



CERTIFICATION TEST REPORT

Report Number. : 12607353-E7V3

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

Model : A2215

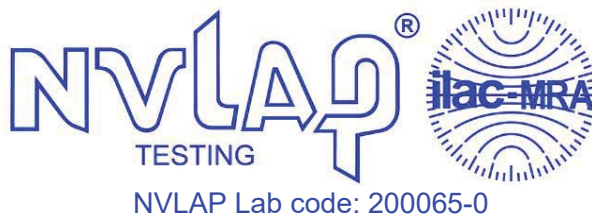
FCC ID : BCG-E3307A

EUT Description : SMARTPHONE

Test Standard(s) : FCC CFR47 PART 22H, 24E, 27, 90S, AND
96

Date Of Issue:
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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	8/8/2019	Initial Review	Mengistu Mekuria
V2	8/16/2019	Addressed TCB feedback	John Thompson
V3	8/19/2019	Addressed TCB feedback	Lieu Nguyen

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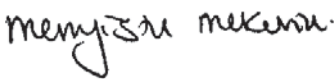
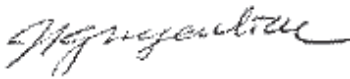
1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE INC. 1 APPLE PARK WAY CUPERTINO, CA. 95014, U.S.A.
Model	A2215
FCC ID	BCG-E3307A
EUT Description	SMARTPHONE
Serial Number	C39YV06LN2RW, C39YT01DN2RK
Date Tested	MARCH 29, 2019 to AUGUST 14, 2019
Applicable Standards	PART 22H, 24E, 27, 90S, AND 96
Test Results	COMPLIES

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

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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, FCC CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S, and 96, FCC KDB 971168 D01 v03r01/ D02 v02r01, KDB 412172 D01 v01r01.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, and 47658 Kato Road, 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	47658 Kato Rd.
☒ Chamber A (ISED:2324B-1)	☐ Chamber D (ISED:22541-1)	☐ Chamber I (ISED: 2324A-5)
☒ Chamber B (ISED:2324B-2)	☐ Chamber E (ISED:22541-2)	☐ Chamber J (ISED: 2324A-6)
☐ Chamber C (ISED:2324B-3)	☐ Chamber F (ISED:22541-3)	☐ Chamber K (ISED: 2324A-1)
	☐ Chamber G (ISED:22541-4)	☐ Chamber L (ISED: 2324A-3)
	☐ Chamber H (ISED:22541-5)	

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers above are covered under Industry Canada company address and respective code.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

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

RADIATED EMISSIONS

Where relevant, the following sample calculation is provided:

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

MAINS CONDUCTED EMISSIONS

Where relevant, the following sample calculation is provided:

Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

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	2.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.88 dB
Radiated Disturbance, 1000 to 18000 MHz	4.24 dB
Radiated Disturbance, 18000 to 26000 MHz	4.37 dB
Radiated Disturbance, 26000 to 40000 MHz	5.17 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

EUT 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/ax, Bluetooth, Ultra-Wide band, GPS and NFC. All models support at least one UICC based SIM. The second SIM, if present, is either UICC based pSIM (physical SIM) or e-SIM (electronic SIM). The device has a built-in inductive charging receiver. The rechargeable battery is also not user accessible.

5.2. MAXIMUM OUTPUT POWER

ERP/EIRP LIMIT

FCC: §2.1046, §22.913, §24.232, §27.50, §90.635, §90.541, and §96.41

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.6

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

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

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

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

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

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

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)			-2.50					
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	24.8	22.30	0.170	1093.2	1M09G7W
	16QAM			23.9	21.40	0.138	1089.8	1M09D7W
	64QAM			23.3	20.80	0.120	1094.1	1M09D7W
3.0	QPSK	1851.5	1908.5	24.7	22.20	0.166	2704.6	2M70G7W
	16QAM			24.0	21.50	0.141	2703.6	2M70D7W
	64QAM			23.1	20.60	0.115	2700	2M70D7W
5.0	QPSK	1852.5	1907.5	24.9	22.40	0.174	4499.5	4M50G7W
	16QAM			24.1	21.60	0.145	4503.4	4M50D7W
	64QAM			23.4	20.90	0.123	4502	4M50D7W
10.0	QPSK	1855.0	1905.0	24.9	22.40	0.174	9032.6	9M03G7W
	16QAM			24.2	21.70	0.148	9023.9	9M02D7W
	64QAM			23.3	20.80	0.120	9010.6	9M01D7W
15.0	QPSK	1857.5	1902.5	25.0	22.50	0.178	13502	13M5G7W
	16QAM			24.3	21.80	0.151	13500	13M5D7W
	64QAM			23.3	20.80	0.120	13477	13M5D7W
20.0	QPSK	1860.0	1900.0	24.9	22.40	0.174	17971	18M0G7W
	16QAM			24.2	21.70	0.148	17952	18M0D7W
	64QAM			23.5	21.00	0.126	17968	18M0D7W

LTE BAND 5

Part 22H								
ERP Limit (W)			7.00					
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
1.4	QPSK	824.7	848.3	25.7	18.52	0.071	1094.2	1M09G7W
	16QAM			24.7	17.57	0.057	1092.8	1M09D7W
	64QAM			24.6	17.48	0.056	1093.2	1M09D7W
3.0	QPSK	825.5	847.5	25.7	18.55	0.072	2703.4	2M70G7W
	16QAM			24.8	17.66	0.058	2707.7	2M71D7W
	64QAM			24.4	17.21	0.053	2701.2	2M70D7W
5.0	QPSK	826.5	846.5	25.5	18.36	0.069	4498.4	4M50G7W
	16QAM			24.9	17.79	0.060	4500.6	4M50D7W
	64QAM			24.4	17.28	0.053	4500.7	4M50D7W
10.0	QPSK	829.0	844.0	25.6	18.44	0.070	9005	9M01G7W
	16QAM			25.0	17.86	0.061	9008.7	9M01D7W
	64QAM			24.4	17.24	0.053	8993.2	8M99D7W

LTE BAND 7

Part 27 / RSS 199								
EIRP Limit (W)			2.00					
Antenna Gain (dBi)			-2.70					
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	25.6	22.95	0.197	4504.5	4M50G7W
	16QAM			25.0	22.32	0.170	4500.6	4M50D7W
	64QAM			24.1	21.42	0.139	4499.6	4M50D7W
10.0	QPSK	2505.0	2565.0	25.7	23.00	0.200	9013.5	9M01G7W
	16QAM			25.1	22.42	0.174	9012	9M01D7W
	64QAM			24.3	21.56	0.143	9010.1	9M01D7W
15.0	QPSK	2507.5	2562.5	25.7	22.99	0.199	13481	13M5G7W
	16QAM			25.0	22.33	0.171	13488	13M5D7W
	64QAM			24.2	21.51	0.142	13477	13M5D7W
20.0	QPSK	2510.0	2560.0	25.6	22.89	0.194	17971	18M0G7W
	16QAM			25.2	22.48	0.177	17972	18M0D7W
	64QAM			24.2	21.47	0.140	17935	17M9D7W

LTE BAND 12

Part 27 / RSS 130								
ERP Limit (W)			3.00					
Antenna Gain (dBi)			-6.20					
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	25.7	17.35	0.054	1091.7	1M09G7W
	16QAM			25.2	16.81	0.048	1092.5	1M09D7W
	64QAM			24.0	15.63	0.037	1089.8	1M09D7W
3.0	QPSK	700.5	714.5	25.6	17.27	0.053	2697.8	2M70G7W
	16QAM			24.8	16.49	0.045	2705.5	2M71D7W
	64QAM			23.9	15.56	0.036	2705.2	2M71D7W
5.0	QPSK	701.5	713.5	25.5	17.14	0.052	4497.9	4M50G7W
	16QAM			24.9	16.58	0.046	4493.2	4M49D7W
	64QAM			24.0	15.60	0.036	4489.9	4M49D7W
10.0	QPSK	704.0	711.0	25.5	17.18	0.052	9028.1	9M03G7W
	16QAM			24.7	16.39	0.044	8999.7	9M00D7W
	64QAM			23.9	15.56	0.036	9009.9	9M01D7W

LTE BAND 13

Part 27 / RSS 130								
ERP Limit (W)		3.00						
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
5.0	QPSK	779.5	784.5	25.7	18.05	0.064	4494.2	4M49G7W
	16QAM			25.0	17.30	0.054	4497.1	4M50D7W
	64QAM			23.9	16.23	0.042	4497.4	4M50D7W
10.0	QPSK	782.0	782.0	25.6	17.91	0.062	8989.4	8M99G7W
	16QAM			24.7	17.10	0.051	8995.8	9M00D7W
	64QAM			23.8	16.11	0.041	8974.2	8M97D7W

LTE BAND 17

Part 27 / RSS 130								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-6.20						
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	706.5	713.5	25.6	17.23	0.053	4497.5	4M50G7W
	16QAM			25.0	16.62	0.046	4496.4	4M50D7W
	64QAM			24.2	15.83	0.038	4499.6	4M50D7W
10.0	QPSK	709.0	711.0	25.7	17.35	0.054	9001	9M00G7W
	16QAM			25.0	16.64	0.046	9031.2	9M03D7W
	64QAM			24.1	15.79	0.038	9015	9M02D7W

LTE BAND 25

Part 24 / RSS 133								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-2.50						
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	25.0	22.50	0.178	1092	1M09G7W
	16QAM			24.2	21.70	0.148	1090.7	1M09D7W
	64QAM			23.4	20.90	0.123	1090.5	1M09D7W
3.0	QPSK	1851.5	1913.5	24.9	22.40	0.174	2710	2M71G7W
	16QAM			24.1	21.60	0.145	2703.4	2M70D7W
	64QAM			23.3	20.80	0.120	2704.1	2M70D7W
5.0	QPSK	1852.5	1912.5	24.9	22.40	0.174	4498.4	4M50G7W
	16QAM			24.2	21.70	0.148	4489.2	4M49D7W
	64QAM			23.4	20.90	0.123	4487.3	4M49D7W
10.0	QPSK	1855.0	1910.0	24.9	22.40	0.174	9026.7	9M03G7W
	16QAM			24.3	21.80	0.151	9033.1	9M03D7W
	64QAM			23.5	21.00	0.126	9022.1	9M02D7W
15.0	QPSK	1857.5	1907.5	25.0	22.50	0.178	13479	13M5G7W
	16QAM			24.3	21.80	0.151	13490	13M5D7W
	64QAM			23.5	21.00	0.126	13488	13M5D7W
20.0	QPSK	1860.0	1905.0	25.0	22.50	0.178	17976	18M0G7W
	16QAM			24.4	21.90	0.155	17976	18M0D7W
	64QAM			23.6	21.10	0.129	17945	17M9D7W

LTE BAND 26 (Part 90S)

Part 90S								
ERP Limit (W)		100.00						
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
1.4	QPSK	814.7	823.3	25.7	18.54	0.071	1091.2	1M09G7W
	16QAM			25.0	17.81	0.060	1094.5	1M09D7W
	64QAM			24.2	17.04	0.051	1096.5	1M10D7W
3.0	QPSK	815.5	822.5	25.6	18.47	0.070	2702.3	2M70G7W
	16QAM			24.9	17.73	0.059	2707.5	2M71D7W
	64QAM			24.0	16.80	0.048	2704.3	2M70D7W
5.0	QPSK	816.5	821.5	25.7	18.55	0.072	4501.5	4M50G7W
	16QAM			25.0	17.89	0.061	4496.2	4M50D7W
	64QAM			24.1	16.93	0.049	4488.2	4M49D7W
10.0	QPSK	819.0	819.0	25.7	18.54	0.072	8994.5	8M99G7W
	16QAM			25.0	17.81	0.060	9021.8	9M02D7W
	64QAM			23.9	16.77	0.048	9012.8	9M01D7W

LTE BAND 30

Part 27 / RSS 195								
EIRP Limit (W)			0.25					
Antenna Gain (dBi)			-2.20					
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	25.7	23.50	0.224	4505.1	4M51G7W
	16QAM			25.1	22.90	0.195	4499.1	4M50D7W
	64QAM			24.3	22.08	0.161	4485.9	4M49D7W
10.0	QPSK	2310.0	2310.0	25.7	23.48	0.223	9009.6	9M01G7W
	16QAM			25.0	22.83	0.192	8991.3	8M99D7W
	64QAM			24.3	22.14	0.164	8997	9M00D7W

LTE BAND 41

Part 27								
EIRP Limit (W)			2.00					
Antenna Gain (dBi)			-2.70					
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	28.5	25.78	0.378	4492.3	4M49G7W
	16QAM			27.8	25.10	0.323	4488.3	4M49D7W
	64QAM			26.5	23.85	0.242	4478.2	4M48D7W
10.0	QPSK	2501.0	2685.0	28.6	25.88	0.387	9005.3	9M01G7W
	16QAM			27.9	25.24	0.334	9019.9	9M02D7W
	64QAM			26.5	23.82	0.241	9009.6	9M01D7W
15.0	QPSK	2503.5	2682.5	28.7	25.98	0.396	13457	13M5G7W
	16QAM			27.8	25.13	0.326	13476	13M5D7W
	64QAM			26.6	23.90	0.245	13435	13M4D7W
20.0	QPSK	2506.0	2680.0	28.7	26.00	0.398	17930	17M9G7W
	16QAM			28.0	25.31	0.340	17976	18M0D7W
	64QAM			26.7	23.96	0.249	17896	17M9D7W

LTE BAND 48

Part 96								
EIRP Limit (W)		0.20						
Antenna Gain (dBi)		-4.60						
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	3552.5	3597.5	25.5	20.90	0.123	4483.3	4M48G7W
	16QAM			24.9	20.30	0.107	4481.7	4M48D7W
	64QAM			23.7	19.10	0.081	4473.7	4M47D7W
10.0	QPSK	3555.0	3595.0	25.7	21.10	0.129	9004.4	9M00G7W
	16QAM			25.0	20.40	0.110	8967.6	8M97D7W
	64QAM			23.8	19.20	0.083	8947.3	8M95D7W
15.0	QPSK	3557.5	3592.5	25.5	20.90	0.123	13436	13M4G7W
	16QAM			24.9	20.30	0.107	13463	13M5D7W
	64QAM			24.0	19.40	0.087	13401	13M4D7W
20.0	QPSK	3560.0	3590.0	25.7	21.10	0.129	17898	17M9G7W
	16QAM			25.2	20.60	0.115	17980	18M0D7W
	64QAM			24.1	19.50	0.089	17922	17M9D7W

LTE BAND 66

Part 27 / RSS 139								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-2.30						
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	24.8	22.50	0.178	1089.1	1M09G7W
	16QAM			24.1	21.80	0.151	1095.3	1M10D7W
	64QAM			23.0	20.70	0.117	1090.4	1M09D7W
3.0	QPSK	1711.5	1778.5	24.8	22.50	0.178	2713.2	2M71G7W
	16QAM			24.1	21.80	0.151	2697.1	2M70D7W
	64QAM			23.0	20.70	0.117	2702.3	2M70D7W
5.0	QPSK	1712.5	1777.5	24.8	22.50	0.178	4499.4	4M50G7W
	16QAM			24.2	21.90	0.155	4497.7	4M50D7W
	64QAM			23.2	20.90	0.123	4493.5	4M49D7W
10.0	QPSK	1715.0	1775.0	24.9	22.60	0.182	9007.6	9M01G7W
	16QAM			24.2	21.90	0.155	8995.1	9M00D7W
	64QAM			23.2	20.90	0.123	9014.1	9M01D7W
15.0	QPSK	1717.5	1772.5	24.9	22.60	0.182	13490	13M5G7W
	16QAM			24.3	22.00	0.158	13488	13M5D7W
	64QAM			23.3	21.00	0.126	13470	13M5D7W
20.0	QPSK	1720.0	1770.0	25.0	22.70	0.186	17938	17M9G7W
	16QAM			24.5	22.20	0.166	17995	18M0D7W
	64QAM			23.6	21.30	0.135	17968	18M0D7W

5.3. SOFTWARE AND FIRMWARE

The EUT Firmware installed during testing was version: 19-01.1919.01_27-0.22.00-27.

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

LTE Bands	Ant 1 Gain (dBi)	Ant 2 Gain (dBi)	Ant 3 Gain (dBi)	Ant 4 Gain (dBi)	Ant 6 Gain (dBi)
LTE Band 2, 1850 – 1910 MHz	-3.5	-2.3	-2.5	-5.9	N/A
LTE Band 4, 1710 – 1755 MHz	-3.6	-3.0	-2.6	-6.8	N/A
LTE Band 5, 824 – 849 MHz	-5.0	-5.1	N/A	N/A	N/A
LTE Band 7, 2500 – 2570 MHz	-2.7	-4.6	-8.4	-2.0	N/A
LTE Band 12, 699 – 716 MHz	-6.2	-5.9	N/A	N/A	N/A
LTE Band 13, 777 – 787 MHz	-5.5	-5.0	N/A	N/A	N/A
LTE Band 17, 704 – 716 MHz	-6.2	-5.9	N/A	N/A	N/A
LTE Band 25, 1850 – 1915 MHz	-3.5	-2.3	-2.5	-5.9	N/A
LTE Band 26, 814 – 824 MHz (Part 90S)	-5.0	-5.1	N/A	N/A	N/A
LTE Band 30, 2305 – 2315 MHz	-2.2	-5.9	-2.8	-2.0	N/A
LTE Band 41, 2496 – 2690 MHz	-2.7	-3.9	-7.5	-1.9	N/A
LTE Band 48, 3550 – 3700 MHz	-4.6	N/A	-7.0	-7.5	-8.3
LTE Band 66, 1710 – 1780 MHz	-3.6	-2.8	-2.3	-6.4	N/A

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 17, Band 25, Band 26, Band 30, Band 41, Band 48, and Band 66.

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

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.

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. Tests were performed on the conducted test at ANT 1 antenna as worst case since it has higher output powers.

The EUT was investigated in three orthogonal orientations X/Y/Z on antennas 1, 2, 3, 4, and 6. For ANT 1 antenna, it was determined that X (Flatbed) orientation was worst-case orientation for AWS bands; Y (Landscape) orientation was worst-case orientation for cell bands and PCS bands; Z (Portrait) orientation was worst-case orientation for bands 7, 30, 38, 41 and 48 without AC/DC adapter.

For ANT 2 antenna, it was determined that Y (Landscape) orientation was worst-case orientation for cell bands; X (Flatbed) orientation was worst-case orientation for AWS bands, PCS bands and bands 7, 30, 38, and 41 without AC/DC adapter

For ANT 3 antenna, it was determined that Z (Portrait) orientation was worst-case orientation for band 48; X (Flatbed) orientation was worst-case for AWS bands, PCS bands and bands 7, 30, 38, and 41 without AC/DC adapter.

For ANT 4 antenna, it was determined that Z (Portrait) orientation was worst-case orientation for bands 7, 30, 41, and 48; Y (Landscape) orientation was worst-case for AWS bands, PCS bands without AC/DC adapter

For ANT 6 antenna, it was determined that X (Flatbed) orientation was worst-case orientation for band 48 without AC/DC adapter.

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

For simultaneous transmission of multiple channels in the 2.4GHz/5GH WLAN, UWB, and Cellular bands, tests were conducted for various configurations having the highest power, least separation in frequencies and widest operation bandwidths. No noticeable new emission was found.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List			
Description	Manufacturer	Model	Serial Number
Laptop AC/DC adapter	Apple	85W MagSafe 2	C0651730MMMG6P4AL
Laptop	Apple	Macbook Pro	C02PM012G3QD
Laptop	Apple	Macbook Pro	C02P52HGG085

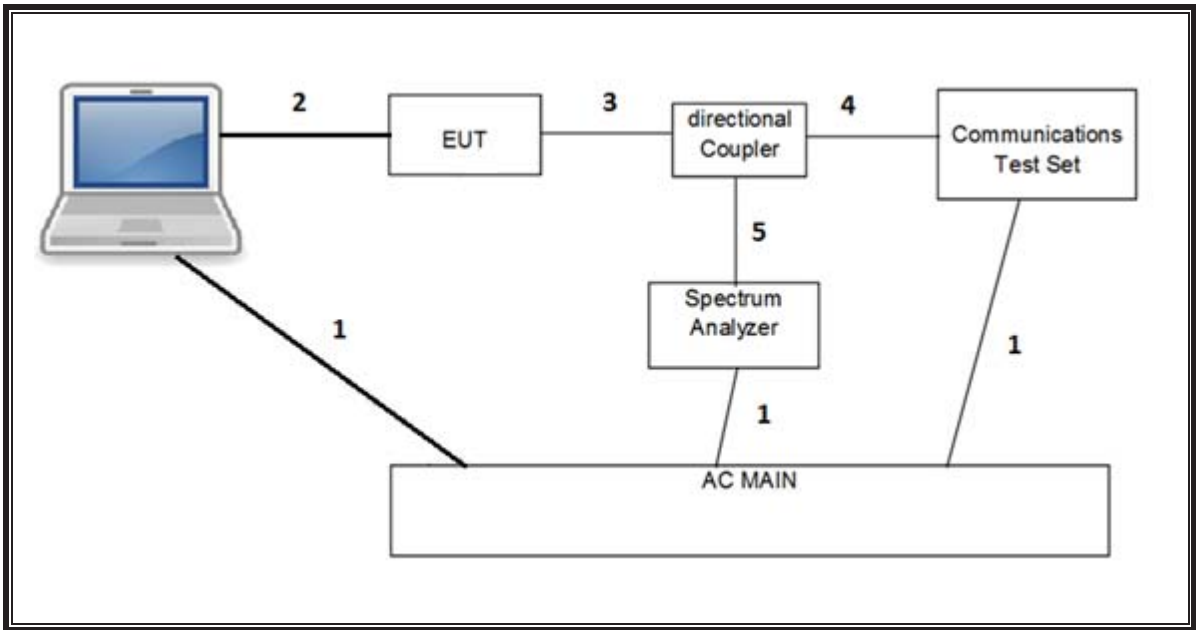
I/O CABLES (RF Conducted Test)

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

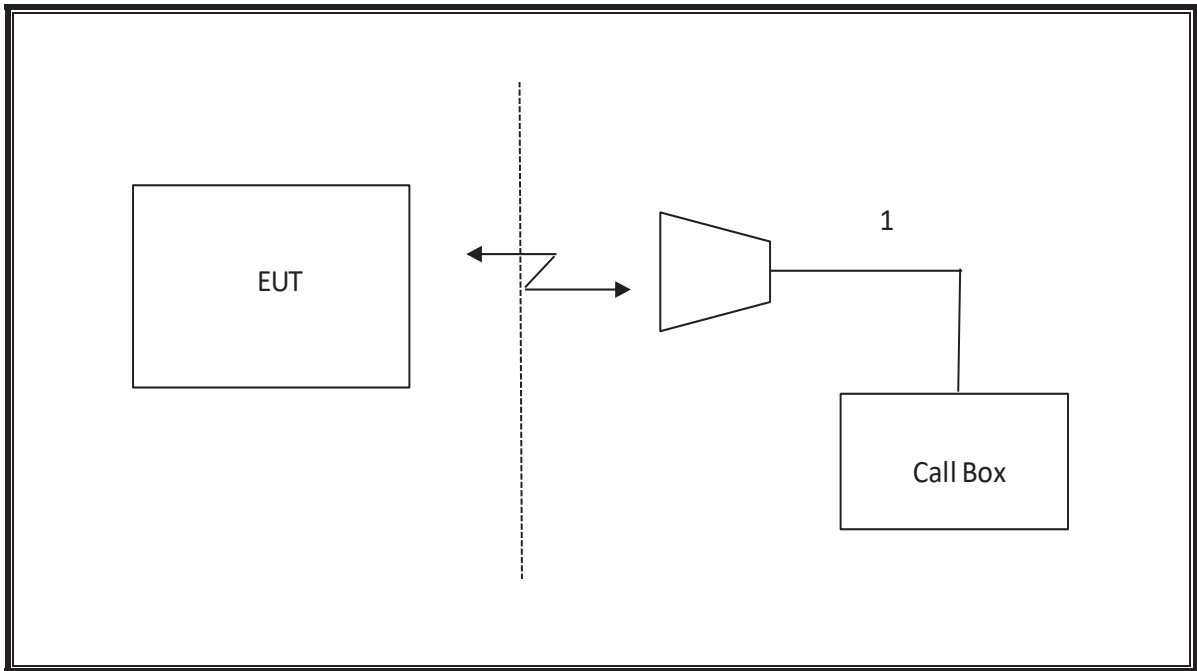
I/O CABLES (RF Radiated Test)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	RF In/Out	1	Antenna	Un-shielded	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	T344	05/07/2020
Antenna, Horn 18-26GHz	ARA	MWH-1826/B	T447	6/16/2019
Antenna, Horn 26-40GHz	ARA	MWH-2640/B	T446	8/9/2019
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	PRE0181574	08/01/2019
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T15	08/15/2019
Amplifier, 18-26GHz	Agilent	8449B	T404	3/23/2020
Amplifier, 26-40GHz	Miteq	TTA2640	T1804	3/23/2020
Spectrum Analyzer, PXA 3Hz to 44GHz	Agilent	N9030A	T905	1/24/2020
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T340	01/22/2020
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T1454	01/23/2020
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T908	01/23/2020
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T339	01/29/2020
Amplifier, 1 to 18GHz	MITEQ	AFS42-00101800-25-S-42	T931	05/11/2020
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	PRE0180176	11/01/2019
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	E4446A	T177	04/12/2019
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	E4446A	T123	01/28/2020
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	E4440A	T198	01/30/2020
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	E4440A	T99	1/28/2020
Directional Coupler	KRYTAR	152610	T1536	04/27/2019
Directional Coupler	KRYTAR	152610	T1537	04/27/2019
Wireless Communications Test Set, 8960 Series 10	Agilent	E5515C	T211	05/10/2020
Filter, HPF 3.0GHz	Micro-Tronics	HPM17543	T487	12/04/2019
Filter, HPF 1.2GHz	Micro-Tronics	WHKX1.2/15G-6ST	T1182	05/19/2019
Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T459	07/25/2019
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T959	02/16/2020
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T1871	02/18/2020
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T921	02/18/2020
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T376	02/21/2020
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T958	02/20/2020
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	08/15/2019
Power Meter, P-series single channel	Keysight	N1911A	T1268	01/31/2020
Power Sensor	Keysight	N1921A	T1228	07/10/2019
Antenna, Horn 1-18GHz	ETS Lindgren	T3117	T346	05/14/2020
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	PRE0077974	05/13/2020
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T1616	10/18/2019
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	Ver 9.5, April 26, 2016	
Power Measurement Software	UL	UL RF	Ver 2.2, June 2017	

NOTES:

- For equipment listed above that had a calibration due during the testing period, its use was paused to allow for calibration.

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 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 48
- 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. LTE BAND 2

ID:	10646	Date:	7/5/19
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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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18607	18900	19193	18607	18900	19193	18607	18900	19193	18607	18900	19193
1.4	QPSK	1	0	1850.7	1880.0	1909.3	1850.7	1880.0	1909.3	1850.7	1880.0	1909.3	1850.7	1880.0	1909.3
		1	2	25.5	25.6	25.4	20.2	20.2	20.4	24.6	24.8	24.5	19.6	19.8	19.8
		1	5	25.5	25.6	25.5	20.2	20.3	20.4	24.6	24.8	24.5	19.5	19.8	19.8
		3	0	25.4	25.5	25.3	20.1	20.1	20.2	24.5	24.6	24.4	19.4	19.6	19.7
		3	1	25.5	25.5	25.3	20.1	20.1	20.2	24.5	24.6	24.4	19.4	19.6	19.7
		3	2	25.5	25.4	25.3	20.1	20.2	20.2	24.5	24.6	24.4	19.4	19.6	19.7
	16QAM	6	0	24.5	24.5	24.2	19.1	19.0	19.1	23.5	23.6	23.4	18.4	18.5	18.6
		1	0	24.8	24.9	24.8	19.4	19.4	19.6	23.8	23.9	23.8	18.7	19.0	19.1
		1	2	24.8	24.8	24.7	19.4	19.4	19.4	23.8	23.9	23.7	18.7	19.0	19.1
		1	5	24.8	24.8	24.7	19.4	19.4	19.5	23.9	23.9	23.7	18.8	19.0	19.1
		3	0	24.6	24.6	24.5	19.2	19.1	19.2	23.7	23.6	23.5	18.5	18.7	18.8
		3	1	24.6	24.6	24.4	19.2	19.1	19.3	23.6	23.7	23.4	18.5	18.7	18.9
	64QAM	3	2	24.6	24.5	24.4	19.2	19.1	19.2	23.6	23.6	23.4	18.5	18.7	18.8
		6	0	23.5	23.3	23.3	18.1	18.1	18.1	22.5	22.5	22.3	17.4	17.6	17.8
		1	0	24.4	24.3	24.0	18.7	18.5	18.7	23.0	23.3	23.0	17.7	18.1	18.2
		1	2	24.4	24.2	24.0	18.8	18.5	18.6	23.0	23.3	22.9	17.7	18.1	18.1
		1	5	24.3	24.1	23.9	18.8	18.5	18.7	23.0	23.3	22.9	17.6	18.0	18.1
		3	0	24.1	23.9	23.8	18.4	18.2	18.4	22.8	23.0	22.6	17.4	17.8	17.8
	64QAM	3	1	24.1	23.9	23.8	18.5	18.2	18.5	22.8	23.0	22.6	17.4	17.8	17.8
		3	2	24.2	23.8	23.8	18.5	18.3	18.5	22.9	23.0	22.6	17.4	17.7	17.8
		6	0	23.0	22.8	22.7	17.3	17.3	17.4	21.7	21.9	21.6	16.4	16.6	16.7

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18615	18900	19185	18615	18900	19185	18615	18900	19185	18615	18900	19185
3.0	QPSK	1	0	1851.5	1880.0	1908.5	1851.5	1880.0	1908.5	1851.5	1880.0	1908.5	1851.5	1880.0	1908.5
		1	7	25.6	25.5	25.5	20.1	20.1	20.3	24.6	24.7	24.6	19.5	19.7	19.8
		1	14	25.6	25.5	25.4	20.2	20.2	20.3	24.6	24.7	24.4	19.5	19.7	19.7
		8	0	24.5	24.5	24.4	19.1	19.0	19.2	23.5	23.6	23.4	18.4	18.6	18.7
		8	4	24.5	24.4	24.3	19.1	19.0	19.2	23.5	23.6	23.4	18.4	18.6	18.7
		8	7	24.6	24.4	24.3	19.1	19.0	19.1	23.5	23.6	23.4	18.4	18.6	18.8
	16QAM	15	0	24.5	24.4	24.4	19.1	19.1	19.2	23.5	23.6	23.4	18.4	18.6	18.8
		1	0	24.9	24.7	24.8	19.5	19.4	19.5	23.9	23.9	23.8	18.8	19.0	19.1
		1	7	24.9	24.8	24.7	19.5	19.5	19.6	24.0	24.0	23.8	18.9	19.0	19.2
		1	14	24.9	24.7	24.6	19.5	19.5	19.5	23.8	23.9	23.7	18.8	19.0	19.0
		8	0	23.5	23.4	23.4	18.1	18.0	18.1	22.5	22.6	22.4	17.4	17.6	17.7
		8	4	23.5	23.4	23.3	18.0	18.0	18.1	22.5	22.5	22.3	17.4	17.6	17.7
	64QAM	8	7	23.5	23.3	23.3	18.0	18.1	18.1	22.5	22.6	22.3	17.4	17.6	17.7
		15	0	23.4	23.3	23.3	18.0	18.1	18.1	22.5	22.5	22.3	17.4	17.5	17.7
		1	0	24.0	24.1	24.0	18.5	18.4	18.7	23.0	23.1	22.9	17.5	17.9	17.9
		1	7	24.1	24.1	23.9	18.6	18.5	18.6	23.1	23.1	23.0	17.7	17.9	18.0
		1	14	23.9	24.0	23.9	18.5	18.6	18.6	22.9	23.1	22.8	17.6	17.9	17.9
		8	0	22.8	22.8	22.7	17.2	17.1	17.3	21.7	21.8	21.6	16.4	16.7	16.6
	64QAM	8	4	22.7	22.8	22.6	17.3	17.1	17.2	21.7	21.8	21.5	16.4	16.7	16.7
		8	7	22.8	22.7	22.6	17.3	17.1	17.2	21.7	21.8	21.5	16.4	16.6	16.7
		15	0	22.8	22.7	22.6	17.2	17.1	17.3	21.7	21.8	21.5	16.3	16.5	16.7

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18625	18900	19175	18625	18900	19175	18625	18900	19175	18625	18900	19175
5.0	QPSK	1	0	25.5	25.5	25.6	20.2	20.2	20.4	24.7	24.8	24.9	19.5	19.8	19.9
		1	12	25.5	25.5	25.4	20.2	20.3	20.4	24.7	24.8	24.7	19.5	19.7	19.9
		1	24	25.5	25.5	25.4	20.4	20.3	20.4	24.7	24.8	24.6	19.7	19.7	19.8
		12	0	24.5	24.5	24.5	19.2	19.2	19.4	23.7	23.7	23.7	18.5	18.7	18.7
		12	6	24.5	24.5	24.4	19.2	19.2	19.4	23.7	23.7	23.6	18.5	18.7	18.8
		12	11	24.5	24.4	24.3	19.2	19.2	19.3	23.7	23.7	23.5	18.6	18.7	18.9
	16QAM	25	0	24.5	24.5	24.4	19.2	19.2	19.3	23.6	23.7	23.6	18.5	18.7	18.9
		1	0	24.9	24.9	24.9	19.5	19.5	19.7	24.0	24.0	24.1	18.9	19.2	19.2
		1	12	24.9	24.8	24.7	19.6	19.6	19.7	24.1	24.1	23.9	18.9	19.1	19.2
		1	24	24.9	24.8	24.7	19.7	19.6	19.7	24.0	24.1	23.9	19.0	19.2	19.2
		12	0	23.5	23.5	23.5	18.2	18.1	18.3	22.6	22.7	22.6	17.5	17.8	17.8
		12	6	23.5	23.5	23.4	18.2	18.2	18.3	22.6	22.7	22.6	17.5	17.8	17.8
	64QAM	12	11	23.5	23.4	23.3	18.2	18.3	18.3	22.6	22.7	22.5	17.6	17.7	17.9
		25	0	23.5	23.4	23.4	18.2	18.2	18.3	22.6	22.7	22.6	17.5	17.7	17.8
		1	0	24.0	24.2	24.2	18.7	18.7	18.9	23.1	23.3	23.4	17.8	18.0	18.2
		1	12	24.0	24.1	24.1	18.7	18.8	18.9	23.1	23.3	23.3	17.8	18.0	18.1
		1	24	23.9	24.1	24.1	18.9	18.9	18.8	23.1	23.3	23.2	18.0	18.1	18.1
		12	0	22.8	22.8	22.8	17.4	17.3	17.6	21.8	21.8	21.9	16.5	16.8	16.8
	64QAM	12	6	22.8	22.8	22.8	17.3	17.3	17.6	21.9	21.9	21.8	16.4	16.7	16.8
		12	11	22.8	22.7	22.7	17.4	17.4	17.6	21.9	21.9	21.7	16.5	16.7	16.8
		25	0	22.8	22.7	22.8	17.4	17.4	17.6	21.8	21.9	21.8	16.5	16.7	16.8

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18650	18900	19150	18650	18900	19150	18650	18900	19150	18650	18900	19150
10.0	QPSK	1	0	25.4	25.5	25.7	20.3	20.2	20.5	24.8	24.8	24.9	19.7	19.8	19.9
		1	24	25.3	25.5	25.6	20.4	20.3	20.5	24.8	24.9	24.9	19.7	19.8	19.9
		1	49	25.3	25.3	25.3	20.4	20.3	20.4	24.8	24.8	24.6	19.8	19.9	20.0
		25	0	24.5	24.5	24.7	19.3	19.2	19.4	23.8	23.9	23.9	18.6	18.8	18.9
		25	12	24.5	24.5	24.6	19.3	19.3	19.5	23.8	23.9	23.8	18.7	18.9	18.9
		25	24	24.4	24.5	24.5	19.3	19.4	19.4	23.8	23.9	23.8	18.8	18.8	18.9
	16QAM	50	0	24.4	24.5	24.6	19.4	19.4	19.5	23.8	23.9	23.8	18.7	18.8	18.9
		1	0	24.8	24.8	24.9	19.7	19.6	19.7	24.1	24.1	24.2	19.0	19.1	19.3
		1	24	24.7	24.8	24.8	19.7	19.7	19.8	24.1	24.2	24.2	19.0	19.2	19.2
		1	49	24.6	24.5	24.6	19.7	19.7	19.8	24.2	24.0	23.9	19.1	19.2	19.3
		25	0	23.6	23.5	23.7	18.4	18.3	18.5	22.9	22.9	23.0	17.7	17.9	18.0
		25	12	23.5	23.5	23.6	18.4	18.3	18.5	22.9	23.0	22.9	17.8	17.9	18.0
	64QAM	25	24	23.4	23.4	23.5	18.4	18.4	18.5	22.8	22.9	22.8	17.9	17.9	18.0
		50	0	23.5	23.4	23.6	18.4	18.4	18.5	22.9	22.9	22.9	17.8	17.9	18.0
		1	0	24.0	24.0	24.3	18.8	18.6	18.8	23.2	23.1	23.1	17.9	18.1	18.2
		1	24	23.9	24.1	24.1	18.8	18.7	18.9	23.2	23.2	23.2	18.0	18.0	18.2
		1	49	24.0	24.0	24.0	18.8	18.7	18.9	23.3	23.3	23.1	18.0	18.1	18.2
		25	0	22.9	23.0	23.1	17.6	17.4	17.7	22.0	22.0	22.1	16.7	16.9	17.0
	64QAM	25	12	22.8	23.0	23.0	17.7	17.5	17.8	22.1	22.0	22.1	16.8	17.0	17.0
		25	24	22.9	22.9	22.9	17.7	17.6	17.8	22.0	22.1	22.0	16.9	17.0	17.0
		50	0	22.9	22.9	23.0	17.6	17.6	17.7	22.1	22.1	22.1	16.8	16.8	16.9

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18675	18900	19125	18675	18900	19125	18675	18900	19125	18675	18900	19125
				1857.5	1880.0	1902.5	1857.5	1880.0	1902.5	1857.5	1880.0	1902.5	1857.5	1880.0	1902.5
15.0	QPSK	1	0	25.5	25.5	25.5	20.4	20.3	20.3	24.8	24.8	24.9	19.6	19.8	19.9
		1	37	25.4	25.5	25.7	20.4	20.3	20.5	24.8	24.9	25.0	19.7	19.8	20.0
		1	74	25.3	25.3	25.3	20.3	20.3	20.4	24.6	24.7	24.7	19.9	19.8	19.9
		36	0	24.5	24.5	24.6	19.4	19.2	19.4	23.8	23.9	23.9	18.7	18.9	18.9
		36	16	24.5	24.6	24.7	19.5	19.3	19.4	23.8	23.9	24.0	18.8	18.9	19.0
		36	35	24.4	24.4	24.6	19.4	19.3	19.5	23.8	23.9	23.9	18.9	18.9	18.9
		75	0	24.4	24.4	24.7	19.4	19.3	19.4	23.8	23.9	24.0	18.8	18.8	18.9
	16QAM	1	0	24.8	24.8	24.8	19.7	19.7	19.6	24.1	24.1	24.3	18.9	19.2	19.1
		1	37	24.6	24.7	25.0	19.7	19.7	19.8	24.3	24.2	24.3	19.0	19.1	19.3
		1	74	24.6	24.6	24.5	19.7	19.6	19.8	23.9	24.0	24.0	19.1	19.0	19.3
		36	0	23.5	23.5	23.6	18.5	18.3	18.4	22.9	22.8	22.9	17.7	17.9	18.0
		36	16	23.4	23.5	23.7	18.5	18.4	18.5	22.9	22.9	23.0	17.8	17.9	18.0
		36	35	23.4	23.4	23.6	18.5	18.4	18.5	22.8	22.9	22.9	17.9	17.9	18.0
		75	0	23.4	23.4	23.7	18.5	18.4	18.5	22.8	22.9	23.0	17.8	17.9	18.0
	64QAM	1	0	24.1	23.7	24.3	18.8	18.7	18.7	23.1	23.1	23.3	17.9	18.1	18.1
		1	37	23.9	24.0	24.2	18.9	18.8	18.8	23.2	23.3	23.3	17.9	18.0	18.2
		1	74	24.1	23.8	24.0	18.8	18.6	18.9	23.0	23.0	23.2	18.1	18.0	18.1
		36	0	22.9	22.9	23.1	17.6	17.5	17.6	22.0	22.1	22.1	16.7	16.9	17.0
		36	16	22.9	22.9	23.1	17.7	17.6	17.6	22.1	22.1	22.1	16.9	17.0	17.0
		36	35	22.9	22.9	23.0	17.7	17.6	17.7	22.1	22.1	22.1	16.9	16.9	17.0
		75	0	22.9	22.8	23.0	17.6	17.6	17.7	22.0	22.1	22.1	16.8	16.9	16.9

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				18700	18900	19100	18700	18900	19100	18700	18900	19100	18700	18900	19100
				1860.0	1880.0	1900.0	1860.0	1880.0	1900.0	1860.0	1880.0	1900.0	1860.0	1880.0	1900.0
20.0	QPSK	1	0	25.6	25.4	25.4	20.4	20.3	20.3	24.8	24.7	24.9	19.7	19.7	19.8
		1	49	25.4	25.5	25.6	20.4	20.3	20.4	24.7	24.8	24.9	19.8	19.8	19.9
		1	99	25.4	25.4	25.3	20.3	20.4	20.5	24.7	24.9	24.7	19.8	19.8	20.0
		50	0	24.6	24.6	24.5	19.4	19.3	19.3	23.8	23.8	23.9	18.7	18.8	18.9
		50	24	24.4	24.5	24.6	19.4	19.3	19.4	23.7	23.9	23.9	18.8	18.9	19.0
		50	49	24.4	24.4	24.6	19.4	19.3	19.4	23.8	23.9	23.9	19.0	18.9	18.9
		100	0	24.5	24.5	24.6	19.4	19.4	19.5	23.7	23.9	23.9	18.9	18.8	19.0
	16QAM	1	0	24.9	24.8	24.8	19.8	19.7	19.8	24.2	24.0	24.2	19.0	19.2	19.1
		1	49	24.7	24.8	25.1	19.8	19.7	19.7	24.1	24.2	24.2	19.1	19.3	19.3
		1	99	24.8	24.6	24.7	19.7	19.8	19.9	24.0	24.2	24.1	19.3	19.1	19.3
		50	0	23.5	23.6	23.5	18.5	18.4	18.4	22.9	22.8	22.9	17.8	17.9	17.9
		50	24	23.4	23.5	23.7	18.4	18.5	18.5	22.8	22.8	23.0	17.8	17.9	18.0
		50	49	23.4	23.4	23.6	18.4	18.4	18.5	22.8	22.8	22.9	18.0	17.9	18.0
		100	0	23.4	23.4	23.7	18.4	18.5	18.5	22.8	22.9	22.9	17.9	17.8	18.0
	64QAM	1	0	23.9	24.1	24.3	18.9	18.8	18.6	23.0	23.0	23.5	17.9	17.9	18.2
		1	49	23.9	24.2	24.4	19.0	18.8	18.7	23.2	23.4	23.4	18.1	17.9	18.3
		1	99	24.0	24.2	24.1	18.8	18.9	18.8	23.0	23.4	23.3	18.2	17.9	18.3
		50	0	22.9	22.8	23.0	17.6	17.5	17.5	22.0	22.0	22.1	16.7	16.8	17.0
		50	24	22.9	22.8	23.1	17.7	17.6	17.6	22.0	22.1	22.1	16.8	16.9	17.1
		50	49	22.9	22.9	23.0	17.7	17.6	17.8	21.9	22.1	22.1	16.9	16.9	17.0
		100	0	22.9	22.9	23.1	17.7	17.6	17.7	22.0	22.1	22.1	16.9	16.8	17.0

7.2. LTE BAND 5

ID:	10646	Date:	7/5/19
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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
				824.7 MHz	836.5 MHz	848.3 MHz	824.7 MHz	836.5 MHz	848.3 MHz
1.4	QPSK	1	0	25.6	25.4	25.2	24.2	24.2	24.0
		1	2	25.6	25.4	25.3	24.1	24.2	24.0
		1	5	25.7	25.4	25.3	24.1	24.2	24.0
		3	0	25.5	25.2	25.1	23.9	24.1	23.8
		3	1	25.4	25.2	25.1	23.9	24.1	23.8
		3	2	25.4	25.2	25.1	23.9	24.1	23.8
	16QAM	6	0	24.3	24.2	24.0	22.9	23.0	22.7
		1	0	24.7	24.7	24.5	23.4	23.4	23.3
		1	2	24.6	24.7	24.6	23.2	23.3	23.2
		1	5	24.7	24.7	24.6	23.3	23.4	23.3
		3	0	24.4	24.3	24.2	23.0	23.1	22.9
		3	1	24.3	24.3	24.2	22.9	23.2	22.9
	64QAM	3	2	24.3	24.3	24.3	22.9	23.1	22.9
		6	0	23.2	23.0	23.1	21.8	22.1	21.8
		1	0	24.5	24.2	24.0	22.6	22.8	22.4
		1	2	24.6	24.2	24.1	22.5	22.7	22.3
		1	5	24.6	24.2	24.3	22.3	22.8	22.3
		3	0	24.3	23.9	23.9	22.3	22.5	22.0
	64QAM	3	1	24.2	23.9	23.9	22.2	22.5	22.0
		3	2	24.2	23.9	23.8	22.2	22.5	22.0
		6	0	23.0	22.9	22.8	21.2	21.3	21.0

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
				825.5 MHz	836.5 MHz	847.5 MHz	825.5 MHz	836.5 MHz	847.5 MHz
3.0	QPSK	1	0	25.5	25.3	25.2	24.1	24.3	24.0
		1	7	25.7	25.4	25.2	24.2	24.2	24.0
		1	14	25.6	25.3	25.2	24.1	24.1	24.0
		8	0	24.4	24.2	24.1	22.9	23.0	22.9
		8	4	24.4	24.1	24.0	23.0	23.1	22.9
		8	7	24.4	24.1	24.0	23.0	23.0	22.9
	16QAM	15	0	24.4	24.2	24.1	23.0	23.1	23.0
		1	0	24.8	24.6	24.5	23.3	23.5	23.4
		1	7	24.8	24.6	24.5	23.4	23.4	23.4
		1	14	24.8	24.5	24.5	23.4	23.3	23.3
		8	0	23.3	23.1	23.0	21.8	22.0	21.9
		8	4	23.4	23.1	22.9	21.9	22.0	21.9
	64QAM	8	7	23.4	23.1	22.9	22.0	22.0	21.9
		15	0	23.4	23.1	23.0	22.0	22.0	21.9
		1	0	24.3	24.2	24.2	22.4	22.6	22.5
		1	7	24.4	24.3	24.1	22.4	22.5	22.4
		1	14	24.3	24.2	24.1	22.5	22.4	22.4
		8	0	23.0	22.9	22.7	21.0	21.2	21.0
	64QAM	8	4	23.1	22.9	22.7	21.1	21.2	21.0
		8	7	23.1	22.9	22.7	21.1	21.2	21.0
		15	0	23.1	22.9	22.7	21.1	21.2	21.0

OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20425	20525	20625	20425	20525	20625
				826.5 MHz	836.5 MHz	846.5 MHz	826.5 MHz	836.5 MHz	846.5 MHz
5.0	QPSK	1	0	25.5	25.5	25.5	24.3	24.4	24.2
		1	12	25.5	25.4	25.4	24.3	24.3	24.1
		1	24	25.5	25.4	25.4	24.5	24.3	24.1
		12	0	24.5	24.3	24.3	23.2	23.3	23.1
		12	6	24.5	24.3	24.3	23.2	23.2	23.0
		12	11	24.5	24.3	24.3	23.2	23.2	23.0
	16QAM	25	0	24.5	24.4	24.2	23.3	23.2	23.0
		1	0	24.8	24.9	24.8	23.7	23.6	23.6
		1	12	24.9	24.8	24.7	23.7	23.6	23.5
		1	24	24.9	24.9	24.7	24.0	23.5	23.4
		12	0	23.4	23.4	23.2	22.2	22.2	22.1
		12	6	23.4	23.4	23.1	22.2	22.2	22.1
		12	11	23.4	23.4	23.1	22.2	22.2	22.0
	64QAM	25	0	23.4	23.3	23.1	22.2	22.1	22.0
		1	0	24.4	24.4	24.2	22.5	22.7	22.7
		1	12	24.4	24.3	24.3	22.6	22.6	22.6
		1	24	24.4	24.4	24.3	22.9	22.6	22.6
		12	0	23.2	22.9	22.9	21.3	21.4	21.2
		12	6	23.2	22.9	22.8	21.3	21.3	21.1
		12	11	23.2	23.0	22.8	21.4	21.2	21.1
		25	0	23.2	23.0	22.8	21.3	21.3	21.1

OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20450	20525	20600	20450	20525	20600
				829.0 MHz	836.5 MHz	844.0 MHz	829.0 MHz	836.5 MHz	844.0 MHz
10.0	QPSK	1	0	25.6	25.6	25.5	24.2	24.5	24.2
		1	24	25.5	25.4	25.4	24.4	24.3	24.2
		1	49	25.5	25.5	25.4	24.3	24.2	24.1
		25	0	24.6	24.5	24.5	23.2	23.3	23.2
		25	12	24.5	24.5	24.4	23.3	23.3	23.1
		25	24	24.5	24.5	24.4	23.3	23.2	23.1
	16QAM	50	0	24.5	24.5	24.4	23.3	23.3	23.2
		1	0	24.7	25.0	24.9	23.3	23.7	23.5
		1	24	24.7	24.8	24.7	23.7	23.6	23.5
		1	49	24.7	24.8	24.7	23.6	23.4	23.3
		25	0	23.6	23.6	23.5	22.2	22.4	22.1
		25	12	23.6	23.5	23.4	22.4	22.3	22.1
	64QAM	25	24	23.6	23.5	23.4	22.4	22.2	22.0
		50	0	23.6	23.5	23.4	22.4	22.4	22.1
		1	0	24.3	24.4	24.3	22.5	22.9	22.4
		1	24	24.3	24.2	24.1	22.9	22.5	22.5
		1	49	24.4	24.3	24.1	22.8	22.4	22.3
		25	0	23.3	23.2	23.1	21.5	21.5	21.3
		25	12	23.2	23.1	23.0	21.6	21.5	21.3
		25	24	23.2	23.2	23.0	21.7	21.4	21.3
		50	0	23.2	23.1	23.0	21.6	21.5	21.4

7.3. LTE BAND 7

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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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				20775	21100	21425	20775	21100	21425	20775	21100	21425	20775	21100	21425
5.0	QPSK	1	0	2502.5	2535	2567.5	2502.5	2535	2567.5	2502.5	2535	2567.5	2502.5	2535	2567.5
		1	12	25.6	25.6	25.5	20.2	20.2	20.1	24.7	24.8	24.3	18.2	18.2	18.1
		1	24	25.6	25.5	25.5	20.2	20.1	20.2	24.5	24.6	24.3	18.2	18.1	18.1
		12	0	24.5	24.4	24.4	19.2	19.1	19.0	23.6	23.7	23.4	17.2	17.0	16.9
		12	6	24.4	24.4	24.4	19.1	19.1	19.0	23.6	23.7	23.4	17.1	17.0	17.0
		12	11	24.5	24.3	24.4	19.1	19.1	19.1	23.6	23.7	23.3	17.1	17.0	17.0
	16QAM	25	0	24.5	24.3	24.4	19.2	19.1	19.0	23.6	23.7	23.4	17.1	17.0	16.9
		1	0	24.9	25.0	24.8	19.6	19.7	19.5	24.0	24.3	23.7	17.6	17.6	17.4
		1	12	24.9	24.9	24.8	19.5	19.5	19.4	23.9	24.2	23.7	17.4	17.4	17.5
		1	24	25.0	24.9	24.8	19.4	19.4	19.6	23.8	24.1	23.7	17.4	17.5	17.6
		12	0	23.5	23.4	23.4	18.2	18.2	18.0	22.7	22.8	22.4	16.1	16.1	15.9
		12	6	23.5	23.4	23.4	18.2	18.1	18.0	22.7	22.8	22.4	16.1	16.1	16.0
	64QAM	12	11	23.5	23.4	23.4	18.1	18.1	18.1	22.6	22.8	22.3	16.0	16.1	16.0
		25	0	23.4	23.3	23.4	18.1	18.1	18.0	22.6	22.7	22.4	16.1	16.0	16.0
		1	0	23.9	24.1	23.7	18.4	18.5	18.3	22.8	23.0	22.6	16.6	16.6	16.4
		1	12	24.0	24.1	23.8	18.4	18.3	18.1	22.8	23.0	22.5	16.5	16.5	16.5
		1	24	24.1	24.0	23.9	18.3	18.2	18.4	22.8	22.9	22.5	16.5	16.6	16.6
		12	0	22.5	22.5	22.4	17.0	16.9	16.9	21.4	21.5	21.3	15.2	15.1	15.1
	64QAM	12	6	22.5	22.5	22.4	17.0	16.9	16.9	21.4	21.5	21.3	15.2	15.1	15.2
		12	11	22.6	22.5	22.4	16.9	16.9	17.0	21.5	21.5	21.3	15.2	15.1	15.2
		25	0	22.6	22.5	22.5	17.1	16.9	16.9	21.5	21.5	21.2	15.2	15.1	15.1

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400
10.0	QPSK	1	0	2505	2535	2565	2505	2535	2565	2505	2535	2565	2505	2535	2565
		1	24	25.6	25.7	25.4	20.3	20.3	20.2	24.9	24.9	24.6	15.7	15.7	15.6
		1	49	25.7	25.5	25.5	20.2	20.2	20.1	24.7	24.7	24.3	15.6	15.5	15.4
		25	0	24.6	24.5	24.5	19.3	19.3	19.2	23.8	23.9	23.6	14.6	14.6	14.5
		25	12	24.7	24.4	24.5	19.2	19.2	19.1	23.7	23.8	23.5	14.5	14.5	14.4
		25	24	24.7	24.4	24.4	19.2	19.1	19.2	23.6	23.8	23.5	14.5	14.5	14.5
	16QAM	50	0	24.7	24.4	24.5	19.2	19.2	19.2	23.7	23.8	23.5	14.6	14.5	14.5
		1	0	25.0	25.1	24.9	19.7	19.6	19.5	24.2	24.2	24.1	15.1	15.0	15.0
		1	24	25.1	24.9	24.8	19.5	19.4	19.4	24.0	24.1	23.8	14.9	14.7	14.8
		1	49	25.1	24.9	24.9	19.6	19.3	19.6	24.1	23.9	23.7	14.9	14.8	15.0
		25	0	23.7	23.6	23.6	18.3	18.3	18.3	22.8	23.0	22.7	13.7	13.7	13.6
		25	12	23.7	23.4	23.6	18.2	18.3	18.3	22.7	22.9	22.6	13.6	13.6	13.5
	64QAM	25	24	23.8	23.4	23.5	18.3	18.2	18.2	22.7	22.8	22.6	13.6	13.6	13.6
		50	0	23.7	23.5	23.6	18.2	18.3	18.2	22.8	22.9	22.6	13.6	13.6	13.5
		1	0	24.0	24.0	23.9	18.5	18.3	18.3	22.9	23.0	22.8	14.0	14.0	14.1
		1	24	24.2	24.0	23.8	18.3	18.1	18.3	22.8	22.8	22.6	14.0	13.8	13.9
		1	49	24.3	24.1	24.1	18.4	18.2	18.4	22.9	22.9	22.6	14.1	13.9	14.1
		25	0	22.8	22.7	22.6	17.2	17.2	17.2	21.7	21.8	21.5	12.8	12.8	12.7
	64QAM	25	12	22.9	22.6	22.7	17.1	17.1	17.1	21.6	21.8	21.5	12.8	12.7	12.7
		25	24	23.0	22.7	22.7	17.2	17.1	17.1	21.6	21.7	21.5	12.7	12.7	12.8
		50	0	22.9	22.7	22.7	17.1	17.1	17.1	21.6	21.7	21.5	12.8	12.7	12.7

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375
				2507.5	2535	2562.5	2507.5	2535	2562.5	2507.5	2535	2562.5	2507.5	2535	2562.5
15.0	QPSK	1	0	25.6	25.5	25.2	20.3	20.4	20.4	24.8	25.0	24.7	15.7	15.7	15.6
		1	37	25.7	25.4	25.5	20.2	20.1	20.2	24.6	24.8	24.5	15.5	15.5	15.5
		1	74	25.6	25.3	25.5	20.3	20.0	20.2	24.6	24.6	24.3	15.6	15.4	15.6
		36	0	24.6	24.5	24.4	19.2	19.3	19.2	23.7	23.9	23.8	14.5	14.6	14.6
		36	16	24.7	24.4	24.6	19.2	19.2	19.2	23.6	23.8	23.6	14.5	14.5	14.5
		36	35	24.7	24.4	24.6	19.3	19.1	19.1	23.7	23.7	23.5	14.5	14.5	14.5
		75	0	24.6	24.4	24.5	19.2	19.2	19.2	23.6	23.7	23.6	14.5	14.5	14.5
	16QAM	1	0	25.0	25.0	24.9	19.6	19.7	19.7	24.2	24.4	24.0	15.1	15.0	15.0
		1	37	25.0	24.8	24.9	19.5	19.5	19.5	24.0	24.2	23.8	14.9	14.7	14.9
		1	74	25.0	24.7	24.9	19.7	19.5	19.5	24.0	23.9	23.5	15.0	14.8	14.9
		36	0	23.6	23.6	23.5	18.3	18.4	18.3	22.8	23.0	22.8	13.5	13.6	13.6
		36	16	23.7	23.5	23.6	18.3	18.3	18.3	22.7	22.9	22.7	13.6	13.6	13.6
		36	35	23.7	23.5	23.6	18.3	18.2	18.2	22.7	22.8	22.6	13.6	13.6	13.5
		75	0	23.7	23.5	23.6	18.2	18.2	18.3	22.6	22.8	22.6	13.5	13.6	13.5
	64QAM	1	0	24.0	24.1	23.8	18.5	18.5	18.4	22.9	23.0	22.7	14.1	14.1	14.0
		1	37	24.2	23.9	23.9	18.2	18.3	18.4	22.8	22.9	22.7	13.9	13.9	14.0
		1	74	24.2	23.9	24.0	18.4	18.3	18.3	22.9	22.8	22.5	14.1	13.9	14.1
		36	0	22.9	22.8	22.6	17.1	17.1	17.1	21.6	21.7	21.5	12.8	12.8	12.8
		36	16	22.9	22.7	22.7	17.2	17.1	17.2	21.6	21.7	21.5	12.7	12.7	12.8
		36	35	23.0	22.7	22.8	17.2	17.0	17.2	21.6	21.6	21.5	12.8	12.7	12.7
		75	0	22.9	22.7	22.7	17.2	17.1	17.1	21.5	21.6	21.6	12.8	12.7	12.7

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	2535	2560	2510	2535	2560	2510	2535	2560	2510	2535	2560
20.0	QPSK	1	0	25.5	25.5	25.4	20.3	20.5	20.4	24.9	25.0	24.6	15.6	15.8	15.7
		1	49	25.6	25.4	25.4	20.3	20.2	20.2	24.7	24.8	24.7	15.5	15.5	15.5
		1	99	25.6	25.4	25.5	20.5	20.1	20.2	24.7	24.5	24.3	15.7	17.0	15.6
		50	0	24.6	24.5	24.3	19.2	19.3	19.3	23.6	23.9	23.8	14.6	18.2	14.5
		50	24	24.6	24.4	24.4	19.3	19.2	19.2	23.6	23.8	23.7	14.5	18.1	14.5
		50	49	24.5	24.4	24.5	19.3	19.1	19.2	23.6	23.7	23.5	14.5	18.0	14.5
		100	0	24.6	24.5	24.4	19.3	19.2	19.1	23.6	23.8	23.7	14.5	17.9	14.5
	16QAM	1	0	25.1	24.9	24.8	19.7	19.9	20.0	24.2	24.4	24.0	15.0	15.4	15.1
		1	49	25.1	24.8	24.8	19.6	19.5	19.6	24.0	24.2	24.0	14.9	14.9	14.9
		1	99	25.2	24.7	24.8	19.9	19.5	19.7	24.1	23.9	23.6	15.2	15.0	15.0
		50	0	23.6	23.5	23.4	18.2	18.4	18.3	22.7	23.0	22.8	13.6	13.7	13.6
		50	24	23.6	23.5	23.4	18.3	18.3	18.2	22.7	22.9	22.7	13.6	13.6	13.6
		50	49	23.6	23.5	23.5	18.4	18.2	18.2	22.7	22.7	22.6	13.6	13.6	13.5
		100	0	23.6	23.5	23.4	18.3	18.2	18.2	22.6	22.8	22.7	13.6	13.6	13.5
	64QAM	1	0	24.0	24.2	24.0	18.6	18.4	18.6	23.2	23.0	22.9	13.9	14.2	14.1
		1	49	24.0	24.1	24.0	18.5	18.1	18.4	23.1	22.9	23.1	13.9	13.9	14.0
		1	99	24.1	24.1	24.2	18.8	18.2	18.4	23.2	22.8	22.9	14.1	14.0	14.3
		50	0	22.9	22.8	22.5	17.1	17.1	17.1	21.7	21.8	21.6	12.8	12.7	12.7
		50	24	22.9	22.8	22.6	17.1	17.1	17.1	21.7	21.8	21.7	12.8	12.6	12.7
		50	49	22.9	22.7	22.7	17.2	17.0	17.1	21.8	21.7	21.6	12.8	12.6	12.7
		100	0	22.9	22.7	22.6	17.2	17.1	17.0	21.7	21.7	21.6	12.7	12.6	12.7

7.4. LTE BAND 12

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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 (dBm)			Conducted Average (dBm)		
				23017	23095	23173	23017	23095	23173
				699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
1.4	QPSK	1	0	25.6	25.4	25.7	24.4	24.3	24.5
		1	2	25.5	25.4	25.5	24.4	24.3	24.5
		1	5	25.5	25.5	25.6	24.4	24.3	24.5
		3	0	25.4	25.3	25.4	24.3	24.1	24.3
		3	1	25.4	25.3	25.4	24.3	24.1	24.3
		3	2	25.4	25.3	25.4	24.3	24.1	24.3
	16QAM	6	0	24.3	24.2	24.6	23.2	23.1	23.1
		1	0	24.8	24.6	25.2	23.7	23.6	23.7
		1	2	24.7	24.6	25.0	23.6	23.5	23.7
		1	5	24.8	24.6	25.0	23.6	23.5	23.7
		3	0	24.5	24.3	24.6	23.4	23.2	23.4
		3	1	24.5	24.3	24.6	23.4	23.1	23.4
	64QAM	3	2	24.5	24.4	24.6	23.3	23.2	23.4
		6	0	23.4	23.2	23.4	22.2	22.0	22.3
		1	0	23.9	23.7	23.9	23.1	22.7	22.9
		1	2	24.0	23.7	23.8	23.0	22.7	22.9
		1	5	23.9	23.6	23.8	23.0	22.8	22.9
		3	0	23.6	23.4	23.6	22.6	22.4	22.7
	64QAM	3	1	23.6	23.3	23.6	22.6	22.4	22.6
		3	2	23.6	23.4	23.5	22.7	22.4	22.6
		6	0	22.4	22.3	22.4	21.4	21.4	21.5

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23025	23095	23165	23025	23095	23165
				700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
3.0	QPSK	1	0	25.5	25.4	25.5	24.3	24.3	24.5
		1	7	25.4	25.4	25.6	24.4	24.3	24.5
		1	14	25.4	25.3	25.5	24.3	24.3	24.5
		8	0	24.4	24.1	24.3	23.2	23.1	23.2
		8	4	24.3	24.2	24.4	23.2	23.1	23.3
		8	7	24.3	24.2	24.4	23.2	23.2	23.3
	16QAM	15	0	24.3	24.2	24.5	23.3	23.2	23.3
		1	0	24.8	24.7	24.7	23.6	23.6	23.7
		1	7	24.7	24.6	24.8	23.7	23.6	23.7
		1	14	24.7	24.5	24.8	23.4	23.6	23.6
		8	0	23.2	23.1	23.2	22.2	22.1	22.2
		8	4	23.1	23.1	23.3	22.1	22.1	22.3
	64QAM	8	7	23.1	23.2	23.3	22.1	22.1	22.3
		15	0	23.2	23.2	23.3	22.2	22.1	22.3
		1	0	23.8	23.7	23.9	22.8	22.7	22.8
		1	7	23.8	23.6	23.9	22.9	22.6	22.9
		1	14	23.6	23.6	23.7	22.6	22.6	22.9
		8	0	22.4	22.3	22.4	21.4	21.3	21.4
	64QAM	8	4	22.3	22.3	22.5	21.4	21.2	21.5
		8	7	22.3	22.3	22.5	21.4	21.2	21.5
		15	0	22.4	22.3	22.5	21.4	21.3	21.5

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23035	23095	23155	23035	23095	23155
				701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
5.0	QPSK	1	0	25.5	25.4	25.5	24.4	24.4	24.4
		1	12	25.4	25.3	25.5	24.3	24.3	24.4
		1	24	25.3	25.4	25.5	24.5	24.4	24.5
		12	0	24.3	24.2	24.4	23.4	23.2	23.3
		12	6	24.2	24.2	24.4	23.3	23.2	23.3
		12	11	24.2	24.2	24.4	23.4	23.2	23.4
	16QAM	25	0	24.3	24.2	24.4	23.4	23.2	23.3
		1	0	24.8	24.6	24.9	23.9	23.6	23.7
		1	12	24.7	24.6	24.9	23.7	23.5	23.8
		1	24	24.7	24.6	24.9	23.8	23.6	23.8
		12	0	23.2	23.1	23.4	22.4	22.2	22.3
		12	6	23.2	23.2	23.4	22.3	22.2	22.3
		12	11	23.2	23.2	23.4	22.3	22.2	22.4
	64QAM	25	0	23.2	23.2	23.3	22.3	22.2	22.3
		1	0	24.0	23.8	23.9	23.0	22.7	22.8
		1	12	23.9	23.7	23.9	22.8	22.7	22.8
		1	24	23.9	23.8	23.9	22.9	22.8	22.9
		12	0	22.5	22.4	22.4	21.5	21.4	21.4
		12	6	22.4	22.4	22.4	21.4	21.4	21.4
		12	11	22.4	22.4	22.5	21.4	21.4	21.6
		25	0	22.4	22.4	22.5	21.4	21.4	21.5

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23060	23095	23130	23060	23095	23130
				704.0 MHz	707.5 MHz	711.0 MHz	704.0 MHz	707.5 MHz	711.0 MHz
10.0	QPSK	1	0	25.5	25.2	25.3	24.5	24.4	24.3
		1	24	25.4	25.3	25.4	24.5	24.2	24.3
		1	49	25.4	25.4	25.4	24.4	24.3	24.5
		25	0	24.5	24.2	24.2	23.4	23.3	23.3
		25	12	24.4	24.2	24.3	23.3	23.2	23.3
		25	24	24.3	24.2	24.4	23.3	23.2	23.3
	16QAM	50	0	24.4	24.2	24.4	23.4	23.2	23.3
		1	0	24.7	24.6	24.5	23.7	23.6	23.7
		1	24	24.5	24.6	24.6	23.6	23.5	23.7
		1	49	24.5	24.7	24.7	23.6	23.6	23.7
		25	0	23.3	23.2	23.2	22.3	22.3	22.3
		25	12	23.2	23.2	23.3	22.4	22.2	22.3
	64QAM	25	24	23.2	23.3	23.4	22.3	22.3	22.3
		50	0	23.2	23.2	23.4	22.4	22.2	22.3
		1	0	23.8	23.7	23.7	22.8	22.7	22.6
		1	24	23.7	23.6	23.8	22.7	22.6	22.7
		1	49	23.7	23.8	23.9	22.8	22.8	22.9
		25	0	22.5	22.5	22.5	21.6	21.5	21.5
		25	12	22.4	22.5	22.6	21.6	21.5	21.5
		25	24	22.5	22.5	22.6	21.5	21.5	21.6
		50	0	22.5	22.5	22.6	21.6	21.5	21.5

7.5. LTE BAND 13

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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 (dBm)			Conducted Average (dBm)		
				23205	23230	23255	23205	23230	23255
				779.5 MHz	782.0 MHz	784.5 MHz	779.5 MHz	782.0 MHz	784.5 MHz
5.0	QPSK	1	0	25.7	25.6	25.4	24.5	24.5	24.4
		1	12	25.6	25.5	25.4	24.5	24.4	24.3
		1	24	25.5	25.5	25.4	24.4	24.3	24.3
		12	0	24.5	24.4	24.2	23.4	23.3	23.3
		12	6	24.5	24.4	24.3	23.4	23.3	23.2
		12	11	24.4	24.4	24.2	23.4	23.3	23.2
	16QAM	25	0	24.6	24.4	24.3	23.4	23.4	23.2
		1	0	24.9	25.0	24.7	23.7	23.9	23.8
		1	12	24.8	24.9	24.6	23.8	23.8	23.7
		1	24	24.8	24.9	24.7	23.7	23.7	23.7
		12	0	23.4	23.4	23.1	22.3	22.4	22.2
		12	6	23.4	23.3	23.2	22.4	22.3	22.1
	64QAM	12	11	23.4	23.3	23.2	22.3	22.3	22.1
		25	0	23.5	23.3	23.2	22.4	22.2	22.2
		1	0	23.8	23.9	23.8	22.7	22.9	22.9
		1	12	23.7	23.8	23.8	22.8	22.8	22.8
		1	24	23.7	23.8	23.8	22.8	22.7	22.8
		12	0	22.4	22.4	22.3	21.5	21.4	21.5
	64QAM	12	6	22.5	22.3	22.4	21.5	21.4	21.4
		12	11	22.4	22.3	22.4	21.5	21.5	21.4
		25	0	22.5	22.4	22.4	21.5	21.5	21.4

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				N/A	23230	N/A	N/A	23230	N/A
				N/A	782.0 MHz	N/A	N/A	782.0 MHz	N/A
10.0	QPSK	1	0		25.6			24.5	
		1	24		25.4			24.4	
		1	49		25.5			24.4	
		25	0		24.5			23.4	
		25	12		24.4			23.4	
		25	24		24.4			23.3	
	16QAM	50	0		24.3			23.4	
		1	0		24.7			23.7	
		1	24		24.6			23.7	
		1	49		24.6			23.7	
		25	0		23.4			22.4	
		25	12		23.3			22.4	
	64QAM	25	24		23.4			22.3	
		50	0		23.3			22.4	
		1	0		23.8			22.8	
		1	24		23.7			22.8	
		1	49		23.6			22.8	
		25	0		22.5			21.6	
	64QAM	25	12		22.5			21.6	
		25	24		22.5			21.5	
		50	0		22.5			21.6	

7.6. LTE BAND 17

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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 (dBm)			Conducted Average (dBm)		
				23755	23790	23825	23755	23790	23825
				706.5 MHz	710.0 MHz	713.5 MHz	706.5 MHz	710.0 MHz	713.5 MHz
5.0	QPSK	1	0	25.5	25.5	25.6	24.5	24.2	24.3
		1	12	25.4	25.5	25.6	24.3	24.3	24.4
		1	24	25.5	25.6	25.5	24.4	24.4	24.5
		12	0	24.4	24.3	24.5	23.2	23.2	23.3
		12	6	24.3	24.3	24.5	23.2	23.2	23.3
		12	11	24.4	24.4	24.5	23.2	23.2	23.3
	16QAM	25	0	24.4	24.4	24.5	23.2	23.3	23.3
		1	0	24.8	24.8	25.0	23.7	23.6	23.7
		1	12	24.8	24.8	24.9	23.6	23.8	23.8
		1	24	24.7	25.0	24.9	23.7	23.8	23.9
		12	0	23.3	23.3	23.4	22.2	22.1	22.2
		12	6	23.3	23.4	23.4	22.2	22.1	22.2
	64QAM	12	11	23.3	23.4	23.4	22.2	22.2	22.3
		25	0	23.3	23.4	23.4	22.2	22.2	22.3
		1	0	23.9	23.9	24.0	22.8	22.7	22.8
		1	12	23.9	24.1	24.1	22.7	22.9	23.0
		1	24	23.9	24.2	24.1	22.8	22.8	23.0
		12	0	22.5	22.5	22.7	21.3	21.3	21.4
		12	6	22.4	22.6	22.8	21.4	21.4	21.5
		12	11	22.5	22.6	22.8	21.4	21.4	21.5
		25	0	22.5	22.6	22.7	21.3	21.5	21.5

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				23780	23790	23800	23780	23790	23800
				709.0 MHz	710.0 MHz	711.0 MHz	709.0 MHz	710.0 MHz	711.0 MHz
10.0	QPSK	1	0	25.5	25.4	25.5	24.4	24.3	24.3
		1	24	25.5	25.4	25.6	24.3	24.4	24.4
		1	49	25.7	25.7	25.6	24.4	24.5	24.5
		25	0	24.4	24.4	24.4	23.3	23.2	23.3
		25	12	24.4	24.4	24.5	23.3	23.3	23.4
		25	24	24.6	24.6	24.6	23.3	23.4	23.4
	16QAM	50	0	24.5	24.5	24.6	23.3	23.4	23.4
		1	0	24.7	24.8	24.9	23.8	23.6	23.6
		1	24	24.7	24.7	24.8	23.6	23.6	23.7
		1	49	24.9	25.0	24.9	23.8	23.8	23.8
		25	0	23.4	23.4	23.4	22.3	22.3	22.3
		25	12	23.4	23.4	23.5	22.3	22.3	22.4
	64QAM	25	24	23.6	23.5	23.5	22.3	22.4	22.4
		50	0	23.5	23.5	23.6	22.3	22.4	22.4
		1	0	24.0	23.9	23.9	22.8	22.7	22.6
		1	24	23.8	23.9	23.9	22.7	22.8	22.7
		1	49	24.1	24.1	24.1	22.9	22.9	22.9
		25	0	22.7	22.6	22.7	21.5	21.4	21.5
		25	12	22.7	22.6	22.8	21.6	21.5	21.5
		25	24	22.9	22.8	22.8	21.6	21.6	21.6
		50	0	22.8	22.7	22.8	21.6	21.6	21.6

7.7. 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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26047	26365	26683	26047	26365	26683	26047	26365	26683	26047	26365	26683
1.4	QPSK	1	0	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	2	25.5	25.5	25.5	20.1	20.2	20.1	24.9	25.0	24.9	19.5	19.6	19.5
		1	5	25.5	25.5	25.5	20.2	20.1	20.0	24.9	25.0	24.7	19.5	19.6	19.4
		3	0	25.4	25.4	25.3	20.0	20.0	19.9	24.8	24.9	24.7	19.3	19.5	19.3
		3	1	25.4	25.4	25.3	20.0	20.0	19.9	24.8	24.9	24.7	19.4	19.5	19.3
		3	2	25.5	25.4	25.3	20.0	20.0	19.9	24.8	24.9	24.7	19.4	19.5	19.3
	16QAM	6	0	24.4	24.4	24.2	19.0	19.0	18.8	23.8	23.8	23.6	18.3	18.5	18.2
		1	0	24.7	24.8	24.6	19.3	19.5	19.4	24.1	24.2	24.0	18.7	18.9	18.7
		1	2	24.7	24.8	24.6	19.3	19.5	19.3	23.9	24.2	23.9	18.7	18.9	18.7
		1	5	24.8	24.8	24.7	19.3	19.5	19.3	24.1	24.1	23.9	18.6	18.9	18.6
		3	0	24.5	24.5	24.4	19.0	19.1	19.0	23.8	23.9	23.7	18.4	18.6	18.5
		3	1	24.5	24.4	24.4	19.0	19.2	19.0	23.8	23.9	23.6	18.4	18.6	18.4
	64QAM	3	2	24.5	24.5	24.4	19.1	19.1	19.0	23.9	23.9	23.7	18.4	18.6	18.4
		6	0	23.3	23.3	23.3	17.9	17.9	17.9	22.7	22.8	22.6	17.3	17.4	17.3
		1	0	24.5	24.2	24.3	18.7	18.5	18.4	23.4	23.3	23.0	17.7	17.7	17.5
		1	2	24.6	24.2	24.2	18.8	18.5	18.4	23.3	23.2	23.0	17.7	17.6	17.5
		1	5	24.5	24.3	24.2	18.8	18.5	18.4	23.4	23.3	23.1	17.7	17.6	17.5
		3	0	24.2	24.0	24.1	18.4	18.2	18.3	23.1	22.9	22.9	17.3	17.4	17.3
	64QAM	3	1	24.2	24.0	24.1	18.5	18.2	18.2	23.0	22.9	22.9	17.4	17.4	17.3
		3	2	24.3	24.0	24.1	18.4	18.2	18.2	23.1	22.9	22.9	17.4	17.4	17.3
		6	0	23.0	23.0	22.9	17.2	17.2	17.1	21.9	22.0	21.8	16.2	16.3	16.2

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675
3.0	QPSK	1	0	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	7	25.6	25.5	25.5	20.1	20.1	20.1	24.9	24.9	24.7	19.4	19.6	19.5
		1	14	25.5	25.5	25.5	20.1	20.1	19.9	24.8	24.8	24.7	19.4	19.5	19.3
		8	0	24.4	24.4	24.3	19.0	19.0	18.9	23.6	23.7	23.6	18.3	18.5	18.3
		8	4	24.4	24.4	24.3	19.0	19.0	18.8	23.6	23.7	23.5	18.3	18.5	18.3
		8	7	24.4	24.4	24.3	19.0	18.9	18.8	23.7	23.7	23.6	18.3	18.5	18.3
	16QAM	15	0	24.5	24.4	24.4	19.0	19.0	18.9	23.7	23.7	23.6	18.3	18.5	18.3
		1	0	24.7	24.8	24.8	19.3	19.4	19.2	24.1	24.1	23.8	18.7	18.8	18.7
		1	7	24.8	24.8	24.8	19.4	19.4	19.2	24.0	24.1	23.9	18.7	18.9	18.6
		1	14	24.6	24.8	24.8	19.3	19.4	19.2	24.1	24.1	24.0	18.7	18.8	18.6
		8	0	23.4	23.4	23.3	17.9	18.0	17.9	22.6	22.7	22.5	17.3	17.4	17.3
		8	4	23.4	23.4	23.3	17.9	18.0	17.8	22.6	22.7	22.5	17.3	17.5	17.3
	64QAM	8	7	23.4	23.3	23.3	17.9	17.9	17.8	22.7	22.6	22.5	17.3	17.5	17.3
		15	0	23.4	23.3	23.3	17.9	17.9	17.8	22.7	22.6	22.6	17.2	17.5	17.3
		1	0	24.3	24.2	24.2	18.5	18.4	18.3	23.1	23.3	23.1	17.4	17.6	17.5
		1	7	24.3	24.2	24.3	18.7	18.5	18.5	23.2	23.2	23.1	17.5	17.6	17.6
		1	14	24.2	24.2	24.3	18.6	18.4	18.3	23.1	23.2	23.1	17.3	17.6	17.5
		8	0	23.0	22.9	22.9	17.2	17.1	17.0	21.8	21.9	21.7	16.1	16.3	16.2
	64QAM	8	4	22.9	23.0	22.9	17.2	17.1	17.0	21.8	21.9	21.8	16.1	16.3	16.1
		8	7	23.0	22.9	22.9	17.2	17.1	17.0	21.8	21.9	21.8	16.1	16.3	16.1
		15	0	23.0	22.9	22.8	17.2	17.0	17.1	21.8	22.0	21.7	16.0	16.3	16.2

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665
				1852.5	1882.5	1912.5	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5	1852.5	1882.5	1912.5
5.0	QPSK	1	0	25.7	25.6	25.6	20.1	20.2	20.2	24.8	24.9	24.8	19.5	19.6	19.8
		1	12	25.7	25.6	25.5	20.2	20.1	20.1	24.9	24.9	24.7	19.4	19.6	19.5
		1	24	25.6	25.5	25.5	20.2	20.1	20.0	24.9	24.9	24.8	19.6	19.6	19.4
		12	0	24.6	24.5	24.5	19.1	19.1	19.1	23.7	23.9	23.6	18.4	18.6	18.5
		12	6	24.6	24.5	24.4	19.1	19.1	19.0	23.7	23.9	23.7	18.4	18.6	18.5
		12	11	24.5	24.5	24.4	19.2	19.0	19.0	23.8	23.8	23.7	18.5	18.6	18.4
		25	0	24.6	24.5	24.4	19.1	19.0	19.1	23.8	23.8	23.7	18.4	18.6	18.4
	16QAM	1	0	25.1	25.0	24.9	19.4	19.6	19.6	24.1	24.2	24.1	18.9	18.9	19.0
		1	12	25.0	24.9	24.8	19.4	19.5	19.5	24.2	24.2	24.0	18.9	19.0	18.8
		1	24	25.0	24.8	24.8	19.5	19.6	19.4	24.1	24.1	24.0	19.0	19.0	18.7
		12	0	23.6	23.5	23.5	18.0	18.1	18.1	22.8	22.9	22.6	17.5	17.6	17.5
		12	6	23.6	23.5	23.4	18.1	18.1	18.0	22.8	22.8	22.6	17.4	17.6	17.5
		12	11	23.5	23.4	23.4	18.1	18.1	18.0	22.8	22.8	22.6	17.5	17.6	17.5
		25	0	23.5	23.4	23.4	18.0	18.0	18.0	22.7	22.8	22.6	17.4	17.6	17.4
	64QAM	1	0	24.4	24.4	24.5	18.6	18.7	18.6	23.3	23.4	23.4	17.6	17.8	17.9
		1	12	24.4	24.4	24.5	18.7	18.7	18.5	23.3	23.4	23.3	17.5	17.8	17.7
		1	24	24.4	24.3	24.5	18.8	18.7	18.6	23.3	23.2	23.4	17.6	17.8	17.7
		12	0	23.2	23.1	23.1	17.3	17.3	17.4	22.0	22.0	21.9	16.2	16.4	16.4
		12	6	23.2	23.1	23.0	17.3	17.3	17.3	22.0	22.0	21.9	16.2	16.5	16.3
		12	11	23.1	23.1	23.1	17.4	17.3	17.3	22.0	22.0	21.9	16.2	16.5	16.3
		25	0	23.2	23.1	23.0	17.3	17.2	17.3	21.9	22.0	21.9	16.2	16.5	16.3

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640
				1855.0	1882.5	1910.0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0	1855.0	1882.5	1910.0
10.0	QPSK	1	0	25.7	25.6	25.7	20.3	20.3	20.5	24.9	24.9	24.9	19.6	19.9	19.9
		1	24	25.5	25.5	25.6	20.3	20.3	20.4	24.8	24.9	24.7	19.7	19.8	19.8
		1	49	25.5	25.5	25.6	20.4	20.2	20.3	24.9	24.8	24.8	19.7	19.9	19.6
		25	0	24.7	24.6	24.7	19.2	19.3	19.5	23.9	23.9	23.8	18.6	18.8	18.9
		25	12	24.6	24.6	24.6	19.3	19.3	19.4	23.9	23.9	23.7	18.6	18.8	18.8
		25	24	24.6	24.5	24.5	19.3	19.3	19.3	23.9	23.9	23.8	18.7	18.9	18.6
		50	0	24.6	24.6	24.6	19.3	19.3	19.4	23.9	23.9	23.8	18.6	18.8	18.9
	16QAM	1	0	25.0	25.0	25.0	19.6	19.7	19.8	24.1	24.2	24.3	19.0	19.1	19.3
		1	24	24.8	24.8	24.9	19.6	19.7	19.7	24.2	24.2	24.1	19.0	19.1	19.2
		1	49	24.8	24.8	24.9	19.7	19.6	19.5	24.3	24.1	24.2	19.0	19.0	18.9
		25	0	23.7	23.7	23.7	18.3	18.4	18.5	22.9	23.0	22.9	17.6	17.9	18.0
		25	12	23.7	23.7	23.6	18.4	18.4	18.4	22.9	23.0	22.7	17.7	17.9	17.9
		25	24	23.7	23.6	23.5	18.4	18.3	18.3	22.9	23.0	22.8	17.7	17.9	17.7
		50	0	23.6	23.6	23.6	18.4	18.3	18.4	22.9	23.0	22.8	17.6	17.9	17.9
	64QAM	1	0	24.5	24.5	24.5	18.7	18.6	18.9	23.2	23.3	23.3	17.6	17.8	17.9
		1	24	24.4	24.4	24.4	18.8	18.7	18.8	23.3	23.4	23.2	17.7	17.8	17.9
		1	49	24.4	24.3	24.4	18.7	18.6	18.6	23.5	23.3	23.3	17.6	17.7	17.8
		25	0	23.4	23.3	23.4	17.5	17.5	17.7	22.2	22.3	22.2	16.4	16.6	16.8
		25	12	23.3	23.3	23.3	17.6	17.5	17.6	22.2	22.3	22.1	16.4	16.6	16.7
		25	24	23.3	23.2	23.3	17.6	17.5	17.5	22.2	22.3	22.1	16.5	16.7	16.5
		50	0	23.3	23.3	23.3	17.6	17.5	17.6	22.2	22.3	22.1	16.5	16.6	16.7

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615
				1857.5	1882.5	1907.5	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
15.0	QPSK	1	0	25.5	25.4	25.7	20.3	20.2	20.3	24.9	24.8	25.0	19.6	19.8	20.0
		1	37	25.4	25.4	25.5	20.3	20.2	20.4	24.9	24.9	24.9	19.6	19.9	19.9
		1	74	25.5	25.5	25.4	20.2	20.2	20.1	24.7	24.9	24.8	19.7	19.9	19.6
		36	0	24.5	24.5	24.6	19.3	19.2	19.4	23.9	23.9	23.9	18.6	18.9	19.0
		36	16	24.5	24.5	24.5	19.3	19.3	19.3	23.9	24.0	23.8	18.7	18.9	18.9
		36	35	24.5	24.5	24.4	19.3	19.2	19.3	23.8	23.9	23.8	18.8	18.8	18.8
		75	0	24.5	24.4	24.5	19.3	19.2	19.4	23.9	23.9	23.8	18.7	18.9	19.0
	16QAM	1	0	24.9	24.8	25.0	19.6	19.6	19.6	24.1	24.1	24.2	18.9	19.2	19.2
		1	37	24.8	24.7	24.6	19.7	19.6	19.6	24.3	24.3	24.2	19.0	19.2	19.1
		1	74	24.9	24.8	24.6	19.6	19.5	19.4	23.9	24.2	24.0	19.1	19.1	18.9
		36	0	23.6	23.6	23.6	18.4	18.2	18.4	22.9	23.0	23.0	17.7	18.0	18.0
		36	16	23.5	23.5	23.6	18.4	18.3	18.4	22.9	23.0	22.9	17.8	17.9	18.0
		36	35	23.5	23.5	23.4	18.4	18.2	18.3	22.9	22.9	22.8	17.8	17.9	17.9
		75	0	23.5	23.4	23.6	18.3	18.2	18.4	22.9	23.0	22.8	17.8	17.9	18.0
	64QAM	1	0	24.5	24.4	24.9	18.7	18.6	18.9	23.3	23.2	23.5	17.5	17.8	18.0
		1	37	24.5	24.4	24.6	18.8	18.6	19.0	23.4	23.3	23.4	17.6	17.9	17.9
		1	74	24.6	24.5	24.5	18.7	18.6	18.7	23.2	23.4	23.4	17.7	17.9	17.7
		36	0	23.4	23.4	23.4	17.6	17.5	17.7	22.2	22.3	22.3	16.5	16.7	16.8
		36	16	23.3	23.4	23.4	17.6	17.6	17.7	22.2	22.3	22.2	16.6	16.7	16.8
		36	35	23.4	23.3	23.3	17.6	17.4	17.6	22.2	22.2	22.1	16.6	16.6	16.8
		75	0	23.3	23.3	23.4	17.6	17.5	17.7	22.2	22.2	22.2	16.5	16.6	16.8

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590
				1860.0	1882.5	1905.0	1860.0	1882.5	1905.0	1860.0	1882.5	1905.0	1860.0	1882.5	1905.0
20.0	QPSK	1	0	25.5	25.5	25.6	20.3	20.2	20.2	24.9	24.8	24.9	19.6	19.8	19.8
		1	49	25.4	25.4	25.5	20.3	20.4	20.4	24.9	25.0	25.0	19.7	19.7	19.8
		1	99	25.5	25.5	25.4	20.2	20.3	20.3	24.8	24.9	24.9	19.8	19.7	19.6
		50	0	24.5	24.5	24.7	19.4	19.3	19.3	24.0	23.9	24.0	18.6	18.8	18.9
		50	24	24.5	24.4	24.6	19.4	19.3	19.4	23.8	24.0	23.9	18.7	18.8	18.8
		50	49	24.5	24.4	24.5	19.4	19.3	19.3	23.8	23.9	23.7	18.8	18.7	18.9
		100	0	24.5	24.4	24.6	19.4	19.3	19.4	23.9	24.0	23.9	18.8	18.8	18.9
	16QAM	1	0	24.9	24.8	25.1	19.7	19.6	19.5	24.3	24.1	24.2	18.9	19.1	19.2
		1	49	24.8	24.7	24.9	19.7	19.6	19.7	24.4	24.2	24.2	19.0	19.1	19.2
		1	99	24.9	24.8	24.8	19.6	19.6	19.6	24.1	24.4	24.1	19.1	19.1	19.0
		50	0	23.5	23.6	23.7	18.5	18.3	18.4	23.0	23.0	23.0	17.7	17.8	17.9
		50	24	23.5	23.5	23.5	18.4	18.3	18.4	22.9	23.0	22.9	17.8	17.8	17.9
		50	49	23.6	23.5	23.4	18.4	18.3	18.4	22.8	22.9	22.7	17.9	17.7	17.8
		100	0	23.5	23.5	23.5	18.4	18.3	18.4	22.9	22.9	22.9	17.8	17.8	17.9
	64QAM	1	0	24.6	24.6	24.6	18.9	18.8	18.5	23.5	23.5	23.3	17.8	18.0	17.8
		1	49	24.5	24.6	24.5	18.8	18.9	18.8	23.5	23.6	23.4	17.8	17.9	17.8
		1	99	24.7	24.8	24.4	18.8	18.8	18.5	23.4	23.6	23.2	17.9	18.0	17.6
		50	0	23.3	23.4	23.6	17.5	17.5	17.6	22.2	22.2	22.4	16.5	16.7	16.9
		50	24	23.3	23.4	23.4	17.5	17.5	17.6	22.1	22.3	22.3	16.6	16.7	16.8
		50	49	23.4	23.4	23.3	17.5	17.5	17.6	22.1	22.2	22.1	16.7	16.7	16.8
		100	0	23.3	23.4	23.4	17.6	17.5	17.6	22.2	22.3	22.3	16.6	16.6	16.8

7.8. LTE BAND 26 (Part 90S)

ID:		Date:	
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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 (dBm)			Conducted Average (dBm)		
				26697	26740	26783	26697	26740	26783
				814.7 MHz	819.0 MHz	823.3 MHz	814.7 MHz	819.0 MHz	823.3 MHz
1.4	QPSK	1	0	25.6	25.6	25.6	24.3	24.4	24.4
		1	2	25.7	25.5	25.6	24.3	24.3	24.4
		1	5	25.6	25.6	25.7	24.4	24.4	24.5
		3	0	25.5	25.4	25.5	24.2	24.2	24.3
		3	1	25.5	25.4	25.5	24.2	24.2	24.3
		3	2	25.4	25.3	25.5	24.2	24.2	24.3
	16QAM	6	0	24.4	24.3	24.5	23.1	23.2	23.2
		1	0	24.9	24.7	24.9	23.5	23.5	23.6
		1	2	24.9	24.7	24.8	23.5	23.5	23.6
		1	5	24.9	24.6	25.0	23.6	23.6	23.7
		3	0	24.4	24.4	24.6	23.3	23.3	23.4
		3	1	24.5	24.4	24.5	23.3	23.3	23.4
	64QAM	3	2	24.5	24.4	24.5	23.3	23.3	23.4
		6	0	23.4	23.2	23.3	22.1	22.1	22.3
		1	0	23.8	23.9	24.0	22.4	22.5	22.4
		1	2	23.8	23.9	24.1	22.5	22.5	22.4
		1	5	23.8	23.8	24.2	22.5	22.5	22.4
		3	0	23.6	23.6	23.7	22.3	22.3	22.2
	64QAM	3	1	23.6	23.5	23.8	22.3	22.2	22.1
		3	2	23.6	23.5	23.7	22.2	22.2	22.1
		6	0	22.5	22.5	22.6	21.1	21.0	21.1

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26705	26740	26775	26705	26740	26775
				815.5 MHz	819.0 MHz	822.5 MHz	815.5 MHz	819.0 MHz	822.5 MHz
3.0	QPSK	1	0	25.5	25.4	25.5	24.4	24.3	24.4
		1	7	25.5	25.5	25.6	24.5	24.3	24.4
		1	14	25.5	25.4	25.6	24.5	24.3	24.4
		8	0	24.4	24.3	24.4	23.2	23.2	23.3
		8	4	24.3	24.3	24.5	23.3	23.2	23.3
		8	7	24.3	24.3	24.5	23.3	23.2	23.3
	16QAM	15	0	24.3	24.4	24.5	23.3	23.3	23.3
		1	0	24.8	24.6	24.8	23.7	23.6	23.6
		1	7	24.8	24.8	24.9	23.8	23.6	23.7
		1	14	24.8	24.7	24.8	23.8	23.5	23.7
		8	0	23.3	23.2	23.3	22.3	22.2	22.2
		8	4	23.2	23.2	23.4	22.3	22.2	22.2
	64QAM	8	7	23.2	23.2	23.3	22.3	22.2	22.2
		15	0	23.2	23.2	23.4	22.3	22.1	22.2
		1	0	23.8	23.8	23.8	22.4	22.5	22.3
		1	7	23.8	23.8	24.0	22.6	22.4	22.3
		1	14	23.8	23.8	23.9	22.6	22.4	22.3
		8	0	22.5	22.4	22.5	21.1	21.1	21.0
	64QAM	8	4	22.4	22.4	22.5	21.1	21.0	21.0
		8	7	22.4	22.4	22.5	21.1	21.0	21.0
		15	0	22.4	22.5	22.5	21.1	21.1	21.0

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				26715 816.5 MHz	26740 819.0 MHz	26765 821.5 MHz	26715 816.5 MHz	26740 819.0 MHz	26765 821.5 MHz
5.0	QPSK	1	0	25.5	25.6	25.5	24.4	24.5	24.4
		1	12	25.4	25.5	25.6	24.4	24.3	24.3
		1	24	25.5	25.6	25.7	24.3	24.4	24.5
		12	0	24.3	24.4	24.5	23.3	23.3	23.3
		12	6	24.3	24.4	24.5	23.3	23.3	23.3
		12	11	24.4	24.4	24.5	23.3	23.3	23.3
	16QAM	25	0	24.3	24.4	24.5	23.4	23.3	23.3
		1	0	24.9	24.9	24.9	23.8	23.8	23.7
		1	12	24.7	24.8	25.0	23.9	23.6	23.6
		1	24	24.8	24.8	25.0	23.7	23.6	23.8
		12	0	23.3	23.4	23.5	22.3	22.3	22.3
		12	6	23.2	23.4	23.5	22.3	22.2	22.3
	64QAM	12	11	23.3	23.4	23.5	22.3	22.2	22.3
		25	0	23.3	23.3	23.4	22.3	22.2	22.3
		1	0	24.0	23.8	23.8	22.6	22.6	22.4
		1	12	23.9	23.9	23.9	22.6	22.3	22.4
		1	24	24.1	24.0	24.0	22.4	22.4	22.5
		12	0	22.5	22.5	22.6	21.2	21.1	21.1
		12	6	22.5	22.5	22.6	21.2	21.2	21.1
		12	11	22.5	22.5	22.7	21.2	21.0	21.1
		25	0	22.5	22.5	22.6	21.2	21.1	21.1

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				N/A	26740 819.0 MHz	N/A	N/A	26740 819.0 MHz	N/A
10.0	QPSK	1	0		25.7			24.4	
		1	24		25.5			24.3	
		1	49		25.5			24.4	
		25	0		24.6			23.4	
		25	12		24.5			23.4	
		25	24		24.5			23.4	
	16QAM	50	0		24.5			23.4	
		1	0		25.0			23.7	
		1	24		24.8			23.6	
		1	49		24.8			23.6	
		25	0		23.6			22.4	
		25	12		23.5			22.4	
	64QAM	25	24		23.5			22.4	
		50	0		23.5			22.4	
		1	0		23.8			22.5	
		1	24		23.8			22.3	
		1	49		23.9			22.5	
		25	0		22.6			21.3	
		25	12		22.7			21.3	
		25	24		22.8			21.3	
		50	0		22.7			21.3	

7.9. LTE BAND 30

ID:	12491	Date:	6/25/19
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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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				27685	27710	27735	27685	27710	27735	27685	27710	27735	27685	27710	27735
5.0	QPSK	1	0	25.5	25.7	25.5	20.8	20.9	20.8	24.1	24.2	24.5	18.8	18.7	19.0
		1	12	25.5	25.5	25.5	20.8	20.8	20.8	24.2	24.4	24.4	18.7	18.8	18.9
		1	24	25.5	25.5	25.5	20.8	20.9	20.8	24.3	24.5	24.4	18.8	19.0	18.9
		12	0	24.5	24.6	24.4	19.7	19.7	19.8	23.1	23.3	23.4	17.6	17.7	17.8
		12	6	24.5	24.6	24.3	19.7	19.8	19.8	23.2	23.4	23.4	17.6	17.7	17.8
		12	11	24.5	24.5	24.3	19.7	19.7	19.8	23.2	23.5	23.4	17.7	17.8	17.7
	16QAM	25	0	24.6	24.5	24.3	19.7	19.7	19.8	23.2	23.5	23.4	17.6	17.7	17.8
		1	0	25.1	25.1	25.0	20.2	20.4	20.4	23.5	23.6	23.9	18.1	18.2	18.4
		1	12	25.1	24.9	24.8	20.2	20.3	20.3	23.4	23.8	23.9	18.0	18.3	18.3
		1	24	25.0	24.9	24.9	20.1	20.3	20.4	23.7	23.8	23.8	18.2	18.4	18.4
		12	0	23.6	23.7	23.4	18.7	18.8	18.8	22.1	22.3	22.5	16.7	16.7	16.8
		12	6	23.6	23.6	23.4	18.7	18.8	18.8	22.2	22.4	22.4	16.7	16.8	16.9
	64QAM	12	11	23.6	23.5	23.4	18.7	18.8	18.8	22.2	22.5	22.4	16.7	16.9	16.8
		25	0	23.6	23.5	23.4	18.7	18.8	18.8	22.2	22.4	22.4	16.7	16.8	16.8
		1	0	24.2	24.2	24.3	19.4	19.4	19.4	22.3	22.4	22.5	17.3	17.3	17.6
		1	12	24.2	24.1	24.2	19.4	19.4	19.5	22.3	22.6	22.6	17.3	17.5	17.4
		1	24	24.2	24.0	24.2	19.5	19.3	19.5	22.5	22.7	22.6	17.4	17.6	17.5
		12	0	22.9	22.7	22.7	18.0	17.8	18.0	20.9	21.0	21.3	15.8	15.9	16.1
		12	6	22.9	22.8	22.7	18.0	17.9	18.0	20.9	21.2	21.3	15.8	15.9	16.1
		12	11	22.9	22.7	22.7	18.0	17.8	18.0	20.9	21.3	21.3	15.9	16.1	16.1
		25	0	22.9	22.7	22.7	17.9	17.9	18.0	21.0	21.1	21.2	15.9	16.0	16.0

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				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		25.7			21.0			24.1			18.8	
		1	24		25.6			20.9			24.3			18.9	
		1	49		25.4			20.9			24.4			19.0	
		25	0		24.6			20.0			23.3			17.8	
		25	12		24.6			19.9			23.4			17.9	
		25	24		24.5			19.9			23.4			18.0	
	16QAM	50	0		24.5			20.0			23.5			17.9	
		1	0		25.0			20.5			23.6			18.2	
		1	24		24.9			20.4			23.8			18.4	
		1	49		24.8			20.3			23.8			18.4	
		25	0		23.8			19.0			22.4			16.9	
		25	12		23.7			19.0			22.5			16.9	
	64QAM	25	24		23.6			19.0			22.5			17.1	
		50	0		23.6			19.0			22.6			17.0	
		1	0		24.3			19.4			22.3			17.3	
		1	24		24.2			19.4			22.5			17.5	
		1	49		24.1			19.4			22.6			17.5	
		25	0		23.2			18.2			21.2			16.1	
		25	12		23.0			18.2			21.3			16.1	
		25	24		23.0			18.2			21.4			16.3	
		50	0		23.0			18.2			21.4			16.2	

7.10. LTE BAND 41

ID:	12491	Date:	6/25/19
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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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				39675	40620	41565	39675	40620	41565	39675	40620	41565	39675	40620	41565
5.0	QPSK	1	0	25.9	28.3	28.5	20.4	22.7	22.6	25.1	28.0	27.7	19.3	21.0	20.8
		1	12	27.7	28.3	28.3	22.5	22.7	22.5	27.0	27.9	27.6	20.9	20.9	20.7
		1	24	27.7	28.3	28.3	22.5	22.7	22.6	27.0	27.9	27.6	20.9	20.9	20.7
		12	0	24.7	27.2	27.3	19.4	21.6	21.5	24.1	26.9	26.6	18.1	19.9	19.8
		12	6	24.7	27.2	27.2	19.4	21.5	21.5	24.0	26.8	26.6	18.0	19.9	19.7
		12	11	26.6	27.2	27.2	21.4	21.5	21.5	26.0	26.8	26.6	19.9	19.9	19.7
	16QAM	25	0	24.6	27.2	27.3	19.4	21.6	21.5	24.0	26.8	26.6	18.0	19.9	19.8
		1	0	25.3	27.8	27.8	19.8	22.2	22.0	24.5	27.4	26.9	18.7	20.3	20.1
		1	12	27.2	27.7	27.7	21.8	22.2	21.9	26.1	27.3	26.9	20.1	20.3	20.0
		1	24	27.1	27.8	27.7	21.9	22.1	22.0	26.2	27.3	26.8	20.1	20.3	20.0
		12	0	23.7	26.3	26.3	18.4	20.6	20.5	23.1	25.9	25.7	17.1	18.9	18.8
		12	6	23.8	26.2	26.3	18.4	20.6	20.5	23.1	25.9	25.7	17.0	18.9	18.8
	64QAM	12	11	25.7	26.2	26.4	20.4	20.6	20.5	25.0	25.9	25.6	18.9	18.9	18.7
		25	0	23.7	26.2	26.3	18.4	20.6	20.5	23.0	25.8	25.6	17.0	18.9	18.7
		1	0	24.0	26.4	26.4	18.7	21.1	20.8	23.4	26.1	25.8	17.4	19.2	18.5
		1	12	26.0	26.4	26.3	20.8	21.0	20.7	25.1	26.1	25.9	18.8	19.1	18.4
		1	24	26.0	26.5	26.4	20.7	21.0	20.7	25.2	26.2	25.8	18.8	19.2	18.4
		12	0	22.6	25.0	25.1	17.3	19.6	19.5	22.0	24.8	24.7	16.1	17.9	17.2
		12	6	22.6	25.0	25.1	17.3	19.6	19.5	21.9	24.7	24.7	16.0	17.9	17.2
		12	11	24.6	25.0	25.1	19.3	19.6	19.5	23.9	24.7	24.7	18.0	17.8	17.2
		25	0	22.6	25.0	25.1	17.3	19.6	19.4	22.0	24.7	24.6	16.0	17.8	17.2

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				39700	40620	41540	39700	40620	41540	39700	40620	41540	39700	40620	41540
10.0	QPSK	1	0	24.9	28.3	28.6	19.5	22.7	22.5	24.1	27.9	27.7	18.3	21.0	20.8
		1	24	27.7	28.4	28.5	22.5	22.7	22.5	26.9	27.9	27.6	20.9	20.9	20.7
		1	49	27.7	28.4	28.4	22.6	22.6	22.5	27.0	27.9	27.5	20.8	20.8	20.6
		25	0	24.8	27.3	27.5	19.5	21.7	21.5	24.1	26.9	26.7	18.2	19.9	19.8
		25	12	26.7	27.3	27.5	21.5	21.6	21.5	26.0	26.9	26.6	20.0	19.9	19.7
		25	24	25.7	27.3	27.4	20.5	21.6	21.5	25.1	26.9	26.6	18.9	19.9	19.7
	16QAM	50	0	24.8	27.3	27.5	19.5	21.6	21.5	24.0	26.9	26.6	18.1	19.9	19.7
		1	0	24.3	27.7	27.9	18.8	22.2	21.9	23.5	27.2	27.0	17.8	20.3	20.1
		1	24	27.1	27.7	27.8	21.9	22.0	21.8	26.1	27.2	26.8	20.2	20.2	20.0
		1	49	27.1	27.7	27.7	21.9	22.0	21.8	26.2	27.3	26.7	20.0	20.1	19.9
		25	0	23.9	26.4	26.6	18.5	20.7	20.6	23.2	26.0	25.7	17.3	19.1	18.9
		25	12	25.8	26.4	26.6	20.5	20.7	20.6	25.1	25.9	25.7	19.1	19.0	18.8
	64QAM	25	24	24.8	26.4	26.5	19.6	20.7	20.6	24.1	25.9	25.7	18.0	18.9	18.8
		50	0	23.8	26.3	26.5	18.6	20.7	20.6	23.1	25.9	25.7	17.2	19.0	18.8
		1	0	22.9	26.4	26.4	17.6	21.1	20.8	22.4	26.1	25.9	16.7	19.0	18.6
		1	24	26.0	26.5	26.5	20.7	21.0	20.6	25.2	26.0	25.8	19.0	19.1	18.5
		1	49	26.0	26.5	26.5	20.8	21.0	20.6	25.3	26.2	25.6	19.0	19.1	18.4
		25	0	22.8	25.1	25.3	17.5	19.7	19.6	22.2	24.9	24.7	16.3	18.0	17.4
		25	12	24.8	25.1	25.3	19.6	19.6	19.5	24.1	24.8	24.8	18.2	18.0	17.3
		25	24	23.8	25.2	25.3	18.6	19.7	19.5	23.2	24.8	24.8	17.1	17.9	17.3
		50	0	22.8	25.1	25.2	17.5	19.6	19.5	22.2	24.9	24.7	16.2	17.9	17.3

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				39725	40620	41515	39725	40620	41515	39725	40620	41515	39725	40620	41515
15.0	QPSK	1	0	24.9	28.3	28.7	19.5	22.7	22.5	24.0	27.9	27.7	18.4	20.9	20.8
		1	37	27.7	28.4	28.5	22.5	22.6	22.5	26.7	27.8	27.6	20.9	20.9	20.7
		1	74	27.7	28.4	28.3	22.6	22.5	22.5	27.0	27.8	27.5	20.8	20.6	20.6
		36	0	23.8	27.4	27.5	18.5	21.7	21.5	22.9	26.9	26.7	17.2	20.0	19.9
		36	16	26.7	27.4	27.5	21.5	21.6	21.5	25.8	26.9	26.7	20.0	19.9	19.8
		36	35	25.8	27.4	27.4	20.5	21.6	21.5	24.8	26.9	26.6	19.0	19.8	19.8
		75	0	23.7	27.3	27.4	18.5	21.6	21.5	22.8	26.8	26.6	17.0	19.9	19.8
	16QAM	1	0	24.2	27.8	27.8	18.7	22.1	21.9	23.1	27.2	27.0	17.7	20.2	20.2
		1	37	27.1	27.7	27.7	21.8	22.1	21.9	25.8	27.2	26.9	20.0	20.2	20.0
		1	74	27.1	27.8	27.6	21.7	21.9	21.8	26.1	27.1	26.7	20.0	19.9	19.9
		36	0	22.8	26.4	26.6	17.5	20.8	20.6	22.0	26.0	25.7	16.3	19.0	18.9
		36	16	25.8	26.4	26.5	20.6	20.7	20.6	24.9	25.9	25.7	19.1	19.0	18.9
		36	35	24.8	26.4	26.6	19.6	20.6	20.6	23.8	25.9	25.6	18.1	18.9	18.8
		75	0	22.8	26.4	26.5	17.5	20.6	20.6	21.8	25.9	25.6	16.1	18.9	18.8
	64QAM	1	0	22.9	26.5	26.5	17.4	20.8	20.7	22.3	26.1	25.8	16.8	19.2	18.6
		1	37	26.0	26.5	26.6	20.7	20.9	20.7	25.0	26.1	25.8	19.0	19.2	18.4
		1	74	25.9	26.5	26.5	20.7	20.8	20.7	25.4	26.1	25.6	19.1	19.0	18.4
		36	0	21.8	25.1	25.3	16.4	19.6	19.5	20.9	24.8	24.7	15.4	18.0	17.5
		36	16	24.8	25.1	25.3	19.4	19.5	19.5	23.9	24.8	24.8	18.2	17.9	17.4
		36	35	23.8	25.1	25.3	18.5	19.5	19.4	22.9	24.8	24.7	17.2	17.9	17.3
		75	0	21.7	25.1	25.3	16.4	19.5	19.4	20.9	24.8	24.7	15.2	17.9	17.3

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				39750	40620	41490	39750	40620	41490	39750	40620	41490	39750	40620	41490
20.0	QPSK	1	0	24.7	28.3	28.7	19.5	22.7	22.6	23.9	28.0	27.7	18.3	21.0	20.9
		1	49	27.6	28.4	28.6	22.5	22.6	22.6	26.8	27.9	27.6	20.8	20.9	20.8
		1	99	27.7	28.5	28.4	22.6	22.6	22.5	27.0	27.9	27.5	20.9	20.7	20.6
		50	0	23.6	27.3	27.6	18.5	21.6	21.5	22.8	26.9	26.6	17.1	20.0	19.8
		50	24	26.6	27.4	27.5	21.5	21.6	21.5	25.8	26.8	26.6	19.9	19.9	19.8
		50	49	25.5	27.3	27.4	20.5	21.5	21.5	24.8	26.8	26.6	19.0	19.8	19.7
		100	0	23.5	27.3	27.5	18.4	21.6	21.5	22.7	26.8	26.6	16.9	19.9	19.8
	16QAM	1	0	24.1	27.6	28.0	18.8	22.2	22.1	23.2	27.4	27.0	17.7	20.4	20.1
		1	49	27.0	27.8	27.9	21.9	22.0	22.1	25.9	27.3	26.9	20.1	20.3	20.1
		1	99	27.1	27.8	27.8	22.0	21.9	21.9	26.2	27.3	26.8	20.2	20.0	19.9
		50	0	22.6	26.4	26.6	17.5	20.7	20.5	21.8	25.9	25.7	16.2	19.0	18.9
		50	24	25.6	26.4	26.5	20.5	20.6	20.6	24.8	25.9	25.6	18.9	19.0	18.9
		50	49	24.5	26.4	26.5	19.5	20.6	20.5	23.9	25.9	25.6	18.0	18.9	18.8
		100	0	22.6	26.3	26.5	17.5	20.6	20.5	21.8	25.8	25.6	16.0	18.9	18.9
	64QAM	1	0	22.9	26.4	26.7	17.7	20.9	20.8	22.1	26.2	25.9	16.6	19.1	18.8
		1	49	25.8	26.4	26.5	20.7	20.8	20.8	24.8	26.1	25.9	18.8	19.1	18.5
		1	99	25.9	26.5	26.6	20.9	20.7	20.6	25.3	26.2	25.7	19.0	19.0	18.4
		50	0	21.6	25.1	25.3	16.4	19.6	19.4	20.8	24.9	24.8	15.2	17.9	17.5
		50	24	24.6	25.1	25.3	19.4	19.5	19.5	23.9	24.8	24.7	18.0	17.9	17.4
		50	49	23.5	25.2	25.3	18.4	19.5	19.5	23.1	24.9	24.7	17.1	17.8	17.3
		100	0	21.5	25.1	25.2	16.3	19.5	19.4	20.8	24.8	24.7	15.1	17.9	17.5

7.11. LTE BAND 48

ID:	12491	Date:	6/25/19
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OUTPUT POWER FOR LTE BAND 48 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 6			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				55265	55990	56715	55265	55990	56715	55265	55990	56715	55265	55990	56715
5.0	QPSK	1	0	21.0	25.5	21.0	18.1	22.5	18.5	19.9	25.2	20.5	18.5	22.3	18.3
		1	12	20.7	25.2	20.8	17.9	22.2	18.1	19.7	25.1	20.3	18.2	22.0	18.1
		1	24	21.0	25.3	21.0	18.5	22.5	18.3	20.0	25.2	20.5	18.4	22.3	18.3
		12	0	19.9	24.4	20.1	17.2	21.5	17.3	19.6	24.3	19.4	17.4	21.3	17.2
		12	6	19.8	24.3	20.0	17.1	21.4	17.3	19.5	24.2	19.3	17.3	21.2	17.5
		12	11	19.8	24.3	20.0	17.1	21.4	17.3	19.5	24.2	19.4	17.3	21.2	17.5
		25	0	20.0	24.5	20.1	17.2	21.6	17.4	19.6	24.3	19.5	17.5	21.4	17.7
	16QAM	1	0	20.3	24.9	20.6	17.7	22.1	17.8	20.0	24.7	19.9	17.8	21.6	18.0
		1	12	20.1	24.7	20.3	17.4	21.8	17.5	20.0	24.4	19.6	17.6	21.4	17.8
		1	24	20.3	24.9	20.4	17.7	22.1	17.7	20.1	24.7	20.1	18.0	21.7	18.0
		12	0	18.8	23.2	18.9	16.1	20.3	16.2	18.4	23.1	18.2	16.5	20.2	16.3
		12	6	18.7	23.2	18.8	16.0	20.2	16.1	19.0	23.1	18.2	16.5	20.1	16.3
		12	11	18.7	23.3	18.8	16.1	20.3	16.2	19.0	23.1	18.3	16.5	20.1	16.3
		25	0	18.9	23.4	19.1	16.2	20.5	16.3	19.2	23.3	18.4	16.6	20.3	16.5
	64QAM	1	0	19.4	23.7	19.5	16.5	21.0	16.8	19.7	23.7	19.0	17.4	18.4	17.5
		1	12	19.2	23.5	19.3	16.3	20.8	16.5	19.4	23.5	18.6	17.2	18.3	17.2
		1	24	19.4	23.7	19.4	16.6	20.9	16.8	19.7	23.7	18.9	17.4	18.5	17.4
		12	0	17.5	22.3	18.0	15.2	19.2	15.0	18.0	22.0	17.1	15.7	17.2	16.0
		12	6	17.6	22.3	17.8	15.0	19.1	14.9	17.7	22.0	17.3	15.5	17.1	16.0
		12	11	17.5	22.3	17.7	15.1	19.1	15.0	17.8	21.9	17.2	15.6	17.1	16.1
		25	0	17.9	22.4	18.1	15.2	19.4	15.4	18.2	22.3	17.5	15.9	17.2	16.2

OUTPUT POWER FOR LTE BAND 48 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 6			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				55290	55990	56690	55290	55990	56690	55290	55990	56690	55290	55990	56690
10.0	QPSK	1	0	21.0	25.7	21.0	18.4	22.4	18.4	20.4	25.4	20.5	18.1	22.5	18.4
		1	24	20.7	25.4	20.7	18.2	22.1	18.2	20.1	25.2	20.2	17.8	22.2	18.1
		1	49	21.0	25.6	21.0	18.4	22.4	18.4	20.4	25.4	20.4	18.5	22.4	18.4
		25	0	19.8	24.5	19.9	17.2	21.2	17.2	19.2	24.3	19.3	17.5	21.3	17.3
		25	12	19.7	24.4	19.8	17.2	21.2	17.2	19.1	24.2	19.2	17.5	21.2	17.2
		25	24	19.8	24.5	19.8	17.2	21.2	17.2	19.2	24.3	19.3	17.5	21.3	17.3
		50	0	19.9	24.6	19.9	17.3	21.3	17.3	19.2	24.4	19.3	17.6	21.3	17.3
	16QAM	1	0	20.3	25.0	20.4	17.8	21.9	17.7	19.7	24.9	20.0	18.0	21.9	17.8
		1	24	20.0	24.7	20.1	17.6	21.7	17.4	19.5	24.7	19.7	17.7	21.6	17.5
		1	49	20.2	25.0	20.4	17.8	21.9	17.7	19.8	25.0	19.9	17.9	21.9	17.8
		25	0	18.7	23.4	18.7	16.1	20.2	16.1	18.1	23.2	18.2	16.4	20.2	16.1
		25	12	18.6	23.4	18.6	16.1	20.1	16.0	18.1	23.2	18.1	16.4	20.1	16.1
		25	24	18.7	23.4	18.7	16.1	20.2	16.1	18.1	23.3	18.2	16.4	20.2	16.1
		50	0	18.8	23.5	18.8	16.2	20.3	16.2	18.2	23.4	18.3	16.6	20.3	16.3
	64QAM	1	0	19.1	23.8	19.2	16.6	20.7	16.2	18.6	23.8	18.8	16.7	18.8	16.5
		1	24	18.9	23.7	18.9	16.4	20.4	16.0	18.4	23.6	18.5	16.5	18.6	16.3
		1	49	19.1	24.0	19.2	16.7	20.7	16.1	18.6	23.9	18.8	16.8	18.9	16.5
		25	0	17.7	22.4	17.7	15.2	19.2	15.1	17.1	22.3	17.3	15.1	17.2	14.9
		25	12	17.6	22.4	17.7	15.1	19.1	15.1	17.0	22.2	17.1	15.0	17.1	15.0
		25	24	17.7	22.4	17.8	15.2	19.1	15.1	17.2	22.2	17.2	15.2	17.2	14.9
		50	0	17.7	22.5	17.8	15.2	19.3	15.3	17.1	22.4	17.4	15.2	17.4	15.1

OUTPUT POWER FOR LTE BAND 48 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 6			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				55315	55990	56665	55315	55990	56665	55315	55990	56665	55315	55990	56665
15.0	QPSK	1	0	21.0	25.5	21.0	18.4	22.4	18.5	20.4	25.3	20.5	18.5	22.4	18.5
		1	37	20.9	25.3	20.9	18.3	22.3	18.4	20.3	25.2	20.3	18.4	22.2	18.4
		1	74	21.0	25.5	21.0	18.4	22.4	18.5	20.4	25.3	20.5	18.5	22.4	18.5
		36	0	19.9	24.5	19.9	17.2	21.3	17.4	19.2	24.3	19.4	17.4	21.3	17.4
		36	16	19.8	24.4	19.9	17.2	21.3	17.3	19.2	24.3	19.3	17.3	21.2	17.4
		36	35	19.8	24.4	19.9	17.2	21.3	17.4	19.2	24.3	19.3	17.4	21.2	17.4
	16QAM	75	0	19.9	24.5	19.9	17.2	21.3	17.4	19.3	24.3	19.4	17.4	21.3	17.4
		1	0	20.2	24.8	20.4	17.6	21.9	17.9	19.7	24.8	20.0	17.7	21.8	17.9
		1	37	20.2	24.7	20.3	17.5	21.8	17.8	19.6	24.7	19.8	17.6	21.7	17.8
		1	74	20.3	24.9	20.4	17.6	21.9	18.0	19.7	24.8	19.9	17.7	21.8	17.9
		36	0	18.8	23.4	18.9	16.1	20.3	16.3	18.2	23.3	18.4	16.3	20.2	16.4
		36	16	18.8	23.4	18.8	16.1	20.2	16.3	18.2	23.2	18.3	16.3	20.2	16.4
	64QAM	36	35	18.8	23.4	18.9	16.1	20.3	16.3	18.2	23.2	18.3	16.3	20.2	16.3
		75	0	18.9	23.5	18.9	16.2	20.3	16.4	18.3	23.3	18.4	16.4	20.3	16.4
		1	0	19.3	24.0	19.2	16.7	20.8	16.9	18.8	23.8	18.9	16.6	18.8	16.8
		1	37	19.3	23.8	19.2	16.5	20.8	16.9	18.8	23.7	18.8	16.5	18.7	16.6
		1	74	19.4	24.0	19.3	16.7	20.9	16.9	18.8	23.8	18.9	16.6	18.9	16.7
		36	0	17.8	22.4	17.8	15.0	19.3	15.5	17.2	22.3	17.4	15.0	17.2	15.2
	64QAM	36	16	17.8	22.4	17.8	15.0	19.3	15.5	17.2	22.3	17.4	15.0	17.2	15.2
		36	35	17.8	22.4	17.8	15.0	19.3	15.5	17.2	22.2	17.4	15.0	17.2	15.3
		75	0	17.8	22.4	17.9	15.1	19.3	15.6	17.2	22.3	17.5	15.0	17.3	15.3

OUTPUT POWER FOR LTE BAND 48 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 6			Ant 3			Ant 4		
				Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				55340	55990	56640	55340	55990	56640	55340	55990	56640	55340	55990	56640
20.0	QPSK	1	0	21.0	25.6	21.0	18.5	22.5	18.4	20.4	25.5	20.5	18.4	22.5	18.4
		1	49	20.7	25.4	20.8	18.2	22.3	18.2	20.2	25.2	20.3	18.1	22.3	18.1
		1	99	21.0	25.7	21.0	18.5	22.5	18.4	20.4	25.5	20.5	18.5	22.5	18.4
		50	0	19.8	24.5	19.8	17.3	21.4	17.2	19.2	24.4	19.3	17.3	21.3	17.2
		50	24	19.7	24.5	19.8	17.2	21.3	17.1	19.2	24.3	19.3	17.2	21.2	17.1
		50	49	19.7	24.5	19.8	17.3	21.4	17.2	19.2	24.4	19.3	17.2	21.3	17.1
	16QAM	100	0	19.8	24.6	19.9	17.3	21.4	17.2	19.2	24.4	19.3	17.3	21.3	17.2
		1	0	20.4	25.2	20.4	17.9	22.1	17.9	19.9	24.9	20.0	17.9	21.9	17.8
		1	49	20.2	24.9	20.2	17.7	21.8	17.6	19.6	24.7	19.8	17.5	21.6	17.5
		1	99	20.4	25.1	20.5	17.9	22.0	17.9	19.8	24.9	20.0	17.8	21.9	17.8
		50	0	18.7	23.5	18.8	16.2	20.3	16.1	18.2	23.3	18.3	16.2	20.3	16.2
		50	24	18.7	23.4	18.7	16.2	20.3	16.1	18.1	23.3	18.2	16.1	20.2	16.1
	64QAM	50	49	18.7	23.5	18.8	16.2	20.3	16.1	18.2	23.4	18.3	16.2	20.3	16.1
		100	0	18.8	23.5	18.8	16.3	20.4	16.2	18.2	23.4	18.3	16.3	20.3	16.2
		1	0	19.3	24.0	19.4	16.9	21.1	16.8	18.9	23.8	19.0	16.5	18.9	16.5
		1	49	19.2	23.9	19.1	16.7	20.9	16.5	18.7	23.6	18.7	16.2	18.6	16.3
		1	99	19.3	24.1	19.4	17.0	21.1	16.7	18.8	23.9	19.0	16.4	18.9	16.4
		50	0	17.7	22.5	17.8	15.3	19.4	15.2	17.2	22.3	17.3	14.9	17.3	15.0
	64QAM	50	24	17.6	22.6	17.7	15.2	19.3	15.1	17.1	22.5	17.3	14.8	17.3	15.0
		50	49	17.6	22.6	17.8	15.3	19.4	15.1	17.2	22.3	17.3	14.9	17.3	15.0
		100	0	17.7	22.6	17.8	15.3	19.4	15.2	17.3	22.5	17.4	14.9	17.4	15.1

7.12. LTE BAND 66

ID:	12491	Date:	6/25/19
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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	25.3	25.5	25.2	21.9	21.8	21.6	24.3	24.8	24.6	21.5	21.9	21.3
		1	2	25.3	25.5	25.2	21.8	21.7	21.5	24.3	24.8	24.6	21.4	21.9	21.3
		1	5	25.3	25.5	25.2	21.8	21.8	21.5	24.3	24.7	24.6	21.4	21.9	21.4
		3	0	25.1	25.4	25.1	21.7	21.6	21.5	24.3	24.7	24.4	21.4	21.8	21.2
		3	1	25.1	25.3	25.0	21.7	21.6	21.5	24.3	24.7	24.4	21.3	21.8	21.2
		3	2	25.1	25.4	25.1	21.7	21.6	21.5	24.3	24.7	24.4	21.3	21.8	21.2
	16QAM	6	0	24.2	24.2	23.9	20.7	20.5	20.4	23.2	23.7	23.4	20.3	20.8	20.2
		1	0	24.6	24.8	24.5	21.2	20.9	20.8	23.6	24.1	23.8	20.7	21.1	20.6
		1	2	24.6	24.7	24.5	21.1	20.9	20.8	23.4	24.0	23.8	20.6	21.1	20.5
		1	5	24.6	24.8	24.5	21.1	21.0	20.7	23.5	24.0	23.8	20.6	21.2	20.7
		3	0	24.2	24.5	24.2	20.8	20.7	20.6	23.3	23.8	23.6	20.5	20.9	20.3
		3	1	24.3	24.5	24.1	20.7	20.7	20.5	23.3	23.8	23.6	20.4	20.9	20.3
	64QAM	3	2	24.3	24.5	24.1	20.7	20.7	20.5	23.3	23.7	23.5	20.4	20.9	20.3
		6	0	23.1	23.4	22.9	19.6	19.6	19.4	22.1	22.6	22.5	19.4	19.7	19.3
		1	0	23.8	23.9	23.6	20.3	20.0	19.9	22.7	23.0	22.8	20.0	20.2	19.6
		1	2	23.9	23.9	23.7	20.2	20.1	19.8	22.7	23.0	22.8	19.9	20.2	19.6
		1	5	23.8	24.0	23.7	20.2	20.0	19.8	22.6	23.0	22.8	19.9	20.2	19.7
		3	0	23.6	23.5	23.3	19.9	19.7	19.6	22.4	22.8	22.6	19.8	20.0	19.4
		3	1	23.5	23.6	23.3	19.9	19.7	19.6	22.5	22.8	22.6	19.7	20.0	19.5
		3	2	23.5	23.6	23.3	19.8	19.7	19.6	22.4	22.7	22.6	19.7	20.0	19.5
		6	0	22.3	22.7	22.3	18.6	18.7	18.5	21.2	21.7	21.5	18.5	19.0	18.4

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				131987	132322	132657	131987	132322	132657	131987	132322	132657	131987	132322	132657
3.0	QPSK	1	0	25.2	25.5	25.1	21.8	21.7	21.6	24.3	24.7	24.5	21.5	21.9	21.3
		1	7	25.3	25.5	25.1	21.8	21.7	21.6	24.4	24.8	24.6	21.5	21.9	21.3
		1	14	25.3	25.4	25.1	21.7	21.6	21.4	24.3	24.7	24.5	21.4	21.9	21.3
		8	0	24.1	24.3	24.0	20.6	20.5	20.4	23.2	23.7	23.4	20.3	20.7	20.2
		8	4	24.1	24.3	24.0	20.5	20.5	20.4	23.2	23.7	23.4	20.3	20.7	20.2
		8	7	24.1	24.3	24.0	20.5	20.5	20.4	23.2	23.6	23.4	20.3	20.7	20.2
	16QAM	15	0	24.1	24.3	24.1	20.5	20.6	20.4	23.3	23.7	23.4	20.3	20.7	20.2
		1	0	24.6	24.8	24.5	21.1	21.0	20.8	23.6	24.0	23.9	20.7	21.1	20.5
		1	7	24.6	24.7	24.6	21.0	20.9	20.9	23.6	24.1	23.9	20.7	21.2	20.4
		1	14	24.6	24.7	24.5	21.0	20.9	20.7	23.5	24.0	23.8	20.7	21.1	20.5
		8	0	23.1	23.3	23.0	19.6	19.5	19.4	22.2	22.7	22.4	19.3	19.8	19.2
		8	4	23.1	23.3	23.0	19.6	19.6	19.3	22.2	22.7	22.4	19.3	19.8	19.2
	64QAM	8	7	23.1	23.3	23.0	19.5	19.5	19.3	22.2	22.6	22.4	19.4	19.8	19.2
		15	0	23.1	23.3	22.9	19.5	19.5	19.3	22.2	22.6	22.4	19.3	19.7	19.2
		1	0	23.6	24.0	23.5	20.1	20.0	19.9	22.4	23.0	22.8	19.8	20.1	19.7
		1	7	23.6	23.9	23.6	20.0	20.0	19.9	22.4	23.0	22.8	19.9	20.2	19.5
		1	14	23.7	23.8	23.6	20.1	19.9	19.7	22.5	22.9	22.7	19.8	20.2	19.7
		8	0	22.3	22.6	22.2	18.7	18.6	18.5	21.2	21.8	21.4	18.4	18.9	18.4
		8	4	22.3	22.6	22.2	18.6	18.6	18.5	21.2	21.8	21.4	18.4	18.9	18.3
		8	7	22.3	22.6	22.2	18.6	18.6	18.5	21.2	21.6	21.4	18.5	18.9	18.4
		15	0	22.3	22.6	22.2	18.6	18.6	18.5	21.2	21.6	21.4	18.4	18.9	18.3

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				131997	132322	132647	131997	132322	132647	131997	132322	132647	131997	132322	132647
5.0	QPSK	1	0	25.4	25.7	25.3	21.9	21.7	21.7	24.4	24.7	24.7	21.6	21.8	21.6
		1	12	25.3	25.6	25.2	21.7	21.7	21.6	24.4	24.8	24.6	21.5	21.9	21.4
		1	24	25.4	25.5	25.3	21.7	21.7	21.5	24.5	24.7	24.6	21.5	21.9	21.4
		12	0	24.3	24.6	24.2	20.7	20.6	20.6	23.4	23.8	23.6	20.4	20.9	20.5
		12	6	24.3	24.5	24.2	20.7	20.6	20.5	23.4	23.9	23.5	20.4	20.9	20.4
		12	11	24.3	24.5	24.2	20.6	20.6	20.5	23.4	23.8	23.5	20.3	20.9	20.4
	16QAM	25	0	24.3	24.6	24.2	20.6	20.6	20.5	23.4	23.8	23.6	20.4	20.9	20.4
		1	0	24.7	25.3	24.7	21.3	21.1	21.3	23.5	24.0	24.1	20.9	21.2	20.8
		1	12	24.7	25.0	24.6	21.1	21.0	21.0	23.6	24.2	24.0	20.9	21.2	20.6
		1	24	24.7	24.9	24.7	21.1	21.1	20.9	23.7	24.1	24.0	20.9	21.3	20.7
		12	0	23.3	23.6	23.2	19.7	19.6	19.7	22.4	22.8	22.6	19.5	19.9	19.5
		12	6	23.3	23.6	23.1	19.7	19.6	19.6	22.3	22.9	22.5	19.5	19.9	19.4
	64QAM	12	11	23.4	23.6	23.1	19.6	19.6	19.5	22.4	22.8	22.5	19.4	19.9	19.4
		25	0	23.3	23.5	23.1	19.6	19.6	19.5	22.3	22.8	22.5	19.4	19.8	19.4
		1	0	23.8	24.2	23.7	20.3	20.2	20.2	22.6	22.9	23.2	20.1	20.2	19.9
		1	12	23.7	24.0	23.8	20.2	20.2	20.0	22.6	23.1	23.1	20.0	20.3	19.7
		1	24	23.7	23.9	23.8	20.1	20.2	19.9	22.7	23.0	23.0	20.0	20.3	19.8
		12	0	22.4	22.7	22.4	18.7	18.8	18.8	21.4	21.7	21.6	18.6	19.1	18.6
		12	6	22.4	22.7	22.4	18.7	18.8	18.7	21.4	21.8	21.6	18.6	19.0	18.5
		12	11	22.5	22.7	22.4	18.7	18.8	18.7	21.5	21.8	21.6	18.5	19.0	18.5
		25	0	22.4	22.7	22.3	18.8	18.7	18.7	21.4	21.8	21.5	18.5	19.0	18.5

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				132022	132322	132622	132022	132322	132622	132022	132322	132622	132022	132322	132622
10.0	QPSK	1	0	25.5	25.7	25.4	21.9	21.9	21.9	24.4	24.8	24.7	21.6	21.9	21.8
		1	24	25.4	25.6	25.3	21.8	21.8	21.8	24.5	24.9	24.8	21.6	22.0	21.7
		1	49	25.4	25.5	25.4	21.8	21.9	21.7	24.6	24.7	24.7	21.7	22.1	21.4
		25	0	24.4	24.7	24.4	20.9	20.8	20.8	23.6	23.9	23.8	20.6	21.0	20.7
		25	12	24.5	24.6	24.3	20.8	20.8	18.8	23.6	24.0	23.8	20.5	21.0	20.7
		25	24	24.5	24.6	24.3	20.8	20.9	20.6	23.6	23.9	23.7	20.6	21.0	20.6
	16QAM	50	0	24.4	24.6	24.4	20.8	20.8	20.7	23.6	23.9	23.7	20.6	21.0	20.6
		1	0	24.7	25.2	24.7	21.3	21.1	21.3	23.8	24.1	24.0	20.9	21.2	21.2
		1	24	24.7	25.0	24.6	21.1	21.1	21.2	23.8	24.2	24.1	20.9	21.3	21.0
		1	49	24.8	24.8	24.7	21.2	21.2	21.0	23.9	23.9	24.0	21.0	21.4	20.6
		25	0	23.5	23.8	23.4	19.9	19.9	19.8	22.6	22.9	22.9	19.7	20.0	19.8
		25	12	23.5	23.7	23.4	19.8	19.9	19.8	22.6	23.0	22.8	19.6	20.1	19.7
	64QAM	25	24	23.5	23.6	23.4	19.8	19.9	19.7	22.7	22.9	22.8	19.6	20.1	19.6
		50	0	23.5	23.7	23.4	19.8	19.9	19.8	22.7	22.9	22.8	19.6	20.1	19.7
		1	0	23.9	24.2	23.7	20.2	20.2	20.2	22.7	23.0	23.0	19.9	20.2	20.2
		1	24	23.8	24.0	23.7	20.0	20.1	20.2	22.8	23.2	23.0	20.0	20.3	20.0
		1	49	23.9	23.9	23.8	20.2	19.9	20.0	22.9	23.0	22.9	20.3	20.2	19.9
		25	0	22.7	23.0	22.6	19.0	19.0	19.0	21.7	22.0	21.9	18.8	19.1	18.9
		25	12	22.8	22.9	22.6	19.0	19.0	19.0	21.7	22.1	21.9	18.8	19.2	18.9
		25	24	22.8	22.8	22.6	19.1	19.0	18.9	21.7	22.0	21.9	18.8	19.3	18.8
		50	0	22.7	22.9	22.6	19.0	19.0	19.0	21.7	22.0	21.8	18.8	19.2	18.9

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				132047	132322	132597	132047	132322	132597	132047	132322	132597	132047	132322	132597
15.0	QPSK	1	0	25.3	25.6	25.4	21.9	21.8	22.0	24.5	24.9	24.6	21.6	21.9	22.2
		1	37	25.3	25.5	25.2	21.8	21.8	21.8	24.5	24.8	24.7	21.5	21.9	21.8
		1	74	25.2	25.4	25.2	21.8	21.6	21.7	24.8	24.7	24.6	21.6	21.8	21.4
		36	0	24.4	24.6	24.4	20.7	20.8	20.8	23.6	23.9	23.6	20.6	20.9	20.9
		36	16	24.4	24.5	24.3	20.8	20.8	20.8	23.6	24.0	23.7	20.6	21.0	20.7
		36	35	24.3	24.4	24.3	20.7	20.8	20.8	23.6	23.8	23.7	20.6	21.0	20.7
		75	0	24.4	24.5	24.3	20.8	20.8	20.8	23.7	23.9	23.7	20.5	21.0	20.7
	16QAM	1	0	24.8	25.0	24.6	21.2	21.1	21.4	23.8	24.3	23.9	20.7	21.1	21.6
		1	37	24.7	25.0	24.5	21.1	21.0	21.3	23.9	24.2	24.1	20.9	21.3	21.1
		1	74	24.6	24.8	24.6	21.3	20.8	21.0	24.3	24.0	23.9	21.0	21.2	20.6
		36	0	23.5	23.7	23.4	19.8	19.9	19.9	22.7	22.9	22.7	19.7	20.0	19.9
		36	16	23.4	23.6	23.3	19.9	19.9	19.9	22.7	23.0	22.8	19.7	20.1	19.8
		36	35	23.4	23.5	23.3	19.8	19.8	19.8	22.7	22.9	22.8	19.7	20.0	19.7
		75	0	23.4	23.6	23.3	19.9	19.8	19.8	22.7	22.9	22.7	19.6	20.1	19.7
	64QAM	1	0	23.9	24.2	23.9	20.2	20.2	20.4	22.7	23.2	23.0	19.9	20.3	20.6
		1	37	23.9	24.1	23.7	20.3	20.1	20.3	22.8	23.1	23.2	20.1	20.4	20.2
		1	74	23.9	24.0	23.8	20.4	20.0	20.1	23.3	23.0	23.0	20.2	20.3	19.7
		36	0	22.7	23.0	22.6	19.0	19.0	19.1	21.7	22.0	21.7	18.7	19.2	19.0
		36	16	22.8	22.9	22.5	19.1	19.0	19.0	21.7	22.2	21.9	18.8	19.3	18.9
		36	35	22.7	22.8	22.5	19.0	19.0	19.0	21.8	22.0	21.8	18.9	19.2	18.8
		75	0	22.7	22.8	22.5	19.0	18.9	19.0	21.7	22.1	21.8	18.7	19.2	18.8

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 (dBm)			Conducted Average (dBm)			Conducted Average (dBm)			Conducted Average (dBm)		
				132072	132322	132572	132072	132322	132572	132072	132322	132572	132072	132322	132572
20.0	QPSK	1	0	25.4	25.6	25.4	21.9	21.8	22.0	24.5	25.0	24.7	21.6	21.8	22.2
		1	49	25.3	25.6	25.3	21.8	21.7	21.9	24.6	24.8	24.6	21.7	22.0	21.8
		1	99	25.4	25.5	25.3	21.8	21.8	21.6	24.9	24.6	24.6	21.6	22.0	21.4
		50	0	24.5	24.7	24.4	20.8	20.8	20.9	23.6	23.9	23.7	20.5	20.9	21.1
		50	24	24.4	24.6	24.4	20.7	20.8	20.8	23.6	23.9	23.6	20.6	21.0	20.8
		50	49	24.4	24.5	24.3	20.7	20.8	20.7	23.8	23.8	23.6	20.5	21.0	20.6
		100	0	24.4	24.6	24.4	20.7	20.8	20.8	23.7	23.9	23.5	20.5	21.0	20.8
	16QAM	1	0	24.9	25.0	24.7	21.2	21.1	21.4	23.9	24.4	23.9	20.9	21.1	21.6
		1	49	24.8	24.9	24.7	21.1	21.1	21.2	24.0	24.2	24.0	21.1	21.4	21.0
		1	99	25.0	24.8	24.7	21.2	21.1	21.0	24.5	23.9	24.0	20.9	21.4	20.7
		50	0	23.5	23.7	23.5	19.8	19.9	19.9	22.7	23.0	22.7	19.6	20.0	20.1
		50	24	23.5	23.7	23.4	19.8	19.8	19.7	22.7	22.9	22.6	19.7	20.1	19.9
		50	49	23.5	23.6	23.4	19.7	19.8	19.5	22.9	22.9	22.7	19.7	20.1	19.7
		100	0	23.4	23.7	23.4	19.8	19.7	19.6	22.7	23.0	22.6	19.7	20.1	19.9
	64QAM	1	0	23.9	24.4	24.0	20.2	20.3	20.2	22.7	23.6	22.8	20.0	20.1	20.7
		1	49	23.8	24.3	23.9	20.4	20.3	20.2	22.9	23.4	22.8	20.4	20.2	20.3
		1	99	24.1	24.2	24.0	20.5	20.3	20.0	23.5	23.1	22.9	20.4	20.3	19.9
		50	0	22.8	23.1	22.7	19.0	19.0	19.1	21.7	22.0	21.8	18.8	19.1	19.2
		50	24	22.8	23.0	22.7	19.0	19.0	19.0	21.8	22.1	21.8	18.9	19.2	19.0
		50	49	22.9	22.9	22.7	19.0	19.0	19.0	22.0	22.0	21.8	18.8	19.2	18.9
		100	0	22.8	23.0	22.7	19.0	18.9	19.0	21.8	22.1	21.7	18.8	19.2	19.0

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 17
- LTE Band 25
- LTE Band 26
- LTE Band 30
- LTE Band 41
- LTE Band 48
- 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	1.4MHz, QPSK	6/0	1880.0	1.0932	1.245
	1.4MHz, 16QAM			1.0898	1.245
	1.4MHz 64QAM			1.0941	1.367
	3MHz, QPSK	15/0		2.7046	2.976
	3MHz, 16QAM			2.7036	2.989
	3MHz 64QAM			2.7000	2.981
	5MHz, QPSK	25/0		4.4995	4.935
	5MHz, 16QAM			4.5034	4.924
	5MHz 64QAM			4.5020	4.922
	10MHz, QPSK	50/0		9.0326	10.44
	10MHz, 16QAM			9.0239	10.34
	10MHz 64QAM			9.0106	10.46
	15MHz, QPSK	75/0		13.502	15.72
	15MHz, 16QAM			13.500	15.63
	15MHz 64QAM			13.477	15.51
	20MHz, QPSK	100/0		17.971	19.96
	20MHz, 16QAM			17.952	19.91
	20MHz 64QAM			17.968	20.00

LTE BAND 5

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 5	1.4MHz, QPSK	6/0	836.5	1.0942	1.242
	1.4MHz, 16QAM			1.0928	1.245
	1.4MHz 64QAM			1.0932	1.244
	3MHz, QPSK	15/0		2.7034	2.997
	3MHz, 16QAM			2.7077	2.994
	3MHz 64QAM			2.7012	2.982
	5MHz, QPSK	25/0		4.4984	4.935
	5MHz, 16QAM			4.5006	4.905
	5MHz 64QAM			4.5007	4.903
	10MHz, QPSK	50/0		9.0050	10.43
	10MHz, 16QAM			9.0087	10.48
	10MHz 64QAM			8.9932	10.39

LTE BAND 7

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 7	5MHz, QPSK	25/0	2535.0	4.5045	4.948
	5MHz, 16QAM			4.5006	4.933
	5MHz 64QAM			4.4996	4.888
	10MHz, QPSK	50/0		9.0135	10.45
	10MHz, 16QAM			9.0120	10.50
	10MHz 64QAM			9.0101	10.26
	15MHz, QPSK	75/0		13.481	15.52
	15MHz, 16QAM			13.488	15.33
	15MHz 64QAM			13.477	15.45
	20MHz, QPSK	100/0		17.971	20.16
	20MHz, 16QAM			17.972	19.80
	20MHz 64QAM			17.935	19.66

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	1.0917	1.245
	1.4 MHz, 16QAM			1.0925	1.242
	1.4 MHz 64QAM			1.0898	1.241
	3 MHz, QPSK	15/0		2.6978	2.981
	3 MHz, 16QAM			2.7055	2.988
	3 MHz 64QAM			2.7052	2.987
	5 MHz, QPSK	25/0		4.4979	4.941
	5 MHz, 16QAM			4.4932	4.899
	5 MHz 64QAM			4.4899	4.895
	10 MHz, QPSK	50/0		9.0281	10.50
	10 MHz, 16QAM			8.9997	10.45
	10 MHz 64QAM			9.0099	10.32

LTE BAND 13

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)	
LTE BAND 13	5 MHz, QPSK	25/0	782.0	4.4942	4.929	
	5 MHz, 16QAM			4.4971	4.928	
	5 MHz 64QAM			4.4974	4.910	
	10 MHz, QPSK	50/0		8.9894	10.34	
	10 MHz, 16QAM			8.9958	10.35	
	10 MHz 64QAM			8.9742	10.21	

LTE BAND 17

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 17	5 MHz, QPSK	25/0	710.0	4.4975	4.907
	5 MHz, 16QAM			4.4964	4.925
	5 MHz 64QAM			4.4996	4.922
	10 MHz, QPSK	50/0		9.0010	10.45
	10 MHz, 16QAM			9.0312	10.43
	10 MHz 64QAM			9.0150	10.36

LTE BAND 25

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 25	1.4MHz, QPSK	6/0	1882.5	1.0920	1.244
	1.4MHz, 16QAM			1.0907	1.240
	1.4MHz 64QAM			1.0905	1.241
	3MHz, QPSK	15/0		2.7100	2.984
	3MHz, 16QAM			2.7034	2.988
	3MHz 64QAM			2.7041	2.996
	5MHz, QPSK	25/0		4.4984	4.945
	5MHz, 16QAM			4.4892	4.915
	5MHz 64QAM			4.4873	4.931
	10MHz, QPSK	50/0		9.0267	10.34
	10MHz, 16QAM			9.0331	10.39
	10MHz 64QAM			9.0221	10.29
	15MHz, QPSK	75/0		13.479	15.74
	15MHz, 16QAM			13.490	15.50
	15MHz 64QAM			13.488	15.44
	20MHz, QPSK	100/0		17.976	20.12
	20MHz, 16QAM			17.976	19.88
	20MHz 64QAM			17.945	20.24

LTE BAND 26(PART 90S)

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 26	1.4 MHz, QPSK	1/0	819.0	0.24784	0.350
	1.4 MHz, 16QAM			0.25569	0.347
	1.4 MHz, 64QAM			0.27656	0.3871
	1.4 MHz, QPSK	6/0		1.0912	1.241
	1.4 MHz, 16QAM			1.0945	1.246
	1.4 MHz 64QAM			1.0965	1.244
	3 MHz, QPSK	1/0		0.25583	0.3855
	3 MHz, 16QAM			0.26157	0.3787
	3 MHz, 64QAM			0.30266	0.4113
	3 MHz, QPSK	15/0		2.7023	2.991
	3 MHz, 16QAM			2.7075	2.972
	3 MHz 64QAM			2.7043	2.989
	5 MHz, QPSK	1/0		0.23602	0.3789
	5 MHz, 16QAM			0.23865	0.4412
	5 MHz, 64QAM			0.24174	0.4239
	5 MHz, QPSK	25/0		4.5015	4.918
	5 MHz, 16QAM			4.4962	4.928
	5 MHz 64QAM			4.4882	5.067
	10 MHz, QPSK	1/0		0.27833	0.4524
	10 MHz, 16QAM			0.29774	0.4493
	10 MHz, 64QAM			0.30785	0.4971
	10 MHz, QPSK	50/0		8.9945	10.36
	10 MHz, 16QAM			9.0218	10.41
	10 MHz 64QAM			9.0128	10.47

LTE BAND 30

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 30	5MHz, QPSK	25/0	2310.0	4.5051	4.929
	5MHz, 16QAM			4.4991	4.926
	5MHz 64QAM			4.4859	4.943
	10MHz, QPSK	50/0		9.0096	10.33
	10MHz, 16QAM			8.9913	10.40
	10MHz 64QAM			8.9970	10.34

LTE BAND 41

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 41	5MHz, QPSK	25/0	2593.0	4.4923	5.192
	5MHz, 16QAM			4.4883	5.049
	5MHz 64QAM			4.4782	4.933
	10MHz, QPSK	50/0		9.0053	11.72
	10MHz, 16QAM			9.0199	11.21
	10MHz 64QAM			9.0096	10.19
	15MHz, QPSK	75/0		13.457	16.63
	15MHz, 16QAM			13.476	18.37
	15MHz 64QAM			13.435	15.01
	20MHz, QPSK	100/0		17.930	25.42
	20MHz, 16QAM			17.976	24.38
	20MHz 64QAM			17.896	22.93

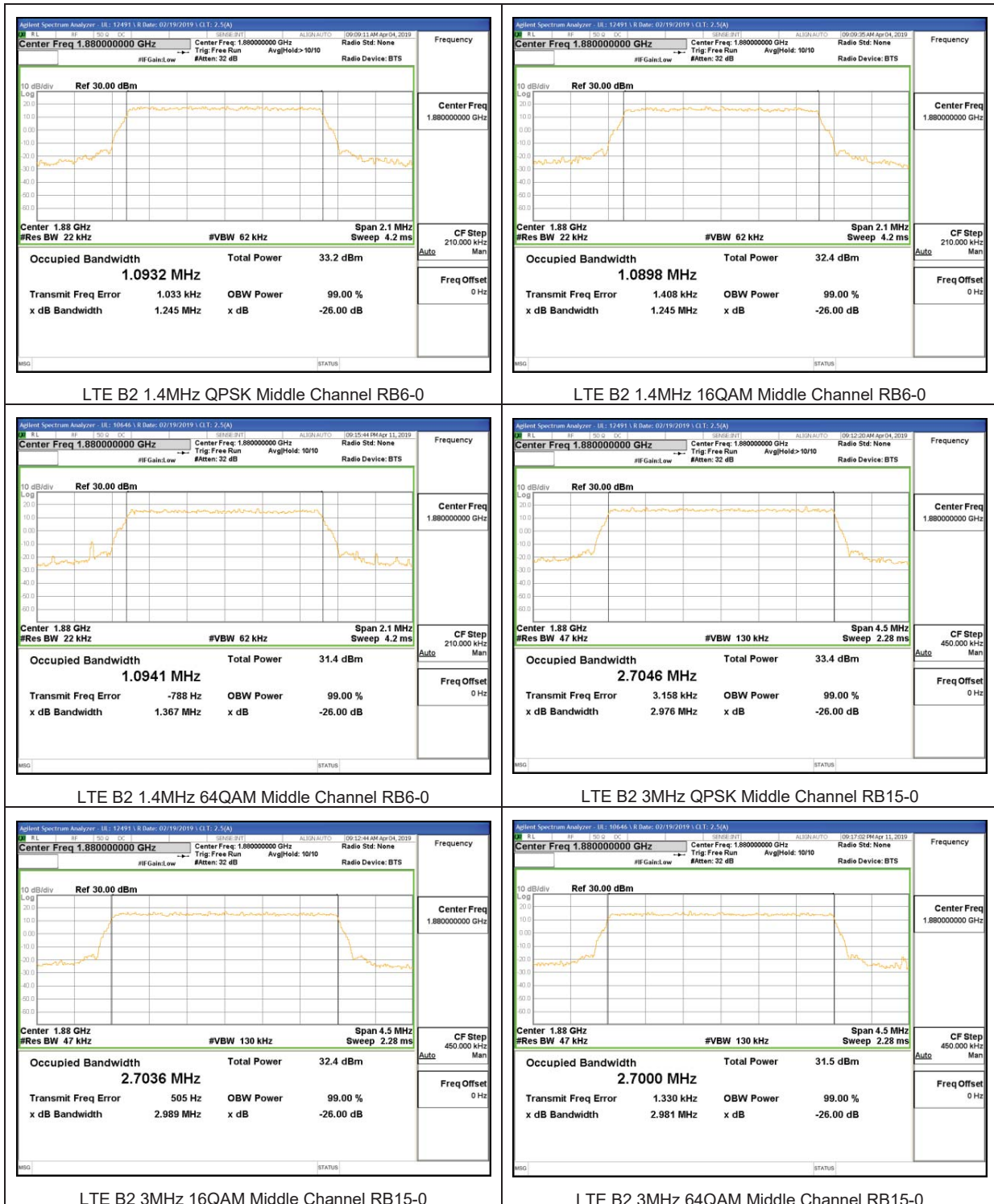
LTE BAND 48

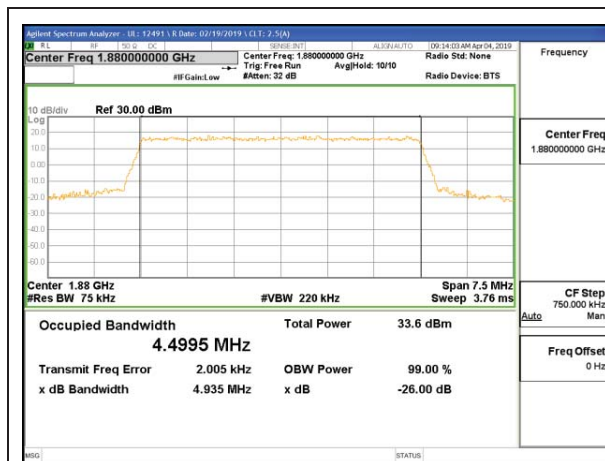
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE 48	5MHz, QPSK	25/0	3625	4.4833	4.868
	5MHz, 16QAM			4.4817	4.822
	5MHz 64QAM			4.4737	4.869
	10MHz, QPSK	50/0		9.0044	10.01
	10MHz, 16QAM			8.9676	10.12
	10MHz 64QAM			8.9473	10.09
	15MHz, QPSK	75/0		13.436	14.63
	15MHz, 16QAM			13.463	15.01
	15MHz 64QAM			13.401	14.92
	20MHz, QPSK	100/0		17.898	19.25
	20MHz, 16QAM			17.980	19.22
	20MHz 64QAM			17.922	19.22

LTE BAND 66

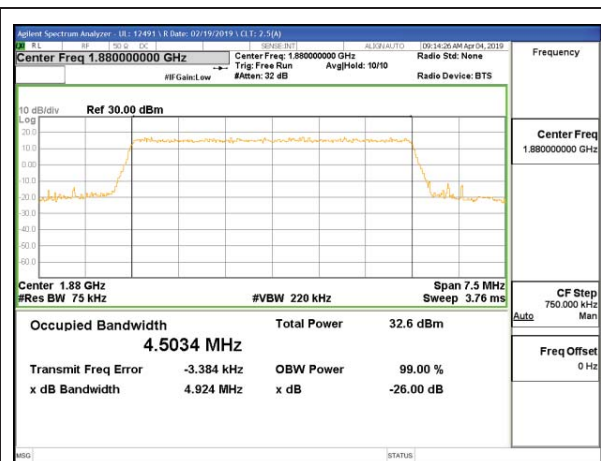
Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 66	1.4MHz, QPSK	6/0	1745.0	1.0891	1.240
	1.4MHz, 16QAM			1.0953	1.244
	1.4MHz 64QAM			1.0904	1.245
	3MHz, QPSK	15/0		2.7132	2.984
	3MHz, 16QAM			2.6971	2.989
	3MHz 64QAM			2.7023	2.988
	5MHz, QPSK	25/0		4.4994	4.922
	5MHz, 16QAM			4.4977	4.920
	5MHz 64QAM			4.4935	4.904
	10MHz, QPSK	50/0		9.0076	10.37
	10MHz, 16QAM			8.9951	10.43
	10MHz 64QAM			9.0141	10.24
	15MHz, QPSK	75/0		13.490	15.47
	15MHz, 16QAM			13.488	15.52
	15MHz 64QAM			13.470	15.26
	20MHz, QPSK	100/0		17.938	19.96
	20MHz, 16QAM			17.995	19.82
	20MHz 64QAM			17.968	19.78

8.1.1. LTE BAND 2

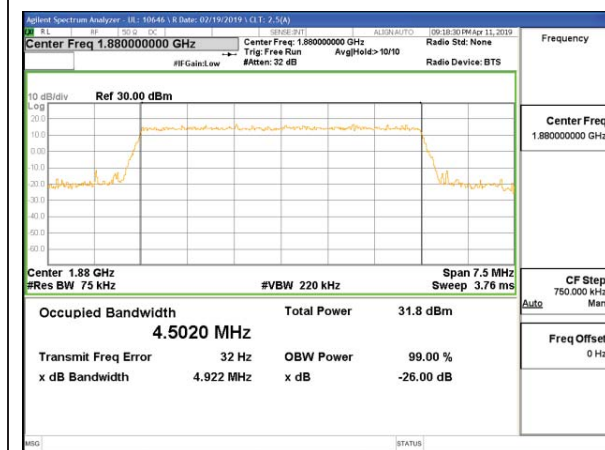




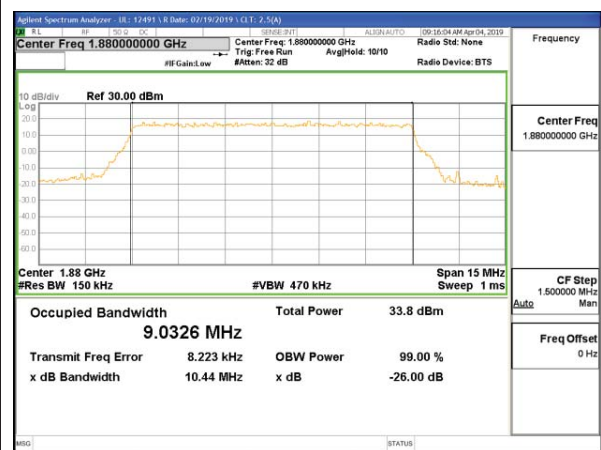
LTE B2 5MHz QPSK Middle Channel RB25-0



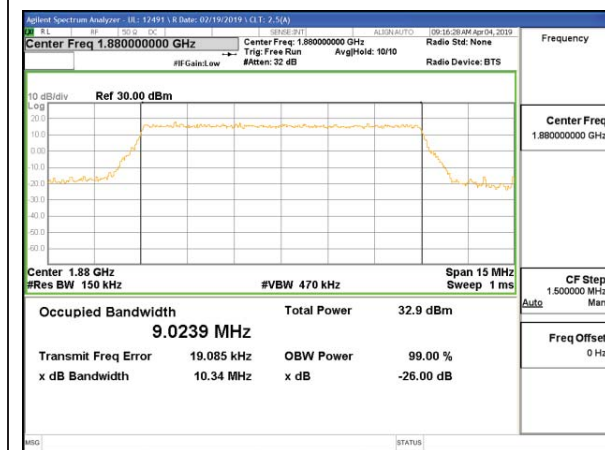
LTE B2 5MHz 16QAM Middle Channel RB25-0



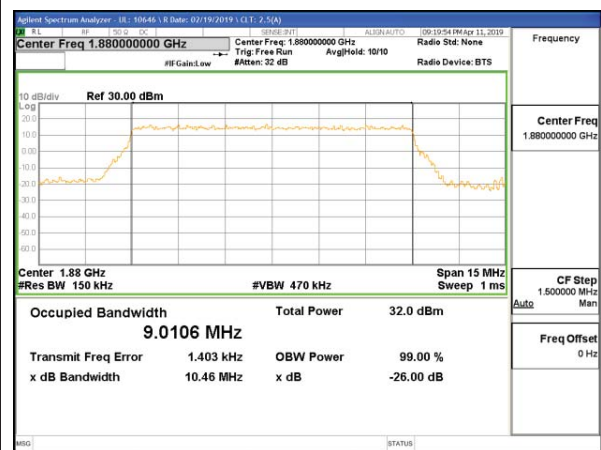
LTE B2 5MHz 64QAM Middle Channel RB25-0



LTE B2 10MHz QPSK Middle Channel RB50-0



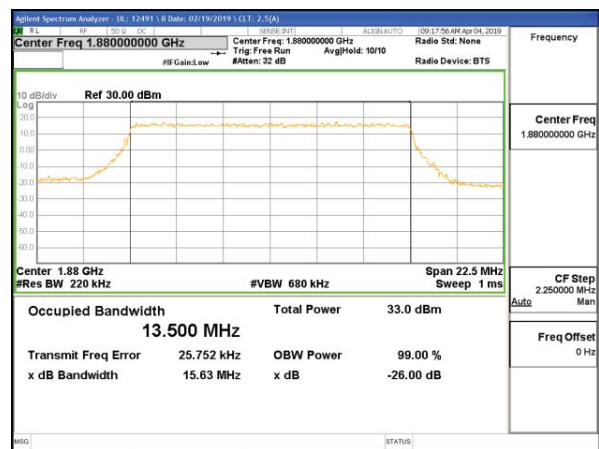
LTE B2 10MHz 16QAM Middle Channel RB50-0



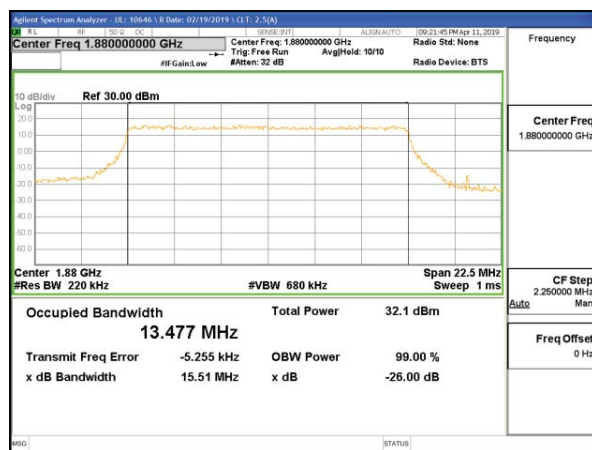
LTE B2 10MHz 64QAM Middle Channel RB50-0



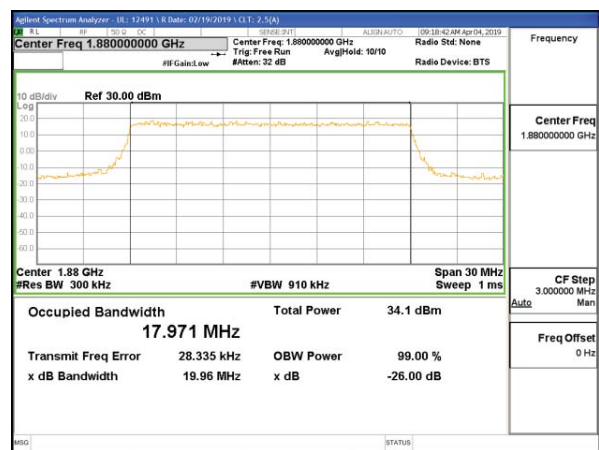
LTE B2 15MHz QPSK Middle Channel RB75-0



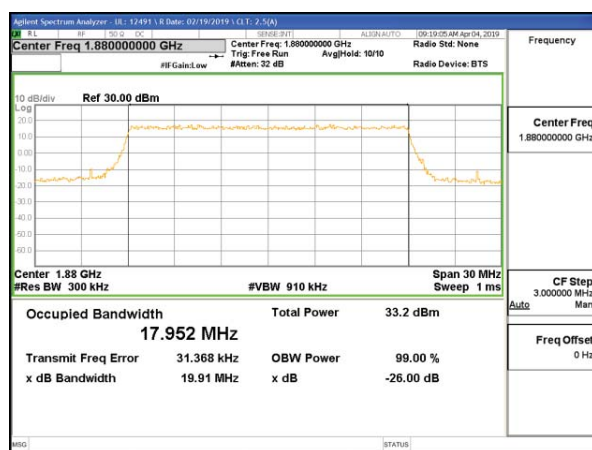
LTE B2 15MHz 16QAM Middle Channel RB75-0



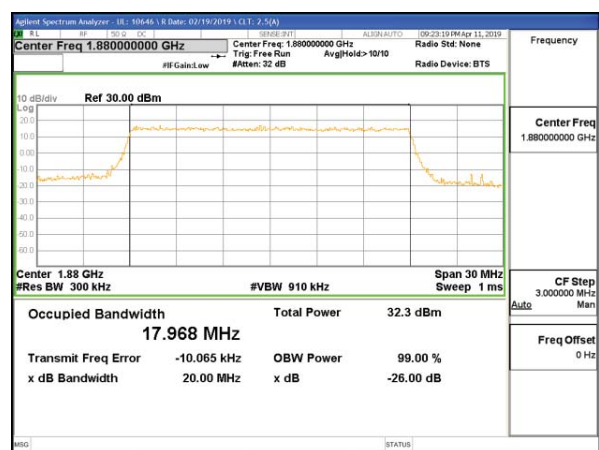
LTE B2 15MHz 64QAM Middle Channel RB75-0



LTE B2 20MHz QPSK Middle Channel RB100-0



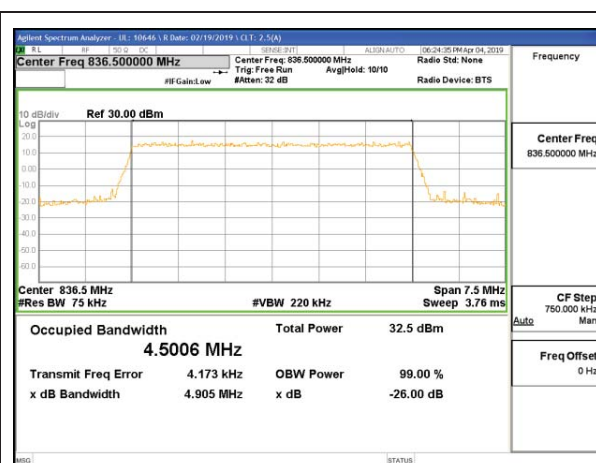
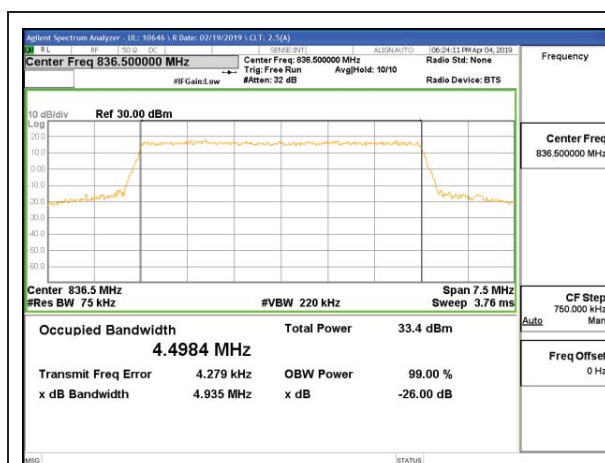
LTE B2 20MHz 16QAM Middle Channel RB100-0



LTE B2 20MHz 64QAM Middle Channel RB100-0

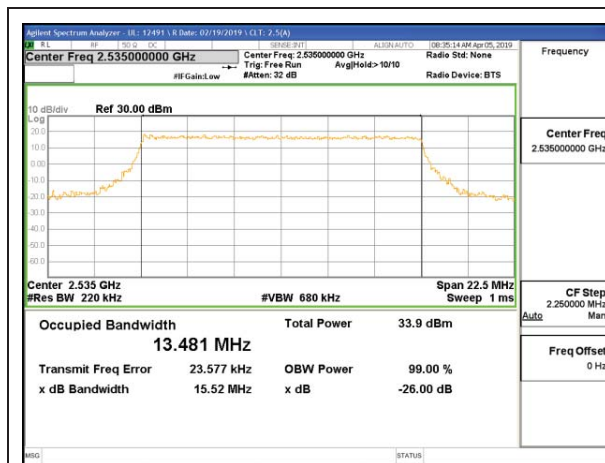
8.1.2. LTE BAND 5



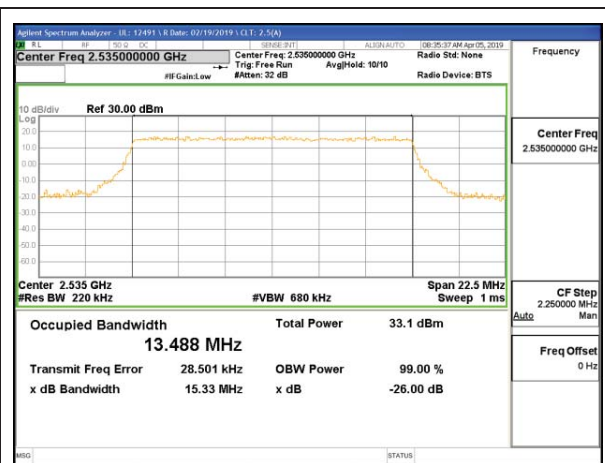


8.1.3. LTE BAND 7

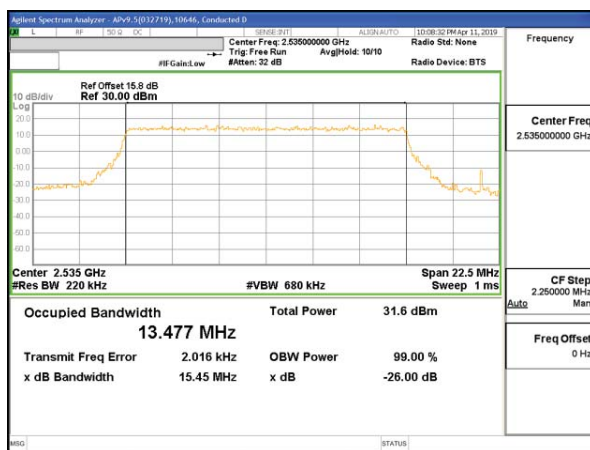




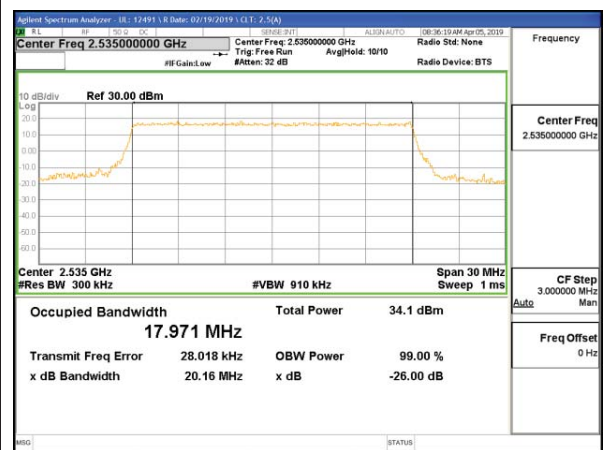
LTE B7 15MHz QPSK Middle Channel RB75-0



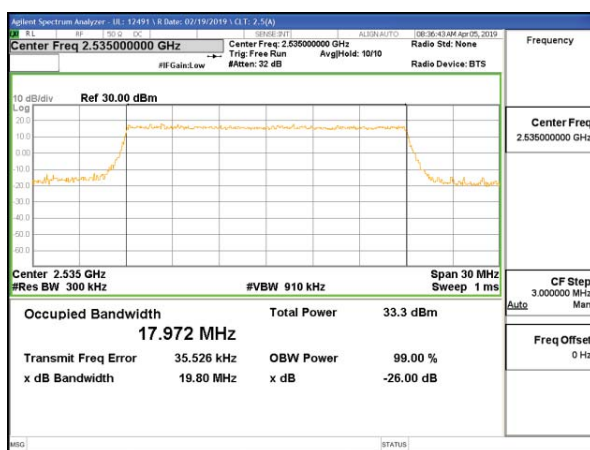
LTE B7 15MHz 16QAM Middle Channel RB75-0



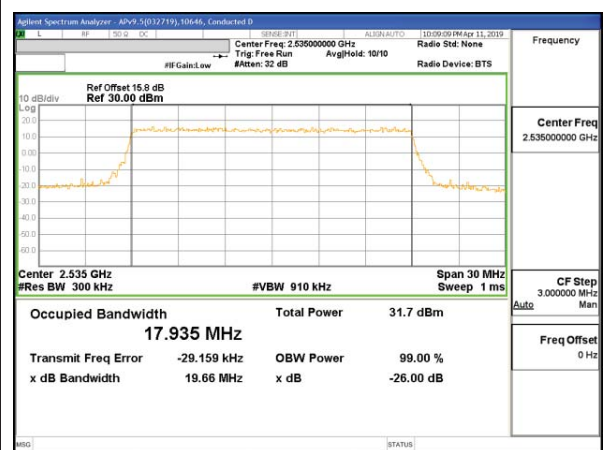
LTE B7 15MHz 64QAM Middle Channel RB75-0



LTE B7 20MHz QPSK Middle Channel RB100-0



LTE B7 20MHz 16QAM Middle Channel RB100-0



LTE B7 20MHz 64QAM Middle Channel RB100-0

8.1.4. LTE BAND 12

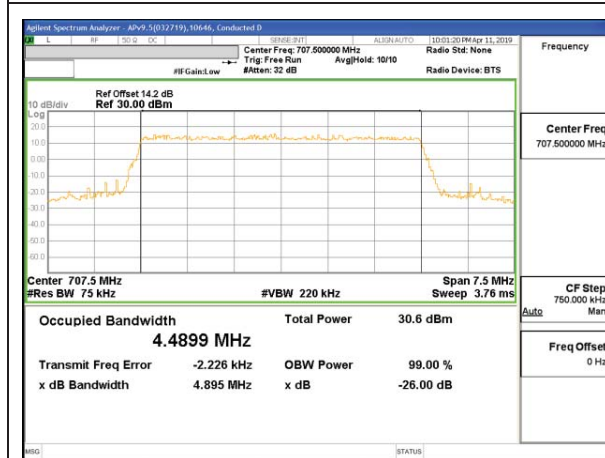




LTE B12 5MHz QPSK Middle Channel RB25-0



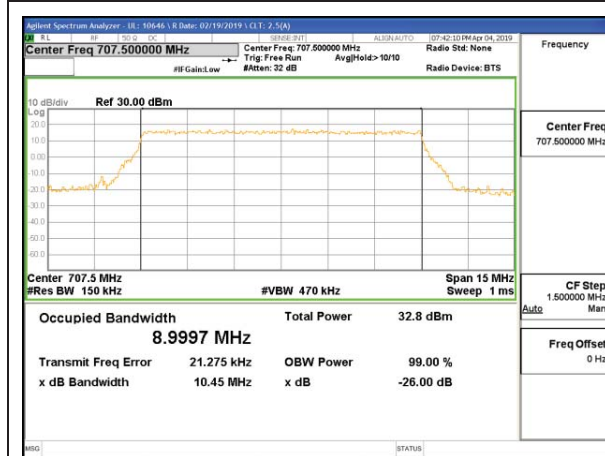
LTE B12 5MHz 16QAM Middle Channel RB25-0



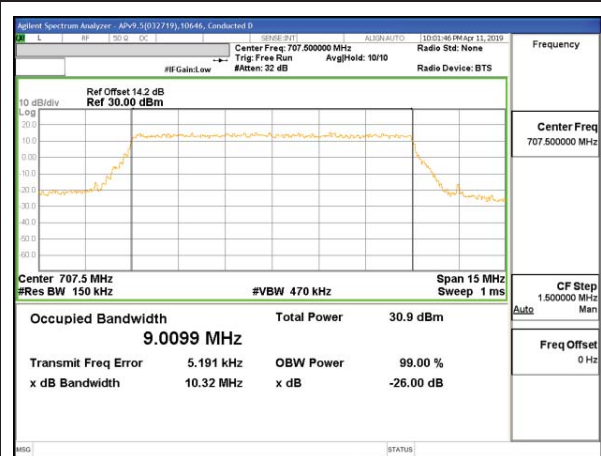
LTE B12 5MHz 64QAM Middle Channel RB25-0



LTE B12 10MHz QPSK Middle Channel RB50-0



LTE B12 10MHz 16QAM Middle Channel RB50-0



LTE B12 10MHz 64QAM Middle Channel RB50-0

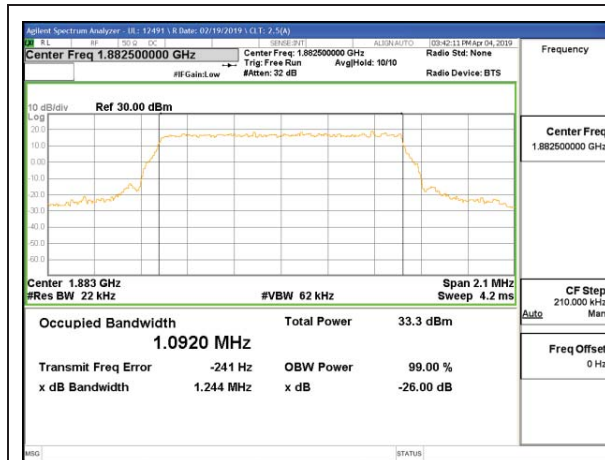
8.1.5. LTE BAND 13



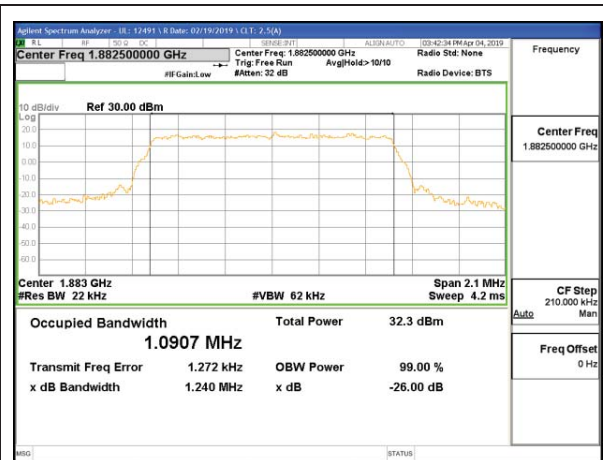
8.1.6. LTE BAND 17



8.1.7. LTE BAND 25



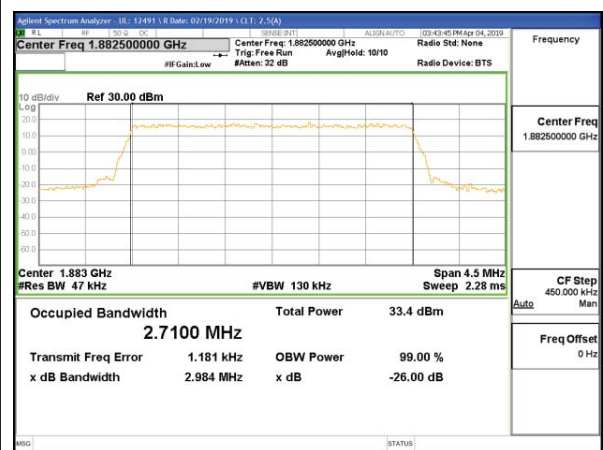
LTE B25 1.4MHz QPSK Middle Channel RB6-0



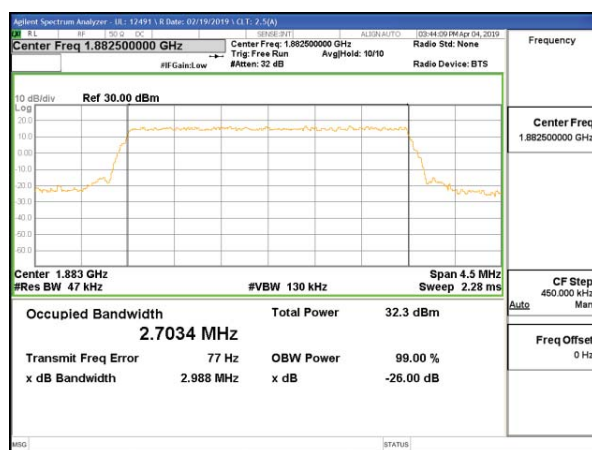
LTE B25 1.4MHz 16QAM Middle Channel RB6-0



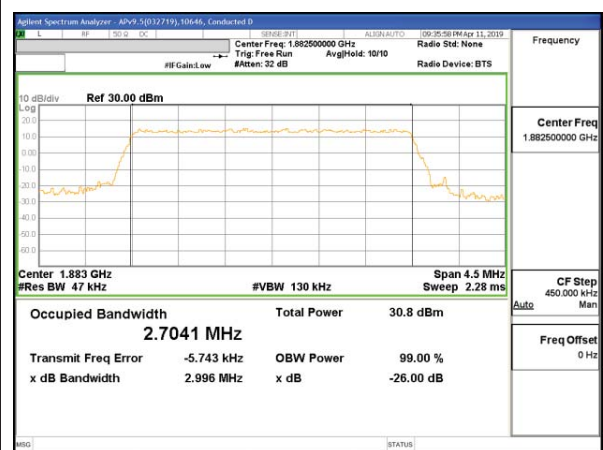
LTE B25 1.4MHz 64QAM Middle Channel RB6-0



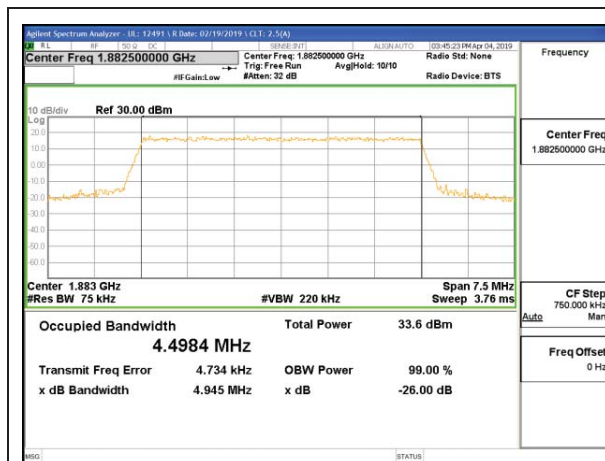
LTE B25 3MHz QPSK Middle Channel RB15-0



LTE B25 3MHz 16QAM Middle Channel RB15-0



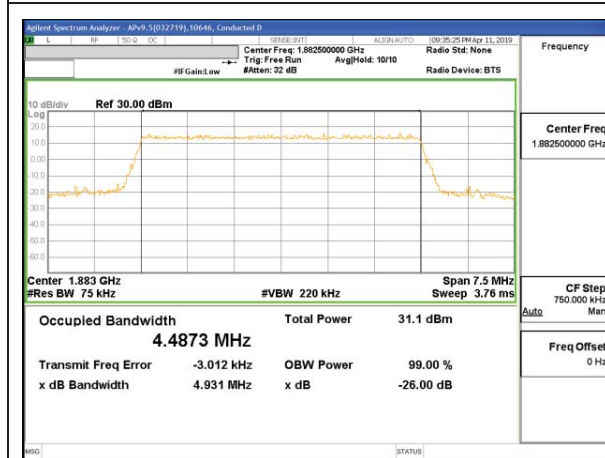
LTE B25 3MHz 64QAM Middle Channel RB15-0



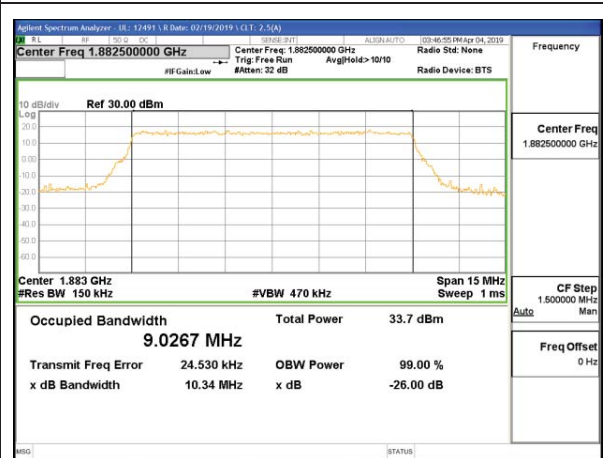
LTE B25 5MHz QPSK Middle Channel RB25-0



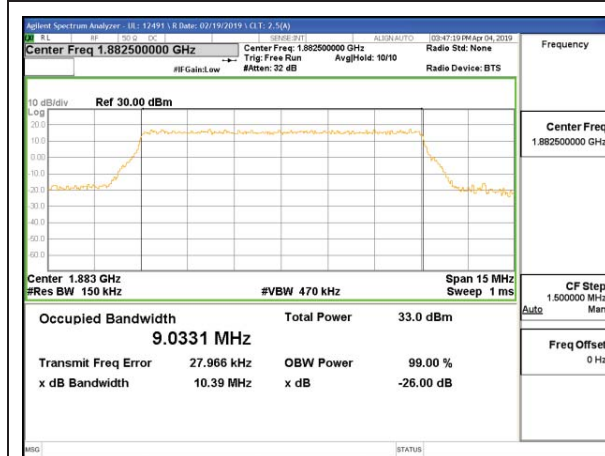
LTE B25 5MHz 16QAM Middle Channel RB25-0



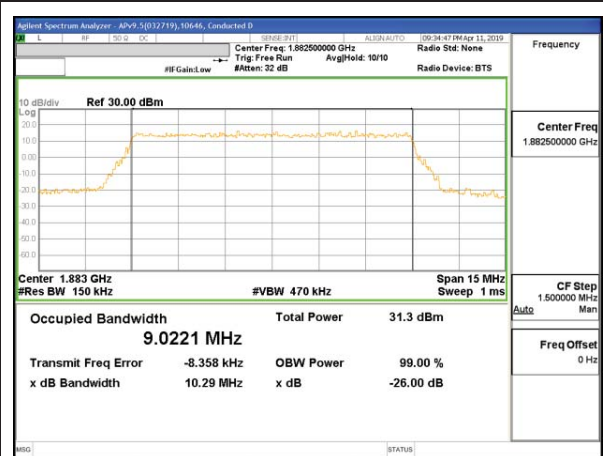
LTE B25 5MHz 64QAM Middle Channel RB25-0



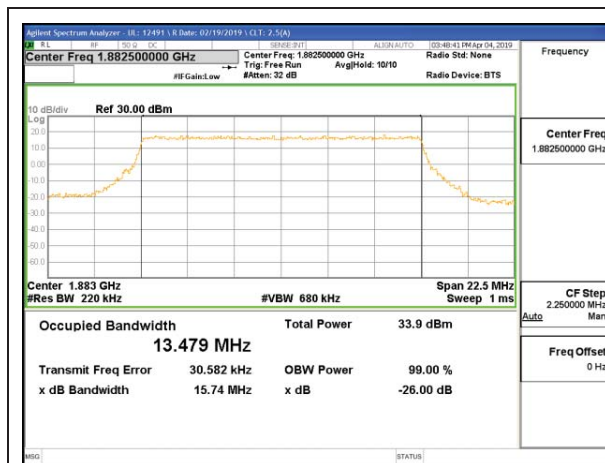
LTE B25 10MHz QPSK Middle Channel RB50-0



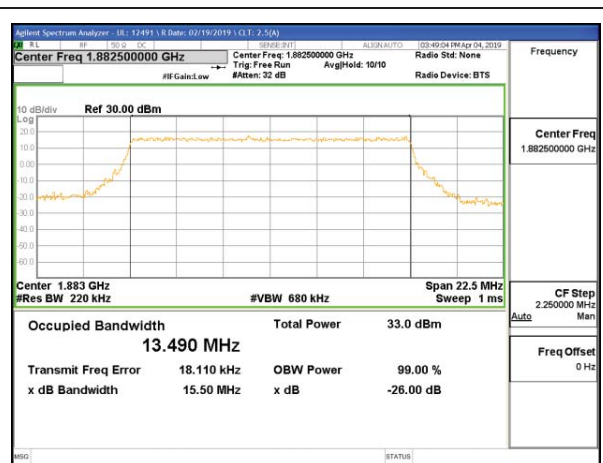
LTE B25 10MHz 16QAM Middle Channel RB50-0



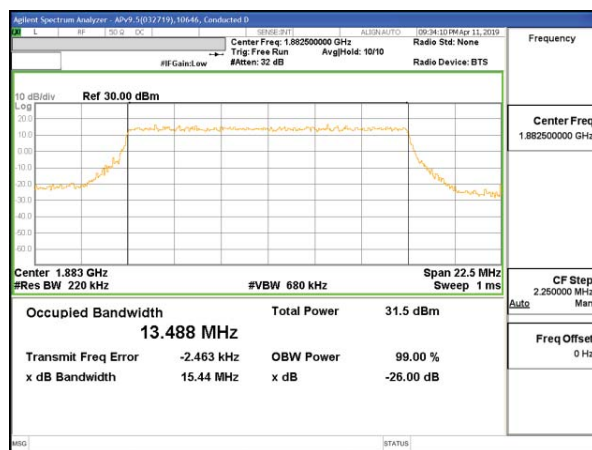
LTE B25 10MHz 64QAM Middle Channel RB50-0



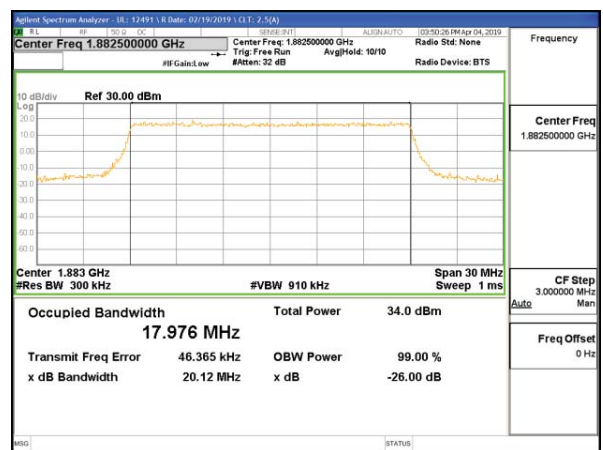
LTE B25 15MHz QPSK Middle Channel RB75-0



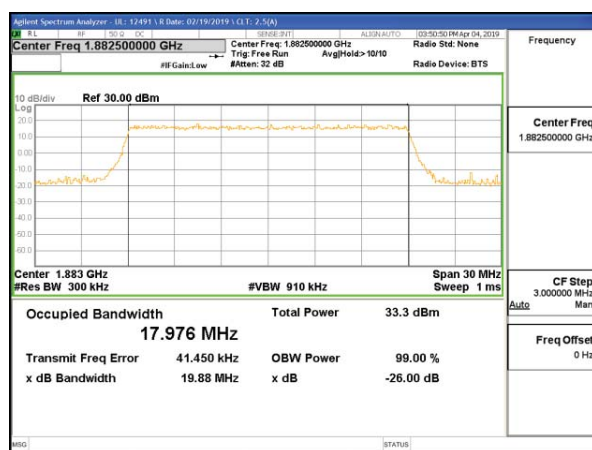
LTE B25 15MHz 16QAM Middle Channel RB75-0



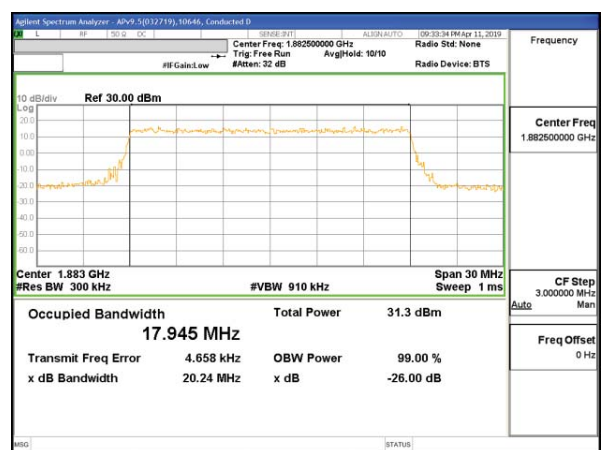
LTE B25 15MHz 64QAM Middle Channel RB75-0



LTE B25 20MHz QPSK Middle Channel RB100-0

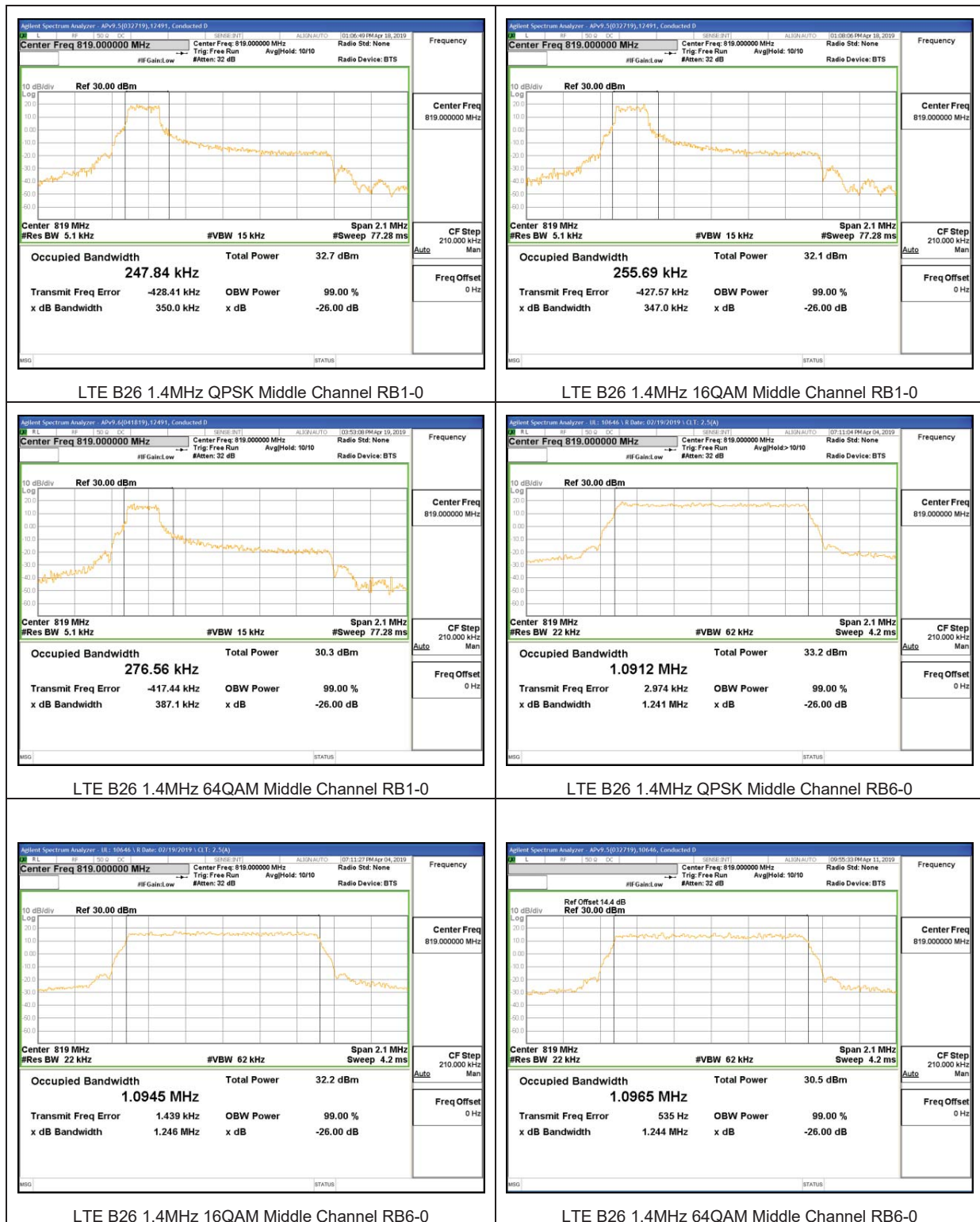


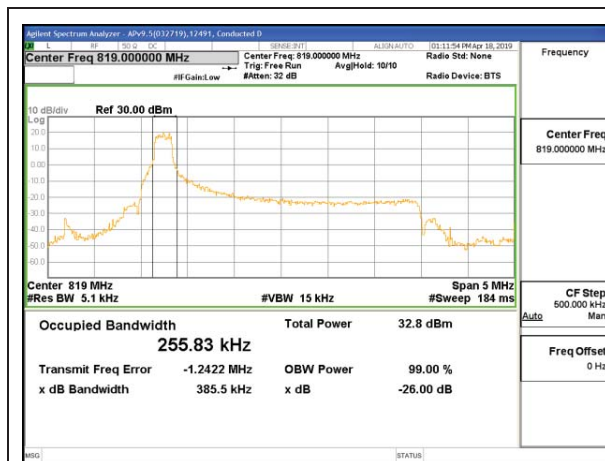
LTE B25 20MHz 16QAM Middle Channel RB100-0



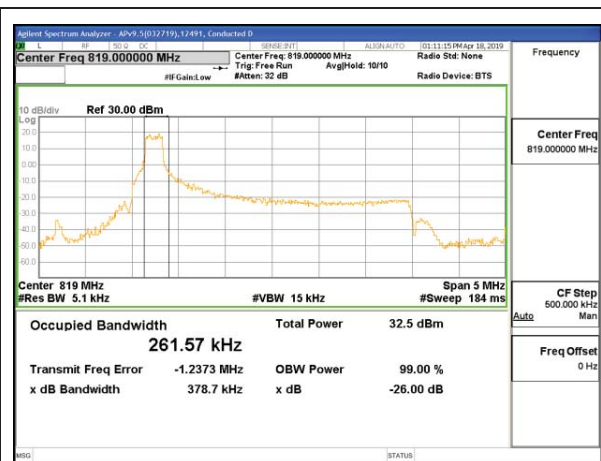
LTE B25 20MHz 64QAM Middle Channel RB100-0

8.1.8. LTE BAND 26 (PART 90S)





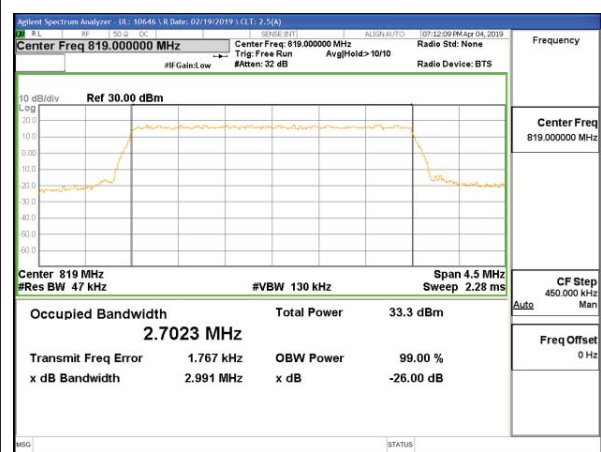
LTE B26 3MHz QPSK Middle Channel RB1-0



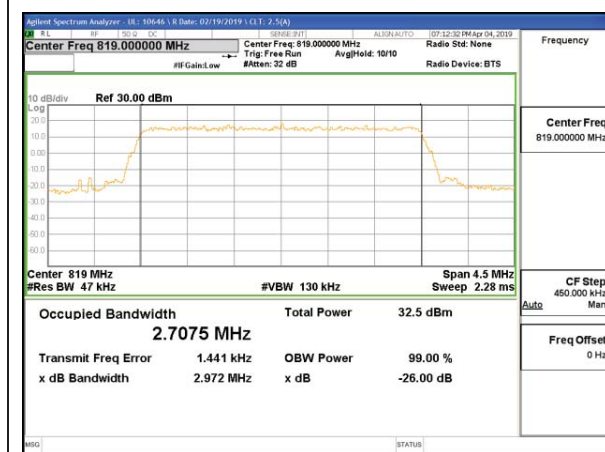
LTE B26 3MHz 16QAM Middle Channel RB1-0



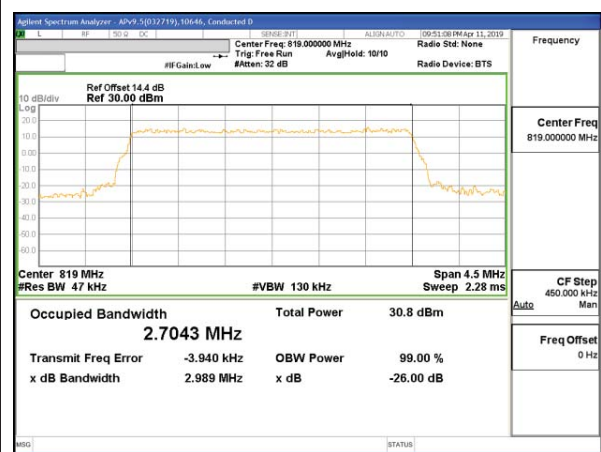
LTE B26 3MHz 64QAM Middle Channel RB1-0



LTE B26 3MHz QPSK Middle Channel RB15-0



LTE B26 3MHz 16QAM Middle Channel RB15-0



LTE B26 3MHz 64QAM Middle Channel RB15-0