



# **CERTIFICATION TEST REPORT**

**Report Number. :** 11792137-E8V2

**Applicant :** APPLE, INC.  
1 INFINITE LOOP  
CUPERTINO, CA 95014, U.S.A.

**Model :** A1901

**FCC ID :** BCG-E3175A

**EUT Description :** SMARTPHONE

**Test Standard(s) :** FCC CFR47 PART 22H, 24E, 27, AND 90S

**Date Of Issue:**  
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Revision History

| Rev. | Issue Date | Revisions         | Revised By |
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## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** APPLE, INC.  
1 INFINITE LOOP  
CUPERTINO, CA 95014, U.S.A.

**EUT DESCRIPTION:** SMARTPHONE

**MODEL:** A1901

**SERIAL NUMBER:** C39TX006J8QN

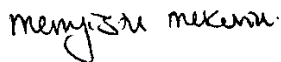
**DATE TESTED:** MAY 04, 2017 – AUGUST 03, 2017

| APPLICABLE STANDARDS                |              |
|-------------------------------------|--------------|
| STANDARD                            | TEST RESULTS |
| FCC CFR47 PART 22H, 24E, 27 AND 90S | Pass         |

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

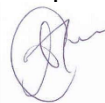
**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

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## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.26:2015, FCC CFR 47 Part 2, FCC KDB 971168 D01 v02r02, KDB 971168 D02 v01, Part 22, Part 24, Part 27, Part 90S.

## 3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

| 47173 Benicia Street                            | 47266 Benicia Street                                       |
|-------------------------------------------------|------------------------------------------------------------|
| <input type="checkbox"/> Chamber A (IC:2324B-1) | <input type="checkbox"/> Chamber D (IC:22541-1)            |
| <input type="checkbox"/> Chamber B (IC:2324B-2) | <input checked="" type="checkbox"/> Chamber E (IC:22541-2) |
| <input type="checkbox"/> Chamber C (IC:2324B-3) | <input checked="" type="checkbox"/> Chamber F (IC:22541-3) |
|                                                 | <input type="checkbox"/> Chamber G (IC:22541-4)            |
|                                                 | <input type="checkbox"/> Chamber H (IC:22541-5)            |

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned}\text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m}\end{aligned}$$

### 4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| PARAMETER                                | UNCERTAINTY |
|------------------------------------------|-------------|
| Conducted Disturbance, 9KHz to 0.15 MHz  | 3.84 dB     |
| Conducted Disturbance, 0.15 to 30 MHz    | 3.65 dB     |
| Radiated Disturbance, 9KHz to 30 MHz     | 3.15 dB     |
| Radiated Disturbance, 30 to 1000 MHz     | 5.36 dB     |
| Radiated Disturbance, 1000 to 18000 MHz  | 4.32 dB     |
| Radiated Disturbance, 18000 to 26000 MHz | 4.45 dB     |
| Radiated Disturbance, 26000 to 40000 MHz | 5.24 dB     |
| Occupied Channel Bandwidth               | ±0.39 %     |
| Temperature                              | ±0.9 °C     |
| Supply voltages                          | ±0.45 %     |
| Time                                     | ±0.02 %     |

Uncertainty figures are valid to a confidence level of 95%.

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The Equipment Under Test is a mobile phone with GSM, GPRS, EGPRS, UMTS, LTE and TD-SCDMA technologies. It also supports IEEE 802.11a/b/g/n/ac, Bluetooth®, GPS and NFC. The device has a built-in inductive charging receiver which is not user accessible. The rechargeable battery is not user accessible.

### 5.2. MAXIMUM OUTPUT POWER

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations ERP/EIRP output powers as follows:

#### 5.2.1. LAT 1

##### OUTPUT POWER FOR LTE BAND 2

| Part 24 / RSS 133 LTE Band 2 |                    |            |                |       |
|------------------------------|--------------------|------------|----------------|-------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | EIRP (Average) |       |
|                              |                    |            | dBm            | mW    |
| 1.4                          | 1850 - 1910        | QPSK       | 24.0           | 251.2 |
|                              |                    | 16QAM      | 23.3           | 213.8 |
|                              |                    | 64QAM      | 22.2           | 166.0 |
| 3                            |                    | QPSK       | 24.1           | 257.0 |
|                              |                    | 16QAM      | 23.4           | 218.8 |
|                              |                    | 64QAM      | 22.3           | 169.8 |
| 5                            |                    | QPSK       | 24.1           | 257.0 |
|                              |                    | 16QAM      | 23.4           | 218.8 |
|                              |                    | 64QAM      | 22.5           | 177.8 |
| 10                           |                    | QPSK       | 24.1           | 257.0 |
|                              |                    | 16QAM      | 23.5           | 223.9 |
|                              |                    | 64QAM      | 22.5           | 177.8 |
| 15                           |                    | QPSK       | 24.0           | 251.2 |
|                              |                    | 16QAM      | 23.5           | 223.9 |
|                              |                    | 64QAM      | 22.5           | 177.8 |
| 20                           |                    | QPSK       | 24.0           | 251.2 |
|                              |                    | 16QAM      | 23.5           | 223.9 |
|                              |                    | 64QAM      | 22.6           | 182.0 |

#### OUTPUT POWER FOR LTE BAND 4

| Part 27 / RSS 139 LTE Band 4 |                 |            |                |       |
|------------------------------|-----------------|------------|----------------|-------|
| Bandwidth (MHz)              | Frequency Range | Modulation | EIRP (Average) |       |
|                              |                 |            | dBm            | mW    |
| 1.4                          | 1710-1755       | QPSK       | 23.1           | 204.2 |
|                              |                 | 16QAM      | 22.5           | 177.8 |
|                              |                 | 64QAM      | 21.5           | 141.3 |
| 3                            |                 | QPSK       | 23.1           | 204.2 |
|                              |                 | 16QAM      | 22.4           | 173.8 |
|                              |                 | 64QAM      | 21.5           | 141.3 |

#### OUTPUT POWER FOR LTE BAND 5 AND BAND 26

| Part 22 /RSS 132 LTE Band 5 and Band 26 |                    |            |               |      |
|-----------------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)                      | Frequency<br>Range | Modulation | ERP (Average) |      |
|                                         |                    |            | dBm           | mW   |
| 1.4                                     | 824 -849           | QPSK       | 19.5          | 89.1 |
|                                         |                    | 16QAM      | 18.6          | 72.4 |
|                                         |                    | 64QAM      | 17.9          | 61.7 |
| 3                                       |                    | QPSK       | 19.5          | 89.1 |
|                                         |                    | 16QAM      | 18.5          | 70.8 |
|                                         |                    | 64QAM      | 17.5          | 56.2 |
| 5                                       |                    | QPSK       | 19.4          | 87.1 |
|                                         |                    | 16QAM      | 18.8          | 75.9 |
|                                         |                    | 64QAM      | 17.7          | 58.9 |
| 10                                      |                    | QPSK       | 19.4          | 87.1 |
|                                         |                    | 16QAM      | 18.6          | 72.4 |
|                                         |                    | 64QAM      | 17.5          | 56.2 |

#### OUTPUT POWER FOR LTE BAND 7

| Part 27 / RSS 139 LTE Band 7 |                    |            |                |       |
|------------------------------|--------------------|------------|----------------|-------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | EIRP (Average) |       |
|                              |                    |            | dBm            | mW    |
| 5                            | 2500-2570          | QPSK       | 25.5           | 354.8 |
|                              |                    | 16QAM      | 24.7           | 295.1 |
|                              |                    | 64QAM      | 23.8           | 239.9 |
| 10                           |                    | QPSK       | 25.5           | 354.8 |
|                              |                    | 16QAM      | 24.7           | 295.1 |
|                              |                    | 64QAM      | 23.8           | 239.9 |
| 15                           |                    | QPSK       | 25.5           | 354.8 |
|                              |                    | 16QAM      | 24.5           | 281.8 |
|                              |                    | 64QAM      | 23.6           | 229.1 |
| 20                           |                    | QPSK       | 25.5           | 354.8 |
|                              |                    | 16QAM      | 24.6           | 288.4 |
|                              |                    | 64QAM      | 23.6           | 229.1 |

### OUTPUT POWER FOR LTE BAND 12

| Part 27 /RSS 130 LTE Band 12 |                    |            |               |      |
|------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | ERP (Average) |      |
|                              |                    |            | dBm           | mW   |
| 1.4                          | 699-716            | QPSK       | 18.2          | 66.1 |
|                              |                    | 16QAM      | 17.5          | 56.2 |
|                              |                    | 64QAM      | 16.7          | 46.8 |
| 3                            |                    | QPSK       | 18.3          | 67.6 |
|                              |                    | 16QAM      | 17.5          | 56.2 |
|                              |                    | 64QAM      | 16.6          | 45.7 |
| 5                            |                    | QPSK       | 18.2          | 66.1 |
|                              |                    | 16QAM      | 17.3          | 53.7 |
|                              |                    | 64QAM      | 16.4          | 43.7 |
| 10                           |                    | QPSK       | 18.3          | 67.6 |
|                              |                    | 16QAM      | 17.5          | 56.2 |
|                              |                    | 64QAM      | 16.5          | 44.7 |

### OUTPUT POWER FOR LTE BAND 13

| Part 27 /RSS 130 LTE Band 13 |                    |            |               |      |
|------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | ERP (Average) |      |
|                              |                    |            | dBm           | mW   |
| 5                            | 777-787            | QPSK       | 18.8          | 75.9 |
|                              |                    | 16QAM      | 17.9          | 61.7 |
|                              |                    | 64QAM      | 17.3          | 53.7 |
| 10                           |                    | QPSK       | 18.8          | 75.9 |
|                              |                    | 16QAM      | 18.0          | 63.1 |
|                              |                    | 64QAM      | 17.0          | 50.1 |

### OUTPUT POWER FOR LTE BAND 17

| Part 27 /RSS 130 LTE Band 17 |                    |            |               |      |
|------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | ERP (Average) |      |
|                              |                    |            | dBm           | mW   |
| 5                            | 704-716            | QPSK       | 18.3          | 67.6 |
|                              |                    | 16QAM      | 17.5          | 56.2 |
|                              |                    | 64QAM      | 16.7          | 46.8 |
| 10                           |                    | QPSK       | 18.3          | 67.6 |
|                              |                    | 16QAM      | 17.6          | 57.5 |
|                              |                    | 64QAM      | 16.7          | 46.8 |

### OUTPUT POWER FOR LTE BAND 25

| Part 24 / RSS 133 LTE Band 25 |                    |            |                |       |
|-------------------------------|--------------------|------------|----------------|-------|
| Bandwidth<br>(MHz)            | Frequency<br>Range | Modulation | EIRP (Average) |       |
|                               |                    |            | dBm            | mW    |
| 1.4                           | 1850-1915          | QPSK       | 24.1           | 257.0 |
|                               |                    | 16QAM      | 23.0           | 199.5 |
|                               |                    | 64QAM      | 22.1           | 162.2 |
| 3                             |                    | QPSK       | 24.1           | 257.0 |
|                               |                    | 16QAM      | 23.1           | 204.2 |
|                               |                    | 64QAM      | 22.1           | 162.2 |
| 5                             |                    | QPSK       | 24.0           | 251.2 |
|                               |                    | 16QAM      | 23.2           | 208.9 |
|                               |                    | 64QAM      | 22.3           | 169.8 |
| 10                            |                    | QPSK       | 24.1           | 257.0 |
|                               |                    | 16QAM      | 23.1           | 204.2 |
|                               |                    | 64QAM      | 22.2           | 166.0 |
| 15                            |                    | QPSK       | 24.0           | 251.2 |
|                               |                    | 16QAM      | 23.2           | 208.9 |
|                               |                    | 64QAM      | 22.2           | 166.0 |
| 20                            |                    | QPSK       | 24.1           | 257.0 |
|                               |                    | 16QAM      | 23.1           | 204.2 |
|                               |                    | 64QAM      | 22.3           | 169.8 |

### OUTPUT POWER FOR LTE BAND 26

| Part 90 LTE Band 26 |                    |            |               |      |
|---------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)  | Frequency<br>Range | Modulation | ERP (Average) |      |
|                     |                    |            | dBm           | mW   |
| 1.4                 | 814-824            | QPSK       | 19.2          | 83.2 |
|                     |                    | 16QAM      | 18.4          | 69.2 |
|                     |                    | 64QAM      | 17.5          | 56.2 |
| 3                   |                    | QPSK       | 19.2          | 83.2 |
|                     |                    | 16QAM      | 18.4          | 69.2 |
|                     |                    | 64QAM      | 17.6          | 57.5 |
| 5                   |                    | QPSK       | 19.2          | 83.2 |
|                     |                    | 16QAM      | 18.5          | 70.8 |
|                     |                    | 64QAM      | 17.5          | 56.2 |
| 10                  |                    | QPSK       | 19.1          | 81.3 |
|                     |                    | 16QAM      | 18.5          | 70.8 |
|                     |                    | 64QAM      | 17.6          | 57.5 |

### **OUTPUT POWER FOR LTE BAND 30**

| Part 27 /RSS 195 LTE Band 30 |                 |            |                |       |
|------------------------------|-----------------|------------|----------------|-------|
| Bandwidth (MHz)              | Frequency Range | Modulation | EIRP (Average) |       |
|                              |                 |            | dBm            | mW    |
| 5                            | 2305-2315       | QPSK       | 22.1           | 162.2 |
|                              |                 | 16QAM      | 21.2           | 131.8 |
|                              |                 | 64QAM      | 20.3           | 107.2 |
| 10                           |                 | QPSK       | 22.1           | 162.2 |
|                              |                 | 16QAM      | 21.3           | 134.9 |
|                              |                 | 64QAM      | 20.5           | 112.2 |

### **OUTPUT POWER FOR LTE BAND 41**

| Part 27 LTE Band 41 |                    |            |                |       |
|---------------------|--------------------|------------|----------------|-------|
| Bandwidth<br>(MHz)  | Frequency<br>Range | Modulation | EIRP (Average) |       |
|                     |                    |            | dBm            | mW    |
| 5                   | 2496-2690          | QPSK       | 24.7           | 295.1 |
|                     |                    | 16QAM      | 24.0           | 251.2 |
|                     |                    | 64QAM      | 23.1           | 204.2 |
| 10                  |                    | QPSK       | 24.7           | 295.1 |
|                     |                    | 16QAM      | 23.9           | 245.5 |
|                     |                    | 64QAM      | 23.1           | 204.2 |
| 15                  |                    | QPSK       | 24.7           | 295.1 |
|                     |                    | 16QAM      | 24.0           | 251.2 |
|                     |                    | 64QAM      | 23.0           | 199.5 |
| 20                  |                    | QPSK       | 24.7           | 295.1 |
|                     |                    | 16QAM      | 24.0           | 251.2 |
|                     |                    | 64QAM      | 23.1           | 204.2 |

**OUTPUT POWER FOR LTE BAND 66 AND BAND 4**

| Part 27 / RSS 139 LTE Band 66 |                    |            |                |       |
|-------------------------------|--------------------|------------|----------------|-------|
| Bandwidth<br>(MHz)            | Frequency<br>Range | Modulation | EIRP (Average) |       |
|                               |                    |            | dBm            | mW    |
| 5                             | 1710-1780          | QPSK       | 23.2           | 208.9 |
|                               |                    | 16QAM      | 22.3           | 169.8 |
|                               |                    | 64QAM      | 21.5           | 141.3 |
| 10                            |                    | QPSK       | 23.2           | 208.9 |
|                               |                    | 16QAM      | 22.3           | 169.8 |
|                               |                    | 64QAM      | 21.4           | 138.0 |
| 15                            |                    | QPSK       | 23.2           | 208.9 |
|                               |                    | 16QAM      | 22.3           | 169.8 |
|                               |                    | 64QAM      | 21.3           | 134.9 |
| 20                            |                    | QPSK       | 23.2           | 208.9 |
|                               |                    | 16QAM      | 22.4           | 173.8 |
|                               |                    | 64QAM      | 21.5           | 141.3 |

## 5.2.2. UAT 1

### OUTPUT POWER FOR LTE BAND 2

| Part 24 / RSS 133 LTE Band 2 |                    |            |                |      |
|------------------------------|--------------------|------------|----------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | EIRP (Average) |      |
|                              |                    |            | dBm            | mW   |
| 1.4                          | 1850 - 1910        | QPSK       | 18.5           | 70.8 |
|                              |                    | 16QAM      | 17.8           | 60.3 |
|                              |                    | 64QAM      | 16.9           | 49.0 |
| 3                            |                    | QPSK       | 18.4           | 69.2 |
|                              |                    | 16QAM      | 17.4           | 55.0 |
|                              |                    | 64QAM      | 16.6           | 45.7 |
| 5                            |                    | QPSK       | 18.5           | 70.8 |
|                              |                    | 16QAM      | 17.8           | 60.3 |
|                              |                    | 64QAM      | 17.2           | 52.5 |
| 10                           |                    | QPSK       | 18.5           | 70.8 |
|                              |                    | 16QAM      | 17.9           | 61.7 |
|                              |                    | 64QAM      | 17.2           | 52.5 |
| 15                           |                    | QPSK       | 18.5           | 70.8 |
|                              |                    | 16QAM      | 17.8           | 60.3 |
|                              |                    | 64QAM      | 17.0           | 50.1 |
| 20                           |                    | QPSK       | 18.5           | 70.8 |
|                              |                    | 16QAM      | 17.8           | 60.3 |
|                              |                    | 64QAM      | 16.9           | 49.0 |

### OUTPUT POWER FOR LTE BAND 4

| Part 27 / RSS 139 LTE Band 4 |                 |            |                |      |
|------------------------------|-----------------|------------|----------------|------|
| Bandwidth (MHz)              | Frequency Range | Modulation | EIRP (Average) |      |
|                              |                 |            | dBm            | mW   |
| 1.4                          | 1710-1755       | QPSK       | 19.4           | 87.1 |
|                              |                 | 16QAM      | 18.5           | 70.8 |
|                              |                 | 64QAM      | 17.8           | 60.3 |
| 3                            |                 | QPSK       | 19.4           | 87.1 |
|                              |                 | 16QAM      | 18.7           | 74.1 |
|                              |                 | 64QAM      | 17.9           | 61.7 |

**OUTPUT POWER FOR LTE BAND 5 AND BAND 26**

| Part 22 /RSS 132 LTE Band 5 and Band 26 |                    |            |               |      |
|-----------------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)                      | Frequency<br>Range | Modulation | ERP (Average) |      |
|                                         |                    |            | dBm           | mW   |
| 1.4                                     | 824 -849           | QPSK       | 19.2          | 83.2 |
|                                         |                    | 16QAM      | 18.4          | 69.2 |
|                                         |                    | 64QAM      | 17.5          | 56.2 |
| 3                                       |                    | QPSK       | 19.2          | 83.2 |
|                                         |                    | 16QAM      | 18.4          | 69.2 |
|                                         |                    | 64QAM      | 17.6          | 57.5 |
| 5                                       |                    | QPSK       | 19.2          | 83.2 |
|                                         |                    | 16QAM      | 18.5          | 70.8 |
|                                         |                    | 64QAM      | 17.5          | 56.2 |
| 10                                      |                    | QPSK       | 19.1          | 81.3 |
|                                         |                    | 16QAM      | 18.5          | 70.8 |
|                                         |                    | 64QAM      | 17.7          | 58.9 |

**OUTPUT POWER FOR LTE BAND 7**

| Part 27 / RSS 139 LTE Band 7 |                    |            |                |      |
|------------------------------|--------------------|------------|----------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | EIRP (Average) |      |
|                              |                    |            | dBm            | mW   |
| 5                            | 2500-2570          | QPSK       | 16.2           | 41.7 |
|                              |                    | 16QAM      | 15.4           | 34.7 |
|                              |                    | 64QAM      | 14.6           | 28.8 |
| 10                           |                    | QPSK       | 16.2           | 41.7 |
|                              |                    | 16QAM      | 15.5           | 35.5 |
|                              |                    | 64QAM      | 14.8           | 30.2 |
| 15                           |                    | QPSK       | 16.0           | 39.8 |
|                              |                    | 16QAM      | 15.6           | 36.3 |
|                              |                    | 64QAM      | 14.6           | 28.8 |
| 20                           |                    | QPSK       | 16.1           | 40.7 |
|                              |                    | 16QAM      | 15.4           | 34.7 |
|                              |                    | 64QAM      | 14.4           | 27.5 |

### **OUTPUT POWER FOR LTE BAND 12**

| Part 27 /RSS 130 LTE Band 12 |                    |            |               |      |
|------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | ERP (Average) |      |
|                              |                    |            | dBm           | mW   |
| 1.4                          | 699-716            | QPSK       | 15.2          | 33.1 |
|                              |                    | 16QAM      | 14.4          | 27.5 |
|                              |                    | 64QAM      | 13.5          | 22.4 |
| 3                            |                    | QPSK       | 15.1          | 32.4 |
|                              |                    | 16QAM      | 14.5          | 28.2 |
|                              |                    | 64QAM      | 13.8          | 24.0 |
| 5                            |                    | QPSK       | 15.2          | 33.1 |
|                              |                    | 16QAM      | 14.4          | 27.5 |
|                              |                    | 64QAM      | 13.8          | 24.0 |
| 10                           |                    | QPSK       | 15.1          | 32.4 |
|                              |                    | 16QAM      | 14.5          | 28.2 |
|                              |                    | 64QAM      | 13.8          | 24.0 |

### **OUTPUT POWER FOR LTE BAND 13**

| Part 27 /RSS 130 LTE Band 13 |                 |            |               |      |
|------------------------------|-----------------|------------|---------------|------|
| Bandwidth (MHz)              | Frequency Range | Modulation | ERP (Average) |      |
|                              |                 |            | dBm           | mW   |
| 5                            | 777-787         | QPSK       | 18.0          | 63.1 |
|                              |                 | 16QAM      | 17.4          | 55.0 |
|                              |                 | 64QAM      | 16.5          | 44.7 |
| 10                           |                 | QPSK       | 18.0          | 63.1 |
|                              |                 | 16QAM      | 17.1          | 51.3 |
|                              |                 | 64QAM      | 16.2          | 41.7 |

### **OUTPUT POWER FOR LTE BAND 17**

| Part 27 /RSS 130 LTE Band 17 |                    |            |               |      |
|------------------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)           | Frequency<br>Range | Modulation | ERP (Average) |      |
|                              |                    |            | dBm           | mW   |
| 5                            | 704-716            | QPSK       | 15.2          | 33.1 |
|                              |                    | 16QAM      | 14.5          | 28.2 |
|                              |                    | 64QAM      | 13.7          | 23.4 |
| 10                           |                    | QPSK       | 15.1          | 32.4 |
|                              |                    | 16QAM      | 14.4          | 27.5 |
|                              |                    | 64QAM      | 13.4          | 21.9 |

### OUTPUT POWER FOR LTE BAND 25

| Part 24 / RSS 133 LTE Band 25 |                    |            |                |      |
|-------------------------------|--------------------|------------|----------------|------|
| Bandwidth<br>(MHz)            | Frequency<br>Range | Modulation | EIRP (Average) |      |
|                               |                    |            | dBm            | mW   |
| 1.4                           | 1850-1915          | QPSK       | 19.0           | 79.4 |
|                               |                    | 16QAM      | 18.3           | 67.6 |
|                               |                    | 64QAM      | 17.3           | 53.7 |
| 3                             |                    | QPSK       | 19.0           | 79.4 |
|                               |                    | 16QAM      | 18.2           | 66.1 |
|                               |                    | 64QAM      | 17.2           | 52.5 |
| 5                             |                    | QPSK       | 19.0           | 79.4 |
|                               |                    | 16QAM      | 18.3           | 67.6 |
|                               |                    | 64QAM      | 17.5           | 56.2 |
| 10                            |                    | QPSK       | 18.9           | 77.6 |
|                               |                    | 16QAM      | 18.3           | 67.6 |
|                               |                    | 64QAM      | 17.2           | 52.5 |
| 15                            |                    | QPSK       | 19.0           | 79.4 |
|                               |                    | 16QAM      | 18.4           | 69.2 |
|                               |                    | 64QAM      | 17.5           | 56.2 |
| 20                            |                    | QPSK       | 18.9           | 77.6 |
|                               |                    | 16QAM      | 18.4           | 69.2 |
|                               |                    | 64QAM      | 17.5           | 56.2 |

### OUTPUT POWER FOR LTE BAND 26

| Part 90 LTE Band 26 |                    |            |               |      |
|---------------------|--------------------|------------|---------------|------|
| Bandwidth<br>(MHz)  | Frequency<br>Range | Modulation | ERP (Average) |      |
|                     |                    |            | dBm           | mW   |
| 1.4                 | 814-824            | QPSK       | 18.4          | 69.2 |
|                     |                    | 16QAM      | 17.7          | 58.9 |
|                     |                    | 64QAM      | 16.8          | 47.9 |
| 3                   |                    | QPSK       | 18.4          | 69.2 |
|                     |                    | 16QAM      | 17.7          | 58.9 |
|                     |                    | 64QAM      | 16.8          | 47.9 |
| 5                   |                    | QPSK       | 18.3          | 67.6 |
|                     |                    | 16QAM      | 17.7          | 58.9 |
|                     |                    | 64QAM      | 16.8          | 47.9 |
| 10                  |                    | QPSK       | 18.4          | 69.2 |
|                     |                    | 16QAM      | 17.8          | 60.3 |
|                     |                    | 64QAM      | 16.9          | 49.0 |

### **OUTPUT POWER FOR LTE BAND 30**

| Part 27 /RSS 195 LTE Band 30 |                 |            |                |      |
|------------------------------|-----------------|------------|----------------|------|
| Bandwidth (MHz)              | Frequency Range | Modulation | EIRP (Average) |      |
|                              |                 |            | dBm            | mW   |
| 5                            | 2305-2315       | QPSK       | 17.4           | 55.0 |
|                              |                 | 16QAM      | 16.7           | 46.8 |
|                              |                 | 64QAM      | 15.8           | 38.0 |
| 10                           |                 | QPSK       | 17.4           | 55.0 |
|                              |                 | 16QAM      | 16.7           | 46.8 |
|                              |                 | 64QAM      | 15.8           | 38.0 |

### **OUTPUT POWER FOR LTE BAND 41**

| Part 27 LTE Band 41 |                    |            |                |      |
|---------------------|--------------------|------------|----------------|------|
| Bandwidth<br>(MHz)  | Frequency<br>Range | Modulation | EIRP (Average) |      |
|                     |                    |            | dBm            | mW   |
| 5                   | 2496-2690          | QPSK       | 18.4           | 69.2 |
|                     |                    | 16QAM      | 18.0           | 63.1 |
|                     |                    | 64QAM      | 16.9           | 49.0 |
| 10                  |                    | QPSK       | 18.4           | 69.2 |
|                     |                    | 16QAM      | 17.9           | 61.7 |
|                     |                    | 64QAM      | 17.2           | 52.5 |
| 15                  |                    | QPSK       | 18.3           | 67.6 |
|                     |                    | 16QAM      | 17.9           | 61.7 |
|                     |                    | 64QAM      | 17.0           | 50.1 |
| 20                  |                    | QPSK       | 18.5           | 70.8 |
|                     |                    | 16QAM      | 18.0           | 63.1 |
|                     |                    | 64QAM      | 17.1           | 51.3 |

### **OUTPUT POWER FOR LTE BAND 66 AND BAND 4**

| Part 27 / RSS 139 LTE Band 66 |                    |            |                |      |
|-------------------------------|--------------------|------------|----------------|------|
| Bandwidth<br>(MHz)            | Frequency<br>Range | Modulation | EIRP (Average) |      |
|                               |                    |            | dBm            | mW   |
| 5                             | 1710-1780          | QPSK       | 19.4           | 87.1 |
|                               |                    | 16QAM      | 18.5           | 70.8 |
|                               |                    | 64QAM      | 17.5           | 56.2 |
| 10                            |                    | QPSK       | 19.4           | 87.1 |
|                               |                    | 16QAM      | 18.5           | 70.8 |
|                               |                    | 64QAM      | 17.6           | 57.5 |
| 15                            |                    | QPSK       | 19.4           | 87.1 |
|                               |                    | 16QAM      | 18.6           | 72.4 |
|                               |                    | 64QAM      | 16.7           | 46.8 |
| 20                            |                    | QPSK       | 19.4           | 87.1 |
|                               |                    | 16QAM      | 18.6           | 72.4 |
|                               |                    | 64QAM      | 17.6           | 57.5 |

### 5.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 00.34.09.

### 5.4. MAXIMUM ANTENNA GAIN

Please see table below:

| LTE BANDS                    | LAT 1 Antenna Gain (dBi) | UAT 1 Antenna Gain (dBi) |
|------------------------------|--------------------------|--------------------------|
| LTE Band 2, 1850 – 1910 MHz  | -1.27                    | -2.30                    |
| LTE Band 4, 1710 – 1755 MHz  | -2.20                    | -2.83                    |
| LTE Band 5, 824 – 849 MHz    | -3.21                    | -2.84                    |
| LTE Band 7, 2500 – 2570 MHz  | 0.20                     | -3.35                    |
| LTE Band 12, 699 – 716 MHz   | -4.40                    | -6.72                    |
| LTE Band 13, 777 – 787 MHz   | -3.84                    | -3.86                    |
| LTE Band 17, 704 – 716 MHz   | -4.40                    | -6.72                    |
| LTE Band 25, 1850 – 1915 MHz | -1.27                    | -1.87                    |
| LTE Band 26, 814 – 824 MHz   | -3.47                    | -3.45                    |
| LTE Band 30, 2305 – 2315 MHz | -1.74                    | -2.98                    |
| LTE Band 41, 2496 – 2690 MHz | 0.20                     | -2.99                    |
| LTE Band 66, 1710 – 1780 MHz | -2.13                    | -2.83                    |

## **5.5. WORST-CASE CONFIGURATION AND MODE**

The worst-case scenario for all measurements is based on the investigation results.

The device has LTE Bands of:

Band 2, Band 4, Band 5, Band 7, Band 12, Band 13, Band 17, Band 25, Band 26, Band 30, Band 41 and Band 66.

FCC rule Part 22.905 of LTE Band 26 (824-849MHz) is covered by LTE band 5 of same rule since they have the same output power and supported bandwidths.

LTE Band 4 (1710-1755MHz, 5/10/15/20MHz bandwidth) is covered by LTE Band 66 because it is a subset of LTE band 66 and they have same output power.

Tests were performed on the conducted test at LAT 1 antenna as worst case since it has higher output powers. Only output power and occupied bandwidth were performed on the 64QAM due to power is lower than QPSK/16QAM.

The EUT was investigated in three orthogonal orientations X/Y/Z on both LAT 1 and UAT 1 antennas, it was determined that X (Flatbed) orientation was worst-case orientation for all bands without AC/DC adapter, headphones, or laptop on both antennas.

Radiated spurious emissions were investigated below 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found on below 30MHz and 30MHz-1GHz.

For simultaneous transmission of multiple channels in the 2.4GHz and Cellular bands, tests were conducted for various configurations having the highest power, least separation in frequencies and widest operation bandwidths. No noticeable new emission was found.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

| Support Equipment List |              |           |               |
|------------------------|--------------|-----------|---------------|
| Description            | Manufacturer | Model     | Serial Number |
| Laptop AC Adapter      | Apple        | MD592LL/A | N/A           |
| Laptop                 | Apple        | A1466     | C02PS2H6G08S  |

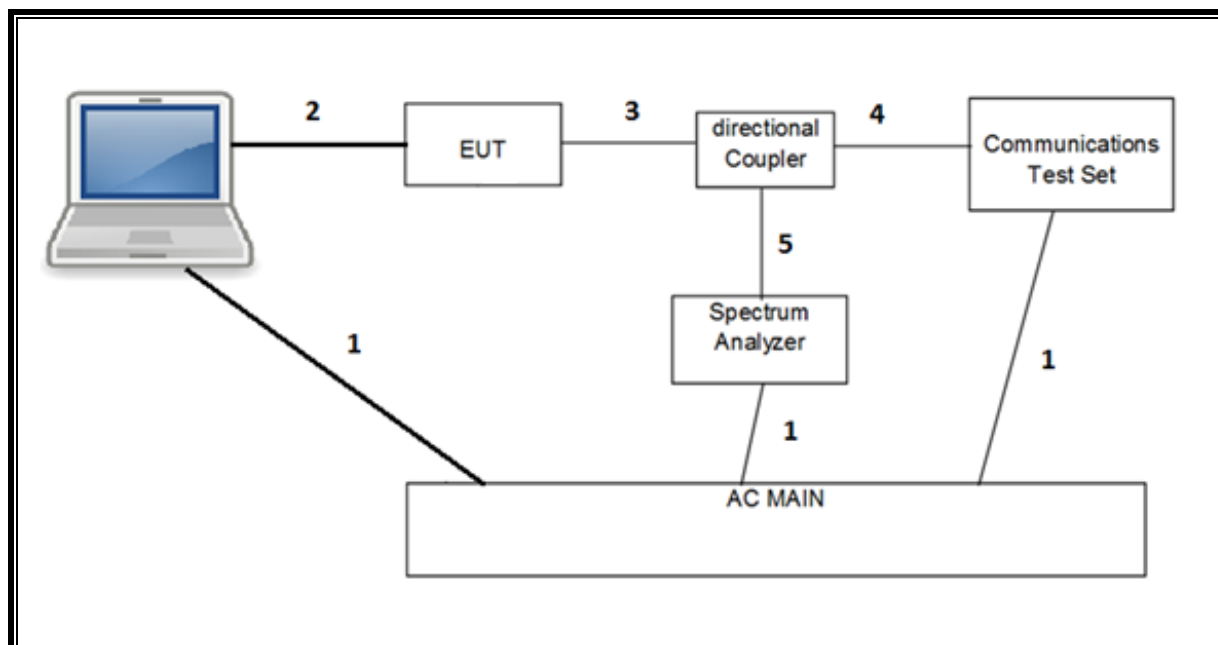
### I/O CABLES (RF Conducted Test)

| I/O Cable List |           |                      |                        |             |                  |         |
|----------------|-----------|----------------------|------------------------|-------------|------------------|---------|
| Cable No       | Port      | # of identical ports | Connector Type         | Cable Type  | Cable Length (m) | Remarks |
| 1              | AC        | 3                    | US 115V                | Un-shielded | 2.0m             | N/A     |
| 2              | USB       | 1                    | DC                     | Un-shielded | 1.0m             | N/A     |
| 3              | RF In/Out | 1                    | EUT                    | Un-shielded | 0.6m             | N/A     |
| 4              | RF In/Out | 1                    | Communication Test Set | Un-shielded | 1.2m             | N/A     |
| 5              | RF In/Out | 1                    | Barrel                 | N/A         | N/A              | N/A     |

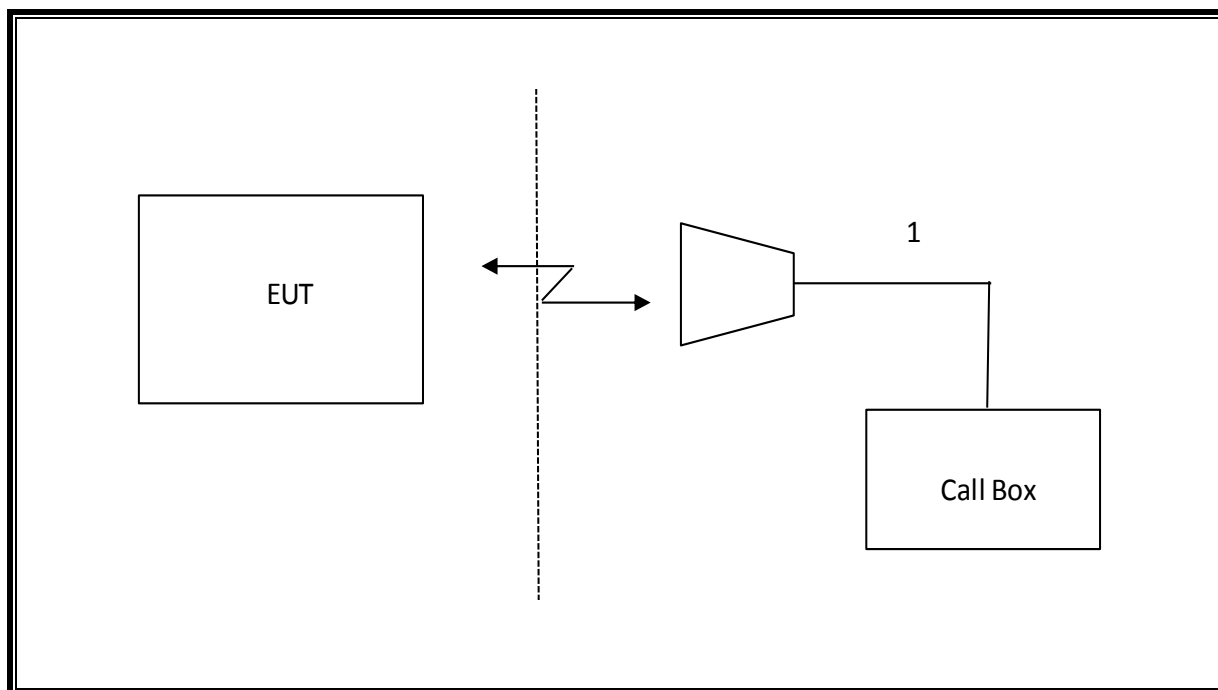
### I/O CABLES (RF Radiated Test)

| I/O Cable List |           |                      |                |             |                  |         |
|----------------|-----------|----------------------|----------------|-------------|------------------|---------|
| Cable No       | Port      | # of identical ports | Connector Type | Cable Type  | Cable Length (m) | Remarks |
| 1              | RF In/Out | 1                    | Antenna        | Un-shielded | 5m               | NA      |

### CONDUCTED SETUP



### RADIATED SETUP



## 6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

| TEST EQUIPMENT LIST                                |                     |                        |              |                         |
|----------------------------------------------------|---------------------|------------------------|--------------|-------------------------|
| Description                                        | Manufacturer        | Model                  | Asset        | Cal Due                 |
| *Antenna, Horn 1-18GHz                             | ETS Lindgren        | 3117                   | T863         | 6/9/2017                |
| Antenna, Horn 1-18GHz                              | ETS Lindgren        | 3117                   | T863         | 6/9/2018                |
| Antenna, Broadband Hybrid, 30MHz to 2000MHz        | Sunol Sciences      | JB3                    | T900         | 5/31/2018               |
| Amplifier, 1 to 18GHz                              | Miteq               | AFS42-00101800-25-S-42 | T1131        | 9/23/2017               |
| *Amplifier, 10KHz to 1GHz, 32dB                    | Sonoma              | 310N                   | T285         | 6/20/2017               |
| Amplifier, 10KHz to 1GHz, 32dB                     | Sonoma              | 310N                   | T285         | 6/24/2018               |
| Spectrum Analyzer, PXA 3Hz to 44GHz                | Keysight            | N9030A                 | T1113        | 12/20/2017              |
| Antenna, Horn 1-18GHz                              | ETS Lindgren        | 3117                   | T119         | 3/28/2018               |
| Antenna, Broadband Hybrid, 30MHz to 2000MHz        | Sunol Sciences      | JB1                    | T122         | 1/31/2018               |
| Amplifier, 1 to 18GHz                              | Miteq               | AFS42-00101800-25-S-42 | T742         | 11/29/2017              |
| *Amplifier, 10KHz to 1GHz, 32dB                    | Sonoma              | 310N                   | T173         | 6/17/2017               |
| Spectrum Analyzer, PXA 3Hz to 44GHz                | Keysight            | N9030A                 | T1113        | 12/20/2017              |
| Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext.        | Keysight            | N9030A                 | T342         | 2/23/2018               |
| Spectrum Analyzer, PSA 3Hz to 44GHz                | Keysight            | E4446A                 | T123         | 10/20/2017              |
| Wideband Communication Test Set, Call Box          | R&S GmbH & Co. KG   | CMW500                 | AE0038201512 | connection purpose only |
| Directional Coupler                                | KRYTAR              | 152610                 | T1536        | 4/24/2018               |
| Directional Coupler                                | KRYTAR              | 152610                 | T1537        | 4/24/2018               |
| Power Meter, P-series single channel               | Keysight            | N1912A                 | T1245        | 5/12/2018               |
| Power Sensor, P - series, 50MHz to 18GHz, Wideband | Keysight            | N1921A                 | T1224        | 3/29/2018               |
| Filter, HPF 3.0GHz                                 | MICROTRONICS        | HPM17543               | T487         | 1/28/2018               |
| *Filter, HPF 1.2GHz                                | Micro-Tronics       | WHKX1.2/15G-6ST        | T1182        | 5/31/2017               |
| *Spectrum Analyzer, PXA, 3Hz to 44GHz              | Keysight            | N9030A                 | T1210        | 6/30/2017               |
| *Wideband Communication Test Set, Call Box         | R&S GmbH & Co. KG   | CMW500                 | T959         | 7/9/2017                |
| Wideband Communication Test Set, Call Box          | R&S GmbH & Co. KG   | CMW500                 | T971         | 8/5/2017                |
| Wideband Communication Test Set, Call Box          | R&S GmbH & Co. KG   | CMW500                 | T949         | 3/15/2018               |
| Chamber, Environmental                             | Cincinnati Sub Zero | ZPHS-8-3.5-SCT/WC      | T754         | 9/10/2017               |
| Antenna, Horn 1-18GHz                              | Emco                | 3115                   | T59          | 11/18/2017              |
| Amplifier, 26.5GHz to 40GHz                        | Miteq               | NSP 4000 SP2           | T88          | 4/29/2018               |
| *Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum      | Keysight            | 8449B                  | T404         | 7/5/2017                |
| *Antenna, Horn 18 to 26.5GHz                       | ARA                 | MWH-1826/B             | T447         | 6/16/2017               |
| Antenna, Horn 26.5GHz to 40GHz                     | ARA                 | MWH-2640               | T90          | 8/19/2017               |
| Spectrum Analyzer                                  | Keysight            | 8564E                  | T106         | 9/7/2017                |
| Antenna, Active Loop 9KHz to 30MHz                 | EMCO                | 6502                   | T1616        | 12/12/2017              |

NOTE: Equipment that calibrated during the testing period was set for test after the calibration.

\*Testing is completed before equipment expiration date.

## 7. TRANSMITTER OUTPUT POWER (CONDUCTED AND ERP/EIRP)

### CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

All LTE bands conducted average power is obtained from the CMW500 telecommunication test set.

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

UE Power Class: 3 (23 +/- 2dBm). The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

**Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3**

| Modulation | Channel bandwidth / Transmission bandwidth ( $N_{RB}$ ) |         |       |        |        |        | MPR (dB) |
|------------|---------------------------------------------------------|---------|-------|--------|--------|--------|----------|
|            | 1.4 MHz                                                 | 3.0 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz |          |
| QPSK       | > 5                                                     | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 1      |
| 16 QAM     | ≤ 5                                                     | ≤ 4     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 1      |
| 16 QAM     | > 5                                                     | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 2      |
| 64 QAM     | ≤ 5                                                     | ≤ 4     | ≤ 8   | ≤ 12   | ≤ 16   | ≤ 18   | ≤ 2      |
| 64 QAM     | > 5                                                     | > 4     | > 8   | > 12   | > 16   | > 18   | ≤ 3      |

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS\_01".3

**Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)**

| Network Signalling value | Requirements (sub-clause) | E-UTRA Band              | Channel bandwidth (MHz) | Resources Blocks ( $N_{RB}$ ) | A-MPR (dB)    |
|--------------------------|---------------------------|--------------------------|-------------------------|-------------------------------|---------------|
| NS_01                    | 6.6.2.1.1                 | Table 5.5-1              | 1.4, 3, 5, 10, 15, 20   | Table 5.6-1                   | NA            |
| NS_03                    | 6.6.2.2.1                 | 2, 4, 10, 23, 25, 35, 36 | 3                       | >5                            | ≤ 1           |
|                          |                           |                          | 5                       | >6                            | ≤ 1           |
|                          |                           |                          | 10                      | >6                            | ≤ 1           |
|                          |                           |                          | 15                      | >8                            | ≤ 1           |
|                          |                           |                          | 20                      | >10                           | ≤ 1           |
| NS_04                    | 6.6.2.2.2                 | 41                       | 5                       | >6                            | ≤ 1           |
|                          |                           |                          | 10, 15, 20              | See Table 6.2.4-4             |               |
| NS_05                    | 6.6.3.3.1                 | 1                        | 10,15,20                | ≥ 50                          | ≤ 1           |
| NS_06                    | 6.6.2.2.3                 | 12, 13, 14, 17           | 1.4, 3, 5, 10           | Table 5.6-1                   | n/a           |
| NS_07                    | 6.6.2.2.3                 | 13                       | 10                      | Table 6.2.4-2                 | Table 6.2.4-2 |
|                          | 6.6.3.3.2                 |                          |                         |                               |               |
| NS_08                    | 6.6.3.3.3                 | 19                       | 10, 15                  | > 44                          | ≤ 3           |
| NS_09                    | 6.6.3.3.4                 | 21                       | 10, 15                  | > 40                          | ≤ 1           |
|                          |                           |                          |                         | > 55                          | ≤ 2           |
| NS_10                    |                           | 20                       | 15, 20                  | Table 6.2.4-3                 | Table 6.2.4-3 |
| NS_11                    | 6.6.2.2.1                 | 23 <sup>1</sup>          | 1.4, 3, 5, 10           | Table 6.2.4-5                 | Table 6.2.4-5 |
| ..                       |                           |                          |                         |                               |               |
| NS_32                    | -                         | -                        | -                       | -                             | -             |

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

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**ERP/EIRP LIMIT**

FCC: §2.1046, §22.913, §24.232, §27.50 §90.635

22.913(a) - The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.

24.232(c) - Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

27.50 (c) (10) the following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band, the portable stations (hand-held devices) are limited to 3 watts ERP.

27.50 (b)(10) Portable stations (hand-held devices) transmitting in the 746–757 MHz, 758–763 MHz, 776–793 MHz, and 805–806 MHz bands are limited to 3 watts ERP.

27.50 (d)(4) The following power and antenna height requirements apply to stations transmitting in the 1710–1755 MHz and 2110–2155 MHz bands: Fixed, mobile, and portable (hand-held) stations operating in the 1710–1755 MHz band are limited to 1 watt EIRP

27.50 (h) The following power limits shall apply in the BRS and EBS:

(2) Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

§90.635 Limitations on power and antenna height.

(a) The effective radiated power and antenna height for base stations may not exceed 1 kilowatt (30 dBw) and 304 m. (1,000 ft.) above average terrain (AAT), respectively, or the equivalent thereof as determined from the Table. These are maximum values, and applicants will be required to justify power levels and antenna heights requested.

(b) The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

Table—Equivalent Power and Antenna Heights for Base Stations in the 851–869 MHz and 935–940 MHz Bands Which Have a Requirement for a 32 km (20 mi) Service Area Radius

| Antenna height (ATT) meters (feet)   | Effective radiated power (watts) <sup>1 2 4</sup> |
|--------------------------------------|---------------------------------------------------|
| Above 1,372 (4,500)                  | 65                                                |
| Above 1,220 (4,000) to 1,372 (4,500) | 70                                                |
| Above 1,067 (3,500) to 1,220 (4,000) | 75                                                |
| Above 915 (3,000) to 1,067 (3,500)   | 100                                               |
| Above 763 (2,500) to 915 (3,000)     | 140                                               |
| Above 610 (2,000) to 763 (2,500)     | 200                                               |
| Above 458 (1,500) to 610 (2,000)     | 350                                               |
| Above 305 (1,000) to 458 (1,500)     | 600                                               |
| Up to 305 (1,000)                    | <sup>3</sup> 1,000                                |

<sup>1</sup>Power is given in terms of effective radiated power (ERP).

<sup>2</sup>Applicants in the Los Angeles, CA, area who demonstrate a need to serve both the downtown and fringe areas will be permitted to utilize an ERP of 1 kw at the following mountaintop sites: Santiago Park, Sierra Peak, Mount Lukens, and Mount Wilson.

<sup>3</sup>Stations with antennas below 305 m (1,000 ft) (AAT) will be restricted to a maximum power of 1 kw (ERP).

<sup>4</sup>Licensees in San Diego, CA, will be permitted to utilize an ERP of 500 watts at the following mountaintop sites: Palomar, Otay, Woodson and Miguel.

In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

## **TEST PROCEDURE**

ANSI C63.26:2015  
KDB 971168 Section 5.6

$$\text{ERP/EIRP} = \text{PMeas} + \text{GT} - \text{LC}$$

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

## **MODES TESTED**

- LTE Band 2
- LTE Band 4
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 66

## **RESULTS**

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted and ERP/EIRP output powers as follows:

## 7.1. LAT 1

### 7.1.1. LTE BAND 2

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

| Antenna gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | QPSK       | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 2         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 5         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 1         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    | 18900      | 1880.0          |            | 6       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 2         | 25.1                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 5         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 0         | 25.1                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 3       | 1         | 25.1                    | 23.8               | 33.0             | -9.2        |
|                    | 19193      | 1909.3          |            | 3       | 2         | 25.1                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 6       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 2         | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 5         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 1         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 6       | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |

| Antenna gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | 16QAM      | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 2         | 24.5                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 5         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 3       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 3       | 1         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 3       | 2         | 24.5                    | 23.3               | 33.0             | -9.8        |
|                    | 18900      | 1880.0          |            | 6       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 2         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 5         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 3       | 0         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 3       | 1         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    | 19193      | 1909.3          |            | 3       | 2         | 24.4                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 6       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 0         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 2         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 5         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 3       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 3       | 1         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 3       | 2         | 24.4                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 6       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |

| Antenna gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | 64QAM      | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 2         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 5         | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 3       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 3       | 1         | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 3       | 2         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    | 18900      | 1880.0          |            | 6       | 0         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 5         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 3       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 3       | 1         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    | 19193      | 1909.3          |            | 3       | 2         | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 6       | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 5         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 3       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 3       | 1         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 3       | 2         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 6       | 0         | 22.3                    | 21.1               | 33.0             | -11.9       |

**OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | QPSK       | 1       | 0         | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 14        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 8       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 4         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 8       | 7         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 18900      | 1880.0          |            | 15      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 14        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 8       | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 4         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 8       | 7         | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 15      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 19185      | 1908.5          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 1       | 14        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 8       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 8       | 4         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 8       | 7         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 15      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | 16QAM      | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 7         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 14        | 24.5                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 8       | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 8       | 4         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 8       | 7         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 15      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 7         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 14        | 24.6                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 8       | 0         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 4         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 7         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 15      | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    | 19185      | 1908.5          |            | 1       | 0         | 24.6                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 7         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 14        | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 8       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 8       | 4         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 8       | 7         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 15      | 0         | 23.4                    | 22.2               | 33.0             | -10.9       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | 64QAM      | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 7         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 14        | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 8       | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 21.1               | 33.0             | -12.0       |
|                    | 18900      | 1880.0          |            | 15      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 7         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 14        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    | 19185      | 1908.5          |            | 8       | 7         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 15      | 0         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 7         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 14        | 23.5                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 8       | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 4         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 8       | 7         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 15      | 0         | 22.4                    | 21.2               | 33.0             | -11.8       |

**OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | QPSK       | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 6         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    | 18900      | 1880.0          |            | 25      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 6         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 19175      | 1907.5          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 6         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | 16QAM      | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 12        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 24        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 12      | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 23.6                    | 22.4               | 33.0             | -10.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 12        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 24        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 12      | 0         | 23.7                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 12      | 11        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 0         | 23.5                    | 22.3               | 33.0             | -10.7       |
|                    | 19175      | 1907.5          |            | 1       | 0         | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 12        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 24        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 12      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 12      | 6         | 23.6                    | 22.4               | 33.0             | -10.7       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 23.6                    | 22.4               | 33.0             | -10.6       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | 64QAM      | 1       | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 12        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 12      | 0         | 22.7                    | 21.5               | 33.0             | -11.6       |
|                    |            |                 |            | 12      | 6         | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 12      | 11        | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 21.3               | 33.0             | -11.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 12        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 23.6                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 12      | 0         | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 12      | 6         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 12      | 11        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 25      | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    | 19175      | 1907.5          |            | 1       | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 12        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 24        | 23.7                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 12      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 6         | 22.6                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |

**OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | QPSK       | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 12        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 12        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 24        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    | 19150      | 1905.0          |            | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 12        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | 16QAM      | 1       | 0         | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 24        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 49        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 25      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 12        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 24        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 24        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 49        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 25      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 12        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 24        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    | 19150      | 1905.0          |            | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 24        | 24.7                    | 23.5               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 49        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 25      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 25      | 12        | 23.6                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 25      | 24        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | 64QAM      | 1       | 0         | 23.6                    | 22.4               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 24        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 22.6                    | 21.4               | 33.0             | -11.7       |
|                    |            |                 |            | 25      | 12        | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 25      | 24        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    | 18900      | 1880.0          |            | 50      | 0         | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 1       | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 23.6                    | 22.4               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 25      | 12        | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    | 19150      | 1905.0          |            | 25      | 24        | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 50      | 0         | 22.6                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 1       | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 23.7                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 25      | 12        | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 25      | 24        | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 50      | 0         | 22.6                    | 21.3               | 33.0             | -11.7       |

**OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | QPSK       | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 74        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 36      | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 75      | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    | 18900      | 1880.0          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 75      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 36      | 35        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 75      | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | 16QAM      | 1       | 0         | 24.6                    | 23.4               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 37        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 74        | 24.6                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 36      | 16        | 23.7                    | 22.5               | 33.0             | -10.6       |
|                    |            |                 |            | 36      | 35        | 23.7                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 75      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 37        | 24.5                    | 23.3               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 74        | 24.6                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 36      | 16        | 23.5                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 36      | 35        | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 75      | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 37        | 24.7                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 74        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 36      | 0         | 23.6                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 36      | 16        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 36      | 35        | 23.6                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 75      | 0         | 23.7                    | 22.5               | 33.0             | -10.5       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | 64QAM      | 1       | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 37        | 23.6                    | 22.4               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 74        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 36      | 0         | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 36      | 16        | 22.6                    | 21.4               | 33.0             | -11.7       |
|                    |            |                 |            | 36      | 35        | 22.6                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 75      | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 23.6                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 37        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 74        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 36      | 0         | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 36      | 16        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 36      | 35        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 75      | 0         | 22.6                    | 21.3               | 33.0             | -11.7       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 23.7                    | 22.5               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 37        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 74        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 36      | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 36      | 16        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 36      | 35        | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 75      | 0         | 22.6                    | 21.3               | 33.0             | -11.7       |

**OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | QPSK       | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 18900      | 1880.0          |            | 100     | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 49        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 100     | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 19100      | 1900.0          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 50      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 49        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 100     | 0         | 24.4                    | 23.2               | 33.0             | -9.8        |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | 16QAM      | 1       | 0         | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 49        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 99        | 24.7                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 50      | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 24        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 49        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 100     | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 24.7                    | 23.5               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 49        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 99        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 50      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 24        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 49        | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 100     | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    | 19100      | 1900.0          |            | 1       | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 99        | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 50      | 0         | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 24        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 49        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 100     | 0         | 23.5                    | 22.3               | 33.0             | -10.7       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | 64QAM      | 1       | 0         | 23.7                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 1       | 49        | 23.8                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 1       | 99        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 50      | 0         | 22.8                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 50      | 24        | 22.8                    | 21.6               | 33.0             | -11.5       |
|                    |            |                 |            | 50      | 49        | 22.8                    | 21.6               | 33.0             | -11.4       |
|                    | 18900      | 1880.0          |            | 100     | 0         | 22.8                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 1       | 0         | 23.8                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 1       | 49        | 23.8                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 1       | 99        | 23.8                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 50      | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 50      | 24        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    | 19100      | 1900.0          |            | 50      | 49        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 100     | 0         | 22.6                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 1       | 0         | 23.8                    | 22.6               | 33.0             | -10.5       |
|                    |            |                 |            | 1       | 49        | 23.6                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 99        | 23.8                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 50      | 0         | 22.6                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 50      | 24        | 22.7                    | 21.4               | 33.0             | -11.6       |
|                    |            |                 |            | 50      | 49        | 22.7                    | 21.5               | 33.0             | -11.5       |
|                    |            |                 |            | 100     | 0         | 22.7                    | 21.4               | 33.0             | -11.6       |

### 7.1.2. LTE BAND 4

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | QPSK       | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 2         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 5         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 1         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    | 20175      | 1732.5          |            | 6       | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 2         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 5         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 1         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 2         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 6       | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    | 20393      | 1754.3          |            | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 2         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 1       | 5         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 3       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 1         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 6       | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | 16QAM      | 1       | 0         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 2         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 5         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 3       | 0         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 3       | 1         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 3       | 2         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    | 20175      | 1732.5          |            | 6       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 0         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 2         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 5         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 3       | 0         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 3       | 1         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    | 20393      | 1754.3          |            | 3       | 2         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 6       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 0         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 2         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 1       | 5         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 3       | 0         | 24.7                    | 22.5               | 30.0             | -7.5        |
|                    |            |                 |            | 3       | 1         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 3       | 2         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 6       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | 64QAM      | 1       | 0         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 2         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 5         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 3       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 3       | 1         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 3       | 2         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    | 20175      | 1732.5          |            | 6       | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 2         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 5         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 3       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 3       | 1         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    | 20393      | 1754.3          |            | 3       | 2         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 6       | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 2         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 5         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 3       | 0         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 3       | 1         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 3       | 2         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 6       | 0         | 22.7                    | 20.5               | 30.0             | -9.5        |

**OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)**

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | QPSK       | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 14        | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 8       | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 8       | 4         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 8       | 7         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    | 20175      | 1732.5          |            | 15      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 14        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 8       | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 8       | 4         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 8       | 7         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 15      | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    | 20385      | 1753.5          |            | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 14        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 8       | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 8       | 4         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 8       | 7         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 15      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | 16QAM      | 1       | 0         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 1       | 7         | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 14        | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 8       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 4         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 7         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    | 20175      | 1732.5          |            | 15      | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 0         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 1       | 7         | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 1       | 14        | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 8       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 4         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    | 20385      | 1753.5          |            | 8       | 7         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 15      | 0         | 23.5                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 0         | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 7         | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 14        | 24.6                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 8       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 4         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 7         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 15      | 0         | 23.5                    | 21.3               | 30.0             | -8.7        |

| Antenna Gain (dBi) |            | -2.2            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | 64QAM      | 1       | 0         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 7         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 14        | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 8       | 4         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 8       | 7         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    | 20175      | 1732.5          |            | 15      | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 7         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 14        | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 8       | 0         | 22.7                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 8       | 4         | 22.7                    | 20.5               | 30.0             | -9.5        |
|                    | 20385      | 1753.5          |            | 8       | 7         | 22.7                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 15      | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 7         | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 14        | 23.7                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 8       | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 8       | 4         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 8       | 7         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 15      | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |

### 7.1.3. LTE BAND 5

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | QPSK       | 1       | 0         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 2         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 5         | 24.8                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 3       | 0         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 3       | 1         | 24.7                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 3       | 2         | 24.7                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 6       | 0         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    | 20525      | 836.5           |            | 1       | 0         | 24.8                    | 19.5              | 38.45           | -19.0       |
|                    |            |                 |            | 1       | 2         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 1       | 5         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 3       | 0         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 3       | 1         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 3       | 2         | 24.8                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 6       | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    | 20643      | 848.3           |            | 1       | 0         | 24.8                    | 19.5              | 38.45           | -19.0       |
|                    |            |                 |            | 1       | 2         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 5         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 3       | 0         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 3       | 1         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 3       | 2         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 6       | 0         | 23.7                    | 18.3              | 38.45           | -20.1       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | 16QAM      | 1       | 0         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    | 20525      | 836.5           |            | 6       | 0         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 1       | 2         | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 6       | 0         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    | 20643      | 848.3           |            | 1       | 0         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 3       | 0         | 23.8                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 17.6              | 38.45           | -20.9       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | 64QAM      | 1       | 0         | 23.2                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 17.8              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 3       | 0         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 3       | 1         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 3       | 2         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    | 20525      | 836.5           |            | 6       | 0         | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 17.8              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 3       | 0         | 23.1                    | 17.8              | 38.45           | -20.7       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    | 20643      | 848.3           |            | 3       | 2         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 6       | 0         | 22.1                    | 16.7              | 38.45           | -21.8       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 3       | 0         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 3       | 2         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 6       | 0         | 22.0                    | 16.7              | 38.45           | -21.8       |

**OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)**

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | QPSK       | 1       | 0         | 24.6                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 1       | 7         | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 14        | 24.6                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 8       | 0         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 8       | 4         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 8       | 7         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    | 20525      | 836.5           |            | 15      | 0         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 14        | 24.7                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 8       | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 8       | 4         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    | 20635      | 847.5           |            | 8       | 7         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 15      | 0         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 19.5              | 38.45           | -19.0       |
|                    |            |                 |            | 1       | 14        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 8       | 0         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 8       | 4         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 8       | 7         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 15      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | 16QAM      | 1       | 0         | 23.8                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 7         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 14        | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 8       | 0         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    | 20525      | 836.5           |            | 15      | 0         | 22.8                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 7         | 23.8                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 14        | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 8       | 0         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 4         | 22.7                    | 17.4              | 38.45           | -21.1       |
|                    | 20635      | 847.5           |            | 8       | 7         | 22.7                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 15      | 0         | 22.7                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 0         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 7         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 8       | 0         | 22.7                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 15      | 0         | 22.7                    | 17.4              | 38.45           | -21.1       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | 64QAM      | 1       | 0         | 22.9                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 1       | 7         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 14        | 22.9                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 8       | 0         | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 8       | 4         | 21.9                    | 16.5              | 38.45           | -21.9       |
|                    |            |                 |            | 8       | 7         | 21.9                    | 16.5              | 38.45           | -22.0       |
|                    | 20525      | 836.5           |            | 15      | 0         | 21.9                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 7         | 22.9                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 1       | 14        | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 0         | 21.9                    | 16.6              | 38.45           | -21.9       |
|                    |            |                 |            | 8       | 4         | 21.9                    | 16.6              | 38.45           | -21.9       |
|                    | 20635      | 847.5           |            | 8       | 7         | 21.9                    | 16.6              | 38.45           | -21.9       |
|                    |            |                 |            | 15      | 0         | 21.9                    | 16.5              | 38.45           | -21.9       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 7         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 14        | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 8       | 0         | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 8       | 4         | 21.8                    | 16.4              | 38.45           | -22.0       |
|                    |            |                 |            | 8       | 7         | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 15      | 0         | 21.8                    | 16.5              | 38.45           | -22.0       |

**OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)**

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | QPSK       | 1       | 0         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    | 20525      | 836.5           |            | 25      | 0         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 19.4              | 38.45           | -19.0       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    | 20625      | 846.5           |            | 1       | 0         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | 16QAM      | 1       | 0         | 24.1                    | 18.8              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 12        | 24.1                    | 18.7              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 18.8              | 38.45           | -19.7       |
|                    |            |                 |            | 12      | 0         | 23.1                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 6         | 23.0                    | 17.6              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 17.6              | 38.45           | -20.9       |
|                    | 20525      | 836.5           |            | 25      | 0         | 23.0                    | 17.6              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 0         | 24.1                    | 18.7              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 12        | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 12      | 0         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 12      | 6         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    | 20625      | 846.5           |            | 1       | 0         | 24.1                    | 18.7              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 12        | 24.1                    | 18.8              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 18.6              | 38.45           | -19.8       |
|                    |            |                 |            | 12      | 0         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 6         | 23.1                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 11        | 23.1                    | 17.8              | 38.45           | -20.7       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 17.7              | 38.45           | -20.7       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | 64QAM      | 1       | 0         | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 17.6              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 17.6              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 0         | 22.0                    | 16.7              | 38.45           | -21.8       |
|                    |            |                 |            | 12      | 6         | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 12      | 11        | 22.1                    | 16.8              | 38.45           | -21.7       |
|                    | 20525      | 836.5           |            | 25      | 0         | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 12        | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 12      | 0         | 22.1                    | 16.8              | 38.45           | -21.7       |
|                    |            |                 |            | 12      | 6         | 22.1                    | 16.7              | 38.45           | -21.7       |
|                    | 20625      | 846.5           |            | 12      | 11        | 22.0                    | 16.7              | 38.45           | -21.8       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 16.7              | 38.45           | -21.8       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 12      | 0         | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 12      | 6         | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 12      | 11        | 22.0                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 16.6              | 38.45           | -21.8       |

**OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)**

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | QPSK       | 1       | 0         | 24.6                    | 19.3              | 38.45           | -19.2       |
|                    |            |                 |            | 1       | 24        | 24.6                    | 19.2              | 38.45           | -19.2       |
|                    |            |                 |            | 1       | 49        | 24.8                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 12        | 23.6                    | 18.3              | 38.45           | -20.2       |
|                    |            |                 |            | 25      | 24        | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    | 20525      | 836.5           |            | 50      | 0         | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 19.4              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 1       | 49        | 24.6                    | 19.2              | 38.45           | -19.2       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 25      | 12        | 23.7                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 24        | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 50      | 0         | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    | 20600      | 844.0           |            | 1       | 0         | 24.6                    | 19.2              | 38.45           | -19.2       |
|                    |            |                 |            | 1       | 24        | 24.6                    | 19.2              | 38.45           | -19.2       |
|                    |            |                 |            | 1       | 49        | 24.7                    | 19.3              | 38.45           | -19.1       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 18.3              | 38.45           | -20.2       |
|                    |            |                 |            | 25      | 12        | 23.7                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 50      | 0         | 23.8                    | 18.5              | 38.45           | -20.0       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | 16QAM      | 1       | 0         | 23.9                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 12        | 22.7                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 24        | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    | 20525      | 836.5           |            | 50      | 0         | 22.8                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 18.5              | 38.45           | -19.9       |
|                    |            |                 |            | 1       | 49        | 23.8                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 25      | 12        | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 25      | 24        | 22.7                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 50      | 0         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    | 20600      | 844.0           |            | 1       | 0         | 23.8                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.5              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 18.6              | 38.45           | -19.9       |
|                    |            |                 |            | 25      | 0         | 22.7                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 12        | 22.7                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 24        | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 17.5              | 38.45           | -20.9       |

| Antenna Gain (dBi) |            | -3.21           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | 64QAM      | 1       | 0         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 49        | 22.9                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 25      | 24        | 21.9                    | 16.6              | 38.45           | -21.9       |
|                    | 20525      | 836.5           |            | 50      | 0         | 21.9                    | 16.5              | 38.45           | -21.9       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 16.4              | 38.45           | -22.1       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 16.4              | 38.45           | -22.1       |
|                    | 20600      | 844.0           |            | 25      | 24        | 21.7                    | 16.4              | 38.45           | -22.1       |
|                    |            |                 |            | 50      | 0         | 21.8                    | 16.4              | 38.45           | -22.0       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.8                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 17.5              | 38.45           | -21.0       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 16.4              | 38.45           | -22.0       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 16.5              | 38.45           | -22.0       |
|                    |            |                 |            | 25      | 24        | 21.9                    | 16.5              | 38.45           | -21.9       |
|                    |            |                 |            | 50      | 0         | 21.8                    | 16.4              | 38.45           | -22.0       |

### 7.1.4. LTE BAND 7

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | QPSK       | 1       | 0         | 25.1                    | 25.3               | 33.0             | -7.7        |
|                    |            |                 |            | 1       | 12        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 12      | 0         | 24.2                    | 24.4               | 33.0             | -8.7        |
|                    |            |                 |            | 12      | 6         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 12      | 11        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    | 21100      | 2535.0          |            | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 25.5               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 12      | 6         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 12      | 11        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    | 21425      | 2567.5          |            | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 12        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 12      | 6         | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    |            |                 |            | 12      | 11        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | 16QAM      | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.4        |
|                    |            |                 |            | 12      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 6         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 11        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 21100      | 2535.0          |            | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.4        |
|                    |            |                 |            | 12      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 6         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 11        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 21425      | 2567.5          |            | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 12        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 12      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 6         | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 12      | 11        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 25      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | 64QAM      | 1       | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 12      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 12      | 6         | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    | 21100      | 2535.0          |            | 25      | 0         | 22.5                    | 22.7               | 33.0             | -10.4       |
|                    |            |                 |            | 1       | 0         | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 12      | 6         | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    | 21425      | 2567.5          |            | 1       | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 6         | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 25      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |

**OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | QPSK       | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 25      | 12        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 25      | 24        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    | 21100      | 2535.0          |            | 50      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 0         | 25.2                    | 25.4               | 33.0             | -7.7        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 25      | 12        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 25      | 24        | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    |            |                 |            | 50      | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    | 21400      | 2565.0          |            | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 25.4               | 33.0             | -7.7        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 25      | 12        | 24.2                    | 24.4               | 33.0             | -8.7        |
|                    |            |                 |            | 25      | 24        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | 16QAM      | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 24        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 21100      | 2535.0          |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 12        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 24        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 23.6               | 33.0             | -9.5        |
|                    | 21400      | 2565.0          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | 64QAM      | 1       | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 49        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 25      | 12        | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 25      | 24        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    | 21100      | 2535.0          |            | 50      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 1       | 0         | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 49        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 25      | 12        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 25      | 24        | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    |            |                 |            | 50      | 0         | 22.5                    | 22.7               | 33.0             | -10.3       |
|                    | 21400      | 2565.0          |            | 1       | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 49        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 0         | 22.5                    | 22.7               | 33.0             | -10.4       |
|                    |            |                 |            | 25      | 12        | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |

**OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | QPSK       | 1       | 0         | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 25.4               | 33.0             | -7.7        |
|                    |            |                 |            | 36      | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 36      | 16        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 36      | 35        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    | 21100      | 2535.0          |            | 75      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 0         | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 36      | 16        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 36      | 35        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 75      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    | 21375      | 2562.5          |            | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 36      | 16        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 36      | 35        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 75      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | 16QAM      | 1       | 0         | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    |            |                 |            | 1       | 37        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 1       | 74        | 24.1                    | 24.3               | 33.0             | -8.7        |
|                    |            |                 |            | 36      | 0         | 23.3                    | 23.5               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 16        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 36      | 35        | 23.3                    | 23.5               | 33.0             | -9.6        |
|                    |            |                 |            | 75      | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    | 21100      | 2535.0          |            | 1       | 0         | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 1       | 37        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 74        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 36      | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 36      | 16        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 35        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 75      | 0         | 23.1                    | 23.3               | 33.0             | -9.7        |
|                    | 21375      | 2562.5          |            | 1       | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 37        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 74        | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    |            |                 |            | 36      | 0         | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 16        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 36      | 35        | 23.1                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 75      | 0         | 23.2                    | 23.4               | 33.0             | -9.6        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | 64QAM      | 1       | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 37        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 36      | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 36      | 16        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 36      | 35        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 75      | 0         | 22.3                    | 22.5               | 33.0             | -10.6       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 1       | 37        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 36      | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 36      | 16        | 22.2                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 36      | 35        | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 75      | 0         | 22.2                    | 22.4               | 33.0             | -10.6       |
|                    | 21375      | 2562.5          |            | 1       | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 1       | 37        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 36      | 0         | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 36      | 16        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 36      | 35        | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 75      | 0         | 22.4                    | 22.6               | 33.0             | -10.5       |

**OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | QPSK       | 1       | 0         | 25.1                    | 25.3               | 33.0             | -7.7        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 25.5               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 99        | 25.1                    | 25.3               | 33.0             | -7.7        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 24        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 49        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    | 21100      | 2535.0          |            | 100     | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 0         | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 25.4               | 33.0             | -7.6        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 24        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 49        | 24.3                    | 24.5               | 33.0             | -8.6        |
|                    |            |                 |            | 100     | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    | 21350      | 2560.0          |            | 1       | 0         | 25.3                    | 25.5               | 33.0             | -7.5        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 25.5               | 33.0             | -7.6        |
|                    |            |                 |            | 1       | 99        | 25.1                    | 25.3               | 33.0             | -7.7        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 24        | 24.4                    | 24.6               | 33.0             | -8.5        |
|                    |            |                 |            | 50      | 49        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 100     | 0         | 24.4                    | 24.6               | 33.0             | -8.5        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | 16QAM      | 1       | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 99        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 50      | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 50      | 24        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 50      | 49        | 23.2                    | 23.4               | 33.0             | -9.7        |
|                    |            |                 |            | 100     | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    | 21100      | 2535.0          |            | 1       | 0         | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 99        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 50      | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 50      | 24        | 23.4                    | 23.6               | 33.0             | -9.5        |
|                    |            |                 |            | 50      | 49        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 100     | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    | 21350      | 2560.0          |            | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 99        | 24.2                    | 24.4               | 33.0             | -8.6        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 24        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 49        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 100     | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | 64QAM      | 1       | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 1       | 49        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 99        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 50      | 0         | 22.2                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 24        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 50      | 49        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    | 21100      | 2535.0          |            | 100     | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 1       | 49        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 99        | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 50      | 0         | 22.2                    | 22.4               | 33.0             | -10.6       |
|                    |            |                 |            | 50      | 24        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 50      | 49        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 100     | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    | 21350      | 2560.0          |            | 1       | 0         | 23.2                    | 23.4               | 33.0             | -9.6        |
|                    |            |                 |            | 1       | 49        | 23.4                    | 23.6               | 33.0             | -9.5        |
|                    |            |                 |            | 1       | 99        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 50      | 0         | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 50      | 24        | 22.4                    | 22.6               | 33.0             | -10.4       |
|                    |            |                 |            | 50      | 49        | 22.3                    | 22.5               | 33.0             | -10.5       |
|                    |            |                 |            | 100     | 0         | 22.4                    | 22.6               | 33.0             | -10.4       |

### 7.1.5. LTE BAND 12

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 12 (1.4MHz)

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | QPSK       | 1       | 0         | 24.8                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 2         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 5         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 3       | 0         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 3       | 1         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 3       | 2         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    | 23095      | 707.5           |            | 6       | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 1       | 0         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 2         | 24.8                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 5         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 3       | 0         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 3       | 1         | 24.5                    | 18.0              | 34.77           | -16.8       |
|                    | 23173      | 715.3           |            | 3       | 2         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 6       | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 2         | 24.7                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 5         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 3       | 0         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 3       | 1         | 24.6                    | 18.0              | 34.77           | -16.7       |
|                    |            |                 |            | 3       | 2         | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 6       | 0         | 23.7                    | 17.1              | 34.77           | -17.7       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | 16QAM      | 1       | 0         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 2         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 3       | 1         | 24.0                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    | 23095      | 707.5           |            | 6       | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 2         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 3       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 3       | 1         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    | 23173      | 715.3           |            | 3       | 2         | 24.0                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 2         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 6       | 0         | 22.8                    | 16.2              | 34.77           | -18.5       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | 64QAM      | 1       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    | 23095      | 707.5           |            | 6       | 0         | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 16.6              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    | 23173      | 715.3           |            | 3       | 2         | 23.2                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 6       | 0         | 22.1                    | 15.5              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 16.6              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 15.6              | 34.77           | -19.2       |

**OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)**

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | QPSK       | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 14        | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 8       | 0         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 8       | 4         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 8       | 7         | 23.8                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 15      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    | 23095      | 707.5           |            | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 14        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 8       | 0         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 8       | 4         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 8       | 7         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 15      | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    | 23165      | 714.5           |            | 1       | 0         | 24.8                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 14        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 8       | 0         | 23.8                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 8       | 4         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 8       | 7         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 15      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | 16QAM      | 1       | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    | 23095      | 707.5           |            | 15      | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 7         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    | 23165      | 714.5           |            | 8       | 7         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 15      | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 7         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 14        | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 15      | 0         | 23.0                    | 16.5              | 34.77           | -18.3       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | 64QAM      | 1       | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 7         | 23.1                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 14        | 23.1                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 8       | 4         | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 8       | 7         | 22.2                    | 15.6              | 34.77           | -19.2       |
|                    | 23095      | 707.5           |            | 15      | 0         | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 16.6              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 14        | 23.2                    | 16.6              | 34.77           | -18.1       |
|                    |            |                 |            | 8       | 0         | 22.0                    | 15.4              | 34.77           | -19.3       |
|                    |            |                 |            | 8       | 4         | 22.0                    | 15.4              | 34.77           | -19.4       |
|                    | 23165      | 714.5           |            | 8       | 7         | 22.0                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 15      | 0         | 22.2                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 16.5              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 7         | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 14        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 8       | 0         | 22.1                    | 15.5              | 34.77           | -19.2       |
|                    |            |                 |            | 8       | 4         | 22.1                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 8       | 7         | 22.1                    | 15.5              | 34.77           | -19.2       |
|                    |            |                 |            | 15      | 0         | 22.1                    | 15.5              | 34.77           | -19.2       |

**OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)**

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | QPSK       | 1       | 0         | 24.7                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 12        | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 12      | 0         | 23.6                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 12      | 6         | 23.6                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 17.1              | 34.77           | -17.6       |
|                    | 23095      | 707.5           |            | 25      | 0         | 23.7                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 18.1              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 12      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    | 23155      | 713.5           |            | 1       | 0         | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 12        | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 1       | 24        | 24.5                    | 18.0              | 34.77           | -16.8       |
|                    |            |                 |            | 12      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 6         | 23.6                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 12      | 11        | 23.6                    | 17.0              | 34.77           | -17.7       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.1              | 34.77           | -17.7       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | 16QAM      | 1       | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 12        | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    | 23095      | 707.5           |            | 1       | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 12        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    | 23155      | 713.5           |            | 1       | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 12        | 23.7                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 1       | 24        | 23.7                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.3              | 34.77           | -18.5       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | 64QAM      | 1       | 0         | 22.8                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 1       | 12        | 22.7                    | 16.1              | 34.77           | -18.7       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 0         | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 12      | 6         | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 12      | 11        | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    | 23095      | 707.5           |            | 25      | 0         | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 12        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 0         | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 12      | 6         | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    | 23155      | 713.5           |            | 12      | 11        | 22.0                    | 15.4              | 34.77           | -19.3       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 1       | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 12        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 24        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 0         | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 12      | 6         | 21.8                    | 15.2              | 34.77           | -19.5       |
|                    |            |                 |            | 12      | 11        | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 25      | 0         | 21.9                    | 15.3              | 34.77           | -19.5       |

**OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)**

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | QPSK       | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 49        | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 12        | 23.8                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    | 23095      | 707.5           |            | 50      | 0         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 49        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 12        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 50      | 0         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    | 23130      | 711.0           |            | 1       | 0         | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.1              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 49        | 24.6                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 12        | 23.8                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 50      | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | 16QAM      | 1       | 0         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 12        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 24        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    | 23095      | 707.5           |            | 50      | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 12        | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    | 23130      | 711.0           |            | 25      | 24        | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 12        | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 24        | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | 64QAM      | 1       | 0         | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 49        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 15.2              | 34.77           | -19.5       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 25      | 24        | 21.9                    | 15.3              | 34.77           | -19.5       |
|                    | 23095      | 707.5           |            | 50      | 0         | 21.9                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 49        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 25      | 12        | 21.9                    | 15.3              | 34.77           | -19.5       |
|                    | 23130      | 711.0           |            | 25      | 24        | 21.9                    | 15.3              | 34.77           | -19.4       |
|                    |            |                 |            | 50      | 0         | 21.9                    | 15.3              | 34.77           | -19.4       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 49        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 25      | 0         | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 25      | 12        | 21.9                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 25      | 24        | 21.8                    | 15.3              | 34.77           | -19.5       |
|                    |            |                 |            | 50      | 0         | 22.0                    | 15.4              | 34.77           | -19.3       |

### 7.1.6. LTE BAND 13

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

| Antenna Gain (dBi) |            | -3.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23207      | 779.5           | QPSK       | 1       | 0         | 24.7                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 18.7              | 34.77           | -16.1       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 12      | 0         | 23.6                    | 17.7              | 34.77           | -17.1       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 17.7              | 34.77           | -17.1       |
|                    |            |                 |            | 12      | 11        | 23.6                    | 17.6              | 34.77           | -17.2       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.7              | 34.77           | -17.1       |
|                    | 23230      | 782.0           |            | 1       | 0         | 24.7                    | 18.7              | 34.77           | -16.1       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 18.8              | 34.77           | -15.9       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.7              | 34.77           | -16.1       |
|                    |            |                 |            | 12      | 0         | 23.7                    | 17.7              | 34.77           | -17.1       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    | 23255      | 784.5           |            | 1       | 0         | 24.8                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.7              | 34.77           | -16.1       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 17.8              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.8              | 34.77           | -16.9       |

| Antenna Gain (dBi) |            | -3.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23207      | 779.5           | 16QAM      | 1       | 0         | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 12        | 23.8                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 17.8              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 16.9              | 34.77           | -17.8       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 17.0              | 34.77           | -17.8       |
|                    | 23230      | 782.0           |            | 1       | 0         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 22.7                    | 16.7              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    | 23255      | 784.5           |            | 1       | 0         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.9              | 34.77           | -16.8       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 17.8              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.8              | 34.77           | -17.9       |

| Antenna Gain (dBi) |            | -3.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23205      | 779.5           | 64QAM      | 1       | 0         | 23.2                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 12        | 23.1                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 0         | 22.1                    | 16.1              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    | 23230      | 782.0           |            | 1       | 0         | 23.1                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 16.3              | 34.77           | -18.5       |
|                    | 23255      | 784.5           |            | 1       | 0         | 23.1                    | 17.1              | 34.77           | -17.7       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 16.3              | 34.77           | -18.4       |

**OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)**

| Antenna Gain (dBi) |            | -3.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23230      | 782.0           | QPSK       | 1       | 0         | 24.7                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.8              | 34.77           | -16.0       |
|                    |            |                 |            | 1       | 49        | 24.7                    | 18.7              | 34.77           | -16.1       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.7              | 34.77           | -17.0       |
|                    |            |                 |            | 25      | 12        | 23.7                    | 17.7              | 34.77           | -17.0       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 | 16QAM      | 50      | 0         | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.0              | 34.77           | -16.8       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 18.0              | 34.77           | -16.8       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 25      | 12        | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 25      | 24        | 22.8                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 16.9              | 34.77           | -17.9       |
|                    |            |                 | 64QAM      | 1       | 0         | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 17.0              | 34.77           | -17.7       |
|                    |            |                 |            | 1       | 49        | 23.0                    | 17.0              | 34.77           | -17.7       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 15.8              | 34.77           | -19.0       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 15.9              | 34.77           | -18.9       |
|                    |            |                 |            | 25      | 24        | 21.9                    | 15.9              | 34.77           | -18.9       |
|                    |            |                 |            | 50      | 0         | 22.0                    | 16.0              | 34.77           | -18.7       |

### 7.1.7. LTE BAND 17

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | QPSK       | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    | 23790      | 710.0           |            | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    | 23825      | 713.5           |            | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.1              | 34.77           | -16.7       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 6         | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 12      | 11        | 23.7                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | 16QAM      | 1       | 0         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 16.2              | 34.77           | -18.6       |
|                    | 23790      | 710.0           |            | 1       | 0         | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 12      | 0         | 23.0                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 12      | 6         | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    | 23825      | 713.5           |            | 1       | 0         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 12        | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 12      | 0         | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.3              | 34.77           | -18.4       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | 64QAM      | 1       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 12        | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 12      | 0         | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 15.6              | 34.77           | -19.1       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 15.7              | 34.77           | -19.1       |
|                    | 23790      | 710.0           |            | 25      | 0         | 22.2                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 15.7              | 34.77           | -19.1       |
|                    | 23825      | 713.5           |            | 12      | 11        | 22.2                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 24        | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 0         | 22.1                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 12      | 6         | 22.1                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 12      | 11        | 22.0                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 25      | 0         | 22.1                    | 15.5              | 34.77           | -19.3       |

**OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)**

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | QPSK       | 1       | 0         | 24.8                    | 18.2              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 49        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 12        | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 25      | 24        | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    | 23790      | 710.0           |            | 50      | 0         | 23.8                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 49        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 25      | 0         | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 12        | 23.8                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 25      | 24        | 23.9                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 50      | 0         | 23.9                    | 17.4              | 34.77           | -17.4       |
|                    | 23800      | 711.0           |            | 1       | 0         | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 18.2              | 34.77           | -16.6       |
|                    |            |                 |            | 1       | 49        | 24.8                    | 18.3              | 34.77           | -16.5       |
|                    |            |                 |            | 25      | 0         | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 25      | 12        | 23.9                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 25      | 24        | 23.7                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 50      | 0         | 23.7                    | 17.2              | 34.77           | -17.6       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | 16QAM      | 1       | 0         | 24.1                    | 17.6              | 34.77           | -17.2       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 17.5              | 34.77           | -17.2       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 16.5              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 12        | 23.1                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 25      | 24        | 23.1                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 50      | 0         | 23.0                    | 16.4              | 34.77           | -18.3       |
|                    | 23790      | 710.0           |            | 1       | 0         | 24.1                    | 17.6              | 34.77           | -17.2       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 24        | 22.9                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 50      | 0         | 23.0                    | 16.4              | 34.77           | -18.4       |
|                    | 23800      | 711.0           |            | 1       | 0         | 24.0                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 17.6              | 34.77           | -17.2       |
|                    |            |                 |            | 1       | 49        | 24.1                    | 17.5              | 34.77           | -17.3       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 12        | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 50      | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |

| Antenna Gain (dBi) |            | -4.4            |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | 64QAM      | 1       | 0         | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 16.6              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 49        | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 15.6              | 34.77           | -19.1       |
|                    |            |                 |            | 25      | 12        | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 25      | 24        | 22.2                    | 15.6              | 34.77           | -19.2       |
|                    | 23790      | 710.0           |            | 50      | 0         | 22.1                    | 15.5              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 16.7              | 34.77           | -18.1       |
|                    |            |                 |            | 1       | 49        | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 25      | 12        | 22.1                    | 15.5              | 34.77           | -19.2       |
|                    | 23800      | 711.0           |            | 25      | 24        | 22.0                    | 15.4              | 34.77           | -19.3       |
|                    |            |                 |            | 50      | 0         | 22.1                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 16.6              | 34.77           | -18.2       |
|                    |            |                 |            | 1       | 49        | 23.1                    | 16.5              | 34.77           | -18.2       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 25      | 12        | 22.2                    | 15.6              | 34.77           | -19.2       |
|                    |            |                 |            | 25      | 24        | 22.2                    | 15.7              | 34.77           | -19.1       |
|                    |            |                 |            | 50      | 0         | 22.1                    | 15.6              | 34.77           | -19.2       |

### 7.1.8. LTE BAND 25

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | QPSK       | 1       | 0         | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 2         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 5         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 1         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    | 26365      | 1882.5          |            | 6       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 2         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 5         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 1         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 2         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 6       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 26683      | 1914.3          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 2         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 5         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 3       | 1         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 3       | 2         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 6       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | 16QAM      | 1       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 2         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 5         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 3       | 1         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 3       | 2         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 26365      | 1882.5          |            | 6       | 0         | 23.2                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 2         | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 5         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 1         | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    | 26683      | 1914.3          |            | 3       | 2         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 6       | 0         | 23.1                    | 21.8               | 33.0             | -11.2       |
|                    |            |                 |            | 1       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 2         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 5         | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 1         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 3       | 2         | 24.1                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 6       | 0         | 23.1                    | 21.9               | 33.0             | -11.2       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | 64QAM      | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26365      | 1882.5          |            | 6       | 0         | 22.2                    | 20.9               | 33.0             | -12.1       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 5         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 3       | 0         | 23.1                    | 21.9               | 33.0             | -11.2       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26683      | 1914.3          |            | 3       | 2         | 23.1                    | 21.8               | 33.0             | -11.2       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 21.8               | 33.0             | -11.2       |
|                    |            |                 |            | 3       | 2         | 23.1                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 20.9               | 33.0             | -12.1       |

**OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | QPSK       | 1       | 0         | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 1       | 7         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 14        | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 8       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 4         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 7         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 26365      | 1882.5          |            | 15      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 7         | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 14        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 8       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 8       | 4         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    | 26675      | 1913.5          |            | 8       | 7         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 15      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 1       | 7         | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 14        | 25.1                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 8       | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 8       | 4         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 7         | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 15      | 0         | 24.2                    | 23.0               | 33.0             | -10.1       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | 16QAM      | 1       | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 7         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 14        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 8       | 4         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 8       | 7         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    | 26365      | 1882.5          |            | 15      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 0         | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 7         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 14        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 8       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 8       | 4         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26675      | 1913.5          |            | 8       | 7         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 15      | 0         | 23.1                    | 21.9               | 33.0             | -11.2       |
|                    |            |                 |            | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 7         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 14        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 8       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 4         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 8       | 7         | 23.2                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 15      | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | 64QAM      | 1       | 0         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 7         | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 14        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    | 26365      | 1882.5          |            | 15      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 7         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 14        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 8       | 0         | 22.3                    | 21.1               | 33.0             | -12.0       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 15      | 0         | 22.2                    | 21.0               | 33.0             | -12.1       |
|                    | 26675      | 1913.5          |            | 1       | 0         | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 1       | 14        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 8       | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 15      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |

**OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | QPSK       | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 12        | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 6         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 11        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 26365      | 1882.5          |            | 25      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 6         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    | 26665      | 1912.5          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 12        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 6         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 11        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | 16QAM      | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 12        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 12      | 6         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 12      | 11        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 24.4                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 1       | 12        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 12      | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 12      | 6         | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 12      | 11        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    | 26665      | 1912.5          |            | 1       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 12        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 12      | 6         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 12      | 11        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 25      | 0         | 23.4                    | 22.2               | 33.0             | -10.9       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | 64QAM      | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 12        | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 24        | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 12      | 0         | 22.4                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 6         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 21.3               | 33.0             | -11.8       |
|                    | 26365      | 1882.5          |            | 25      | 0         | 22.5                    | 21.3               | 33.0             | -11.7       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 12      | 0         | 22.4                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 6         | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    | 26665      | 1912.5          |            | 12      | 11        | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 1       | 0         | 23.5                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 12        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 6         | 22.5                    | 21.3               | 33.0             | -11.8       |
|                    |            |                 |            | 12      | 11        | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 25      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |

**OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | QPSK       | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.1               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 12        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    | 26365      | 1882.5          |            | 50      | 0         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 12        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    | 26640      | 1910.0          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 12        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | 16QAM      | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 0         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 25      | 12        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 24        | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    | 26365      | 1882.5          |            | 50      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 49        | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 12        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 25      | 24        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 50      | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26640      | 1910.0          |            | 1       | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 25      | 12        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 25      | 24        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 0         | 23.2                    | 22.0               | 33.0             | -11.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | 64QAM      | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 25      | 12        | 22.3                    | 21.1               | 33.0             | -12.0       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    | 26365      | 1882.5          |            | 50      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 25      | 12        | 22.2                    | 20.9               | 33.0             | -12.1       |
|                    | 26640      | 1910.0          |            | 25      | 24        | 22.2                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 50      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 22.2               | 33.0             | -10.9       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 25      | 12        | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 25      | 24        | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |

**OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | QPSK       | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 37        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 75      | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    | 26365      | 1882.5          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 37        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 75      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    | 26615      | 1907.5          |            | 1       | 0         | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 37        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 36      | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 36      | 16        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 75      | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | 16QAM      | 1       | 0         | 24.3                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 37        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 36      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 36      | 16        | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 36      | 35        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 75      | 0         | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 37        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 74        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 36      | 16        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 36      | 35        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 75      | 0         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    | 26615      | 1907.5          |            | 1       | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 23.2               | 33.0             | -9.8        |
|                    |            |                 |            | 36      | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 36      | 16        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 36      | 35        | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 75      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | 64QAM      | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 37        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 74        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 36      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 36      | 16        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 36      | 35        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 75      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 37        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 74        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 36      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 36      | 16        | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 36      | 35        | 22.2                    | 20.9               | 33.0             | -12.1       |
|                    |            |                 |            | 75      | 0         | 22.3                    | 21.1               | 33.0             | -12.0       |
|                    | 26615      | 1907.5          |            | 1       | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 37        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 74        | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 36      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 36      | 16        | 22.3                    | 21.0               | 33.0             | -12.0       |
|                    |            |                 |            | 36      | 35        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 75      | 0         | 22.3                    | 21.0               | 33.0             | -12.0       |

**OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)**

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | QPSK       | 1       | 0         | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    | 26365      | 1882.5          |            | 100     | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 99        | 25.3                    | 24.1               | 33.0             | -8.9        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 100     | 0         | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    | 26590      | 1905.0          |            | 1       | 0         | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 49        | 24.4                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 100     | 0         | 24.6                    | 23.3               | 33.0             | -9.7        |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | 16QAM      | 1       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 24.2                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 99        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 50      | 24        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 50      | 49        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 100     | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 24.3                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 99        | 24.2                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 50      | 24        | 23.3                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 50      | 49        | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 100     | 0         | 23.2                    | 21.9               | 33.0             | -11.1       |
|                    | 26590      | 1905.0          |            | 1       | 0         | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 24.3                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 99        | 24.2                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 24        | 23.3                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 49        | 23.2                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 100     | 0         | 23.3                    | 22.0               | 33.0             | -11.0       |

| Antenna Gain (dBi) |            | -1.27           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | 64QAM      | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 49        | 23.5                    | 22.3               | 33.0             | -10.7       |
|                    |            |                 |            | 1       | 99        | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 50      | 0         | 22.3                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 50      | 24        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 50      | 49        | 22.4                    | 21.2               | 33.0             | -11.9       |
|                    | 26365      | 1882.5          |            | 100     | 0         | 22.4                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 99        | 23.4                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 50      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 50      | 24        | 22.4                    | 21.2               | 33.0             | -11.8       |
|                    | 26590      | 1905.0          |            | 50      | 49        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 100     | 0         | 22.4                    | 21.2               | 33.0             | -11.9       |
|                    |            |                 |            | 1       | 0         | 23.5                    | 22.2               | 33.0             | -10.8       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 99        | 23.4                    | 22.2               | 33.0             | -10.9       |
|                    |            |                 |            | 50      | 0         | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 50      | 24        | 22.5                    | 21.2               | 33.0             | -11.8       |
|                    |            |                 |            | 50      | 49        | 22.4                    | 21.1               | 33.0             | -11.9       |
|                    |            |                 |            | 100     | 0         | 22.4                    | 21.1               | 33.0             | -11.9       |

### 7.1.9. LTE BAND 26

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | QPSK       | 1       | 0         | 24.6                    | 18.9              | 50.00           | -31.1       |
|                    |            |                 |            | 1       | 2         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 1       | 5         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 3       | 0         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 3       | 1         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 3       | 2         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    | 26740      | 819.0           |            | 6       | 0         | 23.6                    | 18.0              | 50.00           | -32.0       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 2         | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 5         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 0         | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 1         | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 2         | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 6       | 0         | 23.8                    | 18.1              | 50.00           | -31.9       |
|                    | 26783      | 823.3           |            | 1       | 0         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 2         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 5         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 0         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 1         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 3       | 2         | 24.7                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 6       | 0         | 23.7                    | 18.1              | 50.00           | -31.9       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | 16QAM      | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    | 26740      | 819.0           |            | 6       | 0         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 3       | 0         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 3       | 1         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    | 26783      | 823.3           |            | 3       | 2         | 23.9                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 6       | 0         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 0         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 3       | 1         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 3       | 2         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | 64QAM      | 1       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 5         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 3       | 0         | 22.9                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 3       | 1         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 3       | 2         | 22.9                    | 17.2              | 50.00           | -32.8       |
|                    | 26740      | 819.0           |            | 6       | 0         | 21.9                    | 16.2              | 50.00           | -33.8       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 5         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 3       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 3       | 1         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    | 26783      | 823.3           |            | 3       | 2         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 6       | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 5         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 3       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 3       | 1         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 3       | 2         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 6       | 0         | 22.0                    | 16.3              | 50.00           | -33.7       |

**OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)**

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | QPSK       | 1       | 0         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 7         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 14        | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 8       | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 4         | 23.7                    | 18.1              | 50.00           | -31.9       |
|                    |            |                 |            | 8       | 7         | 23.8                    | 18.1              | 50.00           | -31.9       |
|                    | 26740      | 819.0           |            | 15      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 14        | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 8       | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 4         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    | 26775      | 822.5           |            | 8       | 7         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 15      | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 7         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 14        | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 8       | 0         | 23.9                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 4         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 7         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 15      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | 16QAM      | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 8       | 0         | 22.8                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 17.1              | 50.00           | -32.9       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 17.1              | 50.00           | -32.9       |
|                    | 26740      | 819.0           |            | 15      | 0         | 22.8                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 14        | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    | 26775      | 822.5           |            | 8       | 7         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 15      | 0         | 22.9                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 14        | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 8       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 8       | 4         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 8       | 7         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 15      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | 64QAM      | 1       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 14        | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 8       | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 8       | 4         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 8       | 7         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    | 26740      | 819.0           |            | 15      | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 14        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 8       | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 8       | 4         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 8       | 7         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 15      | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    | 26775      | 822.5           |            | 1       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 7         | 23.1                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 14        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 8       | 4         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 8       | 7         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 15      | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |

**OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)**

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | QPSK       | 1       | 0         | 24.6                    | 19.0              | 50.00           | -31.0       |
|                    |            |                 |            | 1       | 12        | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 12      | 0         | 23.7                    | 18.1              | 50.00           | -31.9       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 18.1              | 50.00           | -31.9       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    | 26740      | 819.0           |            | 25      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 0         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    | 26765      | 821.5           |            | 12      | 11        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 0         | 24.8                    | 19.2              | 50.00           | -30.8       |
|                    |            |                 |            | 1       | 12        | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 24        | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 12      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 6         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 11        | 23.8                    | 18.1              | 50.00           | -31.9       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | 16QAM      | 1       | 0         | 24.1                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 1       | 12        | 24.0                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 12      | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 6         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 11        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    | 26740      | 819.0           |            | 25      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 12        | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 12      | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 6         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    | 26765      | 821.5           |            | 12      | 11        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 12        | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 24        | 24.1                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 12      | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 6         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | 64QAM      | 1       | 0         | 22.9                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 12      | 6         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 12      | 11        | 22.1                    | 16.4              | 50.00           | -33.6       |
|                    | 26740      | 819.0           |            | 25      | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 12        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 0         | 21.9                    | 16.3              | 50.00           | -33.7       |
|                    |            |                 |            | 12      | 6         | 22.0                    | 16.3              | 50.00           | -33.7       |
|                    | 26765      | 821.5           |            | 12      | 11        | 22.0                    | 16.3              | 50.00           | -33.7       |
|                    |            |                 |            | 25      | 0         | 21.9                    | 16.3              | 50.00           | -33.7       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 12        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 12      | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 12      | 6         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 12      | 11        | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |

**OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)**

| Antenna Gain (dBi) |            | -3.47           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 26740      | 819.0           | QPSK       | 1       | 0         | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 24        | 24.8                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 1       | 49        | 24.7                    | 19.1              | 50.00           | -30.9       |
|                    |            |                 |            | 25      | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 25      | 12        | 23.9                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 25      | 24        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 | 16QAM      | 50      | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 0         | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 24        | 24.2                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 1       | 49        | 24.1                    | 18.5              | 50.00           | -31.5       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 25      | 12        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 | 64QAM      | 50      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 1       | 49        | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 25      | 0         | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 25      | 12        | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 25      | 24        | 22.0                    | 16.4              | 50.00           | -33.6       |
|                    |            |                 |            | 50      | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |

### 7.1.10. LTE BAND 30

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 40813 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

| Antenna Gain (dBi) |            | -1.74           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | QPSK       | 1       | 0         | 23.8                    | 22.1               | 24.0             | -1.9        |
|                    |            |                 |            | 1       | 12        | 23.8                    | 22.0               | 24.0             | -2.0        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 21.9               | 24.0             | -2.1        |
|                    |            |                 |            | 12      | 0         | 22.8                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 12      | 6         | 22.8                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 12      | 11        | 22.7                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 25      | 0         | 22.8                    | 21.0               | 24.0             | -3.0        |
|                    | 27710      | 2310.0          |            | 1       | 0         | 23.8                    | 22.0               | 24.0             | -2.0        |
|                    |            |                 |            | 1       | 12        | 23.6                    | 21.9               | 24.0             | -2.1        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 21.9               | 24.0             | -2.1        |
|                    |            |                 |            | 12      | 0         | 22.7                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 12      | 6         | 22.7                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 12      | 11        | 22.7                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 25      | 0         | 22.8                    | 21.0               | 24.0             | -3.0        |
|                    | 27735      | 2312.5          |            | 1       | 0         | 23.7                    | 22.0               | 24.0             | -2.0        |
|                    |            |                 |            | 1       | 12        | 23.7                    | 21.9               | 24.0             | -2.1        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 22.0               | 24.0             | -2.0        |
|                    |            |                 |            | 12      | 0         | 22.7                    | 20.9               | 24.0             | -3.1        |
|                    |            |                 |            | 12      | 6         | 22.7                    | 20.9               | 24.0             | -3.1        |
|                    |            |                 |            | 12      | 11        | 22.7                    | 20.9               | 24.0             | -3.1        |
|                    |            |                 |            | 25      | 0         | 22.7                    | 20.9               | 24.0             | -3.1        |

| Antenna Gain (dBi) |            | -1.74           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | 16QAM      | 1       | 0         | 22.8                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 1       | 12        | 22.9                    | 21.2               | 24.0             | -2.8        |
|                    |            |                 |            | 1       | 24        | 22.9                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 12      | 0         | 21.9                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 12      | 6         | 21.8                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 12      | 11        | 21.7                    | 20.0               | 24.0             | -4.0        |
|                    |            |                 |            | 25      | 0         | 21.8                    | 20.1               | 24.0             | -3.9        |
|                    | 27710      | 2310.0          |            | 1       | 0         | 22.9                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 1       | 12        | 22.9                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 1       | 24        | 22.9                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 12      | 0         | 21.8                    | 20.0               | 24.0             | -4.0        |
|                    |            |                 |            | 12      | 6         | 21.9                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 12      | 11        | 21.9                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 25      | 0         | 21.9                    | 20.1               | 24.0             | -3.9        |
|                    | 27735      | 2312.5          |            | 1       | 0         | 22.9                    | 21.2               | 24.0             | -2.8        |
|                    |            |                 |            | 1       | 12        | 22.9                    | 21.1               | 24.0             | -2.9        |
|                    |            |                 |            | 1       | 24        | 22.9                    | 21.2               | 24.0             | -2.8        |
|                    |            |                 |            | 12      | 0         | 21.8                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 12      | 6         | 21.8                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 12      | 11        | 21.8                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 25      | 0         | 21.8                    | 20.1               | 24.0             | -3.9        |

| Antenna Gain (dBi) |            | -1.74           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | 64QAM      | 1       | 0         | 22.0                    | 20.3               | 24.0             | -3.7        |
|                    |            |                 |            | 1       | 12        | 22.0                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 1       | 24        | 21.9                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 12      | 0         | 20.9                    | 19.1               | 24.0             | -4.9        |
|                    |            |                 |            | 12      | 6         | 21.0                    | 19.2               | 24.0             | -4.8        |
|                    |            |                 |            | 12      | 11        | 21.0                    | 19.3               | 24.0             | -4.7        |
|                    |            |                 |            | 25      | 0         | 21.0                    | 19.3               | 24.0             | -4.7        |
|                    | 27710      | 2310.0          |            | 1       | 0         | 21.9                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 1       | 12        | 21.9                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 1       | 24        | 22.0                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 12      | 0         | 21.0                    | 19.3               | 24.0             | -4.7        |
|                    |            |                 |            | 12      | 6         | 21.0                    | 19.2               | 24.0             | -4.8        |
|                    |            |                 |            | 12      | 11        | 20.9                    | 19.1               | 24.0             | -4.9        |
|                    |            |                 |            | 25      | 0         | 21.0                    | 19.3               | 24.0             | -4.7        |
|                    | 27735      | 2312.5          |            | 1       | 0         | 22.0                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 1       | 12        | 21.9                    | 20.1               | 24.0             | -3.9        |
|                    |            |                 |            | 1       | 24        | 21.9                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 12      | 0         | 20.9                    | 19.1               | 24.0             | -4.9        |
|                    |            |                 |            | 12      | 6         | 20.9                    | 19.1               | 24.0             | -4.9        |
|                    |            |                 |            | 12      | 11        | 21.0                    | 19.3               | 24.0             | -4.7        |
|                    |            |                 |            | 25      | 0         | 21.0                    | 19.3               | 24.0             | -4.7        |

**OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)**

| Antenna Gain (dBi) |            | -1.74           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 27710      | 2310.0          | QPSK       | 1       | 0         | <b>23.8</b>             | <b>22.1</b>        | 24.0             | -1.9        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 22.0               | 24.0             | -2.0        |
|                    |            |                 |            | 1       | 49        | 23.6                    | 21.8               | 24.0             | -2.2        |
|                    |            |                 |            | 25      | 0         | 22.7                    | 21.0               | 24.0             | -3.0        |
|                    |            |                 |            | 25      | 12        | 22.6                    | 20.8               | 24.0             | -3.2        |
|                    |            |                 |            | 25      | 24        | 22.6                    | 20.8               | 24.0             | -3.2        |
|                    |            |                 |            | 50      | 0         | 22.6                    | 20.9               | 24.0             | -3.1        |
|                    |            |                 | 16QAM      | 1       | 0         | 23.1                    | 21.3               | 24.0             | -2.7        |
|                    |            |                 |            | 1       | 24        | <b>23.1</b>             | <b>21.3</b>        | 24.0             | -2.7        |
|                    |            |                 |            | 1       | 49        | 23.0                    | 21.3               | 24.0             | -2.7        |
|                    |            |                 |            | 25      | 0         | 22.1                    | 20.3               | 24.0             | -3.7        |
|                    |            |                 |            | 25      | 12        | 21.9                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 25      | 24        | 22.0                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 |            | 50      | 0         | 22.0                    | 20.2               | 24.0             | -3.8        |
|                    |            |                 | 64QAM      | 1       | 0         | 22.2                    | 20.4               | 24.0             | -3.6        |
|                    |            |                 |            | 1       | 24        | 22.0                    | 20.3               | 24.0             | -3.7        |
|                    |            |                 |            | 1       | 49        | <b>22.2</b>             | <b>20.5</b>        | 24.0             | -3.5        |
|                    |            |                 |            | 25      | 0         | 21.2                    | 19.4               | 24.0             | -4.6        |
|                    |            |                 |            | 25      | 12        | 21.1                    | 19.4               | 24.0             | -4.6        |
|                    |            |                 |            | 25      | 24        | 21.3                    | 19.5               | 24.0             | -4.5        |
|                    |            |                 |            | 50      | 0         | 21.3                    | 19.5               | 24.0             | -4.5        |

### 7.1.11. LTE BAND 41

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | QPSK       | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 12      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 6         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 12      | 11        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    | 40620      | 2593.0          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 12      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 6         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 11        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 41565      | 2687.5          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 12      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 6         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 12      | 11        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | 16QAM      | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 12        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 12      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 12        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 24        | 23.8                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 12      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 6         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 11        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    | 41565      | 2687.5          |            | 1       | 0         | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 12        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 23.9               | 33.0             | -9.2        |
|                    |            |                 |            | 12      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 12      | 6         | 22.7                    | 22.9               | 33.0             | -10.2       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | 64QAM      | 1       | 0         | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 12        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 6         | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 11        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    | 40620      | 2593.0          |            | 25      | 0         | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 1       | 0         | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 12        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 6         | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    | 41565      | 2687.5          |            | 12      | 11        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 1       | 0         | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 1       | 12        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 12      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 6         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 12      | 11        | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 25      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |

**OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | QPSK       | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 25      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 12        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    | 40620      | 2593.0          |            | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.3                    | 24.5               | 33.0             | -8.5        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 12        | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    |            |                 |            | 25      | 24        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    | 41540      | 2685.0          |            | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 25      | 0         | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    |            |                 |            | 25      | 12        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 25      | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | 16QAM      | 1       | 0         | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 49        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 25      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 12        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 24        | 23.7                    | 23.9               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 49        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 25      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 25      | 12        | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 25      | 24        | 22.7                    | 22.9               | 33.0             | -10.2       |
|                    |            |                 |            | 50      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    | 41540      | 2685.0          |            | 1       | 0         | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 49        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 25      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 12        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 25      | 24        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | 64QAM      | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 24        | 21.9                    | 22.1               | 33.0             | -11.0       |
|                    | 40620      | 2593.0          |            | 50      | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 0         | 22.9                    | 23.1               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 24        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 49        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 25      | 0         | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 25      | 12        | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    | 41540      | 2685.0          |            | 25      | 24        | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 50      | 0         | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 1       | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 24        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 25      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 25      | 12        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 25      | 24        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |

**OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | QPSK       | 1       | 0         | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 36      | 0         | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 36      | 16        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 36      | 35        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 75      | 0         | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    | 40620      | 2593.0          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 36      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 36      | 16        | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    |            |                 |            | 36      | 35        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 75      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 41515      | 2682.5          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 36      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 36      | 16        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 36      | 35        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 75      | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | 16QAM      | 1       | 0         | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 37        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 74        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 36      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 36      | 16        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 75      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 37        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 74        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 36      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 16        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 35        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 75      | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    | 41515      | 2682.5          |            | 1       | 0         | 23.7                    | 23.9               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 37        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 1       | 74        | 23.6                    | 23.8               | 33.0             | -9.2        |
|                    |            |                 |            | 36      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 36      | 16        | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    |            |                 |            | 36      | 35        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 75      | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | 64QAM      | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 37        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 74        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 36      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 36      | 16        | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 36      | 35        | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 75      | 0         | 21.6                    | 21.8               | 33.0             | -11.2       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 37        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 74        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 0         | 21.6                    | 21.8               | 33.0             | -11.2       |
|                    |            |                 |            | 36      | 16        | 21.7                    | 21.9               | 33.0             | -11.2       |
|                    |            |                 |            | 36      | 35        | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 75      | 0         | 21.6                    | 21.8               | 33.0             | -11.2       |
|                    | 41515      | 2682.5          |            | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 37        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 74        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 36      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 36      | 16        | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 36      | 35        | 21.8                    | 22.0               | 33.0             | -11.1       |
|                    |            |                 |            | 75      | 0         | 21.6                    | 21.8               | 33.0             | -11.2       |

**OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)**

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | QPSK       | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 99        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 49        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 100     | 0         | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    | 40620      | 2593.0          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 24.6               | 33.0             | -8.4        |
|                    |            |                 |            | 1       | 99        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 24        | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 49        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 100     | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |
|                    | 41490      | 2680.0          |            | 1       | 0         | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 1       | 99        | 24.5                    | 24.7               | 33.0             | -8.3        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 23.7               | 33.0             | -9.4        |
|                    |            |                 |            | 50      | 24        | 23.5                    | 23.7               | 33.0             | -9.3        |
|                    |            |                 |            | 50      | 49        | 23.4                    | 23.6               | 33.0             | -9.4        |
|                    |            |                 |            | 100     | 0         | 23.3                    | 23.5               | 33.0             | -9.5        |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | 16QAM      | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 99        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 50      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 100     | 0         | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.1        |
|                    |            |                 |            | 1       | 49        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 50      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 50      | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 100     | 0         | 22.6                    | 22.8               | 33.0             | -10.2       |
|                    | 41490      | 2680.0          |            | 1       | 0         | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 49        | 23.8                    | 24.0               | 33.0             | -9.0        |
|                    |            |                 |            | 1       | 99        | 23.7                    | 23.9               | 33.0             | -9.1        |
|                    |            |                 |            | 50      | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 24        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 100     | 0         | 22.7                    | 22.9               | 33.0             | -10.2       |

| Antenna Gain (dBi) |            | 0.2             |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | 64QAM      | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 22.9               | 33.0             | -10.1       |
|                    |            |                 |            | 1       | 99        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 24        | 21.9                    | 22.1               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 49        | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    | 40620      | 2593.0          |            | 100     | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 99        | 22.9                    | 23.1               | 33.0             | -9.9        |
|                    |            |                 |            | 50      | 0         | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 24        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    | 41490      | 2680.0          |            | 50      | 49        | 21.9                    | 22.1               | 33.0             | -10.9       |
|                    |            |                 |            | 100     | 0         | 21.7                    | 21.9               | 33.0             | -11.2       |
|                    |            |                 |            | 1       | 0         | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 49        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 1       | 99        | 22.8                    | 23.0               | 33.0             | -10.0       |
|                    |            |                 |            | 50      | 0         | 21.7                    | 21.9               | 33.0             | -11.1       |
|                    |            |                 |            | 50      | 24        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 50      | 49        | 21.8                    | 22.0               | 33.0             | -11.0       |
|                    |            |                 |            | 100     | 0         | 21.6                    | 21.8               | 33.0             | -11.2       |

### 7.1.12. LTE BAND 66

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 40813 | <b>Date:</b> | 5/6/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | QPSK       | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 12      | 0         | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 12      | 6         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 11        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    | 132322     | 1745.0          |            | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 6         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 11        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    | 132647     | 1777.5          |            | 1       | 0         | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 12        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 12      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 6         | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 12      | 11        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 25      | 0         | 24.2                    | 22.1               | 30.0             | -7.9        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | 16QAM      | 1       | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 12        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 24        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 0         | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 12      | 6         | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 12      | 11        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 25      | 0         | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    | 132322     | 1745.0          |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 12        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 12      | 0         | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 12      | 6         | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 12      | 11        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    | 132647     | 1777.5          |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 12        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 24        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 12      | 0         | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 12      | 6         | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 12      | 11        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 25      | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | 64QAM      | 1       | 0         | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 12        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 12      | 0         | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 12      | 6         | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 12      | 11        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 25      | 0         | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    | 132322     | 1745.0          |            | 1       | 0         | 23.6                    | 21.5               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 12        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 12      | 0         | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 12      | 6         | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 12      | 11        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 25      | 0         | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    | 132647     | 1777.5          |            | 1       | 0         | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 12        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 1       | 24        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 12      | 0         | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 12      | 6         | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 12      | 11        | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 25      | 0         | 22.6                    | 20.5               | 30.0             | -9.5        |

**OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | QPSK       | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 25      | 12        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 25      | 24        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    | 132322     | 1745.0          |            | 50      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 12        | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 25      | 24        | 24.3                    | 22.2               | 30.0             | -7.9        |
|                    |            |                 |            | 50      | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    | 132622     | 1775.0          |            | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 24        | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 25      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 12        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 24        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 50      | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | 16QAM      | 1       | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 25      | 0         | 23.2                    | 21.0               | 30.0             | -9.0        |
|                    |            |                 |            | 25      | 12        | 23.2                    | 21.0               | 30.0             | -9.0        |
|                    |            |                 |            | 25      | 24        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    | 132322     | 1745.0          |            | 50      | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 22.3               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 25      | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 25      | 12        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 25      | 24        | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    | 132622     | 1775.0          |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 24        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 25      | 0         | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 25      | 12        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 25      | 24        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 21.2               | 30.0             | -8.8        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | 64QAM      | 1       | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 24        | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 49        | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 25      | 0         | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 25      | 12        | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 25      | 24        | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    | 132322     | 1745.0          |            | 50      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 24        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 49        | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 25      | 0         | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 25      | 12        | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    | 132622     | 1775.0          |            | 25      | 24        | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 50      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 24        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 49        | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 25      | 0         | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 25      | 12        | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 25      | 24        | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 50      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |

**OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)**

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | QPSK       | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 23.2               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.1               | 30.0             | -7.0        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 36      | 16        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 36      | 35        | 24.1                    | 22.0               | 30.0             | -8.0        |
|                    | 132322     | 1745.0          |            | 75      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 0         | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 37        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 36      | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 36      | 16        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 36      | 35        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 75      | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    | 132597     | 1772.5          |            | 1       | 0         | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 37        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 74        | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 36      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 36      | 16        | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 36      | 35        | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 75      | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | 16QAM      | 1       | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 1       | 74        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 36      | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 36      | 16        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 36      | 35        | 23.2                    | 21.1               | 30.0             | -9.0        |
|                    | 132322     | 1745.0          |            | 75      | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 74        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 36      | 0         | 23.4                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 36      | 16        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 36      | 35        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 75      | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    | 132597     | 1772.5          |            | 1       | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 37        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 74        | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 36      | 0         | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 36      | 16        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 36      | 35        | 23.2                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 75      | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |

|                    |            |                 |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | 64QAM      | 1       | 0         | 23.3                    | 21.1               | 30.0             | -8.9        |
|                    |            |                 |            | 1       | 37        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 36      | 0         | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 36      | 16        | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 36      | 35        | 22.3                    | 20.2               | 30.0             | -9.9        |
|                    |            |                 |            | 75      | 0         | 22.5                    | 20.3               | 30.0             | -9.7        |
|                    | 132322     | 1745.0          |            | 1       | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 37        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 36      | 0         | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 36      | 16        | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 36      | 35        | 22.4                    | 20.3               | 30.0             | -9.7        |
|                    |            |                 |            | 75      | 0         | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    | 132597     | 1772.5          |            | 1       | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 37        | 23.4                    | 21.3               | 30.0             | -8.8        |
|                    |            |                 |            | 1       | 74        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 36      | 0         | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 36      | 16        | 22.3                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 36      | 35        | 22.4                    | 20.2               | 30.0             | -9.8        |
|                    |            |                 |            | 75      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |

**OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)**

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | QPSK       | 1       | 0         | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 1       | 99        | 25.1                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 50      | 0         | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 50      | 24        | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 50      | 49        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    | 132322     | 1745.0          |            | 100     | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 1       | 0         | 25.3                    | 23.2               | 30.0             | -6.8        |
|                    |            |                 |            | 1       | 49        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 50      | 24        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 50      | 49        | 24.2                    | 22.1               | 30.0             | -7.9        |
|                    |            |                 |            | 100     | 0         | 24.4                    | 22.2               | 30.0             | -7.8        |
|                    | 132572     | 1770.0          |            | 1       | 0         | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 1       | 49        | 25.3                    | 23.1               | 30.0             | -6.9        |
|                    |            |                 |            | 1       | 99        | 25.2                    | 23.0               | 30.0             | -7.0        |
|                    |            |                 |            | 50      | 0         | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 50      | 24        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 50      | 49        | 24.3                    | 22.2               | 30.0             | -7.8        |
|                    |            |                 |            | 100     | 0         | 24.4                    | 22.3               | 30.0             | -7.7        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | 16QAM      | 1       | 0         | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 49        | 24.4                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 99        | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 50      | 0         | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 50      | 24        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 50      | 49        | 23.4                    | 21.2               | 30.0             | -8.8        |
|                    | 132322     | 1745.0          |            | 100     | 0         | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 0         | 24.5                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 1       | 99        | 24.5                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 50      | 24        | 23.4                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 50      | 49        | 23.4                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 100     | 0         | 23.5                    | 21.3               | 30.0             | -8.7        |
|                    | 132572     | 1770.0          |            | 1       | 0         | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 49        | 24.5                    | 22.3               | 30.0             | -7.7        |
|                    |            |                 |            | 1       | 99        | 24.5                    | 22.4               | 30.0             | -7.6        |
|                    |            |                 |            | 50      | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 50      | 24        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 50      | 49        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 100     | 0         | 23.5                    | 21.3               | 30.0             | -8.7        |

| Antenna Gain (dBi) |            | -2.13           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | 64QAM      | 1       | 0         | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 49        | 23.3                    | 21.2               | 30.0             | -8.8        |
|                    |            |                 |            | 1       | 99        | 23.4                    | 21.3               | 30.0             | -8.7        |
|                    |            |                 |            | 50      | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 50      | 24        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 50      | 49        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    | 132322     | 1745.0          |            | 100     | 0         | 22.6                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 1       | 0         | 23.5                    | 21.4               | 30.0             | -8.7        |
|                    |            |                 |            | 1       | 49        | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 99        | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 50      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 50      | 24        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    | 132572     | 1770.0          |            | 50      | 49        | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 100     | 0         | 22.8                    | 20.6               | 30.0             | -9.4        |
|                    |            |                 |            | 1       | 0         | 23.5                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 49        | 23.6                    | 21.4               | 30.0             | -8.6        |
|                    |            |                 |            | 1       | 99        | 23.6                    | 21.5               | 30.0             | -8.5        |
|                    |            |                 |            | 50      | 0         | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 50      | 24        | 22.5                    | 20.4               | 30.0             | -9.6        |
|                    |            |                 |            | 50      | 49        | 22.6                    | 20.5               | 30.0             | -9.5        |
|                    |            |                 |            | 100     | 0         | 22.8                    | 20.6               | 30.0             | -9.4        |

## 7.2. UAT 1

### 7.2.1. LTE BAND 2

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 7/6/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

| Antenna gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | QPSK       | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 2         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 5         | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 3       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 3       | 1         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 3       | 2         | 20.7                    | 18.4               | 33.0             | -14.7       |
|                    | 18900      | 1880.0          |            | 6       | 0         | 19.7                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 2         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 5         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 3       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 3       | 1         | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    | 19193      | 1909.3          |            | 3       | 2         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 6       | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 2         | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 5         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 3       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 3       | 1         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 3       | 2         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 6       | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
| Antenna gain (dBi) |            |                 | -2.3       |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | 16QAM      | 1       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 2         | 20.1                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 5         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 3       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 3       | 1         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 3       | 2         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    | 18900      | 1880.0          |            | 6       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.4       |
|                    |            |                 |            | 1       | 2         | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    |            |                 |            | 1       | 5         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 3       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 3       | 1         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    | 19193      | 1909.3          |            | 3       | 2         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 6       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 2         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 5         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 3       | 0         | 20.1                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 3       | 1         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 3       | 2         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 6       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
| Antenna gain (dBi) |            |                 | -2.3       |         |           |                         |                    |                  |             |

| Antenna gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 18607      | 1850.7          | 64QAM      | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 2         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 5         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 3       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 3       | 1         | 19.1                    | 16.8               | 33.0             | -16.3       |
|                    |            |                 |            | 3       | 2         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 18900      | 1880.0          |            | 6       | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 2         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 5         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 3       | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 3       | 1         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 19193      | 1909.3          |            | 3       | 2         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 6       | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 2         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 5         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 3       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 3       | 1         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 3       | 2         | 19.2                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 6       | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |

**OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)**

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | QPSK       | 1       | 0         | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 7         | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 14        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 8       | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 4         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 15      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 7         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 14        | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 8       | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 8       | 4         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 8       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 15      | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    | 19185      | 1908.5          |            | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 7         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 14        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 8       | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 4         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 15      | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | 16QAM      | 1       | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 14        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 8       | 4         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 8       | 7         | 18.8                    | 16.5               | 33.0             | -16.6       |
|                    | 15         | 0               |            | 18.7    | 16.4      | 33.0                    | -16.6              |                  |             |
|                    | 18900      | 1880.0          |            | 1       | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 14        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 0         | 18.7                    | 16.4               | 33.0             | -16.7       |
|                    |            |                 |            | 8       | 4         | 18.6                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 8       | 7         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    | 15         | 0               |            | 18.7    | 16.4      | 33.0                    | -16.6              |                  |             |
|                    | 19185      | 1908.5          |            | 1       | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 7         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 14        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 8       | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 8       | 4         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 8       | 7         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 15      | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 15      | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 18615      | 1851.5          | 64QAM      | 1       | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 1       | 7         | 18.8                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 1       | 14        | 18.9                    | 16.6               | 33.0             | -16.4       |
|                    |            |                 |            | 8       | 0         | 17.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 8       | 4         | 17.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 8       | 7         | 17.9                    | 15.6               | 33.0             | -17.4       |
|                    | 18900      | 1880.0          |            | 15      | 0         | 17.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 1       | 0         | 18.8                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 1       | 7         | 18.9                    | 16.6               | 33.0             | -16.4       |
|                    |            |                 |            | 1       | 14        | 18.9                    | 16.6               | 33.0             | -16.4       |
|                    |            |                 |            | 8       | 0         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 8       | 4         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    | 19185      | 1908.5          |            | 8       | 7         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 15      | 0         | 17.9                    | 15.6               | 33.0             | -17.5       |
|                    |            |                 |            | 1       | 0         | 18.9                    | 16.6               | 33.0             | -16.4       |
|                    |            |                 |            | 1       | 7         | 18.9                    | 16.6               | 33.0             | -16.5       |
|                    |            |                 |            | 1       | 14        | 18.9                    | 16.6               | 33.0             | -16.5       |
|                    |            |                 |            | 8       | 0         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 8       | 4         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 8       | 7         | 17.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 15      | 0         | 17.8                    | 15.5               | 33.0             | -17.5       |

**OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)**

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | QPSK       | 1       | 0         | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 12        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 12      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 6         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 12      | 11        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    | 18900      | 1880.0          |            | 25      | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 12        | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 24        | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 12      | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 12      | 6         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 11        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 25      | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    | 19175      | 1907.5          |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 12        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 12      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 6         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 12      | 11        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | 16QAM      | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 12        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 12      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 12      | 6         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 11        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 12        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 24        | 20.0                    | 17.7               | 33.0             | -15.4       |
|                    |            |                 |            | 12      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 12      | 6         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 11        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 25      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 19175      | 1907.5          |            | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 12        | 20.1                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 12      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 6         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 12      | 11        | 18.9                    | 16.6               | 33.0             | -16.4       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 18625      | 1852.5          | 64QAM      | 1       | 0         | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 12        | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 17.2               | 33.0             | -15.9       |
|                    |            |                 |            | 12      | 0         | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 12      | 6         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 12      | 11        | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    | 18900      | 1880.0          |            | 25      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 0         | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 12        | 19.5                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 0         | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 12      | 6         | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    | 19175      | 1907.5          |            | 12      | 11        | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 0         | 19.5                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 12        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 24        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 12      | 0         | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 12      | 6         | 18.3                    | 16.0               | 33.0             | -17.1       |
|                    |            |                 |            | 12      | 11        | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.0               | 33.0             | -17.0       |

**OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | QPSK       | 1       | 0         | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 24        | 20.7                    | 18.4               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 25      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 12        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 24        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    | 18900      | 1880.0          |            | 50      | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 20.6                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 25      | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 12        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 24        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 50      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    | 19150      | 1905.0          |            | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 17.5               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 12        | 19.8                    | 17.5               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 24        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | 16QAM      | 1       | 0         | 20.2                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.2                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.8               | 33.0             | -16.3       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 16.8               | 33.0             | -16.3       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.2                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 25      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 16.8               | 33.0             | -16.3       |
|                    | 18900      | 1880.0          |            | 25      | 24        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 0         | 20.2                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.2                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 49        | 20.2                    | 17.9               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 12        | 19.2                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 24        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
| 19150              | 1905.0     | 1               | 0          | 20.2    | 17.9      | 33.0                    | -15.1              |                  |             |
|                    |            | 1               | 24         | 20.2    | 17.9      | 33.0                    | -15.1              |                  |             |
|                    |            | 1               | 49         | 20.2    | 17.9      | 33.0                    | -15.2              |                  |             |
|                    |            | 25              | 0          | 19.2    | 16.9      | 33.0                    | -16.1              |                  |             |
|                    |            | 25              | 12         | 19.2    | 16.9      | 33.0                    | -16.2              |                  |             |
|                    |            | 25              | 24         | 19.2    | 16.9      | 33.0                    | -16.1              |                  |             |
|                    |            | 50              | 0          | 19.2    | 16.9      | 33.0                    | -16.1              |                  |             |
|                    |            |                 |            |         |           |                         |                    |                  |             |
|                    |            |                 |            |         |           |                         |                    |                  |             |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 18650      | 1855.0          | 64QAM      | 1       | 0         | 19.3                    | 17.0               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 24        | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 49        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 25      | 12        | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 25      | 24        | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    | 18900      | 1880.0          |            | 50      | 0         | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 24        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 49        | 19.5                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 25      | 12        | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 24        | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 50      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    | 19150      | 1905.0          |            | 1       | 0         | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 24        | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 12        | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 24        | 18.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 50      | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |

**OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)**

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | QPSK       | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 37        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 36      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 36      | 16        | 19.7                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 75      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 37        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 36      | 0         | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 36      | 16        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 75      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 37        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 36      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 36      | 16        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 75      | 0         | 19.9                    | 17.6               | 33.0             | -15.4       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | 16QAM      | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 37        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 74        | 20.1                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 36      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 16        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 35        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 37        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 74        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 36      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 36      | 16        | 19.1                    | 16.8               | 33.0             | -16.3       |
|                    |            |                 |            | 36      | 35        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 37        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 74        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 36      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 36      | 16        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 36      | 35        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 18675      | 1857.5          | 64QAM      | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 36      | 16        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 35        | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 75      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 36      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 36      | 16        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 35        | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 75      | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    | 19125      | 1902.5          |            | 1       | 0         | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 19.3                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 36      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 36      | 16        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 35        | 18.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 75      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |

**OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)**

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | QPSK       | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 99        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 50      | 0         | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    |            |                 |            | 50      | 24        | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    |            |                 |            | 50      | 49        | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    | 18900      | 1880.0          |            | 100     | 0         | 20.1                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 0         | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 99        | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 50      | 0         | 19.6                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 24        | 19.8                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 50      | 49        | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    |            |                 |            | 100     | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    | 19100      | 1900.0          |            | 1       | 0         | 20.8                    | 18.5               | 33.0             | -14.5       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 99        | 20.7                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 50      | 0         | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 24        | 19.7                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 49        | 19.7                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 100     | 0         | 20.0                    | 17.7               | 33.0             | -15.3       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | 16QAM      | 1       | 0         | 19.9                    | 17.6               | 33.0             | -15.4       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 99        | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 50      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 50      | 24        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 50      | 49        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 18900      | 1880.0          | 16QAM      | 100     | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 17.7               | 33.0             | -15.4       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 99        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 0         | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 50      | 24        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    | 19100      | 1900.0          | 16QAM      | 50      | 49        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 100     | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 0         | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 99        | 20.1                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 24        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 50      | 49        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 100     | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |

| Antenna Gain (dBi) |            | -2.3            |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 18700      | 1860.0          | 64QAM      | 1       | 0         | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 49        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 99        | 19.1                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 24        | 18.2                    | 15.9               | 33.0             | -17.2       |
|                    |            |                 |            | 50      | 49        | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 100     | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    | 18900      | 1880.0          |            | 1       | 0         | 18.7                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 1       | 49        | 19.0                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 1       | 99        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 50      | 24        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 49        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 100     | 0         | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    | 19100      | 1900.0          |            | 1       | 0         | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 49        | 19.2                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 99        | 19.2                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 0         | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 50      | 24        | 18.1                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 50      | 49        | 18.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 100     | 0         | 18.4                    | 16.1               | 33.0             | -16.9       |

## 7.2.2. LTE BAND 4

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 37290 | <b>Date:</b> | 5/4/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | QPSK       | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 2         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 5         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 3       | 0         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 3       | 1         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 3       | 2         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    | 20175      | 1732.5          |            | 6       | 0         | 21.1                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 1       | 0         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 2         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 5         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 3       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 3       | 1         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    | 20393      | 1754.3          |            | 3       | 2         | 22.0                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 6       | 0         | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 2         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 5         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 3       | 0         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 3       | 1         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 3       | 2         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 6       | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | 16QAM      | 1       | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 2         | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 5         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 3       | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 3       | 1         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 3       | 2         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 6       | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    | 20175      | 1732.5          | 16QAM      | 1       | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 2         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 5         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 3       | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 3       | 1         | 21.1                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 3       | 2         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 6       | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    | 20393      | 1754.3          | 16QAM      | 1       | 0         | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 2         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 5         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 3       | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 3       | 1         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 3       | 2         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 6       | 0         | 20.5                    | 17.6               | 30.0             | -12.4       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 19957      | 1710.7          | 64QAM      | 1       | 0         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 1       | 2         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 1       | 5         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 3       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 3       | 1         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 3       | 2         | 20.5                    | 17.6               | 30.0             | -12.4       |
|                    | 20175      | 1732.5          |            | 6       | 0         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 1       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 2         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 5         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 3       | 0         | 20.5                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 3       | 1         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    | 20393      | 1754.3          |            | 3       | 2         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 6       | 0         | 19.6                    | 16.7               | 30.0             | -13.3       |
|                    |            |                 |            | 1       | 0         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 1       | 2         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 1       | 5         | 20.7                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 3       | 0         | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    |            |                 |            | 3       | 1         | 20.6                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 3       | 2         | 20.6                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 6       | 0         | 19.5                    | 16.7               | 30.0             | -13.3       |

**OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)**

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | QPSK       | 1       | 0         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 7         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 14        | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 8       | 0         | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 8       | 4         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 8       | 7         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 15      | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    | 20175      | 1732.5          |            | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 7         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 14        | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 8       | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 8       | 4         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 8       | 7         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 15      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    | 20385      | 1753.5          |            | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 7         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 14        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 8       | 0         | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 8       | 4         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 8       | 7         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 15      | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | 16QAM      | 1       | 0         | 21.4                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 7         | 21.5                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 14        | 21.5                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 8       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 8       | 4         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 8       | 7         | 20.5                    | 17.6               | 30.0             | -12.4       |
|                    | 20175      | 1732.5          |            | 15      | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 1       | 0         | 21.4                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 7         | 21.5                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 14        | 21.5                    | 18.7               | 30.0             | -11.3       |
|                    |            |                 |            | 8       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 8       | 4         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    | 20385      | 1753.5          |            | 8       | 7         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 15      | 0         | 20.5                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 1       | 0         | 21.5                    | 18.7               | 30.0             | -11.3       |
|                    |            |                 |            | 1       | 7         | 21.5                    | 18.7               | 30.0             | -11.3       |
|                    |            |                 |            | 1       | 14        | 21.5                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 8       | 0         | 20.4                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 8       | 4         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 8       | 7         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 15      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 19965      | 1711.5          | 64QAM      | 1       | 0         | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 1       | 7         | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 1       | 14        | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 8       | 0         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 8       | 4         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 8       | 7         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    | 20175      | 1732.5          |            | 15      | 0         | 19.7                    | 16.9               | 30.0             | -13.1       |
|                    |            |                 |            | 1       | 0         | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 1       | 7         | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 1       | 14        | 20.7                    | 17.9               | 30.0             | -12.1       |
|                    |            |                 |            | 8       | 0         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 8       | 4         | 19.6                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 8       | 7         | 19.7                    | 16.8               | 30.0             | -13.2       |
|                    |            |                 |            | 15      | 0         | 19.7                    | 16.9               | 30.0             | -13.1       |
|                    |            |                 |            | 20385   | 1753.5    | 1                       | 0                  | 20.7             | 17.8        |
|                    | 1          | 7               |            |         |           | 20.6                    | 17.8               | 30.0             | -12.2       |
|                    | 1          | 14              |            |         |           | 20.7                    | 17.8               | 30.0             | -12.2       |
|                    | 8          | 0               |            |         |           | 19.7                    | 16.9               | 30.0             | -13.1       |
|                    | 8          | 4               |            |         |           | 19.8                    | 16.9               | 30.0             | -13.1       |
|                    | 8          | 7               |            |         |           | 19.7                    | 16.9               | 30.0             | -13.1       |
|                    | 15         | 0               |            |         |           | 19.7                    | 16.9               | 30.0             | -13.1       |

### 7.2.3. LTE BAND 5

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

#### OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | QPSK       | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 19.1              | 38.45           | -19.4       |
|                    |            |                 |            | 3       | 0         | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    | 20525      | 836.5           |            | 6       | 0         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 0         | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    | 20643      | 848.3           |            | 3       | 2         | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 6       | 0         | 22.8                    | 17.8              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 17.9              | 38.45           | -20.5       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | 16QAM      | 1       | 0         | 23.1                    | 18.1              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 2         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 18.2              | 38.45           | -20.3       |
|                    |            |                 |            | 3       | 0         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    | 20525      | 836.5           |            | 6       | 0         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 18.2              | 38.45           | -20.3       |
|                    | 20643      | 848.3           |            | 3       | 2         | 23.2                    | 18.2              | 38.45           | -20.3       |
|                    |            |                 |            | 6       | 0         | 22.1                    | 17.1              | 38.45           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 18.1              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 5         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 3       | 0         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 3       | 2         | 23.0                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 17.2              | 38.45           | -21.3       |

|                    |            |                 |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 20407      | 824.7           | 64QAM      | 1       | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 2         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 3       | 0         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 3       | 1         | 22.2                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 3       | 2         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    | 20525      | 836.5           |            | 6       | 0         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 1       | 2         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    | 20643      | 848.3           |            | 3       | 2         | 22.3                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 6       | 0         | 21.1                    | 16.1              | 38.45           | -22.3       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 2         | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 5         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 3       | 1         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 3       | 2         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 6       | 0         | 21.2                    | 16.2              | 38.45           | -22.2       |

**OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)**

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | QPSK       | 1       | 0         | 23.8                    | 18.8              | 38.45           | -19.7       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 8       | 7         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 15      | 0         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    | 20525      | 836.5           |            | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 7         | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 15      | 0         | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    | 20635      | 847.5           |            | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.8              | 38.45           | -19.7       |
|                    |            |                 |            | 8       | 0         | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 8       | 7         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 15      | 0         | 22.8                    | 17.8              | 38.45           | -20.7       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | 16QAM      | 1       | 0         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 1       | 7         | 23.1                    | 18.1              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 14        | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 8       | 4         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 8       | 7         | 22.2                    | 17.3              | 38.45           | -21.2       |
|                    | 20525      | 836.5           |            | 15      | 0         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 18.2              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 18.2              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 14        | 23.1                    | 18.2              | 38.45           | -20.3       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 8       | 4         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    | 20635      | 847.5           |            | 8       | 7         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 15      | 0         | 22.1                    | 17.1              | 38.45           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 1       | 7         | 23.0                    | 18.0              | 38.45           | -20.5       |
|                    |            |                 |            | 1       | 14        | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 8       | 0         | 22.1                    | 17.1              | 38.45           | -21.3       |
|                    |            |                 |            | 8       | 4         | 22.0                    | 17.0              | 38.45           | -21.4       |
|                    |            |                 |            | 8       | 7         | 22.0                    | 17.0              | 38.45           | -21.5       |
|                    |            |                 |            | 15      | 0         | 22.1                    | 17.1              | 38.45           | -21.4       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 20415      | 825.5           | 64QAM      | 1       | 0         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 7         | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 14        | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 8       | 0         | 21.3                    | 16.3              | 38.45           | -22.2       |
|                    |            |                 |            | 8       | 4         | 21.3                    | 16.3              | 38.45           | -22.2       |
|                    |            |                 |            | 8       | 7         | 21.3                    | 16.3              | 38.45           | -22.1       |
|                    | 20525      | 836.5           |            | 15      | 0         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 1       | 7         | 22.3                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 14        | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 8       | 0         | 21.3                    | 16.3              | 38.45           | -22.2       |
|                    |            |                 |            | 8       | 4         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    | 20635      | 847.5           |            | 8       | 7         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    |            |                 |            | 15      | 0         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 7         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 14        | 22.1                    | 17.1              | 38.45           | -21.4       |
|                    |            |                 |            | 8       | 0         | 21.2                    | 16.2              | 38.45           | -22.2       |
|                    |            |                 |            | 8       | 4         | 21.2                    | 16.2              | 38.45           | -22.3       |
|                    |            |                 |            | 8       | 7         | 21.1                    | 16.1              | 38.45           | -22.3       |
|                    |            |                 |            | 15      | 0         | 21.1                    | 16.1              | 38.45           | -22.4       |

**OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)**

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | QPSK       | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 12        | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 18.0              | 38.45           | -20.5       |
|                    | 20525      | 836.5           |            | 25      | 0         | 23.0                    | 18.0              | 38.45           | -20.5       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 19.0              | 38.45           | -19.4       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 17.8              | 38.45           | -20.6       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 17.8              | 38.45           | -20.7       |
|                    | 20625      | 846.5           |            | 1       | 0         | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 12        | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 17.9              | 38.45           | -20.6       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 17.9              | 38.45           | -20.6       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | 16QAM      | 1       | 0         | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    | 20525      | 836.5           |            | 25      | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 18.2              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 18.3              | 38.45           | -20.2       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 17.2              | 38.45           | -21.2       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    | 20625      | 846.5           |            | 1       | 0         | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 18.3              | 38.45           | -20.2       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 18.3              | 38.45           | -20.2       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 17.2              | 38.45           | -21.3       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 17.2              | 38.45           | -21.2       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 20425      | 826.5           | 64QAM      | 1       | 0         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.3                    | 16.3              | 38.45           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.3                    | 16.3              | 38.45           | -22.1       |
|                    |            |                 |            | 12      | 11        | 21.2                    | 16.3              | 38.45           | -22.2       |
|                    | 20525      | 836.5           |            | 25      | 0         | 21.2                    | 16.2              | 38.45           | -22.3       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.3                    | 16.3              | 38.45           | -22.2       |
|                    |            |                 |            | 12      | 6         | 21.4                    | 16.4              | 38.45           | -22.0       |
|                    | 20625      | 846.5           |            | 12      | 11        | 21.4                    | 16.4              | 38.45           | -22.1       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 16.4              | 38.45           | -22.1       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 17.3              | 38.45           | -21.2       |
|                    |            |                 |            | 12      | 0         | 21.3                    | 16.3              | 38.45           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.3                    | 16.3              | 38.45           | -22.2       |
|                    |            |                 |            | 12      | 11        | 21.4                    | 16.4              | 38.45           | -22.0       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 16.5              | 38.45           | -22.0       |

**OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | QPSK       | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 19.0              | 38.45           | -19.4       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 25      | 12        | 23.1                    | 18.1              | 38.45           | -20.4       |
|                    |            |                 |            | 25      | 24        | 23.1                    | 18.1              | 38.45           | -20.3       |
|                    | 20525      | 836.5           |            | 50      | 0         | 23.1                    | 18.1              | 38.45           | -20.3       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 18.9              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 19.0              | 38.45           | -19.5       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 18.0              | 38.45           | -20.4       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 25      | 24        | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 18.0              | 38.45           | -20.5       |
|                    | 20600      | 844.0           |            | 1       | 0         | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.8              | 38.45           | -19.6       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 18.9              | 38.45           | -19.5       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 18.0              | 38.45           | -20.4       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 17.9              | 38.45           | -20.5       |
|                    |            |                 |            | 25      | 24        | 22.9                    | 18.0              | 38.45           | -20.5       |
|                    |            |                 |            | 50      | 0         | 23.0                    | 18.0              | 38.45           | -20.4       |

| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | 16QAM      | 1       | 0         | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 12        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    | 20525      | 836.5           |            | 50      | 0         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 18.4              | 38.45           | -20.0       |
|                    |            |                 |            | 1       | 49        | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 17.3              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 12        | 22.4                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 17.4              | 38.45           | -21.0       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 17.4              | 38.45           | -21.0       |
|                    | 20600      | 844.0           |            | 1       | 0         | 23.4                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 18.4              | 38.45           | -20.1       |
|                    |            |                 |            | 1       | 49        | 23.3                    | 18.3              | 38.45           | -20.1       |
|                    |            |                 |            | 25      | 0         | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 12        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 17.4              | 38.45           | -21.1       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 17.4              | 38.45           | -21.0       |

|                    |            |                 |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Antenna Gain (dBi) |            | -2.84           |            |         |           |                         |                   |                 |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 20450      | 829.0           | 64QAM      | 1       | 0         | 22.6                    | 17.6              | 38.45           | -20.9       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 25      | 0         | 21.7                    | 16.7              | 38.45           | -21.8       |
|                    |            |                 |            | 25      | 12        | 21.7                    | 16.7              | 38.45           | -21.7       |
|                    |            |                 |            | 25      | 24        | 21.7                    | 16.7              | 38.45           | -21.7       |
|                    | 20525      | 836.5           |            | 50      | 0         | 21.7                    | 16.7              | 38.45           | -21.7       |
|                    |            |                 |            | 1       | 0         | 22.5                    | 17.5              | 38.45           | -20.9       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 25      | 0         | 21.6                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 25      | 12        | 21.5                    | 16.5              | 38.45           | -21.9       |
|                    | 20600      | 844.0           |            | 25      | 24        | 21.6                    | 16.6              | 38.45           | -21.9       |
|                    |            |                 |            | 50      | 0         | 21.6                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 1       | 0         | 22.7                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 17.7              | 38.45           | -20.7       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 17.7              | 38.45           | -20.8       |
|                    |            |                 |            | 25      | 0         | 21.6                    | 16.6              | 38.45           | -21.8       |
|                    |            |                 |            | 25      | 12        | 21.6                    | 16.6              | 38.45           | -21.9       |
|                    |            |                 |            | 25      | 24        | 21.6                    | 16.6              | 38.45           | -21.9       |
|                    |            |                 |            | 50      | 0         | 21.6                    | 16.6              | 38.45           | -21.8       |

## 7.2.4. LTE BAND 7

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | QPSK       | 1       | 0         | 19.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 12        | 19.4                    | 16.1               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 12      | 0         | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 6         | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 11        | 18.5                    | 15.2               | 33.0             | -17.8       |
|                    | 21100      | 2535.0          |            | 25      | 0         | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 1       | 0         | 19.5                    | 16.2               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 12        | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 12      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 6         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 11        | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 15.0               | 33.0             | -18.0       |
|                    | 21425      | 2567.5          |            | 1       | 0         | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 12        | 19.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 24        | 19.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 12      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 6         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 12      | 11        | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 15.0               | 33.0             | -18.0       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | 16QAM      | 1       | 0         | 18.6                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 1       | 12        | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 12      | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 12      | 6         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 12      | 11        | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    | 21100      | 2535.0          |            | 25      | 0         | 17.7                    | 14.4               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 0         | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 12        | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 12      | 0         | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 12      | 6         | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 12      | 11        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    | 21425      | 2567.5          |            | 1       | 0         | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 12        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 24        | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 12      | 0         | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 12      | 6         | 17.7                    | 14.4               | 33.0             | -18.7       |
|                    |            |                 |            | 12      | 11        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 0         | 17.6                    | 14.3               | 33.0             | -18.7       |

|                    |            |                 |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 20775      | 2502.5          | 64QAM      | 1       | 0         | 17.8                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 12        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 1       | 24        | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 12      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 12      | 6         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 12      | 11        | 17.0                    | 13.7               | 33.0             | -19.3       |
|                    |            |                 |            | 25      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 12        | 17.9                    | 14.6               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 24        | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 12      | 0         | 16.8                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 12      | 6         | 16.8                    | 13.5               | 33.0             | -19.6       |
|                    |            |                 |            | 12      | 11        | 16.8                    | 13.5               | 33.0             | -19.6       |
|                    |            |                 |            | 25      | 0         | 16.8                    | 13.5               | 33.0             | -19.5       |
|                    | 21425      | 2567.5          |            | 1       | 0         | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 12        | 17.8                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 24        | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 12      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 12      | 6         | 16.9                    | 13.6               | 33.0             | -19.5       |
|                    |            |                 |            | 12      | 11        | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 25      | 0         | 16.8                    | 13.5               | 33.0             | -19.5       |

**OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)**

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | QPSK       | 1       | 0         | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 49        | 19.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 0         | 18.6                    | 15.3               | 33.0             | -17.8       |
|                    |            |                 |            | 25      | 12        | 18.6                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 25      | 24        | 18.5                    | 15.2               | 33.0             | -17.8       |
|                    | 21100      | 2535.0          |            | 50      | 0         | 18.6                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 1       | 0         | 19.5                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 24        | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 25      | 12        | 18.5                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 25      | 24        | 18.5                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 50      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    | 21400      | 2565.0          |            | 1       | 0         | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 24        | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 25      | 0         | 18.5                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 25      | 12        | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 25      | 24        | 18.4                    | 15.0               | 33.0             | -18.0       |
|                    |            |                 |            | 50      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | 16QAM      | 1       | 0         | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 24        | 18.8                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 49        | 18.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 25      | 0         | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 12        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 24        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    | 21100      | 2535.0          |            | 50      | 0         | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 1       | 0         | 18.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 1       | 24        | 18.8                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 49        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 12        | 17.7                    | 14.4               | 33.0             | -18.7       |
|                    |            |                 |            | 25      | 24        | 17.7                    | 14.4               | 33.0             | -18.7       |
|                    |            |                 |            | 50      | 0         | 17.8                    | 14.5               | 33.0             | -18.5       |
|                    | 21400      | 2565.0          |            | 1       | 0         | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 49        | 18.8                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 25      | 12        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 25      | 24        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 50      | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 20800      | 2505.0          | 64QAM      | 1       | 0         | 18.1                    | 14.7               | 33.0             | -18.3       |
|                    |            |                 |            | 1       | 24        | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 49        | 18.0                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 25      | 0         | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 25      | 12        | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 25      | 24        | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    | 21100      | 2535.0          |            | 50      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 1       | 0         | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 24        | 18.1                    | 14.8               | 33.0             | -18.2       |
|                    |            |                 |            | 1       | 49        | 18.1                    | 14.8               | 33.0             | -18.2       |
|                    |            |                 |            | 25      | 0         | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 25      | 12        | 17.0                    | 13.6               | 33.0             | -19.4       |
|                    | 21400      | 2565.0          |            | 25      | 24        | 17.1                    | 13.8               | 33.0             | -19.2       |
|                    |            |                 |            | 50      | 0         | 17.1                    | 13.7               | 33.0             | -19.3       |
|                    |            |                 |            | 1       | 0         | 18.1                    | 14.8               | 33.0             | -18.2       |
|                    |            |                 |            | 1       | 24        | 18.0                    | 14.7               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 49        | 18.0                    | 14.7               | 33.0             | -18.3       |
|                    |            |                 |            | 25      | 0         | 17.1                    | 13.8               | 33.0             | -19.2       |
|                    |            |                 |            | 25      | 12        | 17.0                    | 13.7               | 33.0             | -19.4       |
|                    |            |                 |            | 25      | 24        | 17.1                    | 13.8               | 33.0             | -19.2       |
|                    |            |                 |            | 50      | 0         | 17.1                    | 13.8               | 33.0             | -19.2       |

**OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)**

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | QPSK       | 1       | 0         | 19.3                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 1       | 37        | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 74        | 19.2                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 0         | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 36      | 16        | 18.4                    | 15.1               | 33.0             | -18.0       |
|                    |            |                 |            | 36      | 35        | 18.4                    | 15.1               | 33.0             | -18.0       |
|                    |            |                 |            | 75      | 0         | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 19.2                    | 15.9               | 33.0             | -17.2       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 1       | 74        | 19.3                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 0         | 18.2                    | 14.9               | 33.0             | -18.1       |
|                    |            |                 |            | 36      | 16        | 18.2                    | 14.9               | 33.0             | -18.2       |
|                    |            |                 |            | 36      | 35        | 18.2                    | 14.8               | 33.0             | -18.2       |
|                    |            |                 |            | 75      | 0         | 18.2                    | 14.8               | 33.0             | -18.2       |
|                    | 21375      | 2562.5          |            | 1       | 0         | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 37        | 19.3                    | 16.0               | 33.0             | -17.1       |
|                    |            |                 |            | 1       | 74        | 19.2                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 36      | 0         | 18.3                    | 15.0               | 33.0             | -18.0       |
|                    |            |                 |            | 36      | 16        | 18.3                    | 15.0               | 33.0             | -18.0       |
|                    |            |                 |            | 36      | 35        | 18.2                    | 14.9               | 33.0             | -18.1       |
|                    |            |                 |            | 75      | 0         | 18.4                    | 15.0               | 33.0             | -18.0       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | 16QAM      | 1       | 0         | 18.9                    | 15.6               | 33.0             | -17.5       |
|                    |            |                 |            | 1       | 37        | 18.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 1       | 74        | 18.8                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 36      | 0         | 18.0                    | 14.7               | 33.0             | -18.3       |
|                    |            |                 |            | 36      | 16        | 18.0                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 36      | 35        | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 75      | 0         | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 18.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 1       | 37        | 18.9                    | 15.6               | 33.0             | -17.4       |
|                    |            |                 |            | 1       | 74        | 18.9                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 36      | 0         | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 36      | 16        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 36      | 35        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 75      | 0         | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    | 21375      | 2562.5          |            | 1       | 0         | 18.9                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 1       | 37        | 18.8                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 1       | 74        | 18.9                    | 15.5               | 33.0             | -17.5       |
|                    |            |                 |            | 36      | 0         | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 36      | 16        | 17.8                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 36      | 35        | 17.8                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 75      | 0         | 17.8                    | 14.5               | 33.0             | -18.5       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 20825      | 2507.5          | 64QAM      | 1       | 0         | 17.9                    | 14.6               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 37        | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 74        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 36      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 36      | 16        | 16.9                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 36      | 35        | 16.9                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 75      | 0         | 16.8                    | 13.4               | 33.0             | -19.6       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 37        | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 74        | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 36      | 0         | 16.8                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 36      | 16        | 16.8                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 36      | 35        | 16.8                    | 13.5               | 33.0             | -19.5       |
|                    |            |                 |            | 75      | 0         | 16.7                    | 13.4               | 33.0             | -19.7       |
|                    | 21375      | 2562.5          |            | 1       | 0         | 17.9                    | 14.6               | 33.0             | -18.4       |
|                    |            |                 |            | 1       | 37        | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 1       | 74        | 17.9                    | 14.5               | 33.0             | -18.5       |
|                    |            |                 |            | 36      | 0         | 16.9                    | 13.6               | 33.0             | -19.4       |
|                    |            |                 |            | 36      | 16        | 16.9                    | 13.6               | 33.0             | -19.5       |
|                    |            |                 |            | 36      | 35        | 16.8                    | 13.4               | 33.0             | -19.6       |
|                    |            |                 |            | 75      | 0         | 16.8                    | 13.4               | 33.0             | -19.6       |

**OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)**

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | QPSK       | 1       | 0         | 19.5                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 99        | 19.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 50      | 0         | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 50      | 24        | 18.6                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 50      | 49        | 18.4                    | 15.1               | 33.0             | -18.0       |
|                    | 21100      | 2535.0          |            | 100     | 0         | 18.6                    | 15.2               | 33.0             | -17.8       |
|                    |            |                 |            | 1       | 0         | 19.4                    | 16.1               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 99        | 19.3                    | 16.0               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 0         | 18.3                    | 15.0               | 33.0             | -18.0       |
|                    |            |                 |            | 50      | 24        | 18.3                    | 15.0               | 33.0             | -18.0       |
|                    |            |                 |            | 50      | 49        | 18.3                    | 14.9               | 33.0             | -18.1       |
|                    |            |                 |            | 100     | 0         | 18.3                    | 15.0               | 33.0             | -18.0       |
|                    | 21350      | 2560.0          |            | 1       | 0         | 19.3                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 49        | 19.4                    | 16.1               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 99        | 19.3                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 0         | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 50      | 24        | 18.5                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 50      | 49        | 18.4                    | 15.1               | 33.0             | -17.9       |
|                    |            |                 |            | 100     | 0         | 18.5                    | 15.2               | 33.0             | -17.9       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | 16QAM      | 1       | 0         | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 49        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 99        | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 50      | 0         | 17.5                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 50      | 24        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 50      | 49        | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 100     | 0         | 17.6                    | 14.3               | 33.0             | -18.7       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 49        | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 99        | 18.6                    | 15.3               | 33.0             | -17.8       |
|                    |            |                 |            | 50      | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 50      | 24        | 17.6                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 50      | 49        | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 100     | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    | 21350      | 2560.0          |            | 1       | 0         | 18.7                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 1       | 49        | 18.7                    | 15.4               | 33.0             | -17.6       |
|                    |            |                 |            | 1       | 99        | 18.6                    | 15.3               | 33.0             | -17.7       |
|                    |            |                 |            | 50      | 0         | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 50      | 24        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 50      | 49        | 17.6                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 100     | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |

| Antenna Gain (dBi) |            | -3.35           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 20850      | 2510.0          | 64QAM      | 1       | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 49        | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 99        | 17.6                    | 14.2               | 33.0             | -18.8       |
|                    |            |                 |            | 50      | 0         | 16.7                    | 13.4               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 24        | 16.6                    | 13.3               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 49        | 16.5                    | 13.2               | 33.0             | -19.8       |
|                    |            |                 |            | 100     | 0         | 16.7                    | 13.4               | 33.0             | -19.7       |
|                    | 21100      | 2535.0          |            | 1       | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 49        | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 99        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 50      | 0         | 16.7                    | 13.3               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 24        | 16.6                    | 13.3               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 49        | 16.7                    | 13.4               | 33.0             | -19.6       |
|                    |            |                 |            | 100     | 0         | 16.6                    | 13.2               | 33.0             | -19.8       |
|                    | 21350      | 2560.0          |            | 1       | 0         | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 1       | 49        | 17.7                    | 14.4               | 33.0             | -18.6       |
|                    |            |                 |            | 1       | 99        | 17.7                    | 14.3               | 33.0             | -18.7       |
|                    |            |                 |            | 50      | 0         | 16.7                    | 13.3               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 24        | 16.6                    | 13.3               | 33.0             | -19.7       |
|                    |            |                 |            | 50      | 49        | 16.6                    | 13.2               | 33.0             | -19.8       |
|                    |            |                 |            | 100     | 0         | 16.6                    | 13.3               | 33.0             | -19.7       |

## 7.2.5. LTE BAND 12

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 12 (1.4MHz)

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | QPSK       | 1       | 0         | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 3       | 0         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 14.9              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 2         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 6       | 0         | 22.8                    | 13.9              | 34.77           | -20.8       |
|                    | 23095      | 707.5           |            | 1       | 0         | 24.0                    | 15.2              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 2         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 5         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    | 23173      | 715.3           |            | 1       | 0         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 5         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 0         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 3       | 2         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 14.0              | 34.77           | -20.8       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | 16QAM      | 1       | 0         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 3       | 1         | 23.1                    | 14.2              | 34.77           | -20.5       |
|                    |            |                 |            | 3       | 2         | 23.1                    | 14.3              | 34.77           | -20.5       |
|                    | 23095      | 707.5           |            | 6       | 0         | 22.2                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    | 23173      | 715.3           |            | 3       | 2         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 6       | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 13.3              | 34.77           | -21.4       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 23017      | 699.7           | 64QAM      | 1       | 0         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 2         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 3       | 2         | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    | 23095      | 707.5           |            | 6       | 0         | 21.4                    | 12.6              | 34.77           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 2         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 3       | 0         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    | 23173      | 715.3           |            | 3       | 2         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 6       | 0         | 21.4                    | 12.5              | 34.77           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 2         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 3       | 2         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 6       | 0         | 21.4                    | 12.5              | 34.77           | -22.2       |

**OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)**

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | QPSK       | 1       | 0         | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 8       | 7         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    | 23095      | 707.5           |            | 15      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 7         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 8       | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 8       | 4         | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    | 23165      | 714.5           |            | 8       | 7         | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 15      | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 8       | 0         | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 8       | 7         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 15      | 0         | 22.9                    | 14.1              | 34.77           | -20.7       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | 16QAM      | 1       | 0         | 23.3                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 7         | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 14        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    | 23095      | 707.5           |            | 15      | 0         | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 7         | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 14        | 23.3                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 8       | 0         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    | 23165      | 714.5           |            | 8       | 7         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 15      | 0         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 14        | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 8       | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 15      | 0         | 22.2                    | 13.3              | 34.77           | -21.5       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 23025      | 700.5           | 64QAM      | 1       | 0         | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 7         | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 14        | 22.6                    | 13.7              | 34.77           | -21.0       |
|                    |            |                 |            | 8       | 0         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 8       | 4         | 21.6                    | 12.7              | 34.77           | -22.0       |
|                    |            |                 |            | 8       | 7         | 21.6                    | 12.7              | 34.77           | -22.0       |
|                    | 23095      | 707.5           |            | 15      | 0         | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 1       | 0         | 22.5                    | 13.6              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 7         | 22.5                    | 13.6              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 14        | 22.6                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 8       | 0         | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 8       | 4         | 21.6                    | 12.7              | 34.77           | -22.0       |
|                    | 23165      | 714.5           |            | 8       | 7         | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 15      | 0         | 21.6                    | 12.7              | 34.77           | -22.0       |
|                    |            |                 |            | 1       | 0         | 22.6                    | 13.7              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 7         | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 14        | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 8       | 0         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 8       | 4         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 8       | 7         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 15      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |

**OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)**

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | QPSK       | 1       | 0         | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    | 23095      | 707.5           |            | 25      | 0         | 22.8                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 25      | 0         | 22.8                    | 14.0              | 34.77           | -20.8       |
|                    | 23155      | 713.5           |            | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 12        | 24.0                    | 15.2              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 14.0              | 34.77           | -20.8       |
| 25                 |            |                 | 0          | 23.0    | 14.1      | 34.77                   | -20.7             |                 |             |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | 16QAM      | 1       | 0         | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    | 23095      | 707.5           |            | 25      | 0         | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    | 23155      | 713.5           |            | 12      | 11        | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            | 12              | 6          | 22.2    | 13.3      | 34.77                   | -21.5             |                 |             |
|                    |            | 12              | 11         | 22.2    | 13.3      | 34.77                   | -21.5             |                 |             |
|                    |            | 25              | 0          | 22.2    | 13.3      | 34.77                   | -21.4             |                 |             |
|                    |            |                 |            |         |           |                         |                   |                 |             |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23035      | 701.5           | 64QAM      | 1       | 0         | 22.5                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 24        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 12.6              | 34.77           | -22.2       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    | 23095      | 707.5           |            | 25      | 0         | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 1       | 0         | 22.5                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.5                    | 13.6              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 24        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.4                    | 12.5              | 34.77           | -22.3       |
|                    | 23155      | 713.5           |            | 12      | 11        | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 12.5              | 34.77           | -22.3       |
|                    |            |                 |            | 1       | 0         | 22.6                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 24        | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 12      | 0         | 21.4                    | 12.5              | 34.77           | -22.2       |
|                    |            |                 |            | 12      | 6         | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |

**OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)**

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | QPSK       | 1       | 0         | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 15.1              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 25      | 12        | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 24        | 23.1                    | 14.2              | 34.77           | -20.6       |
|                    | 23095      | 707.5           |            | 50      | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 12        | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 14.2              | 34.77           | -20.6       |
|                    |            |                 |            | 50      | 0         | 23.0                    | 14.2              | 34.77           | -20.6       |
|                    | 23130      | 711.0           |            | 1       | 0         | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 14.2              | 34.77           | -20.6       |
|                    |            |                 |            | 50      | 0         | 23.1                    | 14.2              | 34.77           | -20.6       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | 16QAM      | 1       | 0         | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 12        | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    | 23095      | 707.5           |            | 50      | 0         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 49        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 25      | 12        | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 25      | 24        | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    | 23130      | 711.0           |            | 1       | 0         | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 49        | 23.4                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 12        | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 24        | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 50      | 0         | 22.3                    | 13.5              | 34.77           | -21.3       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23060      | 704.0           | 64QAM      | 1       | 0         | 22.6                    | 13.7              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.7                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 25      | 0         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 12        | 21.7                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 25      | 24        | 21.5                    | 12.6              | 34.77           | -22.2       |
|                    | 23095      | 707.5           |            | 50      | 0         | 21.7                    | 12.8              | 34.77           | -21.9       |
|                    |            |                 |            | 1       | 0         | 22.6                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.5                    | 13.6              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 49        | 22.6                    | 13.7              | 34.77           | -21.0       |
|                    |            |                 |            | 25      | 0         | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 12        | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    | 23130      | 711.0           |            | 25      | 24        | 21.6                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 50      | 0         | 21.7                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 1       | 0         | 22.7                    | 13.8              | 34.77           | -21.0       |
|                    |            |                 |            | 1       | 24        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 49        | 22.7                    | 13.8              | 34.77           | -20.9       |
|                    |            |                 |            | 25      | 0         | 21.6                    | 12.7              | 34.77           | -22.0       |
|                    |            |                 |            | 25      | 12        | 21.6                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 24        | 21.7                    | 12.8              | 34.77           | -22.0       |
|                    |            |                 |            | 50      | 0         | 21.7                    | 12.8              | 34.77           | -21.9       |

## 7.2.6. LTE BAND 13

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

| Antenna Gain (dBi) |            | -3.86           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23207      | 779.5           | QPSK       | 1       | 0         | 23.8                    | 17.7              | 34.77           | -17.0       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.8              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 16.9              | 34.77           | -17.8       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    | 23230      | 782.0           |            | 1       | 0         | 24.0                    | 18.0              | 34.77           | -16.8       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.8              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 11        | 22.8                    | 16.8              | 34.77           | -17.9       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.9              | 34.77           | -17.9       |
|                    | 23255      | 784.5           |            | 1       | 0         | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 12        | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 12      | 0         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 6         | 22.8                    | 16.8              | 34.77           | -18.0       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 16.8              | 34.77           | -17.9       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 16.9              | 34.77           | -17.9       |

| Antenna Gain (dBi) |            | -3.86           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23207      | 779.5           | 16QAM      | 1       | 0         | 23.3                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 16.1              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 16.3              | 34.77           | -18.5       |
|                    |            |                 |            | 12      | 11        | 22.4                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 0         | 22.4                    | 16.3              | 34.77           | -18.4       |
|                    | 23230      | 782.0           |            | 1       | 0         | 23.4                    | 17.4              | 34.77           | -17.3       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 17.3              | 34.77           | -17.5       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 17.2              | 34.77           | -17.5       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 6         | 22.4                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 11        | 22.4                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 25      | 0         | 22.4                    | 16.4              | 34.77           | -18.3       |
|                    | 23255      | 784.5           |            | 1       | 0         | 23.4                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 12        | 23.4                    | 17.3              | 34.77           | -17.4       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 17.4              | 34.77           | -17.4       |
|                    |            |                 |            | 12      | 0         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 16.2              | 34.77           | -18.5       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 16.2              | 34.77           | -18.5       |

| Antenna Gain (dBi) |            | -3.86           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23207      | 779.5           | 64QAM      | 1       | 0         | 22.5                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 12        | 22.5                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 24        | 22.4                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 12      | 0         | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    | 23230      | 782.0           |            | 1       | 0         | 22.5                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 16.4              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 24        | 22.5                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 12      | 11        | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    | 23255      | 784.5           |            | 1       | 0         | 22.5                    | 16.5              | 34.77           | -18.3       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 16.3              | 34.77           | -18.4       |
|                    |            |                 |            | 1       | 24        | 22.5                    | 16.4              | 34.77           | -18.3       |
|                    |            |                 |            | 12      | 0         | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 12      | 6         | 21.4                    | 15.4              | 34.77           | -19.4       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 15.5              | 34.77           | -19.3       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 15.3              | 34.77           | -19.4       |

**OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)**

| Antenna Gain (dBi) |            | -3.86           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23230      | 782.0           | QPSK       | 1       | 0         | 23.8                    | 17.8              | 34.77           | -17.0       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 17.9              | 34.77           | -16.9       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 18.0              | 34.77           | -16.8       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.0              | 34.77           | -17.7       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 16.9              | 34.77           | -17.8       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    |            |                 | 16QAM      | 50      | 0         | 23.2                    | 17.2              | 34.77           | -17.6       |
|                    |            |                 |            | 1       | 0         | 23.0                    | 17.0              | 34.77           | -17.8       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 17.0              | 34.77           | -17.7       |
|                    |            |                 |            | 1       | 49        | 23.2                    | 17.1              | 34.77           | -17.6       |
|                    |            |                 |            | 25      | 0         | 22.1                    | 16.1              | 34.77           | -18.7       |
|                    |            |                 |            | 25      | 12        | 22.1                    | 16.1              | 34.77           | -18.6       |
|                    |            |                 |            | 25      | 24        | 22.0                    | 16.0              | 34.77           | -18.8       |
|                    |            |                 |            | 50      | 0         | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 | 64QAM      | 1       | 0         | 22.1                    | 16.1              | 34.77           | -18.7       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 16.2              | 34.77           | -18.6       |
|                    |            |                 |            | 1       | 49        | 22.1                    | 16.1              | 34.77           | -18.7       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 15.1              | 34.77           | -19.6       |
|                    |            |                 |            | 25      | 12        | 21.1                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 24        | 21.1                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 50      | 0         | 21.2                    | 15.2              | 34.77           | -19.5       |

## 7.2.7. LTE BAND 17

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | QPSK       | 1       | 0         | 24.0                    | 15.2              | 34.77           | -19.6       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    | 23790      | 710.0           |            | 25      | 0         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    | 23825      | 713.5           |            | 12      | 11        | 22.9                    | 14.0              | 34.77           | -20.8       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 14.1              | 34.77           | -20.7       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | 16QAM      | 1       | 0         | 23.4                    | 14.5              | 34.77           | -20.2       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 12      | 0         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 12      | 6         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    | 23790      | 710.0           |            | 25      | 0         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 24        | 23.4                    | 14.5              | 34.77           | -20.3       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    | 23825      | 713.5           |            | 12      | 11        | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 14.4              | 34.77           | -20.3       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 12      | 0         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 12      | 6         | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 12      | 11        | 22.4                    | 13.5              | 34.77           | -21.2       |
|                    |            |                 |            | 25      | 0         | 22.4                    | 13.5              | 34.77           | -21.3       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 23755      | 706.5           | 64QAM      | 1       | 0         | 22.5                    | 13.6              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 24        | 22.5                    | 13.6              | 34.77           | -21.2       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    | 23790      | 710.0           |            | 25      | 0         | 21.4                    | 12.6              | 34.77           | -22.2       |
|                    |            |                 |            | 1       | 0         | 22.5                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 12        | 22.5                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 24        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 12.6              | 34.77           | -22.2       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    | 23825      | 713.5           |            | 12      | 11        | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 0         | 21.5                    | 12.6              | 34.77           | -22.1       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 13.5              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 12        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 1       | 24        | 22.6                    | 13.7              | 34.77           | -21.1       |
|                    |            |                 |            | 12      | 0         | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 6         | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 12      | 11        | 21.5                    | 12.7              | 34.77           | -22.1       |
|                    |            |                 |            | 25      | 0         | 21.5                    | 12.7              | 34.77           | -22.1       |

**OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)**

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | QPSK       | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 14.2              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 12        | 23.1                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 14.2              | 34.77           | -20.6       |
|                    | 23790      | 710.0           |            | 50      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |
|                    |            |                 |            | 1       | 0         | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 49        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 25      | 12        | 22.9                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 50      | 0         | 23.1                    | 14.2              | 34.77           | -20.6       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 15.0              | 34.77           | -19.8       |
|                    |            |                 |            | 1       | 24        | 24.0                    | 15.1              | 34.77           | -19.7       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 15.0              | 34.77           | -19.7       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 14.1              | 34.77           | -20.6       |
|                    | 23800      | 711.0           |            | 25      | 12        | 23.0                    | 14.2              | 34.77           | -20.6       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 14.1              | 34.77           | -20.7       |
|                    |            |                 |            | 50      | 0         | 22.9                    | 14.0              | 34.77           | -20.7       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | 16QAM      | 1       | 0         | 23.1                    | 14.2              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 14.3              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 49        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 25      | 0         | 22.1                    | 13.2              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 12        | 22.1                    | 13.2              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 24        | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    | 23790      | 710.0           |            | 50      | 0         | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 24        | 23.1                    | 14.2              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 49        | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 12        | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 24        | 22.2                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 50      | 0         | 22.1                    | 13.3              | 34.77           | -21.5       |
|                    | 23800      | 711.0           |            | 1       | 0         | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 14.4              | 34.77           | -20.4       |
|                    |            |                 |            | 1       | 49        | 23.2                    | 14.3              | 34.77           | -20.5       |
|                    |            |                 |            | 25      | 0         | 22.1                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 12        | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 24        | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    |            |                 |            | 50      | 0         | 22.2                    | 13.4              | 34.77           | -21.4       |

| Antenna Gain (dBi) |            | -6.72           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 23780      | 709.0           | 64QAM      | 1       | 0         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 49        | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 0         | 21.3                    | 12.4              | 34.77           | -22.3       |
|                    |            |                 |            | 25      | 12        | 21.2                    | 12.3              | 34.77           | -22.4       |
|                    |            |                 |            | 25      | 24        | 21.3                    | 12.4              | 34.77           | -22.4       |
|                    | 23790      | 710.0           |            | 50      | 0         | 21.2                    | 12.3              | 34.77           | -22.5       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 13.4              | 34.77           | -21.3       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 49        | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 12.3              | 34.77           | -22.5       |
|                    |            |                 |            | 25      | 12        | 21.3                    | 12.5              | 34.77           | -22.3       |
|                    | 23800      | 711.0           |            | 25      | 24        | 21.2                    | 12.3              | 34.77           | -22.5       |
|                    |            |                 |            | 50      | 0         | 21.2                    | 12.3              | 34.77           | -22.4       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 13.3              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 13.4              | 34.77           | -21.4       |
|                    |            |                 |            | 1       | 49        | 22.2                    | 13.3              | 34.77           | -21.5       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 12.3              | 34.77           | -22.5       |
|                    |            |                 |            | 25      | 12        | 21.3                    | 12.4              | 34.77           | -22.4       |
|                    |            |                 |            | 25      | 24        | 21.2                    | 12.3              | 34.77           | -22.4       |
|                    |            |                 |            | 50      | 0         | 21.2                    | 12.4              | 34.77           | -22.4       |

## 7.2.8. LTE BAND 25

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | QPSK       | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 2         | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 5         | 20.6                    | 18.7               | 33.0             | -14.3       |
|                    |            |                 |            | 3       | 0         | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 3       | 1         | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 3       | 2         | 20.7                    | 18.9               | 33.0             | -14.2       |
|                    | 26365      | 1882.5          |            | 6       | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 19.0               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 2         | 20.8                    | 19.0               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 5         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 3       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 3       | 1         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    | 26683      | 1914.3          |            | 3       | 2         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 6       | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 19.0               | 33.0             | -14.0       |
|                    |            |                 |            | 1       | 2         | 20.7                    | 18.9               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 5         | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 3       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 3       | 1         | 20.6                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 3       | 2         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 6       | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | 16QAM      | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 2         | 20.1                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 5         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 1         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 2         | 20.0                    | 18.2               | 33.0             | -14.9       |
|                    | 26365      | 1882.5          |            | 6       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 2         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 5         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 0         | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 3       | 1         | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    | 26683      | 1914.3          |            | 3       | 2         | 20.1                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 6       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 2         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 5         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 0         | 20.0                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 3       | 1         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 3       | 2         | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 6       | 0         | 19.1                    | 17.3               | 33.0             | -15.7       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 1.4                | 26047      | 1850.7          | 64QAM      | 1       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 2         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 5         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 3       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 3       | 1         | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 3       | 2         | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    | 26365      | 1882.5          |            | 6       | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 0         | 19.0                    | 17.2               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 2         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 5         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 3       | 0         | 19.1                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 3       | 1         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    | 26683      | 1914.3          |            | 3       | 2         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 6       | 0         | 18.0                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 2         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 5         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 3       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 3       | 1         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 3       | 2         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 6       | 0         | 18.0                    | 16.1               | 33.0             | -16.9       |

**OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)**

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | QPSK       | 1       | 0         | 20.8                    | 19.0               | 33.0             | -14.0       |
|                    |            |                 |            | 1       | 7         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 14        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 8       | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 8       | 4         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 8       | 7         | 19.8                    | 18.0               | 33.0             | -15.1       |
|                    | 26365      | 1882.5          |            | 15      | 0         | 19.8                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 7         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 14        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 8       | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 8       | 4         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    | 26675      | 1913.5          |            | 8       | 7         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 15      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 7         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 14        | 20.6                    | 18.7               | 33.0             | -14.3       |
|                    |            |                 |            | 8       | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 8       | 4         | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 8       | 7         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 15      | 0         | 19.8                    | 18.0               | 33.0             | -15.1       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | 16QAM      | 1       | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 7         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 14        | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 8       | 0         | 19.0                    | 17.2               | 33.0             | -15.9       |
|                    |            |                 |            | 8       | 4         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 8       | 7         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 15      | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 20.0                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 7         | 19.9                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 1       | 14        | 19.9                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 8       | 0         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 8       | 4         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 8       | 7         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 15      | 0         | 19.0                    | 17.2               | 33.0             | -15.9       |
|                    | 26675      | 1913.5          |            | 1       | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 7         | 20.0                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 14        | 19.9                    | 18.1               | 33.0             | -15.0       |
|                    |            |                 |            | 8       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 8       | 4         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 8       | 7         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 15      | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 3.0                | 26055      | 1851.5          | 64QAM      | 1       | 0         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 7         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 14        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 8       | 0         | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 8       | 4         | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 8       | 7         | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    | 26365      | 1882.5          |            | 15      | 0         | 18.0                    | 16.2               | 33.0             | -16.9       |
|                    |            |                 |            | 1       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 7         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 14        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 8       | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 8       | 4         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    | 26675      | 1913.5          |            | 8       | 7         | 18.1                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 15      | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 7         | 18.9                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 14        | 18.9                    | 17.1               | 33.0             | -16.0       |
|                    |            |                 |            | 8       | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 8       | 4         | 17.9                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 8       | 7         | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 15      | 0         | 18.0                    | 16.1               | 33.0             | -16.9       |

**OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)**

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | QPSK       | 1       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 12        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 24        | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 12      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 12      | 6         | 19.8                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 12      | 11        | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    | 26365      | 1882.5          |            | 25      | 0         | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 12        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 19.0               | 33.0             | -14.1       |
|                    |            |                 |            | 12      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 12      | 6         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    | 26665      | 1912.5          |            | 12      | 11        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 12        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 24        | 20.6                    | 18.7               | 33.0             | -14.3       |
|                    |            |                 |            | 12      | 0         | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 12      | 6         | 19.7                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 12      | 11        | 19.6                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | 16QAM      | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 12        | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 12      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 6         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 11        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    | 26365      | 1882.5          |            | 25      | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 12        | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 12      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 6         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    | 26665      | 1912.5          |            | 12      | 11        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 12        | 20.1                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 12      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 6         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 12      | 11        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |

|                    |            |                 |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 26065      | 1852.5          | 64QAM      | 1       | 0         | 19.2                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 12        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 24        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 0         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 6         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 11        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 12        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 24        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 0         | 18.3                    | 16.5               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 6         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 11        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    | 26665      | 1912.5          |            | 1       | 0         | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 12        | 19.3                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 1       | 24        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 0         | 18.3                    | 16.5               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 6         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 12      | 11        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 25      | 0         | 18.3                    | 16.4               | 33.0             | -16.6       |

**OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)**

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | QPSK       | 1       | 0         | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 24        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 25      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 12        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 24        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    | 26365      | 1882.5          |            | 50      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 0         | 20.5                    | 18.6               | 33.0             | -14.4       |
|                    |            |                 |            | 1       | 24        | 20.5                    | 18.6               | 33.0             | -14.4       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 25      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 12        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 24        | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 50      | 0         | 19.5                    | 17.6               | 33.0             | -15.4       |
|                    | 26640      | 1910.0          |            | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 49        | 20.6                    | 18.7               | 33.0             | -14.3       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 25      | 12        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 24        | 19.6                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | 16QAM      | 1       | 0         | 20.0                    | 18.2               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 24        | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 25      | 0         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 12        | 19.0                    | 17.2               | 33.0             | -15.9       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 0         | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    | 26640      | 1910.0          |            | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 24        | 20.0                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 24        | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 26090      | 1855.0          | 64QAM      | 1       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 24        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 49        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 0         | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 12        | 18.1                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 25      | 24        | 18.1                    | 16.3               | 33.0             | -16.7       |
|                    | 26365      | 1882.5          |            | 50      | 0         | 18.1                    | 16.3               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 24        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 49        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 25      | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 12        | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    | 26640      | 1910.0          |            | 25      | 24        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 50      | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 1       | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 1       | 24        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 49        | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 25      | 0         | 18.1                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 12        | 18.0                    | 16.2               | 33.0             | -16.8       |
|                    |            |                 |            | 25      | 24        | 18.0                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 50      | 0         | 18.0                    | 16.2               | 33.0             | -16.8       |

**OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)**

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | QPSK       | 1       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 37        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 36      | 0         | 19.7                    | 17.9               | 33.0             | -15.2       |
|                    |            |                 |            | 36      | 16        | 19.7                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 75      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 37        | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 36      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 36      | 16        | 19.7                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 75      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    | 26615      | 1907.5          |            | 1       | 0         | 20.8                    | 19.0               | 33.0             | -14.0       |
|                    |            |                 |            | 1       | 37        | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 74        | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 36      | 0         | 19.7                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 36      | 16        | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 36      | 35        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 75      | 0         | 19.8                    | 18.0               | 33.0             | -15.0       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | 16QAM      | 1       | 0         | 20.2                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 37        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 74        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 36      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 16        | 19.1                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 35        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 75      | 0         | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    | 26365      | 1882.5          | 16QAM      | 1       | 0         | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 37        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 74        | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 36      | 0         | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 16        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 35        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 75      | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    | 26615      | 1907.5          | 16QAM      | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 37        | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 74        | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 36      | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 16        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 35        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 75      | 0         | 19.2                    | 17.4               | 33.0             | -15.6       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 26115      | 1857.5          | 64QAM      | 1       | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 74        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 36      | 16        | 18.3                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 36      | 35        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 75      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 19.2                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 37        | 19.2                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 74        | 19.3                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 36      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 36      | 16        | 18.2                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 36      | 35        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 75      | 0         | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    | 26615      | 1907.5          |            | 1       | 0         | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 37        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 74        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 36      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 36      | 16        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 36      | 35        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 75      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |

**OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)**

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | QPSK       | 1       | 0         | 20.8                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 99        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 50      | 24        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 49        | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    | 26365      | 1882.5          |            | 100     | 0         | 19.9                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 1       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 18.9               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 99        | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 50      | 0         | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 24        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 49        | 19.8                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 100     | 0         | 19.7                    | 17.9               | 33.0             | -15.1       |
|                    | 26590      | 1905.0          |            | 1       | 0         | 20.7                    | 18.8               | 33.0             | -14.2       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 18.9               | 33.0             | -14.1       |
|                    |            |                 |            | 1       | 99        | 20.6                    | 18.7               | 33.0             | -14.3       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 18.0               | 33.0             | -15.0       |
|                    |            |                 |            | 50      | 24        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 49        | 19.7                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 100     | 0         | 20.0                    | 18.1               | 33.0             | -14.9       |

| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | 16QAM      | 1       | 0         | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 99        | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 50      | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 24        | 19.1                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 49        | 19.1                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 100     | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    | 26365      | 1882.5          |            | 1       | 0         | 20.2                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 99        | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 50      | 0         | 19.0                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 50      | 24        | 19.0                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 49        | 19.1                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 100     | 0         | 19.2                    | 17.4               | 33.0             | -15.6       |
|                    | 26590      | 1905.0          |            | 1       | 0         | 20.1                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 49        | 20.2                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 99        | 20.1                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 24        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 49        | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 100     | 0         | 19.2                    | 17.4               | 33.0             | -15.7       |

|                    |            |                 |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Antenna Gain (dBi) |            | -1.87           |            |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 26140      | 1860.0          | 64QAM      | 1       | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 49        | 19.3                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 1       | 99        | 19.3                    | 17.5               | 33.0             | -15.5       |
|                    |            |                 |            | 50      | 0         | 18.3                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 50      | 24        | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 50      | 49        | 18.3                    | 16.5               | 33.0             | -16.5       |
|                    | 26365      | 1882.5          |            | 100     | 0         | 18.3                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 1       | 0         | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 49        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 99        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 0         | 18.2                    | 16.3               | 33.0             | -16.7       |
|                    |            |                 |            | 50      | 24        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    | 26590      | 1905.0          |            | 50      | 49        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 100     | 0         | 17.8                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 0         | 19.2                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 1       | 49        | 19.3                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 1       | 99        | 19.2                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 0         | 18.3                    | 16.5               | 33.0             | -16.5       |
|                    |            |                 |            | 50      | 24        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 50      | 49        | 18.3                    | 16.4               | 33.0             | -16.6       |
|                    |            |                 |            | 100     | 0         | 18.3                    | 16.5               | 33.0             | -16.5       |

## 7.2.9. LTE BAND 26

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 40813 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | QPSK       | 1       | 0         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 1         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 2         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    | 26740      | 819.0           |            | 6       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 3       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    | 26783      | 823.3           |            | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 2         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 5         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 3       | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 3       | 1         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 3       | 2         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 6       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | 16QAM      | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 5         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    | 26740      | 819.0           |            | 6       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 2         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 5         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    | 26783      | 823.3           |            | 3       | 2         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 1       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 2         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 5         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 1         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 3       | 2         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 6       | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 1.4                | 26697      | 814.7           | 64QAM      | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 2         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 5         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 1         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 3       | 2         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    | 26740      | 819.0           |            | 6       | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 2         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 5         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    | 26783      | 823.3           |            | 3       | 2         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 6       | 0         | 21.2                    | 15.6              | 50.00           | -34.4       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 2         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 5         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 3       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 1         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 3       | 2         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 6       | 0         | 21.2                    | 15.6              | 50.00           | -34.4       |

**OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)**

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | QPSK       | 1       | 0         | 24.0                    | 18.4              | 50.00           | -31.6       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 8       | 4         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 8       | 7         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    | 26740      | 819.0           |            | 15      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 7         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 14        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 8       | 4         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    | 26775      | 822.5           |            | 8       | 7         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 15      | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 1       | 0         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 7         | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 14        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 8       | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 8       | 4         | 22.8                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 8       | 7         | 22.8                    | 17.2              | 50.00           | -32.8       |
|                    |            |                 |            | 15      | 0         | 22.8                    | 17.2              | 50.00           | -32.8       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | 16QAM      | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 7         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 14        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 8       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 15      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    | 26740      | 819.0           |            | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 14        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 8       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 4         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 7         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 15      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    | 26775      | 822.5           |            | 1       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 7         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 14        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 8       | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 8       | 4         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 8       | 7         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 15      | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 3.0                | 26705      | 815.5           | 64QAM      | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 7         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 14        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 8       | 4         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 8       | 7         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    | 26740      | 819.0           |            | 15      | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 7         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 14        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 8       | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 8       | 4         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    | 26775      | 822.5           |            | 8       | 7         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 15      | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 7         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 14        | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 8       | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 8       | 4         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 8       | 7         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 15      | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |

**OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)**

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | QPSK       | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 12        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 12      | 6         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 12      | 11        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    | 26740      | 819.0           |            | 25      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    | 26765      | 821.5           |            | 12      | 11        | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 25      | 0         | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 1       | 0         | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 12        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 24        | 23.8                    | 18.2              | 50.00           | -31.8       |
|                    |            |                 |            | 12      | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 12      | 6         | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 12      | 11        | 22.9                    | 17.3              | 50.00           | -32.7       |
|                    |            |                 |            | 25      | 0         | 22.9                    | 17.3              | 50.00           | -32.7       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | 16QAM      | 1       | 0         | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 12      | 0         | 22.1                    | 16.5              | 50.00           | -33.5       |
|                    |            |                 |            | 12      | 6         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 12      | 11        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    | 26740      | 819.0           |            | 25      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 12        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    | 26765      | 821.5           |            | 12      | 11        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 0         | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 12        | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 1       | 24        | 23.2                    | 17.6              | 50.00           | -32.4       |
|                    |            |                 |            | 12      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 12      | 6         | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 12      | 11        | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 25      | 0         | 22.2                    | 16.6              | 50.00           | -33.4       |

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 5.0                | 26715      | 816.5           | 64QAM      | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 12        | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 24        | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 12      | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 12      | 6         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 12      | 11        | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    | 26740      | 819.0           |            | 25      | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 1       | 0         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 12        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 24        | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 12      | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 12      | 6         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    | 26765      | 821.5           |            | 12      | 11        | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 25      | 0         | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 1       | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 12        | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 1       | 24        | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 12      | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 12      | 6         | 21.3                    | 15.7              | 50.00           | -34.3       |
|                    |            |                 |            | 12      | 11        | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 25      | 0         | 21.3                    | 15.7              | 50.00           | -34.3       |

**OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)**

| Antenna Gain (dBi) |            | -3.45           |            |         |           |                         |                   |                 |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|-------------------|-----------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | ERP Average (dBm) | ERP Limit (dBm) | Margin (dB) |
| 10.0               | 26740      | 819.0           | QPSK       | 1       | 0         | <b>24.0</b>             | <b>18.4</b>       | 50.00           | -31.6       |
|                    |            |                 |            | 1       | 24        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 1       | 49        | 23.9                    | 18.3              | 50.00           | -31.7       |
|                    |            |                 |            | 25      | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 |            | 25      | 12        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 25      | 24        | 23.0                    | 17.4              | 50.00           | -32.6       |
|                    |            |                 |            | 50      | 0         | 23.1                    | 17.5              | 50.00           | -32.5       |
|                    |            |                 | 16QAM      | 1       | 0         | <b>23.4</b>             | <b>17.8</b>       | 50.00           | -32.2       |
|                    |            |                 |            | 1       | 24        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 1       | 49        | 23.3                    | 17.7              | 50.00           | -32.3       |
|                    |            |                 |            | 25      | 0         | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 25      | 12        | 22.2                    | 16.6              | 50.00           | -33.4       |
|                    |            |                 |            | 25      | 24        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 50      | 0         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 | 64QAM      | 1       | 0         | 22.4                    | 16.8              | 50.00           | -33.2       |
|                    |            |                 |            | 1       | 24        | 22.3                    | 16.7              | 50.00           | -33.3       |
|                    |            |                 |            | 1       | 49        | <b>22.5</b>             | <b>16.9</b>       | 50.00           | -33.1       |
|                    |            |                 |            | 25      | 0         | 21.5                    | 15.9              | 50.00           | -34.1       |
|                    |            |                 |            | 25      | 12        | 21.5                    | 15.9              | 50.00           | -34.1       |
|                    |            |                 |            | 25      | 24        | 21.4                    | 15.8              | 50.00           | -34.2       |
|                    |            |                 |            | 50      | 0         | 21.5                    | 15.9              | 50.00           | -34.1       |

## 7.2.10. LTE BAND 30

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 50820 | <b>Date:</b> | 5/5/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

| Antenna Gain (dBi) |            | -2.98           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | QPSK       | 1       | 0         | 20.3                    | 17.3               | 24.0             | -6.7        |
|                    |            |                 |            | 1       | 12        | 20.2                    | 17.2               | 24.0             | -6.8        |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.1               | 24.0             | -6.9        |
|                    |            |                 |            | 12      | 0         | 19.3                    | 16.3               | 24.0             | -7.7        |
|                    |            |                 |            | 12      | 6         | 19.2                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 12      | 11        | 19.1                    | 16.1               | 24.0             | -7.9        |
|                    | 27710      | 2310.0          |            | 25      | 0         | 19.1                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 1       | 0         | 20.2                    | 17.2               | 24.0             | -6.8        |
|                    |            |                 |            | 1       | 12        | 20.3                    | 17.4               | 24.0             | -6.6        |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.3               | 24.0             | -6.7        |
|                    |            |                 |            | 12      | 0         | 19.1                    | 16.1               | 24.0             | -7.9        |
|                    |            |                 |            | 12      | 6         | 19.3                    | 16.3               | 24.0             | -7.7        |
|                    |            |                 |            | 12      | 11        | 19.3                    | 16.3               | 24.0             | -7.7        |
|                    |            |                 |            | 25      | 0         | 19.3                    | 16.4               | 24.0             | -7.6        |
|                    |            |                 |            | 1       | 0         | 20.1                    | 17.2               | 24.0             | -6.8        |
|                    |            |                 |            | 1       | 12        | 20.3                    | 17.3               | 24.0             | -6.7        |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.3               | 24.0             | -6.7        |
|                    |            |                 |            | 12      | 0         | 19.2                    | 16.3               | 24.0             | -7.7        |
|                    | 27735      | 2312.5          |            | 12      | 6         | 19.2                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 12      | 11        | 19.2                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 25      | 0         | 19.2                    | 16.3               | 24.0             | -7.7        |

| Antenna Gain (dBi) |            | -2.98           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | 16QAM      | 1       | 0         | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 1       | 12        | 19.6                    | 16.6               | 24.0             | -7.4        |
|                    |            |                 |            | 1       | 24        | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 12      | 0         | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 12      | 6         | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    |            |                 |            | 12      | 11        | 18.7                    | 15.8               | 24.0             | -8.2        |
|                    | 27710      | 2310.0          |            | 25      | 0         | 18.7                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 1       | 0         | 19.6                    | 16.6               | 24.0             | -7.4        |
|                    |            |                 |            | 1       | 12        | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 1       | 24        | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 12      | 0         | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    |            |                 |            | 12      | 6         | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 12      | 11        | 18.6                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 25      | 0         | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    |            |                 |            | 1       | 0         | 19.6                    | 16.6               | 24.0             | -7.4        |
|                    |            |                 |            | 1       | 12        | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 1       | 24        | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    |            |                 |            | 27735   | 2312.5    | 12                      | 0                  | 18.6             | 15.6        |
|                    | 12         | 6               |            |         |           | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    | 12         | 11              |            |         |           | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    | 25         | 0               |            |         |           | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    | 1          | 0               |            |         |           | 19.6                    | 16.6               | 24.0             | -7.4        |
|                    | 1          | 12              |            |         |           | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    | 1          | 24              |            |         |           | 19.7                    | 16.7               | 24.0             | -7.3        |
|                    | 12         | 0               |            |         |           | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    | 12         | 6               |            |         |           | 18.6                    | 15.6               | 24.0             | -8.4        |

| Antenna Gain (dBi) |            | -2.98           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 27685      | 2307.5          | 64QAM      | 1       | 0         | 18.8                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 1       | 12        | 18.6                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 12      | 0         | 17.8                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 12      | 6         | 17.7                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 12      | 11        | 17.7                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.8               | 24.0             | -9.2        |
|                    | 27710      | 2310.0          |            | 1       | 0         | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 1       | 12        | 18.8                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 1       | 24        | 18.8                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 12      | 0         | 17.7                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 12      | 6         | 17.7                    | 14.7               | 24.0             | -9.3        |
|                    |            |                 |            | 12      | 11        | 17.8                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.8               | 24.0             | -9.2        |
|                    | 27735      | 2312.5          |            | 1       | 0         | 18.8                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 1       | 12        | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 12      | 0         | 17.8                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 12      | 6         | 17.8                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 12      | 11        | 17.8                    | 14.8               | 24.0             | -9.2        |
|                    |            |                 |            | 25      | 0         | 17.8                    | 14.8               | 24.0             | -9.2        |

**OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.98           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 27710      | 2310.0          | QPSK       | 1       | 0         | <b>20.3</b>             | <b>17.4</b>        | 24.0             | -6.6        |
|                    |            |                 |            | 1       | 24        | 20.2                    | 17.2               | 24.0             | -6.8        |
|                    |            |                 |            | 1       | 49        | 20.1                    | 17.1               | 24.0             | -6.9        |
|                    |            |                 |            | 25      | 0         | 19.3                    | 16.3               | 24.0             | -7.7        |
|                    |            |                 |            | 25      | 12        | 19.2                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 25      | 24        | 19.1                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 |            | 50      | 0         | 19.2                    | 16.2               | 24.0             | -7.8        |
|                    |            |                 | 16QAM      | 1       | 0         | 19.6                    | 16.6               | 24.0             | -7.4        |
|                    |            |                 |            | 1       | 24        | <b>19.6</b>             | <b>16.7</b>        | 24.0             | -7.3        |
|                    |            |                 |            | 1       | 49        | 19.5                    | 16.6               | 24.0             | -7.4        |
|                    |            |                 |            | 25      | 0         | 18.6                    | 15.6               | 24.0             | -8.4        |
|                    |            |                 |            | 25      | 12        | 18.5                    | 15.5               | 24.0             | -8.5        |
|                    |            |                 |            | 25      | 24        | 18.4                    | 15.4               | 24.0             | -8.6        |
|                    |            |                 |            | 50      | 0         | 18.5                    | 15.5               | 24.0             | -8.5        |
|                    |            |                 | 64QAM      | 1       | 0         | <b>18.8</b>             | <b>15.8</b>        | 24.0             | -8.2        |
|                    |            |                 |            | 1       | 24        | 18.7                    | 15.7               | 24.0             | -8.3        |
|                    |            |                 |            | 1       | 49        | 18.8                    | 15.8               | 24.0             | -8.2        |
|                    |            |                 |            | 25      | 0         | 17.7                    | 14.7               | 24.0             | -9.3        |
|                    |            |                 |            | 25      | 12        | 17.6                    | 14.7               | 24.0             | -9.3        |
|                    |            |                 |            | 25      | 24        | 17.7                    | 14.7               | 24.0             | -9.3        |
|                    |            |                 |            | 50      | 0         | 17.8                    | 14.8               | 24.0             | -9.2        |

## 7.2.11. LTE BAND 41

|     |       |       |        |
|-----|-------|-------|--------|
| ID: | 40813 | Date: | 5/5/17 |
|-----|-------|-------|--------|

### OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | QPSK       | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 12        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 12      | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 6         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 12      | 11        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 12        | 21.3                    | 18.4               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 24        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 12      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 12      | 6         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 12      | 11        | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    | 41565      | 2687.5          |            | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 12        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 24        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 12      | 0         | 20.2                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 6         | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 12      | 11        | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 25      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |

|                    |            |                 |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | 16QAM      | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 12        | 20.9                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 12      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 6         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 11        | 19.8                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 16.9               | 33.0             | -16.2       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 12        | 20.9                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 12      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 6         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 11        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    | 41565      | 2687.5          |            | 1       | 0         | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 12        | 20.9                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 12      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 6         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 11        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 39675      | 2498.5          | 64QAM      | 1       | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 12        | 19.8                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 24        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 0         | 18.8                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 12      | 6         | 18.8                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 12      | 11        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    | 40620      | 2593.0          |            | 25      | 0         | 18.8                    | 15.8               | 33.0             | -17.2       |
|                    |            |                 |            | 1       | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 12        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 24        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 12      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 12      | 6         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    | 41565      | 2687.5          |            | 12      | 11        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 25      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 1       | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 1       | 12        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 24        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 12      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 12      | 6         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 12      | 11        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 25      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |

**OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | QPSK       | 1       | 0         | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 25      | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 12        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 24        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 24        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 25      | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 12        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 25      | 24        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    | 41540      | 2685.0          |            | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 24        | 21.2                    | 18.3               | 33.0             | -14.8       |
|                    |            |                 |            | 1       | 49        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 25      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 12        | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 25      | 24        | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | 16QAM      | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 25      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 12        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 25      | 24        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 12        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 24        | 19.8                    | 16.9               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    | 41540      | 2685.0          |            | 1       | 0         | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 24        | 20.7                    | 17.8               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 49        | 20.7                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 25      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 12        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 25      | 24        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 39700      | 2501.0          | 64QAM      | 1       | 0         | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 24        | 20.0                    | 17.1               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    | 40620      | 2593.0          |            | 50      | 0         | 19.0                    | 16.1               | 33.0             | -17.0       |
|                    |            |                 |            | 1       | 0         | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 24        | 20.1                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 49        | 20.1                    | 17.2               | 33.0             | -15.9       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    | 41540      | 2685.0          |            | 1       | 0         | 20.1                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 1       | 24        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 25      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 12        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 25      | 24        | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 50      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |

**OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)**

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | QPSK       | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 37        | 21.1                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 1       | 74        | 21.1                    | 18.1               | 33.0             | -14.9       |
|                    |            |                 |            | 36      | 0         | 20.1                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 36      | 16        | 20.1                    | 17.1               | 33.0             | -15.9       |
|                    |            |                 |            | 36      | 35        | 20.3                    | 17.4               | 33.0             | -15.7       |
|                    |            |                 |            | 75      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 37        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 74        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 36      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 16        | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 35        | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 75      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    | 41515      | 2682.5          |            | 1       | 0         | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 37        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 74        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 36      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 16        | 20.2                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 36      | 35        | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 75      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | 16QAM      | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 37        | 20.8                    | 17.9               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 74        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 36      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 16        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.7                    | 16.7               | 33.0             | -16.3       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 37        | 20.7                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 74        | 20.7                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 36      | 0         | 19.7                    | 16.7               | 33.0             | -16.3       |
|                    |            |                 |            | 36      | 16        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    | 41515      | 2682.5          |            | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 37        | 20.7                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 1       | 74        | 20.7                    | 17.7               | 33.0             | -15.3       |
|                    |            |                 |            | 36      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 16        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 36      | 35        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 75      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 39725      | 2503.5          | 64QAM      | 1       | 0         | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 37        | 19.9                    | 17.0               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 36      | 0         | 19.1                    | 16.1               | 33.0             | -16.9       |
|                    |            |                 |            | 36      | 16        | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 36      | 35        | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 75      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 37        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 36      | 0         | 18.9                    | 16.0               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 16        | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 36      | 35        | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 75      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    | 41515      | 2682.5          |            | 1       | 0         | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 37        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 74        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 36      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 16        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 36      | 35        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 75      | 0         | 18.8                    | 15.9               | 33.0             | -17.2       |

**OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)**

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | QPSK       | 1       | 0         | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 99        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 50      | 24        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 50      | 49        | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    |            |                 |            | 100     | 0         | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 21.4                    | 18.5               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 99        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 50      | 0         | 20.2                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 24        | 20.2                    | 17.3               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 49        | 20.3                    | 17.3               | 33.0             | -15.7       |
|                    |            |                 |            | 100     | 0         | 20.4                    | 17.4               | 33.0             | -15.6       |
|                    | 41490      | 2680.0          |            | 1       | 0         | 21.4                    | 18.4               | 33.0             | -14.6       |
|                    |            |                 |            | 1       | 49        | 21.3                    | 18.3               | 33.0             | -14.7       |
|                    |            |                 |            | 1       | 99        | 21.2                    | 18.2               | 33.0             | -14.8       |
|                    |            |                 |            | 50      | 0         | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 24        | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 50      | 49        | 20.2                    | 17.2               | 33.0             | -15.8       |
|                    |            |                 |            | 100     | 0         | 20.3                    | 17.4               | 33.0             | -15.7       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | 16QAM      | 1       | 0         | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 49        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 99        | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 50      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 24        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 49        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 100     | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 49        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 99        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 50      | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 24        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 50      | 49        | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 100     | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    | 41490      | 2680.0          |            | 1       | 0         | 20.8                    | 17.8               | 33.0             | -15.2       |
|                    |            |                 |            | 1       | 49        | 20.9                    | 18.0               | 33.0             | -15.1       |
|                    |            |                 |            | 1       | 99        | 20.9                    | 17.9               | 33.0             | -15.1       |
|                    |            |                 |            | 50      | 0         | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 24        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 50      | 49        | 19.8                    | 16.8               | 33.0             | -16.2       |
|                    |            |                 |            | 100     | 0         | 19.8                    | 16.9               | 33.0             | -16.2       |

| Antenna Gain (dBi) |            | -2.99           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 39750      | 2506.0          | 64QAM      | 1       | 0         | 19.9                    | 16.9               | 33.0             | -16.1       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 99        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 50      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 24        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 49        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 100     | 0         | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    | 40620      | 2593.0          |            | 1       | 0         | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.1               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 99        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 50      | 0         | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 50      | 24        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 49        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 100     | 0         | 19.0                    | 16.1               | 33.0             | -17.0       |
|                    | 41490      | 2680.0          |            | 1       | 0         | 20.0                    | 17.1               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 49        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 1       | 99        | 20.0                    | 17.0               | 33.0             | -16.0       |
|                    |            |                 |            | 50      | 0         | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 24        | 18.9                    | 15.9               | 33.0             | -17.1       |
|                    |            |                 |            | 50      | 49        | 19.0                    | 16.0               | 33.0             | -17.0       |
|                    |            |                 |            | 100     | 0         | 19.0                    | 16.0               | 33.0             | -17.0       |

## 7.2.12. LTE BAND 66

|            |       |              |        |
|------------|-------|--------------|--------|
| <b>ID:</b> | 40813 | <b>Date:</b> | 5/6/17 |
|------------|-------|--------------|--------|

### OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | QPSK       | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 12        | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 12      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 12      | 6         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 12      | 11        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    | 132322     | 1745.0          |            | 25      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 12        | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 12      | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 12      | 6         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    | 132647     | 1777.5          |            | 12      | 11        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 12        | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 12      | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 12      | 6         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 12      | 11        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | 16QAM      | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 12        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 24        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 12      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 12      | 6         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 12      | 11        | 20.2                    | 17.3               | 30.0             | -12.7       |
|                    | 132322     | 1745.0          |            | 25      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 12        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 24        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 12      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 12      | 6         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    | 132647     | 1777.5          |            | 12      | 11        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 25      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 12        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 24        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 12      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 12      | 6         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 12      | 11        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 5.0                | 131997     | 1712.5          | 64QAM      | 1       | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 12        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 12      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 12      | 6         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 12      | 11        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    | 132322     | 1745.0          |            | 25      | 0         | 19.2                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 1       | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 12        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 12      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 12      | 6         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    | 132647     | 1777.5          |            | 12      | 11        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 25      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 1       | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 12        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 12      | 0         | 19.2                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 12      | 6         | 19.2                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 12      | 11        | 19.2                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 25      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |

**OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)**

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | QPSK       | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 19.4               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 25      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 12        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 24        | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 50      | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 24        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 49        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 25      | 12        | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 24        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 50      | 0         | 21.1                    | 18.2               | 30.0             | -11.8       |
|                    | 132622     | 1775.0          |            | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 24        | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 25      | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 25      | 12        | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 24        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 50      | 0         | 21.1                    | 18.3               | 30.0             | -11.8       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | 16QAM      | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 24        | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 49        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 12        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 25      | 24        | 20.3                    | 17.5               | 30.0             | -12.6       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.5               | 30.0             | -12.6       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 24        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 49        | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 25      | 0         | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 12        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 24        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    | 132622     | 1775.0          |            | 1       | 0         | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 24        | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 49        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 25      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 12        | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 25      | 24        | 20.2                    | 17.3               | 30.0             | -12.7       |
|                    |            |                 |            | 50      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 10.0               | 132022     | 1715.0          | 64QAM      | 1       | 0         | 20.4                    | 17.6               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 49        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 25      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 25      | 12        | 19.4                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 25      | 24        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 50      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 1       | 24        | 20.4                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 49        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 25      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 25      | 12        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 25      | 24        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 50      | 0         | 19.3                    | 16.4               | 30.0             | -13.6       |
|                    | 132622     | 1775.0          |            | 1       | 0         | 20.3                    | 17.5               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 24        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 49        | 20.4                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 25      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 25      | 12        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 25      | 24        | 19.4                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 50      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |

**OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)**

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | QPSK       | 1       | 0         | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 37        | 22.0                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 74        | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 36      | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 16        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 36      | 35        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    | 132322     | 1745.0          |            | 75      | 0         | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 37        | 22.0                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 74        | 22.0                    | 19.1               | 30.0             | -10.9       |
|                    |            |                 |            | 36      | 0         | 21.2                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 16        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 35        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 75      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    | 132597     | 1772.5          |            | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 37        | 22.2                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 74        | 22.0                    | 19.2               | 30.0             | -10.9       |
|                    |            |                 |            | 36      | 0         | 21.2                    | 18.4               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 16        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 35        | 21.1                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 75      | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | 16QAM      | 1       | 0         | 21.4                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 37        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 1       | 74        | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 36      | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 36      | 16        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 36      | 35        | 20.4                    | 17.6               | 30.0             | -12.5       |
|                    |            |                 |            | 75      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 37        | 21.4                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 74        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 36      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 36      | 16        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 36      | 35        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 75      | 0         | 20.4                    | 17.6               | 30.0             | -12.5       |
|                    | 132597     | 1772.5          |            | 1       | 0         | 21.4                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 1       | 37        | 21.4                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 74        | 21.2                    | 18.4               | 30.0             | -11.7       |
|                    |            |                 |            | 36      | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 36      | 16        | 20.3                    | 17.5               | 30.0             | -12.6       |
|                    |            |                 |            | 36      | 35        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 75      | 0         | 20.1                    | 17.2               | 30.0             | -12.8       |
|                    |            |                 |            | 75      | 0         | 20.1                    | 17.2               | 30.0             | -12.8       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 15.0               | 132047     | 1717.5          | 64QAM      | 1       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 37        | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 74        | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 36      | 0         | 19.5                    | 16.7               | 30.0             | -13.4       |
|                    |            |                 |            | 36      | 16        | 19.5                    | 16.7               | 30.0             | -13.3       |
|                    |            |                 |            | 36      | 35        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 75      | 0         | 19.4                    | 16.5               | 30.0             | -13.5       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 1       | 37        | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 74        | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 36      | 0         | 19.4                    | 16.6               | 30.0             | -13.5       |
|                    |            |                 |            | 36      | 16        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 36      | 35        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 75      | 0         | 19.5                    | 16.6               | 30.0             | -13.4       |
|                    | 132597     | 1772.5          |            | 1       | 0         | 20.5                    | 17.7               | 30.0             | -12.3       |
|                    |            |                 |            | 1       | 37        | 20.4                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 74        | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 36      | 0         | 19.3                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 36      | 16        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 36      | 35        | 19.5                    | 16.7               | 30.0             | -13.3       |
|                    |            |                 |            | 75      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |

**OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)**

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | QPSK       | 1       | 0         | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 1       | 49        | 22.0                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 99        | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 50      | 0         | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 50      | 24        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 50      | 49        | 21.1                    | 18.2               | 30.0             | -11.8       |
|                    | 132322     | 1745.0          |            | 100     | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 0         | 22.2                    | 19.4               | 30.0             | -10.6       |
|                    |            |                 |            | 1       | 49        | 22.1                    | 19.3               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 99        | 22.1                    | 19.3               | 30.0             | -10.7       |
|                    |            |                 |            | 50      | 0         | 21.2                    | 18.4               | 30.0             | -11.7       |
|                    |            |                 |            | 50      | 24        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 50      | 49        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 100     | 0         | 21.3                    | 18.4               | 30.0             | -11.6       |
|                    | 132572     | 1770.0          |            | 1       | 0         | 22.1                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 49        | 22.0                    | 19.2               | 30.0             | -10.8       |
|                    |            |                 |            | 1       | 99        | 21.9                    | 19.1               | 30.0             | -10.9       |
|                    |            |                 |            | 50      | 0         | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 50      | 24        | 21.1                    | 18.3               | 30.0             | -11.7       |
|                    |            |                 |            | 50      | 49        | 21.0                    | 18.2               | 30.0             | -11.8       |
|                    |            |                 |            | 100     | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | 16QAM      | 1       | 0         | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 49        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 99        | 21.4                    | 18.6               | 30.0             | -11.4       |
|                    |            |                 |            | 50      | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 50      | 24        | 20.4                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 50      | 49        | 20.4                    | 17.6               | 30.0             | -12.5       |
|                    |            |                 |            | 100     | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    | 132322     | 1745.0          |            | 1       | 0         | 21.4                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 49        | 21.4                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 99        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 50      | 0         | 20.2                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 50      | 24        | 20.2                    | 17.3               | 30.0             | -12.7       |
|                    |            |                 |            | 50      | 49        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 100     | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    | 132572     | 1770.0          |            | 1       | 0         | 21.2                    | 18.4               | 30.0             | -11.6       |
|                    |            |                 |            | 1       | 49        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 1       | 99        | 21.3                    | 18.5               | 30.0             | -11.5       |
|                    |            |                 |            | 50      | 0         | 20.2                    | 17.3               | 30.0             | -12.7       |
|                    |            |                 |            | 50      | 24        | 20.2                    | 17.4               | 30.0             | -12.7       |
|                    |            |                 |            | 50      | 49        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 100     | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |

| Antenna Gain (dBi) |            | -2.83           |            |         |           |                         |                    |                  |             |
|--------------------|------------|-----------------|------------|---------|-----------|-------------------------|--------------------|------------------|-------------|
| Bandwidth          | UL Channel | Frequency (MHz) | Modulation | RB Size | RB Offset | Conducted Average (dBm) | EIRP Average (dBm) | EIRP Limit (dBm) | Margin (dB) |
| 20.0               | 132072     | 1720.0          | 64QAM      | 1       | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 49        | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 99        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 50      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 50      | 24        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 50      | 49        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    | 132322     | 1745.0          |            | 100     | 0         | 19.4                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 1       | 0         | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 1       | 49        | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 99        | 20.4                    | 17.6               | 30.0             | -12.4       |
|                    |            |                 |            | 50      | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 50      | 24        | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 50      | 49        | 19.4                    | 16.5               | 30.0             | -13.5       |
|                    |            |                 |            | 100     | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |
|                    | 132572     | 1770.0          |            | 1       | 0         | 20.3                    | 17.5               | 30.0             | -12.5       |
|                    |            |                 |            | 1       | 49        | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 1       | 99        | 20.3                    | 17.4               | 30.0             | -12.6       |
|                    |            |                 |            | 50      | 0         | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 50      | 24        | 19.4                    | 16.6               | 30.0             | -13.4       |
|                    |            |                 |            | 50      | 49        | 19.3                    | 16.4               | 30.0             | -13.6       |
|                    |            |                 |            | 100     | 0         | 19.3                    | 16.5               | 30.0             | -13.5       |