



FCC RF Test Report

APPLICANT : Viavi Solutions Inc.
EQUIPMENT : 5G Sub-6 GHz M.2 Module with WCDMA and LTE
BRAND NAME : VIAVI
MODEL NAME : RM520N-GL
FCC ID : WUW-RM520NGL
STANDARD : 47 CFR Part 22(H), 24(E), 27(L)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Jul. 30, 2024

The product was installed into a host (Brand Name: VIAVI, Model Name: NXE-DEVICE-4M) during the test, only Conducted Power, ERP/EIRP and RSE test items are tested in this report.

We, Sporton International Inc. (Kunshan), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Kunshan), the test report shall not be reproduced except in full.

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300
People's Republic of China



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG452001B	Rev. 01	Initial issue of report	Dec. 18, 2024



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.3	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		-
-	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	1
-	§2.1049	Occupied Bandwidth	-	Report Only	1
-	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1051 §22.917(a) §24.238(a) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	1
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 4.45 dB at 3420.00 MHz

Remark 1: Test results are leveraged from module RF report No “SEWA2204000008RG01”

Conformity Assessment Condition:

- 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.
- The measurement uncertainty please refer to each test result in the section “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.



1 General Description

1.1 Applicant

Viavi Solutions Inc.

1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

1.2 Manufacturer

Viavi Solutions Inc.

1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Sub-6 GHz M.2 Module with WCDMA and LTE
Brand Name	VIAVI
Model Name	RM520N-GL
FCC ID	WUW-RM520NGL
EUT Stage	Identical Prototype

Host Product Feature	
Equipment	XEDGE 2.0
Brand Name	VIAVI
Model Name	NXE-DEVICE-4M
IMEI Code	Conducted : IMEI A: 868371051639645 IMEI B: 868371051635213 IMEI C: 868371051635338 IMEI D: 868371051639819 Radiation : IMEI A: 868371051120539 IMEI B: 868371051121032 IMEI C: 868371051143184 IMEI D: 868371051635312
Applicant	Viavi Solutions Inc. 1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286
Manufacturer	Viavi Solutions Inc. 1445 South Spectrum Boulevard, Suite 102, Chandler, Arizona 85286

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 25 : 1850 MHz ~ 1915 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 25 : 1930 MHz ~ 1995 MHz LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 66 : 2110 MHz ~ 2180 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 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Module A> <Ant.0> LTE Band 2 : 21.77 dBm LTE Band 2C : 21.69 dBm LTE Band 4 : 18.80 dBm LTE Band 5 : 23.38 dBm LTE Band 5B : 23.12 dBm LTE Band 25 : 22.05 dBm LTE Band 26 : 23.45 dBm LTE Band 66 : 18.88 dBm LTE Band 66B : 18.71 dBm LTE Band 66C : 18.76 dBm <Ant.2> LTE Band 2 : 22.09 dBm LTE Band 4 : 18.87 dBm LTE Band 25 : 22.16 dBm LTE Band 66 : 19.06 dBm <Module B> <Ant.0> LTE Band 2 : 21.79 dBm LTE Band 2C : 21.64 dBm LTE Band 4 : 19.01 dBm LTE Band 5 : 23.71 dBm LTE Band 5B : 23.70 dBm LTE Band 25 : 22.01 dBm LTE Band 26 : 23.78 dBm LTE Band 66 : 19.02 dBm LTE Band 66B : 18.88 dBm LTE Band 66C : 18.84 dBm <Ant.2> LTE Band 2 : 21.72 dBm LTE Band 4 : 19.12 dBm

	LTE Band 25 : 22.41 dBm LTE Band 66 : 19.25 dBm <Module C> <Ant.0> LTE Band 2 : 21.78 dBm LTE Band 2C : 21.61 dBm LTE Band 4 : 18.86 dBm LTE Band 5 : 23.22 dBm LTE Band 5B : 23.15 dBm LTE Band 25 : 22.23 dBm LTE Band 26 : 23.34 dBm LTE Band 66 : 18.92 dBm LTE Band 66B : 18.79 dBm LTE Band 66C : 18.73 dBm <Ant.2> LTE Band 2 : 21.79 dBm LTE Band 4 : 19.00 dBm LTE Band 25 : 21.80 dBm LTE Band 66 : 19.04 dBm <Module D> <Ant.0> LTE Band 2 : 21.78 dBm LTE Band 2C : 21.66 dBm LTE Band 4 : 18.88 dBm LTE Band 5 : 23.47 dBm LTE Band 5B : 23.42 dBm LTE Band 25 : 21.88 dBm LTE Band 26 : 23.48 dBm LTE Band 66 : 18.89 dBm LTE Band 66B : 18.79 dBm LTE Band 66C : 18.76 dBm <Ant.2> LTE Band 2 : 21.82 dBm LTE Band 4 : 19.10 dBm LTE Band 25 : 21.86 dBm LTE Band 66 : 19.09 dBm
Antenna Gain	< Module A/B/C/D> <Ant.0> LTE Band 5/26 : 6.0 dBi LTE Band 2/25 : 8.9 dBi LTE Band 4/66 : 8.9 dBi <Ant.2> LTE Band 2/25 : 8.9 dBi LTE Band 4/66 : 8.9 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note:

1. The maximum ERP/EIRP is calculated from max output power and max antenna gain, so only the maximum ERP/EIRP of Antenna 0 for Band5(Module B)/26(Module B)/5B(Module B)/66B(Module B)/66C(Module B)/2C(Module A), Antenna 2 for Band 2(Module A)/4(Module B)/25(Module B)/66(Module B) are shown in the report.
2. The four Modules are the same include Power setting, but we still verified the real power, which is within the uncertainty range, so we chose the module of the higher power for testing, each Module has four antennas, only Ant.0/2 supports TX/RX function, the others are RX only.



3. For RSE testing, we choice the module of the higher conducted Power to test, because between four modules do not support MIMO mode.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power

LTE Band 2		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1909.3	1.2474	-	0.9863	-
3	1851.5 ~ 1908.5	1.2474	-	0.9931	-
5	1852.5 ~ 1907.5	1.2474	-	0.9817	-
10	1855.0 ~ 1905.0	1.2474	-	0.9863	-
15	1857.5 ~ 1902.5	1.2503	-	0.9817	-
20	1860.0 ~ 1900.0	1.2560	-	0.9908	-
LTE Band 25		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1914.3	1.3335	-	1.3092	-
3	1851.5 ~ 1913.5	1.3122	-	1.3152	-
5	1852.5 ~ 1912.5	1.3335	-	1.3213	-
10	1855.0 ~ 1910.0	1.2972	-	1.3092	-
15	1857.5 ~ 1907.5	1.3183	-	1.3032	-
20	1860.0 ~ 1905.0	1.3521	-	1.3490	-
LTE Band 4		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1754.3	0.6180	-	0.5794	-
3	1711.5 ~ 1753.5	0.6166	-	0.5970	-
5	1712.5 ~ 1752.5	0.5902	-	0.5741	-
10	1715.0 ~ 1750.0	0.6138	-	0.5808	-
15	1717.5 ~ 1747.5	0.6252	-	0.5970	-
20	1720.0 ~ 1745.0	0.6339	-	0.6053	-



LTE Band 5		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.5559	-	0.4498	-
3	825.5 ~ 847.5	0.5495	-	0.4426	-
5	826.5 ~ 846.5	0.5559	-	0.4436	-
10	829.0 ~ 844.0	0.5702	-	0.4519	-
LTE Band 26		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.5675	-	0.4656	-
3	825.5 ~ 847.5	0.5546	-	0.4477	-
5	826.5 ~ 846.5	0.5649	-	0.4375	-
10	829.0 ~ 844.0	0.5715	-	0.4385	-
15	831.5 ~ 841.5	0.5794	-	0.4571	-
CH26790	824.0	0.5572	-	0.4487	-
LTE Band 66		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1779.3	0.6501	-	0.6353	-
3	1711.5 ~ 1778.5	0.6310	-	0.6166	-
5	1712.5 ~ 1777.5	0.6412	-	0.6109	-
10	1715.0 ~ 1775.0	0.6295	-	0.6152	-
15	1717.5 ~ 1772.5	0.6486	-	0.6194	-
20	1720.0 ~ 1770.0	0.6531	-	0.6427	-



LTE Band CA_2C	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz	1.1402	-	1.1220	-
10MHz+15MHz	1.1220	-	1.1066	-
10MHz+20MHz	1.1015	-	1.1272	-
15MHz+10MHz	1.1324	-	1.1220	-
15MHz+15MHz	1.1092	-	1.1429	-
15MHz+20MHz	1.1324	-	1.1324	-
20MHz+5MHz	1.1429	-	1.1298	-
20MHz+10MHz	1.1298	-	1.1324	-
20MHz+15MHz	1.1169	-	1.1376	-
20MHz+20MHz	1.1455	-	1.1272	-
LTE Band CA_5B	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
3MHz+5MHz	0.5458	-	0.4508	-
5MHz+3MHz	0.5483	-	0.4416	-
5MHz+10MHz	0.5559	-	0.4395	-
10MHz+5MHz	0.5636	-	0.4477	-
10MHz+10MHz	0.5689	-	0.4539	-
LTE Band CA_66B	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+5MHz	0.5970	-	0.5848	-
5MHz+10MHz	0.5848	-	0.5662	-
5MHz+15MHz	0.5902	-	0.5821	-
10MHz+5MHz	0.5834	-	0.5675	-
10MHz+10MHz	0.5998	-	0.5943	-
15MHz+5MHz	0.5794	-	0.5848	-



LTE Band CA_66C	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz	0.5702	-	0.5715	-
10MHz+15MHz	0.5902	-	0.5675	-
10MHz+20MHz	0.5781	-	0.5623	-
15MHz+10MHz	0.5821	-	0.5754	-
15MHz+15MHz	0.5916	-	0.5702	-
15MHz+20MHz	0.5848	-	0.5794	-
20MHz+5MHz	0.5834	-	0.5702	-
20MHz+10MHz	0.5715	-	0.5662	-
20MHz+15MHz	0.5702	-	0.5598	-
20MHz+20MHz	0.5943	-	0.5916	-

Note:

1. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 26 as well as Band 5.
2. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
3. LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2.



1.7 Testing Location

Sporton International Inc. (Kunshan) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International Inc. (Kunshan)		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-KS TH01-KS	CN1257	314309

1.8 Test Software

Item	Site	Manufacturer	Name	Version
1.	TH01-KS	SPORTON	Part2224_Ver5.0 200330	5.0
2.	03CH04-KS	AUDIX	E3	210616

1.9 Applicable Standards

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

- ♦ 47 CFR Part 22(H), 24(E), 27(L)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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



2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

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

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	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	v
	5	v	v	v	v	-	-	v	v	v	v	v		v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
	26	v	v	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	v
E.R.P / E.I.R.P	2	v	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	v
	5	v	v	v	v	-	-	v	v	v	v	v		v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
	26	v	v	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	v
Radiated Spurious Emission	25	Worst Case												v	v	v	
	26	Worst Case												v	v	v	
	66	Worst Case												v	v	v	
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-” means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.																

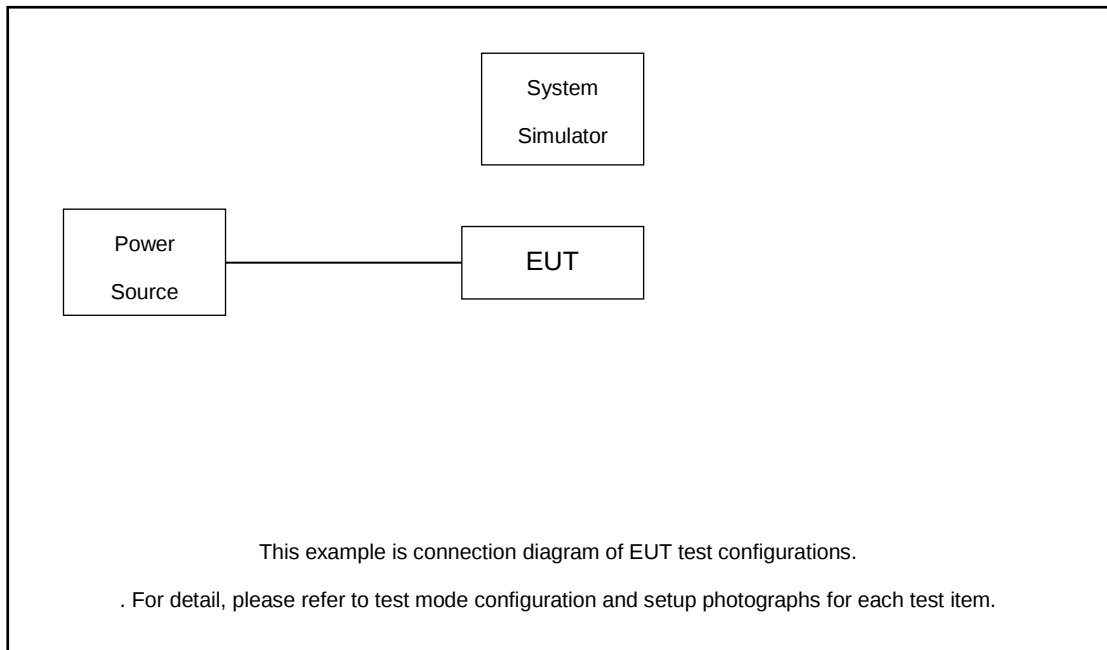


Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	20+10	20+5	15+20	15+15	15+10	10+20	10+15	5+20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
E.I.R.P.	2C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2C_CA	Worst Case																	v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. 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. 3. All test items are based on engineering evaluation. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																				

Test Items	Band	Bandwidth (MHz)								Modulation				RB #			Test Channel		
		10+10	15+5	5+15	10+5	5+10	5+5	5+3	3+5	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v			v	v	v
	66B_CA	v	v	v	v	v	v	-	-	v	v	v	v	v			v	v	v
E.I.R.P.	5B_CA	v	-	-	v	v	-	v	v	v	v	v	v	v			v	v	v
	66B_CA	v	v	v	v	v	v	-	-	v	v	v	v	v			v	v	v
Radiated Spurious Emission	5B_CA	Worst Case															v	v	v
	66B_CA	Worst Case															v	v	v
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "- " means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation. 5. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																		

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	20+10	20+5	15+20	15+15	15+10	10+20	10+15	5+20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
E.I.R.P.	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	66C_CA	Worst Case																	v	v	v
Note	5.	The mark “v “ means that this configuration is chosen for testing																			
	6.	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.																			
	7.	All test items are based on engineering evaluation.																			
	8.	For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																			

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.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

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

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



	Frequency	1710.7	1732.5	1754.3
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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 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3



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

LTE Band 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 2C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 20	PCC	Channel	18633	18808	18983
		Frequency	1853.3	1870.8	1888.3
	SCC	Channel	18750	18925	19100
		Frequency	1865	1882.5	1900
20 + 5	PCC	Channel	18700	18875	19050



	SCC	Frequency	1860	1877.5	1895
		Channel	18817	18992	19167
10 + 20	PCC	Frequency	1871.7	1889.2	1906.7
		Channel	18655	18806	18956
	SCC	Frequency	1855.5	1870.6	1885.6
		Channel	18799	18950	19100
20 + 10	PCC	Frequency	1869.9	1885	1900
		Channel	18700	18851	19001
	SCC	Frequency	1860	1875.1	1890.1
		Channel	18844	18995	19145
10 + 15	PCC	Frequency	1874.4	1889.5	1904.5
		Channel	18653	18829	19005
	SCC	Frequency	1855.3	1872.9	1890.5
		Channel	18773	18949	19125
15 + 10	PCC	Frequency	1867.3	1884.9	1902.5
		Channel	18675	18851	19027
	SCC	Frequency	1857.5	1875.1	1892.7
		Channel	18795	18971	19147
15 + 15	PCC	Frequency	1869.5	1887.1	1904.7
		Channel	18675	18825	18975
	SCC	Frequency	1857.5	1872.5	1887.5
		Channel	18825	18975	19125
15 + 20	PCC	Frequency	1872.5	1887.5	1902.5
		Channel	18678	18803	18929
	SCC	Frequency	1857.8	1870.3	1882.9
		Channel	18849	18974	19100
20 + 15	PCC	Frequency	1874.9	1887.4	1900
		Channel	18700	18826	18951
	SCC	Frequency	1860	1872.6	1885.1
		Channel	18871	18997	19122
20 + 20	PCC	Frequency	1877.1	1889.7	1902.2
		Channel	18700	18801	18902
	SCC	Frequency	1860	1870.1	1880.2
		Channel	18898	18999	19100
		Frequency	1879.8	1889.9	1900



LTE Band 5B_CA Channel and Frequency List					
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	20625
		Frequency	829.5	838.0	846.5
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	839	844
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829	834	839
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844

LTE Band 66C_CA Channel and Frequency List					
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	132471	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	132493	132619
		Frequency	1729.5	1762.1	1774.7
10 + 20	PCC	Channel	132027	132328	132428
		Frequency	1715.5	1745.6	1755.6



	SCC	Channel	132171	132472	132572
		Frequency	1729.9	1760	1770
20 + 10	PCC	Channel	132072	132373	132473
		Frequency	1720	1750.1	1760.1
	SCC	Channel	132216	132517	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	132497	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	132496	132572
		Frequency	1734.9	1762.4	1770
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720	1747.6	1755.1
	SCC	Channel	132243	132519	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720	1752.5	1765
	SCC	Channel	132189	132514	132639
		Frequency	1731.7	1764.2	1776.7
5 + 20	PCC	Channel	132005	132330	132455
		Frequency	1713.3	1745.8	1758.3
	SCC	Channel	132122	132447	132572
		Frequency	1725	1757.5	1770
20 + 20	PCC	Channel	132072	132323	132374
		Frequency	1720	1745.1	1750.2
	SCC	Channel	132270	132521	132572
		Frequency	1739.8	1764.9	1770

LTE Band 66B_CA Channel and Frequency List					
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	132446	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	132447	132622
		Frequency	1720	1757.5	1775
10 + 5	PCC	Channel	132022	132397	132572
		Frequency	1715	1752.5	1770
	SCC	Channel	132094	132469	132644
		Frequency	1722.2	1759.7	1777.2
5 + 15	PCC	Channel	132002	132353	132504
		Frequency	1713	1748.1	1763.2
	SCC	Channel	132095	132446	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	132491	132642
		Frequency	1726.8	1761.9	1777
10 + 10	PCC	Channel	132022	132373	132523
		Frequency	1715	1750.1	1765.1
	SCC	Channel	132121	132472	132622
		Frequency	1724.9	1760	1775

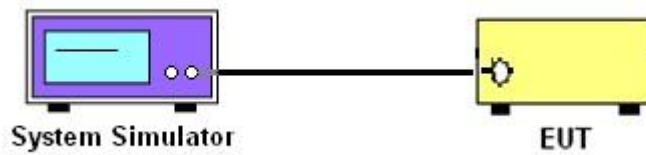
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power





3.3 Conducted Output Power and ERP/EIRP

3.3.1 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 EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25.

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

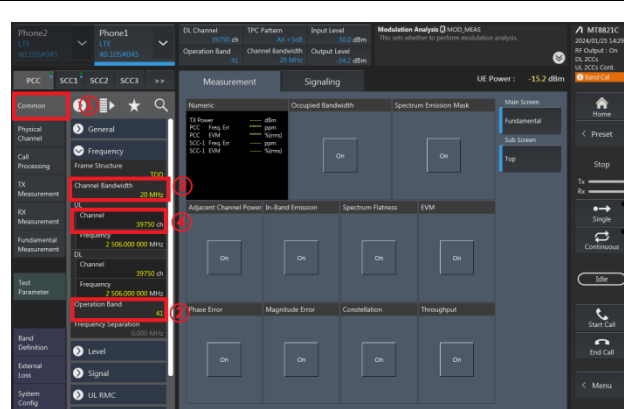
3.3.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

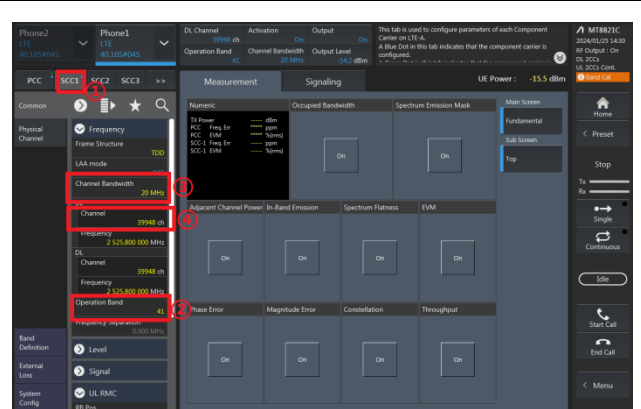
3.3.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

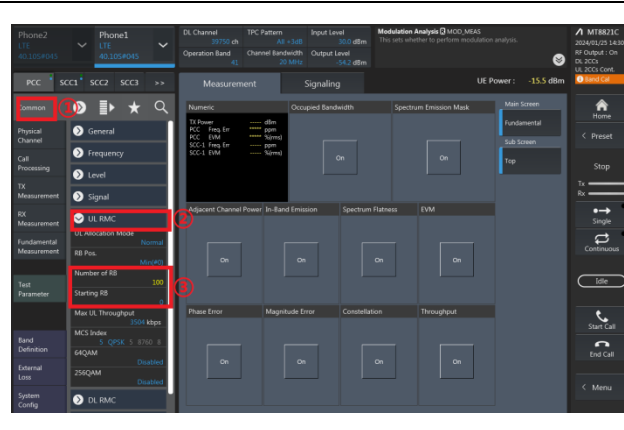
PCC config_ (Channel Bandwidth / Channel / Band)



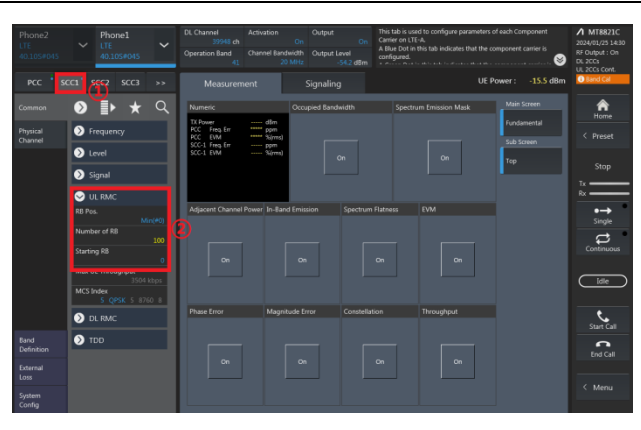
SCC config_ (Channel Bandwidth / Channel / Band)



PCC config_ (Number of RB / Starting RB)

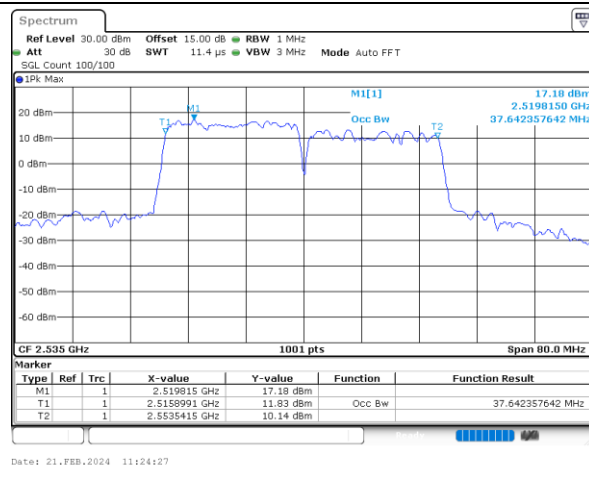


SCC config_ (Number of RB / Starting RB)

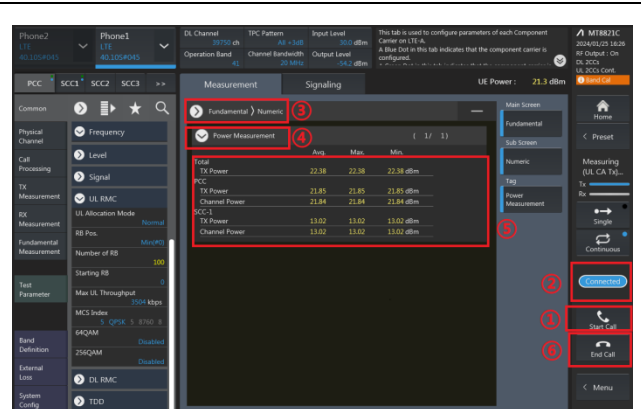


4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)



Read the Total UL CA output power (PCC+SCC)



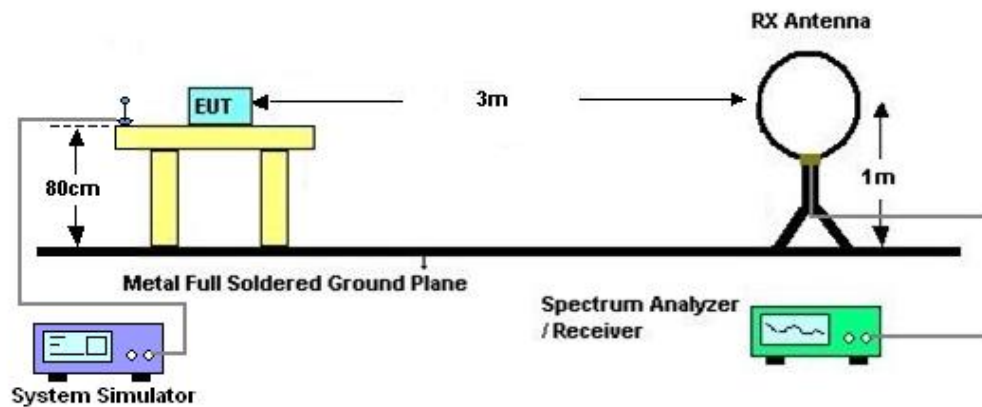
4 Radiated Test Items

4.1 Measuring Instruments

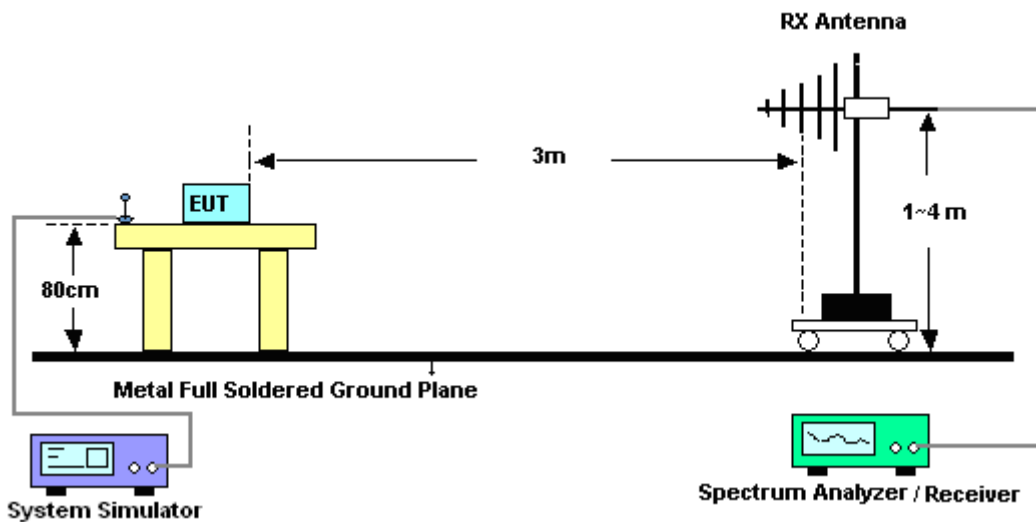
See list of measuring instruments of this test report.

4.2 Test Setup

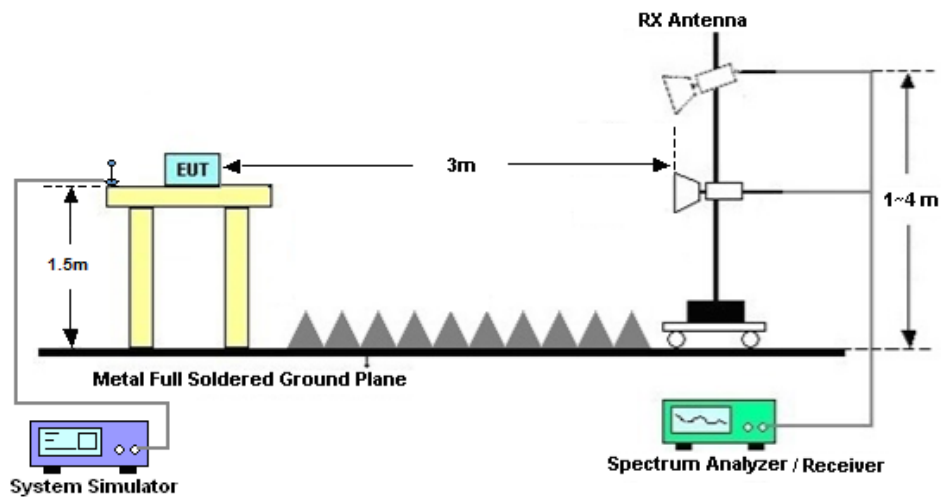
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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.

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. 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.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
11. $ERP \text{ (dBm)} = EIRP - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

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

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

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

$$= -13\text{dBm}.$$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 11, 2023	Jul. 30, 2024	Oct. 10, 2024	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Jul. 30, 2024	NCR	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010B	MY57471079	10Hz-44G,MAX 30dB	Oct. 11, 2023	Jul. 30, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 09, 2023	Jul. 30, 2024	Sep. 08, 2024	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 06, 2023	Jul. 30, 2024	Dec. 05, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75957	1GHz~18GHz	Oct. 23, 2023	Jul. 30, 2024	Oct. 22, 2024	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Jul. 30, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Jul. 30, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060728	18~40GHz	Jan. 02, 2024	Jul. 30, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz-18Ghz	Oct. 11, 2023	Jul. 30, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz-18Ghz	Oct. 11, 2023	Jul. 30, 2024	Oct. 10, 2024	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Jul. 30, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Jul. 30, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Jul. 30, 2024	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



6 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage $K=2$ to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Conducted Power	± 0.50 dB
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Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.83 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.83 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.82 dB
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----- THE END -----



Appendix A. Test Results of Conducted Test

Test Engineer :	Smile	Temperature :	24~26°C
		Relative Humidity :	50~53%

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 2_ANT2 (Module A) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18700	18900	19100			
Frequency (MHz)				1860	1880	1900	L	M	H
20	QPSK	1	0	22.05	22.09	22.06	1.2445	1.2560	1.2474
20	QPSK	1	99	22.03	22.05	22.07	1.2388	1.2445	1.2503
20	QPSK	100	0	21.85	21.92	21.87	1.1885	1.2078	1.1940
20	16QAM	1	0	21.87	21.84	21.83	1.1940	1.1858	1.1830
20	64QAM	1	0	21.90	21.98	22.07	1.2023	1.2246	1.2503
20	256QAM	1	0	19.30	19.75	19.57	0.6607	0.7328	0.7031
Channel				18675	18900	19125	EIRP(W)		
Frequency (MHz)				1857.5	1880	1902.5	L	M	H
15	QPSK	1	0	22.01	22.07	22.02	1.2331	1.2503	1.2359
15	16QAM	1	0	21.86	21.72	21.73	1.1912	1.1535	1.1561
Channel				18650	18900	19150	EIRP(W)		
Frequency (MHz)				1855	1880	1905	L	M	H
10	QPSK	1	0	22.04	22.06	22.00	1.2417	1.2474	1.2303
10	16QAM	1	0	21.78	21.81	21.74	1.1695	1.1776	1.1588
Channel				18625	18900	19175	EIRP(W)		
Frequency (MHz)				1852.5	1880	1907.5	L	M	H
5	QPSK	1	0	22.01	22.06	22.03	1.2331	1.2474	1.2388
5	16QAM	1	0	21.75	21.74	21.83	1.1614	1.1588	1.1830
Channel				18615	18900	19185	EIRP(W)		
Frequency (MHz)				1851.5	1880	1908.5	L	M	H
3	QPSK	1	0	22.00	22.06	22.03	1.2303	1.2474	1.2388
3	16QAM	1	0	21.76	21.73	21.80	1.1641	1.1561	1.1749
Channel				18607	18900	19193	EIRP(W)		
Frequency (MHz)				1850.7	1880	1909.3	L	M	H
1.4	QPSK	1	0	22.00	22.06	22.03	1.2303	1.2474	1.2388
1.4	16QAM	1	0	21.80	21.81	21.75	1.1749	1.1776	1.1614



LTE Band 4_ANT2 (Module B) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				20050	20175	20300			
Frequency (MHz)				1720	1732.5	1745	L	M	H
20	QPSK	1	0	18.87	19.12	19.03	0.5984	0.6339	0.6209
20	QPSK	1	99	18.82	18.73	18.72	0.5916	0.5794	0.5781
20	QPSK	100	0	18.80	18.92	18.81	0.5888	0.6053	0.5902
20	16QAM	1	0	18.65	18.92	18.61	0.5689	0.6053	0.5636
20	64QAM	1	0	18.78	18.92	18.76	0.5861	0.6053	0.5834
20	256QAM	1	0	14.17	14.27	13.99	0.2028	0.2075	0.1945
Channel				20025	20175	20325	EIRP(W)		
Frequency (MHz)				1717.5	1732.5	1747.5	L	M	H
15	QPSK	1	0	18.84	19.06	19.02	0.5943	0.6252	0.6194
15	16QAM	1	0	18.82	18.86	18.74	0.5916	0.5970	0.5808
Channel				20000	20175	20350	EIRP(W)		
Frequency (MHz)				1715	1732.5	1750	L	M	H
10	QPSK	1	0	18.87	18.92	18.98	0.5984	0.6053	0.6138
10	16QAM	1	0	18.62	18.74	18.65	0.5649	0.5808	0.5689
Channel				19975	20175	20375	EIRP(W)		
Frequency (MHz)				1712.5	1732.5	1752.5	L	M	H
5	QPSK	1	0	18.70	18.75	18.81	0.5754	0.5821	0.5902
5	16QAM	1	0	18.50	18.69	18.61	0.5495	0.5741	0.5636
Channel				19965	20175	20385	EIRP(W)		
Frequency (MHz)				1711.5	1732.5	1753.5	L	M	H
3	QPSK	1	0	18.83	19.00	18.95	0.5929	0.6166	0.6095
3	16QAM	1	0	18.79	18.86	18.69	0.5875	0.5970	0.5741
Channel				19950	20175	20393	EIRP(W)		
Frequency (MHz)				1710	1732.5	1754.3	L	M	H
1.4	QPSK	1	0	18.79	19.01	18.85	0.5875	0.6180	0.5957
1.4	16QAM	1	0	18.65	18.73	18.66	0.5689	0.5794	0.5702



LTE Band 5_ANT0 (Module B) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20450	20525	20600			
Frequency (MHz)				829	836.5	844	L	M	H
10	QPSK	1	0	23.63	23.71	23.65	0.5598	0.5702	0.5623
10	QPSK	1	49	23.49	23.61	23.60	0.5420	0.5572	0.5559
10	QPSK	50	0	22.68	22.69	22.62	0.4498	0.4508	0.4436
10	16QAM	1	0	22.70	22.63	22.60	0.4519	0.4446	0.4416
10	64QAM	1	0	21.69	21.79	21.63	0.3581	0.3664	0.3532
10	256QAM	1	0	18.57	18.69	18.61	0.1746	0.1795	0.1762
Channel				20425	20525	20625	ERP(W)		
Frequency (MHz)				826.5	836.5	846.5	L	M	H
5	QPSK	1	0	23.49	23.53	23.60	0.5420	0.5470	0.5559
5	16QAM	1	0	22.62	22.58	22.49	0.4436	0.4395	0.4305
Channel				20415	20525	20635	ERP(W)		
Frequency (MHz)				825.5	836.5	847.5	L	M	H
3	QPSK	1	0	23.53	23.55	23.50	0.5470	0.5495	0.5433
3	16QAM	1	0	22.61	22.47	22.58	0.4426	0.4285	0.4395
Channel				20407	20525	20643	ERP(W)		
Frequency (MHz)				824.7	836.5	848.3	L	M	H
1.4	QPSK	1	0	23.52	23.57	23.60	0.5458	0.5521	0.5559
1.4	16QAM	1	0	22.60	22.68	22.62	0.4416	0.4498	0.4436

LTE Band 25_ANT2 (Module B) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				26140	26340	26590			
Frequency (MHz)				1860	1880	1905	L	M	H
20	QPSK	1	0	22.27	22.41	22.19	1.3092	1.3521	1.2853
20	QPSK	1	99	22.22	22.38	22.02	1.2942	1.3428	1.2359
20	QPSK	100	0	22.20	22.37	22.19	1.2882	1.3397	1.2853
20	16QAM	1	0	22.29	22.33	22.15	1.3152	1.3274	1.2735
20	64QAM	1	0	22.24	22.40	22.24	1.3002	1.3490	1.3002
20	256QAM	1	0	19.22	19.46	19.11	0.6486	0.6855	0.6324
Channel				26115	26340	26615	EIRP(W)		
Frequency (MHz)				1857.5	1880	1907.5	L	M	H
15	QPSK	1	0	22.16	22.30	22.10	1.2764	1.3183	1.2589



15	16QAM	1	0	22.24	22.25	22.08	1.3002	1.3032	1.2531
Channel				26090	26340	26640	EIRP(W)		
Frequency (MHz)				1855	1880	1910	L	M	H
10	QPSK	1	0	22.18	22.23	22.09	1.2823	1.2972	1.2560
10	16QAM	1	0	22.27	22.24	22.04	1.3092	1.3002	1.2417
Channel				26065	26340	26665	EIRP(W)		
Frequency (MHz)				1852.5	1880	1912.5	L	M	H
5	QPSK	1	0	22.15	22.35	22.22	1.2735	1.3335	1.2942
5	16QAM	1	0	22.26	22.31	22.07	1.3062	1.3213	1.2503
Channel				26055	26340	26675	EIRP(W)		
Frequency (MHz)				1851.5	1880	1913.5	L	M	H
3	QPSK	1	0	22.18	22.28	22.17	1.2823	1.3122	1.2794
3	16QAM	1	0	22.18	22.29	22.04	1.2823	1.3152	1.2417
Channel				26047	26340	26683	EIRP(W)		
Frequency (MHz)				1850.7	1880	1914.3	L	M	H
1.4	QPSK	1	0	22.21	22.35	22.04	1.2912	1.3335	1.2417
1.4	16QAM	1	0	22.23	22.27	22.19	1.2972	1.3092	1.2853

LTE Band 26_ANT0 (Module B) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)			
Channel				26790	26865	26915	26965				
Frequency (MHz)				824	831.5	836.5	841.5	Straddle Ch	L	M	H
15	QPSK	1	0	23.61	23.78	23.52	23.76	0.5572	0.5794	0.5458	0.5768
15	QPSK	1	74	23.55	23.62	23.34	23.62	0.5495	0.5585	0.5236	0.5585
15	QPSK	75	0	22.60	22.82	22.51	22.74	0.4416	0.4645	0.4325	0.4560
15	16QAM	1	0	22.67	22.75	22.59	22.69	0.4487	0.4571	0.4406	0.4508
15	64QAM	1	0	21.66	21.86	21.61	21.78	0.3556	0.3724	0.3516	0.3656
15	256QAM	1	0	18.68	18.85	18.68	18.82	0.1791	0.1862	0.1791	0.1849
Channel				26790	26840	26915	26990	ERP(W)			
Frequency (MHz)				824	829	836.5	844	Straddle Ch	L	M	H
10	QPSK	1	0	23.49	23.48	23.50	23.72	0.5420	0.5408	0.5433	0.5715



10	16QAM	1	0	22.65	22.45	22.56	22.57	0.4467	0.4266	0.4375	0.4385
Channel				26790	26815	26915	27015	ERP(W)			
Frequency (MHz)				824	826.5	836.5	846.5	Straddle Ch	L	M	H
5	QPSK	1	0	23.58	23.47	23.47	23.67	0.5534	0.5395	0.5395	0.5649
5	16QAM	1	0	22.53	22.51	22.47	22.56	0.4345	0.4325	0.4285	0.4375
Channel				26790	26815	26915	27025	ERP(W)			
Frequency (MHz)				824	825.5	836.5	847.5	Straddle Ch	L	M	H
3	QPSK	1	0	23.50	23.30	23.58	23.59	0.5433	0.5188	0.5534	0.5546
3	16QAM	1	0	22.60	22.41	22.47	22.66	0.4416	0.4227	0.4285	0.4477
Channel				26790	26797	26915	27033	ERP(W)			
Frequency (MHz)				824	824.7	836.5	848.3	Straddle Ch	L	M	H
1.4	QPSK	1	0	23.54	23.25	23.45	23.69	0.5483	0.5129	0.5370	0.5675
1.4	16QAM	1	0	22.63	22.38	22.52	22.83	0.4446	0.4198	0.4335	0.4656

LTE Band 66_ANT2 (Module B) :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)			
Channel				132072	132322	132572				
Frequency (MHz)				1720	1745	1770	L	M	H	
20	QPSK	1	0	19.07	19.25	19.10	0.6266	0.6531	0.6310	
20	QPSK	1	99	18.97	19.14	19.06	0.6124	0.6368	0.6252	
20	QPSK	100	0	19.00	19.13	18.93	0.6166	0.6353	0.6067	
20	16QAM	1	0	18.95	19.06	18.94	0.6095	0.6252	0.6081	
20	64QAM	1	0	18.97	19.18	19.00	0.6124	0.6427	0.6166	
20	256QAM	1	0	14.00	14.25	14.12	0.1950	0.2065	0.2004	
Channel				132047	132322	132597	EIRP(W)			
Frequency (MHz)				1717.5	1745	1772.5	L	M	H	
15	QPSK	1	0	18.91	19.22	18.95	0.6039	0.6486	0.6095	
15	16QAM	1	0	18.85	19.02	18.78	0.5957	0.6194	0.5861	
Channel				132022	132322	132622	EIRP(W)			
Frequency (MHz)				1715	1745	1775	L	M	H	
10	QPSK	1	0	18.95	19.09	18.99	0.6095	0.6295	0.6152	



10	16QAM	1	0	18.89	18.99	18.82	0.6012	0.6152	0.5916
Channel				131997	132322	132647	EIRP(W)		
Frequency (MHz)				1712.5	1745	1777.5	L	M	H
5	QPSK	1	0	18.94	19.17	18.92	0.6081	0.6412	0.6053
5	16QAM	1	0	18.82	18.96	18.82	0.5916	0.6109	0.5916
Channel				131987	132322	132657	EIRP(W)		
Frequency (MHz)				1711.5	1745	1778.5	L	M	H
3	QPSK	1	0	18.90	19.10	19.04	0.6026	0.6310	0.6223
3	16QAM	1	0	18.79	19.00	18.85	0.5875	0.6166	0.5957
Channel				131979	132322	132665	EIRP(W)		
Frequency (MHz)				1710.7	1745	1779.3	L	M	H
1.4	QPSK	1	0	18.92	19.23	18.93	0.6053	0.6501	0.6067
1.4	16QAM	1	0	18.94	19.13	18.95	0.6081	0.6353	0.6095

LTE Band 2C_ANT0 (Module A) :

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	21.66	1.1376
M	QPSK	1	Max	1	0	21.69	1.1455
H	QPSK	1	Max	1	0	21.48	1.0914
L	16QAM	1	Max	1	0	21.50	1.0965
M	16QAM	1	Max	1	0	21.52	1.1015
H	16QAM	1	Max	1	0	21.41	1.0740
L	64QAM	1	Max	1	0	21.62	1.1272
M	64QAM	1	Max	1	0	21.57	1.1143
H	64QAM	1	Max	1	0	21.33	1.0544
L	256QAM	1	Max	1	0	18.75	0.5821
M	256QAM	1	Max	1	0	18.61	0.5636
H	256QAM	1	Max	1	0	18.43	0.5408
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.58	1.1169
M	16QAM	1	Max	1	0	21.66	1.1376
Combination 15MHz+20MHz (75RB+100RB)							



Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.64	1.1324
M	16QAM	1	Max	1	0	21.64	1.1324
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.55	1.1092
M	16QAM	1	Max	1	0	21.68	1.1429
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.63	1.1298
M	16QAM	1	Max	1	0	21.64	1.1324
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.52	1.1015
M	16QAM	1	Max	1	0	21.62	1.1272
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.64	1.1324
M	16QAM	1	Max	1	0	21.60	1.1220
Combination 10MHz+15MHz (50RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.60	1.1220
M	16QAM	1	Max	1	0	21.54	1.1066
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.68	1.1429
M	16QAM	1	Max	1	0	21.63	1.1298
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured	EIRP(W)



		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	21.67	1.1402
M	16QAM	1	Max	1	0	21.60	1.1220

LTE Band 5B_ANT0 (Module B) :

Combination 10MHz+10MHz (50RB+50RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	EIRP(W)
		RB Size	RB offset	RB Size	RB offset			
L	QPSK	1	Max	1	0	23.61	0.5572	0.9141
M	QPSK	1	Max	1	0	23.70	0.5689	0.9333
H	QPSK	1	Max	1	0	23.63	0.5598	0.9183
L	16QAM	1	Max	1	0	22.55	0.4365	0.7161
M	16QAM	1	Max	1	0	22.65	0.4467	0.7328
H	16QAM	1	Max	1	0	22.72	0.4539	0.7447
L	64QAM	1	Max	1	0	21.61	0.3516	0.5768
M	64QAM	1	Max	1	0	21.64	0.3540	0.5808
H	64QAM	1	Max	1	0	21.67	0.3565	0.5848
L	256QAM	1	Max	1	0	18.66	0.1782	0.2924
M	256QAM	1	Max	1	0	18.71	0.1803	0.2958
H	256QAM	1	Max	1	0	18.63	0.1770	0.2904
Combination 10MHz+5MHz (50RB+25RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	EIRP(W)
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.66	0.5636	0.9247
H	16QAM	1	Max	1	0	22.66	0.4477	0.7345
Combination 5MHz+10MHz (25RB+50RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	EIRP(W)
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.60	0.5559	0.9120
H	16QAM	1	Max	1	0	22.58	0.4395	0.7211
Combination 5MHz+3MHz (25RB+15RB)								
Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	EIRP(W)
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.54	0.5483	0.8995
H	16QAM	1	Max	1	0	22.60	0.4416	0.7244
Combination 3MHz+5MHz (15RB+25RB)								



Channel	Modulation	PCC		SCC		Measured Power	ERP(W)	EIRP(W)
		RB Size	RB offset	RB Size	RB offset			
M	QPSK	1	Max	1	0	23.52	0.5458	0.8954
H	16QAM	1	Max	1	0	22.69	0.4508	0.7396

LTE Band 66B_ANT0 (Module B) :

Combination 10MHz+10MHz (50RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	18.74	0.5808
M	QPSK	1	Max	1	0	18.88	0.5998
H	QPSK	1	Max	1	0	18.73	0.5794
L	16QAM	1	Max	1	0	18.55	0.5559
M	16QAM	1	Max	1	0	18.81	0.5902
H	16QAM	1	Max	1	0	18.70	0.5754
L	64QAM	1	Max	1	0	18.65	0.5689
M	64QAM	1	Max	1	0	18.84	0.5943
H	64QAM	1	Max	1	0	18.67	0.5715
L	256QAM	1	Max	1	0	18.73	0.5794
M	256QAM	1	Max	1	0	18.72	0.5781
H	256QAM	1	Max	1	0	18.69	0.5741
Combination 15MHz+5MHz (75RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.73	0.5794
M	16QAM	1	Max	1	0	18.77	0.5848
Combination 5MHz+15MHz (25RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.81	0.5902
M	16QAM	1	Max	1	0	18.75	0.5821
Combination 10MHz+5MHz (50RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.76	0.5834
M	16QAM	1	Max	1	0	18.64	0.5675



Combination 5MHz+10MHz (25RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.77	0.5848
M	16QAM	1	Max	1	0	18.63	0.5662
Combination 5MHz+5MHz (25RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.86	0.5970
M	16QAM	1	Max	1	0	18.77	0.5848

LTE Band 66C_ANT0 (Module B) :

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	18.81	0.5902
M	QPSK	1	Max	1	0	18.84	0.5943
H	QPSK	1	Max	1	0	18.70	0.5754
L	16QAM	1	Max	1	0	18.77	0.5848
M	16QAM	1	Max	1	0	18.66	0.5702
H	16QAM	1	Max	1	0	18.65	0.5689
L	64QAM	1	Max	1	0	18.73	0.5794
M	64QAM	1	Max	1	0	18.82	0.5916
H	64QAM	1	Max	1	0	18.67	0.5715
L	256QAM	1	Max	1	0	18.72	0.5781
M	256QAM	1	Max	1	0	18.74	0.5808
H	256QAM	1	Max	1	0	18.67	0.5715
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.66	0.5702
L	16QAM	1	Max	1	0	18.58	0.5598
Combination 15MHz+20MHz (75RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.77	0.5848



L	16QAM	1	Max	1	0	18.73	0.5794
Combination 15MHz+15MHz (75RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.82	0.5916
L	16QAM	1	Max	1	0	18.66	0.5702
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.67	0.5715
L	16QAM	1	Max	1	0	18.63	0.5662
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.72	0.5781
L	16QAM	1	Max	1	0	18.60	0.5623
Combination 15MHz+10MHz (75RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.75	0.5821
L	16QAM	1	Max	1	0	18.70	0.5754
Combination 10MHz+15MHz (50RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.81	0.5902
L	16QAM	1	Max	1	0	18.64	0.5675
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.76	0.5834
L	16QAM	1	Max	1	0	18.66	0.5702
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
M	QPSK	1	Max	1	0	18.66	0.5702
L	16QAM	1	Max	1	0	18.67	0.5715



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Bruce	Temperature :	23~25°C
		Relative Humidity :	41~42%

RSE pretest all the supported Antennas, only the worst results are shown in the report.

LTE Band 25 / 20MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-35.88	-13	-22.88	-48.14	2.64	14.90	H
	5550	-41.67	-13	-28.67	-53.53	2.94	14.80	H
	7410	-51.62	-13	-38.62	-61.39	3.39	13.16	H
	3705	-27.59	-13	-14.59	-39.85	2.64	14.90	V
	5550	-42.21	-13	-29.21	-54.07	2.94	14.80	V
	7410	-50.86	-13	-37.86	-60.63	3.39	13.16	V
Middle	3750	-37.55	-13	-24.55	-49.81	2.64	14.90	H
	5625	-49.02	-13	-36.02	-60.88	2.94	14.80	H
	7500	-54.08	-13	-41.08	-63.85	3.39	13.16	H
	3750	-27.62	-13	-14.62	-39.88	2.64	14.90	V
	5625	-48.49	-13	-35.49	-60.35	2.94	14.80	V
	7500	-53.47	-13	-40.47	-63.24	3.39	13.16	V
Highest	3795	-38.94	-13	-25.94	-51.20	2.64	14.90	H
	5685	-53.39	-13	-40.39	-65.25	2.94	14.80	H
	7590	-53.78	-13	-40.78	-63.55	3.39	13.16	H
	3795	-31.35	-13	-18.35	-43.61	2.64	14.90	V
	5685	-52.03	-13	-39.03	-63.89	2.94	14.80	V
	7590	-53.71	-13	-40.71	-63.48	3.39	13.16	V

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



LTE Band 26 / 15MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-67.04	-13	-54.04	-74.01	1.58	10.70	H
	2472	-56.32	-13	-43.32	-64.57	2.102	12.50	H
	3296	-57.23	-13	-44.23	-66.12	2.856	13.90	H
	1648	-65.89	-13	-52.89	-72.86	1.58	10.70	V
	2472	-57.17	-13	-44.17	-65.42	2.10	12.50	V
	3296	-52.56	-13	-39.56	-61.45	2.86	13.90	V
Middle	1656	-65.41	-13	-52.41	-72.38	1.58	10.70	H
	2488	-60.98	-13	-47.98	-69.23	2.102	12.50	H
	3320	-57.88	-13	-44.88	-66.77	2.856	13.90	H
	4152	-60.01	-13	-47.01	-68.47	2.689	13.30	H
	1656	-65.15	-13	-52.15	-72.12	1.58	10.70	V
	2488	-57.57	-13	-44.57	-65.82	2.10	12.50	V
	3320	-51.34	-13	-38.34	-60.23	2.86	13.90	V
	4152	-57.61	-13	-44.61	-66.07	2.69	13.30	V
Highest	1672	-65.15	-13	-52.15	-72.12	1.58	10.70	H
	2504	-60.03	-13	-47.03	-68.28	2.102	12.50	H
	3336	-56.76	-13	-43.76	-65.65	2.856	13.90	H
	4176	-60.57	-13	-47.57	-69.03	2.689	13.30	H
	1672	-64.11	-13	-51.11	-71.08	1.58	10.70	V
	2504	-57.97	-13	-44.97	-66.22	2.10	12.50	V
	3336	-50.70	-13	-37.70	-59.59	2.86	13.90	V
	4176	-57.98	-13	-44.98	-66.44	2.69	13.30	V

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

LTE Band 66 / 20MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-17.45	-13	-4.45	-28.19	2.604	13.34	H
	5130	-28.84	-13	-15.84	-39.35	3.011	13.52	H
	6840	-28.51	-13	-15.51	-38.71	3.271	13.47	H
	8550	-44.17	-13	-31.17	-51.14	5.527	12.5	H
	10260	-50.12	-13	-37.12	-56.98	6.038	12.9	H
	11970	-45.96	-13	-32.96	-53.16	6.726	13.93	H
	13695	-45.83	-13	-32.83	-53.27	6.963	14.4	H
	15405	-44.10	-13	-31.10	-50.73	7.57	14.2	H
	17115	-40.11	-13	-27.11	-45.68	8.063	13.63	H
	3420	-18.49	-13	-5.49	-29.23	2.604	13.34	V
	5130	-23.62	-13	-10.62	-34.13	3.011	13.52	V
	6840	-29.79	-13	-16.79	-39.99	3.271	13.47	V
	8550	-47.08	-13	-34.08	-54.05	5.527	12.50	V
	10260	-50.26	-13	-37.26	-57.12	6.038	12.90	V
	11970	-44.66	-13	-31.66	-51.86	6.726	13.93	V



	13680	-46.14	-13	-33.14	-53.58	6.963	14.40	V
	15405	-43.63	-13	-30.63	-50.26	7.57	14.20	V
	17115	-39.95	-13	-26.95	-45.52	8.063	13.63	V
Middle	3465	-21.79	-13	-8.79	-32.53	2.604	13.34	H
	5205	-28.02	-13	-15.02	-38.53	3.011	13.52	H
	6945	-31.18	-13	-18.18	-41.38	3.271	13.47	H
	8685	-47.28	-13	-34.28	-54.25	5.527	12.5	H
	10410	-49.48	-13	-36.48	-56.34	6.038	12.9	H
	12150	-45.94	-13	-32.94	-53.14	6.726	13.93	H
	13890	-44.79	-13	-31.79	-52.23	6.963	14.4	H
	15630	-38.72	-13	-25.72	-45.35	7.57	14.2	H
	17355	-37.06	-13	-24.06	-42.63	8.063	13.63	H
	3465	-19.04	-13	-6.04	-29.78	2.604	13.34	V
	5205	-20.02	-13	-7.02	-30.53	3.011	13.52	V
	6945	-27.44	-13	-14.44	-37.64	3.271	13.47	V
	8685	-41.68	-13	-28.68	-48.65	5.527	12.50	V
	10410	-49.87	-13	-36.87	-56.73	6.038	12.90	V
	12150	-45.02	-13	-32.02	-52.22	6.726	13.93	V
	13890	-47.27	-13	-34.27	-54.71	6.963	14.40	V
	15630	-41.26	-13	-28.26	-47.89	7.57	14.20	V
	17355	-41.91	-13	-28.91	-47.48	8.063	13.63	V
Highest	3525	-23.38	-13	-10.38	-34.12	2.604	13.34	H
	5280	-29.26	-13	-16.26	-39.77	3.011	13.52	H
	7050	-31.87	-13	-18.87	-42.07	3.271	13.47	H
	8805	-50.14	-13	-37.14	-57.11	5.527	12.5	H
	10560	-49.83	-13	-36.83	-56.69	6.038	12.9	H
	12330	-45.80	-13	-32.80	-53.00	6.726	13.93	H
	14085	-46.08	-13	-33.08	-53.52	6.963	14.4	H
	15855	-38.18	-13	-25.18	-44.81	7.57	14.2	H
	17610	-38.75	-13	-25.75	-44.32	8.063	13.63	H
	3525	-21.43	-13	-8.43	-32.17	2.604	13.34	V
	5280	-22.62	-13	-9.62	-33.13	3.011	13.52	V
	7050	-31.34	-13	-18.34	-41.54	3.271	13.47	V
	8805	-47.25	-13	-34.25	-54.22	5.527	12.50	V
	10560	-50.56	-13	-37.56	-57.42	6.038	12.90	V
	12330	-43.68	-13	-30.68	-50.88	6.726	13.93	V
	14085	-46.52	-13	-33.52	-53.96	6.963	14.40	V
	15855	-43.70	-13	-30.70	-50.33	7.57	14.20	V
	17610	-42.99	-13	-29.99	-48.56	8.063	13.63	V

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



LTE Band 2C / 20MHz+20MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3705	-58.44	-13	-45.44	-70.70	2.64	14.90	H
	5550	-58.31	-13	-45.31	-70.17	2.94	14.80	H
	7410	-54.38	-13	-41.38	-64.15	3.39	13.16	H
	3705	-58.24	-13	-45.24	-70.50	2.64	14.90	V
	5550	-58.25	-13	-45.25	-70.11	2.94	14.80	V
	7410	-54.28	-13	-41.28	-64.05	3.39	13.16	V
	3735	-59.00	-13	-46.00	-61.63	1.09	5.87	H
	5610	-58.01	-13	-45.01	-60.41	1.37	5.92	H
	7485	-54.14	-13	-41.14	-58.03	1.64	7.68	H
	3735	-58.45	-13	-45.45	-61.08	1.09	5.87	V
	5610	-58.60	-13	-45.60	-61.00	1.37	5.92	V
	7485	-54.13	-13	-41.13	-58.02	1.64	7.68	V
Middle	3720	-58.74	-13	-45.74	-71.00	2.64	14.90	H
	5580	-58.17	-13	-45.17	-70.03	2.94	14.80	H
	7440	-54.02	-13	-41.02	-63.79	3.39	13.16	H
	3720	-58.58	-13	-45.58	-70.84	2.64	14.90	V
	5580	-58.43	-13	-45.43	-70.29	2.94	14.80	V
	7440	-54.28	-13	-41.28	-64.05	3.39	13.16	V
	3765	-58.79	-13	-45.79	-61.42	1.09	5.87	H
	5640	-58.23	-13	-45.23	-60.63	1.37	5.92	H
	7530	-54.32	-13	-41.32	-58.21	1.64	7.68	H
	3765	-58.87	-13	-45.87	-61.50	1.09	5.87	V
	5640	-58.80	-13	-45.80	-61.20	1.37	5.92	V
	7530	-54.02	-13	-41.02	-57.91	1.64	7.68	V
Highest	3735	-58.83	-13	-45.83	-71.09	2.64	14.90	H
	5610	-58.42	-13	-45.42	-70.28	2.94	14.80	H
	7485	-53.84	-13	-40.84	-63.61	3.39	13.16	H
	3735	-58.76	-13	-45.76	-71.02	2.64	14.90	V
	5610	-58.44	-13	-45.44	-70.30	2.94	14.80	V
	7485	-54.24	-13	-41.24	-64.01	3.39	13.16	V
	3780	-58.98	-13	-45.98	-61.61	1.09	5.87	H
	5670	-57.99	-13	-44.99	-60.39	1.37	5.92	H
	7560	-54.24	-13	-41.24	-58.13	1.64	7.68	H
	3780	-58.86	-13	-45.86	-61.49	1.09	5.87	V
	5670	-58.51	-13	-45.51	-60.91	1.37	5.92	V
	7560	-54.01	-13	-41.01	-57.90	1.64	7.68	V

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



LTE Band 5B / 10MHz+10MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	1648	-64.60	-13	-51.60	-71.57	1.58	10.70	H
	2472	-49.61	-13	-36.61	-57.86	2.102	12.50	H
	3296	-58.85	-13	-45.85	-67.74	2.856	13.90	H
	1648	-63.50	-13	-50.50	-70.47	1.58	10.70	V
	2472	-52.40	-13	-39.40	-60.65	2.10	12.50	V
	3296	-58.96	-13	-45.96	-67.85	2.86	13.90	V
	1672	-63.89	-13	-50.89	-70.86	1.58	10.70	H
	2504	-59.96	-13	-46.96	-68.21	2.102	12.50	H
	3336	-59.49	-13	-46.49	-68.38	2.856	13.90	H
	1672	-63.00	-13	-50.00	-69.97	1.58	10.70	V
	2504	-58.83	-13	-45.83	-67.08	2.10	12.50	V
	3336	-59.36	-13	-46.36	-68.25	2.86	13.90	V
Middle	1656	-64.27	-13	-51.27	-71.24	1.58	10.70	H
	2475	-50.11	-13	-37.11	-58.36	2.102	12.50	H
	3304	-59.50	-13	-46.50	-68.39	2.856	13.90	H
	1656	-63.54	-13	-50.54	-70.51	1.58	10.70	V
	2475	-47.90	-13	-34.90	-56.15	2.10	12.50	V
	3304	-59.43	-13	-46.43	-68.32	2.86	13.90	V
	1672	-63.97	-13	-50.97	-70.94	1.58	10.70	H
	2512	-59.57	-13	-46.57	-67.82	2.102	12.50	H
	3352	-59.67	-13	-46.67	-68.56	2.856	13.90	H
	1672	-62.89	-13	-49.89	-69.86	1.58	10.70	V
	2512	-58.66	-13	-45.66	-66.91	2.10	12.50	V
	3352	-59.47	-13	-46.47	-68.36	2.86	13.90	V
Highest	1656	-64.51	-13	-51.51	-71.48	1.58	10.70	H
	2488	-60.55	-13	-47.55	-68.80	2.102	12.50	H
	3320	-59.42	-13	-46.42	-68.31	2.856	13.90	H
	1656	-63.59	-13	-50.59	-70.56	1.58	10.70	V
	2488	-58.52	-13	-45.52	-66.77	2.10	12.50	V
	3320	-59.30	-13	-46.30	-68.19	2.86	13.90	V
	1680	-63.72	-13	-50.72	-70.69	1.58	10.70	H
	2520	-59.53	-13	-46.53	-67.78	2.102	12.50	H
	3360	-59.15	-13	-46.15	-68.04	2.856	13.90	H
	1680	-62.73	-13	-49.73	-69.70	1.58	10.70	V
	2520	-58.96	-13	-45.96	-67.21	2.10	12.50	V
	3360	-59.23	-13	-46.23	-68.12	2.86	13.90	V

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



LTE Band 66B / 10MHz+10MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-58.71	-13	-45.71	-69.45	2.604	13.34	H
	5130	-57.39	-13	-44.39	-67.90	3.011	13.52	H
	6840	-56.52	-13	-43.52	-66.72	3.271	13.47	H
	3420	-58.89	-13	-45.89	-69.63	2.604	13.34	V
	5130	-57.42	-13	-44.42	-67.93	3.011	13.52	V
	6840	-56.47	-13	-43.47	-66.67	3.271	13.47	V
	3440	-58.63	-13	-45.63	-69.37	2.604	13.34	H
	5160	-57.34	-13	-44.34	-67.85	3.011	13.52	H
	6885	-56.98	-13	-43.98	-67.18	3.271	13.47	H
	3440	-59.30	-13	-46.30	-70.04	2.604	13.34	V
	5160	-57.46	-13	-44.46	-67.97	3.011	13.52	V
	6885	-56.64	-13	-43.64	-66.84	3.271	13.47	V
Middle	3495	-59.14	-13	-46.14	-69.88	2.604	13.34	H
	5235	-58.09	-13	-45.09	-68.60	3.011	13.52	H
	6975	-56.81	-13	-43.81	-67.01	3.271	13.47	H
	3495	-59.67	-13	-46.67	-70.41	2.604	13.34	V
	5235	-57.79	-13	-44.79	-68.30	3.011	13.52	V
	6975	-56.57	-13	-43.57	-66.77	3.271	13.47	V
	3510	-59.23	-13	-46.23	-69.97	2.604	13.34	H
	5265	-57.97	-13	-44.97	-68.48	3.011	13.52	H
	7020	-56.80	-13	-43.80	-67.00	3.271	13.47	H
	3510	-59.82	-13	-46.82	-70.56	2.604	13.34	V
	5265	-57.73	-13	-44.73	-68.24	3.011	13.52	V
	7020	-56.51	-13	-43.51	-66.71	3.271	13.47	V
Highest	3525	-59.34	-13	-46.34	-70.08	2.604	13.34	H
	5280	-57.95	-13	-44.95	-68.46	3.011	13.52	H
	7035	-56.37	-13	-43.37	-66.57	3.271	13.47	H
	3525	-59.43	-13	-46.43	-70.17	2.604	13.34	V
	5280	-58.05	-13	-45.05	-68.56	3.011	13.52	V
	7035	-56.56	-13	-43.56	-66.76	3.271	13.47	V
	3540	-59.21	-13	-46.21	-69.95	2.604	13.34	H
	5310	-58.12	-13	-45.12	-68.63	3.011	13.52	H
	7080	-55.99	-13	-42.99	-66.19	3.271	13.47	H
	3540	-59.25	-13	-46.25	-69.99	2.604	13.34	V
	5310	-58.02	-13	-45.02	-68.53	3.011	13.52	V
	7080	-56.25	-13	-43.25	-66.45	3.271	13.47	V

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



LTE Band 66C / 20MHz+20MHz / QPSK / Ant.0								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-58.70	-13	-45.70	-69.44	2.604	13.34	H
	5130	-57.13	-13	-44.13	-67.64	3.011	13.52	H
	6840	-56.32	-13	-43.32	-66.52	3.271	13.47	H
	3420	-58.58	-13	-45.58	-69.32	2.604	13.34	V
	5130	-57.30	-13	-44.30	-67.81	3.011	13.52	V
	6840	-56.44	-13	-43.44	-66.64	3.271	13.47	V
	3465	-58.64	-13	-45.64	-69.38	2.604	13.34	H
	5190	-57.82	-13	-44.82	-68.33	3.011	13.52	H
	6915	-56.72	-13	-43.72	-66.92	3.271	13.47	H
	3465	-53.36	-13	-40.36	-64.10	2.604	13.34	V
	5190	-57.66	-13	-44.66	-68.17	3.011	13.52	V
	6915	-56.93	-13	-43.93	-67.13	3.271	13.47	V
Middle	3465	-58.62	-13	-45.62	-69.36	2.604	13.34	H
	5205	-57.84	-13	-44.84	-68.35	3.011	13.52	H
	6945	-56.71	-13	-43.71	-66.91	3.271	13.47	H
	3465	-58.92	-13	-45.92	-69.66	2.604	13.34	V
	5205	-57.94	-13	-44.94	-68.45	3.011	13.52	V
	6945	-56.65	-13	-43.65	-66.85	3.271	13.47	V
	3510	-59.07	-13	-46.07	-69.81	2.604	13.34	H
	5265	-57.73	-13	-44.73	-68.24	3.011	13.52	H
	7020	-56.57	-13	-43.57	-66.77	3.271	13.47	H
	3510	-59.66	-13	-46.66	-70.40	2.604	13.34	V
	5265	-57.63	-13	-44.63	-68.14	3.011	13.52	V
	7020	-56.25	-13	-43.25	-66.45	3.271	13.47	V
Highest	3480	-58.95	-13	-45.95	-69.69	2.604	13.34	H
	5220	-57.77	-13	-44.77	-68.28	3.011	13.52	H
	6960	-57.15	-13	-44.15	-67.35	3.271	13.47	H
	3480	-59.27	-13	-46.27	-70.01	2.604	13.34	V
	5220	-57.78	-13	-44.78	-68.29	3.011	13.52	V
	6960	-57.13	-13	-44.13	-67.33	3.271	13.47	V
	3525	-58.92	-13	-45.92	-69.66	2.604	13.34	H
	5280	-58.04	-13	-45.04	-68.55	3.011	13.52	H
	7050	-56.45	-13	-43.45	-66.65	3.271	13.47	H
	3525	-59.09	-13	-46.09	-69.83	2.604	13.34	V
	5280	-57.73	-13	-44.73	-68.24	3.011	13.52	V
	7050	-56.29	-13	-43.29	-66.49	3.271	13.47	V

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