FCC/IC RF Test Report
FCC ID:2AX9H-25126
IC： 26675-25126

Product	:	4G lte router
Model Name	:	CPE810, LC111,GC111, CPE812, L100 ,CPE120
Brand	:	N/A
Report No.	:	**PTC20092106702E-FC01**

Prepared for

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Prepared by

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TEST RESULT CERTIFICATION

Applicant's name	:	Shen Zhen Shi JuHui Tou Zi Guan li You Xian Gong Si
Address	:	5A09 Unit A building B. BaoNeng Zhi Chuang Gu PingHu Longgang Shenzhen China 518111
Product name	:	4G lte router
Model name	:	CPE810, LC111,GC111, CPE812, L100 ,CPE120
Standards	:	47 CFR Part 2, 24(E), 27 IC RSS-130 issue 2；IC RSS-133 issue 6 IC RSS-139 issue 3
Test Date	:	Nov.20, 2020 to Dec.31, 2020
Date of Issue	:	Jan.04, 2021
Test Result	:	Pass

This device described above has been tested by PTC, and the test results show that the equipment under test (EUT) is in compliance with the IC requirements. And it is applicable only to the tested sample identified in the report.
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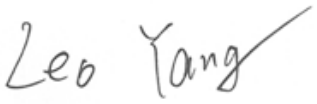
Test Engineer:



Leo Yang / Engineer

Technical Manager:

Chris Du / Manager

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
PTC20092106702E-FC01	Rev. 01	Initial issue of report	Dec. 31, 2020

SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.4	§2.1046	RSS-130 (4.6) RSS-133 (6.4) RSS-139 (6.4)	Conducted Output Power	Reporting Only	PASS	-
3.5	§24.232(d)	RSS-130(4.4) RSS-133 (6.4) RSS-139 (6.4)	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049 §24.238(b) §27.53(h)(3) §27.53(m)(6)	RSS-GEN(6.6) RSS-133 (3.1) RSS-130 (3.1) RSS-139 (3.1)	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §24.238(a) §27.53(c)(2) §27.53(c)(4) §27.53(f) §27.53(g) §27.53(m)(4)	RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.5)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 12)	< 43+10log10(P[Watts])	PASS	-

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.8	§2.1051 §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g)	RSS-133 (6.5.1) RSS-130(4.6) RSS-139 (6.5)	Conducted Spurious Emission (Band 2) (Band 4) (Band 12)	< 43+10log10(P[Watts])	PASS	-
3.9	§2.1055 §24.235 §27.54	RSS-GEN(6.11) RSS-133(6.3) RSS-130(4.5) RSS-139 (6.3)	Frequency Stability Temperature & Voltage	< 2.5 ppm Within Authorized Band	PASS	-
4.4	§27.50(b)(10) §27.50(c)(10)	RSS-130(4.6)	Effective Radiated Power (Band 12)	ERP < 3 Watt	PASS	-
	N/A	RSS-130(4.6)	Equivalent Isotropic Radiated Power (Band 12)	ERP < 3 Watt		
	§24.232(c) §27.50(h)(2)	RSS-133 (6.4) SRSP-510(5.1.2)	Equivalent Isotropic Radiated Power (Band 2)	EIRP < 2Watt		
	§27.50(d)(4)	RSS-139 (6.4) SRSP-513(5.1.2)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
4.5	§2.1053 §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)	RSS-133 (6.5.1) RSS-130 (4.6) RSS-139 (6.5)	Radiated Spurious Emission (Band 2) (Band 4) (Band 12)	< 43+10log$_{10}$(P[Watts])	PASS	Under limit 12.42 dB at 12504.000 MHz

1 General Description

1.1 Product Feature of Equipment Under Test

The Equipment Under Test (hereafter called: EUT) is 4G lte router , LTE, Wi-Fi 2.4GHz 802.11b/g/n,features, and below is details of information.

Product Feature	
Equipment	4G lte router
Brand Name	N/A
Model Name	CPE810
Additional model	LC111,GC111, CPE812, L100 ,CPE120
LTE Operating Band(s)	FDD Band II / IV / XII
Wi-Fi Specification	802.11b/g/n (HT20/HT40)
Power Supply	DC 5V 2A Adaptor input 100-240VAC 50/60Hz （Model : GQ12-050200-HU）
Hardware Version	US
Software Version	A8_V1.5

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.2 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2 : 1850.7 MHz ~ 1909.3 MHz LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 12 : 699 MHz ~ 716 MHz
Rx Frequency	LTE Band 2 : 1930.7 MHz ~ 1989.3 MHz LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 12 : 729 MHz ~ 746 MHz
Bandwidth	LTE Band 2 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12 : 1.4MHz / 3MHz / 5MHz / 10MHz
Maximum Output Power to Antenna	LTE Band 2 : 22.29 dBm LTE Band 4 : 22.87 dBm LTE Band 12 : 23.09 dBm
Type of Modulation	QPSK / 16QAM

EUT Information List				
IMEI	HW Version	SW Version	S/N	Performed Test Item
IMEI : 863879047395648	US	A8_V1.5	N/A	Conducted Measurement Radiated Spurious Emission ERP /EIRP Test

Accessory List	
AC Adapter	Model No. : GQ12-050200-HU
	Type No. : AC/DC ADAPTOR

Note:

1. Above EUT list and accessory list used are electrically identical per declared by manufacturer.
2. Above the accessories list are used to exercise the EUT during test.
3. For other wireless features of this EUT, test report will be issued separately.

1.3 Modification of EUT

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

1.4 Emission Designator

LTE Band 2	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M10G7D	-	0.1119	1M10W7D	-	0.0977
3	2M72G7D	-	0.1109	2M72W7D	-	0.0902
5	4M51G7D	-	0.1038	4M52W7D	-	0.0849
10	9M06G7D	0.0008	0.1112	9M04W7D	-	0.0873
15	13M5G7D	-	0.1094	13M5W7D	-	0.0861
20	18M6G7D	-	0.1180	18M6W7D	-	0.0841

LTE Band 4	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
1.4	1M09G7D	-	0.1542	1M10W7D	-	0.1271
3	2M72G7D	-	0.1535	2M72W7D	-	0.1271
5	4M52G7D	-	0.1503	4M51W7D	-	0.1245
10	9M08G7D	0.0010	0.1315	9M04W7D	-	0.1104
15	13M5G7D	-	0.1459	13M5W7D	-	0.1219
20	18M6G7D	-	0.1349	18M6W7D	-	0.1127

LTE Band 12	QPSK				16QAM			
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Maximum EIRP(W)
1.4	1M10G7D	-	0.0258	0.0424	1M10W7D	-	0.0226	0.0348
3	2M72G7D	-	0.0255	0.0418	2M72W7D	-	0.0218	0.0357
5	4M51G7D	-	0.0269	0.0441	4M51W7D	-	0.0229	0.0375
10	9M10G7D	0.0134	0.0272	0.0446	9M06W7D	-	0.0226	0.0371

1.5 Testing Location

PRECISE TESTING & CERTIFICATION (GUANGDONG) CO., LTD

Address: Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China

FCC Registration Number: 790290

A2LA Certificate No.: 4408.01

IC Registration Number: 12191A
CAB identifier: CN0080

1.6 Applicable Standards

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

- 47 CFR Part 2, 24(E), 27
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- IC RSS-130 Issue2
- IC RSS-133 Issue 6
- IC RSS-139 Issue 3
- IC RSS-Gen Issue 5
- NOTICE 2012-DRS0126

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.
3. Per the section 2.2.3 of Notice of 2012-DRS0126, " Receivers Excluded from Industry Canada Requirements", only radiocommunication receivers operating in stand-alone mode within the band 30-960 MHz and scanner receivers are subject to Industry Canada requirements.

1.7 Environmental conditions

Temperature:	15ºC~35ºC
Humidity	20%~75%
Atmospheric pressure	98kPa~101kPa

1.8 Test software

Software Name	Manufacturer	Model	Version
LTE	Shenzhen JS tonscend co,.ltd	JS1120-1	2.6.8.0518

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 v02r02 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	1	Half	Full	L	M	H
Max. Output Power	2	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	12	v	v	v	v	-	-	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	2						v	v	v	v		v	v	v	v
	4						v	v	v	v		v	v	v	v
	12				v	-	-	v	v	v		v	v	v	v
26dB and 99% Bandwidth	2	v	v	v	v	v	v	v	v			v	v	v	v
	4	v	v	v	v	v	v	v	v			v	v	v	v
	12	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	1	Half	Full	L	M	H
Conducted Band Edge	2	v	v	v	v	v	v	v	v	v		v	v		v
	4	v	v	v	v	v	v	v	v	v		v	v		v
	12	v	v	v	v	-	-	v	v	v		v	v		v
Conducted Spurious Emission	2	v	v	v	v	v	v	v	v	v			v	v	v
	4	v	v	v	v	v	v	v	v	v			v	v	v
	12	v	v	v	v	-	-	v	v	v			v	v	v
Frequency Stability	2				v			v				v		v	
	4				v			v				v		v	
	12			v	v	-	-	v				v		v	
E.R.P./ E.I.R.P.	2	v	v	v	v	v	v	v	v	v			v	v	v
	4	v	v	v	v	v	v	v	v	v			v	v	v
	12	v	v	v	v	v	v	v	v	v			v	v	v

Test Items	Band	Bandwidth (MHz)						Modulation		RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Radiated Spurious Emission	2	v	v	v	v	v	v	v		v			v	v	v
	4	v	v	v	v	v	v	v		v			v	v	v
	12	v	v	v	v	-	-	v		v			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 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :
Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

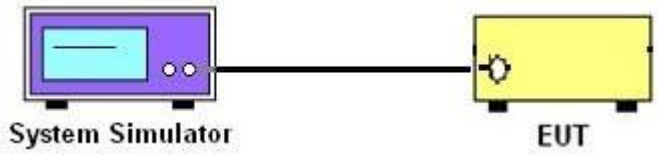
3 Conducted Test Items

3.1 Measuring Instruments

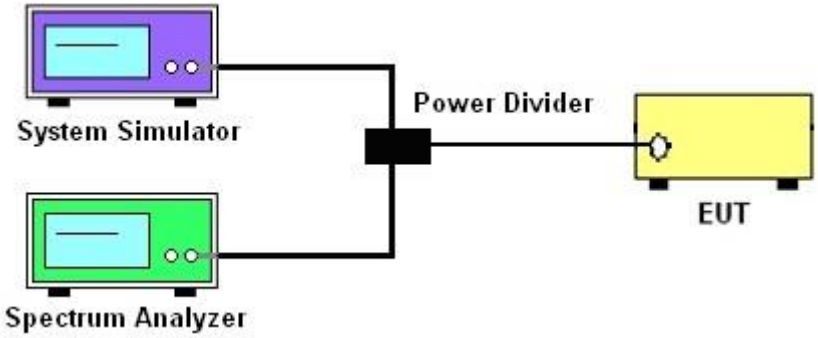
See list of measuring instruments of this test report.

3.2 Test Setup

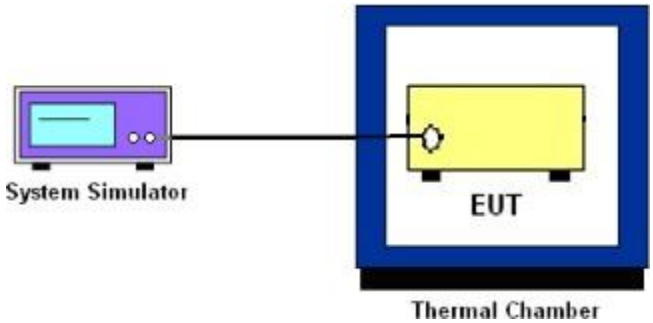
3.2.1 Conducted Output Power



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

3.4.1 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.

3.4.2 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.

3.5 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 FCC KDB 971168 v02r02 Section 5.7.1.
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 FCC KDB 971168 v02r02 Section 4.2.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.

3.7 Conducted Band Edge

3.7.1 Description of Conducted Band Edge Measurement

24.238 (a) and RSS – 133

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

27.53 (c) and RSS – 130

For operations in the 776-788 MHz band, the FCC limit is 43 + $10\log_{10}$(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed. In addition, the power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dBW), by at least 65 + 10 log10 p(watts), dB, for mobile and portable equipment.

27.53 (g) and RSS – 130

For operations in the 698 -746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

27.53 (h) and RSS – 139

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

27.53(m)(4) and RSS-199

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 FCC KDB 971168 v02r02 Section 6.0.
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. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
4. Set spectrum analyzer with RMS detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

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.

3.8.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 6.0.
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, taking the record of maximum spurious emission.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

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

3.9.2 Test Procedures for Temperature Variation

1. The 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.

3.9.3 Test Procedures for Voltage Variation

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency was measured for the worst case.

3.9.4 Test Procedures for Frequency Stability (IC)

1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The EUT was operated at the lowest and highest channel
4. Using RBW= 1% OBW and displaying line = -13dBm.
5. The frequency at these points shall be recorded as f_L and f_H respectively.
6. Calculate frequency stability within the 2500 – 2570MHz, 699 – 716MHz, 777 – 787MHz and 704 – 716 band.

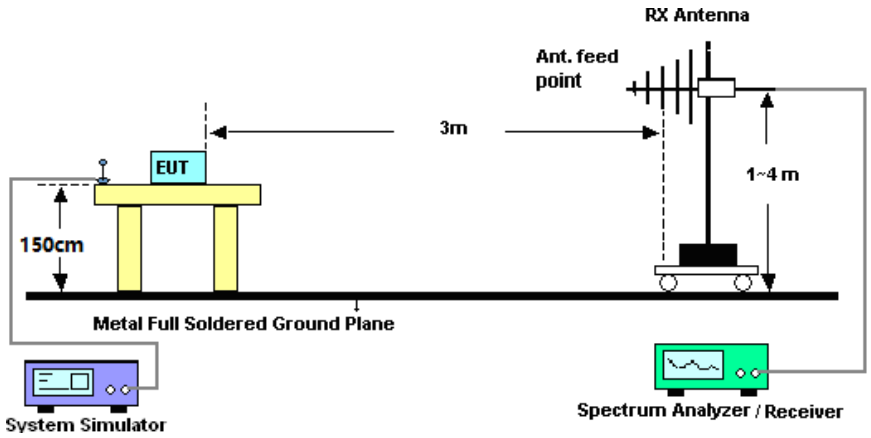
4 Radiated Test Items

4.1 Measuring Instruments

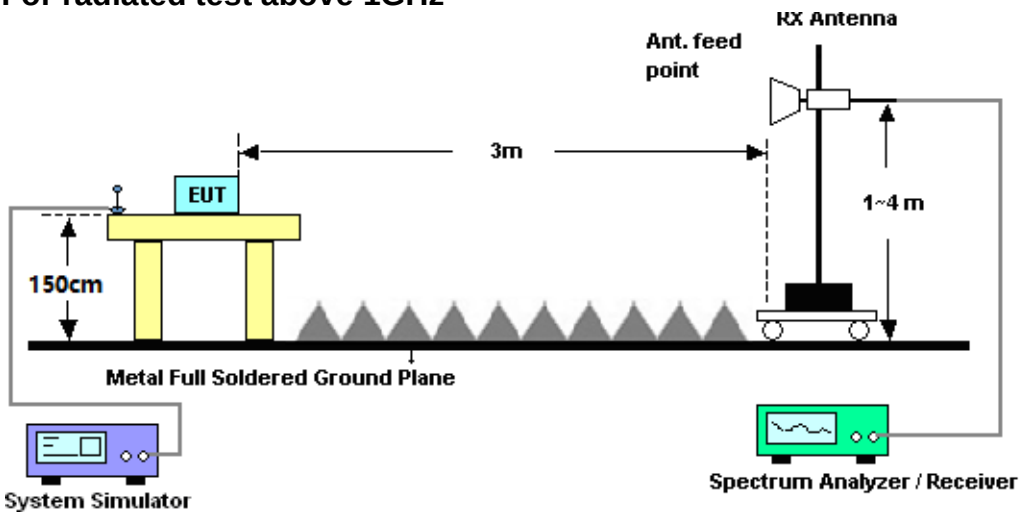
See list of measuring instruments of this test report.

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 Effective Radiated Power and Effective Isotropic Radiated Power

4.4.1 Description of the ERP/EIRP Measurement

Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average ERP of 3 watts with LTE band 12.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-C-2004, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v02r02. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 and 1 watt with LTE band 4.

4.4.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.2.1. (for CDMA/WCDMA), Section 5.2.2.2 (for GSM/GPRS/EDGE) and ANSI / TIA-603-C-2004 Section 2.2.17.
2. The EUT was placed on a non-conductive rotating platform 0.8 meters high in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RMS detector.
3. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power. The maximum emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
4. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (substitution antenna) at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP= LVL + Correction factor and ERP = EIRP – 2.15.

	LTE					
LTE BW	1.4M	3M	5M	10M	15M	20M
Span	3MHz	6MHz	10MHz	20MHz	30MHz	40MHz
RBW	30kHz	100kHz	100kHz	300kHz	300kHz	300kHz
VBW	100kHz	300kHz	300kHz	1MHz	1MHz	1MHz
Detector	RMS	RMS	RMS	RMS	RMS	RMS
Trace	Average	Average	Average	Average	Average	Average
Average Type	Power	Power	Power	Power	Power	Power
Sweep Count	100	100	100	100	100	100

4.5 Radiated Spurious Emission

4.5.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. 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

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.

For Band 12,13,17

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

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

4.5.2 Test Procedures

1. The testing follows FCC KDB 971168 v02r02 Section 5.8 and ANSI / TIA-603-C-2004 Section 2.2.12.
2. The EUT was placed on a rotatable wooden table with 0.8 meter above ground.
3. The EUT was set 3 meters from the receiving antenna, which was 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 one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
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.
8. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
9. Taking the record of output power at antenna port.
10. Repeat step 7 to step 8 for another polarization.
11. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
    For Band 7:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
    ERP (dBm) = EIRP - 2.15

5 List of Measuring Equipment

Equipment Name	Manufacturer	Model	Serial No.	Last Cal.	Cal. Interval
EMI Test Receiver	Rohde&schwarz	ESPI7	100314	Sep. 118, 2020	1 Year
Spectrum Analyzer	Rohde&schwarz	FSP40	100056	Sep. 118, 2020	1 Year
TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-872	Sep. 118, 2020	1 Year
amplifier	Hewlett-Packard	8447D	3113A06150	Sep. 118, 2020	1 Year
Single path vehicle AMN(LISN)	Schwarzbeck	NNBM 8124	01175	Sep. 118, 2020	1 Year
Low noise active vertical monopole antenna	Schwarzbeck	VAMP 9243	#565	Sep. 118, 2020	1 Year
Biconical antenna	Schwarzbeck	BBA 9106	#164	Sep. 118, 2020	1 Year
MXG Vector Signal Generator	Agilent	N5182A	MY49060455	Sep. 118, 2020	1 Year
ESG Series Analog signal generator	Agilent	E4421B	GB40051240	Sep. 118, 2020	1 Year
Thermometer clock humidity monitor	-	HTC-1	/	Sep. 118, 2020	1 Year
Log Periodic Antenna	Schwarzbeck	VUSLP 9111B	#312	Sep. 118, 2020	1 Year
Log Periodic Dipole Array Antenna	ETS-LINDGREN	3148B	00224524	Sep. 118, 2020	1 Year
Amplifier	EMtrace	RP06A	00117	Sep. 118, 2020	1 Year
Comprehensive test instrument	Rohde&schwarz	CMW500	149155	Sep. 118, 2020	1 Year
PXA Signal Analyzer	Agilent	N9030A	MY51350296	Sep. 118, 2020	1 Year
EMI Test Receiver	Rohde&schwarz	ESIB26	100273	Sep. 118, 2020	1 Year
Synthesized Sweeper	Agilent	83752A	3610A01957	Sep. 118, 2020	1 Year
DC Power Supply	Agilent	E3632A	MY40027695	Sep. 118, 2020	1 Year
Artificial mains network	3ctest	LISN J50	ES3911805	Sep. 118, 2020	1 Year
Power amplifier	Space-Dtroniccs	EWLNA0118G-P40	1852001	Sep. 118, 2020	1 Year

Current Probe	SOLAR ELECTRONICS CO.	9207-1	220095-1	Sep. 118, 2020	1 Year
Loop Sensor	SOLAR ELECTRONICS CO.	7334-1	220095-2	Sep. 118, 2020	1 Year
Note: the calibration interval of the above test instruments is 12 or 24 months and the calibrations are traceable to international system unit (SI).					

6 Uncertainty of Evaluation

Parameter	Uncertainty
RF output power, conducted	±1.0dB
Power Spectral Density, conducted	±2.2dB
Radio Frequency	± 1 x 10^{-6}
Bandwidth	± 1.5 x 10^{-6}
Time	±2%
Duty Cycle	±2%
Temperature	±1°C
Humidity	±5%
DC and low frequency voltages	±3%
Conducted Emissions (150kHz~30MHz)	±3.64dB
Radiated Emission(30MHz~1GHz)	±5.03dB
Radiated Emission(1GHz~25GHz)	±4.74dB
Remark: The coverage Factor (k=2), and measurement Uncertainty for a level of Confidence of 95%	

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.95	**22.00**	**22.00**
1.4	1	2		21.92	21.99	21.99
1.4	1	5		21.85	21.98	21.89
1.4	3	0		21.83	21.88	21.87
1.4	3	1		21.90	21.96	21.95
1.4	3	2		21.89	21.96	21.94
1.4	6	0		20.93	20.98	20.98
1.4	1	0	16-QAM	21.22	21.26	21.15
1.4	1	2		21.21	21.25	21.14
1.4	1	5		21.12	21.11	21.06
1.4	3	0		20.97	20.97	20.96
1.4	3	1		20.91	20.94	20.93
1.4	3	2		20.89	20.93	20.92
1.4	6	0		20.01	20.03	20.05
3	1	0	QPSK	21.87	21.93	**21.96**
3	1	7		21.82	21.92	21.95
3	1	14		21.76	21.87	21.86
3	8	0		20.95	21.00	21.02
3	8	4		20.95	20.99	21.00
3	8	7		20.92	20.99	20.99
3	15	0		20.93	21.01	21.04
3	1	0	16-QAM	21.16	21.16	21.14
3	1	7		21.15	21.15	21.13
3	1	14		21.05	21.11	21.04
3	8	0		20.01	20.03	20.06
3	8	4		19.99	20.02	20.04
3	8	7		19.97	20.02	20.01
3	15	0		19.93	20.00	20.01

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.90	21.97	**21.99**
5	1	12		21.89	21.96	21.98
5	1	24		21.80	21.88	21.88
5	12	0		20.99	21.05	21.08
5	12	6		20.96	21.02	21.04
5	12	11		20.96	21.03	21.04
5	25	0		20.91	21.00	21.03
5	1	0	16-QAM	21.19	21.20	21.19
5	1	12		21.18	21.19	21.18
5	1	24		21.07	21.11	21.05
5	12	0		19.98	20.03	20.06
5	12	6		19.97	20.01	20.03
5	12	11		19.96	20.02	20.02
5	25	0		19.90	19.98	20.00
10	1	0	QPSK	22.01	22.01	**22.07**
10	1	24		21.94	21.99	22.01
10	1	49		21.89	21.97	21.96
10	25	0		21.01	21.05	21.08
10	25	12		20.98	21.05	21.07
10	25	24		20.97	21.05	21.07
10	50	0		21.01	21.09	21.11
10	1	0	16-QAM	21.29	21.24	21.32
10	1	24		21.21	21.21	21.25
10	1	49		21.15	21.21	21.15
10	25	0		20.01	20.02	20.06
10	25	12		19.97	20.02	20.06
10	25	24		19.95	20.03	20.05
10	50	0		20.00	20.06	20.08

LTE Band 2 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.09	22.08	22.15
15	1	37		22.02	22.07	22.11
15	1	74		21.98	22.07	22.07
15	36	0		21.10	21.14	21.22
15	36	18		21.08	21.14	21.17
15	36	37		21.07	21.14	21.16
15	75	0		21.08	21.13	21.17
15	1	0	16-QAM	21.35	21.33	21.41
15	1	37		21.29	21.32	21.33
15	1	74		21.22	21.32	21.22
15	36	0		20.10	20.12	20.19
15	36	18		20.05	20.11	20.14
15	36	37		20.03	20.12	20.12
15	75	0		20.05	20.10	20.15
20	1	0	QPSK	22.24	22.25	22.29
20	1	49		22.13	22.19	22.22
20	1	99		22.17	22.23	22.19
20	50	0		21.26	21.31	21.35
20	50	24		21.19	21.28	21.30
20	50	49		21.20	21.27	21.26
20	100	0		21.21	21.28	21.30
20	1	0	16-QAM	21.46	21.48	21.49
20	1	49		21.39	21.47	21.48
20	1	99		21.37	21.41	21.39
20	50	0		20.25	20.28	20.32
20	50	24		20.18	20.24	20.27
20	50	49		20.19	20.24	20.23
20	100	0		20.17	20.24	20.26

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	22.51	22.59	22.60
1.4	1	2		22.50	22.58	22.59
1.4	1	5		22.40	22.47	22.50
1.4	3	0		22.40	22.58	22.48
1.4	3	1		22.46	22.53	22.55
1.4	3	2		22.46	22.52	22.56
1.4	6	0		21.49	21.58	21.58
1.4	1	0	16-QAM	21.78	21.82	21.88
1.4	1	2		21.77	21.81	21.86
1.4	1	5		21.67	21.69	21.73
1.4	3	0		21.52	21.57	21.60
1.4	3	1		21.48	21.53	21.55
1.4	3	2		21.48	21.50	21.54
1.4	6	0		20.55	20.63	20.65
3	1	0	QPSK	22.51	22.55	22.55
3	1	7		22.50	22.54	22.54
3	1	14		22.42	22.45	22.50
3	8	0		21.58	21.62	21.64
3	8	4		21.56	21.62	21.63
3	8	7		21.53	21.60	21.62
3	15	0		21.56	21.61	21.63
3	1	0	16-QAM	21.77	21.74	21.79
3	1	7		21.76	21.73	21.78
3	1	14		21.67	21.68	21.73
3	8	0		20.61	20.66	20.68
3	8	4		20.58	20.64	20.66
3	8	7		20.58	20.63	20.65
3	15	0		20.56	20.58	20.64

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.52	22.56	22.58
5	1	12		22.51	22.55	22.57
5	1	24		22.41	22.47	22.48
5	12	0		21.61	21.65	21.66
5	12	6		21.57	21.64	21.63
5	12	11		21.57	21.63	21.64
5	25	0		21.54	21.61	21.61
5	1	0	16-QAM	21.77	21.78	21.85
5	1	12		21.76	21.75	21.84
5	1	24		21.66	21.69	21.75
5	12	0		20.60	20.63	20.66
5	12	6		20.55	20.62	20.62
5	12	11		20.55	20.62	20.64
5	25	0		20.53	20.58	20.59
10	1	0	QPSK	22.63	22.64	22.62
10	1	24		22.59	22.61	22.58
10	1	49		22.50	22.54	22.53
10	25	0		21.61	21.68	21.62
10	25	12		21.59	21.66	21.61
10	25	24		21.60	21.64	21.61
10	50	0		21.62	21.70	21.65
10	1	0	16-QAM	21.91	21.85	21.88
10	1	24		21.87	21.84	21.85
10	1	49		21.77	21.79	21.80
10	25	0		20.61	20.66	20.61
10	25	12		20.57	20.64	20.60
10	25	24		20.58	20.61	20.60
10	50	0		20.60	20.68	20.63

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.68	22.70	22.68
15	1	37		22.62	22.66	22.62
15	1	74		22.60	22.60	22.58
15	36	0		21.70	21.76	21.72
15	36	18		21.69	21.74	21.70
15	36	37		21.67	21.70	21.67
15	75	0		21.67	21.73	21.67
15	1	0	16-QAM	21.95	21.92	21.92
15	1	37		21.87	21.91	21.90
15	1	74		21.83	21.85	21.83
15	36	0		20.68	20.74	20.70
15	36	18		20.66	20.71	20.66
15	36	37		20.64	20.67	20.66
15	75	0		20.63	20.70	20.66
20	1	0	QPSK	22.87	22.85	22.85
20	1	49		22.75	22.77	22.75
20	1	99		22.77	22.75	22.72
20	50	0		21.85	21.90	21.88
20	50	24		21.81	21.85	21.81
20	50	49		21.83	21.82	21.78
20	100	0		21.81	21.86	21.82
20	1	0	16-QAM	22.12	22.10	22.11
20	1	49		22.01	22.00	22.02
20	1	99		21.99	22.00	21.99
20	50	0		20.83	20.87	20.85
20	50	24		20.79	20.82	20.80
20	50	49		20.80	20.79	20.75
20	100	0		20.76	20.82	20.79

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	23.08	23.06	23.02
1.4	1	2		23.05	23.05	23.01
1.4	1	5		22.94	22.94	22.90
1.4	3	0		22.87	22.87	22.81
1.4	3	1		22.71	22.72	22.77
1.4	3	2		22.62	22.69	22.68
1.4	6	0		22.01	22.00	22.00
1.4	1	0	16-QAM	22.36	22.30	22.37
1.4	1	2		22.35	22.29	22.36
1.4	1	5		22.24	22.27	22.23
1.4	3	0		22.08	22.13	22.09
1.4	3	1		22.04	22.07	22.05
1.4	3	2		22.04	22.02	22.03
1.4	6	0		21.11	21.11	21.10
3	1	0	QPSK	22.98	23.01	22.96
3	1	7		22.97	23.00	22.95
3	1	14		22.94	22.89	22.88
3	8	0		22.06	22.06	22.02
3	8	4		22.04	22.06	22.05
3	8	7		22.05	22.05	22.03
3	15	0		22.03	22.05	22.02
3	1	0	16-QAM	22.28	22.36	22.32
3	1	7		22.27	22.35	22.31
3	1	14		22.26	22.25	22.23
3	8	0		21.14	21.13	21.11
3	8	4		21.13	21.14	21.11
3	8	7		21.13	21.13	21.10
3	15	0		21.06	21.07	21.05

LTE Band 12 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	23.01	23.01	22.94
5	1	12		23.00	23.00	22.93
5	1	24		22.95	22.92	22.84
5	12	0		22.03	22.05	21.98
5	12	6		22.05	22.05	21.96
5	12	11		22.07	22.04	21.98
5	25	0		22.00	21.99	21.93
5	1	0	16-QAM	22.32	22.35	22.27
5	1	12		22.31	22.34	22.26
5	1	24		22.30	22.25	22.19
5	12	0		21.06	21.09	21.01
5	12	6		21.08	21.09	20.99
5	12	11		21.08	21.07	21.01
5	25	0		21.01	21.00	20.94
10	1	0	QPSK	23.09	23.04	22.99
10	1	24		23.03	23.03	22.97
10	1	49		23.00	22.98	22.93
10	25	0		22.02	22.03	22.00
10	25	12		22.01	22.04	21.98
10	25	24		22.06	22.03	22.00
10	50	0		22.03	22.01	22.02
10	1	0	16-QAM	22.38	22.39	22.33
10	1	24		22.37	22.38	22.30
10	1	49		22.36	22.32	22.31
10	25	0		21.03	21.05	21.03
10	25	12		21.03	21.06	21.02
10	25	24		21.08	21.06	21.03
10	50	0		21.04	21.04	21.04

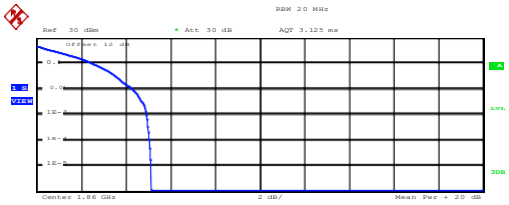
LTE Band 2

Peak-to-Average Ratio

Mode	LTE Band 2 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	4.9	5.51	6.19	6.31	PASS
Middle CH	4.62	5.51	5.61	6.22	
Highest CH	4.58	5.54	5.8	6.22	

LTE Band 2 / 20MHz / QPSK

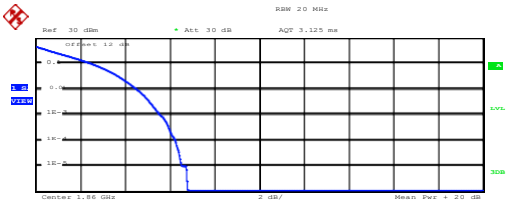
Lowest Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	21.69 dBm
Peak	26.80 dBm
Crest	5.10 dB
10 %	2.50 dB
1 %	4.26 dB
.1 %	4.90 dB
.01 %	5.03 dB

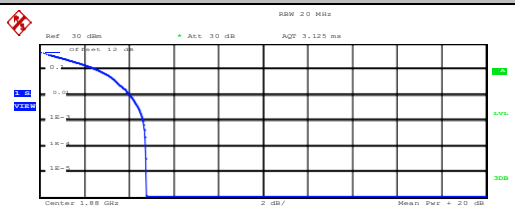
Lowest Channel / Full RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	20.94 dBm
Peak	27.71 dBm
Crest	6.77 dB
10 %	2.47 dB
1 %	4.49 dB
.1 %	5.51 dB
.01 %	6.22 dB

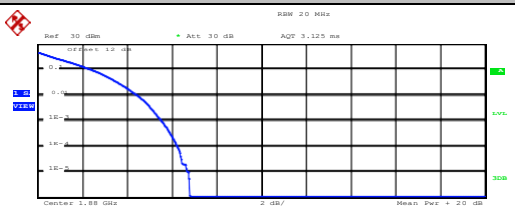
Middle Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	21.79 dBm
Peak	26.54 dBm
Crest	4.74 dB
10 %	2.53 dB
1 %	4.01 dB
.1 %	4.62 dB
.01 %	4.74 dB

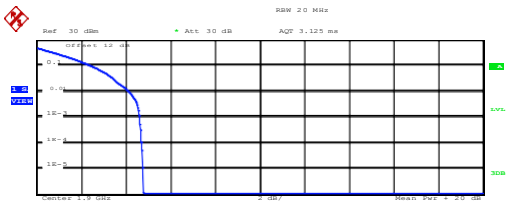
Middle Channel / Full RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	21.02 dBm
Peak	27.81 dBm
Crest	6.79 dB
10 %	2.40 dB
1 %	4.42 dB
.1 %	5.51 dB
.01 %	6.22 dB

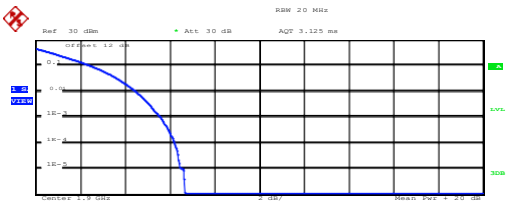
Highest Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	21.91 dBm
Peak	26.66 dBm
Crest	4.74 dB
10 %	2.40 dB
1 %	4.10 dB
.1 %	4.58 dB
.01 %	4.68 dB

Highest Channel / Full RB

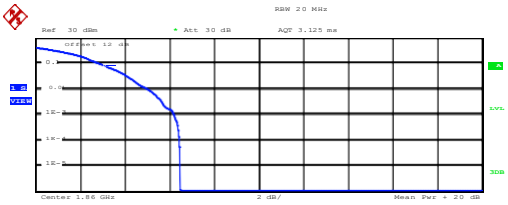


Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

Trace 1	
Mean	21.07 dBm
Peak	27.72 dBm
Crest	6.65 dB
10 %	2.44 dB
1 %	4.46 dB
.1 %	5.54 dB
.01 %	6.19 dB

LTE Band 2 / 20MHz / 16QAM

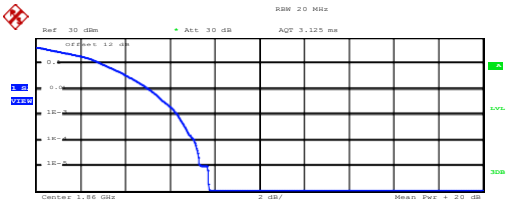
Lowest Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	21.05 dBm
Peak	27.50 dBm
Crest	6.45 dB
10 %	2.85 dB
1 %	4.97 dB
.1 %	6.19 dB
.01 %	6.41 dB

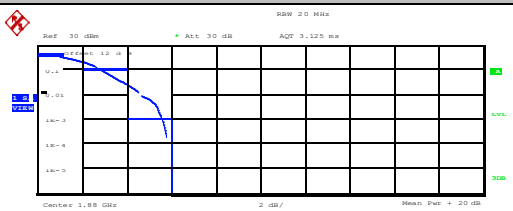
Lowest Channel / Full RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	19.92 dBm
Peak	27.64 dBm
Crest	7.72 dB
10 %	2.92 dB
1 %	5.03 dB
.1 %	6.31 dB
.01 %	7.05 dB

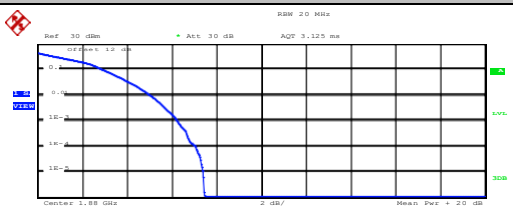
Middle Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	20.83 dBm
Peak	26.75 dBm
Crest	5.92 dB
10 %	2.82 dB
1 %	4.65 dB
.1 %	5.61 dB
.01 %	5.83 dB

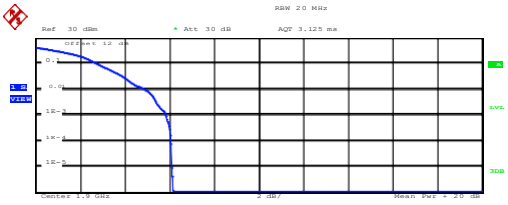
Middle Channel / Full RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	20.02 dBm
Peak	27.45 dBm
Crest	7.43 dB
10 %	2.88 dB
1 %	5.00 dB
.1 %	6.22 dB
.01 %	7.05 dB

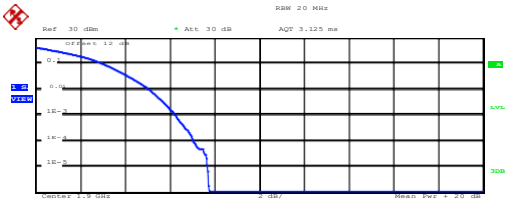
Highest Channel / 1RB



Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

	Trace 1
Mean	21.22 dBm
Peak	27.36 dBm
Crest	6.14 dB
10 %	2.72 dB
1 %	4.87 dB
.1 %	5.80 dB
.01 %	6.06 dB

Highest Channel / Full RB

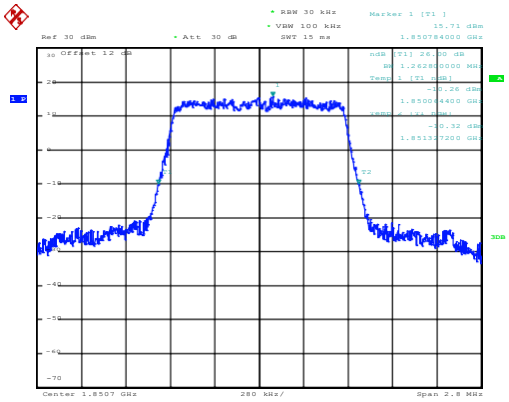
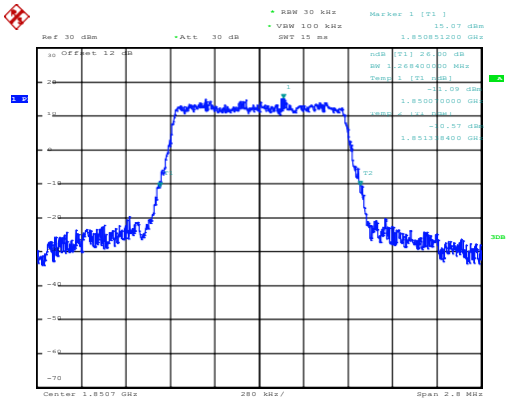
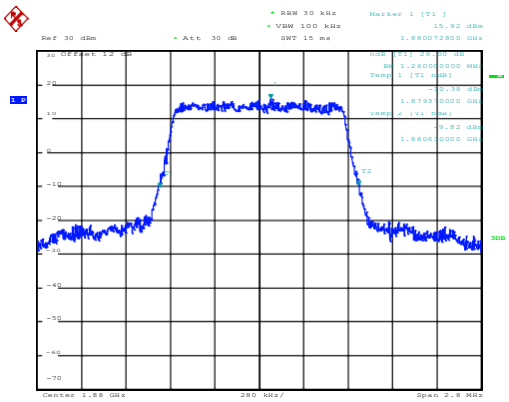
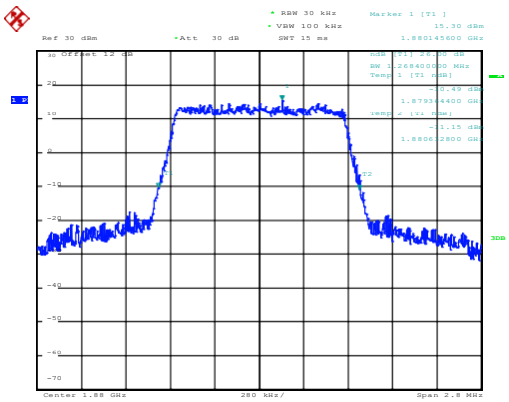
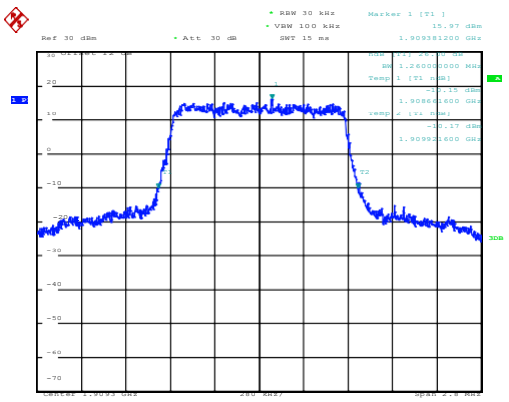
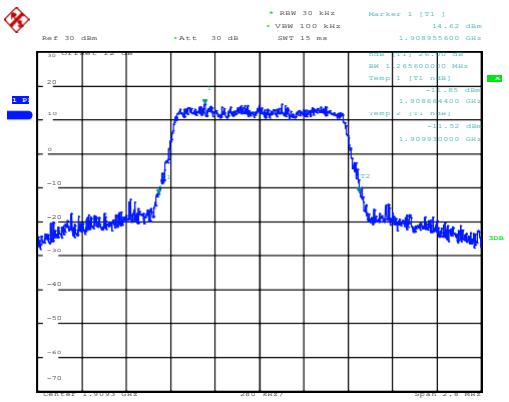


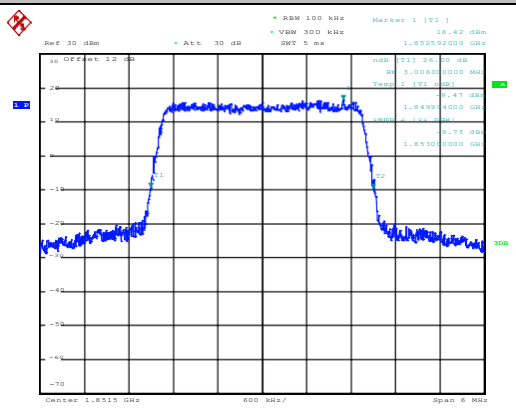
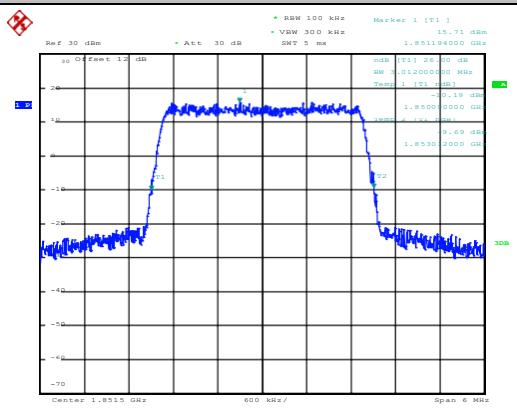
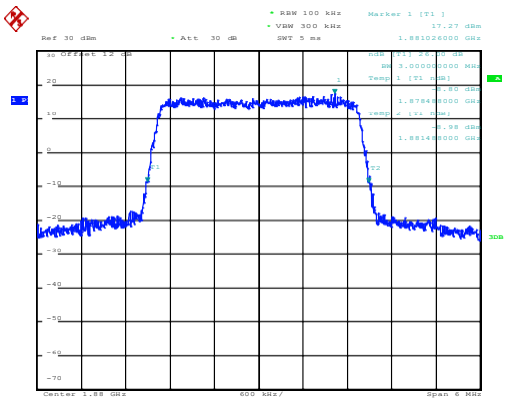
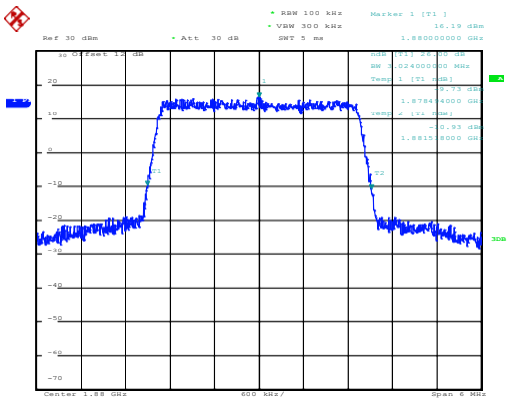
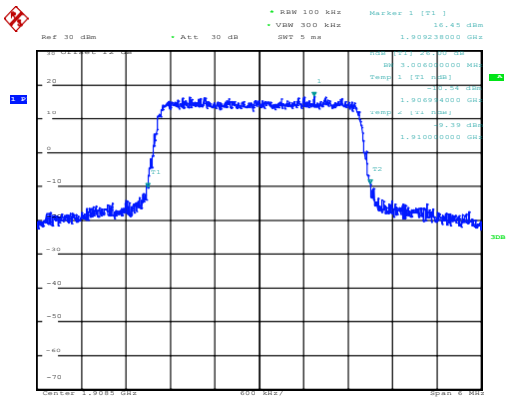
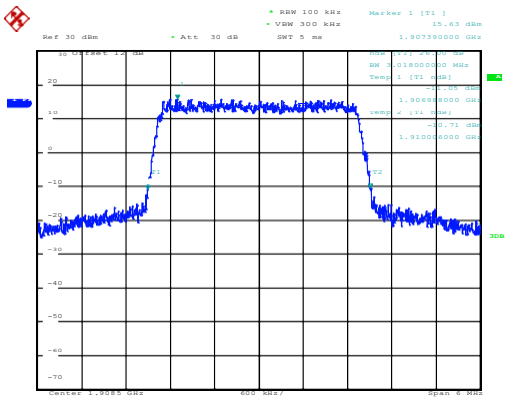
Complementary Cumulative Distribution Function
NOF samples: 100000, Usable BW: 23.7MHz

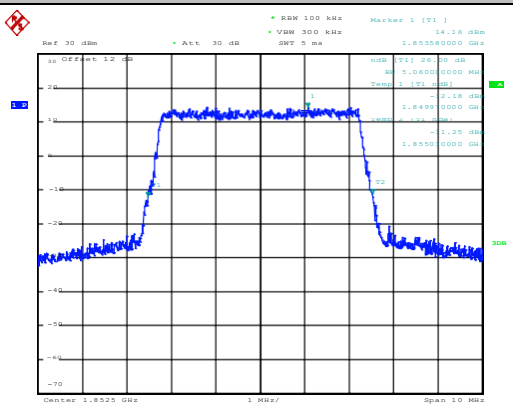
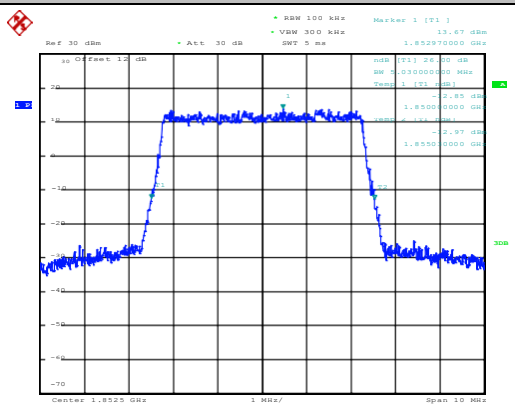
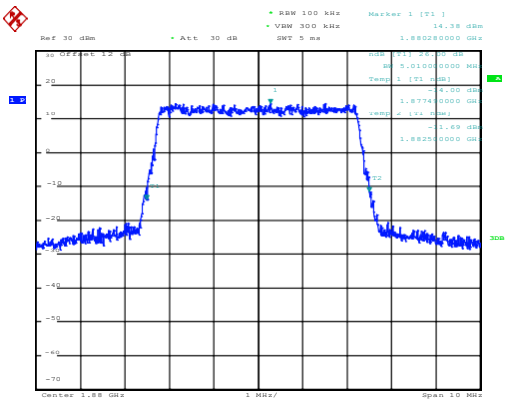
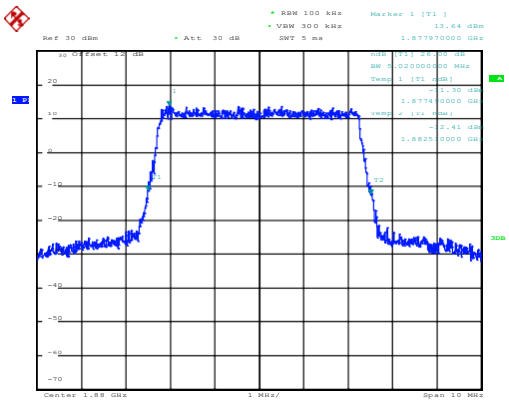
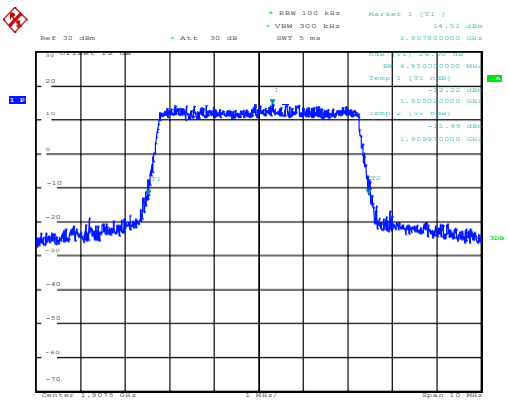
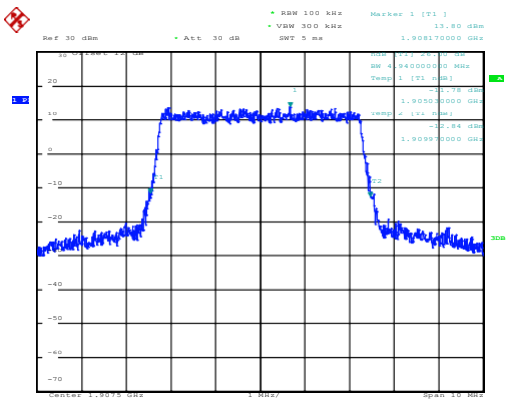
	Trace 1
Mean	20.06 dBm
Peak	27.79 dBm
Crest	7.72 dB
10 %	3.01 dB
1 %	5.03 dB
.1 %	6.22 dB
.01 %	7.02 dB

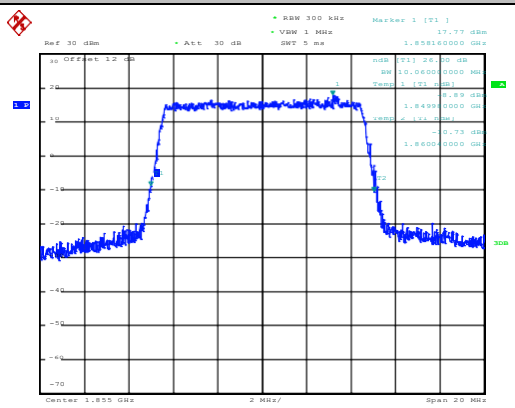
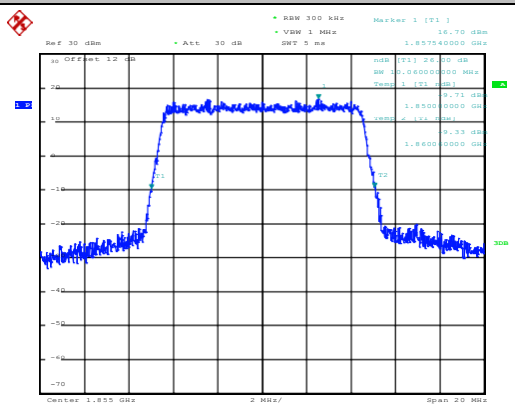
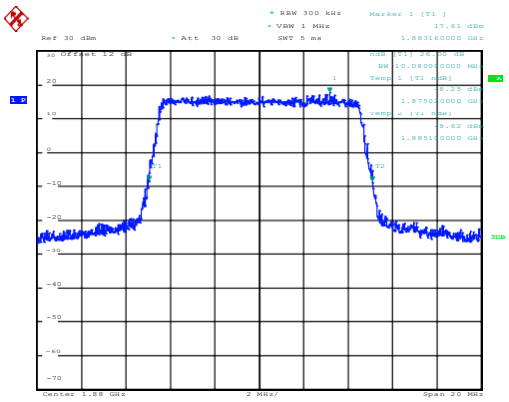
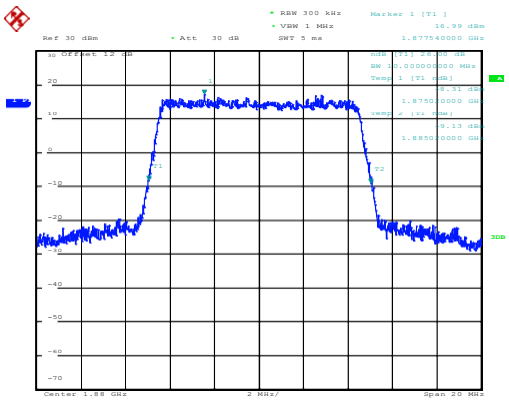
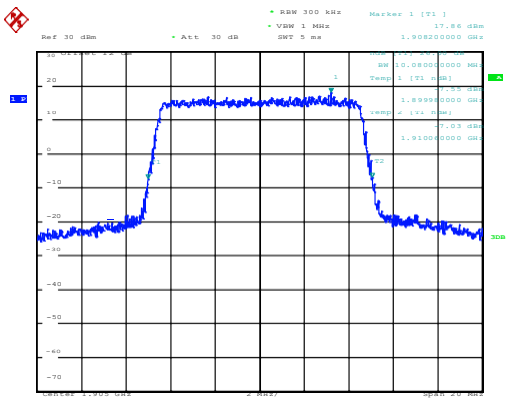
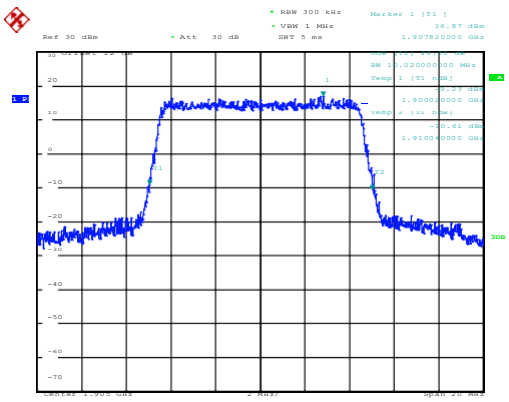
26dB Bandwidth

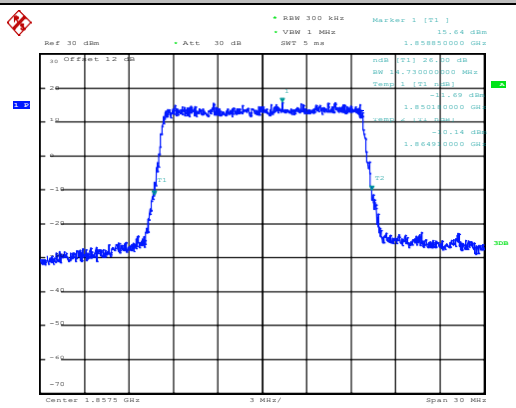
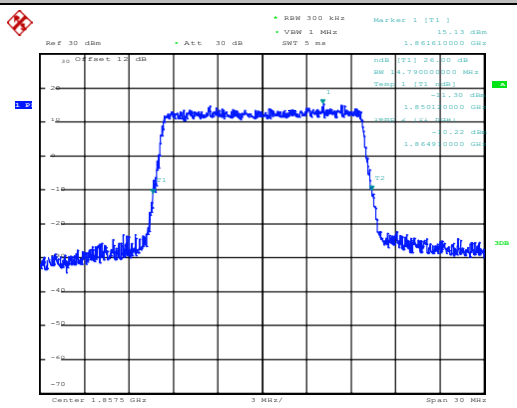
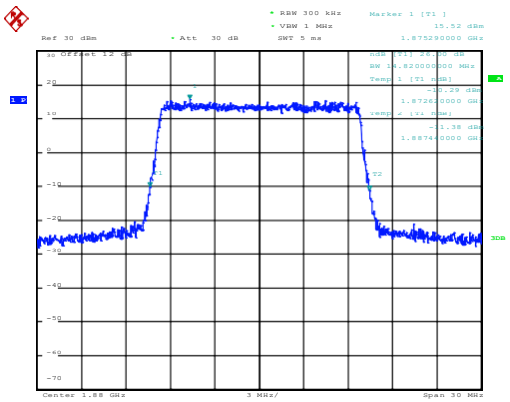
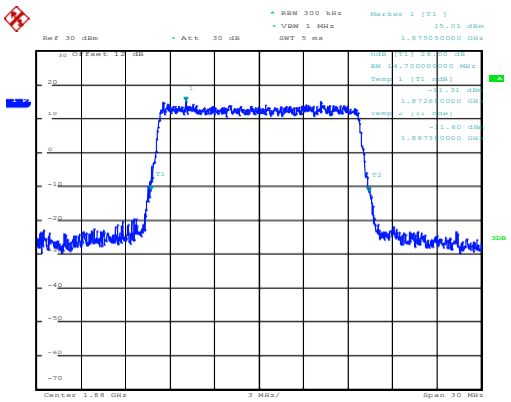
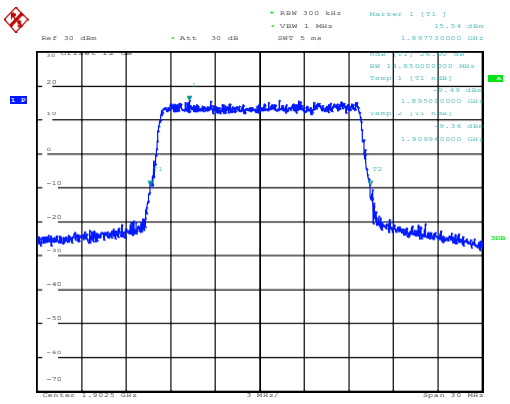
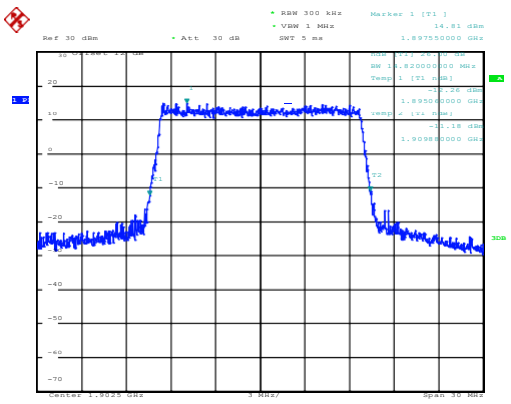
Mode	LTE Band 2 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.26	1.27	3.01	3.01	5.06	5.03	10.06	10.06	14.73	14.79	21.08	21
Middle CH	1.26	1.27	3	3.02	5.01	5.02	10.08	10	14.82	14.7	21.12	21.08
Highest CH	1.26	1.27	3.01	3.02	4.95	4.94	10.08	10.02	14.85	14.82	21.16	21.2

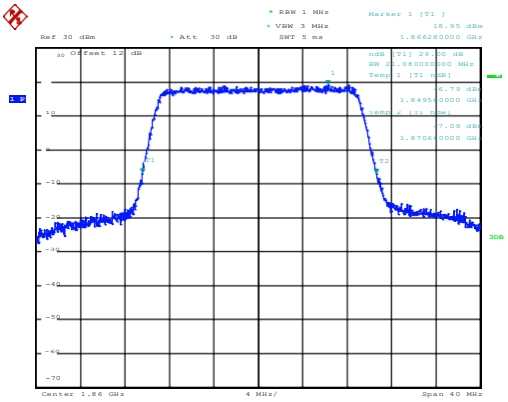
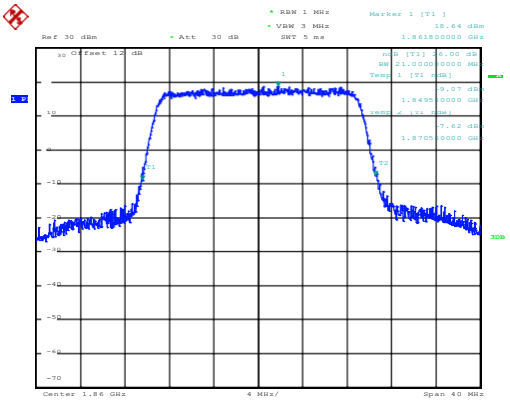
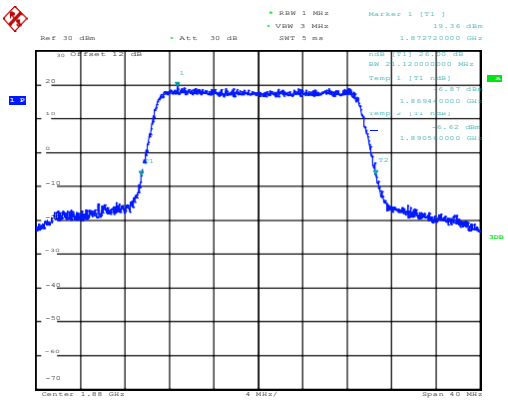
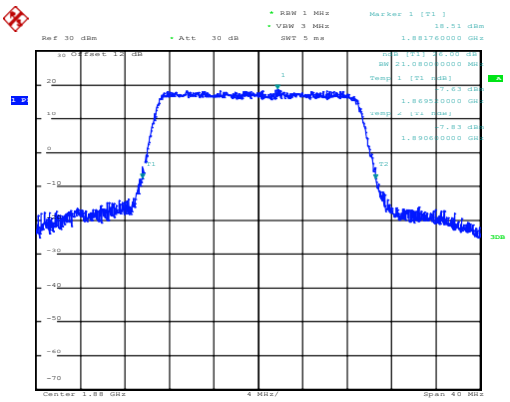
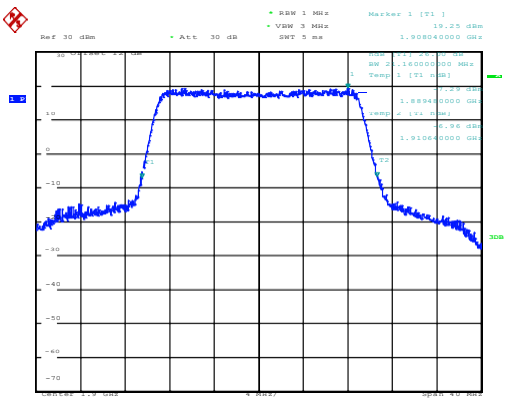
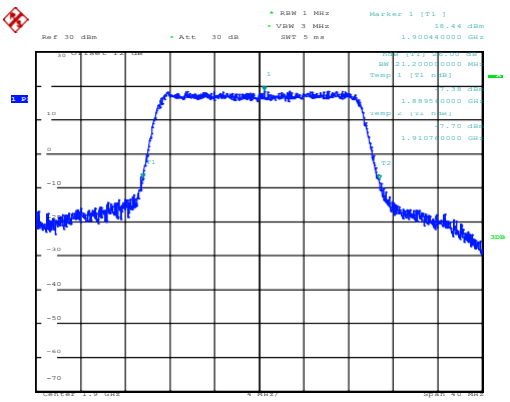
LTE Band 2	
Lowest Channel / 1.4MHz / QPSK	**Lowest Channel / 1.4MHz / 16QAM**
	
Middle Channel / 1.4MHz / QPSK	**Middle Channel / 1.4MHz / 16QAM**
	
Highest Channel / 1.4MHz / QPSK	**Highest Channel / 1.4MHz / 16QAM**
	

LTE Band 2	
Lowest Channel / 3MHz / QPSK	**Lowest Channel / 3MHz / 16QAM**
	
Middle Channel / 3MHz / QPSK	**Middle Channel /3MHz / 16QAM**
	
Highest Channel /3MHz / QPSK	**Highest Channel /3MHz / 16QAM**
	

LTE Band 2	
Lowest Channel / 5MHz / QPSK	**Lowest Channel / 5MHz / 16QAM**
	
Middle Channel / 5MHz / QPSK	**Middle Channel / 5MHz / 16QAM**
	
Highest Channel / 5MHz / QPSK	**Highest Channel / 5MHz / 16QAM**
	

LTE Band 2	
Lowest Channel / 10MHz / QPSK	**Lowest Channel / 10MHz / 16QAM**
	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	
Highest Channel / 10MHz / QPSK	**Highest Channel / 10MHz / 16QAM**
	

LTE Band 2	
Lowest Channel / 15MHz / QPSK	**Lowest Channel / 15MHz / 16QAM**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
Highest Channel / 15MHz / QPSK	**Highest Channel / 15MHz / 16QAM**
	

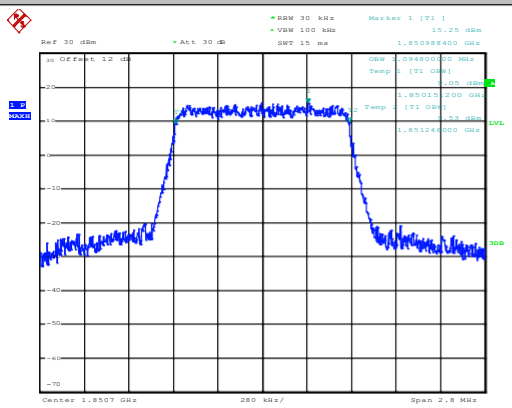
LTE Band 2	
Lowest Channel / 20MHz / QPSK	**Lowest Channel / 20MHz / 16QAM**
	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	
Highest Channel / 20MHz / QPSK	**Highest Channel / 20MHz / 16QAM**
	

Occupied Bandwidth

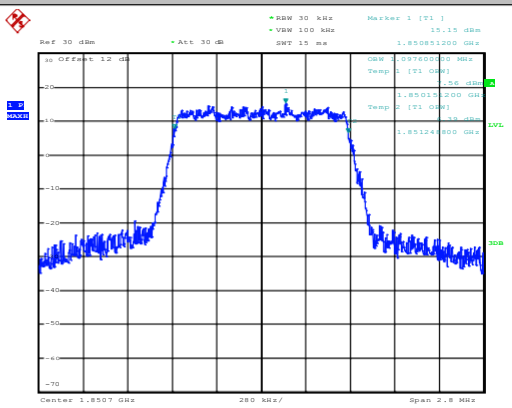
Mode	LTE Band 2 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.09	1.1	2.72	2.72	4.49	4.51	9.04	9.04	13.47	13.47	18.56	18.52
Middle CH	1.1	1.1	2.72	2.72	4.51	4.51	9.06	9.04	13.5	13.53	18.6	18.6
Highest CH	1.1	1.1	2.71	2.72	4.5	4.52	9.06	9.04	13.47	13.53	18.6	18.6

LTE Band 2

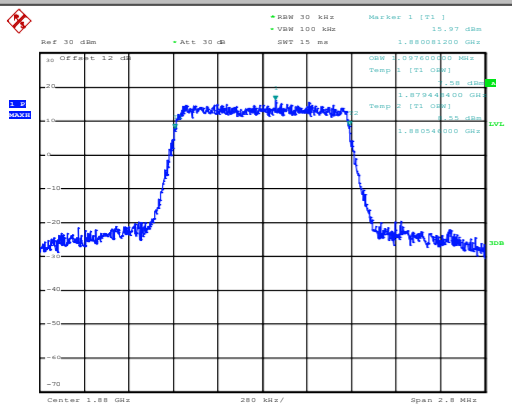
Lowest Channel / 1.4MHz / QPSK



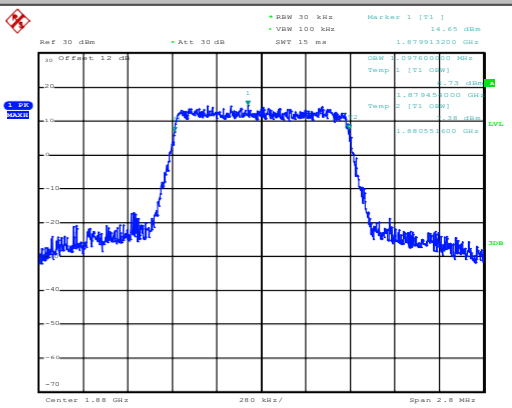
Lowest Channel / 1.4MHz / 16QAM



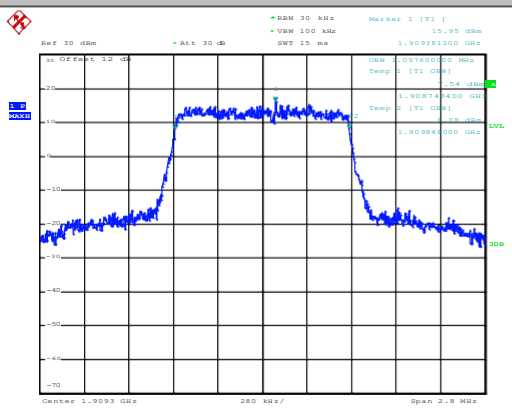
Middle Channel / 1.4MHz / QPSK



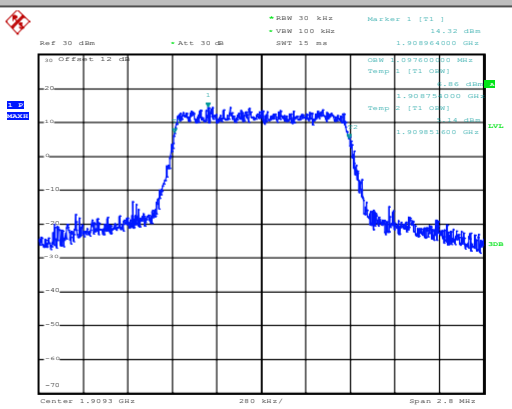
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

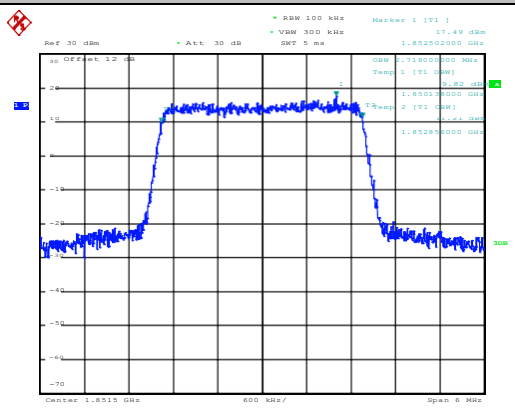


Highest Channel / 1.4MHz / 16QAM

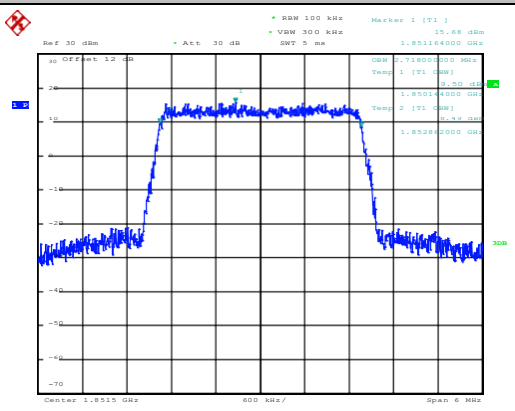


LTE Band 2

Lowest Channel / 3MHz / QPSK

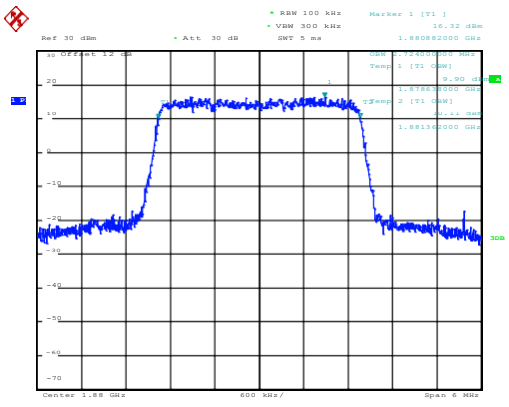


Lowest Channel / 3MHz / 16QAM

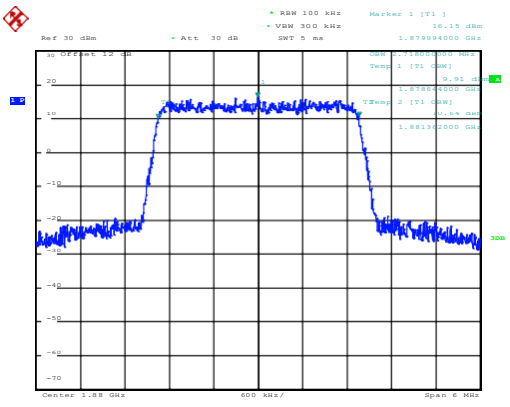


Date: 12.JAN.2015 14:03:04

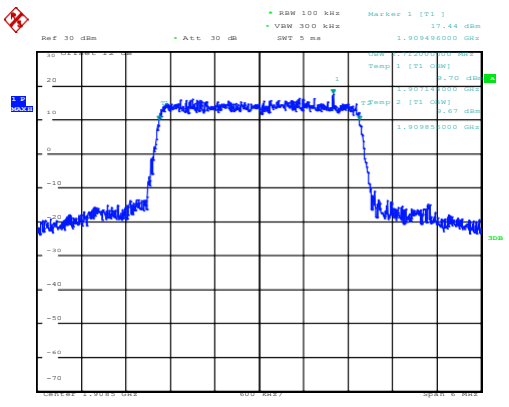
Middle Channel / 3MHz / QPSK



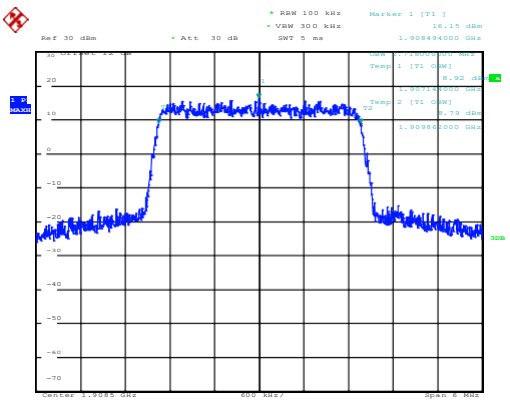
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

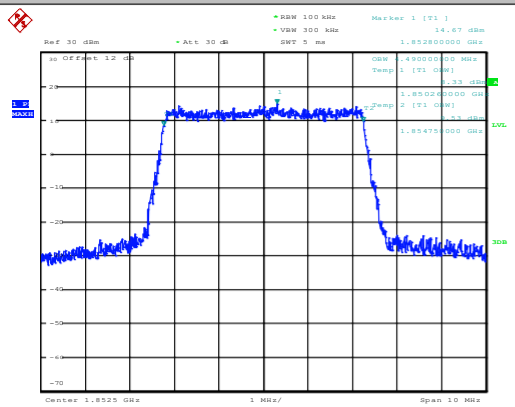


Highest Channel / 3MHz / 16QAM

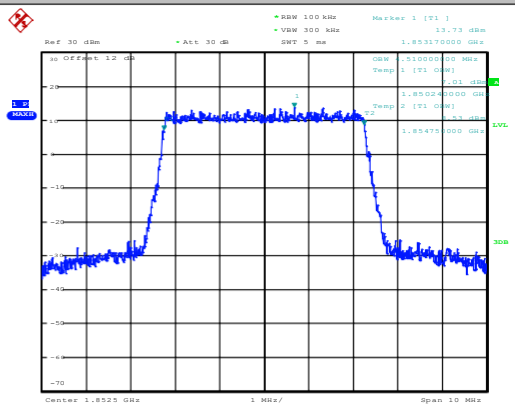


LTE Band 2

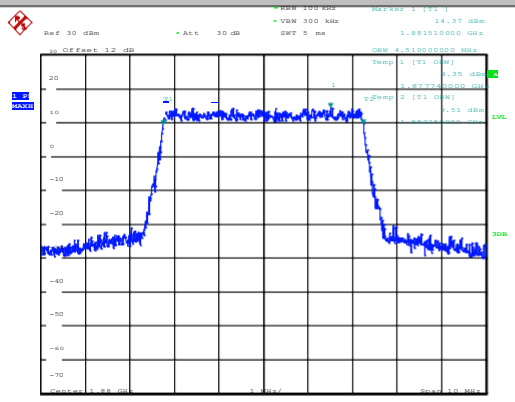
Lowest Channel / 5MHz / QPSK



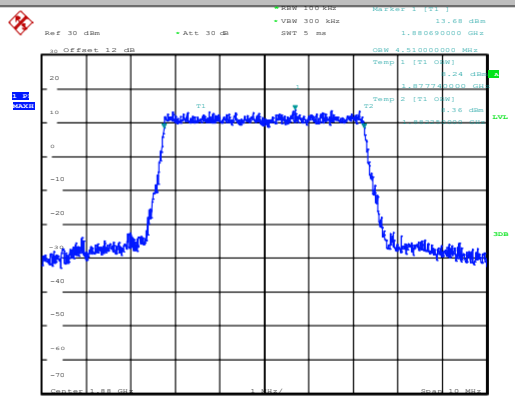
Lowest Channel / 5MHz / 16QAM



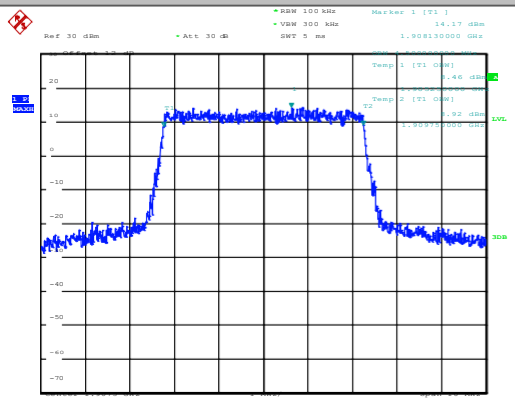
Middle Channel / 5MHz / QPSK



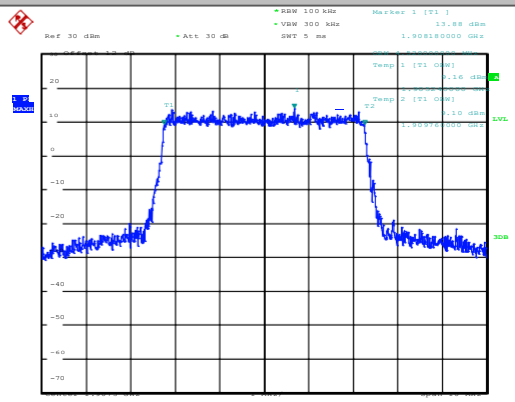
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

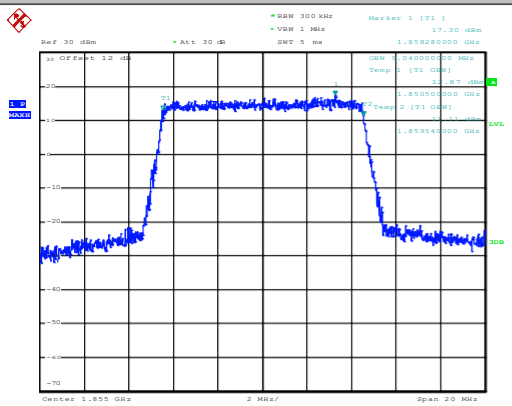


Highest Channel / 5MHz / 16QAM

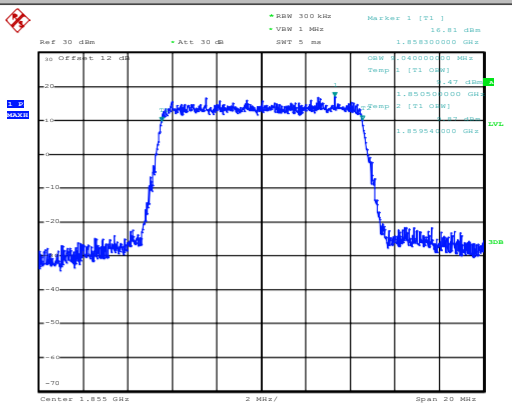


LTE Band 2

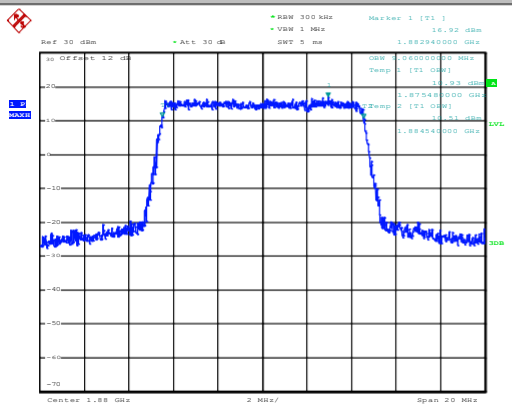
Lowest Channel / 10MHz / QPSK



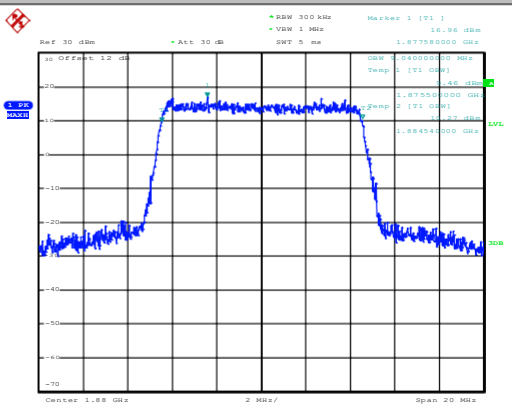
Lowest Channel / 10MHz / 16QAM



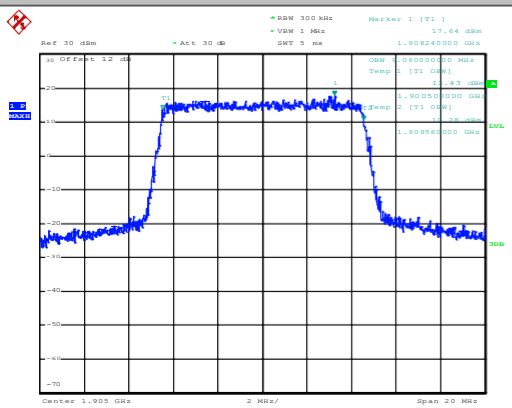
Middle Channel / 10MHz / QPSK



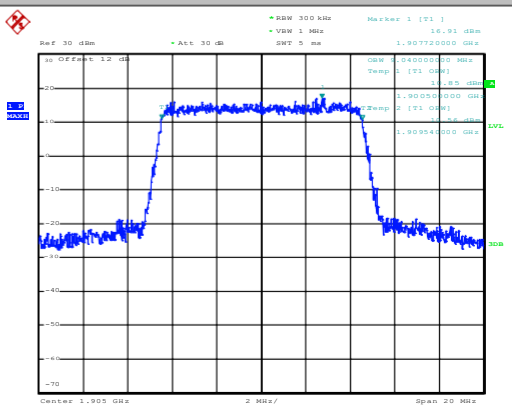
Middle Channel / 10MHz / 16QAM

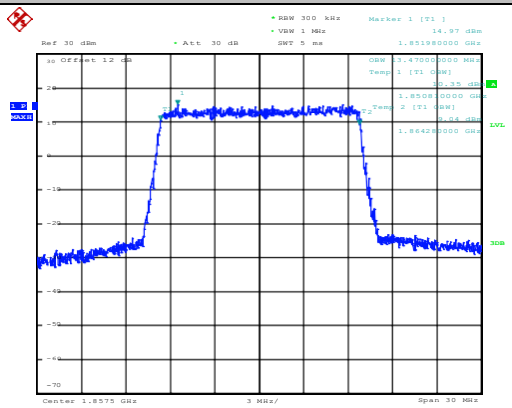
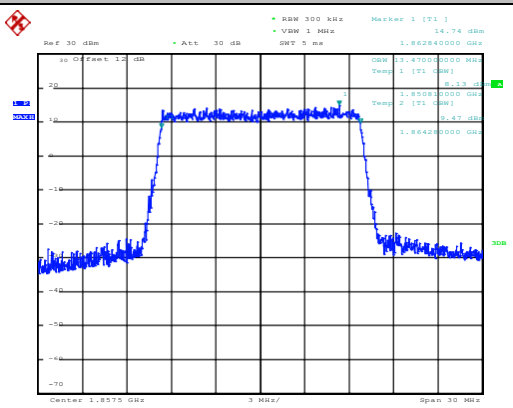
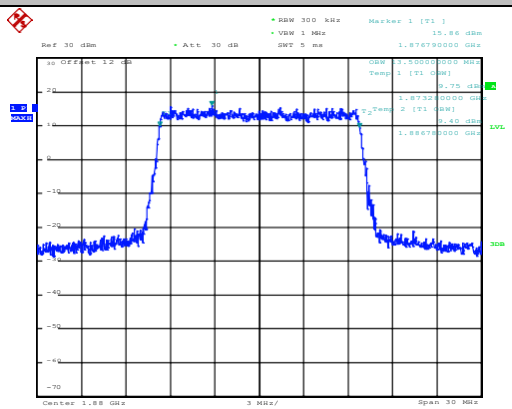
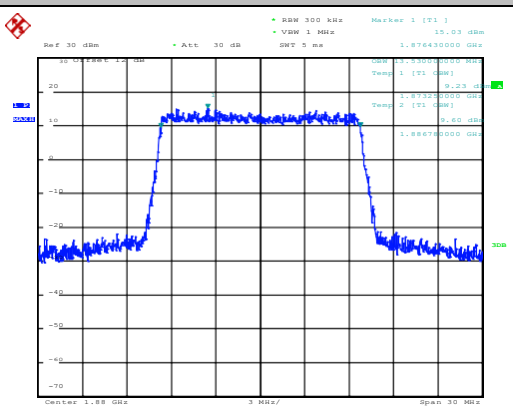
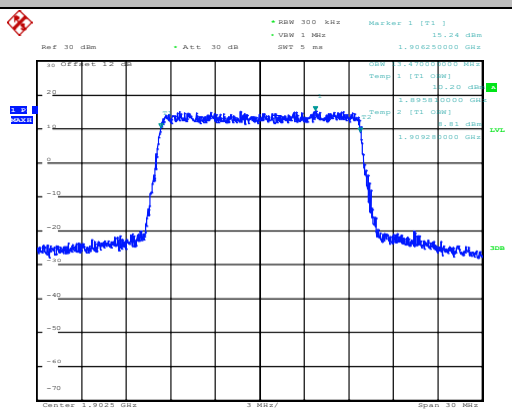
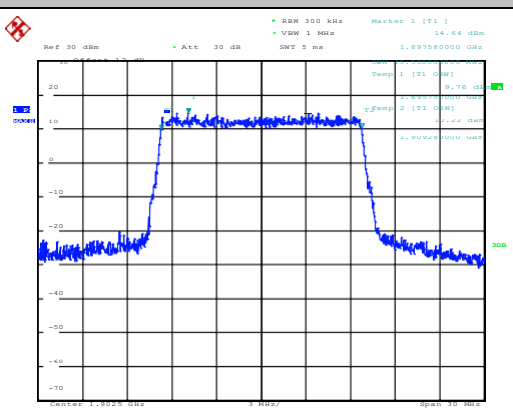


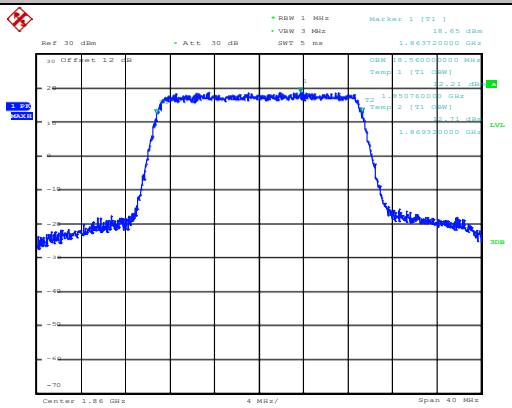
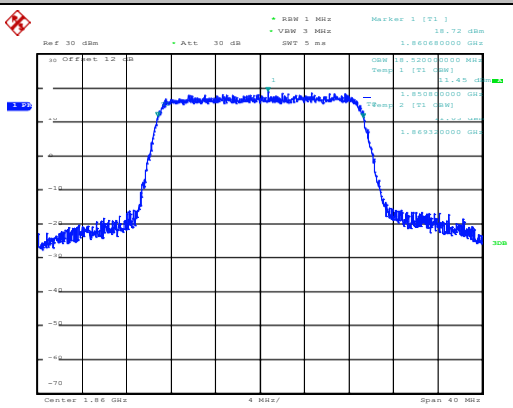
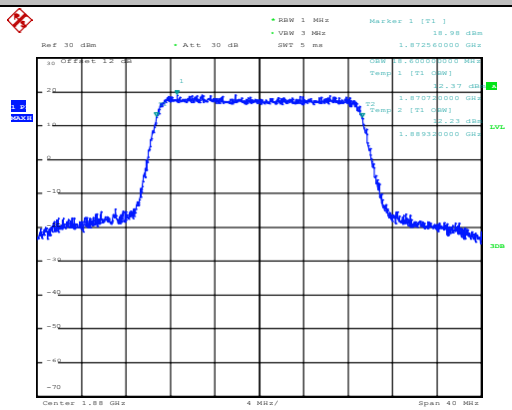
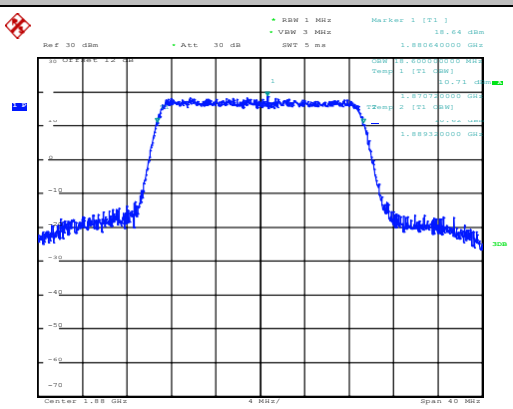
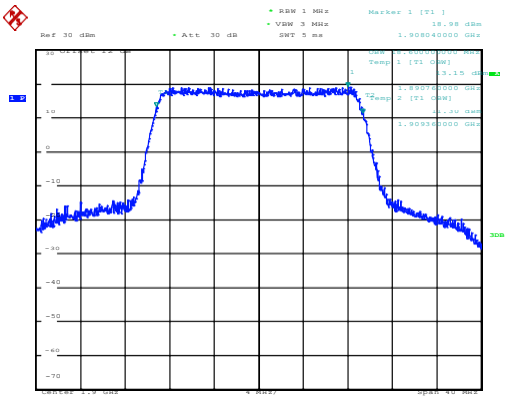
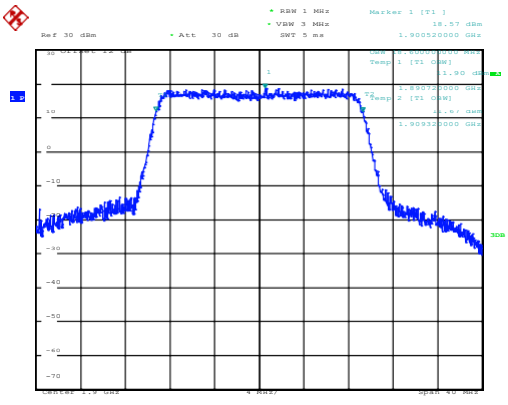
Highest Channel / 10MHz / QPSK



Highest Channel / 10MHz / 16QAM



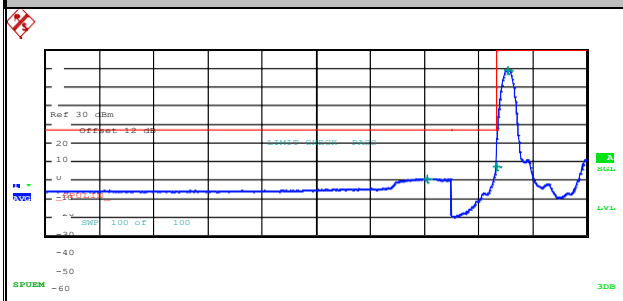
LTE Band 2	
Lowest Channel / 15MHz / QPSK	**Lowest Channel / 15MHz / 16QAM**
	
Middle Channel / 15MHz / QPSK	**Middle Channel / 15MHz / 16QAM**
	
Highest Channel / 15MHz / QPSK	**Highest Channel / 15MHz / 16QAM**
	

LTE Band 2	
Lowest Channel / 20MHz / QPSK	**Lowest Channel / 20MHz / 16QAM**
	
Middle Channel / 20MHz / QPSK	**Middle Channel / 20MHz / 16QAM**
	
Highest Channel / 20MHz / QPSK	**Highest Channel / 20MHz / 16QAM**
	

Conducted Band Edge

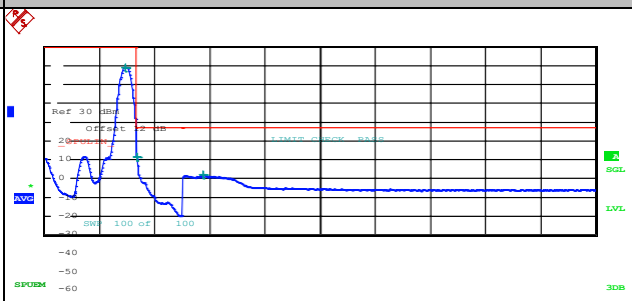
LTE Band 2 / 1.4MHz / QPSK

Lowest Band Edge / 1RB



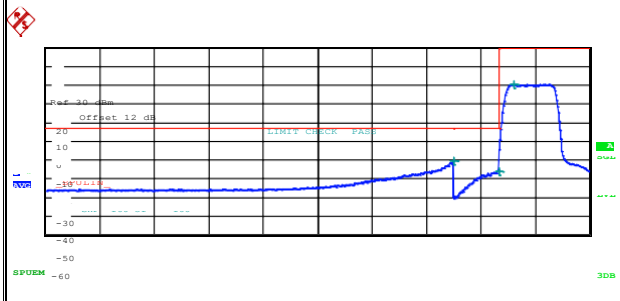
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848460 G	-39.53	-26.53
1.849 G	1.850 G	20.00 k	1.849999 G	-33.34	-20.34
1.850 G	1.852 G	100.00 k	1.850248 G	18.72	-11.28

Highest Band Edge / 1RB



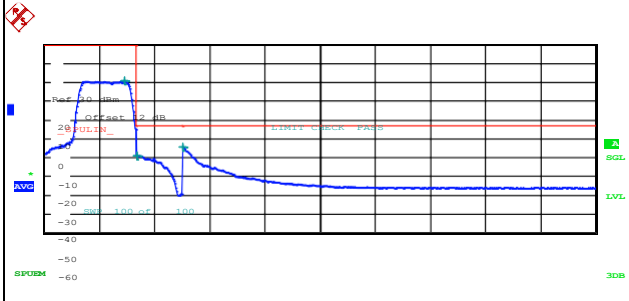
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.908 G	1.910 G	100.00 k	1.909754 G	18.73	-11.27
1.910 G	1.911 G	20.00 k	1.910004 G	-29.08	-16.08
1.911 G	1.920 G	1.00 M	1.911450 G	-38.42	-25.42

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-30.68	-17.68
1.849 G	1.850 G	20.00 k	1.849995 G	-36.24	-23.24
1.850 G	1.852 G	100.00 k	1.850318 G	10.25	-19.75

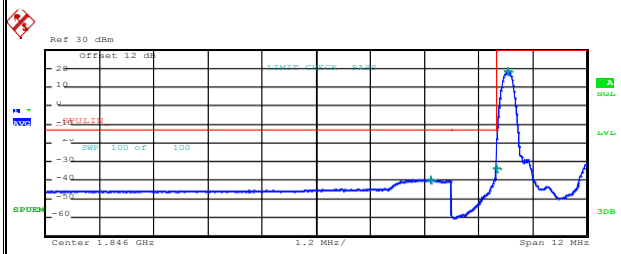
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.908 G	1.910 G	100.00 k	1.909722 G	10.55	-19.45
1.910 G	1.911 G	20.00 k	1.910008 G	-29.20	-16.20
1.911 G	1.920 G	1.00 M	1.911009 G	-24.58	-11.58

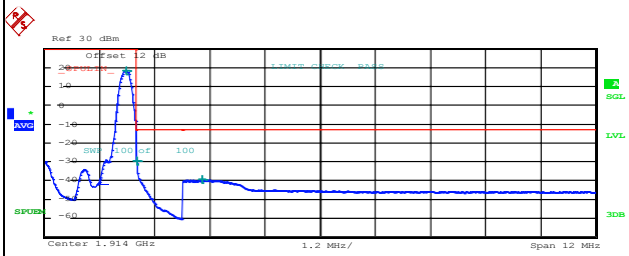
LTE Band 2 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB



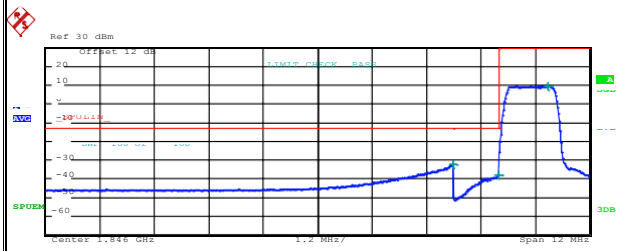
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848541 G	-40.14	-27.14
1.849 G	1.850 G	20.00 k	1.849999 G	-34.28	-21.28
1.850 G	1.852 G	100.00 k	1.850246 G	18.23	-11.77

Highest Band Edge / 1 RB



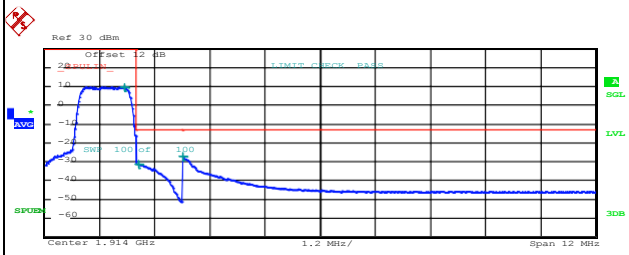
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.908 G	1.910 G	100.00 k	1.909772 G	17.93	-12.07
1.910 G	1.911 G	20.00 k	1.910002 G	-30.09	-17.09
1.911 G	1.920 G	1.00 M	1.911423 G	-39.70	-26.70

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848982 G	-32.58	-19.58
1.849 G	1.850 G	20.00 k	1.849987 G	-38.24	-25.24
1.850 G	1.852 G	100.00 k	1.851082 G	9.21	-20.79

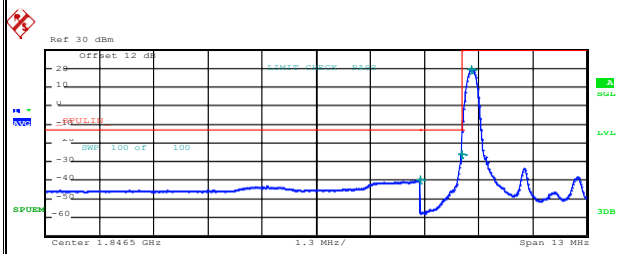
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.908 G	1.910 G	100.00 k	1.909722 G	9.20	-20.80
1.910 G	1.911 G	20.00 k	1.910036 G	-31.57	-18.57
1.911 G	1.920 G	1.00 M	1.911009 G	-27.71	-14.71

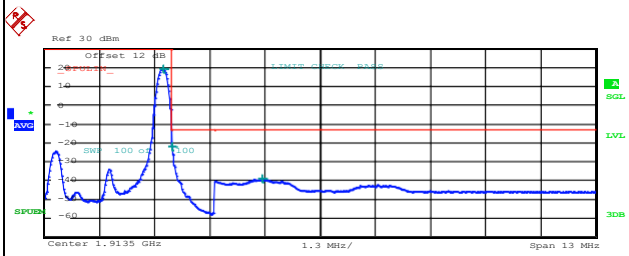
LTE Band 2 / 3MHz / QPSK

Lowest Band Edge / 1RB



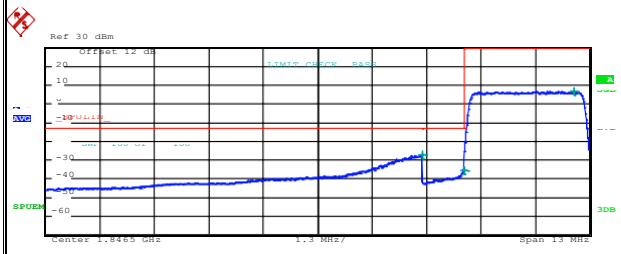
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-40.35	-27.35
1.849 G	1.850 G	30.00 k	1.849996 G	-26.50	-13.50
1.850 G	1.853 G	100.00 k	1.850231 G	18.77	-11.23

Highest Band Edge / 1 RB



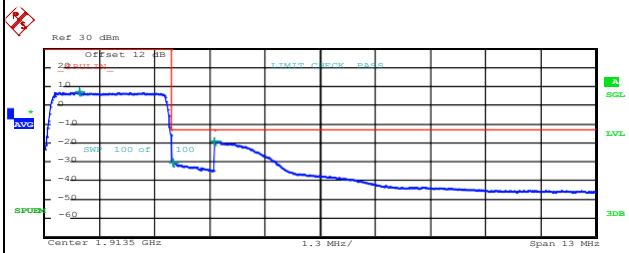
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.909787 G	18.81	-11.19
1.910 G	1.911 G	30.00 k	1.910001 G	-22.27	-9.27
1.911 G	1.920 G	1.00 M	1.912116 G	-39.42	-26.42

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-27.73	-14.73
1.849 G	1.850 G	30.00 k	1.849998 G	-36.03	-23.03
1.850 G	1.853 G	100.00 k	1.852634 G	6.19	-23.81

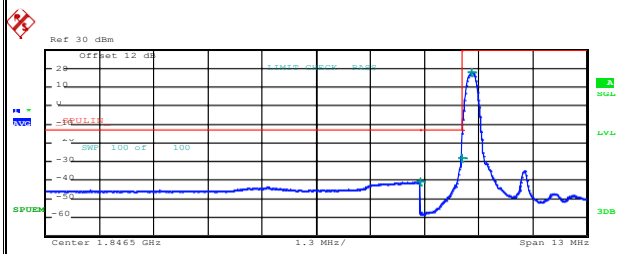
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.907819 G	6.67	-23.33
1.910 G	1.911 G	30.00 k	1.910018 G	-30.66	-17.66
1.911 G	1.920 G	1.00 M	1.911009 G	-19.58	-6.58

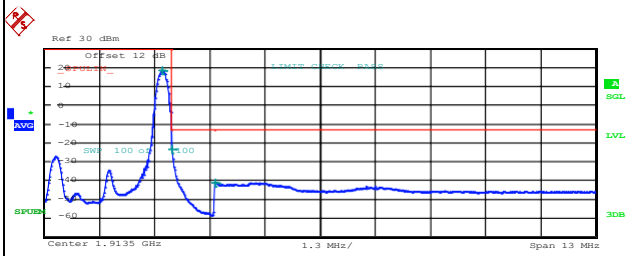
LTE Band 2 / 3MHz / 16QAM

Lowest Band Edge / 1 RB



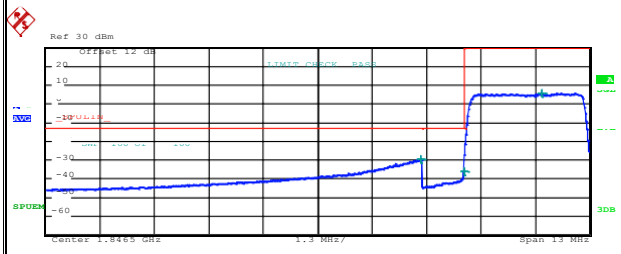
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-41.20	-28.20
1.849 G	1.850 G	30.00 k	1.849990 G	-28.61	-15.61
1.850 G	1.853 G	100.00 k	1.850231 G	17.74	-12.26

Highest Band Edge /1 RB



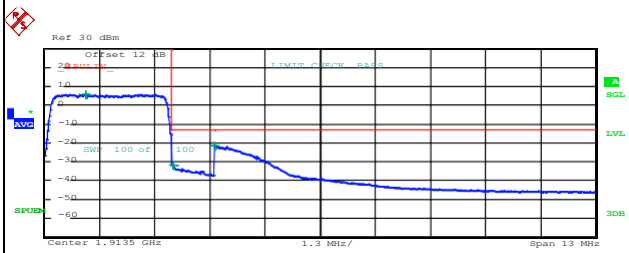
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.909763 G	17.91	-12.09
1.910 G	1.911 G	30.00 k	1.910002 G	-23.84	-10.84
1.911 G	1.920 G	1.00 M	1.911027 G	-41.50	-28.50

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848955 G	-29.86	-16.86
1.849 G	1.850 G	30.00 k	1.849999 G	-36.59	-23.59
1.850 G	1.853 G	100.00 k	1.851848 G	5.38	-24.62

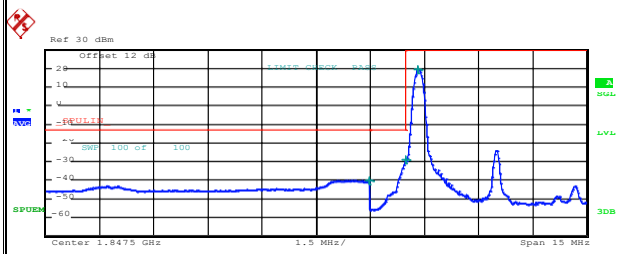
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.907 G	1.910 G	100.00 k	1.907954 G	5.52	-24.48
1.910 G	1.911 G	30.00 k	1.910011 G	-32.02	-19.02
1.911 G	1.920 G	1.00 M	1.911009 G	-21.73	-8.73

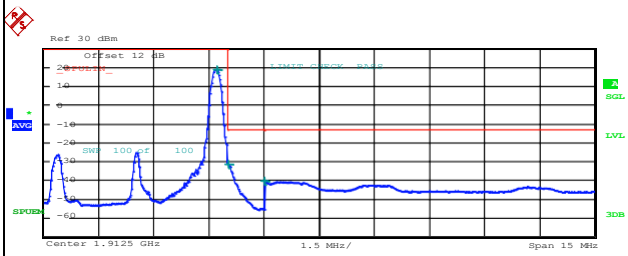
LTE Band 2 / 5MHz / QPSK

Lowest Band Edge / 1 RB



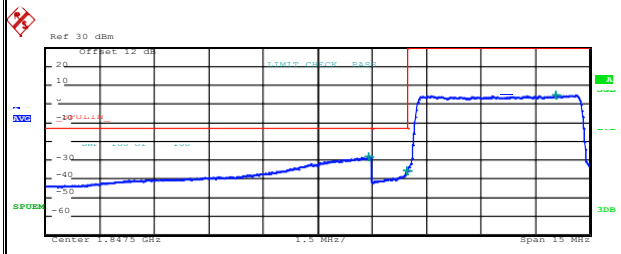
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848973 G	-40.50	-27.50
1.849 G	1.850 G	50.00 k	1.849984 G	-29.35	-16.35
1.850 G	1.855 G	100.00 k	1.850320 G	18.74	-11.26

Highest Band Edge / 1 RB



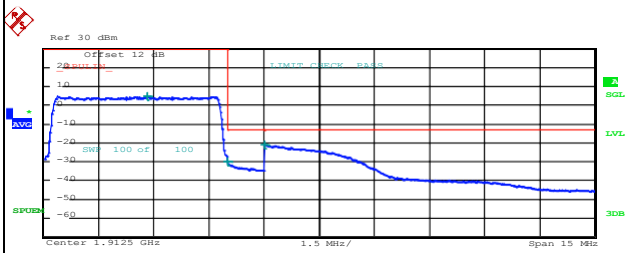
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.905 G	1.910 G	100.00 k	1.909710 G	18.71	-11.29
1.910 G	1.911 G	50.00 k	1.910014 G	-31.58	-18.58
1.911 G	1.920 G	1.00 M	1.911009 G	-40.77	-27.77

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848883 G	-28.53	-15.53
1.849 G	1.850 G	50.00 k	1.849952 G	-36.17	-23.17
1.850 G	1.855 G	100.00 k	1.854065 G	4.51	-25.49

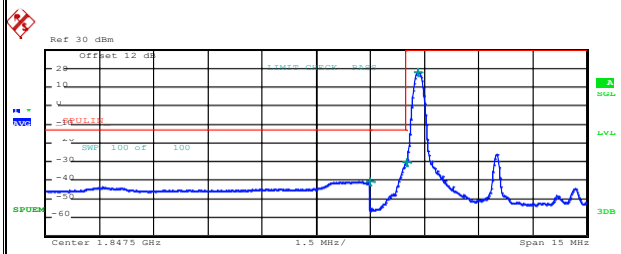
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.905 G	1.910 G	100.00 k	1.907820 G	4.48	-25.52
1.910 G	1.911 G	50.00 k	1.910008 G	-30.16	-17.16
1.911 G	1.920 G	1.00 M	1.911018 G	-21.49	-8.49

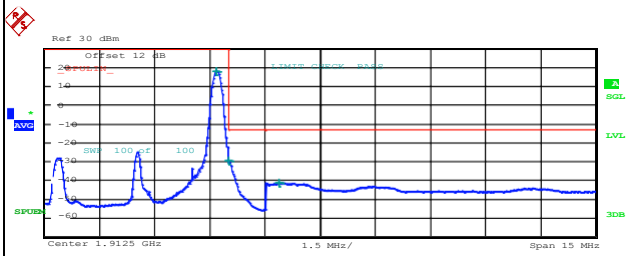
LTE Band 2 / 5MHz / 16QAM

Lowest Band Edge / 1RB



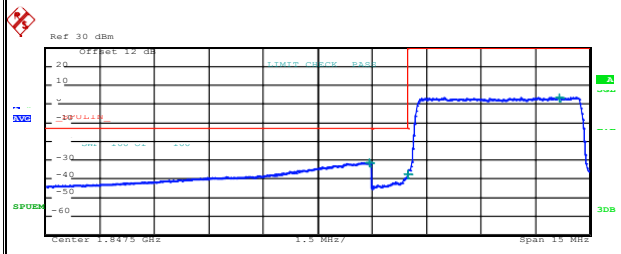
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-41.17	-28.17
1.849 G	1.850 G	50.00 k	1.849992 G	-30.79	-17.79
1.850 G	1.855 G	100.00 k	1.850320 G	17.78	-12.22

Highest Band Edge / 1 RB



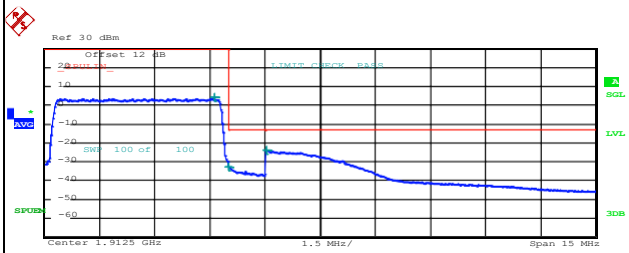
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.905 G	1.910 G	100.00 k	1.909665 G	17.44	-12.56
1.910 G	1.911 G	50.00 k	1.910012 G	-30.04	-17.04
1.911 G	1.920 G	1.00 M	1.911378 G	-41.68	-28.68

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848910 G	-31.57	-18.57
1.849 G	1.850 G	50.00 k	1.849980 G	-37.87	-24.87
1.850 G	1.855 G	100.00 k	1.854160 G	3.07	-26.93

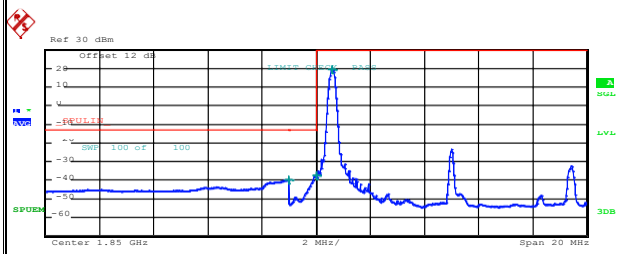
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.905 G	1.910 G	100.00 k	1.909605 G	3.97	-26.03
1.910 G	1.911 G	50.00 k	1.910001 G	-33.31	-20.31
1.911 G	1.920 G	1.00 M	1.911027 G	-24.33	-11.33

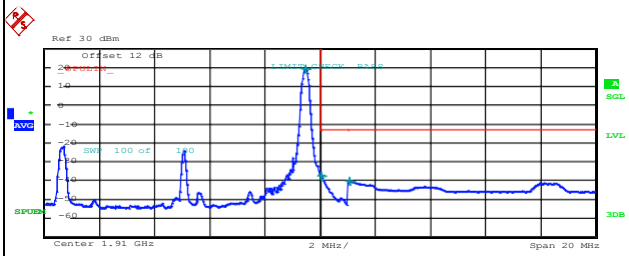
LTE Band 2 / 10MHz / QPSK

Lowest Band Edge / 1 RB



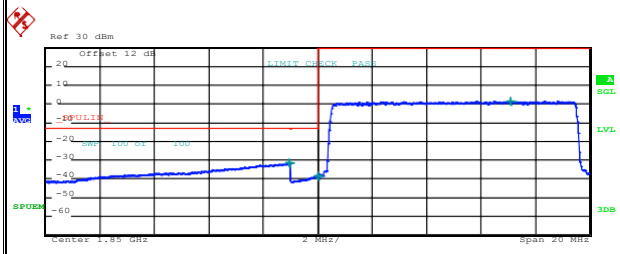
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848982 G	-40.10	-27.10
1.849 G	1.850 G	100.00 k	1.849989 G	-38.06	-25.06
1.850 G	1.860 G	100.00 k	1.850570 G	18.94	-11.06

Highest Band Edge / 1 RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.900 G	1.910 G	100.00 k	1.909450 G	18.84	-11.16
1.910 G	1.911 G	100.00 k	1.910022 G	-37.75	-24.75
1.911 G	1.920 G	1.00 M	1.911054 G	-40.60	-27.60

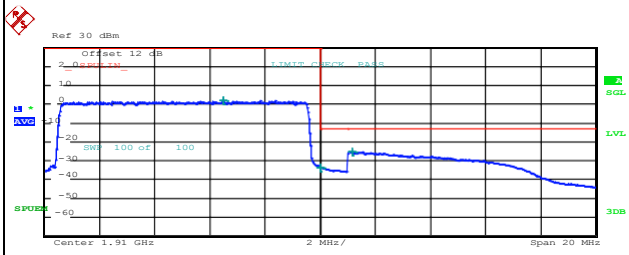
Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848946 G	-31.68	-18.68
1.849 G	1.850 G	100.00 k	1.849998 G	-38.59	-25.59
1.850 G	1.860 G	100.00 k	1.857070 G	1.11	-28.89

Highest Band Edge / Full RB

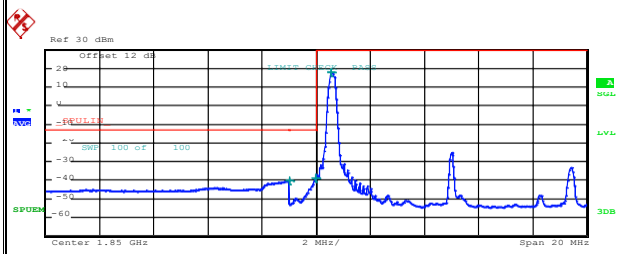
[



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.900 G	1.910 G	100.00 k	1.906480 G	1.58	-28.42
1.910 G	1.911 G	100.00 k	1.910007 G	-33.89	-20.89
1.911 G	1.920 G	1.00 M	1.911144 G	-25.77	-12.77

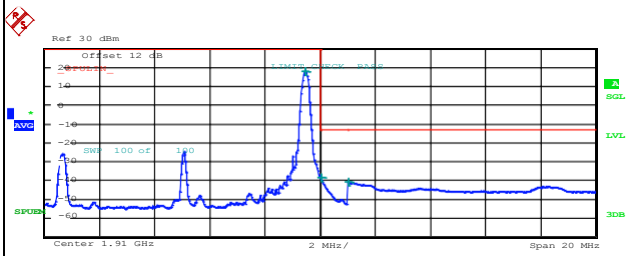
LTE Band 2 / 10MHz / 16QAM

Lowest Band Edge / 1 RB



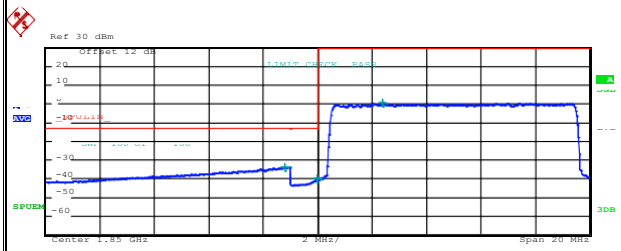
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848991 G	-40.66	-27.66
1.849 G	1.850 G	100.00 k	1.849964 G	-39.15	-26.15
1.850 G	1.860 G	100.00 k	1.850560 G	17.57	-12.43

Highest Band Edge / 1 RB



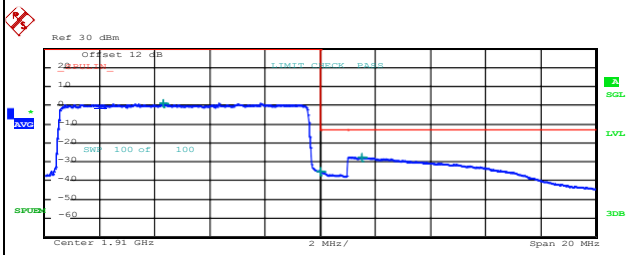
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.900 G	1.910 G	100.00 k	1.909460 G	17.62	-12.38
1.910 G	1.911 G	100.00 k	1.910036 G	-38.82	-25.82
1.911 G	1.920 G	1.00 M	1.911036 G	-41.00	-28.00

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848784 G	-34.06	-21.06
1.849 G	1.850 G	100.00 k	1.849971 G	-40.17	-27.17
1.850 G	1.860 G	100.00 k	1.852360 G	0.03	-29.97

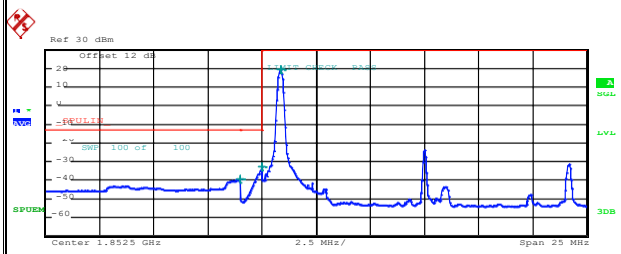
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.900 G	1.910 G	100.00 k	1.904310 G	0.57	-29.43
1.910 G	1.911 G	100.00 k	1.910016 G	-35.65	-22.65
1.911 G	1.920 G	1.00 M	1.911495 G	-28.01	-15.01

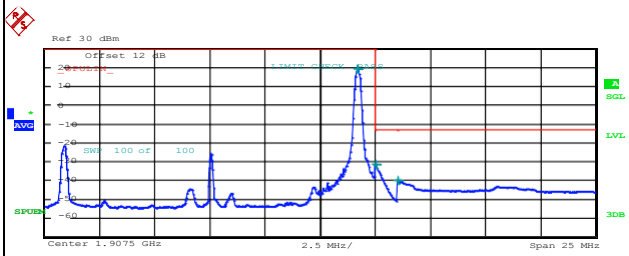
LTE Band 2 / 15MHz / QPSK

Lowest Band Edge / 1 RB



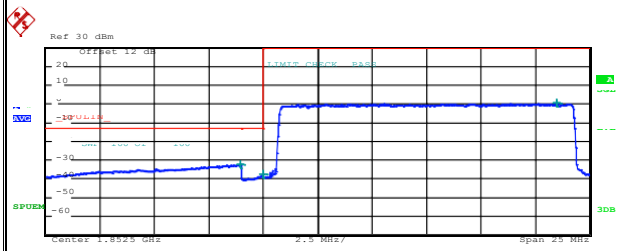
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848955 G	-39.57	-26.57
1.849 G	1.850 G	150.00 k	1.849986 G	-33.31	-20.31
1.850 G	1.865 G	100.00 k	1.850840 G	18.75	-11.25

Highest Band Edge / 1 RB



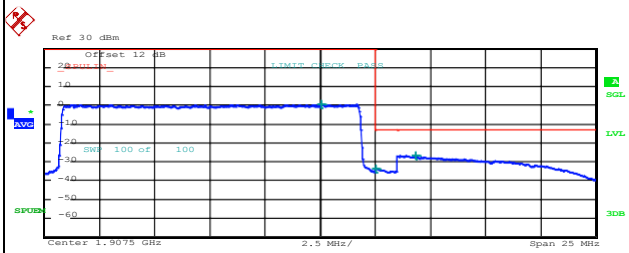
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.895 G	1.910 G	100.00 k	1.909175 G	19.04	-10.96
1.910 G	1.911 G	150.00 k	1.910005 G	-31.74	-18.74
1.911 G	1.920 G	1.00 M	1.911036 G	-40.13	-27.13

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848946 G	-32.84	-19.84
1.849 G	1.850 G	150.00 k	1.849988 G	-37.98	-24.98
1.850 G	1.865 G	100.00 k	1.863485 G	-0.03	-30.03

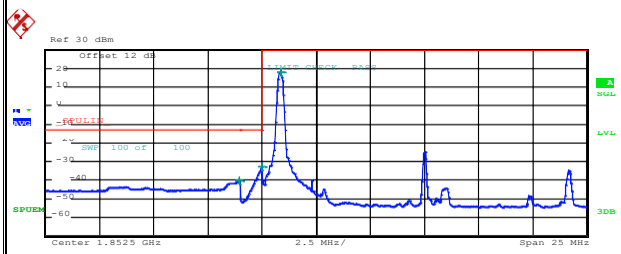
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.895 G	1.910 G	100.00 k	1.907540 G	0.05	-29.95
1.910 G	1.911 G	150.00 k	1.910037 G	-33.86	-20.86
1.911 G	1.920 G	1.00 M	1.911819 G	-27.17	-14.17

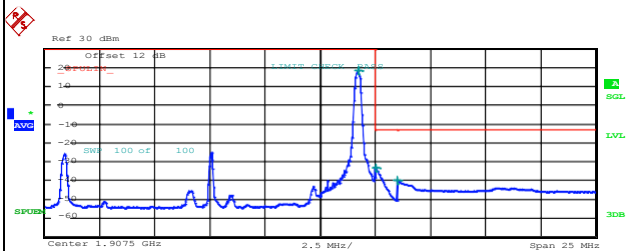
LTE Band 2 / 15MHz / 16QAM

Lowest Band Edge / 1 RB



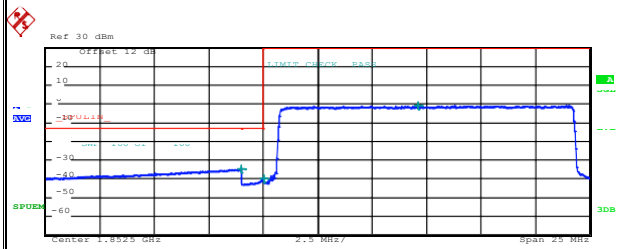
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848937 G	-40.59	-27.59
1.849 G	1.850 G	150.00 k	1.849995 G	-33.34	-20.34
1.850 G	1.865 G	100.00 k	1.850840 G	17.71	-12.29

Highest Band Edge / 1 RB



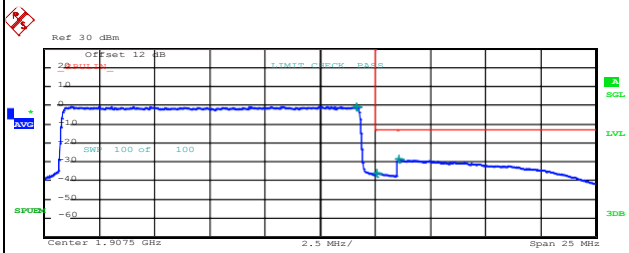
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.895 G	1.910 G	100.00 k	1.909205 G	18.06	-11.94
1.910 G	1.911 G	150.00 k	1.910007 G	-33.54	-20.54
1.911 G	1.920 G	1.00 M	1.911000 G	-40.23	-27.23

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848982 G	-35.23	-22.23
1.849 G	1.850 G	150.00 k	1.849996 G	-40.20	-27.20
1.850 G	1.865 G	100.00 k	1.857095 G	-1.30	-31.30

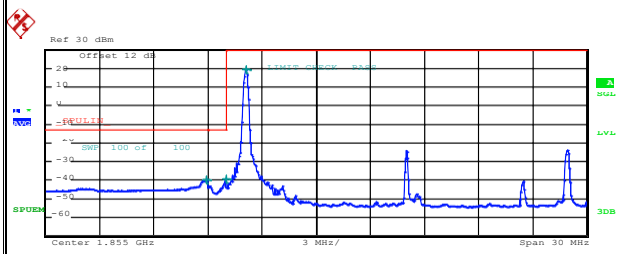
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.895 G	1.910 G	100.00 k	1.909145 G	-1.05	-31.05
1.910 G	1.911 G	150.00 k	1.910046 G	-36.22	-23.22
1.911 G	1.920 G	1.00 M	1.911072 G	-28.97	-15.97

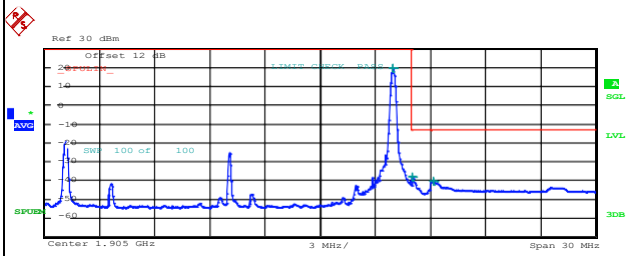
LTE Band 2 / 20MHz / QPSK

Lowest Band Edge / 1 RB



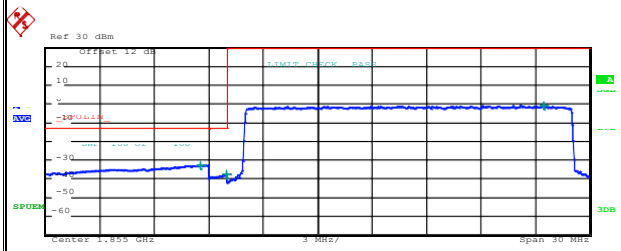
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848901 G	-40.39	-27.39
1.849 G	1.850 G	200.00 k	1.849995 G	-39.87	-26.87
1.850 G	1.870 G	100.00 k	1.851100 G	18.80	-11.20

Highest Band Edge / 1 RB



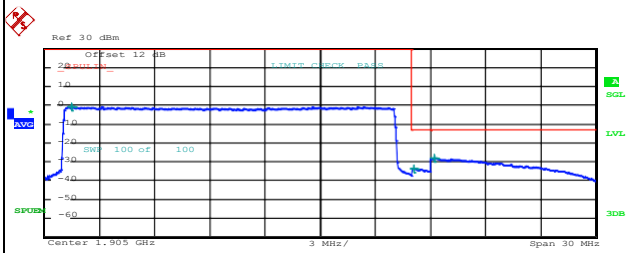
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.890 G	1.910 G	100.00 k	1.908960 G	19.29	-10.71
1.910 G	1.911 G	200.00 k	1.910009 G	-38.30	-25.30
1.911 G	1.920 G	1.00 M	1.911171 G	-40.88	-27.88

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848505 G	-32.94	-19.94
1.849 G	1.850 G	200.00 k	1.849934 G	-38.06	-25.06
1.850 G	1.870 G	100.00 k	1.867460 G	-1.29	-31.29

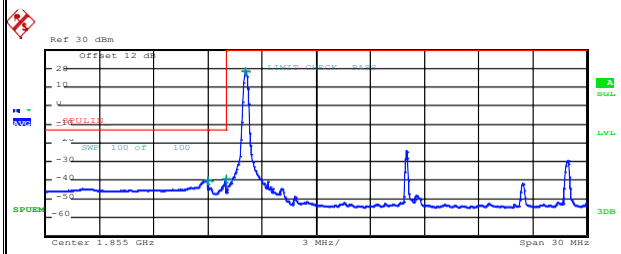
Highest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.890 G	1.910 G	100.00 k	1.891440 G	-1.02	-31.02
1.910 G	1.911 G	200.00 k	1.910083 G	-33.92	-20.92
1.911 G	1.920 G	1.00 M	1.911225 G	-28.41	-15.41

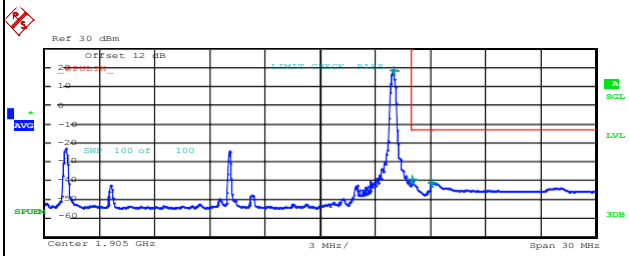
LTE Band 2 / 20MHz / 16QAM

Lowest Band Edge / 1 RB



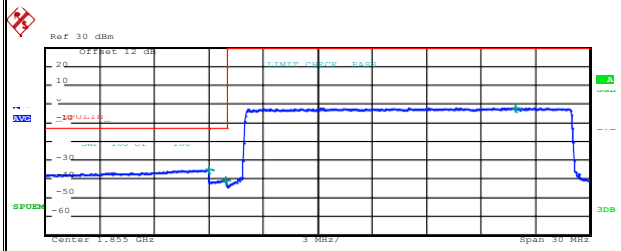
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.848982 G	-40.56	-27.56
1.849 G	1.850 G	200.00 k	1.849986 G	-39.80	-26.80
1.850 G	1.870 G	100.00 k	1.851040 G	17.84	-12.16

Highest Band Edge / 1 RB



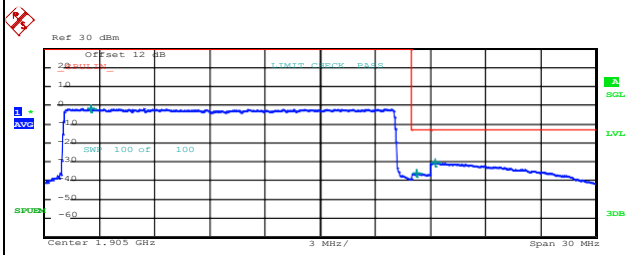
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.890 G	1.910 G	100.00 k	1.908980 G	17.83	-12.17
1.910 G	1.911 G	200.00 k	1.910007 G	-39.86	-26.86
1.911 G	1.920 G	1.00 M	1.911054 G	-41.38	-28.38

Lowest Band Edge / Full RB



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.840 G	1.849 G	1.00 M	1.849000 G	-35.59	-22.59
1.849 G	1.850 G	200.00 k	1.849915 G	-41.01	-28.01
1.850 G	1.870 G	100.00 k	1.865900 G	-2.58	-32.58

Highest Band Edge / Full RB

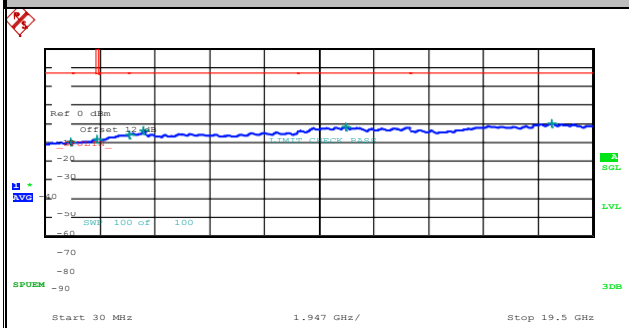


Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
1.890 G	1.910 G	100.00 k	1.892480 G	-2.15	-32.15
1.910 G	1.911 G	200.00 k	1.910230 G	-36.56	-23.56
1.911 G	1.920 G	1.00 M	1.911270 G	-30.99	-17.99

Conducted Spurious Emission

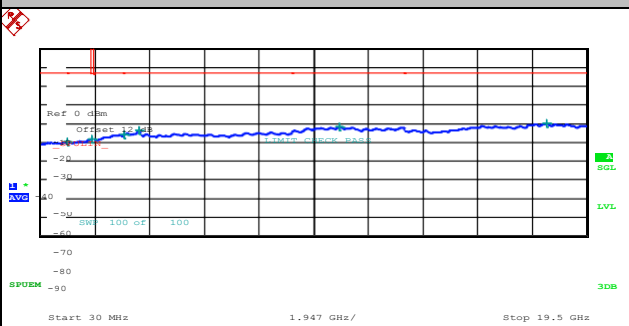
LTE Band 2 / 1.4MHz

Lowest Channel / QPSK



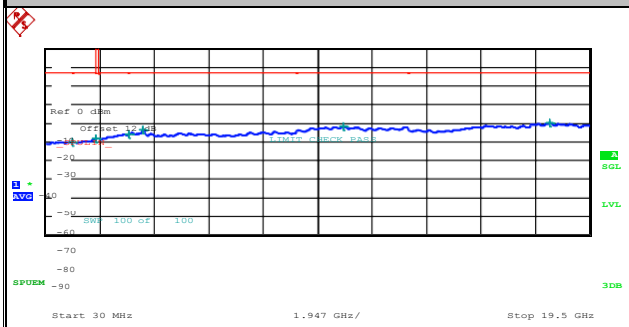
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	902.030000 M	-50.23	-37.23
1.000 G	1.840 G	1.00 M	1.835800 G	-48.48	-35.48
1.920 G	3.000 G	1.00 M	2.996760 G	-46.27	-33.27
3.000 G	9.000 G	1.00 M	3.504000 G	-44.09	-31.09
9.000 G	13.000 G	1.00 M	10.696000 G	-42.24	-29.24
13.000 G	19.500 G	1.00 M	18.044000 G	-40.16	-27.16

Lowest Channel / 16QAM



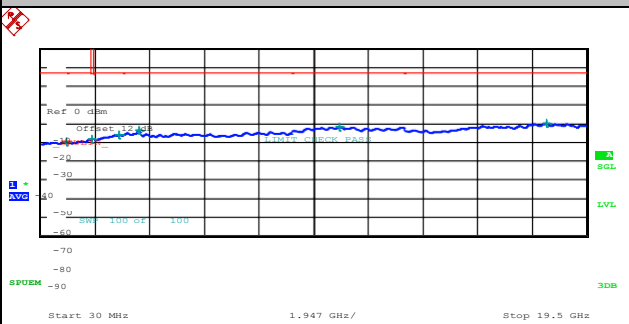
Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	958.290000 M	-50.14	-37.14
1.000 G	1.840 G	1.00 M	1.834960 G	-48.69	-35.69
1.920 G	3.000 G	1.00 M	2.997840 G	-46.38	-33.38
3.000 G	9.000 G	1.00 M	3.516000 G	-43.98	-30.98
9.000 G	13.000 G	1.00 M	10.668000 G	-42.20	-29.20
13.000 G	19.500 G	1.00 M	18.050500 G	-40.17	-27.17

Middle Channel / QPSK



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	980.600000 M	-50.31	-37.31
1.000 G	1.840 G	1.00 M	1.815640 G	-48.61	-35.61
1.920 G	3.000 G	1.00 M	2.996760 G	-46.24	-33.24
3.000 G	9.000 G	1.00 M	3.504000 G	-44.08	-31.08
9.000 G	13.000 G	1.00 M	10.680000 G	-42.25	-29.25
13.000 G	19.500 G	1.00 M	18.057000 G	-40.20	-27.20

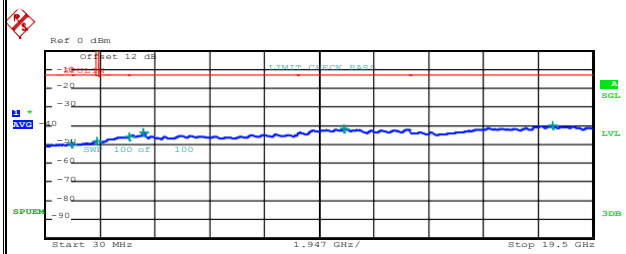
Middle Channel / 16QAM



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	944.710000 M	-50.20	-37.20
1.000 G	1.840 G	1.00 M	1.824880 G	-48.78	-35.78
1.920 G	3.000 G	1.00 M	2.794800 G	-46.36	-33.36
3.000 G	9.000 G	1.00 M	3.510000 G	-44.05	-31.05
9.000 G	13.000 G	1.00 M	10.668000 G	-42.21	-29.21
13.000 G	19.500 G	1.00 M	18.063500 G	-40.23	-27.23

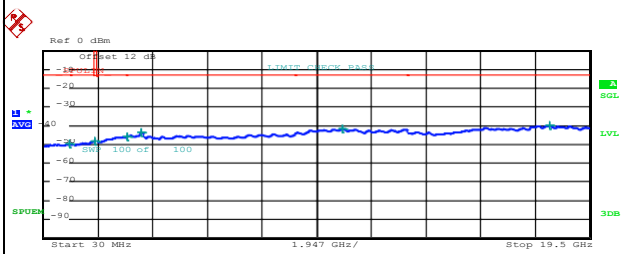
LTE Band 2 / 1.4MHz

Highest Channel / QPSK



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	932.100000 M	-50.18	-37.18
1.000 G	1.840 G	1.00 M	1.829920 G	-48.62	-35.62
1.920 G	3.000 G	1.00 M	2.996760 G	-46.36	-33.36
3.000 G	9.000 G	1.00 M	3.504000 G	-44.08	-31.08
9.000 G	13.000 G	1.00 M	10.632000 G	-42.19	-29.19
13.000 G	19.500 G	1.00 M	18.063500 G	-40.18	-27.18

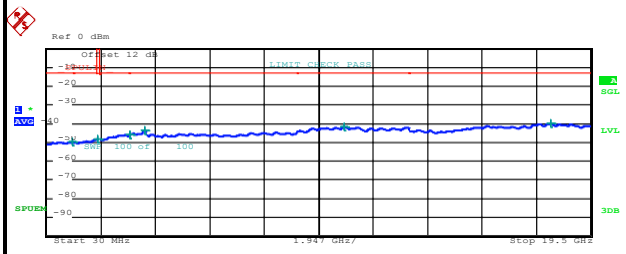
Highest Channel / 16QAM



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	940.830000 M	-50.18	-37.18
1.000 G	1.840 G	1.00 M	1.830760 G	-48.56	-35.56
1.920 G	3.000 G	1.00 M	3.000000 G	-46.37	-33.37
3.000 G	9.000 G	1.00 M	3.504000 G	-44.04	-31.04
9.000 G	13.000 G	1.00 M	10.680000 G	-42.16	-29.16
13.000 G	19.500 G	1.00 M	18.063500 G	-40.15	-27.15

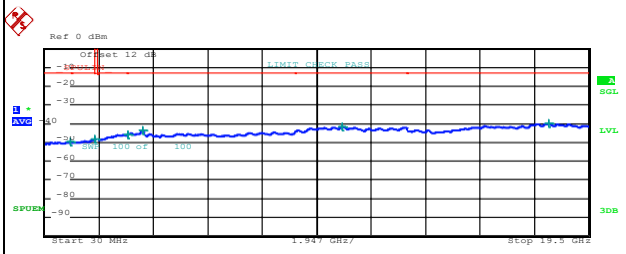
LTE Band 2 / 3MHz

Lowest Channel / QPSK



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	933.070000 M	-50.08	-37.08
1.000 G	1.840 G	1.00 M	1.831600 G	-48.68	-35.68
1.920 G	3.000 G	1.00 M	2.982720 G	-46.31	-33.31
3.000 G	9.000 G	1.00 M	3.516000 G	-43.93	-30.93
9.000 G	13.000 G	1.00 M	10.680000 G	-42.25	-29.25
13.000 G	19.500 G	1.00 M	18.063500 G	-40.16	-27.16

Lowest Channel / 16QAM



Start [Hz]	Stop [Hz]	RBW [Hz]	Freq [Hz]	PwrAbs [dBm]	Δ Limit [dB]
30.000 M	1.000 G	1.00 M	919.490000 M	-50.19	-37.19
1.000 G	1.840 G	1.00 M	1.801360 G	-48.66	-35.66
1.920 G	3.000 G	1.00 M	2.996760 G	-46.25	-33.25
3.000 G	9.000 G	1.00 M	3.510000 G	-44.02	-31.02
9.000 G	13.000 G	1.00 M	10.672000 G	-42.16	-29.16
13.000 G	19.500 G	1.00 M	18.050500 G	-40.15	-27.15