

FCC RADIO TEST REPORT

FCC ID : PU5-TP00107B
Equipment : Notebook Computer
Brand Name : Lenovo
Model Name : TP00107B
Applicant : Wistron Corporation
21F, No. 88, Sec. 1, Hsin Tai Wu Rd.,
Hsichih Dist, New Taipei City 221, Taiwan
Manufacturer : Wistron Corporation
21F, No. 88, Sec. 1, Hsin Tai Wu Rd.,
Hsichih Dist, New Taipei City 221, Taiwan
Standard : 47 CFR Part 2, 22(H), 24(E), 27

Equipment: Fibocom L850-GL tested inside of Lenovo Notebook Computer.

The product was received on Dec. 28, 2019 and testing was started from Feb. 05, 2020 and completed on Feb. 21, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The report must not be used by the client to claim product certification, approval, or endorsement by TAF or any agency of government.

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

Louis Wu

Approved by: Louis Wu

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan



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History of this test report

Report No.	Version	Description	Issued Date
FG9D2810-03B	01	Initial issue of report	Mar. 10, 2020

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
	§22.913 (a)(2)	Effective Radiated Power (Band 5) (Band 26)	Pass	
	§27.50 (b)(10) §27.50 (c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17)		
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 7) (Band 41)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)		
-	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	-	See Note
-	§2.1049	Occupied Bandwidth	-	See Note
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2)(4) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 66)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7) (Band 41)		
-	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (g) §27.53 (h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 26) (Band 66)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7) (Band 41)		
-	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	-	See Note

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
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 17) (Band 26) (Band 66)	Pass	Under limit 10.68 dB at 7554.000 MHz
	§2.1051 §27.53 (m)(4)	Radiated Spurious Emission (Band 7) (Band 41)		

Note: The module (Model: L850-GL) makes no difference after verifying output power, this report reuses test data from the module report.

Declaration of Conformity:

The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.

Comments and Explanations:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

Reviewed by: Wii Chang

Report Producer: Lucy Wu



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook Computer
Brand Name	Lenovo
Model Name	TP00107B
FCC ID	PU5-TP00107B
EUT supports Radios application	WCDMA/LTE/GNSS
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Fibocom L850-GL tested inside of Lenovo Notebook Computer

Antenna Information				
WWAN				3G<E (dBi)
Antenna	Manufacturer	WNC	Peak gain	2.54
	Part number	025.901FP.0001	Type	PIFA

1.2 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 LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 26 : 824.7MHz ~ 848.3 MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 26 : 869.7MHz ~ 893.3MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 2110.7 MHz ~ 2199.3 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.95 dBm LTE Band 4 : 23.31 dBm LTE Band 5 : 22.45 dBm LTE Band 7 : 22.96 dBm LTE Band 12 : 22.96 dBm LTE Band 13 : 23.03 dBm LTE Band 17 : 23.00 dBm LTE Band 26 : 22.78 dBm LTE Band 41 : 22.89 dBm LTE Band 66 : 23.13dBm
Type of Modulation	QPSK / 16QAM

1.3 Modification of EUT

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



1.4 Testing Location

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory	
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan	
Test Site No.	Sporton Site No.	
	TH05-HY	03CH07-HY
Test Engineer	Jacky Wang	Jesse Wang , Stan Hsieh , Ken Wu
Temperature	23~25℃	20~24℃
Relative Humidity	52~55%	48~58%

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

FCC Designation No.: TW1190

1.5 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ 47 CFR Part 2, 22(H), 24(E), 27
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site 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

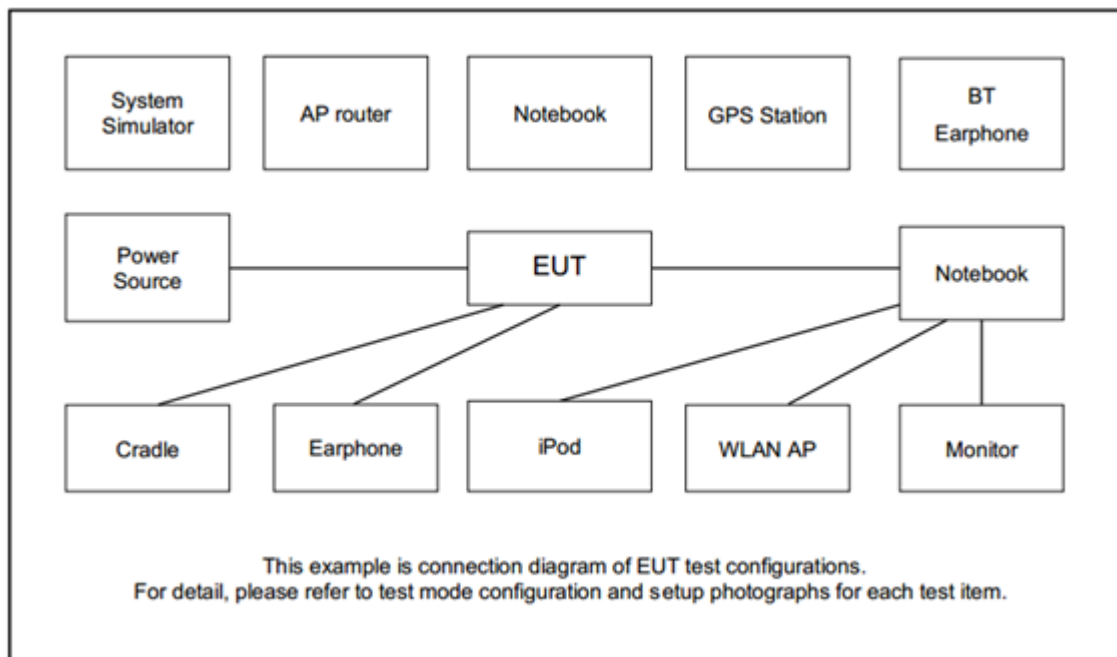
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y Plane for LTE Band 12 / 13 / 17 / 41 ; Z Plane for LTE Band 2 / 7 ; Notebook Type for LTE Band 4 / 26 / 66) were recorded in this report.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	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
	12	v	v	v	v	-	-	v	v		v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v		v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v		v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v		v	v	v	v	v	v
	41	-	-	v	v	v	v	v	v		v	v	v	v	v	v
	66	v	v	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
	12	v	v	v	v	-	-	v	v		v			v	v	v
	13	-	-	v	v	-	-	v	v		v			v	v	v
	17	-	-	v	v	-	-	v	v		v			v	v	v
	26	v	v	v	v	v	-	v	v		v			v	v	v
	41	-	-	v	v	v	v	v	v		v			v	v	v
	66	v	v	v	v	v	v	v	v		v			v	v	v

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	2	Worst Case												v	v	v
	4	Worst Case												v	v	v
	5	Covered by Band 26														
	7	Worst Case												v	v	v
	12	Worst Case												v	v	v
	13	Worst Case												v	v	v
	17	Worst Case												v	v	v
	26	Worst Case												v	v	v
	41	Worst Case												v	v	v
	66	Worst Case												v	v	v
Remark	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. 4. All the radiated test cases were performed with Adapter 2. 5. Wider operating range bandwidth covers narrower one when the power is higher or the same.															

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.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

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 17 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	23780	23790	23800
	Frequency	709	710	711
5	Channel	23755	23790	23825
	Frequency	706.5	710	713.5

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	829.0	836.5	844.0
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	2506.0	2593.0	2680.0
15	Channel	39725	40620	41515
	Frequency	2503.5	2593.0	2682.5
10	Channel	39700	40620	41540
	Frequency	2501.0	2593.0	2685.0
5	Channel	39675	40620	41565
	Frequency	2498.5	2593.0	2687.5

LTE Band 66 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	132072	132322	132572
	Frequency	1720	1745	1770
15	Channel	132047	132322	132597
	Frequency	1717.5	1745	1772.5
10	Channel	132022	132322	132622
	Frequency	1715	1745	1775
5	Channel	131997	132322	132647
	Frequency	1712.5	1745	1777.5
3	Channel	131987	132322	132657
	Frequency	1711.5	1745	1778.5
1.4	Channel	131979	132322	132665
	Frequency	1710.7	1745	1779.3

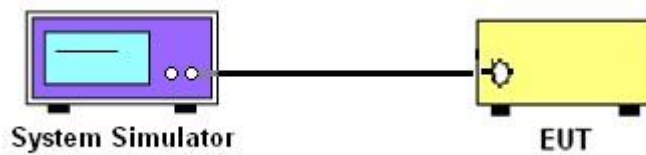
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP/EIRP

3.2.1 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 and Band 17

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

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4 and Band 66

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

3.2.2 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.

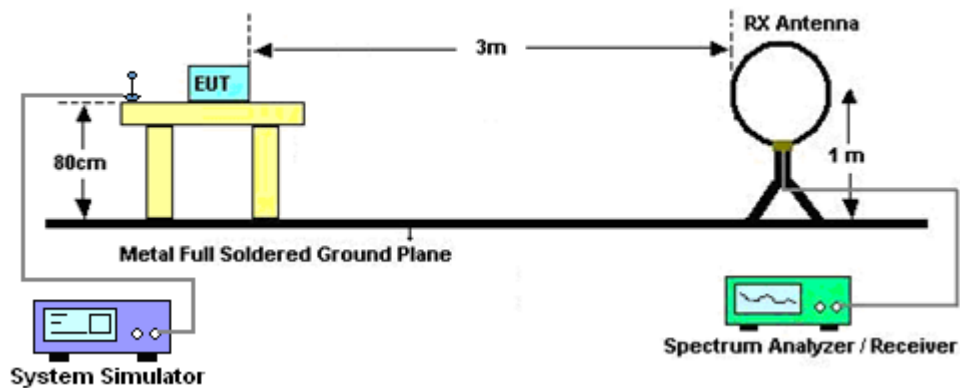
4 Radiated Test Items

4.1 Measuring Instruments

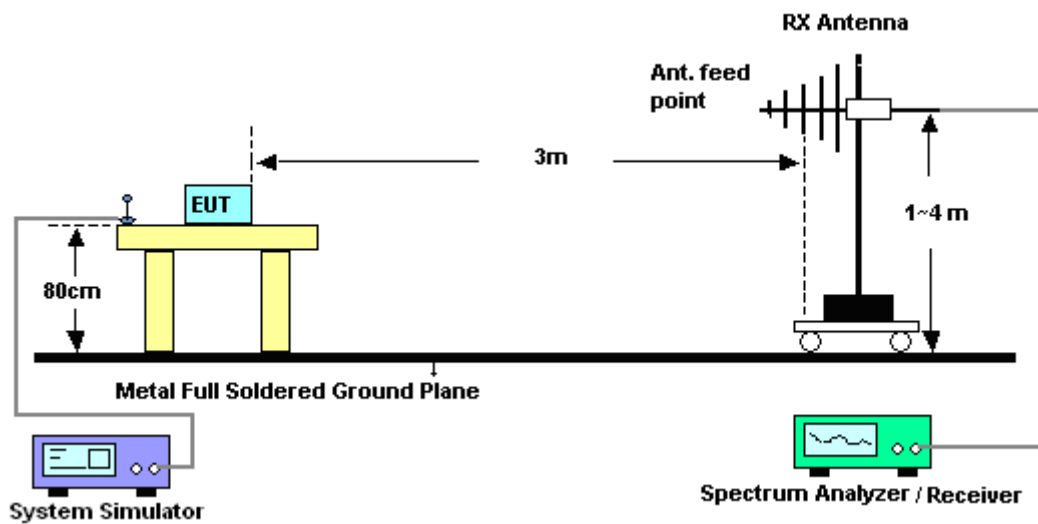
See list of measuring instruments of this test report.

4.1.1 Test Setup

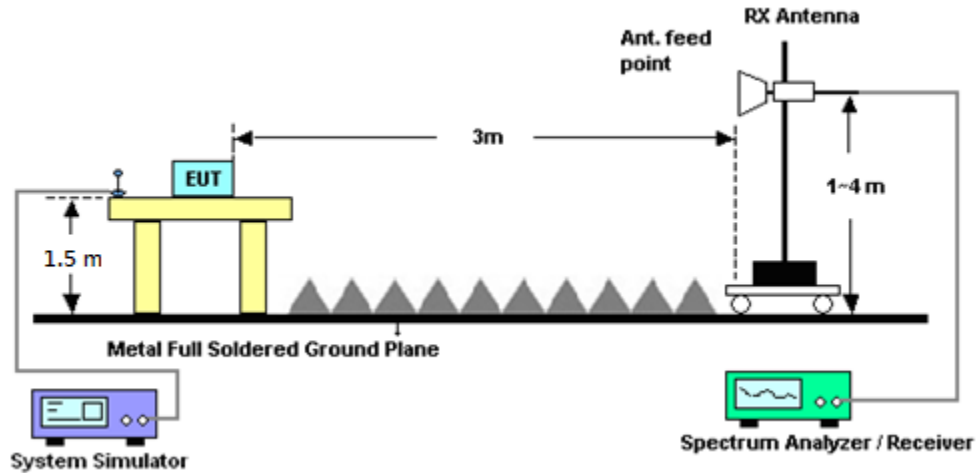
For radiated emissions below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

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 LTE 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 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

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. 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.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. 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)

For LTE Band 7, 41

The limit line is derived from $55 + 10\log(P)$ 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
LTE Base Station	Anritsu	MT8820C	6201107509	-	Jul. 03, 2019	Feb. 21, 2020	Jul. 02, 2020	Conducted (TH05-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	35419 & 03	30MHz~1GHz	Apr. 30, 2019	Feb. 05, 2020~Feb. 13, 2020	Apr. 29, 2020	Radiation (03CH07-HY)
Bilog Antenna	TESEQ	CBL 6111D & N-6-06	35414 & AT-N0602	30MHz~1GHz	Oct. 12, 2019	Feb. 05, 2020~Feb. 13, 2020	Oct. 11, 2020	Radiation (03CH07-HY)
Double Ridge Horn Antenna	ESCO	3117	00075962	1GHz ~ 18GHz	Dec. 06, 2019	Feb. 05, 2020~Feb. 13, 2020	Dec. 05, 2020	Radiation (03CH07-HY)
Horn Antenna	ESCO	3117	00066584	1GHz ~18GHz	Sep. 25, 2019	Feb. 05, 2020~Feb. 13, 2020	Sep. 24, 2020	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170576	18GHz~40GHz	May 14, 2019	Feb. 05, 2020~Feb. 13, 2020	May 13, 2020	Radiation (03CH07-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170251	18GHz~40GHz	Dec. 06, 2019	Feb. 05, 2020~Feb. 13, 2020	Dec. 06, 2020	Radiation (03CH07-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Apr. 02, 2019	Feb. 05, 2020~Feb. 13, 2020	Apr. 01, 2020	Radiation (03CH07-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 28, 2019	Feb. 05, 2020~Feb. 13, 2020	Oct. 27, 2020	Radiation (03CH07-HY)
Preamplifier	MITEQ	AMF-7D-0010 1800-30-10P	1590075	1GHz~18GHz	Apr. 24, 2019	Feb. 05, 2020~Feb. 13, 2020	Apr. 23, 2020	Radiation (03CH07-HY)
Preamplifier	COM-POWER	PA-103A	161241	10MHz~1GHz	May 20, 2019	Feb. 05, 2020~Feb. 13, 2020	May 19, 2020	Radiation (03CH07-HY)
Preamplifier	Agilent	8449B	3008A02362	1GHz~26.5GHz	Nov. 01, 2019	Feb. 05, 2020~Feb. 13, 2020	Oct. 31, 2020	Radiation (03CH07-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Feb. 05, 2020~Feb. 13, 2020	Dec. 12, 2020	Radiation (03CH07-HY)
Filter	Microwave	H1G013G1	SN477215	1GHz High Pass Filter	Nov. 01, 2019	Feb. 05, 2020~Feb. 13, 2020	Oct. 31, 2020	Radiation (03CH07-HY)
Filter	Microwave	H3G018G1	SN477220	3GHz High Pass Filter	Nov. 01, 2019	Feb. 05, 2020~Feb. 13, 2020	Oct. 31, 2020	Radiation (03CH07-HY)
Filter	Wainwright	WHNX7.0-26.5 G-6SS	SN7	7GHz High Pass Filter	Aug. 22, 2019	Feb. 05, 2020~Feb. 13, 2020	Aug. 21, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	30MHz~1GHz	Feb. 26, 2019	Feb. 05, 2020~Feb. 13, 2020	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY28655/4, MY24971/4, MY15682/4	1GHz~18GHz	Feb. 26, 2019	Feb. 05, 2020~Feb. 13, 2020	Feb. 25, 2020	Radiation (03CH07-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY2858/2	18GHz~40GHz	Feb. 26, 2019	Feb. 05, 2020~Feb. 13, 2020	Feb. 25, 2020	Radiation (03CH07-HY)
Antenna Mast	Max-Full	MFA520BS	N/A	1m~4m	N/A	Feb. 05, 2020~Feb. 13, 2020	N/A	Radiation (03CH07-HY)
Turn Table	ChainTek	Chaintek 3000	N/A	0~360 Degree	N/A	Feb. 05, 2020~Feb. 13, 2020	N/A	Radiation (03CH07-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	Aug. 27, 2019	Feb. 05, 2020~Feb. 13, 2020	Aug. 26, 2020	Radiation (03CH07-HY)
Software	Audix	E3 6.2009-8-24	80504004656H	N/A	N/A	Feb. 05, 2020~Feb. 13, 2020	N/A	Radiation (03CH07-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.23
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.63
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.70
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.94	22.95	22.87
20	1	49		22.75	22.93	22.65
20	1	99		22.91	22.92	22.84
20	50	0		21.76	21.95	21.72
20	50	24		21.71	21.94	21.68
20	50	50		21.74	21.94	21.77
20	100	0		21.90	21.94	21.90
20	1	0	16-QAM	21.97	21.93	21.97
20	1	49		21.82	21.97	21.69
20	1	99		21.88	21.94	21.87
20	50	0		20.81	20.97	20.77
20	50	24		20.78	20.95	20.71
20	50	50		20.78	20.96	20.80
20	100	0		20.88	20.97	20.92
15	1	0	QPSK	22.93	22.75	22.85
15	1	37		22.63	22.93	22.65
15	1	74		22.90	22.76	22.69
15	36	0		21.74	21.75	21.55
15	36	20		21.67	21.88	21.58
15	36	39		21.68	21.77	21.67
15	75	0		21.73	21.91	21.83
15	1	0	16-QAM	21.90	21.84	21.96
15	1	37		21.68	21.93	21.53
15	1	74		21.85	21.83	21.80
15	36	0		20.80	20.86	20.62
15	36	20		20.60	20.77	20.66
15	36	39		20.75	20.89	20.61
15	75	0		20.87	20.97	20.88



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.92	22.86	22.81
10	1	25		22.55	22.92	22.56
10	1	49		22.76	22.76	22.75
10	25	0		21.56	21.95	21.59
10	25	12		21.68	21.81	21.55
10	25	25		21.57	21.81	21.57
10	50	0		21.71	21.80	21.88
10	1	0	16-QAM	21.77	21.76	21.96
10	1	25		21.73	21.78	21.60
10	1	49		21.87	21.90	21.67
10	25	0		20.67	20.86	20.59
10	25	12		20.65	20.86	20.60
10	25	25		20.67	20.87	20.68
10	50	0		20.83	20.87	20.86
5	1	0	QPSK	22.82	22.83	22.74
5	1	12		22.62	22.81	22.61
5	1	24		22.85	22.86	22.66
5	12	0		21.61	21.89	21.55
5	12	7		21.55	21.78	21.68
5	12	13		21.71	21.76	21.60
5	25	0		21.85	21.92	21.74
5	1	0	16-QAM	21.82	21.87	21.90
5	1	12		21.79	21.85	21.64
5	1	24		21.74	21.85	21.79
5	12	0		20.81	20.80	20.59
5	12	7		20.77	20.79	20.55
5	12	13		20.66	20.83	20.67
5	25	0		20.77	20.92	20.91



LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.81	22.92	22.69
3	1	8		22.57	22.89	22.52
3	1	14		22.84	22.83	22.69
3	8	0		21.58	21.82	21.72
3	8	4		21.55	21.77	21.50
3	8	7		21.61	21.93	21.60
3	15	0		21.70	21.82	21.89
3	1	0	16-QAM	21.78	21.74	21.94
3	1	8		21.82	21.92	21.60
3	1	14		21.74	21.91	21.71
3	8	0		20.63	20.94	20.62
3	8	4		20.77	20.77	20.63
3	8	7		20.72	20.94	20.65
3	15	0		20.86	20.88	20.77
1.4	1	0	QPSK	22.87	22.88	22.73
1.4	1	3		22.70	22.74	22.61
1.4	1	5		22.84	22.83	22.65
1.4	3	0		22.75	22.80	22.67
1.4	3	1		22.70	22.83	22.61
1.4	3	3		22.66	22.79	22.59
1.4	6	0		21.78	21.90	21.81
1.4	1	0	16-QAM	21.80	21.80	21.85
1.4	1	3		21.77	21.91	21.54
1.4	1	5		21.77	21.78	21.87
1.4	3	0		21.73	21.89	21.59
1.4	3	1		21.70	21.82	21.55
1.4	3	3		21.61	21.79	21.62
1.4	6	0		20.71	20.81	20.81



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.27	23.31	23.13
20	1	49		23.25	23.05	23.16
20	1	99		23.12	23.17	23.20
20	50	0		22.35	22.13	22.14
20	50	24		22.34	22.05	22.17
20	50	50		22.26	22.09	22.16
20	100	0		22.43	22.15	22.36
20	1	0	16-QAM	22.32	22.43	22.39
20	1	49		22.49	22.28	22.39
20	1	99		22.34	22.35	22.43
20	50	0		21.36	21.17	21.16
20	50	24		21.34	21.11	21.19
20	50	50		21.28	21.13	21.17
20	100	0		21.39	21.16	21.34
15	1	0	QPSK	23.17	23.18	22.93
15	1	37		23.18	23.03	22.97
15	1	74		22.94	23.11	23.17
15	36	0		22.21	22.09	22.04
15	36	20		22.33	21.89	22.09
15	36	39		22.06	21.98	22.10
15	75	0		22.31	22.03	22.22
15	1	0	16-QAM	22.20	22.31	22.19
15	1	37		22.45	22.22	22.19
15	1	74		22.17	22.25	22.31
15	36	0		21.22	21.02	21.15
15	36	20		21.15	21.07	21.03
15	36	39		21.20	21.03	21.05
15	75	0		21.29	20.96	21.16



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.20	23.23	22.94
10	1	25		23.08	23.00	22.96
10	1	49		22.99	22.98	23.06
10	25	0		22.24	22.08	22.12
10	25	12		22.24	21.85	22.00
10	25	25		22.19	22.06	22.07
10	50	0		22.42	22.13	22.20
10	1	0	16-QAM	22.29	22.30	22.33
10	1	25		22.41	22.24	22.37
10	1	49		22.30	22.24	22.24
10	25	0		21.24	21.03	21.14
10	25	12		21.23	21.03	21.03
10	25	25		21.17	20.95	21.03
10	50	0		21.35	20.97	21.15
5	1	0	QPSK	23.15	23.19	23.09
5	1	12		23.09	22.87	23.12
5	1	24		22.93	22.98	23.12
5	12	0		22.23	22.04	22.08
5	12	7		22.16	22.01	22.14
5	12	13		22.15	21.94	22.02
5	25	0		22.42	22.07	22.19
5	1	0	16-QAM	22.15	22.34	22.25
5	1	12		22.35	22.08	22.19
5	1	24		22.19	22.15	22.36
5	12	0		21.28	21.08	20.98
5	12	7		21.19	20.97	21.19
5	12	13		21.20	21.04	21.01
5	25	0		21.33	21.03	21.22



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.25	23.30	23.12
3	1	8		23.15	23.00	23.13
3	1	14		23.05	23.07	23.00
3	8	0		22.27	22.08	22.00
3	8	4		22.17	21.87	22.11
3	8	7		22.09	21.97	22.05
3	15	0		22.26	22.15	22.18
3	1	0	16-QAM	22.12	22.39	22.24
3	1	8		22.44	22.23	22.20
3	1	14		22.19	22.25	22.26
3	8	0		21.21	21.04	21.09
3	8	4		21.20	20.99	21.05
3	8	7		21.09	21.02	21.14
3	15	0		21.39	21.08	21.31
1.4	1	0	QPSK	23.11	23.22	22.95
1.4	1	3		23.14	22.86	23.13
1.4	1	5		23.02	23.14	23.12
1.4	3	0		23.09	23.03	23.10
1.4	3	1		23.14	22.87	23.08
1.4	3	3		23.23	23.03	23.05
1.4	6	0		22.31	22.14	22.27
1.4	1	0	16-QAM	22.17	22.39	22.23
1.4	1	3		22.43	22.08	22.22
1.4	1	5		22.34	22.15	22.24
1.4	3	0		22.24	22.09	22.13
1.4	3	1		22.34	22.08	22.07
1.4	3	3		22.27	22.11	22.05
1.4	6	0		21.37	20.97	21.31



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.42	22.45	22.17
10	1	25		22.29	22.14	22.11
10	1	49		22.26	22.24	22.10
10	25	0		21.73	21.76	21.67
10	25	12		21.71	21.72	21.65
10	25	25		21.65	21.73	21.63
10	50	0		21.66	21.71	21.66
10	1	0	16-QAM	21.88	21.92	21.82
10	1	25		21.91	21.80	21.66
10	1	49		21.91	21.87	21.76
10	25	0		20.89	20.81	20.71
10	25	12		20.90	20.77	20.70
10	25	25		20.92	20.85	20.68
10	50	0		20.91	20.78	20.77
5	1	0	QPSK	22.32	22.16	22.14
5	1	12		22.27	22.09	22.01
5	1	24		22.19	22.20	22.10
5	12	0		21.77	21.71	21.57
5	12	7		21.75	21.62	21.58
5	12	13		21.84	21.59	21.63
5	25	0		21.78	21.52	21.56
5	1	0	16-QAM	21.87	21.88	21.63
5	1	12		21.81	21.64	21.52
5	1	24		21.82	21.87	21.56
5	12	0		20.85	20.74	20.69
5	12	7		20.85	20.71	20.69
5	12	13		20.85	20.75	20.63
5	25	0		20.75	20.59	20.65



LTE Band 5 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.37	22.24	22.17
3	1	8		22.25	22.08	22.04
3	1	14		22.26	22.20	22.03
3	8	0		21.76	21.61	21.57
3	8	4		21.80	21.61	21.64
3	8	7		21.84	21.66	21.53
3	15	0		21.78	21.53	21.62
3	1	0	16-QAM	21.73	21.83	21.75
3	1	8		21.86	21.68	21.55
3	1	14		21.76	21.85	21.73
3	8	0		20.85	20.62	20.71
3	8	4		20.89	20.59	20.67
3	8	7		20.91	20.67	20.56
3	15	0		20.71	20.69	20.75
1.4	1	0	QPSK	22.32	22.24	22.11
1.4	1	3		22.22	22.11	22.08
1.4	1	5		22.23	22.17	22.10
1.4	3	0		22.37	22.10	22.09
1.4	3	1		22.33	22.13	22.09
1.4	3	3		22.20	22.09	21.96
1.4	6	0		21.90	21.85	21.98
1.4	1	0	16-QAM	21.81	21.75	21.77
1.4	1	3		21.74	21.80	21.58
1.4	1	5		21.85	21.75	21.63
1.4	3	0		21.72	21.66	21.69
1.4	3	1		21.84	21.67	21.61
1.4	3	3		21.82	21.69	21.55
1.4	6	0		20.73	20.64	20.69



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.78	22.65	22.67
20	1	49		22.82	22.66	22.82
20	1	99		22.92	22.89	22.96
20	50	0		21.91	21.73	21.79
20	50	24		21.90	21.75	21.85
20	50	50		21.92	21.86	21.93
20	100	0		21.98	21.83	22.01
20	1	0	16-QAM	22.06	21.89	21.90
20	1	49		22.15	21.93	22.05
20	1	99		22.21	22.23	22.24
20	50	0		20.99	20.76	20.85
20	50	24		20.97	20.76	20.91
20	50	50		20.98	20.88	20.99
20	100	0		21.06	20.89	21.02
15	1	0	QPSK	22.67	22.64	22.60
15	1	37		22.70	22.52	22.77
15	1	74		22.91	22.79	22.95
15	36	0		21.75	21.70	21.75
15	36	20		21.77	21.65	21.78
15	36	39		21.90	21.80	21.80
15	75	0		21.86	21.68	21.87
15	1	0	16-QAM	21.90	21.84	21.76
15	1	37		22.06	21.77	21.85
15	1	74		22.06	22.08	22.17
15	36	0		20.90	20.57	20.76
15	36	20		20.94	20.66	20.87
15	36	39		20.80	20.69	20.98
15	75	0		20.89	20.83	20.84



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.71	22.58	22.54
10	1	25		22.81	22.53	22.65
10	1	49		22.78	22.71	22.95
10	25	0		21.88	21.54	21.60
10	25	12		21.78	21.56	21.75
10	25	25		21.91	21.75	21.74
10	50	0		21.96	21.77	21.88
10	1	0	16-QAM	22.05	21.81	21.75
10	1	25		22.00	21.83	22.03
10	1	49		22.20	22.23	22.09
10	25	0		20.87	20.70	20.72
10	25	12		20.89	20.75	20.81
10	25	25		20.94	20.81	20.80
10	50	0		20.94	20.88	20.92
5	1	0	QPSK	22.59	22.57	22.64
5	1	12		22.80	22.59	22.77
5	1	24		22.85	22.74	22.95
5	12	0		21.77	21.68	21.68
5	12	7		21.90	21.66	21.76
5	12	13		21.87	21.81	21.74
5	25	0		21.90	21.75	21.94
5	1	0	16-QAM	21.93	21.79	21.86
5	1	12		21.96	21.78	21.89
5	1	24		22.14	22.15	22.24
5	12	0		20.90	20.68	20.84
5	12	7		20.92	20.68	20.89
5	12	13		20.81	20.77	20.97
5	25	0		20.87	20.72	20.86



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.77	22.86	22.78
10	1	25		22.91	22.78	22.87
10	1	49		22.94	22.96	22.94
10	25	0		21.93	21.91	21.93
10	25	12		22.00	21.88	21.99
10	25	25		22.00	21.95	21.96
10	50	0		21.80	21.68	21.74
10	1	0	16-QAM	21.84	21.94	21.81
10	1	25		22.00	21.84	21.91
10	1	49		21.97	21.98	21.97
10	25	0		20.67	20.70	20.70
10	25	12		20.76	20.70	20.75
10	25	25		20.76	20.73	20.74
10	50	0		20.82	20.77	20.81
5	1	0	QPSK	22.59	22.69	22.71
5	1	12		22.74	22.76	22.67
5	1	24		22.94	22.86	22.88
5	12	0		21.73	21.90	21.73
5	12	7		21.89	21.73	21.88
5	12	13		21.93	21.89	21.89
5	25	0		21.72	21.64	21.73
5	1	0	16-QAM	21.73	21.89	21.62
5	1	12		21.89	21.81	21.73
5	1	24		21.97	21.79	21.84
5	12	0		20.64	20.63	20.58
5	12	7		20.59	20.51	20.70
5	12	13		20.61	20.55	20.58
5	25	0		20.67	20.76	20.71



LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.59	22.71	22.70
3	1	8		22.82	22.76	22.80
3	1	14		22.93	22.87	22.89
3	8	0		21.83	21.79	21.90
3	8	4		21.93	21.76	21.99
3	8	7		21.81	21.84	21.88
3	15	0		21.68	21.66	21.71
3	1	0	16-QAM	21.70	21.94	21.72
3	1	8		21.96	21.79	21.84
3	1	14		21.80	21.79	21.89
3	8	0		20.51	20.58	20.64
3	8	4		20.73	20.66	20.74
3	8	7		20.68	20.73	20.65
3	15	0		20.81	20.76	20.74
1.4	1	0	QPSK	22.63	22.77	22.60
1.4	1	3		22.88	22.75	22.79
1.4	1	5		22.92	22.77	22.85
1.4	3	0		22.79	22.84	22.82
1.4	3	1		22.89	22.72	22.83
1.4	3	3		22.79	22.75	22.82
1.4	6	0		21.78	21.54	21.69
1.4	1	0	16-QAM	21.73	21.84	21.73
1.4	1	3		21.86	21.73	21.76
1.4	1	5		21.87	21.91	21.82
1.4	3	0		21.67	21.64	21.59
1.4	3	1		21.68	21.62	21.65
1.4	3	3		21.60	21.68	21.58
1.4	6	0		20.81	20.69	20.64



LTE Band 13 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK		23.03	
10	1	25			22.90	
10	1	49			22.95	
10	25	0			21.99	
10	25	12			21.93	
10	25	25			21.96	
10	50	0			22.12	
10	1	0	16-QAM		22.30	
10	1	25			22.13	
10	1	49			22.29	
10	25	0			21.00	
10	25	12			20.94	
10	25	25			21.01	
10	50	0			21.17	
5	1	0	QPSK	22.82	22.88	22.78
5	1	12		22.62	22.71	22.69
5	1	24		22.81	22.91	22.81
5	12	0		21.80	21.81	21.75
5	12	7		21.73	21.75	21.75
5	12	13		21.78	21.82	21.73
5	25	0		22.00	22.05	22.04
5	1	0	16-QAM	22.11	22.15	22.07
5	1	12		22.00	22.10	22.06
5	1	24		22.17	22.18	22.11
5	12	0		20.72	20.82	20.82
5	12	7		20.70	20.80	20.77
5	12	13		20.94	21.00	20.93
5	25	0		21.03	21.03	21.03



LTE Band 17 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.82	22.78	22.79
10	1	25		22.80	22.81	22.86
10	1	49		22.94	23.00	22.94
10	25	0		21.88	21.89	21.92
10	25	12		21.92	21.90	21.89
10	25	25		21.96	21.95	21.97
10	50	0		21.92	21.95	21.97
10	1	0	16-QAM	21.84	21.79	21.79
10	1	25		21.78	21.82	21.88
10	1	49		21.96	21.98	21.95
10	25	0		20.93	20.94	20.92
10	25	12		20.91	20.97	20.96
10	25	25		20.91	20.96	20.94
10	50	0		20.92	20.97	20.98
5	1	0	QPSK	22.66	22.74	22.62
5	1	12		22.65	22.80	22.69
5	1	24		22.85	22.98	22.77
5	12	0		21.81	21.73	21.87
5	12	7		21.87	21.88	21.85
5	12	13		21.77	21.87	21.91
5	25	0		21.72	21.95	21.86
5	1	0	16-QAM	21.67	21.75	21.62
5	1	12		21.60	21.75	21.85
5	1	24		21.92	21.89	21.91
5	12	0		20.73	20.90	20.80
5	12	7		20.88	20.90	20.80
5	12	13		20.85	20.83	20.87
5	25	0		20.92	20.89	20.87



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.64	22.78	22.60
15	1	37		22.69	22.69	22.54
15	1	74		22.72	22.71	22.52
15	36	0		21.76	21.86	21.67
15	36	20		21.80	21.76	21.64
15	36	39		21.85	21.71	21.59
15	75	0		21.91	21.85	21.81
15	1	0	16-QAM	21.85	21.93	21.79
15	1	37		21.97	21.84	21.73
15	1	74		21.98	21.94	21.77
15	36	0		20.87	20.88	20.72
15	36	20		20.86	20.82	20.66
15	36	39		20.95	20.76	20.63
15	75	0		20.97	20.91	20.84
10	1	0	QPSK	22.47	22.67	22.40
10	1	25		22.50	22.59	22.46
10	1	49		22.69	22.71	22.37
10	25	0		21.68	21.73	21.49
10	25	12		21.75	21.57	21.47
10	25	25		21.80	21.62	21.47
10	50	0		21.73	21.83	21.61
10	1	0	16-QAM	21.77	21.86	21.61
10	1	25		21.82	21.67	21.57
10	1	49		21.83	21.87	21.58
10	25	0		20.72	20.74	20.66
10	25	12		20.84	20.78	20.53
10	25	25		20.84	20.57	20.60
10	50	0		20.97	20.82	20.74



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.45	22.70	22.41
5	1	12		22.50	22.69	22.34
5	1	24		22.66	22.53	22.38
5	12	0		21.66	21.69	21.56
5	12	7		21.71	21.58	21.59
5	12	13		21.66	21.55	21.40
5	25	0		21.77	21.83	21.73
5	1	0	16-QAM	21.85	21.79	21.71
5	1	12		21.78	21.77	21.55
5	1	24		21.87	21.80	21.57
5	12	0		20.76	20.82	20.70
5	12	7		20.70	20.72	20.52
5	12	13		20.80	20.64	20.62
5	25	0		20.82	20.91	20.66
3	1	0	QPSK	22.59	22.68	22.43
3	1	8		22.57	22.64	22.52
3	1	14		22.59	22.62	22.42
3	8	0		21.71	21.71	21.63
3	8	4		21.71	21.63	21.51
3	8	7		21.71	21.61	21.58
3	15	0		21.80	21.79	21.71
3	1	0	16-QAM	21.73	21.83	21.59
3	1	8		21.83	21.80	21.56
3	1	14		21.82	21.77	21.63
3	8	0		20.72	20.86	20.58
3	8	4		20.68	20.70	20.61
3	8	7		20.81	20.65	20.43
3	15	0		20.78	20.83	20.69



LTE Band 26 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.58	22.61	22.46
1.4	1	3		22.58	22.56	22.52
1.4	1	5		22.54	22.52	22.42
1.4	3	0		22.64	22.61	22.53
1.4	3	1		22.72	22.66	22.47
1.4	3	3		22.64	22.58	22.47
1.4	6	0		21.82	21.67	21.72
1.4	1	0	16-QAM	21.83	21.89	21.64
1.4	1	3		21.95	21.72	21.62
1.4	1	5		21.98	21.82	21.72
1.4	3	0		21.77	21.78	21.45
1.4	3	1		21.82	21.80	21.66
1.4	3	3		21.85	21.72	21.57
1.4	6	0		20.97	20.89	20.71



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.89	22.89	22.83
20	1	49		22.77	22.74	22.62
20	1	99		22.87	22.73	22.81
20	50	0		21.59	21.60	21.55
20	50	24		21.56	21.54	21.49
20	50	50		21.56	21.58	21.52
20	100	0		21.63	21.56	21.60
20	1	0	16-QAM	21.81	21.89	21.72
20	1	49		21.77	21.75	21.64
20	1	99		21.85	21.77	21.85
20	50	0		20.73	20.75	20.62
20	50	24		20.73	20.67	20.56
20	50	50		20.71	20.68	20.70
20	100	0		20.74	20.64	20.64
15	1	0	QPSK	22.72	22.83	22.75
15	1	37		22.75	22.62	22.50
15	1	74		22.68	22.53	22.75
15	36	0		21.43	21.55	21.52
15	36	20		21.50	21.48	21.33
15	36	39		21.49	21.40	21.49
15	75	0		21.54	21.36	21.51
15	1	0	16-QAM	21.72	21.80	21.69
15	1	37		21.65	21.55	21.45
15	1	74		21.67	21.60	21.85
15	36	0		20.55	20.64	20.61
15	36	20		20.67	20.58	20.49
15	36	39		20.56	20.60	20.61
15	75	0		20.63	20.48	20.60



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.87	22.71	22.70
10	1	25		22.59	22.60	22.45
10	1	49		22.79	22.62	22.79
10	25	0		21.42	21.48	21.41
10	25	12		21.53	21.38	21.34
10	25	25		21.51	21.41	21.52
10	50	0		21.61	21.46	21.49
10	1	0	16-QAM	21.65	21.78	21.65
10	1	25		21.74	21.63	21.58
10	1	49		21.82	21.67	21.75
10	25	0		20.68	20.59	20.55
10	25	12		20.72	20.58	20.56
10	25	25		20.64	20.56	20.56
10	50	0		20.71	20.58	20.52
5	1	0	QPSK	22.73	22.70	22.63
5	1	12		22.67	22.71	22.56
5	1	24		22.75	22.68	22.68
5	12	0		21.55	21.51	21.50
5	12	7		21.40	21.38	21.39
5	12	13		21.41	21.54	21.48
5	25	0		21.51	21.41	21.56
5	1	0	16-QAM	21.61	21.79	21.72
5	1	12		21.59	21.75	21.46
5	1	24		21.69	21.72	21.77
5	12	0		20.56	20.60	20.57
5	12	7		20.59	20.55	20.43
5	12	13		20.64	20.55	20.51
5	25	0		20.69	20.64	20.57



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.94	22.92	22.95
20	1	49		22.85	22.89	22.69
20	1	99		23.06	23.13	22.97
20	50	0		21.97	21.91	21.82
20	50	24		22.02	21.94	21.69
20	50	50		22.04	22.07	21.87
20	100	0		22.14	22.18	22.02
20	1	0	16-QAM	22.17	22.24	22.35
20	1	49		22.27	22.16	22.02
20	1	99		22.18	22.40	22.25
20	50	0		21.07	20.86	20.83
20	50	24		21.03	20.89	20.64
20	50	50		20.96	20.96	20.75
20	100	0		21.16	21.12	20.99
15	1	0	QPSK	22.93	22.85	22.78
15	1	37		23.02	22.78	22.64
15	1	74		22.79	22.93	22.84
15	36	0		21.94	21.73	21.70
15	36	20		21.99	21.87	21.51
15	36	39		21.86	21.89	21.70
15	75	0		22.00	22.11	21.88
15	1	0	16-QAM	22.07	22.04	22.27
15	1	37		22.22	22.15	21.84
15	1	74		22.08	22.25	22.11
15	36	0		20.87	20.76	20.70
15	36	20		20.86	20.74	20.56
15	36	39		20.78	20.90	20.62
15	75	0		21.00	21.02	20.95



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	22.79	22.75	22.88
10	1	25		22.99	22.81	22.54
10	1	49		22.65	23.03	22.88
10	25	0		22.01	21.80	21.79
10	25	12		21.95	21.86	21.54
10	25	25		21.92	21.87	21.72
10	50	0		22.00	22.04	21.86
10	1	0	16-QAM	22.13	22.24	22.25
10	1	25		22.27	22.12	21.84
10	1	49		21.99	22.20	22.24
10	25	0		20.94	20.75	20.68
10	25	12		20.99	20.78	20.58
10	25	25		20.80	20.77	20.58
10	50	0		21.01	20.96	20.93
5	1	0	QPSK	22.78	22.73	22.94
5	1	12		23.04	22.89	22.62
5	1	24		22.78	23.08	22.90
5	12	0		21.84	21.82	21.71
5	12	7		21.82	21.81	21.50
5	12	13		21.84	21.91	21.79
5	25	0		22.07	22.09	21.89
5	1	0	16-QAM	22.10	22.04	22.29
5	1	12		22.13	22.14	21.86
5	1	24		22.10	22.23	22.18
5	12	0		20.93	20.74	20.65
5	12	7		20.93	20.86	20.57
5	12	13		20.96	20.81	20.62
5	25	0		21.13	21.11	20.88



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	22.76	22.84	22.96
3	1	8		22.88	22.74	22.63
3	1	14		22.74	23.02	22.88
3	8	0		21.96	21.73	21.69
3	8	4		22.00	21.75	21.62
3	8	7		21.93	21.90	21.72
3	15	0		22.02	22.06	21.82
3	1	0	16-QAM	22.00	22.16	22.32
3	1	8		22.20	21.96	21.93
3	1	14		22.13	22.32	22.19
3	8	0		20.92	20.72	20.71
3	8	4		20.97	20.75	20.52
3	8	7		20.82	20.93	20.63
3	15	0		21.10	20.98	20.87
1.4	1	0	QPSK	22.88	22.74	22.79
1.4	1	3		22.87	22.88	22.62
1.4	1	5		22.80	22.95	22.94
1.4	3	0		22.79	22.88	22.79
1.4	3	1		22.89	22.75	22.66
1.4	3	3		22.88	22.97	22.77
1.4	6	0		22.10	22.11	21.97
1.4	1	0	16-QAM	22.09	22.14	22.23
1.4	1	3		22.22	22.15	21.91
1.4	1	5		22.06	22.27	22.19
1.4	3	0		22.00	21.70	21.72
1.4	3	1		21.84	21.79	21.65
1.4	3	3		21.89	21.77	21.66
1.4	6	0		21.04	21.05	20.99



Appendix B. Test Results of ERP/EIRP and Radiated Test

ERP/EIRP

LTE Band 2 / 1.4MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.87	0.1936	25.41	0.3475
Middle		1	0	22.88	0.1941	25.42	0.3483
Highest		1	0	22.73	0.1875	25.27	0.3365
Lowest	16QAM	1	3	21.77	0.1503	24.31	0.2698
Middle		1	3	21.91	0.1552	24.45	0.2786
Highest		1	3	21.54	0.1426	24.08	0.2559
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 3MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.81	0.1910	25.35	0.3428
Middle		1	0	22.92	0.1959	25.46	0.3516
Highest		1	0	22.69	0.1858	25.23	0.3334
Lowest	16QAM	1	0	21.78	0.1507	24.32	0.2704
Middle		1	0	21.74	0.1493	24.28	0.2679
Highest		1	0	21.94	0.1563	24.48	0.2805
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 5MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	24	22.85	0.1928	25.39	0.3459
Middle		1	24	22.86	0.1932	25.40	0.3467
Highest		1	24	22.66	0.1845	25.20	0.3311
Lowest	16QAM	1	0	21.82	0.1521	24.36	0.2729
Middle		1	0	21.87	0.1538	24.41	0.2761
Highest		1	0	21.90	0.1549	24.44	0.2780
Limit	EIRP < 2W			Result		PASS	



LTE Band 2 / 10MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.92	0.1959	25.46	0.3516
Middle		1	0	22.86	0.1932	25.40	0.3467
Highest		1	0	22.81	0.1910	25.35	0.3428
Lowest	16QAM	1	0	21.77	0.1503	24.31	0.2698
Middle		1	0	21.76	0.1500	24.30	0.2692
Highest		1	0	21.96	0.1570	24.50	0.2818
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 15MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.93	0.1963	25.47	0.3524
Middle		1	0	22.75	0.1884	25.29	0.3381
Highest		1	0	22.85	0.1928	25.39	0.3459
Lowest	16QAM	1	0	21.90	0.1549	24.44	0.2780
Middle		1	0	21.84	0.1528	24.38	0.2742
Highest		1	0	21.96	0.1570	24.50	0.2818
Limit	EIRP < 2W			Result		PASS	

LTE Band 2 / 20MHz (Average) (GT - LC = 2.54 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	22.94	0.1968	25.48	0.3532
Middle		1	0	22.95	0.1972	25.49	0.3540
Highest		1	0	22.87	0.1936	25.41	0.3475
Lowest	16QAM	1	0	21.97	0.1574	24.51	0.2825
Middle		1	0	21.93	0.1560	24.47	0.2799
Highest		1	0	21.97	0.1574	24.51	0.2825
Limit	EIRP < 2W			Result		PASS	



LTE Band 4 / 1.4MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	3	23.23	0.2104	25.34	0.3420
Middle		3	3	23.03	0.2009	25.14	0.3266
Highest		3	3	23.05	0.2018	25.16	0.3281
Lowest	16QAM	1	3	22.43	0.1750	24.54	0.2844
Middle		1	3	22.08	0.1614	24.19	0.2624
Highest		1	3	22.22	0.1667	24.33	0.2710
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 3MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.25	0.2113	25.36	0.3436
Middle		1	0	23.30	0.2138	25.41	0.3475
Highest		1	0	23.12	0.2051	25.23	0.3334
Lowest	16QAM	1	8	22.44	0.1754	24.55	0.2851
Middle		1	8	22.23	0.1671	24.34	0.2716
Highest		1	8	22.20	0.1660	24.31	0.2698
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 5MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.15	0.2065	25.26	0.3357
Middle		1	0	23.19	0.2084	25.30	0.3388
Highest		1	0	23.09	0.2037	25.20	0.3311
Lowest	16QAM	1	24	22.19	0.1656	24.30	0.2692
Middle		1	24	22.15	0.1641	24.26	0.2667
Highest		1	24	22.36	0.1722	24.47	0.2799
Limit	EIRP < 1W			Result		PASS	



LTE Band 4 / 10MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.20	0.2089	25.31	0.3396
Middle		1	0	23.23	0.2104	25.34	0.3420
Highest		1	0	22.94	0.1968	25.05	0.3199
Lowest	16QAM	1	25	22.41	0.1742	24.52	0.2831
Middle		1	25	22.24	0.1675	24.35	0.2723
Highest		1	25	22.37	0.1726	24.48	0.2805
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 15MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.17	0.2075	25.28	0.3373
Middle		1	0	23.18	0.2080	25.29	0.3381
Highest		1	0	22.93	0.1963	25.04	0.3192
Lowest	16QAM	1	37	22.45	0.1758	24.56	0.2858
Middle		1	37	22.22	0.1667	24.33	0.2710
Highest		1	37	22.19	0.1656	24.30	0.2692
Limit	EIRP < 1W			Result		PASS	

LTE Band 4 / 20MHz (Average) (GT - LC = 2.11 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	0	23.27	0.2123	25.38	0.3451
Middle		1	0	23.31	0.2143	25.42	0.3483
Highest		1	0	23.13	0.2056	25.24	0.3342
Lowest	16QAM	1	49	22.49	0.1774	24.60	0.2884
Middle		1	49	22.28	0.1690	24.39	0.2748
Highest		1	49	22.39	0.1734	24.50	0.2818
Limit	EIRP < 1W			Result		PASS	



LTE Band 5 / 1.4MHz (Average) (GT - LC = 0.56 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	3	0	22.37	0.1726	20.78	0.1197
Middle		3	0	22.10	0.1622	20.51	0.1125
Highest		3	0	22.09	0.1618	20.50	0.1122
Lowest	16QAM	1	5	21.85	0.1531	20.26	0.1062
Middle		1	5	21.75	0.1496	20.16	0.1038
Highest		1	5	21.63	0.1455	20.04	0.1009
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 3MHz (Average) (GT - LC = 0.56 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.37	0.1726	20.78	0.1197
Middle		1	0	22.24	0.1675	20.65	0.1161
Highest		1	0	22.17	0.1648	20.58	0.1143
Lowest	16QAM	1	8	21.86	0.1535	20.27	0.1064
Middle		1	8	21.68	0.1472	20.09	0.1021
Highest		1	8	21.55	0.1429	19.96	0.0991
Limit	ERP < 7W			Result		PASS	

LTE Band 5 / 5MHz (Average) (GT - LC = 0.56 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.32	0.1706	20.73	0.1183
Middle		1	0	22.16	0.1644	20.57	0.1140
Highest		1	0	22.14	0.1637	20.55	0.1135
Lowest	16QAM	1	0	21.87	0.1538	20.28	0.1067
Middle		1	0	21.88	0.1542	20.29	0.1069
Highest		1	0	21.63	0.1455	20.04	0.1009
Limit	ERP < 7W			Result		PASS	



LTE Band 5 / 10MHz (Average) (GT - LC = 0.56 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.42	0.1746	20.83	0.1211
Middle		1	0	22.45	0.1758	20.86	0.1219
Highest		1	0	22.17	0.1648	20.58	0.1143
Lowest	16QAM	1	0	21.88	0.1542	20.29	0.1069
Middle		1	0	21.92	0.1556	20.33	0.1079
Highest		1	0	21.82	0.1521	20.23	0.1054
Limit	ERP < 7W			Result		PASS	



LTE Band 7 / 5MHz (Average) (GT - LC = -0.87 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	24.00	22.85	0.1928	21.98	0.1578
Middle		1.00	24.00	22.74	0.1879	21.87	0.1538
Highest		1.00	24.00	22.95	0.1972	22.08	0.1614
Lowest	16QAM	1.00	24.00	22.14	0.1637	21.27	0.1340
Middle		1.00	24.00	22.15	0.1641	21.28	0.1343
Highest		1.00	24.00	22.24	0.1675	21.37	0.1371
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 10MHz (Average) (GT - LC = -0.87 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	49	22.78	0.1897	21.91	0.1552
Middle		1.00	49	22.71	0.1866	21.84	0.1528
Highest		1.00	49	22.95	0.1972	22.08	0.1614
Lowest	16QAM	1.00	49	22.20	0.1660	21.33	0.1358
Middle		1.00	49	22.23	0.1671	21.36	0.1368
Highest		1.00	49	22.09	0.1618	21.22	0.1324
Limit	EIRP < 2W			Result		PASS	

LTE Band 7 / 15MHz (Average) (GT - LC = -0.87 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	74.00	22.91	0.1954	22.04	0.1600
Middle		1.00	74.00	22.79	0.1901	21.92	0.1556
Highest		1.00	74.00	22.95	0.1972	22.08	0.1614
Lowest	16QAM	1.00	74.00	22.06	0.1607	21.19	0.1315
Middle		1.00	74.00	22.08	0.1614	21.21	0.1321
Highest		1.00	74.00	22.17	0.1648	21.30	0.1349
Limit	EIRP < 2W			Result		PASS	



LTE Band 7 / 20MHz (Average) (GT - LC = -0.87 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	99.00	22.92	0.1959	22.05	0.1603
Middle		1.00	99.00	22.89	0.1945	22.02	0.1592
Highest		1.00	99.00	22.96	0.1977	22.09	0.1618
Lowest	16QAM	1.00	99.00	22.21	0.1663	21.34	0.1361
Middle		1.00	99.00	22.23	0.1671	21.36	0.1368
Highest		1.00	99.00	22.24	0.1675	21.37	0.1371
Limit	EIRP < 2W			Result		PASS	



LTE Band 12 / 1.4MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	5	22.92	0.1959	21.34	0.1361
Middle		1	5	22.77	0.1892	21.19	0.1315
Highest		1	5	22.85	0.1928	21.27	0.1340
Lowest	16QAM	1	5	21.87	0.1538	20.29	0.1069
Middle		1	5	21.91	0.1552	20.33	0.1079
Highest		1	5	21.82	0.1521	20.24	0.1057
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 3MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	14	22.93	0.1963	21.35	0.1365
Middle		1	14	22.87	0.1936	21.29	0.1346
Highest		1	14	22.89	0.1945	21.31	0.1352
Lowest	16QAM	1	8	21.96	0.1570	20.38	0.1091
Middle		1	8	21.79	0.1510	20.21	0.1050
Highest		1	8	21.84	0.1528	20.26	0.1062
Limit	ERP < 3W			Result		PASS	

LTE Band 12 / 5MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	22.94	0.1968	21.36	0.1368
Middle		1	24	22.86	0.1932	21.28	0.1343
Highest		1	24	22.88	0.1941	21.30	0.1349
Lowest	16QAM	1	24	21.97	0.1574	20.39	0.1094
Middle		1	24	21.79	0.1510	20.21	0.1050
Highest		1	24	21.84	0.1528	20.26	0.1062
Limit	ERP < 3W			Result		PASS	



LTE Band 12 / 10MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	49	22.94	0.1968	21.36	0.1368
Middle		1	49	22.96	0.1977	21.38	0.1374
Highest		1	49	22.94	0.1968	21.36	0.1368
Lowest	16QAM	1	25	22.00	0.1585	20.42	0.1102
Middle		1	25	21.84	0.1528	20.26	0.1062
Highest		1	25	21.91	0.1552	20.33	0.1079
Limit	ERP < 3W			Result		PASS	



LTE Band 13 / 5MHz (Average) (GT - LC = 0.69 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	22.81	0.1910	21.35	0.1365
Middle		1	24	22.91	0.1954	21.45	0.1396
Highest		1	24	22.81	0.1910	21.35	0.1365
Lowest	16QAM	1	24	22.17	0.1648	20.71	0.1178
Middle		1	24	22.18	0.1652	20.72	0.1180
Highest		1	24	22.11	0.1626	20.65	0.1161
Limit	ERP < 3W			Result		PASS	

LTE Band 13 / 10MHz (Average) (GT - LC = 0.69 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	-	-	-	-	-	-
Middle		1	0	23.03	0.2009	21.57	0.1435
Highest		-	-	-	-	-	-
Lowest	16QAM	-	-	-	-	-	-
Middle		1	0	22.30	0.1698	20.84	0.1213
Highest		-	-	-	-	-	-
Limit	ERP < 3W			Result		PASS	



LTE Band 17 / 5MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	24	22.85	0.1928	21.27	0.1340
Middle		1	24	22.98	0.1986	21.40	0.1380
Highest		1	24	22.77	0.1892	21.19	0.1315
Lowest	16QAM	1	24	21.92	0.1556	20.34	0.1081
Middle		1	24	21.89	0.1545	20.31	0.1074
Highest		1	24	21.91	0.1552	20.33	0.1079
Limit	ERP < 3W			Result		PASS	

LTE Band 17 / 10MHz (Average) (GT - LC = 0.57 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	49	22.94	0.1968	21.36	0.1368
Middle		1	49	23.00	0.1995	21.42	0.1387
Highest		1	49	22.94	0.1968	21.36	0.1368
Lowest	16QAM	1	49	21.96	0.1570	20.38	0.1091
Middle		1	49	21.98	0.1578	20.40	0.1096
Highest		1	49	21.95	0.1567	20.37	0.1089
Limit	ERP < 3W			Result		PASS	



LTE Band 41 / 5MHz (Average) (GT - LC = -0.92 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	24.00	22.75	0.1884	21.83	0.1524
Middle		1.00	24.00	22.68	0.1854	21.76	0.1500
Highest		1.00	24.00	22.68	0.1854	21.76	0.1500
Lowest	16QAM	1.00	0.00	21.61	0.1449	20.69	0.1172
Middle		1.00	0.00	21.79	0.1510	20.87	0.1222
Highest		1.00	0.00	21.72	0.1486	20.80	0.1202
Limit	EIRP < 2W			Result		PASS	

LTE Band 41 / 10MHz (Average) (GT - LC = -0.92 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	0.00	22.87	0.1936	21.95	0.1567
Middle		1.00	0.00	22.71	0.1866	21.79	0.1510
Highest		1.00	0.00	22.70	0.1862	21.78	0.1507
Lowest	16QAM	1.00	49	21.82	0.1521	20.90	0.1230
Middle		1.00	49	21.67	0.1469	20.75	0.1189
Highest		1.00	49	21.75	0.1496	20.83	0.1211
Limit	EIRP < 2W			Result		PASS	

LTE Band 41 / 15MHz (Average) (GT - LC = -0.92 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	0.00	22.72	0.1871	21.80	0.1514
Middle		1.00	0.00	22.83	0.1919	21.91	0.1552
Highest		1.00	0.00	22.75	0.1884	21.83	0.1524
Lowest	16QAM	1.00	74.00	21.67	0.1469	20.75	0.1189
Middle		1.00	74.00	21.60	0.1445	20.68	0.1169
Highest		1.00	74.00	21.85	0.1531	20.93	0.1239
Limit	EIRP < 2W			Result		PASS	



LTE Band 41 / 20MHz (Average) (GT - LC = -0.92 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1.00	0.00	22.89	0.1945	21.97	0.1574
Middle		1.00	0.00	22.89	0.1945	21.97	0.1574
Highest		1.00	0.00	22.83	0.1919	21.91	0.1552
Lowest	16QAM	1.00	0.00	21.81	0.1517	20.89	0.1227
Middle		1.00	0.00	21.89	0.1545	20.97	0.1250
Highest		1.00	0.00	21.72	0.1486	20.80	0.1202
Limit	EIRP < 2W			Result		PASS	



LTE Band 26 / 1.4MHz (Average) (GT - LC = 0.66 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	3	1	22.72	0.1871	21.23	0.1327
Middle		3	1	22.66	0.1845	21.17	0.1309
Highest		3	1	22.47	0.1766	20.98	0.1253
Lowest	16QAM	1	5	21.98	0.1578	20.49	0.1119
Middle		1	5	21.82	0.1521	20.33	0.1079
Highest		1	5	21.72	0.1486	20.23	0.1054
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 3MHz (Average) (GT - LC = 0.66 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.59	0.1816	21.10	0.1288
Middle		1	0	22.68	0.1854	21.19	0.1315
Highest		1	0	22.43	0.1750	20.94	0.1242
Lowest	16QAM	1	0	21.73	0.1489	20.24	0.1057
Middle		1	0	21.83	0.1524	20.34	0.1081
Highest		1	0	21.59	0.1442	20.10	0.1023
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 5MHz (Average) (GT - LC = 0.66 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.45	0.1758	20.96	0.1247
Middle		1	0	22.70	0.1862	21.21	0.1321
Highest		1	0	22.41	0.1742	20.92	0.1236
Lowest	16QAM	1	24	21.87	0.1538	20.38	0.1091
Middle		1	24	21.80	0.1514	20.31	0.1074
Highest		1	24	21.57	0.1435	20.08	0.1019
Limit	ERP < 7W			Result		PASS	



LTE Band 26 / 10MHz (Average) (GT - LC = 0.66 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	49	22.69	0.1858	21.20	0.1318
Middle		1	49	22.71	0.1866	21.22	0.1324
Highest		1	49	22.37	0.1726	20.88	0.1225
Lowest	16QAM	1	49	21.83	0.1524	20.34	0.1081
Middle		1	49	21.87	0.1538	20.38	0.1091
Highest		1	49	21.58	0.1439	20.09	0.1021
Limit	ERP < 7W			Result		PASS	

LTE Band 26 / 15MHz (Average) (GT - LC = 0.66 dB)							
Channel	Mode	RB		Conducted		ERP	
		Size	Offset	Power (dBm)	Power (Watts)	ERP(dBm)	ERP(W)
Lowest	QPSK	1	0	22.64	0.1837	21.15	0.1303
Middle		1	0	22.78	0.1897	21.29	0.1346
Highest		1	0	22.60	0.1820	21.11	0.1291
Lowest	16QAM	1	74	21.98	0.1578	20.49	0.1119
Middle		1	74	21.94	0.1563	20.45	0.1109
Highest		1	74	21.77	0.1503	20.28	0.1067
Limit	ERP < 7W			Result		PASS	



LTE Band 66 / 1.4MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	3	3	22.88	0.1941	24.62	0.2897
Middle		3	3	22.97	0.1982	24.71	0.2958
Highest		3	3	22.77	0.1892	24.51	0.2825
Lowest	16QAM	1	5	22.06	0.1607	23.80	0.2399
Middle		1	5	22.27	0.1687	24.01	0.2518
Highest		1	5	22.19	0.1656	23.93	0.2472
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 3MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	14	22.74	0.1879	24.48	0.2805
Middle		1	14	23.02	0.2004	24.76	0.2992
Highest		1	14	22.88	0.1941	24.62	0.2897
Lowest	16QAM	1	0	22.00	0.1585	23.74	0.2366
Middle		1	0	22.16	0.1644	23.90	0.2455
Highest		1	0	22.32	0.1706	24.06	0.2547
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 5MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	24	22.78	0.1897	24.52	0.2831
Middle		1	24	23.08	0.2032	24.82	0.3034
Highest		1	24	22.90	0.1950	24.64	0.2911
Lowest	16QAM	1	0	22.10	0.1622	23.84	0.2421
Middle		1	0	22.04	0.1600	23.78	0.2388
Highest		1	0	22.29	0.1694	24.03	0.2529
Limit	EIRP < 1W			Result		PASS	



LTE Band 66 / 10MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	49	22.65	0.1841	24.39	0.2748
Middle		1	49	23.03	0.2009	24.77	0.2999
Highest		1	49	22.88	0.1941	24.62	0.2897
Lowest	16QAM	1	25	22.27	0.1687	24.01	0.2518
Middle		1	25	22.12	0.1629	23.86	0.2432
Highest		1	25	21.84	0.1528	23.58	0.2280
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 15MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	37	23.02	0.2004	24.76	0.2992
Middle		1	37	22.78	0.1897	24.52	0.2831
Highest		1	37	22.64	0.1837	24.38	0.2742
Lowest	16QAM	1	0	22.07	0.1611	23.81	0.2404
Middle		1	0	22.04	0.1600	23.78	0.2388
Highest		1	0	22.27	0.1687	24.01	0.2518
Limit	EIRP < 1W			Result		PASS	

LTE Band 66 / 20MHz (Average) (GT - LC = 1.74 dB)							
Channel	Mode	RB		Conducted		EIRP	
		Size	Offset	Power (dBm)	Power (Watts)	EIRP(dBm)	EIRP(W)
Lowest	QPSK	1	99	23.06	0.2023	24.80	0.3020
Middle		1	99	23.13	0.2056	24.87	0.3069
Highest		1	99	22.97	0.1982	24.71	0.2958
Lowest	16QAM	1	99	22.18	0.1652	23.92	0.2466
Middle		1	99	22.40	0.1738	24.14	0.2594
Highest		1	99	22.25	0.1679	23.99	0.2506
Limit	EIRP < 1W			Result		PASS	

**Radiated Spurious Emission****LTE Band 26**

LTE Band 26 / 15MHz / 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	-54.06	-13	-41.06	-66.24	-55.82	0.98	4.89	H
	4952	-49.27	-13	-36.27	-72.41	-54.41	2.31	9.60	H
	5776	-51.64	-13	-38.64	-77.31	-56.52	2.78	9.81	H
	1648	-54.12	-13	-41.12	-66.82	-55.88	0.98	4.89	V
	4952	-49.72	-13	-36.72	-62.7	-54.86	2.31	9.60	V
	5776	-48.03	-13	-35.03	-73.53	-52.91	2.78	9.81	V
Middle	1656	-55.09	-13	-42.09	-67.44	-56.82	0.98	4.86	H
	4152	-55.74	-13	-42.74	-76.38	-60.37	1.85	8.63	H
	4976	-51.51	-13	-38.51	-74.79	-56.69	2.32	9.65	H
	5808	-54.09	-13	-41.09	-79.7	-58.96	2.80	9.82	H
	6640	-51.98	-13	-38.98	-78.36	-57.49	2.71	10.37	H
	1656	-55.85	-13	-42.85	-68.72	-57.58	0.98	4.86	V
	4152	-56.56	-13	-43.56	-77.28	-61.19	1.85	8.63	V
	4976	-52.43	-13	-39.43	-75.62	-57.61	2.32	9.65	V
	5808	-53.11	-13	-40.11	-78.64	-57.98	2.80	9.82	V
	6640	-52.08	-13	-39.08	-78.54	-57.59	2.71	10.37	V
Highest	1672	-52.84	-13	-39.84	-65.38	-54.52	0.99	4.82	H
	5008	-53.58	-13	-40.58	-76.86	-58.79	2.34	9.70	H
	5848	-53.19	-13	-40.19	-78.9	-58.05	2.83	9.84	H
	1672	-54.43	-13	-41.43	-67.43	-56.11	0.99	4.82	V
	5008	-54.71	-13	-41.71	-77.8	-59.92	2.34	9.70	V
	5848	-51.58	-13	-38.58	-77.26	-56.44	2.83	9.84	V

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

LTE Band 2

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	3702	-55.63	-13	-42.63	-76.23	-62.2	1.67	8.24	H
	5556	-53.73	-13	-40.73	-78.79	-60.8	2.66	9.72	H
	7404	-48.75	-13	-35.75	-76.15	-57.9	2.46	11.61	H
	3702	-52.73	-13	-39.73	-73.03	-59.3	1.67	8.24	V
	9252	-49.64	-13	-36.64	-74.47	-59.7	2.54	12.60	V
	11110.5	-47.13	-13	-34.13	-74.79	-56.9	2.69	12.46	V
Middle	3744	-54.89	-13	-41.89	-75.44	-61.5	1.68	8.29	H
	5616	-53.05	-13	-40.05	-78.02	-60.1	2.69	9.75	H
	7482	-49.37	-13	-36.37	-76.59	-58.7	2.44	11.76	H
	3744	-53.49	-13	-40.49	-73.95	-60.1	1.68	8.29	V
	5616	-46.95	-13	-33.95	-71.98	-54	2.69	9.75	V
	7482	-49.87	-13	-36.87	-77.54	-59.2	2.44	11.76	V
Highest	3780	-55.46	-13	-42.46	-76.01	-62.1	1.69	8.34	H
	5676	-53.76	-13	-40.76	-78.87	-60.8	2.73	9.77	H
	7566	-47.67	-13	-34.67	-75.12	-57.1	2.41	11.84	H
	3780	-53.56	-13	-40.56	-74.27	-60.2	1.69	8.34	V
	5676	-46.66	-13	-33.66	-71.93	-53.7	2.73	9.77	V
	7566	-47.77	-13	-34.77	-75.53	-57.2	2.41	11.84	V

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

**LTE Band 4**

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	-51.44	-13	-38.44	-72.2	-57.51	1.58	7.65	H
	5136	-47.97	-13	-34.97	-71.9	-55.25	2.42	9.70	H
	6846	-47.79	-13	-34.79	-74.78	-55.77	2.64	10.62	H
	10270.5	-39.44	-13	-26.44	-72.34	-49.05	2.69	12.31	H
	3420	-49.11	-13	-36.11	-69.91	-55.18	1.58	7.65	V
	5136	-50.83	-13	-37.83	-74.66	-58.11	2.42	9.70	V
	6846	-47.69	-13	-34.69	-74.63	-55.67	2.64	10.62	V
	10270.5	-39.64	-13	-26.64	-72.39	-49.25	2.69	12.31	V
Middle	3450	-51.32	-13	-38.32	-72.16	-57.51	1.59	7.78	H
	5172	-47.48	-13	-34.48	-71.54	-54.74	2.44	9.70	H
	6894	-44.43	-13	-31.43	-71.59	-52.48	2.62	10.67	H
	10344	-38.72	-13	-25.72	-71.92	-48.36	2.69	12.34	H
	3450	-48.09	-13	-35.09	-68.91	-54.28	1.59	7.78	V
	5172	-49.13	-13	-36.13	-73.13	-56.39	2.44	9.70	V
	6894	-47.56	-13	-34.56	-74.71	-55.61	2.62	10.67	V
	10344	-42.49	-13	-29.49	-75.55	-52.13	2.69	12.34	V
Highest	3474	-51.72	-13	-38.72	-72.74	-58.01	1.60	7.89	H
	5208	-47.38	-13	-34.38	-71.55	-54.62	2.46	9.70	H
	6942	-48.81	-13	-35.81	-76.13	-56.93	2.61	10.73	H
	10417.5	-41.16	-13	-28.16	-74.45	-50.83	2.69	12.37	H
	3474	-50.12	-13	-37.12	-71.09	-56.41	1.60	7.89	V
	5208	-50.88	-13	-37.88	-74.95	-58.12	2.46	9.70	V
	6942	-51.51	-13	-38.51	-78.68	-59.63	2.61	10.73	V
	10417.5	-42.45	-13	-29.45	-75.66	-52.12	2.69	12.37	V

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

**LTE Band 66**

LTE Band 66 / 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	3456	-51.88	-13	-38.88	-72.54	-58.1	1.59	7.81	H
	5184	-48.04	-13	-35.04	-72.16	-55.3	2.44	9.70	H
	6918	-48.02	-13	-35.02	-75.37	-56.1	2.62	10.70	H
	10375.5	-38.94	-13	-25.94	-72.4	-48.6	2.69	12.35	H
	3456	-49.88	-13	-36.88	-70.51	-56.1	1.59	7.81	V
	5184	-48.54	-13	-35.54	-72.58	-55.8	2.44	9.70	V
	6918	-49.62	-13	-36.62	-76.92	-57.7	2.62	10.70	V
	10375.5	-36.04	-13	-23.04	-69.35	-45.7	2.69	12.35	V
Middle	3510	-49.80	-13	-36.80	-71	-56.2	1.61	8.01	H
	5262	-47.99	-13	-34.99	-72.31	-55.2	2.49	9.70	H
	7014	-44.46	-13	-31.46	-72.07	-52.7	2.59	10.83	H
	10522.5	-40.59	-13	-27.59	-73.98	-50.3	2.69	12.40	H
	3510	-48.80	-13	-35.80	-69.56	-55.2	1.61	8.01	V
	5262	-51.09	-13	-38.09	-75.41	-58.3	2.49	9.70	V
	7014	-46.86	-13	-33.86	-74.25	-55.1	2.59	10.83	V
	10522.5	-39.59	-13	-26.59	-72.89	-49.3	2.69	12.40	V
Highest	3558	-46.05	-13	-33.05	-67.28	-52.5	1.62	8.07	H
	5334	-49.73	-13	-36.73	-74.14	-56.9	2.53	9.70	H
	7116	-38.72	-13	-25.72	-66.41	-47.2	2.55	11.03	H
	10669.5	-37.76	-13	-24.76	-71.78	-47.5	2.69	12.43	H
	3558	-45.65	-13	-32.65	-66.25	-52.1	1.62	8.07	V
	5334	-51.43	-13	-38.43	-76.13	-58.6	2.53	9.70	V
	7116	-44.62	-13	-31.62	-71.22	-53.1	2.55	11.03	V
	10669.5	-43.46	-13	-30.46	-77.44	-53.2	2.69	12.43	V

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

**LTE Band 12**

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	1416	-61.55	-13	-48.55	-71.63	-63.30	0.87	4.78	H
	2128	-57.74	-13	-44.74	-73.32	-58.70	1.17	4.28	H
	2836	-58.98	-13	-45.98	-76.62	-61.10	1.40	5.67	H
	1416	-63.05	-13	-50.05	-73.65	-64.80	0.87	4.78	V
	2128	-58.64	-13	-45.64	-74.53	-59.60	1.17	4.28	V
	2836	-58.98	-13	-45.98	-77.03	-61.10	1.40	5.67	V
Middle	1424	-60.10	-13	-47.10	-70.51	-61.90	0.88	4.83	H
	2136	-54.72	-13	-41.72	-70.50	-55.70	1.18	4.31	H
	2848	-59.27	-13	-46.27	-76.62	-61.40	1.40	5.68	H
	1424	-60.70	-13	-47.70	-71.53	-62.50	0.88	4.83	V
	2136	-59.42	-13	-46.42	-75.31	-60.40	1.18	4.31	V
	2848	-58.97	-13	-45.97	-77.06	-61.10	1.40	5.68	V
Highest	1432	-63.15	-13	-50.15	-73.63	-65.00	0.88	4.88	H
	2144	-56.20	-13	-43.20	-71.97	-57.20	1.18	4.33	H
	2864	-59.56	-13	-46.56	-76.92	-61.70	1.40	5.69	H
	1432	-56.85	-13	-43.85	-67.58	-58.70	0.88	4.88	V
	2144	-58.20	-13	-45.20	-73.98	-59.20	1.18	4.33	V
	2864	-58.36	-13	-45.36	-76.84	-60.50	1.40	5.69	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	-62.46	-42.15	-20.31	-73.78	-64.50	0.94	5.13	H
	2344	-53.56	-13	-40.56	-69.67	-55.10	1.24	4.93	H
	3128	-59.67	-13	-46.67	-77.91	-62.40	1.49	6.36	H
	1560	-62.56	-42.15	-20.41	-74.06	-64.60	0.94	5.13	V
	2344	-56.66	-13	-43.66	-73.39	-58.20	1.24	4.93	V
	3128	-59.07	-13	-46.07	-77.64	-61.80	1.49	6.36	V
Middle	1568	-59.28	-42.15	-17.13	-70.29	-61.30	0.94	5.11	H
	2352	-48.04	-13	-35.04	-64.80	-49.60	1.24	4.96	H
	3138	-59.73	-13	-46.73	-77.91	-62.50	1.49	6.41	H
	1568	-59.18	-42.15	-17.03	-70.68	-61.20	0.94	5.11	V
	2352	-51.04	-13	-38.04	-68.14	-52.60	1.24	4.96	V
	3138	-58.43	-13	-45.43	-77.67	-61.20	1.49	6.41	V
Highest	1576	-63.11	-42.15	-20.96	-74.21	-65.10	0.95	5.09	H
	2360	-58.62	-13	-45.62	-75.28	-60.20	1.25	4.98	H
	3152	-59.08	-13	-46.08	-77.60	-61.90	1.50	6.47	H
	1576	-62.11	-42.15	-19.96	-74.18	-64.10	0.95	5.09	V
	2360	-59.02	-13	-46.02	-76.07	-60.60	1.25	4.98	V
	3152	-58.88	-13	-45.88	-77.79	-61.70	1.50	6.47	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	1552	-58.03	-13	-45.03	-69.08	-60.1	0.94	5.15	H
	2336	-54.38	-13	-41.38	-70.87	-55.9	1.24	4.91	H
	3104	-59.27	-13	-46.27	-77.43	-61.9	1.48	6.26	H
	1552	-59.03	-13	-46.03	-70.94	-61.1	0.94	5.15	V
	2336	-55.28	-13	-42.28	-71.76	-56.8	1.24	4.91	V
	3104	-58.87	-13	-45.87	-77.51	-61.5	1.48	6.26	V

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

**LTE Band 17**

LTE Band 17 / 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	1424	-59.30	-13	-46.30	-69.60	-61.10	0.88	4.83	H
	2144	-56.70	-13	-43.70	-72.33	-57.70	1.18	4.33	H
	2856	-59.17	-13	-46.17	-76.75	-61.30	1.40	5.68	H
	1424	-57.80	-13	-44.80	-68.55	-59.60	0.88	4.83	V
	2144	-57.70	-13	-44.70	-73.88	-58.70	1.18	4.33	V
	2856	-58.47	-13	-45.47	-76.71	-60.60	1.40	5.68	V
Middle	1432	-59.75	-13	-46.75	-70.15	-61.60	0.88	4.88	H
	2144	-55.90	-13	-42.90	-71.57	-56.90	1.18	4.33	H
	2860	-59.87	-13	-46.87	-77.07	-62.00	1.40	5.69	H
	1432	-58.95	-13	-45.95	-69.83	-60.80	0.88	4.88	V
	2144	-58.60	-13	-45.60	-74.46	-59.60	1.18	4.33	V
	2860	-58.67	-13	-45.67	-77.00	-60.80	1.40	5.69	V
Highest	1432	-62.85	-13	-49.85	-73.24	-64.70	0.88	4.88	H
	2144	-55.90	-13	-42.90	-71.57	-56.90	1.18	4.33	H
	2864	-59.76	-13	-46.76	-77.21	-61.90	1.40	5.69	H
	1432	-59.75	-13	-46.75	-70.79	-61.60	0.88	4.88	V
	2144	-57.10	-13	-44.10	-73.16	-58.10	1.18	4.33	V
	2864	-58.66	-13	-45.66	-77.20	-60.80	1.40	5.69	V

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



LTE Band 17 / 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	1424	-57.15	-13	-44.15	-69.60	-61.10	0.88	4.83	H
	2144	-54.55	-13	-41.55	-72.33	-57.70	1.18	4.33	H
	2856	-57.02	-13	-44.02	-76.75	-61.30	1.40	5.68	H
	1424	-55.65	-13	-42.65	-68.55	-59.60	0.88	4.83	V
	2144	-55.55	-13	-42.55	-73.88	-58.70	1.18	4.33	V
	2856	-56.32	-13	-43.32	-76.71	-60.60	1.40	5.68	V
Middle	1432	-60.70	-13	-47.70	-73.24	-64.70	0.88	4.88	H
	2144	-53.75	-13	-40.75	-71.57	-56.90	1.18	4.33	H
	2864	-57.61	-13	-44.61	-77.21	-61.90	1.40	5.69	H
	1432	-57.60	-13	-44.60	-70.79	-61.60	0.88	4.88	V
	2144	-54.95	-13	-41.95	-73.16	-58.10	1.18	4.33	V
	2864	-56.51	-13	-43.51	-77.20	-60.80	1.40	5.69	V
Highest	1432	-57.60	-13	-44.60	-70.15	-61.60	0.88	4.88	H
	2144	-53.75	-13	-40.75	-71.57	-56.90	1.18	4.33	H
	2860	-57.72	-13	-44.72	-77.07	-62.00	1.40	5.69	H
	1432	-56.80	-13	-43.80	-69.83	-60.80	0.88	4.88	V
	2144	-56.45	-13	-43.45	-74.46	-59.60	1.18	4.33	V
	2860	-56.52	-13	-43.52	-77.00	-60.80	1.40	5.69	V

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

**LTE Band 7**

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	5040	-49.76	-25	-24.76	-73.27	-57.1	2.36	9.70	H
	7554	-35.68	-25	-10.68	-63.79	-45.1	2.41	11.83	H
	10080	-47.26	-25	-22.26	-79.85	-56.8	2.70	12.23	H
	15120	-41.98	-25	-16.98	-78.68	-52.1	3.65	13.77	H
	5040	-49.76	-25	-24.76	-73.41	-57.1	2.36	9.70	V
	7554	-38.18	-25	-13.18	-66.35	-47.6	2.41	11.83	V
	10080	-48.06	-25	-23.06	-80.41	-57.6	2.70	12.23	V
	15120	-39.98	-25	-14.98	-76.64	-50.1	3.65	13.77	V
Middle	5088	-48.09	-25	-23.09	-72.05	-55.4	2.39	9.70	H
	7632	-42.61	-25	-17.61	-70.91	-52.1	2.39	11.88	H
	10170	-44.93	-25	-19.93	-77.93	-54.5	2.70	12.27	H
	15264	-41.94	-25	-16.94	-79.33	-52.2	3.71	13.97	H
	5088	-47.49	-25	-22.49	-71.19	-54.8	2.39	9.70	V
	7632	-40.11	-25	-15.11	-67.92	-49.6	2.39	11.88	V
	10170	-46.93	-25	-21.93	-79.46	-56.5	2.70	12.27	V
	15264	-40.94	-25	-15.94	-78.27	-51.2	3.71	13.97	V
Highest	5136	-48.02	-25	-23.02	-72.1	-55.3	2.42	9.70	H
	7704	-40.84	-25	-15.84	-69.2	-50.4	2.36	11.92	H
	10278	-46.68	-25	-21.68	-79.67	-56.3	2.69	12.31	H
	15408	-41.10	-25	-16.10	-78.82	-51.5	3.77	14.17	H
	5136	-46.02	-25	-21.02	-70.11	-53.3	2.42	9.70	V
	7704	-41.84	-25	-16.84	-70.17	-51.4	2.36	11.92	V
	10278	-46.58	-25	-21.58	-79.71	-56.2	2.69	12.31	V
	15408	-39.40	-25	-14.40	-76.94	-49.8	3.77	14.17	V

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

LTE Band 41

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	-53.51	-25	-28.51	-77.1	-60.86	2.33	9.68	H
	7494	-37.52	-25	-12.52	-65.17	-46.88	2.43	11.79	H
	9990	-49.26	-25	-24.26	-81.51	-58.77	2.69	12.21	H
	4992	-52.59	-25	-27.59	-75.89	-59.94	2.33	9.68	V
	7494	-37.03	-25	-12.03	-64.99	-46.39	2.43	11.79	V
	9990	-49.07	-25	-24.07	-81.26	-58.58	2.69	12.21	V
Middle	5166	-50.46	-25	-25.46	-74.61	-57.73	2.43	9.70	H
	7752	-41.63	-25	-16.63	-69.97	-51.23	2.35	11.95	H
	10332	-48.51	-25	-23.51	-81.64	-58.15	2.69	12.33	H
	5166	-48.74	-25	-23.74	-72.64	-56.01	2.43	9.70	V
	7752	-43.13	-25	-18.13	-71.79	-52.73	2.35	11.95	V
	10332	-48.72	-25	-23.72	-81.53	-58.36	2.69	12.33	V
Highest	5340	-47.27	-25	-22.27	-71.8	-54.44	2.53	9.70	H
	8016	-45.18	-25	-20.18	-74.13	-55.02	2.27	12.11	H
	10674	-46.92	-25	-21.92	-80.95	-56.66	2.69	12.43	H
	5340	-48.32	-25	-23.32	-72.68	-55.49	2.53	9.70	V
	8016	-45.41	-25	-20.41	-74.81	-55.25	2.27	12.11	V
	10674	-47.14	-25	-22.14	-81.04	-56.88	2.69	12.43	V

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