



FCC RF Test Report

APPLICANT : Motorola Mobility LLC
EQUIPMENT : Mobile Cellular Phone
BRAND NAME : Motorola
MODEL NAME : XT2205-1, XT2205-2
FCC ID : IHDT56AE7
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(H), 27(F)
CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE)
TEST DATE(S) : Apr. 24, 2022 ~ May 17, 2022

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.

This report contains data that were produced under subcontract by Sporton International Inc. (Shenzhen).

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

Jason Jia

Approved by: Jason Jia



Sporton International Inc. (Kunshan)

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



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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG240834B	Rev. 01	Initial issue of report	Jun. 06, 2022



SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	-	Report Only	-
	§22.913(a)(5)	Effective Radiated Power (Band 5) (Band 26)	ERP < 7 Watt	PASS	-
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17)	ERP < 3 Watt		-
	§24.232(c)	Equivalent Isotropic Radiated Power (Band 2) (Band 25)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt		-
3.5	§24.232(d)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	-	Report Only	-
3.7	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2)(4) §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.8	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	-
3.9	§2.1055 §22.355	Frequency Stability Temperature & Voltage	< 2.5 ppm for Part 22	PASS	-
	§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 17) (Band 25) (Band 26) (Band 66)	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 22.54 dB at 1559.50 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

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.2 Manufacturer

Motorola Mobility LLC

222 W,Merchandise Mart Plaza, Chicago IL 60654 USA

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2205-1, XT2205-2
FCC ID	IHDT56AE7
IMEI Code	Conducted: 357910940017709 Radiation: 357910940014326
HW Version	DVT2
SW Version	S2ST32.48
EUT Stage	Identical Prototype

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 17 : 704 MHz ~ 716 MHz LTE Band 25 : 1850 MHz ~ 1915 MHz LTE Band 26 : 824 MHz ~ 849 MHz LTE Band 66 : 1710 MHz ~ 1780 MHz
Rx Frequency	LTE Band 2 : 1930 MHz ~ 1990 MHz LTE Band 4 : 2110 MHz ~ 2155 MHz LTE Band 5 : 869 MHz ~ 894 MHz LTE Band 12 : 729 MHz ~ 746 MHz LTE Band 13 : 746 MHz ~ 756 MHz LTE Band 17 : 734 MHz ~ 746 MHz LTE Band 25 : 1930 MHz ~ 1995 MHz LTE Band 26 : 869 MHz ~ 894 MHz LTE Band 66 : 2110 MHz ~ 2200 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz



	LTE Band 5 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13 : 5MHz / 10MHz LTE Band 17 : 5MHz / 10MHz LTE Band 25 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Ant. 0> LTE Band 2 : 22.71 dBm LTE Band 4 : 22.35 dBm LTE Band 5 : 23.00 dBm LTE Band 12 : 22.90 dBm LTE Band 13 : 22.53 dBm LTE Band 17 : 22.88 dBm LTE Band 25 : 22.91 dBm LTE Band 26 : 23.16 dBm LTE Band 66 : 23.15 dBm LTE Band 5B_CA : 23.41 dBm LTE Band 66B_CA : 23.82 dBm LTE Band 66C_CA : 23.69 dBm <Ant. 1> LTE Band 2 : 22.27 dBm LTE Band 4 : 21.65 dBm LTE Band 5 : 22.78 dBm LTE Band 12 : 23.36 dBm LTE Band 13 : 23.04 dBm LTE Band 17 : 23.06 dBm LTE Band 25 : 22.52 dBm LTE Band 26 : 23.02 dBm LTE Band 66 : 22.04 dBm LTE Band 5B_CA : 22.76 dBm LTE Band 66B_CA : 22.31 dBm LTE Band 66C_CA : 21.85 dBm
Antenna Type/Gain	<Ant. 0> IFA antenna LTE Band 2 : -4.2 dBi LTE Band 4 : -5.0 dBi LTE Band 5 : -7.4 dBi LTE Band 12 : -6.8 dBi LTE Band 13 : -7.5 dBi LTE Band 17 : -6.8 dBi LTE Band 25 : -4.2 dBi LTE Band 26 : -7.4 dBi LTE Band 66 : -5.0 dBi <Ant. 1> IFA antenna LTE Band 2 : -7.0 dBi LTE Band 4 : -7.0 dBi LTE Band 5 : -7.2 dBi LTE Band 12 : -7.5 dBi LTE Band 13 : -7.5 dBi LTE Band 17 : -7.5 dBi LTE Band 25 : -7.0 dBi LTE Band 26 : -7.2 dBi LTE Band 66 : -7.0 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM



Note: The maximum ERP/EIRP is calculated from max output power and max antenna gain, so only the maximum ERP/EIRP of Antenna 0 for LTE Band2/4/5/12/17/25/66/5B/66B/66C and Antenna 1 for LTE Band 13/26 are shown in the report.

1.5 Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	Motorola(Salom)	Model Name	MC-301
AC Adapter 2	Brand Name	Motorola(Acbel)	Model Name	MC-301
Battery	Brand Name	Motorola(ATL)	Model Name	NF50
USB Cable 1	Brand Name	Motorola(Saibao)	Model Name	SC18D13215
USB Cable 2	Brand Name	Motorola(Cabletech)	Model Name	SC18D13216
USB Cable 3	Brand Name	Motorola(Luxshare)	Model Name	SC18D13217

1.6 Modification of EUT

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

1.7 Maximum ERP/EIRP and Emission Designator

LTE Band 2		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1909.3	0.0731	1M09G7D	0.0594	1M09W7D
3	1851.5 ~ 1908.5	0.0723	2M72G7D	0.0587	2M72W7D
5	1852.5 ~ 1907.5	0.0733	4M49G7D	0.0589	4M50W7D
10	1855.0 ~ 1905.0	0.0733	9M07G7D	0.0592	9M07W7D
15	1857.5 ~ 1902.5	0.0723	13M5G7D	0.0575	13M4W7D
20	1860.0 ~ 1900.0	0.0743	18M3G7D	0.0592	18M4W7D
LTE Band 25		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1850.7 ~ 1914.3	0.0731	1M09G7D	0.0594	1M09W7D
3	1851.5 ~ 1913.5	0.0723	2M72G7D	0.0587	2M72W7D
5	1852.5 ~ 1912.5	0.0733	4M49G7D	0.0589	4M50W7D
10	1855.0 ~ 1910.0	0.0733	9M07G7D	0.0592	9M07W7D
15	1857.5 ~ 1907.5	0.0723	13M5G7D	0.0575	13M4W7D
20	1860.0 ~ 1905.0	0.0743	18M3G7D	0.0592	18M4W7D



LTE Band 4		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1754.3	0.0628	1M09G7D	0.0528	1M09W7D
3	1711.5 ~ 1753.5	0.0635	2M72G7D	0.0495	2M72W7D
5	1712.5 ~ 1752.5	0.0640	4M50G7D	0.0491	4M48W7D
10	1715.0 ~ 1750.0	0.0632	8M99G7D	0.0490	8M97W7D
15	1717.5 ~ 1747.5	0.0644	13M5G7D	0.0508	13M5W7D
20	1720.0 ~ 1745.0	0.0653	18M4G7D	0.0507	18M3W7D
LTE Band 5		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.0231	1M09G7D	0.0190	1M10W7D
3	825.5 ~ 847.5	0.0231	2M72G7D	0.0185	2M74W7D
5	826.5 ~ 846.5	0.0228	4M49G7D	0.0183	4M50W7D
10	829.0 ~ 844.0	0.0230	9M05G7D	0.0182	9M03W7D
LTE Band 12		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	699.7 ~ 715.3	0.0247	1M09G7D	0.0199	1M09W7D
3	700.5 ~ 714.5	0.0245	2M71G7D	0.0196	2M70W7D
5	701.5 ~ 713.5	0.0247	4M47G7D	0.0199	4M51W7D
10	704.0 ~ 711.0	0.0248	9M05G7D	0.0199	8M97W7D
LTE Band 13		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	779.5 ~ 784.5	0.0214	4M50G7D	0.0167	4M49W7D
10	782.0	0.0218	8M97G7D	0.0168	8M99W7D
LTE Band 17		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
5	706.5 ~ 713.5	0.0247	4M47G7D	0.0199	4M51W7D
10	709.0 ~ 711.0	0.0248	9M05G7D	0.0199	8M97W7D



LTE Band 26		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
1.4	824.7 ~ 848.3	0.0231	1M09G7D	0.0190	1M10W7D
3	825.5 ~ 847.5	0.0231	2M72G7D	0.0185	2M74W7D
5	826.5 ~ 846.5	0.0228	4M49G7D	0.0183	4M50W7D
10	829.0 ~ 844.0	0.0230	9M05G7D	0.0182	9M03W7D
15	831.5 ~ 841.5	0.0233	13M5G7D	0.0189	13M4W7D
CH26765	821.5	0.0230	13M4G7D	0.0182	13M4W7D
LTE Band 66		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
1.4	1710.7 ~ 1779.3	0.0628	1M09G7D	0.0528	1M09W7D
3	1711.5 ~ 1778.5	0.0635	2M72G7D	0.0495	2M72W7D
5	1712.5 ~ 1777.5	0.0640	4M50G7D	0.0491	4M48W7D
10	1715.0 ~ 1775.0	0.0632	8M99G7D	0.0490	8M97W7D
15	1717.5 ~ 1772.5	0.0644	13M5G7D	0.0508	13M5W7D
20	1720.0 ~ 1770.0	0.0653	18M4G7D	0.0507	18M3W7D



LTE Band 5B CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum ERP(W)	Emission Designator (99%OBW)	Maximum ERP(W)	Emission Designator (99%OBW)
3MHz+5MHz	0.0209	7M58G7D	0.0210	7M61W7D
5MHz+3MHz	0.0207	7M48G7D	0.0215	7M53W7D
5MHz+10MHz	0.0236	13M9G7D	0.0223	13M9W7D
10MHz+5MHz	0.0243	13M7G7D	0.0239	13M8W7D
10MHz+10MHz	0.0215	18M9G7D	0.0209	18M7W7D
LTE Band 66B CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+5MHz	0.0684	9M27G7D	0.0596	9M33W7D
5MHz+10MHz	0.0731	13M9G7D	0.0573	13M8W7D
5MHz+15MHz	0.0762	18M1G7D	0.0553	18M2W7D
10MHz+5MHz	0.0731	13M9G7D	0.0561	13M9W7D
10MHz+10MHz	0.0736	18M8G7D	0.0579	18M8W7D
15MHz+5MHz	0.0690	18M2G7D	0.0604	18M3W7D
LTE Band 66C CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)
5MHz+20MHz	0.0718	23M4G7D	0.0590	23M3W7D
10MHz+15MHz	0.0740	23M6G7D	0.0581	23M5W7D
10MHz+20MHz	0.0721	28M0G7D	0.0611	28M1W7D
15MHz+10MHz	0.0729	23M6G7D	0.0551	23M7W7D
15MHz+15MHz	0.0700	28M7G7D	0.0542	28M5W7D
15MHz+20MHz	0.0693	33M0G7D	0.0535	33M1W7D
20MHz+5MHz	0.0721	23M4G7D	0.0579	23M5W7D
20MHz+10MHz	0.0701	28M2G7D	0.0605	28M1W7D
20MHz+15MHz	0.0703	32M8G7D	0.0570	32M9W7D
20MHz+20MHz	0.0728	37M8G7D	0.0605	37M6W7D

Note:

1. LTE Band 26 overlaps the entire frequency range of LTE Band 5. Therefore, the test results provided in this report covers Band 5 and the portion of Band 26 subject to Part 22.
2. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
3. LTE Band 25 overlaps the entire frequency range of LTE Band 2. Therefore, the test results provided in this report covers Band 25 as well as Band 2.



4. LTE Band 12 overlaps the entire frequency range of LTE Band 17. Therefore, the test results provided in this report covers Band 12 as well as Band 17.

1.8 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 FAX : +86-512-57900958		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-KS	CN1257	314309

Sporton International Inc. (Shenzhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (Shenzhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City Guangdong Province China 518103 TEL: +86-755-33202398		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH01-SZ	CN1256	421272

Note: Test data subcontracted: Conducted test cases in section 4.4 of this report

1.9 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH01-SZ	AUDIX	E3	6.2009-8-24



1.10 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)
- ♦ ANSI C63.26-2015
- ♦ FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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



2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

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

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	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	v
	12	v	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	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	26	v	v	v	v	v	-	v	v	v	v	v	v	v	v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	12				v	-	-	v	v	v	v			v		v	
	13	-	-		v	-	-	v	v	v	v			v		v	
	25						v	v	v	v	v			v		v	
	26				v		-	v	v	v	v			v		v	
	66						v	v	v	v	v			v		v	
26dB and 99% Bandwidth	12	v	v	v	v	-	-	v	v					v		v	
	13	-	-	v	v	-	-	v	v					v		v	
	25	v	v	v	v	v	v	v	v					v		v	
	26	v	v	v	v	v	-	v	v					v		v	
	66	v	v	v	v	v	v	v	v					v		v	
Conducted Band Edge	12	v	v	v	v	-	-	v	v	v		v		v	v		v
	13	-	-	v	v	-	-	v	v	v		v		v	v		v
	25	v	v	v	v	v	v	v	v	v		v		v	v		v
	26	v	v	v	v	v	-	v	v	v		v		v	v		v
	66	v	v	v	v	v	v	v	v	v		v		v	v		v



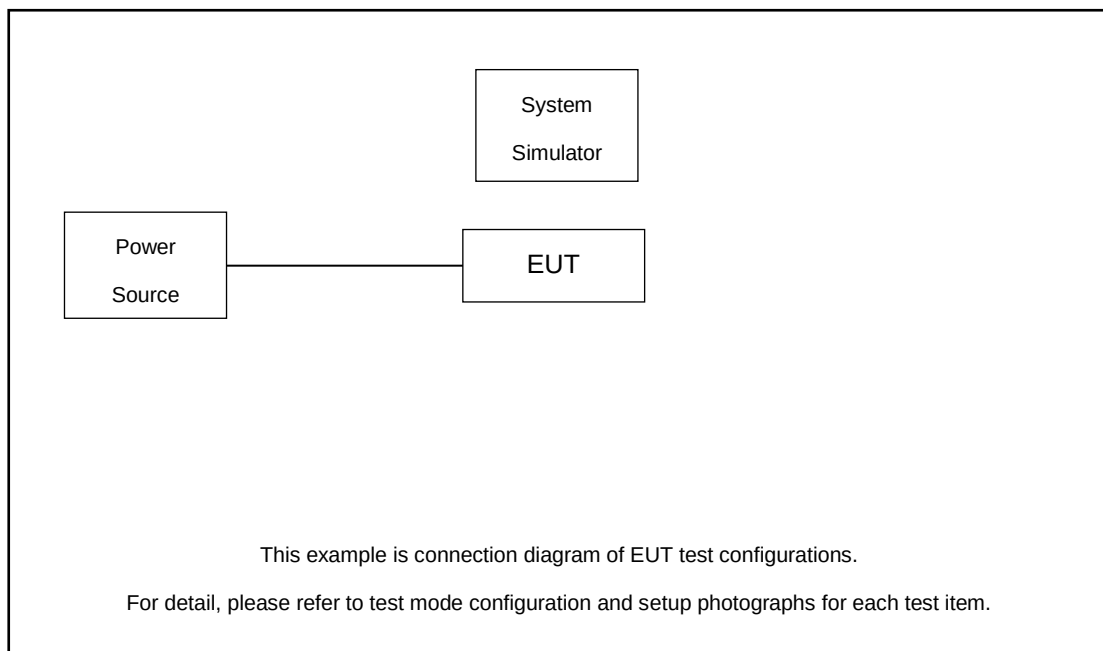
Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Conducted Spurious Emission	12	v	v	v	v	-	-	v				v			v	v	v
	13	-	-	v	v	-	-	v				v			v	v	v
	25	v	v	v	v	v	v	v				v			v	v	v
	26	v	v	v	v	v	-	v				v			v	v	v
	66	v	v	v	v	v	v	v				v			v	v	v
Frequency Stability	12				v	-	-	v						v		v	
	13	-	-		v	-	-	v						v		v	
	25				v			v						v		v	
	26				v		-	v						v		v	
	66				v			v						v		v	
E.R.P / E.I.R.P	12	v	v	v	v	-	-	v	v	v	v	v			v	v	v
	13	-	-	v	v	-	-	v	v	v	v	v			v	v	v
	25	v	v	v	v	v	v	v	v	v	v	v			v	v	v
	26	v	v	v	v	v	-	v	v	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	2	Worst Case													v	v	v
	4	Worst Case													v	v	v
	5	Worst Case													v	v	v
	12	Worst Case													v	v	v
	13	Worst Case													v	v	v
	17	Worst Case													v	v	v
	25	Worst Case													v	v	v
	26	Worst Case													v	v	v
	66	Worst Case													v	v	v
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "- " means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation.																



Test Items	Band	Bandwidth (MHz)								Modulation				RB #			Test Channel		
		10+10	15+5	5+15	10+5	5+10	5+5	5+3	3+5	QPSK	16QAM	64QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	5B_CA	v			v	v		v	v	v	v	v	v	v		v	v	v	v
	66B_CA	v	v	v	v	v	v			v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	5B_CA	v			v	v		v	v	v	v					v		v	
	66B_CA	v	v	v	v	v	v			v	v					v		v	
Conducted Band Edge	5B_CA	v			v	v		v	v	v	v	v	v	v		v	v	v	v
	66B_CA	v	v	v	v	v	v			v	v	v	v	v		v	v	v	v
Conducted Spurious Emission	5B_CA	v			v	v		v	v	v				v			v	v	v
	66B_CA	v	v	v	v	v	v			v				v			v	v	v
E.I.R.P.	5B_CA	v			v	v		v	v	v	v	v	v	v		v	v	v	v
	66B_CA	v	v	v	v	v	v			v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	5B_CA	Worst Case															v	v	v
	66B_CA	Worst Case															v	v	v
Note	1. The mark "v " means that this configuration is chosen for testing 2. The mark "- " means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation.																		

Test Items	Band	Bandwidth (MHz)										Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
26dB and 99% Bandwidth	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v					v		v	
Conducted Band Edge	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	66C_CA	v	v	v	v	v	v	v	v	v	v	v					v			v	v
E.I.R.P.	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v		v	v	v	v
Radiated Spurious Emission	66C_CA	Worst Case																	v	v	v
Note	1. The mark “v ” means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. All test items are based on engineering evaluation.																				

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 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 4.7 dB.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\ &= 4.7 \text{ (dB)} \end{aligned}$$



2.5 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 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905
15	Channel	26115	26340	26615
	Frequency	1857.5	1880	1907.5
10	Channel	26090	26340	26640
	Frequency	1855	1880	1910
5	Channel	26065	26340	26665
	Frequency	1852.5	1880	1912.5
3	Channel	26055	26340	26675
	Frequency	1851.5	1880	1913.5
1.4	Channel	26047	26340	26683
	Frequency	1850.7	1880	1914.3

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



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



LTE Band 5B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
3 + 5	PCC	Channel	20416	20501	20586
		Frequency	825.6	834.1	842.6
	SCC	Channel	20455	20540	20625
		Frequency	829.5	838.0	846.5
5 + 3	PCC	Channel	20425	20510	20595
		Frequency	826.5	835.0	843.5
	SCC	Channel	20464	20549	20634
		Frequency	830.4	838.9	847.4
5 + 10	PCC	Channel	20428	20478	20528
		Frequency	826.8	831.8	836.8
	SCC	Channel	20500	20550	20600
		Frequency	834	839	844
10 + 5	PCC	Channel	20450	20500	20550
		Frequency	829	834	839
	SCC	Channel	20522	20572	20622
		Frequency	836.2	841.2	846.2
10 + 10	PCC	Channel	20450	20476	20501
		Frequency	829	831.6	834.1
	SCC	Channel	20549	20575	20600
		Frequency	838.9	841.5	844



LTE Band 66C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
10 + 15	PCC	Channel	132025	132351	132477
		Frequency	1715.3	1747.9	1760.5
	SCC	Channel	132145	132471	132597
		Frequency	1727.3	1759.9	1772.5
15 + 10	PCC	Channel	132047	132373	132499
		Frequency	1717.5	1750.1	1762.7
	SCC	Channel	132167	132493	132619
		Frequency	1729.5	1762.1	1774.7
10 + 20	PCC	Channel	132027	132328	132428
		Frequency	1715.5	1745.6	1755.6
	SCC	Channel	132171	132472	132572
		Frequency	1729.9	1760	1770
20 + 10	PCC	Channel	132072	132373	132473
		Frequency	1720	1750.1	1760.1
	SCC	Channel	132216	132517	132617
		Frequency	1734.4	1764.5	1774.5
15 + 15	PCC	Channel	132047	132347	132447
		Frequency	1717.5	1747.5	1757.5
	SCC	Channel	132197	132497	132597
		Frequency	1732.5	1762.5	1772.5
15 + 20	PCC	Channel	132050	132325	132401
		Frequency	1717.8	1745.3	1752.9
	SCC	Channel	132221	132496	132572
		Frequency	1734.9	1762.4	1770
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720	1747.6	1755.1
	SCC	Channel	132243	132519	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720	1752.5	1765
	SCC	Channel	132189	132514	132639
		Frequency	1731.7	1764.2	1776.7
5 + 20	PCC	Channel	132005	132330	132455



20 + 20	SCC	Frequency	1713.3	1745.8	1758.3
		Channel	132122	132447	132572
	PCC	Frequency	1725	1757.5	1770
		Channel	132072	132323	132374
	SCC	Frequency	1720	1745.1	1750.2
		Channel	132270	132521	132572
	SCC	Frequency	1739.8	1764.9	1770
		Channel	132270	132521	132572

LTE Band 66B_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 5	PCC	Channel	131997	132398	132599
		Frequency	1712.5	1752.6	1772.7
	SCC	Channel	132045	132446	132647
		Frequency	1717.3	1757.4	1777.5
5 + 10	PCC	Channel	132000	132375	132550
		Frequency	1712.8	1750.3	1767.8
	SCC	Channel	132072	132447	132622
		Frequency	1720	1757.5	1775
10 + 5	PCC	Channel	132022	132397	132572
		Frequency	1715	1752.5	1770
	SCC	Channel	132094	132469	132644
		Frequency	1722.2	1759.7	1777.2
5 + 15	PCC	Channel	132002	132353	132504
		Frequency	1713	1748.1	1763.2
	SCC	Channel	132095	132446	132597
		Frequency	1722.3	1757.4	1772.5
15 + 5	PCC	Channel	132047	132398	132549
		Frequency	1717.5	1752.6	1767.7
	SCC	Channel	132140	132491	132642
		Frequency	1726.8	1761.9	1777
10 + 10	PCC	Channel	132022	132373	132523
		Frequency	1715	1750.1	1765.1
	SCC	Channel	132121	132472	132622
		Frequency	1724.9	1760	1775

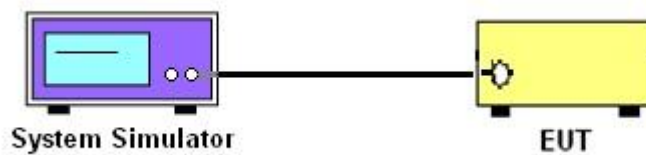
3 Conducted Test Items

3.1 Measuring Instruments

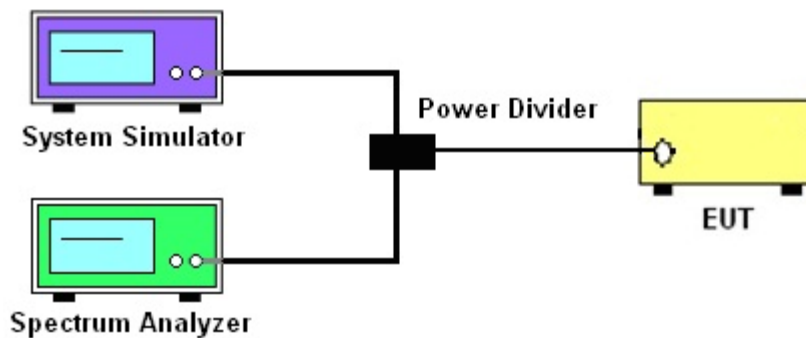
See list of measuring instruments of this test report.

3.2 Test Setup

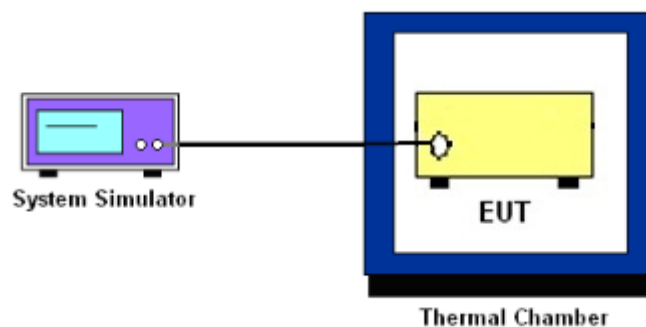
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



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.

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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.3.4 (CCDF).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
5. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.6.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.
(this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “-X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

22.917(a)

For operations in the 824 – 849 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100kHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

24.238 (a)

For operations in the 1850-1910 and 1930-1990 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1MHz bandwidth. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53 (c)

For operations in the 776-788 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least $65 + 10 \log_{10} p(\text{watts})$, dB, for mobile and portable equipment.

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10\log_{10}(P[\text{Watts}])$ dB below the transmitter power $P(\text{Watts})$ in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq$ 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

Example:

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

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

$= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB) = -13dBm.

9. When using the integration method, the starting frequency of the integration shall be centered at one-half of the RBW away from the band edge.

3.8 Conducted Spurious Emission

3.8.1 Description of Conducted Spurious Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5
2. The EUT was placed in a temperature chamber at $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

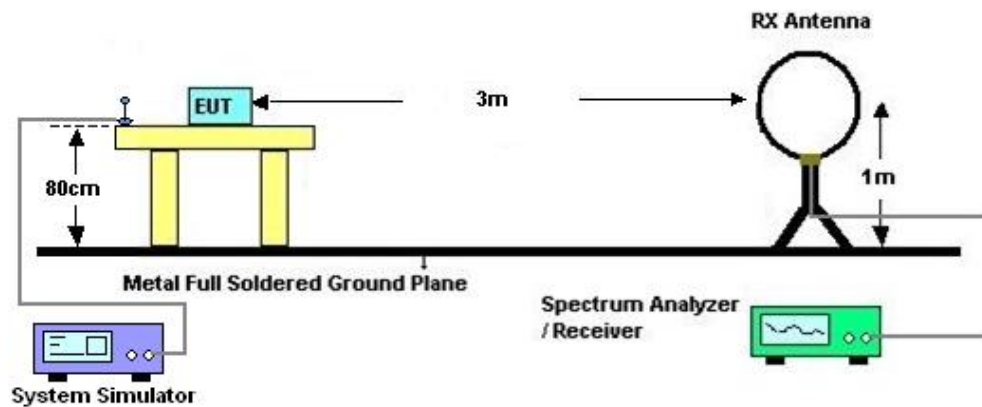
4 Radiated Test Items

4.1 Measuring Instruments

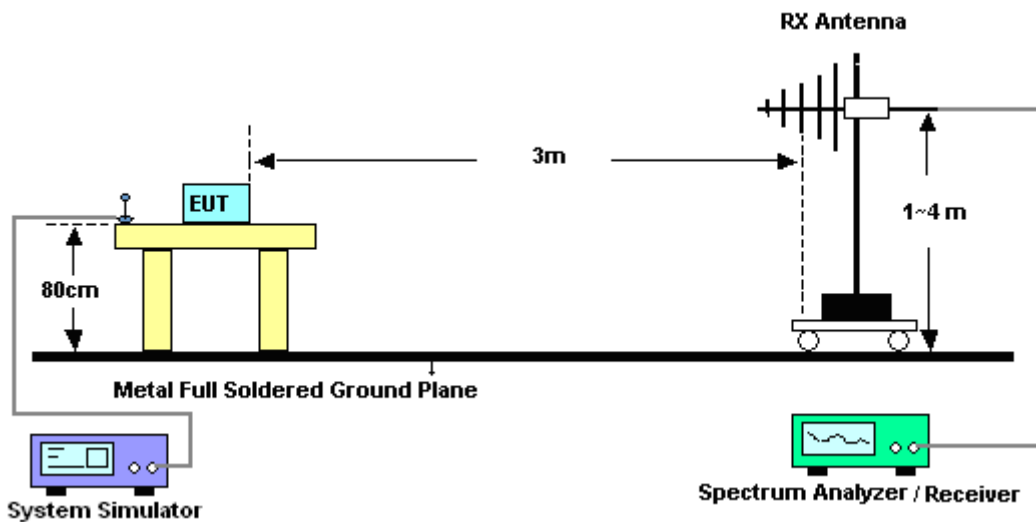
See list of measuring instruments of this test report.

4.2 Test Setup

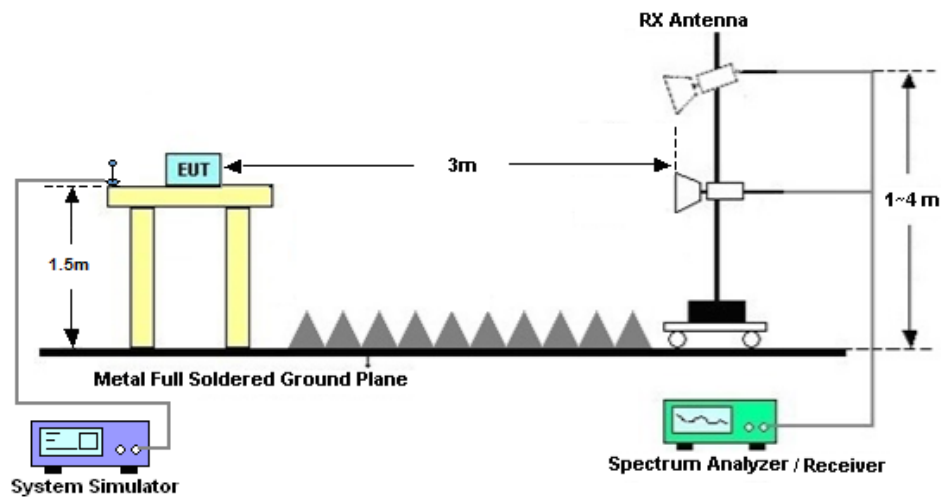
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

Please refer to Appendix B.



4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For LTE Band 13

For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth.

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

4.4.2 Test Procedures

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

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



5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Oct. 14, 2021	Apr. 24, 2022~ May 17, 2022	Oct. 13, 2022	Conducted (TH01-KS)
Power divider	STI	STI08-0055	-	0.5~40GHz	Aug. 26, 2021	Apr. 24, 2022~ May 17, 2022	Aug. 25, 2022	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 12, 2021	Apr. 24, 2022~ May 17, 2022	Jul. 11, 2022	Conducted (TH01-KS)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2021	May 10, 2022	Dec. 26, 2022	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jun. 22, 2020	May 10, 2022	Jun. 21, 2022	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5GHz	Oct. 22, 2021	May 10, 2022	Oct. 21, 2022	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Sep. 28, 2021	May 10, 2022	Sep. 27, 2022	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 18, 2021	May 10, 2022	Jul. 17, 2022	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18GHz-40GHz	Apr. 10, 2022	May 10, 2022	Apr. 09, 2023	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 06, 2022	May 10, 2022	Apr. 05, 2023	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P-R	1943528	1GHz~18GHz	Oct. 22, 2021	May 10, 2022	Oct. 21, 2022	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 13, 2021	May 10, 2022	Jul. 12, 2022	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	May 10, 2022	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 10, 2022	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 10, 2022	NCR	Radiation (03CH01-SZ)

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% ($U = 2Uc(y)$)	2.48dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.53dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.02dB
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Appendix A. Test Results of Conducted Test

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

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	22.61	22.71	22.67
20	QPSK	1	49	22.56	22.6	22.52
20	QPSK	1	99	22.48	22.58	22.51
20	QPSK	50	0	21.69	21.78	21.72
20	QPSK	50	24	21.56	21.57	21.49
20	QPSK	50	50	21.45	21.52	21.46
20	QPSK	100	0	21.59	21.72	21.68
20	16QAM	1	0	21.55	21.82	21.55
20	16QAM	1	49	21.6	21.51	21.56
20	16QAM	1	99	21.52	21.46	21.59
20	16QAM	50	0	20.73	20.63	20.62
20	16QAM	50	24	20.65	20.58	20.43
20	16QAM	50	50	20.52	20.47	20.42
20	16QAM	100	0	20.6	20.7	20.88
20	64QAM	1	0	20.48	20.85	20.47
20	64QAM	1	49	20.54	20.58	20.49
20	64QAM	1	99	20.57	20.49	20.57
20	64QAM	50	0	19.65	19.55	19.63
20	64QAM	50	24	19.76	19.59	19.52
20	64QAM	50	50	19.53	19.49	19.38
20	64QAM	100	0	19.59	19.61	19.79
20	256QAM	1	0	17.44	17.91	17.53
20	256QAM	1	49	17.5	17.65	17.53
20	256QAM	1	99	17.59	17.51	17.55
20	256QAM	50	0	17.71	17.57	17.68
20	256QAM	50	24	17.77	17.58	17.61
20	256QAM	50	50	17.57	17.49	17.45
20	256QAM	100	0	17.6	17.66	17.81
Channel				18675	18900	19125
Frequency (MHz)				1857.5	1880	1902.5
15	QPSK	1	0	22.62	22.61	22.54
15	QPSK	1	37	22.57	22.59	22.47
15	QPSK	1	74	22.43	22.48	22.5
15	QPSK	36	0	21.5	21.68	21.51
15	QPSK	36	20	21.56	21.36	21.34



15	QPSK	36	39	21.43	21.41	21.45
15	QPSK	75	0	21.48	21.61	21.56
15	16QAM	1	0	21.45	21.69	21.37
15	16QAM	1	37	21.61	21.3	21.37
15	16QAM	1	74	21.39	21.3	21.46
15	16QAM	36	0	20.61	20.55	20.42
15	16QAM	36	20	20.53	20.58	20.3
15	16QAM	36	39	20.37	20.42	20.3
15	16QAM	75	0	20.47	20.72	20.88
15	64QAM	1	0	20.48	20.64	20.48
15	64QAM	1	37	20.38	20.41	20.32
15	64QAM	1	74	20.48	20.39	20.49
15	64QAM	36	0	19.54	19.35	19.6
15	64QAM	36	20	19.58	19.54	19.53
15	64QAM	36	39	19.42	19.4	19.22
15	64QAM	75	0	19.61	19.54	19.68
15	256QAM	1	0	17.5	17.85	17.52
15	256QAM	1	37	17.59	17.53	17.56
15	256QAM	1	74	17.66	17.59	17.64
15	256QAM	36	0	17.6	17.5	17.68
15	256QAM	36	20	17.79	17.58	17.59
15	256QAM	36	39	17.51	17.55	17.44
15	256QAM	75	0	17.6	17.63	17.77
Channel				18650	18900	19150
Frequency (MHz)				1855	1880	1905
10	QPSK	1	0	22.62	22.56	22.68
10	QPSK	1	25	22.48	22.4	22.47
10	QPSK	1	49	22.33	22.59	22.51
10	QPSK	25	0	21.57	21.72	21.61
10	QPSK	25	12	21.43	21.43	21.3
10	QPSK	25	25	21.26	21.49	21.35
10	QPSK	50	0	21.51	21.7	21.61
10	16QAM	1	0	21.49	21.69	21.35
10	16QAM	1	25	21.55	21.4	21.4
10	16QAM	1	49	21.46	21.26	21.41
10	16QAM	25	0	20.62	20.58	20.49
10	16QAM	25	12	20.5	20.56	20.34
10	16QAM	25	25	20.49	20.38	20.35
10	16QAM	50	0	20.54	20.65	20.77
10	64QAM	1	0	20.29	20.65	20.25
10	64QAM	1	25	20.5	20.59	20.28
10	64QAM	1	49	20.54	20.51	20.37
10	64QAM	25	0	19.57	19.48	19.5
10	64QAM	25	12	19.72	19.58	19.35
10	64QAM	25	25	19.49	19.29	19.31
10	64QAM	50	0	19.45	19.45	19.6
10	256QAM	1	0	17.44	17.85	17.55
10	256QAM	1	25	17.5	17.64	17.44
10	256QAM	1	49	17.59	17.58	17.56
10	256QAM	25	0	17.64	17.53	17.71



10	256QAM	25	12	17.77	17.64	17.61
10	256QAM	25	25	17.54	17.53	17.34
10	256QAM	50	0	17.69	17.58	17.8
Channel				18625	18900	19175
Frequency (MHz)				1852.5	1880	1907.5
5	QPSK	1	0	22.47	22.65	22.47
5	QPSK	1	12	22.52	22.46	22.35
5	QPSK	1	24	22.49	22.51	22.49
5	QPSK	12	0	21.7	21.62	21.63
5	QPSK	12	7	21.57	21.43	21.37
5	QPSK	12	13	21.33	21.32	21.37
5	QPSK	25	0	21.55	21.69	21.53
5	16QAM	1	0	21.54	21.75	21.35
5	16QAM	1	12	21.49	21.39	21.42
5	16QAM	1	24	21.32	21.25	21.43
5	16QAM	12	0	20.52	20.61	20.46
5	16QAM	12	7	20.67	20.51	20.29
5	16QAM	12	13	20.31	20.41	20.32
5	16QAM	25	0	20.47	20.52	20.78
5	64QAM	1	0	20.29	20.68	20.26
5	64QAM	1	12	20.48	20.55	20.38
5	64QAM	1	24	20.37	20.3	20.41
5	64QAM	12	0	19.62	19.54	19.57
5	64QAM	12	7	19.57	19.55	19.43
5	64QAM	12	13	19.44	19.48	19.18
5	64QAM	25	0	19.58	19.55	19.64
5	256QAM	1	0	17.51	17.8	17.54
5	256QAM	1	12	17.49	17.62	17.52
5	256QAM	1	24	17.6	17.51	17.66
5	256QAM	12	0	17.69	17.65	17.63
5	256QAM	12	7	17.79	17.54	17.52
5	256QAM	12	13	17.58	17.54	17.43
5	256QAM	25	0	17.57	17.58	17.77
Channel				18615	18900	19185
Frequency (MHz)				1851.5	1880	1908.5
3	QPSK	1	0	22.55	22.69	22.6
3	QPSK	1	8	22.46	22.47	22.43
3	QPSK	1	14	22.28	22.48	22.5
3	QPSK	8	0	21.7	21.56	21.57
3	QPSK	8	4	21.51	21.48	21.39
3	QPSK	8	7	21.29	21.31	21.3
3	QPSK	15	0	21.46	21.52	21.52
3	16QAM	1	0	21.49	21.82	21.5
3	16QAM	1	8	21.45	21.53	21.5
3	16QAM	1	14	21.4	21.32	21.43
3	16QAM	8	0	20.54	20.42	20.45
3	16QAM	8	4	20.49	20.43	20.36
3	16QAM	8	7	20.39	20.27	20.3
3	16QAM	15	0	20.45	20.67	20.9
3	64QAM	1	0	20.46	20.81	20.47



3	64QAM	1	8	20.35	20.52	20.49
3	64QAM	1	14	20.36	20.43	20.5
3	64QAM	8	0	19.48	19.53	19.59
3	64QAM	8	4	19.72	19.55	19.53
3	64QAM	8	7	19.33	19.41	19.33
3	64QAM	15	0	19.54	19.61	19.67
3	256QAM	1	0	17.44	17.91	17.53
3	256QAM	1	8	17.51	17.68	17.44
3	256QAM	1	14	17.6	17.48	17.57
3	256QAM	8	0	17.62	17.55	17.62
3	256QAM	8	4	17.81	17.63	17.53
3	256QAM	8	7	17.53	17.47	17.46
3	256QAM	15	0	17.61	17.66	17.76
Channel				18607	18900	19193
Frequency (MHz)				1850.7	1880	1909.3
1.4	QPSK	1	0	22.57	22.62	22.48
1.4	QPSK	1	3	22.53	22.41	22.43
1.4	QPSK	1	5	22.58	22.61	22.68
1.4	QPSK	3	0	22.41	22.41	22.35
1.4	QPSK	3	1	22.27	22.54	22.33
1.4	QPSK	3	3	22.29	22.41	22.4
1.4	QPSK	6	0	21.54	21.64	21.51
1.4	16QAM	1	0	21.44	21.47	21.51
1.4	16QAM	1	3	21.5	21.71	21.47
1.4	16QAM	1	5	21.38	21.55	21.5
1.4	16QAM	3	0	21.51	21.77	21.44
1.4	16QAM	3	1	21.29	21.43	21.55
1.4	16QAM	3	3	21.33	21.58	21.53
1.4	16QAM	6	0	20.6	20.74	20.57
1.4	64QAM	1	0	20.43	20.58	20.58
1.4	64QAM	1	3	20.55	20.64	20.38
1.4	64QAM	1	5	20.47	20.66	20.55
1.4	64QAM	3	0	20.57	20.65	20.36
1.4	64QAM	3	1	20.22	20.53	20.63
1.4	64QAM	3	3	20.31	20.58	20.58
1.4	64QAM	6	0	19.48	19.52	19.5
1.4	256QAM	1	0	17.45	17.92	17.53
1.4	256QAM	1	3	17.6	17.57	17.54
1.4	256QAM	1	5	17.63	17.51	17.6
1.4	256QAM	3	0	17.73	17.57	17.62
1.4	256QAM	3	1	17.75	17.67	17.6
1.4	256QAM	3	3	17.58	17.44	17.37
1.4	256QAM	6	0	17.63	17.64	17.77



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	22.12	22.35	22.17
20	QPSK	1	49	22.03	22.26	22.18
20	QPSK	1	99	22.11	22.26	22.1
20	QPSK	50	0	21.23	21.36	21.19
20	QPSK	50	24	21.13	21.23	21.29
20	QPSK	50	50	21.11	21.18	21.18
20	QPSK	100	0	21.06	21.29	21.27
20	16QAM	1	0	21.23	21.24	21.24
20	16QAM	1	49	21.14	21.25	21.14
20	16QAM	1	99	21.22	21.29	21.09
20	16QAM	50	0	20.19	20.34	20.19
20	16QAM	50	24	20.15	20.38	20.19
20	16QAM	50	50	20.1	20.23	20.28
20	16QAM	100	0	20.07	20.29	20.21
20	64QAM	1	0	20.01	20.27	20.06
20	64QAM	1	49	20.11	20.21	20.19
20	64QAM	1	99	20.19	20.15	20.22
20	64QAM	50	0	19.1	19.26	19.13
20	64QAM	50	24	19.03	19.25	19.18
20	64QAM	50	50	19.01	19.27	19.08
20	64QAM	100	0	19.17	19.16	19.11
20	256QAM	1	0	17.07	17.32	17.07
20	256QAM	1	49	17.16	17.21	17.26
20	256QAM	1	99	17.19	17.11	17.27
20	256QAM	50	0	17.13	17.23	17.14
20	256QAM	50	24	17.08	17.25	17.25
20	256QAM	50	50	17.03	17.29	17.16
20	256QAM	100	0	17.17	17.2	17.17
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.11	22.19	22.09
15	QPSK	1	37	22.03	22.07	21.97
15	QPSK	1	74	22.09	22.15	21.9
15	QPSK	36	0	21.02	21.29	21.14
15	QPSK	36	20	21.12	21.18	21.23
15	QPSK	36	39	20.92	21.15	21.18
15	QPSK	75	0	20.91	21.12	21.22
15	16QAM	1	0	21.13	21.06	21.05
15	16QAM	1	37	21.01	21.2	21.1
15	16QAM	1	74	21.1	21.22	20.89
15	16QAM	36	0	20.12	20.34	20.16
15	16QAM	36	20	19.92	20.22	20.11
15	16QAM	36	39	20.11	20.08	20.15
15	16QAM	75	0	20.03	20.22	20.11



15	64QAM	1	0	19.82	20.06	20.02
15	64QAM	1	37	19.92	20.09	19.99
15	64QAM	1	74	20.2	19.95	20.01
15	64QAM	36	0	18.94	19.15	19.07
15	64QAM	36	20	18.94	19.23	19.02
15	64QAM	36	39	18.99	19.24	18.92
15	64QAM	75	0	18.98	19.15	18.88
15	256QAM	1	0	17.05	17.29	17.09
15	256QAM	1	37	17.11	17.19	17.16
15	256QAM	1	74	17.25	17.24	17.29
15	256QAM	36	0	17.18	17.31	17.1
15	256QAM	36	20	17.1	17.3	17.2
15	256QAM	36	39	17.07	17.36	17.13
15	256QAM	75	0	17.19	17.19	17.06
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.04	22.32	22.05
10	QPSK	1	25	21.94	22.27	21.99
10	QPSK	1	49	22.04	22.2	22.01
10	QPSK	25	0	21.11	21.23	21.04
10	QPSK	25	12	20.97	21.08	21.08
10	QPSK	25	25	21.09	21.12	20.97
10	QPSK	50	0	20.98	21.23	21.16
10	16QAM	1	0	21.15	21.16	21.21
10	16QAM	1	25	20.92	21.18	20.98
10	16QAM	1	49	21.22	21.21	21.1
10	16QAM	25	0	20.18	20.16	20.13
10	16QAM	25	12	19.88	20.21	20.08
10	16QAM	25	25	19.9	20.03	20.26
10	16QAM	50	0	19.95	20.08	20.09
10	64QAM	1	0	19.94	20.07	20.08
10	64QAM	1	25	19.98	20.17	20.13
10	64QAM	1	49	20.21	20.04	20
10	64QAM	25	0	18.99	19.06	19.07
10	64QAM	25	12	18.91	19.13	19.14
10	64QAM	25	25	18.89	19.29	19
10	64QAM	50	0	19.09	18.95	18.82
10	256QAM	1	0	17.11	17.23	17.1
10	256QAM	1	25	17.12	17.19	17.2
10	256QAM	1	49	17.22	17.13	17.32
10	256QAM	25	0	17.16	17.26	17.22
10	256QAM	25	12	16.99	17.31	17.22
10	256QAM	25	25	17.09	17.36	17.06
10	256QAM	50	0	17.26	17.12	17.13
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.13	22.27	22.16
5	QPSK	1	12	21.98	22.26	22.14
5	QPSK	1	24	22.1	22.16	21.98
5	QPSK	12	0	21.01	21.16	21.1



5	QPSK	12	7	21.09	21.05	21.3
5	QPSK	12	13	20.96	21.05	21.11
5	QPSK	25	0	21.02	21.28	21.12
5	16QAM	1	0	21.23	21.26	21.1
5	16QAM	1	12	20.99	21.08	21.11
5	16QAM	1	24	21.15	21.27	20.95
5	16QAM	12	0	20.13	20.25	20.08
5	16QAM	12	7	19.92	20.3	20
5	16QAM	12	13	19.99	20.2	20.18
5	16QAM	25	0	19.99	20.24	20.22
5	64QAM	1	0	19.85	20.13	19.87
5	64QAM	1	12	19.92	20.17	20.02
5	64QAM	1	24	20.17	19.97	20.05
5	64QAM	12	0	18.99	19.28	18.97
5	64QAM	12	7	19.03	19.08	18.97
5	64QAM	12	13	18.95	19.12	18.93
5	64QAM	25	0	19.05	18.96	18.86
5	256QAM	1	0	16.97	17.25	17.12
5	256QAM	1	12	17.09	17.21	17.17
5	256QAM	1	24	17.17	17.11	17.21
5	256QAM	12	0	17.07	17.33	17.15
5	256QAM	12	7	17.1	17.35	17.23
5	256QAM	12	13	17.09	17.22	17.11
5	256QAM	25	0	17.25	17.26	17.18
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.1	22.31	21.95
3	QPSK	1	8	22.02	22.27	21.97
3	QPSK	1	14	22.02	22.23	21.99
3	QPSK	8	0	21.21	21.15	21
3	QPSK	8	4	21.07	21.08	21.25
3	QPSK	8	7	21.05	21.08	21.17
3	QPSK	15	0	21.05	21.16	21.21
3	16QAM	1	0	21.12	21.04	21.05
3	16QAM	1	8	20.99	21.18	21.07
3	16QAM	1	14	21.16	21.08	21.08
3	16QAM	8	0	20.07	20.31	20
3	16QAM	8	4	19.89	20.23	20.12
3	16QAM	8	7	20.1	20.05	20.14
3	16QAM	15	0	20.02	20.24	20.06
3	64QAM	1	0	19.85	20.08	20.04
3	64QAM	1	8	19.9	20.15	20.1
3	64QAM	1	14	20.09	20.07	20.07
3	64QAM	8	0	18.88	19.25	19.08
3	64QAM	8	4	19.02	19.1	19.12
3	64QAM	8	7	18.83	19.06	19.07
3	64QAM	15	0	19.08	19.16	18.79
3	256QAM	1	0	17.01	17.27	17.04
3	256QAM	1	8	17.18	17.17	17.28
3	256QAM	1	14	17.21	17.22	17.18



3	256QAM	8	0	17.07	17.32	17.22
3	256QAM	8	4	17.11	17.28	17.19
3	256QAM	8	7	17	17.35	17.09
3	256QAM	15	0	17.2	17.15	17.06
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.1	22.11	21.9
1.4	QPSK	1	3	21.95	22.23	21.85
1.4	QPSK	1	5	21.89	22.15	21.93
1.4	QPSK	3	0	22.06	22.13	21.93
1.4	QPSK	3	1	21.85	22.14	21.93
1.4	QPSK	3	3	22.04	22.19	21.85
1.4	QPSK	6	0	21.07	21.19	20.86
1.4	16QAM	1	0	20.99	21.16	20.89
1.4	16QAM	1	3	20.98	21.25	20.93
1.4	16QAM	1	5	21.04	21.36	21.02
1.4	16QAM	3	0	21.03	21.31	21.06
1.4	16QAM	3	1	21.08	21.32	21.04
1.4	16QAM	3	3	20.98	21.27	20.91
1.4	16QAM	6	0	19.02	19.1	18.76
1.4	64QAM	1	0	19.07	19.22	18.91
1.4	64QAM	1	3	18.95	19.35	18.92
1.4	64QAM	1	5	19.07	19.37	19.11
1.4	64QAM	3	0	19.1	19.21	18.97
1.4	64QAM	3	1	19.1	19.25	19.16
1.4	64QAM	3	3	18.88	19.36	18.96
1.4	64QAM	6	0	18.1	18.31	18.01
1.4	256QAM	1	0	17	17.25	17.09
1.4	256QAM	1	3	17.21	17.21	17.19
1.4	256QAM	1	5	17.25	17.24	17.2
1.4	256QAM	3	0	17.15	17.23	17.09
1.4	256QAM	3	1	17.13	17.29	17.18
1.4	256QAM	3	3	17.05	17.25	17.1
1.4	256QAM	6	0	17.13	17.25	17.2



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	22.9	23	22.97
10	QPSK	1	25	22.9	22.83	22.88
10	QPSK	1	49	22.71	22.91	22.77
10	QPSK	25	0	21.94	22.14	21.89
10	QPSK	25	12	22.01	21.85	21.85
10	QPSK	25	25	21.68	21.94	21.85
10	QPSK	50	0	21.92	22.12	21.93
10	16QAM	1	0	21.95	21.93	22.01
10	16QAM	1	25	21.99	21.87	21.83
10	16QAM	1	49	21.75	21.79	21.74
10	16QAM	25	0	20.82	20.92	21.06
10	16QAM	25	12	20.88	20.77	20.88
10	16QAM	25	25	20.76	20.95	20.76
10	16QAM	50	0	20.86	20.9	20.97
10	64QAM	1	0	20.9	21.06	20.97
10	64QAM	1	25	20.92	20.85	20.85
10	64QAM	1	49	20.59	21	20.72
10	64QAM	25	0	19.93	20	19.93
10	64QAM	25	12	19.88	20.1	20.03
10	64QAM	25	25	20.02	19.84	19.93
10	64QAM	50	0	19.76	19.82	19.72
10	256QAM	1	0	17.89	18.07	17.97
10	256QAM	1	25	17.9	17.93	17.82
10	256QAM	1	49	17.67	18.1	17.83
10	256QAM	25	0	18.04	18.04	18.04
10	256QAM	25	12	17.88	18.09	18.13
10	256QAM	25	25	18.04	17.84	17.97
10	256QAM	50	0	17.87	17.88	17.8
Channel				20425	20525	20625
Frequency (MHz)				826.5	836.5	846.5
5	QPSK	1	0	22.69	22.79	22.8
5	QPSK	1	12	22.72	22.72	22.81
5	QPSK	1	24	22.7	22.88	22.62
5	QPSK	12	0	21.86	21.96	21.75
5	QPSK	12	7	21.88	21.73	21.75
5	QPSK	12	13	21.68	21.86	21.81
5	QPSK	25	0	21.86	22.1	21.94
5	16QAM	1	0	21.83	21.92	21.85
5	16QAM	1	12	21.81	21.66	21.63
5	16QAM	1	24	21.54	21.58	21.68
5	16QAM	12	0	20.83	20.94	20.94
5	16QAM	12	7	20.8	20.61	20.81
5	16QAM	12	13	20.66	20.8	20.62
5	16QAM	25	0	20.66	20.81	20.96



5	64QAM	1	0	20.81	20.84	20.77
5	64QAM	1	12	20.74	20.76	20.81
5	64QAM	1	24	20.58	20.96	20.69
5	64QAM	12	0	19.88	19.88	19.91
5	64QAM	12	7	19.85	19.89	19.91
5	64QAM	12	13	19.97	19.82	19.8
5	64QAM	25	0	19.55	19.81	19.52
5	256QAM	1	0	17.89	18.12	18.05
5	256QAM	1	12	18.03	17.97	17.86
5	256QAM	1	24	17.67	17.97	17.74
5	256QAM	12	0	17.94	18.06	17.92
5	256QAM	12	7	17.85	18.06	18.01
5	256QAM	12	13	18.05	17.97	17.91
5	256QAM	25	0	17.78	17.9	17.68
Channel				20415	20525	20635
Frequency (MHz)				825.5	836.5	847.5
3	QPSK	1	0	22.77	22.87	22.89
3	QPSK	1	8	22.91	22.81	22.84
3	QPSK	1	14	22.58	22.7	22.65
3	QPSK	8	0	21.82	21.99	21.86
3	QPSK	8	4	21.8	21.68	21.87
3	QPSK	8	7	21.56	21.82	21.74
3	QPSK	15	0	21.93	22.01	21.75
3	16QAM	1	0	21.86	21.73	21.9
3	16QAM	1	8	21.88	21.69	21.66
3	16QAM	1	14	21.76	21.75	21.65
3	16QAM	8	0	20.62	20.72	20.97
3	16QAM	8	4	20.67	20.6	20.73
3	16QAM	8	7	20.6	20.77	20.77
3	16QAM	15	0	20.69	20.75	20.85
3	64QAM	1	0	20.92	20.93	20.76
3	64QAM	1	8	20.71	20.79	20.81
3	64QAM	1	14	20.47	20.91	20.56
3	64QAM	8	0	19.86	19.94	19.94
3	64QAM	8	4	19.71	20.11	19.91
3	64QAM	8	7	19.91	19.8	19.91
3	64QAM	15	0	19.67	19.64	19.56
3	256QAM	1	0	17.88	18.04	17.93
3	256QAM	1	8	17.87	17.9	17.96
3	256QAM	1	14	17.68	18.07	17.69
3	256QAM	8	0	17.9	17.97	17.96
3	256QAM	8	4	17.97	18.15	18.13
3	256QAM	8	7	18.06	17.91	17.99
3	256QAM	15	0	17.8	17.86	17.78
Channel				20407	20525	20643
Frequency (MHz)				824.7	836.5	848.3
1.4	QPSK	1	0	22.72	22.93	22.87
1.4	QPSK	1	3	22.9	22.65	22.87
1.4	QPSK	1	5	22.72	22.79	22.73
1.4	QPSK	3	0	22.74	22.81	22.75



1.4	QPSK	3	1	22.69	22.77	22.67
1.4	QPSK	3	3	22.58	22.81	22.57
1.4	QPSK	6	0	21.81	22.09	22.03
1.4	16QAM	1	0	21.95	21.71	21.83
1.4	16QAM	1	3	21.75	22	21.85
1.4	16QAM	1	5	21.82	22	22.01
1.4	16QAM	3	0	21.99	22.06	22.08
1.4	16QAM	3	1	21.88	21.83	21.83
1.4	16QAM	3	3	21.79	21.97	21.82
1.4	16QAM	6	0	20.96	21.08	21.07
1.4	64QAM	1	0	20.82	20.89	20.87
1.4	64QAM	1	3	20.71	21.02	20.68
1.4	64QAM	1	5	20.87	20.9	20.88
1.4	64QAM	3	0	20.93	21	21.01
1.4	64QAM	3	1	20.84	20.83	20.93
1.4	64QAM	3	3	20.7	21.02	20.69
1.4	64QAM	6	0	19.81	20.08	19.89
1.4	256QAM	1	0	17.86	18.01	18.04
1.4	256QAM	1	3	18.02	17.97	17.84
1.4	256QAM	1	5	17.67	18.04	17.68
1.4	256QAM	3	0	18.01	18.03	17.94
1.4	256QAM	3	1	17.96	18.23	18
1.4	256QAM	3	3	18	17.92	17.99
1.4	256QAM	6	0	17.87	17.8	17.84



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	22.89	22.9	22.73
10	QPSK	1	25	22.67	22.86	22.57
10	QPSK	1	49	22.86	22.83	22.58
10	QPSK	25	0	21.75	21.96	21.62
10	QPSK	25	12	21.77	21.94	21.65
10	QPSK	25	25	21.91	21.72	21.66
10	QPSK	50	0	21.86	21.89	21.75
10	16QAM	1	0	21.88	21.93	21.72
10	16QAM	1	25	21.67	21.8	21.66
10	16QAM	1	49	21.81	21.92	21.61
10	16QAM	25	0	20.92	20.99	20.64
10	16QAM	25	12	20.69	20.86	20.63
10	16QAM	25	25	20.82	20.99	20.55
10	16QAM	50	0	21.07	20.92	20.65
10	64QAM	1	0	21.03	20.95	20.8
10	64QAM	1	25	20.74	20.8	20.73
10	64QAM	1	49	20.82	20.97	20.62
10	64QAM	25	0	19.93	20.04	19.7
10	64QAM	25	12	19.94	19.89	19.7
10	64QAM	25	25	19.63	19.79	19.71
10	64QAM	50	0	19.8	19.94	19.52
10	256QAM	1	0	18.01	17.95	17.89
10	256QAM	1	25	17.79	17.8	17.76
10	256QAM	1	49	17.84	17.97	17.72
10	256QAM	25	0	17.97	18.05	17.69
10	256QAM	25	12	18.01	17.85	17.72
10	256QAM	25	25	17.59	17.77	17.75
10	256QAM	50	0	17.77	17.94	17.57
Channel				23035	23095	23155
Frequency (MHz)				701.5	707.5	713.5
5	QPSK	1	0	22.83	22.71	22.63
5	QPSK	1	12	22.51	22.87	22.51
5	QPSK	1	24	22.75	22.62	22.37
5	QPSK	12	0	22.02	21.87	21.49
5	QPSK	12	7	21.7	21.91	21.48
5	QPSK	12	13	21.74	21.6	21.59
5	QPSK	25	0	21.74	21.95	21.6
5	16QAM	1	0	21.82	21.94	21.63
5	16QAM	1	12	21.65	21.78	21.64
5	16QAM	1	24	21.73	21.83	21.49
5	16QAM	12	0	20.73	20.99	20.64
5	16QAM	12	7	20.67	20.87	20.64
5	16QAM	12	13	20.76	20.91	20.52
5	16QAM	25	0	20.9	20.84	20.59



5	64QAM	1	0	20.82	20.95	20.61
5	64QAM	1	12	20.69	20.65	20.72
5	64QAM	1	24	20.73	20.88	20.41
5	64QAM	12	0	19.78	20.06	19.71
5	64QAM	12	7	19.94	19.85	19.62
5	64QAM	12	13	19.57	19.59	19.51
5	64QAM	25	0	19.73	19.89	19.34
5	256QAM	1	0	18.15	18.05	17.91
5	256QAM	1	12	17.79	17.79	17.69
5	256QAM	1	24	17.87	17.99	17.7
5	256QAM	12	0	17.93	18.02	17.72
5	256QAM	12	7	17.9	17.86	17.7
5	256QAM	12	13	17.63	17.82	17.7
5	256QAM	25	0	17.78	17.98	17.6
Channel				23025	23095	23165
Frequency (MHz)				700.5	707.5	714.5
3	QPSK	1	0	22.68	22.75	22.74
3	QPSK	1	8	22.61	22.73	22.4
3	QPSK	1	14	22.85	22.83	22.6
3	QPSK	8	0	21.79	21.72	21.61
3	QPSK	8	4	21.55	21.88	21.56
3	QPSK	8	7	21.73	21.7	21.45
3	QPSK	15	0	21.87	21.94	21.54
3	16QAM	1	0	21.74	21.88	21.7
3	16QAM	1	8	21.55	21.64	21.5
3	16QAM	1	14	21.78	21.72	21.52
3	16QAM	8	0	20.89	20.84	20.5
3	16QAM	8	4	20.51	20.83	20.6
3	16QAM	8	7	20.64	20.91	20.38
3	16QAM	15	0	21.06	20.79	20.62
3	64QAM	1	0	20.96	20.88	20.77
3	64QAM	1	8	20.75	20.77	20.72
3	64QAM	1	14	20.68	20.8	20.45
3	64QAM	8	0	19.92	20.03	19.61
3	64QAM	8	4	19.73	19.72	19.48
3	64QAM	8	7	19.64	19.77	19.69
3	64QAM	15	0	19.68	19.88	19.31
3	256QAM	1	0	18.1	18.03	17.86
3	256QAM	1	8	17.86	17.91	17.73
3	256QAM	1	14	17.86	18.08	17.65
3	256QAM	8	0	18.01	18.14	17.76
3	256QAM	8	4	17.89	17.99	17.79
3	256QAM	8	7	17.75	17.92	17.72
3	256QAM	15	0	17.85	17.97	17.51
Channel				23017	23095	23173
Frequency (MHz)				699.7	707.5	715.3
1.4	QPSK	1	0	22.88	22.77	22.58
1.4	QPSK	1	3	22.54	22.84	22.44
1.4	QPSK	1	5	22.84	22.73	22.41
1.4	QPSK	3	0	21.8	21.81	21.46



1.4	QPSK	3	1	21.79	21.96	21.6
1.4	QPSK	3	3	21.71	21.59	21.66
1.4	QPSK	6	0	21.74	22	21.71
1.4	16QAM	1	0	21.72	21.71	21.61
1.4	16QAM	1	3	21.52	21.62	21.48
1.4	16QAM	1	5	21.68	21.94	21.54
1.4	16QAM	3	0	20.94	20.89	20.61
1.4	16QAM	3	1	20.58	20.72	20.6
1.4	16QAM	3	3	20.79	20.85	20.44
1.4	16QAM	6	0	21.09	20.77	20.63
1.4	64QAM	1	0	20.9	20.88	20.72
1.4	64QAM	1	3	20.53	20.7	20.55
1.4	64QAM	1	5	20.73	20.89	20.56
1.4	64QAM	3	0	19.75	19.83	19.52
1.4	64QAM	3	1	19.74	19.91	19.55
1.4	64QAM	3	3	19.6	19.73	19.6
1.4	64QAM	6	0	19.69	19.75	19.49
1.4	256QAM	1	0	18.07	17.93	17.75
1.4	256QAM	1	3	17.85	17.88	17.68
1.4	256QAM	1	5	17.9	17.95	17.69
1.4	256QAM	3	0	17.89	18.17	17.8
1.4	256QAM	3	1	17.95	17.97	17.69
1.4	256QAM	3	3	17.6	17.78	17.83
1.4	256QAM	6	0	17.91	17.97	17.48



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		23.04	
10	QPSK	1	25		22.92	
10	QPSK	1	49		22.92	
10	QPSK	25	0		21.88	
10	QPSK	25	12		21.75	
10	QPSK	25	25		21.69	
10	QPSK	50	0		21.84	
10	16QAM	1	0		21.72	
10	16QAM	1	25		21.9	
10	16QAM	1	49		21.81	
10	16QAM	25	0		20.85	
10	16QAM	25	12		20.71	
10	16QAM	25	25		20.78	
10	16QAM	50	0		20.68	
10	64QAM	1	0		20.69	
10	64QAM	1	25		20.8	
10	64QAM	1	49		20.77	
10	64QAM	25	0		19.81	
10	64QAM	25	12		19.73	
10	64QAM	25	25		19.63	
10	64QAM	50	0		19.77	
10	256QAM	1	0		17.7	
10	256QAM	1	25		17.83	
10	256QAM	1	49		17.81	
10	256QAM	25	0		17.78	
10	256QAM	25	12		17.74	
10	256QAM	25	25		17.65	
10	256QAM	50	0		17.74	
Channel				23205	23230	23255
Frequency (MHz)				779.5	782	784.5
5	QPSK	1	0	22.88	22.95	22.91
5	QPSK	1	12	22.77	22.8	22.79
5	QPSK	1	24	22.81	22.78	22.87
5	QPSK	12	0	21.68	21.75	21.82
5	QPSK	12	7	21.56	21.66	21.76
5	QPSK	12	13	21.55	21.54	21.59
5	QPSK	25	0	21.7	21.67	21.73
5	16QAM	1	0	21.69	21.59	21.59
5	16QAM	1	12	21.89	21.82	21.82
5	16QAM	1	24	21.63	21.73	21.6
5	16QAM	12	0	20.82	20.81	20.73
5	16QAM	12	7	20.55	20.69	20.57
5	16QAM	12	13	20.66	20.71	20.66
5	16QAM	25	0	20.66	20.54	20.58



5	64QAM	1	0	20.65	20.7	20.63
5	64QAM	1	12	20.8	20.62	20.76
5	64QAM	1	24	20.73	20.71	20.57
5	64QAM	12	0	19.76	19.65	19.64
5	64QAM	12	7	19.58	19.72	19.62
5	64QAM	12	13	19.52	19.6	19.64
5	64QAM	25	0	19.65	19.57	19.67
5	256QAM	1	0	17.63	17.68	17.71
5	256QAM	1	12	17.91	17.74	17.79
5	256QAM	1	24	17.73	17.66	17.6
5	256QAM	12	0	17.72	17.65	17.7
5	256QAM	12	7	17.7	17.76	17.69
5	256QAM	12	13	17.62	17.6	17.72
5	256QAM	25	0	17.77	17.67	17.67



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	22.84	22.88	22.77
10	QPSK	1	25	22.77	22.82	22.65
10	QPSK	1	49	22.82	22.73	22.72
10	QPSK	25	0	21.8	21.91	21.67
10	QPSK	25	12	21.75	21.85	21.89
10	QPSK	25	25	21.87	21.87	21.7
10	QPSK	50	0	21.88	21.89	21.68
10	16QAM	1	0	21.94	21.86	21.72
10	16QAM	1	25	21.75	21.84	21.75
10	16QAM	1	49	21.86	21.94	21.77
10	16QAM	25	0	20.78	20.87	20.87
10	16QAM	25	12	20.94	20.82	20.83
10	16QAM	25	25	20.75	20.82	20.87
10	16QAM	50	0	20.9	20.93	20.73
10	64QAM	1	0	20.76	20.93	20.73
10	64QAM	1	25	20.73	20.81	20.8
10	64QAM	1	49	20.88	20.96	20.75
10	64QAM	25	0	19.84	19.9	19.84
10	64QAM	25	12	19.85	19.88	19.71
10	64QAM	25	25	19.74	19.84	19.88
10	64QAM	50	0	19.85	19.85	19.84
10	256QAM	1	0	17.83	17.94	17.81
10	256QAM	1	25	17.72	17.81	17.87
10	256QAM	1	49	17.88	18.03	17.85
10	256QAM	25	0	17.92	17.95	17.79
10	256QAM	25	12	17.86	17.94	17.84
10	256QAM	25	25	17.86	17.9	17.89
10	256QAM	50	0	17.87	17.87	17.83
Channel				23755	23790	23825
Frequency (MHz)				706.5	710	713.5
5	QPSK	1	0	22.6	22.85	22.53
5	QPSK	1	12	22.51	22.63	22.35
5	QPSK	1	24	22.54	22.43	22.44
5	QPSK	12	0	21.59	21.69	21.55
5	QPSK	12	7	21.53	21.49	21.67
5	QPSK	12	13	21.48	21.73	21.52
5	QPSK	25	0	21.64	21.7	21.53
5	16QAM	1	0	21.57	21.67	21.66
5	16QAM	1	12	21.58	21.73	21.59
5	16QAM	1	24	21.52	21.9	21.54
5	16QAM	12	0	20.65	20.64	20.86
5	16QAM	12	7	20.95	20.57	20.74
5	16QAM	12	13	20.66	20.58	20.52
5	16QAM	25	0	20.69	20.72	20.4



5	64QAM	1	0	20.52	20.88	20.53
5	64QAM	1	12	20.53	20.55	20.67
5	64QAM	1	24	20.59	20.82	20.63
5	64QAM	12	0	19.55	19.84	19.73
5	64QAM	12	7	19.6	19.73	19.56
5	64QAM	12	13	19.43	19.6	19.79
5	64QAM	25	0	19.59	19.79	19.58
5	256QAM	1	0	17.87	18.02	17.8
5	256QAM	1	12	17.71	17.87	17.78
5	256QAM	1	24	17.99	18.07	17.88
5	256QAM	12	0	17.84	18.03	17.89
5	256QAM	12	7	17.87	17.95	17.79
5	256QAM	12	13	17.75	17.88	17.89
5	256QAM	25	0	17.83	17.92	17.82



LTE Band 25:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				26140	26340	26590
Frequency (MHz)				1860	1880	1905
20	QPSK	1	0	22.85	22.91	22.84
20	QPSK	1	49	22.72	22.75	22.68
20	QPSK	1	99	22.78	22.71	22.63
20	QPSK	50	0	21.78	21.99	21.77
20	QPSK	50	24	21.74	21.77	21.67
20	QPSK	50	50	21.9	21.71	21.72
20	QPSK	100	0	21.88	21.92	21.86
20	16QAM	1	0	21.87	21.92	21.9
20	16QAM	1	49	21.77	21.77	21.79
20	16QAM	1	99	21.67	21.7	21.54
20	16QAM	50	0	20.75	20.96	20.72
20	16QAM	50	24	20.97	20.82	20.88
20	16QAM	50	50	20.85	20.83	20.75
20	16QAM	100	0	20.96	20.82	20.78
20	64QAM	1	0	20.88	20.89	20.76
20	64QAM	1	49	20.87	20.86	20.92
20	64QAM	1	99	20.76	20.89	20.89
20	64QAM	50	0	19.73	19.86	19.91
20	64QAM	50	24	19.79	19.91	19.75
20	64QAM	50	50	19.71	19.73	19.71
20	64QAM	100	0	19.77	19.82	19.56
20	256QAM	1	0	17.98	18	17.81
20	256QAM	1	49	17.87	17.9	17.99
20	256QAM	1	99	17.84	17.96	18.01
20	256QAM	50	0	17.78	17.85	17.96
20	256QAM	50	24	17.87	18.02	17.74
20	256QAM	50	50	17.72	17.71	17.68
20	256QAM	100	0	17.85	17.87	17.58
Channel				26115	26340	26615
Frequency (MHz)				1857.5	1880	1907.5
15	QPSK	1	0	22.77	22.71	22.66
15	QPSK	1	37	22.63	22.54	22.48
15	QPSK	1	74	22.79	22.63	22.5
15	QPSK	36	0	21.64	21.85	21.76
15	QPSK	36	20	21.67	21.56	21.51
15	QPSK	36	39	21.8	21.56	21.56
15	QPSK	75	0	21.71	21.73	21.74
15	16QAM	1	0	21.71	21.72	21.8
15	16QAM	1	37	21.63	21.62	21.73
15	16QAM	1	74	21.5	21.57	21.53
15	16QAM	36	0	20.65	20.9	20.66
15	16QAM	36	20	20.88	20.73	20.75
15	16QAM	36	39	20.72	20.72	20.75
15	16QAM	75	0	20.84	20.74	20.73



15	64QAM	1	0	20.66	20.82	20.62
15	64QAM	1	37	20.69	20.68	20.79
15	64QAM	1	74	20.74	20.85	20.82
15	64QAM	36	0	19.69	19.71	19.77
15	64QAM	36	20	19.68	19.69	19.56
15	64QAM	36	39	19.63	19.73	19.7
15	64QAM	75	0	19.61	19.63	19.34
15	256QAM	1	0	17.92	17.88	17.77
15	256QAM	1	37	17.95	17.9	17.94
15	256QAM	1	74	17.8	17.9	17.98
15	256QAM	36	0	17.68	17.84	17.92
15	256QAM	36	20	17.75	18	17.78
15	256QAM	36	39	17.83	17.82	17.74
15	256QAM	75	0	17.85	17.9	17.54
Channel				26090	26340	26640
Frequency (MHz)				1855	1880	1910
10	QPSK	1	0	22.7	22.76	22.85
10	QPSK	1	25	22.58	22.55	22.5
10	QPSK	1	49	22.63	22.69	22.57
10	QPSK	25	0	21.76	21.81	21.76
10	QPSK	25	12	21.65	21.78	21.57
10	QPSK	25	25	21.85	21.53	21.54
10	QPSK	50	0	21.85	21.74	21.77
10	16QAM	1	0	21.76	21.92	21.9
10	16QAM	1	25	21.59	21.56	21.69
10	16QAM	1	49	21.45	21.49	21.55
10	16QAM	25	0	20.58	20.75	20.62
10	16QAM	25	12	20.76	20.75	20.68
10	16QAM	25	25	20.82	20.85	20.64
10	16QAM	50	0	20.92	20.67	20.72
10	64QAM	1	0	20.77	20.71	20.6
10	64QAM	1	25	20.83	20.69	20.7
10	64QAM	1	49	20.72	20.82	20.81
10	64QAM	25	0	19.63	19.78	19.89
10	64QAM	25	12	19.58	19.75	19.69
10	64QAM	25	25	19.71	19.62	19.49
10	64QAM	50	0	19.65	19.66	19.39
10	256QAM	1	0	17.91	17.96	17.74
10	256QAM	1	25	17.87	17.98	17.98
10	256QAM	1	49	17.83	17.91	17.9
10	256QAM	25	0	17.86	17.95	17.97
10	256QAM	25	12	17.8	17.96	17.79
10	256QAM	25	25	17.78	17.69	17.69
10	256QAM	50	0	17.82	17.93	17.53
Channel				26065	26340	26665
Frequency (MHz)				1852.5	1880	1912.5
5	QPSK	1	0	22.8	22.85	22.83
5	QPSK	1	12	22.53	22.53	22.55
5	QPSK	1	24	22.71	22.49	22.48
5	QPSK	12	0	21.71	21.86	21.75



5	QPSK	12	7	21.63	21.71	21.52
5	QPSK	12	13	21.88	21.56	21.52
5	QPSK	25	0	21.73	21.83	21.88
5	16QAM	1	0	21.8	21.9	21.77
5	16QAM	1	12	21.72	21.6	21.68
5	16QAM	1	24	21.54	21.58	21.33
5	16QAM	12	0	20.71	20.95	20.62
5	16QAM	12	7	20.92	20.83	20.72
5	16QAM	12	13	20.8	20.7	20.67
5	16QAM	25	0	20.94	20.81	20.68
5	64QAM	1	0	20.67	20.68	20.59
5	64QAM	1	12	20.74	20.83	20.75
5	64QAM	1	24	20.62	20.85	20.77
5	64QAM	12	0	19.73	19.81	19.73
5	64QAM	12	7	19.64	19.69	19.54
5	64QAM	12	13	19.73	19.66	19.54
5	64QAM	25	0	19.66	19.82	19.48
5	256QAM	1	0	17.96	17.95	17.81
5	256QAM	1	12	17.89	17.85	18.04
5	256QAM	1	24	17.85	17.93	17.86
5	256QAM	12	0	17.77	17.89	17.93
5	256QAM	12	7	17.87	17.86	17.74
5	256QAM	12	13	17.84	17.8	17.77
5	256QAM	25	0	17.83	17.89	17.53
Channel				26055	26340	26675
Frequency (MHz)				1851.5	1880	1913.5
3	QPSK	1	0	22.79	22.78	22.71
3	QPSK	1	8	22.71	22.57	22.61
3	QPSK	1	14	22.58	22.53	22.47
3	QPSK	8	0	21.61	21.88	21.77
3	QPSK	8	4	21.75	21.6	21.57
3	QPSK	8	7	21.79	21.66	21.63
3	QPSK	15	0	21.76	21.9	21.65
3	16QAM	1	0	21.83	21.8	21.89
3	16QAM	1	8	21.6	21.71	21.8
3	16QAM	1	14	21.64	21.71	21.55
3	16QAM	8	0	20.71	20.85	20.54
3	16QAM	8	4	20.96	20.83	20.83
3	16QAM	8	7	20.71	20.84	20.67
3	16QAM	15	0	20.75	20.76	20.72
3	64QAM	1	0	20.89	20.72	20.65
3	64QAM	1	8	20.77	20.78	20.76
3	64QAM	1	14	20.7	20.78	20.87
3	64QAM	8	0	19.62	19.81	19.88
3	64QAM	8	4	19.6	19.87	19.74
3	64QAM	8	7	19.58	19.62	19.52
3	64QAM	15	0	19.65	19.6	19.36
3	256QAM	1	0	17.99	17.87	17.73
3	256QAM	1	8	17.87	17.99	17.87
3	256QAM	1	14	17.89	17.99	18.02



3	256QAM	8	0	17.71	17.82	17.92
3	256QAM	8	4	17.83	17.89	17.84
3	256QAM	8	7	17.82	17.83	17.72
3	256QAM	15	0	17.87	17.85	17.6
Channel				26047	26340	26683
Frequency (MHz)				1850.7	1880	1914.3
1.4	QPSK	1	0	22.81	22.82	22.66
1.4	QPSK	1	3	22.62	22.69	22.59
1.4	QPSK	1	5	22.76	22.66	22.6
1.4	QPSK	3	0	22.66	22.84	22.66
1.4	QPSK	3	1	22.51	22.66	22.51
1.4	QPSK	3	3	22.76	22.62	22.51
1.4	QPSK	6	0	21.73	21.91	21.58
1.4	16QAM	1	0	21.74	21.77	21.59
1.4	16QAM	1	3	21.76	21.92	21.59
1.4	16QAM	1	5	21.7	21.82	21.68
1.4	16QAM	3	0	21.59	21.64	21.68
1.4	16QAM	3	1	21.75	21.52	21.57
1.4	16QAM	3	3	21.87	21.94	21.87
1.4	16QAM	6	0	20.7	20.93	20.51
1.4	64QAM	1	0	20.75	20.64	20.83
1.4	64QAM	1	3	20.67	20.96	20.58
1.4	64QAM	1	5	20.56	20.85	20.69
1.4	64QAM	3	0	20.88	20.65	20.71
1.4	64QAM	3	1	20.71	20.63	20.7
1.4	64QAM	3	3	20.86	20.69	20.59
1.4	64QAM	6	0	19.71	19.63	19.48
1.4	256QAM	1	0	17.87	17.91	17.85
1.4	256QAM	1	3	17.9	17.88	17.99
1.4	256QAM	1	5	17.76	17.95	17.89
1.4	256QAM	3	0	17.72	17.88	17.98
1.4	256QAM	3	1	17.74	17.88	17.76
1.4	256QAM	3	3	17.79	17.68	17.82
1.4	256QAM	6	0	17.8	17.84	17.61



LTE Band 26:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				26765	26865	26965
Frequency (MHz)				821.5	831.5	841.5
15	QPSK	1	0	22.97	23.02	22.96
15	QPSK	1	37	22.83	23	22.9
15	QPSK	1	74	22.9	23.01	22.82
15	QPSK	36	0	21.96	22.06	21.94
15	QPSK	36	20	21.79	22	21.9
15	QPSK	36	39	21.89	21.96	21.8
15	QPSK	75	0	21.95	22.02	21.9
15	16QAM	1	0	21.89	21.9	22.03
15	16QAM	1	37	21.76	21.94	21.9
15	16QAM	1	74	21.88	22.11	21.85
15	16QAM	36	0	20.87	21.1	20.91
15	16QAM	36	20	20.76	21	20.89
15	16QAM	36	39	20.8	21.02	20.71
15	16QAM	75	0	21.05	20.94	20.91
15	64QAM	1	0	21	21.14	20.9
15	64QAM	1	37	20.82	20.91	20.82
15	64QAM	1	74	20.79	21.01	20.73
15	64QAM	36	0	19.99	20.09	19.97
15	64QAM	36	20	19.81	19.95	19.94
15	64QAM	36	39	19.9	20.08	19.78
15	64QAM	75	0	20	20.09	19.92
15	256QAM	1	0	18.11	18.12	17.94
15	256QAM	1	37	17.84	18.01	17.89
15	256QAM	1	74	17.92	18.05	17.83
15	256QAM	36	0	17.98	18.17	18.08
15	256QAM	36	20	17.93	18.04	18.03
15	256QAM	36	39	17.96	18.13	17.73
15	256QAM	75	0	18.09	18.14	17.98
Channel				26740	26865	26990
Frequency (MHz)				819	831.5	844
10	QPSK	1	0	22.96	22.86	22.84
10	QPSK	1	25	22.82	22.8	22.83
10	QPSK	1	49	22.88	22.87	22.71
10	QPSK	25	0	21.94	21.97	21.79
10	QPSK	25	12	21.66	21.96	21.72
10	QPSK	25	25	21.82	21.81	21.69
10	QPSK	50	0	21.83	21.94	21.9
10	16QAM	1	0	21.89	21.87	21.85
10	16QAM	1	25	21.69	21.94	21.88
10	16QAM	1	49	21.76	21.89	21.75
10	16QAM	25	0	20.66	20.88	20.8
10	16QAM	25	12	20.68	20.91	20.83
10	16QAM	25	25	20.8	20.87	20.69
10	16QAM	50	0	21	20.93	20.73



10	64QAM	1	0	20.81	21.03	20.69
10	64QAM	1	25	20.72	20.89	20.74
10	64QAM	1	49	20.65	21.01	20.68
10	64QAM	25	0	19.88	19.95	19.76
10	64QAM	25	12	19.6	19.73	19.72
10	64QAM	25	25	19.76	19.87	19.76
10	64QAM	50	0	20.01	20.07	19.83
10	256QAM	1	0	17.98	18.14	17.89
10	256QAM	1	25	17.8	18.03	17.78
10	256QAM	1	49	17.91	18.05	17.69
10	256QAM	25	0	17.99	18.04	18
10	256QAM	25	12	17.82	18	17.97
10	256QAM	25	25	17.87	18.19	17.85
10	256QAM	50	0	18.05	18.14	18.01
Channel				26715	26865	27015
Frequency (MHz)				816.5	831.5	846.5
5	QPSK	1	0	22.84	22.93	22.77
5	QPSK	1	12	22.73	22.9	22.81
5	QPSK	1	24	22.86	22.9	22.66
5	QPSK	12	0	21.88	21.87	21.85
5	QPSK	12	7	21.61	21.85	21.91
5	QPSK	12	13	21.9	21.77	21.66
5	QPSK	25	0	21.85	22.01	21.73
5	16QAM	1	0	21.89	21.75	21.97
5	16QAM	1	12	21.77	21.73	21.84
5	16QAM	1	24	21.67	21.95	21.72
5	16QAM	12	0	20.68	21	20.88
5	16QAM	12	7	20.66	20.95	20.86
5	16QAM	12	13	20.7	20.93	20.69
5	16QAM	25	0	20.84	20.75	20.75
5	64QAM	1	0	20.82	21.11	20.85
5	64QAM	1	12	20.66	20.78	20.83
5	64QAM	1	24	20.69	20.92	20.75
5	64QAM	12	0	19.84	20.07	19.82
5	64QAM	12	7	19.72	19.8	19.91
5	64QAM	12	13	19.75	20.02	19.78
5	64QAM	25	0	20.01	20.08	19.84
5	256QAM	1	0	18.11	18.14	18
5	256QAM	1	12	17.83	17.96	17.93
5	256QAM	1	24	17.82	18	17.85
5	256QAM	12	0	18.12	18.07	18.04
5	256QAM	12	7	17.81	18	18.02
5	256QAM	12	13	17.96	18.04	17.77
5	256QAM	25	0	18.12	18.1	17.96
Channel				26705	26865	27025
Frequency (MHz)				815.5	831.5	847.5
3	QPSK	1	0	22.81	22.99	22.96
3	QPSK	1	8	22.81	22.93	22.91
3	QPSK	1	14	22.82	22.91	22.77
3	QPSK	8	0	21.75	21.98	21.89



3	QPSK	8	4	21.64	21.98	21.9
3	QPSK	8	7	21.89	21.96	21.71
3	QPSK	15	0	21.82	21.86	21.69
3	16QAM	1	0	21.87	21.78	21.89
3	16QAM	1	8	21.74	21.81	21.74
3	16QAM	1	14	21.88	22.01	21.64
3	16QAM	8	0	20.85	21.03	20.89
3	16QAM	8	4	20.63	20.82	20.69
3	16QAM	8	7	20.71	20.91	20.53
3	16QAM	15	0	21	20.83	20.83
3	64QAM	1	0	20.91	21.01	20.89
3	64QAM	1	8	20.6	20.78	20.7
3	64QAM	1	14	20.58	20.94	20.62
3	64QAM	8	0	19.8	20	19.76
3	64QAM	8	4	19.6	19.8	19.93
3	64QAM	8	7	19.92	19.94	19.71
3	64QAM	15	0	20.01	20.06	19.84
3	256QAM	1	0	18.04	18.09	18.01
3	256QAM	1	8	17.77	17.96	17.8
3	256QAM	1	14	17.92	18.11	17.8
3	256QAM	8	0	18.05	18.2	18
3	256QAM	8	4	17.9	17.91	17.9
3	256QAM	8	7	17.98	18.07	17.75
3	256QAM	15	0	18.1	18.18	17.94
Channel				26697	26865	27033
Frequency (MHz)				814.7	831.5	848.3
1.4	QPSK	1	0	22.91	22.97	22.83
1.4	QPSK	1	3	22.75	22.8	22.79
1.4	QPSK	1	5	22.8	22.98	22.71
1.4	QPSK	3	0	22.92	22.82	22.9
1.4	QPSK	3	1	22.77	22.88	22.89
1.4	QPSK	3	3	22.68	22.84	22.7
1.4	QPSK	6	0	21.96	22.13	21.96
1.4	16QAM	1	0	21.92	22.08	21.78
1.4	16QAM	1	3	22.01	22.12	21.91
1.4	16QAM	1	5	21.97	22.13	21.92
1.4	16QAM	3	0	21.97	22.03	21.85
1.4	16QAM	3	1	21.81	21.98	21.92
1.4	16QAM	3	3	21.84	22.03	21.86
1.4	16QAM	6	0	21.09	21.05	21.08
1.4	64QAM	1	0	20.9	20.97	20.88
1.4	64QAM	1	3	20.82	20.92	20.84
1.4	64QAM	1	5	21.02	20.96	20.92
1.4	64QAM	3	0	20.86	20.95	21
1.4	64QAM	3	1	20.77	21.01	20.82
1.4	64QAM	3	3	21	20.99	20.83
1.4	64QAM	6	0	19.94	20.09	19.98
1.4	256QAM	1	0	18.09	18.16	17.86
1.4	256QAM	1	3	17.94	17.95	17.9
1.4	256QAM	1	5	17.85	17.99	17.7



1.4	256QAM	3	0	18	18.11	18.01
1.4	256QAM	3	1	17.91	17.92	17.94
1.4	256QAM	3	3	17.91	18.2	17.82
1.4	256QAM	6	0	17.99	18.2	18.03

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	22.94	23.15	22.83
20	QPSK	1	49	22.87	23	22.79
20	QPSK	1	99	22.87	22.99	22.81
20	QPSK	50	0	22.02	22.17	21.89
20	QPSK	50	24	21.8	21.99	21.9
20	QPSK	50	50	21.99	21.87	21.91
20	QPSK	100	0	21.97	22.03	21.8
20	16QAM	1	0	21.97	22.05	21.74
20	16QAM	1	49	21.91	21.9	21.86
20	16QAM	1	99	21.93	21.89	21.93
20	16QAM	50	0	20.99	21.03	20.92
20	16QAM	50	24	20.88	20.9	20.82
20	16QAM	50	50	21.03	21.26	20.79
20	16QAM	100	0	20.93	20.9	20.69
20	64QAM	1	0	20.95	21.12	20.84
20	64QAM	1	49	20.8	21.05	20.76
20	64QAM	1	99	20.82	21	20.76
20	64QAM	50	0	20.06	20.07	19.73
20	64QAM	50	24	19.93	20.19	19.74
20	64QAM	50	50	19.91	19.89	19.69
20	64QAM	100	0	19.94	19.99	19.92
20	256QAM	1	0	17.9	18.24	17.93
20	256QAM	1	49	17.8	18.06	17.8
20	256QAM	1	99	17.93	18	17.86
20	256QAM	50	0	18.08	18.17	17.79
20	256QAM	50	24	18.05	18.22	17.74
20	256QAM	50	50	17.95	18.01	17.75
20	256QAM	100	0	18.07	17.98	18.01
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	22.87	23.09	22.69
15	QPSK	1	37	22.72	22.81	22.75
15	QPSK	1	74	22.8	22.83	22.76
15	QPSK	36	0	21.87	22.03	21.68
15	QPSK	36	20	21.78	21.97	21.87
15	QPSK	36	39	21.88	21.86	21.84
15	QPSK	75	0	21.88	22.04	21.82
15	16QAM	1	0	21.79	22.06	21.55
15	16QAM	1	37	21.72	21.79	21.81



15	16QAM	1	74	21.79	21.84	21.72
15	16QAM	36	0	20.79	20.9	20.73
15	16QAM	36	20	20.8	20.82	20.83
15	16QAM	36	39	21.01	21.15	20.72
15	16QAM	75	0	20.77	20.7	20.65
15	64QAM	1	0	20.94	20.91	20.76
15	64QAM	1	37	20.79	20.96	20.65
15	64QAM	1	74	20.64	20.91	20.65
15	64QAM	36	0	19.88	19.86	19.65
15	64QAM	36	20	19.71	20.11	19.56
15	64QAM	36	39	19.81	19.67	19.71
15	64QAM	75	0	19.89	19.9	19.94
15	256QAM	1	0	17.99	18.18	17.88
15	256QAM	1	37	17.92	18.14	17.79
15	256QAM	1	74	17.82	18.02	17.72
15	256QAM	36	0	18.08	18.14	17.74
15	256QAM	36	20	17.94	18.19	17.81
15	256QAM	36	39	18.03	17.92	17.8
15	256QAM	75	0	18.02	18.11	17.93
Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	22.75	23.01	22.82
10	QPSK	1	25	22.72	22.83	22.76
10	QPSK	1	49	22.65	22.84	22.79
10	QPSK	25	0	21.84	22.12	21.88
10	QPSK	25	12	21.77	22	21.75
10	QPSK	25	25	21.88	21.75	21.71
10	QPSK	50	0	21.92	22.02	21.75
10	16QAM	1	0	21.82	21.89	21.59
10	16QAM	1	25	21.9	21.7	21.66
10	16QAM	1	49	21.9	21.82	21.78
10	16QAM	25	0	20.88	20.99	20.9
10	16QAM	25	12	20.87	20.9	20.68
10	16QAM	25	25	20.93	21.15	20.59
10	16QAM	50	0	20.93	20.91	20.55
10	64QAM	1	0	20.94	21.06	20.68
10	64QAM	1	25	20.82	21	20.73
10	64QAM	1	49	20.63	20.91	20.69
10	64QAM	25	0	19.9	19.98	19.71
10	64QAM	25	12	19.89	20.17	19.75
10	64QAM	25	25	19.93	19.88	19.66
10	64QAM	50	0	19.75	19.89	19.85
10	256QAM	1	0	17.93	18.11	17.81
10	256QAM	1	25	17.81	18.16	17.74
10	256QAM	1	49	17.85	18.12	17.75
10	256QAM	25	0	18.11	18.05	17.71
10	256QAM	25	12	18.04	18.15	17.73
10	256QAM	25	25	17.88	17.89	17.8
10	256QAM	50	0	17.94	18.02	17.92
Channel				131997	132322	132647



Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	22.8	23.06	22.68
5	QPSK	1	12	22.71	22.91	22.62
5	QPSK	1	24	22.66	22.95	22.78
5	QPSK	12	0	21.91	22.05	21.79
5	QPSK	12	7	21.77	21.82	21.77
5	QPSK	12	13	21.93	21.67	21.85
5	QPSK	25	0	21.81	21.86	21.79
5	16QAM	1	0	21.76	21.91	21.7
5	16QAM	1	12	21.7	21.87	21.69
5	16QAM	1	24	21.83	21.8	21.75
5	16QAM	12	0	20.81	20.94	20.87
5	16QAM	12	7	20.69	20.76	20.71
5	16QAM	12	13	21	21.15	20.62
5	16QAM	25	0	20.88	20.79	20.63
5	64QAM	1	0	20.95	20.94	20.71
5	64QAM	1	12	20.71	21.02	20.64
5	64QAM	1	24	20.77	20.83	20.67
5	64QAM	12	0	20	20.01	19.67
5	64QAM	12	7	19.85	20.07	19.54
5	64QAM	12	13	19.87	19.87	19.7
5	64QAM	25	0	19.93	19.89	19.77
5	256QAM	1	0	17.94	18.18	17.89
5	256QAM	1	12	17.83	18.01	17.86
5	256QAM	1	24	17.83	18	17.74
5	256QAM	12	0	18.06	18.05	17.79
5	256QAM	12	7	17.92	18.15	17.79
5	256QAM	12	13	17.89	17.94	17.78
5	256QAM	25	0	17.95	18	17.93
Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	22.8	23.03	22.75
3	QPSK	1	8	22.78	22.86	22.57
3	QPSK	1	14	22.69	23.01	22.61
3	QPSK	8	0	21.97	22.01	21.79
3	QPSK	8	4	21.64	21.87	21.71
3	QPSK	8	7	21.95	21.79	21.92
3	QPSK	15	0	21.93	21.94	21.62
3	16QAM	1	0	21.87	21.95	21.73
3	16QAM	1	8	21.8	21.85	21.72
3	16QAM	1	14	21.88	21.9	21.94
3	16QAM	8	0	20.93	21.04	20.76
3	16QAM	8	4	20.73	20.83	20.81
3	16QAM	8	7	20.95	21.07	20.59
3	16QAM	15	0	20.71	20.8	20.7
3	64QAM	1	0	20.92	20.92	20.7
3	64QAM	1	8	20.71	20.9	20.63
3	64QAM	1	14	20.73	20.8	20.63
3	64QAM	8	0	20.05	19.96	19.65
3	64QAM	8	4	19.84	20.04	19.66



3	64QAM	8	7	19.75	19.83	19.71
3	64QAM	15	0	19.93	19.79	19.8
3	256QAM	1	0	18.03	18.14	17.8
3	256QAM	1	8	17.79	18.07	17.74
3	256QAM	1	14	17.8	18.04	17.88
3	256QAM	8	0	18.08	18.05	17.73
3	256QAM	8	4	18	18.25	17.74
3	256QAM	8	7	17.91	17.89	17.81
3	256QAM	15	0	18.04	18.04	17.91
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	22.76	22.98	22.68
1.4	QPSK	1	3	22.82	22.94	22.77
1.4	QPSK	1	5	22.65	22.91	22.7
1.4	QPSK	3	0	22.78	22.95	22.71
1.4	QPSK	3	1	22.71	22.93	22.72
1.4	QPSK	3	3	22.73	22.97	22.74
1.4	QPSK	6	0	21.89	22.22	21.78
1.4	16QAM	1	0	21.99	21.92	21.75
1.4	16QAM	1	3	21.95	21.96	21.72
1.4	16QAM	1	5	21.9	22.16	21.79
1.4	16QAM	3	0	21.93	22.23	21.76
1.4	16QAM	3	1	21.91	22.1	21.78
1.4	16QAM	3	3	21.86	21.99	21.87
1.4	16QAM	6	0	20.82	21.08	20.76
1.4	64QAM	1	0	20.94	21.06	20.7
1.4	64QAM	1	3	20.92	21.08	20.88
1.4	64QAM	1	5	21.06	21.11	20.91
1.4	64QAM	3	0	21.03	21.07	20.76
1.4	64QAM	3	1	20.91	21.12	20.74
1.4	64QAM	3	3	20.83	21.11	20.74
1.4	64QAM	6	0	20.05	20.1	19.87
1.4	256QAM	1	0	17.9	18.09	17.9
1.4	256QAM	1	3	17.83	18.03	17.74
1.4	256QAM	1	5	17.82	17.98	17.74
1.4	256QAM	3	0	18.09	18.19	17.84
1.4	256QAM	3	1	18.03	18.17	17.74
1.4	256QAM	3	3	17.92	17.99	17.77
1.4	256QAM	6	0	17.89	18.02	17.97

**ERP/EIRP**

LTE Band 12 (GT - LC = -6.8 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)	22.88	22.77	22.58	22.85	22.83	22.60	22.51	22.87	22.51
Conducted Power (Watts)	0.1941	0.1892	0.1811	0.1928	0.1919	0.1820	0.1782	0.1936	0.1782
ERP(dBm)	13.93	13.82	13.63	13.90	13.88	13.65	13.56	13.92	13.56
ERP(Watts)	0.0247	0.0241	0.0231	0.0245	0.0244	0.0232	0.0227	0.0247	0.0227

LTE Band 12 (GT - LC = -6.8 dB) QPSK			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency (MHz)	704	707.5	711
Conducted Power (dBm)	22.89	22.90	22.73
Conducted Power (Watts)	0.1945	0.1950	0.1875
ERP(dBm)	13.94	13.95	13.78
ERP(Watts)	0.0248	0.0248	0.0239



LTE Band 12 (GT - LC = -6.8 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	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
(MHz)									
Conducted Power (dBm)	21.68	21.94	21.54	21.74	21.88	21.70	21.82	21.94	21.63
Conducted Power (Watts)	0.1472	0.1563	0.1426	0.1493	0.1542	0.1479	0.1521	0.1563	0.1455
ERP(dBm)	12.73	12.99	12.59	12.79	12.93	12.75	12.87	12.99	12.68
ERP(Watts)	0.0187	0.0199	0.0182	0.0190	0.0196	0.0188	0.0194	0.0199	0.0185

LTE Band 12 (GT - LC = -6.8 dB) 16QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency	704	707.5	711
(MHz)			
Conducted Power (dBm)	21.88	21.93	21.72
Conducted Power (Watts)	0.1542	0.1560	0.1486
ERP(dBm)	12.93	12.98	12.77
ERP(Watts)	0.0196	0.0199	0.0189



LTE Band 12 (GT - LC = -6.8 dB) 64QAM									
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	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
(MHz)									
Conducted Power (dBm)	20.90	20.88	20.72	20.96	20.88	20.77	20.82	20.95	20.61
Conducted Power (Watts)	0.1230	0.1225	0.1180	0.1247	0.1225	0.1194	0.1208	0.1245	0.1151
ERP(dBm)	11.95	11.93	11.77	12.01	11.93	11.82	11.87	12.00	11.66
ERP(Watts)	0.0157	0.0156	0.0150	0.0159	0.0156	0.0152	0.0154	0.0158	0.0147

LTE Band 12 (GT - LC = -6.8 dB) 64QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency	704	707.5	711
(MHz)			
Conducted Power (dBm)	21.03	20.95	20.80
Conducted Power (Watts)	0.1268	0.1245	0.1202
ERP(dBm)	12.08	12.00	11.85
ERP(Watts)	0.0161	0.0158	0.0153



LTE Band 12 (GT - LC = -6.8 dB) 256QAM									
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	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
(MHz)									
Conducted Power (dBm)	17.89	18.17	17.80	18.01	18.14	17.76	18.15	18.05	17.91
Conducted Power (Watts)	0.0615	0.0656	0.0603	0.0632	0.0652	0.0597	0.0653	0.0638	0.0618
ERP(dBm)	8.94	9.22	8.85	9.06	9.19	8.81	9.20	9.10	8.96
ERP(Watts)	0.0078	0.0084	0.0077	0.0081	0.0083	0.0076	0.0083	0.0081	0.0079

LTE Band 12 (GT - LC = -6.8 dB) 256QAM			
Bandwidth	10M		
Channel	23060	23095	23130
	(Low)	(Mid)	(High)
Frequency	704	707.5	711
(MHz)			
Conducted Power (dBm)	18.01	17.95	17.89
Conducted Power (Watts)	0.0632	0.0624	0.0615
ERP(dBm)	9.06	9.00	8.94
ERP(Watts)	0.0081	0.0079	0.0078



LTE Band 13 (GT - LC = -7.5 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)	22.88	22.95	22.91		23.04	-
Conducted Power (Watts)	0.1941	0.1972	0.1954		0.2014	-
ERP(dBm)	13.23	13.30	13.26		13.39	-
ERP(Watts)	0.0210	0.0214	0.0212		0.0218	-

LTE Band 13 (GT - LC = -7.5 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)	21.89	21.82	21.82		21.90	-
Conducted Power (Watts)	0.1545	0.1521	0.1521		0.1549	-
ERP(dBm)	12.24	12.17	12.17		12.25	-
ERP(Watts)	0.0167	0.0165	0.0165		0.0168	-



LTE Band 13 (GT - LC = -7.5 dB) 64QAM						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	20.80	20.62	20.76		20.80	-
Conducted Power (Watts)	0.1202	0.1153	0.1191		0.1202	-
ERP(dBm)	11.15	10.97	11.11		11.15	-
ERP(Watts)	0.0130	0.0125	0.0129		0.0130	-

LTE Band 13 (GT - LC = -7.5 dB) 256QAM						
Bandwidth	5M			10M		
Channel	23205	23230	23255	23230		
	(Low)	(Mid)	(High)	-	(Mid)	-
Frequency	779.5	782	784.5	-	782	-
(MHz)						
Conducted Power (dBm)	17.91	17.74	17.79		17.83	-
Conducted Power (Watts)	0.0618	0.0594	0.0601		0.0607	-
ERP(dBm)	8.26	8.09	8.14		8.18	-
ERP(Watts)	0.0067	0.0064	0.0065		0.0066	-



LTE Band 25 (GT - LC = -4.2 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	22.66	22.84	22.66	22.79	22.78	22.71	22.80	22.85	22.83
Conducted Power (Watts)	0.1845	0.1923	0.1845	0.1901	0.1897	0.1866	0.1905	0.1928	0.1919
EIRP(dBm)	18.46	18.64	18.46	18.59	18.58	18.51	18.60	18.65	18.63
EIRP(Watts)	0.0701	0.0731	0.0701	0.0723	0.0721	0.0710	0.0724	0.0733	0.0729

LTE Band 25 (GT - LC = -4.2 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	22.70	22.76	22.85	22.79	22.63	22.50	22.85	22.91	22.84
Conducted Power (Watts)	0.1862	0.1888	0.1928	0.1901	0.1832	0.1778	0.1928	0.1954	0.1923
EIRP(dBm)	18.50	18.56	18.65	18.59	18.43	18.30	18.65	18.71	18.64
EIRP(Watts)	0.0708	0.0718	0.0733	0.0723	0.0697	0.0676	0.0733	0.0743	0.0731



LTE Band 25 (GT - LC = -4.2 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	21.87	21.94	21.87	21.83	21.80	21.89	21.80	21.90	21.77
Conducted Power (Watts)	0.1538	0.1563	0.1538	0.1524	0.1514	0.1545	0.1514	0.1549	0.1503
EIRP(dBm)	17.67	17.74	17.67	17.63	17.60	17.69	17.60	17.70	17.57
EIRP(Watts)	0.0585	0.0594	0.0585	0.0579	0.0575	0.0587	0.0575	0.0589	0.0571

LTE Band 25 (GT - LC = -4.2 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	21.76	21.92	21.90	21.71	21.72	21.80	21.87	21.92	21.90
Conducted Power (Watts)	0.1500	0.1556	0.1549	0.1483	0.1486	0.1514	0.1538	0.1556	0.1549
EIRP(dBm)	17.56	17.72	17.70	17.51	17.52	17.60	17.67	17.72	17.70
EIRP(Watts)	0.0570	0.0592	0.0589	0.0564	0.0565	0.0575	0.0585	0.0592	0.0589



LTE Band 25 (GT - LC = -4.2 dB) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	20.67	20.96	20.58	20.89	20.72	20.65	20.62	20.85	20.77
Conducted Power (Watts)	0.1167	0.1247	0.1143	0.1227	0.1180	0.1161	0.1153	0.1216	0.1194
EIRP(dBm)	16.47	16.76	16.38	16.69	16.52	16.45	16.42	16.65	16.57
EIRP(Watts)	0.0444	0.0474	0.0435	0.0467	0.0449	0.0442	0.0439	0.0462	0.0454

LTE Band 25 (GT - LC = -4.2 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	20.83	20.69	20.70	20.74	20.85	20.82	20.87	20.86	20.92
Conducted Power (Watts)	0.1211	0.1172	0.1175	0.1186	0.1216	0.1208	0.1222	0.1219	0.1236
EIRP(dBm)	16.63	16.49	16.50	16.54	16.65	16.62	16.67	16.66	16.72
EIRP(Watts)	0.0460	0.0446	0.0447	0.0451	0.0462	0.0459	0.0465	0.0463	0.0470



LTE Band 25 (GT - LC = -4.2 dB) 256QAM									
Bandwidth	1.4M			3M			5M		
Channel	26407	26340	26683	26055	26340	26675	26065	26340	26665
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1850.7	1880	1914.3	1851.5	1880	1913.5	1852.5	1880	1912.5
(MHz)									
Conducted Power (dBm)	17.90	17.88	17.99	17.89	17.99	18.02	17.89	17.85	18.04
Conducted Power (Watts)	0.0617	0.0614	0.0630	0.0615	0.0630	0.0634	0.0615	0.0610	0.0637
EIRP(dBm)	13.70	13.68	13.79	13.69	13.79	13.82	13.69	13.65	13.84
EIRP(Watts)	0.0234	0.0233	0.0239	0.0234	0.0239	0.0241	0.0234	0.0232	0.0242

LTE Band 25 (GT - LC = -4.2 dB) 256QAM									
Bandwidth	10M			15M			20M		
Channel	26090	26340	26640	26115	26340	26615	26140	26340	26590
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	1855	1880	1910	1857.5	1880	1907.5	1860	1880	1905
(MHz)									
Conducted Power (dBm)	17.87	17.98	17.98	17.75	18.00	17.78	17.87	18.02	17.74
Conducted Power (Watts)	0.0612	0.0628	0.0628	0.0596	0.0631	0.0600	0.0612	0.0634	0.0594
EIRP(dBm)	13.67	13.78	13.78	13.55	13.80	13.58	13.67	13.82	13.54
EIRP(Watts)	0.0233	0.0239	0.0239	0.0226	0.0240	0.0228	0.0233	0.0241	0.0226

LTE Band 26 (GT - LC = -7.2 dB) QPSK									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	22.80	22.98	22.71	22.81	22.99	22.96	22.84	22.93	22.77
Conducted Power (Watts)	0.1905	0.1986	0.1866	0.1910	0.1991	0.1977	0.1923	0.1963	0.1892
ERP(dBm)	13.45	13.63	13.36	13.46	13.64	13.61	13.49	13.58	13.42
ERP(Watts)	0.0221	0.0231	0.0217	0.0222	0.0231	0.0230	0.0223	0.0228	0.0220

LTE Band 26 (GT - LC = -7.2 dB) QPSK							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	22.96	22.86	22.84	22.97	23.02	22.96	22.97
Conducted Power (Watts)	0.1977	0.1932	0.1923	0.1982	0.2004	0.1977	0.1982
ERP(dBm)	13.61	13.51	13.49	13.62	13.67	13.61	13.62
ERP(Watts)	0.0230	0.0224	0.0223	0.0230	0.0233	0.0230	0.0230



LTE Band 26 (GT - LC = -7.2 dB) 16QAM									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	21.97	22.13	21.92	21.88	22.01	21.64	21.89	21.75	21.97
Conducted Power (Watts)	0.1574	0.1633	0.1556	0.1542	0.1589	0.1459	0.1545	0.1496	0.1574
ERP(dBm)	12.62	12.78	12.57	12.53	12.66	12.29	12.54	12.40	12.62
ERP(Watts)	0.0183	0.0190	0.0181	0.0179	0.0185	0.0169	0.0179	0.0174	0.0183

LTE Band 26 (GT - LC = -7.2 dB) 16QAM							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	21.69	21.94	21.88	21.88	22.11	21.85	21.95
Conducted Power (Watts)	0.1476	0.1563	0.1542	0.1542	0.1626	0.1531	0.1567
ERP(dBm)	12.34	12.59	12.53	12.53	12.76	12.50	12.60
ERP(Watts)	0.0171	0.0182	0.0179	0.0179	0.0189	0.0178	0.0182



LTE Band 26 (GT - LC = -7.2 dB) 64QAM									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	21.02	20.96	20.92	20.91	21.01	20.89	20.82	21.11	20.85
Conducted Power (Watts)	0.1265	0.1247	0.1236	0.1233	0.1262	0.1227	0.1208	0.1291	0.1216
ERP(dBm)	11.67	11.61	11.57	11.56	11.66	11.54	11.47	11.76	11.50
ERP(Watts)	0.0147	0.0145	0.0144	0.0143	0.0147	0.0143	0.0140	0.0150	0.0141

LTE Band 26 (GT - LC = -7.2 dB) 64QAM							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	20.81	21.03	20.69	21.00	21.14	20.90	21.00
Conducted Power (Watts)	0.1205	0.1268	0.1172	0.1259	0.1300	0.1230	0.1259
ERP(dBm)	11.46	11.68	11.34	11.65	11.79	11.55	11.65
ERP(Watts)	0.0140	0.0147	0.0136	0.0146	0.0151	0.0143	0.0146



LTE Band 26 (GT - LC = -7.2 dB) 256QAM									
Bandwidth	1.4M			3M			5M		
Channel	26797	26915	27033	26805	26915	27025	26815	26915	27015
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
(MHz)									
Conducted Power (dBm)	17.99	18.20	18.03	18.05	18.20	18.00	18.11	18.14	18.00
Conducted Power (Watts)	0.0630	0.0661	0.0635	0.0638	0.0661	0.0631	0.0647	0.0652	0.0631
ERP(dBm)	8.64	8.85	8.68	8.70	8.85	8.65	8.76	8.79	8.65
ERP(Watts)	0.0073	0.0077	0.0074	0.0074	0.0077	0.0073	0.0075	0.0076	0.0073

LTE Band 26 (GT - LC = -7.2 dB) 256QAM							
Bandwidth	10M			15M			15M
Channel	26840	26915	26990	26865	26915	26965	26765
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)
Frequency	829	836.5	844	831.5	836.5	841.5	821.5
(MHz)							
Conducted Power (dBm)	17.87	18.19	17.85	17.98	18.17	18.08	18.11
Conducted Power (Watts)	0.0612	0.0659	0.0610	0.0628	0.0656	0.0643	0.0647
ERP(dBm)	8.52	8.84	8.50	8.63	8.82	8.73	8.76
ERP(Watts)	0.0071	0.0077	0.0071	0.0073	0.0076	0.0075	0.0075



LTE Band 66 (GT - LC = -5.0 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	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	22.76	22.98	22.68	22.80	23.03	22.75	22.80	23.06	22.68
Conducted Power (Watts)	0.1888	0.1986	0.1854	0.1905	0.2009	0.1884	0.1905	0.2023	0.1854
EIRP(dBm)	17.76	17.98	17.68	17.80	18.03	17.75	17.80	18.06	17.68
EIRP(Watts)	0.0597	0.0628	0.0586	0.0603	0.0635	0.0596	0.0603	0.0640	0.0586

LTE Band 66 (GT - LC = -5.0 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	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	22.75	23.01	22.82	22.87	23.09	22.69	22.94	23.15	22.83
Conducted Power (Watts)	0.1884	0.2000	0.1914	0.1936	0.2037	0.1858	0.1968	0.2065	0.1919
EIRP(dBm)	17.75	18.01	17.82	17.87	18.09	17.69	17.94	18.15	17.83
EIRP(Watts)	0.0596	0.0632	0.0605	0.0612	0.0644	0.0587	0.0622	0.0653	0.0607



LTE Band 66 (GT - LC = -5.0 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	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	21.93	22.23	21.76	21.87	21.95	21.73	21.76	21.91	21.70
Conducted Power (Watts)	0.1560	0.1671	0.1500	0.1538	0.1567	0.1489	0.1500	0.1552	0.1479
EIRP(dBm)	16.93	17.23	16.76	16.87	16.95	16.73	16.76	16.91	16.70
EIRP(Watts)	0.0493	0.0528	0.0474	0.0486	0.0495	0.0471	0.0474	0.0491	0.0468

LTE Band 66 (GT - LC = -5.0 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	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	21.90	21.70	21.66	21.79	22.06	21.55	21.97	22.05	21.74
Conducted Power (Watts)	0.1549	0.1479	0.1466	0.1510	0.1607	0.1429	0.1574	0.1603	0.1493
EIRP(dBm)	16.90	16.70	16.66	16.79	17.06	16.55	16.97	17.05	16.74
EIRP(Watts)	0.0490	0.0468	0.0463	0.0478	0.0508	0.0452	0.0498	0.0507	0.0472



LTE Band 66 (GT - LC = -5.0 dB) 64QAM									
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	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	20.91	21.12	20.74	20.92	20.92	20.70	20.71	21.02	20.64
Conducted Power (Watts)	0.1233	0.1294	0.1186	0.1236	0.1236	0.1175	0.1178	0.1265	0.1159
EIRP(dBm)	15.91	16.12	15.74	15.92	15.92	15.70	15.71	16.02	15.64
EIRP(Watts)	0.0390	0.0409	0.0375	0.0391	0.0391	0.0372	0.0372	0.0400	0.0366

LTE Band 66 (GT - LC = -5.0 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	20.94	21.06	20.68	20.79	20.96	20.65	20.95	21.12	20.84
Conducted Power (Watts)	0.1242	0.1276	0.1169	0.1199	0.1247	0.1161	0.1245	0.1294	0.1213
EIRP(dBm)	15.94	16.06	15.68	15.79	15.96	15.65	15.95	16.12	15.84
EIRP(Watts)	0.0393	0.0404	0.0370	0.0379	0.0394	0.0367	0.0394	0.0409	0.0384



LTE Band 66 (GT - LC = -5.0 dB) 256QAM									
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	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
(MHz)									
Conducted Power (dBm)	18.09	18.19	17.84	18.00	18.25	17.74	17.94	18.18	17.89
Conducted Power (Watts)	0.0644	0.0659	0.0608	0.0631	0.0668	0.0594	0.0622	0.0658	0.0615
EIRP(dBm)	13.09	13.19	12.84	13.00	13.25	12.74	12.94	13.18	12.89
EIRP(Watts)	0.0204	0.0208	0.0192	0.0200	0.0211	0.0188	0.0197	0.0208	0.0195

LTE Band 66 (GT - LC = -5.0 dB) 256QAM									
Bandwidth	10M			15M			20M		
Channel	132022	132322	132622	132047	132322	132597	132072	132322	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(Mid)
Frequency	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
(MHz)									
Conducted Power (dBm)	17.81	18.16	17.74	17.94	18.19	17.81	17.90	18.24	17.93
Conducted Power (Watts)	0.0604	0.0655	0.0594	0.0622	0.0659	0.0604	0.0617	0.0667	0.0621
EIRP(dBm)	12.81	13.16	12.74	12.94	13.19	12.81	12.90	13.24	12.93
EIRP(Watts)	0.0191	0.0207	0.0188	0.0197	0.0208	0.0191	0.0195	0.0211	0.0196



CA Power and ERP/EIRP

CA_5B										
Combination 10MHz+5MHz (50RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)	ERP (W)
			RB Size	RB offset	RB Size	RB offset				
20450	20522	QPSK	50	0	25	0	75	23.28	13.73	0.0236
		QPSK	1	0	1	24	2	12.33	2.78	0.0019
		QPSK	1	49	1	0	2	23.17	13.62	0.0230
		16QAM	1	49	1	0	2	23.04	13.49	0.0223
		64QAM	1	49	1	0	2	22.85	13.30	0.0214
		256QAM	1	49	1	0	2	20.67	11.12	0.0129
20500	20572	QPSK	50	0	25	0	75	23.34	13.79	0.0239
		QPSK	1	0	1	24	2	12.18	2.63	0.0018
		QPSK	1	49	1	0	2	23.41	13.86	0.0243
		16QAM	1	49	1	0	2	23.34	13.79	0.0239
		64QAM	1	49	1	0	2	22.46	12.91	0.0195
		256QAM	1	49	1	0	2	20.76	11.21	0.0132
20550	20622	QPSK	50	0	25	0	75	23.33	13.78	0.0239
		QPSK	1	0	1	24	2	12.02	2.47	0.0018
		QPSK	1	49	1	0	2	23.22	13.67	0.0233
		16QAM	1	49	1	0	2	23.17	13.62	0.0230
		64QAM	1	49	1	0	2	22.83	13.28	0.0213
		256QAM	1	49	1	0	2	20.71	11.16	0.0131
Combination 5MHz+10MHz (25RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)	ERP (W)
			RB Size	RB offset	RB Size	RB offset				
20428	20500	QPSK	25	0	50	0	75	23.28	13.73	0.0236
		QPSK	1	0	1	49	2	12.22	2.67	0.0018
		QPSK	1	24	1	0	2	23.14	13.59	0.0229
		16QAM	1	24	1	0	2	23.04	13.49	0.0223
		64QAM	1	24	1	0	2	22.93	13.38	0.0218
		256QAM	1	24	1	0	2	22.71	13.16	0.0207
20478	20550	QPSK	25	0	50	0	75	23.01	13.46	0.0222
		QPSK	1	0	1	49	2	12.14	2.59	0.0018
		QPSK	1	24	1	0	2	22.86	13.31	0.0214
		16QAM	1	24	1	0	2	22.73	13.18	0.0208
		64QAM	1	24	1	0	2	22.42	12.87	0.0194
		256QAM	1	24	1	0	2	20.46	10.91	0.0123
20528	20600	QPSK	25	0	50	0	75	23.24	13.69	0.0234
		QPSK	1	0	1	49	2	12.15	2.60	0.0018
		QPSK	1	24	1	0	2	22.68	13.13	0.0206
		16QAM	1	24	1	0	2	22.52	12.97	0.0198
		64QAM	1	24	1	0	2	22.16	12.61	0.0182
		256QAM	1	24	1	0	2	20.19	10.64	0.0116
Combination 5MHz+3MHz (25RB+15RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)	ERP (W)
			RB Size	RB offset	RB Size	RB offset				



20425	20464	QPSK	25	0	15	0	40	22.71	13.16	0.0207
		QPSK	1	0	1	14	2	12.52	2.97	0.0020
		QPSK	1	24	1	0	2	22.61	13.06	0.0202
		16QAM	1	24	1	0	2	22.86	13.31	0.0214
		64QAM	1	24	1	0	2	22.14	12.59	0.0182
		256QAM	1	24	1	0	2	20.63	11.08	0.0128
20510	20549	QPSK	25	0	15	0	40	22.48	12.93	0.0196
		QPSK	1	0	1	14	2	12.82	3.27	0.0021
		QPSK	1	24	1	0	2	22.41	12.86	0.0193
		16QAM	1	24	1	0	2	22.36	12.81	0.0191
		64QAM	1	24	1	0	2	22.11	12.56	0.0180
		256QAM	1	24	1	0	2	20.31	10.76	0.0119
20595	20634	QPSK	25	0	15	0	40	22.53	12.98	0.0199
		QPSK	1	0	1	14	2	12.64	3.09	0.0020
		QPSK	1	24	1	0	2	22.34	12.79	0.0190
		16QAM	1	24	1	0	2	22.88	13.33	0.0215
		64QAM	1	24	1	0	2	22.31	12.76	0.0189
		256QAM	1	24	1	0	2	20.71	11.16	0.0131
Combination 3MHz+5MHz (15RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)	ERP (W)
			RB Size	RB offset	RB Size	RB offset				
20416	20455	QPSK	15	0	25	0	40	22.75	13.20	0.0209
		QPSK	1	0	1	24	2	12.82	3.27	0.0021
		QPSK	1	14	1	0	2	22.59	13.04	0.0201
		16QAM	1	14	1	0	2	22.78	13.23	0.0210
		64QAM	1	14	1	0	2	22.31	12.76	0.0189
		256QAM	1	14	1	0	2	20.71	11.16	0.0131
20501	20540	QPSK	15	0	25	0	40	22.48	12.93	0.0196
		QPSK	1	0	1	24	2	12.42	2.87	0.0019
		QPSK	1	14	1	0	2	22.54	12.99	0.0199
		16QAM	1	14	1	0	2	22.63	13.08	0.0203
		64QAM	1	14	1	0	2	22.34	12.79	0.0190
		256QAM	1	14	1	0	2	20.43	10.88	0.0122
20586	20625	QPSK	15	0	25	0	40	22.51	12.96	0.0198
		QPSK	1	0	1	24	2	12.82	3.27	0.0021
		QPSK	1	14	1	0	2	22.39	12.84	0.0192
		16QAM	1	14	1	0	2	22.65	13.10	0.0204
		64QAM	1	14	1	0	2	22.13	12.58	0.0181
		256QAM	1	14	1	0	2	20.49	10.94	0.0124
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	ERP (dBm)	ERP (W)
			RB Size	RB offset	RB Size	RB offset				
20450	20549	QPSK	50	0	50	0	40	22.88	13.33	0.0215
		QPSK	1	0	1	49	2	12.95	3.40	0.0022
		QPSK	1	49	1	0	2	22.68	13.13	0.0206
		16QAM	1	49	1	0	2	22.75	13.20	0.0209
		64QAM	1	49	1	0	2	22.31	12.76	0.0189
		256QAM	1	49	1	0	2	20.85	11.30	0.0135
20476	20575	QPSK	50	0	50	0	40	22.74	13.19	0.0208
		QPSK	1	0	1	49	2	12.68	3.13	0.0021



		QPSK	1	49	1	0	2	22.64	13.09	0.0204
		16QAM	1	49	1	0	2	22.68	13.13	0.0206
		64QAM	1	49	1	0	2	22.44	12.89	0.0195
		256QAM	1	49	1	0	2	20.58	11.03	0.0127
20501	20600	QPSK	50	0	50	0	40	22.79	13.24	0.0211
		QPSK	1	0	1	49	2	12.91	3.36	0.0022
		QPSK	1	49	1	0	2	22.45	12.90	0.0195
		16QAM	1	49	1	0	2	22.68	13.13	0.0206
		64QAM	1	49	1	0	2	22.35	12.80	0.0191
		256QAM	1	49	1	0	2	20.67	11.12	0.0129



CA_66B										
Combination 10MHz+10MHz (50RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132022	132121	QPSK	50	0	50	0	175	22.12	17.12	0.0515
		QPSK	1	0	1	49	2	13.86	8.86	0.0077
		QPSK	1	49	1	0	2	23.46	18.46	0.0701
		16QAM	1	49	1	0	2	22.34	17.34	0.0542
		64QAM	1	49	1	0	2	20.34	15.34	0.0342
		256QAM	1	49	1	0	2	18.52	13.52	0.0225
132373	132472	QPSK	50	0	50	0	175	22.57	17.57	0.0571
		QPSK	1	0	1	49	2	13.58	8.58	0.0072
		QPSK	1	49	1	0	2	23.67	18.67	0.0736
		16QAM	1	49	1	0	2	22.47	17.47	0.0558
		64QAM	1	49	1	0	2	20.52	15.52	0.0356
		256QAM	1	49	1	0	2	18.37	13.37	0.0217
132523	132622	QPSK	50	0	50	0	175	22.46	17.46	0.0557
		QPSK	1	0	1	49	2	13.94	8.94	0.0078
		QPSK	1	49	1	0	2	23.54	18.54	0.0714
		16QAM	1	49	1	0	2	22.63	17.63	0.0579
		64QAM	1	49	1	0	2	20.49	15.49	0.0354
		256QAM	1	49	1	0	2	18.76	13.76	0.0238
Combination 10MHz+5MHz (50RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132022	132094	QPSK	50	0	25	0	175	22.47	17.47	0.0558
		QPSK	1	0	1	24	2	13.82	8.82	0.0076
		QPSK	1	49	1	0	2	23.56	18.56	0.0718
		16QAM	1	49	1	0	2	22.43	17.43	0.0553
		64QAM	1	49	1	0	2	20.37	15.37	0.0344
		256QAM	1	49	1	0	2	18.48	13.48	0.0223
132397	132469	QPSK	50	0	25	0	175	22.64	17.64	0.0581
		QPSK	1	0	1	24	2	13.93	8.93	0.0078
		QPSK	1	49	1	0	2	23.41	18.41	0.0693
		16QAM	1	49	1	0	2	22.38	17.38	0.0547
		64QAM	1	49	1	0	2	20.47	15.47	0.0352
		256QAM	1	49	1	0	2	18.33	13.33	0.0215
132572	132644	QPSK	50	0	25	0	175	22.71	17.71	0.0590
		QPSK	1	0	1	24	2	13.79	8.79	0.0076
		QPSK	1	49	1	0	2	23.64	18.64	0.0731
		16QAM	1	49	1	0	2	22.49	17.49	0.0561
		64QAM	1	49	1	0	2	20.51	15.51	0.0356
		256QAM	1	49	1	0	2	18.73	13.73	0.0236
Combination 5MHz+15MHz (25RB+75RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132002	132095	QPSK	25	0	75	0	150	22.64	17.64	0.0581
		QPSK	1	0	1	74	2	13.85	8.85	0.0077



		QPSK	1	24	1	0	2	23.46	18.46	0.0701
		16QAM	1	24	1	0	2	22.28	17.28	0.0535
		64QAM	1	24	1	0	2	20.36	15.36	0.0344
		256QAM	1	24	1	0	2	18.82	13.82	0.0241
132353	132446	QPSK	25	0	75	0	150	22.71	17.71	0.0590
		QPSK	1	0	1	74	2	13.68	8.68	0.0074
		QPSK	1	24	1	0	2	23.52	18.52	0.0711
		16QAM	1	24	1	0	2	22.34	17.34	0.0542
		64QAM	1	24	1	0	2	20.46	15.46	0.0352
		256QAM	1	24	1	0	2	18.72	13.72	0.0236
132504	132597	QPSK	25	0	75	0	150	22.46	17.46	0.0557
		QPSK	1	0	1	74	2	13.77	8.77	0.0075
		QPSK	1	24	1	0	2	23.82	18.82	0.0762
		16QAM	1	24	1	0	2	22.43	17.43	0.0553
		64QAM	1	24	1	0	2	20.16	15.16	0.0328
		256QAM	1	24	1	0	2	18.33	13.33	0.0215
Combination 5MHz+10MHz (25RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132000	132072	QPSK	25	0	50	0	150	22.76	17.76	0.0597
		QPSK	1	0	1	49	2	13.58	8.58	0.0072
		QPSK	1	24	1	0	2	23.64	18.64	0.0731
		16QAM	1	24	1	0	2	22.49	17.49	0.0561
		64QAM	1	24	1	0	2	20.39	15.39	0.0346
		256QAM	1	24	1	0	2	18.93	13.93	0.0247
132375	132447	QPSK	25	0	50	0	150	22.46	17.46	0.0557
		QPSK	1	0	1	49	2	13.55	8.55	0.0072
		QPSK	1	24	1	0	2	23.48	18.48	0.0705
		16QAM	1	24	1	0	2	22.58	17.58	0.0573
		64QAM	1	24	1	0	2	20.39	15.39	0.0346
		256QAM	1	24	1	0	2	18.67	13.67	0.0233
132550	132622	QPSK	25	0	50	0	150	22.82	17.82	0.0605
		QPSK	1	0	1	49	2	13.95	8.95	0.0079
		QPSK	1	24	1	0	2	23.47	18.47	0.0703
		16QAM	1	24	1	0	2	22.37	17.37	0.0546
		64QAM	1	24	1	0	2	20.46	15.46	0.0352
		256QAM	1	24	1	0	2	18.76	13.76	0.0238
Combination 5MHz+5MHz (25RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
131997	132045	QPSK	25	0	25	0	150	22.36	17.36	0.0545
		QPSK	1	0	1	24	2	13.95	8.95	0.0079
		QPSK	1	24	1	0	2	23.34	18.34	0.0682
		16QAM	1	24	1	0	2	22.75	17.75	0.0596
		64QAM	1	24	1	0	2	20.46	15.46	0.0352
		256QAM	1	24	1	0	2	18.38	13.38	0.0218
132398	132446	QPSK	25	0	25	0	150	22.27	17.27	0.0533
		QPSK	1	0	1	24	2	14.05	9.05	0.0080
		QPSK	1	24	1	0	2	23.26	18.26	0.0670
		16QAM	1	24	1	0	2	22.63	17.63	0.0579



132599	132647	64QAM	1	24	1	0	2	20.24	15.24	0.0334
		256QAM	1	24	1	0	2	18.55	13.55	0.0226
		QPSK	25	0	25	0	150	22.26	17.26	0.0532
		QPSK	1	0	1	24	2	14.06	9.06	0.0081
		QPSK	1	24	1	0	2	23.35	18.35	0.0684
		16QAM	1	24	1	0	2	22.63	17.63	0.0579
		64QAM	1	24	1	0	2	20.16	15.16	0.0328
		256QAM	1	24	1	0	2	18.41	13.41	0.0219
Combination 15MHz+5MHz (75RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132047	132140	QPSK	75	0	25	0	150	22.46	17.46	0.0557
		QPSK	1	0	1	24	2	14.02	9.02	0.0080
		QPSK	1	74	1	0	150	23.38	18.38	0.0689
		16QAM	1	74	1	0	2	22.78	17.78	0.0600
		64QAM	1	74	1	0	2	20.49	15.49	0.0354
		256QAM	1	74	1	0	2	18.41	13.41	0.0219
132398	132491	QPSK	75	0	25	0	150	22.38	17.38	0.0547
		QPSK	1	0	1	24	2	14.11	9.11	0.0081
		QPSK	1	74	1	0	150	23.34	18.34	0.0682
		16QAM	1	74	1	0	2	22.81	17.81	0.0604
		64QAM	1	74	1	0	2	20.35	15.35	0.0343
		256QAM	1	74	1	0	2	18.62	13.62	0.0230
132549	132642	QPSK	75	0	25	0	150	22.35	17.35	0.0543
		QPSK	1	0	1	24	2	14.08	9.08	0.0081
		QPSK	1	74	1	0	150	23.39	18.39	0.0690
		16QAM	1	74	1	0	2	22.69	17.69	0.0587
		64QAM	1	74	1	0	2	20.22	15.22	0.0333
		256QAM	1	74	1	0	2	18.45	13.45	0.0221



CA_66C										
Combination 20MHz+15MHz (100RB+75RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132072	132243	QPSK	100	0	75	0	175	22.49	17.49	0.0561
		QPSK	1	0	1	74	2	13.76	8.76	0.0075
		QPSK	1	99	1	0	2	23.23	18.23	0.0665
		16QAM	1	99	1	0	2	22.56	17.56	0.0570
		64QAM	1	99	1	0	2	20.49	15.49	0.0354
		256QAM	1	99	1	0	2	18.93	13.93	0.0247
132348	132519	QPSK	100	0	75	0	175	22.43	17.43	0.0553
		QPSK	1	0	1	74	2	13.65	8.65	0.0073
		QPSK	1	99	1	0	2	23.47	18.47	0.0703
		16QAM	1	99	1	0	2	22.28	17.28	0.0535
		64QAM	1	99	1	0	2	20.19	15.19	0.0330
		256QAM	1	99	1	0	2	18.25	13.25	0.0211
132423	132594	QPSK	100	0	75	0	175	22.36	17.36	0.0545
		QPSK	1	0	1	74	2	13.62	8.62	0.0073
		QPSK	1	99	1	0	2	23.28	18.28	0.0673
		16QAM	1	99	1	0	2	22.43	17.43	0.0553
		64QAM	1	99	1	0	2	20.49	15.49	0.0354
		256QAM	1	99	1	0	2	18.32	13.32	0.0215
Combination 20MHz+10MHz (100RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132072	132216	QPSK	100	0	50	0	175	22.44	17.44	0.0555
		QPSK	1	0	1	49	2	13.86	8.86	0.0077
		QPSK	1	99	1	0	2	23.27	18.27	0.0671
		16QAM	1	99	1	0	2	22.52	17.52	0.0565
		64QAM	1	99	1	0	2	20.46	15.46	0.0352
		256QAM	1	99	1	0	2	18.52	13.52	0.0225
132373	132517	QPSK	100	0	50	0	175	22.43	17.43	0.0553
		QPSK	1	0	1	49	2	14.11	9.11	0.0081
		QPSK	1	99	1	0	2	23.43	18.43	0.0697
		16QAM	1	99	1	0	2	22.56	17.56	0.0570
		64QAM	1	99	1	0	2	20.44	15.44	0.0350
		256QAM	1	99	1	0	2	18.72	13.72	0.0236
132473	132617	QPSK	100	0	50	0	175	22.28	17.28	0.0535
		QPSK	1	0	1	49	2	13.83	8.83	0.0076
		QPSK	1	99	1	0	2	23.46	18.46	0.0701
		16QAM	1	99	1	0	2	22.82	17.82	0.0605
		64QAM	1	99	1	0	2	20.46	15.46	0.0352
		256QAM	1	99	1	0	2	18.25	13.25	0.0211
Combination 20MHz+5MHz (100RB+25RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132072	132189	QPSK	100	0	25	0	175	20.35	15.35	0.0343
		QPSK	1	0	1	24	2	13.79	8.79	0.0076



		QPSK	1	99	1	0	2	23.39	18.39	0.0690
		16QAM	1	99	1	0	2	22.14	17.14	0.0518
		64QAM	1	99	1	0	2	20.47	15.47	0.0352
		256QAM	1	99	1	0	2	18.43	13.43	0.0220
132397	132514	QPSK	100	0	25	0	175	22.64	17.64	0.0581
		QPSK	1	0	1	24	2	13.66	8.66	0.0073
		QPSK	1	99	1	0	2	23.58	18.58	0.0721
		16QAM	1	99	1	0	2	22.46	17.46	0.0557
		64QAM	1	99	1	0	2	20.68	15.68	0.0370
		256QAM	1	99	1	0	2	18.59	13.59	0.0229
132522	132639	QPSK	100	0	25	0	175	22.28	17.28	0.0535
		QPSK	1	0	1	24	2	13.77	8.77	0.0075
		QPSK	1	99	1	0	2	23.57	18.57	0.0719
		16QAM	1	99	1	0	2	22.63	17.63	0.0579
		64QAM	1	99	1	0	2	20.41	15.41	0.0348
		256QAM	1	99	1	0	2	18.67	13.67	0.0233
Combination 15MHz+20MHz (75RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132050	132221	QPSK	75	0	100	0	150	22.37	17.37	0.0546
		QPSK	1	0	1	99	2	13.67	8.67	0.0074
		QPSK	1	74	1	0	2	23.39	18.39	0.0690
		16QAM	1	74	1	0	2	22.23	17.23	0.0528
		64QAM	1	74	1	0	2	20.43	15.43	0.0349
		256QAM	1	74	1	0	2	18.52	13.52	0.0225
132325	132496	QPSK	75	0	100	0	150	22.72	17.72	0.0592
		QPSK	1	0	1	99	2	13.79	8.79	0.0076
		QPSK	1	74	1	0	2	23.41	18.41	0.0693
		16QAM	1	74	1	0	2	22.21	17.21	0.0526
		64QAM	1	74	1	0	2	20.34	15.34	0.0342
		256QAM	1	74	1	0	2	18.73	13.73	0.0236
132401	132572	QPSK	75	0	100	0	150	20.64	15.64	0.0366
		QPSK	1	0	1	99	2	13.55	8.55	0.0072
		QPSK	1	74	1	0	2	23.34	18.34	0.0682
		16QAM	1	74	1	0	2	22.28	17.28	0.0535
		64QAM	1	74	1	0	2	20.48	15.48	0.0353
		256QAM	1	74	1	0	2	18.63	13.63	0.0231
Combination 15MHz+15MHz (75RB+75RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132047	132197	QPSK	75	0	75	0	175	22.52	17.52	0.0565
		QPSK	1	0	1	74	2	13.70	8.70	0.0074
		QPSK	1	74	1	0	2	23.41	18.41	0.0693
		16QAM	1	74	1	0	2	22.34	17.34	0.0542
		64QAM	1	74	1	0	2	20.52	15.52	0.0356
		256QAM	1	74	1	0	2	18.43	13.43	0.0220
132347	132497	QPSK	75	0	75	0	150	22.41	17.41	0.0551
		QPSK	1	0	1	74	2	13.68	8.68	0.0074
		QPSK	1	74	1	0	2	23.27	18.27	0.0671
		16QAM	1	74	1	0	2	22.34	17.34	0.0542



		64QAM	1	74	1	0	2	20.47	15.47	0.0352
		256QAM	1	74	1	0	2	18.66	13.66	0.0232
132447	132597	QPSK	75	0	75	0	150	22.51	17.51	0.0564
		QPSK	1	0	1	74	2	13.71	8.71	0.0074
		QPSK	1	74	1	0	2	23.45	18.45	0.0700
		16QAM	1	74	1	0	2	22.04	17.04	0.0506
		64QAM	1	74	1	0	2	20.41	15.41	0.0348
		256QAM	1	74	1	0	2	18.55	13.55	0.0226
Combination 15MHz+10MHz (75RB+50RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132047	132167	QPSK	75	0	50	0		22.45	17.45	0.0556
		QPSK	1	0	1	49	175	13.70	8.70	0.0074
		QPSK	1	74	1	0	2	23.36	18.36	0.0685
		16QAM	1	74	1	0	2	22.41	17.41	0.0551
		64QAM	1	74	1	0	2	20.67	15.67	0.0369
		256QAM	1	74	1	0	2	18.72	13.72	0.0236
132373	132493	QPSK	75	0	50	0	2	22.25	17.25	0.0531
		QPSK	1	0	1	49	125	14.11	9.11	0.0081
		QPSK	1	74	1	0	2	23.52	18.52	0.0711
		16QAM	1	74	1	0	2	22.28	17.28	0.0535
		64QAM	1	74	1	0	2	20.34	15.34	0.0342
		256QAM	1	74	1	0	2	18.71	13.71	0.0235
132499	132619	QPSK	75	0	50	0	2	22.05	17.05	0.0507
		QPSK	1	0	1	49	125	14.11	9.11	0.0081
		QPSK	1	74	1	0	2	23.63	18.63	0.0729
		16QAM	1	74	1	0	2	22.31	17.31	0.0538
		64QAM	1	74	1	0	125	20.43	15.43	0.0349
		256QAM	1	74	1	0	2	18.34	13.34	0.0216
Combination 10MHz+20MHz (50RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132027	132171	QPSK	50	0	100	0	175	22.57	17.57	0.0571
		QPSK	1	0	1	99	2	13.74	8.74	0.0075
		QPSK	1	49	1	0	2	23.53	18.53	0.0713
		16QAM	1	49	1	0	2	22.64	17.64	0.0581
		64QAM	1	49	1	0	2	20.67	15.67	0.0369
		256QAM	1	49	1	0	2	18.55	13.55	0.0226
132328	132472	QPSK	50	0	100	0	125	22.46	17.46	0.0557
		QPSK	1	0	1	99	2	13.62	8.62	0.0073
		QPSK	1	49	1	0	2	23.58	18.58	0.0721
		16QAM	1	49	1	0	2	22.67	17.67	0.0585
		64QAM	1	49	1	0	2	20.41	15.41	0.0348
		256QAM	1	49	1	0	2	18.42	13.42	0.0220
132428	132572	QPSK	50	0	100	0	125	22.49	17.49	0.0561
		QPSK	1	0	1	99	2	13.60	8.60	0.0072
		QPSK	1	49	1	0	2	23.48	18.48	0.0705
		16QAM	1	49	1	0	2	22.86	17.86	0.0611
		64QAM	1	49	1	0	2	20.42	15.42	0.0348



		256QAM	1	49	1	0	2	18.37	13.37	0.0217
Combination 10MHz+15MHz (50RB+75RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132025	132145	QPSK	50	0	75	0	125	22.43	17.43	0.0553
		QPSK	1	0	1	74	2	13.67	8.67	0.0074
		QPSK	1	49	1	0	2	23.69	18.69	0.0740
		16QAM	1	49	1	0	2	22.54	17.54	0.0568
		64QAM	1	49	1	0	2	20.67	15.67	0.0369
		256QAM	1	49	1	0	2	18.52	13.52	0.0225
132351	132471	QPSK	50	0	75	0	175	22.55	17.55	0.0569
		QPSK	1	0	1	74	2	13.49	8.49	0.0071
		QPSK	1	49	1	0	2	23.64	18.64	0.0731
		16QAM	1	49	1	0	2	22.64	17.64	0.0581
		64QAM	1	49	1	0	175	20.69	15.69	0.0371
		256QAM	1	49	1	0	2	18.52	13.52	0.0225
132477	132597	QPSK	50	0	75	0	125	22.71	17.71	0.0590
		QPSK	1	0	1	74	2	13.88	8.88	0.0077
		QPSK	1	49	1	0	2	23.63	18.63	0.0729
		16QAM	1	49	1	0	2	22.15	17.15	0.0519
		64QAM	1	49	1	0	2	20.11	15.11	0.0324
		256QAM	1	49	1	0	2	18.40	13.40	0.0219
Combination 5MHz+20MHz (25RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132005	132122	QPSK	25	0	100	0	125	20.64	15.64	0.0366
		QPSK	1	0	1	99	2	13.71	8.71	0.0074
		QPSK	1	24	1	0	2	23.44	18.44	0.0698
		16QAM	1	24	1	0	2	22.28	17.28	0.0535
		64QAM	1	24	1	0	2	20.31	15.31	0.0340
		256QAM	1	24	1	0	2	18.24	13.24	0.0211
132330	132447	QPSK	25	0	100	0	125	22.36	17.36	0.0545
		QPSK	1	0	1	99	2	13.63	8.63	0.0073
		QPSK	1	24	1	0	2	23.52	18.52	0.0711
		16QAM	1	24	1	0	125	22.54	17.54	0.0568
		64QAM	1	24	1	0	2	20.41	15.41	0.0348
		256QAM	1	24	1	0	2	18.34	13.34	0.0216
132455	132572	QPSK	25	0	100	0	175	22.37	17.37	0.0546
		QPSK	1	0	1	99	2	13.59	8.59	0.0072
		QPSK	1	24	1	0	2	23.56	18.56	0.0718
		16QAM	1	24	1	0	175	22.71	17.71	0.0590
		64QAM	1	24	1	0	2	20.71	15.71	0.0372
		256QAM	1	24	1	0	2	18.54	13.54	0.0226
Combination 20MHz+20MHz (100RB+100RB)										
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)	EIRP (dBm)	EIRP (W)
			RB Size	RB offset	RB Size	RB offset				
132072	132270	QPSK	100	0	100	0	125	20.68	15.68	0.0370
		QPSK	1	0	1	99	2	13.82	8.82	0.0076
		QPSK	1	99	1	0	2	23.48	18.48	0.0705
		16QAM	1	99	1	0	2	22.45	17.45	0.0556



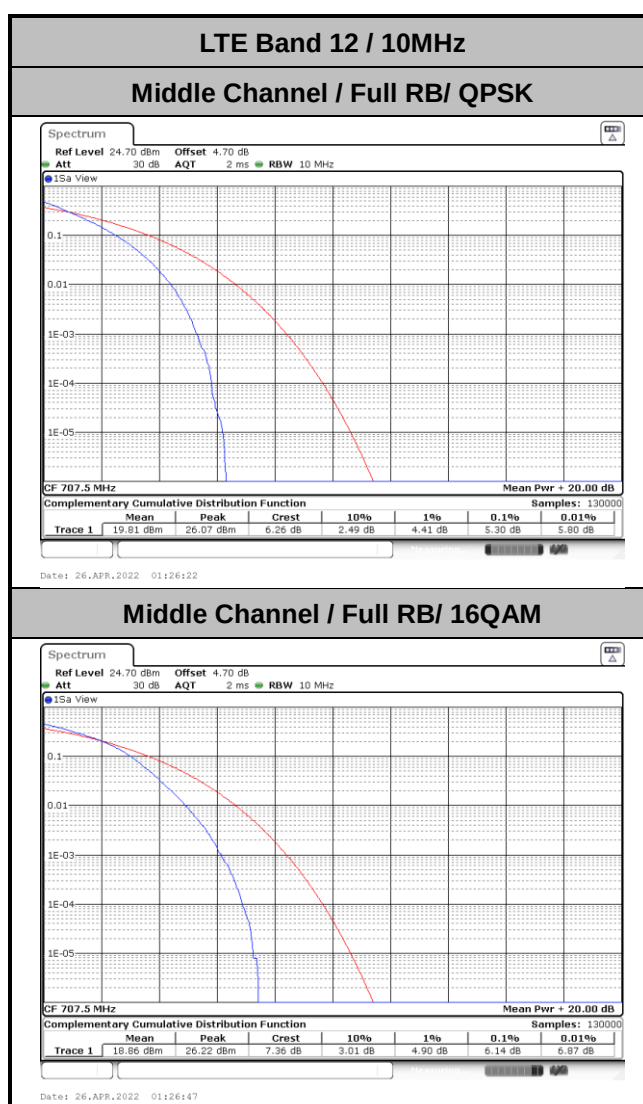
		64QAM	1	99	1	0	2	20.48	15.48	0.0353
		256QAM	1	99	1	0	2	18.45	13.45	0.0221
132323	132521	QPSK	100	0	100	0	125	22.45	17.45	0.0556
		QPSK	1	0	1	99	2	13.69	8.69	0.0074
		QPSK	1	99	1	0	2	23.62	18.62	0.0728
		16QAM	1	99	1	0	125	22.64	17.64	0.0581
		64QAM	1	99	1	0	2	20.48	15.48	0.0353
		256QAM	1	99	1	0	2	18.42	13.42	0.0220
132374	132572	QPSK	100	0	100	0	175	22.39	17.39	0.0548
		QPSK	1	0	1	99	2	13.62	8.62	0.0073
		QPSK	1	99	1	0	2	23.58	18.58	0.0721
		16QAM	1	99	1	0	175	22.82	17.82	0.0605
		64QAM	1	99	1	0	2	20.78	15.78	0.0378
		16QAM	1	99	1	0	2	22.39	17.39	0.0548

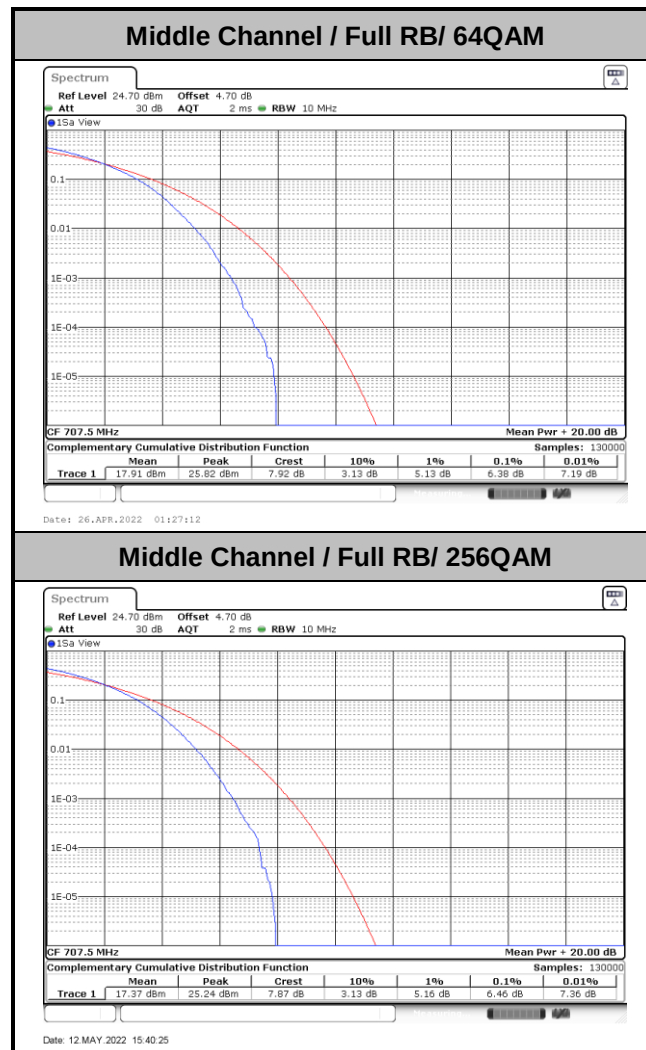


LTE Band 12

Peak-to-Average Ratio

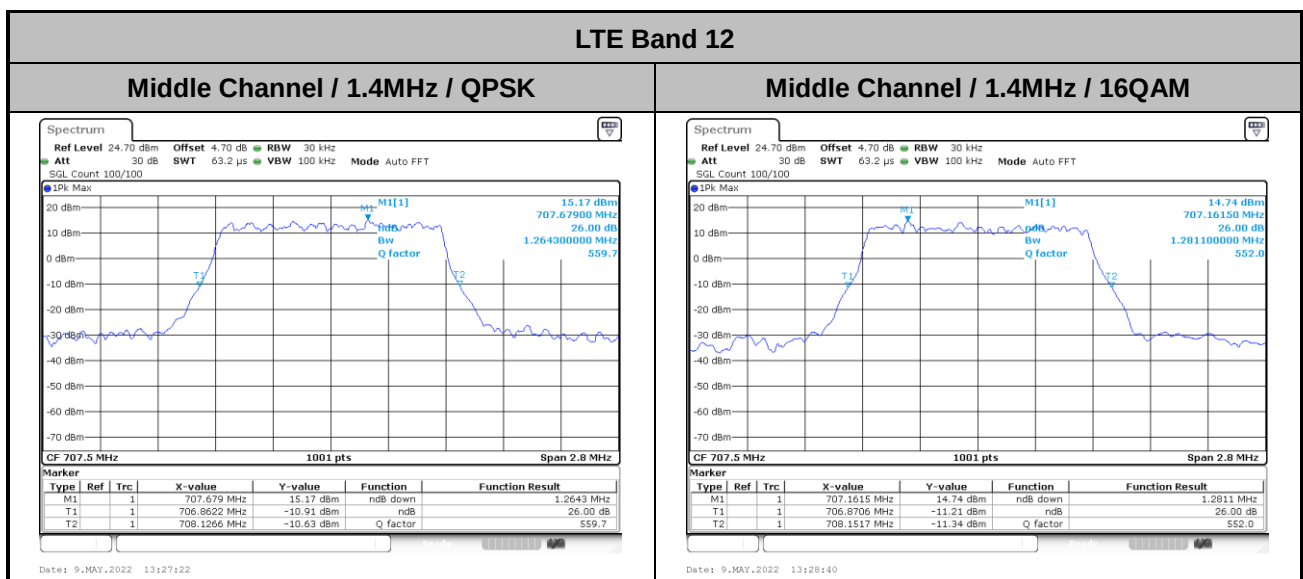
Mode	LTE Band 12 / 10MHz				
Mod.	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.30	6.14	6.38	6.46	PASS





**26dB Bandwidth**

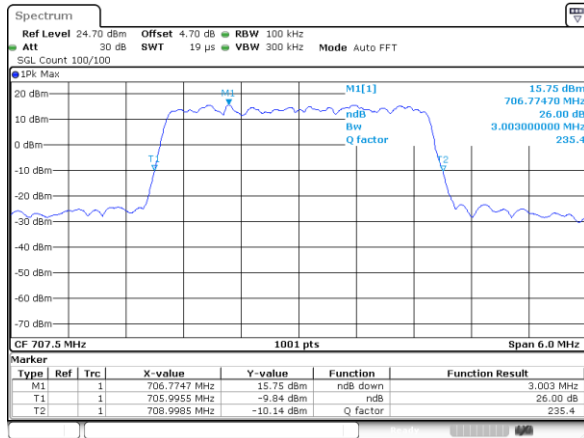
Mode	LTE Band 12 : 26dB BW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.26	1.28
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	3	2.99
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.91	4.89
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.77	9.85





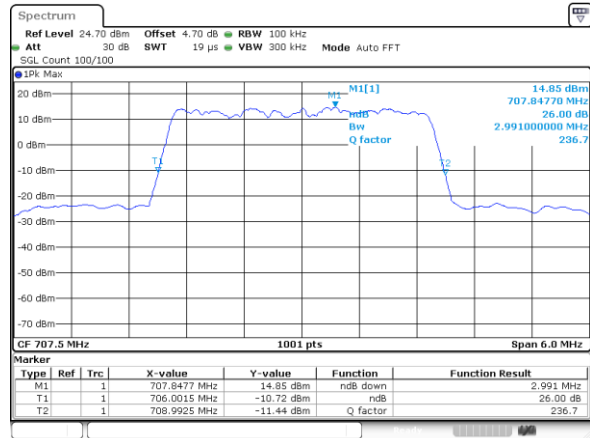
LTE Band 12

Middle Channel / 3MHz / QPSK



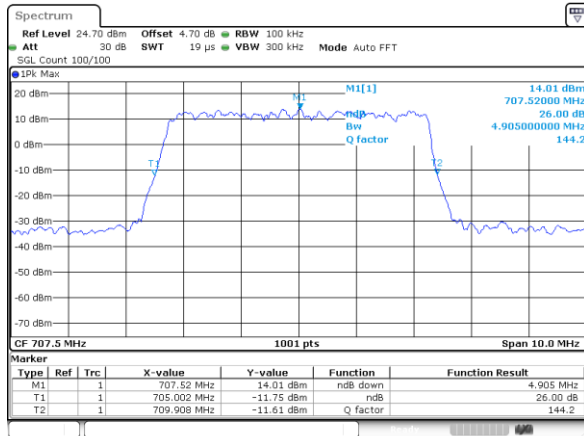
Date: 9.MAY.2022 13:32:02

Middle Channel / 3MHz / 16QAM



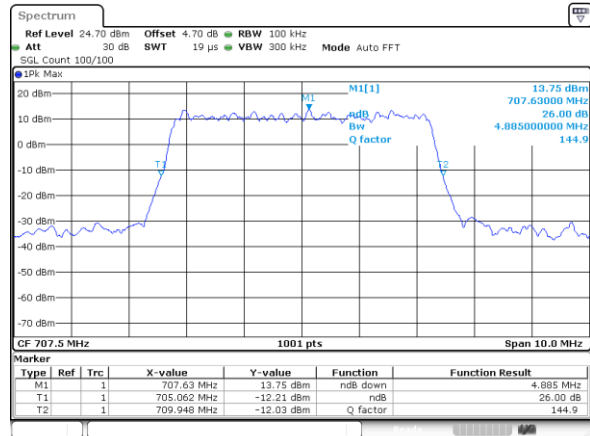
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Middle Channel / 5MHz / QPSK



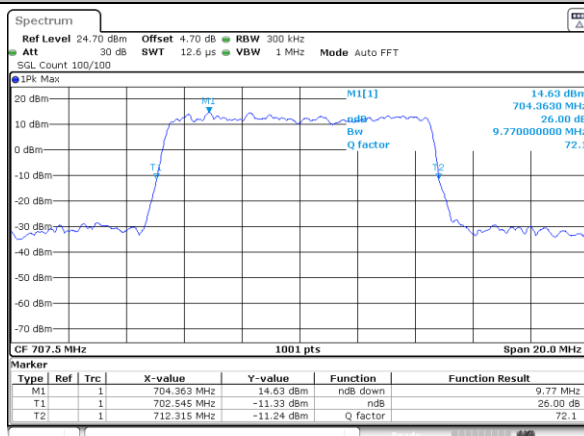
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Middle Channel / 5MHz / 16QAM



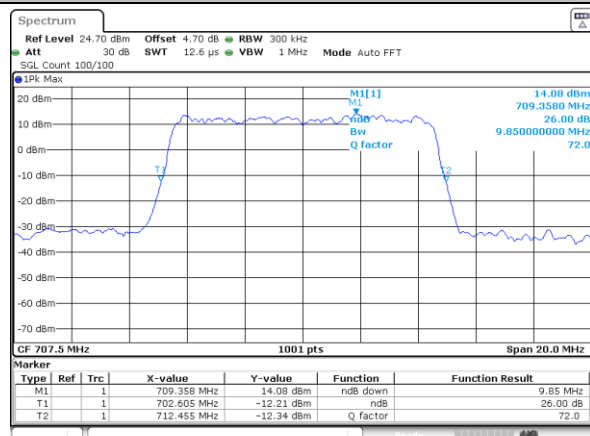
Date: 9.MAY.2022 13:34:36

Middle Channel / 10MHz / QPSK



Date: 26.APR.2022 01:28:24

Middle Channel / 10MHz / 16QAM

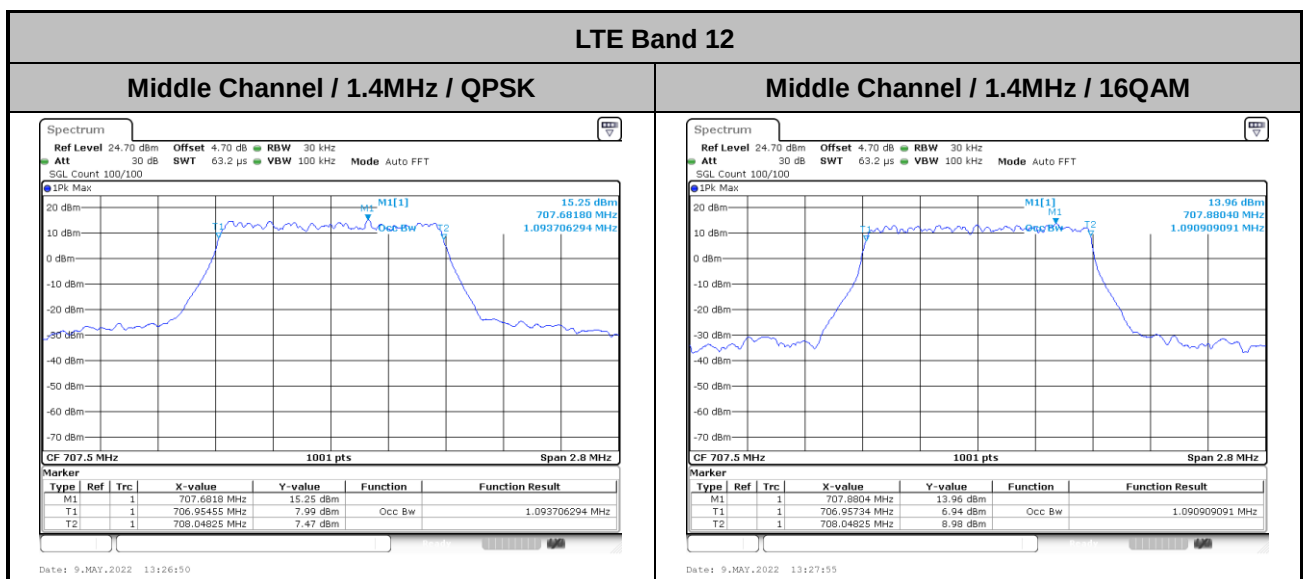


Date: 26.APR.2022 01:28:48



Occupied Bandwidth

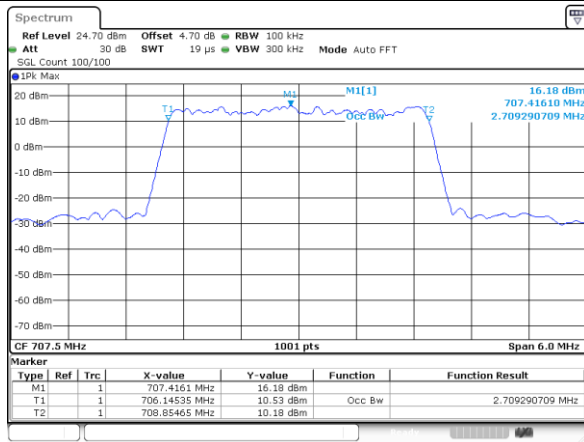
Mode	LTE Band 12 : 99%OBW(MHz)	
BW	1.4MHz	
Mod.	QPSK	16QAM
Middle CH	1.09	1.09
BW	3MHz	
Mod.	QPSK	16QAM
Middle CH	2.71	2.70
BW	5MHz	
Mod.	QPSK	16QAM
Middle CH	4.47	4.51
BW	10MHz	
Mod.	QPSK	16QAM
Middle CH	9.05	8.97



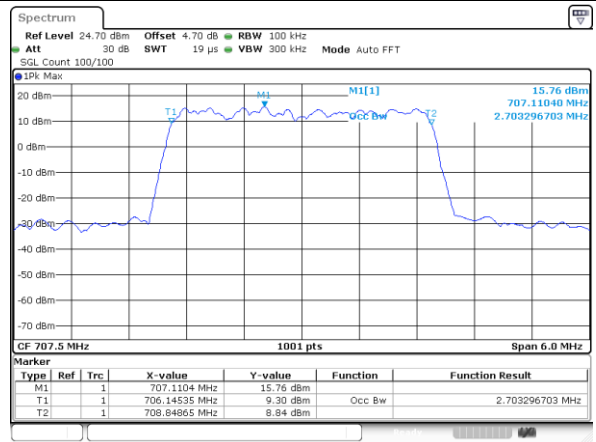


LTE Band 12

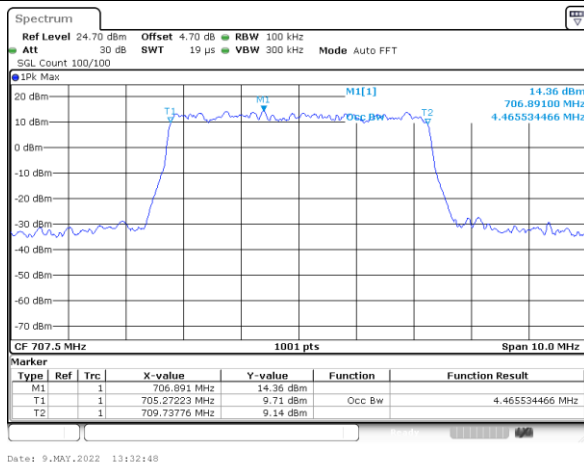
Middle Channel / 3MHz / QPSK



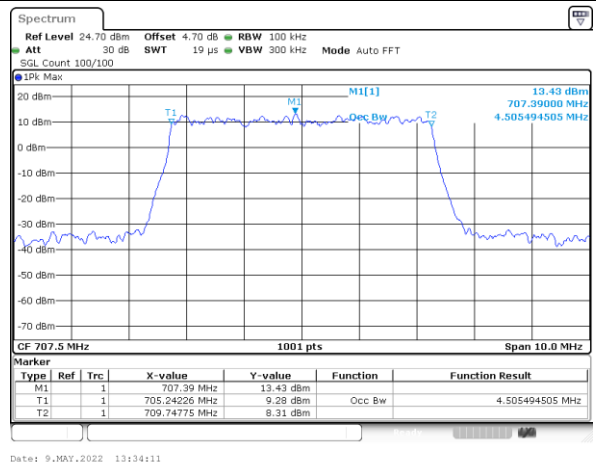
Middle Channel / 3MHz / 16QAM



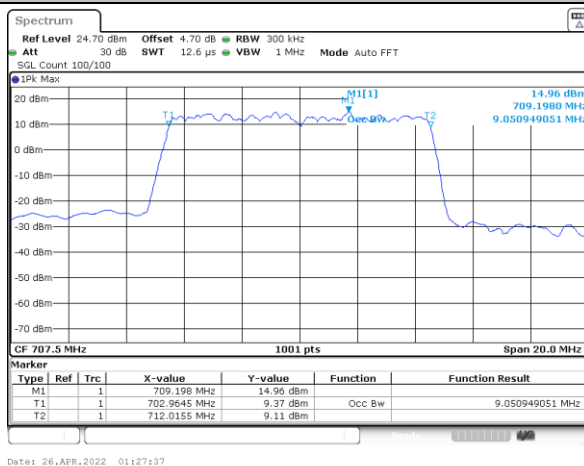
Middle Channel / 5MHz / QPSK



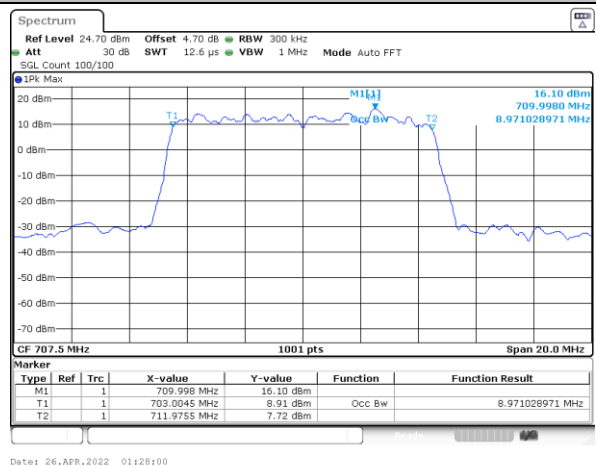
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK



Middle Channel / 10MHz / 16QAM

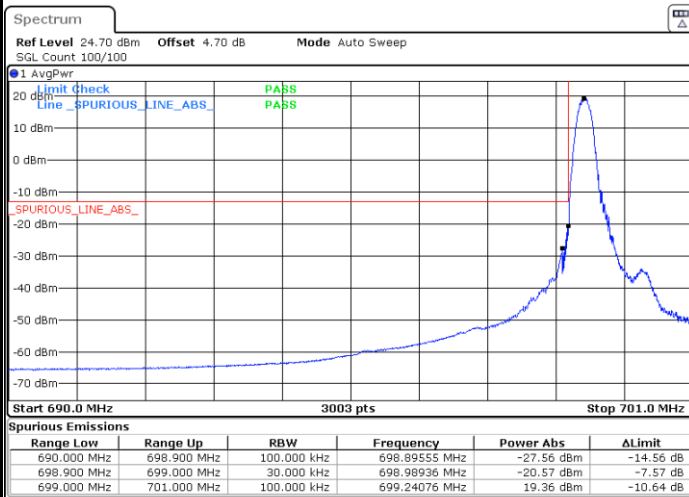




Conducted Band Edge

LTE Band 12 / 1.4MHz / QPSK

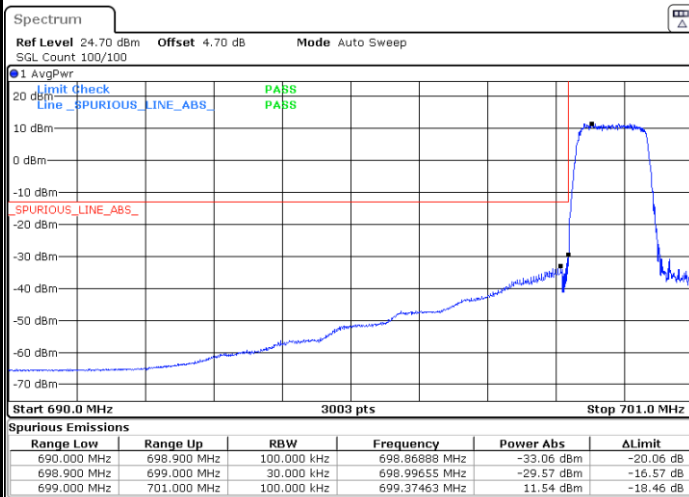
Lowest Band Edge / 1RB



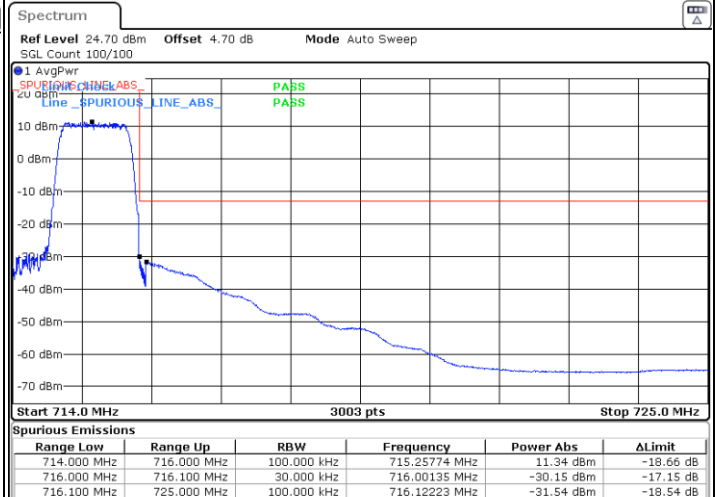
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



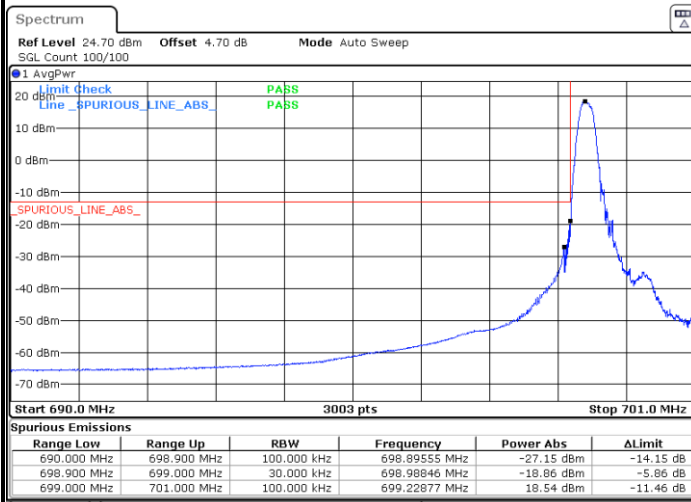
Highest Band Edge / Full RB



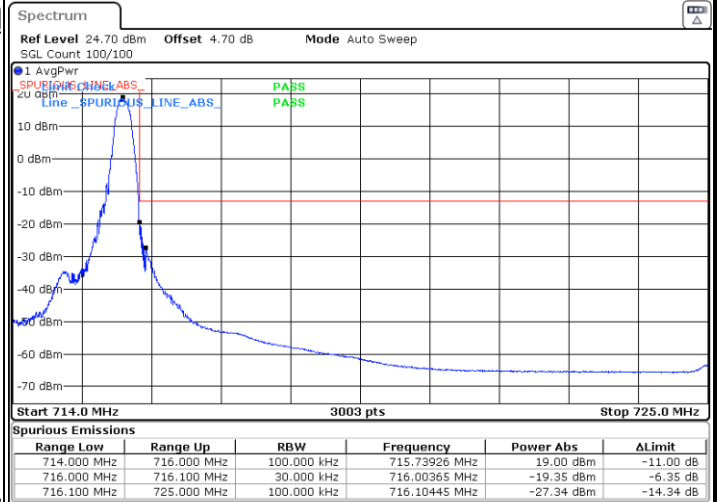


LTE Band 12 / 1.4MHz / 16QAM

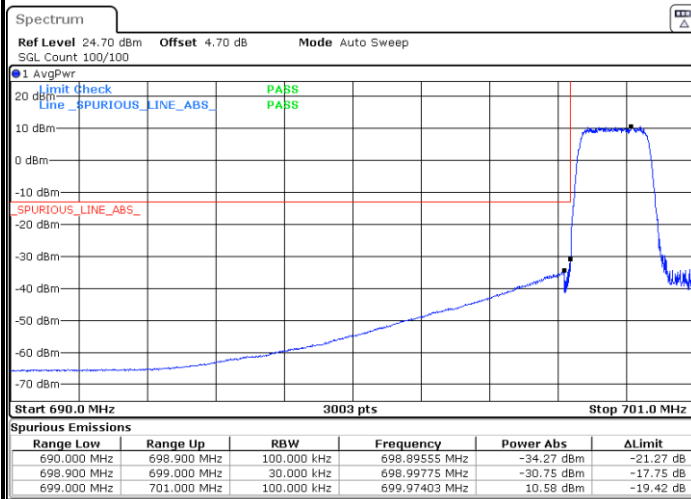
Lowest Band Edge / 1 RB



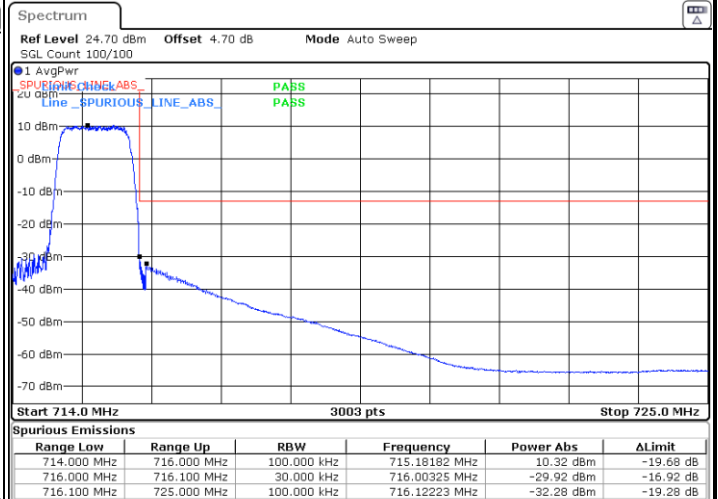
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



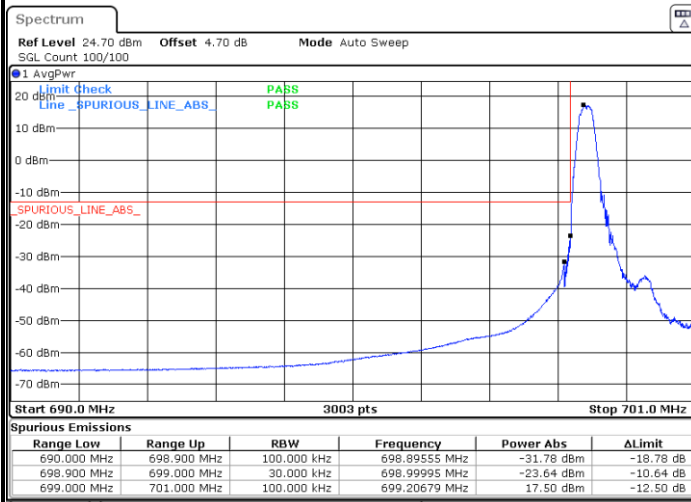
Highest Band Edge / Full RB



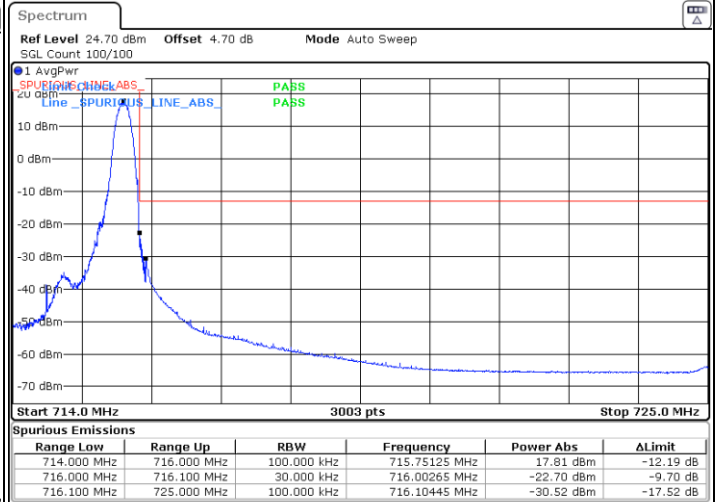


LTE Band 12 / 1.4MHz / 64QAM

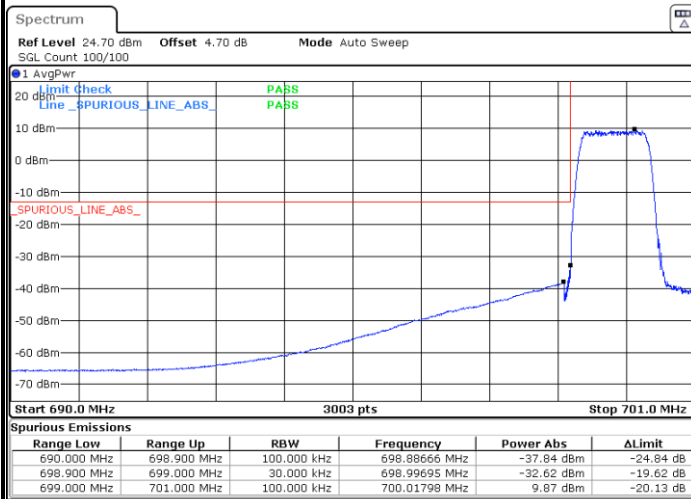
Lowest Band Edge / 1 RB



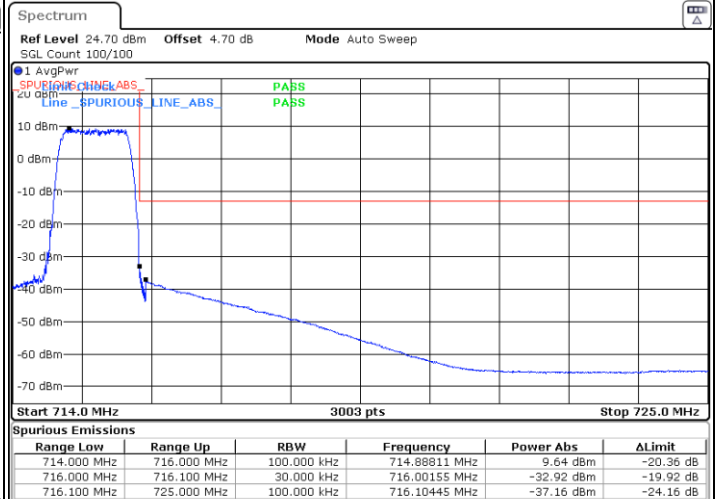
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



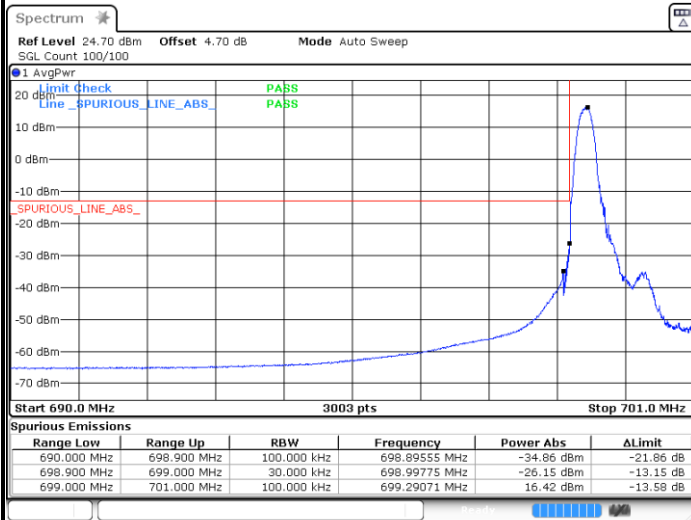
Highest Band Edge / Full RB



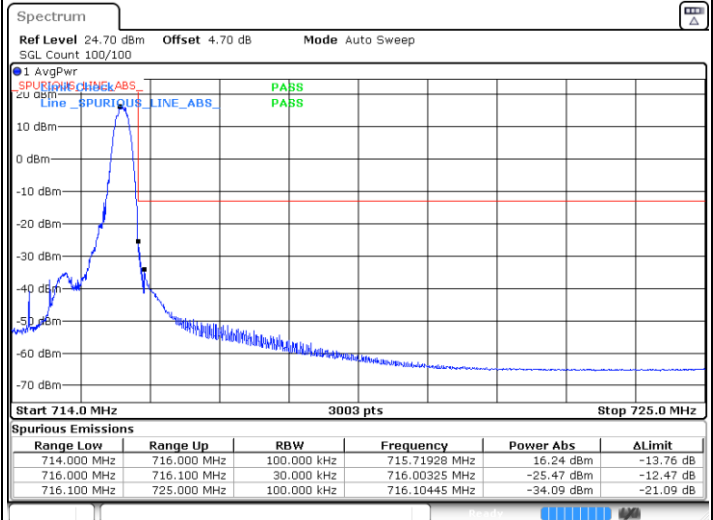


LTE Band 12 / 1.4MHz / 256QAM

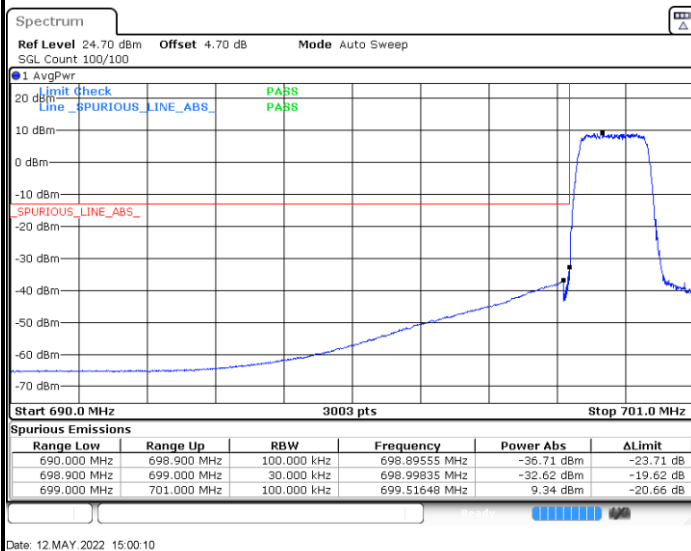
Lowest Band Edge / 1RB



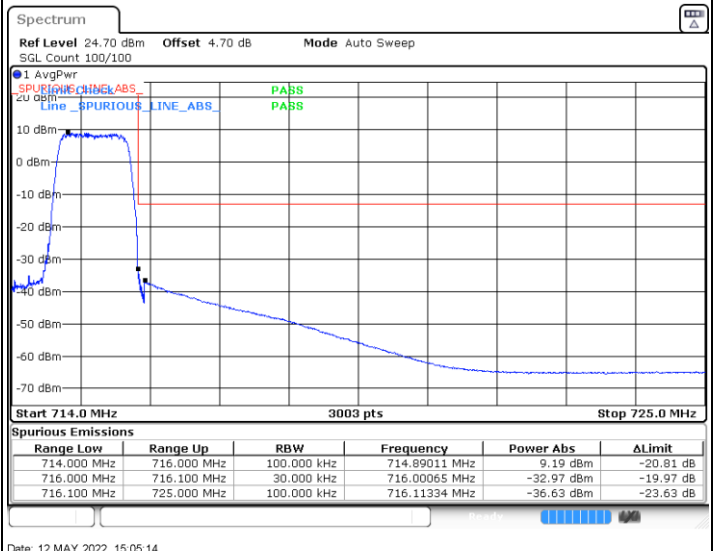
Highest Band Edge / 1RB



Lowest Band Edge / Full RB



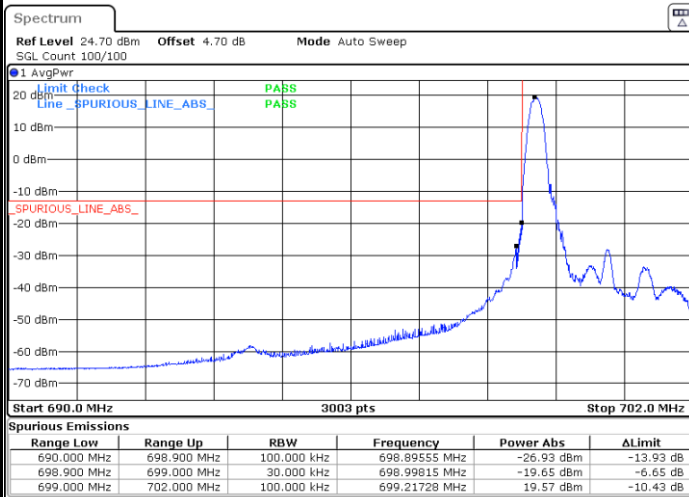
Highest Band Edge / Full RB



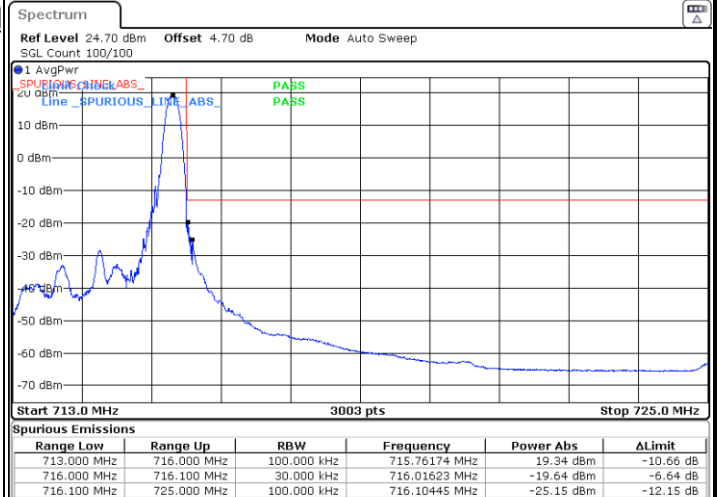


LTE Band 12 / 3MHz / QPSK

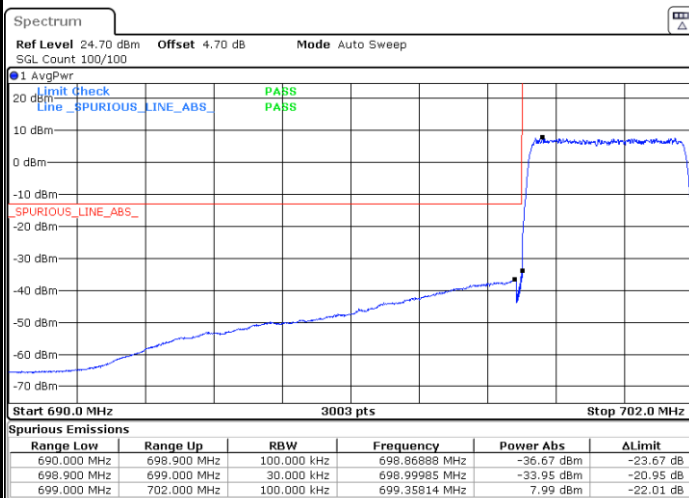
Lowest Band Edge / 1RB



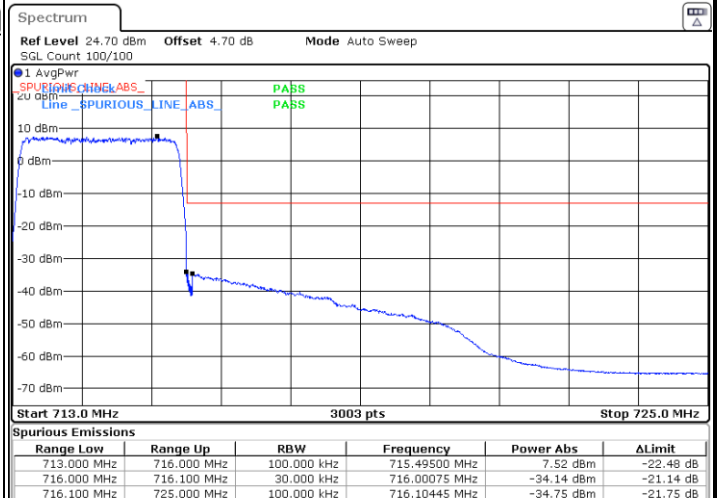
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



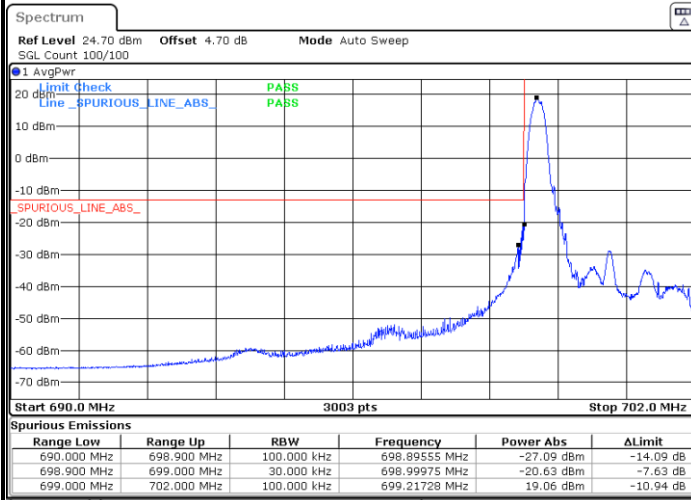
Highest Band Edge / Full RB



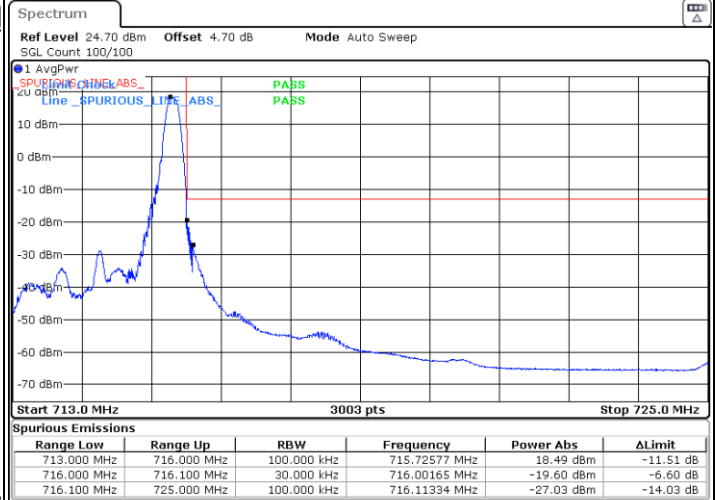


LTE Band 12 / 3MHz / 16QAM

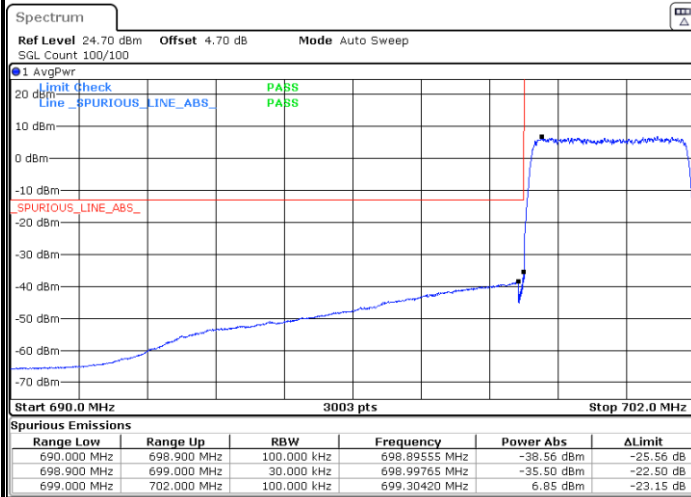
Lowest Band Edge / 1 RB



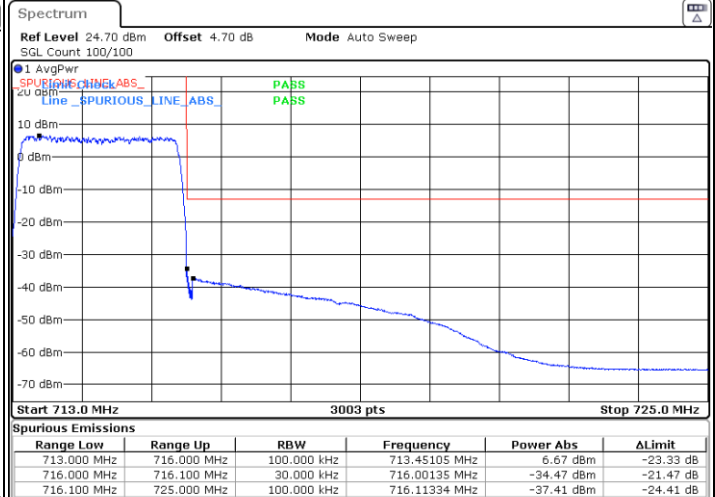
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



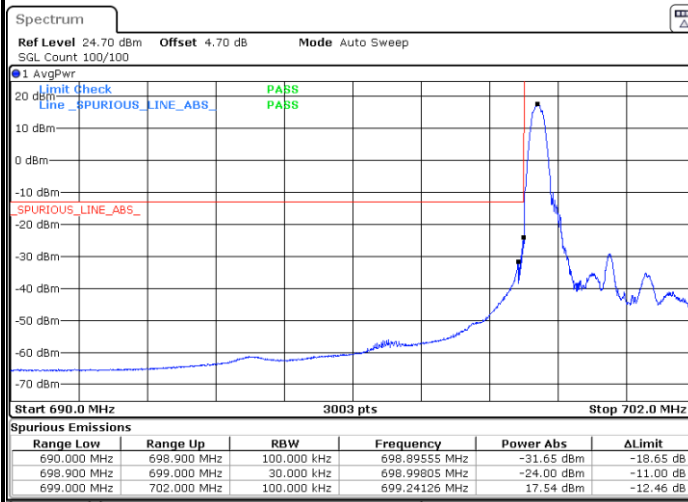
Highest Band Edge / Full RB



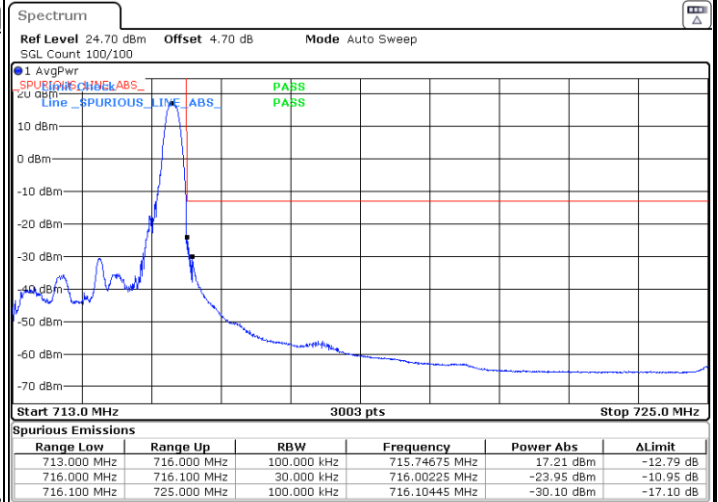


LTE Band 12 / 3MHz / 64QAM

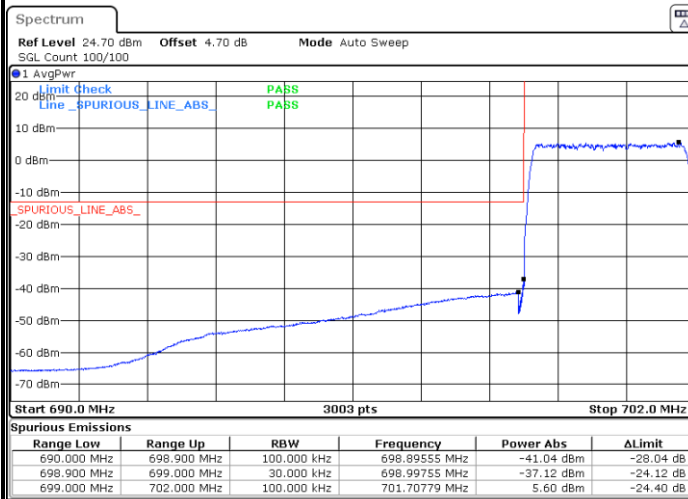
Lowest Band Edge / 1 RB



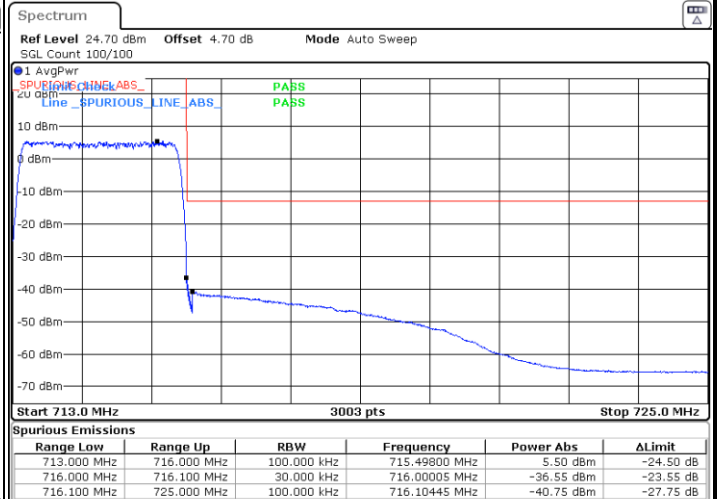
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



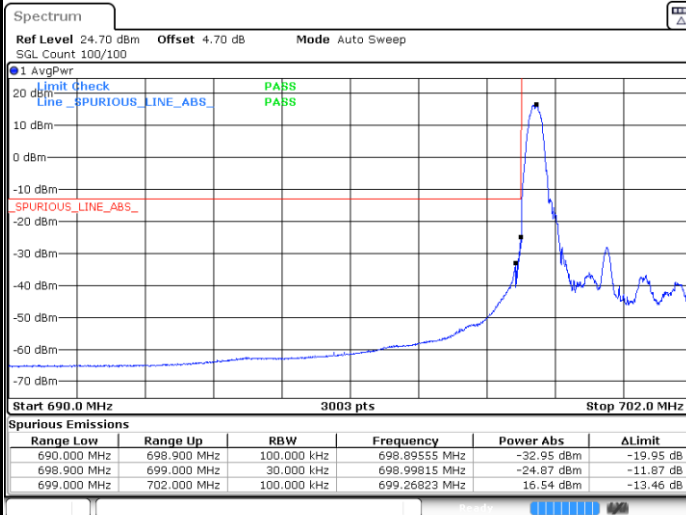
Highest Band Edge / Full RB



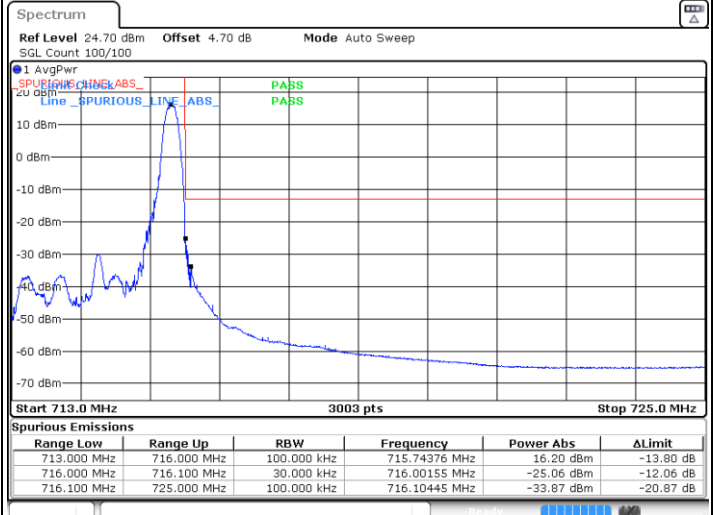


LTE Band 12 / 3MHz / 256QAM

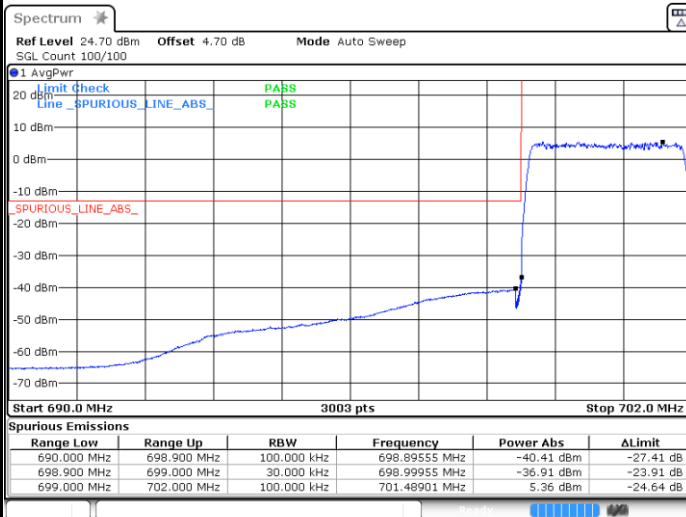
Lowest Band Edge / 1RB



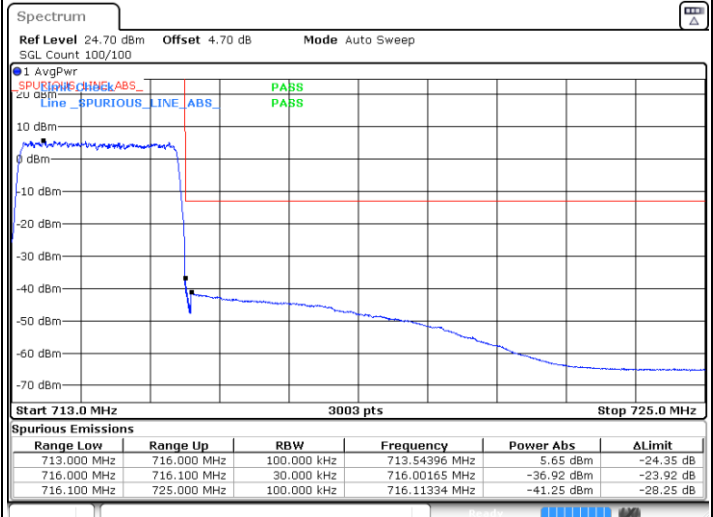
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



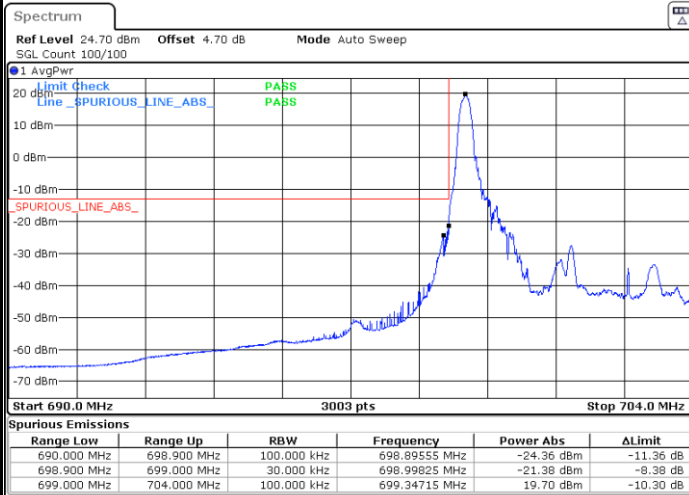
Highest Band Edge / Full RB



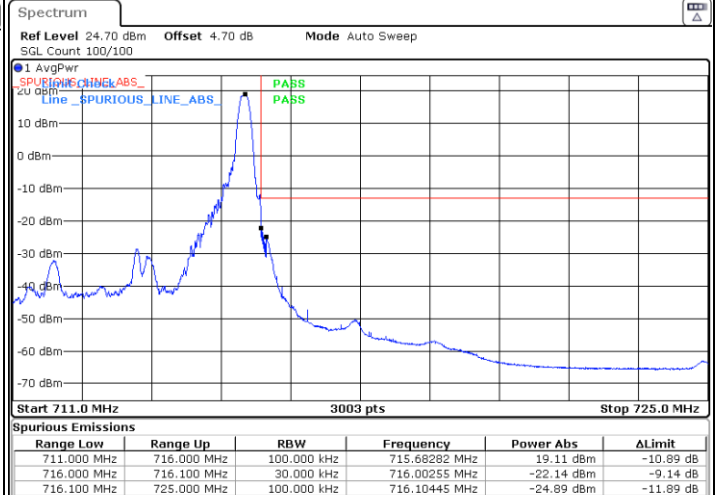


LTE Band 12 / 5MHz / QPSK

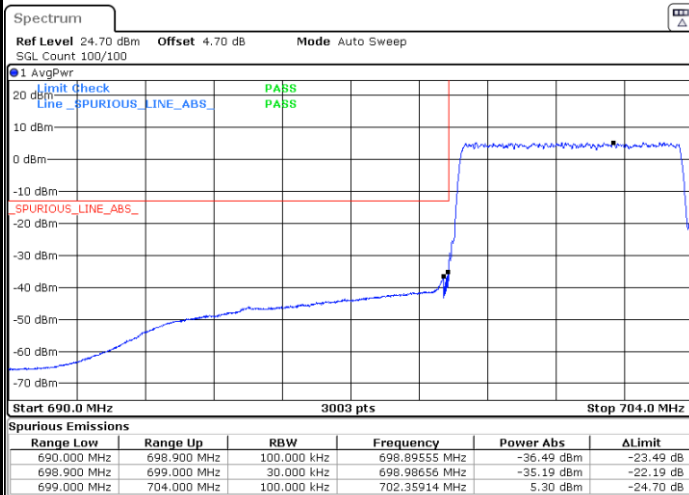
Lowest Band Edge / 1 RB



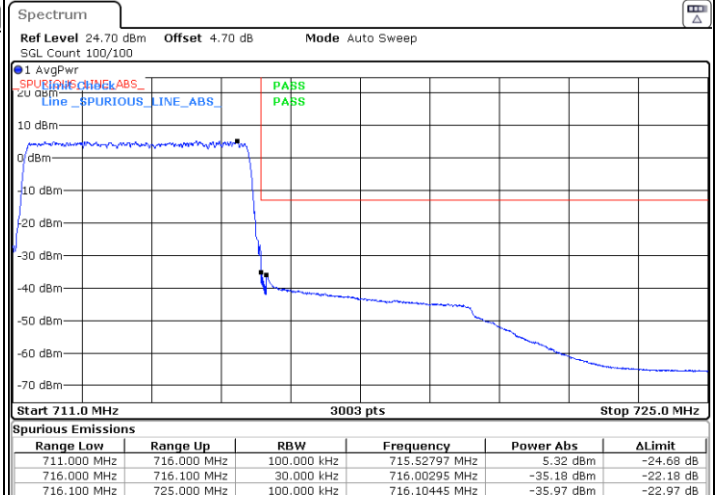
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



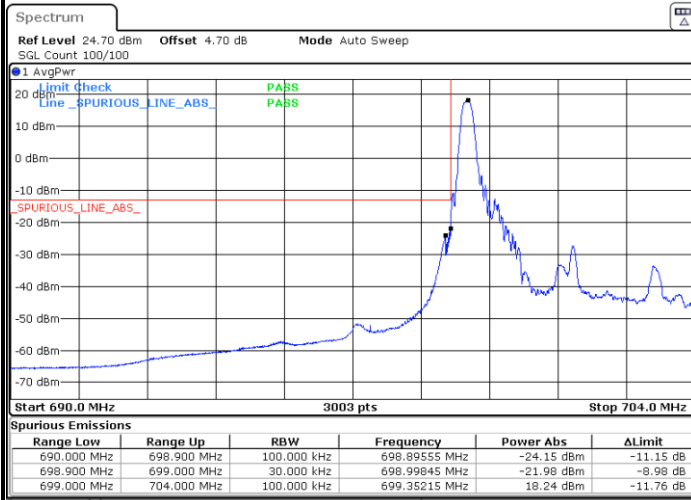
Highest Band Edge / Full RB



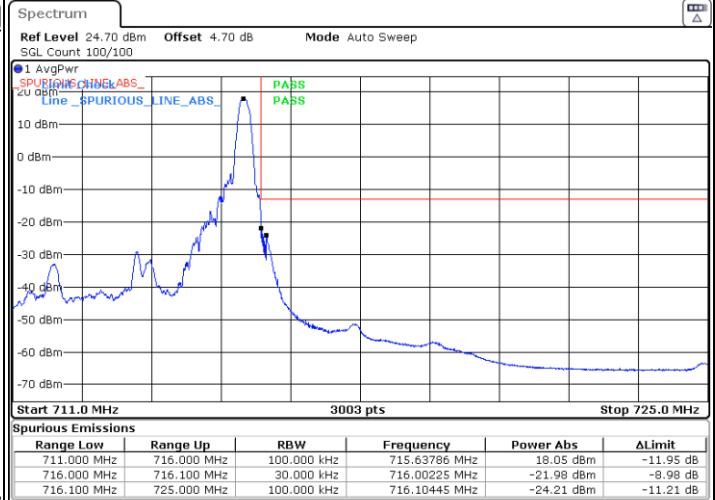


LTE Band 12 / 5MHz / 16QAM

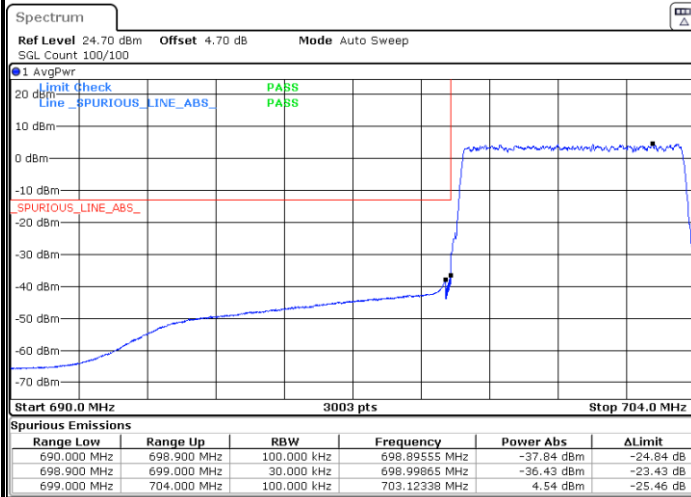
Lowest Band Edge / 1RB



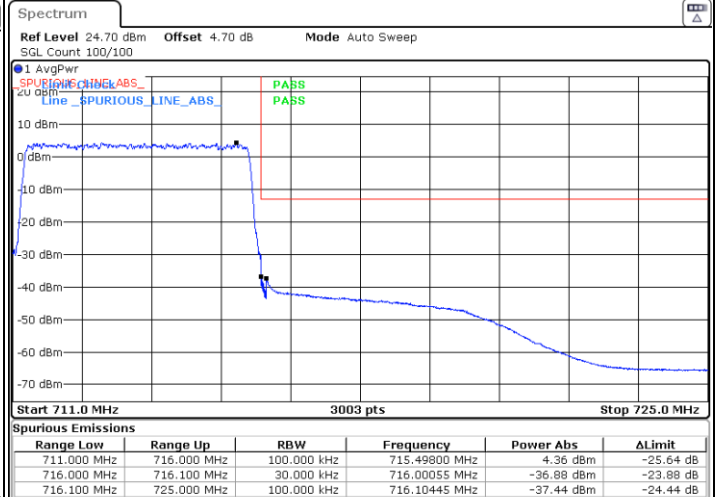
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



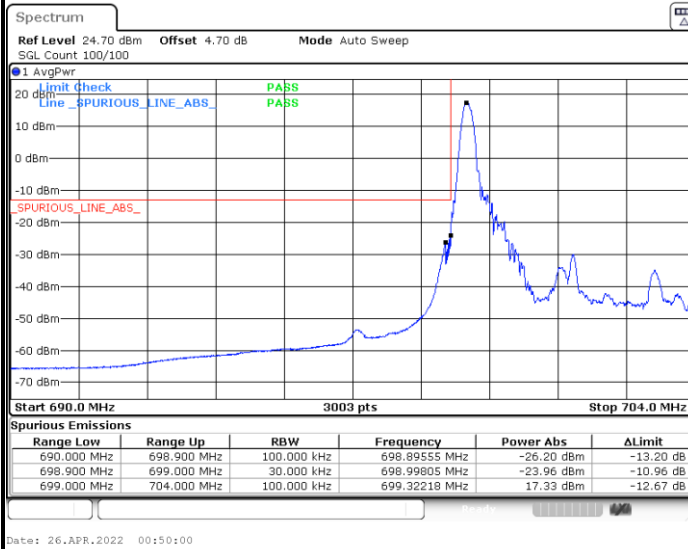
Highest Band Edge / Full RB



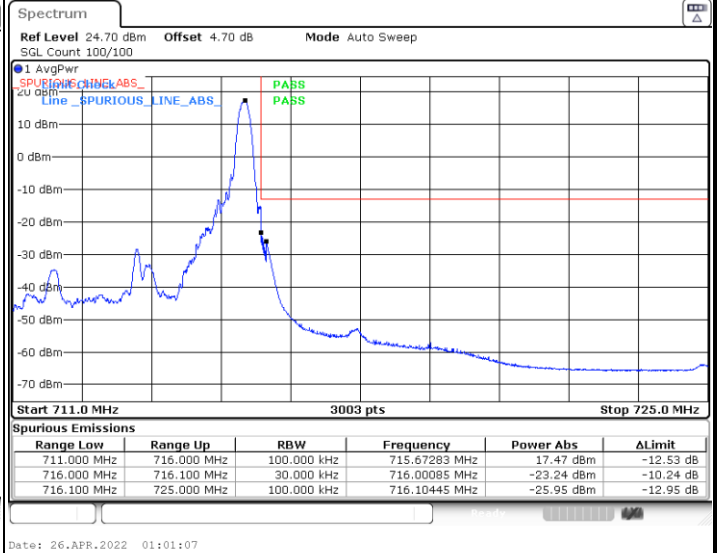


LTE Band 12 / 5MHz / 64QAM

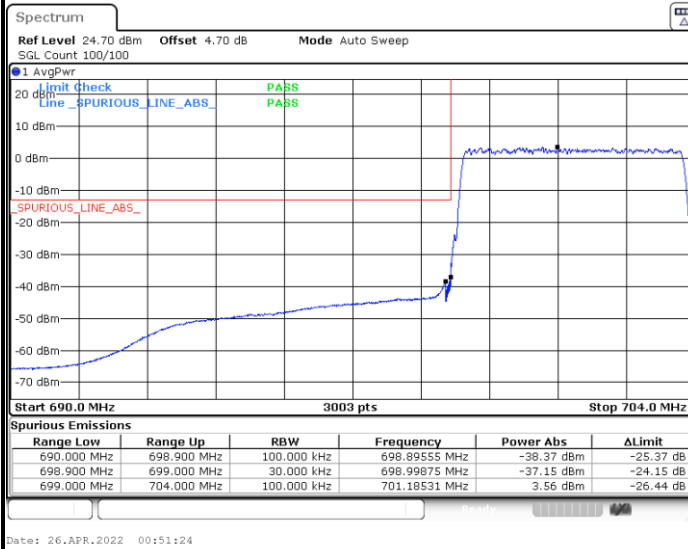
Lowest Band Edge / 1RB



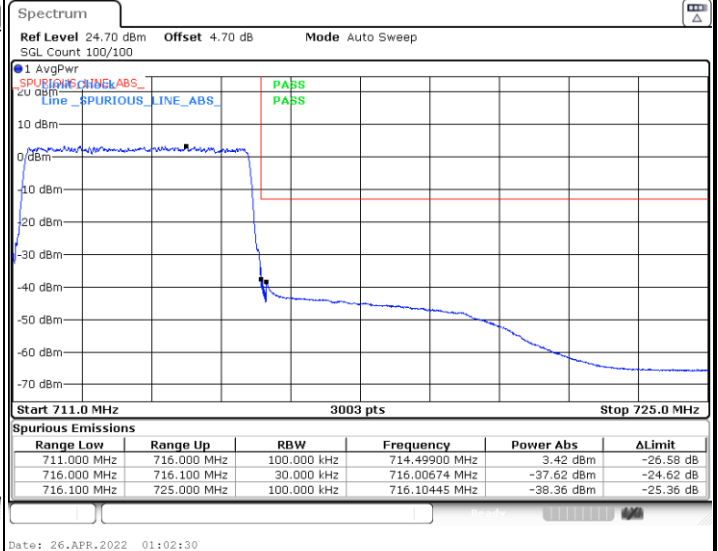
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



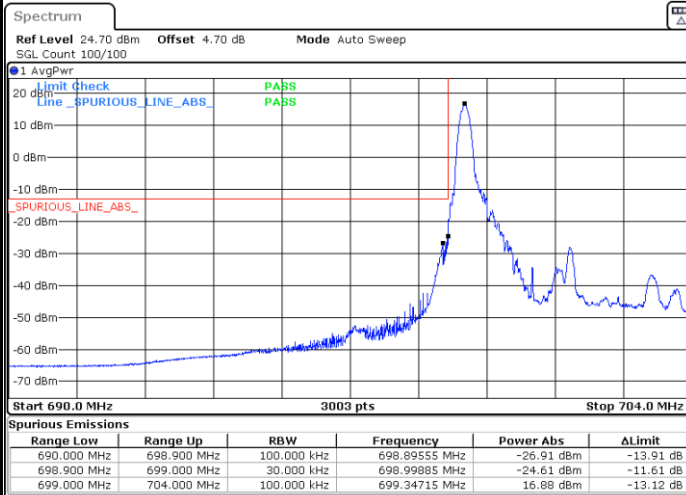
Highest Band Edge / Full RB





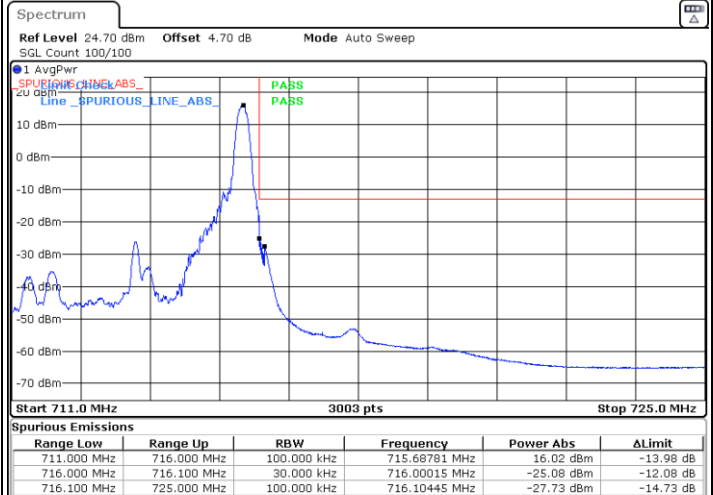
LTE Band 12 / 5MHz / 256QAM

Lowest Band Edge / 1 RB



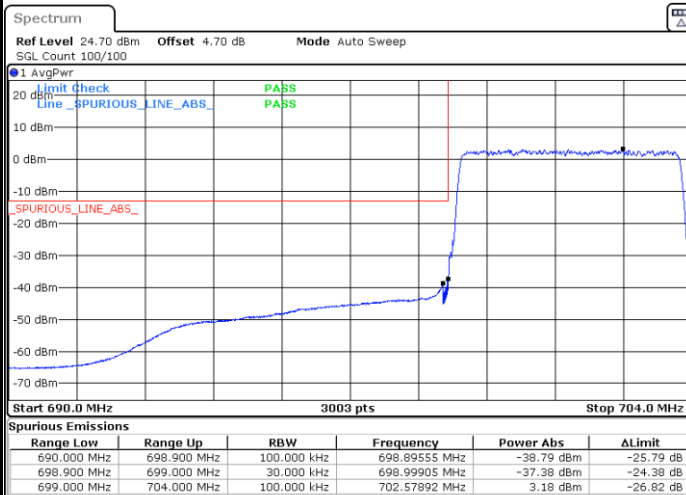
Date: 12 MAY 2022 15:20:52

Highest Band Edge / 1 RB



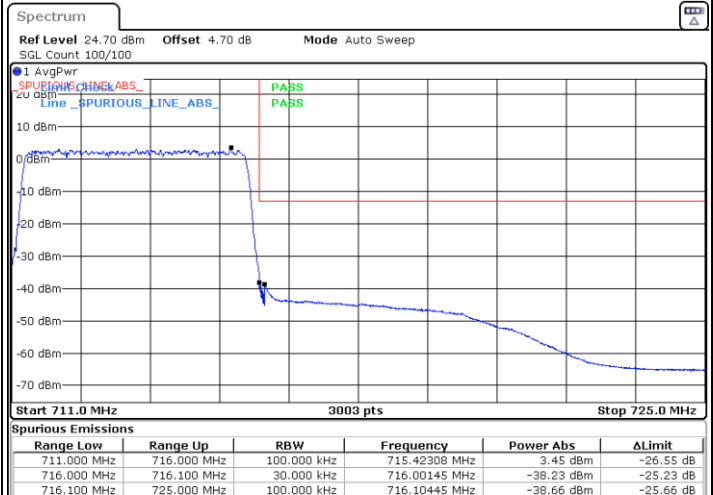
Date: 12 MAY 2022 15:19:09

Lowest Band Edge / Full RB



Date: 12 MAY 2022 15:21:51

Highest Band Edge / Full RB

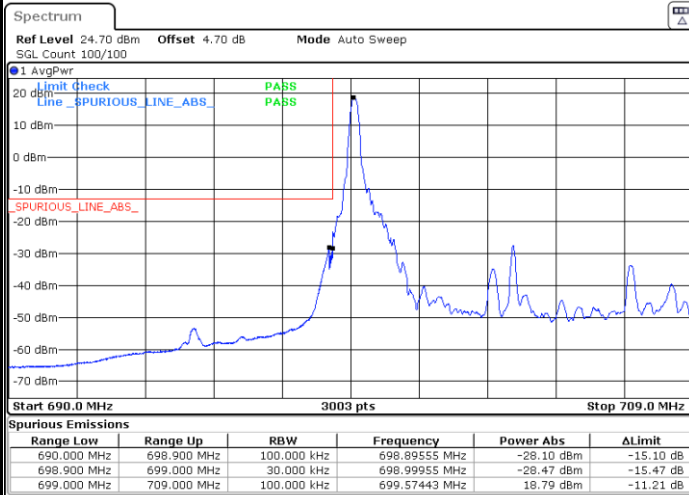


Date: 12 MAY 2022 15:18:19

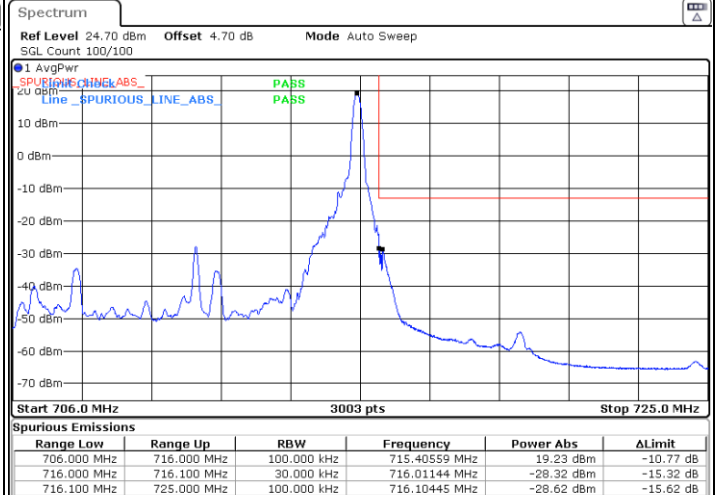


LTE Band 12 / 10MHz / QPSK

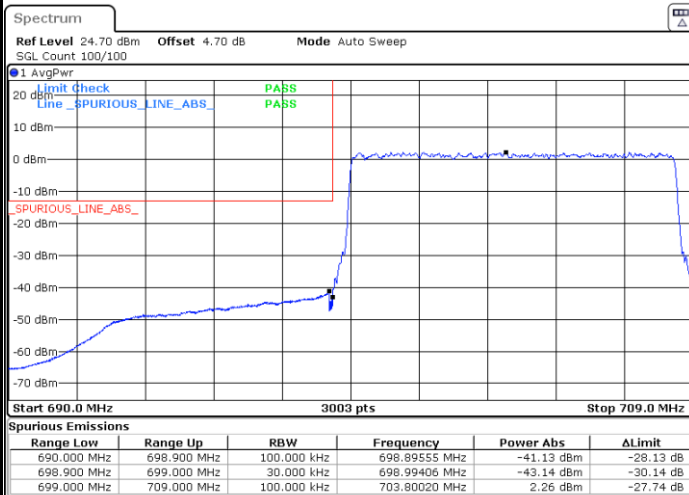
Lowest Band Edge / 1 RB



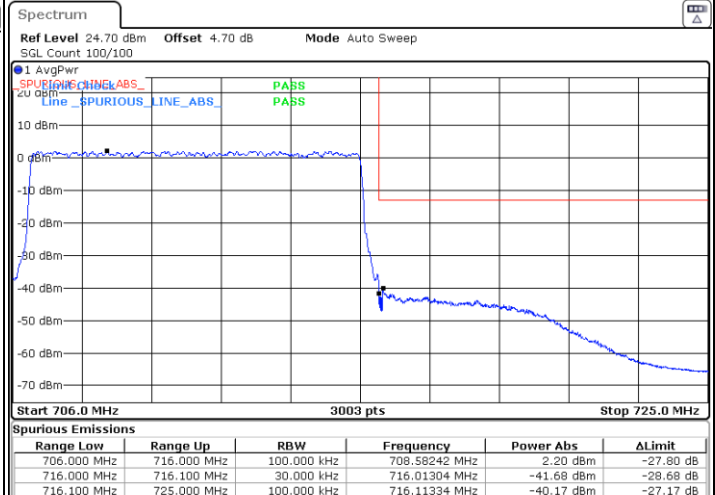
Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



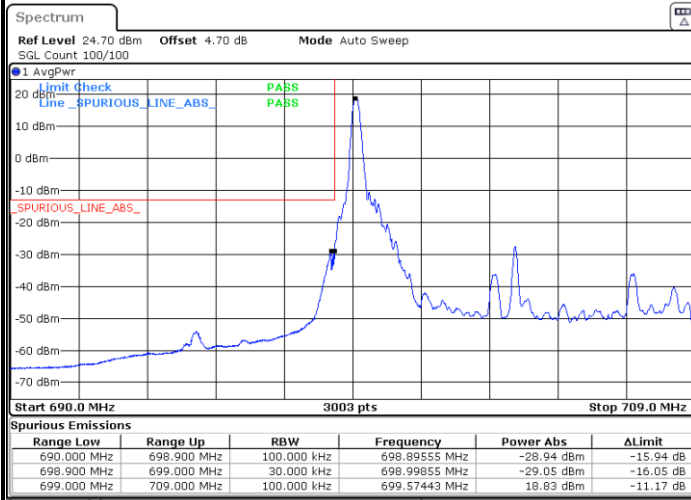
Highest Band Edge / Full RB



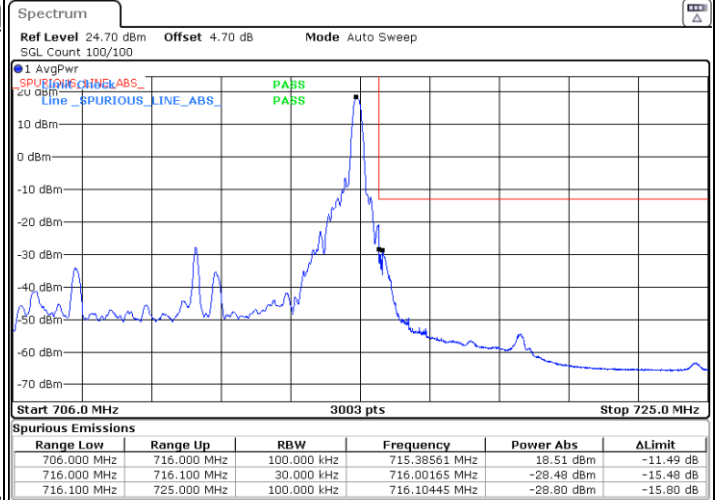


LTE Band 12 / 10MHz / 16QAM

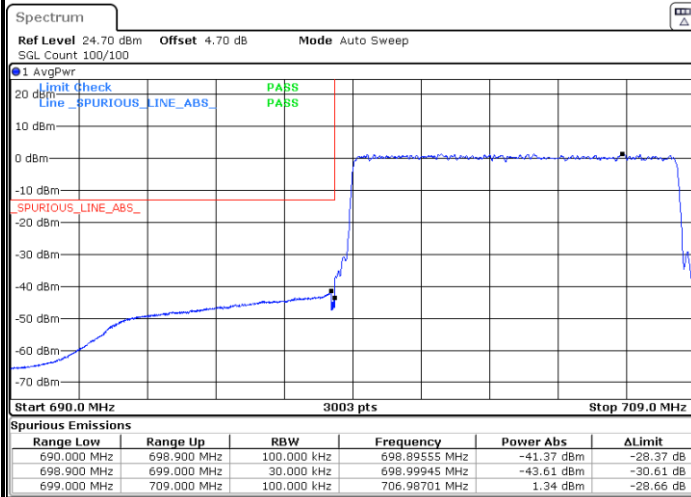
Lowest Band Edge / 1 RB



Highest Band Edge / 1 RB



Lowest Band Edge / Full RB



Highest Band Edge / Full RB

