



# FCC RF Test Report

**APPLICANT** : Motorola Mobility LLC  
**EQUIPMENT** : Mobile Cellular Phone  
**BRAND NAME** : Motorola  
**MODEL NAME** : XT2043-4, XT2043-5, XT2043-6  
**FCC ID** : IHDT56YN1  
**STANDARD** : 47 CFR Part 2, 27(L), 27(M), 27(N)  
**CLASSIFICATION** : PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Oct. 09, 2019 and completely tested on Nov. 08, 2019. We, Sporton International (Kunshan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Jason Jia

Reviewed by: Jason Jia / Supervisor

James Huang

Approved by: James Huang / Manager



**Sporton International (Kunshan) Inc.**

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



TABLE OF CONTENTS

REVISION HISTORY...3
SUMMARY OF TEST RESULT...4
1 GENERAL DESCRIPTION...5
1.1 Applicant...5
1.2 Manufacturer...5
1.3 Product Feature of Equipment Under Test...5
1.4 Product Specification of Equipment Under Test...6
1.5 Specification of Accessory...7
1.6 Modification of EUT...7
1.7 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator...8
1.8 Testing Location...12
1.9 Test Software...12
1.10 Applicable Standards...12
2 TEST CONFIGURATION OF EQUIPMENT UNDER TEST...13
2.1 Test Mode...13
2.2 Connection Diagram of Test System...16
2.3 Support Unit used in test configuration and system...16
2.4 Measurement Results Explanation Example...16
2.5 Frequency List of Low/Middle/High Channels...17
3 CONDUCTED TEST ITEMS...22
3.1 Measuring Instruments...22
3.2 Test Setup...22
3.3 Test Result of Conducted Test...22
3.4 Conducted Output Power and ERP/EIRP...23
3.5 Peak-to-Average Ratio...24
3.6 Occupied Bandwidth...25
3.7 Conducted Band Edge...26
3.8 Conducted Spurious Emission...28
3.9 Frequency Stability...29
4 RADIATED TEST ITEMS...30
4.1 Measuring Instruments...30
4.2 Test Setup...30
4.3 Test Result of Radiated Test...30
4.4 Radiated Spurious Emission...31
5 LIST OF MEASURING EQUIPMENT...32
6 UNCERTAINTY OF EVALUATION...33
APPENDIX A. TEST RESULTS OF CONDUCTED TEST
APPENDIX B. TEST RESULTS OF RADIATED TEST
APPENDIX C. TEST SETUP PHOTOGRAPHS





## 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+10log <sub>10</sub> (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+10log <sub>10</sub> (P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log <sub>10</sub> (P[Watts])		
3.9	§2.1055 §24.235 §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 <sub>10</sub> (P[Watts])	PASS	Under limit 19.92 dB at 7492.000 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)	< 55+10log <sub>10</sub> (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

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.2 Manufacturer

Motorola Mobility LLC  
222 W, Merchandise Mart Plaza, Chicago IL 60654 USA

## 1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Cellular Phone
Brand Name	Motorola
Model Name	XT2043-4, XT2043-5, XT2043-6
FCC ID	IHDT56YN1
EUT supports Radios application	CDMA/EV-DO/GSM/GPRS/EGPRS/WCDMA/HSPA/ DC-HSDPA/HSPA+(16QAM uplink is not supported)/LTE WLAN 2.4GHz 802.11b/g/n HT20 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE GNSS/FM Receiver
IMEI Code	Conducted: 359084100015032 Radiation: 359084100021238 for band 4/7/66/71 359084100021162 for band 38/41
HW Version	DVT2
SW Version	QPR30.56
EUT Stage	Identical Prototype

Note: The different model names are for different market requirement.



### 1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
<b>Tx Frequency</b>	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
<b>Rx Frequency</b>	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
<b>Bandwidth</b>	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
<b>Maximum Output Power to Antenna</b>	LTE Band 4 : 23.30 dBm LTE Band 7 : 23.64 dBm LTE Band 38 : 23.76 dBm LTE Band 41 : 26.48 dBm LTE Band 41C_CA : 24.13 dBm LTE Band 66 : 23.31 dBm LTE Band 71 : 23.42 dBm
<b>Antenna Gain</b>	LTE Band 4 : -1.0 dBi LTE Band 7 : 1.0 dBi LTE Band 38 : 1.0 dBi LTE Band 41 : 1.0 dBi LTE Band 66 : -1.0 dBi LTE Band 71 : -4.0 dBi
<b>Type of Modulation</b>	QPSK / 16QAM / 64QAM



### 1.5 Specification of Accessory

Specification of Accessory				
AC Adapter 1	Brand Name	Motorola (Acbel)	Model Name	SC-41
	Power Rating	I/P: 100-240 Vac, 300mA ; O/P: 5Vdc, 2000mA		
AC Adapter 2	Brand Name	Motorola (Chenyang)	Model Name	SC-41
	Power Rating	I/P: 100-240 Vac, 300mA ; O/P: 5Vdc, 2000mA		
Battery	Brand Name	Motorola (Amperex)	Model Name	KX50
	Power Rating	3.8Vdc, 4000mAh	Type	Li-ion
USB Cable 1	Brand Name	Motorola (Luxshare)	Model Name	SC18C24368
	Signal Line Type	1.0 meter, shielded cable, without ferrite core		
USB Cable 2	Brand Name	Motorola (Saibao)	Model Name	SC18C24367
	Signal Line Type	1.0 meter, shielded cable, without ferrite core		

### 1.6 Modification of EUT

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



### 1.7 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	1M09G7D	-	0.1626	1M10W7D	-	0.1422
3	1711.5 ~ 1753.5	2M73G7D	-	0.1637	2M72W7D	-	0.1432
5	1712.5 ~ 1752.5	4M51G7D	-	0.1698	4M49W7D	-	0.1483
10	1715.0 ~ 1750.0	9M03G7D	0.0037	0.1637	9M07W7D	-	0.1442
15	1717.5 ~ 1747.5	13M4G7D	-	0.1683	13M5W7D	-	0.1476
20	1720.0 ~ 1745.0	18M4G7D	-	0.1702	18M3W7D	-	0.1466
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	1M09W7D	-		0.1122		
3	1711.5 ~ 1753.5	2M72W7D	-		0.1122		
5	1712.5 ~ 1752.5	4M51W7D	-		0.1167		
10	1715.0 ~ 1750.0	9M03W7D	-		0.1135		
15	1717.5 ~ 1747.5	13M5W7D	-		0.1161		
20	1720.0 ~ 1745.0	18M5W7D	-		0.1148		
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	4M53G7D	-	0.2884	4M50W7D	-	0.2455
10	2505.0 ~ 2565.0	9M01G7D	0.0048	0.2891	9M01W7D	-	0.2472
15	2507.5 ~ 2562.5	13M5G7D	-	0.2904	13M5W7D	-	0.2489
20	2510.0 ~ 2560.0	18M6G7D	-	0.2911	18M5W7D	-	0.2477
LTE Band 7		64QAM					
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)		Maximum EIRP(W)		
5	2502.5 ~ 2567.5	4M50W7D	-		0.1941		
10	2505.0 ~ 2565.0	9M07W7D	-		0.1932		
15	2507.5 ~ 2562.5	13M5W7D	-		0.1954		
20	2510.0 ~ 2560.0	18M4W7D	-		0.1963		





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	4M54G7D	-	0.5470	4M51W7D	-	0.4667
10	2575.0 ~ 2615.0	9M03G7D	0.0032	0.5534	9M07W7D	-	0.4721
15	2577.5 ~ 2612.5	13M5G7D	-	0.5546	13M4W7D	-	0.4721
20	2580.0 ~ 2610.0	18M4G7D	-	0.5598	18M5W7D	-	0.4732
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	-		0.3724		
10	2575.0 ~ 2615.0	9M03W7D	-		0.3767		
15	2577.5 ~ 2612.5	13M4W7D	-		0.3741		
20	2580.0 ~ 2610.0	18M4W7D	-		0.3855		
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	4M54G7D	-	0.5470	4M51W7D	-	0.4667
10	2501.0 ~ 2685.0	9M03G7D	0.0032	0.5534	9M07W7D	-	0.4721
15	2503.5 ~ 2682.5	13M5G7D	-	0.5546	13M4W7D	-	0.4721
20	2506.0 ~ 2680.0	18M4G7D	-	0.5598	18M5W7D	-	0.4732
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	-		0.3724		
10	2501.0 ~ 2685.0	9M03W7D	-		0.3767		
15	2503.5 ~ 2682.5	13M4W7D	-		0.3741		
20	2506.0 ~ 2680.0	18M4W7D	-		0.3855		



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	1M09G7D	-	0.1626	1M10W7D	-	0.1422
3	1711.5 ~ 1778.5	2M73G7D	-	0.1637	2M72W7D	-	0.1432
5	1712.5 ~ 1777.5	4M51G7D	-	0.1698	4M49W7D	-	0.1483
10	1715.0 ~ 1775.0	9M03G7D	0.0037	0.1637	9M07W7D	-	0.1442
15	1717.5 ~ 1772.5	13M4G7D	-	0.1683	13M5W7D	-	0.1476
20	1720.0 ~ 1770.0	18M4G7D	-	0.1702	18M3W7D	-	0.1466
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	1M09W7D	-		0.1122		
3	1711.5 ~ 1778.5	2M72W7D	-		0.1122		
5	1712.5 ~ 1777.5	4M51W7D	-		0.1167		
10	1715.0 ~ 1775.0	9M03W7D	-		0.1135		
15	1717.5 ~ 1772.5	13M5W7D	-		0.1161		
20	1720.0 ~ 1770.0	18M5W7D	-		0.1148		
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	4M50G7D	-	0.0514	4M51W7D	-	0.0437
10	668.0 ~ 693.0	9M05G7D	0.0050	0.0513	9M03W7D	-	0.0440
15	670.5 ~ 690.5	13M5G7D	-	0.0520	13M5W7D	-	0.0447
20	673.0 ~ 688.0	18M4G7D	-	0.0533	18M4W7D	-	0.0460
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	-		0.0345		
10	668.0 ~ 693.0	9M09W7D	-		0.0347		
15	670.5 ~ 690.5	13M4W7D	-		0.0354		
20	673.0 ~ 688.0	18M4W7D	-		0.0358		



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	23M2G7D	-	0.2951	23M4W7D	-	0.3034
10MHz+20MHz	28M0G7D	-	0.2877	27M9W7D	-	0.2999
10MHz+15MHz	23M5G7D	-	0.2985	23M6W7D	-	0.3069
15MHz+15MHz	29M0G7D	-	0.3126	28M7W7D	-	0.3258
15MHz+20MHz	32M9G7D	-	0.2924	33M0W7D	-	0.2951
15MHz+10MHz	23M6G7D	-	0.3133	23M8W7D	-	0.3199
20MHz+5MHz	23M4G7D	-	0.3020	23M3W7D	-	0.3083
20MHz+10MHz	28M0G7D	-	0.2999	28M3W7D	-	0.3048
20MHz+15MHz	33M0G7D	-	0.2972	33M2W7D	-	0.3055
20MHz+20MHz	38M0G7D	-	0.2951	37M7W7D	-	0.3097
LTE Band 41 CA	64QAM					
BW (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)		Maximum EIRP(W)		
5MHz+20MHz	23M3W7D	-		0.2089		
10MHz+20MHz	28M1W7D	-		0.2004		
10MHz+15MHz	23M5W7D	-		0.2265		
15MHz+15MHz	28M8W7D	-		0.2254		
15MHz+20MHz	32M9W7D	-		0.2000		
15MHz+10MHz	23M7W7D	-		0.2307		
20MHz+5MHz	23M4W7D	-		0.2158		
20MHz+10MHz	28M2W7D	-		0.2037		
20MHz+15MHz	32M9W7D	-		0.2018		
20MHz+20MHz	37M8W7D	-		0.2767		

**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.



### 1.8 Testing Location

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

<b>Test Firm</b>	Sporton International (Kunshan) Inc.		
<b>Test Site Location</b>	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
<b>Test Site No.</b>	<b>Sporton Site No.</b>	<b>FCC Designation No.</b>	<b>FCC Test Firm Registration No.</b>
	03CH06-KS TH01-KS	CN1257	314309

### 1.9 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH06-KS	AUDIX	E3	6.2009-8-24al

### 1.10 Applicable Standards

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

- 47 CFR Part 2, 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	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
	7	-	-	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
	41	-	-	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
	71	-	-	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

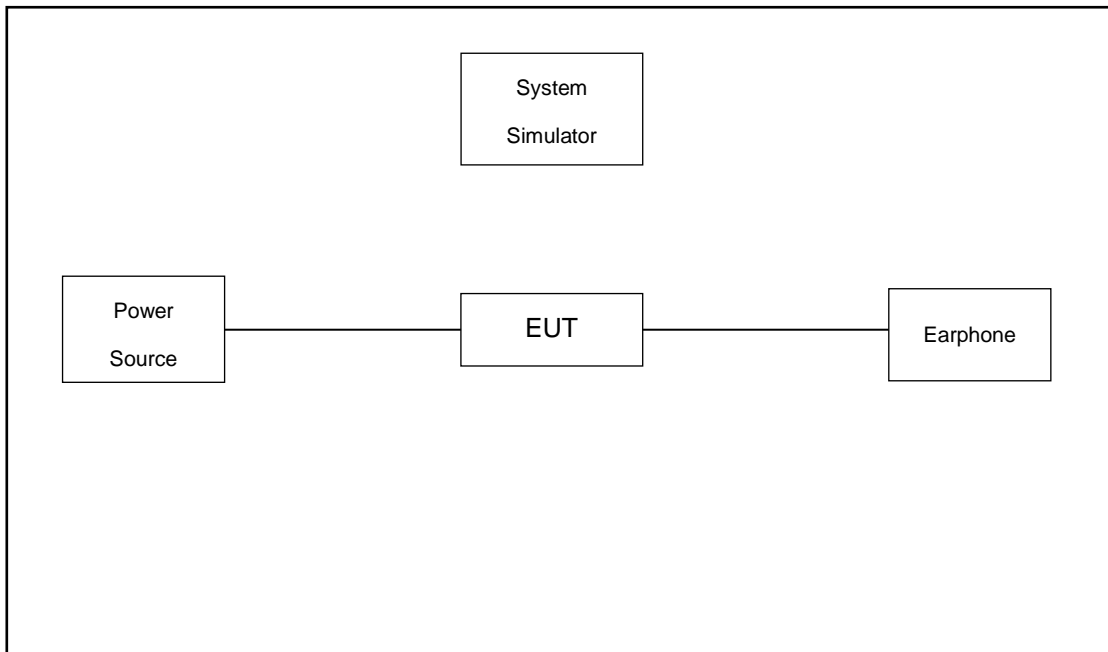


Test Items	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Conducted Spurious Emission	7	-	-	v	v	v	v	v	v	v	v			v	v	v
	41	-	-	v	v	v	v	v	v	v	v			v	v	v
	66	v	v	v	v	v	v	v	v	v	v			v	v	v
	71	-	-	v	v	v	v	v	v	v	v			v	v	v
Frequency Stability	7				v			v					v		v	
	41	-	-		v			v					v		v	
	66				v			v					v		v	
	71	-	-		v			v					v		v	
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	<ol style="list-style-type: none"> <li>The mark "v" means that this configuration is chosen for testing</li> <li>The mark "-" means that this bandwidth is not supported.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol>															



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	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		
26dB and 99% Bandwidth	41C_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		
Conducted Spurious Emission	41C_CA	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		
Radiated Spurious Emission	41C_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.																					

## 2.2 Connection Diagram of Test System



## 2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	Power Supply	GWINSTEK	PSS-2002	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	Earphone	Lenovo	N/A	N/A	Unshielded, 1.2m	N/A

## 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.

*Offset = RF cable loss*

Following shows an offset computation example with cable loss 9.8 dB.

Example :

$$\begin{aligned}
 \text{Offset(dB)} &= \text{RF cable loss(dB)}. \\
 &= 9.8 \text{ (dB)}
 \end{aligned}$$





### 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

### 3 Conducted Test Items

#### 3.1 Measuring Instruments

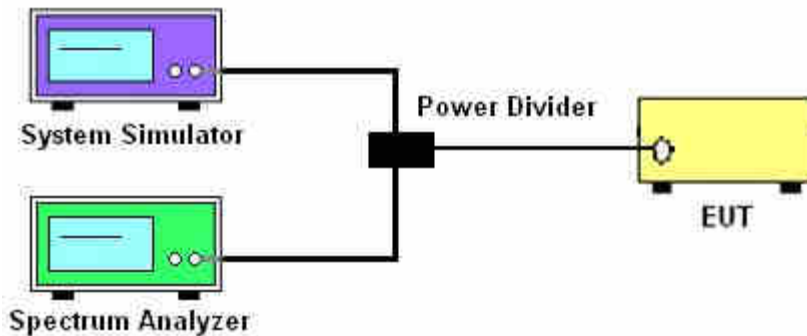
See list of measuring instruments of this test report.

#### 3.2 Test Setup

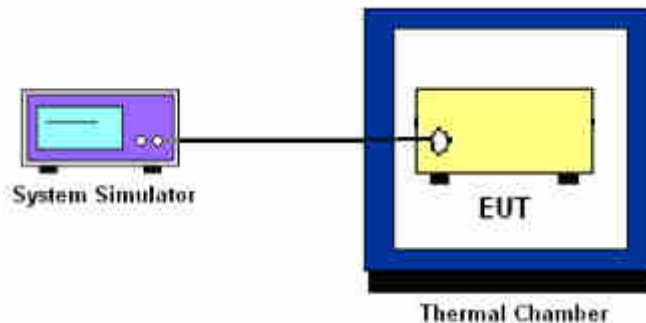
##### 3.2.1 Conducted Output Power



##### 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, 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  $43 + 10\log_{10}(P[\text{Watts}])$  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  $43 + 10\log_{10}(P[\text{Watts}])$  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  $\geq$  1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. Offset has included the duty factor for LTE Band 38/41. Duty factor =  $10 \log (1/x)$ , where x is the measured duty cycle.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. Checked that all the results comply with the emission limit line.

Example:

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

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

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

10. 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 10<sup>th</sup> 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. Offset has included the duty factor for LTE Band 38/41. Duty factor =  $10 \log (1/x)$ , where x is the measured duty cycle.
9. Taking the record of maximum spurious emission.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. The limit line is derived from  $43 + 10 \log (P)$  dB below the transmitter power P(Watts)  
=  $P(W) - [43 + 10 \log (P)]$  (dB)  
=  $[30 + 10 \log (P)]$  (dBm) -  $[43 + 10 \log (P)]$  (dB)  
= -13dBm.
12. For Band 7, 38, 41  
The limit line is derived from  $55 + 10 \log (P)$  dB below the transmitter power P(Watts)  
=  $P(W) - [55 + 10 \log (P)]$  (dB)  
=  $[30 + 10 \log (P)]$  (dBm) -  $[55 + 10 \log (P)]$  (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  $\pm 0.00025\%$  ( $\pm 2.5\text{ppm}$ ) of the center frequency.

### 3.9.2 Test Procedures for Temperature Variation

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

### 3.9.3 Test Procedures for Voltage Variation

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

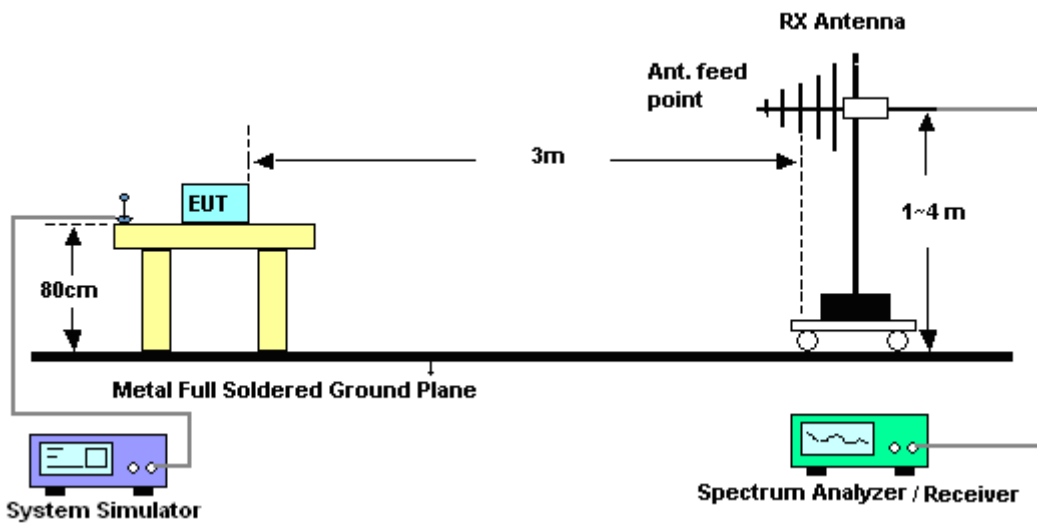
## 4 Radiated Test Items

### 4.1 Measuring Instruments

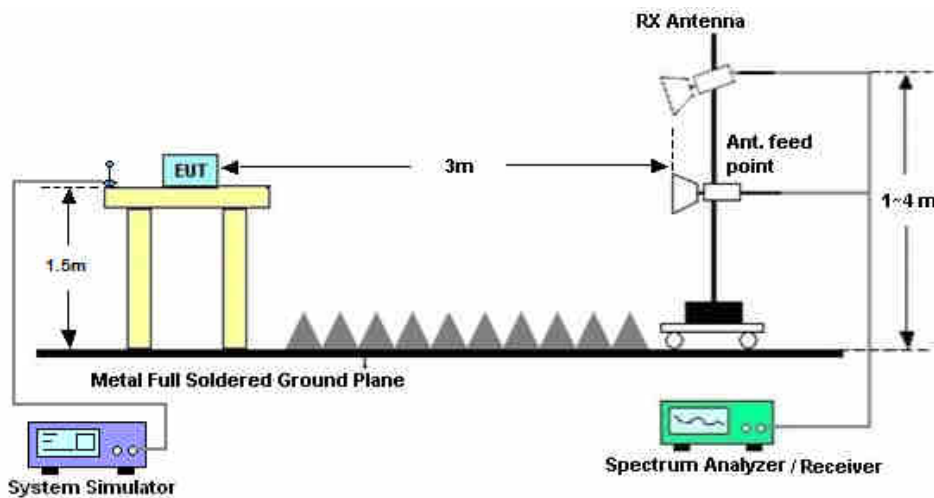
See list of measuring instruments of this test report.

### 4.2 Test Setup

#### 4.2.1 For radiated test 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  $43 + 10\log(P)$ dB below the transmitter power P(Watts)  
 $= P(W) - [43 + 10\log(P)] (dB)$   
 $= [30 + 10\log(P)] (dBm) - [43 + 10\log(P)] (dB)$   
 $= -13dBm.$

13. For Band 7, 38, 41:

The limit line is derived from  $55 + 10\log(P)$ 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	101040	10Hz~40GHz	Aug. 07, 2019	Oct. 28, 2019~ Oct. 30, 2019	Aug. 06, 2020	Conducted (TH01-KS)
Temperature & humidity chamber	Hongzhan	LP-150U	H2014011440	-40~+150°C 20%~95%RH	Jul. 04, 2019	Oct. 28, 2019~ Oct. 30, 2019	Jul. 03, 2020	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150208	10Hz-44GHz	Apr. 16, 2019	Nov. 08, 2019	Apr. 18, 2020	Radiation (03CH06-KS)
Bilog Antenna	TeseQ	CBL6111D	44483	30MHz-1GHz	Dec. 28, 2018	Nov. 08, 2019	Dec. 27, 2019	Radiation (03CH06-KS)
Double Ridge Horn Antenna	ETS-Lindgren	3117	75959	1GHz~18GHz	Jan. 27, 2019	Nov. 08, 2019	Jan. 26, 2020	Radiation (03CH06-KS)
SHF-EHF Horn	Com-power	AH-840	101070	18GHz~40GHz	Jan. 05, 2019	Nov. 08, 2019	Jan. 04, 2020	Radiation (03CH06-KS)
Amplifier	SONOMA	310N	187289	9KHz ~1GHZ	Aug. 06, 2019	Nov. 08, 2019	Aug. 05, 2020	Radiation (03CH06-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Apr. 17, 2019	Nov. 08, 2019	Apr. 16, 2020	Radiation (03CH06-KS)
Amplifier	MITEQ	TTA1840-35 -HG	2014749	18~40GHz	Jan. 14, 2019	Nov. 08, 2019	Jan. 13, 2020	Radiation (03CH06-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 08, 2019	NCR	Radiation (03CH06-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 08, 2019	NCR	Radiation (03CH06-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 08, 2019	NCR	Radiation (03CH06-KS)

NCR: No Calibration Required





## 6 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.5dB
---	-------

### Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.1dB
---	-------



### Appendix A. Test Results of Conducted Test

#### Conducted Output Power(Average power)

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.30	23.29	23.23
20	1	49		23.15	23.08	23.11
20	1	99		23.11	23.04	23.06
20	50	0		22.24	22.19	22.15
20	50	24		22.18	22.16	22.10
20	50	50		22.13	22.07	22.13
20	100	0		22.19	22.16	22.09
20	1	0	16-QAM	22.68	22.78	22.67
20	1	49		22.57	22.56	22.47
20	1	99		22.56	22.40	22.43
20	50	0		21.37	21.31	21.28
20	50	24		21.36	21.25	21.18
20	50	50		21.26	21.17	21.25
20	100	0		21.28	21.23	21.21
20	1	0	64-QAM	21.71	21.72	21.62
20	1	49		21.52	21.47	21.46
20	1	99		21.48	21.35	21.39
20	50	0		20.43	20.39	20.35
20	50	24		20.40	20.31	20.23
20	50	50		20.33	20.24	20.31
20	100	0		20.40	20.31	20.30



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.20	23.28	23.20
15	1	37		23.12	23.10	23.09
15	1	74		23.14	23.06	23.09
15	36	0		22.25	22.15	22.09
15	36	20		22.20	22.15	22.15
15	36	39		22.15	22.08	22.08
15	75	0		22.18	22.13	22.11
15	1	0	16-QAM	22.70	22.70	22.58
15	1	37		22.55	22.49	22.45
15	1	74		22.59	22.47	22.46
15	36	0		21.34	21.26	21.20
15	36	20		21.32	21.22	21.26
15	36	39		21.27	21.17	21.21
15	75	0		21.29	21.22	21.14
15	1	0	64-QAM	21.67	21.65	21.56
15	1	37		21.54	21.49	21.43
15	1	74		21.57	21.38	21.39
15	36	0		20.43	20.35	20.29
15	36	20		20.40	20.30	20.35
15	36	39		20.33	20.24	20.29
15	75	0		20.36	20.29	20.22



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.22	23.12	23.18
10	1	25		23.12	23.08	23.08
10	1	49		23.12	23.00	23.03
10	25	0		22.16	22.11	22.19
10	25	12		22.14	22.08	22.16
10	25	25		22.12	22.07	22.10
10	50	0		22.17	22.11	22.12
10	1	0	16-QAM	22.60	22.61	22.52
10	1	25		22.56	22.45	22.47
10	1	49		22.56	22.41	22.41
10	25	0		21.31	21.23	21.25
10	25	12		21.31	21.20	21.20
10	25	25		21.26	21.17	21.19
10	50	0		21.28	21.21	21.25
10	1	0	64-QAM	21.57	21.55	21.52
10	1	25		21.49	21.42	21.39
10	1	49		21.49	21.40	21.40
10	25	0		20.37	20.30	20.34
10	25	12		20.39	20.28	20.28
10	25	25		20.33	20.23	20.25
10	50	0		20.35	20.29	20.32



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.16	23.13	23.15
5	1	12		23.11	23.04	23.08
5	1	24		23.11	23.02	23.07
5	12	0		22.17	22.11	22.11
5	12	7		22.16	22.12	22.16
5	12	13		22.16	22.07	22.10
5	25	0		22.12	22.06	22.10
5	1	0	16-QAM	22.56	22.54	22.50
5	1	12		22.55	22.53	22.43
5	1	24		22.54	22.44	22.44
5	12	0		21.31	21.25	21.24
5	12	7		21.33	21.25	21.19
5	12	13		21.29	21.20	21.19
5	25	0		21.26	21.19	21.22
5	1	0	64-QAM	21.48	21.49	21.45
5	1	12		21.52	21.44	21.41
5	1	24		21.46	21.33	21.41
5	12	0		20.35	20.30	20.31
5	12	7		20.39	20.30	20.27
5	12	13		20.36	20.28	20.24
5	25	0		20.34	20.28	20.30



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.08	23.05	23.04
3	1	8		23.07	23.00	23.03
3	1	14		23.08	22.97	22.98
3	8	0		22.13	22.03	22.04
3	8	4		22.15	22.08	22.07
3	8	7		22.08	22.04	22.03
3	15	0		22.07	22.03	22.06
3	1	0	16-QAM	22.48	22.45	22.40
3	1	8		22.51	22.48	22.43
3	1	14		22.44	22.39	22.37
3	8	0		21.29	21.19	21.21
3	8	4		21.31	21.24	21.24
3	8	7		21.27	21.19	21.18
3	15	0		21.21	21.17	21.14
3	1	0	64-QAM	21.44	21.38	21.33
3	1	8		21.46	21.42	21.32
3	1	14		21.41	21.32	21.33
3	8	0		20.32	20.23	20.24
3	8	4		20.34	20.26	20.25
3	8	7		20.29	20.25	20.22
3	15	0		20.26	20.20	20.21



LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.00	22.95	22.95
1.4	1	3		23.06	23.01	23.05
1.4	1	5		22.99	22.91	22.94
1.4	3	0		23.06	22.98	23.02
1.4	3	1		23.09	23.01	23.05
1.4	3	3		23.06	23.00	23.01
1.4	6	0		22.04	21.96	21.99
1.4	1	0	16-QAM	22.37	22.42	22.34
1.4	1	3		22.45	22.41	22.44
1.4	1	5		22.38	22.35	22.32
1.4	3	0		22.20	22.12	22.12
1.4	3	1		22.23	22.15	22.14
1.4	3	3		22.17	22.09	22.11
1.4	6	0		21.22	21.18	21.17
1.4	1	0	64-QAM	21.35	21.35	21.29
1.4	1	3		21.43	21.37	21.38
1.4	1	5		21.34	21.35	21.26
1.4	3	0		21.31	21.28	21.21
1.4	3	1		21.32	21.26	21.27
1.4	3	3		21.30	21.25	21.23
1.4	6	0		20.23	20.16	20.15



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.64	23.53	23.52
20	1	49		23.44	23.46	23.49
20	1	99		23.53	23.57	23.55
20	50	0		22.60	22.55	22.56
20	50	24		22.56	22.55	22.55
20	50	50		22.60	22.53	22.55
20	100	0		22.65	22.55	22.57
20	1	0	16-QAM	22.82	22.77	22.80
20	1	49		22.72	22.74	22.80
20	1	99		22.78	22.83	22.94
20	50	0		21.65	21.59	21.61
20	50	24		21.61	21.60	21.69
20	50	50		21.65	21.61	21.65
20	100	0		21.69	21.59	21.62
20	1	0	64-QAM	21.82	21.79	21.78
20	1	49		21.70	21.70	21.79
20	1	99		21.77	21.82	21.93
20	50	0		20.72	20.66	20.68
20	50	24		20.68	20.66	20.72
20	50	50		20.69	20.69	20.73
20	100	0		20.77	20.67	20.71





LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.63	23.53	23.58
15	1	37		23.49	23.48	23.52
15	1	74		23.47	23.54	23.58
15	36	0		22.60	22.51	22.54
15	36	20		22.57	22.53	22.62
15	36	39		22.50	22.52	22.59
15	75	0		22.57	22.53	22.59
15	1	0	16-QAM	22.85	22.78	22.84
15	1	37		22.75	22.76	22.84
15	1	74		22.72	22.85	22.96
15	36	0		21.62	21.58	21.68
15	36	20		21.62	21.62	21.68
15	36	39		21.56	21.59	21.65
15	75	0		21.59	21.57	21.66
15	1	0	64-QAM	21.83	21.79	21.86
15	1	37		21.78	21.76	21.83
15	1	74		21.70	21.79	21.91
15	36	0		20.69	20.65	20.71
15	36	20		20.68	20.68	20.77
15	36	39		20.61	20.67	20.73
15	75	0		20.67	20.65	20.73



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.61	23.48	23.58
10	1	25		23.55	23.48	23.57
10	1	49		23.49	23.52	23.53
10	25	0		22.62	22.52	22.57
10	25	12		22.62	22.54	22.63
10	25	25		22.56	22.52	22.59
10	50	0		22.58	22.49	22.57
10	1	0	16-QAM	22.85	22.76	22.90
10	1	25		22.79	22.75	22.84
10	1	49		22.72	22.77	22.93
10	25	0		21.65	21.57	21.66
10	25	12		21.66	21.59	21.69
10	25	25		21.61	21.59	21.64
10	50	0		21.63	21.59	21.64
10	1	0	64-QAM	21.86	21.77	21.84
10	1	25		21.75	21.76	21.85
10	1	49		21.73	21.76	21.86
10	25	0		20.72	20.64	20.71
10	25	12		20.73	20.66	20.78
10	25	25		20.68	20.63	20.72
10	50	0		20.70	20.67	20.72



LTE Band 7 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.60	23.49	23.55
5	1	12		23.57	23.51	23.57
5	1	24		23.54	23.48	23.53
5	12	0		22.61	22.50	22.60
5	12	7		22.61	22.54	22.62
5	12	13		22.59	22.50	22.57
5	25	0		22.63	22.53	22.58
5	1	0	16-QAM	22.84	22.79	22.88
5	1	12		22.81	22.80	22.90
5	1	24		22.79	22.77	22.89
5	12	0		21.65	21.57	21.64
5	12	7		21.64	21.59	21.67
5	12	13		21.60	21.55	21.70
5	25	0		21.63	21.59	21.64
5	1	0	64-QAM	21.81	21.77	21.88
5	1	12		21.79	21.76	21.87
5	1	24		21.77	21.73	21.85
5	12	0		20.72	20.61	20.72
5	12	7		20.72	20.65	20.75
5	12	13		20.67	20.64	20.70
5	25	0		20.72	20.66	20.72



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.73	23.76	23.70
20	1	49		23.65	23.55	23.50
20	1	99		23.72	23.68	23.58
20	50	0		22.66	22.66	22.66
20	50	24		22.66	22.67	22.65
20	50	50		22.66	22.65	22.58
20	100	0		22.68	22.66	22.64
20	1	0	16-QAM	22.86	22.90	22.87
20	1	49		22.78	22.84	22.74
20	1	99		22.86	22.87	22.76
20	50	0		21.80	21.78	21.81
20	50	24		21.81	21.79	21.79
20	50	50		21.79	21.74	21.67
20	100	0		21.74	21.75	21.79
20	1	0	64-QAM	21.63	21.68	21.69
20	1	49		21.62	21.66	21.50
20	1	99		21.71	21.64	21.52
20	50	0		20.80	20.81	20.82
20	50	24		20.79	20.79	20.79
20	50	50		20.78	20.75	20.69
20	100	0		20.87	20.86	20.91



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.69	23.75	23.73
15	1	37		23.58	23.65	23.57
15	1	74		23.68	23.63	23.66
15	36	0		22.65	22.63	22.62
15	36	20		22.66	22.61	22.54
15	36	39		22.63	22.59	22.53
15	75	0		22.63	22.65	22.64
15	1	0	16-QAM	22.91	22.93	22.88
15	1	37		22.73	22.83	22.72
15	1	74		22.82	22.84	22.79
15	36	0		21.74	21.72	21.74
15	36	20		21.73	21.71	21.64
15	36	39		21.72	21.74	21.62
15	75	0		21.76	21.71	21.77
15	1	0	64-QAM	21.61	21.62	21.70
15	1	37		21.57	21.61	21.56
15	1	74		21.57	21.63	21.57
15	36	0		20.85	20.84	20.86
15	36	20		20.86	20.83	20.74
15	36	39		20.81	20.79	20.73
15	75	0		20.82	20.79	20.86



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.62	23.60	23.54
10	1	25		23.56	23.57	23.50
10	1	49		23.67	23.67	23.55
10	25	0		22.65	22.63	22.48
10	25	12		22.67	22.63	22.54
10	25	25		22.66	22.56	22.47
10	50	0		22.62	22.64	22.54
10	1	0	16-QAM	22.78	22.83	22.70
10	1	25		22.79	22.74	22.71
10	1	49		22.77	22.80	22.66
10	25	0		21.75	21.68	21.65
10	25	12		21.72	21.75	21.66
10	25	25		21.77	21.74	21.61
10	50	0		21.77	21.70	21.61
10	1	0	64-QAM	21.56	21.60	21.48
10	1	25		21.58	21.54	21.48
10	1	49		21.55	21.56	21.52
10	25	0		20.75	20.73	20.67
10	25	12		20.78	20.78	20.72
10	25	25		20.81	20.76	20.67
10	50	0		20.75	20.74	20.64



LTE Band 38 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.58	23.57	23.48
5	1	12		23.55	23.64	23.49
5	1	24		23.56	23.51	23.45
5	12	0		22.65	22.63	22.51
5	12	7		22.62	22.64	22.55
5	12	13		22.62	22.66	22.52
5	25	0		22.58	22.57	22.53
5	1	0	16-QAM	22.72	22.77	22.67
5	1	12		22.73	22.82	22.69
5	1	24		22.69	22.76	22.65
5	12	0		21.68	21.70	21.62
5	12	7		21.68	21.69	21.62
5	12	13		21.66	21.73	21.58
5	25	0		21.72	21.75	21.64
5	1	0	64-QAM	21.61	21.59	21.48
5	1	12		21.55	21.55	21.53
5	1	24		21.53	21.55	21.49
5	12	0		20.74	20.76	20.63
5	12	7		20.80	20.81	20.73
5	12	13		20.73	20.76	20.68
5	25	0		20.73	20.77	20.65



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	26.22	26.48	26.47
20	1	49		26.12	26.28	26.32
20	1	99		26.23	26.38	26.34
20	50	0		25.33	25.53	25.52
20	50	24		25.42	25.42	25.44
20	50	50		25.39	25.43	25.44
20	100	0		25.35	25.40	25.48
20	1	0	16-QAM	25.63	25.67	25.75
20	1	49		25.55	25.66	25.66
20	1	99		25.54	25.62	25.66
20	50	0		24.42	24.54	24.57
20	50	24		24.52	24.61	24.54
20	50	50		24.45	24.51	24.51
20	100	0		24.48	24.55	24.55
20	1	0	64-QAM	24.67	24.74	24.86
20	1	49		24.48	24.62	24.67
20	1	99		24.52	24.61	24.62
20	50	0		23.53	23.60	23.65
20	50	24		23.53	23.58	23.58
20	50	50		23.52	23.60	23.55
20	100	0		23.61	23.68	23.74





LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	26.39	26.37	26.40
15	1	37		26.28	26.33	26.44
15	1	74		26.31	26.36	26.40
15	36	0		25.32	25.49	25.49
15	36	20		25.34	25.47	25.53
15	36	39		25.34	25.48	25.41
15	75	0		25.43	25.41	25.42
15	1	0	16-QAM	25.63	25.70	25.74
15	1	37		25.53	25.63	25.67
15	1	74		25.67	25.67	25.69
15	36	0		24.34	24.53	24.54
15	36	20		24.33	24.52	24.51
15	36	39		24.46	24.52	24.51
15	75	0		24.49	24.56	24.53
15	1	0	64-QAM	24.63	24.70	24.73
15	1	37		24.57	24.60	24.71
15	1	74		24.68	24.66	24.67
15	36	0		23.53	23.67	23.68
15	36	20		23.48	23.68	23.65
15	36	39		23.54	23.66	23.62
15	75	0		23.62	23.66	23.66



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	26.24	26.32	26.43
10	1	25		26.23	26.31	26.40
10	1	49		26.13	26.32	26.35
10	25	0		25.31	25.44	25.52
10	25	12		25.33	25.49	25.46
10	25	25		25.33	25.41	25.44
10	50	0		25.37	25.42	25.49
10	1	0	16-QAM	25.56	25.67	25.74
10	1	25		25.57	25.66	25.69
10	1	49		25.52	25.70	25.66
10	25	0		24.49	24.60	24.65
10	25	12		24.49	24.60	24.62
10	25	25		24.42	24.55	24.58
10	50	0		24.42	24.58	24.56
10	1	0	64-QAM	24.58	24.72	24.76
10	1	25		24.58	24.66	24.71
10	1	49		24.53	24.63	24.71
10	25	0		23.52	23.64	23.68
10	25	12		23.52	23.64	23.63
10	25	25		23.46	23.62	23.64
10	50	0		23.44	23.61	23.64



LTE Band 41 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	26.23	26.29	26.38
5	1	12		26.19	26.33	26.36
5	1	24		26.14	26.30	26.32
5	12	0		25.34	25.42	25.45
5	12	7		25.36	25.45	25.46
5	12	13		25.29	25.40	25.44
5	25	0		25.32	25.43	25.42
5	1	0	16-QAM	25.56	25.63	25.64
5	1	12		25.56	25.61	25.69
5	1	24		25.55	25.63	25.66
5	12	0		24.44	24.57	24.58
5	12	7		24.46	24.52	24.55
5	12	13		24.41	24.57	24.52
5	25	0		24.46	24.61	24.58
5	1	0	64-QAM	24.55	24.61	24.67
5	1	12		24.56	24.63	24.71
5	1	24		24.55	24.65	24.69
5	12	0		23.50	23.65	23.62
5	12	7		23.54	23.60	23.62
5	12	13		23.48	23.63	23.59
5	25	0		23.47	23.63	23.63



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	22.97	23.31	23.24
20	1	49		22.84	23.01	23.01
20	1	99		22.85	22.97	22.94
20	50	0		21.98	22.17	22.14
20	50	24		21.94	22.12	22.10
20	50	50		21.91	22.05	22.04
20	100	0		21.94	22.15	22.10
20	1	0	16-QAM	22.43	22.64	22.66
20	1	49		22.32	22.32	22.51
20	1	99		22.16	22.30	22.34
20	50	0		20.99	21.29	21.27
20	50	24		21.02	21.20	21.22
20	50	50		20.94	21.14	21.16
20	100	0		21.00	21.23	21.21
20	1	0	64-QAM	21.39	21.57	21.60
20	1	49		21.20	21.32	21.40
20	1	99		21.11	21.27	21.33
20	50	0		20.12	20.34	20.37
20	50	24		20.11	20.30	20.28
20	50	50		20.06	20.20	20.22
20	100	0		20.08	20.28	20.29



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.22	23.26	23.24
15	1	37		23.07	23.04	23.01
15	1	74		23.06	23.03	23.00
15	36	0		22.13	22.15	22.17
15	36	20		22.08	22.11	22.09
15	36	39		22.08	22.04	22.08
15	75	0		22.10	22.12	22.09
15	1	0	16-QAM	22.56	22.61	22.69
15	1	37		22.47	22.36	22.44
15	1	74		22.48	22.40	22.42
15	36	0		21.28	21.27	21.28
15	36	20		21.21	21.25	21.22
15	36	39		21.16	21.19	21.13
15	75	0		21.22	21.20	21.21
15	1	0	64-QAM	21.56	21.57	21.65
15	1	37		21.41	21.36	21.37
15	1	74		21.43	21.36	21.37
15	36	0		20.35	20.35	20.37
15	36	20		20.27	20.28	20.31
15	36	39		20.26	20.23	20.25
15	75	0		20.31	20.32	20.31



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.13	23.14	23.12
10	1	25		22.99	22.96	22.91
10	1	49		23.03	22.92	23.04
10	25	0		22.03	22.04	22.07
10	25	12		21.95	22.01	21.96
10	25	25		21.98	21.93	21.98
10	50	0		22.00	22.04	21.98
10	1	0	16-QAM	22.46	22.49	22.59
10	1	25		22.37	22.24	22.35
10	1	49		22.38	22.31	22.32
10	25	0		21.16	21.15	21.17
10	25	12		21.11	21.16	21.12
10	25	25		21.06	21.07	21.03
10	50	0		21.12	21.16	21.11
10	1	0	64-QAM	21.45	21.46	21.55
10	1	25		21.31	21.26	21.25
10	1	49		21.33	21.24	21.27
10	25	0		20.25	20.24	20.27
10	25	12		20.17	20.23	20.21
10	25	25		20.16	20.13	20.15
10	50	0		20.21	20.22	20.21



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.30	23.29	23.10
5	1	12		23.15	23.14	23.09
5	1	24		23.11	23.06	23.12
5	12	0		22.17	22.25	22.24
5	12	7		22.18	22.29	22.19
5	12	13		22.24	22.14	22.16
5	25	0		22.20	22.16	22.19
5	1	0	16-QAM	22.43	22.71	22.65
5	1	12		22.57	22.48	22.54
5	1	24		22.52	22.50	22.52
5	12	0		21.38	21.42	21.40
5	12	7		21.31	21.34	21.32
5	12	13		21.26	21.29	21.26
5	25	0		21.32	21.42	21.31
5	1	0	64-QAM	21.66	21.67	21.54
5	1	12		21.51	21.54	21.47
5	1	24		21.53	21.46	21.47
5	12	0		20.54	20.45	20.47
5	12	7		20.37	20.40	20.41
5	12	13		20.36	20.39	20.35
5	25	0		20.41	20.37	20.45



LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
3	1	0	QPSK	23.01	23.13	23.14
3	1	8		22.76	22.91	22.91
3	1	14		22.67	22.87	22.84
3	8	0		21.76	22.07	22.04
3	8	4		21.73	22.02	22.00
3	8	7		21.70	21.95	21.94
3	15	0		21.68	22.05	22.00
3	1	0	16-QAM	22.34	22.54	22.56
3	1	8		22.26	22.22	22.41
3	1	14		22.11	22.20	22.24
3	8	0		21.01	21.19	21.17
3	8	4		20.98	21.10	21.12
3	8	7		20.89	21.04	21.06
3	15	0		20.99	21.13	21.11
3	1	0	64-QAM	21.32	21.47	21.50
3	1	8		21.11	21.22	21.30
3	1	14		21.13	21.17	21.23
3	8	0		20.07	20.24	20.27
3	8	4		20.06	20.20	20.18
3	8	7		19.97	20.10	20.12
3	15	0		20.11	20.18	20.19





LTE Band 66 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.98	23.10	23.11
1.4	1	3		22.73	22.86	22.88
1.4	1	5		22.76	22.81	22.81
1.4	3	0		22.73	22.46	22.30
1.4	3	1		22.73	22.38	22.38
1.4	3	3		22.78	22.43	22.39
1.4	6	0		21.65	22.03	21.97
1.4	1	0	16-QAM	22.31	22.51	22.53
1.4	1	3		22.23	22.21	22.38
1.4	1	5		22.08	22.19	22.21
1.4	3	0		21.67	21.33	21.34
1.4	3	1		21.70	21.32	21.39
1.4	3	3		21.43	21.40	21.50
1.4	6	0		20.96	21.06	21.08
1.4	1	0	64-QAM	21.32	21.44	21.50
1.4	1	3		21.11	21.17	21.30
1.4	1	5		21.13	21.18	21.23
1.4	3	0		20.96	21.10	21.16
1.4	3	1		20.95	21.02	21.07
1.4	3	3		20.86	21.01	21.01
1.4	6	0		20.36	20.42	20.44



LTE Band 71 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
20	1	0	QPSK	23.42	23.37	23.32
20	1	49		23.22	23.12	23.14
20	1	99		23.07	23.09	23.03
20	50	0		22.37	22.33	22.27
20	50	24		22.28	22.21	22.22
20	50	50		22.24	22.23	22.15
20	100	0		22.21	22.25	22.20
20	1	0	16-QAM	22.78	22.60	22.73
20	1	49		22.54	22.39	22.48
20	1	99		22.37	22.45	22.38
20	50	0		21.46	21.40	21.28
20	50	24		21.33	21.26	21.29
20	50	50		21.32	21.25	21.15
20	100	0		21.38	21.22	21.26
20	1	0	64-QAM	21.69	21.65	21.67
20	1	49		21.43	21.34	21.32
20	1	99		21.47	21.43	21.39
20	50	0		20.46	20.45	20.39
20	50	24		20.29	20.31	20.33
20	50	50		20.33	20.30	20.26
20	100	0		20.40	20.36	20.31



LTE Band 71 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	23.30	23.31	23.28
15	1	37		23.24	23.20	23.23
15	1	74		23.14	23.10	23.12
15	36	0		22.31	22.29	22.27
15	36	20		22.21	22.22	22.18
15	36	39		22.18	22.12	22.13
15	75	0		22.20	22.19	22.21
15	1	0	16-QAM	22.65	22.61	22.65
15	1	37		22.41	22.43	22.45
15	1	74		22.36	22.31	22.32
15	36	0		21.32	21.41	21.43
15	36	20		21.34	21.29	21.31
15	36	39		21.12	21.11	21.12
15	75	0		21.29	21.27	21.21
15	1	0	64-QAM	21.64	21.63	21.47
15	1	37		21.45	21.46	21.32
15	1	74		21.29	21.34	21.44
15	36	0		20.43	20.47	20.41
15	36	20		20.34	20.32	20.29
15	36	39		20.18	20.21	20.24
15	75	0		20.36	20.35	20.26



LTE Band 71 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK	23.21	23.25	23.24
10	1	25		23.22	23.23	23.22
10	1	49		23.15	23.13	23.12
10	25	0		22.36	22.37	22.33
10	25	12		22.38	22.34	22.31
10	25	25		22.26	22.23	22.24
10	50	0		22.29	22.28	22.29
10	1	0	16-QAM	22.58	22.51	22.45
10	1	25		22.55	22.56	22.48
10	1	49		22.28	22.26	22.25
10	25	0		21.46	21.44	21.43
10	25	12		21.41	21.43	21.42
10	25	25		21.14	21.28	21.28
10	50	0		21.29	21.33	21.28
10	1	0	64-QAM	21.43	21.53	21.52
10	1	25		21.49	21.55	21.49
10	1	49		21.44	21.30	21.18
10	25	0		20.39	20.51	20.50
10	25	12		20.50	20.47	20.40
10	25	25		20.36	20.37	20.27
10	50	0		20.43	20.42	20.30



LTE Band 71 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.21	23.22	23.25
5	1	12		23.18	23.20	23.26
5	1	24		23.19	23.22	23.21
5	12	0		22.31	22.30	22.38
5	12	7		22.29	22.29	22.36
5	12	13		22.31	22.28	22.37
5	25	0		22.52	22.37	22.41
5	1	0	16-QAM	22.47	22.55	22.48
5	1	12		22.53	22.48	22.45
5	1	24		22.48	22.55	22.49
5	12	0		21.35	21.34	21.33
5	12	7		21.32	21.33	21.18
5	12	13		21.38	21.39	21.45
5	25	0		21.34	21.35	21.32
5	1	0	64-QAM	21.29	21.48	21.47
5	1	12		21.43	21.52	21.43
5	1	24		21.49	21.53	21.29
5	12	0		20.44	20.40	20.33
5	12	7		20.50	20.43	20.35
5	12	13		20.45	20.44	20.40
5	25	0		20.55	20.51	20.43



CA_41C								
Combination 20MHz+20MHz (100RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39948	QPSK	0	0	1	99	1	23.48
			1	0	0	0	1	23.33
			100	0	0	0	100	22.43
			100	0	100	0	200	21.49
			1	0	1	99	2	16.51
			1	0	1	0	2	20.72
			1	99	1	0	2	23.7
			100	0	1	99	101	21.68
		16QAM	0	0	1	99	1	23.8
			1	0	0	0	1	23.66
			100	0	0	0	100	21.61
			100	0	100	0	200	20.63
			1	0	1	99	2	16.68
			1	0	1	0	2	20.79
			1	99	1	0	2	23.71
			100	0	1	99	101	21.88
		64QAM	0	0	1	99	1	23.09
			1	0	0	0	1	23.32
			100	0	0	0	100	21.62
			100	0	100	0	200	20.5
			1	0	1	99	2	16.29
			1	0	1	0	2	20.35
			1	99	1	0	2	22.16
			100	0	1	99	101	21.65



40521	40719	QPSK	0	0	1	99	1	23.56
			1	0	0	0	1	23.41
			100	0	0	0	100	22.42
			100	0	100	0	200	21.45
			1	0	1	99	2	16.61
			1	0	1	0	2	20.69
			1	99	1	0	2	23.43
			100	0	1	99	101	21.71
		16QAM	0	0	1	99	1	23.91
			1	0	0	0	1	23.76
			100	0	0	0	100	21.52
			100	0	100	0	200	20.57
			1	0	1	99	2	16.74
			1	0	1	0	2	20.96
			1	99	1	0	2	23.79
			100	0	1	99	101	21.84
		64QAM	0	0	1	99	1	23.14
			1	0	0	0	1	23.42
			100	0	0	0	100	21.57
			100	0	100	0	200	20.5
			1	0	1	99	2	16.41
			1	0	1	0	2	20.45
			1	99	1	0	2	22.03
			100	0	1	99	101	21.68



41292	41490	QPSK	0	0	1	99	1	23.05
			1	0	0	0	1	23.24
			100	0	0	0	100	22.29
			100	0	100	0	200	21.13
			1	0	1	99	2	16.2
			1	0	1	0	2	20.53
			1	99	1	0	2	23.44
			100	0	1	99	101	21.33
		16QAM	0	0	1	99	1	23.26
			1	0	0	0	1	23.5
			100	0	0	0	100	21.45
			100	0	100	0	200	20.3
			1	0	1	99	2	16.31
			1	0	1	0	2	20.73
			1	99	1	0	2	23.52
			100	0	1	99	101	21.45
		64QAM	0	0	1	99	1	22.49
			1	0	0	0	1	23.12
			100	0	0	0	100	21.43
			100	0	100	0	200	20.2
			1	0	1	99	2	15.99
			1	0	1	0	2	20.26
			1	99	1	0	2	21.79
			100	0	1	99	101	21.26





CA_41C								
Combination 20MHz+15MHz (100RB+75RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39750	39921	QPSK	100	0	75	0	175	21.56
		QPSK	1	0	1	74	2	16.59
		QPSK	1	99	1	0	2	23.73
		16QAM	100	0	75	0	175	20.66
		16QAM	1	0	1	74	2	16.74
		16QAM	1	99	1	0	2	23.85
		64QAM	100	0	75	0	175	20.71
		64QAM	1	0	1	74	2	16.38
		64QAM	1	99	1	0	2	22.05
40546	40717	QPSK	100	0	75	0	175	21.48
		QPSK	1	0	1	74	2	16.7
		QPSK	1	99	1	0	2	23.54
		16QAM	100	0	75	0	175	20.61
		16QAM	1	0	1	74	2	16.81
		16QAM	1	99	1	0	2	23.76
		64QAM	100	0	75	0	175	20.63
		64QAM	1	0	1	74	2	16.45
		64QAM	1	99	1	0	2	21.87
41341	41512	QPSK	100	0	75	0	175	21.22
		QPSK	1	0	1	74	2	16.31
		QPSK	1	99	1	0	2	23.42
		16QAM	100	0	75	0	175	20.34
		16QAM	1	0	1	74	2	16.42
		16QAM	1	99	1	0	2	23.58
		64QAM	100	0	75	0	175	20.34
		64QAM	1	0	1	74	2	16.11
		64QAM	1	99	1	0	2	21.89



Combination 15MHz+20MHz (75RB+100RB)								
PCC Channel	SCC Channel	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
			RB Size	RB offset	RB Size	RB offset		
39728	39899	QPSK	75	0	100	0	175	21.54
		QPSK	1	0	1	99	2	16.56
		QPSK	1	74	1	0	2	23.66
		16QAM	75	0	100	0	175	20.67
		16QAM	1	0	1	99	2	16.73
		16QAM	1	74	1	0	2	21.19
		64QAM	75	0	100	0	175	20.66
		64QAM	1	0	1	99	2	16.38
		64QAM	1	74	1	0	2	20.69
40523	40694	QPSK	75	0	100	0	175	21.45
		QPSK	1	0	1	99	2	16.66
		QPSK	1	74	1	0	2	23.37
		16QAM	75	0	100	0	175	20.57
		16QAM	1	0	1	99	2	16.75
		16QAM	1	74	1	0	2	23.7
		64QAM	75	0	100	0	175	20.58
		64QAM	1	0	1	99	2	16.43
		64QAM	1	74	1	0	2	22.01
41319	41490	QPSK	75	0	100	0	175	21.22
		QPSK	1	0	1	99	2	16.25
		QPSK	1	74	1	0	2	23.53
		16QAM	75	0	100	0	175	20.32
		16QAM	1	0	1	99	2	16.34
		16QAM	1	74	1	0	2	23.61
		64QAM	75	0	100	0	175	20.32
		64QAM	1	0	1	99	2	16.05
		64QAM	1	74	1	0	2	21.94



Combination 20MHz+10MHz (100RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39750	39894	QPSK	100	0	50	0	150	21.56
		QPSK	1	0	1	49	2	16.62
		QPSK	1	99	1	0	2	23.77
		16QAM	100	0	50	0	150	23.84
		16QAM	1	0	1	49	2	16.76
		16QAM	1	99	1	0	2	23.83
		64QAM	100	0	50	0	150	20.7
		64QAM	1	0	1	49	2	16.43
		64QAM	1	99	1	0	2	22.09
40571	40715	QPSK	100	0	50	0	150	21.45
		QPSK	1	0	1	49	2	16.65
		QPSK	1	99	1	0	2	23.57
		16QAM	100	0	50	0	150	20.57
		16QAM	1	0	1	49	2	16.77
		16QAM	1	99	1	0	2	23.75
		64QAM	100	0	50	0	150	20.56
		64QAM	1	0	1	49	2	16.4
		64QAM	1	99	1	0	2	21.94
41391	41535	QPSK	100	0	50	0	150	21.25
		QPSK	1	0	1	49	2	16.33
		QPSK	1	99	1	0	2	23.33
		16QAM	100	0	50	0	150	20.36
		16QAM	1	0	1	49	2	16.45
		16QAM	1	99	1	0	2	23.54
		64QAM	100	0	50	0	150	20.35
		64QAM	1	0	1	49	2	16.08
		64QAM	1	99	1	0	2	21.93



Combination 10MHz+20MHz (50RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39705	39849	QPSK	50	0	100	0	150	21.41
		QPSK	1	0	1	99	2	16.64
		QPSK	1	49	1	0	2	23.49
		16QAM	50	0	100	0	150	20.55
		16QAM	1	0	1	99	2	16.78
		16QAM	1	49	1	0	2	23.52
		64QAM	50	0	100	0	150	20.58
		64QAM	1	0	1	99	2	16.38
		64QAM	1	49	1	0	2	21.95
40526	40670	QPSK	50	0	100	0	150	21.46
		QPSK	1	0	1	99	2	16.66
		QPSK	1	49	1	0	2	23.59
		16QAM	50	0	100	0	150	20.6
		16QAM	1	0	1	99	2	16.78
		16QAM	1	49	1	0	2	23.77
		64QAM	50	0	100	0	150	20.61
		64QAM	1	0	1	99	2	16.42
		64QAM	1	49	1	0	2	22.02
41346	41490	QPSK	50	0	100	0	150	21.23
		QPSK	1	0	1	99	2	16.26
		QPSK	1	49	1	0	2	23.42
		16QAM	50	0	100	0	150	20.37
		16QAM	1	0	1	99	2	16.38
		16QAM	1	49	1	0	2	23.55
		64QAM	50	0	100	0	150	20.35
		64QAM	1	0	1	99	2	16.01
		64QAM	1	49	1	0	2	21.95



Combination 20MHz+5MHz (100RB+25RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39750	39867	QPSK	100	0	25	0	125	21.74
		QPSK	1	0	1	24	2	16.83
		QPSK	1	99	1	0	2	23.8
		16QAM	100	0	25	0	125	20.84
		16QAM	1	0	1	24	2	16.97
		16QAM	1	99	1	0	2	23.89
		64QAM	100	0	25	0	125	20.89
		64QAM	1	0	1	24	2	16.58
		64QAM	1	99	1	0	2	22.34
40595	40712	QPSK	100	0	25	0	125	21.64
		QPSK	1	0	1	24	2	16.85
		QPSK	1	99	1	0	2	16.94
		16QAM	100	0	25	0	125	20.76
		16QAM	1	0	1	24	2	16.96
		16QAM	1	99	1	0	2	23.84
		64QAM	100	0	25	0	125	20.82
		64QAM	1	0	1	24	2	16.56
		64QAM	1	99	1	0	2	22.09
41440	41557	QPSK	100	0	25	0	125	21.35
		QPSK	1	0	1	24	2	16.43
		QPSK	1	99	1	0	2	23.47
		16QAM	100	0	25	0	125	20.45
		16QAM	1	0	1	24	2	16.52
		16QAM	1	99	1	0	2	23.54
		64QAM	100	0	25	0	125	20.45
		64QAM	1	0	1	24	2	16.11
		64QAM	1	99	1	0	2	21.91



Combination 5MHz+20MHz (25RB+100RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39683	39800	QPSK	25	0	100	0	125	21.53
		QPSK	1	0	1	99	2	16.79
		QPSK	1	24	1	0	2	23.49
		16QAM	25	0	100	0	125	20.66
		16QAM	1	0	1	99	2	16.89
		16QAM	1	24	1	0	2	23.7
		64QAM	25	0	100	0	125	20.72
		64QAM	1	0	1	99	2	16.52
		64QAM	1	24	1	0	2	22.1
40528	40645	QPSK	25	0	100	0	125	21.62
		QPSK	1	0	1	99	2	16.85
		QPSK	1	24	1	0	2	23.7
		16QAM	25	0	100	0	125	20.76
		16QAM	1	0	1	99	2	16.93
		16QAM	1	24	1	0	2	23.82
		64QAM	25	0	100	0	125	20.79
		64QAM	1	0	1	99	2	16.58
		64QAM	1	24	1	0	2	22.2
41373	41490	QPSK	25	0	100	0	125	21.49
		QPSK	1	0	1	99	2	16.43
		QPSK	1	24	1	0	2	23.6
		16QAM	25	0	100	0	125	20.58
		16QAM	1	0	1	99	2	16.52
		16QAM	1	24	1	0	2	23.79
		64QAM	25	0	100	0	125	20.61
		64QAM	1	0	1	99	2	16.15
		64QAM	1	24	1	0	2	22.15



Combination 15MHz+15MHz (75RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39725	39875	QPSK	75	0	75	0	150	21.78
		QPSK	1	0	1	74	2	16.82
		QPSK	1	74	1	0	2	23.95
		16QAM	75	0	75	0	150	20.96
		16QAM	1	0	1	74	2	16.95
		16QAM	1	74	1	0	2	24.13
		64QAM	75	0	75	0	150	21
		64QAM	1	0	1	74	2	16.53
		64QAM	1	74	1	0	2	22.53
40545	40695	QPSK	75	0	75	0	150	21.67
		QPSK	1	0	1	74	2	16.82
		QPSK	1	74	1	0	2	23.67
		16QAM	75	0	75	0	150	20.79
		16QAM	1	0	1	74	2	16.93
		16QAM	1	74	1	0	2	23.95
		64QAM	75	0	75	0	150	20.83
		64QAM	1	0	1	74	2	16.54
		64QAM	1	74	1	0	2	22.31
41365	41515	QPSK	75	0	75	0	150	21.41
		QPSK	1	0	1	74	2	16.42
		QPSK	1	74	1	0	2	23.66
		16QAM	75	0	75	0	150	20.55
		16QAM	1	0	1	74	2	16.51
		16QAM	1	74	1	0	2	22.31
		64QAM	75	0	75	0	150	20.57
		64QAM	1	0	1	74	2	16.15
		64QAM	1	74	1	0	2	22.13



Combination 15MHz+10MHz (75RB+50RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39725	39845	QPSK	75	0	50	0	125	23.49
		QPSK	1	0	1	49	2	16.82
		QPSK	1	74	1	0	2	23.96
		16QAM	75	0	50	0	125	22.63
		16QAM	1	0	1	49	2	16.92
		16QAM	1	74	1	0	2	24.05
		64QAM	75	0	50	0	125	22.63
		64QAM	1	0	1	49	2	16.54
		64QAM	1	74	1	0	2	22.42
40571	40691	QPSK	75	0	50	0	125	23.41
		QPSK	1	0	1	49	2	16.79
		QPSK	1	74	1	0	2	23.75
		16QAM	75	0	50	0	125	22.5
		16QAM	1	0	1	49	2	16.9
		16QAM	1	74	1	0	2	23.68
		64QAM	75	0	50	0	125	22.52
		64QAM	1	0	1	49	2	16.54
		64QAM	1	74	1	0	2	22.24
41417	41537	QPSK	75	0	50	0	125	23.12
		QPSK	1	0	1	49	2	16.4
		QPSK	1	74	1	0	2	23.06
		16QAM	75	0	50	0	125	22.29
		16QAM	1	0	1	49	2	16.49
		16QAM	1	74	1	0	2	23.79
		64QAM	75	0	50	0	125	22.31
		64QAM	1	0	1	49	2	16.08
		64QAM	1	74	1	0	2	22.19





Combination 10MHz+15MHz (50RB+75RB)								
PCC	SCC	Modulation	PCC		SCC		Total RB Size	Measured Power (dBm)
Channel	Channel		RB Size	RB offset	RB Size	RB offset		
39703	39823	QPSK	50	0	75	0	125	23.4
		QPSK	1	49	1	0	2	16.86
		QPSK	1	0	1	74	2	23.74
		16QAM	50	0	75	0	125	22.5
		16QAM	1	49	1	0	2	16.98
		16QAM	1	0	1	74	2	23.79
		64QAM	50	0	75	0	125	22.52
		64QAM	1	49	1	0	2	16.57
		64QAM	1	0	1	74	2	22.22
40549	40669	QPSK	50	0	75	0	125	23.39
		QPSK	1	49	1	0	2	16.84
		QPSK	1	0	1	74	2	23.75
		16QAM	50	0	75	0	125	22.52
		16QAM	1	49	1	0	2	16.94
		16QAM	1	0	1	74	2	23.87
		64QAM	50	0	75	0	125	22.55
		64QAM	1	49	1	0	2	16.57
		64QAM	1	0	1	74	2	22.23
41395	41515	QPSK	50	0	75	0	125	23.17
		QPSK	1	49	1	0	2	16.43
		QPSK	1	0	1	74	2	23.67
		16QAM	50	0	75	0	125	22.32
		16QAM	1	49	1	0	2	16.53
		16QAM	1	0	1	74	2	23.74
		64QAM	50	0	75	0	125	22.35
		64QAM	1	49	1	0	2	16.13
		64QAM	1	0	1	74	2	22.18



**ERP/EIRP**

LTE Band 7 (GT - LC = 1.0 dB) QPSK			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency (MHz)	2502.5	2535	2567.5
	Conducted Power (dBm)	23.60	23.49
Conducted Power (Watts)	0.2291	0.2234	0.2265
EIRP(dBm)	24.60	24.49	24.55
EIRP(Watts)	0.2884	0.2812	0.2851

LTE Band 7 (GT - LC = 1.0 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)	23.61	23.48	23.58	23.63	23.53	23.58	23.64	23.53
Conducted Power (Watts)	0.2296	0.2228	0.2280	0.2307	0.2254	0.2280	0.2312	0.2254	0.2249
EIRP(dBm)	24.61	24.48	24.58	24.63	24.53	24.58	24.64	24.53	24.52
EIRP(Watts)	0.2891	0.2805	0.2871	0.2904	0.2838	0.2871	0.2911	0.2838	0.2831



LTE Band 7 (GT - LC = 1.0 dB) 16QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	22.81	22.80	22.90
Conducted Power (Watts)	0.1910	0.1905	0.1950
EIRP(dBm)	23.81	23.80	23.90
EIRP(Watts)	0.2404	0.2399	0.2455

LTE Band 7 (GT - LC = 1.0 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	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	22.72	22.77	22.93	22.72	22.85	22.96	22.78	22.83	22.94
Conducted Power (Watts)	0.1871	0.1892	0.1963	0.1871	0.1928	0.1977	0.1897	0.1919	0.1968
EIRP(dBm)	23.72	23.77	23.93	23.72	23.85	23.96	23.78	23.83	23.94
EIRP(Watts)	0.2355	0.2382	0.2472	0.2355	0.2427	0.2489	0.2388	0.2415	0.2477



LTE Band 7 (GT - LC = 1.0 dB) 64QAM			
Bandwidth	5M		
Channel	20775	21100	21425
	(Low)	(Mid)	(High)
Frequency	2502.5	2535	2567.5
(MHz)			
Conducted Power (dBm)	21.81	21.77	21.88
Conducted Power (Watts)	0.1517	0.1503	0.1542
EIRP(dBm)	22.81	22.77	22.88
EIRP(Watts)	0.1910	0.1892	0.1941

LTE Band 7 (GT - LC = 1.0 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	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
(MHz)									
Conducted Power (dBm)	21.86	21.77	21.84	21.70	21.79	21.91	21.77	21.82	21.93
Conducted Power (Watts)	0.1535	0.1503	0.1528	0.1479	0.1510	0.1552	0.1503	0.1521	0.1560
EIRP(dBm)	22.86	22.77	22.84	22.70	22.79	22.91	22.77	22.82	22.93
EIRP(Watts)	0.1932	0.1892	0.1923	0.1862	0.1901	0.1954	0.1892	0.1914	0.1963



LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) 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	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	26.23	26.29	26.38	26.24	26.32	26.43	26.28	26.33	26.44
Conducted Power (Watts)	0.4198	0.4256	0.4345	0.4207	0.4285	0.4395	0.4246	0.4295	0.4406
EIRP(dBm)	27.23	27.29	27.38	27.24	27.32	27.43	27.28	27.33	27.44
EIRP(Watts)	0.5284	0.5358	0.5470	0.5297	0.5395	0.5534	0.5346	0.5408	0.5546

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) QPSK			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	26.22	26.48	26.47
Conducted Power (Watts)	0.4188	0.4446	0.4436
EIRP(dBm)	27.22	27.48	27.47
EIRP(Watts)	0.5272	0.5598	0.5585



LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) 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	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	25.56	25.61	25.69	25.56	25.67	25.74	25.63	25.70	25.74
Conducted Power (Watts)	0.3597	0.3639	0.3707	0.3597	0.3690	0.3750	0.3656	0.3715	0.3750
EIRP(dBm)	26.56	26.61	26.69	26.56	26.67	26.74	26.63	26.70	26.74
EIRP(Watts)	0.4529	0.4581	0.4667	0.4529	0.4645	0.4721	0.4603	0.4677	0.4721

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) 16QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	25.63	25.67	25.75
Conducted Power (Watts)	0.3656	0.3690	0.3758
EIRP(dBm)	26.63	26.67	26.75
EIRP(Watts)	0.4603	0.4645	0.4732



LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) 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	2498.5	2593	2687.5	2501	2593	2685	2503.5	2593	2682.5
(MHz)									
Conducted Power (dBm)	24.56	24.63	24.71	24.58	24.72	24.76	24.63	24.70	24.73
Conducted Power (Watts)	0.2858	0.2904	0.2958	0.2871	0.2965	0.2992	0.2904	0.2951	0.2972
EIRP(dBm)	25.56	25.63	25.71	25.58	25.72	25.76	25.63	25.70	25.73
EIRP(Watts)	0.3597	0.3656	0.3724	0.3614	0.3733	0.3767	0.3656	0.3715	0.3741

LTE Band 41 (G <sub>T</sub> - L <sub>C</sub> = 1.0dB) 64QAM			
Bandwidth	20M		
Channel	39750	40620	41490
	(Low)	(Mid)	(High)
Frequency	2506	2593	2680
(MHz)			
Conducted Power (dBm)	24.67	24.74	24.86
Conducted Power (Watts)	0.2931	0.2979	0.3062
EIRP(dBm)	25.67	25.74	25.86
EIRP(Watts)	0.3690	0.3750	0.3855



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)	22.98	23.10	23.11	23.01	23.13	23.14	23.30	23.29	23.10
Conducted Power (Watts)	0.1986	0.2042	0.2046	0.2000	0.2056	0.2061	0.2138	0.2133	0.2042
EIRP(dBm)	21.98	22.10	22.11	22.01	22.13	22.14	22.30	22.29	22.10
EIRP(Watts)	0.1578	0.1622	0.1626	0.1589	0.1633	0.1637	0.1698	0.1694	0.1622

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)	23.13	23.14	23.12	23.22	23.26	23.24	22.97	23.31	23.24
Conducted Power (Watts)	0.2056	0.2061	0.2051	0.2099	0.2118	0.2109	0.1982	0.2143	0.2109
EIRP(dBm)	22.13	22.14	22.12	22.22	22.26	22.24	21.97	22.31	22.24
EIRP(Watts)	0.1633	0.1637	0.1629	0.1667	0.1683	0.1675	0.1574	0.1702	0.1675





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)	22.31	22.51	22.53	22.34	22.54	22.56	22.43	22.71	22.65
Conducted Power (Watts)	0.1702	0.1782	0.1791	0.1714	0.1795	0.1803	0.1750	0.1866	0.1841
EIRP(dBm)	21.31	21.51	21.53	21.34	21.54	21.56	21.43	21.71	21.65
EIRP(Watts)	0.1352	0.1416	0.1422	0.1361	0.1426	0.1432	0.1390	0.1483	0.1462

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)	22.46	22.49	22.59	22.56	22.61	22.69	22.43	22.64	22.66
Conducted Power (Watts)	0.1762	0.1774	0.1816	0.1803	0.1824	0.1858	0.1750	0.1837	0.1845
EIRP(dBm)	21.46	21.49	21.59	21.56	21.61	21.69	21.43	21.64	21.66
EIRP(Watts)	0.1400	0.1409	0.1442	0.1432	0.1449	0.1476	0.1390	0.1459	0.1466



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)	21.32	21.44	21.50	21.32	21.47	21.50	21.66	21.67	21.54
Conducted Power (Watts)	0.1355	0.1393	0.1413	0.1355	0.1403	0.1413	0.1466	0.1469	0.1426
EIRP(dBm)	20.32	20.44	20.50	20.32	20.47	20.50	20.66	20.67	20.54
EIRP(Watts)	0.1076	0.1107	0.1122	0.1076	0.1114	0.1122	0.1164	0.1167	0.1132

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)	21.45	21.46	21.55	21.56	21.57	21.65	21.39	21.57	21.60
Conducted Power (Watts)	0.1396	0.1400	0.1429	0.1432	0.1435	0.1462	0.1377	0.1435	0.1445
EIRP(dBm)	20.45	20.46	20.55	20.56	20.57	20.65	20.39	20.57	20.60
EIRP(Watts)	0.1109	0.1112	0.1135	0.1138	0.1140	0.1161	0.1094	0.1140	0.1148



LTE Band 71 (GT - LC = -4.0 dB) QPSK									
Bandwidth	5M			10M			15M		
Channel	133147	133297	133447	133172	133297	133422	133197	133297	133397
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Frequency (MHz)	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
Conducted Power (dBm)	23.18	23.20	23.26	23.21	23.25	23.24	23.30	23.31	23.28
Conducted Power (Watts)	0.2080	0.2089	0.2118	0.2094	0.2113	0.2109	0.2138	0.2143	0.2128
ERP(dBm)	17.03	17.05	17.11	17.06	17.10	17.09	17.15	17.16	17.13
ERP(Watts)	0.0505	0.0507	0.0514	0.0508	0.0513	0.0512	0.0519	0.0520	0.0516

LTE Band 71 (GT - LC = -4.0 dB) QPSK			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	23.42	23.37	23.32
Conducted Power (Watts)	0.2198	0.2173	0.2148
ERP(dBm)	17.27	17.22	17.17
ERP(Watts)	0.0533	0.0527	0.0521



LTE Band 71 (GT - LC = -4.0 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)	22.48	22.55	22.49	22.58	22.51	22.45	22.65	22.61	22.65
Conducted Power (Watts)	0.1770	0.1799	0.1774	0.1811	0.1782	0.1758	0.1841	0.1824	0.1841
ERP(dBm)	16.33	16.40	16.34	16.43	16.36	16.30	16.50	16.46	16.50
ERP(Watts)	0.0430	0.0437	0.0431	0.0440	0.0433	0.0427	0.0447	0.0443	0.0447

LTE Band 71 (GT - LC = -4.0 dB) 16QAM			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency (MHz)	673	680.5	688
Conducted Power (dBm)	22.78	22.60	22.73
Conducted Power (Watts)	0.1897	0.1820	0.1875
ERP(dBm)	16.63	16.45	16.58
ERP(Watts)	0.0460	0.0442	0.0455



LTE Band 71 (GT - LC = -4.0 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	665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5
(MHz)									
Conducted Power (dBm)	21.49	21.53	21.29	21.49	21.55	21.49	21.64	21.63	21.47
Conducted Power (Watts)	0.1409	0.1422	0.1346	0.1409	0.1429	0.1409	0.1459	0.1455	0.1403
ERP(dBm)	15.34	15.38	15.14	15.34	15.40	15.34	15.49	15.48	15.32
ERP(Watts)	0.0342	0.0345	0.0327	0.0342	0.0347	0.0342	0.0354	0.0353	0.0340

LTE Band 71 (GT - LC = -4.0 dB) 64QAM			
Bandwidth	20M		
Channel	133222	133297	133372
	(Low)	(Mid)	(High)
Frequency	673	680.5	688
(MHz)			
Conducted Power (dBm)	21.69	21.65	21.67
Conducted Power (Watts)	0.1476	0.1462	0.1469
ERP(dBm)	15.54	15.50	15.52
ERP(Watts)	0.0358	0.0355	0.0356



LTE Band 41C_CA (GT - LC = 1.0 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)	23.95	23.67	23.66	23.49	23.7	23.6	23.80	21.64	23.47
Conducted Power (Watts)	0.2483	0.2328	0.2323	0.2234	0.2344	0.2291	0.2399	0.1459	0.2223
EIRP(dBm)	24.95	24.67	24.66	24.49	24.70	24.60	24.80	22.64	24.47
EIRP(Watts)	0.3126	0.2931	0.2924	0.2812	0.2951	0.2884	0.3020	0.1837	0.2799

LTE Band 41C_CA (GT - LC = 1.0 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)	23.49	23.59	23.42	23.77	23.57	23.33	23.66	23.37	23.53
Conducted Power (Watts)	0.2234	0.2286	0.2198	0.2382	0.2275	0.2153	0.2323	0.2173	0.2254
EIRP(dBm)	24.49	24.59	24.42	24.77	24.57	24.33	24.66	24.37	24.53
EIRP(Watts)	0.2812	0.2877	0.2767	0.2999	0.2864	0.2710	0.2924	0.2735	0.2838



LTE Band 41C_CA (GT - LC = 1.0 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)	23.73	23.54	23.42	23.70	23.56	23.44
Conducted Power (Watts)	0.2360	0.2259	0.2198	0.2344	0.2270	0.2208
EIRP(dBm)	24.73	24.54	24.42	24.70	24.56	24.44
EIRP(Watts)	0.2972	0.2844	0.2767	0.2951	0.2858	0.2780

LTE Band 41C_CA (GT - LC = 1.0 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	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	23.96	23.75	23.12	23.74	23.75	23.67
Conducted Power (Watts)	0.2489	0.2371	0.2051	0.2366	0.2371	0.2328
EIRP(dBm)	24.96	24.75	24.12	24.74	24.75	24.67
EIRP(Watts)	0.3133	0.2985	0.2582	0.2979	0.2985	0.2931



LTE Band 41C_CA (GT - LC = 1.0 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)	24.13	23.95	22.31	23.70	23.82	23.79	23.89	23.84	23.54
Conducted Power (Watts)	0.2588	0.2483	0.1702	0.2344	0.2410	0.2393	0.2449	0.2421	0.2259
EIRP(dBm)	25.13	24.95	23.31	24.70	24.82	24.79	24.89	24.84	24.54
EIRP(Watts)	0.3258	0.3126	0.2143	0.2951	0.3034	0.3013	0.3083	0.3048	0.2844

LTE Band 41C_CA (GT - LC = 1.0 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)	23.52	23.77	23.55	23.84	23.75	23.54	21.19	23.7	23.61
Conducted Power (Watts)	0.2249	0.2382	0.2265	0.2421	0.2371	0.2259	0.1315	0.2344	0.2296
EIRP(dBm)	24.52	24.77	24.55	24.84	24.75	24.54	22.19	24.70	24.61
EIRP(Watts)	0.2831	0.2999	0.2851	0.3048	0.2985	0.2844	0.1656	0.2951	0.2891





LTE Band 41C_CA (GT - LC = 1.0 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)	23.85	23.76	23.58	23.80	23.91	23.52
Conducted Power (Watts)	0.2427	0.2377	0.2280	0.2399	0.2460	0.2249
EIRP(dBm)	24.85	24.76	24.58	24.80	24.91	24.52
EIRP(Watts)	0.3055	0.2992	0.2871	0.3020	0.3097	0.2831

LTE Band 41C_CA (GT - LC = 1.0 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	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	24.05	23.68	23.79	23.79	23.87	23.74
Conducted Power (Watts)	0.2541	0.2333	0.2393	0.2393	0.2438	0.2366
EIRP(dBm)	25.05	24.68	24.79	24.79	24.87	24.74
EIRP(Watts)	0.3199	0.2938	0.3013	0.3013	0.3069	0.2979



LTE Band 41C_CA (GT - LC = 1.0 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)	22.53	22.31	22.13	22.10	22.2	22.15	22.34	22.09	21.91
Conducted Power (Watts)	0.1791	0.1702	0.1633	0.1622	0.1660	0.1641	0.1714	0.1618	0.1552
EIRP(dBm)	23.53	23.31	23.13	23.10	23.20	23.15	23.34	23.09	22.91
EIRP(Watts)	0.2254	0.2143	0.2056	0.2042	0.2089	0.2065	0.2158	0.2037	0.1954

LTE Band 41C_CA (GT - LC = 1.0 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)	21.95	22.02	21.95	22.09	21.94	21.93	20.69	22.01	21.94
Conducted Power (Watts)	0.1567	0.1592	0.1567	0.1618	0.1563	0.1560	0.1172	0.1589	0.1563
EIRP(dBm)	22.95	23.02	22.95	23.09	22.94	22.93	21.69	23.01	22.94
EIRP(Watts)	0.1972	0.2004	0.1972	0.2037	0.1968	0.1963	0.1476	0.2000	0.1968



LTE Band 41C_CA (GT - LC = 1.0 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)	22.05	21.87	21.89	23.32	23.42	23.12
Conducted Power (Watts)	0.1603	0.1538	0.1545	0.2148	0.2198	0.2051
EIRP(dBm)	23.05	22.87	22.89	24.32	24.42	24.12
EIRP(Watts)	0.2018	0.1936	0.1945	0.2704	0.2767	0.2582

LTE Band 41C_CA (GT - LC = 1.0 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	41515
	(Low)	(Mid)	(High)	(Low)	(Mid)	(High)
Conducted Power (dBm)	22.63	22.52	22.31	22.52	22.55	22.35
Conducted Power (Watts)	0.1832	0.1786	0.1702	0.1786	0.1799	0.1718
EIRP(dBm)	23.63	23.52	23.31	23.52	23.55	23.35
EIRP(Watts)	0.2307	0.2249	0.2143	0.2249	0.2265	0.2163

Note: The Maximum ERP/EIRP is calculated from Max Output power and Max antenna gain.



# 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	3.28	4.41	4.78	5.68	<b>PASS</b>
Middle CH	3.39	4.41	5.07	5.77	
Highest CH	3.42	4.55	5.39	5.94	
Mod.	64QAM		Limit: 13dB		
RB Size	1RB	Full RB	Result		
Lowest CH	5.04	5.65	<b>PASS</b>		
Middle CH	5.22	5.74			
Highest CH	5.36	5.88			



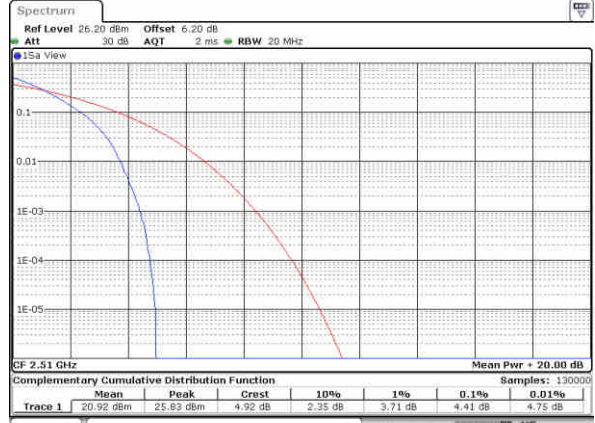
LTE Band 7 / 20MHz / QPSK

Lowest Channel / 1RB



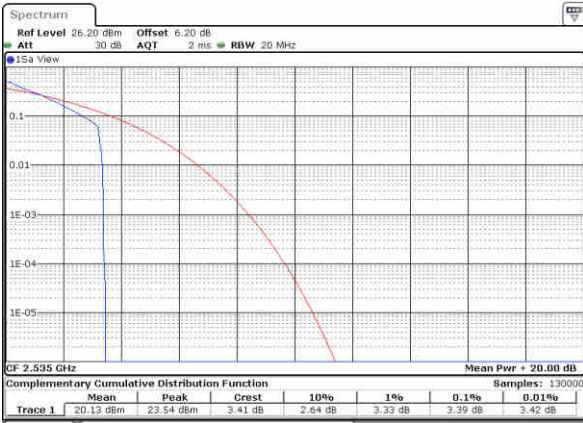
Date: 20.OCT.2019 03:41:18

Lowest Channel / Full RB



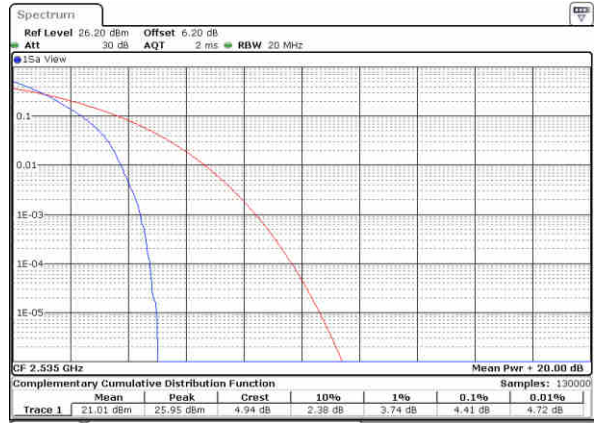
Date: 20.OCT.2019 03:41:27

Middle Channel / 1RB



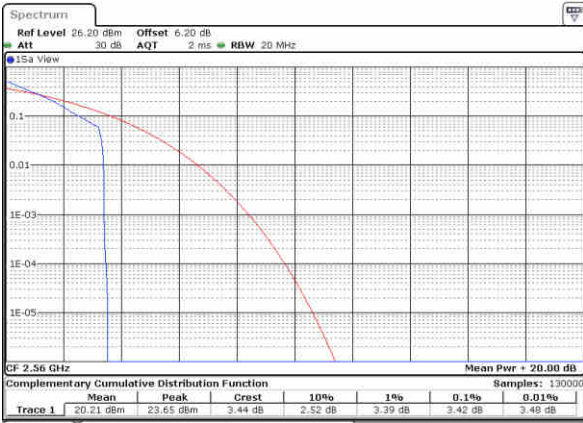
Date: 20.OCT.2019 03:42:01

Middle Channel / Full RB



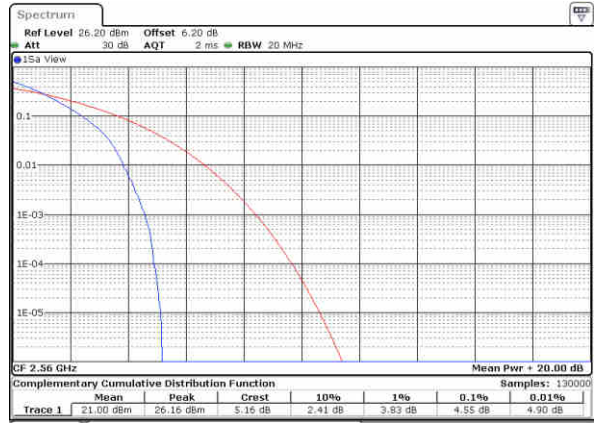
Date: 20.OCT.2019 03:41:53

Highest Channel / 1RB



Date: 20.OCT.2019 03:42:27

Highest Channel / Full RB

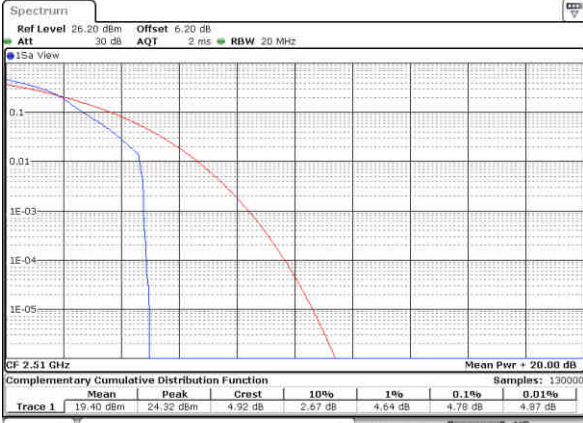


Date: 20.OCT.2019 03:42:38



LTE Band 7 / 20MHz / 16QAM

Lowest Channel / 1RB



Date: 20.OCT.2019 03:41:09

Lowest Channel / Full RB



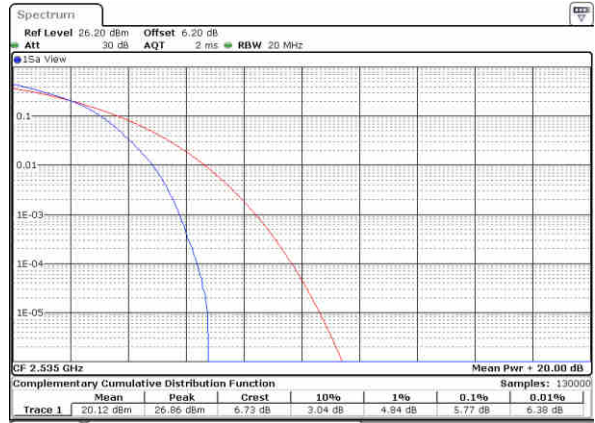
Date: 20.OCT.2019 03:41:35

Middle Channel / 1RB



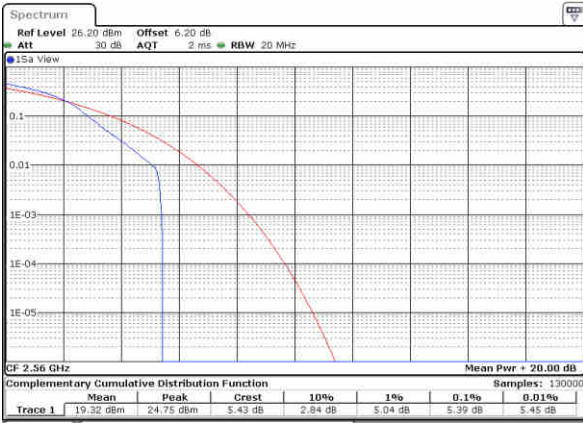
Date: 20.OCT.2019 03:42:10

Middle Channel / Full RB



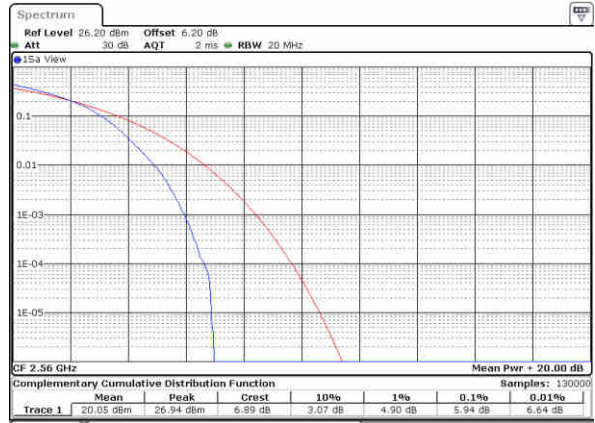
Date: 20.OCT.2019 03:41:44

Highest Channel / 1RB



Date: 20.OCT.2019 03:42:19

Highest Channel / Full RB



Date: 20.OCT.2019 03:42:45





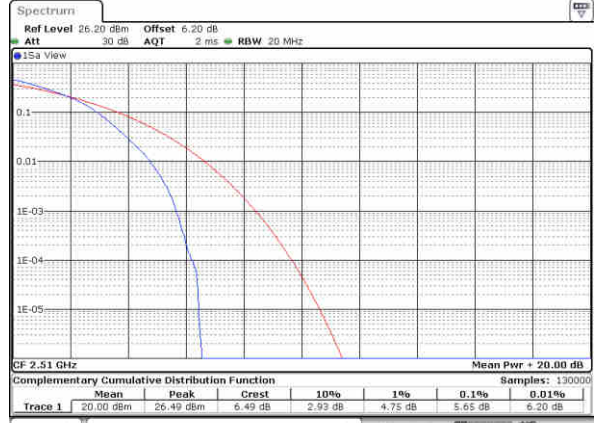
LTE Band 7 / 20MHz / 64QAM

Lowest Channel / 1RB



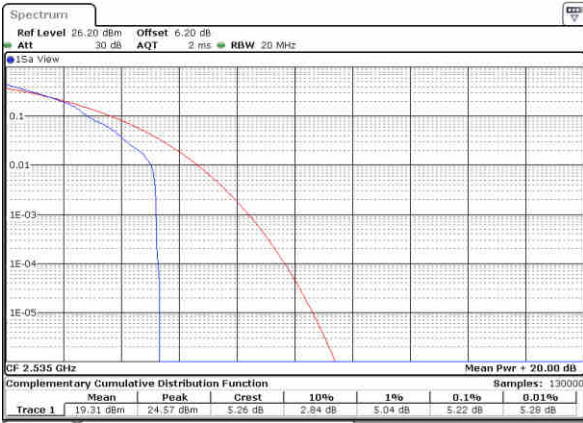
Date: 20.OCT.2019 03:40:19

Lowest Channel / Full RB



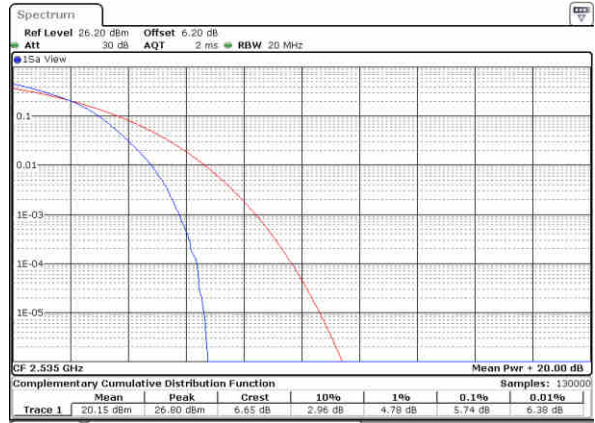
Date: 20.OCT.2019 03:40:25

Middle Channel / 1RB



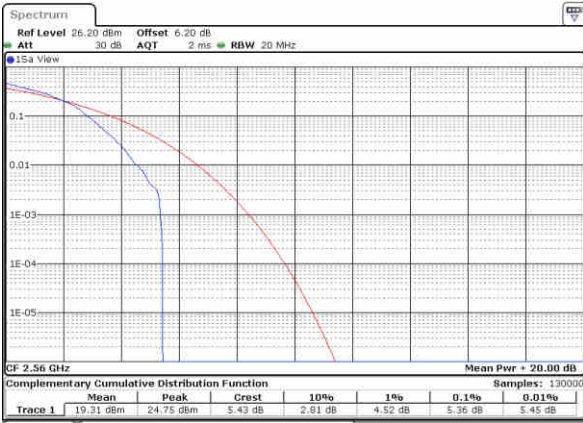
Date: 20.OCT.2019 03:40:43

Middle Channel / Full RB



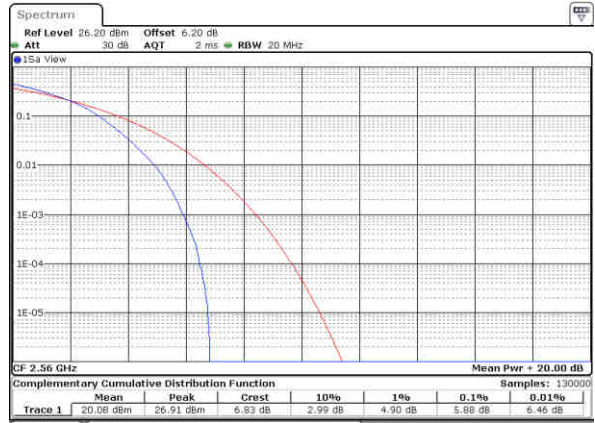
Date: 20.OCT.2019 03:40:34

Highest Channel / 1RB



Date: 20.OCT.2019 03:40:51

Highest Channel / Full RB



Date: 20.OCT.2019 03:41:00



**26dB Bandwidth**

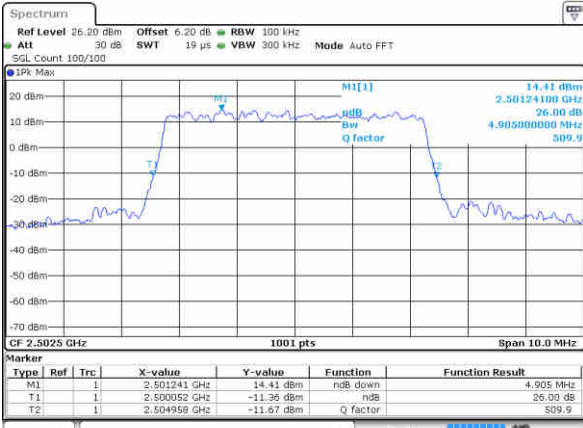
Mode												
BW	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	4.905	4.855	9.81	9.71	14.236	14.416	20.02	20.14	4.845	9.99	14.565	20.18
Middle CH	4.935	4.855	9.69	9.93	14.446	14.565	20.06	20.18	4.855	9.77	14.386	20.30
Highest CH	4.755	4.955	9.79	9.83	14.386	14.625	20.10	20.10	4.895	9.65	14.176	20.18





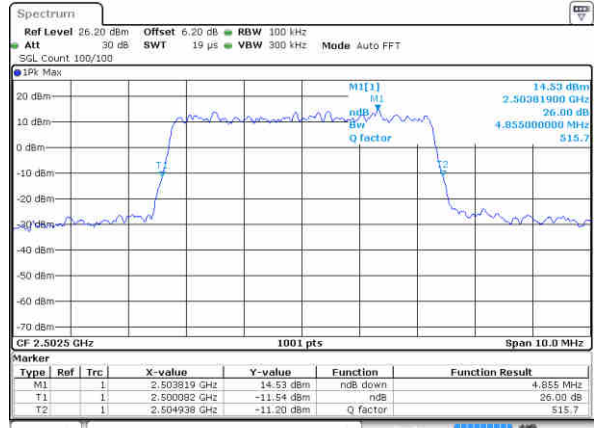
LTE Band 7

Lowest Channel / 5MHz / QPSK



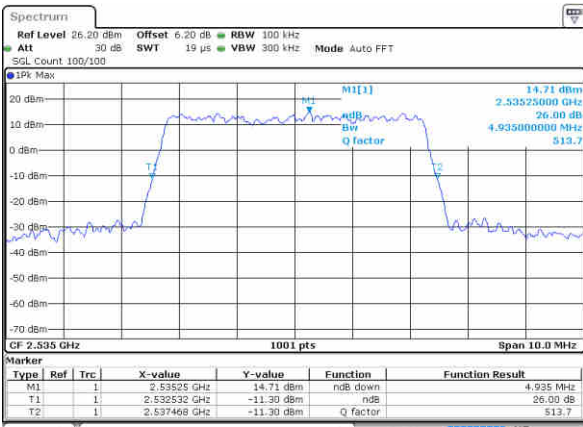
Date: 20.OCT.2019 01:39:06

Lowest Channel / 5MHz / 16QAM



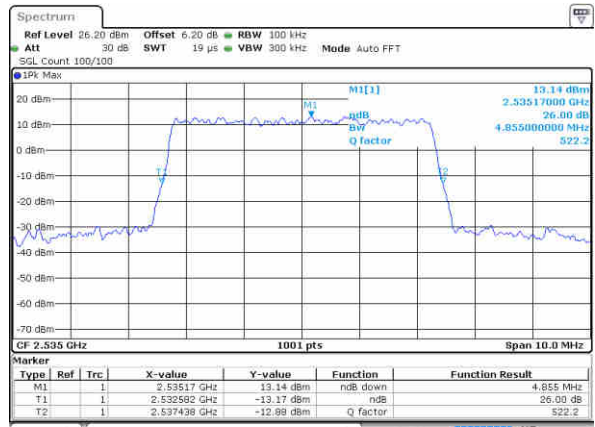
Date: 20.OCT.2019 01:39:26

Middle Channel / 5MHz / QPSK



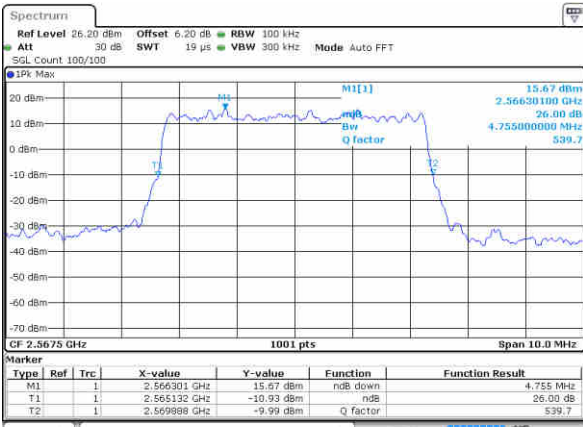
Date: 20.OCT.2019 01:40:06

Middle Channel / 5MHz / 16QAM



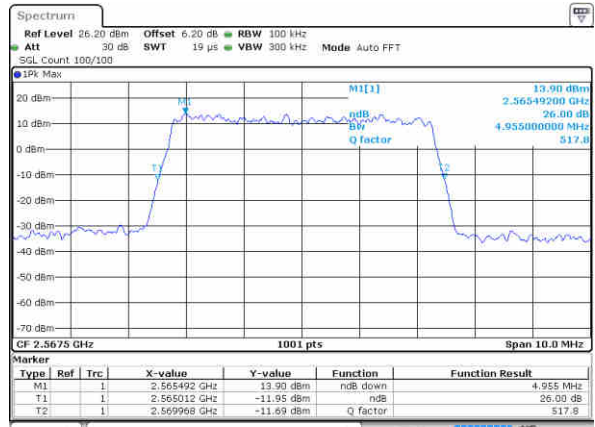
Date: 20.OCT.2019 01:39:46

Highest Channel / 5MHz / QPSK



Date: 20.OCT.2019 01:40:26

Highest Channel / 5MHz / 16QAM

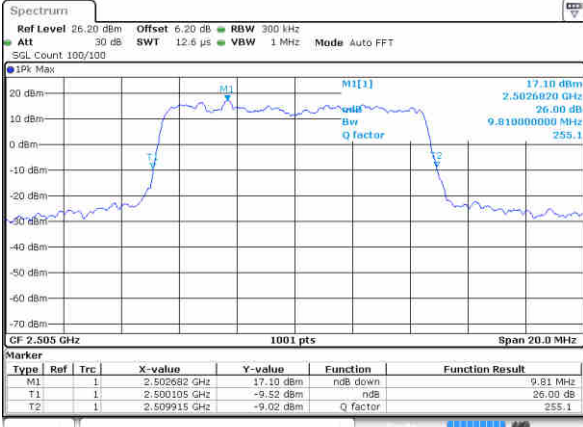


Date: 20.OCT.2019 01:40:46



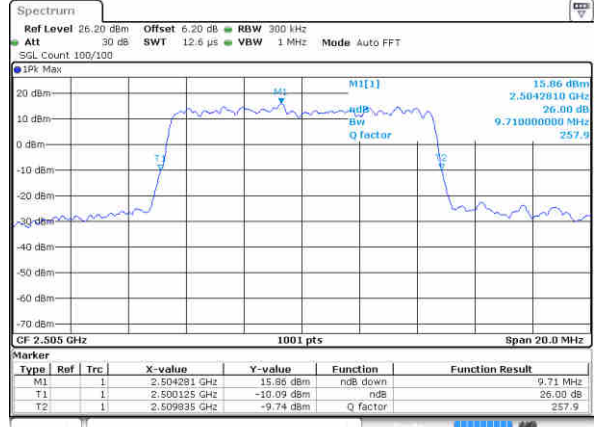
LTE Band 7

Lowest Channel / 10MHz / QPSK



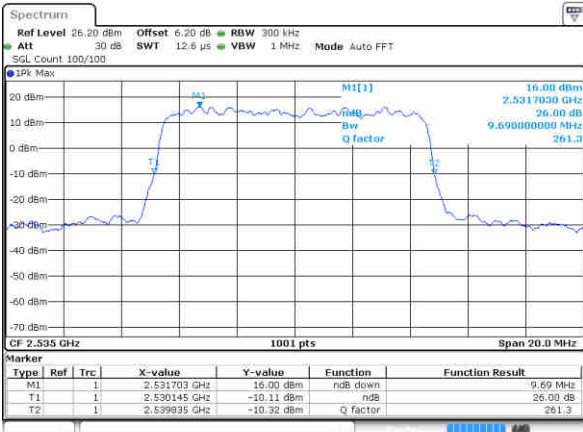
Date: 20.OCT.2019 01:55:02

Lowest Channel / 10MHz / 16QAM



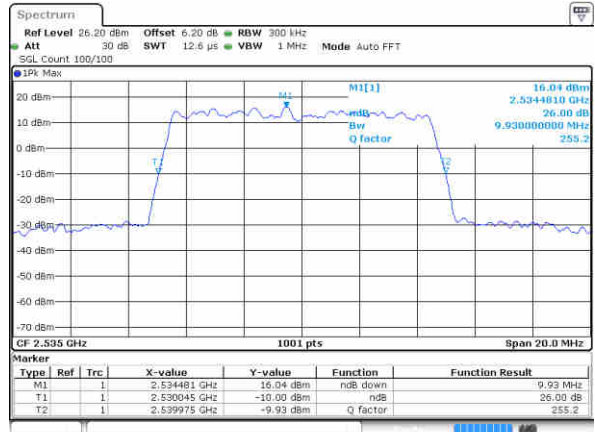
Date: 20.OCT.2019 01:55:22

Middle Channel / 10MHz / QPSK



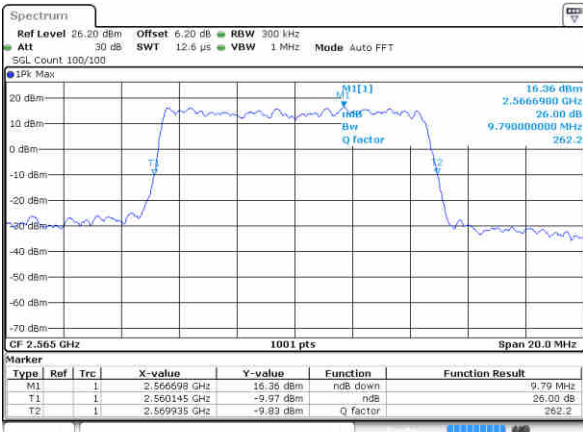
Date: 20.OCT.2019 01:56:02

Middle Channel / 10MHz / 16QAM



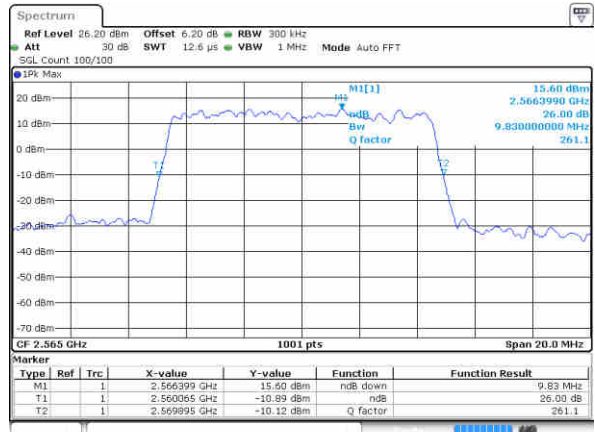
Date: 20.OCT.2019 01:56:42

Highest Channel / 10MHz / QPSK



Date: 20.OCT.2019 01:56:22

Highest Channel / 10MHz / 16QAM

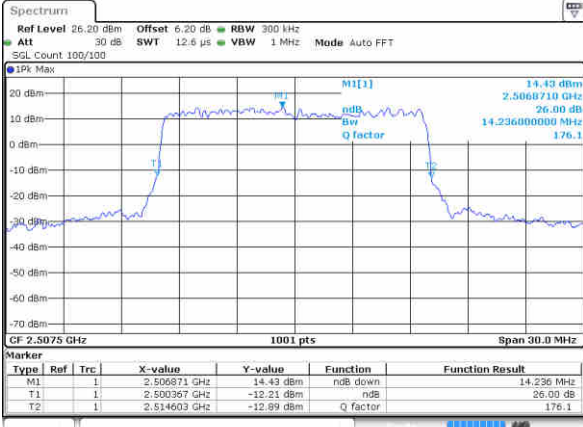


Date: 20.OCT.2019 01:56:42



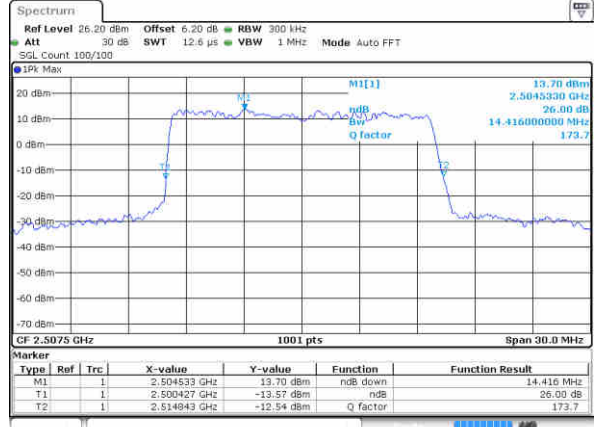
LTE Band 7

Lowest Channel / 15MHz / QPSK



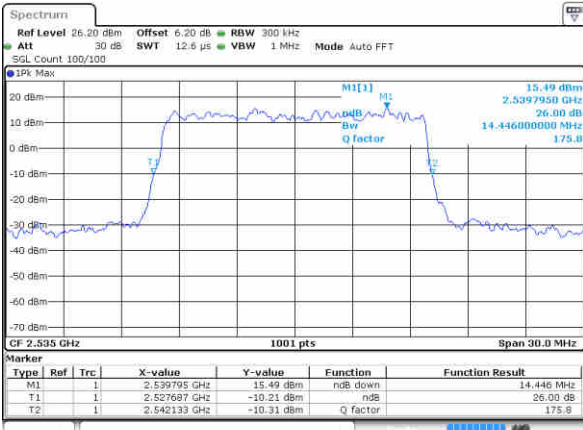
Date: 20.OCT.2019 02:34:48

Lowest Channel / 15MHz / 16QAM



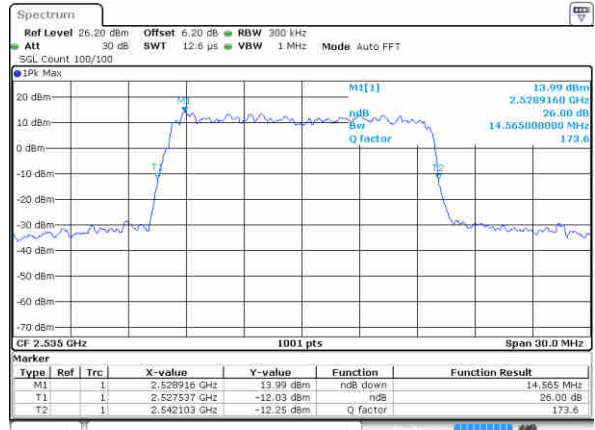
Date: 20.OCT.2019 02:34:28

Middle Channel / 15MHz / QPSK



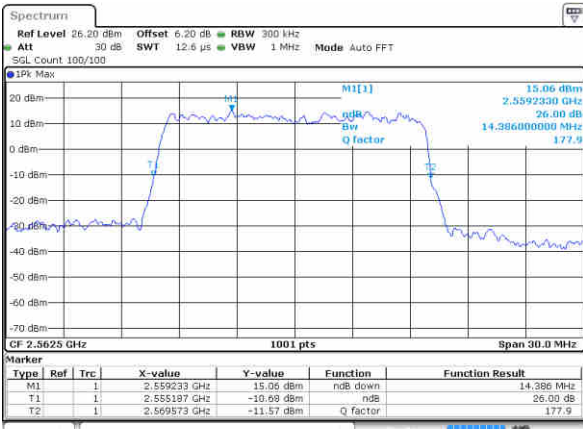
Date: 20.OCT.2019 02:35:08

Middle Channel / 15MHz / 16QAM



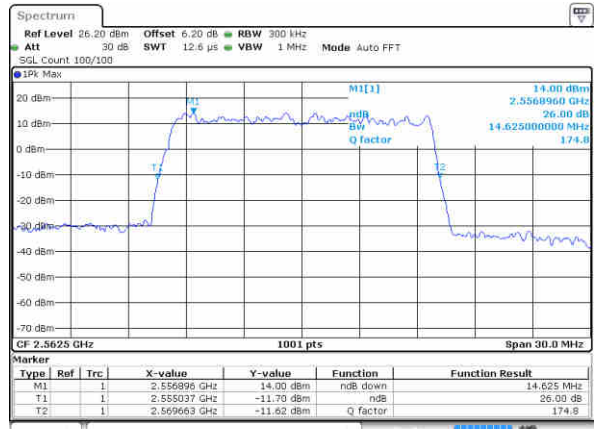
Date: 20.OCT.2019 02:35:29

Highest Channel / 15MHz / QPSK



Date: 20.OCT.2019 02:36:09

Highest Channel / 15MHz / 16QAM

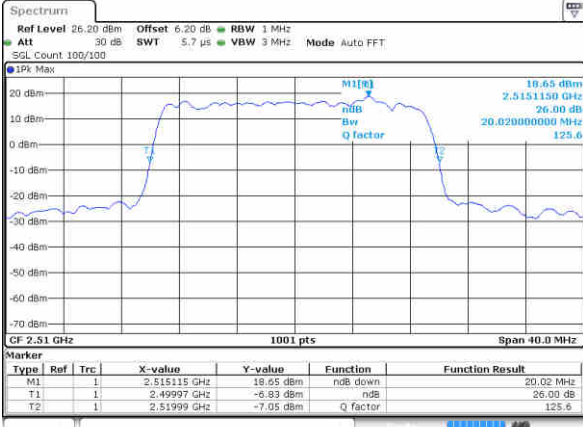


Date: 20.OCT.2019 02:35:49



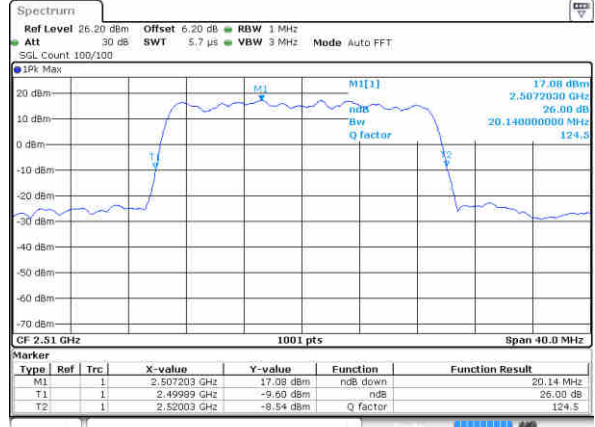
LTE Band 7

Lowest Channel / 20MHz / QPSK



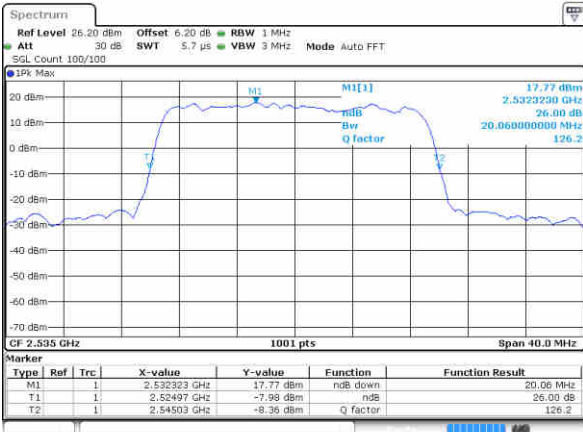
Date: 20.OCT.2019 02:51:17

Lowest Channel / 20MHz / 16QAM



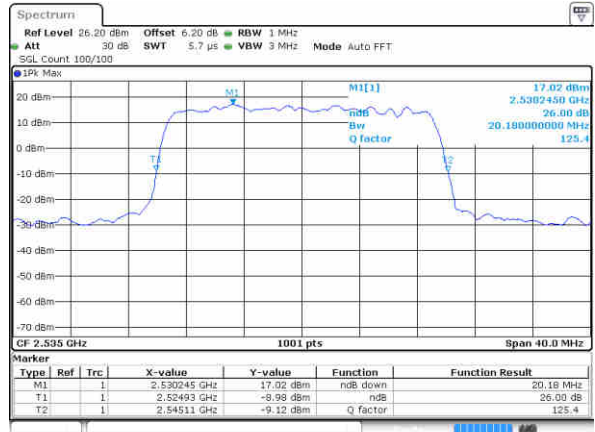
Date: 20.OCT.2019 02:50:57

Middle Channel / 20MHz / QPSK



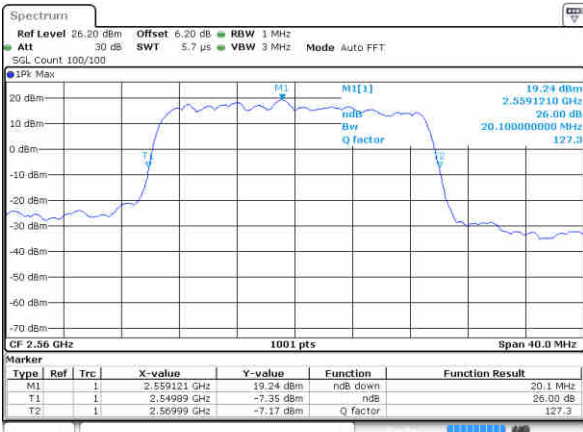
Date: 20.OCT.2019 02:51:37

Middle Channel / 20MHz / 16QAM



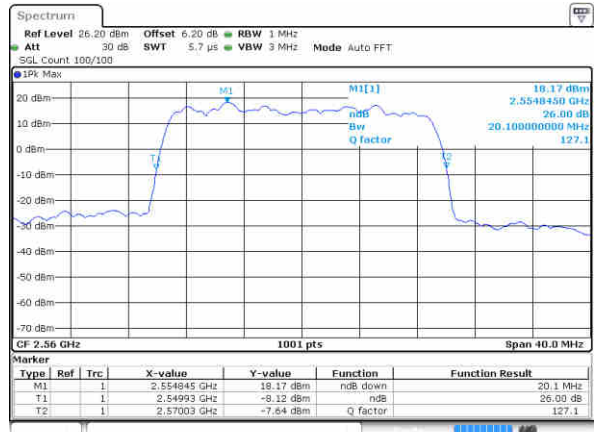
Date: 20.OCT.2019 02:51:57

Highest Channel / 20MHz / QPSK



Date: 20.OCT.2019 02:52:37

Highest Channel / 20MHz / 16QAM

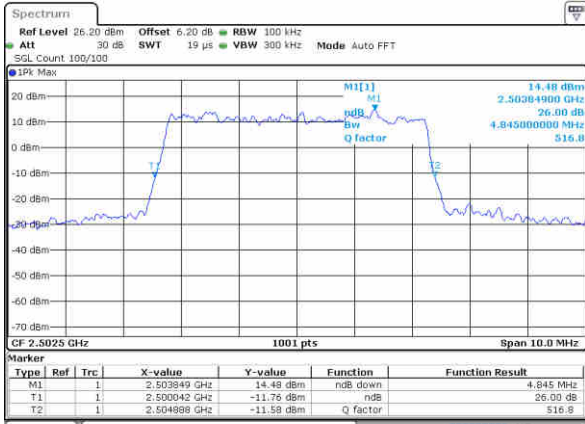


Date: 20.OCT.2019 02:52:17



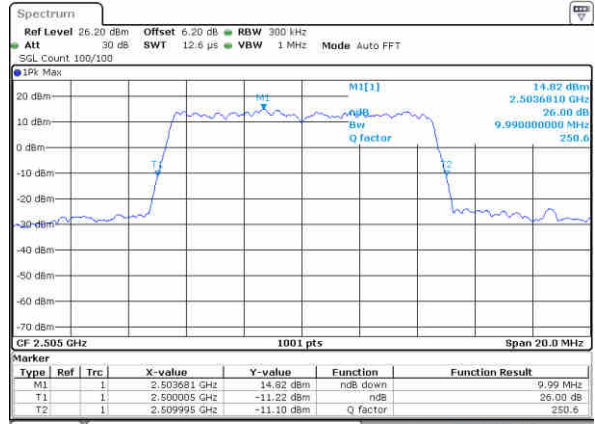
LTE Band 7

Lowest Channel / 5MHz / 64QAM



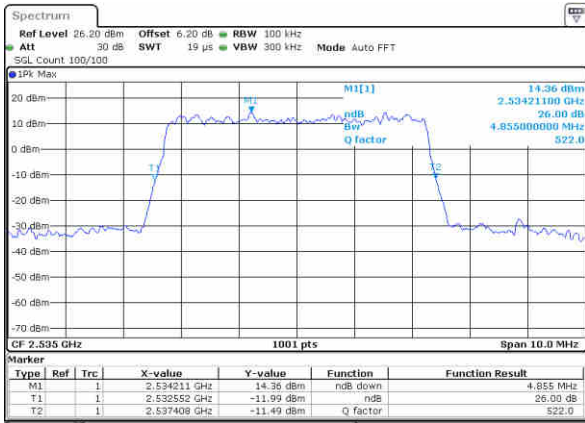
Date: 20.OCT.2019 03:07:46

Lowest Channel / 10MHz / 64QAM



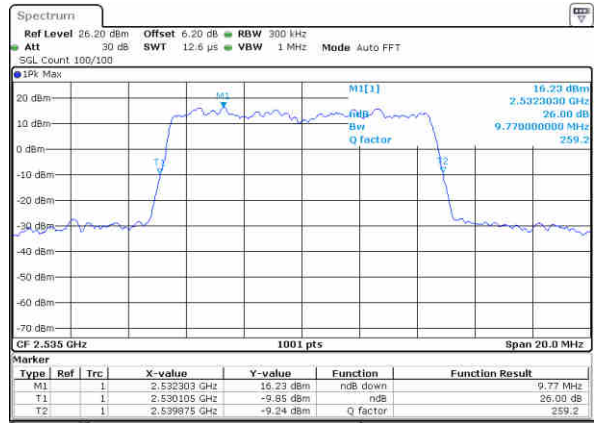
Date: 20.OCT.2019 03:16:00

Middle Channel / 5MHz / 64QAM



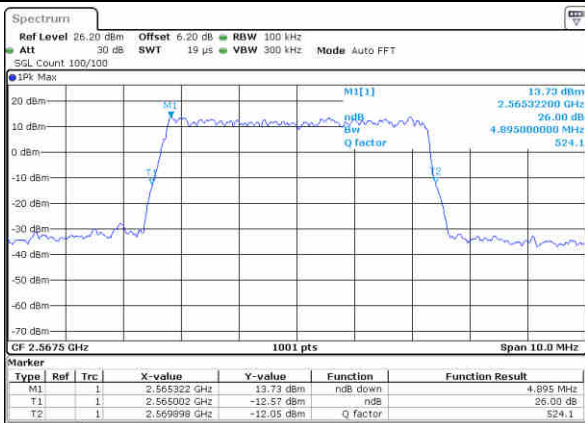
Date: 20.OCT.2019 03:07:56

Middle Channel / 10MHz / 64QAM



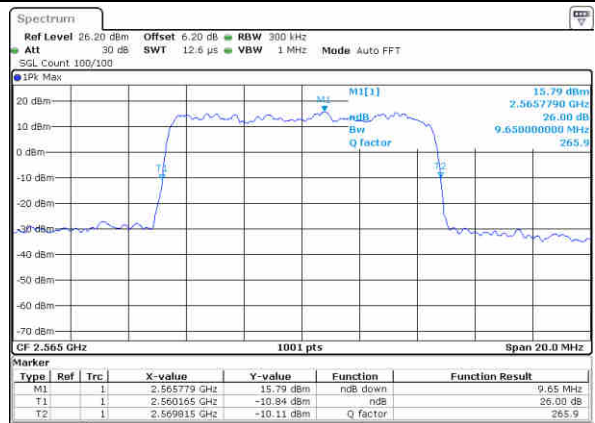
Date: 20.OCT.2019 03:16:10

Highest Channel / 5MHz / 64QAM



Date: 20.OCT.2019 03:08:06

Highest Channel / 10MHz / 64QAM



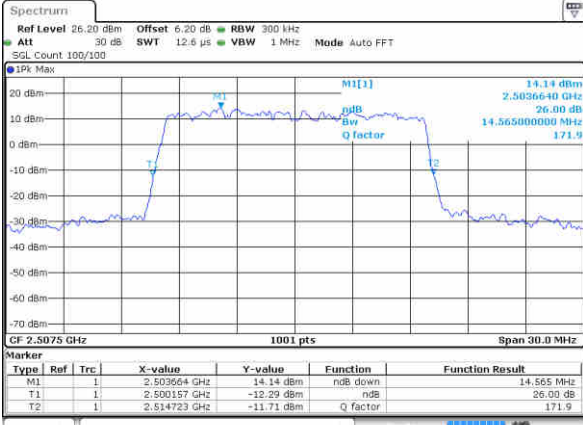
Date: 20.OCT.2019 03:16:20





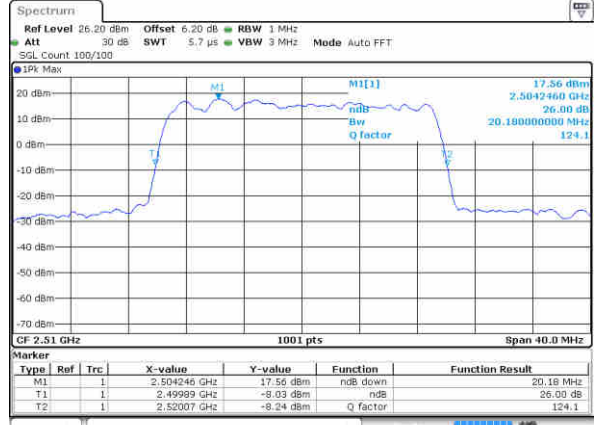
LTE Band 7

Lowest Channel / 15MHz / 64QAM



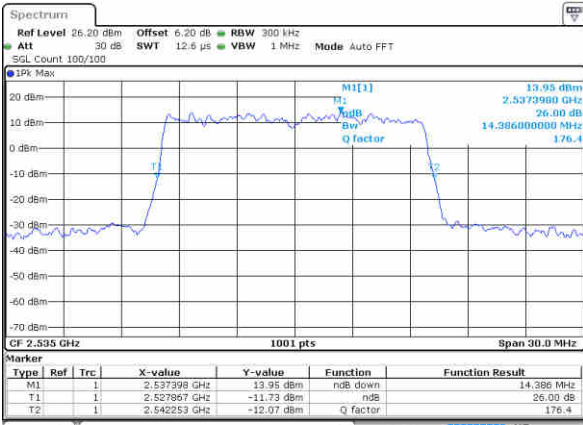
Date: 20.OCT.2019 03.24.14

Lowest Channel / 20MHz / 64QAM



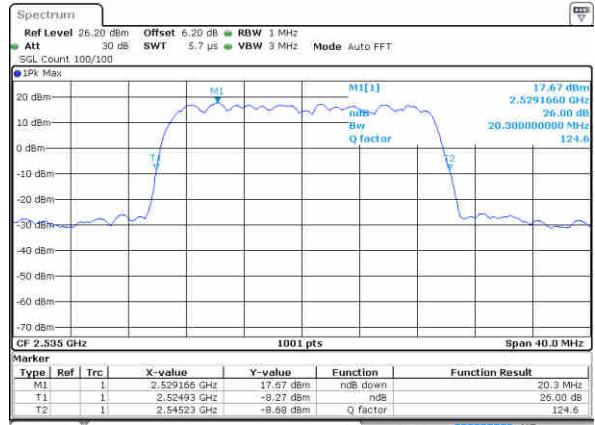
Date: 20.OCT.2019 03.32.29

Middle Channel / 15MHz / 64QAM



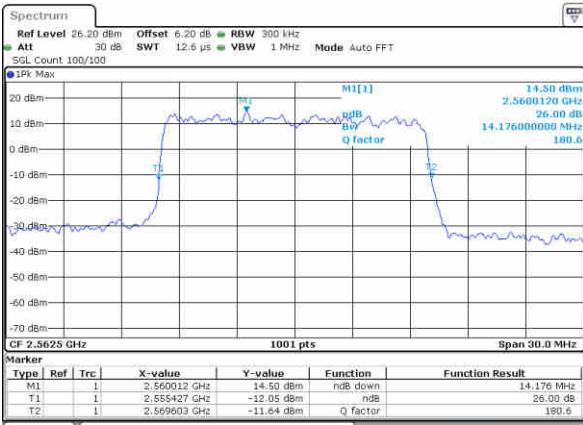
Date: 20.OCT.2019 03.24.24

Middle Channel / 20MHz / 64QAM



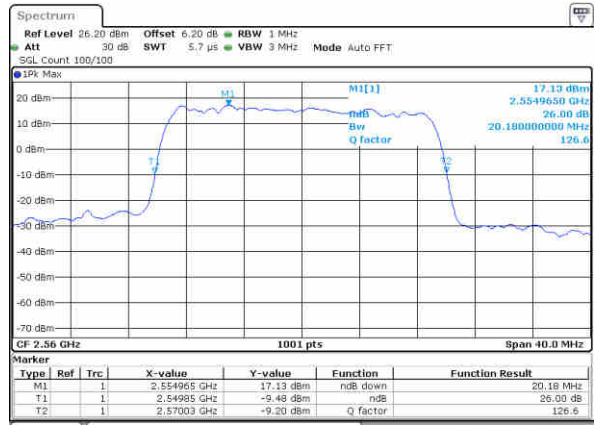
Date: 20.OCT.2019 03.32.39

Highest Channel / 15MHz / 64QAM



Date: 20.OCT.2019 03.24.34

Highest Channel / 20MHz / 64QAM



Date: 20.OCT.2019 03.32.49



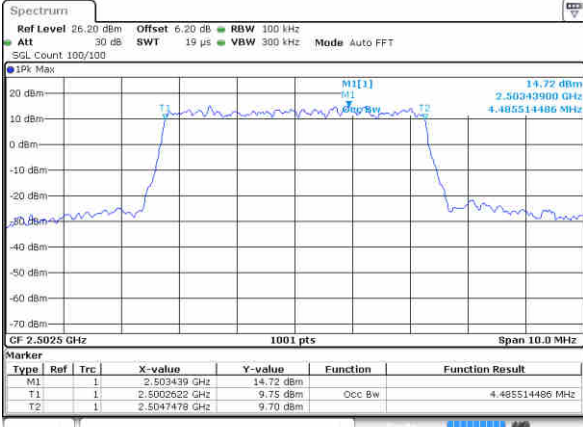
Occupied Bandwidth

Mode	LTE Band 7 : 99%OBW(MHz)											
	5MHz		10MHz		15MHz		20MHz		5MHz	10MHz	15MHz	20MHz
BW												
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	64QAM	64QAM	64QAM	64QAM
Lowest CH	4.49	4.48	9.01	8.99	13.40	13.43	18.26	18.38	4.49	9.07	13.46	18.42
Middle CH	4.53	4.49	9.01	8.99	13.43	13.52	18.58	18.50	4.47	9.05	13.52	18.34
Highest CH	4.50	4.50	8.99	9.01	13.46	13.46	18.30	18.30	4.50	9.01	13.40	18.22



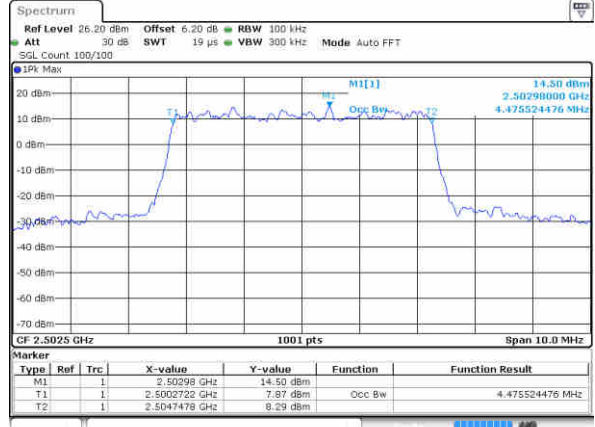
LTE Band 7

Lowest Channel / 5MHz / QPSK



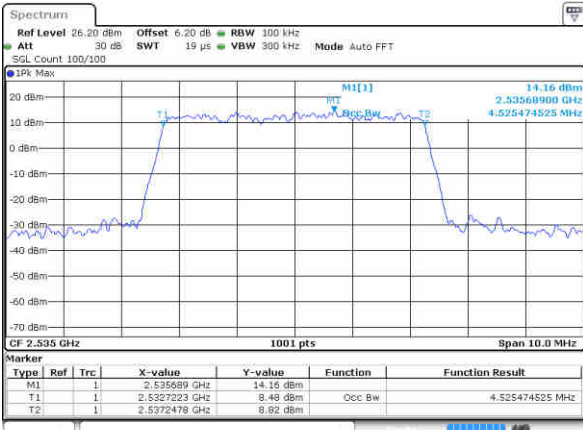
Date: 20.OCT.2019 01:38:58

Lowest Channel / 5MHz / 16QAM



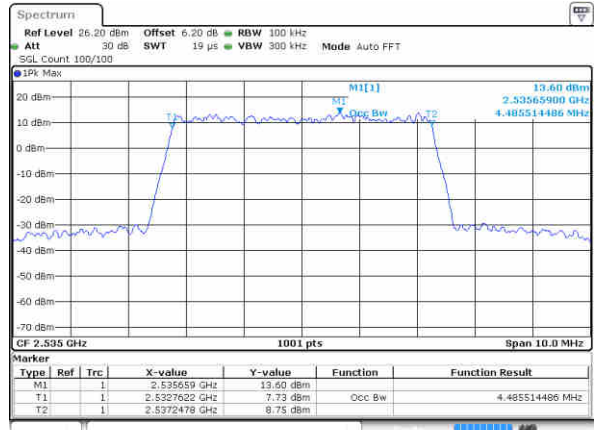
Date: 20.OCT.2019 01:39:16

Middle Channel / 5MHz / QPSK



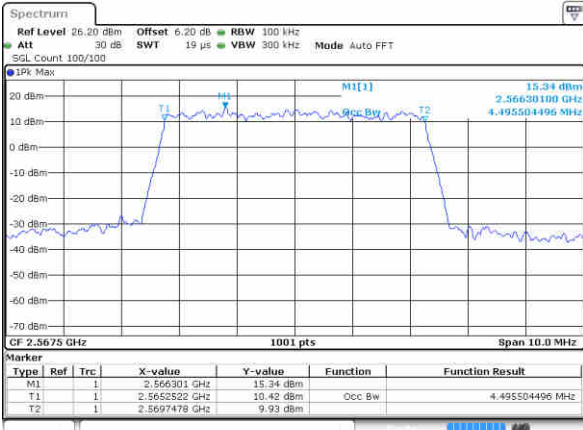
Date: 20.OCT.2019 01:39:58

Middle Channel / 5MHz / 16QAM



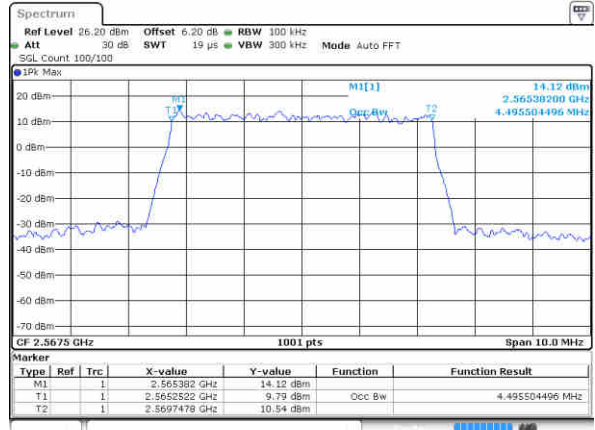
Date: 20.OCT.2019 01:39:38

Highest Channel / 5MHz / QPSK



Date: 20.OCT.2019 01:40:19

Highest Channel / 5MHz / 16QAM



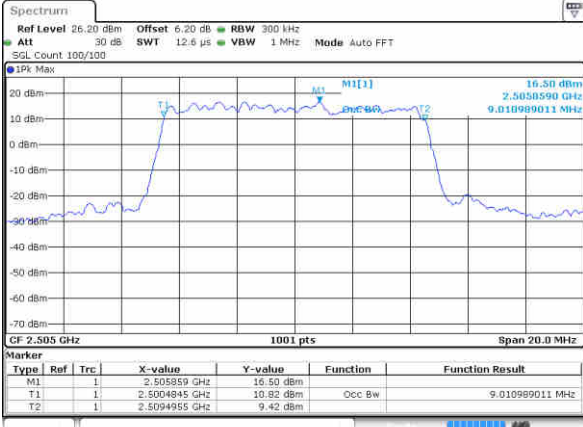
Date: 20.OCT.2019 01:40:36





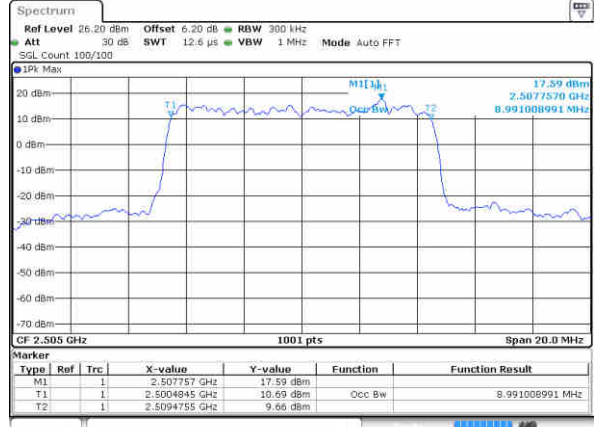
LTE Band 7

Lowest Channel / 10MHz / QPSK



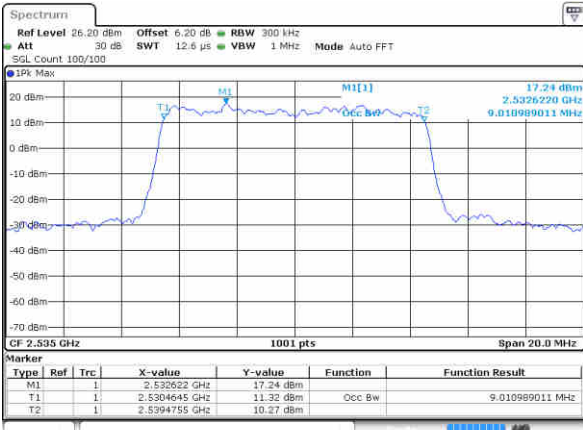
Date: 20.OCT.2019 02:20:23

Lowest Channel / 10MHz / 16QAM



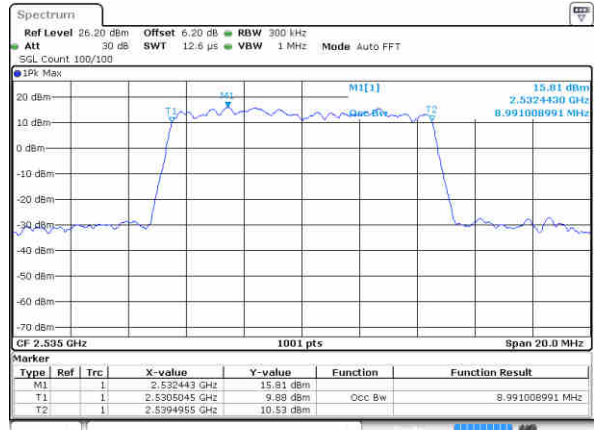
Date: 20.OCT.2019 01:55:12

Middle Channel / 10MHz / QPSK



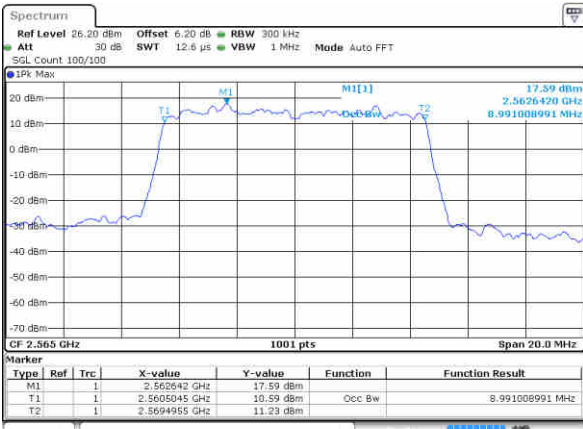
Date: 20.OCT.2019 01:55:52

Middle Channel / 10MHz / 16QAM



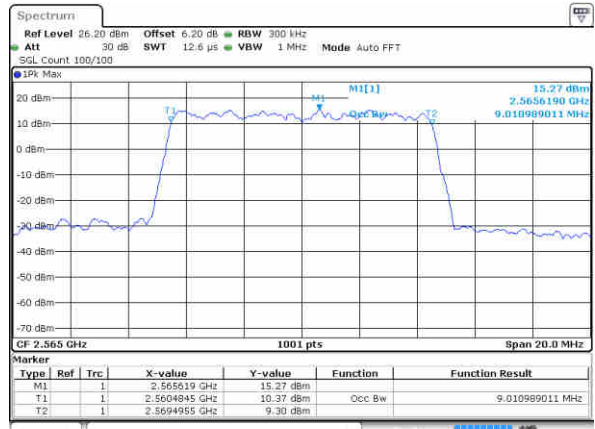
Date: 20.OCT.2019 01:55:32

Highest Channel / 10MHz / QPSK



Date: 20.OCT.2019 01:56:12

Highest Channel / 10MHz / 16QAM

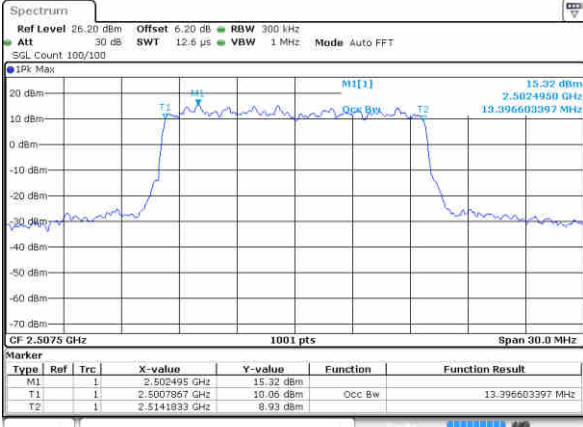


Date: 20.OCT.2019 01:56:32



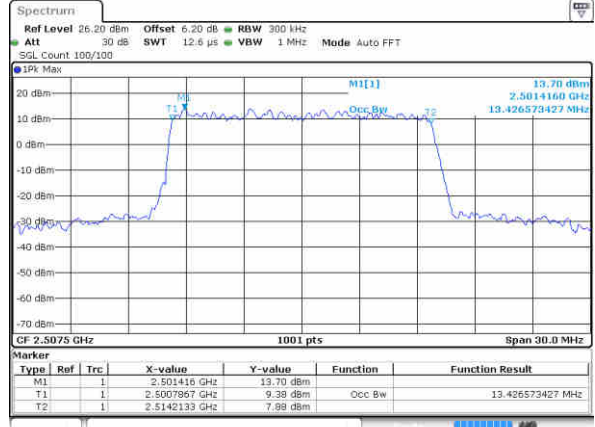
LTE Band 7

Lowest Channel / 15MHz / QPSK



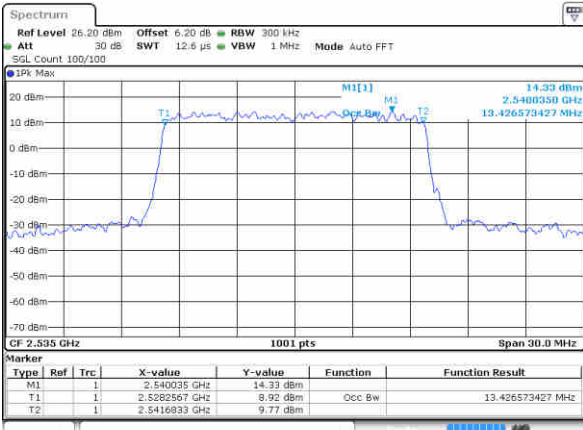
Date: 20.OCT.2019 02:34:38

Lowest Channel / 15MHz / 16QAM



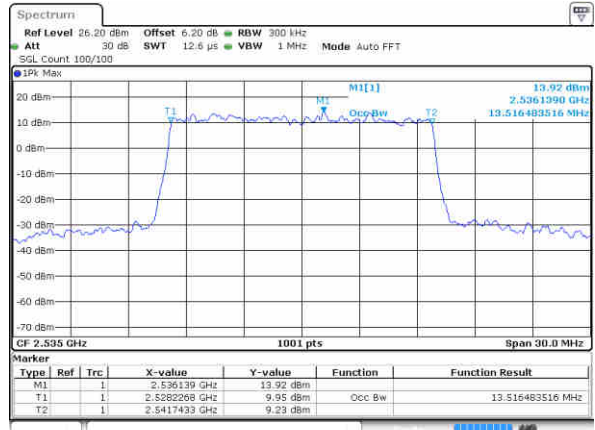
Date: 20.OCT.2019 02:34:18

Middle Channel / 15MHz / QPSK



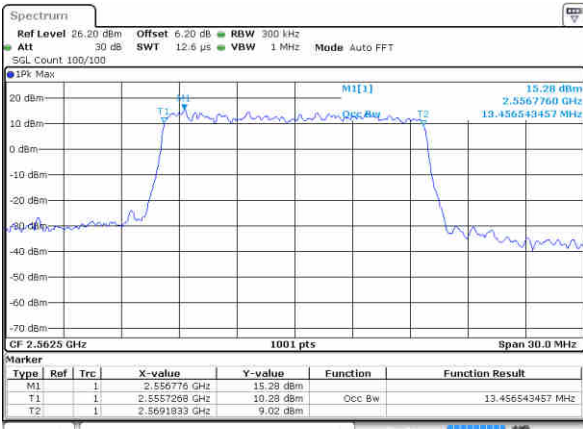
Date: 20.OCT.2019 02:34:58

Middle Channel / 15MHz / 16QAM



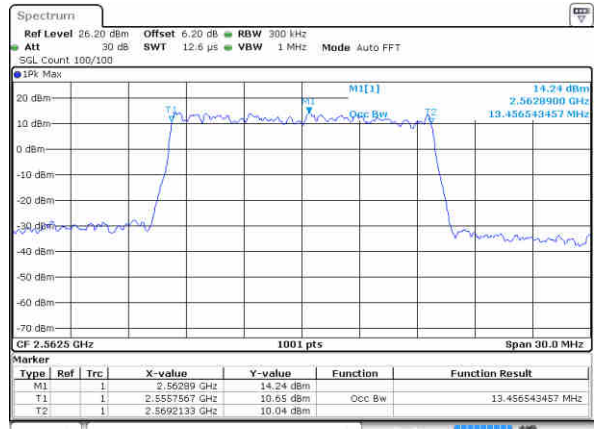
Date: 20.OCT.2019 02:35:18

Highest Channel / 15MHz / QPSK



Date: 20.OCT.2019 02:35:59

Highest Channel / 15MHz / 16QAM

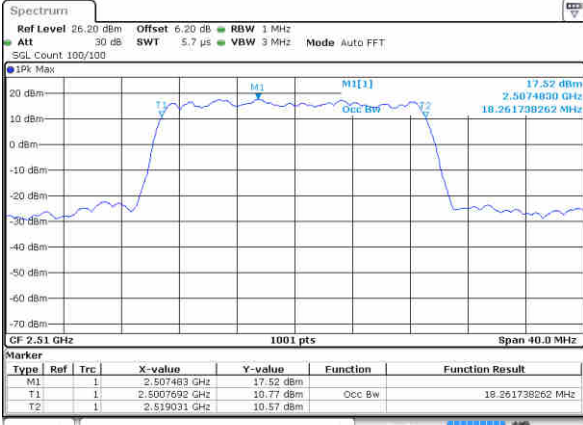


Date: 20.OCT.2019 02:35:39



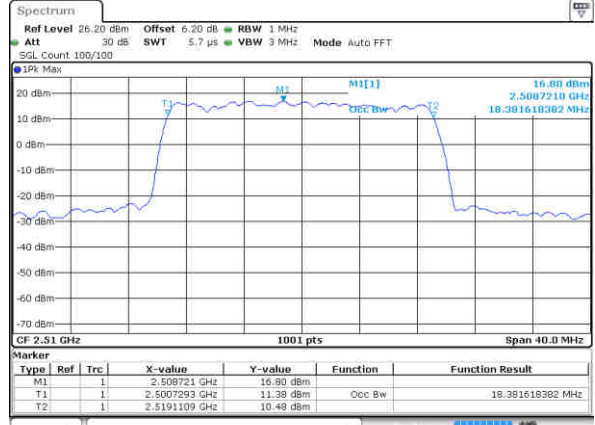
LTE Band 7

Lowest Channel / 20MHz / QPSK



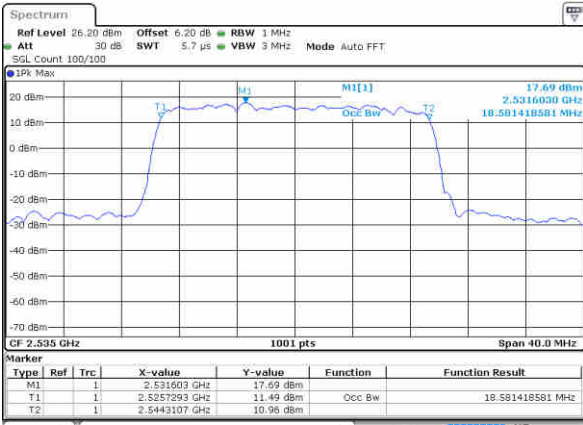
Date: 20.OCT.2019 02:51:07

Lowest Channel / 20MHz / 16QAM



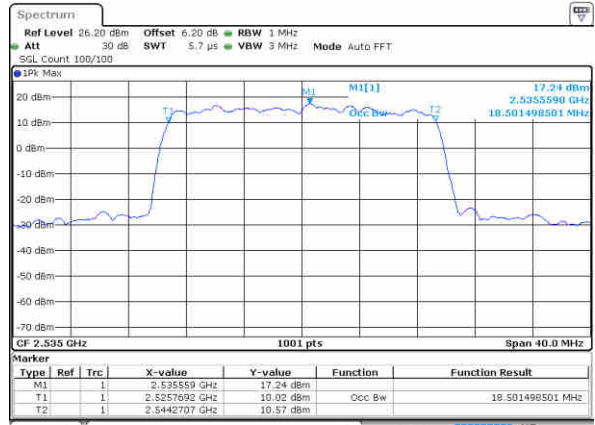
Date: 20.OCT.2019 02:50:47

Middle Channel / 20MHz / QPSK



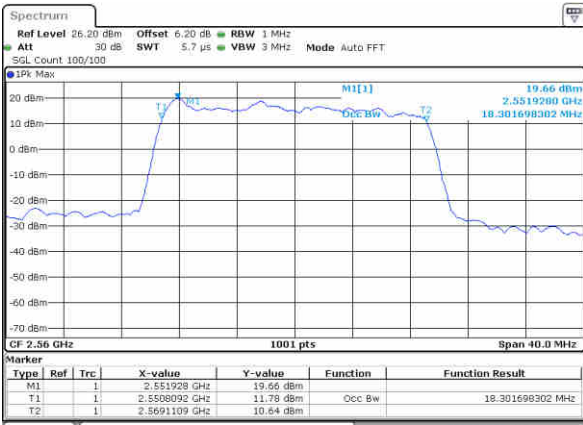
Date: 20.OCT.2019 02:51:27

Middle Channel / 20MHz / 16QAM



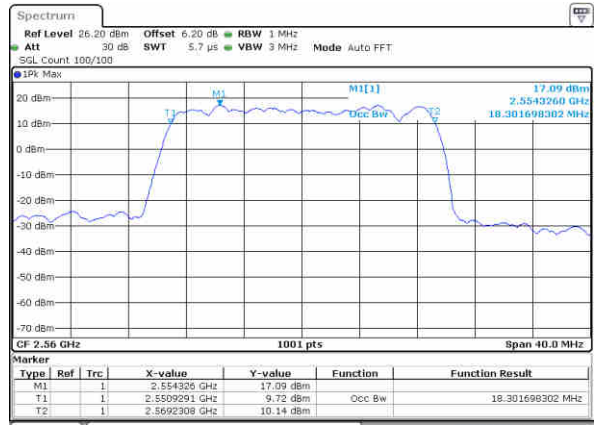
Date: 20.OCT.2019 02:51:47

Highest Channel / 20MHz / QPSK



Date: 20.OCT.2019 02:52:27

Highest Channel / 20MHz / 16QAM

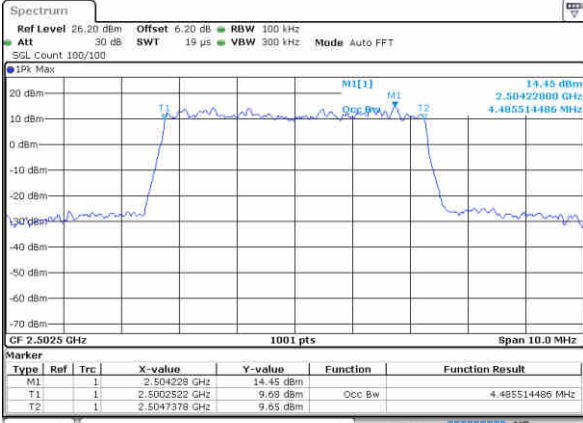


Date: 20.OCT.2019 02:52:07



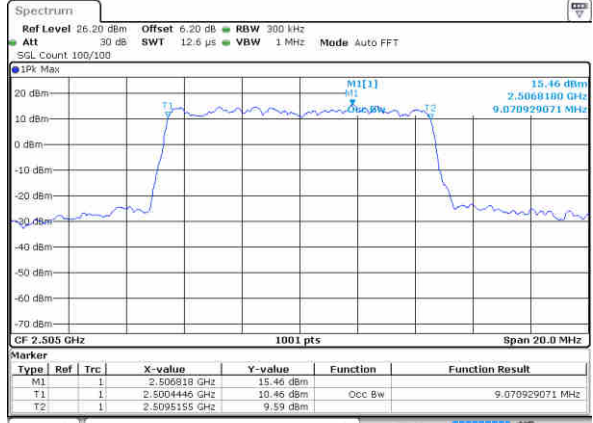
LTE Band 7

Lowest Channel / 5MHz / 64QAM



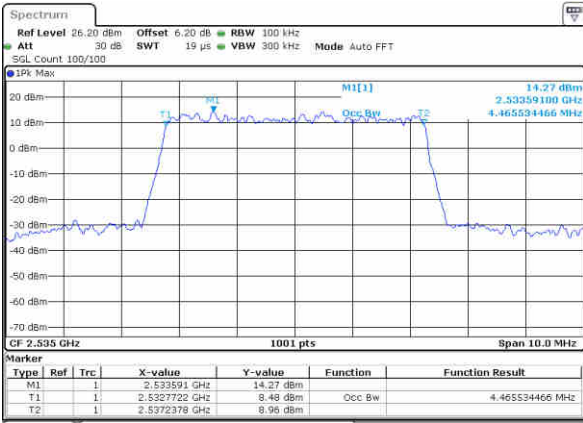
Date: 20.OCT.2019 03:07:16

Lowest Channel / 10MHz / 64QAM



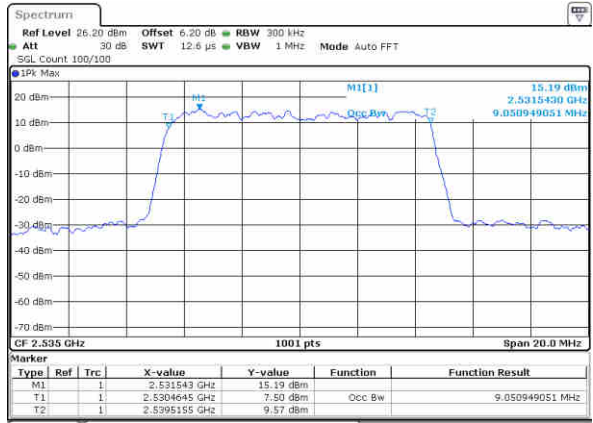
Date: 20.OCT.2019 03:15:30

Middle Channel / 5MHz / 64QAM



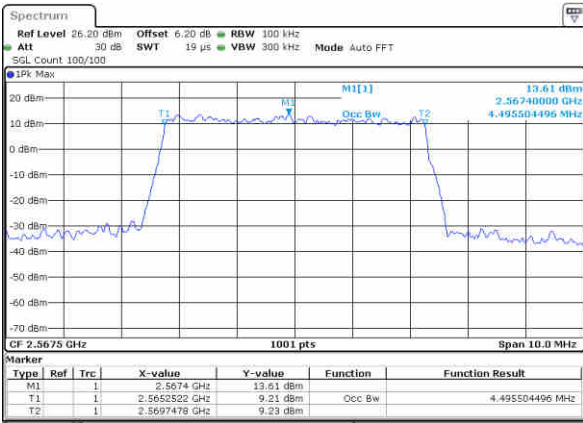
Date: 20.OCT.2019 03:07:26

Middle Channel / 10MHz / 64QAM



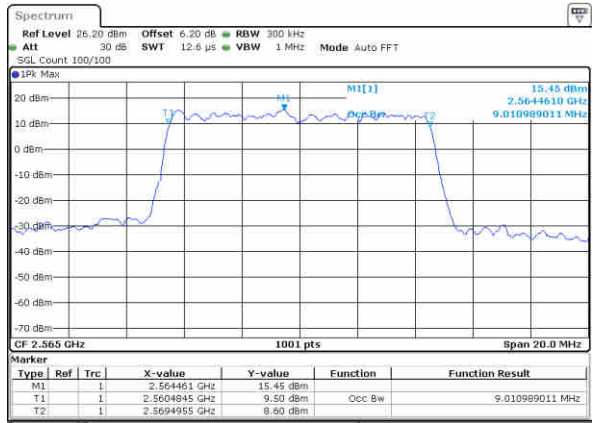
Date: 20.OCT.2019 03:15:40

Highest Channel / 5MHz / 64QAM



Date: 20.OCT.2019 03:07:36

Highest Channel / 10MHz / 64QAM

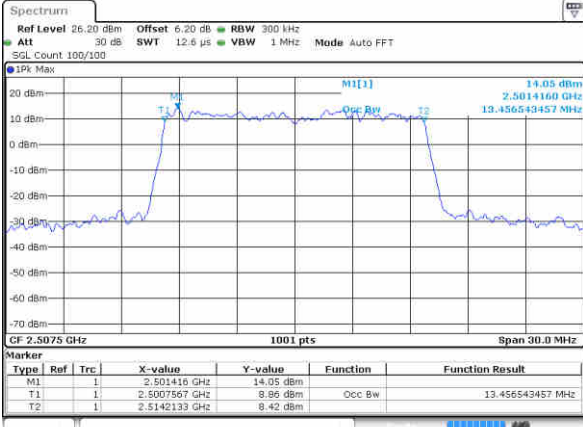


Date: 20.OCT.2019 03:15:50



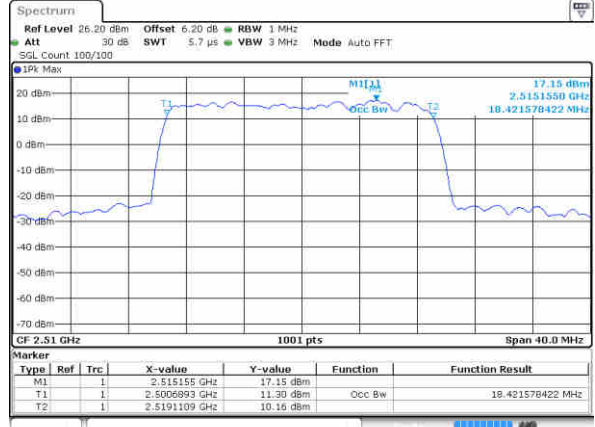
LTE Band 7

Lowest Channel / 15MHz / 64QAM



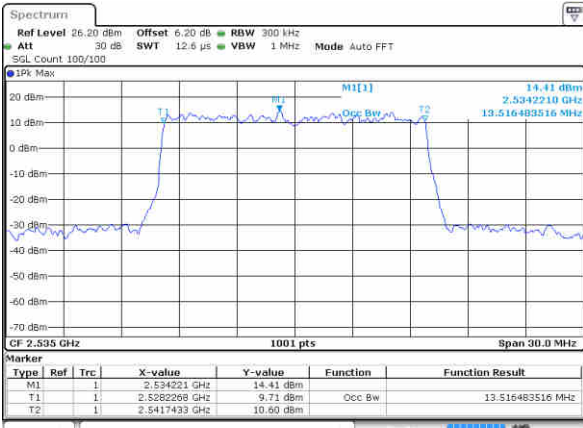
Date: 20.OCT.2019 03:23:44

Lowest Channel / 20MHz / 64QAM



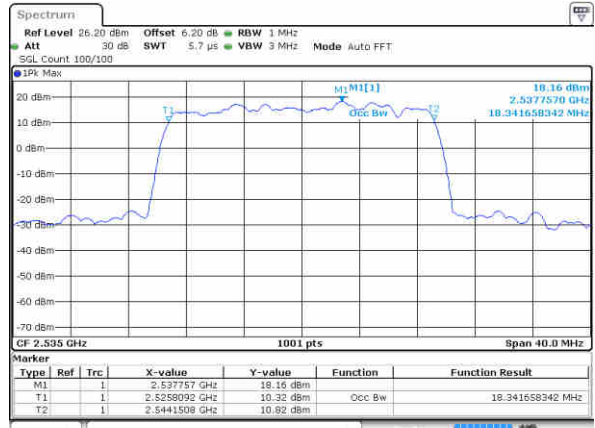
Date: 20.OCT.2019 03:31:58

Middle Channel / 15MHz / 64QAM



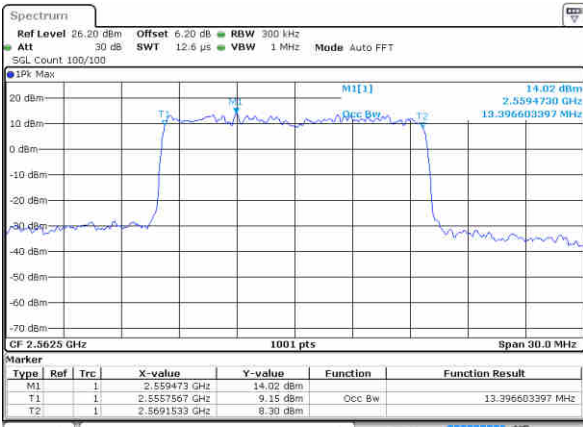
Date: 20.OCT.2019 03:23:54

Middle Channel / 20MHz / 64QAM



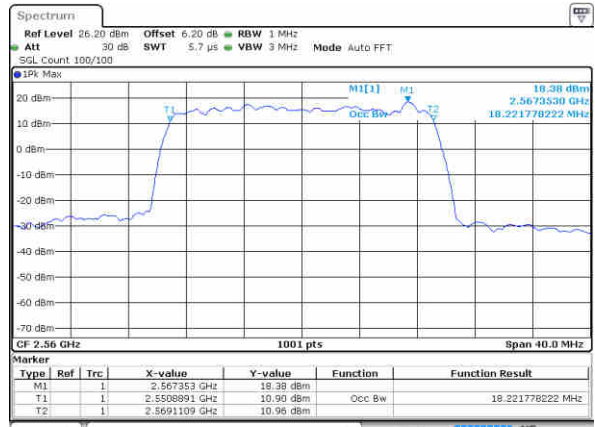
Date: 20.OCT.2019 03:32:09

Highest Channel / 15MHz / 64QAM



Date: 20.OCT.2019 03:24:04

Highest Channel / 20MHz / 64QAM



Date: 20.OCT.2019 03:32:19

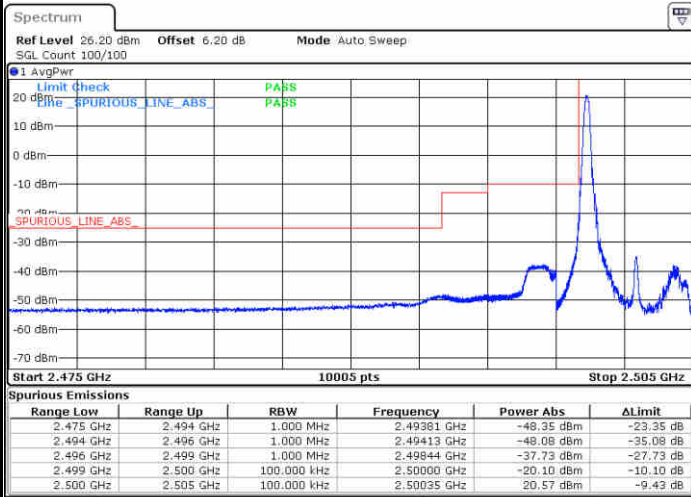




# Conducted Band Edge

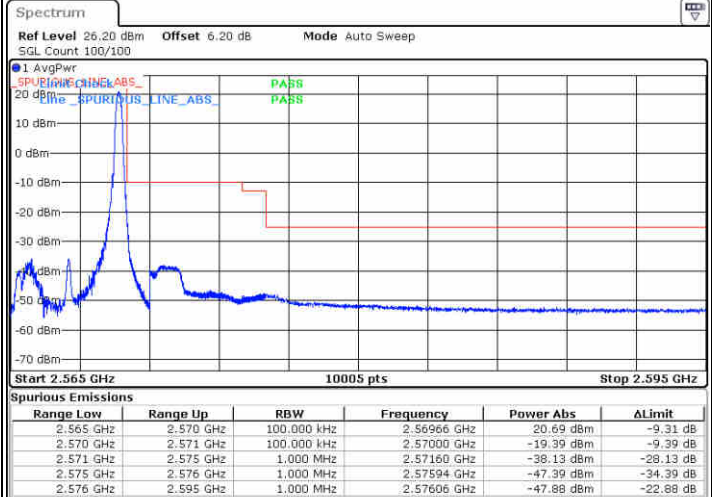
## LTE Band 7 / 5MHz / QPSK

### Lowest Band Edge / 1 RB



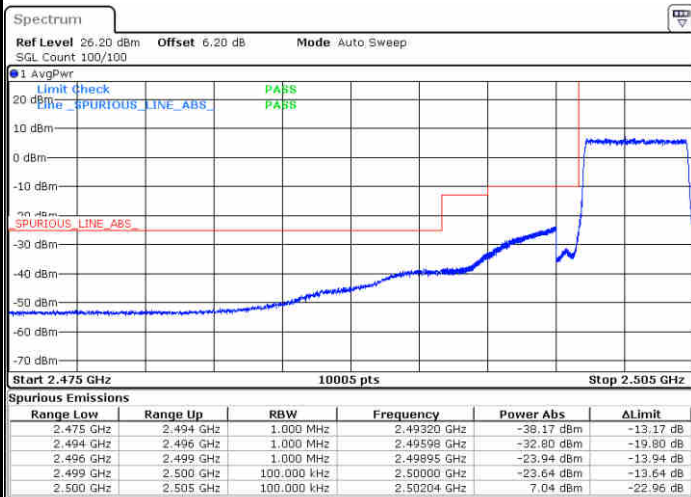
Date: 20.OCT.2019 01:41:55

### Highest Band Edge / 1 RB



Date: 20.OCT.2019 01:49:52

### Lowest Band Edge / Full RB



Date: 20.OCT.2019 01:45:20

### Highest Band Edge / Full RB



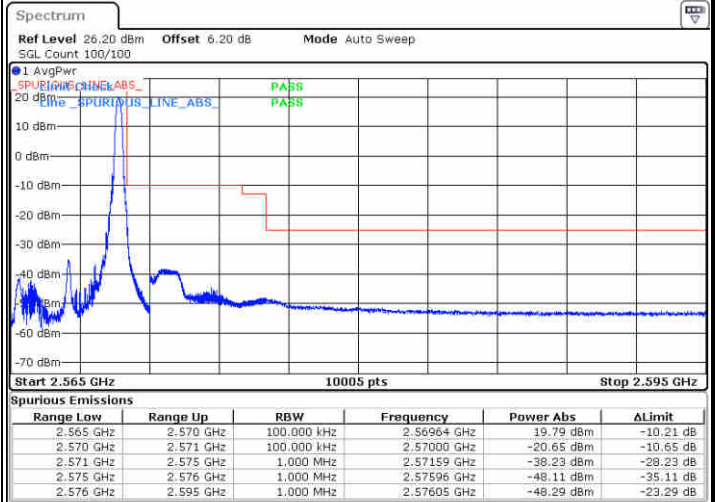
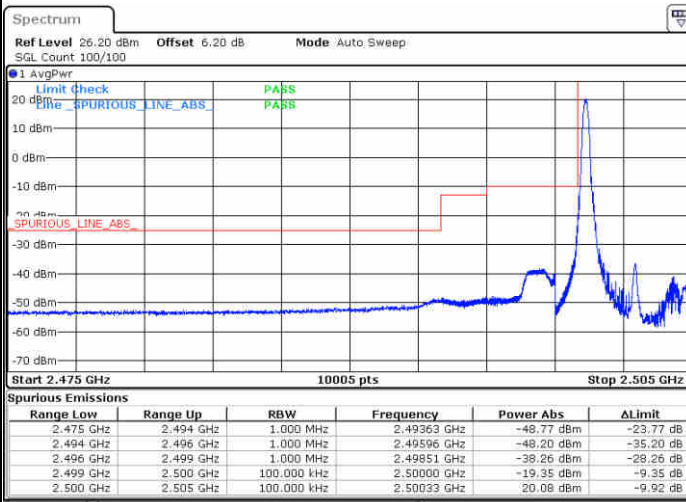
Date: 20.OCT.2019 01:46:28



LTE Band 7 / 5MHz / 16QAM

Lowest Band Edge / 1 RB

Highest Band Edge / 1 RB

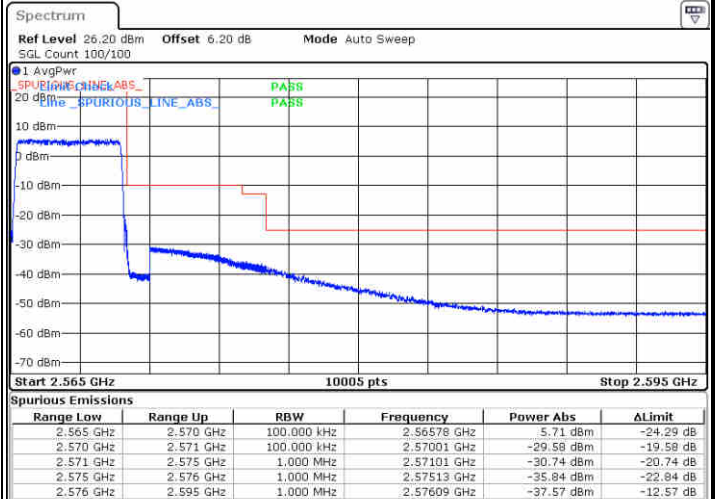
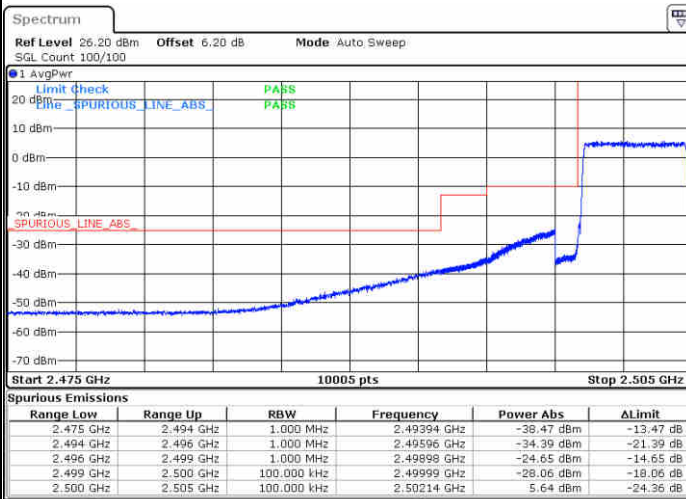


Date: 20.OCT.2019 01:43:03

Date: 20.OCT.2019 01:48:44

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



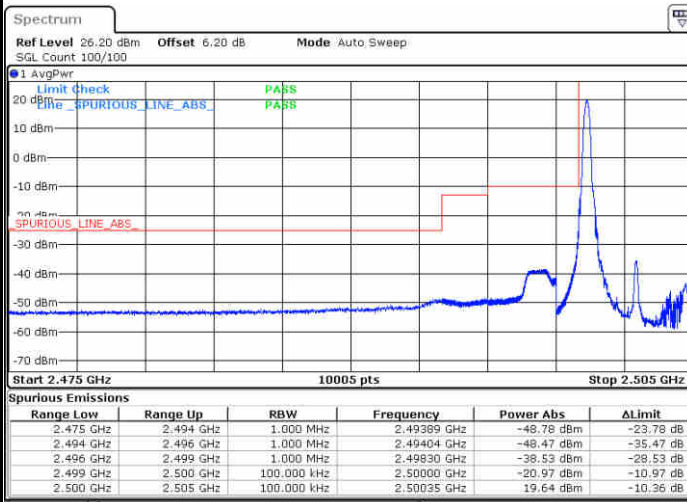
Date: 20.OCT.2019 01:44:12

Date: 20.OCT.2019 01:47:36



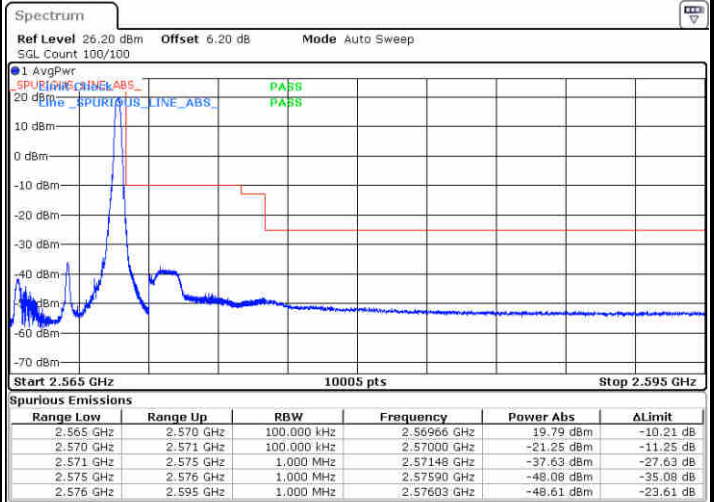
LTE Band 7 / 5MHz / 64QAM

Lowest Band Edge / 1RB



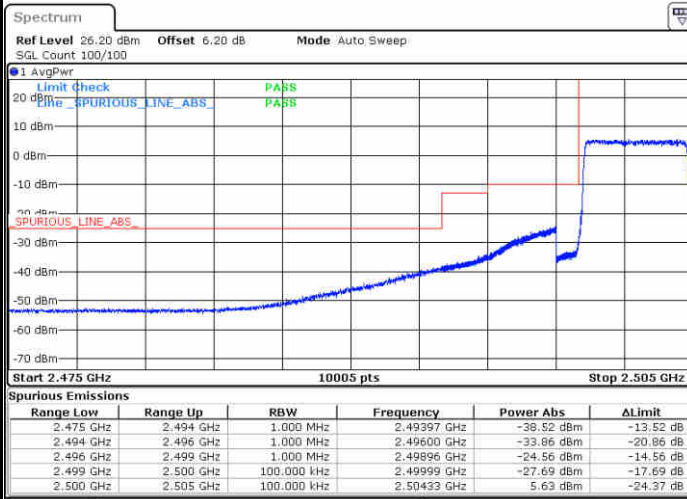
Date: 20.OCT.2019 03:11:56

Highest Band Edge / 1 RB



Date: 20.OCT.2019 03:14:12

Lowest Band Edge / Full RB



Date: 20.OCT.2019 03:13:04

Highest Band Edge / Full RB



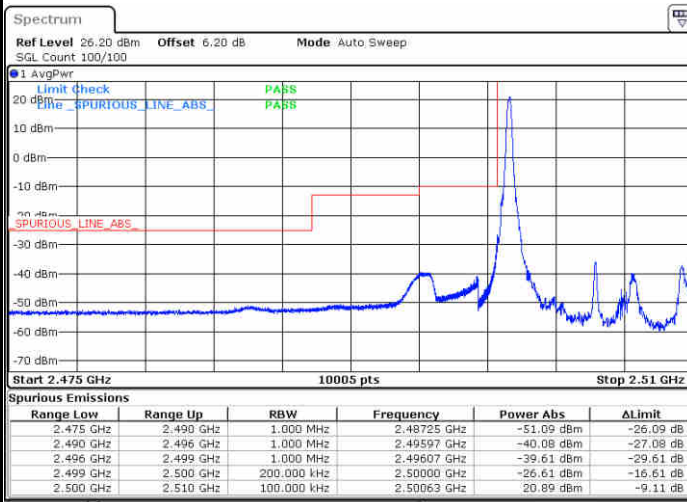
Date: 20.OCT.2019 03:15:20





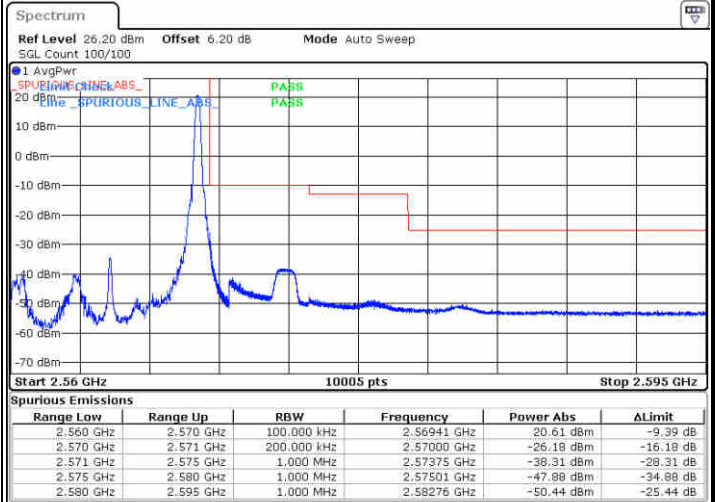
LTE Band 7 / 10MHz / QPSK

Lowest Band Edge / 1 RB



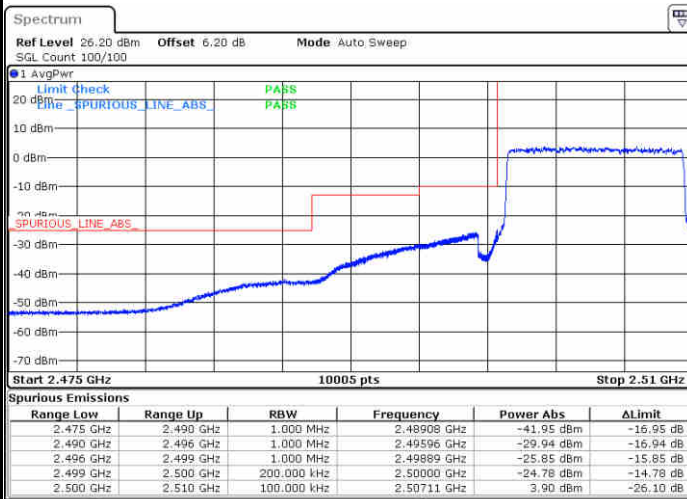
Date: 20.OCT.2019 01:57:51

Highest Band Edge / 1 RB



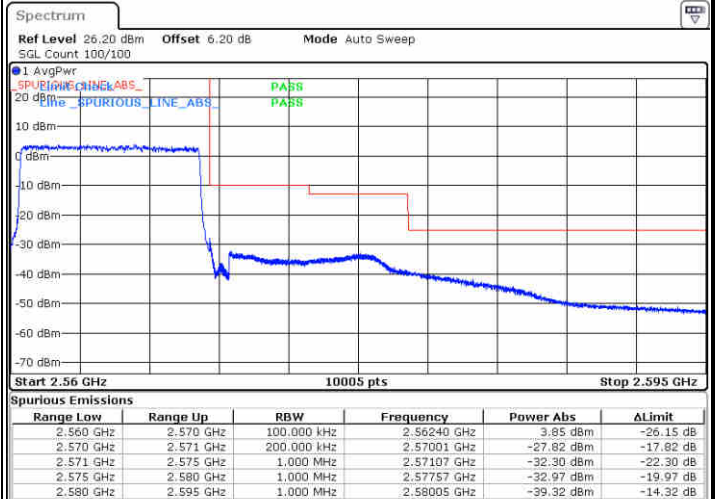
Date: 20.OCT.2019 02:28:46

Lowest Band Edge / Full RB



Date: 20.OCT.2019 02:24:14

Highest Band Edge / Full RB

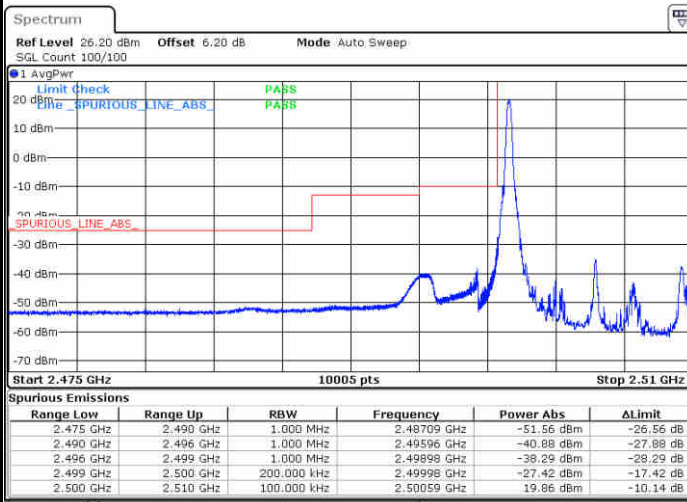


Date: 20.OCT.2019 02:25:22



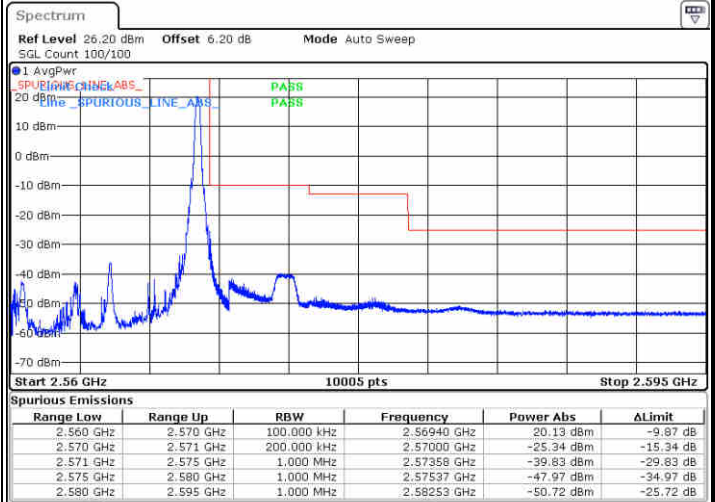
LTE Band 7 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



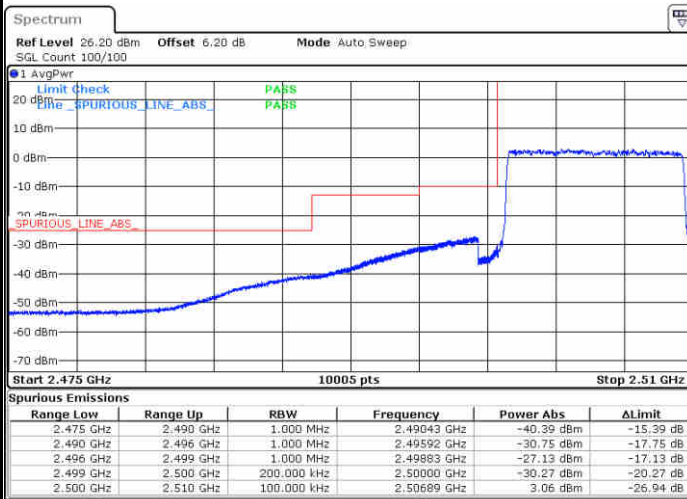
Date: 20.OCT.2019 02:21:57

Highest Band Edge / 1 RB



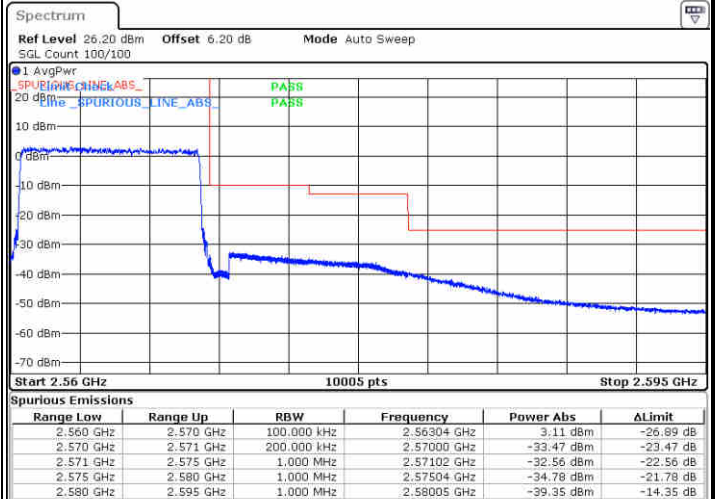
Date: 20.OCT.2019 02:27:38

Lowest Band Edge / Full RB



Date: 20.OCT.2019 02:23:06

Highest Band Edge / Full RB

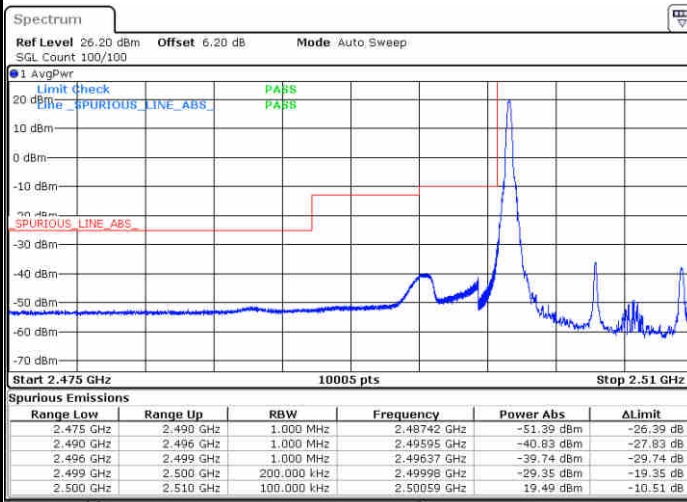


Date: 20.OCT.2019 02:26:30



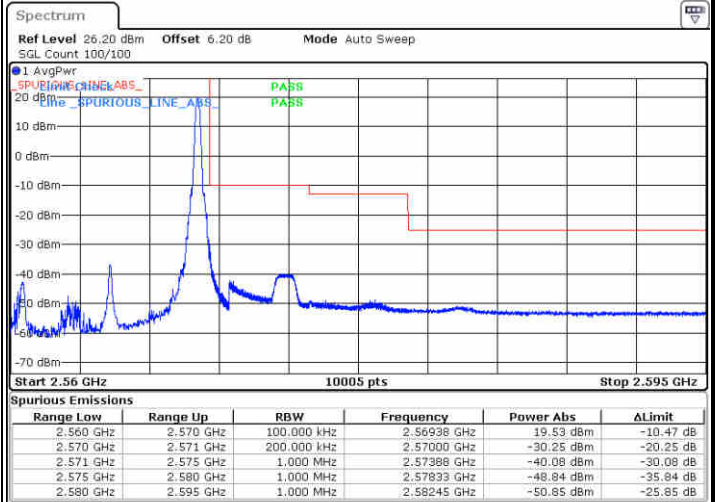
LTE Band 7 / 10MHz / 64QAM

Lowest Band Edge / 1 RB



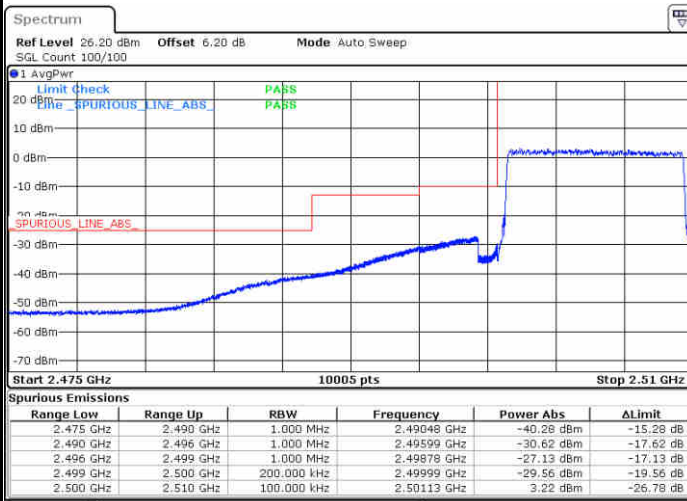
Date: 20.OCT.2019 03:20:10

Highest Band Edge / 1 RB



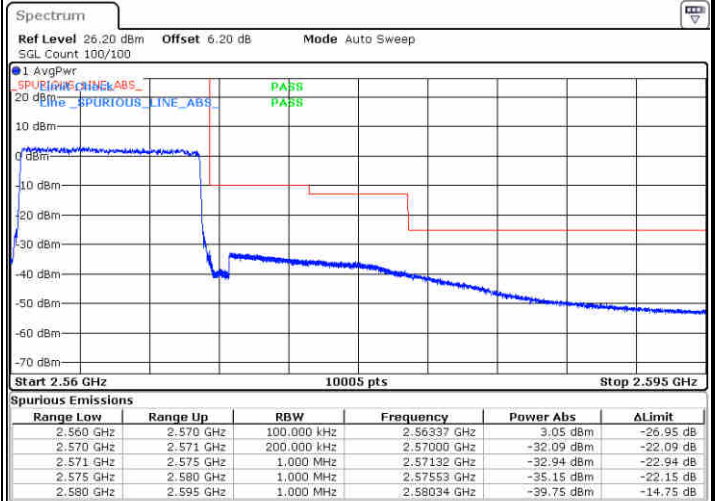
Date: 20.OCT.2019 03:22:26

Lowest Band Edge / Full RB



Date: 20.OCT.2019 03:21:18

Highest Band Edge / Full RB

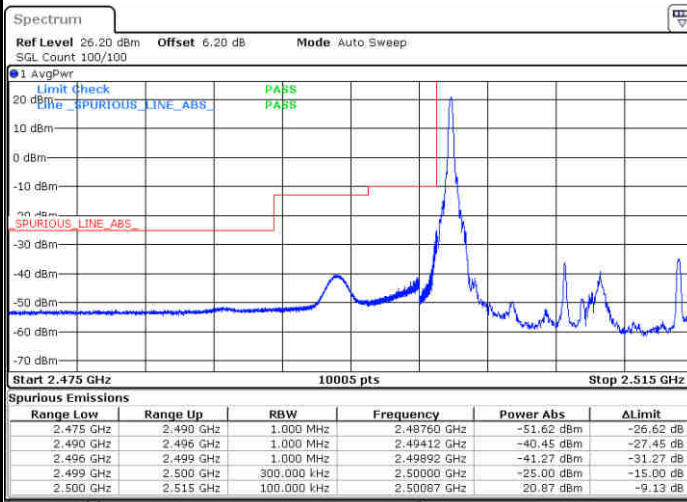


Date: 20.OCT.2019 03:23:34



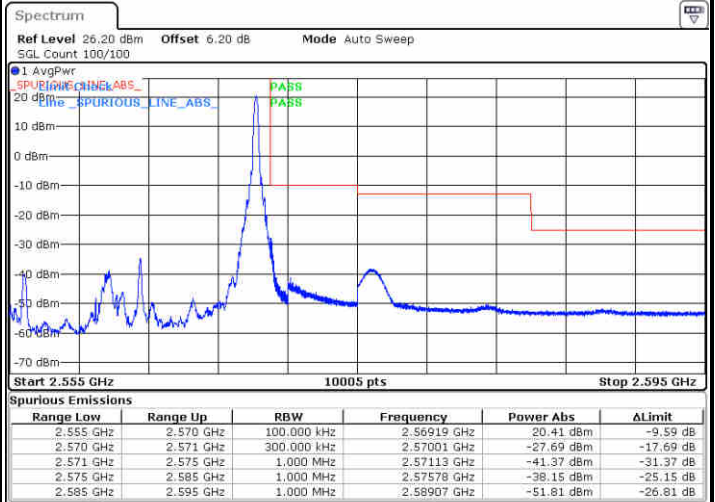
LTE Band 7 / 15MHz / QPSK

Lowest Band Edge / 1 RB



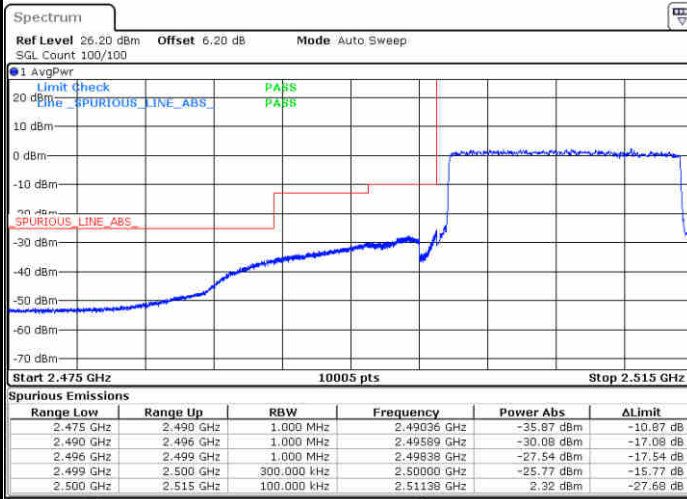
Date: 20.OCT.2019 02:37:17

Highest Band Edge / 1 RB



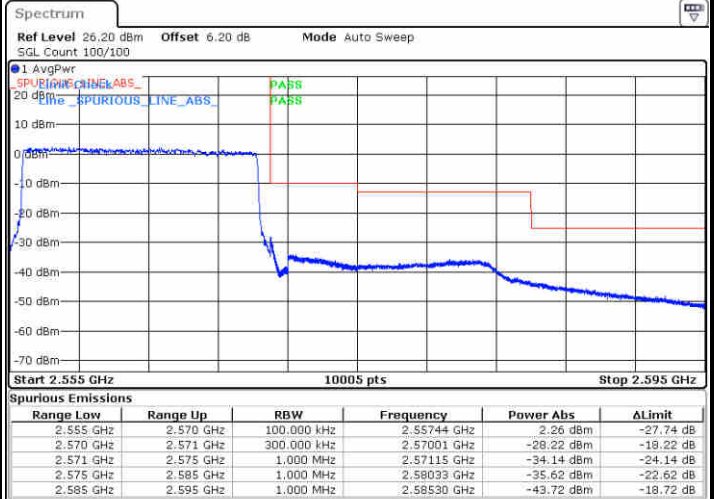
Date: 20.OCT.2019 02:45:14

Lowest Band Edge / Full RB



Date: 20.OCT.2019 02:40:42

Highest Band Edge / Full RB



Date: 20.OCT.2019 02:41:50