



CERTIFICATION TEST REPORT

Report Number. : 12258201-E7V2

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

Model : A2106

FCC ID : BCG-E3238A

EUT Description : SMARTPHONE

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

Date Of Issue:
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Revision History



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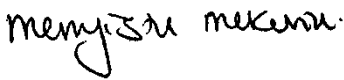
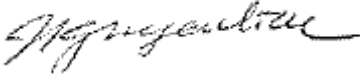
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1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	APPLE, INC. 1 APPLE PARK WAY CUPERTINO, CA 95014, U.S.A.
Model	A2106
FCC ID	BCG-E3238A
EUT Description	SMARTPHONE
Serial Number	C7CWN00RK3MY
Date Tested	MARCH 19, 2018 to AUGUST 21, 2018
Applicable Standards	CFR47 PART 22H, 24E, 27, 90S, and 90R
Test Results	COMPLIES

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

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government (NIST Handbook 150, Annex A). This report is written to support regulatory compliance of the applicable standards stated above.

Approved & Released By: 	Prepared By: 
Mengistu Mekuria Lead Test Engineer UL Verification Services Inc.	Lieu Nguyen Laboratory Engineer UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.26:2015, CFR 47 Part 2, Part 22, Part 24, Part 27, Part 90S, 90R, KDB 971168 D01 v03r01/ D02 v02r01, and KDB 412172 D01 Determining ERP and EIRP v01r01.

3. FACILITIES AND ACCREDITATION

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

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

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at [NVLAP Lab Search](#).

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

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

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

5.2. MAXIMUM OUTPUT POWER

ERP/EIRP LIMIT

§2.1046, §22.913, §24.232, §27.50, §90.635 and §90.541

EIRP/ERP TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 D01 Section 5.6
KDB 412172 D01 Determining ERP and EIRP v01r01

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

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)		0.20						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1909.3	25.5	25.70	0.372	1090.9	1M09G7W
	16QAM			24.8	25.00	0.316	1094.7	1M09D7W
	64QAM			23.7	23.90	0.245	1094.6	1M09D7W
3.0	QPSK	1851.5	1908.5	25.5	25.70	0.372	2706.8	2M71G7W
	16QAM			24.8	25.00	0.316	2701.0	2M70D7W
	64QAM			23.6	23.80	0.240	2708.6	2M71D7W
5.0	QPSK	1852.5	1907.5	25.5	25.70	0.372	4499.5	4M50G7W
	16QAM			25.0	25.20	0.331	4502.3	4M50D7W
	64QAM			23.8	24.00	0.251	4496.6	4M50D7W
10.0	QPSK	1855.0	1905.0	25.5	25.70	0.372	9012.3	9M01G7W
	16QAM			24.8	25.00	0.316	9005.2	9M01D7W
	64QAM			23.6	23.80	0.240	8993.8	8M99D7W
15.0	QPSK	1857.5	1902.5	25.5	25.70	0.372	13483.0	13M5G7W
	16QAM			24.7	24.90	0.309	13469.0	13M5D7W
	64QAM			23.6	23.80	0.240	13541.0	13M5D7W
20.0	QPSK	1860.0	1900.0	25.5	25.70	0.372	17991.0	18M0G7W
	16QAM			24.8	25.00	0.316	17980.0	18M0D7W
	64QAM			23.8	24.00	0.251	17953.1	18M0D7W

LTE BAND 5

Part 22H								
ERP Limit (W)		7.00						
Antenna Gain (dBi)		-3.30						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	824.7	848.3	25.5	20.05	0.101	1091.0	1M09G7W
	16QAM			24.8	19.35	0.086	1093.2	1M09D7W
	64QAM			23.6	18.15	0.065	1077.4	1M08D7W
3.0	QPSK	825.5	847.5	25.5	20.05	0.101	2703.8	2M70G7W
	16QAM			24.7	19.25	0.084	2706.4	2M71D7W
	64QAM			23.8	18.35	0.068	2689.4	2M69D7W
5.0	QPSK	826.5	846.5	25.5	20.05	0.101	4500.7	4M50G7W
	16QAM			24.9	19.45	0.088	4499.0	4M50D7W
	64QAM			23.8	18.35	0.068	4487.5	4M49D7W
10.0	QPSK	829.0	844.0	25.5	20.05	0.101	9019.0	9M02G7W
	16QAM			24.7	19.25	0.084	9014.6	9M01D7W
	64QAM			23.7	18.25	0.067	8929.2	8M93D7W

LTE BAND 7

Part 27 / RSS 199								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-0.90						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2502.5	2567.5	25.5	24.60	0.288	4495.5	4M50G7W
	16QAM			24.8	23.90	0.245	4503.5	4M50D7W
	64QAM			23.5	22.60	0.182	4498.0	4M50D7W
10.0	QPSK	2505.0	2565.0	25.5	24.60	0.288	9003.5	9M00G7W
	16QAM			24.8	23.90	0.245	9011.4	9M01D7W
	64QAM			23.5	22.60	0.182	8983.9	8M98D7W
15.0	QPSK	2507.5	2562.5	25.5	24.60	0.288	13484.0	13M5G7W
	16QAM			24.6	23.70	0.234	13496.0	13M5D7W
	64QAM			24.3	23.40	0.219	13495.0	13M5D7W
20.0	QPSK	2510.0	2560.0	25.5	24.60	0.288	17982.0	18M0G7W
	16QAM			24.8	23.90	0.245	17932.0	17M9D7W
	64QAM			24.4	23.50	0.224	17983.0	18M0D7W

LTE BAND 12

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	699.7	715.3	25.5	19.75	0.094	1093.3	1M09G7W
	16QAM			24.6	18.85	0.077	1093.3	1M09D7W
	64QAM			23.7	17.95	0.062	1093.6	1M09D7W
3.0	QPSK	700.5	714.5	25.5	19.75	0.094	2703.7	2M70G7W
	16QAM			24.7	18.95	0.079	2712.0	2M71D7W
	64QAM			23.6	17.85	0.061	2712.1	2M71D7W
5.0	QPSK	701.5	713.5	25.5	19.75	0.094	4495.9	4M50G7W
	16QAM			24.8	19.05	0.080	4498.8	4M50D7W
	64QAM			23.8	18.05	0.064	4507.4	4M51D7W
10.0	QPSK	704.0	711.0	25.5	19.75	0.094	8984.0	8M98G7W
	16QAM			24.8	19.05	0.080	8952.0	8M95D7W
	64QAM			23.6	17.85	0.061	8982.4	8M98D7W

LTE BAND 13

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-2.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	779.5	784.5	25.5	20.75	0.119	4505.6	4M51G7W
	16QAM			24.9	20.15	0.104	4504.5	4M50D7W
	64QAM			23.8	19.05	0.080	4502.1	4M50D7W
10.0	QPSK	782.0	782.0	25.5	20.75	0.119	8976.5	8M98G7W
	16QAM			24.9	20.15	0.104	8952.7	8M95D7W
	64QAM			23.9	19.15	0.082	8912.7	8M91D7W

LTE BAND 14

Part 90R								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-2.70						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	790.5	795.5	25.5	20.65	0.116	4496.4	4M50G7W
	16QAM			24.8	19.95	0.099	4490.9	4M49D7W
	64QAM			23.7	18.85	0.077	4496.2	4M50D7W
10.0	QPSK	793.0	793.0	25.5	20.65	0.116	8995.0	9M00G7W
	16QAM			24.7	19.85	0.097	8991.7	8M99D7W
	64QAM			23.7	18.85	0.077	8996.6	9M00D7W

LTE BAND 17

Part 27								
ERP Limit (W)		3.00						
Antenna Gain (dBi)		-3.60						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	ERP Average (dBm)	ERP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	706.5	713.5	25.5	19.75	0.094	4501.2	4M50G7W
	16QAM			24.9	19.15	0.082	4503.0	4M50D7W
	64QAM			23.7	17.95	0.062	4501.9	4M50D7W
10.0	QPSK	709.0	711.0	25.5	19.75	0.094	8992.6	8M99G7W
	16QAM			24.7	18.95	0.079	8995.3	9M00D7W
	64QAM			23.6	17.85	0.061	8908.0	8M91D7W

LTE BAND 25

Part 24 / RSS 133								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		0.20						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1850.7	1914.3	25.5	25.70	0.372	1086.6	1M09G7W
	16QAM			24.8	25.00	0.316	1087.1	1M09D7W
	64QAM			23.8	24.00	0.251	1092.7	1M09D7W
3.0	QPSK	1851.5	1913.5	25.5	25.70	0.372	2699.4	2M70G7W
	16QAM			24.7	24.90	0.309	2684.5	2M68D7W
	64QAM			23.5	23.70	0.234	2703.8	2M70D7W
5.0	QPSK	1852.5	1912.5	25.5	25.70	0.372	4508.5	4M51G7W
	16QAM			25.0	25.20	0.331	4502.3	4M50D7W
	64QAM			23.8	24.00	0.251	4502.4	4M50D7W
10.0	QPSK	1855.0	1910.0	25.5	25.70	0.372	8993.5	8M99G7W
	16QAM			24.7	24.90	0.309	9024.9	9M02D7W
	64QAM			23.6	23.80	0.240	8994.9	8M99D7W
15.0	QPSK	1857.5	1907.5	25.5	25.70	0.372	13425.9	13M4G7W
	16QAM			24.8	25.00	0.316	13439.7	13M4D7W
	64QAM			23.6	23.80	0.240	13505.0	13M5D7W
20.0	QPSK	1860.0	1905.0	25.5	25.70	0.372	17939.7	17M9G7W
	16QAM			24.4	24.60	0.288	17863.1	17M9D7W
	64QAM			23.3	23.50	0.224	17856.3	17M9D7W

LTE BAND 26 (Part 90S)

Part 90S								
ERP Limit (W)		100.00						
Antenna Gain (dBi)		-3.90						
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	25.5	19.45	0.088	1093.1	1M09G7W
	16QAM			24.8	18.75	0.075	1092.4	1M09D7W
	64QAM			23.9	17.85	0.061	1081.7	1M08D7W
3.0	QPSK	815.5	822.5	25.5	19.45	0.088	2705.2	2M71G7W
	16QAM			24.6	18.55	0.072	2705.9	2M71D7W
	64QAM			23.7	17.65	0.058	2685.7	2M69D7W
5.0	QPSK	816.5	821.5	25.5	19.45	0.088	4523.6	4M52G7W
	16QAM			24.9	18.85	0.077	4496.2	4M50D7W
	64QAM			23.9	17.85	0.061	4467.1	4M47D7W
10.0	QPSK	819.0	819.0	25.5	19.45	0.088	9011.9	9M01G7W
	16QAM			24.8	18.75	0.075	9010.2	9M01D7W
	64QAM			23.9	17.85	0.061	8936.9	8M94D7W

LTE BAND 30

Part 27 / RSS 195								
EIRP Limit (W)		0.25						
Antenna Gain (dBi)		-1.80						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
5.0	QPSK	2307.5	2312.5	23.5	21.70	0.148	4498.7	4M50G7W
	16QAM			23.0	21.20	0.132	4510.4	4M51D7W
	64QAM			21.8	20.00	0.100	4498.8	4M50D7W
10.0	QPSK	2310.0	2310.0	23.5	21.70	0.148	8978.0	8M98G7W
	16QAM			22.6	20.80	0.120	8989.3	8M99D7W
	64QAM			21.4	19.60	0.091	8983.7	8M98D7W

LTE BAND 41

Part 27								
EIRP Limit (W)		2.00						
Antenna Gain (dBi)		-0.90						
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	27.0	26.10	0.407	4494.1	4M49G7W
	16QAM			25.9	25.00	0.316	4507.0	4M51D7W
	64QAM			24.9	24.00	0.251	4501.5	4M50D7W
10.0	QPSK	2501.0	2685.0	27.0	26.10	0.407	8985.3	8M99G7W
	16QAM			25.9	25.00	0.316	8978.2	8M98D7W
	64QAM			24.7	23.80	0.240	9002.5	9M00D7W
15.0	QPSK	2503.5	2682.5	27.0	26.10	0.407	13394.0	13M4G7W
	16QAM			26.0	25.10	0.324	13493.2	13M5D7W
	64QAM			25.1	24.20	0.263	13498.0	13M5D7W
20.0	QPSK	2506.0	2680.0	27.0	26.10	0.407	17909.7	17M9G7W
	16QAM			26.4	25.50	0.355	17942.2	17M9D7W
	64QAM			25.4	24.50	0.282	17954.0	18M0D7W

LTE BAND 66

Part 27 / RSS 139								
EIRP Limit (W)		1.00						
Antenna Gain (dBi)		-0.80						
Bandwidth (MHz)	Modulation	Low Frequency (MHz)	Upper Frequency (MHz)	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Average (W)	99% BW (kHz)	Emission Designator
1.4	QPSK	1710.7	1779.3	25.5	24.70	0.295	1089.8	1M09G7W
	16QAM			24.8	24.00	0.251	1087.2	1M09D7W
	64QAM			23.0	22.20	0.166	1090.6	1M09D7W
3.0	QPSK	1711.5	1778.5	25.5	24.70	0.295	2690.4	2M69G7W
	16QAM			25.0	24.20	0.263	2684.0	2M68D7W
	64QAM			23.2	22.40	0.174	2709.3	2M71D7W
5.0	QPSK	1712.5	1777.5	25.5	24.70	0.295	4506.1	4M51G7W
	16QAM			24.9	24.10	0.257	4495.4	4M50D7W
	64QAM			23.7	22.90	0.195	4493.6	4M49D7W
10.0	QPSK	1715.0	1775.0	25.5	24.70	0.295	8993.0	8M99G7W
	16QAM			24.8	24.00	0.251	8998.6	9M00D7W
	64QAM			23.7	22.90	0.195	8984.3	8M98D7W
15.0	QPSK	1717.5	1772.5	25.5	24.70	0.295	13451.0	13M5G7W
	16QAM			24.9	24.10	0.257	13436.0	13M4D7W
	64QAM			23.5	22.70	0.186	13493.0	13M5D7W
20.0	QPSK	1720.0	1770.0	25.5	24.70	0.295	17908.2	17M9G7W
	16QAM			24.8	24.00	0.251	17955.2	18M0D7W
	64QAM			23.6	22.80	0.191	17949.0	17M9D7W

5.3. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 00.28.02.

5.4. MAXIMUM ANTENNA GAIN

Please see table below:

Frequency (MHz)	Ant 1 Gain (dBi)	Ant 2 Gain (dBi)
660	-4.7	-7.5
670	-4.7	-7.2
680	-4.9	-7.0
690	-5.4	-6.9
700	-4.9	-7.0
710	-4.1	-6.8
720	-3.6	-6.8
770	-2.6	-5.5
780	-2.6	-5.6
790	-2.7	-5.8
800	-3.3	-6.0
810	-6.4	-5.5
820	-5.8	-5.2
830	-3.9	-5.5
840	-3.7	-6.0
850	-3.3	-6.1
860	-3.0	-6.3
1700	-2.7	-3.8
1720	-2.3	-3.5
1740	-2.2	-3.5
1760	-1.5	-3.3
1780	-0.8	-3.0
1840	0.1	-2.1
1860	0.2	-1.6
1880	0.2	-1.3
1900	0.2	-0.7
1920	-0.2	-0.6
2300	-1.9	-2.3
2320	-1.8	-2.8
2500	-0.9	-2.3
2520	-1.0	-1.9
2540	-1.5	-1.7
2560	-1.9	-1.7
2580	-2.1	-1.6
2600	-2.6	-1.8
2620	-3.1	-2.2
2640	-3.6	-2.6
2660	-4.3	-3.3
2680	-5.0	-4.0
2700	-5.1	-4.2

5.5. WORST-CASE CONFIGURATION AND MODE

The EUT supports LTE Bands of:

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

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

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

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

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

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

Radiated test was investigated in three orthogonal orientations X, Y and Z on Ant.1 and Ant.2. It was determined that Y (Landscape) orientation was the worst-case orientation for cell, PCS, Band 7, 12, 66, and 41 on Ant 1 and X (Flatbed) orientation for Cell, PCS, band 7, 12, 66, 41 on Ant 2. without AC/DC adapter or earphone.

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

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

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

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

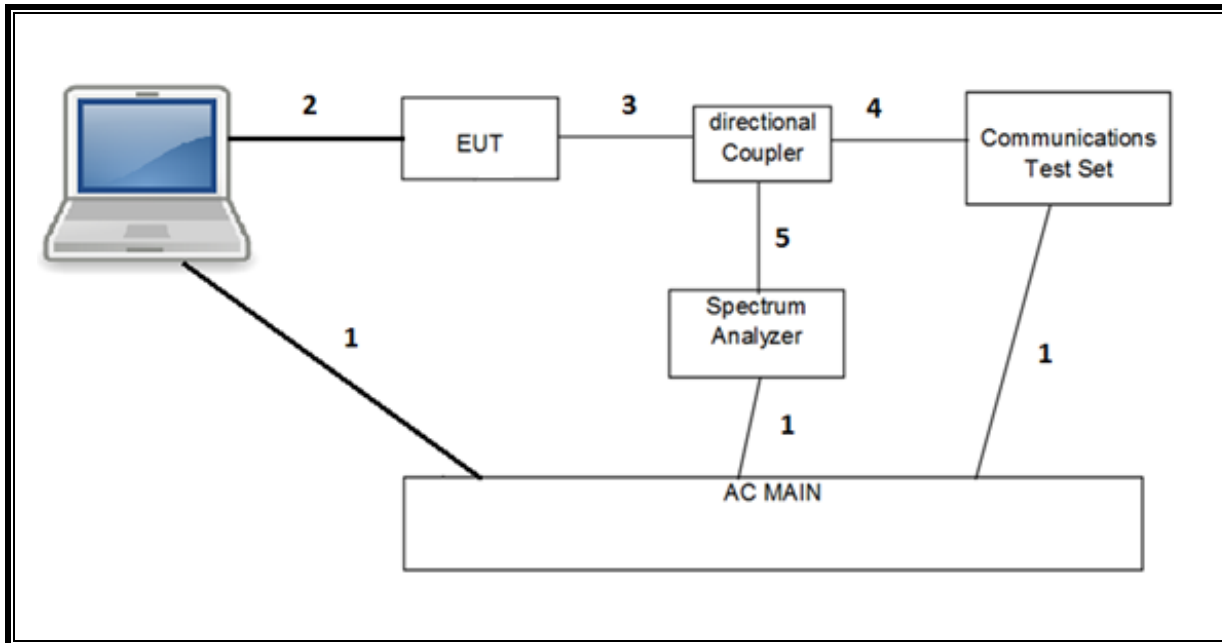
I/O CABLES (RF Conducted Test)

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

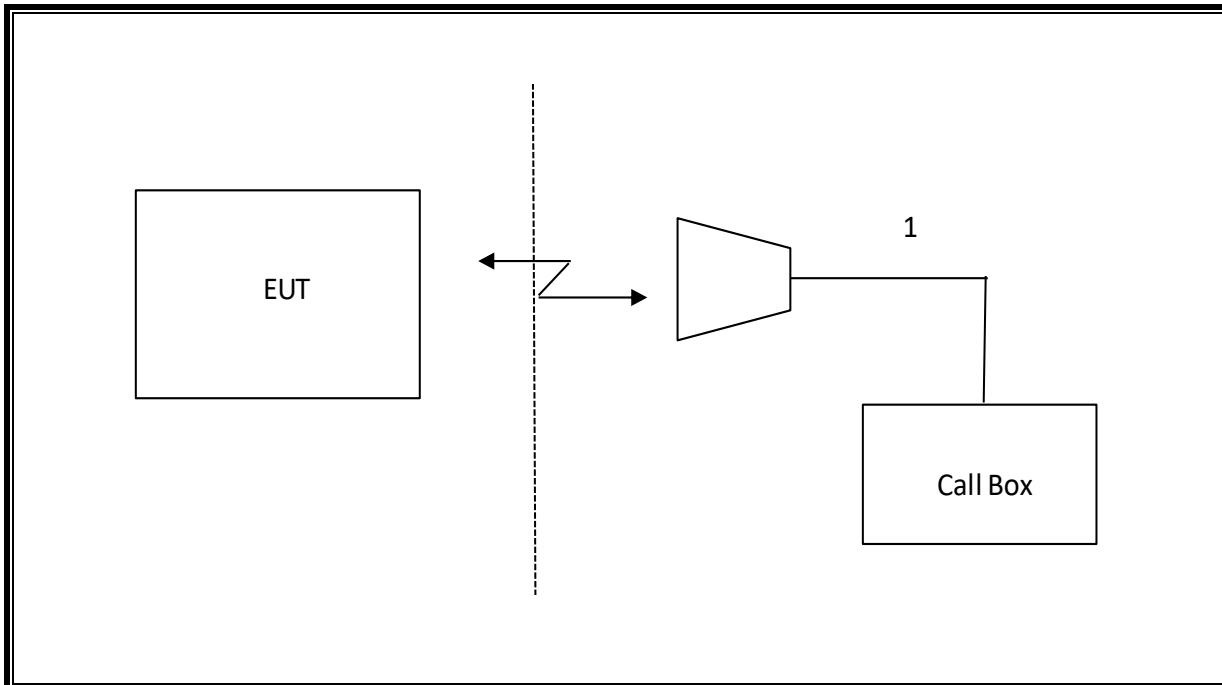
I/O CABLES (RF Radiated Test)

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
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T931	02/24/2019
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T120	07/02/2019
Spectrum Analyzer, PSA, 3Hz to 44GHz	Keysight	E4446A	T177	04/12/2019
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T712	02/08/2019
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T900	06/18/2019
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T741	12/30/2018
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T712	02/08/2019
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	07/06/2019
Amplifier, 1 to 8GHz	Miteq	AFS42-00101800-25-S-42	T1131	12/30/2018
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T711	01/30/2019
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T408	12/15/2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-S-42	T742	12/04/2018
*Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T173	06/24/2018
Power Meter, P-series single channel	Keysight	N1912A	T1244	06/13/2019
Power Sensor	Keysight	N1921A	T1226	08/30/2018
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T978	08/31/2018
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T949	02/21/2019
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T979	02/17/2019
Wideband Communication Test Set, Call Box	Rohde & Schwarz	CMW500	T959	02/17/2019
Antenna, Active Loop 9KHz to 30MHz	ETS-Lindgren	6502	T757	09/14/2018
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	09/05/2018
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T1154	09/05/2018
Directional Coupler	KRYTAR	152610	T1537	04/27/2019
Directional Coupler	KRYTAR	152610	T1536	04/27/2019
Filter, HPF 1.2GHz	MICROTRONICS	WHKX1.2/15G-6ST	T1182	05/19/2019
*Filter, HPF 4GHz	MICROTRONICS	HPM13351	T1239	08/11/2018
Filter, HPF 3.0GHz	MICROTRONICS	HPM17543	T487	12/04/2018
UL AUTOMATION SOFTWARE				
CLT Software	UL	UL RF	Ver 1.7, November 2015	
Power Measurement Software	UL	UL RF	Ver 2.2, June 2017	

NOTES: *The testing is completed before equipment expiration date.

7. RF OUTPUT POWER VERIFICATION

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

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

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

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

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

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

The allowed A-MPR values specified below in Table 6.2.4.-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signaling Value of "NS_01".3

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

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

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

MODES TESTED

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

RESULTS

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

7.1. LTE BAND 2

ID:	10646	Date:	6/3/18
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OUTPUT POWER FOR LTE BAND 2 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			
				Conducted Average			Conducted Average			
				18607	18900	19193	18607	18900	19193	
1.4	QPSK	1	0	25.4	25.2	25.0	19.4	19.4	19.1	
		1	2	25.4	25.2	24.9	19.5	19.4	19.0	
		1	5	25.5	25.3	25.0	19.5	19.5	19.1	
		3	0	25.4	25.2	24.9	19.5	19.5	19.1	
		3	1	25.4	25.3	24.9	19.5	19.5	19.1	
		3	2	25.5	25.3	25.0	19.5	19.5	19.1	
	16QAM	6	0	24.4	24.2	23.9	18.5	18.5	18.0	
		1	0	24.8	24.6	24.3	18.8	18.7	18.4	
		1	2	24.7	24.5	24.2	18.7	18.7	18.3	
		1	5	24.8	24.6	24.3	18.8	18.8	18.3	
		3	0	24.6	24.5	24.1	18.7	18.6	18.2	
		3	1	24.6	24.5	24.1	18.7	18.6	18.2	
	64QAM	3	2	24.6	24.4	24.1	18.7	18.6	18.2	
		6	0	23.5	23.3	23.0	17.6	17.6	17.2	
		1	0	23.7	23.2	23.2	17.8	17.7	17.3	
		1	2	23.7	23.2	23.2	17.8	17.8	17.3	
		1	5	23.7	23.3	23.2	17.8	17.9	17.4	
		3	0	23.5	23.3	23.0	17.6	17.6	17.1	
			3	1	23.5	23.3	23.0	17.6	17.6	17.1
			3	2	23.5	23.2	23.0	17.7	17.7	17.1
			6	0	22.4	22.2	21.9	16.5	16.5	16.1

OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			
				Conducted Average			Conducted Average			
				18615	18900	19185	18615	18900	19185	
3.0	QPSK	1	0	25.4	25.1	24.9	19.3	19.3	19.1	
		1	7	25.5	25.3	25.0	19.5	19.5	19.1	
		1	14	25.4	25.3	25.0	19.4	19.4	19.0	
		8	0	24.5	24.3	24.0	18.4	18.4	18.1	
		8	4	24.5	24.3	24.0	18.5	18.4	18.1	
		8	7	24.5	24.3	24.0	18.5	18.5	18.1	
	16QAM	15	0	24.5	24.3	24.0	18.5	18.5	18.1	
		1	0	24.8	24.5	24.3	18.8	18.8	18.6	
		1	7	24.8	24.5	24.3	18.9	18.9	18.5	
		1	14	24.6	24.3	24.0	18.8	18.8	18.4	
		8	0	23.4	23.2	23.0	17.5	17.5	17.2	
		8	4	23.4	23.3	22.9	17.5	17.5	17.2	
	64QAM	8	7	23.4	23.2	22.9	17.6	17.6	17.2	
		15	0	23.4	23.2	22.9	17.5	17.5	17.1	
		1	0	23.6	23.3	23.0	17.6	17.5	17.4	
		1	7	23.6	23.3	23.1	17.6	17.7	17.3	
		1	14	23.5	23.3	23.1	17.7	17.7	17.1	
		8	0	22.4	22.2	21.9	16.5	16.5	16.1	
			8	4	22.4	22.2	21.9	16.5	16.5	16.1
			8	7	22.4	22.2	21.9	16.5	16.5	16.1
			15	0	22.3	22.1	21.9	16.4	16.5	16.1

OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average		
				18625	18900	19175	18625	18900	19175
				1852.5	1880.0	1907.5	1852.5	1880.0	1907.5
5.0	QPSK	1	0	25.5	25.2	25.0	19.4	19.3	19.2
		1	12	25.4	25.3	25.0	19.4	19.4	19.1
		1	24	25.4	25.3	25.0	19.3	19.5	19.1
		12	0	24.6	24.4	24.2	18.4	18.4	18.1
		12	6	24.5	24.4	24.1	18.4	18.4	18.1
		12	11	24.5	24.4	24.1	18.4	18.5	18.1
	16QAM	25	0	24.6	24.4	24.1	18.4	18.4	18.1
		1	0	25.0	24.7	24.5	18.8	18.7	18.5
		1	12	24.9	24.7	24.5	18.8	18.8	18.5
		1	24	24.8	24.7	24.4	18.7	18.8	18.4
		12	0	23.7	23.5	23.3	17.6	17.5	17.3
		12	6	23.7	23.5	23.2	17.6	17.6	17.3
	64QAM	12	11	23.6	23.5	23.2	17.5	17.6	17.2
		25	0	23.6	23.4	23.2	17.5	17.6	17.2
		1	0	23.8	23.4	23.3	17.6	17.5	17.5
		1	12	23.7	23.5	23.3	17.7	17.7	17.4
		1	24	23.6	23.6	23.2	17.6	17.7	17.4
		12	0	22.6	22.4	22.2	16.5	16.4	16.2

OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average		
				18650	18900	19150	18650	18900	19150
				1855.0	1880.0	1905.0	1855.0	1880.0	1905.0
10.0	QPSK	1	0	25.5	25.2	25.2	19.5	19.4	19.4
		1	24	25.3	25.3	25.1	19.4	19.5	19.2
		1	49	25.1	25.2	25.0	19.4	19.5	19.2
		25	0	24.2	24.1	24.0	18.4	18.3	18.2
		25	12	24.0	24.2	24.0	18.2	18.4	18.1
		25	24	24.0	24.1	23.9	18.2	18.4	18.1
		50	0	24.0	24.1	23.9	18.2	18.5	18.2
	16QAM	1	0	24.8	24.6	24.5	19.0	18.8	18.8
		1	24	24.6	24.6	24.4	18.9	19.0	18.6
		1	49	24.3	24.5	24.2	18.8	18.9	18.6
		25	0	23.3	23.2	23.1	17.6	17.5	17.4
		25	12	23.2	23.3	23.1	17.4	17.6	17.3
		25	24	23.1	23.2	22.9	17.3	17.5	17.3
	64QAM	50	0	23.1	23.1	22.9	17.3	17.5	17.2
		1	0	23.6	23.3	23.4	17.8	17.6	18.5
		1	24	23.4	23.4	23.2	17.6	17.7	18.3
		1	49	23.2	23.3	23.1	17.6	17.7	18.2
		25	0	22.3	22.1	22.1	16.5	16.5	17.4
		25	12	22.1	22.2	22.0	16.3	16.5	17.3
		25	24	22.1	22.1	21.9	16.3	16.5	17.2
		50	0	22.0	22.1	21.9	16.3	16.5	17.2

OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				18675	18900	19125	18675	18900	19125
15.0	QPSK	1	0	25.5	25.2	25.3	19.4	19.2	19.4
		1	37	25.2	25.4	25.2	19.3	19.5	19.3
		1	74	25.1	25.3	25.1	19.2	19.4	19.1
		36	0	24.2	24.2	24.2	18.2	18.2	18.3
		36	16	24.1	24.3	24.2	18.1	18.4	18.2
		36	35	24.0	24.2	24.0	18.0	18.3	18.1
		75	0	24.1	24.3	24.2	18.1	18.4	18.3
	16QAM	1	0	24.7	24.4	24.5	18.9	18.6	18.9
		1	37	24.4	24.5	24.4	18.7	18.9	18.7
		1	74	24.2	24.4	24.1	18.5	18.8	18.4
		36	0	23.2	23.2	23.2	17.3	17.3	17.4
		36	16	23.0	23.2	23.1	17.2	17.4	17.3
		36	35	22.9	23.2	22.9	17.1	17.4	17.2
		75	0	22.9	23.2	23.1	17.2	17.4	17.3
	64QAM	1	0	23.6	23.3	23.4	17.7	17.5	17.7
		1	37	23.3	23.5	23.3	17.6	17.7	17.5
		1	74	23.1	23.4	23.1	17.4	17.6	17.3
		36	0	22.2	22.2	22.2	16.3	16.3	16.4
		36	16	22.0	22.3	22.1	16.2	16.4	16.3
		36	35	21.9	22.2	22.0	16.1	16.4	16.1
		75	0	21.9	22.1	22.1	16.1	16.4	16.3

OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				18700	18900	19100	18700	18900	19100
20.0	QPSK	1	0	25.5	25.1	25.2	19.5	19.2	19.4
		1	49	25.1	25.3	25.3	19.3	19.5	19.4
		1	99	25.1	25.3	25.1	19.2	19.4	19.2
		50	0	24.1	24.1	24.1	18.2	18.3	18.4
		50	24	23.9	24.2	24.1	18.0	18.4	18.3
		50	49	23.8	24.1	24.0	18.0	18.2	18.2
		100	0	23.9	24.2	24.2	18.1	18.4	18.4
	16QAM	1	0	24.8	24.4	24.6	19.0	18.6	18.9
		1	49	24.4	24.6	24.5	18.8	19.0	18.8
		1	99	24.5	24.6	24.3	18.6	18.8	18.6
		50	0	23.1	23.2	23.2	17.2	17.3	17.4
		50	24	22.9	23.2	23.1	17.1	17.4	17.3
		50	49	22.8	23.1	23.0	17.0	17.3	17.2
		100	0	22.9	23.2	23.2	17.1	17.5	17.4
	64QAM	1	0	23.8	23.4	23.5	17.8	17.5	17.8
		1	49	23.3	23.6	23.5	17.6	17.8	17.7
		1	99	23.4	23.5	23.2	17.5	17.7	17.5
		50	0	22.0	22.1	22.1	16.2	16.3	16.4
		50	24	21.8	22.1	22.1	16.1	16.4	16.3
		50	49	21.7	22.0	22.0	16.0	16.2	16.2
		100	0	21.9	22.2	22.2	16.1	16.4	16.4

7.1. LTE BAND 5

ID:	39004	Date:	6/4/18
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OUTPUT POWER FOR LTE BAND 5 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average		
				20407	20525	20643	20407	20525	20643
1.4	QPSK	1	0	25.4	25.3	25.0	23.4	23.4	23.1
		1	2	25.4	25.3	25.0	23.4	23.3	23.1
		1	5	25.5	25.4	25.1	23.4	23.4	23.2
		3	0	25.4	25.4	25.1	23.4	23.4	23.1
		3	1	25.4	25.4	25.1	23.4	23.4	23.1
		3	2	25.4	25.4	25.1	23.5	23.4	23.1
	16QAM	6	0	24.3	24.4	24.1	22.4	22.4	22.1
		1	0	24.7	24.6	24.2	22.7	22.6	22.4
		1	2	24.6	24.6	24.1	22.7	22.6	22.3
		1	5	24.8	24.6	24.3	22.7	22.6	22.4
		3	0	24.4	24.4	24.1	22.6	22.5	22.2
		3	1	24.4	24.4	24.0	22.6	22.5	22.2
	64QAM	3	2	24.4	24.4	24.0	22.6	22.5	22.2
		6	0	23.3	23.4	23.0	21.6	21.5	21.2
		1	0	23.6	23.6	23.3	21.8	21.8	21.5
		1	2	23.6	23.6	23.3	21.9	21.8	21.4
		1	5	23.6	23.6	23.3	21.8	21.8	21.5
		3	0	23.4	23.4	23.2	21.7	21.6	21.3
	64QAM	3	1	23.4	23.4	23.1	21.7	21.6	21.3
		3	2	23.4	23.4	23.1	21.7	21.7	21.3
		6	0	22.4	22.3	22.1	20.6	20.5	20.2

OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average (dBm)			Conducted Average (dBm)		
				20415	20525	20635	20415	20525	20635
3.0	QPSK	1	0	25.3	25.3	25.1	23.5	23.4	23.1
		1	7	25.5	25.4	25.1	23.5	23.5	23.1
		1	14	25.4	25.3	25.1	23.5	23.4	23.2
		8	0	24.3	24.3	24.1	22.6	22.5	22.1
		8	4	24.4	24.3	24.1	22.5	22.5	22.2
		8	7	24.4	24.4	24.1	22.5	22.5	22.2
	16QAM	15	0	24.4	24.4	24.1	22.5	22.5	22.2
		1	0	24.7	24.7	24.4	22.9	22.9	22.5
		1	7	24.7	24.6	24.4	22.9	22.9	22.5
		1	14	24.6	24.7	24.3	22.9	22.8	22.6
		8	0	23.5	23.4	23.2	21.7	21.6	21.2
		8	4	23.5	23.4	23.2	21.6	21.6	21.2
	64QAM	8	7	23.5	23.4	23.1	21.6	21.6	21.2
		15	0	23.5	23.4	23.1	21.5	21.5	21.1
		1	0	23.7	23.5	23.3	21.7	21.8	21.4
		1	7	23.8	23.6	23.3	21.8	21.7	21.4
		1	14	23.8	23.6	23.3	21.8	21.8	21.5
		8	0	22.5	22.4	22.2	20.7	20.6	20.2
	64QAM	8	4	22.5	22.4	22.2	20.6	20.6	20.3
		8	7	22.6	22.4	22.2	20.6	20.6	20.3
		15	0	22.5	22.4	22.1	20.5	20.5	20.2

OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20425	20525	20625	20425	20525	20625
				826.5	836.5	846.5	826.5	836.5	846.5
5.0	QPSK	1	0	25.4	25.3	25.2	23.5	23.4	23.2
		1	12	25.4	25.3	25.1	23.5	23.4	23.1
		1	24	25.5	25.3	25.2	23.5	23.5	23.2
		12	0	24.5	24.4	24.2	22.4	22.4	22.1
		12	6	24.5	24.4	24.2	22.4	22.4	22.1
		12	11	24.5	24.5	24.2	22.4	22.4	22.1
	16QAM	25	0	24.5	24.5	24.3	22.5	22.4	22.1
		1	0	24.8	24.7	24.6	22.7	22.7	22.5
		1	12	24.8	24.7	24.5	22.7	22.7	22.3
		1	24	24.9	24.7	24.6	22.7	22.7	22.4
		12	0	23.6	23.5	23.3	21.5	21.5	21.2
		12	6	23.6	23.6	23.3	21.5	21.5	21.1
	64QAM	12	11	23.6	23.6	23.3	21.5	21.5	21.2
		25	0	23.6	23.5	23.4	21.5	21.5	21.1
		1	0	23.7	23.6	23.6	21.7	21.6	21.5
		1	12	23.8	23.6	23.4	21.6	21.6	21.2
		1	24	23.8	23.6	23.4	21.7	21.6	21.4
		12	0	22.6	22.5	22.3	20.5	20.5	20.2
		12	6	22.6	22.5	22.3	20.5	20.5	20.1
		12	11	22.6	22.5	22.3	20.5	20.5	20.2
		25	0	22.6	22.5	22.3	20.5	20.5	20.1

OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20450	20525	20600	20450	20525	20600
				829.0	836.5	844.0	829.0	836.5	844.0
10.0	QPSK	1	0	25.5	25.3	25.3	23.5	23.4	23.4
		1	24	25.5	25.4	25.3	23.4	23.4	23.2
		1	49	25.3	25.3	25.2	23.5	23.3	23.1
		25	0	24.4	24.3	24.2	22.3	22.3	22.2
		25	12	24.4	24.3	24.2	22.4	22.3	22.1
		25	24	24.2	24.2	24.1	22.4	22.3	22.0
	16QAM	50	0	24.4	24.3	24.1	22.4	22.3	22.1
		1	0	24.6	24.5	24.5	22.9	22.8	22.8
		1	24	24.7	24.5	24.5	22.9	22.8	22.6
		1	49	24.5	24.6	24.4	22.8	22.8	22.4
		25	0	23.4	23.3	23.2	21.5	21.4	21.3
		25	12	23.5	23.3	23.2	21.5	21.4	21.2
	64QAM	25	24	23.3	23.3	23.2	21.5	21.4	21.1
		50	0	23.4	23.2	23.1	21.5	21.4	21.2
		1	0	23.6	23.5	23.5	21.8	21.8	21.8
		1	24	23.7	23.5	23.5	21.7	21.7	21.5
		1	49	23.5	23.5	23.3	21.8	21.7	21.4
		25	0	22.4	22.3	22.3	20.5	20.5	20.4
		25	12	22.5	22.3	22.2	20.6	20.5	20.3
		25	24	22.3	22.3	22.2	20.6	20.5	20.2
		50	0	22.4	22.2	22.1	20.5	20.4	20.2

7.2. LTE BAND 7

ID:	10646	Date:	6/4/18
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OUTPUT POWER FOR LTE BAND 7 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20775	21100	21425	20775	21100	21425
5.0	QPSK	1	0	25.2	25.2	25.3	21.3	21.3	21.0
		1	12	25.4	25.3	25.3	21.4	21.3	21.0
		1	24	25.5	25.4	25.4	21.5	21.4	21.1
		12	0	24.4	24.3	24.4	20.4	20.3	20.0
		12	6	24.5	24.3	24.4	20.4	20.3	20.0
		12	11	24.6	24.3	24.4	20.5	20.3	20.0
		25	0	24.6	24.3	24.5	20.4	20.3	20.0
	16QAM	1	0	24.6	24.7	24.8	20.6	20.6	20.4
		1	12	24.8	24.7	24.8	20.7	20.7	20.4
		1	24	24.8	24.7	24.8	20.8	20.7	20.4
		12	0	23.4	23.2	23.4	19.4	19.3	19.0
		12	6	23.5	23.3	23.4	19.4	19.3	19.0
		12	11	23.5	23.2	23.3	19.5	19.3	19.0
		25	0	23.5	23.2	23.3	19.4	19.3	19.0
	64QAM	1	0	23.4	23.4	23.5	19.5	19.4	19.2
		1	12	23.5	23.4	23.5	19.6	19.5	19.2
		1	24	23.5	23.4	23.5	19.7	19.6	19.2
		12	0	22.1	22.1	22.2	18.3	18.2	17.9
		12	6	22.3	22.1	22.2	18.3	18.2	17.9
		12	11	22.3	22.1	22.2	18.3	18.2	17.9
25		0	22.3	22.1	22.2	18.3	18.2	17.9	

OUTPUT POWER FOR LTE BAND 7 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20800	21100	21400	20800	21100	21400
10.0	QPSK	1	0	25.0	25.1	25.2	21.2	20.9	20.7
		1	24	25.3	25.2	25.3	21.3	21.0	20.8
		1	49	25.5	25.2	25.3	21.5	21.0	20.8
		25	0	24.4	24.1	24.3	20.3	19.9	19.7
		25	12	24.4	24.1	24.3	20.3	20.0	19.7
		25	24	24.4	24.1	24.4	20.4	20.0	19.7
		50	0	24.4	24.1	24.3	20.2	20.0	19.7
	16QAM	1	0	24.5	24.6	24.7	20.4	20.4	20.1
		1	24	24.6	24.5	24.6	20.5	20.3	20.1
		1	49	24.8	24.4	24.6	20.6	20.3	20.1
		25	0	23.5	23.2	23.4	19.3	19.1	18.8
		25	12	23.5	23.2	23.4	19.3	19.1	18.8
		25	24	23.5	23.2	23.4	19.3	19.1	18.8
		50	0	23.4	23.1	23.3	19.2	19.0	18.7
	64QAM	1	0	23.2	23.3	23.3	19.1	19.1	18.9
		1	24	23.4	23.3	23.4	19.2	19.1	18.9
		1	49	23.5	23.3	23.4	19.4	19.1	18.9
		25	0	22.3	22.1	22.2	18.1	18.0	17.7
		25	12	22.3	22.1	22.3	18.1	18.0	17.7
		25	24	22.3	22.1	22.3	18.2	18.0	17.7
50		0	22.3	22.1	22.2	18.1	18.0	17.7	

OUTPUT POWER FOR LTE BAND 7 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20825	21100	21375	20825	21100	21375
				2507.5	2535.0	2562.5	2507.5	2535.0	2562.5
15.0	QPSK	1	0	25.0	25.1	25.0	21.2	21.1	20.6
		1	37	25.4	25.2	25.2	21.4	21.2	20.8
		1	74	25.5	25.2	25.2	21.5	21.1	20.9
		36	0	24.6	24.3	24.3	20.4	20.2	19.8
		36	16	24.5	24.2	24.4	20.5	20.2	19.9
		36	35	24.5	24.2	24.4	20.5	20.2	20.0
		75	0	24.5	24.1	24.3	20.4	20.2	19.9
	16QAM	1	0	24.3	24.4	24.4	20.5	20.6	20.1
		1	37	24.6	24.4	24.6	20.8	20.6	20.2
		1	74	24.6	24.3	24.5	20.8	20.5	20.3
		36	0	23.4	23.2	23.2	19.4	19.3	18.9
		36	16	23.4	23.1	23.2	19.5	19.2	18.9
		36	35	23.4	23.1	23.2	19.4	19.2	19.0
		75	0	23.3	23.0	23.2	19.4	19.2	18.9
	64QAM	1	0	23.1	23.2	24.0	19.4	19.3	18.9
		1	37	23.4	23.2	24.3	19.6	19.4	19.0
		1	74	23.5	23.2	24.3	19.7	19.3	19.1
		36	0	22.3	22.1	23.1	18.3	18.2	17.8
		36	16	22.3	22.0	23.2	18.4	18.2	17.8
		36	35	22.3	22.0	23.2	18.4	18.2	17.9
		75	0	22.2	22.0	23.1	18.3	18.1	17.8

OUTPUT POWER FOR LTE BAND 7 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				20850	21100	21350	20850	21100	21350
				2510.0	2535.0	2560.0	2510.0	2535.0	2560.0
20.0	QPSK	1	0	25.1	25.2	25.0	21.2	21.2	20.8
		1	49	25.5	25.2	25.2	21.5	21.2	20.8
		1	99	25.4	25.1	25.2	21.4	21.1	21.0
		50	0	24.5	24.2	24.3	20.4	20.2	19.8
		50	24	24.5	24.2	24.3	20.5	20.2	19.8
		50	49	24.5	24.1	24.4	20.4	20.1	19.9
		100	0	24.5	24.1	24.3	20.5	20.2	19.8
	16QAM	1	0	24.5	24.6	24.6	20.6	20.6	20.2
		1	49	24.8	24.5	24.7	20.8	20.6	20.1
		1	99	24.6	24.4	24.7	20.6	20.4	20.3
		50	0	23.4	23.2	23.2	19.3	19.1	18.7
		50	24	23.4	23.2	23.2	19.4	19.1	18.7
		50	49	23.5	23.1	23.3	19.3	19.0	18.8
		100	0	23.5	23.1	23.3	19.4	19.1	18.8
	64QAM	1	0	23.4	23.4	24.2	19.4	19.3	19.0
		1	49	23.6	23.4	24.3	19.6	19.4	18.9
		1	99	23.5	23.3	24.4	19.4	19.2	19.0
		50	0	22.3	22.1	23.1	18.2	18.1	17.6
		50	24	22.3	22.0	23.2	18.3	18.0	17.6
		50	49	22.4	22.0	23.3	18.2	18.0	17.8
		100	0	22.4	22.1	23.2	18.3	18.1	17.7

7.3. 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			Conducted Average			
				23017	23095	23173	23017	23095	23173	
1.4	QPSK	1	0	25.3	25.4	25.2	24.1	24.1	24.0	
		1	2	25.2	25.4	25.3	24.2	24.1	24.0	
		1	5	25.3	25.4	25.4	24.2	24.1	24.1	
		3	0	25.3	25.5	25.3	24.2	24.2	24.1	
		3	1	25.3	25.5	25.3	24.2	24.2	24.1	
		3	2	25.3	25.5	25.3	24.2	24.2	24.1	
	16QAM	6	0	24.3	24.5	24.4	23.3	23.2	23.1	
		1	0	24.4	24.6	24.5	23.5	23.4	23.4	
		1	2	24.4	24.6	24.4	23.5	23.5	23.3	
		1	5	24.4	24.6	24.6	23.5	23.5	23.4	
		3	0	24.3	24.5	24.4	23.4	23.3	23.3	
		3	1	24.3	24.5	24.4	23.4	23.3	23.2	
	64QAM	3	2	24.3	24.5	24.4	23.4	23.3	23.2	
		6	0	23.3	23.5	23.3	22.4	22.4	22.2	
		1	0	23.5	23.7	23.5	22.6	22.5	22.4	
		1	2	23.5	23.6	23.5	22.5	22.4	22.4	
		1	5	23.4	23.6	23.7	22.5	22.5	22.4	
		3	0	23.4	23.5	23.4	22.5	22.4	22.3	
			3	1	23.4	23.5	23.4	22.5	22.4	22.3
			3	2	23.4	23.5	23.4	22.5	22.4	22.3
			6	0	22.3	22.5	22.4	21.4	21.3	21.2

OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2			
				Conducted Average			Conducted Average			
				23025	23095	23165	23025	23095	23165	
3.0	QPSK	1	0	25.2	25.4	25.3	24.1	24.0	24.2	
		1	7	25.3	25.5	25.4	24.2	24.1	24.1	
		1	14	25.1	25.4	25.4	24.1	24.2	24.0	
		8	0	24.4	24.5	24.4	23.3	23.2	23.3	
		8	4	24.3	24.5	24.4	23.3	23.2	23.2	
		8	7	24.3	24.5	24.4	23.3	23.2	23.1	
	16QAM	15	0	24.4	24.5	24.4	23.3	23.2	23.2	
		1	0	24.4	24.6	24.6	23.5	23.5	23.7	
		1	7	24.5	24.7	24.6	23.6	23.5	23.5	
		1	14	24.4	24.6	24.6	23.4	23.6	23.5	
		8	0	23.3	23.4	23.4	22.4	22.3	22.4	
		8	4	23.3	23.5	23.3	22.4	22.3	22.3	
	64QAM	8	7	23.3	23.4	23.3	22.4	22.3	22.2	
		15	0	23.3	23.4	23.3	22.3	22.3	22.2	
		1	0	23.4	23.5	23.5	22.5	22.4	22.5	
		1	7	23.4	23.6	23.4	22.5	22.5	22.4	
		1	14	23.2	23.6	23.5	22.3	22.5	22.2	
		8	0	22.3	22.5	22.4	21.3	21.3	21.4	
			8	4	22.3	22.5	22.4	21.3	21.3	21.3
			8	7	22.3	22.5	22.4	21.3	21.3	21.3
			15	0	22.3	22.5	22.3	21.3	21.2	21.2

OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23035	23095	23155	23035	23095	23155
5.0	QPSK	1	0	25.2	25.2	25.5	24.0	23.9	24.2
		1	12	25.1	25.3	25.2	23.8	23.9	24.0
		1	24	25.1	25.3	25.3	23.8	24.2	23.9
		12	0	24.2	24.4	24.6	23.0	23.0	23.2
		12	6	24.1	24.4	24.3	22.9	23.0	23.1
		12	11	24.1	24.4	24.3	22.8	23.0	22.9
	16QAM	25	0	24.2	24.4	24.3	22.9	23.0	23.1
		1	0	24.5	24.5	24.8	23.3	23.2	23.6
		1	12	24.3	24.6	24.6	23.2	23.3	23.3
		1	24	24.4	24.7	24.7	23.0	23.5	23.2
		12	0	23.4	23.5	23.6	22.2	22.1	22.4
		12	6	23.3	23.5	23.4	22.1	22.1	22.3
	64QAM	12	11	23.2	23.5	23.4	22.0	22.2	22.1
		25	0	23.3	23.4	23.4	22.1	22.1	22.2
		1	0	23.4	23.5	23.8	22.3	22.1	22.4
		1	12	23.3	23.6	23.5	22.1	22.1	22.2
		1	24	23.4	23.5	23.6	22.0	22.4	22.2
		12	0	22.3	22.5	22.7	21.1	21.0	21.3
		12	6	22.2	22.5	22.5	21.0	21.1	21.2
		12	11	22.2	22.5	22.4	20.9	21.2	21.1
25	0	22.2	22.4	22.4	21.0	21.1	21.1		

OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23060	23095	23130	23060	23095	23130
10.0	QPSK	1	0	25.2	25.1	25.3	23.9	23.6	23.9
		1	24	25.1	25.4	25.4	23.7	23.9	24.1
		1	49	25.4	25.5	25.2	24.0	24.2	23.8
		25	0	24.0	24.1	24.3	22.8	22.8	23.0
		25	12	24.0	24.2	24.4	22.7	22.9	23.1
		25	24	24.2	24.3	24.2	22.9	23.1	23.0
	16QAM	50	0	24.1	24.2	24.4	22.8	22.9	23.1
		1	0	24.4	24.3	24.8	23.4	23.0	23.3
		1	24	24.4	24.6	24.7	23.1	23.3	23.5
		1	49	24.7	24.7	24.6	23.3	23.6	23.2
		25	0	23.1	23.3	23.4	21.9	22.0	22.1
		25	12	23.1	23.4	23.4	21.8	22.0	22.2
	64QAM	25	24	23.4	23.4	23.3	22.0	22.2	22.1
		50	0	23.1	23.3	23.5	21.9	22.0	22.2
		1	0	23.4	23.2	23.6	22.2	21.9	22.2
		1	24	23.4	23.6	23.6	22.0	22.2	22.3
		1	49	23.6	23.6	23.4	22.2	22.4	22.0
		25	0	22.1	22.2	22.3	20.9	21.0	21.1
		25	12	22.2	22.4	22.5	20.8	21.1	21.2
		25	24	22.4	22.4	22.3	21.0	21.3	21.1
50	0	22.2	22.3	22.5	20.9	21.0	21.2		

7.4. 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			Conducted Average		
				23207	23230	23255	23207	23230	23255
5.0	QPSK	1	0	779.5	782.0	784.5	779.5	782.0	784.5
				25.5	25.1	25.2	23.7	22.7	23.3
		1	12	25.2	25.2	25.4	23.3	23.2	23.4
		1	24	25.1	25.3	25.4	23.3	23.4	23.5
		12	0	24.4	24.1	24.0	22.6	22.3	22.5
		12	6	24.2	24.1	24.2	22.3	22.4	22.5
		12	11	24.0	24.1	24.4	22.3	22.4	22.5
	25	0	24.2	24.2	24.3	22.3	22.4	22.5	
	16QAM	1	0	24.9	24.6	24.5	23.2	22.8	22.8
		1	12	24.6	24.6	24.7	22.7	22.7	22.9
		1	24	24.5	24.7	24.7	22.8	22.9	23.0
		12	0	23.4	23.1	23.1	21.5	21.4	21.5
		12	6	23.2	23.1	23.3	21.4	21.4	21.5
		12	11	23.0	23.1	23.5	21.3	21.5	21.6
		25	0	23.2	23.2	23.3	21.3	21.4	21.6
	64QAM	1	0	23.8	23.3	23.4	22.1	21.8	21.7
		1	12	23.5	23.4	23.7	21.7	21.6	21.8
		1	24	23.4	23.6	23.7	21.7	21.8	21.9
		12	0	22.3	22.0	22.0	20.5	20.3	20.5
		12	6	22.1	22.0	22.2	20.4	20.4	20.5
		12	11	21.9	22.1	22.4	20.3	20.4	20.5
		25	0	22.1	22.2	22.4	20.4	20.4	20.6

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	23230	N/A	N/A	23230	N/A
10.0	QPSK	1	0	N/A	25.5	N/A	N/A	23.7	N/A
					25.1			23.3	
		1	24		25.4			23.6	
		25	0		24.1			22.4	
		25	12		24.2			22.4	
		25	24		24.4			22.6	
		50	0		24.3			22.4	
	16QAM	1	0		24.9			23.0	
		1	24		24.4			22.6	
		1	49		24.7			22.9	
		25	0		23.2			21.4	
		25	12		23.2			21.4	
		25	24		23.4			21.6	
		50	0		23.3			21.4	
	64QAM	1	0		23.9			21.9	
		1	24		23.3			21.6	
		1	49		23.8			21.8	
		25	0		22.2			20.4	
		25	12		22.3			20.4	
		25	24		22.4			20.6	
		50	0		22.4			20.5	

7.5. LTE BAND 14

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OUTPUT POWER FOR LTE BAND 14 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23305	23330	23355	23305	23330	23355
5.0	QPSK	1	0	25.3	25.5	25.5	24.1	24.1	24.1
		1	12	25.5	25.5	25.5	24.0	24.1	24.1
		1	24	25.5	25.5	25.5	24.2	24.1	24.1
		12	0	24.5	24.5	24.4	23.1	23.1	23.1
		12	6	24.5	24.5	24.5	23.1	23.2	23.1
		12	11	24.5	24.5	24.5	23.1	23.1	23.2
	16QAM	25	0	24.5	24.7	24.7	23.1	23.1	23.1
		1	0	24.5	24.8	24.8	23.4	23.3	23.5
		1	12	24.8	24.7	24.7	23.3	23.3	23.5
		1	24	24.8	24.7	24.7	23.4	23.4	23.6
		12	0	23.4	23.4	23.3	22.2	22.2	22.2
		12	6	23.4	23.4	23.4	22.1	22.2	22.2
	64QAM	12	11	23.4	23.4	23.3	22.2	22.2	22.3
		25	0	23.4	23.5	23.4	22.1	22.2	22.1
		1	0	23.4	23.7	23.7	22.3	22.3	22.3
		1	12	23.7	23.7	23.5	22.2	22.3	22.4
		1	24	23.6	23.6	23.5	22.4	22.4	22.4
		12	0	22.3	22.3	22.3	21.2	21.2	21.1
		12	6	22.3	22.3	22.3	21.0	21.2	21.1
		12	11	22.3	22.3	22.3	21.1	21.2	21.2
25	0	22.4	22.4	22.4	21.1	21.2	21.1		

OUTPUT POWER FOR LTE BAND 14 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	23330	N/A	N/A	23330	N/A
10.0	QPSK	1	0		25.4			24.2	
		1	24		25.5			24.2	
		1	49		25.5			24.2	
		25	0		24.6			23.3	
		25	12		24.6			23.4	
		25	24		24.6			23.3	
	16QAM	50	0		24.6			23.3	
		1	0		24.6			23.5	
		1	24		24.7			23.6	
		1	49		24.6			23.7	
		25	0		23.6			22.3	
		25	12		23.6			22.5	
	64QAM	25	24		23.6			22.4	
		50	0		23.6			22.4	
		1	0		23.5			22.5	
		1	24		23.7			22.5	
		1	49		23.6			22.7	
		25	0		22.6			21.4	
		25	12		22.6			21.5	
		25	24		22.6			21.5	
50	0		22.6			21.4			

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			Conducted Average		
				23755	23790	23825	23755	23790	23825
5.0	QPSK	1	0	25.1	25.3	25.5	23.8	23.9	24.2
		1	12	25.3	25.3	25.2	23.9	24.1	23.9
		1	24	25.3	25.5	25.3	24.1	24.2	23.9
		12	0	24.2	24.4	24.5	23.0	23.1	23.2
		12	6	24.4	24.4	24.3	23.0	23.2	23.1
		12	11	24.4	24.5	24.3	23.0	23.2	22.9
	16QAM	25	0	24.4	24.5	24.3	23.0	23.2	23.0
		1	0	24.5	24.7	24.7	23.1	23.2	23.6
		1	12	24.7	24.7	24.5	23.3	23.5	23.3
		1	24	24.7	24.9	24.6	23.4	23.5	23.2
		12	0	23.4	23.5	23.7	22.1	22.3	22.3
		12	6	23.5	23.5	23.5	22.1	22.3	22.3
	64QAM	12	11	23.5	23.6	23.5	22.1	22.3	22.1
		25	0	23.4	23.5	23.4	22.1	22.3	22.2
		1	0	23.3	23.5	23.6	22.0	22.1	22.5
		1	12	23.6	23.6	23.5	22.2	22.3	22.2
		1	24	23.5	23.7	23.6	22.3	22.4	22.2
		12	0	22.3	22.5	22.6	21.1	21.2	21.3
		12	6	22.5	22.5	22.4	21.1	21.3	21.2
		12	11	22.5	22.6	22.4	21.1	21.3	21.1
		25	0	22.5	22.5	22.4	21.1	21.3	21.1

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				23780	23790	23800	23780	23790	23800
10.0	QPSK	1	0	25.2	25.3	25.4	24.0	24.1	24.1
		1	24	25.4	25.4	25.5	24.2	24.2	24.2
		1	49	25.4	25.3	25.3	24.2	24.1	24.0
		25	0	24.4	24.3	24.3	23.1	23.1	23.2
		25	12	24.4	24.3	24.4	23.2	23.3	23.3
		25	24	24.6	24.6	24.3	23.4	23.3	23.2
	16QAM	50	0	24.3	24.4	24.5	23.3	23.3	23.3
		1	0	24.5	24.5	24.6	23.5	23.5	23.5
		1	24	24.6	24.6	24.7	23.6	23.7	23.7
		1	49	24.5	24.5	24.5	23.6	23.4	23.4
		25	0	23.4	23.4	23.4	22.2	22.2	22.3
		25	12	23.4	23.4	23.5	22.3	22.4	22.4
	64QAM	25	24	23.6	23.6	23.3	22.5	22.4	22.3
		50	0	23.2	23.4	23.5	22.4	22.4	22.4
		1	0	23.5	23.5	23.6	22.3	22.4	22.4
		1	24	23.6	23.5	23.6	22.4	22.5	22.6
		1	49	23.5	23.5	23.4	22.6	22.3	22.3
		25	0	22.4	22.4	22.4	21.2	21.2	21.4
		25	12	22.4	22.4	22.5	21.4	21.4	21.4
		25	24	22.6	22.6	22.4	21.5	21.4	21.3
		50	0	22.3	22.4	22.5	21.4	21.3	21.4

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		
				Conducted Average			Conducted Average		
				26047	26365	26683	26047	26365	26683
1.4	QPSK	1	0	25.4	25.0	25.1	19.3	19.3	19.2
		1	2	25.4	25.0	25.2	19.3	19.3	19.3
		1	5	25.5	25.1	25.1	19.4	19.3	19.4
		3	0	25.4	25.1	25.4	19.3	19.3	19.4
		3	1	25.4	25.1	24.7	19.4	19.3	19.4
		3	2	25.4	25.1	23.6	19.4	19.3	19.5
		6	0	24.4	24.1	23.1	18.3	18.2	18.4
	16QAM	1	0	24.8	24.4	23.7	18.6	18.6	18.7
		1	2	24.7	24.3	22.4	18.6	18.6	18.7
		1	5	24.8	24.4	24.0	18.6	18.5	18.8
		3	0	24.6	24.2	24.3	18.5	18.5	18.6
		3	1	24.6	24.2	23.3	18.5	18.5	18.6
		3	2	24.6	24.2	22.2	18.5	18.4	18.6
		6	0	23.5	23.2	22.0	17.4	17.4	17.5
	64QAM	1	0	23.6	23.1	23.4	17.7	17.6	17.7
		1	2	23.7	23.3	23.4	17.7	17.6	17.7
		1	5	23.8	23.3	23.6	17.7	17.7	17.7
		3	0	23.5	23.1	23.3	17.5	17.5	17.5
		3	1	23.5	23.1	23.3	17.5	17.5	17.5
		3	2	23.5	23.1	23.4	17.5	17.4	17.5
		6	0	22.4	22.1	22.2	16.4	16.3	16.3

OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26055	26365	26675	26055	26365	26675
3.0	QPSK	1	0	25.4	25.1	25.1	19.4	19.3	19.2
		1	7	25.5	25.2	25.2	19.5	19.3	19.4
		1	14	25.4	25.2	25.1	19.5	19.3	19.5
		8	0	24.4	24.2	24.3	18.5	18.4	18.3
		8	4	24.4	24.2	24.3	18.4	18.4	18.4
		8	7	24.5	24.2	24.4	18.5	18.3	18.4
		15	0	24.5	24.2	24.4	18.5	18.3	18.4
	16QAM	1	0	24.7	24.4	24.5	18.8	18.7	18.6
		1	7	24.7	24.4	24.6	18.9	18.8	18.8
		1	14	24.6	24.4	24.2	18.9	18.7	18.9
		8	0	23.4	23.2	23.4	17.5	17.5	17.3
		8	4	23.4	23.1	23.3	17.5	17.5	17.4
		8	7	23.4	23.2	23.4	17.5	17.4	17.4
		15	0	23.4	23.1	23.3	17.5	17.4	17.4
	64QAM	1	0	23.5	23.2	23.2	17.6	17.4	17.4
		1	7	23.5	23.3	23.3	17.7	17.6	17.6
		1	14	23.4	23.3	23.5	17.7	17.6	17.7
		8	0	22.4	22.2	22.1	16.5	16.4	16.3
		8	4	22.4	22.1	22.1	16.5	16.5	16.4
		8	7	22.4	22.1	22.2	16.5	16.4	16.4
		15	0	22.3	22.1	22.1	16.4	16.3	16.3

OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26065	26365	26665	26065	26365	26665
5.0	QPSK	1	0	25.5	25.2	25.0	19.4	19.4	19.1
		1	12	25.4	25.2	25.2	19.4	19.3	19.2
		1	24	25.3	25.3	25.2	19.3	19.3	19.5
		12	0	24.6	24.3	24.3	18.4	18.4	18.1
		12	6	24.5	24.3	24.3	18.3	18.4	18.2
		12	11	24.5	24.3	24.4	18.3	18.3	18.3
	16QAM	25	0	24.5	24.3	24.4	18.4	18.3	18.3
		1	0	25.0	24.7	24.6	18.8	18.8	18.4
		1	12	24.9	24.6	24.7	18.8	18.7	18.6
		1	24	24.7	24.6	24.6	18.7	18.6	18.8
		12	0	23.7	23.4	23.5	17.6	17.6	17.3
		12	6	23.6	23.4	23.5	17.5	17.5	17.4
	64QAM	12	11	23.6	23.4	23.6	17.5	17.5	17.5
		25	0	23.6	23.3	23.4	17.5	17.4	17.4
		1	0	23.8	23.5	23.3	17.6	17.6	17.3
		1	12	23.7	23.4	23.5	17.6	17.6	17.5
		1	24	23.6	23.4	23.7	17.5	17.5	17.7
		12	0	22.5	22.3	22.2	16.5	16.5	16.2
		12	6	22.5	22.3	22.3	16.4	16.5	16.3
		12	11	22.5	22.3	22.3	16.4	16.4	16.4
		25	0	22.5	22.3	22.3	16.4	16.3	16.3

OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26090	26365	26640	26090	26365	26640
10.0	QPSK	1	0	25.5	25.2	25.0	19.5	19.4	19.2
		1	24	25.3	25.2	25.0	19.4	19.5	19.2
		1	49	25.2	25.3	25.3	19.3	19.5	19.5
		25	0	24.3	24.2	24.0	18.4	18.4	18.1
		25	12	24.1	24.1	23.9	18.2	18.4	18.1
		25	24	24.0	24.1	24.1	18.2	18.3	18.2
	16QAM	50	0	24.1	24.1	24.0	18.2	18.3	18.1
		1	0	24.7	24.5	24.3	19.0	18.9	18.8
		1	24	24.5	24.4	24.2	18.9	18.9	18.6
		1	49	24.3	24.4	24.6	18.8	18.9	19.0
		25	0	23.3	23.2	23.0	17.6	17.6	17.2
		25	12	23.1	23.1	22.9	17.4	17.5	17.2
	64QAM	25	24	23.0	23.1	23.1	17.3	17.4	17.4
		50	0	23.1	23.0	22.9	17.3	17.4	17.2
		1	0	23.6	23.0	23.1	17.7	17.7	17.5
		1	24	23.4	23.4	23.1	17.6	17.8	17.4
		1	49	23.2	23.3	23.4	17.6	17.7	17.7
		25	0	22.3	22.2	21.9	16.5	16.5	16.2
		25	12	22.1	22.1	21.8	16.3	16.5	16.2
		25	24	22.0	22.1	22.0	16.3	16.4	16.3
		50	0	22.0	22.0	21.8	16.3	16.4	16.1

OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26115	26365	26615	26115	26365	26615
15.0	QPSK	1	0	1857.5	1882.5	1907.5	1857.5	1882.5	1907.5
		1	0	25.5	25.2	25.1	19.4	19.2	19.2
		1	37	25.2	25.3	25.0	19.3	19.4	19.1
		1	74	25.1	25.3	25.2	19.2	19.3	19.5
		36	0	24.2	24.2	24.3	18.2	18.3	18.2
		36	16	24.1	24.2	24.0	18.1	18.4	18.1
		36	35	24.0	24.0	24.0	18.0	18.2	18.0
	75	0	24.0	24.1	24.1	18.1	18.3	18.1	
	16QAM	1	0	24.8	24.5	24.6	18.8	18.6	18.6
		1	37	24.4	24.5	24.3	18.6	18.7	18.4
		1	74	24.3	24.5	24.7	18.4	18.6	18.8
		36	0	23.3	23.2	23.2	17.2	17.3	17.2
		36	16	23.1	23.2	23.0	17.1	17.3	17.1
		36	35	23.0	23.1	23.0	17.0	17.1	17.0
		75	0	23.0	23.1	23.0	17.1	17.2	17.0
	64QAM	1	0	23.6	23.3	23.3	17.6	17.4	17.4
		1	37	23.4	23.4	23.2	17.4	17.6	17.3
		1	74	23.2	23.4	23.5	17.3	17.5	17.6
		36	0	22.2	22.2	22.1	16.2	16.3	16.1
		36	16	22.1	22.2	22.0	16.1	16.3	16.1
		36	35	22.0	22.1	22.0	16.0	16.2	16.0
75		0	22.0	22.1	22.0	16.0	16.2	15.9	

OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26140	26365	26590	26140	26365	26590
20.0	QPSK	1	0	1860.0	1882.5	1905.0	1860.0	1882.5	1905.0
		1	0	25.5	25.1	25.3	19.5	19.3	19.5
		1	49	25.1	25.2	25.1	19.3	19.5	19.2
		1	99	25.1	25.2	25.2	19.2	19.4	19.5
		50	0	24.0	24.1	24.2	18.1	18.3	18.3
		50	24	23.9	24.1	24.0	18.0	18.3	18.1
		50	49	23.7	24.0	23.8	18.0	18.2	18.0
	100	0	23.9	24.1	24.1	18.0	18.3	18.2	
	16QAM	1	0	24.4	24.0	24.2	19.0	18.7	19.0
		1	49	23.9	24.1	24.0	18.7	18.9	18.7
		1	99	23.9	24.1	24.2	18.6	18.8	18.9
		50	0	22.7	22.7	22.8	17.2	17.4	17.4
		50	24	22.5	22.7	22.6	17.1	17.3	17.2
		50	49	22.4	22.6	22.4	17.0	17.2	17.0
		100	0	22.5	22.6	22.6	17.1	17.3	17.3
	64QAM	1	0	23.3	22.9	23.2	17.9	17.6	17.8
		1	49	22.8	23.0	22.9	17.6	17.8	17.5
		1	99	22.9	23.0	23.1	17.5	17.7	17.7
		50	0	21.6	21.7	21.7	16.2	16.3	16.3
		50	24	21.4	21.6	21.5	16.0	16.3	16.1
		50	49	21.3	21.5	21.4	16.0	16.2	15.9
100		0	21.4	21.6	21.6	16.0	16.3	16.2	

7.8. LTE BAND 26 (Part 90S)

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OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26697	26740	26783	26697	26740	26783
1.4	QPSK	1	0	25.4	25.3	25.4	23.3	23.4	23.4
		1	2	25.4	25.3	25.4	23.3	23.4	23.4
		1	5	25.4	25.4	25.5	23.3	23.3	23.5
		3	0	25.4	25.4	25.5	23.3	23.4	23.5
		3	1	25.4	25.4	25.5	23.3	23.4	23.4
		3	2	25.4	25.4	25.5	23.3	23.4	23.5
	16QAM	6	0	24.4	24.3	24.4	22.3	22.3	22.4
		1	0	24.7	24.6	24.8	22.6	22.7	22.7
		1	2	24.7	24.6	24.7	22.6	22.7	22.7
		1	5	24.7	24.6	24.8	22.6	22.6	22.8
		3	0	24.5	24.5	24.6	22.5	22.6	22.7
		3	1	24.5	24.5	24.6	22.5	22.6	22.6
	64QAM	3	2	24.6	24.5	24.6	22.5	22.5	22.6
		6	0	23.5	23.5	23.6	21.4	21.5	21.6
		1	0	23.8	23.6	23.8	21.7	21.9	21.9
		1	2	23.8	23.6	23.8	21.7	21.8	21.9
		1	5	23.8	23.6	23.9	21.8	21.8	21.8
		3	0	23.7	23.5	23.7	21.6	21.7	21.7
		3	1	23.6	23.5	23.7	21.5	21.7	21.7
		3	2	23.6	23.5	23.7	21.6	21.6	21.7
		6	0	22.5	22.5	22.6	20.5	20.5	20.6

OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26705	26740	26775	26705	26740	26775
3.0	QPSK	1	0	25.4	25.3	25.3	23.3	23.3	23.4
		1	7	25.4	25.4	25.5	23.4	23.4	23.5
		1	14	25.3	25.4	25.5	23.3	23.3	23.4
		8	0	24.4	24.3	24.4	22.3	22.4	22.4
		8	4	24.4	24.3	24.4	22.3	22.4	22.5
		8	7	24.4	24.4	24.4	22.3	22.3	22.5
	16QAM	15	0	24.4	24.4	24.4	22.3	22.3	22.5
		1	0	24.6	24.6	24.6	22.7	22.7	22.8
		1	7	24.6	24.6	24.6	22.8	22.8	22.9
		1	14	24.5	24.6	24.5	22.7	22.8	22.9
		8	0	23.4	23.3	23.4	21.4	21.5	21.5
		8	4	23.4	23.3	23.4	21.4	21.5	21.5
	64QAM	8	7	23.4	23.3	23.4	21.4	21.4	21.6
		15	0	23.3	23.3	23.4	21.4	21.4	21.5
		1	0	23.5	23.4	23.6	21.5	21.6	21.8
		1	7	23.7	23.5	23.7	21.7	21.8	21.8
		1	14	23.5	23.6	23.7	21.7	21.5	21.8
		8	0	22.4	22.3	22.4	20.4	20.5	20.5
		8	4	22.4	22.4	22.4	20.5	20.5	20.6
		8	7	22.4	22.4	22.5	20.5	20.5	20.6
		15	0	22.4	22.3	22.4	20.4	20.4	20.5

OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				26715	26740	26765	26715	26740	26765
				816.5	819.0	821.5	816.5	819.0	821.5
5.0	QPSK	1	0	25.5	25.3	25.3	23.4	23.4	23.4
		1	12	25.4	25.4	25.4	23.5	23.4	23.5
		1	24	25.4	25.4	25.5	23.5	23.5	23.5
		12	0	24.5	24.5	24.5	22.4	22.4	22.4
		12	6	24.5	24.5	24.5	22.4	22.4	22.4
		12	11	24.5	24.5	24.5	22.4	22.4	22.5
	16QAM	25	0	24.5	24.5	24.5	22.5	22.4	22.5
		1	0	24.9	24.8	24.8	22.7	22.7	22.7
		1	12	24.7	24.8	24.8	22.7	22.7	22.7
		1	24	24.8	24.9	24.9	22.8	22.8	22.8
		12	0	23.7	23.6	23.6	21.5	21.5	21.4
		12	6	23.6	23.6	23.6	21.5	21.5	21.5
	64QAM	12	11	23.6	23.6	23.7	21.5	21.5	21.6
		25	0	23.5	23.5	23.5	21.5	21.4	21.5
		1	0	23.8	23.6	23.7	21.6	21.7	21.7
		1	12	23.6	23.7	23.7	21.7	21.7	21.7
		1	24	23.7	23.7	23.9	21.7	21.7	21.7
		12	0	22.6	22.5	22.5	20.4	20.5	20.4
		12	6	22.5	22.5	22.6	20.4	20.5	20.5
		12	11	22.5	22.5	22.6	20.5	20.4	20.6
		25	0	22.6	22.5	22.6	20.5	20.4	20.5

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	26740	N/A	N/A	26740	N/A
				N/A	819.0	N/A	N/A	819.0	N/A
10.0	QPSK	1	0		25.4			23.4	
		1	24		25.4			23.4	
		1	49		25.5			23.5	
		25	0		24.3			22.4	
		25	12		24.4			22.4	
		25	24		24.4			22.4	
	16QAM	50	0		24.3			22.3	
		1	0		24.8			22.7	
		1	24		24.7			22.9	
		1	49		24.8			22.9	
		25	0		23.5			21.5	
		25	12		23.5			21.5	
	64QAM	25	24		23.5			21.5	
		50	0		23.4			21.4	
		1	0		23.7			21.7	
		1	24		23.7			21.8	
		1	49		23.9			21.8	
		25	0		22.5			20.5	
		25	12		22.5		20.5		
		25	24		22.5		20.5		
		50	0		22.4		20.4		

7.9. LTE BAND 30

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OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				27685	27710	27735	27685	27710	27735
5.0	QPSK	1	0	2307.5	2310.0	2312.5	2307.5	2310.0	2312.5
				23.5	23.4	23.3	20.3	20.4	20.2
		1	12	23.4	23.2	23.3	20.3	20.3	20.3
		1	24	23.4	23.4	23.4	20.3	20.4	20.5
		12	0	22.5	22.3	22.2	19.3	19.4	19.4
		12	6	22.5	22.3	22.3	19.4	19.3	19.4
		12	11	22.3	22.2	22.2	19.3	19.3	19.4
	25	0	22.5	22.2	22.3	19.4	19.4	19.4	
	16QAM	1	0	23.0	22.8	22.7	19.6	19.8	19.7
		1	12	22.8	22.6	22.8	19.6	19.6	19.8
		1	24	22.7	22.7	22.8	19.5	19.8	19.9
		12	0	21.5	21.3	21.2	18.3	18.3	18.4
		12	6	21.4	21.2	21.2	18.4	18.3	18.3
		12	11	21.3	21.1	21.2	18.3	18.3	18.4
		25	0	21.4	21.2	21.3	18.3	18.3	18.3
	64QAM	1	0	21.8	21.6	21.4	18.7	18.6	18.4
		1	12	21.6	21.4	21.5	18.6	18.4	18.5
		1	24	21.6	21.6	21.6	18.4	18.6	18.7
		12	0	20.4	20.2	20.0	17.3	17.2	17.2
		12	6	20.4	20.2	20.2	17.3	17.2	17.3
		12	11	20.3	20.1	20.0	17.3	17.2	17.3
		25	0	20.4	20.1	20.2	17.3	17.3	17.3

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				N/A	27710	N/A	N/A	27710	N/A
10.0	QPSK	1	0	N/A	2310.0	N/A	N/A	2310.0	N/A
					23.5			20.4	
		1	24		23.3			20.3	
		1	49		23.4			20.5	
		25	0		22.5			19.5	
		25	12		22.4			19.5	
		25	24		22.3			19.5	
	50	0		22.3			19.5		
	16QAM	1	0		22.6			19.7	
		1	24		22.3			19.6	
		1	49		22.4			19.9	
		25	0		21.2			18.6	
		25	12		21.1			18.5	
		25	24		21.0			18.6	
		50	0		21.0			18.5	
	64QAM	1	0		21.4			18.6	
		1	24		21.2			18.5	
		1	49		21.2			18.7	
		25	0		20.2			17.5	
		25	12		20.1			17.5	
		25	24		20.0			17.5	
		50	0		20.0			17.5	

7.10. LTE BAND 41

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OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				39675	40620	41565	39675	40620	41565
5.0	QPSK	1	0	23.9	26.6	26.4	19.6	22.5	22.1
		1	12	26.9	26.6	26.4	22.6	22.5	22.0
		1	24	27.0	26.6	26.4	22.7	22.5	22.1
		12	0	22.8	26.3	26.2	18.5	21.4	21.0
		12	6	22.8	26.3	26.1	18.6	21.4	21.0
		12	11	25.8	26.3	26.1	21.6	21.4	21.0
		25	0	22.8	26.3	26.2	18.6	21.4	21.1
	16QAM	1	0	22.5	25.9	25.9	18.2	21.1	20.5
		1	12	25.4	25.9	25.8	21.2	21.1	20.5
		1	24	25.6	25.9	25.7	21.4	21.1	20.6
		12	0	21.0	24.5	24.4	16.9	19.7	19.4
		12	6	21.0	24.6	24.4	16.9	19.7	19.4
		12	11	24.0	24.5	24.4	19.9	19.8	19.3
		25	0	21.0	24.5	24.4	16.9	19.7	19.3
	64QAM	1	0	21.2	24.9	24.7	17.1	20.0	19.6
		1	12	24.3	24.8	24.7	20.1	20.0	19.6
		1	24	24.4	24.8	24.6	20.1	20.0	19.7
		12	0	20.0	23.5	23.3	15.8	18.7	18.3
		12	6	20.0	23.5	23.3	15.8	18.8	18.3
		12	11	23.0	23.5	23.3	18.7	18.7	18.3
		25	0	20.0	23.5	23.3	15.8	18.8	18.3

OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				39700	40620	41540	39700	40620	41540
10.0	QPSK	1	0	21.8	26.7	26.6	17.6	22.5	22.2
		1	24	26.9	26.7	26.5	22.7	22.5	22.1
		1	49	27.0	26.8	26.5	22.7	22.5	22.2
		25	0	22.8	26.4	26.3	18.7	21.4	21.1
		25	12	25.9	26.4	26.3	21.6	21.5	21.1
		25	24	24.9	26.4	26.3	20.7	21.5	21.1
		50	0	22.9	26.4	26.2	18.7	21.5	21.0
	16QAM	1	0	20.2	25.8	25.7	16.8	21.6	21.3
		1	24	25.2	25.8	25.6	21.9	21.7	21.2
		1	49	25.3	25.9	25.5	21.9	21.7	21.3
		25	0	20.9	24.5	24.4	17.7	20.5	20.1
		25	12	23.9	24.5	24.4	20.7	20.5	20.1
		25	24	22.9	24.5	24.4	19.7	20.5	20.1
		50	0	20.9	24.5	24.3	17.6	20.4	20.0
	64QAM	1	0	19.1	24.7	24.6	15.7	20.5	20.1
		1	24	24.2	24.7	24.6	20.7	20.5	20.0
		1	49	24.2	24.7	24.4	20.7	20.6	20.1
		25	0	19.9	23.5	23.4	16.7	19.5	19.1
		25	12	22.9	23.5	23.4	19.7	19.5	19.1
		25	24	21.9	23.5	23.4	18.7	19.5	19.1
		50	0	19.9	23.5	23.3	16.6	19.5	19.0

OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				39725	40620	41515	39725	40620	41515
				2503.5	2593.0	2682.5	2503.5	2593.0	2682.5
15.0	QPSK	1	0	21.8	26.6	26.6	17.6	22.5	22.0
		1	37	26.8	26.7	26.6	22.7	22.5	22.0
		1	74	27.0	26.7	26.4	22.7	22.5	22.1
		36	0	21.8	26.3	26.3	17.7	21.4	21.0
		36	16	25.9	26.4	26.3	21.7	21.5	21.1
		36	35	22.9	26.5	26.3	18.7	21.5	21.1
	16QAM	75	0	21.8	26.4	26.2	17.7	21.4	21.0
		1	0	20.5	25.9	25.9	16.7	21.5	21.2
		1	37	25.5	26.0	25.8	21.8	21.6	21.2
		1	74	25.6	26.0	25.7	21.8	21.5	21.1
		36	0	20.3	24.7	24.7	16.5	20.3	19.9
		36	16	24.3	24.8	24.7	20.6	20.4	20.0
	64QAM	36	35	21.3	24.9	24.6	17.6	20.3	19.9
		75	0	20.2	24.7	24.6	16.5	20.3	19.9
		1	0	19.5	25.0	24.9	15.7	20.4	20.0
		1	37	24.5	25.0	24.9	20.6	20.4	20.0
		1	74	24.7	25.1	24.7	20.6	20.4	20.0
		36	0	19.2	23.8	23.7	15.6	19.3	18.9
		36	16	23.3	23.8	23.7	19.6	19.4	18.9
		36	35	20.3	23.9	23.6	16.6	19.4	18.9
		75	0	19.2	23.7	23.6	15.5	19.3	18.8

OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				39750	40620	41490	39750	40620	41490
				2506.0	2593.0	2680.0	2506.0	2593.0	2680.0
20.0	QPSK	1	0	22.1	26.1	26.1	17.7	22.6	22.1
		1	49	26.9	26.1	26.0	22.7	22.5	22.0
		1	99	27.0	26.3	25.9	22.7	22.6	22.1
		50	0	21.9	25.7	25.7	17.7	21.4	21.0
		50	24	25.9	25.8	25.6	21.7	21.5	21.1
		50	49	22.8	25.9	25.6	18.7	21.5	21.1
	16QAM	100	0	21.9	25.8	25.6	17.7	21.5	21.1
		1	0	21.4	26.2	26.3	17.1	21.9	21.5
		1	49	26.2	26.3	26.2	22.0	21.9	21.4
		1	99	26.3	26.4	26.1	22.1	22.0	21.4
		50	0	20.9	24.8	24.7	16.8	20.5	20.1
		50	24	24.8	24.9	24.7	20.7	20.5	20.1
	64QAM	50	49	21.9	24.9	24.7	17.8	20.5	20.1
		100	0	20.9	24.8	24.7	16.7	20.5	20.1
		1	0	20.1	25.2	25.2	16.0	20.8	20.4
		1	49	25.2	25.2	25.1	20.9	20.8	20.3
		1	99	25.3	25.4	25.0	21.0	20.8	20.3
		50	0	19.9	23.8	23.7	15.8	19.5	19.1
		50	24	23.9	23.9	23.7	19.7	19.5	19.1
		50	49	21.0	23.9	23.7	16.8	19.5	19.1
		100	0	19.9	23.8	23.7	15.7	19.5	19.1

7.11. LTE BAND 66

ID:	10646	Date:	6/4/18
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OUTPUT POWER FOR LTE BAND 66 (1.4 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				131979	132322	132665	131979	132322	132665
1.4	QPSK	1	0	25.4	25.3	25.2	21.3	21.5	21.4
		1	2	25.4	25.3	25.3	21.3	21.5	21.4
		1	5	25.5	25.4	25.4	21.1	21.3	21.3
		3	0	25.4	25.3	25.3	21.1	21.3	21.4
		3	1	25.4	25.3	25.3	20.9	21.2	21.4
		3	2	25.4	25.3	25.3	21.3	21.1	21.3
	16QAM	6	0	24.4	24.3	24.3	20.9	20.9	21.0
		1	0	24.8	24.5	24.6	19.9	20.7	20.7
		1	2	24.8	24.5	24.6	20.1	20.7	20.9
		1	5	24.8	24.5	24.6	20.1	20.6	20.7
		3	0	24.6	24.4	24.5	20.3	20.8	20.8
		3	1	24.5	24.4	24.5	20.4	20.6	20.8
	64QAM	3	2	24.5	24.4	24.5	20.4	20.7	20.8
		6	0	23.4	23.3	23.4	20.2	20.2	20.1
		1	0	23.0	22.9	23.0	19.8	19.9	19.6
		1	2	22.9	22.9	23.0	19.8	19.9	19.7
		1	5	23.0	22.9	23.0	19.8	19.8	19.8
		3	0	22.9	22.7	22.8	19.7	19.7	19.6
		3	1	22.9	22.7	22.8	19.7	19.6	19.6
		3	2	22.9	22.7	22.8	19.7	19.7	19.6
		6	0	21.8	21.7	21.7	18.6	18.6	18.5

OUTPUT POWER FOR LTE BAND 66 (3.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				131987	132322	132657	131987	132322	132657
3.0	QPSK	1	0	25.5	25.3	25.4	21.0	20.3	20.7
		1	7	25.5	25.4	25.5	20.9	20.3	20.7
		1	14	25.5	25.4	25.5	21.0	21.5	20.6
		8	0	24.5	24.4	24.4	20.8	21.0	20.6
		8	4	24.4	24.4	24.4	20.8	20.9	20.5
		8	7	24.4	24.4	24.4	20.9	21.0	20.5
	16QAM	15	0	24.5	24.3	24.4	20.8	21.0	20.5
		1	0	24.9	24.8	24.6	20.3	20.5	20.1
		1	7	25.0	24.8	24.7	20.4	20.6	19.6
		1	14	24.9	24.7	24.7	20.4	20.7	19.5
		8	0	23.5	23.4	23.5	19.8	19.7	19.6
		8	4	23.5	23.4	23.5	19.7	19.7	19.5
	64QAM	8	7	23.5	23.4	23.5	19.7	19.7	19.5
		15	0	23.4	23.3	23.4	19.7	19.6	19.5
		1	0	23.0	22.8	23.0	19.7	19.7	19.5
		1	7	23.2	23.0	23.0	19.7	19.7	19.5
		1	14	23.1	23.0	23.0	19.7	19.6	19.4
		8	0	21.9	21.7	21.8	18.5	18.5	18.4
		8	4	21.9	21.7	21.8	18.5	18.5	18.4
		8	7	21.9	21.7	21.8	18.5	18.5	18.4
		15	0	21.8	21.7	21.8	18.4	18.5	18.3

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				131997	132322	132647	131997	132322	132647
5.0	QPSK	1	0	25.5	25.4	25.4	21.4	21.5	21.4
		1	12	25.4	25.4	25.4	21.4	21.5	21.4
		1	24	25.5	25.5	25.5	21.5	21.5	21.3
		12	0	24.5	24.4	24.4	20.4	20.4	20.3
		12	6	24.5	24.5	24.4	20.4	20.4	20.3
		12	11	24.5	24.5	24.5	20.4	20.4	20.3
		25	0	24.5	24.5	24.5	20.4	20.4	20.3
	16QAM	1	0	24.9	24.7	24.7	20.8	20.8	20.7
		1	12	24.8	24.7	24.7	20.8	20.7	20.7
		1	24	24.9	24.8	24.7	20.8	20.8	20.6
		12	0	23.6	23.5	23.5	19.5	19.5	19.4
		12	6	23.5	23.5	23.5	19.6	19.5	19.5
		12	11	23.5	23.5	23.5	19.5	19.5	19.4
		25	0	23.5	23.4	23.5	19.5	19.5	19.5
	64QAM	1	0	23.7	23.5	23.5	19.6	19.7	19.6
		1	12	23.6	23.6	23.5	19.7	19.7	19.6
		1	24	23.6	23.6	23.6	19.7	19.6	19.5
		12	0	22.4	22.4	22.4	18.4	18.5	18.4
		12	6	22.4	22.4	22.4	18.5	18.4	18.4
		12	11	22.4	22.4	22.4	18.5	18.4	18.4
25		0	22.4	22.4	22.4	18.5	18.4	18.4	

OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				132022	132322	132622	132022	132322	132622
10.0	QPSK	1	0	25.4	25.2	25.4	21.5	21.4	21.4
		1	24	25.3	25.3	25.3	21.5	21.4	21.4
		1	49	25.5	25.5	25.4	21.5	21.5	21.3
		25	0	24.2	24.2	24.2	20.4	20.3	20.3
		25	12	24.2	24.2	24.2	20.3	20.3	20.2
		25	24	24.3	24.2	24.2	20.3	20.3	20.2
		50	0	24.3	24.2	24.2	20.3	20.3	20.3
	16QAM	1	0	24.7	24.5	24.7	20.9	20.9	20.9
		1	24	24.8	24.6	24.6	20.9	20.9	20.8
		1	49	24.7	24.8	24.6	20.8	20.9	20.7
		25	0	23.4	23.3	23.3	19.5	19.4	19.4
		25	12	23.3	23.3	23.3	19.4	19.4	19.4
		25	24	23.4	23.3	23.3	19.4	19.4	19.4
		50	0	23.3	23.2	23.2	19.4	19.4	19.3
	64QAM	1	0	23.6	23.4	23.6	19.8	19.7	19.7
		1	24	23.5	23.5	23.4	19.7	19.7	19.7
		1	49	23.6	23.7	23.5	19.7	19.7	19.5
		25	0	22.3	22.3	22.3	18.5	18.4	18.4
		25	12	22.3	22.3	22.2	18.5	18.4	18.3
		25	24	22.3	22.3	22.3	18.5	18.4	18.4
50		0	22.3	22.2	22.2	18.4	18.4	18.3	

OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				132047	132322	132597	132047	132322	132597
				1717.5	1745.0	1772.5	1717.5	1745.0	1772.5
15.0	QPSK	1	0	25.3	25.1	25.5	21.4	21.3	21.4
		1	37	25.4	25.3	25.3	21.5	21.4	21.4
		1	74	25.2	25.5	25.4	21.3	21.5	21.3
		36	0	24.3	24.1	24.4	20.3	20.2	20.3
		36	16	24.3	24.2	24.2	20.3	20.3	20.3
		36	35	24.3	24.2	24.2	20.3	20.3	20.2
	16QAM	75	0	24.3	24.2	24.3	20.4	20.3	20.3
		1	0	24.7	24.5	24.9	20.9	20.8	20.9
		1	37	24.7	24.7	24.6	20.9	20.9	20.8
		1	74	24.5	24.7	24.6	20.7	20.8	20.7
		36	0	23.2	23.2	23.5	19.4	19.3	19.4
		36	16	23.3	23.2	23.3	19.4	19.4	19.3
	64QAM	36	35	23.3	23.3	23.2	19.3	19.4	19.3
		75	0	23.3	23.2	23.2	19.4	19.4	19.3
		1	0	23.3	23.1	23.5	19.7	19.7	19.7
		1	37	23.4	23.3	23.3	19.7	19.7	19.7
		1	74	23.2	23.4	23.3	19.5	19.7	19.4
		36	0	22.0	21.9	22.2	18.4	18.3	18.3
		36	16	22.1	22.0	22.0	18.4	18.4	18.4
		36	35	22.1	22.1	22.0	18.4	18.4	18.3
		75	0	22.1	22.0	22.0	18.4	18.3	18.3

OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Bandwidth (MHz)	Modulation	RB Allocation	RB Offset	Ant 1			Ant 2		
				Conducted Average			Conducted Average		
				132072	132322	132572	132072	132322	132572
				1720.0	1745.0	1770.0	1720.0	1745.0	1770.0
20.0	QPSK	1	0	25.3	25.1	25.4	21.4	21.5	21.4
		1	49	25.3	25.3	25.3	21.4	21.5	21.4
		1	99	25.3	25.5	25.4	21.4	21.5	21.3
		50	0	24.3	24.0	24.3	20.3	20.2	20.3
		50	24	24.3	24.1	24.2	20.3	20.3	20.3
		50	49	24.0	24.2	24.1	20.2	20.4	20.3
	16QAM	100	0	24.2	24.1	24.2	20.3	20.4	20.3
		1	0	24.6	24.4	24.8	21.0	20.9	21.0
		1	49	24.6	24.5	24.6	20.8	20.9	20.9
		1	99	24.4	24.6	24.4	20.8	20.9	20.7
		50	0	23.1	23.0	23.3	19.4	19.3	19.4
		50	24	23.1	23.0	23.1	19.3	19.4	19.3
	64QAM	50	49	22.9	23.1	23.0	19.2	19.4	19.3
		100	0	23.1	23.0	23.1	19.3	19.4	19.3
		1	0	23.5	23.3	23.6	19.8	19.8	19.9
		1	49	23.5	23.4	23.5	19.7	19.8	19.8
		1	99	23.4	23.6	23.4	19.7	19.8	19.6
		50	0	22.1	21.9	22.1	18.4	18.2	18.3
		50	24	22.1	22.0	22.0	18.3	18.3	18.3
		50	49	21.8	22.1	21.9	18.2	18.3	18.3
		100	0	22.1	22.0	22.0	18.3	18.4	18.3

8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

§2.1049

LIMITS

For reporting purposes only.

TEST PROCEDURE

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

MODES TESTED

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

RESULTS

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

LTE BAND 2

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 2	1.4 MHz, QPSK	6/0	1880.0	1.0909	1.240
	1.4 MHz, 16QAM			1.0947	1.246
	1.4 MHz, 64QAM			1.0946	1.251
	3 MHz, QPSK	15/0		2.7068	2.993
	3 MHz, 16QAM			2.7010	2.982
	3 MHz, 64QAM			2.7068	2.992
	5 MHz, QPSK	25/0		4.4995	4.919
	5 MHz, 16QAM			4.5023	4.926
	5 MHz, 64QAM			4.4966	4.925
	10 MHz, QPSK	50/0		9.0123	10.370
	10 MHz, 16QAM			9.0052	10.440
	10 MHz, 64QAM			8.9938	10.030
	15 MHz, QPSK	75/0		13.4830	15.490
	15 MHz, 16QAM			13.4690	15.500
	15 MHz, 64QAM			13.541	15.670
	20 MHz, QPSK	100/0		17.991	19.690
	20 MHz, 16QAM			17.980	20.160
	20 MHz, 64QAM			17.9531	18.561

LTE BAND 5

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 5	1.4 MHz, QPSK	6/0	836.5	1.0910	1.244
	1.4 MHz, 16QAM			1.0932	1.247
	1.4 MHz, 64QAM			1.0774	1.211
	3 MHz, QPSK	15/0		2.7038	2.993
	3 MHz, 16QAM			2.7064	2.991
	3 MHz, 64QAM			2.6894	2.805
	5 MHz, QPSK	25/0		4.5007	4.937
	5 MHz, 16QAM			4.4990	4.937
	5 MHz, 64QAM			4.4875	4.685
	10 MHz, QPSK	50/0		9.0190	10.360
	10 MHz, 16QAM			9.0146	10.400
	10 MHz, 64QAM			8.9292	9.348

LTE BAND 7

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 7	5 MHz, QPSK	25/0	2535.0	4.4955	4.929
	5 MHz, 16QAM			4.5035	4.931
	5 MHz, 64QAM			4.4980	4.945
	10 MHz, QPSK	50/0		9.0035	10.420
	10 MHz, 16QAM			9.0114	10.500
	10 MHz, 64QAM			8.9839	10.010
	15 MHz, QPSK	75/0		13.4840	15.630
	15 MHz, 16QAM			13.4960	15.400
	15 MHz, 64QAM			13.4950	15.470
	20 MHz, QPSK	100/0		17.9820	19.780
	20 MHz, 16QAM			17.9320	20.050
20 MHz, 64QAM	17.9830		19.780		

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	1.0933	1.242
	1.4 MHz, 16QAM			1.0933	1.246
	1.4 MHz, 64QAM			1.0936	1.249
	3 MHz, QPSK	15/0		2.7037	2.991
	3 MHz, 16QAM			2.7120	2.981
	3 MHz, 64QAM			2.7121	2.998
	5 MHz, QPSK	25/0		4.4959	4.909
	5 MHz, 16QAM			4.4988	4.944
	5 MHz, 64QAM			4.5074	4.939
	10 MHz, QPSK	50/0		8.9840	9.636
	10 MHz, 16QAM			8.9520	9.897
	10 MHz, 64QAM			8.9824	9.726

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	4.5056	4.958
	5 MHz, 16QAM			4.5045	4.943
	5 MHz, 64QAM			4.5021	4.753
	10 MHz, QPSK	50/0		8.9765	10.082
	10 MHz, 16QAM			8.9527	10.357
	10 MHz, 64QAM			8.9127	9.387

LTE BAND 14

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 14	5 MHz, QPSK	25/0	793	4.4964	4.791
	5 MHz, 16QAM			4.4909	4.963
	5 MHz, 64QAM			4.4962	4.910
	10 MHz, QPSK	50/0		8.9950	10.387
	10 MHz, 16QAM			8.9917	10.361
	10 MHz, 64QAM			8.9966	10.030

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	4.5012	4.822
	5 MHz, 16QAM			4.5030	4.944
	5 MHz, 64QAM			4.5019	4.746
	10 MHz, QPSK	50/0		8.9926	10.335
	10 MHz, 16QAM			8.9953	10.328
	10 MHz, 64QAM			8.9080	9.398

LTE BAND 25

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 25	1.4 MHz, QPSK	6/0	1882.5	1.0866	1.247
	1.4 MHz, 16QAM			1.0871	1.238
	1.4 MHz, 64QAM			1.0927	1.241
	3 MHz, QPSK	15/0		2.6994	2.996
	3 MHz, 16QAM			2.6845	2.986
	3 MHz, 64QAM			2.7038	2.993
	5 MHz, QPSK	25/0		4.5085	4.933
	5 MHz, 16QAM			4.5023	4.951
	5 MHz, 64QAM			4.5024	4.920
	10 MHz, QPSK	50/0		8.9935	10.163
	10 MHz, 16QAM			9.0249	10.265
	10 MHz, 64QAM			8.9949	10.050
	15 MHz, QPSK	75/0		13.4259	15.458
	15 MHz, 16QAM			13.4397	15.064
	15 MHz, 64QAM			13.5050	15.620
	20 MHz, QPSK	100/0		17.9397	19.569
20 MHz, 16QAM	17.8631		19.910		
20 MHz, 64QAM	17.8563		19.592		

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	0.24746	0.3259
	1.4 MHz, 16QAM			0.25804	0.3646
	1.4 MHz, 64QAM			0.26155	0.3768
	1.4 MHz, QPSK	6/0		1.0931	1.247
	1.4 MHz, 16QAM			1.0924	1.249
	1.4 MHz, 64QAM			1.0817	1.222
	3 MHz, QPSK	1/0		0.25407	0.3916
	3 MHz, 16QAM			0.27647	0.3944
	3 MHz, 64QAM			0.26304	0.4285
	3 MHz, QPSK	15/0		2.7052	2.996
	3 MHz, 16QAM			2.7059	2.990
	3 MHz, 64QAM			2.6857	2.879
	5 MHz, QPSK	1/0		0.23227	0.3938
	5 MHz, 16QAM			0.23166	0.4132
	5 MHz, 64QAM			0.22828	0.3938
	5 MHz, QPSK	25/0		4.5236	4.952
	5 MHz, 16QAM			4.4962	4.927
	5 MHz, 64QAM			4.4671	4.726
	10 MHz, QPSK	1/0		0.25824	0.4020
	10 MHz, 16QAM			0.27523	0.4269
10 MHz, 64QAM	0.26208		0.3949		
10 MHz, QPSK	50/0	9.0119	10.390		
10 MHz, 16QAM		9.0102	10.490		
10 MHz, 64QAM		8.9369	9.354		

LTE BAND 30

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 30	5 MHz, QPSK	25/0	2310.0	4.4987	4.928
	5 MHz, 16QAM			4.5104	4.928
	5 MHz, 64QAM			4.4988	4.919
	10 MHz, QPSK	50/0		8.9780	10.130
	10 MHz, 16QAM			8.9893	10.160
	10 MHz, 64QAM			8.9837	10.020

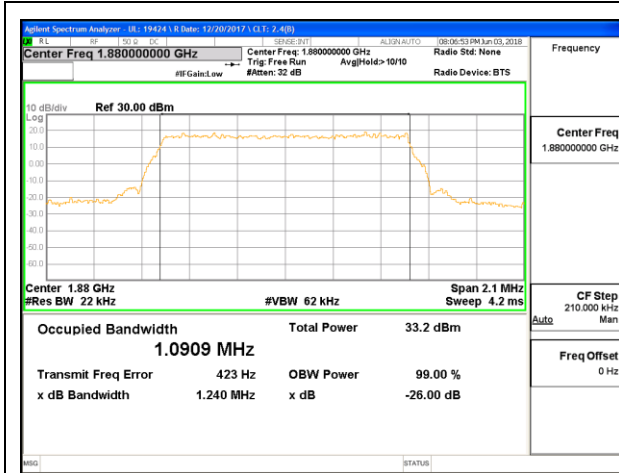
LTE BAND 41

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 41	5 MHz, QPSK	25/0	2593.0	4.4941	5.136
	5 MHz, 16QAM			4.5070	4.845
	5 MHz, 64QAM			4.5015	5.321
	10 MHz, QPSK	50/0		8.9853	10.356
	10 MHz, 16QAM			8.9782	10.088
	10 MHz, 64QAM			9.0025	10.810
	15 MHz, QPSK	75/0		13.3940	14.701
	15 MHz, 16QAM			13.4932	15.108
	15 MHz, 64QAM			13.4980	16.640
	20 MHz, QPSK	100/0		17.9097	19.478
	20 MHz, 16QAM			17.9422	19.046
	20 MHz, 64QAM			17.9540	21.570

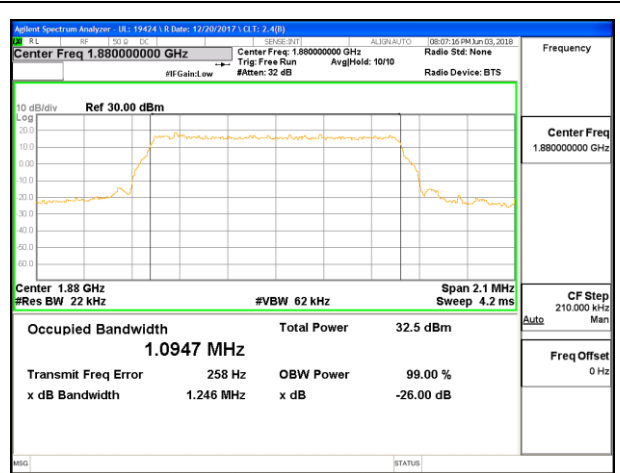
LTE BAND 66

Band	Mode	RB Allocation/RB Offset	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 66	1.4MHz, QPSK	6/0	1745.0	1.0898	1.240
	1.4MHz, 16QAM			1.0872	1.246
	1.4MHz 64QAM			1.0906	1.244
	3MHz, QPSK	15/0		2.6904	2.961
	3MHz, 16QAM			2.6840	2.984
	3MHz 64QAM			2.7093	2.987
	5MHz, QPSK	25/0		4.5061	4.937
	5MHz, 16QAM			4.4954	4.868
	5MHz 64QAM			4.4936	4.920
	10MHz, QPSK	50/0		8.9930	10.316
	10MHz, 16QAM			8.9986	10.389
	10MHz 64QAM			8.9843	10.13
	15MHz, QPSK	75/0		13.4510	15.375
	15MHz, 16QAM			13.4360	14.903
	15MHz 64QAM			13.493	15.490
	20MHz, QPSK	100/0		17.9082	19.543
	20MHz, 16QAM			17.9552	19.555
	20MHz 64QAM			17.9490	19.960

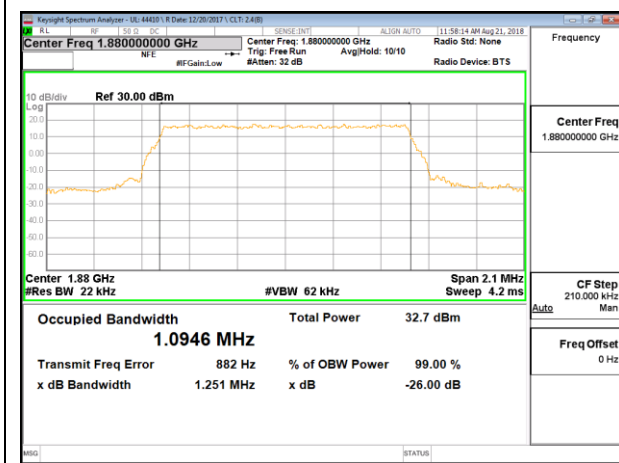
8.1.1. LTE BAND 2



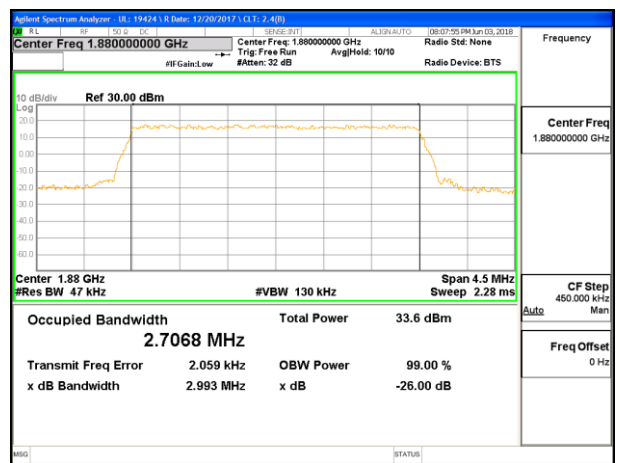
LTE B2 1.4MHz QPSK Middle Channel RB6-0



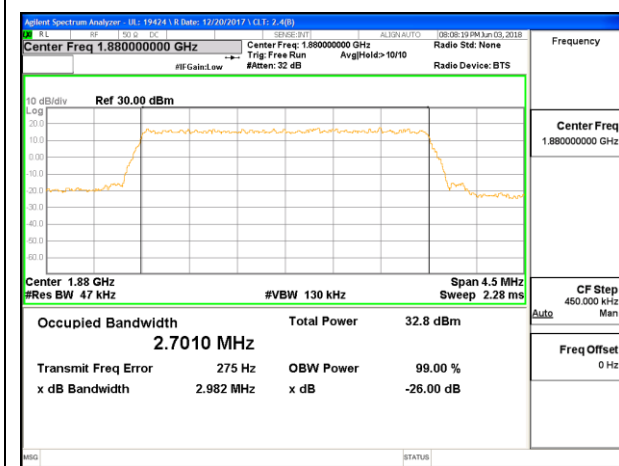
LTE B2 1.4MHz 16QAM Middle Channel RB6-0



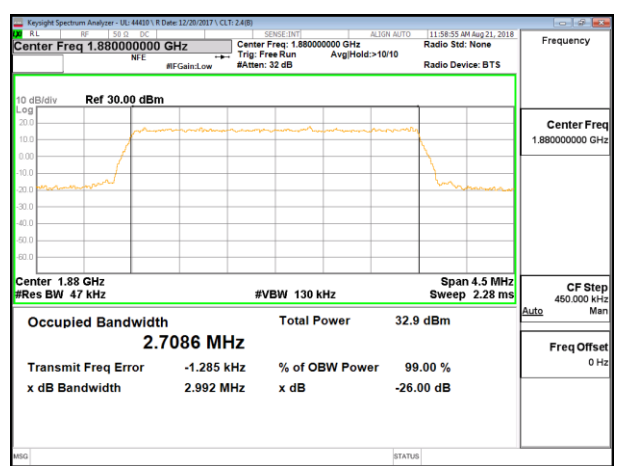
LTE B2 1.4MHz 64QAM Middle Channel RB6-0



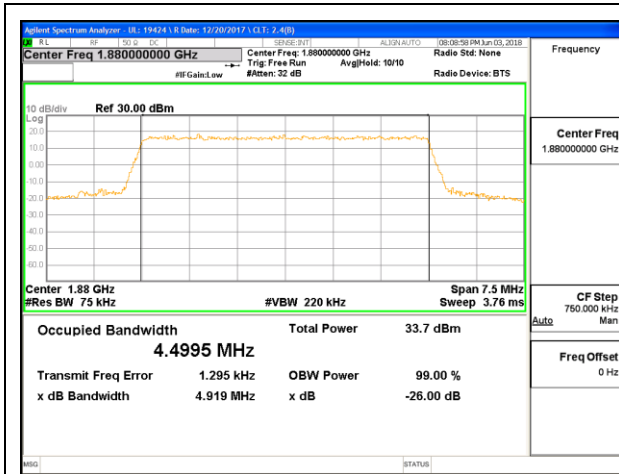
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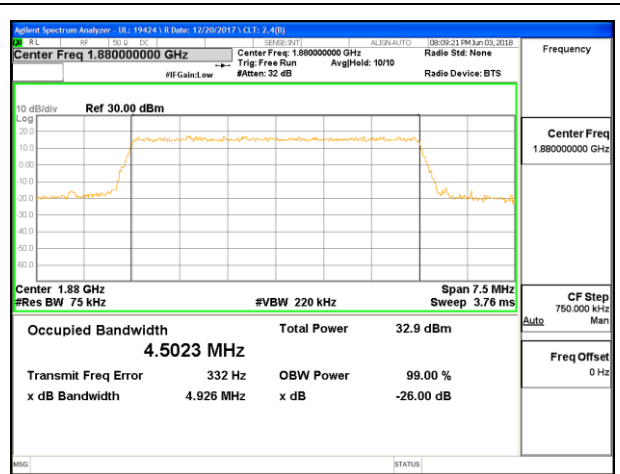
LTE B2 3MHz 16QAM Middle Channel RB15-0



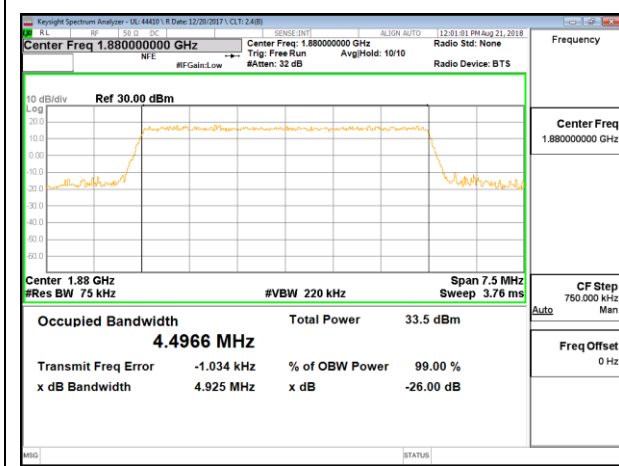
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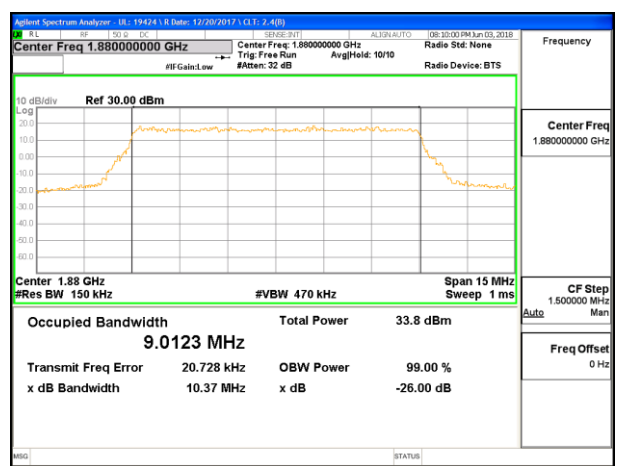
LTE B2 5MHz QPSK Middle Channel RB50-0



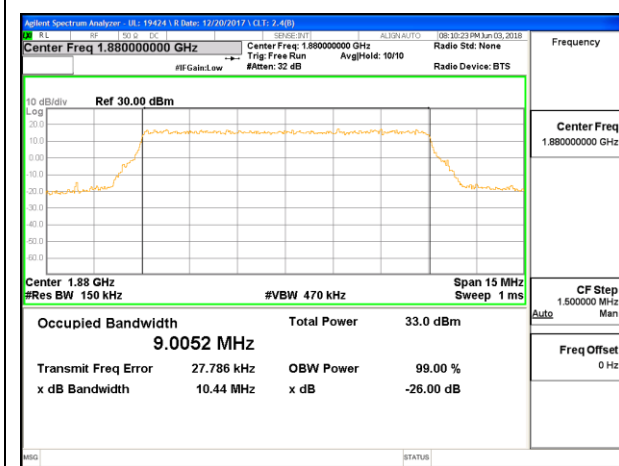
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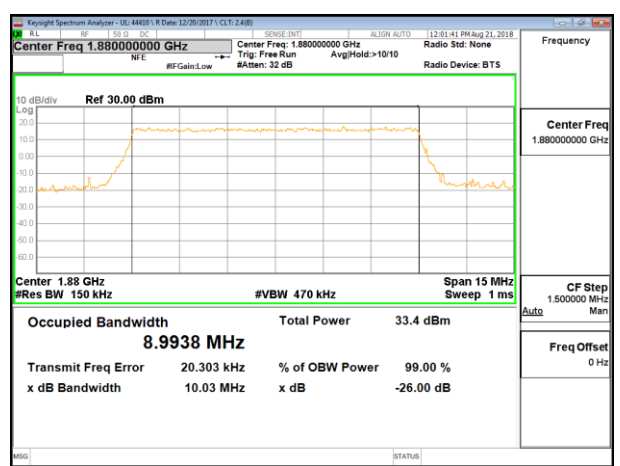
LTE B2 5MHz 64QAM Middle Channel RB50-0



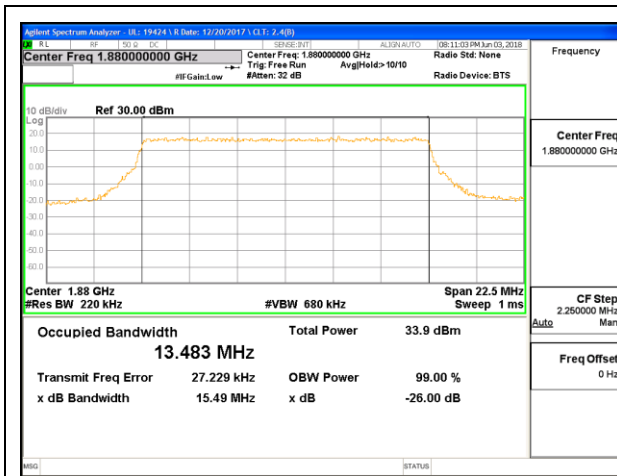
LTE B2 10MHz QPSK Middle Channel RB75-0



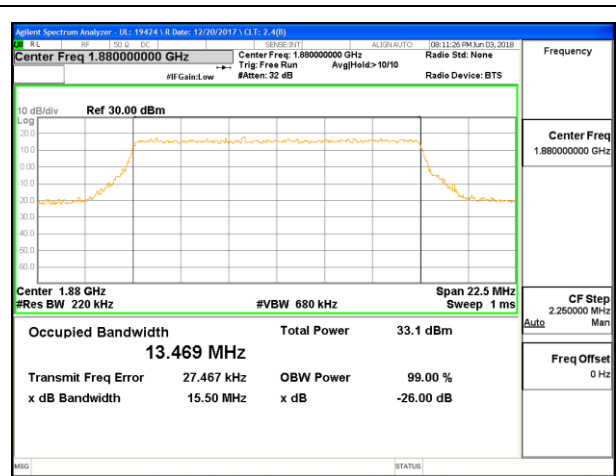
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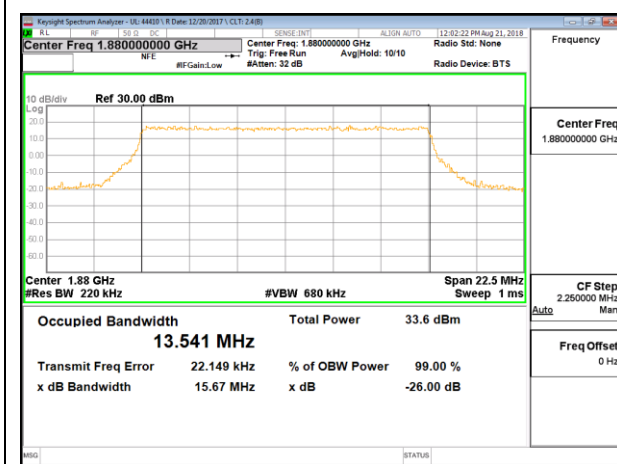
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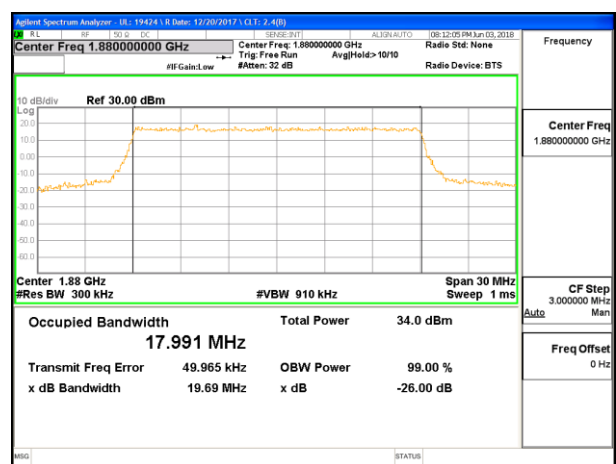
LTE B2 15MHz QPSK Middle Channel RB75-0



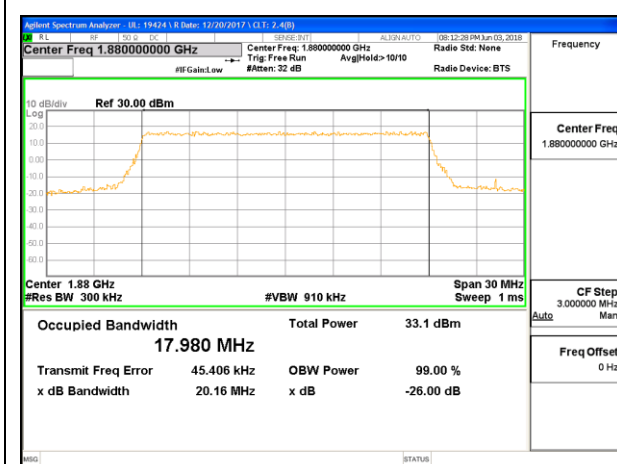
LTE B2 15MHz 16QAM Middle Channel RB75-0



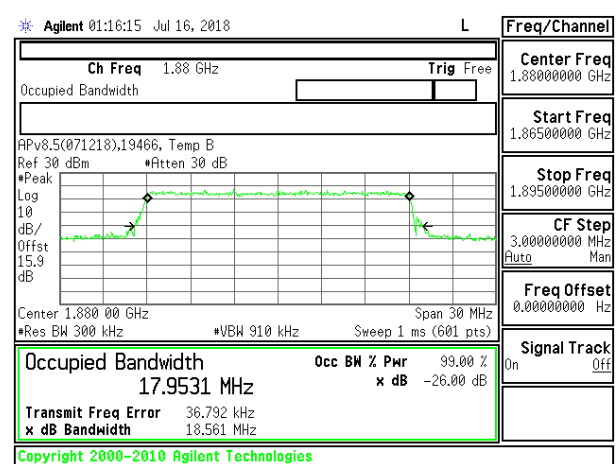
LTE B2 15MHz 64QAM Middle Channel RB75-0



LTE B2 20MHz QPSK Middle Channel RB100-0

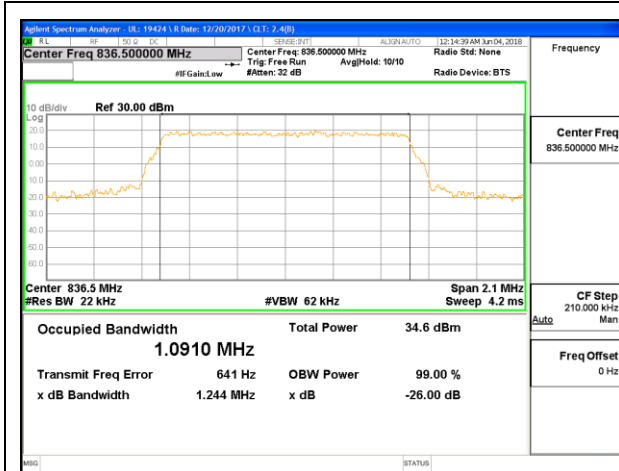


LTE B2 20MHz 16QAM Middle Channel RB100-0

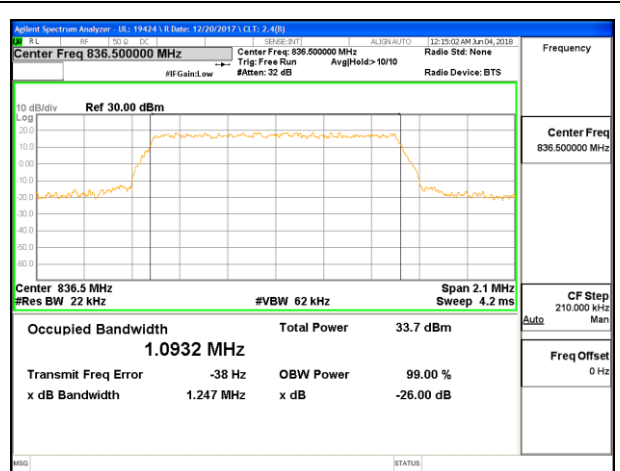


LTE B2 20MHz 64QAM Middle Channel RB100-0

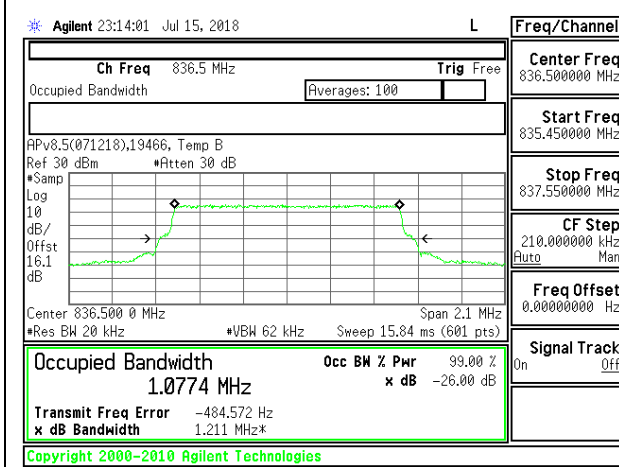
8.1.2. LTE BAND 5



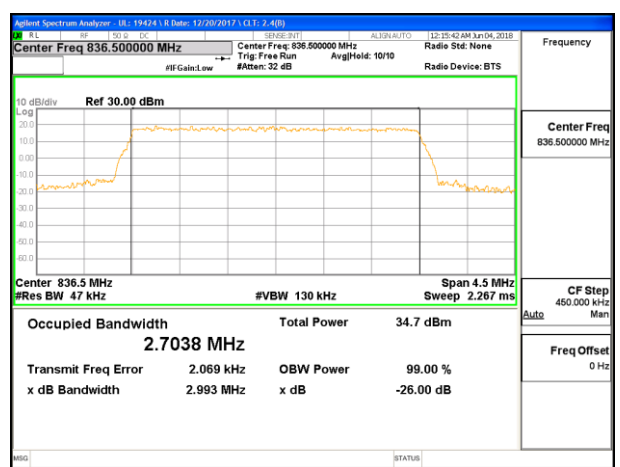
LTE B5 1.4MHz QPSK Middle Channel RB6-0



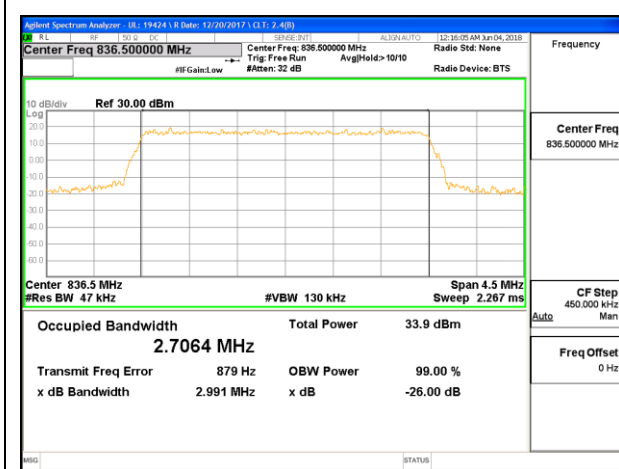
LTE B5 1.4MHz 16QAM Middle Channel RB6-0



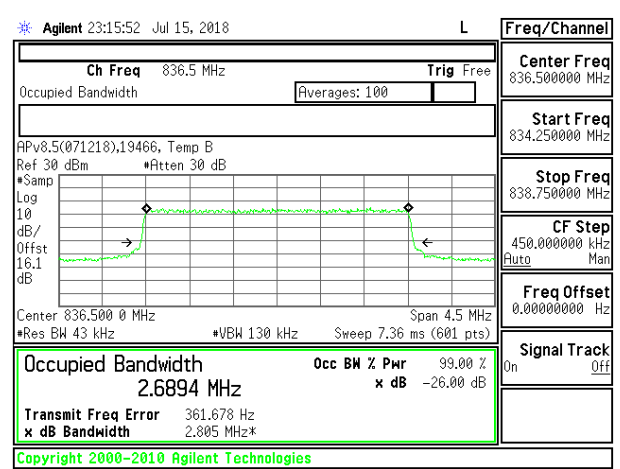
LTE B5 1.4MHz 64QAM Middle Channel RB6-0



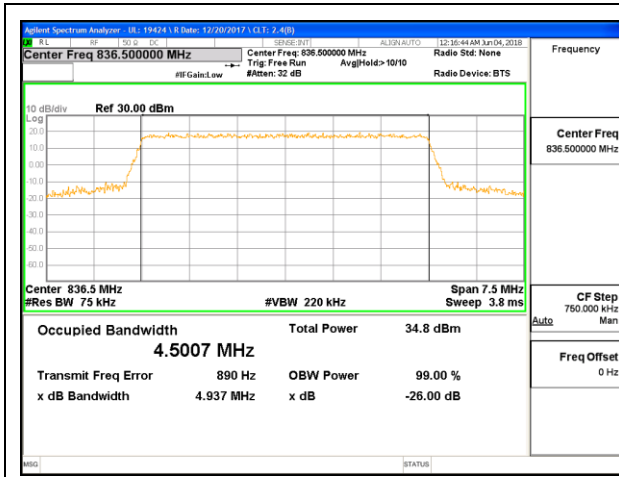
LTE B5 3MHz QPSK Middle Channel RB15-0



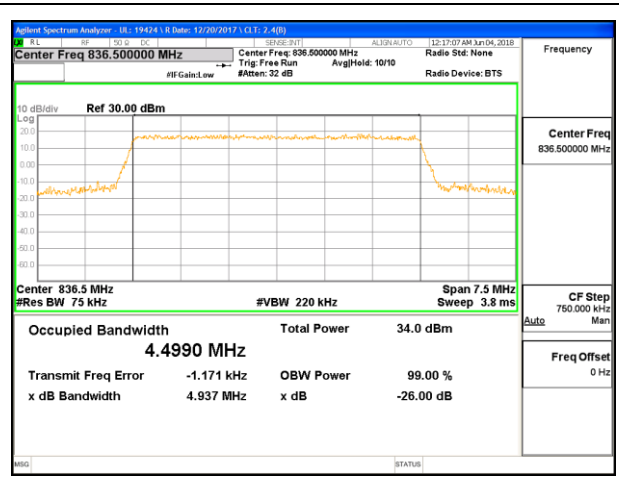
LTE B5 3MHz 16QAM Middle Channel RB15-0



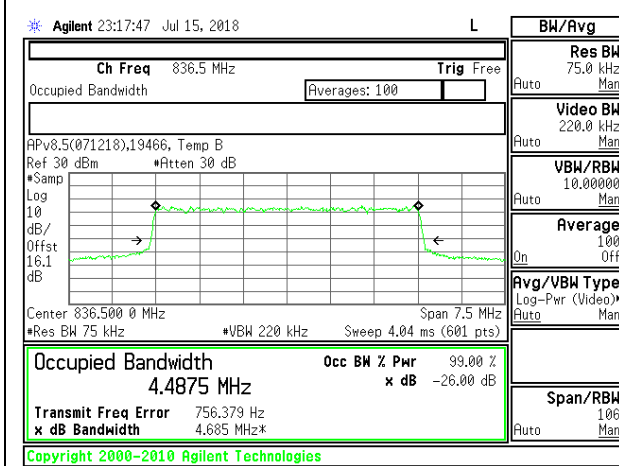
LTE B5 3MHz 64QAM Middle Channel RB15-0



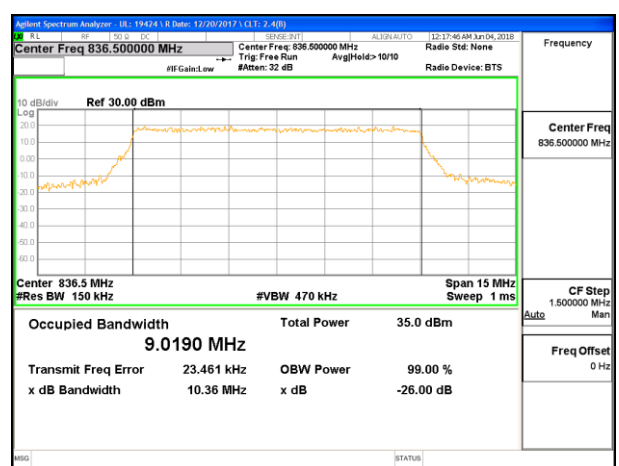
LTE B5 5MHz QPSK Middle Channel RB25-0



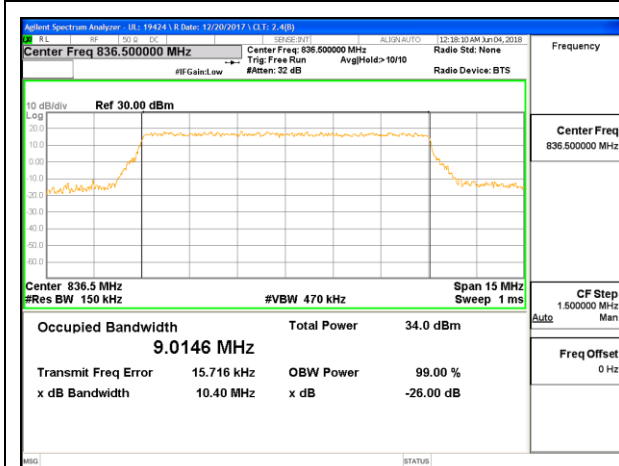
LTE B5 5MHz 16QAM Middle Channel RB25-0



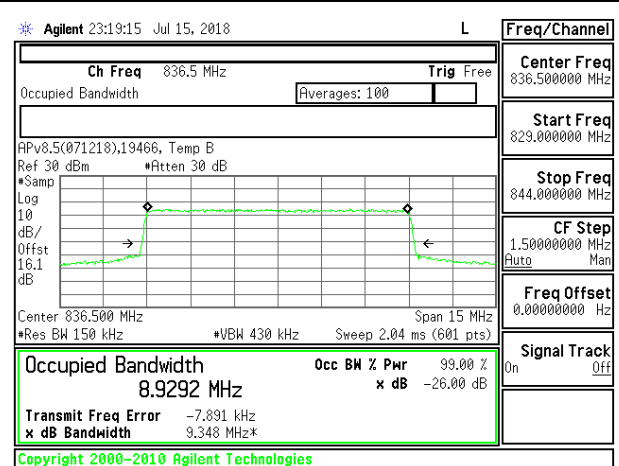
LTE B5 5MHz 64QAM Middle Channel RB25-0



LTE B5 10MHz QPSK Middle Channel RB50-0

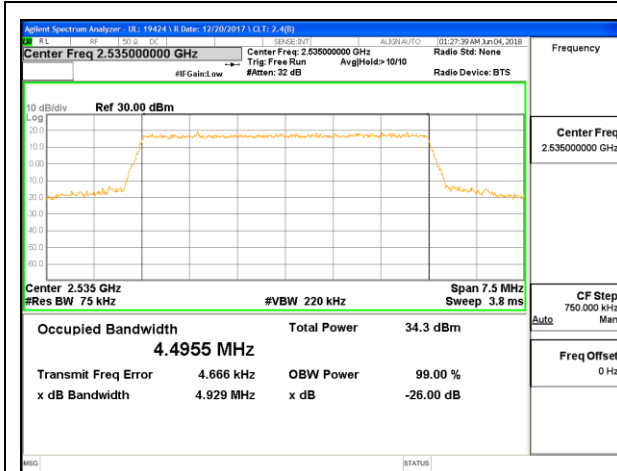


LTE B5 10MHz 16QAM Middle Channel RB50-0

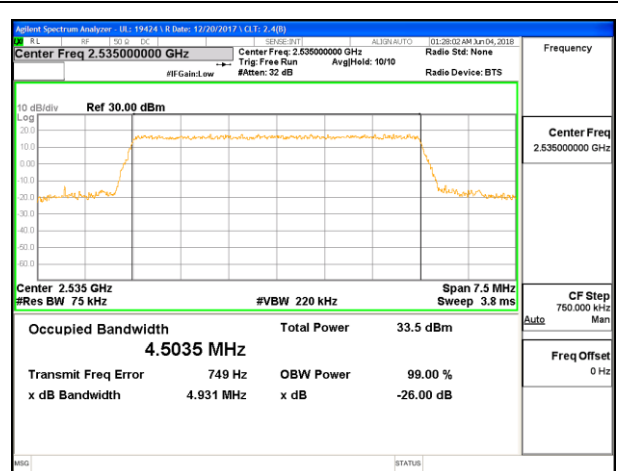


LTE B5 10MHz 64QAM Middle Channel RB50-0

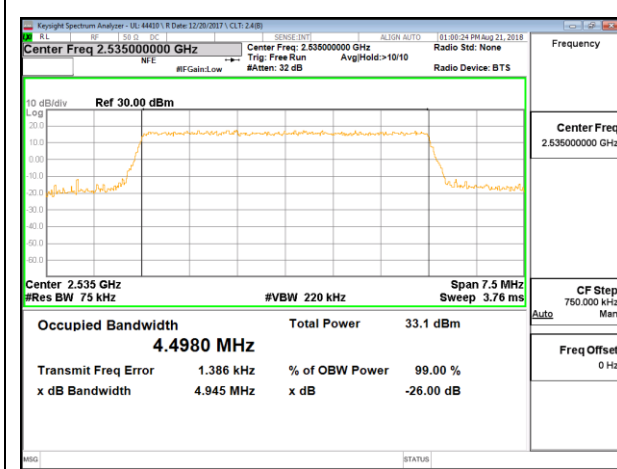
8.1.3. LTE BAND 7



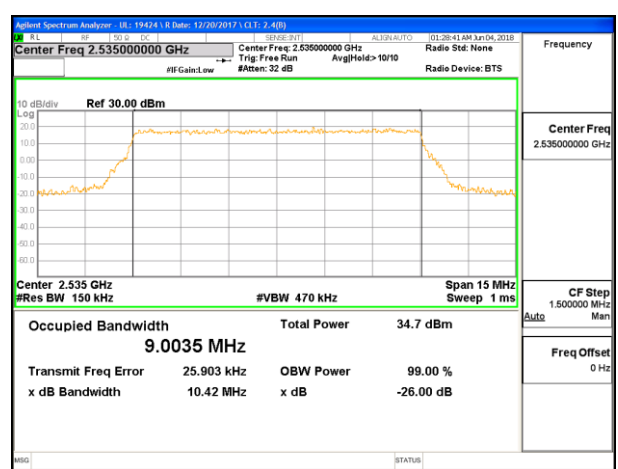
LTE B7 5MHz QPSK Middle Channel RB25-0



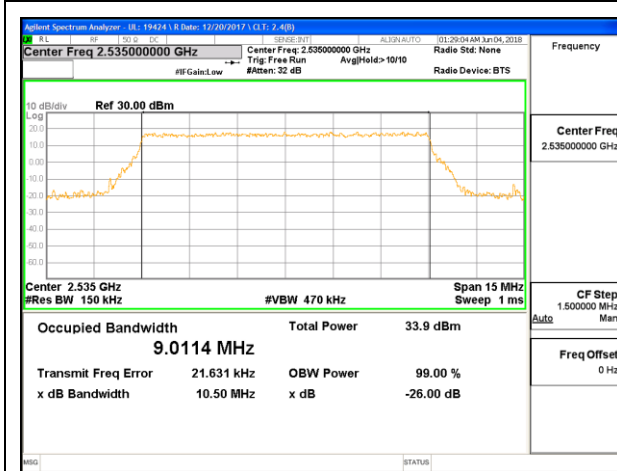
LTE B7 5MHz 16QAM Middle Channel RB25-0



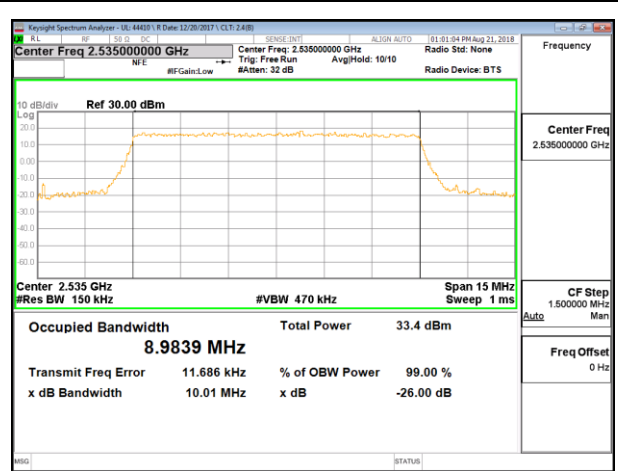
LTE B7 5MHz 64QAM Middle Channel RB25-0



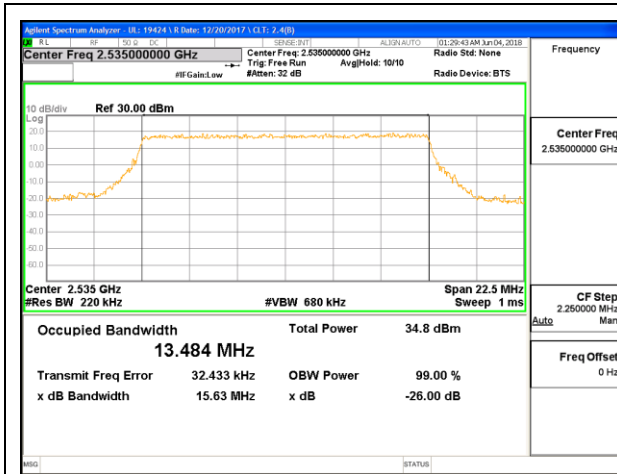
LTE B7 10MHz QPSK Middle Channel RB50-0



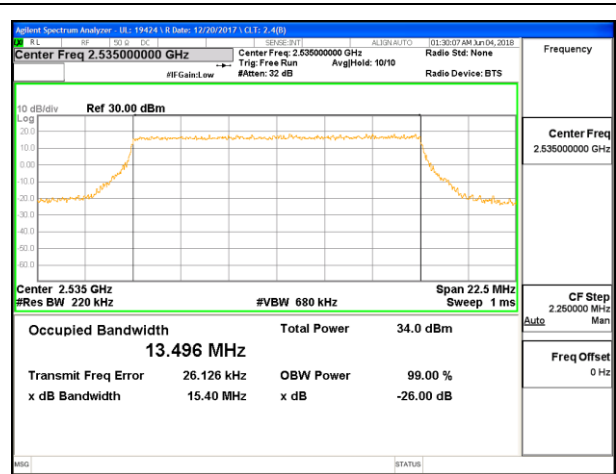
LTE B7 10MHz 16QAM Middle Channel RB50-0



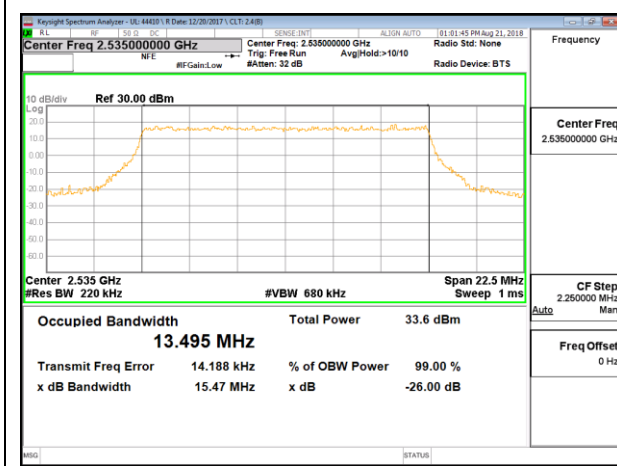
LTE B7 10MHz 64QAM Middle Channel RB50-0



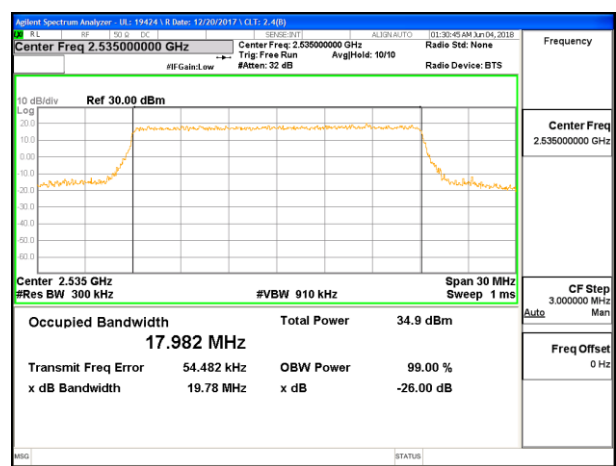
LTE B7 15MHz QPSK Middle Channel RB75-0



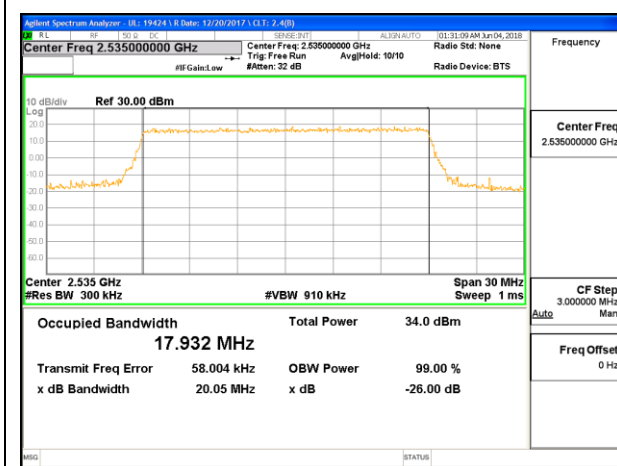
LTE B7 15MHz 16QAM Middle Channel RB75-0



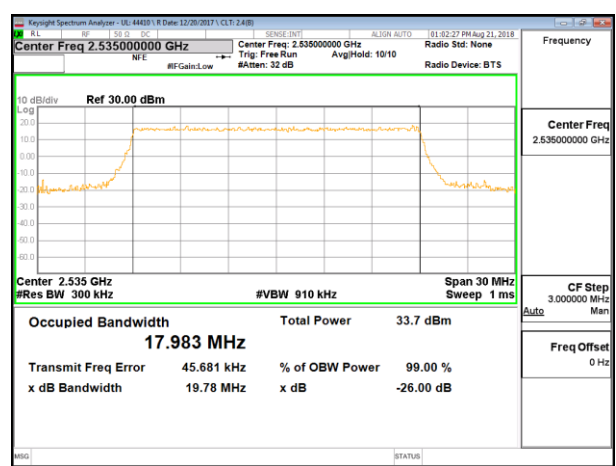
LTE B7 15MHz 64QAM Middle Channel RB75-0



LTE B7 20MHz QPSK Middle Channel RB100-0

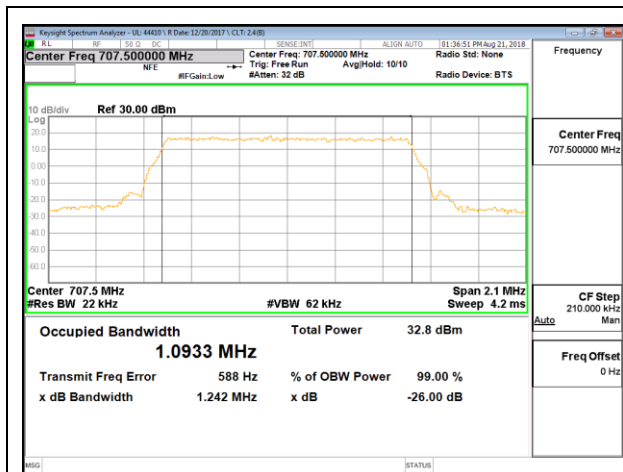


LTE B7 20MHz 16QAM Middle Channel RB100-0

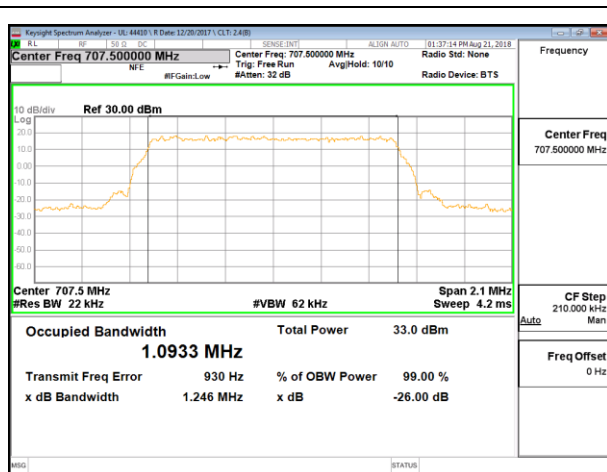


LTE B7 20MHz 64QAM Middle Channel RB100-0

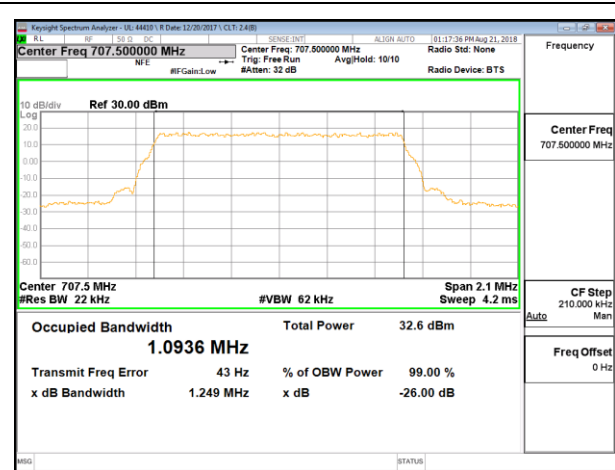
8.1.4. LTE BAND 12



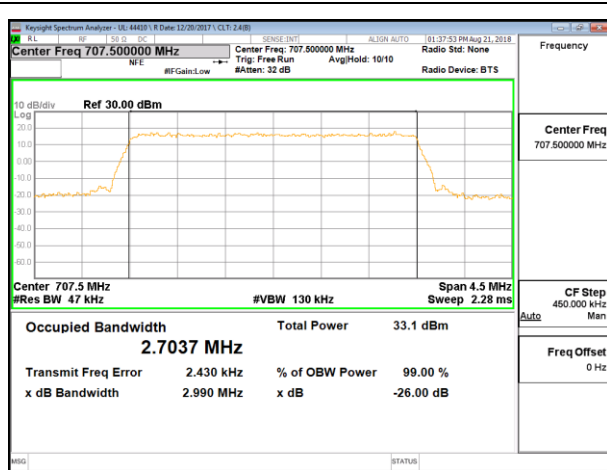
LTE B12 1.4MHz QPSK Middle Channel RB6-0



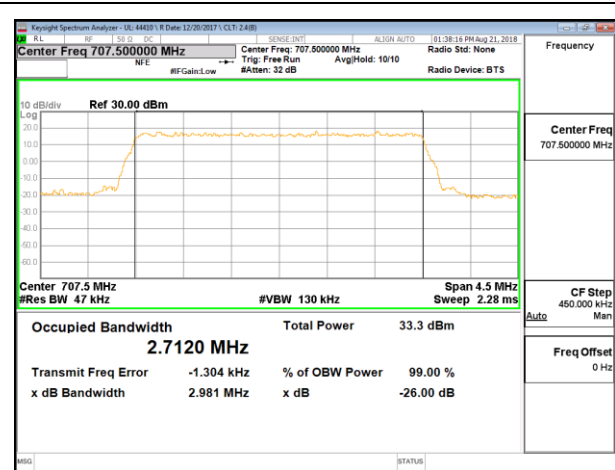
LTE B12 1.4MHz 16QAM Middle Channel RB6-0



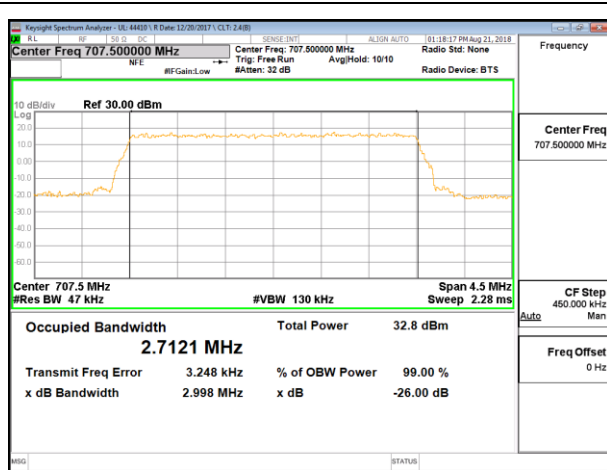
LTE B12 1.4MHz 64QAM Middle Channel RB6-0



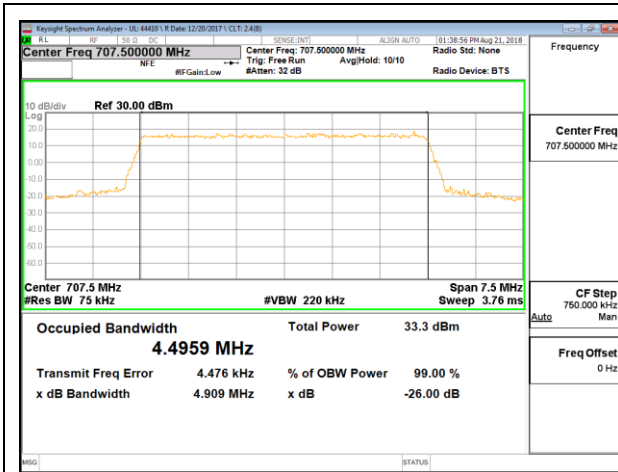
LTE B12 3MHz QPSK Middle Channel RB15-0



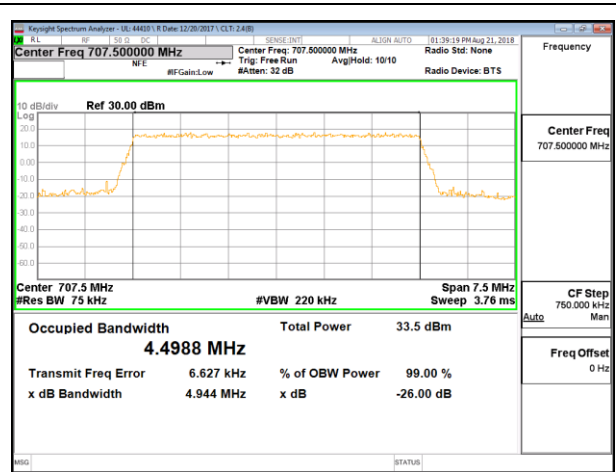
LTE B12 3MHz 16QAM Middle Channel RB15-0



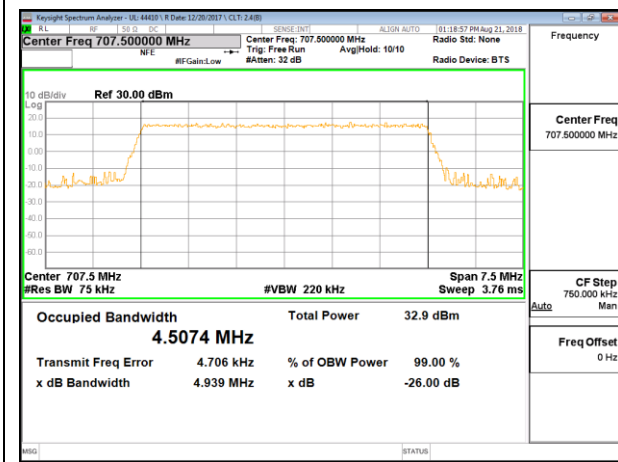
LTE B12 3MHz 64QAM Middle Channel RB15-0



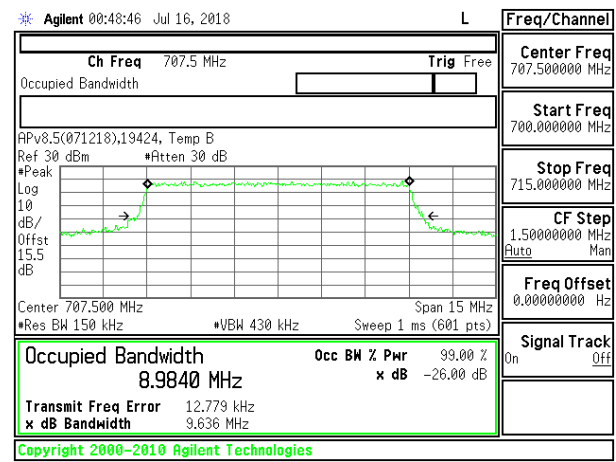
LTE B12 5MHz QPSK Middle Channel RB25-0



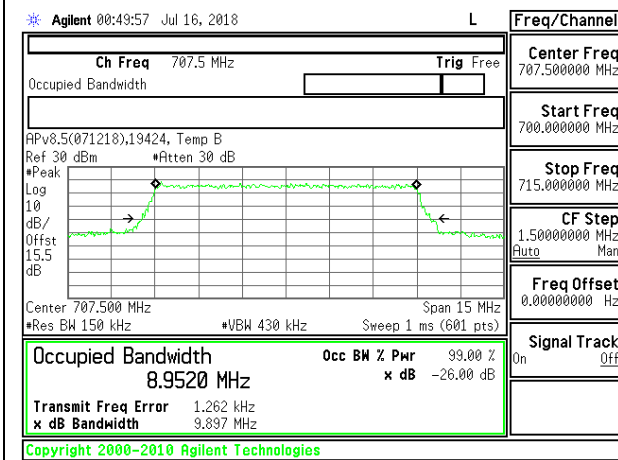
LTE B12 5MHz 16QAM Middle Channel RB25-0



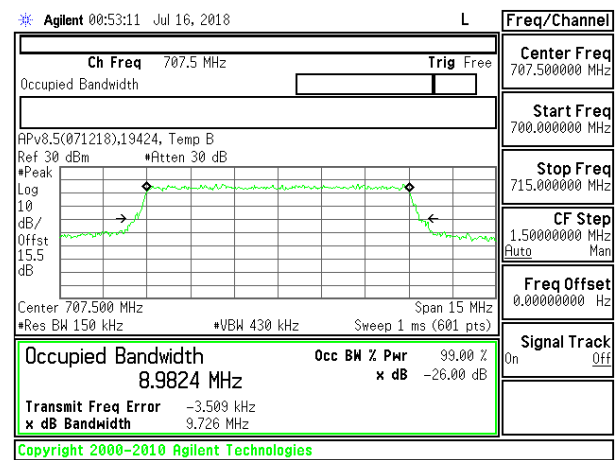
LTE B12 5MHz 64QAM Middle Channel RB25-0



LTE B12 10MHz QPSK Middle Channel RB50-0

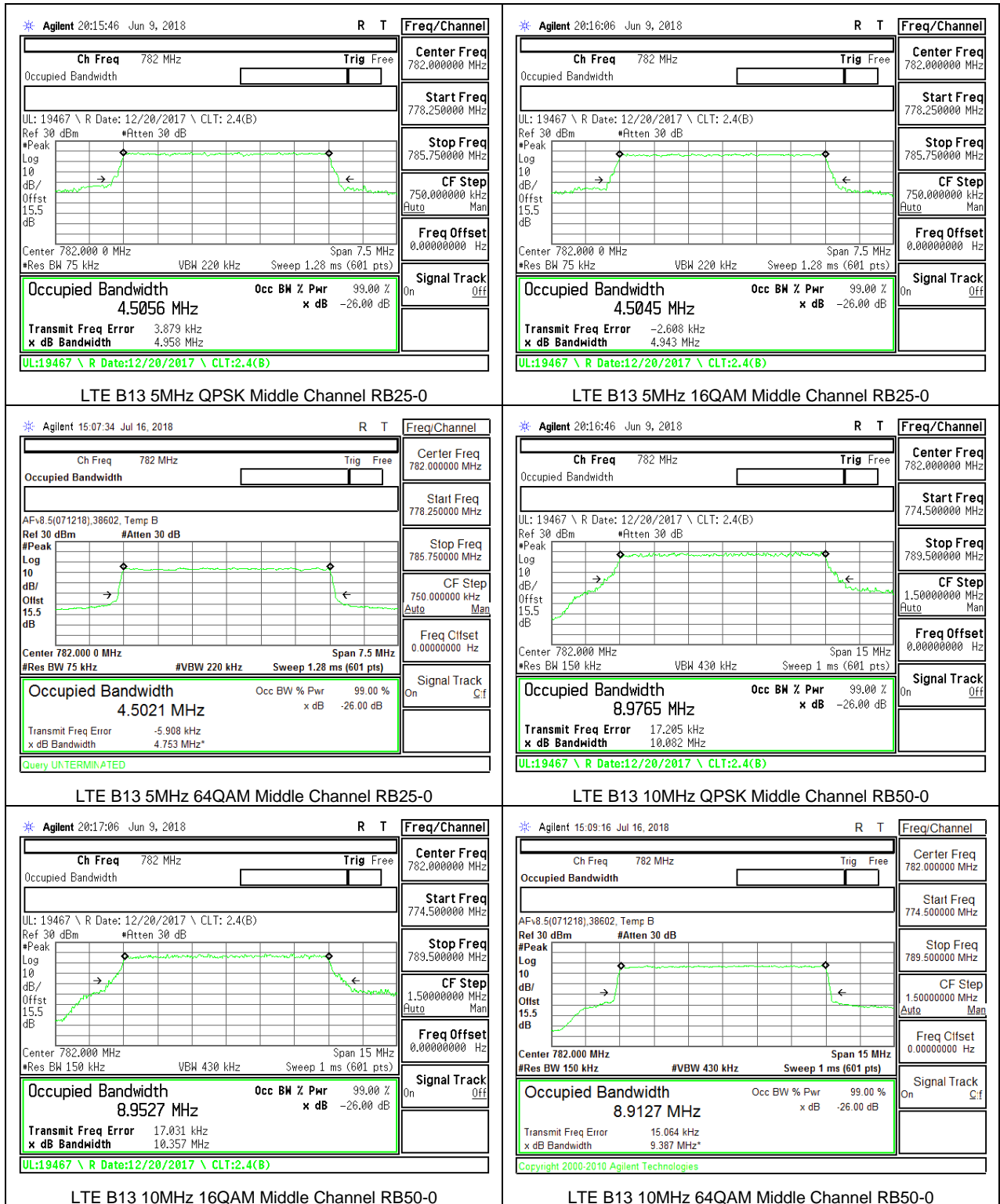


LTE B12 10MHz 16QAM Middle Channel RB50-0

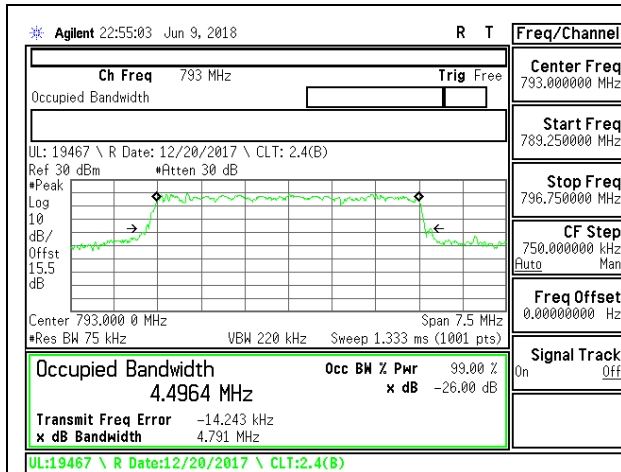


LTE B12 10MHz 64QAM Middle Channel RB50-0

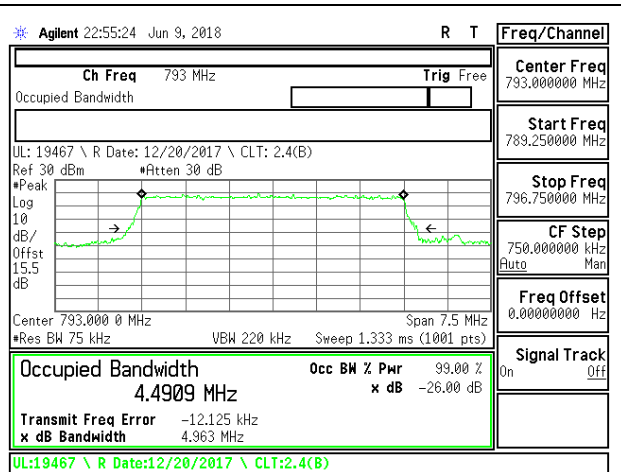
8.1.5. LTE BAND 13



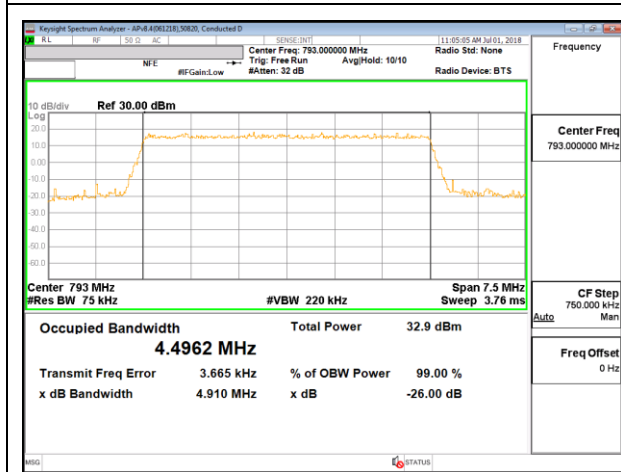
8.1.6. LTE BAND 14



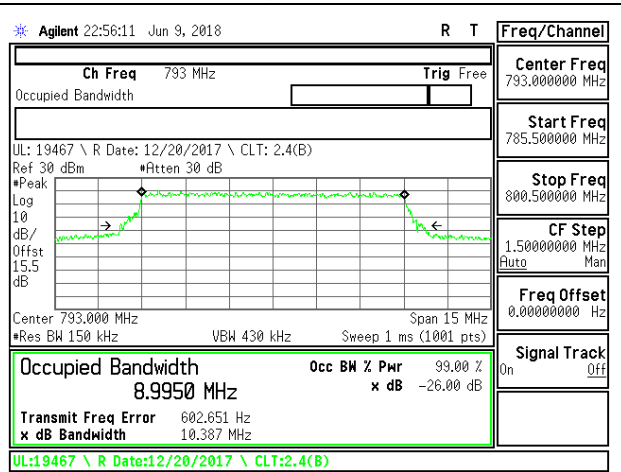
LTE B14 5MHz QPSK Middle Channel RB25-0



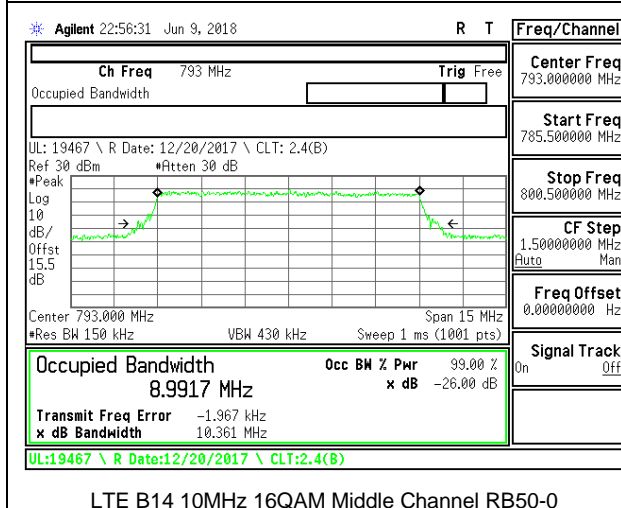
LTE B14 5MHz 16QAM Middle Channel RB25-0



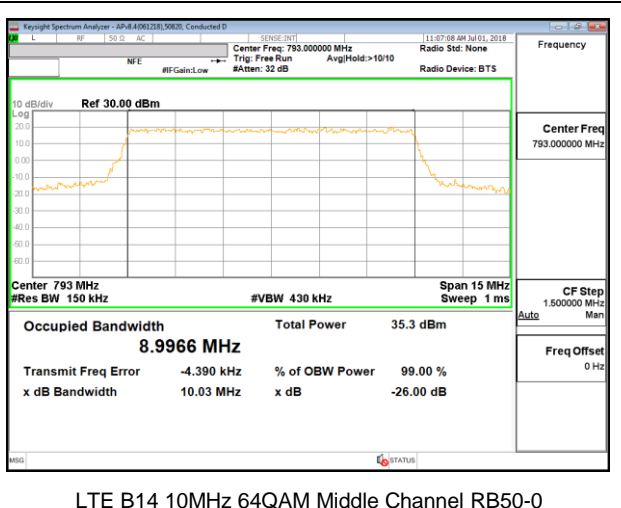
LTE B14 5MHz 64QAM Middle Channel RB25-0



LTE B14 10MHz QPSK Middle Channel RB50-0

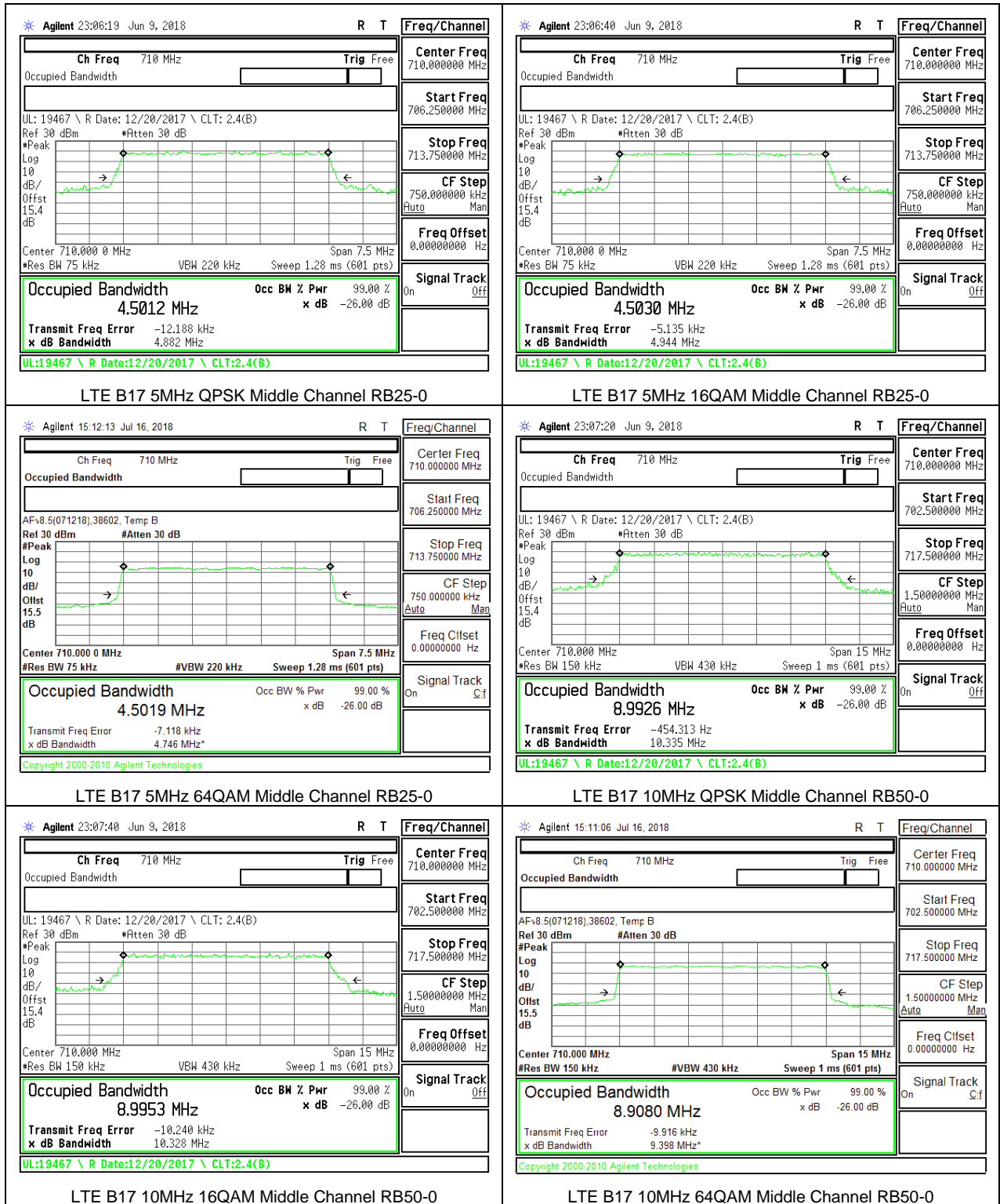


LTE B14 10MHz 16QAM Middle Channel RB50-0

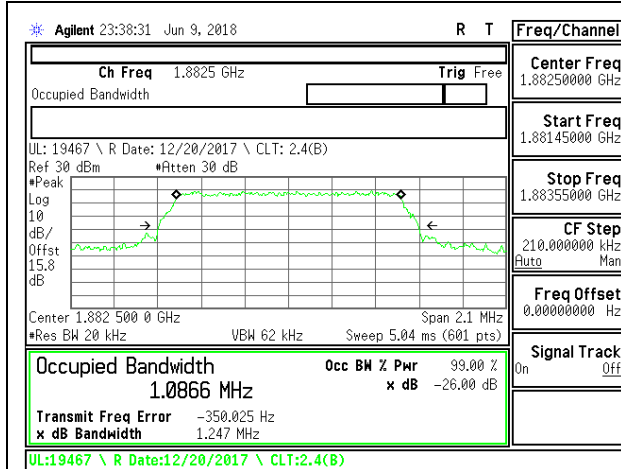


LTE B14 10MHz 64QAM Middle Channel RB50-0

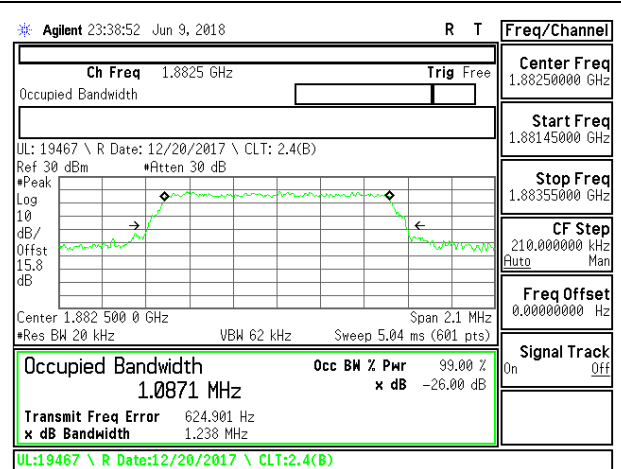
8.1.7. LTE BAND 17



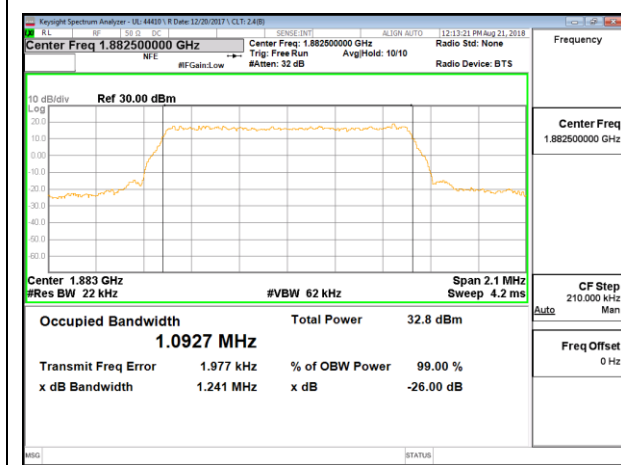
8.1.8. LTE BAND 25



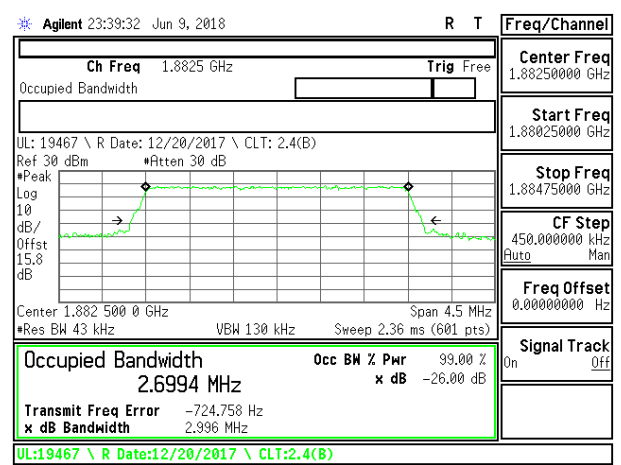
LTE B25 1.4MHz QPSK Middle Channel RB6-0



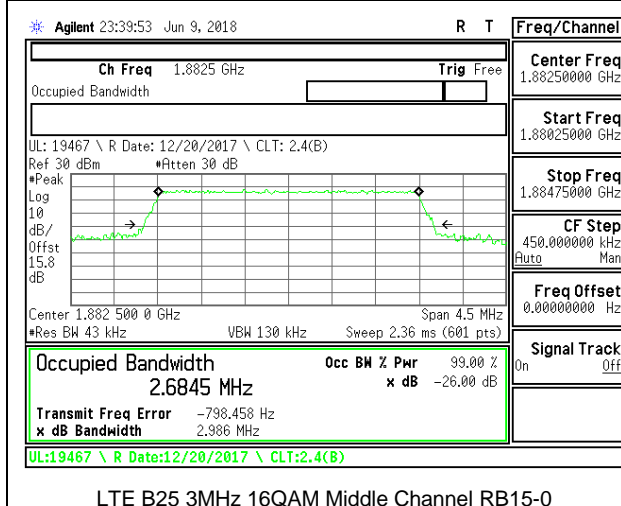
LTE B25 1.4MHz 16QAM Middle Channel RB6-0



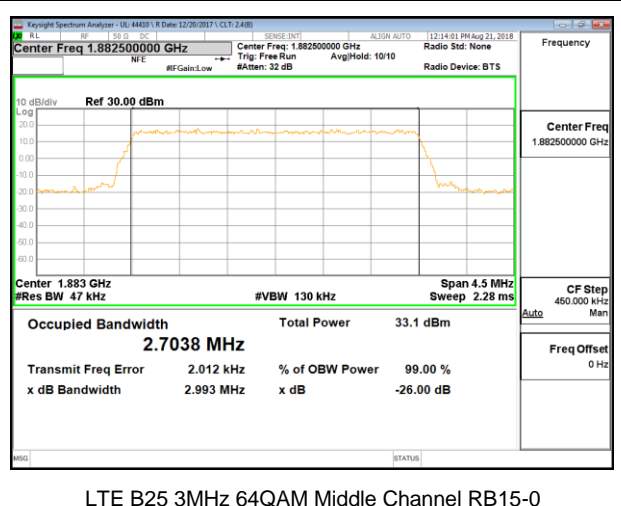
LTE B25 1.4MHz 64QAM Middle Channel RB6-0



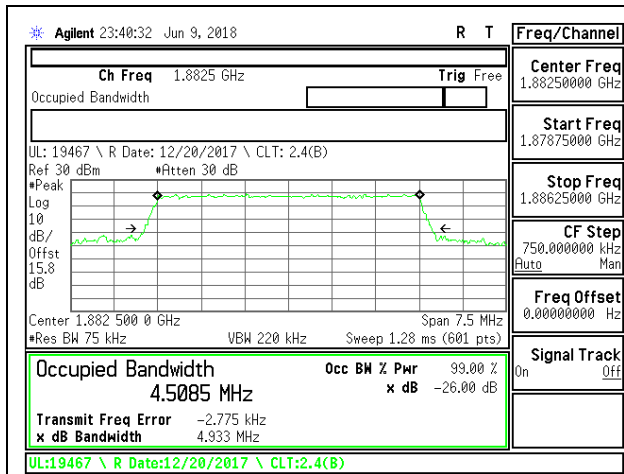
LTE B25 3MHz QPSK Middle Channel RB15-0



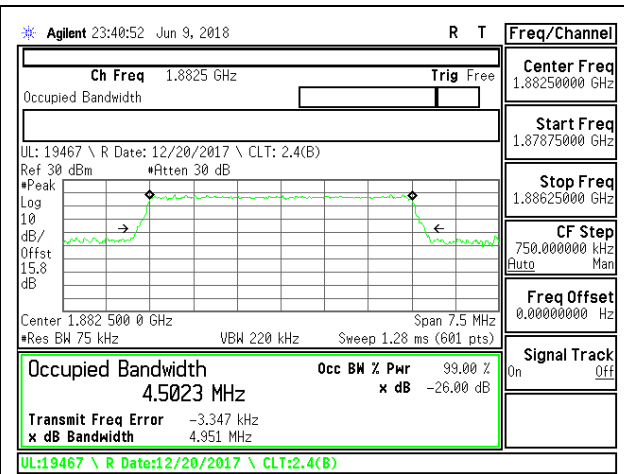
LTE B25 3MHz 16QAM Middle Channel RB15-0



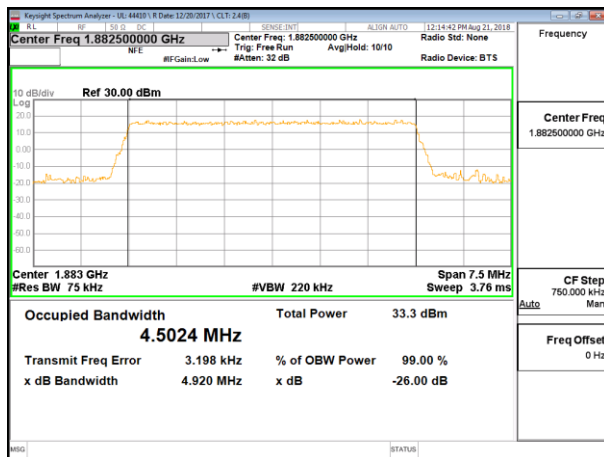
LTE B25 3MHz 64QAM Middle Channel RB15-0



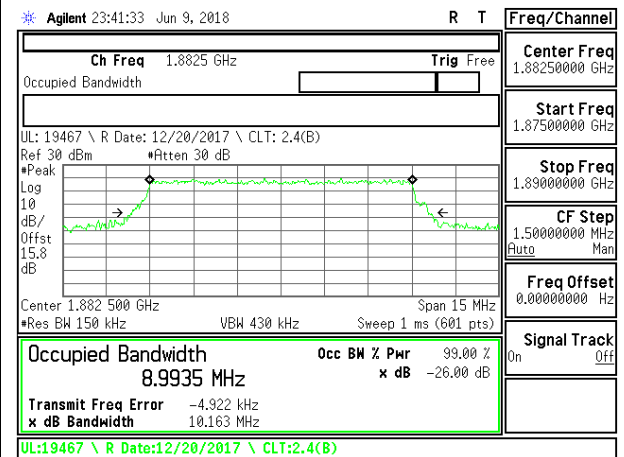
LTE B25 5MHz QPSK Middle Channel RB25-0



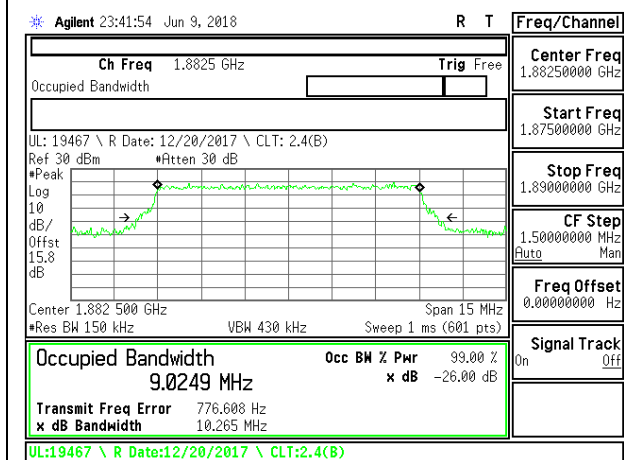
LTE B25 5MHz 16QAM Middle Channel RB25-0



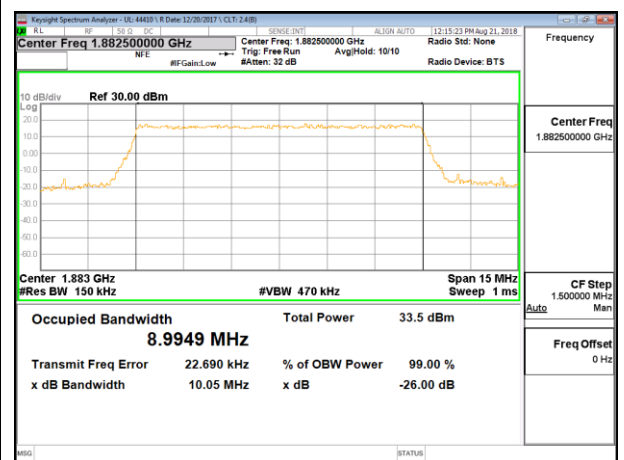
LTE B25 5MHz 64QAM Middle Channel RB25-0



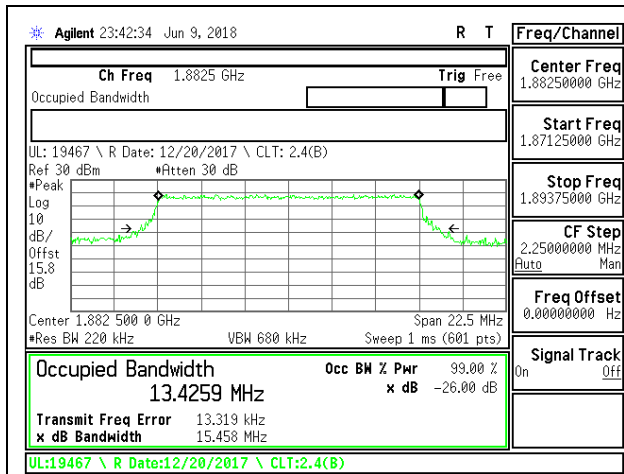
LTE B25 10MHz QPSK Middle Channel RB50-0



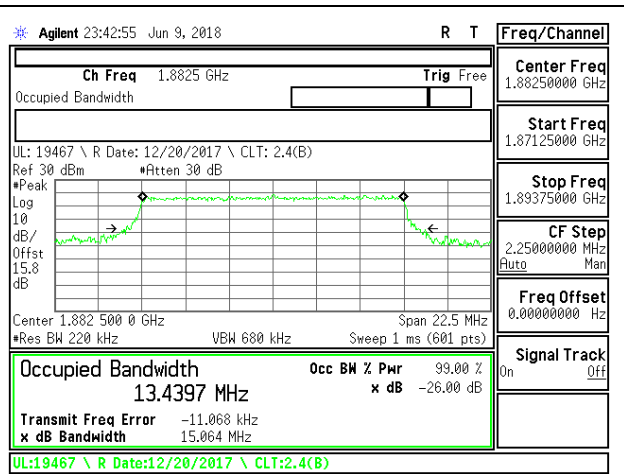
LTE B25 10MHz 16QAM Middle Channel RB50-0



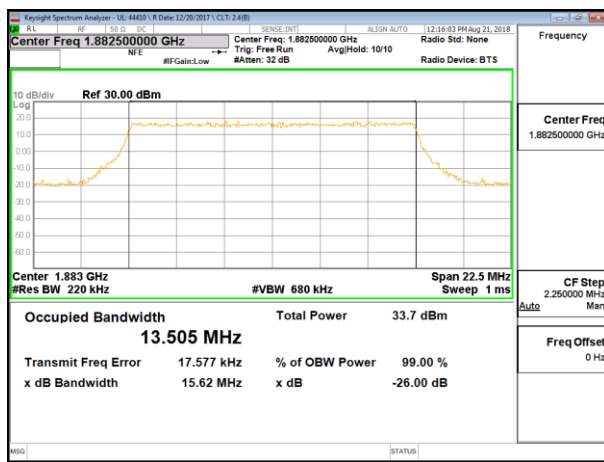
LTE B25 10MHz 64QAM Middle Channel RB50-0



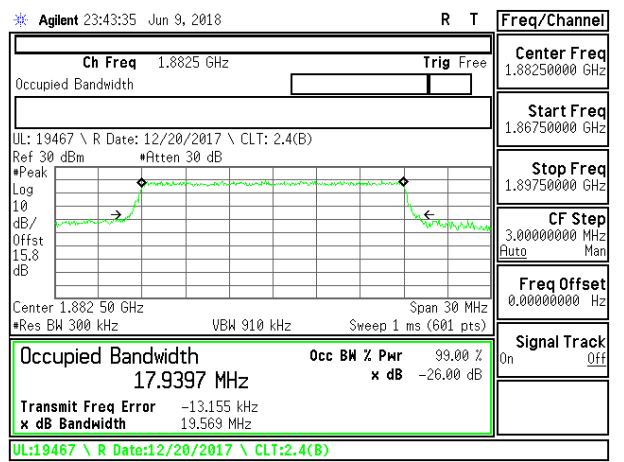
LTE B25 15MHz QPSK Middle Channel RB75-0



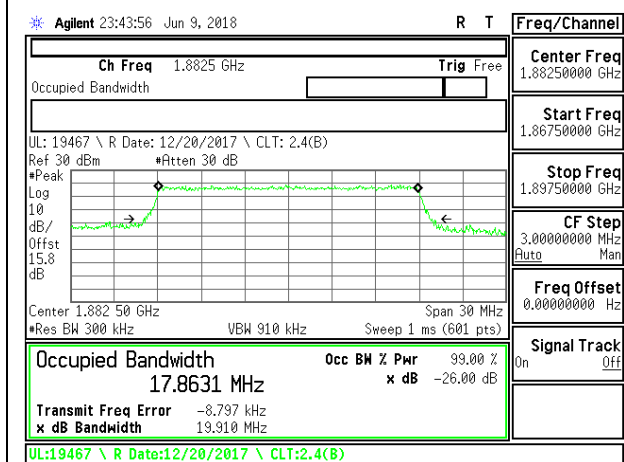
LTE B25 15MHz 16QAM Middle Channel RB75-0



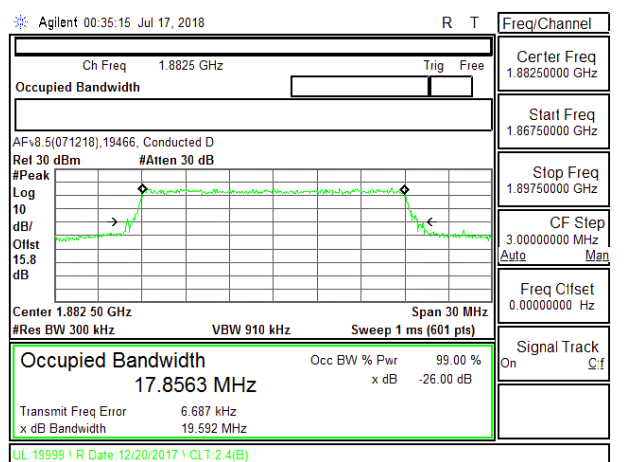
LTE B25 15MHz 64QAM Middle Channel RB75-0



LTE B25 20MHz QPSK Middle Channel RB100-0

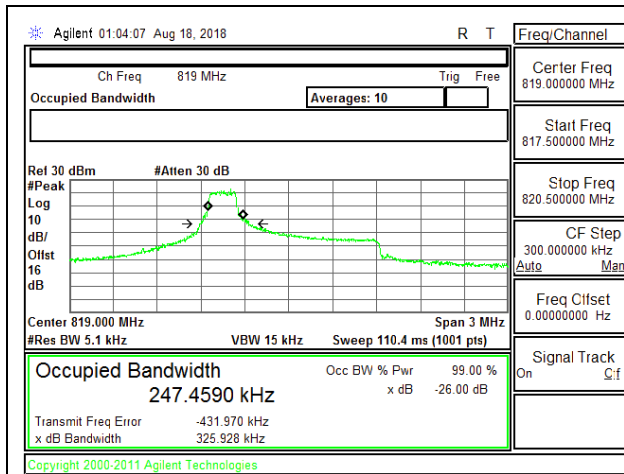


LTE B25 20MHz 16QAM Middle Channel RB100-0

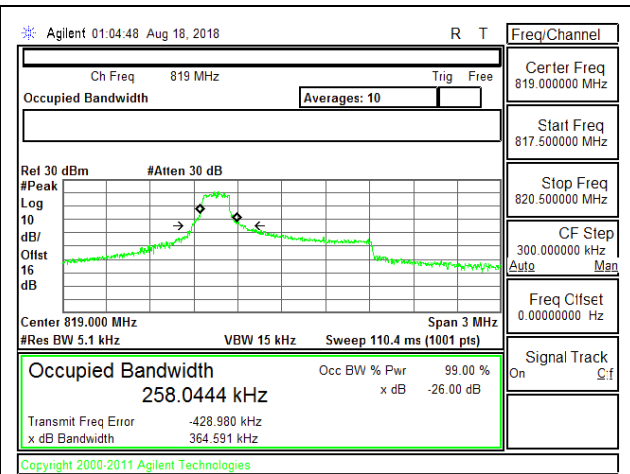


LTE B25 20MHz 64QAM Middle Channel RB100-0

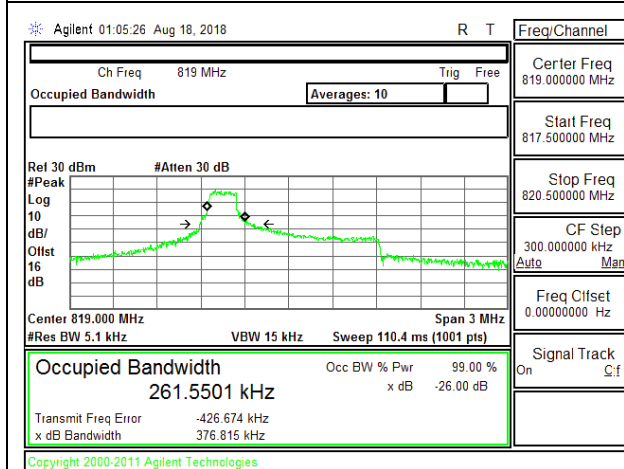
8.1.9. LTE BAND 26 (PART 90S)



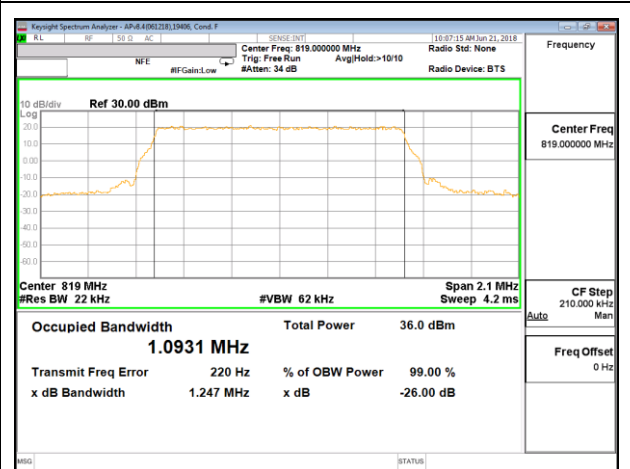
LTE B26 1.4MHz QPSK Middle Channel RB1-0, ID: 10646



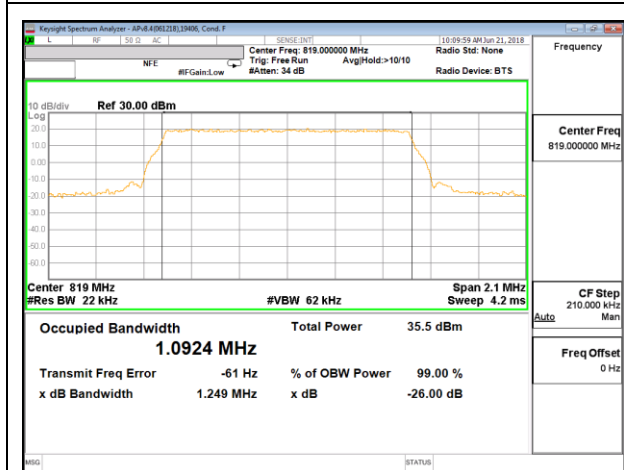
LTE B26 1.4MHz 16QAM Middle Channel RB1-0, ID: 10646



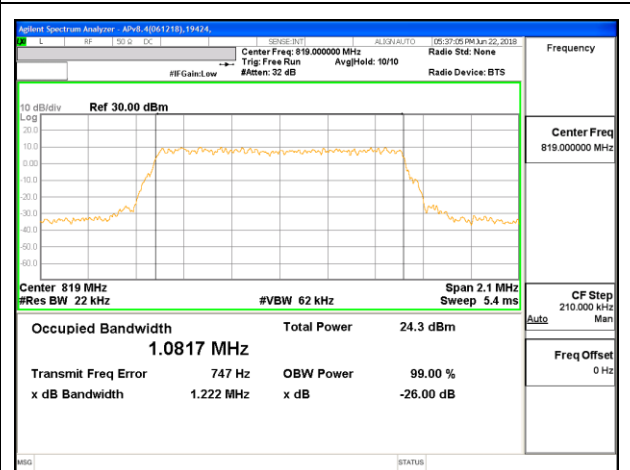
LTE B26 1.4MHz 64QAM Middle Channel RB1-0, ID: 10646



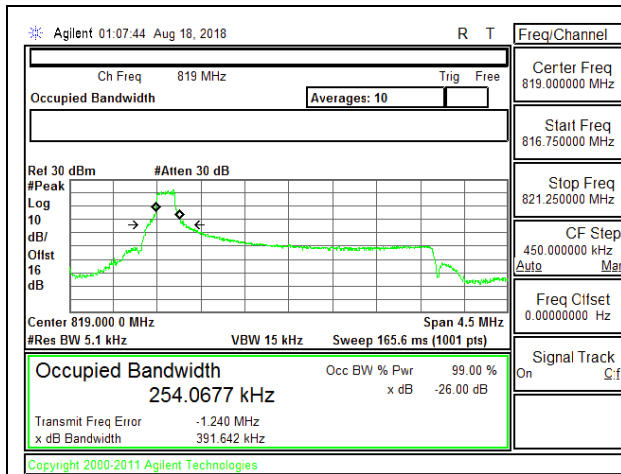
LTE B26 1.4MHz QPSK Middle Channel RB6-0



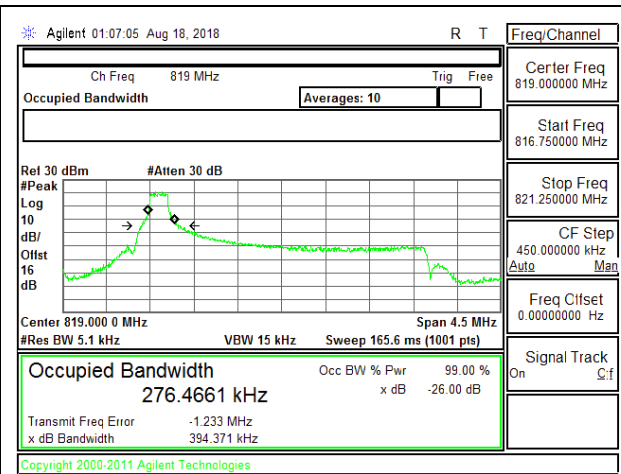
LTE B26 1.4MHz 16QAM Middle Channel RB6-0



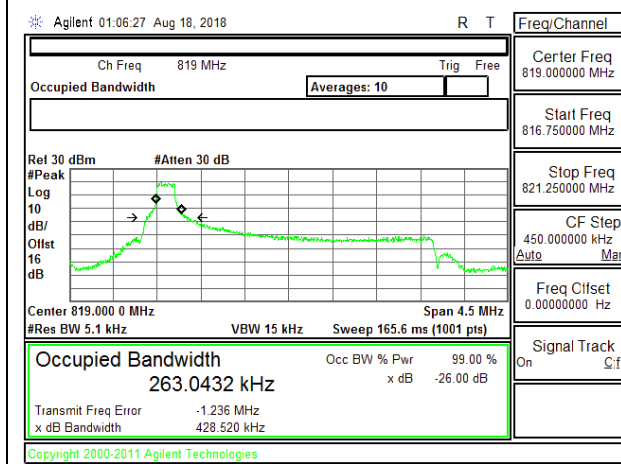
LTE B26 1.4MHz 64QAM Middle Channel RB6-0



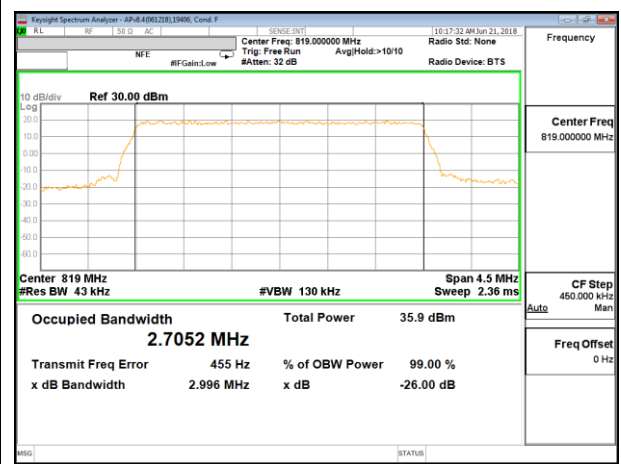
LTE B26 3MHz QPSK Middle Channel RB1-0, ID: 10646



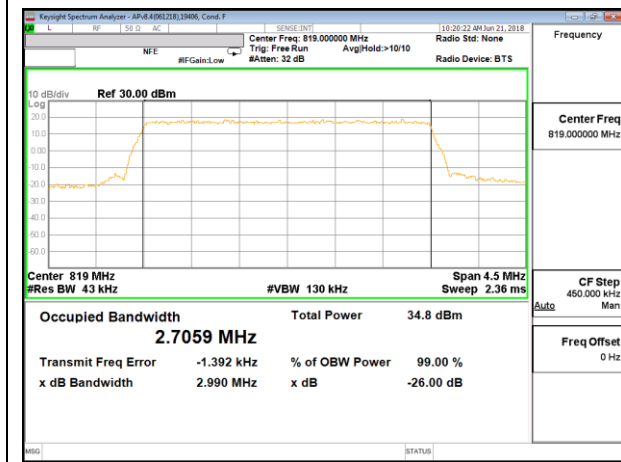
LTE B26 3MHz 16QAM Middle Channel RB1-0, ID: 10646



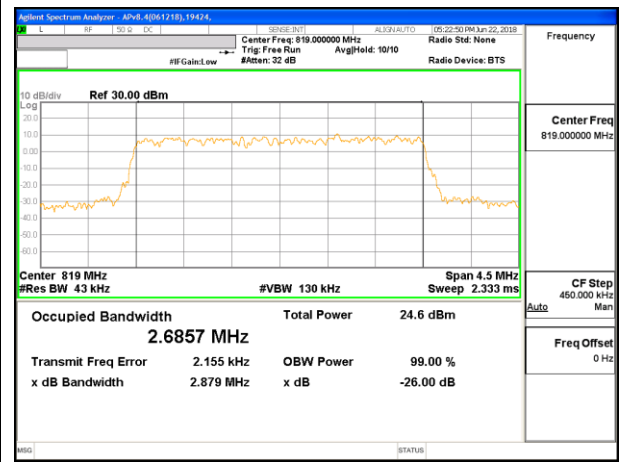
LTE B26 3MHz 64QAM Middle Channel RB1-0, ID: 10646



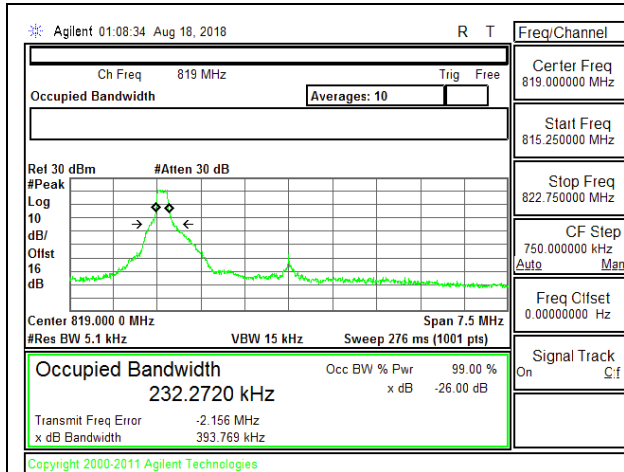
LTE B26 3MHz QPSK Middle Channel RB15-0



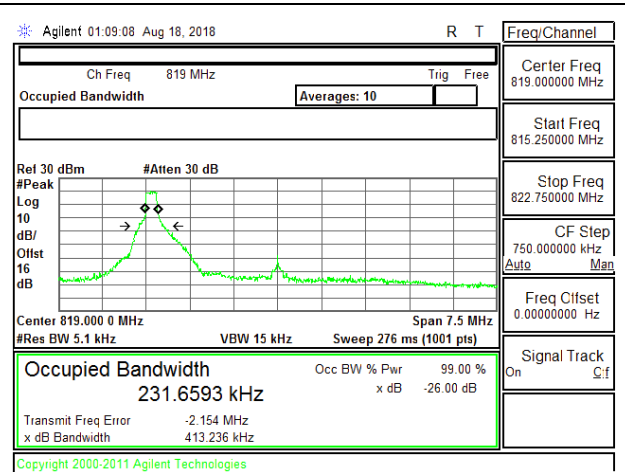
LTE B26 3MHz 16QAM Middle Channel RB15-0



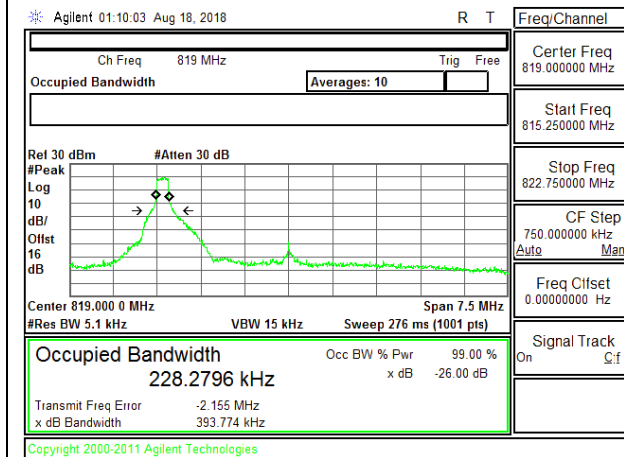
LTE B26 3MHz 64QAM Middle Channel RB15-0



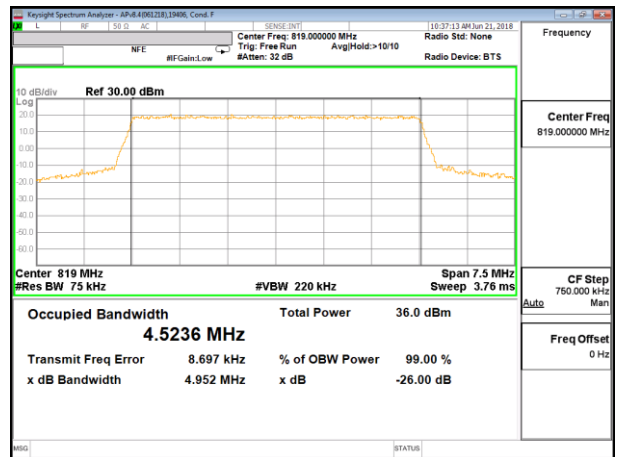
LTE B26 5MHz QPSK Middle Channel RB1-0, ID: 10646



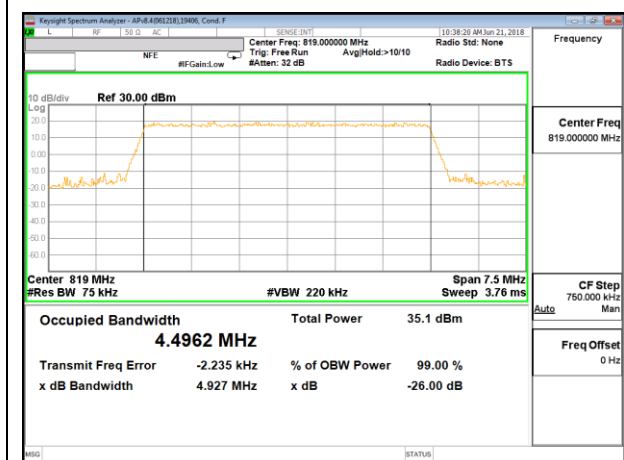
LTE B26 5MHz 16QAM Middle Channel RB1-0, ID: 10646



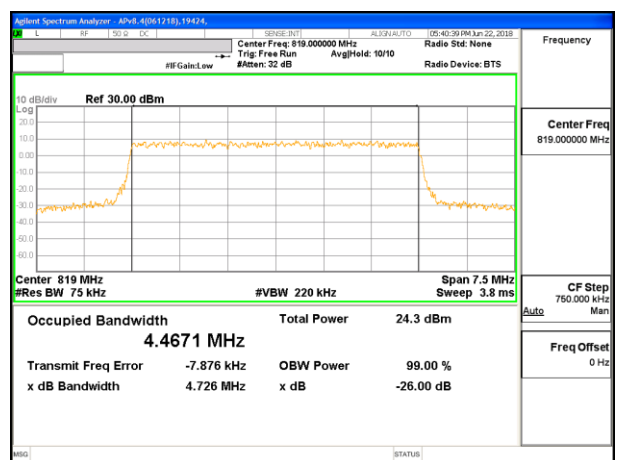
LTE B26 5MHz 64QAM Middle Channel RB1-0, ID: 10646



LTE B26 5MHz QPSK Middle Channel RB25-0



LTE B26 5MHz 16QAM Middle Channel RB25-0



LTE B26 5MHz 64QAM Middle Channel RB25-0