FCC RF Test Report

APPLICANT	:	Motorola Mobility LLC
EQUIPMENT	:	Mobile Cellular Phone
BRAND NAME	:	Motorola
MODEL NAME	:	XT1944-3, XT1944-4
FCC ID	:	IHDT56XF4
STANDARD	:	47 CFR Part 2, 22(H), 24(E), 27(L), 27(M)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Dec. 20, 2017 and completely tested on Jan. 09, 2018. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI/TIA-603-E 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

James Huang

NVLAP®
TESTING
NVLAP LAB CODE 600155-0

Approved by: James Huang / Manager

Sporton International (Kunshan) Inc.
No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335
China

TABLE OF CONTENTS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG7D2007B	Rev. 01	Initial issue of report	Feb. 08, 2018

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)	ERP < 7 Watt	PASS	-
	§24.232(c) §27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 2)(Band 7)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt	PASS	-
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 19.12 dB at 5061.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	< $55+10\log_{10}$(P[Watts])		

1 General Description

1.1 Applicant

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT1944-3, XT1944-4
FCC ID	IHDT56XF4
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/DC-HSDPA/ HSPA+ (16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth v3.0+EDR/ Bluetooth v4.0LE/ Bluetooth v4.1LE/ Bluetooth v4.2LE
IMEI Code	Radiation: 354123090006794/354123090006802
HW Version	DVT1B
SW Version	nora_row_n-userdebug 8.0.0 OPP27.60 222 intcfg,test-keys
EUT Stage	Identical Prototype

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. There are two types of EUT, the only difference between two samples is SIM slot: sample 1(Model: XT1944-4) is dual SIM slot, sample 2(Model: XT1944-3) is single SIM slot. Based on the similarity between two samples, we only choose sample 1 to perform RF test.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.63 dBm LTE Band 4 : 23.19 dBm LTE Band 5 : 23.45 dBm LTE Band 7 : 23.06 dBm
Antenna Gain	LTE Band 2 : -1.25 dBi LTE Band 4 : -2.35 dBi LTE Band 5 : -3.05 dBi LTE Band 7 : -1.65 dBi
Type of Modulation	QPSK / 16QAM

1.5 Specification of Accessory

Specification of Accessory				
AC Adapter 1(US)	**Brand Name**	Motorola (Acbel)	**Model Name**	SPN5945A C-P35
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 1(EU)	**Brand Name**	Motorola (Acbel)	**Model Name**	SPN5944A C-P36
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 1(UK)	**Brand Name**	Motorola (Acbel)	**Model Name**	SPN5940A C-P37
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 1(IN)	**Brand Name**	Motorola (Acbel)	**Model Name**	SA18C19493 C-P49
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 1(AU)	**Brand Name**	Motorola (Acbel)	**Model Name**	SPN5953A C-P48
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 1(AR)	**Brand Name**	Motorola (Acbel)	**Model Name**	SPN5942A C-P47
	Power Rating	I/P: 100-240 Vac, 500mA, O/P: 5.2Vdc,2000mA		
AC Adapter 2(US)	**Brand Name**	Motorola (Salom)	**Model Name**	SSW-2919UMTJ C-P35 SPN5945A
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 2(EU)	**Brand Name**	Motorola (Salom)	**Model Name**	SSW-2919EU C-P36 SPN5944A
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 2(UK)	**Brand Name**	Motorola (Salom)	**Model Name**	SSW-2919UK C-P37 SPN5940A
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 2(AU)	**Brand Name**	Motorola (Salom)	**Model Name**	SSW-2919AU C-P48 SPN5953A
	Power Rating	I/P: 100-240 Vac, 300mA, O/P: 5.2Vdc,2000mA		
AC Adapter 2(AR)	**Brand Name**	Motorola (Salom)	**Model Name**	SSW-2919AR C-P47 SPN5955A
	Power Rating	I/P: 100-240 Vac, 500mA, O/P: 5.2Vdc,2000mA		
Battery	**Brand Name**	Lenovo (SCUD)	**Model Name**	BL270
	Power Rating	3.85/4.4Vdc,4000mAh	Type	Li-ion

Earphone 1	**Brand Name**	Motorola(NEW Leaders)	**Model Name**	NLD-EM300V-01SF
	Signal Line Type	1.2 meter, non-shielded cable, without ferrite core		
Earphone 2	**Brand Name**	Motorola(Cosonic)	**Model Name**	SH38C16617
	Signal Line Type	1.1 meter, non-shielded cable, without ferrite core		
USB Cable	**Brand Name**	Motorola (Saibao)	**Model Name**	SLQ-A081A
	Signal Line Type	1.0 meter, shielded cable, without ferrite core		

1.6 Modification of EUT

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

1.7 Re-use of Measured Data

1.7.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: XT1944-3, XT1944-4, FCC ID: IHDT56XF4) is electrically identical to the reference device (Model: XT1922-5, XT1922-4, FCC ID: IHDT56XB5) for the portions of the circuitry corresponding to the data being re-used, as treated by KDB Publication 178919 D01.

1.7.2 Difference Section

For details concerning the similarity with respect to component placement, mechanical/electrical design etc., some difference of population/depopulation to enable support of different cellular bands, please refer to the Product Equality Declaration.

The re-used RF data includes the following bands provided in Appendix A (Sporton RF Report No. FG7D0507B for the reference device Model: XT1922-5, XT1922-4, FCC ID: IHDT56XB5):

1.7.3 Spot Check Verification Data Section

In order to confirm hardware similarity of the subject device with the reference device, spot check measurements were performed on the subject device for Conducted Band-edge and Conducted spurious emission, the test result were consistent with FCC ID: IHDT56XB5 and radiated spurious emission, ERP/EIRP to re-test.

Assertions concerning the similarity of these devices are based on representations by the applicant. The applicant accepts full responsibility for the validity of the similarity claim, and for the determination that verification test data are sufficient to support it.

1.7.4 Reference detail Section:

Equipment Class	Reference FCC ID	Folder Test	Report Title/Section
PCE (2G/3G)	IHDT56XB5	Part22H.24E.27L (FG7D0507A)	All conducted sections applicable
PCE (LTE)	IHDT56XB5	Part22H.24E.27L.27M (FG7D0507B)	All conducted sections applicable

1.8 Maximum ERP/EIRP Power

LTE Band 2		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1850.7 ~ 1909.3	0.1371	0.1102
3	1851.5 ~ 1908.5	0.1371	0.1122
5	1852.5 ~ 1907.5	0.1352	0.1076
10	1855.0 ~ 1905.0	0.1324	0.1026
15	1857.5 ~ 1902.5	0.1355	0.1016
20	1860.0 ~ 1900.0	0.1374	0.1079
LTE Band 4		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	0.1211	0.0984
3	1711.5 ~ 1753.5	0.1199	0.0914
5	1712.5 ~ 1752.5	0.1189	0.0959
10	1715.0 ~ 1750.0	0.1213	0.0869
15	1717.5 ~ 1747.5	0.1169	0.0975
20	1720.0 ~ 1745.0	0.1164	0.0971
LTE Band 5		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	824.7 ~ 848.3	0.0653	0.0504
3	825.5 ~ 847.5	0.0627	0.0511
5	826.5 ~ 846.5	0.0647	0.0473
10	829.0 ~ 844.0	0.0668	0.0452
LTE Band 7		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
5	2502.5 ~ 2567.5	0.1365	0.1159
10	2505.0 ~ 2565.0	0.1371	0.1074
15	2507.5 ~ 2562.5	0.1380	0.1180
20	2510.0 ~ 2560.0	0.1384	0.1156

1.9 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO 17025 by National Voluntary Laboratory Accreditation Program (NVLAP code: 600155-0) and the FCC designation No. is CN5013.

Test Site	Sporton International (Kunshan) Inc.		
Test Site Location	No.3-2 Ping-Xiang Rd, Kunshan Development Zone Kunshan City Jiangsu Province 215335 China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**		**FCC Test Firm Registration No.**
	TH01-KS	03CH03-KS	630927

Note: The test site complies with ANSI C63.4 2014 requirement.

1.10 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(L), 27(M)
- ANSI/TIA-603-E
- FCC KDB 971168 D01 Power Meas License Digital Systems v03
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

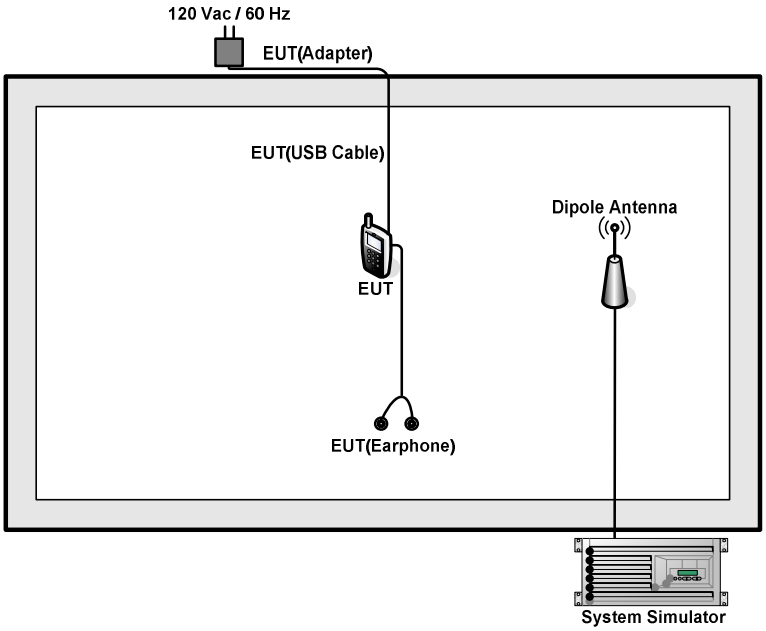
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03 with maximum output power.

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

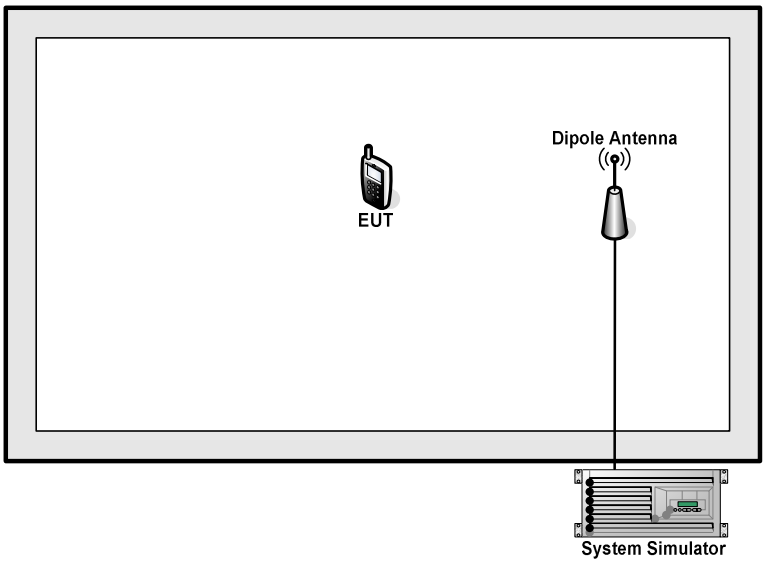
Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v
E.R.P./ E.I.R.P.	2	v	v	v	v	v	v	v	v	v			v	v	v
	4	v	v	v	v	v	v	v	v	v			v	v	v
	5	v	v	v	v	-	-	v	v	v			v	v	v
	7	-	-	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v				v	
	4	v	v	v	v	v	v	v		v				v	
	5	v	v	v	v	-	-	v		v				v	
	7	-	-	v	v	v	v	v		v				v	
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 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.														

2.2 Connection Diagram of Test System

LTE Band 2, 4, 5



LTE Band 7



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

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.

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

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.

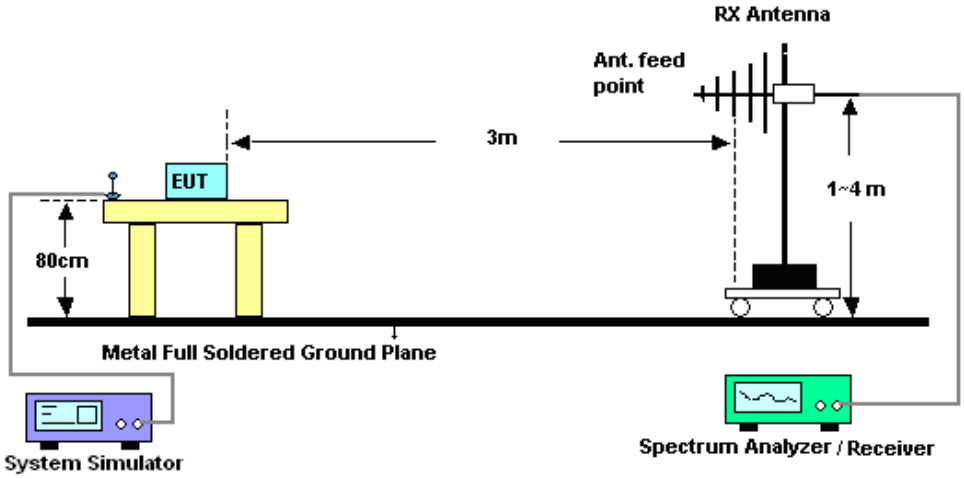
4 Radiated Test Items

4.1 Measuring Instruments

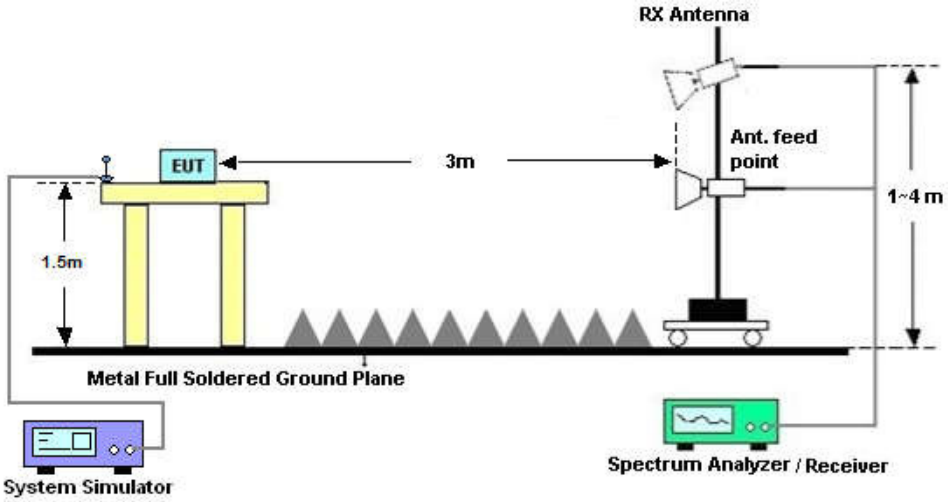
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E.

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

For Band 7

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

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

4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 v03 Section 5.8 and ANSI/TIA-603-E Section 2.2.12.
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For Band 7:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    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
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz~44GHz	Apr. 18, 2017	Dec. 28, 2017~ Jan. 02, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
Bilog Antenna	TeseQ	CBL6112D	35406	25MHz~2GHz	Apr. 22, 2017	Dec. 28, 2017~ Jan. 02, 2018	Apr. 21, 2018	Radiation (03CH03-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	9120D-1356	1GHz~18GHz	Apr. 22, 2017	Dec. 28, 2017~ Jan. 02, 2018	Apr. 21, 2018	Radiation (03CH03-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15GHz~40GHz	Feb. 15, 2017	Dec. 28, 2017~ Jan. 02, 2018	Feb. 14, 2018	Radiation (03CH03-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1000MHz / 32 dB	Apr. 18, 2017	Dec. 28, 2017~ Jan. 02, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1GHz~18GHz	Apr. 18, 2017	Dec. 28, 2017~ Jan. 02, 2018	Apr. 17, 2018	Radiation (03CH03-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Oct. 12, 2017	Dec. 28, 2017~ Jan. 02, 2018	Oct. 11, 2018	Radiation (03CH03-KS)
Amplifier	MITEQ	TTA1840-35 -HG	1887435	18GHz~40GHz	Oct. 12, 2017	Dec. 28, 2017~ Jan. 02, 2018	Oct. 11, 2018	Radiation (03CH03-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Dec. 28, 2017~ Jan. 02, 2018	NCR	Radiation (03CH03-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Dec. 28, 2017~ Jan. 02, 2018	NCR	Radiation (03CH03-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Dec. 28, 2017~ Jan. 02, 2018	NCR	Radiation (03CH03-KS)

NCR: No Calibration Required

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))	**2.8 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.3 dB**

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	22.46	22.63	22.50
20	1	49		22.39	22.37	22.31
20	1	99		22.16	22.16	22.25
20	50	0		21.56	21.61	21.55
20	50	24		21.52	21.52	21.52
20	50	50		21.56	21.48	21.45
20	100	0		21.56	21.57	21.55
20	1	0	16-QAM	21.21	21.15	21.24
20	1	49		21.58	21.29	21.29
20	1	99		21.54	21.16	21.04
20	50	0		20.54	20.35	20.52
20	50	24		20.58	20.59	20.52
20	50	50		20.56	20.64	20.52
20	100	0		20.42	20.61	20.42
15	1	0	QPSK	22.47	22.51	22.35
15	1	37		22.54	22.57	22.28
15	1	74		22.38	22.55	22.52
15	36	0		21.38	21.53	21.46
15	36	20		21.43	21.50	21.39
15	36	39		21.46	21.56	21.46
15	75	0		21.45	21.47	21.44
15	1	0	16-QAM	21.08	21.05	21.13
15	1	37		21.28	21.32	21.14
15	1	74		21.05	21.27	21.02
15	36	0		20.38	20.42	20.34
15	36	20		20.43	20.41	20.29
15	36	39		20.55	20.45	20.38
15	75	0		20.44	20.46	20.44

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.38	22.36	22.29
10	1	25		22.28	22.36	22.47
10	1	49		22.23	22.37	22.34
10	25	0		21.46	21.48	21.56
10	25	12		21.48	21.39	21.45
10	25	25		21.50	21.50	21.56
10	50	0		21.41	21.41	21.43
10	1	0	16-QAM	21.08	21.12	21.26
10	1	25		21.09	21.36	21.32
10	1	49		21.08	21.15	21.19
10	25	0		20.42	20.43	20.57
10	25	12		20.58	20.49	20.47
10	25	25		20.62	20.63	20.55
10	50	0		20.51	20.52	20.34
5	1	0	QPSK	22.37	22.30	22.40
5	1	12		22.45	22.53	22.36
5	1	24		22.37	22.56	22.19
5	12	0		21.42	21.37	21.45
5	12	7		21.43	21.39	21.33
5	12	13		21.50	21.35	21.51
5	25	0		21.51	21.33	21.53
5	1	0	16-QAM	21.09	21.09	21.02
5	1	12		21.19	21.26	21.48
5	1	24		21.47	21.57	21.01
5	12	0		20.33	20.28	20.36
5	12	7		20.34	20.29	20.26
5	12	13		20.30	20.26	20.31
5	25	0		20.30	20.45	20.46

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.50	22.56	22.59
3	1	8		22.62	22.53	22.59
3	1	14		22.45	22.46	22.38
3	8	0		21.65	21.57	21.90
3	8	4		21.64	21.76	21.76
3	8	7		21.53	21.56	21.65
3	15	0		21.57	21.56	21.48
3	1	0	16-QAM	21.43	21.74	21.17
3	1	8		21.21	21.75	21.30
3	1	14		21.43	21.63	21.05
3	8	0		20.44	20.43	20.47
3	8	4		20.41	20.49	20.47
3	8	7		20.53	20.52	20.36
3	15	0		20.44	20.21	20.45
1.4	1	0	QPSK	22.62	22.34	22.53
1.4	1	3		22.49	22.52	22.49
1.4	1	5		22.48	22.36	22.46
1.4	3	0		22.54	22.46	22.55
1.4	3	1		22.57	22.50	22.54
1.4	3	3		22.48	22.51	22.49
1.4	6	0		21.40	21.36	21.47
1.4	1	0	16-QAM	21.06	21.13	21.67
1.4	1	3		21.04	21.33	21.04
1.4	1	5		21.52	21.11	21.06
1.4	3	0		21.43	21.30	21.35
1.4	3	1		21.40	21.37	21.35
1.4	3	3		21.38	21.28	21.31
1.4	6	0		20.35	20.23	20.24

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.87	22.86	22.77
20	1	49		23.01	22.97	22.83
20	1	99		22.86	22.95	22.95
20	50	0		22.21	22.10	22.01
20	50	24		22.02	22.09	21.92
20	50	50		22.04	22.08	21.80
20	100	0		22.12	22.10	21.98
20	1	0	16-QAM	21.59	21.83	22.22
20	1	49		21.37	22.22	22.15
20	1	99		21.32	21.94	22.19
20	50	0		21.11	21.12	21.24
20	50	24		21.11	21.05	20.99
20	50	50		21.15	21.06	20.92
20	100	0		21.11	20.99	21.10
15	1	0	QPSK	23.10	23.03	22.97
15	1	37		22.86	22.90	23.01
15	1	74		23.04	22.97	22.82
15	36	0		22.06	22.07	21.88
15	36	20		21.97	22.00	21.87
15	36	39		21.91	22.14	21.95
15	75	0		22.00	22.04	21.90
15	1	0	16-QAM	21.67	21.96	21.42
15	1	37		22.12	21.94	21.71
15	1	74		22.24	21.50	21.60
15	36	0		21.15	21.06	20.88
15	36	20		20.97	21.00	20.78
15	36	39		20.74	21.05	20.96
15	75	0		21.00	21.03	20.90

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.89	23.04	22.99
10	1	25		22.85	**23.19**	22.99
10	1	49		22.84	23.05	22.81
10	25	0		22.03	22.10	21.96
10	25	12		21.98	21.98	21.88
10	25	25		21.90	22.09	21.85
10	50	0		22.08	22.07	21.98
10	1	0	16-QAM	21.59	21.36	21.31
10	1	25		21.44	21.41	21.43
10	1	49		21.30	21.74	21.28
10	25	0		21.04	21.10	20.87
10	25	12		21.09	21.09	20.89
10	25	25		21.07	21.19	20.96
10	50	0		21.19	21.07	20.99
5	1	0	QPSK	22.92	22.72	22.77
5	1	12		23.10	22.72	22.69
5	1	24		23.03	22.74	22.92
5	12	0		22.07	22.14	21.76
5	12	7		21.97	22.08	21.72
5	12	13		21.98	22.06	21.85
5	25	0		22.09	22.10	21.90
5	1	0	16-QAM	22.17	22.13	21.75
5	1	12		21.77	21.87	21.51
5	1	24		22.03	22.01	21.54
5	12	0		20.73	20.84	20.63
5	12	7		20.87	20.86	20.57
5	12	13		20.80	20.83	20.84
5	25	0		21.12	21.29	20.82

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.88	23.03	22.67
3	1	8		23.14	22.62	22.79
3	1	14		22.78	22.86	22.61
3	8	0		21.99	22.20	21.67
3	8	4		22.03	22.02	21.76
3	8	7		21.96	22.05	21.81
3	15	0		21.95	22.04	21.81
3	1	0	16-QAM	21.96	21.95	21.44
3	1	8		21.65	21.60	21.58
3	1	14		21.90	21.76	21.58
3	8	0		20.74	21.05	20.88
3	8	4		21.01	21.09	20.88
3	8	7		21.06	21.06	20.92
3	15	0		21.03	20.77	20.57
1.4	1	0	QPSK	22.85	23.00	22.80
1.4	1	3		22.85	23.16	22.91
1.4	1	5		22.69	22.89	22.70
1.4	3	0		23.04	23.18	22.87
1.4	3	1		22.94	23.16	22.90
1.4	3	3		22.93	23.15	22.90
1.4	6	0		21.99	22.15	21.89
1.4	1	0	16-QAM	22.17	22.15	22.02
1.4	1	3		22.19	22.25	22.08
1.4	1	5		22.17	21.47	22.11
1.4	3	0		21.90	21.77	21.79
1.4	3	1		22.28	21.93	22.12
1.4	3	3		22.11	21.92	22.22
1.4	6	0		20.78	20.84	20.87

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.92	23.22	22.86
10	1	25		23.31	**23.45**	22.89
10	1	49		23.12	23.26	22.91
10	25	0		22.15	22.16	22.23
10	25	12		22.76	22.25	22.32
10	25	25		22.23	22.23	22.29
10	50	0		22.14	22.26	22.23
10	1	0	16-QAM	21.39	21.45	21.51
10	1	25		21.68	21.74	21.75
10	1	49		21.66	21.72	21.72
10	25	0		21.10	21.16	21.14
10	25	12		21.24	21.28	21.23
10	25	25		21.33	21.23	21.29
10	50	0		21.31	21.26	21.23
5	1	0	QPSK	22.90	22.93	23.04
5	1	12		23.10	23.21	23.31
5	1	24		22.98	23.14	22.97
5	12	0		22.11	22.11	22.20
5	12	7		22.17	22.18	22.18
5	12	13		22.12	22.24	22.17
5	25	0		22.19	22.15	22.12
5	1	0	16-QAM	21.45	21.91	21.65
5	1	12		21.82	21.95	21.88
5	1	24		21.63	21.83	21.59
5	12	0		20.91	20.91	21.03
5	12	7		21.00	21.00	21.00
5	12	13		20.92	20.96	20.99
5	25	0		20.98	21.15	21.14

LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.05	23.11	23.17
3	1	8		23.10	22.98	22.95
3	1	14		23.04	22.99	23.13
3	8	0		22.17	22.18	22.17
3	8	4		22.23	22.25	22.26
3	8	7		22.21	22.23	22.16
3	15	0		22.18	22.19	22.11
3	1	0	16-QAM	22.23	21.66	22.20
3	1	8		21.89	21.71	22.00
3	1	14		22.12	22.28	21.81
3	8	0		20.92	21.18	21.15
3	8	4		21.18	21.11	21.13
3	8	7		21.16	21.18	21.12
3	15	0		21.30	21.34	20.85
1.4	1	0	QPSK	23.03	22.98	23.01
1.4	1	3		23.20	23.16	23.13
1.4	1	5		23.15	23.02	23.01
1.4	3	0		23.19	23.22	23.20
1.4	3	1		23.22	23.35	23.22
1.4	3	3		23.21	23.34	23.21
1.4	6	0		22.07	22.26	22.09
1.4	1	0	16-QAM	21.72	21.73	21.67
1.4	1	3		21.59	22.02	22.02
1.4	1	5		21.69	21.65	21.76
1.4	3	0		22.09	21.98	22.03
1.4	3	1		22.12	22.22	22.06
1.4	3	3		22.14	22.01	22.00
1.4	6	0		21.14	20.97	20.86

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.36	22.77	22.73
20	1	49		22.69	**23.06**	22.76
20	1	99		22.54	22.83	22.71
20	50	0		21.48	21.59	21.65
20	50	24		21.80	21.80	21.55
20	50	50		21.86	22.02	22.00
20	100	0		21.75	22.02	21.94
20	1	0	16-QAM	21.33	22.01	21.88
20	1	49		21.37	22.09	21.79
20	1	99		21.31	22.28	21.76
20	50	0		20.96	20.95	20.94
20	50	24		21.03	20.94	20.90
20	50	50		20.90	21.11	20.97
20	100	0		20.90	21.09	20.91
15	1	0	QPSK	22.71	22.95	22.99
15	1	37		22.51	22.92	22.97
15	1	74		22.86	23.05	22.54
15	36	0		21.79	22.14	22.12
15	36	20		21.83	22.02	22.06
15	36	39		21.89	22.18	22.17
15	75	0		21.80	22.16	22.16
15	1	0	16-QAM	21.36	22.34	21.75
15	1	37		21.38	21.78	21.72
15	1	74		21.43	22.37	21.60
15	36	0		20.77	20.95	20.99
15	36	20		20.77	20.85	21.00
15	36	39		20.88	21.02	21.00
15	75	0		20.89	21.02	21.11

LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.51	22.92	23.02
10	1	25		22.82	22.99	22.94
10	1	49		22.67	22.99	22.98
10	25	0		21.95	22.13	22.10
10	25	12		21.90	22.18	22.18
10	25	25		21.83	22.15	22.16
10	50	0		21.86	22.15	22.08
10	1	0	16-QAM	21.96	21.48	21.78
10	1	25		21.50	21.33	21.61
10	1	49		21.90	21.87	21.42
10	25	0		20.90	21.14	21.07
10	25	12		20.98	21.11	21.13
10	25	25		21.01	21.08	21.10
10	50	0		20.90	21.02	21.07
5	1	0	QPSK	22.70	22.90	22.70
5	1	12		23.00	22.96	22.81
5	1	24		22.83	22.99	22.88
5	12	0		21.68	21.86	22.11
5	12	7		21.75	21.83	22.00
5	12	13		21.77	21.87	22.03
5	25	0		21.87	21.95	22.18
5	1	0	16-QAM	21.53	22.21	22.29
5	1	12		21.82	21.75	22.04
5	1	24		22.16	21.58	22.00
5	12	0		20.64	20.78	20.83
5	12	7		20.69	20.73	20.73
5	12	13		20.91	20.68	20.81
5	25	0		20.79	20.92	21.06

ERP/EIRP

LTE Band 2 (G_T - L_C = -1.25 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	22.62	22.34	22.53	22.62	22.53	22.59	22.37	22.56	22.19
Conducted Power (Watts)	0.1828	0.1714	0.1791	0.1828	0.1791	0.1816	0.1726	0.1803	0.1656
EIRP(dBm)	21.37	21.09	21.28	21.37	21.28	21.34	21.12	21.31	20.94
EIRP(Watts)	0.1371	0.1285	0.1343	0.1371	0.1343	0.1361	0.1294	0.1352	0.1242

LTE Band 2 (G_T - L_C = -1.25 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	22.28	22.36	22.47	22.54	22.57	22.28	22.46	22.63	22.50
Conducted Power (Watts)	0.1690	0.1722	0.1766	0.1795	0.1807	0.1690	0.1762	0.1832	0.1778
EIRP(dBm)	21.03	21.11	21.22	21.29	21.32	21.03	21.21	21.38	21.25
EIRP(Watts)	0.1268	0.1291	0.1324	0.1346	0.1355	0.1268	0.1321	0.1374	0.1334

LTE Band 2 (G_T - L_C = -1.25 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	21.06	21.13	21.67	21.21	21.75	21.30	21.47	21.57	21.01
Conducted Power (Watts)	0.1276	0.1297	0.1469	0.1321	0.1496	0.1349	0.1403	0.1435	0.1262
EIRP(dBm)	19.81	19.88	20.42	19.96	20.50	20.05	20.22	20.32	19.76
EIRP(Watts)	0.0957	0.0973	0.1102	0.0991	0.1122	0.1012	0.1052	0.1076	0.0946

LTE Band 2 (G_T - L_C = -1.25 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	21.09	21.36	21.32	21.28	21.32	21.14	21.58	21.29	21.29
Conducted Power (Watts)	0.1285	0.1368	0.1355	0.1343	0.1355	0.1300	0.1439	0.1346	0.1346
EIRP(dBm)	19.84	20.11	20.07	20.03	20.07	19.89	20.33	20.04	20.04
EIRP(Watts)	0.0964	0.1026	0.1016	0.1007	0.1016	0.0975	0.1079	0.1009	0.1009

LTE Band 4 (G_T - L_C = -2.35 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	23.04	23.18	22.87	23.14	22.62	22.79	23.10	22.72	22.69
Conducted Power (Watts)	0.2014	0.2080	0.1936	0.2061	0.1828	0.1901	0.2042	0.1871	0.1858
EIRP(dBm)	20.69	20.83	20.52	20.79	20.27	20.44	20.75	20.37	20.34
EIRP(Watts)	0.1172	0.1211	0.1127	0.1199	0.1064	0.1107	0.1189	0.1089	0.1081

LTE Band 4 (G_T - L_C = -2.35 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	22.85	23.19	22.99	23.10	23.03	22.97	23.01	22.97	22.83
Conducted Power (Watts)	0.1928	0.2084	0.1991	0.2042	0.2009	0.1982	0.2000	0.1982	0.1919
EIRP(dBm)	20.50	20.84	20.64	20.75	20.68	20.62	20.66	20.62	20.48
EIRP(Watts)	0.1122	0.1213	0.1159	0.1189	0.1169	0.1153	0.1164	0.1153	0.1117

LTE Band 4 (G_T - L_C = -2.35 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	19957	20175	20393	19965	20175	20385	19975	20175	20375
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
Conducted Power (dBm)	22.28	21.93	22.12	21.96	21.95	21.44	22.17	22.13	21.75
Conducted Power (Watts)	0.1690	0.1560	0.1629	0.1570	0.1567	0.1393	0.1648	0.1633	0.1496
EIRP(dBm)	19.93	19.58	19.77	19.61	19.60	19.09	19.82	19.78	19.40
EIRP(Watts)	0.0984	0.0908	0.0948	0.0914	0.0912	0.0811	0.0959	0.0951	0.0871

LTE Band 4 (G_T - L_C = -2.35 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20000	20175	20350	20025	20175	20325	20050	20175	20300
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1715	1732.5	1750	1717.5	1732.5	1747.5	1720	1732.5	1745
Conducted Power (dBm)	21.30	21.74	21.28	22.24	21.50	21.60	21.37	22.22	22.15
Conducted Power (Watts)	0.1349	0.1493	0.1343	0.1675	0.1413	0.1445	0.1371	0.1667	0.1641
EIRP(dBm)	18.95	19.39	18.93	19.89	19.15	19.25	19.02	19.87	19.80
EIRP(Watts)	0.0785	0.0869	0.0782	0.0975	0.0822	0.0841	0.0798	0.0971	0.0955

LTE Band 5 (G_T - L_C = -3.05 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	20407	20525	20643	20415	20525	20635	20425	20525	20625
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
Conducted Power (dBm)	23.22	23.35	23.22	23.05	23.11	23.17	23.10	23.21	23.31
Conducted Power (Watts)	0.2099	0.2163	0.2099	0.2018	0.2046	0.2075	0.2042	0.2094	0.2143
ERP(dBm)	18.02	18.15	18.02	17.85	17.91	17.97	17.90	18.01	18.11
ERP(Watts)	0.0634	0.0653	0.0634	0.0610	0.0618	0.0627	0.0617	0.0632	0.0647

LTE Band 5 (G_T - L_C = -3.05 dB) QPSK			
Bandwidth	10M		
Channel	20450	20525	20600
	(Low)	(Mid)	(High)
Frequency (MHz)	829	836.5	844
Conducted Power (dBm)	23.31	23.45	22.89
Conducted Power (Watts)	0.2143	0.2213	0.1945
ERP(dBm)	18.11	18.25	17.69
ERP(Watts)	0.0647	0.0668	0.0587

LTE Band 5 (G_T - L_C = -3.05 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	20407	20525	20643	20415	20525	20635	20425	20525	20625
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
Conducted Power (dBm)	22.12	22.22	22.06	22.12	22.28	21.81	21.82	21.95	21.88
Conducted Power (Watts)	0.1629	0.1667	0.1607	0.1629	0.1690	0.1517	0.1521	0.1567	0.1542
ERP(dBm)	16.92	17.02	16.86	16.92	17.08	16.61	16.62	16.75	16.68
ERP(Watts)	0.0492	0.0504	0.0485	0.0492	0.0511	0.0458	0.0459	0.0473	0.0466

LTE Band 5 (G_T - L_C = -3.05 dB) 16QAM			
Bandwidth	10M		
Channel	20450	20525	20600
	(Low)	(Mid)	(High)
Frequency (MHz)	829	836.5	844
Conducted Power (dBm)	21.68	21.74	21.75
Conducted Power (Watts)	0.1472	0.1493	0.1496
ERP(dBm)	16.48	16.54	16.55
ERP(Watts)	0.0445	0.0451	0.0452

LTE Band 7 (G_T - L_C = -1.65 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
Conducted Power (dBm)	23.00	22.96	22.81
Conducted Power (Watts)	0.1995	0.1977	0.1910
EIRP(dBm)	21.35	21.31	21.16
EIRP(Watts)	0.1365	0.1352	0.1306

LTE Band 7 (G_T - L_C = -1.65 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
Conducted Power (dBm)	22.51	22.92	23.02	22.86	23.05	22.54	22.69	23.06	22.76
Conducted Power (Watts)	0.1782	0.1959	0.2004	0.1932	0.2018	0.1795	0.1858	0.2023	0.1888
EIRP(dBm)	20.86	21.27	21.37	21.21	21.40	20.89	21.04	21.41	21.11
EIRP(Watts)	0.1219	0.1340	0.1371	0.1321	0.1380	0.1227	0.1271	0.1384	0.1291

LTE Band 7 (G_T - L_C = -1.65 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
Conducted Power (dBm)	21.53	22.21	22.29
Conducted Power (Watts)	0.1422	0.1663	0.1694
EIRP(dBm)	19.88	20.56	20.64
EIRP(Watts)	0.0973	0.1138	0.1159

LTE Band 7 (G_T - L_C = -1.65 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
Conducted Power (dBm)	21.96	21.48	21.78	21.43	22.37	21.60	21.31	22.28	21.76
Conducted Power (Watts)	0.1570	0.1406	0.1507	0.1390	0.1726	0.1445	0.1352	0.1690	0.1500
EIRP(dBm)	20.31	19.83	20.13	19.78	20.72	19.95	19.66	20.63	20.11
EIRP(Watts)	0.1074	0.0962	0.1030	0.0951	0.1180	0.0989	0.0925	0.1156	0.1026

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 2 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3759	-57.91	-13	-44.91	-72.15	-59.62	5.08	6.80	H
	5637	-55.87	-13	-42.87	-72.67	-57.54	8.03	9.70	H
	7518	-50.82	-13	-37.82	-72.12	-53.20	9.43	11.81	H
	3759	-58.78	-13	-45.78	-71.21	-60.49	5.08	6.80	V
	5637	-55.30	-13	-42.30	-72.39	-56.97	8.03	9.70	V
	7518	-51.06	-13	-38.06	-72.2	-53.44	9.43	11.81	V

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

LTE Band 2 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3756	-57.39	-13	-44.39	-71.63	-59.10	5.08	6.80	H
	5637	-56.47	-13	-43.47	-73.27	-58.14	8.03	9.70	H
	7515	-50.66	-13	-37.66	-71.96	-53.04	9.43	11.81	H
	3756	-59.38	-13	-46.38	-71.81	-61.09	5.08	6.80	V
	5637	-55.96	-13	-42.96	-73.05	-57.63	8.03	9.70	V
	7515	-52.33	-13	-39.33	-73.47	-54.71	9.43	11.81	V

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

LTE Band 2 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3756	-57.32	-13	-44.32	-71.56	-59.03	5.08	6.80	H
	5634	-54.71	-13	-41.71	-71.51	-56.38	8.03	9.70	H
	7512	-51.68	-13	-38.68	-72.98	-54.06	9.43	11.81	H
	3756	-58.35	-13	-45.35	-70.78	-60.06	5.08	6.80	V
	5634	-55.59	-13	-42.59	-72.68	-57.26	8.03	9.70	V
	7512	-51.68	-13	-38.68	-72.82	-54.06	9.43	11.81	V

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

LTE Band 2 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3750	-57.13	-13	-44.13	-71.37	-58.84	5.08	6.80	H
	5628	-55.78	-13	-42.78	-72.58	-57.45	8.03	9.70	H
	7503	-50.69	-13	-37.69	-71.99	-53.07	9.43	11.81	H
	3750	-59.48	-13	-46.48	-71.91	-61.19	5.08	6.80	V
	5628	-55.91	-13	-42.91	-73	-57.58	8.03	9.70	V
	7503	-51.81	-13	-38.81	-72.95	-54.19	9.43	11.81	V

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

LTE Band 2 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3747	-57.28	-13	-44.28	-71.52	-58.99	5.08	6.80	H
	5619	-56.14	-13	-43.14	-72.94	-57.81	8.03	9.70	H
	7494	-50.94	-13	-37.94	-72.24	-53.32	9.43	11.81	H
	3747	-59.07	-13	-46.07	-71.5	-60.78	5.08	6.80	V
	5619	-55.36	-13	-42.36	-72.45	-57.03	8.03	9.70	V
	7494	-51.04	-13	-38.04	-72.18	-53.42	9.43	11.81	V

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

LTE Band 2 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3741	-57.40	-13	-44.40	-71.64	-59.11	5.08	6.80	H
	5613	-56.70	-13	-43.70	-73.50	-58.37	8.03	9.70	H
	7485	-51.59	-13	-38.59	-72.89	-53.97	9.43	11.81	H
	3741	-59.41	-13	-46.41	-71.84	-61.12	5.08	6.80	V
	5613	-56.78	-13	-43.78	-73.87	-58.45	8.03	9.70	V
	7485	-51.83	-13	-38.83	-72.97	-54.21	9.43	11.81	V

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

LTE Band 4 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3465	-56.94	-13	-43.94	-68.97	-60.91	4.87	8.84	H
	5196	-56.04	-13	-43.04	-71.86	-57.48	7.70	9.14	H
	6927	-51.98	-13	-38.98	-73.03	-53.66	8.98	10.66	H
	3465	-52.40	-13	-39.40	-67.11	-56.37	4.87	8.84	V
	5196	-56.16	-13	-43.16	-72.18	-57.60	7.70	9.14	V
	6927	-52.06	-13	-39.06	-72.86	-53.74	8.98	10.66	V

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

LTE Band 4 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3462	-56.55	-13	-43.55	-68.58	-60.52	4.87	8.84	H
	5193	-56.96	-13	-43.96	-72.78	-58.40	7.70	9.14	H
	6924	-51.44	-13	-38.44	-72.49	-53.12	8.98	10.66	H
	3462	-52.69	-13	-39.69	-67.4	-56.66	4.87	8.84	V
	5193	-56.68	-13	-43.68	-72.7	-58.12	7.70	9.14	V
	6924	-52.58	-13	-39.58	-73.38	-54.26	8.98	10.66	V

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

LTE Band 4 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3462	-57.45	-13	-44.45	-69.48	-61.42	4.87	8.84	H
	5190	-57.48	-13	-44.48	-73.30	-58.92	7.70	9.14	H
	6921	-51.85	-13	-38.85	-72.90	-53.53	8.98	10.66	H
	3462	-53.18	-13	-40.18	-67.89	-57.15	4.87	8.84	V
	5190	-56.48	-13	-43.48	-72.5	-57.92	7.70	9.14	V
	6921	-51.61	-13	-38.61	-72.41	-53.29	8.98	10.66	V

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

LTE Band 4 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3456	-53.78	-13	-40.78	-65.81	-57.75	4.87	8.84	H
	5184	-55.67	-13	-42.67	-71.49	-57.11	7.70	9.14	H
	6912	-52.58	-13	-39.58	-73.63	-54.26	8.98	10.66	H
	3456	-50.13	-13	-37.13	-64.84	-54.10	4.87	8.84	V
	5184	-53.82	-13	-40.82	-69.84	-55.26	7.70	9.14	V
	6912	-50.93	-13	-37.93	-71.73	-52.61	8.98	10.66	V

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

LTE Band 4 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3453	-57.28	-13	-44.28	-69.31	-61.25	4.87	8.84	H
	5178	-56.67	-13	-43.67	-72.49	-58.11	7.70	9.14	H
	6903	-51.31	-13	-38.31	-72.36	-52.99	8.98	10.66	H
	3453	-51.95	-13	-38.95	-66.66	-55.92	4.87	8.84	V
	5178	-56.39	-13	-43.39	-72.41	-57.83	7.70	9.14	V
	6903	-51.93	-13	-38.93	-72.73	-53.61	8.98	10.66	V

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

LTE Band 4 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	3447	-57.52	-13	-44.52	-69.55	-61.49	4.87	8.84	H
	5172	-56.15	-13	-43.15	-71.97	-57.59	7.70	9.14	H
	6894	-51.13	-13	-38.13	-72.18	-52.81	8.98	10.66	H
	3447	-53.58	-13	-40.58	-68.29	-57.55	4.87	8.84	V
	5172	-56.50	-13	-43.50	-72.52	-57.94	7.70	9.14	V
	6894	-52.48	-13	-39.48	-73.28	-54.16	8.98	10.66	V

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

LTE Band 5 / 1.4MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	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	1672	-44.46	-13	-31.46	-50.64	-46.37	1.14	5.20	H
	2508	-55.39	-13	-42.39	-66.50	-58.02	1.12	5.90	H
	3345	-62.21	-13	-49.21	-72.18	-65.42	1.34	6.70	H
	4179	-57.21	-13	-44.21	-70.97	-60.67	1.59	7.20	H
	1672	-43.76	-13	-30.76	-50.27	-45.67	1.14	5.20	V
	2508	-57.65	-13	-44.65	-67.31	-60.28	1.12	5.90	V
	3345	-60.86	-13	-47.86	-70.99	-64.07	1.34	6.70	V
	4179	-54.84	-13	-41.84	-65.32	-58.30	1.59	7.20	V

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

LTE Band 5 / 3MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1670	-42.84	-13	-29.84	-49.16	-44.75	1.14	5.20	H
	2506	-55.38	-13	-42.38	-66.49	-58.01	1.12	5.90	H
	3342	-61.96	-13	-48.96	-71.93	-65.17	1.34	6.70	H
	4176	-55.01	-13	-42.01	-68.77	-58.47	1.59	7.20	H
	1670	-45.08	-13	-32.08	-51.42	-46.99	1.14	5.20	V
	2506	-56.40	-13	-43.40	-66.06	-59.03	1.12	5.90	V
	3342	-62.29	-13	-49.29	-72.42	-65.50	1.34	6.70	V
	4176	-54.98	-13	-41.98	-65.46	-58.44	1.59	7.20	V

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

LTE Band 5 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1668	-43.50	-13	-30.50	-49.73	-45.41	1.14	5.20	H
	2504	-54.73	-13	-41.73	-65.84	-57.36	1.12	5.90	H
	3336	-61.12	-13	-48.12	-71.09	-64.33	1.34	6.70	H
	4173	-54.86	-13	-41.86	-68.62	-58.32	1.59	7.20	H
	1668	-43.83	-13	-30.83	-50.33	-45.74	1.14	5.20	V
	2504	-57.54	-13	-44.54	-67.20	-60.17	1.12	5.90	V
	3336	-59.40	-13	-46.40	-69.53	-62.61	1.34	6.70	V
	4173	-57.76	-13	-44.76	-68.24	-61.22	1.59	7.20	V

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

LTE Band 5 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-41.42	-13	-28.42	-47.83	-43.33	1.14	5.20	H
	2496	-54.26	-13	-41.26	-65.37	-56.89	1.12	5.90	H
	3327	-61.87	-13	-48.87	-71.84	-65.08	1.34	6.70	H
	4161	-55.69	-13	-42.69	-69.45	-59.15	1.59	7.20	H
	1664	-43.56	-13	-30.56	-50.09	-45.47	1.14	5.20	V
	2496	-52.00	-13	-39.00	-61.66	-54.63	1.12	5.90	V
	3327	-61.40	-13	-48.40	-71.53	-64.61	1.34	6.70	V
	4161	-54.05	-13	-41.05	-64.53	-57.51	1.59	7.20	V

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

LTE Band 7 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	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)
Middle	5067	-48.40	-25	-23.40	-33.93	-55.76	1.76	9.12	H
	7599	-48.86	-25	-23.86	-38.56	-58.83	2.16	12.13	H
	10134	-58.22	-25	-33.22	-53.46	-68.10	2.22	12.10	H
	5067	-45.00	-25	-20.00	-33.59	-52.36	1.76	9.12	V
	7599	-47.50	-25	-22.50	-36.9	-57.47	2.16	12.13	V
	10134	-58.14	-25	-33.14	-53.59	-68.02	2.22	12.10	V

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

LTE Band 7 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5061	-47.02	-25	-22.02	-32.78	-54.38	1.76	9.12	H
	7593	-47.43	-25	-22.43	-37.13	-57.40	2.16	12.13	H
	10125	-57.93	-25	-32.93	-53.17	-67.81	2.22	12.10	H
	5061	-44.12	-25	-19.12	-33.01	-51.48	1.76	9.12	V
	7593	-51.06	-25	-26.06	-39.05	-61.03	2.16	12.13	V
	10125	-58.81	-25	-33.81	-54.26	-68.69	2.22	12.10	V

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

LTE Band 7 / 15MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5058	-48.55	-25	-23.55	-34.11	-55.91	1.76	9.12	H
	7584	-47.91	-25	-22.91	-37.61	-57.88	2.16	12.13	H
	10116	-57.26	-25	-32.26	-52.50	-67.14	2.22	12.10	H
	5058	-45.78	-25	-20.78	-34	-53.14	1.76	9.12	V
	7584	-50.55	-25	-25.55	-38.54	-60.52	2.16	12.13	V
	10116	-57.22	-25	-32.22	-52.67	-67.10	2.22	12.10	V

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

LTE Band 7 / 20MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5052	-47.58	-25	-22.58	-33.16	-54.94	1.76	9.12	H
	7578	-47.55	-25	-22.55	-37.25	-57.52	2.16	12.13	H
	10107	-57.52	-25	-32.52	-52.76	-67.40	2.22	12.10	H
	5052	-44.50	-25	-19.50	-33.26	-51.86	1.76	9.12	V
	7578	-51.54	-25	-26.54	-39.53	-61.51	2.16	12.13	V
	10107	-58.04	-25	-33.04	-53.49	-67.92	2.22	12.10	V

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