FCC Test Report

Equipment	:	**OH-335 LTE Cat. 6 Outdoor CPE**
Brand Name	:	**Greenpacket**
Model No.	:	**OH-335**
FCC ID	:	**W9V-OH335-GP**
FCC Standard	:	**47 CFR FCC Part 90(Z)**
LTE Band	:	**XLIII**
FCC Classification	:	**TNB**
Applicant	:	**Green Packet Berhad, Taiwan** 6F, No.21, Lane 583, Rueiguang Rd. Neihu District, Taipei City 11492, Taiwan
Manufacturer	:	**Green Packet Berhad, Taiwan** 1. 6F, No.21, Lane 583, Rueiguang Rd. Neihu District, Taipei City 11492, Taiwan 2. Room A68, 3F, 151, Huaqiang Bld., Keyuan Road, Zhangjiang Hi-Tech Park, Pudong New District, Shanghai 201203, PRC

The product sample received on Sep. 06, 2016 and completely tested on Nov. 23, 2016. We, SPORTON, would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI/TIA-603-D-2010 and shown compliance with the applicable technical standards.
The test results in this report apply exclusively to the tested model / sample. Wit1j6hout written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.

Reviewed by:

Kevin Liang / Assistant Manager

Testing Laboratory
1190

Table of Contents

Summary of Test Result

Test Specifications					
Report Clause	**FCC Std. Clause**	**Description**	**Measured**	**Limit**	**Result**
3.1	2.1049 90.1323	Emission Bandwidth	Bandwidth 19.48MHz	Information for Emission Designator	Complied
3.1.6	2.1047	Emission Designator	G7D, W7D	Information only	Complied
3.2	2.1046	Transmitter Conducted Output Power	Conducted Power 32.89dBm EIRP	25W/25MHz EIRP	Complied
3.3	90.1321	Peak EIRP Density	29.41W/MHz EIRP	≤1W/MHz EIRP	Complied
3.4	2.1051 90.1323	Transmitter Conducted Bandedge Emissions	refer to test data	≤43+10log(P) [-13dBm] P=TX Power in Watts	Complied
3.5	90.210	Emission Mask	refer to test data	Mask B	Complied
3.6	2.1051 90.1323	Transmitter Conducted Unwanted Emissions	refer to test data	≤43+10log(P) [-13dBm] P=TX Power in Watts	Complied
3.7	2.1055	Frequency Stability	0.0075ppm	within band	Complied
3.8	2.1053 90.1323	Transmitter Radiated Unwanted Emissions	[dBm]: 7336.8MHz -32.33 (Margin19.33dB)	≤43+10log(P) [-13dBm] P=TX Power in Watts	Complied

Revision History

Report No.	Version	Description	Issued Date
FG690511TN	Rev. 01	Initial issue of report	Nov. 25, 2016
FG690511TN	Rev. 02	Update FCC Classification Update Emission Designator code Update Power Add Accessories: two cores	Dec. 02, 2016
FG690511TN	Rev. 03	Add Adaptivity data	Dec. 08, 2016
FG690511TN	Rev. 04	Remove Adaptivity data	Jan. 16, 2017

1 General Description

1.1 Information

1.1.1 RF General Information

RF General Information						
Mode	TX Ch. Freq. (MHz)	Channel Number	BW (MHz)	Emission Designator	Max. EIRP	
					(dBm)	(W)
Band 43	3652.5-3697.5	44115-44565	5-20	17M9W7D	32.89	1.9454
Type of modulation : QPSK / 16QAM						

1.1.2 Antenna Information

Antenna Category	
☐	Equipment placed on the market without antennas
☒	Integral antenna (antenna permanently attached)
	☒ Temporary RF connector provided
	☐ No temporary RF connector provided Transmit chains bypass antenna and soldered temporary RF connector provided for connected measurement. In case of conducted measurements the transmitter shall be connected to the measuring equipment via a suitable attenuator and correct for all losses in the RF path.
☐	External antenna (dedicated antennas)

Antenna General Information				
Operating Band	Ant. Cat.	Ant. Type	Connector	Gain (dBi)
Band 43	Integral	Embedded	I-pex	10

1.1.3 Type of EUT

Identify EUT	
EUT Serial Number	N/A
HW Ver. / FW Ver.	N/A
Presentation of Equipment	☒ Production ; ☐ Pre-Production ; ☐ Prototype
Type of EUT	
☒	Stand-alone
☐	Combined (EUT where the radio part is fully integrated within another device) Combined Equipment - Brand Name / Model No.: …
☐	Plug-in radio (EUT intended for a variety of host systems) Host System - Brand Name / Model No.: …
☐	Other:

1.1.4 EUT Operational Condition

Supply Voltage	☐ AC mains	☒ DC	
Type of DC Source	☐ Internal DC supply	☐ External AC adapter	☒ PoE
Test Voltage	☒ Vnom (12V)	☒ Vmax (13.8 V)	☒ Vmin (10.2V)
Test Climatic	☒ Tnom (20°C)	☒ Tmax (55°C)	☒ Tmin (-40°C)

1.2 Testing Applied Standards

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

- 47 CFR FCC Part 90(Z)
- ANSI/TIA-603-D-2010
- KDB 971168 D01 v02r02
- KDB 412172 D01 v01r01
- KDB 552295 D01 v02r02
- KDB 965270 D01 v01

1.3 Testing Location Information

Testing Location					
☒	HWA YA	ADD : No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.			
		TEL : 886-3-327-3456 FAX : 886-3-327-0973			
Test Condition	**Test Site No.**	**Test Engineer**	**Test Environment**	**Test Date**	
RF Conducted	TH01-HY	Candy Wu	24.3°C / 62%	23/11/2016	
Radiated Emission	03CH03-HY	Jeff Lin	24.2°C / 57%	20/11/2016	

Test site registered number [553509] with FCC.

1.4 Measurement Uncertainty

ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report. The measurement uncertainties given below are based on a 95% confidence level (based on a coverage factor (k=2)

Measurement Uncertainty		
Test Item		**Uncertainty**
AC power-line conducted emissions		±2.2 dB
Emission bandwidth		±1.4 %
RF output power, conducted		±0.6 dB
Unwanted emissions, conducted	30 – 1000 MHz	±0.5 dB
	1 – 18 GHz	±0.6 dB
	18 – 40 GHz	±0.8 dB
	40 – 200 GHz	N/A
All emissions, radiated	30 – 1000 MHz	±2.5 dB
	1 – 18 GHz	±3.5 dB
	18 – 40 GHz	±3.8 dB
	40 – 200 GHz	N/A
Temperature		±0.8 °C
Humidity		±3 %
DC and low frequency voltages		±3 %
Time		±1.4 %
Duty Cycle		±1.4 %

2 Test Configuration of EUT

2.1 Frequency List of Low/Middle/High Channels

BW (MHz)	Channel/Freq.(MHz)	Lowest	Middle	Highest
20	Channel	44190	44340	44490
	Freq.(MHz)	3660	3675	3690
15	Channel	44165	44340	44515
	Freq.(MHz)	3657.5	3675	3692.5
10	Channel	44140	44340	44540
	Freq.(MHz)	3655	3675	3695
5	Channel	44115	44340	44565
	Freq.(MHz)	3652.5	3675	3697.5

2.2 Test Mode

Test Items	Band	Bandwidth (MHz)				Modulation		RB#			Test Channel		
		5	10	15	20	QPSK	16QAM	1	Half	Full	L	H	M
Transmitter Conducted Output Power	43	v	v	v	v	v	v	v	v	v	v	v	v
EIRP	43	v	v	v	v	v	v	v	-	-	v	v	v
Peak EIRP Density	43	v	v	v	v	v	v	v	-	-	v	v	v
Emission Bandwidth	43	v	v	v	v	v	v	-	-	v	v	v	v
Conducted Band Edge	43	v	v	v	v	v	v	v	-	v	v	-	v
Emission Mask	43	v	v	v	v	v	v	v	-	v	v	v	v
Conducted Spurious Emission	43	v	v	v	v	v	v	v	-	-	v	v	v
Frequency Stability	43	-	v	-	-	v	-	-	-	v	-	-	v
Radiated Spurious Emission	43	v	v	v	v	v	-	v	-	-	-	v	-
Adaptivity	43	v	v	v	v	v	-	v	-	-	v	v	-
Note	1. The mark “v “ means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.												

2.3 The Worst Case Measurement Configuration

The Worst Case Mode for Following Conformance Tests	
Tests Item	Transmitter Conducted Output Power Peak EIRP Density Emission Bandwidth Conducted Band Edge Emission Mask Conducted Spurious Emission Frequency Stability Effective Isotropic Radiated Power (EIRP)
Test Condition	Conducted measurement at transmit chains
Modulation Mode	LTE

The Worst Case Mode for Following Conformance Tests		
Tests Item	Radiated Spurious Emission	
Test Condition	Radiated measurement	
Modulation Mode	LTE	
User Position	☒	EUT will be placed in fixed position.
	☐	EUT will be placed in mobile position and operating multiple positions.
	☐	EUT will be a hand-held or body-worn battery-powered devices and operating multiple positions.
Orthogonal Planes of EUT	**X Plane**	
		
Worst Planes of EUT	V	

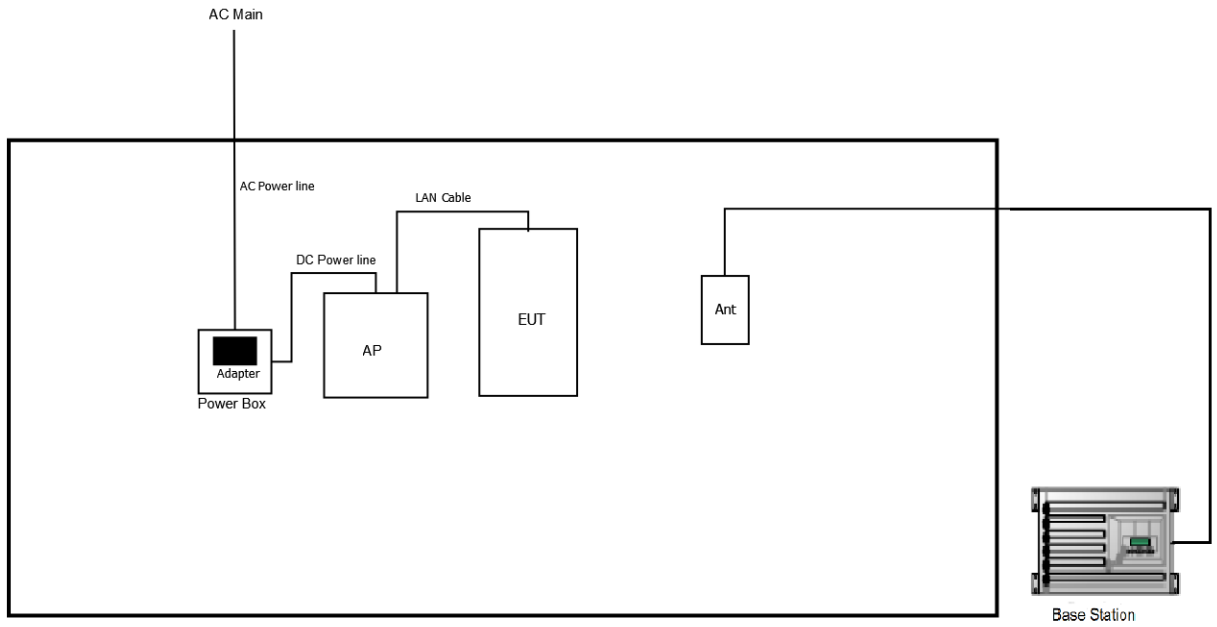
2.4 Accessories and Support Equipment

Accessories				
Greenpacket Wi-Fi 11ac/b/g/n Router	Brand Name	Greenpacket	Model Name	WA-1200
AC Adapter 1	Brand Name	Asian Power Device	Model Name	WA-24Q12R
	Power Rating	I/P: 100 - 240 Vac ~50/60Hz 0.7 A, O/P: 12V, 2A		
	Power Cord	1.14 meter, non-shielded cable, with w/o ferrite core		
AC Adapter 2	Brand Name	SWITCHING POWER SUPPLY	Model Name	S024AMM1200200
	Power Rating	I/P: 100- 240 Vac ~50/60Hz 600 mA, O/P: 12V, 2000 mA		
	Power Cord	1.2 meter, non-shielded cable, with w/o ferrite core		
RJ45 Cable 1	Category	5E	Model Name	E485131
	Power Cord	1.5 meter, shield or non-shielded cable		
RJ45 Cable 2	Category	5E	Model Name	E473734
	Power Cord	1.5 meter, shield or non-shielded cable		
CORE	-	core code :130		
CORE	-	core code :130		

Support Equipment- Conducted			
No.	**Equipment**	**Brand Name**	**Model Name**
1	SIM card	-	-

2.5 Test Setup Diagram

Test Setup Diagram - Radiated Test



3 Transmitter Test Result

3.1 Emission Bandwidth

3.1.1 Emission Bandwidth Limit

Emission Bandwidth Limit
Information for Emission Designator.
Note 1: The 99% occupied bandwidth is the frequency bandwidth of the signal power at the 99% channel power of occupied bandwidth when resolution bandwidth should be approximately 1 % to 5 % of the span. These measurements shall also be performed at normal test conditions.

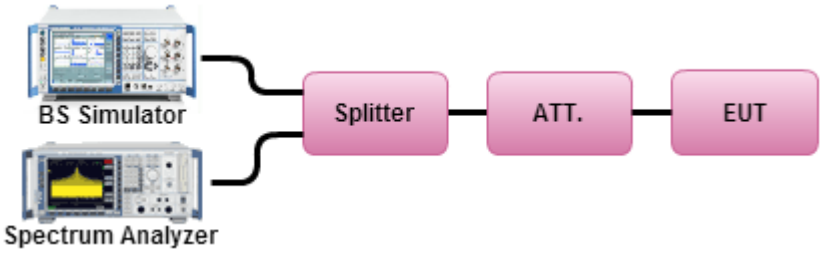
3.1.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.1.3 Test Procedures

Test Method		
☒	For the emission bandwidth shall be measured using one of the options below:	
	☐	Refer as ANSI/TIA-603-D, clause 1.3.4.4 for test bandwidth.
	☒	Refer as KDB 971168 D01, clause 4 for occupied bandwidth.
	☐	Refer as IC RSS-Gen, clause 6.6 for emission bandwidth.
☒	For conducted measurement.	
	☒	If EUT supports single transmit chain and measurements performed on this transmit chain.
	☐	If EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
	☐	If EUT supports multiple transmit chains using options given below:
		☐ Option 1: Multiple transmit chains measurements need to be performed on one of the active transmit chains (antenna outputs). All measurement had be performed on transmit chains 1.
		☐ Option 2: Multiple transmit chains measurements need to be performed on each transmit chains individually (antenna outputs). All measurement had be performed on all transmit chains.
☐	For radiated measurement. The equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted power level.	

3.1.4 Test Setup

Emission Bandwidth


3.1.5 Test Result of Emission Bandwidth

Refer as Appendix A

3.1.6 Emission Designator

Refer as Appendix A

3.2 Transmitter Conducted Output Power and EIRP

3.2.1 Transmitter Conducted Output Power Limit

Transmitter Conducted Output Power Limit
Information for RF exposure

3.2.2 EIRP Limit

EIRP Limit
25Watts/25MHz

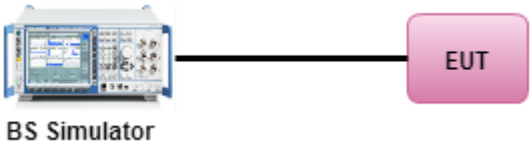
3.2.3 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.2.4 Test Procedures

Test Method	
☒	Transmitter Conducted Output Power
	☒ Refer as KDB 971168 D01, clause 5 for RF power output.
☒	EIRP
	☒ Refer as KDB 412172, clause 1.2 following as power approach. EIRP= $P_T+G_T+L_{C.}$
☒	For conducted measurement.
	☒ If EUT supports single transmit chain and measurements performed on this transmit chain.
	☐ If EUT supports diversity transmitting and the results on transmit chain port 1 is the worst case.
	☐ If EUT supports multiple transmit chains using options given below: Refer as FCC KDB 662911, In-band power measurements. Using the measure-and-sum approach, measured all transmit ports individually. Sum the power (in linear power units e.g., mW) of all ports for each individual sample and save them.

3.2.5 Test Setup

Transmitter Conducted Output Power


3.2.6 Test Result of Transmitter Conducted Output Power

Refer as Appendix B

3.2.7 Test Result of E.I.R.P

Refer as Appendix B

3.3 Peak E.I.R.P Density

3.3.1 Peak E.I.R.P Density Limit

Peak E.I.R.P Density Limit
In any event, the peak EIRP power density shall not exceed 1 Watt in any one-megahertz slice of spectrum.

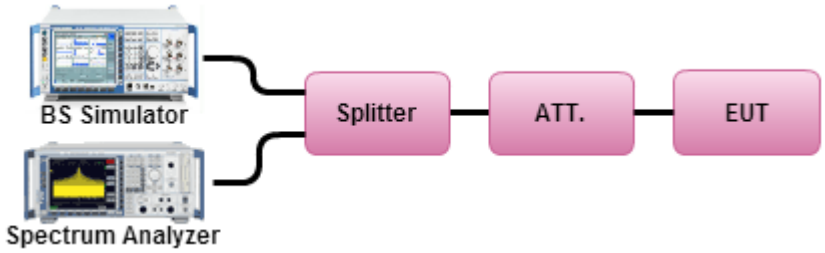
3.3.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.3.3 Test Procedures

Test Method		
☒	Refer as KDB 965270 D01 for Maximum power spectral density measurement	
☐	Refer as RSS-Gen, clause 6.13 for transmitter unwanted emissions measurement.	
☐	In case a narrower measurement bandwidth was used, the following conversion formula has to be applied: (e.g. if reference bandwidth 1 MHz and measurement bandwidth 100 kHz, then measurement bandwidth conversion factor is 10 dB); B = A + 10 log (BW_{ref} / $BW_{measured}$) • A is the value at the narrower measurement bandwidth; • B is the value referred to the reference bandwidth; • Correction Factor(dB)= 10log(1% Emission BW/RBW);	
☒	For conducted measurement.	
	☒	For conducted measurements on devices with single transmit chain.
	☐	For conducted measurements on devices with multiple transmit chains using options given below:
		☐ Option 1: measure and sum the spectra across the transmitter outputs.
		☐ Option 2: N transmitter outputs, then spurious emissions limits on each individual output. Measure and add 10 log (N) dB.

3.3.4 Test Setup

Transmitter Conducted Bandedge Emissions


3.3.5 Test Result of Transmitter Conducted Bandedge Emissions

Refer as Appendix C

3.4 Transmitter Conducted Bandedge Emissions

3.4.1 Transmitter Conducted Bandedge Emissions Limit

Transmitter Conducted Bandedge Emissions Limit
The power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least 43 + 10 log (P) dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or less, but at least one percent of the emission bandwidth of the fundamental emission of the transmitter, provided the measured energy is integrated over a 1 MHz bandwidth.

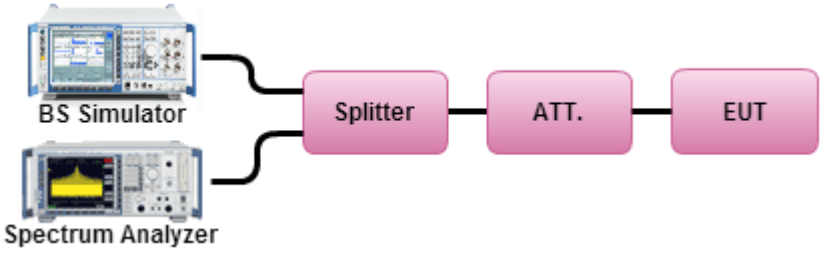
3.4.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.4.3 Test Procedures

Test Method			
☒	Refer as KDB 971168 D01, clause 6 for spurious emissions.		
☐	Refer as RSS-Gen, clause 6.13 for transmitter unwanted emissions measurement.		
☐	In case a narrower measurement bandwidth was used, the following conversion formula has to be applied: (e.g. if reference bandwidth 1 MHz and measurement bandwidth 100 kHz, then measurement bandwidth conversion factor is 10 dB); B = A + 10 log (BW_{ref} / $BW_{measured}$) • A is the value at the narrower measurement bandwidth; • B is the value referred to the reference bandwidth; • Correction Factor(dB)= 10log(1% Emission BW/RBW);		
☒	For conducted measurement.		
	☒	For conducted measurements on devices with single transmit chain.	
	☐	For conducted measurements on devices with multiple transmit chains using options given below:	
		☐	Option 1: measure and sum the spectra across the transmitter outputs.
		☐	Option 2: N transmitter outputs, then spurious emissions limits on each individual output. Measure and add 10 log (N) dB.

3.4.4 Test Setup

Transmitter Conducted Bandedge Emissions


3.4.5 Test Result of Transmitter Conducted Bandedge Emissions

Refer as Appendix D

3.5 Emission Mask

3.5.1 Emission Mask Limit

Emission Mask Limit
(1) On any frequency removed from the assigned frequency by more than 50 percent, but not more than 100 percent of the authorized bandwidth: At least 25 dB. (2) On any frequency removed from the assigned frequency by more than 100 percent, but not more than 250 percent of the authorized bandwidth: At least 35 dB. (3) On any frequency removed from the assigned frequency by more than 250 percent of the authorized bandwidth: At least 43 + 10 log (P) dB.

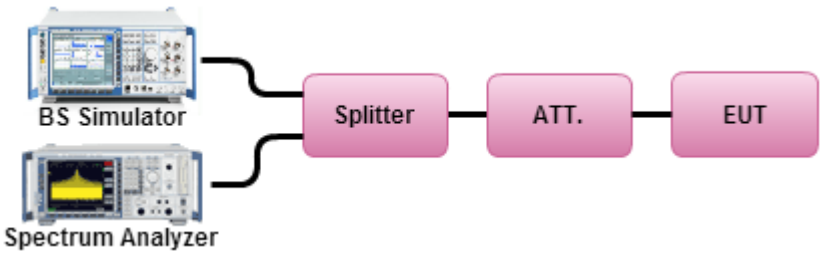
3.5.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.5.3 Test Procedures

Test Method			
☒	Refer as KDB 971168 D01, clause 6 for spurious emissions.		
☐	Refer as RSS-Gen, clause 6.13 for transmitter unwanted emissions measurement.		
☐	In case a narrower measurement bandwidth was used, the following conversion formula has to be applied: (e.g. if reference bandwidth 1 MHz and measurement bandwidth 100 kHz, then measurement bandwidth conversion factor is 10 dB); B = A + 10 log (BW_{ref} / $BW_{measured}$) • A is the value at the narrower measurement bandwidth; • B is the value referred to the reference bandwidth; • Correction Factor(dB)= 10log(1% Emission BW/RBW);		
☒	For conducted measurement.		
	☒	For conducted measurements on devices with single transmit chain.	
	☐	For conducted measurements on devices with multiple transmit chains using options given below:	
		☐	Option 1: measure and sum the spectra across the transmitter outputs.
		☐	Option 2: N transmitter outputs, then spurious emissions limits on each individual output. Measure and add 10 log (N) dB.

3.5.4 Test Setup

Transmitter Conducted Unwanted Emissions


3.5.5 Test Result of Transmitter Conducted Unwanted Emissions

Refer as Appendix E

3.6 Transmitter Conducted Unwanted Emissions

3.6.1 Transmitter Conducted Unwanted Emissions Limit

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

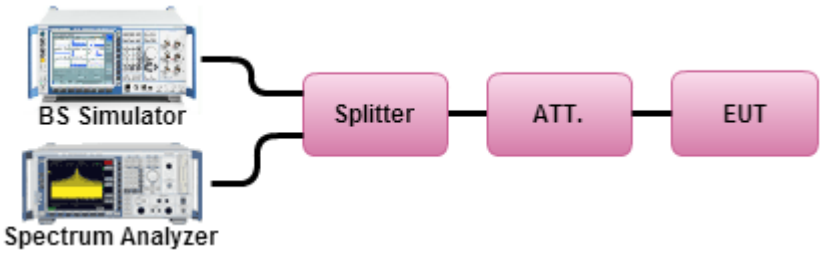
3.6.2 Measuring Instruments

Refer a test equipment and calibration data table in this test report.

3.6.3 Test Procedures

Test Method			
☒	Refer as KDB 971168 D01, clause 6 for spurious emissions.		
☐	Refer as RSS-Gen, clause 6.13 for transmitter unwanted emissions measurement.		
☐	In case a narrower measurement bandwidth was used, the following conversion formula has to be applied: (e.g. if reference bandwidth 1 MHz and measurement bandwidth 100 kHz, then measurement bandwidth conversion factor is 10 dB); B = A + 10 log (BW_{ref} / $BW_{measured}$) • A is the value at the narrower measurement bandwidth; • B is the value referred to the reference bandwidth; • Correction Factor(dB)= 10log(1% Emission BW/RBW);		
☒	For conducted measurement.		
	☒	For conducted measurements on devices with single transmit chain.	
	☐	For conducted measurements on devices with multiple transmit chains using options given below:	
		☐	Option 1: measure and sum the spectra across the transmitter outputs.
		☐	Option 2: N transmitter outputs, then spurious emissions limits on each individual output. Measure and add 10 log (N) dB.

3.6.4 Test Setup

Transmitter Conducted Unwanted Emissions


3.6.5 Test Result of Transmitter Conducted Unwanted Emissions

Refer as Appendix F

3.7 Frequency Stability

3.7.1 Frequency Stability Limit

Frequency Stability Limit	
☒	The transmitter center frequency stability shall be ± 2.5 ppm maximum. The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.
☒	Temperature:
☒	-40°C to +55°C in 10°C step.
☒	If the EUT cannot be turned on at -40°C, the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.
☒	Voltage:
☒	For non hand-carried battery and AC powered equipment: 85% to 115% of the nominal value
☒	For hand-carried, battery-powered equipment: Voltage is reduced to the battery operating end point which shall be specified by the manufacturer.
Note 1: These measurements shall also be performed at normal and extreme test conditions.	

3.7.2 Measuring Instruments

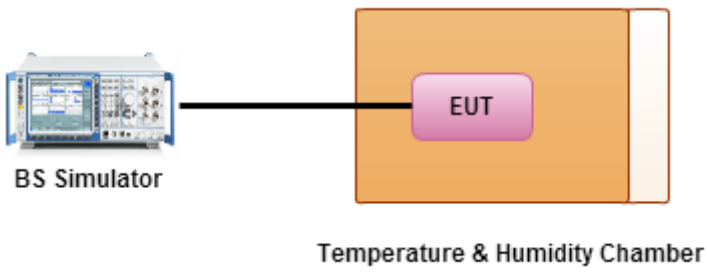
Refer a test equipment and calibration data table in this test report.

3.7.3 Test Procedures

Test Method	
☒	Refer as KDB 971168 D01, clause 9 for frequency stability.
☒	Frequency stability with respect to ambient temperature
☒	Frequency stability when varying supply voltage
☒	For conducted measurement.
☐	For radiated measurement. The equipment to be measured and the test antenna shall be oriented to obtain the maximum emitted power level.

3.7.4 Test Setup

Frequency Stability



3.7.5 Test Result of Frequency Stability

Refer as Appendix G

3.8 Transmitter Radiated Unwanted Emissions

3.8.1 Transmitter Radiated Unwanted Emissions Limit

Transmitter Radiated Unwanted Emissions Limit
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. The spectrum is scanned from 30 MHz up to a frequency including its 10^{th} harmonic.

3.8.2 Measuring Instruments

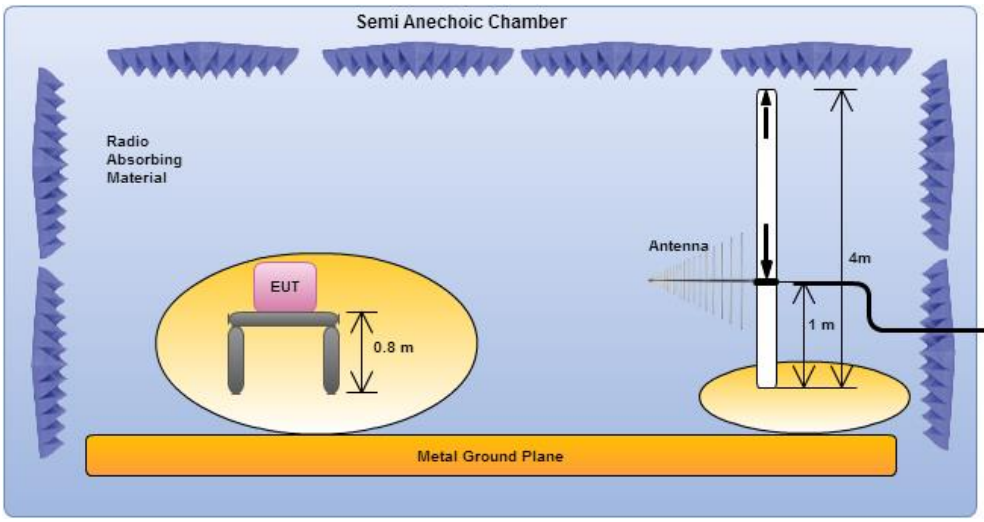
Refer a test equipment and calibration data table in this test report.

3.8.3 Test Procedures

Test Method	
☒	Refer as KDB 971168 D01, clause 6 for spurious emissions.
☒	Refer as RSS-Gen, clause 6.13 for transmitter unwanted emissions measurement.
☐	In case a narrower measurement bandwidth was used, the following conversion formula has to be applied: (e.g. if reference bandwidth 1 MHz and measurement bandwidth 100 kHz, then measurement bandwidth conversion factor is 10 dB) $B = A + 10 \log (BW_{ref} / BW_{measured})$ • A is the value at the narrower measurement bandwidth; • B is the value referred to the reference bandwidth; • Correction Factor(dB)= 10log(1% Emission BW/RBW);
☒	Effective Isotropic Radiated Power (EIRP)
☒	Refer as KDB 412172, clause 1.2 following as power approach. EIRP= $P_T+G_T+L_{C.}$
☐	Refer as KDB 412172, clause 1.1 following as field strength approach. EIRP= $(E \times d)^2 / 30$.
☒	For radiated measurement.
☐	Refer as KDB 412172, clause 2.2 following EIRP can be used radiated test configuration.
☒	Refer as KDB 412172, clause 2.3 following EIRP can be used signal/antenna substitution techniques.
☐	Refer as ANSI/TIA-603-D-2010, clause 2.2.12 for radiated measurement.

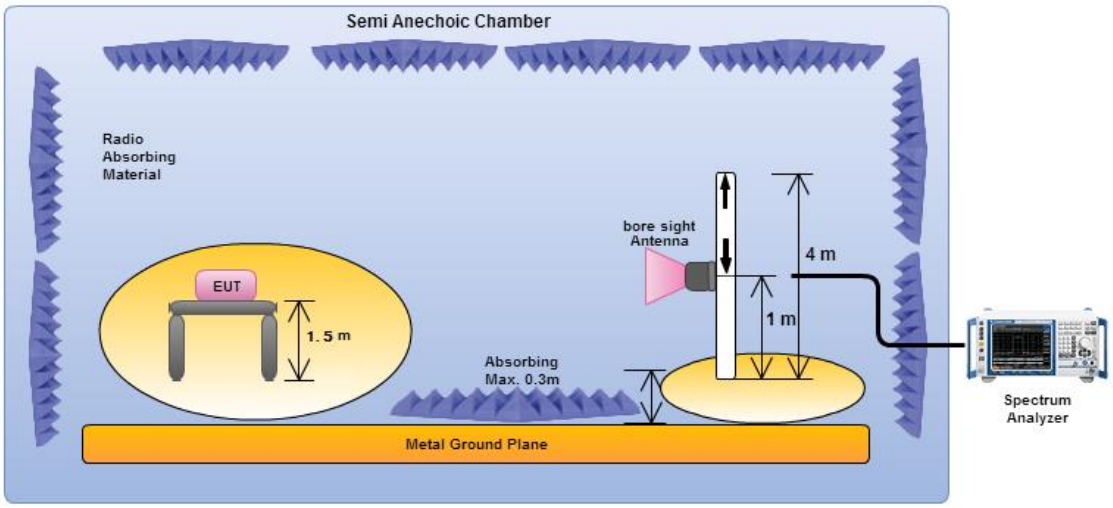
3.8.4 Test Setup

Transmitter Radiated Unwanted Emissions (below 1GHz)



Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna

Transmitter Radiated Unwanted Emissions (Above 1GHz)



Electric field tests shall be performed in the frequency range of 1 GHz to 10th harmonic of highest fundamental frequency or 40 GHz using a calibrated horn antenna.

3.8.5 Test Result of Transmitter Radiated Unwanted Emissions

Refer as Appendix H

4 Test Equipment and Calibration Data

Instrument for Conducted Test

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Radio Communication Analyzer	Anritsu	MT8820C	MY53202219	N/A	03/05/2016	03/05/2017
Spectrum Analyzer	R&S	FSV 40	101013	9KHz~40GHz	16/02/2016	15/02/2017
Temp. and Humidity Chamber	Giant Force	GTH-225-40-CP-AR	MAA1311-008	-40 ~ 100℃	04/05/2016	03/05/2017
DC Power Source	G.W.	GPC-6030D	C671845	DC 1V ~ 60V	27/07/2016	26/07/2017
Radio Communication Analyzer	Anritsu	MT8820C	6201465544	WWAN Station	19/08/2016	18/08/2017

Instrument for Radiated Test

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	30MHz ~ 1GHz 3m	28/11/2015	27/11/2016
3m Semi Anechoic Chamber	SIDT FRANKONIA	SAC-3M	03CH03-HY	1GHz ~ 18GHz 3m	16/12/2015	15/12/2016
Amplifier	HP	8447D	2944A08033	10kHz ~ 1.3GHz	10/05//2016	09/05/2017
Amplifier	Keysight	83017A	MY53270197	1GHz ~ 26.5GHz	29/08/2016	28/08/2017
Spectrum	R&S	FSV40	101513	9kHz ~ 40GHz	16/02/ 2016	15/02/2017
Bilog Antenna	SCHAFFNER	CBL 6112B	2723	30MHz ~ 1GHz	01/10/2016	30/09/2017
Horn Antenna	SCHWARZBECK	BBHA9120D	1531	1GHz ~ 18GHz	22/04/ 2016	21/04/2017
Horn Antenna	SCHWARZBECK	BBHA9170	BBHA9170154	18GHz ~ 40GHz	29/01/ 2016	28/01/2017
Amplifier	MITEQ	JS44-18004000-33-8P	1840917	18GHz ~ 40GHz	02/06/ 2015	01/06/2017
Radio Communication Analyzer	Anritsu	MT8820C	6201465544	WWAN Station	19/08/2016	18/08/2017

Instrument for Adaptivity Test

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Calibration Due Date
Vector Signal Generator	R&S	SMU200A	102098	100kHz ~ 6GHz	22/12/2015	21/12/2016
Spectrum Analyzer	Keysight	N9010A	MY55150165	9kHz~7GHz	28/10/2016	27/10/2017
Radio Communication Analyzer	Anritsu	MT8820C	6201465544	WWAN Station	19/08/2016	18/08/2017

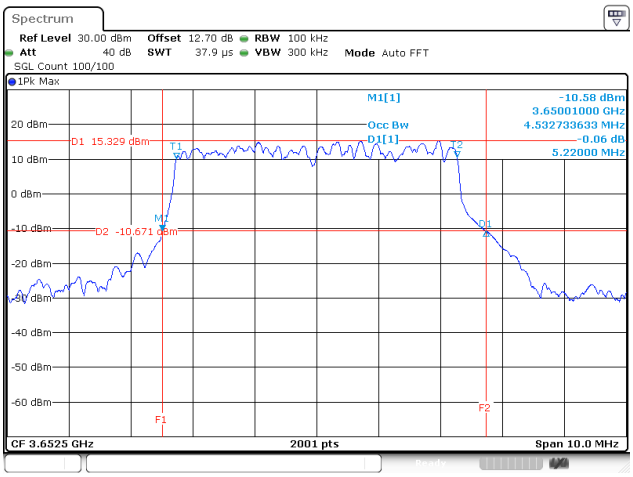
Mode	LTE Band 43: 99%OBW (MHz)							
Bandwidth (MHz)	5		10		15		20	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH.	4.53	4.50	8.92	8.91	13.40	13.35	17.87	17.89
Middle CH.	4.50	4.49	8.86	8.95	13.43	13.46	17.83	17.89
Highest CH.	4.50	4.50	8.88	8.97	13.43	13.38	17.91	17.95

Mode	LTE Band 43 : 26dB bandwidth (MHz)							
Bandwidth (MHz)	5		10		15		20	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH.	5.22	4.88	9.84	9.54	14.56	14.92	18.58	19.32
Middle CH.	5.21	4.89	9.88	9.52	14.41	14.46	18.92	19.9
Highest CH.	5.10	4.88	9.23	9.94	14.59	14.35	19.08	19.48

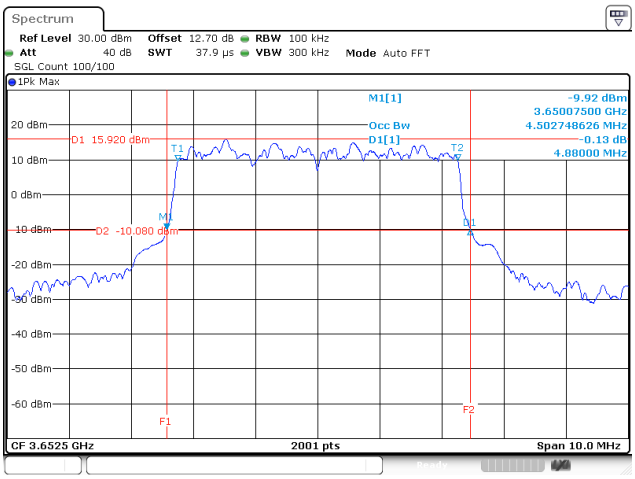
LTE Band 43 Emission Designator		
Bandwidth (MHz)	Mode	Emission Designator
5	QPSK	4M53G7D
	16QAM	4M50W7D
10	QPSK	8M92G7D
	16QAM	8M97W7D
15	QPSK	13M4G7D
	16QAM	13M4W7D
20	QPSK	17M9G7D
	16QAM	17M9W7D

LTE Band 43 / 5MHz

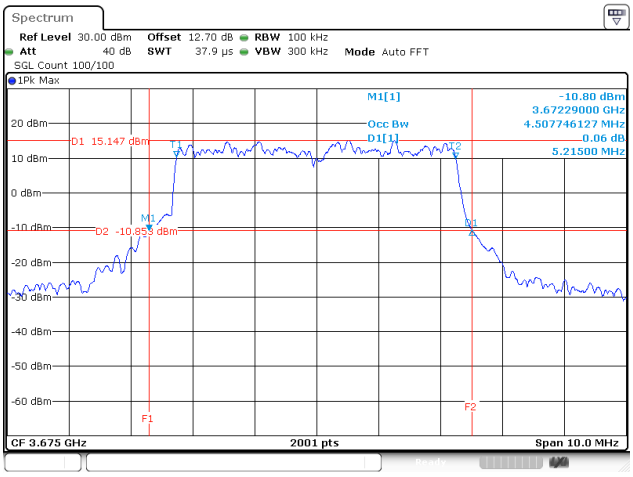
Lowest Channel / QPSK



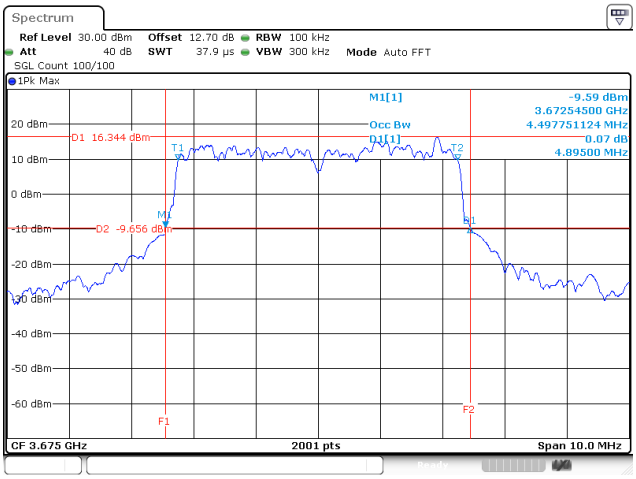
Lowest Channel / 16QAM



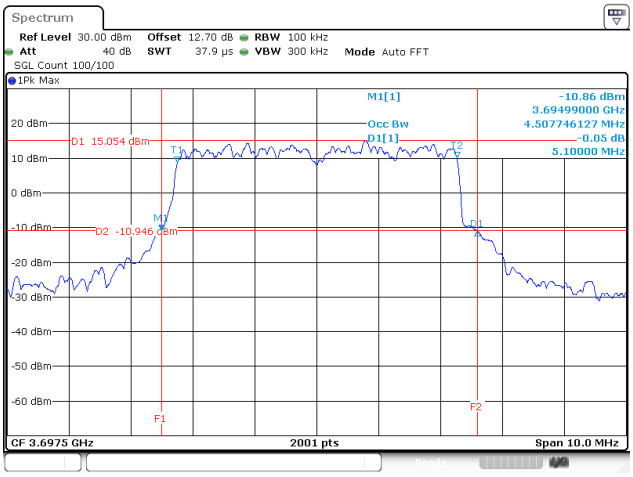
Middle Channel / QPSK



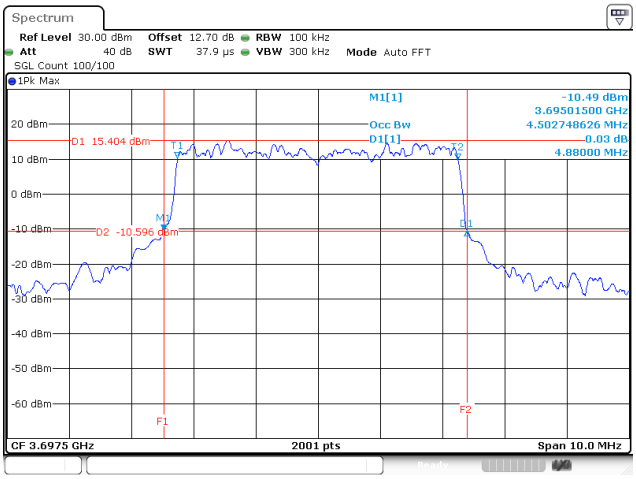
Midddle Channel / 16QAM



Highest Channel / QPSK

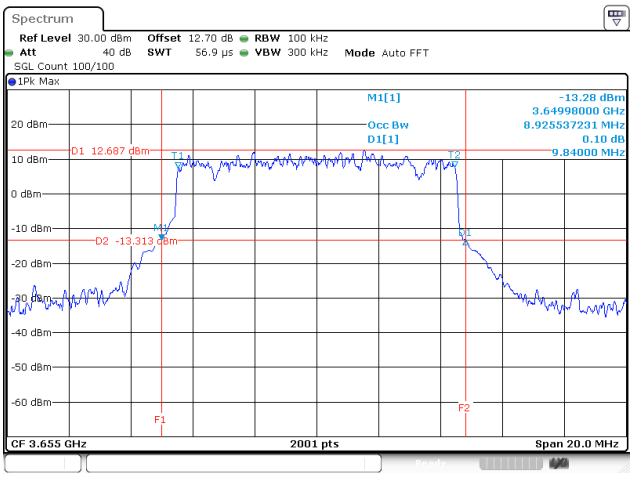


Highest Channel / 16QAM

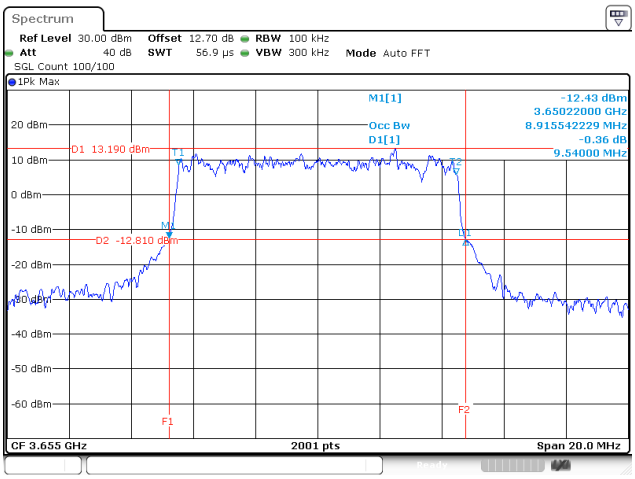


LTE Band 43 / 10MHz

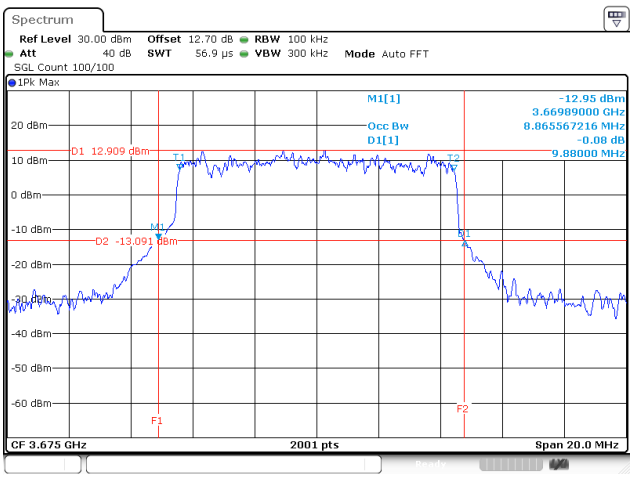
Lowest Channel / QPSK



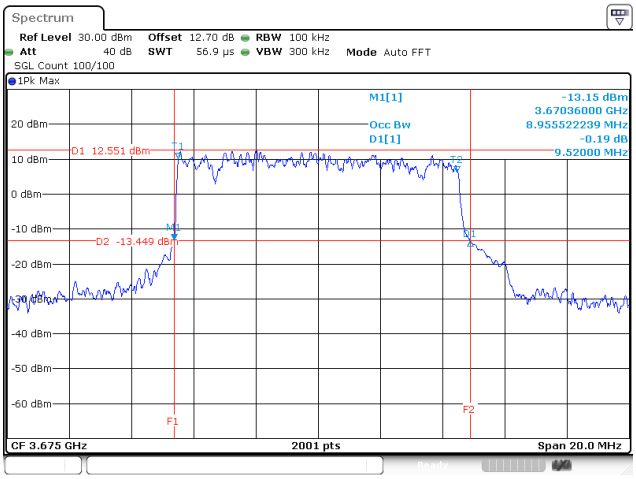
Lowest Channel / 16QAM



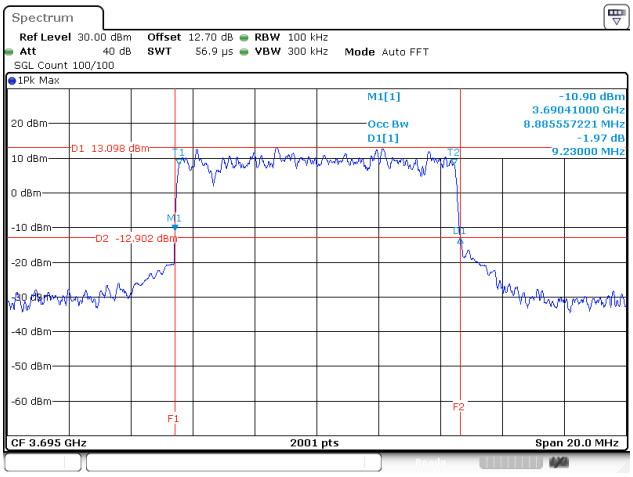
Middle Channel / QPSK



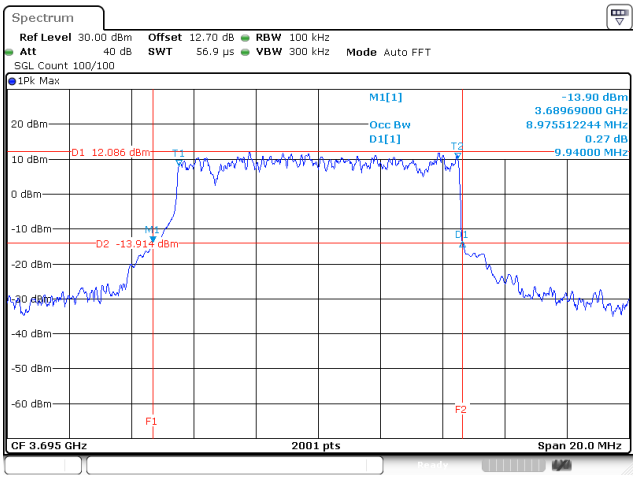
Midddle Channel / 16QAM



Highest Channel / QPSK

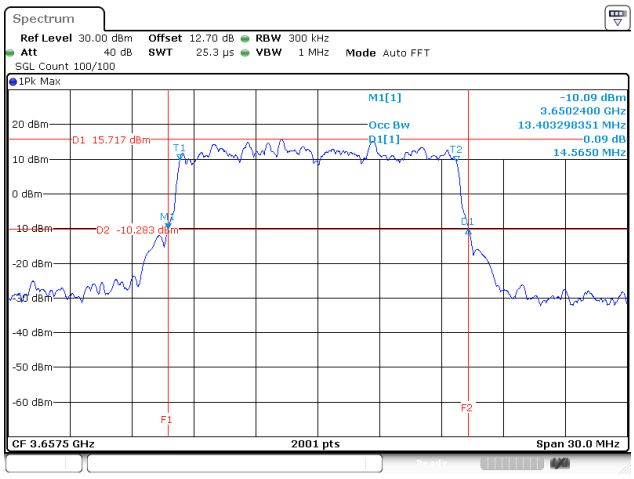


Highest Channel / 16QAM

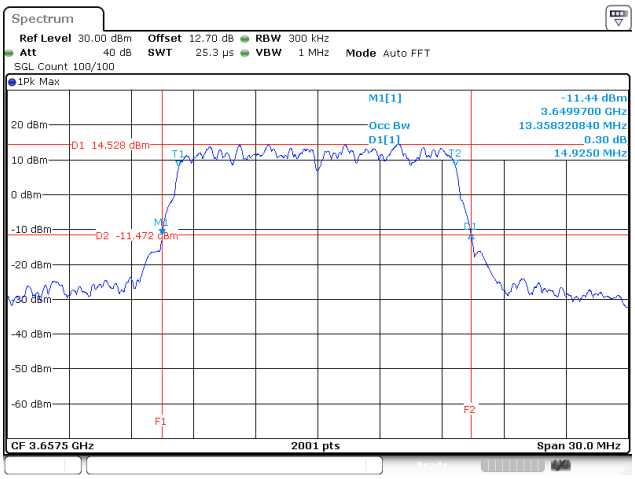


LTE Band 43 / 15MHz

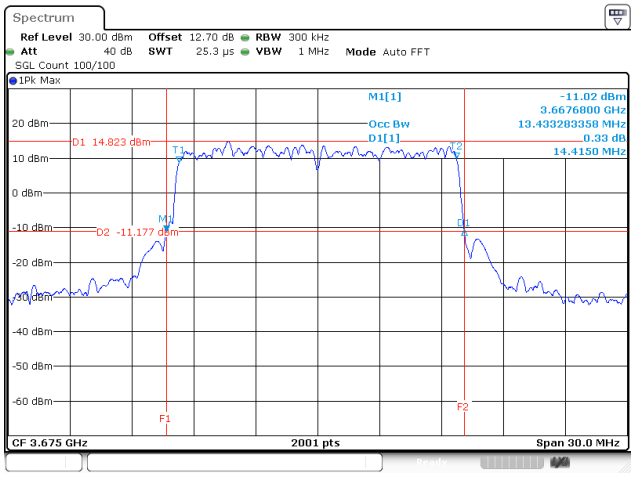
Lowest Channel / QPSK



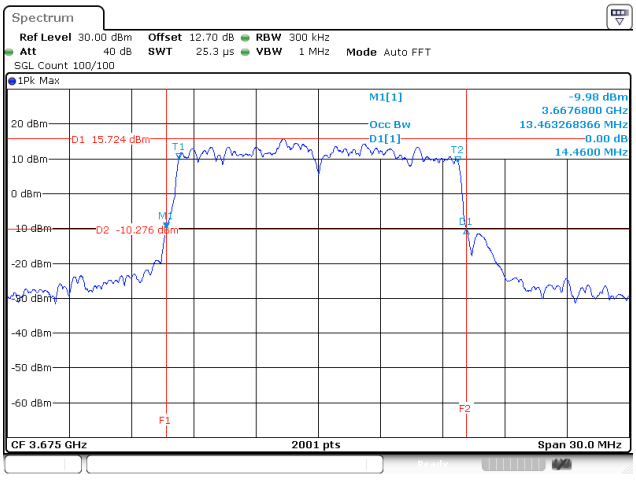
Lowest Channel / 16QAM



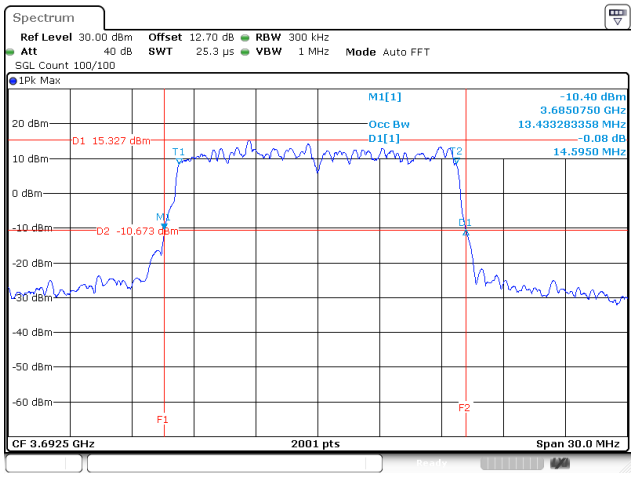
Middle Channel / QPSK



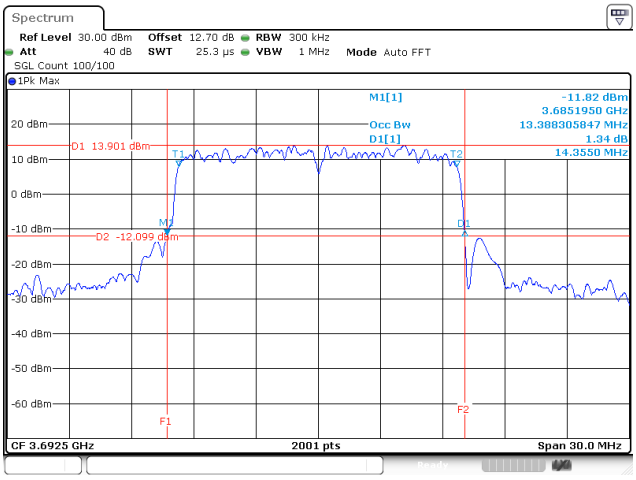
Middle Channel / 16QAM



Highest Channel / QPSK

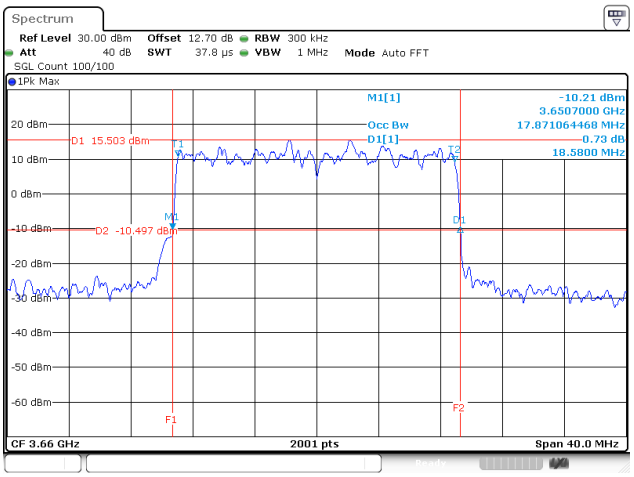


Highest Channel / 16QAM

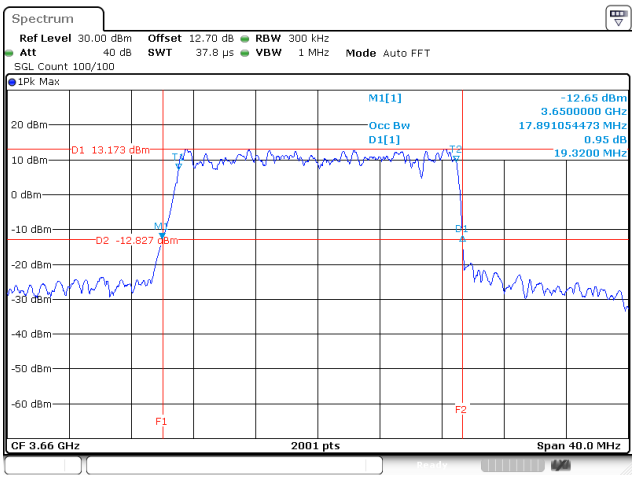


LTE Band 43 / 20MHz

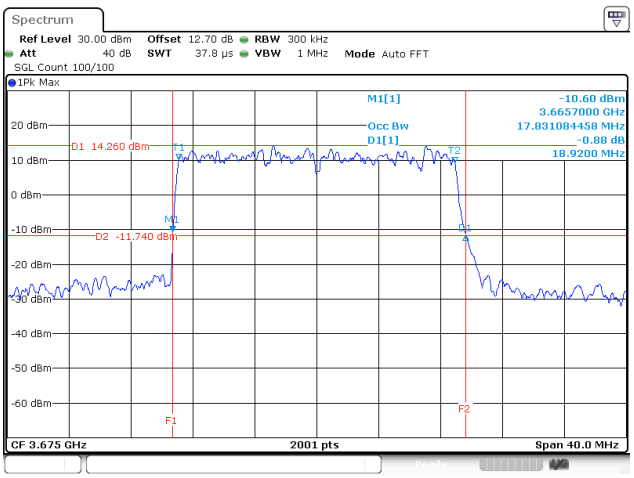
Lowest Channel / QPSK



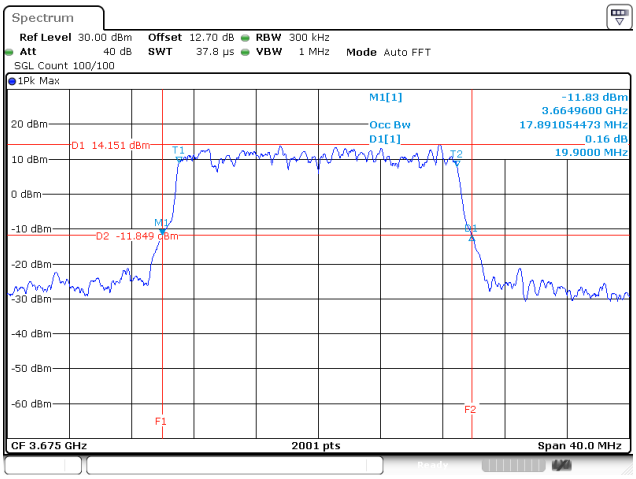
Lowest Channel / 16QAM



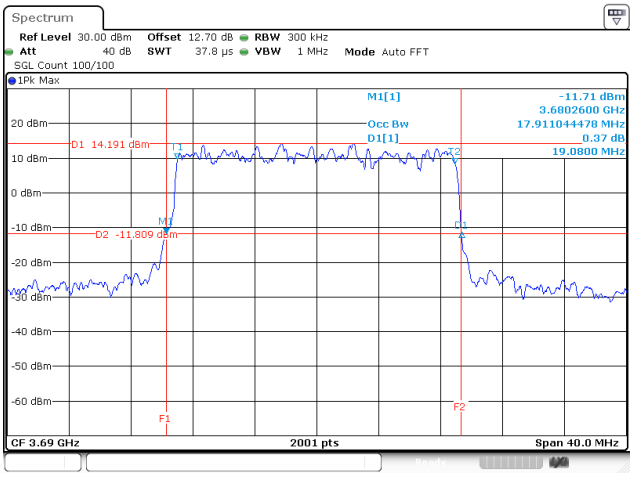
Middle Channel / QPSK



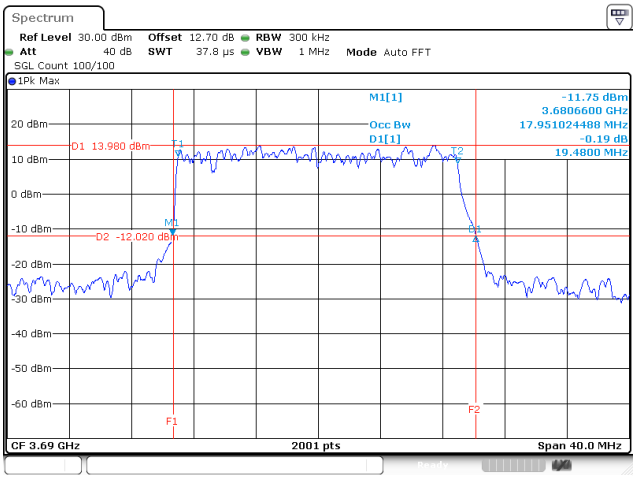
Midddle Channel / 16QAM



Highest Channel / QPSK



Highest Channel / 16QAM



LTE Band 43-Conducted Output Power(Average power)						
BW	**Mod.**	**RB Size**	**RB Offset**	**Lowest CH.**	**Middle CH.**	**Highest CH.**
Channel				**44190**	**44340**	**44490**
Frequency(MHz)				**3660**	**3675**	**3690**
20M	**QPSK**	**1**	**0**	22.89	22.81	22.83
		1	**49**	22.24	22.21	22.26
		1	**99**	22.60	22.64	22.74
		50	**0**	22.52	22.37	22.49
		50	**24**	22.32	22.23	22.37
		50	**50**	22.43	22.3	22.47
		100	**0**	22.52	22.34	22.48
	16QAM	**1**	**0**	22.45	22.41	22.38
		1	**49**	22.40	22.38	22.28
		1	**99**	22.47	22.41	22.31
		50	**0**	21.94	21.77	21.93
		50	**24**	21.73	21.62	21.8
		50	**50**	21.74	21.69	21.9
		100	**0**	21.79	21.72	21.89
Channel				**44165**	**44340**	**44515**
Frequency(MHz)				**3657.5**	**3675**	**3692.5**
15M	**QPSK**	**1**	**0**	22.73	22.70	22.69
		1	**37**	22.61	22.65	22.81
		1	**74**	22.40	22.46	22.65
		36	**0**	22.18	22.17	22.31
		36	**20**	22.04	22.03	22.23
		36	**39**	22.14	22.19	22.37
		75	**0**	22.15	22.16	22.35
	16QAM	**1**	**0**	22.21	22.31	22.19
		1	**37**	22.63	22.56	22.65
		1	**74**	22.15	22.54	22.45
		36	**0**	21.72	21.75	21.88
		36	**20**	21.94	21.92	21.98
		36	**39**	21.68	21.73	21.9
		75	**0**	21.67	21.69	21.86

LTE Band 43-Conducted Output Power(Average power)						
Channel				44140	44340	44540
Frequency(MHz)				3655	3675	3695
10M	QPSK	1	0	22.78	22.74	22.61
		1	25	22.49	22.48	22.53
		1	49	22.22	22.18	22.25
		25	0	22.28	22.13	22.13
		25	12	22.44	22.34	22.35
		25	25	22.23	22.15	22.18
		50	0	22.18	21.96	22.11
	16QAM	1	0	22.24	22.09	22.12
		1	25	22.48	22.31	22.44
		1	49	22.13	21.89	22.11
		25	0	21.96	21.97	21.88
		25	12	21.83	21.49	21.68
		25	25	21.61	21.31	21.54
		50	0	21.54	21.29	21.45
Channel				44115	44340	44565
Frequency(MHz)				3652.5	3675	3697.5
5M	QPSK	1	0	22.64	22.54	22.48
		1	12	22.28	22.14	22.05
		1	24	22.04	22.15	22.11
		12	0	22.24	22.1	21.81
		12	7	22.35	22.21	21.92
		12	13	22.17	21.51	21.82
		25	0	22.25	21.57	21.85
	16QAM	1	0	22.41	22.25	22.31
		1	12	22.04	22.16	22.48
		1	24	22.09	22.13	22.08
		12	0	21.43	21.53	21.84
		12	7	21.54	21.59	21.94
		12	13	21.43	21.46	21.84
		25	0	21.65	21.74	21.88

(G_T-L_C= 10 dB)						
Modes	**LTE Band 43 (QPSK,BW=5M)**			**LTE Band 43 (16QAM,BW=5M)**		
Channel	**44115 (Low)**	**44340 (Mid)**	**44565 (High)**	**44115 (Low)**	**44340 (Mid)**	**44565 (High)**
Frequency (MHz)	**3652.5**	**3675**	**3697.5**	**3652.5**	**3675**	**3697.5**
Conducted power P_T (dBm)	22.64	22.54	22.48	22.41	22.25	22.48
Conducted power P_T (Watts)	0.1837	0.1795	0.1770	0.1742	0.1679	0.1770
EIRP (dBm)	32.64	32.54	32.48	32.41	32.25	32.48
EIRP (Watts)	1.8365	1.7947	1.7701	1.7418	1.6788	1.7701

(G_T-L_C= 10 dB)						
Modes	**LTE Band 43 (QPSK,BW=10M)**			**LTE Band 43 (16QAM,BW=10M)**		
Channel	**44140 (Low)**	**44340 (Mid)**	**44540 (High)**	**44140 (Low)**	**44340 (Mid)**	**44540 (High)**
Frequency (MHz)	**3655**	**3675**	**3695**	**3655**	**3675**	**3695**
Conducted power P_T (dBm)	22.78	22.74	22.61	22.48	22.31	22.44
Conducted power P_T (Watts)	0.1897	0.1879	0.1824	0.1770	0.1702	0.1754
EIRP (dBm)	32.78	32.74	32.61	32.48	32.31	32.44
EIRP (Watts)	1.8967	1.8793	1.8239	1.7701	1.7022	1.7539

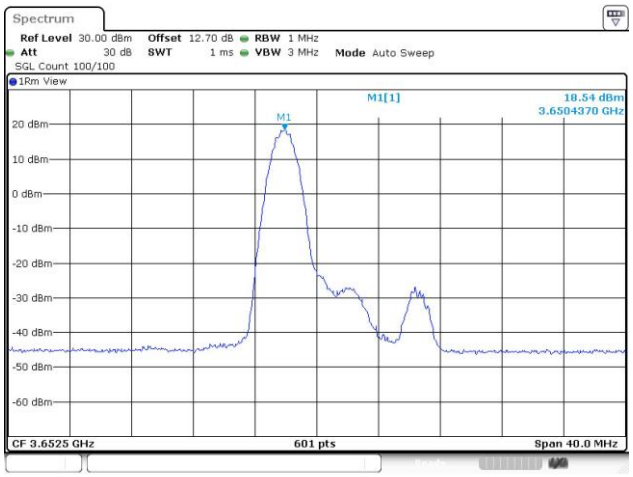
(G_T-L_C= 10 dB)						
Modes	**LTE Band 43 (QPSK,BW=15M)**			**LTE Band 43 (16QAM,BW=15M)**		
Channel	**44165 (Low)**	**44340 (Mid)**	**44515 (High)**	**44165 (Low)**	**44340 (Mid)**	**44515 (High)**
Frequency (MHz)	**3657.5**	**3675**	**3692.5**	**3657.5**	**3675**	**3692.5**
Conducted power P_T (dBm)	22.73	22.7	22.81	22.63	22.56	22.65
Conducted power P_T (Watts)	0.1875	0.1862	0.1910	0.1832	0.1803	0.1841
EIRP (dBm)	32.73	32.7	32.81	32.63	32.56	32.65
EIRP (Watts)	1.8750	1.8621	1.9099	1.8323	1.8030	1.8408

(G_T-L_C= 10 dB)						
Modes	**LTE Band 43 (QPSK,BW=20M)**			**LTE Band 43 (16QAM,BW=20M)**		
Channel	**44190 (Low)**	**44340 (Mid)**	**44490 (High)**	**44190 (Low)**	**44340 (Mid)**	**44490 (High)**
Frequency (MHz)	**3660**	**3675**	**3690**	**3660**	**3675**	**3690**
Conducted power P_T (dBm)	22.89	22.81	22.83	22.47	22.41	22.38
Conducted power P_T (Watts)	0.1945	0.1910	0.1919	0.1766	0.1742	0.1730
EIRP (dBm)	32.89	32.81	32.83	32.47	32.41	32.38
EIRP (Watts)	1.9454	1.9099	1.9187	1.7660	1.7418	1.7298

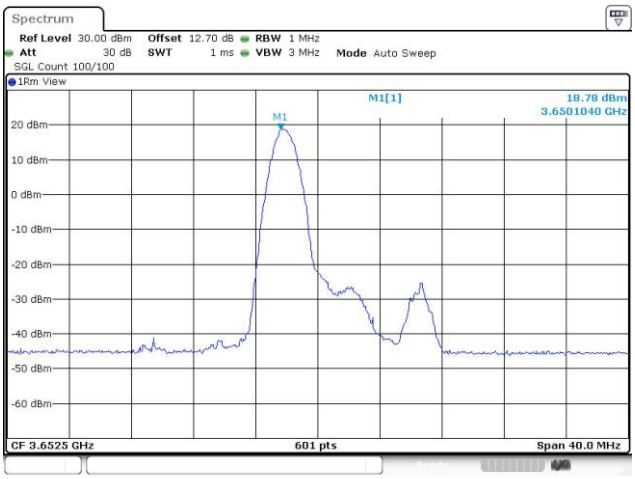
Mode	LTE Band 43 : Peak EIRP Density (dBm/MHz)								
Bandwidth (MHz)	5		10		15		20		Limit (dBm/MHz)
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	
Lowest CH.	28.54	28.78	28.3	28.94	27.61	27.85	29.14	29.35	30
Middle CH.	28.37	28.83	28.2	28.85	27.9	27.43	29.35	29.41	30
Highest CH.	28.52	28.64	28.21	28.19	27.68	27.61	29.33	29.24	30

LTE Band 43 / 5MHz

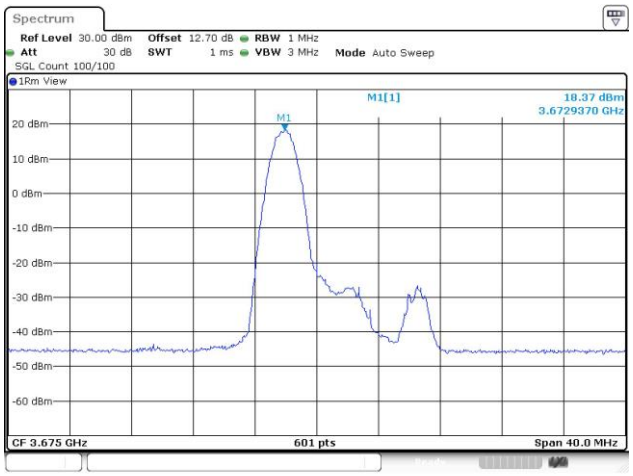
Lowest Channel / QPSK



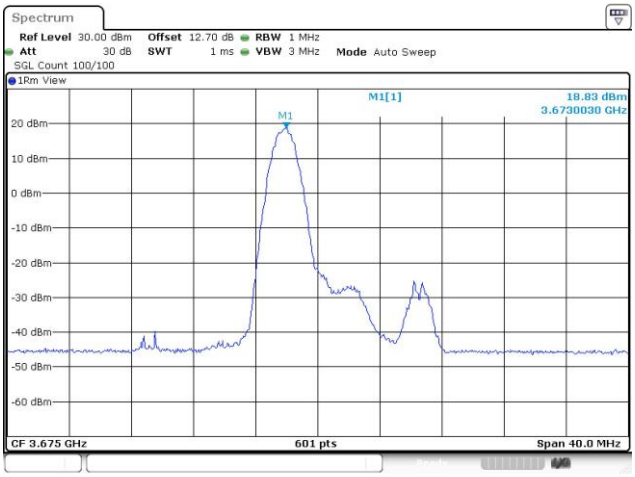
Lowest Channel / 16QAM



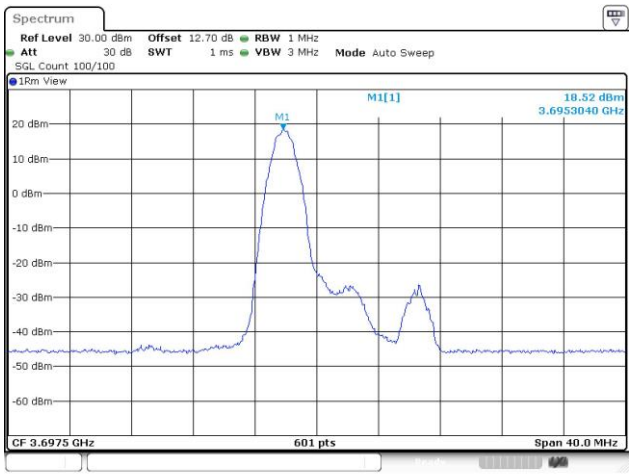
Middle Channel / QPSK



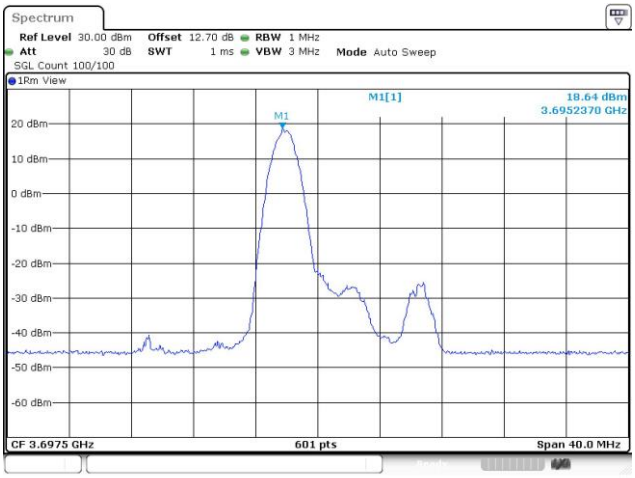
Midddle Channel / 16QAM



Highest Channel / QPSK

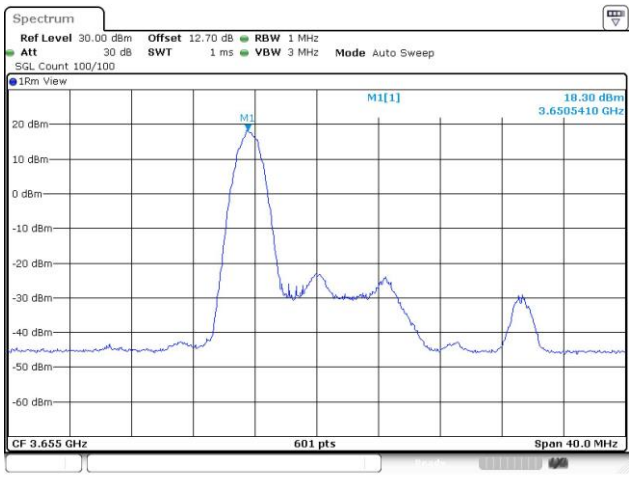


Highest Channel / 16QAM

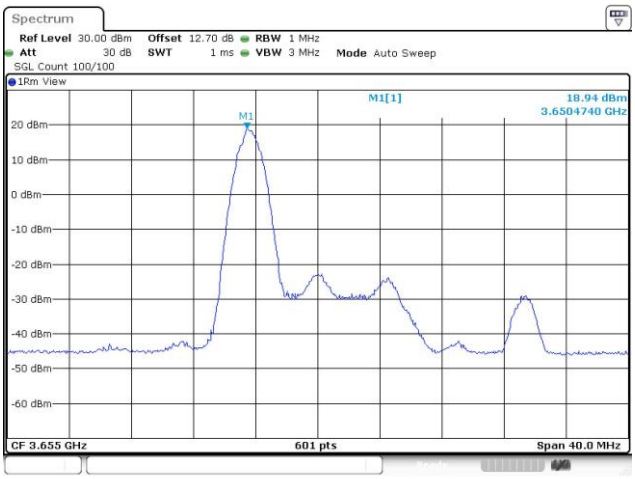


LTE Band 43 / 10MHz

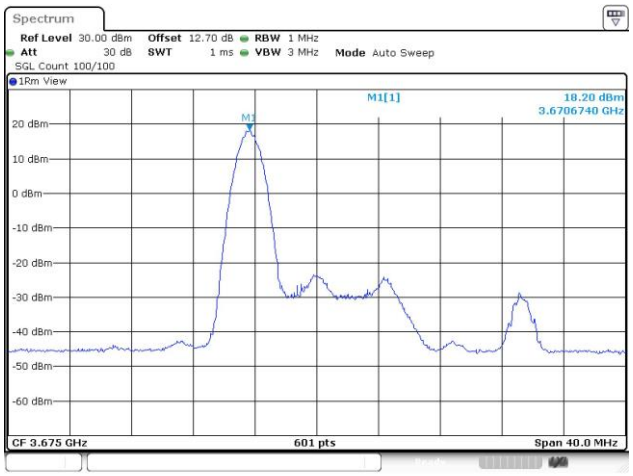
Lowest Channel / QPSK



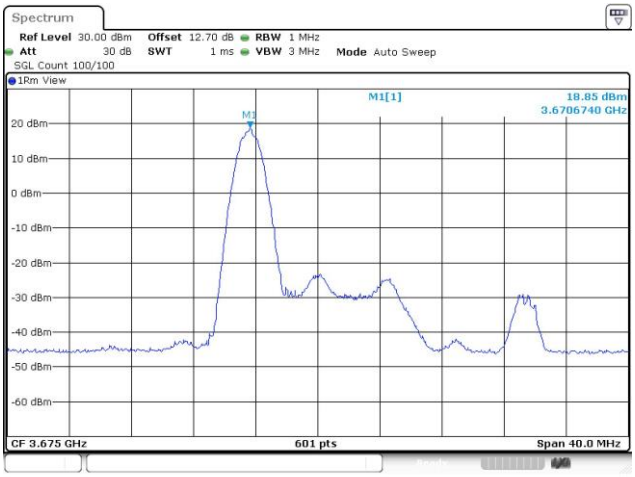
Lowest Channel / 16QAM



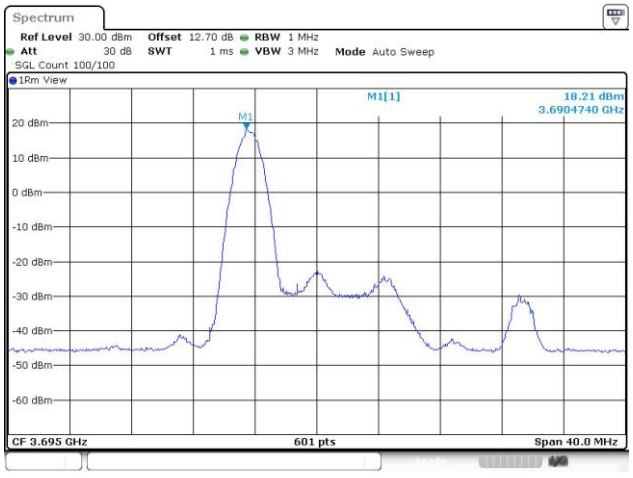
Middle Channel / QPSK



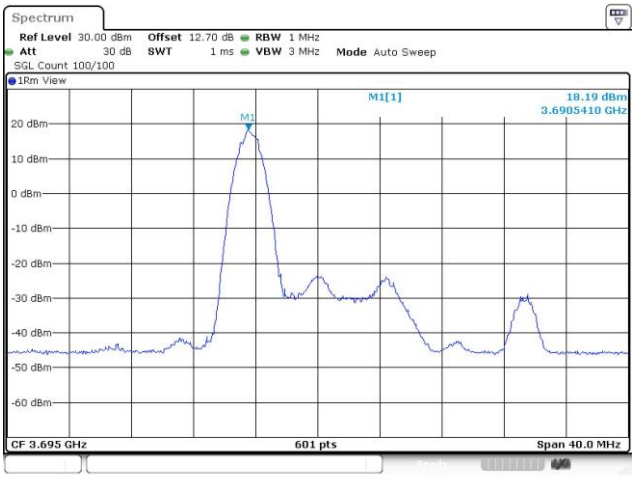
Midddle Channel / 16QAM

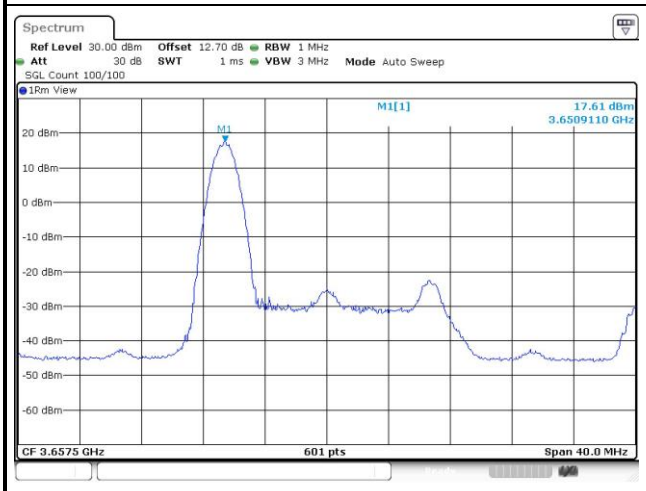
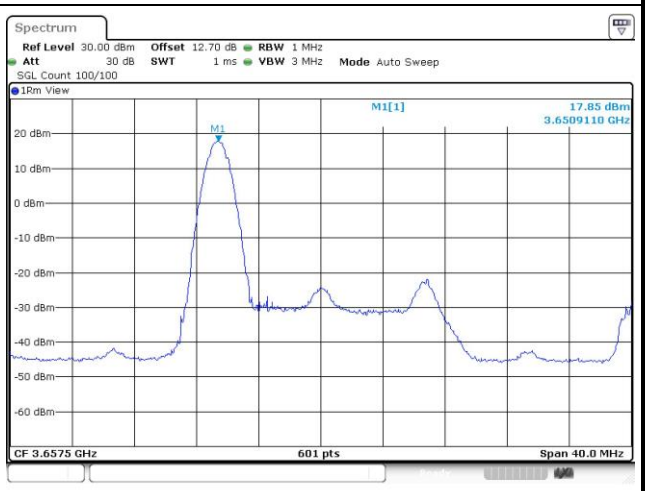
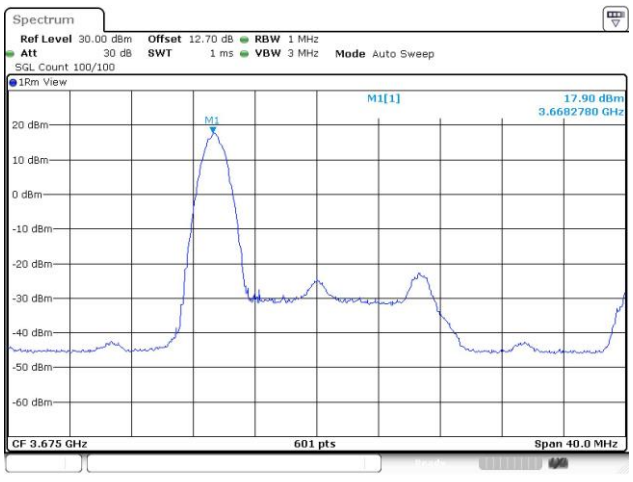
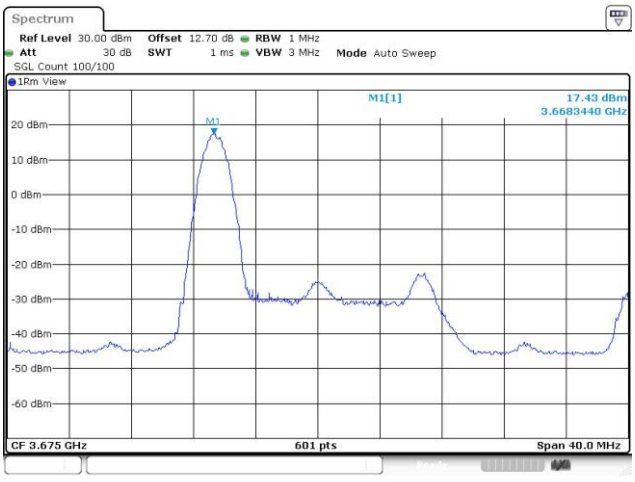
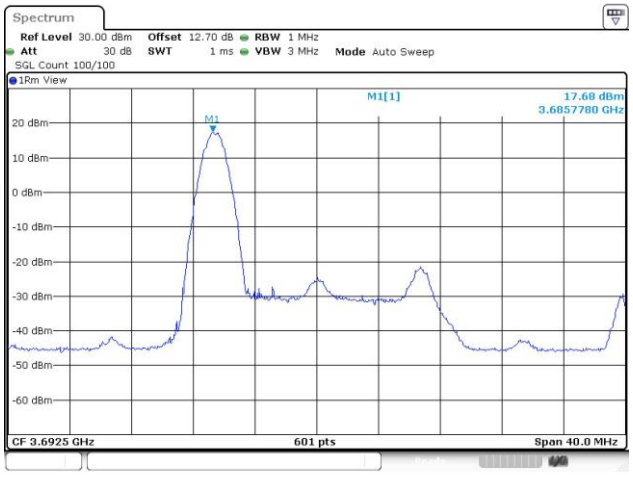
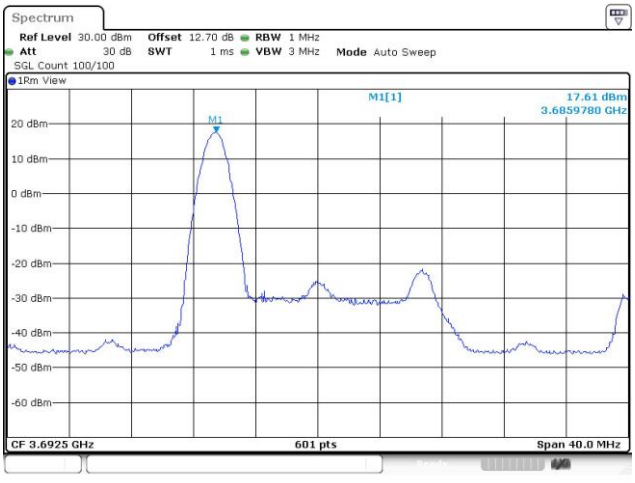


Highest Channel / QPSK



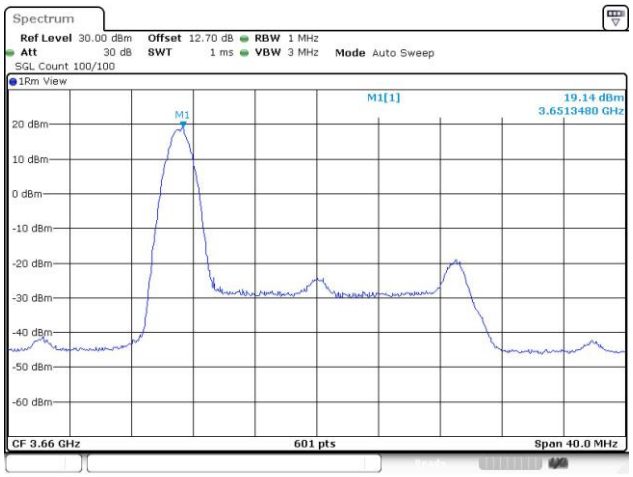
Highest Channel / 16QAM



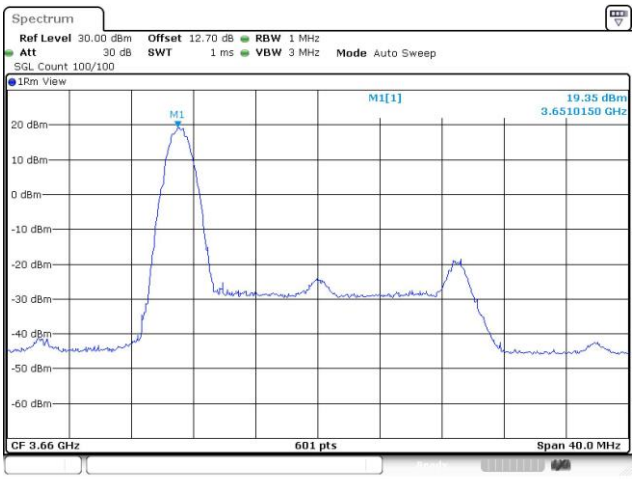
LTE Band 43 / 15MHz	
Lowest Channel / QPSK	**Lowest Channel / 16QAM**
	
Middle Channel / QPSK	**Midddle Channel / 16QAM**
	
Highest Channel / QPSK	**Highest Channel / 16QAM**
	

LTE Band 43 / 20MHz

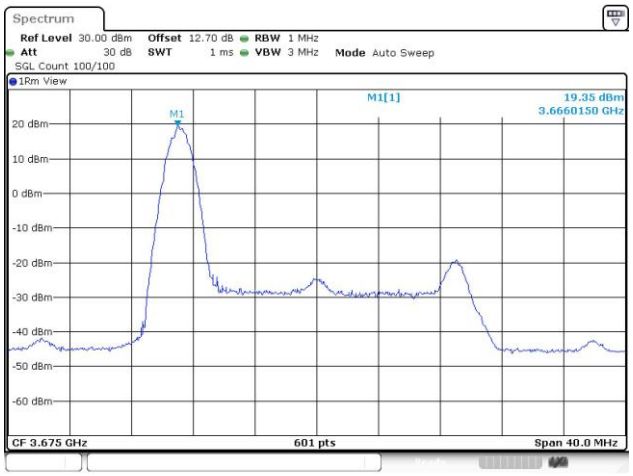
Lowest Channel / QPSK



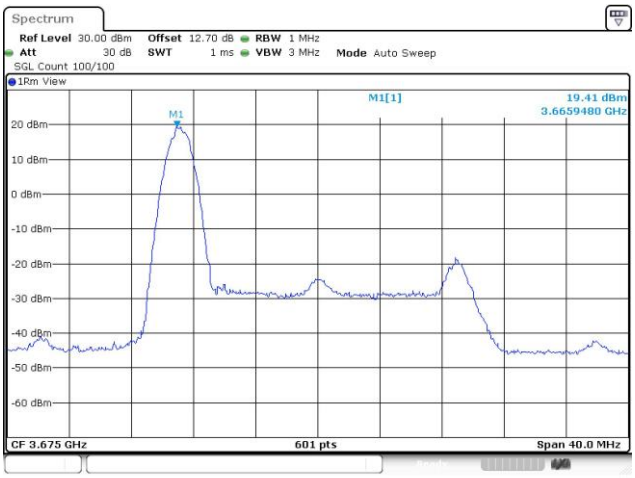
Lowest Channel / 16QAM



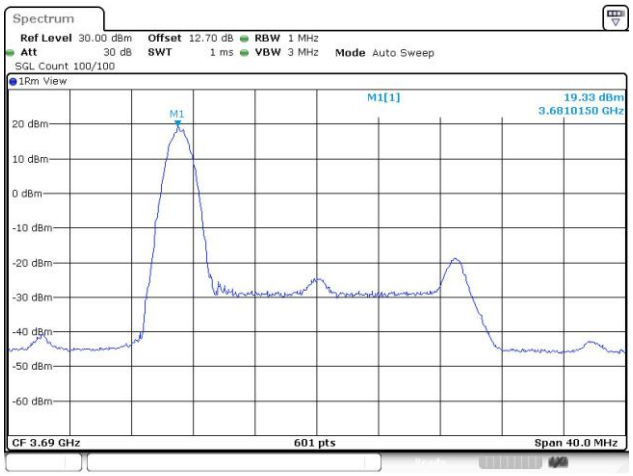
Middle Channel / QPSK



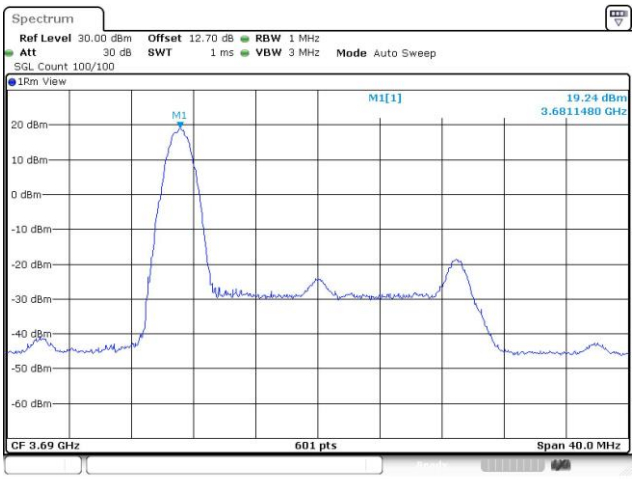
Midddle Channel / 16QAM



Highest Channel / QPSK

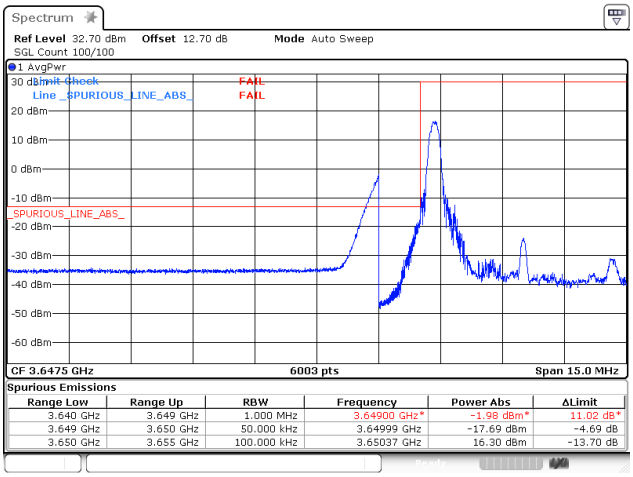


Highest Channel / 16QAM



LTE Band 43 / 5MHz/ QPSK

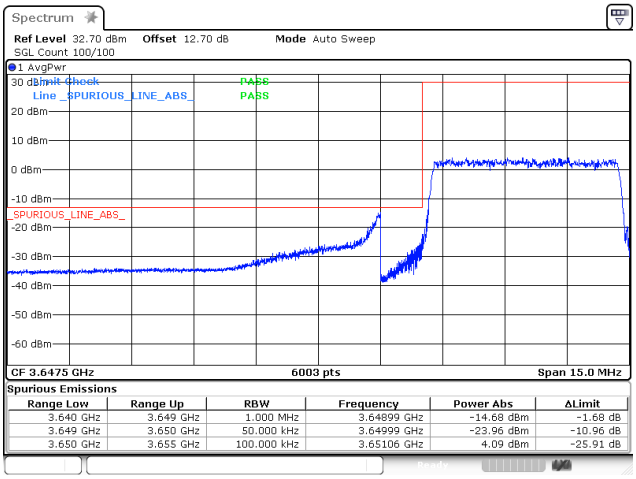
Lowest Band Edge / 1RB



Spurious Emissions

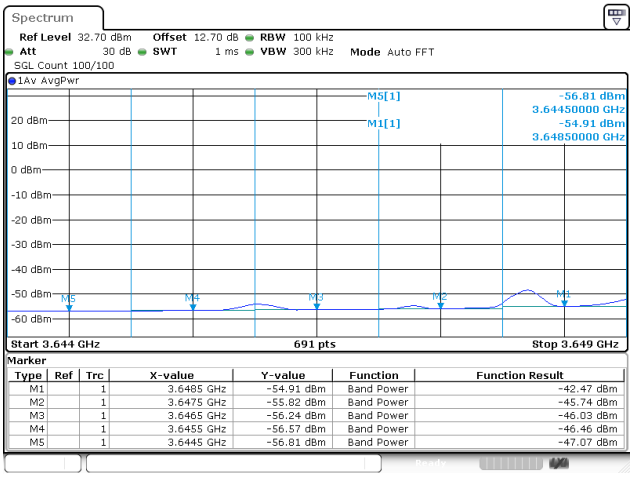
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64900 GHz*	-1.98 dBm*	11.02 dB*
3.649 GHz	3.650 GHz	50.000 kHz	3.64999 GHz	-17.69 dBm	-4.69 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65037 GHz	16.30 dBm	-13.70 dB

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64899 GHz	-14.68 dBm	-1.68 dB
3.649 GHz	3.650 GHz	50.000 kHz	3.64999 GHz	-23.96 dBm	-10.96 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65106 GHz	4.09 dBm	-25.91 dB

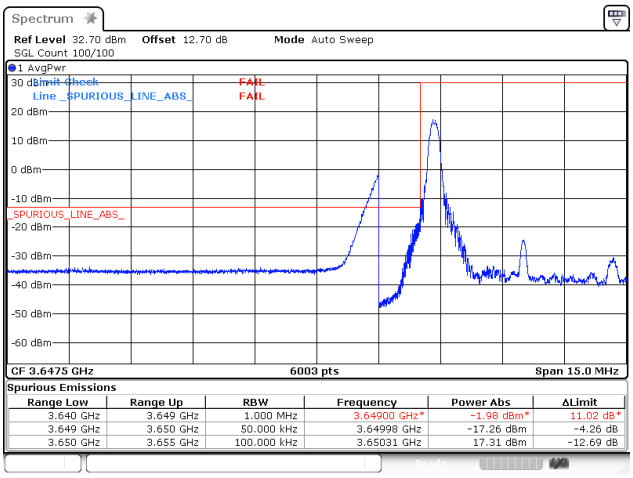


Marker

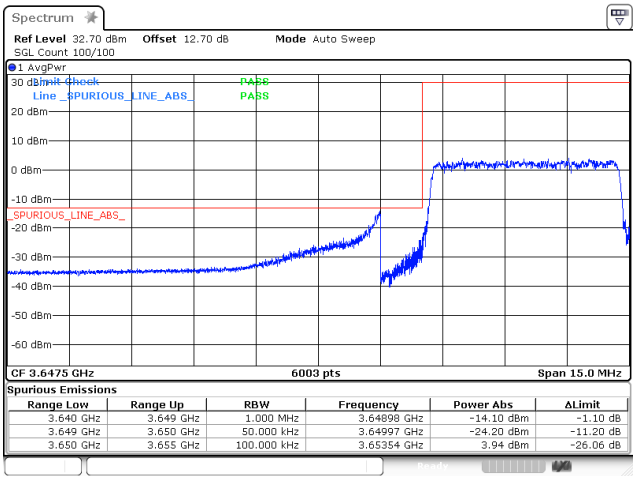
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.6485 GHz	-54.91 dBm	Band Power	-42.47 dBm
M2		1	3.6475 GHz	-55.82 dBm	Band Power	-45.74 dBm
M3		1	3.6465 GHz	-56.24 dBm	Band Power	-46.03 dBm
M4		1	3.6455 GHz	-56.57 dBm	Band Power	-46.46 dBm
M5		1	3.6445 GHz	-56.81 dBm	Band Power	-47.07 dBm

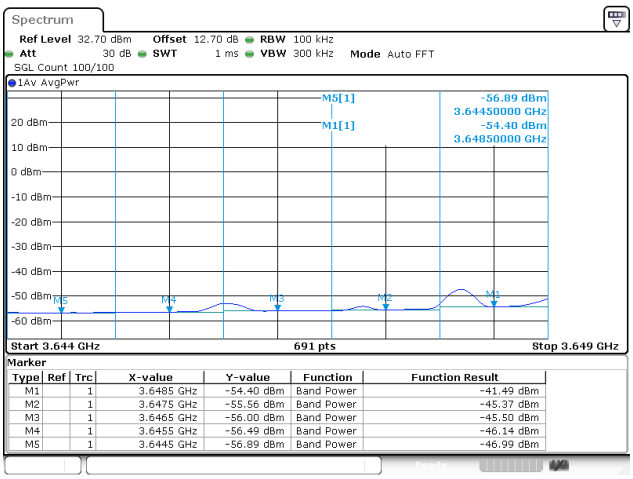
LTE Band 43 / 5MHz/ 16QAM

Lowest Band Edge / 1RB



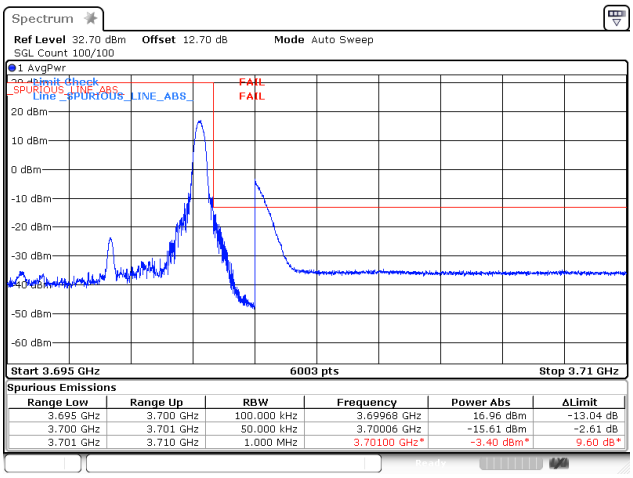
Lowest Band Edge / Full RB





LTE Band 43 / 5MHz/ QPSK

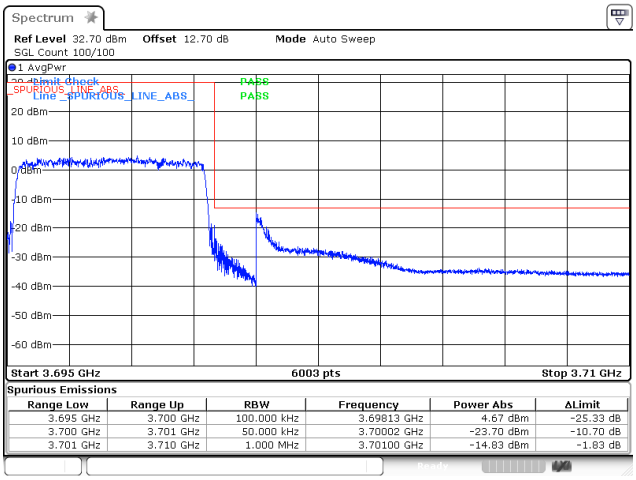
Highest Band Edge / 1RB



Spurious Emissions

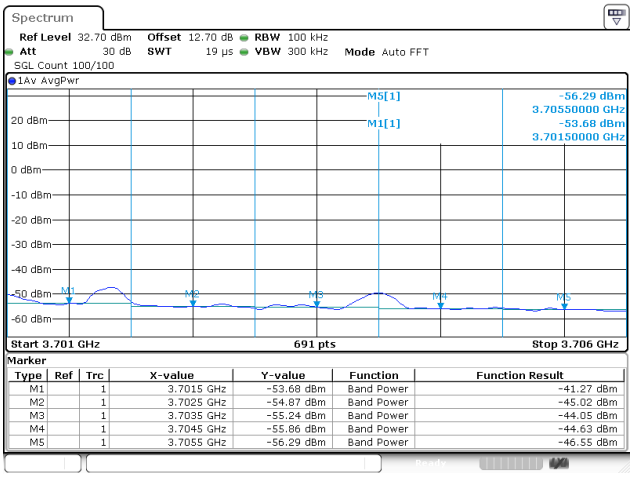
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69968 GHz	16.96 dBm	-13.04 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70006 GHz	-15.61 dBm	-2.61 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz*	-3.40 dBm*	9.60 dB*

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69813 GHz	4.67 dBm	-25.33 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70002 GHz	-23.70 dBm	-10.70 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz	-14.83 dBm	-1.83 dB

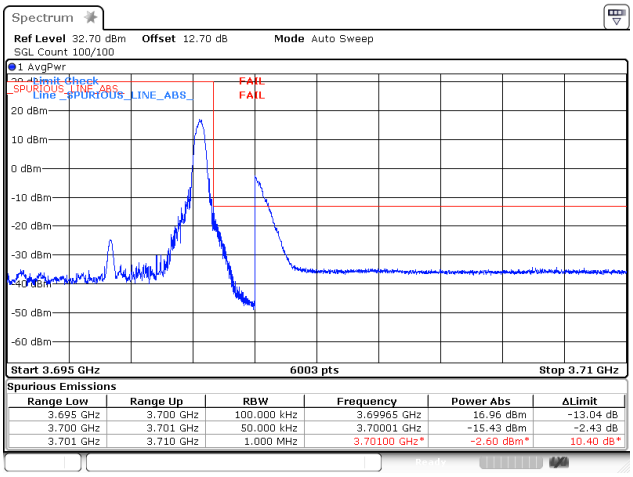


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.7015 GHz	-53.68 dBm	Band Power	-41.27 dBm
M2		1	3.7025 GHz	-54.87 dBm	Band Power	-45.02 dBm
M3		1	3.7035 GHz	-55.24 dBm	Band Power	-44.05 dBm
M4		1	3.7045 GHz	-55.86 dBm	Band Power	-44.63 dBm
M5		1	3.7055 GHz	-56.29 dBm	Band Power	-46.55 dBm

LTE Band 43 / 5MHz/ 16QAM

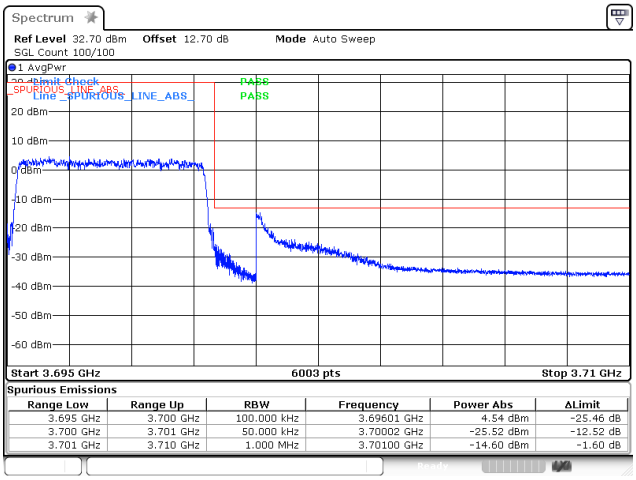
Highest Band Edge / 1RB



Spurious Emissions

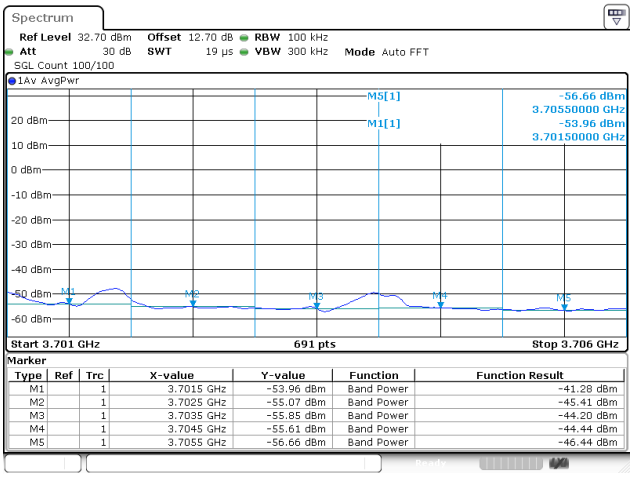
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69965 GHz	16.96 dBm	-13.04 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70001 GHz	-15.43 dBm	-2.43 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz*	-2.60 dBm*	10.40 dB*

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69601 GHz	4.54 dBm	-25.46 dB
3.700 GHz	3.701 GHz	50.000 kHz	3.70002 GHz	-25.52 dBm	-12.52 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz	-14.60 dBm	-1.60 dB

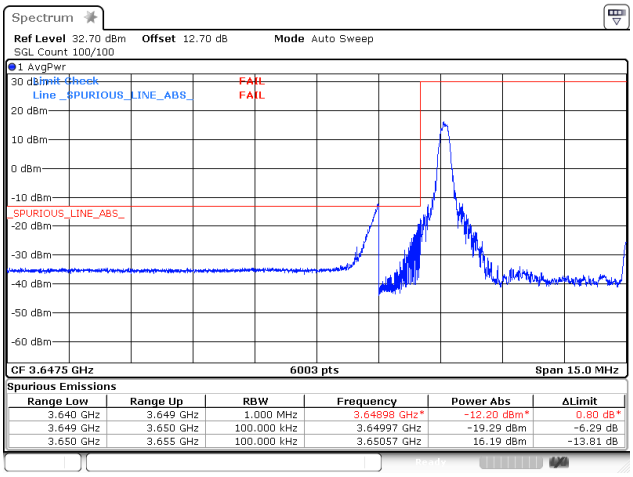


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.7015 GHz	-53.96 dBm	Band Power	-41.28 dBm
M2		1	3.7025 GHz	-55.07 dBm	Band Power	-45.41 dBm
M3		1	3.7035 GHz	-55.85 dBm	Band Power	-44.20 dBm
M4		1	3.7045 GHz	-55.61 dBm	Band Power	-44.44 dBm
M5		1	3.7055 GHz	-56.66 dBm	Band Power	-46.44 dBm

LTE Band 43 / 10MHz/ QPSK

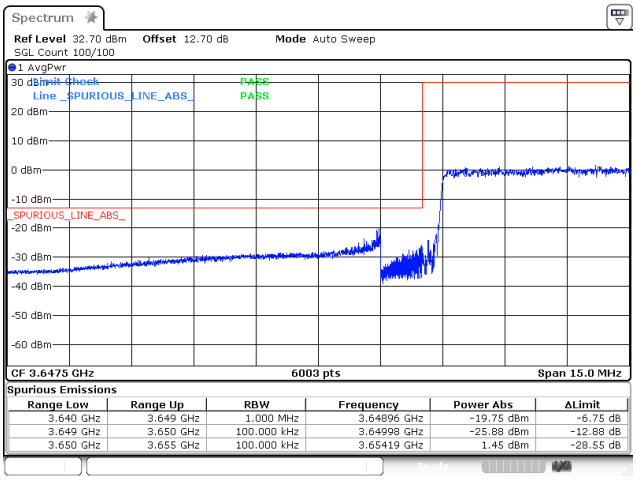
Lowest Band Edge / 1RB



Spurious Emissions

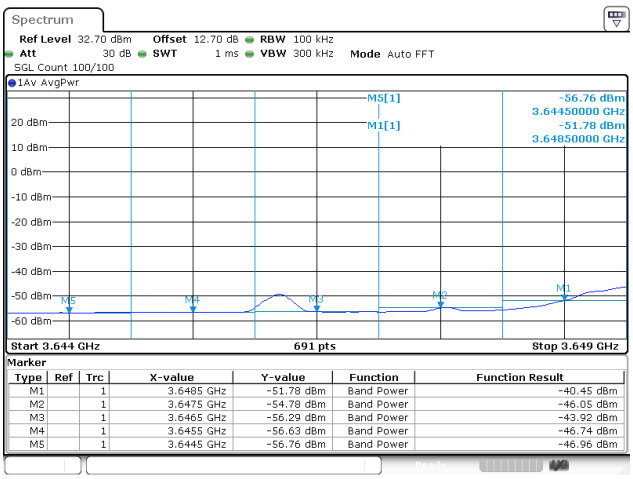
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64898 GHz*	-12.20 dBm*	0.80 dB*
3.649 GHz	3.650 GHz	100.000 kHz	3.64997 GHz	-19.29 dBm	-6.29 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65057 GHz	16.19 dBm	-13.81 dB

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64896 GHz	-19.75 dBm	-6.75 dB
3.649 GHz	3.650 GHz	100.000 kHz	3.64998 GHz	-25.88 dBm	-12.88 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65419 GHz	1.45 dBm	-28.55 dB

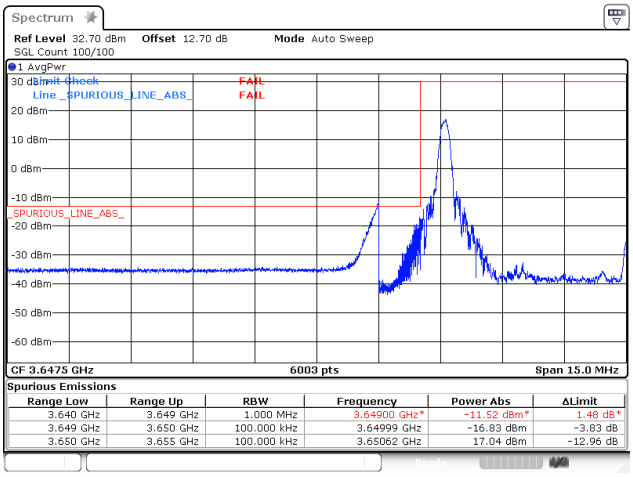


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.6485 GHz	-51.78 dBm	Band Power	-40.45 dBm
M2		1	3.6475 GHz	-54.78 dBm	Band Power	-46.05 dBm
M3		1	3.6465 GHz	-56.29 dBm	Band Power	-43.92 dBm
M4		1	3.6455 GHz	-56.63 dBm	Band Power	-46.74 dBm
M5		1	3.6445 GHz	-56.76 dBm	Band Power	-46.96 dBm

LTE Band 43 / 10MHz/ 16QAM

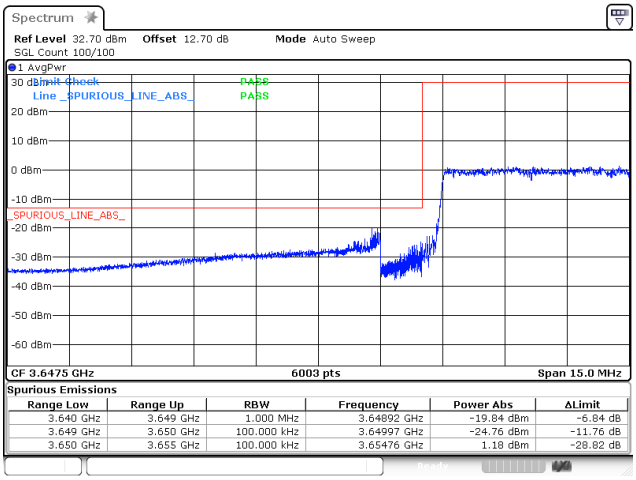
Lowest Band Edge / 1RB



Spurious Emissions

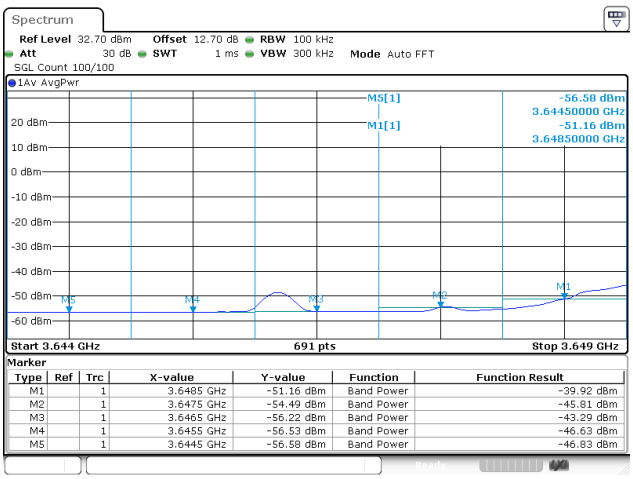
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64900 GHz*	-11.52 dBm*	1.48 dB*
3.649 GHz	3.650 GHz	100.000 kHz	3.64999 GHz	-16.83 dBm	-3.83 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65062 GHz	17.04 dBm	-12.96 dB

Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64892 GHz	-19.84 dBm	-6.84 dB
3.649 GHz	3.650 GHz	100.000 kHz	3.64997 GHz	-24.76 dBm	-11.76 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65476 GHz	1.18 dBm	-28.82 dB

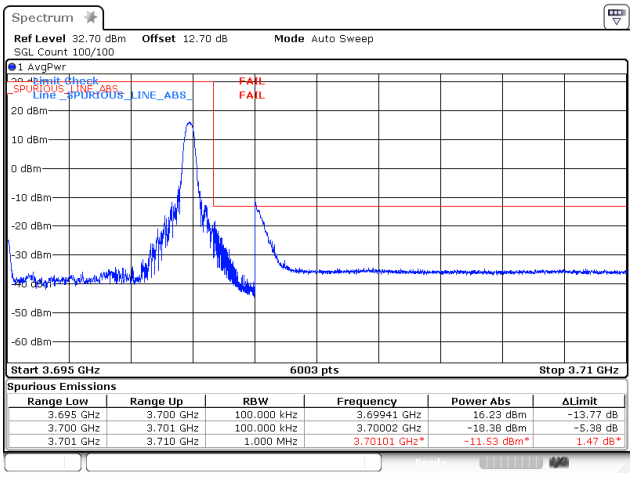


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.6485 GHz	-51.16 dBm	Band Power	-39.92 dBm
M2		1	3.6475 GHz	-54.49 dBm	Band Power	-45.81 dBm
M3		1	3.6465 GHz	-56.22 dBm	Band Power	-43.29 dBm
M4		1	3.6455 GHz	-56.53 dBm	Band Power	-46.63 dBm
M5		1	3.6445 GHz	-56.58 dBm	Band Power	-46.83 dBm

LTE Band 43 / 10MHz/ QPSK

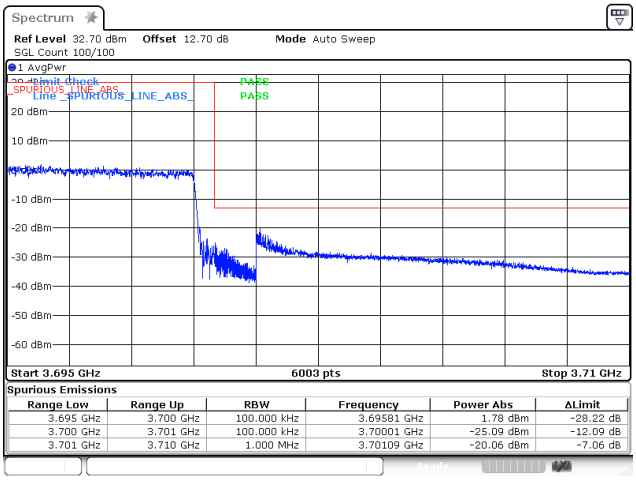
Highest Band Edge / 1RB



Spurious Emissions

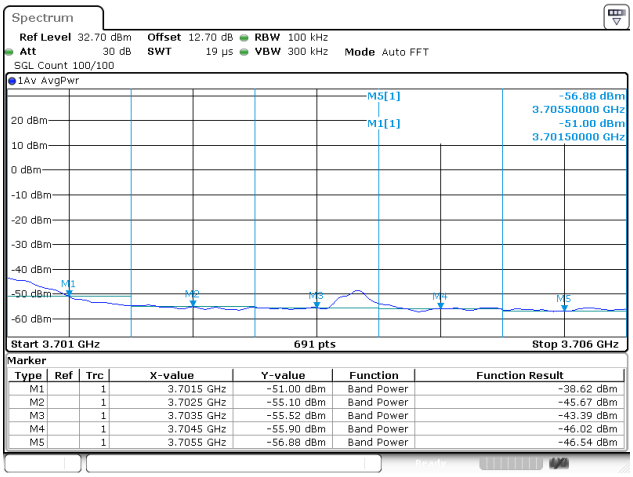
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69941 GHz	16.23 dBm	-13.77 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70002 GHz	-18.38 dBm	-5.38 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70101 GHz*	-11.53 dBm*	1.47 dB*

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69581 GHz	1.78 dBm	-28.22 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70001 GHz	-25.09 dBm	-12.09 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70109 GHz	-20.06 dBm	-7.06 dB

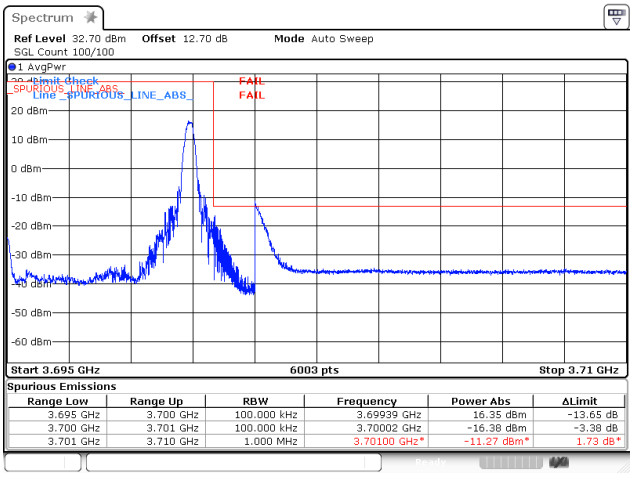


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.7015 GHz	-51.00 dBm	Band Power	-38.62 dBm
M2		1	3.7025 GHz	-55.10 dBm	Band Power	-45.67 dBm
M3		1	3.7035 GHz	-55.52 dBm	Band Power	-43.39 dBm
M4		1	3.7045 GHz	-55.90 dBm	Band Power	-46.02 dBm
M5		1	3.7055 GHz	-56.88 dBm	Band Power	-46.54 dBm

LTE Band 43 / 10MHz/ 16QAM

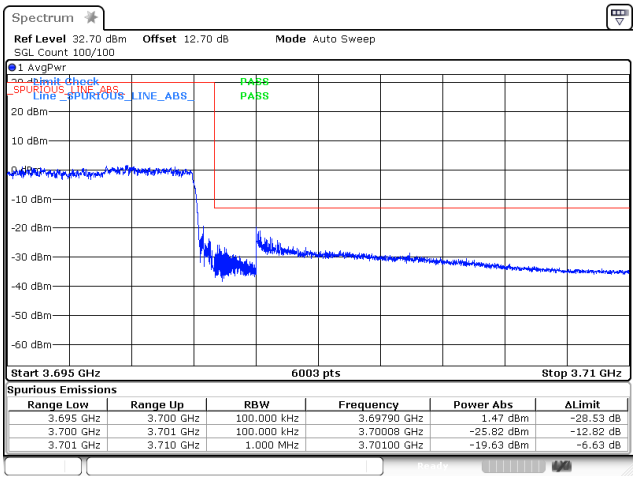
Highest Band Edge / 1RB



Spurious Emissions

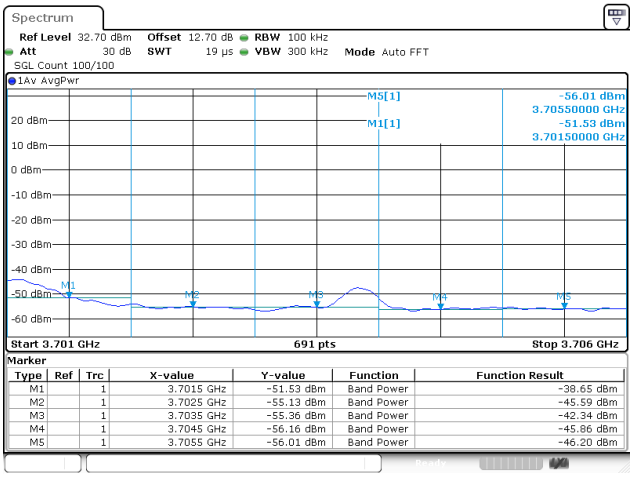
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69939 GHz	16.35 dBm	-13.65 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70002 GHz	-16.38 dBm	-3.38 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz*	-11.27 dBm*	1.73 dB*

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69790 GHz	1.47 dBm	-28.53 dB
3.700 GHz	3.701 GHz	100.000 kHz	3.70008 GHz	-25.82 dBm	-12.82 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz	-19.63 dBm	-6.63 dB

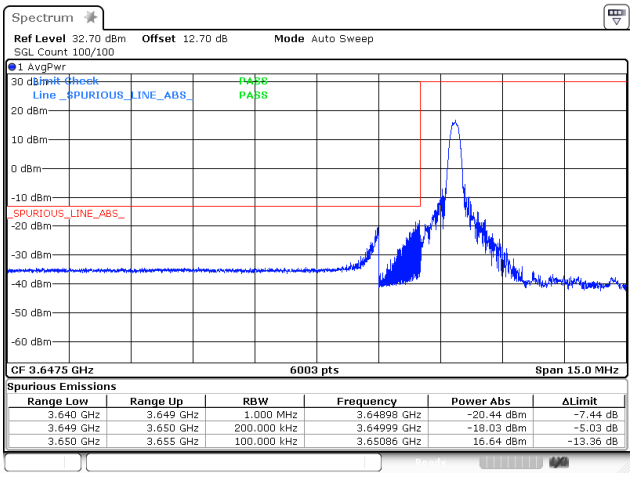


Marker

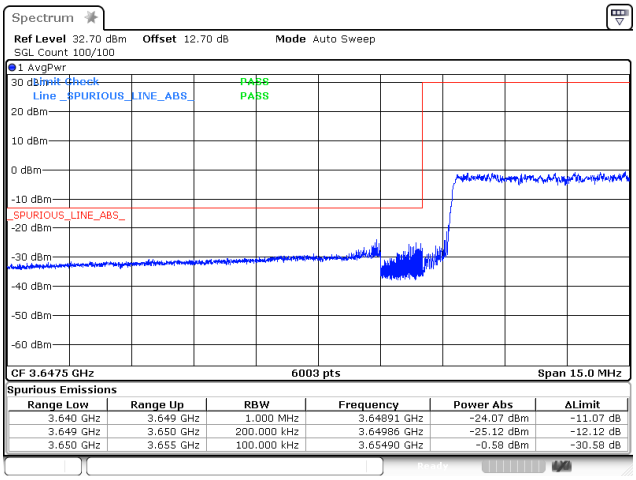
Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	3.7015 GHz	-51.53 dBm	Band Power	-38.65 dBm
M2		1	3.7025 GHz	-55.13 dBm	Band Power	-45.59 dBm
M3		1	3.7035 GHz	-55.36 dBm	Band Power	-42.34 dBm
M4		1	3.7045 GHz	-56.16 dBm	Band Power	-45.86 dBm
M5		1	3.7055 GHz	-56.01 dBm	Band Power	-46.20 dBm

LTE Band 43 / 15MHz/ QPSK

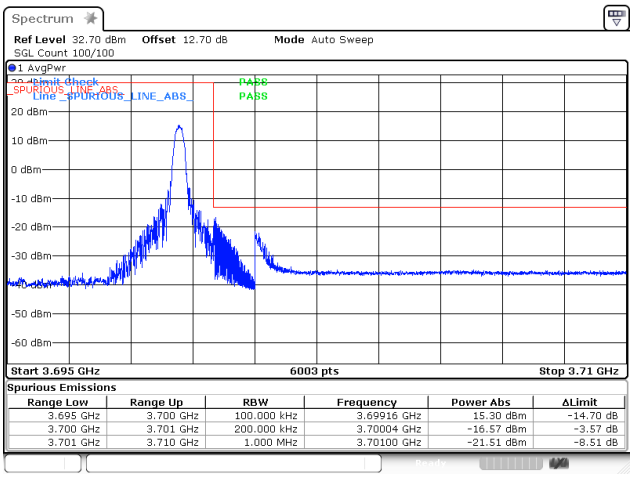
Lowest Band Edge / 1RB



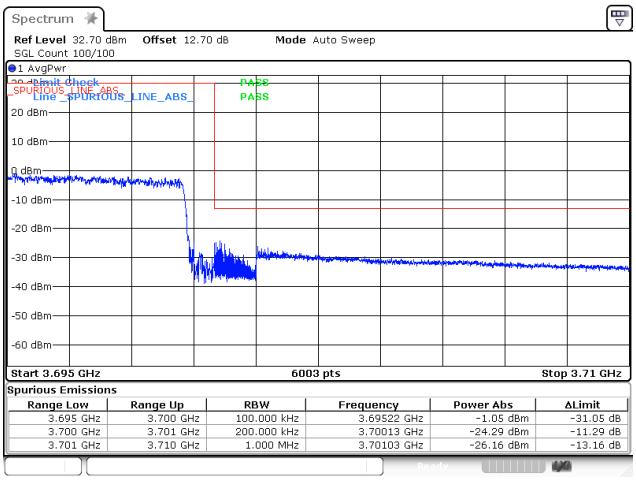
Lowest Band Edge / Full RB



Highest Band Edge / 1RB

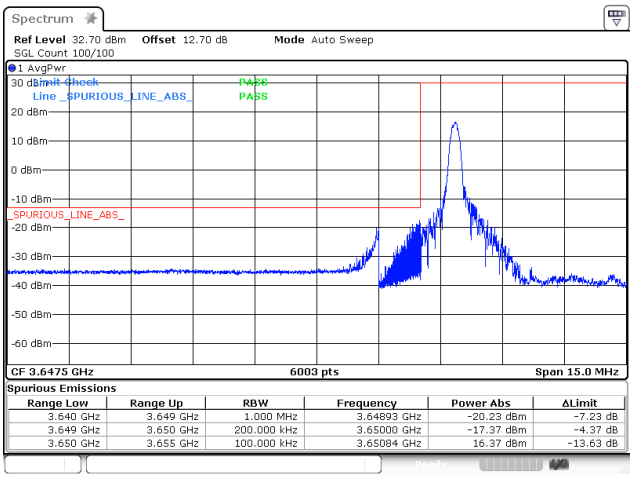


Highest Band Edge / Full RB

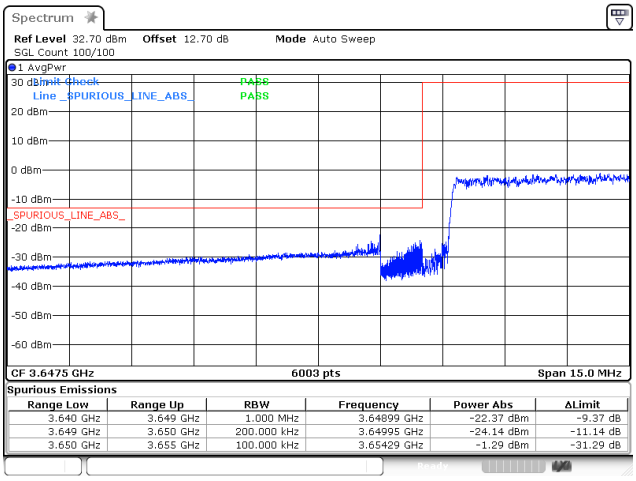


LTE Band 43 / 15MHz/ 16QAM

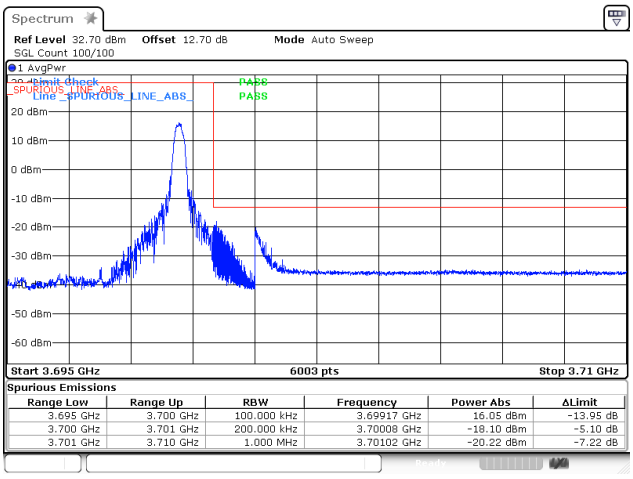
Lowest Band Edge / 1RB



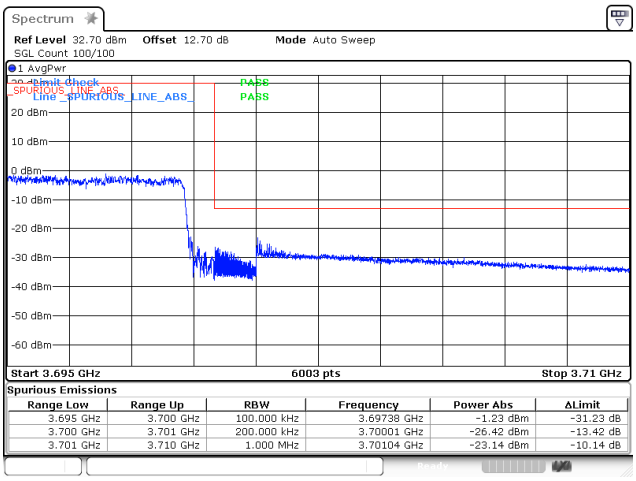
Lowest Band Edge / Full RB



Highest Band Edge / 1RB

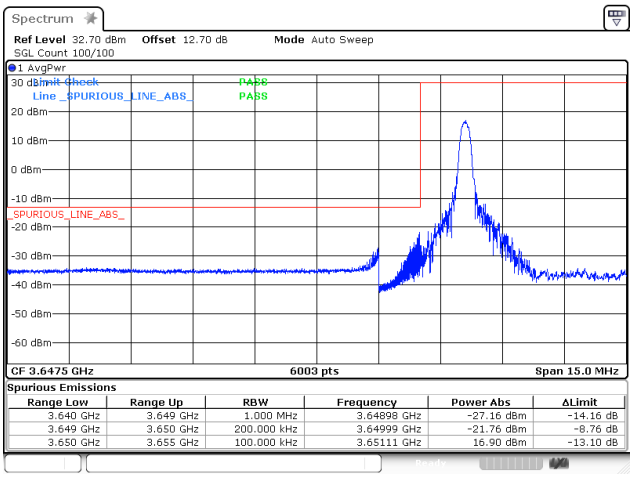


Highest Band Edge / Full RB



LTE Band 43 / 20MHz/ QPSK

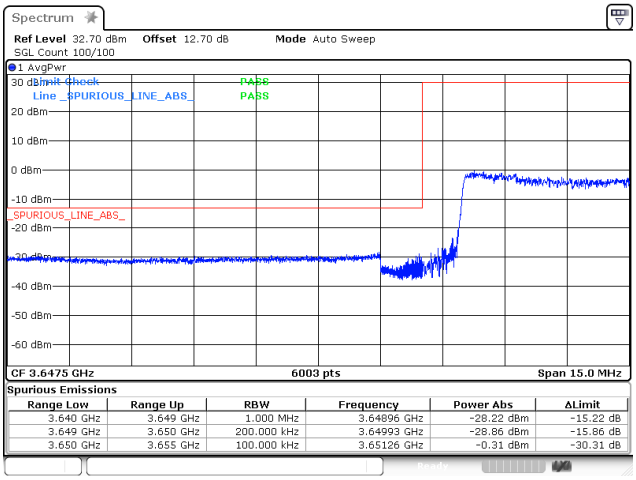
Lowest Band Edge / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64898 GHz	-27.16 dBm	-14.16 dB
3.649 GHz	3.650 GHz	200.000 kHz	3.64999 GHz	-21.76 dBm	-8.76 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65111 GHz	16.90 dBm	-13.10 dB

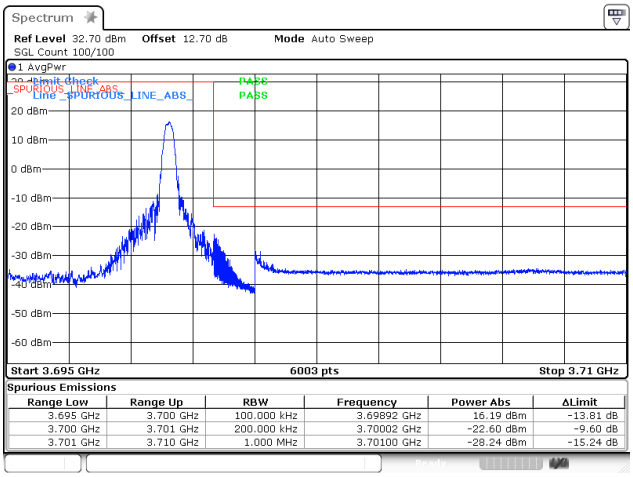
Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64896 GHz	-28.22 dBm	-15.22 dB
3.649 GHz	3.650 GHz	200.000 kHz	3.64993 GHz	-28.86 dBm	-15.86 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65126 GHz	-0.31 dBm	-30.31 dB

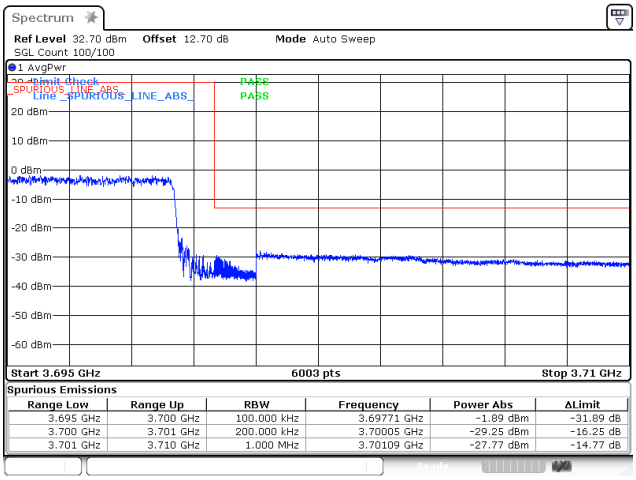
Highest Band Edge / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69892 GHz	16.19 dBm	-13.81 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70002 GHz	-22.60 dBm	-9.60 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70100 GHz	-28.24 dBm	-15.24 dB

Highest Band Edge / Full RB

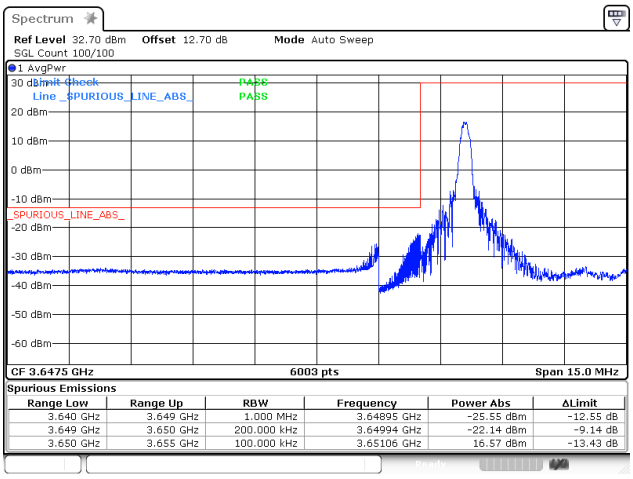


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69771 GHz	-1.89 dBm	-31.89 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70005 GHz	-29.25 dBm	-16.25 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70109 GHz	-27.77 dBm	-14.77 dB

LTE Band 43 / 20MHz/ 16QAM

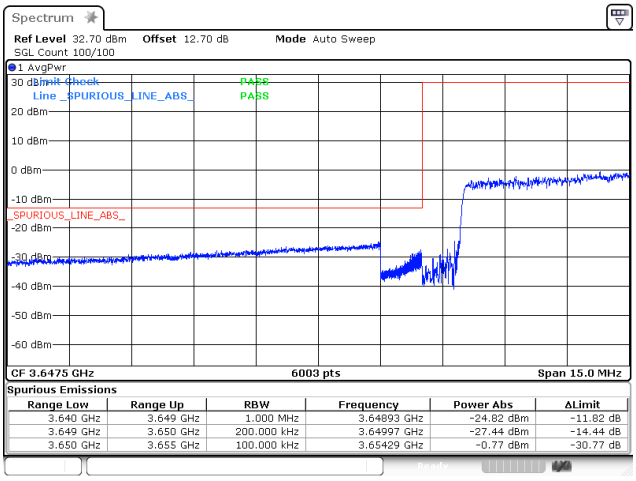
Lowest Band Edge / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64895 GHz	-25.55 dBm	-12.55 dB
3.649 GHz	3.650 GHz	200.000 kHz	3.64994 GHz	-22.14 dBm	-9.14 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65106 GHz	16.57 dBm	-13.43 dB

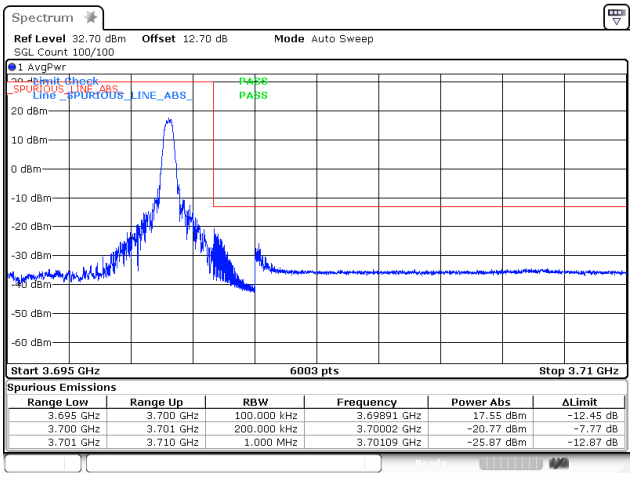
Lowest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.640 GHz	3.649 GHz	1.000 MHz	3.64893 GHz	-24.82 dBm	-11.82 dB
3.649 GHz	3.650 GHz	200.000 kHz	3.64997 GHz	-27.44 dBm	-14.44 dB
3.650 GHz	3.655 GHz	100.000 kHz	3.65429 GHz	-0.77 dBm	-30.77 dB

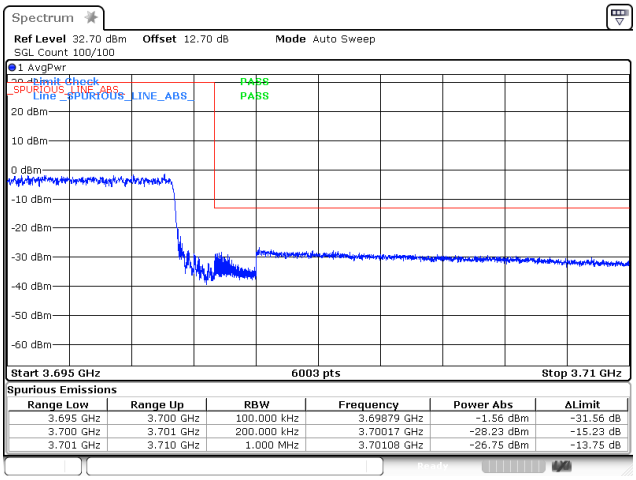
Highest Band Edge / 1RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69891 GHz	17.55 dBm	-12.45 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70002 GHz	-20.77 dBm	-7.77 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70109 GHz	-25.87 dBm	-12.87 dB

Highest Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
3.695 GHz	3.700 GHz	100.000 kHz	3.69879 GHz	-1.56 dBm	-31.56 dB
3.700 GHz	3.701 GHz	200.000 kHz	3.70017 GHz	-28.23 dBm	-15.23 dB
3.701 GHz	3.710 GHz	1.000 MHz	3.70108 GHz	-26.75 dBm	-13.75 dB