FCC RF Test Report

APPLICANT	:	Fibocom Wireless Inc.
EQUIPMENT	:	5G module
BRAND NAME	:	Fibocom
MODEL NAME	:	FM350R-GL
FCC ID	:	ZMOFM350RGL
STANDARD	:	47 CFR Part 2, 96
CLASSIFICATION	:	Citizens Band End User Devices (CBE)
EQUIPMENT TYPE	:	End User Equipment
TEST DATE(S)	:	May 07, 2024 ~ Jun. 07, 2024

We, Sporton International Inc. (ShenZhen), would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26 and shown compliance with the applicable technical standards.

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

Jason Jia

Approved by: Jason Jia

ACCREDITED Cert #5145.01

Sporton International Inc. (ShenZhen)

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

People's Republic of China

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History of this test report

Report No.	Version	Description	Issued Date
FG431133H	01	Initial issue of report	Jun. 21, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.3	§2.1046	Conducted Output Power	Reporting only	-
-	§96.41	Peak-to-Average Ratio	Not Applicable	Not applicable for End User Devices
3.4	§96.41	Maximum E.I.R.P	Pass	-
		Maximum Power Spectral Density	Not Applicable	Not applicable for End User Devices
3.5	§2.1049 §96.41	Occupied Bandwidth	Reporting only	-
3.6	§2.1051 §96.41	Conducted Band Edge Measurement Adjacent Channel Leakage Ratio	Pass	-
3.7	§2.1051 §96.41	Conducted Spurious Emission	Pass	
3.8	§2.1055	Frequency Stability for Temperature & Voltage	Pass	-
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	Under limit 12.28 dB at 10848.00 MHz

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Applicant

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.2 Manufacturer

Fibocom Wireless Inc.
1101,Tower A, Building 6, Shenzhen International Innovation Valley, Dashi 1st Rd, Nanshan,Shenzhen, China.

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	5G module
Brand Name	Fibocom
Model Name	FM350R-GL
FCC ID	ZMOFM350RGL
Tx Frequency	LTE Band 42 : 3550 MHz ~ 3600 MHz LTE Band 43 : 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 42 : 3550 MHz ~ 3600 MHz LTE Band 43 : 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz
Bandwidth	5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	LTE Band 42: 21.32 dBm LTE Band 43: 21.23 dBm LTE Band 48: 21.53 dBm LTE CA_42C : 20.62 dBm LTE CA_48C : 20.73 dBm
Antenna Gain	LTE Band 42: 1 dBi LTE Band 43: 1 dBi LTE Band 48: 1 dBi
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM
IMEI Code	Conducted: 863687070000500 Radiation: 863687070001516 for sample 1 863687070000526 for sample 2
HW Version	V1.1
SW Version	81601.0000.00.29.24.13
EUT Stage	Identical Prototype

Remark:

1. The device has two optional antennas, they are same antenna gain, RSE pretest the two antennas, choose worst antenna to perform final test and recorded in the report.

2. There are two samples under test, sample 1 is 1st source and sample 2 is 2nd source, the detailed differences could be referred to the FM350R-GL_Operational Description of Product Equality Declaration

which is exhibit separately. According to the differences, sample 1 perform full test, sample 2 verify conducted power and found less than sample 1, and sample 2 additional verify the worst case of RSE.

1.4 Maximum Conducted Power and Emission Designator

LTE Band 42		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	3552.5~3597.5	0.1352	4M48G7D	0.1072	4M48W7D
10	3555.0~3595.0	0.1355	9M01G7D	0.1057	9M01W7D
15	3557.5~3592.5	0.1346	13M5G7D	0.1069	13M5W7D
20	3560.0~3590.0	0.1355	17M9G7D	0.1079	17M9W7D

LTE Band 43		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	3602.5~3697.5	0.1312	4M48G7D	0.1021	4M48W7D
10	3605.0~3695.0	0.1303	9M01G7D	0.1030	9M01W7D
15	3607.5~3692.5	0.1288	13M5G7D	0.1019	13M5W7D
20	3610.0~3690.0	0.1327	17M9G7D	0.1035	17M9W7D

LTE Band 48		QPSK		16QAM/64QAM/256QAM	
BW (MHz)	Frequency Range (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5	3552.5~3697.5	0.1384	4M48G7D	0.1081	4M48W7D
10	3555~3695	0.1387	9M01G7D	0.1064	9M01W7D
15	3557.5~3692.5	0.1361	13M5G7D	0.1067	13M5W7D
20	3560~3690	0.1422	17M9G7D	0.1104	17M9W7D

LTE Band 42 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz) Frequency (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5MHz+20MHz	0.1135	23M0G7D	0.0944	23M0W7D
10MHz+20MHz	0.1135	28M1G7D	0.0962	27M8W7D
15MHz+20MHz	0.1143	32M7G7D	0.0968	32M7W7D
20MHz+5MHz	0.1148	23M1G7D	0.0946	23M2W7D
20MHz+10MHz	0.1127	28M1G7D	0.0942	28M1W7D
20MHz+15MHz	0.1151	32M3G7D	0.0968	32M8W7D
20MHz+20MHz	0.1153	37M6G7D	0.0906	37M3W7D

LTE Band 48 CA	QPSK		16QAM/64QAM/256QAM	
BW (MHz) Frequency (MHz)	Maximum Conducted power (W)	Emission Designator (99%OBW)	Maximum Conducted power (W)	Emission Designator (99%OBW)
5MHz+20MHz	0.1089	23M0G7D	0.0873	23M0W7D
10MHz+20MHz	0.1076	28M1G7D	0.0877	27M8W7D
15MHz+20MHz	0.1094	32M7G7D	0.0853	32M7W7D
20MHz+5MHz	0.1076	23M1G7D	0.0865	23M2W7D
20MHz+10MHz	0.1069	28M1G7D	0.0869	28M1W7D
20MHz+15MHz	0.1072	32M3G7D	0.0865	32M8W7D
20MHz+20MHz	0.1183	37M6G7D	0.0897	37M3W7D

Note:

1. LTE Band 48 overlaps the entire frequency range of Band 42/43, and Band 48 power > Band 42/43 power, therefore the conducted test results of Band 48 provided in this report cover Band 42/43.
2. LTE Band CA_48C overlaps the entire frequency range of Band CA_42C, and Band 48C power > Band 42C power, therefore the conducted test results of Band 48C provided in this report cover Band 42C.
3. All modulations have been tested, only the worst test results of PSK & QAM are shown in the report.

1.5 Testing Site

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

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

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH01-SZ	CN1256	421272

1.6 Test Software

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

1.7 Applied Standards

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

- ANSI C63.26-2015
- 47 CFR Part 2, 96
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 940660 D01 Part 96 CBRS v03
- 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

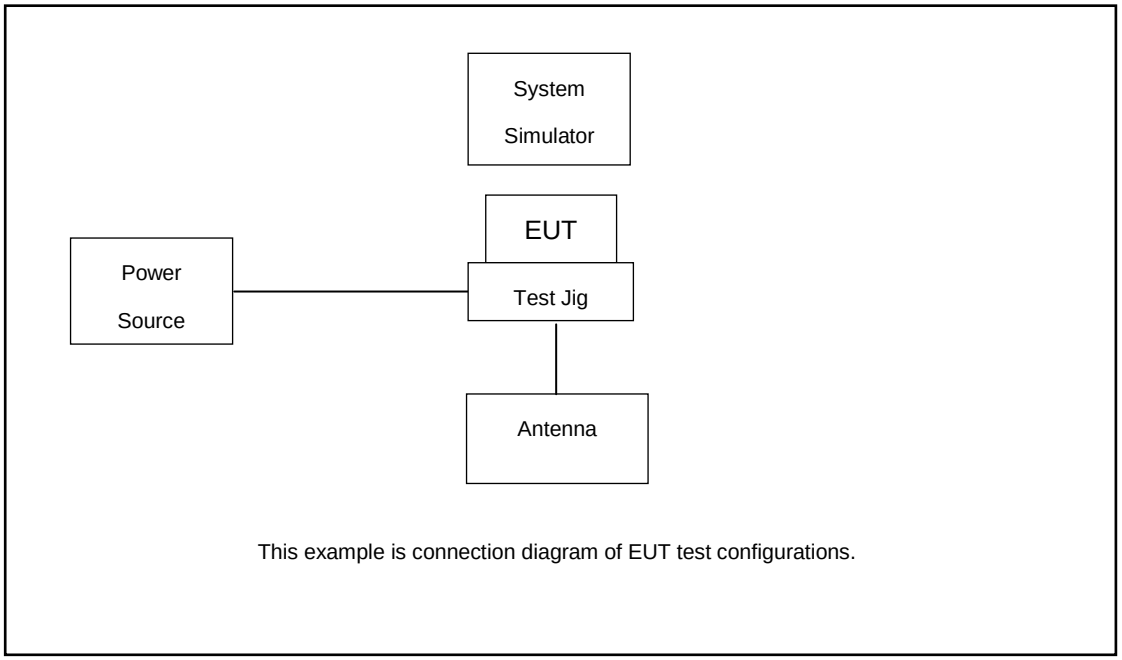
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (X plane) were recorded in this report.

Test Items	Band	Bandwidth (MHz)						Modulation				RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	42	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	43	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	48	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Adjacent Channel Leakage Ratio	48	-	-	v	v	v	v	v	v	v		v		v	v	v	v
26dB and 99% Bandwidth	48	-	-	v	v	v	v	v	v					v		v	
Conducted Band Edge	48	-	-	v	v	v	v	v	v	v		v		v	v	v	v
Conducted Spurious Emission	48	-	-	v	v	v	v	v				v		v	v	v	v
E.I.R.P	42	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	43	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	48	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v	v
Frequency Stability	48	-	-		v			v				v				v	
Radiated Spurious Emission	48	Worst Case														v	
Remark	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power																

Test Items	Band	Bandwidth (MHz)								Modulation				RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	10+10	20+5	5+20	QPSK	16QAM	64 QAM	256 QAM	1	Half	Full	L	M	H
Max. Output Power	42C	v	v	v	v	v	-	v	v	v	v	v	v	v			v	v	v
	48C	v	v	v	v	v	-	v	v	v	v	v	v	v			v	v	v
26dB and 99% Bandwidth	48C	v	v	v	v	v	-	v	v	v	v					v		v	
Conducted Band Edge	48C	v	v	v	v	v	-	v	v	v	v	v		v		v	v	v	v
Conducted Spurious Emission	48C	v	v	v	v	v	-	v	v	v				v			v	v	v
Adjacent Channel Leakage Ratio	48C	v	v	v	v	v	-	v	v	v	v	v		v		v	v	v	v
E.I.R.P.	42C	v	v	v	v	v	-	v	v	v	v	v	v	v			v	v	v
	48C	v	v	v	v	v	-	v	v	v	v	v	v	v			v	v	v
Radiated Spurious Emission	48C	Worst Case																v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. For QAM modulation mode, the whole testing has assessed 16QAM&64QAM mode by referring to the higher conducted power.																		

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

2.3 Support Unit used in test configuration

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.	Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
3.	Test jig	N/A	N/A	N/A	N/A	N/A
4.	Antenna	N/A	N/A	N/A	N/A	N/A
5.	Adapter	N/A	N/A	N/A	N/A	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 and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 5.5 dB and 10dB attenuator.

Example :

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

= 5.5 + 10 = 15.5 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	55340	55990	56640
	Frequency	3560.0	3625.0	3690.0
15	Channel	55315	55990	56665
	Frequency	3557.5	3625.0	3692.5
10	Channel	55290	55990	56690
	Frequency	3555.0	3625.0	3695.0
5	Channel	55265	55990	56715
	Frequency	3552.5	3625.0	3697.5

LTE Band 42 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	43190	43340	43490
	Frequency	3560	3575	3590
15	Channel	43165	43340	43515
	Frequency	3557.5	3575	3592.5
10	Channel	43140	43340	43540
	Frequency	3555	3575	3595
5	Channel	43115	43340	43565
	Frequency	3552.5	3575	3597.5

LTE Band 43 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	43690	44090	44490
	Frequency	3610	3650	3690
15	Channel	43665	44090	44515
	Frequency	3607.5	3650	3692.5
10	Channel	43640	44090	44540
	Frequency	3605	3650	3695
5	Channel	43615	44090	44565
	Frequency	3602.5	3650	3697.5

LTE Band 48C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
5 + 20	PCC	Channel	55273	55898	56523
		Frequency	3553.3	3615.8	3678.3
	SCC	Channel	55390	56015	56640
		Frequency	3565	3627.5	3690
20 + 5	PCC	Channel	55340	55965	56590
		Frequency	3560	3622.5	3685
	SCC	Channel	55457	56082	56707
		Frequency	3571.7	3634.2	3696.7
10 + 20	PCC	Channel	55295	55896	56496
		Frequency	3555.5	3615.6	3675.6
	SCC	Channel	55439	56040	56640
		Frequency	3569.9	3630	3690
20 + 10	PCC	Channel	55340	55941	56541
		Frequency	3560	3620.1	3680.1
	SCC	Channel	55484	56085	56685
		Frequency	3574.4	3634.5	3694.5
15 + 20	PCC	Channel	55318	55893	56469
		Frequency	3557.8	3615.3	3672.9
	SCC	Channel	55489	56064	56640
		Frequency	3574.9	3632.4	3690
20 + 15	PCC	Channel	55340	55916	56491
		Frequency	3560	3617.6	3675.1
	SCC	Channel	55511	56087	56662
		Frequency	3577.1	3634.7	3692.2
20 +20	PCC	Channel	55340	55891	56442
		Frequency	3560	3615.1	3670.2
	SCC	Channel	55538	56089	56640
		Frequency	3579.8	3634.9	3690

LTE Band 42C_CA Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	43190	43340	43292
		Frequency	3560	3575	3570.2
	SCC	Channel	43388	43538	43490
		Frequency	3579.8	3594.8	3590
20 + 15	PCC	Channel	43190	43340	43344
		Frequency	3560	3575	3575.4
	SCC	Channel	43361	43511	43515
		Frequency	3577.1	3592.1	3592.5
15 + 20	PCC	Channel	43165	43340	43319
		Frequency	3557.5	3575	3572.9
	SCC	Channel	43336	43511	43490
		Frequency	3574.6	3592.1	3590
20 + 10	PCC	Channel	43190	43340	43396
		Frequency	3560	3575	3580.6
	SCC	Channel	43334	43484	43540
		Frequency	3574.4	3589.4	3595
10 + 20	PCC	Channel	43140	43340	43346
		Frequency	3555	3575	3575.6
	SCC	Channel	43284	43484	43490
		Frequency	3569.4	3589.4	3590
20 + 5	PCC	Channel	43190	43340	43448
		Frequency	3560	3575	3585.8
	SCC	Channel	43307	43457	43565
		Frequency	3571.7	3586.7	3597.5
5 + 20	PCC	Channel	43115	43340	43373
		Frequency	3552.5	3575	3578.3
	SCC	Channel	43232	43457	43490
		Frequency	3564.2	3586.7	3590

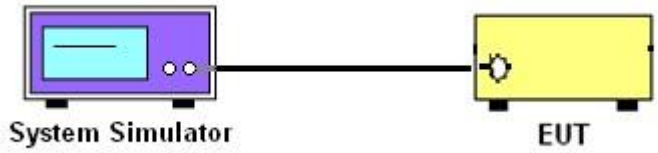
3 Conducted Test Items

3.1 Measuring Instruments

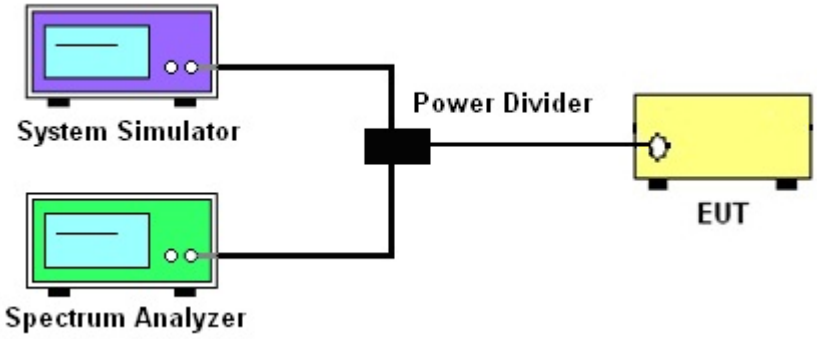
See list of measuring instruments of this test report.

3.2 Test Setup

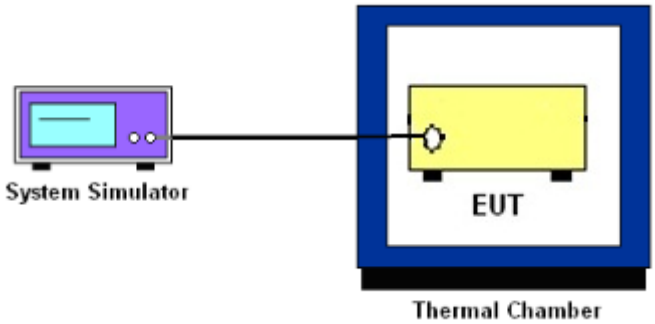
3.2.1 Conducted Output Power / ACLR



3.2.2 26dB & 99% Occupied Bandwidth, Conducted Band-Edge and Conducted Spurious Emission



3.2.3 Frequency Stability



3.2.4 Test Result of Conducted Test

Please refer to Appendix A.

3.3 Conducted Output Power

3.3.1 Description of the Conducted Output Power Measurement

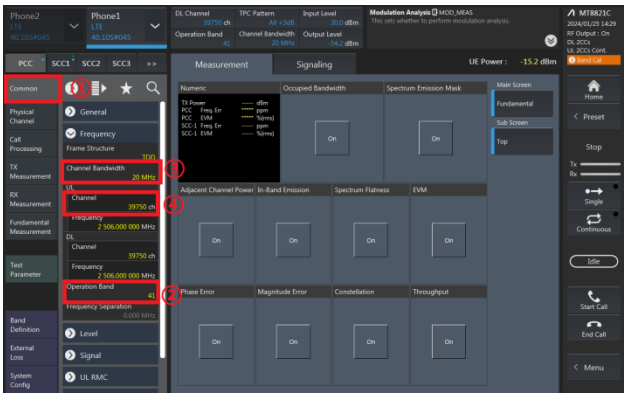
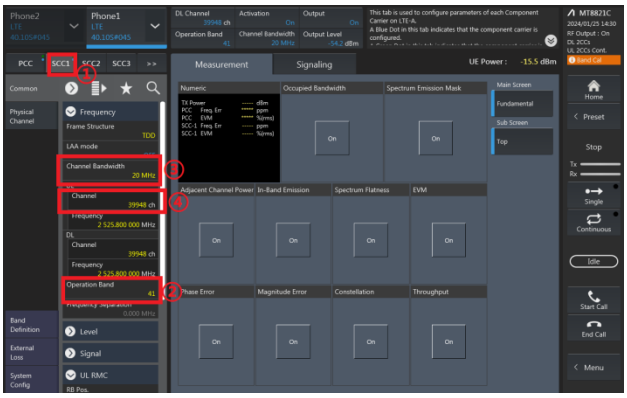
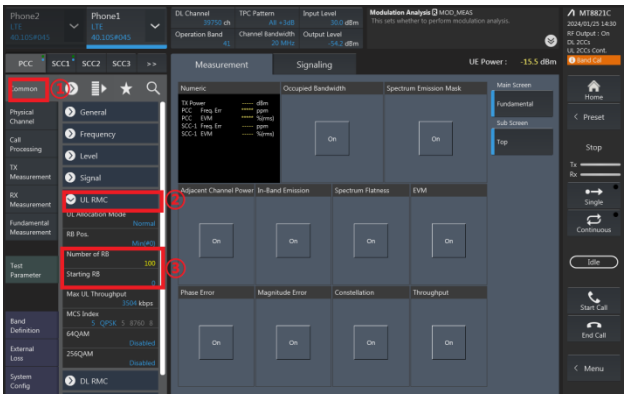
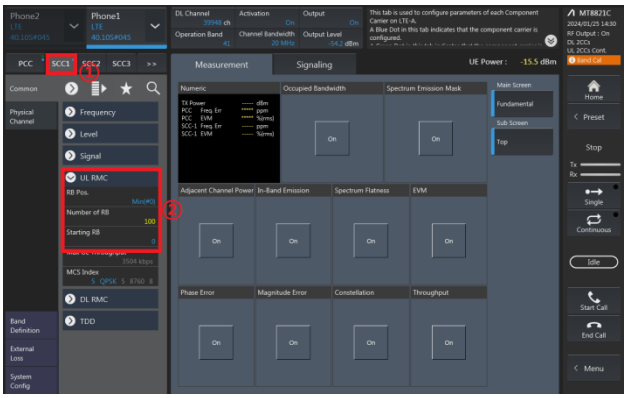
A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.3.2 Test Procedures

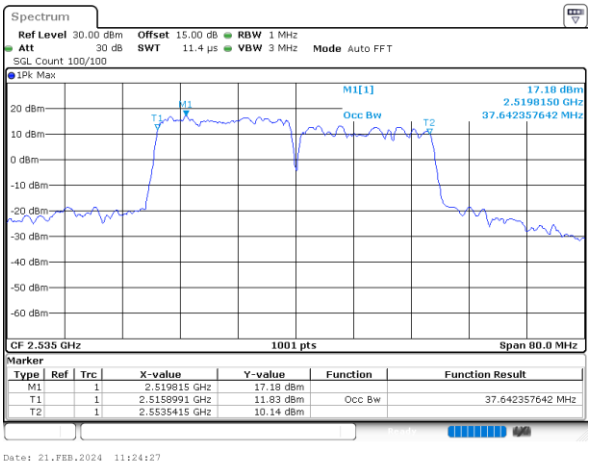
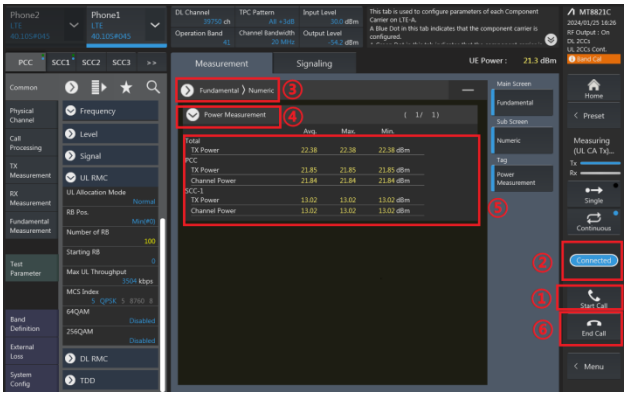
1. The transmitter output port was connected to the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

3.3.3 Test Procedures for LTE ULCA

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter PCC & SCC output ports were connected to the system simulator.
3. Set EUT at maximum power, set the PCC/SCC CA band, channel, bandwidth and RB config.

PCC config_(Channel Bandwidth / Channel / Band)	SCC config_(Channel Bandwidth / Channel / Band)
	
PCC config_(Number of RB / Starting RB)	**SCC config_(Number of RB / Starting RB)**
	

4. Select lowest, middle, and highest channels for each ULCA band and different modulation.
5. Check the ULCA spectrum and record the total power from the system simulator.

Check the ULCA spectrum (eg. 20M+20M)	Read the Total UL CA output power (PCC+SCC)
	

3.4 EIRP

3.4.1 Description of the EIRP Measurement

EIRP limits for CBRS equipment as below table:

Device		Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
Applied	**End User Device**	23	n/a
☐	**Category A CBSD**	30	20
☐	**Category B CBSD**	47	37

Remark:

1. The worst case EIRP shown in this section is found with LTE operating only using 1RB. As such, the EIRP/10MHz and full channel EIRP values will be identical since 1RB is fully contained within all available channel bandwidths for LTE Band 48 (i.e. 5, 10, 15, 20MHz)

3.4.2 Test Procedures for EIRP

1. Establishing a communications link with the call box (Base station) to measure the Maximum conducted power, the parameters were set to force the EUT transmitting at maximum output power level. Use the average power measurement function to measure total channel power of each channel bandwidth (per ANSI C63.26-2015 Section 5.2.1)

2. Determining ERP and/or EIRP from conducted RF output power measurements (Per ANSI C63.26-2015 Section 5.2.5.5)

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

3.5 Occupied Bandwidth

3.5.1 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.

3.5.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. 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.
4. Set the detection mode to peak, and the trace mode to max hold.
5. 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)
6. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
7. 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.
8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.6 Conducted Band Edge

3.6.1 Description of Conducted Band Edge Measurement

Part 96.41 (e) (1) (ii)

For End User Devices the emission limits outside the fundamental are as follows:

Within 0 MHz to B MHz above and below the assigned channel ≤ −13 dBm/MHz

Greater than B MHz above and below the assigned channel ≤ −25 dBm/MHz

where B is the bandwidth in megahertz of the assigned channel or multiple contiguous channels of the End User Device.

Notwithstanding the emission limits in this paragraph, the Adjacent Channel Leakage Ratio for End User Devices shall be at least 30 dB.

Part 96.41 (e) (2)

For CBSDs and End User Devices, the conducted power of emissions below 3540 MHz or above 3710 MHz shall not exceed −25 dBm/MHz, and the conducted power of emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz

3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

9. The EUT was connected to spectrum analyzer and system simulator via a power divider.
10. The band edges of low and high channels for the highest RF powers were measured.
11. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
12. Beyond the 1 MHz band from the band edge, RBW=1MHz was used
13. Offset has included the duty factor for LTE Band 48. Duty factor =10 log (1/x), where x is the measured duty cycle.
14. Set spectrum analyzer with RMS detector.
15. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.7 Conducted Spurious Emission

3.7.1 Description of Conducted Spurious Emission Measurement

96.41 (e)(2)

The conducted power of any emissions below 3530 MHz or above 3720 MHz shall not exceed −40dBm/MHz.

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. 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.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
6. Set spectrum analyzer with RMS detector.
7. Taking the record of maximum spurious emission.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is −40dBm/MHz.

3.8 Frequency Stability

3.8.1 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.

3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

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

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

1. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

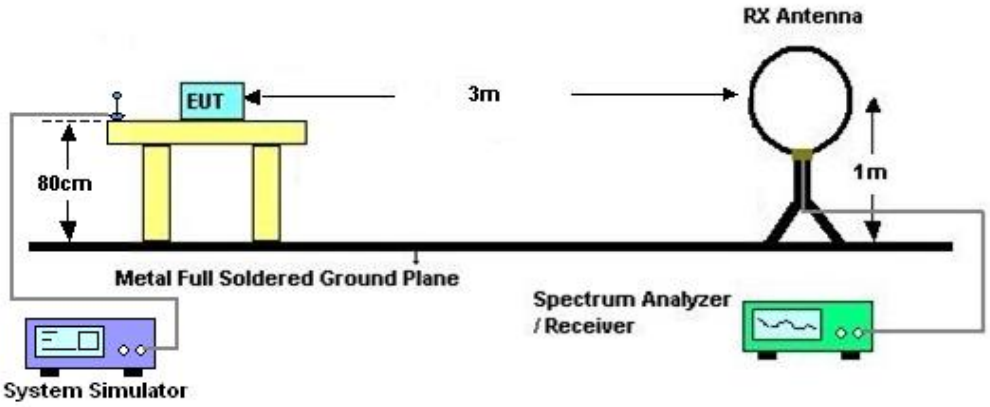
4 Radiated Test Items

4.1 Measuring Instruments

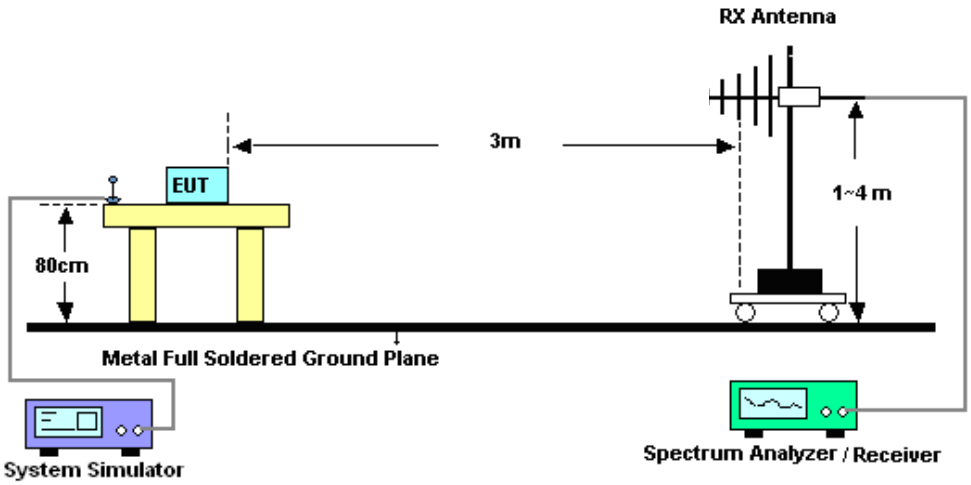
See list of measuring instruments of this test report.

4.2 Test Setup

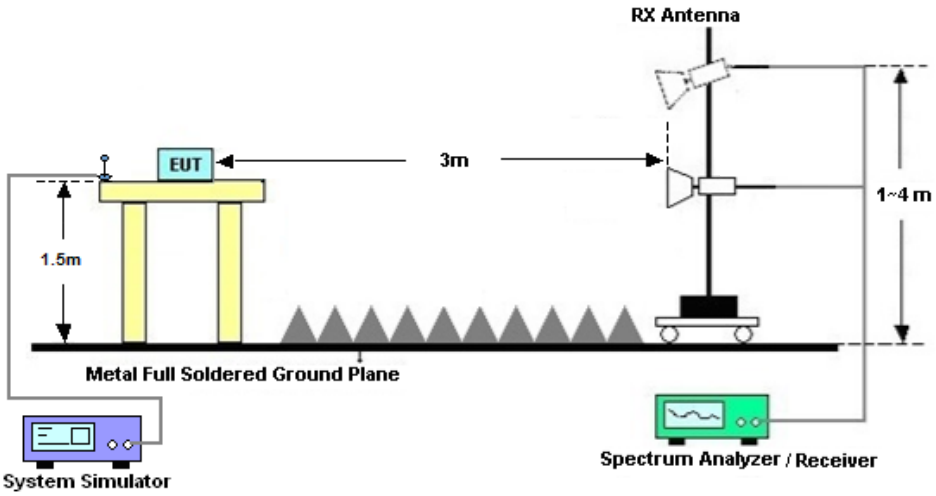
4.2.1 For radiated test below 30MHz



4.2.2 For radiated test from 30MHz to 1GHz



4.2.3 For radiated test above 1GHz



4.3 Test Result of Radiated Test

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

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015.

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 -40dBm / MHz.

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

4.4.2 Test Procedures

1. 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.
2. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
   Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
   EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
   ERP (dBm) = EIRP - 2.15
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
   The limit line is −40dBm/MHz

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 09, 2024	Jun. 05, 2024~ Jun. 07, 2024~	Apr. 08, 2025	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V，3A	Oct. 16, 2023	Jun. 05, 2024~ Jun. 07, 2024~	Oct. 15, 2024	Conducted (TH01-SZ)
Power Divider	TOJOIN	PS-2SM-04265	60.06.020.0077	0.4GHz~26.5GHz	Dec. 25, 2023	Jun. 05, 2024~ Jun. 07, 2024~	Dec. 24, 2024	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 05, 2023	Jun. 05, 2024~ Jun. 07, 2024~	Jul. 04, 2024	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent	N9038A	MY52260185	20Hz~26.5GHz	Dec. 27, 2023	May 07, 2024~ May 20, 2024	Dec. 26, 2024	Radiation (03CH01-SZ)
Loop Antenna	R&S	HFH2-Z2	100354	9kHz~30MHz	Jul. 28, 2022	May 07, 2024~ May 20, 2024	Jul. 27, 2024	Radiation (03CH01-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 18, 2023	May 07, 2024~ May 20, 2024	Oct. 17, 2024	Radiation (03CH01-SZ
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Oct. 24, 2023	May 07, 2024~ May 20, 2024	Oct. 23, 2025	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 08, 2023	May 07, 2024~ May 20, 2024	Jul. 07, 2024	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 09, 2024	May 07, 2024~ May 20, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
LF Amplifier	Burgeon	BPA-530	102209	0.01~3000Mhz	Apr. 09, 2024	May 07, 2024~ May 20, 2024	Apr. 08, 2025	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18, 2023	May 07, 2024~ May 20, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 07, 2023	May 07, 2024~ May 20, 2024	Jul. 06, 2024	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	Oct. 18, 2023	May 07, 2024~ May 20, 2024	Oct. 17, 2024	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	May 07, 2024~ May 20, 2024	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	May 07, 2024~ May 20, 2024	NCR	Radiation (03CH01-SZ)

NCR: No Calibration Required

6 Measurement Uncertainty

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Spurious Emission & Bandedge	±1.34 dB
Occupied Channel Bandwidth	±0.012 MHz
Conducted Power	±1.34 dB
Conducted Power Density	±1.32 dB
Peak to Average Ratio	±1.34 dB
Frequency Stability	±1.3 Hz

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.48 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.53 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.02 dB

---------- THE END ----------

Appendix A. Test Results of Conducted Test

Test Engineer :	Gary	Temperature :	24~26℃
		Relative Humidity :	50~53%

Conducted Output Power(Average power) and EIRP

LTE Band 42:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				43190	43340	43490			
Frequency (MHz)				3560	3575	3590	L	M	H
20	QPSK	1	0	21.32	21.03	21.01	0.1706	0.1596	0.1589
20	QPSK	1	49	21.15	20.93	20.95	0.1641	0.1560	0.1567
20	QPSK	1	99	21.03	20.87	20.74	0.1596	0.1538	0.1493
20	QPSK	50	0	20.30	20.01	19.96	0.1349	0.1262	0.1247
20	QPSK	50	24	20.25	19.87	20.08	0.1334	0.1222	0.1282
20	QPSK	50	50	20.09	19.94	19.89	0.1285	0.1242	0.1227
20	QPSK	100	0	20.23	19.88	19.95	0.1327	0.1225	0.1245
20	16QAM	1	0	20.33	20.07	19.91	0.1358	0.1279	0.1233
20	64QAM	1	0	18.91	18.55	18.62	0.0979	0.0902	0.0916
20	256QAM	1	0	16.04	15.77	15.73	0.0506	0.0475	0.0471
Channel				43165	43340	43515	EIRP(W)		
Frequency (MHz)				3557.5	3575	3592.5	L	M	H
15	QPSK	1	0	21.29	21.00	20.97	0.1694	0.1585	0.1574
15	16QAM	1	0	20.29	20.07	20.00	0.1346	0.1279	0.1259
Channel				43140	43340	43540	EIRP(W)		
Frequency (MHz)				3555	3575	3595	L	M	H
10	QPSK	1	0	21.32	20.98	21.02	0.1706	0.1578	0.1592
10	16QAM	1	0	20.24	20.10	19.96	0.1330	0.1288	0.1247
Channel				43115	43340	43565	EIRP(W)		
Frequency (MHz)				3552.5	3575	3597.5	L	M	H
5	QPSK	1	0	21.31	20.88	21.01	0.1702	0.1542	0.1589
5	16QAM	1	0	20.30	20.13	20.02	0.1349	0.1297	0.1265

LTE Band 43:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				43690	44090	44490			
Frequency (MHz)				3610	3650	3690	L	M	H
20	QPSK	1	0	21.23	20.71	21.14	0.1671	0.1483	0.1637
20	QPSK	1	49	21.09	20.77	21.04	0.1618	0.1503	0.1600
20	QPSK	1	99	20.93	20.55	20.82	0.1560	0.1429	0.1521
20	QPSK	50	0	20.11	19.81	20.09	0.1291	0.1205	0.1285
20	QPSK	50	24	19.85	19.64	19.97	0.1216	0.1159	0.1250

20	QPSK	50	50	19.99	19.74	19.86	0.1256	0.1186	0.1219
20	QPSK	100	0	20.03	19.66	20.02	0.1268	0.1164	0.1265
20	16QAM	1	0	20.15	19.82	20.04	0.1303	0.1208	0.1271
20	64QAM	1	0	18.69	18.46	18.75	0.0931	0.0883	0.0944
20	256QAM	1	0	15.91	15.57	15.89	0.0491	0.0454	0.0489
Channel				43665	44090	44515	EIRP(W)		
Frequency (MHz)				3607.5	3650	3692.5	L	M	H
15	QPSK	1	0	20.99	20.75	21.10	0.1581	0.1496	0.1622
15	16QAM	1	0	20.06	19.95	20.08	0.1276	0.1245	0.1282
Channel				43640	44090	44540	EIRP(W)		
Frequency (MHz)				3605	3650	3695	L	M	H
10	QPSK	1	0	20.97	20.81	21.15	0.1574	0.1517	0.1641
10	16QAM	1	0	20.13	19.98	20.09	0.1297	0.1253	0.1285
Channel				43615	44090	44565	EIRP(W)		
Frequency (MHz)				3602.5	3650	3697.5	L	M	H
5	QPSK	1	0	20.99	20.75	21.18	0.1581	0.1496	0.1652
5	16QAM	1	0	20.05	19.99	20.09	0.1274	0.1256	0.1285

LTE Band 48:

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	EIRP(W)		
Channel				55340	55990	56640			
Frequency (MHz)				3560	3625	3690	L	M	H
20	QPSK	1	0	21.53	21.21	20.94	0.1791	0.1663	0.1563
20	QPSK	1	49	21.45	21.08	20.99	0.1758	0.1614	0.1581
20	QPSK	1	99	21.27	21.01	20.71	0.1687	0.1589	0.1483
20	QPSK	50	0	20.37	20.10	20.02	0.1371	0.1288	0.1265
20	QPSK	50	24	20.38	20.14	19.90	0.1374	0.1300	0.1230
20	QPSK	50	50	20.33	20.08	19.77	0.1358	0.1282	0.1194
20	QPSK	100	0	20.38	20.10	19.89	0.1374	0.1288	0.1227
20	16QAM	1	0	20.43	20.17	20.06	0.1390	0.1309	0.1276
20	64QAM	1	0	19.13	18.82	18.51	0.1030	0.0959	0.0893
20	256QAM	1	0	16.34	15.92	15.82	0.0542	0.0492	0.0481
Channel				55315	55990	56665	EIRP(W)		
Frequency (MHz)				3557.5	3625	3692.5	L	M	H
15	QPSK	1	0	21.34	21.26	20.91	0.1714	0.1683	0.1552
15	16QAM	1	0	20.28	20.14	20.04	0.1343	0.1300	0.1271
Channel				55290	55990	56690	EIRP(W)		
Frequency (MHz)				3555	3625	3695	L	M	H
10	QPSK	1	0	21.42	21.16	20.85	0.1746	0.1644	0.1531
10	16QAM	1	0	20.27	20.16	20.05	0.1340	0.1306	0.1274
Channel				55265	55990	56715	EIRP(W)		
Frequency (MHz)				3552.5	3625	3697.5	L	M	H
5	QPSK	1	0	21.41	21.17	20.93	0.1742	0.1648	0.1560
5	16QAM	1	0	20.34	20.08	20.03	0.1361	0.1282	0.1268

LTE CA_42C:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.62	0.1452
M	QPSK	1	Max	1	0	20.52	0.1419
H	QPSK	1	Max	1	0	20.54	0.1426
L	16QAM	1	Max	1	0	19.47	0.1114
M	16QAM	1	Max	1	0	19.53	0.1130
H	16QAM	1	Max	1	0	19.57	0.1140
L	64QAM	1	Max	1	0	17.49	0.0706
M	64QAM	1	Max	1	0	17.63	0.0729
H	64QAM	1	Max	1	0	17.54	0.0714
L	256QAM	1	Max	1	0	15.45	0.0442
M	256QAM	1	Max	1	0	15.48	0.0445
H	256QAM	1	Max	1	0	15.43	0.0440
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.61	0.1449
H	16QAM	1	Max	1	0	19.86	0.1219
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.58	0.1439
H	16QAM	1	Max	1	0	19.86	0.1219
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.52	0.1419
H	16QAM	1	Max	1	0	19.74	0.1186
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.55	0.1429
H	16QAM	1	Max	1	0	19.83	0.1211
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.60	0.1445
H	16QAM	1	Max	1	0	19.76	0.1191
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.55	0.1429
H	16QAM	1	Max	1	0	19.75	0.1189

LTE CA_48C:

Combination 20MHz+20MHz (100RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.73	0.1489
M	QPSK	1	Max	1	0	20.20	0.1318
H	QPSK	1	Max	1	0	20.02	0.1265
L	16QAM	1	Max	1	0	19.53	0.1130
M	16QAM	1	Max	1	0	19.19	0.1045
H	16QAM	1	Max	1	0	19.05	0.1012
L	64QAM	1	Max	1	0	17.28	0.0673
M	64QAM	1	Max	1	0	17.05	0.0638
H	64QAM	1	Max	1	0	16.99	0.0630
L	256QAM	1	Max	1	0	15.37	0.0434
M	256QAM	1	Max	1	0	15.21	0.0418
H	256QAM	1	Max	1	0	14.99	0.0397
Combination 20MHz+15MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.30	0.1349
L	16QAM	1	Max	1	0	19.37	0.1089
Combination 15MHz+20MHz (100RB+75RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.39	0.1377
L	16QAM	1	Max	1	0	19.31	0.1074
Combination 20MHz+10MHz (100RB+50RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.29	0.1346
L	16QAM	1	Max	1	0	19.39	0.1094
Combination 10MHz+20MHz (50RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.32	0.1355
L	16QAM	1	Max	1	0	19.43	0.1104
Combination 20MHz+5MHz (100RB+25RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.32	0.1355
L	16QAM	1	Max	1	0	19.37	0.1089
Combination 5MHz+20MHz (25RB+100RB)							
Channel	Modulation	PCC		SCC		Measured Power	EIRP(W)
		RB Size	RB offset	RB Size	RB offset		
L	QPSK	1	Max	1	0	20.37	0.1371
L	16QAM	1	Max	1	0	19.41	0.1099

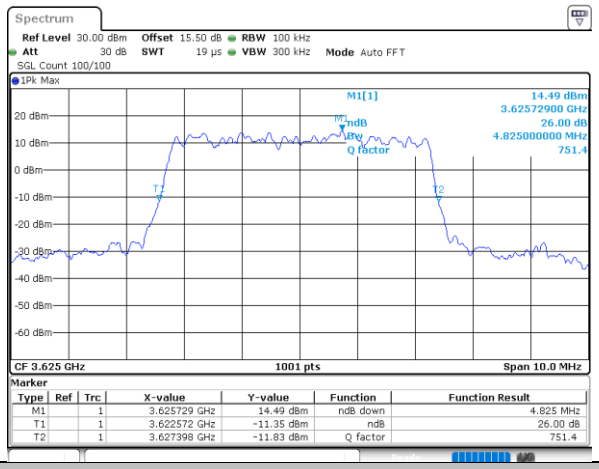
LTE Band 48

26dB Bandwidth

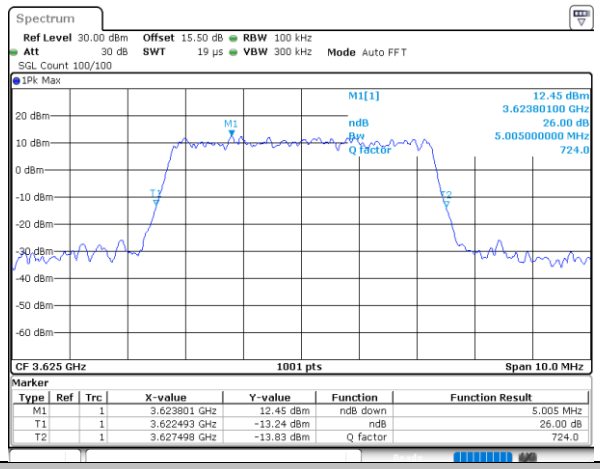
Mode	LTE Band 48 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.83	5.01	9.67	9.63	14.30	14.12	18.70	18.66

LTE Band 48

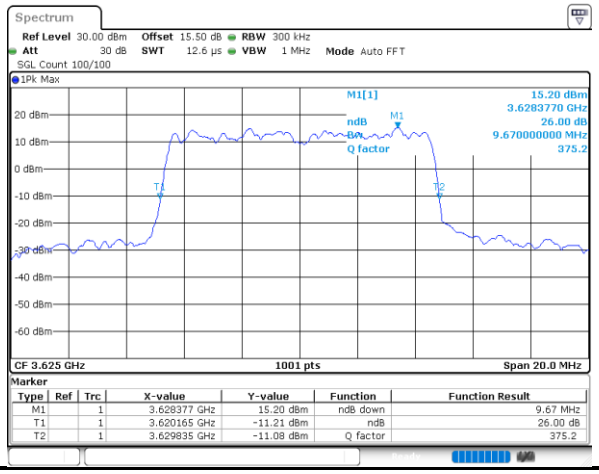
Middle Channel / 5MHz / QPSK



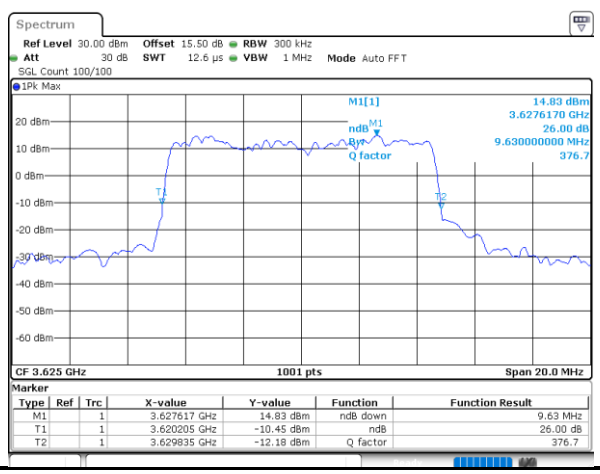
Middle Channel / 5MHz / 16QAM



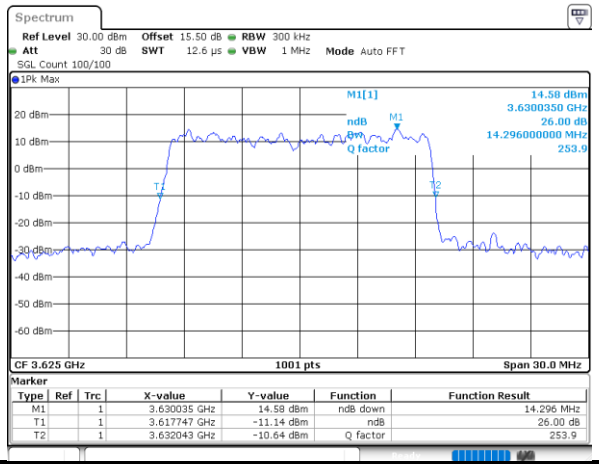
Middle Channel / 10MHz / QPSK

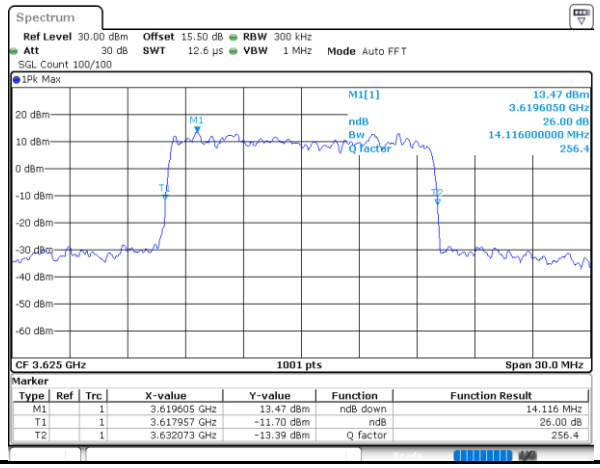


Middle Channel / 10MHz / 16QAM

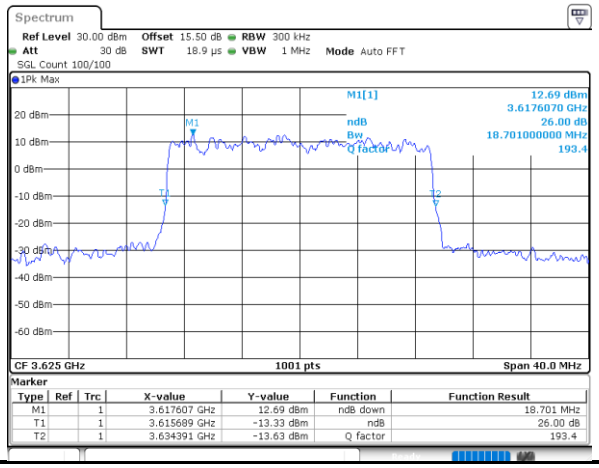


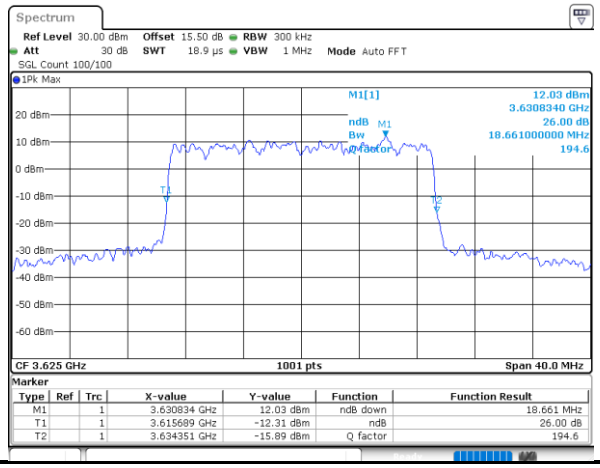
Middle Channel / 15MHz / QPSK	Middle Channel / 15MHz / 16QAM





LTE Band 48	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**



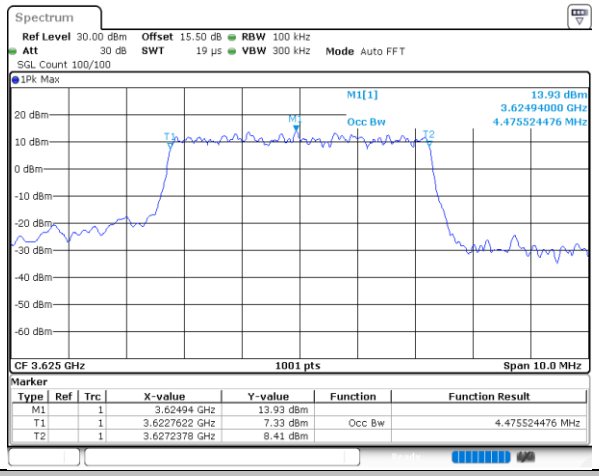


Occupied Bandwidth

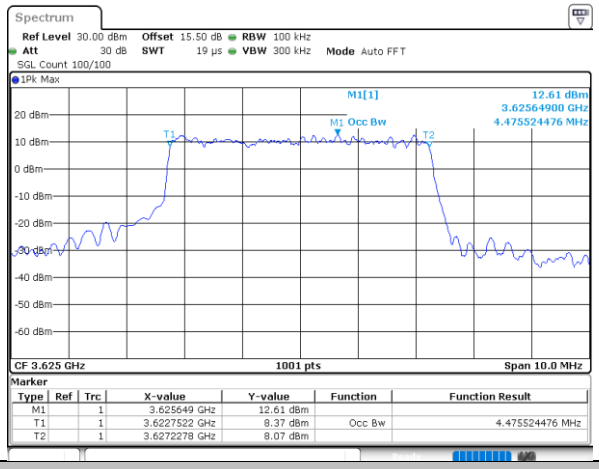
Mode	LTE Band 48 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Middle CH	-	-	-	-	4.48	4.48	9.01	9.01	13.46	13.46	17.90	17.90

LTE Band 48

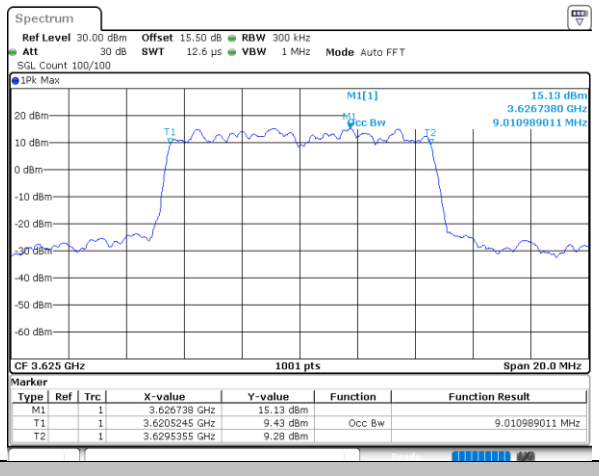
Middle Channel / 5MHz / QPSK



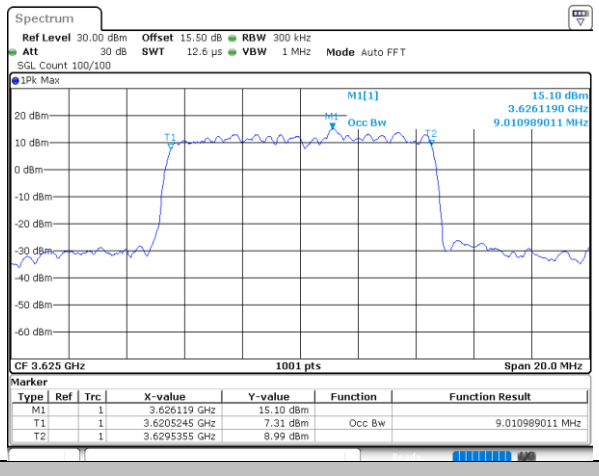
Middle Channel / 5MHz / 16QAM



Middle Channel / 10MHz / QPSK

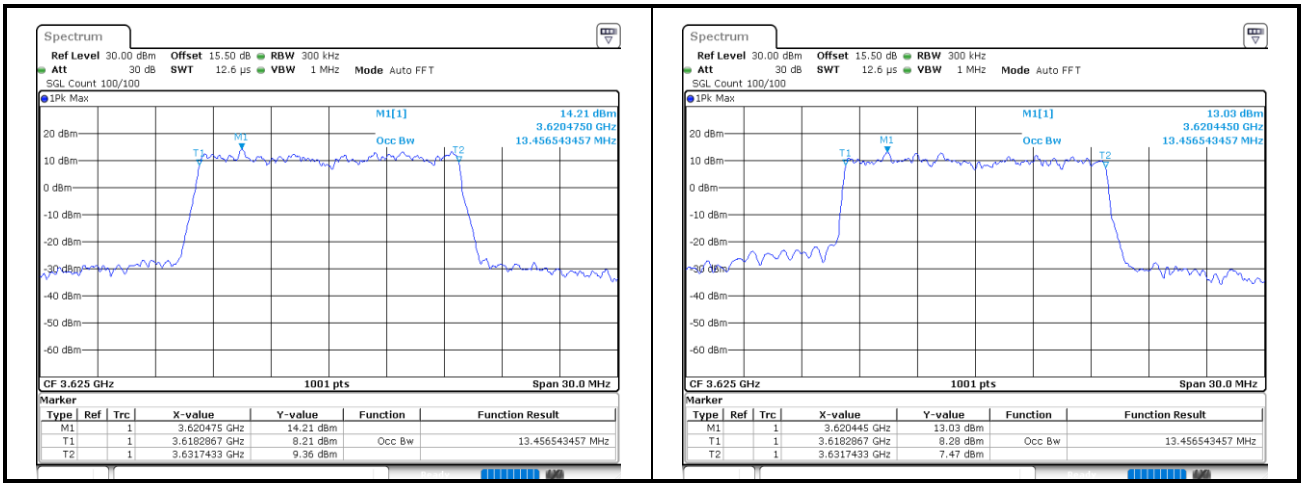


Middle Channel / 10MHz / 16QAM

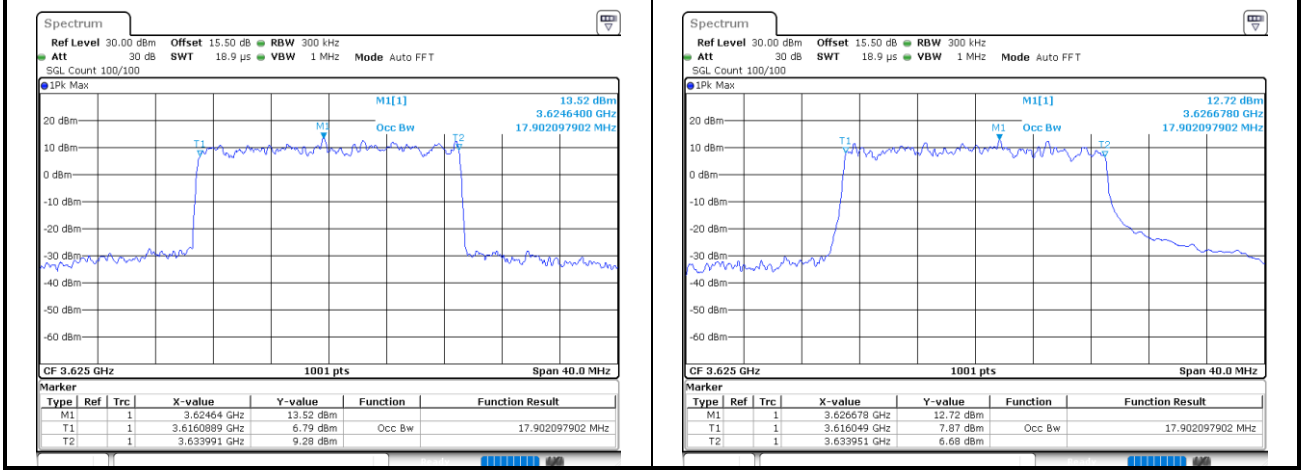


Middle Channel / 15MHz / QPSK

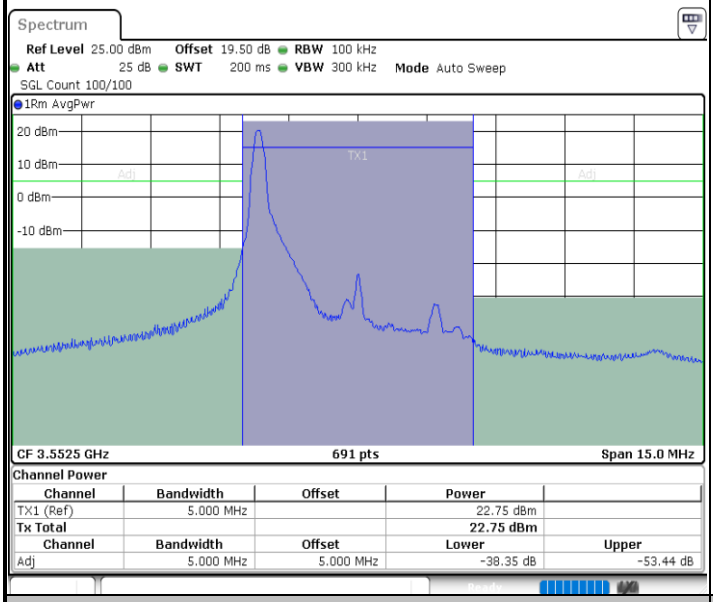
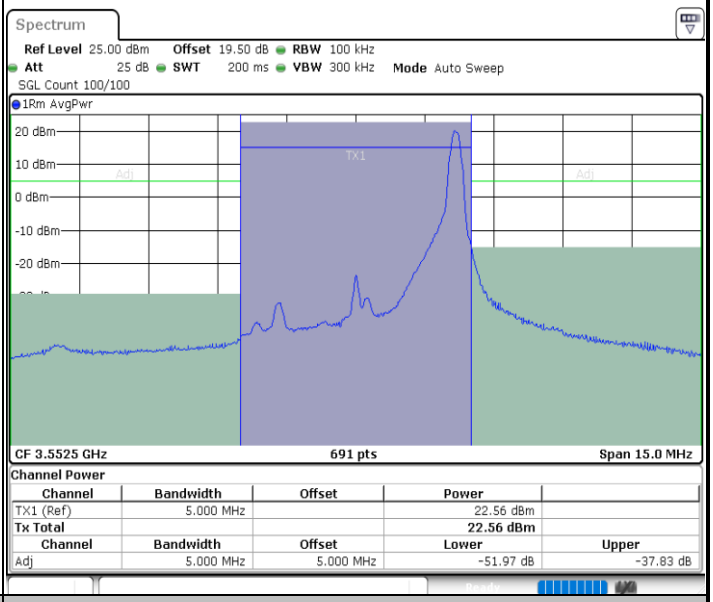
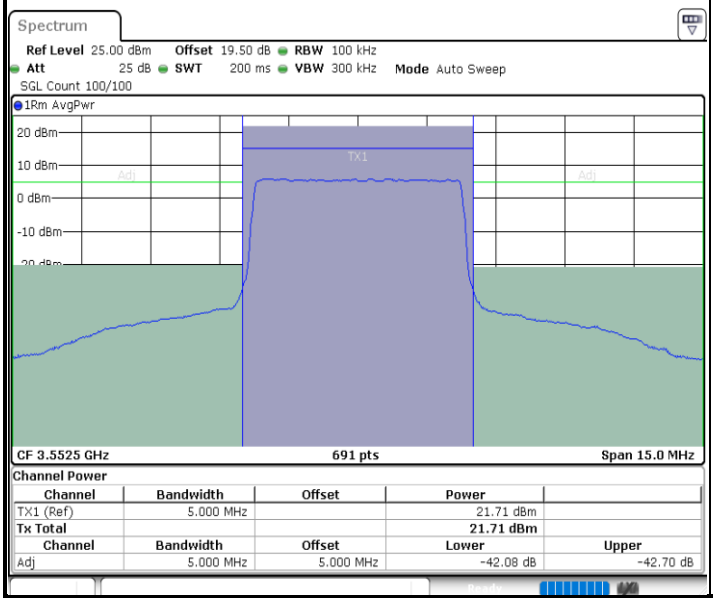
Middle Channel / 15MHz / 16QAM

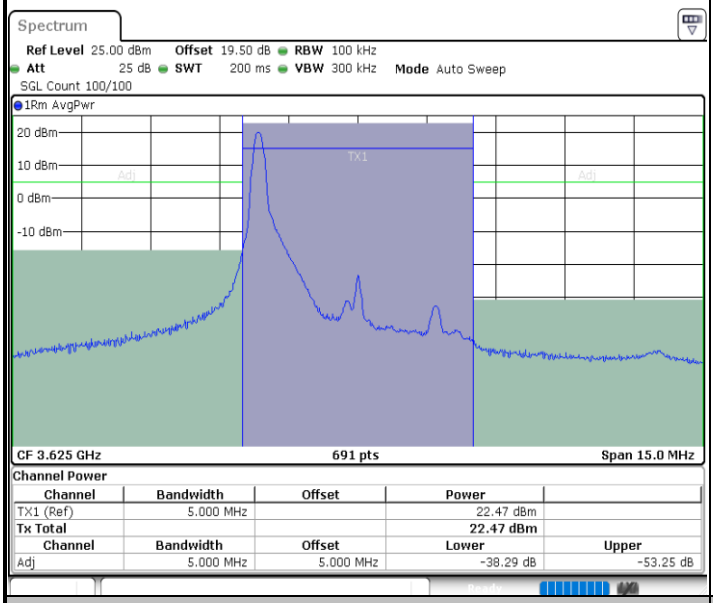
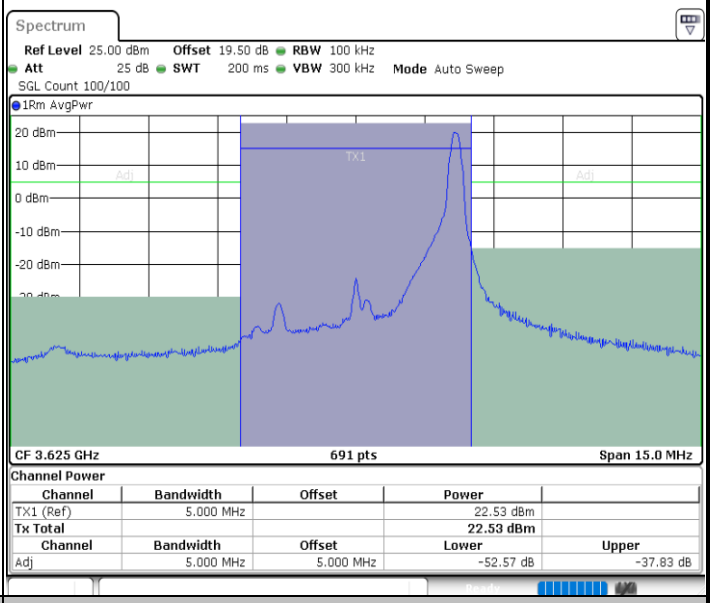
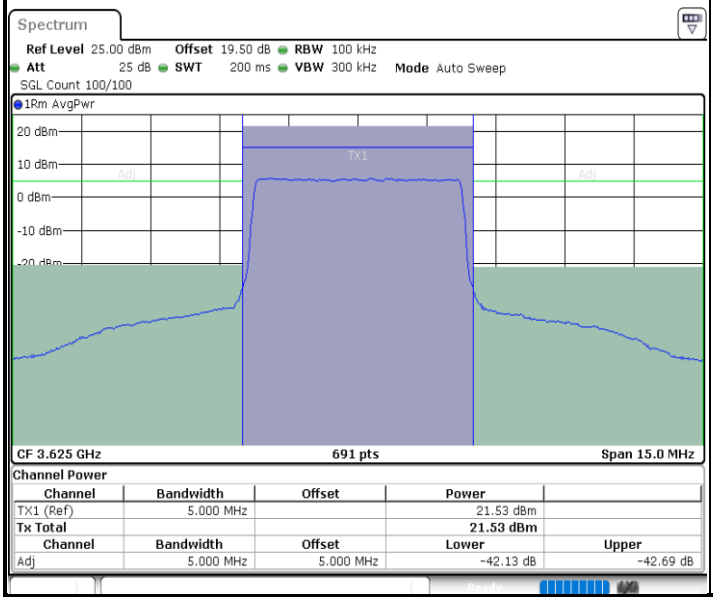


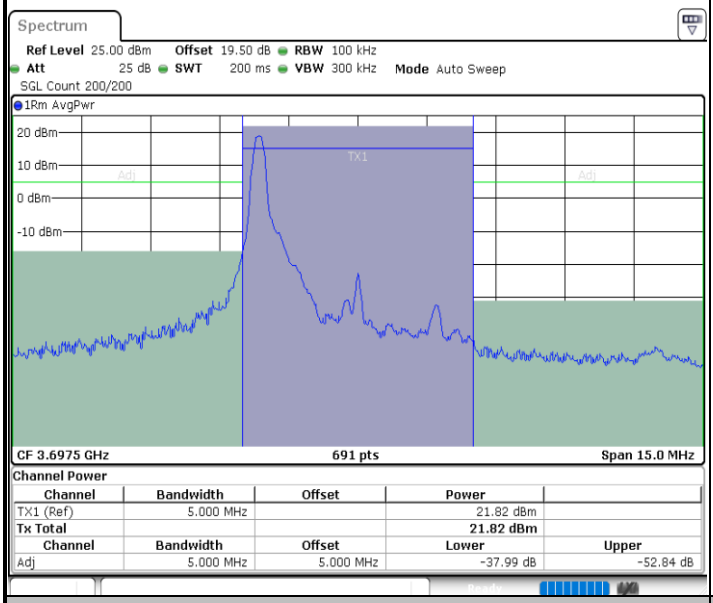
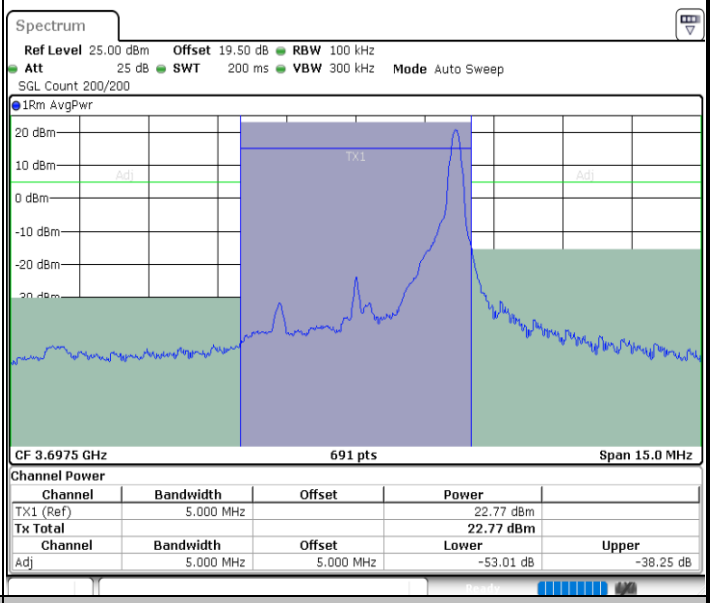
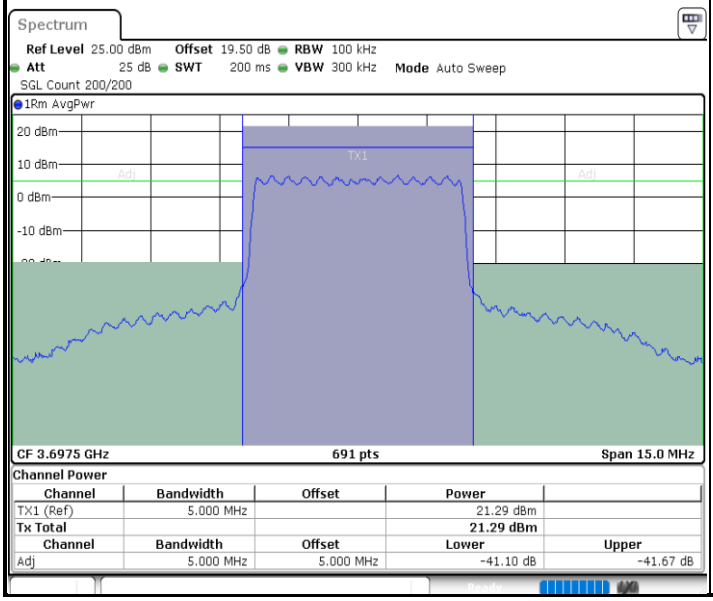
LTE Band 48	
Middle Channel / 20MHz / QPSK	Middle Channel / 20MHz / 16QAM



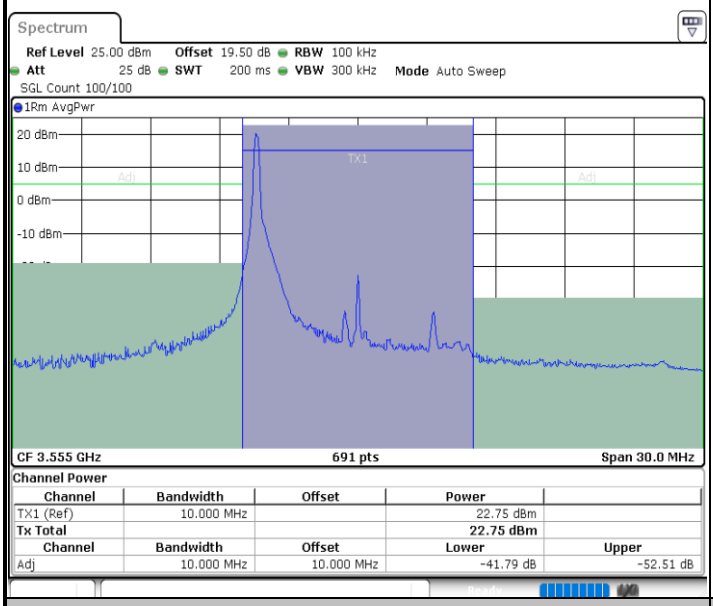
ACLR

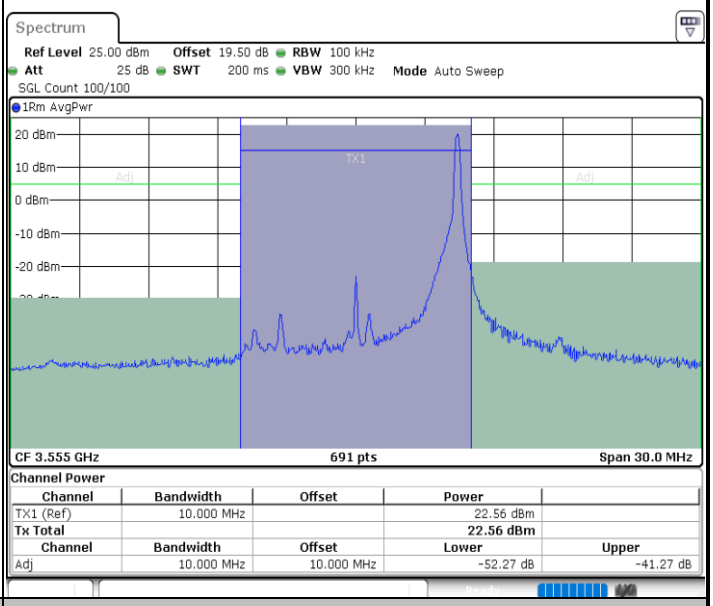
LTE Band 48 / 5MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	N/A
	

LTE Band 48 / 5MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

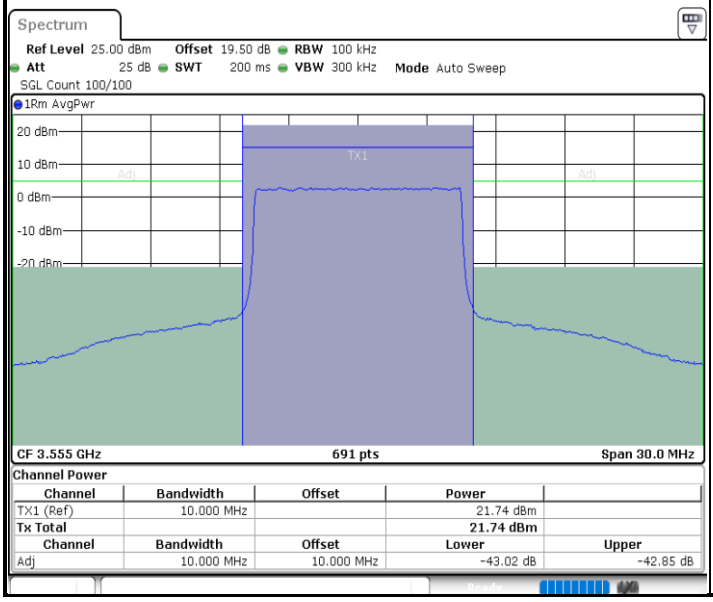
LTE Band 48 / 5MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

LTE Band 48 / 10MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax

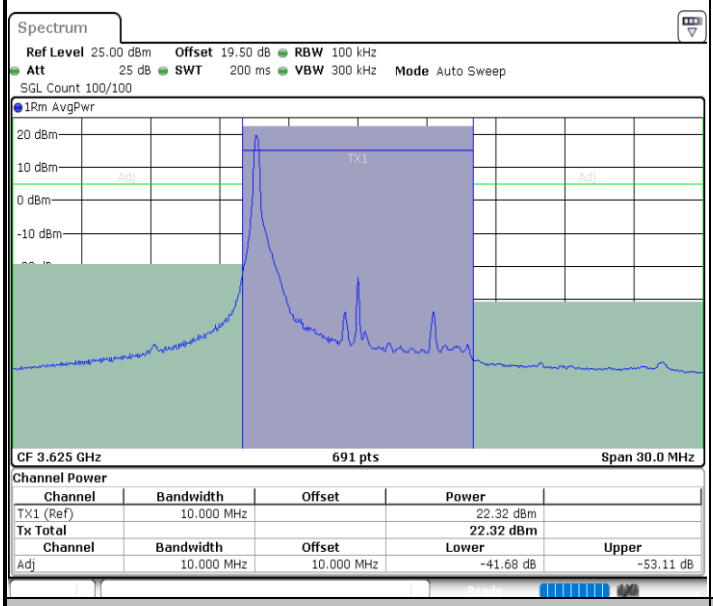


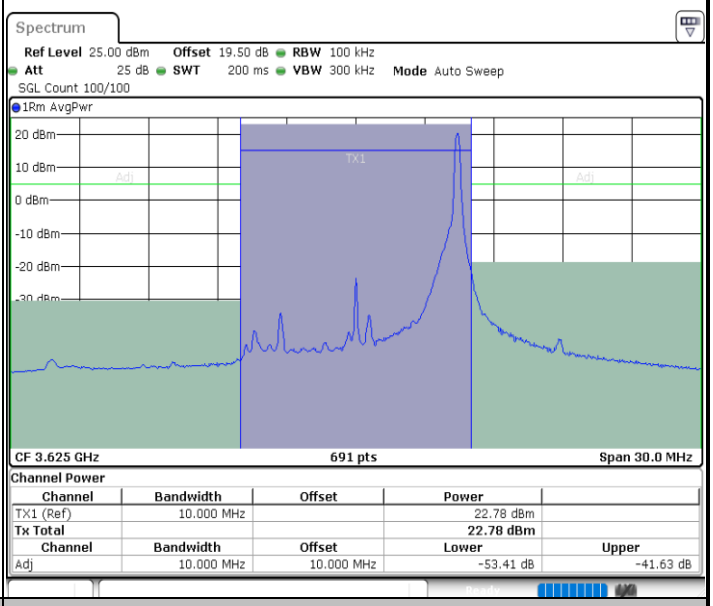


Lowest Channel / FullRB	N/A

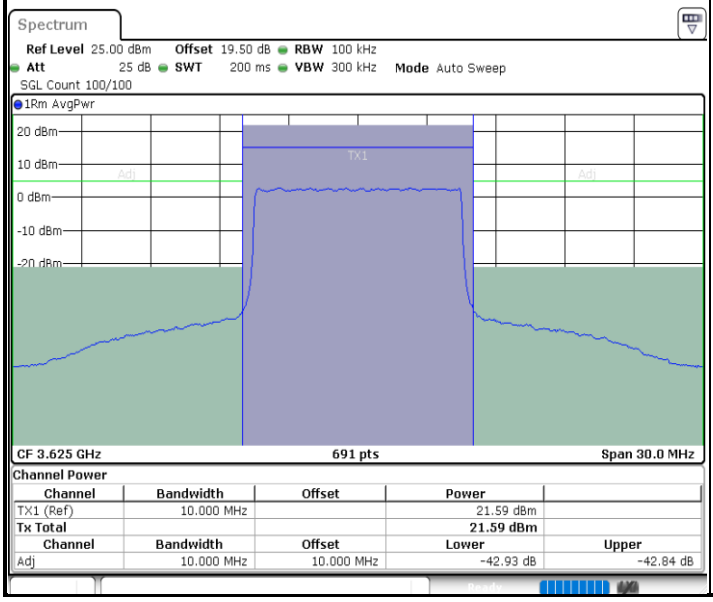


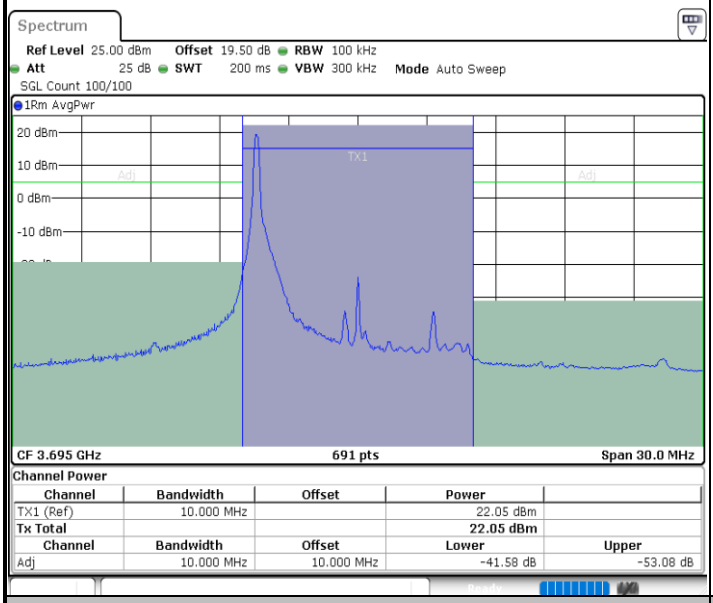
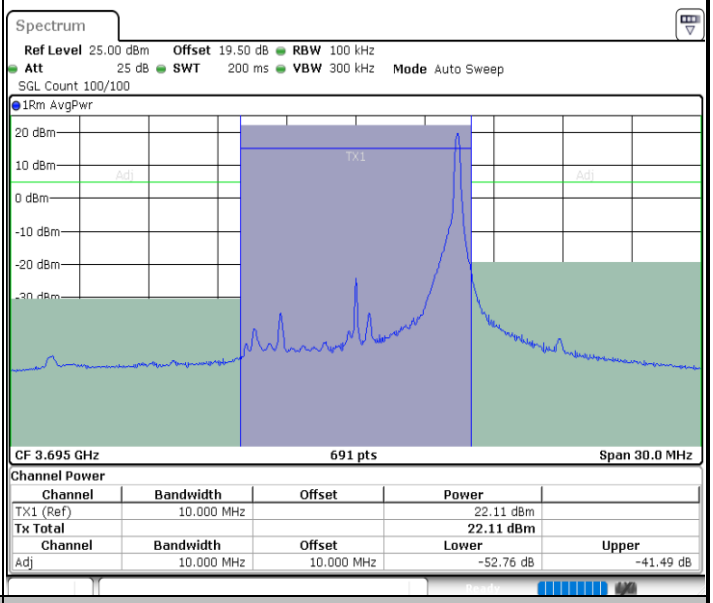
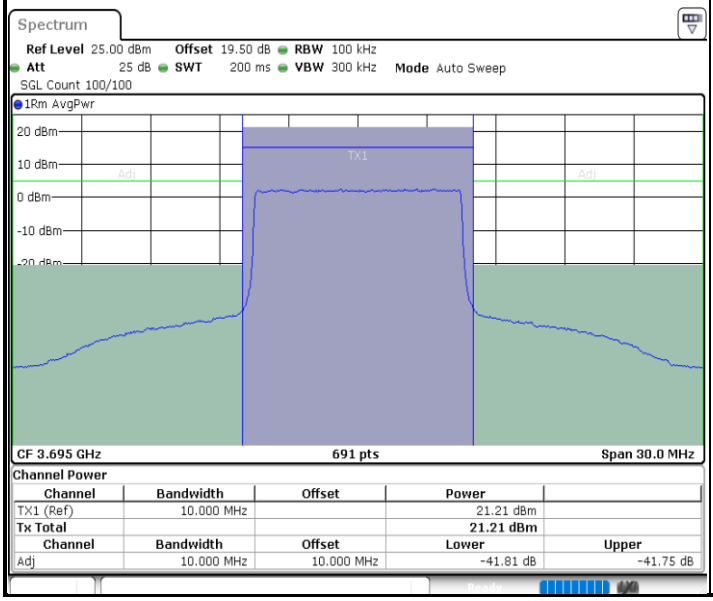
LTE Band 48 / 10MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax



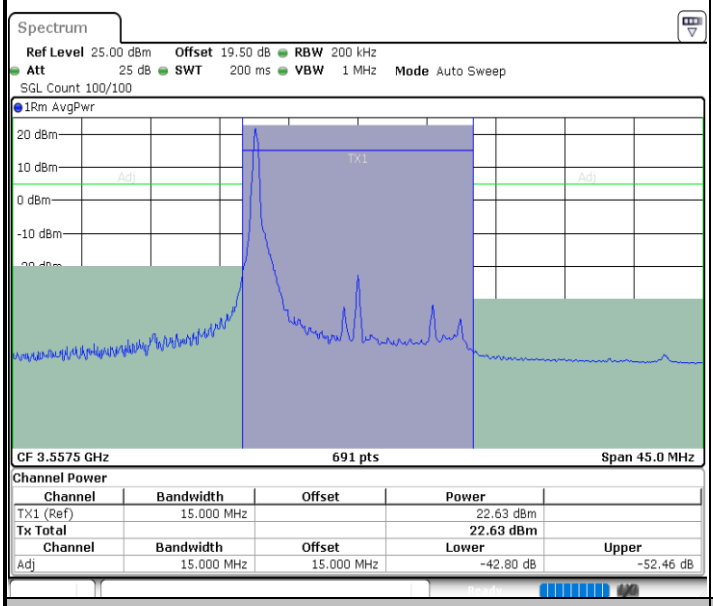


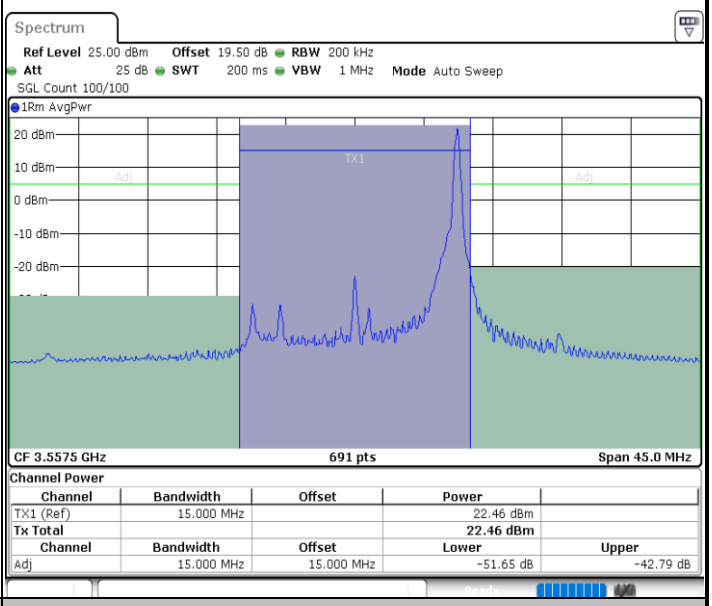
Middle Channel / FullRB	N/A



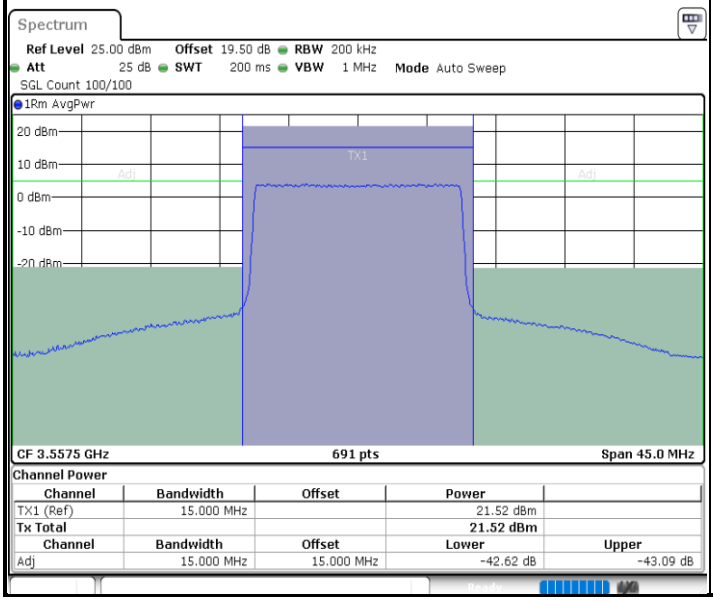
LTE Band 48 / 10MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

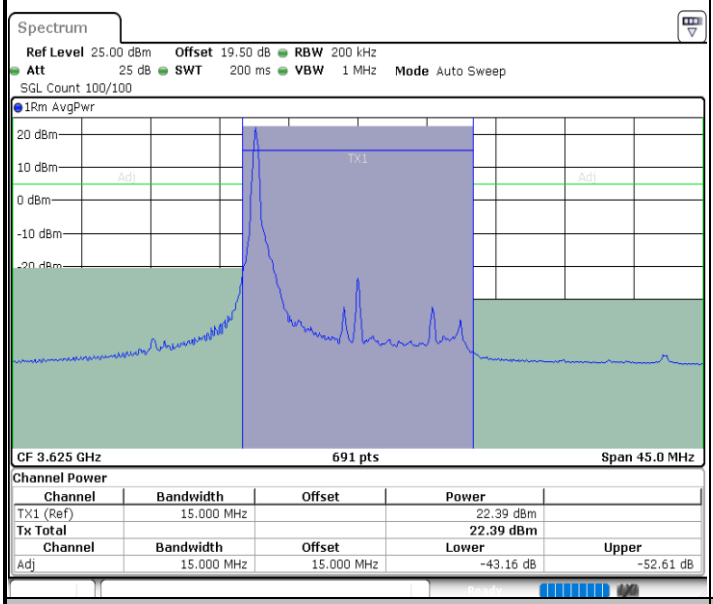
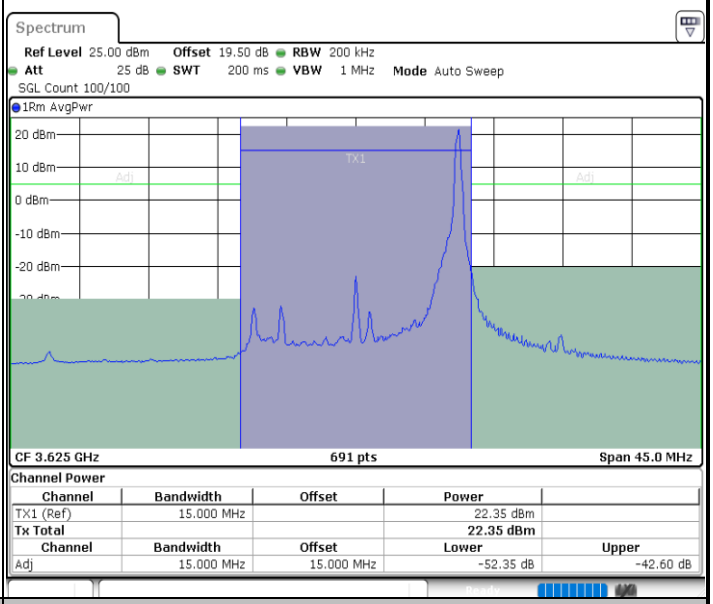
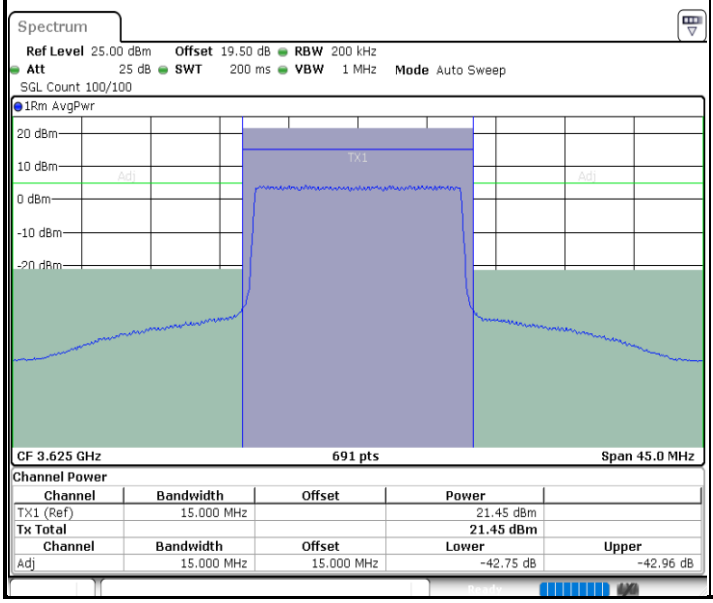
LTE Band 48 / 15MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax

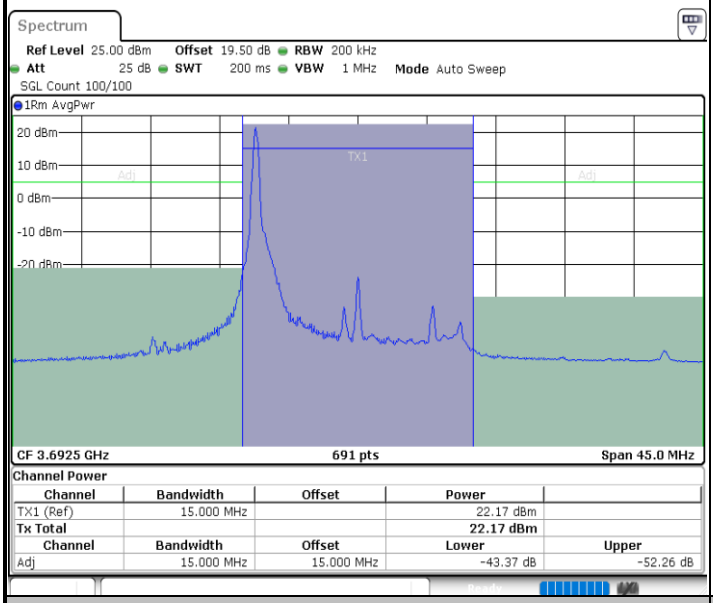
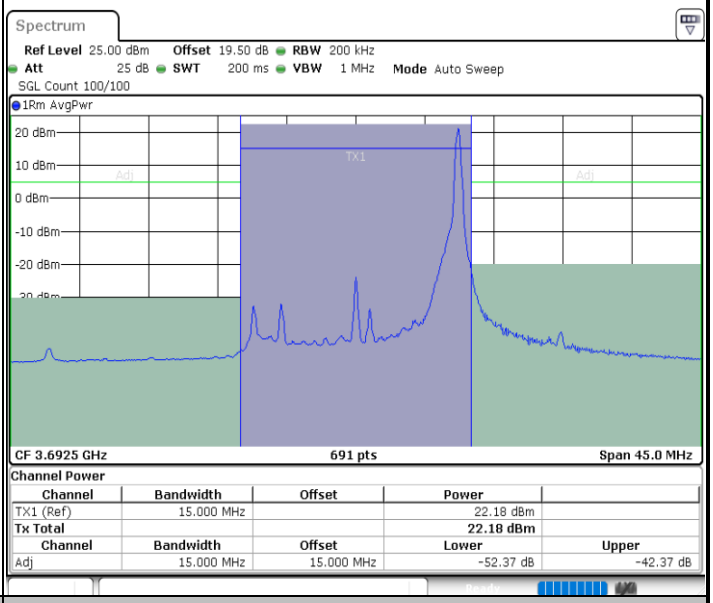
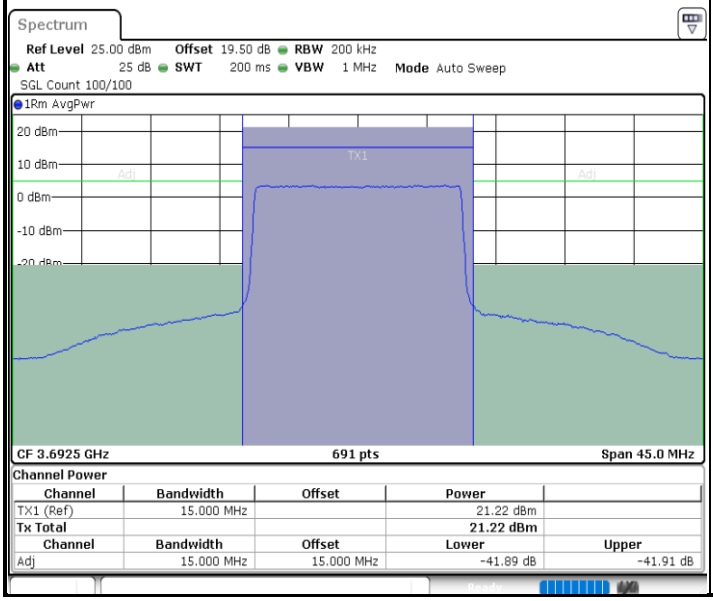




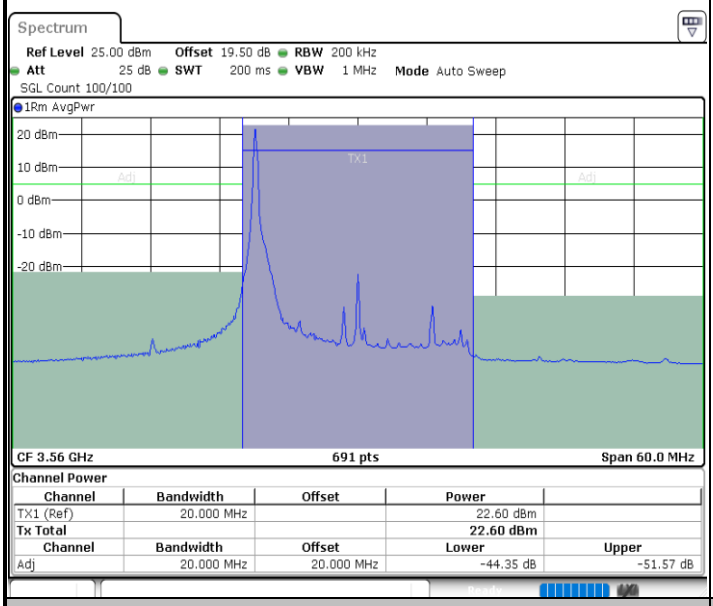
Lowest Channel / FullRB	N/A

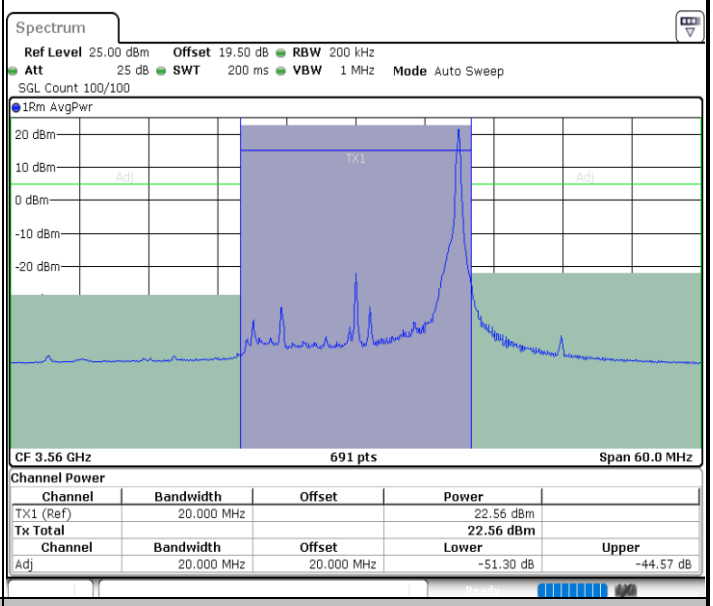


LTE Band 48 / 15MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

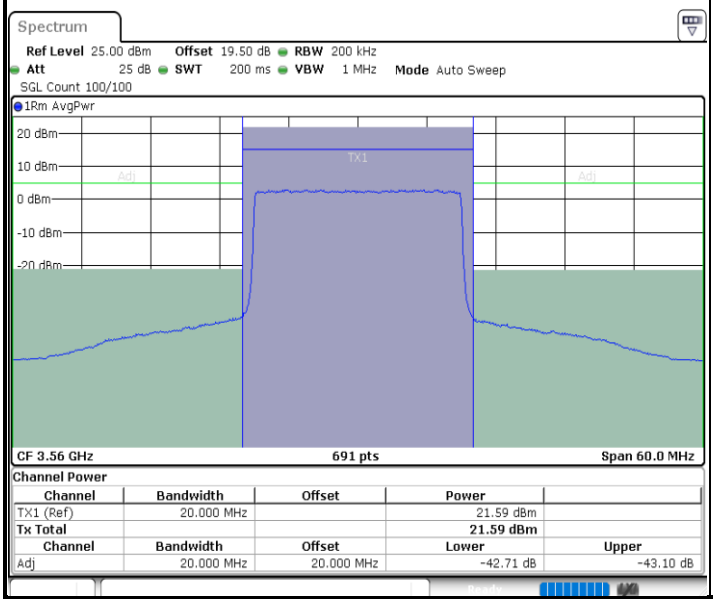
LTE Band 48 / 15MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

LTE Band 48 / 20MHz	
QPSK	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax

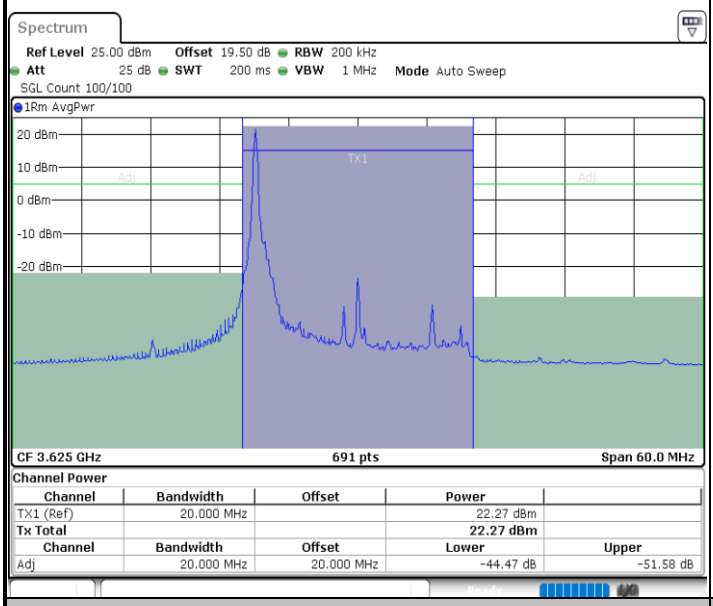


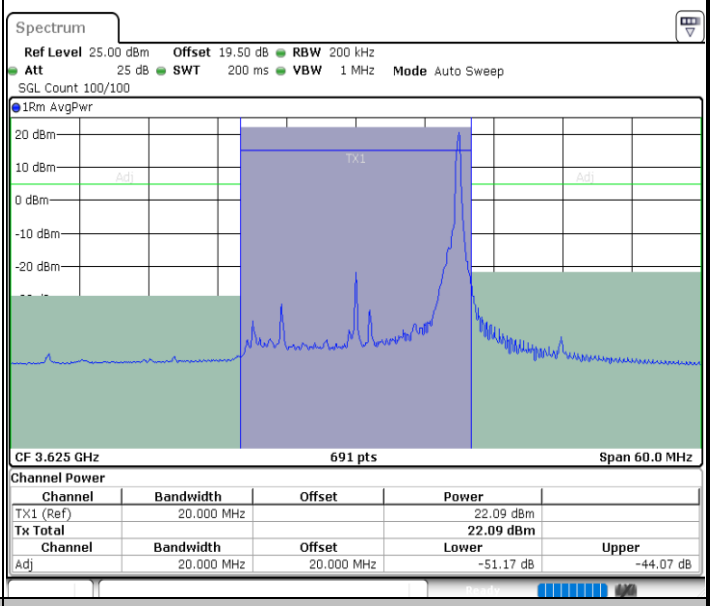


Lowest Channel / FullRB	N/A

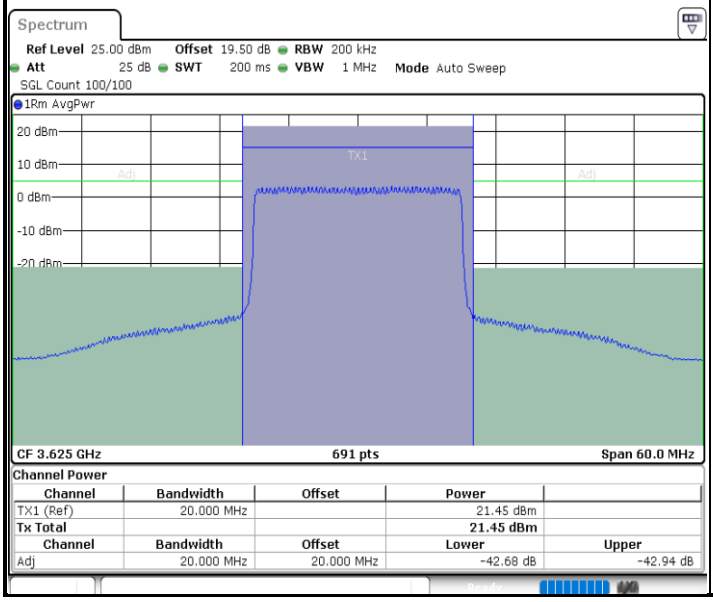


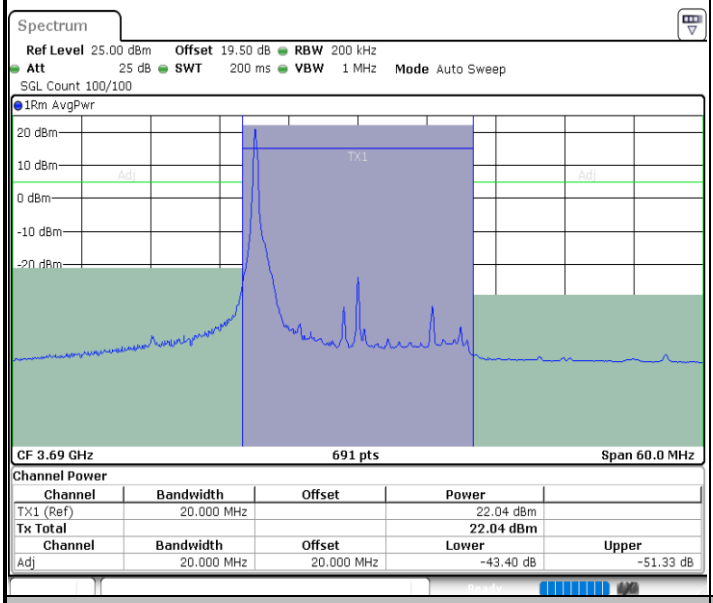
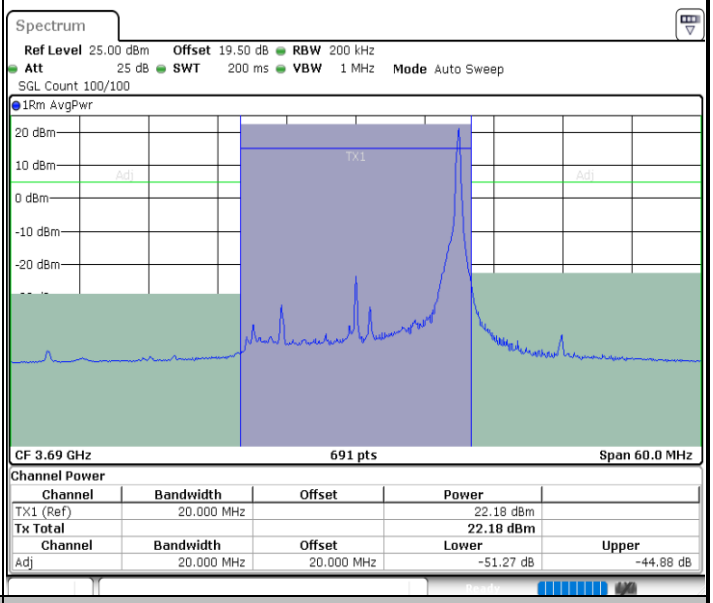
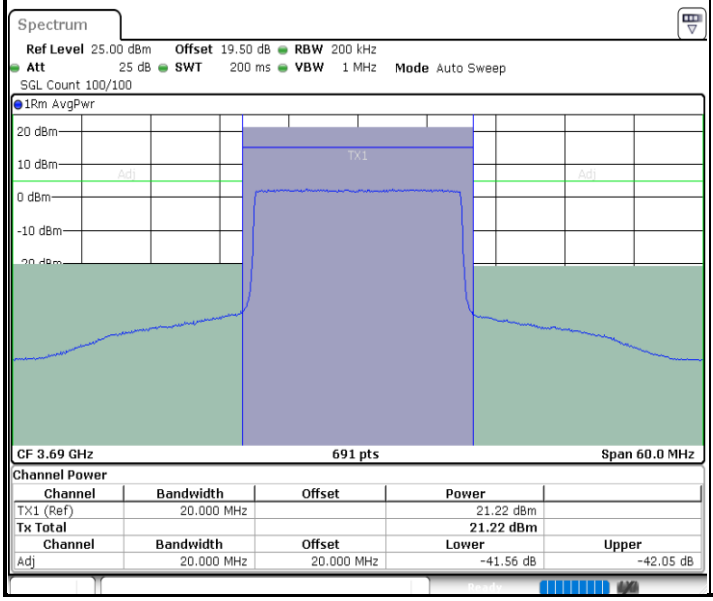
LTE Band 48 / 20MHz	
QPSK	
Middle Channel / 1RB0	Middle Channel / 1RBmax



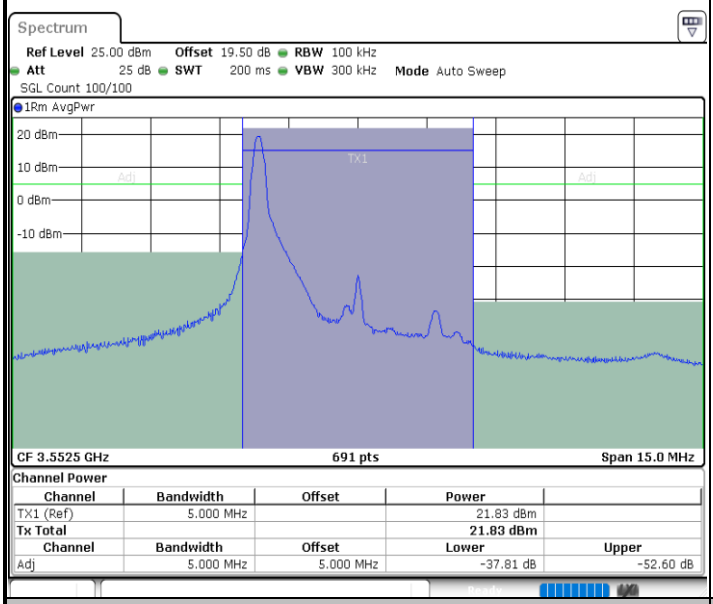


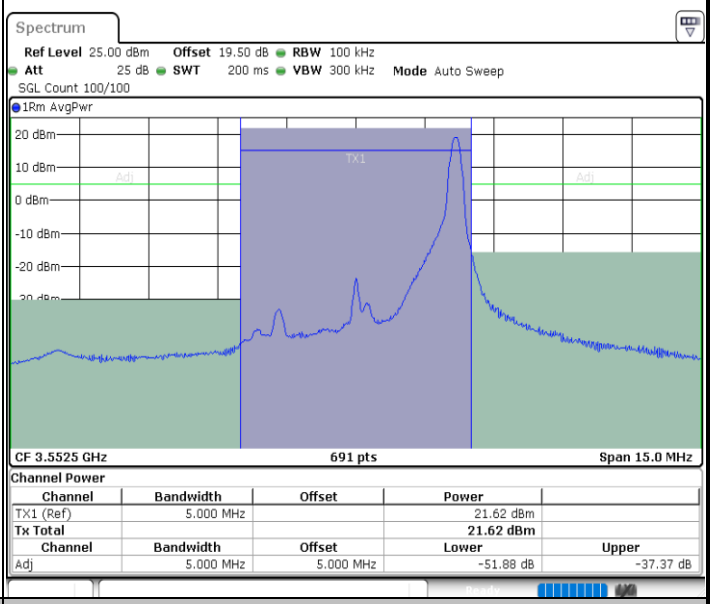
Middle Channel / FullRB	N/A



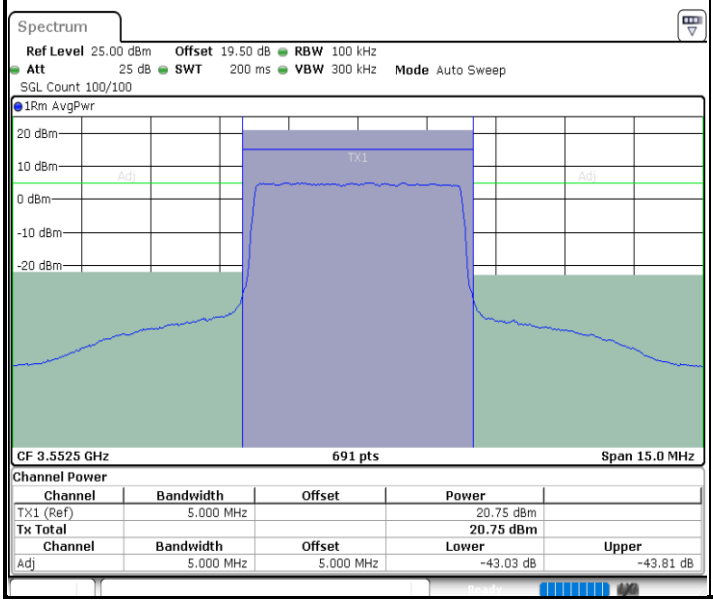
LTE Band 48 / 20MHz	
QPSK	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

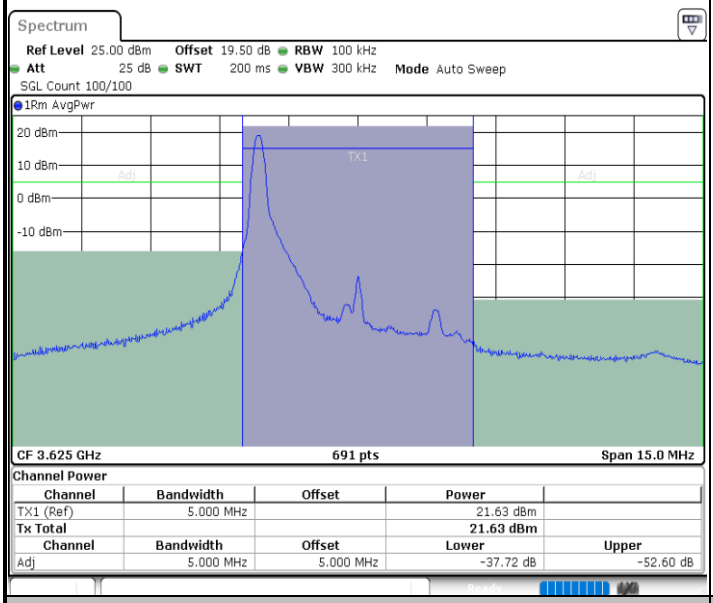
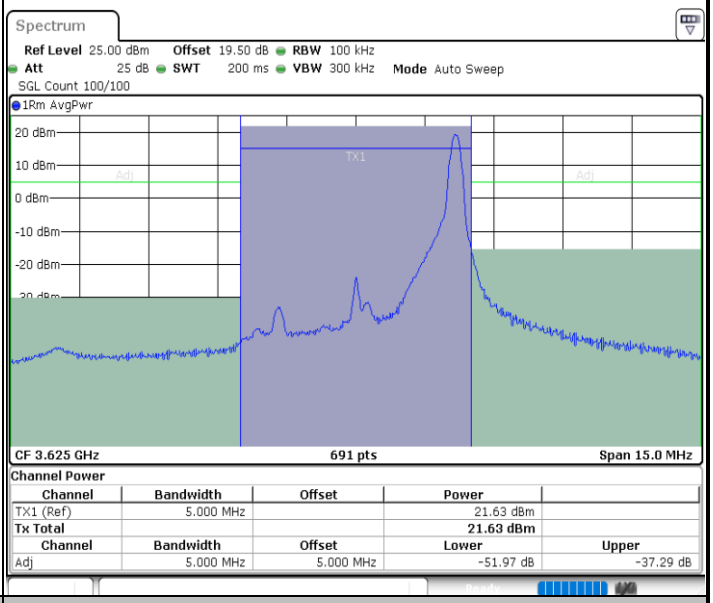
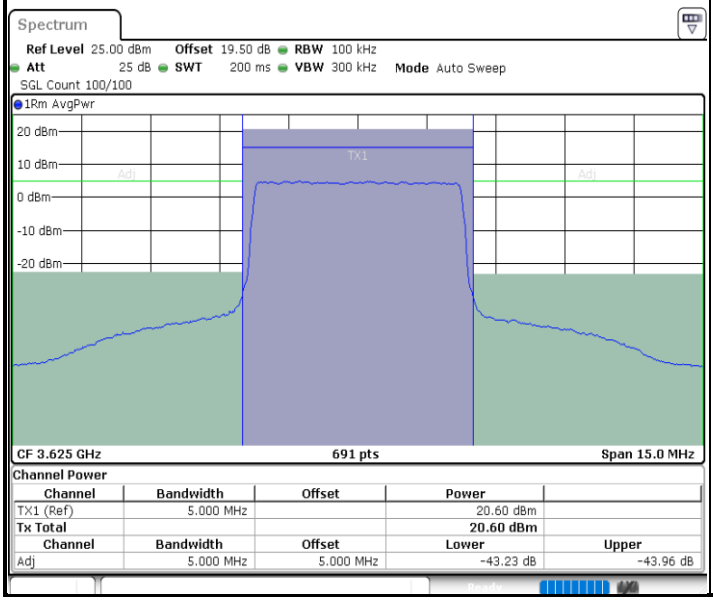
LTE Band 48 / 5MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax

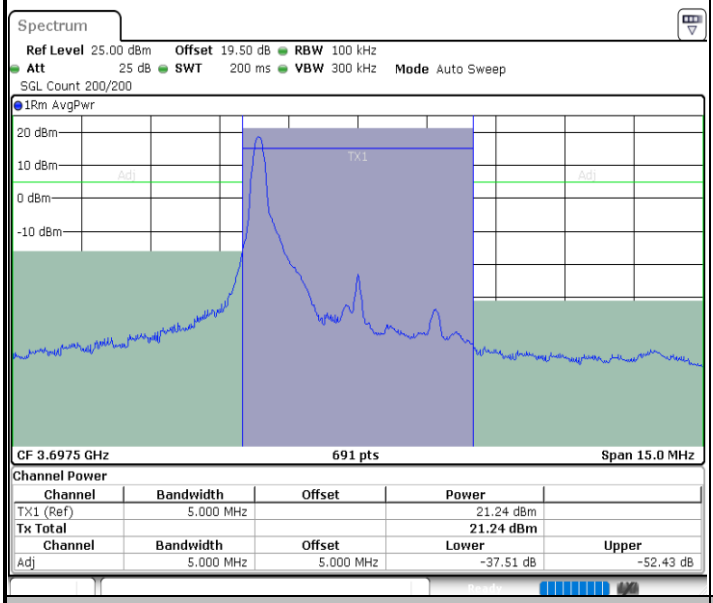
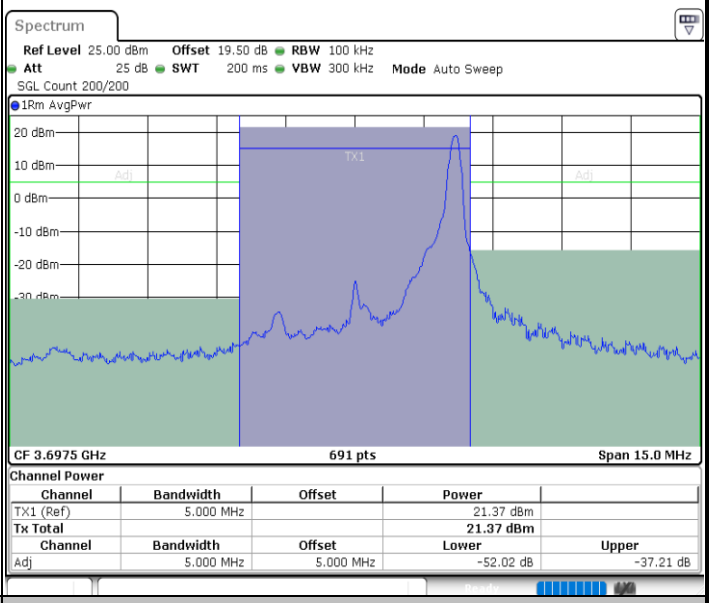
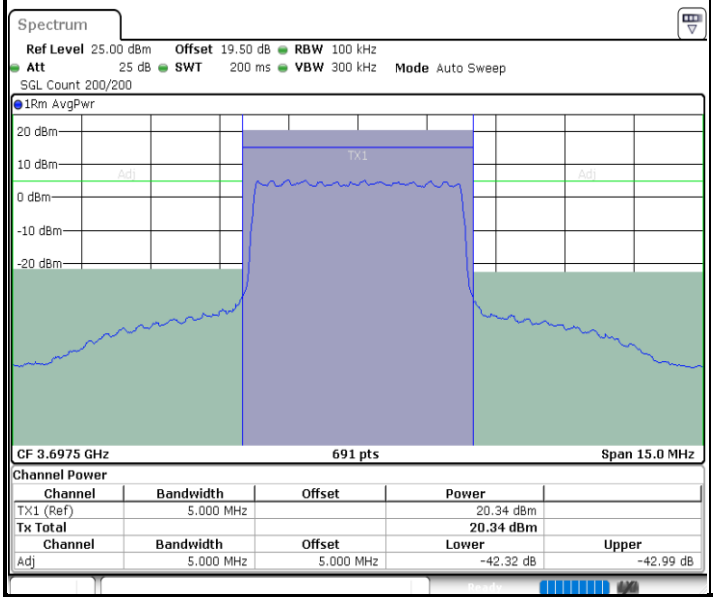


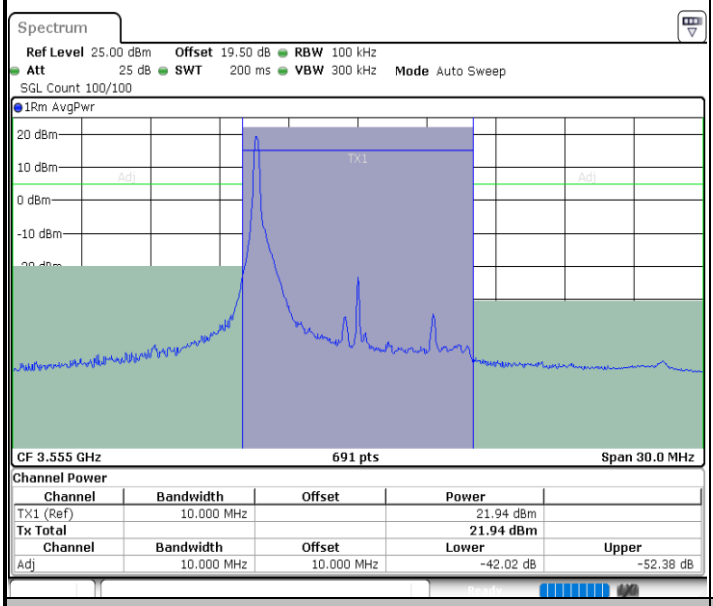
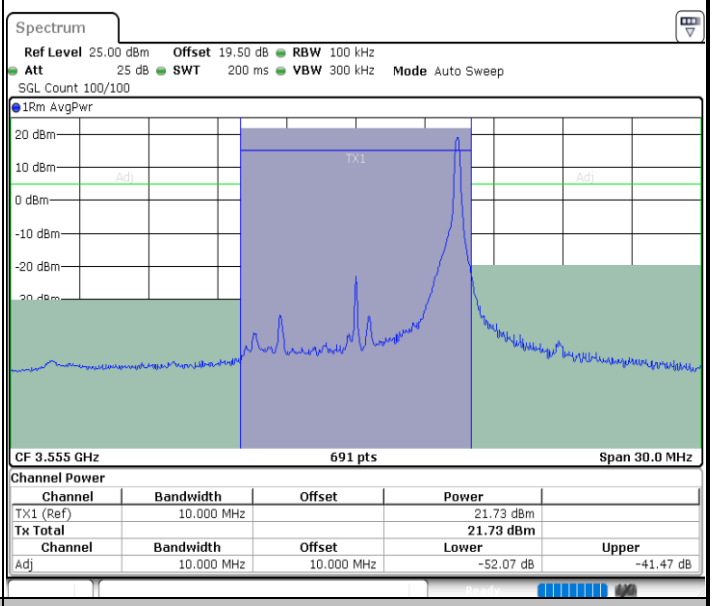
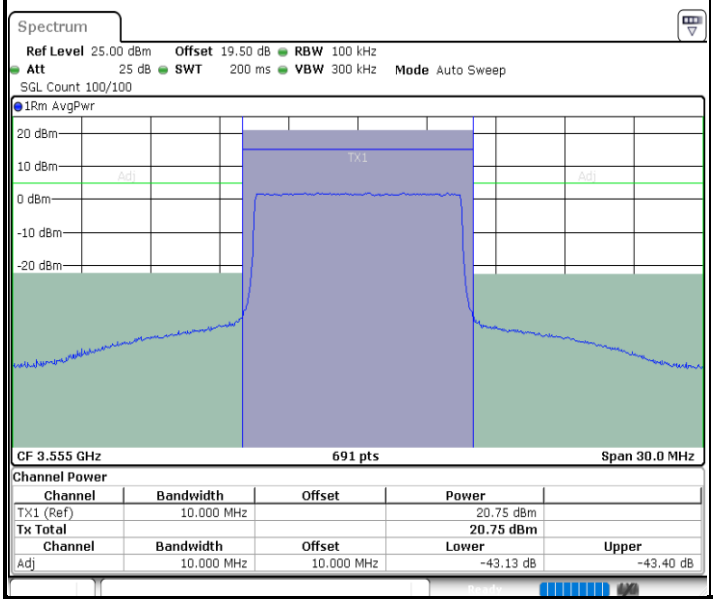


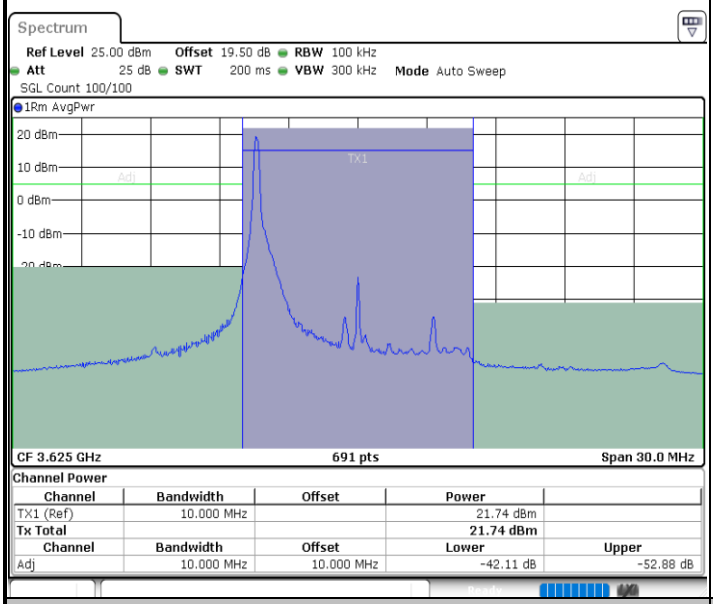
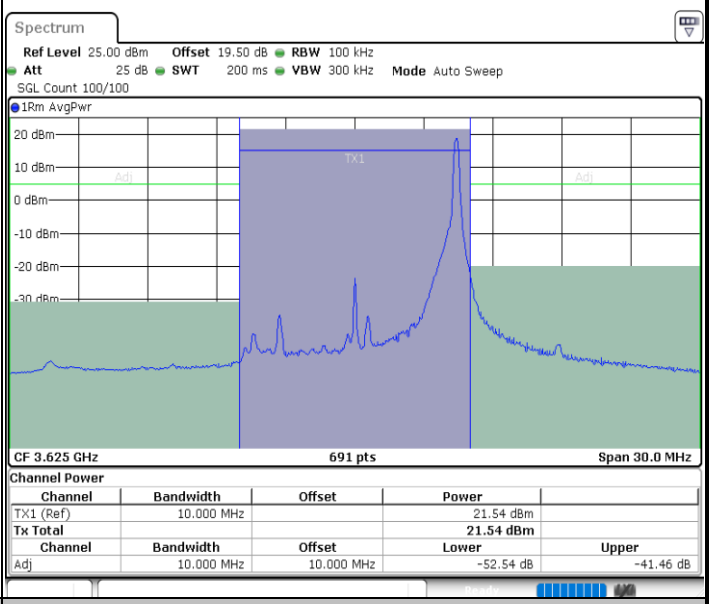
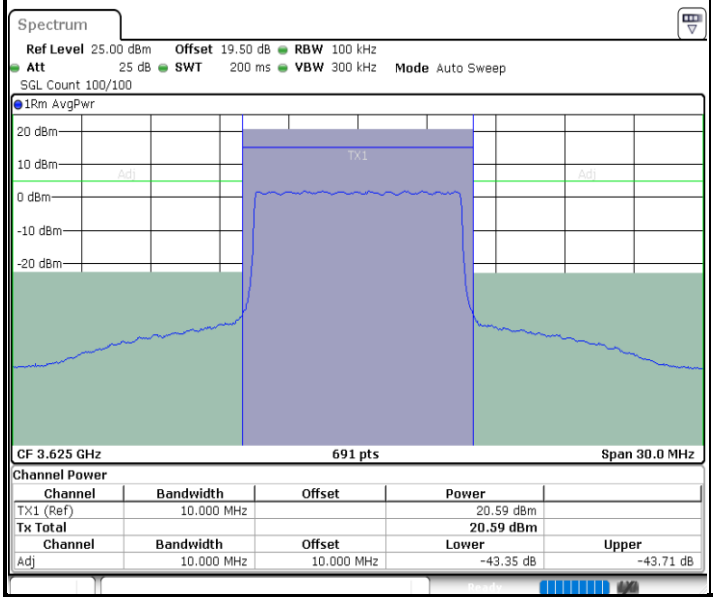
Lowest Channel / FullRB	N/A

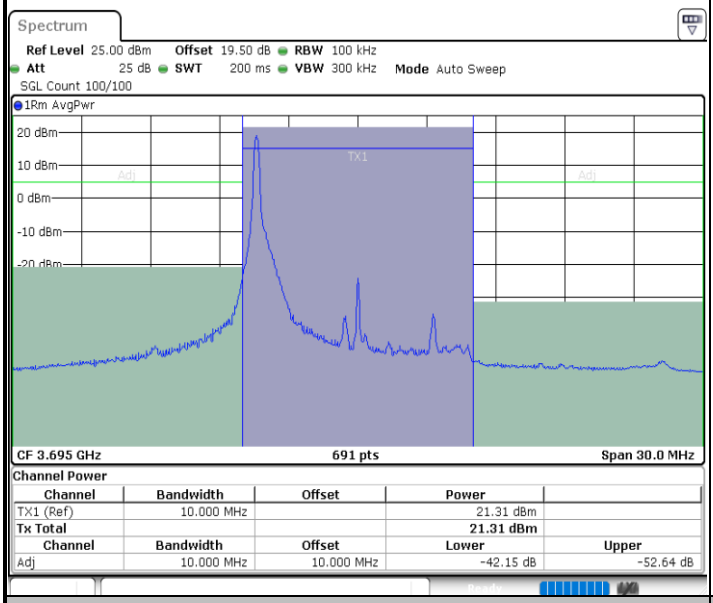
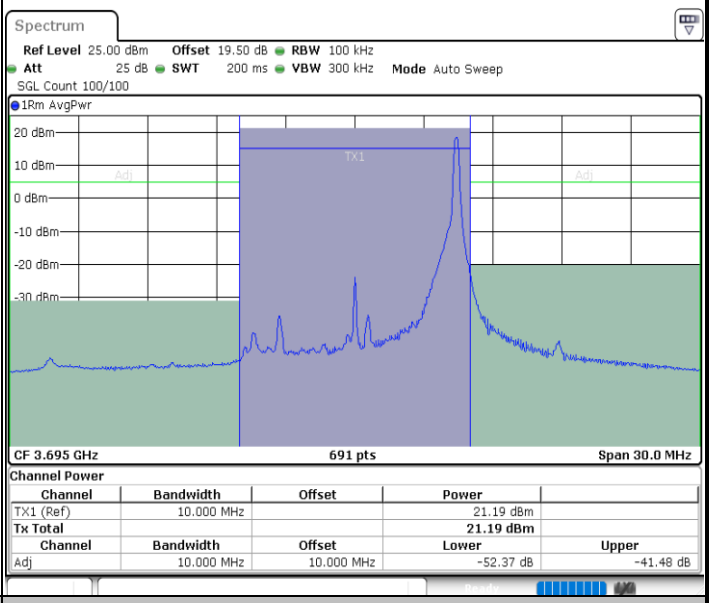
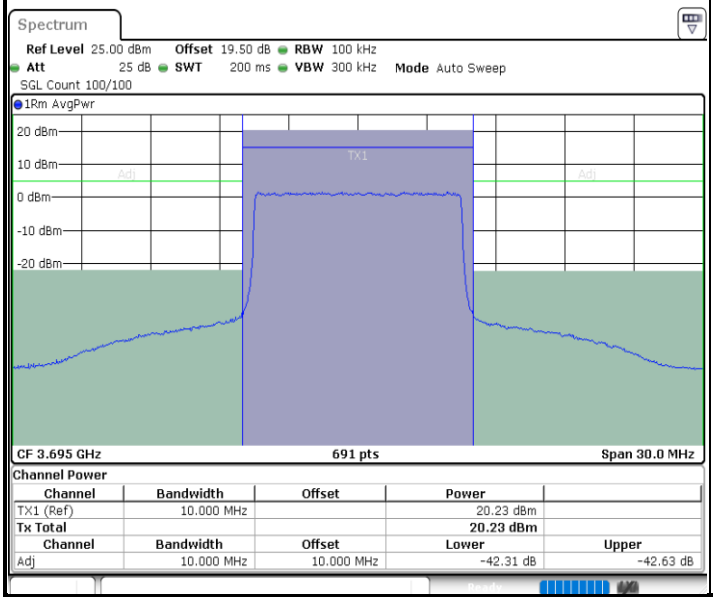


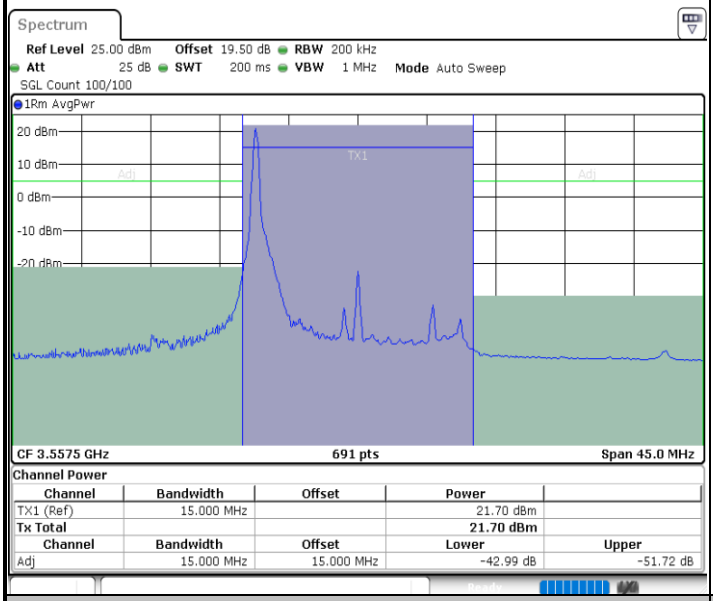
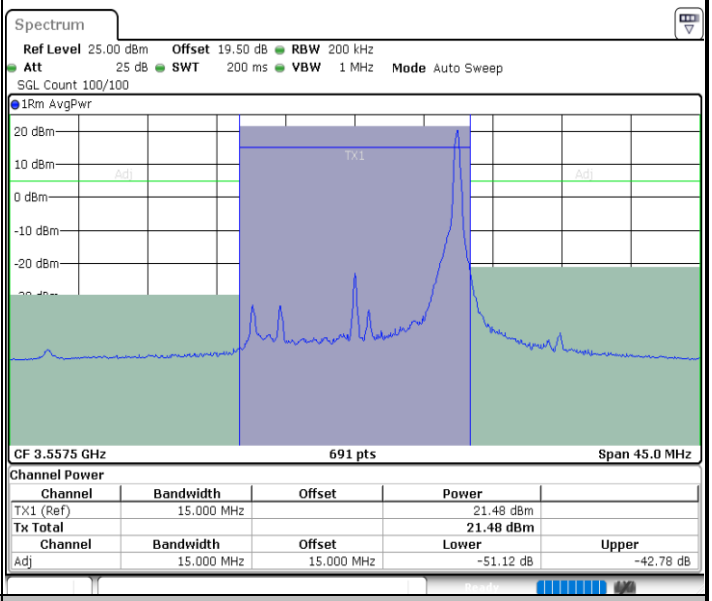
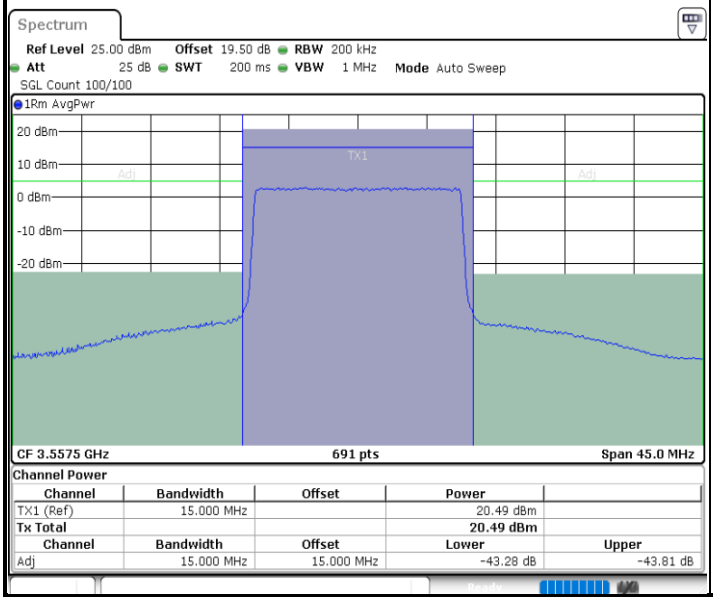
LTE Band 48 / 5MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

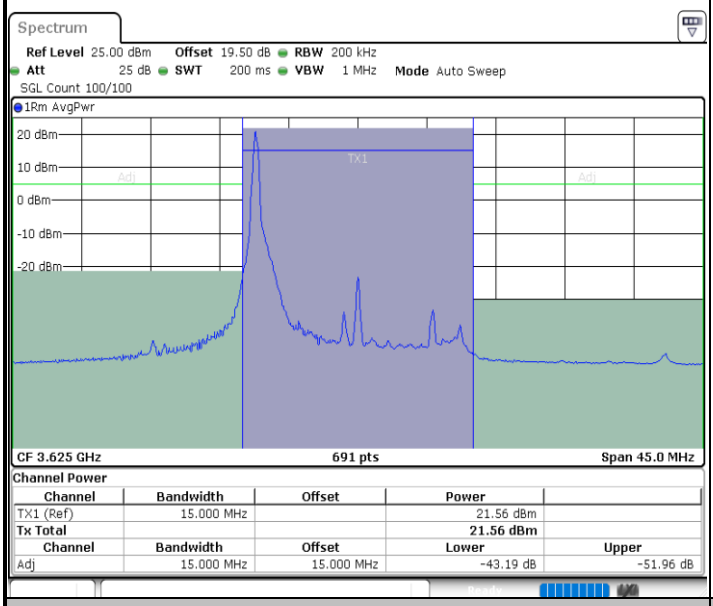
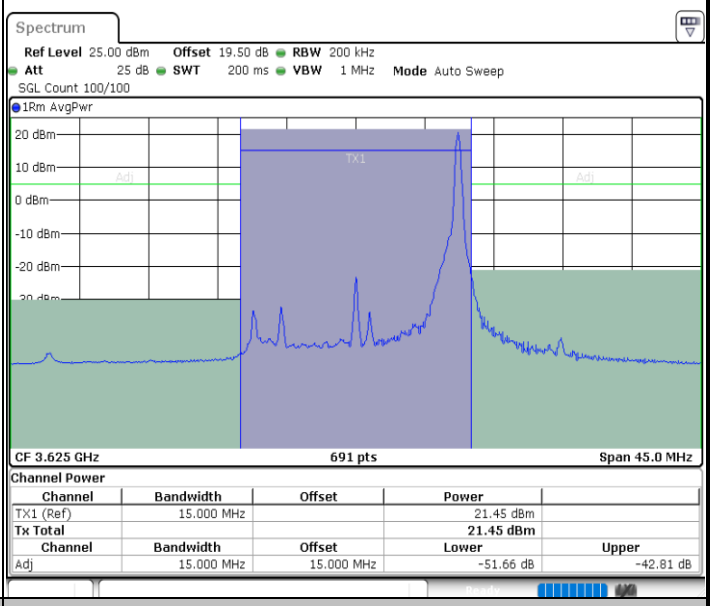
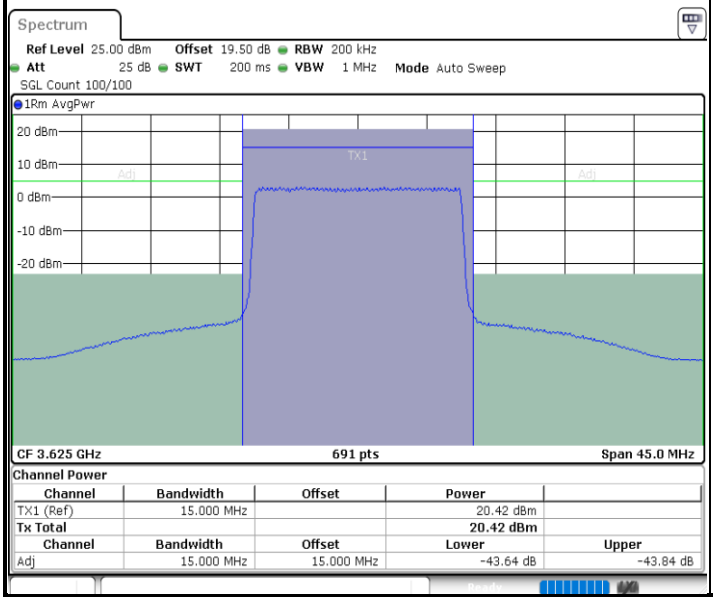
LTE Band 48 / 5MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

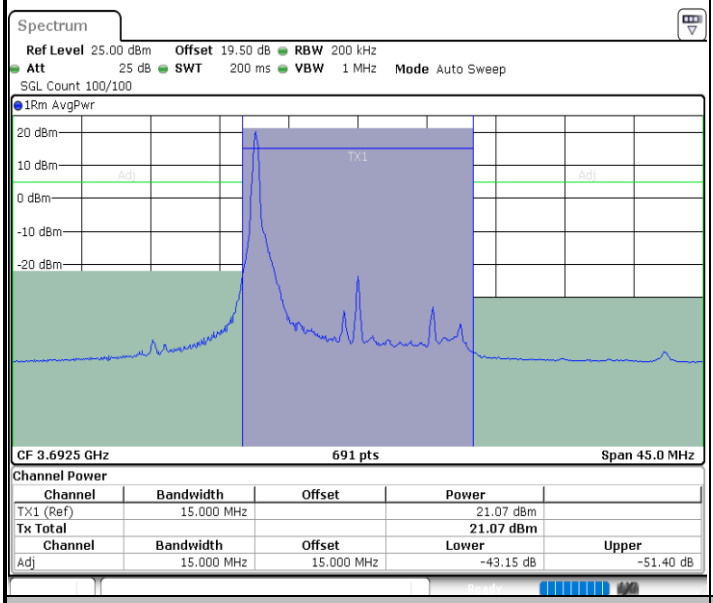
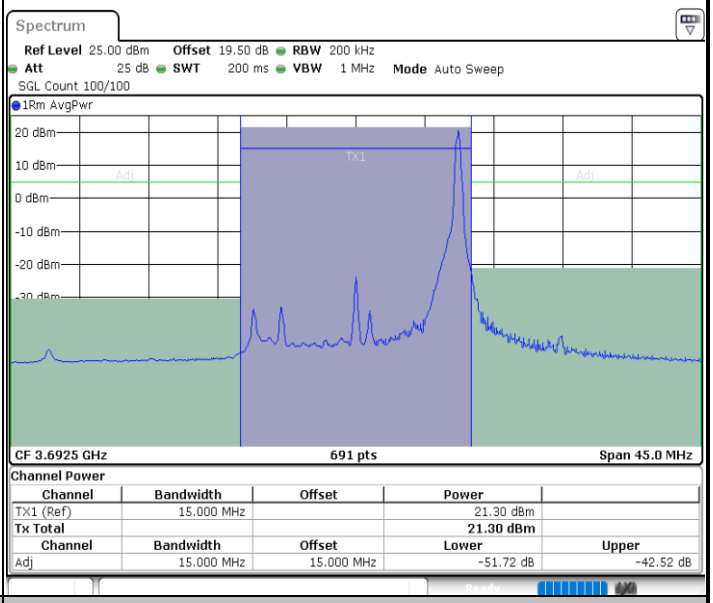
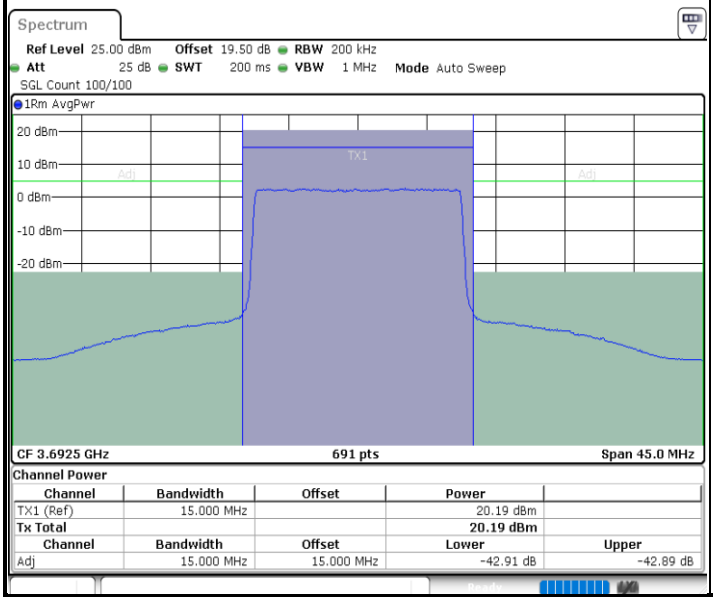
LTE Band 48 / 10MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	N/A
	

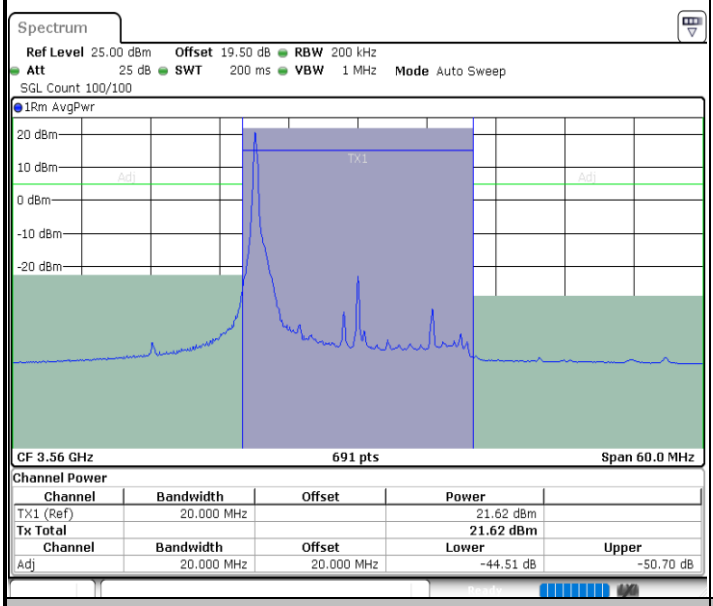
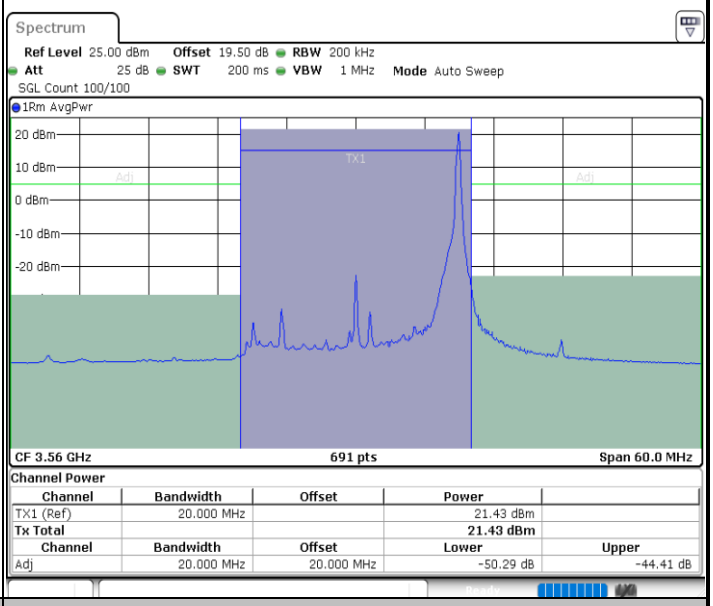
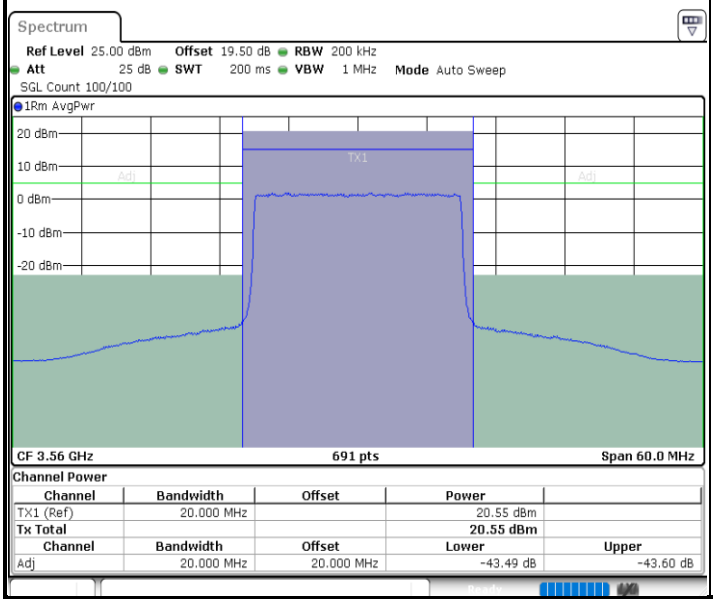
LTE Band 48 / 10MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

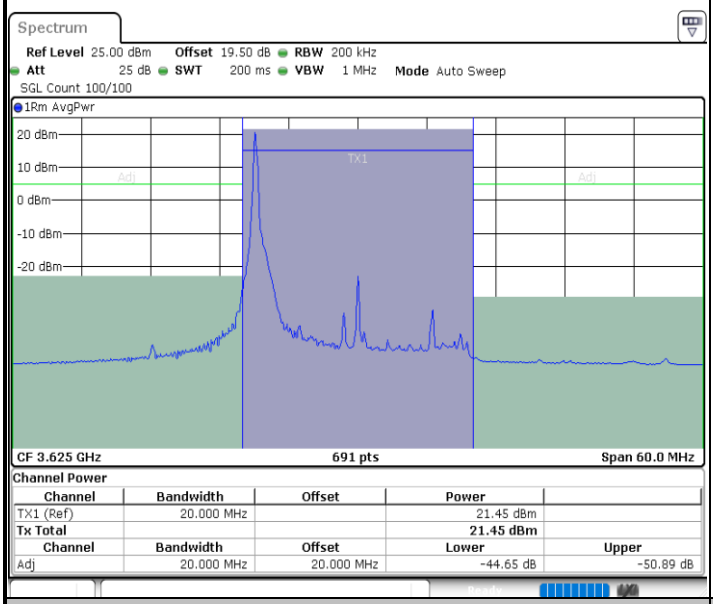
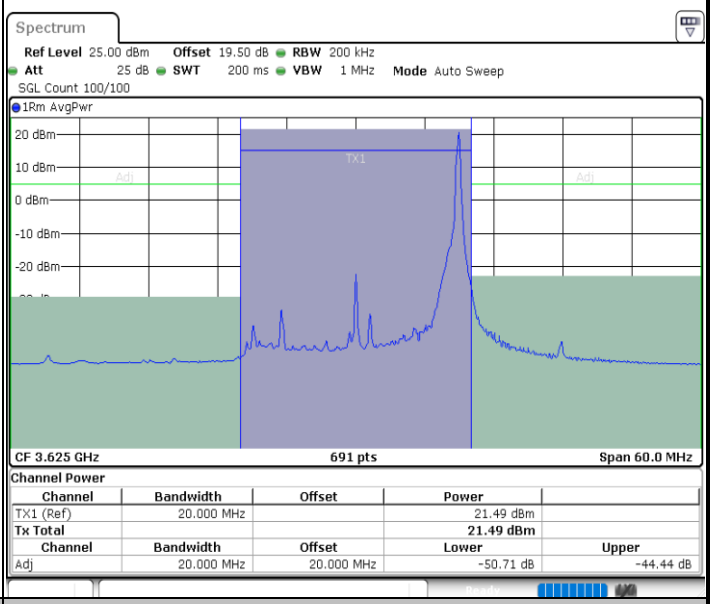
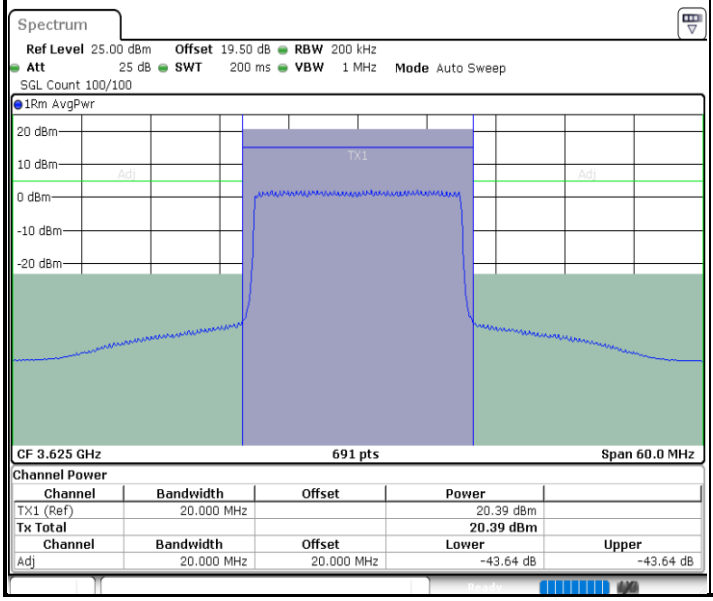
LTE Band 48 / 10MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

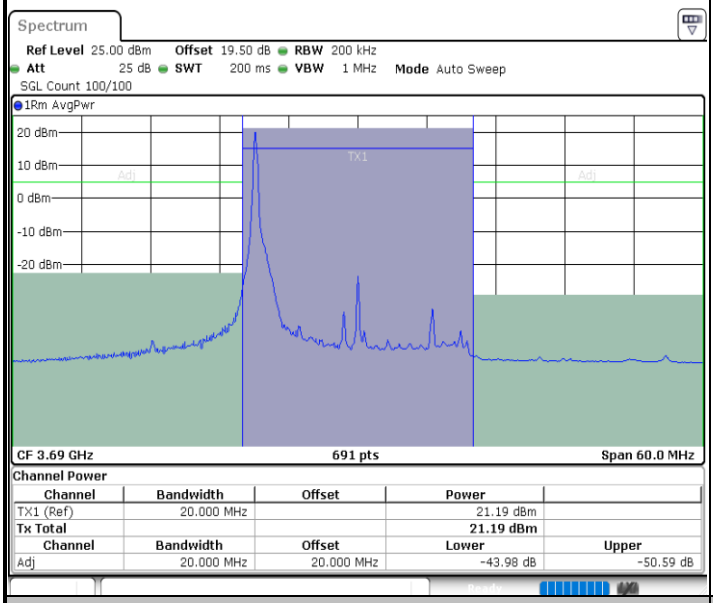
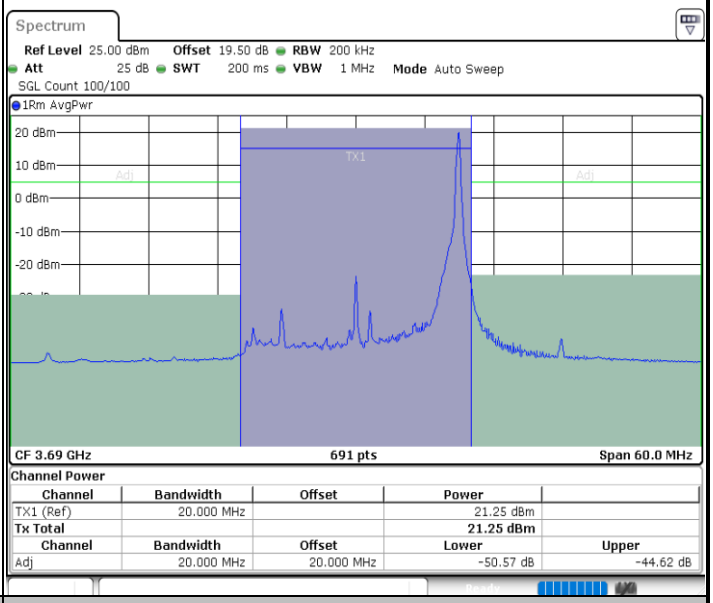
LTE Band 48 / 15MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	N/A
	

LTE Band 48 / 15MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

LTE Band 48 / 15MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A
	

LTE Band 48 / 20MHz	
16QAM	
Lowest Channel / 1RB0	Lowest Channel / 1RBmax
	
Lowest Channel / FullRB	N/A
	

LTE Band 48 / 20MHz	
16QAM	
Middle Channel / 1RB0	Middle Channel / 1RBmax
	
Middle Channel / FullRB	N/A
	

LTE Band 48 / 20MHz	
16QAM	
Highest Channel / 1RB0	Highest Channel / 1RBmax
	
Highest Channel / FullRB	N/A