



CERTIFICATION TEST REPORT

Report Number. : 12204475-E7V2

Applicant : APPLE INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A.

Model : A2098

FCC ID : BCG-E3233A

EUT Description : SMARTPHONE

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

Date Of Issue:

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	7/17/2018	Initial Review	Mengistu Mekuria
V2	7/24/2018	Address TCB's Question	Mengistu Mekuria

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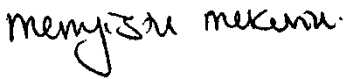
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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.		
Model	A2098		
FCC ID	BCG-E3233A		
EUT Description	SMARTPHONE		
Serial Number	C39WG035JVWF		
Date Tested	FEBRUARY 08, 2018 to JUNE 27, 2018		
Applicable Standards	CFR47 PART 22H, 24E, 27, 90S, and 90R		
Test Results	COMPLIES		
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 (NIST Handbook 150, Annex A). This report is written to support regulatory compliance of the applicable standards stated above.			
Approved & Released By:		Prepared By:	
			
Mengistu Mekuria Lead Test Engineer UL Verification Services Inc.		Lieu Nguyen Laboratory Engineer UL Verification Services Inc.	

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.26:2015, CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S and 90R, KDB 971168 D01 v03r01/ D02 v02r01, ANSI C63.26:2015.

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
☐ Chamber A (IC:2324B-1)	☐ Chamber D (IC:22541-1)
☐ Chamber B (IC:2324B-2)	☒ Chamber E (IC:22541-2)
☒ Chamber C (IC:2324B-3)	☐ Chamber F (IC:22541-3)
	☐ Chamber G (IC:22541-4)
	☐ 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 [NVLAP Lab Search](#).

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 Apple iPhone, is a smartphone with multimedia functions (music, application support, and video), cellular GSM, GPRS, EGPRS, UMTS, LTE, TD-SCDMA, CDMA, IEEE 802.11a/b/g/n/ac, Bluetooth, GPS and NFC. All models support at least one UICC based SIM. The second SIM is either UICC based, electronic SIM (e-SIM), or second SIM is not present. 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

ERP/EIRP LIMIT

\$2.1046, \$22.913, \$24.232, \$27.50, \$90.635, \$90.541

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015

KDB 971168 D01 Section 5.6

$ERP/EIRP = P_{Meas} + GT - LC$

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

P_{Meas} = 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.

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:

LTE BAND 2

Part 24 / RSS 133								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-3.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1909.3	25.4	21.82	0.152	1085.1	1M09G7W
	16QAM			24.7	21.06	0.128	1087.4	1M09D7W
	64QAM			24.2	20.63	0.116	1090.8	1M09D7W
3.0	QPSK	1851.5	1908.5	25.4	21.84	0.153	2681.7	2M68G7W
	16QAM			24.9	21.26	0.134	2692.6	2M69D7W
	64QAM			24.2	20.57	0.114	2705.3	2M71D7W
5.0	QPSK	1852.5	1907.5	25.4	21.82	0.152	4498.5	4M50G7W
	16QAM			24.9	21.31	0.135	4495.5	4M50D7W
	64QAM			24.2	20.60	0.115	4502.5	4M50D7W
10.0	QPSK	1855.0	1905.0	25.5	21.90	0.155	8996.4	9M00G7W
	16QAM			24.9	21.27	0.134	8982.7	8M98D7W
	64QAM			24.1	20.49	0.112	9012.9	9M01D7W
15.0	QPSK	1857.5	1902.5	25.5	21.86	0.153	13463.6	13M5G7W
	16QAM			24.8	21.24	0.133	13476	13M5D7W
	64QAM			24.1	20.53	0.113	13499	13M5D7W
20.0	QPSK	1860.0	1900.0	25.4	21.84	0.153	17911.1	17M9G7W
	16QAM			24.9	21.32	0.135	17931.2	17M9D7W
	64QAM			24.2	20.55	0.114	17966	18M0D7W

LTE BAND 5

Part 22H								
ERP Limit (W)		7.00						
Antenna Gain (dBi)		-5.50						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	824.7	848.3	25.5	17.85	0.061	1083	1M08G7W
	16QAM			24.8	17.12	0.052	1086	1M09D7W
	64QAM			24.3	16.64	0.046	1092	1M09D7W
3.0	QPSK	825.5	847.5	25.5	17.81	0.060	2693	2M69G7W
	16QAM			24.9	17.22	0.053	2689	2M69D7W
	64QAM			24.2	16.53	0.045	2703	2M70D7W
5.0	QPSK	826.5	846.5	25.5	17.80	0.060	4484	4M48G7W
	16QAM			24.9	17.26	0.053	4479	4M48D7W
	64QAM			24.2	16.54	0.045	4507	4M51D7W
10.0	QPSK	829.0	844.0	25.4	17.76	0.060	9004	9M00G7W
	16QAM			24.8	17.16	0.052	9023	9M02D7W
	64QAM			24.1	16.46	0.044	9036	9M04D7W

LTE BAND 7

Part 27 / RSS 199								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-1.50						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2502.5	2567.5	25.5	23.95	0.248	4487	4M49G7W
	16QAM			24.8	23.26	0.212	4493	4M49D7W
	64QAM			24.3	22.78	0.189	4504	4M50D7W
10.0	QPSK	2505.0	2565.0	25.4	23.92	0.247	8983	8M98G7W
	16QAM			24.7	23.20	0.209	9002	9M00D7W
	64QAM			24.3	22.84	0.192	9023	9M02D7W
15.0	QPSK	2507.5	2562.5	25.4	23.93	0.247	13456	13M5G7W
	16QAM			24.6	23.13	0.206	13462	13M5D7W
	64QAM			24.4	22.95	0.197	13485	13M5D7W
20.0	QPSK	2510.0	2560.0	25.5	24.00	0.251	17910	17M9G7W
	16QAM			24.9	23.40	0.219	17946	17M9D7W
	64QAM			24.5	23.02	0.201	17957	18M0D7W

LTE BAND 12

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-5.70						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	699.7	715.3	25.5	17.63	0.058	1088	1M09G7W
	16QAM			24.7	16.87	0.049	1089	1M09D7W
	64QAM			24.5	16.66	0.046	1093	1M09D7W
3.0	QPSK	700.5	714.5	25.5	17.65	0.058	2702	2M70G7W
	16QAM			24.8	16.98	0.050	2696	2M70D7W
	64QAM			24.6	16.76	0.047	2705	2M71D7W
5.0	QPSK	701.5	713.5	25.5	17.65	0.058	4486	4M49G7W
	16QAM			24.9	17.05	0.051	4494	4M49D7W
	64QAM			24.7	16.88	0.049	4502	4M50D7W
10.0	QPSK	704.0	711.0	25.5	17.64	0.058	8991	8M99G7W
	16QAM			24.9	17.00	0.050	8988	8M99D7W
	64QAM			24.6	16.75	0.047	9010	9M01D7W

LTE BAND 13

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-4.20						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	779.5	784.5	25.5	19.15	0.082	4479	4M48G7W
	16QAM			25.0	18.63	0.073	4492	4M49D7W
	64QAM			24.7	18.36	0.068	4498	4M50D7W
10.0	QPSK	782.0	782.0	25.4	19.06	0.081	8975	8M98G7W
	16QAM			24.7	18.35	0.068	8967	8M97D7W
	64QAM			24.4	18.07	0.064	8994	8M99D7W

LTE BAND 14

Part 90R / RSS 140								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-5.00						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	790.5	795.5	25.5	18.32	0.068	4503	4M50G7W
	16QAM			24.9	17.80	0.060	4506	4M51D7W
	64QAM			24.1	17.00	0.050	4492	4M49D7W
10.0	QPSK	793.0	793.0	25.5	18.31	0.068	8989	8M99G7W
	16QAM			24.9	17.75	0.060	8992	8M99D7W
	64QAM			24.0	16.86	0.049	9014	9M01D7W

LTE BAND 17

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-5.70						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	706.5	713.5	25.5	17.66	0.058	4489	4M49G7W
	16QAM			24.9	17.07	0.051	4489	4M49D7W
	64QAM			24.6	16.74	0.047	4502	4M50D7W
10.0	QPSK	709.0	711.0	25.5	17.61	0.058	8998	9M00G7W
	16QAM			24.8	16.99	0.050	9005	9M01D7W
	64QAM			24.6	16.76	0.047	9026	9M03D7W

LTE BAND 25

Part 24 / RSS 133								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-3.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1914.3	25.5	21.90	0.155	1085	1M09G7W
	16QAM			24.8	21.18	0.131	1088	1M09D7W
	64QAM			24.1	20.49	0.112	1096	1M10D7W
3.0	QPSK	1851.5	1913.5	25.5	21.85	0.153	2698	2M70G7W
	16QAM			24.9	21.26	0.134	2695	2M70D7W
	64QAM			24.1	20.52	0.113	2703	2M70D7W
5.0	QPSK	1852.5	1912.5	25.5	21.85	0.153	4487	4M49G7W
	16QAM			24.8	21.20	0.132	4492	4M49D7W
	64QAM			24.2	20.58	0.114	4508	4M51D7W
10.0	QPSK	1855.0	1910.0	25.4	21.85	0.153	9003	9M00G7W
	16QAM			24.9	21.25	0.133	8992	8M99D7W
	64QAM			24.2	20.56	0.114	9018	9M02D7W
15.0	QPSK	1857.5	1907.5	25.4	21.85	0.153	13437	13M4G7W
	16QAM			24.8	21.17	0.131	13458	13M5D7W
	64QAM			24.1	20.47	0.111	13493	13M5D7W
20.0	QPSK	1860.0	1905.0	25.4	21.85	0.153	17894	17M9G7W
	16QAM			24.9	21.30	0.135	17889	17M9D7W
	64QAM			24.2	20.55	0.114	17961	18M0D7W

LTE BAND 26 (FCC Part 90S)

ERP Limit (W)		100.00						
Antenna Gain (dBi)		-6.40						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	814.7	823.3	25.3	16.76	0.047	1090.5	1M09G7W
	16QAM			24.8	16.20	0.042	1090.1	1M09D7W
	64QAM			24.1	15.51	0.036	1091.6	1M09D7W
3.0	QPSK	815.5	822.5	25.4	16.84	0.048	2687.6	2M69G7W
	16QAM			24.5	15.94	0.039	2684.4	2M68D7W
	64QAM			23.6	15.08	0.032	2694.5	2M69D7W
5.0	QPSK	816.5	821.5	25.4	16.84	0.048	4476.5	4M48G7W
	16QAM			24.5	15.91	0.039	4482.1	4M48D7W
	64QAM			23.8	15.21	0.033	4497.7	4M50D7W
10.0	QPSK	819.0	819.0	25.5	16.92	0.049	8965.5	8M97G7W
	16QAM			24.3	15.71	0.037	8968.5	8M97D7W
	64QAM			23.6	15.09	0.032	9004	9M00D7W

LTE BAND 30

Part 27 / RSS 195								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		-1.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2307.5	2312.5	23.5	21.90	0.155	4495	4M50G7W
	16QAM			22.5	20.90	0.123	4513	4M51D7W
	64QAM			21.7	20.10	0.102	4502	4M50D7W
10.0	QPSK	2310.0	2310.0	23.4	21.84	0.153	9006	9M01G7W
	16QAM			22.2	20.64	0.116	8990	8M99D7W
	64QAM			21.9	20.31	0.107	9001	9M00D7W

LTE BAND 41

Part 27								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-1.50						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2498.5	2687.5	26.9	25.37	0.345	4512	4M51G7W
	16QAM			26.2	24.66	0.292	4496	4M50D7W
	64QAM			25.2	23.74	0.237	4488	4M49D7W
10.0	QPSK	2501.0	2685.0	27.0	25.48	0.353	8992	8M99G7W
	16QAM			26.3	24.78	0.300	8965	8M97D7W
	64QAM			25.3	23.78	0.239	8992	8M99D7W
15.0	QPSK	2503.5	2682.5	26.9	25.37	0.344	13491	13M5G7W
	16QAM			26.1	24.55	0.285	13450	13M5D7W
	64QAM			25.3	23.78	0.239	13502	13M5D7W
20.0	QPSK	2506.0	2680.0	27.0	25.50	0.355	17936	17M9G7W
	16QAM			26.3	24.79	0.301	17909	17M9D7W
	64QAM			25.3	23.77	0.238	17932	17M9D7W

LTE BAND 66

Part 27 / RSS 139								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-3.30						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1710.7	1779.3	25.0	21.70	0.148	1085	1M09G7W
	16QAM			24.3	21.00	0.126	1087	1M09D7W
	64QAM			23.3	20.00	0.100	1088	1M09D7W
3.0	QPSK	1711.5	1778.5	25.0	21.70	0.148	2664	2M66G7W
	16QAM			24.3	21.00	0.126	2695	2M70D7W
	64QAM			23.3	20.00	0.100	2683	2M68D7W
5.0	QPSK	1712.5	1777.5	25.0	21.70	0.148	4500	4M50G7W
	16QAM			24.4	21.15	0.130	4515	4M52D7W
	64QAM			24.2	20.90	0.123	4500	4M50D7W
10.0	QPSK	1715.0	1775.0	24.7	21.40	0.138	8991	8M99G7W
	16QAM			23.9	20.60	0.115	9003	9M00D7W
	64QAM			23.9	20.60	0.115	8997	9M00D7W
15.0	QPSK	1717.5	1772.5	24.7	21.40	0.138	13459	13M5G7W
	16QAM			24.3	21.00	0.126	13439	13M4D7W
	64QAM			24.3	21.00	0.126	13464	13M5D7W
20.0	QPSK	1720.0	1770.0	25.0	21.70	0.148	17876	17M9G7W
	16QAM			23.9	20.60	0.115	17886	17M9D7W
	64QAM			23.8	20.50	0.112	17926	17M9D7W

5.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 0.26.01

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

Frequency (MHz)	Ant 1 Gain (dBi)	Ant 2 Gain (dBi)	Ant 3 Gain (dBi)	Ant 4 Gain (dBi)
660	-5.7	-7.9	N/A	N/A
670	-5.9	-7.9	N/A	N/A
680	-5.8	-7.8	N/A	N/A
690	-6.5	-8.3	N/A	N/A
700	-5.8	-7.7	N/A	N/A
710	-5.7	-7.6	N/A	N/A
720	-5.8	-7.5	N/A	N/A
770	-4.2	-7.4	N/A	N/A
780	-4.4	-8.1	N/A	N/A
790	-5.0	-9.0	N/A	N/A
810	-6.6	-6.7	N/A	N/A
820	-6.4	-6.9	N/A	N/A
830	-5.6	-6.7	N/A	N/A
840	-5.5	-6.7	N/A	N/A
850	-5.8	-6.8	N/A	N/A
860	-8.5	-6.8	N/A	N/A
1700	-4.2	-3.1	-6.3	-8.2
1720	-4.2	-3.4	-5.0	-7.5
1740	-4.5	-4.5	-4.2	-7.4
1760	-4.9	-4.9	-3.3	-7.0
1840	-3.6	-3.9	-3.4	-5.8
1860	-3.9	-3.9	-3.9	-4.8
1880	-4.0	-3.8	-4.2	-4.8
1900	-4.1	-3.5	-4.2	-4.8
1920	-4.4	-3.8	-4.4	-4.6
2300	-1.6	-5.0	-4.9	-2.7
2320	-1.7	-4.7	-4.8	-2.7
2500	-1.5	-5.0	-3.9	-2.7
2520	-1.6	-5.5	-3.9	-2.6
2540	-1.7	-5.7	-3.8	-2.5
2560	-1.9	-5.6	-3.9	-2.3
2580	-1.7	-5.4	-4.3	-2.2
2600	-1.8	-5.6	-4.9	-2.2
2620	-2.1	-5.9	-5.2	-2.4
2640	-2.1	-6.0	-5.5	-2.5
2660	-2.4	-6.5	-5.7	-2.5
2680	-2.7	-6.7	-6.1	-2.6
2700	-2.4	-6.9	-6.1	-2.1

5.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports LTE Bands of:

Band 2, Band 4, Band 5, Band 7, Band 12, Band 13, Band 14, Band 17, Band 25, Band 26, Band 30, Band 41, and Band 66.

LTE Band 4 (1710-1755MHz) is covered by LTE Band 66 because it is a subset of LTE band 66 and they have same output power.

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.

According to the Tune-up procedure, power class 2 (PC2) used to measure LTE band 41 powers.

The worst-case scenario for all measurements is based on the average conducted output power measurement investigation results. Output power measurements were measured on QPSK, 16QAM and 64QAM modulations. It was found that QPSK and 16QAM results were worst case. All testing was performed using QPSK and 16QAM modulations to represent the worst case.

Conducted tests were performed on at Ant. 1 as the worst case since it has higher output powers.

Radiated test was investigated in three orthogonal orientations X, Y and Z on Ant.1/2/3/4 . For Ant. 1, 3 and 4, it was determined that X (Flatbed) orientation was the worst-case orientation for cell bands, band 7 and band 41. And Y (Landscape) orientation was the worst-case orientation for Ant.1 and 2 on pcs bands; without AC/DC adapter or earphone.

Radiated spurious emissions were investigated below 30MHz, 30MHz-1GHz and above 1GHz. There were no emissions found on below 30MHz and 30MHz-1GHz within 20dB of the limit.

For simultaneous transmission of multiple channels in the 2.4 / 5GHz and Cellular bands, no noticeable emission was found.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
Laptop AC/DC adapter	Delta Electronic	A1343	ADP-85EBT V85
Laptop	Apple	Macbook Pro	73008ACB7XJ

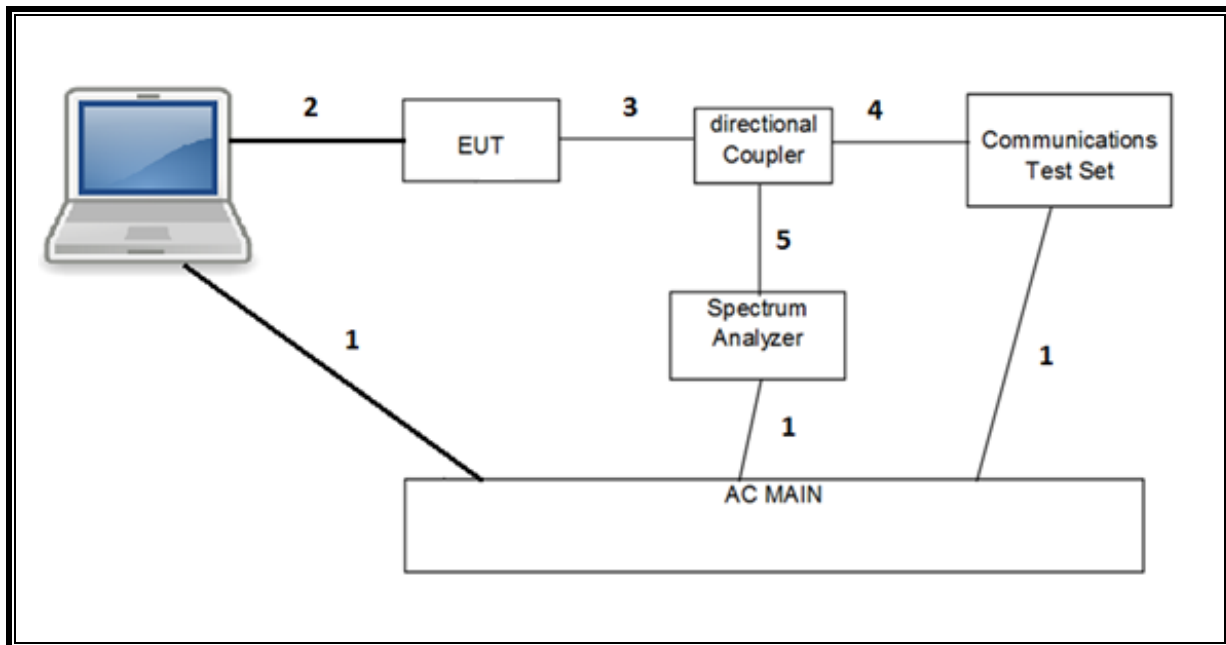
I/O CABLES (RF Conducted Test)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	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

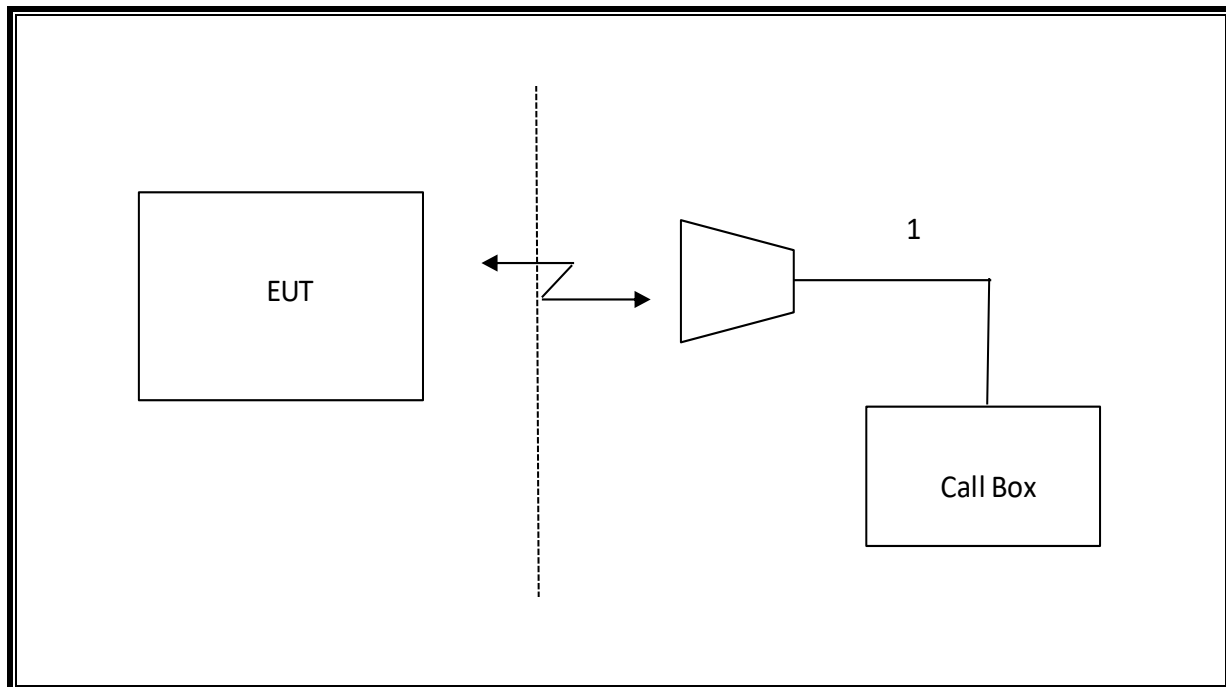
I/O CABLES (RF Radiated Test)

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	5.0m	N/A

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	T712	02/08/2019
*Antenna, Broadband Hybrid, 30MHz	Sunol Sciences	JB3	T900	05/31/2018
*Antenna, Broadband Hybrid, 30MHz	Sunol Sciences	JB3	T899	06/15/2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T741	12/30/2018
Amplifier, 1 to 8GHz	Miteq	AMF-4D-01000800-30-29P	T1169	12/30/2018
*Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	06/24/2018
Spectrum Analyzer, PXA 3Hz to	Keysight	N9030A	T906	02/16/2019
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T712	02/08/2019
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T119	04/03/2019
*Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T407	04/14/2018
*Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T491	06/01/2018
*Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T834	06/01/2018
Spectrum Analyzer, PXA 3Hz to	Keysight	N9030A-544	T341	11/12/2018
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T119	04/03/2019
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T35	12/15/2018
*Filter, HPF 1.2GHz	MICROTRONICS	WHKX1.2/15G-6ST	T1182	06/1/2018
Filter, HPF 3.0GHz	MICROTRONICS	HPM17543	T487	12/04/2018
Filter, HPF 4GHz	MICROTRONICS	HPM13351	T1239	08/11/2018
Power Meter, P-series single channel	Keysight	N1912A	T1272	05/1/2019
Power Sensor	Keysight	N1921A	T1225	04/10/2019
Directional Coupler	KRYTAR	152610	T1537	04/27/2019
Directional Coupler	KRYTAR	152613	T1536	04/27/2019
Wideband Communication Test Set,	Rohde &	CMW500	T979	02/17/2019
Wideband Communication Test Set,	Rohde &	CMW500	T959	02/17/2019
Wideband Communication Test Set,	Rohde &	CMW500	T979	02/17/2019
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	09/05/2018

Note: * The tests are completed before equipment expiration dates indicated above.

7. RF OUTPUT POWER VERIFICATION

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 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
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 ¹	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.

MODES TESTED

- LTE Band 2
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 14
- 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 output powers as follows:

7.1. Ant 1, Ant 2, Ant 3 and Ant 4

7.1.1. LTE BAND 2

ID:	50820	Date:	5/29/18
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OUTPUT POWER FOR LTE BAND 2 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				18607	18900	19193	18607	18900	19193	18607	18900	19193	18607	18900	19193
1.4	QPSK	1	0	25.2	25.4	25.3	18.2	18.4	18.2	24.4	24.5	24.2	20.4	20.4	20.4
			2	25.2	25.4	25.4	18.2	18.4	18.3	24.4	24.5	24.2	20.4	20.4	20.5
			5	25.3	25.4	25.4	18.2	18.4	18.3	24.4	24.4	24.3	20.5	20.3	20.4
			3	25.2	25.4	25.4	18.2	18.5	18.3	24.4	24.5	24.2	20.4	20.4	20.4
			3	25.2	25.4	25.4	18.2	18.4	18.3	24.4	24.5	24.2	20.4	20.4	20.4
			2	25.2	25.3	25.4	18.2	18.4	18.3	24.4	24.4	24.2	20.4	20.3	20.4
	16QAM	1	0	24.1	24.3	24.3	17.1	17.4	17.3	23.4	23.4	23.1	19.4	19.3	19.4
			2	24.6	24.6	24.6	17.4	17.8	17.6	23.6	23.7	23.6	19.7	19.7	19.7
			5	24.6	24.6	24.6	17.4	17.7	17.7	23.7	23.6	23.6	19.8	19.6	19.7
			3	24.3	24.6	24.5	17.4	17.7	17.4	23.5	23.6	23.3	19.5	19.5	19.5
			3	24.3	24.5	24.5	17.3	17.6	17.4	23.5	23.6	23.3	19.5	19.5	19.5
			2	24.3	24.5	24.5	17.3	17.6	17.4	23.5	23.5	23.3	19.6	19.5	19.5
	64QAM	1	0	23.2	23.4	23.4	16.3	16.5	16.3	22.5	22.5	22.2	18.5	18.4	18.5
			2	23.9	24.2	24.0	15.9	16.1	15.9	22.2	22.5	22.4	18.7	18.6	18.5
			2	23.9	24.2	24.0	16.0	16.2	16.0	22.3	22.5	22.4	18.6	18.6	18.5
			5	24.0	24.1	24.1	16.0	16.2	15.9	22.4	22.5	22.4	18.7	18.6	18.6
			3	23.7	24.0	23.9	15.8	16.0	15.8	22.1	22.4	22.3	18.4	18.5	18.4
			1	23.7	24.1	23.9	15.8	16.0	15.8	22.1	22.4	22.3	18.4	18.5	18.4
	64QAM	3	2	23.7	24.0	23.9	15.8	15.9	15.8	22.1	22.3	22.3	18.5	18.4	18.4
			0	22.6	22.8	22.8	14.7	14.8	14.7	21.1	21.2	21.1	17.4	17.4	17.3

OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				18615	18900	19185	18615	18900	19185	18615	18900	19185	18615	18900	19185
3.0	QPSK	1	0	25.3	25.4	25.4	18.2	18.5	18.2	24.4	24.5	24.3	20.3	20.4	20.5
			7	25.3	25.4	25.4	18.2	18.4	18.2	24.5	24.5	24.3	20.4	20.4	20.4
			14	25.4	25.4	25.4	18.3	18.4	18.2	24.4	24.4	24.3	20.5	20.3	20.4
			8	24.2	24.5	24.4	17.2	17.4	17.2	23.4	23.5	23.2	19.4	19.4	19.4
			4	24.3	24.5	24.3	17.2	17.4	17.2	23.4	23.5	23.3	19.4	19.4	19.4
			7	24.3	24.4	24.3	17.2	17.3	17.2	23.4	23.5	23.3	19.4	19.3	19.4
	16QAM	1	0	24.3	24.4	24.4	17.2	17.3	17.2	23.4	23.5	23.3	19.4	19.3	19.4
			7	24.6	24.8	24.7	17.4	17.8	17.6	23.7	24.0	23.6	19.6	19.6	19.8
			14	24.7	24.8	24.7	17.5	17.8	17.6	23.7	23.9	23.7	19.8	19.6	19.7
			8	24.7	24.9	24.7	17.7	17.8	17.5	23.8	23.9	23.6	19.9	19.5	19.7
			4	23.3	23.6	23.5	16.2	16.5	16.3	22.5	22.6	22.3	18.5	18.5	18.5
			7	23.3	23.6	23.4	16.2	16.5	16.3	22.5	22.6	22.3	18.5	18.5	18.4
	64QAM	1	0	23.3	23.5	23.4	16.2	16.4	16.2	22.5	22.6	22.3	18.5	18.4	18.4
			15	23.3	23.4	23.4	16.2	16.4	16.2	22.5	22.5	22.3	18.4	18.4	18.4
			7	23.7	24.2	24.0	15.9	16.1	15.8	22.1	22.6	22.4	18.3	18.6	18.5
			14	23.8	24.2	24.0	16.0	16.0	15.8	22.4	22.6	22.4	18.6	18.7	18.4
			8	23.9	24.0	24.1	15.9	16.0	15.9	22.4	22.4	22.5	18.7	18.6	18.4
			4	22.6	22.9	22.8	14.6	14.9	14.6	21.1	21.4	21.2	17.4	17.5	17.3
	64QAM	8	7	22.7	22.9	22.8	14.7	14.9	14.6	21.2	21.4	21.2	17.4	17.5	17.2
			0	22.7	22.9	22.8	14.7	14.9	14.6	21.2	21.4	21.2	17.5	17.5	17.2
			15	22.7	22.9	22.8	14.6	14.8	14.6	21.2	21.3	21.1	17.4	17.4	17.2

OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average			Conducted Average			Conducted Average		
				18625	18900	19175	18625	18900	19175	18625	18900	19175	18625	18900	19175
5.0	QPSK	1	0	25.1	25.4	25.3	18.3	18.5	18.4	24.9	25.0	24.6	20.3	20.4	20.4
		1	12	25.3	25.3	25.2	18.4	18.5	18.3	24.8	24.9	24.7	20.5	20.3	20.4
		1	24	25.3	25.4	25.3	18.3	18.5	18.3	24.8	24.9	24.8	20.5	20.3	20.3
		12	0	24.3	24.4	24.3	17.3	17.5	17.4	23.8	24.0	23.7	19.4	19.3	19.5
		12	6	24.3	24.4	24.2	17.4	17.5	17.3	23.8	23.9	23.8	19.5	19.3	19.4
		12	11	24.4	24.4	24.2	17.4	17.4	17.3	23.7	23.9	23.8	19.5	19.3	19.4
	16QAM	25	0	24.4	24.4	24.3	17.4	17.4	17.3	23.8	23.9	23.8	19.5	19.3	19.5
		1	0	24.5	24.9	24.7	17.7	18.0	17.7	24.2	24.4	24.0	19.7	19.8	19.8
		1	12	24.7	24.8	24.6	17.8	18.0	17.6	24.1	24.3	24.1	19.9	19.6	19.7
		1	24	24.7	24.9	24.6	17.8	17.9	17.6	24.2	24.3	24.1	19.9	19.7	19.7
		12	0	23.4	23.5	23.5	16.4	16.6	16.5	23.0	23.0	22.9	18.5	18.5	18.7
		12	6	23.5	23.5	23.4	16.5	16.6	16.5	23.0	23.0	22.9	18.6	18.5	18.6
	64QAM	12	11	23.5	23.5	23.4	16.5	16.6	16.4	23.0	23.0	22.9	18.6	18.4	18.5
		25	0	23.4	23.5	23.4	16.4	16.6	16.5	23.0	23.0	22.8	18.6	18.4	18.5
		1	0	23.8	24.2	24.0	16.1	16.2	16.0	22.9	23.1	22.8	18.5	18.7	18.6
		1	12	23.9	24.1	24.0	16.2	16.2	15.9	23.0	22.9	22.8	18.7	18.6	18.5
		1	24	24.0	24.2	24.0	16.2	16.2	16.0	23.0	23.0	22.9	18.8	18.6	18.5
		12	0	22.7	22.9	22.8	14.8	15.0	14.9	21.7	21.8	21.7	17.5	17.5	17.5
		12	6	22.8	22.9	22.8	14.9	15.0	14.9	21.7	21.8	21.7	17.5	17.5	17.5
		12	11	22.8	22.9	22.8	14.9	15.0	14.8	21.7	21.8	21.6	17.6	17.4	17.4
		25	0	22.7	22.8	22.8	14.9	14.9	14.8	21.7	21.7	21.6	17.5	17.4	17.4

OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average			Conducted Average (dBm)			Conducted Average		
				18650	18900	19150	18650	18900	19150	18650	18900	19150	18650	18900	19150
10.0	QPSK	1	0	25.2	25.5	25.5	18.1	18.4	18.4	24.5	24.5	24.2	20.2	20.4	20.4
		1	24	25.4	25.4	25.4	18.2	18.4	18.2	24.4	24.5	24.4	20.4	20.2	20.3
		1	49	25.3	25.3	25.3	18.1	18.3	18.2	24.4	24.4	24.5	20.4	20.1	20.3
		25	0	24.2	24.3	24.4	17.1	17.2	17.3	23.5	23.4	23.2	19.3	19.2	19.3
		25	12	24.3	24.2	24.3	17.1	17.2	17.1	23.4	23.3	23.3	19.3	19.1	19.3
		25	24	24.2	24.2	24.2	17.0	17.2	17.1	23.3	23.3	23.3	19.2	19.1	19.3
	16QAM	50	0	24.3	24.2	24.3	17.1	17.2	17.2	23.3	23.2	23.3	19.3	19.1	19.3
		1	0	24.4	24.9	24.9	17.5	17.8	17.9	23.9	23.9	23.7	19.6	19.7	19.7
		1	24	24.6	24.8	24.7	17.5	17.8	17.6	23.7	23.9	23.7	19.8	19.6	19.7
		1	49	24.6	24.7	24.7	17.4	17.8	17.6	23.7	23.8	23.9	19.8	19.5	19.6
		25	0	23.4	23.4	23.5	16.3	16.4	16.4	22.6	22.5	22.4	18.4	18.3	18.4
		25	12	23.4	23.4	23.4	16.2	16.4	16.3	22.5	22.5	22.4	18.4	18.3	18.4
	64QAM	25	24	23.3	23.3	23.3	16.1	16.3	16.2	22.5	22.4	22.4	18.3	18.2	18.4
		50	0	23.3	23.2	23.3	16.1	16.2	16.2	22.4	22.3	22.3	18.3	18.1	18.3
		1	0	23.7	24.0	24.1	15.9	16.0	16.1	22.3	22.6	22.5	18.3	18.5	18.3
		1	24	23.9	24.0	24.0	16.0	16.1	15.8	22.5	22.5	22.4	18.5	18.5	18.3
		1	49	23.9	24.0	24.0	15.8	16.0	15.8	22.6	22.5	22.4	18.6	18.4	18.3
		25	0	22.6	22.7	22.9	14.7	14.7	14.8	21.2	21.3	21.3	17.3	17.3	17.2
		25	12	22.7	22.7	22.8	14.6	14.8	14.7	21.3	21.3	21.2	17.3	17.3	17.2
		25	24	22.7	22.7	22.8	14.6	14.7	14.6	21.3	21.2	21.2	17.3	17.2	17.2
		50	0	22.6	22.6	22.7	14.5	14.6	14.6	21.2	21.2	21.1	17.2	17.1	17.2

OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				18675	18900	19125	18675	18900	19125	18675	18900	19125	18675	18900	19125
15.0	QPSK	1	0	25.2	25.5	25.2	18.1	18.4	18.3	24.3	24.5	24.1	20.4	20.5	20.3
		1	37	25.3	25.4	25.4	18.1	18.3	18.3	24.4	24.3	24.3	20.4	20.3	20.4
		1	74	25.2	25.2	25.2	18.1	18.2	18.1	24.3	24.2	24.2	20.4	20.0	20.3
		36	0	24.2	24.2	24.3	17.1	17.3	17.3	23.4	23.3	23.2	19.4	19.3	19.3
		36	16	24.2	24.3	24.4	17.0	17.3	17.3	23.3	23.3	23.3	19.4	19.2	19.3
		36	35	24.2	24.2	24.2	17.0	17.2	17.1	23.2	23.2	23.3	19.4	19.1	19.3
		75	0	24.2	24.2	24.4	17.0	17.2	17.3	23.3	23.2	23.2	19.3	19.2	19.3
	16QAM	1	0	24.4	24.8	24.7	17.5	17.9	17.7	23.8	23.9	23.5	19.8	19.9	19.5
		1	37	24.6	24.7	24.8	17.4	17.8	17.8	23.8	23.8	23.7	19.8	19.7	19.6
		1	74	24.5	24.5	24.7	17.3	17.7	17.5	23.7	23.6	23.6	19.8	19.5	19.5
		36	0	23.3	23.3	23.4	16.2	16.3	16.4	22.5	22.4	22.3	18.5	18.3	18.3
		36	16	23.3	23.3	23.5	16.1	16.3	16.4	22.4	22.3	22.3	18.4	18.3	18.4
		36	35	23.2	23.2	23.3	16.0	16.3	16.2	22.3	22.2	22.3	18.4	18.2	18.4
		75	0	23.3	23.2	23.4	16.0	16.2	16.3	22.4	22.2	22.3	18.3	18.2	18.3
	64QAM	1	0	23.8	24.0	23.9	15.8	16.0	16.0	22.2	22.5	22.4	18.4	18.7	18.5
		1	37	23.9	24.0	24.1	15.8	16.1	16.1	22.4	22.4	22.5	18.6	18.5	18.6
		1	74	23.9	23.9	24.0	15.8	15.9	15.9	22.4	22.3	22.4	18.6	18.4	18.5
		36	0	22.6	22.7	22.8	14.6	14.7	14.8	21.1	21.2	21.2	17.4	17.4	17.2
		36	16	22.6	22.7	22.9	14.5	14.7	14.8	21.1	21.2	21.2	17.4	17.3	17.3
		36	35	22.6	22.7	22.8	14.4	14.7	14.6	21.2	21.1	21.1	17.4	17.3	17.3
		75	0	22.6	22.6	22.8	14.4	14.6	14.7	21.1	21.0	21.1	17.3	17.2	17.2

OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				18700	18900	19100	18700	18900	19100	18700	18900	19100	18700	18900	19100
20.0	QPSK	1	0	25.3	25.4	25.3	18.3	18.5	18.4	24.4	24.4	24.2	20.4	20.5	20.2
		1	49	25.3	25.4	25.4	18.2	18.4	18.4	24.5	24.4	24.4	20.5	20.3	20.3
		1	99	25.4	25.2	25.3	18.4	18.4	18.2	24.3	24.3	24.3	20.5	20.1	20.3
		50	0	24.3	24.3	24.2	17.2	17.4	17.3	23.3	23.4	23.3	19.4	19.4	19.2
		50	24	24.1	24.2	24.4	17.1	17.3	17.4	23.3	23.2	23.3	19.4	19.2	19.3
		50	49	24.1	24.2	24.3	17.1	17.3	17.3	23.3	23.2	23.1	19.4	19.2	19.3
		100	0	24.2	24.2	24.4	17.2	17.3	17.4	23.4	23.2	23.3	19.4	19.2	19.3
	16QAM	1	0	24.5	24.7	24.8	17.6	17.8	17.9	23.7	23.9	23.5	19.7	19.8	19.7
		1	49	24.6	24.7	24.9	17.5	17.8	18.0	23.8	23.9	23.7	19.8	19.7	19.7
		1	99	24.6	24.5	24.7	17.7	17.7	17.7	23.6	23.7	23.7	19.8	19.5	19.6
		50	0	23.3	23.4	23.3	16.3	16.4	16.4	22.4	22.4	22.3	18.5	18.4	18.3
		50	24	23.2	23.2	23.4	16.1	16.3	16.4	22.4	22.2	22.3	18.4	18.2	18.3
		50	49	23.1	23.2	23.3	16.2	16.3	16.3	22.3	22.2	22.2	18.4	18.2	18.4
		100	0	23.2	23.2	23.4	16.2	16.3	16.4	22.4	22.3	22.3	18.4	18.2	18.3
	64QAM	1	0	23.9	24.1	23.7	16.1	16.3	15.9	22.4	22.3	22.5	18.6	18.5	18.5
		1	49	24.0	24.2	23.9	15.9	16.3	16.0	22.6	22.3	22.6	18.8	18.4	18.6
		1	99	24.1	24.0	23.8	16.1	16.2	15.8	22.6	22.2	22.4	18.8	18.2	18.5
		50	0	22.6	22.7	22.6	14.7	14.8	14.8	21.1	21.2	21.1	17.4	17.4	17.2
		50	24	22.5	22.6	22.7	14.6	14.7	14.8	21.1	21.1	21.1	17.4	17.3	17.2
		50	49	22.5	22.6	22.7	14.6	14.8	14.7	21.0	21.1	21.1	17.4	17.2	17.3
		100	0	22.5	22.6	22.7	14.6	14.7	14.8	21.1	21.0	21.2	17.3	17.2	17.3

7.1.2. LTE BAND 5

ID:	50820	Date:	5/29/18
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OUTPUT POWER FOR LTE BAND 5 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20407	20525	20643	20407	20525	20643
1.4	QPSK	1	0	25.3	25.5	25.3	24.2	24.5	24.3
		1	2	25.2	25.5	25.3	24.2	24.4	24.3
		1	5	25.3	25.5	25.2	24.2	24.5	24.3
		3	0	25.3	25.5	25.3	24.2	24.5	24.3
		3	1	25.2	25.5	25.2	24.2	24.5	24.3
		3	2	25.2	25.5	25.2	24.2	24.5	24.3
	16QAM	6	0	24.2	24.5	24.2	23.2	23.5	23.2
		1	0	24.6	24.8	24.6	23.6	23.8	23.7
		1	2	24.6	24.8	24.6	23.5	23.7	23.6
		1	5	24.7	24.8	24.5	23.6	23.7	23.6
		3	0	24.4	24.6	24.4	23.3	23.6	23.5
		3	1	24.4	24.6	24.4	23.3	23.6	23.4
	64QAM	3	2	24.4	24.6	24.4	23.3	23.6	23.4
		6	0	23.3	23.6	23.3	22.2	22.6	22.4
		1	0	24.0	24.2	23.9	22.2	22.7	22.5
		1	2	23.9	24.3	23.9	22.3	22.6	22.5
		1	5	23.9	24.3	23.8	22.3	22.8	22.5
		3	0	23.7	24.1	23.8	22.1	22.5	22.4
	64QAM	3	1	23.7	24.1	23.8	22.1	22.5	22.3
		3	2	23.7	24.1	23.8	22.0	22.5	22.3
		6	0	22.7	23.0	22.7	21.1	21.4	21.2

OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20415	20525	20635	20415	20525	20635
3.0	QPSK	825.5	836.5	847.5	825.5	836.5	847.5	825.5	836.5
		1	0	25.2	25.4	25.4	24.2	24.4	24.4
		1	7	25.3	25.5	25.4	24.2	24.5	24.3
		1	14	25.2	25.4	25.2	24.1	24.4	24.3
		8	0	24.2	24.5	24.4	23.2	23.5	23.3
		8	4	24.2	24.5	24.3	23.1	23.5	23.3
	16QAM	8	7	24.2	24.5	24.3	23.1	23.5	23.3
		15	0	24.3	24.5	24.3	23.2	23.4	23.3
		1	0	24.6	24.8	24.7	23.5	23.9	23.6
		1	7	24.7	24.9	24.7	23.5	23.9	23.7
		1	14	24.6	24.9	24.5	23.5	23.9	23.5
		8	0	23.3	23.5	23.5	22.2	22.6	22.4
	64QAM	8	4	23.3	23.5	23.4	22.2	22.5	22.3
		8	7	23.3	23.6	23.4	22.2	22.5	22.3
		15	0	23.3	23.5	23.3	22.2	22.5	22.3
		1	0	23.9	24.0	24.0	22.2	22.6	22.4
		1	7	23.9	24.2	24.1	22.3	22.5	22.4
		1	14	23.8	24.1	23.9	22.3	22.4	22.2
	64QAM	8	0	22.7	22.9	22.9	21.1	21.4	21.2
		8	4	22.7	22.9	22.8	21.1	21.4	21.2
		8	7	22.7	23.0	22.8	21.1	21.4	21.2
		15	0	22.6	22.9	22.7	21.0	21.3	21.1

OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Bandwidth h (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20425	20525	20625	20425	20525	20625
				826.5	836.5	846.5	826.5	836.5	846.5
5.0	QPSK	1	0	25.2	25.5	25.3	24.1	24.4	24.3
		1	12	25.1	25.4	25.4	24.1	24.4	24.3
		1	24	25.1	25.3	25.1	24.2	24.3	24.2
		12	0	24.3	24.5	24.4	23.2	23.4	23.3
		12	6	24.2	24.5	24.3	23.2	23.4	23.3
		12	11	24.2	24.5	24.3	23.2	23.4	23.2
	16QAM	25	0	24.3	24.5	24.4	23.2	23.4	23.3
		1	0	24.6	24.9	24.6	23.5	23.9	23.7
		1	12	24.5	24.9	24.7	23.5	23.8	23.6
		1	24	24.5	24.8	24.5	23.6	23.7	23.5
		12	0	23.4	23.6	23.6	22.3	22.6	22.5
		12	6	23.4	23.6	23.5	22.3	22.5	22.5
	64QAM	12	11	23.3	23.6	23.5	22.4	22.5	22.4
		25	0	23.3	23.6	23.5	22.3	22.5	22.5
		1	0	23.8	24.2	23.9	22.2	22.7	22.5
		1	12	23.8	24.1	24.0	22.2	22.7	22.4
		1	24	23.8	24.2	23.8	22.4	22.7	22.4
		12	0	22.8	22.9	22.9	21.1	21.4	21.3
	64QAM	12	6	22.7	22.9	22.8	21.1	21.4	21.3
		12	11	22.8	22.9	22.8	21.2	21.4	21.3
		25	0	22.7	22.9	22.9	21.1	21.4	21.3

OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20450	20525	20600	20450	20525	20600
				829.0	836.5	844.0	829.0	836.5	844.0
10.0	QPSK	1	0	25.1	25.3	25.2	24.2	24.5	24.4
		1	24	25.0	25.4	25.2	24.3	24.5	24.3
		1	49	25.4	25.2	25.1	24.5	24.3	24.2
		25	0	24.1	24.4	24.1	23.1	23.5	23.3
		25	12	24.0	24.3	24.2	23.2	23.4	23.3
		25	24	24.2	24.3	24.2	23.3	23.4	23.3
	16QAM	50	0	24.1	24.3	24.2	23.2	23.4	23.3
		1	0	24.4	24.7	24.7	23.5	23.9	23.8
		1	24	24.3	24.8	24.6	23.6	23.9	23.8
		1	49	24.6	24.6	24.5	23.8	23.7	23.6
		25	0	23.2	23.5	23.2	22.3	22.6	22.4
		25	12	23.1	23.5	23.3	22.3	22.5	22.5
	64QAM	25	24	23.3	23.4	23.4	22.5	22.5	22.4
		50	0	23.1	23.4	23.3	22.3	22.5	22.4
		1	0	23.8	23.9	23.9	22.2	22.6	22.6
		1	24	23.7	24.1	23.9	22.3	22.7	22.5
		1	49	24.1	23.9	23.8	22.6	22.4	22.4
		25	0	22.6	22.9	22.6	21.1	21.4	21.3
	64QAM	25	12	22.6	22.9	22.7	21.2	21.4	21.4
		25	24	22.8	22.8	22.8	21.3	21.4	21.3
		50	0	22.6	22.8	22.7	21.2	21.3	21.3

7.1.3. LTE BAND 7

ID:	50820	Date:	5/29/18
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OUTPUT POWER FOR LTE BAND 7 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				20775	21100	21425	20775	21100	21425	20775	21100	21425	20775	21100	21425
5.0	QPSK	1	0	25.2	25.1	25.2	21.3	21.3	21.2	24.1	24.4	24.5	18.6	18.5	18.5
		1	12	25.3	25.2	25.1	21.3	21.2	21.2	24.0	24.4	24.4	18.6	18.5	18.5
		1	24	25.5	25.2	25.1	21.4	21.2	21.1	23.9	24.4	24.5	18.7	18.5	18.4
		12	0	24.3	24.1	24.2	20.3	20.2	20.2	23.1	23.4	23.5	17.6	17.4	17.5
		12	6	24.3	24.1	24.1	20.3	20.2	20.2	23.1	23.4	23.5	17.6	17.4	17.4
		12	11	24.4	24.1	24.1	20.3	20.2	20.1	23.0	23.4	23.4	17.6	17.4	17.3
	16QAM	25	0	24.3	24.2	24.2	20.3	20.2	20.2	23.1	23.4	23.5	17.6	17.4	17.4
		1	0	24.6	24.6	24.5	20.7	20.7	20.5	23.6	23.9	23.8	17.9	18.0	17.8
		1	12	24.7	24.6	24.4	20.7	20.6	20.5	23.4	23.8	23.8	18.0	18.0	17.7
		1	24	24.8	24.6	24.3	20.7	20.4	20.4	23.2	23.9	23.8	18.0	18.0	17.6
		12	0	23.3	23.2	23.2	19.3	19.3	19.2	22.3	22.5	22.6	16.6	16.5	16.5
		12	6	23.3	23.1	23.2	19.3	19.2	19.2	22.2	22.5	22.6	16.6	16.5	16.5
	64QAM	12	11	23.3	23.2	23.2	19.3	19.2	19.2	22.2	22.5	22.5	16.6	16.5	16.4
		25	0	23.3	23.2	23.2	19.3	19.2	19.2	22.2	22.5	22.5	16.6	16.5	16.5
		1	0	24.0	24.1	24.0	18.6	18.8	18.7	22.2	22.2	22.1	16.7	16.7	16.7
		1	12	24.1	24.2	24.1	18.7	18.8	18.7	22.2	22.2	22.1	16.8	16.8	16.7
		1	24	24.3	24.2	24.0	18.9	18.8	18.7	22.3	22.3	22.0	16.8	16.9	16.6
		12	0	22.9	22.7	22.8	17.4	17.4	17.4	20.9	20.9	20.8	15.5	15.3	15.4
		12	6	23.0	22.7	22.8	17.5	17.4	17.4	20.8	20.8	20.8	15.5	15.3	15.4
		12	11	23.0	22.8	22.8	17.5	17.4	17.3	20.8	20.8	20.8	15.5	15.4	15.3
		25	0	22.9	22.8	22.8	17.4	17.4	17.4	20.8	20.8	20.9	15.5	15.3	15.4

OUTPUT POWER FOR LTE BAND 7 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400
10.0	QPSK	1	0	25.3	25.1	25.2	21.4	21.3	21.3	24.8	24.7	25.0	18.5	18.4	18.6
		1	24	25.4	25.1	25.1	21.5	21.4	21.3	24.7	24.8	25.0	18.6	18.4	18.4
		1	49	25.4	25.3	25.0	21.4	21.4	21.2	24.6	24.8	25.0	18.6	18.4	18.2
		25	0	24.4	24.1	24.2	20.4	20.4	20.4	23.9	23.8	24.1	17.6	17.4	17.5
		25	12	24.4	24.1	24.2	20.4	20.3	20.3	23.8	23.7	24.1	17.6	17.4	17.4
		25	24	24.5	24.2	24.2	20.4	20.3	20.3	23.7	23.7	24.0	17.6	17.4	17.4
	16QAM	50	0	24.4	24.1	24.2	20.4	20.3	20.3	23.7	23.7	24.0	17.5	17.3	17.4
		1	0	24.5	24.4	24.5	20.6	20.7	20.6	24.1	24.1	24.3	17.8	17.8	17.8
		1	24	24.6	24.4	24.5	20.7	20.7	20.6	24.0	24.1	24.3	17.9	17.8	17.6
		1	49	24.7	24.6	24.3	20.6	20.7	20.5	23.8	24.2	24.3	18.0	17.9	17.5
		25	0	23.4	23.2	23.3	19.5	19.4	19.5	22.9	22.8	23.2	16.7	16.5	16.6
		25	12	23.5	23.2	23.3	19.5	19.4	19.4	22.8	22.8	23.2	16.6	16.5	16.5
	64QAM	25	24	23.5	23.2	23.2	19.5	19.4	19.4	22.7	22.8	23.1	16.6	16.5	16.5
		50	0	23.4	23.2	23.2	19.5	19.3	19.3	22.8	22.8	23.0	16.5	16.4	16.4
		1	0	24.0	23.9	24.0	18.7	18.6	18.7	23.0	22.6	22.7	16.6	16.5	16.5
		1	24	24.1	24.0	23.9	18.8	18.8	18.7	23.0	22.7	22.6	16.7	16.5	16.5
		1	49	24.3	24.2	24.0	18.8	18.8	18.7	23.1	22.8	22.6	16.7	16.6	16.4
		25	0	23.1	22.8	22.9	17.6	17.5	17.6	21.9	21.6	21.7	15.5	15.3	15.4
		25	12	23.1	22.8	22.9	17.7	17.6	17.6	21.9	21.6	21.6	15.5	15.3	15.4
		25	24	23.2	22.9	22.9	17.6	17.6	17.6	21.9	21.6	21.6	15.6	15.4	15.4
		50	0	23.1	22.8	22.8	17.6	17.5	17.6	21.8	21.5	21.6	15.4	15.3	15.4

OUTPUT POWER FOR LTE BAND 7 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375
				2507.5	2535.0	2562.5	2507.5	2535.0	2562.5	2507.5	2535.0	2562.5	2507.5	2535.0	2562.5
15.0	QPSK	1	0	25.2	25.1	25.1	21.3	21.3	21.2	24.0	24.2	24.6	18.7	18.5	18.5
		1	37	25.4	25.2	25.2	21.4	21.3	21.2	24.1	24.2	24.3	18.7	18.5	18.5
		1	74	25.2	25.3	25.0	21.2	21.4	21.1	23.9	24.2	24.2	18.5	18.5	18.2
		36	0	24.4	24.0	24.3	20.5	20.2	20.4	23.2	23.1	23.5	17.7	17.5	17.6
		36	16	24.4	24.1	24.2	20.4	20.3	20.3	23.2	23.2	23.5	17.7	17.5	17.5
		36	35	24.3	24.2	24.2	20.4	20.2	20.2	23.2	23.1	23.4	17.5	17.5	17.4
		75	0	24.4	24.1	24.2	20.4	20.3	20.3	23.2	23.1	23.5	17.6	17.4	17.5
	16QAM	1	0	24.4	24.5	24.4	20.6	20.6	20.6	23.5	23.5	23.9	18.0	17.8	17.8
		1	37	24.6	24.5	24.5	20.7	20.7	20.5	23.5	23.6	23.8	18.0	17.9	17.8
		1	74	24.5	24.6	24.3	20.6	20.7	20.5	23.2	23.5	23.7	17.9	17.8	17.5
		36	0	23.4	23.1	23.3	19.5	19.3	19.5	22.3	22.2	22.6	16.8	16.6	16.7
		36	16	23.5	23.2	23.2	19.5	19.3	19.4	22.3	22.2	22.5	16.7	16.5	16.6
		36	35	23.3	23.2	23.2	19.4	19.3	19.3	22.2	22.2	22.4	16.6	16.5	16.5
		75	0	23.4	23.2	23.2	19.4	19.3	19.3	22.2	22.2	22.4	16.6	16.5	16.6
	64QAM	1	0	24.1	23.9	23.9	18.7	18.6	18.6	22.4	22.1	22.1	16.7	16.5	16.6
		1	37	24.4	24.0	24.0	18.8	18.8	18.7	22.5	22.2	22.3	16.8	16.7	16.7
		1	74	24.3	24.1	23.9	18.8	18.9	18.7	22.4	22.3	22.1	16.7	16.7	16.6
		36	0	23.1	22.7	23.0	17.7	17.4	17.6	21.4	20.9	21.1	15.6	15.4	15.6
		36	16	23.2	22.8	22.9	17.7	17.5	17.6	21.4	21.0	21.1	15.6	15.4	15.5
		36	35	23.2	22.9	22.9	17.6	17.5	17.6	21.3	21.1	21.1	15.5	15.5	15.5
		75	0	23.1	22.8	22.8	17.6	17.4	17.5	21.3	21.0	21.1	15.5	15.3	15.5

OUTPUT POWER FOR LTE BAND 7 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				20850	21100	21350	20850	21100	21350	20850	21100	21350	20850	21100	21350
				2510.0	2535.0	2560.0	2510.0	2535.0	2560.0	2510.0	2535.0	2560.0	2510.0	2535.0	2560.0
20.0	QPSK	1	0	25.4	25.3	25.4	21.4	21.4	21.4	24.1	24.1	24.6	18.6	18.5	18.5
		1	49	25.5	25.3	25.4	21.4	21.4	21.4	24.1	24.2	24.4	18.7	18.5	18.5
		1	99	25.3	25.5	25.3	21.3	21.4	21.3	24.0	24.2	24.1	18.5	18.5	18.3
		50	0	24.6	24.3	24.4	20.6	20.3	20.4	23.1	23.1	23.5	17.7	17.5	17.6
		50	24	24.5	24.3	24.4	20.5	20.4	20.4	23.2	23.1	23.4	17.6	17.5	17.6
		50	49	24.4	24.4	24.3	20.3	20.3	20.3	23.1	23.1	23.2	17.5	17.5	17.5
		100	0	24.5	24.4	24.5	20.4	20.4	20.5	23.2	23.1	23.4	17.6	17.5	17.6
	16QAM	1	0	24.7	24.8	24.7	20.8	20.9	20.7	23.4	23.6	23.9	17.9	17.8	17.9
		1	49	24.8	24.7	24.6	20.8	20.9	20.7	23.4	23.5	23.7	18.0	17.8	17.9
		1	99	24.6	24.9	24.5	20.7	20.9	20.6	23.3	23.6	23.5	17.8	17.8	17.7
		50	0	23.6	23.3	23.4	19.6	19.4	19.4	22.2	22.2	22.5	16.7	16.6	16.6
		50	24	23.5	23.4	23.4	19.5	19.4	19.4	22.2	22.2	22.4	16.6	16.5	16.6
		50	49	23.4	23.5	23.3	19.3	19.4	19.4	22.2	22.2	22.3	16.5	16.5	16.5
		100	0	23.5	23.4	23.4	19.4	19.4	19.5	22.2	22.2	22.4	16.6	16.5	16.6
	64QAM	1	0	24.1	24.3	24.2	18.6	18.9	18.9	22.4	22.3	22.2	16.5	16.6	16.7
		1	49	24.3	24.3	24.3	18.7	18.9	18.8	22.3	22.3	22.2	16.6	16.8	16.7
		1	99	24.2	24.5	24.3	18.7	19.0	18.9	22.2	22.4	22.3	16.5	16.8	16.7
		50	0	23.3	22.9	23.0	17.7	17.5	17.6	21.3	20.9	21.0	15.5	15.3	15.4
		50	24	23.3	23.1	23.1	17.7	17.6	17.6	21.3	21.0	21.0	15.5	15.3	15.5
		50	49	23.2	23.2	23.0	17.6	17.6	17.6	21.2	21.0	21.1	15.4	15.4	15.5
		100	0	23.3	23.1	23.1	17.6	17.6	17.7	21.2	21.0	21.0	15.4	15.3	15.5

7.1.4. LTE BAND 12

ID:	50820	Date:	5/30/18
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OUTPUT POWER FOR LTE BAND 12 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23017	23095	23173	23017	23095	23173
				699.7	707.5	715.3	699.7	707.5	715.3
1.4	QPSK	1	0	25.5	25.3	25.4	24.4	24.2	24.4
		1	2	25.4	25.3	25.4	24.4	24.2	24.4
		1	5	25.5	25.3	25.4	24.4	24.2	24.4
		3	0	25.5	25.3	25.5	24.4	24.3	24.4
		3	1	25.5	25.3	25.5	24.4	24.2	24.4
		3	2	25.5	25.3	25.5	24.4	24.2	24.4
	16QAM	6	0	24.5	24.2	24.5	23.4	23.2	23.4
		1	0	24.7	24.7	24.7	23.8	23.4	23.8
		1	2	24.7	24.6	24.7	23.8	23.4	23.7
		1	5	24.7	24.6	24.7	23.8	23.4	23.7
		3	0	24.6	24.4	24.6	23.6	23.4	23.6
		3	1	24.6	24.4	24.6	23.6	23.3	23.5
	64QAM	3	2	24.6	24.4	24.6	23.6	23.3	23.5
		6	0	23.6	23.4	23.6	22.5	22.3	22.5
		1	0	24.5	24.5	24.4	22.5	22.3	22.5
		1	2	24.5	24.5	24.5	22.5	22.2	22.4
		1	5	24.4	24.4	24.3	22.4	22.3	22.5
		3	0	24.2	24.3	24.5	22.4	22.3	22.4
	64QAM	3	1	24.5	24.3	24.5	22.4	22.1	22.4
		3	2	24.2	24.4	24.3	22.4	22.1	22.4
		6	0	23.4	23.2	23.5	21.4	21.1	21.2

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23025	23095	23165	23025	23095	23165
				700.5	707.5	714.5	700.5	707.5	714.5
3.0	QPSK	1	0	25.4	25.3	25.3	24.4	24.2	24.3
		1	7	25.5	25.3	25.4	24.5	24.2	24.3
		1	14	25.5	25.2	25.4	24.4	24.2	24.3
		8	0	24.5	24.3	24.4	23.4	23.2	23.3
		8	4	24.5	24.3	24.5	23.4	23.2	23.3
		8	7	24.5	24.2	24.5	23.4	23.2	23.4
	16QAM	15	0	24.5	24.3	24.5	23.5	23.2	23.4
		1	0	24.6	24.6	24.6	23.7	23.5	23.6
		1	7	24.7	24.7	24.8	23.8	23.5	23.7
		1	14	24.8	24.6	24.7	23.8	23.5	23.6
		8	0	23.6	23.4	23.5	22.5	22.2	22.4
		8	4	23.5	23.4	23.6	22.5	22.3	22.5
	64QAM	8	7	23.5	23.3	23.6	22.5	22.3	22.5
		15	0	23.5	23.3	23.6	22.5	22.2	22.5
		1	0	24.5	24.3	24.4	22.5	22.1	22.3
		1	7	24.6	24.3	24.6	22.6	22.4	22.4
		1	14	24.6	24.4	24.4	22.4	22.3	22.4
		8	0	23.4	23.3	23.3	21.4	21.1	21.2
	64QAM	8	4	23.4	23.2	23.4	21.4	21.2	21.3
		8	7	23.4	23.2	23.4	21.4	21.2	21.3
		15	0	23.4	23.2	23.4	21.3	21.1	21.3

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23035	23095	23155	23035	23095	23155
				701.5	707.5	713.5	701.5	707.5	713.5
5.0	QPSK	1	0	25.4	25.4	25.2	24.5	24.3	24.1
		1	12	25.4	25.2	25.3	24.5	24.2	24.3
		1	24	25.5	25.2	25.4	24.4	24.2	24.3
		12	0	24.5	24.3	24.4	23.5	23.3	23.2
		12	6	24.5	24.2	24.4	23.5	23.3	23.3
		12	11	24.6	24.3	24.5	23.5	23.3	23.3
	16QAM	25	0	24.5	24.2	24.4	23.6	23.3	23.3
		1	0	24.8	24.7	24.7	23.8	23.8	23.5
		1	12	24.8	24.5	24.7	23.8	23.7	23.6
		1	24	24.9	24.5	24.8	23.7	23.6	23.7
		12	0	23.6	23.5	23.6	22.7	22.4	22.4
		12	6	23.6	23.4	23.5	22.7	22.4	22.5
	64QAM	12	11	23.7	23.5	23.6	22.6	22.4	22.5
		25	0	23.7	23.4	23.5	22.6	22.4	22.5
		1	0	24.6	24.6	24.4	22.7	22.5	22.3
		1	12	24.6	24.4	24.4	22.7	22.4	22.5
		1	24	24.7	24.4	24.6	22.6	22.4	22.5
		12	0	23.5	23.3	23.3	21.6	21.2	21.3
		12	6	23.5	23.2	23.3	21.6	21.2	21.3
		12	11	23.7	23.3	23.4	21.5	21.3	21.4
		25	0	23.5	23.2	23.3	21.5	21.2	21.3

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23060	23095	23130	23060	23095	23130
				704.0	707.5	711.0	704.0	707.5	711.0
10.0	QPSK	1	0	25.4	25.5	25.2	24.5	24.5	24.1
		1	24	25.5	25.2	25.1	24.3	24.2	24.0
		1	49	25.2	25.3	25.4	24.3	24.2	24.3
		25	0	24.4	24.2	24.1	23.4	23.3	23.2
		25	12	24.4	24.1	24.1	23.3	23.2	23.0
		25	24	24.2	24.1	24.2	23.2	23.1	23.2
	16QAM	50	0	24.3	24.1	24.2	23.3	23.2	23.0
		1	0	24.7	24.9	24.6	23.8	23.9	23.5
		1	24	24.7	24.6	24.6	23.7	23.6	23.4
		1	49	24.5	24.6	24.8	23.6	23.6	23.7
		25	0	23.5	23.4	23.2	22.6	22.4	22.3
		25	12	23.5	23.2	23.3	22.5	22.3	22.1
	64QAM	25	24	23.3	23.2	23.4	22.3	22.2	22.4
		50	0	23.4	23.2	23.3	22.3	22.3	22.2
		1	0	24.5	24.6	24.3	22.6	22.6	22.3
		1	24	24.6	24.3	24.2	22.5	22.4	22.2
		1	49	24.4	24.4	24.6	22.4	22.4	22.5
		25	0	23.3	23.3	23.1	21.4	21.3	21.2
		25	12	23.3	23.1	23.1	21.3	21.2	21.1
		25	24	23.1	23.2	23.3	21.2	21.1	21.3
		50	0	23.3	23.1	23.2	21.2	21.1	21.1

7.1.5. LTE BAND 13

ID:	50820	Date:	5/30/18
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OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23207	23230	23255	23207	23230	23255
				779.5	782.0	784.5	779.5	782.0	784.5
5.0	QPSK	1	0	25.5	25.4	25.4	24.5	24.4	24.4
		1	12	25.4	25.4	25.4	24.4	24.3	24.2
		1	24	25.5	25.4	25.2	24.5	24.2	24.0
		12	0	24.4	24.4	24.3	23.4	23.3	23.3
		12	6	24.3	24.4	24.4	23.3	23.4	23.2
		12	11	24.4	24.3	24.2	23.2	23.3	23.1
	16QAM	25	0	24.4	24.3	24.3	23.3	23.3	23.1
		1	0	24.9	24.7	24.9	23.9	23.7	23.8
		1	12	24.9	24.7	24.7	23.9	23.7	23.5
		1	24	25.0	24.8	24.6	23.9	23.5	23.4
		12	0	23.5	23.4	23.3	22.6	22.3	22.3
		12	6	23.4	23.4	23.4	22.3	22.4	22.3
	64QAM	12	11	23.5	23.4	23.2	22.3	22.4	22.1
		25	0	23.3	23.3	23.3	22.2	22.3	22.2
		1	0	24.5	24.6	24.5	22.5	22.6	22.4
		1	12	24.5	24.6	24.5	22.4	22.6	22.3
		1	24	24.7	24.6	24.3	22.6	22.5	22.2
		12	0	23.2	23.2	23.1	21.2	21.1	21.1
		12	6	23.1	23.2	23.2	21.1	21.2	21.0
		12	11	23.3	23.2	23.1	21.1	21.2	20.9
		25	0	23.1	23.1	23.1	21.1	21.1	21.0

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	23230	N/A	N/A	23230	N/A
				N/A	782.0	N/A	N/A	782.0	N/A
10.0	QPSK	1	0		25.4			24.5	
		1	24		25.3			24.4	
		1	49		25.0			23.9	
		25	0		24.3			23.4	
		25	12		24.3			23.4	
		25	24		24.3			23.2	
	16QAM	50	0		24.3			23.4	
		1	0		24.7			23.9	
		1	24		24.7			23.7	
		1	49		24.3			23.2	
		25	0		23.4			22.4	
		25	12		23.4			22.5	
	64QAM	25	24		23.4			22.3	
		50	0		23.4			22.4	
		1	0		24.4			22.6	
		1	24		24.4			22.5	
		1	49		24.1			22.1	
		25	0		23.2			21.2	
		25	12		23.2			21.3	
		25	24		23.2			21.2	
		50	0		23.2			21.3	

7.1.6. LTE BAND 14

ID:	50820	Date:	5/30/18
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OUTPUT POWER FOR LTE BAND 14 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23305	23330	23355	23305	23330	23355
				790.5	793.0	795.5	790.5	793.0	795.5
5.0	QPSK	1	0	25.5	25.4	25.3	24.5	24.4	24.3
		1	12	25.3	25.3	25.2	24.4	24.3	24.2
		1	24	25.3	25.2	25.3	24.3	24.3	24.3
		12	0	24.4	24.3	24.3	23.5	23.4	23.4
		12	6	24.3	24.2	24.2	23.4	23.3	23.3
		12	11	24.3	24.3	24.1	23.4	23.2	23.3
	16QAM	25	0	24.3	24.3	24.3	23.4	23.3	23.4
		1	0	24.9	24.7	24.8	24.0	23.7	23.7
		1	12	24.8	24.7	24.6	23.8	23.7	23.7
		1	24	24.8	24.6	24.7	23.8	23.7	23.7
		12	0	23.5	23.4	23.5	22.6	22.5	22.5
		12	6	23.4	23.4	23.3	22.5	22.4	22.4
	64QAM	12	11	23.3	23.4	23.2	22.5	22.3	22.3
		25	0	23.3	23.4	23.3	22.5	22.3	22.4
		1	0	24.1	24.1	24.0	22.6	22.6	22.4
		1	12	24.0	24.1	23.8	22.4	22.5	22.3
		1	24	24.0	24.0	23.9	22.5	22.5	22.4
		12	0	22.8	22.7	22.8	21.4	21.3	21.2
		12	6	22.8	22.7	22.7	21.3	21.1	21.1
		12	11	22.8	22.7	22.5	21.3	21.1	21.1
		25	0	22.7	22.7	22.7	21.2	21.1	21.1

OUTPUT POWER FOR LTE BAND 14 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	23330	N/A	N/A	23330	N/A
				N/A	793.0	N/A	N/A	793.0	N/A
10.0	QPSK	1	0		25.5			24.5	
		1	24		25.3			24.3	
		1	49		25.3			24.4	
		25	0		24.4			23.5	
		25	12		24.4			23.4	
		25	24		24.3			23.4	
	16QAM	50	0		24.4			23.3	
		1	0		24.9			23.9	
		1	24		24.8			23.7	
		1	49		24.7			23.8	
		25	0		23.5			22.6	
		25	12		23.5			22.5	
	64QAM	25	24		23.5			22.5	
		50	0		23.5			22.4	
		1	0		24.0			22.5	
		1	24		24.0			22.5	
		1	49		23.9			22.5	
		25	0		22.9			21.4	
		25	12		22.9			21.3	
		25	24		22.9			21.4	
		50	0		22.9			21.2	

7.1.7. LTE BAND 17

ID:	10646	Date:	5/30/18
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OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23755	23790	23825	23755	23790	23825
				706.5	710.0	713.5	706.5	710.0	713.5
5.0	QPSK	1	0	25.5	25.2	25.3	24.5	24.4	24.2
		1	12	25.2	25.2	25.3	24.3	24.3	24.4
		1	24	25.2	25.3	25.4	24.4	24.4	24.5
		12	0	24.4	24.2	24.4	23.5	23.4	23.4
		12	6	24.3	24.2	24.4	23.4	23.3	23.5
		12	11	24.3	24.2	24.5	23.4	23.2	23.5
	16QAM	25	0	24.3	24.3	24.4	23.4	23.3	23.5
		1	0	24.9	24.5	24.6	23.9	23.7	23.6
		1	12	24.7	24.5	24.6	23.7	23.6	23.8
		1	24	24.6	24.6	24.8	23.8	23.7	23.8
		12	0	23.6	23.4	23.6	22.7	22.6	22.6
		12	6	23.4	23.4	23.5	22.5	22.5	22.6
	64QAM	12	11	23.4	23.5	23.6	22.5	22.5	22.7
		25	0	23.4	23.4	23.5	22.5	22.5	22.6
		1	0	24.6	24.3	24.4	22.6	22.5	22.4
		1	12	24.4	24.4	24.4	22.5	22.5	22.6
		1	24	24.3	24.5	24.5	22.7	22.5	22.6
		12	0	23.4	23.2	23.3	21.4	21.4	21.4
		12	6	23.3	23.2	23.3	21.4	21.3	21.5
		12	11	23.3	23.2	23.4	21.4	21.3	21.6
		25	0	23.2	23.2	23.3	21.4	21.3	21.5

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23780	23790	23800	23780	23790	23800
				709.0	710.0	711.0	709.0	710.0	711.0
10.0	QPSK	1	0	25.5	25.3	25.2	24.4	24.4	24.2
		1	24	25.2	25.1	25.2	24.3	24.2	24.1
		1	49	25.4	25.4	25.4	24.4	24.5	24.4
		25	0	24.1	24.1	24.1	23.2	23.3	23.2
		25	12	24.1	24.1	24.1	23.3	23.2	23.1
		25	24	24.2	24.3	24.3	23.1	23.2	23.3
	16QAM	50	0	24.1	24.2	24.2	23.2	23.2	23.2
		1	0	24.8	24.7	24.6	23.8	23.7	23.7
		1	24	24.6	24.5	24.5	23.7	23.5	23.6
		1	49	24.7	24.8	24.8	23.9	23.8	23.8
		25	0	23.3	23.2	23.3	22.3	22.4	22.4
		25	12	23.2	23.2	23.3	22.4	22.3	22.3
	64QAM	25	24	23.3	23.4	23.4	22.3	22.4	22.5
		50	0	23.2	23.3	23.3	22.3	22.3	22.3
		1	0	24.5	24.4	24.3	22.5	22.3	22.3
		1	24	24.3	24.3	24.2	22.4	22.3	22.3
		1	49	24.5	24.6	24.6	22.6	22.6	22.6
		25	0	23.1	23.1	23.1	21.2	21.2	21.2
		25	12	23.1	23.1	23.1	21.3	21.1	21.1
		25	24	23.2	23.3	23.3	21.2	21.3	21.3
		50	0	23.0	23.1	23.2	21.2	21.1	21.0

7.1.8. LTE BAND 25

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OUTPUT POWER FOR LTE BAND 25 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26047	26365	26683	26047	26365	26683	26047	26365	26683	26047	26365	26683
1.4	QPSK			1850.7	1882.5	1914.3	1850.7	1882.5	1914.3	1850.7	1882.5	1914.3	1850.7	1882.5	1914.3
		1	0	25.1	25.3	25.5	18.2	18.5	18.4	25.0	24.9	24.9	20.2	20.2	20.4
		1	2	25.1	25.3	25.5	18.2	18.4	18.4	25.0	24.9	24.8	20.2	20.2	20.4
		1	5	25.2	25.3	25.5	18.2	18.4	18.4	24.9	24.9	24.9	20.3	20.2	20.4
		3	0	25.1	25.3	25.5	18.2	18.4	18.4	24.9	24.9	24.9	20.2	20.2	20.5
		3	1	25.1	25.2	25.5	18.2	18.4	18.4	24.9	24.9	24.9	20.2	20.2	20.5
	16QAM	3	2	25.1	25.2	25.5	18.2	18.4	18.4	24.9	24.9	24.9	20.2	20.2	20.5
		6	0	24.0	24.2	24.4	17.2	17.4	17.3	23.9	23.9	23.8	19.2	19.2	19.5
		1	0	24.5	24.5	24.8	17.5	17.8	17.7	24.3	24.2	24.2	19.5	19.6	19.7
		1	2	24.5	24.5	24.7	17.5	17.8	17.6	24.3	24.2	24.2	19.5	19.6	19.7
		1	5	24.5	24.5	24.7	17.5	17.9	17.7	24.1	24.1	24.2	19.6	19.6	19.6
		3	0	24.2	24.4	24.6	17.4	17.6	17.5	24.1	24.1	24.0	19.3	19.3	19.5
	64QAM	3	1	24.2	24.4	24.6	17.3	17.6	17.5	24.1	24.0	23.9	19.3	19.4	19.5
		3	2	24.2	24.4	24.6	17.3	17.6	17.5	24.1	24.0	23.9	19.4	19.3	19.5
		6	0	23.1	23.3	23.5	16.3	16.5	16.4	23.1	23.0	22.9	18.3	18.2	18.5
		1	0	23.8	24.1	24.0	16.5	16.7	16.7	22.6	22.9	22.9	18.4	18.6	18.6
		1	2	23.9	24.1	24.0	16.5	16.6	16.7	22.6	22.9	23.0	18.4	18.5	18.7
		1	5	23.9	24.1	24.1	16.5	16.7	16.7	22.6	22.9	22.9	18.5	18.4	18.7
	64QAM	3	0	23.7	23.9	23.9	16.3	16.6	16.5	22.5	22.7	22.8	18.3	18.4	18.6
		3	1	23.7	23.9	23.9	16.3	16.6	16.5	22.5	22.7	22.9	18.2	18.3	18.6
		3	2	23.7	23.9	23.9	16.3	16.5	16.5	22.5	22.7	22.9	18.3	18.3	18.6
		6	0	22.5	22.8	22.8	15.2	15.4	15.3	21.5	21.6	21.7	17.3	17.3	17.5

OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675
3.0	QPSK			1851.5	1882.5	1913.5	1851.5	1882.5	1913.5	1851.5	1882.5	1913.5	1851.5	1882.5	1913.5
		1	0	25.1	25.3	25.2	18.2	18.5	18.3	24.9	24.8	24.7	20.1	20.1	20.2
		1	7	25.2	25.3	25.5	18.3	18.5	18.4	24.9	24.8	24.8	20.2	20.1	20.4
		1	14	25.2	25.2	25.3	18.3	18.4	18.4	24.7	24.8	24.8	20.2	20.0	20.3
		8	0	24.0	24.2	24.3	17.2	17.4	17.4	23.9	23.8	23.7	19.1	19.1	19.3
		8	4	24.1	24.2	24.4	17.2	17.4	17.4	23.9	23.8	23.8	19.1	19.1	19.4
	16QAM	8	7	24.1	24.2	24.4	17.2	17.4	17.4	23.9	23.8	23.8	19.2	19.1	19.4
		15	0	24.1	24.3	24.4	17.1	17.4	17.4	23.9	23.8	23.8	19.2	19.1	19.4
		1	0	24.4	24.6	24.6	17.4	17.9	17.8	24.3	24.1	24.1	19.3	19.4	19.6
		1	7	24.4	24.7	24.9	17.5	17.8	17.8	24.2	24.2	24.1	19.5	19.5	19.7
		1	14	24.5	24.6	24.7	17.4	17.7	17.7	23.9	24.1	24.2	19.5	19.4	19.6
		8	0	23.1	23.3	23.4	16.2	16.5	16.5	23.1	22.9	22.8	18.2	18.1	18.4
	64QAM	8	4	23.1	23.3	23.5	16.2	16.5	16.5	23.0	22.9	22.8	18.2	18.1	18.4
		8	7	23.2	23.3	23.4	16.2	16.5	16.5	23.0	22.9	22.8	18.2	18.1	18.5
		15	0	23.2	23.3	23.5	16.2	16.5	16.4	23.0	22.9	22.8	18.1	18.1	18.4
		1	0	23.8	24.0	24.0	16.3	16.4	16.5	22.5	22.8	22.7	18.1	18.4	18.3
		1	7	23.7	24.1	24.1	16.4	16.5	16.6	22.6	22.8	22.8	18.3	18.4	18.6
		1	14	23.9	23.9	24.0	16.5	16.6	16.5	22.5	22.8	22.7	18.5	18.2	18.4
	64QAM	8	0	22.5	22.8	22.8	15.1	15.4	15.3	21.3	21.6	21.5	17.2	17.3	17.3
		8	4	22.6	22.8	22.8	15.1	15.4	15.3	21.4	21.6	21.5	17.2	17.2	17.3
		8	7	22.6	22.8	22.8	15.1	15.4	15.3	21.4	21.6	21.5	17.2	17.3	17.4
		15	0	22.5	22.7	22.8	15.1	15.3	15.3	21.3	21.5	21.5	17.2	17.2	17.3

OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665
5.0	QPSK	1	0	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
		1	12	25.2	25.4	25.3	18.2	18.4	18.3	24.9	24.9	24.7	20.3	20.3	20.4
		1	24	25.3	25.4	25.4	18.3	18.4	18.4	25.0	24.8	24.8	20.4	20.2	20.4
		12	0	25.3	25.4	25.5	18.2	18.4	18.4	24.6	24.8	24.8	20.5	20.2	20.5
		12	6	24.2	24.3	24.4	17.2	17.4	17.3	24.1	23.9	23.8	19.4	19.3	19.5
		12	11	24.3	24.3	24.4	17.3	17.4	17.3	24.1	23.8	23.9	19.4	19.3	19.5
	16QAM	12	11	24.3	24.3	24.5	17.3	17.4	17.3	24.0	23.8	23.9	19.4	19.3	19.6
		25	0	24.3	24.3	24.5	17.3	17.4	17.4	24.1	23.8	23.9	19.4	19.3	19.6
		1	0	24.6	24.7	24.7	17.6	17.9	17.6	24.4	24.2	24.1	19.6	19.6	19.8
		1	12	24.7	24.7	24.8	17.6	17.9	17.7	24.3	24.1	24.2	19.7	19.6	19.8
		1	24	24.7	24.7	24.8	17.6	17.8	17.8	24.0	24.1	24.2	19.8	19.6	19.8
		12	0	23.3	23.5	23.6	16.3	16.5	16.5	23.2	23.0	22.9	18.5	18.5	18.6
	64QAM	12	6	23.4	23.5	23.5	16.4	16.5	16.5	23.2	23.0	23.0	18.6	18.4	18.6
		12	11	23.4	23.5	23.7	16.4	16.5	16.5	23.1	22.9	23.0	18.6	18.4	18.7
		25	0	23.4	23.5	23.5	16.3	16.5	16.5	23.2	22.9	23.0	18.5	18.3	18.6
		1	0	24.0	24.1	24.0	16.5	16.6	16.4	22.7	22.8	22.7	18.5	18.6	18.6
		1	12	24.1	24.1	24.1	16.6	16.6	16.6	22.7	22.7	22.7	18.7	18.6	18.7
		1	24	24.1	24.1	24.2	16.6	16.6	16.6	22.8	22.7	22.8	18.7	18.6	18.8
		12	0	22.7	22.9	22.9	15.2	15.4	15.2	21.4	21.6	21.5	17.4	17.5	17.5
		12	6	22.8	22.9	22.9	15.2	15.4	15.4	21.5	21.6	21.6	17.5	17.4	17.5
		12	11	22.8	22.9	23.1	15.3	15.4	15.3	21.5	21.6	21.6	17.5	17.5	17.6
		25	0	22.8	22.9	22.9	15.2	15.3	15.3	21.5	21.5	21.6	17.5	17.4	17.5

OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640
10.0	QPSK	1	0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0
		1	12	25.3	25.4	25.4	18.2	18.4	18.2	24.7	25.0	24.8	20.2	20.3	20.4
		1	24	25.4	25.4	25.4	18.2	18.4	18.1	24.7	24.8	24.9	20.3	20.2	20.3
		1	49	25.4	25.2	25.4	18.1	18.3	18.3	24.7	24.7	25.0	20.4	20.1	20.5
		25	0	24.3	24.3	24.3	17.1	17.2	17.1	23.6	23.7	23.9	19.3	19.1	19.3
		25	12	24.3	24.2	24.3	17.1	17.2	17.1	23.7	23.7	23.9	19.3	19.1	19.3
	16QAM	25	24	24.3	24.2	24.4	17.0	17.2	17.2	23.8	23.7	23.9	19.3	19.1	19.4
		50	0	24.3	24.2	24.3	17.1	17.2	17.2	23.8	23.7	23.9	19.3	19.1	19.4
		1	0	24.5	24.8	24.7	17.5	17.9	17.6	24.1	24.4	24.1	19.6	19.6	19.8
		1	24	24.7	24.8	24.7	17.5	17.8	17.6	24.1	24.2	24.2	19.7	19.5	19.6
		1	49	24.6	24.7	24.9	17.4	17.7	17.8	24.0	24.2	24.3	19.8	19.4	19.8
		25	0	23.4	23.4	23.4	16.3	16.4	16.2	22.8	22.9	23.0	18.4	18.3	18.4
	64QAM	25	12	23.4	23.4	23.4	16.2	16.3	16.2	22.9	22.9	23.0	18.4	18.2	18.4
		25	24	23.4	23.3	23.5	16.1	16.3	16.3	22.9	22.8	23.0	18.3	18.2	18.4
		50	0	23.3	23.3	23.4	16.1	16.3	16.2	22.9	22.8	22.9	18.3	18.2	18.4
		1	0	23.8	24.1	24.1	16.4	16.6	16.3	22.6	22.8	22.7	18.4	18.5	18.5
		1	24	24.0	24.1	24.0	16.4	16.5	16.2	22.8	22.7	22.7	18.6	18.4	18.4
		1	49	24.0	24.0	24.2	16.2	16.4	16.5	22.9	22.7	22.8	18.7	18.3	18.7
		25	0	22.8	22.8	22.8	15.2	15.2	15.1	21.5	21.5	21.4	17.4	17.3	17.3
		25	12	22.8	22.8	22.8	15.1	15.2	15.1	21.5	21.5	21.5	17.4	17.3	17.3
		25	24	22.8	22.8	22.9	15.1	15.2	15.2	21.6	21.5	21.5	17.4	17.3	17.4
		50	0	22.8	22.7	22.8	15.0	15.1	15.1	21.5	21.5	21.4	17.3	17.3	17.3

OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615
15.0	QPSK	1	0	25.2	25.4	25.4	18.2	18.5	18.5	24.8	24.9	24.6	20.3	20.4	20.3
		1	37	25.3	25.3	25.3	18.2	18.5	18.3	24.7	24.7	24.8	20.4	20.3	20.3
		1	74	25.2	25.2	25.4	18.2	18.3	18.4	24.4	24.6	24.6	20.3	20.1	20.4
		36	0	24.2	24.2	24.3	17.2	17.3	17.3	23.7	23.7	23.7	19.4	19.2	19.3
		36	16	24.1	24.1	24.2	17.1	17.3	17.2	23.7	23.6	23.7	19.3	19.2	19.3
		36	35	24.1	24.0	24.2	17.0	17.2	17.2	23.7	23.5	23.7	19.3	19.0	19.3
	16QAM	75	0	24.1	24.1	24.2	17.1	17.3	17.3	23.8	23.6	23.7	19.3	19.1	19.4
		1	0	24.5	24.8	24.7	17.6	18.0	18.0	24.1	24.2	24.0	19.6	19.8	19.8
		1	37	24.6	24.7	24.5	17.6	17.9	17.6	23.9	24.1	24.2	19.6	19.7	19.6
		1	74	24.6	24.6	24.6	17.4	17.7	17.8	23.7	24.0	24.0	19.6	19.5	19.8
		36	0	23.2	23.2	23.3	16.3	16.4	16.4	22.8	22.8	22.8	18.5	18.3	18.4
		36	16	23.2	23.2	23.3	16.2	16.4	16.3	22.8	22.7	22.8	18.4	18.2	18.4
	64QAM	36	35	23.2	23.1	23.3	16.1	16.3	16.3	22.8	22.6	22.7	18.4	18.1	18.4
		75	0	23.2	23.1	23.3	16.1	16.3	16.3	22.8	22.7	22.7	18.3	18.2	18.4
		1	0	23.8	24.0	24.0	16.4	16.7	16.7	22.4	22.7	22.7	18.4	18.7	18.5
		1	37	24.0	24.0	23.9	16.4	16.6	16.4	22.6	22.6	22.5	18.5	18.5	18.4
		1	74	24.0	24.0	24.1	16.4	16.5	16.6	22.6	22.5	22.6	18.7	18.5	18.6
		36	0	22.6	22.7	22.8	15.2	15.3	15.2	21.3	21.4	21.3	17.4	17.3	17.3
		36	16	22.6	22.6	22.7	15.1	15.3	15.2	21.3	21.3	21.2	17.4	17.3	17.3
		36	35	22.6	22.5	22.7	15.1	15.2	15.2	21.3	21.3	21.3	17.4	17.1	17.3
		75	0	22.6	22.6	22.7	15.0	15.2	15.2	21.3	21.2	21.3	17.3	17.2	17.3

OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590
20.0	QPSK	1	0	25.2	25.4	25.2	18.3	18.5	18.4	24.8	24.9	24.7	20.4	20.5	20.2
		1	49	25.3	25.3	25.3	18.2	18.4	18.3	24.6	24.7	24.8	20.4	20.2	20.4
		1	99	25.3	25.2	25.4	18.4	18.3	18.5	24.7	24.7	24.8	20.5	20.2	20.5
		50	0	24.2	24.2	24.3	17.2	17.4	17.4	23.8	23.8	23.8	19.4	19.2	19.3
		50	24	24.1	24.1	24.2	17.1	17.3	17.3	23.6	23.6	23.7	19.4	19.2	19.3
		50	49	24.0	23.9	24.2	17.1	17.2	17.3	23.7	23.5	23.5	19.3	19.0	19.4
	16QAM	100	0	24.1	24.1	24.3	17.2	17.3	17.3	23.8	23.6	23.7	19.4	19.2	19.4
		1	0	24.4	24.7	24.7	17.6	17.8	17.9	24.2	24.4	24.0	19.7	19.8	19.7
		1	49	24.5	24.6	24.8	17.5	17.8	17.8	23.9	24.1	24.1	19.8	19.6	19.8
		1	99	24.5	24.5	24.9	17.6	17.7	18.0	23.9	24.2	24.1	19.7	19.5	20.0
		50	0	23.2	23.2	23.4	16.3	16.4	16.5	22.9	22.8	22.8	18.4	18.3	18.3
		50	24	23.2	23.1	23.3	16.1	16.3	16.3	22.7	22.6	22.7	18.4	18.2	18.4
	64QAM	50	49	23.1	23.0	23.3	16.2	16.2	16.3	22.8	22.6	22.6	18.4	18.0	18.4
		100	0	23.1	23.1	23.3	16.2	16.3	16.4	22.8	22.6	22.7	18.4	18.2	18.4
		1	0	23.9	24.1	23.7	16.6	16.5	16.7	22.6	22.8	22.4	18.6	18.5	18.5
		1	49	24.0	24.2	23.8	16.4	16.4	16.6	22.8	22.7	22.3	18.7	18.4	18.6
		1	99	24.1	24.1	24.0	16.7	16.4	16.8	22.8	22.7	22.6	18.8	18.3	18.8
		50	0	22.6	22.6	22.8	15.2	15.3	15.4	21.3	21.3	21.3	17.3	17.3	17.3
		50	24	22.5	22.6	22.7	15.1	15.2	15.2	21.3	21.2	21.2	17.3	17.2	17.3
		50	49	22.5	22.5	22.7	15.1	15.2	15.2	21.2	21.2	21.3	17.4	17.1	17.4
		100	0	22.5	22.6	22.7	15.1	15.2	15.2	21.3	21.2	21.2	17.3	17.2	17.3

7.1.9. LTE BAND 26 (FCC Part 90S)

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OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26697	26740	26783	26697	26740	26783
1.4	QPSK	1	0	25.2	25.3	24.9	24.3	24.2	24.0
		1	2	25.2	25.3	24.9	24.3	24.2	24.0
		1	5	25.3	25.2	24.9	24.3	24.2	24.0
		3	0	25.2	25.3	24.9	24.3	24.2	24.0
		3	1	25.3	25.3	24.9	24.2	24.2	24.0
		3	2	25.3	25.2	24.9	24.2	24.1	24.0
		6	0	24.3	24.2	23.9	23.2	23.1	23.1
	16QAM	1	0	24.5	24.8	24.2	23.6	23.6	23.4
		1	2	24.5	24.7	24.3	23.6	23.6	23.3
		1	5	24.6	24.6	24.2	23.8	23.6	23.4
		3	0	24.4	24.4	24.1	23.4	23.4	23.2
		3	1	24.4	24.4	24.1	23.4	23.4	23.2
		3	2	24.4	24.3	24.1	23.4	23.3	23.2
		6	0	23.4	23.3	23.0	22.3	22.3	22.1
	64QAM	1	0	24.0	24.0	23.6	23.6	23.5	23.4
		1	2	24.1	23.9	23.7	23.6	23.6	23.5
		1	5	24.0	23.9	23.7	23.7	23.4	23.4
		3	0	23.9	23.9	23.5	23.5	23.4	23.3
		3	1	23.9	23.9	23.5	23.5	23.4	23.3
		3	2	23.9	23.8	23.5	23.4	23.3	23.3
		6	0	22.8	22.8	22.5	22.3	22.3	22.2

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26705	26740	26775	26705	26740	26775
3.0	QPSK	1	0	25.3	25.2	25.0	24.5	24.4	24.2
		1	7	25.4	25.2	24.9	24.5	24.3	24.3
		1	14	25.3	25.1	24.9	24.4	24.3	24.2
		8	0	24.3	24.3	24.0	23.4	23.4	23.3
		8	4	24.3	24.2	23.9	23.4	23.4	23.3
		8	7	24.4	24.2	23.9	23.5	23.3	23.3
		15	0	24.4	24.2	23.9	23.4	23.3	23.3
	16QAM	1	0	24.4	24.2	24.0	23.2	23.1	23.1
		1	7	24.5	24.3	24.0	23.3	23.1	23.2
		1	14	24.4	24.1	23.9	23.3	23.2	23.0
		8	0	23.1	23.0	22.8	22.0	22.0	21.9
		8	4	23.1	23.0	22.7	22.0	22.0	21.9
		8	7	23.1	22.9	22.7	22.0	21.9	21.8
		15	0	23.1	22.9	22.6	22.0	21.9	21.8
	64QAM	1	0	23.5	23.5	23.3	22.3	22.2	22.0
		1	7	23.6	23.6	23.2	22.3	22.2	22.1
		1	14	23.5	23.5	23.2	22.1	22.2	22.0
		8	0	22.5	22.5	22.2	21.0	21.0	21.0
		8	4	22.5	22.5	22.1	21.1	21.0	20.9
		8	7	22.5	22.4	22.1	21.1	21.0	20.9
		15	0	22.4	22.4	22.1	21.0	20.9	20.8

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26715	26740	26765	26715	26740	26765
				816.5	819.0	821.5	816.5	819.0	821.5
5.0	QPSK	1	0	25.3	25.4	25.3	24.3	24.3	24.1
		1	12	25.3	25.2	25.1	24.2	24.1	24.1
		1	24	25.3	25.0	25.0	24.3	24.1	24.1
		12	0	24.4	24.3	24.2	23.4	23.3	23.2
		12	6	24.4	24.3	24.1	23.3	23.3	23.2
		12	11	24.4	24.3	24.0	23.3	23.2	23.2
	16QAM	25	0	24.4	24.3	24.1	23.3	23.2	23.2
		1	0	24.5	24.4	24.2	23.4	23.4	23.4
		1	12	24.4	24.2	24.0	23.3	23.3	23.3
		1	24	24.4	24.0	23.9	23.4	23.3	23.2
		12	0	23.1	23.1	23.0	22.2	22.1	22.1
		12	6	23.1	23.1	22.8	22.1	22.1	22.0
	64QAM	12	11	23.1	23.0	22.8	22.2	22.1	22.0
		25	0	23.1	23.0	22.8	22.1	22.0	22.0
		1	0	23.7	23.7	23.6	23.6	23.6	23.5
		1	12	23.7	23.6	23.4	23.6	23.6	23.5
		1	24	23.8	23.5	23.4	23.6	23.5	23.4
		12	0	22.6	22.5	22.3	22.4	22.4	22.3
		12	6	22.5	22.5	22.2	22.4	22.4	22.3
		12	11	22.5	22.4	22.2	22.4	22.4	22.3
		25	0	22.5	22.4	22.2	22.4	22.3	22.3

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	26740	N/A	N/A	26740	N/A
				N/A	819.0	N/A	N/A	819.0	N/A
10.0	QPSK	1	0		25.5			24.4	
		1	24		25.4			24.3	
		1	49		25.1			24.1	
		25	0		24.4			23.3	
		25	12		24.3			23.2	
		25	24		24.1			23.2	
	16QAM	50	0		24.2			23.1	
		1	0		24.3			23.7	
		1	24		24.2			23.6	
		1	49		23.9			23.4	
		25	0		22.9			22.4	
		25	12		22.8			22.4	
	64QAM	25	24		22.6			22.3	
		50	0		22.5			22.2	
		1	0		23.5			23.6	
		1	24		23.2			23.6	
		1	49		22.3			23.5	
		25	0		22.2			22.4	
		25	12		22.0			22.4	
		25	24		22.1			22.3	
		50	0		22.1			22.3	

7.1.10. LTE BAND 30

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OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				27685	27710	27735	27685	27710	27735	27685	27710	27735	27685	27710	27735
5.0	QPSK	1	0	23.3	23.4	23.5	20.4	20.4	20.4	23.3	23.4	23.5	19.4	19.4	19.5
		1	12	23.4	23.5	23.4	20.4	20.4	20.3	23.3	23.5	23.4	19.3	19.4	19.4
		1	24	23.5	23.5	23.5	20.4	20.4	20.4	23.3	23.5	23.5	19.4	19.4	19.4
		12	0	22.3	22.3	22.4	19.2	19.3	19.2	22.2	22.4	22.4	18.2	18.3	18.3
		12	6	22.3	22.4	22.4	19.3	19.3	19.2	22.2	22.4	22.4	18.2	18.3	18.3
		12	11	22.3	22.3	22.4	19.3	19.3	19.2	22.2	22.4	22.4	18.3	18.3	18.3
		25	0	22.3	22.4	22.4	19.3	19.3	19.2	22.3	22.4	22.4	18.2	18.3	18.3
	16QAM	1	0	22.2	22.5	22.2	19.5	19.6	19.5	21.9	22.1	22.1	18.3	18.3	18.2
		1	12	22.2	22.3	22.2	19.5	19.5	19.4	21.9	22.1	22.0	18.2	18.3	18.2
		1	24	22.3	22.3	22.2	19.5	19.5	19.4	21.9	22.1	22.1	18.3	18.3	18.3
		12	0	20.7	20.7	20.8	17.9	18.0	18.0	20.4	20.6	20.6	16.7	16.8	16.8
		12	6	20.7	20.8	20.8	18.0	18.0	17.9	20.5	20.6	20.5	16.7	16.8	16.7
		12	11	20.7	20.8	20.8	17.9	18.0	17.9	20.5	20.6	20.6	16.7	16.8	16.8
		25	0	20.7	20.7	20.7	18.0	17.9	17.9	20.5	20.6	20.6	16.7	16.8	16.7
	64QAM	1	0	21.6	21.6	21.7	19.4	19.6	19.4	22.1	22.2	22.3	18.0	18.1	18.1
		1	12	21.6	21.7	21.6	19.4	19.5	19.4	22.1	22.4	22.2	18.0	18.2	18.0
		1	24	21.7	21.7	21.7	19.5	19.6	19.5	22.3	22.2	22.2	18.1	18.1	18.0
		12	0	20.2	20.2	20.2	18.0	18.0	18.0	20.8	20.8	20.8	16.6	16.6	16.6
		12	6	20.2	20.3	20.2	18.1	18.0	18.0	20.8	20.8	20.8	16.6	16.6	16.6
		12	11	20.2	20.3	20.2	18.1	18.0	18.0	20.8	20.9	20.8	16.7	16.7	16.6
		25	0	20.2	20.2	20.2	18.0	18.0	18.0	20.7	20.9	20.9	16.6	16.6	16.6

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A	N/A	27710	N/A
10.0	QPSK	1	0		23.3			20.4			23.4			19.4	
		1	24		23.4			20.5			23.3			19.4	
		1	49		23.4			20.5			23.4			19.5	
		25	0		22.3			19.4			22.3			18.4	
		25	12		22.4			19.4			22.3			18.4	
		25	24		22.4			19.4			22.4			18.4	
		50	0		22.4			19.4			22.5			18.5	
	16QAM	1	0		22.2			19.7			22.2			18.3	
		1	24		22.2			19.7			22.1			18.2	
		1	49		22.2			19.8			22.2			18.3	
		25	0		20.9			18.5			20.9			17.0	
		25	12		21.0			18.5			20.9			17.0	
		25	24		21.0			18.5			20.9			17.0	
		50	0		21.0			18.5			21.0			17.0	
	64QAM	1	0		21.7			19.4			21.6			18.1	
		1	24		21.9			19.6			21.7			18.1	
		1	49		21.9			19.6			21.7			18.2	
		25	0		20.7			18.3			20.4			16.8	
		25	12		20.7			18.3			20.4			16.8	
		25	24		20.7			18.3			20.5			16.8	
		50	0		20.7			18.3			20.5			16.9	

7.1.11. LTE BAND 41

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OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				39675	40620	41565	39675	40620	41565	39675	40620	41565	39675	40620	41565
5.0	QPSK			2498.5	2593.0	2687.5	2498.5	2593.0	2687.5	2498.5	2593.0	2687.5	2498.5	2593.0	2687.5
		1	0	23.9	25.7	26.2	17.9	22.1	22.3	23.3	26.1	26.2	18.0	21.2	21.5
		1	12	26.8	25.7	26.2	20.7	22.1	22.2	26.4	26.1	26.2	21.1	21.2	21.4
		1	24	26.9	25.7	26.3	20.7	22.0	22.3	26.5	26.1	26.2	21.1	21.2	21.5
		12	0	22.8	24.6	25.2	16.8	21.0	21.3	22.4	25.1	25.2	17.0	20.2	20.5
		12	6	22.8	24.7	25.2	16.8	21.1	21.3	22.4	25.1	25.2	17.1	20.2	20.5
	16QAM	12	11	25.8	24.7	25.2	19.7	21.0	21.2	25.4	25.1	25.2	20.1	20.2	20.5
		25	0	22.8	24.7	25.3	16.8	21.1	21.3	22.4	25.2	25.2	17.1	20.2	20.5
		1	0	23.3	25.0	25.5	17.4	21.5	21.7	22.7	25.4	25.5	17.4	20.5	20.8
		1	12	26.2	25.1	25.4	20.2	21.4	21.6	25.6	25.5	25.4	20.3	20.5	20.7
		1	24	26.1	25.1	25.4	20.1	21.5	21.6	25.9	25.4	25.4	20.4	20.5	20.7
		12	0	22.0	23.7	24.2	15.8	20.1	20.3	21.4	24.1	24.3	16.1	19.2	19.5
	64QAM	12	6	21.9	23.7	24.2	15.7	20.1	20.3	21.4	24.2	24.2	16.1	19.2	19.5
		12	11	24.8	23.7	24.2	18.8	20.1	20.3	24.5	24.2	24.2	19.1	19.2	19.5
		25	0	21.9	23.7	24.2	15.7	20.1	20.3	21.4	24.2	24.2	16.1	19.2	19.5
		1	0	21.5	24.8	25.1	15.6	19.3	19.5	22.3	24.3	24.3	15.9	18.6	18.7
		1	12	24.4	24.8	25.1	18.5	19.3	19.4	25.4	24.4	24.2	18.8	18.6	18.7
		1	24	24.4	24.9	25.2	18.5	19.2	19.4	25.4	24.3	24.4	18.9	18.7	18.7
		12	0	20.2	23.5	23.9	14.2	17.9	18.1	21.1	23.1	23.0	14.6	17.4	17.5
		12	6	20.1	23.5	23.9	14.2	18.0	18.1	21.1	23.2	23.0	14.6	17.4	17.5
		12	11	23.1	23.5	23.9	17.2	18.0	18.1	24.1	23.2	23.0	17.6	17.4	17.5
		25	0	20.1	23.5	23.9	14.2	18.0	18.1	21.1	23.1	23.0	14.6	17.4	17.5

OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				39700	40620	41540	39700	40620	41540	39700	40620	41540	39700	40620	41540
10.0	QPSK			2501.0	2593.0	2685.0	2501.0	2593.0	2685.0	2501.0	2593.0	2685.0	2501.0	2593.0	2685.0
		1	0	22.1	25.7	26.4	15.9	22.1	22.5	21.5	26.1	26.4	16.2	21.2	21.7
		1	24	26.9	25.7	26.3	20.8	22.1	22.4	26.5	26.2	26.3	21.2	21.2	21.5
		1	49	27.0	25.8	26.3	20.8	22.0	22.4	26.5	26.2	26.3	21.0	21.3	21.5
		25	0	23.0	24.8	25.4	16.9	21.1	21.4	22.6	25.2	25.3	17.2	20.3	20.7
		25	12	25.9	24.8	25.3	19.8	21.1	21.4	25.5	25.2	25.3	20.2	20.3	20.7
	16QAM	25	24	24.9	24.8	25.3	18.8	21.1	21.4	24.6	25.2	25.3	19.1	20.3	20.6
		50	0	22.9	24.8	25.3	16.8	21.1	21.4	22.5	25.2	25.3	17.1	20.3	20.6
		1	0	21.5	25.1	25.6	15.4	21.4	21.8	20.9	25.4	25.6	15.7	20.6	21.0
		1	24	26.2	25.1	25.5	20.1	21.4	21.7	25.7	25.4	25.5	20.4	20.5	20.9
		1	49	26.3	25.2	25.5	20.1	21.4	21.7	25.8	25.5	25.5	20.2	20.5	20.8
		25	0	22.1	23.9	24.5	16.0	20.2	20.6	21.6	24.3	24.5	16.3	19.4	19.8
	64QAM	25	12	25.0	23.9	24.4	18.9	20.2	20.5	24.6	24.3	24.4	19.3	19.4	19.7
		25	24	24.1	23.9	24.4	17.9	20.2	20.5	23.7	24.3	24.4	18.2	19.4	19.7
		50	0	22.1	23.8	24.4	15.9	20.2	20.5	21.6	24.3	24.4	16.2	19.3	19.7
		1	0	19.8	24.8	25.3	13.8	19.2	19.7	20.7	24.4	24.5	14.2	18.7	18.9
		1	24	24.5	24.7	25.2	18.6	19.1	19.6	25.5	24.5	24.4	18.9	18.7	18.7
		1	49	24.5	24.8	25.2	18.6	19.2	19.6	25.5	24.5	24.5	18.7	18.8	18.7
		25	0	20.4	23.6	24.2	14.4	18.0	18.4	21.4	23.3	23.4	14.8	17.6	17.8
		25	12	23.3	23.7	24.1	17.4	18.1	18.4	24.3	23.3	23.4	17.8	17.6	17.7
		25	24	22.4	23.7	24.1	16.4	18.1	18.3	23.4	23.3	23.4	16.7	17.6	17.7
		50	0	20.4	23.6	24.1	14.4	18.1	18.3	21.3	23.3	23.3	14.7	17.5	17.6

OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				39725	40620	41515	39725	40620	41515	39725	40620	41515	39725	40620	41515
15.0	QPSK	1	0	22.1	25.7	26.4	15.9	22.1	22.5	21.5	26.1	26.4	16.2	21.2	21.7
		1	37	26.9	25.7	26.3	20.7	22.1	22.4	26.4	26.2	26.3	21.1	21.2	21.6
		1	74	26.8	25.8	26.3	20.7	22.0	22.3	26.2	26.1	26.2	20.7	21.2	21.5
		36	0	22.0	24.7	25.4	15.8	21.1	21.5	21.6	25.2	25.4	16.2	20.3	20.6
		36	16	25.9	24.8	25.3	19.8	21.2	21.4	25.5	25.2	25.3	20.1	20.3	20.7
		36	35	23.0	24.8	25.3	16.8	21.1	21.4	22.5	25.2	25.3	17.0	20.2	20.6
		75	0	21.9	24.8	25.3	15.8	21.1	21.4	21.5	25.2	25.3	16.1	20.3	20.6
	16QAM	1	0	21.4	25.0	25.6	15.2	21.5	21.8	20.8	25.3	25.6	15.5	20.5	20.9
		1	37	26.1	25.1	25.5	19.9	21.4	21.7	25.6	25.4	25.4	20.3	20.5	20.8
		1	74	26.0	25.1	25.4	19.9	21.4	21.6	25.4	25.4	25.4	19.9	20.4	20.6
		36	0	21.1	23.8	24.4	14.9	20.2	20.6	20.6	24.3	24.5	15.3	19.3	19.7
		36	16	25.0	23.9	24.4	18.9	20.2	20.5	24.5	24.3	24.4	19.1	19.3	19.7
		36	35	22.1	23.8	24.4	15.8	20.2	20.5	21.5	24.3	24.4	16.0	19.3	19.6
		75	0	21.0	23.8	24.4	14.9	20.2	20.5	20.5	24.3	24.4	15.1	19.3	19.7
	64QAM	1	0	19.8	24.6	25.3	13.8	19.2	19.8	20.8	24.3	24.6	14.2	18.7	19.0
		1	37	24.5	24.7	25.3	18.6	19.2	19.6	25.5	24.5	24.5	18.8	18.7	18.9
		1	74	24.5	24.8	25.2	18.6	19.1	19.6	25.3	24.5	24.5	18.4	18.7	18.7
		36	0	19.4	23.6	24.1	13.4	18.0	18.4	20.5	23.3	23.4	13.8	17.5	17.7
		36	16	23.3	23.7	24.1	17.3	18.1	18.4	24.3	23.3	23.4	17.6	17.5	17.7
		36	35	20.4	23.6	24.1	14.3	18.1	18.3	21.3	23.3	23.4	14.5	17.5	17.6
		75	0	19.3	23.6	24.1	13.3	18.0	18.3	20.3	23.3	23.4	13.6	17.5	17.6

OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				39750	40620	41490	39750	40620	41490	39750	40620	41490	39750	40620	41490
20.0	QPSK	1	0	22.1	25.7	26.5	16.0	22.1	22.5	21.6	26.1	26.4	16.2	21.2	21.7
		1	49	26.9	25.7	26.4	20.8	22.1	22.4	26.4	26.1	26.3	21.0	21.2	21.6
		1	99	27.0	25.9	26.3	20.8	22.1	22.3	26.1	26.3	26.3	20.6	21.3	21.5
		50	0	22.0	24.7	25.4	15.8	21.1	21.5	21.6	25.2	25.4	16.2	20.3	20.7
		50	24	25.9	24.8	25.4	19.7	21.1	21.4	25.4	25.2	25.3	19.9	20.3	20.6
		50	49	22.9	24.8	25.3	16.7	21.1	21.4	22.3	25.2	25.3	16.7	20.3	20.6
		100	0	22.0	24.8	25.4	15.8	21.1	21.4	21.4	25.2	25.4	15.9	20.3	20.6
	16QAM	1	0	21.6	25.1	25.8	15.5	21.4	21.9	21.0	25.4	25.8	15.7	20.5	21.1
		1	49	26.2	25.0	25.6	20.1	21.4	21.9	25.7	25.4	25.7	20.3	20.5	20.9
		1	99	26.3	25.1	25.5	20.2	21.4	21.7	25.4	25.6	25.6	19.9	20.6	20.8
		50	0	21.1	23.8	24.5	14.9	20.2	20.6	20.7	24.3	24.5	15.3	19.3	19.8
		50	24	25.0	23.8	24.4	18.8	20.2	20.5	24.5	24.3	24.4	19.0	19.3	19.7
		50	49	22.1	23.9	24.4	15.8	20.1	20.5	21.4	24.3	24.4	15.8	19.3	19.7
		100	0	21.1	23.9	24.4	14.8	20.2	20.6	20.5	24.3	24.5	15.0	19.3	19.7
	64QAM	1	0	19.9	24.8	25.3	13.9	19.3	19.8	20.8	24.4	24.7	14.2	18.6	19.1
		1	49	24.5	24.9	25.3	18.5	19.3	19.7	25.4	24.5	24.4	18.6	18.7	18.8
		1	99	24.5	25.0	25.1	18.6	19.3	19.6	25.1	24.6	24.4	18.2	18.8	18.7
		50	0	19.4	23.6	24.2	13.4	18.0	18.4	20.4	23.3	23.5	13.8	17.5	17.8
		50	24	23.3	23.6	24.1	17.3	18.0	18.4	24.2	23.3	23.4	17.4	17.5	17.7
		50	49	20.3	23.7	24.1	14.3	18.0	18.3	21.1	23.4	23.4	14.2	17.6	17.7
		100	0	19.4	23.6	24.2	13.3	18.0	18.4	20.2	23.3	23.4	13.4	17.6	17.8

7.1.12. LTE BAND 66

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OUTPUT POWER FOR LTE BAND 66 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				131979	132322	132665	131979	132322	132665	131979	132322	132665	131979	132322	132665
1.4	QPSK	1	0	25.4	25.5	25.5	20.0	20.0	20.0	25.0	24.9	25.0	22.3	22.5	22.4
		1	3	25.5	25.5	25.4	20.0	20.0	20.1	24.9	24.9	25.0	22.3	22.4	22.4
		1	5	25.5	25.5	25.4	20.1	20.0	20.1	24.9	24.9	25.0	22.3	22.5	22.5
		3	0	25.5	25.5	25.4	20.0	20.0	20.1	24.9	24.9	25.0	22.3	22.5	22.4
		3	1	25.5	25.5	25.4	20.0	20.0	20.1	24.9	24.9	25.0	22.3	22.5	22.4
		3	3	25.5	25.5	25.4	20.0	20.0	20.1	24.9	24.9	25.0	22.3	22.5	22.4
	16QAM	6	0	24.5	24.4	24.4	19.0	19.0	19.1	23.9	23.9	23.9	21.3	21.5	21.5
		1	0	24.7	24.9	24.7	19.4	19.3	19.4	24.2	24.1	24.3	21.7	21.7	21.8
		1	3	24.7	24.8	24.7	19.4	19.2	19.4	24.2	24.1	24.2	21.7	21.7	21.8
		1	5	24.7	24.8	24.7	19.4	19.2	19.4	24.2	24.1	24.2	21.7	21.7	21.8
		3	0	24.6	24.6	24.6	19.2	19.2	19.3	24.0	23.9	24.1	21.4	21.6	21.7
		3	1	24.6	24.6	24.6	19.2	19.1	19.3	24.0	24.0	24.0	21.4	21.6	21.7
	64QAM	3	3	24.6	24.6	24.6	19.2	19.1	19.3	24.0	24.0	24.0	21.4	21.6	21.6
		6	0	23.5	23.6	23.6	18.1	18.1	18.2	23.0	22.9	23.0	20.4	20.6	20.6
		1	0	24.0	24.1	24.1	18.5	18.6	18.7	23.0	22.9	23.0	20.5	20.7	20.8
		1	3	24.0	24.1	24.0	18.6	18.6	18.6	23.1	22.9	23.0	20.5	20.7	20.8
		1	5	24.1	24.1	24.0	18.5	18.6	18.7	23.3	23.0	23.0	20.5	20.7	20.9
		3	0	23.9	24.1	23.9	18.4	18.5	18.5	23.0	22.8	22.9	20.4	20.5	20.7
	64QAM	3	1	23.9	24.1	24.0	18.4	18.5	18.6	22.9	22.8	22.9	20.4	20.5	20.7
		3	3	23.9	24.1	24.0	18.4	18.5	18.5	23.0	22.8	22.9	20.4	20.5	20.7
		6	0	22.9	22.9	22.9	17.3	17.4	17.5	21.9	21.8	21.8	19.4	19.5	19.6

OUTPUT POWER FOR LTE BAND 66 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				131987	132322	132657	131987	132322	132657	131987	132322	132657	131987	132322	132657
3.0	QPSK	1	0	25.4	25.4	25.4	20.0	20.0	20.1	24.8	24.9	24.9	22.3	22.5	22.4
		1	8	25.4	25.5	25.4	20.0	20.0	20.1	24.9	24.9	25.0	22.3	22.5	22.5
		1	14	25.5	25.4	25.3	20.0	20.0	20.1	24.8	24.8	25.0	22.3	22.4	22.4
		8	0	24.5	24.4	24.5	19.0	19.0	19.1	24.0	23.9	23.9	21.3	21.5	21.5
		8	4	24.4	24.4	24.5	19.0	19.0	19.1	24.0	23.9	23.9	21.3	21.5	21.5
		8	7	24.5	24.4	24.5	19.0	19.0	19.1	23.9	23.9	23.9	21.3	21.5	21.5
	16QAM	15	0	24.5	24.4	24.5	19.0	19.0	19.1	24.0	23.9	23.9	21.3	21.5	21.5
		1	0	24.7	24.8	24.8	19.3	19.3	19.4	24.2	24.2	24.2	21.6	21.8	21.8
		1	8	24.8	24.8	24.9	19.4	19.4	19.4	24.3	24.2	24.2	21.6	21.9	21.8
		1	14	24.8	24.7	24.7	19.3	19.3	19.3	24.2	24.1	24.2	21.6	21.8	21.8
		8	0	23.5	23.5	23.6	18.1	18.1	18.2	23.1	23.0	23.0	20.4	20.5	20.6
		8	4	23.5	23.5	23.6	18.0	18.0	18.2	23.1	22.9	22.9	20.4	20.5	20.6
	64QAM	8	7	23.5	23.5	23.6	18.0	18.0	18.2	23.0	22.9	22.9	20.3	20.5	20.6
		15	0	23.5	23.5	23.5	18.0	18.0	18.1	23.0	22.9	22.9	20.3	20.5	20.5
		1	0	24.0	24.0	24.0	18.4	18.4	18.6	22.9	22.9	22.9	20.6	20.6	20.8
		1	8	24.0	24.1	24.0	18.5	18.5	18.7	23.0	22.9	23.0	20.5	20.7	20.7
		1	14	24.0	24.1	23.9	18.4	18.4	18.6	23.3	22.9	22.9	20.6	20.5	20.8
		8	0	22.8	22.8	22.9	17.3	17.3	17.5	21.8	21.7	21.9	19.4	19.5	19.6
	64QAM	8	4	22.8	22.9	22.9	17.3	17.3	17.5	21.8	21.8	21.9	19.4	19.5	19.6
		8	7	22.8	22.8	22.9	17.3	17.3	17.5	21.8	21.8	21.8	19.4	19.5	19.6
		15	0	22.8	22.8	22.8	17.3	17.3	17.4	21.8	21.7	21.8	19.3	19.4	19.5

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				131997	132322	132647	131997	132322	132647	131997	132322	132647	131997	132322	132647
				1712.5	1745.0	1777.5	1712.5	1745.0	1777.5	1712.5	1745.0	1777.5	1712.5	1745.0	1777.5
5.0	QPSK	1	0	25.3	25.4	25.4	20.0	20.0	20.1	24.8	25.0	25.0	22.1	22.4	22.2
		1	12	25.4	25.4	25.4	20.0	20.0	20.0	24.8	24.9	25.0	22.1	22.3	22.2
		1	24	25.4	25.5	25.3	20.0	20.1	20.0	24.9	25.0	25.0	22.1	22.4	22.2
		12	0	24.4	24.4	24.4	19.0	19.1	19.1	24.0	24.0	23.9	21.2	21.4	21.2
		12	6	24.4	24.4	24.4	19.0	19.0	19.0	23.9	24.0	24.0	21.2	21.4	21.1
		12	11	24.4	24.4	24.4	19.0	19.0	19.0	24.0	24.0	23.9	21.2	21.4	21.1
		25	0	24.5	24.4	24.4	19.1	19.1	19.1	24.0	24.0	23.9	21.2	21.4	21.2
	16QAM	1	0	24.4	24.4	23.1	19.0	19.1	19.0	24.4	24.3	24.3	21.5	21.9	21.6
		1	12	24.4	24.3	23.1	19.0	19.1	19.0	24.3	24.3	24.2	21.5	21.8	21.5
		1	24	24.4	24.3	23.1	19.0	19.1	19.0	24.4	24.3	24.2	21.5	21.9	21.5
		12	0	23.2	23.2	21.8	17.7	17.8	17.9	23.1	23.2	23.1	20.3	20.5	20.4
		12	6	23.1	23.2	21.9	17.8	17.8	17.8	23.1	23.2	23.1	20.3	20.5	20.4
		12	11	23.2	23.2	21.9	17.8	17.8	17.8	23.1	23.2	23.1	20.3	20.5	20.3
		25	0	23.2	23.2	21.8	17.7	17.8	17.8	23.1	23.1	23.1	20.3	20.5	20.3
	64QAM	1	0	23.8	23.7	21.3	19.2	19.4	19.3	24.0	24.2	24.1	21.4	21.7	21.4
		1	12	24.0	24.1	24.0	19.3	19.3	19.4	24.1	24.2	24.0	21.4	21.7	21.4
		1	24	24.1	24.1	24.0	19.3	19.4	19.3	24.1	24.2	24.1	21.5	21.7	21.5
		12	0	24.1	24.1	24.0	18.1	18.2	18.2	23.0	23.0	22.9	20.2	20.4	20.3
		12	6	22.8	22.9	23.0	18.1	18.1	18.2	23.0	22.9	22.9	20.2	20.4	20.3
		12	11	22.9	22.9	22.9	18.2	18.2	18.2	23.0	23.0	23.0	20.3	20.5	20.2
		25	0	22.8	22.9	22.8	18.1	18.1	18.2	22.9	22.9	22.9	20.2	20.4	20.2

OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				132022	132322	132622	132022	132322	132622	132022	132322	132622	132022	132322	132622
				1715.0	1745.0	1775.0	1715.0	1745.0	1775.0	1715.0	1745.0	1775.0	1715.0	1745.0	1775.0
10.0	QPSK	1	0	25.2	25.3	25.1	20.1	20.1	20.2	24.6	24.7	24.7	22.2	22.4	22.2
		1	24	25.3	25.3	25.2	20.2	20.1	20.2	24.6	24.7	24.7	22.2	22.4	22.2
		1	49	25.3	25.3	25.1	20.2	20.1	20.1	24.7	24.7	24.7	22.3	22.3	22.2
		25	0	24.2	24.1	24.2	19.1	19.1	19.2	23.6	23.6	23.6	21.2	21.4	21.2
		25	12	24.2	24.1	24.2	19.1	19.1	19.2	23.5	23.6	23.6	21.2	21.3	21.2
		25	24	24.2	24.2	24.2	19.1	19.1	19.1	23.6	23.6	23.6	21.2	21.3	21.2
		50	0	24.2	24.2	24.2	19.1	19.1	19.1	23.6	23.6	23.6	21.2	21.3	21.2
	16QAM	1	0	24.5	24.6	24.6	19.0	19.0	19.0	23.7	23.9	23.8	21.6	21.9	21.6
		1	24	24.5	24.6	24.6	19.0	19.1	19.0	23.7	23.8	23.8	21.7	21.8	21.6
		1	49	24.6	24.6	24.5	19.1	19.0	19.0	23.9	23.8	23.8	21.6	21.8	21.6
		25	0	23.3	23.3	23.3	17.8	17.7	17.8	22.5	22.5	22.6	20.3	20.5	20.3
		25	12	23.3	23.3	23.3	17.7	17.7	17.8	22.5	22.5	22.5	20.3	20.4	20.3
		25	24	23.3	23.3	23.3	17.7	17.7	17.8	22.5	22.5	22.5	20.3	20.4	20.3
		50	0	23.3	23.2	23.3	17.7	17.7	17.7	22.5	22.5	22.5	20.2	20.4	20.2
	64QAM	1	0	23.8	24.0	23.8	19.3	19.3	19.3	23.8	23.8	23.6	21.4	21.6	21.3
		1	24	24.0	24.0	23.8	19.3	19.4	19.4	23.8	23.8	23.7	21.5	21.6	21.4
		1	49	24.1	24.1	23.9	19.4	19.4	19.3	23.9	23.8	23.9	21.5	21.6	21.4
		25	0	22.7	22.8	22.7	18.1	18.1	18.2	22.7	22.6	22.6	20.2	20.4	20.2
		25	12	22.8	22.8	22.8	18.1	18.1	18.2	22.6	22.6	22.6	20.2	20.4	20.2
		25	24	22.8	22.8	22.8	18.2	18.2	18.2	22.7	22.6	22.7	20.2	20.5	20.2
		50	0	22.7	22.7	22.7	18.1	18.1	18.2	22.6	22.6	22.6	20.2	20.4	20.2

OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				132047	132322	132597	132047	132322	132597	132047	132322	132597	132047	132322	132597
				1717.5	1745.0	1772.5	1717.5	1745.0	1772.5	1717.5	1745.0	1772.5	1717.5	1745.0	1772.5
15.0	QPSK	1	0	25.4	25.5	25.2	19.8	19.8	19.7	24.5	24.7	24.7	22.2	22.4	22.2
		1	37	25.4	25.5	25.4	19.9	19.9	19.9	24.6	24.7	24.7	22.3	22.4	22.2
		1	74	25.4	25.4	25.3	19.9	19.8	19.8	24.7	24.7	24.6	22.3	22.3	22.2
		36	0	24.4	24.3	24.3	18.8	18.8	18.8	23.6	23.6	23.6	21.2	21.3	21.1
		36	16	24.4	24.4	24.4	18.8	18.8	18.8	23.6	23.6	23.6	21.2	21.3	21.2
		36	35	24.4	24.3	24.4	18.8	18.8	18.8	23.6	23.6	23.6	21.2	21.3	21.1
		75	0	24.4	24.3	24.4	18.8	18.8	18.9	23.6	23.6	23.6	21.2	21.4	21.2
	16QAM	1	0	24.2	24.4	24.3	19.0	19.0	18.9	24.0	24.3	23.9	21.6	21.9	21.5
		1	37	24.2	24.4	24.4	19.1	19.0	19.0	24.0	24.0	23.8	21.7	21.9	21.5
		1	74	24.2	24.4	24.3	19.1	19.0	18.9	24.0	24.0	23.8	21.7	21.7	21.5
		36	0	23.1	23.0	23.0	17.7	17.7	17.7	22.7	22.7	22.7	20.3	20.4	20.1
		36	16	23.1	23.0	23.1	17.7	17.7	17.7	22.6	22.7	22.7	20.3	20.4	20.2
		36	35	23.1	23.0	23.1	17.6	17.6	17.7	22.7	22.7	22.6	20.2	20.4	20.2
		75	0	23.0	23.0	23.1	17.6	17.6	17.7	22.6	22.7	22.7	20.2	20.4	20.2
	64QAM	1	0	23.7	23.8	23.6	19.2	19.3	19.3	24.1	24.1	24.0	21.3	21.6	21.3
		1	37	23.8	23.8	23.7	19.4	19.4	19.4	24.2	24.1	24.2	21.5	21.7	21.5
		1	74	23.9	23.8	23.7	19.5	19.3	19.4	24.1	24.1	24.3	21.5	21.6	21.5
		36	0	22.5	22.5	22.3	18.1	18.0	18.0	22.9	22.8	22.8	20.1	20.3	20.1
		36	16	22.5	22.5	22.5	18.1	18.1	18.1	22.9	22.9	22.9	20.2	20.4	20.2
		36	35	22.6	22.5	22.5	18.1	18.1	18.1	22.9	22.9	22.9	20.2	20.4	20.2
		75	0	22.5	22.5	22.5	18.1	18.0	18.1	22.9	22.8	22.8	20.1	20.3	20.1

OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			Ant 3			Ant 4		
				Conducted Average			Conducted Average			Conducted Average			Conducted Average		
				132072	132322	132572	132072	132322	132572	132072	132322	132572	132072	132322	132572
				1720.0	1745.0	1770.0	1720.0	1745.0	1770.0	1720.0	1745.0	1770.0	1720.0	1745.0	1770.0
20.0	QPSK	1	0	25.3	25.3	25.1	20.0	20.0	20.1	24.9	25.0	25.0	22.2	22.4	22.3
		1	49	25.4	25.3	25.2	20.1	20.1	20.0	24.8	25.0	25.0	22.2	22.4	22.1
		1	99	25.3	25.3	25.2	20.1	20.1	20.0	25.0	25.0	24.9	22.3	22.3	22.2
		50	0	24.3	24.3	24.2	19.1	19.0	18.9	23.9	23.9	24.0	21.2	21.4	21.1
		50	24	24.3	24.3	24.2	19.0	19.0	19.0	23.8	23.9	23.9	21.2	21.4	21.1
		50	49	24.2	24.2	24.3	19.0	19.0	19.0	23.8	23.9	23.9	21.2	21.3	21.1
		100	0	24.4	24.3	24.3	19.0	19.0	19.0	23.9	23.9	23.9	21.2	21.4	21.2
	16QAM	1	0	24.3	24.3	24.4	20.0	20.1	20.0	23.9	23.8	23.8	21.5	22.0	21.6
		1	49	24.4	24.3	24.4	20.0	20.1	20.0	23.8	23.8	23.7	21.6	21.9	21.5
		1	99	24.3	24.3	24.4	20.0	20.1	20.0	23.9	23.8	23.7	21.6	21.8	21.6
		50	0	23.1	23.0	22.9	18.7	18.6	18.6	22.4	22.5	22.5	20.3	20.4	20.2
		50	24	23.1	23.0	23.0	18.7	18.7	18.6	22.4	22.5	22.4	20.2	20.4	20.1
		50	49	23.0	22.9	23.0	18.7	18.6	18.6	22.4	22.4	22.4	20.2	20.3	20.2
		100	0	23.1	23.0	23.0	18.6	18.7	18.7	22.4	22.5	22.5	20.2	20.4	20.2
	64QAM	1	0	23.5	23.9	23.6	18.7	18.8	18.4	23.7	23.7	23.4	21.4	21.7	21.2
		1	49	23.7	23.9	23.7	18.8	18.8	18.4	23.7	23.7	23.3	21.5	21.8	21.1
		1	99	23.8	23.9	23.8	18.8	18.8	18.5	23.8	23.7	23.6	21.7	21.7	21.3
		50	0	22.5	22.5	22.3	17.4	17.3	17.3	22.4	22.3	22.2	20.2	20.3	20.0
		50	24	22.6	22.5	22.4	17.4	17.3	17.3	22.4	22.4	22.2	20.2	20.3	20.1
		50	49	22.5	22.5	22.5	17.4	17.3	17.4	22.4	22.4	22.3	20.2	20.3	20.1
		100	0	22.6	22.5	22.4	17.4	17.3	17.3	22.4	22.4	22.3	20.2	20.3	20.1

8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only.

TEST PROCEDURE

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the middle channel in each band. The 99% and -26dB bandwidths was also measured and recorded.

MODES TESTED

- LTE Band 2
- LTE Band 5
- LTE Band 7
- LTE Band 12
- LTE Band 13
- LTE Band 14
- LTE Band 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 66

RESULTS

There is no limit required and power is the same for low, middle and high channel; therefore, only middle channel was tested.

LTE BAND 2

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 2	1.4 MHz, QPSK	6/0	1880.0	1.0851	1.247
	1.4 MHz,16QAM			1.0874	1.241
	1.4 MHz,64QAM			1.0908	1.246
	3 MHz, QPSK	15/0		2.6817	2.996
	3 MHz, 16QAM			2.6926	2.977
	3 MHz, 64QAM			2.7053	2.994
	5 MHz, QPSK	25/0		4.4985	4.896
	5 MHz, 16QAM			4.4955	4.884
	5 MHz, 64QAM			4.5025	4.945
	10 MHz, QPSK	50/0		8.9964	10.345
	10 MHz, 16QAM			8.9827	10.220
	10 MHz, 64QAM			9.0129	10.45
	15 MHz, QPSK	75/0		13.4636	15.199
	15 MHz, 16QAM			13.4760	15.225
	15 MHz, 64QAM			13.499	15.15
	20 MHz, QPSK	100/0		17.9111	19.670
	20 MHz, 16QAM			17.9312	19.873
	20 MHz, 64QAM			17.966	19.69

LTE BAND 5

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 5	1.4 MHz, QPSK	6/0	836.5	1.0830	1.237
	1.4 MHz, 16QAM			1.0855	1.235
	1.4 MHz, 64QAM			1.0924	1.244
	3 MHz, QPSK	15/0		2.6933	2.976
	3 MHz, 16QAM			2.6886	2.979
	3 MHz, 64QAM			2.7031	2.991
	5 MHz, QPSK	25/0		4.4842	4.935
	5 MHz, 16QAM			4.4793	4.918
	5 MHz, 64QAM			4.5074	4.923
	10 MHz, QPSK	50/0		9.0037	10.293
	10 MHz, 16QAM			9.0233	10.440
	10 MHz, 64QAM			9.0356	10.450

LTE BAND 7

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 7	5 MHz, QPSK	25/0	2535.0	4.4868	4.937
	5 MHz, 16QAM			4.4926	4.931
	5 MHz, 64QAM			4.5040	4.922
	10 MHz, QPSK	50/0		8.9831	10.418
	10 MHz, 16QAM			9.0024	10.427
	10 MHz, 64QAM			9.0229	10.42
	15 MHz, QPSK	75/0		13.4564	15.436
	15 MHz, 16QAM			13.4621	15.645
	15 MHz, 64QAM			13.485	15.11
	20 MHz, QPSK	100/0		17.9096	19.920
	20 MHz, 16QAM			17.9461	19.751
	20 MHz, 64QAM			17.957	19.79

LTE BAND 12

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 12	1.4 MHz, QPSK	6/0	707.5	1.0877	1.239
	1.4 MHz, 16QAM			1.0892	1.233
	1.4 MHz, 64QAM			1.0925	1.242
	3 MHz, QPSK	15/0		2.7020	2.983
	3 MHz, 16QAM			2.6961	2.980
	3 MHz, 64QAM			2.7053	2.989
	5 MHz, QPSK	25/0		4.4858	4.4928
	5 MHz, 16QAM			4.4935	4.935
	5 MHz, 64QAM			4.5022	4.914
	10 MHz, QPSK	50/0		8.9913	10.370
	10 MHz, 16QAM			8.9881	10.380
	10 MHz, 64QAM			9.0096	10.36