



FCC RADIO TEST REPORT

FCC ID : PU5-TP00132C
Equipment : Notebook Computer
Brand Name : Lenovo
Model Name : TP00132C
Applicant : Wistron Corporation
21F, No. 88, Sec. 1, Hsin Tai Wu Rd., Hsichih
Dist, New Taipei City 221, Taiwan
Manufacturer : Lenovo PC HK Limited.
23/F, Lincoln House, Taikoo Place, 979
King's Road, Quarry Bay, Hong Kong, China
Standard : FCC 47 CFR Part 2, 22(H), 24(E), 27

Equipment: Fibocom L860-GL-16 tested inside of Lenovo Notebook Computer.

The product was received on Dec. 09, 2022 and testing was performed from Jan. 20, 2023 to Mar. 03, 2023. 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 test results in this partial report apply exclusively to the tested model / sample. Without written approval from 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



Table of Contents

History of this test report	3
Summary of Test Result	4
1 General Description	6
1.1 Product Feature of Equipment Under Test	6
1.2 Product Specification of Equipment Under Test.....	8
1.3 Modification of EUT	9
1.4 Testing Location	10
1.5 Applicable Standards	10
2 Test Configuration of Equipment Under Test	11
2.1 Test Mode	11
2.2 Connection Diagram of Test System	15
2.3 Support Unit used in test configuration and system	15
2.4 Frequency List of Low/Middle/High Channels	16
3 Conducted Test Items	28
3.1 Measuring Instruments	28
3.2 Conducted Output Power and ERP/EIRP	29
4 Radiated Test Items	30
4.1 Measuring Instruments	30
4.2 Radiated Spurious Emission Measurement	32
5 List of Measuring Equipment	33
6 Uncertainty of Evaluation	34
Appendix A. Test Results of Conducted Test	
Appendix B. Test Results of Radiated Test	
Appendix C. Test Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FG2D0922B	01	Initial issue of report	Apr. 07, 2023

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)(5)	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) (Band 71)		
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 25) (Band 7) (Band 38) (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 25) (Band 26) (Band 66) (Band 71)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (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 25) (Band 26) (Band 66) (Band 71)	-	See Note
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (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 25) (Band 26) (Band 66) (Band 71)	Pass	6.04 dB under the limit at 1564.000 MHz
	§2.1051 §27.53 (m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)		

Note:

1. For host device, Radiated Spurious Emission, Effective Radiated Power and Equivalent Isotropic Radiated Power are verified and complies with the limit in this test report.
2. For host device, the Conducted Output Power is no difference after compared to module (Model: L860-GL-16)

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. Please refer to the section "Uncertainty of Evaluation" for measurement uncertainty.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sheng Kuo

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	TP00132C
FCC ID	PU5-TP00132C
Sample 1	EUT with AVX/ Ethertronics Antenna
Sample 2	EUT with LUXSHARE-ICT Antenna
Integrated WLAN Module	Brand Name: Intel Model Name: AX211D2W FCC ID: PD9AX211D2
Integrated NFC Module	Brand Name: Foxconn Model Name: T77H747
EUT supports Radios application	WCDMA/HSPA/LTE/GNSS/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Fibocom L860-GL-16 tested inside of Lenovo Notebook Computer.

WWAN Antenna Information				
Main Antenna	Manufacturer	AVX/ Ethertronics	Peak gain (dBi)	LTE Band 2: 1.92 LTE Band 4: 1.56 LTE Band 5: 0.33 LTE Band 7: 1.76 LTE Band 12: 0.95 LTE Band 13: 1.73 LTE Band 17: 1.01 LTE Band 25: 1.85 LTE Band 26: 0.79 LTE Band 38: 1.82 LTE Band 41: 1.81 LTE Band 66: 1.69 LTE Band 71: 0.40
	Part number	SA31F29287AA	Type	PIFA
	Manufacturer	LUXSHARE-ICT	Peak gain (dBi)	LTE Band 2: 0.20 LTE Band 4: 1.10 LTE Band 5: -3.00 LTE Band 7: -1.90 LTE Band 12: 0.60 LTE Band 13: 0.20 LTE Band 17: 0.60 LTE Band 25: 0.20 LTE Band 26: -2.70 LTE Band 38: -0.70 LTE Band 41: -0.70 LTE Band 66: 1.10 LTE Band 71: -0.50
	Part number	SA31F29290AA	Type	PIFA

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx Frequency	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 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 25: 1850.7 MHz ~ 1914.3 MHz LTE Band 26: 824.7 MHz ~ 848.3 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz
Rx Frequency	LTE Band 2: 1930.7 MHz ~ 1989.3 MHz LTE Band 4: 2110.7 MHz ~ 2154.3 MHz LTE Band 5: 869.7 MHz ~ 893.3 MHz LTE Band 7: 2622.5MHz ~ 2687.5 MHz LTE Band 12: 729.7 MHz ~ 745.3 MHz LTE Band 13: 748.5 MHz ~ 753.5 MHz LTE Band 17: 736.5 MHz ~ 743.5 MHz LTE Band 25: 1930.7MHz ~ 1994.3 MHz LTE Band 26: 869.7 MHz ~ 893.3 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 2110.7 MHz ~ 2199.3 MHz LTE Band 71: 619.5 MHz ~ 649.5 MHz
Bandwidth	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7: 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13: 5MHz / 10MHz LTE Band 17: 5MHz / 10MHz LTE Band 25: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 38: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 71: 5MHz / 10MHz / 15MHz / 20MHz

Product Specification is subject to this standard	
Maximum Output Power to Antenna	LTE Band 2 : 22.73 dBm LTE Band 4 : 22.52 dBm LTE Band 5 : 23.42 dBm LTE Band 5B : 22.13 dBm LTE Band 7 : 22.51 dBm LTE Band 7C : 22.82 dBm LTE Band 12 : 23.36 dBm LTE Band 13 : 23.23 dBm LTE Band 17 : 23.34 dBm LTE Band 25 : 22.74 dBm LTE Band 26 : 23.42 dBm LTE Band 38 : 22.46 dBm LTE Band 38C : 22.14 dBm LTE Band 41 : 24.54 dBm for HPUE LTE Band 41C : 22.72 dBm LTE Band 66 : 22.58 dBm LTE Band 66B : 22.56 dBm LTE Band 66C : 22.82 dBm LTE Band 71 : 23.37 dBm
Type of Modulation	QPSK / 16QAM / 64QAM

1.3 Modification of EUT

No modifications made to the EUT during the testing.



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 333
Test Site No.	Sporton Site No.
	TH03-HY
Test Engineer	Mike Yeh
Temperature (°C)	22.8~23.4
Relative Humidity (%)	52~55

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010
Test Site No.	Sporton Site No.
	03CH16-HY (TAF Code: 3786)
Test Engineer	Andy Yang, Karl Hou and Steven Wu
Temperature (°C)	20~25
Relative Humidity (%)	50~65
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC Designation No.: TW1190 and TW3786

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
- ♦ FCC 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:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.



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.

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
	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
	25	v	v	v	v	v	v	v	v		v			v	v	v
	26	v	v	v	v	v	-	v	v		v			v	v	v
	38	-	-	v	v	v	v	v	v		v			v	v	v
	41 HPUE	-	-	v	v	v	v	v	v		v			v	v	v
	66	v	v	v	v	v	v	v	v		v			v	v	v
	71	-	-	v	v	v	v	v	v		v			v	v	v
ERP / EIRP	2	v	v	v	v	v	v	v	v		Max. Power					
	4	v	v	v	v	v	v	v	v							
	5	v	v	v	v	-	-	v	v							
	7	-	-	v	v	v	v	v	v							
	12	v	v	v	v	-	-	v	v							
	13	-	-	v	v	-	-	v	v							
	17	-	-	v	v	-	-	v	v							
	25	v	v	v	v	v	v	v	v							
	26	v	v	v	v	v	-	v	v							
	38	-	-	v	v	v	v	v	v							
	41 HPUE	-	-	v	v	v	v	v	v							
	66	v	v	v	v	v	v	v	v							
	71	-	-	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	Covered by LTE Band 25														
	4	Covered by LTE Band 66														
	5	Covered by LTE Band 26														
	7	-	-				v	v			v			v	v	v
	12				v	-	-	v			v			v	v	v
	13	-	-	v	v	-	-	v			v			v	v	v
	17	Covered by LTE Band 12														
	25						v	v			v			v	v	v
	26					v	-	v			v			v	v	v
	38	Covered by LTE Band 41														
	41 HPUE	-	-				v	v			v			v	v	v
	66						v	v			v			v	v	v
	71	-	-				v	v			v			v	v	v
Remark	- The mark "v" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. - All the radiated test cases were performed with Adapter 1 and Sample 1 - Wider operating range bandwidth covers narrower one when the power is higher or the same. - For modulation of QPSK/16QAM, the maximum power of QPSK/16QAM is higher than other modulation(64QAM), therefore, according to engineering evaluation, we choose higher power (QPSK/16QAM) to perform all tests and show in the report.															



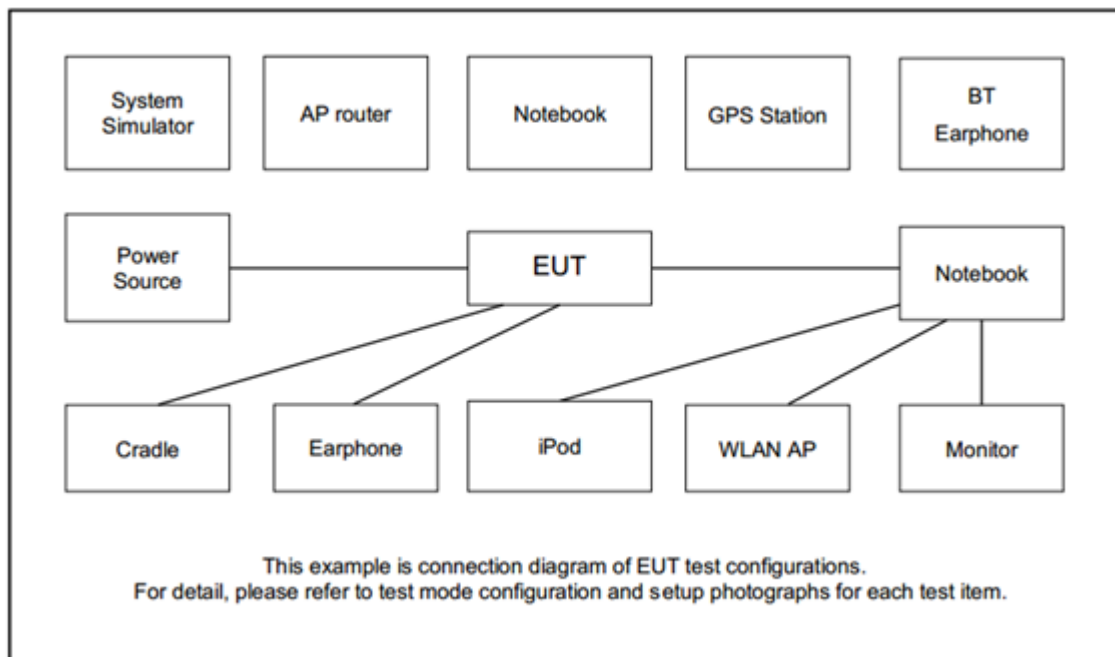
Test Items	Band	Bandwidth (MHz)					Modulation			RB #			Test Channel		
		3+5	5+3	5+10	10+5	10+10	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v	v	v	v	v	v	v		v			v	v	v
ERP.	5B_CA	v	v	v	v	v	v	v		Max. Power					
Radiated Spurious Emission	5B_CA					v	v			v			v	v	v
Remark	- The mark "v" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. - All the radiated test cases were performed with Adapter 1 and Sample 1. - For modulation of QPSK/16QAM, the maximum power of QPSK/16QAM is higher than other modulation(64QAM), therefore, according to engineering evaluation, we choose higher power (QPSK/16QAM) to perform all tests and show in the report.														

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		5+5	5+10	10+5	5+15	15+5	10+10	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	66B_CA	v	v	v	v	v	v	v	v		v			v	v	v
E.I.R.P.	66B_CA	v	v	v	v	v	v	v	v		Max. Power					
Radiated Spurious Emission	66B_CA					v		v			v			v	v	v
Remark	- The mark "v" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. - All the radiated test cases were performed with Adapter 1 and Sample 1. - For modulation of QPSK/16QAM, the maximum power of QPSK/16QAM is higher than other modulation(64QAM), therefore, according to engineering evaluation, we choose higher power (QPSK/16QAM) to perform all tests and show in the report.															



Test Items	Band	Bandwidth (MHz)										Modulation			RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v		v			v	v	v
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v		v			v	v	v
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
E.I.R.P	7C_CA	v	v	v	v	v	-	-	v	v	-	v	v		Max. Power					
	38C_CA	v	-	-	-	-	-	-	v	-	-	v	v							
	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v							
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v							
Radiated Spurious Emission	7C_CA	v					-	-			-	v			v			v	v	v
	38C_CA	Covered by LTE Band 41C_CA																		
	41C_CA	v										v			v			v	v	v
	66C_CA	v										v			v			v	v	v
Remark	- The mark "v" means that this configuration is chosen for testing - The mark "-" means that this bandwidth is not supported. - The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. - All the radiated test cases were performed with Adapter 1 and Sample 1. - Wider operating range bandwidth covers narrower one when the power is higher or the same. - For modulation of QPSK/16QAM, the maximum power of QPSK/16QAM is higher than other modulation(64QAM), therefore, according to engineering evaluation, we choose higher power (QPSK/16QAM) to perform all tests and show in the report.																			

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	Earphone	Lenovo	TS300-01MS21-8S	N/A	Shielded, 1.2 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 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3



LTE Band 26 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
15	Channel	26865	26915	26965
	Frequency	831.5	836.5	841.5
10	Channel	26840	26915	26990
	Frequency	829.0	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 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580.0	2595.0	2610.0
15	Channel	37825	38000	38175
	Frequency	2577.5	2595.0	2612.5
10	Channel	37800	38000	38200
	Frequency	2575.0	2595.0	2615.0
5	Channel	37775	38000	38225
	Frequency	2572.5	2595.0	2617.5

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

LTE Band 71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	133222	133297	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133297	133422
	Frequency	668.0	680.5	693.0
5	Channel	133147	133297	133447
	Frequency	665.5	680.5	695.5



LTE Band 5B Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
3 + 5	PCC	Channel	20416	20501	20586
		Frequency	825.6	834.1	842.6
	SCC	Channel	20455	20540	20575
		Frequency	829.5	838.0	841.5
5 + 3	PCC	Channel	20425	20510	20595
		Frequency	826.5	835.0	843.5
	SCC	Channel	20464	20549	20634
		Frequency	830.4	838.9	847.4
5 + 10	PCC	Channel	20428	20478	20528
		Frequency	826.8	831.8	836.8
	SCC	Channel	20500	20550	20600
		Frequency	834.0	839.0	844.0
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829.0	834.0	839.0
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829.0	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844.0



LTE Band 7C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7



LTE Band 38C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	37850	37901	37952
		Frequency	2580.0	2585.1	2590.2
	SCC	Channel	38048	38099	38150
		Frequency	2599.8	2604.9	2610.0
15+ 15	PCC	Channel	37825	37925	38025
		Frequency	2577.5	2587.5	2597.5
	SCC	Channel	37975	38075	38175
		Frequency	2592.5	2602.5	2612.5

LTE Band 41C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	39750	40521	41292
		Frequency	2506.0	2583.1	2660.2
	SCC	Channel	39948	40719	41490
		Frequency	2525.8	2602.9	2680.0
20 + 15	PCC	Channel	39750	40546	41341
		Frequency	2506.0	2585.6	2665.1
	SCC	Channel	39921	40717	41512
		Frequency	2523.1	2602.7	2682.2
15 + 20	PCC	Channel	39728	40523	41319
		Frequency	2503.8	2593.3	2662.9
	SCC	Channel	39899	40694	41490
		Frequency	2520.9	2600.4	2680.0
20 + 10	PCC	Channel	39750	40571	41391
		Frequency	2506.0	2588.1	2670.1
	SCC	Channel	39894	40715	41535
		Frequency	2520.4	2602.5	2684.5
10 + 20	PCC	Channel	39705	40526	41346
		Frequency	2501.5	2583.6	2665.6
	SCC	Channel	39849	40670	41490
		Frequency	2515.9	2598.0	2680.0

LTE Band 41C Channel and Frequency List_CA					
20 + 5	PCC	Channel	39750	40595	41440
		Frequency	2506.0	2590.5	2675.0
	SCC	Channel	39867	40712	41557
		Frequency	2517.7	2602.2	2686.7
5 + 20	PCC	Channel	39683	40528	41373
		Frequency	2499.3	2583.8	2668.3
	SCC	Channel	39800	40645	41490
		Frequency	2511.0	2595.5	2680.0
15 + 15	PCC	Channel	39725	40545	41365
		Frequency	2503.5	2585.5	2667.5
	SCC	Channel	39875	40695	41515
		Frequency	2518.5	2600.5	2682.5
10 + 15	PCC	Channel	39703	40549	41395
		Frequency	2501.3	2585.9	2670.5
	SCC	Channel	39823	40669	41515
		Frequency	2513.3	2597.9	2682.5
15 + 10	PCC	Channel	39725	40571	41417
		Frequency	2503.5	2588.1	2672.7
	SCC	Channel	39845	40691	41537
		Frequency	2515.5	2600.1	2684.7

LTE Band 66B Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 5	PCC	Channel	131997	132398	132599
		Frequency	1712.5	1752.6	1772.7
	SCC	Channel	132045	133346	132647
		Frequency	1717.3	1757.4	1777.5
5 + 10	PCC	Channel	132000	132375	132550
		Frequency	1712.8	1750.3	1767.8
	SCC	Channel	132072	133347	132622
		Frequency	1720.0	1757.5	1775.0
10 + 5	PCC	Channel	132022	132397	132572
		Frequency	1715.0	1752.5	1770.0
	SCC	Channel	132094	133369	132644
		Frequency	1722.2	1759.7	1777.2
5 + 15	PCC	Channel	132002	132353	132504
		Frequency	1713.0	1748.1	1763.2
	SCC	Channel	132095	133346	132597
		Frequency	1722.3	1757.4	1772.5
15 + 5	PCC	Channel	132047	132398	132549
		Frequency	1717.5	1752.6	1767.7
	SCC	Channel	132140	133391	132642
		Frequency	1726.8	1761.9	1777.0
10 + 10	PCC	Channel	132022	132373	135523
		Frequency	1715.0	1750.1	1765.1
	SCC	Channel	132121	133372	132622
		Frequency	1724.9	1760.0	1775.0



LTE Band 66C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
10 + 15	PCC	Channel	132025	132351	132477
		Frequency	1715.3	1747.9	1760.5
	SCC	Channel	132145	133371	132597
		Frequency	1727.3	1759.9	1772.5
15 + 10	PCC	Channel	132047	132373	132499
		Frequency	1717.5	1750.1	1762.7
	SCC	Channel	132167	133393	132619
		Frequency	1729.5	1761.1	1774.7
10 + 20	PCC	Channel	132027	132328	132428
		Frequency	1715.5	1745.6	1755.6
	SCC	Channel	131171	133372	132572
		Frequency	1729.9	1760.0	1770.0
20 + 10	PCC	Channel	132072	132373	132473
		Frequency	1720.0	1750.1	1760.1
	SCC	Channel	132216	133417	132617
		Frequency	1734.4	1764.5	1774.5
15 + 15	PCC	Channel	132047	132347	132447
		Frequency	1717.5	1747.5	1757.5
	SCC	Channel	132197	133397	132597
		Frequency	1732.5	1762.5	1772.5
15 + 20	PCC	Channel	132050	132325	132401
		Frequency	1717.8	1745.3	1752.9
	SCC	Channel	132221	133396	132572
		Frequency	1734.9	1762.4	1770.0
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720.0	1747.6	1755.1
	SCC	Channel	132243	133419	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720.0	1752.5	1765.0
	SCC	Channel	132189	133414	132639
		Frequency	1731.7	1764.2	1776.7



LTE Band 66C Channel and Frequency List_CA					
5 + 20	PCC	Channel	132005	132330	132455
		Frequency	1713.3	1745.8	1758.3
	SCC	Channel	132122	132447	132572
		Frequency	1725.0	1757.5	1770.0
20 + 20	PCC	Channel	132072	132323	132374
		Frequency	1720.0	1745.1	1750.2
	SCC	Channel	132270	133421	132572
		Frequency	1739.8	1764.9	1770.0

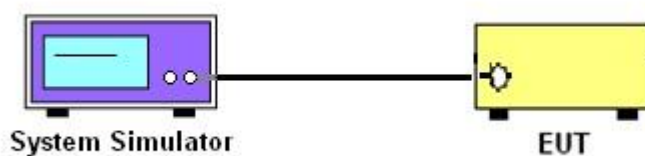
3 Conducted Test Items

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 and Band 71

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25 and Band 7 and Band 38 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.

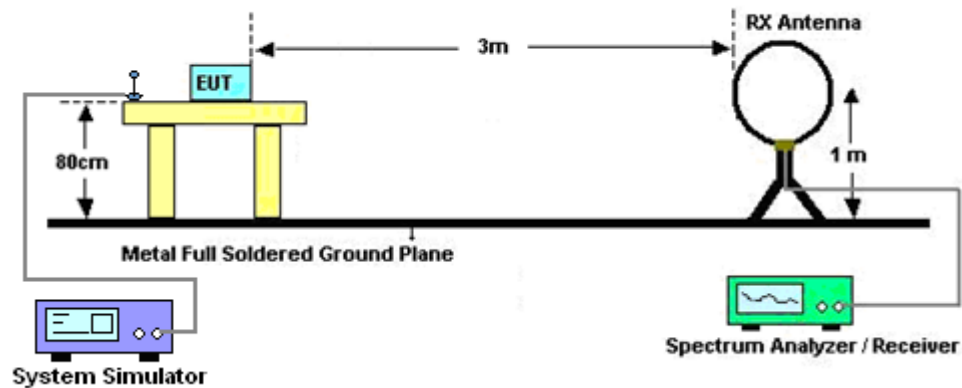
4 Radiated Test Items

4.1 Measuring Instruments

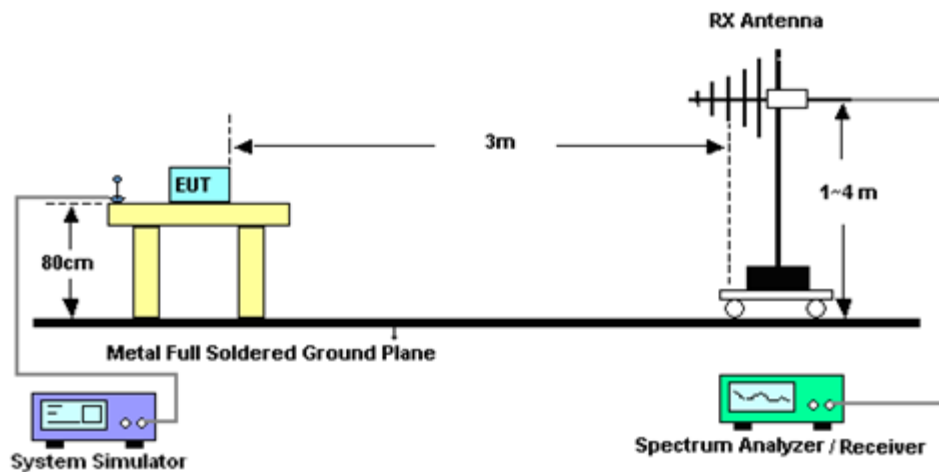
See list of measuring instruments of this test report.

4.1.1 Test Setup

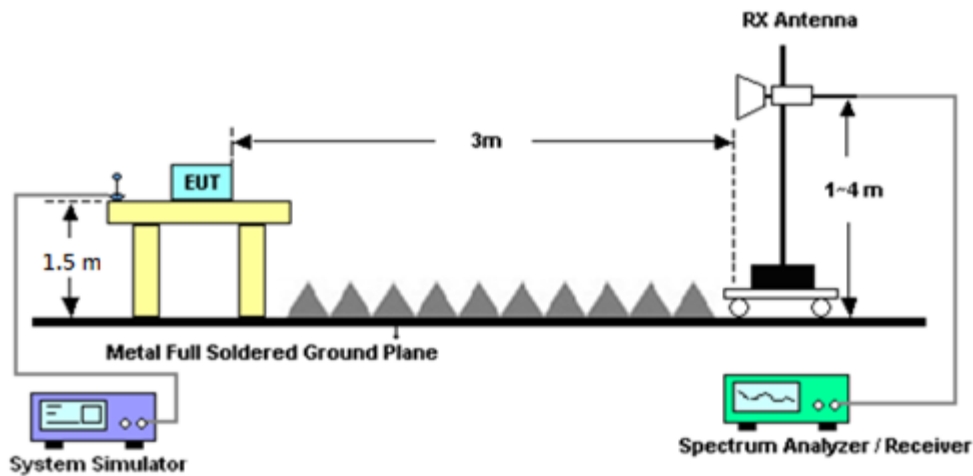
For radiated test below 30MHz



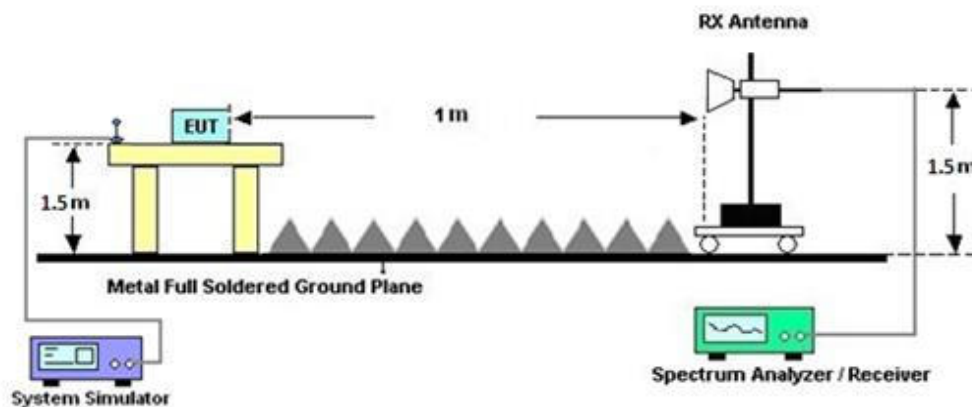
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



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 adequate comparison measurement 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, 38, 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, 38, 41

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

$EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$

$ERP \text{ (dBm)} = EIRP - 2.15$



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Sep. 20, 2022	Jan. 20, 2023~ Mar. 03, 2023	Sep. 19, 2023	Radiation (03CH16-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz~40GHz	Nov. 24, 2022	Jan. 20, 2023~ Mar. 03, 2023	Nov. 23, 2023	Radiation (03CH16-HY)
Spectrum Analyzer	Keysight	N9010A	MY54200486	10Hz~44GHz	Oct. 07, 2022	Jan. 20, 2023~ Mar. 03, 2023	Oct. 06, 2023	Radiation (03CH16-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	Jun. 28, 2022	Jan. 20, 2023~ Mar. 03, 2023	Jun. 27, 2023	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40G	Jan. 03, 2023	Jan. 20, 2023~ Mar. 03, 2023	Jan. 02, 2024	Radiation (03CH16-HY)
Signal Generator	Agilent	MG3694C	163401	0.1Hz~40GHz	Feb. 13, 2022	Jan. 20, 2023~ Feb. 08, 2023	Feb. 12, 2023	Radiation (03CH16-HY)
Signal Generator	Agilent	MG3694C	163401	0.1Hz~40GHz	Feb. 08, 2023	Feb. 08, 2023~ Mar. 03, 2023	Feb. 07, 2024	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	40103 & 07	30MHz to 1GHz	Apr. 24, 2022	Jan. 20, 2023~ Mar. 03, 2023	Apr. 23, 2022	Radiation (03CH16-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00802N1D01N-06	47020 & 06	30MHz to 1GHz	Oct. 08, 2022	Jan. 20, 2023~ Mar. 03, 2023	Oct. 07, 2023	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1G~18GHz	Aug. 09, 2022	Jan. 20, 2023~ Mar. 03, 2023	Aug. 08, 2023	Radiation (03CH16-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 10, 2022	Jan. 20, 2023~ Mar. 03, 2023	Mar. 09, 2023	Radiation (03CH16-HY)
Amplifier	SONOMA	310N	371607	9kHz~1G	Jul. 04, 2022	Jan. 20, 2023~ Mar. 03, 2023	Jul. 03, 2023	Radiation (03CH16-HY)
Preamplifier	EMEC	EM1G18G	060812	1-18GHz	Dec. 26, 2022	Jan. 20, 2023~ Mar. 03, 2023	Dec. 25, 2023	Radiation (03CH16-HY)
Preamplifier	Keysight	83017A	MY53270264	1GHz~26.5GHz	Dec. 09, 2022	Jan. 20, 2023~ Mar. 03, 2023	Dec. 08, 2023	Radiation (03CH16-HY)
EMI Test Receiver	Keysight	N9038A	MY57290111	3Hz~26.5GHz	Dec. 15, 2022	Jan. 20, 2023~ Mar. 03, 2023	Dec. 14, 2023	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	805935/4	N/A	Aug. 09, 2022	Jan. 20, 2023~ Mar. 03, 2023	Aug. 08, 2023	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	802434/4	N/A	Aug. 09, 2022	Jan. 20, 2023~ Mar. 03, 2023	Aug. 08, 2023	Radiation (03CH16-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	EC-A5-300-5757	N/A	Aug. 09, 2022	Jan. 20, 2023~ Mar. 03, 2023	Aug. 08, 2023	Radiation (03CH16-HY)
Software	Audix	E3 6.2009-8-24	RK-001136	N/A	N/A	Jan. 20, 2023~ Mar. 03, 2023	N/A	Radiation (03CH16-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jan. 20, 2023~ Mar. 03, 2023	N/A	Radiation (03CH16-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jan. 20, 2023~ Mar. 03, 2023	N/A	Radiation (03CH16-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jan. 20, 2023~ Mar. 03, 2023	N/A	Radiation (03CH16-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 13, 2022	Jan. 21, 2023~ Jan. 22, 2023	Oct. 12, 2023	Conducted (TH03-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 06, 2023	Jan. 21, 2023~ Jan. 22, 2023	Jan. 05, 2024	Conducted (TH03-HY)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.98 dB
---	---------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.54 dB
---	---------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.79 dB
---	---------



Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & ERP/EIRP)

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.73	22.21	22.67	24.65	0.2917
20	1	0	16-QAM	21.80	21.43	21.71	23.72	0.2355
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.67	22.12	22.58	24.59	0.2877
15	1	0	16-QAM	21.71	21.34	21.70	23.63	0.2307
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.56	22.36	22.16	24.48	0.2805
10	1	0	16-QAM	21.78	21.45	21.25	23.70	0.2344
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.72	22.17	22.63	24.64	0.2911
5	1	0	16-QAM	21.75	21.35	21.68	23.67	0.2328
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.71	22.18	22.58	24.63	0.2904
3	1	0	16-QAM	21.75	21.37	21.65	23.67	0.2328
Limit	EIRP < 2W			Result			Pass	

LTE Band 2 Maximum Average Power [dBm] (GT - LC = 1.92 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.54	22.49	22.70	24.62	0.2897
1.4	1	0	16-QAM	21.92	21.78	22.10	24.02	0.2523
Limit	EIRP < 2W			Result			Pass	



LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.09	22.32	22.74	24.59	0.2877
20	1	0	16-QAM	21.51	21.57	21.73	23.58	0.2280
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.09	22.30	22.40	24.25	0.2661
15	1	0	16-QAM	21.46	21.51	21.64	23.49	0.2234
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.20	22.07	22.55	24.40	0.2754
10	1	0	16-QAM	21.02	21.07	21.90	23.75	0.2371
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.09	22.28	22.33	24.18	0.2618
5	1	0	16-QAM	21.44	21.50	21.64	23.49	0.2234
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.03	22.29	22.37	24.22	0.2642
3	1	0	16-QAM	21.47	21.50	21.70	23.55	0.2265
Limit	EIRP < 2W			Result			Pass	

LTE Band 25 Maximum Average Power [dBm] (GT - LC = 1.85 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.25	22.32	22.17	24.17	0.2612
1.4	1	0	16-QAM	21.70	21.88	21.46	23.73	0.2360
Limit	EIRP < 2W			Result			Pass	



LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.22	22.42	22.44	24.00	0.2512
20	1	0	16-QAM	21.62	21.29	21.13	23.18	0.2080
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.17	22.35	22.34	23.91	0.2460
15	1	0	16-QAM	21.62	21.20	21.03	23.18	0.2080
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.29	22.34	22.43	23.99	0.2506
10	1	0	16-QAM	21.61	21.55	21.66	23.22	0.2099
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.20	22.38	22.36	23.94	0.2477
5	1	0	16-QAM	21.53	21.26	21.12	23.09	0.2037
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.17	22.42	22.42	23.98	0.2500
3	1	0	16-QAM	21.56	21.24	21.12	23.12	0.2051
Limit	EIRP < 1W			Result			Pass	

LTE Band 4 Maximum Average Power [dBm] (GT - LC = 1.56 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.28	22.26	22.52	24.08	0.2559
1.4	1	0	16-QAM	21.68	21.45	21.97	23.53	0.2254
Limit	EIRP < 1W			Result			Pass	



LTE Band 5 Maximum Average Power [dBm] (GT - LC = 0.33 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.33	23.42	23.24	21.60	0.1445
10	1	0	16-QAM	22.77	22.89	22.68	21.07	0.1279
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = 0.33 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.26	23.38	23.13	21.56	0.1432
5	1	0	16-QAM	22.68	22.79	22.65	20.97	0.1250
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = 0.33 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.26	23.32	23.23	21.50	0.1413
3	1	0	16-QAM	22.70	22.87	22.62	21.05	0.1274
Limit	ERP < 7W			Result			Pass	

LTE Band 5 Maximum Average Power [dBm] (GT - LC = 0.33 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.39	23.29	23.18	21.57	0.1435
1.4	1	0	16-QAM	22.85	22.80	22.97	21.15	0.1303
Limit	ERP < 7W			Result			Pass	



LTE Band 7 Maximum Average Power [dBm] (GT - LC = 1.76 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.14	22.35	22.27	24.11	0.2576
20	1	0	16-QAM	21.74	21.16	21.32	23.50	0.2239
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 1.76 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.12	22.27	22.20	24.03	0.2529
15	1	0	16-QAM	21.67	21.13	21.26	23.43	0.2203
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 1.76 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.19	22.40	22.51	24.27	0.2673
10	1	0	16-QAM	21.66	22.02	21.54	23.78	0.2388
Limit	EIRP < 2W			Result			Pass	

LTE Band 7 Maximum Average Power [dBm] (GT - LC = 1.76 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.13	22.27	22.19	24.03	0.2529
5	1	0	16-QAM	21.71	21.09	21.26	23.47	0.2223
Limit	EIRP < 2W			Result			Pass	



LTE Band 12 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.17	23.36	23.30	22.16	0.1644
10	1	0	16-QAM	22.75	22.80	22.71	21.60	0.1445
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.17	23.35	23.30	22.15	0.1641
5	1	0	16-QAM	22.66	22.72	22.61	21.52	0.1419
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.17	23.33	23.21	22.13	0.1633
3	1	0	16-QAM	22.69	22.71	22.63	21.51	0.1416
Limit	ERP < 3W			Result			Pass	

LTE Band 12 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.17	23.32	23.35	22.15	0.1641
1.4	1	0	16-QAM	22.59	22.54	22.98	21.78	0.1507
Limit	ERP < 3W			Result			Pass	



FCC RADIO TEST REPORT

Report No. : FG2D0922B

LTE Band 13 Maximum Average Power [dBm] (GT - LC = 1.73 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	-	23.23	-	22.81	0.1910
10	1	0	16-QAM		22.43		22.01	0.1589
Limit	ERP < 3W			Result			Pass	

LTE Band 13 Maximum Average Power [dBm] (GT - LC = 1.73 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.21	23.20	23.20	22.79	0.1901
5	1	0	16-QAM	22.68	22.90	22.66	22.48	0.1770
Limit	ERP < 3W			Result			Pass	



FCC RADIO TEST REPORT

Report No. : FG2D0922B

LTE Band 17 Maximum Average Power [dBm] (GT - LC = 1.01 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.34	23.25	23.21	22.20	0.1660
10	1	0	16-QAM	22.94	22.67	22.98	21.84	0.1528
Limit	ERP < 3W			Result			Pass	

LTE Band 17 Maximum Average Power [dBm] (GT - LC = 1.01 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.28	23.23	23.18	22.14	0.1637
5	1	0	16-QAM	22.92	22.65	22.92	21.78	0.1507
Limit	ERP < 3W			Result			Pass	



LTE Band 26 Maximum Average Power [dBm] (GT - LC = 0.79 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	23.42	23.24	23.42	22.06	0.1607
15	1	0	16-QAM	23.10	22.47	22.61	21.74	0.1493
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 0.79 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.29	23.28	23.20	21.93	0.1560
10	1	0	16-QAM	23.27	22.60	22.89	21.91	0.1552
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 0.79 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.39	23.14	23.40	22.04	0.1600
5	1	0	16-QAM	23.00	22.44	22.53	21.64	0.1459
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 0.79 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
3	1	0	QPSK	23.39	23.20	23.35	22.03	0.1596
3	1	0	16-QAM	23.03	22.44	22.57	21.67	0.1469
Limit	ERP < 7W			Result			Pass	

LTE Band 26 Maximum Average Power [dBm] (GT - LC = 0.79 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
1.4	1	0	QPSK	23.29	23.33	23.14	21.97	0.1574
1.4	1	0	16-QAM	22.99	22.66	22.72	21.63	0.1455
Limit	ERP < 7W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = 1.82 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.28	22.33	22.46	24.28	0.2679
20	1	0	16-QAM	21.11	21.23	21.32	23.14	0.2061
Limit	EIRP < 2W			Result			Pass	

LTE Band 38 Maximum Average Power [dBm] (GT - LC = 1.82 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.27	22.31	22.46	24.28	0.2679
15	1	0	16-QAM	21.11	21.23	21.31	23.13	0.2056
Limit	EIRP < 2W			Result			Pass	

LTE Band 38 Maximum Average Power [dBm] (GT - LC = 1.82 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.26	22.28	22.37	24.19	0.2624
10	1	0	16-QAM	21.02	21.13	21.29	23.11	0.2046
Limit	EIRP < 2W			Result			Pass	

LTE Band 38 Maximum Average Power [dBm] (GT - LC = 1.82 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.22	22.27	22.44	24.26	0.2667
5	1	0	16-QAM	21.11	21.23	21.29	23.11	0.2046
Limit	EIRP < 2W			Result			Pass	



LTE Band 41(HPUE) Maximum Average Power [dBm] (GT - LC = 1.81 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	24.54	24.54	24.49	26.35	0.4315
20	1	0	16-QAM	23.75	23.49	23.75	25.56	0.3597
Limit	EIRP < 2W			Result			Pass	

LTE Band 41(HPUE) Maximum Average Power [dBm] (GT - LC = 1.81 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	24.53	24.39	24.37	26.34	0.4305
15	1	0	16-QAM	23.71	23.44	23.72	25.53	0.3573
Limit	EIRP < 2W			Result			Pass	

LTE Band 41(HPUE) Maximum Average Power [dBm] (GT - LC = 1.81 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	24.45	24.35	24.46	26.27	0.4236
10	1	0	16-QAM	23.72	23.49	23.71	25.53	0.3573
Limit	EIRP < 2W			Result			Pass	

LTE Band 41(HPUE) Maximum Average Power [dBm] (GT - LC = 1.81 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	24.45	24.41	24.46	26.27	0.4236
5	1	0	16-QAM	23.71	23.47	23.72	25.53	0.3573
Limit	EIRP < 2W			Result			Pass	



LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	22.34	22.58	22.50	24.27	0.2673
20	1	0	16-QAM	21.76	21.31	21.78	23.47	0.2223
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	22.27	22.40	22.43	24.12	0.2582
15	1	0	16-QAM	21.76	21.25	21.74	23.45	0.2213
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	22.24	22.50	22.36	24.19	0.2624
10	1	0	16-QAM	21.28	21.41	21.26	23.10	0.2042
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	22.22	22.47	22.48	24.17	0.2612
5	1	0	16-QAM	21.69	21.21	21.75	23.44	0.2208
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
3	1	0	QPSK	22.25	22.47	22.46	24.16	0.2606
3	1	0	16-QAM	21.70	21.25	21.74	23.43	0.2203
Limit	EIRP < 1W			Result			Pass	

LTE Band 66 Maximum Average Power [dBm] (GT - LC = 1.69 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
1.4	1	0	QPSK	22.40	22.51	22.55	24.24	0.2655
1.4	1	0	16-QAM	21.51	21.96	21.78	23.65	0.2317
Limit	EIRP < 1W			Result			Pass	



LTE Band 71 Maximum Average Power [dBm] (GT - LC = 0.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
20	1	0	QPSK	23.11	23.25	23.37	21.62	0.1452
20	1	0	16-QAM	22.44	22.68	22.78	21.03	0.1268
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = 0.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
15	1	0	QPSK	23.22	23.36	23.29	21.61	0.1449
15	1	0	16-QAM	22.44	22.58	22.76	21.01	0.1262
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = 0.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
10	1	0	QPSK	23.27	23.21	23.31	21.56	0.1432
10	1	0	16-QAM	22.39	22.66	22.71	20.96	0.1247
Limit	ERP < 3W			Result			Pass	

LTE Band 71 Maximum Average Power [dBm] (GT - LC = 0.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
5	1	0	QPSK	23.24	23.37	23.29	21.62	0.1452
5	1	0	16-QAM	22.37	22.68	22.77	21.02	0.1265
Limit	ERP < 3W			Result			Pass	



LTE Band 5B_CA Maximum Average Power [dBm] (GT - LC = 0.33 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	ERP (dBm)	ERP (W)
	RB Size	RB Offset	RB Size	RB Offset						
10+10	1	49	1	0	QPSK	21.87	21.59	21.66	20.05	0.1012
10+10	1	49	1	0	16-QAM	21.96	21.77	21.83	20.14	0.1033
10+5	1	49	1	0	QPSK	21.80	21.87	21.85	20.05	0.1012
10+5	1	49	1	0	16-QAM	21.98	22.07	22.04	20.25	0.1059
5+10	1	24	1	0	QPSK	21.73	21.88	21.92	20.10	0.1023
5+10	1	24	1	0	16-QAM	21.96	22.09	22.13	20.31	0.1074
5+3	1	24	1	0	QPSK	21.72	21.86	21.79	20.04	0.1009
5+3	1	24	1	0	16-QAM	21.85	22.09	21.93	20.27	0.1064
3+5	1	14	1	0	QPSK	21.72	21.84	21.82	20.02	0.1005
3+5	1	14	1	0	16-QAM	21.89	21.98	21.97	20.16	0.1038
Limit	ERP < 7W					Result			Pass	



FCC RADIO TEST REPORT

Report No. : FG2D0922B

LTE Band 66B_CA Maximum Average Power [dBm] (GT - LC = 1.69 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
10+10	1	49	1	0	QPSK	22.16	22.29	22.11	23.98	0.2500
10+10	1	49	1	0	16-QAM	21.21	21.33	21.21	23.02	0.2004
15+5	1	74	1	0	QPSK	21.05	21.36	21.89	23.58	0.2280
15+5	1	74	1	0	16-QAM	21.13	21.43	21.90	23.59	0.2286
5+15	1	24	1	0	QPSK	22.43	22.21	22.05	24.12	0.2582
5+15	1	24	1	0	16-QAM	22.52	22.54	22.03	24.23	0.2649
10+5	1	49	1	0	QPSK	22.32	22.35	22.52	24.21	0.2636
10+5	1	49	1	0	16-QAM	21.43	21.37	21.55	23.24	0.2109
5+10	1	24	1	0	QPSK	22.48	22.48	22.35	24.17	0.2612
5+10	1	24	1	0	16-QAM	21.55	21.51	21.32	23.24	0.2109
5+5	1	24	1	0	QPSK	22.45	22.29	22.32	24.14	0.2594
5+5	1	24	1	0	16-QAM	22.56	22.43	22.34	24.25	0.2661
Limit	EIRP < 1W					Result			Pass	



FCC RADIO TEST REPORT

Report No. : FG2D0922B

LTE Band 66C_CA Maximum Average Power [dBm] (GT - LC = 1.69 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	1	99	1	0	QPSK	22.14	22.55	22.38	24.24	0.2655
20+20	1	99	1	0	16-QAM	21.14	21.55	21.43	23.24	0.2109
20+15	1	74	1	0	QPSK	22.18	22.53	22.28	24.22	0.2642
20+15	1	74	1	0	16-QAM	21.23	21.59	21.35	23.28	0.2128
15+20	1	74	1	0	QPSK	22.25	22.78	22.44	24.47	0.2799
15+20	1	74	1	0	16-QAM	21.25	21.79	21.43	23.48	0.2228
20+10	1	99	1	0	QPSK	22.25	22.45	22.38	24.14	0.2594
20+10	1	99	1	0	16-QAM	21.33	21.53	21.53	23.22	0.2099
10+20	1	49	1	0	QPSK	22.49	22.49	22.38	24.18	0.2618
10+20	1	49	1	0	16-QAM	21.55	21.57	21.39	23.26	0.2118
20+5	1	99	1	0	QPSK	22.09	22.27	22.68	24.37	0.2735
20+5	1	99	1	0	16-QAM	21.16	21.34	21.75	23.44	0.2208
5+20	1	24	1	0	QPSK	22.68	22.82	22.05	24.51	0.2825
5+20	1	24	1	0	16-QAM	21.74	21.85	21.18	23.54	0.2259
15+10	1	74	1	0	QPSK	22.18	22.48	22.36	24.17	0.2612
15+10	1	74	1	0	16-QAM	21.19	21.45	21.42	23.14	0.2061
10+15	1	49	1	0	QPSK	22.43	22.59	22.01	24.28	0.2679
10+15	1	49	1	0	16-QAM	21.45	21.61	21.18	23.30	0.2138
15+15	1	74	1	0	QPSK	22.18	22.55	22.18	24.24	0.2655
15+15	1	74	1	0	16-QAM	21.16	21.57	21.18	23.26	0.2118
Limit	EIRP < 1W					Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = 1.76 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	1	99	1	0	QPSK	22.57	22.69	22.82	24.58	0.2871
20+20	1	99	1	0	16-QAM	21.78	21.85	21.97	23.73	0.2360
20+15	1	99	1	0	QPSK	22.48	22.71	22.65	24.47	0.2799
20+15	1	99	1	0	16-QAM	21.62	21.89	21.79	23.65	0.2317
15+20	1	74	1	0	QPSK	22.53	22.77	22.78	24.54	0.2844
15+20	1	74	1	0	16-QAM	21.74	21.93	21.89	23.69	0.2339
20+10	1	99	1	0	QPSK	22.52	22.79	22.73	24.55	0.2851
20+10	1	99	1	0	16-QAM	21.65	21.93	21.92	23.69	0.2339
10+20	1	74	1	0	QPSK	22.42	22.66	22.59	24.42	0.2767
10+20	1	74	1	0	16-QAM	21.63	21.81	21.79	23.57	0.2275
15+15	1	74	1	0	QPSK	22.46	22.63	22.59	24.39	0.2748
15+15	1	74	1	0	16-QAM	21.59	21.77	21.72	23.53	0.2254
15+10	1	74	1	0	QPSK	22.42	22.67	22.59	24.43	0.2773
15+10	1	74	1	0	16-QAM	21.53	21.78	21.74	23.54	0.2259
Limit	EIRP < 2W					Result			Pass	



LTE Band 38C_CA Maximum Average Power [dBm] (GT - LC = 1.82 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	1	99	1	0	QPSK	21.96	21.96	21.89	23.78	0.2388
20+20	1	99	1	0	16-QAM	20.95	20.75	20.76	22.77	0.1892
15+15	1	74	1	0	QPSK	22.14	21.99	21.99	23.96	0.2489
15+15	1	74	1	0	16-QAM	21.15	20.93	20.98	22.97	0.1982
Limit	EIRP < 2W					Result			Pass	



LTE Band 41C_CA Maximum Average Power [dBm] (GT - LC = 1.81 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	1	99	1	0	QPSK	21.89	22.18	21.60	23.99	0.2506
20+20	1	99	1	0	16-QAM	20.85	21.16	20.56	22.97	0.1982
20+15	1	99	1	0	QPSK	22.00	21.75	21.76	23.81	0.2404
20+15	1	99	1	0	16-QAM	21.01	20.72	20.63	22.82	0.1914
15+20	1	74	1	0	QPSK	22.45	22.12	22.09	24.26	0.2667
15+20	1	74	1	0	16-QAM	21.45	21.05	20.96	23.26	0.2118
20+10	1	99	1	0	QPSK	22.43	22.10	21.97	24.24	0.2655
20+10	1	99	1	0	16-QAM	21.42	21.01	20.86	23.23	0.2104
10+20	1	49	1	0	QPSK	22.72	22.27	22.16	24.53	0.2838
10+20	1	49	1	0	16-QAM	21.71	21.21	21.08	23.52	0.2249
20+5	1	99	1	0	QPSK	22.48	22.15	22.01	24.29	0.2685
20+5	1	99	1	0	16-QAM	21.38	21.12	20.89	23.19	0.2084
5+20	1	24	1	0	QPSK	22.71	22.30	22.23	24.52	0.2831
5+20	1	24	1	0	16-QAM	21.65	21.29	21.15	23.46	0.2218
15+10	1	74	1	0	QPSK	22.60	22.17	21.95	24.41	0.2761
15+10	1	74	1	0	16-QAM	21.53	21.04	20.77	23.34	0.2158
10+15	1	49	1	0	QPSK	22.63	22.17	21.99	24.44	0.2780
10+15	1	49	1	0	16-QAM	21.60	21.17	20.83	23.41	0.2193
15+15	1	74	1	0	QPSK	22.54	22.19	22.00	24.35	0.2723
15+15	1	74	1	0	16-QAM	21.47	21.02	20.86	23.28	0.2128
Limit	EIRP < 2W					Result			Pass	



Appendix B. Test Results of Radiated Test

LTE Band 26

LTE Band 26 / 15MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1649	-39.29	-13	-26.29	-53.48	-42.75	3.88	9.49	H
	2474	-44.17	-13	-31.17	-62.09	-47.77	4.80	10.55	H
	3299	-54.42	-13	-41.42	-75.32	-58.91	5.56	12.19	H
									H
									H
									H
	1649	-40.34	-13	-27.34	-54.41	-43.8	3.88	9.49	V
	2474	-45.40	-13	-32.40	-63.3	-49	4.80	10.55	V
	3299	-54.53	-13	-41.53	-75.34	-59.02	5.56	12.19	V
									V
									V
									V
Middle	1659	-36.85	-13	-23.85	-51.08	-40.36	3.89	9.55	H
	2489	-48.39	-13	-35.39	-66.25	-52	4.82	10.58	H
	3319	-54.34	-13	-41.34	-75.2	-58.89	5.57	12.28	H
									H
									H
									H
	1659	-39.51	-13	-26.51	-53.65	-43.02	3.89	9.55	V
	2489	-48.37	-13	-35.37	-66.25	-51.98	4.82	10.58	V
	3319	-54.80	-13	-41.80	-75.58	-59.35	5.57	12.28	V
									V
									V
									V



Highest	1669	-35.80	-13	-22.80	-50.08	-39.36	3.91	9.61	H
	2504	-44.91	-13	-31.91	-62.74	-48.55	4.83	10.62	H
	3339	-55.02	-13	-42.02	-75.83	-59.63	5.59	12.36	H
									H
									H
									H
	1669	-36.52	-13	-23.52	-50.71	-40.08	3.91	9.61	V
	2504	-46.07	-13	-33.07	-63.93	-49.71	4.83	10.62	V
	3339	-54.83	-13	-41.83	-75.57	-59.44	5.59	12.36	V
									V
									V
									V

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

**LTE Band 5B**

LTE Band 5B / 10MHz+10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1666	-40.46	-13	-27.46	-54.71	-44	3.90	9.60	H
	2500	-49.91	-13	-36.91	-67.71	-53.53	4.83	10.60	H
	3333	-54.53	-13	-41.53	-75.36	-59.13	5.59	12.33	H
									H
									H
									H
	1666	-42.04	-13	-29.04	-56.21	-45.58	3.90	9.60	V
	2500	-48.50	-13	-35.50	-66.35	-52.12	4.83	10.60	V
	3333	-54.86	-13	-41.86	-75.61	-59.46	5.59	12.33	V
									V
									V
									V
Middle	1672	-38.67	-13	-25.67	-52.95	-42.24	3.91	9.63	H
	2508	-46.44	-13	-33.44	-64.31	-50.1	4.84	10.65	H
	3344	-54.88	-13	-41.88	-75.69	-59.51	5.60	12.38	H
									H
									H
									H
	1672	-39.28	-13	-26.28	-53.49	-42.85	3.91	9.63	V
	2508	-45.16	-13	-32.16	-63.82	-48.82	4.84	10.65	V
	3344	-55.01	-13	-42.01	-75.75	-59.64	5.60	12.38	V
									V
									V
									V



Highest	1677	-39.90	-13	-26.90	-54.2	-43.5	3.92	9.66	H
	2515	-50.31	-13	-37.31	-68.24	-54.01	4.84	10.69	H
	3354	-54.82	-13	-41.82	-75.62	-59.47	5.61	12.41	H
									H
									H
									H
	1677	-41.68	-13	-28.68	-55.91	-45.28	3.92	9.66	V
	2515	-46.09	-13	-33.09	-63.96	-49.79	4.84	10.69	V
	3354	-55.00	-13	-42.00	-75.73	-59.65	5.61	12.41	V
									V
									V
									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)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1399	-38.76	-13.00	-25.76	-52.66	-40.43	3.57	7.39	H
	2098	-36.51	-13.00	-23.51	-53.37	-39.68	4.40	9.72	H
	2798	-55.78	-13.00	-42.78	-75.36	-59.53	5.10	11.00	H
	3498	-53.11	-13.00	-40.11	-74.72	-57.63	5.74	12.40	H
									H
									H
	1399	-33.98	-13.00	-20.98	-48.25	-35.65	3.57	7.39	V
	2098	-38.27	-13.00	-25.27	-55.59	-41.44	4.40	9.72	V
	2798	-55.92	-13.00	-42.92	-75.43	-59.67	5.10	11.00	V
	3498	-49.88	-13.00	-36.88	-71.40	-54.40	5.74	12.40	V
									V
									V
Middle	1406	-39.61	-13.00	-26.61	-53.52	-41.30	3.58	7.42	H
	2109	-35.06	-13.00	-22.06	-52.01	-38.13	4.41	9.63	H
	2812	-55.40	-13.00	-42.40	-75.03	-59.14	5.11	11.00	H
	3515	-52.30	-13.00	-39.30	-73.89	-56.71	5.75	12.31	H
									H
									H
	1406	-34.55	-13.00	-21.55	-48.82	-36.24	3.58	7.42	V
	2109	-37.15	-13.00	-24.15	-54.58	-40.22	4.41	9.63	V
	2812	-55.77	-13.00	-42.77	-75.34	-59.51	5.11	11.00	V
	3515	-51.80	-13.00	-38.80	-73.29	-56.21	5.75	12.31	V
									V
									V



Highest	1413	-41.24	-13.00	-28.24	-55.16	-42.95	3.59	7.45	H
	2119	-35.58	-13.00	-22.58	-52.62	-38.56	4.42	9.55	H
	2826	-55.38	-13.00	-42.38	-75.06	-59.11	5.12	11.00	H
	3532	-52.94	-13.00	-39.94	-74.46	-57.23	5.77	12.21	H
									H
									H
	1413	-36.99	-13.00	-23.99	-51.24	-38.70	3.59	7.45	V
	2119	-38.13	-13.00	-25.13	-55.66	-41.11	4.42	9.55	V
	2826	-55.31	-13.00	-42.31	-74.93	-59.04	5.12	11.00	V
	3532	-52.53	-13.00	-39.53	-73.94	-56.82	5.77	12.21	V
									V
									V

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

**LTE Band 13**

LTE Band 13 / 5MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1554	-44.44	-13	-31.44	-58.46	-47.35	3.77	8.83	H
	2332	-47.73	-13	-34.73	-65.82	-50.66	4.65	9.73	H
	3109	-54.73	-13	-41.73	-75.46	-58.50	5.38	11.30	H
									H
									H
									H
	1554	-48.03	-13	-35.03	-61.98	-50.94	3.77	8.83	V
	2332	-46.96	-13	-33.96	-65.10	-49.89	4.65	9.73	V
	3109	-54.76	-13	-41.76	-75.42	-58.53	5.38	11.30	V
									V
									V
									V
Middle	1559	-48.52	-42.15	-6.37	-62.53	-51.46	3.78	8.87	H
	2339	-44.42	-13	-31.42	-62.52	-47.37	4.66	9.76	H
	3119	-54.34	-13	-41.34	-75.12	-58.10	5.39	11.30	H
									H
									H
									H
	1559	-49.30	-42.15	-7.15	-63.23	-52.24	3.78	8.87	V
	2339	-43.04	-13	-30.04	-61.16	-45.99	4.66	9.76	V
	3119	-54.88	-13	-41.88	-75.59	-58.64	5.39	11.30	V
									V
									V
									V



Highest	1564	-48.19	-42.15	-6.04	-62.21	-51.17	3.78	8.91	H
	2347	-48.59	-13	-35.59	-66.72	-51.56	4.66	9.79	H
	3129	-54.82	-13	-41.82	-75.64	-58.57	5.40	11.30	H
									H
									H
									H
	1564	-51.35	-42.15	-9.20	-65.28	-54.33	3.78	8.91	V
	2347	-44.49	-13	-31.49	-62.60	-47.46	4.66	9.79	V
	3129	-54.69	-13	-41.69	-75.42	-58.44	5.40	11.30	V
									V
									V
									V

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



LTE Band 13 / 10MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1555	-44.44	-13	-31.44	-58.46	-47.36	3.77	8.84	H
	2332	-49.44	-13	-36.44	-67.53	-52.37	4.65	9.73	H
	3110	-55.19	-13	-42.19	-75.92	-58.96	5.38	11.30	H
									H
									H
									H
	1555	-48.14	-13	-35.14	-62.09	-51.06	3.77	8.84	V
	2332	-46.96	-13	-33.96	-65.1	-49.89	4.65	9.73	V
	3110	-54.88	-13	-41.88	-75.54	-58.65	5.38	11.30	V
									V
									V
									V

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

**LTE Band 25**

LTE Band 25 / 20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3702	-53.47	-13	-40.47	-76.01	-59.84	5.93	12.30	H
	5553	-48.89	-13	-35.89	-76.91	-54.45	7.74	13.31	H
	7404	-42.12	-13	-29.12	-76.02	-44.6	8.72	11.20	H
									H
									H
									H
	3702	-53.63	-13	-40.63	-76.08	-60	5.93	12.30	V
	5553	-48.76	-13	-35.76	-76.82	-54.32	7.74	13.31	V
	7404	-41.66	-13	-28.66	-75.82	-44.14	8.72	11.20	V
									V
									V
									V
Middle	3742	-53.52	-13	-40.52	-76.28	-59.86	5.96	12.30	H
	5613	-49.22	-13	-36.22	-77.23	-54.85	7.79	13.43	H
	7484	-41.87	-13	-28.87	-76.06	-44.32	8.75	11.20	H
									H
									H
									H
	3742	-53.70	-13	-40.70	-76.41	-60.04	5.96	12.30	V
	5613	-48.82	-13	-35.82	-76.83	-54.45	7.79	13.43	V
	7484	-41.25	-13	-28.25	-75.78	-43.7	8.75	11.20	V
									V
									V
									V



Highest	3792	-53.44	-13	-40.44	-76.47	-59.73	6.01	12.30	H
	5688	-48.97	-13	-35.97	-77.24	-54.62	7.85	13.50	H
	7584	-41.86	-13	-28.86	-76.78	-44.6	8.80	11.54	H
									H
									H
									H
	3792	-53.01	-13	-40.01	-76.03	-59.3	6.01	12.30	V
	5688	-48.78	-13	-35.78	-77.02	-54.43	7.85	13.50	V
	7584	-41.78	-13	-28.78	-76.98	-44.52	8.80	11.54	V
									V
									V
									V

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

**LTE Band 71**

LTE Band 71 / 20MHz / QPSK									
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1328	-41.91	-13	-28.91	-55.61	-45.29	3.47	6.86	H
	1992	-30.00	-13	-17.00	-45.98	-35.92	4.28	10.20	H
	2656	-56.16	-13	-43.16	-75.12	-61.99	4.97	10.80	H
	3320	-51.58	-13	-38.58	-72.44	-58.29	5.57	12.28	H
									H
									H
	1328	-38.59	-13	-25.59	-52.4	-41.97	3.47	6.86	V
	1992	-29.66	-13	-16.66	-45.94	-35.58	4.28	10.20	V
	2656	-56.44	-13	-43.44	-74.92	-62.27	4.97	10.80	V
	3320	-48.06	-13	-35.06	-68.84	-54.77	5.57	12.28	V
									V
									V
Middle	1348	-40.93	-13	-27.93	-54.68	-44.33	3.50	6.90	H
	2022	-31.99	-13	-18.99	-48.22	-37.88	4.31	10.20	H
	2696	-56.09	-13	-43.09	-75.22	-61.88	5.01	10.80	H
	3370	-51.70	-13	-38.70	-72.46	-58.52	5.62	12.44	H
									H
									H
	1348	-41.65	-13	-28.65	-55.5	-45.05	3.50	6.90	V
	2022	-31.48	-13	-18.48	-48.05	-37.37	4.31	10.20	V
	2696	-56.47	-13	-43.47	-75.24	-62.26	5.01	10.80	V
	3370	-50.26	-13	-37.26	-70.95	-57.08	5.62	12.44	V
									V
									V



Highest	1358	-42.86	-13	-29.86	-56.64	-46.33	3.51	6.98	H
	2037	-33.42	-13	-20.42	-49.77	-39.29	4.33	10.20	H
	2716	-55.66	-13	-42.66	-74.87	-61.47	5.02	10.83	H
	3395	-53.37	-13	-40.37	-74.08	-60.22	5.64	12.49	H
									H
									H
	1358	-43.00	-13	-30.00	-57	-46.47	3.51	6.98	V
	2037	-33.76	-13	-20.76	-50.47	-39.63	4.33	10.20	V
	2716	-55.98	-13	-42.98	-74.88	-61.79	5.02	10.83	V
	3395	-52.44	-13	-39.44	-73.1	-59.29	5.64	12.49	V
									V
									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)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5002	-60.09	-25	-35.09	-51.19	-65.3	7.49	12.70	H
	7503	-57.62	-25	-32.62	-56.11	-60.07	8.76	11.21	H
	10004	-53.89	-25	-28.89	-56.28	-54.98	10.01	11.11	H
									H
									H
									H
	5002	-56.92	-25	-31.92	-47.55	-62.13	7.49	12.70	V
	7503	-57.08	-25	-32.08	-55.92	-59.53	8.76	11.21	V
	10004	-54.40	-25	-29.40	-56.18	-55.49	10.01	11.11	V
									V
									V
									V
Middle	5052	-58.16	-25	-33.16	-49.12	-63.24	7.51	12.59	H
	7578	-55.19	-25	-30.19	-54.35	-57.91	8.80	11.51	H
	10104	-53.47	-25	-28.47	-55.99	-54.67	10.10	11.30	H
									H
									H
									H
	5052	-55.35	-25	-30.35	-45.95	-60.43	7.51	12.59	V
	7578	-52.22	-25	-27.22	-51.66	-54.94	8.80	11.51	V
	10104	-54.21	-25	-29.21	-56.06	-55.41	10.10	11.30	V
									V
									V
									V



Highest	5102	-58.56	-25	-33.56	-49.37	-63.43	7.53	12.40	H
	7653	-56.24	-25	-31.24	-55.5	-59.11	8.83	11.70	H
	10204	-53.65	-25	-28.65	-56.31	-54.76	10.18	11.29	H
									H
									H
									H
	5102	-54.75	-25	-29.75	-45.3	-59.62	7.53	12.40	V
	7653	-55.71	-25	-30.71	-55.17	-58.58	8.83	11.70	V
	10204	-54.55	-25	-29.55	-56.47	-55.66	10.18	11.29	V
									V
									V
									V

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

**LTE Band 7C**

LTE Band 7C / 20MHz+20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5037	-57.39	-25	-32.39	-48.39	-62.51	7.51	12.63	H
	7556	-56.49	-25	-31.49	-55.44	-59.13	8.79	11.42	H
	10075	-54.00	-25	-29.00	-56.49	-55.18	10.07	11.25	H
									H
									H
									H
	5037	-54.64	-25	-29.64	-45.24	-59.76	7.51	12.63	V
	7556	-53.90	-25	-28.90	-53.16	-56.54	8.79	11.42	V
	10075	-54.95	-25	-29.95	-56.78	-56.13	10.07	11.25	V
									V
									V
									V
Middle	5068	-57.00	-25	-32.00	-47.91	-62.01	7.52	12.53	H
	7602	-56.53	-25	-31.53	-55.88	-59.33	8.81	11.60	H
	10136	-53.49	-25	-28.49	-56.06	-54.67	10.12	11.30	H
									H
									H
									H
	5068	-53.84	-25	-28.84	-44.41	-58.85	7.52	12.53	V
	7602	-56.22	-25	-31.22	-55.82	-59.02	8.81	11.60	V
	10136	-54.25	-25	-29.25	-56.12	-55.43	10.12	11.30	V
									V
									V
									V



Highest	5098	-55.34	-25	-30.34	-46.15	-60.22	7.53	12.41	H
	7647	-56.48	-25	-31.48	-55.75	-59.35	8.83	11.69	H
	10196	-53.55	-25	-28.55	-56.19	-54.68	10.17	11.30	H
									H
									H
									H
	5098	-49.22	-25	-24.22	-39.77	-54.10	7.53	12.41	V
	7647	-55.83	-25	-30.83	-55.31	-58.70	8.83	11.69	V
	10196	-54.56	-25	-29.56	-56.47	-55.69	10.17	11.30	V
									V
									V
									V
									V

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

LTE Band 41 (HPUE)

LTE Band 41(HPUE) / 20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4994	-57.83	-25	-32.83	-48.89	-63.06	7.48	12.71	H
	7491	-54.15	-25	-29.15	-52.56	-56.59	8.76	11.20	H
	12485	-50.90	-25	-25.90	-59.53	-52.96	11.49	13.56	H
	14982	-50.96	-25	-25.96	-60.4	-50.65	12.75	12.45	H
									H
									H
	4994	-51.90	-25	-26.90	-42.5	-57.13	7.48	12.71	V
	7491	-50.70	-25	-25.70	-49.46	-53.14	8.76	11.20	V
	12485	-51.06	-25	-26.06	-58.06	-53.12	11.49	13.56	V
	14982	-46.88	-25	-21.88	-58.16	-46.57	12.75	12.45	V
									V
									V
Middle	5168	-50.78	-25	-25.78	-41.39	-55.86	7.56	12.64	H
	7752	-55.07	-25	-30.07	-54.14	-58.00	8.88	11.80	H
	10336	-52.75	-25	-27.75	-55.57	-53.46	10.29	10.99	H
									H
									H
									H
	5168	-48.81	-25	-23.81	-39.3	-53.89	7.56	12.64	V
	7752	-48.73	-25	-23.73	-47.89	-51.66	8.88	11.80	V
	10336	-53.65	-25	-28.65	-55.65	-54.36	10.29	10.99	V
									V
									V
									V



Highest	5342	-54.73	-25	-29.73	-45.78	-60.66	7.63	13.57	H
	8013	-56.01	-25	-31.01	-55.81	-58.29	9.00	11.27	H
	16026	-49.88	-25	-24.88	-60.13	-53.49	13.04	16.65	H
									H
									H
									H
	5342	-51.41	-25	-26.41	-42.3	-57.34	7.63	13.57	V
	8013	-55.77	-25	-30.77	-55.65	-58.05	9.00	11.27	V
	16026	-47.03	-25	-22.03	-56.86	-50.64	13.04	16.65	V
									V
									V
									V

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

**LTE Band 41C**

LTE Band 41C / 20MHz+20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	5029	-61.68	-25	-36.68	-52.7	-66.82	7.50	12.64	H
	7544	-57.06	-25	-32.06	-55.91	-59.66	8.78	11.38	H
	10059	-54.08	-25	-29.08	-56.55	-55.24	10.06	11.22	H
									H
									H
									H
	5029	-60.85	-25	-35.85	-51.45	-65.99	7.50	12.64	V
	7544	-56.46	-25	-31.46	-55.62	-59.06	8.78	11.38	V
	10059	-54.65	-25	-29.65	-56.47	-55.81	10.06	11.22	V
									V
									V
									V
Middle	5184	-61.32	-25	-36.32	-51.89	-66.52	7.57	12.77	H
	7776	-53.02	-25	-28.02	-52.06	-55.99	8.89	11.85	H
	10368	-53.66	-25	-28.66	-56.53	-54.24	10.31	10.90	H
									H
									H
									H
	5184	-61.15	-25	-36.15	-51.64	-66.35	7.57	12.77	V
	7776	-46.09	-25	-21.09	-45.19	-49.06	8.89	11.85	V
	10368	-54.59	-25	-29.59	-56.62	-55.17	10.31	10.90	V
									V
									V
									V



Highest	5342	-62.73	-25	-37.73	-53.78	-68.66	7.63	13.57	H
	8013	-55.89	-25	-30.89	-55.69	-58.17	9.00	11.27	H
	10684	-53.63	-25	-28.63	-57.51	-54.06	10.49	10.92	H
									H
									H
									H
	5342	-62.17	-25	-37.17	-53.06	-68.10	7.63	13.57	V
	8013	-56.02	-25	-31.02	-55.9	-58.30	9.00	11.27	V
	10684	-54.68	-25	-29.68	-57.52	-55.11	10.49	10.92	V
									V
									V
									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)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3422	-54.51	-13	-41.51	-75.97	-61.34	5.67	12.50	H
	5133	-49.36	-13	-36.36	-76.98	-54.28	7.55	12.47	H
	6844	-44.29	-13	-31.29	-76.32	-48.06	8.44	12.21	H
									H
									H
									H
	3422	-53.91	-13	-40.91	-75.31	-60.74	5.67	12.50	V
	5133	-47.28	-13	-34.28	-74.71	-52.20	7.55	12.47	V
	6844	-44.39	-13	-31.39	76.23	-48.16	8.44	12.21	V
									V
									V
									V
Middle	3472	-54.08	-13	-41.08	-76.02	-60.82	5.71	12.46	H
	5208	-48.71	-13	-35.71	-76.05	-54.08	7.58	12.95	H
	6944	-43.56	-13	-30.56	-76.17	-46.96	8.51	11.91	H
									H
									H
									H
	3472	-53.87	-13	-40.87	-75.73	-60.61	5.71	12.46	V
	5208	-46.66	-13	-33.66	-73.95	-52.03	7.58	12.95	V
	6944	-43.34	-13	-30.34	-76.03	-46.74	8.51	11.91	V
									V
									V
									V



Highest	3522	-53.69	-13	-40.69	-75.84	-60.20	5.76	12.27	H
	5283	-46.46	-13	-33.46	-74	-52.18	7.61	13.33	H
	7044	-42.97	-13	-29.97	-76.05	-46.04	8.57	11.64	H
									H
									H
									H
	3522	-53.61	-13	-40.61	-75.65	-60.12	5.76	12.27	V
	5283	-45.04	-13	-32.04	-72.47	-50.76	7.61	13.33	V
	7044	-42.26	-13	-29.26	-75.62	-45.33	8.57	11.64	V
									V
									V
									V

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

**LTE Band 66B**

LTE Band 66B / 15MHz+5MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3448	-54.12	-13	-41.12	-75.84	-60.93	5.69	12.50	H
	5172	-49.51	-13	-36.51	-76.97	-54.62	7.56	12.68	H
	6896	-43.10	-13	-30.10	-75.44	-46.64	8.48	12.02	H
									H
									H
									H
	3448	-54.19	-13	-41.19	-75.84	-61.00	5.69	12.50	V
	5172	-48.46	-13	-35.46	-75.81	-53.57	7.56	12.68	V
	6896	-43.46	-13	-30.46	-75.75	-47.00	8.48	12.02	V
									V
									V
									V
Middle	3518	-53.86	-13	-40.86	-76.02	-60.40	5.76	12.29	H
	5277	-48.33	-13	-35.33	-75.86	-54.03	7.61	13.31	H
	7037	-42.82	-13	-29.82	-75.86	-45.93	8.57	11.68	H
									H
									H
									H
	3518	-54.07	-13	-41.07	-76.13	-60.61	5.76	12.29	V
	5277	-45.38	-13	-32.38	-72.8	-51.08	7.61	13.31	V
	7037	-42.70	-13	-29.70	-76.02	-45.81	8.57	11.68	V
									V
									V
									V



Highest	3548	-54.18	-13	-41.18	-76.25	-60.51	5.78	12.11	H
	5323	-47.04	-13	-34.04	-74.68	-52.91	7.63	13.49	H
	7097	-42.66	-13	-29.66	-75.9	-45.48	8.59	11.41	H
									H
									H
									H
	3548	-54.15	-13	-41.15	-76.09	-60.48	5.78	12.11	V
	5323	-45.64	-13	-32.64	-73.15	-51.51	7.63	13.49	V
	7097	-42.19	-13	-29.19	-75.78	-45.01	8.59	11.41	V
									V
									V
									V

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

**LTE Band 66C**

LTE Band 66C / 20MHz+20MHz / QPSK									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3457	-54.03	-13	-41.03	-75.82	-60.82	5.70	12.49	H
	5186	-49.35	-13	-36.35	76.74	-54.57	7.57	12.79	H
	6915	-43.45	-13	-30.45	-75.89	-46.93	8.49	11.97	H
									H
									H
									H
	3457	-54.46	-13	-41.46	-76.18	-61.25	5.70	12.49	V
	5186	-48.75	-13	-35.75	-76.07	-53.97	7.57	12.79	V
	6915	-43.39	-13	-30.39	-75.84	-46.87	8.49	11.97	V
									V
									V
									V
Middle	3508	-53.89	-13	-40.89	-76.07	-60.49	5.75	12.35	H
	5262	-48.82	-13	-35.82	-76.3	-54.47	7.60	13.25	H
	7016	-42.68	-13	-29.68	-75.66	-45.93	8.56	11.80	H
									H
									H
									H
	3508	-54.11	-13	-41.11	-76.19	-60.71	5.75	12.35	V
	5262	-45.44	-13	-32.44	-72.83	-51.09	7.60	13.25	V
	7016	-42.62	-13	-29.62	-75.85	-45.87	8.56	11.80	V
									V
									V
									V



Highest	3518	-53.85	-13	-40.85	-76.01	-60.39	5.76	12.29	H
	5277	-48.16	-13	-35.16	-75.69	-53.86	7.61	13.31	H
	7036	-43.12	-13	-30.12	-76.16	-46.24	8.57	11.68	H
									H
									H
									H
	3518	-53.45	-13	-40.45	-75.51	-59.99	5.76	12.29	V
	5277	-45.49	-13	-32.49	-72.91	-51.19	7.61	13.31	V
	7036	-42.70	-13	-29.70	-76.01	-45.82	8.57	11.68	V
									V
									V
									V

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