



FCC RF Test Report

APPLICANT : Fibocom Wireless Inc.
EQUIPMENT : LTE module
BRAND NAME : Fibocom
MODEL NAME : NL668-AM-00
FCC ID : ZMONL668AM00
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H),
 27(F) , 27(N)
CLASSIFICATION : PCS Licensed Transmitter (PCB)

The product was received on Sep. 13, 2020 and completely tested on Sep. 18, 2020. We, Sporton International (Kunshan) Inc., 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 (Kunshan) Inc., the test report shall not be reproduced except in full.

Jason Jia

Reviewed by: Jason Jia / Supervisor

James Huang

Approved by: James Huang / Manager



Sporton International (Kunshan) Inc.

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 People's Republic of China**



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG091101B	Rev. 01	Initial issue of report	Oct. 10, 2020



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§22.913(a)(5)	Effective Radiated Power (Band 5)	ERP < 7 Watt	PASS	
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)	ERP < 3 Watt	PASS	
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt	PASS	
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt	PASS	
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 17) (Band 66)(Band 71)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 18.66 dB at 1560.00 MHz

Declaration of Conformity:

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

Comments and Explanations:

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



1 General Description

1.1 Applicant

Fibocom Wireless Inc.

5/F, Tower A, Technology Building II, 1057 Nanhai Ave, ShenZhen China

1.2 Manufacturer

Fibocom Wireless Inc.

5/F, Tower A, Technology Building II, 1057 Nanhai Ave, ShenZhen China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	LTE module
Brand Name	Fibocom
Model Name	NL668-AM-00
FCC ID	ZMONL668AM00
EUT supports Radios application	WCDMA/LTE
IMEI Code	Radiation: 359120100027757
HW Version	V1.0
SW Version	19006.1000.00.02.79.42
EUT Stage	Identical Prototype

Remark:

This is a variant report for NL668-AM-00. The change note could be referred to the product equality declaration which is exhibit separately. Based on the similarity between current and previous project, only the Conducted power/ERP/EIRP and the worst case of RSE from original test report (Sporton Report Number FG8O1914B) were verified for the differences.



1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz LTE Band 12 : 699.7 MHz ~ 715.3 MHz LTE Band 13 : 779.5 MHz ~ 784.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 5 : 869.7 MHz ~ 893.3 MHz LTE Band 12 : 729.7 MHz ~ 745.3 MHz LTE Band 13 : 748.5 MHz ~ 753.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz LTE Band 66 : 2110.7 MHz~ 2179.3 MHz LTE Band 71: 619.5 MHz ~ 649.5MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 71 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.90 dBm LTE Band 4 : 22.66 dBm LTE Band 5 : 22.67 dBm LTE Band 12 : 22.56 dBm LTE Band 13 : 22.69 dBm LTE Band 17 : 22.68 dBm LTE Band 66 : 23.05 dBm LTE Band 71 : 23.12 dBm
Antenna Gain	LTE Band 2 : 4.0 dBi LTE Band 4 : 4.5 dBi LTE Band 5 : 4.0 dBi LTE Band 12 : 3.0 dBi LTE Band 13 : 3.5 dBi LTE Band 17 : 3.0 dBi LTE Band 66 : 4.5 dBi LTE Band 71 : 2.0 dBi
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

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



1.6 Testing Location

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

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-KS TH01-KS	CN1257	314309

1.7 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-KS	AUDIX	E3	6.2009-8-24a

1.8 Applicable Standards

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

- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H), 27(F) , 27(N)
- ♦ 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

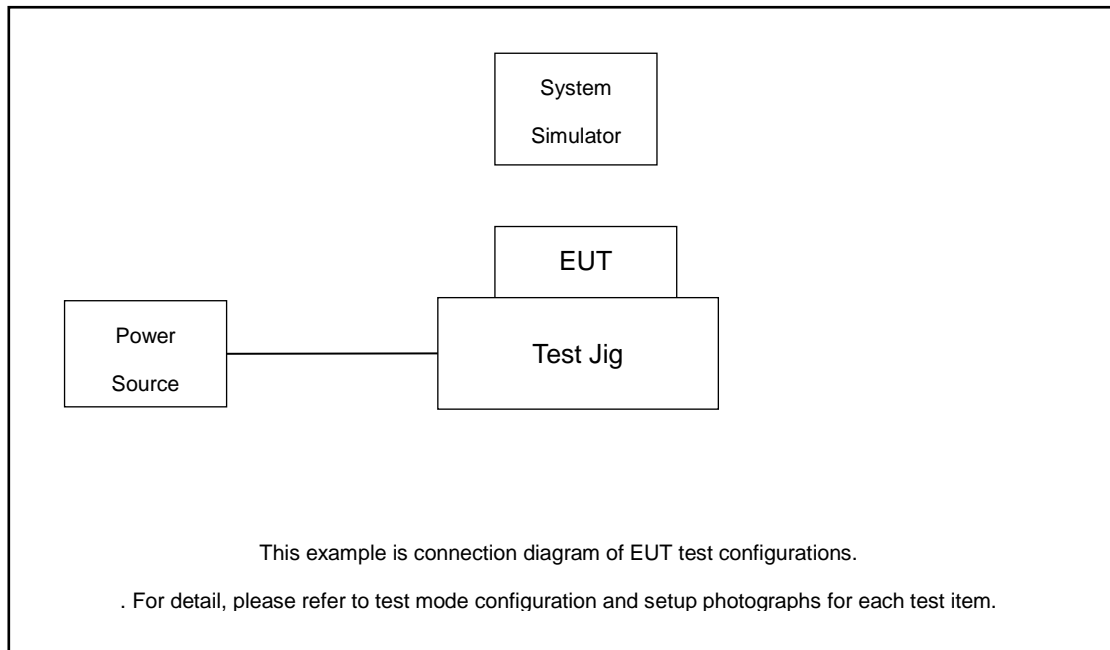
2.1 Test Mode

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.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	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
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v
	17	-	-	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
	71	-	-	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
	5	v	v	v	v	-	-	v	v	v	v			v	v	v
	12	v	v	v	v	-	-	v	v	v	v			v	v	v
	13	-	-	v	v	-	-	v	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v	v			v	v	v
	71	-	-	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	Worst Case											v	v	v	
	5	Worst Case											v	v	v	
	12	Worst Case											v	v	v	
	13	Worst Case											v	v	v	
	66	Worst Case											v	v	v	
	71	Worst Case											v	v	v	
Note	<ol style="list-style-type: none"> The mark "v" means that this configuration is chosen for testing The mark "-" means that this bandwidth is not supported. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 															

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
3.	Test Jig	N/A	N/A	N/A	N/A	N/A
4.	WWAN Antenna	N/A	HYT-690-2700H-3	N/A	N/A	N/A
5.	Fixture	INTEL	NGFF Card Carrier	N/A	N/A	N/A



2.4 Frequency List of Low/Middle/High Channels

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

LTE Band 4 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20050	20175	20300
	Frequency	1720	1732.5	1745
15	Channel	20025	20175	20325
	Frequency	1717.5	1732.5	1747.5
10	Channel	20000	20175	20350
	Frequency	1715	1732.5	1750
5	Channel	19975	20175	20375
	Frequency	1712.5	1732.5	1752.5
3	Channel	19965	20175	20385
	Frequency	1711.5	1732.5	1753.5
1.4	Channel	19957	20175	20393
	Frequency	1710.7	1732.5	1754.3



LTE Band 5 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
10	Channel	20450	20525	20600
	Frequency	829	836.5	844
5	Channel	20425	20525	20625
	Frequency	826.5	836.5	846.5
3	Channel	20415	20525	20635
	Frequency	825.5	836.5	847.5
1.4	Channel	20407	20525	20643
	Frequency	824.7	836.5	848.3

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

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



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

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

LTE Band 71 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	133222	133322	133372
	Frequency	673.0	680.5	688.0
15	Channel	133197	133297	133397
	Frequency	670.5	680.5	690.5
10	Channel	133172	133272	133422
	Frequency	668.0	678.0	693.0
5	Channel	133147	133247	133447
	Frequency	665.5	675.5	695.5

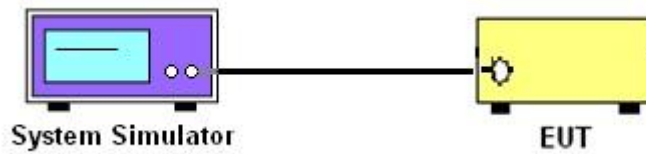
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.2 Test Setup

3.2.1 Conducted Output Power





3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

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

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

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

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12, Band 13 and Band 17 and Band 71.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2 and Band 25 and Band 7 and Band 38 and Band 41.

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

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, $ERP = EIRP - 2.15$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.4.2 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.

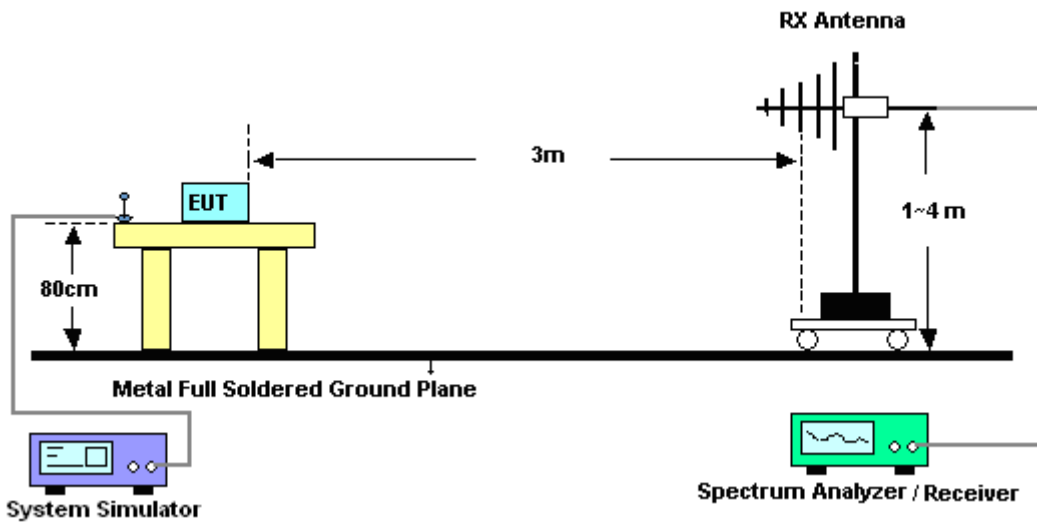
4 Radiated Test Items

4.1 Measuring Instruments

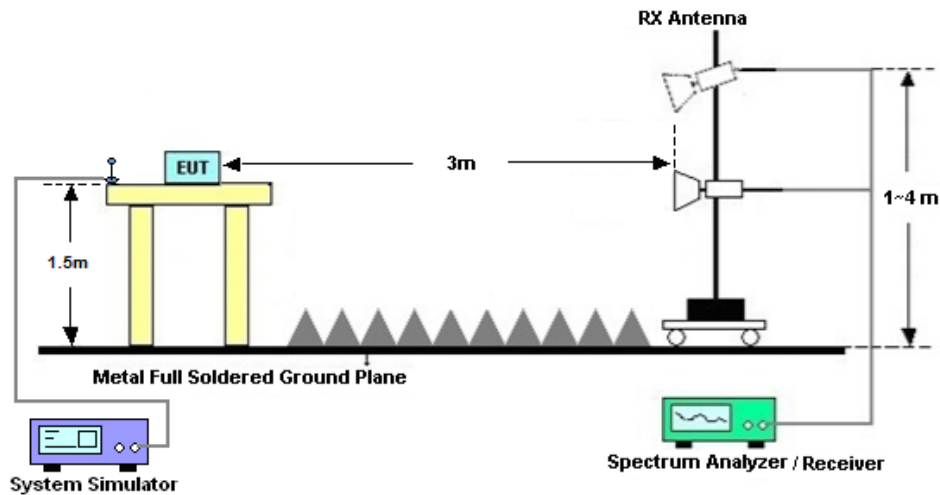
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI 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. $EIRP \text{ (dBm)} = S.G. \text{ Power} - Tx \text{ Cable Loss} + Tx \text{ Antenna Gain}$
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
System Simulator	R&S	CMW500	150792	2G/3G/4G	Jan. 14, 2020	Sep. 19, 2020	Jan. 13, 2021	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 15, 2020	Sep. 18, 2020	Apr. 14, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jan. 02, 2020	Sep. 18, 2020	Jan. 3, 2021	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 20, 2020	Sep. 18, 2020	Apr. 19, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 10, 2019	Sep. 18, 2020	Nov. 09, 2020	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 02, 2020	Sep. 18, 2020	Jan. 03, 2021	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 08, 2020	Sep. 18, 2020	Jan. 07, 2021	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1	2025788	1Ghz-18Ghz	Jan. 02, 2020	Sep. 18, 2020	Jan. 03, 2021	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct.15, 2019	Sep. 18, 2020	Oct.14, 2020	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Sep. 18, 2020	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Sep. 18, 2020	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Sep. 18, 2020	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



6 Uncertainty of Evaluation

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 Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.3dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.8dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				18700	18900	19100
Frequency (MHz)				1860	1880	1900
20	QPSK	1	0	22.87	22.76	22.81
20	QPSK	1	49	22.81	22.86	22.74
20	QPSK	1	99	22.87	22.69	22.79
20	QPSK	50	0	21.76	21.80	21.76
20	QPSK	50	24	21.69	21.75	21.69
20	QPSK	50	50	21.71	21.62	21.72
20	QPSK	100	0	21.59	21.57	21.65
20	16QAM	1	0	21.66	21.75	21.62
20	16QAM	1	49	21.59	21.56	21.53
20	16QAM	1	99	21.49	21.71	21.58
20	16QAM	50	0	20.55	20.79	20.59
20	16QAM	50	24	20.76	20.72	20.64
20	16QAM	50	50	20.53	20.56	20.69
20	16QAM	100	0	20.43	20.72	20.66



Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	22.86	22.82	22.89
15	QPSK	1	37	22.79	22.85	22.82
15	QPSK	1	74	22.75	22.81	22.79
15	QPSK	36	0	21.75	21.67	21.68
15	QPSK	36	20	21.69	21.61	21.58
15	QPSK	36	39	21.66	21.65	21.69
15	QPSK	75	0	21.58	21.68	21.75
15	16QAM	1	0	21.62	21.79	21.62
15	16QAM	1	37	21.77	21.76	21.66
15	16QAM	1	74	21.62	21.63	21.59
15	16QAM	36	0	20.69	20.66	20.52
15	16QAM	36	20	20.63	20.65	20.49
15	16QAM	36	39	20.55	20.72	20.58
15	16QAM	75	0	20.59	20.75	20.66
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	22.72	22.76	22.54
10	QPSK	1	25	22.83	22.68	22.32
10	QPSK	1	49	22.45	22.75	22.32
10	QPSK	25	0	21.61	21.62	21.40
10	QPSK	25	12	21.60	21.59	21.58
10	QPSK	25	25	21.66	21.63	21.62
10	QPSK	50	0	21.59	21.52	21.71
10	16QAM	1	0	21.45	21.47	21.58
10	16QAM	1	25	21.57	21.56	21.69
10	16QAM	1	49	21.43	21.49	21.39
10	16QAM	25	0	20.63	20.52	20.68
10	16QAM	25	12	20.63	20.63	20.65
10	16QAM	25	25	20.59	20.42	20.58
10	16QAM	50	0	20.58	20.38	20.49



Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	22.38	22.63	22.82
5	QPSK	1	12	22.37	22.61	22.90
5	QPSK	1	24	22.49	22.72	22.76
5	QPSK	12	0	21.35	21.60	21.28
5	QPSK	12	7	21.30	21.58	21.17
5	QPSK	12	13	21.15	21.57	21.27
5	QPSK	25	0	21.28	21.63	21.14
5	16QAM	1	0	21.30	21.37	21.29
5	16QAM	1	12	20.82	21.47	20.95
5	16QAM	1	24	21.24	21.66	21.38
5	16QAM	12	0	20.29	20.50	20.29
5	16QAM	12	7	20.33	20.81	20.39
5	16QAM	12	13	20.31	20.58	20.41
5	16QAM	25	0	20.46	20.55	20.24
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	22.70	22.84	22.46
3	QPSK	1	8	22.43	22.65	22.43
3	QPSK	1	14	22.76	22.46	22.38
3	QPSK	8	0	21.35	21.57	21.38
3	QPSK	8	4	21.35	21.60	21.35
3	QPSK	8	7	21.27	21.56	21.25
3	QPSK	15	0	21.30	21.56	21.32
3	16QAM	1	0	21.35	21.54	21.68
3	16QAM	1	8	21.46	21.64	21.28
3	16QAM	1	14	21.42	21.71	21.46
3	16QAM	8	0	20.88	20.60	20.20
3	16QAM	8	4	20.65	20.83	20.17
3	16QAM	8	7	20.44	20.72	20.04
3	16QAM	15	0	20.36	20.68	20.34



Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	22.56	22.36	22.31
1.4	QPSK	1	3	22.52	22.32	22.27
1.4	QPSK	1	5	22.47	22.32	22.25
1.4	QPSK	3	0	22.38	22.21	22.29
1.4	QPSK	3	1	22.32	22.18	22.08
1.4	QPSK	3	3	22.34	22.16	22.11
1.4	QPSK	6	0	21.23	21.31	21.28
1.4	16QAM	1	0	21.33	21.29	21.26
1.4	16QAM	1	3	21.26	21.22	21.13
1.4	16QAM	1	5	21.18	21.11	21.02
1.4	16QAM	3	0	21.09	21.07	21.05
1.4	16QAM	3	1	21.38	21.32	21.23
1.4	16QAM	3	3	21.27	21.22	21.17
1.4	16QAM	6	0	20.23	20.08	20.02



LTE Band 4 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20050	20175	20300
Frequency (MHz)				1720	1732.5	1745
20	QPSK	1	0	22.44	22.35	22.27
20	QPSK	1	49	22.25	22.47	22.66
20	QPSK	1	99	22.53	22.21	22.49
20	QPSK	50	0	21.22	21.17	21.26
20	QPSK	50	24	21.24	21.12	21.17
20	QPSK	50	50	21.19	20.96	21.12
20	QPSK	100	0	21.17	20.96	21.16
20	16QAM	1	0	21.29	21.25	21.04
20	16QAM	1	49	21.15	21.35	21.12
20	16QAM	1	99	21.09	21.13	20.98
20	16QAM	50	0	20.27	20.11	20.18
20	16QAM	50	24	20.42	20.22	20.17
20	16QAM	50	50	20.33	20.19	20.36
20	16QAM	100	0	20.32	20.06	20.21
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.54	22.21	22.11
15	QPSK	1	37	22.45	22.41	22.29
15	QPSK	1	74	22.44	22.17	22.54
15	QPSK	36	0	21.37	20.99	21.15
15	QPSK	36	20	21.29	21.01	21.03
15	QPSK	36	39	21.11	20.92	21.07
15	QPSK	75	0	21.14	20.92	21.12
15	16QAM	1	0	21.36	21.17	21.05
15	16QAM	1	37	20.96	21.22	20.92
15	16QAM	1	74	21.08	21.26	21.04
15	16QAM	36	0	20.16	20.03	20.10
15	16QAM	36	20	20.23	20.17	20.05
15	16QAM	36	39	20.11	20.15	20.25
15	16QAM	75	0	20.21	20.14	20.24



Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.42	22.16	22.46
10	QPSK	1	25	22.47	22.45	22.26
10	QPSK	1	49	22.16	21.95	22.49
10	QPSK	25	0	21.29	21.16	21.08
10	QPSK	25	12	21.21	21.04	21.06
10	QPSK	25	25	21.35	20.92	21.14
10	QPSK	50	0	21.31	20.96	21.17
10	16QAM	1	0	21.18	21.17	21.13
10	16QAM	1	25	21.37	21.39	21.42
10	16QAM	1	49	21.48	21.08	20.94
10	16QAM	25	0	20.41	20.13	20.31
10	16QAM	25	12	20.26	20.15	20.29
10	16QAM	25	25	20.35	20.03	20.31
10	16QAM	50	0	20.47	20.11	20.27
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.35	22.42	22.37
5	QPSK	1	12	22.33	22.35	22.59
5	QPSK	1	24	22.34	22.15	22.61
5	QPSK	12	0	21.39	21.15	21.35
5	QPSK	12	7	21.25	21.03	21.28
5	QPSK	12	13	21.32	21.01	21.42
5	QPSK	25	0	21.37	21.12	21.39
5	16QAM	1	0	21.34	21.13	21.55
5	16QAM	1	12	21.11	21.36	21.42
5	16QAM	1	24	20.83	21.06	21.45
5	16QAM	12	0	20.45	20.21	20.34
5	16QAM	12	7	20.17	20.16	20.34
5	16QAM	12	13	20.32	20.24	20.46
5	16QAM	25	0	20.33	20.13	20.57



Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.27	22.30	22.27
3	QPSK	1	8	22.32	22.27	22.22
3	QPSK	1	14	22.25	22.19	22.36
3	QPSK	8	0	21.22	21.11	21.20
3	QPSK	8	4	21.28	21.12	21.17
3	QPSK	8	7	21.22	21.11	21.16
3	QPSK	15	0	21.23	21.24	21.13
3	16QAM	1	0	21.13	21.22	21.35
3	16QAM	1	8	21.31	20.94	21.57
3	16QAM	1	14	21.16	20.81	21.11
3	16QAM	8	0	20.76	20.36	20.27
3	16QAM	8	4	20.46	20.24	20.32
3	16QAM	8	7	20.64	20.32	20.36
3	16QAM	15	0	20.35	20.06	20.33
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.33	22.26	22.46
1.4	QPSK	1	3	22.34	22.34	22.28
1.4	QPSK	1	5	22.36	22.22	22.37
1.4	QPSK	3	0	22.28	22.16	22.24
1.4	QPSK	3	1	22.36	22.21	22.26
1.4	QPSK	3	3	22.37	22.29	22.19
1.4	QPSK	6	0	21.26	21.05	21.34
1.4	16QAM	1	0	21.45	21.04	21.23
1.4	16QAM	1	3	21.79	21.15	21.63
1.4	16QAM	1	5	21.23	21.13	21.27
1.4	16QAM	3	0	21.31	20.91	21.13
1.4	16QAM	3	1	21.48	21.08	21.25
1.4	16QAM	3	3	21.21	21.35	21.39
1.4	16QAM	6	0	20.29	20.29	20.39



LTE Band 5 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20450	20525	20600
Frequency (MHz)				829	836.5	844
10	QPSK	1	0	22.49	22.48	22.28
10	QPSK	1	25	22.42	22.34	22.26
10	QPSK	1	49	22.11	22.48	22.27
10	QPSK	25	0	21.39	21.31	21.24
10	QPSK	25	12	21.31	21.28	21.33
10	QPSK	25	25	21.25	21.36	21.27
10	QPSK	50	0	21.32	21.28	21.36
10	16QAM	1	0	21.02	21.46	21.05
10	16QAM	1	25	21.13	21.07	21.17
10	16QAM	1	49	21.12	21.13	21.02
10	16QAM	25	0	20.44	20.38	20.27
10	16QAM	25	12	20.46	20.44	20.38
10	16QAM	25	25	20.44	20.39	20.28
10	16QAM	50	0	20.33	20.33	20.44
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.58	22.39	22.46
5	QPSK	1	12	22.67	22.43	22.45
5	QPSK	1	24	22.26	22.25	22.47
5	QPSK	12	0	21.38	21.22	21.36
5	QPSK	12	7	21.49	21.34	21.32
5	QPSK	12	13	21.42	21.41	21.48
5	QPSK	25	0	21.33	21.33	21.38
5	16QAM	1	0	21.49	20.92	21.31
5	16QAM	1	12	21.12	21.11	20.78
5	16QAM	1	24	20.95	21.23	20.92
5	16QAM	12	0	20.35	20.37	20.26
5	16QAM	12	7	20.49	20.24	20.42
5	16QAM	12	13	20.41	20.53	20.54
5	16QAM	25	0	20.40	20.34	20.29



Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.53	22.38	22.48
3	QPSK	1	8	22.44	22.44	22.41
3	QPSK	1	14	21.32	22.58	22.56
3	QPSK	8	0	21.42	21.43	21.32
3	QPSK	8	4	21.45	21.47	21.51
3	QPSK	8	7	21.39	21.39	21.41
3	QPSK	15	0	21.41	21.37	21.44
3	16QAM	1	0	21.61	21.02	21.01
3	16QAM	1	8	21.16	21.26	21.13
3	16QAM	1	14	21.12	21.33	21.19
3	16QAM	8	0	20.83	20.55	20.16
3	16QAM	8	4	20.72	20.59	20.52
3	16QAM	8	7	20.59	20.68	20.43
3	16QAM	15	0	20.57	20.46	20.37
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.42	22.28	22.38
1.4	QPSK	1	3	22.45	22.46	22.44
1.4	QPSK	1	5	22.50	22.27	22.43
1.4	QPSK	3	0	22.42	22.35	22.45
1.4	QPSK	3	1	22.55	22.42	22.34
1.4	QPSK	3	3	22.49	22.27	22.41
1.4	QPSK	6	0	21.51	21.31	21.43
1.4	16QAM	1	0	21.32	21.40	21.34
1.4	16QAM	1	3	21.12	21.56	21.52
1.4	16QAM	1	5	20.95	21.37	21.39
1.4	16QAM	3	0	21.21	21.22	21.37
1.4	16QAM	3	1	21.43	21.22	21.64
1.4	16QAM	3	3	21.29	21.19	21.16
1.4	16QAM	6	0	20.37	20.02	20.15



LTE Band 12 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				23060	23095	23130
Frequency (MHz)				704	707.5	711
10	QPSK	1	0	22.54	22.27	22.44
10	QPSK	1	25	22.34	22.56	22.41
10	QPSK	1	49	22.37	22.37	22.27
10	QPSK	25	0	21.39	21.03	21.36
10	QPSK	25	12	21.16	21.19	21.42
10	QPSK	25	25	21.29	21.30	21.21
10	QPSK	50	0	21.28	21.40	21.19
10	16QAM	1	0	21.42	20.91	20.93
10	16QAM	1	25	21.27	20.96	21.05
10	16QAM	1	49	20.69	21.01	20.71
10	16QAM	25	0	20.38	20.26	20.30
10	16QAM	25	12	20.62	20.29	20.45
10	16QAM	25	25	20.45	20.37	20.41
10	16QAM	50	0	20.37	20.26	20.25
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.55	22.29	22.42
5	QPSK	1	12	22.39	22.43	22.46
5	QPSK	1	24	22.34	22.56	22.29
5	QPSK	12	0	21.42	21.27	21.35
5	QPSK	12	7	21.20	21.23	21.23
5	QPSK	12	13	21.25	21.37	21.29
5	QPSK	25	0	21.35	21.22	21.27
5	16QAM	1	0	20.99	21.18	20.92
5	16QAM	1	12	21.21	21.15	21.16
5	16QAM	1	24	21.02	21.27	21.01
5	16QAM	12	0	20.46	20.12	20.29
5	16QAM	12	7	20.25	20.22	20.26
5	16QAM	12	13	20.38	20.35	20.33
5	16QAM	25	0	20.41	20.31	20.47



Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	22.40	22.39	22.56
3	QPSK	1	8	22.33	22.38	22.43
3	QPSK	1	14	22.46	22.27	22.42
3	QPSK	8	0	21.24	21.38	21.45
3	QPSK	8	4	21.32	21.45	21.29
3	QPSK	8	7	21.15	21.47	21.22
3	QPSK	15	0	21.24	21.42	21.41
3	16QAM	1	0	21.18	21.04	21.29
3	16QAM	1	8	21.02	21.25	21.07
3	16QAM	1	14	20.87	21.12	21.01
3	16QAM	8	0	20.37	20.24	20.55
3	16QAM	8	4	20.39	20.23	20.57
3	16QAM	8	7	20.52	20.58	20.33
3	16QAM	15	0	20.38	20.15	20.42
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	22.49	22.37	22.26
1.4	QPSK	1	3	22.54	22.55	22.37
1.4	QPSK	1	5	22.37	22.44	22.42
1.4	QPSK	3	0	22.32	22.42	22.34
1.4	QPSK	3	1	22.53	22.44	22.38
1.4	QPSK	3	3	22.47	22.34	22.28
1.4	QPSK	6	0	21.37	21.23	21.33
1.4	16QAM	1	0	21.16	20.87	21.12
1.4	16QAM	1	3	21.14	21.13	21.28
1.4	16QAM	1	5	21.34	20.97	21.22
1.4	16QAM	3	0	21.25	21.14	21.13
1.4	16QAM	3	1	21.06	21.12	21.11
1.4	16QAM	3	3	21.38	21.13	21.15
1.4	16QAM	6	0	20.24	20.23	20.29



LTE Band 13 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				23230		
Frequency (MHz)				782		
10	QPSK	1	0		22.49	
10	QPSK	1	25		22.25	
10	QPSK	1	49		22.38	
10	QPSK	25	0		21.33	
10	QPSK	25	12		21.26	
10	QPSK	25	25		21.20	
10	QPSK	50	0		21.43	
10	16QAM	1	0		20.68	
10	16QAM	1	25		21.39	
10	16QAM	1	49		21.35	
10	16QAM	25	0		20.37	
10	16QAM	25	12		20.39	
10	16QAM	25	25		20.42	
10	16QAM	50	0		20.42	
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	22.58	22.60	22.66
5	QPSK	1	12	22.66	22.56	22.58
5	QPSK	1	24	22.56	22.41	22.69
5	QPSK	12	0	21.49	21.44	21.57
5	QPSK	12	7	21.39	21.37	21.58
5	QPSK	12	13	21.37	21.31	21.49
5	QPSK	25	0	21.59	21.55	21.43
5	16QAM	1	0	21.56	21.40	21.52
5	16QAM	1	12	21.35	21.28	21.39
5	16QAM	1	24	21.39	21.34	21.39
5	16QAM	12	0	20.28	20.57	20.42
5	16QAM	12	7	20.38	20.39	20.55
5	16QAM	12	13	20.37	20.46	20.39
5	16QAM	25	0	20.29	20.56	20.34



LTE Band 17 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				23780	23790	23800
Frequency (MHz)				709	710	711
10	QPSK	1	0	22.58	22.62	22.59
10	QPSK	1	25	22.62	22.49	22.68
10	QPSK	1	49	22.49	22.60	22.42
10	QPSK	25	0	21.55	21.33	21.39
10	QPSK	25	12	21.63	21.61	21.42
10	QPSK	25	25	21.38	21.42	21.38
10	QPSK	50	0	21.38	21.32	21.29
10	16QAM	1	0	21.13	21.12	21.29
10	16QAM	1	25	21.39	21.28	21.22
10	16QAM	1	49	21.56	21.38	21.33
10	16QAM	25	0	20.38	20.36	20.28
10	16QAM	25	12	20.48	20.49	20.24
10	16QAM	25	25	20.41	20.48	20.19
10	16QAM	50	0	20.39	20.33	20.38
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.55	22.59	22.49
5	QPSK	1	12	22.42	22.53	22.48
5	QPSK	1	24	22.63	22.46	22.59
5	QPSK	12	0	21.35	21.30	21.43
5	QPSK	12	7	21.25	21.39	21.39
5	QPSK	12	13	21.36	21.46	21.38
5	QPSK	25	0	21.32	21.41	21.56
5	16QAM	1	0	21.13	20.79	21.22
5	16QAM	1	12	21.33	21.34	21.28
5	16QAM	1	24	21.27	21.01	21.29
5	16QAM	12	0	20.38	20.38	20.39
5	16QAM	12	7	20.28	20.48	20.28
5	16QAM	12	13	20.19	20.56	20.27
5	16QAM	25	0	20.39	20.32	20.31



LTE Band 66 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				132072	132322	132572
Frequency (MHz)				1720	1745	1770
20	QPSK	1	0	22.93	22.65	23.05
20	QPSK	1	49	22.91	22.61	22.96
20	QPSK	1	99	22.82	22.57	22.89
20	QPSK	50	0	21.69	21.41	21.71
20	QPSK	50	24	21.65	21.37	21.68
20	QPSK	50	50	21.61	21.45	21.63
20	QPSK	100	0	21.53	21.39	21.56
20	16QAM	1	0	21.77	21.49	21.83
20	16QAM	1	49	21.68	21.33	21.73
20	16QAM	1	99	21.56	21.42	21.62
20	16QAM	50	0	20.63	20.39	20.58
20	16QAM	50	24	20.57	20.31	20.55
20	16QAM	50	50	20.61	20.36	20.59
20	16QAM	100	0	20.63	20.41	20.61
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	22.88	22.59	22.85
15	QPSK	1	37	22.81	22.52	22.76
15	QPSK	1	74	22.78	22.57	22.72
15	QPSK	36	0	21.62	21.53	21.58
15	QPSK	36	20	21.57	21.46	21.52
15	QPSK	36	39	21.52	21.42	21.49
15	QPSK	75	0	21.58	21.48	21.56
15	16QAM	1	0	21.78	21.53	21.62
15	16QAM	1	37	21.43	21.38	21.47
15	16QAM	1	74	21.43	21.31	21.49
15	16QAM	36	0	20.58	20.38	20.46
15	16QAM	36	20	20.54	20.32	20.42
15	16QAM	36	39	20.52	20.33	20.44
15	16QAM	75	0	20.56	20.37	20.59



Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	22.89	22.56	22.93
10	QPSK	1	25	22.83	22.52	22.86
10	QPSK	1	49	22.76	22.47	22.82
10	QPSK	25	0	21.69	21.38	21.72
10	QPSK	25	12	21.56	21.33	21.59
10	QPSK	25	25	21.51	21.29	21.55
10	QPSK	50	0	21.62	21.36	21.65
10	16QAM	1	0	21.66	21.42	21.68
10	16QAM	1	25	21.59	21.37	21.63
10	16QAM	1	49	21.42	21.23	21.39
10	16QAM	25	0	20.65	20.33	20.46
10	16QAM	25	12	20.62	20.31	20.73
10	16QAM	25	25	20.69	20.38	20.65
10	16QAM	50	0	20.71	20.41	20.62
Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	22.83	22.67	22.87
5	QPSK	1	12	22.79	22.62	22.81
5	QPSK	1	24	22.65	22.58	22.73
5	QPSK	12	0	21.67	21.46	21.71
5	QPSK	12	7	21.58	21.32	21.63
5	QPSK	12	13	21.55	21.36	21.62
5	QPSK	25	0	21.62	21.38	21.65
5	16QAM	1	0	21.64	21.31	21.66
5	16QAM	1	12	21.58	21.23	21.62
5	16QAM	1	24	21.49	21.21	21.53
5	16QAM	12	0	20.67	20.39	20.58
5	16QAM	12	7	20.57	20.27	20.42
5	16QAM	12	13	20.62	20.31	20.57
5	16QAM	25	0	20.77	20.47	20.62



Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	22.92	22.68	22.81
3	QPSK	1	8	22.85	22.52	22.78
3	QPSK	1	14	22.82	22.48	22.76
3	QPSK	8	0	21.75	21.33	21.62
3	QPSK	8	4	21.72	21.35	21.59
3	QPSK	8	7	21.77	21.39	21.61
3	QPSK	15	0	21.65	21.29	21.52
3	16QAM	1	0	21.71	21.32	21.62
3	16QAM	1	8	21.62	21.25	21.55
3	16QAM	1	14	21.65	21.27	21.49
3	16QAM	8	0	20.69	20.23	20.56
3	16QAM	8	4	20.67	20.21	20.52
3	16QAM	8	7	20.58	20.19	20.47
3	16QAM	15	0	20.83	20.41	20.59
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	22.88	22.58	22.93
1.4	QPSK	1	3	22.78	22.56	22.79
1.4	QPSK	1	5	22.82	22.52	22.85
1.4	QPSK	3	0	22.78	22.46	22.77
1.4	QPSK	3	1	22.79	22.53	22.72
1.4	QPSK	3	3	22.83	22.57	22.81
1.4	QPSK	6	0	21.78	21.32	21.62
1.4	16QAM	1	0	21.72	21.33	21.68
1.4	16QAM	1	3	21.63	21.28	21.58
1.4	16QAM	1	5	21.49	21.25	21.38
1.4	16QAM	3	0	21.77	21.34	21.67
1.4	16QAM	3	1	21.65	21.38	21.55
1.4	16QAM	3	3	21.71	21.33	21.62
1.4	16QAM	6	0	20.68	20.38	20.57



LTE Band 71 :

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				133222	133322	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	22.78	22.69	22.71
20	QPSK	1	49	22.73	22.61	22.69
20	QPSK	1	99	22.43	22.52	22.36
20	QPSK	50	0	21.56	21.49	21.52
20	QPSK	50	24	21.62	21.43	21.54
20	QPSK	50	50	21.49	21.36	21.41
20	QPSK	100	0	21.47	21.32	21.43
20	16QAM	1	0	21.53	21.44	21.56
20	16QAM	1	49	21.58	21.59	21.52
20	16QAM	1	99	21.32	21.23	21.39
20	16QAM	50	0	20.48	20.36	20.32
20	16QAM	50	24	20.51	20.53	20.49
20	16QAM	50	50	20.42	20.33	20.38
20	16QAM	100	0	20.46	20.49	20.44
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	22.73	22.85	22.73
15	QPSK	1	37	22.66	22.79	22.80
15	QPSK	1	74	22.62	22.65	22.46
15	QPSK	36	0	21.52	21.56	21.47
15	QPSK	36	20	21.49	21.42	21.45
15	QPSK	36	39	21.51	21.56	21.49
15	QPSK	75	0	21.48	21.42	21.44
15	16QAM	1	0	21.58	21.51	21.55
15	16QAM	1	37	21.42	21.48	21.43
15	16QAM	1	74	21.37	21.32	21.29
15	16QAM	36	0	20.39	20.27	20.33
15	16QAM	36	20	20.59	20.33	20.45
15	16QAM	36	39	20.44	20.38	20.46
15	16QAM	75	0	20.53	20.51	20.55



Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	22.96	22.63	22.72
10	QPSK	1	25	22.67	22.49	22.54
10	QPSK	1	49	22.73	22.55	22.63
10	QPSK	25	0	21.47	21.62	21.58
10	QPSK	25	12	21.53	21.58	21.62
10	QPSK	25	25	21.56	21.52	21.47
10	QPSK	50	0	21.44	21.33	21.23
10	16QAM	1	0	21.47	21.42	21.46
10	16QAM	1	25	21.42	21.45	21.52
10	16QAM	1	49	21.31	21.41	21.43
10	16QAM	25	0	20.49	20.65	20.67
10	16QAM	25	12	20.61	20.52	20.49
10	16QAM	25	25	20.71	20.55	20.63
10	16QAM	50	0	20.46	20.42	20.49
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	23.12	22.77	22.71
5	QPSK	1	12	23.02	22.67	22.63
5	QPSK	1	24	22.83	22.65	22.66
5	QPSK	12	0	21.52	21.46	21.32
5	QPSK	12	7	21.56	21.47	21.29
5	QPSK	12	13	21.53	21.43	21.21
5	QPSK	25	0	21.49	21.42	21.33
5	16QAM	1	0	21.33	21.45	21.47
5	16QAM	1	12	21.44	21.42	21.38
5	16QAM	1	24	21.32	21.33	21.36
5	16QAM	12	0	20.42	20.45	20.44
5	16QAM	12	7	20.51	20.56	20.38
5	16QAM	12	13	20.49	20.51	20.23
5	16QAM	25	0	20.53	20.55	20.47



ERP/EIRP

LTE Band 2 (GT - LC = 4.00 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
(MHz)									
Conducted Power (dBm)	22.56	22.36	22.31	22.70	22.84	22.46	22.37	22.61	22.90
Conducted Power (Watts)	0.1803	0.1722	0.1702	0.1862	0.1923	0.1762	0.1726	0.1824	0.1950
EIRP(dBm)	26.56	26.36	26.31	26.70	26.84	26.46	26.37	26.61	26.90
EIRP(Watts)	0.4529	0.4325	0.4276	0.4677	0.4831	0.4426	0.4335	0.4581	0.4898

LTE Band 2 (GT - LC = 4.00 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
(MHz)									
Conducted Power (dBm)	22.83	22.68	22.32	22.86	22.82	22.89	22.87	22.76	22.81
Conducted Power (Watts)	0.1919	0.1854	0.1706	0.1932	0.1914	0.1945	0.1936	0.1888	0.1910
EIRP(dBm)	26.83	26.68	26.32	26.86	26.82	26.89	26.87	26.76	26.81
EIRP(Watts)	0.4819	0.4656	0.4285	0.4853	0.4808	0.4887	0.4864	0.4742	0.4797



LTE Band 2 (GT - LC = 4.00 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	18607	18900	19193	18615	18900	19185	18625	18900	19175
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1850.7	1880	1909.3	1851.5	1880	1908.5	1852.5	1880	1907.5
Conducted Power (dBm)	21.38	21.32	21.23	21.42	21.71	21.46	21.24	21.66	21.38
Conducted Power (Watts)	0.1374	0.1355	0.1327	0.1387	0.1483	0.1400	0.1330	0.1466	0.1374
EIRP(dBm)	25.38	25.32	25.23	25.42	25.71	25.46	25.24	25.66	25.38
EIRP(Watts)	0.3451	0.3404	0.3334	0.3483	0.3724	0.3516	0.3342	0.3681	0.3451

LTE Band 2 (GT - LC = 4.00 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	18650	18900	19150	18675	18900	19125	18650	18900	19100
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1855	1880	1905	1857.5	1880	1902.5	1860	1880	1900
Conducted Power (dBm)	21.57	21.56	21.69	21.62	21.79	21.62	21.66	21.75	21.62
Conducted Power (Watts)	0.1435	0.1432	0.1476	0.1452	0.1510	0.1452	0.1466	0.1496	0.1452
EIRP(dBm)	25.57	25.56	25.69	25.62	25.79	25.62	25.66	25.75	25.62
EIRP(Watts)	0.3606	0.3597	0.3707	0.3648	0.3793	0.3648	0.3681	0.3758	0.3648



LTE Band 5 (GT - LC = 4.00 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	20407	20525	20643	20415	20525	20635	20425	20525	20625
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
Conducted Power (dBm)	22.55	22.42	22.34	21.32	22.58	22.56	22.67	22.43	22.45
Conducted Power (Watts)	0.1799	0.1746	0.1714	0.1355	0.1811	0.1803	0.1849	0.1750	0.1758
ERP(dBm)	24.40	24.27	24.19	23.17	24.43	24.41	24.52	24.28	24.30
ERP(Watts)	0.2754	0.2673	0.2624	0.2075	0.2773	0.2761	0.2831	0.2679	0.2692

LTE Band 5 (GT - LC = 4.00 dB) QPSK			
Bandwidth	10M		
Channel	20450	20525	20600
	(Low)	(Mid)	(High)
Frequency (MHz)	829	836.5	844
Conducted Power (dBm)	22.49	22.48	22.28
Conducted Power (Watts)	0.1774	0.1770	0.1690
ERP(dBm)	24.34	24.33	24.13
ERP(Watts)	0.2716	0.2710	0.2588



LTE Band 5 (GT - LC = 4.00 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	20407	20525	20643	20415	20525	20635	20425	20525	20625
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
Conducted Power (dBm)	21.43	21.22	21.64	21.61	21.02	21.01	21.49	20.92	21.31
Conducted Power (Watts)	0.1390	0.1324	0.1459	0.1449	0.1265	0.1262	0.1409	0.1236	0.1352
ERP(dBm)	23.28	23.07	23.49	23.46	22.87	22.86	23.34	22.77	23.16
ERP(Watts)	0.2128	0.2028	0.2234	0.2218	0.1936	0.1932	0.2158	0.1892	0.2070

LTE Band 5 (GT - LC = 4.00 dB) 16QAM			
Bandwidth	10M		
Channel	20450	20525	20600
	(Low)	(Mid)	(High)
Frequency (MHz)	829	836.5	844
Conducted Power (dBm)	21.02	21.46	21.05
Conducted Power (Watts)	0.1265	0.1400	0.1274
ERP(dBm)	22.87	23.31	22.90
ERP(Watts)	0.1936	0.2143	0.1950



LTE Band 12 (GT - LC = 3.00 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	22.54	22.55	22.37	22.40	22.39	22.56	22.34	22.56	22.29
Conducted Power (Watts)	0.1795	0.1799	0.1726	0.1738	0.1734	0.1803	0.1714	0.1803	0.1694
ERP(dBm)	23.39	23.40	23.22	23.25	23.24	23.41	23.19	23.41	23.14
ERP(Watts)	0.2183	0.2188	0.2099	0.2113	0.2109	0.2193	0.2084	0.2193	0.2061

LTE Band 12 (GT - LC = 3.00 dB) QPSK			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	22.34	22.56	22.41
Conducted Power (Watts)	0.1714	0.1803	0.1742
ERP(dBm)	23.19	23.41	23.26
ERP(Watts)	0.2084	0.2193	0.2118



LTE Band 12 (GT - LC = 3.00 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	23017	23095	23173	23025	23095	23165	23035	23095	23155
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
Conducted Power (dBm)	21.38	21.13	21.15	21.18	21.04	21.29	21.02	21.27	21.01
Conducted Power (Watts)	0.1374	0.1297	0.1303	0.1312	0.1271	0.1346	0.1265	0.1340	0.1262
ERP(dBm)	22.23	21.98	22.00	22.03	21.89	22.14	21.87	22.12	21.86
ERP(Watts)	0.1671	0.1578	0.1585	0.1596	0.1545	0.1637	0.1538	0.1629	0.1535

LTE Band 12 (GT - LC = 3.00 dB) 16QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	21.42	20.91	20.93
Conducted Power (Watts)	0.1387	0.1233	0.1239
ERP(dBm)	22.27	21.76	21.78
ERP(Watts)	0.1687	0.1500	0.1507



LTE Band 13 (GT - LC = 3.50 dB) QPSK						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	22.56	22.41	22.69		22.49	-
Conducted Power (Watts)	0.1803	0.1742	0.1858		0.1774	-
ERP(dBm)	23.91	23.76	24.04		23.84	-
ERP(Watts)	0.2460	0.2377	0.2535		0.2421	-

LTE Band 13 (GT - LC = 3.50 dB) 16QAM						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	21.56	21.40	21.52		21.39	-
Conducted Power (Watts)	0.1432	0.1380	0.1419		0.1377	-
ERP(dBm)	22.91	22.75	22.87		22.74	-
ERP(Watts)	0.1954	0.1884	0.1936		0.1879	-



LTE Band 66 (GT - LC = 4.50 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	131979	132322	132665	131987	132322	132657	131997	132322	132647
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
Conducted Power (dBm)	22.88	22.58	22.93	22.92	22.68	22.81	22.83	22.67	22.87
Conducted Power (Watts)	0.1941	0.1811	0.1963	0.1959	0.1854	0.1910	0.1919	0.1849	0.1936
EIRP(dBm)	27.38	27.08	27.43	27.42	27.18	27.31	27.33	27.17	27.37
EIRP(Watts)	0.5470	0.5105	0.5534	0.5521	0.5224	0.5383	0.5408	0.5212	0.5458

LTE Band 66 (GT - LC = 4.50 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency (MHz)	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
Conducted Power (dBm)	22.89	22.56	22.93	22.88	22.59	22.85	22.93	22.65	23.05
Conducted Power (Watts)	0.1945	0.1803	0.1963	0.1941	0.1816	0.1928	0.1963	0.1841	0.2018
EIRP(dBm)	27.39	27.06	27.43	27.38	27.09	27.35	27.43	27.15	27.55
EIRP(Watts)	0.5483	0.5082	0.5534	0.5470	0.5117	0.5433	0.5534	0.5188	0.5689



LTE Band 66 (GT - LC = 4.50 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	131979	132322	132665	131987	132322	132657	131997	132322	132647
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
Conducted Power (dBm)	21.77	21.34	21.67	21.71	21.32	21.62	21.64	21.31	21.66
Conducted Power (Watts)	0.1503	0.1361	0.1469	0.1483	0.1355	0.1452	0.1459	0.1352	0.1466
EIRP(dBm)	26.27	25.84	26.17	26.21	25.82	26.12	26.14	25.81	26.16
EIRP(Watts)	0.4236	0.3837	0.4140	0.4178	0.3819	0.4093	0.4111	0.3811	0.4130

LTE Band 66 (GT - LC = 4.50 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency (MHz)	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
Conducted Power (dBm)	21.66	21.42	21.68	21.78	21.53	21.62	21.77	21.49	21.83
Conducted Power (Watts)	0.1466	0.1387	0.1472	0.1507	0.1422	0.1452	0.1503	0.1409	0.1524
EIRP(dBm)	26.16	25.92	26.18	26.28	26.03	26.12	26.27	25.99	26.33
EIRP(Watts)	0.4130	0.3908	0.4150	0.4246	0.4009	0.4093	0.4236	0.3972	0.4295



LTE Band 71 (GT - LC = 2.00 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
Conducted Power (dBm)	23.12	22.77	22.71	22.96	22.63	22.72	22.73	22.85	22.73
Conducted Power (Watts)	0.2051	0.1892	0.1866	0.1977	0.1832	0.1871	0.1875	0.1928	0.1875
ERP(dBm)	22.97	22.62	22.56	22.81	22.48	22.57	22.58	22.70	22.58
ERP(Watts)	0.1982	0.1828	0.1803	0.1910	0.1770	0.1807	0.1811	0.1862	0.1811

LTE Band 71 (GT - LC = 2.00 dB) QPSK			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	22.78	22.69	22.71
Conducted Power (Watts)	0.1897	0.1858	0.1866
ERP(dBm)	22.63	22.54	22.56
ERP(Watts)	0.1832	0.1795	0.1803



LTE Band 71 (GT - LC = 2.00 dB) 16QAM									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
(MHz)									
Conducted Power (dBm)	21.33	21.45	21.47	21.42	21.45	21.52	21.58	21.51	21.55
Conducted Power (Watts)	0.1358	0.1396	0.1403	0.1387	0.1396	0.1419	0.1439	0.1416	0.1429
ERP(dBm)	21.18	21.30	21.32	21.27	21.30	21.37	21.43	21.36	21.40
ERP(Watts)	0.1312	0.1349	0.1355	0.1340	0.1349	0.1371	0.1390	0.1368	0.1380

LTE Band 71 (GT - LC = 2.00 dB) 16QAM			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency	673	680.5	688
(MHz)			
Conducted Power (dBm)	21.58	21.59	21.52
Conducted Power (Watts)	0.1439	0.1442	0.1419
ERP(dBm)	21.43	21.44	21.37
ERP(Watts)	0.1390	0.1393	0.1371



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 2 / 20MHz / 16QAM								
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)
Middle	3741	-60.28	-13	-47.28	-72.54	2.64	14.90	H
	5613	-53.65	-13	-40.65	-65.51	2.94	14.80	H
	7488	-52.13	-13	-39.13	-61.90	3.39	13.16	H
	3741	-56.46	-13	-43.46	-68.72	2.64	14.90	V
	5613	-50.33	-13	-37.33	-62.19	2.94	14.80	V
	7488	-52.01	-13	-39.01	-61.78	3.39	13.16	V

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

LTE Band 5 / 10MHz / 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)
Middle	1664	-59.05	-13	-46.05	-66.02	1.58	10.70	H
	2496	-66.21	-13	-53.21	-74.46	2.102	12.50	H
	3330	-64.47	-13	-51.47	-73.36	2.856	13.90	H
	1664	-57.55	-13	-44.55	-64.52	1.58	10.70	V
	2496	-64.28	-13	-51.28	-72.53	2.10	12.50	V
	3330	-65.71	-13	-52.71	-74.60	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)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1406	-63.65	-13	-50.65	-70.62	1.58	10.70	H
	2110	-37.27	-13	-24.27	-45.52	2.102	12.50	H
	2812	-64.38	-13	-51.38	-73.27	2.856	13.90	H
	3516	-48.89	-13	-35.89	-57.35	2.689	13.30	H
	4218	-61.25	-13	-48.25	-70.67	3.327	14.90	H
	4920	-55.52	-13	-42.52	-65.45	3.7351	15.82	H
	1406	-56.01	-13	-43.01	-62.98	1.58	10.70	V
	2110	-37.05	-13	-24.05	-45.30	2.10	12.50	V
	2812	-59.66	-13	-46.66	-68.55	2.86	13.90	V
	3516	-37.62	-13	-24.62	-47.58	3.46	15.57	V
	4218	-58.74	-13	-45.74	-69.66	4.09	17.17	V
	4920	-48.24	-13	-35.24	-60.13	4.73	18.77	V

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

LTE Band 13 / 5MHz / 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)
Middle	1560	-61.45	-42.15	-19.30	-64.08	1.09	5.87	H
	2340	-43.34	-13	-30.34	-45.74	1.37	5.92	H
	3120	-64.51	-13	-51.51	-68.40	1.64	7.68	H
	3900	-41.32	-13	-28.32	-45.17	1.69	7.69	H
	1560	-60.81	-42.15	-18.66	-63.44	1.09	5.87	V
	2340	-40.54	-13	-27.54	-42.94	1.37	5.92	V
	3120	-63.96	-13	-50.96	-67.85	1.64	7.68	V
	3900	-40.29	-13	-27.29	-44.14	1.69	7.69	V

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



LTE Band 13 / 10MHz / 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)
Middle	1556	-63.12	-13	-50.12	-65.75	1.09	5.87	H
	2332	-53.17	-13	-40.17	-55.57	1.37	5.92	H
	3108	-64.51	-13	-51.51	-68.40	1.64	7.68	H
	3888	-57.67	-13	-44.67	-61.53	1.68	7.69	H
	1556	-61.47	-13	-48.47	-64.10	1.09	5.87	V
	2332	-48.88	-13	-35.88	-51.28	1.37	5.92	V
	3108	-64.34	-13	-51.34	-68.23	1.64	7.68	V
	3888	-44.95	-13	-31.95	-48.81	1.68	7.69	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)
Middle	3471	-56.29	-13	-43.29	-67.03	2.604	13.34	H
	5208	-56.20	-13	-43.20	-66.71	3.011	13.52	H
	6948	-54.33	-13	-41.33	-64.53	3.271	13.47	H
	3471	-45.05	-13	-32.05	-55.79	2.604	13.34	V
	5208	-53.41	-13	-40.41	-63.92	3.011	13.52	V
	6948	-53.83	-13	-40.83	-64.03	3.271	13.47	V

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



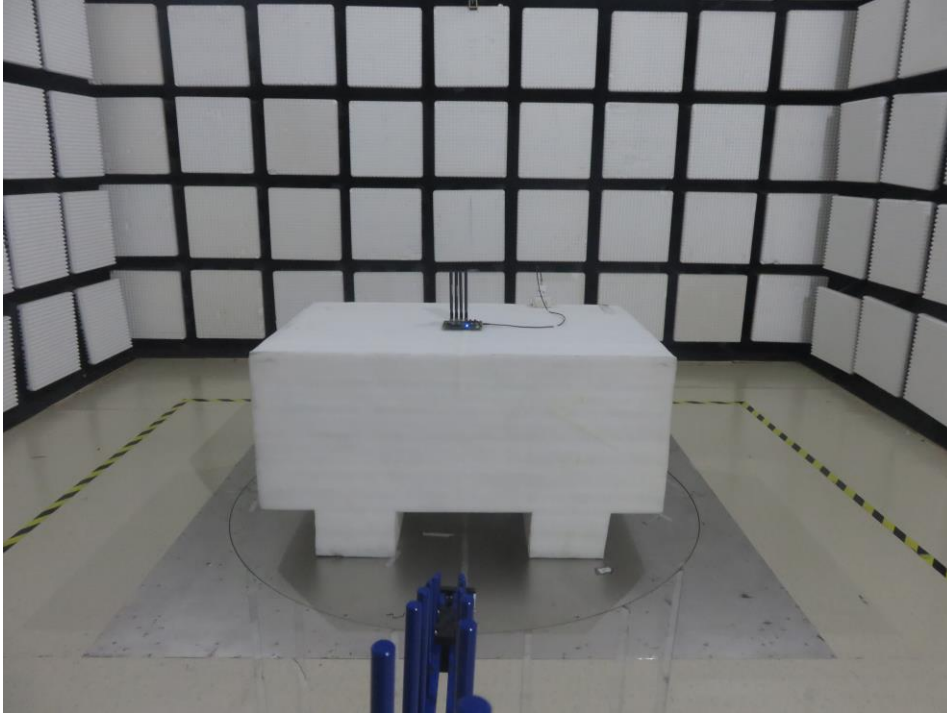
LTE Band 71 / 20MHz / QPSK								
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1348	-53.33	-13	-40.33	-55.08	1.02	4.92	H
	2022	-40.16	-13	-27.16	-42.13	1.27	5.39	H
	2696	-62.26	-13	-49.26	-65.19	1.49	6.57	H
	3372	-51.78	-13	-38.78	-55.18	1.73	7.28	H
	1348	-47.15	-13	-34.15	-48.90	1.02	4.92	V
	2022	-36.01	-13	-23.01	-37.98	1.27	5.39	V
	2696	-58.95	-13	-45.95	-61.88	1.49	6.57	V
	3372	-45.22	-13	-32.22	-48.62	1.73	7.28	V

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

Appendix C. Setup Photographs

<Radiated Emission>

LF



HF

