CERTIFICATION TEST REPORT

Report Number. : 11696948-E8V2

Applicant	:	APPLE, INC. 1 INFINITE LOOP CUPERTINO, CA 95014, U.S.A.
Model	:	A1864, A1899
FCC ID	:	BCG-E3160A
EUT Description	:	SMARTPHONE
Test Standard(s)	:	FCC CFR47 PART 22H, 24E, 27 AND 90S

Date Of Issue:
July 25, 2017

Prepared by:
UL Verification Services Inc.
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NVLAP TESTING
NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/06/2017	Initial Review	--
V2	07/25/2017	Updated report to address TCB's questions	Tina Chu

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1. ATTESTATION OF TEST RESULTS

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

EUT DESCRIPTION: SMARTPHONE

MODEL: A1864, A1899

SERIAL NUMBER: C39TQ00FJ6KP

DATE TESTED: March 1, 2017 – July 21, 2017

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

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

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

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2. TEST METHODOLOGY

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

3. FACILITIES AND ACCREDITATION

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

47173 Benicia Street	47266 Benicia Street
☐ Chamber A (IC:2324B-1)	☐ Chamber D (IC:22541-1)
☐ Chamber B (IC:2324B-2)	☒ Chamber E (IC:22541-2)
☐ Chamber C (IC:2324B-3)	☒ Chamber F (IC:22541-3)
	☐ Chamber G (IC:22541-4)
	☐ Chamber H (IC:22541-5)

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

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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%.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

5.2. DIFFERENCE IN MODEL NUMBER

Model A1864 and A1899 are identical. Two model numbers are allocated for marketing and logistic purpose only.

5.3. MAXIMUM OUTPUT POWER

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

5.3.1. LAT 1

OUTPUT POWER FOR LTE BAND 2

Part 24 / RSS 133 LTE Band 2				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1850 - 1910	QPSK	24.5	281.8
		16QAM	23.8	239.9
		64QAM	22.9	195.0
3		QPSK	24.5	281.8
		16QAM	23.6	229.1
		64QAM	22.9	195.0
5		QPSK	24.4	275.4
		16QAM	23.7	234.4
		64QAM	22.7	186.2
10		QPSK	24.4	275.4
		16QAM	23.5	223.9
		64QAM	22.8	190.5
15		QPSK	24.5	281.8
		16QAM	23.9	245.5
		64QAM	22.6	182.0
20		QPSK	24.5	281.8
		16QAM	23.9	245.5
		64QAM	22.7	186.2

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OUTPUT POWER FOR LTE BAND 4

Part 27 / RSS 139 LTE Band 4				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1710-1755	QPSK	24.7	295.1
		16QAM	24.1	257.0
		64QAM	23.2	208.9
3		QPSK	24.7	295.1
		16QAM	24.1	257.0
		64QAM	23.2	208.9

OUTPUT POWER FOR LTE BAND 5 AND BAND 26

Part 22 /RSS 132 LTE Band 5 and Band 26				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	824 -849	QPSK	20.8	120.2
		16QAM	19.8	95.5
		64QAM	18.9	77.6
3		QPSK	21.0	125.9
		16QAM	20.1	102.3
		64QAM	19.1	81.3
5		QPSK	20.9	123.0
		16QAM	20.1	102.3
		64QAM	19.1	81.3
10		QPSK	20.9	123.0
		16QAM	19.9	97.7
		64QAM	19.0	79.4

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OUTPUT POWER FOR LTE BAND 7

Part 27 / RSS 139 LTE Band 7				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2500-2570	QPSK	24.8	302.0
		16QAM	23.9	245.5
		64QAM	22.9	195.0
10		QPSK	24.8	302.0
		16QAM	24.1	257.0
		64QAM	23.0	199.5
15		QPSK	24.7	295.1
		16QAM	24.1	257.0
		64QAM	23.1	204.2
20		QPSK	24.8	302.0
		16QAM	24.1	257.0
		64QAM	23.4	218.8

OUTPUT POWER FOR LTE BAND 12

Part 27 /RSS 130 LTE Band 12				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	699-716	QPSK	20.5	112.2
		16QAM	20.0	100.0
		64QAM	18.6	72.4
3		QPSK	20.5	112.2
		16QAM	19.9	97.7
		64QAM	18.7	74.1
5		QPSK	20.4	109.6
		16QAM	20.0	100.0
		64QAM	18.8	75.9
10		QPSK	20.3	107.2
		16QAM	19.8	95.5
		64QAM	18.7	74.1

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OUTPUT POWER FOR LTE BAND 13

Part 27 /RSS 130 LTE Band 13				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
5	777-787	QPSK	20.8	120.2
		16QAM	20.1	102.3
		64QAM	18.9	77.6
10		QPSK	20.6	114.8
		16QAM	19.6	91.2
		64QAM	18.9	77.6

OUTPUT POWER FOR LTE BAND 17

Part 27 /RSS 130 LTE Band 17				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
5	704-716	QPSK	20.5	112.2
		16QAM	19.9	97.7
		64QAM	18.7	74.1
10		QPSK	20.4	109.6
		16QAM	19.7	93.3
		64QAM	18.8	75.9

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OUTPUT POWER FOR LTE BAND 25

Part 24 / RSS 133 LTE Band 25				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1850-1915	QPSK	24.0	251.2
		16QAM	23.0	199.5
		64QAM	22.4	173.8
3		QPSK	23.9	245.5
		16QAM	22.9	195.0
		64QAM	22.4	173.8
5		QPSK	23.9	245.5
		16QAM	22.9	195.0
		64QAM	22.3	169.8
10		QPSK	23.9	245.5
		16QAM	22.9	195.0
		64QAM	22.4	173.8
15		QPSK	23.9	245.5
		16QAM	22.9	195.0
		64QAM	22.3	169.8
20		QPSK	24.0	251.2
		16QAM	22.8	190.5
		64QAM	22.2	166.0

OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	814-824	QPSK	20.1	102.3
		16QAM	19.3	85.1
		64QAM	18.3	67.6
3		QPSK	20.2	104.7
		16QAM	19.2	83.2
		64QAM	18.1	64.6
5		QPSK	20.2	104.7
		16QAM	19.2	83.2
		64QAM	18.3	67.6
10		QPSK	20.2	104.7
		16QAM	19.2	83.2
		64QAM	18.4	69.2

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OUTPUT POWER FOR LTE BAND 30

Part 27 /RSS 195 LTE Band 30				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2305-2315	QPSK	21.9	154.9
		16QAM	21.4	138.0
		64QAM	20.6	114.8
10		QPSK	22.2	166.0
		16QAM	21.2	131.8
		64QAM	20.6	114.8

OUTPUT POWER FOR LTE BAND 41

Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2496-2690	QPSK	24.8	302.0
		16QAM	24.1	257.0
		64QAM	23.4	218.8
10		QPSK	25.0	316.2
		16QAM	24.2	263.0
		64QAM	23.4	218.8
15		QPSK	24.9	309.0
		16QAM	24.3	269.2
		64QAM	23.5	223.9
20		QPSK	25.0	316.2
		16QAM	24.0	251.2
		64QAM	23.5	223.9

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OUTPUT POWER FOR LTE BAND 66 AND BAND 4

Part 27 / RSS 139 LTE Band 66 and Band 4				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	1710-1780	QPSK	25.2	331.1
		16QAM	24.3	269.2
		64QAM	23.9	245.5
10		QPSK	25.2	331.1
		16QAM	24.3	269.2
		64QAM	23.8	239.9
15		QPSK	25.2	331.1
		16QAM	24.3	269.2
		64QAM	23.7	234.4
20		QPSK	25.1	323.6
		16QAM	24.2	263.0
		64QAM	23.7	234.4

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5.3.2. UAT 1

OUTPUT POWER FOR LTE BAND 2

Part 24 / RSS 133 LTE Band 2				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1850 - 1910	QPSK	20.4	109.6
		16QAM	19.5	89.1
		64QAM	18.6	72.4
3		QPSK	20.3	107.2
		16QAM	19.5	89.1
		64QAM	18.4	69.2
5		QPSK	20.3	107.2
		16QAM	19.6	91.2
		64QAM	18.8	75.9
10		QPSK	20.3	107.2
		16QAM	19.5	89.1
		64QAM	18.5	70.8
15		QPSK	20.3	107.2
		16QAM	19.7	93.3
		64QAM	18.9	77.6
20		QPSK	20.4	109.6
		16QAM	19.9	97.7
		64QAM	18.6	72.4

OUTPUT POWER FOR LTE BAND 4

Part 27 / RSS 139 LTE Band 4				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1710-1755	QPSK	20.3	107.2
		16QAM	19.8	95.5
		64QAM	18.7	74.1
3		QPSK	20.3	107.2
		16QAM	19.8	95.5
		64QAM	18.5	70.8

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OUTPUT POWER FOR LTE BAND 5 AND BAND 26

Part 22 /RSS 132 LTE Band 5 and Band 26				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	824 -849	QPSK	18.0	63.1
		16QAM	17.0	50.1
		64QAM	16.2	41.7
3		QPSK	17.9	61.7
		16QAM	17.2	52.5
		64QAM	16.1	40.7
5		QPSK	18.0	63.1
		16QAM	17.1	51.3
		64QAM	16.2	41.7
10		QPSK	18.0	63.1
		16QAM	17.1	51.3
		64QAM	16.1	40.7

OUTPUT POWER FOR LTE BAND 7

Part 27 / RSS 139 LTE Band 7				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2500-2570	QPSK	19.5	89.1
		16QAM	18.8	75.9
		64QAM	18.0	63.1
10		QPSK	19.5	89.1
		16QAM	18.7	74.1
		64QAM	17.9	61.7
15		QPSK	19.5	89.1
		16QAM	18.8	75.9
		64QAM	18.0	63.1
20		QPSK	19.5	89.1
		16QAM	19.0	79.4
		64QAM	17.9	61.7

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OUTPUT POWER FOR LTE BAND 12

Part 27 /RSS 130 LTE Band 12				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	699-716	QPSK	17.2	52.5
		16QAM	16.3	42.7
		64QAM	15.3	33.9
3		QPSK	17.2	52.5
		16QAM	16.2	41.7
		64QAM	15.4	34.7
5		QPSK	17.2	52.5
		16QAM	16.4	43.7
		64QAM	15.4	34.7
10		QPSK	17.2	52.5
		16QAM	16.4	43.7
		64QAM	15.3	33.9

OUTPUT POWER FOR LTE BAND 13

Part 27 /RSS 130 LTE Band 13				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
5	777-787	QPSK	17.8	60.3
		16QAM	17.0	50.1
		64QAM	16.0	39.8
10		QPSK	17.7	58.9
		16QAM	16.8	47.9
		64QAM	16.0	39.8

OUTPUT POWER FOR LTE BAND 17

Part 27 /RSS 130 LTE Band 17				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
5	704-716	QPSK	17.2	52.5
		16QAM	16.1	40.7
		64QAM	15.4	34.7
10		QPSK	17.2	52.5
		16QAM	16.0	39.8
		64QAM	15.2	33.1

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OUTPUT POWER FOR LTE BAND 25

Part 24 / RSS 133 LTE Band 25				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
1.4	1850-1915	QPSK	20.3	107.2
		16QAM	19.6	91.2
		64QAM	18.5	70.8
3		QPSK	20.4	109.6
		16QAM	19.6	91.2
		64QAM	18.7	74.1
5		QPSK	20.3	107.2
		16QAM	19.6	91.2
		64QAM	18.6	72.4
10		QPSK	20.3	107.2
		16QAM	19.4	87.1
		64QAM	18.8	75.9
15		QPSK	20.4	109.6
		16QAM	19.8	95.5
		64QAM	19.0	79.4
20		QPSK	20.3	107.2
		16QAM	19.5	89.1
		64QAM	18.8	75.9

OUTPUT POWER FOR LTE BAND 26

Part 90 LTE Band 26				
Bandwidth (MHz)	Frequency Range	Modulation	ERP (Average)	
			dBm	mW
1.4	814-824	QPSK	17.1	51.3
		16QAM	16.2	41.7
		64QAM	15.4	34.7
3		QPSK	17.2	52.5
		16QAM	16.1	40.7
		64QAM	15.3	33.9
5		QPSK	17.1	51.3
		16QAM	16.2	41.7
		64QAM	15.5	35.5
10		QPSK	17.1	51.3
		16QAM	16.1	40.7
		64QAM	15.3	33.9

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OUTPUT POWER FOR LTE BAND 30

Part 27 /RSS 195 LTE Band 30				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2305-2315	QPSK	20.7	117.5
		16QAM	19.9	97.7
		64QAM	19.3	85.1
10		QPSK	20.8	120.2
		16QAM	19.9	97.7
		64QAM	19.2	83.2

OUTPUT POWER FOR LTE BAND 41

Part 27 LTE Band 41				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	2496-2690	QPSK	20.4	109.6
		16QAM	19.6	91.2
		64QAM	18.5	70.8
10		QPSK	20.4	109.6
		16QAM	19.6	91.2
		64QAM	18.6	72.4
15		QPSK	20.4	109.6
		16QAM	19.6	91.2
		64QAM	18.5	70.8
20		QPSK	20.3	107.2
		16QAM	19.7	93.3
		64QAM	18.6	72.4

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OUTPUT POWER FOR LTE BAND 66 AND BAND 4

Part 27 / RSS 139 LTE Band 66 and Band 4				
Bandwidth (MHz)	Frequency Range	Modulation	EIRP (Average)	
			dBm	mW
5	1710-1780	QPSK	20.2	104.7
		16QAM	19.3	85.1
		64QAM	18.8	75.9
10		QPSK	20.3	107.2
		16QAM	19.4	87.1
		64QAM	18.7	74.1
15		QPSK	20.1	102.3
		16QAM	19.2	83.2
		64QAM	18.8	75.9
20		QPSK	20.3	107.2
		16QAM	19.4	87.1
		64QAM	18.4	69.2

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5.4. SOFTWARE AND FIRMWARE

The EUT firmware installed during testing was version 00.28.00.

5.5. MAXIMUM ANTENNA GAIN

Please see table below:

LTE BANDS	LAT 1 Antenna Gain (dBi)	UAT 1 Antenna Gain (dBi)
LTE Band 2, 1850 – 1910 MHz	-0.36	0.37
LTE Band 4, 1710 – 1755 MHz	-0.02	-0.56
LTE Band 5, 824 – 849 MHz	-1.69	-3.17
LTE Band 7, 2500 – 2570 MHz	0.05	0.05
LTE Band 12, 699 – 716 MHz	-2.13	-4.01
LTE Band 13, 777 – 787 MHz	-1.93	-3.38
LTE Band 17, 704 – 716 MHz	-2.13	-4.01
LTE Band 25, 1850 – 1915 MHz	-0.36	0.37
LTE Band 26, 814 – 824 MHz	-2.41	-4.04
LTE Band 30, 2305 – 2315 MHz	-0.88	1.42
LTE Band 41, 2496 – 2690 MHz	0.20	0.05
LTE Band 66, 1710 – 1780 MHz	0.44	-0.56

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5.6. WORST-CASE CONFIGURATION AND MODE

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

The device has LTE Bands of:
Band 2, Band 4, Band 5, Band 7, Band 12, Band 13, Band 17, Band 25, Band 26, Band 30, Band 41 and Band 66.

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

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

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

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

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

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

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5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List			
Description	**Manufacturer**	**Model**	**Serial Number**
AC/DC adapter	HP	HNSTNN-DA40	WDWR7OBAR9AKS8
Laptop	HP	HP ProBook 450 G2	CND5367Z97

I/O CABLES (RF Conducted Test)

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

I/O CABLES (RF Radiated Test)

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

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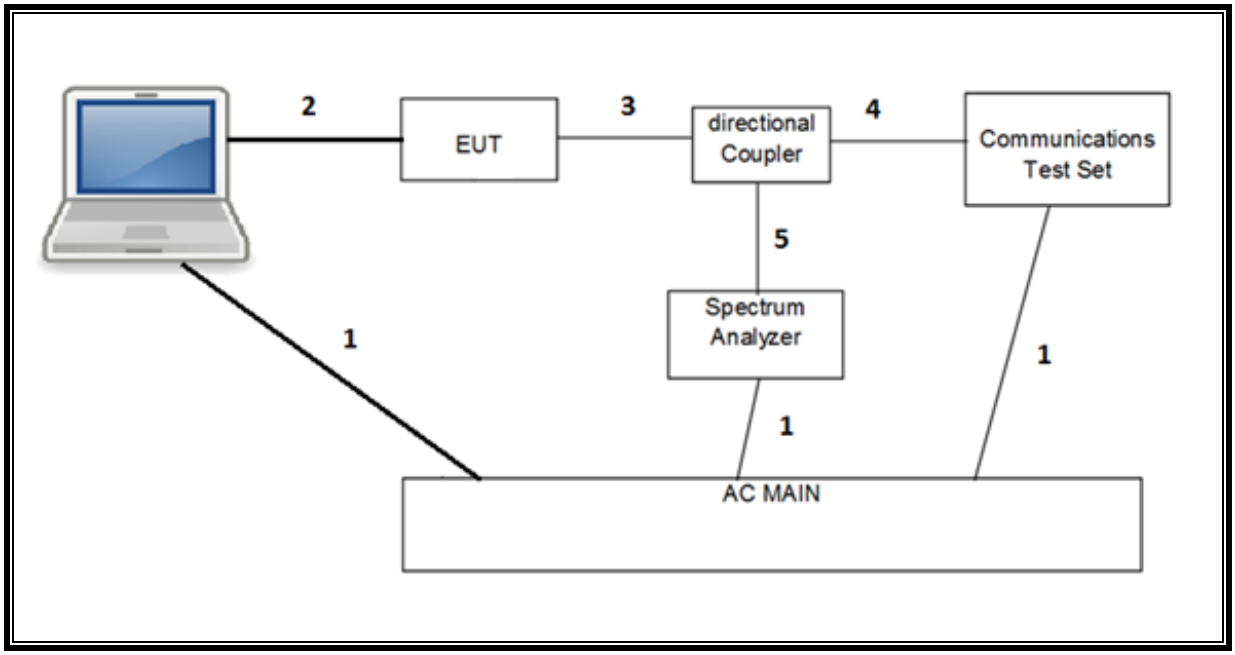
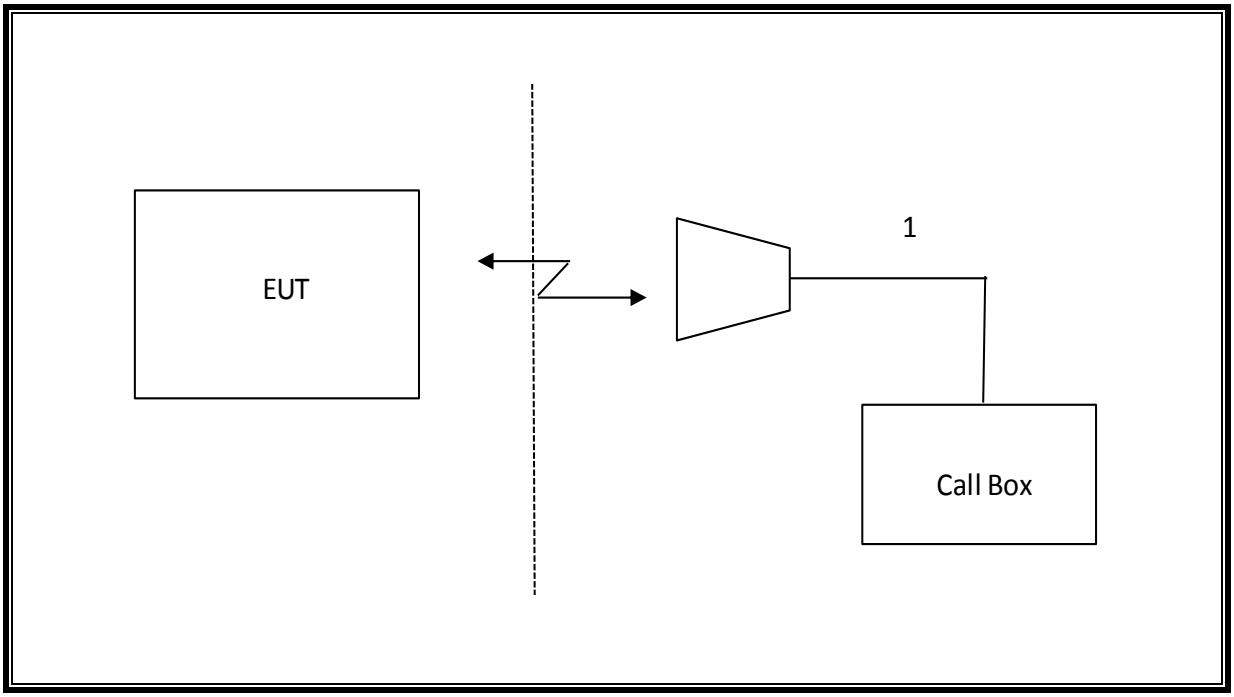
CONDUCTED SETUP



RADIATED SETUP



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6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T863	6/9/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	T900	5/31/2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-	T741	11/29/2017
*Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	6/20/2017
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T285	6/24/2018
Spectrum Analyzer, PXA 3Hz to 44GHz	Keysight	N9030A	T1113	12/20/2017
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T119	3/28/2018
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB1	T122	1/31/2018
Amplifier, 1 to 18GHz	Miteq	AFS42-00101800-25-	T742	11/29/2017
*Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	T173	6/17/2017
Spectrum Analyzer, PSA, 3Hz to 44GHz	Agilent (Keysight) Technologies	E4446A	T177	03/20/2018
Spectrum Analyzer, PXA, 3Hz to 50GHz w/Ext. Mixer	Keysight	N9030A	T342	2/23/2018
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	AE0038201512	For connection purpose
Spectrum Analyzer, PSA 3Hz to 44GHz	Keysight	E4446A	T123	10/20/2017
*Directional Coupler	KRYTAR	152610	T1536	4/11/2017
Directional Coupler	KRYTAR	152610	T1536	4/24/2018
*Directional Coupler	KRYTAR	152610	T1537	4/11/2017
Directional Coupler	KRYTAR	152610	T1537	4/24/2018
*Power Meter, P-series single channel	Keysight	N1912A	T1245	5/3/2017
Power Meter, P-series single channel	Keysight	N1912A	T1245	512//2018
*Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	T1226	5/18/2017
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Keysight	N1921A	T1224	3/29/2018
Filter, HPF 3.0GHz	MICROTRONICS	HPM17543	T487	1/28/2018
*Filter, HPF 1.2GHz	Micro-Tronics	WHKX1.2/15G-6ST	T1182	5/31/2017
*Spectrum Analyzer, PXA, 3Hz to 44GHz	Keysight	N9030A	T1210	6/30/2017
*Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T959	7/9/2017
Wideband Communication Test Set, Call Box	R&S GmbH & Co. KG	CMW500	T971	8/5/2017
Chamber, Environmental	Cincinnati Sub Zero	ZPHS-8-3.5-SCT/WC	T754	9/10/2017
Antenna, Horn 1-18GHz	Emco	3115	T59	11/18/2017
*Amplifier, 26.5GHz to 40GHz	Miteq	NSP 4000 SP2	T88	4/7/2017
Amplifier, 26.5GHz to 40GHz	Miteq	NSP 4000 SP2	T88	4/29/2018
*Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum	Keysight	8449B	T404	7/5/2017
*Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826/B	T447	6/16/2017
Antenna, Horn 26.5GHz to 40GHz	ARA	MWH-2640	T90	8/19/2017
Spectrum Analyzer	Keysight	8564E	T106	9/7/2017
Antenna, Active Loop 9KHz to 30MHz	EMCO	6502	T1616	12/12/2017

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

*Testing is completed before equipment expiration date.

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

CONDUCTED OUTPUT POWER MEASUREMENT PROCEDURE

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

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

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

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

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

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

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

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

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ERP/EIRP LIMIT

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

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

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

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

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

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

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

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

§90.635 Limitations on power and antenna height.

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

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

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

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

[1]Power is given in terms of effective radiated power (ERP).

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

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

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

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

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TEST PROCEDURE

ANSI C63.26:2015
KDB 971168 Section 5.6

ERP/EIRP = PMeas + GT − 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.2

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

MODES TESTED

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

RESULTS

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

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7.1. LAT 1

7.1.1. LTE BAND 2

ID:	50820	Date:	3/15/17

OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

Antenna gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	QPSK	1	0	24.8	24.5	33.0	-8.6
				1	2	24.8	24.4	33.0	-8.6
				1	5	24.8	24.5	33.0	-8.6
				3	0	**24.8**	**24.5**	33.0	-8.5
				3	1	24.8	24.5	33.0	-8.5
				3	2	24.8	24.5	33.0	-8.6
				6	0	23.8	23.5	33.0	-9.5
	18900	1880.0		1	0	24.8	24.4	33.0	-8.6
				1	2	24.8	24.4	33.0	-8.6
				1	5	24.7	24.4	33.0	-8.6
				3	0	24.8	24.4	33.0	-8.6
				3	1	24.8	24.4	33.0	-8.6
				3	2	24.8	24.4	33.0	-8.6
				6	0	23.8	23.4	33.0	-9.6
	19193	1909.3		1	0	24.6	24.3	33.0	-8.7
				1	2	24.7	24.3	33.0	-8.7
				1	5	24.6	24.3	33.0	-8.7
				3	0	24.7	24.4	33.0	-8.7
				3	1	24.8	24.4	33.0	-8.6
				3	2	24.8	24.5	33.0	-8.6
				6	0	23.8	23.5	33.0	-9.6

Antenna gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	16QAM	1	0	23.9	23.5	33.0	-9.5
				1	2	23.9	23.6	33.0	-9.4
				1	5	23.9	23.5	33.0	-9.5
				3	0	24.1	23.7	33.0	-9.3
				3	1	24.1	23.7	33.0	-9.3
				3	2	24.1	23.7	33.0	-9.3
				6	0	23.0	22.7	33.0	-10.3
	18900	1880.0		1	0	24.1	23.8	33.0	-9.2
				1	2	**24.2**	**23.8**	33.0	-9.2
				1	5	24.1	23.7	33.0	-9.3
				3	0	24.0	23.6	33.0	-9.4
				3	1	24.0	23.6	33.0	-9.4
				3	2	24.0	23.6	33.0	-9.4
				6	0	22.7	22.3	33.0	-10.7
	19193	1909.3		1	0	23.8	23.5	33.0	-9.5
				1	2	23.9	23.5	33.0	-9.5
				1	5	23.8	23.5	33.0	-9.5
				3	0	23.8	23.4	33.0	-9.6
				3	1	23.8	23.5	33.0	-9.5
				3	2	23.8	23.5	33.0	-9.5
				6	0	22.9	22.5	33.0	-10.5

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Antenna gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	64QAM	1	0	22.9	22.5	33.0	-10.5
				1	2	22.9	22.6	33.0	-10.4
				1	5	22.8	22.5	33.0	-10.6
				3	0	23.1	22.7	33.0	-10.3
				3	1	23.2	22.8	33.0	-10.2
				3	2	23.2	22.8	33.0	-10.2
				6	0	22.3	21.9	33.0	-11.1
	18900	1880.0		1	0	23.0	22.7	33.0	-10.3
				1	2	23.1	22.7	33.0	-10.3
				1	5	23.1	22.7	33.0	-10.3
				3	0	23.0	22.6	33.0	-10.4
				3	1	23.0	22.7	33.0	-10.3
				3	2	23.1	22.7	33.0	-10.3
				6	0	22.1	21.7	33.0	-11.3
	19193	1909.3		1	0	23.1	22.7	33.0	-10.3
				1	2	23.2	22.8	33.0	-10.2
				1	5	23.0	22.6	33.0	-10.4
				3	0	23.1	22.8	33.0	-10.2
				3	1	23.2	22.8	33.0	-10.2
				3	2	**23.2**	**22.9**	33.0	-10.2
				6	0	22.0	21.6	33.0	-11.4

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OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	QPSK	1	0	24.6	24.2	33.0	-8.8
				1	7	24.7	24.3	33.0	-8.7
				1	14	24.6	24.2	33.0	-8.8
				8	0	23.7	23.3	33.0	-9.7
				8	4	23.6	23.3	33.0	-9.7
				8	7	23.7	23.3	33.0	-9.7
				15	0	23.6	23.3	33.0	-9.7
	18900	1880.0		1	0	24.8	24.4	33.0	-8.6
				1	7	24.8	24.4	33.0	-8.6
				1	14	24.7	24.3	33.0	-8.7
				8	0	23.8	23.5	33.0	-9.5
				8	4	23.8	23.5	33.0	-9.5
				8	7	23.8	23.5	33.0	-9.5
				15	0	23.8	23.5	33.0	-9.5
	19185	1908.5		1	0	24.7	24.4	33.0	-8.7
				1	7	**24.8**	**24.5**	33.0	-8.5
				1	14	24.7	24.3	33.0	-8.7
				8	0	23.8	23.4	33.0	-9.6
				8	4	23.8	23.4	33.0	-9.6
				8	7	23.8	23.4	33.0	-9.6
				15	0	23.8	23.4	33.0	-9.6

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	16QAM	1	0	23.7	23.3	33.0	-9.7
				1	7	23.8	23.4	33.0	-9.6
				1	14	23.6	23.3	33.0	-9.7
				8	0	22.8	22.5	33.0	-10.6
				8	4	22.8	22.5	33.0	-10.5
				8	7	22.9	22.5	33.0	-10.5
				15	0	22.6	22.2	33.0	-10.8
	18900	1880.0		1	0	23.9	23.5	33.0	-9.5
				1	7	**23.9**	**23.6**	33.0	-9.4
				1	14	23.8	23.4	33.0	-9.6
				8	0	22.7	22.4	33.0	-10.6
				8	4	22.7	22.4	33.0	-10.6
				8	7	22.8	22.4	33.0	-10.6
				15	0	22.8	22.5	33.0	-10.5
	19185	1908.5		1	0	23.7	23.4	33.0	-9.6
				1	7	23.8	23.4	33.0	-9.6
				1	14	23.7	23.3	33.0	-9.7
				8	0	22.9	22.5	33.0	-10.5
				8	4	22.9	22.5	33.0	-10.5
				8	7	22.9	22.5	33.0	-10.5
				15	0	22.8	22.5	33.0	-10.5

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	64QAM	1	0	22.9	22.6	33.0	-10.5
				1	7	23.0	22.7	33.0	-10.3
				1	14	22.9	22.5	33.0	-10.5
				8	0	22.1	21.8	33.0	-11.2
				8	4	22.2	21.8	33.0	-11.2
				8	7	22.1	21.8	33.0	-11.2
				15	0	22.2	21.8	33.0	-11.2
	18900	1880.0		1	0	22.9	22.5	33.0	-10.5
				1	7	23.0	22.6	33.0	-10.4
				1	14	22.8	22.5	33.0	-10.5
				8	0	21.7	21.4	33.0	-11.6
				8	4	21.7	21.4	33.0	-11.6
				8	7	21.7	21.4	33.0	-11.7
				15	0	21.8	21.4	33.0	-11.6
	19185	1908.5		1	0	23.1	22.8	33.0	-10.2
				1	7	**23.3**	**22.9**	33.0	-10.1
				1	14	23.1	22.8	33.0	-10.2
				8	0	22.0	21.6	33.0	-11.4
				8	4	22.0	21.7	33.0	-11.4
				8	7	22.0	21.6	33.0	-11.4
				15	0	22.0	21.6	33.0	-11.4

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OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	QPSK	1	0	24.7	24.3	33.0	-8.7
				1	12	24.6	24.3	33.0	-8.8
				1	24	24.6	24.2	33.0	-8.8
				12	0	23.7	23.3	33.0	-9.7
				12	6	23.6	23.3	33.0	-9.7
				12	11	23.7	23.3	33.0	-9.7
				25	0	23.7	23.3	33.0	-9.7
	18900	1880.0		1	0	**24.8**	**24.4**	33.0	-8.6
				1	12	24.7	24.4	33.0	-8.6
				1	24	24.7	24.3	33.0	-8.7
				12	0	23.9	23.5	33.0	-9.5
				12	6	23.9	23.5	33.0	-9.5
				12	11	23.9	23.5	33.0	-9.5
				25	0	23.9	23.5	33.0	-9.5
	19175	1907.5		1	0	24.8	24.4	33.0	-8.6
				1	12	24.7	24.4	33.0	-8.6
				1	24	24.8	24.4	33.0	-8.6
				12	0	23.8	23.5	33.0	-9.6
				12	6	23.8	23.5	33.0	-9.5
				12	11	23.8	23.4	33.0	-9.6
				25	0	23.8	23.4	33.0	-9.6

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	16QAM	1	0	23.8	23.5	33.0	-9.5
				1	12	23.8	23.4	33.0	-9.6
				1	24	23.8	23.4	33.0	-9.6
				12	0	22.7	22.4	33.0	-10.6
				12	6	22.7	22.4	33.0	-10.6
				12	11	22.7	22.3	33.0	-10.7
				25	0	22.6	22.2	33.0	-10.8
	18900	1880.0		1	0	23.9	23.5	33.0	-9.5
				1	12	23.8	23.4	33.0	-9.6
				1	24	23.8	23.4	33.0	-9.6
				12	0	23.0	22.7	33.0	-10.4
				12	6	23.0	22.6	33.0	-10.4
				12	11	23.0	22.6	33.0	-10.4
				25	0	22.9	22.6	33.0	-10.5
	19175	1907.5		1	0	**24.0**	**23.7**	33.0	-9.3
				1	12	24.0	23.6	33.0	-9.4
				1	24	24.0	23.6	33.0	-9.4
				12	0	22.9	22.5	33.0	-10.5
				12	6	22.9	22.5	33.0	-10.5
				12	11	22.9	22.5	33.0	-10.5
				25	0	22.9	22.5	33.0	-10.5

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	64QAM	1	0	22.9	22.5	33.0	-10.5
				1	12	22.9	22.5	33.0	-10.5
				1	24	22.8	22.5	33.0	-10.5
				12	0	21.7	21.4	33.0	-11.6
				12	6	22.8	22.4	33.0	-10.6
				12	11	21.7	21.4	33.0	-11.7
				25	0	21.7	21.4	33.0	-11.6
	18900	1880.0		1	0	23.1	22.7	33.0	-10.3
				1	12	23.0	22.7	33.0	-10.3
				1	24	23.1	22.7	33.0	-10.3
				12	0	21.8	21.4	33.0	-11.6
				12	6	21.7	21.4	33.0	-11.6
				12	11	21.7	21.4	33.0	-11.6
				25	0	21.7	21.4	33.0	-11.7
	19175	1907.5		1	0	**23.1**	**22.7**	33.0	-10.3
				1	12	23.1	22.7	33.0	-10.3
				1	24	23.0	22.7	33.0	-10.3
				12	0	21.9	21.5	33.0	-11.5
				12	6	21.9	21.5	33.0	-11.5
				12	11	21.9	21.5	33.0	-11.5
				25	0	21.8	21.5	33.0	-11.5

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OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	QPSK	1	0	24.7	24.3	33.0	-8.7
				1	24	24.6	24.2	33.0	-8.8
				1	49	24.6	24.3	33.0	-8.7
				25	0	23.7	23.3	33.0	-9.7
				25	12	23.7	23.3	33.0	-9.7
				25	24	23.7	23.3	33.0	-9.7
				50	0	23.7	23.3	33.0	-9.7
	18900	1880.0		1	0	**24.8**	**24.4**	33.0	-8.6
				1	24	24.7	24.3	33.0	-8.7
				1	49	24.6	24.3	33.0	-8.7
				25	0	23.9	23.6	33.0	-9.5
				25	12	23.9	23.5	33.0	-9.5
				25	24	23.9	23.5	33.0	-9.5
				50	0	23.9	23.5	33.0	-9.5
	19150	1905.0		1	0	24.8	24.4	33.0	-8.6
				1	24	24.7	24.3	33.0	-8.7
				1	49	24.7	24.4	33.0	-8.7
				25	0	23.9	23.5	33.0	-9.5
				25	12	23.8	23.5	33.0	-9.5
				25	24	23.8	23.4	33.0	-9.6
				50	0	23.8	23.5	33.0	-9.5

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	16QAM	1	0	23.8	23.4	33.0	-9.6
				1	24	23.7	23.3	33.0	-9.7
				1	49	23.7	23.3	33.0	-9.7
				25	0	22.8	22.4	33.0	-10.6
				25	12	22.8	22.4	33.0	-10.6
				25	24	22.7	22.4	33.0	-10.6
				50	0	22.7	22.3	33.0	-10.7
	18900	1880.0		1	0	**23.8**	**23.5**	33.0	-9.5
				1	24	23.7	23.4	33.0	-9.6
				1	49	23.6	23.3	33.0	-9.7
				25	0	22.9	22.6	33.0	-10.4
				25	12	22.9	22.6	33.0	-10.5
				25	24	22.8	22.5	33.0	-10.5
				50	0	22.9	22.5	33.0	-10.5
	19150	1905.0		1	0	23.8	23.4	33.0	-9.6
				1	24	23.7	23.4	33.0	-9.7
				1	49	23.7	23.4	33.0	-9.7
				25	0	22.9	22.5	33.0	-10.5
				25	12	22.8	22.5	33.0	-10.5
				25	24	22.8	22.5	33.0	-10.5
				50	0	22.8	22.4	33.0	-10.6

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	64QAM	1	0	22.8	22.4	33.0	-10.6
				1	24	22.7	22.4	33.0	-10.7
				1	49	22.7	22.3	33.0	-10.7
				25	0	22.0	21.7	33.0	-11.4
				25	12	22.0	21.6	33.0	-11.4
				25	24	23.0	22.6	33.0	-10.4
				50	0	22.0	21.6	33.0	-11.4
	18900	1880.0		1	0	23.0	22.6	33.0	-10.4
				1	24	23.0	22.6	33.0	-10.4
				1	49	22.9	22.6	33.0	-10.5
				25	0	22.0	21.6	33.0	-11.4
				25	12	22.0	21.6	33.0	-11.4
				25	24	22.0	21.6	33.0	-11.4
				50	0	21.9	21.5	33.0	-11.5
	19150	1905.0		1	0	**23.2**	**22.8**	33.0	-10.2
				1	24	23.1	22.8	33.0	-10.3
				1	49	23.1	22.7	33.0	-10.3
				25	0	22.0	21.6	33.0	-11.4
				25	12	21.9	21.6	33.0	-11.4
				25	24	21.9	21.6	33.0	-11.4
				50	0	21.9	21.6	33.0	-11.4

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OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	QPSK	1	0	**24.8**	**24.5**	33.0	-8.5
				1	37	24.6	24.3	33.0	-8.7
				1	74	24.7	24.4	33.0	-8.6
				36	0	23.8	23.4	33.0	-9.6
				36	16	23.8	23.4	33.0	-9.6
				36	35	23.7	23.4	33.0	-9.7
				75	0	23.7	23.4	33.0	-9.6
	18900	1880.0		1	0	24.8	24.4	33.0	-8.6
				1	37	24.8	24.4	33.0	-8.6
				1	74	24.7	24.4	33.0	-8.6
				36	0	24.0	23.6	33.0	-9.4
				36	16	23.9	23.6	33.0	-9.5
				36	35	23.8	23.5	33.0	-9.5
				75	0	23.9	23.5	33.0	-9.5
	19125	1902.5		1	0	24.8	24.4	33.0	-8.6
				1	37	24.7	24.4	33.0	-8.7
				1	74	24.8	24.4	33.0	-8.6
				36	0	23.9	23.5	33.0	-9.5
				36	16	23.8	23.5	33.0	-9.5
				36	35	23.8	23.4	33.0	-9.6
				75	0	23.8	23.5	33.0	-9.5

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	16-QAM	1	0	24.2	23.9	33.0	-9.1
				1	37	24.1	23.7	33.0	-9.3
				1	74	24.2	23.8	33.0	-9.2
				36	0	22.8	22.4	33.0	-10.6
				36	16	22.7	22.4	33.0	-10.6
				36	35	22.7	22.3	33.0	-10.7
				75	0	22.7	22.4	33.0	-10.6
	18900	1880.0		1	0	23.8	23.4	33.0	-9.6
				1	37	**24.2**	**23.9**	33.0	-9.1
				1	74	24.1	23.8	33.0	-9.2
				36	0	23.1	22.7	33.0	-10.3
				36	16	23.0	22.7	33.0	-10.4
				36	35	22.9	22.5	33.0	-10.5
				75	0	22.9	22.6	33.0	-10.4
	19125	1902.5		1	0	23.9	23.5	33.0	-9.5
				1	37	23.7	23.4	33.0	-9.7
				1	74	23.8	23.4	33.0	-9.6
				36	0	22.9	22.5	33.0	-10.5
				36	16	22.8	22.5	33.0	-10.6
				36	35	22.8	22.4	33.0	-10.6
				75	0	22.9	22.5	33.0	-10.5

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	64QAM	1	0	22.8	22.4	33.0	-10.6
				1	37	22.6	22.3	33.0	-10.8
				1	74	22.6	22.2	33.0	-10.8
				36	0	22.0	21.6	33.0	-11.4
				36	16	22.0	21.6	33.0	-11.4
				36	35	21.9	21.5	33.0	-11.5
				75	0	21.9	21.5	33.0	-11.5
	18900	1880.0		1	0	22.9	22.5	33.0	-10.5
				1	37	23.0	22.6	33.0	-10.4
				1	74	**23.0**	**22.6**	33.0	-10.4
				36	0	21.9	21.6	33.0	-11.5
				36	16	21.9	21.5	33.0	-11.5
				36	35	21.9	21.5	33.0	-11.5
				75	0	21.8	21.4	33.0	-11.6
	19125	1902.5		1	0	22.8	22.4	33.0	-10.6
				1	37	22.6	22.3	33.0	-10.8
				1	74	22.7	22.3	33.0	-10.7
				36	0	22.1	21.8	33.0	-11.3
				36	16	22.1	21.7	33.0	-11.3
				36	35	22.1	21.7	33.0	-11.3
				75	0	22.0	21.6	33.0	-11.4

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OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	18700	1860.0	QPSK	1	0	24.8	24.4	33.0	-8.6
				1	49	24.6	24.3	33.0	-8.7
				1	99	**24.8**	**24.5**	33.0	-8.5
				50	0	23.8	23.4	33.0	-9.6
				50	24	23.8	23.4	33.0	-9.6
				50	49	23.8	23.4	33.0	-9.6
				100	0	23.8	23.4	33.0	-9.6
	18900	1880.0		1	0	24.8	24.5	33.0	-8.6
				1	49	24.6	24.2	33.0	-8.8
				1	99	24.5	24.1	33.0	-8.9
				50	0	24.0	23.7	33.0	-9.4
				50	24	23.9	23.6	33.0	-9.4
				50	49	23.8	23.4	33.0	-9.6
				100	0	23.9	23.6	33.0	-9.4
	19100	1900.0		1	0	24.8	24.4	33.0	-8.6
				1	49	24.7	24.4	33.0	-8.6
				1	99	24.8	24.4	33.0	-8.6
				50	0	23.9	23.5	33.0	-9.5
				50	24	23.9	23.5	33.0	-9.5
				50	49	23.8	23.5	33.0	-9.6
				100	0	23.9	23.5	33.0	-9.5

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	16-QAM	1	0	24.2	23.9	33.0	-9.1
				1	37	24.1	23.7	33.0	-9.3
				1	74	24.2	23.8	33.0	-9.2
				36	0	22.8	22.4	33.0	-10.6
				36	16	22.7	22.4	33.0	-10.6
				36	35	22.7	22.3	33.0	-10.7
				75	0	22.7	22.4	33.0	-10.6
	18900	1880.0		1	0	23.8	23.4	33.0	-9.6
				1	37	**24.2**	**23.9**	33.0	-9.1
				1	74	24.1	23.8	33.0	-9.2
				36	0	23.1	22.7	33.0	-10.3
				36	16	23.0	22.7	33.0	-10.4
				36	35	22.9	22.5	33.0	-10.5
				75	0	22.9	22.6	33.0	-10.4
	19125	1902.5		1	0	23.9	23.5	33.0	-9.5
				1	37	23.7	23.4	33.0	-9.7
				1	74	23.8	23.4	33.0	-9.6
				36	0	22.9	22.5	33.0	-10.5
				36	16	22.8	22.5	33.0	-10.6
				36	35	22.8	22.4	33.0	-10.6
				75	0	22.9	22.5	33.0	-10.5

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	18700	1860.0	64QAM	1	0	22.9	22.5	33.0	-10.5
				1	49	**23.0**	**22.7**	33.0	-10.3
				1	99	23.0	22.6	33.0	-10.4
				50	0	21.8	21.5	33.0	-11.6
				50	24	21.8	21.4	33.0	-11.6
				50	49	21.7	21.4	33.0	-11.7
				100	0	21.8	21.4	33.0	-11.6
	18900	1880.0		1	0	23.0	22.6	33.0	-10.4
				1	49	22.9	22.6	33.0	-10.5
				1	99	22.8	22.5	33.0	-10.6
				50	0	21.8	21.5	33.0	-11.5
				50	24	21.8	21.4	33.0	-11.6
				50	49	21.8	21.4	33.0	-11.6
				100	0	21.8	21.4	33.0	-11.6
	19100	1900.0		1	0	23.0	22.6	33.0	-10.4
				1	49	23.0	22.7	33.0	-10.4
				1	99	23.0	22.7	33.0	-10.4
				50	0	22.1	21.8	33.0	-11.2
				50	24	22.1	21.7	33.0	-11.3
				50	49	22.0	21.6	33.0	-11.4
				100	0	22.1	21.7	33.0	-11.3

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7.1.2. LTE BAND 4

ID:	50820	Date:	3/15/17

OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

Antenna Gain (dBi)	-0.02

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	QPSK	1	0	24.7	24.6	30.0	-5.4
				1	2	24.7	24.7	30.0	-5.3
				1	5	24.6	24.6	30.0	-5.4
				3	0	**24.7**	**24.7**	30.0	-5.3
				3	1	24.7	24.7	30.0	-5.3
				3	2	24.7	24.6	30.0	-5.4
				6	0	23.9	23.8	30.0	-6.2
1.4	20175	1732.5	QPSK	1	0	24.5	24.5	30.0	-5.5
				1	2	24.6	24.6	30.0	-5.4
				1	5	24.5	24.5	30.0	-5.5
				3	0	24.6	24.6	30.0	-5.4
				3	1	24.7	24.6	30.0	-5.4
				3	2	24.7	24.6	30.0	-5.4
				6	0	23.9	23.8	30.0	-6.2
1.4	20393	1754.3	QPSK	1	0	24.6	24.6	30.0	-5.4
				1	2	24.7	24.6	30.0	-5.4
				1	5	24.6	24.6	30.0	-5.4
				3	0	24.6	24.6	30.0	-5.4
				3	1	24.7	24.7	30.0	-5.3
				3	2	24.7	24.7	30.0	-5.3
				6	0	23.9	23.9	30.0	-6.1

Antenna Gain (dBi)	-0.02

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	16QAM	1	0	23.5	23.5	30.0	-6.5
				1	2	23.6	23.5	30.0	-6.5
				1	5	23.5	23.5	30.0	-6.5
				3	0	23.4	23.3	30.0	-6.7
				3	1	23.4	23.4	30.0	-6.6
				3	2	23.4	23.4	30.0	-6.6
				6	0	22.9	22.9	30.0	-7.1
1.4	20175	1732.5	16QAM	1	0	23.7	23.7	30.0	-6.3
				1	2	23.7	23.7	30.0	-6.3
				1	5	23.7	23.6	30.0	-6.4
				3	0	23.8	23.7	30.0	-6.3
				3	1	23.8	23.7	30.0	-6.3
				3	2	23.8	23.8	30.0	-6.2
				6	0	22.8	22.8	30.0	-7.2
1.4	20393	1754.3	16QAM	1	0	23.9	23.9	30.0	-6.1
				1	2	23.9	23.9	30.0	-6.1
				1	5	23.9	23.9	30.0	-6.1
				3	0	24.1	24.0	30.0	-6.0
				3	1	**24.1**	**24.1**	30.0	-5.9
				3	2	24.0	23.9	30.0	-6.1
				6	0	22.8	22.8	30.0	-7.2

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Antenna Gain (dBi)	-0.02								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	64QAM	1	0	22.8	22.8	30.0	-7.2
				1	2	22.9	22.8	30.0	-7.2
				1	5	22.8	22.7	30.0	-7.3
				3	0	23.0	23.0	30.0	-7.0
				3	1	23.1	23.1	30.0	-6.9
				3	2	23.1	23.1	30.0	-6.9
				6	0	22.2	22.2	30.0	-7.8
1.4	20175	1732.5	64QAM	1	0	23.1	23.1	30.0	-6.9
				1	2	23.2	23.2	30.0	-6.9
				1	5	23.2	23.1	30.0	-6.9
				3	0	23.0	23.0	30.0	-7.0
				3	1	23.1	23.0	30.0	-7.0
				3	2	23.1	23.1	30.0	-6.9
				6	0	22.2	22.1	30.0	-7.9
1.4	20393	1754.3	64QAM	1	0	23.1	23.1	30.0	-6.9
				1	2	23.2	23.2	30.0	-6.8
				1	5	23.0	23.0	30.0	-7.0
				3	0	23.2	23.2	30.0	-6.8
				3	1	23.2	23.2	30.0	-6.8
				3	2	**23.3**	**23.2**	30.0	-6.8
				6	0	21.9	21.8	30.0	-8.2

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OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)

Antenna Gain (dBi)	-0.02								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	QPSK	1	0	24.5	24.5	30.0	-5.5
				1	7	24.7	24.6	30.0	-5.4
				1	14	24.5	24.5	30.0	-5.5
				8	0	23.7	23.6	30.0	-6.4
				8	4	23.7	23.6	30.0	-6.4
				8	7	23.7	23.7	30.0	-6.3
				15	0	23.6	23.6	30.0	-6.4
3.0	20175	1732.5	QPSK	1	0	24.4	24.4	30.0	-5.6
				1	7	24.6	24.6	30.0	-5.4
				1	14	24.4	24.4	30.0	-5.6
				8	0	23.7	23.7	30.0	-6.3
				8	4	23.7	23.6	30.0	-6.4
				8	7	23.7	23.6	30.0	-6.4
				15	0	23.6	23.6	30.0	-6.4
3.0	20385	1753.5	QPSK	1	0	24.7	24.7	30.0	-5.3
				1	7	**24.8**	**24.7**	30.0	-5.3
				1	14	24.6	24.6	30.0	-5.4
				8	0	23.8	23.8	30.0	-6.2
				8	4	23.8	23.8	30.0	-6.2
				8	7	23.8	23.8	30.0	-6.2
				15	0	23.8	23.8	30.0	-6.2

Antenna Gain (dBi)	-0.02								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	16QAM	1	0	24.0	24.0	30.0	-6.0
				1	7	**24.1**	**24.1**	30.0	-5.9
				1	14	24.0	24.0	30.0	-6.0
				8	0	22.7	22.7	30.0	-7.3
				8	4	22.8	22.8	30.0	-7.2
				8	7	22.8	22.7	30.0	-7.3
				15	0	22.9	22.9	30.0	-7.1
3.0	20175	1732.5	16QAM	1	0	23.4	23.4	30.0	-6.6
				1	7	23.6	23.5	30.0	-6.5
				1	14	23.5	23.4	30.0	-6.6
				8	0	22.7	22.7	30.0	-7.3
				8	4	22.7	22.6	30.0	-7.4
				8	7	22.7	22.6	30.0	-7.4
				15	0	22.6	22.6	30.0	-7.4
3.0	20385	1753.5	16QAM	1	0	23.8	23.8	30.0	-6.2
				1	7	23.8	23.8	30.0	-6.2
				1	14	23.7	23.7	30.0	-6.3
				8	0	22.8	22.8	30.0	-7.2
				8	4	22.8	22.8	30.0	-7.2
				8	7	22.8	22.8	30.0	-7.2
				15	0	22.9	22.9	30.0	-7.1

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Antenna Gain (dBi)	-0.02

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	64QAM	1	0	22.6	22.6	30.0	-7.4
				1	7	22.7	22.7	30.0	-7.3
				1	14	22.6	22.6	30.0	-7.4
				8	0	21.9	21.9	30.0	-8.1
				8	4	21.9	21.9	30.0	-8.1
				8	7	21.9	21.9	30.0	-8.1
				15	0	21.8	21.8	30.0	-8.2
3.0	20175	1732.5	64QAM	1	0	23.0	23.0	30.0	-7.1
				1	7	**23.2**	**23.2**	30.0	-6.8
				1	14	23.0	23.0	30.0	-7.0
				8	0	21.9	21.8	30.0	-8.2
				8	4	21.9	21.8	30.0	-8.2
				8	7	21.8	21.8	30.0	-8.2
				15	0	21.9	21.9	30.0	-8.2
3.0	20385	1753.5	64QAM	1	0	23.0	23.0	30.0	-7.0
				1	7	23.1	23.1	30.0	-6.9
				1	14	23.0	22.9	30.0	-7.1
				8	0	21.8	21.8	30.0	-8.2
				8	4	21.8	21.8	30.0	-8.2
				8	7	21.8	21.8	30.0	-8.2
				15	0	21.8	21.8	30.0	-8.2

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7.1.3. LTE BAND 5

ID:	50820	Date:	3/17/17

OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	QPSK	1	0	24.6	20.7	38.45	-17.7
				1	2	24.6	20.8	38.45	-17.7
				1	5	24.6	20.7	38.45	-17.7
				3	0	24.6	20.8	38.45	-17.7
				3	1	24.7	20.8	38.45	-17.6
				3	2	**24.7**	**20.8**	38.45	-17.6
				6	0	24.1	20.3	38.45	-18.2
1.4	20525	836.5	QPSK	1	0	24.6	20.8	38.45	-17.7
				1	2	24.7	20.8	38.45	-17.6
				1	5	24.6	20.8	38.45	-17.7
				3	0	24.7	20.8	38.45	-17.6
				3	1	24.7	20.8	38.45	-17.6
				3	2	24.7	20.8	38.45	-17.6
				6	0	23.8	19.9	38.45	-18.5
1.4	20643	848.3	QPSK	1	0	24.5	20.7	38.45	-17.8
				1	2	24.6	20.8	38.45	-17.7
				1	5	24.6	20.7	38.45	-17.7
				3	0	24.6	20.8	38.45	-17.7
				3	1	24.7	20.8	38.45	-17.6
				3	2	24.7	20.8	38.45	-17.6
				6	0	23.9	20.1	38.45	-18.4

Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	16QAM	1	0	23.6	19.8	38.45	-18.7
				1	2	**23.7**	**19.8**	38.45	-18.6
				1	5	23.6	19.8	38.45	-18.7
				3	0	23.5	19.6	38.45	-18.8
				3	1	23.5	19.7	38.45	-18.8
				3	2	23.5	19.7	38.45	-18.8
				6	0	22.3	18.5	38.45	-20.0
1.4	20525	836.5	16QAM	1	0	23.6	19.8	38.45	-18.7
				1	2	23.6	19.8	38.45	-18.6
				1	5	23.6	19.7	38.45	-18.7
				3	0	23.4	19.6	38.45	-18.9
				3	1	23.5	19.6	38.45	-18.8
				3	2	23.4	19.6	38.45	-18.9
				6	0	22.7	18.8	38.45	-19.6
1.4	20643	848.3	16QAM	1	0	23.6	19.7	38.45	-18.7
				1	2	23.6	19.8	38.45	-18.6
				1	5	23.6	19.7	38.45	-18.7
				3	0	23.6	19.7	38.45	-18.7
				3	1	23.6	19.8	38.45	-18.7
				3	2	23.6	19.8	38.45	-18.7
				6	0	22.5	18.7	38.45	-19.7

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Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	64QAM	1	0	22.4	18.6	38.45	-19.9
				1	2	22.6	18.7	38.45	-19.7
				1	5	22.4	18.6	38.45	-19.9
				3	0	22.7	18.8	38.45	-19.6
				3	1	22.8	18.9	38.45	-19.5
				3	2	22.8	18.9	38.45	-19.5
				6	0	21.4	17.6	38.45	-20.9
1.4	20525	836.5	64QAM	1	0	22.6	18.8	38.45	-19.7
				1	2	22.7	18.9	38.45	-19.6
				1	5	22.7	18.8	38.45	-19.6
				3	0	22.5	18.7	38.45	-19.8
				3	1	22.6	18.8	38.45	-19.7
				3	2	22.6	18.8	38.45	-19.7
				6	0	21.6	17.8	38.45	-20.7
1.4	20643	848.3	64QAM	1	0	22.6	18.8	38.45	-19.7
				1	2	22.7	18.9	38.45	-19.6
				1	5	22.6	18.7	38.45	-19.7
				3	0	22.7	18.9	38.45	-19.6
				3	1	22.7	18.9	38.45	-19.6
				3	2	**22.8**	**18.9**	38.45	-19.5
				6	0	21.4	17.5	38.45	-20.9

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OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	QPSK	1	0	24.7	20.8	38.45	-17.6
				1	7	24.7	20.9	38.45	-17.5
				1	14	24.6	20.8	38.45	-17.7
				8	0	23.8	19.9	38.45	-18.5
				8	4	23.7	19.9	38.45	-18.6
				8	7	23.7	19.9	38.45	-18.6
				15	0	23.7	19.9	38.45	-18.6
3.0	20525	836.5	QPSK	1	0	24.7	20.9	38.45	-17.6
				1	7	**24.8**	**21.0**	38.45	-17.5
				1	14	24.7	20.8	38.45	-17.6
				8	0	23.9	20.0	38.45	-18.4
				8	4	23.9	20.0	38.45	-18.4
				8	7	23.9	20.0	38.45	-18.4
				15	0	23.8	20.0	38.45	-18.5
3.0	20635	847.5	QPSK	1	0	24.7	20.8	38.45	-17.6
				1	7	24.8	20.9	38.45	-17.5
				1	14	24.6	20.8	38.45	-17.7
				8	0	23.8	19.9	38.45	-18.5
				8	4	23.7	19.9	38.45	-18.6
				8	7	23.7	19.9	38.45	-18.6
				15	0	23.7	19.9	38.45	-18.6

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	16QAM	1	0	23.6	19.8	38.45	-18.6
				1	7	23.7	19.8	38.45	-18.6
				1	14	23.5	19.7	38.45	-18.8
				8	0	22.9	19.0	38.45	-19.4
				8	4	22.8	19.0	38.45	-19.5
				8	7	22.8	19.0	38.45	-19.5
				15	0	22.8	18.9	38.45	-19.5
3.0	20525	836.5	16QAM	1	0	23.7	19.9	38.45	-18.6
				1	7	23.7	19.9	38.45	-18.5
				1	14	23.7	19.8	38.45	-18.6
				8	0	22.7	18.9	38.45	-19.5
				8	4	22.8	18.9	38.45	-19.5
				8	7	22.8	18.9	38.45	-19.5
				15	0	22.5	18.7	38.45	-19.8
3.0	20635	847.5	16QAM	1	0	23.9	20.1	38.45	-18.4
				1	7	**23.9**	**20.1**	38.45	-18.3
				1	14	23.8	20.0	38.45	-18.5
				8	0	22.9	19.1	38.45	-19.4
				8	4	22.9	19.1	38.45	-19.3
				8	7	22.9	19.1	38.45	-19.4
				15	0	23.0	19.2	38.45	-19.3

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Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	64QAM	1	0	22.7	18.9	38.45	-19.6
				1	7	22.8	19.0	38.45	-19.5
				1	14	22.8	19.0	38.45	-19.5
				8	0	21.5	17.7	38.45	-20.8
				8	4	21.5	17.7	38.45	-20.8
				8	7	21.5	17.6	38.45	-20.8
				15	0	21.5	17.7	38.45	-20.8
3.0	20525	836.5	64QAM	1	0	22.7	18.8	38.45	-19.6
				1	7	**22.9**	**19.1**	38.45	-19.4
				1	14	22.7	18.9	38.45	-19.6
				8	0	21.6	17.8	38.45	-20.7
				8	4	21.7	17.8	38.45	-20.6
				8	7	21.6	17.8	38.45	-20.7
				15	0	21.6	17.7	38.45	-20.7
3.0	20635	847.5	64QAM	1	0	22.7	18.9	38.45	-19.6
				1	7	22.7	18.9	38.45	-19.6
				1	14	22.6	18.8	38.45	-19.7
				8	0	21.6	17.7	38.45	-20.7
				8	4	21.5	17.7	38.45	-20.8
				8	7	21.5	17.7	38.45	-20.8
				15	0	21.6	17.7	38.45	-20.7

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OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	QPSK	1	0	24.7	20.9	38.45	-17.6
				1	12	24.6	20.8	38.45	-17.6
				1	24	24.6	20.8	38.45	-17.7
				12	0	23.8	19.9	38.45	-18.5
				12	6	23.7	19.9	38.45	-18.6
				12	11	23.7	19.9	38.45	-18.6
				25	0	23.7	19.9	38.45	-18.6
5.0	20525	836.5	QPSK	1	0	24.7	20.8	38.45	-17.6
				1	12	**24.7**	**20.9**	38.45	-17.6
				1	24	24.7	20.8	38.45	-17.6
				12	0	23.8	19.9	38.45	-18.5
				12	6	23.8	19.9	38.45	-18.5
				12	11	23.7	19.9	38.45	-18.5
				25	0	23.7	19.9	38.45	-18.6
5.0	20625	846.5	QPSK	1	0	24.7	20.9	38.45	-17.6
				1	12	24.7	20.8	38.45	-17.6
				1	24	24.6	20.8	38.45	-17.6
				12	0	23.8	19.9	38.45	-18.5
				12	6	23.7	19.9	38.45	-18.5
				12	11	23.7	19.9	38.45	-18.6
				25	0	23.7	19.9	38.45	-18.6

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	16QAM	1	0	23.8	20.0	38.45	-18.5
				1	12	23.8	19.9	38.45	-18.5
				1	24	23.7	19.9	38.45	-18.6
				12	0	22.8	19.0	38.45	-19.5
				12	6	22.8	18.9	38.45	-19.5
				12	11	22.7	18.9	38.45	-19.5
				25	0	22.7	18.8	38.45	-19.6
5.0	20525	836.5	16QAM	1	0	23.7	19.8	38.45	-18.6
				1	12	23.7	19.9	38.45	-18.6
				1	24	23.7	19.9	38.45	-18.6
				12	0	22.9	19.1	38.45	-19.4
				12	6	22.9	19.1	38.45	-19.4
				12	11	22.9	19.1	38.45	-19.4
				25	0	22.8	19.0	38.45	-19.5
5.0	20625	846.5	16QAM	1	0	**23.9**	**20.1**	38.45	-18.4
				1	12	23.9	20.0	38.45	-18.4
				1	24	23.9	20.1	38.45	-18.4
				12	0	22.9	19.1	38.45	-19.4
				12	6	22.9	19.1	38.45	-19.4
				12	11	22.9	19.0	38.45	-19.4
				25	0	22.8	19.0	38.45	-19.5

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Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	64QAM	1	0	22.5	18.7	38.45	-19.8
				1	12	22.5	18.7	38.45	-19.8
				1	24	22.5	18.6	38.45	-19.8
				12	0	21.4	17.6	38.45	-20.9
				12	6	21.4	17.6	38.45	-20.9
				12	11	21.3	17.5	38.45	-21.0
				25	0	21.3	17.5	38.45	-21.0
5.0	20525	836.5	64QAM	1	0	22.6	18.8	38.45	-19.7
				1	12	22.7	18.8	38.45	-19.6
				1	24	22.6	18.8	38.45	-19.7
				12	0	21.4	17.6	38.45	-20.9
				12	6	21.5	17.7	38.45	-20.8
				12	11	21.5	17.6	38.45	-20.8
				25	0	21.5	17.7	38.45	-20.8
5.0	20625	846.5	64QAM	1	0	**22.9**	**19.1**	38.45	-19.4
				1	12	22.8	19.0	38.45	-19.5
				1	24	22.8	19.0	38.45	-19.5
				12	0	21.5	17.7	38.45	-20.8
				12	6	21.6	17.7	38.45	-20.7
				12	11	21.5	17.7	38.45	-20.8
				25	0	21.5	17.7	38.45	-20.8

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OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	QPSK	1	0	24.7	20.9	38.45	-17.6
				1	24	24.6	20.8	38.45	-17.7
				1	49	24.6	20.8	38.45	-17.7
				25	0	23.7	19.9	38.45	-18.6
				25	12	23.7	19.9	38.45	-18.6
				25	24	23.7	19.8	38.45	-18.6
				50	0	23.7	19.9	38.45	-18.6
10.0	20525	836.5	QPSK	1	0	**24.8**	**20.9**	38.45	-17.5
				1	24	24.7	20.9	38.45	-17.6
				1	49	24.7	20.9	38.45	-17.6
				25	0	23.7	19.9	38.45	-18.6
				25	12	23.8	20.0	38.45	-18.5
				25	24	23.7	19.9	38.45	-18.6
				50	0	23.8	20.0	38.45	-18.5
10.0	20600	844.0	QPSK	1	0	24.7	20.9	38.45	-17.6
				1	24	24.7	20.9	38.45	-17.6
				1	49	24.6	20.8	38.45	-17.7
				25	0	23.8	20.0	38.45	-18.5
				25	12	23.8	20.0	38.45	-18.5
				25	24	23.7	19.9	38.45	-18.6
				50	0	23.8	20.0	38.45	-18.5

Antenna Gain (dBi)	-1.69								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	16QAM	1	0	23.5	19.6	38.45	-18.8
				1	24	23.4	19.5	38.45	-18.9
				1	49	23.4	19.5	38.45	-18.9
				25	0	22.6	18.7	38.45	-19.7
				25	12	22.5	18.7	38.45	-19.8
				25	24	22.4	18.6	38.45	-19.9
				50	0	22.4	18.6	38.45	-19.9
10.0	20525	836.5	16QAM	1	0	23.7	19.9	38.45	-18.6
				1	24	**23.7**	**19.9**	38.45	-18.6
				1	49	23.7	19.9	38.45	-18.6
				25	0	22.5	18.7	38.45	-19.8
				25	12	22.5	18.7	38.45	-19.8
				25	24	22.5	18.6	38.45	-19.8
				50	0	22.5	18.7	38.45	-19.8
10.0	20600	844.0	16QAM	1	0	23.4	19.5	38.45	-18.9
				1	24	23.4	19.5	38.45	-18.9
				1	49	23.3	19.5	38.45	-19.0
				25	0	22.6	18.8	38.45	-19.7
				25	12	22.5	18.7	38.45	-19.8
				25	24	22.5	18.6	38.45	-19.8
				50	0	22.5	18.7	38.45	-19.8

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Antenna Gain (dBi)	-1.69

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	64QAM	1	0	22.8	19.0	38.45	-19.5
				1	24	22.7	18.8	38.45	-19.6
				1	49	**22.8**	**19.0**	38.45	-19.5
				25	0	21.6	17.8	38.45	-20.7
				25	12	21.6	17.7	38.45	-20.7
				25	24	21.6	17.8	38.45	-20.7
				50	0	21.6	17.7	38.45	-20.7
10.0	20525	836.5	64QAM	1	0	22.4	18.5	38.45	-19.9
				1	24	22.5	18.7	38.45	-19.8
				1	49	22.6	18.8	38.45	-19.7
				25	0	21.7	17.9	38.45	-20.6
				25	12	21.8	18.0	38.45	-20.5
				25	24	21.8	17.9	38.45	-20.5
				50	0	21.8	17.9	38.45	-20.5
10.0	20600	844.0	64QAM	1	0	22.8	19.0	38.45	-19.5
				1	24	22.8	19.0	38.45	-19.5
				1	49	22.8	18.9	38.45	-19.5
				25	0	21.8	18.0	38.45	-20.5
				25	12	21.8	18.0	38.45	-20.5
				25	24	21.8	17.9	38.45	-20.5
				50	0	21.8	17.9	38.45	-20.5

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7.1.4. LTE BAND 7

ID:	50820	Date:	3/16/17

OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	QPSK	1	0	24.6	24.6	33.0	-8.4
				1	12	24.5	24.6	33.0	-8.4
				1	24	24.5	24.5	33.0	-8.5
				12	0	23.4	23.5	33.0	-9.5
				12	6	23.6	23.6	33.0	-9.4
				12	11	23.5	23.6	33.0	-9.4
				25	0	23.5	23.6	33.0	-9.4
5.0	21100	2535.0	QPSK	1	0	**24.8**	**24.8**	33.0	-8.2
				1	12	24.7	24.7	33.0	-8.3
				1	24	24.6	24.7	33.0	-8.3
				12	0	23.7	23.8	33.0	-9.3
				12	6	23.7	23.7	33.0	-9.3
				12	11	23.7	23.7	33.0	-9.3
				25	0	23.6	23.7	33.0	-9.3
5.0	21425	2567.5	QPSK	1	0	24.5	24.6	33.0	-8.4
				1	12	24.5	24.6	33.0	-8.4
				1	24	24.6	24.6	33.0	-8.4
				12	0	23.7	23.8	33.0	-9.2
				12	6	23.7	23.8	33.0	-9.3
				12	11	23.6	23.6	33.0	-9.4
				25	0	23.7	23.7	33.0	-9.3

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	16QAM	1	0	23.6	23.7	33.0	-9.3
				1	12	23.8	23.9	33.0	-9.2
				1	24	23.8	23.8	33.0	-9.2
				12	0	22.5	22.5	33.0	-10.5
				12	6	22.7	22.8	33.0	-10.2
				12	11	22.7	22.7	33.0	-10.3
				25	0	22.6	22.7	33.0	-10.4
5.0	21100	2535.0	16QAM	1	0	**23.9**	**23.9**	33.0	-9.1
				1	12	23.8	23.9	33.0	-9.1
				1	24	23.8	23.8	33.0	-9.2
				12	0	22.7	22.7	33.0	-10.3
				12	6	22.6	22.7	33.0	-10.3
				12	11	22.6	22.7	33.0	-10.3
				25	0	22.6	22.6	33.0	-10.4
5.0	21425	2567.5	16QAM	1	0	23.8	23.9	33.0	-9.2
				1	12	23.8	23.8	33.0	-9.2
				1	24	23.6	23.7	33.0	-9.3
				12	0	22.8	22.9	33.0	-10.1
				12	6	22.8	22.9	33.0	-10.1
				12	11	22.8	22.9	33.0	-10.1
				25	0	22.7	22.8	33.0	-10.2

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	64QAM	1	0	22.7	22.8	33.0	-10.3
				1	12	22.6	22.7	33.0	-10.4
				1	24	22.6	22.7	33.0	-10.4
				12	0	21.4	21.5	33.0	-11.6
				12	6	21.4	21.5	33.0	-11.6
				12	11	21.4	21.5	33.0	-11.6
				25	0	21.3	21.4	33.0	-11.7
5.0	21100	2535.0	64QAM	1	0	**22.8**	**22.9**	33.0	-10.2
				1	12	22.8	22.8	33.0	-10.2
				1	24	22.8	22.8	33.0	-10.2
				12	0	21.5	21.6	33.0	-11.5
				12	6	21.5	21.6	33.0	-11.5
				12	11	21.5	21.6	33.0	-11.5
				25	0	21.5	21.6	33.0	-11.5
5.0	21425	2567.5	64QAM	1	0	22.7	22.8	33.0	-10.3
				1	12	22.7	22.8	33.0	-10.3
				1	24	22.6	22.7	33.0	-10.4
				12	0	21.5	21.6	33.0	-11.5
				12	6	21.5	21.6	33.0	-11.5
				12	11	21.4	21.5	33.0	-11.6
				25	0	21.5	21.6	33.0	-11.5

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OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	QPSK	1	0	24.6	24.6	33.0	-8.4
				1	24	24.5	24.6	33.0	-8.5
				1	49	24.4	24.5	33.0	-8.5
				25	0	23.6	23.6	33.0	-9.4
				25	12	23.5	23.6	33.0	-9.4
				25	24	23.5	23.6	33.0	-9.5
				50	0	23.5	23.6	33.0	-9.4
10.0	21100	2535.0	QPSK	1	0	**24.7**	**24.8**	33.0	-8.2
				1	24	24.6	24.7	33.0	-8.3
				1	49	24.6	24.6	33.0	-8.4
				25	0	23.8	23.8	33.0	-9.2
				25	12	23.8	23.9	33.0	-9.1
				25	24	23.7	23.8	33.0	-9.2
				50	0	23.7	23.8	33.0	-9.2
10.0	21400	2565.0	QPSK	1	0	24.7	24.7	33.0	-8.3
				1	24	24.6	24.7	33.0	-8.3
				1	49	24.6	24.6	33.0	-8.4
				25	0	23.7	23.7	33.0	-9.3
				25	12	23.7	23.8	33.0	-9.2
				25	24	23.7	23.7	33.0	-9.3
				50	0	23.7	23.8	33.0	-9.3

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	16QAM	1	0	23.5	23.6	33.0	-9.4
				1	24	23.5	23.6	33.0	-9.4
				1	49	23.5	23.5	33.0	-9.5
				25	0	22.7	22.7	33.0	-10.3
				25	12	22.7	22.7	33.0	-10.3
				25	24	22.6	22.6	33.0	-10.4
				50	0	22.6	22.6	33.0	-10.4
10.0	21100	2535.0	16QAM	1	0	24.1	24.1	33.0	-8.9
				1	24	**24.1**	**24.1**	33.0	-8.9
				1	49	24.0	24.0	33.0	-9.0
				25	0	22.8	22.9	33.0	-10.1
				25	12	22.8	22.9	33.0	-10.1
				25	24	22.7	22.8	33.0	-10.2
				50	0	22.8	22.8	33.0	-10.2
10.0	21400	2565.0	16QAM	1	0	23.7	23.7	33.0	-9.3
				1	24	23.6	23.6	33.0	-9.4
				1	49	23.6	23.7	33.0	-9.4
				25	0	22.8	22.9	33.0	-10.1
				25	12	22.8	22.8	33.0	-10.2
				25	24	22.8	22.8	33.0	-10.2
				50	0	22.8	22.8	33.0	-10.2

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	64QAM	1	0	22.8	22.9	33.0	-10.1
				1	24	22.7	22.8	33.0	-10.2
				1	49	22.8	22.8	33.0	-10.2
				25	0	21.6	21.7	33.0	-11.3
				25	12	21.6	21.7	33.0	-11.4
				25	24	21.6	21.6	33.0	-11.4
				50	0	21.6	21.7	33.0	-11.4
10.0	21100	2535.0	64QAM	1	0	**22.9**	**23.0**	33.0	-10.0
				1	24	22.9	23.0	33.0	-10.1
				1	49	22.8	22.9	33.0	-10.1
				25	0	21.7	21.8	33.0	-11.2
				25	12	21.7	21.8	33.0	-11.2
				25	24	21.7	21.7	33.0	-11.3
				50	0	21.7	21.7	33.0	-11.3
10.0	21400	2565.0	64QAM	1	0	22.9	22.9	33.0	-10.1
				1	24	22.7	22.8	33.0	-10.2
				1	49	22.7	22.7	33.0	-10.3
				25	0	21.8	21.8	33.0	-11.2
				25	12	21.7	21.8	33.0	-11.2
				25	24	21.7	21.8	33.0	-11.3
				50	0	21.7	21.8	33.0	-11.3

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OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	QPSK	1	0	**24.7**	**24.7**	33.0	-8.3
				1	37	24.5	24.5	33.0	-8.5
				1	74	24.5	24.5	33.0	-8.5
				36	0	23.6	23.7	33.0	-9.3
				36	16	23.6	23.6	33.0	-9.4
				36	35	23.4	23.5	33.0	-9.5
				75	0	23.5	23.6	33.0	-9.4
15.0	21100	2535.0	QPSK	1	0	24.4	24.4	33.0	-8.6
				1	37	24.5	24.5	33.0	-8.5
				1	74	24.4	24.5	33.0	-8.5
				36	0	23.8	23.9	33.0	-9.1
				36	16	23.8	23.9	33.0	-9.1
				36	35	23.7	23.7	33.0	-9.3
				75	0	23.7	23.8	33.0	-9.2
15.0	21375	2562.5	QPSK	1	0	24.4	24.4	33.0	-8.6
				1	37	24.6	24.7	33.0	-8.3
				1	74	24.6	24.6	33.0	-8.4
				36	0	23.8	23.8	33.0	-9.2
				36	16	23.8	23.9	33.0	-9.1
				36	35	23.7	23.8	33.0	-9.2
				75	0	23.8	23.8	33.0	-9.2

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	16-QAM	1	0	23.7	23.7	33.0	-9.3
				1	37	23.9	23.9	33.0	-9.1
				1	74	23.6	23.7	33.0	-9.3
				36	0	22.6	22.6	33.0	-10.4
				36	16	22.5	22.6	33.0	-10.4
				36	35	22.3	22.4	33.0	-10.6
				75	0	22.5	22.6	33.0	-10.4
15.0	21100	2535.0	16-QAM	1	0	**24.1**	**24.1**	33.0	-8.9
				1	37	24.1	24.1	33.0	-8.9
				1	74	24.0	24.0	33.0	-9.0
				36	0	22.8	22.9	33.0	-10.1
				36	16	22.7	22.8	33.0	-10.2
				36	35	22.6	22.7	33.0	-10.3
				75	0	22.7	22.7	33.0	-10.3
15.0	21375	2562.5	16-QAM	1	0	23.8	23.8	33.0	-9.2
				1	37	23.7	23.8	33.0	-9.3
				1	74	23.7	23.8	33.0	-9.2
				36	0	22.7	22.7	33.0	-10.3
				36	16	22.6	22.7	33.0	-10.3
				36	35	22.6	22.6	33.0	-10.4
				75	0	22.6	22.6	33.0	-10.4

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Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	64QAM	1	0	22.7	22.8	33.0	-10.2
				1	37	22.6	22.6	33.0	-10.4
				1	74	22.6	22.6	33.0	-10.4
				36	0	21.4	21.5	33.0	-11.5
				36	16	21.4	21.5	33.0	-11.5
				36	35	21.4	21.5	33.0	-11.5
				75	0	21.2	21.3	33.0	-11.7
15.0	21100	2535.0	64QAM	1	0	**23.1**	**23.1**	33.0	-9.9
				1	37	22.9	22.9	33.0	-10.1
				1	74	22.9	22.9	33.0	-10.1
				36	0	21.4	21.4	33.0	-11.6
				36	16	21.3	21.3	33.0	-11.7
				36	35	21.3	21.3	33.0	-11.7
				75	0	21.4	21.4	33.0	-11.6
15.0	21375	2562.5	64QAM	1	0	22.6	22.6	33.0	-10.4
				1	37	22.5	22.5	33.0	-10.5
				1	74	22.4	22.4	33.0	-10.6
				36	0	21.7	21.7	33.0	-11.3
				36	16	21.6	21.6	33.0	-11.4
				36	35	21.5	21.5	33.0	-11.5
				75	0	21.5	21.5	33.0	-11.5

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OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	QPSK	1	0	24.7	24.7	33.0	-8.3
				1	49	24.4	24.5	33.0	-8.5
				1	99	24.5	24.6	33.0	-8.4
				50	0	23.6	23.7	33.0	-9.3
				50	24	23.5	23.5	33.0	-9.5
				50	49	23.4	23.4	33.0	-9.6
				100	0	23.5	23.6	33.0	-9.4
20.0	21100	2535.0	QPSK	1	0	24.6	24.7	33.0	-8.3
				1	49	24.3	24.3	33.0	-8.7
				1	99	24.5	24.6	33.0	-8.4
				50	0	23.7	23.7	33.0	-9.3
				50	24	23.6	23.6	33.0	-9.4
				50	49	23.5	23.6	33.0	-9.5
				100	0	23.6	23.6	33.0	-9.4
20.0	21350	2560.0	QPSK	1	0	24.4	24.5	33.0	-8.5
				1	49	**24.8**	**24.8**	33.0	-8.2
				1	99	24.6	24.7	33.0	-8.3
				50	0	23.7	23.7	33.0	-9.3
				50	24	23.6	23.7	33.0	-9.3
				50	49	23.5	23.6	33.0	-9.4
				100	0	23.6	23.7	33.0	-9.3

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	16-QAM	1	0	23.7	23.8	33.0	-9.2
				1	49	23.8	23.9	33.0	-9.1
				1	99	23.6	23.6	33.0	-9.4
				50	0	22.6	22.6	33.0	-10.4
				50	24	22.4	22.5	33.0	-10.5
				50	49	22.3	22.4	33.0	-10.6
				100	0	22.5	22.6	33.0	-10.4
20.0	21100	2535.0	16-QAM	1	0	24.1	24.1	33.0	-8.9
				1	49	24.0	24.1	33.0	-9.0
				1	99	23.8	23.9	33.0	-9.2
				50	0	22.8	22.8	33.0	-10.2
				50	24	22.7	22.7	33.0	-10.3
				50	49	22.6	22.6	33.0	-10.4
				100	0	22.7	22.7	33.0	-10.3
20.0	21350	2560.0	16-QAM	1	0	24.1	24.1	33.0	-8.9
				1	49	**24.1**	**24.1**	33.0	-8.9
				1	99	23.6	23.7	33.0	-9.3
				50	0	22.8	22.8	33.0	-10.2
				50	24	22.7	22.8	33.0	-10.2
				50	49	22.6	22.7	33.0	-10.3
				100	0	22.7	22.8	33.0	-10.2

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Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	64QAM	1	0	22.6	22.7	33.0	-10.4
				1	49	22.4	22.5	33.0	-10.5
				1	99	22.4	22.5	33.0	-10.6
				50	0	21.3	21.4	33.0	-11.6
				50	24	21.3	21.4	33.0	-11.6
				50	49	21.3	21.3	33.0	-11.7
				100	0	21.3	21.4	33.0	-11.7
20.0	21100	2535.0	64QAM	1	0	22.5	22.5	33.0	-10.5
				1	49	22.4	22.5	33.0	-10.6
				1	99	22.4	22.4	33.0	-10.6
				50	0	21.3	21.4	33.0	-11.6
				50	24	21.3	21.4	33.0	-11.7
				50	49	21.3	21.4	33.0	-11.7
				100	0	21.3	21.4	33.0	-11.6
20.0	21350	2560.0	64QAM	1	0	**23.3**	**23.4**	33.0	-9.6
				1	49	23.1	23.1	33.0	-9.9
				1	99	23.0	23.0	33.0	-10.0
				50	0	21.4	21.4	33.0	-11.6
				50	24	21.3	21.4	33.0	-11.7
				50	49	21.2	21.3	33.0	-11.7
				100	0	21.3	21.3	33.0	-11.7

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7.1.5. LTE BAND 12

ID:	50820	Date:	3/16/17

OUTPUT POWER FOR LTE BAND 12 (1.4MHz)

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	QPSK	1	0	24.6	20.3	34.77	-14.5
				1	2	24.7	20.4	34.77	-14.4
				1	5	24.6	20.3	34.77	-14.5
				3	0	24.7	20.4	34.77	-14.4
				3	1	24.7	20.4	34.77	-14.4
				3	2	24.7	20.4	34.77	-14.3
				6	0	23.8	19.6	34.77	-15.2
1.4	23095	707.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	2	24.7	20.4	34.77	-14.3
				1	5	24.6	20.3	34.77	-14.4
				3	0	24.7	20.4	34.77	-14.3
				3	1	**24.8**	**20.5**	34.77	-14.3
				3	2	24.8	20.5	34.77	-14.3
				6	0	24.1	19.8	34.77	-15.0
1.4	23173	715.3	QPSK	1	0	24.6	20.4	34.77	-14.4
				1	2	24.7	20.4	34.77	-14.4
				1	5	24.6	20.3	34.77	-14.4
				3	0	24.7	20.4	34.77	-14.3
				3	1	24.7	20.4	34.77	-14.4
				3	2	24.7	20.4	34.77	-14.3
				6	0	24.1	19.8	34.77	-15.0

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	16QAM	1	0	23.7	19.5	34.77	-15.3
				1	2	23.8	19.5	34.77	-15.3
				1	5	23.7	19.4	34.77	-15.3
				3	0	23.7	19.4	34.77	-15.3
				3	1	23.8	19.5	34.77	-15.3
				3	2	23.8	19.5	34.77	-15.3
				6	0	22.9	18.6	34.77	-16.2
1.4	23095	707.5	16QAM	1	0	24.2	19.9	34.77	-14.9
				1	2	24.2	19.9	34.77	-14.8
				1	5	24.1	19.9	34.77	-14.9
				3	0	24.3	20.0	34.77	-14.8
				3	1	24.3	20.0	34.77	-14.7
				3	2	**24.3**	**20.0**	34.77	-14.7
				6	0	23.1	18.8	34.77	-16.0
1.4	23173	715.3	16QAM	1	0	24.1	19.9	34.77	-14.9
				1	2	24.1	19.8	34.77	-15.0
				1	5	24.0	19.7	34.77	-15.0
				3	0	23.9	19.6	34.77	-15.1
				3	1	23.9	19.6	34.77	-15.2
				3	2	23.9	19.6	34.77	-15.2
				6	0	23.0	18.7	34.77	-16.1

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Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	64QAM	1	0	22.5	18.2	34.77	-16.6
				1	2	22.6	18.3	34.77	-16.5
				1	5	22.6	18.3	34.77	-16.5
				3	0	22.5	18.2	34.77	-16.6
				3	1	22.5	18.3	34.77	-16.5
				3	2	22.6	18.3	34.77	-16.5
				6	0	21.6	17.3	34.77	-17.5
1.4	23095	707.5	64QAM	1	0	22.8	18.5	34.77	-16.3
				1	2	22.9	18.6	34.77	-16.2
				1	5	22.7	18.4	34.77	-16.4
				3	0	22.9	18.6	34.77	-16.2
				3	1	**22.9**	**18.6**	34.77	-16.2
				3	2	22.9	18.6	34.77	-16.2
				6	0	21.6	17.3	34.77	-17.5
1.4	23173	715.3	64QAM	1	0	22.4	18.1	34.77	-16.6
				1	2	22.5	18.2	34.77	-16.6
				1	5	22.4	18.1	34.77	-16.7
				3	0	22.6	18.4	34.77	-16.4
				3	1	22.7	18.4	34.77	-16.4
				3	2	22.7	18.4	34.77	-16.4
				6	0	21.8	17.5	34.77	-17.2

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OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	QPSK	1	0	24.7	20.4	34.77	-14.3
				1	7	24.8	20.5	34.77	-14.3
				1	14	24.6	20.3	34.77	-14.5
				8	0	23.7	19.4	34.77	-15.3
				8	4	23.7	19.4	34.77	-15.3
				8	7	23.7	19.4	34.77	-15.3
				15	0	23.7	19.4	34.77	-15.4
3.0	23095	707.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	7	**24.8**	**20.5**	34.77	-14.3
				1	14	24.6	20.3	34.77	-14.4
				8	0	23.7	19.4	34.77	-15.3
				8	4	23.7	19.4	34.77	-15.3
				8	7	23.7	19.4	34.77	-15.4
				15	0	23.7	19.4	34.77	-15.4
3.0	23165	714.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	7	24.7	20.5	34.77	-14.3
				1	14	24.5	20.3	34.77	-14.5
				8	0	23.7	19.4	34.77	-15.4
				8	4	23.6	19.4	34.77	-15.4
				8	7	23.7	19.4	34.77	-15.4
				15	0	23.7	19.4	34.77	-15.4

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	16QAM	1	0	23.8	19.5	34.77	-15.2
				1	7	23.8	19.5	34.77	-15.2
				1	14	23.7	19.4	34.77	-15.3
				8	0	22.8	18.5	34.77	-16.3
				8	4	22.8	18.5	34.77	-16.2
				8	7	22.8	18.5	34.77	-16.2
				15	0	22.6	18.3	34.77	-16.5
3.0	23095	707.5	16QAM	1	0	24.1	19.8	34.77	-15.0
				1	7	**24.1**	**19.9**	34.77	-14.9
				1	14	24.0	19.7	34.77	-15.0
				8	0	22.6	18.3	34.77	-16.5
				8	4	22.6	18.3	34.77	-16.5
				8	7	22.6	18.3	34.77	-16.4
				15	0	22.7	18.4	34.77	-16.4
3.0	23165	714.5	16QAM	1	0	23.6	19.3	34.77	-15.4
				1	7	23.7	19.4	34.77	-15.4
				1	14	23.5	19.3	34.77	-15.5
				8	0	22.8	18.5	34.77	-16.3
				8	4	22.8	18.5	34.77	-16.3
				8	7	22.8	18.5	34.77	-16.3
				15	0	22.7	18.4	34.77	-16.3

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Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	64QAM	1	0	22.4	18.1	34.77	-16.7
				1	7	22.5	18.2	34.77	-16.6
				1	14	22.3	18.1	34.77	-16.7
				8	0	21.6	17.3	34.77	-17.5
				8	4	21.6	17.4	34.77	-17.4
				8	7	21.6	17.3	34.77	-17.5
				15	0	21.6	17.3	34.77	-17.5
3.0	23095	707.5	64QAM	1	0	22.9	18.6	34.77	-16.2
				1	7	**22.9**	**18.7**	34.77	-16.1
				1	14	22.8	18.5	34.77	-16.3
				8	0	21.7	17.4	34.77	-17.4
				8	4	21.7	17.4	34.77	-17.4
				8	7	21.7	17.4	34.77	-17.4
				15	0	21.6	17.4	34.77	-17.4
3.0	23165	714.5	64QAM	1	0	22.8	18.5	34.77	-16.3
				1	7	22.9	18.6	34.77	-16.2
				1	14	22.7	18.4	34.77	-16.3
				8	0	21.7	17.4	34.77	-17.4
				8	4	21.6	17.4	34.77	-17.4
				8	7	21.6	17.3	34.77	-17.5
				15	0	21.7	17.4	34.77	-17.4

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OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	12	24.6	20.3	34.77	-14.5
				1	24	24.5	20.2	34.77	-14.5
				12	0	23.7	19.4	34.77	-15.3
				12	6	23.7	19.4	34.77	-15.3
				12	11	23.7	19.4	34.77	-15.3
				25	0	23.7	19.4	34.77	-15.3
5.0	23095	707.5	QPSK	1	0	24.6	20.3	34.77	-14.5
				1	12	24.6	20.3	34.77	-14.5
				1	24	**24.7**	**20.4**	34.77	-14.4
				12	0	23.8	19.5	34.77	-15.3
				12	6	23.7	19.5	34.77	-15.3
				12	11	23.7	19.4	34.77	-15.3
				25	0	23.7	19.4	34.77	-15.3
5.0	23155	713.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	12	24.6	20.3	34.77	-14.5
				1	24	24.5	20.2	34.77	-14.5
				12	0	23.7	19.4	34.77	-15.4
				12	6	23.7	19.4	34.77	-15.4
				12	11	23.6	19.3	34.77	-15.4
				25	0	23.6	19.3	34.77	-15.4

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	16QAM	1	0	23.9	19.6	34.77	-15.1
				1	12	23.8	19.5	34.77	-15.2
				1	24	23.8	19.5	34.77	-15.3
				12	0	22.8	18.5	34.77	-16.2
				12	6	22.8	18.5	34.77	-16.3
				12	11	22.7	18.5	34.77	-16.3
				25	0	22.7	18.4	34.77	-16.4
5.0	23095	707.5	16QAM	1	0	24.2	19.9	34.77	-14.8
				1	12	24.2	20.0	34.77	-14.8
				1	24	**24.3**	**20.0**	34.77	-14.7
				12	0	22.9	18.6	34.77	-16.1
				12	6	22.9	18.6	34.77	-16.2
				12	11	22.9	18.6	34.77	-16.2
				25	0	22.8	18.5	34.77	-16.2
5.0	23155	713.5	16QAM	1	0	23.9	19.6	34.77	-15.1
				1	12	23.8	19.6	34.77	-15.2
				1	24	23.8	19.5	34.77	-15.2
				12	0	22.8	18.5	34.77	-16.3
				12	6	22.7	18.5	34.77	-16.3
				12	11	22.7	18.4	34.77	-16.3
				25	0	22.7	18.4	34.77	-16.4

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Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	64QAM	1	0	22.7	18.4	34.77	-16.3
				1	12	22.7	18.4	34.77	-16.4
				1	24	22.7	18.4	34.77	-16.4
				12	0	21.6	17.3	34.77	-17.5
				12	6	21.6	17.3	34.77	-17.5
				12	11	21.5	17.2	34.77	-17.5
				25	0	21.6	17.3	34.77	-17.5
5.0	23095	707.5	64QAM	1	0	23.0	18.7	34.77	-16.1
				1	12	23.0	18.7	34.77	-16.0
				1	24	**23.1**	**18.8**	34.77	-16.0
				12	0	21.7	17.4	34.77	-17.3
				12	6	21.7	17.5	34.77	-17.3
				12	11	21.7	17.4	34.77	-17.4
				25	0	21.7	17.4	34.77	-17.4
5.0	23155	713.5	64QAM	1	0	22.9	18.6	34.77	-16.2
				1	12	22.8	18.5	34.77	-16.3
				1	24	22.8	18.5	34.77	-16.2
				12	0	21.7	17.4	34.77	-17.4
				12	6	21.7	17.4	34.77	-17.4
				12	11	21.7	17.4	34.77	-17.4
				25	0	21.6	17.4	34.77	-17.4

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OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	QPSK	1	0	**24.6**	**20.3**	34.77	-14.4
				1	24	24.5	20.3	34.77	-14.5
				1	49	24.5	20.3	34.77	-14.5
				25	0	23.7	19.4	34.77	-15.3
				25	12	23.7	19.4	34.77	-15.3
				25	24	23.8	19.5	34.77	-15.3
				50	0	23.7	19.4	34.77	-15.4
10.0	23095	707.5	QPSK	1	0	24.5	20.3	34.77	-14.5
				1	24	24.5	20.2	34.77	-14.5
				1	49	24.6	20.3	34.77	-14.5
				25	0	23.8	19.5	34.77	-15.3
				25	12	23.9	19.6	34.77	-15.2
				25	24	23.9	19.6	34.77	-15.2
				50	0	23.8	19.5	34.77	-15.2
10.0	23130	711.0	QPSK	1	0	24.6	20.3	34.77	-14.4
				1	24	24.6	20.3	34.77	-14.4
				1	49	24.5	20.2	34.77	-14.5
				25	0	23.7	19.4	34.77	-15.3
				25	12	23.8	19.5	34.77	-15.3
				25	24	23.8	19.5	34.77	-15.3
				50	0	23.8	19.5	34.77	-15.3

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	16QAM	1	0	**24.1**	**19.8**	34.77	-14.9
				1	24	24.1	19.8	34.77	-15.0
				1	49	24.0	19.7	34.77	-15.0
				25	0	22.8	18.5	34.77	-16.3
				25	12	22.7	18.5	34.77	-16.3
				25	24	22.8	18.5	34.77	-16.3
				50	0	22.7	18.4	34.77	-16.3
10.0	23095	707.5	16QAM	1	0	23.8	19.5	34.77	-15.3
				1	24	23.8	19.5	34.77	-15.3
				1	49	23.8	19.5	34.77	-15.3
				25	0	22.8	18.5	34.77	-16.2
				25	12	22.9	18.6	34.77	-16.2
				25	24	22.9	18.6	34.77	-16.1
				50	0	22.8	18.5	34.77	-16.2
10.0	23130	711.0	16QAM	1	0	23.8	19.5	34.77	-15.3
				1	24	23.8	19.5	34.77	-15.2
				1	49	23.7	19.4	34.77	-15.3
				25	0	22.8	18.6	34.77	-16.2
				25	12	22.9	18.6	34.77	-16.1
				25	24	22.8	18.5	34.77	-16.2
				50	0	22.8	18.5	34.77	-16.2

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Antenna Gain (dBi)	-2.13								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	64QAM	1	0	22.5	18.2	34.77	-16.6
				1	24	22.4	18.1	34.77	-16.7
				1	49	22.5	18.2	34.77	-16.5
				25	0	21.6	17.4	34.77	-17.4
				25	12	21.6	17.3	34.77	-17.4
				25	24	21.7	17.4	34.77	-17.4
				50	0	21.7	17.4	34.77	-17.4
10.0	23095	707.5	64QAM	1	0	22.6	18.4	34.77	-16.4
				1	24	22.8	18.5	34.77	-16.3
				1	49	22.8	18.5	34.77	-16.3
				25	0	21.7	17.4	34.77	-17.4
				25	12	21.8	17.5	34.77	-17.2
				25	24	21.8	17.5	34.77	-17.2
				50	0	21.7	17.4	34.77	-17.4
10.0	23130	711.0	64QAM	1	0	**22.9**	**18.7**	34.77	-16.1
				1	24	22.9	18.7	34.77	-16.1
				1	49	22.9	18.6	34.77	-16.2
				25	0	21.7	17.4	34.77	-17.3
				25	12	21.8	17.5	34.77	-17.3
				25	24	21.7	17.4	34.77	-17.3
				50	0	21.8	17.5	34.77	-17.3

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7.1.6. LTE BAND 13

ID:	50820	Date:	3/17/17

OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Antenna Gain (dBi)	-1.93

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	QPSK	1	0	24.7	20.7	34.77	-14.1
				1	12	24.7	20.6	34.77	-14.2
				1	24	24.7	20.7	34.77	-14.1
				12	0	23.6	19.5	34.77	-15.3
				12	6	23.6	19.5	34.77	-15.3
				12	11	23.6	19.5	34.77	-15.2
				25	0	23.6	19.5	34.77	-15.3
5.0	23230	782.0	QPSK	1	0	24.6	20.5	34.77	-14.3
				1	12	24.4	20.3	34.77	-14.4
				1	24	24.4	20.3	34.77	-14.5
				12	0	23.6	19.6	34.77	-15.2
				12	6	23.6	19.6	34.77	-15.2
				12	11	23.6	19.5	34.77	-15.2
				25	0	23.6	19.5	34.77	-15.2
5.0	23255	784.5	QPSK	1	0	24.7	20.6	34.77	-14.1
				1	12	**24.8**	**20.8**	34.77	-14.0
				1	24	24.8	20.7	34.77	-14.1
				12	0	23.6	19.5	34.77	-15.2
				12	6	23.7	19.7	34.77	-15.1
				12	11	23.7	19.6	34.77	-15.2
				25	0	23.7	19.6	34.77	-15.2

Antenna Gain (dBi)	-1.93

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	16QAM	1	0	24.1	20.0	34.77	-14.7
				1	12	24.1	20.0	34.77	-14.8
				1	24	**24.2**	**20.1**	34.77	-14.7
				12	0	22.6	18.5	34.77	-16.3
				12	6	22.6	18.5	34.77	-16.3
				12	11	22.6	18.5	34.77	-16.2
				25	0	22.5	18.4	34.77	-16.4
5.0	23230	782.0	16QAM	1	0	23.9	19.8	34.77	-14.9
				1	12	23.8	19.8	34.77	-15.0
				1	24	23.8	19.7	34.77	-15.0
				12	0	22.8	18.7	34.77	-16.0
				12	6	22.8	18.7	34.77	-16.0
				12	11	22.8	18.7	34.77	-16.1
				25	0	22.8	18.7	34.77	-16.1
5.0	23255	784.5	16QAM	1	0	23.8	19.7	34.77	-15.0
				1	12	23.8	19.7	34.77	-15.0
				1	24	23.8	19.7	34.77	-15.0
				12	0	22.6	18.5	34.77	-16.2
				12	6	22.7	18.6	34.77	-16.2
				12	11	22.6	18.6	34.77	-16.2
				25	0	22.6	18.5	34.77	-16.3

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Antenna Gain (dBi)	-1.93								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	64QAM	1	0	22.7	18.6	34.77	-16.2
				1	12	23.0	18.9	34.77	-15.9
				1	24	22.9	18.8	34.77	-15.9
				12	0	21.6	17.5	34.77	-17.3
				12	6	21.6	17.5	34.77	-17.2
				12	11	21.6	17.5	34.77	-17.3
				25	0	21.6	17.5	34.77	-17.3
5.0	23230	782.0	64QAM	1	0	22.6	18.5	34.77	-16.3
				1	12	23.0	18.9	34.77	-15.9
				1	24	22.9	18.8	34.77	-15.9
				12	0	21.7	17.6	34.77	-17.1
				12	6	21.8	17.7	34.77	-17.1
				12	11	21.7	17.7	34.77	-17.1
				25	0	21.7	17.7	34.77	-17.1
5.0	23255	784.5	64QAM	1	0	22.9	18.8	34.77	-15.9
				1	12	**23.0**	**18.9**	34.77	-15.9
				1	24	23.0	18.9	34.77	-15.9
				12	0	21.7	17.6	34.77	-17.1
				12	6	21.8	17.7	34.77	-17.0
				12	11	21.8	17.7	34.77	-17.1
				25	0	21.8	17.7	34.77	-17.1

OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Antenna Gain (dBi)	-1.93								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23230	782.0	QPSK	1	0	**24.7**	**20.6**	34.77	-14.2
				1	24	24.6	20.6	34.77	-14.2
				1	49	24.6	20.5	34.77	-14.2
				25	0	23.6	19.5	34.77	-15.2
				25	12	23.6	19.5	34.77	-15.3
				25	24	23.5	19.5	34.77	-15.3
				50	0	23.6	19.5	34.77	-15.3
10.0	23230	782.0	16QAM	1	0	23.6	19.5	34.77	-15.3
				1	24	23.6	19.5	34.77	-15.2
				1	49	**23.6**	**19.6**	34.77	-15.2
				25	0	22.6	18.5	34.77	-16.3
				25	12	22.5	18.5	34.77	-16.3
				25	24	22.4	18.3	34.77	-16.4
				50	0	22.4	18.3	34.77	-16.4
10.0	23230	782.0	64QAM	1	0	22.7	18.7	34.77	-16.1
				1	24	23.0	18.9	34.77	-15.9
				1	49	**23.0**	**18.9**	34.77	-15.9
				25	0	21.7	17.7	34.77	-17.1
				25	12	21.8	17.7	34.77	-17.1
				25	24	21.7	17.7	34.77	-17.1
				50	0	21.8	17.7	34.77	-17.1

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7.1.7. LTE BAND 17

ID:	58020	Date:	3/17/17

OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	12	24.6	20.4	34.77	-14.4
				1	24	24.5	20.3	34.77	-14.5
				12	0	23.7	19.4	34.77	-15.3
				12	6	23.7	19.4	34.77	-15.4
				12	11	23.7	19.4	34.77	-15.4
				25	0	23.7	19.4	34.77	-15.4
5.0	23790	710.0	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	12	**24.8**	**20.5**	34.77	-14.3
				1	24	24.7	20.4	34.77	-14.3
				12	0	23.6	19.3	34.77	-15.5
				12	6	23.7	19.4	34.77	-15.4
				12	11	23.7	19.4	34.77	-15.4
				25	0	23.6	19.3	34.77	-15.4
5.0	23825	713.5	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	12	24.5	20.2	34.77	-14.5
				1	24	24.5	20.3	34.77	-14.5
				12	0	23.6	19.3	34.77	-15.4
				12	6	23.6	19.3	34.77	-15.5
				12	11	23.6	19.3	34.77	-15.5
				25	0	23.6	19.3	34.77	-15.5

Antenna Gain (dBi)	-2.13

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	16QAM	1	0	23.7	19.4	34.77	-15.3
				1	12	23.6	19.4	34.77	-15.4
				1	24	23.6	19.4	34.77	-15.4
				12	0	22.6	18.3	34.77	-16.4
				12	6	22.6	18.3	34.77	-16.5
				12	11	22.5	18.3	34.77	-16.5
				25	0	22.5	18.2	34.77	-16.5
5.0	23790	710.0	16QAM	1	0	23.7	19.4	34.77	-15.4
				1	12	23.7	19.4	34.77	-15.3
				1	24	23.7	19.4	34.77	-15.3
				12	0	22.7	18.4	34.77	-16.3
				12	6	22.8	18.5	34.77	-16.2
				12	11	22.8	18.5	34.77	-16.3
				25	0	22.7	18.4	34.77	-16.4
5.0	23825	713.5	16QAM	1	0	**24.1**	**19.9**	34.77	-14.9
				1	12	24.1	19.8	34.77	-15.0
				1	24	24.1	19.8	34.77	-15.0
				12	0	22.7	18.4	34.77	-16.4
				12	6	22.6	18.4	34.77	-16.4
				12	11	22.6	18.4	34.77	-16.4
				25	0	22.6	18.3	34.77	-16.5

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Antenna Gain (dBi)	-2.13								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	64QAM	1	0	22.7	18.5	34.77	-16.3
				1	12	22.7	18.4	34.77	-16.4
				1	24	22.6	18.4	34.77	-16.4
				12	0	21.5	17.2	34.77	-17.5
				12	6	21.5	17.2	34.77	-17.6
				12	11	21.5	17.2	34.77	-17.6
				25	0	21.6	17.3	34.77	-17.5
5.0	23790	710.0	64QAM	1	0	22.9	18.6	34.77	-16.2
				1	12	23.0	18.7	34.77	-16.1
				1	24	**23.0**	**18.7**	34.77	-16.0
				12	0	21.5	17.2	34.77	-17.5
				12	6	21.6	17.4	34.77	-17.4
				12	11	21.7	17.4	34.77	-17.4
				25	0	21.6	17.3	34.77	-17.5
5.0	23825	713.5	64QAM	1	0	22.8	18.5	34.77	-16.3
				1	12	22.8	18.5	34.77	-16.3
				1	24	22.7	18.5	34.77	-16.3
				12	0	21.6	17.3	34.77	-17.4
				12	6	21.6	17.3	34.77	-17.5
				12	11	21.6	17.3	34.77	-17.5
				25	0	21.6	17.3	34.77	-17.5

OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Antenna Gain (dBi)	-2.13								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23790	710.0	QPSK	1	0	24.7	20.4	34.77	-14.4
				1	24	**24.7**	**20.4**	34.77	-14.3
				1	49	24.6	20.3	34.77	-14.5
				25	0	23.7	19.4	34.77	-15.3
				25	12	23.8	19.5	34.77	-15.3
				25	24	23.7	19.4	34.77	-15.3
				50	0	23.7	19.4	34.77	-15.3
10.0	23790	710.0	16QAM	1	0	**24.0**	**19.7**	34.77	-15.0
				1	24	24.0	19.7	34.77	-15.1
				1	49	24.0	19.7	34.77	-15.1
				25	0	22.7	18.4	34.77	-16.3
				25	12	22.8	18.5	34.77	-16.3
				25	24	22.7	18.4	34.77	-16.3
				50	0	22.8	18.5	34.77	-16.3
10.0	23790	710.0	64QAM	1	0	23.0	18.7	34.77	-16.1
				1	24	**23.0**	**18.8**	34.77	-16.0
				1	49	23.0	18.7	34.77	-16.1
				25	0	21.9	17.6	34.77	-17.2
				25	12	22.0	17.7	34.77	-17.1
				25	24	22.0	17.7	34.77	-17.0
				50	0	21.9	17.6	34.77	-17.2

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7.1.8. LTE BAND 25

ID:	50820	Date:	3/17/17

OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	2	24.3	23.9	33.0	-9.1
				1	5	24.2	23.8	33.0	-9.2
				3	0	24.2	23.9	33.0	-9.1
				3	1	24.3	23.9	33.0	-9.1
				3	2	24.3	23.9	33.0	-9.1
				6	0	23.0	22.6	33.0	-10.4
1.4	26365	1882.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	2	24.2	23.8	33.0	-9.2
				1	5	24.2	23.8	33.0	-9.2
				3	0	24.2	23.9	33.0	-9.2
				3	1	24.2	23.8	33.0	-9.2
				3	2	24.2	23.9	33.0	-9.2
				6	0	23.2	22.8	33.0	-10.2
1.4	26683	1914.3	QPSK	1	0	24.2	23.9	33.0	-9.1
				1	2	24.3	23.9	33.0	-9.1
				1	5	24.3	23.9	33.0	-9.1
				3	0	**24.3**	**24.0**	33.0	-9.1
				3	1	24.3	23.9	33.0	-9.1
				3	2	24.3	23.9	33.0	-9.1
				6	0	23.2	22.8	33.0	-10.2

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	16QAM	1	0	23.1	22.7	33.0	-10.3
				1	2	23.1	22.8	33.0	-10.2
				1	5	23.1	22.7	33.0	-10.3
				3	0	23.2	22.8	33.0	-10.2
				3	1	23.2	22.9	33.0	-10.1
				3	2	23.3	22.9	33.0	-10.1
				6	0	22.2	21.8	33.0	-11.2
1.4	26365	1882.5	16QAM	1	0	23.1	22.7	33.0	-10.3
				1	2	23.0	22.7	33.0	-10.4
				1	5	22.9	22.5	33.0	-10.5
				3	0	22.9	22.6	33.0	-10.4
				3	1	22.9	22.5	33.0	-10.5
				3	2	22.9	22.5	33.0	-10.5
				6	0	22.1	21.7	33.0	-11.3
1.4	26683	1914.3	16QAM	1	0	23.3	22.9	33.0	-10.1
				1	2	23.3	22.9	33.0	-10.1
				1	5	23.2	22.9	33.0	-10.1
				3	0	23.3	22.9	33.0	-10.1
				3	1	23.3	23.0	33.0	-10.1
				3	2	**23.3**	**23.0**	33.0	-10.0
				6	0	22.3	22.0	33.0	-11.0

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	64QAM	1	0	22.5	22.2	33.0	-10.8
				1	2	22.7	22.3	33.0	-10.7
				1	5	22.5	22.1	33.0	-10.9
				3	0	22.6	22.2	33.0	-10.8
				3	1	22.7	22.3	33.0	-10.7
				3	2	22.7	22.3	33.0	-10.7
				6	0	21.3	20.9	33.0	-12.1
1.4	26365	1882.5	64QAM	1	0	22.6	22.3	33.0	-10.7
				1	2	**22.7**	**22.4**	33.0	-10.7
				1	5	22.7	22.3	33.0	-10.7
				3	0	22.5	22.2	33.0	-10.8
				3	1	22.6	22.3	33.0	-10.8
				3	2	22.6	22.3	33.0	-10.8
				6	0	21.6	21.3	33.0	-11.7
1.4	26683	1914.3	64QAM	1	0	22.2	21.9	33.0	-11.2
				1	2	22.3	21.9	33.0	-11.1
				1	5	22.2	21.8	33.0	-11.2
				3	0	22.4	22.1	33.0	-11.0
				3	1	22.5	22.1	33.0	-10.9
				3	2	22.5	22.2	33.0	-10.8
				6	0	21.7	21.3	33.0	-11.7

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OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	QPSK	1	0	24.1	23.7	33.0	-9.3
				1	7	24.2	23.8	33.0	-9.2
				1	14	24.1	23.7	33.0	-9.3
				8	0	23.1	22.7	33.0	-10.3
				8	4	23.1	22.8	33.0	-10.3
				8	7	23.1	22.8	33.0	-10.2
				15	0	23.1	22.7	33.0	-10.3
3.0	26365	1882.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	7	24.2	23.9	33.0	-9.1
				1	14	24.1	23.7	33.0	-9.3
				8	0	23.3	22.9	33.0	-10.1
				8	4	23.3	22.9	33.0	-10.1
				8	7	23.3	22.9	33.0	-10.1
				15	0	23.3	22.9	33.0	-10.1
3.0	26675	1913.5	QPSK	1	0	24.1	23.8	33.0	-9.2
				1	7	**24.2**	**23.9**	33.0	-9.1
				1	14	24.1	23.7	33.0	-9.3
				8	0	23.3	22.9	33.0	-10.1
				8	4	23.3	22.9	33.0	-10.1
				8	7	23.3	22.9	33.0	-10.1
				15	0	23.3	22.9	33.0	-10.1

Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	16QAM	1	0	23.2	22.8	33.0	-10.2
				1	7	23.2	22.9	33.0	-10.1
				1	14	23.1	22.7	33.0	-10.3
				8	0	22.3	21.9	33.0	-11.1
				8	4	22.3	21.9	33.0	-11.1
				8	7	22.3	22.0	33.0	-11.1
				15	0	22.1	21.7	33.0	-11.3
3.0	26365	1882.5	16QAM	1	0	23.2	22.8	33.0	-10.2
				1	7	23.2	22.9	33.0	-10.1
				1	14	23.1	22.7	33.0	-10.3
				8	0	22.2	21.8	33.0	-11.2
				8	4	22.2	21.8	33.0	-11.2
				8	7	22.2	21.8	33.0	-11.2
				15	0	22.3	21.9	33.0	-11.1
3.0	26675	1913.5	16QAM	1	0	23.2	22.8	33.0	-10.2
				1	7	**23.2**	**22.9**	33.0	-10.1
				1	14	23.1	22.8	33.0	-10.3
				8	0	22.3	21.9	33.0	-11.1
				8	4	22.3	21.9	33.0	-11.1
				8	7	22.2	21.8	33.0	-11.2
				15	0	22.3	22.0	33.0	-11.1

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	64QAM	1	0	22.6	22.3	33.0	-10.7
				1	7	**22.7**	**22.4**	33.0	-10.6
				1	14	22.6	22.2	33.0	-10.8
				8	0	21.4	21.1	33.0	-11.9
				8	4	21.5	21.1	33.0	-11.9
				8	7	21.4	21.1	33.0	-12.0
				15	0	21.5	21.1	33.0	-11.9
3.0	26365	1882.5	64QAM	1	0	22.6	22.2	33.0	-10.8
				1	7	22.7	22.3	33.0	-10.7
				1	14	22.5	22.1	33.0	-10.9
				8	0	21.4	21.1	33.0	-12.0
				8	4	21.4	21.1	33.0	-12.0
				8	7	21.4	21.0	33.0	-12.0
				15	0	21.4	21.1	33.0	-12.0
3.0	26675	1913.5	64QAM	1	0	22.3	21.9	33.0	-11.1
				1	7	22.4	22.0	33.0	-11.0
				1	14	22.3	21.9	33.0	-11.1
				8	0	21.5	21.1	33.0	-11.9
				8	4	21.5	21.2	33.0	-11.8
				8	7	21.5	21.1	33.0	-11.9
				15	0	21.5	21.1	33.0	-11.9

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OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	QPSK	1	0	24.2	23.9	33.0	-9.1
				1	12	24.2	23.8	33.0	-9.2
				1	24	24.2	23.8	33.0	-9.2
				12	0	23.1	22.8	33.0	-10.2
				12	6	23.1	22.8	33.0	-10.2
				12	11	23.1	22.8	33.0	-10.2
				25	0	23.1	22.7	33.0	-10.3
5.0	26365	1882.5	QPSK	1	0	**24.3**	**23.9**	33.0	-9.1
				1	12	24.1	23.8	33.0	-9.2
				1	24	24.1	23.8	33.0	-9.3
				12	0	23.3	23.0	33.0	-10.0
				12	6	23.3	22.9	33.0	-10.1
				12	11	23.3	22.9	33.0	-10.1
				25	0	23.3	22.9	33.0	-10.1
5.0	26665	1912.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	12	24.1	23.8	33.0	-9.2
				1	24	24.1	23.7	33.0	-9.3
				12	0	23.3	22.9	33.0	-10.1
				12	6	23.3	22.9	33.0	-10.1
				12	11	23.3	22.9	33.0	-10.1
				25	0	23.3	22.9	33.0	-10.1

Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	16QAM	1	0	**23.3**	**22.9**	33.0	-10.1
				1	12	23.2	22.9	33.0	-10.2
				1	24	23.3	22.9	33.0	-10.1
				12	0	22.2	21.9	33.0	-11.2
				12	6	22.2	21.9	33.0	-11.1
				12	11	22.2	21.8	33.0	-11.2
				25	0	22.1	21.7	33.0	-11.3
5.0	26365	1882.5	16QAM	1	0	23.3	22.9	33.0	-10.1
				1	12	23.2	22.8	33.0	-10.2
				1	24	23.2	22.8	33.0	-10.2
				12	0	22.3	21.9	33.0	-11.1
				12	6	22.2	21.9	33.0	-11.1
				12	11	22.2	21.8	33.0	-11.2
				25	0	22.2	21.8	33.0	-11.2
5.0	26665	1912.5	16QAM	1	0	23.1	22.8	33.0	-10.2
				1	12	23.1	22.7	33.0	-10.3
				1	24	23.1	22.8	33.0	-10.3
				12	0	22.2	21.8	33.0	-11.2
				12	6	22.2	21.8	33.0	-11.2
				12	11	22.2	21.8	33.0	-11.2
				25	0	22.1	21.7	33.0	-11.3

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	64QAM	1	0	22.4	22.1	33.0	-10.9
				1	12	22.4	22.1	33.0	-11.0
				1	24	22.4	22.0	33.0	-11.0
				12	0	21.2	20.9	33.0	-12.1
				12	6	21.2	20.9	33.0	-12.1
				12	11	21.2	20.8	33.0	-12.2
				25	0	21.2	20.8	33.0	-12.2
5.0	26365	1882.5	64QAM	1	0	22.6	22.2	33.0	-10.8
				1	12	**22.6**	**22.3**	33.0	-10.8
				1	24	22.5	22.1	33.0	-10.9
				12	0	21.3	21.0	33.0	-12.1
				12	6	21.3	21.0	33.0	-12.0
				12	11	21.3	20.9	33.0	-12.1
				25	0	21.3	20.9	33.0	-12.1
5.0	26665	1912.5	64QAM	1	0	22.5	22.2	33.0	-10.8
				1	12	22.5	22.2	33.0	-10.9
				1	24	22.5	22.2	33.0	-10.9
				12	0	21.3	20.9	33.0	-12.1
				12	6	21.3	20.9	33.0	-12.1
				12	11	21.3	20.9	33.0	-12.1
				25	0	21.3	20.9	33.0	-12.1

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OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	QPSK	1	0	24.1	23.7	33.0	-9.3
				1	24	24.0	23.6	33.0	-9.4
				1	49	24.0	23.6	33.0	-9.4
				25	0	23.2	22.8	33.0	-10.2
				25	12	23.2	22.8	33.0	-10.2
				25	24	23.1	22.8	33.0	-10.2
				50	0	23.1	22.8	33.0	-10.2
10.0	26365	1882.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	24	24.0	23.7	33.0	-9.3
				1	49	24.0	23.6	33.0	-9.4
				25	0	23.3	22.9	33.0	-10.1
				25	12	23.3	23.0	33.0	-10.0
				25	24	23.3	22.9	33.0	-10.1
				50	0	23.2	22.8	33.0	-10.2
10.0	26640	1910.0	QPSK	1	0	**24.3**	**23.9**	33.0	-9.1
				1	24	24.2	23.8	33.0	-9.2
				1	49	24.2	23.8	33.0	-9.2
				25	0	23.3	22.9	33.0	-10.1
				25	12	23.3	22.9	33.0	-10.1
				25	24	23.3	22.9	33.0	-10.1
				50	0	23.3	23.0	33.0	-10.0

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	16QAM	1	0	23.2	22.9	33.0	-10.1
				1	24	23.1	22.8	33.0	-10.2
				1	49	23.1	22.8	33.0	-10.3
				25	0	22.3	21.9	33.0	-11.1
				25	12	22.3	21.9	33.0	-11.1
				25	24	22.2	21.8	33.0	-11.2
				50	0	22.2	21.8	33.0	-11.2
10.0	26365	1882.5	16QAM	1	0	**23.3**	**22.9**	33.0	-10.1
				1	24	23.1	22.8	33.0	-10.2
				1	49	23.0	22.7	33.0	-10.3
				25	0	22.2	21.8	33.0	-11.2
				25	12	22.3	22.0	33.0	-11.0
				25	24	22.3	21.9	33.0	-11.1
				50	0	22.3	22.0	33.0	-11.0
10.0	26640	1910.0	16QAM	1	0	23.2	22.9	33.0	-10.1
				1	24	23.2	22.8	33.0	-10.2
				1	49	23.1	22.8	33.0	-10.3
				25	0	22.3	22.0	33.0	-11.0
				25	12	22.3	22.0	33.0	-11.0
				25	24	22.3	21.9	33.0	-11.1
				50	0	22.3	21.9	33.0	-11.1

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	64QAM	1	0	**22.7**	**22.4**	33.0	-10.6
				1	24	22.7	22.3	33.0	-10.7
				1	49	22.6	22.3	33.0	-10.7
				25	0	21.5	21.2	33.0	-11.8
				25	12	21.5	21.2	33.0	-11.9
				25	24	21.5	21.1	33.0	-11.9
				50	0	21.5	21.2	33.0	-11.9
10.0	26365	1882.5	64QAM	1	0	22.7	22.3	33.0	-10.7
				1	24	22.6	22.2	33.0	-10.8
				1	49	22.5	22.2	33.0	-10.9
				25	0	21.6	21.2	33.0	-11.8
				25	12	21.5	21.2	33.0	-11.8
				25	24	21.5	21.2	33.0	-11.9
				50	0	21.5	21.1	33.0	-11.9
10.0	26640	1910.0	64QAM	1	0	22.4	22.0	33.0	-11.0
				1	24	22.3	21.9	33.0	-11.1
				1	49	22.3	21.9	33.0	-11.1
				25	0	21.6	21.2	33.0	-11.8
				25	12	21.5	21.2	33.0	-11.8
				25	24	21.5	21.2	33.0	-11.8
				50	0	21.5	21.2	33.0	-11.9

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OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	37	24.0	23.7	33.0	-9.4
				1	74	24.1	23.7	33.0	-9.3
				36	0	23.3	22.9	33.0	-10.1
				36	16	23.2	22.9	33.0	-10.1
				36	35	23.2	22.9	33.0	-10.1
				75	0	23.2	22.9	33.0	-10.1
15.0	26365	1882.5	QPSK	1	0	**24.2**	**23.9**	33.0	-9.1
				1	37	23.9	23.6	33.0	-9.4
				1	74	23.9	23.5	33.0	-9.5
				36	0	23.2	22.9	33.0	-10.1
				36	16	23.3	22.9	33.0	-10.1
				36	35	23.3	23.0	33.0	-10.0
				75	0	23.3	23.0	33.0	-10.0
15.0	26615	1907.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	37	24.0	23.7	33.0	-9.4
				1	74	24.1	23.7	33.0	-9.3
				36	0	23.2	22.8	33.0	-10.2
				36	16	23.3	23.0	33.0	-10.0
				36	35	23.3	23.0	33.0	-10.0
				75	0	23.3	23.0	33.0	-10.0

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	16-QAM	1	0	23.1	22.8	33.0	-10.2
				1	37	23.0	22.6	33.0	-10.4
				1	74	23.0	22.7	33.0	-10.4
				36	0	22.2	21.9	33.0	-11.1
				36	16	22.2	21.8	33.0	-11.2
				36	35	22.2	21.8	33.0	-11.2
				75	0	22.2	21.9	33.0	-11.1
15.0	26365	1882.5	16-QAM	1	0	23.2	22.8	33.0	-10.2
				1	37	23.0	22.6	33.0	-10.4
				1	74	22.9	22.5	33.0	-10.5
				36	0	22.2	21.9	33.0	-11.2
				36	16	22.2	21.8	33.0	-11.2
				36	35	22.0	21.7	33.0	-11.4
				75	0	22.1	21.7	33.0	-11.3
15.0	26615	1907.5	16-QAM	1	0	23.2	22.8	33.0	-10.2
				1	37	**23.2**	**22.9**	33.0	-10.2
				1	74	23.2	22.8	33.0	-10.2
				36	0	22.2	21.8	33.0	-11.2
				36	16	22.2	21.8	33.0	-11.2
				36	35	22.3	21.9	33.0	-11.1
				75	0	22.3	22.0	33.0	-11.0

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	64QAM	1	0	22.5	22.2	33.0	-10.8
				1	37	22.4	22.1	33.0	-10.9
				1	74	22.4	22.1	33.0	-10.9
				36	0	21.4	21.1	33.0	-12.0
				36	16	21.4	21.0	33.0	-12.0
				36	35	21.3	21.0	33.0	-12.0
				75	0	21.2	20.9	33.0	-12.1
15.0	26365	1882.5	64QAM	1	0	22.6	22.2	33.0	-10.8
				1	37	22.5	22.2	33.0	-10.9
				1	74	**22.6**	**22.3**	33.0	-10.7
				36	0	21.4	21.0	33.0	-12.0
				36	16	21.4	21.0	33.0	-12.0
				36	35	21.3	20.9	33.0	-12.1
				75	0	21.3	21.0	33.0	-12.0
15.0	26615	1907.5	64QAM	1	0	22.4	22.0	33.0	-11.0
				1	37	22.1	21.7	33.0	-11.3
				1	74	22.1	21.7	33.0	-11.3
				36	0	21.5	21.2	33.0	-11.9
				36	16	21.5	21.1	33.0	-11.9
				36	35	21.4	21.0	33.0	-12.0
				75	0	21.4	21.0	33.0	-12.0

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OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	QPSK	1	0	24.2	23.9	33.0	-9.1
				1	49	24.1	23.7	33.0	-9.3
				1	99	24.2	23.9	33.0	-9.1
				50	0	23.3	22.9	33.0	-10.1
				50	24	23.3	22.9	33.0	-10.1
				50	49	23.2	22.9	33.0	-10.1
				100	0	23.3	22.9	33.0	-10.1
20.0	26365	1882.5	QPSK	1	0	24.2	23.8	33.0	-9.2
				1	49	24.1	23.8	33.0	-9.2
				1	99	24.1	23.7	33.0	-9.3
				50	0	23.2	22.8	33.0	-10.2
				50	24	23.2	22.8	33.0	-10.2
				50	49	23.3	22.9	33.0	-10.1
				100	0	23.2	22.8	33.0	-10.2
20.0	26590	1905.0	QPSK	1	0	**24.3**	**24.0**	33.0	-9.0
				1	49	24.2	23.8	33.0	-9.2
				1	99	24.2	23.8	33.0	-9.2
				50	0	23.4	23.0	33.0	-10.0
				50	24	23.3	23.0	33.0	-10.0
				50	49	23.3	22.9	33.0	-10.1
				100	0	23.3	23.0	33.0	-10.0

Antenna Gain (dBi)	-0.36								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	16-QAM	1	0	23.2	22.8	33.0	-10.2
				1	49	23.0	22.6	33.0	-10.4
				1	99	23.1	22.8	33.0	-10.2
				50	0	22.3	22.0	33.0	-11.0
				50	24	22.3	21.9	33.0	-11.1
				50	49	22.3	21.9	33.0	-11.1
				100	0	22.3	21.9	33.0	-11.1
20.0	26365	1882.5	16-QAM	1	0	23.2	22.8	33.0	-10.2
				1	49	22.9	22.5	33.0	-10.5
				1	99	22.9	22.5	33.0	-10.5
				50	0	22.5	22.5	33.0	-10.5
				50	24	22.3	22.3	33.0	-10.7
				50	49	22.2	22.2	33.0	-10.8
				100	0	22.4	22.4	33.0	-10.6
20.0	26590	1905.0	16-QAM	1	0	**23.2**	**22.8**	33.0	-10.2
				1	49	23.0	22.6	33.0	-10.4
				1	99	22.9	22.5	33.0	-10.5
				50	0	22.4	22.1	33.0	-11.0
				50	24	22.4	22.0	33.0	-11.0
				50	49	22.3	22.0	33.0	-11.0
				100	0	22.3	22.0	33.0	-11.0

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Antenna Gain (dBi)	-0.36

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	64QAM	1	0	22.5	22.1	33.0	-10.9
				1	49	22.4	22.0	33.0	-11.0
				1	99	22.4	22.1	33.0	-11.0
				50	0	21.3	20.9	33.0	-12.1
				50	24	21.2	20.9	33.0	-12.1
				50	49	21.2	20.8	33.0	-12.2
				100	0	21.2	20.8	33.0	-12.2
20.0	26365	1882.5	64QAM	1	0	**22.5**	**22.2**	33.0	-10.8
				1	49	22.4	22.0	33.0	-11.0
				1	99	22.3	21.9	33.0	-11.1
				50	0	21.3	21.0	33.0	-12.1
				50	24	21.2	20.9	33.0	-12.2
				50	49	21.2	20.8	33.0	-12.2
				100	0	21.2	20.9	33.0	-12.2
20.0	26590	1905.0	64QAM	1	0	22.4	22.1	33.0	-10.9
				1	49	22.5	22.2	33.0	-10.9
				1	99	22.4	22.1	33.0	-10.9
				50	0	21.3	21.0	33.0	-12.0
				50	24	21.3	20.9	33.0	-12.1
				50	49	21.2	20.8	33.0	-12.2
				100	0	21.3	20.9	33.0	-12.1

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7.1.9. LTE BAND 26

ID:	50820	Date:	3/22/17

OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	QPSK	1	0	24.6	20.1	50.00	-29.9
				1	2	**24.7**	**20.1**	50.00	-29.9
				1	5	24.6	20.1	50.00	-29.9
				3	0	24.6	20.1	50.00	-29.9
				3	1	24.6	20.1	50.00	-29.9
				3	2	24.6	20.1	50.00	-29.9
				6	0	24.1	19.6	50.00	-30.4
1.4	26740	819.0	QPSK	1	0	24.6	20.0	50.00	-30.0
				1	2	24.6	20.1	50.00	-29.9
				1	5	24.6	20.0	50.00	-30.0
				3	0	24.6	20.0	50.00	-30.0
				3	1	24.6	20.1	50.00	-29.9
				3	2	24.6	20.1	50.00	-29.9
				6	0	24.1	19.5	50.00	-30.5
1.4	26783	823.3	QPSK	1	0	24.6	20.0	50.00	-30.0
				1	2	24.6	20.1	50.00	-30.0
				1	5	24.6	20.0	50.00	-30.0
				3	0	24.6	20.0	50.00	-30.0
				3	1	24.6	20.1	50.00	-29.9
				3	2	24.6	20.1	50.00	-29.9
				6	0	23.7	19.1	50.00	-30.9

Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	16QAM	1	0	23.8	19.3	50.00	-30.7
				1	2	23.8	19.2	50.00	-30.8
				1	5	23.8	19.3	50.00	-30.7
				3	0	23.8	19.2	50.00	-30.8
				3	1	**23.9**	**19.3**	50.00	-30.7
				3	2	23.9	19.3	50.00	-30.7
				6	0	23.6	19.0	50.00	-31.0
1.4	26740	819.0	16QAM	1	0	23.8	19.2	50.00	-30.8
				1	2	23.8	19.2	50.00	-30.8
				1	5	23.7	19.1	50.00	-30.9
				3	0	23.6	19.0	50.00	-31.0
				3	1	23.6	19.0	50.00	-31.0
				3	2	23.6	19.0	50.00	-31.0
				6	0	23.0	18.4	50.00	-31.6
1.4	26783	823.3	16QAM	1	0	23.7	19.2	50.00	-30.8
				1	2	23.8	19.2	50.00	-30.8
				1	5	23.8	19.2	50.00	-30.8
				3	0	23.7	19.1	50.00	-30.9
				3	1	23.6	19.1	50.00	-30.9
				3	2	23.6	19.1	50.00	-30.9
				6	0	23.7	19.1	50.00	-30.9

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Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	64QAM	1	0	22.4	17.9	50.00	-32.1
				1	2	22.5	18.0	50.00	-32.0
				1	5	22.4	17.8	50.00	-32.2
				3	0	22.5	17.9	50.00	-32.1
				3	1	22.5	18.0	50.00	-32.0
				3	2	22.5	18.0	50.00	-32.0
				6	0	21.7	17.1	50.00	-32.9
1.4	26740	819.0	64QAM	1	0	22.4	17.9	50.00	-32.1
				1	2	22.5	17.9	50.00	-32.1
				1	5	22.4	17.9	50.00	-32.1
				3	0	22.3	17.8	50.00	-32.3
				3	1	22.4	17.8	50.00	-32.2
				3	2	22.4	17.9	50.00	-32.1
				6	0	21.5	16.9	50.00	-33.1
1.4	26783	823.3	64QAM	1	0	22.7	18.2	50.00	-31.8
				1	2	22.8	18.3	50.00	-31.7
				1	5	22.7	18.1	50.00	-31.9
				3	0	22.8	18.2	50.00	-31.8
				3	1	22.8	18.3	50.00	-31.7
				3	2	**22.9**	**18.3**	50.00	-31.7
				6	0	21.5	16.9	50.00	-33.1

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OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Antenna Gain (dBi)	-2.41								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	QPSK	1	0	24.7	20.2	50.00	-29.8
				1	7	**24.8**	**20.2**	50.00	-29.8
				1	14	24.7	20.1	50.00	-29.9
				8	0	23.7	19.2	50.00	-30.8
				8	4	23.8	19.2	50.00	-30.8
				8	7	23.8	19.2	50.00	-30.8
				15	0	23.8	19.2	50.00	-30.8
3.0	26740	819.0	QPSK	1	0	24.6	20.0	50.00	-30.0
				1	7	24.7	20.1	50.00	-29.9
				1	14	24.5	20.0	50.00	-30.0
				8	0	23.5	19.0	50.00	-31.0
				8	4	23.5	19.0	50.00	-31.0
				8	7	23.5	19.0	50.00	-31.0
				15	0	23.5	18.9	50.00	-31.1
3.0	26775	822.5	QPSK	1	0	24.6	20.0	50.00	-30.0
				1	7	24.7	20.2	50.00	-29.8
				1	14	24.6	20.0	50.00	-30.0
				8	0	23.5	19.0	50.00	-31.0
				8	4	23.6	19.0	50.00	-31.0
				8	7	23.6	19.0	50.00	-31.0
				15	0	23.6	19.0	50.00	-31.0

Antenna Gain (dBi)	-2.41								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	16QAM	1	0	23.6	19.0	50.00	-31.0
				1	7	23.6	19.1	50.00	-30.9
				1	14	23.5	19.0	50.00	-31.0
				8	0	22.4	17.8	50.00	-32.2
				8	4	22.4	17.8	50.00	-32.2
				8	7	22.6	18.1	50.00	-31.9
				15	0	22.5	17.9	50.00	-32.1
3.0	26740	819.0	16QAM	1	0	23.5	18.9	50.00	-31.1
				1	7	23.5	19.0	50.00	-31.0
				1	14	23.4	18.9	50.00	-31.1
				8	0	23.3	18.7	50.00	-31.3
				8	4	23.3	18.7	50.00	-31.3
				8	7	23.3	18.8	50.00	-31.2
				15	0	23.0	18.5	50.00	-31.5
3.0	26775	822.5	16QAM	1	0	23.6	19.0	50.00	-31.0
				1	7	**23.7**	**19.2**	50.00	-30.8
				1	14	23.6	19.0	50.00	-31.0
				8	0	22.7	18.1	50.00	-31.9
				8	4	22.7	18.1	50.00	-31.9
				8	7	22.7	18.1	50.00	-31.9
				15	0	22.6	18.0	50.00	-32.0

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Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	64QAM	1	0	22.3	17.7	50.00	-32.3
				1	7	22.4	17.8	50.00	-32.2
				1	14	22.3	17.7	50.00	-32.3
				8	0	21.5	17.0	50.00	-33.0
				8	4	21.5	17.0	50.00	-33.1
				8	7	21.5	17.0	50.00	-33.1
				15	0	21.5	17.0	50.00	-33.1
3.0	26740	819.0	64QAM	1	0	22.4	17.8	50.00	-32.2
				1	7	22.5	17.9	50.00	-32.1
				1	14	22.3	17.7	50.00	-32.3
				8	0	21.2	16.7	50.00	-33.3
				8	4	21.2	16.7	50.00	-33.3
				8	7	21.2	16.6	50.00	-33.4
				15	0	21.2	16.7	50.00	-33.4
3.0	26775	822.5	64QAM	1	0	22.6	18.0	50.00	-32.0
				1	7	**22.7**	**18.1**	50.00	-31.9
				1	14	22.6	18.0	50.00	-32.0
				8	0	21.4	16.9	50.00	-33.1
				8	4	21.4	16.9	50.00	-33.2
				8	7	21.4	16.8	50.00	-33.2
				15	0	21.4	16.8	50.00	-33.2

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OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Antenna Gain (dBi)	-2.41								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	QPSK	1	0	24.7	20.1	50.00	-29.9
				1	12	24.6	20.1	50.00	-29.9
				1	24	24.6	20.1	50.00	-29.9
				12	0	23.6	19.0	50.00	-31.0
				12	6	23.6	19.0	50.00	-31.0
				12	11	23.5	19.0	50.00	-31.0
				25	0	23.6	19.0	50.00	-31.0
5.0	26740	819.0	QPSK	1	0	24.7	20.1	50.00	-29.9
				1	12	24.7	20.1	50.00	-29.9
				1	24	**24.7**	**20.2**	50.00	-29.8
				12	0	23.5	19.0	50.00	-31.0
				12	6	23.5	19.0	50.00	-31.0
				12	11	23.5	19.0	50.00	-31.0
				25	0	23.5	19.0	50.00	-31.0
5.0	26765	821.5	QPSK	1	0	24.7	20.1	50.00	-29.9
				1	12	24.7	20.1	50.00	-29.9
				1	24	24.7	20.1	50.00	-29.9
				12	0	23.5	18.9	50.00	-31.1
				12	6	23.6	19.0	50.00	-31.0
				12	11	23.6	19.0	50.00	-31.0
				25	0	23.6	19.0	50.00	-31.0

Antenna Gain (dBi)	-2.41								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	16QAM	1	0	23.7	19.2	50.00	-30.8
				1	12	23.7	19.1	50.00	-30.9
				1	24	23.7	19.1	50.00	-30.9
				12	0	23.7	19.2	50.00	-30.8
				12	6	23.7	19.2	50.00	-30.8
				12	11	23.7	19.1	50.00	-30.9
				25	0	22.7	18.2	50.00	-31.8
5.0	26740	819.0	16QAM	1	0	23.7	19.1	50.00	-30.9
				1	12	23.6	19.1	50.00	-30.9
				1	24	23.7	19.1	50.00	-30.9
				12	0	23.6	19.0	50.00	-31.0
				12	6	23.6	19.0	50.00	-31.0
				12	11	23.6	19.0	50.00	-31.0
				25	0	22.5	17.9	50.00	-32.1
5.0	26765	821.5	16QAM	1	0	23.7	19.1	50.00	-30.9
				1	12	**23.7**	**19.2**	50.00	-30.8
				1	24	22.5	17.9	50.00	-32.1
				12	0	22.6	18.0	50.00	-32.0
				12	6	22.5	18.0	50.00	-32.0
				12	11	22.5	18.0	50.00	-32.0
				25	0	22.7	18.2	50.00	-31.8

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Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	64QAM	1	0	22.5	17.9	50.00	-32.1
				1	12	22.4	17.9	50.00	-32.1
				1	24	22.4	17.8	50.00	-32.2
				12	0	21.3	16.7	50.00	-33.3
				12	6	21.3	16.7	50.00	-33.3
				12	11	21.2	16.7	50.00	-33.4
				25	0	21.3	16.7	50.00	-33.3
5.0	26740	819.0	64QAM	1	0	22.5	17.9	50.00	-32.1
				1	12	22.4	17.8	50.00	-32.2
				1	24	22.5	17.9	50.00	-32.1
				12	0	21.3	16.7	50.00	-33.3
				12	6	21.3	16.7	50.00	-33.3
				12	11	21.2	16.7	50.00	-33.4
				25	0	21.5	16.9	50.00	-33.1
5.0	26765	821.5	64QAM	1	0	22.6	18.1	50.00	-31.9
				1	12	22.8	18.2	50.00	-31.8
				1	24	**22.8**	**18.3**	50.00	-31.7
				12	0	21.3	16.7	50.00	-33.3
				12	6	21.5	16.9	50.00	-33.1
				12	11	21.4	16.9	50.00	-33.1
				25	0	21.3	16.8	50.00	-33.2

OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Antenna Gain (dBi)	-2.41

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	26740	819.0	QPSK	1	0	24.7	20.1	50.00	-29.9
				1	24	24.6	20.1	50.00	-29.9
				1	49	**24.7**	**20.2**	50.00	-29.8
				25	0	23.5	18.9	50.00	-31.1
				25	12	23.4	18.9	50.00	-31.1
				25	24	23.5	18.9	50.00	-31.1
				50	0	23.4	18.9	50.00	-31.1
10.0	26740	819.0	16QAM	1	0	**23.7**	**19.2**	50.00	-30.8
				1	24	23.7	19.1	50.00	-30.9
				1	49	23.7	19.1	50.00	-30.9
				25	0	22.4	17.8	50.00	-32.2
				25	12	22.4	17.8	50.00	-32.2
				25	24	22.4	17.9	50.00	-32.1
				50	0	22.3	17.8	50.00	-32.2
10.0	26740	819.0	64QAM	1	0	22.9	18.3	50.00	-31.7
				1	24	22.8	18.2	50.00	-31.8
				1	49	**22.9**	**18.4**	50.00	-31.6
				25	0	21.7	17.2	50.00	-32.8
				25	12	21.7	17.2	50.00	-32.8
				25	24	21.8	17.2	50.00	-32.8
				50	0	21.8	17.2	50.00	-32.8

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7.1.10. LTE BAND 30

ID:	50820	Date:	3/16/17

OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Antenna Gain (dBi)	-0.88

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	QPSK	1	0	**22.8**	**21.9**	24.0	-2.1
				1	12	22.7	21.8	24.0	-2.2
				1	24	22.5	21.7	24.0	-2.3
				12	0	21.8	20.9	24.0	-3.1
				12	6	21.7	20.9	24.0	-3.1
				12	11	21.6	20.8	24.0	-3.2
				25	0	21.7	20.9	24.0	-3.1
5.0	27710	2310.0	QPSK	1	0	22.7	21.9	24.0	-2.1
				1	12	22.6	21.7	24.0	-2.3
				1	24	22.6	21.7	24.0	-2.3
				12	0	21.7	20.8	24.0	-3.2
				12	6	21.7	20.8	24.0	-3.2
				12	11	21.6	20.7	24.0	-3.3
				25	0	21.6	20.7	24.0	-3.3
5.0	27735	2312.5	QPSK	1	0	22.6	21.7	24.0	-2.3
				1	12	22.6	21.7	24.0	-2.3
				1	24	22.6	21.7	24.0	-2.3
				12	0	21.7	20.8	24.0	-3.2
				12	6	21.7	20.8	24.0	-3.2
				12	11	21.6	20.7	24.0	-3.3
				25	0	21.6	20.7	24.0	-3.3

Antenna Gain (dBi)	-0.88

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	16QAM	1	0	21.9	21.1	24.0	-2.9
				1	12	21.8	20.9	24.0	-3.1
				1	24	21.7	20.8	24.0	-3.2
				12	0	20.8	20.0	24.0	-4.0
				12	6	20.8	19.9	24.0	-4.1
				12	11	20.7	19.8	24.0	-4.2
				25	0	20.7	19.8	24.0	-4.2
5.0	27710	2310.0	16QAM	1	0	**22.2**	**21.4**	24.0	-2.6
				1	12	22.1	21.3	24.0	-2.7
				1	24	22.2	21.3	24.0	-2.7
				12	0	20.8	19.9	24.0	-4.1
				12	6	20.8	19.9	24.0	-4.1
				12	11	20.8	19.9	24.0	-4.1
				25	0	20.7	19.8	24.0	-4.2
5.0	27735	2312.5	16QAM	1	0	21.9	21.0	24.0	-3.0
				1	12	21.8	20.9	24.0	-3.1
				1	24	21.8	20.9	24.0	-3.1
				12	0	20.7	19.8	24.0	-4.2
				12	6	20.7	19.8	24.0	-4.2
				12	11	20.7	19.8	24.0	-4.2
				25	0	20.7	19.8	24.0	-4.2

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Antenna Gain (dBi)	-0.88								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	64QAM	1	0	21.4	20.5	24.0	-3.5
				1	12	21.3	20.4	24.0	-3.6
				1	24	21.4	20.5	24.0	-3.5
				12	0	20.3	19.4	24.0	-4.6
				12	6	20.2	19.4	24.0	-4.6
				12	11	20.3	19.4	24.0	-4.6
				25	0	20.1	19.2	24.0	-4.8
5.0	27710	2310.0	64QAM	1	0	21.3	20.4	24.0	-3.6
				1	12	**21.4**	**20.6**	24.0	-3.4
				1	24	21.4	20.6	24.0	-3.4
				12	0	20.2	19.3	24.0	-4.7
				12	6	20.2	19.3	24.0	-4.7
				12	11	20.1	19.2	24.0	-4.8
				25	0	20.1	19.2	24.0	-4.8
5.0	27735	2312.5	64QAM	1	0	21.4	20.5	24.0	-3.5
				1	12	21.4	20.5	24.0	-3.5
				1	24	21.3	20.5	24.0	-3.5
				12	0	20.1	19.2	24.0	-4.8
				12	6	20.2	19.3	24.0	-4.7
				12	11	20.1	19.3	24.0	-4.7
				25	0	20.2	19.4	24.0	-4.6

OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Antenna Gain (dBi)	-0.88								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	27710	2310.0	QPSK	1	0	**23.0**	**22.2**	24.0	-1.8
				1	24	22.8	21.9	24.0	-2.1
				1	49	22.7	21.9	24.0	-2.1
				25	0	21.9	21.0	24.0	-3.0
				25	12	21.9	21.0	24.0	-3.0
				25	24	21.8	20.9	24.0	-3.1
				50	0	21.9	21.0	24.0	-3.0
10.0	27710	2310.0	16QAM	1	0	**22.1**	**21.2**	24.0	-2.8
				1	24	21.8	21.0	24.0	-3.0
				1	49	21.8	20.9	24.0	-3.1
				25	0	21.0	20.1	24.0	-3.9
				25	12	21.0	20.1	24.0	-3.9
				25	24	20.9	20.0	24.0	-4.0
				50	0	20.9	20.0	24.0	-4.0
10.0	27710	2310.0	64QAM	1	0	**21.4**	**20.6**	24.0	-3.4
				1	24	21.3	20.5	24.0	-3.5
				1	49	21.3	20.5	24.0	-3.6
				25	0	20.1	19.2	24.0	-4.8
				25	12	20.2	19.4	24.0	-4.6
				25	24	20.3	19.4	24.0	-4.6
				50	0	20.2	19.3	24.0	-4.7

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4031B
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7.1.11. LTE BAND 41

ID:	50820	Date:	3/20/17

OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	QPSK	1	0	24.5	24.7	33.0	-8.3
				1	12	24.5	24.7	33.0	-8.3
				1	24	24.5	24.7	33.0	-8.3
				12	0	23.4	23.6	33.0	-9.4
				12	6	23.5	23.7	33.0	-9.3
				12	11	23.4	23.6	33.0	-9.4
				25	0	23.5	23.7	33.0	-9.3
5.0	40620	2593.0	QPSK	1	0	24.6	24.8	33.0	-8.2
				1	12	24.5	24.7	33.0	-8.3
				1	24	24.6	24.8	33.0	-8.3
				12	0	23.6	23.8	33.0	-9.2
				12	6	23.6	23.8	33.0	-9.2
				12	11	23.6	23.8	33.0	-9.2
				25	0	23.5	23.7	33.0	-9.3
5.0	41565	2687.5	QPSK	1	0	24.6	24.8	33.0	-8.2
				1	12	**24.6**	**24.8**	33.0	-8.2
				1	24	24.5	24.7	33.0	-8.3
				12	0	23.3	23.5	33.0	-9.5
				12	6	23.4	23.6	33.0	-9.4
				12	11	23.3	23.5	33.0	-9.5
				25	0	23.3	23.5	33.0	-9.5

Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	16QAM	1	0	23.8	24.0	33.0	-9.0
				1	12	23.8	24.0	33.0	-9.0
				1	24	23.8	24.0	33.0	-9.0
				12	0	22.6	22.8	33.0	-10.2
				12	6	22.6	22.8	33.0	-10.2
				12	11	22.6	22.8	33.0	-10.3
				25	0	22.5	22.7	33.0	-10.3
5.0	40620	2593.0	16QAM	1	0	23.8	24.0	33.0	-9.0
				1	12	23.7	23.9	33.0	-9.1
				1	24	23.8	24.0	33.0	-9.0
				12	0	22.6	22.8	33.0	-10.2
				12	6	22.6	22.8	33.0	-10.2
				12	11	22.6	22.8	33.0	-10.2
				25	0	22.6	22.8	33.0	-10.2
5.0	41565	2687.5	16QAM	1	0	**23.9**	**24.1**	33.0	-8.9
				1	12	23.8	24.0	33.0	-9.0
				1	24	23.8	24.0	33.0	-9.0
				12	0	22.4	22.6	33.0	-10.4
				12	6	22.5	22.7	33.0	-10.3
				12	11	22.4	22.6	33.0	-10.4
				25	0	22.4	22.6	33.0	-10.4

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Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	64QAM	1	0	23.1	23.3	33.0	-9.7
				1	12	23.1	23.3	33.0	-9.7
				1	24	23.0	23.2	33.0	-9.8
				12	0	22.2	22.4	33.0	-10.7
				12	6	22.1	22.3	33.0	-10.7
				12	11	22.1	22.3	33.0	-10.7
				25	0	22.2	22.4	33.0	-10.6
5.0	40620	2593.0	64QAM	1	0	23.2	23.4	33.0	-9.6
				1	12	23.0	23.2	33.0	-9.8
				1	24	23.1	23.3	33.0	-9.8
				12	0	22.1	22.3	33.0	-10.7
				12	6	22.1	22.3	33.0	-10.7
				12	11	22.0	22.2	33.0	-10.8
				25	0	22.2	22.4	33.0	-10.7
5.0	41565	2687.5	64QAM	1	0	23.1	23.3	33.0	-9.7
				1	12	23.1	23.3	33.0	-9.7
				1	24	**23.2**	**23.4**	33.0	-9.6
				12	0	22.2	22.4	33.0	-10.6
				12	6	22.2	22.4	33.0	-10.7
				12	11	22.1	22.3	33.0	-10.7
				25	0	22.1	22.3	33.0	-10.7

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OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	QPSK	1	0	24.6	24.8	33.0	-8.2
				1	24	24.6	24.8	33.0	-8.2
				1	49	24.5	24.7	33.0	-8.3
				25	0	23.4	23.6	33.0	-9.4
				25	12	23.4	23.6	33.0	-9.4
				25	24	23.3	23.5	33.0	-9.5
				50	0	23.4	23.6	33.0	-9.4
10.0	40620	2593.0	QPSK	1	0	**24.8**	**25.0**	33.0	-8.0
				1	24	24.8	25.0	33.0	-8.0
				1	49	24.7	24.9	33.0	-8.1
				25	0	23.4	23.6	33.0	-9.4
				25	12	23.4	23.6	33.0	-9.4
				25	24	23.4	23.6	33.0	-9.4
				50	0	23.4	23.6	33.0	-9.4
10.0	41540	2685.0	QPSK	1	0	24.8	25.0	33.0	-8.0
				1	24	24.7	24.9	33.0	-8.1
				1	49	24.7	24.9	33.0	-8.1
				25	0	23.4	23.6	33.0	-9.4
				25	12	23.4	23.6	33.0	-9.4
				25	24	23.3	23.5	33.0	-9.5
				50	0	23.4	23.6	33.0	-9.4

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	16QAM	1	0	**24.0**	**24.2**	33.0	-8.8
				1	24	23.9	24.1	33.0	-8.9
				1	49	23.8	24.0	33.0	-9.0
				25	0	22.4	22.6	33.0	-10.4
				25	12	22.4	22.6	33.0	-10.4
				25	24	22.4	22.6	33.0	-10.4
				50	0	22.4	22.6	33.0	-10.4
10.0	40620	2593.0	16QAM	1	0	23.8	24.0	33.0	-9.0
				1	24	23.8	24.0	33.0	-9.0
				1	49	23.7	23.9	33.0	-9.1
				25	0	22.4	22.6	33.0	-10.4
				25	12	22.5	22.7	33.0	-10.3
				25	24	22.5	22.7	33.0	-10.4
				50	0	22.4	22.6	33.0	-10.4
10.0	41540	2685.0	16QAM	1	0	23.8	24.0	33.0	-9.1
				1	24	23.8	24.0	33.0	-9.0
				1	49	23.8	24.0	33.0	-9.0
				25	0	22.4	22.6	33.0	-10.5
				25	12	22.5	22.7	33.0	-10.3
				25	24	22.5	22.7	33.0	-10.3
				50	0	22.5	22.7	33.0	-10.3

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Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	64QAM	1	0	23.2	23.4	33.0	-9.6
				1	24	**23.2**	**23.4**	33.0	-9.6
				1	49	23.2	23.4	33.0	-9.6
				25	0	22.2	22.4	33.0	-10.6
				25	12	22.2	22.4	33.0	-10.6
				25	24	22.3	22.5	33.0	-10.5
				50	0	22.1	22.3	33.0	-10.7
10.0	40620	2593.0	64QAM	1	0	23.2	23.4	33.0	-9.6
				1	24	23.2	23.4	33.0	-9.6
				1	49	23.1	23.3	33.0	-9.7
				25	0	21.9	22.1	33.0	-10.9
				25	12	22.0	22.2	33.0	-10.8
				25	24	22.0	22.2	33.0	-10.8
				50	0	22.0	22.2	33.0	-10.8
10.0	41540	2685.0	64QAM	1	0	23.2	23.4	33.0	-9.6
				1	24	23.1	23.3	33.0	-9.7
				1	49	23.1	23.3	33.0	-9.7
				25	0	22.2	22.4	33.0	-10.6
				25	12	22.1	22.3	33.0	-10.7
				25	24	22.1	22.3	33.0	-10.7
				50	0	22.2	22.4	33.0	-10.6

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OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	QPSK	1	0	24.7	24.9	33.0	-8.1
				1	37	24.5	24.7	33.0	-8.3
				1	74	24.5	24.7	33.0	-8.3
				36	0	23.6	23.8	33.0	-9.2
				36	16	23.6	23.8	33.0	-9.2
				36	35	23.6	23.8	33.0	-9.2
				75	0	23.5	23.7	33.0	-9.3
15.0	40620	2593.0	QPSK	1	0	24.6	24.8	33.0	-8.2
				1	37	24.5	24.7	33.0	-8.3
				1	74	24.4	24.6	33.0	-8.4
				36	0	23.4	23.6	33.0	-9.4
				36	16	23.4	23.6	33.0	-9.4
				36	35	23.4	23.6	33.0	-9.4
				75	0	23.4	23.6	33.0	-9.4
15.0	41515	2682.5	QPSK	1	0	**24.7**	**24.9**	33.0	-8.1
				1	37	24.6	24.8	33.0	-8.2
				1	74	24.5	24.7	33.0	-8.3
				36	0	24.2	24.4	33.0	-8.6
				36	16	24.2	24.4	33.0	-8.7
				36	35	24.1	24.3	33.0	-8.7
				75	0	24.1	24.3	33.0	-8.7

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	16-QAM	1	0	24.0	24.2	33.0	-8.8
				1	37	24.0	24.2	33.0	-8.8
				1	74	24.0	24.2	33.0	-8.9
				36	0	22.6	22.8	33.0	-10.2
				36	16	22.6	22.8	33.0	-10.2
				36	35	22.5	22.7	33.0	-10.3
				75	0	22.6	22.8	33.0	-10.3
15.0	40620	2593.0	16-QAM	1	0	23.8	24.0	33.0	-9.0
				1	37	23.7	23.9	33.0	-9.1
				1	74	23.8	24.0	33.0	-9.0
				36	0	22.4	22.6	33.0	-10.4
				36	16	22.5	22.7	33.0	-10.4
				36	35	22.4	22.6	33.0	-10.4
				75	0	22.4	22.6	33.0	-10.5
15.0	41515	2682.5	16-QAM	1	0	**24.1**	**24.3**	33.0	-8.7
				1	37	23.9	24.1	33.0	-8.9
				1	74	23.9	24.1	33.0	-8.9
				36	0	22.7	22.9	33.0	-10.1
				36	16	22.7	22.9	33.0	-10.1
				36	35	22.7	22.9	33.0	-10.2
				75	0	22.7	22.9	33.0	-10.1

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Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	64QAM	1	0	23.2	23.4	33.0	-9.7
				1	37	23.1	23.3	33.0	-9.7
				1	74	23.2	23.4	33.0	-9.6
				36	0	22.2	22.4	33.0	-10.6
				36	16	22.3	22.5	33.0	-10.6
				36	35	22.2	22.4	33.0	-10.6
				75	0	22.1	22.3	33.0	-10.7
15.0	40620	2593.0	64QAM	1	0	**23.3**	**23.5**	33.0	-9.5
				1	37	23.2	23.4	33.0	-9.6
				1	74	23.2	23.4	33.0	-9.6
				36	0	22.1	22.3	33.0	-10.7
				36	16	22.1	22.3	33.0	-10.7
				36	35	22.1	22.3	33.0	-10.7
				75	0	22.2	22.4	33.0	-10.6
15.0	41515	2682.5	64QAM	1	0	23.1	23.3	33.0	-9.7
				1	37	23.1	23.3	33.0	-9.7
				1	74	23.3	23.5	33.0	-9.6
				36	0	22.3	22.5	33.0	-10.6
				36	16	22.2	22.4	33.0	-10.6
				36	35	22.3	22.5	33.0	-10.6
				75	0	22.2	22.4	33.0	-10.6

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OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	QPSK	1	0	24.7	24.9	33.0	-8.1
				1	49	24.6	24.8	33.0	-8.2
				1	99	24.5	24.7	33.0	-8.3
				50	0	23.7	23.9	33.0	-9.2
				50	24	23.6	23.8	33.0	-9.2
				50	49	23.5	23.7	33.0	-9.3
				100	0	23.6	23.8	33.0	-9.2
20.0	40620	2593.0	QPSK	1	0	24.7	24.9	33.0	-8.1
				1	49	24.5	24.7	33.0	-8.3
				1	99	24.5	24.7	33.0	-8.3
				50	0	23.6	23.8	33.0	-9.2
				50	24	23.5	23.7	33.0	-9.3
				50	49	23.5	23.7	33.0	-9.3
				100	0	23.6	23.8	33.0	-9.3
20.0	41490	2680.0	QPSK	1	0	**24.8**	**25.0**	33.0	-8.0
				1	49	24.8	25.0	33.0	-8.0
				1	99	24.8	25.0	33.0	-8.0
				50	0	23.4	23.6	33.0	-9.4
				50	24	23.4	23.6	33.0	-9.4
				50	49	23.4	23.6	33.0	-9.5
				100	0	23.4	23.6	33.0	-9.4

Antenna Gain (dBi)	0.20								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	16-QAM	1	0	23.8	24.0	33.0	-9.0
				1	49	23.8	24.0	33.0	-9.0
				1	99	23.7	23.9	33.0	-9.1
				50	0	22.6	22.8	33.0	-10.2
				50	24	22.6	22.8	33.0	-10.2
				50	49	22.6	22.8	33.0	-10.3
				100	0	22.6	22.8	33.0	-10.2
20.0	40620	2593.0	16-QAM	1	0	**23.8**	**24.0**	33.0	-9.0
				1	49	23.7	23.9	33.0	-9.1
				1	99	23.7	23.9	33.0	-9.1
				50	0	22.6	22.8	33.0	-10.2
				50	24	22.5	22.7	33.0	-10.3
				50	49	22.4	22.6	33.0	-10.4
				100	0	22.5	22.7	33.0	-10.3
20.0	41490	2680.0	16-QAM	1	0	23.8	24.0	33.0	-9.0
				1	49	23.8	24.0	33.0	-9.0
				1	99	23.7	23.9	33.0	-9.1
				50	0	22.5	22.7	33.0	-10.3
				50	24	22.4	22.6	33.0	-10.4
				50	49	22.4	22.6	33.0	-10.4
				100	0	22.4	22.6	33.0	-10.4

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Antenna Gain (dBi)	0.20

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	64QAM	1	0	23.1	23.3	33.0	-9.7
				1	49	23.2	23.4	33.0	-9.7
				1	99	23.0	23.2	33.0	-9.8
				50	0	22.2	22.4	33.0	-10.7
				50	24	22.3	22.5	33.0	-10.5
				50	49	22.1	22.3	33.0	-10.8
				100	0	22.1	22.3	33.0	-10.7
20.0	40620	2593.0	64QAM	1	0	23.2	23.4	33.0	-9.6
				1	49	**23.3**	**23.5**	33.0	-9.5
				1	99	23.2	23.4	33.0	-9.6
				50	0	22.3	22.5	33.0	-10.5
				50	24	22.2	22.4	33.0	-10.6
				50	49	22.3	22.5	33.0	-10.5
				100	0	22.3	22.5	33.0	-10.5
20.0	41490	2680.0	64QAM	1	0	23.1	23.3	33.0	-9.7
				1	49	23.2	23.4	33.0	-9.6
				1	99	23.2	23.4	33.0	-9.6
				50	0	22.2	22.4	33.0	-10.6
				50	24	22.2	22.4	33.0	-10.6
				50	49	22.1	22.3	33.0	-10.7
				100	0	22.3	22.5	33.0	-10.5

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7.1.12. LTE BAND 66

ID:	39005	Date:	4/7/17

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	QPSK	1	0	24.6	25.1	30.0	-4.9
				1	12	24.7	25.1	30.0	-4.9
				1	24	24.6	25.1	30.0	-4.9
				12	0	23.7	24.1	30.0	-5.9
				12	6	23.7	24.2	30.0	-5.8
				12	11	23.6	24.0	30.0	-6.0
				25	0	23.6	24.0	30.0	-6.0
5.0	132322	1745.0	QPSK	1	0	**24.7**	**25.2**	30.0	-4.8
				1	12	24.7	25.1	30.0	-4.9
				1	24	24.7	25.1	30.0	-4.9
				12	0	23.8	24.2	30.0	-5.8
				12	6	23.8	24.2	30.0	-5.8
				12	11	23.7	24.2	30.0	-5.8
				25	0	23.7	24.1	30.0	-5.9
5.0	132647	1777.5	QPSK	1	0	24.5	25.0	30.0	-5.0
				1	12	24.7	25.1	30.0	-4.9
				1	24	24.6	25.1	30.0	-4.9
				12	0	23.6	24.0	30.0	-6.0
				12	6	23.6	24.0	30.0	-6.0
				12	11	23.6	24.0	30.0	-6.0
				25	0	23.6	24.0	30.0	-6.0

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	16QAM	1	0	23.8	24.3	30.0	-5.7
				1	12	23.8	24.2	30.0	-5.8
				1	24	23.8	24.2	30.0	-5.8
				12	0	22.7	23.2	30.0	-6.8
				12	6	22.7	23.2	30.0	-6.8
				12	11	22.6	23.1	30.0	-6.9
				25	0	22.7	23.1	30.0	-6.9
5.0	132322	1745.0	16QAM	1	0	**23.8**	**24.3**	30.0	-5.7
				1	12	23.8	24.2	30.0	-5.8
				1	24	23.8	24.2	30.0	-5.8
				12	0	22.8	23.2	30.0	-6.8
				12	6	22.8	23.2	30.0	-6.8
				12	11	22.7	23.2	30.0	-6.8
				25	0	22.7	23.2	30.0	-6.8
5.0	132647	1777.5	16QAM	1	0	23.7	24.1	30.0	-5.9
				1	12	23.8	24.3	30.0	-5.8
				1	24	23.8	24.2	30.0	-5.8
				12	0	22.6	23.1	30.0	-6.9
				12	6	22.7	23.1	30.0	-6.9
				12	11	22.6	23.1	30.0	-6.9
				25	0	22.6	23.0	30.0	-7.0

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Antenna Gain (dBi)	0.44								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	64QAM	1	0	23.1	23.6	30.0	-6.4
				1	12	23.1	23.5	30.0	-6.5
				1	24	23.0	23.5	30.0	-6.5
				12	0	21.9	22.3	30.0	-7.7
				12	6	21.9	22.3	30.0	-7.7
				12	11	21.9	22.3	30.0	-7.7
				25	0	21.9	22.3	30.0	-7.7
5.0	132322	1745.0	64QAM	1	0	**23.4**	**23.9**	30.0	-6.1
				1	12	23.4	23.8	30.0	-6.2
				1	24	23.4	23.9	30.0	-6.2
				12	0	22.1	22.6	30.0	-7.5
				12	6	22.1	22.6	30.0	-7.5
				12	11	22.1	22.5	30.0	-7.5
				25	0	22.0	22.5	30.0	-7.5
5.0	132647	1777.5	64QAM	1	0	23.0	23.5	30.0	-6.5
				1	12	23.0	23.4	30.0	-6.6
				1	24	22.9	23.4	30.0	-6.6
				12	0	21.8	22.2	30.0	-7.8
				12	6	21.8	22.2	30.0	-7.8
				12	11	21.8	22.2	30.0	-7.8
				25	0	21.8	22.2	30.0	-7.8

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OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Antenna Gain (dBi)	0.44								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	QPSK	1	0	24.7	25.1	30.0	-4.9
				1	24	24.7	25.1	30.0	-4.9
				1	49	24.7	25.1	30.0	-4.9
				25	0	23.7	24.2	30.0	-5.8
				25	12	23.7	24.2	30.0	-5.8
				25	24	23.6	24.0	30.0	-6.0
				50	0	23.6	24.1	30.0	-5.9
10.0	132322	1745.0	QPSK	1	0	**24.8**	**25.2**	30.0	-4.8
				1	24	24.7	25.1	30.0	-4.9
				1	49	24.6	25.1	30.0	-4.9
				25	0	23.6	24.0	30.0	-6.0
				25	12	23.6	24.0	30.0	-6.0
				25	24	23.6	24.1	30.0	-5.9
				50	0	23.7	24.2	30.0	-5.8
10.0	132622	1775.0	QPSK	1	0	24.7	25.2	30.0	-4.8
				1	24	24.7	25.1	30.0	-4.9
				1	49	24.7	25.1	30.0	-4.9
				25	0	23.6	24.1	30.0	-5.9
				25	12	23.6	24.1	30.0	-5.9
				25	24	23.6	24.1	30.0	-5.9
				50	0	23.6	24.1	30.0	-6.0

Antenna Gain (dBi)	0.44								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	16QAM	1	0	23.8	24.2	30.0	-5.8
				1	24	23.8	24.2	30.0	-5.8
				1	49	23.8	24.2	30.0	-5.8
				25	0	22.7	23.2	30.0	-6.8
				25	12	22.7	23.2	30.0	-6.9
				25	24	22.7	23.1	30.0	-6.9
				50	0	22.7	23.1	30.0	-6.9
10.0	132322	1745.0	16QAM	1	0	**23.8**	**24.3**	30.0	-5.7
				1	24	23.7	24.2	30.0	-5.8
				1	49	23.7	24.2	30.0	-5.8
				25	0	22.6	23.0	30.0	-7.0
				25	12	22.5	22.9	30.0	-7.1
				25	24	22.5	23.0	30.0	-7.0
				50	0	22.7	23.2	30.0	-6.8
10.0	132622	1775.0	16QAM	1	0	23.8	24.2	30.0	-5.8
				1	24	23.8	24.2	30.0	-5.8
				1	49	23.8	24.2	30.0	-5.8
				25	0	22.6	23.1	30.0	-6.9
				25	12	22.7	23.1	30.0	-6.9
				25	24	22.6	23.1	30.0	-6.9
				50	0	22.6	23.1	30.0	-6.9

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Antenna Gain (dBi)	0.44								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	64QAM	1	0	22.9	23.3	30.0	-6.7
				1	24	22.8	23.2	30.0	-6.8
				1	49	22.9	23.3	30.0	-6.7
				25	0	22.0	22.5	30.0	-7.5
				25	12	22.0	22.5	30.0	-7.5
				25	24	22.0	22.5	30.0	-7.5
				50	0	22.0	22.5	30.0	-7.5
10.0	132322	1745.0	64QAM	1	0	**23.4**	**23.8**	30.0	-6.2
				1	24	23.3	23.7	30.0	-6.3
				1	49	23.3	23.7	30.0	-6.3
				25	0	22.2	22.6	30.0	-7.4
				25	12	22.2	22.6	30.0	-7.4
				25	24	22.1	22.6	30.0	-7.4
				50	0	22.2	22.6	30.0	-7.4
10.0	132622	1775.0	64QAM	1	0	23.1	23.6	30.0	-6.4
				1	24	23.0	23.4	30.0	-6.6
				1	49	23.0	23.4	30.0	-6.6
				25	0	22.0	22.5	30.0	-7.6
				25	12	22.0	22.4	30.0	-7.6
				25	24	22.0	22.4	30.0	-7.6
				50	0	21.9	22.4	30.0	-7.6

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OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	QPSK	1	0	24.8	25.2	30.0	-4.8
				1	37	24.7	25.1	30.0	-4.9
				1	74	24.6	25.1	30.0	-4.9
				36	0	23.7	24.2	30.0	-5.8
				36	16	23.7	24.1	30.0	-5.9
				36	35	23.7	24.1	30.0	-5.9
				75	0	23.7	24.2	30.0	-5.8
15.0	132322	1745.0	QPSK	1	0	**24.8**	**25.2**	30.0	-4.8
				1	37	24.6	25.1	30.0	-4.9
				1	74	24.6	25.1	30.0	-4.9
				36	0	23.7	24.2	30.0	-5.8
				36	16	23.7	24.2	30.0	-5.8
				36	35	23.7	24.2	30.0	-5.8
				75	0	23.7	24.2	30.0	-5.8
15.0	132597	1772.5	QPSK	1	0	24.7	25.2	30.0	-4.8
				1	37	24.6	25.1	30.0	-5.0
				1	74	24.6	25.0	30.0	-5.0
				36	0	23.8	24.2	30.0	-5.8
				36	16	23.7	24.1	30.0	-5.9
				36	35	23.7	24.1	30.0	-5.9
				75	0	23.7	24.2	30.0	-5.8

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	16-QAM	1	0	**23.8**	**24.3**	30.0	-5.7
				1	37	23.7	24.1	30.0	-5.9
				1	74	23.7	24.1	30.0	-5.9
				36	0	22.8	23.2	30.0	-6.8
				36	16	22.7	23.1	30.0	-6.9
				36	35	22.7	23.1	30.0	-6.9
				75	0	22.7	23.1	30.0	-6.9
15.0	132322	1745.0	16-QAM	1	0	23.8	24.3	30.0	-5.7
				1	37	23.8	24.3	30.0	-5.7
				1	74	23.8	24.3	30.0	-5.7
				36	0	22.7	23.1	30.0	-6.9
				36	16	22.6	23.1	30.0	-6.9
				36	35	22.6	23.0	30.0	-7.0
				75	0	22.7	23.1	30.0	-6.9
15.0	132597	1772.5	16-QAM	1	0	23.8	24.3	30.0	-5.7
				1	37	23.7	24.2	30.0	-5.8
				1	74	23.7	24.2	30.0	-5.8
				36	0	22.7	23.1	30.0	-6.9
				36	16	22.7	23.2	30.0	-6.9
				36	35	22.7	23.2	30.0	-6.8
				75	0	22.7	23.2	30.0	-6.8

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Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	64QAM	1	0	**23.2**	**23.7**	30.0	-6.3
				1	37	23.1	23.5	30.0	-6.5
				1	74	23.2	23.7	30.0	-6.3
				36	0	22.4	22.8	30.0	-7.2
				36	16	22.4	22.8	30.0	-7.2
				36	35	22.5	22.9	30.0	-7.1
				75	0	22.4	22.8	30.0	-7.2
15.0	132322	1745.0	64QAM	1	0	23.2	23.7	30.0	-6.3
				1	37	23.1	23.5	30.0	-6.5
				1	74	23.1	23.6	30.0	-6.4
				36	0	22.5	23.0	30.0	-7.0
				36	16	22.5	22.9	30.0	-7.1
				36	35	22.5	22.9	30.0	-7.1
				75	0	22.6	23.0	30.0	-7.0
15.0	132597	1772.5	64QAM	1	0	23.1	23.5	30.0	-6.5
				1	37	23.2	23.6	30.0	-6.4
				1	74	23.0	23.5	30.0	-6.5
				36	0	22.4	22.9	30.0	-7.2
				36	16	22.4	22.8	30.0	-7.2
				36	35	22.3	22.8	30.0	-7.2
				75	0	22.3	22.7	30.0	-7.3

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OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	QPSK	1	0	24.6	25.0	30.0	-5.0
				1	49	24.6	25.1	30.0	-4.9
				1	99	24.6	25.1	30.0	-4.9
				50	0	23.6	24.1	30.0	-5.9
				50	24	23.6	24.1	30.0	-5.9
				50	49	23.5	23.9	30.0	-6.1
				100	0	23.5	23.9	30.0	-6.1
20.0	132322	1745.0	QPSK	1	0	24.6	25.0	30.0	-5.0
				1	49	**24.7**	**25.1**	30.0	-4.9
				1	99	24.6	25.1	30.0	-4.9
				50	0	23.7	24.1	30.0	-5.9
				50	24	23.7	24.1	30.0	-5.9
				50	49	23.7	24.1	30.0	-5.9
				100	0	23.6	24.0	30.0	-6.0
20.0	132572	1770.0	QPSK	1	0	24.6	25.0	30.0	-5.0
				1	49	24.6	25.0	30.0	-5.0
				1	99	24.6	25.0	30.0	-5.0
				50	0	23.5	23.9	30.0	-6.1
				50	24	23.5	24.0	30.0	-6.0
				50	49	23.5	23.9	30.0	-6.1
				100	0	23.5	23.9	30.0	-6.1

Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	16-QAM	1	0	23.7	24.2	30.0	-5.9
				1	49	23.7	24.1	30.0	-5.9
				1	99	23.7	24.1	30.0	-5.9
				50	0	22.6	23.1	30.0	-6.9
				50	24	22.7	23.1	30.0	-6.9
				50	49	22.6	23.0	30.0	-7.0
				100	0	22.6	23.0	30.0	-7.0
20.0	132322	1745.0	16-QAM	1	0	**23.7**	**24.2**	30.0	-5.8
				1	49	23.7	24.1	30.0	-5.9
				1	99	23.7	24.1	30.0	-5.9
				50	0	22.7	23.1	30.0	-6.9
				50	24	22.7	23.1	30.0	-6.9
				50	49	22.7	23.1	30.0	-6.9
				100	0	22.6	23.1	30.0	-6.9
20.0	132572	1770.0	16-QAM	1	0	23.7	24.1	30.0	-5.9
				1	49	23.7	24.2	30.0	-5.9
				1	99	23.7	24.1	30.0	-5.9
				50	0	22.6	23.0	30.0	-7.0
				50	24	22.6	23.0	30.0	-7.0
				50	49	22.6	23.0	30.0	-7.0
				100	0	22.5	22.9	30.0	-7.1

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Antenna Gain (dBi)	0.44

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	64QAM	1	0	23.0	23.5	30.0	-6.6
				1	49	23.2	23.6	30.0	-6.4
				1	99	23.0	23.4	30.0	-6.6
				50	0	22.1	22.5	30.0	-7.5
				50	24	22.1	22.6	30.0	-7.4
				50	49	22.1	22.6	30.0	-7.5
				100	0	22.1	22.6	30.0	-7.4
20.0	132322	1745.0	64QAM	1	0	23.2	23.6	30.0	-6.4
				1	49	23.2	23.6	30.0	-6.4
				1	99	**23.2**	**23.7**	30.0	-6.3
				50	0	22.3	22.7	30.0	-7.3
				50	24	22.2	22.7	30.0	-7.3
				50	49	22.2	22.6	30.0	-7.4
				100	0	22.2	22.7	30.0	-7.4
20.0	132572	1770.0	64QAM	1	0	23.2	23.7	30.0	-6.4
				1	49	23.2	23.6	30.0	-6.4
				1	99	23.1	23.6	30.0	-6.5
				50	0	22.1	22.6	30.0	-7.4
				50	24	22.1	22.5	30.0	-7.5
				50	49	22.0	22.4	30.0	-7.6
				100	0	22.0	22.5	30.0	-7.5

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7.2. UAT 1

7.2.1. LTE BAND 2

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 2 (1.4MHz)

Antenna gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	2	19.9	20.3	33.0	-12.7
				1	5	19.8	20.2	33.0	-12.8
				3	0	19.9	20.2	33.0	-12.8
				3	1	19.9	20.3	33.0	-12.7
				3	2	19.9	20.3	33.0	-12.7
				6	0	18.9	19.2	33.0	-13.8
1.4	18900	1880.0	QPSK	1	0	19.6	19.9	33.0	-13.1
				1	2	19.7	20.1	33.0	-12.9
				1	5	19.7	20.0	33.0	-13.0
				3	0	19.7	20.1	33.0	-12.9
				3	1	19.8	20.1	33.0	-12.9
				3	2	19.8	20.1	33.0	-12.9
				6	0	18.7	19.1	33.0	-14.0
1.4	19193	1909.3	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	2	19.9	20.3	33.0	-12.8
				1	5	19.8	20.2	33.0	-12.8
				3	0	19.8	20.2	33.0	-12.8
				3	1	20.0	20.4	33.0	-12.6
				3	2	**20.0**	**20.4**	33.0	-12.6
				6	0	18.9	19.3	33.0	-13.7

Antenna gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	16QAM	1	0	18.9	19.3	33.0	-13.7
				1	2	19.0	19.3	33.0	-13.7
				1	5	18.9	19.3	33.0	-13.7
				3	0	19.0	19.4	33.0	-13.6
				3	1	19.1	19.4	33.0	-13.6
				3	2	19.0	19.3	33.0	-13.7
				6	0	17.9	18.3	33.0	-14.7
1.4	18900	1880.0	16QAM	1	0	19.1	19.4	33.0	-13.6
				1	2	19.1	19.5	33.0	-13.5
				1	5	19.1	19.4	33.0	-13.6
				3	0	18.9	19.2	33.0	-13.8
				3	1	18.9	19.3	33.0	-13.7
				3	2	18.9	19.3	33.0	-13.8
				6	0	17.5	17.9	33.0	-15.2
1.4	19193	1909.3	16QAM	1	0	19.1	19.4	33.0	-13.6
				1	2	**19.2**	**19.5**	33.0	-13.5
				1	5	19.1	19.4	33.0	-13.6
				3	0	19.0	19.4	33.0	-13.6
				3	1	19.1	19.4	33.0	-13.6
				3	2	19.0	19.4	33.0	-13.6
				6	0	18.1	18.4	33.0	-14.6

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Antenna gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	18607	1850.7	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	2	18.2	18.6	33.0	-14.4
				1	5	18.0	18.4	33.0	-14.6
				3	0	18.2	18.6	33.0	-14.5
				3	1	18.2	18.6	33.0	-14.5
				3	2	18.0	18.4	33.0	-14.7
				6	0	16.8	17.2	33.0	-15.8
1.4	18900	1880.0	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	2	18.0	18.4	33.0	-14.7
				1	5	18.0	18.3	33.0	-14.7
				3	0	17.8	18.2	33.0	-14.8
				3	1	17.9	18.3	33.0	-14.7
				3	2	17.9	18.3	33.0	-14.7
				6	0	16.9	17.3	33.0	-15.7
1.4	19193	1909.3	64QAM	1	0	18.0	18.3	33.0	-14.7
				1	2	18.0	18.4	33.0	-14.6
				1	5	18.0	18.4	33.0	-14.6
				3	0	18.2	18.6	33.0	-14.5
				3	1	18.2	18.6	33.0	-14.4
				3	2	**18.3**	**18.6**	33.0	-14.4
				6	0	17.4	17.8	33.0	-15.3

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OUTPUT POWER FOR LTE BAND 2 (3.0 MHz)

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	7	**19.9**	**20.3**	33.0	-12.7
				1	14	19.8	20.1	33.0	-12.9
				8	0	18.9	19.2	33.0	-13.8
				8	4	18.9	19.2	33.0	-13.8
				8	7	18.8	19.2	33.0	-13.8
				15	0	18.8	19.2	33.0	-13.8
3.0	18900	1880.0	QPSK	1	0	19.6	19.9	33.0	-13.1
				1	7	19.7	20.1	33.0	-12.9
				1	14	19.6	20.0	33.0	-13.0
				8	0	18.7	19.0	33.0	-14.0
				8	4	18.6	19.0	33.0	-14.0
				8	7	18.6	19.0	33.0	-14.0
				15	0	18.6	19.0	33.0	-14.0
3.0	19185	1908.5	QPSK	1	0	19.8	20.1	33.0	-12.9
				1	7	19.9	20.3	33.0	-12.8
				1	14	19.8	20.2	33.0	-12.8
				8	0	18.8	19.2	33.0	-13.8
				8	4	18.8	19.2	33.0	-13.8
				8	7	18.9	19.2	33.0	-13.8
				15	0	18.8	19.2	33.0	-13.8

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	16QAM	1	0	18.9	19.3	33.0	-13.7
				1	7	18.9	19.3	33.0	-13.7
				1	14	18.8	19.2	33.0	-13.8
				8	0	17.9	18.3	33.0	-14.7
				8	4	17.9	18.3	33.0	-14.7
				8	7	17.9	18.3	33.0	-14.7
				15	0	17.7	18.1	33.0	-15.0
3.0	18900	1880.0	16QAM	1	0	19.0	19.4	33.0	-13.6
				1	7	**19.1**	**19.5**	33.0	-13.5
				1	14	19.0	19.4	33.0	-13.6
				8	0	17.6	17.9	33.0	-15.1
				8	4	17.5	17.8	33.0	-15.2
				8	7	17.4	17.8	33.0	-15.2
				15	0	17.6	17.9	33.0	-15.1
3.0	19185	1908.5	16QAM	1	0	18.9	19.3	33.0	-13.8
				1	7	19.0	19.3	33.0	-13.7
				1	14	18.8	19.2	33.0	-13.9
				8	0	18.1	18.4	33.0	-14.6
				8	4	17.9	18.3	33.0	-14.7
				8	7	17.9	18.3	33.0	-14.7
				15	0	17.8	18.2	33.0	-14.8

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	18615	1851.5	64QAM	1	0	18.0	18.3	33.0	-14.7
				1	7	**18.0**	**18.4**	33.0	-14.6
				1	14	17.9	18.3	33.0	-14.8
				8	0	16.7	17.1	33.0	-15.9
				8	4	16.8	17.2	33.0	-15.9
				8	7	16.7	17.1	33.0	-16.0
				15	0	16.7	17.1	33.0	-15.9
3.0	18900	1880.0	64QAM	1	0	17.9	18.3	33.0	-14.8
				1	7	17.9	18.3	33.0	-14.7
				1	14	17.8	18.2	33.0	-14.8
				8	0	16.7	17.1	33.0	-15.9
				8	4	16.7	17.1	33.0	-15.9
				8	7	16.7	17.1	33.0	-15.9
				15	0	16.7	17.1	33.0	-15.9
3.0	19185	1908.5	64QAM	1	0	17.8	18.1	33.0	-14.9
				1	7	17.9	18.3	33.0	-14.7
				1	14	17.8	18.1	33.0	-14.9
				8	0	17.1	17.4	33.0	-15.6
				8	4	17.1	17.4	33.0	-15.6
				8	7	17.0	17.4	33.0	-15.6
				15	0	17.0	17.4	33.0	-15.7

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OUTPUT POWER FOR LTE BAND 2 (5.0 MHz)

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	12	19.9	20.2	33.0	-12.8
				1	24	19.8	20.2	33.0	-12.8
				12	0	18.9	19.2	33.0	-13.8
				12	6	18.8	19.2	33.0	-13.8
				12	11	18.8	19.2	33.0	-13.8
				25	0	18.9	19.2	33.0	-13.8
5.0	18900	1880.0	QPSK	1	0	19.6	20.0	33.0	-13.0
				1	12	19.6	20.0	33.0	-13.0
				1	24	19.6	20.0	33.0	-13.0
				12	0	18.7	19.0	33.0	-14.0
				12	6	18.7	19.0	33.0	-14.0
				12	11	18.6	19.0	33.0	-14.0
				25	0	18.7	19.1	33.0	-13.9
5.0	19175	1907.5	QPSK	1	0	**19.9**	**20.3**	33.0	-12.7
				1	12	19.9	20.2	33.0	-12.8
				1	24	19.8	20.2	33.0	-12.8
				12	0	18.9	19.2	33.0	-13.8
				12	6	18.9	19.2	33.0	-13.8
				12	11	18.8	19.2	33.0	-13.8
				25	0	18.9	19.3	33.0	-13.8

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	16QAM	1	0	19.0	19.4	33.0	-13.6
				1	12	18.9	19.3	33.0	-13.7
				1	24	18.9	19.3	33.0	-13.7
				12	0	17.9	18.3	33.0	-14.7
				12	6	17.8	18.2	33.0	-14.8
				12	11	17.8	18.1	33.0	-14.9
				25	0	17.7	18.0	33.0	-15.0
5.0	18900	1880.0	16QAM	1	0	**19.2**	**19.6**	33.0	-13.4
				1	12	19.2	19.5	33.0	-13.5
				1	24	19.2	19.5	33.0	-13.5
				12	0	17.9	18.2	33.0	-14.8
				12	6	17.7	18.1	33.0	-14.9
				12	11	17.7	18.1	33.0	-14.9
				25	0	17.6	18.0	33.0	-15.0
5.0	19175	1907.5	16QAM	1	0	19.1	19.5	33.0	-13.5
				1	12	19.1	19.5	33.0	-13.6
				1	24	19.1	19.5	33.0	-13.6
				12	0	18.1	18.4	33.0	-14.6
				12	6	17.9	18.3	33.0	-14.7
				12	11	17.9	18.3	33.0	-14.7
				25	0	17.9	18.2	33.0	-14.8

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	18625	1852.5	64QAM	1	0	17.9	18.3	33.0	-14.7
				1	12	17.9	18.3	33.0	-14.8
				1	24	17.9	18.3	33.0	-14.8
				12	0	16.7	17.1	33.0	-15.9
				12	6	16.8	17.1	33.0	-15.9
				12	11	16.7	17.0	33.0	-16.0
				25	0	16.7	17.0	33.0	-16.0
5.0	18900	1880.0	64QAM	1	0	18.2	18.5	33.0	-14.5
				1	12	18.2	18.6	33.0	-14.4
				1	24	18.2	18.6	33.0	-14.4
				12	0	16.9	17.3	33.0	-15.7
				12	6	16.8	17.2	33.0	-15.8
				12	11	16.9	17.3	33.0	-15.8
				25	0	16.8	17.2	33.0	-15.8
5.0	19175	1907.5	64QAM	1	0	**18.4**	**18.8**	33.0	-14.2
				1	12	18.3	18.7	33.0	-14.3
				1	24	18.3	18.6	33.0	-14.4
				12	0	17.1	17.5	33.0	-15.5
				12	6	17.2	17.5	33.0	-15.5
				12	11	17.1	17.5	33.0	-15.5
				25	0	17.1	17.5	33.0	-15.5

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OUTPUT POWER FOR LTE BAND 2 (10.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	24	19.8	20.1	33.0	-12.9
				1	49	19.7	20.1	33.0	-12.9
				25	0	18.9	19.2	33.0	-13.8
				25	12	18.9	19.2	33.0	-13.8
				25	24	18.8	19.2	33.0	-13.8
				50	0	18.8	19.2	33.0	-13.8
10.0	18900	1880.0	QPSK	1	0	19.7	20.1	33.0	-13.0
				1	24	19.7	20.1	33.0	-13.0
				1	49	19.6	20.0	33.0	-13.0
				25	0	18.7	19.1	33.0	-13.9
				25	12	18.7	19.1	33.0	-13.9
				25	24	18.7	19.0	33.0	-14.0
				50	0	18.7	19.1	33.0	-13.9
10.0	19150	1905.0	QPSK	1	0	**19.9**	**20.3**	33.0	-12.8
				1	24	19.8	20.2	33.0	-12.8
				1	49	19.8	20.1	33.0	-12.9
				25	0	18.9	19.3	33.0	-13.7
				25	12	18.9	19.3	33.0	-13.7
				25	24	18.9	19.2	33.0	-13.8
				50	0	19.0	19.3	33.0	-13.7

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	16QAM	1	0	18.9	19.3	33.0	-13.7
				1	24	18.8	19.2	33.0	-13.8
				1	49	18.7	19.1	33.0	-13.9
				25	0	18.0	18.3	33.0	-14.7
				25	12	17.9	18.2	33.0	-14.8
				25	24	17.7	18.1	33.0	-14.9
				50	0	17.8	18.1	33.0	-14.9
10.0	18900	1880.0	16QAM	1	0	**19.1**	**19.5**	33.0	-13.5
				1	24	19.0	19.4	33.0	-13.6
				1	49	19.0	19.4	33.0	-13.6
				25	0	17.7	18.1	33.0	-15.0
				25	12	17.6	18.0	33.0	-15.0
				25	24	17.6	17.9	33.0	-15.1
				50	0	17.6	18.0	33.0	-15.1
10.0	19150	1905.0	16QAM	1	0	19.0	19.4	33.0	-13.6
				1	24	18.9	19.3	33.0	-13.8
				1	49	18.8	19.2	33.0	-13.8
				25	0	18.0	18.4	33.0	-14.6
				25	12	17.9	18.3	33.0	-14.7
				25	24	17.9	18.2	33.0	-14.8
				50	0	17.9	18.2	33.0	-14.8

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	18650	1855.0	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	24	18.0	18.4	33.0	-14.6
				1	49	17.9	18.3	33.0	-14.7
				25	0	16.9	17.3	33.0	-15.7
				25	12	16.9	17.2	33.0	-15.8
				25	24	16.8	17.2	33.0	-15.8
				50	0	16.9	17.3	33.0	-15.8
10.0	18900	1880.0	64QAM	1	0	18.0	18.4	33.0	-14.6
				1	24	17.9	18.3	33.0	-14.7
				1	49	18.0	18.3	33.0	-14.7
				25	0	17.0	17.4	33.0	-15.6
				25	12	17.0	17.3	33.0	-15.7
				25	24	16.9	17.3	33.0	-15.8
				50	0	16.9	17.3	33.0	-15.7
10.0	19150	1905.0	64QAM	1	0	**18.1**	**18.5**	33.0	-14.5
				1	24	18.0	18.4	33.0	-14.6
				1	49	18.0	18.3	33.0	-14.7
				25	0	17.3	17.7	33.0	-15.3
				25	12	17.3	17.6	33.0	-15.4
				25	24	17.2	17.6	33.0	-15.4
				50	0	17.3	17.6	33.0	-15.4

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OUTPUT POWER FOR LTE BAND 2 (15.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	QPSK	1	0	**20.0**	**20.3**	33.0	-12.7
				1	37	19.7	20.1	33.0	-12.9
				1	74	19.7	20.0	33.0	-13.0
				36	0	18.8	19.2	33.0	-13.8
				36	16	18.8	19.1	33.0	-13.9
				36	35	18.7	19.0	33.0	-14.0
				75	0	18.7	19.1	33.0	-13.9
15.0	18900	1880.0	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	37	19.6	20.0	33.0	-13.0
				1	74	19.6	20.0	33.0	-13.0
				36	0	18.7	19.0	33.0	-14.0
				36	16	18.6	19.0	33.0	-14.0
				36	35	18.6	19.0	33.0	-14.0
				75	0	18.6	19.0	33.0	-14.0
15.0	19125	1902.5	QPSK	1	0	19.9	20.3	33.0	-12.7
				1	37	19.7	20.1	33.0	-12.9
				1	74	19.7	20.1	33.0	-12.9
				36	0	18.9	19.3	33.0	-13.7
				36	16	18.9	19.3	33.0	-13.8
				36	35	18.9	19.3	33.0	-13.8
				75	0	18.9	19.3	33.0	-13.7

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	16-QAM	1	0	**19.4**	**19.7**	33.0	-13.3
				1	37	19.1	19.5	33.0	-13.5
				1	74	19.1	19.4	33.0	-13.6
				36	0	17.8	18.2	33.0	-14.8
				36	16	17.7	18.1	33.0	-14.9
				36	35	17.6	18.0	33.0	-15.1
				75	0	17.6	18.0	33.0	-15.0
15.0	18900	1880.0	16-QAM	1	0	19.1	19.5	33.0	-13.5
				1	37	19.0	19.3	33.0	-13.7
				1	74	18.9	19.3	33.0	-13.7
				36	0	17.8	18.1	33.0	-14.9
				36	16	17.7	18.1	33.0	-14.9
				36	35	17.6	18.0	33.0	-15.0
				75	0	17.6	18.0	33.0	-15.0
15.0	19125	1902.5	16-QAM	1	0	19.0	19.4	33.0	-13.6
				1	37	18.8	19.2	33.0	-13.8
				1	74	18.8	19.2	33.0	-13.8
				36	0	18.0	18.4	33.0	-14.7
				36	16	17.9	18.3	33.0	-14.7
				36	35	17.9	18.2	33.0	-14.8
				75	0	17.9	18.3	33.0	-14.7

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	18675	1857.5	64QAM	1	0	18.2	18.6	33.0	-14.4
				1	37	18.1	18.5	33.0	-14.5
				1	74	17.9	18.3	33.0	-14.7
				36	0	17.0	17.4	33.0	-15.7
				36	16	16.9	17.3	33.0	-15.7
				36	35	16.8	17.2	33.0	-15.8
				75	0	16.8	17.2	33.0	-15.8
15.0	18900	1880.0	64QAM	1	0	18.3	18.6	33.0	-14.4
				1	37	18.2	18.5	33.0	-14.5
				1	74	18.1	18.5	33.0	-14.5
				36	0	16.9	17.2	33.0	-15.8
				36	16	16.8	17.1	33.0	-15.9
				36	35	16.9	17.2	33.0	-15.8
				75	0	17.0	17.3	33.0	-15.7
15.0	19125	1902.5	64QAM	1	0	**18.5**	**18.9**	33.0	-14.1
				1	37	18.5	18.8	33.0	-14.2
				1	74	18.4	18.8	33.0	-14.2
				36	0	17.5	17.8	33.0	-15.2
				36	16	17.5	17.8	33.0	-15.2
				36	35	17.4	17.8	33.0	-15.2
				75	0	17.4	17.7	33.0	-15.3

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OUTPUT POWER FOR LTE BAND 2 (20.0 MHz)

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	18700	1860.0	QPSK	1	0	**20.0**	**20.4**	33.0	-12.7
				1	49	19.7	20.1	33.0	-12.9
				1	99	19.6	20.0	33.0	-13.0
				50	0	18.9	19.3	33.0	-13.7
				50	24	18.8	19.2	33.0	-13.8
				50	49	18.8	19.1	33.0	-13.9
				100	0	18.9	19.2	33.0	-13.8
20.0	18900	1880.0	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	49	19.7	20.0	33.0	-13.0
				1	99	19.6	20.0	33.0	-13.0
				50	0	18.8	19.2	33.0	-13.8
				50	24	18.7	19.1	33.0	-13.9
				50	49	18.7	19.1	33.0	-14.0
				100	0	18.8	19.1	33.0	-13.9
20.0	19100	1900.0	QPSK	1	0	20.0	20.3	33.0	-12.7
				1	49	19.9	20.2	33.0	-12.8
				1	99	19.9	20.2	33.0	-12.8
				50	0	19.1	19.5	33.0	-13.6
				50	24	19.0	19.4	33.0	-13.6
				50	49	19.0	19.3	33.0	-13.7
				100	0	19.0	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	18700	1860.0	16-QAM	1	0	19.4	19.8	33.0	-13.2
				1	49	19.2	19.6	33.0	-13.5
				1	99	19.0	19.4	33.0	-13.6
				50	0	17.9	18.3	33.0	-14.7
				50	24	17.8	18.2	33.0	-14.8
				50	49	17.7	18.1	33.0	-14.9
				100	0	17.8	18.2	33.0	-14.8
20.0	18900	1880.0	16-QAM	1	0	19.3	19.7	33.0	-13.3
				1	49	19.2	19.6	33.0	-13.4
				1	99	19.1	19.4	33.0	-13.6
				50	0	17.9	18.2	33.0	-14.8
				50	24	17.7	18.1	33.0	-14.9
				50	49	17.7	18.1	33.0	-14.9
				100	0	17.7	18.1	33.0	-14.9
20.0	19100	1900.0	16-QAM	1	0	19.4	19.8	33.0	-13.2
				1	49	**19.5**	**19.9**	33.0	-13.1
				1	99	19.5	19.8	33.0	-13.2
				50	0	18.1	18.5	33.0	-14.5
				50	24	18.1	18.4	33.0	-14.6
				50	49	18.0	18.4	33.0	-14.6
				100	0	18.1	18.5	33.0	-14.5

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	18700	1860.0	64QAM	1	0	**18.2**	**18.6**	33.0	-14.4
				1	49	18.2	18.6	33.0	-14.4
				1	99	18.2	18.6	33.0	-14.5
				50	0	17.0	17.4	33.0	-15.7
				50	24	17.0	17.3	33.0	-15.7
				50	49	16.9	17.3	33.0	-15.7
				100	0	16.9	17.3	33.0	-15.8
20.0	18900	1880.0	64QAM	1	0	18.2	18.6	33.0	-14.4
				1	49	18.2	18.6	33.0	-14.5
				1	99	18.1	18.5	33.0	-14.5
				50	0	16.9	17.3	33.0	-15.7
				50	24	17.0	17.4	33.0	-15.7
				50	49	16.9	17.3	33.0	-15.7
				100	0	17.0	17.3	33.0	-15.7
20.0	19100	1900.0	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	49	18.1	18.5	33.0	-14.6
				1	99	18.1	18.5	33.0	-14.5
				50	0	17.0	17.4	33.0	-15.6
				50	24	17.0	17.4	33.0	-15.7
				50	49	16.9	17.2	33.0	-15.8
				100	0	16.9	17.2	33.0	-15.8

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7.2.2. LTE BAND 4

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 4 (1.4MHz)

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	QPSK	1	0	20.7	20.2	30.0	-9.8
				1	2	20.8	20.2	30.0	-9.8
				1	5	20.7	20.2	30.0	-9.8
				3	0	20.7	20.2	30.0	-9.8
				3	1	20.8	20.2	30.0	-9.8
				3	2	20.8	20.2	30.0	-9.8
				6	0	19.8	19.2	30.0	-10.8
1.4	20175	1732.5	QPSK	1	0	20.8	20.3	30.0	-9.7
				1	2	20.8	20.2	30.0	-9.8
				1	5	**20.8**	**20.3**	30.0	-9.7
				3	0	20.8	20.2	30.0	-9.8
				3	1	20.8	20.2	30.0	-9.8
				3	2	20.8	20.2	30.0	-9.8
				6	0	19.9	19.3	30.0	-10.7
1.4	20393	1754.3	QPSK	1	0	20.6	20.1	30.0	-9.9
				1	2	20.7	20.1	30.0	-9.9
				1	5	20.7	20.1	30.0	-9.9
				3	0	20.6	20.1	30.0	-9.9
				3	1	20.7	20.1	30.0	-9.9
				3	2	20.7	20.1	30.0	-9.9
				6	0	19.6	19.0	30.0	-11.0

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	16QAM	1	0	19.8	19.2	30.0	-10.8
				1	2	19.8	19.3	30.0	-10.7
				1	5	19.8	19.2	30.0	-10.8
				3	0	19.9	19.3	30.0	-10.7
				3	1	20.0	19.4	30.0	-10.6
				3	2	20.0	19.4	30.0	-10.6
				6	0	18.9	18.4	30.0	-11.6
1.4	20175	1732.5	16QAM	1	0	**20.3**	**19.8**	30.0	-10.2
				1	2	20.3	19.7	30.0	-10.3
				1	5	20.3	19.7	30.0	-10.3
				3	0	20.1	19.5	30.0	-10.5
				3	1	20.1	19.6	30.0	-10.4
				3	2	20.1	19.6	30.0	-10.4
				6	0	18.8	18.2	30.0	-11.8
1.4	20393	1754.3	16QAM	1	0	19.8	19.2	30.0	-10.8
				1	2	19.8	19.3	30.0	-10.7
				1	5	19.8	19.2	30.0	-10.8
				3	0	19.7	19.2	30.0	-10.8
				3	1	19.8	19.2	30.0	-10.8
				3	2	19.8	19.2	30.0	-10.8
				6	0	18.8	18.2	30.0	-11.8

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Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	19957	1710.7	64QAM	1	0	19.0	18.5	30.0	-11.5
				1	2	19.1	18.5	30.0	-11.5
				1	5	19.1	18.5	30.0	-11.5
				3	0	18.9	18.4	30.0	-11.6
				3	1	19.0	18.4	30.0	-11.6
				3	2	19.0	18.5	30.0	-11.6
				6	0	18.1	17.5	30.0	-12.5
1.4	20175	1732.5	64QAM	1	0	18.6	18.0	30.0	-12.0
				1	2	18.7	18.1	30.0	-11.9
				1	5	18.6	18.0	30.0	-12.0
				3	0	18.9	18.3	30.0	-11.7
				3	1	19.0	18.4	30.0	-11.6
				3	2	19.0	18.4	30.0	-11.6
				6	0	18.1	17.5	30.0	-12.5
1.4	20393	1754.3	64QAM	1	0	19.1	18.5	30.0	-11.5
				1	2	19.2	18.6	30.0	-11.4
				1	5	19.0	18.5	30.0	-11.5
				3	0	19.2	18.6	30.0	-11.4
				3	1	19.2	18.6	30.0	-11.4
				3	2	**19.2**	**18.7**	30.0	-11.3
				6	0	17.8	17.2	30.0	-12.8

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OUTPUT POWER FOR LTE BAND 4 (3.0 MHz)

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	QPSK	1	0	20.6	20.1	30.0	-9.9
				1	7	20.7	20.1	30.0	-9.9
				1	14	20.6	20.1	30.0	-9.9
				8	0	19.7	19.1	30.0	-10.9
				8	4	19.6	19.1	30.0	-10.9
				8	7	19.6	19.1	30.0	-10.9
				15	0	19.6	19.1	30.0	-10.9
3.0	20175	1732.5	QPSK	1	0	20.6	20.0	30.0	-10.0
				1	7	**20.8**	**20.3**	30.0	-9.7
				1	14	20.8	20.2	30.0	-9.8
				8	0	19.7	19.2	30.0	-10.8
				8	4	19.8	19.2	30.0	-10.8
				8	7	19.7	19.2	30.0	-10.8
				15	0	19.7	19.2	30.0	-10.8
3.0	20385	1753.5	QPSK	1	0	20.5	19.9	30.0	-10.1
				1	7	20.6	20.0	30.0	-10.0
				1	14	20.5	19.9	30.0	-10.1
				8	0	19.5	19.0	30.0	-11.0
				8	4	19.5	19.0	30.0	-11.0
				8	7	19.5	19.0	30.0	-11.0
				15	0	19.5	19.0	30.0	-11.0

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	16QAM	1	0	19.7	19.2	30.0	-10.8
				1	7	19.8	19.2	30.0	-10.8
				1	14	19.7	19.1	30.0	-10.9
				8	0	18.8	18.2	30.0	-11.8
				8	4	18.7	18.1	30.0	-11.9
				8	7	18.7	18.1	30.0	-11.9
				15	0	18.5	17.9	30.0	-12.1
3.0	20175	1732.5	16QAM	1	0	20.2	19.6	30.0	-10.4
				1	7	**20.3**	**19.8**	30.0	-10.2
				1	14	20.3	19.7	30.0	-10.3
				8	0	18.7	18.1	30.0	-11.9
				8	4	18.7	18.1	30.0	-11.9
				8	7	18.7	18.1	30.0	-11.9
				15	0	18.8	18.2	30.0	-11.8
3.0	20385	1753.5	16QAM	1	0	19.5	18.9	30.0	-11.1
				1	7	19.5	19.0	30.0	-11.0
				1	14	19.4	18.9	30.0	-11.1
				8	0	18.6	18.1	30.0	-11.9
				8	4	18.6	18.1	30.0	-11.9
				8	7	18.6	18.1	30.0	-11.9
				15	0	18.5	18.0	30.0	-12.0

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Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	19965	1711.5	64QAM	1	0	19.0	18.4	30.0	-11.6
				1	7	**19.1**	**18.5**	30.0	-11.5
				1	14	18.9	18.3	30.0	-11.7
				8	0	17.8	17.2	30.0	-12.8
				8	4	17.8	17.2	30.0	-12.8
				8	7	17.8	17.2	30.0	-12.8
				15	0	17.8	17.2	30.0	-12.8
3.0	20175	1732.5	64QAM	1	0	18.9	18.3	30.0	-11.7
				1	7	19.0	18.4	30.0	-11.6
				1	14	19.0	18.4	30.0	-11.6
				8	0	18.9	18.3	30.0	-11.7
				8	4	18.9	18.3	30.0	-11.7
				8	7	18.9	18.3	30.0	-11.7
				15	0	17.9	17.3	30.0	-12.7
3.0	20385	1753.5	64QAM	1	0	18.9	18.3	30.0	-11.7
				1	7	19.0	18.4	30.0	-11.6
				1	14	18.8	18.3	30.0	-11.7
				8	0	17.7	17.2	30.0	-12.9
				8	4	17.7	17.2	30.0	-12.8
				8	7	17.7	17.1	30.0	-12.9
				15	0	17.7	17.1	30.0	-12.9

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7.2.3. LTE BAND 5

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 5 (1.4MHz)

Antenna Gain (dBi)	-3.17

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	QPSK	1	0	23.1	17.8	38.45	-20.7
				1	2	23.2	17.8	38.45	-20.6
				1	5	23.1	17.8	38.45	-20.7
				3	0	23.1	17.8	38.45	-20.7
				3	1	23.2	17.9	38.45	-20.6
				3	2	23.2	17.9	38.45	-20.6
				6	0	22.1	16.8	38.45	-21.7
1.4	20525	836.5	QPSK	1	0	23.1	17.8	38.45	-20.6
				1	2	23.2	17.8	38.45	-20.6
				1	5	23.1	17.8	38.45	-20.7
				3	0	23.1	17.7	38.45	-20.7
				3	1	23.1	17.8	38.45	-20.7
				3	2	23.1	17.8	38.45	-20.7
				6	0	22.1	16.7	38.45	-21.7
1.4	20643	848.3	QPSK	1	0	23.2	17.8	38.45	-20.6
				1	2	23.0	17.7	38.45	-20.8
				1	5	23.1	17.8	38.45	-20.7
				3	0	**23.3**	**18.0**	38.45	-20.5
				3	1	23.2	17.8	38.45	-20.6
				3	2	23.1	17.8	38.45	-20.7
				6	0	22.2	16.9	38.45	-21.6

Antenna Gain (dBi)	-3.17

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	16QAM	1	0	22.2	16.8	38.45	-21.6
				1	2	22.2	16.9	38.45	-21.5
				1	5	22.2	16.8	38.45	-21.6
				3	0	22.3	17.0	38.45	-21.5
				3	1	22.4	17.0	38.45	-21.4
				3	2	**22.4**	**17.0**	38.45	-21.4
				6	0	21.3	16.0	38.45	-22.5
1.4	20525	836.5	16QAM	1	0	22.1	16.8	38.45	-21.6
				1	2	22.2	16.9	38.45	-21.6
				1	5	22.1	16.8	38.45	-21.7
				3	0	22.0	16.6	38.45	-21.8
				3	1	22.0	16.7	38.45	-21.8
				3	2	22.0	16.6	38.45	-21.8
				6	0	21.3	15.9	38.45	-22.5
1.4	20643	848.3	16QAM	1	0	22.0	16.6	38.45	-21.8
				1	2	22.2	16.9	38.45	-21.6
				1	5	22.1	16.8	38.45	-21.7
				3	0	22.1	16.8	38.45	-21.6
				3	1	22.1	16.8	38.45	-21.6
				3	2	22.1	16.8	38.45	-21.7
				6	0	21.0	15.6	38.45	-22.8

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Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	20407	824.7	64QAM	1	0	21.5	16.2	38.45	-22.3
				1	2	**21.5**	**16.2**	38.45	-22.2
				1	5	21.5	16.2	38.45	-22.3
				3	0	21.4	16.1	38.45	-22.4
				3	1	21.5	16.2	38.45	-22.3
				3	2	21.5	16.2	38.45	-22.3
				6	0	20.6	15.3	38.45	-23.2
1.4	20525	836.5	64QAM	1	0	21.1	15.8	38.45	-22.7
				1	2	21.2	15.9	38.45	-22.6
				1	5	21.1	15.8	38.45	-22.7
				3	0	21.4	16.0	38.45	-22.4
				3	1	21.4	16.1	38.45	-22.4
				3	2	21.4	16.1	38.45	-22.3
				6	0	20.6	15.3	38.45	-23.2
1.4	20643	848.3	64QAM	1	0	21.3	16.0	38.45	-22.5
				1	2	21.3	16.0	38.45	-22.5
				1	5	21.1	15.8	38.45	-22.7
				3	0	21.3	16.0	38.45	-22.5
				3	1	21.3	16.0	38.45	-22.4
				3	2	21.1	15.8	38.45	-22.7
				6	0	20.1	14.8	38.45	-23.6

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OUTPUT POWER FOR LTE BAND 5 (3.0 MHz)

Antenna Gain (dBi)	-3.17

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	QPSK	1	0	23.0	17.7	38.45	-20.7
				1	7	23.1	17.8	38.45	-20.7
				1	14	22.9	17.6	38.45	-20.8
				8	0	22.0	16.7	38.45	-21.7
				8	4	22.0	16.7	38.45	-21.7
				8	7	22.0	16.7	38.45	-21.7
				15	0	22.0	16.6	38.45	-21.8
3.0	20525	836.5	QPSK	1	0	23.2	17.9	38.45	-20.5
				1	7	23.2	17.9	38.45	-20.5
				1	14	**23.3**	**17.9**	38.45	-20.5
				8	0	22.3	16.9	38.45	-21.5
				8	4	22.2	16.9	38.45	-21.5
				8	7	22.2	16.9	38.45	-21.6
				15	0	22.2	16.9	38.45	-21.5
3.0	20635	847.5	QPSK	1	0	23.1	17.8	38.45	-20.6
				1	7	23.1	17.8	38.45	-20.7
				1	14	23.2	17.9	38.45	-20.5
				8	0	22.2	16.9	38.45	-21.6
				8	4	22.2	16.8	38.45	-21.6
				8	7	21.9	16.6	38.45	-21.8
				15	0	22.0	16.7	38.45	-21.8

Antenna Gain (dBi)	-3.17

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	16QAM	1	0	22.1	16.8	38.45	-21.7
				1	7	22.1	16.8	38.45	-21.6
				1	14	22.0	16.7	38.45	-21.8
				8	0	21.2	15.9	38.45	-22.5
				8	4	21.2	15.9	38.45	-22.6
				8	7	21.2	15.9	38.45	-22.6
				15	0	20.9	15.6	38.45	-22.8
3.0	20525	836.5	16QAM	1	0	**22.5**	**17.2**	38.45	-21.2
				1	7	22.5	17.1	38.45	-21.3
				1	14	22.5	17.2	38.45	-21.3
				8	0	21.2	15.9	38.45	-22.6
				8	4	21.2	15.8	38.45	-22.6
				8	7	21.2	15.8	38.45	-22.6
				15	0	21.3	15.9	38.45	-22.5
3.0	20635	847.5	16QAM	1	0	22.1	16.8	38.45	-21.6
				1	7	22.0	16.7	38.45	-21.7
				1	14	22.1	16.8	38.45	-21.7
				8	0	21.3	16.0	38.45	-22.4
				8	4	21.3	15.9	38.45	-22.5
				8	7	21.1	15.7	38.45	-22.7
				15	0	21.1	15.8	38.45	-22.7

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Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	20415	825.5	64QAM	1	0	21.3	16.0	38.45	-22.4
				1	7	21.4	16.1	38.45	-22.4
				1	14	21.2	15.9	38.45	-22.5
				8	0	20.3	14.9	38.45	-23.5
				8	4	20.2	14.9	38.45	-23.6
				8	7	20.2	14.9	38.45	-23.6
				15	0	20.3	14.9	38.45	-23.5
3.0	20525	836.5	64QAM	1	0	21.3	16.0	38.45	-22.5
				1	7	**21.4**	**16.1**	38.45	-22.4
				1	14	21.3	16.0	38.45	-22.5
				8	0	20.2	14.9	38.45	-23.6
				8	4	20.2	14.8	38.45	-23.6
				8	7	20.2	14.8	38.45	-23.6
				15	0	20.1	14.8	38.45	-23.7
3.0	20635	847.5	64QAM	1	0	20.9	15.6	38.45	-22.9
				1	7	21.0	15.7	38.45	-22.8
				1	14	20.6	15.3	38.45	-23.2
				8	0	20.2	14.9	38.45	-23.6
				8	4	20.2	14.9	38.45	-23.6
				8	7	20.0	14.7	38.45	-23.8
				15	0	20.1	14.8	38.45	-23.7

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OUTPUT POWER FOR LTE BAND 5 (5.0 MHz)

Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	QPSK	1	0	23.1	17.8	38.45	-20.7
				1	12	23.0	17.7	38.45	-20.8
				1	24	23.0	17.7	38.45	-20.8
				12	0	22.0	16.7	38.45	-21.8
				12	6	22.0	16.7	38.45	-21.7
				12	11	22.0	16.6	38.45	-21.8
				25	0	22.0	16.6	38.45	-21.8
5.0	20525	836.5	QPSK	1	0	23.2	17.9	38.45	-20.5
				1	12	23.2	17.9	38.45	-20.5
				1	24	23.2	17.9	38.45	-20.6
				12	0	22.1	16.8	38.45	-21.6
				12	6	22.2	16.9	38.45	-21.5
				12	11	22.2	16.8	38.45	-21.6
				25	0	22.3	16.9	38.45	-21.5
5.0	20625	846.5	QPSK	1	0	**23.3**	**18.0**	38.45	-20.5
				1	12	23.2	17.9	38.45	-20.6
				1	24	23.2	17.9	38.45	-20.6
				12	0	22.2	16.9	38.45	-21.6
				12	6	22.2	16.9	38.45	-21.6
				12	11	22.0	16.7	38.45	-21.7
				25	0	22.2	16.9	38.45	-21.5

Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	16QAM	1	0	22.2	16.9	38.45	-21.6
				1	12	22.1	16.8	38.45	-21.7
				1	24	22.1	16.8	38.45	-21.7
				12	0	21.1	15.8	38.45	-22.7
				12	6	21.0	15.7	38.45	-22.7
				12	11	21.0	15.7	38.45	-22.8
				25	0	21.0	15.6	38.45	-22.8
5.0	20525	836.5	16QAM	1	0	22.2	16.9	38.45	-21.5
				1	12	22.3	16.9	38.45	-21.5
				1	24	22.2	16.9	38.45	-21.5
				12	0	21.3	16.0	38.45	-22.4
				12	6	21.4	16.0	38.45	-22.4
				12	11	21.4	16.0	38.45	-22.4
				25	0	21.3	16.0	38.45	-22.5
5.0	20625	846.5	16QAM	1	0	22.3	17.0	38.45	-21.5
				1	12	**22.4**	**17.1**	38.45	-21.4
				1	24	22.2	16.8	38.45	-21.6
				12	0	21.3	16.0	38.45	-22.4
				12	6	21.3	16.0	38.45	-22.4
				12	11	21.1	15.8	38.45	-22.6
				25	0	21.2	15.9	38.45	-22.6

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Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	20425	826.5	64QAM	1	0	21.4	16.1	38.45	-22.3
				1	12	21.4	16.1	38.45	-22.4
				1	24	21.3	16.0	38.45	-22.4
				12	0	20.3	15.0	38.45	-23.5
				12	6	20.2	14.9	38.45	-23.6
				12	11	20.2	14.9	38.45	-23.6
				25	0	20.3	15.0	38.45	-23.5
5.0	20525	836.5	64QAM	1	0	21.4	16.0	38.45	-22.4
				1	12	21.3	16.0	38.45	-22.5
				1	24	21.3	16.0	38.45	-22.5
				12	0	20.2	14.9	38.45	-23.6
				12	6	20.2	14.9	38.45	-23.6
				12	11	20.1	14.8	38.45	-23.6
				25	0	20.1	14.8	38.45	-23.7
5.0	20625	846.5	64QAM	1	0	**21.5**	**16.2**	38.45	-22.3
				1	12	21.5	16.1	38.45	-22.3
				1	24	21.1	15.8	38.45	-22.6
				12	0	20.2	14.8	38.45	-23.6
				12	6	20.2	14.9	38.45	-23.6
				12	11	20.2	14.8	38.45	-23.6
				25	0	20.2	14.8	38.45	-23.6

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OUTPUT POWER FOR LTE BAND 5 (10.0 MHz)

Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	QPSK	1	0	23.1	17.8	38.45	-20.7
				1	24	22.9	17.6	38.45	-20.8
				1	49	23.1	17.7	38.45	-20.7
				25	0	22.0	16.7	38.45	-21.8
				25	12	22.0	16.6	38.45	-21.8
				25	24	22.0	16.7	38.45	-21.7
				50	0	22.0	16.7	38.45	-21.8
10.0	20525	836.5	QPSK	1	0	23.3	18.0	38.45	-20.5
				1	24	**23.3**	**18.0**	38.45	-20.4
				1	49	23.2	17.8	38.45	-20.6
				25	0	22.2	16.9	38.45	-21.6
				25	12	22.2	16.9	38.45	-21.5
				25	24	22.2	16.9	38.45	-21.5
				50	0	22.3	16.9	38.45	-21.5
10.0	20600	844.0	QPSK	1	0	23.2	17.9	38.45	-20.6
				1	24	23.2	17.9	38.45	-20.6
				1	49	23.3	17.9	38.45	-20.5
				25	0	22.3	17.0	38.45	-21.4
				25	12	22.2	16.9	38.45	-21.5
				25	24	22.2	16.9	38.45	-21.6
				50	0	22.3	17.0	38.45	-21.5

Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	16QAM	1	0	22.2	16.8	38.45	-21.6
				1	24	22.0	16.6	38.45	-21.8
				1	49	22.1	16.8	38.45	-21.6
				25	0	21.1	15.8	38.45	-22.7
				25	12	21.1	15.7	38.45	-22.7
				25	24	21.1	15.8	38.45	-22.7
				50	0	21.0	15.7	38.45	-22.8
10.0	20525	836.5	16QAM	1	0	**22.4**	**17.1**	38.45	-21.3
				1	24	22.3	17.0	38.45	-21.5
				1	49	22.4	17.1	38.45	-21.4
				25	0	21.2	15.9	38.45	-22.5
				25	12	21.3	15.9	38.45	-22.5
				25	24	21.2	15.9	38.45	-22.5
				50	0	21.3	15.9	38.45	-22.5
10.0	20600	844.0	16QAM	1	0	22.3	16.9	38.45	-21.5
				1	24	22.2	16.9	38.45	-21.6
				1	49	22.2	16.9	38.45	-21.5
				25	0	21.3	16.0	38.45	-22.4
				25	12	21.3	16.0	38.45	-22.5
				25	24	21.2	15.9	38.45	-22.5
				50	0	21.3	15.9	38.45	-22.5

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Antenna Gain (dBi)	-3.17								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	20450	829.0	64QAM	1	0	**21.5**	**16.1**	38.45	-22.3
				1	24	21.4	16.1	38.45	-22.4
				1	49	21.4	16.1	38.45	-22.4
				25	0	20.3	15.0	38.45	-23.5
				25	12	20.3	15.0	38.45	-23.5
				25	24	20.2	14.9	38.45	-23.5
				50	0	20.2	14.9	38.45	-23.5
10.0	20525	836.5	64QAM	1	0	20.9	15.6	38.45	-22.8
				1	24	21.0	15.7	38.45	-22.8
				1	49	21.0	15.7	38.45	-22.8
				25	0	20.3	15.0	38.45	-23.5
				25	12	20.3	14.9	38.45	-23.5
				25	24	20.2	14.9	38.45	-23.6
				50	0	20.3	14.9	38.45	-23.5
10.0	20600	844.0	64QAM	1	0	21.2	15.9	38.45	-22.6
				1	24	21.2	15.9	38.45	-22.6
				1	49	20.7	15.4	38.45	-23.1
				25	0	20.3	14.9	38.45	-23.5
				25	12	20.3	14.9	38.45	-23.5
				25	24	20.2	14.9	38.45	-23.6
				50	0	20.2	14.8	38.45	-23.6

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7.2.4. LTE BAND 7

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 7 (5.0 MHZ)

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	QPSK	1	0	19.2	19.3	33.0	-13.8
				1	12	19.5	19.5	33.0	-13.5
				1	24	**19.5**	**19.5**	33.0	-13.5
				12	0	18.3	18.3	33.0	-14.7
				12	6	18.5	18.5	33.0	-14.5
				12	11	18.5	18.5	33.0	-14.5
				25	0	18.5	18.6	33.0	-14.5
5.0	21100	2535.0	QPSK	1	0	19.2	19.2	33.0	-13.8
				1	12	19.2	19.3	33.0	-13.7
				1	24	19.3	19.3	33.0	-13.7
				12	0	18.1	18.1	33.0	-14.9
				12	6	18.1	18.1	33.0	-14.9
				12	11	18.0	18.1	33.0	-14.9
				25	0	18.1	18.1	33.0	-14.9
5.0	21425	2567.5	QPSK	1	0	19.3	19.3	33.0	-13.7
				1	12	19.2	19.3	33.0	-13.8
				1	24	19.3	19.3	33.0	-13.7
				12	0	18.1	18.1	33.0	-14.9
				12	6	18.1	18.1	33.0	-14.9
				12	11	18.1	18.1	33.0	-14.9
				25	0	18.1	18.1	33.0	-14.9

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	16QAM	1	0	18.4	18.5	33.0	-14.5
				1	12	18.6	18.6	33.0	-14.4
				1	24	18.5	18.6	33.0	-14.4
				12	0	17.2	17.3	33.0	-15.7
				12	6	17.6	17.6	33.0	-15.4
				12	11	17.6	17.6	33.0	-15.4
				25	0	17.4	17.5	33.0	-15.5
5.0	21100	2535.0	16QAM	1	0	**18.7**	**18.8**	33.0	-14.2
				1	12	18.6	18.6	33.0	-14.4
				1	24	18.5	18.6	33.0	-14.4
				12	0	17.2	17.2	33.0	-15.8
				12	6	17.2	17.3	33.0	-15.7
				12	11	17.2	17.2	33.0	-15.8
				25	0	17.1	17.1	33.0	-15.9
5.0	21425	2567.5	16QAM	1	0	18.3	18.3	33.0	-14.7
				1	12	18.2	18.3	33.0	-14.7
				1	24	18.2	18.3	33.0	-14.7
				12	0	17.2	17.2	33.0	-15.8
				12	6	17.2	17.2	33.0	-15.8
				12	11	17.1	17.2	33.0	-15.8
				25	0	17.1	17.1	33.0	-15.9

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Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	20775	2502.5	64QAM	1	0	17.8	17.8	33.0	-15.2
				1	12	17.9	18.0	33.0	-15.0
				1	24	**17.9**	**18.0**	33.0	-15.0
				12	0	16.6	16.6	33.0	-16.4
				12	6	16.5	16.6	33.0	-16.4
				12	11	16.5	16.5	33.0	-16.5
				25	0	16.5	16.5	33.0	-16.5
5.0	21100	2535.0	64QAM	1	0	17.4	17.5	33.0	-15.6
				1	12	17.4	17.5	33.0	-15.5
				1	24	17.4	17.5	33.0	-15.5
				12	0	16.3	16.3	33.0	-16.7
				12	6	16.3	16.3	33.0	-16.7
				12	11	16.3	16.3	33.0	-16.7
				25	0	16.2	16.3	33.0	-16.7
5.0	21425	2567.5	64QAM	1	0	17.6	17.6	33.0	-15.4
				1	12	17.6	17.6	33.0	-15.4
				1	24	17.5	17.6	33.0	-15.5
				12	0	16.4	16.4	33.0	-16.6
				12	6	16.4	16.4	33.0	-16.6
				12	11	16.4	16.4	33.0	-16.6
				25	0	16.4	16.5	33.0	-16.6

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OUTPUT POWER FOR LTE BAND 7 (10.0 MHZ)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	QPSK	1	0	19.2	19.3	33.0	-13.8
				1	24	19.4	19.4	33.0	-13.6
				1	49	19.4	19.4	33.0	-13.6
				25	0	18.5	18.6	33.0	-14.4
				25	12	18.5	18.5	33.0	-14.5
				25	24	18.5	18.5	33.0	-14.5
				50	0	18.5	18.5	33.0	-14.5
10.0	21100	2535.0	QPSK	1	0	19.3	19.3	33.0	-13.7
				1	24	19.1	19.1	33.0	-13.9
				1	49	19.0	19.1	33.0	-14.0
				25	0	18.2	18.2	33.0	-14.8
				25	12	18.0	18.1	33.0	-14.9
				25	24	18.0	18.1	33.0	-15.0
				50	0	18.1	18.1	33.0	-14.9
10.0	21400	2565.0	QPSK	1	0	19.4	19.4	33.0	-13.6
				1	24	19.3	19.4	33.0	-13.6
				1	49	**19.4**	**19.5**	33.0	-13.5
				25	0	18.1	18.2	33.0	-14.8
				25	12	18.1	18.2	33.0	-14.8
				25	24	18.1	18.1	33.0	-14.9
				50	0	18.1	18.1	33.0	-14.9

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	16QAM	1	0	18.3	18.4	33.0	-14.6
				1	24	18.5	18.5	33.0	-14.5
				1	49	18.4	18.5	33.0	-14.5
				25	0	17.5	17.6	33.0	-15.4
				25	12	17.5	17.5	33.0	-15.5
				25	24	17.5	17.5	33.0	-15.5
				50	0	17.4	17.4	33.0	-15.6
10.0	21100	2535.0	16QAM	1	0	**18.6**	**18.7**	33.0	-14.3
				1	24	18.4	18.5	33.0	-14.6
				1	49	18.3	18.4	33.0	-14.6
				25	0	17.2	17.3	33.0	-15.7
				25	12	17.1	17.1	33.0	-15.9
				25	24	17.0	17.1	33.0	-15.9
				50	0	17.1	17.1	33.0	-15.9
10.0	21400	2565.0	16QAM	1	0	18.1	18.2	33.0	-14.8
				1	24	18.0	18.1	33.0	-14.9
				1	49	18.0	18.0	33.0	-15.0
				25	0	17.1	17.2	33.0	-15.8
				25	12	17.1	17.2	33.0	-15.9
				25	24	17.1	17.1	33.0	-15.9
				50	0	17.1	17.1	33.0	-15.9

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Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	20800	2505.0	64QAM	1	0	17.5	17.6	33.0	-15.4
				1	24	17.7	17.8	33.0	-15.2
				1	49	17.7	17.8	33.0	-15.2
				25	0	16.7	16.8	33.0	-16.2
				25	12	16.9	16.9	33.0	-16.1
				25	24	16.9	17.0	33.0	-16.0
				50	0	16.8	16.9	33.0	-16.1
10.0	21100	2535.0	64QAM	1	0	**17.9**	**17.9**	33.0	-15.1
				1	24	17.8	17.8	33.0	-15.2
				1	49	17.7	17.8	33.0	-15.2
				25	0	16.6	16.7	33.0	-16.3
				25	12	16.6	16.7	33.0	-16.3
				25	24	16.6	16.7	33.0	-16.4
				50	0	16.6	16.6	33.0	-16.4
10.0	21400	2565.0	64QAM	1	0	17.8	17.9	33.0	-15.1
				1	24	17.8	17.9	33.0	-15.1
				1	49	17.8	17.8	33.0	-15.2
				25	0	16.8	16.8	33.0	-16.2
				25	12	16.8	16.8	33.0	-16.2
				25	24	16.7	16.8	33.0	-16.2
				50	0	16.7	16.8	33.0	-16.3

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OUTPUT POWER FOR LTE BAND 7 (15.0 MHZ)

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	QPSK	1	0	19.3	19.3	33.0	-13.7
				1	37	**19.4**	**19.5**	33.0	-13.5
				1	74	19.4	19.4	33.0	-13.6
				36	0	18.4	18.4	33.0	-14.6
				36	16	18.5	18.5	33.0	-14.5
				36	35	18.4	18.5	33.0	-14.5
				75	0	18.4	18.5	33.0	-14.5
15.0	21100	2535.0	QPSK	1	0	19.4	19.4	33.0	-13.6
				1	37	19.4	19.4	33.0	-13.6
				1	74	19.3	19.4	33.0	-13.6
				36	0	18.1	18.2	33.0	-14.8
				36	16	18.0	18.0	33.0	-15.0
				36	35	17.9	18.0	33.0	-15.1
				75	0	18.0	18.0	33.0	-15.0
15.0	21375	2562.5	QPSK	1	0	19.4	19.4	33.0	-13.6
				1	37	19.3	19.3	33.0	-13.7
				1	74	19.3	19.3	33.0	-13.7
				36	0	18.0	18.1	33.0	-14.9
				36	16	18.0	18.1	33.0	-15.0
				36	35	18.0	18.0	33.0	-15.0
				75	0	18.0	18.0	33.0	-15.0

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	16-QAM	1	0	18.4	18.4	33.0	-14.6
				1	37	**18.7**	**18.8**	33.0	-14.2
				1	74	18.7	18.7	33.0	-14.3
				36	0	17.4	17.4	33.0	-15.6
				36	16	17.3	17.4	33.0	-15.6
				36	35	17.3	17.3	33.0	-15.7
				75	0	17.3	17.4	33.0	-15.6
15.0	21100	2535.0	16-QAM	1	0	18.7	18.8	33.0	-14.3
				1	37	18.3	18.3	33.0	-14.7
				1	74	18.2	18.3	33.0	-14.7
				36	0	17.2	17.2	33.0	-15.8
				36	16	17.0	17.1	33.0	-15.9
				36	35	16.9	17.0	33.0	-16.0
				75	0	17.0	17.0	33.0	-16.0
15.0	21375	2562.5	16-QAM	1	0	18.1	18.1	33.0	-14.9
				1	37	18.1	18.2	33.0	-14.8
				1	74	18.2	18.3	33.0	-14.7
				36	0	17.3	17.4	33.0	-15.6
				36	16	17.3	17.4	33.0	-15.6
				36	35	17.2	17.3	33.0	-15.7
				75	0	17.3	17.3	33.0	-15.7

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Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	20825	2507.5	64QAM	1	0	17.6	17.7	33.0	-15.3
				1	37	17.8	17.8	33.0	-15.2
				1	74	17.8	17.8	33.0	-15.2
				36	0	17.0	17.0	33.0	-16.0
				36	16	17.1	17.2	33.0	-15.9
				36	35	17.0	17.0	33.0	-16.0
				75	0	16.9	17.0	33.0	-16.1
15.0	21100	2535.0	64QAM	1	0	**17.9**	**18.0**	33.0	-15.0
				1	37	17.8	17.8	33.0	-15.2
				1	74	17.8	17.8	33.0	-15.2
				36	0	16.8	16.8	33.0	-16.2
				36	16	16.7	16.7	33.0	-16.3
				36	35	16.6	16.7	33.0	-16.4
				75	0	16.5	16.5	33.0	-16.5
15.0	21375	2562.5	64QAM	1	0	17.7	17.8	33.0	-15.2
				1	37	17.8	17.9	33.0	-15.1
				1	74	17.6	17.7	33.0	-15.3
				36	0	16.8	16.8	33.0	-16.2
				36	16	16.7	16.8	33.0	-16.2
				36	35	16.7	16.7	33.0	-16.3
				75	0	16.8	16.9	33.0	-16.1

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OUTPUT POWER FOR LTE BAND 7 (20.0 MHZ)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	QPSK	1	0	19.2	19.3	33.0	-13.7
				1	49	**19.5**	**19.5**	33.0	-13.5
				1	99	19.4	19.5	33.0	-13.5
				50	0	18.6	18.6	33.0	-14.4
				50	24	18.5	18.6	33.0	-14.4
				50	49	18.5	18.5	33.0	-14.5
				100	0	18.5	18.6	33.0	-14.4
20.0	21100	2535.0	QPSK	1	0	19.4	19.5	33.0	-13.5
				1	49	19.0	19.1	33.0	-14.0
				1	99	18.9	19.0	33.0	-14.0
				50	0	18.3	18.3	33.0	-14.7
				50	24	18.1	18.1	33.0	-14.9
				50	49	18.0	18.0	33.0	-15.0
				100	0	18.1	18.1	33.0	-14.9
20.0	21350	2560.0	QPSK	1	0	19.2	19.2	33.0	-13.8
				1	49	19.3	19.4	33.0	-13.6
				1	99	19.3	19.4	33.0	-13.7
				50	0	18.2	18.2	33.0	-14.8
				50	24	18.1	18.2	33.0	-14.8
				50	49	18.1	18.1	33.0	-14.9
				100	0	18.1	18.2	33.0	-14.8

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	16-QAM	1	0	18.4	18.5	33.0	-14.5
				1	49	18.8	18.9	33.0	-14.1
				1	99	18.8	18.9	33.0	-14.1
				50	0	17.5	17.6	33.0	-15.4
				50	24	17.5	17.5	33.0	-15.5
				50	49	17.3	17.4	33.0	-15.6
				100	0	17.4	17.5	33.0	-15.5
20.0	21100	2535.0	16-QAM	1	0	**18.9**	**19.0**	33.0	-14.0
				1	49	18.5	18.5	33.0	-14.5
				1	99	18.4	18.4	33.0	-14.6
				50	0	17.3	17.3	33.0	-15.7
				50	24	17.1	17.1	33.0	-15.9
				50	49	17.0	17.0	33.0	-16.0
				100	0	17.0	17.1	33.0	-15.9
20.0	21350	2560.0	16-QAM	1	0	18.9	19.0	33.0	-14.0
				1	49	18.6	18.7	33.0	-14.3
				1	99	18.6	18.6	33.0	-14.4
				50	0	17.2	17.2	33.0	-15.8
				50	24	17.1	17.2	33.0	-15.9
				50	49	17.1	17.1	33.0	-15.9
				100	0	17.1	17.2	33.0	-15.8

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	20850	2510.0	64QAM	1	0	**17.8**	**17.9**	33.0	-15.1
				1	49	17.6	17.7	33.0	-15.4
				1	99	17.6	17.7	33.0	-15.3
				50	0	16.6	16.7	33.0	-16.4
				50	24	16.6	16.6	33.0	-16.4
				50	49	16.6	16.6	33.0	-16.4
				100	0	16.5	16.6	33.0	-16.4
20.0	21100	2535.0	64QAM	1	0	17.8	17.8	33.0	-15.2
				1	49	17.5	17.5	33.0	-15.5
				1	99	17.4	17.5	33.0	-15.5
				50	0	16.4	16.4	33.0	-16.6
				50	24	16.3	16.3	33.0	-16.7
				50	49	16.3	16.3	33.0	-16.7
				100	0	16.3	16.4	33.0	-16.7
20.0	21350	2560.0	64QAM	1	0	17.8	17.8	33.0	-15.2
				1	49	17.6	17.7	33.0	-15.4
				1	99	17.6	17.6	33.0	-15.4
				50	0	16.5	16.6	33.0	-16.4
				50	24	16.5	16.5	33.0	-16.5
				50	49	16.4	16.4	33.0	-16.6
				100	0	16.4	16.4	33.0	-16.6

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7.2.5. LTE BAND 12

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 12 (1.4MHz)

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	QPSK	1	0	23.1	17.0	34.77	-17.8
				1	2	23.1	17.0	34.77	-17.8
				1	5	23.1	16.9	34.77	-17.8
				3	0	23.1	17.0	34.77	-17.8
				3	1	23.2	17.0	34.77	-17.8
				3	2	23.2	17.0	34.77	-17.7
				6	0	22.1	16.0	34.77	-18.8
1.4	23095	707.5	QPSK	1	0	23.2	17.1	34.77	-17.7
				1	2	**23.3**	**17.2**	34.77	-17.6
				1	5	23.3	17.1	34.77	-17.7
				3	0	23.2	17.1	34.77	-17.7
				3	1	23.3	17.1	34.77	-17.6
				3	2	23.3	17.1	34.77	-17.7
				6	0	22.2	16.0	34.77	-18.7
1.4	23173	715.3	QPSK	1	0	23.2	17.0	34.77	-17.8
				1	2	23.3	17.1	34.77	-17.7
				1	5	23.2	17.0	34.77	-17.7
				3	0	23.2	17.0	34.77	-17.8
				3	1	23.3	17.1	34.77	-17.7
				3	2	23.2	17.1	34.77	-17.7
				6	0	22.2	16.0	34.77	-18.7

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	16QAM	1	0	22.1	16.0	34.77	-18.8
				1	2	22.2	16.0	34.77	-18.7
				1	5	22.1	16.0	34.77	-18.8
				3	0	22.3	16.1	34.77	-18.6
				3	1	22.3	16.2	34.77	-18.6
				3	2	22.3	16.2	34.77	-18.6
				6	0	21.3	15.1	34.77	-19.7
1.4	23095	707.5	16QAM	1	0	22.4	16.2	34.77	-18.5
				1	2	**22.4**	**16.3**	34.77	-18.5
				1	5	22.3	16.1	34.77	-18.7
				3	0	22.4	16.2	34.77	-18.5
				3	1	22.4	16.3	34.77	-18.5
				3	2	22.4	16.3	34.77	-18.5
				6	0	21.1	14.9	34.77	-19.8
1.4	23173	715.3	16QAM	1	0	22.3	16.1	34.77	-18.6
				1	2	22.4	16.2	34.77	-18.6
				1	5	22.4	16.2	34.77	-18.6
				3	0	22.3	16.1	34.77	-18.7
				3	1	22.3	16.1	34.77	-18.6
				3	2	22.3	16.1	34.77	-18.6
				6	0	21.3	15.2	34.77	-19.6

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4031B
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Antenna Gain (dBi)	-4.01								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	23017	699.7	64QAM	1	0	21.3	15.2	34.77	-19.6
				1	2	21.4	15.3	34.77	-19.5
				1	5	21.3	15.1	34.77	-19.6
				3	0	21.4	15.2	34.77	-19.6
				3	1	**21.4**	**15.3**	34.77	-19.5
				3	2	21.4	15.3	34.77	-19.5
				6	0	20.1	14.0	34.77	-20.8
1.4	23095	707.5	64QAM	1	0	21.3	15.1	34.77	-19.7
				1	2	21.3	15.2	34.77	-19.6
				1	5	21.3	15.1	34.77	-19.6
				3	0	21.2	15.0	34.77	-19.8
				3	1	21.2	15.1	34.77	-19.7
				3	2	21.3	15.1	34.77	-19.7
				6	0	20.3	14.2	34.77	-20.6
1.4	23173	715.3	64QAM	1	0	20.9	14.8	34.77	-20.0
				1	2	21.1	14.9	34.77	-19.9
				1	5	20.9	14.8	34.77	-20.0
				3	0	21.2	15.0	34.77	-19.7
				3	1	21.3	15.1	34.77	-19.7
				3	2	21.3	15.1	34.77	-19.7
				6	0	20.4	14.2	34.77	-20.5

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OUTPUT POWER FOR LTE BAND 12 (3.0 MHz)

Antenna Gain (dBi)	-4.01								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	QPSK	1	0	23.2	17.0	34.77	-17.8
				1	7	23.2	17.1	34.77	-17.7
				1	14	23.1	16.9	34.77	-17.8
				8	0	22.2	16.1	34.77	-18.7
				8	4	22.2	16.0	34.77	-18.7
				8	7	22.2	16.0	34.77	-18.7
				15	0	22.2	16.0	34.77	-18.7
3.0	23095	707.5	QPSK	1	0	23.2	17.0	34.77	-17.8
				1	7	23.2	17.0	34.77	-17.8
				1	14	23.3	17.1	34.77	-17.6
				8	0	22.3	16.1	34.77	-18.7
				8	4	22.3	16.1	34.77	-18.6
				8	7	22.3	16.1	34.77	-18.7
				15	0	22.3	16.1	34.77	-18.7
3.0	23165	714.5	QPSK	1	0	23.2	17.1	34.77	-17.7
				1	7	**23.3**	**17.2**	34.77	-17.6
				1	14	23.2	17.1	34.77	-17.7
				8	0	22.3	16.1	34.77	-18.7
				8	4	22.3	16.1	34.77	-18.7
				8	7	22.3	16.1	34.77	-18.7
				15	0	22.3	16.1	34.77	-18.7

Antenna Gain (dBi)	-4.01								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	16QAM	1	0	22.2	16.1	34.77	-18.7
				1	7	22.3	16.1	34.77	-18.6
				1	14	22.2	16.0	34.77	-18.8
				8	0	21.4	15.2	34.77	-19.6
				8	4	21.4	15.2	34.77	-19.6
				8	7	21.4	15.2	34.77	-19.6
				15	0	21.1	15.0	34.77	-19.8
3.0	23095	707.5	16QAM	1	0	22.2	16.1	34.77	-18.7
				1	7	**22.3**	**16.2**	34.77	-18.6
				1	14	22.3	16.2	34.77	-18.6
				8	0	21.2	15.0	34.77	-19.8
				8	4	21.2	15.0	34.77	-19.7
				8	7	21.2	15.0	34.77	-19.7
				15	0	21.3	15.1	34.77	-19.7
3.0	23165	714.5	16QAM	1	0	22.2	16.0	34.77	-18.7
				1	7	22.3	16.1	34.77	-18.6
				1	14	22.2	16.0	34.77	-18.8
				8	0	21.4	15.3	34.77	-19.5
				8	4	21.4	15.2	34.77	-19.6
				8	7	21.4	15.2	34.77	-19.5
				15	0	21.3	15.1	34.77	-19.6

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Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	23025	700.5	64QAM	1	0	21.5	15.3	34.77	-19.5
				1	7	**21.5**	**15.4**	34.77	-19.4
				1	14	21.4	15.2	34.77	-19.5
				8	0	20.4	14.2	34.77	-20.6
				8	4	20.3	14.2	34.77	-20.6
				8	7	20.3	14.2	34.77	-20.6
				15	0	20.4	14.2	34.77	-20.5
3.0	23095	707.5	64QAM	1	0	21.5	15.3	34.77	-19.5
				1	7	21.5	15.4	34.77	-19.4
				1	14	21.4	15.2	34.77	-19.6
				8	0	20.4	14.2	34.77	-20.6
				8	4	20.4	14.3	34.77	-20.5
				8	7	20.4	14.2	34.77	-20.5
				15	0	20.4	14.2	34.77	-20.5
3.0	23165	714.5	64QAM	1	0	21.1	15.0	34.77	-19.8
				1	7	21.2	15.1	34.77	-19.7
				1	14	21.1	15.0	34.77	-19.8
				8	0	20.4	14.2	34.77	-20.6
				8	4	20.4	14.2	34.77	-20.5
				8	7	20.4	14.2	34.77	-20.6
				15	0	20.4	14.2	34.77	-20.6

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OUTPUT POWER FOR LTE BAND 12 (5.0 MHz)

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	QPSK	1	0	23.3	17.1	34.77	-17.6
				1	12	23.2	17.1	34.77	-17.7
				1	24	23.2	17.1	34.77	-17.7
				12	0	22.2	16.0	34.77	-18.7
				12	6	22.2	16.1	34.77	-18.7
				12	11	22.1	16.0	34.77	-18.8
				25	0	22.2	16.0	34.77	-18.8
5.0	23095	707.5	QPSK	1	0	23.2	17.1	34.77	-17.7
				1	12	23.3	17.1	34.77	-17.6
				1	24	**23.3**	**17.2**	34.77	-17.6
				12	0	22.3	16.1	34.77	-18.7
				12	6	22.3	16.1	34.77	-18.6
				12	11	22.2	16.1	34.77	-18.7
				25	0	22.2	16.1	34.77	-18.7
5.0	23155	713.5	QPSK	1	0	23.2	17.0	34.77	-17.7
				1	12	23.3	17.2	34.77	-17.6
				1	24	23.3	17.2	34.77	-17.6
				12	0	22.3	16.2	34.77	-18.6
				12	6	22.3	16.1	34.77	-18.6
				12	11	22.3	16.1	34.77	-18.7
				25	0	22.3	16.1	34.77	-18.6

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	16QAM	1	0	22.4	16.2	34.77	-18.6
				1	12	22.3	16.1	34.77	-18.6
				1	24	22.3	16.1	34.77	-18.6
				12	0	21.3	15.1	34.77	-19.7
				12	6	21.2	15.1	34.77	-19.7
				12	11	21.2	15.0	34.77	-19.7
				25	0	21.1	15.0	34.77	-19.8
5.0	23095	707.5	16QAM	1	0	22.1	15.9	34.77	-18.8
				1	12	22.1	15.9	34.77	-18.8
				1	24	22.2	16.0	34.77	-18.7
				12	0	21.5	15.3	34.77	-19.5
				12	6	21.4	15.3	34.77	-19.5
				12	11	21.4	15.2	34.77	-19.6
				25	0	21.3	15.2	34.77	-19.6
5.0	23155	713.5	16QAM	1	0	**22.6**	**16.4**	34.77	-18.4
				1	12	22.5	16.3	34.77	-18.5
				1	24	22.5	16.3	34.77	-18.5
				12	0	21.4	15.2	34.77	-19.5
				12	6	21.4	15.2	34.77	-19.5
				12	11	21.4	15.2	34.77	-19.5
				25	0	21.3	15.2	34.77	-19.6

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Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23035	701.5	64QAM	1	0	**21.5**	**15.4**	34.77	-19.4
				1	12	21.5	15.4	34.77	-19.4
				1	24	21.5	15.4	34.77	-19.4
				12	0	20.3	14.1	34.77	-20.7
				12	6	20.3	14.1	34.77	-20.7
				12	11	20.2	14.1	34.77	-20.7
				25	0	20.2	14.1	34.77	-20.7
5.0	23095	707.5	64QAM	1	0	21.3	15.1	34.77	-19.7
				1	12	21.4	15.2	34.77	-19.6
				1	24	21.3	15.2	34.77	-19.6
				12	0	20.2	14.1	34.77	-20.7
				12	6	20.2	14.1	34.77	-20.7
				12	11	20.2	14.0	34.77	-20.8
				25	0	20.1	14.0	34.77	-20.8
5.0	23155	713.5	64QAM	1	0	21.4	15.2	34.77	-19.6
				1	12	21.3	15.2	34.77	-19.6
				1	24	21.3	15.1	34.77	-19.6
				12	0	20.1	14.0	34.77	-20.8
				12	6	20.2	14.0	34.77	-20.8
				12	11	20.2	14.0	34.77	-20.8
				25	0	20.2	14.0	34.77	-20.8

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OUTPUT POWER FOR LTE BAND 12 (10.0 MHz)

Antenna Gain (dBi)	-4.01								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	QPSK	1	0	23.3	17.1	34.77	-17.7
				1	24	23.1	16.9	34.77	-17.8
				1	49	23.3	17.1	34.77	-17.7
				25	0	22.2	16.1	34.77	-18.7
				25	12	22.2	16.0	34.77	-18.8
				25	24	22.2	16.1	34.77	-18.7
				50	0	22.3	16.1	34.77	-18.7
10.0	23095	707.5	QPSK	1	0	23.3	17.1	34.77	-17.7
				1	24	23.2	17.0	34.77	-17.8
				1	49	23.2	17.1	34.77	-17.7
				25	0	22.2	16.1	34.77	-18.7
				25	12	22.3	16.2	34.77	-18.6
				25	24	22.4	16.2	34.77	-18.6
				50	0	22.3	16.1	34.77	-18.6
10.0	23130	711.0	QPSK	1	0	**23.3**	**17.2**	34.77	-17.6
				1	24	23.3	17.1	34.77	-17.6
				1	49	23.3	17.1	34.77	-17.6
				25	0	22.3	16.1	34.77	-18.7
				25	12	22.4	16.2	34.77	-18.6
				25	24	22.3	16.2	34.77	-18.6
				50	0	22.4	16.2	34.77	-18.6

Antenna Gain (dBi)	-4.01								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	16QAM	1	0	22.3	16.2	34.77	-18.6
				1	24	22.2	16.0	34.77	-18.7
				1	49	22.3	16.2	34.77	-18.6
				25	0	21.3	15.2	34.77	-19.6
				25	12	21.2	15.1	34.77	-19.7
				25	24	21.3	15.1	34.77	-19.6
				50	0	21.3	15.1	34.77	-19.6
10.0	23095	707.5	16QAM	1	0	22.5	16.3	34.77	-18.5
				1	24	**22.5**	**16.4**	34.77	-18.4
				1	49	22.5	16.3	34.77	-18.4
				25	0	21.3	15.1	34.77	-19.7
				25	12	21.3	15.2	34.77	-19.6
				25	24	21.4	15.2	34.77	-19.5
				50	0	21.3	15.2	34.77	-19.6
10.0	23130	711.0	16QAM	1	0	22.4	16.2	34.77	-18.6
				1	24	22.2	16.1	34.77	-18.7
				1	49	22.3	16.1	34.77	-18.7
				25	0	21.3	15.1	34.77	-19.6
				25	12	21.4	15.2	34.77	-19.6
				25	24	21.4	15.2	34.77	-19.6
				50	0	21.4	15.2	34.77	-19.6

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Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23060	704.0	64QAM	1	0	**21.4**	**15.3**	34.77	-19.5
				1	24	21.4	15.2	34.77	-19.6
				1	49	21.4	15.3	34.77	-19.5
				25	0	20.2	14.1	34.77	-20.7
				25	12	20.2	14.0	34.77	-20.7
				25	24	20.3	14.1	34.77	-20.7
				50	0	20.2	14.0	34.77	-20.8
10.0	23095	707.5	64QAM	1	0	20.9	14.8	34.77	-20.0
				1	24	21.0	14.9	34.77	-19.9
				1	49	21.0	14.9	34.77	-19.9
				25	0	20.2	14.1	34.77	-20.7
				25	12	20.3	14.1	34.77	-20.6
				25	24	20.3	14.1	34.77	-20.7
				50	0	20.2	14.1	34.77	-20.7
10.0	23130	711.0	64QAM	1	0	21.3	15.2	34.77	-19.6
				1	24	21.3	15.1	34.77	-19.7
				1	49	21.2	15.0	34.77	-19.7
				25	0	20.3	14.2	34.77	-20.6
				25	12	20.3	14.1	34.77	-20.6
				25	24	20.3	14.1	34.77	-20.7
				50	0	20.2	14.0	34.77	-20.8

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7.2.6. LTE BAND 13

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 13 (5.0 MHz)

Antenna Gain (dBi)	-3.38

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	QPSK	1	0	23.2	17.7	34.77	-17.1
				1	12	**23.3**	**17.8**	34.77	-17.0
				1	24	23.2	17.7	34.77	-17.1
				12	0	22.0	16.4	34.77	-18.3
				12	6	22.3	16.7	34.77	-18.0
				12	11	22.2	16.7	34.77	-18.1
				25	0	22.2	16.6	34.77	-18.1
5.0	23230	782.0	QPSK	1	0	23.3	17.7	34.77	-17.0
				1	12	23.3	17.8	34.77	-17.0
				1	24	23.3	17.8	34.77	-17.0
				12	0	22.2	16.7	34.77	-18.1
				12	6	22.4	16.8	34.77	-17.9
				12	11	22.3	16.8	34.77	-18.0
				25	0	22.3	16.8	34.77	-18.0
5.0	23255	784.5	QPSK	1	0	23.2	17.6	34.77	-17.1
				1	12	23.2	17.7	34.77	-17.1
				1	24	23.2	17.7	34.77	-17.1
				12	0	22.3	16.8	34.77	-18.0
				12	6	22.4	16.9	34.77	-17.9
				12	11	22.4	16.8	34.77	-17.9
				25	0	22.4	16.9	34.77	-17.9

Antenna Gain (dBi)	-3.38

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	16QAM	1	0	22.4	16.8	34.77	-17.9
				1	12	22.3	16.8	34.77	-18.0
				1	24	22.4	16.9	34.77	-17.9
				12	0	21.1	15.6	34.77	-19.2
				12	6	21.3	15.8	34.77	-19.0
				12	11	21.3	15.8	34.77	-19.0
				25	0	21.1	15.5	34.77	-19.2
5.0	23230	782.0	16QAM	1	0	22.1	16.6	34.77	-18.2
				1	12	22.1	16.6	34.77	-18.2
				1	24	22.1	16.6	34.77	-18.2
				12	0	21.4	15.9	34.77	-18.9
				12	6	21.5	16.0	34.77	-18.8
				12	11	21.5	16.0	34.77	-18.8
				25	0	21.4	15.8	34.77	-18.9
5.0	23255	784.5	16QAM	1	0	**22.6**	**17.0**	34.77	-17.7
				1	12	22.5	17.0	34.77	-17.8
				1	24	22.5	17.0	34.77	-17.8
				12	0	21.4	15.9	34.77	-18.9
				12	6	21.5	16.0	34.77	-18.8
				12	11	21.5	16.0	34.77	-18.8
				25	0	21.4	15.9	34.77	-18.9

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Antenna Gain (dBi)	-3.38

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23207	779.5	64QAM	1	0	20.5	15.0	34.77	-19.8
				1	12	21.2	15.6	34.77	-19.1
				1	24	21.2	15.7	34.77	-19.1
				12	0	19.8	14.3	34.77	-20.5
				12	6	20.0	14.4	34.77	-20.4
				12	11	20.0	14.5	34.77	-20.3
				25	0	20.0	14.4	34.77	-20.3
5.0	23230	782.0	64QAM	1	0	21.3	15.7	34.77	-19.0
				1	12	21.2	15.7	34.77	-19.1
				1	24	1.3	-4.3	34.77	-39.0
				12	0	20.0	14.5	34.77	-20.3
				12	6	20.0	14.5	34.77	-20.3
				12	11	20.0	14.5	34.77	-20.3
				25	0	20.0	14.4	34.77	-20.3
5.0	23255	784.5	64QAM	1	0	21.4	15.9	34.77	-18.9
				1	12	21.5	16.0	34.77	-18.8
				1	24	**21.5**	**16.0**	34.77	-18.8
				12	0	20.1	14.5	34.77	-20.2
				12	6	20.1	14.6	34.77	-20.2
				12	11	20.1	14.6	34.77	-20.2
				25	0	20.1	14.5	34.77	-20.2

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OUTPUT POWER FOR LTE BAND 13 (10.0 MHz)

Antenna Gain (dBi)	-3.38								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23230	782.0	QPSK	1	0	23.2	17.6	34.77	-17.1
				1	24	**23.3**	**17.7**	34.77	-17.0
				1	49	23.2	17.6	34.77	-17.1
				25	0	22.1	16.6	34.77	-18.2
				25	12	22.4	16.8	34.77	-17.9
				25	24	22.3	16.8	34.77	-18.0
				50	0	22.3	16.8	34.77	-18.0
			16QAM	1	0	22.3	16.7	34.77	-18.0
				1	24	22.2	16.7	34.77	-18.1
				1	49	**22.4**	**16.8**	34.77	-17.9
				25	0	21.1	15.5	34.77	-19.2
				25	12	21.4	15.9	34.77	-18.9
				25	24	21.4	15.8	34.77	-18.9
				50	0	21.3	15.8	34.77	-19.0
			64QAM	1	0	**21.5**	**16.0**	34.77	-18.8
				1	24	21.4	15.8	34.77	-18.9
				1	49	21.4	15.8	34.77	-18.9
				25	0	20.4	14.8	34.77	-20.0
				25	12	20.3	14.8	34.77	-20.0
				25	24	20.3	14.8	34.77	-20.0
				50	0	20.3	14.8	34.77	-20.0

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7.2.7. LTE BAND 17

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 17 (5.0 MHz)

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	QPSK	1	0	23.2	17.1	34.77	-17.7
				1	12	23.2	17.0	34.77	-17.8
				1	24	23.2	17.0	34.77	-17.8
				12	0	22.2	16.0	34.77	-18.8
				12	6	22.1	16.0	34.77	-18.8
				12	11	22.1	15.9	34.77	-18.8
				25	0	22.1	16.0	34.77	-18.8
5.0	23790	710.0	QPSK	1	0	23.1	16.9	34.77	-17.8
				1	12	23.2	17.1	34.77	-17.7
				1	24	23.2	17.1	34.77	-17.7
				12	0	22.0	15.9	34.77	-18.9
				12	6	22.2	16.0	34.77	-18.8
				12	11	22.2	16.1	34.77	-18.7
				25	0	22.1	16.0	34.77	-18.8
5.0	23825	713.5	QPSK	1	0	**23.3**	**17.2**	34.77	-17.6
				1	12	23.2	17.1	34.77	-17.7
				1	24	23.3	17.1	34.77	-17.7
				12	0	22.2	16.1	34.77	-18.7
				12	6	22.2	16.0	34.77	-18.7
				12	11	22.2	16.0	34.77	-18.7
				25	0	22.2	16.1	34.77	-18.7

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	16QAM	1	0	**22.3**	**16.1**	34.77	-18.6
				1	12	22.2	16.1	34.77	-18.7
				1	24	22.2	16.0	34.77	-18.7
				12	0	21.2	15.1	34.77	-19.7
				12	6	21.2	15.0	34.77	-19.7
				12	11	21.2	15.0	34.77	-19.8
				25	0	21.1	14.9	34.77	-19.8
5.0	23790	710.0	16QAM	1	0	22.0	15.8	34.77	-19.0
				1	12	22.1	15.9	34.77	-18.9
				1	24	22.0	15.9	34.77	-18.9
				12	0	21.3	15.1	34.77	-19.7
				12	6	21.3	15.1	34.77	-19.7
				12	11	21.3	15.2	34.77	-19.6
				25	0	21.2	15.0	34.77	-19.7
5.0	23825	713.5	16QAM	1	0	22.2	16.0	34.77	-18.8
				1	12	22.1	15.9	34.77	-18.8
				1	24	22.1	15.9	34.77	-18.8
				12	0	21.3	15.1	34.77	-19.6
				12	6	21.3	15.1	34.77	-19.6
				12	11	21.3	15.1	34.77	-19.6
				25	0	21.3	15.1	34.77	-19.7

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Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	23755	706.5	64QAM	1	0	**21.6**	**15.4**	34.77	-19.3
				1	12	21.6	15.4	34.77	-19.4
				1	24	21.6	15.4	34.77	-19.4
				12	0	20.3	14.1	34.77	-20.7
				12	6	20.3	14.1	34.77	-20.6
				12	11	20.2	14.1	34.77	-20.7
				25	0	20.2	14.1	34.77	-20.7
5.0	23790	710.0	64QAM	1	0	21.3	15.2	34.77	-19.6
				1	12	21.3	15.1	34.77	-19.6
				1	24	21.4	15.2	34.77	-19.5
				12	0	20.2	14.0	34.77	-20.7
				12	6	20.2	14.1	34.77	-20.7
				12	11	20.3	14.1	34.77	-20.7
				25	0	20.1	13.9	34.77	-20.8
5.0	23825	713.5	64QAM	1	0	21.5	15.3	34.77	-19.5
				1	12	21.4	15.3	34.77	-19.5
				1	24	21.4	15.2	34.77	-19.6
				12	0	20.3	14.1	34.77	-20.6
				12	6	20.3	14.1	34.77	-20.6
				12	11	20.3	14.1	34.77	-20.7
				25	0	20.3	14.1	34.77	-20.7

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OUTPUT POWER FOR LTE BAND 17 (10.0 MHz)

Antenna Gain (dBi)	-4.01

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	23790	710.0	QPSK	1	0	23.3	17.1	34.77	-17.7
				1	24	**23.3**	**17.2**	34.77	-17.6
				1	49	23.3	17.1	34.77	-17.6
				25	0	22.1	16.0	34.77	-18.8
				25	12	22.2	16.0	34.77	-18.7
				25	24	22.2	16.0	34.77	-18.7
				50	0	22.1	16.0	34.77	-18.8
			16QAM	1	0	**22.1**	**16.0**	34.77	-18.8
				1	24	22.1	15.9	34.77	-18.8
				1	49	22.1	15.9	34.77	-18.9
				25	0	21.2	15.0	34.77	-19.8
				25	12	21.2	15.0	34.77	-19.7
				25	24	21.3	15.1	34.77	-19.7
				50	0	21.2	15.0	34.77	-19.8
			64QAM	1	0	21.4	15.2	34.77	-19.6
				1	24	21.4	15.2	34.77	-19.6
				1	49	**21.4**	**15.2**	34.77	-19.5
				25	0	20.2	14.1	34.77	-20.7
				25	12	20.2	14.1	34.77	-20.7
				25	24	20.3	14.1	34.77	-20.7
				50	0	20.2	14.1	34.77	-20.7

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7.2.8. LTE BAND 25

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 25 (1.4MHz)

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	QPSK	1	0	19.7	20.1	33.0	-13.0
				1	2	19.8	20.1	33.0	-12.9
				1	5	19.7	20.1	33.0	-13.0
				3	0	19.8	20.1	33.0	-12.9
				3	1	19.8	20.2	33.0	-12.8
				3	2	19.8	20.2	33.0	-12.9
				6	0	18.8	19.1	33.0	-13.9
1.4	26365	1882.5	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	2	19.9	20.2	33.0	-12.8
				1	5	19.8	20.2	33.0	-12.8
				3	0	19.8	20.2	33.0	-12.8
				3	1	19.9	20.2	33.0	-12.8
				3	2	19.8	20.2	33.0	-12.8
				6	0	18.8	19.1	33.0	-13.9
1.4	26683	1914.3	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	2	19.8	20.2	33.0	-12.8
				1	5	19.9	20.2	33.0	-12.8
				3	0	19.9	20.2	33.0	-12.8
				3	1	**19.9**	**20.3**	33.0	-12.7
				3	2	19.8	20.2	33.0	-12.8
				6	0	18.9	19.3	33.0	-13.7

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	16QAM	1	0	18.8	19.2	33.0	-13.8
				1	2	18.8	19.2	33.0	-13.8
				1	5	18.8	19.2	33.0	-13.9
				3	0	18.9	19.3	33.0	-13.7
				3	1	19.0	19.3	33.0	-13.7
				3	2	18.9	19.3	33.0	-13.7
				6	0	17.9	18.3	33.0	-14.7
1.4	26365	1882.5	16QAM	1	0	19.2	19.5	33.0	-13.5
				1	2	**19.2**	**19.6**	33.0	-13.4
				1	5	19.2	19.5	33.0	-13.5
				3	0	19.0	19.4	33.0	-13.7
				3	1	19.0	19.4	33.0	-13.6
				3	2	19.0	19.4	33.0	-13.6
				6	0	17.7	18.1	33.0	-14.9
1.4	26683	1914.3	16QAM	1	0	18.9	19.3	33.0	-13.7
				1	2	19.0	19.4	33.0	-13.6
				1	5	18.9	19.3	33.0	-13.7
				3	0	19.0	19.4	33.0	-13.6
				3	1	19.0	19.4	33.0	-13.6
				3	2	19.0	19.4	33.0	-13.7
				6	0	18.0	18.4	33.0	-14.6

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
1.4	26047	1850.7	64QAM	1	0	18.0	18.3	33.0	-14.7
				1	2	18.1	18.5	33.0	-14.5
				1	5	18.0	18.3	33.0	-14.7
				3	0	18.1	18.5	33.0	-14.6
				3	1	18.1	18.5	33.0	-14.5
				3	2	18.1	18.5	33.0	-14.5
				6	0	16.7	17.1	33.0	-15.9
1.4	26365	1882.5	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	2	**18.2**	**18.5**	33.0	-14.5
				1	5	18.1	18.5	33.0	-14.5
				3	0	18.0	18.4	33.0	-14.6
				3	1	18.1	18.5	33.0	-14.6
				3	2	18.1	18.5	33.0	-14.6
				6	0	17.1	17.5	33.0	-15.5
1.4	26683	1914.3	64QAM	1	0	17.8	18.2	33.0	-14.9
				1	2	17.9	18.2	33.0	-14.8
				1	5	17.7	18.1	33.0	-14.9
				3	0	18.0	18.4	33.0	-14.6
				3	1	18.1	18.5	33.0	-14.5
				3	2	18.1	18.5	33.0	-14.5
				6	0	17.3	17.6	33.0	-15.4

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OUTPUT POWER FOR LTE BAND 25 (3.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	QPSK	1	0	19.9	20.3	33.0	-12.7
				1	7	20.0	20.3	33.0	-12.7
				1	14	19.9	20.2	33.0	-12.8
				8	0	18.9	19.3	33.0	-13.7
				8	4	18.9	19.3	33.0	-13.7
				8	7	18.9	19.3	33.0	-13.7
				15	0	18.9	19.3	33.0	-13.7
3.0	26365	1882.5	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	7	19.8	20.2	33.0	-12.8
				1	14	19.7	20.1	33.0	-13.0
				8	0	18.7	19.1	33.0	-13.9
				8	4	18.7	19.1	33.0	-13.9
				8	7	18.7	19.1	33.0	-13.9
				15	0	18.7	19.1	33.0	-13.9
3.0	26675	1913.5	QPSK	1	0	19.9	20.3	33.0	-12.7
				1	7	**20.0**	**20.4**	33.0	-12.6
				1	14	20.0	20.3	33.0	-12.7
				8	0	19.1	19.4	33.0	-13.6
				8	4	19.0	19.4	33.0	-13.6
				8	7	19.1	19.4	33.0	-13.6
				15	0	19.0	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	16QAM	1	0	19.0	19.4	33.0	-13.6
				1	7	19.0	19.4	33.0	-13.6
				1	14	18.9	19.3	33.0	-13.7
				8	0	18.1	18.5	33.0	-14.5
				8	4	18.1	18.5	33.0	-14.5
				8	7	18.1	18.5	33.0	-14.5
				15	0	17.8	18.2	33.0	-14.8
3.0	26365	1882.5	16QAM	1	0	19.1	19.5	33.0	-13.5
				1	7	**19.2**	**19.6**	33.0	-13.4
				1	14	19.1	19.5	33.0	-13.6
				8	0	17.6	18.0	33.0	-15.0
				8	4	17.6	18.0	33.0	-15.0
				8	7	17.6	18.0	33.0	-15.0
				15	0	17.7	18.1	33.0	-14.9
3.0	26675	1913.5	16QAM	1	0	19.0	19.3	33.0	-13.7
				1	7	19.0	19.4	33.0	-13.6
				1	14	18.9	19.3	33.0	-13.8
				8	0	18.2	18.6	33.0	-14.4
				8	4	18.2	18.5	33.0	-14.5
				8	7	18.2	18.5	33.0	-14.5
				15	0	18.1	18.4	33.0	-14.6

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
3.0	26055	1851.5	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	7	18.2	18.6	33.0	-14.5
				1	14	18.0	18.4	33.0	-14.6
				8	0	17.0	17.4	33.0	-15.7
				8	4	17.0	17.3	33.0	-15.7
				8	7	16.9	17.3	33.0	-15.7
				15	0	17.0	17.3	33.0	-15.7
3.0	26365	1882.5	64QAM	1	0	18.2	18.6	33.0	-14.5
				1	7	**18.4**	**18.7**	33.0	-14.3
				1	14	18.2	18.6	33.0	-14.4
				8	0	17.1	17.4	33.0	-15.6
				8	4	17.1	17.4	33.0	-15.6
				8	7	17.1	17.5	33.0	-15.6
				15	0	17.0	17.4	33.0	-15.6
3.0	26675	1913.5	64QAM	1	0	18.1	18.5	33.0	-14.5
				1	7	18.2	18.6	33.0	-14.4
				1	14	18.1	18.4	33.0	-14.6
				8	0	17.4	17.7	33.0	-15.3
				8	4	17.4	17.7	33.0	-15.3
				8	7	17.3	17.7	33.0	-15.3
				15	0	17.3	17.7	33.0	-15.3

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OUTPUT POWER FOR LTE BAND 25 (5.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	QPSK	1	0	19.9	20.3	33.0	-12.8
				1	12	19.9	20.2	33.0	-12.8
				1	24	19.8	20.2	33.0	-12.8
				12	0	18.8	19.2	33.0	-13.8
				12	6	18.8	19.2	33.0	-13.8
				12	11	18.8	19.2	33.0	-13.8
				25	0	18.8	19.2	33.0	-13.8
5.0	26365	1882.5	QPSK	1	0	19.7	20.0	33.0	-13.0
				1	12	19.6	19.9	33.0	-13.1
				1	24	19.6	20.0	33.0	-13.0
				12	0	18.6	19.0	33.0	-14.0
				12	6	18.6	19.0	33.0	-14.0
				12	11	18.6	18.9	33.0	-14.1
				25	0	18.6	19.0	33.0	-14.0
5.0	26665	1912.5	QPSK	1	0	20.0	20.3	33.0	-12.7
				1	12	19.9	20.3	33.0	-12.7
				1	24	**20.0**	**20.3**	33.0	-12.7
				12	0	19.0	19.4	33.0	-13.6
				12	6	19.0	19.4	33.0	-13.6
				12	11	18.9	19.3	33.0	-13.7
				25	0	19.0	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	16QAM	1	0	19.0	19.4	33.0	-13.7
				1	12	18.9	19.3	33.0	-13.7
				1	24	18.9	19.3	33.0	-13.7
				12	0	17.9	18.3	33.0	-14.7
				12	6	17.9	18.2	33.0	-14.8
				12	11	17.8	18.2	33.0	-14.8
				25	0	17.7	18.1	33.0	-14.9
5.0	26365	1882.5	16QAM	1	0	19.2	19.6	33.0	-13.4
				1	12	19.2	19.5	33.0	-13.5
				1	24	19.1	19.5	33.0	-13.5
				12	0	17.8	18.2	33.0	-14.9
				12	6	17.8	18.2	33.0	-14.8
				12	11	17.8	18.1	33.0	-14.9
				25	0	17.7	18.1	33.0	-15.0
5.0	26665	1912.5	16QAM	1	0	**19.3**	**19.6**	33.0	-13.4
				1	12	19.2	19.6	33.0	-13.4
				1	24	19.1	19.5	33.0	-13.5
				12	0	18.1	18.5	33.0	-14.5
				12	6	18.1	18.4	33.0	-14.6
				12	11	18.0	18.4	33.0	-14.6
				25	0	18.0	18.4	33.0	-14.7

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	26065	1852.5	64QAM	1	0	18.1	18.5	33.0	-14.6
				1	12	18.1	18.4	33.0	-14.6
				1	24	18.0	18.4	33.0	-14.6
				12	0	16.7	17.1	33.0	-15.9
				12	6	16.7	17.1	33.0	-15.9
				12	11	16.7	17.1	33.0	-16.0
				25	0	16.7	17.1	33.0	-16.0
5.0	26365	1882.5	64QAM	1	0	17.9	18.3	33.0	-14.7
				1	12	18.0	18.3	33.0	-14.7
				1	24	18.0	18.3	33.0	-14.7
				12	0	16.7	17.1	33.0	-15.9
				12	6	16.8	17.1	33.0	-15.9
				12	11	16.8	17.1	33.0	-15.9
				25	0	16.7	17.1	33.0	-15.9
5.0	26665	1912.5	64QAM	1	0	**18.3**	**18.6**	33.0	-14.4
				1	12	18.2	18.6	33.0	-14.4
				1	24	18.2	18.5	33.0	-14.5
				12	0	17.0	17.4	33.0	-15.6
				12	6	17.0	17.4	33.0	-15.6
				12	11	17.0	17.3	33.0	-15.7
				25	0	17.0	17.4	33.0	-15.6

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OUTPUT POWER FOR LTE BAND 25 (10.0 MHz)

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	24	19.7	20.1	33.0	-12.9
				1	49	19.7	20.0	33.0	-13.0
				25	0	18.8	19.2	33.0	-13.8
				25	12	18.8	19.2	33.0	-13.8
				25	24	18.8	19.1	33.0	-13.9
				50	0	18.8	19.2	33.0	-13.8
10.0	26365	1882.5	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	24	19.6	20.0	33.0	-13.0
				1	49	19.6	19.9	33.0	-13.1
				25	0	18.7	19.0	33.0	-14.0
				25	12	18.6	19.0	33.0	-14.0
				25	24	18.6	19.0	33.0	-14.0
				50	0	18.6	19.0	33.0	-14.0
10.0	26640	1910.0	QPSK	1	0	**19.9**	**20.3**	33.0	-12.7
				1	24	19.8	20.2	33.0	-12.8
				1	49	19.9	20.3	33.0	-12.7
				25	0	19.1	19.4	33.0	-13.6
				25	12	19.0	19.4	33.0	-13.6
				25	24	19.0	19.4	33.0	-13.7
				50	0	19.1	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	16QAM	1	0	18.9	19.3	33.0	-13.7
				1	24	18.8	19.2	33.0	-13.8
				1	49	18.7	19.1	33.0	-13.9
				25	0	17.9	18.3	33.0	-14.7
				25	12	17.9	18.3	33.0	-14.7
				25	24	17.8	18.2	33.0	-14.8
				50	0	17.8	18.2	33.0	-14.8
10.0	26365	1882.5	16QAM	1	0	19.1	19.4	33.0	-13.6
				1	24	19.0	19.4	33.0	-13.6
				1	49	19.0	19.3	33.0	-13.7
				25	0	17.7	18.1	33.0	-14.9
				25	12	17.7	18.1	33.0	-14.9
				25	24	17.7	18.0	33.0	-15.0
				50	0	17.6	18.0	33.0	-15.0
10.0	26640	1910.0	16QAM	1	0	**19.1**	**19.4**	33.0	-13.6
				1	24	18.9	19.3	33.0	-13.7
				1	49	18.8	19.2	33.0	-13.8
				25	0	18.1	18.5	33.0	-14.5
				25	12	18.0	18.4	33.0	-14.6
				25	24	18.0	18.4	33.0	-14.7
				50	0	18.0	18.4	33.0	-14.6

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	26090	1855.0	64QAM	1	0	18.3	18.7	33.0	-14.3
				1	24	18.2	18.6	33.0	-14.4
				1	49	18.4	18.8	33.0	-14.2
				25	0	17.6	17.9	33.0	-15.1
				25	12	17.5	17.9	33.0	-15.1
				25	24	17.4	17.8	33.0	-15.2
				50	0	17.5	17.8	33.0	-15.2
10.0	26365	1882.5	64QAM	1	0	18.2	18.5	33.0	-14.5
				1	24	18.2	18.6	33.0	-14.5
				1	49	18.2	18.5	33.0	-14.5
				25	0	17.4	17.8	33.0	-15.2
				25	12	17.4	17.8	33.0	-15.2
				25	24	17.4	17.8	33.0	-15.2
				50	0	17.4	17.8	33.0	-15.2
10.0	26640	1910.0	64QAM	1	0	18.2	18.6	33.0	-14.4
				1	24	18.3	18.7	33.0	-14.3
				1	49	**18.4**	**18.8**	33.0	-14.2
				25	0	17.4	17.7	33.0	-15.3
				25	12	17.5	17.9	33.0	-15.1
				25	24	17.4	17.8	33.0	-15.2
				50	0	17.3	17.7	33.0	-15.3

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OUTPUT POWER FOR LTE BAND 25 (15.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	QPSK	1	0	**20.0**	**20.4**	33.0	-12.6
				1	37	19.8	20.2	33.0	-12.8
				1	74	19.7	20.1	33.0	-12.9
				36	0	18.9	19.3	33.0	-13.7
				36	16	18.8	19.2	33.0	-13.8
				36	35	18.7	19.1	33.0	-13.9
				75	0	18.8	19.2	33.0	-13.8
15.0	26365	1882.5	QPSK	1	0	19.9	20.2	33.0	-12.8
				1	37	19.7	20.0	33.0	-13.0
				1	74	19.8	20.1	33.0	-12.9
				36	0	18.7	19.1	33.0	-13.9
				36	16	18.7	19.1	33.0	-14.0
				36	35	18.6	19.0	33.0	-14.0
				75	0	18.7	19.1	33.0	-14.0
15.0	26615	1907.5	QPSK	1	0	20.0	20.3	33.0	-12.7
				1	37	19.9	20.3	33.0	-12.8
				1	74	19.9	20.3	33.0	-12.7
				36	0	19.2	19.5	33.0	-13.5
				36	16	19.1	19.4	33.0	-13.6
				36	35	19.1	19.4	33.0	-13.6
				75	0	19.1	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	16-QAM	1	0	**19.4**	**19.8**	33.0	-13.2
				1	37	19.2	19.6	33.0	-13.4
				1	74	19.1	19.5	33.0	-13.5
				36	0	17.9	18.2	33.0	-14.8
				36	16	17.8	18.2	33.0	-14.8
				36	35	17.7	18.1	33.0	-14.9
				75	0	17.8	18.2	33.0	-14.8
15.0	26365	1882.5	16-QAM	1	0	19.2	19.6	33.0	-13.4
				1	37	19.1	19.4	33.0	-13.6
				1	74	19.1	19.5	33.0	-13.5
				36	0	17.8	18.2	33.0	-14.8
				36	16	17.8	18.1	33.0	-14.9
				36	35	17.7	18.1	33.0	-14.9
				75	0	17.7	18.1	33.0	-14.9
15.0	26615	1907.5	16-QAM	1	0	19.1	19.5	33.0	-13.6
				1	37	19.0	19.3	33.0	-13.7
				1	74	18.8	19.2	33.0	-13.9
				36	0	18.1	18.5	33.0	-14.5
				36	16	18.1	18.4	33.0	-14.6
				36	35	18.0	18.4	33.0	-14.6
				75	0	18.1	18.4	33.0	-14.6

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Antenna Gain (dBi)	0.37

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	26115	1857.5	64QAM	1	0	18.4	18.8	33.0	-14.2
				1	37	18.2	18.6	33.0	-14.5
				1	74	18.2	18.5	33.0	-14.5
				36	0	17.6	17.9	33.0	-15.1
				36	16	17.5	17.9	33.0	-15.1
				36	35	17.5	17.8	33.0	-15.2
				75	0	17.5	17.8	33.0	-15.2
15.0	26365	1882.5	64QAM	1	0	18.5	18.9	33.0	-14.1
				1	37	18.5	18.9	33.0	-14.1
				1	74	**18.6**	**19.0**	33.0	-14.0
				36	0	17.4	17.8	33.0	-15.2
				36	16	17.4	17.8	33.0	-15.3
				36	35	17.4	17.8	33.0	-15.2
				75	0	17.3	17.7	33.0	-15.4
15.0	26615	1907.5	64QAM	1	0	18.4	18.8	33.0	-14.2
				1	37	18.4	18.7	33.0	-14.3
				1	74	18.3	18.7	33.0	-14.3
				36	0	17.5	17.9	33.0	-15.1
				36	16	17.4	17.8	33.0	-15.2
				36	35	17.3	17.7	33.0	-15.3
				75	0	17.5	17.8	33.0	-15.2

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OUTPUT POWER FOR LTE BAND 25 (20.0 MHz)

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	QPSK	1	0	19.8	20.2	33.0	-12.8
				1	49	19.6	20.0	33.0	-13.0
				1	99	19.6	19.9	33.0	-13.1
				50	0	18.8	19.2	33.0	-13.8
				50	24	18.7	19.1	33.0	-13.9
				50	49	18.6	19.0	33.0	-14.1
				100	0	18.7	19.1	33.0	-13.9
20.0	26365	1882.5	QPSK	1	0	19.7	20.1	33.0	-12.9
				1	49	19.6	20.0	33.0	-13.0
				1	99	19.7	20.1	33.0	-12.9
				50	0	18.7	19.0	33.0	-14.0
				50	24	18.6	19.0	33.0	-14.1
				50	49	18.5	18.9	33.0	-14.1
				100	0	18.6	18.9	33.0	-14.1
20.0	26590	1905.0	QPSK	1	0	**19.9**	**20.3**	33.0	-12.7
				1	49	19.8	20.2	33.0	-12.8
				1	99	19.8	20.2	33.0	-12.8
				50	0	19.0	19.4	33.0	-13.6
				50	24	19.0	19.4	33.0	-13.6
				50	49	18.9	19.3	33.0	-13.7
				100	0	19.0	19.4	33.0	-13.6

Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	16-QAM	1	0	**19.2**	**19.5**	33.0	-13.5
				1	49	19.1	19.5	33.0	-13.6
				1	99	18.9	19.3	33.0	-13.7
				50	0	17.8	18.1	33.0	-14.9
				50	24	17.7	18.1	33.0	-14.9
				50	49	17.6	18.0	33.0	-15.1
				100	0	17.7	18.1	33.0	-14.9
20.0	26365	1882.5	16-QAM	1	0	19.2	19.5	33.0	-13.5
				1	49	19.0	19.4	33.0	-13.6
				1	99	19.0	19.4	33.0	-13.6
				50	0	17.7	18.1	33.0	-15.0
				50	24	17.6	18.0	33.0	-15.0
				50	49	17.5	17.9	33.0	-15.1
				100	0	17.6	18.0	33.0	-15.0
20.0	26590	1905.0	16-QAM	1	0	19.0	19.4	33.0	-13.6
				1	49	19.0	19.4	33.0	-13.6
				1	99	19.0	19.4	33.0	-13.6
				50	0	18.0	18.4	33.0	-14.6
				50	24	18.0	18.4	33.0	-14.6
				50	49	17.9	18.3	33.0	-14.7
				100	0	18.0	18.4	33.0	-14.6

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Antenna Gain (dBi)	0.37								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	26140	1860.0	64QAM	1	0	18.3	18.7	33.0	-14.3
				1	49	18.3	18.7	33.0	-14.3
				1	99	18.4	18.8	33.0	-14.2
				50	0	17.2	17.6	33.0	-15.4
				50	24	17.2	17.5	33.0	-15.5
				50	49	17.2	17.6	33.0	-15.5
				100	0	17.2	17.5	33.0	-15.5
20.0	26365	1882.5	64QAM	1	0	18.3	18.7	33.0	-14.3
				1	49	18.3	18.7	33.0	-14.3
				1	99	**18.5**	**18.8**	33.0	-14.2
				50	0	17.2	17.6	33.0	-15.5
				50	24	17.2	17.6	33.0	-15.4
				50	49	17.2	17.6	33.0	-15.5
				100	0	17.2	17.5	33.0	-15.5
20.0	26590	1905.0	64QAM	1	0	18.4	18.7	33.0	-14.3
				1	49	18.2	18.6	33.0	-14.5
				1	99	18.0	18.4	33.0	-14.6
				50	0	17.0	17.4	33.0	-15.6
				50	24	17.1	17.4	33.0	-15.6
				50	49	16.9	17.3	33.0	-15.7
				100	0	17.1	17.4	33.0	-15.6

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4031B
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7.2.9. LTE BAND 26

ID:	50820	Date:	4/6/17

OUTPUT POWER FOR LTE BAND 26 (1.4 MHz)

Antenna Gain (dBi)	-4.04								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	QPSK	1	0	23.0	16.8	50.00	-33.2
				1	2	23.1	16.9	50.00	-33.1
				1	5	23.0	16.8	50.00	-33.2
				3	0	23.0	16.8	50.00	-33.2
				3	1	23.1	16.9	50.00	-33.1
				3	2	23.0	16.9	50.00	-33.1
				6	0	22.0	15.8	50.00	-34.2
1.4	26740	819.0	QPSK	1	0	23.0	16.8	50.00	-33.2
				1	2	23.0	16.9	50.00	-33.1
				1	5	23.0	16.8	50.00	-33.2
				3	0	23.0	16.8	50.00	-33.2
				3	1	23.0	16.8	50.00	-33.2
				3	2	23.0	16.8	50.00	-33.2
				6	0	22.0	15.8	50.00	-34.2
1.4	26783	823.3	QPSK	1	0	23.2	17.0	50.00	-33.0
				1	2	**23.3**	**17.1**	50.00	-32.9
				1	5	23.2	17.0	50.00	-33.0
				3	0	23.2	17.0	50.00	-33.0
				3	1	23.2	17.1	50.00	-32.9
				3	2	23.2	17.1	50.00	-32.9
				6	0	22.2	16.0	50.00	-34.0

Antenna Gain (dBi)	-4.04								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	16QAM	1	0	22.0	15.8	50.00	-34.2
				1	2	22.1	15.9	50.00	-34.1
				1	5	22.1	15.9	50.00	-34.1
				3	0	22.2	16.0	50.00	-34.0
				3	1	22.3	16.1	50.00	-33.9
				3	2	22.3	16.1	50.00	-33.9
				6	0	21.2	15.0	50.00	-35.0
1.4	26740	819.0	16QAM	1	0	22.4	16.2	50.00	-33.8
				1	2	**22.4**	**16.2**	50.00	-33.8
				1	5	22.3	16.1	50.00	-33.9
				3	0	22.2	16.0	50.00	-34.0
				3	1	22.2	16.0	50.00	-34.0
				3	2	22.2	16.0	50.00	-34.0
				6	0	20.9	14.7	50.00	-35.3
1.4	26783	823.3	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	2	22.2	16.1	50.00	-33.9
				1	5	22.2	16.0	50.00	-34.0
				3	0	22.1	15.9	50.00	-34.1
				3	1	22.1	15.9	50.00	-34.1
				3	2	22.1	15.9	50.00	-34.1
				6	0	21.3	15.2	50.00	-34.8

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Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
1.4	26697	814.7	64QAM	1	0	21.5	15.3	50.00	-34.7
				1	2	21.5	15.4	50.00	-34.7
				1	5	21.4	15.2	50.00	-34.8
				3	0	21.5	15.3	50.00	-34.7
				3	1	21.6	15.4	50.00	-34.6
				3	2	21.6	15.4	50.00	-34.6
				6	0	20.2	14.0	50.00	-36.0
1.4	26740	819.0	64QAM	1	0	21.3	15.1	50.00	-34.9
				1	2	21.3	15.1	50.00	-34.9
				1	5	21.3	15.1	50.00	-34.9
				3	0	21.2	15.0	50.00	-35.0
				3	1	21.2	15.1	50.00	-35.0
				3	2	21.3	15.1	50.00	-34.9
				6	0	21.3	15.1	50.00	-34.9
1.4	26783	823.3	64QAM	1	0	21.4	15.2	50.00	-34.8
				1	2	21.5	15.3	50.00	-34.7
				1	5	21.4	15.2	50.00	-34.8
				3	0	21.5	15.3	50.00	-34.7
				3	1	21.6	15.4	50.00	-34.6
				3	2	**21.6**	**15.4**	50.00	-34.6
				6	0	20.2	14.0	50.00	-36.0

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OUTPUT POWER FOR LTE BAND 26 (3.0 MHz)

Antenna Gain (dBi)	-4.04								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	QPSK	1	0	23.1	16.9	50.00	-33.1
				1	7	23.1	17.0	50.00	-33.0
				1	14	23.1	16.9	50.00	-33.1
				8	0	22.1	15.9	50.00	-34.1
				8	4	22.1	16.0	50.00	-34.0
				8	7	22.1	16.0	50.00	-34.0
				15	0	22.1	15.9	50.00	-34.1
3.0	26740	819.0	QPSK	1	0	23.1	16.9	50.00	-33.1
				1	7	23.2	17.0	50.00	-33.0
				1	14	23.0	16.8	50.00	-33.2
				8	0	22.0	15.8	50.00	-34.2
				8	4	22.0	15.9	50.00	-34.1
				8	7	22.0	15.9	50.00	-34.1
				15	0	22.0	15.8	50.00	-34.2
3.0	26775	822.5	QPSK	1	0	23.2	17.0	50.00	-33.0
				1	7	**23.3**	**17.2**	50.00	-32.8
				1	14	23.2	17.1	50.00	-32.9
				8	0	22.3	16.1	50.00	-33.9
				8	4	22.3	16.1	50.00	-33.9
				8	7	22.3	16.1	50.00	-33.9
				15	0	22.3	16.1	50.00	-33.9

Antenna Gain (dBi)	-4.04								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	7	22.2	16.0	50.00	-34.0
				1	14	22.1	15.9	50.00	-34.1
				8	0	21.3	15.1	50.00	-34.9
				8	4	21.3	15.1	50.00	-34.9
				8	7	21.3	15.1	50.00	-34.9
				15	0	21.1	14.9	50.00	-35.1
3.0	26740	819.0	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	7	22.3	16.1	50.00	-33.9
				1	14	22.3	16.1	50.00	-33.9
				8	0	21.0	14.8	50.00	-35.2
				8	4	21.0	14.8	50.00	-35.2
				8	7	20.9	14.7	50.00	-35.3
				15	0	21.1	14.9	50.00	-35.1
3.0	26775	822.5	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	7	**22.3**	**16.1**	50.00	-33.9
				1	14	22.2	16.0	50.00	-34.0
				8	0	21.4	15.2	50.00	-34.8
				8	4	21.4	15.2	50.00	-34.8
				8	7	21.4	15.2	50.00	-34.8
				15	0	21.3	15.1	50.00	-34.9

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Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
3.0	26705	815.5	64QAM	1	0	21.4	15.2	50.00	-34.8
				1	7	21.5	15.3	50.00	-34.7
				1	14	21.3	15.1	50.00	-34.9
				8	0	20.3	14.1	50.00	-35.9
				8	4	20.3	14.1	50.00	-35.9
				8	7	20.2	14.1	50.00	-36.0
				15	0	20.3	14.1	50.00	-35.9
3.0	26740	819.0	64QAM	1	0	21.4	15.2	50.00	-34.8
				1	7	**21.5**	**15.3**	50.00	-34.7
				1	14	21.3	15.1	50.00	-34.9
				8	0	20.2	14.0	50.00	-36.0
				8	4	20.2	14.0	50.00	-36.0
				8	7	20.2	14.0	50.00	-36.0
				15	0	20.2	14.0	50.00	-36.0
3.0	26775	822.5	64QAM	1	0	21.0	14.8	50.00	-35.2
				1	7	21.1	14.9	50.00	-35.1
				1	14	21.0	14.8	50.00	-35.2
				8	0	20.3	14.1	50.00	-35.9
				8	4	20.3	14.1	50.00	-35.9
				8	7	20.3	14.1	50.00	-35.9
				15	0	20.3	14.1	50.00	-35.9

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OUTPUT POWER FOR LTE BAND 26 (5.0 MHz)

Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	QPSK	1	0	23.1	16.9	50.00	-33.1
				1	12	23.1	16.9	50.00	-33.1
				1	24	23.0	16.8	50.00	-33.2
				12	0	22.0	15.8	50.00	-34.2
				12	6	22.0	15.8	50.00	-34.2
				12	11	22.0	15.8	50.00	-34.2
				25	0	22.0	15.8	50.00	-34.2
5.0	26740	819.0	QPSK	1	0	23.0	16.9	50.00	-33.1
				1	12	22.9	16.8	50.00	-33.2
				1	24	23.1	17.0	50.00	-33.0
				12	0	22.0	15.8	50.00	-34.2
				12	6	22.0	15.8	50.00	-34.2
				12	11	21.9	15.8	50.00	-34.2
				25	0	22.0	15.8	50.00	-34.2
5.0	26765	821.5	QPSK	1	0	23.1	16.9	50.00	-33.1
				1	12	**23.2**	**17.1**	50.00	-32.9
				1	24	23.2	17.1	50.00	-32.9
				12	0	22.0	15.8	50.00	-34.2
				12	6	22.2	16.0	50.00	-34.0
				12	11	22.2	16.0	50.00	-34.0
				25	0	22.1	15.9	50.00	-34.1

Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	12	22.1	15.9	50.00	-34.1
				1	24	22.1	15.9	50.00	-34.1
				12	0	21.1	14.9	50.00	-35.1
				12	6	21.1	14.9	50.00	-35.1
				12	11	21.0	14.8	50.00	-35.2
				25	0	21.0	14.8	50.00	-35.2
5.0	26740	819.0	16QAM	1	0	22.4	16.2	50.00	-33.8
				1	12	**22.4**	**16.2**	50.00	-33.8
				1	24	22.3	16.2	50.00	-33.8
				12	0	21.1	14.9	50.00	-35.1
				12	6	21.2	15.0	50.00	-35.0
				12	11	21.1	14.9	50.00	-35.1
				25	0	21.0	14.8	50.00	-35.2
5.0	26765	821.5	16QAM	1	0	22.2	16.0	50.00	-34.0
				1	12	22.4	16.2	50.00	-33.8
				1	24	22.3	16.1	50.00	-33.9
				12	0	21.1	15.0	50.00	-35.0
				12	6	21.3	15.1	50.00	-34.9
				12	11	21.3	15.1	50.00	-34.9
				25	0	21.1	15.0	50.00	-35.0

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Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
5.0	26715	816.5	64QAM	1	0	21.4	15.3	50.00	-34.8
				1	12	21.4	15.2	50.00	-34.8
				1	24	21.4	15.2	50.00	-34.8
				12	0	20.2	14.1	50.00	-36.0
				12	6	20.2	14.0	50.00	-36.0
				12	11	20.2	14.0	50.00	-36.0
				25	0	20.3	14.1	50.00	-35.9
5.0	26740	819.0	64QAM	1	0	21.4	15.2	50.00	-34.8
				1	12	21.4	15.2	50.00	-34.8
				1	24	21.5	15.3	50.00	-34.7
				12	0	20.2	14.0	50.00	-36.0
				12	6	20.2	14.0	50.00	-36.0
				12	11	20.2	14.0	50.00	-36.0
				25	0	20.1	14.0	50.00	-36.1
5.0	26765	821.5	64QAM	1	0	21.6	15.4	50.00	-34.6
				1	12	21.6	15.4	50.00	-34.6
				1	24	**21.6**	**15.5**	50.00	-34.6
				12	0	20.2	14.0	50.00	-36.0
				12	6	20.4	14.2	50.00	-35.8
				12	11	20.3	14.1	50.00	-35.9
				25	0	20.3	14.1	50.00	-35.9

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OUTPUT POWER FOR LTE BAND 26 (10.0 MHz)

Antenna Gain (dBi)	-4.04

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	ERP Average (dBm)	ERP Limit (dBm)	Margin (dB)
10.0	26740	819.0	QPSK	1	0	23.1	16.9	50.00	-33.1
				1	24	23.0	16.9	50.00	-33.1
				1	49	**23.3**	**17.1**	50.00	-32.9
				25	0	22.1	16.0	50.00	-34.0
				25	12	22.1	15.9	50.00	-34.1
				25	24	22.2	16.0	50.00	-34.0
				50	0	22.2	16.0	50.00	-34.0
			16QAM	1	0	22.0	15.8	50.00	-34.2
				1	24	22.0	15.8	50.00	-34.2
				1	49	**22.3**	**16.1**	50.00	-33.9
				25	0	21.2	15.0	50.00	-35.0
				25	12	21.1	14.9	50.00	-35.1
				25	24	21.3	15.1	50.00	-34.9
				50	0	21.2	15.0	50.00	-35.0
			64QAM	1	0	**21.5**	**15.3**	50.00	-34.7
				1	24	21.4	15.2	50.00	-34.8
				1	49	21.4	15.2	50.00	-34.8
				25	0	20.3	14.1	50.00	-35.9
				25	12	20.3	14.1	50.00	-35.9
				25	24	20.3	14.1	50.00	-35.9
				50	0	20.3	14.1	50.00	-35.9

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7.2.10. LTE BAND 30

ID:	50820	Date:	4/5/17

OUTPUT POWER FOR LTE BAND 30 (5.0 MHz)

Antenna Gain (dBi)	1.42

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	QPSK	1	0	**19.3**	**20.7**	24.0	-3.3
				1	12	19.2	20.6	24.0	-3.4
				1	24	19.2	20.6	24.0	-3.4
				12	0	18.2	19.6	24.0	-4.4
				12	6	18.2	19.6	24.0	-4.4
				12	11	18.1	19.6	24.0	-4.4
				25	0	18.2	19.6	24.0	-4.4
5.0	27710	2310.0	QPSK	1	0	19.2	20.7	24.0	-3.3
				1	12	19.1	20.6	24.0	-3.4
				1	24	19.2	20.6	24.0	-3.4
				12	0	18.1	19.6	24.0	-4.4
				12	6	18.2	19.6	24.0	-4.4
				12	11	18.1	19.5	24.0	-4.5
				25	0	18.1	19.6	24.0	-4.4
5.0	27735	2312.5	QPSK	1	0	19.1	20.6	24.0	-3.4
				1	12	19.1	20.5	24.0	-3.5
				1	24	19.1	20.5	24.0	-3.5
				12	0	18.1	19.6	24.0	-4.4
				12	6	18.1	19.5	24.0	-4.5
				12	11	18.1	19.5	24.0	-4.5
				25	0	18.1	19.5	24.0	-4.5

Antenna Gain (dBi)	1.42

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	16QAM	1	0	18.4	19.8	24.0	-4.2
				1	12	18.3	19.7	24.0	-4.3
				1	24	18.3	19.7	24.0	-4.3
				12	0	17.3	18.7	24.0	-5.3
				12	6	17.3	18.7	24.0	-5.3
				12	11	17.2	18.6	24.0	-5.4
				25	0	17.1	18.5	24.0	-5.5
5.0	27710	2310.0	16QAM	1	0	**18.5**	**19.9**	24.0	-4.1
				1	12	18.5	19.9	24.0	-4.1
				1	24	18.5	19.9	24.0	-4.1
				12	0	17.4	18.8	24.0	-5.2
				12	6	17.3	18.8	24.0	-5.2
				12	11	17.3	18.7	24.0	-5.3
				25	0	17.2	18.6	24.0	-5.4
5.0	27735	2312.5	16QAM	1	0	18.4	19.8	24.0	-4.2
				1	12	18.3	19.7	24.0	-4.3
				1	24	18.3	19.7	24.0	-4.3
				12	0	17.2	18.7	24.0	-5.3
				12	6	17.2	18.6	24.0	-5.4
				12	11	17.2	18.6	24.0	-5.4
				25	0	17.1	18.6	24.0	-5.4

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Antenna Gain (dBi)	1.42

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	27685	2307.5	64QAM	1	0	17.7	19.1	24.0	-4.9
				1	12	17.6	19.1	24.0	-4.9
				1	24	17.6	19.0	24.0	-5.0
				12	0	16.5	17.9	24.0	-6.1
				12	6	16.5	17.9	24.0	-6.1
				12	11	16.5	17.9	24.0	-6.1
				25	0	16.4	17.9	24.0	-6.2
5.0	27710	2310.0	64QAM	1	0	**17.9**	**19.3**	24.0	-4.7
				1	12	17.8	19.2	24.0	-4.8
				1	24	17.9	19.3	24.0	-4.7
				12	0	16.5	17.9	24.0	-6.1
				12	6	16.5	17.9	24.0	-6.1
				12	11	16.5	17.9	24.0	-6.1
				25	0	16.5	17.9	24.0	-6.1
5.0	27735	2312.5	64QAM	1	0	17.7	19.1	24.0	-4.9
				1	12	17.6	19.1	24.0	-5.0
				1	24	17.6	19.0	24.0	-5.0
				12	0	16.4	17.8	24.0	-6.2
				12	6	16.4	17.9	24.0	-6.2
				12	11	16.4	17.8	24.0	-6.2
				25	0	16.5	17.9	24.0	-6.1

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OUTPUT POWER FOR LTE BAND 30 (10.0 MHz)

Antenna Gain (dBi)	1.42

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	27710	2310.0	QPSK	1	0	**19.3**	**20.8**	24.0	-3.2
				1	24	19.2	20.6	24.0	-3.4
				1	49	19.3	20.7	24.0	-3.3
				25	0	18.5	19.9	24.0	-4.1
				25	12	18.4	19.8	24.0	-4.2
				25	24	18.3	19.8	24.0	-4.2
				50	0	18.4	19.8	24.0	-4.2
			16QAM	1	0	**18.5**	**19.9**	24.0	-4.1
				1	24	18.3	19.7	24.0	-4.3
				1	49	18.2	19.7	24.0	-4.3
				25	0	17.5	18.9	24.0	-5.1
				25	12	17.4	18.8	24.0	-5.2
				25	24	17.4	18.8	24.0	-5.2
				50	0	17.4	18.8	24.0	-5.2
			64QAM	1	0	**17.7**	**19.2**	24.0	-4.8
				1	24	17.7	19.1	24.0	-4.9
				1	49	17.6	19.1	24.0	-5.0
				25	0	16.6	18.0	24.0	-6.0
				25	12	16.5	17.9	24.0	-6.1
				25	24	16.5	17.9	24.0	-6.1
				50	0	16.5	17.9	24.0	-6.1

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7.2.11. LTE BAND 41

ID:	50820	Date:	4/6/17

OUTPUT POWER FOR LTE BAND 41 (5.0 MHz)

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	QPSK	1	0	20.2	20.2	33.0	-12.8
				1	12	**20.3**	**20.4**	33.0	-12.6
				1	24	20.3	20.4	33.0	-12.6
				12	0	19.3	19.3	33.0	-13.7
				12	6	19.4	19.4	33.0	-13.6
				12	11	19.4	19.5	33.0	-13.5
				25	0	19.3	19.4	33.0	-13.6
5.0	40620	2593.0	QPSK	1	0	20.3	20.4	33.0	-12.7
				1	12	20.2	20.3	33.0	-12.7
				1	24	20.3	20.3	33.0	-12.7
				12	0	19.3	19.3	33.0	-13.7
				12	6	19.3	19.3	33.0	-13.7
				12	11	19.2	19.3	33.0	-13.7
				25	0	19.2	19.3	33.0	-13.7
5.0	41565	2687.5	QPSK	1	0	20.2	20.3	33.0	-12.8
				1	12	20.1	20.2	33.0	-12.8
				1	24	20.1	20.2	33.0	-12.8
				12	0	19.2	19.2	33.0	-13.8
				12	6	19.2	19.3	33.0	-13.7
				12	11	19.2	19.2	33.0	-13.8
				25	0	19.2	19.2	33.0	-13.8

Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	16QAM	1	0	19.5	19.6	33.0	-13.5
				1	12	19.5	19.5	33.0	-13.5
				1	24	19.5	19.5	33.0	-13.5
				12	0	18.4	18.5	33.0	-14.6
				12	6	18.5	18.5	33.0	-14.5
				12	11	18.5	18.6	33.0	-14.4
				25	0	18.4	18.4	33.0	-14.6
5.0	40620	2593.0	16QAM	1	0	19.1	19.1	33.0	-13.9
				1	12	18.9	19.0	33.0	-14.0
				1	24	19.0	19.1	33.0	-13.9
				12	0	18.3	18.4	33.0	-14.6
				12	6	18.3	18.4	33.0	-14.7
				12	11	18.3	18.3	33.0	-14.7
				25	0	18.4	18.4	33.0	-14.6
5.0	41565	2687.5	16QAM	1	0	19.5	19.5	33.0	-13.5
				1	12	**19.5**	**19.6**	33.0	-13.4
				1	24	19.5	19.5	33.0	-13.5
				12	0	18.2	18.3	33.0	-14.7
				12	6	18.3	18.3	33.0	-14.7
				12	11	18.2	18.3	33.0	-14.7
				25	0	18.2	18.2	33.0	-14.8

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	39675	2498.5	64QAM	1	0	18.4	18.4	33.0	-14.6
				1	12	18.3	18.3	33.0	-14.7
				1	24	18.2	18.3	33.0	-14.7
				12	0	17.4	17.5	33.0	-15.5
				12	6	17.5	17.5	33.0	-15.5
				12	11	17.4	17.5	33.0	-15.6
				25	0	17.5	17.5	33.0	-15.5
5.0	40620	2593.0	64QAM	1	0	18.4	18.4	33.0	-14.6
				1	12	18.3	18.3	33.0	-14.7
				1	24	18.3	18.3	33.0	-14.7
				12	0	17.3	17.4	33.0	-15.6
				12	6	17.3	17.4	33.0	-15.7
				12	11	17.2	17.3	33.0	-15.7
				25	0	17.3	17.3	33.0	-15.7
5.0	41565	2687.5	64QAM	1	0	**18.5**	**18.5**	33.0	-14.5
				1	12	18.3	18.3	33.0	-14.7
				1	24	18.5	18.5	33.0	-14.5
				12	0	17.3	17.3	33.0	-15.7
				12	6	17.5	17.5	33.0	-15.5
				12	11	17.3	17.4	33.0	-15.7
				25	0	17.3	17.4	33.0	-15.6

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OUTPUT POWER FOR LTE BAND 41 (10.0 MHz)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	QPSK	1	0	20.0	20.1	33.0	-12.9
				1	24	20.2	20.2	33.0	-12.8
				1	49	20.3	20.3	33.0	-12.7
				25	0	19.2	19.2	33.0	-13.8
				25	12	19.2	19.3	33.0	-13.8
				25	24	19.3	19.3	33.0	-13.7
				50	0	19.2	19.2	33.0	-13.8
10.0	40620	2593.0	QPSK	1	0	**20.3**	**20.4**	33.0	-12.6
				1	24	20.1	20.1	33.0	-12.9
				1	49	20.0	20.0	33.0	-13.0
				25	0	19.2	19.2	33.0	-13.8
				25	12	19.2	19.2	33.0	-13.8
				25	24	19.2	19.2	33.0	-13.8
				50	0	19.2	19.2	33.0	-13.8
10.0	41540	2685.0	QPSK	1	0	20.1	20.2	33.0	-12.8
				1	24	20.2	20.2	33.0	-12.8
				1	49	20.1	20.1	33.0	-12.9
				25	0	19.3	19.3	33.0	-13.7
				25	12	19.3	19.4	33.0	-13.7
				25	24	19.3	19.3	33.0	-13.7
				50	0	19.3	19.3	33.0	-13.7

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	16QAM	1	0	19.4	19.5	33.0	-13.5
				1	24	19.4	19.5	33.0	-13.6
				1	49	19.4	19.5	33.0	-13.5
				25	0	18.2	18.3	33.0	-14.7
				25	12	18.2	18.3	33.0	-14.7
				25	24	18.3	18.4	33.0	-14.6
				50	0	18.2	18.3	33.0	-14.7
10.0	40620	2593.0	16QAM	1	0	**19.5**	**19.6**	33.0	-13.4
				1	24	19.5	19.6	33.0	-13.4
				1	49	19.5	19.5	33.0	-13.5
				25	0	18.2	18.3	33.0	-14.7
				25	12	18.2	18.3	33.0	-14.8
				25	24	18.2	18.2	33.0	-14.8
				50	0	18.2	18.3	33.0	-14.7
10.0	41540	2685.0	16QAM	1	0	19.5	19.5	33.0	-13.5
				1	24	19.5	19.5	33.0	-13.5
				1	49	19.4	19.5	33.0	-13.5
				25	0	18.4	18.4	33.0	-14.6
				25	12	18.3	18.4	33.0	-14.6
				25	24	18.3	18.3	33.0	-14.7
				50	0	18.3	18.3	33.0	-14.7

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	39700	2501.0	64QAM	1	0	18.5	18.6	33.0	-14.5
				1	24	18.4	18.4	33.0	-14.6
				1	49	18.4	18.4	33.0	-14.6
				25	0	17.4	17.4	33.0	-15.6
				25	12	17.6	17.6	33.0	-15.4
				25	24	17.5	17.6	33.0	-15.4
				50	0	17.4	17.5	33.0	-15.5
10.0	40620	2593.0	64QAM	1	0	**18.6**	**18.6**	33.0	-14.4
				1	24	18.4	18.4	33.0	-14.6
				1	49	18.5	18.5	33.0	-14.5
				25	0	17.5	17.6	33.0	-15.5
				25	12	17.4	17.5	33.0	-15.6
				25	24	17.3	17.4	33.0	-15.6
				50	0	17.4	17.5	33.0	-15.5
10.0	41540	2685.0	64QAM	1	0	18.6	18.6	33.0	-14.4
				1	24	18.3	18.4	33.0	-14.6
				1	49	18.5	18.6	33.0	-14.4
				25	0	17.7	17.8	33.0	-15.3
				25	12	17.8	17.9	33.0	-15.1
				25	24	17.8	17.8	33.0	-15.2
				50	0	17.7	17.8	33.0	-15.2

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OUTPUT POWER FOR LTE BAND 41 (15.0 MHz)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	QPSK	1	0	20.0	20.1	33.0	-12.9
				1	37	20.2	20.3	33.0	-12.7
				1	74	**20.3**	**20.4**	33.0	-12.6
				36	0	19.3	19.3	33.0	-13.7
				36	16	19.3	19.3	33.0	-13.7
				36	35	19.4	19.5	33.0	-13.6
				75	0	19.3	19.4	33.0	-13.6
15.0	40620	2593.0	QPSK	1	0	20.2	20.3	33.0	-12.8
				1	37	19.9	19.9	33.0	-13.1
				1	74	19.9	20.0	33.0	-13.1
				36	0	19.0	19.1	33.0	-13.9
				36	16	19.0	19.0	33.0	-14.0
				36	35	18.9	19.0	33.0	-14.1
				75	0	19.0	19.0	33.0	-14.0
15.0	41515	2682.5	QPSK	1	0	20.3	20.4	33.0	-12.6
				1	37	20.2	20.3	33.0	-12.7
				1	74	20.2	20.2	33.0	-12.8
				36	0	19.3	19.3	33.0	-13.7
				36	16	19.4	19.4	33.0	-13.6
				36	35	19.2	19.2	33.0	-13.8
				75	0	19.2	19.3	33.0	-13.7

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	16-QAM	1	0	19.4	19.5	33.0	-13.5
				1	37	**19.5**	**19.6**	33.0	-13.4
				1	74	19.5	19.6	33.0	-13.4
				36	0	18.3	18.4	33.0	-14.6
				36	16	18.4	18.4	33.0	-14.6
				36	35	18.4	18.4	33.0	-14.6
				75	0	18.3	18.3	33.0	-14.7
15.0	40620	2593.0	16-QAM	1	0	19.3	19.3	33.0	-13.7
				1	37	19.3	19.4	33.0	-13.6
				1	74	19.3	19.3	33.0	-13.7
				36	0	18.1	18.1	33.0	-14.9
				36	16	18.0	18.1	33.0	-14.9
				36	35	18.0	18.0	33.0	-15.0
				75	0	18.0	18.0	33.0	-15.0
15.0	41515	2682.5	16-QAM	1	0	19.4	19.5	33.0	-13.5
				1	37	19.4	19.5	33.0	-13.5
				1	74	19.4	19.4	33.0	-13.6
				36	0	18.3	18.3	33.0	-14.7
				36	16	18.3	18.4	33.0	-14.6
				36	35	18.2	18.3	33.0	-14.7
				75	0	18.3	18.3	33.0	-14.7

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	39725	2503.5	64QAM	1	0	**18.5**	**18.5**	33.0	-14.5
				1	37	18.4	18.5	33.0	-14.5
				1	74	18.4	18.5	33.0	-14.5
				36	0	17.5	17.6	33.0	-15.5
				36	16	17.5	17.5	33.0	-15.5
				36	35	17.4	17.5	33.0	-15.6
				75	0	17.3	17.4	33.0	-15.7
15.0	40620	2593.0	64QAM	1	0	18.4	18.4	33.0	-14.6
				1	37	18.4	18.5	33.0	-14.6
				1	74	18.4	18.5	33.0	-14.5
				36	0	17.5	17.5	33.0	-15.5
				36	16	17.5	17.6	33.0	-15.5
				36	35	17.3	17.4	33.0	-15.6
				75	0	17.4	17.4	33.0	-15.6
15.0	41515	2682.5	64QAM	1	0	18.4	18.5	33.0	-14.5
				1	37	18.3	18.4	33.0	-14.7
				1	74	18.3	18.4	33.0	-14.6
				36	0	17.5	17.6	33.0	-15.4
				36	16	17.5	17.5	33.0	-15.5
				36	35	17.3	17.3	33.0	-15.7
				75	0	17.3	17.3	33.0	-15.7

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OUTPUT POWER FOR LTE BAND 41 (20.0 MHz)

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	QPSK	1	0	19.8	19.9	33.0	-13.1
				1	49	20.1	20.2	33.0	-12.8
				1	99	20.2	20.3	33.0	-12.7
				50	0	19.0	19.1	33.0	-13.9
				50	24	19.1	19.2	33.0	-13.8
				50	49	19.1	19.1	33.0	-13.9
				100	0	19.1	19.1	33.0	-13.9
20.0	40620	2593.0	QPSK	1	0	20.2	20.3	33.0	-12.7
				1	49	19.9	19.9	33.0	-13.1
				1	99	19.9	20.0	33.0	-13.0
				50	0	19.1	19.1	33.0	-13.9
				50	24	18.9	19.0	33.0	-14.0
				50	49	18.8	18.9	33.0	-14.1
				100	0	18.9	19.0	33.0	-14.0
20.0	41490	2680.0	QPSK	1	0	**20.3**	**20.3**	33.0	-12.7
				1	49	20.2	20.3	33.0	-12.7
				1	99	20.0	20.0	33.0	-13.0
				50	0	19.1	19.1	33.0	-13.9
				50	24	18.9	19.0	33.0	-14.0
				50	49	19.0	19.0	33.0	-14.0
				100	0	19.1	19.1	33.0	-13.9

Antenna Gain (dBi)	0.05								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	16-QAM	1	0	19.2	19.2	33.0	-13.8
				1	49	19.6	19.6	33.0	-13.4
				1	99	**19.6**	**19.7**	33.0	-13.3
				50	0	18.0	18.1	33.0	-14.9
				50	24	18.2	18.3	33.0	-14.7
				50	49	18.2	18.2	33.0	-14.8
				100	0	18.1	18.2	33.0	-14.8
20.0	40620	2593.0	16-QAM	1	0	19.3	19.4	33.0	-13.6
				1	49	19.0	19.1	33.0	-13.9
				1	99	19.1	19.2	33.0	-13.9
				50	0	18.1	18.2	33.0	-14.8
				50	24	17.9	18.0	33.0	-15.0
				50	49	17.9	17.9	33.0	-15.1
				100	0	17.9	18.0	33.0	-15.1
20.0	41490	2680.0	16-QAM	1	0	19.5	19.5	33.0	-13.5
				1	49	19.2	19.2	33.0	-13.8
				1	99	19.2	19.3	33.0	-13.7
				50	0	18.1	18.2	33.0	-14.8
				50	24	18.0	18.0	33.0	-15.0
				50	49	18.1	18.2	33.0	-14.8
				100	0	18.1	18.2	33.0	-14.8

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Antenna Gain (dBi)	0.05

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	39750	2506.0	64QAM	1	0	**18.6**	**18.6**	33.0	-14.4
				1	49	18.4	18.4	33.0	-14.6
				1	99	18.3	18.4	33.0	-14.6
				50	0	17.4	17.4	33.0	-15.6
				50	24	17.3	17.4	33.0	-15.6
				50	49	17.4	17.4	33.0	-15.6
				100	0	17.3	17.4	33.0	-15.6
20.0	40620	2593.0	64QAM	1	0	18.5	18.6	33.0	-14.5
				1	49	18.3	18.4	33.0	-14.6
				1	99	18.4	18.4	33.0	-14.6
				50	0	17.5	17.6	33.0	-15.4
				50	24	17.5	17.6	33.0	-15.5
				50	49	17.3	17.4	33.0	-15.7
				100	0	17.4	17.4	33.0	-15.6
20.0	41490	2680.0	64QAM	1	0	18.5	18.5	33.0	-14.5
				1	49	18.3	18.4	33.0	-14.6
				1	99	18.3	18.4	33.0	-14.6
				50	0	17.3	17.4	33.0	-15.7
				50	24	17.4	17.4	33.0	-15.6
				50	49	17.3	17.3	33.0	-15.7
				100	0	17.2	17.3	33.0	-15.7

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7.2.12. LTE BAND 66

ID:	39005	Date:	4/7/17

OUTPUT POWER FOR LTE BAND 66 (5.0 MHz)

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	QPSK	1	0	20.7	20.1	30.0	-9.9
				1	12	20.7	20.1	30.0	-9.9
				1	24	20.6	20.1	30.0	-9.9
				12	0	19.8	19.2	30.0	-10.8
				12	6	19.8	19.2	30.0	-10.8
				12	11	19.7	19.2	30.0	-10.9
				25	0	19.7	19.2	30.0	-10.9
5.0	132322	1745.0	QPSK	1	0	20.7	20.1	30.0	-9.9
				1	12	20.7	20.1	30.0	-9.9
				1	24	**20.7**	**20.2**	30.0	-9.8
				12	0	19.7	19.2	30.0	-10.8
				12	6	19.8	19.2	30.0	-10.8
				12	11	19.8	19.2	30.0	-10.8
				25	0	19.7	19.2	30.0	-10.8
5.0	132647	1777.5	QPSK	1	0	20.6	20.0	30.0	-10.0
				1	12	20.6	20.0	30.0	-10.0
				1	24	20.6	20.1	30.0	-9.9
				12	0	19.8	19.3	30.0	-10.7
				12	6	19.8	19.3	30.0	-10.7
				12	11	19.8	19.3	30.0	-10.7
				25	0	19.8	19.2	30.0	-10.8

Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	16QAM	1	0	19.8	19.2	30.0	-10.8
				1	12	19.8	19.3	30.0	-10.8
				1	24	**19.8**	**19.3**	30.0	-10.7
				12	0	18.8	18.3	30.0	-11.7
				12	6	18.8	18.3	30.0	-11.8
				12	11	18.8	18.2	30.0	-11.8
				25	0	18.8	18.2	30.0	-11.8
5.0	132322	1745.0	16QAM	1	0	19.7	19.2	30.0	-10.8
				1	12	19.7	19.2	30.0	-10.8
				1	24	19.8	19.2	30.0	-10.8
				12	0	18.8	18.3	30.0	-11.8
				12	6	18.7	18.2	30.0	-11.8
				12	11	18.9	18.3	30.0	-11.7
				25	0	18.7	18.2	30.0	-11.8
5.0	132647	1777.5	16QAM	1	0	19.7	19.2	30.0	-10.8
				1	12	19.7	19.2	30.0	-10.8
				1	24	19.8	19.2	30.0	-10.8
				12	0	18.8	18.3	30.0	-11.8
				12	6	18.9	18.3	30.0	-11.7
				12	11	18.9	18.3	30.0	-11.7
				25	0	18.9	18.3	30.0	-11.7

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Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
5.0	131997	1712.5	64QAM	1	0	19.2	18.6	30.0	-11.4
				1	12	19.2	18.6	30.0	-11.4
				1	24	19.1	18.6	30.0	-11.5
				12	0	18.0	17.4	30.0	-12.6
				12	6	18.0	17.4	30.0	-12.6
				12	11	17.9	17.4	30.0	-12.7
				25	0	18.0	17.4	30.0	-12.6
5.0	132322	1745.0	64QAM	1	0	**19.4**	**18.8**	30.0	-11.2
				1	12	19.3	18.8	30.0	-11.2
				1	24	19.4	18.8	30.0	-11.2
				12	0	18.0	17.5	30.0	-12.5
				12	6	18.0	17.5	30.0	-12.6
				12	11	18.0	17.4	30.0	-12.6
				25	0	18.0	17.4	30.0	-12.6
5.0	132647	1777.5	64QAM	1	0	18.8	18.3	30.0	-11.7
				1	12	18.8	18.2	30.0	-11.8
				1	24	18.8	18.2	30.0	-11.8
				12	0	17.7	17.1	30.0	-12.9
				12	6	17.7	17.1	30.0	-12.9
				12	11	17.6	17.1	30.0	-12.9
				25	0	17.6	17.0	30.0	-13.0

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OUTPUT POWER FOR LTE BAND 66 (10.0 MHz)

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	QPSK	1	0	20.8	20.2	30.0	-9.8
				1	24	20.8	20.3	30.0	-9.8
				1	49	20.7	20.2	30.0	-9.8
				25	0	19.9	19.3	30.0	-10.7
				25	12	19.8	19.3	30.0	-10.7
				25	24	19.8	19.3	30.0	-10.7
				50	0	19.8	19.3	30.0	-10.7
10.0	132322	1745.0	QPSK	1	0	20.8	20.2	30.0	-9.8
				1	24	**20.8**	**20.3**	30.0	-9.7
				1	49	20.8	20.2	30.0	-9.8
				25	0	19.8	19.3	30.0	-10.7
				25	12	19.8	19.3	30.0	-10.7
				25	24	19.9	19.3	30.0	-10.7
				50	0	19.9	19.3	30.0	-10.7
10.0	132622	1775.0	QPSK	1	0	20.8	20.2	30.0	-9.8
				1	24	20.8	20.3	30.0	-9.8
				1	49	20.8	20.2	30.0	-9.8
				25	0	19.9	19.4	30.0	-10.6
				25	12	19.9	19.4	30.0	-10.6
				25	24	19.9	19.3	30.0	-10.7
				50	0	19.9	19.3	30.0	-10.7

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	16QAM	1	0	19.9	19.3	30.0	-10.7
				1	24	19.9	19.4	30.0	-10.7
				1	49	19.9	19.4	30.0	-10.6
				25	0	18.9	18.4	30.0	-11.6
				25	12	18.9	18.4	30.0	-11.6
				25	24	18.9	18.3	30.0	-11.7
				50	0	18.9	18.3	30.0	-11.7
10.0	132322	1745.0	16QAM	1	0	19.9	19.3	30.0	-10.7
				1	24	19.8	19.3	30.0	-10.7
				1	49	19.9	19.4	30.0	-10.6
				25	0	18.9	18.4	30.0	-11.6
				25	12	18.9	18.3	30.0	-11.7
				25	24	19.0	18.5	30.0	-11.5
				50	0	19.1	18.5	30.0	-11.5
10.0	132622	1775.0	16QAM	1	0	19.7	19.1	30.0	-10.9
				1	24	19.8	19.2	30.0	-10.8
				1	49	**19.9**	**19.4**	30.0	-10.6
				25	0	18.9	18.4	30.0	-11.6
				25	12	19.0	18.4	30.0	-11.6
				25	24	19.0	18.5	30.0	-11.5
				50	0	19.0	18.4	30.0	-11.6

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Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
10.0	132022	1715.0	64QAM	1	0	19.1	18.5	30.0	-11.5
				1	24	19.0	18.4	30.0	-11.6
				1	49	18.9	18.4	30.0	-11.6
				25	0	18.1	17.5	30.0	-12.5
				25	12	18.1	17.5	30.0	-12.5
				25	24	18.0	17.4	30.0	-12.6
				50	0	18.0	17.4	30.0	-12.6
10.0	132322	1745.0	64QAM	1	0	**19.2**	**18.7**	30.0	-11.4
				1	24	19.2	18.6	30.0	-11.4
				1	49	19.2	18.6	30.0	-11.4
				25	0	18.1	17.5	30.0	-12.5
				25	12	18.0	17.4	30.0	-12.6
				25	24	18.0	17.5	30.0	-12.6
				50	0	18.0	17.4	30.0	-12.6
10.0	132622	1775.0	64QAM	1	0	18.6	18.1	30.0	-11.9
				1	24	18.5	17.9	30.0	-12.1
				1	49	18.4	17.9	30.0	-12.1
				25	0	17.8	17.3	30.0	-12.8
				25	12	17.8	17.2	30.0	-12.8
				25	24	17.7	17.2	30.0	-12.9
				50	0	17.7	17.2	30.0	-12.8

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OUTPUT POWER FOR LTE BAND 66 (15.0 MHz)

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	QPSK	1	0	20.5	20.0	30.0	-10.0
				1	37	20.4	19.8	30.0	-10.2
				1	74	20.3	19.8	30.0	-10.2
				36	0	19.5	19.0	30.0	-11.0
				36	16	19.5	19.0	30.0	-11.0
				36	35	19.5	19.0	30.0	-11.0
				75	0	19.5	18.9	30.0	-11.1
15.0	132322	1745.0	QPSK	1	0	20.6	20.1	30.0	-10.0
				1	37	20.5	19.9	30.0	-10.1
				1	74	20.5	19.9	30.0	-10.1
				36	0	19.5	18.9	30.0	-11.1
				36	16	19.5	18.9	30.0	-11.1
				36	35	19.5	18.9	30.0	-11.1
				75	0	19.5	19.0	30.0	-11.0
15.0	132597	1772.5	QPSK	1	0	**20.6**	**20.1**	30.0	-9.9
				1	37	20.5	19.9	30.0	-10.1
				1	74	20.5	19.9	30.0	-10.1
				36	0	19.6	19.0	30.0	-11.0
				36	16	19.6	19.0	30.0	-11.0
				36	35	19.6	19.0	30.0	-11.0
				75	0	19.5	18.9	30.0	-11.1

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	16-QAM	1	0	19.6	19.1	30.0	-10.9
				1	37	19.6	19.1	30.0	-10.9
				1	74	19.6	19.1	30.0	-10.9
				36	0	18.6	18.0	30.0	-12.0
				36	16	18.7	18.1	30.0	-11.9
				36	35	18.6	18.0	30.0	-12.0
				75	0	18.7	18.1	30.0	-11.9
15.0	132322	1745.0	16-QAM	1	0	19.7	19.1	30.0	-10.9
				1	37	19.6	19.0	30.0	-11.0
				1	74	19.6	19.1	30.0	-10.9
				36	0	18.6	18.0	30.0	-12.0
				36	16	18.6	18.0	30.0	-12.0
				36	35	18.7	18.1	30.0	-11.9
				75	0	18.7	18.2	30.0	-11.8
15.0	132597	1772.5	16-QAM	1	0	**19.7**	**19.2**	30.0	-10.8
				1	37	19.5	19.0	30.0	-11.0
				1	74	19.6	19.1	30.0	-11.0
				36	0	18.6	18.0	30.0	-12.0
				36	16	18.7	18.1	30.0	-11.9
				36	35	18.7	18.1	30.0	-11.9
				75	0	18.7	18.2	30.0	-11.8

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Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
15.0	132047	1717.5	64QAM	1	0	19.0	18.4	30.0	-11.6
				1	37	18.9	18.4	30.0	-11.6
				1	74	18.9	18.3	30.0	-11.7
				36	0	18.2	17.6	30.0	-12.4
				36	16	18.1	17.5	30.0	-12.5
				36	35	18.0	17.5	30.0	-12.5
				75	0	18.0	17.5	30.0	-12.5
15.0	132322	1745.0	64QAM	1	0	19.1	18.6	30.0	-11.4
				1	37	19.2	18.6	30.0	-11.4
				1	74	19.2	18.6	30.0	-11.4
				36	0	18.1	17.6	30.0	-12.4
				36	16	18.1	17.5	30.0	-12.5
				36	35	18.1	17.5	30.0	-12.5
				75	0	18.0	17.4	30.0	-12.6
15.0	132597	1772.5	64QAM	1	0	18.8	18.3	30.0	-11.8
				1	37	19.0	18.5	30.0	-11.6
				1	74	**19.3**	**18.8**	30.0	-11.2
				36	0	17.9	17.3	30.0	-12.7
				36	16	17.8	17.2	30.0	-12.8
				36	35	18.0	17.5	30.0	-12.5
				75	0	17.9	17.3	30.0	-12.7

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OUTPUT POWER FOR LTE BAND 66 (20.0 MHz)

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	QPSK	1	0	20.6	20.0	30.0	-10.0
				1	49	20.7	20.1	30.0	-9.9
				1	99	20.7	20.1	30.0	-9.9
				50	0	19.8	19.2	30.0	-10.8
				50	24	19.8	19.2	30.0	-10.8
				50	49	19.8	19.2	30.0	-10.8
				100	0	19.8	19.2	30.0	-10.8
20.0	132322	1745.0	QPSK	1	0	**20.8**	**20.3**	30.0	-9.7
				1	49	20.7	20.1	30.0	-9.9
				1	99	20.7	20.2	30.0	-9.9
				50	0	19.8	19.2	30.0	-10.8
				50	24	19.8	19.2	30.0	-10.8
				50	49	19.8	19.2	30.0	-10.8
				100	0	19.8	19.2	30.0	-10.8
20.0	132572	1770.0	QPSK	1	0	20.8	20.3	30.0	-9.8
				1	49	20.6	20.1	30.0	-9.9
				1	99	20.7	20.1	30.0	-9.9
				50	0	19.8	19.3	30.0	-10.7
				50	24	19.8	19.3	30.0	-10.7
				50	49	19.8	19.3	30.0	-10.8
				100	0	19.8	19.2	30.0	-10.8

Antenna Gain (dBi)	-0.56								
Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	16-QAM	1	0	19.9	19.3	30.0	-10.7
				1	49	19.8	19.3	30.0	-10.7
				1	99	19.8	19.3	30.0	-10.7
				50	0	18.9	18.3	30.0	-11.7
				50	24	18.8	18.3	30.0	-11.7
				50	49	18.9	18.3	30.0	-11.7
				100	0	18.9	18.3	30.0	-11.7
20.0	132322	1745.0	16-QAM	1	0	19.9	19.4	30.0	-10.7
				1	49	19.8	19.2	30.0	-10.8
				1	99	19.8	19.3	30.0	-10.8
				50	0	18.9	18.3	30.0	-11.7
				50	24	18.8	18.3	30.0	-11.7
				50	49	18.9	18.4	30.0	-11.6
				100	0	18.9	18.4	30.0	-11.6
20.0	132572	1770.0	16-QAM	1	0	**19.9**	**19.4**	30.0	-10.6
				1	49	19.7	19.2	30.0	-10.8
				1	99	19.8	19.3	30.0	-10.7
				50	0	18.9	18.3	30.0	-11.7
				50	24	18.9	18.4	30.0	-11.6
				50	49	18.9	18.4	30.0	-11.7
				100	0	18.9	18.4	30.0	-11.6

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Antenna Gain (dBi)	-0.56

Bandwidth	UL Channel	Frequency (MHz)	Modulation	RB Size	RB Offset	Conducted Average (dBm)	EIRP Average (dBm)	EIRP Limit (dBm)	Margin (dB)
20.0	132072	1720.0	64QAM	1	0	**19.0**	**18.4**	30.0	-11.6
				1	49	18.8	18.3	30.0	-11.7
				1	99	18.9	18.4	30.0	-11.7
				50	0	17.7	17.1	30.0	-12.9
				50	24	17.6	17.0	30.0	-13.0
				50	49	17.6	17.1	30.0	-13.0
				100	0	17.6	17.0	30.0	-13.0
20.0	132322	1745.0	64QAM	1	0	18.4	17.9	30.0	-12.2
				1	49	18.4	17.8	30.0	-12.2
				1	99	18.4	17.8	30.0	-12.2
				50	0	17.7	17.2	30.0	-12.8
				50	24	17.7	17.1	30.0	-12.9
				50	49	17.7	17.1	30.0	-12.9
				100	0	17.7	17.1	30.0	-12.9
20.0	132572	1770.0	64QAM	1	0	18.4	17.9	30.0	-12.2
				1	49	18.1	17.6	30.0	-12.4
				1	99	18.1	17.5	30.0	-12.5
				50	0	17.5	17.0	30.0	-13.1
				50	24	17.4	16.8	30.0	-13.2
				50	49	17.3	16.8	30.0	-13.3
				100	0	17.5	16.9	30.0	-13.1

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8. CONDUCTED TEST RESULTS

8.1. OCCUPIED BANDWIDTH

RULE PART(S)

FCC: §2.1049

LIMITS

For reporting purposes only

TEST PROCEDURE

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

MODES TESTED

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

RESULTS

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

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LTE BAND 2

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 2	1.4 MHz, QPSK	6/0	1880.0	1.0885	1.233
	1.4 MHz,16QAM			1.0935	1.241
	1.4 MHz,64QAM			1.0797	1.210
	3 MHz, QPSK	15/0		2.6983	2.989
	3 MHz, 16QAM			2.6917	2.993
	3 MHz, 64QAM			2.6841	2.946
	5 MHz, QPSK	25/0		4.4891	4.939
	5 MHz, 16QAM			4.4872	4.943
	5 MHz, 64QAM			4.4878	4.903
	10 MHz, QPSK	50/0		8.9816	9.770
	10 MHz, 16QAM			8.9664	9.808
	10 MHz, 64QAM			8.9344	9.585
	15 MHz, QPSK	75/0		13.433	14.56
	15 MHz, 16QAM			13.436	14.54
	15 MHz, 64QAM			13.434	14.46
	20 MHz, QPSK	100/0		17.888	19.27
	20 MHz, 16QAM			17.912	19.37
	20 MHz, 64QAM			17.883	19.39

LTE BAND 4

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 4	1.4 MHz, QPSK	6/0	1732.5	1.0905	1.234
	1.4 MHz,16QAM			1.0956	1.244
	1.4 MHz,64QAM			1.0800	1.221
	3 MHz, QPSK	15/0		2.6950	2.988
	3 MHz, 16QAM			2.7036	3.006
	3 MHz, 64QAM			2.6912	2.972

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LTE BAND 5

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 5	1.4 MHz, QPSK	6/0	836.5	1.0840	1.234
	1.4 MHz,16QAM			1.0873	1.231
	1.4 MHz,64QAM			1.0789	1.222
	3 MHz, QPSK	15/0		2.6962	2.967
	3 MHz, 16QAM			2.6943	3.000
	3 MHz, 64QAM			2.6886	2.962
	5 MHz, QPSK	25/0		4.5111	4.961
	5 MHz, 16QAM			4.5016	4.962
	5 MHz, 64QAM			4.5000	4.916
	10 MHz, QPSK	50/0		8.9618	9.788
	10 MHz, 16QAM			8.9631	9.698
	10 MHz, 64QAM			8.9625	9.574

LTE BAND 7

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 7	5 MHz, QPSK	25/0	2535.0	4.4855	4.935
	5 MHz, 16QAM			4.4876	4.940
	5 MHz, 64QAM			4.4820	4.895
	10 MHz, QPSK	50/0		8.9482	9.747
	10 MHz, 16QAM			8.9882	9.758
	10 MHz, 64QAM			8.9391	9.637
	15 MHz, QPSK	75/0		13.414	14.59
	15 MHz, 16QAM			13.445	14.54
	15 MHz, 64QAM			13.448	14.32
	20 MHz, QPSK	100/0		17.902	19.25
	20 MHz, 16QAM			17.918	19.31
	20 MHz, 64QAM			17.849	19.19

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LTE BAND 12

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 12	1.4 MHz, QPSK	6/0	707.5	1.0978	1.240
	1.4 MHz,16QAM			1.0845	1.234
	1.4 MHz,64QAM			1.0810	1.218
	3 MHz, QPSK	15/0		2.6996	2.995
	3 MHz, 16QAM			2.6921	2.996
	3 MHz, 64QAM			2.6908	2.948
	5 MHz, QPSK	25/0		4.5103	4.969
	5 MHz, 16QAM			4.4949	4.969
	5 MHz, 64QAM			4.4781	4.913
	10 MHz, QPSK	50/0		8.9885	9.778
	10 MHz, 16QAM			8.9438	9.730
	10 MHz, 64QAM			8.9158	9.588

LTE BAND 13

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 13	5 MHz, QPSK	25/0	782.0	4.4995	4.907
	5 MHz, 16QAM			4.4851	4.906
	5 MHz, 64QAM			4.4850	4.872
	10 MHz, QPSK	50/0		8.9614	9.671
	10 MHz, 16QAM			8.9799	9.708
	10 MHz, 64QAM			8.9497	9.596

LTE BAND 17

BAND	MODE	RB SIZE/RB OFFSET	f(MHz)	99% BW (MHz)	-26dB BW (MHz)
LTE BAND 17	5 MHz, QPSK	25/0	710.0	4.4897	4.925
	5 MHz, 16QAM			4.4933	4.918
	5 MHz, 64QAM			4.4793	4.860
	10 MHz, QPSK	50/0		8.9618	9.846
	10 MHz, 16QAM			8.9801	9.802
	10 MHz, 64QAM			8.9570	9.579

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