FCC RF Test Report

APPLICANT	:	FoxInsights GmbH
EQUIPMENT	:	FoxPressure
BRAND NAME	:	FoxInsights
MODEL NAME	:	FoxPressure-V1
FCC ID	:	2BKML-FOXPRESSURE
STANDARD	:	47 CFR Part 22(H), 24(E), 27(L), 27(H), 27(F)
CLASSIFICATION	:	PCS Licensed Transmitter (PCB)
TEST DATE(S)	:	Oct. 17, 2024 ~ Oct. 30, 2024

This product installed a RF module (Brand Name: Quectel, Model Name: BG95-M3, FCC ID: XMR201910BG95M3) during the test, only Conducted Power, ERP/EIRP and RSE test items are tested in this report, and partial bands verified the worst RSE cases, all the other test results are leveraged from module RF 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

ACCREDITED
Cert #5145.02

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TABLE OF CONTENTS

REVISION HISTORY **3**

SUMMARY OF TEST RESULT **4**

1 GENERAL DESCRIPTION **5**

1.1 Applicant 5
1.2 Manufacturer 5
1.3 Product Feature of Equipment Under Test 5
1.4 Product Specification of Equipment Under Test 5
1.5 Modification of EUT 7
1.6 Maximum ERP/EIRP 7
1.7 Testing Location 10
1.8 Test Software 10
1.9 Applicable Standards 11

2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST **12**

2.1 Test Mode 12
2.2 Connection Diagram of Test System 14
2.3 Support Unit used in test configuration and system 14
2.4 Frequency List of Low/Middle/High Channels 15

3 CONDUCTED TEST ITEMS **21**

3.1 Measuring Instruments 21
3.2 Test Setup 21
3.3 Test Result of Conducted Test 21
3.4 Conducted Output Power and ERP/EIRP 22

4 RADIATED TEST ITEMS **23**

4.1 Measuring Instruments 23
4.2 Test Setup 23
4.3 Test Result of Radiated Test 24
4.4 Radiated Spurious Emission 25

5 LIST OF MEASURING EQUIPMENT **26**

6 MEASUREMENT UNCERTAINTY **27**

APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

APPENDIX C. TEST SETUP PHOTOGRAPHS

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG492610B	Rev. 01	Initial issue of report	Nov. 04, 2024

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13)(Band 85)	ERP < 3 Watt		-
	§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(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 85) (Band 25) (Band 26) (Band 66)	< 43+10log10(P[Watts])	PASS	1
-	§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 85) (Band 25) (Band 26) (Band 66)	< 43+10log10(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(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 85) (Band 25) (Band 26) (Band 66)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 10.24 dB at 1560.00 MHz

Remark 1: Verify the maximum conducted power of the host is lower than and very close to the module, all the conducted test results were leveraged from module RF report which can refer to Report No. R2003A0152-R1 (for LTE B5) & R2003A0152-R2 (for LTE B2/25) & R2003A0152-R3 (for LTE B4/12/13/66/85) & R2003A0152-R4 (for NB-IOT B5) & R2003A0152-R5 (for NB-IOT B2/25) & R2003A0152-R6 (for NB-IOT B4/12/13/66/85) & R2003A0152-R7 (for LTE B26).

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/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. 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

FoxInsights GmbH
Ridlerstr. 57 80339 Munich Germany

1.2 Manufacturer

FoxInsights GmbH
Ridlerstr. 57 80339 Munich Germany

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	FoxPressure
Brand Name	FoxInsights
Model Name	FoxPressure-V1
FCC ID	2BKML-FOXPRESSURE
SN Code	Conducted/Radiation:ONP417602655
HW Version	1.0
SW Version	1.0.0
EUT Stage	Identical Prototype

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Category M1: LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 12 : 699 MHz ~ 716 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 25 : 1850 MHz ~ 1915 MHz LTE Band 26 : 814 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz LTE Band 85: 698 MHz ~ 716 MHz NB-IOT Category NB2: Band 2 : 1850 MHz ~ 1910 MHz Band 4 : 1710 MHz ~ 1755 MHz Band 5 : 824 MHz ~ 849 MHz Band 12 : 699 MHz ~ 716 MHz Band 13 : 777 MHz ~ 787 MHz Band 25 : 1850 MHz ~ 1915 MHz Band 66 : 1710 MHz ~ 1780 MHz Band 85: 698 MHz ~ 716 MHz
Rx Frequency	LTE Category M1:

	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 25 : 1930 MHz ~ 1995 MHz LTE Band 26 : 859 MHz ~ 894 MHz LTE Band 66 : 2110 MHz~ 2180 MHz LTE Band 85 : 728 MHz ~ 746 MHz NB-IOT Category NB2: Band 2 : 1930 MHz ~ 1990 MHz Band 4 : 2110 MHz ~ 2155 MHz Band 5 : 869 MHz ~ 894 MHz Band 12 : 729 MHz ~ 746 MHz Band 13 : 746 MHz ~ 756 MHz Band 25 : 1930 MHz ~ 1995 MHz Band 66 : 2110 MHz~ 2180 MHz Band 85 : 728 MHz ~ 746 MHz
Bandwidth	LTE Category M1: 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 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 85 : 5MHz / 10MHz NB-IOT Category NB2: 200kHz
Sub-carrier Speacing	NB-IOT Category NB2: 3.75KHz /15 KHz
Maximum Output Power to Antenna	LTE Category M1: LTE Band 2 : 19.50 dBm LTE Band 4 : 19.40 dBm LTE Band 5 : 20.33 dBm LTE Band 12 : 20.44 dBm LTE Band 13 : 20.11 dBm LTE Band 25 : 20.45 dBm LTE Band 26 : 20.50 dBm LTE Band 66 : 19.17 dBm LTE Band 85 : 20.84 dBm NB-IOT Category NB2: Band 2 : 19.58 dBm Band 4 : 19.63 dBm Band 5 : 20.37 dBm Band 12 : 20.55 dBm Band 13 : 20.37 dBm Band 25 : 19.25 dBm Band 66 : 18.94 dBm Band 85 : 20.74 dBm
Antenna Gain	Band 2 : 3.1 dBi Band 4 : 3.1 dBi Band 5 : 1.2 dBi Band 12 : 1.2 dBi Band 13 : 1.2 dBi Band 25 : 3.1 dBi

	Band 26 : 1.2 dBi Band 66 : 3.1 dBi Band 85 : 1.2 dBi
Type of Modulation	LTE Category M1: QPSK / 16QAM NB-IOT Category NB2 : BPSK / QPSK

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP

LTE Category M1:

LTE Band 2		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Maximum EIRP(W)**
1.4	1850.7 ~ 1909.3	0.1086	0.0887
3	1851.5 ~ 1908.5	0.1099	0.0897
5	1852.5 ~ 1907.5	0.1734	0.1690
10	1855.0 ~ 1905.0	0.1637	0.1644
15	1857.5 ~ 1902.5	0.1683	0.1694
20	1860.0 ~ 1900.0	0.1820	0.1762
LTE Band 25		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Maximum EIRP(W)**
1.4	1850.7 ~ 1914.3	0.1486	0.1268
3	1851.5 ~ 1913.5	0.1452	0.1262
5	1852.5 ~ 1912.5	0.2188	0.2317
10	1855.0 ~ 1910.0	0.2228	0.2344
15	1857.5 ~ 1907.5	0.2193	0.2377
20	1860.0 ~ 1905.0	0.2193	0.2265
LTE Band 4		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Maximum EIRP(W)**
1.4	1710.7 ~ 1754.3	0.1052	0.0841
3	1711.5 ~ 1753.5	0.1067	0.0841
5	1712.5 ~ 1752.5	0.1698	0.1690
10	1715.0 ~ 1750.0	0.1706	0.1694
15	1717.5 ~ 1747.5	0.1722	0.1694
20	1720.0 ~ 1745.0	0.1778	0.1648

LTE Band 5		QPSK	16QAM
BW (MHz)	**Frequency Range (MHz)**	**Maximum ERP(W)**	**Maximum ERP(W)**
1.4	824.7 ~ 848.3	0.0471	0.0420
3	825.5 ~ 847.5	0.0501	0.0408
5	826.5 ~ 846.5	0.0778	0.0728
10	829.0 ~ 844.0	0.0867	0.0830
LTE Band 12		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum ERP(W)**	**Maximum ERP(W)**
1.4	699.7 ~ 715.3	0.0568	0.0475
3	700.5 ~ 714.5	0.0575	0.0471
5	701.5 ~ 713.5	0.0841	0.0883
10	704.0 ~ 711.0	0.0863	0.0889
LTE Band 13		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum ERP(W)**	**Maximum ERP(W)**
5	779.5 ~ 784.5	0.0769	0.0809
10	782.0	0.0824	0.0728
LTE Band 26		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum ERP(W)**	**Maximum ERP(W)**
1.4	824.7 ~ 848.3	0.0553	0.0474
3	825.5 ~ 847.5	0.0585	0.0472
5	826.5 ~ 846.5	0.0805	0.0847
10	829.0 ~ 844.0	0.0798	0.0832
15	831.5 ~ 841.5	0.0851	0.0843
CH26790	824.0	0.0902	0.0849
LTE Band 66		**QPSK**	**16QAM**
BW (MHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**	**Maximum EIRP(W)**
1.4	1710.7 ~ 1779.3	0.1052	0.0871
3	1711.5 ~ 1778.5	0.1050	0.0877
5	1712.5 ~ 1777.5	0.1611	0.1567
10	1715.0 ~ 1775.0	0.1567	0.1596
15	1717.5 ~ 1772.5	0.1629	0.1596
20	1720.0 ~ 1770.0	0.1687	0.1652

LTE Band 85		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
5	700.5 ~ 713.5	0.0910	0.0940
10	703.0 ~ 711.0	0.0938	0.0975

NB-IOT Category NB2:

LTE Band 2		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1850.1 ~ 1909.9	0.1841
15	1850.1 ~ 1909.9	0.1854
LTE Band 25		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1850.1 ~ 1914.9	0.1718
15	1850.1 ~ 1914.9	0.1714
LTE Band 4		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum EIRP(W)
3.75	1710.2 ~ 1754.8	0.1875
15	1710.2 ~ 1754.8	0.1786
LTE Band 5		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	824.1 ~ 848.9	0.0875
15	824.1 ~ 848.9	0.0867
LTE Band 12		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	699.1 ~ 715.9	0.0912
15	699.1 ~ 715.9	0.0885
LTE Band 13		BPSK/QPSK
Sub-carrier Speacing (KHz)	Frequency Range (MHz)	Maximum ERP(W)
3.75	777.1 ~ 786.9	0.0875
15	777.1 ~ 786.9	0.0817

LTE Band 66		BPSK/QPSK
Sub-carrier Speacing (KHz)	**Frequency Range (MHz)**	**Maximum EIRP(W)**
3.75	1710.1 ~ 1779.9	0.1600
15	1710.1 ~ 1779.9	0.1596
LTE Band 85		**BPSK/QPSK**
Sub-carrier Speacing (KHz)	**Frequency Range (MHz)**	**Maximum ERP(W)**
3.75	698.1 ~ 715.9	0.0935
15	698.1 ~ 715.9	0.0953

Note: All modulations have been tested, and only the worst test results of PSK are shown in the report.

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), 27(H), 27(F)
- 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. (X Plane)

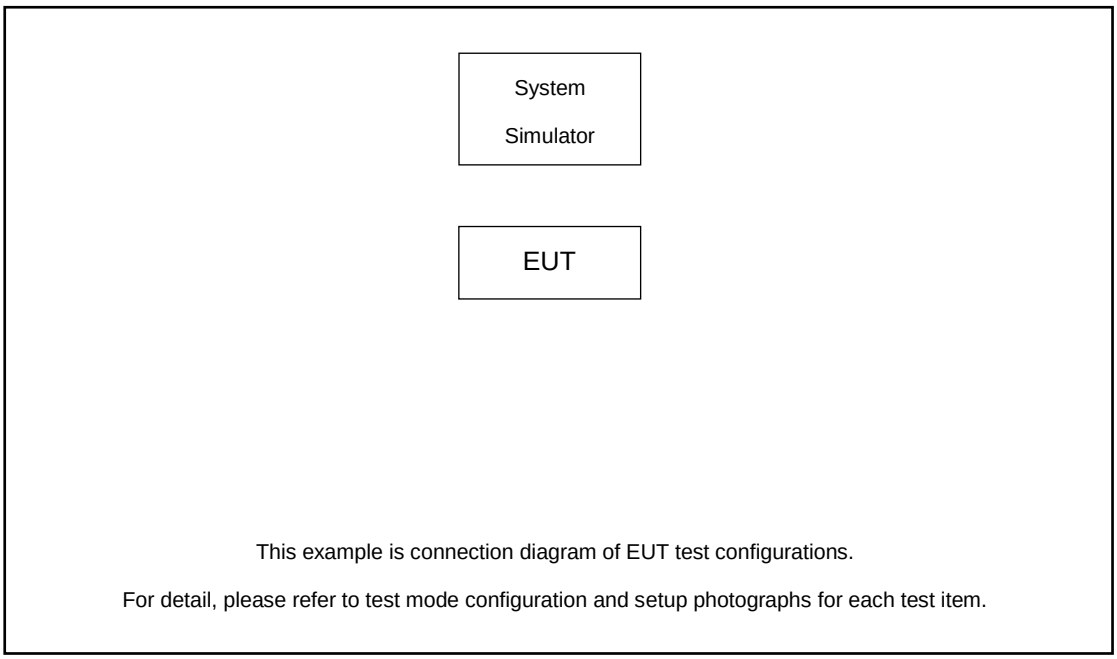
LTE Category M1:

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16 QAM	64 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
	4	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	13	-	-	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
	26	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
	85	-	-	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
	4	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	13	-	-	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
	26	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
	85	-	-	v	v	-	-	v	v	-	v	v	v	v	v	v
Radiated Spurious Emission	2	Worst Case												v	v	v
	4	Worst Case												v	v	v
	5	Worst Case													v	
	12	Worst Case													v	
	13	Worst Case													v	
	25	Worst Case												v	v	v
	26	Worst Case													v	
	66	Worst Case												v	v	v
	85	Worst Case													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. For RSE testing, B5/12/13/26/85 were verified the worst cases from the RF module reports.															

NB-IOT Category NB2:

Test Items	Band	Sub-carrier Speacing(KHz)		Modulation			RB #			Test Channel		
		3.75	15	BPSK	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	-	v		v	v	v	v
	4	v	v	v	v	-	v		v	v	v	v
	5	v	v	v	v	-	v		v	v	v	v
	12	v	v	v	v	-	v		v	v	v	v
	13	v	v	v	v	-	v		v	v	v	v
	25	v	v	v	v	-	v		v	v	v	v
	66	v	v	v	v	-	v		v	v	v	v
	85	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
	4	v	v	v	v	-	v		v	v	v	v
	5	v	v	v	v	-	v		v	v	v	v
	12	v	v	v	v	-	v		v	v	v	v
	13	v	v	v	v	-	v		v	v	v	v
	25	v	v	v	v	-	v		v	v	v	v
	66	v	v	v	v	-	v		v	v	v	v
	85	v	v	v	v	-	v		v	v	v	v
Radiated Spurious Emission	2	Worst Case								v	v	v
	4	Worst Case								v	v	v
	5	Worst Case									v	
	12	Worst Case									v	
	13	Worst Case									v	
	25	Worst Case								v	v	v
	66	Worst Case								v	v	v
	85	Worst Case									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. For RSE testing, B5/12/13/85 were verified the worst cases from the RF module reports.											

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 Category M1:

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

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

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

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

LTE Band 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 85 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	134052	134092	134132
	Frequency	703	707	711
5	Channel	134027	134092	134157
	Frequency	700.5	707	713.5

NB-IOT Category NB2:

LTE Band 2 Channel and Frequency List				
Sub-carrier Speacing (kHz)	**Channel / Frequency (MHz)**	**Lowest**	**Middle**	**Highest**
3.75	Channel	18601	18900	19199
	Frequency	1850.1	1880	1909.9
15	Channel	18601	18900	19199
	Frequency	1850.1	1880	1909.9

LTE Band 4 Channel and Frequency List				
Sub-carrier Speacing (kHz)	**Channel / Frequency (MHz)**	**Lowest**	**Middle**	**Highest**
3.75	Channel	19952	20175	20398
	Frequency	1710.2	1732.5	1754.8
15	Channel	19952	20175	20398
	Frequency	1710.2	1732.5	1754.8

LTE Band 5 Channel and Frequency List				
Sub-carrier Speacing (kHz)	**Channel / Frequency (MHz)**	**Lowest**	**Middle**	**Highest**
3.75	Channel	20410	20525	20649
	Frequency	824.1	836.5	848.9
15	Channel	20410	20525	20649
	Frequency	824.1	836.5	848.9

LTE Band 12 Channel and Frequency List				
Sub-carrier Speacing (kHz)	**Channel / Frequency (MHz)**	**Lowest**	**Middle**	**Highest**
3.75	Channel	23011	23095	23179
	Frequency	699.1	707.5	715.9
15	Channel	23011	23095	23179
	Frequency	699.1	707.5	715.9

LTE Band 13 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	23181	23230	23279
	Frequency	777.1	782	786.9
15	Channel	23181	23230	23279
	Frequency	777.1	782	786.9

LTE Band 25 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	26041	26365	26689
	Frequency	1850.1	1882.5	1914.9
15	Channel	26041	26365	26689
	Frequency	1850.1	1882.5	1914.9

LTE Band 66 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	131973	132322	132671
	Frequency	1710.1	1745	1779.9
15	Channel	131973	132322	132671
	Frequency	1710.1	1745	1779.9

LTE Band 85 Channel and Frequency List				
Sub-carrier Speacing (kHz)	Channel / Frequency (MHz)	Lowest	Middle	Highest
3.75	Channel	134003	134082	134181
	Frequency	698.1	706	715.9
15	Channel	134003	134082	134181
	Frequency	698.1	706	715.9

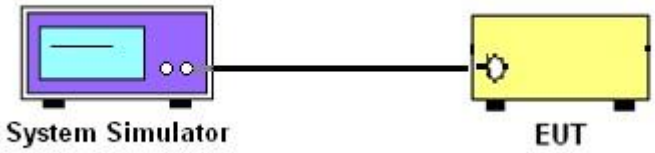
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

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

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

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

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 85.

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

3.4.2 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.

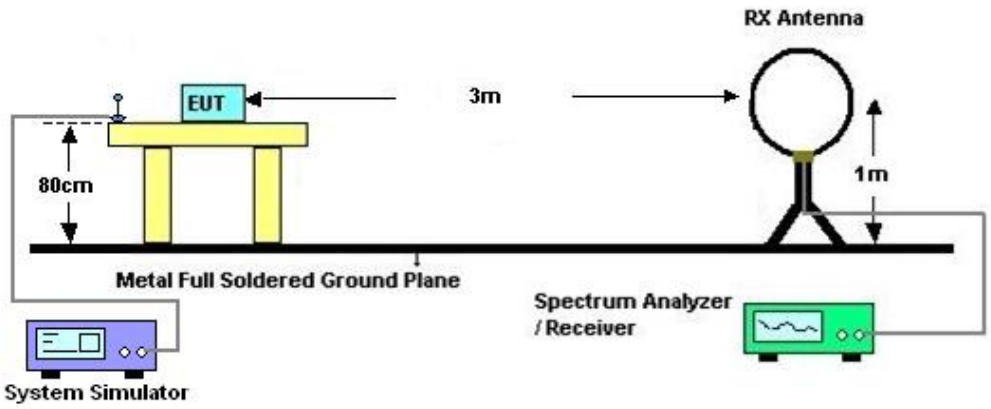
4 Radiated Test Items

4.1 Measuring Instruments

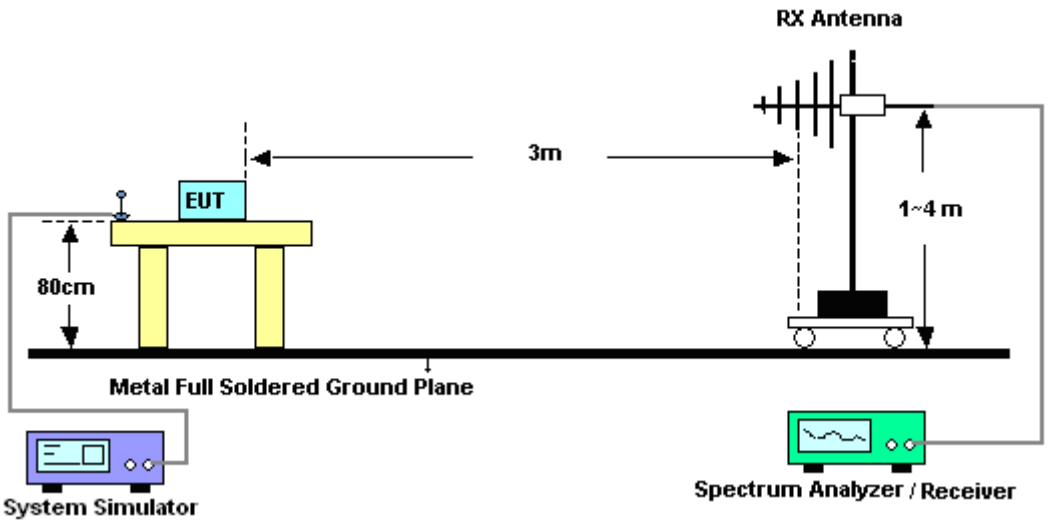
See list of measuring instruments of this test report.

4.2 Test Setup

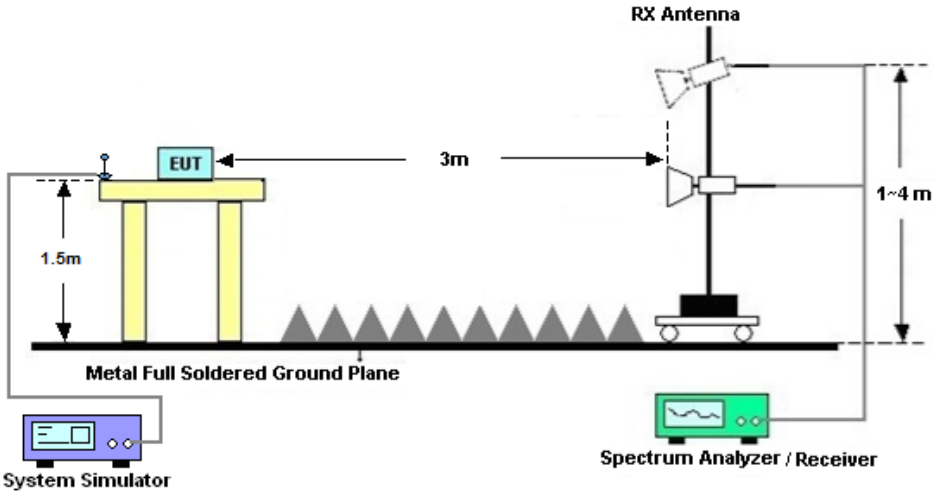
4.2.1 For radiated test below 30MHz



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.

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.

4.4.2 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 (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

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. 10, 2024	Oct. 30, 2024	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Oct. 30, 2024	NCR	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz-44G,MAX 30dB	Oct. 11, 2024	Oct. 17, 2024	Oct. 10, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Oct. 17, 2024	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 06, 2023	Oct. 17, 2024	Dec. 05, 2024	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Oct. 17, 2024	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 27, 2024	Oct. 17, 2024	Jan. 26, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	413740	9KHz-1GHz	Jan. 03, 2024	Oct. 17, 2024	Jan. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40GA	060728	18~40GHz	Jan. 02, 2024	Oct. 17, 2024	Jan. 01, 2025	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18GA	060840	1Ghz-18Ghz	Oct. 10, 2024	Oct. 17, 2024	Oct. 09, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18GA	060892	1Ghz-18Ghz	Oct. 10, 2024	Oct. 17, 2024	Oct. 09, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Oct. 17, 2024	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Oct. 17, 2024	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Oct. 17, 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**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.83 dB**

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.83 dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.82 dB**

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Smile Wang	Temperature :	22~23℃
		Relative Humidity :	40~42%

Conducted Output Power(Average power) and ERP/EIRP

LTE Cat M1:

LTE Band 2:

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	19.40	19.37	19.12	0.1778	0.1766	0.1667
20	QPSK	1	5	19.23	19.28	19.06	0.1710	0.1730	0.1644
20	QPSK	3	0	19.50	19.36	18.98	0.1820	0.1762	0.1614
20	QPSK	3	3	19.43	19.25	19.07	0.1791	0.1718	0.1648
20	QPSK	6	0	19.34	19.31	18.99	0.1754	0.1742	0.1618
20	16QAM	1	0	19.15	19.36	19.05	0.1679	0.1762	0.1641
Channel				18675	18900	19125	EIRP(W)		
Frequency (MHz)				1857.5	1880	1902.5	L	M	H
15	QPSK	1	0	19.16	19.13	18.86	0.1683	0.1671	0.1570
15	16QAM	1	0	19.19	19.07	18.73	0.1694	0.1648	0.1524
Channel				18650	18900	19150	EIRP(W)		
Frequency (MHz)				1855	1880	1905	L	M	H
10	QPSK	1	0	19.04	19.02	18.92	0.1637	0.1629	0.1592
10	16QAM	1	0	19.06	19.01	18.83	0.1644	0.1626	0.1560
Channel				18625	18900	19175	EIRP(W)		
Frequency (MHz)				1852.5	1880	1907.5	L	M	H
5	QPSK	1	0	19.29	18.93	19.21	0.1734	0.1596	0.1702
5	16QAM	1	0	19.09	18.96	19.18	0.1656	0.1607	0.1690
Channel				18615	18900	19185	EIRP(W)		
Frequency (MHz)				1851.5	1880	1908.5	L	M	H
3	QPSK	1	0	17.31	17.28	17.22	0.1099	0.1091	0.1076
3	16QAM	1	0	16.43	16.41	16.35	0.0897	0.0893	0.0881
Channel				18607	18900	19193	EIRP(W)		
Frequency (MHz)				1850.7	1880	1909.3	L	M	H
1.4	QPSK	1	0	17.26	17.22	17.13	0.1086	0.1076	0.1054
1.4	16QAM	1	0	16.38	16.36	16.27	0.0887	0.0883	0.0865

LTE Band 4:

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	18.96	19.37	19.09	0.1607	0.1766	0.1656
20	QPSK	1	5	19.02	19.35	18.91	0.1629	0.1758	0.1589
20	QPSK	3	0	18.95	19.32	18.87	0.1603	0.1746	0.1574
20	QPSK	3	3	18.97	19.24	18.86	0.1611	0.1714	0.1570
20	QPSK	6	0	18.92	19.40	19.13	0.1592	0.1778	0.1671
20	16QAM	1	0	19.07	19.02	18.93	0.1648	0.1629	0.1596
Channel				20025	20175	20325	EIRP(W)		
Frequency (MHz)				1717.5	1732.5	1747.5	L	M	H
15	QPSK	1	0	19.26	19.11	19.05	0.1722	0.1663	0.1641
15	16QAM	1	0	19.15	19.14	19.19	0.1679	0.1675	0.1694
Channel				20000	20175	20350	EIRP(W)		
Frequency (MHz)				1715	1732.5	1750	L	M	H
10	QPSK	1	0	19.22	19.10	19.21	0.1706	0.1660	0.1702
10	16QAM	1	0	19.17	19.11	19.19	0.1687	0.1663	0.1694
Channel				19975	20175	20375	EIRP(W)		
Frequency (MHz)				1712.5	1732.5	1752.5	L	M	H
5	QPSK	1	0	19.09	19.14	19.20	0.1656	0.1675	0.1698
5	16QAM	1	0	19.18	19.12	19.15	0.1690	0.1667	0.1679
Channel				19965	20175	20385	EIRP(W)		
Frequency (MHz)				1711.5	1732.5	1753.5	L	M	H
3	QPSK	1	0	17.10	17.18	16.98	0.1047	0.1067	0.1019
3	16QAM	1		16.15	16.08	16.14	0.0841	0.0828	0.0839
Channel				19957	20175	20393	EIRP(W)		
Frequency (MHz)				1710.7	1732.5	1754.3	L	M	H
1.4	QPSK	1	0	17.08	17.12	17.10	0.1042	0.1052	0.1047
1.4	16QAM	1	0	16.02	16.11	16.15	0.0817	0.0834	0.0841

LTE Band 5:

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	20.02	20.33	19.57	0.0807	0.0867	0.0728
10	QPSK	1	5	19.68	20.19	19.18	0.0746	0.0839	0.0665
10	QPSK	3	0	19.58	19.79	19.26	0.0729	0.0766	0.0678
10	QPSK	3	3	19.66	20.16	19.44	0.0743	0.0834	0.0706
10	QPSK	6	0	19.67	19.98	19.41	0.0745	0.0800	0.0701
10	16QAM	1	0	19.75	20.14	19.12	0.0759	0.0830	0.0656
Channel				20425	20525	20625	ERP(W)		
Frequency (MHz)				826.5	836.5	846.5	L	M	H
5	QPSK	1	0	19.62	19.50	19.86	0.0736	0.0716	0.0778
5	16QAM	1	0	19.57	19.24	19.42	0.0728	0.0675	0.0703
Channel				20415	20525	20635	ERP(W)		
Frequency (MHz)				825.5	836.5	847.5	L	M	H
3	QPSK	1	0	17.38	17.95	17.81	0.0440	0.0501	0.0485
3	16QAM	1	0	16.87	17.06	17.02	0.0391	0.0408	0.0405
Channel				20407	20525	20643	ERP(W)		
Frequency (MHz)				824.7	836.5	848.3	L	M	H
1.4	QPSK	1	0	17.52	17.61	17.68	0.0454	0.0463	0.0471
1.4	16QAM	1	0	16.82	17.18	17.06	0.0386	0.0420	0.0408

LTE Band 12:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23060	23095	23130			
Frequency (MHz)				704	707.5	711	L	M	H
10	QPSK	1	0	20.23	20.26	20.31	0.0847	0.0853	0.0863
10	QPSK	1	5	20.04	20.06	20.22	0.0811	0.0815	0.0845
10	QPSK	3	0	20.08	20.10	20.27	0.0818	0.0822	0.0855
10	QPSK	3	3	19.99	20.09	20.02	0.0802	0.0820	0.0807
10	QPSK	6	0	19.55	19.58	19.70	0.0724	0.0729	0.0750
10	16QAM	1	0	20.31	20.44	19.56	0.0863	0.0889	0.0726
Channel				23035	23095	23155	ERP(W)		
Frequency (MHz)				701.5	707.5	713.5	L	M	H
5	QPSK	1	0	20.20	20.19	20.13	0.0841	0.0839	0.0828
5	16QAM	1	0	20.34	20.41	20.30	0.0869	0.0883	0.0861
Channel				23025	23095	23165	ERP(W)		
Frequency (MHz)				700.5	707.5	714.5	L	M	H
3	QPSK	1	0	18.36	18.55	18.45	0.0551	0.0575	0.0562
3	16QAM	1	0	17.54	17.68	17.66	0.0456	0.0471	0.0469
Channel				23017	23095	23173	ERP(W)		
Frequency (MHz)				699.7	707.5	715.3	L	M	H
1.4	QPSK	1	0	18.36	18.40	18.49	0.0551	0.0556	0.0568
1.4	16QAM	1	0	17.68	17.53	17.72	0.0471	0.0455	0.0475

LTE Band 13:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel					23230				
Frequency (MHz)					782			M	
10	QPSK	1	0		19.86			0.0778	
10	QPSK	1	5		20.09			0.0820	
10	QPSK	3	0		20.11			0.0824	
10	QPSK	3	3		19.79			0.0766	
10	QPSK	6	0		19.26			0.0678	
10	16QAM	1	0		19.57			0.0728	
Channel				23205	23230	23255	ERP(W)		
Frequency (MHz)				779.5	782	784.5	L	M	H
5	QPSK	1	0	19.81	19.73	19.67	0.0769	0.0755	0.0745
5	16QAM	1	0	20.03	19.91	19.77	0.0809	0.0787	0.0762

LTE Band 25:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				26140	26365	26590			
Frequency (MHz)				1860	1882.5	1905	L	M	H
20	QPSK	1	0	20.29	20.26	20.31	0.2183	0.2168	0.2193
20	QPSK	1	5	20.22	20.17	20.12	0.2148	0.2123	0.2099
20	QPSK	3	0	20.19	20.27	20.22	0.2133	0.2173	0.2148
20	QPSK	3	3	20.11	20.15	20.13	0.2094	0.2113	0.2104
20	QPSK	6	0	20.25	20.20	20.25	0.2163	0.2138	0.2163
20	16QAM	1	0	20.33	20.21	20.45	0.2203	0.2143	0.2265
Channel				26115	26365	26615	EIRP(W)		
Frequency (MHz)				1857.5	1882.5	1907.5	L	M	H
15	QPSK	1	0	20.31	20.27	20.16	0.2193	0.2173	0.2118
15	16QAM	1	0	20.57	20.66	20.61	0.2328	0.2377	0.2350
Channel				26090	26365	26640	EIRP(W)		
Frequency (MHz)				1855	1882.5	1910	L	M	H
10	QPSK	1	0	20.27	20.38	20.22	0.2173	0.2228	0.2148
10	16QAM	1	0	20.44	20.60	20.57	0.2259	0.2344	0.2328
Channel				26065	26365	26665	EIRP(W)		
Frequency (MHz)				1852.5	1882.5	1912.5	L	M	H
5	QPSK	1	0	20.24	20.30	20.19	0.2158	0.2188	0.2133
5	16QAM	1	0	20.55	20.47	20.52	0.2317	0.2275	0.2301
Channel				26055	26365	26675	EIRP(W)		
Frequency (MHz)				1851.5	1882.5	1913.5	L	M	H
3	QPSK	1	0	18.52	18.47	18.44	0.1452	0.1435	0.1426
3	16QAM	1	0	17.91	17.60	17.86	0.1262	0.1175	0.1247
Channel				26047	26365	26683	EIRP(W)		
Frequency (MHz)				1850.7	1882.5	1914.3	L	M	H
1.4	QPSK	1	0	18.62	18.57	18.46	0.1486	0.1469	0.1432
1.4	16QAM	1	0	17.93	17.77	17.68	0.1268	0.1222	0.1197

LTE Band 26:

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	26765	26865	26965				
Frequency (MHz)				824	821.5	831.5	841.5	Straddle channel	L	M	H
15	QPSK	1	0	20.50	20.19	20.25	20.11	0.0902	0.0839	0.0851	0.0824
15	QPSK	1	5	20.19	19.95	19.89	20.01	0.0839	0.0794	0.0783	0.0805
15	QPSK	3	0	20.23	19.88	19.92	19.92	0.0847	0.0782	0.0789	0.0789
15	QPSK	3	3	20.01	19.97	19.98	19.90	0.0805	0.0798	0.0800	0.0785
15	QPSK	6	0	19.97	19.89	19.83	19.91	0.0798	0.0783	0.0773	0.0787
15	16QAM	1	0	20.24	20.08	20.21	20.14	0.0849	0.0818	0.0843	0.0830
Channel					26740	26865	26990		ERP(W)		
Frequency (MHz)					819	831.5	844		L	M	H
10	QPSK	1	0		19.96	19.92	19.97		0.0796	0.0789	0.0798
10	16QAM	1	0		20.09	20.10	20.15		0.0820	0.0822	0.0832
Channel					26715	26865	27015		ERP(W)		
Frequency (MHz)					816.5	831.5	846.5		L	M	H
5	QPSK	1	0		19.93	20.01	19.97		0.0791	0.0805	0.0798
5	16QAM	1	0		20.14	20.23	20.21		0.0830	0.0847	0.0843
Channel					26705	26865	27025		ERP(W)		
Frequency (MHz)					815.5	831.5	847.5		L	M	H
3	QPSK	1	0		18.55	18.62	18.43		0.0575	0.0585	0.0560
3	16QAM	1	0		17.56	17.69	17.49		0.0458	0.0472	0.0451
Channel					26697	26865	27033		ERP(W)		
Frequency (MHz)					814.7	831.5	848.3		L	M	H
1.4	QPSK	1	0		18.30	18.26	18.38		0.0543	0.0538	0.0553
1.4	16QAM	1	0		17.71	17.62	17.66		0.0474	0.0465	0.0469

LTE Band 66:

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	19.17	19.10	19.16	0.1687	0.1660	0.1683
20	QPSK	1	5	19.05	18.93	19.11	0.1641	0.1596	0.1663
20	QPSK	3	0	19.12	19.02	19.02	0.1667	0.1629	0.1629
20	QPSK	3	3	18.98	18.86	18.79	0.1614	0.1570	0.1545
20	QPSK	6	0	18.85	18.80	18.92	0.1567	0.1549	0.1592
20	16QAM	1	0	19.08	18.90	19.07	0.1652	0.1585	0.1648
Channel				132047	132322	132597	EIRP(W)		
Frequency (MHz)				1717.5	1745	1772.5	L	M	H
15	QPSK	1	0	18.90	18.88	19.02	0.1585	0.1578	0.1629
15	16QAM	1	0	18.93	18.81	18.83	0.1596	0.1552	0.1560
Channel				132022	132322	132622	EIRP(W)		
Frequency (MHz)				1715	1745	1775	L	M	H
10	QPSK	1	0	18.76	18.85	18.68	0.1535	0.1567	0.1507
10	16QAM	1	0	18.81	18.93	18.75	0.1552	0.1596	0.1531
Channel				131997	132322	132647	EIRP(W)		
Frequency (MHz)				1712.5	1745	1777.5	L	M	H
5	QPSK	1	0	18.97	18.93	18.76	0.1611	0.1596	0.1535
5	16QAM	1	0	18.78	18.82	18.85	0.1542	0.1556	0.1567
Channel				131987	132322	132657	EIRP(W)		
Frequency (MHz)				1711.5	1745	1778.5	L	M	H
3	QPSK	1	0	17.11	17.09	17.01	0.1050	0.1045	0.1026
3	16QAM	1	0	16.28	16.25	16.33	0.0867	0.0861	0.0877
Channel				131979	132322	132665	EIRP(W)		
Frequency (MHz)				1710.7	1745	1779.3	L	M	H
1.4	QPSK	1	0	17.12	17.06	16.92	0.1052	0.1038	0.1005
1.4	16QAM	1	0	16.30	16.19	16.21	0.0871	0.0849	0.0853

LTE Band 85:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				134052	134092	134132			
Frequency (MHz)				703	707	711	L	M	H
10	QPSK	1	0	20.58	20.61	20.67	0.0918	0.0925	0.0938
10	QPSK	1	5	20.41	20.43	20.42	0.0883	0.0887	0.0885
10	QPSK	3	0	20.49	20.41	20.50	0.0899	0.0883	0.0902
10	QPSK	3	3	20.53	20.44	20.34	0.0908	0.0889	0.0869
10	QPSK	6	0	20.19	20.15	20.06	0.0839	0.0832	0.0815
10	16QAM	1	0	20.68	20.84	20.71	0.0940	0.0975	0.0946
Channel				134027	134092	134157	ERP(W)		
Frequency (MHz)				700.5	707	713.5	L	M	H
5	QPSK	1	0	20.49	20.54	20.43	0.0899	0.0910	0.0887
5	16QAM	1	0	20.58	20.68	20.62	0.0918	0.0940	0.0927

NB-IOT Cat NB2:

Band 2:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				18601	18900	19199			
Frequency (MHz)				1850.1	1880	1909.9	L	M	H
3.75	BPSK	1	0	19.55	19.13	18.92	0.1841	0.1671	0.1592
3.75	BPSK	1	47	19.41	19.20	18.86	0.1782	0.1698	0.1570
3.75	QPSK	1	0	19.42	19.12	18.90	0.1786	0.1667	0.1585
3.75	QPSK	1	47	19.37	19.08	18.83	0.1766	0.1652	0.1560
15	BPSK	1	0	19.42	19.04	18.66	0.1786	0.1637	0.1500
15	BPSK	1	11	19.37	18.97	18.62	0.1766	0.1611	0.1486
15	QPSK	1	0	19.58	19.13	18.79	0.1854	0.1671	0.1545
15	QPSK	1	11	19.57	19.11	18.77	0.1849	0.1663	0.1538
15	QPSK	12	0	17.19	16.89	16.51	0.1069	0.0998	0.0914

Band 4:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				19952	20175	20398			
Frequency (MHz)				1710.2	1732.5	1754.8	L	M	H
3.75	BPSK	1	0	19.44	19.60	19.63	0.1795	0.1862	0.1875
3.75	BPSK	1	47	19.34	19.54	19.44	0.1754	0.1837	0.1795
3.75	QPSK	1	0	19.32	19.45	16.55	0.1746	0.1799	0.0923
3.75	QPSK	1	47	19.36	19.41	19.50	0.1762	0.1782	0.1820
15	BPSK	1	0	19.09	19.31	19.42	0.1656	0.1742	0.1786
15	BPSK	1	11	19.05	19.38	19.40	0.1641	0.1770	0.1778
15	QPSK	1	0	18.98	19.29	19.35	0.1614	0.1734	0.1758
15	QPSK	1	11	19.02	19.35	19.40	0.1629	0.1758	0.1778
15	QPSK	12	0	16.89	17.13	17.23	0.0998	0.1054	0.1079

Band 5:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				20401	20525	20649			
Frequency (MHz)				824.1	836.5	848.9	L	M	H
3.75	BPSK	1	0	20.19	20.37	20.23	0.0839	0.0875	0.0847
3.75	BPSK	1	47	20.09	20.21	20.12	0.0820	0.0843	0.0826
3.75	QPSK	1	0	20.01	20.29	20.22	0.0805	0.0859	0.0845
3.75	QPSK	1	47	19.98	20.22	20.09	0.0800	0.0845	0.0820
15	BPSK	1	0	20.05	20.31	20.13	0.0813	0.0863	0.0828
15	BPSK	1	11	20.11	20.25	20.11	0.0824	0.0851	0.0824
15	QPSK	1	0	20.16	20.33	20.21	0.0834	0.0867	0.0843
15	QPSK	1	11	20.08	20.24	20.13	0.0818	0.0849	0.0828
15	QPSK	12	0	18.20	18.26	18.31	0.0531	0.0538	0.0545

Band 12:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23011	23095	23179			
Frequency (MHz)				699.1	707.5	715.9	L	M	H
3.75	BPSK	1	0	20.45	20.49	20.51	0.0891	0.0899	0.0904
3.75	BPSK	1	47	20.49	20.50	20.46	0.0899	0.0902	0.0893
3.75	QPSK	1	0	20.51	20.55	20.41	0.0904	0.0912	0.0883
3.75	QPSK	1	47	20.33	20.48	20.36	0.0867	0.0897	0.0873
15	BPSK	1	0	20.19	20.37	20.27	0.0839	0.0875	0.0855
15	BPSK	1	11	20.25	20.42	20.40	0.0851	0.0885	0.0881
15	QPSK	1	0	20.17	20.35	20.38	0.0836	0.0871	0.0877
15	QPSK	1	11	20.30	20.41	20.29	0.0861	0.0883	0.0859
15	QPSK	12	0	18.15	18.24	18.18	0.0525	0.0536	0.0528

Band 13:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				23181	23230	23279			
Frequency (MHz)				777.1	782	786.9	L	M	H
3.75	BPSK	1	0	20.37	20.30	20.28	0.0875	0.0861	0.0857
3.75	BPSK	1	47	20.31	20.23	20.16	0.0863	0.0847	0.0834
3.75	QPSK	1	0	20.29	20.32	20.22	0.0859	0.0865	0.0845
3.75	QPSK	1	47	20.32	20.20	20.18	0.0865	0.0841	0.0838
15	BPSK	1	0	20.07	20.02	20.00	0.0817	0.0807	0.0804
15	BPSK	1	11	20.06	20.05	20.06	0.0815	0.0813	0.0815
15	QPSK	1	0	20.02	19.98	20.04	0.0807	0.0800	0.0811
15	QPSK	1	11	20.00	20.00	20.03	0.0804	0.0804	0.0809
15	QPSK	12	0	18.03	18.06	18.10	0.0511	0.0514	0.0519

Band 25:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				26041	26365	26689			
Frequency (MHz)				1850.1	1882.5	1914.9	L	M	H
3.75	BPSK	1	0	19.02	19.21	18.78	0.1629	0.1702	0.1542
3.75	BPSK	1	47	19.08	19.17	18.82	0.1652	0.1687	0.1556
3.75	QPSK	1	0	18.96	19.25	18.65	0.1607	0.1718	0.1496
3.75	QPSK	1	47	19.04	19.15	18.72	0.1637	0.1679	0.1521
15	BPSK	1	0	18.95	19.12	18.66	0.1603	0.1667	0.1500
15	BPSK	1	11	18.92	19.08	18.60	0.1592	0.1652	0.1479
15	QPSK	1	0	18.95	19.24	18.77	0.1603	0.1714	0.1538
15	QPSK	1	11	18.94	19.14	18.67	0.1600	0.1675	0.1503
15	QPSK	12	0	16.86	16.93	16.50	0.0991	0.1007	0.0912

Band 66:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				131973	132322	132671			
Frequency (MHz)				1710.1	1745	1779.9	L	M	H
3.75	BPSK	1	0	18.44	18.64	18.94	0.1426	0.1493	0.1600
3.75	BPSK	1	47	18.42	18.78	18.91	0.1419	0.1542	0.1589
3.75	QPSK	1	0	18.45	18.71	18.85	0.1429	0.1517	0.1567
3.75	QPSK	1	47	18.33	18.67	18.86	0.1390	0.1503	0.1570
15	BPSK	1	0	18.12	18.54	18.82	0.1324	0.1459	0.1556
15	BPSK	1	11	18.11	18.49	18.76	0.1321	0.1442	0.1535
15	QPSK	1	0	18.14	18.64	18.93	0.1330	0.1493	0.1596
15	QPSK	1	11	18.24	18.63	18.76	0.1361	0.1489	0.1535
15	QPSK	12	0	16.03	16.39	16.58	0.0818	0.0889	0.0929

Band 85:

Sub-carrier Speacing (KHz)	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	ERP(W)		
Channel				134003	134082	134181			
Frequency (MHz)				698.1	706	715.9	L	M	H
3.75	BPSK	1	0	20.66	20.64	20.52	0.0935	0.0931	0.0906
3.75	BPSK	1	47	20.63	20.58	20.43	0.0929	0.0918	0.0887
3.75	QPSK	1	0	20.65	20.63	20.51	0.0933	0.0929	0.0904
3.75	QPSK	1	47	20.60	20.54	20.47	0.0923	0.0910	0.0895
15	BPSK	1	0	20.71	20.66	20.51	0.0946	0.0935	0.0904
15	BPSK	1	11	20.70	20.71	20.50	0.0944	0.0946	0.0902
15	QPSK	1	0	20.74	20.73	20.43	0.0953	0.0951	0.0887
15	QPSK	1	11	20.65	20.72	20.42	0.0933	0.0948	0.0885
15	QPSK	12	0	18.43	18.45	18.37	0.0560	0.0562	0.0552

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Smile Wang	Temperature :	23~25℃
		Relative Humidity :	41~42%

LTE Cat M1:

LTE Band 2 / 20MHz / QPSK								
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	-48.33	-13	-35.33	-60.59	2.64	14.90	H
	5550	-54.66	-13	-41.66	-66.52	2.94	14.80	H
	7410	-53.91	-13	-40.91	-63.68	3.39	13.16	H
	3705	-45.65	-13	-32.65	-57.91	2.64	14.90	V
	5550	-54.79	-13	-41.79	-66.65	2.94	14.80	V
	7410	-52.93	-13	-39.93	-62.70	3.39	13.16	V
Middle	3750	-50.09	-13	-37.09	-62.35	2.64	14.90	H
	5610	-52.90	-13	-39.90	-64.76	2.94	14.80	H
	7485	-53.61	-13	-40.61	-63.38	3.39	13.16	H
	3750	-45.55	-13	-32.55	-57.81	2.64	14.90	V
	5610	-54.56	-13	-41.56	-66.42	2.94	14.80	V
	7485	-52.88	-13	-39.88	-62.65	3.39	13.16	V
Highest	3780	-46.56	-13	-33.56	-58.82	2.64	14.90	H
	5670	-51.45	-13	-38.45	-63.31	2.94	14.80	H
	7560	-53.42	-13	-40.42	-63.19	3.39	13.16	H
	3780	-43.76	-13	-30.76	-56.02	2.64	14.90	V
	5670	-52.30	-13	-39.30	-64.16	2.94	14.80	V
	7560	-52.30	-13	-39.30	-62.07	3.39	13.16	V

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

LTE Band 4 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	3420	-43.67	-13	-30.67	-54.41	2.604	13.34	H
	5130	-53.75	-13	-40.75	-64.26	3.011	13.52	H
	6840	-54.58	-13	-41.58	-64.78	3.271	13.47	H
	3420	-53.61	-13	-40.61	-64.35	2.604	13.34	V
	5130	-52.25	-13	-39.25	-62.76	3.011	13.52	V
	6840	-54.59	-13	-41.59	-64.79	3.271	13.47	V
Middle	3450	-44.87	-13	-31.87	-55.61	2.604	13.34	H
	5175	-54.39	-13	-41.39	-64.90	3.011	13.52	H
	6900	-54.55	-13	-41.55	-64.75	3.271	13.47	H
	3450	-53.66	-13	-40.66	-64.40	2.604	13.34	V
	5175	-51.53	-13	-38.53	-62.04	3.011	13.52	V
	6900	-54.69	-13	-41.69	-64.89	3.271	13.47	V
Highest	3480	-44.13	-13	-31.13	-54.87	2.604	13.34	H
	5205	-54.19	-13	-41.19	-64.70	3.011	13.52	H
	6945	-54.88	-13	-41.88	-65.08	3.271	13.47	H
	3480	-50.66	-13	-37.66	-61.40	2.604	13.34	V
	5205	-51.10	-13	-38.10	-61.61	3.011	13.52	V
	6945	-54.73	-13	-41.73	-64.93	3.271	13.47	V

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

LTE Band 5 / 5MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1672	-50.64	-13	-37.64	-57.61	1.58	10.70	H
	2504	-58.27	-13	-45.27	-66.52	2.102	12.50	H
	3336	-59.60	-13	-46.60	-68.49	2.856	13.90	H
	1672	-51.26	-13	-38.26	-58.23	1.58	10.70	V
	2504	-55.73	-13	-42.73	-63.98	2.10	12.50	V
	3336	-57.54	-13	-44.54	-66.43	2.86	13.90	V

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

LTE Band 12 / 10MHz / QPSK								
Channel	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1408	-56.45	-13	-43.45	-63.42	1.58	10.70	H
	2112	-45.67	-13	-32.67	-53.92	2.102	12.50	H
	2816	-56.41	-13	-43.41	-65.30	2.856	13.90	H
	1408	-57.09	-13	-44.09	-64.06	1.58	10.70	V
	2112	-48.82	-13	-35.82	-57.07	2.10	12.50	V
	2816	-55.41	-13	-42.41	-64.30	2.86	13.90	V

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

LTE Band 13 / 5MHz / QPSK								
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)
Middle	1560	-53.62	-42.15	-11.47	-56.25	1.09	5.87	H
	2336	-50.37	-13	-37.37	-52.77	1.37	5.92	H
	3120	-55.67	-13	-42.67	-59.56	1.64	7.68	H
	1560	-58.75	-42.15	-16.60	-61.38	1.09	5.87	V
	2336	-52.55	-13	-39.55	-54.95	1.37	5.92	V
	3120	-59.54	-13	-46.54	-63.43	1.64	7.68	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)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1552	-53.17	-13	-40.17	-55.80	1.09	5.87	H
	2336	-50.10	-13	-37.10	-52.50	1.37	5.92	H
	3112	-57.88	-13	-44.88	-61.77	1.64	7.68	H
	1552	-58.86	-13	-45.86	-61.49	1.09	5.87	V
	2336	-52.44	-13	-39.44	-54.84	1.37	5.92	V
	3112	-59.12	-13	-46.12	-63.01	1.64	7.68	V

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

LTE Band 25 / 20MHz / QPSK								
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	3702	-47.18	-13	-34.18	-59.44	2.641	14.90	H
	5550	-54.84	-13	-41.84	-66.70	2.94	14.80	H
	7404	-54.01	-13	-41.01	-63.78	3.39	13.16	H
	3705	-43.13	-13	-30.13	-55.39	2.64	14.90	V
	5550	-54.74	-13	-41.74	-66.60	2.94	14.80	V
	7410	-53.28	-13	-40.28	-63.05	3.39	13.16	V
Middle	3750	-48.77	-13	-35.77	-61.03	2.64	14.90	H
	5625	-54.41	-13	-41.41	-66.27	2.94	14.80	H
	7500	-52.42	-13	-39.42	-62.19	3.39	13.16	H
	3750	-43.67	-13	-30.67	-55.93	2.64	14.90	V
	5625	-55.04	-13	-42.04	-66.90	2.94	14.80	V
	7500	-51.63	-13	-38.63	-61.40	3.39	13.16	V
Highest	3795	-49.21	-13	-36.21	-61.47	2.64	14.90	H
	5685	-54.52	-13	-41.52	-66.38	2.94	14.80	H
	7590	-53.12	-13	-40.12	-62.89	3.39	13.16	H
	3795	-45.01	-13	-32.01	-57.27	2.64	14.90	V
	5685	-55.06	-13	-42.06	-66.92	2.94	14.80	V
	7590	-52.24	-13	-39.24	-62.01	3.39	13.16	V

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

LTE Band 26 / 15MHz / QPSK								
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)
Middle	1656	-49.55	-13	-36.55	-56.52	1.58	10.70	H
	2488	-59.03	-13	-46.03	-67.28	2.102	12.50	H
	3320	-55.84	-13	-42.84	-64.73	2.856	13.90	H
	1656	-53.58	-13	-40.58	-60.55	1.58	10.70	V
	2488	-58.68	-13	-45.68	-66.93	2.10	12.50	V
	3320	-60.71	-13	-47.71	-69.60	2.86	13.90	V

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

LTE Band 66 / 20MHz / QPSK								
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	-44.67	-13	-31.67	-55.41	2.604	13.34	H
	5130	-54.15	-13	-41.15	-64.66	3.011	13.52	H
	6840	-54.95	-13	-41.95	-65.15	3.271	13.47	H
	3420	-50.57	-13	-37.57	-61.31	2.604	13.34	V
	5130	-54.06	-13	-41.06	-64.57	3.011	13.52	V
	6840	-55.29	-13	-42.29	-65.49	3.271	13.47	V
Middle	3472	-46.32	-13	-33.32	-57.06	2.604	13.34	H
	5208	-54.58	-13	-41.58	-65.09	3.011	13.52	H
	6944	-54.74	-13	-41.74	-64.94	3.271	13.47	H
	3472	-49.45	-13	-36.45	-60.19	2.604	13.34	V
	5208	-54.48	-13	-41.48	-64.99	3.011	13.52	V
	6944	-54.84	-13	-41.84	-65.04	3.271	13.47	V
Highest	3525	-47.59	-13	-34.59	-58.33	2.604	13.34	H
	5280	-54.29	-13	-41.29	-64.80	3.011	13.52	H
	7050	-54.50	-13	-41.50	-64.70	3.271	13.47	H
	3525	-47.78	-13	-34.78	-58.52	2.604	13.34	V
	5280	-54.48	-13	-41.48	-64.99	3.011	13.52	V
	7050	-54.52	-13	-41.52	-64.72	3.271	13.47	V

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

LTE Band 85 / 10MHz / QPSK								
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)
Middle	1408	-54.02	-13	-41.02	-64.76	2.604	13.34	H
	2104	-46.64	-13	-33.64	-57.15	3.011	13.52	H
	2808	-57.63	-13	-44.63	-67.83	3.271	13.47	H
	1408	-57.44	-13	-44.44	-68.18	2.604	13.34	V
	2104	-51.09	-13	-38.09	-61.60	3.011	13.52	V
	2808	-55.31	-13	-42.31	-65.51	3.271	13.47	V

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

NB-IOT Cat NB2:

Band 2 / 15kHz / QPSK								
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	-46.11	-13	-33.11	-58.37	2.64	14.90	H
	5550	-55.22	-13	-42.22	-67.08	2.94	14.80	H
	7410	-54.11	-13	-41.11	-63.88	3.39	13.16	H
	3705	-44.12	-13	-31.12	-56.38	2.64	14.90	V
	5550	-54.53	-13	-41.53	-66.39	2.94	14.80	V
	7410	-54.21	-13	-41.21	-63.98	3.39	13.16	V
Middle	3735	-47.31	-13	-34.31	-59.57	2.64	14.90	H
	5610	-54.21	-13	-41.21	-66.07	2.94	14.80	H
	7485	-52.92	-13	-39.92	-62.69	3.39	13.16	H
	3735	-43.63	-13	-30.63	-55.89	2.64	14.90	V
	5610	-54.78	-13	-41.78	-66.64	2.94	14.80	V
	7485	-52.55	-13	-39.55	-62.32	3.39	13.16	V
Highest	3780	-46.56	-13	-33.56	-58.82	2.64	14.90	H
	5670	-54.08	-13	-41.08	-65.94	2.94	14.80	H
	7560	-51.10	-13	-38.10	-60.87	3.39	13.16	H
	3780	-42.34	-13	-29.34	-54.60	2.64	14.90	V
	5670	-54.48	-13	-41.48	-66.34	2.94	14.80	V
	7560	-51.07	-13	-38.07	-60.84	3.39	13.16	V

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

Band 4 / 3.75kHz / BPSK								
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	-43.03	-13	-30.03	-53.77	2.604	13.34	H
	5130	-53.98	-13	-40.98	-64.49	3.011	13.52	H
	6840	-55.11	-13	-42.11	-65.31	3.271	13.47	H
	3420	-52.13	-13	-39.13	-62.87	2.604	13.34	V
	5130	-53.56	-13	-40.56	-64.07	3.011	13.52	V
	6840	-54.91	-13	-41.91	-65.11	3.271	13.47	V
Middle	3450	-45.29	-13	-32.29	-56.03	2.604	13.34	H
	5175	-54.41	-13	-41.41	-64.92	3.011	13.52	H
	6900	-54.36	-13	-41.36	-64.56	3.271	13.47	H
	3450	-54.59	-13	-41.59	-65.33	2.604	13.34	V
	5175	-54.27	-13	-41.27	-64.78	3.011	13.52	V
	6900	-54.45	-13	-41.45	-64.65	3.271	13.47	V
Highest	3465	-45.26	-13	-32.26	-56.00	2.604	13.34	H
	5205	-54.34	-13	-41.34	-64.85	3.011	13.52	H
	6945	-54.86	-13	-41.86	-65.06	3.271	13.47	H
	3465	-49.02	-13	-36.02	-59.76	2.604	13.34	V
	5205	-54.08	-13	-41.08	-64.59	3.011	13.52	V
	6945	-55.02	-13	-42.02	-65.22	3.271	13.47	V

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

Band 5 / 3.75kHz / BPSK								
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)
Middle	1672	-49.91	-13	-36.91	-56.88	1.58	10.70	H
	2504	-57.79	-13	-44.79	-66.04	2.102	12.50	H
	3336	-56.00	-13	-43.00	-64.89	2.856	13.90	H
	1672	-55.41	-13	-42.41	-62.38	1.58	10.70	V
	2504	-59.50	-13	-46.50	-67.75	2.10	12.50	V
	3336	-59.18	-13	-46.18	-68.07	2.86	13.90	V

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

Band 12 / 3.75kHz / QPSK								
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)
Middle	1408	-59.31	-13	-46.31	-66.28	1.58	10.70	H
	2104	-45.97	-13	-32.97	-54.22	2.102	12.50	H
	2808	-55.72	-13	-42.72	-64.61	2.856	13.90	H
	1408	-58.41	-13	-45.41	-65.38	1.58	10.70	V
	2104	-48.20	-13	-35.20	-56.45	2.10	12.50	V
	2808	-55.50	-13	-42.50	-64.39	2.86	13.90	V

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

Band 13 / 3.75kHz / QPSK								
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)
Middle	1560	-52.39	-42.15	-10.24	-55.02	1.09	5.87	H
	2336	-50.10	-13	-37.10	-52.50	1.37	5.92	H
	3120	-53.34	-13	-40.34	-57.23	1.64	7.68	H
	1560	-56.88	-42.15	-14.73	-59.51	1.09	5.87	V
	2336	-53.03	-13	-40.03	-55.43	1.37	5.92	V
	3120	-58.69	-13	-45.69	-62.58	1.64	7.68	V

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

Band 13 / 15kHz / BPSK								
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)
Middle	1552	-54.06	-13	-41.06	-56.69	1.09	5.87	H
	2328	-49.18	-13	-36.18	-51.58	1.37	5.92	H
	3104	-52.43	-13	-39.43	-56.32	1.64	7.68	H
	1552	-56.04	-13	-43.04	-58.67	1.09	5.87	V
	2328	-53.29	-13	-40.29	-55.69	1.37	5.92	V
	3104	-56.42	-13	-43.42	-60.31	1.64	7.68	V

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

Band 25 / 3.75kHz / QPSK								
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	-48.96	-13	-35.96	-61.22	2.641	14.90	H
	5550	-55.09	-13	-42.09	-66.95	2.94	14.80	H
	7410	-53.76	-13	-40.76	-63.53	3.39	13.16	H
	3705	-50.77	-13	-37.77	-63.03	2.64	14.90	V
	5550	-54.92	-13	-41.92	-66.78	2.94	14.80	V
	7410	-53.91	-13	-40.91	-63.68	3.39	13.16	V
Middle	3750	-50.96	-13	-37.96	-63.22	2.64	14.90	H
	5625	-54.57	-13	-41.57	-66.43	2.94	14.80	H
	7500	-52.98	-13	-39.98	-62.75	3.39	13.16	H
	3750	-50.84	-13	-37.84	-63.10	2.64	14.90	V
	5625	-54.66	-13	-41.66	-66.52	2.94	14.80	V
	7500	-53.48	-13	-40.48	-63.25	3.39	13.16	V
Highest	3795	-50.08	-13	-37.08	-62.34	2.64	14.90	H
	5685	-54.29	-13	-41.29	-66.15	2.94	14.80	H
	7590	-53.16	-13	-40.16	-62.93	3.39	13.16	H
	3795	-50.33	-13	-37.33	-62.59	2.64	14.90	V
	5685	-54.30	-13	-41.30	-66.16	2.94	14.80	V
	7590	-53.21	-13	-40.21	-62.98	3.39	13.16	V

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

Band 66 / 3.75kHz / BPSK								
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	-44.19	-13	-31.19	-54.93	2.604	13.34	H
	5130	-53.99	-13	-40.99	-64.50	3.011	13.52	H
	6840	-55.29	-13	-42.29	-65.49	3.271	13.47	H
	3420	-52.41	-13	-39.41	-63.15	2.604	13.34	V
	5130	-54.08	-13	-41.08	-64.59	3.011	13.52	V
	6840	-54.66	-13	-41.66	-64.86	3.271	13.47	V
Middle	3420	-44.19	-13	-31.19	-54.93	2.604	13.34	H
	5130	-53.99	-13	-40.99	-64.50	3.011	13.52	H
	6840	-55.29	-13	-42.29	-65.49	3.271	13.47	H
	3420	-52.41	-13	-39.41	-63.15	2.604	13.34	V
	5130	-54.08	-13	-41.08	-64.59	3.011	13.52	V
	6840	-54.66	-13	-41.66	-64.86	3.271	13.47	V
Highest	3525	-43.41	-13	-30.41	-54.15	2.604	13.34	H
	5280	-54.81	-13	-41.81	-65.32	3.011	13.52	H
	7050	-54.45	-13	-41.45	-64.65	3.271	13.47	H
	3525	-46.38	-13	-33.38	-57.12	2.604	13.34	V
	5280	-54.78	-13	-41.78	-65.29	3.011	13.52	V
	7050	-54.42	-13	-41.42	-64.62	3.271	13.47	V

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

Band 85 / 15kHz / QPSK								
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)
Middle	1408	-61.43	-13	-48.43	-68.40	1.58	10.70	H
	2104	-47.13	-13	-34.13	-55.38	2.102	12.50	H
	2808	-57.88	-13	-44.88	-66.77	2.856	13.90	H
	1408	-65.63	-13	-52.63	-72.60	1.58	10.70	V
	2104	-51.34	-13	-38.34	-59.59	2.10	12.50	V
	2808	-56.31	-13	-43.31	-65.20	2.86	13.90	V

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