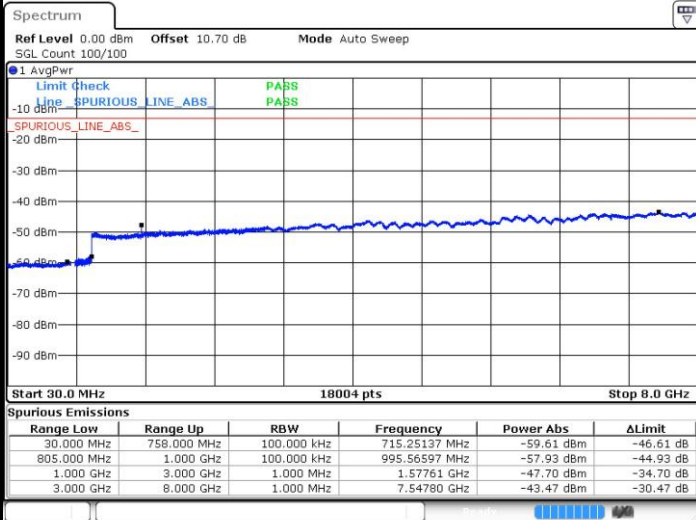


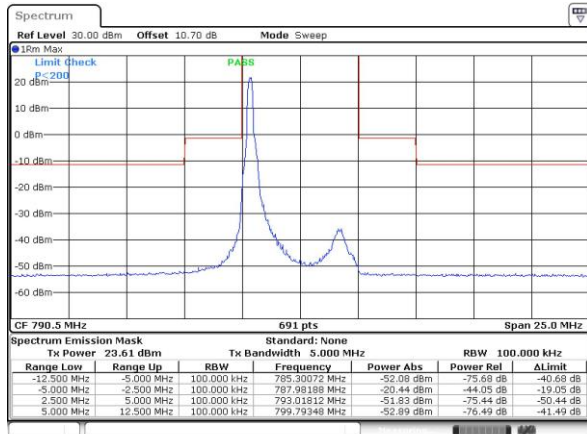


## LTE Band 14 / 10MHz

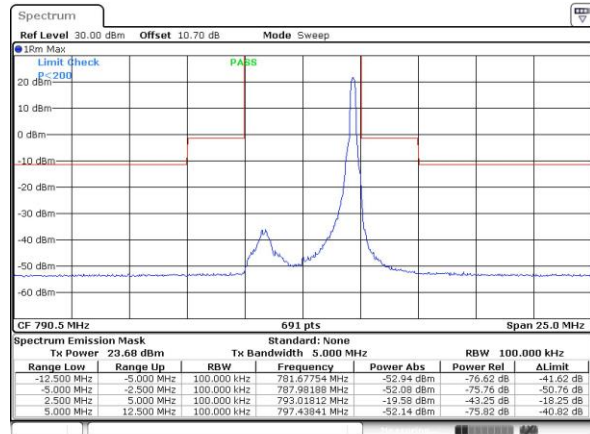
## Middle Channel / 64QAM



Date: 12 APR 2019 20:19:35

**Mask****LTE Band 14 / 5MHz / QPSK****Lowest Channel / 1RB**

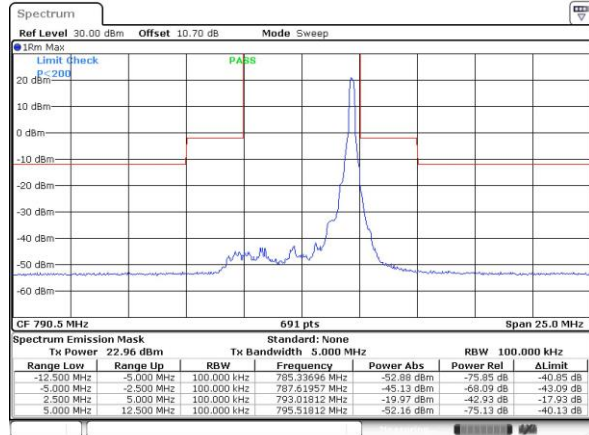
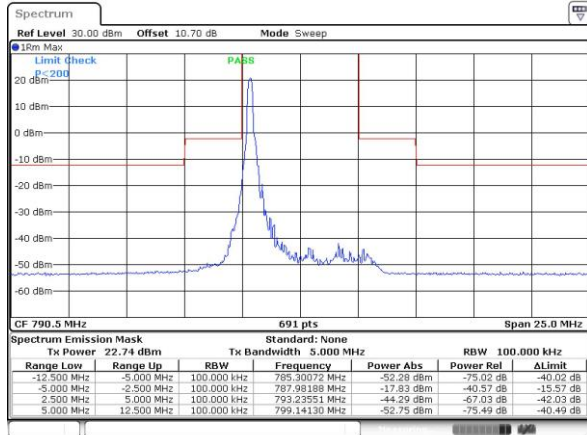
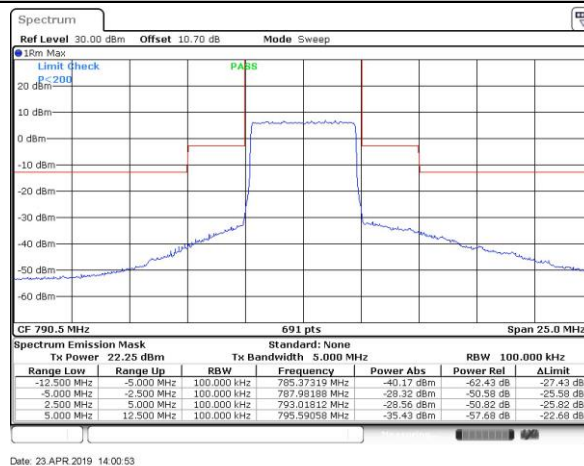
Date: 23 APR 2019 14:02:55

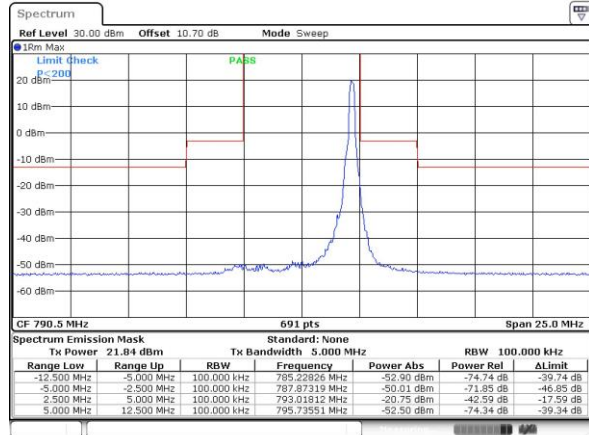
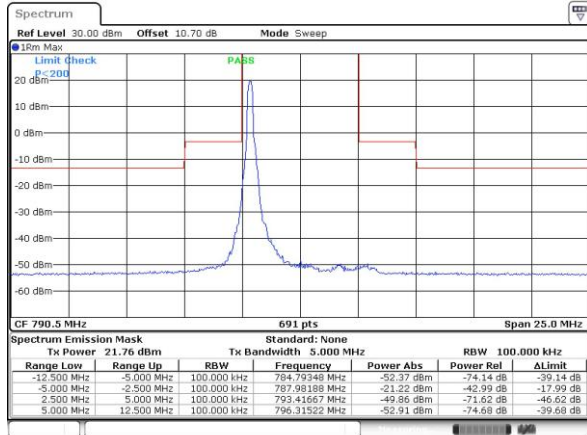


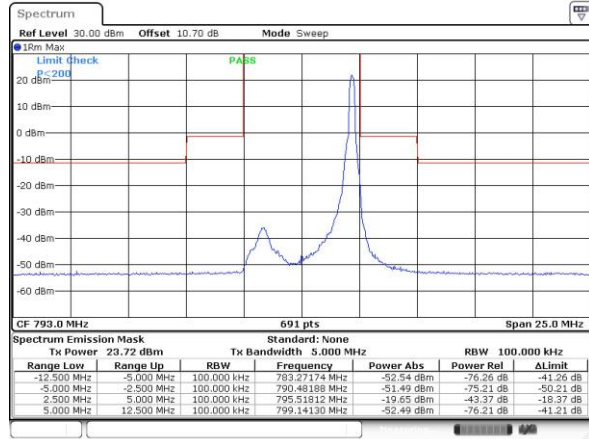
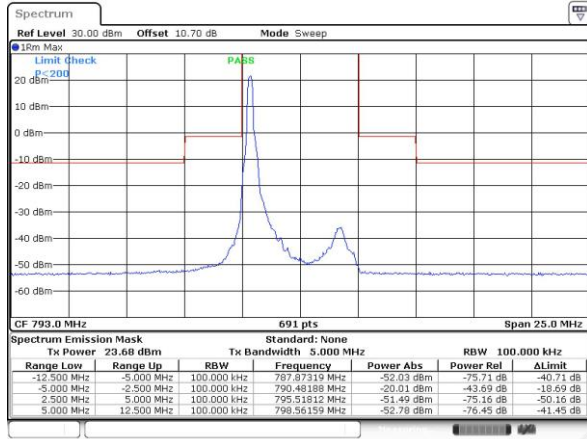
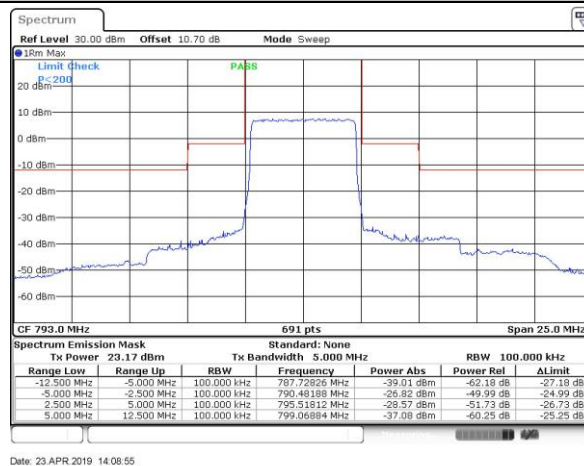
Date: 23 APR 2019 14:03:25

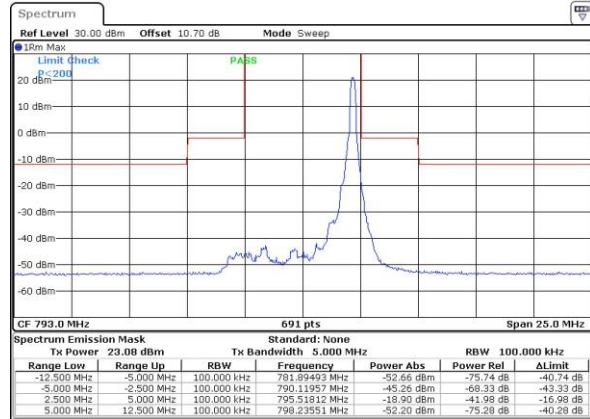
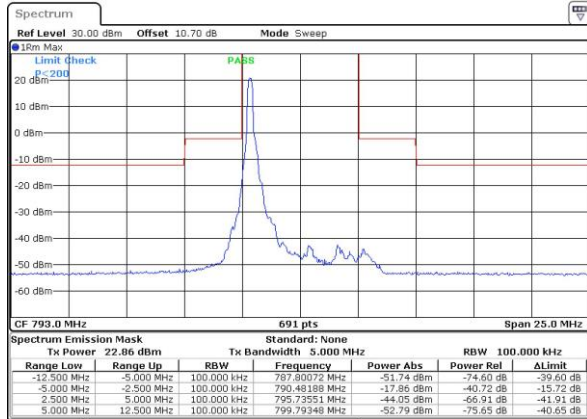
**Lowest Channel / Full RB**

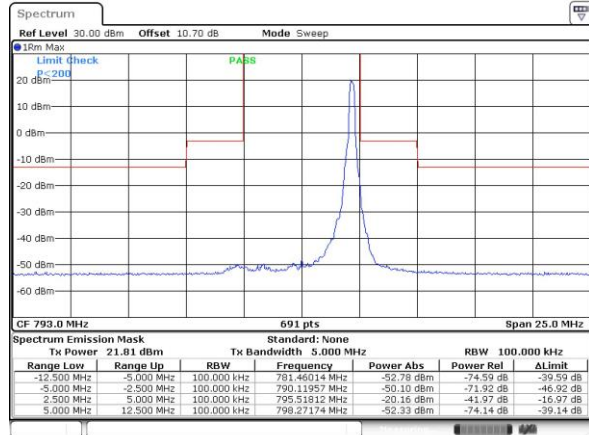
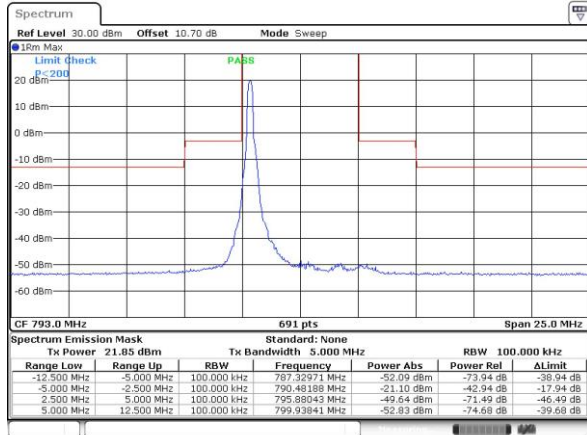
Date: 23 APR 2019 14:00:22

**LTE Band 14 / 5MHz / 16QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**


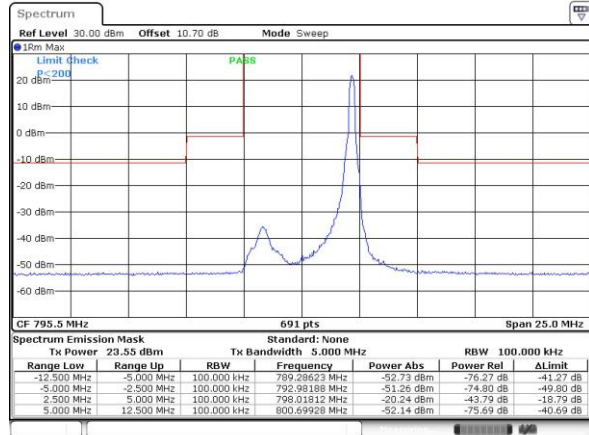
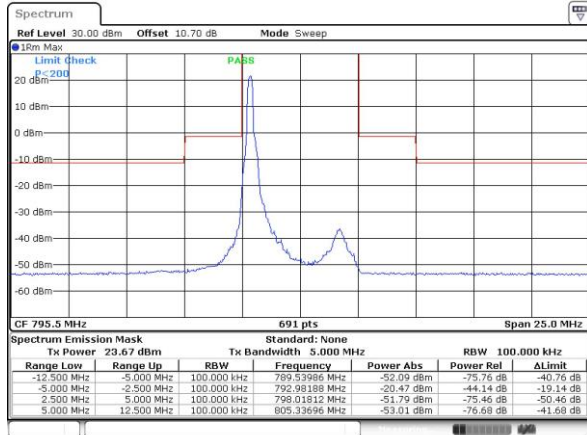
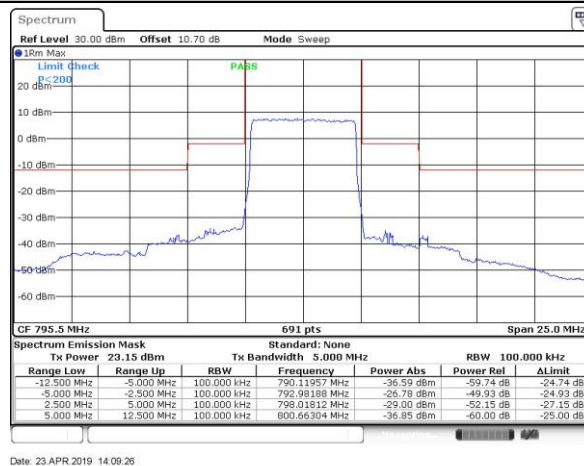
**LTE Band 14 / 5MHz / 64QAM**
**Lowest Channel / 1RB**

**Lowest Channel / Full RB**


**LTE Band 14 / 5MHz / QPSK**
**Middle Channel / 1RB**

**Middle Channel / Full RB**


**LTE Band 14 / 5MHz / 16QAM**
**Middle Channel / 1RB**

**Middle Channel / Full RB**


**LTE Band 14 / 5MHz / 64QAM**
**Middle Channel / 1RB**

**Middle Channel / Full RB**

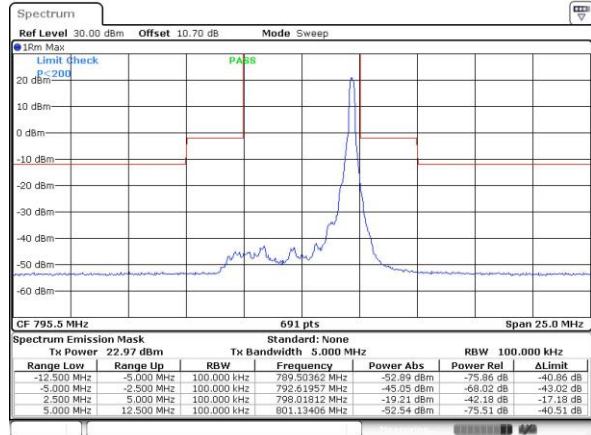
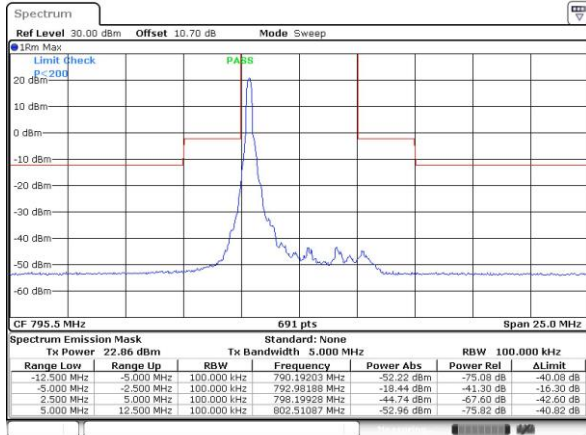



**LTE Band 14 / 5MHz / QPSK**
**Highest Channel / 1RB**

**Highest Channel / Full RB**


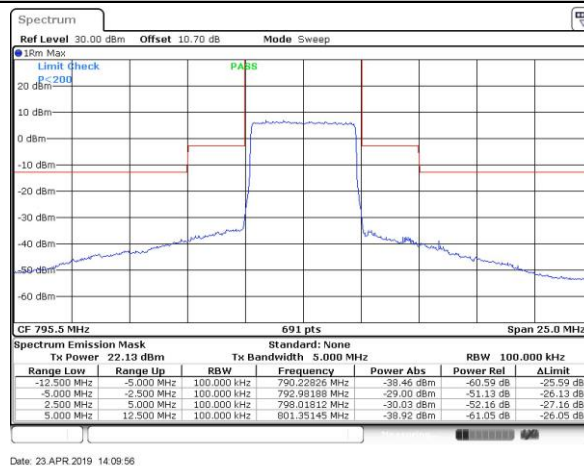


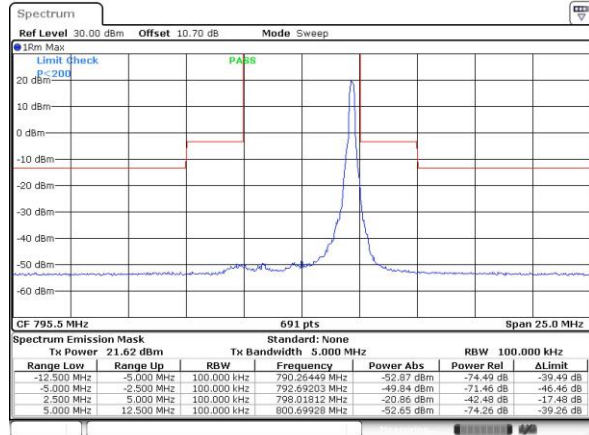
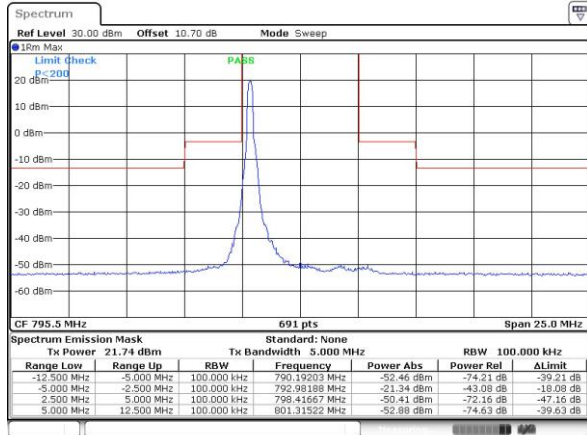
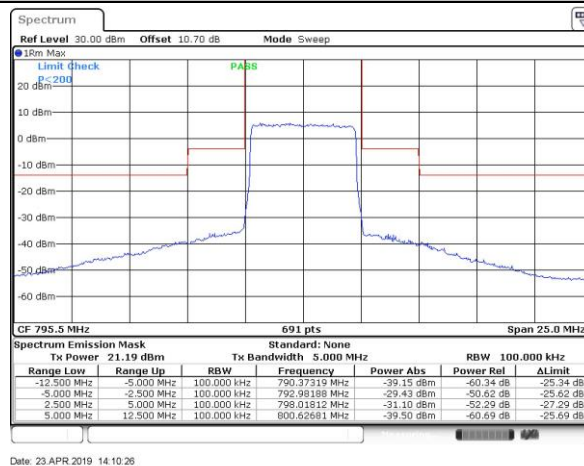
### LTE Band 14 / 5MHz / 16QAM

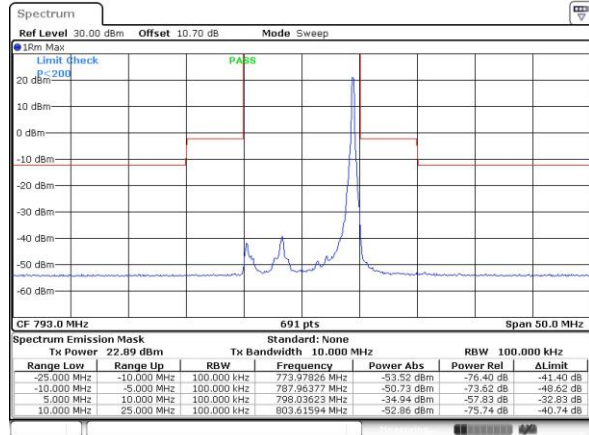
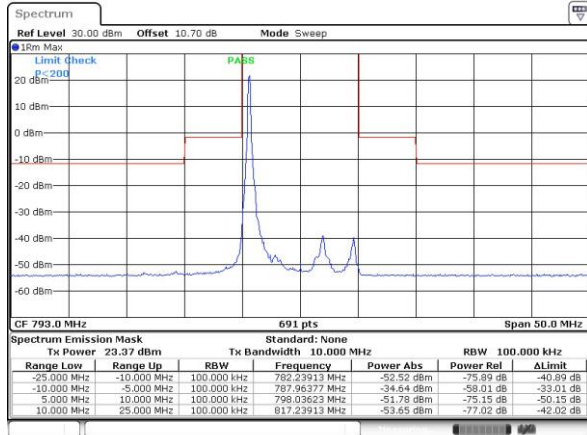
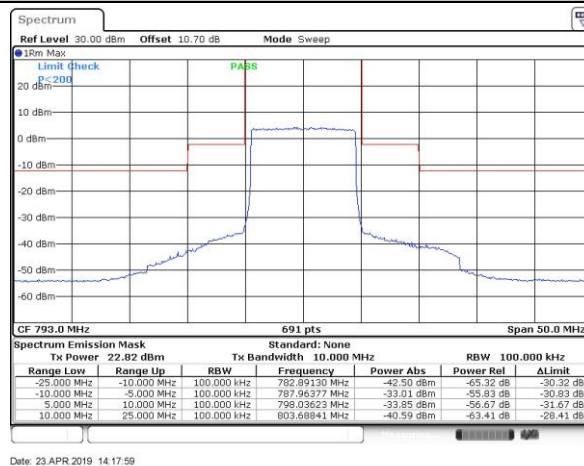
### Highest Channel / 1RB

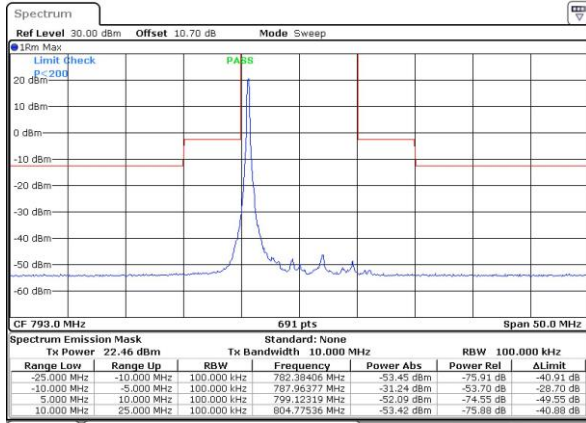


### Highest Channel / Full RB

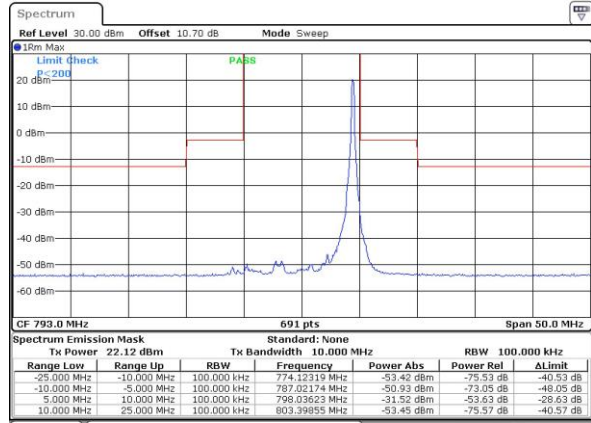


**LTE Band 14 / 5MHz / 64QAM**
**Highest Channel / 1RB**

**Highest Channel / Full RB**


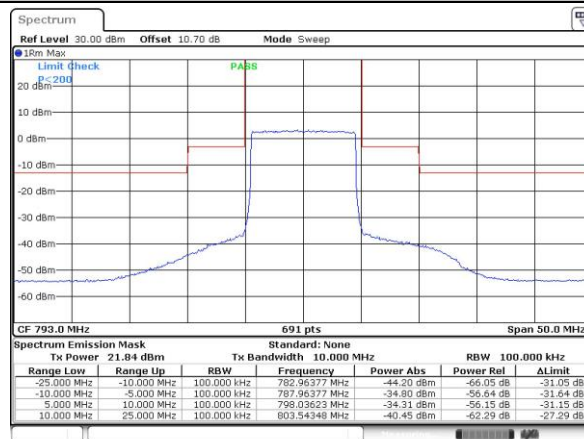
**LTE Band 14 / 10MHz / QPSK**
**Middle Channel / 1RB**

**Middle Channel / Full RB**


**LTE Band 14 / 10MHz / 16QAM**
**Middle Channel / 1RB**


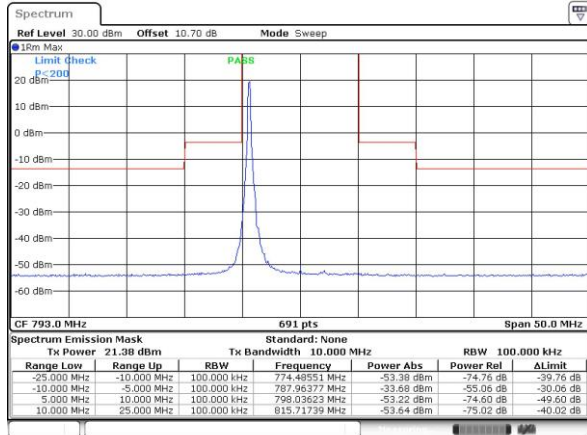
Date: 23 APR 2019 14:15:59



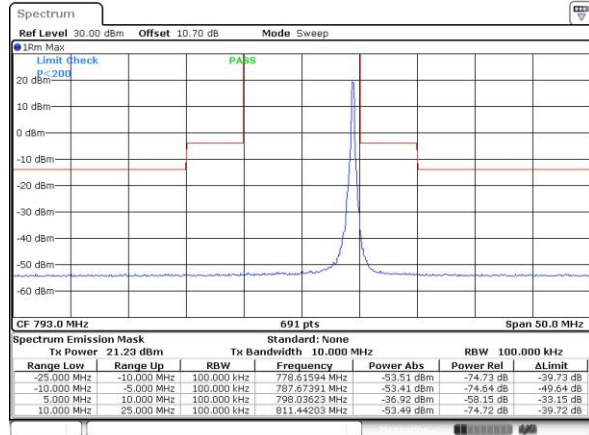
Date: 23 APR 2019 14:14:30

**Middle Channel / Full RB**


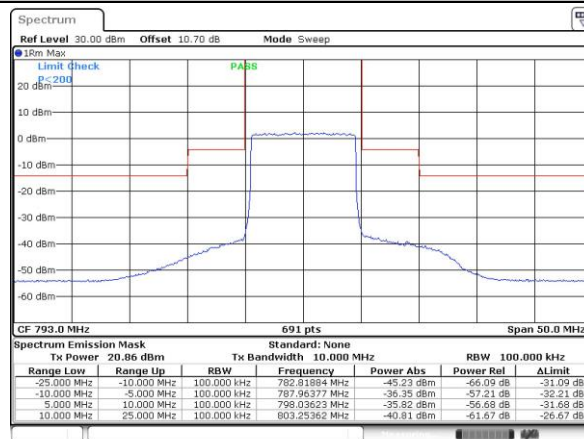
Date: 23 APR 2019 14:17:29

**LTE Band 14 / 10MHz / 64QAM**
**Middle Channel / 1RB**


Date: 23 APR 2019 14:16:29



Date: 23 APR 2019 14:14:00

**Middle Channel / Full RB**


Date: 23 APR 2019 14:16:59

## Frequency Stability

| Test Conditions  |                   | LTE Band 14 (QPSK) / Middle Channel | Limit   |
|------------------|-------------------|-------------------------------------|---------|
| Temperature (°C) | Voltage (Volt)    | BW 10MHz                            | Note 2. |
|                  |                   | Deviation (ppm)                     | Result  |
| 50               | Normal Voltage    | 0.0040                              | PASS    |
| 40               | Normal Voltage    | 0.0052                              |         |
| 30               | Normal Voltage    | 0.0042                              |         |
| 20(Ref.)         | Normal Voltage    | 0.0000                              |         |
| 10               | Normal Voltage    | 0.0037                              |         |
| 0                | Normal Voltage    | 0.0033                              |         |
| -10              | Normal Voltage    | 0.0084                              |         |
| -20              | Normal Voltage    | 0.0048                              |         |
| -30              | Normal Voltage    | 0.0037                              |         |
| 20               | Maximum Voltage   | 0.0052                              |         |
| 20               | Normal Voltage    | 0.0000                              |         |
| 20               | Battery End Point | 0.0026                              |         |

**Note:**

1. Normal Voltage =3.85 V. ; Battery End Point (BEP) =3.5 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



## Appendix B. Test Results of ERP and Radiated Test

## ERP

&lt;For Ant. 0 C&gt;

| LTE Band 14 / 5MHz (Average) (GT - LC = 0.7 dB) |          |      |        |             |               |          |        |
|-------------------------------------------------|----------|------|--------|-------------|---------------|----------|--------|
| Channel                                         | Mode     | RB   |        | Conducted   |               | ERP      |        |
|                                                 |          | Size | Offset | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest                                          | QPSK     | 1    | 24     | 24.48       | 0.2805        | 23.03    | 0.2009 |
| Middle                                          |          | 1    | 24     | 24.43       | 0.2773        | 22.98    | 0.1986 |
| Highest                                         |          | 1    | 24     | 24.40       | 0.2754        | 22.95    | 0.1972 |
| Lowest                                          | 16QAM    | 1    | 12     | 23.78       | 0.2388        | 22.33    | 0.1710 |
| Middle                                          |          | 1    | 12     | 23.75       | 0.2371        | 22.30    | 0.1698 |
| Highest                                         |          | 1    | 12     | 23.69       | 0.2339        | 22.24    | 0.1675 |
| Lowest                                          | 64QAM    | 1    | 24     | 22.73       | 0.1875        | 21.28    | 0.1343 |
| Middle                                          |          | 1    | 24     | 22.67       | 0.1849        | 21.22    | 0.1324 |
| Highest                                         |          | 1    | 24     | 22.60       | 0.1820        | 21.15    | 0.1303 |
| Limit                                           | ERP < 3W |      |        | Result      |               | PASS     |        |

| LTE Band 14 / 10MHz (Average) (GT - LC = 0.7 dB) |          |      |        |             |               |          |        |
|--------------------------------------------------|----------|------|--------|-------------|---------------|----------|--------|
| Channel                                          | Mode     | RB   |        | Conducted   |               | ERP      |        |
|                                                  |          | Size | Offset | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest                                           | QPSK     | -    | -      | -           | -             | -        | -      |
| Middle                                           |          | 1    | 0      | 24.70       | 0.2951        | 23.25    | 0.2113 |
| Highest                                          |          | -    | -      | -           | -             | -        | -      |
| Lowest                                           | 16QAM    | -    | -      | -           | -             | -        | -      |
| Middle                                           |          | 1    | 0      | 23.79       | 0.2393        | 22.34    | 0.1714 |
| Highest                                          |          | -    | -      | -           | -             | -        | -      |
| Lowest                                           | 64QAM    | -    | -      | -           | -             | -        | -      |
| Middle                                           |          | 1    | 0      | 22.77       | 0.1892        | 21.32    | 0.1355 |
| Highest                                          |          | -    | -      | -           | -             | -        | -      |
| Limit                                            | ERP < 3W |      |        | Result      |               | PASS     |        |





**<For Ant. 1>**

| LTE Band 14 / 5MHz (Average) (GT - LC = -5.4 dB) |          |      |        |             |               |          |        |
|--------------------------------------------------|----------|------|--------|-------------|---------------|----------|--------|
| Channel                                          | Mode     | RB   |        | Conducted   |               | ERP      |        |
|                                                  |          | Size | Offset | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest                                           | QPSK     | 1    | 24     | 24.48       | 0.2805        | 16.93    | 0.0493 |
| Middle                                           |          | 1    | 24     | 24.43       | 0.2773        | 16.88    | 0.0488 |
| Highest                                          |          | 1    | 24     | 24.40       | 0.2754        | 16.85    | 0.0484 |
| Lowest                                           | 16QAM    | 1    | 12     | 23.78       | 0.2388        | 16.23    | 0.0420 |
| Middle                                           |          | 1    | 12     | 23.75       | 0.2371        | 16.20    | 0.0417 |
| Highest                                          |          | 1    | 12     | 23.69       | 0.2339        | 16.14    | 0.0411 |
| Lowest                                           | 64QAM    | 1    | 24     | 22.73       | 0.1875        | 15.18    | 0.0330 |
| Middle                                           |          | 1    | 24     | 22.67       | 0.1849        | 15.12    | 0.0325 |
| Highest                                          |          | 1    | 24     | 22.60       | 0.1820        | 15.05    | 0.0320 |
| Limit                                            | ERP < 3W |      |        | Result      |               | PASS     |        |

| LTE Band 14 / 10MHz (Average) (GT - LC = -5.4 dB) |          |      |        |             |               |          |        |
|---------------------------------------------------|----------|------|--------|-------------|---------------|----------|--------|
| Channel                                           | Mode     | RB   |        | Conducted   |               | ERP      |        |
|                                                   |          | Size | Offset | Power (dBm) | Power (Watts) | ERP(dBm) | ERP(W) |
| Lowest                                            | QPSK     | -    | -      | -           | -             | -        | -      |
| Middle                                            |          | 1    | 0      | 24.70       | 0.2951        | 17.15    | 0.0519 |
| Highest                                           |          | -    | -      | -           | -             | -        | -      |
| Lowest                                            | 16QAM    | -    | -      | -           | -             | -        | -      |
| Middle                                            |          | 1    | 0      | 23.79       | 0.2393        | 16.24    | 0.0421 |
| Highest                                           |          | -    | -      | -           | -             | -        | -      |
| Lowest                                            | 64QAM    | -    | -      | -           | -             | -        | -      |
| Middle                                            |          | 1    | 0      | 22.77       | 0.1892        | 15.22    | 0.0333 |
| Highest                                           |          | -    | -      | -           | -             | -        | -      |
| Limit                                             | ERP < 3W |      |        | Result      |               | PASS     |        |

**Radiated Spurious Emission**

&lt;Ant. 0\_C&gt;

**LTE Band 14**

| LTE Band 14 / 5MHz / QPSK |                      |                |                  |                         |                         |                          |                            |                             |                       |
|---------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                   | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                    | 1584                 | -60.50         | -42.15           | -18.35                  | -70.58                  | -65.87                   | 0.90                       | 8.42                        | H                     |
|                           | 2378                 | -50.56         | -13              | -37.56                  | -65.05                  | -57.82                   | 1.12                       | 10.53                       | H                     |
|                           | 3171                 | -54.85         | -13              | -41.85                  | -70.73                  | -63.11                   | 1.30                       | 11.71                       | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           | 1584                 | -61.19         | -42.15           | -19.04                  | -70.80                  | -66.56                   | 0.90                       | 8.42                        | V                     |
|                           | 2378                 | -49.60         | -13              | -36.60                  | -63.94                  | -56.86                   | 1.12                       | 10.53                       | V                     |
|                           | 3171                 | -54.49         | -13              | -41.49                  | -70.84                  | -62.75                   | 1.30                       | 11.71                       | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
| Middle                    | 1592                 | -60.52         | -42.15           | -18.37                  | -70.45                  | -65.92                   | 0.90                       | 8.45                        | H                     |
|                           | 2385                 | -50.98         | -13              | -37.98                  | -65.46                  | -58.24                   | 1.12                       | 10.54                       | H                     |
|                           | 3184                 | -54.82         | -13              | -41.82                  | -70.70                  | -63.11                   | 1.30                       | 11.74                       | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           | 1592                 | -60.92         | -42.15           | -18.77                  | -70.50                  | -66.32                   | 0.90                       | 8.45                        | V                     |
|                           | 2385                 | -50.63         | -13              | -37.63                  | -64.96                  | -57.89                   | 1.12                       | 10.54                       | V                     |
|                           | 3184                 | -54.50         | -13              | -41.50                  | -70.85                  | -62.79                   | 1.30                       | 11.74                       | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |



|         |      |        |        |        |        |        |      |       |   |
|---------|------|--------|--------|--------|--------|--------|------|-------|---|
| Highest | 1595 | -60.66 | -42.15 | -18.51 | -70.60 | -66.07 | 0.90 | 8.46  | H |
|         | 2392 | -51.50 | -13    | -38.50 | -65.86 | -58.77 | 1.13 | 10.55 | H |
|         | 3192 | -54.94 | -13    | -41.94 | -70.85 | -63.25 | 1.30 | 11.76 | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         | 1595 | -61.18 | -42.15 | -19.03 | -70.76 | -66.59 | 0.90 | 8.46  | V |
|         | 2392 | -49.97 | -13    | -36.97 | -64.29 | -57.24 | 1.13 | 10.55 | V |
|         | 3192 | -54.31 | -13    | -41.31 | -70.73 | -62.62 | 1.30 | 11.76 | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |

**Remark:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 14 / 10MHz / QPSK |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                    | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                     | 1577                 | -60.83         | -42.15           | -18.68                  | -70.9                   | -66.18                   | 0.90                       | 8.39                        | H                     |
|                            | 2368                 | -51.30         | -13              | -38.30                  | -65.91                  | -58.54                   | 1.12                       | 10.52                       | H                     |
|                            | 3154                 | -55.24         | -13              | -42.24                  | -71.1                   | -63.46                   | 1.30                       | 11.67                       | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            | 1577                 | -61.11         | -42.15           | -18.96                  | -70.71                  | -66.46                   | 0.90                       | 8.39                        | V                     |
|                            | 2368                 | -51.81         | -13              | -38.81                  | -66.16                  | -59.05                   | 1.12                       | 10.52                       | V                     |
|                            | 3154                 | -54.72         | -13              | -41.72                  | -71.02                  | -62.94                   | 1.30                       | 11.67                       | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |

**Remark:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



&lt;Ant. 1&gt;

**LTE Band 14**

| LTE Band 14 / 5MHz / QPSK |                      |                |                  |                         |                         |                          |                            |                             |                       |
|---------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                   | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Lowest                    | 1584                 | -57.56         | -42.15           | -15.41                  | -67.64                  | -62.93                   | 0.90                       | 8.42                        | H                     |
|                           | 2376                 | -56.16         | -13              | -43.16                  | -70.65                  | -63.41                   | 1.12                       | 10.53                       | H                     |
|                           | 3168                 | -54.53         | -13              | -41.53                  | -70.41                  | -62.78                   | 1.30                       | 11.70                       | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           | 1584                 | -53.73         | -42.15           | -11.58                  | -63.34                  | -59.10                   | 0.90                       | 8.42                        | V                     |
|                           | 2376                 | -56.71         | -13              | -43.71                  | -71.05                  | -63.96                   | 1.12                       | 10.53                       | V                     |
|                           | 3168                 | -53.90         | -13              | -40.90                  | -70.25                  | -62.15                   | 1.30                       | 11.70                       | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
| Middle                    | 1592                 | -55.18         | -42.15           | -13.03                  | -65.11                  | -60.58                   | 0.90                       | 8.45                        | H                     |
|                           | 2385                 | -55.92         | -13              | -42.92                  | -70.40                  | -63.18                   | 1.12                       | 10.54                       | H                     |
|                           | 3180                 | -54.16         | -13              | -41.16                  | -70.04                  | -62.44                   | 1.30                       | 11.73                       | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                           | 1592                 | -52.61         | -42.15           | -10.46                  | -62.19                  | -58.01                   | 0.90                       | 8.45                        | V                     |
|                           | 2385                 | -56.43         | -13              | -43.43                  | -70.76                  | -63.69                   | 1.12                       | 10.54                       | V                     |
|                           | 3180                 | -54.00         | -13              | -41.00                  | -70.35                  | -62.28                   | 1.30                       | 11.73                       | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                           |                      |                |                  |                         |                         |                          |                            |                             | V                     |



|         |      |        |        |        |        |        |      |       |   |
|---------|------|--------|--------|--------|--------|--------|------|-------|---|
| Highest | 1592 | -56.65 | -42.15 | -14.50 | -66.58 | -62.05 | 0.90 | 8.45  | H |
|         | 2392 | -56.40 | -13    | -43.40 | -70.76 | -63.67 | 1.13 | 10.55 | H |
|         | 3190 | -54.59 | -13    | -41.59 | -70.50 | -62.89 | 1.30 | 11.76 | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         |      |        |        |        |        |        |      |       | H |
|         | 1592 | -52.94 | -42.15 | -10.79 | -62.52 | -58.34 | 0.90 | 8.45  | V |
|         | 2392 | -56.68 | -13    | -43.68 | -71.00 | -63.95 | 1.13 | 10.55 | V |
|         | 3190 | -54.54 | -13    | -41.54 | -70.96 | -62.84 | 1.30 | 11.76 | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |
|         |      |        |        |        |        |        |      |       | V |

**Remark:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



| LTE Band 14 / 10MHz / QPSK |                      |                |                  |                         |                         |                          |                            |                             |                       |
|----------------------------|----------------------|----------------|------------------|-------------------------|-------------------------|--------------------------|----------------------------|-----------------------------|-----------------------|
| Channel                    | Frequency<br>( MHz ) | ERP<br>( dBm ) | Limit<br>( dBm ) | Over<br>Limit<br>( dB ) | SPA<br>Reading<br>(dBm) | S.G.<br>Power<br>( dBm ) | TX Cable<br>loss<br>( dB ) | TX Antenna<br>Gain<br>(dBi) | Polarization<br>(H/V) |
| Middle                     | 1576                 | -52.89         | -42.15           | -10.74                  | -62.96                  | -58.23                   | 0.90                       | 8.39                        | H                     |
|                            | 2364                 | -56.53         | -13              | -43.53                  | -71.14                  | -63.77                   | 1.12                       | 10.51                       | H                     |
|                            | 3152                 | -55.31         | -13              | -42.31                  | -71.17                  | -63.53                   | 1.30                       | 11.66                       | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | H                     |
|                            | 1576                 | -52.40         | -42.15           | -10.25                  | -62                     | -57.74                   | 0.90                       | 8.39                        | V                     |
|                            | 2364                 | -56.51         | -13              | -43.51                  | -70.86                  | -63.75                   | 1.12                       | 10.51                       | V                     |
|                            | 3152                 | -54.74         | -13              | -41.74                  | -71.04                  | -62.96                   | 1.30                       | 11.66                       | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |
|                            |                      |                |                  |                         |                         |                          |                            |                             | V                     |

**Remark:** Spurious emissions within 30-1000MHz were found more than 20dB below limit line.