FCC RF Test Report

APPLICANT	:	**CT Asia**
EQUIPMENT	:	**Mobile phone**
BRAND NAME	:	**BLU**
MODEL NAME	:	**BLU WIN JR LTE**
FCC ID	:	**YHLBLUWINJRLTE**
STANDARD	:	**47 CFR Part 2, 27(L), 27(M), 27(H)**
CLASSIFICATION	:	**PCS Licensed Transmitter Held to Ear (PCE)**

The product was received on Feb. 06, 2015 and completely tested on Apr. 11, 2015. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-C-2004 and the testing has shown the tested sample to be in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.

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Approved by: Jones Tsai / Manager

Testing Laboratory
2353

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG520606B	Rev. 01	Initial issue of report	Apr. 29, 2015
FG520606B	Rev. 02	Update the report for revising model name.	May 04, 2015

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§27.50(c)(10)	Effective Radiated Power (Band 17)	ERP < 3 Watt	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (Band 7)	EIRP < 2Watt		-
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4)	EIRP < 1Watt		-
3.7	§2.1049 §27.53(h)(3) §27.53(m)(6)	99% Occupied Bandwidth and 26dB Bandwidth	Reporting Only	PASS	-
3.8	§2.1051 §27.53(g)	Conducted Band Edge Measurement (Band 4)(Band 17)	< 43+10log10(P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Band Edge Measurement (Band 7)	< 5MHz: -10 dBm 5 MHz~6MHz or 26dB(BW): -13 dBm ≥6MHz or 26dB(BW): -25 dBm	PASS	-
3.9	§2.1051 §27.53(g)	Conducted Spurious Emission (Band 4)(Band 17)	< 43+10log10(P[Watts])	PASS	-
	§2.1053 §27.53(m)(4)	Conducted Spurious Emission (Band 7)	< $55+10\log_{10}$(P[Watts])		
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	
4.3	§2.1053 §27.53(g) §27.53(h)	Radiated Spurious Emission (Band 4) (Band 17)	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 2.62 dB at 5102.180 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (Band 7)	< $55+10\log_{10}$(P[Watts])		

1 General Description

1.1 Applicant

CT Asia
Unit 01, 15/F, Seaview Centre, 139-141 Hoi bun road, Kwun Tong, Kowloon, Hongkong

1.2 Manufacturer

Shanghai Huaqin Telecom Technology Co., Ltd.
NO.1 Building, 399 Keyuan Road, Zhangjiang Hi-Tech Park, Pudong New Area, Shanghai, China 201203

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile phone
Brand Name	BLU
Model Name	BLU WIN JR LTE
FCC ID	YHLBLUWINJRLTE
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only)/ LTE/WLAN 2.4GHz 802.11b/g/n HT20 Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
HW Version	QL650_Mh06c
SW Version	00130.04717.20001.15007
EUT Stage	Pre-Production

1.4 Product Specification subjective to this standard

Product Specification subjective to this standard	
Tx Frequency	LTE Band 4 : 1710.7 MHz ~ 1754.3 MHz LTE Band 7 : 2502.5 MHz ~ 2567.5 MHz LTE Band 17 : 706.5 MHz ~ 713.5 MHz
Rx Frequency	LTE Band 4 : 2110.7 MHz ~ 2154.3 MHz LTE Band 7 : 2622.5MHz ~ 2687.5 MHz LTE Band 17 : 736.5 MHz ~ 743.5 MHz
Bandwidth	LTE Band 4 : 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 7 : 5MHz/ 10MHz / 15MHz / 20MHz LTE Band 17 : 5MHz / 10MHz
Maximum Output Power to Antenna	LTE Band 4 : 22.76 dBm LTE Band 7 : 22.67 dBm LTE Band 17 : 23.67 dBm
Type of Modulation	QPSK / 16QAM

1.5 Modification of EUT

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

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

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	1M10G7D	-	0.0824	1M10W7D	-	0.0766
3	2M74G7D	-	0.0745	2M73W7D	-	0.0518
5	4M51G7D	-	0.0695	4M50W7D	-	0.0550
10	9M09G7D	0.0006	0.0721	9M05W7D	-	0.0726
15	13M5G7D	-	0.0740	13M5W7D	-	0.0415
20	18M4G7D	-	0.0668	18M4W7D	-	0.0509
LTE Band 7	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum EIRP(W)
5	4M53G7D	-	0.1398	4M52W7D	-	0.0912
10	9M09G7D	0.0007	0.0493	9M07W7D	-	0.0573
15	13M6G7D	-	0.2056	13M6W7D	-	0.1041
20	18M5G7D	-	0.1094	18M6W7D	-	0.1893
LTE Band 17	QPSK			16QAM		
BW(MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	4M52G7D	-	0.1614	4M51W7D	-	0.1086
10	9M05G7D	0.0013	0.1191	9M01W7D	-	0.1164

1.7 Testing Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	1F & 2F,Building A, Morning Business Center, No. 4003 ShiGu Rd., Xili Town, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755-8637-9589 FAX: +86-755-8637-9595	
Test Site No.	**Sporton Site No.**	
	TH01-SZ	

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.	
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. China TEL: +86-755- 3320-2398	
Test Site No.	**Sporton Site No.**	**FCC/IC Registration No.**
	03CH01-SZ	831040/4086F-1

1.8 Applicable Standards

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

- 47 CFR Part 2, 27(L), 27(M), 27(H)
- ANSI / TIA / EIA-603-C-2004
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02
- IC RSS-130 Issue1
- IC RSS-139 Issue 2
- IC RSS-199 Issue 2
- IC RSS-Gen Issue 4

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

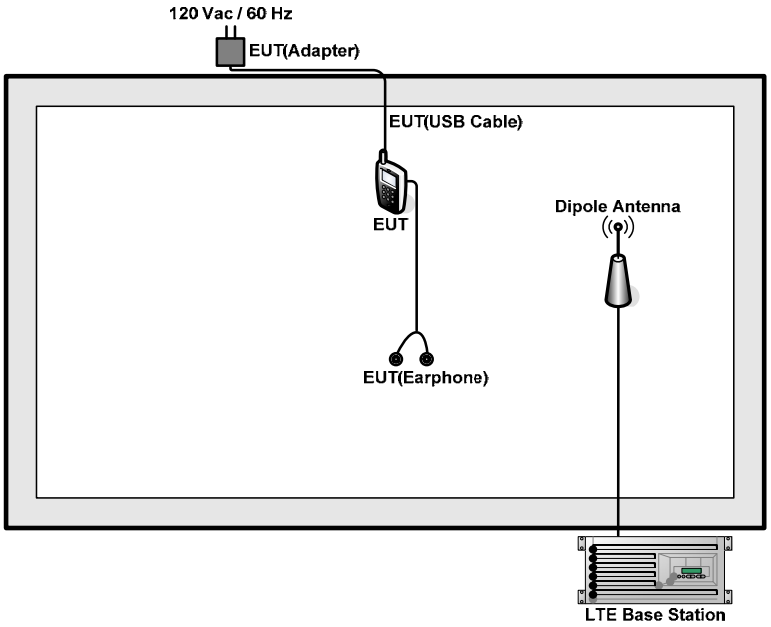
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v02r02 with maximum output power.

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	4	v	v	v	v	v	v	v	v	v	v	v	v	v	v
	7	-	-	v	v	v	v	v	v	v	v	v	v	v	v
	17	-	-	v	v	-	-	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	4						v	v	v	v		v	v	v	v
	7	-	-				v	v	v	v		v	v	v	v
	17	-	-		v	-	-	v	v	v		v	v	v	v
26dB and 99% Bandwidth	4	v	v	v	v	v	v	v	v			v	v	v	v
	7	-	-	v	v	v	v	v	v			v	v	v	v
	17	-	-	v	v	-	-	v	v			v	v	v	v
Conducted Band Edge	4	v	v	v	v	v	v	v	v	v		v	v		v
	7	-	-	v	v	v	v	v	v	v		v	v		v
	17	-	-	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 Spurious Emission	4	v	v	v	v	v	v	v	v	v			v	v	v
	7	-	-	v	v	v	v	v	v	v			v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
Frequency Stability	4				v			v				v		v	
	7	-	-		v			v				v		v	
	17	-	-		v	-	-	v				v		v	
E.R.P./ E.I.R.P.	4	v	v	v	v	v	v	v	v	v			v	v	v
	7	-	-	v	v	v	v	v	v	v			v	v	v
	17	-	-	v	v	-	-	v	v	v			v	v	v
Radiated Spurious Emission	4	v	v	v	v	v	v	v		v			v	v	v
	7	-	-	v	v	v	v	v		v			v	v	v
	17	-	-	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 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	LTE Base Station	Anritsu	MT8820C	N/A	N/A	Unshielded, 1.8 m
2.	DC Power Supply	TOPWORD	3303DR	N/A	N/A	Unshielded, 1.8 m

2.4 Measurement Results Explanation Example

For all conducted test items:

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

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

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

Example :

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

= 4.5 + 10 = 14.5 (dB)

3 Conducted Test Items

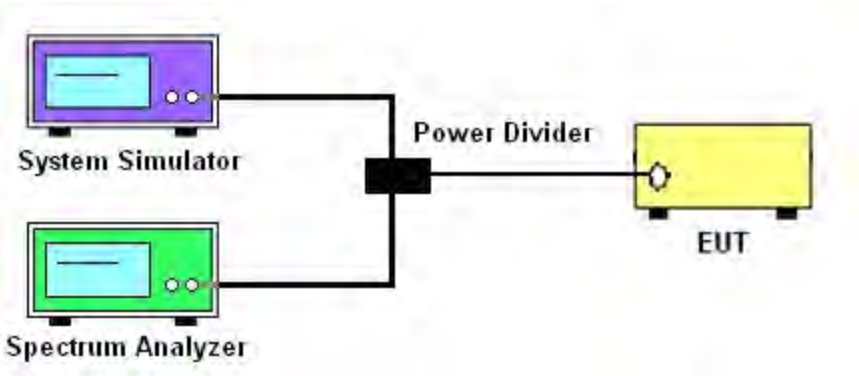
3.1 Measuring Instruments

See list of measuring instruments of this test report.

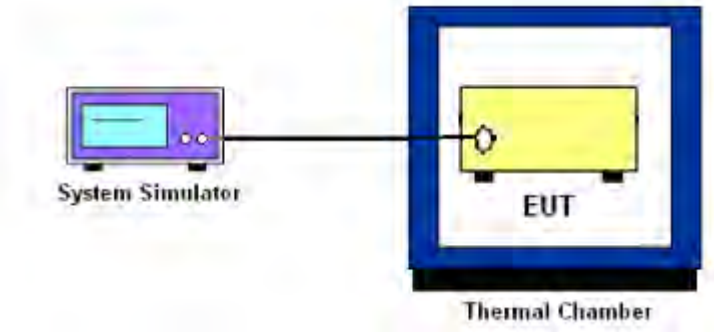
3.2 Test Setup

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 Effective Radiated Power and Effective Isotropic Radiated Power

3.6.1 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 17.

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 7 and 1 watt with LTE band 4.

3.6.2 Test Procedures

1. 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 per section 5. of KDB 971168 D01.
   Note: For IC RSS-199, set PEAK detector instead of RMS detector.
2. 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.
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by the substitution antenna at same location, and then tune the output power of signal generator to the same level as maximum output power of EUT. Take the record of the output power at substitution antenna.

4. The instrument settings (RBW, VBW, detector) for the ERP/EIRP measurements are as following table:

	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

3.7 99% Occupied Bandwidth and 26dB Bandwidth Measurement

3.7.1 Description of 99% Occupied Bandwidth and 26dB Bandwidth Measurement

The 99% 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.

3.7.2 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.

3.8 Conducted Band Edge

3.8.1 Description of Conducted Band Edge Measurement

27.53 (g) for Band 17

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) for Band 4

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

27.53(m)(4) for Band 7:

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.

3.8.2 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 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.

   <For Band 7>

   The limit line is derived from 55+ 10log(P)dB below the transmitter power P(Watts)

   = P(W)- [55 + 10log(P)] (dB)

   = [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)

   = -25dBm.

3.9 Conducted Spurious Emission

3.9.1 Description of Conducted Spurious Emission Measurement

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

For Band 7:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

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

3.9.2 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.
9. For Band 7
   The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [55 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)
   = -25dBm.

3.10 Frequency Stability

3.10.1 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.

3.10.2 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.

3.10.3 Test Procedures for Voltage Variation

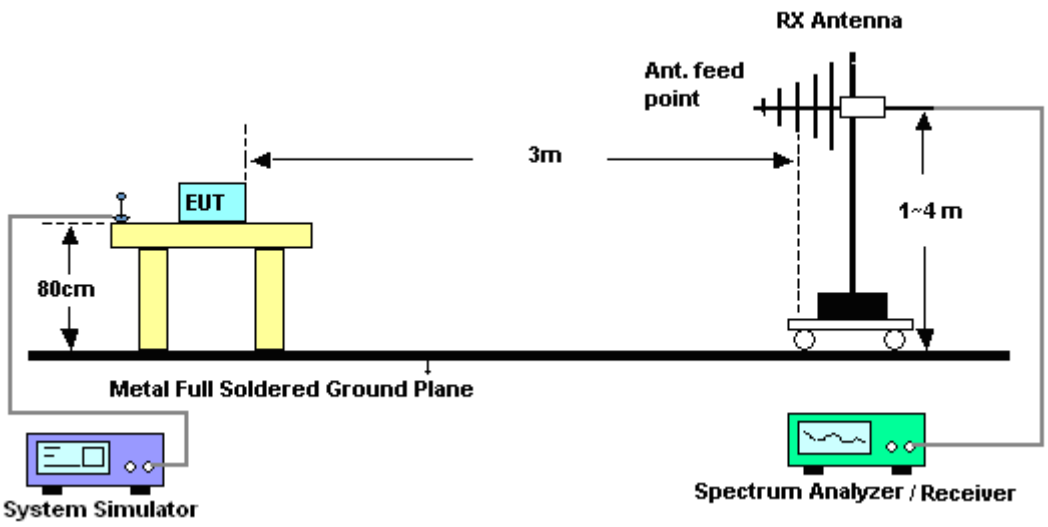
1. The testing follows FCC KDB 971168 v02r02 Section 9.0.
2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
4. The variation in frequency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

4 Radiated Test Items

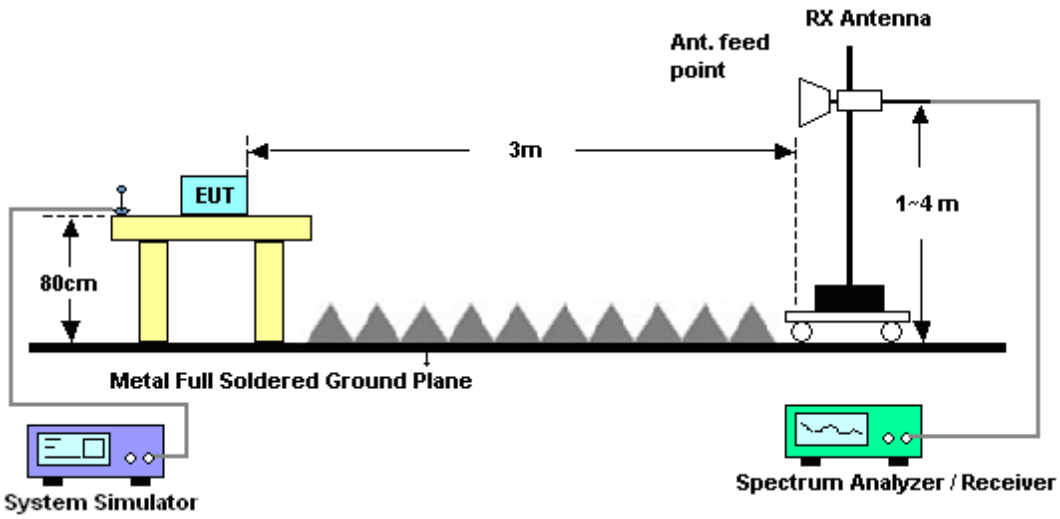
4.1 Measuring Instruments

See list of measuring instruments of this test report.

4.1.1 For radiated test from 30MHz to 1GHz



4.1.2 For radiated test above 1GHz



4.2 Test Result of Radiated Test

Please refer to Appendix B.

4.3 Radiated Spurious Emission

4.3.1 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 LTE Band 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.

4.3.2 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)
    = P(W)- [55 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [55 + 10log(P)] (dB)
    = -25dBm.
12. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
13. ERP (dBm) = EIRP - 2.15

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	May 08, 2014	Mar. 02, 2015	May 07, 2015	Conducted (TH01-SZ)
Thermal Chamber	Hongzhangroup	LP-150U	HD20120425	-40℃~150℃	Jan. 28, 2015	Mar. 02, 2015	Jan. 27, 2016	Conducted (TH01-SZ)
EMI Test Receiver&SA	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	Mar. 14, 2015~ Apr. 11, 2015	May 25, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	R&S	FSV40	101041	10kHz~40GHz;Max 30dBm	Sep. 25, 2014	Mar. 14, 2015~ Apr. 11, 2015	Sep. 24, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TeseQ	CBL6112D	23188	30MHz~2GHz	Nov. 07, 2014	Mar. 14, 2015~ Apr. 11, 2015	Nov. 06, 2015	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Oct. 15, 2014	Mar. 14, 2015~ Apr. 11, 2015	Oct. 14, 2015	Radiation (03CH01-SZ)
SHF-EHF Horn	com-power	AH-840	101073	18GHz~40GHz	Jun. 09, 2014	Mar. 14, 2015~ Apr. 11, 2015	Jun. 08, 2015	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz / 30 dB	Jan. 28, 2015	Mar. 14, 2015~ Apr. 11, 2015	Jan. 27, 2016	Radiation (03CH01-SZ)
Amplifier	MITEQ	AMF-7D-00 101800-30-1	1707137	1GHz~18GHz	May 08, 2014	Mar. 14, 2015~ Apr. 11, 2015	May 07, 2015	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 08, 2014	Mar. 14, 2015~ Apr. 11, 2015	May 07, 2015	Radiation (03CH01-SZ)
AC Power Source	Chroma	61601	616010001985	N/A	NCR	Mar. 14, 2015~ Apr. 11, 2015	NCR	Radiation (03CH01-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Mar. 14, 2015~ Apr. 11, 2015	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Mar. 14, 2015~ Apr. 11, 2015	NCR	Radiation (03CH01-SZ)

6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.9 dB

Appendix A. Test Results of Conducted Test

LTE Band 4

Conducted Output Power(Average power)

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
1.4	1	0	QPSK	21.94	22.25	22.20
1.4	1	2		22.05	22.29	22.31
1.4	1	5		22.03	22.22	22.19
1.4	3	0		22.03	22.40	22.26
1.4	3	1		22.08	22.52	22.25
1.4	3	2		22.09	22.31	22.27
1.4	6	0		21.04	21.29	21.14
1.4	1	0	16-QAM	21.24	21.78	21.54
1.4	1	2		21.33	21.77	21.74
1.4	1	5		21.42	21.43	21.52
1.4	3	0		21.55	21.73	21.73
1.4	3	1		21.54	21.66	21.30
1.4	3	2		21.48	21.77	21.10
1.4	6	0		20.25	20.40	19.84
3	1	0	QPSK	22.07	22.42	22.11
3	1	7		22.62	22.41	22.63
3	1	14		21.99	22.51	22.06
3	8	0		21.18	21.34	21.13
3	8	4		21.16	21.32	21.21
3	8	7		21.15	21.29	21.19
3	15	0		21.03	21.30	21.21
3	1	0	16-QAM	21.41	21.46	21.37
3	1	7		21.12	21.58	21.15
3	1	14		21.59	21.72	21.75
3	8	0		20.04	20.28	20.01
3	8	4		20.23	20.37	20.00
3	8	7		20.27	20.29	19.98
3	15	0		20.01	20.24	19.96

LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	21.87	22.50	22.09
5	1	12		22.11	22.74	22.68
5	1	24		21.76	22.50	21.98
5	12	0		21.07	21.25	21.08
5	12	6		20.99	21.27	21.09
5	12	11		21.11	21.24	21.08
5	25	0		21.09	21.28	21.12
5	1	0	16-QAM	21.04	21.25	21.92
5	1	12		21.52	21.26	21.98
5	1	24		21.39	21.24	21.96
5	12	0		20.11	20.31	20.05
5	12	6		20.25	20.23	20.13
5	12	11		20.28	20.27	20.10
5	25	0		20.08	20.33	20.09
10	1	0	QPSK	22.20	22.35	22.50
10	1	24		21.94	22.15	22.40
10	1	49		22.05	22.11	22.10
10	25	0		21.16	21.28	21.25
10	25	12		21.04	21.28	21.13
10	25	24		21.12	21.26	21.12
10	50	0		21.16	21.31	21.18
10	1	0	16-QAM	21.41	21.76	21.97
10	1	24		21.18	21.38	21.80
10	1	49		21.50	21.72	21.95
10	25	0		20.17	20.37	20.56
10	25	12		20.23	20.26	20.21
10	25	24		20.16	20.22	20.12
10	50	0		20.08	20.36	20.11

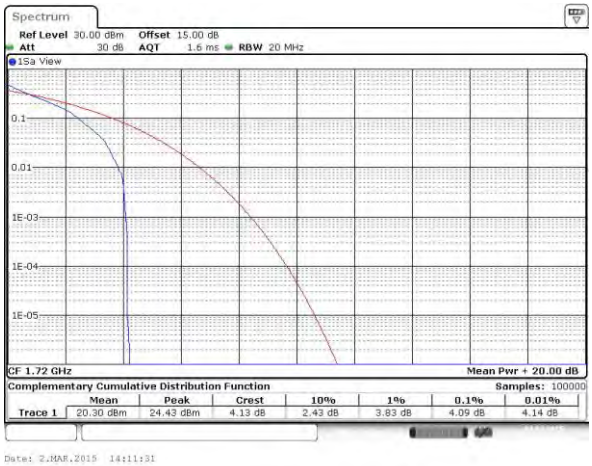
LTE Band 4 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
15	1	0	QPSK	22.24	22.47	22.47
15	1	37		22.60	22.27	22.19
15	1	74		22.18	22.31	22.13
15	36	0		21.18	21.29	21.26
15	36	18		21.14	21.24	21.19
15	36	37		21.09	21.19	21.11
15	75	0		21.18	21.22	21.27
15	1	0	16-QAM	21.95	21.62	21.57
15	1	37		22.00	21.49	21.31
15	1	74		21.79	21.59	20.79
15	36	0		20.17	20.41	20.34
15	36	18		20.12	20.35	20.19
15	36	37		20.17	20.20	20.14
15	75	0		20.19	20.34	20.12
20	1	0	QPSK	22.34	22.49	22.59
20	1	49		22.51	22.76	22.65
20	1	99		22.19	22.36	22.16
20	50	0		21.17	21.33	21.32
20	50	24		21.15	21.26	21.22
20	50	49		21.08	21.13	21.15
20	100	0		21.18	21.25	21.21
20	1	0	16-QAM	21.39	21.44	20.98
20	1	49		20.94	21.21	21.22
20	1	99		20.83	21.16	20.96
20	50	0		20.13	20.35	20.27
20	50	24		20.07	20.22	20.11
20	50	49		20.11	20.08	20.02
20	100	0		20.22	20.36	20.19

Peak-to-Average Ratio

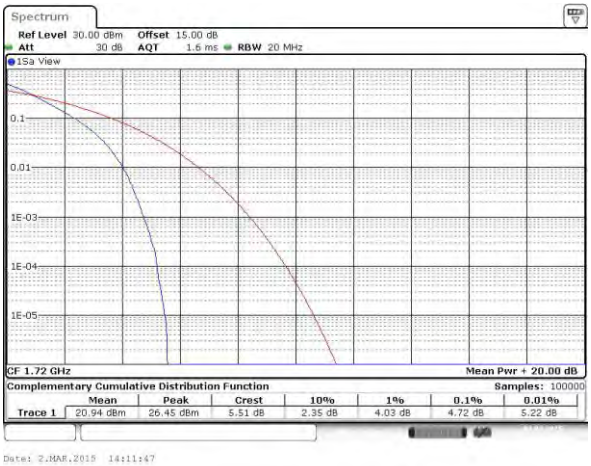
Mode	LTE Band 4 / 20MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	RB Size	Result
Lowest CH	4.09	4.72	4.93	5.68	PASS
Middle CH	4.06	4.87	5.07	5.77	
Highest CH	4.20	4.81	5.51	5.83	

LTE Band 4 / 20MHz / QPSK

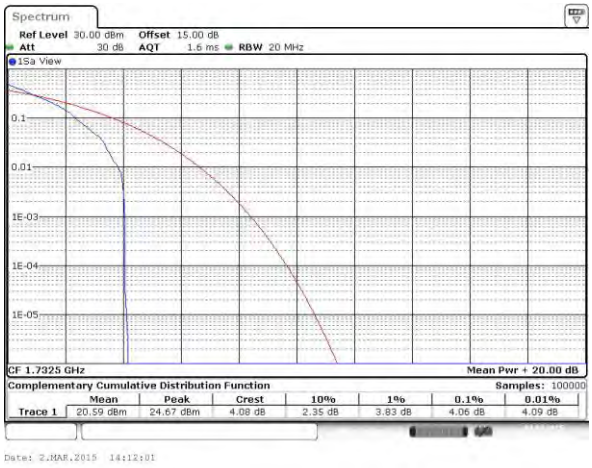
Lowest Channel / 1RB



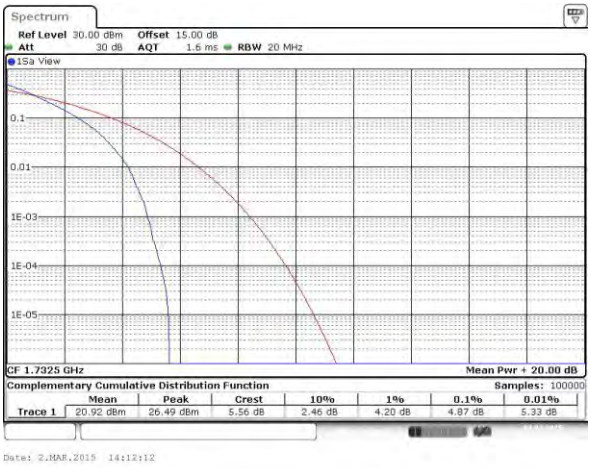
Lowest Channel / Full RB



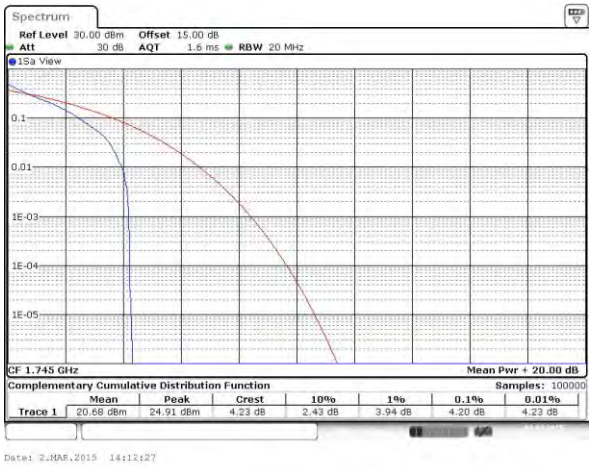
Middle Channel / 1RB



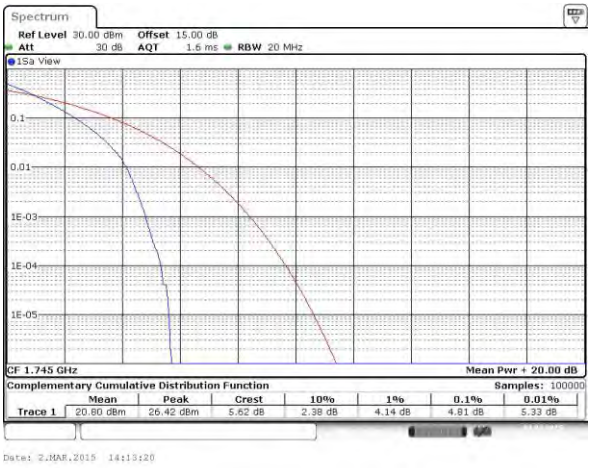
Middle Channel / Full RB



Highest Channel / 1RB

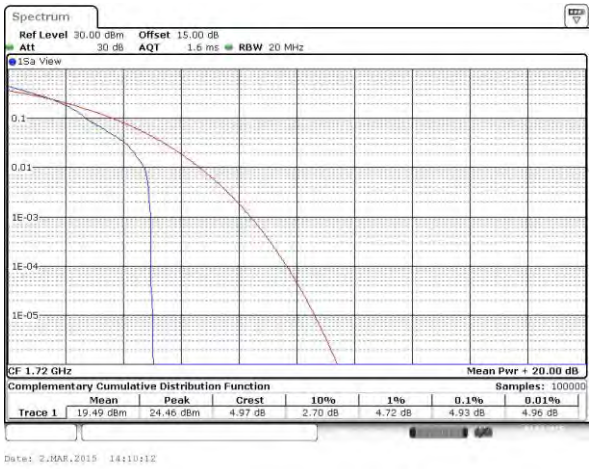


Highest Channel / Full RB

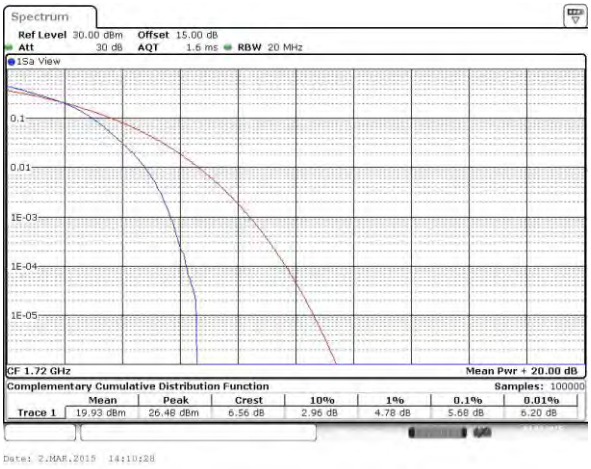


LTE Band 4 / 20MHz / 16QAM

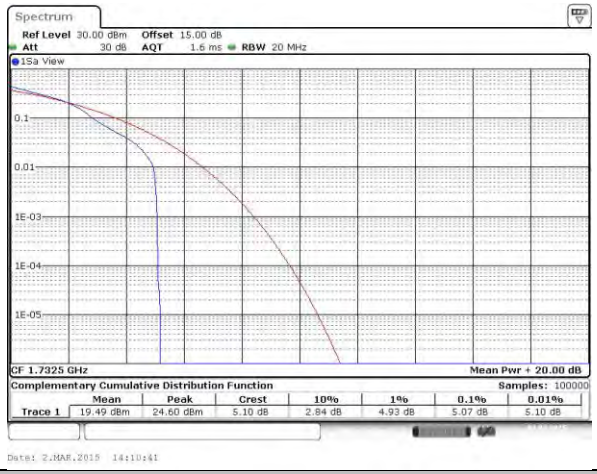
Lowest Channel / 1RB



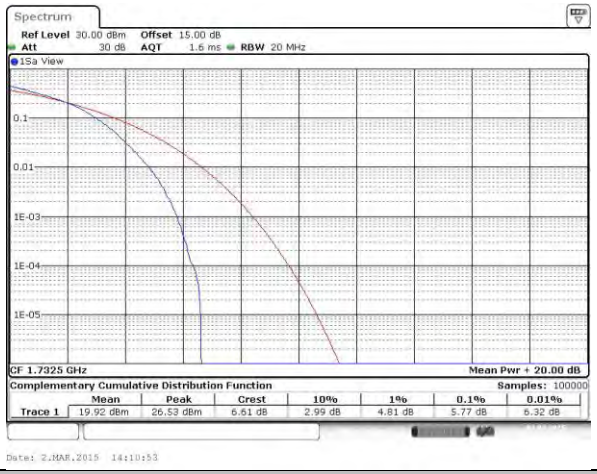
Lowest Channel / Full RB



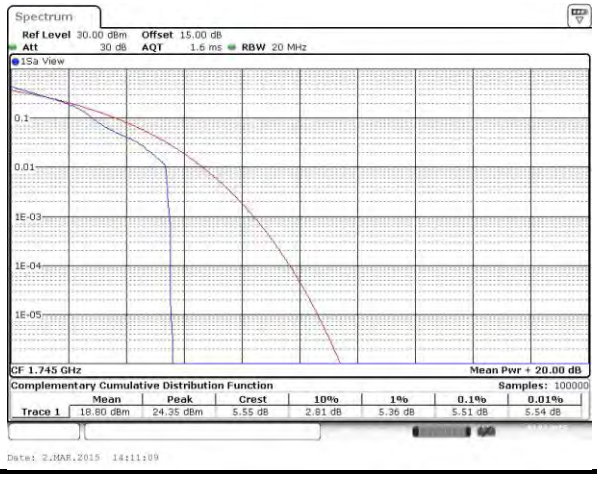
Middle Channel / 1RB



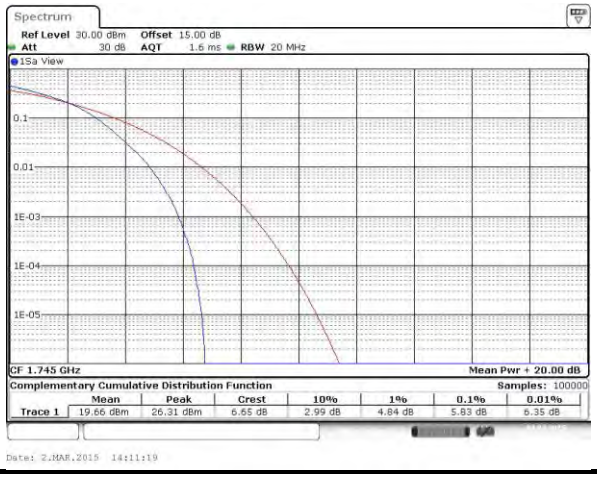
Middle Channel / Full RB



Highest Channel / 1RB



Highest Channel / Full RB

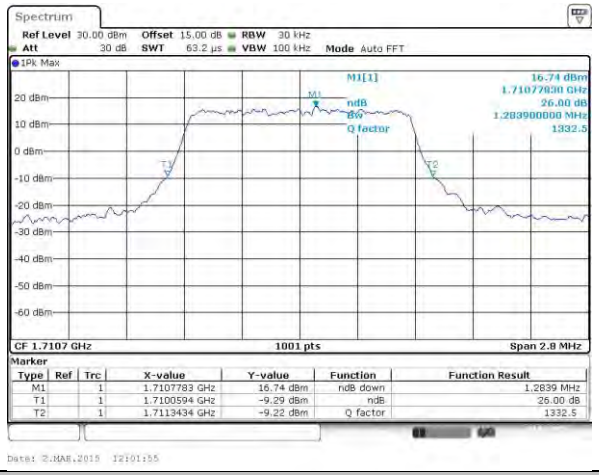


26dB Bandwidth

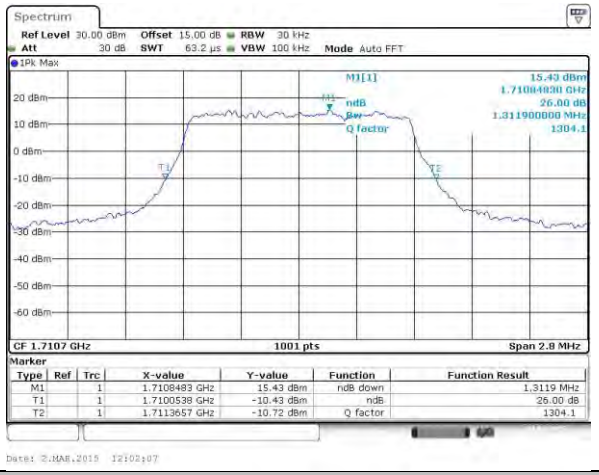
Mode	LTE Band 4 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.28	1.31	3.06	3.06	5.07	5.05	10.09	10.01	14.87	14.78	20.30	20.46
Middle CH	1.29	1.31	3.06	3.06	5.06	5.05	9.95	10.05	14.75	14.75	20.38	20.30
Highest CH	1.31	1.31	3.06	3.07	5.05	5.01	9.97	10.03	14.63	14.63	20.34	20.38

LTE Band 4

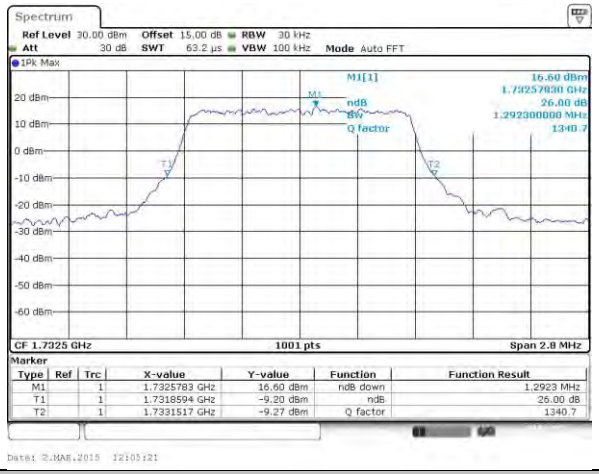
Lowest Channel / 1.4MHz / QPSK



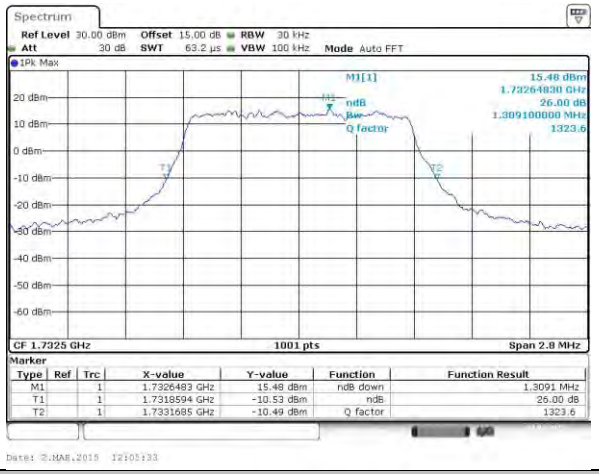
Lowest Channel / 1.4MHz / 16QAM



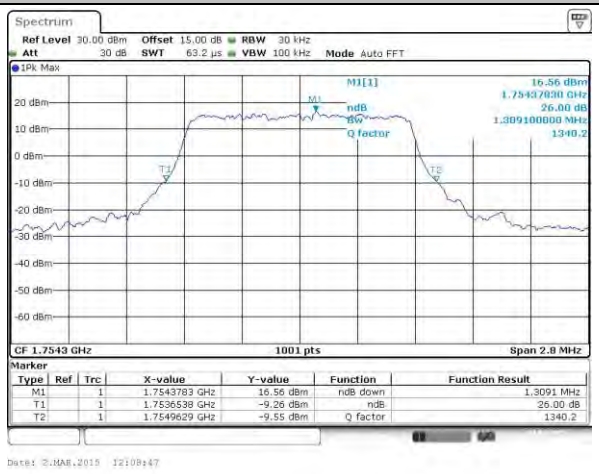
Middle Channel / 1.4MHz / QPSK



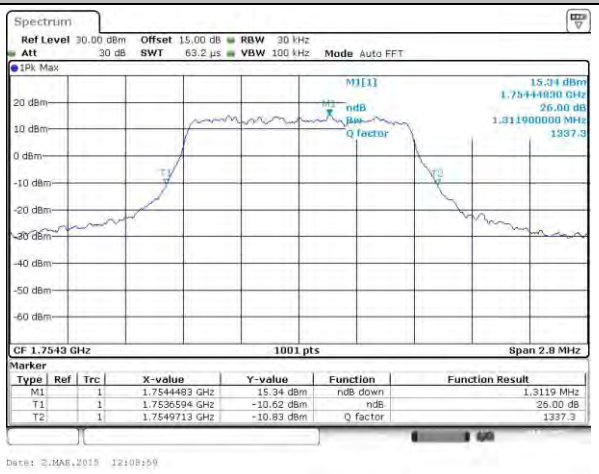
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

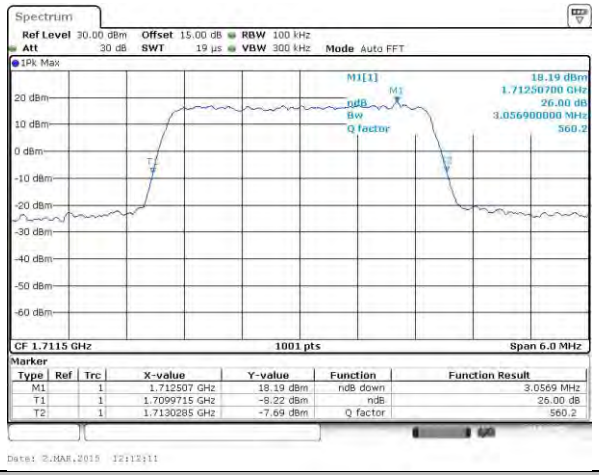


Highest Channel / 1.4MHz / 16QAM

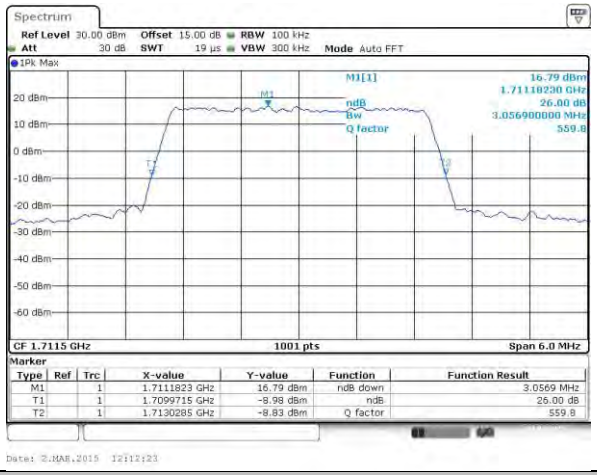


LTE Band 4

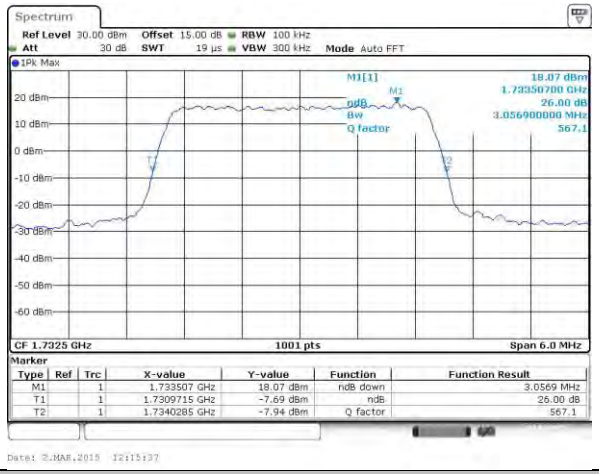
Lowest Channel / 3MHz / QPSK



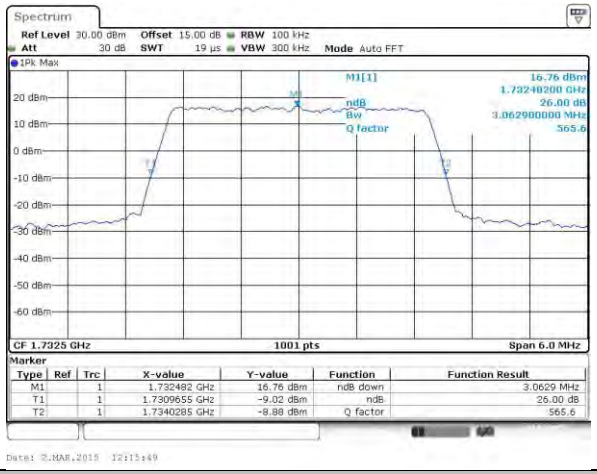
Lowest Channel / 3MHz / 16QAM



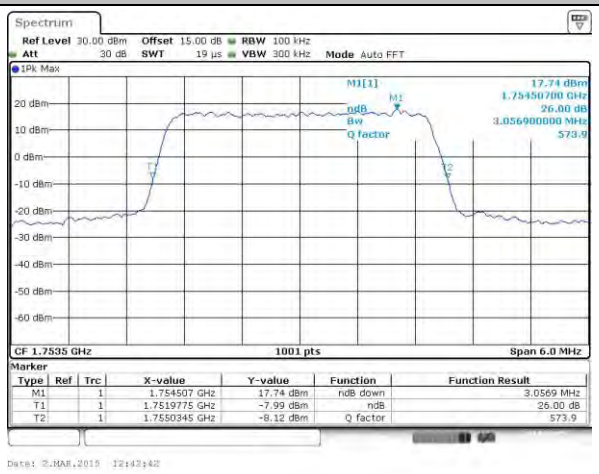
Middle Channel / 3MHz / QPSK



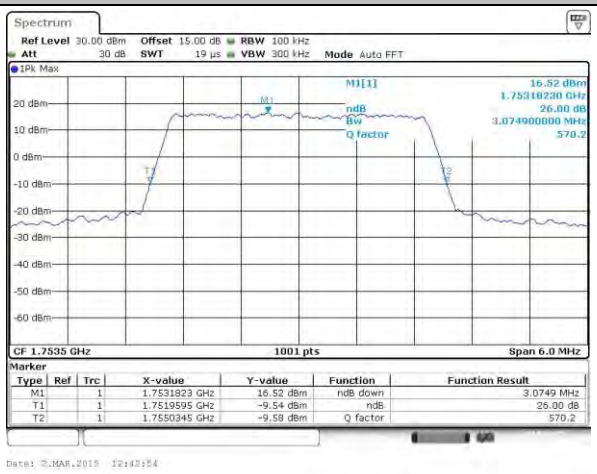
Middle Channel /3MHz / 16QAM



Highest Channel /3MHz / QPSK

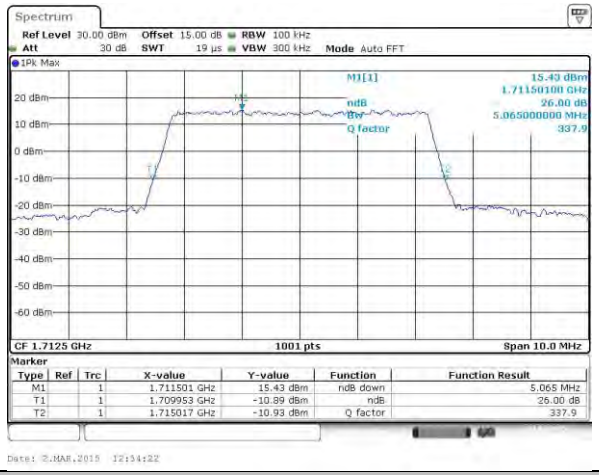


Highest Channel /3MHz / 16QAM

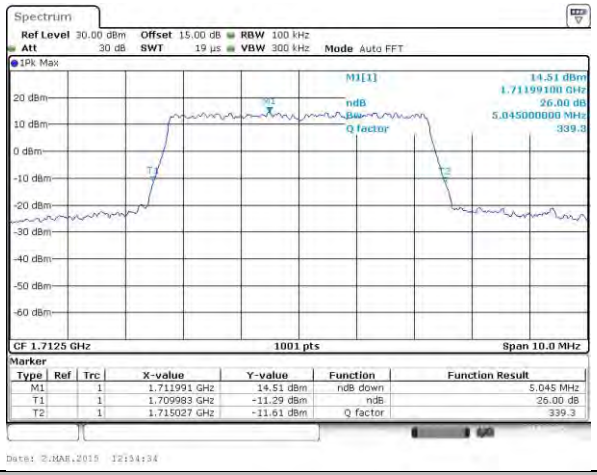


LTE Band 4

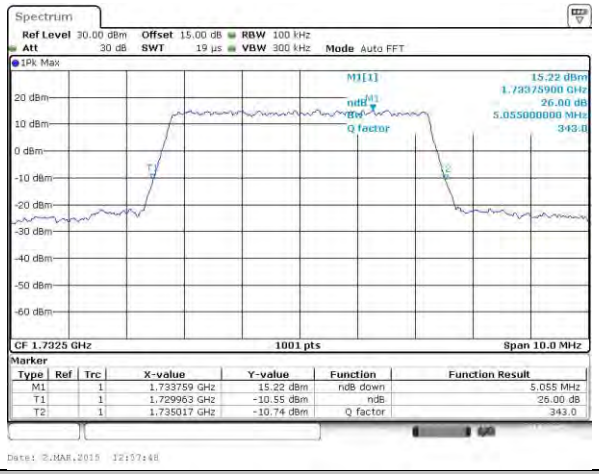
Lowest Channel / 5MHz / QPSK



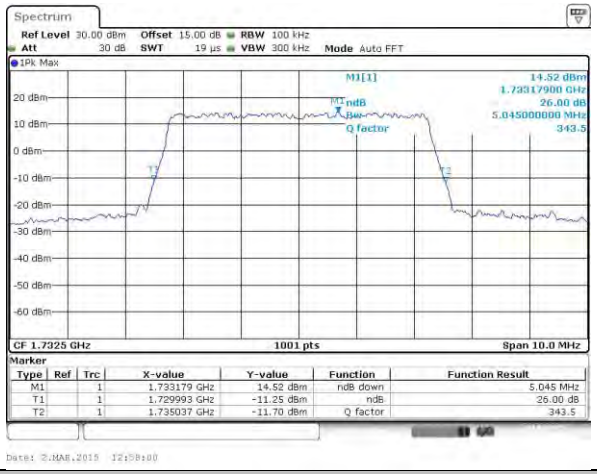
Lowest Channel / 5MHz / 16QAM



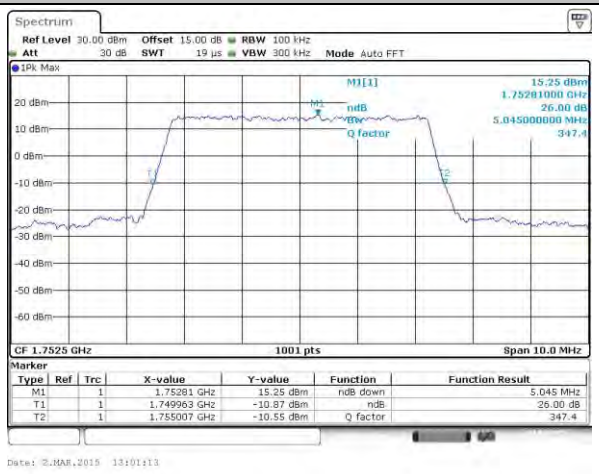
Middle Channel / 5MHz / QPSK



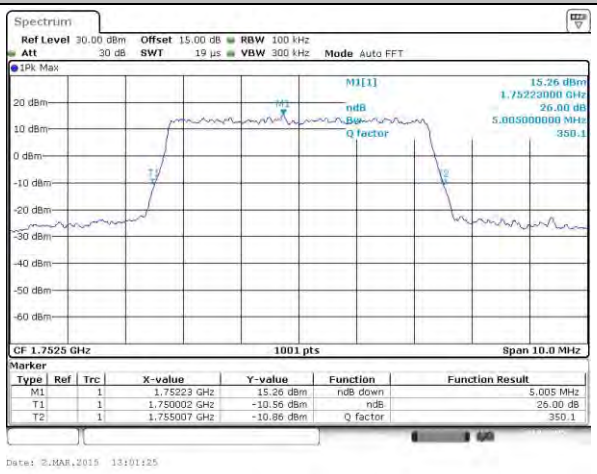
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

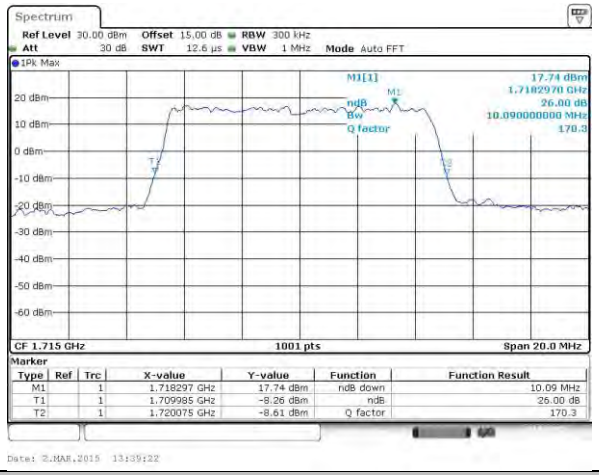


Highest Channel / 5MHz / 16QAM

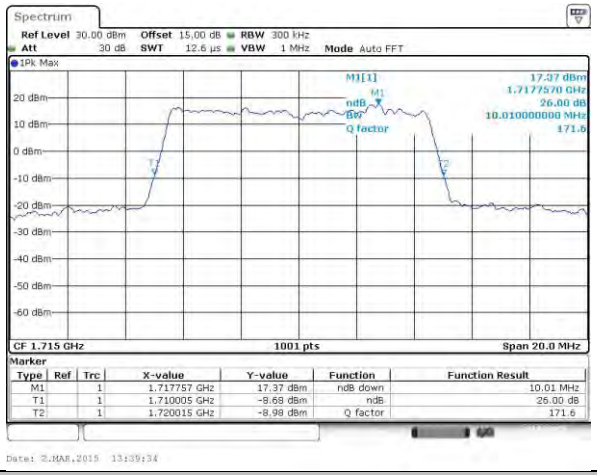


LTE Band 4

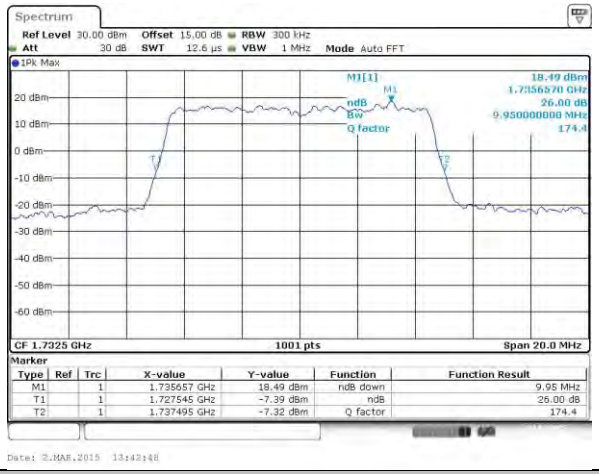
Lowest Channel / 10MHz / QPSK



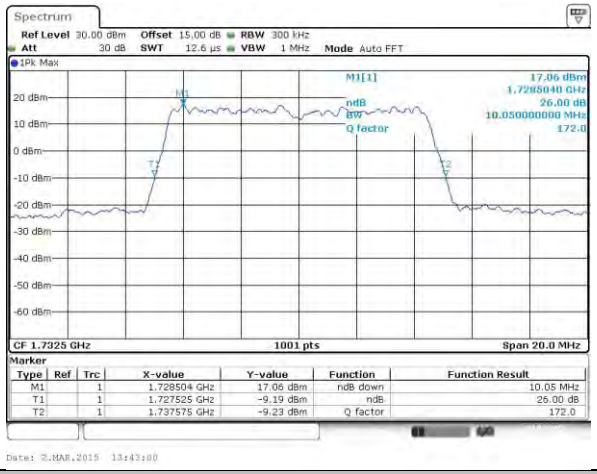
Lowest Channel / 10MHz / 16QAM



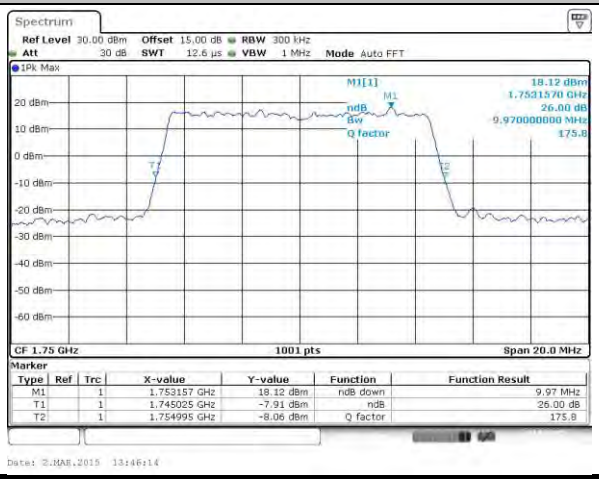
Middle Channel / 10MHz / QPSK



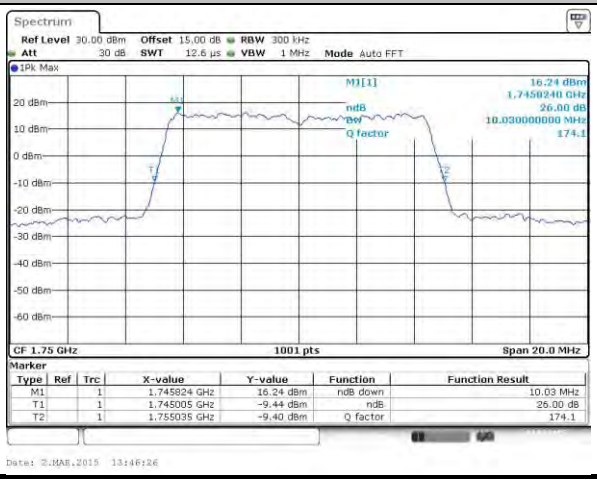
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

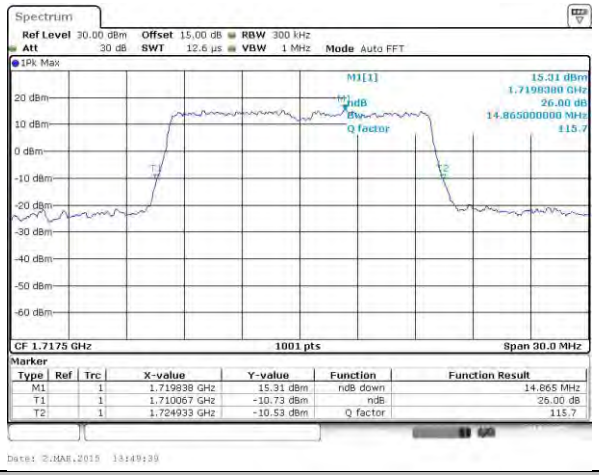


Highest Channel / 10MHz / 16QAM

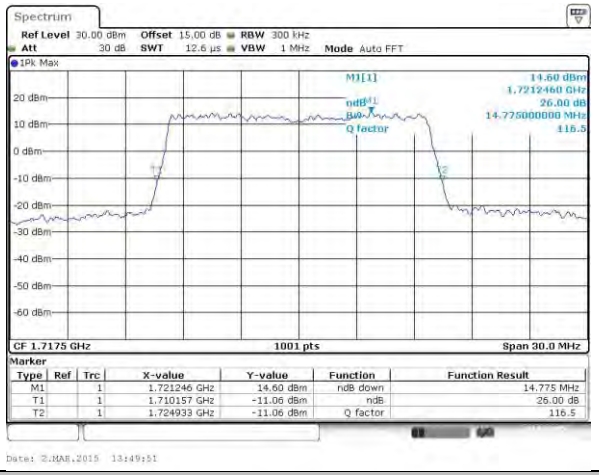


LTE Band 4

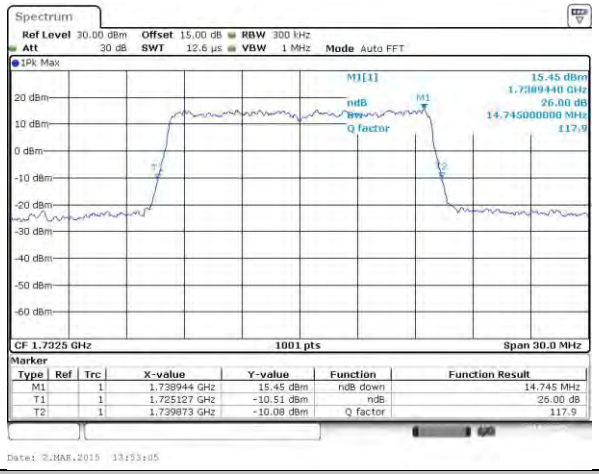
Lowest Channel / 15MHz / QPSK



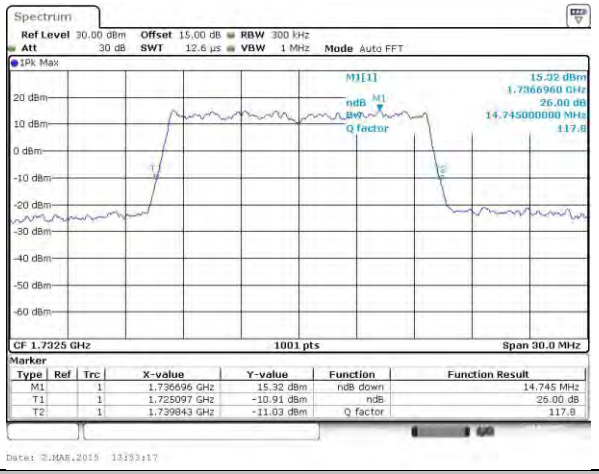
Lowest Channel / 15MHz / 16QAM



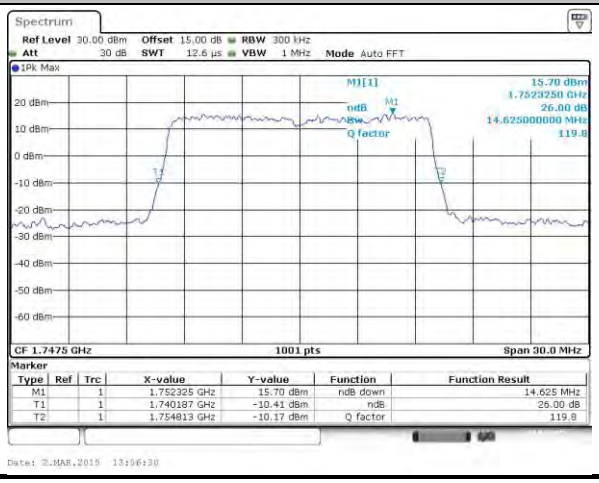
Middle Channel / 15MHz / QPSK



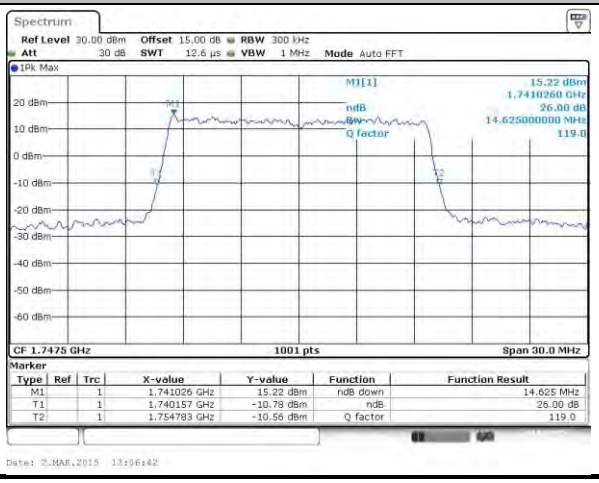
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

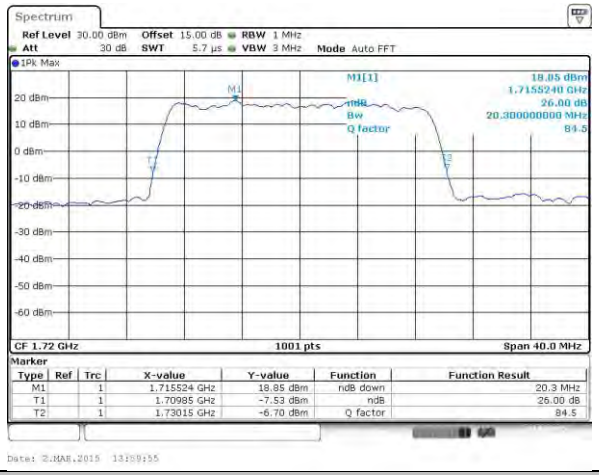


Highest Channel / 15MHz / 16QAM

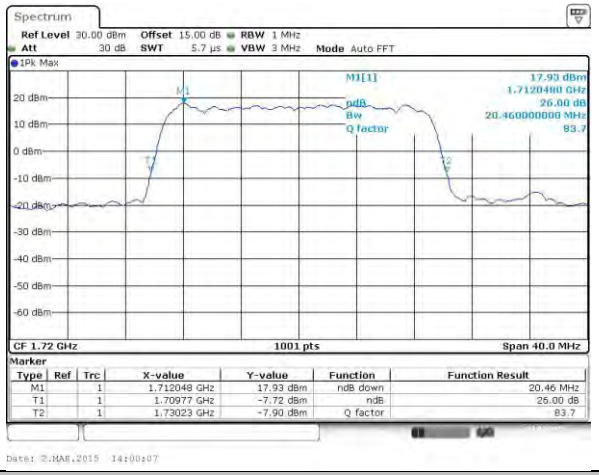


LTE Band 4

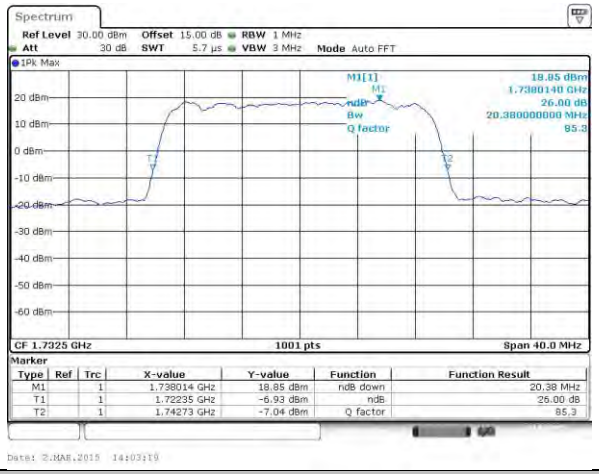
Lowest Channel / 20MHz / QPSK



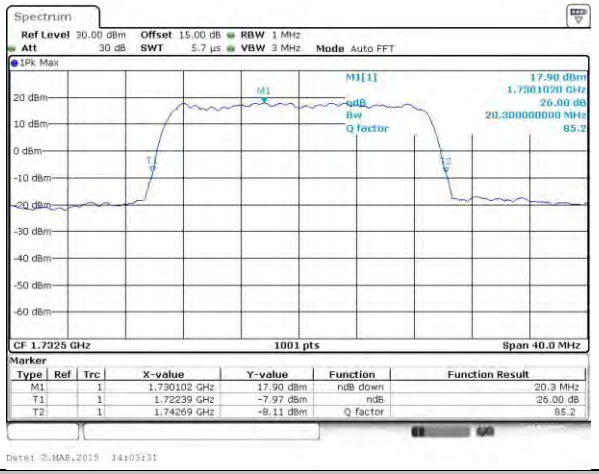
Lowest Channel / 20MHz / 16QAM



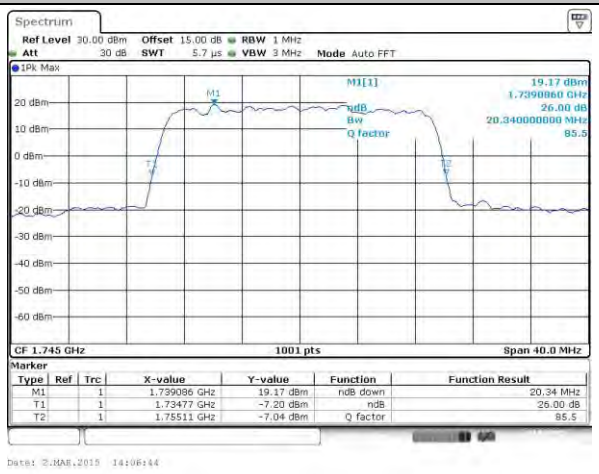
Middle Channel / 20MHz / QPSK



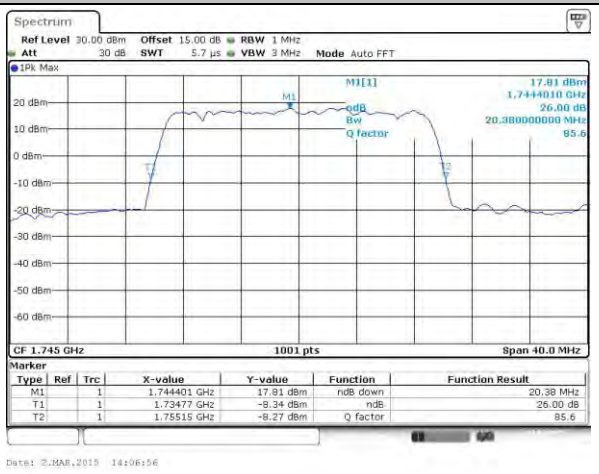
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



Highest Channel / 20MHz / 16QAM

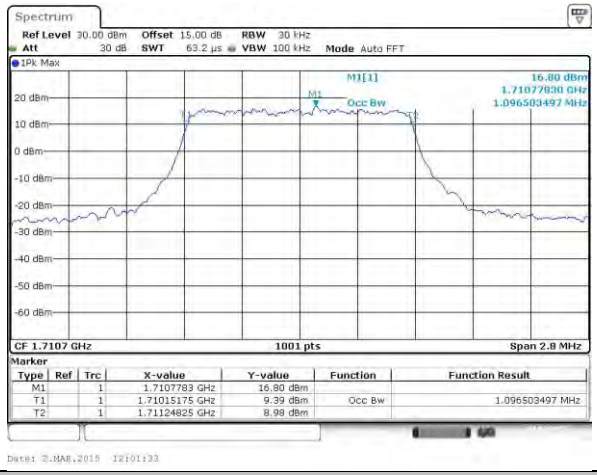


Occupied Bandwidth

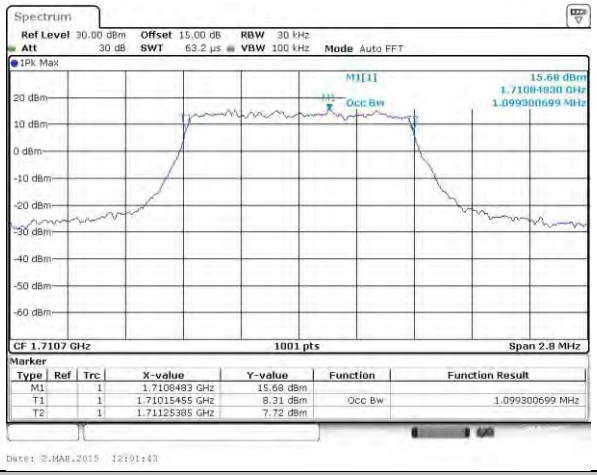
Mode	LTE Band 4 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	1.10	1.10	2.74	2.72	4.51	4.50	9.05	9.05	13.46	13.46	18.34	18.42
Middle CH	1.10	1.10	2.73	2.73	4.50	4.50	9.09	9.05	13.49	13.49	18.42	18.38
Highest CH	1.10	1.10	2.73	2.73	4.51	4.50	9.07	9.03	13.49	13.49	18.38	18.34

LTE Band 4

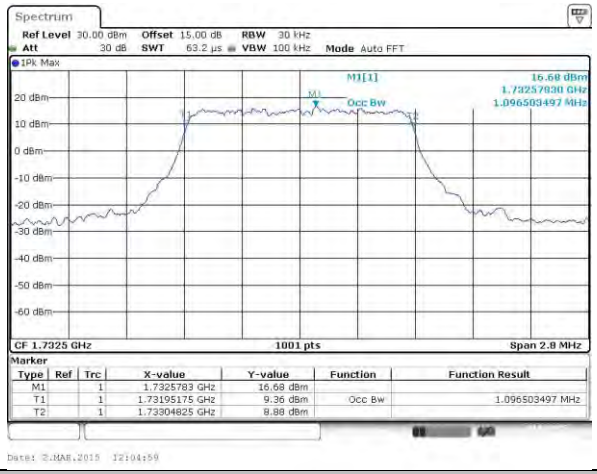
Lowest Channel / 1.4MHz / QPSK



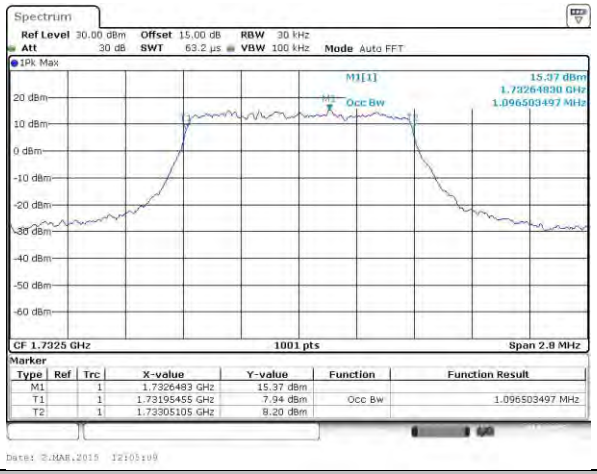
Lowest Channel / 1.4MHz / 16QAM



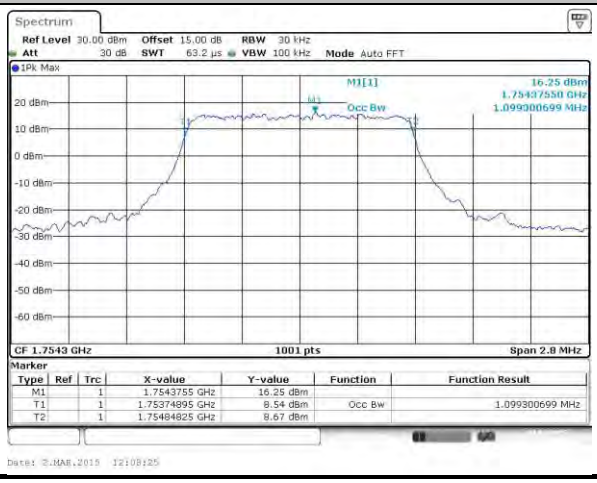
Middle Channel / 1.4MHz / QPSK



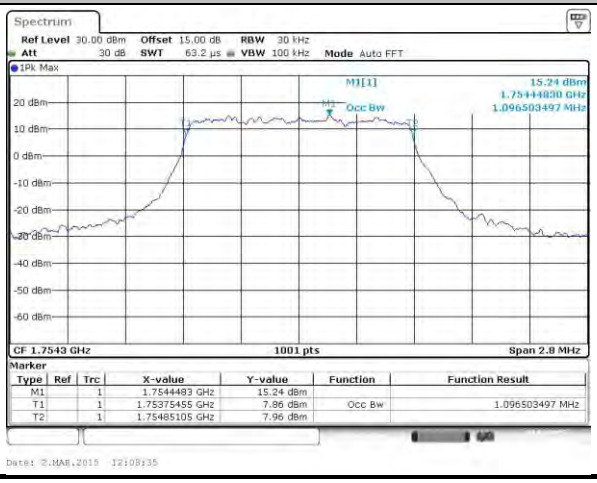
Middle Channel / 1.4MHz / 16QAM



Highest Channel / 1.4MHz / QPSK

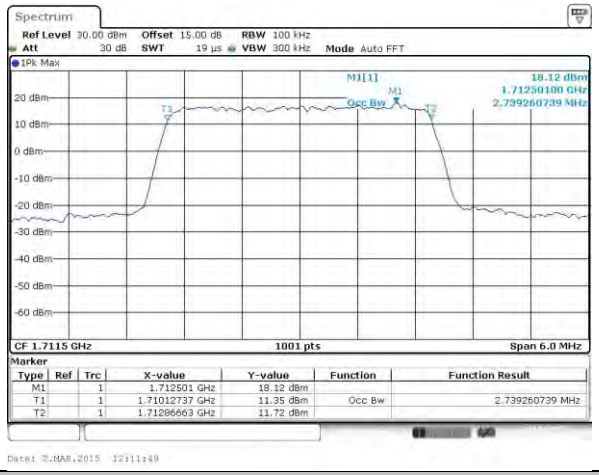


Highest Channel / 1.4MHz / 16QAM

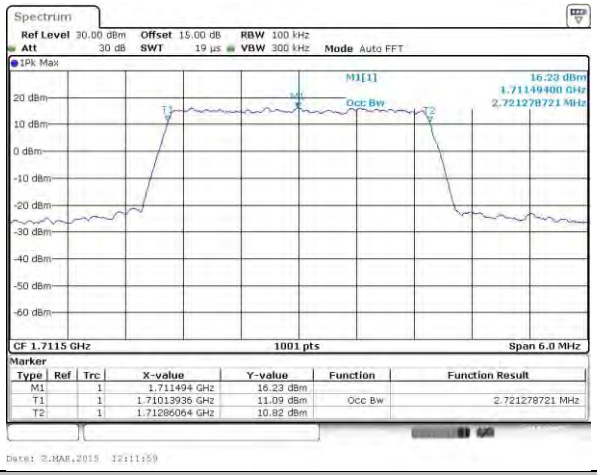


LTE Band 4

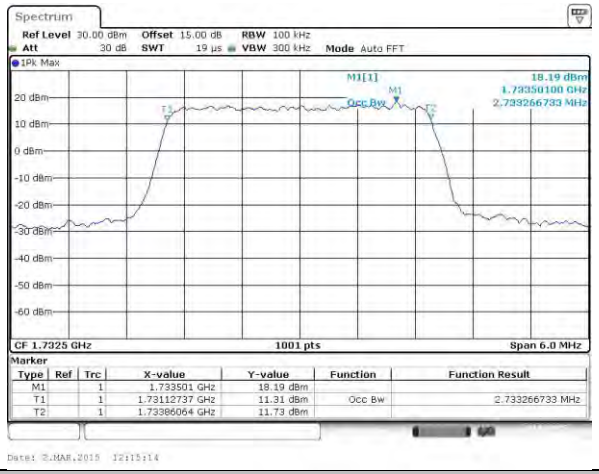
Lowest Channel / 3MHz / QPSK



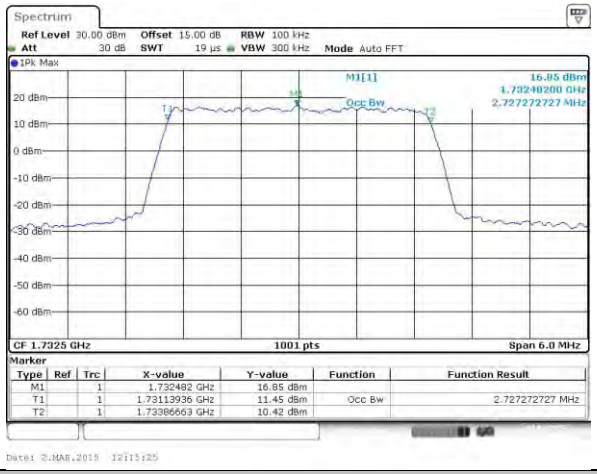
Lowest Channel / 3MHz / 16QAM



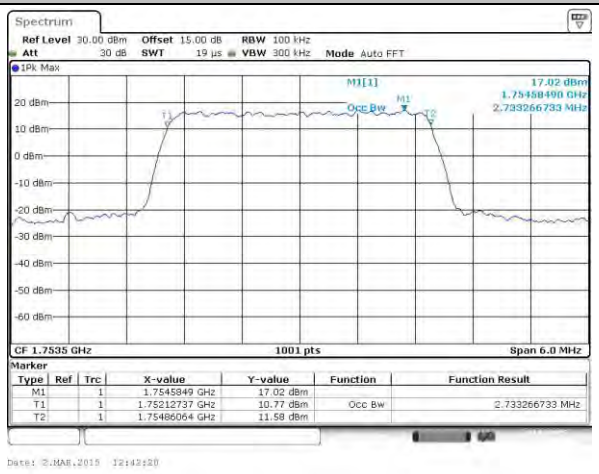
Middle Channel / 3MHz / QPSK



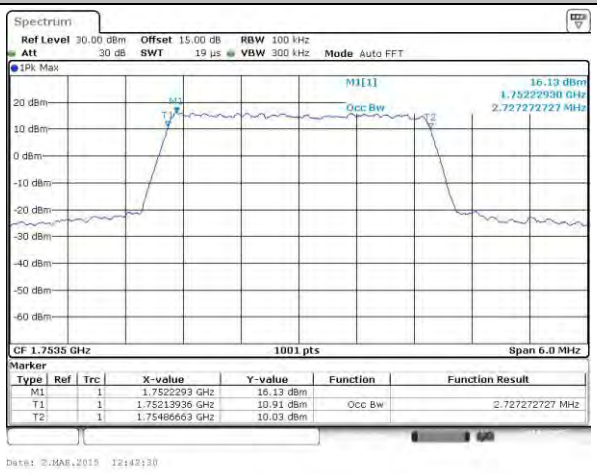
Middle Channel / 3MHz / 16QAM



Highest Channel / 3MHz / QPSK

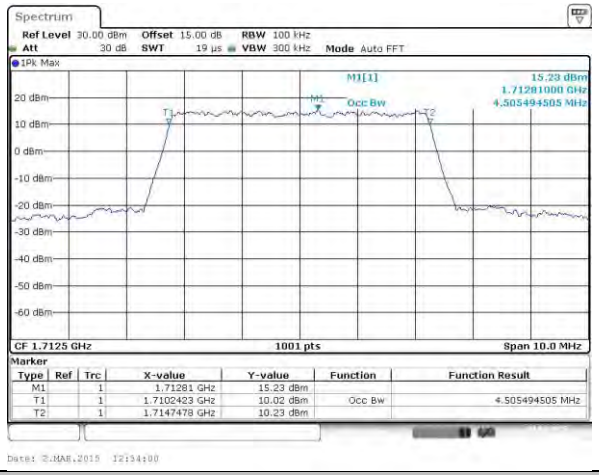


Highest Channel / 3MHz / 16QAM

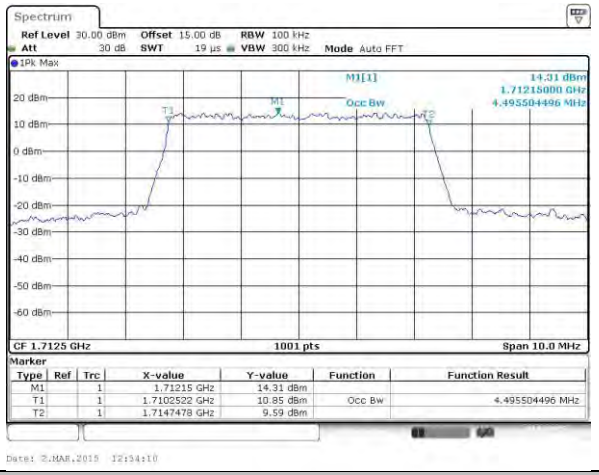


LTE Band 4

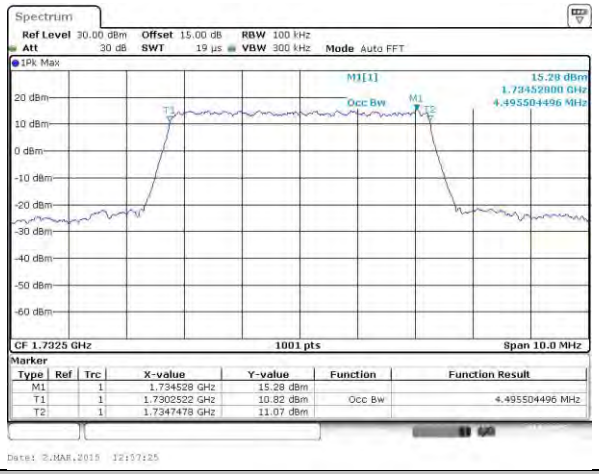
Lowest Channel / 5MHz / QPSK



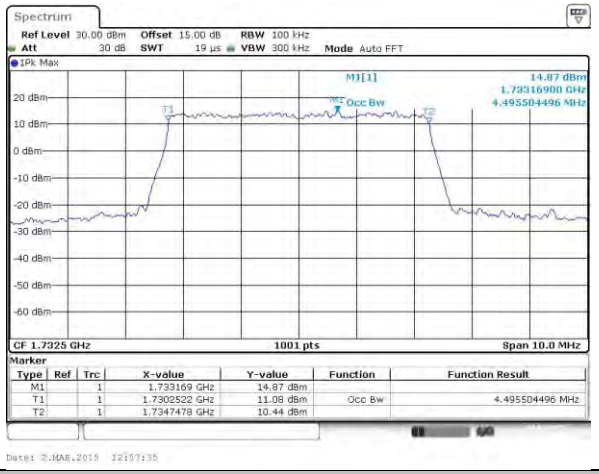
Lowest Channel / 5MHz / 16QAM



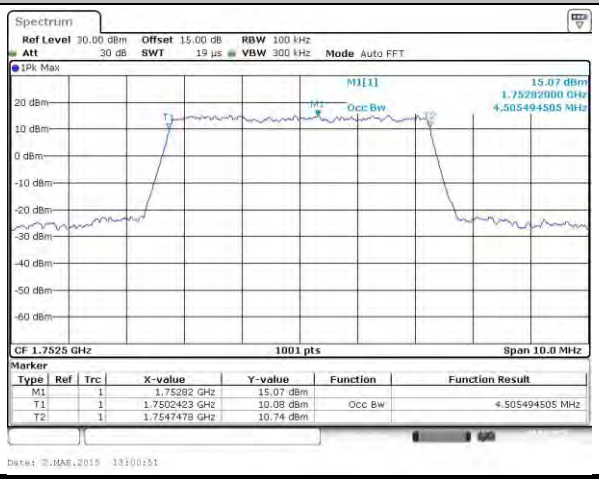
Middle Channel / 5MHz / QPSK



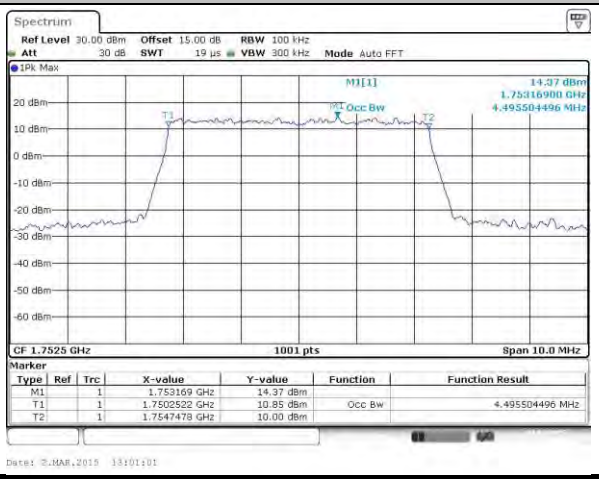
Middle Channel / 5MHz / 16QAM



Highest Channel / 5MHz / QPSK

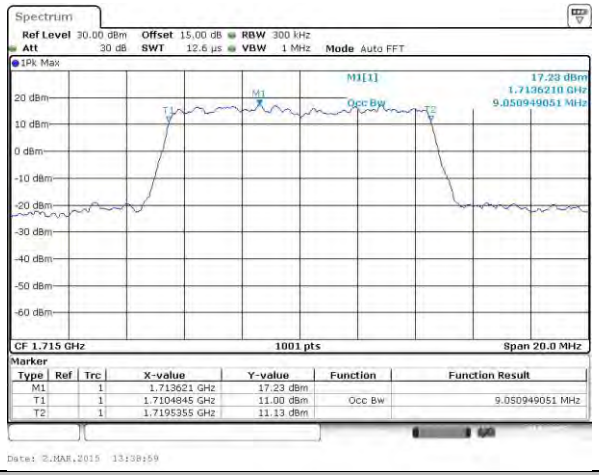


Highest Channel / 5MHz / 16QAM

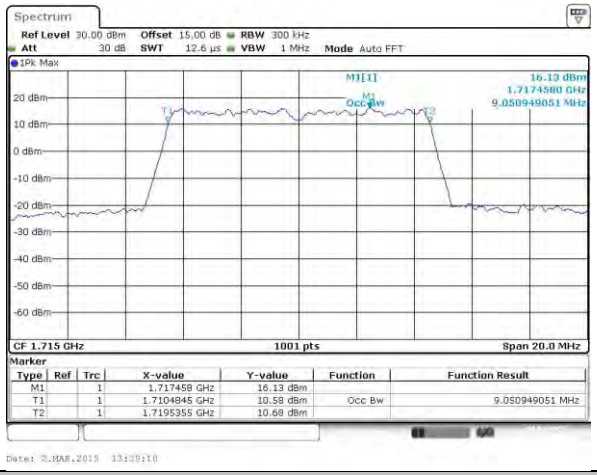


LTE Band 4

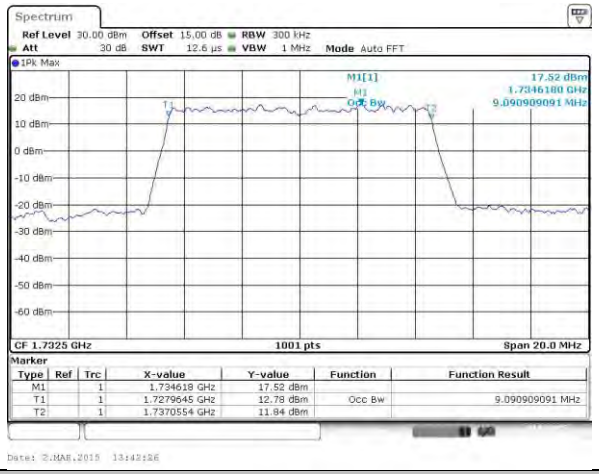
Lowest Channel / 10MHz / QPSK



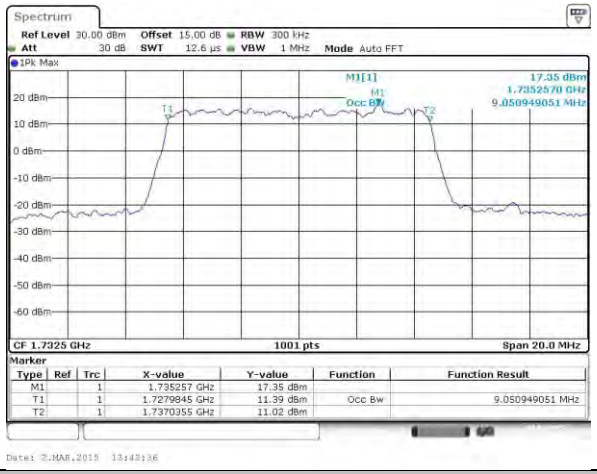
Lowest Channel / 10MHz / 16QAM



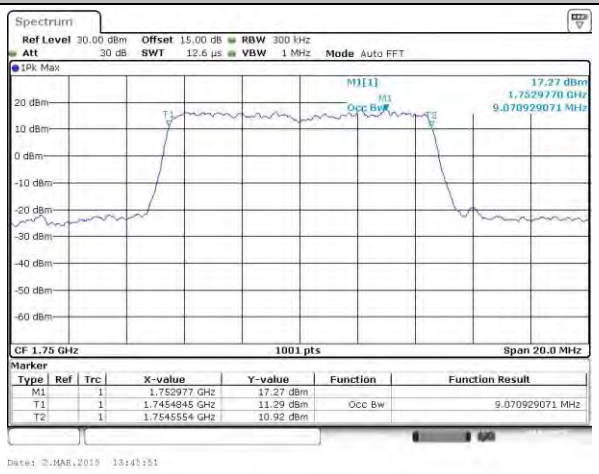
Middle Channel / 10MHz / QPSK



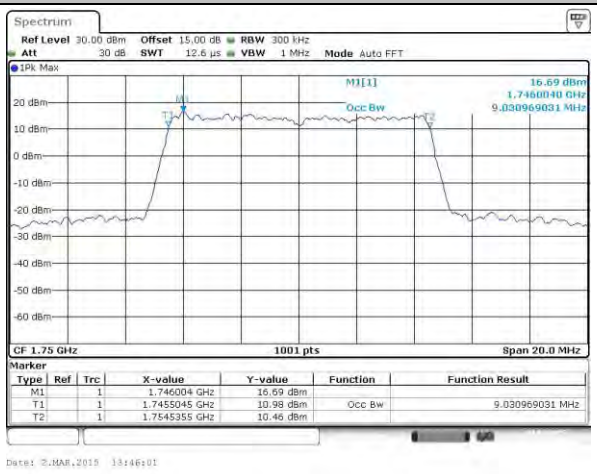
Middle Channel / 10MHz / 16QAM



Highest Channel / 10MHz / QPSK

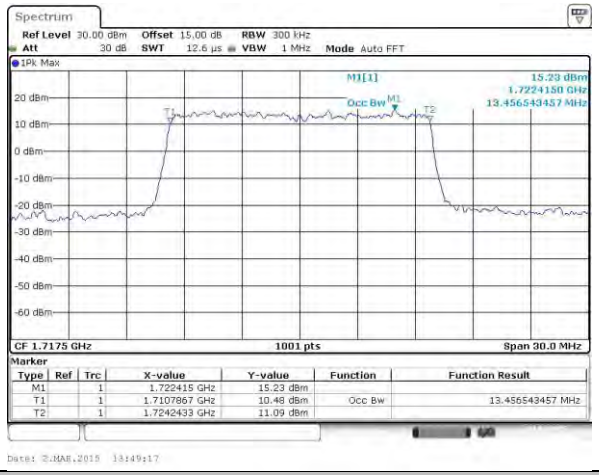


Highest Channel / 10MHz / 16QAM

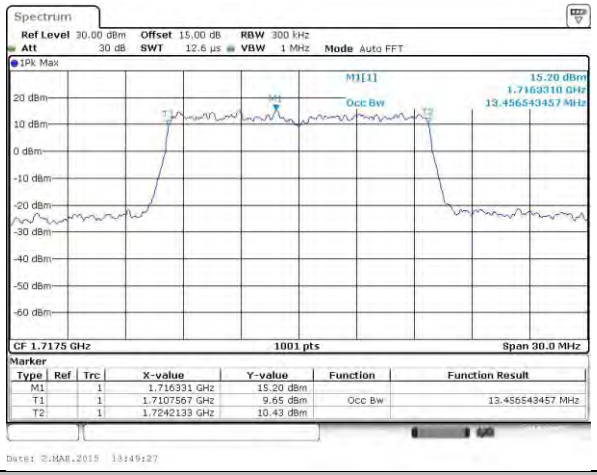


LTE Band 4

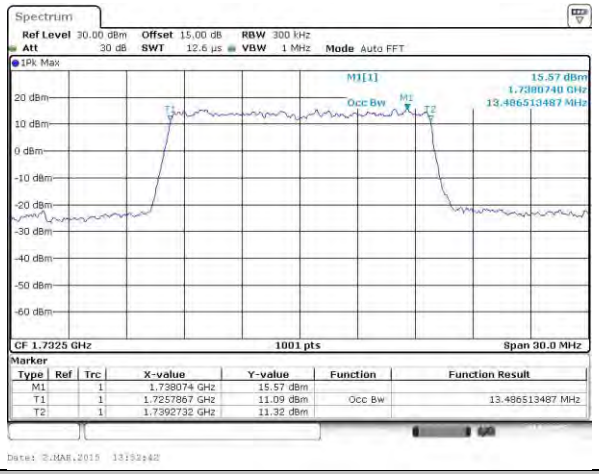
Lowest Channel / 15MHz / QPSK



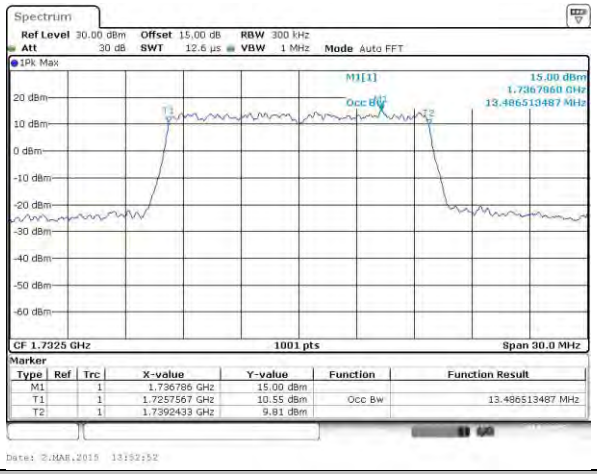
Lowest Channel / 15MHz / 16QAM



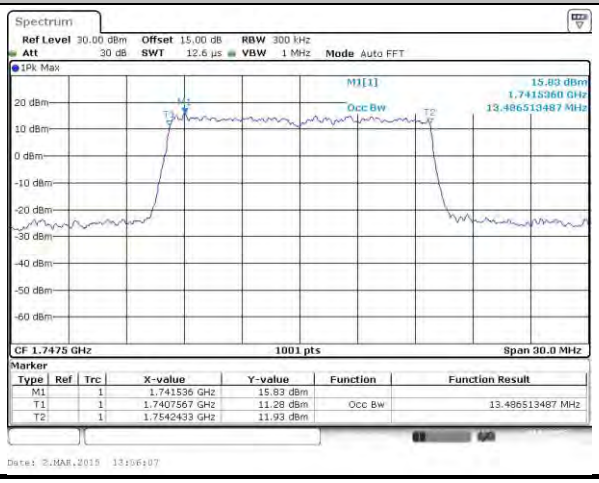
Middle Channel / 15MHz / QPSK



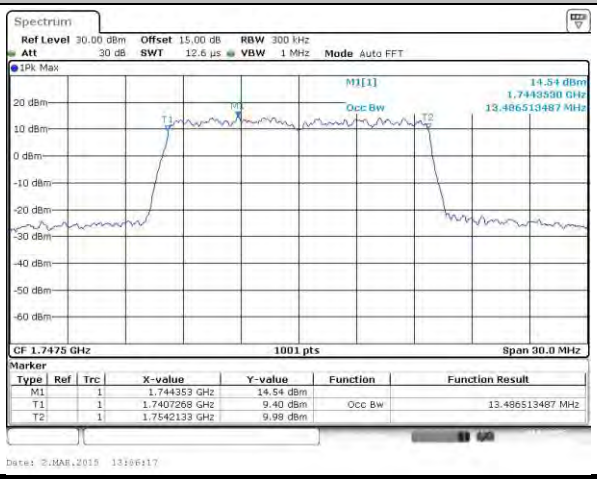
Middle Channel / 15MHz / 16QAM



Highest Channel / 15MHz / QPSK

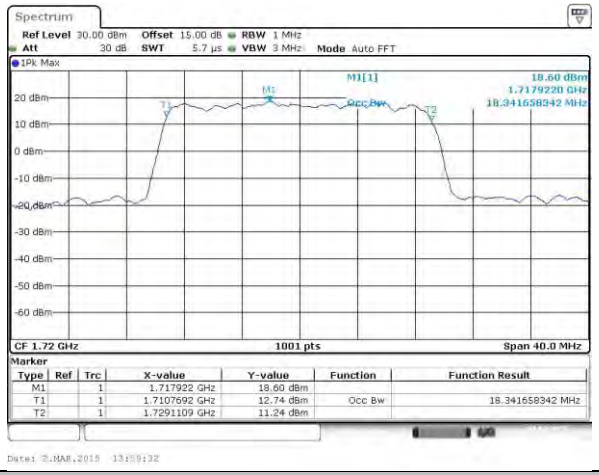


Highest Channel / 15MHz / 16QAM

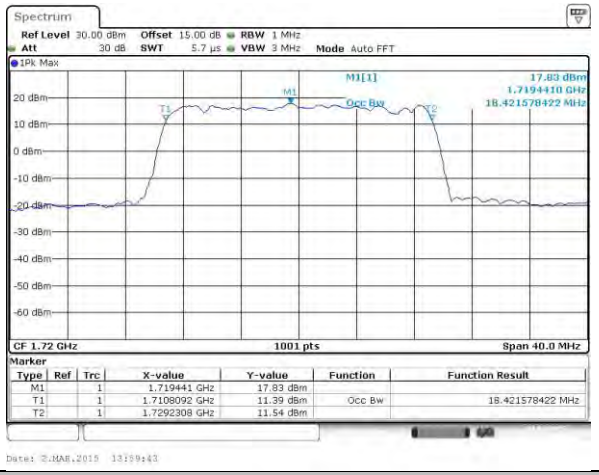


LTE Band 4

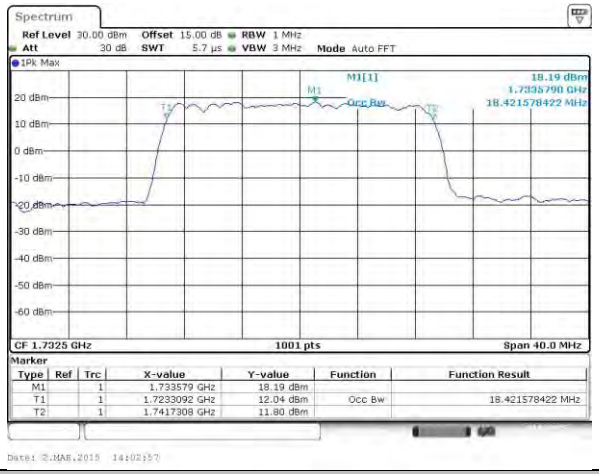
Lowest Channel / 20MHz / QPSK



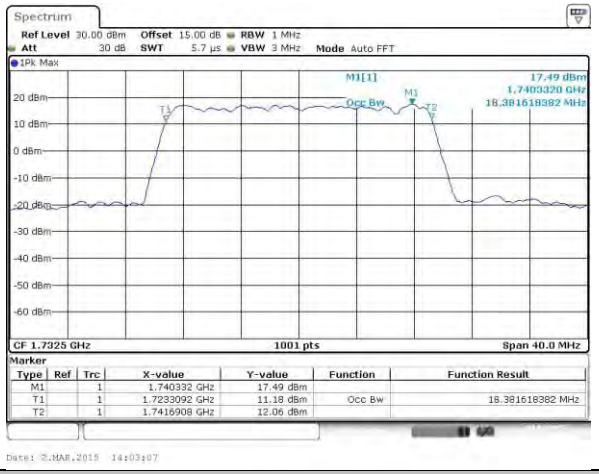
Lowest Channel / 20MHz / 16QAM



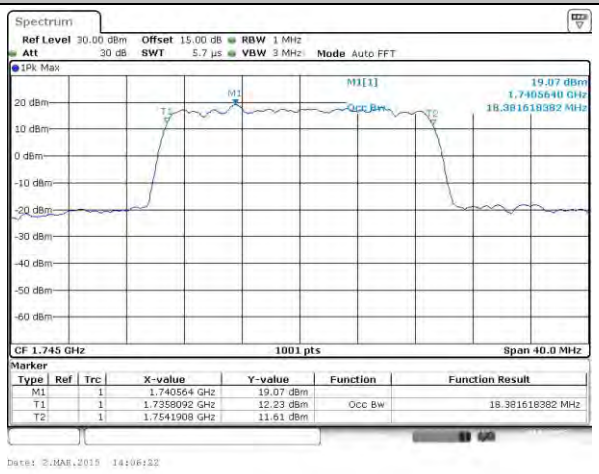
Middle Channel / 20MHz / QPSK



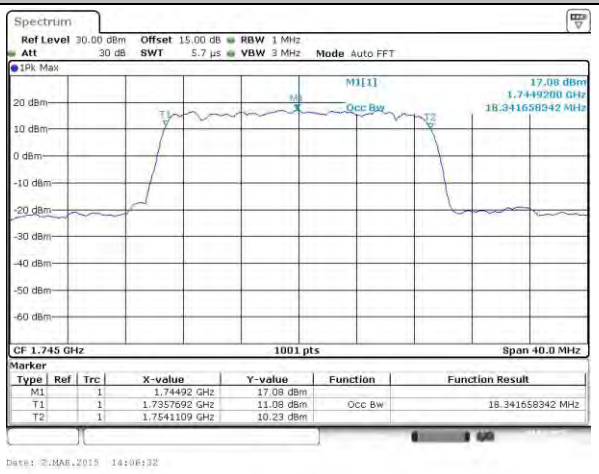
Middle Channel / 20MHz / 16QAM



Highest Channel / 20MHz / QPSK



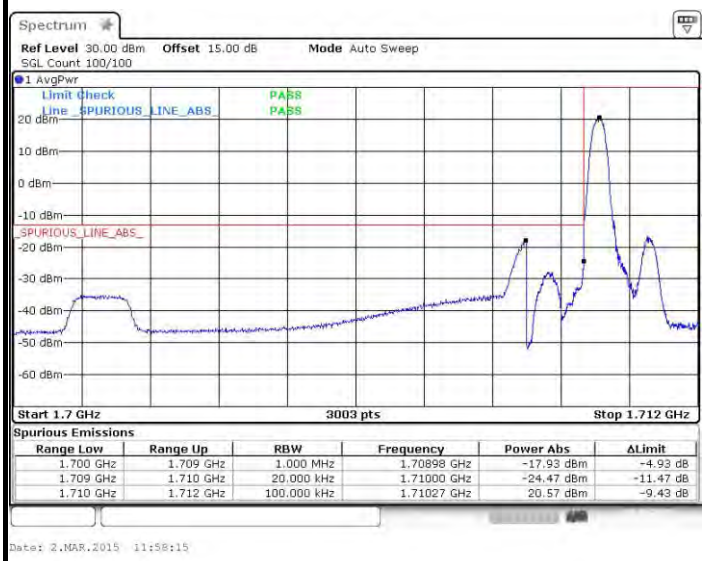
Highest Channel / 20MHz / 16QAM



Conducted Band Edge

LTE Band 4 / 1.4MHz / QPSK

Lowest Band Edge / 1RB

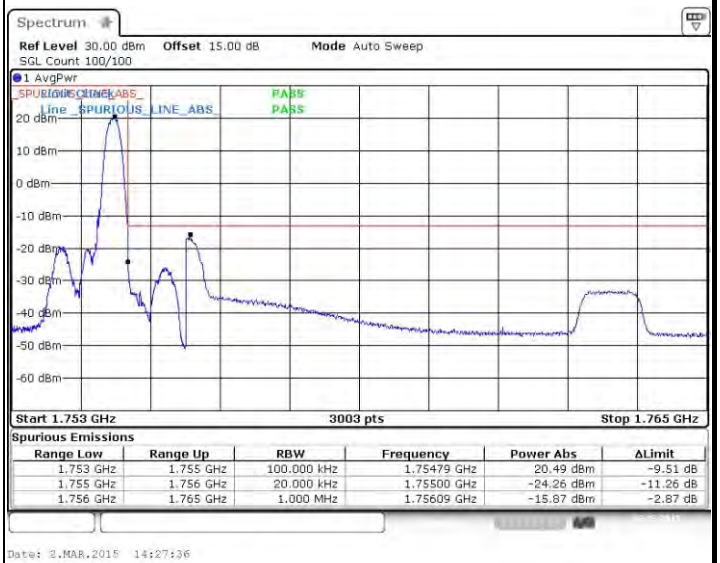


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70898 GHz	-17.93 dBm	-4.93 dB
1.709 GHz	1.710 GHz	20.000 kHz	1.71000 GHz	-24.47 dBm	-11.47 dB
1.710 GHz	1.712 GHz	100.000 kHz	1.71027 GHz	20.57 dBm	-9.43 dB

Date: 2.MAR.2015 11:58:15

Highest Band Edge / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.753 GHz	1.755 GHz	100.000 kHz	1.75479 GHz	20.49 dBm	-9.51 dB
1.755 GHz	1.756 GHz	20.000 kHz	1.75500 GHz	-24.26 dBm	-11.26 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75609 GHz	-15.87 dBm	-2.87 dB

Date: 2.MAR.2015 14:27:36

Lowest Band Edge / Full RB

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70900 GHz	-22.31 dBm	-9.31 dB
1.709 GHz	1.710 GHz	20.000 kHz	1.71000 GHz	-27.51 dBm	-14.51 dB
1.710 GHz	1.712 GHz	100.000 kHz	1.71091 GHz	12.59 dBm	-17.41 dB

Date: 2.MAR.2015 11:59:43

Highest Band Edge / Full RB

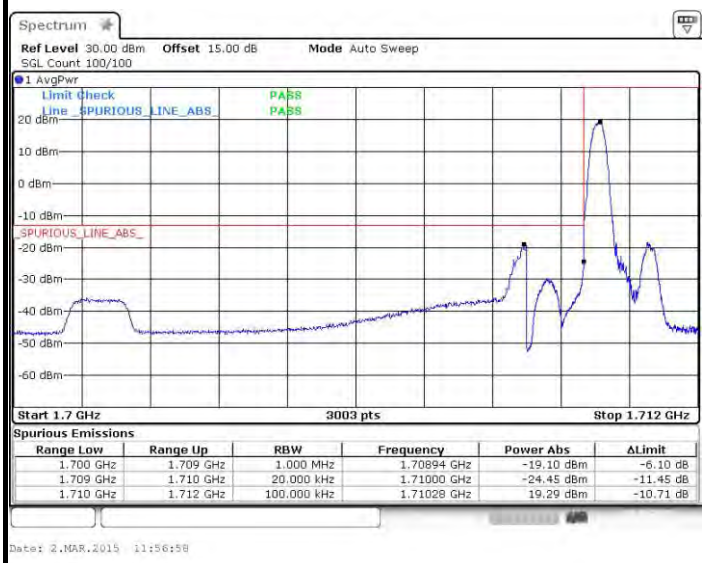
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.753 GHz	1.755 GHz	100.000 kHz	1.75453 GHz	12.52 dBm	-17.48 dB
1.755 GHz	1.756 GHz	20.000 kHz	1.75500 GHz	-26.80 dBm	-13.80 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75601 GHz	-22.45 dBm	-9.45 dB

Date: 2.MAR.2015 14:38:09

LTE Band 4 / 1.4MHz / 16QAM

Lowest Band Edge / 1 RB

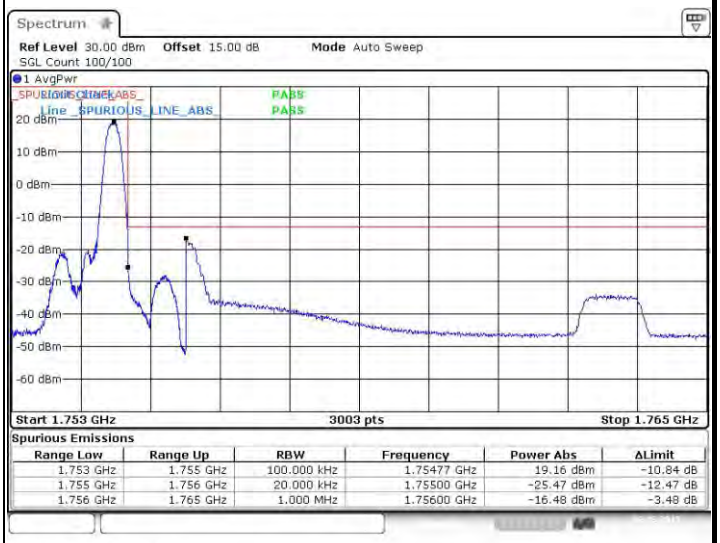


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70894 GHz	-19.10 dBm	-6.10 dB
1.709 GHz	1.710 GHz	20.000 kHz	1.71000 GHz	-24.45 dBm	-11.45 dB
1.710 GHz	1.712 GHz	100.000 kHz	1.71028 GHz	19.29 dBm	-10.71 dB

Date: 2.MAR.2015 11:56:58

Highest Band Edge / 1 RB

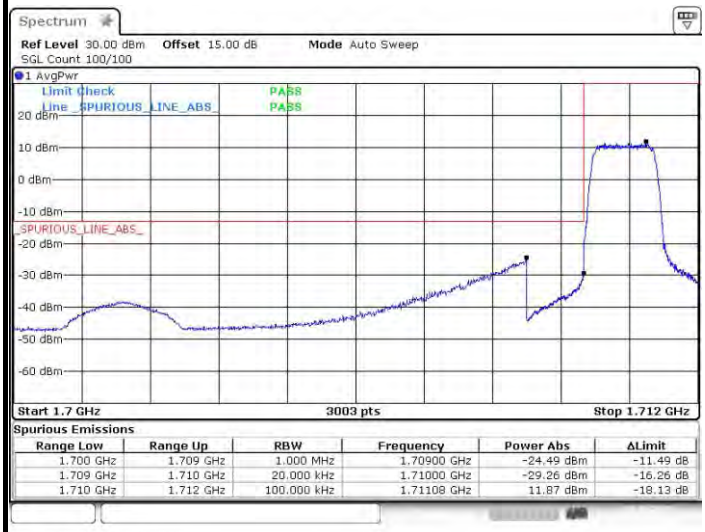


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.753 GHz	1.755 GHz	100.000 kHz	1.75477 GHz	19.16 dBm	-10.84 dB
1.755 GHz	1.756 GHz	20.000 kHz	1.75500 GHz	-25.47 dBm	-12.47 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75600 GHz	-16.48 dBm	-3.48 dB

Date: 2.MAR.2015 14:24:46

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70900 GHz	-24.49 dBm	-11.49 dB
1.709 GHz	1.710 GHz	20.000 kHz	1.71000 GHz	-29.26 dBm	-16.26 dB
1.710 GHz	1.712 GHz	100.000 kHz	1.71108 GHz	11.87 dBm	-18.13 dB

Date: 2.MAR.2015 12:01:00

Highest Band Edge / Full RB

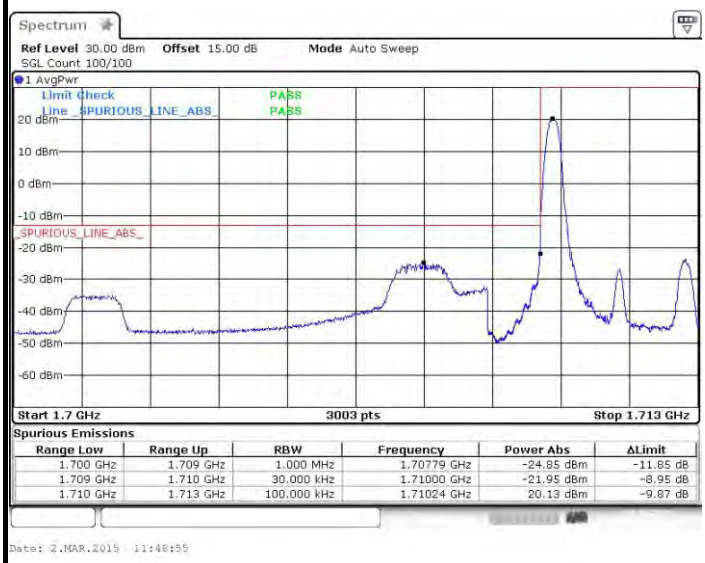
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.753 GHz	1.755 GHz	100.000 kHz	1.75418 GHz	11.14 dBm	-18.86 dB
1.755 GHz	1.756 GHz	20.000 kHz	1.75500 GHz	-27.89 dBm	-14.89 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75603 GHz	-25.62 dBm	-12.62 dB

Date: 2.MAR.2015 14:40:53

LTE Band 4 / 3MHz / QPSK

Lowest Band Edge / 1RB

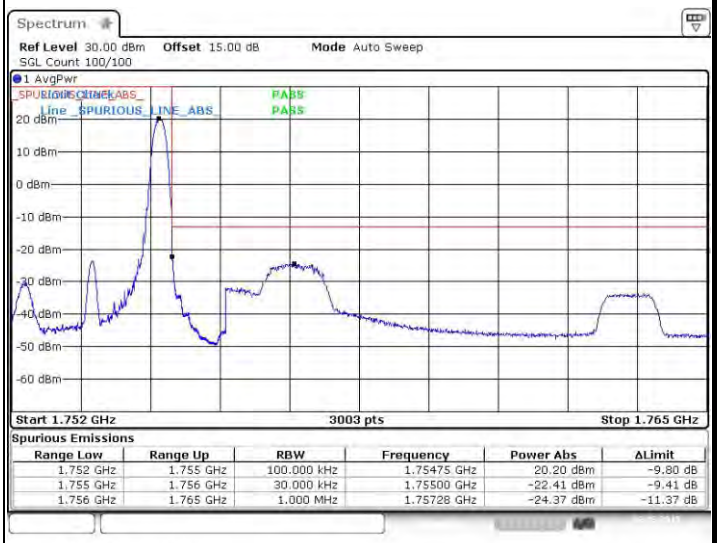


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70779 GHz	-24.85 dBm	-11.85 dB
1.709 GHz	1.710 GHz	30.000 kHz	1.71000 GHz	-21.95 dBm	-8.95 dB
1.710 GHz	1.713 GHz	100.000 kHz	1.71024 GHz	20.13 dBm	-9.87 dB

Date: 2.MAR.2015 11:48:55

Highest Band Edge / 1 RB

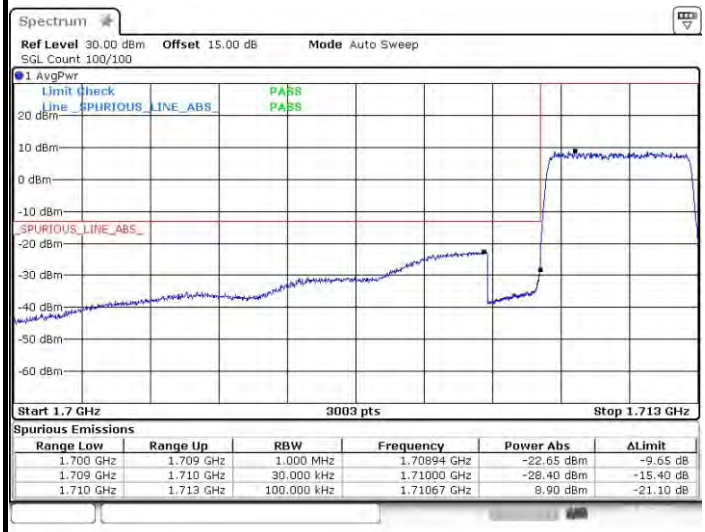


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.752 GHz	1.755 GHz	100.000 kHz	1.75475 GHz	20.20 dBm	-9.80 dB
1.755 GHz	1.756 GHz	30.000 kHz	1.75500 GHz	-22.41 dBm	-9.41 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75728 GHz	-24.37 dBm	-11.37 dB

Date: 2.MAR.2015 11:54:50

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70894 GHz	-22.65 dBm	-9.65 dB
1.709 GHz	1.710 GHz	30.000 kHz	1.71000 GHz	-28.40 dBm	-15.40 dB
1.710 GHz	1.713 GHz	100.000 kHz	1.71067 GHz	8.90 dBm	-21.10 dB

Date: 2.MAR.2015 11:50:21

Highest Band Edge / Full RB

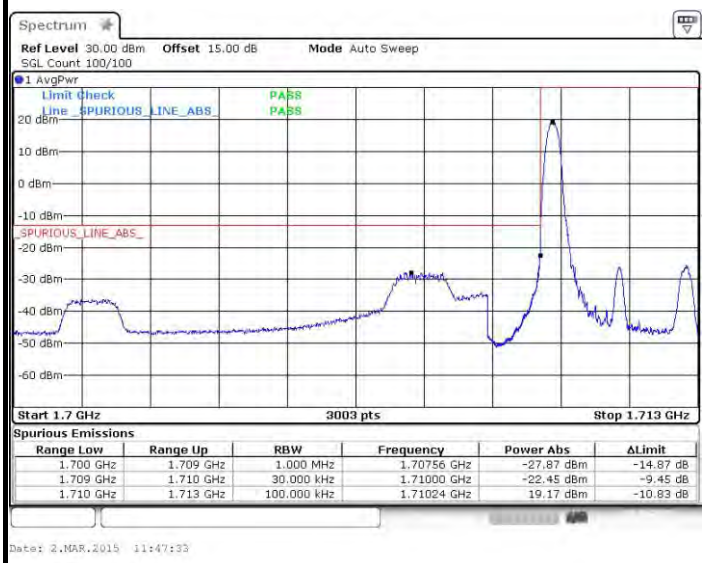
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.752 GHz	1.755 GHz	100.000 kHz	1.75260 GHz	8.19 dBm	-21.81 dB
1.755 GHz	1.756 GHz	30.000 kHz	1.75500 GHz	-28.06 dBm	-15.06 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75611 GHz	-23.84 dBm	-10.84 dB

Date: 2.MAR.2015 11:54:08

LTE Band 4 / 3MHz / 16QAM

Lowest Band Edge / 1 RB

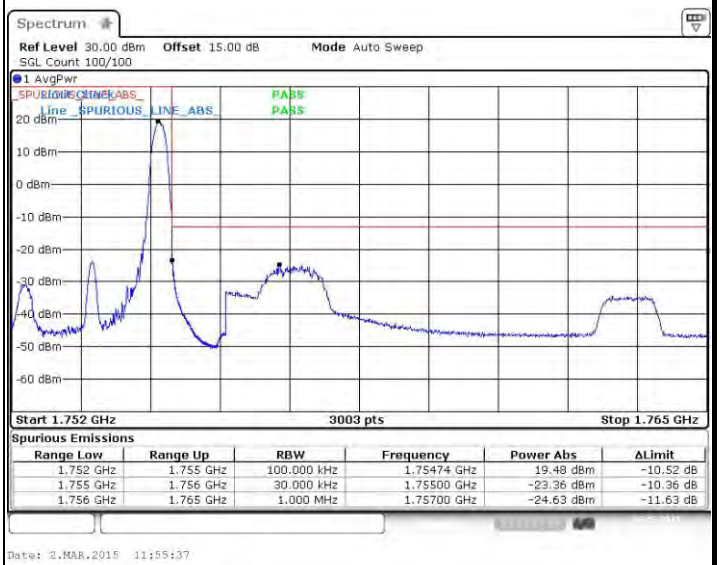


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70756 GHz	-27.87 dBm	-14.87 dB
1.709 GHz	1.710 GHz	30.000 kHz	1.71000 GHz	-22.45 dBm	-9.45 dB
1.710 GHz	1.713 GHz	100.000 kHz	1.71024 GHz	19.17 dBm	-10.83 dB

Date: 2.MAR.2015 11:47:33

Highest Band Edge /1 RB

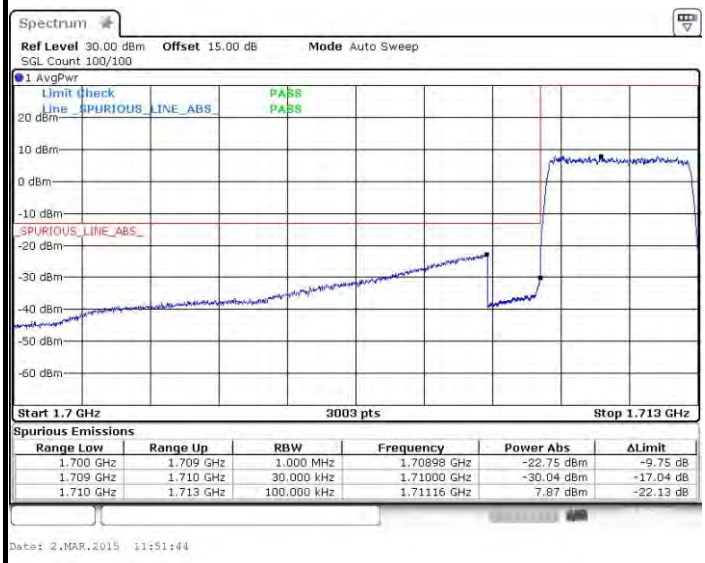


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.752 GHz	1.755 GHz	100.000 kHz	1.75474 GHz	19.48 dBm	-10.52 dB
1.755 GHz	1.756 GHz	30.000 kHz	1.75500 GHz	-23.36 dBm	-10.36 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75700 GHz	-24.63 dBm	-11.63 dB

Date: 2.MAR.2015 11:55:37

Lowest Band Edge / Full RB

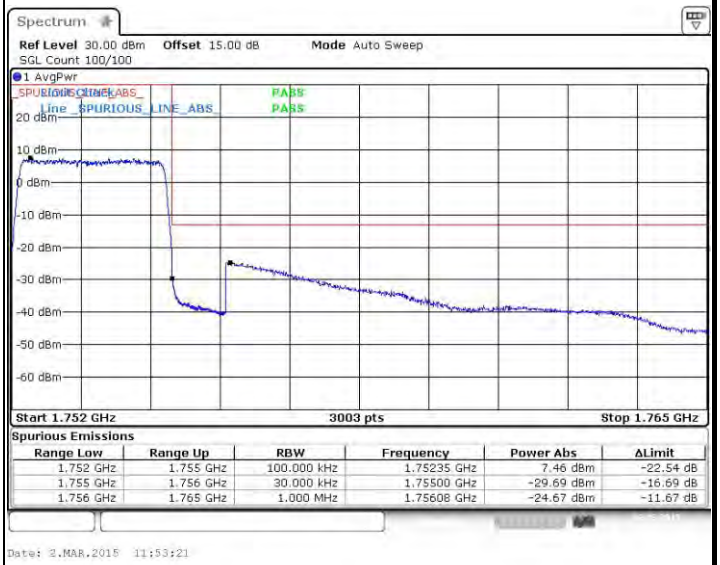


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70898 GHz	-22.75 dBm	-9.75 dB
1.709 GHz	1.710 GHz	30.000 kHz	1.71000 GHz	-30.04 dBm	-17.04 dB
1.710 GHz	1.713 GHz	100.000 kHz	1.71116 GHz	7.87 dBm	-22.13 dB

Date: 2.MAR.2015 11:51:44

Highest Band Edge / Full RB



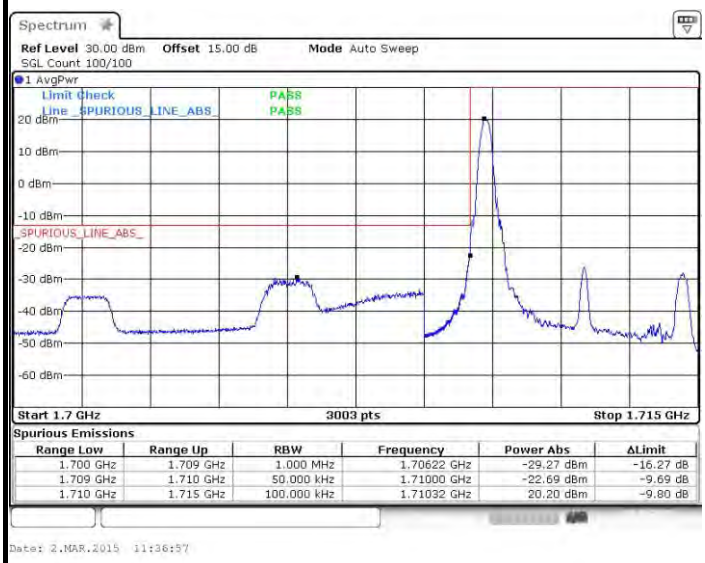
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.752 GHz	1.755 GHz	100.000 kHz	1.75235 GHz	7.46 dBm	-22.54 dB
1.755 GHz	1.756 GHz	30.000 kHz	1.75500 GHz	-29.69 dBm	-16.69 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75608 GHz	-24.67 dBm	-11.67 dB

Date: 2.MAR.2015 11:53:21

LTE Band 4 / 5MHz / QPSK

Lowest Band Edge / 1 RB

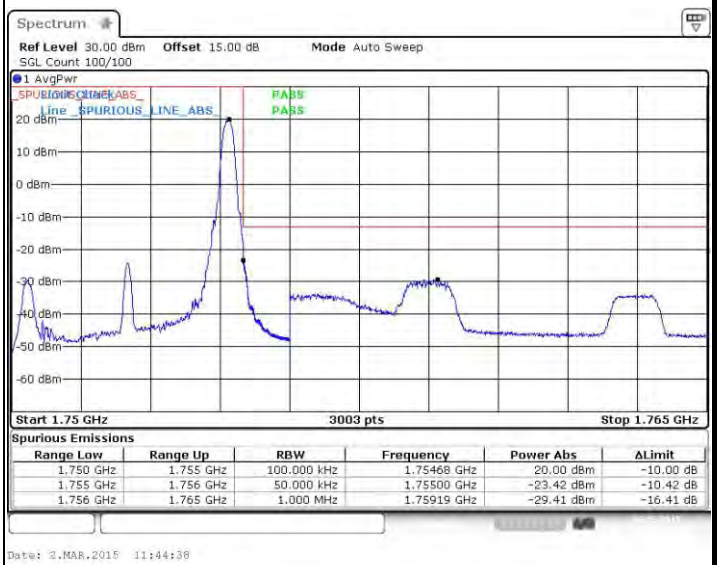


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70622 GHz	-29.27 dBm	-16.27 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.71000 GHz	-22.69 dBm	-9.69 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71032 GHz	20.20 dBm	-9.80 dB

Date: 2.MAR.2015 11:36:57

Highest Band Edge / 1 RB

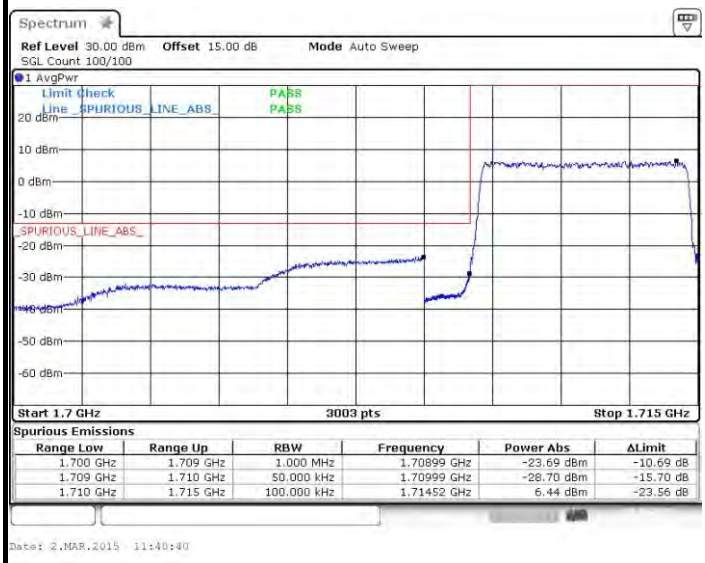


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75468 GHz	20.00 dBm	-10.00 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75500 GHz	-23.42 dBm	-10.42 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75919 GHz	-29.41 dBm	-16.41 dB

Date: 2.MAR.2015 11:44:38

Lowest Band Edge / Full RB

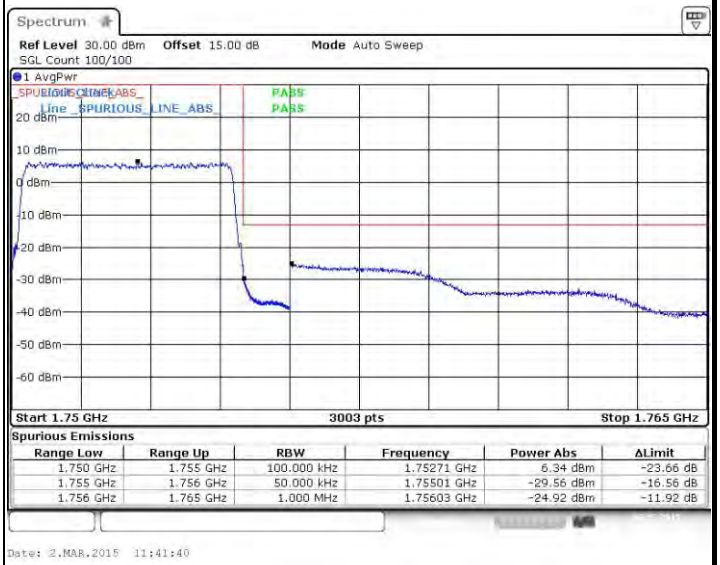


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70899 GHz	-23.69 dBm	-10.69 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.70999 GHz	-28.70 dBm	-15.70 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71452 GHz	6.44 dBm	-23.56 dB

Date: 2.MAR.2015 11:40:40

Highest Band Edge / Full RB



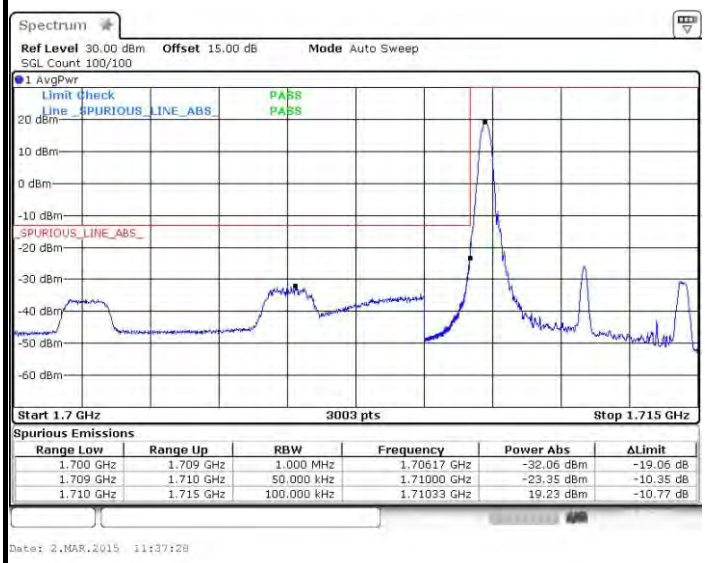
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75271 GHz	6.34 dBm	-23.66 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75501 GHz	-29.56 dBm	-16.56 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75603 GHz	-24.92 dBm	-11.92 dB

Date: 2.MAR.2015 11:41:40

LTE Band 4 / 5MHz / 16QAM

Lowest Band Edge / 1RB

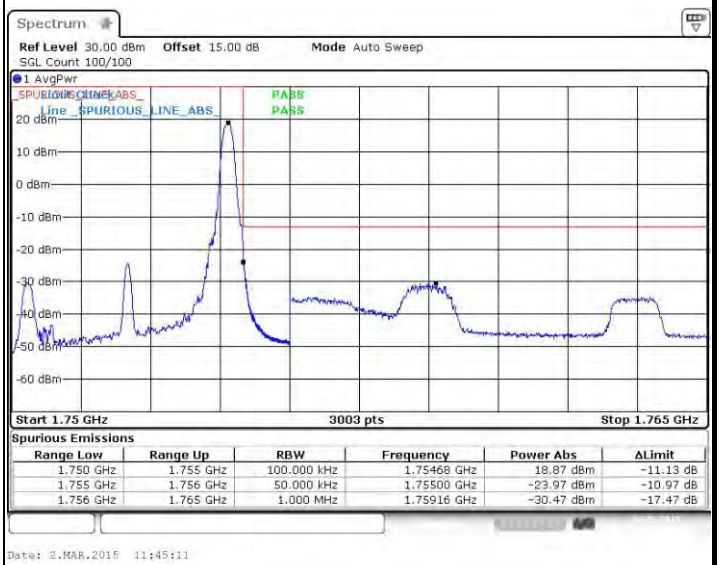


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70617 GHz	-32.06 dBm	-19.06 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.71000 GHz	-23.35 dBm	-10.35 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71033 GHz	19.23 dBm	-10.77 dB

Date: 2.MAR.2015 11:37:28

Highest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75468 GHz	18.87 dBm	-11.13 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75500 GHz	-23.97 dBm	-10.97 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75916 GHz	-30.47 dBm	-17.47 dB

Date: 2.MAR.2015 11:45:11

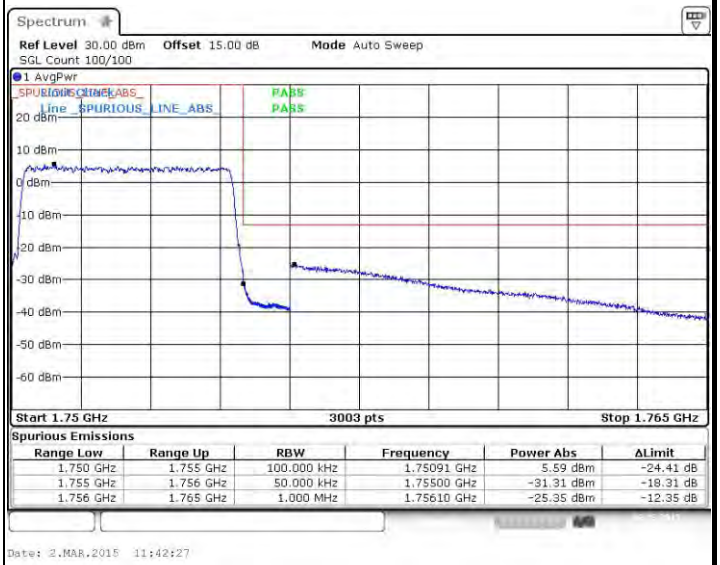
Lowest Band Edge / Full RB

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70895 GHz	-23.99 dBm	-10.99 dB
1.709 GHz	1.710 GHz	50.000 kHz	1.71000 GHz	-30.26 dBm	-17.26 dB
1.710 GHz	1.715 GHz	100.000 kHz	1.71051 GHz	5.79 dBm	-24.21 dB

Date: 2.MAR.2015 11:38:22

Highest Band Edge / Full RB



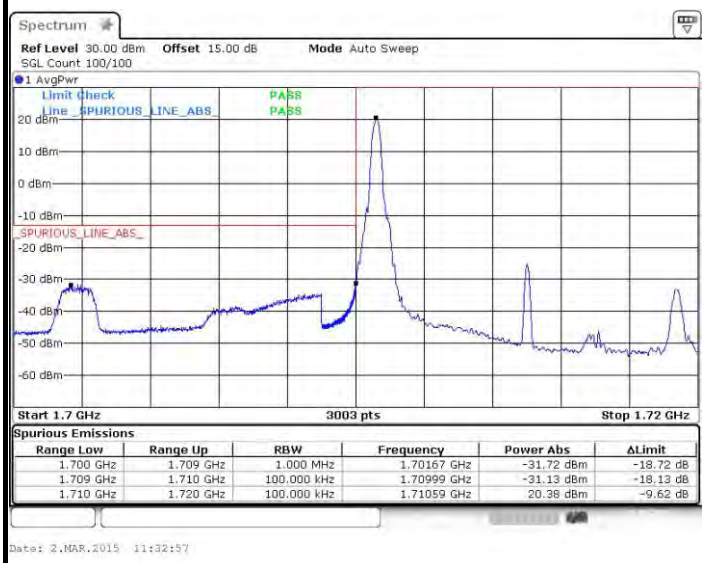
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.750 GHz	1.755 GHz	100.000 kHz	1.75091 GHz	5.59 dBm	-24.41 dB
1.755 GHz	1.756 GHz	50.000 kHz	1.75500 GHz	-31.31 dBm	-18.31 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75610 GHz	-25.35 dBm	-12.35 dB

Date: 2.MAR.2015 11:42:27

LTE Band 4 / 10MHz / QPSK

Lowest Band Edge / 1 RB

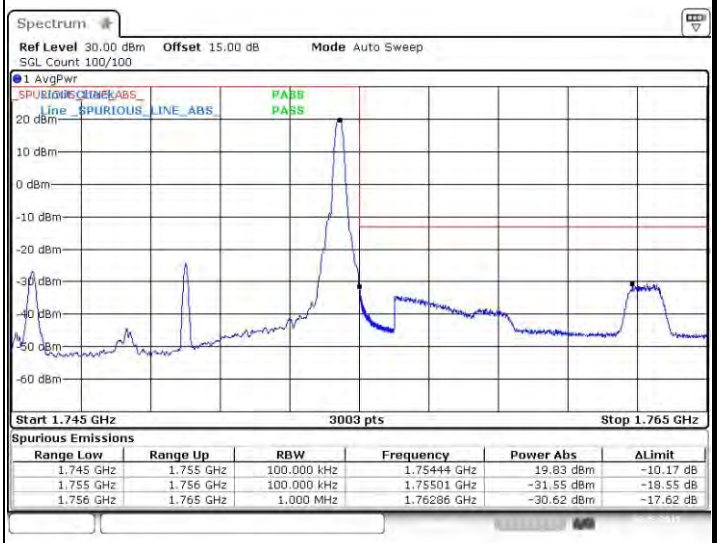


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70167 GHz	-31.72 dBm	-18.72 dB
1.709 GHz	1.710 GHz	100.000 kHz	1.70999 GHz	-31.13 dBm	-18.13 dB
1.710 GHz	1.720 GHz	100.000 kHz	1.71059 GHz	20.38 dBm	-9.62 dB

Date: 2.MAR.2015 11:32:57

Highest Band Edge / 1 RB

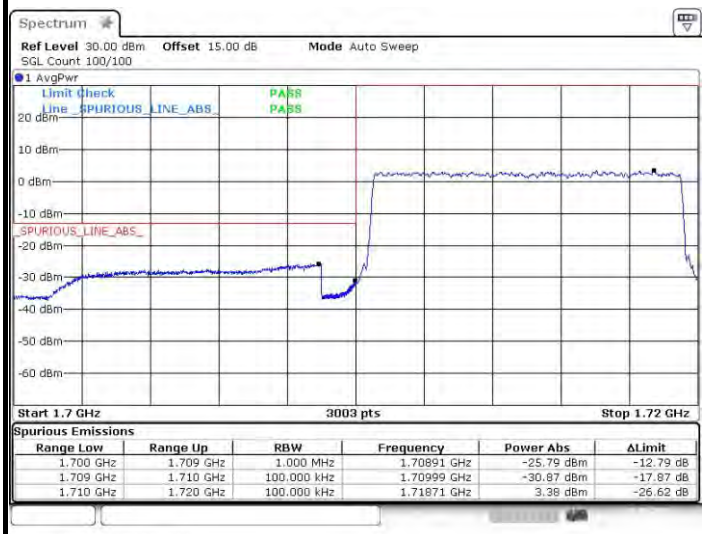


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.745 GHz	1.755 GHz	100.000 kHz	1.75444 GHz	19.83 dBm	-10.17 dB
1.755 GHz	1.756 GHz	100.000 kHz	1.75501 GHz	-31.55 dBm	-18.55 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76286 GHz	-30.62 dBm	-17.62 dB

Date: 2.MAR.2015 11:36:13

Lowest Band Edge / Full RB

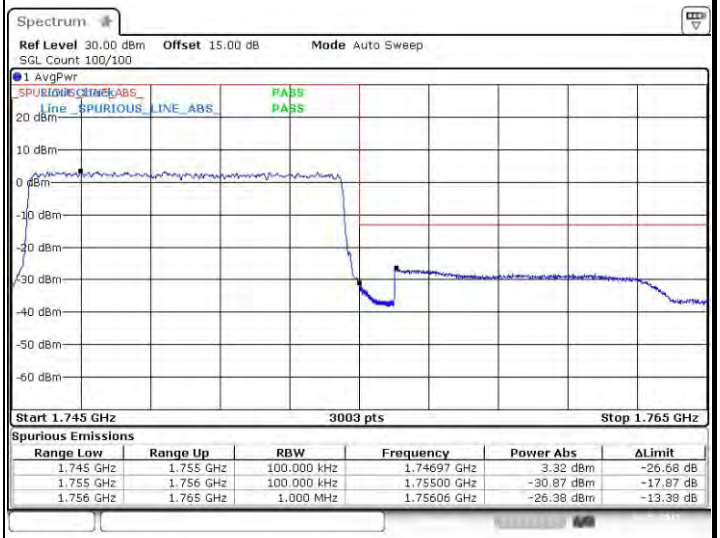


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70891 GHz	-25.79 dBm	-12.79 dB
1.709 GHz	1.710 GHz	100.000 kHz	1.70999 GHz	-30.87 dBm	-17.87 dB
1.710 GHz	1.720 GHz	100.000 kHz	1.71871 GHz	3.38 dBm	-26.62 dB

Date: 2.MAR.2015 11:34:16

Highest Band Edge / Full RB



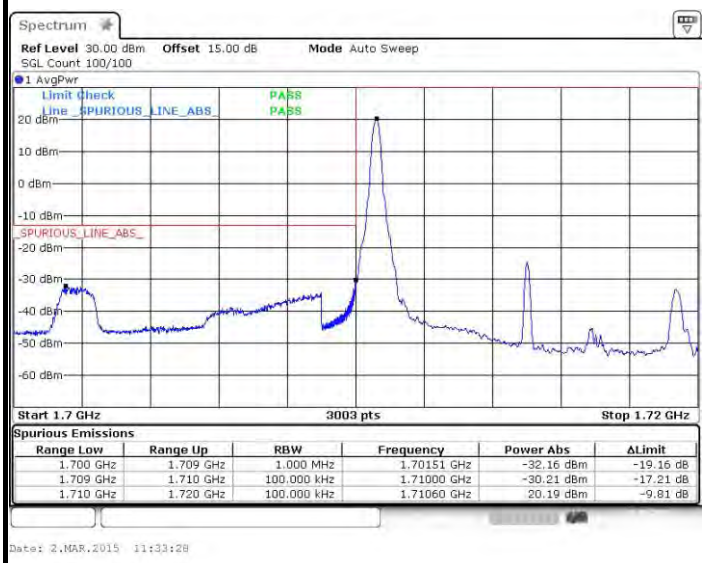
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.745 GHz	1.755 GHz	100.000 kHz	1.74697 GHz	3.32 dBm	-26.68 dB
1.755 GHz	1.756 GHz	100.000 kHz	1.75500 GHz	-30.87 dBm	-17.87 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75606 GHz	-26.38 dBm	-13.38 dB

Date: 2.MAR.2015 11:34:43

LTE Band 4 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

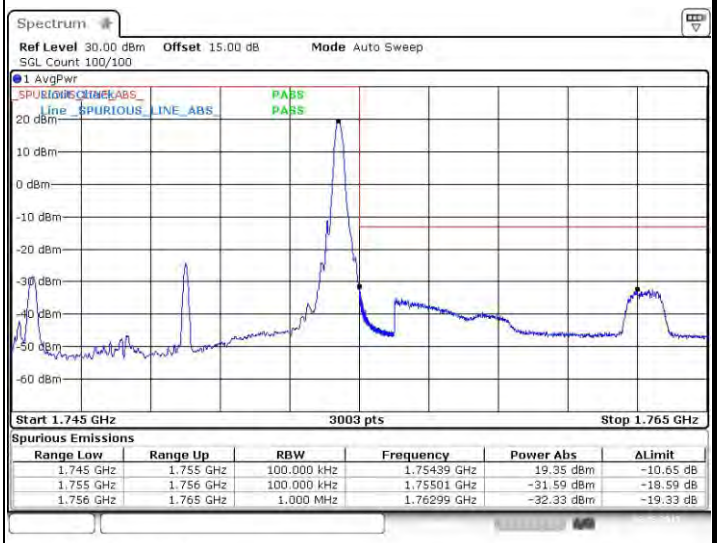


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70151 GHz	-32.16 dBm	-19.16 dB
1.709 GHz	1.710 GHz	100.000 kHz	1.71000 GHz	-30.21 dBm	-17.21 dB
1.710 GHz	1.720 GHz	100.000 kHz	1.71060 GHz	20.19 dBm	-9.81 dB

Date: 2.MAR.2015 11:33:28

Highest Band Edge / 1 RB

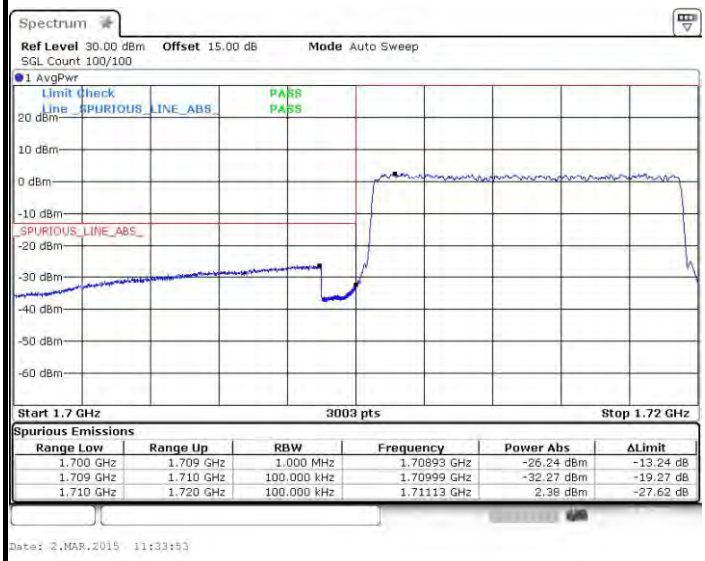


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.745 GHz	1.755 GHz	100.000 kHz	1.75439 GHz	19.35 dBm	-10.65 dB
1.755 GHz	1.756 GHz	100.000 kHz	1.75501 GHz	-31.59 dBm	-18.59 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76299 GHz	-32.33 dBm	-19.33 dB

Date: 2.MAR.2015 11:35:39

Lowest Band Edge / Full RB

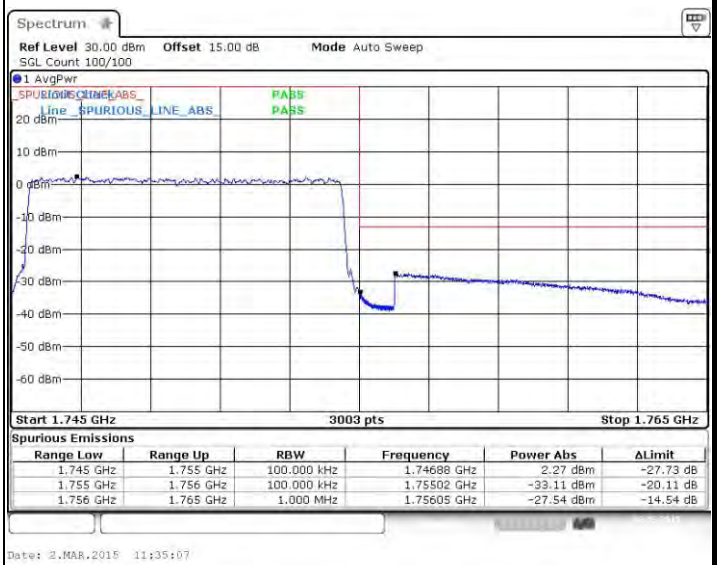


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70893 GHz	-26.24 dBm	-13.24 dB
1.709 GHz	1.710 GHz	100.000 kHz	1.70999 GHz	-32.27 dBm	-19.27 dB
1.710 GHz	1.720 GHz	100.000 kHz	1.71113 GHz	2.38 dBm	-27.62 dB

Date: 2.MAR.2015 11:33:53

Highest Band Edge / Full RB



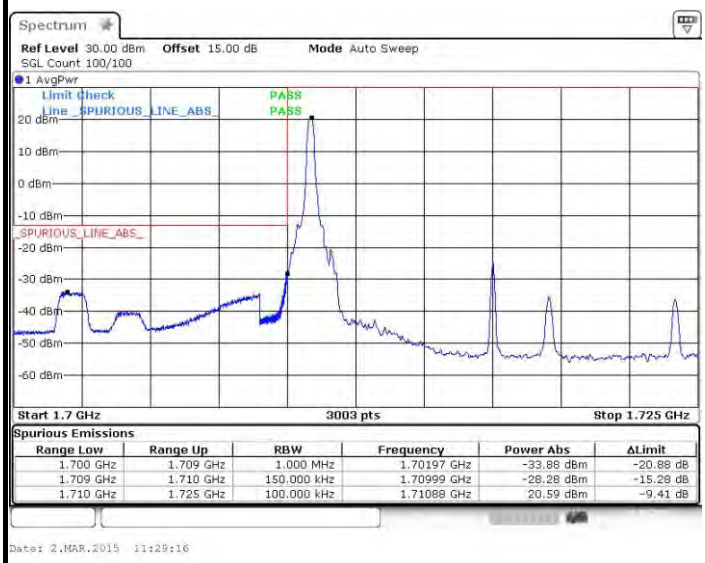
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.745 GHz	1.755 GHz	100.000 kHz	1.74688 GHz	2.27 dBm	-27.73 dB
1.755 GHz	1.756 GHz	100.000 kHz	1.75502 GHz	-33.11 dBm	-20.11 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75605 GHz	-27.54 dBm	-14.54 dB

Date: 2.MAR.2015 11:35:07

LTE Band 4 / 15MHz / QPSK

Lowest Band Edge / 1 RB

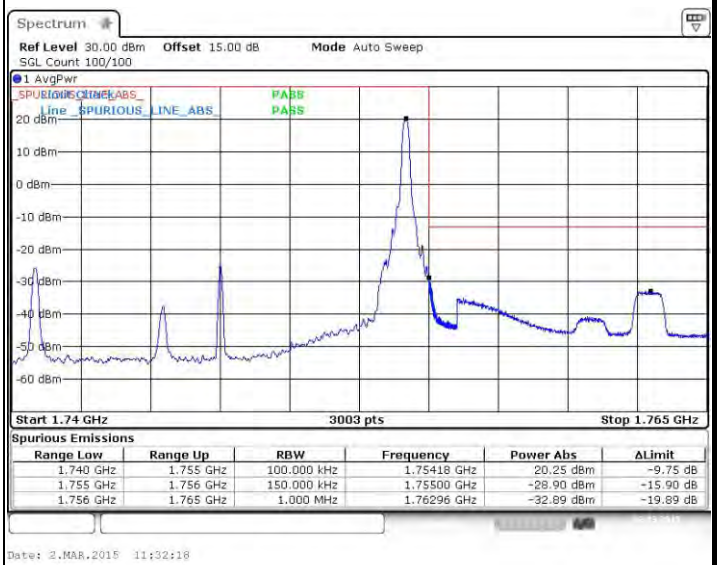


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70197 GHz	-33.88 dBm	-20.88 dB
1.709 GHz	1.710 GHz	150.000 kHz	1.70999 GHz	-28.28 dBm	-15.28 dB
1.710 GHz	1.725 GHz	100.000 kHz	1.71088 GHz	20.59 dBm	-9.41 dB

Date: 2.MAR.2015 11:29:16

Highest Band Edge / 1 RB

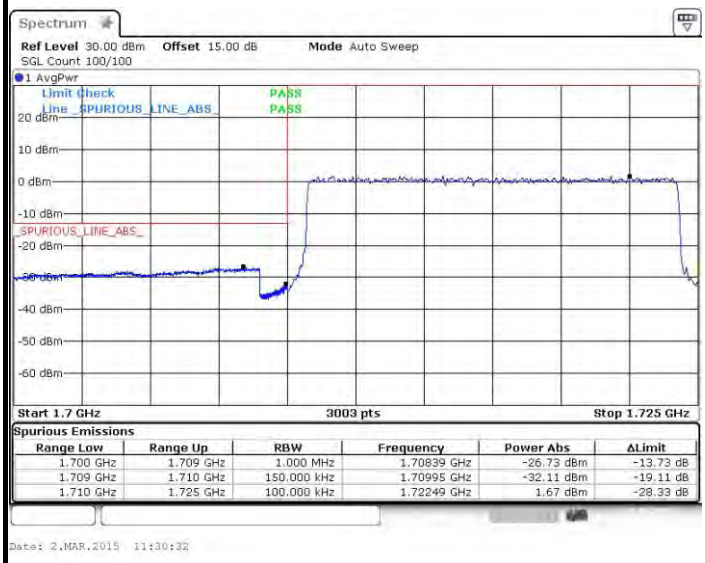


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.740 GHz	1.755 GHz	100.000 kHz	1.75418 GHz	20.25 dBm	-9.75 dB
1.755 GHz	1.756 GHz	150.000 kHz	1.75500 GHz	-28.90 dBm	-15.90 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76296 GHz	-32.89 dBm	-19.89 dB

Date: 2.MAR.2015 11:32:18

Lowest Band Edge / Full RB

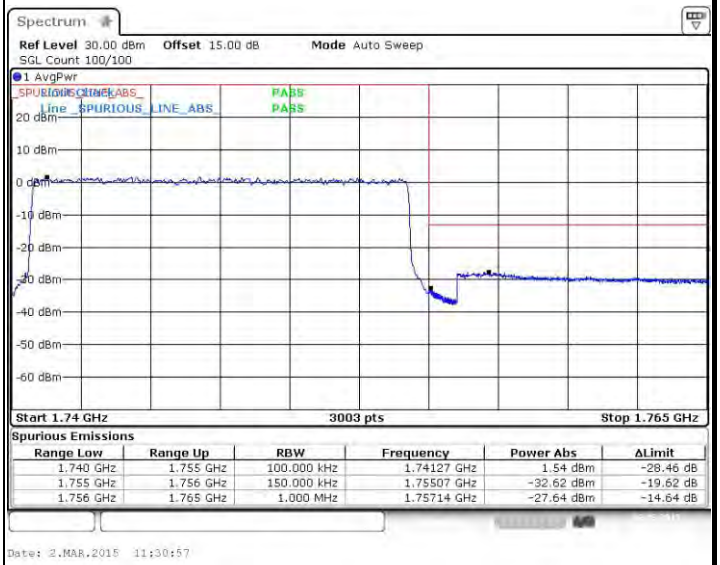


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70839 GHz	-26.73 dBm	-13.73 dB
1.709 GHz	1.710 GHz	150.000 kHz	1.70995 GHz	-32.11 dBm	-19.11 dB
1.710 GHz	1.725 GHz	100.000 kHz	1.72249 GHz	1.67 dBm	-28.33 dB

Date: 2.MAR.2015 11:30:32

Highest Band Edge / Full RB



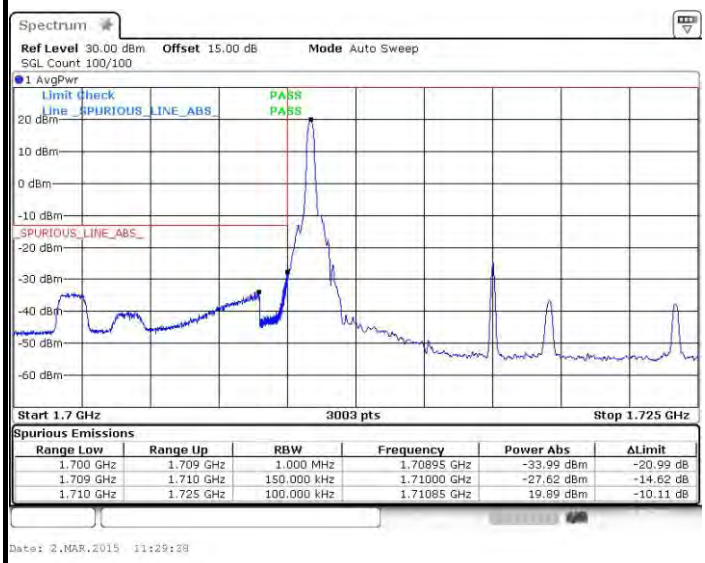
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.740 GHz	1.755 GHz	100.000 kHz	1.74127 GHz	1.54 dBm	-28.46 dB
1.755 GHz	1.756 GHz	150.000 kHz	1.75507 GHz	-32.62 dBm	-19.62 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75714 GHz	-27.64 dBm	-14.64 dB

Date: 2.MAR.2015 11:30:57

LTE Band 4 / 15MHz / 16QAM

Lowest Band Edge / 1 RB

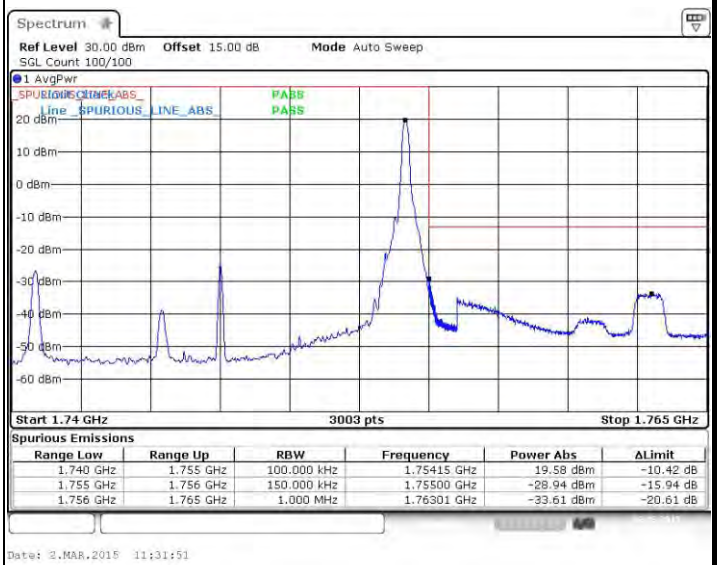


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70895 GHz	-33.99 dBm	-20.99 dB
1.709 GHz	1.710 GHz	150.000 kHz	1.71000 GHz	-27.62 dBm	-14.62 dB
1.710 GHz	1.725 GHz	100.000 kHz	1.71085 GHz	19.89 dBm	-10.11 dB

Date: 2.MAR.2015 11:29:38

Highest Band Edge / 1 RB

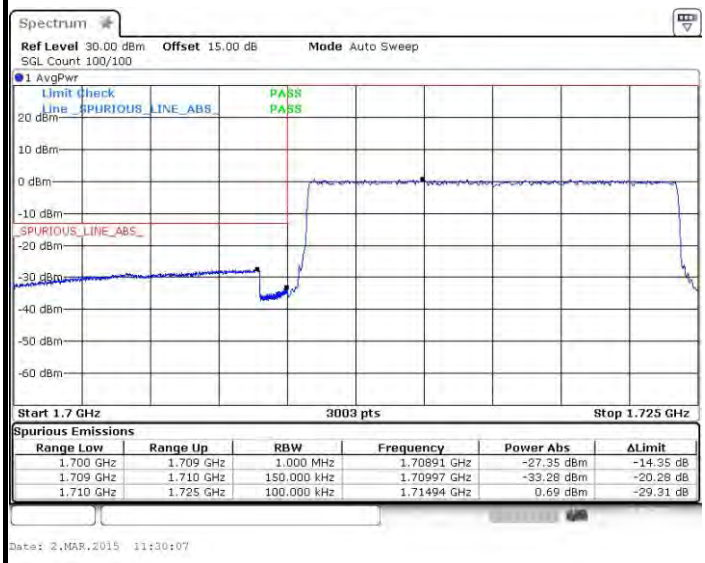


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.740 GHz	1.755 GHz	100.000 kHz	1.75415 GHz	19.58 dBm	-10.42 dB
1.755 GHz	1.756 GHz	150.000 kHz	1.75500 GHz	-28.94 dBm	-15.94 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76301 GHz	-33.61 dBm	-20.61 dB

Date: 2.MAR.2015 11:31:51

Lowest Band Edge / Full RB

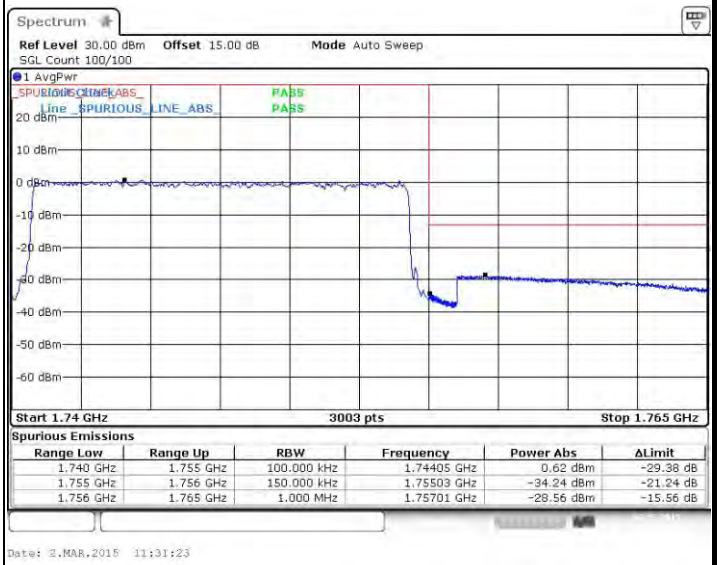


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70891 GHz	-27.35 dBm	-14.35 dB
1.709 GHz	1.710 GHz	150.000 kHz	1.70997 GHz	-33.28 dBm	-20.28 dB
1.710 GHz	1.725 GHz	100.000 kHz	1.71494 GHz	0.69 dBm	-29.31 dB

Date: 2.MAR.2015 11:30:07

Highest Band Edge / Full RB



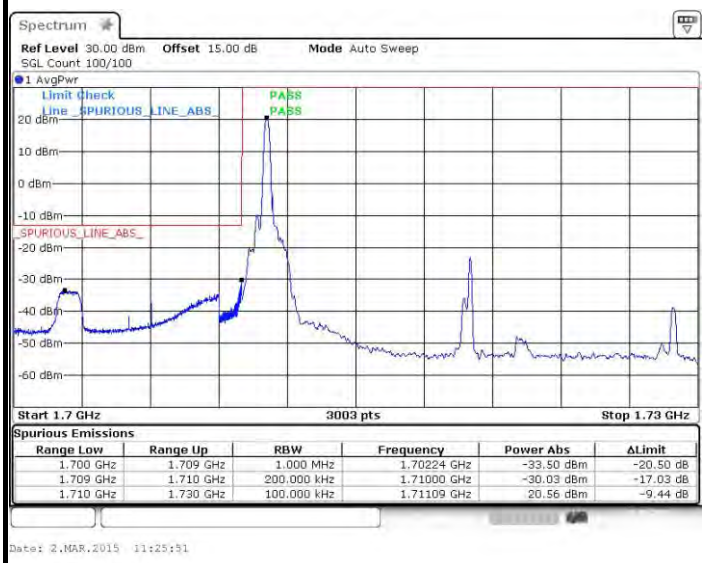
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.740 GHz	1.755 GHz	100.000 kHz	1.74405 GHz	0.62 dBm	-29.38 dB
1.755 GHz	1.756 GHz	150.000 kHz	1.75503 GHz	-34.24 dBm	-21.24 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75701 GHz	-28.56 dBm	-15.56 dB

Date: 2.MAR.2015 11:31:23

LTE Band 4 / 20MHz / QPSK

Lowest Band Edge / 1 RB

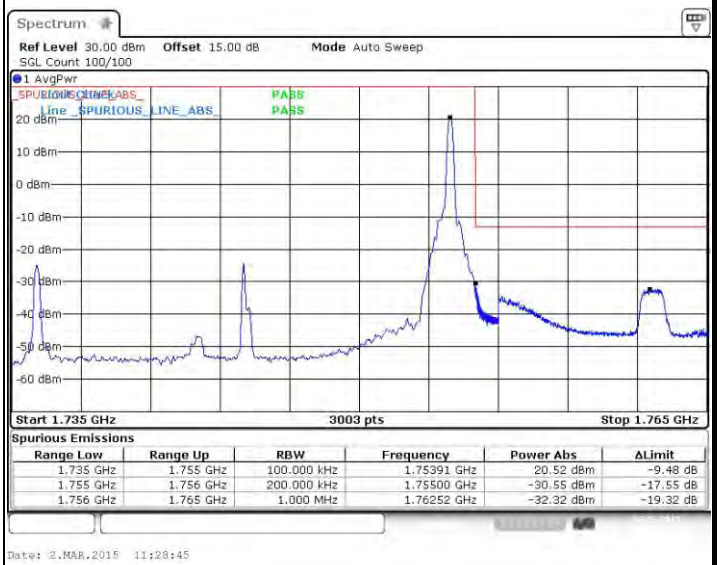


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70224 GHz	-33.50 dBm	-20.50 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.71000 GHz	-30.03 dBm	-17.03 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71109 GHz	20.56 dBm	-9.44 dB

Date: 2.MAR.2015 11:25:51

Highest Band Edge / 1 RB

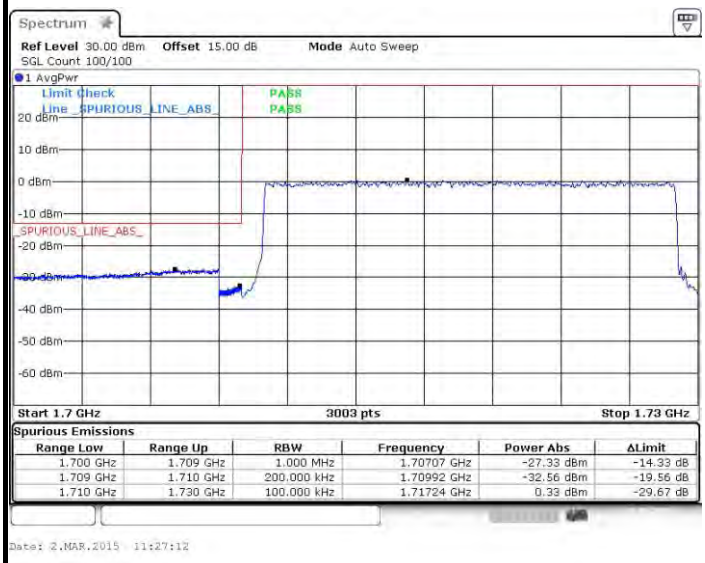


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.735 GHz	1.755 GHz	100.000 kHz	1.75391 GHz	20.52 dBm	-9.48 dB
1.755 GHz	1.756 GHz	200.000 kHz	1.75500 GHz	-30.55 dBm	-17.55 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76252 GHz	-32.32 dBm	-19.32 dB

Date: 2.MAR.2015 11:28:45

Lowest Band Edge / Full RB

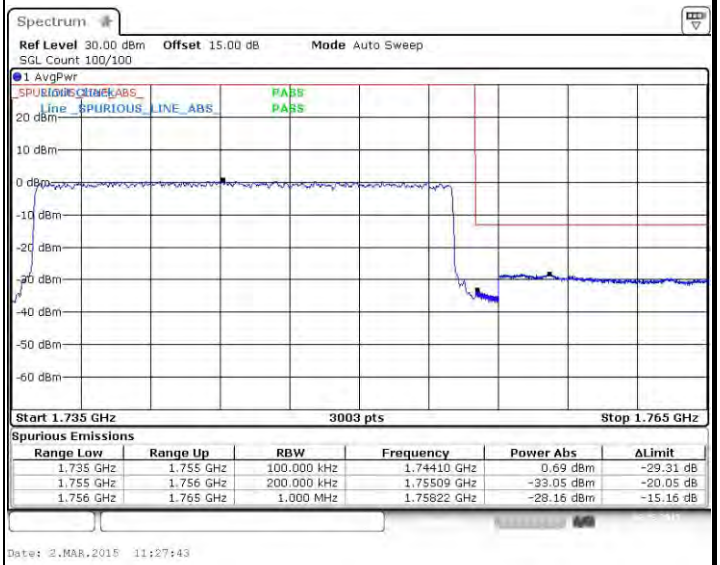


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70707 GHz	-27.33 dBm	-14.33 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70992 GHz	-32.56 dBm	-19.56 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71724 GHz	0.33 dBm	-29.67 dB

Date: 2.MAR.2015 11:27:12

Highest Band Edge / Full RB



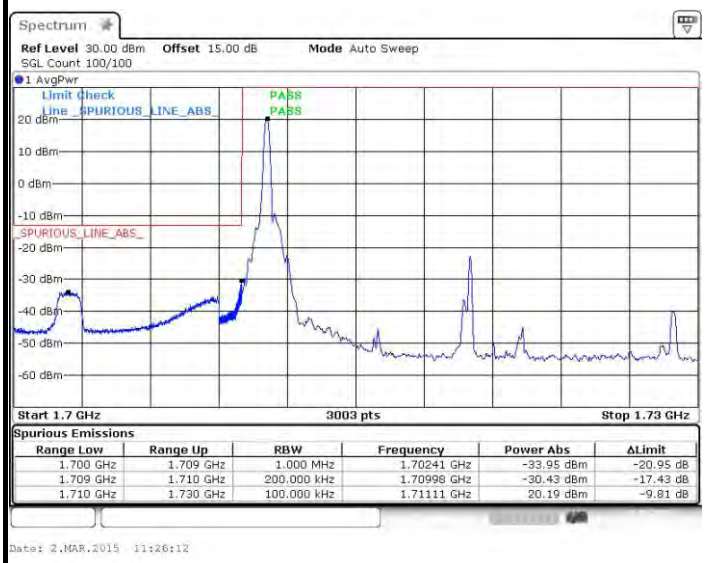
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.735 GHz	1.755 GHz	100.000 kHz	1.74410 GHz	0.69 dBm	-29.31 dB
1.755 GHz	1.756 GHz	200.000 kHz	1.75509 GHz	-33.05 dBm	-20.05 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75822 GHz	-28.16 dBm	-15.16 dB

Date: 2.MAR.2015 11:27:43

LTE Band 4 / 20MHz / 16QAM

Lowest Band Edge / 1 RB

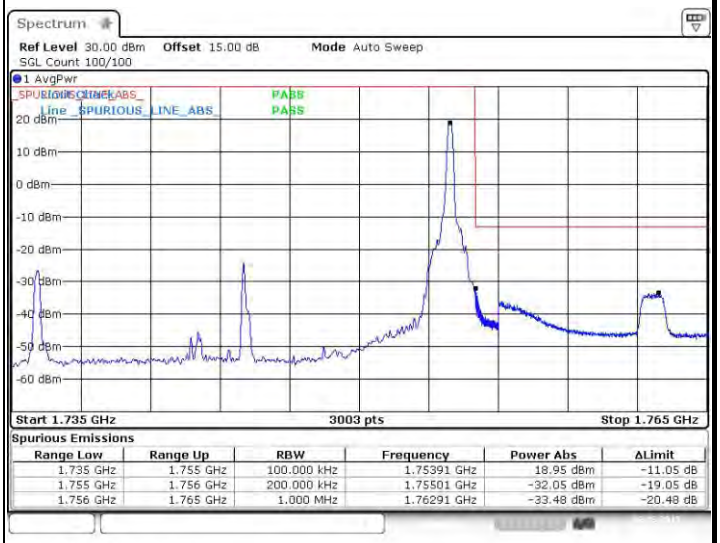


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70241 GHz	-33.95 dBm	-20.95 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70998 GHz	-30.43 dBm	-17.43 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71111 GHz	20.19 dBm	-9.81 dB

Date: 2.MAR.2015 11:26:12

Highest Band Edge / 1 RB

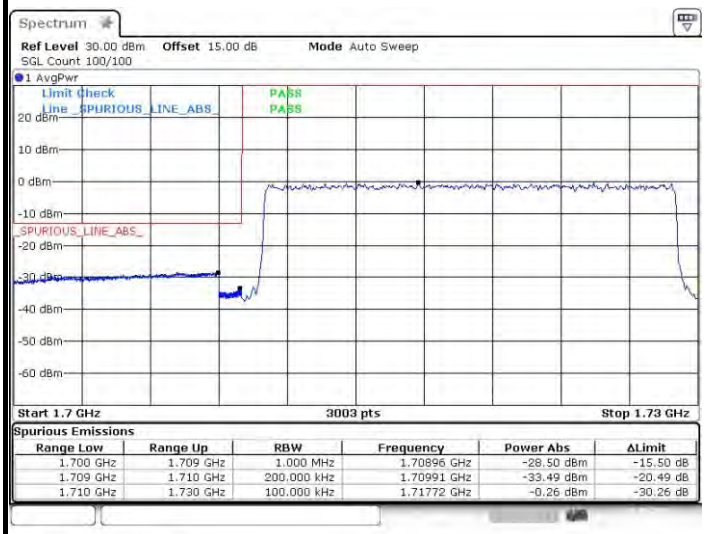


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.735 GHz	1.755 GHz	100.000 kHz	1.75391 GHz	18.95 dBm	-11.05 dB
1.755 GHz	1.756 GHz	200.000 kHz	1.75501 GHz	-32.05 dBm	-19.05 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.76291 GHz	-33.48 dBm	-20.48 dB

Date: 2.MAR.2015 11:28:24

Lowest Band Edge / Full RB

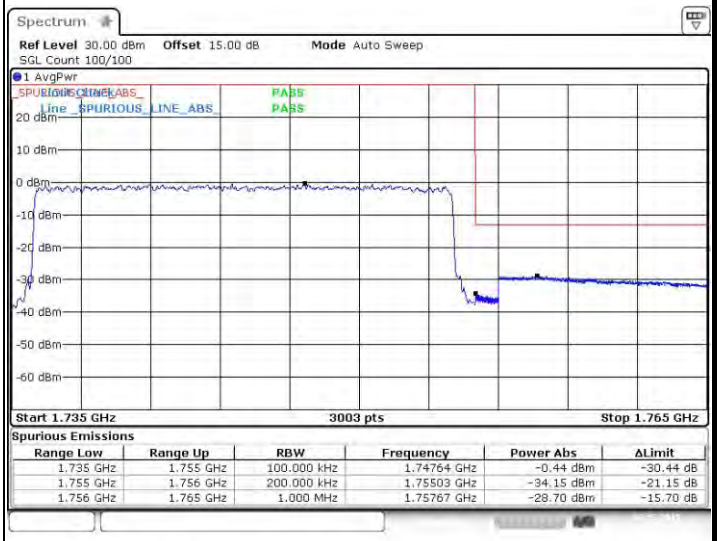


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.700 GHz	1.709 GHz	1.000 MHz	1.70896 GHz	-28.50 dBm	-15.50 dB
1.709 GHz	1.710 GHz	200.000 kHz	1.70991 GHz	-33.49 dBm	-20.49 dB
1.710 GHz	1.730 GHz	100.000 kHz	1.71772 GHz	-0.26 dBm	-30.26 dB

Date: 2.MAR.2015 11:26:51

Highest Band Edge / Full RB



Spurious Emissions

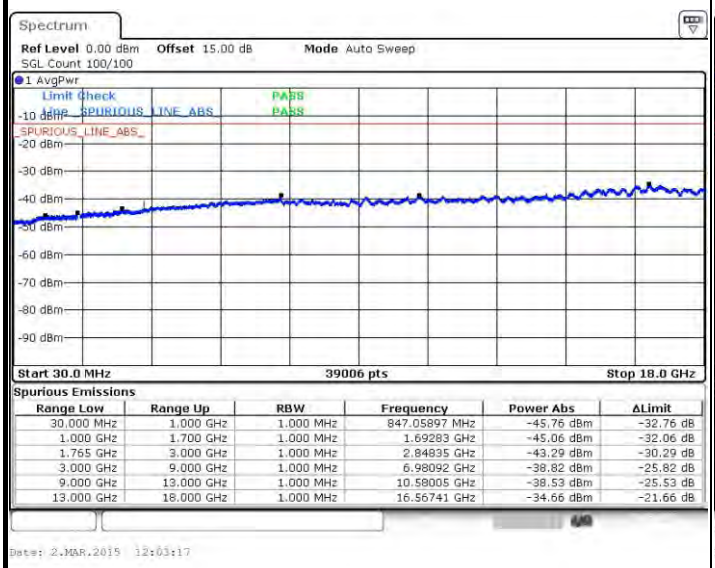
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
1.735 GHz	1.755 GHz	100.000 kHz	1.74764 GHz	-0.44 dBm	-30.44 dB
1.755 GHz	1.756 GHz	200.000 kHz	1.75503 GHz	-34.15 dBm	-21.15 dB
1.756 GHz	1.765 GHz	1.000 MHz	1.75767 GHz	-28.70 dBm	-15.70 dB

Date: 2.MAR.2015 11:28:03

Conducted Spurious Emission

LTE Band 4 / 1.4MHz

Lowest Channel / QPSK

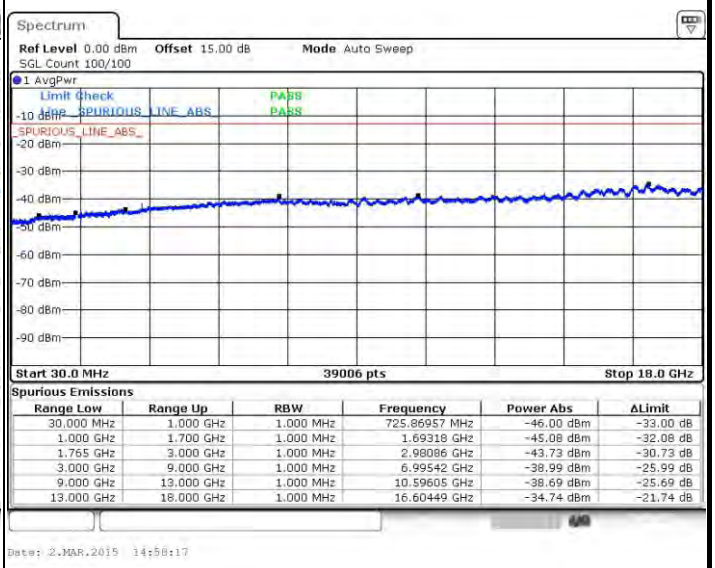


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	847.05897 MHz	-45.76 dBm	-32.76 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69283 GHz	-45.06 dBm	-32.06 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84835 GHz	-43.29 dBm	-30.29 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98092 GHz	-38.82 dBm	-25.82 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58005 GHz	-38.53 dBm	-25.53 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56741 GHz	-34.66 dBm	-21.66 dB

Date: 2.MAR.2015 12:03:17

Lowest Channel / 16QAM

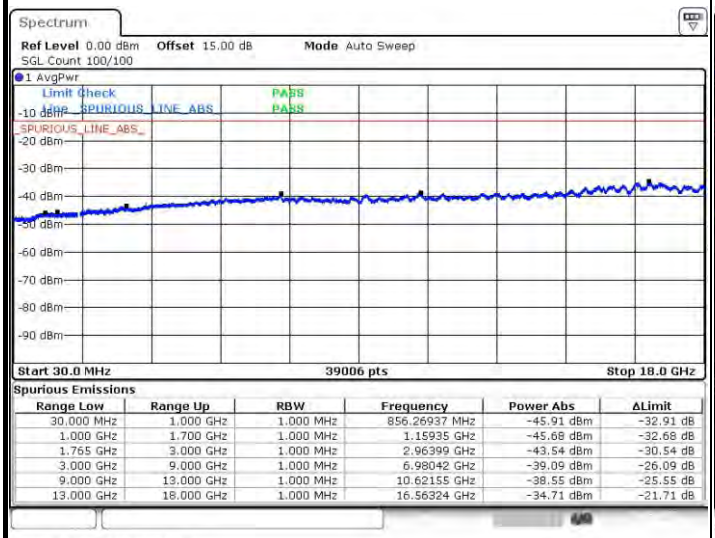


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	725.86957 MHz	-46.00 dBm	-33.00 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69318 GHz	-45.08 dBm	-32.08 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.98086 GHz	-43.73 dBm	-30.73 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99542 GHz	-38.99 dBm	-25.99 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59605 GHz	-38.69 dBm	-25.69 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.60449 GHz	-34.74 dBm	-21.74 dB

Date: 2.MAR.2015 14:58:17

Middle Channel / QPSK

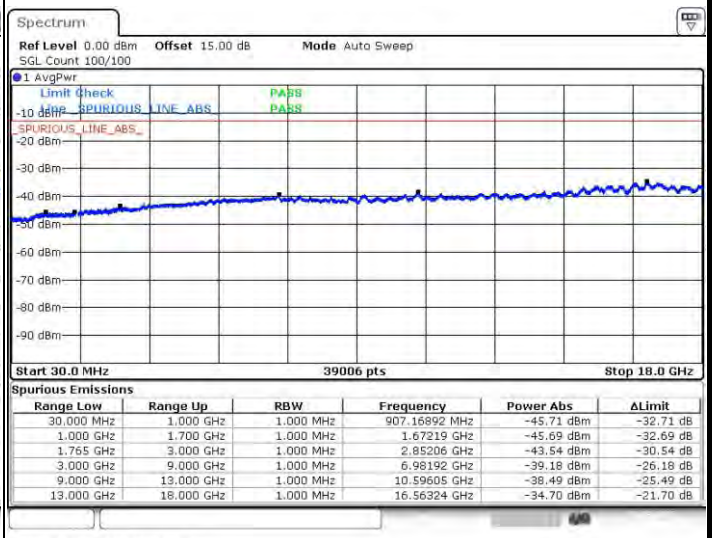


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	856.26937 MHz	-45.91 dBm	-32.91 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.15935 GHz	-45.68 dBm	-32.68 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.96399 GHz	-43.54 dBm	-30.54 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98042 GHz	-39.09 dBm	-26.09 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.62155 GHz	-38.55 dBm	-25.55 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56324 GHz	-34.71 dBm	-21.71 dB

Date: 2.MAR.2015 12:06:43

Middle Channel / 16QAM



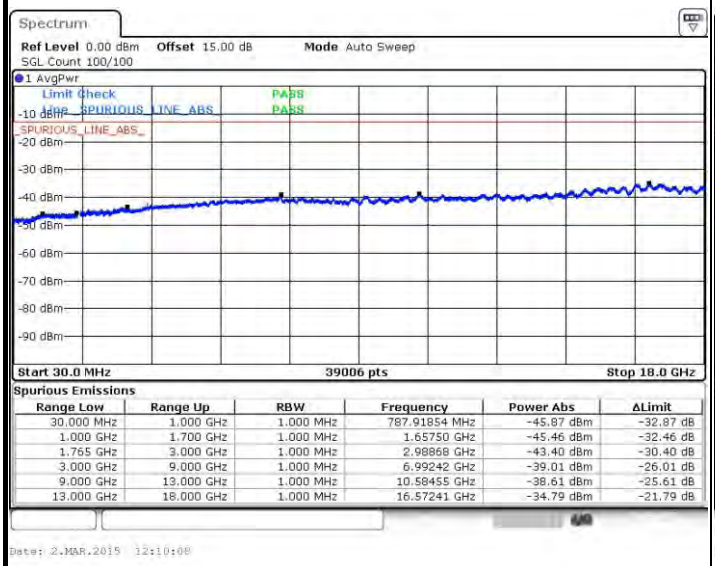
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.16892 MHz	-45.71 dBm	-32.71 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67219 GHz	-45.69 dBm	-32.69 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85206 GHz	-43.54 dBm	-30.54 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98192 GHz	-39.18 dBm	-26.18 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59605 GHz	-38.49 dBm	-25.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56324 GHz	-34.70 dBm	-21.70 dB

Date: 2.MAR.2015 12:08:03

LTE Band 4 / 1.4MHz

Highest Channel / QPSK

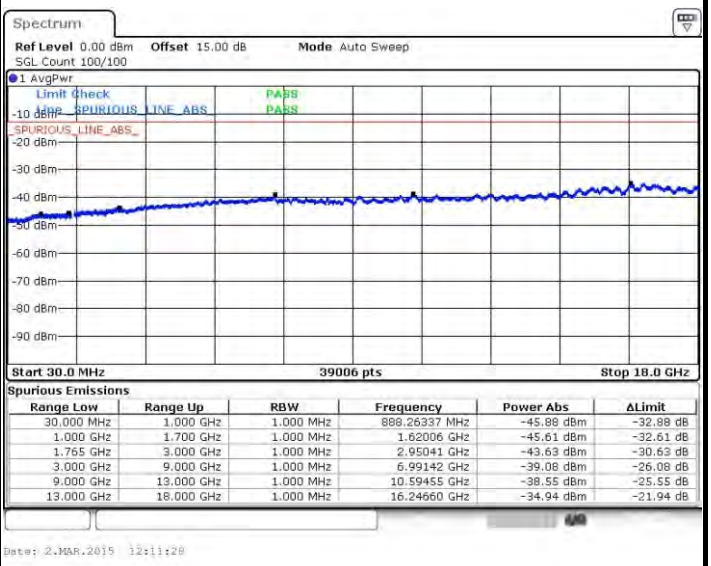


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	787.91854 MHz	-45.87 dBm	-32.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.65750 GHz	-45.46 dBm	-32.46 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.98868 GHz	-43.40 dBm	-30.40 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99242 GHz	-39.01 dBm	-26.01 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58455 GHz	-38.61 dBm	-25.61 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.57241 GHz	-34.79 dBm	-21.79 dB

Date: 2.MAR.2015 12:10:08

Highest Channel / 16QAM



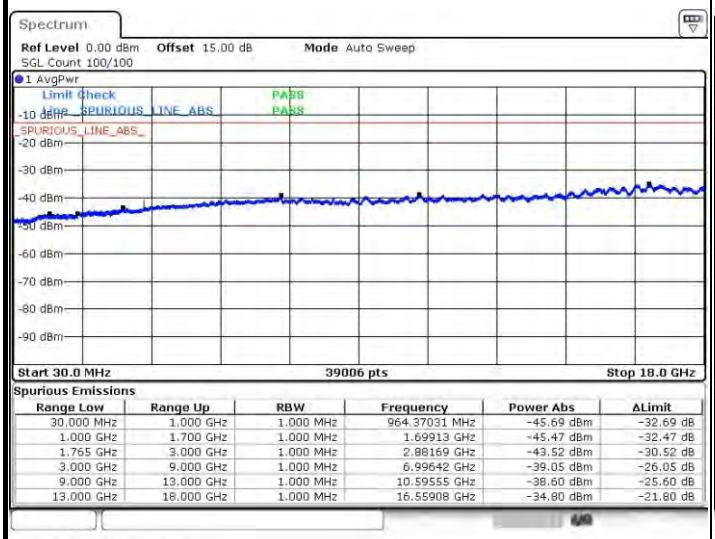
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	888.26337 MHz	-45.88 dBm	-32.88 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.62006 GHz	-45.61 dBm	-32.61 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.95041 GHz	-43.63 dBm	-30.63 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99142 GHz	-39.08 dBm	-26.08 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59455 GHz	-38.55 dBm	-25.55 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.24660 GHz	-34.94 dBm	-21.94 dB

Date: 2.MAR.2015 12:11:20

LTE Band 4 / 3MHz

Lowest Channel / QPSK

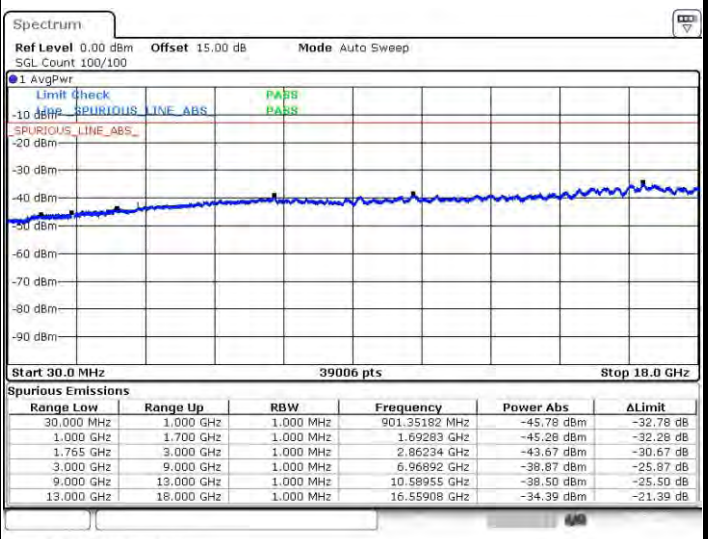


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	964.37031 MHz	-45.69 dBm	-32.69 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69913 GHz	-45.47 dBm	-32.47 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.88169 GHz	-43.52 dBm	-30.52 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99642 GHz	-39.05 dBm	-26.05 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59555 GHz	-38.60 dBm	-25.60 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55908 GHz	-34.80 dBm	-21.80 dB

Date: 2.MAR.2015 12:13:33

Lowest Channel / 16QAM



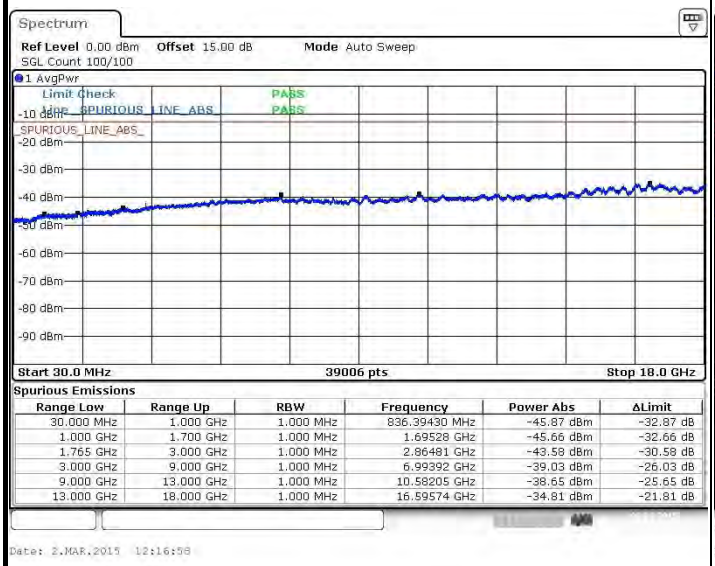
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	901.35182 MHz	-45.78 dBm	-32.78 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69283 GHz	-45.28 dBm	-32.28 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86234 GHz	-43.67 dBm	-30.67 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.96892 GHz	-38.87 dBm	-25.87 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58955 GHz	-38.50 dBm	-25.50 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55908 GHz	-34.39 dBm	-21.39 dB

Date: 2.MAR.2015 12:14:53

LTE Band 4 / 3MHz

Middle Channel / QPSK

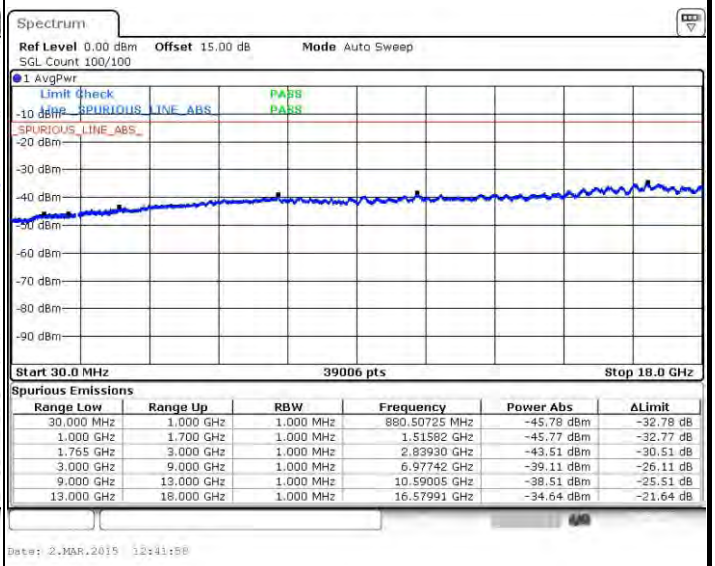


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	836.39430 MHz	-45.87 dBm	-32.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69528 GHz	-45.66 dBm	-32.66 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86481 GHz	-43.58 dBm	-30.58 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99392 GHz	-39.03 dBm	-26.03 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58205 GHz	-38.65 dBm	-25.65 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59574 GHz	-34.81 dBm	-21.81 dB

Date: 2.MAR.2015 12:16:58

Middle Channel / 16QAM

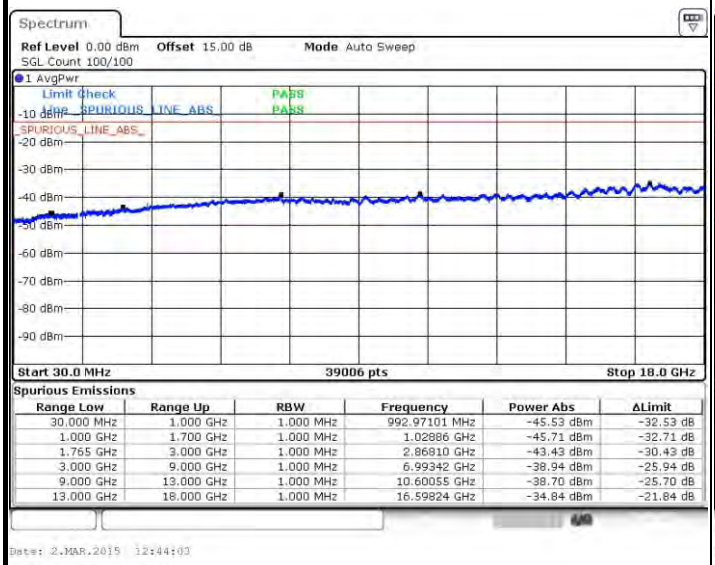


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	880.50725 MHz	-45.78 dBm	-32.78 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.51582 GHz	-45.77 dBm	-32.77 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.83930 GHz	-43.51 dBm	-30.51 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97742 GHz	-39.11 dBm	-26.11 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59005 GHz	-38.51 dBm	-25.51 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.57991 GHz	-34.64 dBm	-21.64 dB

Date: 2.MAR.2015 12:41:58

Highest Channel / QPSK

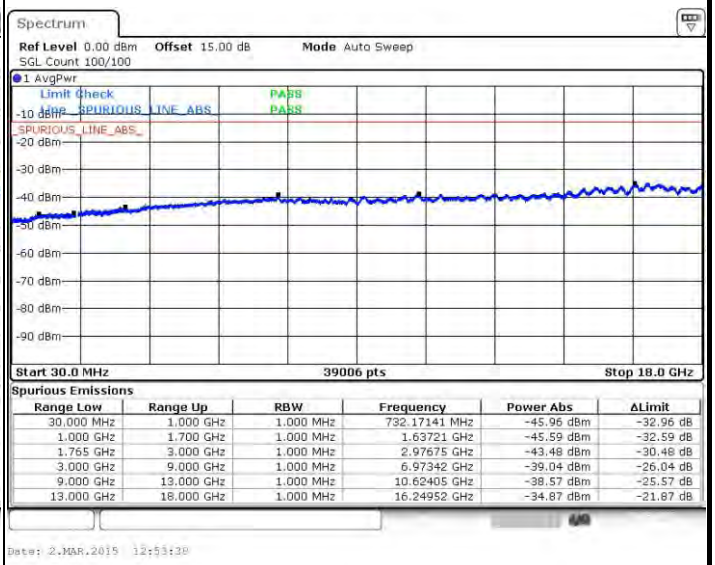


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	992.97101 MHz	-45.53 dBm	-32.53 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.02886 GHz	-45.71 dBm	-32.71 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86810 GHz	-43.43 dBm	-30.43 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99342 GHz	-38.94 dBm	-25.94 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60055 GHz	-38.70 dBm	-25.70 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59824 GHz	-34.84 dBm	-21.84 dB

Date: 2.MAR.2015 12:44:03

Highest Channel / 16QAM



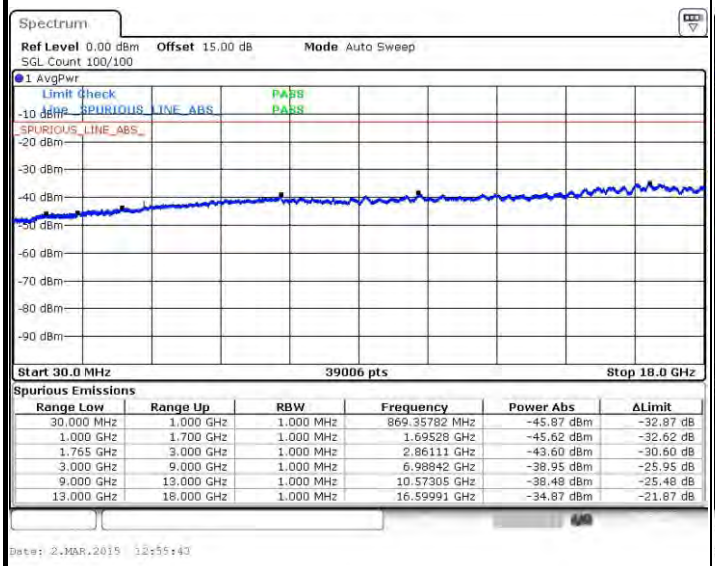
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	732.17141 MHz	-45.96 dBm	-32.96 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.63721 GHz	-45.59 dBm	-32.59 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.97675 GHz	-43.48 dBm	-30.48 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97342 GHz	-39.04 dBm	-26.04 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.62405 GHz	-38.57 dBm	-25.57 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.24952 GHz	-34.87 dBm	-21.87 dB

Date: 2.MAR.2015 12:53:38

LTE Band 4 / 5MHz

Lowest Channel / QPSK

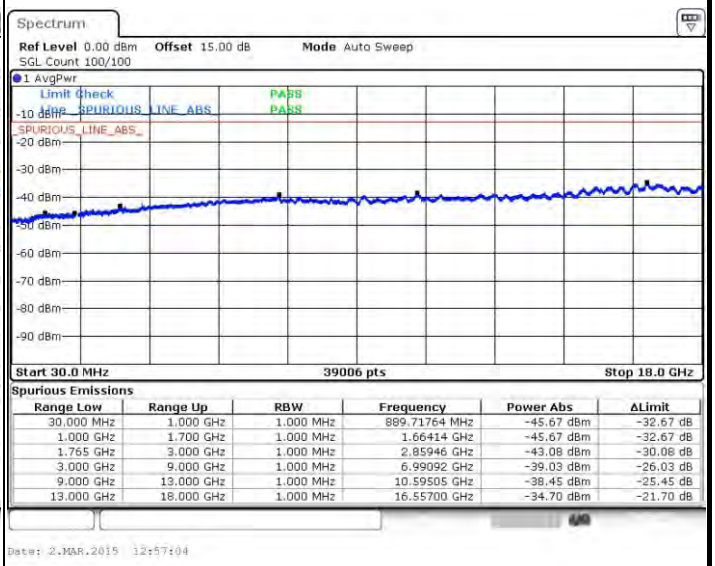


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	869.35782 MHz	-45.87 dBm	-32.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69528 GHz	-45.62 dBm	-32.62 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86111 GHz	-43.60 dBm	-30.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98842 GHz	-38.95 dBm	-25.95 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57305 GHz	-38.48 dBm	-25.48 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59991 GHz	-34.87 dBm	-21.87 dB

Date: 2.MAR.2015 12:55:43

Lowest Channel / 16QAM

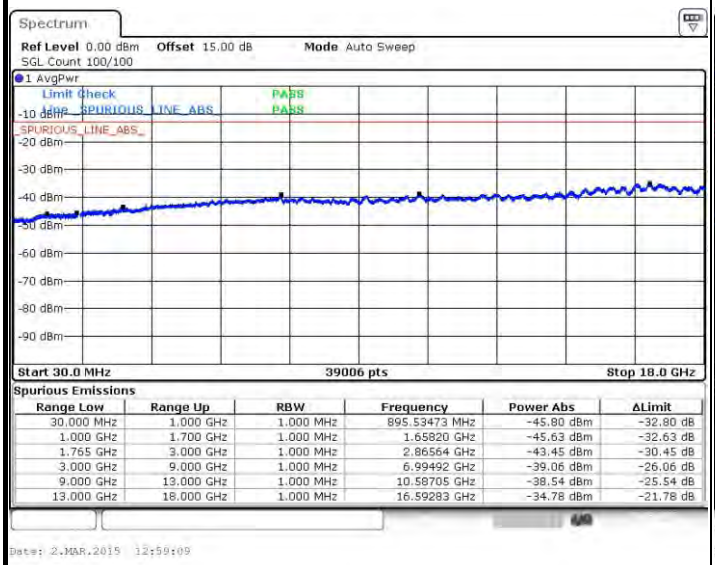


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	889.71764 MHz	-45.67 dBm	-32.67 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.66414 GHz	-45.67 dBm	-32.67 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85946 GHz	-43.08 dBm	-30.08 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99092 GHz	-39.03 dBm	-26.03 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59505 GHz	-38.45 dBm	-25.45 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55700 GHz	-34.70 dBm	-21.70 dB

Date: 2.MAR.2015 12:57:04

Middle Channel / QPSK

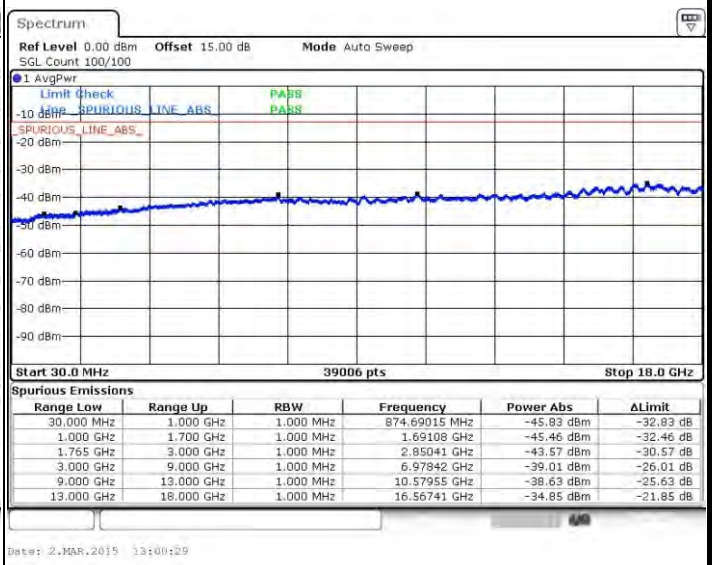


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	895.53473 MHz	-45.80 dBm	-32.80 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.65820 GHz	-45.63 dBm	-32.63 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86564 GHz	-43.45 dBm	-30.45 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99492 GHz	-39.06 dBm	-26.06 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58705 GHz	-38.54 dBm	-25.54 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59283 GHz	-34.78 dBm	-21.78 dB

Date: 2.MAR.2015 12:59:09

Middle Channel / 16QAM



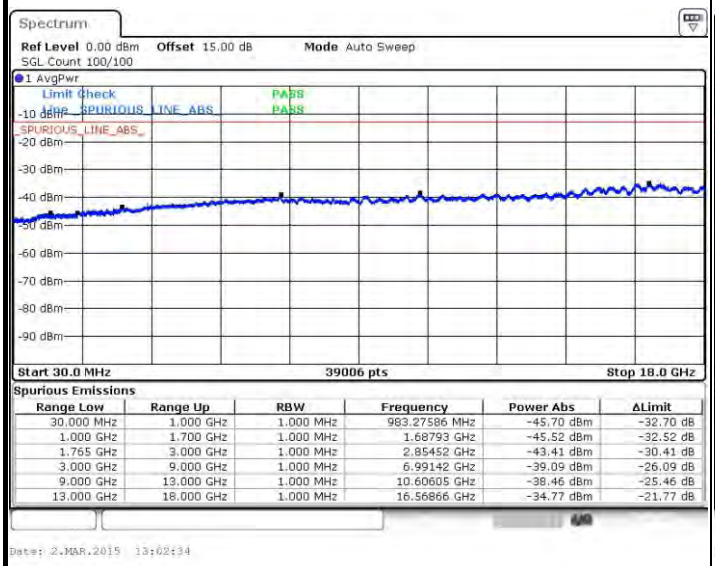
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	874.69015 MHz	-45.83 dBm	-32.83 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69108 GHz	-45.46 dBm	-32.46 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85041 GHz	-43.57 dBm	-30.57 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97842 GHz	-39.01 dBm	-26.01 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57955 GHz	-38.63 dBm	-25.63 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56741 GHz	-34.85 dBm	-21.85 dB

Date: 2.MAR.2015 13:00:29

LTE Band 4 / 5MHz

Highest Channel / QPSK

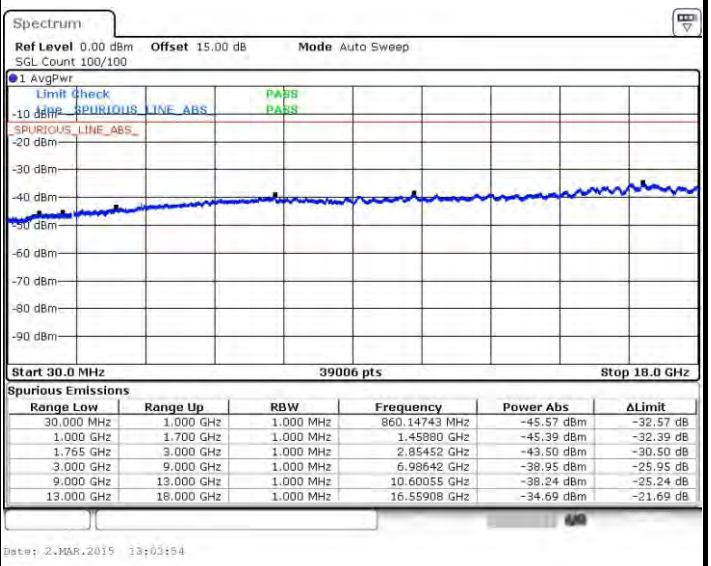


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	983.27586 MHz	-45.70 dBm	-32.70 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68793 GHz	-45.52 dBm	-32.52 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85452 GHz	-43.41 dBm	-30.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99142 GHz	-39.09 dBm	-26.09 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60605 GHz	-38.46 dBm	-25.46 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56866 GHz	-34.77 dBm	-21.77 dB

Date: 2.MAR.2015 13:02:34

Highest Channel / 16QAM



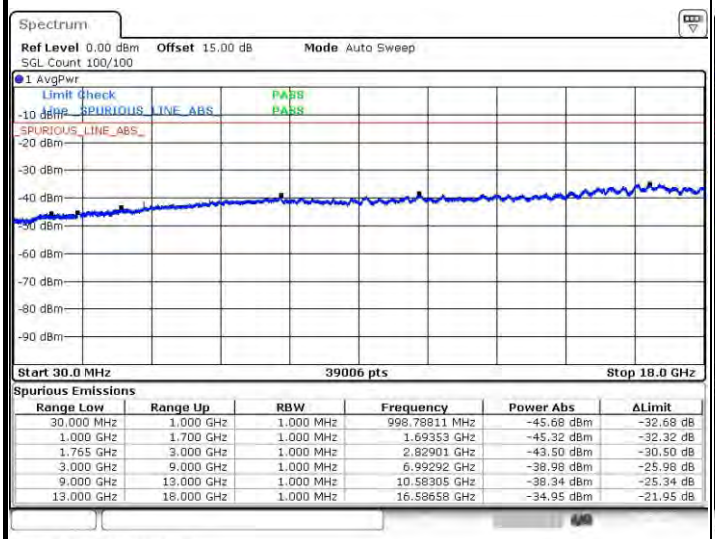
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	860.14743 MHz	-45.57 dBm	-32.57 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.45880 GHz	-45.39 dBm	-32.39 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85452 GHz	-43.50 dBm	-30.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98642 GHz	-38.95 dBm	-25.95 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60055 GHz	-38.24 dBm	-25.24 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55908 GHz	-34.69 dBm	-21.69 dB

Date: 2.MAR.2015 13:03:54

LTE Band 4 / 10MHz

Lowest Channel / QPSK

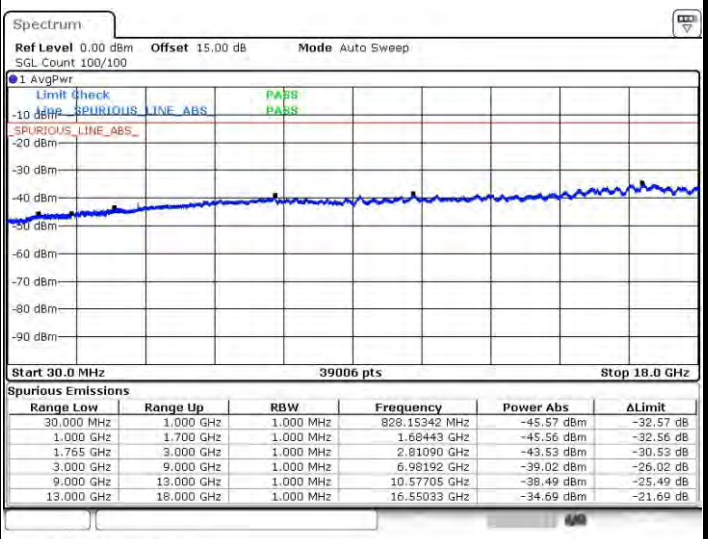


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	998.78811 MHz	-45.68 dBm	-32.68 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-45.32 dBm	-32.32 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.82901 GHz	-43.50 dBm	-30.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99292 GHz	-38.98 dBm	-25.98 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58305 GHz	-38.34 dBm	-25.34 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.58658 GHz	-34.95 dBm	-21.95 dB

Date: 2.MAR.2015 13:40:43

Lowest Channel / 16QAM



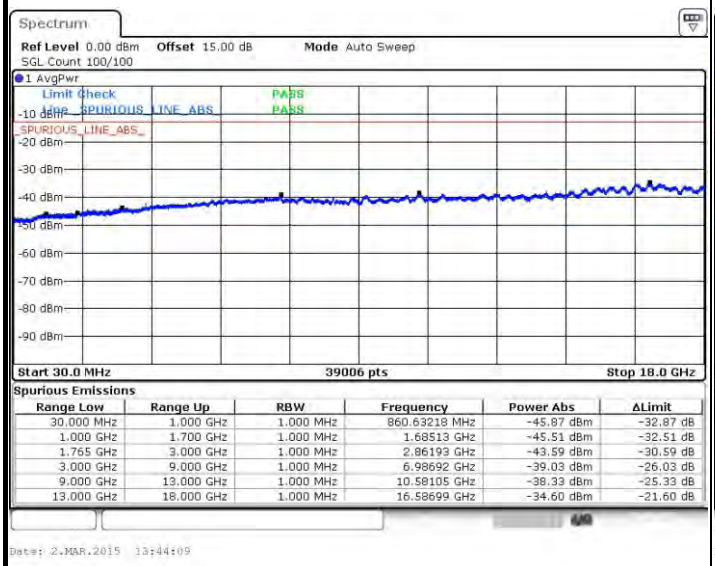
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	828.15342 MHz	-45.57 dBm	-32.57 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68443 GHz	-45.56 dBm	-32.56 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.81090 GHz	-43.53 dBm	-30.53 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98192 GHz	-39.02 dBm	-26.02 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.57705 GHz	-38.49 dBm	-25.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55033 GHz	-34.69 dBm	-21.69 dB

Date: 2.MAR.2015 14:15:49

LTE Band 4 / 10MHz

Middle Channel / QPSK

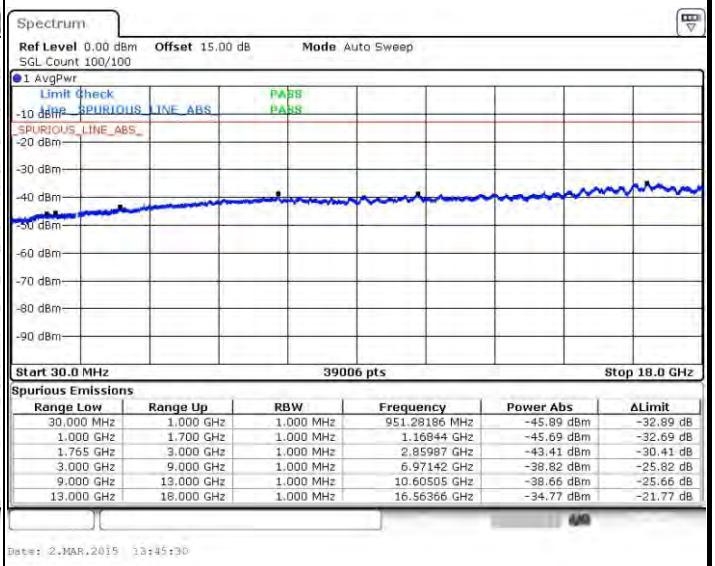


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	860.63218 MHz	-45.87 dBm	-32.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68513 GHz	-45.51 dBm	-32.51 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86193 GHz	-43.59 dBm	-30.59 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98692 GHz	-39.03 dBm	-26.03 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58105 GHz	-38.33 dBm	-25.33 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.58699 GHz	-34.60 dBm	-21.60 dB

Date: 2.MAR.2015 13:44:09

Middle Channel / 16QAM

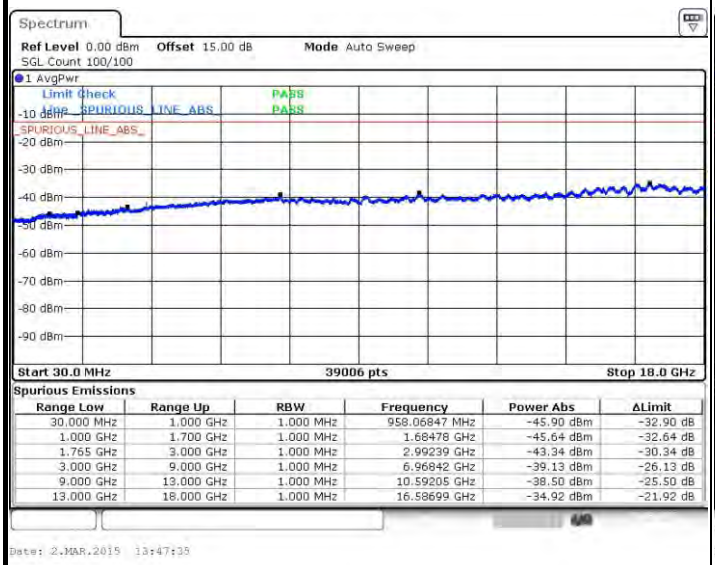


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	951.28186 MHz	-45.89 dBm	-32.89 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.16844 GHz	-45.69 dBm	-32.69 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85987 GHz	-43.41 dBm	-30.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97142 GHz	-38.82 dBm	-25.82 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60505 GHz	-38.66 dBm	-25.66 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56366 GHz	-34.77 dBm	-21.77 dB

Date: 2.MAR.2015 13:45:30

Highest Channel / QPSK

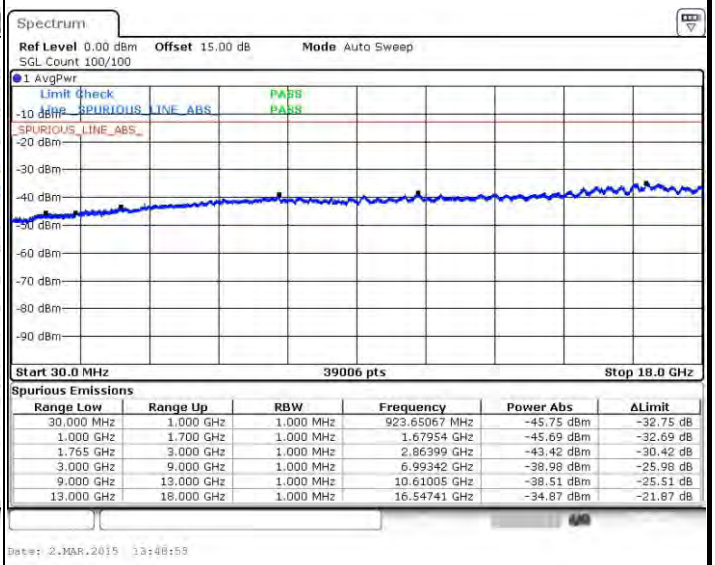


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	958.06847 MHz	-45.90 dBm	-32.90 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.68478 GHz	-45.64 dBm	-32.64 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.99239 GHz	-43.34 dBm	-30.34 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.96842 GHz	-39.13 dBm	-26.13 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59205 GHz	-38.50 dBm	-25.50 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.58699 GHz	-34.92 dBm	-21.92 dB

Date: 2.MAR.2015 13:47:35

Highest Channel / 16QAM



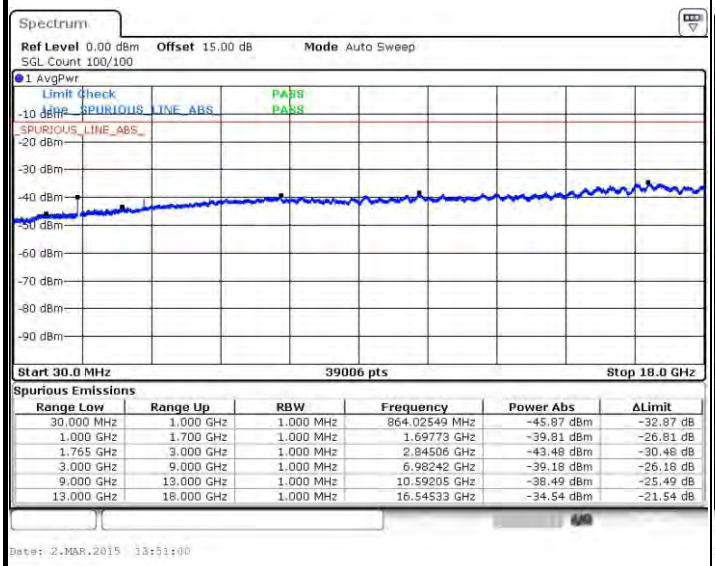
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-45.75 dBm	-32.75 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67954 GHz	-45.69 dBm	-32.69 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86399 GHz	-43.42 dBm	-30.42 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99342 GHz	-38.98 dBm	-25.98 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61005 GHz	-38.51 dBm	-25.51 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.54741 GHz	-34.87 dBm	-21.87 dB

Date: 2.MAR.2015 13:48:53

LTE Band 4 / 15MHz

Lowest Channel / QPSK

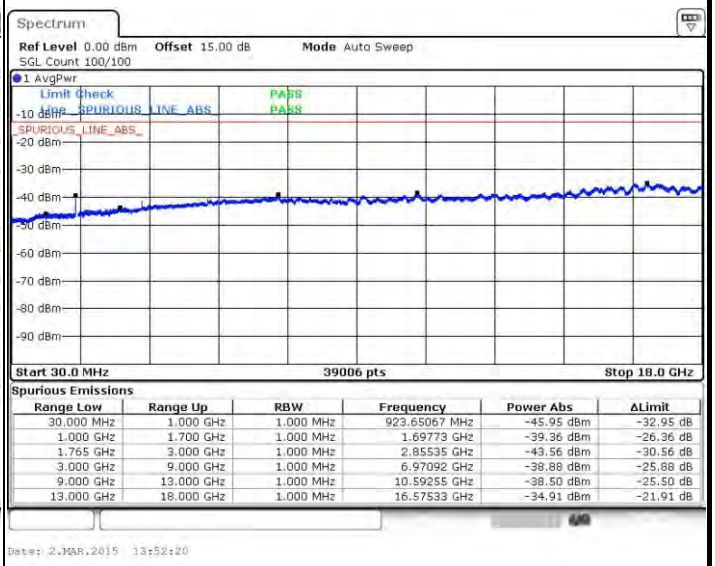


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	864.02549 MHz	-45.87 dBm	-32.87 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69773 GHz	-39.81 dBm	-26.81 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84506 GHz	-43.48 dBm	-30.48 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98242 GHz	-39.18 dBm	-26.18 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59205 GHz	-38.49 dBm	-25.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.54533 GHz	-34.54 dBm	-21.54 dB

Date: 2.MAR.2015 13:51:00

Lowest Channel / 16QAM

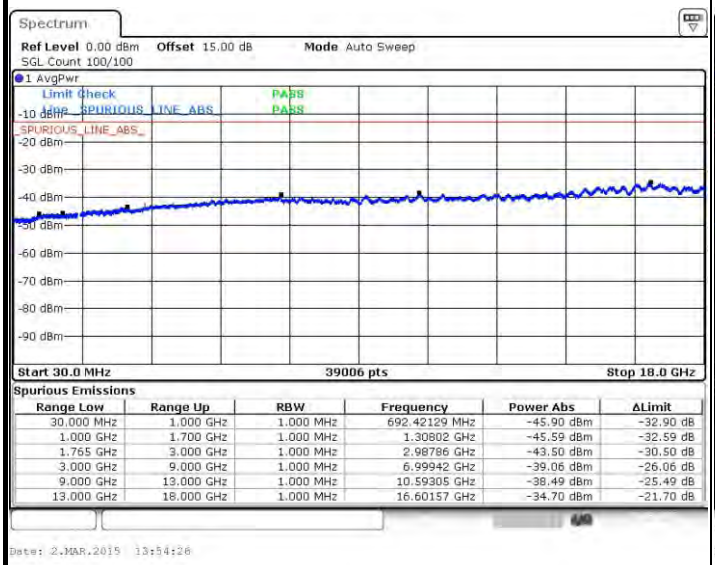


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	923.65067 MHz	-45.95 dBm	-32.95 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69773 GHz	-39.36 dBm	-26.36 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85535 GHz	-43.56 dBm	-30.56 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97092 GHz	-38.88 dBm	-25.88 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59255 GHz	-38.50 dBm	-25.50 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.57533 GHz	-34.91 dBm	-21.91 dB

Date: 2.MAR.2015 13:52:20

Middle Channel / QPSK

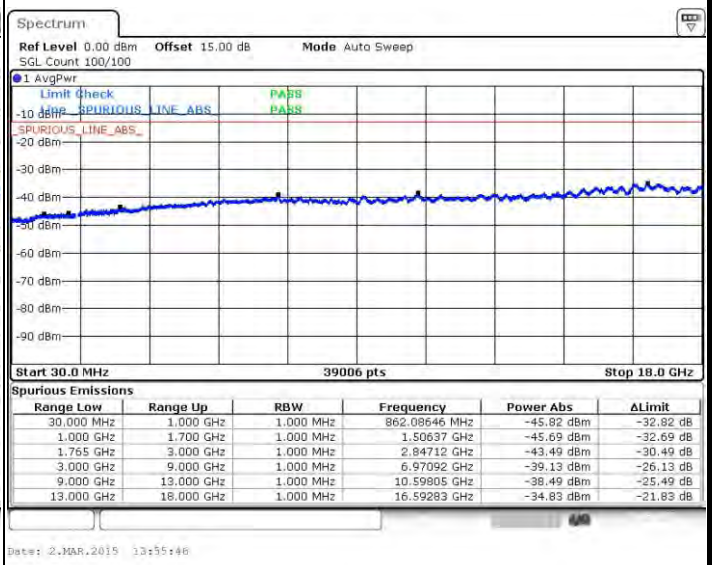


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	692.42129 MHz	-45.90 dBm	-32.90 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.30802 GHz	-45.59 dBm	-32.59 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.98786 GHz	-43.50 dBm	-30.50 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99942 GHz	-39.06 dBm	-26.06 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59305 GHz	-38.49 dBm	-25.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.60157 GHz	-34.70 dBm	-21.70 dB

Date: 2.MAR.2015 13:54:26

Middle Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	862.08646 MHz	-45.82 dBm	-32.82 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.50637 GHz	-45.69 dBm	-32.69 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.84712 GHz	-43.49 dBm	-30.49 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97092 GHz	-39.13 dBm	-26.13 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59805 GHz	-38.49 dBm	-25.49 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59283 GHz	-34.83 dBm	-21.83 dB

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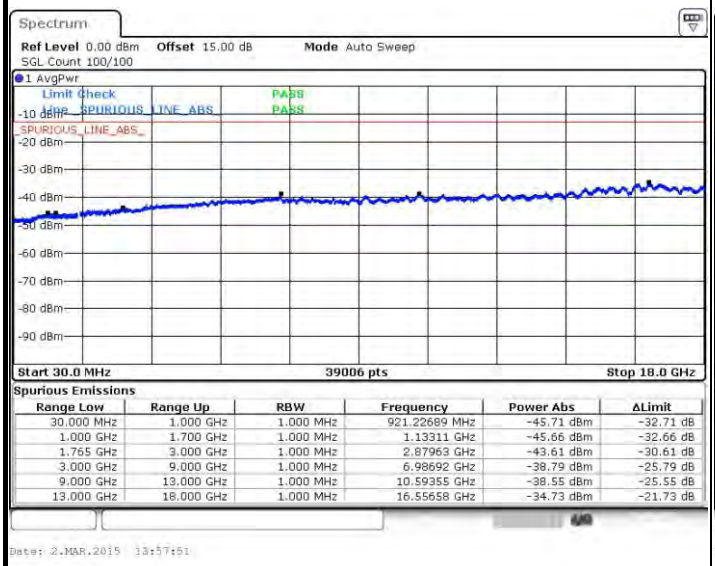
LTE Band 4 / 15MHz

Highest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	921.22689 MHz	-45.71 dBm	-32.71 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.13311 GHz	-45.66 dBm	-32.66 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.87963 GHz	-43.61 dBm	-30.61 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98692 GHz	-38.79 dBm	-25.79 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59355 GHz	-38.55 dBm	-25.55 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55658 GHz	-34.73 dBm	-21.73 dB

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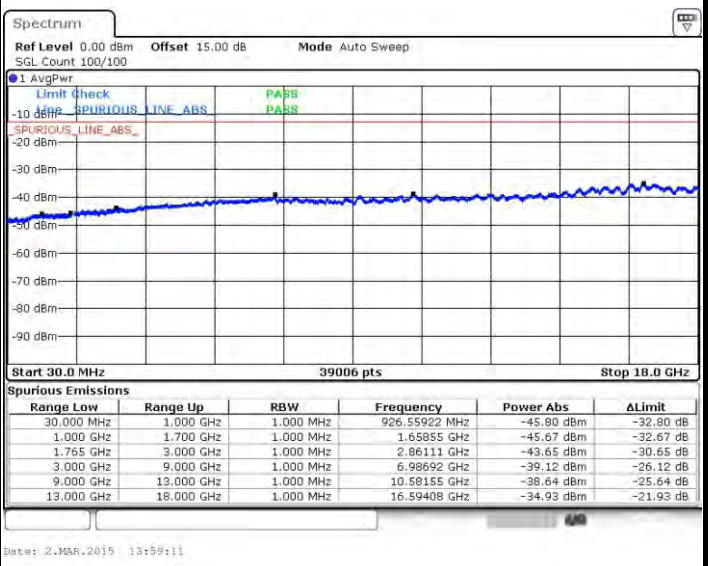
Highest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	926.55922 MHz	-45.80 dBm	-32.80 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.65855 GHz	-45.67 dBm	-32.67 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86111 GHz	-43.65 dBm	-30.65 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.98692 GHz	-39.12 dBm	-26.12 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58155 GHz	-38.64 dBm	-25.64 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59408 GHz	-34.93 dBm	-21.93 dB

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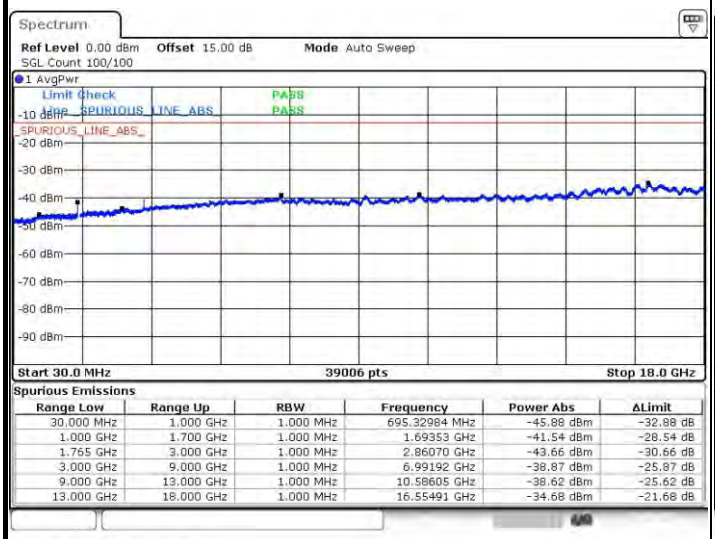
LTE Band 4 / 20MHz

Lowest Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	695.32984 MHz	-45.88 dBm	-32.88 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-41.54 dBm	-28.54 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86070 GHz	-43.66 dBm	-30.66 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99192 GHz	-38.87 dBm	-25.87 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.58605 GHz	-38.62 dBm	-25.62 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.55491 GHz	-34.68 dBm	-21.68 dB

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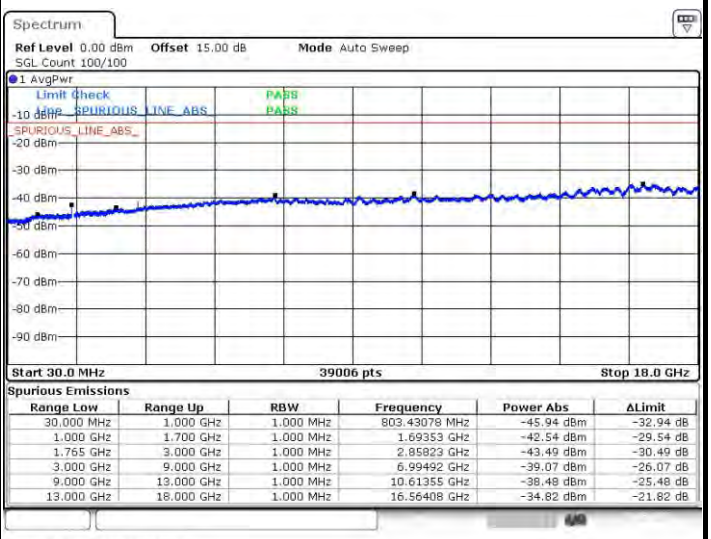
Lowest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	803.43078 MHz	-45.94 dBm	-32.94 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69353 GHz	-42.54 dBm	-29.54 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.85823 GHz	-43.49 dBm	-30.49 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99492 GHz	-39.07 dBm	-26.07 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61355 GHz	-38.48 dBm	-25.48 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.56408 GHz	-34.82 dBm	-21.82 dB

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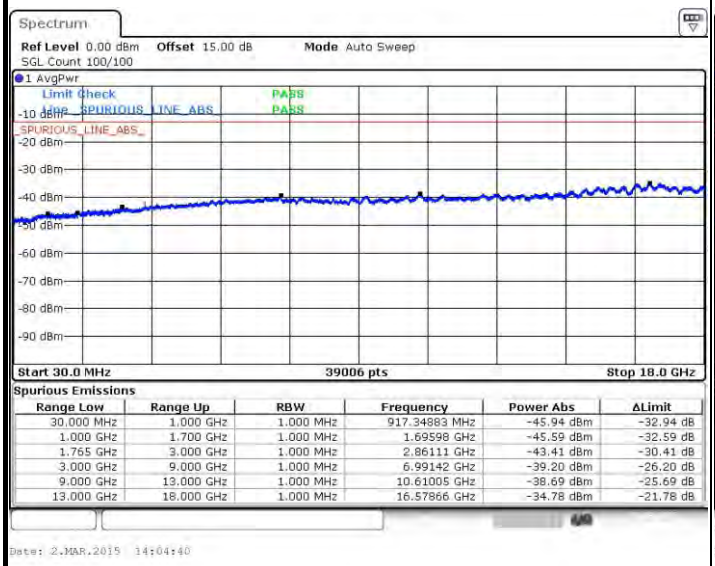
LTE Band 4 / 20MHz

Middle Channel / QPSK



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	917.34883 MHz	-45.94 dBm	-32.94 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69598 GHz	-45.59 dBm	-32.59 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.86111 GHz	-43.41 dBm	-30.41 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99142 GHz	-39.20 dBm	-26.20 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61005 GHz	-38.69 dBm	-25.69 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.57866 GHz	-34.78 dBm	-21.78 dB

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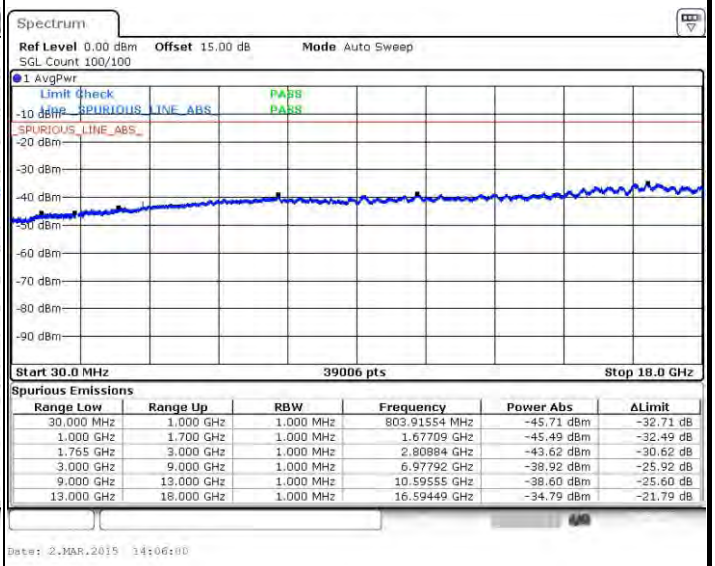
Middle Channel / 16QAM

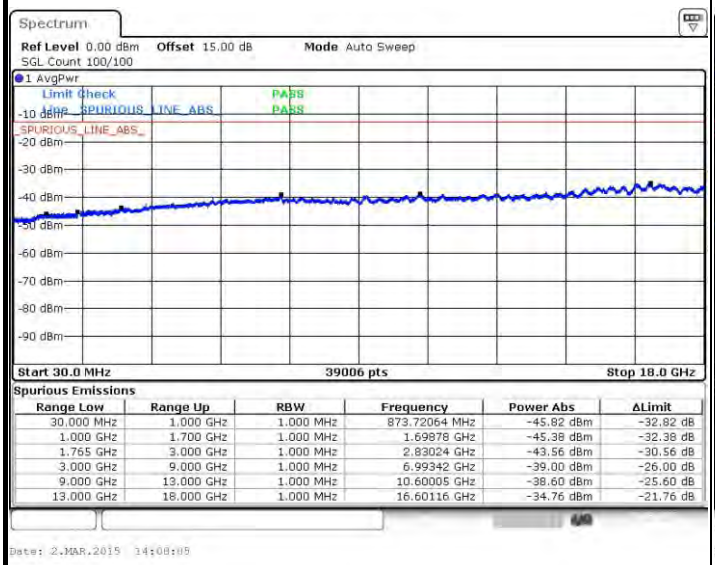


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	803.91554 MHz	-45.71 dBm	-32.71 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.67709 GHz	-45.49 dBm	-32.49 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.80884 GHz	-43.62 dBm	-30.62 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97792 GHz	-38.92 dBm	-25.92 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.59555 GHz	-38.60 dBm	-25.60 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.59449 GHz	-34.79 dBm	-21.79 dB

Date: 2.MAR.2015 14:06:00

Highest Channel / QPSK

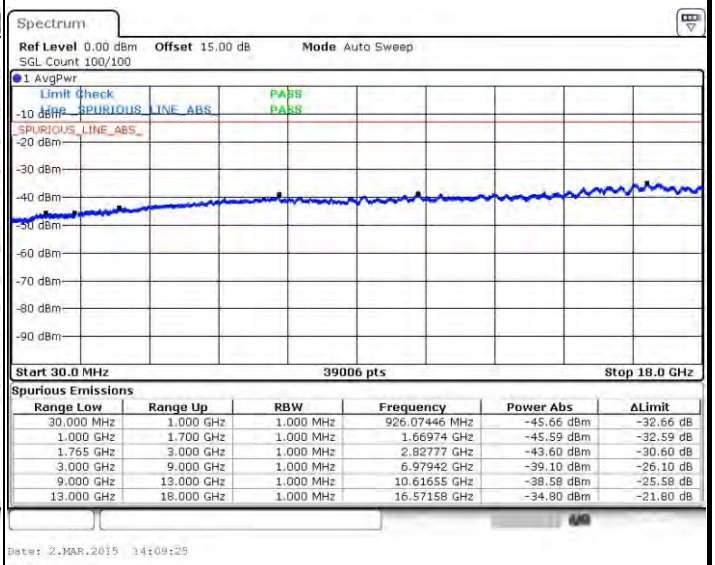


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	873.72064 MHz	-45.82 dBm	-32.82 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.69878 GHz	-45.38 dBm	-32.38 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.83024 GHz	-43.56 dBm	-30.56 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.99342 GHz	-39.00 dBm	-26.00 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.60005 GHz	-38.60 dBm	-25.60 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.60116 GHz	-34.76 dBm	-21.76 dB

Date: 2.MAR.2015 14:08:05

Highest Channel / 16QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	926.07446 MHz	-45.66 dBm	-32.66 dB
1.000 GHz	1.700 GHz	1.000 MHz	1.66974 GHz	-45.59 dBm	-32.59 dB
1.765 GHz	3.000 GHz	1.000 MHz	2.82777 GHz	-43.60 dBm	-30.60 dB
3.000 GHz	9.000 GHz	1.000 MHz	6.97942 GHz	-39.10 dBm	-26.10 dB
9.000 GHz	13.000 GHz	1.000 MHz	10.61655 GHz	-38.58 dBm	-25.58 dB
13.000 GHz	18.000 GHz	1.000 MHz	16.57158 GHz	-34.80 dBm	-21.80 dB

Date: 2.MAR.2015 14:09:25

Frequency Stability

Test Conditions		LTE Band 4 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0006	PASS
40	Normal Voltage	0.0002	
30	Normal Voltage	0.0004	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0002	
0	Normal Voltage	0.0005	
-10	Normal Voltage	0.0002	
-20	Normal Voltage	0.0004	
-30	Normal Voltage	0.0002	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage = 3.8V. ；Battery End Point (BEP) = 3.5 V.；Maximum Voltage =4.35 V
2. Note: The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.