



FCC RF Test Report

APPLICANT : Zhejiang Lingzhu Technology Co., Ltd.
EQUIPMENT : 4G Assistant
MODEL NAME : X-TYGW-A4US2, X-TYGW-A4, X-TYGW-A4US,
X-TYGW-A4US2x("x" represents 1.2.3....., a-z or A-Z)
FCC ID : 2BEWXXGA42
STANDARD : 47 CFR Part 22(H), 24(E), 27(L), 27(N), 27(H), 27(F)
CLASSIFICATION : PCS Licensed Transmitter (PCB)
TEST DATE(S) : Mar. 11, 2025 ~ Apr. 02, 2025

This product installed a RF module (Brand Name: LYNQ, Model Name: L511A, FCC ID:2AK9DL511A) during the test, only Conducted Power, ERP/EIRP and RSE test items are tested in this report, 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



Sporton International Inc. (Kunshan)

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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	6
1.6 Maximum ERP/EIRP	6
1.7 Testing Location	8
1.8 Test Software	8
1.9 Applicable Standards	9
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST	10
2.1 Test Mode	10
2.2 Connection Diagram of Test System	11
2.3 Support Unit used in test configuration and system	11
2.4 Frequency List of Low/Middle/High Channels	12
3 CONDUCTED TEST ITEMS	15
3.1 Measuring Instruments	15
3.2 Test Setup	15
3.3 Test Result of Conducted Test	15
3.4 Conducted Output Power and ERP/EIRP	16
4 RADIATED TEST ITEMS	17
4.1 Measuring Instruments	17
4.2 Test Setup	17
4.3 Test Result of Radiated Test	18
4.4 Radiated Spurious Emission	19
5 LIST OF MEASURING EQUIPMENT	20
6 MEASUREMENT UNCERTAINTY	21
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
FG520507	Rev. 01	Initial issue of report	Apr. 25, 2025



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)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 71)	ERP < 3 Watt		-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2)	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 66)(Band 71)	< 43+10log ₁₀ (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 66) (Band 71)	< 43+10log ₁₀ (P[Watts])	PASS	1
-	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	1
	§2.1055 §24.235 §27.54		Within Authorized Band		
4.4	§2.1053 §22.917(a) §24.238(a) §27.53(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 66) (Band 71)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 8.16 dB at 1560.00 MHz

Remark 1: The conducted test results were leveraged from module RF report which can refer to Report No.24B02W000021-001-V1.

Conformity Assessment Condition:

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

Disclaimer:

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



1 General Description

1.1 Applicant

Zhejiang Lingzhu Technology Co., Ltd.

Room 302, No 1 Building Huace Center, Xihu District, Hangzhou City, Zhejiang Province, China

1.2 Manufacturer

Zhejiang Lingzhu Technology Co., Ltd.

Room 302, No 1 Building Huace Center, Xihu District, Hangzhou City, Zhejiang Province, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	4G Assistant
Model Name	X-TYGW-A4US2, X-TYGW-A4, X-TYGW-A4US, X-TYGW-A4US2x("x" represents 1.2.3....., a-z or A-Z)
FCC ID	2BEWXXGA42
SN	KGVFL16TJ00042
HW Version	V1.0.3
SW Version	L511Av04.01b01.00
EUT Stage	Production Unit

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 2 : 1850 MHz ~ 1910 MHz LTE Band 4 : 1710 MHz ~ 1755 MHz LTE Band 5 : 824 MHz ~ 849 MHz LTE Band 12 : 699 MHz ~ 716 MHz LTE Band 13 : 777 MHz ~ 787 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 66 : 2110 MHz ~ 2180 MHz LTE Band 71: 617 MHz ~ 652 MHz
Bandwidth	QPSK: 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 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz

	LTE Band 71 : 5MHz / 10MHz / 15MHz / 20MHz 16QAM: LTE Band 2 : 1.4MHz / 3MHz / 5MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz LTE Band 5 : 1.4MHz / 3MHz / 5MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz LTE Band 13 : 5MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz LTE Band 71 : 5MHz
Maximum Output Power to Antenna	LTE Band 2 : 23.67 dBm LTE Band 4 : 23.64 dBm LTE Band 5 : 24.08 dBm LTE Band 12 : 24.59 dBm LTE Band 13 : 23.23 dBm LTE Band 66 : 23.75 dBm LTE Band 71 : 24.68 dBm
Antenna Type	Dipole Antenna
Antenna Gain	LTE Band 2 : 3.92 dBi LTE Band 4 : 2.53 dBi LTE Band 5 : 2.69 dBi LTE Band 12 : 0.69 dBi LTE Band 13 : 2.14 dBi LTE Band 66 : 2.53 dBi LTE Band 71 : 0.57 dBi
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP

LTE Band 2		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1850.7 ~ 1909.3	0.5408	0.5260
3	1851.5 ~ 1908.5	0.5508	0.5495
5	1852.5 ~ 1907.5	0.5728	0.4699
10	1855.0 ~ 1905.0	0.5458	-
15	1857.5 ~ 1902.5	0.5623	-
20	1860.0 ~ 1900.0	0.5741	-



LTE Band 4		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	0.3784	0.3690
3	1711.5 ~ 1753.5	0.3811	0.3631
5	1712.5 ~ 1752.5	0.3855	0.3199
10	1715.0 ~ 1750.0	0.3990	-
15	1717.5 ~ 1747.5	0.4064	-
20	1720.0 ~ 1745.0	0.4140	-
LTE Band 5		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	824.7 ~ 848.3	0.2825	0.2825
3	825.5 ~ 847.5	0.2780	0.2735
5	826.5 ~ 846.5	0.2851	0.2355
10	829.0 ~ 844.0	0.2897	-
LTE Band 12		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
1.4	699.7 ~ 715.3	0.1972	0.1972
3	700.5 ~ 714.5	0.2056	0.1995
5	701.5 ~ 713.5	0.2028	0.1656
10	704.0 ~ 711.0	0.1923	-
LTE Band 13		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
5	779.5 ~ 784.5	0.2075	0.2028
10	782.0	0.2099	-
LTE Band 66		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	0.4036	0.3981
3	1711.5 ~ 1778.5	0.3999	0.3864
5	1712.5 ~ 1777.5	0.4159	0.3428
10	1715.0 ~ 1775.0	0.4207	-
15	1717.5 ~ 1772.5	0.4198	-
20	1720.0 ~ 1770.0	0.4246	-



LTE Band 71		QPSK	16QAM
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Maximum ERP(W)
5	665.5 ~ 695.5	0.1972	0.1644
10	668.0 ~ 693.0	0.2037	-
15	670.5 ~ 690.5	0.2042	-
20	673.0 ~ 688.0	0.2009	-

Note:

1. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
2. All modulations have been tested, and only the worst test results of PSK & QAM 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	Manufacture	Name	Version
1.	TH01-KS	SPORTON	FCC LTE_Ver2.0 Auto_china_210503	2.0
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(N), 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

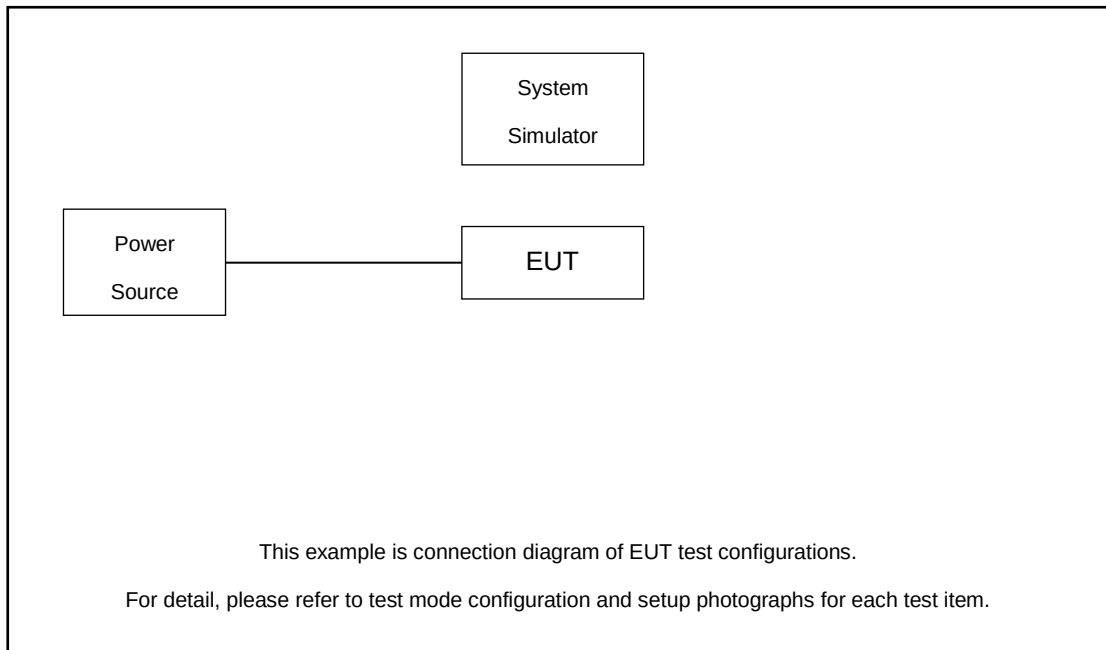
2.1 Test Mode

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.

Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	5	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v
	13	-	-	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
	71	-	-	v	v	v	v	v	v	-	v	v	v	v	v	v
E.R.P / E.I.R.P	2	v	v	v	v	v	v	v	v	-	v	v	v	v	v	v
	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
	66	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
Radiated Spurious Emission	2	Worst Case													v	
	5	Worst Case													v	
	12	Worst Case													v	
	13	Worst Case													v	
	66	Worst Case													v	
	71	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.															

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m

2.4 Frequency List of Low/Middle/High Channels

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

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



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 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

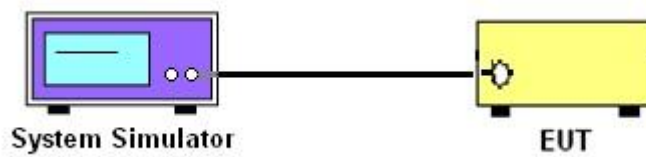
3 Conducted Test Items

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.

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

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2.

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.

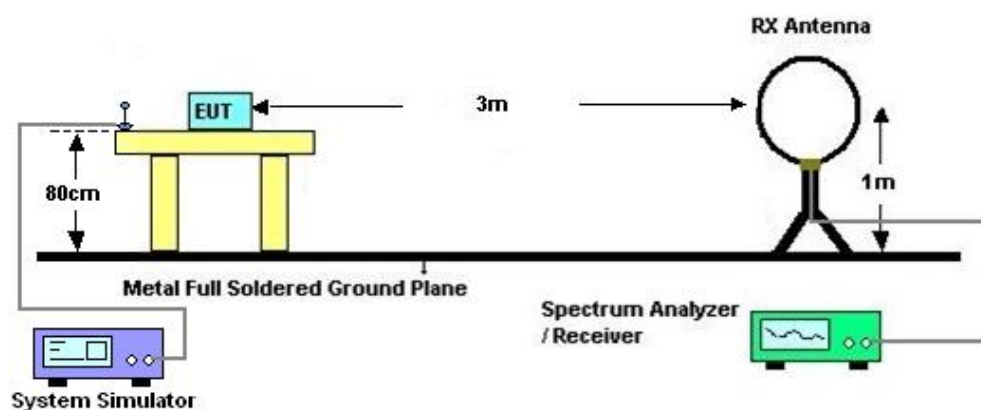
4 Radiated Test Items

4.1 Measuring Instruments

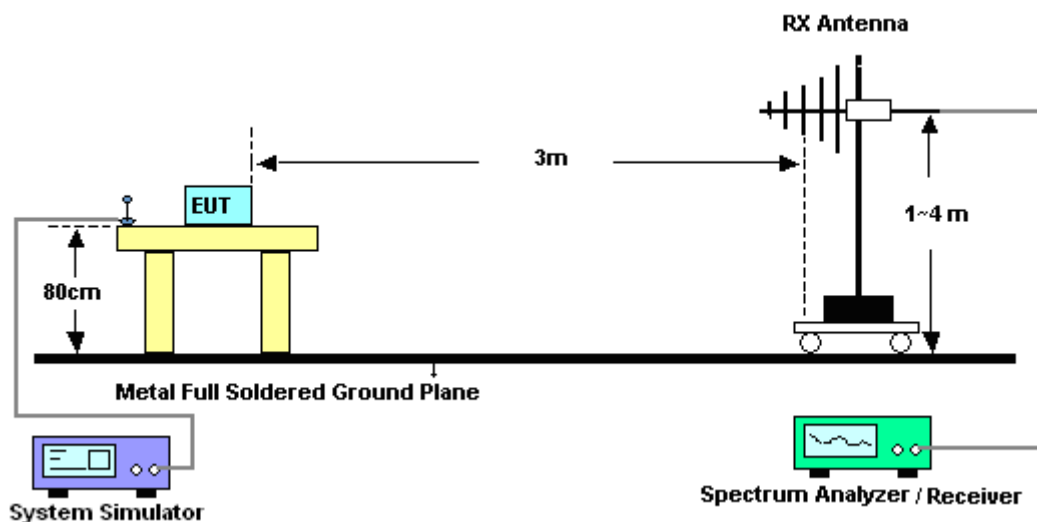
See list of measuring instruments of this test report.

4.2 Test Setup

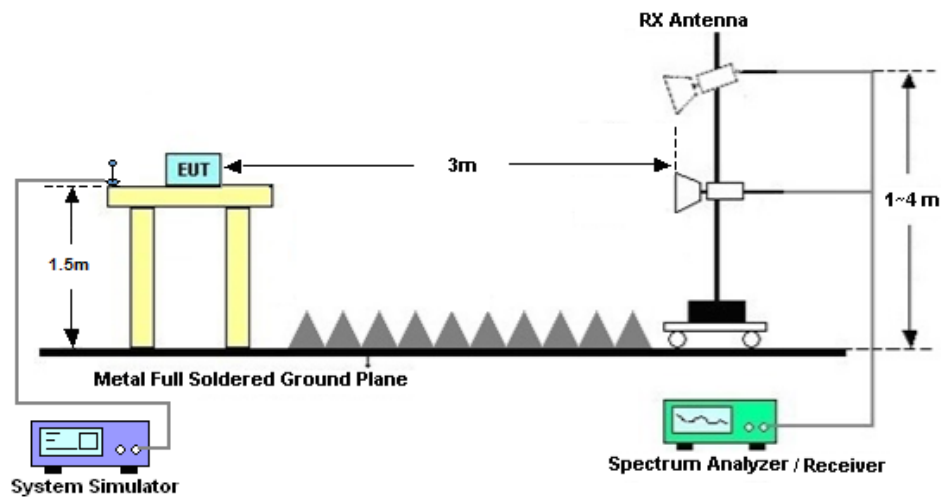
4.2.1 For radiated test below 30MHz



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. $\text{EIRP (dBm)} = \text{S.G. Power} - \text{Tx Cable Loss} + \text{Tx Antenna Gain}$
11. $\text{ERP (dBm)} = \text{EIRP} - 2.15$
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)] \text{ (dB)}$
 $= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$
 $= -13\text{dBm}.$



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 10, 2024	Apr. 02, 2025	Oct. 09, 2025	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	NCR	Apr. 02, 2025	NCR	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55370528	10Hz~44G,MAX 30dB	Oct. 11, 2024	Mar. 11, 2025	Oct. 10, 2025	Radiation (03CH04-KS)
Loop Antenna	R&S	HFH2-Z2E	101125	9kHz~30MHz	Sep. 08, 2024	Mar. 11, 2025	Sep. 07, 2025	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz~1GHz	Nov. 23, 2024	Mar. 11, 2025	Nov. 22, 2025	Radiation (03CH04-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00227860	1GHz~18GHz	Aug. 16, 2024	Mar. 11, 2025	Aug. 15, 2025	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101116	18GHz~40GHz	Oct. 22, 2024	Mar. 11, 2025	Oct. 21, 2025	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	380826	9KHz~1GHz	Jul. 03, 2024	Mar. 11, 2025	Jul. 02, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM18G40G A	060852	18~40GHz	Jan. 03, 2025	Mar. 11, 2025	Jan. 02, 2026	Radiation (03CH04-KS)
high gain Amplifier	EM	EM01G18G A	060840	1Ghz~18Ghz	Oct. 09, 2024	Mar. 11, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
Amplifier	EM	EM01G18G A	060892	1Ghz~18Ghz	Oct. 09, 2024	Mar. 11, 2025	Oct. 08, 2025	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Mar. 11, 2025	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Mar. 11, 2025	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Mar. 11, 2025	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required



6 Measurement Uncertainty

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

Uncertainty of Conducted Measurement

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

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

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.82dB
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Appendix A. Test Results of Conducted Test

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

Conducted Output Power(Average power) and ERP/EIRP

LTE Band 2:

Bandwidth	RBSize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	EIRP(W)
1.4MHz	1RBlow	1850.7	QPSK	23.13	27.05	0.5070
1.4MHz	1RBmid	1850.7	QPSK	23.15	27.07	0.5093
1.4MHz	1RBhigh	1850.7	QPSK	23.22	27.14	0.5176
1.4MHz	50%,low	1850.7	QPSK	23.31	27.23	0.5284
1.4MHz	50%RBmid	1850.7	QPSK	23.3	27.22	0.5272
1.4MHz	50%,high	1850.7	QPSK	23.32	27.24	0.5297
1.4MHz	100%RB	1850.7	QPSK	22.22	26.14	0.4111
1.4MHz	1RBlow	1850.7	16QAM	22.44	26.36	0.4325
1.4MHz	1RBmid	1850.7	16QAM	22.5	26.42	0.4385
1.4MHz	1RBhigh	1850.7	16QAM	22.46	26.38	0.4345
1.4MHz	50%,low	1850.7	16QAM	22.41	26.33	0.4295
1.4MHz	50%RBmid	1850.7	16QAM	22.44	26.36	0.4325
1.4MHz	50%,high	1850.7	16QAM	22.48	26.4	0.4365
1.4MHz	100%RB	1850.7	16QAM	21.38	25.3	0.3388
1.4MHz	1RBlow	1880	QPSK	23.2	27.12	0.5152
1.4MHz	1RBmid	1880	QPSK	23.22	27.14	0.5176
1.4MHz	1RBhigh	1880	QPSK	23.18	27.1	0.5129
1.4MHz	50%,low	1880	QPSK	23.09	27.01	0.5023
1.4MHz	50%RBmid	1880	QPSK	23.13	27.05	0.5070
1.4MHz	50%,high	1880	QPSK	23.18	27.1	0.5129
1.4MHz	100%RB	1880	QPSK	22.29	26.21	0.4178
1.4MHz	1RBlow	1880	16QAM	22.32	26.24	0.4207
1.4MHz	1RBmid	1880	16QAM	22.4	26.32	0.4285
1.4MHz	1RBhigh	1880	16QAM	22.35	26.27	0.4236
1.4MHz	50%,low	1880	16QAM	23.14	27.06	0.5082
1.4MHz	50%RBmid	1880	16QAM	22.29	26.21	0.4178
1.4MHz	50%,high	1880	16QAM	23.1	27.02	0.5035
1.4MHz	100%RB	1880	16QAM	21.36	25.28	0.3373
1.4MHz	1RBlow	1909.3	QPSK	23.27	27.19	0.5236
1.4MHz	1RBmid	1909.3	QPSK	23.28	27.2	0.5248
1.4MHz	1RBhigh	1909.3	QPSK	23.25	27.17	0.5212
1.4MHz	50%,low	1909.3	QPSK	23.34	27.26	0.5321
1.4MHz	50%RBmid	1909.3	QPSK	23.26	27.18	0.5224
1.4MHz	50%,high	1909.3	QPSK	23.41	27.33	0.5408
1.4MHz	100%RB	1909.3	QPSK	22.41	26.33	0.4295
1.4MHz	1RBlow	1909.3	16QAM	22.47	26.39	0.4355
1.4MHz	1RBmid	1909.3	16QAM	22.49	26.41	0.4375
1.4MHz	1RBhigh	1909.3	16QAM	22.44	26.36	0.4325
1.4MHz	50%,low	1909.3	16QAM	23.2	27.12	0.5152



1.4MHz	50%RBmid	1909.3	16QAM	22.4	26.32	0.4285
1.4MHz	50%,high	1909.3	16QAM	23.29	27.21	0.5260
1.4MHz	100%RB	1909.3	16QAM	21.52	25.44	0.3499
3MHz	1RBlow	1851.5	QPSK	23.1	27.02	0.5035
3MHz	1RBmid	1851.5	QPSK	23.43	27.35	0.5433
3MHz	1RBhigh	1851.5	QPSK	23.27	27.19	0.5236
3MHz	50%,low	1851.5	QPSK	23.39	27.31	0.5383
3MHz	50%RBmid	1851.5	QPSK	22.49	26.41	0.4375
3MHz	50%,high	1851.5	QPSK	23.49	27.41	0.5508
3MHz	100%RB	1851.5	QPSK	22.37	26.29	0.4256
3MHz	1RBlow	1851.5	16QAM	22.45	26.37	0.4335
3MHz	1RBmid	1851.5	16QAM	22.71	26.63	0.4603
3MHz	1RBhigh	1851.5	16QAM	22.59	26.51	0.4477
3MHz	50%,low	1851.5	16QAM	23.48	27.4	0.5495
3MHz	50%RBmid	1851.5	16QAM	21.56	25.48	0.3532
3MHz	50%,high	1851.5	16QAM	23.48	27.4	0.5495
3MHz	100%RB	1851.5	16QAM	21.5	25.42	0.3483
3MHz	1RBlow	1880	QPSK	23.11	27.03	0.5047
3MHz	1RBmid	1880	QPSK	23.23	27.15	0.5188
3MHz	1RBhigh	1880	QPSK	23.15	27.07	0.5093
3MHz	50%,low	1880	QPSK	23.14	27.06	0.5082
3MHz	50%RBmid	1880	QPSK	22.28	26.2	0.4169
3MHz	50%,high	1880	QPSK	23.15	27.07	0.5093
3MHz	100%RB	1880	QPSK	22.2	26.12	0.4093
3MHz	1RBlow	1880	16QAM	22.22	26.14	0.4111
3MHz	1RBmid	1880	16QAM	22.37	26.29	0.4256
3MHz	1RBhigh	1880	16QAM	22.16	26.08	0.4055
3MHz	50%,low	1880	16QAM	23.13	27.05	0.5070
3MHz	50%RBmid	1880	16QAM	21.39	25.31	0.3396
3MHz	50%,high	1880	16QAM	23.12	27.04	0.5058
3MHz	100%RB	1880	16QAM	21.25	25.17	0.3289
3MHz	1RBlow	1908.5	QPSK	23.39	27.31	0.5383
3MHz	1RBmid	1908.5	QPSK	23.4	27.32	0.5395
3MHz	1RBhigh	1908.5	QPSK	23.17	27.09	0.5117
3MHz	50%,low	1908.5	QPSK	23.34	27.26	0.5321
3MHz	50%RBmid	1908.5	QPSK	22.45	26.37	0.4335
3MHz	50%,high	1908.5	QPSK	23.33	27.25	0.5309
3MHz	100%RB	1908.5	QPSK	22.37	26.29	0.4256
3MHz	1RBlow	1908.5	16QAM	22.44	26.36	0.4325
3MHz	1RBmid	1908.5	16QAM	22.54	26.46	0.4426
3MHz	1RBhigh	1908.5	16QAM	22.31	26.23	0.4198
3MHz	50%,low	1908.5	16QAM	23.34	27.26	0.5321
3MHz	50%RBmid	1908.5	16QAM	21.44	25.36	0.3436
3MHz	50%,high	1908.5	16QAM	23.33	27.25	0.5309
3MHz	100%RB	1908.5	16QAM	21.47	25.39	0.3459
5MHz	1RBlow	1852.5	QPSK	23.51	27.43	0.5534
5MHz	1RBmid	1852.5	QPSK	23.66	27.58	0.5728
5MHz	1RBhigh	1852.5	QPSK	23.53	27.45	0.5559
5MHz	50%,low	1852.5	QPSK	22.49	26.41	0.4375
5MHz	50%RBmid	1852.5	QPSK	22.53	26.45	0.4416



5MHz	50%,high	1852.5	QPSK	22.5	26.42	0.4385
5MHz	100%RB	1852.5	QPSK	22.49	26.41	0.4375
5MHz	1RBlow	1852.5	16QAM	22.38	26.3	0.4266
5MHz	1RBmid	1852.5	16QAM	22.49	26.41	0.4375
5MHz	1RBhigh	1852.5	16QAM	22.43	26.35	0.4315
5MHz	50%,low	1852.5	16QAM	21.52	25.44	0.3499
5MHz	50%RBmid	1852.5	16QAM	21.59	25.51	0.3556
5MHz	50%,high	1852.5	16QAM	21.57	25.49	0.3540
5MHz	100%RB	1852.5	16QAM	21.51	25.43	0.3491
5MHz	1RBlow	1880	QPSK	23.41	27.33	0.5408
5MHz	1RBmid	1880	QPSK	23.34	27.26	0.5321
5MHz	1RBhigh	1880	QPSK	23.17	27.09	0.5117
5MHz	50%,low	1880	QPSK	22.29	26.21	0.4178
5MHz	50%RBmid	1880	QPSK	22.27	26.19	0.4159
5MHz	50%,high	1880	QPSK	22.25	26.17	0.4140
5MHz	100%RB	1880	QPSK	22.23	26.15	0.4121
5MHz	1RBlow	1880	16QAM	22.4	26.32	0.4285
5MHz	1RBmid	1880	16QAM	22.4	26.32	0.4285
5MHz	1RBhigh	1880	16QAM	22.27	26.19	0.4159
5MHz	50%,low	1880	16QAM	21.39	25.31	0.3396
5MHz	50%RBmid	1880	16QAM	21.37	25.29	0.3381
5MHz	50%,high	1880	16QAM	21.35	25.27	0.3365
5MHz	100%RB	1880	16QAM	21.44	25.36	0.3436
5MHz	1RBlow	1907.5	QPSK	23.42	27.34	0.5420
5MHz	1RBmid	1907.5	QPSK	23.48	27.4	0.5495
5MHz	1RBhigh	1907.5	QPSK	23.31	27.23	0.5284
5MHz	50%,low	1907.5	QPSK	22.56	26.48	0.4446
5MHz	50%RBmid	1907.5	QPSK	22.5	26.42	0.4385
5MHz	50%,high	1907.5	QPSK	22.49	26.41	0.4375
5MHz	100%RB	1907.5	QPSK	22.45	26.37	0.4335
5MHz	1RBlow	1907.5	16QAM	22.77	26.69	0.4667
5MHz	1RBmid	1907.5	16QAM	22.8	26.72	0.4699
5MHz	1RBhigh	1907.5	16QAM	22.62	26.54	0.4508
5MHz	50%,low	1907.5	16QAM	21.66	25.58	0.3614
5MHz	50%RBmid	1907.5	16QAM	21.63	25.55	0.3589
5MHz	50%,high	1907.5	16QAM	21.61	25.53	0.3573
5MHz	100%RB	1907.5	16QAM	21.59	25.51	0.3556
10MHz	1RBlow	1855	QPSK	23.45	27.37	0.5458
10MHz	1RBmid	1855	QPSK	23.4	27.32	0.5395
10MHz	1RBhigh	1855	QPSK	23.24	27.16	0.5200
10MHz	50%,low	1855	QPSK	22.49	26.41	0.4375
10MHz	50%RBmid	1855	QPSK	22.45	26.37	0.4335
10MHz	50%,high	1855	QPSK	22.39	26.31	0.4276
10MHz	100%RB	1855	QPSK	22.44	26.36	0.4325
10MHz	1RBlow	1880	QPSK	23.41	27.33	0.5408
10MHz	1RBmid	1880	QPSK	23.44	27.36	0.5445
10MHz	1RBhigh	1880	QPSK	23.33	27.25	0.5309
10MHz	50%,low	1880	QPSK	22.42	26.34	0.4305
10MHz	50%RBmid	1880	QPSK	22.37	26.29	0.4256
10MHz	50%,high	1880	QPSK	22.34	26.26	0.4227



10MHz	100%RB	1880	QPSK	22.35	26.27	0.4236
10MHz	1RBlow	1905	QPSK	23.42	27.34	0.5420
10MHz	1RBmid	1905	QPSK	23.43	27.35	0.5433
10MHz	1RBhigh	1905	QPSK	23.26	27.18	0.5224
10MHz	50%,low	1905	QPSK	22.41	26.33	0.4295
10MHz	50%RBmid	1905	QPSK	22.44	26.36	0.4325
10MHz	50%,high	1905	QPSK	22.47	26.39	0.4355
10MHz	100%RB	1905	QPSK	22.45	26.37	0.4335
15MHz	1RBlow	1857.5	QPSK	23.46	27.38	0.5470
15MHz	1RBmid	1857.5	QPSK	23.41	27.33	0.5408
15MHz	1RBhigh	1857.5	QPSK	23.29	27.21	0.5260
15MHz	50%,low	1857.5	QPSK	22.62	26.54	0.4508
15MHz	50%RBmid	1857.5	QPSK	22.55	26.47	0.4436
15MHz	50%,high	1857.5	QPSK	22.5	26.42	0.4385
15MHz	100%RB	1857.5	QPSK	22.56	26.48	0.4446
15MHz	1RBlow	1880	QPSK	23.58	27.5	0.5623
15MHz	1RBmid	1880	QPSK	23.42	27.34	0.5420
15MHz	1RBhigh	1880	QPSK	23.5	27.42	0.5521
15MHz	50%,low	1880	QPSK	22.61	26.53	0.4498
15MHz	50%RBmid	1880	QPSK	22.55	26.47	0.4436
15MHz	50%,high	1880	QPSK	22.55	26.47	0.4436
15MHz	100%RB	1880	QPSK	22.55	26.47	0.4436
15MHz	1RBlow	1902.5	QPSK	23.56	27.48	0.5598
15MHz	1RBmid	1902.5	QPSK	23.51	27.43	0.5534
15MHz	1RBhigh	1902.5	QPSK	23.39	27.31	0.5383
15MHz	50%,low	1902.5	QPSK	22.54	26.46	0.4426
15MHz	50%RBmid	1902.5	QPSK	22.55	26.47	0.4436
15MHz	50%,high	1902.5	QPSK	22.56	26.48	0.4446
15MHz	100%RB	1902.5	QPSK	22.57	26.49	0.4457
20MHz	1RBlow	1860	QPSK	23.63	27.55	0.5689
20MHz	1RBmid	1860	QPSK	23.52	27.44	0.5546
20MHz	1RBhigh	1860	QPSK	23.54	27.46	0.5572
20MHz	50%,low	1860	QPSK	22.61	26.53	0.4498
20MHz	50%RBmid	1860	QPSK	22.56	26.48	0.4446
20MHz	50%,high	1860	QPSK	22.57	26.49	0.4457
20MHz	100%RB	1860	QPSK	22.58	26.5	0.4467
20MHz	1RBlow	1880	QPSK	23.45	27.37	0.5458
20MHz	1RBmid	1880	QPSK	23.51	27.43	0.5534
20MHz	1RBhigh	1880	QPSK	23.52	27.44	0.5546
20MHz	50%,low	1880	QPSK	22.65	26.57	0.4539
20MHz	50%RBmid	1880	QPSK	22.56	26.48	0.4446
20MHz	50%,high	1880	QPSK	22.59	26.51	0.4477
20MHz	100%RB	1880	QPSK	22.61	26.53	0.4498
20MHz	1RBlow	1900	QPSK	23.67	27.59	0.5741
20MHz	1RBmid	1900	QPSK	23.6	27.52	0.5649
20MHz	1RBhigh	1900	QPSK	23.39	27.31	0.5383
20MHz	50%,low	1900	QPSK	22.62	26.54	0.4508
20MHz	50%RBmid	1900	QPSK	22.62	26.54	0.4508
20MHz	50%,high	1900	QPSK	22.6	26.52	0.4487
20MHz	100%RB	1900	QPSK	22.62	26.54	0.4508

**LTE Band 4:**

Bandwidth	RBsize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	EIRP(W)
1.4MHz	1RBlow	1710.7	QPSK	22.97	25.5	0.3548
1.4MHz	1RBmid	1710.7	QPSK	22.94	25.47	0.3524
1.4MHz	1RBhigh	1710.7	QPSK	23.02	25.55	0.3589
1.4MHz	50%,low	1710.7	QPSK	23.01	25.54	0.3581
1.4MHz	50%RBmid	1710.7	QPSK	22.99	25.52	0.3565
1.4MHz	50%,high	1710.7	QPSK	23.04	25.57	0.3606
1.4MHz	100%RB	1710.7	QPSK	22.02	24.55	0.2851
1.4MHz	1RBlow	1710.7	16QAM	22.16	24.69	0.2944
1.4MHz	1RBmid	1710.7	16QAM	22.24	24.77	0.2999
1.4MHz	1RBhigh	1710.7	16QAM	22.19	24.72	0.2965
1.4MHz	50%,low	1710.7	16QAM	23.05	25.58	0.3614
1.4MHz	50%RBmid	1710.7	16QAM	22.1	24.63	0.2904
1.4MHz	50%,high	1710.7	16QAM	23.04	25.57	0.3606
1.4MHz	100%RB	1710.7	16QAM	21.04	23.57	0.2275
1.4MHz	1RBlow	1732.5	QPSK	23.22	25.75	0.3758
1.4MHz	1RBmid	1732.5	QPSK	23.25	25.78	0.3784
1.4MHz	1RBhigh	1732.5	QPSK	23.24	25.77	0.3776
1.4MHz	50%,low	1732.5	QPSK	23.15	25.68	0.3698
1.4MHz	50%RBmid	1732.5	QPSK	23.17	25.7	0.3715
1.4MHz	50%,high	1732.5	QPSK	23.12	25.65	0.3673
1.4MHz	100%RB	1732.5	QPSK	22.27	24.8	0.3020
1.4MHz	1RBlow	1732.5	16QAM	22.29	24.82	0.3034
1.4MHz	1RBmid	1732.5	16QAM	22.41	24.94	0.3119
1.4MHz	1RBhigh	1732.5	16QAM	22.36	24.89	0.3083
1.4MHz	50%,low	1732.5	16QAM	23.14	25.67	0.3690
1.4MHz	50%RBmid	1732.5	16QAM	22.32	24.85	0.3055
1.4MHz	50%,high	1732.5	16QAM	23.12	25.65	0.3673
1.4MHz	100%RB	1732.5	16QAM	21.41	23.94	0.2477
1.4MHz	1RBlow	1754.3	QPSK	22.91	25.44	0.3499
1.4MHz	1RBmid	1754.3	QPSK	22.93	25.46	0.3516
1.4MHz	1RBhigh	1754.3	QPSK	22.96	25.49	0.3540
1.4MHz	50%,low	1754.3	QPSK	23.02	25.55	0.3589
1.4MHz	50%RBmid	1754.3	QPSK	22.93	25.46	0.3516
1.4MHz	50%,high	1754.3	QPSK	23.02	25.55	0.3589
1.4MHz	100%RB	1754.3	QPSK	22.04	24.57	0.2864
1.4MHz	1RBlow	1754.3	16QAM	22.11	24.64	0.2911
1.4MHz	1RBmid	1754.3	16QAM	22.21	24.74	0.2979
1.4MHz	1RBhigh	1754.3	16QAM	22.17	24.7	0.2951
1.4MHz	50%,low	1754.3	16QAM	22.93	25.46	0.3516
1.4MHz	50%RBmid	1754.3	16QAM	21.98	24.51	0.2825
1.4MHz	50%,high	1754.3	16QAM	22.94	25.47	0.3524
1.4MHz	100%RB	1754.3	16QAM	21.03	23.56	0.2270
3MHz	1RBlow	1711.5	QPSK	22.63	25.16	0.3281
3MHz	1RBmid	1711.5	QPSK	22.85	25.38	0.3451
3MHz	1RBhigh	1711.5	QPSK	22.73	25.26	0.3357
3MHz	50%,low	1711.5	QPSK	22.87	25.4	0.3467
3MHz	50%RBmid	1711.5	QPSK	21.92	24.45	0.2786
3MHz	50%,high	1711.5	QPSK	22.98	25.51	0.3556



3MHz	100%RB	1711.5	QPSK	21.92	24.45	0.2786
3MHz	1RBlow	1711.5	16QAM	22.1	24.63	0.2904
3MHz	1RBmid	1711.5	16QAM	22.27	24.8	0.3020
3MHz	1RBhigh	1711.5	16QAM	22.09	24.62	0.2897
3MHz	50%,low	1711.5	16QAM	22.92	25.45	0.3508
3MHz	50%RBmid	1711.5	16QAM	21.06	23.59	0.2286
3MHz	50%,high	1711.5	16QAM	22.92	25.45	0.3508
3MHz	100%RB	1711.5	16QAM	21	23.53	0.2254
3MHz	1RBlow	1732.5	QPSK	23.1	25.63	0.3656
3MHz	1RBmid	1732.5	QPSK	23.28	25.81	0.3811
3MHz	1RBhigh	1732.5	QPSK	23.15	25.68	0.3698
3MHz	50%,low	1732.5	QPSK	23.1	25.63	0.3656
3MHz	50%RBmid	1732.5	QPSK	22.31	24.84	0.3048
3MHz	50%,high	1732.5	QPSK	23.08	25.61	0.3639
3MHz	100%RB	1732.5	QPSK	22.24	24.77	0.2999
3MHz	1RBlow	1732.5	16QAM	22.19	24.72	0.2965
3MHz	1RBmid	1732.5	16QAM	22.42	24.95	0.3126
3MHz	1RBhigh	1732.5	16QAM	22.28	24.81	0.3027
3MHz	50%,low	1732.5	16QAM	23.07	25.6	0.3631
3MHz	50%RBmid	1732.5	16QAM	21.42	23.95	0.2483
3MHz	50%,high	1732.5	16QAM	23.07	25.6	0.3631
3MHz	100%RB	1732.5	16QAM	21.27	23.8	0.2399
3MHz	1RBlow	1753.5	QPSK	22.83	25.36	0.3436
3MHz	1RBmid	1753.5	QPSK	23	25.53	0.3573
3MHz	1RBhigh	1753.5	QPSK	22.84	25.37	0.3443
3MHz	50%,low	1753.5	QPSK	22.94	25.47	0.3524
3MHz	50%RBmid	1753.5	QPSK	22.05	24.58	0.2871
3MHz	50%,high	1753.5	QPSK	22.96	25.49	0.3540
3MHz	100%RB	1753.5	QPSK	21.98	24.51	0.2825
3MHz	1RBlow	1753.5	16QAM	21.86	24.39	0.2748
3MHz	1RBmid	1753.5	16QAM	22.09	24.62	0.2897
3MHz	1RBhigh	1753.5	16QAM	21.95	24.48	0.2805
3MHz	50%,low	1753.5	16QAM	22.86	25.39	0.3459
3MHz	50%RBmid	1753.5	16QAM	21.02	23.55	0.2265
3MHz	50%,high	1753.5	16QAM	22.86	25.39	0.3459
3MHz	100%RB	1753.5	16QAM	21.05	23.58	0.2280
5MHz	1RBlow	1712.5	QPSK	23.08	25.61	0.3639
5MHz	1RBmid	1712.5	QPSK	22.98	25.51	0.3556
5MHz	1RBhigh	1712.5	QPSK	22.92	25.45	0.3508
5MHz	50%,low	1712.5	QPSK	22.02	24.55	0.2851
5MHz	50%RBmid	1712.5	QPSK	22.04	24.57	0.2864
5MHz	50%,high	1712.5	QPSK	21.98	24.51	0.2825
5MHz	100%RB	1712.5	QPSK	21.97	24.5	0.2818
5MHz	1RBlow	1712.5	16QAM	21.94	24.47	0.2799
5MHz	1RBmid	1712.5	16QAM	21.95	24.48	0.2805
5MHz	1RBhigh	1712.5	16QAM	21.87	24.4	0.2754
5MHz	50%,low	1712.5	16QAM	21.11	23.64	0.2312
5MHz	50%RBmid	1712.5	16QAM	21.14	23.67	0.2328
5MHz	50%,high	1712.5	16QAM	21.12	23.65	0.2317
5MHz	100%RB	1712.5	16QAM	21.11	23.64	0.2312



5MHz	1RBlow	1732.5	QPSK	23.31	25.84	0.3837
5MHz	1RBmid	1732.5	QPSK	23.31	25.84	0.3837
5MHz	1RBhigh	1732.5	QPSK	23.33	25.86	0.3855
5MHz	50%,low	1732.5	QPSK	22.34	24.87	0.3069
5MHz	50%RBmid	1732.5	QPSK	22.35	24.88	0.3076
5MHz	50%,high	1732.5	QPSK	22.39	24.92	0.3105
5MHz	100%RB	1732.5	QPSK	22.33	24.86	0.3062
5MHz	1RBlow	1732.5	16QAM	22.43	24.96	0.3133
5MHz	1RBmid	1732.5	16QAM	22.48	25.01	0.3170
5MHz	1RBhigh	1732.5	16QAM	22.51	25.04	0.3192
5MHz	50%,low	1732.5	16QAM	21.41	23.94	0.2477
5MHz	50%RBmid	1732.5	16QAM	21.44	23.97	0.2495
5MHz	50%,high	1732.5	16QAM	21.48	24.01	0.2518
5MHz	100%RB	1732.5	16QAM	21.47	24	0.2512
5MHz	1RBlow	1752.5	QPSK	23.03	25.56	0.3597
5MHz	1RBmid	1752.5	QPSK	23.1	25.63	0.3656
5MHz	1RBhigh	1752.5	QPSK	23.07	25.6	0.3631
5MHz	50%,low	1752.5	QPSK	22.1	24.63	0.2904
5MHz	50%RBmid	1752.5	QPSK	22.16	24.69	0.2944
5MHz	50%,high	1752.5	QPSK	22.17	24.7	0.2951
5MHz	100%RB	1752.5	QPSK	22.11	24.64	0.2911
5MHz	1RBlow	1752.5	16QAM	22.44	24.97	0.3141
5MHz	1RBmid	1752.5	16QAM	22.52	25.05	0.3199
5MHz	1RBhigh	1752.5	16QAM	22.47	25	0.3162
5MHz	50%,low	1752.5	16QAM	21.15	23.68	0.2333
5MHz	50%RBmid	1752.5	16QAM	21.21	23.74	0.2366
5MHz	50%,high	1752.5	16QAM	21.23	23.76	0.2377
5MHz	100%RB	1752.5	16QAM	21.13	23.66	0.2323
10MHz	1RBlow	1715	QPSK	23.02	25.55	0.3589
10MHz	1RBmid	1715	QPSK	22.9	25.43	0.3491
10MHz	1RBhigh	1715	QPSK	22.88	25.41	0.3475
10MHz	50%,low	1715	QPSK	22.05	24.58	0.2871
10MHz	50%RBmid	1715	QPSK	22.02	24.55	0.2851
10MHz	50%,high	1715	QPSK	21.97	24.5	0.2818
10MHz	100%RB	1715	QPSK	21.99	24.52	0.2831
10MHz	1RBlow	1732.5	QPSK	23.26	25.79	0.3793
10MHz	1RBmid	1732.5	QPSK	23.4	25.93	0.3917
10MHz	1RBhigh	1732.5	QPSK	23.48	26.01	0.3990
10MHz	50%,low	1732.5	QPSK	22.38	24.91	0.3097
10MHz	50%RBmid	1732.5	QPSK	22.43	24.96	0.3133
10MHz	50%,high	1732.5	QPSK	22.49	25.02	0.3177
10MHz	100%RB	1732.5	QPSK	22.42	24.95	0.3126
10MHz	1RBlow	1750	QPSK	23.3	25.83	0.3828
10MHz	1RBmid	1750	QPSK	23.13	25.66	0.3681
10MHz	1RBhigh	1750	QPSK	23.2	25.73	0.3741
10MHz	50%,low	1750	QPSK	22.28	24.81	0.3027
10MHz	50%RBmid	1750	QPSK	22.2	24.73	0.2972
10MHz	50%,high	1750	QPSK	22.17	24.7	0.2951
10MHz	100%RB	1750	QPSK	22.25	24.78	0.3006
15MHz	1RBlow	1717.5	QPSK	22.92	25.45	0.3508



15MHz	1RBmid	1717.5	QPSK	22.87	25.4	0.3467
15MHz	1RBhigh	1717.5	QPSK	22.92	25.45	0.3508
15MHz	50%,low	1717.5	QPSK	22.04	24.57	0.2864
15MHz	50%RBmid	1717.5	QPSK	22.1	24.63	0.2904
15MHz	50%,high	1717.5	QPSK	22.13	24.66	0.2924
15MHz	100%RB	1717.5	QPSK	22.12	24.65	0.2917
15MHz	1RBlow	1732.5	QPSK	23.14	25.67	0.3690
15MHz	1RBmid	1732.5	QPSK	23.37	25.9	0.3890
15MHz	1RBhigh	1732.5	QPSK	23.49	26.02	0.3999
15MHz	50%,low	1732.5	QPSK	22.43	24.96	0.3133
15MHz	50%RBmid	1732.5	QPSK	22.56	25.09	0.3228
15MHz	50%,high	1732.5	QPSK	22.65	25.18	0.3296
15MHz	100%RB	1732.5	QPSK	22.53	25.06	0.3206
15MHz	1RBlow	1747.5	QPSK	23.56	26.09	0.4064
15MHz	1RBmid	1747.5	QPSK	23.55	26.08	0.4055
15MHz	1RBhigh	1747.5	QPSK	23.42	25.95	0.3936
15MHz	50%,low	1747.5	QPSK	22.59	25.12	0.3251
15MHz	50%RBmid	1747.5	QPSK	22.54	25.07	0.3214
15MHz	50%,high	1747.5	QPSK	22.47	25	0.3162
15MHz	100%RB	1747.5	QPSK	22.57	25.1	0.3236
20MHz	1RBlow	1720	QPSK	23.11	25.64	0.3664
20MHz	1RBmid	1720	QPSK	23.02	25.55	0.3589
20MHz	1RBhigh	1720	QPSK	23.14	25.67	0.3690
20MHz	50%,low	1720	QPSK	22.08	24.61	0.2891
20MHz	50%RBmid	1720	QPSK	22.06	24.59	0.2877
20MHz	50%,high	1720	QPSK	22.16	24.69	0.2944
20MHz	100%RB	1720	QPSK	22.08	24.61	0.2891
20MHz	1RBlow	1732.5	QPSK	23.19	25.72	0.3733
20MHz	1RBmid	1732.5	QPSK	23.46	25.99	0.3972
20MHz	1RBhigh	1732.5	QPSK	23.64	26.17	0.4140
20MHz	50%,low	1732.5	QPSK	22.44	24.97	0.3141
20MHz	50%RBmid	1732.5	QPSK	22.6	25.13	0.3258
20MHz	50%,high	1732.5	QPSK	22.69	25.22	0.3327
20MHz	100%RB	1732.5	QPSK	22.58	25.11	0.3243
20MHz	1RBlow	1745	QPSK	23.54	26.07	0.4046
20MHz	1RBmid	1745	QPSK	23.55	26.08	0.4055
20MHz	1RBhigh	1745	QPSK	23.43	25.96	0.3945
20MHz	50%,low	1745	QPSK	22.64	25.17	0.3289
20MHz	50%RBmid	1745	QPSK	22.64	25.17	0.3289
20MHz	50%,high	1745	QPSK	22.54	25.07	0.3214
20MHz	100%RB	1745	QPSK	22.63	25.16	0.3281



LTE Band 5:

Bandwidth	RBsize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	ERP(W)
1.4MHz	1RBlow	824.7	QPSK	23.77	24.31	0.2698
1.4MHz	1RBmid	824.7	QPSK	23.84	24.38	0.2742
1.4MHz	1RBhigh	824.7	QPSK	23.91	24.45	0.2786
1.4MHz	50%,low	824.7	QPSK	23.91	24.45	0.2786
1.4MHz	50%RBmid	824.7	QPSK	23.79	24.33	0.2710
1.4MHz	50%,high	824.7	QPSK	23.97	24.51	0.2825
1.4MHz	100%RB	824.7	QPSK	22.93	23.47	0.2223
1.4MHz	1RBlow	824.7	16QAM	23.03	23.57	0.2275
1.4MHz	1RBmid	824.7	16QAM	23.13	23.67	0.2328
1.4MHz	1RBhigh	824.7	16QAM	23.12	23.66	0.2323
1.4MHz	50%,low	824.7	16QAM	23.97	24.51	0.2825
1.4MHz	50%RBmid	824.7	16QAM	22.99	23.53	0.2254
1.4MHz	50%,high	824.7	16QAM	23.96	24.5	0.2818
1.4MHz	100%RB	824.7	16QAM	22.03	22.57	0.1807
1.4MHz	1RBlow	836.5	QPSK	23.65	24.19	0.2624
1.4MHz	1RBmid	836.5	QPSK	23.69	24.23	0.2649
1.4MHz	1RBhigh	836.5	QPSK	23.64	24.18	0.2618
1.4MHz	50%,low	836.5	QPSK	23.65	24.19	0.2624
1.4MHz	50%RBmid	836.5	QPSK	23.64	24.18	0.2618
1.4MHz	50%,high	836.5	QPSK	23.63	24.17	0.2612
1.4MHz	100%RB	836.5	QPSK	22.82	23.36	0.2168
1.4MHz	1RBlow	836.5	16QAM	22.88	23.42	0.2198
1.4MHz	1RBmid	836.5	16QAM	22.93	23.47	0.2223
1.4MHz	1RBhigh	836.5	16QAM	22.85	23.39	0.2183
1.4MHz	50%,low	836.5	16QAM	23.65	24.19	0.2624
1.4MHz	50%RBmid	836.5	16QAM	22.87	23.41	0.2193
1.4MHz	50%,high	836.5	16QAM	23.64	24.18	0.2618
1.4MHz	100%RB	836.5	16QAM	21.93	22.47	0.1766
1.4MHz	1RBlow	848.3	QPSK	23.66	24.2	0.2630
1.4MHz	1RBmid	848.3	QPSK	23.64	24.18	0.2618
1.4MHz	1RBhigh	848.3	QPSK	23.63	24.17	0.2612
1.4MHz	50%,low	848.3	QPSK	23.72	24.26	0.2667
1.4MHz	50%RBmid	848.3	QPSK	23.63	24.17	0.2612
1.4MHz	50%,high	848.3	QPSK	23.79	24.33	0.2710
1.4MHz	100%RB	848.3	QPSK	22.73	23.27	0.2123
1.4MHz	1RBlow	848.3	16QAM	22.78	23.32	0.2148
1.4MHz	1RBmid	848.3	16QAM	22.86	23.4	0.2188
1.4MHz	1RBhigh	848.3	16QAM	22.81	23.35	0.2163
1.4MHz	50%,low	848.3	16QAM	23.75	24.29	0.2685
1.4MHz	50%RBmid	848.3	16QAM	22.76	23.3	0.2138
1.4MHz	50%,high	848.3	16QAM	23.76	24.3	0.2692
1.4MHz	100%RB	848.3	16QAM	21.76	22.3	0.1698
3MHz	1RBlow	825.5	QPSK	23.43	23.97	0.2495
3MHz	1RBmid	825.5	QPSK	23.7	24.24	0.2655
3MHz	1RBhigh	825.5	QPSK	23.62	24.16	0.2606
3MHz	50%,low	825.5	QPSK	23.9	24.44	0.2780
3MHz	50%RBmid	825.5	QPSK	22.99	23.53	0.2254
3MHz	50%,high	825.5	QPSK	23.86	24.4	0.2754



3MHz	100%RB	825.5	QPSK	22.84	23.38	0.2178
3MHz	1RBlow	825.5	16QAM	22.89	23.43	0.2203
3MHz	1RBmid	825.5	16QAM	23.17	23.71	0.2350
3MHz	1RBhigh	825.5	16QAM	23.06	23.6	0.2291
3MHz	50%,low	825.5	16QAM	23.83	24.37	0.2735
3MHz	50%RBmid	825.5	16QAM	21.94	22.48	0.1770
3MHz	50%,high	825.5	16QAM	23.83	24.37	0.2735
3MHz	100%RB	825.5	16QAM	21.85	22.39	0.1734
3MHz	1RBlow	836.5	QPSK	23.6	24.14	0.2594
3MHz	1RBmid	836.5	QPSK	23.77	24.31	0.2698
3MHz	1RBhigh	836.5	QPSK	23.54	24.08	0.2559
3MHz	50%,low	836.5	QPSK	23.59	24.13	0.2588
3MHz	50%RBmid	836.5	QPSK	22.87	23.41	0.2193
3MHz	50%,high	836.5	QPSK	23.58	24.12	0.2582
3MHz	100%RB	836.5	QPSK	22.81	23.35	0.2163
3MHz	1RBlow	836.5	16QAM	22.83	23.37	0.2173
3MHz	1RBmid	836.5	16QAM	22.96	23.5	0.2239
3MHz	1RBhigh	836.5	16QAM	22.77	23.31	0.2143
3MHz	50%,low	836.5	16QAM	23.59	24.13	0.2588
3MHz	50%RBmid	836.5	16QAM	21.95	22.49	0.1774
3MHz	50%,high	836.5	16QAM	23.6	24.14	0.2594
3MHz	100%RB	836.5	16QAM	21.82	22.36	0.1722
3MHz	1RBlow	847.5	QPSK	23.64	24.18	0.2618
3MHz	1RBmid	847.5	QPSK	23.75	24.29	0.2685
3MHz	1RBhigh	847.5	QPSK	23.59	24.13	0.2588
3MHz	50%,low	847.5	QPSK	23.72	24.26	0.2667
3MHz	50%RBmid	847.5	QPSK	22.8	23.34	0.2158
3MHz	50%,high	847.5	QPSK	23.73	24.27	0.2673
3MHz	100%RB	847.5	QPSK	22.76	23.3	0.2138
3MHz	1RBlow	847.5	16QAM	22.75	23.29	0.2133
3MHz	1RBmid	847.5	16QAM	22.94	23.48	0.2228
3MHz	1RBhigh	847.5	16QAM	22.76	23.3	0.2138
3MHz	50%,low	847.5	16QAM	23.75	24.29	0.2685
3MHz	50%RBmid	847.5	16QAM	21.79	22.33	0.1710
3MHz	50%,high	847.5	16QAM	23.76	24.3	0.2692
3MHz	100%RB	847.5	16QAM	21.82	22.36	0.1722
5MHz	1RBlow	826.5	QPSK	23.86	24.4	0.2754
5MHz	1RBmid	826.5	QPSK	23.97	24.51	0.2825
5MHz	1RBhigh	826.5	QPSK	24.01	24.55	0.2851
5MHz	50%,low	826.5	QPSK	23.15	23.69	0.2339
5MHz	50%RBmid	826.5	QPSK	23.16	23.7	0.2344
5MHz	50%,high	826.5	QPSK	23.15	23.69	0.2339
5MHz	100%RB	826.5	QPSK	23.12	23.66	0.2323
5MHz	1RBlow	826.5	16QAM	22.96	23.5	0.2239
5MHz	1RBmid	826.5	16QAM	23.1	23.64	0.2312
5MHz	1RBhigh	826.5	16QAM	23.11	23.65	0.2317
5MHz	50%,low	826.5	16QAM	22.12	22.66	0.1845
5MHz	50%RBmid	826.5	16QAM	22.17	22.71	0.1866
5MHz	50%,high	826.5	16QAM	22.19	22.73	0.1875
5MHz	100%RB	826.5	16QAM	22.14	22.68	0.1854



5MHz	1RBlow	836.5	QPSK	23.85	24.39	0.2748
5MHz	1RBmid	836.5	QPSK	23.83	24.37	0.2735
5MHz	1RBhigh	836.5	QPSK	23.67	24.21	0.2636
5MHz	50%,low	836.5	QPSK	22.95	23.49	0.2234
5MHz	50%RBmid	836.5	QPSK	22.92	23.46	0.2218
5MHz	50%,high	836.5	QPSK	22.89	23.43	0.2203
5MHz	100%RB	836.5	QPSK	22.92	23.46	0.2218
5MHz	1RBlow	836.5	16QAM	23.11	23.65	0.2317
5MHz	1RBmid	836.5	16QAM	23.04	23.58	0.2280
5MHz	1RBhigh	836.5	16QAM	22.96	23.5	0.2239
5MHz	50%,low	836.5	16QAM	22	22.54	0.1795
5MHz	50%RBmid	836.5	16QAM	21.98	22.52	0.1786
5MHz	50%,high	836.5	16QAM	21.96	22.5	0.1778
5MHz	100%RB	836.5	16QAM	22.03	22.57	0.1807
5MHz	1RBlow	846.5	QPSK	23.86	24.4	0.2754
5MHz	1RBmid	846.5	QPSK	23.85	24.39	0.2748
5MHz	1RBhigh	846.5	QPSK	23.79	24.33	0.2710
5MHz	50%,low	846.5	QPSK	22.89	23.43	0.2203
5MHz	50%RBmid	846.5	QPSK	22.89	23.43	0.2203
5MHz	50%,high	846.5	QPSK	22.89	23.43	0.2203
5MHz	100%RB	846.5	QPSK	22.88	23.42	0.2198
5MHz	1RBlow	846.5	16QAM	23.16	23.7	0.2344
5MHz	1RBmid	846.5	16QAM	23.18	23.72	0.2355
5MHz	1RBhigh	846.5	16QAM	23.13	23.67	0.2328
5MHz	50%,low	846.5	16QAM	21.99	22.53	0.1791
5MHz	50%RBmid	846.5	16QAM	21.99	22.53	0.1791
5MHz	50%,high	846.5	16QAM	21.99	22.53	0.1791
5MHz	100%RB	846.5	16QAM	21.92	22.46	0.1762
10MHz	1RBlow	829	QPSK	23.85	24.39	0.2748
10MHz	1RBmid	829	QPSK	24.08	24.62	0.2897
10MHz	1RBhigh	829	QPSK	24.03	24.57	0.2864
10MHz	50%,low	829	QPSK	23.09	23.63	0.2307
10MHz	50%RBmid	829	QPSK	23.13	23.67	0.2328
10MHz	50%,high	829	QPSK	23.09	23.63	0.2307
10MHz	100%RB	829	QPSK	23.1	23.64	0.2312
10MHz	1RBlow	836.5	QPSK	24.01	24.55	0.2851
10MHz	1RBmid	836.5	QPSK	23.81	24.35	0.2723
10MHz	1RBhigh	836.5	QPSK	23.52	24.06	0.2547
10MHz	50%,low	836.5	QPSK	23.05	23.59	0.2286
10MHz	50%RBmid	836.5	QPSK	22.98	23.52	0.2249
10MHz	50%,high	836.5	QPSK	22.89	23.43	0.2203
10MHz	100%RB	836.5	QPSK	22.97	23.51	0.2244
10MHz	1RBlow	844	QPSK	23.91	24.45	0.2786
10MHz	1RBmid	844	QPSK	23.81	24.35	0.2723
10MHz	1RBhigh	844	QPSK	23.78	24.32	0.2704
10MHz	50%,low	844	QPSK	23	23.54	0.2259
10MHz	50%RBmid	844	QPSK	22.95	23.49	0.2234
10MHz	50%,high	844	QPSK	22.93	23.47	0.2223
10MHz	100%RB	844	QPSK	22.97	23.51	0.2244

**LTE Band 12:**

Bandwidth	RBsize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	ERP(W)
1.4MHz	1RBlow	699.7	QPSK	24.22	22.76	0.1888
1.4MHz	1RBmid	699.7	QPSK	24.25	22.79	0.1901
1.4MHz	1RBhigh	699.7	QPSK	24.25	22.79	0.1901
1.4MHz	50%,low	699.7	QPSK	24.41	22.95	0.1972
1.4MHz	50%RBmid	699.7	QPSK	24.4	22.94	0.1968
1.4MHz	50%,high	699.7	QPSK	24.37	22.91	0.1954
1.4MHz	100%RB	699.7	QPSK	23.55	22.09	0.1618
1.4MHz	1RBlow	699.7	16QAM	23.48	22.02	0.1592
1.4MHz	1RBmid	699.7	16QAM	23.66	22.2	0.1660
1.4MHz	1RBhigh	699.7	16QAM	23.54	22.08	0.1614
1.4MHz	50%,low	699.7	16QAM	24.41	22.95	0.1972
1.4MHz	50%RBmid	699.7	16QAM	23.56	22.1	0.1622
1.4MHz	50%,high	699.7	16QAM	24.33	22.87	0.1936
1.4MHz	100%RB	699.7	16QAM	22.61	21.15	0.1303
1.4MHz	1RBlow	707.5	QPSK	23.43	21.97	0.1574
1.4MHz	1RBmid	707.5	QPSK	23.53	22.07	0.1611
1.4MHz	1RBhigh	707.5	QPSK	23.62	22.16	0.1644
1.4MHz	50%,low	707.5	QPSK	23.6	22.14	0.1637
1.4MHz	50%RBmid	707.5	QPSK	23.48	22.02	0.1592
1.4MHz	50%,high	707.5	QPSK	23.59	22.13	0.1633
1.4MHz	100%RB	707.5	QPSK	22.58	21.12	0.1294
1.4MHz	1RBlow	707.5	16QAM	22.56	21.1	0.1288
1.4MHz	1RBmid	707.5	16QAM	22.78	21.32	0.1355
1.4MHz	1RBhigh	707.5	16QAM	22.77	21.31	0.1352
1.4MHz	50%,low	707.5	16QAM	23.62	22.16	0.1644
1.4MHz	50%RBmid	707.5	16QAM	22.63	21.17	0.1309
1.4MHz	50%,high	707.5	16QAM	23.6	22.14	0.1637
1.4MHz	100%RB	707.5	16QAM	21.6	20.14	0.1033
1.4MHz	1RBlow	715.3	QPSK	24.13	22.67	0.1849
1.4MHz	1RBmid	715.3	QPSK	23.99	22.53	0.1791
1.4MHz	1RBhigh	715.3	QPSK	23.94	22.48	0.1770
1.4MHz	50%,low	715.3	QPSK	24.12	22.66	0.1845
1.4MHz	50%RBmid	715.3	QPSK	24.06	22.6	0.1820
1.4MHz	50%,high	715.3	QPSK	24.1	22.64	0.1837
1.4MHz	100%RB	715.3	QPSK	23.09	21.63	0.1455
1.4MHz	1RBlow	715.3	16QAM	23.25	21.79	0.1510
1.4MHz	1RBmid	715.3	16QAM	23.27	21.81	0.1517
1.4MHz	1RBhigh	715.3	16QAM	23.16	21.7	0.1479
1.4MHz	50%,low	715.3	16QAM	24.15	22.69	0.1858
1.4MHz	50%RBmid	715.3	16QAM	23.2	21.74	0.1493
1.4MHz	50%,high	715.3	16QAM	24.14	22.68	0.1854
1.4MHz	100%RB	715.3	16QAM	22.16	20.7	0.1175
3MHz	1RBlow	700.5	QPSK	24.16	22.7	0.1862
3MHz	1RBmid	700.5	QPSK	24.59	23.13	0.2056
3MHz	1RBhigh	700.5	QPSK	24.21	22.75	0.1884
3MHz	50%,low	700.5	QPSK	24.5	23.04	0.2014
3MHz	50%RBmid	700.5	QPSK	23.53	22.07	0.1611
3MHz	50%,high	700.5	QPSK	24.48	23.02	0.2004



3MHz	100%RB	700.5	QPSK	23.42	21.96	0.1570
3MHz	1RBlow	700.5	16QAM	23.48	22.02	0.1592
3MHz	1RBmid	700.5	16QAM	23.91	22.45	0.1758
3MHz	1RBhigh	700.5	16QAM	23.65	22.19	0.1656
3MHz	50%,low	700.5	16QAM	24.44	22.98	0.1986
3MHz	50%RBmid	700.5	16QAM	22.76	21.3	0.1349
3MHz	50%,high	700.5	16QAM	24.46	23	0.1995
3MHz	100%RB	700.5	16QAM	22.68	21.22	0.1324
3MHz	1RBlow	707.5	QPSK	23.13	21.67	0.1469
3MHz	1RBmid	707.5	QPSK	23.54	22.08	0.1614
3MHz	1RBhigh	707.5	QPSK	23.49	22.03	0.1596
3MHz	50%,low	707.5	QPSK	23.26	21.8	0.1514
3MHz	50%RBmid	707.5	QPSK	22.51	21.05	0.1274
3MHz	50%,high	707.5	QPSK	23.26	21.8	0.1514
3MHz	100%RB	707.5	QPSK	22.41	20.95	0.1245
3MHz	1RBlow	707.5	16QAM	22.19	20.73	0.1183
3MHz	1RBmid	707.5	16QAM	22.66	21.2	0.1318
3MHz	1RBhigh	707.5	16QAM	22.56	21.1	0.1288
3MHz	50%,low	707.5	16QAM	23.22	21.76	0.1500
3MHz	50%RBmid	707.5	16QAM	21.6	20.14	0.1033
3MHz	50%,high	707.5	16QAM	23.27	21.81	0.1517
3MHz	100%RB	707.5	16QAM	21.42	19.96	0.0991
3MHz	1RBlow	714.5	QPSK	24.17	22.71	0.1866
3MHz	1RBmid	714.5	QPSK	24.09	22.63	0.1832
3MHz	1RBhigh	714.5	QPSK	23.78	22.32	0.1706
3MHz	50%,low	714.5	QPSK	24.18	22.72	0.1871
3MHz	50%RBmid	714.5	QPSK	23.17	21.71	0.1483
3MHz	50%,high	714.5	QPSK	24.2	22.74	0.1879
3MHz	100%RB	714.5	QPSK	23.19	21.73	0.1489
3MHz	1RBlow	714.5	16QAM	23.32	21.86	0.1535
3MHz	1RBmid	714.5	16QAM	23.25	21.79	0.1510
3MHz	1RBhigh	714.5	16QAM	22.95	21.49	0.1409
3MHz	50%,low	714.5	16QAM	24.11	22.65	0.1841
3MHz	50%RBmid	714.5	16QAM	22.18	20.72	0.1180
3MHz	50%,high	714.5	16QAM	24.11	22.65	0.1841
3MHz	100%RB	714.5	16QAM	22.23	20.77	0.1194
5MHz	1RBlow	701.5	QPSK	24.38	22.92	0.1959
5MHz	1RBmid	701.5	QPSK	24.53	23.07	0.2028
5MHz	1RBhigh	701.5	QPSK	24.06	22.6	0.1820
5MHz	50%,low	701.5	QPSK	23.6	22.14	0.1637
5MHz	50%RBmid	701.5	QPSK	23.57	22.11	0.1626
5MHz	50%,high	701.5	QPSK	23.38	21.92	0.1556
5MHz	100%RB	701.5	QPSK	23.57	22.11	0.1626
5MHz	1RBlow	701.5	16QAM	23.55	22.09	0.1618
5MHz	1RBmid	701.5	16QAM	23.55	22.09	0.1618
5MHz	1RBhigh	701.5	16QAM	23.14	21.68	0.1472
5MHz	50%,low	701.5	16QAM	22.76	21.3	0.1349
5MHz	50%RBmid	701.5	16QAM	22.77	21.31	0.1352
5MHz	50%,high	701.5	16QAM	22.6	21.14	0.1300
5MHz	100%RB	701.5	16QAM	22.67	21.21	0.1321



5MHz	1RBlow	707.5	QPSK	23.51	22.05	0.1603
5MHz	1RBmid	707.5	QPSK	23.65	22.19	0.1656
5MHz	1RBhigh	707.5	QPSK	23.83	22.37	0.1726
5MHz	50%,low	707.5	QPSK	22.45	20.99	0.1256
5MHz	50%RBmid	707.5	QPSK	22.55	21.09	0.1285
5MHz	50%,high	707.5	QPSK	22.76	21.3	0.1349
5MHz	100%RB	707.5	QPSK	22.61	21.15	0.1303
5MHz	1RBlow	707.5	16QAM	22.61	21.15	0.1303
5MHz	1RBmid	707.5	16QAM	22.8	21.34	0.1361
5MHz	1RBhigh	707.5	16QAM	23.14	21.68	0.1472
5MHz	50%,low	707.5	16QAM	21.5	20.04	0.1009
5MHz	50%RBmid	707.5	16QAM	21.62	20.16	0.1038
5MHz	50%,high	707.5	16QAM	21.8	20.34	0.1081
5MHz	100%RB	707.5	16QAM	21.71	20.25	0.1059
5MHz	1RBlow	713.5	QPSK	24.25	22.79	0.1901
5MHz	1RBmid	713.5	QPSK	24.36	22.9	0.1950
5MHz	1RBhigh	713.5	QPSK	24.04	22.58	0.1811
5MHz	50%,low	713.5	QPSK	23.45	21.99	0.1581
5MHz	50%RBmid	713.5	QPSK	23.38	21.92	0.1556
5MHz	50%,high	713.5	QPSK	23.27	21.81	0.1517
5MHz	100%RB	713.5	QPSK	23.29	21.83	0.1524
5MHz	1RBlow	713.5	16QAM	23.47	22.01	0.1589
5MHz	1RBmid	713.5	16QAM	23.65	22.19	0.1656
5MHz	1RBhigh	713.5	16QAM	23.33	21.87	0.1538
5MHz	50%,low	713.5	16QAM	22.48	21.02	0.1265
5MHz	50%RBmid	713.5	16QAM	22.52	21.06	0.1276
5MHz	50%,high	713.5	16QAM	22.43	20.97	0.1250
5MHz	100%RB	713.5	16QAM	22.41	20.95	0.1245
10MHz	1RBlow	704	QPSK	24.3	22.84	0.1923
10MHz	1RBmid	704	QPSK	23.7	22.24	0.1675
10MHz	1RBhigh	704	QPSK	23.75	22.29	0.1694
10MHz	50%,low	704	QPSK	23.3	21.84	0.1528
10MHz	50%RBmid	704	QPSK	22.89	21.43	0.1390
10MHz	50%,high	704	QPSK	22.75	21.29	0.1346
10MHz	100%RB	704	QPSK	23.05	21.59	0.1442
10MHz	1RBlow	707.5	QPSK	24.1	22.64	0.1837
10MHz	1RBmid	707.5	QPSK	23.68	22.22	0.1667
10MHz	1RBhigh	707.5	QPSK	24.13	22.67	0.1849
10MHz	50%,low	707.5	QPSK	22.69	21.23	0.1327
10MHz	50%RBmid	707.5	QPSK	22.72	21.26	0.1337
10MHz	50%,high	707.5	QPSK	23.08	21.62	0.1452
10MHz	100%RB	707.5	QPSK	23	21.54	0.1426
10MHz	1RBlow	711	QPSK	23.54	22.08	0.1614
10MHz	1RBmid	711	QPSK	24.21	22.75	0.1884
10MHz	1RBhigh	711	QPSK	24.11	22.65	0.1841
10MHz	50%,low	711	QPSK	23.09	21.63	0.1455
10MHz	50%RBmid	711	QPSK	23.3	21.84	0.1528
10MHz	50%,high	711	QPSK	23.38	21.92	0.1556
10MHz	100%RB	711	QPSK	23.25	21.79	0.1510



LTE Band 13:

Bandwidth	RBSize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	ERP(W)
5MHz	1RBlow	779.5	QPSK	22.7	22.69	0.1858
5MHz	1RBmid	779.5	QPSK	22.75	22.74	0.1879
5MHz	1RBhigh	779.5	QPSK	22.77	22.76	0.1888
5MHz	50%,low	779.5	QPSK	22.83	22.82	0.1914
5MHz	50%RBmid	779.5	QPSK	22.78	22.77	0.1892
5MHz	50%,high	779.5	QPSK	22.87	22.86	0.1932
5MHz	100%RB	779.5	QPSK	22.93	22.92	0.1959
5MHz	1RBlow	779.5	16QAM	22.84	22.83	0.1919
5MHz	1RBmid	779.5	16QAM	22.81	22.8	0.1905
5MHz	1RBhigh	779.5	16QAM	22.87	22.86	0.1932
5MHz	50%,low	779.5	16QAM	22.92	22.91	0.1954
5MHz	50%RBmid	779.5	16QAM	22.91	22.9	0.1950
5MHz	50%,high	779.5	16QAM	22.92	22.91	0.1954
5MHz	100%RB	779.5	16QAM	22.85	22.84	0.1923
5MHz	1RBlow	782	QPSK	23.18	23.17	0.2075
5MHz	1RBmid	782	QPSK	23.04	23.03	0.2009
5MHz	1RBhigh	782	QPSK	22.97	22.96	0.1977
5MHz	50%,low	782	QPSK	23.1	23.09	0.2037
5MHz	50%RBmid	782	QPSK	23.04	23.03	0.2009
5MHz	50%,high	782	QPSK	22.96	22.95	0.1972
5MHz	100%RB	782	QPSK	23.01	23	0.1995
5MHz	1RBlow	782	16QAM	22.64	22.63	0.1832
5MHz	1RBmid	782	16QAM	23.04	23.03	0.2009
5MHz	1RBhigh	782	16QAM	22.96	22.95	0.1972
5MHz	50%,low	782	16QAM	23.02	23.01	0.2000
5MHz	50%RBmid	782	16QAM	23.01	23	0.1995
5MHz	50%,high	782	16QAM	22.98	22.97	0.1982
5MHz	100%RB	782	16QAM	23.06	23.05	0.2018
5MHz	1RBlow	784.5	QPSK	23.1	23.09	0.2037
5MHz	1RBmid	784.5	QPSK	23.11	23.1	0.2042
5MHz	1RBhigh	784.5	QPSK	23.04	23.03	0.2009
5MHz	50%,low	784.5	QPSK	23	22.99	0.1991
5MHz	50%RBmid	784.5	QPSK	22.99	22.98	0.1986
5MHz	50%,high	784.5	QPSK	22.97	22.96	0.1977
5MHz	100%RB	784.5	QPSK	23.02	23.01	0.2000
5MHz	1RBlow	784.5	16QAM	22.69	22.68	0.1854
5MHz	1RBmid	784.5	16QAM	22.77	22.76	0.1888
5MHz	1RBhigh	784.5	16QAM	22.58	22.57	0.1807
5MHz	50%,low	784.5	16QAM	23.08	23.07	0.2028
5MHz	50%RBmid	784.5	16QAM	23.08	23.07	0.2028
5MHz	50%,high	784.5	16QAM	23.05	23.04	0.2014
5MHz	100%RB	784.5	16QAM	23	22.99	0.1991
10MHz	1RBlow	782	QPSK	23.23	23.22	0.2099
10MHz	1RBmid	782	QPSK	22.95	22.94	0.1968
10MHz	1RBhigh	782	QPSK	23.01	23	0.1995
10MHz	50%,low	782	QPSK	23.11	23.1	0.2042
10MHz	50%RBmid	782	QPSK	23.14	23.13	0.2056
10MHz	50%,high	782	QPSK	23.04	23.03	0.2009



10MHz	100%RB	782	QPSK	23.22	23.21	0.2094
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LTE Band 66:

Bandwidth	RBsize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	EIRP(W)
1.4MHz	1RBlow	1710.7	QPSK	23.21	25.74	0.3750
1.4MHz	1RBmid	1710.7	QPSK	23.1	25.63	0.3656
1.4MHz	1RBhigh	1710.7	QPSK	23.05	25.58	0.3614
1.4MHz	50%,low	1710.7	QPSK	23.13	25.66	0.3681
1.4MHz	50%RBmid	1710.7	QPSK	23	25.53	0.3573
1.4MHz	50%,high	1710.7	QPSK	23.15	25.68	0.3698
1.4MHz	100%RB	1710.7	QPSK	22.11	24.64	0.2911
1.4MHz	1RBlow	1710.7	16QAM	22.28	24.81	0.3027
1.4MHz	1RBmid	1710.7	16QAM	22.33	24.86	0.3062
1.4MHz	1RBhigh	1710.7	16QAM	22.28	24.81	0.3027
1.4MHz	50%,low	1710.7	16QAM	23.14	25.67	0.3690
1.4MHz	50%RBmid	1710.7	16QAM	22.2	24.73	0.2972
1.4MHz	50%,high	1710.7	16QAM	23.1	25.63	0.3656
1.4MHz	100%RB	1710.7	16QAM	21.17	23.7	0.2344
1.4MHz	1RBlow	1745	QPSK	23.53	26.06	0.4036
1.4MHz	1RBmid	1745	QPSK	23.49	26.02	0.3999
1.4MHz	1RBhigh	1745	QPSK	23.49	26.02	0.3999
1.4MHz	50%,low	1745	QPSK	23.45	25.98	0.3963
1.4MHz	50%RBmid	1745	QPSK	23.47	26	0.3981
1.4MHz	50%,high	1745	QPSK	23.43	25.96	0.3945
1.4MHz	100%RB	1745	QPSK	22.48	25.01	0.3170
1.4MHz	1RBlow	1745	16QAM	22.54	25.07	0.3214
1.4MHz	1RBmid	1745	16QAM	22.6	25.13	0.3258
1.4MHz	1RBhigh	1745	16QAM	22.55	25.08	0.3221
1.4MHz	50%,low	1745	16QAM	23.47	26	0.3981
1.4MHz	50%RBmid	1745	16QAM	22.54	25.07	0.3214
1.4MHz	50%,high	1745	16QAM	23.46	25.99	0.3972
1.4MHz	100%RB	1745	16QAM	21.65	24.18	0.2618
1.4MHz	1RBlow	1779.3	QPSK	23.22	25.75	0.3758
1.4MHz	1RBmid	1779.3	QPSK	23.13	25.66	0.3681
1.4MHz	1RBhigh	1779.3	QPSK	23.23	25.76	0.3767
1.4MHz	50%,low	1779.3	QPSK	23.31	25.84	0.3837
1.4MHz	50%RBmid	1779.3	QPSK	23.2	25.73	0.3741
1.4MHz	50%,high	1779.3	QPSK	23.29	25.82	0.3819
1.4MHz	100%RB	1779.3	QPSK	22.2	24.73	0.2972
1.4MHz	1RBlow	1779.3	16QAM	22.32	24.85	0.3055
1.4MHz	1RBmid	1779.3	16QAM	22.34	24.87	0.3069
1.4MHz	1RBhigh	1779.3	16QAM	22.27	24.8	0.3020
1.4MHz	50%,low	1779.3	16QAM	23.31	25.84	0.3837
1.4MHz	50%RBmid	1779.3	16QAM	22.25	24.78	0.3006
1.4MHz	50%,high	1779.3	16QAM	23.3	25.83	0.3828
1.4MHz	100%RB	1779.3	16QAM	21.31	23.84	0.2421
3MHz	1RBlow	1711.5	QPSK	22.8	25.33	0.3412
3MHz	1RBmid	1711.5	QPSK	22.94	25.47	0.3524
3MHz	1RBhigh	1711.5	QPSK	22.8	25.33	0.3412



3MHz	50%,low	1711.5	QPSK	22.95	25.48	0.3532
3MHz	50%RBmid	1711.5	QPSK	22.14	24.67	0.2931
3MHz	50%,high	1711.5	QPSK	23.03	25.56	0.3597
3MHz	100%RB	1711.5	QPSK	22.01	24.54	0.2844
3MHz	1RBlow	1711.5	16QAM	22.15	24.68	0.2938
3MHz	1RBmid	1711.5	16QAM	22.37	24.9	0.3090
3MHz	1RBhigh	1711.5	16QAM	22.16	24.69	0.2944
3MHz	50%,low	1711.5	16QAM	22.99	25.52	0.3565
3MHz	50%RBmid	1711.5	16QAM	21.18	23.71	0.2350
3MHz	50%,high	1711.5	16QAM	22.99	25.52	0.3565
3MHz	100%RB	1711.5	16QAM	21.1	23.63	0.2307
3MHz	1RBlow	1745	QPSK	23.36	25.89	0.3882
3MHz	1RBmid	1745	QPSK	23.49	26.02	0.3999
3MHz	1RBhigh	1745	QPSK	23.35	25.88	0.3873
3MHz	50%,low	1745	QPSK	23.32	25.85	0.3846
3MHz	50%RBmid	1745	QPSK	22.43	24.96	0.3133
3MHz	50%,high	1745	QPSK	23.32	25.85	0.3846
3MHz	100%RB	1745	QPSK	22.38	24.91	0.3097
3MHz	1RBlow	1745	16QAM	22.37	24.9	0.3090
3MHz	1RBmid	1745	16QAM	22.54	25.07	0.3214
3MHz	1RBhigh	1745	16QAM	22.39	24.92	0.3105
3MHz	50%,low	1745	16QAM	23.33	25.86	0.3855
3MHz	50%RBmid	1745	16QAM	21.58	24.11	0.2576
3MHz	50%,high	1745	16QAM	23.34	25.87	0.3864
3MHz	100%RB	1745	16QAM	21.43	23.96	0.2489
3MHz	1RBlow	1778.5	QPSK	23.09	25.62	0.3648
3MHz	1RBmid	1778.5	QPSK	23.23	25.76	0.3767
3MHz	1RBhigh	1778.5	QPSK	23.12	25.65	0.3673
3MHz	50%,low	1778.5	QPSK	23.21	25.74	0.3750
3MHz	50%RBmid	1778.5	QPSK	22.25	24.78	0.3006
3MHz	50%,high	1778.5	QPSK	23.21	25.74	0.3750
3MHz	100%RB	1778.5	QPSK	22.18	24.71	0.2958
3MHz	1RBlow	1778.5	16QAM	22.15	24.68	0.2938
3MHz	1RBmid	1778.5	16QAM	22.38	24.91	0.3097
3MHz	1RBhigh	1778.5	16QAM	22.19	24.72	0.2965
3MHz	50%,low	1778.5	16QAM	23.21	25.74	0.3750
3MHz	50%RBmid	1778.5	16QAM	21.3	23.83	0.2415
3MHz	50%,high	1778.5	16QAM	23.22	25.75	0.3758
3MHz	100%RB	1778.5	16QAM	21.32	23.85	0.2427
5MHz	1RBlow	1712.5	QPSK	23.15	25.68	0.3698
5MHz	1RBmid	1712.5	QPSK	23.2	25.73	0.3741
5MHz	1RBhigh	1712.5	QPSK	23.03	25.56	0.3597
5MHz	50%,low	1712.5	QPSK	22.19	24.72	0.2965
5MHz	50%RBmid	1712.5	QPSK	22.19	24.72	0.2965
5MHz	50%,high	1712.5	QPSK	22.15	24.68	0.2938
5MHz	100%RB	1712.5	QPSK	22.17	24.7	0.2951
5MHz	1RBlow	1712.5	16QAM	22.09	24.62	0.2897
5MHz	1RBmid	1712.5	16QAM	22.11	24.64	0.2911
5MHz	1RBhigh	1712.5	16QAM	22.04	24.57	0.2864
5MHz	50%,low	1712.5	16QAM	21.29	23.82	0.2410



5MHz	50%RBmid	1712.5	16QAM	21.3	23.83	0.2415
5MHz	50%,high	1712.5	16QAM	21.3	23.83	0.2415
5MHz	100%RB	1712.5	16QAM	21.27	23.8	0.2399
5MHz	1RBlow	1745	QPSK	23.66	26.19	0.4159
5MHz	1RBmid	1745	QPSK	23.62	26.15	0.4121
5MHz	1RBhigh	1745	QPSK	23.54	26.07	0.4046
5MHz	50%,low	1745	QPSK	22.56	25.09	0.3228
5MHz	50%RBmid	1745	QPSK	22.61	25.14	0.3266
5MHz	50%,high	1745	QPSK	22.71	25.24	0.3342
5MHz	100%RB	1745	QPSK	22.67	25.2	0.3311
5MHz	1RBlow	1745	16QAM	22.82	25.35	0.3428
5MHz	1RBmid	1745	16QAM	22.8	25.33	0.3412
5MHz	1RBhigh	1745	16QAM	22.77	25.3	0.3388
5MHz	50%,low	1745	16QAM	21.71	24.24	0.2655
5MHz	50%RBmid	1745	16QAM	21.67	24.2	0.2630
5MHz	50%,high	1745	16QAM	21.71	24.24	0.2655
5MHz	100%RB	1745	16QAM	21.73	24.26	0.2667
5MHz	1RBlow	1777.5	QPSK	23.26	25.79	0.3793
5MHz	1RBmid	1777.5	QPSK	23.41	25.94	0.3926
5MHz	1RBhigh	1777.5	QPSK	23.33	25.86	0.3855
5MHz	50%,low	1777.5	QPSK	22.27	24.8	0.3020
5MHz	50%RBmid	1777.5	QPSK	22.33	24.86	0.3062
5MHz	50%,high	1777.5	QPSK	22.36	24.89	0.3083
5MHz	100%RB	1777.5	QPSK	22.29	24.82	0.3034
5MHz	1RBlow	1777.5	16QAM	22.55	25.08	0.3221
5MHz	1RBmid	1777.5	16QAM	22.66	25.19	0.3304
5MHz	1RBhigh	1777.5	16QAM	22.58	25.11	0.3243
5MHz	50%,low	1777.5	16QAM	21.43	23.96	0.2489
5MHz	50%RBmid	1777.5	16QAM	21.49	24.02	0.2523
5MHz	50%,high	1777.5	16QAM	21.52	24.05	0.2541
5MHz	100%RB	1777.5	16QAM	21.42	23.95	0.2483
10MHz	1RBlow	1715	QPSK	23.07	25.6	0.3631
10MHz	1RBmid	1715	QPSK	23.08	25.61	0.3639
10MHz	1RBhigh	1715	QPSK	22.92	25.45	0.3508
10MHz	50%,low	1715	QPSK	22.33	24.86	0.3062
10MHz	50%RBmid	1715	QPSK	22.28	24.81	0.3027
10MHz	50%,high	1715	QPSK	22.18	24.71	0.2958
10MHz	100%RB	1715	QPSK	22.24	24.77	0.2999
10MHz	1RBlow	1745	QPSK	23.63	26.16	0.4130
10MHz	1RBmid	1745	QPSK	23.71	26.24	0.4207
10MHz	1RBhigh	1745	QPSK	23.61	26.14	0.4111
10MHz	50%,low	1745	QPSK	22.73	25.26	0.3357
10MHz	50%RBmid	1745	QPSK	22.74	25.27	0.3365
10MHz	50%,high	1745	QPSK	22.7	25.23	0.3334
10MHz	100%RB	1745	QPSK	22.73	25.26	0.3357
10MHz	1RBlow	1775	QPSK	23.34	25.87	0.3864
10MHz	1RBmid	1775	QPSK	23.3	25.83	0.3828
10MHz	1RBhigh	1775	QPSK	23.4	25.93	0.3917
10MHz	50%,low	1775	QPSK	22.39	24.92	0.3105
10MHz	50%RBmid	1775	QPSK	22.4	24.93	0.3112



10MHz	50%,high	1775	QPSK	22.46	24.99	0.3155
10MHz	100%RB	1775	QPSK	22.43	24.96	0.3133
15MHz	1RBlow	1717.5	QPSK	23.07	25.6	0.3631
15MHz	1RBmid	1717.5	QPSK	23.03	25.56	0.3597
15MHz	1RBhigh	1717.5	QPSK	22.94	25.47	0.3524
15MHz	50%,low	1717.5	QPSK	22.4	24.93	0.3112
15MHz	50%RBmid	1717.5	QPSK	22.29	24.82	0.3034
15MHz	50%,high	1717.5	QPSK	22.25	24.78	0.3006
15MHz	100%RB	1717.5	QPSK	22.29	24.82	0.3034
15MHz	1RBlow	1745	QPSK	23.63	26.16	0.4130
15MHz	1RBmid	1745	QPSK	23.7	26.23	0.4198
15MHz	1RBhigh	1745	QPSK	23.47	26	0.3981
15MHz	50%,low	1745	QPSK	22.74	25.27	0.3365
15MHz	50%RBmid	1745	QPSK	22.74	25.27	0.3365
15MHz	50%,high	1745	QPSK	22.68	25.21	0.3319
15MHz	100%RB	1745	QPSK	22.71	25.24	0.3342
15MHz	1RBlow	1772.5	QPSK	23.16	25.69	0.3707
15MHz	1RBmid	1772.5	QPSK	23.4	25.93	0.3917
15MHz	1RBhigh	1772.5	QPSK	23.48	26.01	0.3990
15MHz	50%,low	1772.5	QPSK	22.43	24.96	0.3133
15MHz	50%RBmid	1772.5	QPSK	22.53	25.06	0.3206
15MHz	50%,high	1772.5	QPSK	22.58	25.11	0.3243
15MHz	100%RB	1772.5	QPSK	22.5	25.03	0.3184
20MHz	1RBlow	1720	QPSK	23.33	25.86	0.3855
20MHz	1RBmid	1720	QPSK	23.12	25.65	0.3673
20MHz	1RBhigh	1720	QPSK	23.13	25.66	0.3681
20MHz	50%,low	1720	QPSK	22.29	24.82	0.3034
20MHz	50%RBmid	1720	QPSK	22.22	24.75	0.2985
20MHz	50%,high	1720	QPSK	22.22	24.75	0.2985
20MHz	100%RB	1720	QPSK	22.22	24.75	0.2985
20MHz	1RBlow	1745	QPSK	23.6	26.13	0.4102
20MHz	1RBmid	1745	QPSK	23.75	26.28	0.4246
20MHz	1RBhigh	1745	QPSK	23.58	26.11	0.4083
20MHz	50%,low	1745	QPSK	22.85	25.38	0.3451
20MHz	50%RBmid	1745	QPSK	22.86	25.39	0.3459
20MHz	50%,high	1745	QPSK	22.79	25.32	0.3404
20MHz	100%RB	1745	QPSK	22.84	25.37	0.3443
20MHz	1RBlow	1770	QPSK	23.3	25.83	0.3828
20MHz	1RBmid	1770	QPSK	23.47	26	0.3981
20MHz	1RBhigh	1770	QPSK	23.57	26.1	0.4074
20MHz	50%,low	1770	QPSK	22.34	24.87	0.3069
20MHz	50%RBmid	1770	QPSK	22.51	25.04	0.3192
20MHz	50%,high	1770	QPSK	22.6	25.13	0.3258
20MHz	100%RB	1770	QPSK	22.49	25.02	0.3177

**LTE Band 71:**

Bandwidth	RBsize/offset	Frequency(MHz)	Modulation	AvgPower(dBm)	EIRP Power	ERP(W)
5MHz	1RBlow	665.5	QPSK	23.57	21.99	0.1581
5MHz	1RBmid	665.5	QPSK	24.01	22.43	0.1750
5MHz	1RBhigh	665.5	QPSK	23.81	22.23	0.1671
5MHz	50%,low	665.5	QPSK	22.85	21.27	0.1340
5MHz	50%RBmid	665.5	QPSK	22.99	21.41	0.1384
5MHz	50%,high	665.5	QPSK	23.06	21.48	0.1406
5MHz	100%RB	665.5	QPSK	22.91	21.33	0.1358
5MHz	1RBlow	665.5	16QAM	22.63	21.05	0.1274
5MHz	1RBmid	665.5	16QAM	22.98	21.4	0.1380
5MHz	1RBhigh	665.5	16QAM	22.86	21.28	0.1343
5MHz	50%,low	665.5	16QAM	21.83	20.25	0.1059
5MHz	50%RBmid	665.5	16QAM	22.01	20.43	0.1104
5MHz	50%,high	665.5	16QAM	22.13	20.55	0.1135
5MHz	100%RB	665.5	16QAM	21.97	20.39	0.1094
5MHz	1RBlow	680.5	QPSK	23.51	21.93	0.1560
5MHz	1RBmid	680.5	QPSK	24.04	22.46	0.1762
5MHz	1RBhigh	680.5	QPSK	24.31	22.73	0.1875
5MHz	50%,low	680.5	QPSK	22.86	21.28	0.1343
5MHz	50%RBmid	680.5	QPSK	23.13	21.55	0.1429
5MHz	50%,high	680.5	QPSK	23.32	21.74	0.1493
5MHz	100%RB	680.5	QPSK	23.14	21.56	0.1432
5MHz	1RBlow	680.5	16QAM	22.69	21.11	0.1291
5MHz	1RBmid	680.5	16QAM	23.3	21.72	0.1486
5MHz	1RBhigh	680.5	16QAM	23.48	21.9	0.1549
5MHz	50%,low	680.5	16QAM	22.01	20.43	0.1104
5MHz	50%RBmid	680.5	16QAM	22.28	20.7	0.1175
5MHz	50%,high	680.5	16QAM	22.42	20.84	0.1213
5MHz	100%RB	680.5	16QAM	22.2	20.62	0.1153
5MHz	1RBlow	695.5	QPSK	24.09	22.51	0.1782
5MHz	1RBmid	695.5	QPSK	24.44	22.86	0.1932
5MHz	1RBhigh	695.5	QPSK	24.53	22.95	0.1972
5MHz	50%,low	695.5	QPSK	23.2	21.62	0.1452
5MHz	50%RBmid	695.5	QPSK	23.36	21.78	0.1507
5MHz	50%,high	695.5	QPSK	23.44	21.86	0.1535
5MHz	100%RB	695.5	QPSK	23.33	21.75	0.1496
5MHz	1RBlow	695.5	16QAM	23.34	21.76	0.1500
5MHz	1RBmid	695.5	16QAM	23.67	22.09	0.1618
5MHz	1RBhigh	695.5	16QAM	23.74	22.16	0.1644
5MHz	50%,low	695.5	16QAM	22.32	20.74	0.1186
5MHz	50%RBmid	695.5	16QAM	22.5	20.92	0.1236
5MHz	50%,high	695.5	16QAM	22.56	20.98	0.1253
5MHz	100%RB	695.5	16QAM	22.42	20.84	0.1213
10MHz	1RBlow	668	QPSK	23.52	21.94	0.1563
10MHz	1RBmid	668	QPSK	23.75	22.17	0.1648
10MHz	1RBhigh	668	QPSK	23.54	21.96	0.1570
10MHz	50%,low	668	QPSK	22.99	21.41	0.1384
10MHz	50%RBmid	668	QPSK	23.15	21.57	0.1435
10MHz	50%,high	668	QPSK	23.01	21.43	0.1390



10MHz	100%RB	668	QPSK	23.02	21.44	0.1393
10MHz	1RBlow	680.5	QPSK	23.4	21.82	0.1521
10MHz	1RBmid	680.5	QPSK	24.09	22.51	0.1782
10MHz	1RBhigh	680.5	QPSK	24.67	23.09	0.2037
10MHz	50%,low	680.5	QPSK	22.76	21.18	0.1312
10MHz	50%RBmid	680.5	QPSK	23.19	21.61	0.1449
10MHz	50%,high	680.5	QPSK	23.6	22.02	0.1592
10MHz	100%RB	680.5	QPSK	23.23	21.65	0.1462
10MHz	1RBlow	693	QPSK	24.12	22.54	0.1795
10MHz	1RBmid	693	QPSK	23.97	22.39	0.1734
10MHz	1RBhigh	693	QPSK	24.43	22.85	0.1928
10MHz	50%,low	693	QPSK	22.99	21.41	0.1384
10MHz	50%RBmid	693	QPSK	23.04	21.46	0.1400
10MHz	50%,high	693	QPSK	23.3	21.72	0.1486
10MHz	100%RB	693	QPSK	23.15	21.57	0.1435
15MHz	1RBlow	670.5	QPSK	23.53	21.95	0.1567
15MHz	1RBmid	670.5	QPSK	23.93	22.35	0.1718
15MHz	1RBhigh	670.5	QPSK	23.24	21.66	0.1466
15MHz	50%,low	670.5	QPSK	23.16	21.58	0.1439
15MHz	50%RBmid	670.5	QPSK	23.05	21.47	0.1403
15MHz	50%,high	670.5	QPSK	22.72	21.14	0.1300
15MHz	100%RB	670.5	QPSK	23.01	21.43	0.1390
15MHz	1RBlow	680.5	QPSK	23.57	21.99	0.1581
15MHz	1RBmid	680.5	QPSK	24.21	22.63	0.1832
15MHz	1RBhigh	680.5	QPSK	24.34	22.76	0.1888
15MHz	50%,low	680.5	QPSK	22.69	21.11	0.1291
15MHz	50%RBmid	680.5	QPSK	23.22	21.64	0.1459
15MHz	50%,high	680.5	QPSK	23.68	22.1	0.1622
15MHz	100%RB	680.5	QPSK	23.21	21.63	0.1455
15MHz	1RBlow	690.5	QPSK	24.68	23.1	0.2042
15MHz	1RBmid	690.5	QPSK	24.07	22.49	0.1774
15MHz	1RBhigh	690.5	QPSK	24.4	22.82	0.1914
15MHz	50%,low	690.5	QPSK	23.45	21.87	0.1538
15MHz	50%RBmid	690.5	QPSK	23.18	21.6	0.1445
15MHz	50%,high	690.5	QPSK	23.29	21.71	0.1483
15MHz	100%RB	690.5	QPSK	23.39	21.81	0.1517
20MHz	1RBlow	673	QPSK	23.54	21.96	0.1570
20MHz	1RBmid	673	QPSK	23.67	22.09	0.1618
20MHz	1RBhigh	673	QPSK	24.41	22.83	0.1919
20MHz	50%,low	673	QPSK	23.01	21.43	0.1390
20MHz	50%RBmid	673	QPSK	22.74	21.16	0.1306
20MHz	50%,high	673	QPSK	22.7	21.12	0.1294
20MHz	100%RB	673	QPSK	22.98	21.4	0.1380
20MHz	1RBlow	683	QPSK	23.49	21.91	0.1552
20MHz	1RBmid	683	QPSK	24.61	23.03	0.2009
20MHz	1RBhigh	683	QPSK	23.87	22.29	0.1694
20MHz	50%,low	683	QPSK	22.91	21.33	0.1358
20MHz	50%RBmid	683	QPSK	23.52	21.94	0.1563
20MHz	50%,high	683	QPSK	23.44	21.86	0.1535
20MHz	100%RB	683	QPSK	23.27	21.69	0.1476



20MHz	1RBlow	688	QPSK	23.85	22.27	0.1687
20MHz	1RBmid	688	QPSK	24.35	22.77	0.1892
20MHz	1RBhigh	688	QPSK	24.45	22.87	0.1936
20MHz	50%,low	688	QPSK	23.51	21.93	0.1560
20MHz	50%RBmid	688	QPSK	23.44	21.86	0.1535
20MHz	50%,high	688	QPSK	23.29	21.71	0.1483
20MHz	100%RB	688	QPSK	23.48	21.9	0.1549



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

Test Engineer :	Chris	Temperature :	21~26°C
		Relative Humidity :	50~53%

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)
Middle	3735	-44.55	-13	-31.55	-56.81	2.64	14.90	H
	5610	-54.68	-13	-41.68	-66.54	2.94	14.80	H
	7485	-50.03	-13	-37.03	-59.80	3.39	13.16	H
	3735	-47.29	-13	-34.29	-59.55	2.64	14.90	V
	5610	-55.40	-13	-42.40	-67.26	2.94	14.80	V
	7485	-50.27	-13	-37.27	-60.04	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)	ERP (dBm)	Limit (dBm)	Over Limit (dB)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	1664	-53.29	-13	-40.29	-60.26	1.58	10.70	H
	2496	-55.08	-13	-42.08	-63.33	2.102	12.50	H
	3328	-57.57	-13	-44.57	-66.46	2.856	13.90	H
	1664	-55.80	-13	-42.80	-62.77	1.58	10.70	V
	2496	-51.48	-13	-38.48	-59.73	2.10	12.50	V
	3328	-57.90	-13	-44.90	-66.79	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	-66.60	-13	-53.60	-73.57	1.58	10.70	H
	2112	-62.46	-13	-49.46	-70.71	2.102	12.50	H
	2808	-59.52	-13	-46.52	-68.41	2.856	13.90	H
	1408	-64.68	-13	-51.68	-71.65	1.58	10.70	V
	2112	-59.45	-13	-46.45	-67.70	2.10	12.50	V
	2808	-58.96	-13	-45.96	-67.85	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	-50.31	-42.15	-8.16	-52.94	1.09	5.87	H
	2336	-59.88	-13	-46.88	-62.28	1.37	5.92	H
	3120	-58.03	-13	-45.03	-61.92	1.64	7.68	H
	1560	-52.41	-42.15	-10.26	-55.04	1.09	5.87	V
	2336	-56.01	-13	-43.01	-58.41	1.37	5.92	V
	3120	-57.80	-13	-44.80	-61.69	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	-49.79	-13	-36.79	-52.42	1.09	5.87	H
	2328	-58.97	-13	-45.97	-61.37	1.37	5.92	H
	3112	-57.23	-13	-44.23	-61.12	1.64	7.68	H
	1552	-49.12	-13	-36.12	-51.75	1.09	5.87	V
	2328	-57.45	-13	-44.45	-59.85	1.37	5.92	V
	3112	-56.95	-13	-43.95	-60.84	1.64	7.68	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	3465	-53.07	-13	-40.07	-63.81	2.604	13.34	H
	5205	-54.94	-13	-41.94	-65.45	3.011	13.52	H
	6945	-53.13	-13	-40.13	-63.33	3.271	13.47	H
	3465	-52.88	-13	-39.88	-63.62	2.604	13.34	V
	5205	-55.07	-13	-42.07	-65.58	3.011	13.52	V
	6945	-50.39	-13	-37.39	-60.59	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	1344	-61.73	-13	-48.73	-63.48	1.02	4.92	H
	2016	-45.44	-13	-32.44	-47.41	1.27	5.39	H
	2688	-58.16	-13	-45.16	-61.09	1.49	6.57	H
	1344	-56.18	-13	-43.18	-57.93	1.02	4.92	V
	2016	-33.98	-13	-20.98	-35.95	1.27	5.39	V
	2688	-57.72	-13	-44.72	-60.65	1.49	6.57	V

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