



# FCC RF Test Report

**APPLICANT** : Wistron Corporation  
**EQUIPMENT** : Notebook Computer  
**BRAND NAME** : Lenovo  
**MODEL NAME** : TP00076BUC  
**FCC ID** : PU5-TP00076BUC  
**STANDARD** : 47 CFR Part 2, 22(H), 24(E), 27  
**CLASSIFICATION** : PCS Licensed Transmitter (PCB)

Equipment: AriPrime EM7455 and Intel 8260NGW tested inside of Lenovo Notebook PC.

This is a partial report which is included the conducted output power and radiated test items. The product was received on Nov. 25, 2015 and completely tested on Feb. 13, 2016. 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-D-2010 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.

No. 52, Hwa Ya 1<sup>st</sup> Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

SPORTON INTERNATIONAL INC.

TEL : 886-3-327-3456

FAX : 886-3-328-4978

FCC ID : PU5-TP00076BUC

Page Number : 1 of 22

Report Issued Date : Feb. 22, 2016

Report Version : Rev. 02

Report Template No.: BU5-FGLTE Version 1.5



TABLE OF CONTENTS

REVISION HISTORY.....3
SUMMARY OF TEST RESULT .....4
1 GENERAL DESCRIPTION .....5
1.1 Applicant .....5
1.2 Manufacturer .....5
1.3 Product Feature of Equipment Under Test.....5
1.4 Product Specification of Equipment Under Test.....6
1.5 Modification of EUT .....7
1.6 Maximum ERP / EIRP(W) .....7
1.7 Testing Location .....9
1.8 Applicable Standards.....9
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST .....10
2.1 Test Mode .....10
2.2 Connection Diagram of Test System .....11
2.3 Support Unit used in test configuration and system .....12
2.4 Frequency List of Low/Middle/High Channels .....13
3 CONDUCTED TEST ITEMS .....17
3.1 Measuring Instruments .....17
3.2 Test Setup .....17
3.3 Test Result of Conducted Test .....17
3.4 Conducted Output Power and ERP/EIRP .....18
4 RADIATED SPURIOUS EMISSION .....19
4.1 Radiated Test Items.....19
4.2 Radiated Spurious Emission .....20
5 LIST OF MEASURING EQUIPMENT .....21
6 UNCERTAINTY OF EVALUATION .....22
APPENDIX A. TEST RESULTS OF CONDUCTED TEST
APPENDIX B. TEST RESULTS OF RADIATED TEST
APPENDIX C. TEST SETUP PHOTOGRAPHS



### REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG5O1701-03B	Rev. 01	Initial issue of report	Feb. 18, 2016
FG5O1701-03B	Rev. 02	Adding FCC ID information for module in section 1.3	Feb. 22, 2016



**SUMMARY OF TEST RESULT**

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(2)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt		
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13)	ERP < 3 Watt		
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2)(Band 25) (Band 7)(Band 41)	EIRP < 2Watt		
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		
4.2	§2.1053 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 25) (Band 26)	< 43+10log <sub>10</sub> (P[Watts])	PASS	Under limit 1.37 dB at 1564.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)(Band 41)	< 55+10log <sub>10</sub> (P[Watts])		



# 1 General Description

## 1.1 Applicant

Wistron Corporation

21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist, New Taipei City 221, Taiwan R.O.C.

## 1.2 Manufacturer

Wistron Corporation

21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih Dist, New Taipei City 221, Taiwan R.O.C.

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook Computer
Brand Name	Lenovo
Model Name	TP00076BUC
FCC ID	PU5-TP00076BUC
Integrated WWAN Module	Brand Name: Sierra Model Name: EM7455 FCC ID: N7NEM7455
Integrated WLAN Module	Brand Name: Intel Model Name: 8260NGW FCC ID: PD98260NG
EUT supports Radios application	WCDMA/HSPA/LTE WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth v4.1 EDR/LE
EUT Stage	Production Unit

Remark: Equipment: AriPrime EM7455 and Intel 8260NGW tested inside of Lenovo Notebook PC.

EM7455		3G & LTE	
Manufacturer	Jieng Tai	Peak gain	3.67
P/N	025.900AG.0011	Type	PIFA



### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	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 : 699 MHz ~ 716 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 25 : 1850.7MHz ~ 1914.3 MHz LTE Band 26 : 824.7 MHz ~ 848.3 MHz LTE Band 41 : 2503.5 MHz ~ 2682.5 MHz
<b>Rx Frequency</b>	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 MHz ~ 746 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 25 : 1930.7MHz ~ 1994.3 MHz LTE Band 26 : 869.7 MHz ~ 893.3 MHz LTE Band 41 : 2503.5 MHz ~ 2682.5 MHz
<b>Bandwidth</b>	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 13 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 41 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
<b>Maximum Output Power to Antenna</b>	LTE Band 2 : 23.05 dBm LTE Band 4 : 23.15 dBm LTE Band 5 : 22.40 dBm LTE Band 7 : 21.98 dBm LTE Band 13 : 23.70 dBm LTE Band 12 : 22.68 dBm LTE Band 25 : 23.17 dBm LTE Band 26 : 22.52 dBm LTE Band 41 : 22.22 dBm
<b>Antenna Gain</b>	LTE Band 2 : 0.62 dBi LTE Band 4 : 1.01 dBi LTE Band 5 : 0.54 dBi LTE Band 7 : 3.67 dBi LTE Band 12 : -1.89 dBi LTE Band 13 : 0.21 dBi LTE Band 25 : 0.62 dBi LTE Band 26 : 0.61 dBi LTE Band 41 : 3.67 dBi
<b>Type of Modulation</b>	QPSK / 16QAM



### 1.5 Modification of EUT

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

### 1.6 Maximum ERP / EIRP(W)

LTE Band 2	QPSK	16QAM
BW(MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	0.2168	0.1778
3	0.2198	0.1782
5	0.2228	0.1807
10	0.2291	0.1832
15	0.2291	0.1849
20	0.2328	0.1858
LTE Band 25	QPSK	16QAM
BW(MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	0.2270	0.1828
3	0.2280	0.1905
5	0.2291	0.1945
10	0.2339	0.1959
15	0.2393	0.1919
20	0.2382	0.1991
LTE Band 4	QPSK	16QAM
BW(MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	0.2455	0.1995
3	0.2477	0.2000
5	0.2559	0.1986
10	0.2559	0.2028
15	0.2588	0.2032
20	0.2606	0.2051
LTE Band 5	QPSK	16QAM
BW(MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	0.1172	0.0986
3	0.1169	0.0998
5	0.1178	0.0995
10	0.1199	0.1005



LTE Band 7	QPSK	16QAM
BW(MHz)	Maximum EIRP(W)	Maximum EIRP(W)
	AVG.	AVG.
5	0.3556	0.2992
10	0.3606	0.3034
15	0.3622	0.3027
20	0.3673	0.3090
LTE Band 12	QPSK	16QAM
BW(MHz)	Maximum ERP(W)	Maximum ERP(W)
	AVG.	AVG.
1.4	0.0724	0.0635
3	0.0719	0.0624
5	0.0724	0.0627
10	0.0731	0.0618
LTE Band 26	QPSK	16QAM
BW(MHz)	Maximum ERP(W)	Maximum ERP(W)
	AVG.	AVG.
1.4	0.1197	0.1026
3	0.1213	0.1028
5	0.1230	0.1035
10	0.1247	0.1052
15	0.1253	0.1052
LTE Band 13	QPSK	16QAM
BW(MHz)	Maximum ERP(W)	Maximum ERP(W)
	AVG.	AVG.
5	0.1479	0.1230
10	0.1500	0.1194
LTE Band 41	QPSK	16QAM
BW(MHz)	Maximum EIRP(W)	Maximum EIRP(W)
	AVG.	AVG.
1.4	0.3758	0.3090
3	0.3846	0.3105
5	0.3855	0.3133
10	0.3882	0.3206





### 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.

<b>Test Site</b>	SPORTON INTERNATIONAL INC.	
<b>Test Site Location</b>	No. 52, Hwa Ya 1 <sup>st</sup> 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	
<b>Test Site No.</b>	<b>Sporton Site No.</b>	
	TH05-HY	03CH12-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-D-2010
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

**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

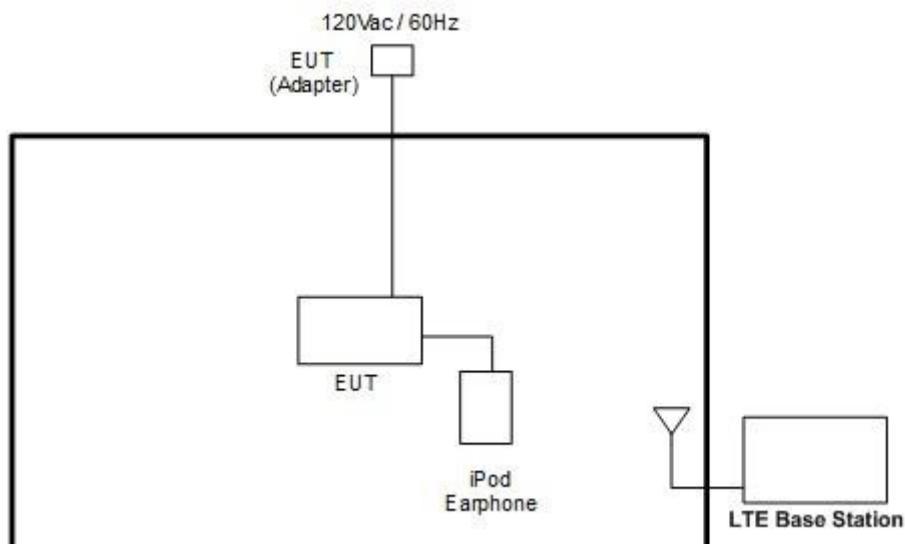
### 2.1 Test Mode

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.

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	✓	✓	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	13	-	-	✓	✓	-	-	✓	✓	✓	✓	✓	✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	26	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓	✓	✓	✓
	41	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
E.R.P/ E.I.R.P.	2	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	5	✓	✓	✓	✓	-	-	✓	✓	✓			✓	✓	✓
	7	-	-	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	12	✓	✓	✓	✓	-	-	✓	✓	✓			✓	✓	✓
	13	-	-	✓	✓	-	-	✓	✓	✓			✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	26	✓	✓	✓	✓	✓	-	✓	✓	✓			✓	✓	✓
	41	-	-	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓

Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	2	√	√	√	√	√	√	√		√			√	√	√
	4	√	√	√	√	√	√	√		√			√	√	√
	5	√	√	√	√	-	-	√		√			√	√	√
	7	-	-	√	√	√	√	√		√			√	√	√
	12	√	√	√	√	-	-	√		√			√	√	√
	13	-	-	√	√	-	-	√		√			√	√	√
	25	√	√	√	√	√	√	√		√			√	√	√
	26	√	√	√	√	√	-	√	√	√	√	√	√	√	√
	41	-	-	√	√	√	√	√		√			√	√	√
Note	<p>1. The mark "√" means that this configuration is chosen for testing</p> <p>2. The mark "-" means that this bandwidth is not supported.</p> <p>3. 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.</p>														

## 2.2 Connection Diagram of Test System





### 2.3 Support Unit used in test configuration and system

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



### 2.4 Frequency List of Low/Middle/High Channels

LTE Band 2 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	18700	18900	19100
	Frequency	1860	1880	1900
15	Channel	18675	18900	19125
	Frequency	1857.5	1880	1902.5
10	Channel	18650	18900	19150
	Frequency	1855	1880	1905
5	Channel	18625	18900	19175
	Frequency	1852.5	1880	1907.5
3	Channel	18615	18900	19185
	Frequency	1851.5	1880	1908.5
1.4	Channel	18607	18900	19193
	Frequency	1850.7	1880	1909.3

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3



LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

LTE Band 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5



LTE Band 12 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23060	23095	23130
	Frequency	704	707.5	711
5	Channel	23035	23095	23155
	Frequency	701.5	707.5	713.5
3	Channel	23025	23095	23165
	Frequency	700.5	707.5	714.5
1.4	Channel	23017	23095	23173
	Frequency	699.7	707.5	715.3

LTE Band 13 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	-	23230	-
	Frequency	-	782	-
5	Channel	23205	23230	23255
	Frequency	779.5	782	784.5

LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3



LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829	836.5	844
5	Channel	26815	26915	27015
	Frequency	826.5	836.5	846.5
3	Channel	26805	26915	27025
	Frequency	825.5	836.5	847.5
1.4	Channel	26797	26915	27033
	Frequency	824.7	836.5	848.3

LTE Band 41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5



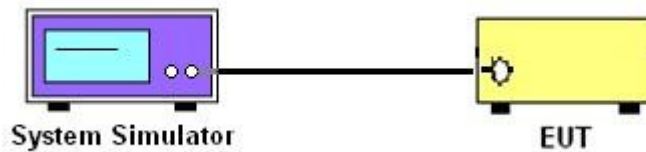
### 3 Conducted Test Items

#### 3.1 Measuring Instruments

See list of measuring instruments of this test report.

#### 3.2 Test Setup

##### 3.2.1 Conducted Output Power



#### 3.3 Test Result of Conducted Test

Please refer to Appendix A.



### 3.4 Conducted Output Power and ERP/EIRP

#### 3.4.1 Description of the Conducted Output Power Measurement and ERP/EIRP 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.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5 and Band 26.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12 and Band 13.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2, Band 25, Band 7, and Band 41.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$ ,  $ERP = EIRP - 2.15$ , where

$P_T$  = transmitter output power in dBm

$G_T$  = gain of the transmitting antenna in dBi

$L_C$  = signal attenuation in the connecting cable between the transmitter and antenna in dB

#### 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.

## 4 Radiated Spurious Emission

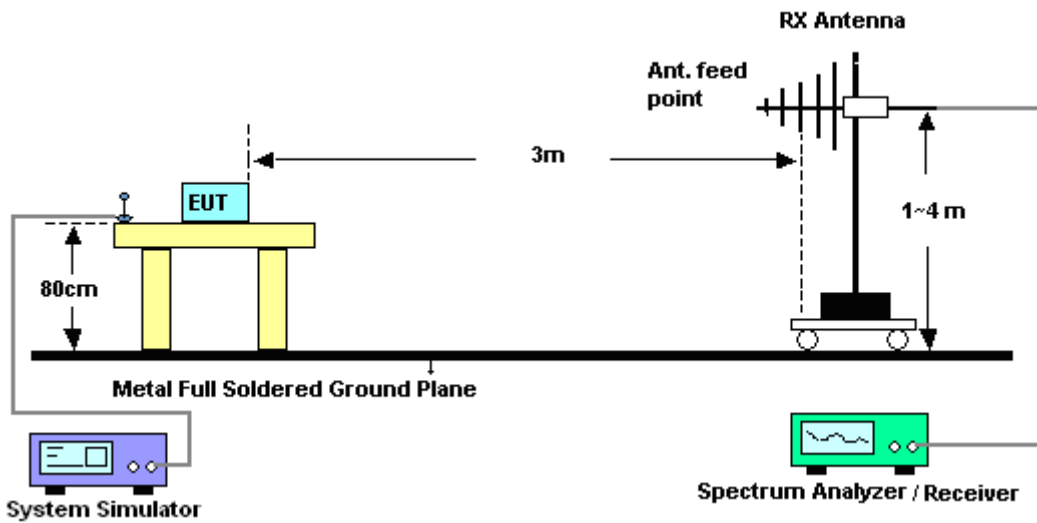
### 4.1 Radiated Test Items

#### 4.1.1 Measuring Instruments

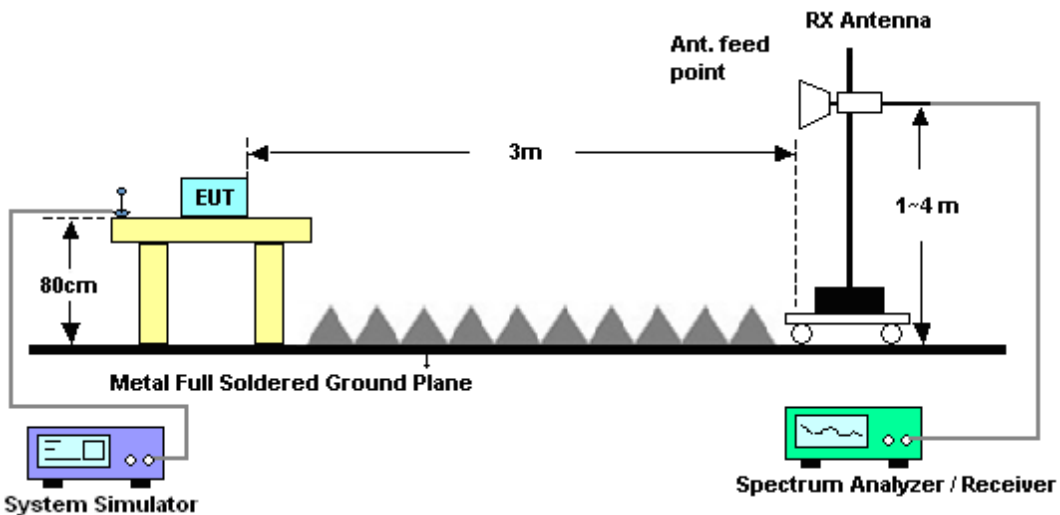
See list of measuring instruments of this test report.

#### 4.1.2 Test Setup

For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



#### 4.1.3 Test Result of Radiated Test

Please refer to Appendix B.



## 4.2 Radiated Spurious Emission

### 4.2.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-D-2010. 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, 41

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 12,13

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.

### 4.2.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-D-2010 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, 41:

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  
 $ERP$  (dBm) =  $EIRP - 2.15$



## 5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Amplifier	Sonoma-Instrument	310 N	187282	10MHz~1GHz	Dec. 31, 2015	Feb. 04, 2016~ Feb. 13, 2016	Dec. 30, 2016	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D	37059	30MHz~1GHz	Dec. 29, 2015	Feb. 04, 2016~ Feb. 13, 2016	Dec. 28, 2016	Radiation (03CH12-HY)
EMI Test Receiver	Rohde & Schwarz	ESU26	100390	20Hz~26.5GHz	Dec. 21, 2015	Feb. 04, 2016~ Feb. 13, 2016	Dec. 20, 2016	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1328	1GHz ~ 18GHz	Nov. 02, 2015	Feb. 04, 2016~ Feb. 13, 2016	Nov. 01, 2016	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 02, 2015	Feb. 04, 2016~ Feb. 13, 2016	Nov. 01, 2016	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP140349	N/A	Nov. 17, 2015	Feb. 04, 2016~ Feb. 13, 2016	Nov. 16, 2016	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103A	161075	10MHz~1GHz	Apr. 09, 2015	Feb. 04, 2016~ Feb. 13, 2016	Apr. 08, 2016	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	Jan. 05, 2016	Feb. 04, 2016~ Feb. 13, 2016	Jan. 04, 2017	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Feb. 04, 2016~ Feb. 13, 2016	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Feb. 04, 2016~ Feb. 13, 2016	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0-360 degree	N/A	Feb. 04, 2016~ Feb. 13, 2016	N/A	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Apr. 22, 2015	Feb. 04, 2016~ Feb. 13, 2016	Apr. 21, 2016	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May 22, 2015	Feb. 04, 2016~ Feb. 13, 2016	May 21, 2016	Radiation (03CH12-HY)
LTE Base Station	Anritsu	MT8820C	6201074414	400MHz~800MHz	Feb. 06, 2015	Jan. 28, 2016	Feb. 05, 2016	Conducted (TH05-HY)



## 6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	2.54
---	------

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ( $U = 2Uc(y)$ )	4.72
---	------



### 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
20	1	0	QPSK	23.02	23.05	22.86
20	1	49		22.59	22.61	22.47
20	1	99		22.81	22.73	22.53
20	50	0		21.95	22.06	21.95
20	50	24		21.76	21.70	21.63
20	50	50		21.69	21.67	21.47
20	100	0		21.90	21.91	21.74
20	1	0	16-QAM	22.05	22.07	21.89
20	1	49		21.87	21.87	21.68
20	1	99		22.02	21.99	21.78
20	50	0		21.08	20.96	20.89
20	50	24		20.72	20.71	20.56
20	50	50		20.70	20.65	20.47
20	100	0		20.89	20.86	20.70
15	1	0	QPSK	22.97	22.98	22.77
15	1	37		22.54	22.55	22.40
15	1	74		22.78	22.72	22.43
15	36	0		21.88	22.04	21.87
15	36	20		21.73	21.62	21.57
15	36	39		21.62	21.63	21.43
15	75	0		21.89	21.89	21.68
15	1	0	16-QAM	22.03	22.05	21.79
15	1	37		21.86	21.83	21.58
15	1	74		21.99	21.98	21.75
15	36	0		21.00	20.88	20.83
15	36	20		20.62	20.67	20.53
15	36	39		20.66	20.63	20.39
15	75	0		20.81	20.85	20.65



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.97	22.98	22.70
10	1	25		22.49	22.50	22.34
10	1	49		22.71	22.63	22.41
10	25	0		21.85	21.99	21.82
10	25	12		21.71	21.56	21.53
10	25	25		21.59	21.62	21.40
10	50	0		21.89	21.79	21.65
10	1	0	16-QAM	21.95	22.01	21.79
10	1	25		21.81	21.83	21.52
10	1	49		21.92	21.91	21.74
10	25	0		20.95	20.87	20.83
10	25	12		20.60	20.57	20.45
10	25	25		20.56	20.58	20.36
10	50	0		20.79	20.79	20.62
5	1	0	QPSK	22.78	22.86	22.69
5	1	12		22.38	22.47	22.25
5	1	24		22.64	22.54	22.42
5	12	0		21.71	21.94	21.87
5	12	7		21.57	21.50	21.51
5	12	13		21.46	21.54	21.38
5	25	0		21.73	21.86	21.63
5	1	0	16-QAM	21.87	21.95	21.74
5	1	12		21.73	21.66	21.48
5	1	24		21.84	21.89	21.60
5	12	0		20.98	20.86	20.65
5	12	7		20.55	20.57	20.38
5	12	13		20.57	20.52	20.35
5	25	0		20.76	20.75	20.51





LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.77	22.80	22.74
3	1	8		22.38	22.38	22.23
3	1	14		22.59	22.51	22.34
3	8	0		21.72	21.95	21.73
3	8	4		21.49	21.39	21.55
3	8	7		21.35	21.52	21.28
3	15	0		21.68	21.82	21.52
3	1	0	16-QAM	21.86	21.87	21.66
3	1	8		21.71	21.61	21.37
3	1	14		21.76	21.89	21.60
3	8	0		20.85	20.84	20.65
3	8	4		20.50	20.42	20.41
3	8	7		20.50	20.55	20.26
3	15	0		20.68	20.73	20.48
1.4	1	0	QPSK	22.71	22.74	22.67
1.4	1	3		22.31	22.26	22.11
1.4	1	5		22.57	22.56	22.33
1.4	3	0		22.11	22.05	22.08
1.4	3	1		22.49	22.22	22.14
1.4	3	3		22.50	22.27	22.10
1.4	6	0		21.72	21.81	21.50
1.4	1	0	16-QAM	21.84	21.88	21.70
1.4	1	3		21.71	21.57	21.41
1.4	1	5		21.66	21.71	21.54
1.4	3	0		21.11	21.10	21.08
1.4	3	1		21.58	21.15	21.03
1.4	3	3		21.62	21.30	21.05
1.4	6	0		20.51	20.60	20.38



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.12	23.15	23.00
20	1	49		22.29	22.10	22.00
20	1	99		22.51	22.33	22.10
20	50	0		21.64	21.65	21.53
20	50	24		21.52	21.21	21.15
20	50	50		21.35	21.21	21.04
20	100	0		21.42	21.45	21.34
20	1	0	16-QAM	22.26	22.37	22.15
20	1	49		21.57	21.29	21.21
20	1	99		21.76	21.50	21.39
20	50	0		20.81	20.48	20.42
20	50	24		20.47	20.25	20.12
20	50	50		20.31	20.20	20.05
20	100	0		20.57	20.33	20.33
15	1	0	QPSK	23.12	23.17	22.98
15	1	37		22.24	22.10	22.08
15	1	74		22.42	22.23	22.10
15	36	0		21.60	21.60	21.53
15	36	20		21.49	21.14	21.11
15	36	39		21.30	21.14	21.11
15	75	0		21.41	21.35	21.30
15	1	0	16-QAM	22.17	22.21	22.13
15	1	37		21.50	21.29	21.17
15	1	74		21.76	21.43	21.35
15	36	0		20.72	20.41	20.42
15	36	20		20.37	20.24	20.09
15	36	39		20.21	20.18	20.04
15	75	0		20.52	20.29	20.27



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.99	23.07	22.89
10	1	25		22.14	22.12	22.10
10	1	49		22.35	22.23	22.00
10	25	0		21.51	21.49	21.39
10	25	12		21.45	21.05	21.03
10	25	25		21.22	21.20	21.18
10	50	0		21.41	21.27	21.33
10	1	0	16-QAM	22.18	22.30	22.05
10	1	25		21.51	21.27	21.12
10	1	49		21.71	21.39	21.27
10	25	0		20.72	20.44	20.35
10	25	12		20.34	20.24	20.21
10	25	25		20.28	20.19	20.12
10	50	0		20.38	20.16	20.22
5	1	0	QPSK	22.97	22.98	22.83
5	1	12		22.05	22.08	22.08
5	1	24		22.27	22.14	22.13
5	12	0		21.49	21.44	21.30
5	12	7		21.42	21.38	21.35
5	12	13		21.12	21.19	21.09
5	25	0		21.34	21.27	21.29
5	1	0	16-QAM	22.18	22.27	21.95
5	1	12		21.50	21.18	21.02
5	1	24		21.63	21.29	21.27
5	12	0		20.62	20.36	20.30
5	12	7		20.30	20.22	20.11
5	12	13		20.25	20.15	20.10
5	25	0		20.31	20.13	20.22



LTE Band 25 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.92	22.96	22.82
3	1	8		22.03	22.05	22.03
3	1	14		22.19	22.13	22.05
3	8	0		21.48	21.38	21.21
3	8	4		21.37	21.34	21.32
3	8	7		21.10	21.16	21.07
3	15	0		21.33	21.22	21.22
3	1	0	16-QAM	22.15	22.18	21.90
3	1	8		21.48	21.30	21.31
3	1	14		21.54	21.27	21.18
3	8	0		20.61	20.36	20.29
3	8	4		20.20	20.14	20.04
3	8	7		20.20	20.09	20.07
3	15	0		20.31	20.11	20.12
1.4	1	0	QPSK	22.87	22.94	22.68
1.4	1	3		22.02	22.00	22.01
1.4	1	5		22.25	22.05	22.03
1.4	3	0		22.59	22.61	22.41
1.4	3	1		22.69	22.69	22.50
1.4	3	3		22.73	22.62	22.54
1.4	6	0		21.28	21.20	21.20
1.4	1	0	16-QAM	21.97	22.00	21.91
1.4	1	3		21.40	21.09	21.08
1.4	1	5		21.55	21.28	21.14
1.4	3	0		21.50	21.44	21.44
1.4	3	1		21.51	21.29	21.43
1.4	3	3		21.54	21.51	21.43
1.4	6	0		20.26	20.06	20.08



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.06	23.15	23.08
20	1	49		22.54	22.59	22.27
20	1	99		22.71	22.69	22.57
20	50	0		21.91	22.06	21.80
20	50	24		21.65	21.57	21.40
20	50	50		21.57	21.44	21.42
20	100	0		21.81	21.97	21.62
20	1	0	16-QAM	21.98	22.11	22.06
20	1	49		21.87	21.75	21.53
20	1	99		21.98	21.86	21.81
20	50	0		20.88	20.88	20.80
20	50	24		20.57	20.58	20.40
20	50	50		20.51	20.42	20.40
20	100	0		20.76	20.76	20.61
15	1	0	QPSK	22.97	23.12	23.06
15	1	37		22.54	22.49	22.24
15	1	74		22.67	22.69	22.51
15	36	0		21.90	22.01	21.73
15	36	20		21.59	21.51	21.31
15	36	39		21.51	21.40	21.40
15	75	0		21.75	21.90	21.56
15	1	0	16-QAM	21.92	22.07	21.97
15	1	37		21.87	21.73	21.53
15	1	74		21.98	21.83	21.78
15	36	0		20.80	20.84	20.79
15	36	20		20.53	20.49	20.31
15	36	39		20.44	20.36	20.39
15	75	0		20.67	20.73	20.52



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.96	23.07	22.98
10	1	25		22.53	22.41	22.24
10	1	49		22.66	22.68	22.51
10	25	0		21.88	21.91	21.73
10	25	12		21.55	21.45	21.29
10	25	25		21.51	21.38	21.31
10	50	0		21.65	21.80	21.47
10	1	0	16-QAM	21.90	22.06	21.97
10	1	25		21.78	21.65	21.44
10	1	49		21.93	21.81	21.75
10	25	0		20.79	20.80	20.71
10	25	12		20.49	20.49	20.25
10	25	25		20.41	20.33	20.35
10	50	0		20.57	20.69	20.45
5	1	0	QPSK	22.90	23.07	22.88
5	1	12		22.49	22.41	22.22
5	1	24		22.66	22.59	22.46
5	12	0		21.88	21.88	21.67
5	12	7		21.51	21.39	21.23
5	12	13		21.51	21.38	21.26
5	25	0		21.60	21.71	21.46
5	1	0	16-QAM	21.84	21.97	21.92
5	1	12		21.72	21.62	21.39
5	1	24		21.90	21.71	21.72
5	12	0		20.71	20.78	20.71
5	12	7		20.39	20.42	20.25
5	12	13		20.31	20.27	20.33
5	25	0		20.47	20.63	20.39



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.90	22.93	22.84
3	1	8		22.43	22.30	22.15
3	1	14		22.50	22.65	22.43
3	8	0		21.85	21.87	21.60
3	8	4		21.53	21.31	21.19
3	8	7		21.40	21.34	21.25
3	15	0		21.48	21.77	21.43
3	1	0	16-QAM	21.80	22.00	21.95
3	1	8		21.69	21.52	21.34
3	1	14		21.75	21.72	21.65
3	8	0		20.67	20.76	20.66
3	8	4		20.34	20.39	20.25
3	8	7		20.30	20.21	20.28
3	15	0		20.49	20.68	20.30
1.4	1	0	QPSK	22.82	22.89	22.84
1.4	1	3		22.36	22.20	22.05
1.4	1	5		22.48	22.63	22.40
1.4	3	0		22.54	22.21	22.05
1.4	3	1		22.57	22.29	22.20
1.4	3	3		22.61	22.33	22.16
1.4	6	0		21.42	21.67	21.40
1.4	1	0	16-QAM	21.73	21.99	21.93
1.4	1	3		21.59	21.52	21.34
1.4	1	5		21.73	21.67	21.60
1.4	3	0		21.61	21.21	21.08
1.4	3	1		21.58	21.24	21.10
1.4	3	3		21.70	21.34	21.13
1.4	6	0		20.40	20.61	20.25



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.35	22.40	22.38
10	1	25		22.30	22.22	22.21
10	1	49		22.20	22.06	22.05
10	25	0		21.25	21.26	21.25
10	25	12		21.14	21.05	21.20
10	25	25		21.23	21.11	21.15
10	50	0		21.25	21.28	21.04
10	1	0	16-QAM	21.62	21.63	21.55
10	1	25		21.62	21.57	21.43
10	1	49		21.44	21.22	21.19
10	25	0		20.25	20.07	20.08
10	25	12		20.25	20.00	20.12
10	25	25		20.24	20.20	20.03
10	50	0		20.24	20.03	20.05
5	1	0	QPSK	22.29	22.32	22.28
5	1	12		22.23	22.14	22.20
5	1	24		22.19	22.02	22.00
5	12	0		21.15	21.15	21.25
5	12	7		21.07	21.05	21.12
5	12	13		21.22	21.01	21.05
5	25	0		21.23	21.11	21.15
5	1	0	16-QAM	21.52	21.44	21.50
5	1	12		21.57	21.59	21.42
5	1	24		21.40	21.22	21.09
5	12	0		20.18	20.07	20.02
5	12	7		20.23	20.20	20.08
5	12	13		20.16	20.15	20.14
5	25	0		20.15	20.00	20.04





LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.26	22.29	22.27
3	1	8		22.11	22.06	22.08
3	1	14		22.15	22.18	22.11
3	8	0		21.20	21.12	21.15
3	8	4		21.07	21.05	21.18
3	8	7		21.20	21.09	21.01
3	15	0		21.15	21.08	21.02
3	1	0	16-QAM	21.59	21.60	21.46
3	1	8		21.54	21.56	21.34
3	1	14		21.31	21.13	21.07
3	8	0		20.23	20.12	20.02
3	8	4		20.08	20.05	20.01
3	8	7		20.05	20.00	20.00
3	15	0		20.18	20.11	20.15
1.4	1	0	QPSK	22.26	22.30	22.27
1.4	1	3		22.20	22.01	22.05
1.4	1	5		22.20	22.08	22.06
1.4	3	0		22.16	22.14	22.05
1.4	3	1		22.21	22.18	22.07
1.4	3	3		22.17	22.18	22.10
1.4	6	0		21.08	21.09	21.00
1.4	1	0	16-QAM	21.50	21.55	21.33
1.4	1	3		21.49	21.42	21.33
1.4	1	5		21.25	21.08	21.02
1.4	3	0		21.24	21.21	21.18
1.4	3	1		21.24	21.14	21.12
1.4	3	3		21.27	21.19	21.20
1.4	6	0		20.09	20.02	20.08



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	21.77	21.98	21.71
20	1	49		21.75	21.92	21.67
20	1	99		21.31	21.51	21.29
20	50	0		20.81	20.98	20.77
20	50	24		20.69	20.95	20.66
20	50	50		20.55	20.91	20.45
20	100	0		20.62	20.91	20.62
20	1	0	16-QAM	20.89	21.14	20.96
20	1	49		20.94	21.23	20.88
20	1	99		20.57	20.76	20.36
20	50	0		19.73	20.01	19.78
20	50	24		19.68	20.04	19.66
20	50	50		19.54	19.92	19.45
20	100	0		19.67	19.96	19.61
15	1	0	QPSK	21.74	21.92	21.66
15	1	37		21.69	21.91	21.58
15	1	74		21.22	21.42	21.29
15	36	0		20.76	20.93	20.68
15	36	20		20.60	20.85	20.65
15	36	39		20.46	20.91	20.38
15	75	0		20.56	20.88	20.55
15	1	0	16-QAM	20.79	21.14	20.90
15	1	37		20.87	21.13	20.87
15	1	74		20.56	20.68	20.33
15	36	0		19.66	19.93	19.77
15	36	20		19.58	19.99	19.66
15	36	39		19.52	19.87	19.38
15	75	0		19.66	19.86	19.61



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	21.72	21.90	21.62
10	1	25		21.62	21.89	21.63
10	1	49		21.22	21.38	21.36
10	25	0		20.64	20.90	20.66
10	25	12		20.58	20.90	20.50
10	25	25		20.44	20.79	20.35
10	50	0		20.60	20.87	20.48
10	1	0	16-QAM	20.79	21.11	20.80
10	1	25		20.93	21.15	20.78
10	1	49		20.43	20.74	20.48
10	25	0		19.61	20.00	19.66
10	25	12		19.65	19.93	19.62
10	25	25		19.42	19.79	19.37
10	50	0		19.54	19.89	19.55
5	1	0	QPSK	21.60	21.84	21.52
5	1	12		21.65	21.83	21.51
5	1	24		21.19	21.39	21.28
5	12	0		20.55	20.88	20.65
5	12	7		20.54	20.79	20.44
5	12	13		20.28	20.75	20.29
5	25	0		20.47	20.82	20.44
5	1	0	16-QAM	20.71	20.95	20.77
5	1	12		20.76	21.09	20.73
5	1	24		20.45	20.63	20.54
5	12	0		19.61	19.92	19.65
5	12	7		19.58	19.84	19.46
5	12	13		19.40	19.71	19.32
5	25	0		19.57	19.89	19.41



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.64	22.68	22.61
10	1	25		22.57	22.63	22.55
10	1	49		22.56	22.63	22.45
10	25	0		21.57	21.63	21.54
10	25	12		21.53	21.62	21.52
10	25	25		21.50	21.61	21.53
10	50	0		21.49	21.65	21.53
10	1	0	16-QAM	21.91	21.95	21.85
10	1	25		21.87	21.90	21.84
10	1	49		21.83	21.79	21.77
10	25	0		20.52	20.54	20.62
10	25	12		20.64	20.62	20.51
10	25	25		20.52	20.64	20.53
10	50	0		20.50	20.65	20.53
5	1	0	QPSK	22.61	22.64	22.56
5	1	12		22.60	22.63	22.46
5	1	24		22.58	22.62	22.48
5	12	0		21.53	21.62	21.44
5	12	7		21.53	21.61	21.52
5	12	13		21.57	21.66	21.52
5	25	0		21.54	21.67	21.48
5	1	0	16-QAM	21.89	22.01	21.80
5	1	12		21.97	21.99	21.87
5	1	24		21.80	21.87	21.80
5	12	0		20.49	20.63	20.45
5	12	7		20.48	20.56	20.52
5	12	13		20.54	20.65	20.54
5	25	0		20.56	20.56	20.46



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.60	22.61	22.54
3	1	8		22.58	22.59	22.45
3	1	14		22.51	22.55	22.44
3	8	0		21.58	21.64	21.52
3	8	4		21.58	21.70	21.52
3	8	7		21.52	21.58	21.46
3	15	0		21.57	21.65	21.53
3	1	0	16-QAM	21.85	21.99	21.70
3	1	8		21.96	21.92	21.92
3	1	14		21.76	21.81	21.72
3	8	0		20.69	20.67	20.60
3	8	4		20.64	20.70	20.51
3	8	7		20.58	20.59	20.58
3	15	0		20.58	20.63	20.54
1.4	1	0	QPSK	22.62	22.64	22.57
1.4	1	3		22.60	22.56	22.47
1.4	1	5		22.61	22.63	22.59
1.4	3	0		22.52	22.55	22.51
1.4	3	1		22.59	22.56	22.56
1.4	3	3		22.57	22.58	22.52
1.4	6	0		21.58	21.50	21.39
1.4	1	0	16-QAM	21.97	22.07	21.89
1.4	1	3		21.94	21.93	21.93
1.4	1	5		22.06	22.01	21.93
1.4	3	0		21.60	21.53	21.56
1.4	3	1		21.64	21.55	21.52
1.4	3	3		21.66	21.68	21.50
1.4	6	0		20.64	20.60	20.43



LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.60	23.64	23.45
5	1	12		23.43	23.47	23.46
5	1	24		23.56	23.45	23.42
5	12	0		22.32	22.42	22.67
5	12	7		22.48	22.53	22.59
5	12	13		22.49	22.50	22.61
5	25	0		22.56	22.39	22.68
5	1	0	16-QAM	22.15	22.84	22.79
5	1	12		22.76	22.74	22.73
5	1	24		22.74	22.68	22.75
5	12	0		21.17	21.40	21.68
5	12	7		21.61	21.43	21.67
5	12	13		21.41	21.51	21.63
5	25	0		21.55	21.48	21.67
10	1	0	QPSK		22.08	
10	1	25			23.70	
10	1	49			23.58	
10	25	0			22.75	
10	25	12			22.72	
10	25	25			22.72	
10	50	0			22.80	
10	1	0	16-QAM		22.08	
10	1	25			22.71	
10	1	49			22.64	
10	25	0			21.64	
10	25	12			21.64	
10	25	25			21.63	
10	50	0			21.68	



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.50	22.52	22.45
15	1	37		22.35	22.22	22.29
15	1	74		22.29	22.16	22.19
15	36	0		21.43	21.46	21.42
15	36	20		21.41	21.36	21.41
15	36	39		21.29	21.18	21.27
15	75	0		21.40	21.43	21.38
15	1	0	16-QAM	21.70	21.76	21.74
15	1	37		21.64	21.52	21.55
15	1	74		21.54	21.42	21.47
15	36	0		20.44	20.40	20.38
15	36	20		20.39	20.32	20.39
15	36	39		20.25	20.15	20.20
15	75	0		20.37	20.32	20.34
10	1	0	QPSK	22.48	22.50	22.42
10	1	25		22.30	22.18	22.27
10	1	49		22.20	22.16	22.13
10	25	0		21.40	21.39	21.36
10	25	12		21.38	21.28	21.34
10	25	25		21.26	21.13	21.26
10	50	0		21.36	21.37	21.38
10	1	0	16-QAM	21.65	21.76	21.74
10	1	25		21.56	21.44	21.49
10	1	49		21.48	21.38	21.43
10	25	0		20.43	20.30	20.36
10	25	12		20.29	20.24	20.30
10	25	25		20.25	20.05	20.14
10	50	0		20.36	20.22	20.28



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.39	22.44	22.41
5	1	12		22.21	22.18	22.19
5	1	24		22.15	22.08	22.04
5	12	0		21.33	21.35	21.36
5	12	7		21.32	21.21	21.33
5	12	13		21.23	21.11	21.23
5	25	0		21.33	21.32	21.37
5	1	0	16-QAM	21.61	21.69	21.66
5	1	12		21.47	21.44	21.49
5	1	24		21.40	21.37	21.36
5	12	0		20.40	20.22	20.29
5	12	7		20.26	20.21	20.22
5	12	13		20.19	20.02	20.08
5	25	0		20.35	20.14	20.24
3	1	0	QPSK	22.34	22.38	22.35
3	1	8		22.21	22.17	22.17
3	1	14		22.14	22.08	22.05
3	8	0		21.28	21.27	21.30
3	8	4		21.25	21.17	21.25
3	8	7		21.19	21.03	21.18
3	15	0		21.26	21.24	21.27
3	1	0	16-QAM	21.60	21.66	21.64
3	1	8		21.40	21.34	21.45
3	1	14		21.34	21.33	21.27
3	8	0		20.33	20.14	20.29
3	8	4		20.17	20.20	20.17
3	8	7		20.17	20.19	20.08
3	15	0		20.34	20.12	20.16





LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.31	22.32	22.25
1.4	1	3		22.12	22.14	22.10
1.4	1	5		22.05	22.03	22.00
1.4	3	0		22.24	22.25	22.29
1.4	3	1		22.18	22.07	22.21
1.4	3	3		22.17	22.01	22.08
1.4	6	0		21.24	21.17	21.18
1.4	1	0	16-QAM	21.60	21.65	21.58
1.4	1	3		21.33	21.27	21.36
1.4	1	5		21.30	21.27	21.22
1.4	3	0		21.26	21.11	21.27
1.4	3	1		21.14	21.10	21.12
1.4	3	3		21.11	21.18	21.07
1.4	6	0		20.24	20.03	20.16



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	21.95	21.63	22.22
20	1	49		21.92	21.61	22.12
20	1	99		21.84	21.60	22.11
20	50	0		20.92	20.75	21.42
20	50	24		20.87	20.59	21.41
20	50	50		20.68	20.29	21.20
20	100	0		20.79	20.51	21.18
20	1	0	16-QAM	20.94	20.59	21.39
20	1	49		20.98	20.63	21.36
20	1	99		20.95	20.53	21.33
20	50	0		19.97	19.65	20.43
20	50	24		19.92	19.65	20.40
20	50	50		19.72	19.65	20.43
20	100	0		19.84	19.53	20.24
15	1	0	QPSK	21.89	21.61	22.19
15	1	37		21.83	21.60	22.10
15	1	74		21.82	21.52	22.10
15	36	0		20.88	20.59	21.33
15	36	20		20.86	20.58	21.36
15	36	39		20.59	20.26	21.13
15	75	0		20.74	20.35	21.11
15	1	0	16-QAM	20.92	20.62	21.29
15	1	37		20.88	20.58	21.28
15	1	74		20.87	20.45	21.25
15	36	0		19.89	19.62	20.42
15	36	20		19.83	19.58	20.33
15	36	39		19.65	19.61	20.38
15	75	0		19.82	19.50	20.14



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	21.87	21.60	22.18
10	1	25		21.74	21.59	22.03
10	1	49		21.72	21.45	22.07
10	25	0		20.78	20.54	21.30
10	25	12		20.86	20.48	21.33
10	25	25		20.57	20.26	21.05
10	50	0		20.73	20.25	21.05
10	1	0	16-QAM	20.85	20.58	21.25
10	1	25		20.79	20.48	21.19
10	1	49		20.80	20.45	21.24
10	25	0		19.86	19.57	20.39
10	25	12		19.74	19.53	20.28
10	25	25		19.56	19.55	20.31
10	50	0		19.75	19.40	20.05
5	1	0	QPSK	21.87	21.60	22.08
5	1	12		21.70	21.59	21.94
5	1	24		21.64	21.38	22.04
5	12	0		20.77	20.48	21.20
5	12	7		20.78	20.42	21.31
5	12	13		20.56	20.16	21.05
5	25	0		20.71	20.20	20.98
5	1	0	16-QAM	20.81	20.56	21.23
5	1	12		20.71	20.42	21.12
5	1	24		20.78	20.43	21.20
5	12	0		19.79	19.55	20.30
5	12	7		19.69	19.45	20.23
5	12	13		19.47	19.50	20.23
5	25	0		19.67	19.30	19.96



**ERP/EIRP**

Modes	LTE Band 2 (QPSK,BW=1.4M)			LTE Band 2 (16QAM,BW=1.4M)		
	Channel	18607(Low)	18900(Mid)	19193 (High)	18607(Low)	18900(Mid)
Frequency (MHz)	1850.7	1880	1909.3	1850.7	1880	1909.3
Conducted Power (dBm)	22.71	22.74	22.67	21.84	21.88	21.7
Conducted Power (Watts)	0.1866	0.1879	0.1849	0.1528	0.1542	0.1479
EIRP(dBm)	23.33	23.36	23.29	22.46	22.50	22.32
EIRP(Watts)	0.2153	0.2168	0.2133	0.1762	0.1778	0.1706

Modes	LTE Band 2 (QPSK,BW=3M)			LTE Band 2 (16QAM,BW=3M)		
	Channel	18615(Low)	18900(Mid)	19185 (High)	18615(Low)	18900(Mid)
Frequency (MHz)	1851.5	1880	1908.5	1851.5	1880	1908.5
Conducted Power (dBm)	22.77	22.8	22.74	21.86	21.89	21.66
Conducted Power (Watts)	0.1892	0.1905	0.1879	0.1535	0.1545	0.1466
EIRP(dBm)	23.39	23.42	23.36	22.48	22.51	22.28
EIRP(Watts)	0.2183	0.2198	0.2168	0.1770	0.1782	0.1690

Modes	LTE Band 2 (QPSK,BW=5M)			LTE Band 2 (16QAM,BW=5M)		
	Channel	18625(Low)	18900(Mid)	19175(High)	18625(Low)	18900(Mid)
Frequency (MHz)	1852.5	1880	1907.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.78	22.86	22.69	21.87	21.95	21.74
Conducted Power (Watts)	0.1897	0.1932	0.1858	0.1538	0.1567	0.1493
EIRP(dBm)	23.40	23.48	23.31	22.49	22.57	22.36
EIRP(Watts)	0.2188	0.2228	0.2143	0.1774	0.1807	0.1722



Modes	LTE Band 2 (QPSK,BW=10M)			LTE Band 2 (16QAM,BW=10M)		
Channel	18650(Low)	18900(Mid)	19150 (High)	18650(Low)	18900(Mid)	19150 (High)
Frequency (MHz)	1855	1880	1905	1855	1880	1905
Conducted Power (dBm)	22.97	22.98	22.7	21.95	22.01	21.79
Conducted Power (Watts)	0.1982	0.1986	0.1862	0.1567	0.1589	0.1510
EIRP(dBm)	23.59	23.60	23.32	22.57	22.63	22.41
EIRP(Watts)	0.2286	0.2291	0.2148	0.1807	0.1832	0.1742

Modes	LTE Band 2 (QPSK,BW=15M)			LTE Band 2 (16QAM,BW=15M)		
Channel	18675(Low)	18900(Mid)	19125 (High)	18675(Low)	18900(Mid)	19125 (High)
Frequency (MHz)	1857.5	1880	1902.5	1857.5	1880	1902.5
Conducted Power (dBm)	22.97	22.98	22.77	22.03	22.05	21.79
Conducted Power (Watts)	0.1982	0.1986	0.1892	0.1596	0.1603	0.1510
EIRP(dBm)	23.59	23.60	23.39	22.65	22.67	22.41
EIRP(Watts)	0.2286	0.2291	0.2183	0.1841	0.1849	0.1742

Modes	LTE Band 2 (QPSK,BW=20M)			LTE Band 2 (16QAM,BW=20M)		
Channel	18700 (Low)	18900(Mid)	19100 (High)	18700 (Low)	18900(Mid)	19100 (High)
Frequency (MHz)	1860	1880	1900	1860	1880	1900
Conducted Power (dBm)	23.02	23.05	22.86	22.05	22.07	21.89
Conducted Power (Watts)	0.2004	0.2018	0.1932	0.1603	0.1611	0.1545
EIRP(dBm)	23.64	23.67	23.48	22.67	22.69	22.51
EIRP(Watts)	0.2312	0.2328	0.2228	0.1849	0.1858	0.1782



Modes	LTE Band 25 (QPSK,BW=1.4M)			LTE Band 25 (16QAM,BW=1.4M)		
Channel	26047(Low)	26340(Mid)	26683(High)	26047(Low)	26340(Mid)	26683(High)
Frequency (MHz)	1850.7	1880	1914.3	1850.7	1880	1914.3
Conducted Power (dBm)	22.87	22.94	22.68	21.97	22	21.91
Conducted Power (Watts)	0.1936	0.1968	0.1854	0.1574	0.1585	0.1552
EIRP(dBm)	23.49	23.56	23.30	22.59	22.62	22.53
EIRP(Watts)	0.2234	0.2270	0.2138	0.1816	0.1828	0.1791

Modes	LTE Band 25 (QPSK,BW=3M)			LTE Band 25 (16QAM,BW=3M)		
Channel	26055(Low)	26340(Mid)	26675 (High)	26055(Low)	26340(Mid)	26675 (High)
Frequency (MHz)	1851.5	1880	1913.5	1851.5	1880	1913.5
Conducted Power (dBm)	22.92	22.96	22.82	22.15	22.18	21.9
Conducted Power (Watts)	0.1959	0.1977	0.1914	0.1641	0.1652	0.1549
EIRP(dBm)	23.54	23.58	23.44	22.77	22.80	22.52
EIRP(Watts)	0.2259	0.2280	0.2208	0.1892	0.1905	0.1786

Modes	LTE Band 25 (QPSK,BW=5M)			LTE Band 25 (16QAM,BW=5M)		
Channel	26065(Low)	26340(Mid)	26665(High)	26065(Low)	26340(Mid)	26665(High)
Frequency (MHz)	1852.5	1880	1912.5	1852.5	1880	1912.5
Conducted Power (dBm)	22.97	22.98	22.83	22.18	22.27	21.95
Conducted Power (Watts)	0.1982	0.1986	0.1919	0.1652	0.1687	0.1567
EIRP(dBm)	23.59	23.60	23.45	22.80	22.89	22.57
EIRP(Watts)	0.2286	0.2291	0.2213	0.1905	0.1945	0.1807



Modes	LTE Band 25 (QPSK,BW=10M)			LTE Band 25 (QPSK,BW=10M)		
	Channel	26090(Low)	26340(Mid)	26640 (High)	26090(Low)	26340(Mid)
Frequency (MHz)	1855	1880	1910	1855	1880	1910
Conducted Power (dBm)	22.99	23.07	22.89	22.18	22.3	22.05
Conducted Power (Watts)	0.1991	0.2028	0.1945	0.1652	0.1698	0.1603
EIRP(dBm)	23.61	23.69	23.51	22.80	22.92	22.67
EIRP(Watts)	0.2296	0.2339	0.2244	0.1905	0.1959	0.1849

Modes	LTE Band 25 (QPSK,BW=15M)			LTE Band 25 (16QAM,BW=15M)		
	Channel	26115(Low)	26340(Mid)	26615(High)	26115(Low)	26340(Mid)
Frequency (MHz)	1857.5	1880	1907.5	1857.5	1880	1907.5
Conducted Power (dBm)	23.12	23.17	22.98	22.17	22.21	22.13
Conducted Power (Watts)	0.2051	0.2075	0.1986	0.1648	0.1663	0.1633
EIRP(dBm)	23.74	23.79	23.60	22.79	22.83	22.75
EIRP(Watts)	0.2366	0.2393	0.2291	0.1901	0.1919	0.1884

Modes	LTE Band 25 (QPSK,BW=20M)			LTE Band 25 (QPSK,BW=20M)		
	Channel	26140(Low)	26340(Mid)	26590(High)	26140(Low)	26340(Mid)
Frequency (MHz)	1855	1880	1905	1855	1880	1905
Conducted Power (dBm)	23.12	23.15	23	22.26	22.37	22.15
Conducted Power (Watts)	0.2051	0.2065	0.1995	0.1683	0.1726	0.1641
EIRP(dBm)	23.74	23.77	23.62	22.88	22.99	22.77
EIRP(Watts)	0.2366	0.2382	0.2301	0.1941	0.1991	0.1892



Modes	LTE Band 5 (QPSK,BW=1.4M)			LTE Band 5 (16QAM,BW=1.4M)		
Channel	20407(Low)	20525(Mid)	20643(High)	20407(Low)	20525(Mid)	20643(High)
Frequency (MHz)	824.7	836.5	848.3	824.7	836.5	848.3
Conducted Power (dBm)	22.26	22.3	22.27	21.5	21.55	21.33
Conducted Power (Watts)	0.1683	0.1698	0.1687	0.1413	0.1429	0.1358
ERP(dBm)	20.65	20.69	20.66	19.89	19.94	19.72
ERP(Watts)	0.1161	0.1172	0.1164	0.0975	0.0986	0.0938

Modes	LTE Band 5 (QPSK,BW=3M)			LTE Band 5 (16QAM,BW=3M)		
Channel	20415 (Low)	20525(Mid)	20635(High)	20415 (Low)	20525(Mid)	20635(High)
Frequency (MHz)	825.5	836.5	847.5	825.5	836.5	847.5
Conducted Power (dBm)	22.26	22.29	22.27	21.59	21.6	21.46
Conducted Power (Watts)	0.1683	0.1694	0.1687	0.1442	0.1445	0.1400
ERP(dBm)	20.65	20.68	20.66	19.98	19.99	19.85
ERP(Watts)	0.1161	0.1169	0.1164	0.0995	0.0998	0.0966

Modes	LTE Band 5 (QPSK,BW=5M)			LTE Band 5 (16QAM,BW=5M)		
Channel	20425(Low)	20525(Mid)	20625(High)	20425(Low)	20525(Mid)	20625(High)
Frequency (MHz)	826.5	836.5	846.5	826.5	836.5	846.5
Conducted Power (dBm)	22.29	22.32	22.28	21.57	21.59	21.42
Conducted Power (Watts)	0.1694	0.1706	0.1690	0.1435	0.1442	0.1387
ERP(dBm)	20.68	20.71	20.67	19.96	19.98	19.81
ERP(Watts)	0.1169	0.1178	0.1167	0.0991	0.0995	0.0957





Modes	LTE Band 5 (QPSK,BW=10M)			LTE Band 5 (16QAM,BW=10M)		
	20450 Low)	20525(Mid)	20600(High)	20450 Low)	20525(Mid)	20600(High)
Channel	829	836.5	844	829	836.5	844
Frequency (MHz)	829	836.5	844	829	836.5	844
Conducted Power (dBm)	22.35	22.4	22.38	21.62	21.63	21.55
Conducted Power (Watts)	0.1718	0.1738	0.1730	0.1452	0.1455	0.1429
ERP(dBm)	20.74	20.79	20.77	20.01	20.02	19.94
ERP(Watts)	0.1186	0.1199	0.1194	0.1002	0.1005	0.0986



Modes	LTE Band 26 (QPSK,BW=1.4M)			LTE Band 26 (16QAM,BW=1.4M)		
Channel	26697 (Low)	26865(Mid)	27033 (High)	26697 (Low)	26865(Mid)	27033 (High)
Frequency (MHz)	814.7	831.5	848.3	814.7	831.5	848.3
Conducted Power (dBm)	22.31	22.32	22.25	21.6	21.65	21.58
Conducted Power (Watts)	0.1702	0.1706	0.1679	0.1445	0.1462	0.1439
ERP(dBm)	20.77	20.78	20.71	20.06	20.11	20.04
ERP(Watts)	0.1194	0.1197	0.1178	0.1014	0.1026	0.1009

Modes	LTE Band 26 (QPSK,BW=3M)			LTE Band 26 (16QAM,BW=3M)		
Channel	26705 (Low)	26865(Mid)	27025 (High)	26705 (Low)	26865(Mid)	27025 (High)
Frequency (MHz)	815.5	831.5	847.5	815.5	831.5	847.5
Conducted Power (dBm)	22.34	22.38	22.35	21.6	21.66	21.64
Conducted Power (Watts)	0.1714	0.1730	0.1718	0.1445	0.1466	0.1459
ERP(dBm)	20.80	20.84	20.81	20.06	20.12	20.10
ERP(Watts)	0.1202	0.1213	0.1205	0.1014	0.1028	0.1023

Modes	LTE Band 26 (QPSK,BW=5M)			LTE Band 26 (16QAM,BW=5M)		
Channel	26715 (Low)	26865(Mid)	27015(High)	26715 (Low)	26865(Mid)	27015(High)
Frequency (MHz)	816.5	831.5	846.5	816.5	831.5	846.5
Conducted Power (dBm)	22.39	22.44	22.41	21.61	21.69	21.66
Conducted Power (Watts)	0.1734	0.1754	0.1742	0.1449	0.1476	0.1466
ERP(dBm)	20.85	20.90	20.87	20.07	20.15	20.12
ERP(Watts)	0.1216	0.1230	0.1222	0.1016	0.1035	0.1028



Modes	LTE Band 26 (QPSK,BW=10M)			LTE Band 26 (16QAM,BW=10M)		
Channel	26740 (Low)	26865(Mid)	26990 (High)	26740 (Low)	26865(Mid)	26990 (High)
Frequency (MHz)	819	831.5	844	819	831.5	844
Conducted Power (dBm)	22.48	22.5	22.42	21.65	21.76	21.74
Conducted Power (Watts)	0.1770	0.1778	0.1746	0.1462	0.1500	0.1493
ERP(dBm)	20.94	20.96	20.88	20.11	20.22	20.20
ERP(Watts)	0.1242	0.1247	0.1225	0.1026	0.1052	0.1047

Modes	LTE Band 26 (QPSK,BW=15M)			LTE Band 26 (16QAM,BW=15M)		
Channel	26765 (Low)	26865(Mid)	26965 (High)	26765 (Low)	26865(Mid)	26965 (High)
Frequency (MHz)	821.5	831.5	841.5	821.5	831.5	841.5
Conducted Power (dBm)	22.5	22.52	22.45	21.7	21.76	21.74
Conducted Power (Watts)	0.1778	0.1786	0.1758	0.1479	0.1500	0.1493
ERP(dBm)	20.96	20.98	20.91	20.16	20.22	20.20
ERP(Watts)	0.1247	0.1253	0.1233	0.1038	0.1052	0.1047



Modes	LTE Band 4 (QPSK,BW=1.4M)			LTE Band 4 (QPSK,BW=1.4M)		
	19957(Low)	20175(Mid)	20393 (High)	19957(Low)	20175(Mid)	20393 (High)
Channel						
Frequency (MHz)	1710.7	1732.5	1754.3	1710.7	1732.5	1754.3
Conducted Power (dBm)	22.82	22.89	22.84	21.73	21.99	21.93
Conducted Power (Watts)	0.1914	0.1945	0.1923	0.1489	0.1581	0.1560
EIRP(dBm)	23.83	23.90	23.85	22.74	23.00	22.94
EIRP(Watts)	0.2415	0.2455	0.2427	0.1879	0.1995	0.1968

Modes	LTE Band 4 (QPSK,BW=3M)			LTE Band 4 (16QAM,BW=3M)		
	19965(Low)	20175(Mid)	20385 (High)	19965(Low)	20175(Mid)	20385 (High)
Channel						
Frequency (MHz)	1711.5	1732.5	1753.5	1711.5	1732.5	1753.5
Conducted Power (dBm)	22.90	22.93	22.84	21.80	22.00	21.95
Conducted Power (Watts)	0.1950	0.1963	0.1923	0.1514	0.1585	0.1567
EIRP(dBm)	23.91	23.94	23.85	22.81	23.01	22.96
EIRP(Watts)	0.2460	0.2477	0.2427	0.1910	0.2000	0.1977

Modes	LTE Band 4 (QPSK,BW=5M)			LTE Band 4 (16QAM,BW=5M)		
	18625(Low)	18900(Mid)	19175(High)	18625(Low)	18900(Mid)	19175(High)
Channel						
Frequency (MHz)	1852.5	1880	1907.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.9	23.07	22.88	21.9	21.97	21.92
Conducted Power (Watts)	0.1950	0.2028	0.1941	0.1549	0.1574	0.1556
EIRP(dBm)	23.91	24.08	23.89	22.91	22.98	22.93
EIRP(Watts)	0.2460	0.2559	0.2449	0.1954	0.1986	0.1963



Modes	LTE Band 4 (QPSK,BW=10M)			LTE Band 4 (16QAM,BW=10M)		
	20000(Low)	20175(Mid)	20350(High)	20000(Low)	20175(Mid)	20350(High)
Channel						
Frequency (MHz)	1715	1732.5	1750	1715	1732.5	1750
Conducted Power (dBm)	22.96	23.07	22.98	21.93	22.06	21.97
Conducted Power (Watts)	0.1977	0.2028	0.1986	0.1560	0.1607	0.1574
EIRP(dBm)	23.97	24.08	23.99	22.94	23.07	22.98
EIRP(Watts)	0.2495	0.2559	0.2506	0.1968	0.2028	0.1986

Modes	LTE Band 4 (QPSK,BW=15M)			LTE Band 4 (16QAM,BW=15M)		
	20025(Low)	20175(Mid)	20325(High)	20025(Low)	20175(Mid)	20325(High)
Channel						
Frequency (MHz)	1717.5	1732.5	1747.5	1717.5	1732.5	1747.5
Conducted Power (dBm)	22.97	23.12	23.06	21.98	22.07	21.97
Conducted Power (Watts)	0.1982	0.2051	0.2023	0.1578	0.1611	0.1574
EIRP(dBm)	23.98	24.13	24.07	22.99	23.08	22.98
EIRP(Watts)	0.2500	0.2588	0.2553	0.1991	0.2032	0.1986

Modes	LTE Band 4 (QPSK,BW=20M)			LTE Band 4 (16QAM,BW=20M)		
	18700 (Low)	18900(Mid)	19100 (High)	20050(Low)	20175(Mid)	20300(High)
Channel						
Frequency (MHz)	1720	1732.5	1745	1720	1732.5	1745
Conducted Power (dBm)	23.06	23.15	23.08	21.98	22.11	22.06
Conducted Power (Watts)	0.2023	0.2065	0.2032	0.1578	0.1626	0.1607
EIRP(dBm)	24.07	24.16	24.09	22.99	23.12	23.07
EIRP(Watts)	0.2553	0.2606	0.2564	0.1991	0.2051	0.2028



Modes	LTE Band 7 (QPSK,BW=5M)			LTE Band 7 (16QAM,BW=5M)		
Channel	20775(Low)	21100(Mid)	21425(High)	20775(Low)	21100(Mid)	21425(High)
Frequency (MHz)	2502.5	2535	2567.5	2502.5	2535	2567.5
Conducted Power (dBm)	21.65	21.84	21.52	20.76	21.09	20.77
Conducted Power (Watts)	0.146	0.153	0.142	0.119	0.129	0.119
EIRP(dBm)	25.32	25.51	25.19	24.43	24.76	24.44
EIRP(Watts)	0.3404	0.3556	0.3304	0.2773	0.2992	0.2780

Modes	LTE Band 7 (QPSK,BW=10M)			LTE Band 7 (16QAM,BW=10M)		
Channel	20800(Low)	21100(Mid)	21400(High)	20800(Low)	21100(Mid)	21400(High)
Frequency (MHz)	2505	2535	2565	2505	2535	2565
Conducted Power (dBm)	21.72	21.9	21.63	20.93	21.15	20.8
Conducted Power (Watts)	0.149	0.155	0.146	0.124	0.130	0.120
EIRP(dBm)	25.39	25.57	25.30	24.60	24.82	24.47
EIRP(Watts)	0.3459	0.3606	0.3388	0.2884	0.3034	0.2799

Modes	LTE Band 7 (QPSK,BW=15M)			LTE Band 7 (16QAM,BW=15M)		
Channel	20825(Low)	21100(Mid)	21375(High)	20825(Low)	21100(Mid)	21375(High)
Frequency (MHz)	2507.5	2535	2562.5	2507.5	2535	2562.5
Conducted Power (dBm)	21.74	21.92	21.66	20.87	21.14	20.9
Conducted Power (Watts)	0.149	0.156	0.147	0.122	0.130	0.123
EIRP(dBm)	25.41	25.59	25.33	24.54	24.81	24.57
EIRP(Watts)	0.3475	0.3622	0.3412	0.2844	0.3027	0.2864



Modes	LTE Band 7 (QPSK,BW=20M)			LTE Band 7 (16QAM,BW=20M)		
	20850(Low)	21100(Mid)	21350 (High)	20850(Low)	21100(Mid)	21350 (High)
Channel						
Frequency (MHz)	2510	2535	2560	2510	2535	2560
Conducted Power (dBm)	21.77	21.98	21.71	20.94	21.23	20.88
Conducted Power (Watts)	0.150	0.158	0.148	0.124	0.133	0.122
EIRP(dBm)	25.44	25.65	25.38	24.61	24.90	24.55
EIRP(Watts)	0.3499	0.3673	0.3451	0.2891	0.3090	0.2851



Modes	LTE Band 12 (QPSK,BW=1.4M)			LTE Band 12 (QPSK,BW=1.4M)		
	Channel	23017(Low)	230955(Mid)	23173(High)	23017(Low)	230955(Mid)
Frequency (MHz)	699.7	707.5	715.3	699.7	707.5	715.3
Conducted Power (dBm)	22.62	22.64	22.59	21.97	22.07	21.93
Conducted Power (Watts)	0.1828	0.1837	0.1816	0.1574	0.1611	0.1560
ERP(dBm)	18.58	18.60	18.55	17.93	18.03	17.89
ERP(Watts)	0.0721	0.0724	0.0716	0.0621	0.0635	0.0615

Modes	LTE Band 12 (QPSK,BW=3M)			LTE Band 12 (16QAM,BW=3M)		
	Channel	23025(Low)	23095(Mid)	23165 (High)	23025(Low)	23095(Mid)
Frequency (MHz)	700.5	707.5	714.5	700.5	707.5	714.5
Conducted Power (dBm)	22.6	22.61	22.54	21.96	21.99	21.92
Conducted Power (Watts)	0.1820	0.1824	0.1795	0.1570	0.1581	0.1556
ERP(dBm)	18.56	18.57	18.50	17.92	17.95	17.88
ERP(Watts)	0.0718	0.0719	0.0708	0.0619	0.0624	0.0614

Modes	LTE Band 12 (QPSK,BW=5M)			LTE Band 12 (16QAM,BW=5M)		
	Channel	23035(Low)	23095(Mid)	23155 (High)	23035(Low)	23095(Mid)
Frequency (MHz)	701.5	707.5	713.5	701.5	707.5	713.5
Conducted Power (dBm)	22.61	22.64	22.56	21.97	22.01	21.87
Conducted Power (Watts)	0.1824	0.1837	0.1803	0.1574	0.1589	0.1538
ERP(dBm)	18.57	18.60	18.52	17.93	17.97	17.83
ERP(Watts)	0.0719	0.0724	0.0711	0.0621	0.0627	0.0607





Modes	LTE Band 12 (QPSK,BW=10M)			LTE Band 12 (16QAM,BW=10M)		
	Channel	23060(Low)	23095(Mid)	23130 (High)	23060(Low)	23095(Mid)
Frequency (MHz)	704	707.5	711	704	707.5	711
Conducted Power (dBm)	22.64	22.68	22.61	21.91	21.95	21.85
Conducted Power (Watts)	0.1837	0.1854	0.1824	0.1552	0.1567	0.1531
ERP(dBm)	18.60	18.64	18.57	17.87	17.91	17.81
ERP(Watts)	0.0724	0.0731	0.0719	0.0612	0.0618	0.0604



Modes	LTE Band 13 (QPSK,BW=5M)			LTE Band 13 (16QAM,BW=5M)		
	23035(Low)	23095(Mid)	23155 (High)	23205(Low)	23230(Mid)	23255 (High)
Channel						
Frequency (MHz)	779.5	782	784.5	779.5	782	784.5
Conducted Power (dBm)	23.6	23.64	23.46	22.76	22.84	22.79
Conducted Power (Watts)	0.2291	0.2312	0.2218	0.1888	0.1923	0.1901
ERP(dBm)	21.66	21.70	21.52	20.82	20.90	20.85
ERP(Watts)	0.1466	0.1479	0.1419	0.1208	0.1230	0.1216

Modes	LTE Band 13 (QPSK,BW=10M)		LTE Band 13 (16QAM,BW=10M)	
		23230(Mid)		23230(Mid)
Channel				
Frequency (MHz)		782		782
Conducted Power (dBm)		23.7		22.71
Conducted Power (Watts)		0.2344		0.1866
ERP(dBm)		21.76		20.77
ERP(Watts)		0.1500		0.1194



Modes	LTE Band 41 (QPSK,BW=5M)			LTE Band 41 (16QAM,BW=5M)		
Channel	39675(Low)	40620(Mid)	41565(High)	39675(Low)	40620(Mid)	41565(High)
Frequency (MHz)	2498.5	2593	2687.5	2498.5	2593	2687.5
Conducted Power (dBm)	21.87	21.6	22.08	20.81	20.56	21.23
Conducted Power (Watts)	0.154	0.145	0.161	0.121	0.114	0.133
EIRP(dBm)	25.54	25.27	25.75	24.48	24.23	24.90
EIRP(Watts)	0.3581	0.3365	0.3758	0.2805	0.2649	0.3090

Modes	LTE Band 41 (QPSK,BW=10M)			LTE Band 41 (16QAM,BW=10M)		
Channel	39700(Low)	40620(Mid)	41540(High)	39700(Low)	40620(Mid)	41540(High)
Frequency (MHz)	2501	2593	2685	2501	2593	2685
Conducted Power (dBm)	21.87	21.6	22.18	20.85	20.58	21.25
Conducted Power (Watts)	0.154	0.145	0.165	0.122	0.114	0.133
EIRP(dBm)	25.54	25.27	25.85	24.52	24.25	24.92
EIRP(Watts)	0.3581	0.3365	0.3846	0.2831	0.2661	0.3105

Modes	LTE Band 41 (QPSK,BW=15M)			LTE Band 41 (16QAM,BW=15M)		
Channel	39725(Low)	40620(Mid)	41515(High)	39725(Low)	40620(Mid)	41515(High)
Frequency (MHz)	2503.5	2593	2682.5	2503.5	2593	2682.5
Conducted Power (dBm)	21.89	21.61	22.19	20.92	20.62	21.29
Conducted Power (Watts)	0.155	0.145	0.166	0.124	0.115	0.135
EIRP(dBm)	25.56	25.28	25.86	24.59	24.29	24.96
EIRP(Watts)	0.3597	0.3373	0.3855	0.2877	0.2685	0.3133



Modes	LTE Band 41 (QPSK,BW=20M)			LTE Band 41 (16QAM,BW=20M)		
	39750(Low)	40620(Mid)	41490(High)	39750(Low)	40620(Mid)	41490(High)
Channel						
Frequency (MHz)	2506	2593	2680	2506	2593	2680
Conducted Power (dBm)	21.95	21.63	22.22	20.98	20.63	21.39
Conducted Power (Watts)	0.157	0.146	0.167	0.125	0.116	0.138
EIRP(dBm)	25.62	25.30	25.89	24.65	24.30	25.06
EIRP(Watts)	0.3648	0.3388	0.3882	0.2917	0.2692	0.3206



## **Appendix B. Test Results of Radiated Test**

### **Radiated Spurious Emission**



LTE Band 2

LTE Band 2 / 1.4MHz / QPSK									
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	-47.87	-13	-34.87	-65.12	-54.44	1.67	8.24	H
	5548	-51.98	-13	-38.98	-73.46	-59.05	2.65	9.72	H
	7403	-46.52	-13	-33.52	-74.64	-55.67	2.46	11.61	H
									H
									H
									H
	3700	-46.65	-13	-33.65	-63.79	-53.22	1.67	8.24	V
	5548	-50.26	-13	-37.26	-71.95	-57.33	2.65	9.72	V
	7403	-46.07	-13	-33.07	-73.72	-55.22	2.46	11.61	V
									V
									V
									V
Middle	3756	-49.26	-13	-36.26	-66.79	-55.88	1.68	8.31	H
	5639	-52.01	-13	-39.01	-73.48	-59.06	2.71	9.76	H
	7515	-46.73	-13	-33.73	-74.73	-56.11	2.42	11.81	H
									H
									H
									H
	3756	-47.04	-13	-34.04	-64.42	-53.66	1.68	8.31	V
	5639	-50.73	-13	-37.73	-72.31	-57.78	2.71	9.76	V
	7515	-46.39	-13	-33.39	-74.09	-55.77	2.42	11.81	V
									V
									V
									V
Highest	3819	-47.33	-13	-34.33	-64.79	-54.01	1.70	8.38	H
	5723	-51.39	-13	-38.39	-73.1	-58.43	2.75	9.79	H
	7634	-47.39	-13	-34.39	-74.62	-56.88	2.39	11.88	H
									H
									H
									H
	3819	-49.34	-13	-36.34	-63.55	-56.02	1.70	8.38	V
	5723	-48.66	-13	-35.66	-71.08	-55.7	2.75	9.79	V
	7634	-46.73	-13	-33.73	-74.01	-56.22	2.39	11.88	V
									V
									V
									V

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



LTE Band 2 / 3MHz / QPSK									
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	-46.76	-13	-33.76	-64.02	-53.33	1.67	8.24	H
	5548	-52.81	-13	-39.81	-74.25	-59.88	2.65	9.72	H
	7403	-46.62	-13	-33.62	-74.88	-55.77	2.46	11.61	H
									H
									H
									H
									H
	3700	-45.98	-13	-32.98	-63.09	-52.55	1.67	8.24	V
	5548	-50.59	-13	-37.59	-72.3	-57.66	2.65	9.72	V
	7403	-46.52	-13	-33.52	-74.28	-55.67	2.46	11.61	V
									V
	Middle	3756	-49.97	-13	-36.97	-67.4	-56.59	1.68	8.31
5639		-51.36	-13	-38.36	-73.02	-58.41	2.71	9.76	H
7515		-46.51	-13	-33.51	-74.54	-55.89	2.42	11.81	H
									H
									H
									H
									H
3756		-48.46	-13	-35.46	-65.85	-55.08	1.68	8.31	V
5639		-50.17	-13	-37.17	-71.96	-57.22	2.71	9.76	V
7515		-46.31	-13	-33.31	-73.95	-55.69	2.42	11.81	V
									V
Highest		3812	-49.35	-13	-36.35	-66.82	-56.02	1.70	8.37
	5723	-52.18	-13	-39.18	-73.9	-59.22	2.75	9.79	H
	7627	-47.56	-13	-34.56	-74.82	-57.05	2.39	11.88	H
									H
									H
									H
									H
	3812	-47.55	-13	-34.55	-64.83	-54.22	1.70	8.37	V
	5723	-47.73	-13	-34.73	-70.12	-54.77	2.75	9.79	V
	7627	-46.62	-13	-33.62	-73.96	-56.11	2.39	11.88	V
									V
									V
								V	

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



LTE Band 2 / 5MHz / QPSK									
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	-47.76	-13	-34.76	-64.76	-54.33	1.67	8.24	H
	5548	-52.39	-13	-39.39	-73.87	-59.46	2.65	9.72	H
	7403	-46.93	-13	-33.93	-74.97	-56.08	2.46	11.61	H
									H
									H
									H
									H
	3700	-45.98	-13	-32.98	-63.09	-52.55	1.67	8.24	V
	5548	-49.94	-13	-36.94	-71.61	-57.01	2.65	9.72	V
	7403	-46.48	-13	-33.48	-74.2	-55.63	2.46	11.61	V
									V
	Middle	3756	-49.07	-13	-36.07	-66.55	-55.69	1.68	8.31
5632		-52.62	-13	-39.62	-74.02	-59.67	2.70	9.75	H
7508		-46.67	-13	-33.67	-74.8	-56.05	2.43	11.80	H
									H
									H
									H
									H
3756		-47.82	-13	-34.82	-65.09	-54.44	1.68	8.31	V
5632		-51.03	-13	-38.03	-72.74	-58.08	2.70	9.75	V
7508		-46.68	-13	-33.68	-74.27	-56.06	2.43	11.80	V
									V
Highest		3812	-48.35	-13	-35.35	-65.81	-55.02	1.70	8.37
	5716	-51.63	-13	-38.63	-73.38	-58.67	2.75	9.79	H
	7620	-47.57	-13	-34.57	-74.8	-57.05	2.39	11.87	H
									H
									H
									H
									H
	3812	-47.39	-13	-34.39	-64.48	-54.06	1.70	8.37	V
	5715	-48.58	-13	-35.58	-70.8	-55.62	2.75	9.79	V
	7620	-47.01	-13	-34.01	-74.46	-56.49	2.39	11.87	V
									V
									V
								V	

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





LTE Band 2 / 10MHz / QPSK									
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	-45.02	-13	-32.02	-62.4	-51.59	1.67	8.24	H
	5548	-52.98	-13	-39.98	-74.53	-60.05	2.65	9.72	H
	7403	-46.90	-13	-33.90	-74.97	-56.05	2.46	11.61	H
									H
									H
									H
									H
	3700	-44.98	-13	-31.98	-61.99	-51.55	1.67	8.24	V
	5548	-50.59	-13	-37.59	-72.27	-57.66	2.65	9.72	V
	7403	-46.31	-13	-33.31	-74.11	-55.46	2.46	11.61	V
									V
	Middle	3749	-44.44	-13	-31.44	-61.89	-51.06	1.68	8.30
5625		-50.39	-13	-37.39	-71.92	-57.44	2.70	9.75	H
7501		-46.33	-13	-33.33	-74.61	-55.7	2.43	11.80	H
									H
									H
									H
									H
3749		-46.43	-13	-33.43	-63.75	-53.05	1.68	8.30	V
5625		-47.61	-13	-34.61	-69.11	-54.66	2.70	9.75	V
7501		-46.35	-13	-33.35	-74.04	-55.72	2.43	11.80	V
									V
Highest		3798	-50.52	-13	-37.52	-68.19	-57.18	1.70	8.36
	5702	-52.01	-13	-39.01	-73.66	-59.05	2.74	9.78	H
	7602	-47.65	-13	-34.65	-74.79	-57.11	2.40	11.86	H
									H
									H
									H
									H
	3798	-45.78	-13	-32.78	-63.02	-52.44	1.70	8.36	V
	5702	-49.04	-13	-36.04	-71.37	-56.08	2.74	9.78	V
	7602	-46.76	-13	-33.76	-74.14	-56.22	2.40	11.86	V
									V
									V
								V	
								V	

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



LTE Band 2 / 15MHz / QPSK									
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	-46.65	-13	-33.65	-63.73	-53.22	1.67	8.24	H
	5555	-52.08	-13	-39.08	-73.66	-59.15	2.66	9.72	H
	7403	-46.53	-13	-33.53	-74.68	-55.68	2.46	11.61	H
									H
									H
									H
									H
	3700	-46.48	-13	-33.48	-63.4	-53.05	1.67	8.24	V
	5555	-50.26	-13	-37.26	-71.83	-57.33	2.66	9.72	V
	7403	-46.42	-13	-33.42	-74.01	-55.57	2.46	11.61	V
									V
	Middle	3749	-47.71	-13	-34.71	-65.28	-54.33	1.68	8.30
5618		-52.31	-13	-39.31	-73.9	-59.36	2.69	9.75	H
7494		-46.52	-13	-33.52	-74.74	-55.88	2.43	11.79	H
									H
									H
									H
									H
3749		-47.71	-13	-34.71	-65	-54.33	1.68	8.30	V
5618		-49.72	-13	-36.72	-71.28	-56.77	2.69	9.75	V
7494		-46.08	-13	-33.08	-73.89	-55.44	2.43	11.79	V
									V
Highest		3791	-49.37	-13	-36.37	-66.75	-56.02	1.70	8.35
	5688	-52.84	-13	-39.84	-74.31	-59.88	2.73	9.78	H
	7585	-47.61	-13	-34.61	-74.93	-57.06	2.40	11.85	H
									H
									H
									H
									H
	3791	-43.57	-13	-30.57	-60.83	-50.22	1.70	8.35	V
	5688	-50.52	-13	-37.52	-72.8	-57.56	2.73	9.78	V
	7585	-46.88	-13	-33.88	-74.28	-56.33	2.40	11.85	V
									V
									V
								V	

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



LTE Band 2 / 20MHz / QPSK									
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	-46.31	-13	-33.31	-63.46	-52.88	1.67	8.24	H
	5555	-52.26	-13	-39.26	-73.82	-59.33	2.66	9.72	H
	7403	-46.93	-13	-33.93	-75.07	-56.08	2.46	11.61	H
									H
									H
									H
									H
	3700	-46.02	-13	-33.02	-63.18	-52.59	1.67	8.24	V
	5555	-48.95	-13	-35.95	-70.59	-56.02	2.66	9.72	V
	7403	-46.73	-13	-33.73	-74.45	-55.88	2.46	11.61	V
									V
	Middle	3742	-47.41	-13	-34.41	-64.58	-54.02	1.68	8.29
5611		-52.46	-13	-39.46	-73.92	-59.52	2.69	9.74	H
7487		-46.68	-13	-33.68	-74.81	-56.02	2.43	11.77	H
									H
									H
									H
									H
3742		-45.41	-13	-32.41	-62.76	-52.02	1.68	8.29	V
5611		-49.27	-13	-36.27	-70.99	-56.33	2.69	9.74	V
7487		-46.74	-13	-33.74	-74.37	-56.08	2.43	11.77	V
									V
Highest		3784	-46.57	-13	-33.57	-64.23	-53.22	1.69	8.34
	5674	-51.62	-13	-38.62	-73.26	-58.66	2.73	9.77	H
	7564	-47.62	-13	-34.62	-75.16	-57.05	2.41	11.84	H
									H
									H
									H
									H
	3784	-42.79	-13	-29.79	-60.04	-49.44	1.69	8.34	V
	5674	-50.35	-13	-37.35	-72.44	-57.39	2.73	9.77	V
	7564	-46.62	-13	-33.62	-73.93	-56.05	2.41	11.84	V
									V
									V
								V	

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



LTE Band 25

LTE Band 25 / 1.4MHz / QPSK									
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)
Highest	3826	-49.54	-13	-36.54	-67.11	-56.22	1.71	8.39	H
	5744	-50.99	-13	-37.99	-72.71	-58.02	2.77	9.80	H
	7655	-47.55	-13	-34.55	-74.81	-57.06	2.38	11.89	H
									H
									H
									H
									H
	3826	-38.98	-13	-25.98	-56.15	-45.66	1.71	8.39	V
	5744	-44.33	-13	-31.33	-67.04	-51.36	2.77	9.80	V
	7655	-46.82	-13	-33.82	-74.08	-56.33	2.38	11.89	V
									V
									V
									V
									V

LTE Band 25 / 3MHz / QPSK									
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)
Highest	3826	-47.01	-13	-34.01	-64.73	-53.69	1.71	8.39	H
	5737	-51.85	-13	-38.85	-73.52	-58.88	2.76	9.79	H
	7648	-47.71	-13	-34.71	-74.9	-57.22	2.38	11.89	H
									H
									H
									H
									H
	3826	-46.01	-13	-33.01	-63.32	-52.69	1.71	8.39	V
	5737	-46.63	-13	-33.63	-69.42	-53.66	2.76	9.79	V
	7648	-47.02	-13	-34.02	-74.31	-56.53	2.38	11.89	V
									V
									V
									V
									V

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



LTE Band 25 / 5MHz / QPSK									
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)
Highest	3819	-47.54	-13	-34.54	-65.18	-54.22	1.70	8.38	H
	5730	-51.99	-13	-38.99	-73.52	-59.02	2.76	9.79	H
	7641	-47.61	-13	-34.61	-74.77	-57.11	2.38	11.88	H
									H
									H
									H
									H
	3819	-47.34	-13	-34.34	-64.54	-54.02	1.70	8.38	V
	5730	-46.85	-13	-33.85	-69.35	-53.88	2.76	9.79	V
	7641	-46.58	-13	-33.58	-73.91	-56.08	2.38	11.88	V
									V
									V
									V
									V

LTE Band 25 / 10MHz / QPSK									
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)
Highest	3812	-48.35	-13	-35.35	-65.8	-55.02	1.70	8.37	H
	5716	-51.29	-13	-38.29	-72.92	-58.33	2.75	9.79	H
	7620	-47.29	-13	-34.29	-74.55	-56.77	2.39	11.87	H
									H
									H
									H
									H
	3812	-45.68	-13	-32.68	-62.94	-52.35	1.70	8.37	V
	5716	-47.31	-13	-34.31	-69.65	-54.35	2.75	9.79	V
	7620	-46.34	-13	-33.34	-73.68	-55.82	2.39	11.87	V
									V
									V
									V
									V

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



LTE Band 25 / 15MHz / QPSK									
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)
Highest	3798	-48.36	-13	-35.36	-66.03	-55.02	1.70	8.36	H
	5702	-51.84	-13	-38.84	-73.43	-58.88	2.74	9.78	H
	7606	-47.06	-13	-34.06	-74.37	-56.53	2.40	11.86	H
									H
									H
									H
									H
	3798	-46.66	-13	-33.66	-63.9	-53.32	1.70	8.36	V
	5702	-47.01	-13	-34.01	-69.28	-54.05	2.74	9.78	V
	7606	-46.97	-13	-33.97	-74.3	-56.44	2.40	11.86	V
									V

LTE Band 25 / 20MHz / QPSK									
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)
Highest	3791	-46.46	-13	-33.46	-64.08	-53.11	1.70	8.35	H
	5688	-52.12	-13	-39.12	-73.77	-59.16	2.73	9.78	H
	7585	-47.56	-13	-34.56	-74.83	-57.01	2.40	11.85	H
									H
									H
									H
									H
	3791	-46.01	-13	-33.01	-63.2	-52.66	1.70	8.35	V
	5688	-49.52	-13	-36.52	-71.74	-56.56	2.73	9.78	V
	7585	-46.88	-13	-33.88	-74.35	-56.33	2.40	11.85	V
									V

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



LTE Band 4

LTE Band 4 / 1.4MHz / QPSK									
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	-45.53	-13	-32.53	-61.37	-51.6	1.58	7.65	H
	5128	-52.32	-13	-39.32	-72.91	-59.61	2.41	9.70	H
	6843	-50.13	-13	-37.13	-75.15	-58.1	2.64	10.61	H
									H
									H
									H
									H
	3420	-49.05	-13	-36.05	-64.88	-55.12	1.58	7.65	V
	5128	-45.86	-13	-32.86	-66.78	-53.15	2.41	9.70	V
	6843	-48.35	-13	-35.35	-74.08	-56.32	2.64	10.61	V
									V
	Middle	3462	-39.28	-13	-26.28	-55.77	-45.52	1.59	7.83
5198		-52.56	-13	-39.56	-73.31	-59.81	2.45	9.70	H
6927		-49.58	-13	-36.58	-74.92	-57.68	2.61	10.71	H
									H
									H
									H
									H
3462		-44.06	-13	-31.06	-60.26	-50.3	1.59	7.83	V
5198		-50.46	-13	-37.46	-71.58	-57.71	2.45	9.70	V
6927		-49.35	-13	-36.35	-75.32	-57.45	2.61	10.71	V
									V
Highest		3504	-40.38	-13	-27.38	-57.27	-46.78	1.61	8.00
	5261	-49.70	-13	-36.70	-70.13	-56.91	2.49	9.70	H
	7018	-49.03	-13	-36.03	-74.79	-57.28	2.58	10.84	H
									H
									H
									H
									H
	3504	-43.04	-13	-30.04	-59.55	-49.44	1.61	8.00	V
	5261	-49.06	-13	-36.06	-69.75	-56.27	2.49	9.70	V
	7018	-48.78	-13	-35.78	-75.09	-57.03	2.58	10.84	V
									V

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



LTE Band 4 / 3MHz / QPSK									
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	-45.82	-13	-32.82	-61.67	-51.89	1.58	7.65	H
	5128	-52.42	-13	-39.42	-73.04	-59.71	2.41	9.70	H
	6843	-50.28	-13	-37.28	-75.33	-58.25	2.64	10.61	H
									H
									H
									H
									H
	3420	-48.33	-13	-35.33	-64.14	-54.4	1.58	7.65	V
	5128	-47.03	-13	-34.03	-68	-54.32	2.41	9.70	V
	6843	-47.61	-13	-34.61	-73.38	-55.58	2.64	10.61	V
									V
	Middle	3462	-40.77	-13	-27.77	-57.25	-47.01	1.59	7.83
5191		-53.13	-13	-40.13	-73.87	-60.38	2.45	9.70	H
6927		-49.40	-13	-36.40	-74.74	-57.5	2.61	10.71	H
									H
									H
									H
									H
3462		-44.47	-13	-31.47	-60.74	-50.71	1.59	7.83	V
5191		-49.37	-13	-36.37	-70.44	-56.62	2.45	9.70	V
6927		-49.30	-13	-36.30	-75.27	-57.4	2.61	10.71	V
									V
Highest		3504	-40.97	-13	-27.97	-57.86	-47.37	1.61	8.00
	5254	-50.07	-13	-37.07	-70.43	-57.29	2.48	9.70	H
	7011	-49.22	-13	-36.22	-74.97	-57.46	2.59	10.82	H
									H
									H
									H
									H
	3504	-42.79	-13	-29.79	-59.3	-49.19	1.61	8.00	V
	5254	-50.61	-13	-37.61	-71.28	-57.83	2.48	9.70	V
	7011	-48.98	-13	-35.98	-75.15	-57.22	2.59	10.82	V
									V

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





LTE Band 4 / 5MHz / QPSK									
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	-46.84	-13	-33.84	-62.69	-52.91	1.58	7.65	H
	5128	-52.83	-13	-39.83	-73.43	-60.12	2.41	9.70	H
	6843	-50.25	-13	-37.25	-75.3	-58.22	2.64	10.61	H
									H
									H
									H
									H
	3420	-50.74	-13	-37.74	-66.56	-56.81	1.58	7.65	V
	5128	-47.15	-13	-34.15	-68.09	-54.44	2.41	9.70	V
	6843	-48.61	-13	-35.61	-74.35	-56.58	2.64	10.61	V
									V
	Middle	3462	-38.65	-13	-25.65	-55.12	-44.89	1.59	7.83
5191		-52.16	-13	-39.16	-72.9	-59.41	2.45	9.70	H
6920		-49.46	-13	-36.46	-74.77	-57.55	2.62	10.70	H
									H
									H
									H
									H
3462		-43.42	-13	-30.42	-59.62	-49.66	1.59	7.83	V
5191		-50.13	-13	-37.13	-71.19	-57.38	2.45	9.70	V
6920		-49.33	-13	-36.33	-75.26	-57.42	2.62	10.70	V
									V
Highest		3497	-40.17	-13	-27.17	-57.06	-46.55	1.60	7.99
	5254	-50.59	-13	-37.59	-70.94	-57.81	2.48	9.70	H
	6997	-49.22	-13	-36.22	-74.8	-57.42	2.59	10.80	H
									H
									H
									H
									H
	3497	-52.34	-13	-39.34	-58.86	-58.72	1.60	7.99	V
	5254	-50.13	-13	-37.13	-70.78	-57.35	2.48	9.70	V
	6997	-48.85	-13	-35.85	-75.01	-57.05	2.59	10.80	V
									V
									V
								V	

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



LTE Band 4 / 10MHz / QPSK									
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	-44.95	-13	-31.95	-60.82	-51.02	1.58	7.65	H
	5128	-52.26	-13	-39.26	-72.88	-59.55	2.41	9.70	H
	6843	-50.25	-13	-37.25	-75.31	-58.22	2.64	10.61	H
									H
									H
									H
									H
	3420	-48.38	-13	-35.38	-64.2	-54.45	1.58	7.65	V
	5128	-47.44	-13	-34.44	-68.39	-54.73	2.41	9.70	V
	6843	-48.62	-13	-35.62	-74.36	-56.59	2.64	10.61	V
									V
	Middle	3455	-39.81	-13	-26.81	-55.83	-46.02	1.59	7.80
5184		-53.27	-13	-40.27	-73.87	-60.53	2.44	9.70	H
6913		-49.98	-13	-36.98	-75.12	-58.06	2.62	10.70	H
									H
									H
									H
									H
3455		-42.32	-13	-29.32	-58.39	-48.53	1.59	7.80	V
5184		-50.11	-13	-37.11	-70.97	-57.37	2.44	9.70	V
6913		-49.36	-13	-36.36	-75.15	-57.44	2.62	10.70	V
									V
Highest		3490	-39.44	-13	-26.44	-56.13	-45.79	1.60	7.96
	5233	-51.27	-13	-38.27	-71.73	-58.5	2.47	9.70	H
	6983	-49.44	-13	-36.44	-74.96	-57.62	2.60	10.78	H
									H
									H
									H
									H
	3490	-52.78	-13	-39.78	-59.3	-59.13	1.60	7.96	V
	5233	-48.63	-13	-35.63	-69.4	-55.86	2.47	9.70	V
	6983	-48.59	-13	-35.59	-74.71	-56.77	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									
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	-44.89	-13	-31.89	-60.73	-50.96	1.58	7.65	H
	5135	-51.77	-13	-38.77	-72.39	-59.06	2.41	9.70	H
	6843	-50.14	-13	-37.14	-75.2	-58.11	2.64	10.61	H
									H
									H
									H
									H
	3420	-48.82	-13	-35.82	-64.63	-54.89	1.58	7.65	V
	5135	-46.04	-13	-33.04	-66.98	-53.33	2.41	9.70	V
	6843	-49.04	-13	-36.04	-74.78	-57.01	2.64	10.61	V
									V
									V
								V	
								V	
								V	
Middle	3448	-39.86	-13	-26.86	-56.13	-46.04	1.59	7.77	H
	5177	-51.18	-13	-38.18	-71.89	-58.44	2.44	9.70	H
	6906	-49.87	-13	-36.87	-75.1	-57.94	2.62	10.69	H
									H
									H
									H
									H
	3448	-42.83	-13	-29.83	-58.81	-49.01	1.59	7.77	V
	5177	-48.35	-13	-35.35	-69.36	-55.61	2.44	9.70	V
	6906	-49.43	-13	-36.43	-75.35	-57.5	2.62	10.69	V
									V
									V
								V	
								V	
								V	
Highest	3483	-40.77	-13	-27.77	-57.46	-47.1	1.60	7.93	H
	5219	-50.88	-13	-37.88	-71.46	-58.12	2.46	9.70	H
	6962	-49.65	-13	-36.65	-75.1	-57.8	2.60	10.75	H
									H
									H
									H
									H
	3483	-44.39	-13	-31.39	-60.72	-50.72	1.60	7.93	V
	5219	-48.98	-13	-35.98	-69.92	-56.22	2.46	9.70	V
	6962	-48.57	-13	-35.57	-74.65	-56.72	2.60	10.75	V
									V
									V
								V	
								V	
								V	

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



LTE Band 4 / 20MHz / QPSK									
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	-43.24	-13	-30.24	-59.07	-49.31	1.58	7.65	H
	5135	-51.06	-13	-38.06	-71.68	-58.35	2.41	9.70	H
	6843	-50.25	-13	-37.25	-75.32	-58.22	2.64	10.61	H
									H
									H
									H
									H
	3420	-47.44	-13	-34.44	-63.24	-53.51	1.58	7.65	V
	5135	-44.83	-13	-31.83	-65.77	-52.12	2.41	9.70	V
	6843	-47.81	-13	-34.81	-73.56	-55.78	2.64	10.61	V
									V
									V
								V	
								V	
								V	
Middle	3448	-41.22	-13	-28.22	-57.49	-47.4	1.59	7.77	H
	5170	-50.44	-13	-37.44	71.11	-57.71	2.43	9.70	H
	6892	-49.97	-13	-36.97	-75.22	-58.02	2.63	10.67	H
									H
									H
									H
									H
	3448	-42.76	-13	-29.76	-58.76	-48.94	1.59	7.77	V
	5170	-48.18	-13	-35.18	-69.21	-55.45	2.43	9.70	V
	6892	-49.45	-13	-36.45	-75.29	-57.5	2.63	10.67	V
									V
									V
								V	
								V	
								V	
Highest	3469	-39.64	-13	-26.64	-56.12	-45.91	1.59	7.86	H
	5205	-50.87	-13	-37.87	-71.59	-58.11	2.46	9.70	H
	6944	-50.13	-13	-37.13	-75.49	-58.25	2.61	10.73	H
									H
									H
									H
									H
	3469	-44.61	-13	-31.61	-60.78	-50.88	1.59	7.86	V
	5205	-49.47	-13	-36.47	-70.61	-56.71	2.46	9.70	V
	6944	-49.29	-13	-36.29	-75.28	-57.41	2.61	10.73	V
									V
									V
								V	
								V	
								V	

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



LTE Band 5

LTE Band 5 / 1.4MHz / QPSK									
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	-32.13	-13	-19.13	-41.63	-33.89	0.98	4.89	H
	2472	-43.14	-13	-30.14	-56.48	-45.02	1.28	5.32	H
	3296	-49.63	-13	-36.63	-65.43	-53.04	1.54	7.10	H
	4120	-51.41	-13	-38.41	-68.87	-56.05	1.83	8.62	H
									H
									H
									H
	1648	-33.68	-13	-20.68	-42.64	-35.44	0.98	4.89	V
	2472	-46.04	-13	-33.04	-59.24	-47.92	1.28	5.32	V
	3296	-52.81	-13	-39.81	-68.15	-56.22	1.54	7.10	V
	4120	-53.05	-13	-40.05	-70.54	-57.69	1.83	8.62	V
									V
									V
									V
Middle	1672	-34.84	-13	-21.84	-44.26	-36.52	0.99	4.82	H
	2504	-41.92	-13	-28.92	-55.24	-43.88	1.29	5.40	H
	3344	-51.61	-13	-38.61	-67.06	-55.22	1.56	7.31	H
	4176	-53.44	-13	-40.44	-70.96	-58.06	1.86	8.64	H
									H
									H
									H
	1672	-36.34	-13	-23.34	-45.19	-38.02	0.99	4.82	V
	2504	-46.48	-13	-33.48	-59.69	-48.44	1.29	5.40	V
	3344	-52.85	-13	-39.85	-68.07	-56.46	1.56	7.31	V
	4176	-55.43	-13	-42.43	-72.82	-60.05	1.86	8.64	V
									V
									V
									V
Highest	1696	-35.42	-13	-22.42	-45.02	-37.02	1.00	4.75	H
	2544	-43.35	-13	-30.35	-56.81	-45.33	1.30	5.44	H
	3392	-52.99	-13	-39.99	-68.49	-56.79	1.57	7.52	H
	4240	-54.51	-13	-41.51	-72.38	-59.11	1.90	8.65	H
									H
									H
									H
	1696	-38.62	-13	-25.62	-47.86	-40.22	1.00	4.75	V
	2544	-44.79	-13	-31.79	-58.14	-46.77	1.30	5.44	V
	3392	-55.28	-13	-42.28	-70.62	-59.08	1.57	7.52	V
	4240	-55.92	-13	-42.92	-73.46	-60.52	1.90	8.65	V
									V
									V
									V

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



LTE Band 5 / 3MHz / QPSK									
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	-32.35	-13	-19.35	-41.87	-34.11	0.98	4.89	H
	2472	-43.23	-13	-30.23	-56.52	-45.11	1.28	5.32	H
	3296	-49.47	-13	-36.47	-65.33	-52.88	1.54	7.10	H
	4120	-50.05	-13	-37.05	-67.7	-54.69	1.83	8.62	H
									H
									H
									H
	1648	-34.12	-13	-21.12	-42.98	-35.88	0.98	4.89	V
	2472	-46.34	-13	-33.34	-59.52	-48.22	1.28	5.32	V
	3296	-52.36	-13	-39.36	-68.09	-55.77	1.54	7.10	V
	4120	-53.41	-13	-40.41	-70.78	-58.05	1.83	8.62	V
									V
									V
									V
Middle	1672	-33.68	-13	-20.68	-43.28	-35.36	0.99	4.82	H
	2504	-42.09	-13	-29.09	-55.48	-44.05	1.29	5.40	H
	3344	-52.28	-13	-39.28	-67.85	-55.89	1.56	7.31	H
	4176	-53.71	-13	-40.71	-71.23	-58.33	1.86	8.64	H
									H
									H
									H
	1672	-36.01	-13	-23.01	-45.04	-37.69	0.99	4.82	V
	2504	-48.03	-13	-35.03	-61.25	-49.99	1.29	5.40	V
	3344	-52.98	-13	-39.98	-68.26	-56.59	1.56	7.31	V
	4176	-55.49	-13	-42.49	-72.96	-60.11	1.86	8.64	V
	4984	-52.47	-13	-39.47	-72.9	-57.66	2.33	9.67	V
									V
									V
Highest	1688	-34.48	-13	-21.48	-44.01	-36.11	1.00	4.77	H
	2536	-43.91	-13	-30.91	-57.26	-45.89	1.30	5.43	H
	3384	-52.24	-13	-39.24	-67.72	-56.01	1.57	7.49	H
									H
									H
									H
									H
	1688	-37.66	-13	-24.66	-46.63	-39.29	1.00	4.77	V
	2538	-45.01	-13	-32.01	-58.38	-46.99	1.30	5.43	V
	3384	-54.12	-13	-41.12	-69.47	-57.89	1.57	7.49	V
	4232	-55.17	-13	-42.17	-72.89	-59.77	1.89	8.65	V
									V
									V
									V
								V	

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



LTE Band 5 / 5MHz / QPSK									
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	-33.46	-13	-20.46	-43.03	-35.22	0.98	4.89	H
	2472	-41.53	-13	-28.53	-54.92	-43.41	1.28	5.32	H
	3296	-49.65	-13	-36.65	-65.49	-53.06	1.54	7.10	H
	4120	-51.77	-13	-38.77	-69.38	-56.41	1.83	8.62	H
	5800	-51.35	-13	-38.35	-73.13	-56.22	2.80	9.82	H
									H
									H
	1648	-34.93	-13	-21.93	-43.92	-36.69	0.98	4.89	V
	2472	-44.64	-13	-31.64	-57.89	-46.52	1.28	5.32	V
	3296	-52.64	-13	-39.64	-68.29	-56.05	1.54	7.10	V
	4120	-53.37	-13	-40.37	-70.86	-58.01	1.83	8.62	V
									V
								V	
								V	
Middle	1664	-34.17	-13	-21.17	-43.59	-35.88	0.98	4.84	H
	2504	-41.56	-13	-28.56	-54.95	-43.52	1.29	5.40	H
	3336	-52.30	-13	-39.30	-67.89	-55.88	1.55	7.28	H
	4168	-53.86	-13	-40.86	-71.44	-58.49	1.86	8.63	H
									H
									H
									H
	1664	-36.58	-13	-23.58	-45.63	-38.29	0.98	4.84	V
	2504	-46.15	-13	-33.15	-59.42	-48.11	1.29	5.40	V
	3336	-52.44	-13	-39.44	-67.73	-56.02	1.55	7.28	V
	4168	-54.86	-13	-41.86	-72.32	-59.49	1.86	8.63	V
									V
								V	
								V	
Highest	1688	-34.89	-13	-21.89	-44.48	-36.52	1.00	4.77	H
	2536	-42.57	-13	-29.57	-55.96	-44.55	1.30	5.43	H
	3376	-52.48	-13	-39.48	-68.04	-56.22	1.57	7.45	H
	4224	-55.21	-13	-42.21	-72.96	-59.81	1.89	8.64	H
									H
									H
									H
	1688	-37.79	-13	-24.79	-46.82	-39.42	1.00	4.77	V
	2536	-44.35	-13	-31.35	-57.66	-46.33	1.30	5.43	V
	3376	-55.27	-13	-42.27	-70.47	-59.01	1.57	7.45	V
	4224	-55.62	-13	-42.62	-73.31	-60.22	1.89	8.64	V
									V
								V	
								V	

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



LTE Band 5 / 10MHz / QPSK									
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	-32.77	-13	-19.77	-42.23	-34.53	0.98	4.89	H
	2474	-43.32	-13	-30.32	-56.73	-45.21	1.28	5.32	H
	3296	-49.88	-13	-36.88	-65.9	-53.29	1.54	7.10	H
	4120	-50.95	-13	-37.95	-68.43	-55.59	1.83	8.62	H
									H
									H
									H
	1648	-34.75	-13	-21.75	-43.74	-36.51	0.98	4.89	V
	2474	-46.44	-13	-33.44	-59.63	-48.33	1.28	5.32	V
	3296	-52.61	-13	-39.61	-68.24	-56.02	1.54	7.10	V
	4120	-52.85	-13	-39.85	-70.35	-57.49	1.83	8.62	V
	4992	-51.57	-13	-38.57	-71.93	-56.77	2.33	9.68	V
								V	
								V	
Middle	1664	-35.98	-13	-22.98	-45.46	-37.69	0.98	4.84	H
	2496	-38.57	-13	-25.57	-51.93	-40.52	1.29	5.39	H
	3328	-53.77	-13	-40.77	-69.41	-57.31	1.55	7.24	H
									H
									H
									H
									H
	1664	-35.31	-13	-22.31	-44.16	-37.02	0.98	4.84	V
	2496	-43.27	-13	-30.27	-56.49	-45.22	1.29	5.39	V
	3328	-54.34	-13	-41.34	-69.45	-57.88	1.55	7.24	V
	4160	-54.58	-13	-41.58	-72.02	-59.21	1.85	8.63	V
									V
								V	
								V	
Highest	1680	-33.41	-13	-20.41	-43.01	-35.06	0.99	4.80	H
	2520	-43.62	-13	-30.62	-57.04	-45.59	1.30	5.42	H
	3360	-52.72	-13	-39.72	-68.32	-56.39	1.56	7.38	H
									H
									H
									H
									H
	1680	-36.41	-13	-23.41	-45.17	-38.06	0.99	4.80	V
	2520	-47.95	-13	-34.95	-61.28	-49.92	1.30	5.42	V
	3360	-54.14	-13	-41.14	-69.17	-57.81	1.56	7.38	V
	4200	-55.46	-13	-42.46	-72.78	-60.07	1.88	8.64	V
									V
								V	
								V	

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





LTE Band 7

LTE Band 7 / 5MHz / QPSK									
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	4998	-44.69	-25	-19.69	-64.73	-52.05	2.34	9.70	H
	7500	-43.69	-25	-18.69	-71.84	-53.06	2.43	11.80	H
	10004	-42.61	-25	-17.61	-74.91	-52.11	2.70	12.20	H
									H
									H
									H
									H
	4998	-41.86	-25	-16.86	-62.3	-49.22	2.34	9.70	V
	7500	-39.84	-25	-14.84	-67.6	-49.21	2.43	11.80	V
	10004	-43.52	-25	-18.52	-74.71	-53.02	2.70	12.20	V
									V
	Middle	5064	-47.56	-25	-22.56	-68.04	-54.89	2.37	9.70
7596		-44.98	-25	-19.98	-72.41	-54.44	2.40	11.86	H
10134		-42.33	-25	-17.33	-75.1	-51.89	2.70	12.25	H
									H
									H
									H
									H
5064		-43.45	-25	-18.45	-64.2	-50.78	2.37	9.70	V
7596		-41.82	-25	-16.82	-69.35	-51.28	2.40	11.86	V
10134		-43.41	-25	-18.41	-75.14	-52.97	2.70	12.25	V
									V
Highest		5130	-45.93	-25	-20.93	-66.49	-53.22	2.41	9.70
	7698	-44.53	-25	-19.53	-71.91	-54.08	2.37	11.92	H
	10260	-42.27	-25	-17.27	-75.09	-51.88	2.69	12.30	H
									H
									H
									H
									H
	5130	-38.99	-25	-13.99	-59.81	-46.28	2.41	9.70	V
	7698	-43.53	-25	-18.53	-70.77	-53.08	2.37	11.92	V
	10260	-43.27	-25	-18.27	-75.25	-52.88	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									
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	4998	-47.66	-25	-22.66	-67.67	-55.02	2.34	9.70	H
	7500	-43.51	-25	-18.51	-71.71	-52.88	2.43	11.80	H
	10002	-42.56	-25	-17.56	-74.85	-52.06	2.70	12.20	H
									H
									H
									H
									H
	4998	-42.86	-25	-17.86	-63.28	-50.22	2.34	9.70	V
	7500	-39.16	-25	-14.16	-67.01	-48.53	2.43	11.80	V
	10002	-43.72	-25	-18.72	-74.81	-53.22	2.70	12.20	V
									V
	Middle	5058	-66.22	-25	-41.22	-67.17	-73.55	2.37	9.70
7590		-46.43	-25	-21.43	-73.55	-55.88	2.40	11.85	H
10122		-42.33	-25	-17.33	-74.84	-51.88	2.70	12.25	H
									H
									H
									H
									H
5058		-41.89	-25	-16.89	-62.46	-49.22	2.37	9.70	V
7590		-42.97	-25	-17.97	-70.28	-52.42	2.40	11.85	V
10122		-43.53	-25	-18.53	-75.13	-53.08	2.70	12.25	V
									V
Highest		5118	-46.81	-25	-21.81	-67.24	-54.11	2.40	9.70
	7680	-45.79	-25	-20.79	-73.15	-55.33	2.37	11.91	H
	10242	-42.46	-25	-17.46	-75.26	-52.06	2.69	12.30	H
									H
									H
									H
									H
	5118	-40.36	-25	-15.36	-61.22	-47.66	2.40	9.70	V
	7680	-42.34	-25	-17.34	-69.62	-51.88	2.37	11.91	V
	10242	-43.46	-25	-18.46	-75.41	-53.06	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									
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	-47.22	-25	-22.22	-67.55	-54.58	2.34	9.70	H
	7500	-43.29	-25	-18.29	-71.46	-52.66	2.43	11.80	H
	10002	-42.52	-25	-17.52	-74.77	-52.02	2.70	12.20	H
									H
									H
									H
									H
	5004	-40.97	-25	-15.97	-61.4	-48.33	2.34	9.70	V
	7500	-39.51	-25	-14.51	-67.16	-48.88	2.43	11.80	V
	10002	-43.86	-25	-18.86	-75.02	-53.36	2.70	12.20	V
									V
	Middle	5058	-47.44	-25	-22.44	-67.71	-54.77	2.37	9.70
7584		-43.77	-25	-18.77	-71.26	-53.22	2.40	11.85	H
10113		-42.47	-25	-17.47	-74.97	-52.02	2.70	12.25	H
									H
									H
									H
									H
5058		-41.89	-25	-16.89	-62.28	-49.22	2.37	9.70	V
7584		-42.61	-25	-17.61	-69.81	-52.06	2.40	11.85	V
10113		-43.67	-25	-18.67	-75.18	-53.22	2.70	12.25	V
									V
Highest		5112	-48.58	-25	-23.58	-68.99	-55.88	2.40	9.70
	7668	-44.25	-25	-19.25	-71.56	-53.78	2.38	11.90	H
	10224	-42.63	-25	-17.63	-75.51	-52.22	2.69	12.29	H
									H
									H
									H
									H
	5112	-41.58	-25	-16.58	-62.2	-48.88	2.40	9.70	V
	7668	-42.26	-25	-17.26	-69.47	-51.79	2.38	11.90	V
	10224	-43.43	-25	-18.43	-75.22	-53.02	2.69	12.29	V
									V

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



LTE Band 7 / 20MHz / QPSK									
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	-47.66	-25	-22.66	-67.8	-55.02	2.34	9.70	H
	7506	-33.51	-25	-8.51	-61.56	-42.89	2.43	11.80	H
	10002	-42.66	-25	-17.66	-74.93	-52.16	2.70	12.20	H
									H
									H
									H
									H
	5004	-44.69	-25	-19.69	-65.04	-52.05	2.34	9.70	V
	7506	-29.95	-25	-4.95	-57.76	-39.33	2.43	11.80	V
	10002	-43.72	-25	-18.72	-74.88	-53.22	2.70	12.20	V
									V
	Middle	5052	-45.89	-25	-20.89	-66.19	-53.22	2.37	9.70
7578		-46.85	-25	-21.85	-74.28	-56.29	2.40	11.85	H
10104		-42.49	-25	-17.49	-74.89	-52.04	2.70	12.24	H
									H
									H
									H
									H
5052		-42.03	-25	-17.03	-62.57	-49.36	2.37	9.70	V
7578		-43.82	-25	-18.82	-71.28	-53.26	2.40	11.85	V
10104		-43.61	-25	-18.61	-75.12	-53.16	2.70	12.24	V
									V
Highest		5100	-47.47	-25	-22.47	-67.67	-54.78	2.39	9.70
	7656	-44.71	-25	-19.71	-72.04	-54.22	2.38	11.89	H
	10206	-42.29	-25	-17.29	-75.03	-51.88	2.70	12.28	H
									H
									H
									H
									H
	5100	-43.02	-25	-18.02	-63.64	-50.33	2.39	9.70	V
	7656	-43.37	-25	-18.37	-70.47	-52.88	2.38	11.89	V
	10206	-43.43	-25	-18.43	-75.33	-53.02	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

LTE Band 12 / 1.4MHz / QPSK									
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	-43.55	-13.00	-30.55	-53.46	-45.21	0.87	4.68	H
	2096	-37.44	-13.00	-24.44	-50.82	-38.31	1.16	4.19	H
	2800	-43.40	-13.00	-30.40	-58.54	-45.51	1.38	5.64	H
									H
									H
									H
									H
	1400	-45.09	-13.00	-32.09	-53.50	-46.75	0.87	4.68	V
	2096	-39.44	-13.00	-26.44	-52.90	-40.31	1.16	4.19	V
	2800	-48.25	-13.00	-35.25	-62.91	-50.36	1.38	5.64	V
									V
									V
								V	
Middle	1416	-43.96	-13.00	-30.96	-53.82	-45.71	0.87	4.78	H
	2120	-33.76	-13.00	-20.76	-47.49	-34.70	1.17	4.26	H
	2824	-45.00	-13.00	-32.00	-60.24	-47.12	1.39	5.66	H
	3536	-55.72	-13.00	-42.72	-72.72	-60.00	1.62	8.04	H
									H
									H
									H
	1416	-42.61	-13.00	-29.61	-51.04	-44.36	0.87	4.78	V
	2120	-38.81	-13.00	-25.81	-52.56	-39.75	1.17	4.26	V
	2824	-44.73	-13.00	-31.73	-59.42	-46.85	1.39	5.66	V
	3536	-54.83	-13.00	-41.83	-71.51	-59.11	1.62	8.04	V
									V
								V	
								V	
Highest	1432	-49.76	-13.00	-36.76	-59.57	-51.61	0.88	4.88	H
	2144	-40.31	-13.00	-27.31	-53.95	-41.31	1.18	4.33	H
	2856	-51.22	-13.00	-38.22	-66.60	-53.35	1.40	5.68	H
									H
									H
									H
									H
	1432	-51.06	-13.00	-38.06	-59.46	-52.91	0.88	4.88	V
	2144	-37.61	-13.00	-24.61	-52.05	-38.61	1.18	4.33	V
	2856	-51.03	-13.00	-38.03	-66.02	-53.16	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 / 3MHz / QPSK									
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	-43.39	-13.00	-30.39	-53.24	-45.05	0.87	4.68	H
	2096	-40.13	-13.00	-27.13	-53.42	-41.00	1.16	4.19	H
	2800	-44.70	-13.00	-31.70	-59.86	-46.81	1.38	5.64	H
									H
									H
									H
									H
	1400	-46.19	-13.00	-33.19	-54.58	-47.85	0.87	4.68	V
	2096	-40.81	-13.00	-27.81	-54.42	-41.68	1.16	4.19	V
	2800	-49.74	-13.00	-36.74	-64.28	-51.85	1.38	5.64	V
									V
	Middle	1408	-44.60	-13.00	-31.60	-54.50	-46.31	0.87	4.73
2120		-39.92	-13.00	-26.92	-53.62	-40.86	1.17	4.26	H
2824		-45.29	-13.00	-32.29	-60.52	-47.41	1.39	5.66	H
									H
									H
									H
									H
1408		-45.40	-13.00	-32.40	-53.77	-47.11	0.87	4.73	V
2120		-40.27	-13.00	-27.27	-54.05	-41.21	1.17	4.26	V
2824		-47.39	-13.00	-34.39	-62.09	-49.51	1.39	5.66	V
									V
Highest		1424	-49.51	-13.00	-36.51	-59.31	-51.31	0.88	4.83
	2136	-39.78	-13.00	-26.78	-53.76	-40.76	1.18	4.31	H
	2856	-47.72	-13.00	-34.72	-63.00	-49.85	1.40	5.68	H
									H
									H
									H
									H
	1424	-39.56	-13.00	-26.56	-47.99	-41.36	0.88	4.83	V
	2136	-40.43	-13.00	-27.43	-54.47	-41.41	1.18	4.31	V
	2856	-45.68	-13.00	-32.68	-60.65	-47.81	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									
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	-42.85	-13.00	-29.85	-52.68	-44.51	0.87	4.68	H
	2096	-40.26	-13.00	-27.26	-53.56	-41.13	1.16	4.19	H
	2800	-43.02	-13.00	-30.02	-58.15	-45.13	1.38	5.64	H
									H
									H
									H
									H
	1400	-43.55	-13.00	-30.55	-51.97	-45.21	0.87	4.68	V
	2096	-40.34	-13.00	-27.34	-53.85	-41.21	1.16	4.19	V
	2800	-48.35	-13.00	-35.35	-62.92	-50.46	1.38	5.64	V
									V
	Middle	1408	-44.11	-13.00	-31.11	-53.98	-45.82	0.87	4.73
2112		-40.30	-13.00	-27.30	-53.80	-41.22	1.17	4.24	H
2824		-45.43	-13.00	-32.43	-60.65	-47.55	1.39	5.66	H
									H
									H
									H
									H
1408		-44.80	-13.00	-31.80	-53.27	-46.51	0.87	4.73	V
2112		-40.98	-13.00	-27.98	-54.71	-41.90	1.17	4.24	V
2824		-48.83	-13.00	-35.83	-63.53	-50.95	1.39	5.66	V
									V
Highest		1424	-49.11	-13.00	-36.11	-58.94	-50.91	0.88	4.83
	2136	-43.38	-13.00	-30.38	-57.31	-44.36	1.18	4.31	H
	2848	-45.77	-13.00	-32.77	-61.08	-47.90	1.40	5.68	H
	3560	-56.30	-13.00	-43.30	-73.30	-60.60	1.62	8.07	H
									H
									H
									H
	1424	-46.41	-13.00	-33.41	-54.90	-48.21	0.88	4.83	V
	2136	-42.63	-13.00	-29.63	-56.72	-43.61	1.18	4.31	V
	2848	-49.10	-13.00	-36.10	-63.97	-51.23	1.40	5.68	V
	3560	-54.50	-13.00	-41.50	-71.15	-58.80	1.62	8.07	V
									V
								V	
								V	

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



LTE Band 12 / 10MHz / QPSK									
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	-44.45	-13.00	-31.45	-54.35	-46.11	0.87	4.68	H
	2096	-43.44	-13.00	-30.44	-56.93	-44.31	1.16	4.19	H
	2800	-48.20	-13.00	-35.20	-63.49	-50.31	1.38	5.64	H
									H
									H
									H
									H
	1400	-43.32	-13.00	-30.32	-51.68	-44.98	0.87	4.68	V
	2096	-43.54	-13.00	-30.54	-56.98	-44.41	1.16	4.19	V
	2800	-49.28	-13.00	-36.28	-63.87	-51.39	1.38	5.64	V
									V
	Middle	1408	-44.95	-13.00	-31.95	-54.80	-46.66	0.87	4.73
2112		-33.49	-13.00	-20.49	-47.07	-34.41	1.17	4.24	H
2808		-43.12	-13.00	-30.12	-58.30	-45.23	1.39	5.65	H
									H
									H
									H
									H
1408		-43.74	-13.00	-30.74	-52.05	-45.45	0.87	4.73	V
2112		-40.86	-13.00	-27.86	-54.64	-41.78	1.17	4.24	V
2808		-46.20	-13.00	-33.20	-60.91	-48.31	1.39	5.65	V
									V
Highest		1416	-43.46	-13.00	-30.46	-53.34	-45.21	0.87	4.78
	2120	-35.27	-13.00	-22.27	-49.04	-36.21	1.17	4.26	H
	2824	-49.88	-13.00	-36.88	-65.08	-52.00	1.39	5.66	H
									H
									H
									H
									H
	1416	-45.86	-13.00	-32.86	-54.22	-47.61	0.87	4.78	V
	2120	-35.37	-13.00	-22.37	-49.22	-36.31	1.17	4.26	V
	2824	-48.29	-13.00	-35.29	-63.00	-50.41	1.39	5.66	V
									V
									V
								V	

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





LTE Band 13

LTE Band 13 / 5MHz / QPSK									
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	1560	-44.32	-42.15	-2.17	-53.93	-46.36	0.94	5.13	H
	2336	-56.73	-13	-43.73	-70.52	-58.25	1.24	4.91	H
	3120	-55.23	-13	-42.23	-71.74	-57.92	1.49	6.33	H
									H
									H
									H
									H
	1560	-45.58	-42.15	-3.43	-54.56	-47.62	0.94	5.13	V
	2336	-56.26	-13	-43.26	-69.30	-57.78	1.24	4.91	V
	3120	-55.35	-13	-42.35	-71.99	-58.04	1.49	6.33	V
									V
	Middle	1568	-46.53	-42.15	-4.38	-56.11	-48.55	0.94	5.11
2352		-49.12	-13	-36.12	-57.98	-52.35	1.53	6.91	H
3136		-56.06	-13	-43.06	-72.69	-58.82	1.49	6.40	H
									H
									H
									H
									H
1568		-46.09	-42.15	-3.94	-55.09	-48.11	0.94	5.11	V
2352		-57.95	-13	-44.95	-71.83	-59.51	1.24	4.96	V
3136		-55.86	-13	-42.86	-72.58	-58.62	1.49	6.40	V
									V
Highest		1568	-44.26	-42.15	-2.11	-53.87	-46.28	0.94	5.11
	2352	-58.04	-13	-45.04	-71.68	-59.60	1.24	4.96	H
	3136	-55.89	-13	-42.89	-72.52	-58.65	1.49	6.40	H
									H
									H
									H
									H
	1568	-46.29	-42.15	-4.14	-55.29	-48.31	0.94	5.11	V
	2352	-58.09	-13	-45.09	-71.97	-59.65	1.24	4.96	V
	3136	-55.80	-13	-42.80	-72.52	-58.56	1.49	6.40	V
									V
									V
								V	
								V	

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



LTE Band 13 / 10MHz / QPSK									
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)
Middle	1564	-43.52	-42.15	-1.37	-53.16	-45.55	0.94	5.12	H
	2344	-54.64	-13	-41.64	-66.41	-56.18	1.24	4.93	H
	3128	-56.15	-13	-43.15	-72.61	-58.88	1.49	6.36	H
									H
									H
									H
									H
	1560	-46.56	-42.15	-4.41	-55.49	-48.6	0.94	5.13	V
	2346	-51.63	-13	-38.63	-65.5	-53.18	1.24	4.94	V
	3128	-55.72	-13	-42.72	-72.32	-58.45	1.49	6.36	V
									V
									V
									V
									V

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



LTE Band 41

LTE Band 41 / 5MHz / QPSK									
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	4992	-29.47	-25	-4.47	-49.82	-36.82	2.33	9.68	H
	7488	-41.01	-25	-16.01	-69.38	-50.35	2.43	11.78	H
	9990	-42.50	-25	-17.50	-74.88	-52.01	2.69	12.21	H
									H
									H
									H
									H
	4992	-33.25	-25	-8.25	-53.8	-40.6	2.33	9.68	V
	7488	-45.49	-25	-20.49	-73.45	-54.83	2.43	11.78	V
	9988	-43.47	-25	-18.47	-74.67	-52.98	2.69	12.21	V
									V
	Middle	5184	-32.36	-25	-7.36	-53.1	-39.62	2.44	9.70
7770		-41.27	-25	-16.27	-68.77	-50.89	2.34	11.96	H
10368		-41.97	-25	-16.97	-75.32	-51.62	2.69	12.35	H
									H
									H
									H
									H
5184		-35.02	-25	-10.02	-56.08	-42.28	2.44	9.70	V
7770		-45.84	-25	-20.84	-73.08	-55.46	2.34	11.96	V
10368		-42.95	-25	-17.95	-75.62	-52.6	2.69	12.35	V
									V
Highest		5370	-32.33	-25	-7.33	-53.22	-39.48	2.55	9.70
	8058	-45.24	-25	-20.24	-73.46	-55.11	2.28	12.15	H
	10746	-42.32	-25	-17.32	-76.19	-52.08	2.69	12.45	H
									H
									H
									H
									H
	5370	-35.98	-25	-10.98	-57.11	-43.13	2.55	9.70	V
	8058	-46.08	-25	-21.08	-73.83	-55.95	2.28	12.15	V
	10746	-42.42	-25	-17.42	-76.07	-52.18	2.69	12.45	V
									V
									V
								V	

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



LTE Band 41 / 10MHz / QPSK									
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	4992	-30.03	-25	-5.03	-50.39	-37.38	2.33	9.68	H
	7488	-40.31	-25	-15.31	-68.68	-49.65	2.43	11.78	H
	9984	-42.59	-25	-17.59	-74.97	-52.11	2.69	12.21	H
									H
									H
									H
									H
	4992	-34.15	-25	-9.15	-54.69	-41.5	2.33	9.68	V
	7488	-42.29	-25	-17.29	-70.25	-51.63	2.43	11.78	V
	9984	-43.63	-25	-18.63	-74.84	-53.15	2.69	12.21	V
									V
	Middle	5178	-31.75	-25	-6.75	-52.46	-39.01	2.44	9.70
7764		-41.34	-25	-16.34	-68.84	-50.95	2.34	11.96	H
10356		-42.68	-25	-17.68	-75.97	-52.33	2.69	12.34	H
									H
									H
									H
									H
5178		-34.46	-25	-9.46	-55.5	-41.72	2.44	9.70	V
7764		-43.93	-25	-18.93	-71.22	-53.54	2.34	11.96	V
10356		-43.06	-25	-18.06	-75.78	-52.71	2.69	12.34	V
									V
Highest		5358	-30.82	-25	-5.82	-51.63	-37.98	2.54	9.70
	8040	-43.45	-25	-18.45	-71.72	-53.31	2.28	12.13	H
	10722	-42.33	-25	-17.33	-76.17	-52.08	2.69	12.44	H
									H
									H
									H
									H
	5358	-35.55	-25	-10.55	-56.6	-42.71	2.54	9.70	V
	8040	-44.50	-25	-19.50	-72.31	-54.36	2.28	12.13	V
	10722	-42.46	-25	-17.46	-76.11	-52.21	2.69	12.44	V
									V
									V
								V	
								V	

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



LTE Band 41 / 15MHz / QPSK									
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	4992	-29.44	-25	-4.44	-49.77	-36.79	2.33	9.68	H
	7488	-41.51	-25	-16.51	-69.87	-50.85	2.43	11.78	H
	9986	-42.39	-25	-17.39	-74.78	-51.9	2.69	12.21	H
									H
									H
									H
									H
	4992	-33.51	-25	-8.51	-51.07	-40.86	2.33	9.68	V
	7488	-44.67	-25	-19.67	-72.59	-54.01	2.43	11.78	V
	9984	-43.50	-25	-18.50	-74.71	-53.02	2.69	12.21	V
									V
	Middle	5172	-31.61	-25	-6.61	-52.27	-38.87	2.44	9.70
7758		-46.27	-25	-21.27	-73.76	-55.88	2.35	11.95	H
10345		-42.16	-25	-17.16	-75.45	-51.8	2.69	12.34	H
									H
									H
									H
									H
5172		-35.76	-25	-10.76	-56.8	-43.02	2.44	9.70	V
7758		-47.67	-25	-22.67	-74.96	-57.28	2.35	11.95	V
10345		-42.82	-25	-17.82	-75.44	-52.46	2.69	12.34	V
									V
Highest		5352	-32.46	-25	-7.46	-53.26	-39.62	2.54	9.70
	8028	-44.12	-25	-19.12	-72.46	-53.97	2.27	12.12	H
	10704	-42.11	-25	-17.11	-75.96	-51.86	2.69	12.44	H
									H
									H
									H
									H
	5352	-36.19	-25	-11.19	-57.23	-43.35	2.54	9.70	V
	8028	-45.50	-25	-20.50	-73.37	-55.35	2.27	12.12	V
	10704	-42.37	-25	-17.37	-75.97	-52.12	2.69	12.44	V
									V
									V
								V	

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



LTE Band 41 / 20MHz / QPSK									
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	4992	-32.03	-25	-7.03	-56.36	-39.38	2.33	9.68	H
	7494	-40.95	-25	-15.95	-69.32	-50.31	2.43	11.79	H
	9990	-42.56	-25	-17.56	-74.94	-52.07	2.69	12.21	H
									H
									H
									H
									H
	4992	-35.75	-25	-10.75	-56.3	-43.1	2.33	9.68	V
	7494	-44.34	-25	-19.34	-72.29	-53.7	2.43	11.79	V
	9990	-43.67	-25	-18.67	-74.87	-53.18	2.69	12.21	V
									V
	Middle	5166	-34.93	-25	-9.93	-53.94	-42.2	2.43	9.70
7752		-43.00	-25	-18.00	-69.19	-52.6	2.35	11.95	H
10332		-43.96	-25	-18.96	-75.95	-53.6	2.69	12.33	H
									H
									H
									H
									H
5166		-40.93	-25	-15.93	-60.5	-48.2	2.43	9.70	V
7752		-44.80	-25	-19.80	-70.37	-54.4	2.35	11.95	V
10332		-45.36	-25	-20.36	-76.07	-55	2.69	12.33	V
									V
Highest		5340	-33.44	-25	-8.44	-54.17	-40.61	2.53	9.70
	8016	-40.54	-25	-15.54	-68.87	-50.38	2.27	12.11	H
	10683	-42.31	-25	-17.31	-76.15	-52.06	2.69	12.44	H
									H
									H
									H
									H
	5340	-36.67	-25	-11.67	-57.64	-43.84	2.53	9.70	V
	8016	-46.44	-25	-21.44	-74.35	-56.28	2.27	12.11	V
	10683	-42.35	-25	-17.35	-76.02	-52.1	2.69	12.44	V
									V
									V
								V	

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



LTE Band 26

LTE Band 26 / 1.4MHz / QPSK									
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	-35.75	-13	-22.75	-44.84	-37.51	0.98	4.89	H
	2472	-36.55	-13	-23.55	-49.7	-38.43	1.28	5.32	H
	3296	-54.78	-13	-41.78	-70.19	-58.19	1.54	7.10	H
	4120	-52.64	-13	-39.64	-70.41	-57.28	1.83	8.62	H
									H
									H
									H
	1648	-38.14	-13	-25.14	-47.28	-39.9	0.98	4.89	V
	2472	-41.16	-13	-28.16	-55.1	-43.04	1.28	5.32	V
	3296	-55.45	-13	-42.45	-71.26	-58.86	1.54	7.10	V
	4120	-55.63	-13	-42.63	-73.46	-60.27	1.83	8.62	V
									V
									V
									V
Middle	1672	-38.57	-13	-25.57	-47.73	-40.25	0.99	4.82	H
	2504	-39.15	-13	-26.15	-53.3	-41.11	1.29	5.40	H
	3344	-56.82	-13	-43.82	-72.61	-60.43	1.56	7.31	H
	4176	-55.57	-13	-42.57	-73.12	-60.19	1.86	8.64	H
									H
									H
									H
	1672	-38.85	-13	-25.85	1672	-40.53	0.99	4.82	V
	2504	-36.13	-13	-23.13	2504	-38.09	1.29	5.40	V
	3344	-56.61	-13	-43.61	3344	-60.22	1.56	7.31	V
	4176	-54.08	-13	-41.08	4176	-58.7	1.86	8.64	V
									V
									V
									V
								V	
Highest	1696	-38.92	-13	-25.92	-47.97	-40.52	1.00	4.75	H
	2511	-38.40	-13	-25.40	-52.09	-40.36	1.29	5.41	H
	3392	-55.28	-13	-42.28	-71.12	-59.08	1.57	7.52	H
									H
									H
									H
									H
	1696	-40.65	-13	-27.65	-49.49	-42.25	1.00	4.75	V
	2511	-42.05	-13	-29.05	-55.86	-44.01	1.29	5.41	V
	3392	-57.29	-13	-44.29	-73.15	-61.09	1.57	7.52	V
									V
									V
									V
									V
								V	

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



LTE Band 26 / 3MHz / QPSK									
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	-35.75	-13	-22.75	-45.38	-37.51	0.98	4.89	H
	2472	-37.73	-13	-24.73	-51.26	-39.61	1.28	5.32	H
	3296	-54.68	-13	-41.68	-70.3	-58.09	1.54	7.10	H
	4120	-52.80	-13	-39.80	-70.6	-57.44	1.83	8.62	H
									H
									H
									H
	1648	-38.30	-13	-25.30	-47.17	-40.06	0.98	4.89	V
	2472	-41.63	-13	-28.63	-54.87	-43.51	1.28	5.32	V
	3296	-55.87	-13	-42.87	-70.98	-59.28	1.54	7.10	V
	4120	-52.70	-13	-39.70	-69.86	-57.34	1.83	8.62	V
									V
								V	
								V	
Middle	1672	-32.83	-13	-19.83	-42.68	-34.51	0.99	4.82	H
	2504	-37.09	-13	-24.09	-51.24	-39.05	1.29	5.40	H
	3344	-53.67	-13	-40.67	-68.73	-57.28	1.56	7.31	H
	4176	-53.80	-13	-40.80	-71.53	-58.42	1.86	8.64	H
									H
									H
									H
	1672	-36.56	-13	-23.56	-45.75	-38.24	0.99	4.82	V
	2504	-38.17	-13	-25.17	-52.07	-40.13	1.29	5.40	V
	3344	-53.27	-13	-40.27	-69.1	-56.88	1.56	7.31	V
	4176	-55.99	-13	-42.99	-72.66	-60.61	1.86	8.64	V
									V
								V	
								V	
Highest	1688	-37.62	-13	-24.62	-46.76	-39.25	1.00	4.77	H
	2536	-38.14	-13	-25.14	-51.58	-40.12	1.30	5.43	H
	3384	-55.07	-13	-42.07	-71.5	-58.84	1.57	7.49	H
	4232	-56.55	-13	-43.55	-74.07	-61.15	1.89	8.65	H
									H
									H
									H
	1688	-39.55	-13	-26.55	-48.68	-41.18	1.00	4.77	V
	2536	-37.06	-13	-24.06	-51.21	-39.04	1.30	5.43	V
	3384	-56.34	-13	-43.34	-72.22	-60.11	1.57	7.49	V
	4232	-55.23	-13	-42.23	-73.29	-59.83	1.89	8.65	V
									V
								V	
								V	

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





LTE Band 26 / 5MHz / QPSK									
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	-33.85	-13	-20.85	-42.76	-35.61	0.98	4.89	H
	2472	-42.40	-13	-29.40	-55.84	-44.28	1.28	5.32	H
	3296	-50.25	-13	-37.25	-66.54	-53.66	1.54	7.10	H
	4120	-52.29	-13	-39.29	-69.89	-56.93	1.83	8.62	H
									H
									H
									H
	1648	-35.86	-13	-22.86	-44.54	-37.62	0.98	4.89	V
	2472	-45.69	-13	-32.69	-58.65	-47.57	1.28	5.32	V
	3296	-52.93	-13	-39.93	-68.15	-56.34	1.54	7.10	V
	4120	-53.24	-13	-40.24	-70.98	-57.88	1.83	8.62	V
									V
									V
									V
Middle	1664	-34.58	-13	-21.58	-43.79	-36.29	0.98	4.84	H
	2504	-42.61	-13	-29.61	-55.72	-44.57	1.29	5.40	H
	3336	-53.04	-13	-40.04	-69.25	-56.62	1.55	7.28	H
	4168	-54.43	-13	-41.43	-71.77	-59.06	1.86	8.63	H
									H
									H
									H
	1664	-36.54	-13	-23.54	-45.21	-38.25	0.98	4.84	V
	2504	-44.52	-13	-31.52	-57.85	-46.48	1.29	5.40	V
	3336	-53.51	-13	-40.51	-69.29	-57.09	1.55	7.28	V
	4168	-55.70	-13	-42.70	-72.72	-60.33	1.86	8.63	V
									V
									V
									V
Highest	1688	-35.62	-13	-22.62	-45.35	-37.25	1.00	4.77	H
	2536	-42.11	-13	-29.11	-56.27	-44.09	1.30	5.43	H
	3376	-54.98	-13	-41.98	-69.8	-58.72	1.57	7.45	H
	4224	-55.99	-13	-42.99	-73.2	-60.59	1.89	8.64	H
									H
									H
									H
	1688	-37.53	-13	-24.53	-47.1	-39.16	1.00	4.77	V
	2536	-44.04	-13	-31.04	-58.4	-46.02	1.30	5.43	V
	3376	-55.57	-13	-42.57	-71.37	-59.31	1.57	7.45	V
	4224	-55.81	-13	-42.81	-73.18	-60.41	1.89	8.64	V
									V
									V
									V

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



LTE Band 26 / 10MHz / QPSK									
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	-37.49	-13	-24.49	-46.77	-39.25	0.98	4.89	H
	2472	-40.45	-13	-27.45	-53.71	-42.33	1.28	5.32	H
	3296	-54.08	-13	-41.08	-70.41	-57.49	1.54	7.10	H
	4120	-53.07	-13	-40.07	-71.68	-57.71	1.83	8.62	H
									H
									H
									H
	1648	-38.75	-13	-25.75	-47.4	-40.51	0.98	4.89	V
	2472	-45.74	-13	-32.74	-58.35	-47.62	1.28	5.32	V
	3296	-54.18	-13	-41.18	-70.59	-57.59	1.54	7.10	V
	4120	-55.17	-13	-42.17	-73.49	-59.81	1.83	8.62	V
									V
									V
									V
								V	
Middle	1664	-37.45	-13	-24.45	-46.87	-39.16	0.98	4.84	H
	2496	-37.53	-13	-24.53	-51.35	-39.48	1.29	5.39	H
	3328	-56.63	-13	-43.63	-72.25	-60.17	1.55	7.24	H
	4160	-54.26	-13	-41.26	-73.3	-58.89	1.85	8.63	H
									H
									H
									H
	1664	-35.37	-13	-22.37	-45	-37.08	0.98	4.84	V
	2496	-41.99	-13	-28.99	-54.74	-43.94	1.29	5.39	V
	3328	-54.83	-13	-41.83	-69.95	-58.37	1.55	7.24	V
	4160	-55.10	-13	-42.10	-72.6	-59.73	1.85	8.63	V
									V
									V
									V
								V	
Highest	1680	-38.73	-13	-25.73	-47.88	-40.38	0.99	4.80	H
	2520	-39.47	-13	-26.47	-53.47	-41.44	1.30	5.42	H
	3360	-54.29	-13	-41.29	-69.84	-57.96	1.56	7.38	H
	4200	-55.44	-13	-42.44	-73.1	-60.05	1.88	8.64	H
									H
									H
									H
	1680	-36.60	-13	-23.60	-45.37	-38.25	0.99	4.80	V
	2520	-44.42	-13	-31.42	-58.33	-46.39	1.30	5.42	V
	3360	-54.84	-13	-41.84	-69.35	-58.51	1.56	7.38	V
	4200	-55.33	-13	-42.33	-73.52	-59.94	1.88	8.64	V
									V
									V
									V
								V	

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



LTE Band 26 / 15MHz / QPSK									
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	-32.83	-13	-19.83	-41.94	-34.59	0.98	4.89	H
	2472	-42.13	-13	-29.13	-56.22	-44.01	1.28	5.32	H
	3296	-49.83	-13	-36.83	-65.99	-53.24	1.54	7.10	H
	4120	-52.24	-13	-39.24	-69.89	-56.88	1.83	8.62	H
									H
									H
									H
	1648	-32.82	-13	-19.82	-41.94	-34.58	0.98	4.89	V
	2472	-42.49	-13	-29.49	-56.22	-44.37	1.28	5.32	V
	3296	-49.68	-13	-36.68	-65.99	-53.09	1.54	7.10	V
	4120	-52.97	-13	-39.97	-69.89	-57.61	1.83	8.62	V
									V
									V
									V
Middle	1656	-32.36	-13	-19.36	-42.23	-34.09	0.98	4.86	H
	2488	-41.95	-13	-28.95	-55.34	-43.88	1.29	5.36	H
	3320	-51.30	-13	-38.30	-67.36	-54.81	1.55	7.21	H
	4152	-52.63	-13	-39.63	-70.64	-57.26	1.85	8.63	H
									H
									H
									H
	1656	-36.86	-13	-23.86	-45.25	-38.59	0.98	4.86	V
	2488	-45.31	-13	-32.31	-58.7	-47.24	1.29	5.36	V
	3320	-53.57	-13	-40.57	-68.78	-57.08	1.55	7.21	V
	4152	-54.53	-13	-41.53	-71.89	-59.16	1.85	8.63	V
									V
									V
									V
Highest	1672	-33.54	-13	-20.54	-43.18	-35.22	0.99	4.82	H
	2504	-40.57	-13	-27.57	-54.02	-42.53	1.29	5.40	H
	3336	-52.23	-13	-39.23	-68.47	-55.81	1.55	7.28	H
	4176	-53.54	-13	-40.54	-71.42	-58.16	1.86	8.64	H
									H
									H
									H
	1672	-35.58	-13	-22.58	-44.46	-37.26	0.99	4.82	V
	2504	-43.72	-13	-30.72	-56.77	-45.68	1.29	5.40	V
	3336	-53.51	-13	-40.51	-68.62	-57.09	1.55	7.28	V
	4176	-55.49	-13	-42.49	-72.89	-60.11	1.86	8.64	V
									V
									V
									V

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