FCC RF Test Report

APPLICANT	:	OnePlus Technology (Shenzhen) Co., Ltd.
EQUIPMENT	:	Smart Phone
BRAND NAME	:	ONEPLUS
MODEL NAME	:	KB2005
FCC ID	:	2ABZ2-EF009
STANDARD	:	47 CFR Part 2, 27(L), 27(M), 27(N)
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Jun. 15, 2020 and completely tested on Jul. 19, 2020. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International (ShenZhen) Inc.

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG061509-03C	Rev. 01	Initial issue of report	Aug. 25, 2020

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(c)(10)	Effective Radiated Power (Band 71)	ERP < 3 Watt	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7) (Band 38) (Band 41)	EIRP < 2Watt	PASS	-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(g) §27.53(h)	Conducted Band Edge Measurement (Band 4) (Band 66) (Band 71)	< 43+10log10(P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)	§27.53(m)(4)		
3.8	§2.1051 §27.53(g) §27.53(h)	Conducted Spurious Emission (Band 4) (Band 66) (Band 71)	< 43+10log10(P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log$_{10}$(P[Watts])		
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 4) (Band 66) (Band 71)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 25.84 dB at 10372.00 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log$_{10}$(P[Watts])		

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

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04, 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, China

1.2 Manufacturer

OnePlus Technology (Shenzhen) Co., Ltd.
18C02, 18C03, 18C04, 18C05, Shum Yip Terra Building, Binhe Avenue North, Futian District, Shenzhen, Guangdong, China

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Smart Phone
Brand Name	ONEPLUS
Model Name	KB2005
FCC ID	2ABZ2-EF009
EUT supports Radios application	CDMA/GSM/WCDMA/LTE/5G NR WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 WLAN 5GHz 802.11ax HE20/HE40/HE80 Bluetooth BR / EDR / LE / ANT+ GNSS/NFC
IMEI Code	Conducted: 990016770027769 for Band 4 / 66 / 7 / 38 / 41 / 71 990016770042099 for Band 66C / 41C Radiation: 990016770042024
HW Version	13
SW Version	OXYGEN OS 11. KB05AA
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. This is a variant report for KB2005. For model change note, Please refer to the product equality declaration exhibit submitted. According to the PED, the change has no influence on the test results, all the test results are leveraged from original report FG061509C.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5MHz
Rx Frequency	LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 38 : 2572.5MHz ~ 2617.5MHz LTE Band 41 : 2498.5 MHz ~ 2687.5 MHz LTE Band 66 : 2110.7 MHz~ 2199.3 MHz LTE Band 71: 619.5 MHz ~ 649.5MHz
Bandwidth	LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 38 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41 : 5MHz / 10MHz / 15MHz / 20MHz LTE Band 66 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 71 : 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	**Bottom Antenna:** LTE Band 4 : 22.52 dBm LTE Band 7 : 22.61 dBm LTE Band 38 : 22.59 dBm LTE Band 41 : 24.73 dBm LTE Band 41_CA : 24.66 dBm LTE Band 66 : 22.55 dBm LTE Band 66_CA : 22.62 dBm LTE Band 71 : 22.85 dBm
Antenna Gain	**Top Antenna:** LTE Band 4 : -2.0 dBi LTE Band 7 : -1.5 dBi LTE Band 38 : -1.5 dBi LTE Band 41 : -1.5 dBi LTE Band 66 : -2.0 dBi LTE Band 71 : -6.0 dBi **Bottom Antenna:** LTE Band 4 : -1.0 dBi LTE Band 7 : -0.5 dBi LTE Band 38 : -0.5 dBi LTE Band 41 : -0.5 dBi LTE Band 66 : -1.0 dBi LTE Band 71 : -4.5 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

Note:

1. The maximum ERP/EIRP is calculated from max output power and max antenna gain, only the maximum ERP/EIRP is shown on the report.
2. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to their higher conducted power.
3. LTE Band 41 supports HPUE.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

LTE Band 4		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	1M10G7D	-	0.1400	1M10W7D	-	0.1175
3	1711.5 ~ 1753.5	2M72G7D	-	0.1400	2M71W7D	-	0.1199
5	1712.5 ~ 1752.5	4M51G7D	-	0.1390	4M50W7D	-	0.1194
10	1715.0 ~ 1750.0	9M01G7D	0.0095	0.1387	9M01W7D	-	0.1208
15	1717.5 ~ 1747.5	13M4G7D	-	0.1393	13M5W7D	-	0.1202
20	1720.0 ~ 1745.0	17M9G7D	-	0.1429	17M9W7D	-	0.1236

LTE Band 4		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1754.3	1M10W7D	-	0.1033
3	1711.5 ~ 1753.5	2M73W7D	-	0.0948
5	1712.5 ~ 1752.5	4M51W7D	-	0.0920
10	1715.0 ~ 1750.0	9M07W7D	-	0.0929
15	1717.5 ~ 1747.5	13M5W7D	-	0.0935
20	1720.0 ~ 1745.0	17M9W7D	-	0.0940

LTE Band 66		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M10G7D	-	0.1400	1M10W7D	-	0.1175
3	1711.5 ~ 1778.5	2M72G7D	-	0.1400	2M71W7D	-	0.1199
5	1712.5 ~ 1777.5	4M51G7D	-	0.1390	4M50W7D	-	0.1194
10	1715.0 ~ 1775.0	9M01G7D	0.0095	0.1387	9M01W7D	-	0.1208
15	1717.5 ~ 1772.5	13M4G7D	-	0.1393	13M5W7D	-	0.1202
20	1720.0 ~ 1770.0	17M9G7D	-	0.1429	17M9W7D	-	0.1236

LTE Band 66		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1710.7 ~ 1779.3	1M10W7D	-	0.1033
3	1711.5 ~ 1778.5	2M73W7D	-	0.0948
5	1712.5 ~ 1777.5	4M51W7D	-	0.0920
10	1715.0 ~ 1775.0	9M07W7D	-	0.0929
15	1717.5 ~ 1772.5	13M5W7D	-	0.0935
20	1720.0 ~ 1770.0	17M9W7D	-	0.0940

LTE Band 7		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2502.5 ~ 2567.5	4M52G7D	-	0.1607	4M50W7D	-	0.1384
10	2505.0 ~ 2565.0	9M01G7D	0.0009	0.1585	9M01W7D	-	0.1390
15	2507.5 ~ 2562.5	13M5G7D	-	0.1603	13M5W7D	-	0.1390
20	2510.0 ~ 2560.0	17M9G7D	-	0.1626	17M9W7D	-	0.1413

LTE Band 7		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2502.5 ~ 2567.5	4M51W7D	-	0.1072
10	2505.0 ~ 2565.0	9M03W7D	-	0.1076
15	2507.5 ~ 2562.5	13M5W7D	-	0.1081
20	2510.0 ~ 2560.0	17M9W7D	-	0.1094

LTE Band 38		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2572.5 ~ 2617.5	4M51G7D	-	0.2649	4M48W7D	-	0.2286
10	2575.0 ~ 2615.0	8M99G7D	0.0093	0.2636	9M11W7D	-	0.2275
15	2577.5 ~ 2612.5	13M4G7D	-	0.2649	13M5W7D	-	0.2291
20	2580.0 ~ 2610.0	17M9G7D	-	0.2642	18M0W7D	-	0.2366

LTE Band 38		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2572.5 ~ 2617.5	4M52W7D	-	0.1758
10	2575.0 ~ 2615.0	9M03W7D	-	0.1871
15	2577.5 ~ 2612.5	13M5W7D	-	0.1795
20	2580.0 ~ 2610.0	17M9W7D	-	0.1778

LTE Band 41		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2498.5 ~ 2687.5	4M51G7D	-	0.2649	4M48W7D	-	0.2286
10	2501.0 ~ 2685.0	8M99G7D	0.0093	0.2636	9M11W7D	-	0.2275
15	2503.5 ~ 2682.5	13M4G7D	-	0.2649	13M5W7D	-	0.2291
20	2506.0 ~ 2680.0	17M9G7D	-	0.2642	18M0W7D	-	0.2366

LTE Band 41		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	2498.5 ~ 2687.5	4M52W7D	-	0.1758
10	2501.0 ~ 2685.0	9M03W7D	-	0.1871
15	2503.5 ~ 2682.5	13M5W7D	-	0.1795
20	2506.0 ~ 2680.0	17M9W7D	-	0.1778

LTE Band 71		QPSK			16QAM		
BW (MHz)	**Frequency Range (MHz)**	**Emission Designator (99%OBW)**	**Frequency Tolerance (ppm)**	**Maximum ERP(W)**	**Emission Designator (99%OBW)**	**Frequency Tolerance (ppm)**	**Maximum ERP(W)**
5	665.5 ~ 695.5	4M51G7D	-	0.0412	4M52W7D	-	0.0365
10	668.0 ~ 693.0	9M01G7D	0.0234	0.0413	9M05W7D	-	0.0363
15	670.5 ~ 690.5	13M5G7D	-	0.0410	13M4W7D	-	0.0370
20	673.0 ~ 688.0	17M9G7D	-	0.0417	18M0W7D	-	0.0368

LTE Band 71		64QAM		
BW (MHz)	**Frequency Range (MHz)**	**Emission Designator (99%OBW)**	**Frequency Tolerance (ppm)**	**Maximum ERP(W)**
5	665.5 ~ 695.5	4M52W7D	-	0.0287
10	668.0 ~ 693.0	9M05W7D	-	0.0286
15	670.5 ~ 690.5	13M5W7D	-	0.0281
20	673.0 ~ 688.0	17M9W7D	-	0.0286

LTE Band 41 CA	QPSK			16QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5MHz+20MHz	23M3G7D	-	0.2600	23M3W7D	-	0.2432
10MHz+20MHz	28M0G7D	-	0.2582	27M9W7D	-	0.2449
10MHz+15MHz	23M5G7D	-	0.2588	23M5W7D	-	0.2432
15MHz+15MHz	28M5G7D	-	0.1435	28M6W7D	-	0.2594
15MHz+20MHz	32M8G7D	-	0.2570	32M8W7D	-	0.2333
15MHz+10MHz	23M5G7D	-	0.2606	23M5W7D	-	0.2404
20MHz+5MHz	23M4G7D	-	0.2582	23M4W7D	-	0.2449
20MHz+10MHz	28M0G7D	-	0.2046	28M1W7D	-	0.2588
20MHz+15MHz	32M8G7D	-	0.2080	32M8W7D	-	0.2541
20MHz+20MHz	37M6G7D	-	0.1349	37M7W7D	-	0.2600

LTE Band 41C_CA	64QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5MHz+20MHz	23M2W7D	-	0.2032
10MHz+20MHz	28M0W7D	-	0.2018
10MHz+15MHz	23M4W7D	-	0.2046
15MHz+15MHz	28M5W7D	-	0.2004
15MHz+20MHz	32M7W7D	-	0.1972
15MHz+10MHz	23M5W7D	-	0.2104
20MHz+5MHz	23M3W7D	-	0.2046
20MHz+10MHz	28M1W7D	-	0.2004
20MHz+15MHz	32M7W7D	-	0.2056
20MHz+20MHz	37M6W7D	-	0.2213

LTE Band 66C_CA	QPSK			16QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
10MHz+15MHz	23M5G7D	-	0.1387	23M5W7D	-	0.1276
5MHz+20MHz	23M3G7D	-	0.1452	23M2W7D	-	0.1297
10MHz+20MHz	27M9G7D	-	0.1393	28M1W7D	-	0.1211
15MHz+15MHz	28M6G7D	-	0.1380	28M6W7D	-	0.1297
15MHz+20MHz	32M7G7D	-	0.1396	32M7W7D	-	0.1197
15MHz+10MHz	23M4G7D	-	0.1384	23M5W7D	-	0.1219
20MHz+5MHz	23M3G7D	-	0.1396	23M3W7D	-	0.1253
20MHz+10MHz	28M0G7D	-	0.1390	28M1W7D	-	0.1242
20MHz+15MHz	32M7G7D	-	0.1400	32M9W7D	-	0.1130
20MHz+20MHz	37M6G7D	-	0.1403	37M6W7D	-	0.1315

LTE Band 66C_CA	64QAM		
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
10MHz+15MHz	23M3W7D	-	0.0957
5MHz+20MHz	23M3W7D	-	0.0951
10MHz+20MHz	27M9W7D	-	0.0962
15MHz+15MHz	28M5W7D	-	0.0957
15MHz+20MHz	32M7W7D	-	0.0916
15MHz+10MHz	23M4W7D	-	0.0953
20MHz+5MHz	23M3W7D	-	0.0962
20MHz+10MHz	28M1W7D	-	0.0933
20MHz+15MHz	32M8W7D	-	0.0927
20MHz+20MHz	37M6W7D	-	0.0957

Note:

1. LTE Band 66 overlaps the entire frequency range of LTE Band 4. Therefore, the test results provided in this report covers Band 66 as well as Band 4.
2. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.

1.7 Testing Location

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

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China TEL: +86-755-86379589 FAX: +86-755-86379595		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	TH01-SZ	CN1256	421272

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH02-SZ	CN1256	421272

1.8 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a

1.9 Applicable Standards

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

- 47 CFR Part 2, 27(L), 27(M), 27(N)
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

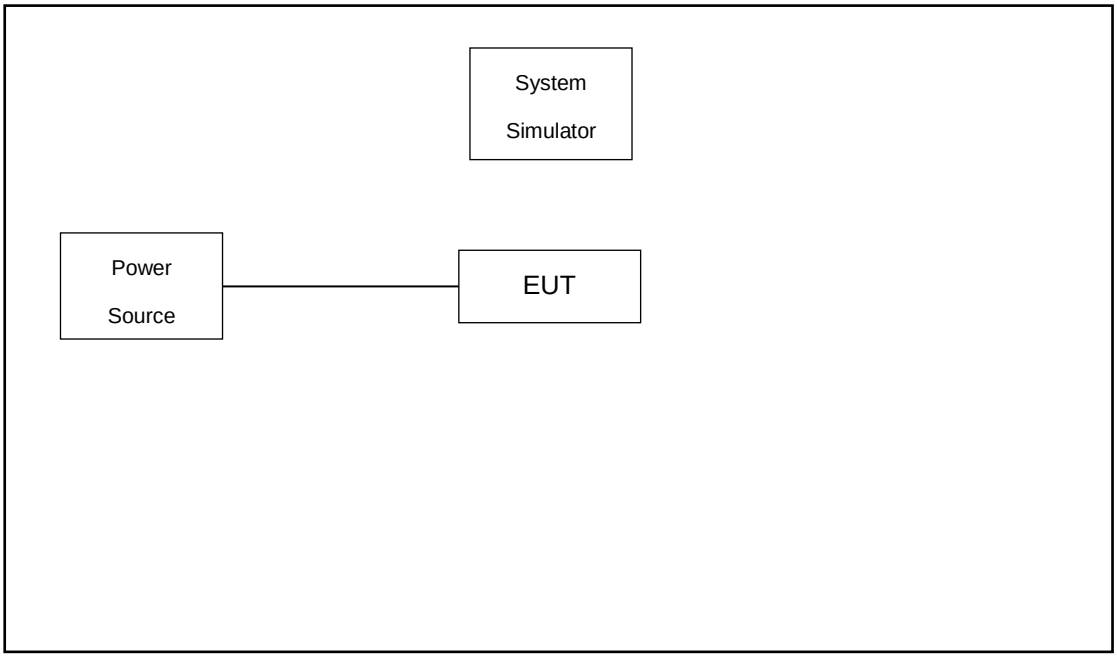
Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
Max. Output Power	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	41	-	-	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
	71	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	7	-	-				v	v	v	v		v		v	v	v	v
	41	-	-				v	v	v	v		v		v	v	v	v
	66						v	v	v	v		v		v	v	v	v
	71	-	-				v	v	v	v		v		v	v	v	v
26dB and 99% Bandwidth	7	-	-	v	v	v	v	v	v	v				v	v	v	v
	41	-	-	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
	71	-	-	v	v	v	v	v	v	v				v	v	v	v
Conducted Band Edge	7	-	-	v	v	v	v	v	v	v		v		v	v		v
	41	-	-	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
	71	-	-	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	7	-	-	v	v	v	v	v	v	v		v			v	v	v
	41	-	-	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
	71	-	-	v	v	v	v	v	v	v		v			v	v	v
Frequency Stability	7	-	-		v			v						v		v	
	41	-	-		v			v						v		v	
	66				v			v						v		v	
	71	-	-		v			v						v		v	

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	M	H
E.R.P / E.I.R.P	7	-	-	v	v	v	v	v	v	v		v			v	v	v
	41	-	-	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
	71	-	-	v	v	v	v	v	v	v		v			v	v	v
Radiated Spurious Emission	7	Worst Case													v	v	v
	41	Worst Case													v	v	v
	66	Worst Case													v	v	v
	71	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. 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. 5. LTE Band 41 overlaps the entire frequency range of LTE Band 38. Therefore, the test results provided in this report covers Band 41 as well as Band 38.																

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	256QAM	1	Half	Full	L	M	H
Max. Output Power	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v				v	v	v	v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v				v	v	v	v
Conducted Band Edge	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	v		v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v		v	v		v
Conducted Spurious Emission	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
E.I.R.P.	41C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
	66C_CA	v	v	v	v	v	v	v	v	v	v	v	v	v		v			v	v	v
Radiated Spurious Emission	41C_CA	Worst Case																	v	v	v
	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. The Maximum Conudcted Power / EIRP are reported of CA combination.																				

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.	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 and attenuator factor 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 and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4.5 dB and 10dB attenuator.

Example :

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).

= 4.5 + 10 = 14.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

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 7 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	20850	21100	21350
	Frequency	2510	2535	2560
15	Channel	20825	21100	21375
	Frequency	2507.5	2535	2562.5
10	Channel	20800	21100	21400
	Frequency	2505	2535	2565
5	Channel	20775	21100	21425
	Frequency	2502.5	2535	2567.5

LTE Band 38 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	37850	38000	38150
	Frequency	2580	2595	2610
15	Channel	37825	38000	38175
	Frequency	2577.5	2595	2612.5
10	Channel	37800	38000	38200
	Frequency	2575	2595	2615
5	Channel	37775	38000	38225
	Frequency	2572.5	2595	2617.5

LTE Band 41 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	39750	40620	41490
	Frequency	2506	2593	2680
15	Channel	39725	40620	41515
	Frequency	2503.5	2593	2682.5
10	Channel	39700	40620	41540
	Frequency	2501	2593	2685
5	Channel	39675	40620	41565
	Frequency	2498.5	2593	2687.5

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

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

LTE Band 41C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	39750	40521	41292
		Frequency	2506.0	2583.1	2660.2
	SCC	Channel	39948	40719	41490
		Frequency	2525.8	2602.9	2680.0
20 + 15	PCC	Channel	39750	40546	41341
		Frequency	2506.0	2585.6	2665.1
	SCC	Channel	39921	40717	41512
		Frequency	2523.1	2602.7	2682.2
15 + 20	PCC	Channel	39728	40523	41319
		Frequency	2503.8	2593.3	2662.9
	SCC	Channel	39899	40694	41490
		Frequency	2520.9	2600.4	2680.0
20 + 10	PCC	Channel	39750	40571	41391
		Frequency	2506.0	2588.1	2670.1
	SCC	Channel	39894	40715	41535
		Frequency	2520.4	2602.5	2684.5
10 + 20	PCC	Channel	39705	40526	41346
		Frequency	2501.5	2583.6	2665.6
	SCC	Channel	39849	40670	41490
		Frequency	2515.9	2598.0	2680.0

LTE Band 41C_CA Channel and Frequency List					
20 + 5	PCC	Channel	39750	40595	41440
		Frequency	2506.0	2590.5	2675.0
	SCC	Channel	39867	40712	41557
		Frequency	2517.7	2602.2	2686.7
5 + 20	PCC	Channel	39683	40528	41373
		Frequency	2499.3	2583.8	2668.3
	SCC	Channel	39800	40645	41490
		Frequency	2511.0	2595.5	2680.0
15 + 15	PCC	Channel	39725	40545	41365
		Frequency	2503.5	2585.5	2667.5
	SCC	Channel	39875	40695	41515
		Frequency	2518.5	2600.5	2682.5
10 + 15	PCC	Channel	39703	40549	41395
		Frequency	2501.3	2585.9	2670.5
	SCC	Channel	39823	40669	41515
		Frequency	2513.3	2597.9	2682.5
15 + 10	PCC	Channel	39725	40571	41417
		Frequency	2503.5	2588.1	2672.7
	SCC	Channel	39845	40691	41537
		Frequency	2515.5	2600.1	2684.7

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

LTE Band 66C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
15 + 20	PCC	Channel	132050	132325	132401
		Frequency	1717.8	1745.3	1752.9
	SCC	Channel	132221	132496	132572
		Frequency	1734.9	1762.4	1770
20 + 15	PCC	Channel	132072	132348	132423
		Frequency	1720	1747.6	1755.1
	SCC	Channel	132243	132519	132594
		Frequency	1737.1	1764.7	1772.2
20 + 5	PCC	Channel	132072	132397	132522
		Frequency	1720	1752.5	1765
	SCC	Channel	132189	132514	132639
		Frequency	1731.7	1764.2	1776.7
5 + 20	PCC	Channel	132005	132330	132455
		Frequency	1713.3	1745.8	1758.3
	SCC	Channel	132122	132447	132572
		Frequency	1725	1757.5	1770
20 + 20	PCC	Channel	132072	132323	132374
		Frequency	1720	1745.1	1750.2
	SCC	Channel	132270	132521	132572
		Frequency	1739.8	1764.9	1770

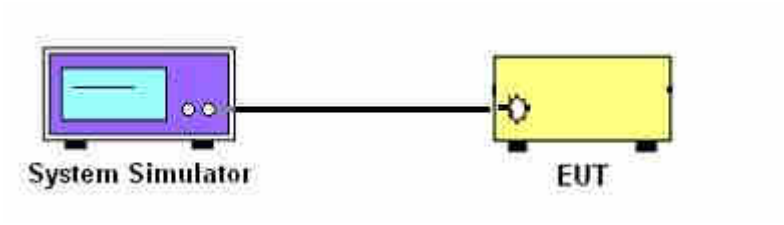
3 Conducted Test Items

3.1 Measuring Instruments

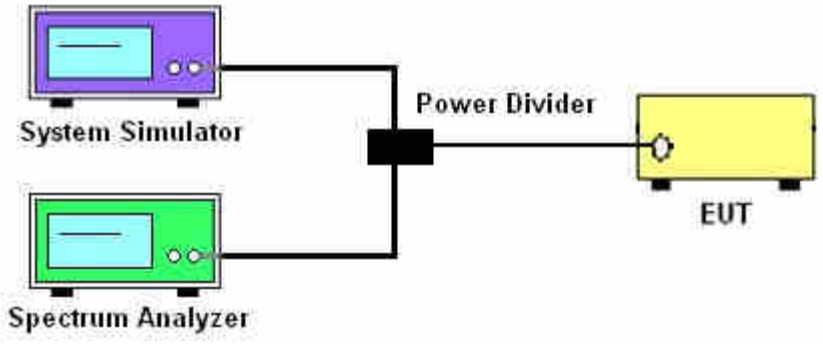
See list of measuring instruments of this test report.

3.2 Test Setup

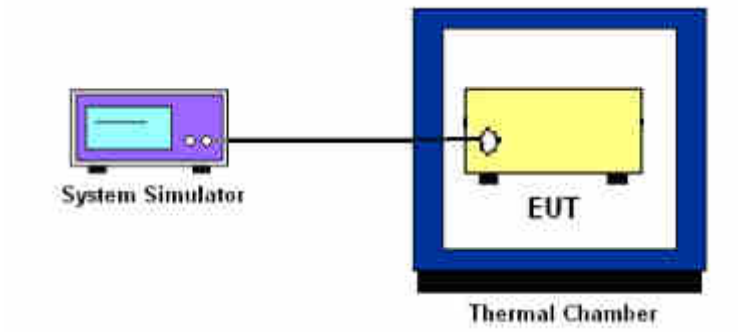
3.2.1 Conducted Output Power



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 3 Watts for LTE Band 71.

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

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

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

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

3.4.2 Test Procedures

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

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

27.53 (g)

For operations in the 600MHz band and 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(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[Watts]) dB below the transmitter power P(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.

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

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 >= 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 + 10log(P)dB below the transmitter power P(Watts)

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

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. For LTE Band 7, 38, 41, the other 40 dB, and 55 dB have additionally applied same calculation above.

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.

For Band 7,38,41:

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 55 + 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 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. For Band 7, 38, 41
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [55+ 10log(P)] (dB)
    = [30+ 10log(P)] (dBm) - [55+ 10log(P)] (dB)
    = -25dBm.

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 ±0.00025% (±2.5ppm) 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±5°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.

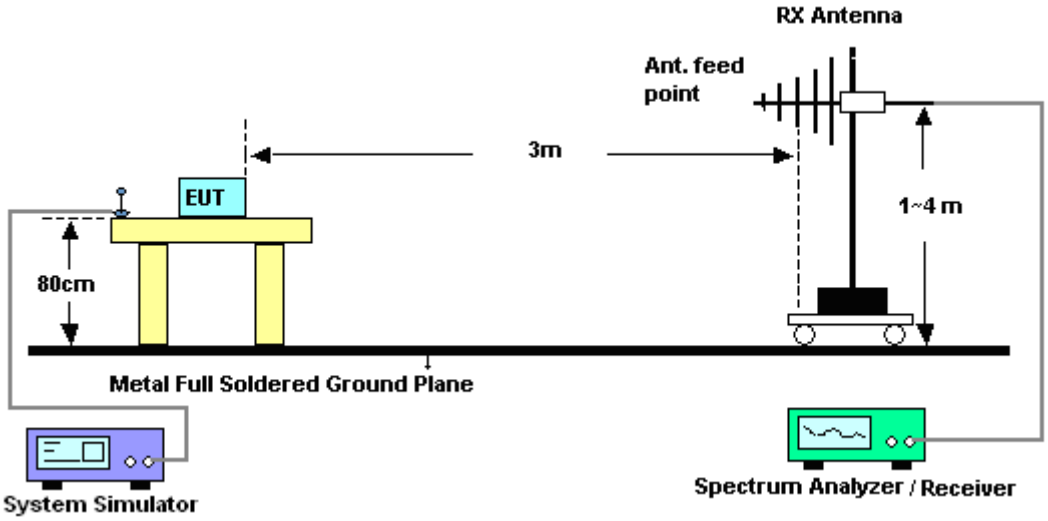
4 Radiated Test Items

4.1 Measuring Instruments

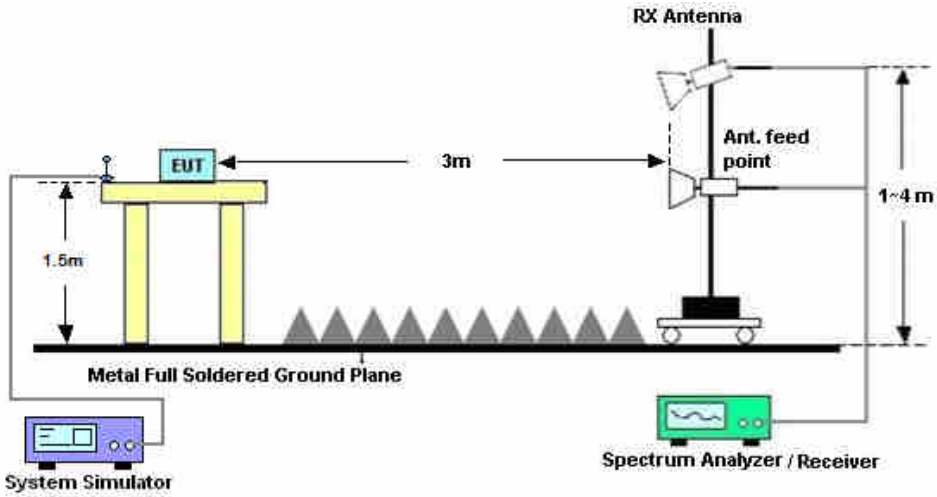
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

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

For Band 7, 38, 41

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 55 + 10 log (P) dB.

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

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For Band 7, 38, 41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 17, 2020	Jul. 04, 2020~ Jul. 15, 2020	Apr. 16, 2021	Conducted (TH01-SZ)
DC Power Supply	GWINSTEK	AnritsuGPS-3030D	EM882636	Max 30V	Apr. 17, 2020	Jul. 04, 2020~ Jul. 15, 2020	Apr. 16, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Dec. 22, 2020	Jul. 04, 2020~ Jul. 15, 2020	Dec. 21, 2021	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Apr. 17, 2020	Jul. 08. 2020~ Jul. 19, 2020	Apr. 16, 2021	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 19, 2019	Jul. 08. 2020~ Jul. 19, 2020	Jul. 18, 2020	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Jul. 15, 2020		Jul. 14, 2021	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Aug. 27, 2019	Jul. 08. 2020~ Jul. 19, 2020	Aug. 26, 2020	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35 -HG	1871923	18GHz~40GHz	Jul. 22, 2019	Jul. 08. 2020~ Jul. 19, 2020	Jul. 21, 2020	Radiation (03CH02-SZ)
LF Amplifier	Burgeon	BPA-530	102211	0.01~3000Mhz	Oct. 18, 2019	Jul. 08. 2020~ Jul. 19, 2020	Oct. 17, 2020	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2019	Jul. 08. 2020~ Jul. 19, 2020	Oct. 17, 2020	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 17, 2020	Jul. 08. 2020~ Jul. 19, 2020	Apr. 16, 2021	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010002470	N/A	NCR	Jul. 08. 2020~ Jul. 19, 2020	NCR	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Jul. 08. 2020~ Jul. 19, 2020	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Jul. 08. 2020~ Jul. 19, 2020	NCR	Radiation (03CH02-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))	**2.47dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.31dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.72dB**

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

Bottom Antenna:

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	22.37	22.52	22.42
20	QPSK	1	49	22.17	22.33	22.28
20	QPSK	1	99	22.14	22.31	22.28
20	QPSK	50	0	21.40	21.54	21.49
20	QPSK	50	24	21.38	21.47	21.48
20	QPSK	50	50	21.35	21.46	21.40
20	QPSK	100	0	21.41	21.46	21.42
20	16QAM	1	0	21.74	21.71	21.87
20	16QAM	1	49	21.55	21.63	21.66
20	16QAM	1	99	21.53	21.69	21.73
20	16QAM	50	0	20.42	20.50	20.54
20	16QAM	50	24	20.43	20.51	20.48
20	16QAM	50	50	20.34	20.42	20.47
20	16QAM	100	0	20.38	20.49	20.44
20	64QAM	1	0	20.54	20.62	20.69
20	64QAM	1	49	20.42	20.52	20.52
20	64QAM	1	99	20.42	20.58	20.52
20	64QAM	50	0	19.42	19.51	19.56
20	64QAM	50	24	19.44	19.53	19.47
20	64QAM	50	50	19.38	19.42	19.50
20	64QAM	100	0	19.43	19.52	19.47
20	256QAM	1	0	17.85	17.92	17.66
20	256QAM	1	49	17.73	17.73	17.62
20	256QAM	1	99	17.69	17.71	17.61
20	256QAM	50	0	17.85	17.85	17.80
20	256QAM	50	24	17.87	17.84	17.70
20	256QAM	50	50	17.83	17.79	17.74
20	256QAM	100	0	17.86	17.77	17.71
Channel				20025	20175	20325
Frequency (MHz)				1717.5	1732.5	1747.5
15	QPSK	1	0	22.32	22.44	22.48
15	QPSK	1	37	22.16	22.28	22.32
15	QPSK	1	74	22.20	22.27	22.32
15	QPSK	36	0	21.37	21.45	21.49
15	QPSK	36	20	21.38	21.46	21.52
15	QPSK	36	39	21.31	21.39	21.45
15	QPSK	75	0	21.37	21.46	21.51

15	16QAM	1	0	21.68	21.70	21.86
15	16QAM	1	37	21.47	21.60	21.62
15	16QAM	1	74	21.44	21.61	21.67
15	16QAM	36	0	20.35	20.45	20.51
15	16QAM	36	20	20.37	20.44	20.52
15	16QAM	36	39	20.29	20.42	20.45
15	16QAM	75	0	20.36	20.44	20.51
15	64QAM	1	0	20.45	20.61	20.68
15	64QAM	1	37	20.37	20.53	20.58
15	64QAM	1	74	20.36	20.56	20.52
15	64QAM	36	0	19.39	19.51	19.55
15	64QAM	36	20	19.40	19.49	19.53
15	64QAM	36	39	19.36	19.47	19.49
15	64QAM	75	0	19.38	19.49	19.54
15	256QAM	1	0	17.81	17.86	17.56
15	256QAM	1	37	17.63	17.76	17.64
15	256QAM	1	74	17.74	17.64	17.52
15	256QAM	36	0	17.88	17.81	17.76
15	256QAM	36	20	17.92	17.87	17.69
15	256QAM	36	39	17.85	17.77	17.84
15	256QAM	75	0	17.87	17.72	17.78
Channel				20000	20175	20350
Frequency (MHz)				1715	1732.5	1750
10	QPSK	1	0	22.19	22.24	22.36
10	QPSK	1	25	22.20	22.30	22.37
10	QPSK	1	49	22.16	22.27	22.37
10	QPSK	25	0	21.28	21.38	21.43
10	QPSK	25	12	21.42	21.50	21.51
10	QPSK	25	25	21.41	21.48	21.50
10	QPSK	50	0	21.40	21.49	21.51
10	16QAM	1	0	21.60	21.72	21.76
10	16QAM	1	25	21.61	21.67	21.70
10	16QAM	1	49	21.59	21.71	21.74
10	16QAM	25	0	20.28	20.36	20.42
10	16QAM	25	12	20.39	20.48	20.55
10	16QAM	25	25	20.40	20.50	20.51
10	16QAM	50	0	20.36	20.49	20.52
10	64QAM	1	0	20.43	20.53	20.58
10	64QAM	1	25	20.53	20.60	20.67
10	64QAM	1	49	20.49	20.54	20.62
10	64QAM	25	0	19.33	19.42	19.42
10	64QAM	25	12	19.46	19.54	19.58
10	64QAM	25	25	19.43	19.54	19.53
10	64QAM	50	0	19.43	19.53	19.55
10	256QAM	1	0	17.83	17.82	17.70
10	256QAM	1	25	17.70	17.80	17.55
10	256QAM	1	49	17.70	17.73	17.68
10	256QAM	25	0	17.78	17.84	17.84
10	256QAM	25	12	17.95	17.75	17.60
10	256QAM	25	25	17.73	17.85	17.78

10	256QAM	50	0	17.90	17.78	17.69
Channel				19975	20175	20375
Frequency (MHz)				1712.5	1732.5	1752.5
5	QPSK	1	0	22.16	22.33	22.31
5	QPSK	1	12	22.24	22.39	22.38
5	QPSK	1	24	22.27	22.39	22.38
5	QPSK	12	0	21.29	21.41	21.40
5	QPSK	12	7	21.41	21.54	21.51
5	QPSK	12	13	21.38	21.48	21.53
5	QPSK	25	0	21.39	21.47	21.45
5	16QAM	1	0	21.50	21.62	21.62
5	16QAM	1	12	21.66	21.68	21.65
5	16QAM	1	24	21.67	21.68	21.75
5	16QAM	12	0	20.38	20.44	20.44
5	16QAM	12	7	20.47	20.52	20.56
5	16QAM	12	13	20.45	20.50	20.55
5	16QAM	25	0	20.43	20.48	20.51
5	64QAM	1	0	20.52	20.61	20.59
5	64QAM	1	12	20.57	20.61	20.60
5	64QAM	1	24	20.64	20.64	20.64
5	64QAM	12	0	19.39	19.47	19.49
5	64QAM	12	7	19.51	19.58	19.56
5	64QAM	12	13	19.50	19.54	19.53
5	64QAM	25	0	19.43	19.48	19.49
5	256QAM	1	0	17.84	17.95	17.56
5	256QAM	1	12	17.80	17.78	17.69
5	256QAM	1	24	17.72	17.67	17.51
5	256QAM	12	0	17.91	17.77	17.80
5	256QAM	12	7	17.80	17.85	17.60
5	256QAM	12	13	17.75	17.79	17.66
5	256QAM	25	0	17.79	17.79	17.69
Channel				19965	20175	20385
Frequency (MHz)				1711.5	1732.5	1753.5
3	QPSK	1	0	22.17	22.33	22.30
3	QPSK	1	8	22.33	22.43	22.41
3	QPSK	1	14	22.28	22.36	22.38
3	QPSK	8	0	21.34	21.43	21.39
3	QPSK	8	4	21.42	21.52	21.53
3	QPSK	8	7	21.35	21.49	21.43
3	QPSK	15	0	21.41	21.46	21.40
3	16QAM	1	0	21.53	21.70	21.62
3	16QAM	1	8	21.70	21.80	21.78
3	16QAM	1	14	21.61	21.72	21.68
3	16QAM	8	0	20.43	20.50	20.49
3	16QAM	8	4	20.50	20.55	20.58
3	16QAM	8	7	20.44	20.53	20.55
3	16QAM	15	0	20.42	20.52	20.46
3	64QAM	1	0	20.40	20.58	20.52
3	64QAM	1	8	20.61	20.68	20.69
3	64QAM	1	14	20.58	20.61	20.63

3	64QAM	8	0	19.44	19.49	19.48
3	64QAM	8	4	19.48	19.57	19.58
3	64QAM	8	7	19.42	19.55	19.51
3	64QAM	15	0	19.42	19.52	19.44
3	256QAM	1	0	17.84	17.87	17.68
3	256QAM	1	8	17.76	17.79	17.54
3	256QAM	1	14	17.62	17.65	17.53
3	256QAM	8	0	17.89	17.85	17.83
3	256QAM	8	4	17.96	17.88	17.73
3	256QAM	8	7	17.78	17.88	17.74
3	256QAM	15	0	17.76	17.77	17.64
Channel				19957	20175	20393
Frequency (MHz)				1710.7	1732.5	1754.3
1.4	QPSK	1	0	22.17	22.27	22.24
1.4	QPSK	1	3	22.22	22.36	22.33
1.4	QPSK	1	5	22.17	22.29	22.28
1.4	QPSK	3	0	22.19	22.31	22.27
1.4	QPSK	3	1	22.25	22.35	22.31
1.4	QPSK	3	3	22.17	22.32	22.30
1.4	QPSK	6	0	21.33	21.43	21.33
1.4	16QAM	1	0	21.48	21.59	21.58
1.4	16QAM	1	3	21.54	21.69	21.71
1.4	16QAM	1	5	21.47	21.58	21.67
1.4	16QAM	3	0	21.26	21.41	21.35
1.4	16QAM	3	1	21.37	21.45	21.41
1.4	16QAM	3	3	21.29	21.39	21.42
1.4	16QAM	6	0	20.35	20.48	20.42
1.4	64QAM	1	0	20.91	21.05	20.97
1.4	64QAM	1	3	21.00	21.13	21.12
1.4	64QAM	1	5	20.94	21.02	21.02
1.4	64QAM	3	0	20.88	21.00	20.94
1.4	64QAM	3	1	20.93	21.04	21.00
1.4	64QAM	3	3	20.86	20.99	20.99
1.4	64QAM	6	0	19.80	19.94	19.86
1.4	256QAM	1	0	17.83	17.95	17.76
1.4	256QAM	1	3	17.79	17.75	17.68
1.4	256QAM	1	5	17.79	17.62	17.60
1.4	256QAM	3	0	17.84	17.91	17.85
1.4	256QAM	3	1	17.86	17.82	17.75
1.4	256QAM	3	3	17.77	17.88	17.77
1.4	256QAM	6	0	17.85	17.86	17.64

LTE Band 7						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				20850	21100	21350
Frequency (MHz)				2510	2535	2560
20	QPSK	1	0	22.21	22.42	22.43
20	QPSK	1	49	22.30	22.47	22.51
20	QPSK	1	99	22.33	22.53	22.61
20	QPSK	50	0	21.33	21.49	21.55
20	QPSK	50	24	21.42	21.52	21.67
20	QPSK	50	50	21.39	21.50	21.65
20	QPSK	100	0	21.41	21.52	21.61
20	16QAM	1	0	21.58	21.77	21.77
20	16QAM	1	49	21.66	21.81	21.87
20	16QAM	1	99	21.67	21.90	22.00
20	16QAM	50	0	20.33	20.49	20.57
20	16QAM	50	24	20.46	20.55	20.70
20	16QAM	50	50	20.46	20.63	20.72
20	16QAM	100	0	20.44	20.49	20.59
20	64QAM	1	0	20.42	20.59	20.67
20	64QAM	1	49	20.48	20.64	20.76
20	64QAM	1	99	20.59	20.79	20.89
20	64QAM	50	0	19.37	19.52	19.59
20	64QAM	50	24	19.47	19.55	19.73
20	64QAM	50	50	19.46	19.64	19.73
20	64QAM	100	0	19.44	19.52	19.61
20	256QAM	1	0	17.78	17.85	17.75
20	256QAM	1	49	17.77	17.79	17.64
20	256QAM	1	99	17.74	17.76	17.63
20	256QAM	50	0	17.63	17.70	17.52
20	256QAM	50	24	17.68	17.66	17.54
20	256QAM	50	50	17.64	17.68	17.53
20	256QAM	100	0	17.71	17.65	17.60
Channel				20825	21100	21375
Frequency (MHz)				2507.5	2535	2562.5
15	QPSK	1	0	22.25	22.40	22.51
15	QPSK	1	37	22.30	22.46	22.55
15	QPSK	1	74	22.36	22.54	22.51
15	QPSK	36	0	21.31	21.48	21.56
15	QPSK	36	20	21.42	21.51	21.68
15	QPSK	36	39	21.40	21.60	21.70
15	QPSK	75	0	21.42	21.50	21.66
15	16QAM	1	0	21.52	21.76	21.79
15	16QAM	1	37	21.64	21.78	21.87
15	16QAM	1	74	21.68	21.86	21.93
15	16QAM	36	0	20.30	20.48	20.58
15	16QAM	36	20	20.41	20.53	20.66
15	16QAM	36	39	20.42	20.61	20.70

15	16QAM	75	0	20.39	20.53	20.68
15	64QAM	1	0	20.43	20.63	20.65
15	64QAM	1	37	20.57	20.70	20.79
15	64QAM	1	74	20.63	20.79	20.84
15	64QAM	36	0	19.34	19.53	19.62
15	64QAM	36	20	19.46	19.57	19.74
15	64QAM	36	39	19.45	19.64	19.74
15	64QAM	75	0	19.43	19.51	19.68
15	256QAM	1	0	17.78	17.85	17.75
15	256QAM	1	37	17.77	17.79	17.64
15	256QAM	1	74	17.74	17.76	17.63
15	256QAM	36	0	17.63	17.70	17.52
15	256QAM	36	20	17.68	17.66	17.54
15	256QAM	36	39	17.64	17.68	17.53
15	256QAM	75	0	17.71	17.65	17.60
Channel				20800	21100	21400
Frequency (MHz)				2505	2535	2565
10	QPSK	1	0	22.15	22.31	22.40
10	QPSK	1	25	22.15	22.35	22.50
10	QPSK	1	49	22.20	22.36	22.49
10	QPSK	25	0	21.32	21.44	21.56
10	QPSK	25	12	21.38	21.48	21.59
10	QPSK	25	25	21.35	21.57	21.66
10	QPSK	50	0	21.34	21.46	21.56
10	16QAM	1	0	21.52	21.73	21.85
10	16QAM	1	25	21.48	21.74	21.81
10	16QAM	1	49	21.57	21.81	21.93
10	16QAM	25	0	20.29	20.48	20.55
10	16QAM	25	12	20.34	20.50	20.59
10	16QAM	25	25	20.33	20.55	20.65
10	16QAM	50	0	20.33	20.45	20.57
10	64QAM	1	0	20.36	20.54	20.68
10	64QAM	1	25	20.40	20.68	20.81
10	64QAM	1	49	20.46	20.70	20.82
10	64QAM	25	0	19.34	19.50	19.55
10	64QAM	25	12	19.41	19.54	19.63
10	64QAM	25	25	19.37	19.58	19.69
10	64QAM	50	0	19.38	19.52	19.58
10	256QAM	1	0	17.78	17.85	17.75
10	256QAM	1	25	17.77	17.79	17.64
10	256QAM	1	49	17.74	17.76	17.63
10	256QAM	25	0	17.63	17.70	17.52
10	256QAM	25	12	17.68	17.66	17.54
10	256QAM	25	25	17.64	17.68	17.53
10	256QAM	50	0	17.71	17.65	17.60
Channel				20775	21100	21425
Frequency (MHz)				2502.5	2535	2567.5
5	QPSK	1	0	22.12	22.34	22.50
5	QPSK	1	12	22.17	22.42	22.56
5	QPSK	1	24	22.22	22.45	22.52

5	QPSK	12	0	21.27	21.46	21.64
5	QPSK	12	7	21.29	21.49	21.65
5	QPSK	12	13	21.29	21.54	21.63
5	QPSK	25	0	21.30	21.50	21.61
5	16QAM	1	0	21.46	21.67	21.88
5	16QAM	1	12	21.46	21.73	21.85
5	16QAM	1	24	21.52	21.80	21.91
5	16QAM	12	0	20.29	20.50	20.64
5	16QAM	12	7	20.29	20.49	20.70
5	16QAM	12	13	20.30	20.58	20.65
5	16QAM	25	0	20.32	20.48	20.63
5	64QAM	1	0	20.41	20.60	20.78
5	64QAM	1	12	20.40	20.62	20.76
5	64QAM	1	24	20.45	20.68	20.80
5	64QAM	12	0	19.33	19.55	19.71
5	64QAM	12	7	19.37	19.53	19.69
5	64QAM	12	13	19.39	19.60	19.70
5	64QAM	25	0	19.33	19.48	19.66
5	256QAM	1	0	17.78	17.85	17.75
5	256QAM	1	12	17.77	17.79	17.64
5	256QAM	1	24	17.74	17.76	17.63
5	256QAM	12	0	17.63	17.70	17.52
5	256QAM	12	7	17.68	17.66	17.54
5	256QAM	12	13	17.64	17.68	17.53
5	256QAM	25	0	17.71	17.65	17.60

LTE Band 38						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				37850	38000	38150
Frequency (MHz)				2580	2595	2610
20	QPSK	1	0	22.59	22.37	22.40
20	QPSK	1	49	22.52	22.35	22.38
20	QPSK	1	99	22.50	22.30	22.36
20	QPSK	50	0	21.61	21.47	21.48
20	QPSK	50	24	21.63	21.49	21.57
20	QPSK	50	50	21.61	21.48	21.53
20	QPSK	100	0	21.61	21.54	21.49
20	16QAM	1	0	21.72	21.43	21.57
20	16QAM	1	49	21.57	21.59	21.62
20	16QAM	1	99	21.63	21.47	21.59
20	16QAM	50	0	20.55	20.46	20.49
20	16QAM	50	24	20.65	20.41	20.61
20	16QAM	50	50	20.74	20.46	20.53
20	16QAM	100	0	20.67	20.53	20.64
20	64QAM	1	0	20.31	20.32	20.26
20	64QAM	1	49	20.32	20.34	20.23
20	64QAM	1	99	20.26	20.26	20.24
20	64QAM	50	0	19.53	19.36	19.52
20	64QAM	50	24	19.66	19.40	19.60
20	64QAM	50	50	19.69	19.52	19.58
20	64QAM	100	0	19.64	19.56	19.60
20	256QAM	1	0	17.58	17.66	17.71
20	256QAM	1	49	17.52	17.51	17.59
20	256QAM	1	99	17.53	17.61	17.56
20	256QAM	50	0	17.82	17.88	17.91
20	256QAM	50	24	17.90	17.87	17.94
20	256QAM	50	50	17.85	17.89	17.92
20	256QAM	100	0	17.82	17.80	17.90
Channel				37825	38000	38175
Frequency (MHz)				2577.5	2595	2612.5
15	QPSK	1	0	22.57	22.31	22.42
15	QPSK	1	37	22.47	22.28	22.37
15	QPSK	1	74	22.46	22.21	22.44
15	QPSK	36	0	21.71	21.29	21.53
15	QPSK	36	20	21.64	21.47	21.44
15	QPSK	36	39	21.70	21.49	21.58
15	QPSK	75	0	21.76	21.48	21.50
15	16QAM	1	0	21.68	21.56	21.67
15	16QAM	1	37	21.63	21.38	21.31
15	16QAM	1	74	21.79	21.33	21.54
15	16QAM	36	0	20.68	20.36	20.42
15	16QAM	36	20	20.61	20.47	20.42
15	16QAM	36	39	20.61	20.45	20.56

15	16QAM	75	0	20.77	20.41	20.52
15	64QAM	1	0	20.30	20.27	20.25
15	64QAM	1	37	20.28	20.21	20.27
15	64QAM	1	74	20.24	20.23	20.34
15	64QAM	36	0	19.63	19.38	19.48
15	64QAM	36	20	19.66	19.40	19.44
15	64QAM	36	39	19.63	19.50	19.60
15	64QAM	75	0	19.62	19.54	19.50
15	256QAM	1	0	17.63	17.70	17.67
15	256QAM	1	37	17.60	17.43	17.64
15	256QAM	1	74	17.48	17.57	17.51
15	256QAM	36	0	17.79	17.98	17.87
15	256QAM	36	20	17.80	17.82	17.94
15	256QAM	36	39	17.85	17.93	17.96
15	256QAM	75	0	17.78	17.83	17.90
Channel				37800	38000	38200
Frequency (MHz)				2575	2595	2615
10	QPSK	1	0	22.44	22.33	22.48
10	QPSK	1	25	22.36	22.38	22.48
10	QPSK	1	49	22.38	22.22	22.32
10	QPSK	25	0	21.64	21.46	21.53
10	QPSK	25	12	21.57	21.57	21.72
10	QPSK	25	25	21.64	21.55	21.73
10	QPSK	50	0	21.66	21.53	21.68
10	16QAM	1	0	21.57	21.65	21.76
10	16QAM	1	25	21.60	21.62	21.66
10	16QAM	1	49	21.68	21.62	21.58
10	16QAM	25	0	20.60	20.48	20.51
10	16QAM	25	12	20.57	20.48	20.66
10	16QAM	25	25	20.56	20.53	20.76
10	16QAM	50	0	20.70	20.60	20.77
10	64QAM	1	0	20.24	20.48	20.42
10	64QAM	1	25	20.16	20.17	20.46
10	64QAM	1	49	20.37	20.50	20.62
10	64QAM	25	0	19.57	19.57	19.63
10	64QAM	25	12	19.54	19.69	19.84
10	64QAM	25	25	19.56	19.69	19.67
10	64QAM	50	0	19.58	19.50	19.79
10	256QAM	1	0	17.48	17.66	17.64
10	256QAM	1	25	17.48	17.48	17.63
10	256QAM	1	49	17.50	17.60	17.65
10	256QAM	25	0	17.91	17.91	17.86
10	256QAM	25	12	17.93	17.91	17.86
10	256QAM	25	25	17.79	17.81	17.84
10	256QAM	50	0	17.83	17.77	17.80
Channel				37775	38000	38225
Frequency (MHz)				2572.5	2595	2617.5
5	QPSK	1	0	22.47	22.40	22.46
5	QPSK	1	12	22.47	22.35	22.37
5	QPSK	1	24	22.44	22.35	22.45

5	QPSK	12	0	21.76	21.48	21.67
5	QPSK	12	7	21.76	21.53	21.64
5	QPSK	12	13	21.80	21.51	21.73
5	QPSK	25	0	21.68	21.48	21.61
5	16QAM	1	0	21.73	21.45	21.66
5	16QAM	1	12	21.78	21.53	21.70
5	16QAM	1	24	21.85	21.56	21.72
5	16QAM	12	0	20.72	20.36	20.64
5	16QAM	12	7	20.75	20.51	20.59
5	16QAM	12	13	20.69	20.44	20.69
5	16QAM	25	0	20.81	20.48	20.69
5	64QAM	1	0	20.50	20.30	20.43
5	64QAM	1	12	20.48	20.25	20.48
5	64QAM	1	24	20.45	20.29	20.45
5	64QAM	12	0	19.74	19.46	19.66
5	64QAM	12	7	19.83	19.53	19.70
5	64QAM	12	13	19.81	19.51	19.70
5	64QAM	25	0	19.82	19.58	19.68
5	256QAM	1	0	17.68	17.57	17.79
5	256QAM	1	12	17.43	17.53	17.51
5	256QAM	1	24	17.53	17.68	17.64
5	256QAM	12	0	17.89	17.81	17.98
5	256QAM	12	7	17.89	17.83	17.97
5	256QAM	12	13	17.80	17.96	18.02
5	256QAM	25	0	17.85	17.83	17.95

LTE Band 41 (HPUE)						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				39750	40620	41490
Frequency (MHz)				2506	2593	2680
20	QPSK	1	0	24.61	24.59	24.67
20	QPSK	1	49	24.63	24.60	24.72
20	QPSK	1	99	24.53	24.58	24.67
20	QPSK	50	0	23.78	23.71	23.87
20	QPSK	50	24	23.77	23.72	23.89
20	QPSK	50	50	23.87	23.73	23.90
20	QPSK	100	0	23.83	23.86	23.81
20	16QAM	1	0	23.95	23.85	24.24
20	16QAM	1	49	23.94	23.93	24.12
20	16QAM	1	99	23.84	23.88	24.00
20	16QAM	50	0	22.94	22.75	22.91
20	16QAM	50	24	22.89	22.76	22.94
20	16QAM	50	50	22.90	22.90	22.93
20	16QAM	100	0	22.86	22.88	22.97
20	64QAM	1	0	22.87	22.69	23.00
20	64QAM	1	49	22.81	22.68	22.93
20	64QAM	1	99	22.63	22.74	22.76
20	64QAM	50	0	21.92	21.75	22.01
20	64QAM	50	24	21.78	21.75	21.95
20	64QAM	50	50	21.69	21.79	22.02
20	64QAM	100	0	21.74	21.89	21.89
20	256QAM	1	0	20.20	20.04	20.01
20	256QAM	1	49	20.06	19.99	19.90
20	256QAM	1	99	20.15	19.96	19.91
20	256QAM	50	0	20.33	20.16	20.11
20	256QAM	50	24	20.31	20.14	20.10
20	256QAM	50	50	20.23	20.16	20.11
20	256QAM	100	0	20.25	20.02	20.03
Channel				39725	40620	41515
Frequency (MHz)				2503.5	2593	2682.5
15	QPSK	1	0	24.43	24.58	24.71
15	QPSK	1	37	24.47	24.64	24.69
15	QPSK	1	74	24.53	24.73	24.63
15	QPSK	36	0	23.74	23.71	23.90
15	QPSK	36	20	23.76	23.84	23.88
15	QPSK	36	39	23.67	23.84	23.97
15	QPSK	75	0	23.73	23.83	23.80
15	16QAM	1	0	23.90	23.95	24.10
15	16QAM	1	37	23.74	23.83	24.04
15	16QAM	1	74	23.81	24.02	24.14
15	16QAM	36	0	22.64	22.69	22.90
15	16QAM	36	20	22.65	22.72	22.79
15	16QAM	36	39	22.67	22.83	22.87

15	16QAM	75	0	22.77	22.86	22.93
15	64QAM	1	0	22.89	22.66	23.04
15	64QAM	1	37	22.77	22.71	22.97
15	64QAM	1	74	22.67	22.76	22.74
15	64QAM	36	0	21.96	21.73	21.98
15	64QAM	36	20	21.79	21.80	21.98
15	64QAM	36	39	21.71	21.81	22.06
15	64QAM	75	0	21.79	21.88	21.94
15	256QAM	1	0	20.29	20.02	19.98
15	256QAM	1	37	20.15	19.93	19.88
15	256QAM	1	74	20.19	20.03	19.93
15	256QAM	36	0	20.23	20.16	20.18
15	256QAM	36	20	20.37	20.20	20.18
15	256QAM	36	39	20.14	20.24	20.02
15	256QAM	75	0	20.20	20.12	20.02
Channel				39700	40620	41540
Frequency (MHz)				2501	2593	2685
10	QPSK	1	0	24.45	24.63	24.71
10	QPSK	1	25	24.4	24.59	24.71
10	QPSK	1	49	24.57	24.65	24.67
10	QPSK	25	0	23.65	23.75	23.81
10	QPSK	25	12	23.73	23.79	23.97
10	QPSK	25	25	23.66	23.85	23.97
10	QPSK	50	0	23.69	23.75	23.93
10	16QAM	1	0	23.9	23.96	24.07
10	16QAM	1	25	23.93	24.03	24.07
10	16QAM	1	49	23.8	23.96	24
10	16QAM	25	0	22.81	22.69	22.95
10	16QAM	25	12	22.78	22.84	23.12
10	16QAM	25	25	22.6	22.78	23.01
10	16QAM	50	0	22.72	22.78	22.97
10	64QAM	1	0	22.90	22.71	22.94
10	64QAM	1	25	22.92	22.67	23.22
10	64QAM	1	49	22.86	22.82	22.94
10	64QAM	25	0	21.78	21.84	22.00
10	64QAM	25	12	21.94	21.80	22.06
10	64QAM	25	25	21.85	21.84	22.05
10	64QAM	50	0	21.73	21.89	21.87
10	256QAM	1	0	20.20	20.02	19.92
10	256QAM	1	25	20.00	20.09	19.89
10	256QAM	1	49	20.14	19.86	20.01
10	256QAM	25	0	20.27	20.14	20.04
10	256QAM	25	12	20.25	20.08	20.16
10	256QAM	25	25	20.20	20.10	20.18
10	256QAM	50	0	20.16	20.06	20.12
Channel				39675	40620	41565
Frequency (MHz)				2498.5	2593	2687.5
5	QPSK	1	0	24.58	24.56	24.73
5	QPSK	1	12	24.43	24.61	24.67
5	QPSK	1	24	24.51	24.63	24.71

5	QPSK	12	0	23.66	23.77	23.90
5	QPSK	12	7	23.68	23.80	23.99
5	QPSK	12	13	23.74	23.78	23.92
5	QPSK	25	0	23.62	23.76	23.94
5	16QAM	1	0	23.79	23.85	24.05
5	16QAM	1	12	23.75	24.04	24.09
5	16QAM	1	24	23.85	23.97	24.04
5	16QAM	12	0	22.69	22.80	23.01
5	16QAM	12	7	22.82	22.83	23.01
5	16QAM	12	13	22.76	22.90	22.94
5	16QAM	25	0	22.68	22.92	22.99
5	64QAM	1	0	22.79	22.82	22.93
5	64QAM	1	12	22.66	22.70	22.95
5	64QAM	1	24	22.67	22.86	22.91
5	64QAM	12	0	21.77	21.84	21.95
5	64QAM	12	7	21.78	21.88	22.04
5	64QAM	12	13	21.72	21.86	21.98
5	64QAM	25	0	21.76	21.87	22.02
5	256QAM	1	0	20.25	20.09	19.94
5	256QAM	1	12	20.16	19.95	19.80
5	256QAM	1	24	20.24	19.96	19.87
5	256QAM	12	0	20.39	20.22	20.09
5	256QAM	12	7	20.28	20.23	20.09
5	256QAM	12	13	20.13	20.08	20.21
5	256QAM	25	0	20.16	19.95	20.11

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	22.35	22.55	22.44
20	QPSK	1	49	22.25	22.44	22.30
20	QPSK	1	99	22.18	22.35	22.21
20	QPSK	50	0	21.39	21.56	21.42
20	QPSK	50	24	21.37	21.50	21.37
20	QPSK	50	50	21.36	21.50	21.38
20	QPSK	100	0	21.40	21.48	21.35
20	16QAM	1	0	21.69	21.92	21.74
20	16QAM	1	49	21.63	21.82	21.65
20	16QAM	1	99	21.61	21.70	21.60
20	16QAM	50	0	20.40	20.54	20.43
20	16QAM	50	24	20.46	20.52	20.39
20	16QAM	50	50	20.43	20.50	20.40
20	16QAM	100	0	20.41	20.48	20.33
20	64QAM	1	0	20.57	20.73	20.59
20	64QAM	1	49	20.50	20.69	20.50
20	64QAM	1	99	20.46	20.61	20.38
20	64QAM	50	0	19.43	19.56	19.42
20	64QAM	50	24	19.48	19.53	19.38
20	64QAM	50	50	19.42	19.53	19.39
20	64QAM	100	0	19.45	19.51	19.36
20	256QAM	1	0	17.91	17.74	17.82
20	256QAM	1	49	17.84	17.84	17.88
20	256QAM	1	99	17.78	17.88	17.82
20	256QAM	50	0	17.62	17.66	17.66
20	256QAM	50	24	17.75	17.72	17.72
20	256QAM	50	50	17.73	17.64	17.67
20	256QAM	100	0	17.72	17.63	17.68
Channel				132047	132322	132597
Frequency (MHz)				1717.5	1745	1772.5
15	QPSK	1	0	22.31	22.44	22.35
15	QPSK	1	37	22.27	22.44	22.31
15	QPSK	1	74	22.22	22.37	22.22
15	QPSK	36	0	21.33	21.48	21.35
15	QPSK	36	20	21.41	21.54	21.41
15	QPSK	36	39	21.39	21.50	21.35
15	QPSK	75	0	21.41	21.45	21.38
15	16QAM	1	0	21.62	21.80	21.64
15	16QAM	1	37	21.58	21.74	21.60
15	16QAM	1	74	21.49	21.63	21.53
15	16QAM	36	0	20.36	20.50	20.38
15	16QAM	36	20	20.43	20.55	20.42
15	16QAM	36	39	20.37	20.49	20.34

15	16QAM	75	0	20.39	20.45	20.39
15	64QAM	1	0	20.49	20.66	20.50
15	64QAM	1	37	20.49	20.71	20.49
15	64QAM	1	74	20.41	20.61	20.38
15	64QAM	36	0	19.43	19.52	19.39
15	64QAM	36	20	19.45	19.59	19.45
15	64QAM	36	39	19.40	19.52	19.42
15	64QAM	75	0	19.41	19.45	19.41
15	256QAM	1	0	17.91	17.74	17.82
15	256QAM	1	37	17.84	17.84	17.88
15	256QAM	1	74	17.78	17.88	17.82
15	256QAM	36	0	17.62	17.66	17.66
15	256QAM	36	20	17.75	17.72	17.72
15	256QAM	36	39	17.73	17.64	17.67
15	256QAM	75	0	17.72	17.63	17.68
Channel				132022	132322	132622
Frequency (MHz)				1715	1745	1775
10	QPSK	1	0	22.30	22.42	22.24
10	QPSK	1	25	22.21	22.36	22.18
10	QPSK	1	49	22.21	22.31	22.14
10	QPSK	25	0	21.33	21.42	21.29
10	QPSK	25	12	21.39	21.45	21.27
10	QPSK	25	25	21.32	21.49	21.29
10	QPSK	50	0	21.37	21.41	21.25
10	16QAM	1	0	21.68	21.82	21.64
10	16QAM	1	25	21.61	21.79	21.57
10	16QAM	1	49	21.58	21.73	21.52
10	16QAM	25	0	20.31	20.46	20.30
10	16QAM	25	12	20.41	20.46	20.28
10	16QAM	25	25	20.34	20.48	20.33
10	16QAM	50	0	20.38	20.44	20.27
10	64QAM	1	0	20.51	20.60	20.47
10	64QAM	1	25	20.60	20.68	20.53
10	64QAM	1	49	20.54	20.58	20.52
10	64QAM	25	0	19.34	19.50	19.35
10	64QAM	25	12	19.46	19.48	19.33
10	64QAM	25	25	19.38	19.52	19.34
10	64QAM	50	0	19.41	19.48	19.29
10	256QAM	1	0	17.91	17.74	17.82
10	256QAM	1	25	17.84	17.84	17.88
10	256QAM	1	49	17.78	17.88	17.82
10	256QAM	25	0	17.62	17.66	17.66
10	256QAM	25	12	17.75	17.72	17.72
10	256QAM	25	25	17.73	17.64	17.67
10	256QAM	50	0	17.72	17.63	17.68
Channel				131997	132322	132647
Frequency (MHz)				1712.5	1745	1777.5
5	QPSK	1	0	22.22	22.36	22.16
5	QPSK	1	12	22.33	22.43	22.25
5	QPSK	1	24	22.26	22.38	22.18

5	QPSK	12	0	21.33	21.43	21.28
5	QPSK	12	7	21.37	21.53	21.31
5	QPSK	12	13	21.35	21.46	21.25
5	QPSK	25	0	21.35	21.47	21.29
5	16QAM	1	0	21.58	21.76	21.53
5	16QAM	1	12	21.64	21.77	21.54
5	16QAM	1	24	21.61	21.74	21.53
5	16QAM	12	0	20.34	20.47	20.31
5	16QAM	12	7	20.39	20.57	20.34
5	16QAM	12	13	20.41	20.52	20.28
5	16QAM	25	0	20.41	20.54	20.28
5	64QAM	1	0	20.48	20.62	20.42
5	64QAM	1	12	20.51	20.64	20.45
5	64QAM	1	24	20.53	20.63	20.43
5	64QAM	12	0	19.42	19.51	19.31
5	64QAM	12	7	19.48	19.60	19.42
5	64QAM	12	13	19.45	19.51	19.37
5	64QAM	25	0	19.41	19.50	19.34
5	256QAM	1	0	17.91	17.74	17.82
5	256QAM	1	12	17.84	17.84	17.88
5	256QAM	1	24	17.78	17.88	17.82
5	256QAM	12	0	17.62	17.66	17.66
5	256QAM	12	7	17.75	17.72	17.72
5	256QAM	12	13	17.73	17.64	17.67
5	256QAM	25	0	17.72	17.63	17.68
Channel				131987	132322	132657
Frequency (MHz)				1711.5	1745	1778.5
3	QPSK	1	0	22.23	22.37	22.20
3	QPSK	1	8	22.32	22.46	22.29
3	QPSK	1	14	22.28	22.38	22.22
3	QPSK	8	0	21.38	21.46	21.26
3	QPSK	8	4	21.38	21.49	21.29
3	QPSK	8	7	21.37	21.46	21.24
3	QPSK	15	0	21.33	21.46	21.27
3	16QAM	1	0	21.56	21.65	21.49
3	16QAM	1	8	21.68	21.79	21.60
3	16QAM	1	14	21.56	21.69	21.50
3	16QAM	8	0	20.45	20.49	20.32
3	16QAM	8	4	20.48	20.56	20.39
3	16QAM	8	7	20.42	20.53	20.35
3	16QAM	15	0	20.35	20.54	20.33
3	64QAM	1	0	20.50	20.65	20.47
3	64QAM	1	8	20.61	20.77	20.58
3	64QAM	1	14	20.57	20.65	20.48
3	64QAM	8	0	19.41	19.55	19.29
3	64QAM	8	4	19.42	19.58	19.42
3	64QAM	8	7	19.41	19.52	19.38
3	64QAM	15	0	19.42	19.53	19.35
3	256QAM	1	0	17.91	17.74	17.82
3	256QAM	1	8	17.84	17.84	17.88

3	256QAM	1	14	17.78	17.88	17.82
3	256QAM	8	0	17.62	17.66	17.66
3	256QAM	8	4	17.75	17.72	17.72
3	256QAM	8	7	17.73	17.64	17.67
3	256QAM	15	0	17.72	17.63	17.68
Channel				131979	132322	132665
Frequency (MHz)				1710.7	1745	1779.3
1.4	QPSK	1	0	22.46	22.34	22.03
1.4	QPSK	1	3	22.33	22.36	22.18
1.4	QPSK	1	5	22.21	22.29	22.10
1.4	QPSK	3	0	22.25	22.35	22.09
1.4	QPSK	3	1	22.29	22.39	22.14
1.4	QPSK	3	3	22.23	22.30	22.10
1.4	QPSK	6	0	21.28	21.40	21.17
1.4	16QAM	1	0	21.54	21.67	21.41
1.4	16QAM	1	3	21.63	21.70	21.54
1.4	16QAM	1	5	21.54	21.62	21.50
1.4	16QAM	3	0	21.34	21.47	21.19
1.4	16QAM	3	1	21.35	21.48	21.27
1.4	16QAM	3	3	21.31	21.45	21.22
1.4	16QAM	6	0	20.36	20.45	20.28
1.4	64QAM	1	0	20.98	21.14	20.87
1.4	64QAM	1	3	21.02	21.12	20.94
1.4	64QAM	1	5	20.93	21.06	20.89
1.4	64QAM	3	0	20.95	21.05	20.81
1.4	64QAM	3	1	20.99	21.10	20.85
1.4	64QAM	3	3	20.94	21.06	20.88
1.4	64QAM	6	0	19.91	20.05	19.80
1.4	256QAM	1	0	17.91	17.74	17.82
1.4	256QAM	1	3	17.84	17.84	17.88
1.4	256QAM	1	5	17.78	17.88	17.82
1.4	256QAM	3	0	17.62	17.66	17.66
1.4	256QAM	3	1	17.75	17.72	17.72
1.4	256QAM	3	3	17.73	17.64	17.67
1.4	256QAM	6	0	17.72	17.63	17.68

LTE Band 71						
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.
Channel				133222	133322	133372
Frequency (MHz)				673	683	688
20	QPSK	1	0	22.82	22.85	22.80
20	QPSK	1	49	22.70	22.74	22.76
20	QPSK	1	99	22.56	22.57	22.59
20	QPSK	50	0	21.76	21.79	21.81
20	QPSK	50	24	21.79	21.89	21.84
20	QPSK	50	50	21.75	21.73	21.72
20	QPSK	100	0	21.76	21.78	21.69
20	16QAM	1	0	22.31	22.28	22.21
20	16QAM	1	49	22.11	22.07	22.05
20	16QAM	1	99	21.93	21.95	21.98
20	16QAM	50	0	20.88	20.79	20.84
20	16QAM	50	24	20.91	20.88	20.86
20	16QAM	50	50	20.76	20.76	20.74
20	16QAM	100	0	20.89	20.86	20.81
20	64QAM	1	0	21.21	21.04	21.10
20	64QAM	1	49	20.97	21.05	21.02
20	64QAM	1	99	20.88	20.79	20.83
20	64QAM	50	0	19.95	19.93	19.88
20	64QAM	50	24	19.98	19.89	19.87
20	64QAM	50	50	19.81	19.74	19.76
20	64QAM	100	0	19.84	19.81	19.87
20	256QAM	1	0	18.08	17.97	18.02
20	256QAM	1	49	17.98	17.91	18.01
20	256QAM	1	99	18.05	17.94	17.92
20	256QAM	50	0	17.83	17.92	17.91
20	256QAM	50	24	17.92	17.78	17.98
20	256QAM	50	50	17.85	17.80	17.75
20	256QAM	100	0	17.90	17.81	17.94
Channel				133197	133297	133397
Frequency (MHz)				670.5	680.5	690.5
15	QPSK	1	0	22.77	22.78	22.76
15	QPSK	1	37	22.73	22.70	22.72
15	QPSK	1	74	22.50	22.52	22.61
15	QPSK	36	0	21.82	21.83	21.90
15	QPSK	36	20	21.75	21.80	21.83
15	QPSK	36	39	21.74	21.79	21.69
15	QPSK	75	0	21.73	21.70	21.78
15	16QAM	1	0	22.33	22.24	22.17
15	16QAM	1	37	22.08	21.99	22.04
15	16QAM	1	74	21.93	21.94	21.93
15	16QAM	36	0	20.86	20.77	20.79
15	16QAM	36	20	20.84	20.82	20.84
15	16QAM	36	39	20.74	20.75	20.75

15	16QAM	75	0	20.91	20.81	20.78
15	64QAM	1	0	21.14	21.00	21.05
15	64QAM	1	37	20.89	21.05	21.00
15	64QAM	1	74	20.87	20.72	20.76
15	64QAM	36	0	19.97	19.90	19.85
15	64QAM	36	20	19.95	19.82	19.89
15	64QAM	36	39	19.73	19.74	19.73
15	64QAM	75	0	19.78	19.74	19.87
15	256QAM	1	0	18.12	18.05	18.07
15	256QAM	1	37	18.06	17.99	18.05
15	256QAM	1	74	17.98	18.01	17.92
15	256QAM	36	0	17.80	17.90	17.95
15	256QAM	36	20	17.97	17.88	18.01
15	256QAM	36	39	17.79	17.74	17.83
15	256QAM	75	0	17.82	17.80	17.94
Channel				133172	133272	133422
Frequency (MHz)				668	678	693
10	QPSK	1	0	22.81	22.80	22.79
10	QPSK	1	25	22.75	22.66	22.74
10	QPSK	1	49	22.49	22.48	22.52
10	QPSK	25	0	21.83	21.85	21.84
10	QPSK	25	12	21.72	21.80	21.85
10	QPSK	25	25	21.75	21.75	21.69
10	QPSK	50	0	21.79	21.80	21.71
10	16QAM	1	0	22.23	22.25	22.21
10	16QAM	1	25	22.03	22.06	22.05
10	16QAM	1	49	21.94	21.97	21.93
10	16QAM	25	0	20.82	20.79	20.84
10	16QAM	25	12	20.93	20.84	20.78
10	16QAM	25	25	20.76	20.74	20.67
10	16QAM	50	0	20.91	20.84	20.73
10	64QAM	1	0	21.22	21.02	21.06
10	64QAM	1	25	20.89	21.03	20.97
10	64QAM	1	49	20.89	20.79	20.84
10	64QAM	25	0	19.90	19.86	19.89
10	64QAM	25	12	19.99	19.89	19.89
10	64QAM	25	25	19.78	19.66	19.70
10	64QAM	50	0	19.83	19.77	19.79
10	256QAM	1	0	18.16	17.92	18.06
10	256QAM	1	25	17.97	18.00	17.91
10	256QAM	1	49	18.15	17.88	17.99
10	256QAM	25	0	17.84	18.02	17.90
10	256QAM	25	12	17.90	17.81	18.01
10	256QAM	25	25	17.84	17.72	17.85
10	256QAM	50	0	18.00	17.75	17.90
Channel				133147	133247	133447
Frequency (MHz)				665.5	675.5	695.5
5	QPSK	1	0	22.79	22.80	22.76
5	QPSK	1	12	22.67	22.63	22.68
5	QPSK	1	24	22.50	22.50	22.57

5	QPSK	12	0	21.85	21.84	21.81
5	QPSK	12	7	21.72	21.71	21.83
5	QPSK	12	13	21.67	21.77	21.72
5	QPSK	25	0	21.79	21.75	21.75
5	16QAM	1	0	22.27	22.20	22.15
5	16QAM	1	12	22.11	22.04	21.97
5	16QAM	1	24	21.89	21.94	21.90
5	16QAM	12	0	20.81	20.79	20.78
5	16QAM	12	7	20.85	20.85	20.80
5	16QAM	12	13	20.78	20.68	20.74
5	16QAM	25	0	20.87	20.88	20.78
5	64QAM	1	0	21.23	21.06	21.07
5	64QAM	1	12	20.96	21.05	20.98
5	64QAM	1	24	20.82	20.71	20.84
5	64QAM	12	0	19.91	19.92	19.88
5	64QAM	12	7	19.94	19.82	19.89
5	64QAM	12	13	19.76	19.74	19.72
5	64QAM	25	0	19.82	19.79	19.84
5	256QAM	1	0	18.14	18.06	17.94
5	256QAM	1	12	17.94	17.92	17.99
5	256QAM	1	24	18.14	18.04	17.98
5	256QAM	12	0	17.78	18.02	17.92
5	256QAM	12	7	17.96	17.69	17.92
5	256QAM	12	13	17.84	17.90	17.81
5	256QAM	25	0	17.87	17.77	17.97

CA Power

Bottom Antenna:

CA_41C (HPUE)							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39750	39948	QPSK	100	0	100	0	21.80
			1	0	1	99	13.98
			1	99	1	0	13.95
		16QAM	100	0	100	0	20.91
			1	0	1	99	17.75
			1	99	1	0	24.65
		64QAM	100	0	100	0	22.90
			1	0	1	99	17.59
			1	99	1	0	23.95
		256QAM	100	0	100	0	20.72
			1	0	1	99	17.35
			1	99	1	0	20.61
40521	40719	QPSK	100	0	100	0	21.58
			1	0	1	99	13.79
			1	99	1	0	13.70
		16QAM	100	0	100	0	20.72
			1	0	1	99	17.54
			1	99	1	0	24.40
		64QAM	100	0	100	0	22.74
			1	0	1	99	17.39
			1	99	1	0	23.78
		256QAM	100	0	100	0	20.60
			1	0	1	99	17.28
			1	99	1	0	20.48
41292	41490	QPSK	100	0	100	0	21.57
			1	0	1	99	13.77
			1	99	1	0	13.69
		16QAM	100	0	100	0	20.70
			1	0	1	99	17.53
			1	99	1	0	24.38
		64QAM	100	0	100	0	22.71
			1	0	1	99	17.38
			1	99	1	0	23.75
		256QAM	100	0	100	0	20.57
			1	0	1	99	17.25
			1	99	1	0	20.45

Combination 20MHz+15MHz (100RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39750	39921	QPSK	100	0	75	0	23.68
			1	0	1	74	13.78
			1	99	1	0	13.74
		16QAM	100	0	75	0	22.75
			1	0	1	74	17.60
			1	99	1	0	24.55
		64QAM	100	0	75	0	22.84
			1	0	1	74	17.30
			1	99	1	0	23.63
		256QAM	100	0	75	0	20.61
			1	0	1	74	17.21
			1	99	1	0	20.55
40546	40717	QPSK	100	0	75	0	23.63
			1	0	1	74	13.71
			1	99	1	0	13.73
		16QAM	100	0	75	0	22.70
			1	0	1	74	17.52
			1	99	1	0	24.54
		64QAM	100	0	75	0	22.80
			1	0	1	74	17.26
			1	99	1	0	23.60
		256QAM	100	0	75	0	20.52
			1	0	1	74	17.13
			1	99	1	0	20.50
41341	41512	QPSK	100	0	75	0	23.60
			1	0	1	74	13.68
			1	99	1	0	13.71
		16QAM	100	0	75	0	22.67
			1	0	1	74	17.47
			1	99	1	0	24.52
		64QAM	100	0	75	0	22.78
			1	0	1	74	17.23
			1	99	1	0	23.57
		256QAM	100	0	75	0	20.53
			1	0	1	74	17.15
			1	99	1	0	20.52

Combination 15MHz+20MHz (75RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39728	39899	QPSK	75	0	100	0	23.60
			1	0	1	99	17.13
			1	74	1	0	24.60
		16QAM	75	0	100	0	22.68
			1	0	1	99	17.24
			1	74	1	0	24.18
		64QAM	75	0	100	0	22.64
			1	0	1	99	17.10
			1	74	1	0	23.45
		256QAM	75	0	100	0	20.65
			1	0	1	99	17.23
			1	74	1	0	20.56
40523	40694	QPSK	75	0	100	0	23.42
			1	0	1	99	16.88
			1	74	1	0	24.52
		16QAM	75	0	100	0	22.48
			1	0	1	99	17.00
			1	74	1	0	23.97
		64QAM	75	0	100	0	22.47
			1	0	1	99	16.88
			1	74	1	0	23.25
		256QAM	75	0	100	0	20.58
			1	0	1	99	17.21
			1	74	1	0	20.55
41319	41490	QPSK	75	0	100	0	23.39
			1	0	1	99	16.80
			1	74	1	0	24.51
		16QAM	75	0	100	0	22.42
			1	0	1	99	16.92
			1	74	1	0	23.98
		64QAM	75	0	100	0	22.41
			1	0	1	99	16.84
			1	74	1	0	23.21
		256QAM	75	0	100	0	20.56
			1	0	1	99	17.13
			1	74	1	0	20.48

Combination 20MHz+10MHz (100RB+50RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39750	39894	QPSK	100	0	50	0	23.61
			1	0	1	49	13.76
			1	99	1	0	13.68
		16QAM	100	0	50	0	22.63
			1	0	1	49	17.04
			1	99	1	0	24.63
		64QAM	100	0	50	0	22.69
			1	0	1	49	17.15
			1	99	1	0	23.52
		256QAM	100	0	50	0	20.56
			1	0	1	49	17.13
			1	99	1	0	20.50
40571	40715	QPSK	100	0	50	0	23.37
			1	0	1	49	13.48
			1	99	1	0	13.40
		16QAM	100	0	50	0	22.37
			1	0	1	49	16.81
			1	99	1	0	24.36
		64QAM	100	0	50	0	22.41
			1	0	1	49	16.88
			1	99	1	0	23.22
		256QAM	100	0	50	0	20.31
			1	0	1	49	16.93
			1	99	1	0	20.25
41391	41535	QPSK	100	0	50	0	23.28
			1	0	1	49	13.48
			1	99	1	0	13.40
		16QAM	100	0	50	0	22.31
			1	0	1	49	16.78
			1	99	1	0	24.36
		64QAM	100	0	50	0	22.50
			1	0	1	49	16.88
			1	99	1	0	23.20
		256QAM	100	0	50	0	20.30
			1	0	1	49	16.93
			1	99	1	0	20.13

Combination 10MHz+20MHz (50RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39705	39849	QPSK	50	0	100	0	23.75
			1	0	1	99	17.14
			1	49	1	0	24.60
		16QAM	50	0	100	0	22.66
			1	0	1	99	17.10
			1	49	1	0	24.39
		64QAM	50	0	100	0	22.71
			1	0	1	99	17.20
			1	49	1	0	23.55
		256QAM	50	0	100	0	20.68
			1	0	1	99	17.23
			1	49	1	0	20.51
40526	40670	QPSK	50	0	100	0	23.67
			1	0	1	99	17.14
			1	49	1	0	24.62
		16QAM	50	0	100	0	22.74
			1	0	1	99	17.12
			1	49	1	0	24.36
		64QAM	50	0	100	0	22.68
			1	0	1	99	17.12
			1	49	1	0	23.54
		256QAM	50	0	100	0	20.65
			1	0	1	99	17.23
			1	49	1	0	20.52
41346	41490	QPSK	50	0	100	0	23.42
			1	0	1	99	16.90
			1	49	1	0	24.53
		16QAM	50	0	100	0	22.48
			1	0	1	99	16.79
			1	49	1	0	24.03
		64QAM	50	0	100	0	22.42
			1	0	1	99	16.90
			1	49	1	0	23.25
		256QAM	50	0	100	0	20.62
			1	0	1	99	17.23
			1	49	1	0	20.51

Combination 20MHz+5MHz (100RB+25RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39750	39867	QPSK	100	0	25	0	23.70
			1	0	1	24	17.14
			1	99	1	0	24.62
		16QAM	100	0	25	0	22.73
			1	0	1	24	17.31
			1	99	1	0	24.35
		64QAM	100	0	25	0	22.80
			1	0	1	24	17.24
			1	99	1	0	23.59
		256QAM	100	0	25	0	20.60
			1	0	1	24	17.10
			1	99	1	0	20.48
40595	40712	QPSK	100	0	25	0	23.37
			1	0	1	24	17.10
			1	99	1	0	24.60
		16QAM	100	0	25	0	22.37
			1	0	1	24	17.26
			1	99	1	0	24.36
		64QAM	100	0	25	0	22.77
			1	0	1	24	17.20
			1	99	1	0	23.58
		256QAM	100	0	25	0	20.31
			1	0	1	24	16.90
			1	99	1	0	20.24
41440	41557	QPSK	100	0	25	0	23.40
			1	0	1	24	17.12
			1	99	1	0	24.62
		16QAM	100	0	25	0	22.39
			1	0	1	24	17.29
			1	99	1	0	24.39
		64QAM	100	0	25	0	22.80
			1	0	1	24	17.23
			1	99	1	0	23.61
		256QAM	100	0	25	0	20.29
			1	0	1	24	16.93
			1	99	1	0	20.25

Combination 5MHz+20MHz (25RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39683	39800	QPSK	25	0	100	0	23.69
			1	0	1	99	17.18
			1	24	1	0	24.60
		16QAM	25	0	100	0	22.75
			1	0	1	99	17.37
			1	24	1	0	24.36
		64QAM	25	0	100	0	22.70
			1	0	1	99	17.22
			1	24	1	0	23.58
		256QAM	25	0	100	0	20.61
			1	0	1	99	17.16
			1	24	1	0	20.55
40528	40645	QPSK	25	0	100	0	23.55
			1	0	1	99	17.07
			1	24	1	0	24.65
		16QAM	25	0	100	0	22.59
			1	0	1	99	17.19
			1	24	1	0	24.26
		64QAM	25	0	100	0	22.55
			1	0	1	99	17.06
			1	24	1	0	23.40
		256QAM	25	0	100	0	20.58
			1	0	1	99	17.04
			1	24	1	0	20.50
41373	41490	QPSK	25	0	100	0	23.41
			1	0	1	99	16.97
			1	24	1	0	24.62
		16QAM	25	0	100	0	22.61
			1	0	1	99	17.24
			1	24	1	0	24.24
		64QAM	25	0	100	0	22.56
			1	0	1	99	17.07
			1	24	1	0	23.42
		256QAM	25	0	100	0	20.45
			1	0	1	99	16.98
			1	24	1	0	20.45

Combination 15MHz+10MHz (75RB+50RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39725	39845	QPSK	75	0	50	0	23.75
			1	0	1	49	17.13
			1	74	1	0	24.66
		16QAM	75	0	50	0	22.78
			1	0	1	49	17.17
			1	74	1	0	24.31
		64QAM	75	0	50	0	22.78
			1	0	1	49	17.22
			1	74	1	0	23.73
		256QAM	75	0	50	0	20.72
			1	0	1	49	17.26
			1	74	1	0	20.64
40571	40691	QPSK	75	0	50	0	23.44
			1	0	1	49	17.82
			1	74	1	0	24.55
		16QAM	75	0	50	0	22.46
			1	0	1	49	16.99
			1	74	1	0	24.07
		64QAM	75	0	50	0	22.56
			1	0	1	49	17.06
			1	74	1	0	23.44
		256QAM	75	0	50	0	20.33
			1	0	1	49	16.95
			1	74	1	0	20.26
41417	41537	QPSK	75	0	50	0	23.46
			1	0	1	49	16.94
			1	74	1	0	24.63
		16QAM	75	0	50	0	22.48
			1	0	1	49	17.02
			1	74	1	0	24.16
		64QAM	75	0	50	0	22.61
			1	0	1	49	17.10
			1	74	1	0	23.48
		256QAM	75	0	50	0	20.34
			1	0	1	49	16.90
			1	74	1	0	20.21

Combination 10MHz+15MHz (50RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39703	39823	QPSK	50	0	75	0	23.66
			1	0	1	74	17.18
			1	49	1	0	24.63
		16QAM	50	0	75	0	22.68
			1	0	1	74	17.43
			1	49	1	0	24.31
		64QAM	50	0	75	0	22.71
			1	0	1	74	17.29
			1	49	1	0	23.61
		256QAM	50	0	75	0	20.68
			1	0	1	74	17.24
			1	49	1	0	20.63
40549	40669	QPSK	50	0	75	0	23.59
			1	0	1	74	17.10
			1	49	1	0	24.61
		16QAM	50	0	75	0	22.63
			1	0	1	74	17.31
			1	49	1	0	24.36
		64QAM	50	0	75	0	22.62
			1	0	1	74	17.20
			1	49	1	0	23.51
		256QAM	50	0	75	0	20.60
			1	0	1	74	17.13
			1	49	1	0	20.55
41395	41515	QPSK	50	0	75	0	23.57
			1	0	1	74	17.08
			1	49	1	0	24.59
		16QAM	50	0	75	0	22.58
			1	0	1	74	17.33
			1	49	1	0	23.94
		64QAM	50	0	75	0	22.59
			1	0	1	74	17.18
			1	49	1	0	23.47
		256QAM	50	0	75	0	20.61
			1	0	1	74	17.11
			1	49	1	0	20.51

Combination 15MHz+15MHz (75RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
39725	39875	QPSK	75	0	75	0	22.07
			1	0	1	74	13.72
			1	74	1	0	13.52
		16QAM	75	0	75	0	21.12
			1	0	1	74	17.28
			1	74	1	0	24.64
		64QAM	75	0	75	0	22.66
			1	0	1	74	17.17
			1	74	1	0	23.52
		256QAM	75	0	75	0	20.53
			1	0	1	74	17.12
			1	74	1	0	20.42
40545	40695	QPSK	75	0	75	0	22.00
			1	0	1	74	13.70
			1	74	1	0	13.56
		16QAM	75	0	75	0	21.04
			1	0	1	74	17.58
			1	74	1	0	24.31
		64QAM	75	0	75	0	22.58
			1	0	1	74	17.09
			1	74	1	0	23.46
		256QAM	75	0	75	0	20.50
			1	0	1	74	17.04
			1	74	1	0	20.37
41365	41515	QPSK	75	0	75	0	21.96
			1	0	1	74	13.53
			1	74	1	0	13.44
		16QAM	75	0	75	0	21.01
			1	0	1	74	17.55
			1	74	1	0	24.23
		64QAM	75	0	75	0	22.51
			1	0	1	74	17.08
			1	74	1	0	22.78
		256QAM	75	0	75	0	20.35
			1	0	1	74	16.88
			1	74	1	0	20.23

CA_66C							
Combination 20MHz+20MHz (100RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132072	132270	QPSK	100	0	100	0	20.72
			1	0	1	99	14.01
			1	99	1	0	22.47
		16QAM	100	0	100	0	19.73
			1	0	1	99	14.33
			1	99	1	0	22.19
		64QAM	100	0	100	0	19.50
			1	0	1	99	14.46
			1	99	1	0	20.81
		256QAM	100	0	100	0	17.89
			1	0	1	99	14.53
			1	99	1	0	17.87
132323	132521	QPSK	100	0	100	0	20.63
			1	0	1	99	13.51
			1	99	1	0	22.43
		16QAM	100	0	100	0	19.69
			1	0	1	99	14.35
			1	99	1	0	22.00
		64QAM	100	0	100	0	19.67
			1	0	1	99	14.42
			1	99	1	0	20.69
		256QAM	100	0	100	0	17.98
			1	0	1	99	14.56
			1	99	1	0	17.93
132374	132572	QPSK	100	0	100	0	20.60
			1	0	1	99	13.73
			1	99	1	0	22.41
		16QAM	100	0	100	0	19.65
			1	0	1	99	14.47
			1	99	1	0	21.94
		64QAM	100	0	100	0	19.68
			1	0	1	99	14.27
			1	99	1	0	20.64
		256QAM	100	0	100	0	17.88
			1	0	1	99	14.50
			1	99	1	0	17.86

Combination 20MHz+15MHz (100RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132072	132243	QPSK	100	0	75	0	20.55
			1	0	1	74	13.89
			1	99	1	0	22.46
		16QAM	100	0	75	0	19.62
			1	0	1	74	14.45
			1	99	1	0	21.53
		64QAM	100	0	75	0	19.55
			1	0	1	74	14.18
			1	99	1	0	20.67
		256QAM	100	0	75	0	17.93
			1	0	1	74	14.56
			1	99	1	0	18.01
132348	132519	QPSK	100	0	75	0	20.53
			1	0	1	74	13.88
			1	99	1	0	22.44
		16QAM	100	0	75	0	19.55
			1	0	1	74	14.38
			1	99	1	0	21.50
		64QAM	100	0	75	0	19.54
			1	0	1	74	14.15
			1	99	1	0	20.66
		256QAM	100	0	75	0	17.88
			1	0	1	74	14.51
			1	99	1	0	17.96
132423	132594	QPSK	100	0	75	0	20.56
			1	0	1	74	13.85
			1	99	1	0	22.36
		16QAM	100	0	75	0	19.53
			1	0	1	74	14.35
			1	99	1	0	21.53
		64QAM	100	0	75	0	19.54
			1	0	1	74	14.12
			1	99	1	0	20.63
		256QAM	100	0	75	0	17.86
			1	0	1	74	14.50
			1	99	1	0	17.95

Combination 15MHz+20MHz (75RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132050	132221	QPSK	75	0	100	0	20.51
			1	0	1	99	13.94
			1	74	1	0	22.45
		16QAM	75	0	100	0	19.47
			1	0	1	99	14.19
			1	74	1	0	21.78
		64QAM	75	0	100	0	19.55
			1	0	1	99	14.28
			1	74	1	0	20.60
		256QAM	75	0	100	0	17.84
			1	0	1	99	14.51
			1	74	1	0	17.95
132325	132496	QPSK	75	0	100	0	20.49
			1	0	1	99	13.85
			1	74	1	0	22.38
		16QAM	75	0	100	0	19.47
			1	0	1	99	14.35
			1	74	1	0	21.43
		64QAM	75	0	100	0	19.45
			1	0	1	99	14.08
			1	74	1	0	20.62
		256QAM	75	0	100	0	17.87
			1	0	1	99	14.53
			1	74	1	0	17.99
132401	132572	QPSK	75	0	100	0	20.49
			1	0	1	99	13.78
			1	74	1	0	22.30
		16QAM	75	0	100	0	19.49
			1	0	1	99	14.31
			1	74	1	0	21.49
		64QAM	75	0	100	0	19.48
			1	0	1	99	14.05
			1	74	1	0	20.56
		256QAM	75	0	100	0	17.85
			1	0	1	99	14.51
			1	74	1	0	17.96

Combination 20MHz+10MHz (100RB+50RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132072	132216	QPSK	100	0	50	0	20.65
			1	0	1	49	14.06
			1	99	1	0	22.40
		16QAM	100	0	50	0	19.68
			1	0	1	49	14.31
			1	99	1	0	21.94
		64QAM	100	0	50	0	19.68
			1	0	1	49	14.48
			1	99	1	0	20.70
		256QAM	100	0	50	0	17.89
			1	0	1	49	14.55
			1	99	1	0	18.00
132373	132517	QPSK	100	0	50	0	20.56
			1	0	1	49	14.00
			1	99	1	0	22.42
		16QAM	100	0	50	0	19.62
			1	0	1	49	14.25
			1	99	1	0	21.90
		64QAM	100	0	50	0	19.57
			1	0	1	49	14.40
			1	99	1	0	20.58
		256QAM	100	0	50	0	17.85
			1	0	1	49	14.51
			1	99	1	0	17.96
132473	132617	QPSK	100	0	50	0	20.60
			1	0	1	49	14.03
			1	99	1	0	22.43
		16QAM	100	0	50	0	19.61
			1	0	1	49	14.26
			1	99	1	0	21.91
		64QAM	100	0	50	0	19.58
			1	0	1	49	14.42
			1	99	1	0	20.61
		256QAM	100	0	50	0	17.84
			1	0	1	49	14.50
			1	99	1	0	17.95

Combination 10MHz+20MHz (50RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132027	132171	QPSK	50	0	100	0	20.61
			1	0	1	99	14.09
			1	49	1	0	22.44
		16QAM	50	0	100	0	19.62
			1	0	1	99	14.28
			1	49	1	0	21.83
		64QAM	50	0	100	0	19.61
			1	0	1	99	14.40
			1	49	1	0	20.83
		256QAM	50	0	100	0	17.84
			1	0	1	99	14.50
			1	49	1	0	17.94
132328	132472	QPSK	50	0	100	0	20.59
			1	0	1	99	14.08
			1	49	1	0	22.37
		16QAM	50	0	100	0	19.59
			1	0	1	99	14.23
			1	49	1	0	21.80
		64QAM	50	0	100	0	19.60
			1	0	1	99	14.43
			1	49	1	0	20.81
		256QAM	50	0	100	0	17.82
			1	0	1	99	14.46
			1	49	1	0	17.92
132428	132572	QPSK	50	0	100	0	20.63
			1	0	1	99	14.10
			1	49	1	0	22.42
		16QAM	50	0	100	0	19.63
			1	0	1	99	14.28
			1	49	1	0	21.79
		64QAM	50	0	100	0	19.60
			1	0	1	99	14.41
			1	49	1	0	20.83
		256QAM	50	0	100	0	17.86
			1	0	1	99	14.51
			1	49	1	0	17.98

Combination 20MHz+5MHz (100RB+25RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132072	132189	QPSK	100	0	25	0	20.64
			1	0	1	24	13.98
			1	99	1	0	22.42
		16QAM	100	0	25	0	19.65
			1	0	1	24	14.37
			1	99	1	0	21.88
		64QAM	100	0	25	0	19.52
			1	0	1	24	14.29
			1	99	1	0	20.83
		256QAM	100	0	25	0	17.83
			1	0	1	24	14.48
			1	99	1	0	17.94
132397	132514	QPSK	100	0	25	0	20.60
			1	0	1	24	14.09
			1	99	1	0	22.45
		16QAM	100	0	25	0	19.58
			1	0	1	24	14.22
			1	99	1	0	21.96
		64QAM	100	0	25	0	19.58
			1	0	1	24	14.30
			1	99	1	0	20.80
		256QAM	100	0	25	0	17.81
			1	0	1	24	14.49
			1	99	1	0	17.97
132522	132639	QPSK	100	0	25	0	20.58
			1	0	1	24	14.10
			1	99	1	0	22.42
		16QAM	100	0	25	0	19.61
			1	0	1	24	14.23
			1	99	1	0	21.98
		64QAM	100	0	25	0	19.61
			1	0	1	24	14.33
			1	99	1	0	20.82
		256QAM	100	0	25	0	17.82
			1	0	1	24	14.50
			1	99	1	0	17.97

Combination 5MHz+20MHz (25RB+100RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132005	132122	QPSK	25	0	100	0	20.59
			1	0	1	99	14.07
			1	24	1	0	22.62
		16QAM	25	0	100	0	19.59
			1	0	1	99	14.33
			1	24	1	0	22.06
		64QAM	25	0	100	0	19.65
			1	0	1	99	14.31
			1	24	1	0	20.77
		256QAM	25	0	100	0	17.84
			1	0	1	99	14.52
			1	24	1	0	17.99
132330	132447	QPSK	25	0	100	0	20.57
			1	0	1	99	14.07
			1	24	1	0	22.58
		16QAM	25	0	100	0	19.64
			1	0	1	99	14.33
			1	24	1	0	22.09
		64QAM	25	0	100	0	19.62
			1	0	1	99	14.30
			1	24	1	0	20.77
		256QAM	25	0	100	0	17.86
			1	0	1	99	14.51
			1	24	1	0	17.98
132455	132572	QPSK	25	0	100	0	20.61
			1	0	1	99	14.11
			1	24	1	0	22.61
		16QAM	25	0	100	0	19.72
			1	0	1	99	14.35
			1	24	1	0	22.13
		64QAM	25	0	100	0	19.62
			1	0	1	99	14.29
			1	24	1	0	20.78
		256QAM	25	0	100	0	17.81
			1	0	1	99	14.49
			1	24	1	0	17.97

Combination 15MHz+10MHz (75RB+50RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132047	132167	QPSK	75	0	50	0	20.57
			1	0	1	49	14.00
			1	74	1	0	22.37
		16QAM	75	0	50	0	19.69
			1	0	1	49	14.45
			1	74	1	0	21.84
		64QAM	75	0	50	0	19.65
			1	0	1	49	14.33
			1	74	1	0	20.79
		256QAM	75	0	50	0	17.84
			1	0	1	49	14.51
			1	74	1	0	17.98
132373	132493	QPSK	75	0	50	0	20.56
			1	0	1	49	13.98
			1	74	1	0	22.36
		16QAM	75	0	50	0	19.60
			1	0	1	49	14.38
			1	74	1	0	21.86
		64QAM	75	0	50	0	19.62
			1	0	1	49	14.32
			1	74	1	0	20.73
		256QAM	75	0	50	0	17.86
			1	0	1	49	14.53
			1	74	1	0	18.00
132499	132619	QPSK	75	0	50	0	20.66
			1	0	1	49	14.04
			1	74	1	0	22.41
		16QAM	75	0	50	0	19.58
			1	0	1	49	14.38
			1	74	1	0	21.84
		64QAM	75	0	50	0	19.65
			1	0	1	49	14.33
			1	74	1	0	20.74
		256QAM	75	0	50	0	17.82
			1	0	1	49	14.50
			1	74	1	0	17.98

Combination 10MHz+15MHz (50RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132025	132145	QPSK	50	0	75	0	20.60
			1	49	1	0	14.03
			1	0	1	74	22.42
		16QAM	50	0	75	0	19.59
			1	49	1	0	14.33
			1	0	1	74	22.06
		64QAM	50	0	75	0	19.65
			1	49	1	0	14.31
			1	0	1	74	20.77
		256QAM	50	0	75	0	17.88
			1	49	1	0	14.55
			1	0	1	74	18.03
132351	132471	QPSK	50	0	75	0	20.57
			1	49	1	0	14.09
			1	0	1	74	22.41
		16QAM	50	0	75	0	19.60
			1	49	1	0	14.22
			1	0	1	74	21.96
		64QAM	50	0	75	0	19.59
			1	49	1	0	14.31
			1	0	1	74	20.80
		256QAM	50	0	75	0	17.84
			1	49	1	0	14.50
			1	0	1	74	17.98
132477	132597	QPSK	50	0	75	0	20.62
			1	49	1	0	13.96
			1	0	1	74	22.36
		16QAM	50	0	75	0	19.63
			1	49	1	0	14.35
			1	0	1	74	21.86
		64QAM	50	0	75	0	19.50
			1	49	1	0	14.27
			1	0	1	74	20.81
		256QAM	50	0	75	0	17.90
			1	49	1	0	14.57
			1	0	1	74	18.05

Combination 15MHz+15MHz (75RB+75RB)							
PCC Channel	SCC Channel	Modulation	PCC		SCC		Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset	
132047	132197	QPSK	75	0	75	0	20.63
			1	0	1	74	14.01
			1	74	1	0	22.38
		16QAM	75	0	75	0	19.70
			1	0	1	74	14.46
			1	74	1	0	21.85
		64QAM	75	0	75	0	19.66
			1	0	1	74	14.34
			1	74	1	0	20.80
		256QAM	75	0	75	0	17.93
			1	0	1	74	14.60
			1	74	1	0	18.10
132347	132497	QPSK	75	0	75	0	20.61
			1	0	1	74	14.11
			1	74	1	0	22.40
		16QAM	75	0	75	0	19.72
			1	0	1	74	14.35
			1	74	1	0	22.13
		64QAM	75	0	75	0	19.62
			1	0	1	74	14.29
			1	74	1	0	20.78
		256QAM	75	0	75	0	17.88
			1	0	1	74	14.56
			1	74	1	0	18.05
132447	132597	QPSK	75	0	75	0	20.59
			1	0	1	74	14.08
			1	74	1	0	22.37
		16QAM	75	0	75	0	19.59
			1	0	1	74	14.23
			1	74	1	0	21.80
		64QAM	75	0	75	0	19.60
			1	0	1	74	14.43
			1	74	1	0	20.81
		256QAM	75	0	75	0	17.86
			1	0	1	74	14.50
			1	74	1	0	18.01

ERP/EIRP

Bottom Antenna:

LTE Band 7 (GT - LC = -0.5 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
Conducted Power (dBm)	22.17	22.42	22.56
Conducted Power (Watts)	0.1648	0.1746	0.1803
EIRP(dBm)	21.67	21.92	22.06
EIRP(Watts)	0.1469	0.1556	0.1607

LTE Band 7 (GT - LC = -0.5 dB) QPSK									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
Conducted Power (dBm)	22.15	22.35	22.50	22.30	22.46	22.55	22.33	22.53	22.61
Conducted Power (Watts)	0.1641	0.1718	0.1778	0.1698	0.1762	0.1799	0.1710	0.1791	0.1824
EIRP(dBm)	21.65	21.85	22.00	21.80	21.96	22.05	21.83	22.03	22.11
EIRP(Watts)	0.1462	0.1531	0.1585	0.1514	0.1570	0.1603	0.1524	0.1596	0.1626

LTE Band 7 (GT - LC = -0.5 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
Conducted Power (dBm)	21.52	21.80	21.91
Conducted Power (Watts)	0.1419	0.1514	0.1552
EIRP(dBm)	21.02	21.30	21.41
EIRP(Watts)	0.1265	0.1349	0.1384

LTE Band 7 (GT - LC = -0.5 dB) 16QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
Conducted Power (dBm)	21.57	21.81	21.93	21.68	21.86	21.93	21.67	21.90	22.00
Conducted Power (Watts)	0.1435	0.1517	0.1560	0.1472	0.1535	0.1560	0.1469	0.1549	0.1585
EIRP(dBm)	21.07	21.31	21.43	21.18	21.36	21.43	21.17	21.40	21.50
EIRP(Watts)	0.1279	0.1352	0.1390	0.1312	0.1368	0.1390	0.1309	0.1380	0.1413

LTE Band 7 (GT - LC = -0.5 dB) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
Conducted Power (dBm)	20.45	20.68	20.80
Conducted Power (Watts)	0.1109	0.1169	0.1202
EIRP(dBm)	19.95	20.18	20.30
EIRP(Watts)	0.0989	0.1042	0.1072

LTE Band 7 (GT - LC = -0.5 dB) 64QAM									
Bandwidth	10M			15M			20M		
Channel	20800	21100	21400	20825	21100	21375	20850	21100	21350
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
Conducted Power (dBm)	20.46	20.70	20.82	20.63	20.79	20.84	20.59	20.79	20.89
Conducted Power (Watts)	0.1112	0.1175	0.1208	0.1156	0.1199	0.1213	0.1146	0.1199	0.1227
EIRP(dBm)	19.96	20.20	20.32	20.13	20.29	20.34	20.09	20.29	20.39
EIRP(Watts)	0.0991	0.1047	0.1076	0.1030	0.1069	0.1081	0.1021	0.1069	0.1094

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
Conducted Power (dBm)	24.58	24.56	24.73	24.45	24.63	24.71	24.53	24.73	24.63
Conducted Power (Watts)	0.2871	0.2858	0.2972	0.2786	0.2904	0.2958	0.2838	0.2972	0.2904
EIRP(dBm)	24.08	24.06	24.23	23.95	24.13	24.21	24.03	24.23	24.13
EIRP(Watts)	0.2559	0.2547	0.2649	0.2483	0.2588	0.2636	0.2529	0.2649	0.2588

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) QPSK			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency (MHz)	2506	2593	2680
Conducted Power (dBm)	24.63	24.60	24.72
Conducted Power (Watts)	0.2904	0.2884	0.2965
EIRP(dBm)	24.13	24.10	24.22
EIRP(Watts)	0.2588	0.2570	0.2642

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) 16QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
Conducted Power (dBm)	23.75	24.04	24.09	23.93	24.03	24.07	23.90	23.95	24.10
Conducted Power (Watts)	0.2371	0.2535	0.2564	0.2472	0.2529	0.2553	0.2455	0.2483	0.2570
EIRP(dBm)	23.25	23.54	23.59	23.43	23.53	23.57	23.40	23.45	23.60
EIRP(Watts)	0.2113	0.2259	0.2286	0.2203	0.2254	0.2275	0.2188	0.2213	0.2291

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) 16QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency (MHz)	2506	2593	2680
Conducted Power (dBm)	23.95	23.85	24.24
Conducted Power (Watts)	0.2483	0.2427	0.2655
EIRP(dBm)	23.45	23.35	23.74
EIRP(Watts)	0.2213	0.2163	0.2366

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) 64QAM									
Bandwidth	5M			10M			15M		
Channel	39675	40620	41565	39700	40620	41540	39725	40620	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
Conducted Power (dBm)	22.66	22.70	22.95	22.92	22.67	23.22	22.89	22.66	23.04
Conducted Power (Watts)	0.1845	0.1862	0.1972	0.1959	0.1849	0.2099	0.1945	0.1845	0.2014
EIRP(dBm)	22.16	22.20	22.45	22.42	22.17	22.72	22.39	22.16	22.54
EIRP(Watts)	0.1644	0.1660	0.1758	0.1746	0.1648	0.1871	0.1734	0.1644	0.1795

LTE Band 41 (HPUE) (G_T - L_C = -0.5 dB) 64QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency (MHz)	2506	2593	2680
Conducted Power (dBm)	22.87	22.69	23.00
Conducted Power (Watts)	0.1936	0.1858	0.1995
EIRP(dBm)	22.37	22.19	22.50
EIRP(Watts)	0.1726	0.1656	0.1778

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
Conducted Power (dBm)	22.46	22.34	22.03	22.32	22.46	22.29	22.33	22.43	22.25
Conducted Power (Watts)	0.1762	0.1714	0.1596	0.1706	0.1762	0.1694	0.1710	0.1750	0.1679
EIRP(dBm)	21.46	21.34	21.03	21.32	21.46	21.29	21.33	21.43	21.25
EIRP(Watts)	0.1400	0.1361	0.1268	0.1355	0.1400	0.1346	0.1358	0.1390	0.1334

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
Conducted Power (dBm)	22.30	22.42	22.24	22.31	22.44	22.35	22.35	22.55	22.44
Conducted Power (Watts)	0.1698	0.1746	0.1675	0.1702	0.1754	0.1718	0.1718	0.1799	0.1754
EIRP(dBm)	21.30	21.42	21.24	21.31	21.44	21.35	21.35	21.55	21.44
EIRP(Watts)	0.1349	0.1387	0.1330	0.1352	0.1393	0.1365	0.1365	0.1429	0.1393

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
Conducted Power (dBm)	21.63	21.70	21.54	21.68	21.79	21.60	21.64	21.77	21.54
Conducted Power (Watts)	0.1455	0.1479	0.1426	0.1472	0.1510	0.1445	0.1459	0.1503	0.1426
EIRP(dBm)	20.63	20.70	20.54	20.68	20.79	20.60	20.64	20.77	20.54
EIRP(Watts)	0.1156	0.1175	0.1132	0.1169	0.1199	0.1148	0.1159	0.1194	0.1132

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
Conducted Power (dBm)	21.68	21.82	21.64	21.62	21.80	21.64	21.69	21.92	21.74
Conducted Power (Watts)	0.1472	0.1521	0.1459	0.1452	0.1514	0.1459	0.1476	0.1556	0.1493
EIRP(dBm)	20.68	20.82	20.64	20.62	20.80	20.64	20.69	20.92	20.74
EIRP(Watts)	0.1169	0.1208	0.1159	0.1153	0.1202	0.1159	0.1172	0.1236	0.1186

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1710.7	1745	1779.3	1711.5	1745	1778.5	1712.5	1745	1777.5
Conducted Power (dBm)	20.98	21.14	20.87	20.61	20.77	20.58	20.51	20.64	20.45
Conducted Power (Watts)	0.1253	0.1300	0.1222	0.1151	0.1194	0.1143	0.1125	0.1159	0.1109
EIRP(dBm)	19.98	20.14	19.87	19.61	19.77	19.58	19.51	19.64	19.45
EIRP(Watts)	0.0995	0.1033	0.0971	0.0914	0.0948	0.0908	0.0893	0.0920	0.0881

LTE Band 66 (GT - LC = -1.0 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 (MHz)	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
Conducted Power (dBm)	20.60	20.68	20.53	20.49	20.71	20.49	20.57	20.73	20.59
Conducted Power (Watts)	0.1148	0.1169	0.1130	0.1119	0.1178	0.1119	0.1140	0.1183	0.1146
EIRP(dBm)	19.60	19.68	19.53	19.49	19.71	19.49	19.57	19.73	19.59
EIRP(Watts)	0.0912	0.0929	0.0897	0.0889	0.0935	0.0889	0.0906	0.0940	0.0910

LTE Band 71 (GT - LC = -4.5 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
Conducted Power (dBm)	22.79	22.80	22.76	22.81	22.80	22.79	22.77	22.78	22.76
Conducted Power (Watts)	0.1901	0.1905	0.1887	0.1909	0.1905	0.1900	0.1891	0.1896	0.1887
ERP(dBm)	16.14	16.15	16.11	16.16	16.15	16.14	16.12	16.13	16.11
ERP(Watts)	0.0411	0.0412	0.0408	0.0413	0.0412	0.0411	0.0409	0.0410	0.0408

LTE Band 71 (GT - LC = -4.5 dB) QPSK			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	22.82	22.85	22.80
Conducted Power (Watts)	0.1914	0.1928	0.1905
ERP(dBm)	16.17	16.20	16.15
ERP(Watts)	0.0414	0.0417	0.0412

LTE Band 71 (GT - LC = -4.5 dB) 16QAM									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
Conducted Power (dBm)	22.27	22.20	22.15	22.23	22.25	22.21	22.33	22.24	22.17
Conducted Power (Watts)	0.1686	0.1659	0.1640	0.1670	0.1678	0.1663	0.1709	0.1674	0.1647
ERP(dBm)	15.62	15.55	15.50	15.58	15.60	15.56	15.68	15.59	15.52
ERP(Watts)	0.0365	0.0359	0.0355	0.0361	0.0363	0.0360	0.0370	0.0362	0.0356

LTE Band 71 (GT - LC = -4.5 dB) 16QAM			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	22.31	22.28	22.21
Conducted Power (Watts)	0.1702	0.1690	0.1663
ERP(dBm)	15.66	15.63	15.56
ERP(Watts)	0.0368	0.0366	0.0360

LTE Band 71 (GT - LC = -4.5 dB) 64QAM									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
Conducted Power (dBm)	21.23	21.06	21.07	21.22	21.02	21.06	21.14	21.00	21.05
Conducted Power (Watts)	0.1327	0.1276	0.1279	0.1324	0.1264	0.1276	0.1300	0.1258	0.1273
ERP(dBm)	14.58	14.41	14.42	14.57	14.37	14.41	14.49	14.35	14.40
ERP(Watts)	0.0287	0.0276	0.0277	0.0286	0.0273	0.0276	0.0281	0.0272	0.0275

LTE Band 71 (GT - LC = -4.5 dB) 64QAM			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	21.21	21.04	21.10
Conducted Power (Watts)	0.1321	0.1271	0.1288
ERP(dBm)	14.56	14.39	14.45
ERP(Watts)	0.0286	0.0275	0.0279

CA EIRP

Bottom Antenna:

LTE Band 41 CA (GT - LC = -0.5 dB) QPSK									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.07	22.00	21.96	24.60	24.65	24.62	24.62	24.60	24.62
Conducted Power (Watts)	0.1611	0.1585	0.1570	0.2884	0.2917	0.2897	0.2897	0.2884	0.2897
EIRP(dBm)	21.57	21.50	21.46	24.10	24.15	24.12	24.12	24.10	24.12
EIRP(Watts)	0.1435	0.1413	0.1400	0.2570	0.2600	0.2582	0.2582	0.2570	0.2582

LTE Band 41 CA (GT - LC = -0.5 dB) QPSK									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.60	24.62	24.53	23.61	23.37	23.28	24.60	24.52	24.51
Conducted Power (Watts)	0.2884	0.2897	0.2838	0.2296	0.2173	0.2128	0.2884	0.2831	0.2825
EIRP(dBm)	24.10	24.12	24.03	23.11	22.87	22.78	24.10	24.02	24.01
EIRP(Watts)	0.2570	0.2582	0.2529	0.2046	0.1936	0.1897	0.2570	0.2523	0.2518

LTE Band 41 CA (GT - LC = -0.5 dB) QPSK						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.68	23.63	23.60	21.80	21.58	21.57
Conducted Power (Watts)	0.2333	0.2307	0.2291	0.1514	0.1439	0.1435
EIRP(dBm)	23.18	23.13	23.10	21.30	21.08	21.07
EIRP(Watts)	0.2080	0.2056	0.2042	0.1349	0.1282	0.1279

LTE Band 41 CA (GT - LC = -0.5 dB) QPSK						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.66	24.55	24.63	24.63	24.61	24.59
Conducted Power (Watts)	0.2924	0.2851	0.2904	0.2904	0.2891	0.2877
EIRP(dBm)	24.16	24.05	24.13	24.13	24.11	24.09
EIRP(Watts)	0.2606	0.2541	0.2588	0.2588	0.2576	0.2564

LTE Band 41 CA (GT - LC = -0.5 dB) 16QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.64	24.31	24.23	24.36	24.26	24.24	24.35	24.36	24.39
Conducted Power (Watts)	0.2911	0.2698	0.2649	0.2729	0.2667	0.2655	0.2723	0.2729	0.2748
EIRP(dBm)	24.14	23.81	23.73	23.86	23.76	23.74	23.85	23.86	23.89
EIRP(Watts)	0.2594	0.2404	0.2360	0.2432	0.2377	0.2366	0.2427	0.2432	0.2449

LTE Band 41 CA (GT - LC = -0.5 dB) 16QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.39	24.36	24.03	24.63	24.36	24.36	24.18	23.97	23.98
Conducted Power (Watts)	0.2748	0.2729	0.2529	0.2904	0.2729	0.2729	0.2618	0.2495	0.2500
EIRP(dBm)	23.89	23.86	23.53	24.13	23.86	23.86	23.68	23.47	23.48
EIRP(Watts)	0.2449	0.2432	0.2254	0.2588	0.2432	0.2432	0.2333	0.2223	0.2228

LTE Band 41 CA (GT - LC = -0.5 dB) 16QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.55	24.54	24.52	24.65	24.40	24.38
Conducted Power (Watts)	0.2851	0.2844	0.2831	0.2917	0.2754	0.2742
EIRP(dBm)	24.05	24.04	24.02	24.15	23.90	23.88
EIRP(Watts)	0.2541	0.2535	0.2523	0.2600	0.2455	0.2443

LTE Band 41 CA (GT - LC = -0.5 dB) 16QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.31	24.07	24.16	24.31	24.36	23.94
Conducted Power (Watts)	0.2698	0.2553	0.2606	0.2698	0.2729	0.2477
EIRP(dBm)	23.81	23.57	23.66	23.81	23.86	23.44
EIRP(Watts)	0.2404	0.2275	0.2323	0.2404	0.2432	0.2208

LTE Band 41 CA (GT - LC = -0.5 dB) 64QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	39725	40545	41365	39683	40528	41373	39750	40595	41440
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39875	40695	41515	39800	40645	41490	39867	40712	41557
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.52	23.46	22.78	23.58	23.40	23.42	23.59	23.58	23.61
Conducted Power (Watts)	0.2249	0.2218	0.1897	0.2280	0.2188	0.2198	0.2286	0.2280	0.2296
EIRP(dBm)	23.02	22.96	22.28	23.08	22.90	22.92	23.09	23.08	23.11
EIRP(Watts)	0.2004	0.1977	0.1690	0.2032	0.1950	0.1959	0.2037	0.2032	0.2046

LTE Band 41 CA (GT - LC = -0.5 dB) 64QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	39705	40526	41346	39750	40571	41391	39728	40523	41319
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39849	40670	41490	39894	40715	41535	39899	40694	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.55	23.54	23.25	23.52	23.22	23.20	23.45	23.25	23.21
Conducted Power (Watts)	0.2265	0.2259	0.2113	0.2249	0.2099	0.2089	0.2213	0.2113	0.2094
EIRP(dBm)	23.05	23.04	22.75	23.02	22.72	22.70	22.95	22.75	22.71
EIRP(Watts)	0.2018	0.2014	0.1884	0.2004	0.1871	0.1862	0.1972	0.1884	0.1866

LTE Band 41 CA (GT - LC = -0.5 dB) 64QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	39750	40546	41341	39750	40521	41292
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39921	40717	41512	39948	40719	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.63	23.60	23.57	23.95	23.78	23.75
Conducted Power (Watts)	0.2307	0.2291	0.2275	0.2483	0.2388	0.2371
EIRP(dBm)	23.13	23.10	23.07	23.45	23.28	23.25
EIRP(Watts)	0.2056	0.2042	0.2028	0.2213	0.2128	0.2113

LTE Band 41 CA (GT - LC = -0.5 dB) 64QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	39725	40571	41417	39703	40549	41395
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	39845	40691	41537	39823	40669	41490
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.73	23.44	23.48	23.61	23.51	23.47
Conducted Power (Watts)	0.2360	0.2208	0.2228	0.2296	0.2244	0.2223
EIRP(dBm)	23.23	22.94	22.98	23.11	23.01	22.97
EIRP(Watts)	0.2104	0.1968	0.1986	0.2046	0.2000	0.1982

LTE Band 66 CA (GT - LC = -1.0 dB) QPSK									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	132047	132347	132447	132005	132330	132455	132072	132397	132522
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132197	132497	132597	132122	132447	132572	132189	132514	132639
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.38	22.40	22.37	22.62	22.58	22.61	22.42	22.45	22.42
Conducted Power (Watts)	0.1730	0.1738	0.1726	0.1828	0.1811	0.1824	0.1746	0.1758	0.1746
EIRP(dBm)	21.38	21.40	21.37	21.62	21.58	21.61	21.42	21.45	21.42
EIRP(Watts)	0.1374	0.1380	0.1371	0.1452	0.1439	0.1449	0.1387	0.1396	0.1387

LTE Band 66 CA (GT - LC = -1.0 dB) QPSK									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	132027	132328	132428	132072	132373	132473	132050	132325	132401
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132171	132472	132572	132216	132517	132617	132221	132496	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.44	22.37	22.42	22.40	22.42	22.43	22.45	22.38	22.30
Conducted Power (Watts)	0.1754	0.1726	0.1746	0.1738	0.1746	0.1750	0.1758	0.1730	0.1698
EIRP(dBm)	21.44	21.37	21.42	21.40	21.42	21.43	21.45	21.38	21.30
EIRP(Watts)	0.1393	0.1371	0.1387	0.1380	0.1387	0.1390	0.1396	0.1374	0.1349

LTE Band 66 CA (GT - LC = -1.0 dB) QPSK						
Bandwidth	20M+15M			20M+20M		
Channel PCC	132072	132348	132423	132072	132323	132374
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132243	132519	132594	132270	132521	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.46	22.44	22.36	22.47	22.43	22.41
Conducted Power (Watts)	0.1762	0.1754	0.1722	0.1766	0.1750	0.1742
EIRP(dBm)	21.46	21.44	21.36	21.47	21.43	21.41
EIRP(Watts)	0.1400	0.1393	0.1368	0.1403	0.1390	0.1384

LTE Band 66 CA (GT - LC = -1.0 dB) QPSK						
Bandwidth	15M+10M			10M+15M		
Channel PCC	132047	132373	132499	132025	132351	132477
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132167	132493	132619	132145	132471	132597
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.37	22.36	22.41	22.42	22.41	22.36
Conducted Power (Watts)	0.1726	0.1722	0.1742	0.1746	0.1742	0.1722
EIRP(dBm)	21.37	21.36	21.41	21.42	21.41	21.36
EIRP(Watts)	0.1371	0.1368	0.1384	0.1387	0.1384	0.1368

LTE Band 66 CA (GT - LC = -1.0 dB) 16QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	132047	132347	132447	132005	132330	132455	132072	132397	132522
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132197	132497	132597	132122	132447	132572	132189	132514	132639
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.85	22.13	21.80	22.06	22.09	22.13	21.88	21.96	21.98
Conducted Power (Watts)	0.1531	0.1633	0.1514	0.1607	0.1618	0.1633	0.1542	0.1570	0.1578
EIRP(dBm)	20.85	21.13	20.80	21.06	21.09	21.13	20.88	20.96	20.98
EIRP(Watts)	0.1216	0.1297	0.1202	0.1276	0.1285	0.1297	0.1225	0.1247	0.1253

LTE Band 66 CA (GT - LC = -1.0 dB) 16QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	132027	132328	132428	132072	132373	132473	132050	132325	132401
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132171	132472	132572	132216	132517	132617	132221	132496	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.83	21.80	21.79	21.94	21.90	21.91	21.78	21.43	21.49
Conducted Power (Watts)	0.1524	0.1514	0.1510	0.1563	0.1549	0.1552	0.1507	0.1390	0.1409
EIRP(dBm)	20.83	20.80	20.79	20.94	20.90	20.91	20.78	20.43	20.49
EIRP(Watts)	0.1211	0.1202	0.1199	0.1242	0.1230	0.1233	0.1197	0.1104	0.1119

LTE Band 66 CA (GT - LC = -1.0 dB) 16QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	132072	132348	132423	132072	132323	132374
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132243	132519	132594	132270	132521	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.53	21.50	21.53	22.19	22.00	21.94
Conducted Power (Watts)	0.1422	0.1413	0.1422	0.1656	0.1585	0.1563
EIRP(dBm)	20.53	20.50	20.53	21.19	21.00	20.94
EIRP(Watts)	0.1130	0.1122	0.1130	0.1315	0.1259	0.1242

LTE Band 66 CA (GT - LC = -1.0 dB) 16QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	132047	132373	132499	132025	132351	132477
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132167	132493	132619	132145	132471	132597
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	21.84	21.86	21.84	22.06	21.96	21.86
Conducted Power (Watts)	0.1528	0.1535	0.1528	0.1607	0.1570	0.1535
EIRP(dBm)	20.84	20.86	20.84	21.06	20.96	20.86
EIRP(Watts)	0.1213	0.1219	0.1213	0.1276	0.1247	0.1219

LTE Band 66 CA (GT - LC = -1.0 dB) 64QAM									
Bandwidth	15M + 15M			5M + 20M			20M + 5M		
Channel PCC	132047	132347	132447	132005	132330	132455	132072	132397	132522
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132197	132497	132597	132122	132447	132572	132189	132514	132639
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	20.80	20.78	20.81	20.77	20.77	20.78	20.83	20.80	20.82
Conducted Power (Watts)	0.1202	0.1197	0.1205	0.1194	0.1194	0.1197	0.1211	0.1202	0.1208
EIRP(dBm)	19.80	19.78	19.81	19.77	19.77	19.78	19.83	19.80	19.82
EIRP(Watts)	0.0955	0.0951	0.0957	0.0948	0.0948	0.0951	0.0962	0.0955	0.0959

LTE Band 66 CA (GT - LC = -1.0 dB) 64QAM									
Bandwidth	10M + 20M			20M + 10M			15M + 20M		
Channel PCC	132027	132328	132428	132072	132373	132473	132050	132325	132401
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132171	132472	132572	132216	132517	132617	132221	132496	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	20.83	20.81	20.83	20.70	20.58	20.61	20.60	20.62	20.56
Conducted Power (Watts)	0.1211	0.1205	0.1211	0.1175	0.1143	0.1151	0.1148	0.1153	0.1138
EIRP(dBm)	19.83	19.81	19.83	19.70	19.58	19.61	19.60	19.62	19.56
EIRP(Watts)	0.0962	0.0957	0.0962	0.0933	0.0908	0.0914	0.0912	0.0916	0.0904

LTE Band 66 CA (GT - LC = -1.0 dB) 64QAM						
Bandwidth	20M+15M			20M+20M		
Channel PCC	132072	132348	132423	132072	132323	132374
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132243	132519	132594	132270	132521	132572
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	20.67	20.66	20.63	20.81	20.69	20.64
Conducted Power (Watts)	0.1167	0.1164	0.1156	0.1205	0.1172	0.1159
EIRP(dBm)	19.67	19.66	19.63	19.81	19.69	19.64
EIRP(Watts)	0.0927	0.0925	0.0918	0.0957	0.0931	0.0920

LTE Band 66 CA (GT - LC = -1.0 dB) 64QAM						
Bandwidth	15M+10M			10M+15M		
Channel PCC	132047	132373	132499	132025	132351	132477
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Channel SCC	132167	132493	132619	132145	132471	132597
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	20.79	20.73	20.74	20.77	20.80	20.81
Conducted Power (Watts)	0.1199	0.1183	0.1186	0.1194	0.1202	0.1205
EIRP(dBm)	19.79	19.73	19.74	19.77	19.80	19.81
EIRP(Watts)	0.0953	0.0940	0.0942	0.0948	0.0955	0.0957

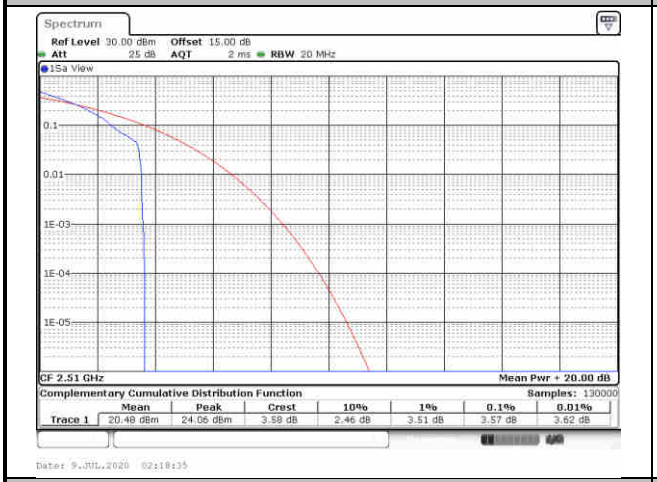
LTE Band 7

Peak-to-Average Ratio

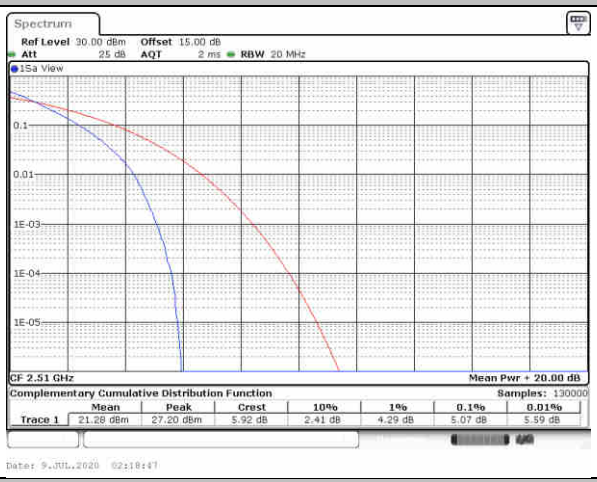
Mode	LTE Band 7 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	3.57	5.07	5.54	5.88	PASS
Middle CH	3.57	5.04	5.33	5.91	
Highest CH	3.62	4.96	5.36	5.94	
Mode	LTE Band 7 / 20MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	5.25	5.86	-	-	PASS
Middle CH	5.22	5.88	-	-	
Highest CH	5.22	5.94	-	-	

LTE Band 7 / 20MHz / QPSK

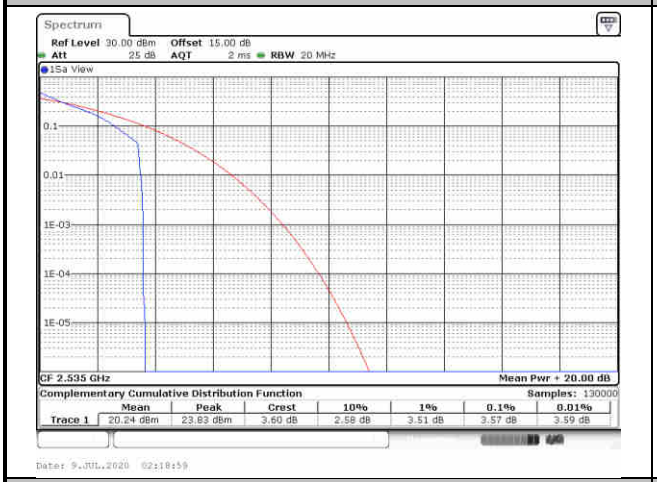
Lowest Channel / 1RB



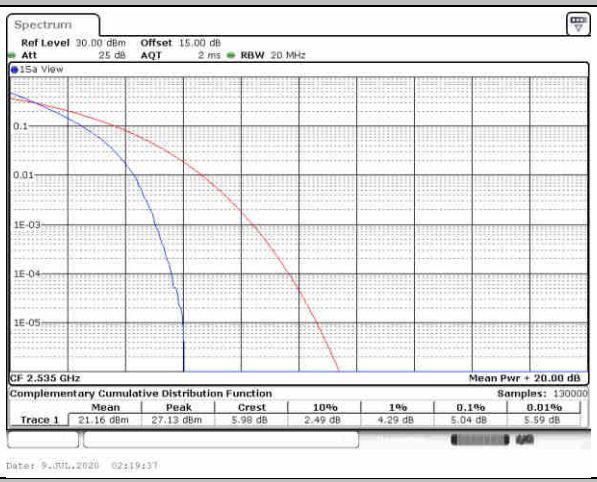
Lowest Channel / Full RB



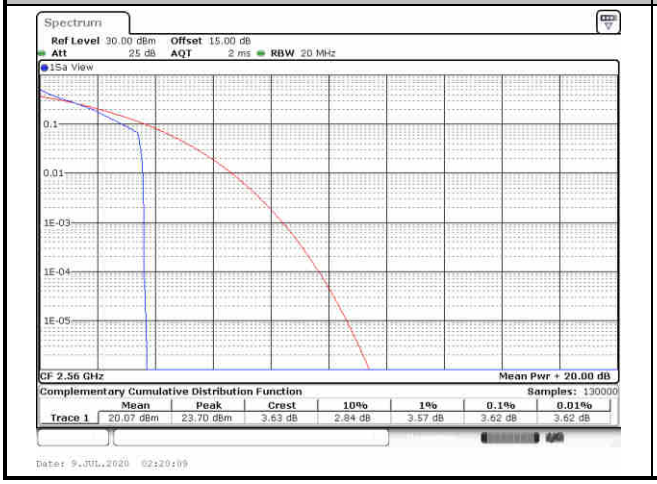
Middle Channel / 1RB



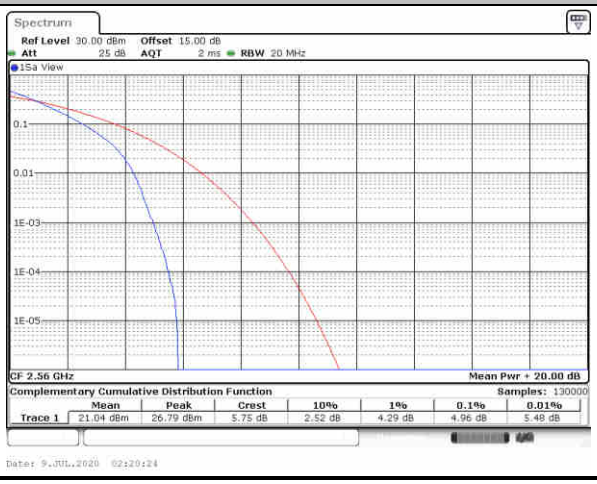
Middle Channel / Full RB



Highest Channel / 1RB

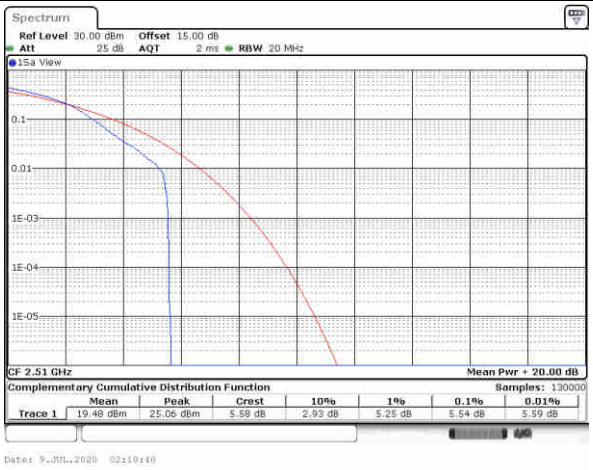


Highest Channel / Full RB

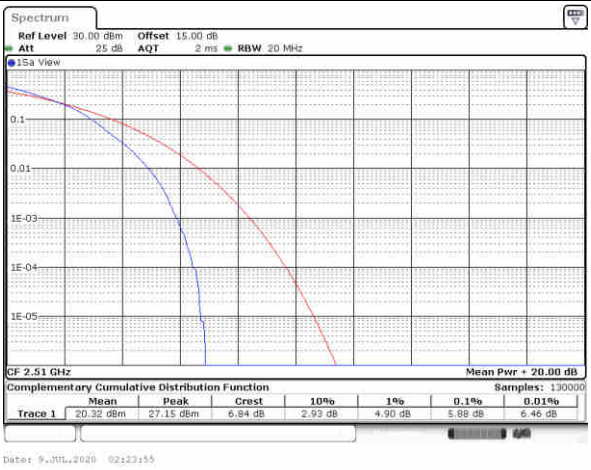


LTE Band 7 / 20MHz / 16QAM

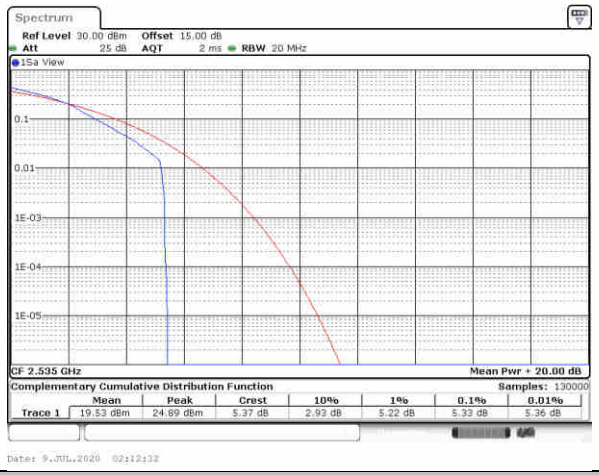
Lowest Channel / 1RB



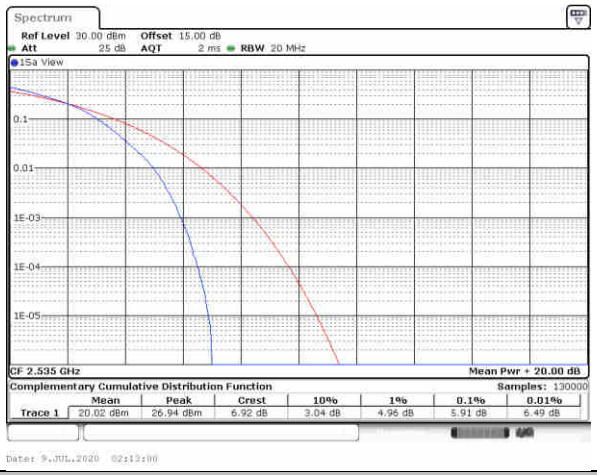
Lowest Channel / Full RB



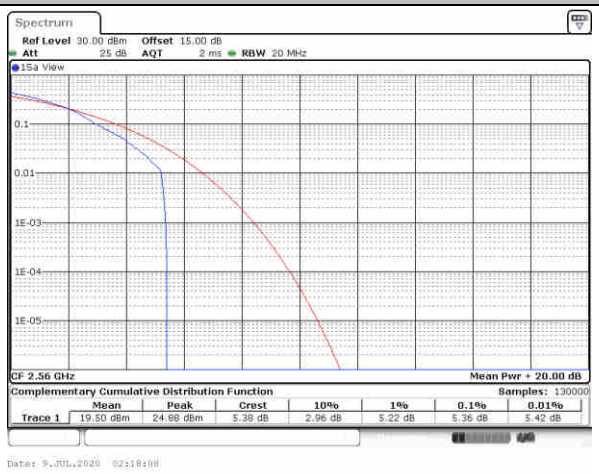
Middle Channel / 1RB



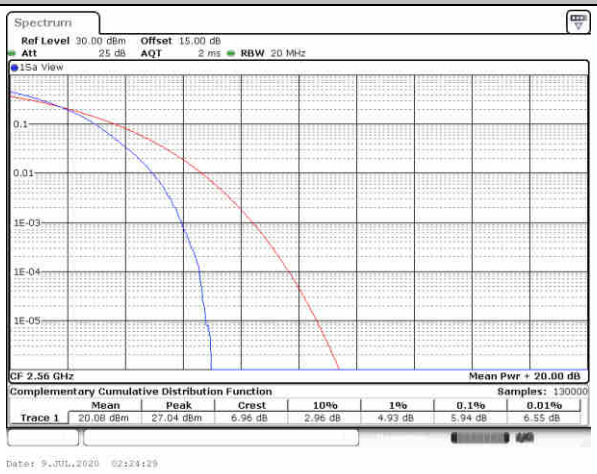
Middle Channel / Full RB



Highest Channel / 1RB

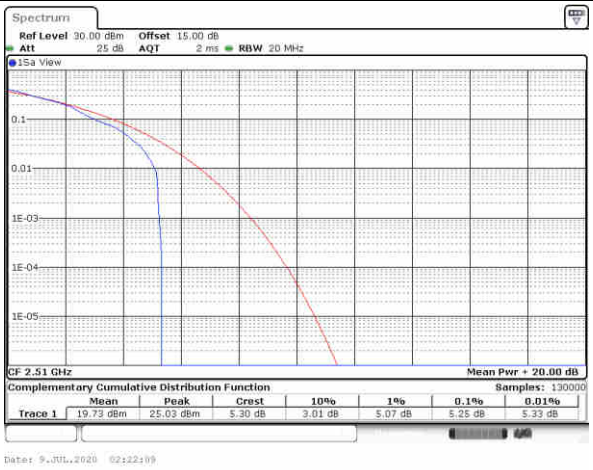


Highest Channel / Full RB

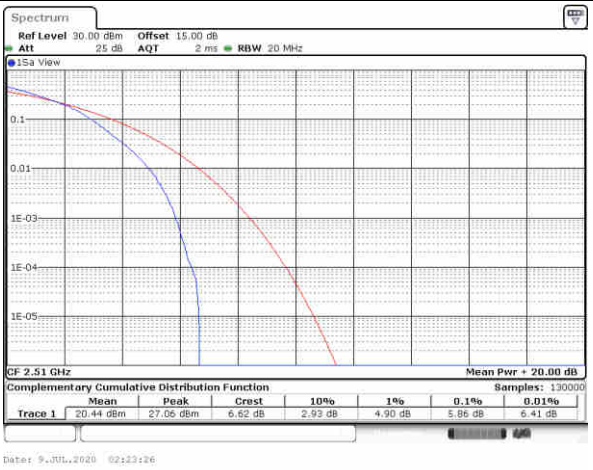


LTE Band 7 / 20MHz / 64QAM

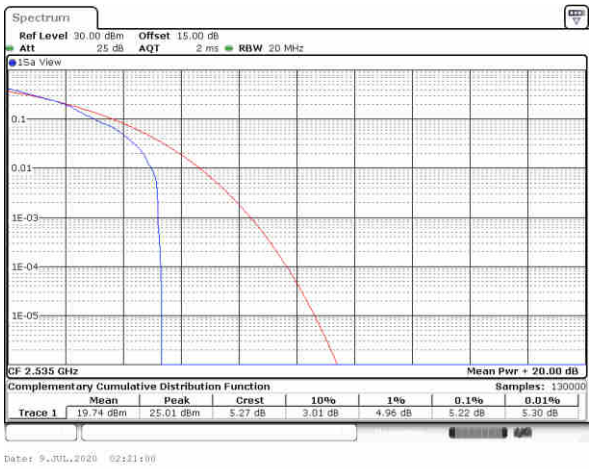
Lowest Channel / 1RB



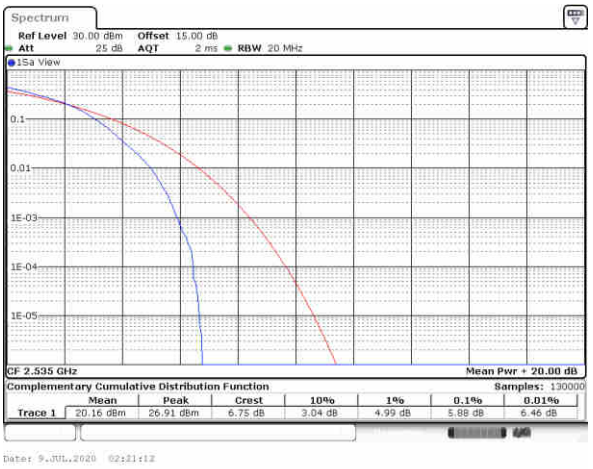
Lowest Channel / Full RB



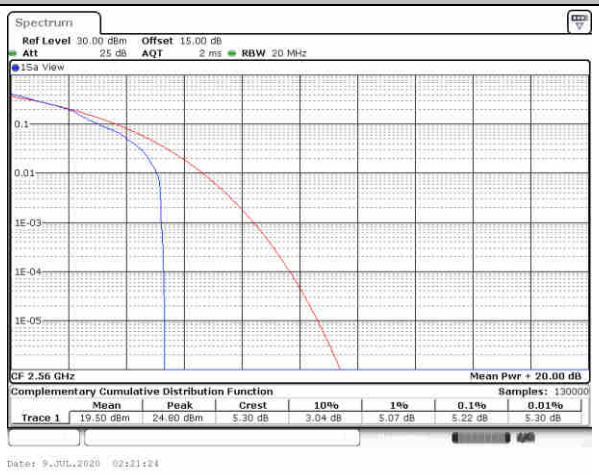
Middle Channel / 1RB



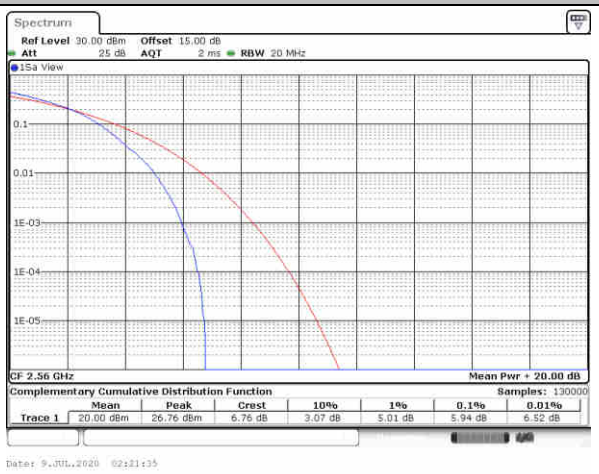
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

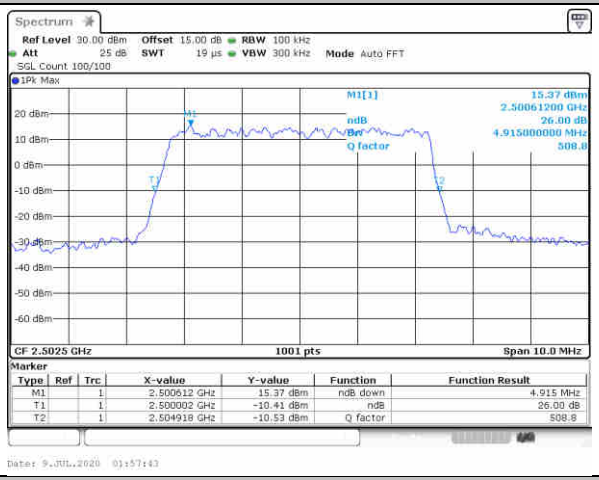


26dB Bandwidth

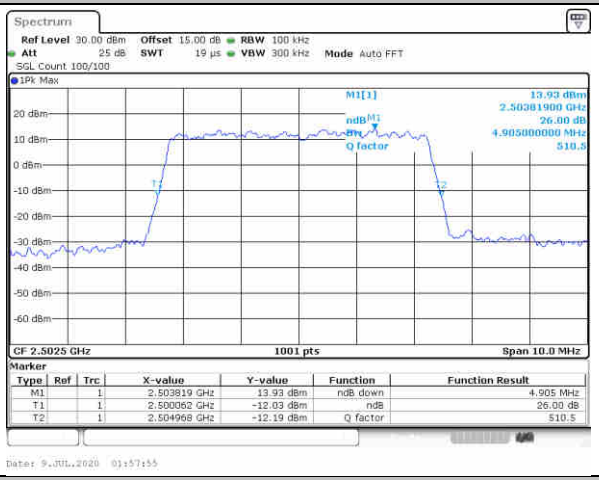
Mode	LTE Band 7 : 26dB BW(MHz)											
BW					5MHz		10MHz		15MHz		20MHz	
Mod.					QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.92	4.91	9.65	9.75	14.39	14.15	18.90	19.02
Middle CH					4.88	4.96	9.63	9.71	14.39	14.36	18.82	19.14
Highest CH					4.92	4.85	9.71	9.65	14.30	14.39	18.78	18.86
Mode	LTE Band 7 : 26dB BW(MHz)											
BW					5MHz		10MHz		15MHz		20MHz	
Mod.					64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.83	-	9.71	-	14.42	-	19.06	-
Middle CH					4.93	-	9.85	-	14.54	-	18.70	-
Highest CH					4.92	-	9.71	-	14.42	-	18.74	-

LTE Band 7

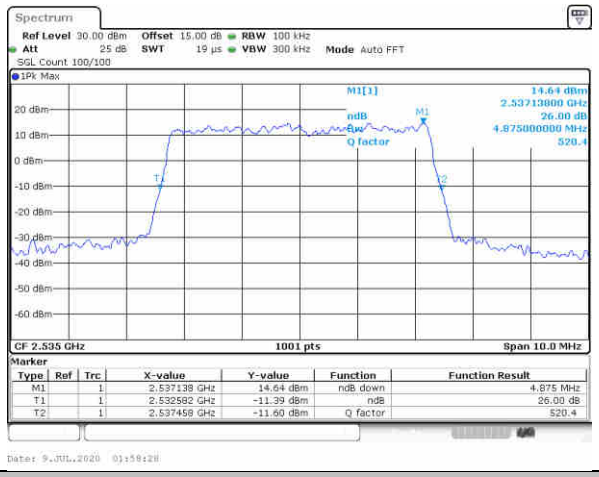
Lowest Channel / 5MHz / QPSK



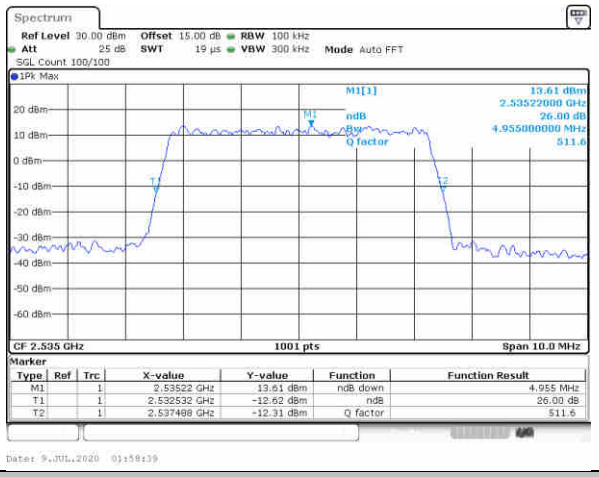
Lowest Channel / 5MHz / 16QAM



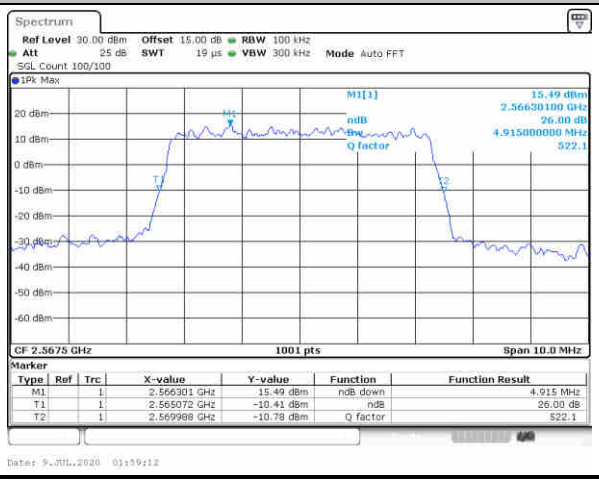
Middle Channel / 5MHz / QPSK



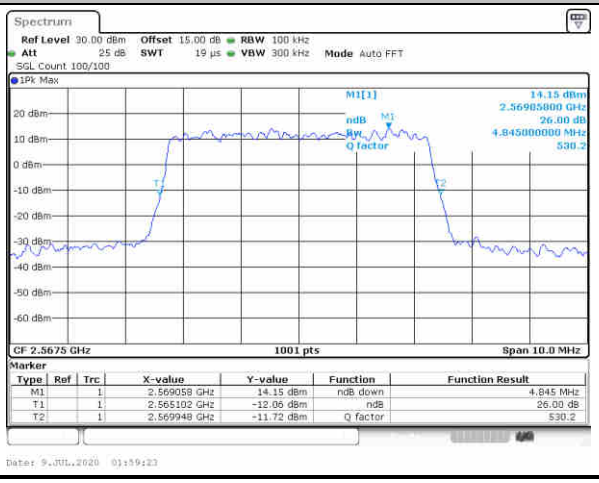
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

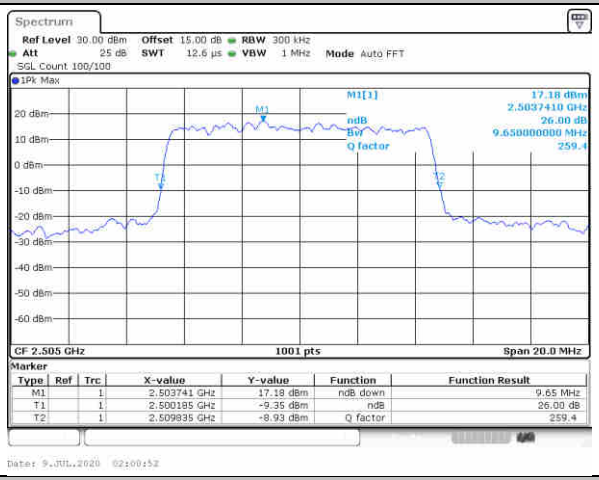


Highest Channel / 5MHz / 16QAM

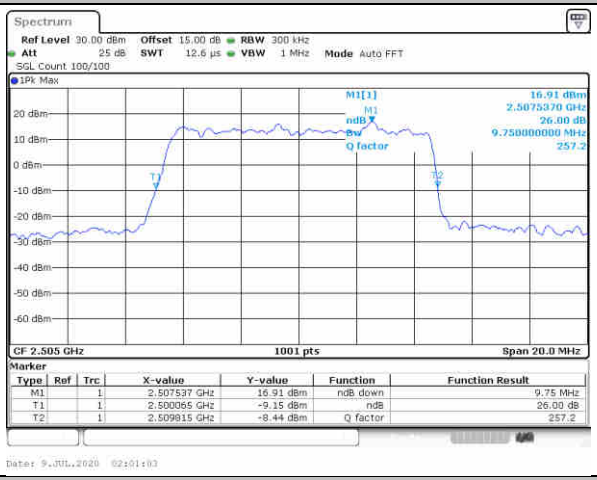


LTE Band 7

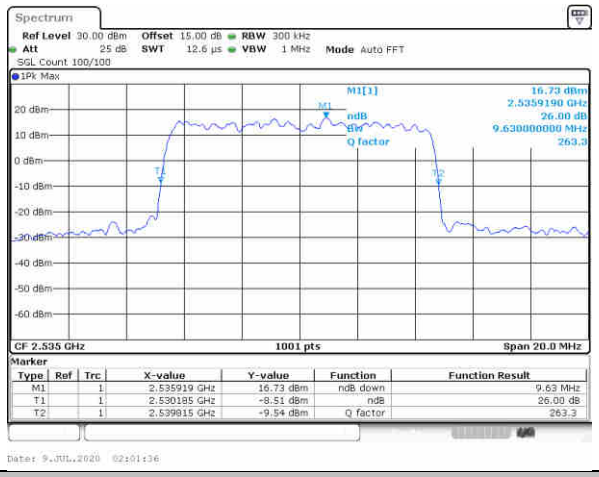
Lowest Channel / 10MHz / QPSK



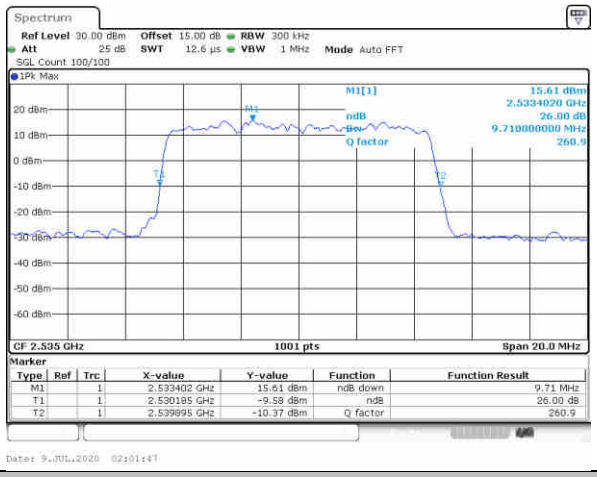
Lowest Channel / 10MHz / 16QAM



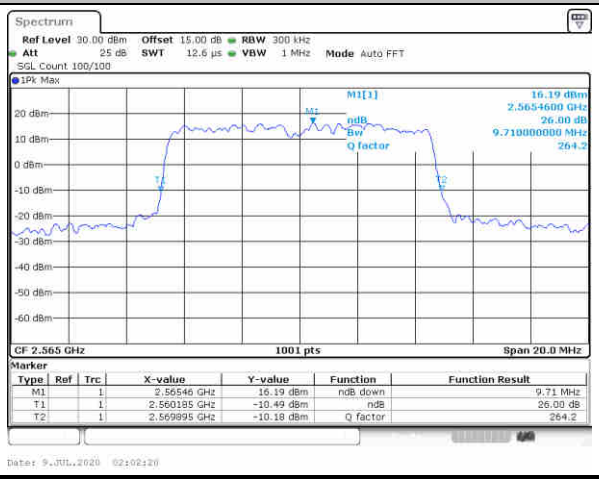
Middle Channel / 10MHz / QPSK



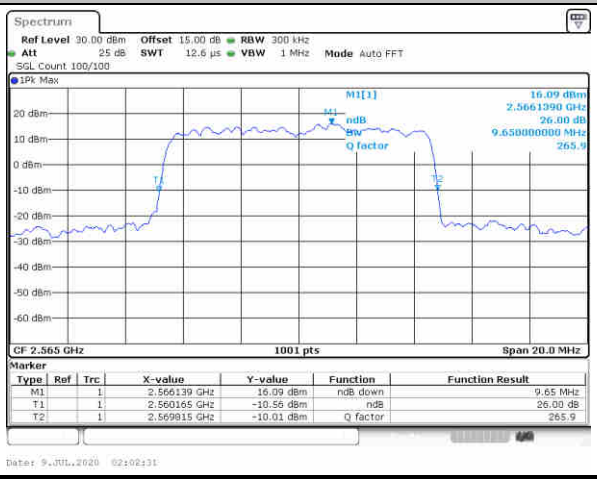
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

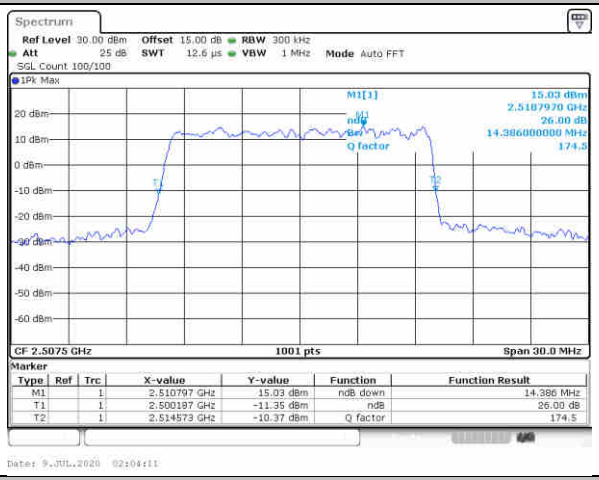


Highest Channel / 10MHz / 16QAM

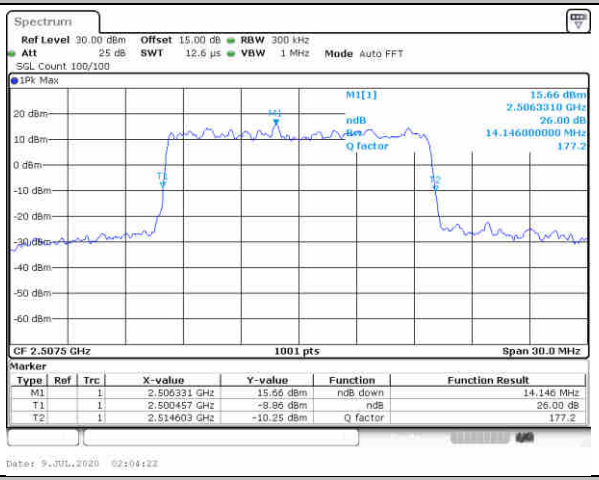


LTE Band 7

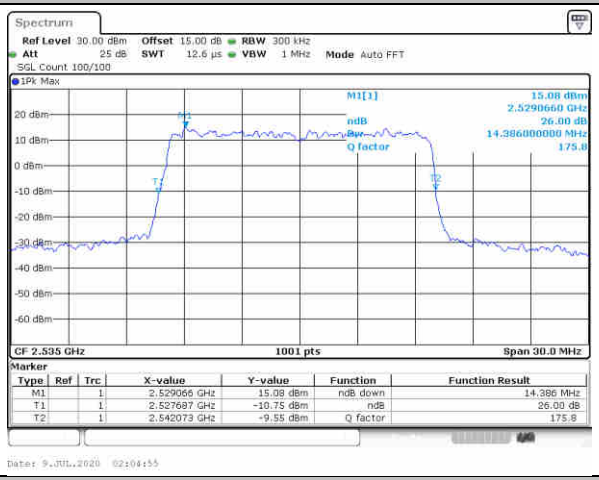
Lowest Channel / 15MHz / QPSK



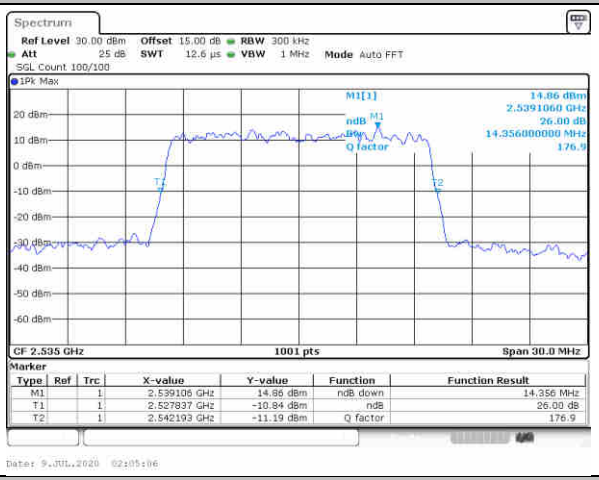
Lowest Channel / 15MHz / 16QAM



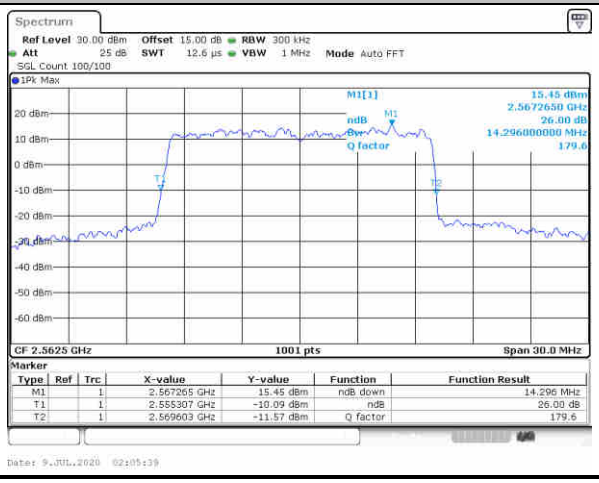
Middle Channel / 15MHz / QPSK



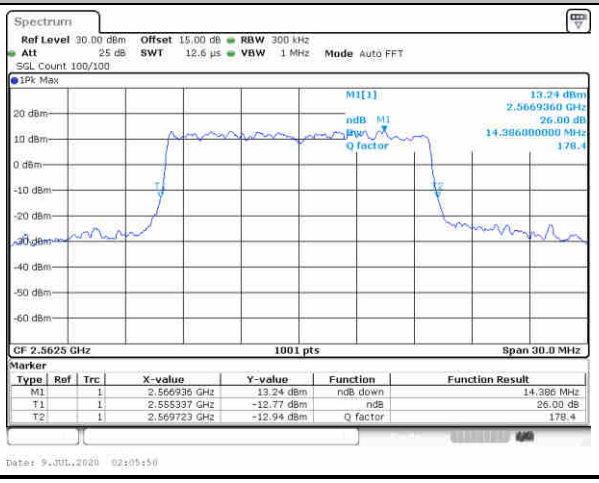
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

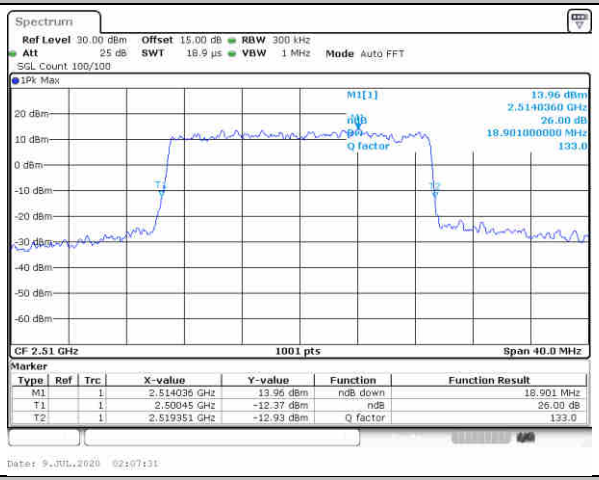


Highest Channel / 15MHz / 16QAM

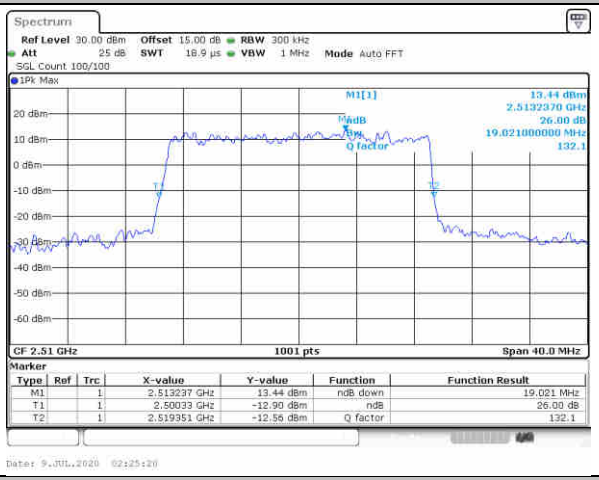


LTE Band 7

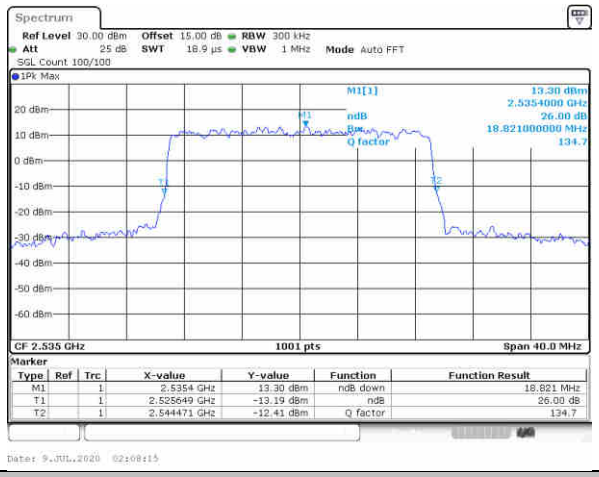
Lowest Channel / 20MHz / QPSK



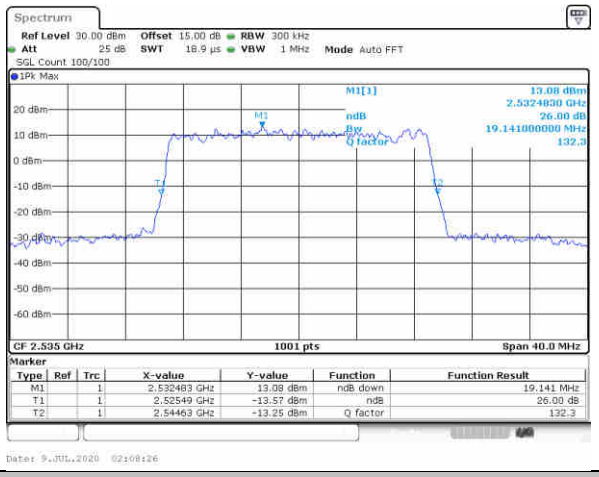
Lowest Channel / 20MHz / 16QAM



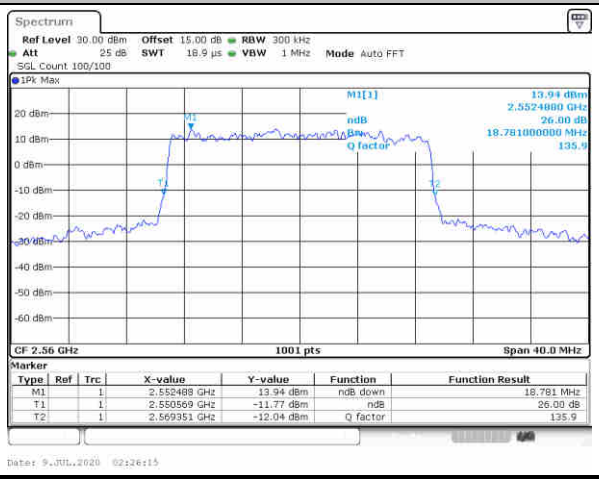
Middle Channel / 20MHz / QPSK



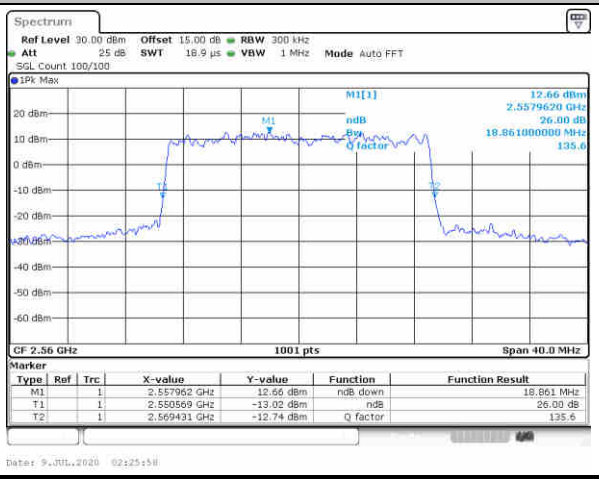
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

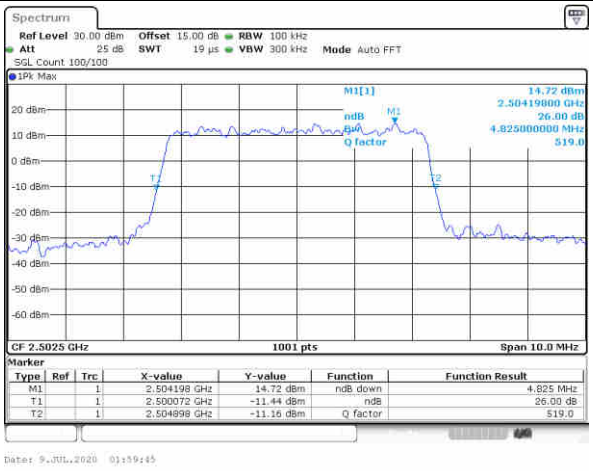


Highest Channel / 20MHz / 16QAM

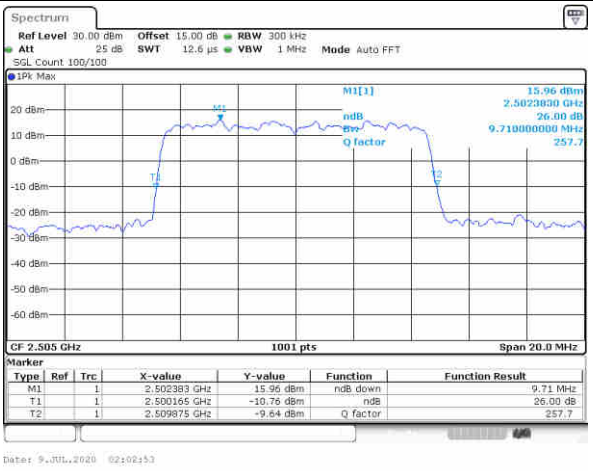


LTE Band 7

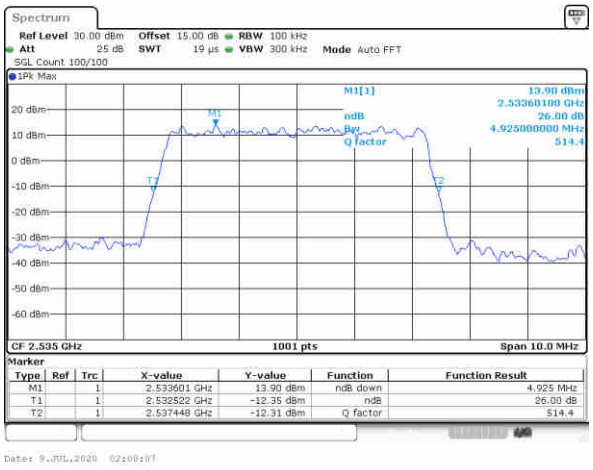
Lowest Channel / 5MHz / 64QAM



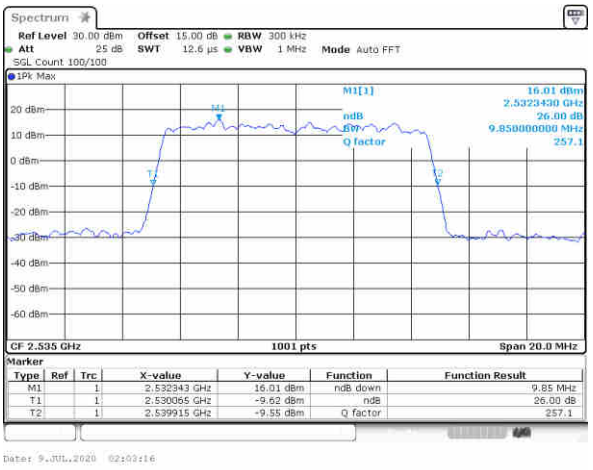
Lowest Channel / 10MHz / 64QAM



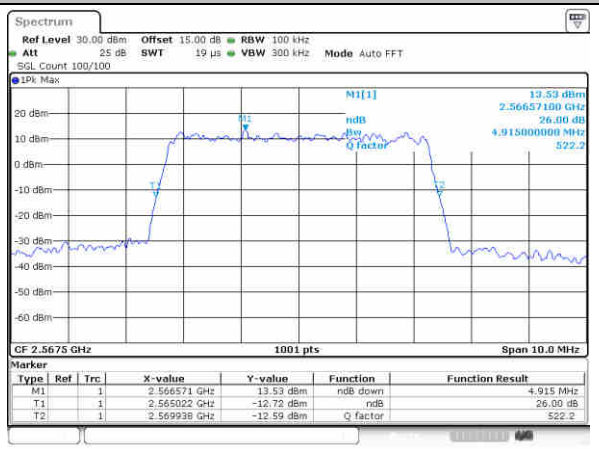
Middle Channel / 5MHz / 64QAM



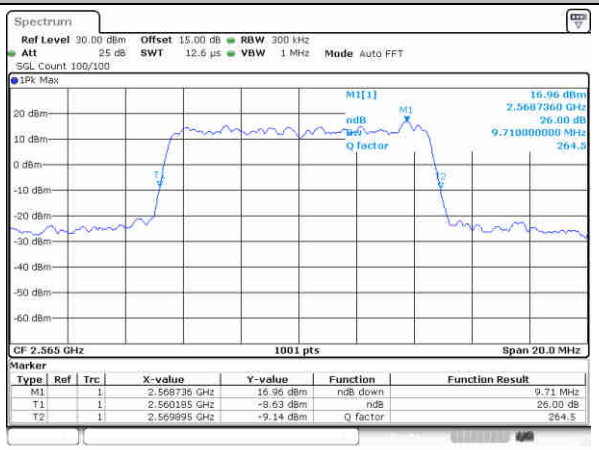
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

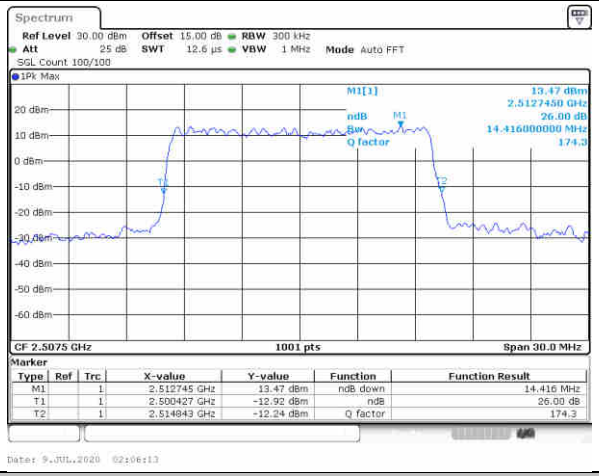


Highest Channel / 10MHz / 64QAM

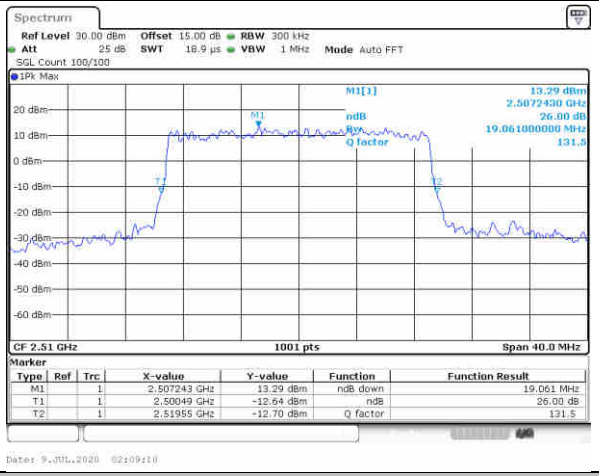


LTE Band 7

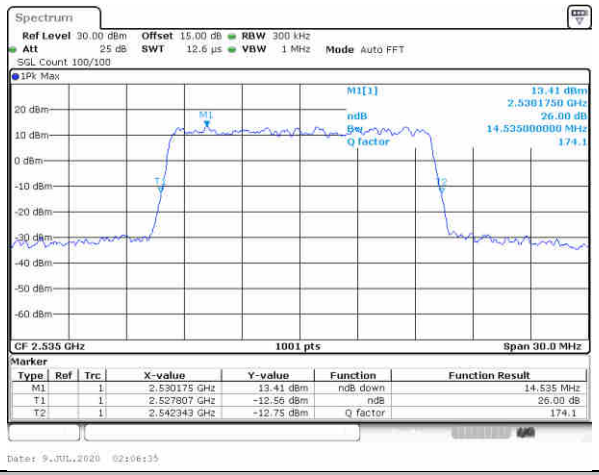
Lowest Channel / 15MHz / 64QAM



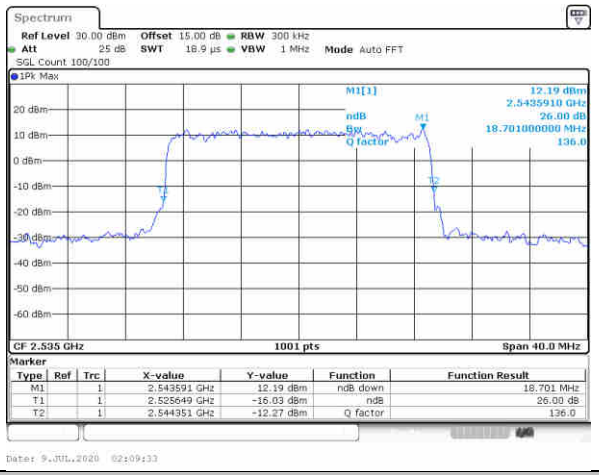
Lowest Channel / 20MHz / 64QAM



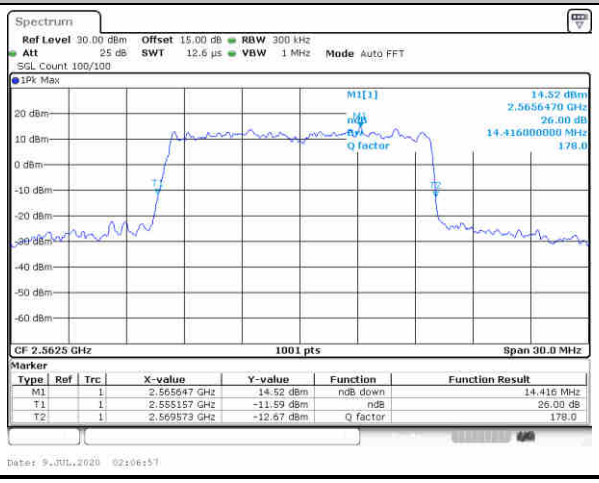
Middle Channel / 15MHz / 64QAM



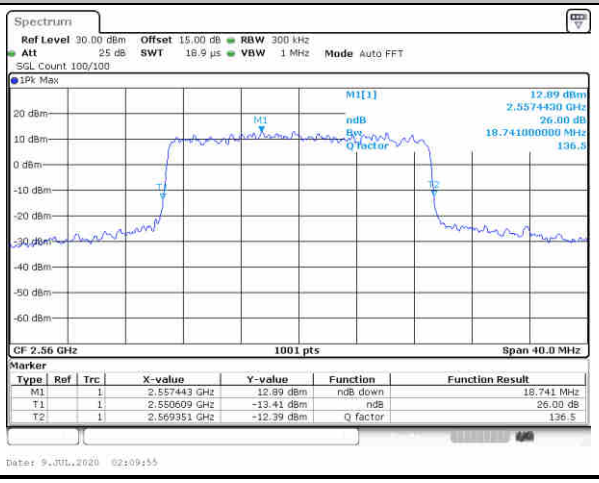
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



Highest Channel / 20MHz / 64QAM

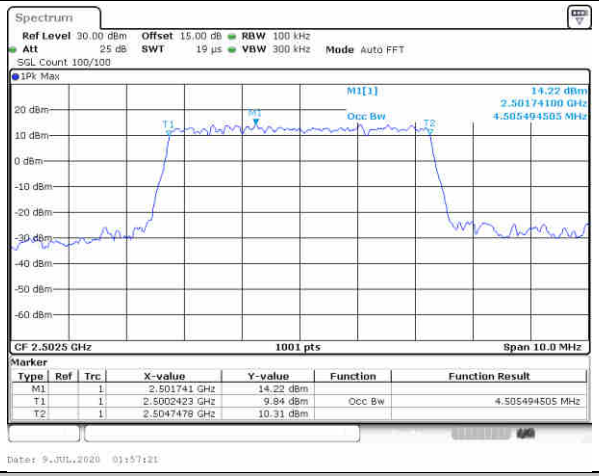


Occupied Bandwidth

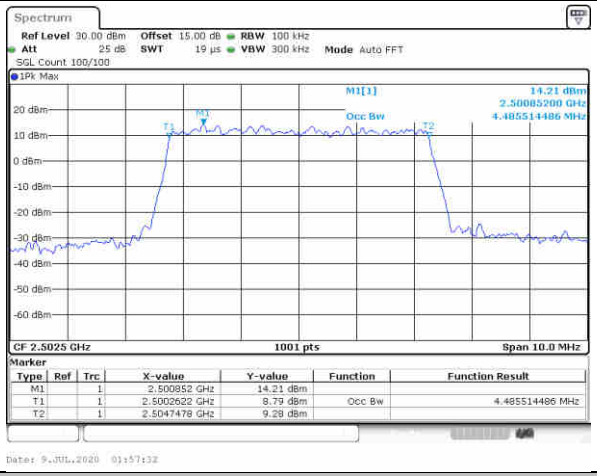
Mode	LTE Band 7 : 99%OBW(MHz)											
BW					5MHz		10MHz		15MHz		20MHz	
Mod.					QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					4.51	4.49	9.01	9.01	13.46	13.52	17.94	17.86
Middle CH					4.50	4.48	8.99	8.99	13.37	13.46	17.82	17.90
Highest CH					4.52	4.50	8.97	8.99	13.40	13.49	17.82	17.78
Mode	LTE Band 7 : 99%OBW(MHz)											
BW					5MHz		10MHz		15MHz		20MHz	
Mod.					64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.48	-	8.97	-	13.52	-	17.82	-
Middle CH					4.47	-	9.03	-	13.46	-	17.94	-
Highest CH					4.51	-	9.01	-	13.43	-	17.86	-

LTE Band 7

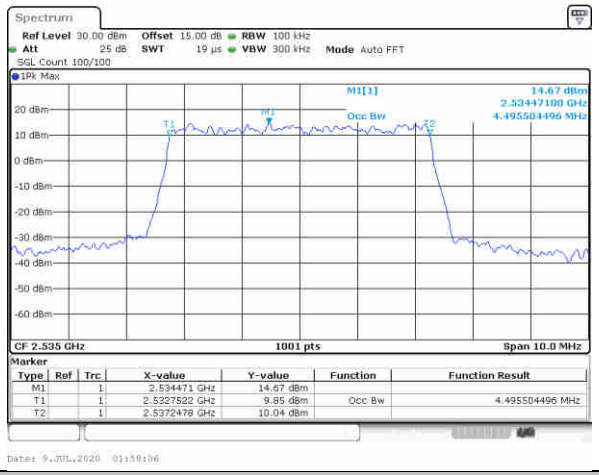
Lowest Channel / 5MHz / QPSK



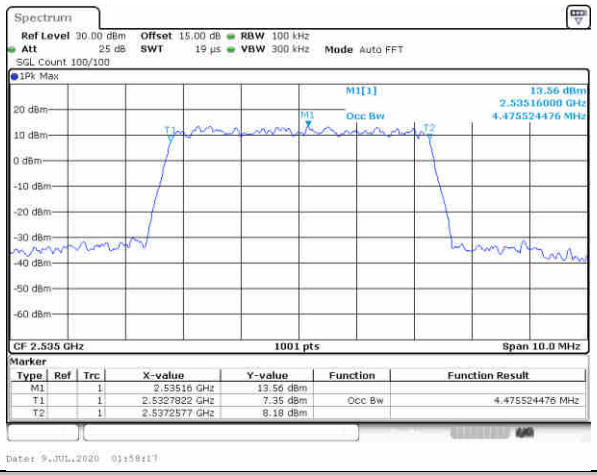
Lowest Channel / 5MHz / 16QAM



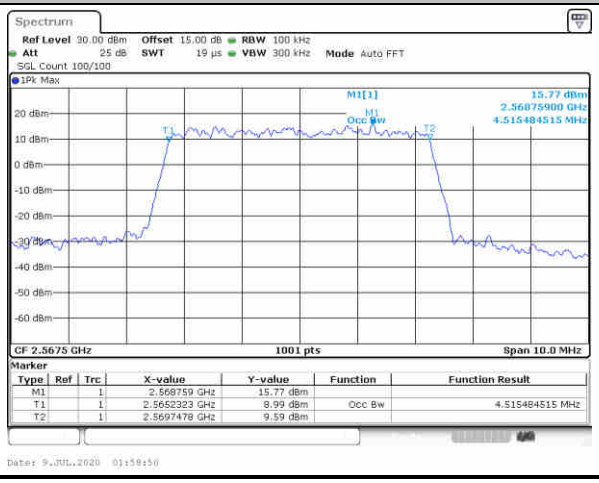
Middle Channel / 5MHz / QPSK



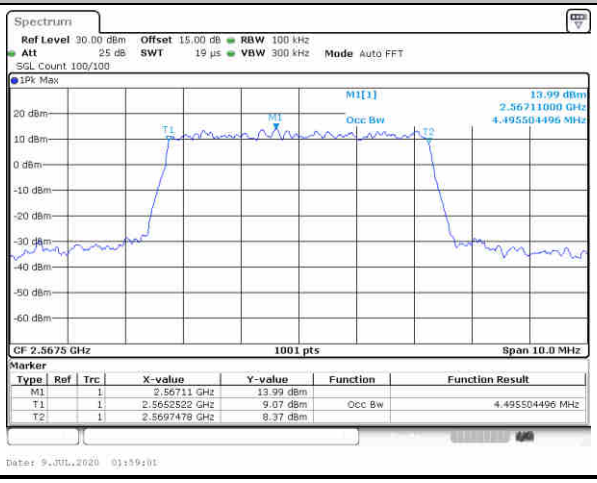
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

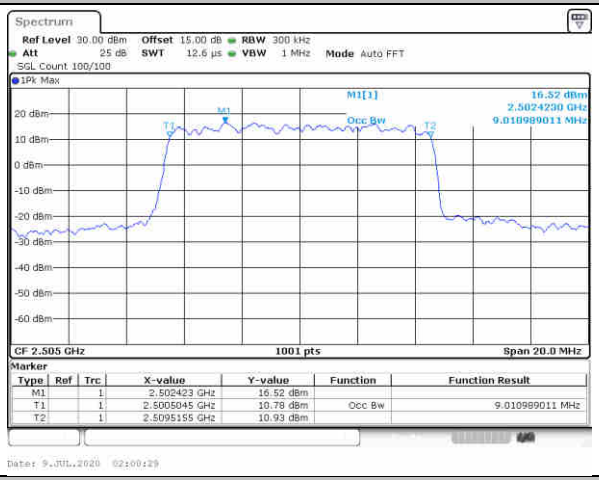


Highest Channel / 5MHz / 16QAM

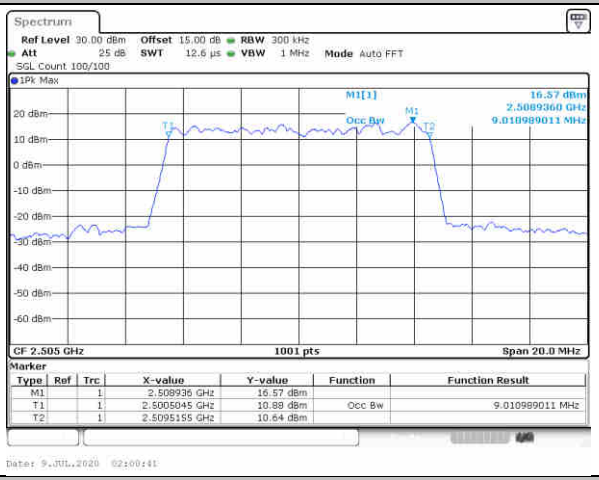


LTE Band 7

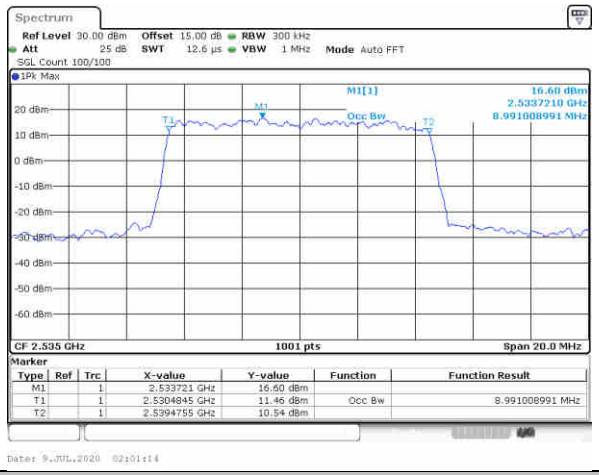
Lowest Channel / 10MHz / QPSK



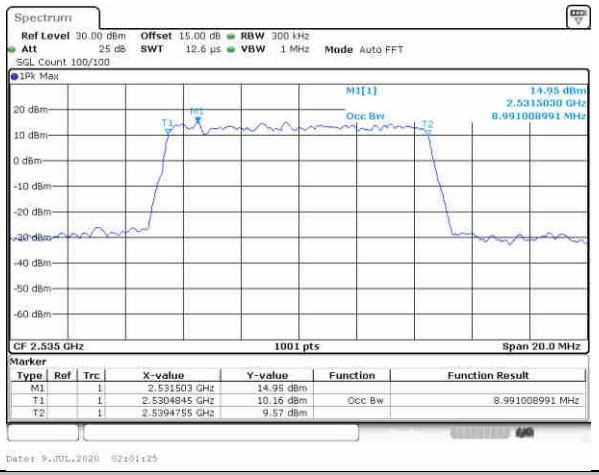
Lowest Channel / 10MHz / 16QAM



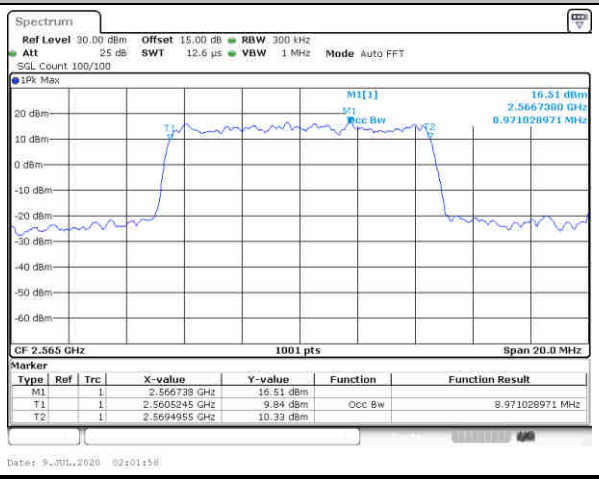
Middle Channel / 10MHz / QPSK



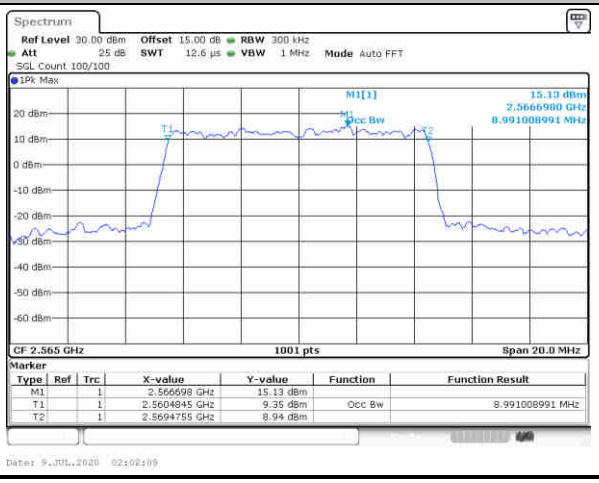
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

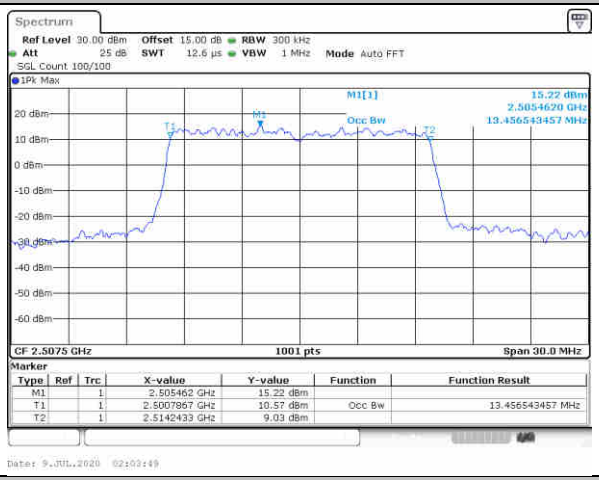


Highest Channel / 10MHz / 16QAM

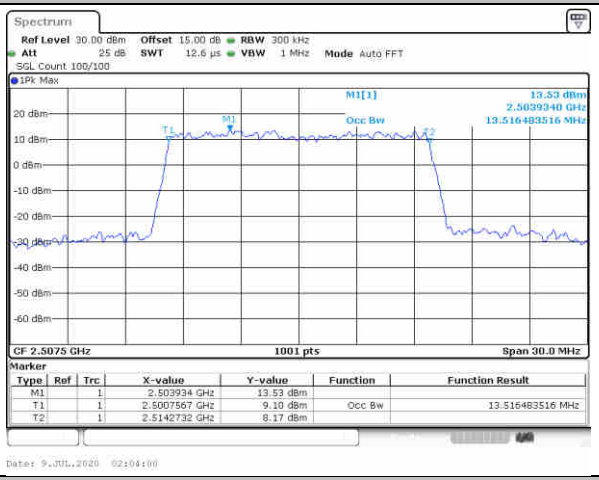


LTE Band 7

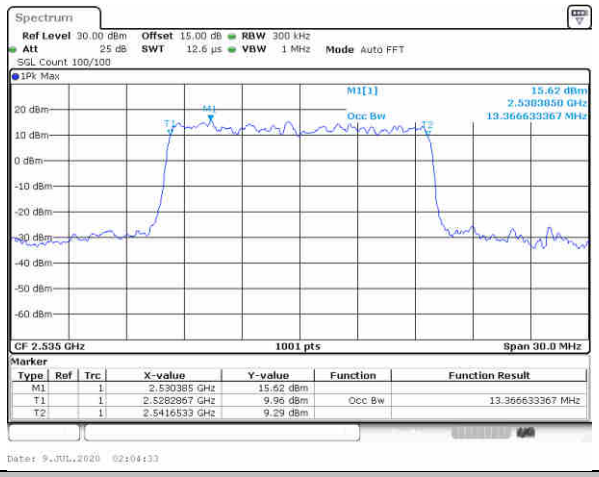
Lowest Channel / 15MHz / QPSK



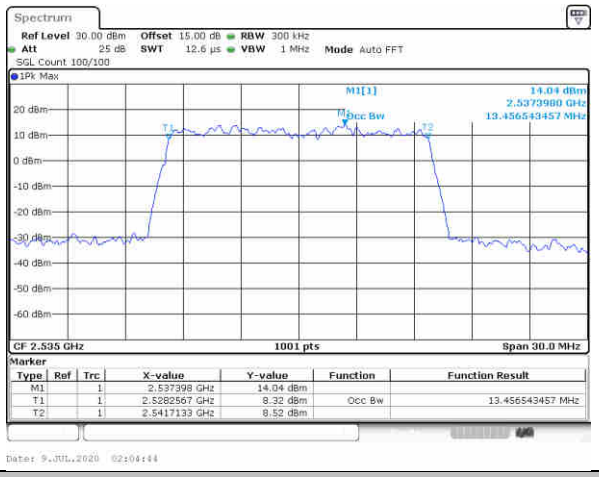
Lowest Channel / 15MHz / 16QAM



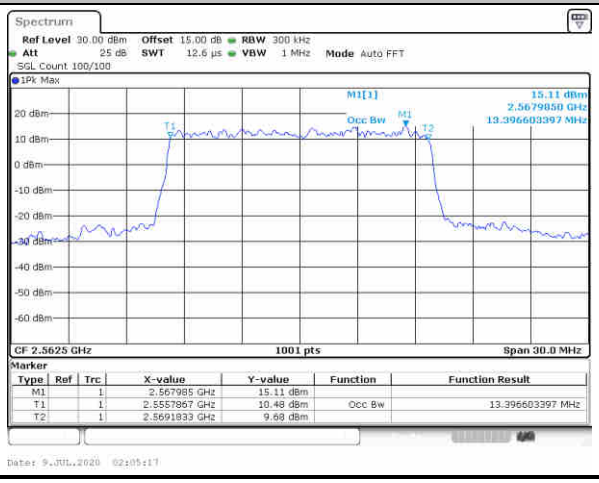
Middle Channel / 15MHz / QPSK



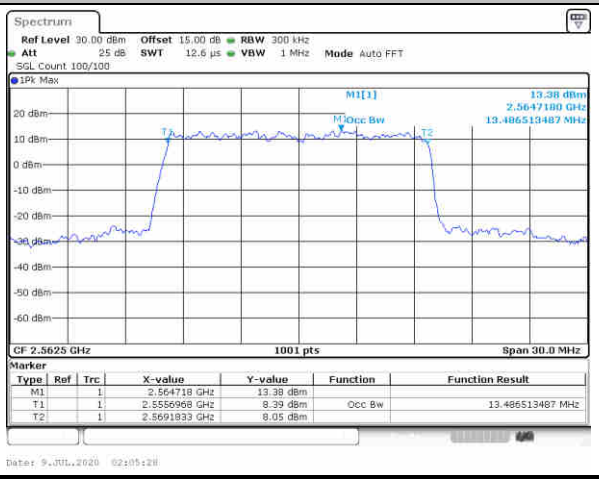
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

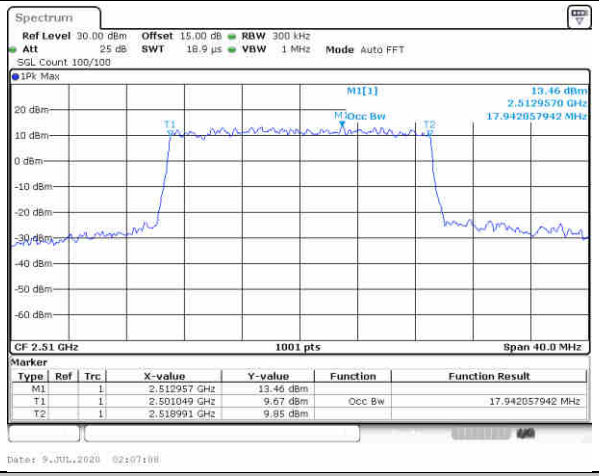


Highest Channel / 15MHz / 16QAM

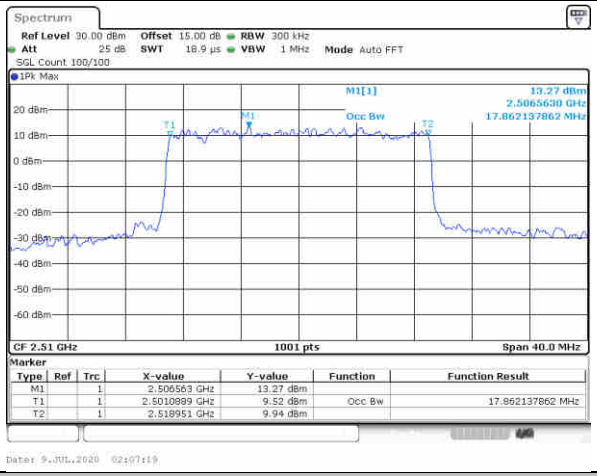


LTE Band 7

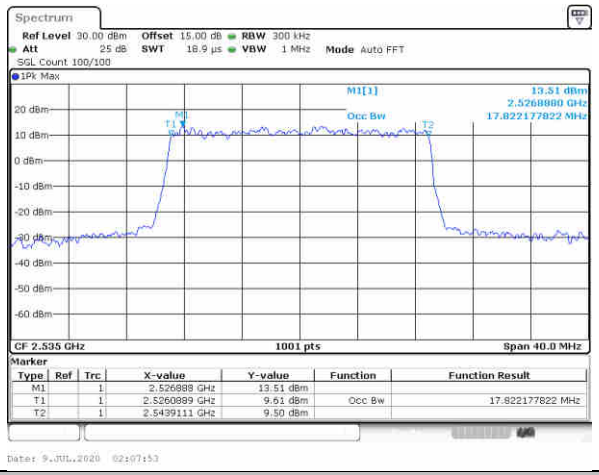
Lowest Channel / 20MHz / QPSK



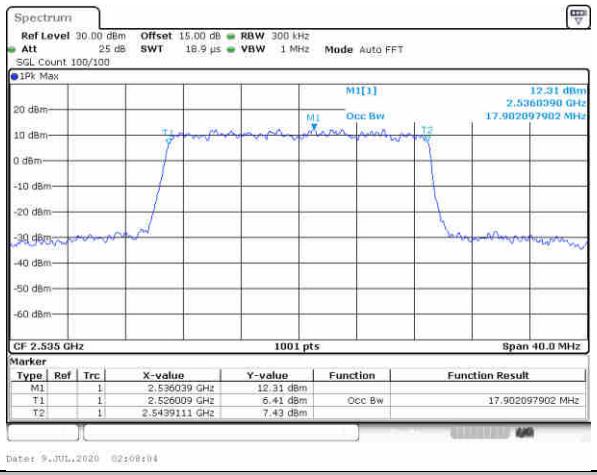
Lowest Channel / 20MHz / 16QAM



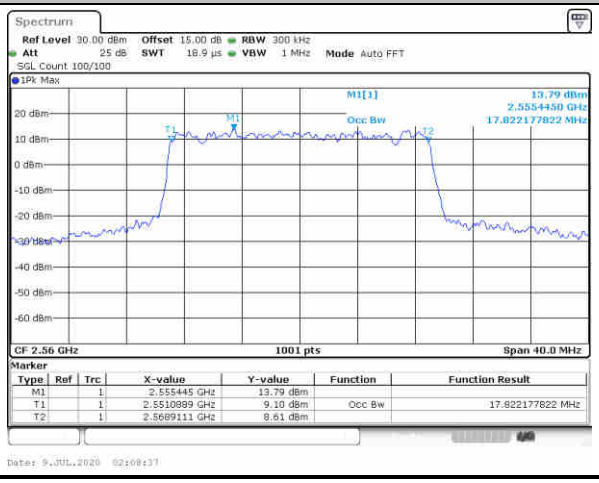
Middle Channel / 20MHz / QPSK



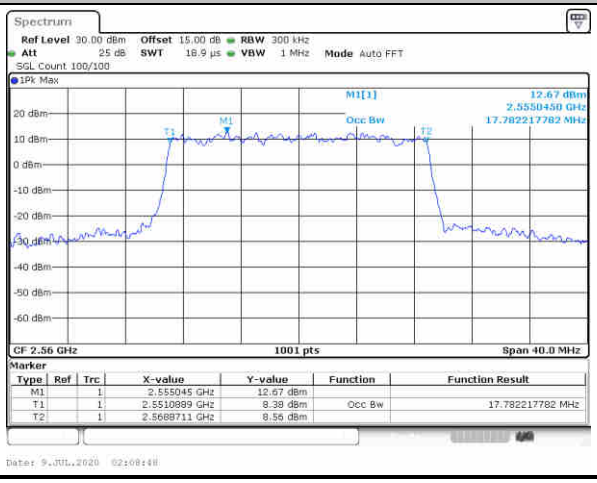
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK

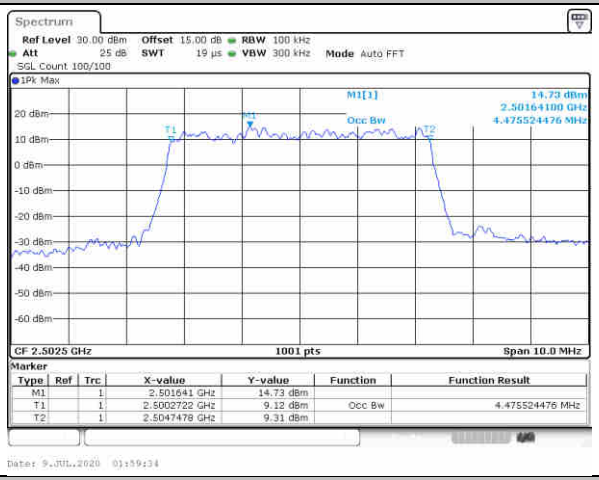


Highest Channel / 20MHz / 16QAM

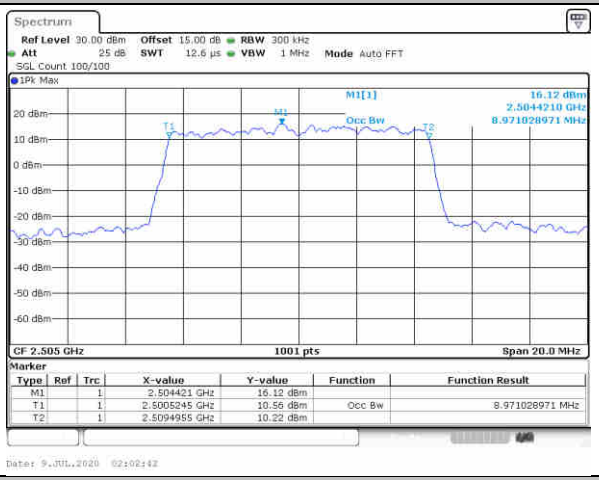


LTE Band 7

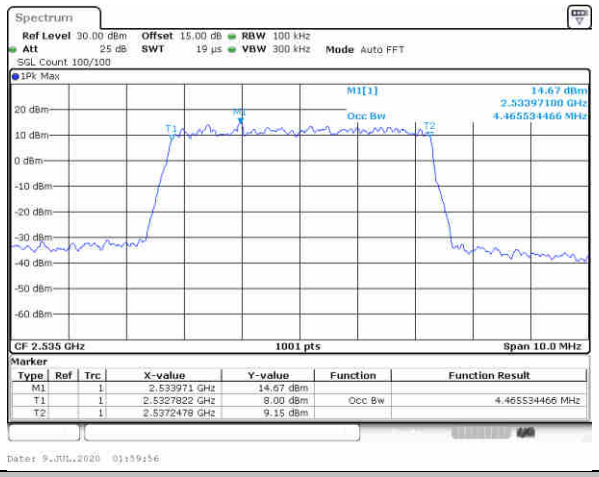
Lowest Channel / 5MHz / 64QAM



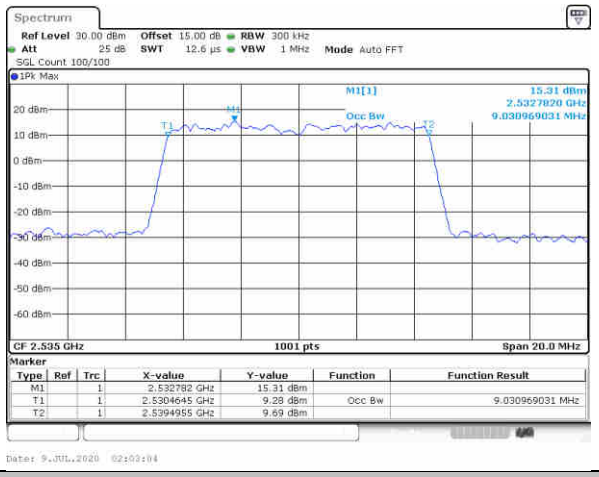
Lowest Channel / 10MHz / 64QAM



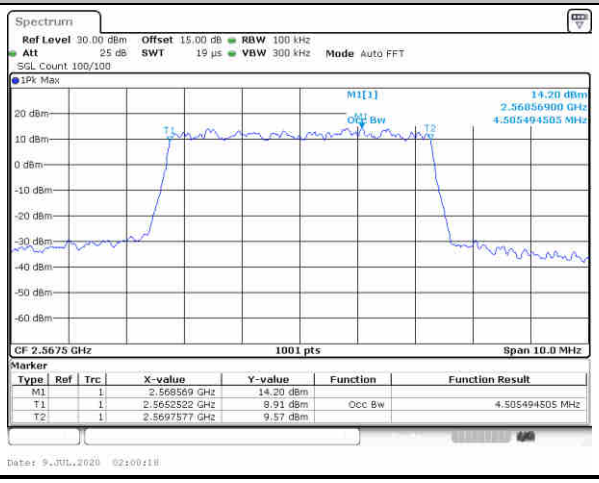
Middle Channel / 5MHz / 64QAM



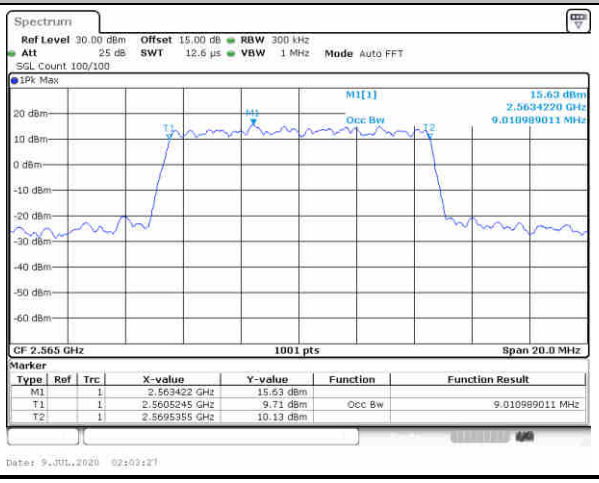
Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

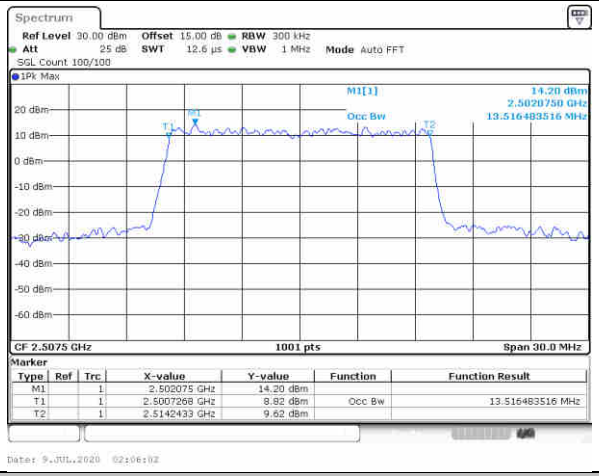


Highest Channel / 10MHz / 64QAM

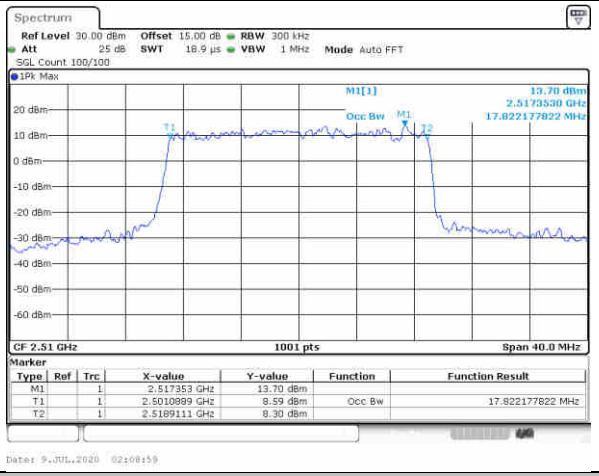


LTE Band 7

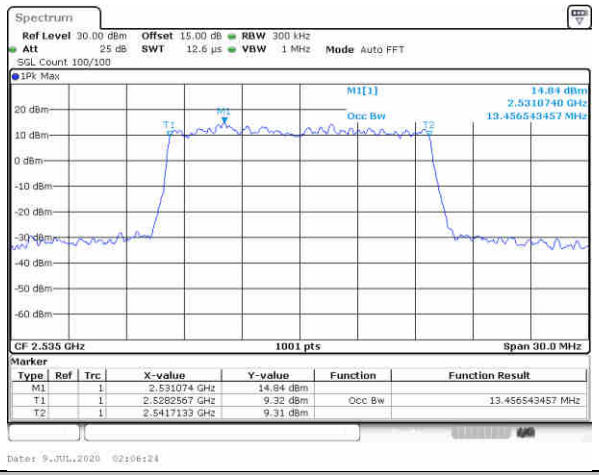
Lowest Channel / 15MHz / 64QAM



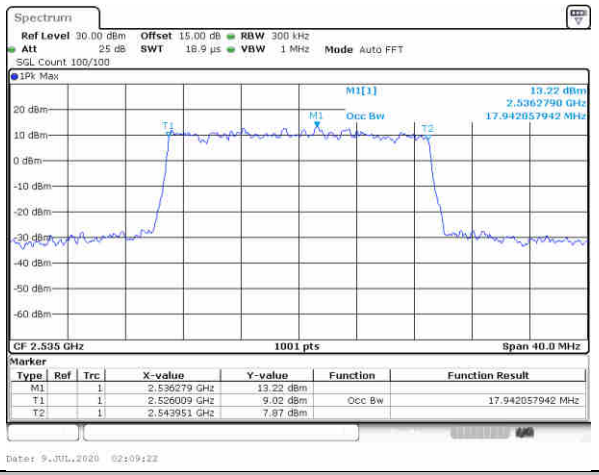
Lowest Channel / 20MHz / 64QAM



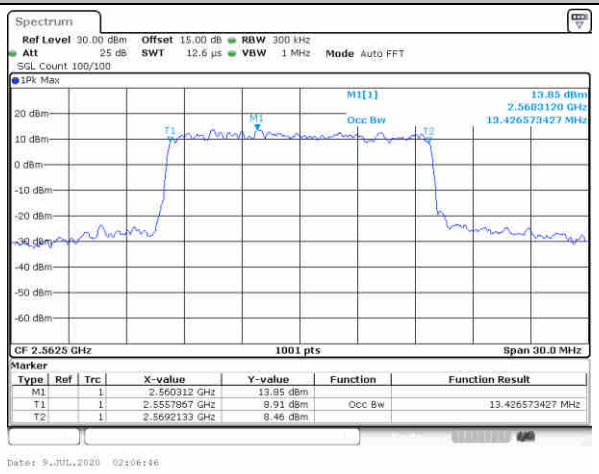
Middle Channel / 15MHz / 64QAM



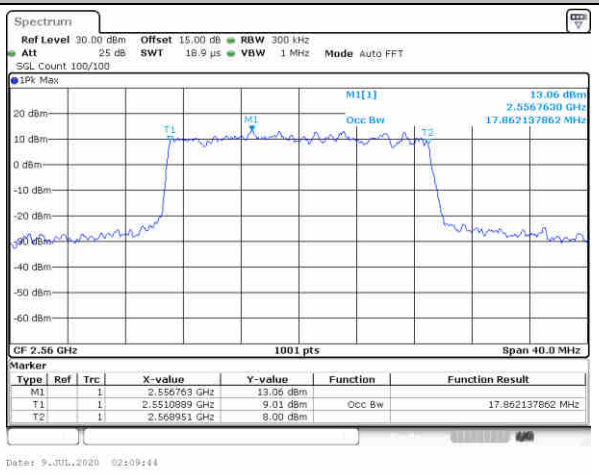
Middle Channel / 20MHz / 64QAM



Highest Channel / 15MHz / 64QAM



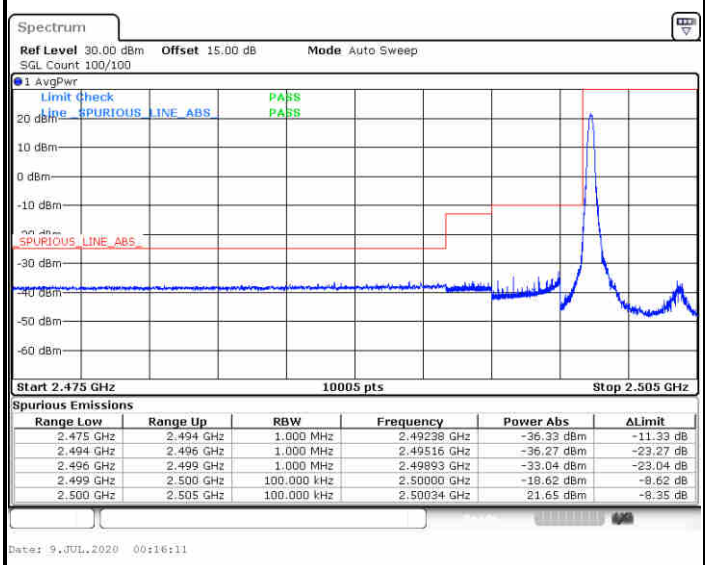
Highest Channel / 20MHz / 64QAM



Conducted Band Edge

LTE Band 7 / 5MHz / QPSK

Lowest Band Edge / 1 RB

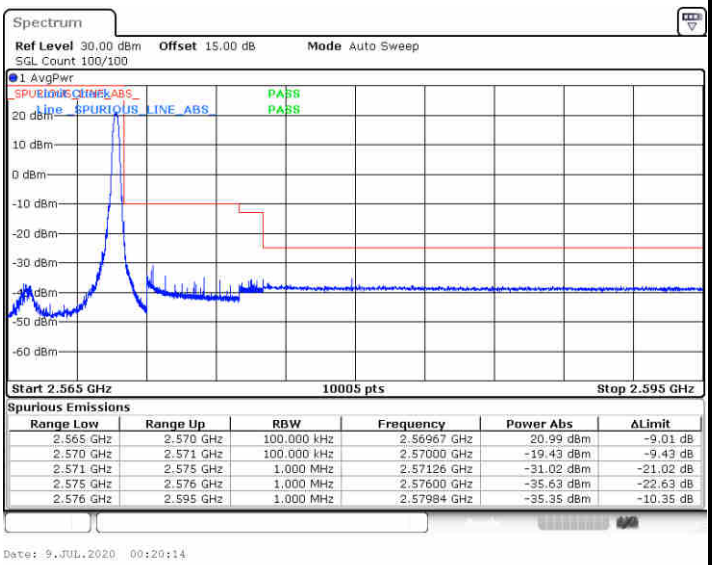


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49238 GHz	-36.33 dBm	-11.33 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49516 GHz	-36.27 dBm	-23.27 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49893 GHz	-33.04 dBm	-23.04 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-18.62 dBm	-8.62 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50034 GHz	21.65 dBm	-8.35 dB

Date: 9.JUL.2020 00:16:11

Highest Band Edge / 1 RB

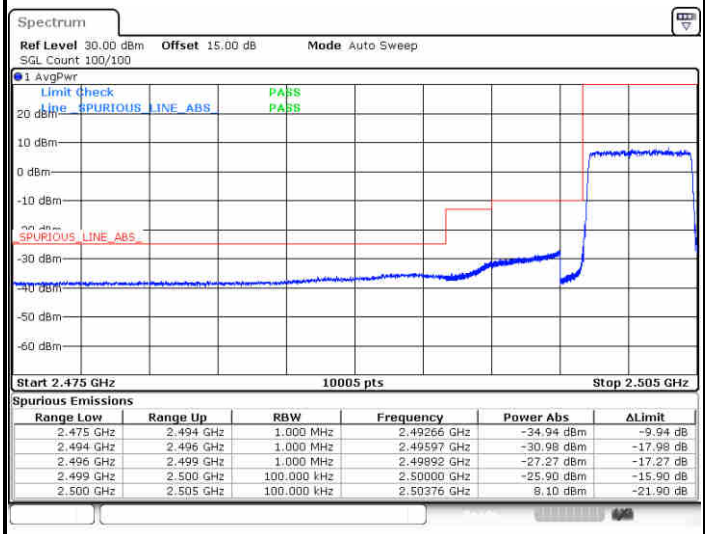


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56967 GHz	20.99 dBm	-9.01 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-19.43 dBm	-9.43 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57126 GHz	-31.02 dBm	-21.02 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57600 GHz	-35.63 dBm	-22.63 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57984 GHz	-35.35 dBm	-10.35 dB

Date: 9.JUL.2020 00:20:14

Lowest Band Edge / Full RB

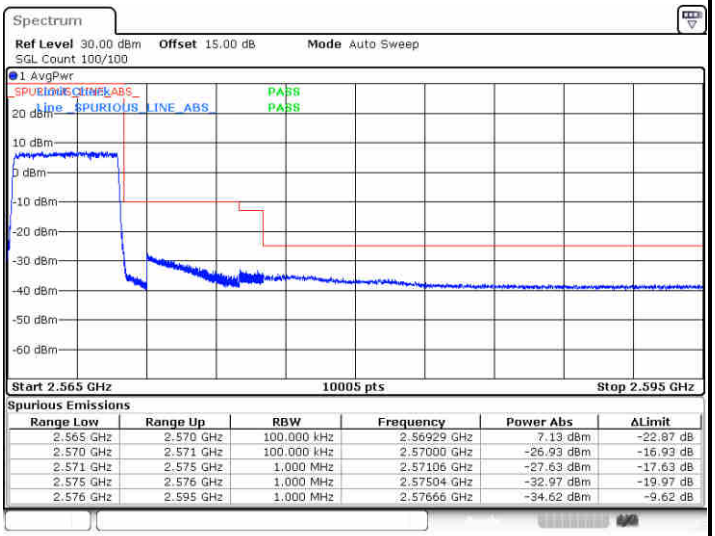


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49266 GHz	-34.94 dBm	-9.94 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-30.98 dBm	-17.98 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49892 GHz	-27.27 dBm	-17.27 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-25.90 dBm	-15.90 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50376 GHz	8.10 dBm	-21.90 dB

Date: 9.JUL.2020 00:18:14

Highest Band Edge / Full RB



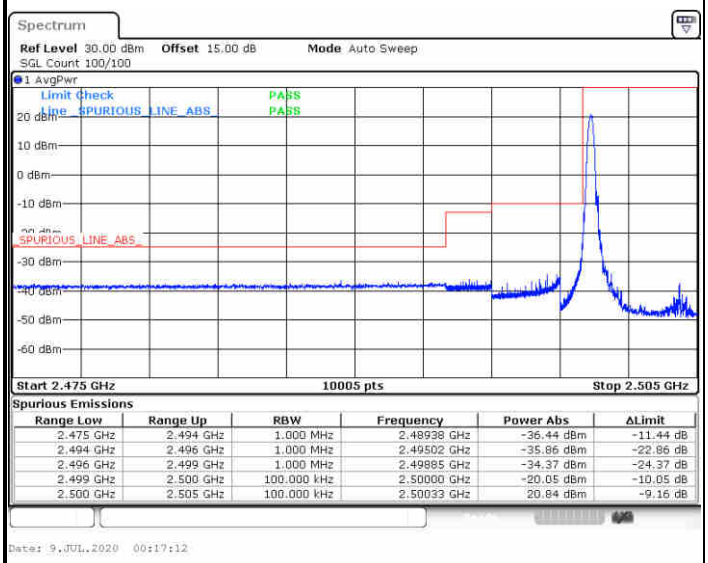
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56929 GHz	7.13 dBm	-22.87 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-26.93 dBm	-16.93 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57106 GHz	-27.63 dBm	-17.63 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57504 GHz	-32.97 dBm	-19.97 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57666 GHz	-34.62 dBm	-9.62 dB

Date: 9.JUL.2020 00:22:11

LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

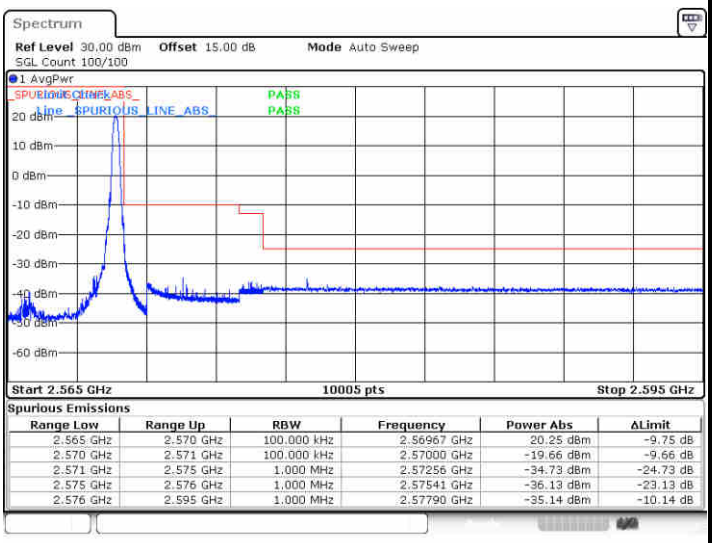


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.48938 GHz	-36.44 dBm	-11.44 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49502 GHz	-35.86 dBm	-22.86 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49885 GHz	-34.37 dBm	-24.37 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-20.05 dBm	-10.05 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50033 GHz	20.84 dBm	-9.16 dB

Date: 9.JUL.2020 00:17:12

Highest Band Edge / 1 RB

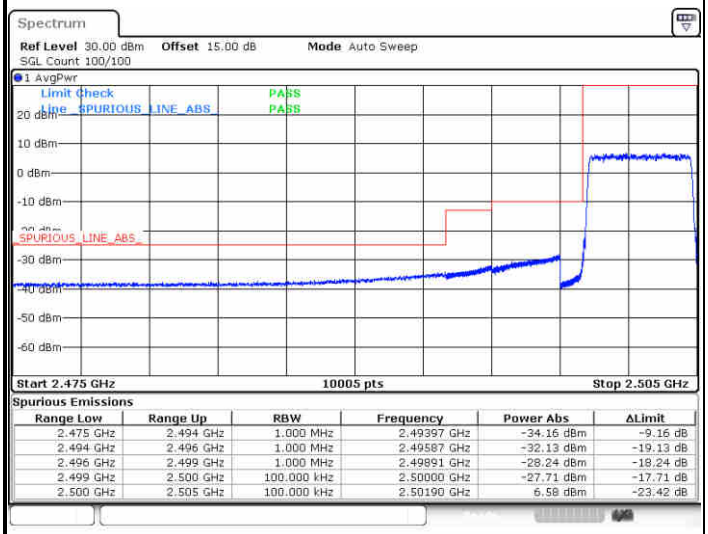


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56967 GHz	20.25 dBm	-9.75 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-19.66 dBm	-9.66 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57256 GHz	-34.73 dBm	-24.73 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57541 GHz	-36.13 dBm	-23.13 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57790 GHz	-35.14 dBm	-10.14 dB

Date: 9.JUL.2020 00:21:13

Lowest Band Edge / Full RB

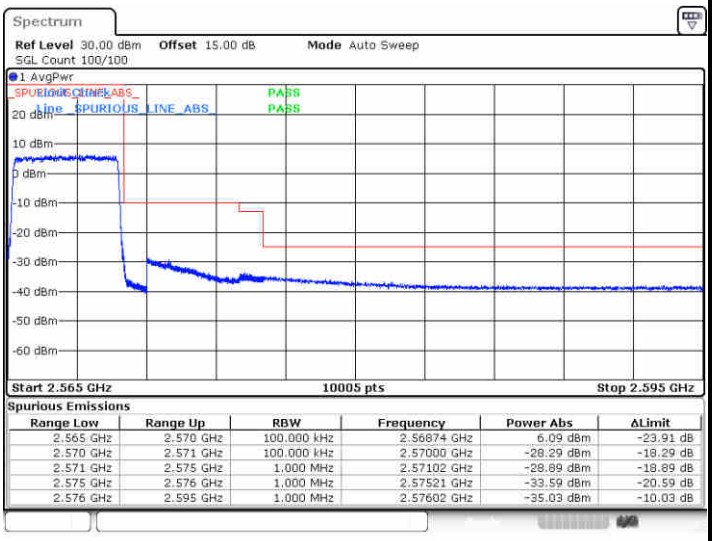


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49397 GHz	-34.16 dBm	-9.16 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49587 GHz	-32.13 dBm	-19.13 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49891 GHz	-28.24 dBm	-18.24 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-27.71 dBm	-17.71 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50190 GHz	6.58 dBm	-23.42 dB

Date: 9.JUL.2020 00:19:15

Highest Band Edge / Full RB



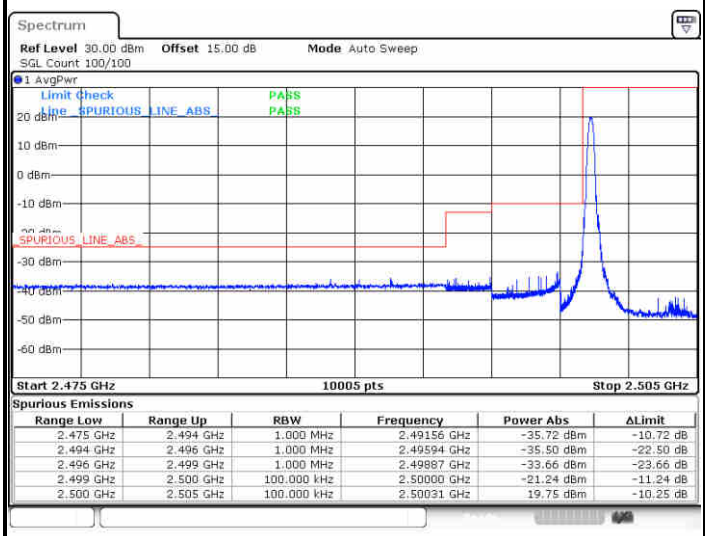
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56874 GHz	6.09 dBm	-23.91 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-28.29 dBm	-18.29 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57102 GHz	-28.89 dBm	-18.89 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57521 GHz	-33.59 dBm	-20.59 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57602 GHz	-35.03 dBm	-10.03 dB

Date: 9.JUL.2020 00:23:10

LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB

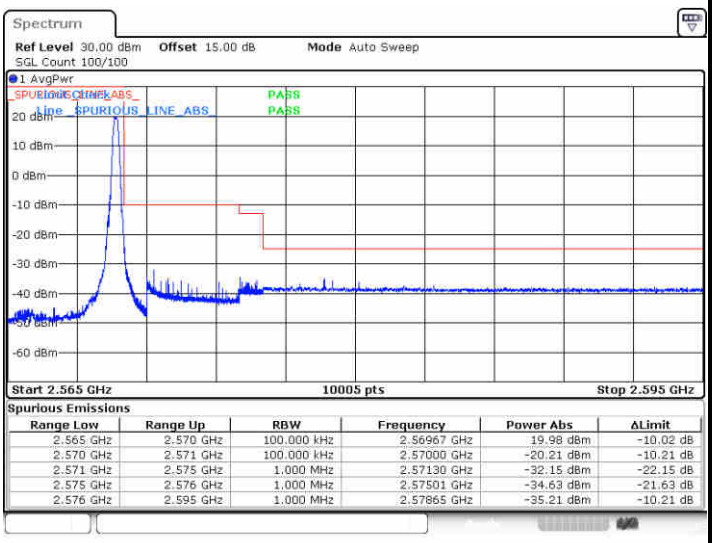


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49156 GHz	-35.72 dBm	-10.72 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49594 GHz	-35.50 dBm	-22.50 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49887 GHz	-33.66 dBm	-23.66 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-21.24 dBm	-11.24 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50031 GHz	19.75 dBm	-10.25 dB

Date: 9.JUL.2020 01:13:29

Highest Band Edge / 1 RB

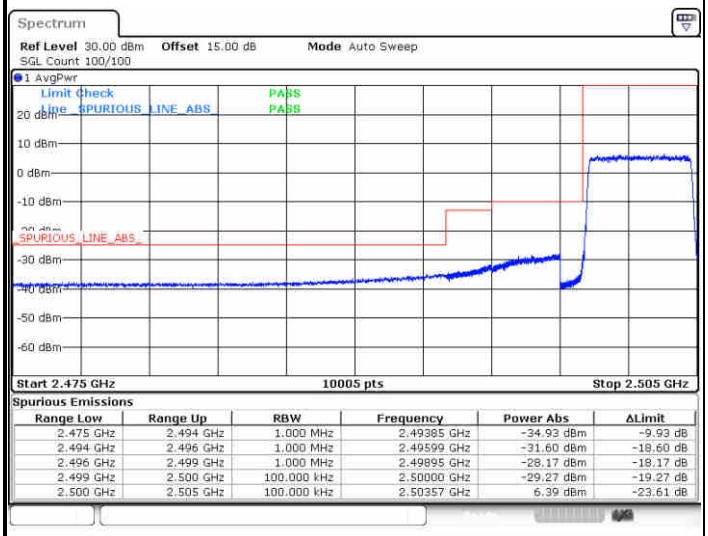


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56967 GHz	19.98 dBm	-10.02 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-20.21 dBm	-10.21 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57130 GHz	-32.15 dBm	-22.15 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57501 GHz	-34.63 dBm	-21.63 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57865 GHz	-35.21 dBm	-10.21 dB

Date: 9.JUL.2020 01:15:28

Lowest Band Edge / Full RB

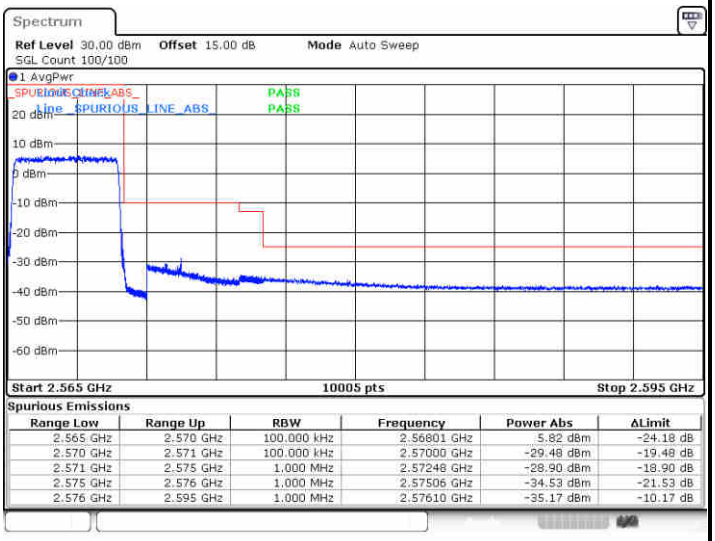


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.494 GHz	1.000 MHz	2.49385 GHz	-34.93 dBm	-9.93 dB
2.494 GHz	2.496 GHz	1.000 MHz	2.49599 GHz	-31.60 dBm	-18.60 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49895 GHz	-28.17 dBm	-18.17 dB
2.499 GHz	2.500 GHz	100.000 kHz	2.50000 GHz	-29.27 dBm	-19.27 dB
2.500 GHz	2.505 GHz	100.000 kHz	2.50357 GHz	6.39 dBm	-23.61 dB

Date: 9.JUL.2020 01:14:30

Highest Band Edge / Full RB



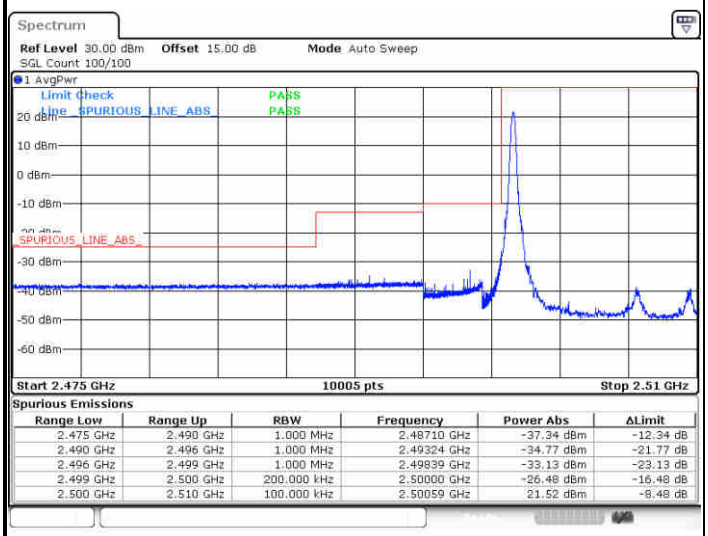
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.565 GHz	2.570 GHz	100.000 kHz	2.56801 GHz	5.82 dBm	-24.18 dB
2.570 GHz	2.571 GHz	100.000 kHz	2.57000 GHz	-29.48 dBm	-19.48 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57248 GHz	-28.90 dBm	-18.90 dB
2.575 GHz	2.576 GHz	1.000 MHz	2.57506 GHz	-34.53 dBm	-21.53 dB
2.576 GHz	2.595 GHz	1.000 MHz	2.57610 GHz	-35.17 dBm	-10.17 dB

Date: 9.JUL.2020 01:54:21

LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB

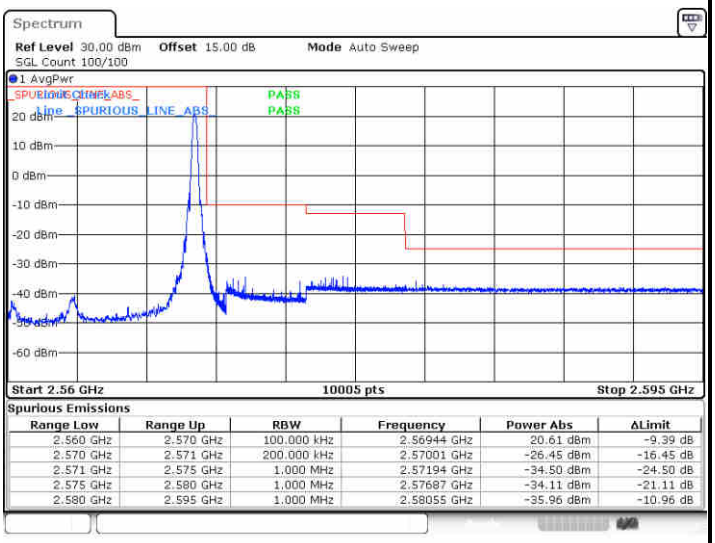


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48710 GHz	-37.34 dBm	-12.34 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49324 GHz	-34.77 dBm	-21.77 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49839 GHz	-33.13 dBm	-23.13 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-26.48 dBm	-16.48 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50059 GHz	21.52 dBm	-8.48 dB

Date: 9.JUL.2020 00:24:09

Highest Band Edge / 1 RB

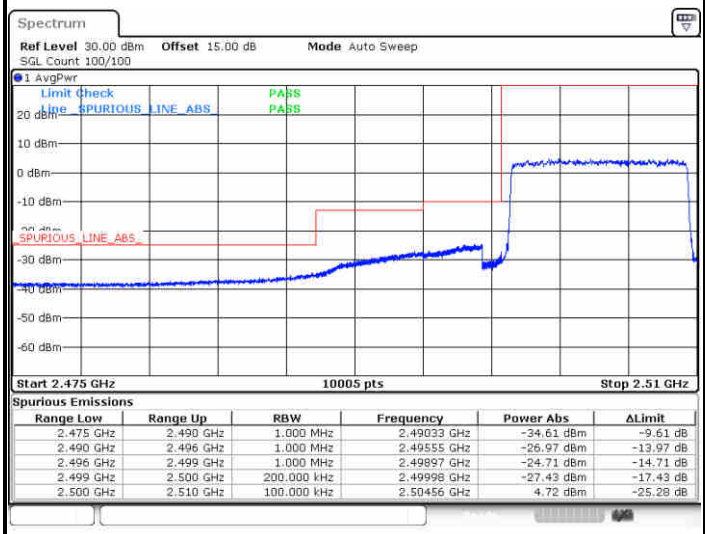


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56944 GHz	20.61 dBm	-9.39 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57001 GHz	-26.45 dBm	-16.45 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57194 GHz	-34.50 dBm	-24.50 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57687 GHz	-34.11 dBm	-21.11 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58055 GHz	-35.96 dBm	-10.96 dB

Date: 9.JUL.2020 00:28:05

Lowest Band Edge / Full RB

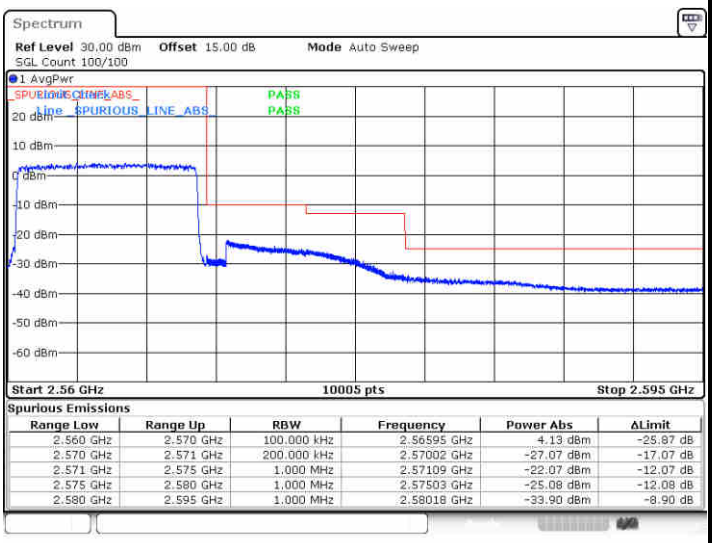


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49033 GHz	-34.61 dBm	-9.61 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49555 GHz	-26.97 dBm	-13.97 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49897 GHz	-24.71 dBm	-14.71 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-27.43 dBm	-17.43 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50456 GHz	4.72 dBm	-25.28 dB

Date: 9.JUL.2020 00:26:07

Highest Band Edge / Full RB



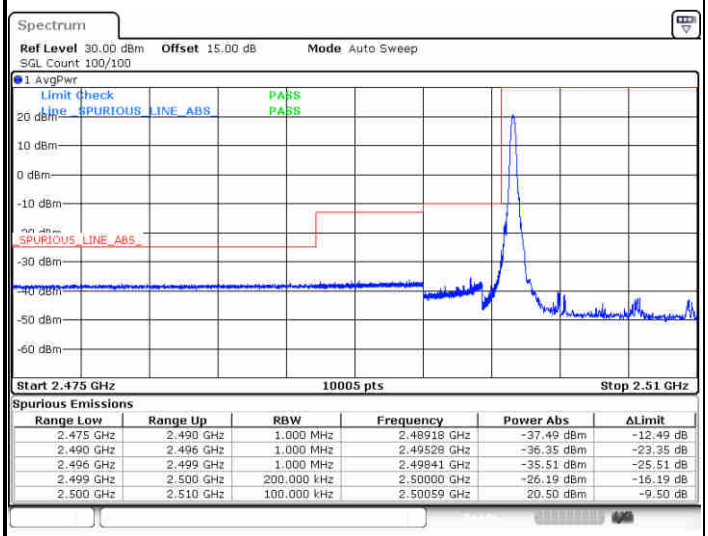
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56595 GHz	4.13 dBm	-25.87 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57002 GHz	-27.07 dBm	-17.07 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57109 GHz	-22.07 dBm	-12.07 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57503 GHz	-25.08 dBm	-12.08 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58018 GHz	-33.90 dBm	-8.90 dB

Date: 9.JUL.2020 00:30:03

LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

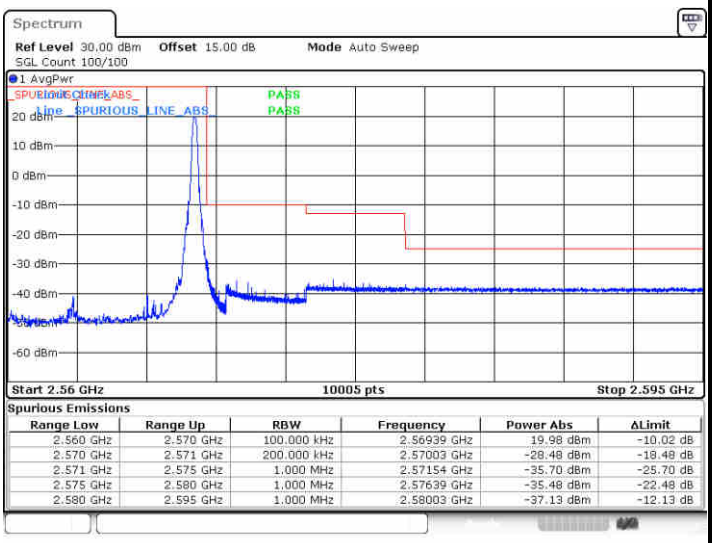


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.48918 GHz	-37.49 dBm	-12.49 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49528 GHz	-36.35 dBm	-23.35 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49841 GHz	-35.51 dBm	-25.51 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-26.19 dBm	-16.19 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50059 GHz	20.50 dBm	-9.50 dB

Date: 9.JUL.2020 00:25:08

Highest Band Edge / 1 RB

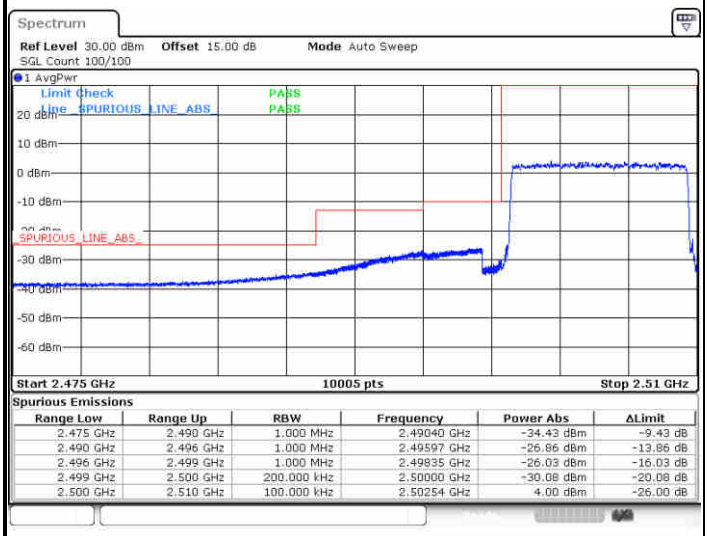


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56939 GHz	19.98 dBm	-10.02 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57003 GHz	-28.48 dBm	-18.48 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57154 GHz	-35.70 dBm	-25.70 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57639 GHz	-35.48 dBm	-22.48 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58003 GHz	-37.13 dBm	-12.13 dB

Date: 9.JUL.2020 00:29:05

Lowest Band Edge / Full RB

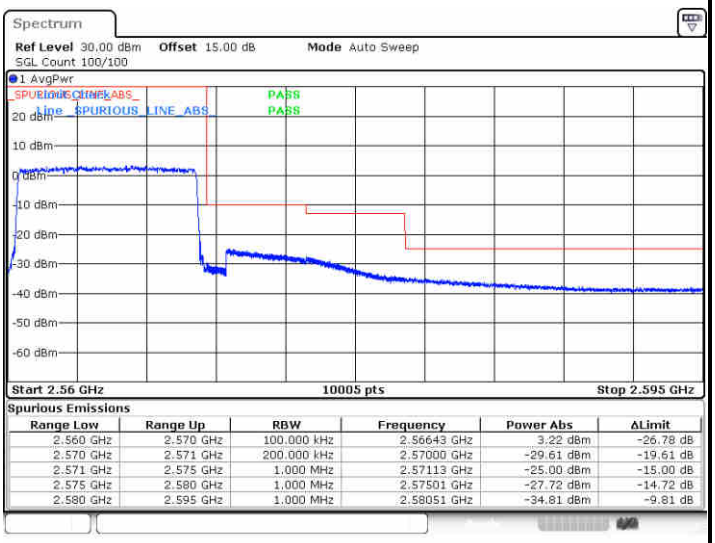


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49040 GHz	-34.43 dBm	-9.43 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49597 GHz	-26.86 dBm	-13.86 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49835 GHz	-26.03 dBm	-16.03 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.50000 GHz	-30.08 dBm	-20.08 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50254 GHz	4.00 dBm	-26.00 dB

Date: 9.JUL.2020 00:27:07

Highest Band Edge / Full RB



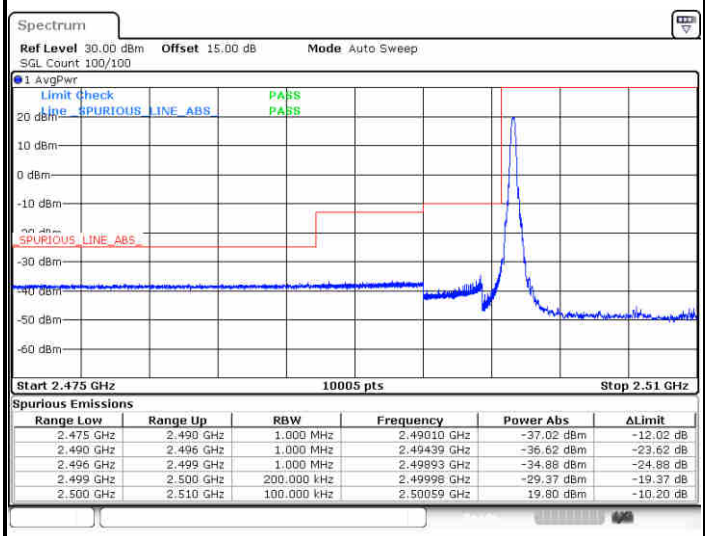
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56643 GHz	3.22 dBm	-26.78 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-29.61 dBm	-19.61 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57113 GHz	-25.00 dBm	-15.00 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57501 GHz	-27.72 dBm	-14.72 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58051 GHz	-34.81 dBm	-9.81 dB

Date: 9.JUL.2020 00:31:01

LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

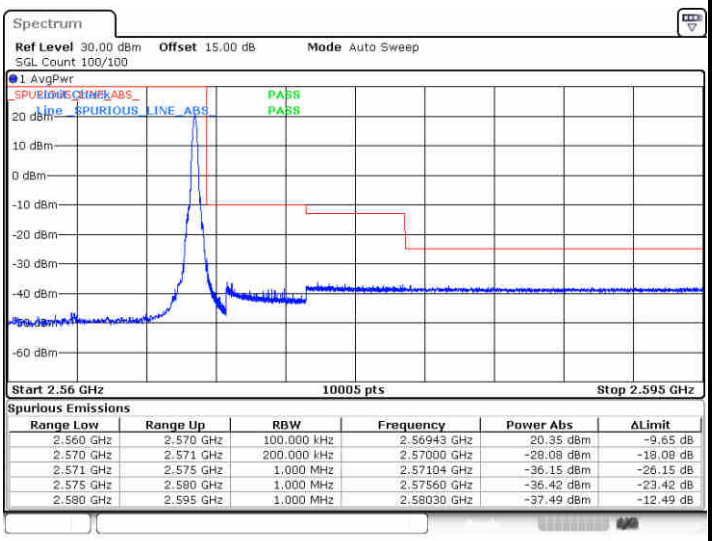


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49010 GHz	-37.02 dBm	-12.02 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49439 GHz	-36.62 dBm	-23.62 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49893 GHz	-34.88 dBm	-24.88 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-29.37 dBm	-19.37 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50059 GHz	19.80 dBm	-10.20 dB

Date: 9.JUL.2020 01:17:22

Highest Band Edge / 1 RB

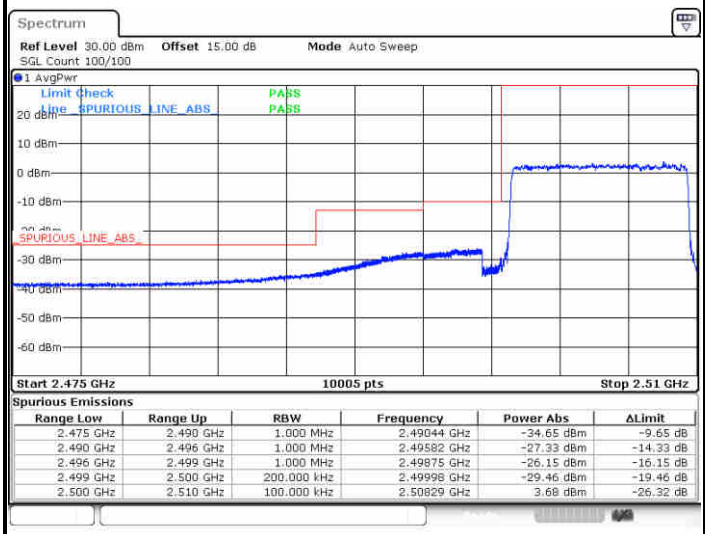


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56943 GHz	20.35 dBm	-9.65 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57000 GHz	-28.08 dBm	-18.08 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57104 GHz	-36.15 dBm	-26.15 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57560 GHz	-36.42 dBm	-23.42 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58030 GHz	-37.49 dBm	-12.49 dB

Date: 9.JUL.2020 01:19:19

Lowest Band Edge / Full RB

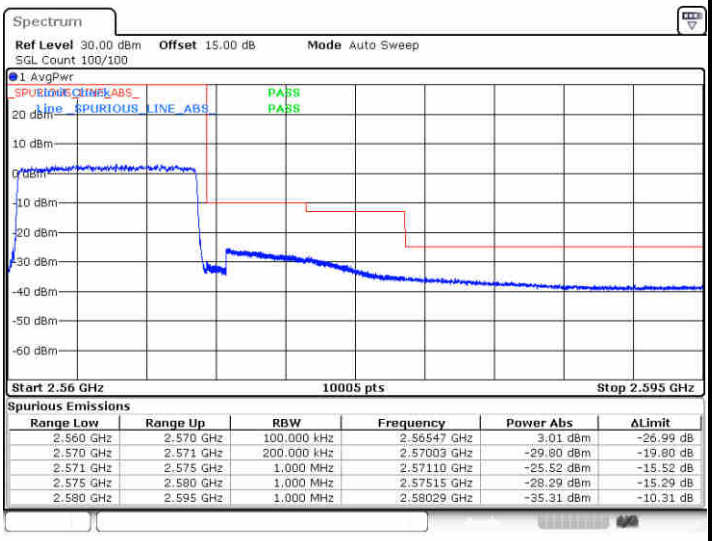


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.475 GHz	2.490 GHz	1.000 MHz	2.49044 GHz	-34.65 dBm	-9.65 dB
2.490 GHz	2.496 GHz	1.000 MHz	2.49582 GHz	-27.33 dBm	-14.33 dB
2.496 GHz	2.499 GHz	1.000 MHz	2.49875 GHz	-26.15 dBm	-16.15 dB
2.499 GHz	2.500 GHz	200.000 kHz	2.49998 GHz	-29.46 dBm	-19.46 dB
2.500 GHz	2.510 GHz	100.000 kHz	2.50829 GHz	3.68 dBm	-26.32 dB

Date: 9.JUL.2020 01:18:20

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.560 GHz	2.570 GHz	100.000 kHz	2.56547 GHz	3.01 dBm	-26.99 dB
2.570 GHz	2.571 GHz	200.000 kHz	2.57003 GHz	-29.80 dBm	-19.80 dB
2.571 GHz	2.575 GHz	1.000 MHz	2.57110 GHz	-25.52 dBm	-15.52 dB
2.575 GHz	2.580 GHz	1.000 MHz	2.57515 GHz	-28.29 dBm	-15.29 dB
2.580 GHz	2.595 GHz	1.000 MHz	2.58029 GHz	-35.31 dBm	-10.31 dB

Date: 9.JUL.2020 01:20:17