



FCC RF Test Report

APPLICANT : ASUSTeK COMPUTER INC.
EQUIPMENT : ASUS Phone
BRAND NAME : ASUS
MODEL NAME : ASUS_Z00TD
MARKETING NAME : ZE551KL
FCC ID : MSQZ00TD
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Aug. 05, 2015 and completely tested on Sep. 03, 2015. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL INC.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG580547B	Rev. 01	Initial issue of report	Sep. 16, 2015

**SUMMARY OF TEST RESULT**

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.4	§2.1046	RSS-Gen(6.12) RSS-130(4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5) RSS-199 (4.4)	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	RSS-130(4.4) RSS-132 (5.4) RSS-133 (6.4) RSS-139 (6.5)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	RSS-GEN(6.6) RSS-132 (3.1) RSS-133 (3.1) RSS-130 (3.1) RSS-139 (3.1) RSS-199 (4.2)	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5.1) RSS-130 (4.6) RSS-139 (6.6)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 17)	< 43+10log10(P[Watts])	PASS	-
	§27.53(m)(4)	RSS-199 (4.6)	Conducted Band Edge Measurement (Band 7)	Offset 0 ~ 5MHz: < 40+10log10(P[Watts]) Offset 5 ~ 6MHz or EBW: < 43+10log10(P[Watts])		



Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5.1) RSS-130 (4.6) RSS-139 (6.6)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 17)	$< 43+10\log_{10}(P[\text{Watts}])$	PASS	-
	§2.1051 §27.53(m)(4)	RSS-199 (4.6)	Conducted Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watts}])$		
3.9	§2.1055 §22.355 §24.235 §27.54	RSS-GEN(6.11) RSS-132(5.3) RSS-133(6.3) RSS-130(4.3) RSS-139 (6.4) RSS-199 (4.3)	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22 Within Authorized Band	PASS	-
4.4	§22.913(a)(2)	RSS-132(5.4) SRSP-503(5.1.3)	Effective Radiated Power (Band 5)	ERP < 7 Watt	PASS	-
	§27.50(c)(10)	N/A	Effective Radiated Power (Band 12) (Band 17)	ERP < 3 Watt		
	N/A	RSS-130(4.4)	Equivalent Isotropic Radiated Power (Band 12) (Band 17)	EIRP < 5 Watt		
	§24.232(c) §27.50(h)(2)	RSS-133 (6.4) SRSP-510(5.1.2) RSS-199 (4.4)	Equivalent Isotropic Radiated Power (Band 2) (Band 7)	EIRP < 2 Watt		
	§27.50(d)(4)	RSS-139 (6.5) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1 Watt		
4.5	§2.1053 §22.917(a) §24.238(a) §27.53(g) §27.53(h)	RSS-132 (5.5) RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.6)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 17)	$< 43+10\log_{10}(P[\text{Watts}])$	PASS	Under limit 10.22 dB at 10002.000 MHz
	§2.1053 §27.53(m)(4)	RSS-199 (4.6)	Radiated Spurious Emission (Band 7)	$< 55+10\log_{10}(P[\text{Watts}])$		



1 General Description

1.1 Applicant

ASUSTeK COMPUTER INC.

4F, No. 150, LI-TE RD., PEITOU, TAIPEI, TAIWAN

1.2 Manufacturer

ASUSTeK COMPUTER INC.

4F, No. 150, LI-TE RD., PEITOU, TAIPEI, TAIWAN

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	ASUS Phone
Brand Name	ASUS
Model Name	ASUS_Z00TD
Marketing Name	ZE551KL
FCC ID	MSQZ00TD
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE WLAN 11b/g/n HT20 Bluetooth v4.0 EDR/LE
EUT Stage	Identical Prototype

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 12 : 698.7 MHz ~ 715.3 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 17: 5MHz / 10MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.38 dBm LTE Band 4 : 23.76 dBm LTE Band 5 : 23.36 dBm LTE Band 7 : 17.98 dBm LTE Band 12 : 23.61 dBm LTE Band 17 : 23.81 dBm
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

No modifications are made to the EUT during all test items.



1.6 Emission Designator

LTE Band 2		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M09G7D	-	0.1996	1M10W7D	-	0.1347
3	2M74G7D	-	0.1847	2M73W7D	-	0.1430
5	4M51G7D	-	0.1836	4M50W7D	-	0.1384
10	9M07G7D	0.0022	0.1988	9M01W7D	-	0.1329
15	13M6G7D	-	0.1698	13M5W7D	-	0.1305
20	18M3G7D	-	0.1612	18M5W7D	-	0.1228
LTE Band 4		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M11G7D	-	0.1766	1M10W7D	-	0.1321
3	2M72G7D	-	0.1708	2M73W7D	-	0.1408
5	4M49G7D	-	0.1687	4M51W7D	-	0.1210
10	9M11G7D	0.0091	0.1654	9M05W7D	-	0.1313
15	13M6G7D	-	0.1710	13M5W7D	-	0.1446
20	18M4G7D	-	0.1737	18M3W7D	-	0.1377
LTE Band 5		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	1M11G7D	-	0.0546	1M10W7D	-	0.0410
3	2M74G7D	-	0.0576	2M75W7D	-	0.0444
5	4M52G7D	-	0.0506	4M51W7D	-	0.0389
10	9M07G7D	0.0097	0.0541	9M09W7D	-	0.0421



LTE Band 7		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
			AVG.			AVG.
5	4M51G7D	-	0.0718	4M51W7D	-	0.0548
10	9M05G7D	0.0070	0.0723	9M05W7D	-	0.0556
15	13M5G7D	-	0.0724	13M5W7D	-	0.0592
20	18M5G7D	-	0.0740	18M5W7D	-	0.0589
LTE Band 12		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
1.4	1M10G7D	-	0.0390	1M09W7D	-	0.0393
3	2M73G7D	-	0.0426	2M73W7D	-	0.0374
5	4M51G7D	-	0.0420	4M50W7D	-	0.0361
10	9M09G7D	0.0079	0.0360	9M05W7D	-	0.0280
LTE Band 17		QPSK		16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	4M51G7D	-	0.0380	4M50W7D	-	0.0317
10	9M09G7D	0.0114	0.0396	9M05W7D	-	0.0308

1.7 Testing Location

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW1022 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No. 52, Hwa Ya 1 st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C. TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	TH05-HY

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	03CH11-HY

1.8 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ 47 CFR Part 2, 22(H), 24(E), 27
- ♦ ANSI / TIA / EIA-603-C-2004
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

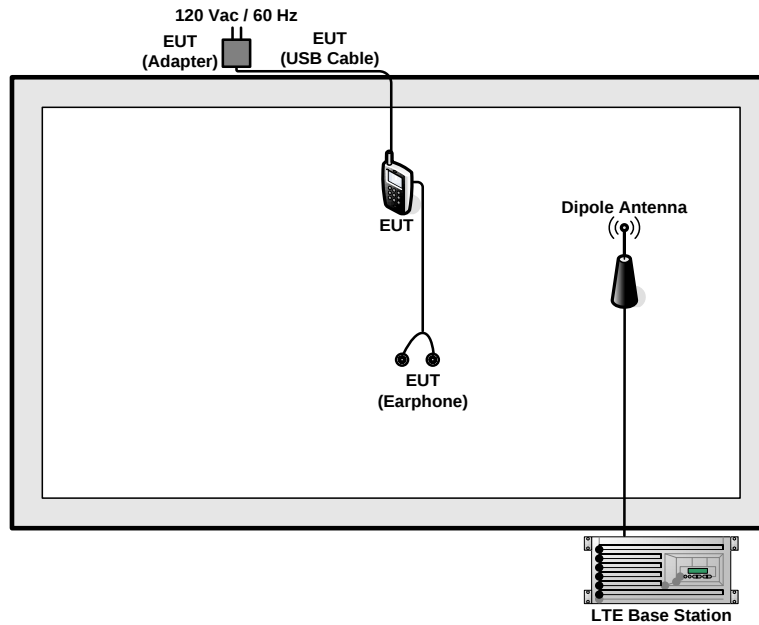
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	17	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Peak-to-Average Ratio	2						✓	✓	✓	✓		✓	✓	✓	✓
	4						✓	✓	✓	✓		✓	✓	✓	✓
	5				✓	-	-	✓	✓	✓		✓	✓	✓	✓
	7	-	-				✓	✓	✓	✓		✓	✓	✓	✓
	12				✓	-	-	✓	✓	✓		✓	✓	✓	✓
	17	-	-		✓	-	-	✓	✓	✓		✓	✓	✓	✓
26dB and 99% Bandwidth	2	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓			✓	✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓	✓			✓	✓	✓	✓
	17	-	-	✓	✓	-	-	✓	✓			✓	✓	✓	✓
Conducted Band Edge	2	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓		✓	✓		✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	12	✓	✓	✓	✓	-	-	✓	✓	✓		✓	✓		✓
	17	-	-	✓	✓	-	-	✓	✓	✓		✓	✓		✓



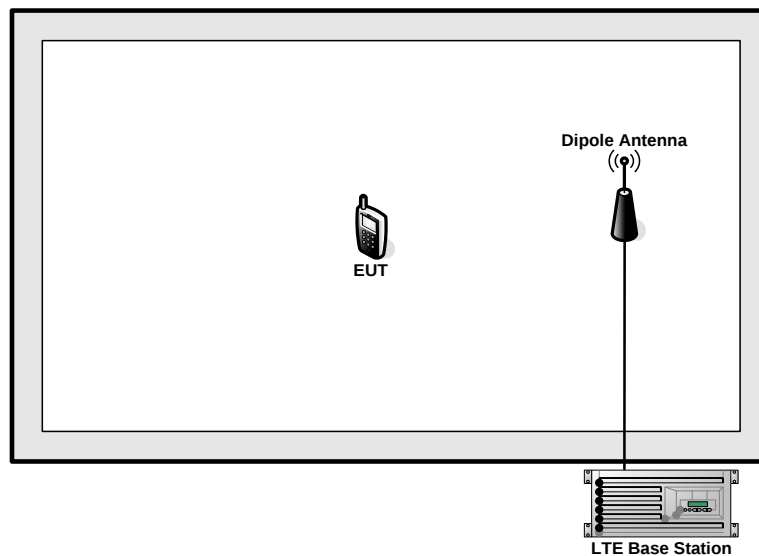
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Conducted Spurious Emission	2	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓			✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓	✓	✓			✓	✓	✓
	17	-	-	✓	✓	-	-	✓	✓	✓			✓	✓	✓
Frequency Stability	2				✓			✓				✓		✓	
	4				✓			✓				✓		✓	
	5				✓	-	-	✓				✓		✓	
	7	-	-		✓			✓				✓		✓	
	12				✓	-	-	✓				✓		✓	
	17	-	-		✓	-	-	✓				✓		✓	
E.R.P./ E.I.R.P.	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	17	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
Radiated Spurious Emission	2	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓		✓			✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓		✓			✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓		✓			✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓		✓			✓	✓	✓
	17	-	-	✓	✓	-	-	✓		✓			✓	✓	✓
Note	- The mark "✓" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. - For radiated spurious emission (LTE Band 4 and LTE Band 5), the test were performed with adapter3, battery 1, and USB cable2.														

2.2 Connection Diagram of Test System

<EUT with Accessory>



<EUT without Accessory>



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

$$= 4.2 + 10 = 14.2 \text{ (dB)}$$

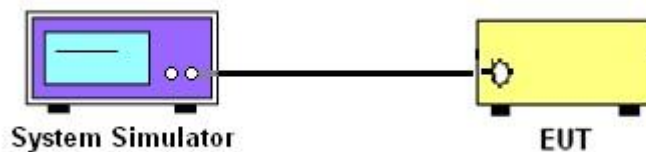
3 Conducted Test Items

3.1 Measuring Instruments

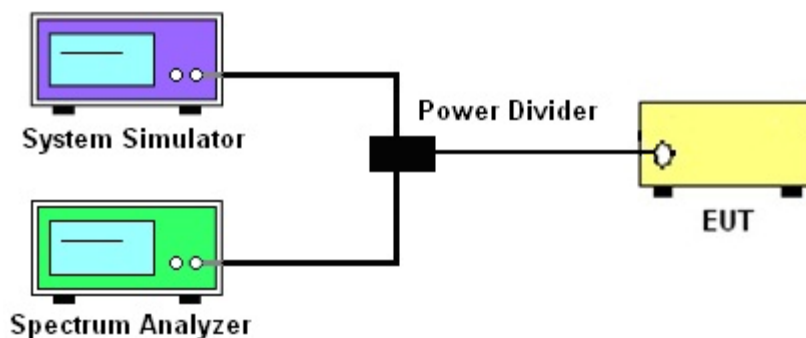
See list of measuring instruments of this test report.

3.2 Test Setup

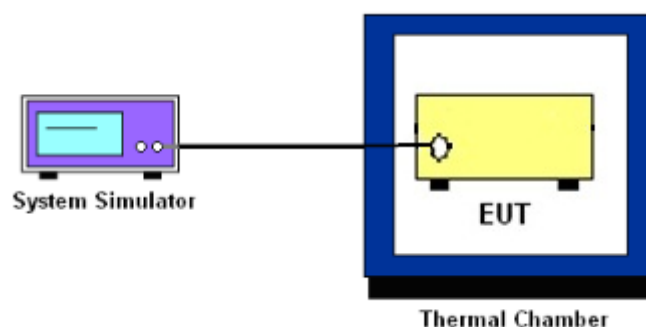
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power

3.4.1 Description of the Conducted Output Power Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.4.2 Test Procedures

1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.7.1.
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.



3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a) and RSS – 132 for Band 5

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a) and RSS – 133 for Band 2

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (g) and RSS – 130 for Band 12,17

For operations in the 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h) and RSS – 139 for Band 4

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(m)(4) for FCC Band 7:

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.7.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)} = -13\text{dBm}.$$

9. For LTE Band 7, the other 40 dB, and 55 dB have additionally applied same calculation above.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.
11. For Band 7
The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [55 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[55 + 10\log(P)]$ (dB)
 $= -25$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

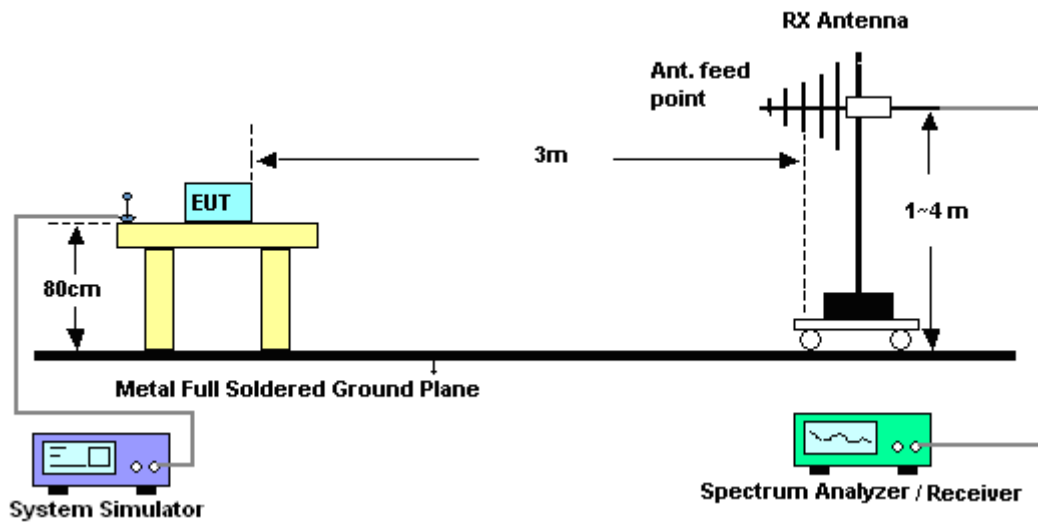
4 Radiated Test Items

4.1 Measuring Instruments

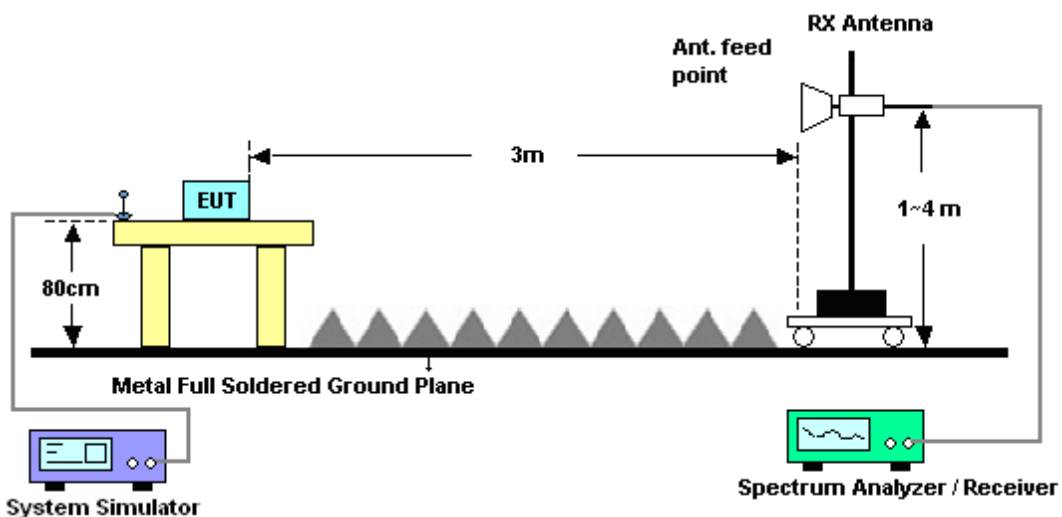
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Effective Radiated Power and Effective Isotropic Radiated Power

4.4.1 Description of the ERP/EIRP Measurement

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5 and 3 watts with LTE band 12 / 17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 7 and 1 watt with LTE band 4.

4.4.2 Test Procedures

1. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector per section 5. of KDB 971168 D01.
2. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, $EIRP = LVL + \text{Correction factor}$ and $ERP = EIRP - 2.15$. Take the record of the output power at substitution antenna.



	LTE Average					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	100kHz	100kHz	300kHz	300kHz	300kHz
VBW	100kHz	300kHz	300kHz	1MHz	1MHz	1MHz
Detector	RMS	RMS	RMS	RMS	RMS	RMS
Trace	Average	Average	Average	Average	Average	Average
Average Type	Power	Power	Power	Power	Power	Power
Sweep Count	100	100	100	100	100	100

	LTE Peak					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	100kHz	100kHz	300kHz	300kHz	300kHz
VBW	100kHz	300kHz	300kHz	1MHz	1MHz	1MHz
Detector	Peak	Peak	Peak	Peak	Peak	Peak
Trace	Max Hold	Max Hold	Max Hold	Max Hold	Max Hold	Max Hold
Power	Channel	Channel	Channel	Channel	Channel	Channel



4.5 Radiated Spurious Emission

4.5.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

For LTE Band 12, 17

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

For Band 7:

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)

12. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
13. ERP (dBm) = EIRP - 2.15



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201432821	GSM/GPRS /WCDMA/LTE	Oct. 27, 2014	Aug. 14, 2015 ~ Sep. 03, 2015	Oct. 26, 2015	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV30	100895	9kHz~30GHz	Apr. 27, 2015	Aug. 14, 2015 ~ Sep. 03, 2015	Apr. 26 2016	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-30℃~70℃	Dec. 04, 2014	Aug. 14, 2015 ~ Sep. 03, 2015	Dec. 03, 2015	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890089	1V~20V 0.5A~5A	Jan. 14, 2015	Aug. 14, 2015 ~ Sep. 03, 2015	Jan. 13, 2016	Conducted (TH05-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz- 40GHz	Oct. 02, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Oct. 01, 2015	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 03, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Nov. 02, 2015	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D	35413	30MHz~1GHz	Oct. 24, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Oct. 23, 2015	Radiation (03CH11-HY)
EMI Test Receiver	Keysight	N9038A	MY54130085	20Hz ~ 8.4GHz	Nov. 05, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Nov. 04, 2015	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1325	1GHz ~ 18GHz	Oct. 03, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Oct. 02, 2015	Radiation (03CH11-HY)
Amplifier	SONOMA	310N	187312	9kHz~1GHz	Nov. 24, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Nov. 23, 2015	Radiation (03CH11-HY)
Bilog Antenna	TESEQ	CBL 6111D	35414	30MHz~1GHz	Oct. 24, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Oct. 23, 2015	Radiation (03CH11-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1326	1GHz ~ 18GHz	Oct. 03, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Oct. 02, 2015	Radiation (03CH11-HY)
Preamplifier	Keysight	83017A	MY53270080	1GHz~26.5GHz	Nov. 20, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Nov. 19, 2015	Radiation (03CH11-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz ~ 44GHZ	Sep. 24, 2014	Aug. 23, 2015 ~ Sep. 03, 2015	Sep. 23, 2015	Radiation (03CH11-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1~4m	N/A	Aug. 23, 2015 ~ Sep. 03, 2015	N/A	Radiation (03CH11-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 22, 2015	Aug. 23, 2015 ~ Sep. 03, 2015	May 21, 2016	Radiation (03CH11-HY)
Turn Table	EMEC	TT 2000	N/A	0-360 degree	N/A	Aug. 23, 2015 ~ Sep. 03, 2015	N/A	Radiation (03CH11-HY)



6 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.2
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.81	22.05	21.82
1.4	1	2		21.96	22.09	21.93
1.4	1	5		21.82	21.95	21.71
1.4	3	0		22.02	22.17	22.00
1.4	3	1		22.01	22.29	21.95
1.4	3	2		22.00	22.02	21.92
1.4	6	0		21.07	21.06	21.05
1.4	1	0	16-QAM	21.31	21.34	21.30
1.4	1	2		21.27	21.38	21.23
1.4	1	5		21.38	21.38	21.47
1.4	3	0		20.84	21.23	21.11
1.4	3	1		21.01	21.28	21.12
1.4	3	2		20.90	21.26	21.19
1.4	6	0		19.73	19.85	19.65
3	1	0	QPSK	22.13	22.22	22.15
3	1	7		22.00	22.09	21.99
3	1	14		21.95	21.99	21.94
3	8	0		21.13	21.09	21.12
3	8	4		21.10	21.06	20.99
3	8	7		21.08	21.15	20.94
3	15	0		21.01	21.06	21.07
3	1	0	16-QAM	21.56	21.45	21.56
3	1	7		21.44	21.37	20.96
3	1	14		21.03	21.38	21.11
3	8	0		20.02	19.92	20.22
3	8	4		20.04	20.14	20.04
3	8	7		20.10	20.17	19.92
3	15	0		19.92	20.11	20.00



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.79	22.16	22.13
5	1	12		22.02	22.13	22.08
5	1	24		22.07	21.89	21.72
5	12	0		21.02	21.01	21.07
5	12	6		21.07	21.07	21.13
5	12	11		20.97	21.07	21.07
5	25	0		21.09	21.03	21.05
5	1	0	16-QAM	20.76	21.31	21.54
5	1	12		21.37	21.40	20.88
5	1	24		21.36	21.37	21.08
5	12	0		20.05	20.04	20.05
5	12	6		20.01	20.01	20.04
5	12	11		20.01	19.97	20.02
5	25	0		20.04	20.10	20.04
10	1	0	QPSK	22.08	22.14	22.22
10	1	24		22.17	22.08	22.28
10	1	49		22.27	22.09	22.06
10	25	0		21.09	21.13	21.17
10	25	12		21.08	21.07	21.05
10	25	24		21.13	21.06	21.05
10	50	0		21.16	21.08	21.12
10	1	0	16-QAM	21.10	21.41	22.00
10	1	24		21.32	21.35	21.38
10	1	49		21.32	21.36	21.33
10	25	0		20.02	20.21	20.08
10	25	12		20.14	20.09	20.06
10	25	24		20.05	20.13	20.14
10	50	0		19.92	20.10	20.03



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.12	22.19	22.36
15	1	37		21.97	22.04	21.92
15	1	74		22.09	21.97	21.93
15	36	0		21.12	21.14	21.18
15	36	18		21.12	21.05	21.04
15	36	37		21.04	21.10	21.18
15	75	0		21.09	21.03	21.05
15	1	0	16-QAM	21.60	21.74	21.61
15	1	37		21.36	21.32	21.30
15	1	74		21.39	21.29	21.38
15	36	0		20.00	20.14	20.07
15	36	18		20.11	20.07	20.04
15	36	37		20.02	19.84	20.17
15	75	0		19.98	20.03	20.04
20	1	0	QPSK	22.19	22.38	22.21
20	1	49		22.01	22.13	22.11
20	1	99		22.02	21.89	22.02
20	50	0		21.15	21.25	21.20
20	50	24		21.06	21.04	21.17
20	50	49		21.10	21.02	21.14
20	100	0		21.15	21.12	21.16
20	1	0	16-QAM	21.58	21.76	21.51
20	1	49		21.85	21.31	21.61
20	1	99		21.47	21.36	21.30
20	50	0		20.20	20.14	20.06
20	50	24		19.96	19.93	19.88
20	50	49		20.02	19.91	20.06
20	100	0		20.11	20.10	20.06



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.36	23.21	22.99
1.4	1	2		23.49	23.35	23.17
1.4	1	5		23.37	23.34	23.06
1.4	3	0		23.41	23.47	23.21
1.4	3	1		23.57	23.49	23.27
1.4	3	2		23.39	23.48	23.27
1.4	6	0		22.57	22.54	22.29
1.4	1	0	16-QAM	22.79	22.86	22.55
1.4	1	2		22.75	22.62	22.53
1.4	1	5		22.82	22.70	22.51
1.4	3	0		22.51	22.64	22.47
1.4	3	1		22.63	22.67	22.51
1.4	3	2		22.64	22.66	22.51
1.4	6	0		21.48	21.45	20.99
3	1	0	QPSK	23.50	23.53	23.35
3	1	7		23.41	23.60	23.35
3	1	14		23.60	23.65	23.51
3	8	0		22.52	22.47	22.30
3	8	4		22.47	22.59	22.32
3	8	7		22.44	22.49	22.34
3	15	0		22.53	22.43	22.21
3	1	0	16-QAM	22.68	22.84	22.60
3	1	7		22.76	22.79	22.50
3	1	14		22.85	22.85	22.72
3	8	0		21.46	21.45	21.18
3	8	4		21.49	21.57	21.21
3	8	7		21.30	21.57	21.30
3	15	0		21.54	21.68	21.45



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.35	23.49	23.11
5	1	12		23.47	23.55	23.22
5	1	24		23.48	23.46	23.27
5	12	0		22.42	22.50	22.20
5	12	6		22.41	22.45	22.28
5	12	11		22.38	22.42	22.25
5	25	0		22.48	22.51	22.27
5	1	0	16-QAM	22.76	22.64	22.48
5	1	12		22.74	22.75	22.49
5	1	24		22.66	22.66	22.54
5	12	0		21.33	21.45	21.17
5	12	6		21.32	21.42	21.21
5	12	11		21.40	21.38	20.98
5	25	0		21.57	21.54	21.10
10	1	0	QPSK	23.59	23.55	23.47
10	1	24		23.64	23.64	23.25
10	1	49		23.61	23.30	23.41
10	25	0		22.45	22.47	22.29
10	25	12		22.52	22.44	22.26
10	25	24		22.47	22.44	22.28
10	50	0		22.52	22.49	22.23
10	1	0	16-QAM	22.92	22.78	22.73
10	1	24		22.83	22.77	22.53
10	1	49		22.75	22.66	22.53
10	25	0		21.57	21.60	21.31
10	25	12		21.68	21.50	21.32
10	25	24		21.35	21.43	21.30
10	50	0		21.54	21.30	21.09



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.70	23.39	23.49
15	1	37		23.38	23.31	23.12
15	1	74		23.50	23.40	23.28
15	36	0		22.56	22.41	22.44
15	36	18		22.50	22.44	22.21
15	36	37		22.41	22.42	22.18
15	75	0	16-QAM	22.53	22.35	22.25
15	1	0		22.91	22.92	22.91
15	1	37		22.75	22.74	22.46
15	1	74		22.66	22.78	22.63
15	36	0		21.56	21.43	21.46
15	36	18		21.50	21.40	21.13
15	36	37	QPSK	21.41	21.27	21.19
15	75	0		21.44	21.39	21.16
20	1	0		23.58	23.76	23.69
20	1	49		23.57	23.59	23.38
20	1	99		23.54	23.43	23.18
20	50	0		22.57	22.58	22.38
20	50	24	16-QAM	22.46	22.40	22.29
20	50	49		22.56	22.33	22.20
20	100	0		22.25	22.45	22.38
20	1	0		22.91	22.96	22.97
20	1	49		22.83	22.67	22.67
20	1	99		22.53	22.66	22.44
20	50	0	16-QAM	21.43	21.27	21.23
20	50	24		21.31	21.22	21.21
20	50	49		21.13	21.36	20.99
20	100	0		21.39	21.29	21.27



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.09	23.04	22.92
1.4	1	2		23.32	23.26	23.16
1.4	1	5		23.01	23.20	22.94
1.4	3	0		23.17	23.23	23.17
1.4	3	1		23.25	23.24	23.24
1.4	3	2		23.25	23.24	23.17
1.4	6	0	16-QAM	22.31	22.22	22.11
1.4	1	0		22.54	22.46	22.38
1.4	1	2		22.49	22.50	22.37
1.4	1	5		22.48	22.07	22.40
1.4	3	0		22.37	22.45	22.31
1.4	3	1		22.42	22.44	22.29
1.4	3	2	QPSK	22.42	22.39	22.33
1.4	6	0		21.05	21.29	21.10
3	1	0		23.31	23.22	23.11
3	1	7		23.25	23.27	23.12
3	1	14		22.93	23.25	23.22
3	8	0		22.37	22.25	22.15
3	8	4	16-QAM	22.12	22.31	22.20
3	8	7		22.20	22.32	22.13
3	15	0		22.12	22.31	22.16
3	1	0		22.59	22.59	22.34
3	1	7		22.53	22.56	22.36
3	1	14		22.45	22.54	22.43
3	8	0	16-QAM	21.28	21.37	21.12
3	8	4		21.33	21.34	21.08
3	8	7		21.29	21.29	21.18
3	15	0		21.03	21.41	20.97



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.10	23.23	23.24
5	1	12		23.34	23.30	23.05
5	1	24		22.92	23.19	22.90
5	12	0		22.17	22.19	22.12
5	12	6		22.26	22.15	22.24
5	12	11		22.12	22.19	22.09
5	25	0		22.16	22.24	22.11
5	1	0	16-QAM	22.41	22.48	22.37
5	1	12		22.45	22.52	22.28
5	1	24		22.38	22.43	22.30
5	12	0		21.16	21.19	21.07
5	12	6		21.18	21.18	21.09
5	12	11		21.06	21.17	21.06
5	25	0		21.18	21.26	21.18
10	1	0	QPSK	23.36	23.20	23.32
10	1	24		23.11	23.19	23.28
10	1	49		22.93	23.08	23.13
10	25	0		22.25	22.26	22.19
10	25	12		22.05	22.22	22.18
10	25	24		22.14	22.19	22.11
10	50	0		22.19	22.20	22.23
10	1	0	16-QAM	22.77	22.42	22.50
10	1	24		22.40	22.44	22.38
10	1	49		22.42	22.39	22.34
10	25	0		21.31	21.28	21.30
10	25	12		21.06	21.31	21.25
10	25	24		21.16	21.30	21.14
10	50	0		21.11	21.18	21.13



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	17.61	17.76	17.63
5	1	12		17.62	17.64	17.88
5	1	24		17.58	17.40	17.66
5	12	0		16.68	16.59	16.77
5	12	6		16.70	16.56	16.78
5	12	11		16.63	16.62	16.76
5	25	0		16.65	16.60	16.82
5	1	0	16-QAM	16.86	16.90	16.62
5	1	12		16.38	16.87	16.60
5	1	24		16.84	16.82	16.61
5	12	0		15.60	15.57	15.37
5	12	6		15.58	15.61	15.40
5	12	11		15.63	15.66	15.31
5	25	0		15.73	15.70	15.34
10	1	0	QPSK	17.78	17.77	17.80
10	1	24		17.86	17.70	17.86
10	1	49		17.51	17.57	17.77
10	25	0		16.75	16.77	16.96
10	25	12		16.68	16.66	16.89
10	25	24		16.72	16.63	16.92
10	50	0		16.77	16.61	16.90
10	1	0	16-QAM	16.97	16.85	16.64
10	1	24		16.85	16.79	16.63
10	1	49		16.74	16.88	16.59
10	25	0		15.67	15.74	15.70
10	25	12		15.56	15.63	15.63
10	25	24		15.69	15.73	15.65
10	50	0		15.71	15.49	15.57



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	17.85	17.93	17.89
15	1	37		17.72	17.50	17.85
15	1	74		17.80	17.60	17.79
15	36	0		16.81	16.91	16.92
15	36	18		16.84	16.69	16.89
15	36	37		16.79	16.78	16.90
15	75	0		16.76	16.86	16.82
15	1	0	16-QAM	16.69	16.96	16.94
15	1	37		16.65	16.94	16.93
15	1	74		16.57	16.89	16.89
15	36	0		15.54	15.86	16.00
15	36	18		15.34	15.65	15.93
15	36	37		15.56	15.85	15.95
15	75	0		15.45	15.80	15.87
20	1	0	QPSK	17.95	17.95	17.98
20	1	49		17.89	17.80	17.91
20	1	99		17.83	17.79	17.88
20	50	0		16.92	16.93	16.95
20	50	24		16.78	16.69	16.93
20	50	49		16.80	16.74	16.86
20	100	0		16.90	16.90	16.93
20	1	0	16-QAM	16.91	16.92	16.97
20	1	49		16.87	16.54	16.95
20	1	99		16.79	16.65	16.96
20	50	0		15.76	15.59	15.72
20	50	24		15.56	15.50	15.75
20	50	49		15.78	15.32	15.66
20	100	0		15.67	15.47	15.69



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.20	23.35	23.25
1.4	1	2		23.26	23.49	23.37
1.4	1	5		23.36	23.17	23.24
1.4	3	0		23.46	23.44	23.22
1.4	3	1		23.54	23.39	23.51
1.4	3	2		23.47	23.38	23.38
1.4	6	0	16-QAM	22.50	22.39	22.39
1.4	1	0		22.78	22.70	22.65
1.4	1	2		22.70	22.67	22.52
1.4	1	5		22.73	22.60	22.71
1.4	3	0		22.61	22.47	22.47
1.4	3	1		22.64	22.60	22.59
1.4	3	2	QPSK	22.58	22.62	22.56
1.4	6	0		21.44	21.39	21.28
3	1	0		23.35	23.35	23.21
3	1	7		23.27	23.42	23.21
3	1	14		23.13	23.16	22.96
3	8	0		22.47	22.33	22.20
3	8	4	16-QAM	22.37	22.36	22.28
3	8	7		22.32	22.28	22.29
3	15	0		22.40	22.33	22.29
3	1	0		22.67	22.68	22.46
3	1	7		22.66	22.60	22.54
3	1	14		22.61	22.44	22.59
3	8	0	16-QAM	21.39	21.48	21.09
3	8	4		21.32	21.32	21.24
3	8	7		21.58	21.42	21.49
3	15	0		21.31	21.16	21.21



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.19	23.38	23.18
5	1	12		23.33	23.35	23.27
5	1	24		23.48	22.88	23.03
5	12	0		22.29	22.24	22.15
5	12	6		22.27	22.32	22.16
5	12	11		22.35	22.23	22.27
5	25	0		22.27	22.27	22.09
5	1	0	16-QAM	22.64	22.53	22.44
5	1	12		22.54	21.99	22.46
5	1	24		22.65	22.30	22.49
5	12	0		21.29	21.23	21.08
5	12	6		21.29	21.32	21.08
5	12	11		21.29	21.11	21.23
5	25	0		21.41	21.08	21.12
10	1	0	QPSK	23.36	23.46	23.61
10	1	24		23.34	23.41	23.39
10	1	49		23.27	23.07	23.33
10	25	0		22.35	22.29	22.36
10	25	12		22.27	22.23	22.21
10	25	24		22.33	22.14	22.15
10	50	0		22.26	22.17	22.31
10	1	0	16-QAM	22.63	22.61	22.77
10	1	24		22.44	22.05	22.43
10	1	49		22.47	22.27	22.59
10	25	0		21.23	21.28	21.26
10	25	12		21.36	21.24	21.33
10	25	24		21.37	21.17	21.16
10	50	0		21.12	20.94	21.17



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.59	23.41	23.33
5	1	12		23.53	23.40	23.45
5	1	24		23.31	23.21	23.26
5	12	0		22.45	22.42	22.42
5	12	6		22.57	22.38	22.42
5	12	11		22.64	22.36	22.45
5	25	0		22.51	22.31	22.45
5	1	0	16-QAM	22.74	22.77	22.95
5	1	12		22.79	22.64	22.70
5	1	24		22.66	22.72	22.70
5	12	0		21.45	21.33	21.28
5	12	6		21.40	21.30	21.18
5	12	11		21.50	21.31	21.29
5	25	0		21.34	21.35	21.42
10	1	0	QPSK	23.65	23.77	23.81
10	1	24		23.39	23.51	23.37
10	1	49		23.58	23.76	23.48
10	25	0		22.66	22.65	22.68
10	25	12		22.45	22.53	22.41
10	25	24		22.36	22.38	22.56
10	50	0		22.43	22.41	22.48
10	1	0	16-QAM	22.93	22.93	22.98
10	1	24		22.65	22.60	22.63
10	1	49		22.84	22.93	22.75
10	25	0		21.65	21.54	21.42
10	25	12		21.53	21.49	21.34
10	25	24		21.36	21.27	21.36
10	50	0		21.34	21.42	21.29



Appendix B. Test Results of Radiated Test

ERP/EIRP

LTE Band 2 / 1.4MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	1	21.03	0.1269	17.13	0.0516
Middle		3	1	21.64	0.1458	17.76	0.0596
Highest		3	1	23.00	0.1996	19.98	0.0996
Lowest	16QAM	1	5	20.33	0.1078	15.90	0.0389
Middle		1	5	20.03	0.1008	16.35	0.0432
Highest		1	5	21.29	0.1347	18.80	0.0758
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 3MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.49	0.1411	17.00	0.0502
Middle		1	0	21.49	0.1408	17.72	0.0592
Highest		1	0	22.67	0.1847	19.55	0.0902
Lowest	16QAM	1	0	20.41	0.1100	15.89	0.0388
Middle		1	0	19.95	0.0988	16.05	0.0402
Highest		1	0	21.55	0.1430	18.40	0.0691
Limit	EIRP < 2W			Result		PASS	



LTE Band 2 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.40	0.1381	16.87	0.0487
Middle		1	0	21.27	0.1340	17.57	0.0571
Highest		1	0	22.64	0.1836	19.40	0.0871
Lowest	16QAM	1	0	20.34	0.1081	15.83	0.0383
Middle		1	0	19.92	0.0982	16.19	0.0416
Highest		1	0	21.41	0.1384	18.15	0.0653
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	24	21.51	0.1417	17.11	0.0514
Middle		1	24	21.30	0.1350	17.52	0.0565
Highest		1	24	22.98	0.1988	19.48	0.0887
Lowest	16QAM	1	0	20.51	0.1124	15.97	0.0395
Middle		1	0	20.03	0.1007	16.46	0.0443
Highest		1	0	21.24	0.1329	18.11	0.0648
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 15MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.23	0.1326	16.77	0.0475
Middle		1	0	20.91	0.1233	17.28	0.0535
Highest		1	0	22.30	0.1698	18.86	0.0770
Lowest	16QAM	1	0	20.36	0.1086	15.89	0.0388
Middle		1	0	20.04	0.1009	16.01	0.0399
Highest		1	0	21.16	0.1305	17.56	0.0570
Limit	EIRP < 2W			Result		PASS	



LTE Band 2 / 20MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.49	0.1408	17.08	0.0510
Middle		1	0	20.97	0.1252	16.91	0.0491
Highest		1	0	22.07	0.1612	18.41	0.0693
Lowest	16QAM	1	49	19.78	0.0950	15.85	0.0384
Middle		1	49	19.97	0.0993	16.12	0.0409
Highest		1	49	20.89	0.1228	17.88	0.0613
Limit	EIRP < 2W			Result		PASS	



LTE Band 4 / 1.4MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	1	22.43	0.1750	21.23	0.1329
Middle		3	1	22.47	0.1766	20.96	0.1246
Highest		3	1	21.06	0.1277	19.70	0.0932
Lowest	16QAM	1	0	21.21	0.1321	20.03	0.1008
Middle		1	0	21.15	0.1303	19.47	0.0885
Highest		1	0	20.12	0.1027	18.79	0.0757
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	14	22.08	0.1614	21.23	0.1326
Middle		1	14	22.32	0.1708	20.96	0.1248
Highest		1	14	21.10	0.1289	19.65	0.0923
Lowest	16QAM	1	14	20.91	0.1232	19.80	0.0954
Middle		1	14	21.49	0.1408	20.12	0.1029
Highest		1	14	20.22	0.1051	18.61	0.0726
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	22.00	0.1584	21.11	0.1291
Middle		1	12	22.27	0.1687	20.71	0.1178
Highest		1	12	21.00	0.1259	19.72	0.0937
Lowest	16QAM	1	0	20.83	0.1210	19.88	0.0972
Middle		1	0	20.55	0.1135	19.23	0.0837
Highest		1	0	20.70	0.1175	19.33	0.0857
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	24	22.15	0.1640	21.12	0.1294
Middle		1	24	22.18	0.1654	20.83	0.1210
Highest		1	24	21.39	0.1376	20.07	0.1015
Lowest	16QAM	1	0	20.97	0.1250	20.03	0.1006
Middle		1	0	20.66	0.1163	19.52	0.0896
Highest		1	0	21.18	0.1313	20.26	0.1062
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.18	0.1650	21.30	0.1350
Middle		1	0	21.51	0.1416	20.45	0.1109
Highest		1	0	22.33	0.1710	21.29	0.1346
Lowest	16QAM	1	0	20.98	0.1254	20.50	0.1122
Middle		1	0	20.79	0.1199	19.71	0.0935
Highest		1	0	21.60	0.1446	20.55	0.1134
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 20MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	21.89	0.1544	20.97	0.1251
Middle		1	0	21.16	0.1306	20.20	0.1046
Highest		1	0	22.40	0.1737	20.92	0.1236
Lowest	16QAM	1	0	20.94	0.1242	20.08	0.1018
Middle		1	0	20.40	0.1096	19.44	0.0880
Highest		1	0	21.39	0.1377	19.95	0.0989
Limit	EIRP < 1W			Result		PASS	



LTE Band 5 / 1.4MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	2	17.37	0.0546	4.12	0.0026
Middle		1	2	16.60	0.0457	4.22	0.0026
Highest		1	2	16.85	0.0484	5.17	0.0033
Lowest	16QAM	1	0	16.13	0.0410	2.82	0.0019
Middle		1	0	15.50	0.0355	3.07	0.0020
Highest		1	0	15.81	0.0381	4.10	0.0026
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 3MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.60	0.0576	3.94	0.0025
Middle		1	0	16.66	0.0464	4.33	0.0027
Highest		1	0	16.53	0.0450	4.76	0.0030
Lowest	16QAM	1	0	16.48	0.0444	2.96	0.0020
Middle		1	0	15.53	0.0357	3.06	0.0020
Highest		1	0	15.08	0.0322	3.47	0.0022
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	12	17.04	0.0506	4.11	0.0026
Middle		1	12	16.62	0.0459	4.41	0.0028
Highest		1	12	16.53	0.0450	4.91	0.0031
Lowest	16QAM	1	12	15.89	0.0389	2.92	0.0020
Middle		1	12	15.57	0.0360	3.13	0.0021
Highest		1	12	15.50	0.0355	3.75	0.0024
Limit	ERP < 7W			Result		PASS	



LTE Band 5 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	17.33	0.0541	4.16	0.0026
Middle		1	0	16.92	0.0492	4.39	0.0027
Highest		1	0	16.88	0.0487	4.50	0.0028
Lowest	16QAM	1	0	16.25	0.0421	3.03	0.0020
Middle		1	0	15.75	0.0376	3.04	0.0020
Highest		1	0	15.66	0.0368	3.56	0.0023
Limit	ERP < 7W			Result		PASS	



LTE Band 7 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	12	17.25	0.0531	18.56	0.0718
Middle		1	12	16.98	0.0499	18.56	0.0718
Highest		1	12	16.43	0.0440	17.99	0.0630
Lowest	16QAM	1	24	16.13	0.0410	17.39	0.0548
Middle		1	24	15.70	0.0372	17.36	0.0545
Highest		1	24	15.02	0.0317	16.70	0.0468
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	49	17.35	0.0543	18.49	0.0706
Middle		1	49	16.96	0.0497	18.59	0.0723
Highest		1	49	16.51	0.0448	18.05	0.0638
Lowest	16QAM	1	0	16.51	0.0448	17.40	0.0549
Middle		1	0	16.37	0.0433	17.45	0.0556
Highest		1	0	15.25	0.0335	17.29	0.0536
Limit	EIRP < 2W			Result		PASS	



LTE Band 7 / 15MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	17.51	0.0564	18.60	0.0724
Middle		1	0	17.17	0.0522	18.41	0.0694
Highest		1	0	16.89	0.0489	18.37	0.0687
Lowest	16QAM	1	74	16.52	0.0448	17.72	0.0592
Middle		1	74	15.97	0.0395	17.50	0.0563
Highest		1	74	15.42	0.0348	16.98	0.0499
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 20MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	EIRP(dBm)	EIRP(W)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	17.54	0.0568	18.45	0.0701
Middle		1	0	17.29	0.0535	18.40	0.0692
Highest		1	0	17.12	0.0515	18.69	0.0740
Lowest	16QAM	1	49	16.47	0.0444	17.67	0.0585
Middle		1	49	16.14	0.0412	17.70	0.0589
Highest		1	49	15.62	0.0364	17.38	0.0547
Limit	EIRP < 2W			Result		PASS	



LTE Band 12 / 1.4MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	3	1	15.03	0.0318	-1.83	0.0007
Middle		3	1	15.53	0.0357	-0.82	0.0008
Highest		3	1	15.91	0.0390	-0.61	0.0009
Lowest	16QAM	1	0	13.94	0.0248	-3.16	0.0005
Middle		1	0	15.05	0.0320	-2.44	0.0006
Highest		1	0	15.94	0.0393	-0.72	0.0008
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 3MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	7	14.63	0.0290	-0.98	0.0008
Middle		1	7	15.57	0.0361	-0.68	0.0009
Highest		1	7	16.29	0.0426	-0.33	0.0009
Lowest	16QAM	1	0	14.07	0.0255	-3.14	0.0005
Middle		1	0	14.95	0.0313	-2.77	0.0005
Highest		1	0	15.72	0.0374	-0.85	0.0008
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	14.96	0.0313	-1.21	0.0008
Middle		1	24	15.23	0.0334	-0.43	0.0009
Highest		1	24	16.23	0.0420	-0.11	0.0010
Lowest	16QAM	1	24	14.26	0.0267	-1.90	0.0006
Middle		1	24	14.08	0.0256	-1.57	0.0007
Highest		1	24	15.58	0.0361	-0.70	0.0009
Limit	ERP < 3W			Result		PASS	



LTE Band 12 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	14.59	0.0288	-1.12	0.0008
Middle		1	0	14.77	0.0300	-1.07	0.0008
Highest		1	0	15.56	0.0360	-0.78	0.0008
Lowest	16QAM	1	0	13.71	0.0235	-2.04	0.0006
Middle		1	0	13.62	0.0230	-2.42	0.0006
Highest		1	0	14.48	0.0280	-1.84	0.0007
Limit	ERP < 3W			Result		PASS	



LTE Band 17 / 5MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	15.17	0.0329	-1.15	0.0008
Middle		1	0	15.56	0.0360	-0.60	0.0009
Highest		1	0	15.80	0.0380	-0.14	0.0010
Lowest	16QAM	1	0	14.48	0.0281	-2.06	0.0006
Middle		1	0	14.77	0.0300	-1.29	0.0007
Highest		1	0	15.01	0.0317	-1.05	0.0008
Limit	ERP < 3W			Result		PASS	

LTE Band 17 / 10MHz (Average)							
Channel	Modulation	RB		Horizontal		Vertical	
		Size	Offset	ERP(dBm)	ERP(W)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	15.62	0.0365	-1.02	0.0008
Middle		1	0	15.94	0.0393	-0.79	0.0008
Highest		1	0	15.98	0.0396	-0.78	0.0008
Lowest	16QAM	1	0	14.46	0.0280	-2.18	0.0006
Middle		1	0	14.77	0.0300	-1.98	0.0006
Highest		1	0	14.88	0.0308	-1.77	0.0007
Limit	ERP < 3W			Result		PASS	



Radiated Spurious Emission

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-57.94	-13	-44.94	-72.18	-64.51	1.67	8.24	H
	5548	-57.09	-13	-44.09	-76.97	-64.16	2.65	9.72	H
	7403	-50.58	-13	-37.58	-75.82	-59.73	2.46	11.61	H
	9251	-48.36	-13	-35.36	-76.88	-58.42	2.54	12.60	H
									H
									H
	3700	-56.98	-13	-43.98	-71.18	-63.55	1.67	8.24	V
	5548	-55.95	-13	-42.95	-74.28	-63.02	2.65	9.72	V
	7403	-45.36	-13	-32.36	-69.34	-54.51	2.46	11.61	V
	9251	-48.79	-13	-35.79	-74.72	-58.85	2.54	12.60	V
									V
									V
Middle	3763	-58.88	-13	-45.88	-73.35	-65.51	1.69	8.32	H
	5639	-58.91	-13	-45.91	-78.56	-65.96	2.71	9.76	H
	7522	-52.84	-13	-39.84	-77.59	-62.23	2.42	11.81	H
									H
									H
									H
	3763	-60.08	-13	-47.08	-74.12	-66.71	1.69	8.32	V
	5639	-59.46	-13	-46.46	-77.61	-66.51	2.71	9.76	V
	7522	-49.41	-13	-36.41	-73.24	-58.8	2.42	11.81	V
									V
									V
									V
Highest	3819	-57.26	-13	-44.26	-71.79	-61.79	1.70	8.38	H
	5730	-56.99	-13	-43.99	-76.94	-61.87	2.76	9.79	H
	7634	-52.32	-13	-39.32	-76.78	-59.66	2.39	11.88	H
	9545	-49.32	-13	-36.32	-78.27	-57.04	2.60	12.47	H
									H
									H
	3819	-57.88	-13	-44.88	-71.76	-62.41	1.70	8.38	V
	5730	-55.57	-13	-42.57	-74.32	-60.45	2.76	9.79	V
	7634	-48.28	-13	-35.28	-71.99	-55.62	2.39	11.88	V
	9545	-51.46	-13	-38.46	-77.24	-59.18	2.60	12.47	V
									V
									V

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



LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-57.84	-13	-44.84	-71.91	-64.41	1.67	8.24	H
	5548	-57.15	-13	-44.15	-76.34	-64.22	2.65	9.72	H
	7403	-53.22	-13	-40.22	-77.84	-62.37	2.46	11.61	H
	9251	-49.22	-13	-36.22	-77.04	-59.28	2.54	12.60	H
									H
									H
	3700	-62.57	-13	-49.57	-76.54	-69.14	1.67	8.24	V
	5548	-60.22	-13	-47.22	-78.28	-67.29	2.65	9.72	V
	7403	-55.54	-13	-42.54	-78.95	-64.69	2.46	11.61	V
	9251	-53.60	-13	-40.60	-78.83	-63.66	2.54	12.60	V
									V
									V
Middle	3756	-57.25	-13	-44.25	-71.55	-63.87	1.68	8.31	H
	5639	-58.52	-13	-45.52	-77.47	-65.57	2.71	9.76	H
	7515	-53.60	-13	-40.60	-78.03	-62.98	2.42	11.81	H
									H
									H
									H
	3756	-58.57	-13	-45.57	-72.47	-65.19	1.68	8.31	V
	5639	-58.87	-13	-45.87	-76.32	-65.92	2.71	9.76	V
	7515	-51.06	-13	-38.06	-74.57	-60.44	2.42	11.81	V
									V
									V
									V
Highest	3812	-55.56	-13	-42.56	-70.05	-60.08	1.70	8.37	H
	5723	-56.99	-13	-43.99	-76.93	-61.88	2.75	9.79	H
	7627	-52.09	-13	-39.09	-76.53	-59.43	2.39	11.88	H
	9538	-49.14	-13	-36.14	-77.91	-56.87	2.60	12.48	H
									H
									H
	3812	-57.03	-13	-44.03	-70.86	-61.55	1.70	8.37	V
	5723	-56.78	-13	-43.78	-75.52	-61.67	2.75	9.79	V
	7627	-48.99	-13	-35.99	-72.75	-56.33	2.39	11.88	V
	9538	-51.44	-13	-38.44	-77.07	-59.17	2.60	12.48	V
									V
									V

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



LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-57.69	-13	-44.69	-71.75	-64.26	1.67	8.24	H
	5548	-57.74	-13	-44.74	-76.93	-64.81	2.65	9.72	H
	7403	-49.97	-13	-36.97	-74.49	-59.12	2.46	11.61	H
	9251	-48.66	-13	-35.66	-76.48	-58.72	2.54	12.60	H
									H
									H
	3700	-56.32	-13	-43.32	-70.29	-62.89	1.67	8.24	V
	5548	-58.26	-13	-45.26	-75.91	-65.33	2.65	9.72	V
	7403	-46.09	-13	-33.09	-69.5	-55.24	2.46	11.61	V
	9251	-50.16	-13	-37.16	-75.39	-60.22	2.54	12.60	V
									V
									V
Middle	3756	-58.86	-13	-45.86	-73.16	-65.48	1.68	8.31	H
	5632	-58.71	-13	-45.71	-77.72	-65.76	2.70	9.75	H
	7508	-53.45	-13	-40.45	-77.89	-62.83	2.43	11.80	H
									H
									H
									H
	3756	-59.69	-13	-46.69	-73.69	-66.31	1.68	8.31	V
	5632	-59.66	-13	-46.66	-77.06	-66.71	2.70	9.75	V
	7508	-53.16	-13	-40.16	-76.58	-62.54	2.43	11.80	V
									V
									V
									V
Highest	3812	-55.43	-13	-42.43	-69.68	-59.95	1.70	8.37	H
	5716	-57.27	-13	-44.27	-76.76	-62.16	2.75	9.79	H
	7620	-52.93	-13	-39.93	-76.69	-60.26	2.39	11.87	H
	9524	-49.41	-13	-36.41	-77.97	-57.15	2.59	12.49	H
									H
									H
	3812	-55.81	-13	-42.81	-69.38	-60.33	1.70	8.37	V
	5716	-56.10	-13	-43.10	-74.84	-60.99	2.75	9.79	V
	7620	-49.32	-13	-36.32	-72.58	-56.65	2.39	11.87	V
	9524	-51.63	-13	-38.63	-77.11	-59.37	2.59	12.49	V
									V
									V

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



LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-57.89	-13	-44.89	-71.95	-64.46	1.67	8.24	H
	5548	-59.20	-13	-46.20	-78.39	-66.27	2.65	9.72	H
	7403	-51.97	-13	-38.97	-76.76	-61.12	2.46	11.61	H
									H
									H
									H
	3700	-57.70	-13	-44.70	-71.67	-64.27	1.67	8.24	V
	5548	-58.84	-13	-45.84	-76.49	-65.91	2.65	9.72	V
	7403	-49.11	-13	-36.11	-72.46	-58.26	2.46	11.61	V
									V
									V
									V
Middle	3749	-58.63	-13	-45.63	-72.93	-65.25	1.68	8.30	H
	5625	-59.26	-13	-46.26	-78.26	-66.31	2.70	9.75	H
	7501	-53.04	-13	-40.04	-77.55	-62.41	2.43	11.80	H
									H
									H
									H
	3749	-61.24	-13	-48.24	-75.24	-67.86	1.68	8.30	V
	5625	-59.84	-13	-46.84	-77.45	-66.89	2.70	9.75	V
	7501	-53.52	-13	-40.52	-76.34	-62.89	2.43	11.80	V
									V
									V
									V
Highest	3805	-54.99	-13	-41.99	-68.84	-59.51	1.70	8.37	H
	5702	-58.00	-13	-45.00	-77.41	-62.89	2.74	9.78	H
	7606	-51.85	-13	-38.85	-75.72	-59.17	2.40	11.86	H
	9503	-48.57	-13	-35.57	-77.18	-56.33	2.59	12.50	H
									H
									H
	3805	-56.20	-13	-43.20	-69.32	-60.72	1.70	8.37	V
	5702	-57.00	-13	-44.00	-75.51	-61.89	2.74	9.78	V
	7606	-47.65	-13	-34.65	-70.9	-54.97	2.40	11.86	V
	9503	-49.19	-13	-36.19	-74.19	-56.95	2.59	12.50	V
									V
									V

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



LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3707	-55.94	-13	-42.94	-69.69	-62.52	1.67	8.25	H
	5562	-57.35	-13	-44.35	-76.53	-64.41	2.66	9.72	H
	7410	-51.75	-13	-38.75	-76.37	-60.91	2.46	11.62	H
	9265	-48.04	-13	-35.04	-75.86	-58.09	2.54	12.59	H
									H
									H
	3707	-55.94	-13	-42.94	-69.69	-62.52	1.67	8.25	V
	5562	-57.35	-13	-44.35	-76.53	-64.41	2.66	9.72	V
	7410	-51.75	-13	-38.75	-76.37	-60.91	2.46	11.62	V
	9265	-48.04	-13	-35.04	-75.86	-58.09	2.54	12.59	V
									V
									V
Middle	3749	-57.21	-13	-44.21	-71.67	-63.83	1.68	8.30	H
	5625	-57.92	-13	-44.92	-77.63	-64.97	2.70	9.75	H
	7501	-52.48	-13	-39.48	-77.39	-61.85	2.43	11.80	H
									H
									H
									H
	3749	-58.63	-13	-45.63	-72.77	-65.25	1.68	8.30	V
	5625	-55.98	-13	-42.98	-74.15	-63.03	2.70	9.75	V
	7501	-50.67	-13	-37.67	-74.6	-60.04	2.43	11.80	V
									V
									V
									V
Highest	3791	-54.46	-13	-41.46	-68.94	-58.96	1.70	8.35	H
	5688	-57.89	-13	-44.89	-77.65	-62.78	2.73	9.78	H
	7585	-52.47	-13	-39.47	-76.98	-59.77	2.40	11.85	H
	9482	-49.08	-13	-36.08	-77.65	-56.85	2.59	12.51	H
									H
									H
	3791	-54.87	-13	-41.87	-68.79	-59.37	1.70	8.35	V
	5688	-57.04	-13	-44.04	-75.51	-61.93	2.73	9.78	V
	7585	-47.46	-13	-34.46	-71.16	-54.76	2.40	11.85	V
	9482	-50.25	-13	-37.25	-75.53	-58.02	2.59	12.51	V
									V
									V

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



LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3700	-58.12	-13	-45.12	-72.18	-64.69	1.67	8.24	H
	5555	-58.07	-13	-45.07	-76.76	-65.14	2.66	9.72	H
	7403	-50.47	-13	-37.47	-75.09	-59.62	2.46	11.61	H
	9258	-48.29	-13	-35.29	-76.12	-58.35	2.54	12.60	H
									H
									H
	3700	-57.12	-13	-44.12	-71	-63.69	1.67	8.24	V
	5555	-57.61	-13	-44.61	-75.26	-64.68	2.66	9.72	V
	7403	-46.58	-13	-33.58	-69.99	-55.73	2.46	11.61	V
	9258	-49.49	-13	-36.49	-74.65	-59.55	2.54	12.60	V
									V
									V
Middle	3742	-58.17	-13	-45.17	-72.4	-64.78	1.68	8.29	H
	5611	-57.90	-13	-44.90	-76.98	-64.96	2.69	9.74	H
	7487	-52.41	-13	-39.41	-76.84	-61.75	2.43	11.77	H
									H
									H
									H
	3742	-57.77	-13	-44.77	-71.69	-64.38	1.68	8.29	V
	5611	-58.38	-13	-45.38	-75.75	-65.44	2.69	9.74	V
	7487	-50.12	-13	-37.12	-73.64	-59.46	2.43	11.77	V
									V
									V
									V
Highest	3784	-57.14	-13	-44.14	-71.35	-61.64	1.69	8.34	H
	5674	-58.23	-13	-45.23	-77.34	-63.12	2.73	9.77	H
	7564	-52.01	-13	-39.01	-76.03	-59.29	2.41	11.84	H
	9454	-48.88	-13	-35.88	-77.5	-56.67	2.58	12.52	H
									H
									H
	3784	-57.25	-13	-44.25	-70.91	-61.75	1.69	8.34	V
	5674	-57.58	-13	-44.58	-75.69	-62.47	2.73	9.77	V
	7564	-49.41	-13	-36.41	-72.59	-56.69	2.41	11.84	V
	9454	-51.42	-13	-38.42	-76.75	-59.21	2.58	12.52	V
									V
									V

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



LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-59.88	-13	-46.88	-71.39	-65.95	1.58	7.65	H
	5128	-58.14	-13	-45.14	-76.62	-65.43	2.41	9.70	H
	6843	-49.59	-13	-36.59	-72.13	-57.56	2.64	10.61	H
	8551	-50.82	-13	-37.82	-76.69	-60.95	2.39	12.52	H
									H
									H
	3420	-59.45	-13	-46.45	-70.67	-65.52	1.58	7.65	V
	5128	-59.83	-13	-46.83	-77.18	-67.12	2.41	9.70	V
	6843	-50.81	-13	-37.81	-73.45	-58.78	2.64	10.61	V
	8551	-52.66	-13	-39.66	-77.27	-62.79	2.39	12.52	V
									V
									V
Middle	3462	-60.43	-13	-47.43	-72.61	-66.67	1.59	7.83	H
	5198	-58.70	-13	-45.70	-77.27	-65.95	2.45	9.70	H
	6927	-48.59	-13	-35.59	-71.04	-56.69	2.61	10.71	H
	8663	-49.58	-13	-36.58	-76.42	-59.73	2.41	12.57	H
									H
									H
	3462	-59.93	-13	-46.93	-72.45	-66.17	1.59	7.83	V
	5198	-59.88	-13	-46.88	-77.48	-67.13	2.45	9.70	V
	6927	-49.65	-13	-36.65	-71.95	-57.75	2.61	10.71	V
	8663	-52.47	-13	-39.47	-77.27	-62.62	2.41	12.57	V
									V
									V
Highest	3511	-58.44	-13	-45.44	-71.27	-64.85	1.61	8.01	H
	5261	-58.10	-13	-45.10	-76.59	-65.31	2.49	9.70	H
	7018	-47.00	-13	-34.00	-69.96	-55.25	2.58	10.84	H
									H
									H
									H
	3511	-58.14	-13	-45.14	-71.52	-64.55	1.61	8.01	V
	5261	-58.67	-13	-45.67	-76.51	-65.88	2.49	9.70	V
	7018	-48.51	-13	-35.51	-71.3	-56.76	2.58	10.84	V
									V
									V
									V

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



LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-60.05	-13	-47.05	-71.56	-66.12	1.58	7.65	H
	5128	-57.40	-13	-44.40	-75.88	-64.69	2.41	9.70	H
	6843	-48.76	-13	-35.76	-71.95	-56.73	2.64	10.61	H
	8551	-50.64	-13	-37.64	-76.51	-60.77	2.39	12.52	H
									H
									H
	3420	-59.68	-13	-46.68	-71.15	-65.75	1.58	7.65	V
	5128	-60.24	-13	-47.24	-77.59	-67.53	2.41	9.70	V
	6843	-49.88	-13	-36.88	-72.75	-57.85	2.64	10.61	V
	8551	-52.49	-13	-39.49	-77.1	-62.62	2.39	12.52	V
									V
									V
Middle	3462	-60.61	-13	-47.61	-72.79	-66.85	1.59	7.83	H
	5191	-57.61	-13	-44.61	-76.18	-64.86	2.45	9.70	H
	6927	-48.36	-13	-35.36	-70.9	-56.46	2.61	10.71	H
	8656	-50.57	-13	-37.57	-77.33	-60.72	2.41	12.56	H
									H
									H
	3462	-60.43	-13	-47.43	-72.85	-66.67	1.59	7.83	V
	5191	-59.91	-13	-46.91	-77.51	-67.16	2.45	9.70	V
	6927	-48.72	-13	-35.72	-71.02	-56.82	2.61	10.71	V
	8656	-52.41	-13	-39.41	-77.21	-62.56	2.41	12.56	V
									V
									V
Highest	3504	-59.45	-13	-46.45	-72.13	-65.85	1.61	8.00	H
	5254	-56.03	-13	-43.03	-74.38	-63.25	2.48	9.70	H
	7011	-48.45	-13	-35.45	-71.31	-56.69	2.59	10.82	H
	8761	-50.12	-13	-37.12	-77.32	-60.29	2.43	12.60	H
									H
									H
	3504	-58.99	-13	-45.99	-72.17	-65.39	1.61	8.00	V
	5254	-59.44	-13	-46.44	-77.23	-66.66	2.48	9.70	V
	7011	-48.93	-13	-35.93	-71.61	-57.17	2.59	10.82	V
	8761	-52.22	-13	-39.22	-77.06	-62.39	2.43	12.60	V
									V
									V

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



LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-58.71	-13	-45.71	-70.53	-64.78	1.58	7.65	H
	5128	-58.90	-13	-45.90	-77.28	-66.19	2.41	9.70	H
	6843	-48.74	-13	-35.74	-71.29	-56.71	2.64	10.61	H
	8551	-51.04	-13	-38.04	-76.91	-61.17	2.39	12.52	H
									H
									H
	3420	-58.57	-13	-45.57	-69.79	-64.64	1.58	7.65	V
	5128	-60.32	-13	-47.32	-77.66	-67.61	2.41	9.70	V
	6843	-50.52	-13	-37.52	-72.99	-58.49	2.64	10.61	V
	8551	-52.28	-13	-39.28	-76.98	-62.41	2.39	12.52	V
									V
									V
Middle	3462	-60.39	-13	-47.39	-72.57	-66.63	1.59	7.83	H
	5191	-58.24	-13	-45.24	-76.81	-65.49	2.45	9.70	H
	6920	-48.65	-13	-35.65	-71.14	-56.74	2.62	10.70	H
	8649	-50.20	-13	-37.20	-76.96	-60.35	2.41	12.56	H
									H
									H
	3462	-60.33	-13	-47.33	-72.75	-66.57	1.59	7.83	V
	5191	-59.39	-13	-46.39	-76.99	-66.64	2.45	9.70	V
	6920	-50.32	-13	-37.32	-72.55	-58.41	2.62	10.70	V
	8649	-52.22	-13	-39.22	-77.02	-62.37	2.41	12.56	V
									V
									V
Highest	3504	-58.79	-13	-45.79	-71.47	-65.19	1.61	8.00	H
	5254	-57.27	-13	-44.27	-75.53	-64.49	2.48	9.70	H
	7004	-47.21	-13	-34.21	-70.05	-55.43	2.59	10.81	H
	8754	-49.97	-13	-36.97	-77.19	-60.14	2.43	12.60	H
									H
									H
	3504	-58.04	-13	-45.04	-71.31	-64.44	1.61	8.00	V
	5254	-58.21	-13	-45.21	-76	-65.43	2.48	9.70	V
	7004	-49.24	-13	-36.24	-71.91	-57.46	2.59	10.81	V
									V
									V
									V

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



LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-59.34	-13	-46.34	-70.85	-65.41	1.58	7.65	H
	5135	-57.85	-13	-44.85	-76.23	-65.14	2.41	9.70	H
	6843	-48.76	-13	-35.76	-71.45	-56.73	2.64	10.61	H
	8551	-51.16	-13	-38.16	-77.03	-61.29	2.39	12.52	H
									H
									H
	3420	-59.50	-13	-46.50	-70.72	-65.57	1.58	7.65	V
	5135	-60.57	-13	-47.57	-77.92	-67.86	2.41	9.70	V
	6843	-49.92	-13	-36.92	-73.47	-57.89	2.64	10.61	V
	8551	-52.99	-13	-39.99	-77.5	-63.12	2.39	12.52	V
									V
									V
Middle	3455	-60.54	-13	-47.54	-72.52	-66.75	1.59	7.80	H
	5184	-58.06	-13	-45.06	-76.61	-65.32	2.44	9.70	H
	6913	-47.97	-13	-34.97	-70.45	-56.05	2.62	10.70	H
	8642	-50.01	-13	-37.01	-76.67	-60.16	2.41	12.56	H
									H
									H
	3455	-60.94	-13	-47.94	-72.89	-67.15	1.59	7.80	V
	5184	-60.27	-13	-47.27	-77.81	-67.53	2.44	9.70	V
	6913	-48.37	-13	-35.37	-70.59	-56.45	2.62	10.70	V
	8642	-52.27	-13	-39.27	-77.07	-62.42	2.41	12.56	V
									V
									V
Highest	3490	-60.28	-13	-47.28	-72.74	-66.63	1.60	7.96	H
	5240	-54.70	-13	-41.70	-73.11	-61.92	2.48	9.70	H
	6983	-47.00	-13	-34.00	-69.76	-55.18	2.60	10.78	H
									H
									H
									H
	3490	-59.78	-13	-46.78	-72.65	-66.13	1.60	7.96	V
	5240	-56.33	-13	-43.33	-74.05	-63.55	2.48	9.70	V
	6983	-47.24	-13	-34.24	-69.81	-55.42	2.60	10.78	V
									V
									V
									V

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



LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-59.04	-13	-46.04	70.55	-65.11	1.58	7.65	H
	5135	-57.52	-13	-44.52	-76	-64.81	2.41	9.70	H
	6843	-49.22	-13	-36.22	-72.01	-57.19	2.64	10.61	H
	8558	-51.05	-13	-38.05	-77.05	-61.19	2.39	12.52	H
									H
									H
	3420	-58.71	-13	-45.71	-70.2	-64.78	1.58	7.65	V
	5135	-59.60	-13	-46.60	-77.51	-66.89	2.41	9.70	V
	6843	-51.24	-13	-38.24	-73.82	-59.21	2.64	10.61	V
	8558	-52.64	-13	-39.64	-77.31	-62.78	2.39	12.52	V
									V
									V
Middle	3455	-60.33	-13	-47.33	-72.31	-66.54	1.59	7.80	H
	5177	-58.09	-13	-45.09	-76.64	-65.35	2.44	9.70	H
	6906	-48.75	-13	-35.75	-71.17	-56.82	2.62	10.69	H
	8628	-50.46	-13	-37.46	-77.15	-60.61	2.40	12.55	H
									H
									H
	3455	-60.31	-13	-47.31	-72.36	-66.52	1.59	7.80	V
	5177	-59.63	-13	-46.63	-77.35	-66.89	2.44	9.70	V
	6906	-49.91	-13	-36.91	-72.06	-57.98	2.62	10.69	V
	8628	-52.29	-13	-39.29	-77.09	-62.44	2.40	12.55	V
									V
									V
Highest	3483	-61.34	-13	-48.34	-73.78	-67.67	1.60	7.93	H
	5226	-53.93	-13	-40.93	-72.25	-61.16	2.47	9.70	H
	6962	-48.31	-13	-35.31	-70.99	-56.46	2.60	10.75	H
	5705	-50.77	-13	-37.77	-77.63	-57.81	2.74	9.78	H
									H
									H
	3483	-62.44	-13	-49.44	-73.7	-68.77	1.60	7.93	V
	5226	-59.55	-13	-46.55	-75.36	-66.78	2.47	9.70	V
	6962	-54.99	-13	-41.99	-71.78	-63.14	2.60	10.75	V
	5705	-52.47	-13	-39.47	-77.16	-59.51	2.74	9.78	V
									V
									V

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



LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-60.44	-13	-47.44	-72	-66.51	1.58	7.65	H
	5135	-58.10	-13	-45.10	-76.58	-65.39	2.41	9.70	H
	6843	-49.96	-13	-36.96	-72.41	-57.93	2.64	10.61	H
	8558	-50.68	-13	-37.68	-76.78	-60.82	2.39	12.52	H
									H
									H
	3420	-60.32	-13	-47.32	-71.54	-66.39	1.58	7.65	V
	5135	-60.58	-13	-47.58	-77.93	-67.87	2.41	9.70	V
	6843	-51.32	-13	-38.32	-73.62	-59.29	2.64	10.61	V
	8558	-52.47	-13	-39.47	-77.14	-62.61	2.39	12.52	V
									V
									V
Middle	3448	-61.10	-13	-48.10	-73.05	-67.28	1.59	7.77	H
	5170	-57.64	-13	-44.64	-76.16	-64.91	2.43	9.70	H
	6892	-49.83	-13	-36.83	-72.23	-57.88	2.63	10.67	H
									H
									H
									H
	3448	-60.94	-13	-47.94	-72.96	-67.12	1.59	7.77	V
	5170	-60.46	-13	-47.46	-77.93	-67.73	2.43	9.70	V
	6892	-51.32	-13	-38.32	-73.45	-59.37	2.63	10.67	V
									V
									V
									V
Highest	3469	-61.44	-13	-48.44	-73.65	-67.71	1.59	7.86	H
	5212	-57.65	-13	-44.65	-76.15	-64.89	2.46	9.70	H
	6948	-48.14	-13	-35.14	-70.76	-56.27	2.61	10.74	H
	8684	-50.72	-13	-37.72	-77.64	-60.88	2.41	12.57	H
									H
									H
	3469	-61.66	-13	-48.66	-74.11	-67.93	1.59	7.86	V
	5212	-59.90	-13	-46.90	-77.46	-67.14	2.46	9.70	V
	6948	-48.49	-13	-35.49	-70.88	-56.62	2.61	10.74	V
	8684	-52.13	-13	-39.13	-76.86	-62.29	2.41	12.57	V
									V
									V

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



LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-52.55	-13	-39.55	-57	-54.31	0.98	4.89	H
	2472	-50.99	-13	-37.99	-60.15	-52.87	1.28	5.32	H
	3296	-60.19	-13	-47.19	-72.45	-63.6	1.54	7.10	H
									H
									H
									H
	1648	-55.26	-13	-42.26	-58.23	-57.02	0.98	4.89	V
	2472	-58.74	-13	-45.74	-68.87	-60.62	1.28	5.32	V
	3296	-63.46	-13	-50.46	-74.7	-66.87	1.54	7.10	V
									V
									V
									V
Middle	1672	-57.04	-13	-44.04	-61.37	-58.72	0.99	4.82	H
	2512	-49.69	-13	-36.69	-72.01	-51.66	1.29	5.41	H
	3344	-62.50	-13	-49.50	-74.41	-66.11	1.56	7.31	H
									H
									H
									H
	1672	-59.94	-13	-46.94	-62.7	-61.62	0.99	4.82	V
	2512	-49.16	-13	-36.16	-59.09	-51.13	1.29	5.41	V
	3344	-64.21	-13	-51.21	-75.3	-67.82	1.56	7.31	V
									V
									V
									V
Highest	1696	-49.26	-13	-36.26	-53.73	-50.86	1.00	4.75	H
	2544	-64.21	-13	-51.21	-73.59	-66.19	1.30	5.44	H
	3392	-56.37	-13	-43.37	-68.39	-60.17	1.57	7.52	H
									H
									H
									H
	1696	-51.09	-13	-38.09	-54.63	-52.69	1.00	4.75	V
	2544	-63.74	-13	-50.74	-73.73	-65.72	1.30	5.44	V
	3392	-59.18	-13	-46.18	-70.71	-62.98	1.57	7.52	V
									V
									V
									V

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



LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-52.46	-13	-39.46	-56.95	-54.22	0.98	4.89	H
	2472	-52.61	-13	-39.61	-61.74	-54.49	1.28	5.32	H
	3296	-60.47	-13	-47.47	-72.71	-63.88	1.54	7.10	H
									H
									H
									H
	1648	-54.53	-13	-41.53	-57.53	-56.29	0.98	4.89	V
	2472	-60.21	-13	-47.21	-70.36	-62.09	1.28	5.32	V
	3296	-63.84	-13	-50.84	-75.12	-67.25	1.54	7.10	V
									V
									V
									V
Middle	1672	-57.11	-13	-44.11	-61.45	-58.79	0.99	4.82	H
	2504	-62.84	-13	-49.84	-72.13	-64.8	1.29	5.40	H
	3344	-61.36	-13	-48.36	-73.3	-64.97	1.56	7.31	H
									H
									H
									H
	1672	-59.94	-13	-46.94	-62.73	-61.62	0.99	4.82	V
	2504	-47.93	-13	-34.93	-57.91	-49.89	1.29	5.40	V
	3344	-63.88	-13	-50.88	-74.98	-67.49	1.56	7.31	V
									V
									V
									V
Highest	1695	-49.14	-13	-36.14	-53.56	-50.75	1.00	4.75	H
	2542.5	-62.98	-13	-49.98	-72.32	-64.96	1.30	5.43	H
	3390	-53.94	-13	-40.94	-65.94	-57.74	1.57	7.52	H
									H
									H
									H
	1695	-51.47	-13	-38.47	-55.01	-53.08	1.00	4.75	V
	2542.5	-62.64	-13	-49.64	-72.63	-64.62	1.30	5.43	V
	3390	-58.02	-13	-45.02	-69.44	-61.82	1.57	7.52	V
									V
									V
									V

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



LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-51.47	-13	-38.47	-55.94	-53.23	0.98	4.89	H
	2472	-60.46	-13	-47.46	-69.57	-62.34	1.28	5.32	H
	3296	-60.44	-13	-47.44	-72.69	-63.85	1.54	7.10	H
									H
									H
									H
	1648	-53.58	-13	-40.58	-56.6	-55.34	0.98	4.89	V
	2472	-49.14	-13	-36.14	-59.23	-51.02	1.28	5.32	V
	3296	-63.67	-13	-50.67	-74.97	-67.08	1.54	7.10	V
									V
									V
									V
Middle	1672	-53.34	-13	-40.34	-57.7	-55.02	0.99	4.82	H
	2504	-61.47	-13	-48.47	-70.75	-63.43	1.29	5.40	H
	3336	-59.48	-13	-46.48	-71.53	-63.06	1.55	7.28	H
									H
									H
									H
	1672	-56.22	-13	-43.22	-59.02	-57.9	0.99	4.82	V
	2504	-63.67	-13	-50.67	-73.64	-65.63	1.29	5.40	V
	3336	-62.74	-13	-49.74	-73.94	-66.32	1.55	7.28	V
									V
									V
									V
Highest	1688	-46.84	-13	-33.84	-51.2	-48.47	1.00	4.77	H
	2536	-61.14	-13	-48.14	-70.48	-63.12	1.30	5.43	H
	3376	-54.98	-13	-41.98	-66.99	-58.72	1.57	7.45	H
									H
									H
									H
	1688	-50.43	-13	-37.43	-53.23	-52.06	1.00	4.77	V
	2536	-56.54	-13	-43.54	-66.51	-58.52	1.30	5.43	V
	3376	-58.87	-13	-45.87	-70.29	-62.61	1.57	7.45	V
									V
									V
									V

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



LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-49.33	-13	-36.33	-53.81	-51.09	0.98	4.89	H
	2472	-44.02	-13	-31.02	-53.18	-45.9	1.28	5.32	H
	3296	-59.57	-13	-46.57	-71.83	-62.98	1.54	7.10	H
	4120	-58.76	-13	-45.76	-74.13	-63.4	1.83	8.62	H
									H
									H
	1648	-51.83	-13	-38.83	-54.84	-53.59	0.98	4.89	V
	2472	-45.91	-13	-32.91	-56.04	-47.79	1.28	5.32	V
	3296	-63.54	-13	-50.54	-74.83	-66.95	1.54	7.10	V
	4120	-61.78	-13	-48.78	-77.14	-66.42	1.83	8.62	V
									V
									V
Middle	1664	-46.73	-13	-33.73	-51.14	-48.44	0.98	4.84	H
	2496	-37.99	-13	-24.99	-47.31	-39.94	1.29	5.39	H
	3328	-56.84	-13	-43.84	-68.87	-60.38	1.55	7.24	H
	4160	-51.78	-13	-38.78	-67.26	-56.41	1.85	8.63	H
									H
									H
	1664	-50.77	-13	-37.77	-53.65	-52.48	0.98	4.84	V
	2496	-39.96	-13	-26.96	-49.94	-41.91	1.29	5.39	V
	3328	-61.19	-13	-48.19	-72.36	-64.73	1.55	7.24	V
	4160	-56.75	-13	-43.75	-72.26	-61.38	1.85	8.63	V
									V
									V
Highest	1680	-49.16	-13	-36.16	-53.49	-50.81	0.99	4.80	H
	2520	-59.88	-13	-46.88	-69.2	-61.85	1.30	5.42	H
	3360	-59.57	-13	-46.57	-71.53	-63.24	1.56	7.38	H
									H
									H
									H
	1680	-52.27	-13	-39.27	-55.01	-53.92	0.99	4.80	V
	2520	-60.69	-13	-47.69	-70.68	-62.66	1.30	5.42	V
	3360	-63.08	-13	-50.08	-74.37	-66.75	1.56	7.38	V
									V
									V
									V

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



LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5004	-43.76	-25	-18.76	-62.43	-51.12	2.34	9.70	H
	7500	-43.84	-25	-18.84	-68.74	-53.21	2.43	11.80	H
	10002	-35.56	-25	-10.56	-64.09	-45.06	2.70	12.20	H
									H
									H
									H
	5004	-54.58	-25	-29.58	-71.8	-61.94	2.34	9.70	V
	7500	-45.65	-25	-20.65	-69.56	-55.02	2.43	11.80	V
	10002	-45.76	-25	-20.76	-71.71	-55.26	2.70	12.20	V
									V
									V
									V
Middle	5064	-43.69	-25	-18.69	-62.5	-51.02	2.37	9.70	H
	7596	-46.38	-25	-21.38	-70.81	-55.84	2.40	11.86	H
	10134	-38.24	-25	-13.24	-66.87	-47.8	2.70	12.25	H
									H
									H
									H
	5064	-55.16	-25	-30.16	-72.6	-62.49	2.37	9.70	V
	7596	-47.25	-25	-22.25	-70.87	-56.71	2.40	11.86	V
	10134	-46.56	-25	-21.56	-72.83	-56.12	2.70	12.25	V
									V
									V
									V
Highest	5130	-44.34	-25	-19.34	63.3	-51.63	2.41	9.70	H
	7698	-43.47	-25	-18.47	67.94	-53.02	2.37	11.92	H
	10260	-40.58	-25	-15.58	-69.36	-50.19	2.69	12.30	H
									H
									H
									H
	5130	-54.17	-25	-29.17	-71.97	-61.46	2.41	9.70	V
	7698	-44.48	-25	-19.48	-68.35	-54.03	2.37	11.92	V
	10260	-45.96	-25	-20.96	-72.61	-55.57	2.69	12.30	V
									V
									V
									V

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



LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5004	-42.97	-25	-17.97	-61.69	-50.33	2.34	9.70	H
	7500	-43.34	-25	-18.34	-68.21	-52.71	2.43	11.80	H
	10002	-36.33	-25	-11.33	-64.92	-45.83	2.70	12.20	H
									H
									H
									H
	5004	-53.92	-25	-28.92	-71.21	-61.28	2.34	9.70	V
	7500	-44.56	-25	-19.56	-68.48	-53.93	2.43	11.80	V
	10002	-45.94	-25	-20.94	-71.9	-55.44	2.70	12.20	V
									V
									V
									V
Middle	5064	-44.48	-25	-19.48	-63.28	-51.81	2.37	9.70	H
	7590	-43.57	-25	-18.57	-67.98	-53.02	2.40	11.85	H
	10122	-40.28	-25	-15.28	-68.9	-49.83	2.70	12.25	H
									H
									H
									H
	5064	-51.42	-25	-26.42	-68.9	-58.75	2.37	9.70	V
	7590	-44.04	-25	-19.04	-67.7	-53.49	2.40	11.85	V
	10122	-47.47	-25	-22.47	-73.75	-57.02	2.70	12.25	V
									V
									V
									V
Highest	5124	-46.17	-25	-21.17	-65.1	-53.46	2.41	9.70	H
	7680	-46.14	-25	-21.14	-70.62	-55.68	2.37	11.91	H
	10242	-42.14	-25	-17.14	-70.88	-51.74	2.69	12.30	H
									H
									H
									H
	5124	-52.78	-25	-27.78	-70.52	-60.07	2.41	9.70	V
	7680	-48.13	-25	-23.13	-71.94	-57.67	2.37	11.91	V
	10242	-48.18	-25	-23.18	-74.78	-57.78	2.69	12.30	V
									V
									V
									V

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



LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5004	-42.48	-25	-17.48	-61.19	-49.84	2.34	9.70	H
	7500	-42.88	-25	-17.88	-67.79	-52.25	2.43	11.80	H
	10002	-35.54	-25	-10.54	-64.1	-45.04	2.70	12.20	H
									H
									H
									H
	5004	-52.76	-25	-27.76	-70.06	-60.12	2.34	9.70	V
	7500	-45.44	-25	-20.44	-69.35	-54.81	2.43	11.80	V
	10002	-45.67	-25	-20.67	-71.62	-55.17	2.70	12.20	V
									V
									V
									V
Middle	5058	-45.36	-25	-20.36	-64.18	-52.69	2.37	9.70	H
	7584	-48.12	-25	-23.12	-72.64	-57.57	2.40	11.85	H
	10116	-39.62	-25	-14.62	-68.29	-49.17	2.70	12.25	H
									H
									H
									H
	5058	-55.03	-25	-30.03	-72.56	-62.36	2.37	9.70	V
	7584	-47.42	-25	-22.42	-71.09	-56.87	2.40	11.85	V
	10116	-48.52	-25	-23.52	-74.73	-58.07	2.70	12.25	V
									V
									V
									V
Highest	5112	-46.38	-25	-21.38	-65.26	-53.68	2.40	9.70	H
	7668	-47.99	-25	-22.99	-72.48	-57.52	2.38	11.90	H
	10224	-39.84	-25	-14.84	-68.58	-49.43	2.69	12.29	H
									H
									H
									H
	5112	-56.99	-25	-31.99	-74.75	-64.29	2.40	9.70	V
	7668	-48.93	-25	-23.93	-72.74	-58.46	2.38	11.90	V
	10224	-46.34	-25	-21.34	-72.9	-55.93	2.69	12.29	V
									V
									V
									V

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



LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5004	-43.27	-25	-18.27	-61.97	-50.63	2.34	9.70	H
	7506	-44.24	-25	-19.24	-69.04	-53.62	2.43	11.80	H
	10002	-35.22	-25	-10.22	-63.78	-44.72	2.70	12.20	H
									H
									H
									H
	5004	-55.76	-25	-30.76	-73.05	-63.12	2.34	9.70	V
	7506	-45.78	-25	-20.78	-69.6	-55.16	2.43	11.80	V
	10002	-44.85	-25	-19.85	-70.87	-54.35	2.70	12.20	V
									V
									V
									V
Middle	5052	-45.92	-25	-20.92	-64.71	-53.25	2.37	9.70	H
	7578	-47.94	-25	-22.94	-72.45	-57.38	2.40	11.85	H
	10104	-40.18	-25	-15.18	-68.83	-49.73	2.70	12.24	H
									H
									H
									H
	5052	-56.19	-25	-31.19	-73.63	-63.52	2.37	9.70	V
	7578	-48.85	-25	-23.85	-72.56	-58.29	2.40	11.85	V
	10104	-49.47	-25	-24.47	-75.71	-59.02	2.70	12.24	V
									V
									V
									V
Highest	5100	-42.47	-25	-17.47	-61.33	-49.78	2.39	9.70	H
	7656	-45.76	-25	-20.76	-70.21	-55.27	2.38	11.89	H
	10206	-35.96	-25	-10.96	-64.7	-45.55	2.70	12.28	H
									H
									H
									H
	5100	-55.78	-25	-30.78	-73.45	-63.09	2.39	9.70	V
	7656	-45.09	-25	-20.09	-68.87	-54.6	2.38	11.89	V
	10206	-44.47	-25	-19.47	-71	-54.06	2.70	12.28	V
									V
									V
									V

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



LTE Band 12 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-54.16	-13	-41.16	-59.07	-55.82	0.87	4.68	H
	2096	-32.92	-13	-19.92	-41.27	-33.79	1.16	4.19	H
	2800	-57.68	-13	-44.68	-68.39	-59.79	1.38	5.64	H
	3496	-51.09	-13	-38.09	-64.12	-55.32	1.60	7.98	H
									H
									H
	1400	-55.45	-13	-42.45	-59.38	-57.11	0.87	4.68	V
	2096	-40.66	-13	-27.66	-49.18	-41.53	1.16	4.19	V
	2800	-59.56	-13	-46.56	-70.83	-61.67	1.38	5.64	V
	3496	-57.14	-13	-44.14	-70.76	-61.37	1.60	7.98	V
									V
									V
Middle	1416	-59.81	-13	-46.81	-64.72	-61.56	0.87	4.78	H
	2120	-46.77	-13	-33.77	-55.39	-47.71	1.17	4.26	H
	2832	-60.29	-13	-47.29	-71.12	-62.41	1.39	5.67	H
									H
									H
									H
	1416	-60.66	-13	-47.66	-64.63	-62.41	0.87	4.78	V
	2120	-51.79	-13	-38.79	-61.03	-52.73	1.17	4.26	V
	2832	-62.06	-13	-49.06	-73.41	-64.18	1.39	5.67	V
									V
									V
									V
Highest	1432	-53.99	-13	-40.99	-59.06	-55.84	0.88	4.88	H
	2144	-34.86	-13	-21.86	-43.66	-35.86	1.18	4.33	H
	2856	-60.10	-13	-47.10	-70.98	-62.23	1.40	5.68	H
	3576	-56.98	-13	-43.98	-70.69	-61.29	1.63	8.09	H
									H
									H
	1432	-55.64	-13	-42.64	-59.52	-57.49	0.88	4.88	V
	2144	-42.56	-13	-29.56	-52.09	-43.56	1.18	4.33	V
	2856	-61.79	-13	-48.79	-73.15	-63.92	1.40	5.68	V
	3576	-60.38	-13	-47.38	-74.50	-64.69	1.63	8.09	V
									V
									V

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



LTE Band 12 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-63.44	-13	-50.44	-68.35	-65.10	0.87	4.68	H
	2096	-44.84	-13	-31.84	-53.17	-45.71	1.16	4.19	H
	2800	-57.06	-13	-44.06	-67.76	-59.17	1.38	5.64	H
									H
									H
									H
	1400	-64.83	-13	-51.83	-68.78	-66.49	0.87	4.68	V
	2096	-50.74	-13	-37.74	-59.29	-51.61	1.16	4.19	V
	2800	-58.97	-13	-45.97	-70.26	-61.08	1.38	5.64	V
									V
									V
									V
Middle	1416	-60.73	-13	-47.73	-65.68	-62.48	0.87	4.78	H
	2120	-48.22	-13	-35.22	-56.84	-49.16	1.17	4.26	H
	2824	-59.80	-13	-46.80	-70.57	-61.92	1.39	5.66	H
									H
									H
									H
	1416	-62.87	-13	-49.87	-66.83	-64.62	0.87	4.78	V
	2120	-52.77	-13	-39.77	-61.99	-53.71	1.17	4.26	V
	2824	-61.41	-13	-48.41	-72.70	-63.53	1.39	5.66	V
									V
									V
									V
Highest	1424	-64.44	-13	-51.44	-69.46	-66.24	0.88	4.83	H
	2144	-44.63	-13	-31.63	-53.41	-45.63	1.18	4.33	H
	2856	-56.62	-13	-43.62	-67.51	-58.75	1.40	5.68	H
									H
									H
									H
	1424	-66.16	-13	-53.16	-70.02	-67.96	0.88	4.83	V
	2144	-49.86	-13	-36.86	-59.43	-50.86	1.18	4.33	V
	2856	-59.05	-13	-46.05	-70.41	-61.18	1.40	5.68	V
									V
									V
									V

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



LTE Band 12 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-62.81	-13	-49.81	-67.71	-64.47	0.87	4.68	H
	2096	-45.28	-13	-32.28	-53.63	-46.15	1.16	4.19	H
	2800	-57.78	-13	-44.78	-68.47	-59.89	1.38	5.64	H
									H
									H
									H
	1400	-63.66	-13	-50.66	-67.61	-65.32	0.87	4.68	V
	2096	-51.61	-13	-38.61	-60.17	-52.48	1.16	4.19	V
	2800	-59.46	-13	-46.46	-70.75	-61.57	1.38	5.64	V
									V
									V
									V
Middle	1408	-62.55	-13	-49.55	-67.48	-64.26	0.87	4.73	H
	2120	-46.49	-13	-33.49	-55.13	-47.43	1.17	4.26	H
	2824	-58.44	-13	-45.44	-69.22	-60.56	1.39	5.66	H
									H
									H
									H
	1408	-63.87	-13	-50.87	-67.84	-65.58	0.87	4.73	V
	2120	-50.84	-13	-37.84	-60.05	-51.78	1.17	4.26	V
	2824	-60.81	-13	-47.81	-72.12	-62.93	1.39	5.66	V
									V
									V
									V
Highest	1424	-64.11	-13	-51.11	-69.16	-65.91	0.88	4.83	H
	2136	-44.84	-13	-31.84	-53.62	-45.82	1.18	4.31	H
	2848	-58.23	-13	-45.23	-69.11	-60.36	1.40	5.68	H
									H
									H
									H
	1424	-66.63	-13	-53.63	-70.55	-68.43	0.88	4.83	V
	2136	-50.18	-13	-37.18	-59.74	-51.16	1.18	4.31	V
	2848	-59.92	-13	-46.92	-71.27	-62.05	1.40	5.68	V
									V
									V
									V

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LTE Band 12 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1400	-62.26	-13	-49.26	-67.19	-63.92	0.87	4.68	H
	2096	-45.47	-13	-32.47	-53.85	-46.34	1.16	4.19	H
	2800	-57.46	-13	-44.46	-68.15	-59.57	1.38	5.64	H
	3496	-51.59	-13	-38.59	-64.63	-55.82	1.60	7.98	H
									H
									H
	1400	-62.83	-13	-49.83	-66.78	-64.49	0.87	4.68	V
	2096	-51.07	-13	-38.07	-59.64	-51.94	1.16	4.19	V
	2800	-58.42	-13	-45.42	-69.69	-60.53	1.38	5.64	V
	3496	-62.86	-13	-49.86	-76.47	-67.09	1.60	7.98	V
									V
									V
Middle	1408	-59.78	-13	-46.78	-64.73	-61.49	0.87	4.73	H
	2112	-45.27	-13	-32.27	-53.76	-46.19	1.17	4.24	H
	2816	-55.77	-13	-42.77	-66.56	-57.88	1.39	5.65	H
									H
									H
									H
	1408	-60.76	-13	-47.76	-64.72	-62.47	0.87	4.73	V
	2112	-52.57	-13	-39.57	-61.44	-53.49	1.17	4.24	V
	2816	-57.74	-13	-44.74	-69.07	-59.85	1.39	5.65	V
									V
									V
									V
Highest	1416	-62.33	-13	-49.33	-67.24	-64.08	0.87	4.78	H
	2120	-45.97	-13	-32.97	-54.62	-46.91	1.17	4.26	H
	2824	-60.27	-13	-47.27	-71.05	-62.39	1.39	5.66	H
									H
									H
									H
	1416	-64.23	-13	-51.23	-68.17	-65.98	0.87	4.78	V
	2120	-49.97	-13	-36.97	-59.19	-50.91	1.17	4.26	V
	2824	-61.87	-13	-48.87	-73.19	-63.99	1.39	5.66	V
									V
									V
									V

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LTE Band 17 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-54.73	-13	-41.73	-59.61	-56.44	0.87	4.73	H
	2112	-43.27	-13	-30.27	-51.45	-44.19	1.17	4.24	H
	2816	-60.57	-13	-47.57	-70.70	-62.68	1.39	5.65	H
	3520	-62.16	-13	-49.16	-74.84	-66.42	1.61	8.02	H
									H
									H
	1408	-55.91	-13	-42.91	-59.40	-57.62	0.87	4.73	V
	2112	-43.59	-13	-30.59	-52.18	-44.51	1.17	4.24	V
	2816	-59.76	-13	-46.76	-70.42	-61.87	1.39	5.65	V
	3520	-62.30	-13	-49.30	-75.53	-66.56	1.61	8.02	V
									V
									V
Middle	1416	-55.79	-13	-42.79	-60.71	-57.54	0.87	4.78	H
	2120	-43.18	-13	-30.18	-51.73	-44.12	1.17	4.26	H
	2832	-62.52	-13	-49.52	-72.72	-64.64	1.39	5.67	H
	3536	-60.71	-13	-47.71	-73.54	-64.99	1.62	8.04	H
									H
									H
	1416	-51.69	-13	-38.69	-55.63	-53.44	0.87	4.78	V
	2120	-43.67	-13	-30.67	-52.70	-44.61	1.17	4.26	V
	2832	-61.63	-13	-48.63	-72.58	-63.75	1.39	5.67	V
	3536	-59.63	-13	-46.63	-72.97	-63.91	1.62	8.04	V
									V
									V
Highest	1424	-50.02	-13	-37.02	-55.10	-51.82	0.88	4.83	H
	2136	-41.61	-13	-28.61	-50.37	-42.59	1.18	4.31	H
	2848	-60.00	-13	-47.00	-70.27	-62.13	1.40	5.68	H
	3560	-60.89	-13	-47.89	-74.02	-65.19	1.62	8.07	H
									H
									H
	1424	-40.73	-13	-27.73	-44.66	-42.53	0.88	4.83	V
	2136	-40.71	-13	-27.71	-50.11	-41.69	1.18	4.31	V
	2848	-59.01	-13	-46.01	-69.74	-61.14	1.40	5.68	V
	3560	-61.19	-13	-48.19	-74.75	-65.49	1.62	8.07	V
									V
									V

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LTE Band 17 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1408	-49.61	-13	-36.61	-54.49	-51.32	0.87	4.73	H
	2112	-41.41	-13	-28.41	-49.60	-42.33	1.17	4.24	H
	2816	-59.62	-13	-46.62	-69.75	-61.73	1.39	5.65	H
	3520	-59.49	-13	-46.49	-72.17	-63.75	1.61	8.02	H
									H
									H
	1408	-51.94	-13	-38.94	-55.84	-53.65	0.87	4.73	V
	2112	-41.49	-13	-28.49	-49.89	-42.41	1.17	4.24	V
	2816	-59.78	-13	-46.78	-70.42	-61.89	1.39	5.65	V
	3520	-59.90	-13	-46.90	-73.01	-64.16	1.61	8.02	V
									V
									V
Middle	1408	-45.20	-13	-32.20	-50.08	-46.91	0.87	4.73	H
	2120	-39.59	-13	-26.59	-48.10	-40.53	1.17	4.26	H
	2824	-60.07	-13	-47.07	-70.12	-62.19	1.39	5.66	H
	3528	-57.31	-13	-44.31	-70.13	-61.58	1.61	8.03	H
									H
									H
	1408	-49.04	-13	-36.04	-52.94	-50.75	0.87	4.73	V
	2120	-38.27	-13	-25.27	-47.36	-39.21	1.17	4.26	V
	2824	-60.42	-13	-47.42	-71.55	-62.54	1.39	5.66	V
	3528	-57.98	-13	-44.98	-71.31	-62.25	1.61	8.03	V
									V
									V
Highest	1416	-51.18	-13	-38.18	-56.10	-52.93	0.87	4.78	H
	2120	-41.24	-13	-28.24	-50.69	-42.18	1.17	4.26	H
	2824	-62.20	-13	-49.20	-72.34	-64.32	1.39	5.66	H
	3536	-59.69	-13	-46.69	-72.52	-63.97	1.62	8.04	H
									H
									H
	1416	-52.69	-13	-39.69	-56.63	-54.44	0.87	4.78	V
	2120	-40.95	-13	-27.95	-50.02	-41.89	1.17	4.26	V
	2824	-61.39	-13	-48.39	-72.06	-63.51	1.39	5.66	V
	3536	-60.23	-13	-47.23	-73.57	-64.51	1.62	8.04	V
									V
									V

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