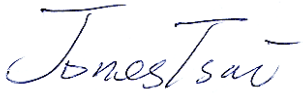
FCC RF Test Report

APPLICANT	: ASUSTeK COMPUTER INC.
EQUIPMENT	: ASUS Phone
BRAND NAME	: ASUS
MODEL NAME	: ASUS_Z01GD
FCC ID	: MSQZ01GD
STANDARD	: FCC 47 CFR Part 2, 27
CLASSIFICATION	: PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Apr. 08, 2017 and completely tested on Jul. 27, 2017. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA / EIA-603-D-2010 and has been 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 INC., the test report shall not be reproduced except in full.

Reviewed by: Joseph Lin / Supervisor



Approved by: Jones Tsai / Manager

SPORTON INTERNATIONAL INC.

No. 52, Hwa Ya 1st Rd., Hwa Ya Technology Park, Kwei-Shan District, Tao Yuan City, Taiwan, R.O.C.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG740840C	Rev. 01	Initial issue of report	Aug. 09, 2017

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
3.5	-	Peak-to-Average Ratio	<13dB	N/A	Reporting only
3.6	§27.50 (a)(3)	EIRP Power Density	EIRP < 250mW/5MHz	PASS	-
3.7	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.8	§2.1051 §27.53 (a)(4)	Conducted Band Edge Measurement	Refer standard	PASS	-
3.9	§2.1051 §27.53 (a)(4)	Conducted Spurious Emission	< $70+10\log_{10}$(P[Watts])	PASS	-
3.10	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within the band	PASS	-
4.4	§2.1053 §27.53 (a)(4)	Radiated Spurious Emission	< $70+10\log_{10}$(P[Watts])	PASS	Under limit 3.42 dB at 6930.000 MHz

1 General Description

1.1 Applicant

ASUSTeK COMPUTER INC.
4F, No. 150, LI-TE RD., PEITOU, TAIPEI, TAIWAN

1.2 Manufacturer

COTEK ELECTRONICS (SUZHOU) CO., LTD.
No.288, Mayun Road, Suzhou Hi-and-New Tech Park, Jiangsu, PRC

1.3 Product Feature of Equipment Under Test

GSM/WCDMA/LTE, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n, Wi-Fi 5GHz 802.11a/n/ac, FM Receiver, NFC, and GPS.

Product Specification subjective to this standard	
Sample 1	EUT with SKU 1
Sample 2	EUT with SKU 2
Sample 3	EUT with SKU 3
Sample 4	EUT with SKU 4
Sample 5	EUT with SKU 5
Sample 6	EUT with SKU 6
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna GPS / Glonass / Galileo / BDS: PIFA Antenna NFC: Loop Antenna

<Sample Information>

SKU MB	SKU1	SKU2
DDR4X	6G/ Hynix	6G/ Hynix
UFS 2.1	128G/ Samsung	64G/ Toshiba
CPU	MSM-8998-1-885MPSP-TR-02-0-AB	
TP Module	TIANMA/TA055VVHM08-03 ON CELL	TIANMA//TA055VVHM09-03 ON CELL
Front Camera (8M)	CAMERA MODULE 8M AF (SonyIMX319, XPT 85B-BC28-SU,KT F6518)	
Rear Camera (12+16M)	DUAL CAMERA MODULE 12M+16M/SEMCO/MOMDM82PG3A V0.0	
Battery	ZS551KL BAT/ATL POLY/C11P1701/SMP/PS414997/1S1P/3.85V/13.8WH	

SKU MB	SKU3	SKU4
DDR4X	4G/ Hynix	6G/ Hynix
UFS 2.1	64G/ Toshiba	64G/ Samsung
CPU	MSM-8998-1-885MPSP-TR-02-0-AB	
TP Module	TIANMA//TA055VVHM09-03 ON CELL	TIANMA/TA055VVHM08-00 ON CELL
Front Camera (8M)	CAMERA MODULE 8M AF (SonyIMX319, XPT 85B-BC28-SU,KT F6518)	
Rear Camera (12+16M)	DUAL CAMERA MODULE 12M+16M/SEMCO/MOMDM82PG3A V0.0	
Battery	ZS551KL BAT/ATL POLY/C11P1701/SMP/PS414997/1S1P/3.85V/13.8WH	

SKU MB	SKU5	SKU6
DDR4X	6G Hynix	6G Hynix
UFS 2.1	128G Toshiba	UFS 2.0 64G Toshiba
CPU	MSM-8998-1-885MPSP-TR-02-0-AB	
TP Module	TIANMA/TA055VVHM09-05 ON CELL	
Front Camera (8M)	CAMERA MODULE 8M AF (SonyIMX319, XPT 85B-BC28-SU,KT F6518)	
Rear Camera (12+16M)	DUAL CAMERA MODULE 12M+16M/SEMCO/MOMDM82PG3A V0.0	
Battery	ZS551KL BAT/ATL POLY/C11P1701/SMP/PS414997/1S1P/3.85V/13.8WH	

1.4 Modification of EUT

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

1.5 Testing Site

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code : 1190) and the FCC designation No. TW0007 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC Test.

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	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: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY

Test Site	SPORTON INTERNATIONAL INC.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd Rd. Guishan Dist, Taoyuan City, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH15-HY

1.6 Applied Standards

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

- 47 CFR Part 2, Part 27(D)
- ANSI / TIA / EIA-603-D-2010
- FCC KDB 971168 D01 Power Meas. License Digital Systems v02r02

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

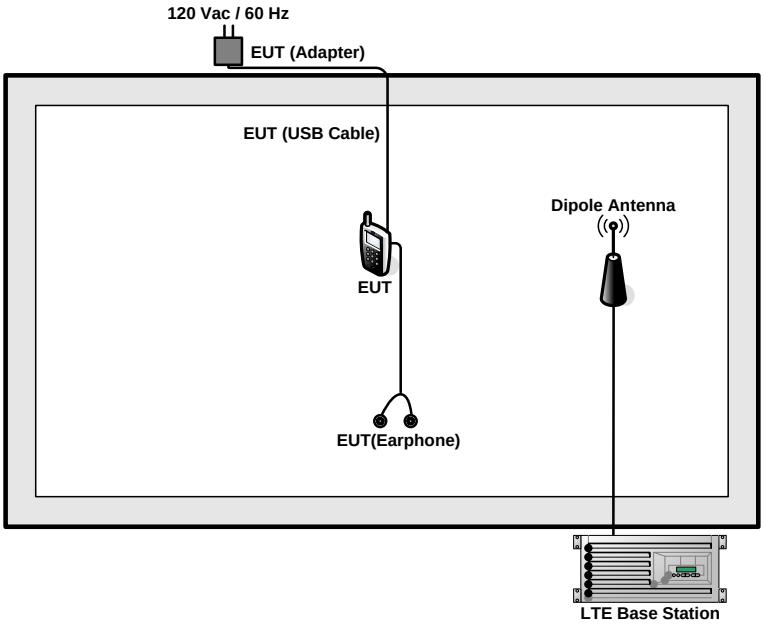
2.1 Test Mode

Antenna port conducted and radiated test items listed below are performed according to K DB 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.

Conducted Test Cases	Band	Bandwidth (MHz)						Modulation			RB #			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	30	-	-	V		-	-	V	V	V	V	V	V	V	V	V
		-	-		V	-	-	V	V	V	V	V	V		V	
Peak-to-Average Ratio	30	-	-		V	-	-	V	V	V	V		V		V	
E.I.R.P PSD	30	-	-	V		-	-	V	V	V	V			V	V	V
		-	-		V	-	-	V	V	V	V				V	
26dB and 99% Bandwidth	30	-	-	V		-	-	V	V	V			V	V	V	V
		-	-		V	-	-	V	V	V			V		V	
Conducted Band Edge	30	-	-	V		-	-	V	V	V	V		V	V		V
		-	-		V	-	-	V	V	V	V		V		V	
Conducted Spurious Emission	30	-	-	V		-	-	V	V	V	V			V	V	V
		-	-		V	-	-	V	V	V	V				V	
Frequency Stability	30	-	-		V	-	-	V					V		V	
Radiated Spurious Emission	30	-	-	V		-	-	V			V			V	V	V
					V			V			V				V	
Note	1. The mark “v “ means that this configuration is chosen for testing 2. The mark “-“ means that this bandwidth is not supported. 3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.															

2.2 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	GW INSTEK	GPS-3030D	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 RF conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level will be exactly the RF output level.

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

Offset = RF cable loss + attenuator factor.

The following shows an offset computation example with RF cable loss 1.9 dB and a 10dB attenuator.

Example :

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

= 1.9 + 10 = 11.9 (dB)

2.5 Frequency List of Low/Middle/High Channels

LTE Band 30 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
10	Channel	-	27710	-
	Frequency	-	2310	-
5	Channel	27685	27710	27735
	Frequency	2307.5	2310	2312.5

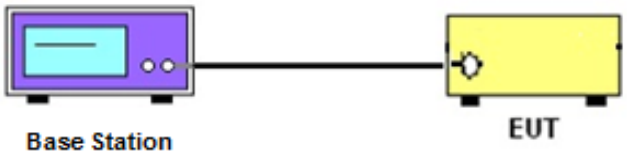
3 Conducted Test Items

3.1 Measuring Instruments

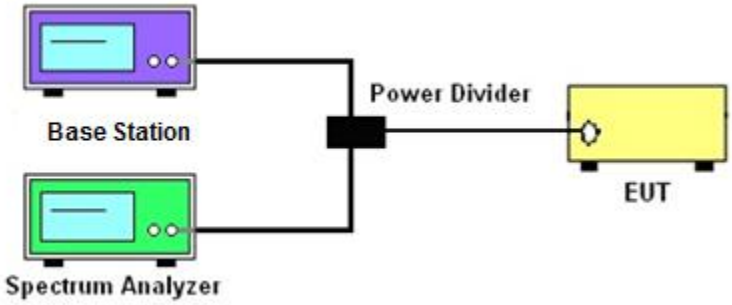
See list of measuring instruments of this test report.

3.2 Test Setup

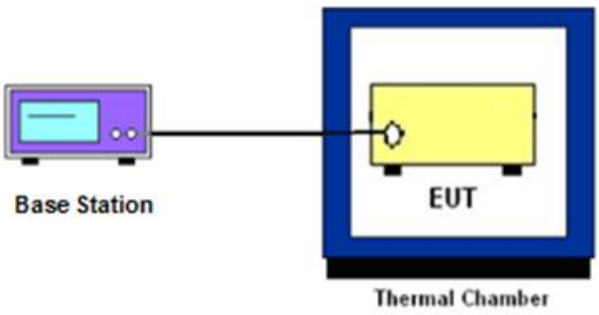
3.2.1 Conducted Output Power



3.2.2 Peak-to-Average Ratio, Occupied / 26dB Bandwidth ,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 Measurement

3.4.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. 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 base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.

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 EIRP Power Density

3.6.1 Description of EIRP Power Density

For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average EIRP must not exceed 50 milliwatts within any 1 megahertz of authorized bandwidth, *except that* for mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth. For mobile and portable stations using time division duplexing (TDD) technology, the duty cycle must not exceed 38 percent in the 2305-2315 MHz and 2350-2360 MHz bands. Mobile and portable stations using FDD technology are restricted to transmitting in the 2305-2315 MHz band. Power averaging shall not include intervals in which the transmitter is off.

3.6.2 Test Procedures

1. Set instrument center frequency to OBW center frequency.
2. Set span to at least 1.5 times the OBW.
3. Set the RBW to the specified reference bandwidth (often 1 MHz).
4. Set VBW ≥ 3 × RBW.
5. Detector = RMS (power averaging).
6. Ensure that the number of measurement points in the sweep ≥ 2 × span/RBW.
7. Sweep time = auto couple.
8. Employ trace averaging (RMS) mode over a minimum of 100 traces.
9. Use the peak marker function to determine the maximum amplitude level within the reference bandwidth (PSD).

3.7 Occupied Bandwidth

3.7.1 Description of Occupied Bandwidth Measurement

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26dB 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 26 dB.
The 26 dB emission bandwidth(EBW) 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 EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF powers with full RB sizes were measured.

3.8 Conducted Band Edge Measurement

3.8.1 Description of Conducted Band Edge Measurement

27.53 (a)(4)

For mobile and portable stations operating in the 2305-2315 MHz and 2350-2360 MHz bands:

(i) By a factor of not less than: 43 + 10 log (P) dB on all frequencies between 2305 and 2320 MHz and on all frequencies between 2345 and 2360 MHz that are outside the licensed band(s) of operation, not less than 55 + 10 log (P) dB on all frequencies between 2320 and 2324 MHz and on all frequencies between 2341 and 2345 MHz, not less than 61 + 10 log (P) dB on all frequencies between 2324 and 2328 MHz and on all frequencies between 2337 and 2341 MHz, and not less than 67 + 10 log (P) dB on all frequencies between 2328 and 2337 MHz;

(ii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2300 and 2305 MHz, 55 + 10 log (P) dB on all frequencies between 2296 and 2300 MHz, 61 + 10 log (P) dB on all frequencies between 2292 and 2296 MHz, 67 + 10 log (P) dB on all frequencies between 2288 and 2292 MHz, and 70 + 10 log (P) dB below 2288 MHz;

(iii) By a factor of not less than 43 + 10 log (P) dB on all frequencies between 2360 and 2365 MHz, and not less than 70 + 10 log (P) dB above 2365 MHz.

3.8.2 Test Procedures

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels were measured with RBW ≥ 1% EBW set in Spectrum Analyzer, while the EUT was transmitting under maximum power.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
4. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB) = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

3.9 Conducted Spurious Emission Measurement

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 70 + 10 log (P) dB.

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

3.9.2 Test Procedures

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 70 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [70 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [70 + 10log(P)] (dB)
   = -40dBm.

3.10 Frequency Stability Measurement

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

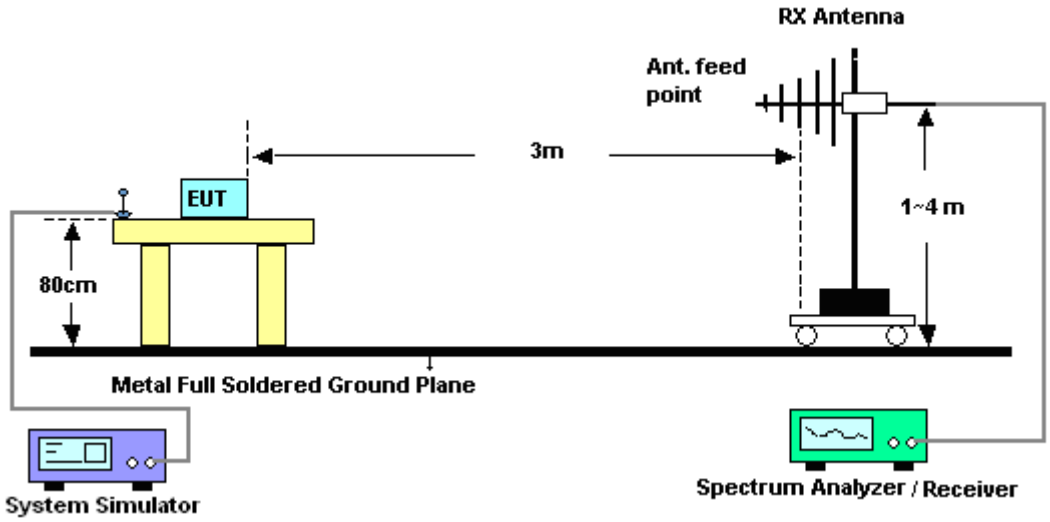
4 Radiated Test Items

4.1 Measuring Instruments

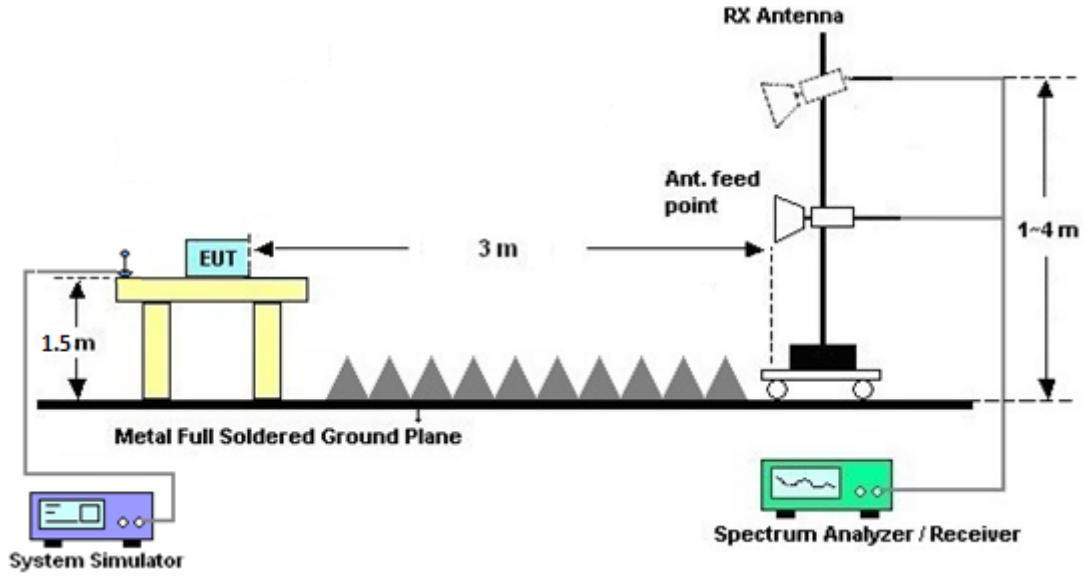
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission Measurement

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-D-2010.

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 70 + 10 log (P) dB.

4.4.2 Test Procedures

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 70 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [70 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [70 + 10log(P)] (dB)
    = -40dBm.
11. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
LTE Base Station	Anritsu	MT8820C	6201432821	GSM/GPRS W/CDMA/LTE	Oct. 11, 2016	Apr. 08, 2017 ~ Jun. 19, 2017	Oct. 10, 2017	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101397	10Hz~40GHz	Nov. 04, 2016	Apr. 08, 2017 ~ Jun. 19, 2017	Nov. 03, 2017	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-30℃~70℃	Sep. 01, 2016	Apr. 08, 2017 ~ Jun. 19, 2017	Aug. 31, 2017	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890001	1V~20V 0.5A~5A	Oct. 03, 2016	Apr. 08, 2017 ~ Jun. 19, 2017	Oct. 02, 2017	Conducted (TH05-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Nov. 09, 2016	Jul. 27, 2017	Nov. 08, 2017	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL6111D& 00800N1D0	41912&05	30MHz to 1GHz	Jan. 07, 2017	Jul. 27, 2017	Jan. 06, 2018	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1620	1G~18GHz	Sep. 30, 2016	Jul. 27, 2017	Sep. 29, 2017	Radiation (03CH15-HY)
Preamplifier	Keysight	83017A	MY53270195	1GHz~26.5GHz	Aug. 24, 2016	Jul. 27, 2017	Aug. 23, 2017	Radiation (03CH15-HY)
Spectrum Analyzer	Agilent	N9030A	MY52350276	3Hz~44GHz	Mar. 23, 2017	Jul. 27, 2017	Mar. 22, 2018	Radiation (03CH15-HY)
Controller	ChainTek	3000-1	N/A	Control Turn table & Ant Mast	N/A	Jul. 27, 2017	N/A	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Jul. 27, 2017	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Jul. 27, 2017	N/A	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA9170584	18GHz- 40GHz	Nov. 08, 2016	Jul. 27, 2017	Nov. 07, 2017	Radiation (03CH15-HY)
Signal Generator	Rohde & Schwarz	SMF100A	101107	100kHz~40GHz	May. 22, 2017	Jul. 27, 2017	May. 21, 2018	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1522	1G~18GHz	Mar. 17, 2017	Jul. 27, 2017	Mar. 16, 2018	Radiation (03CH15-HY)

NCR: No Calibration Required

6 Uncertainty of Evaluation

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz) for 03CH15-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.4dB

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz) for 03CH15-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.7dB

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz) for 03CH15-HY

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.0dB

Appendix A. Test Results of Conducted Test

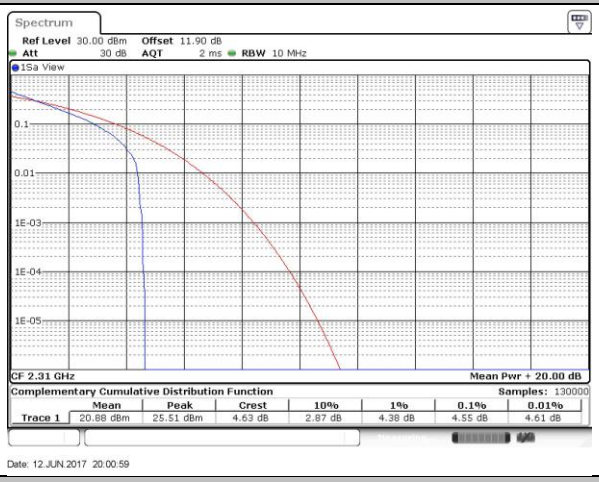
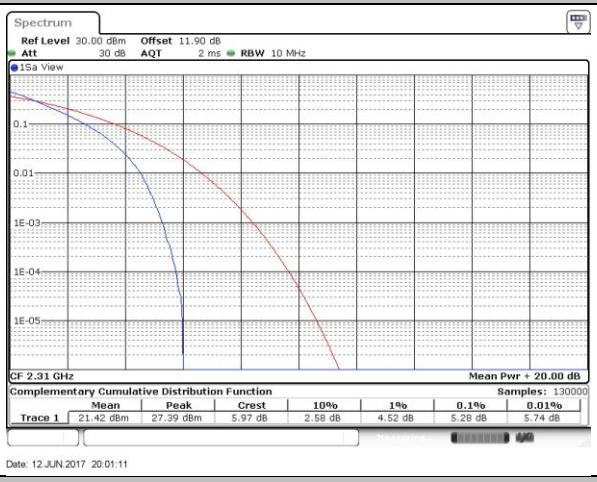
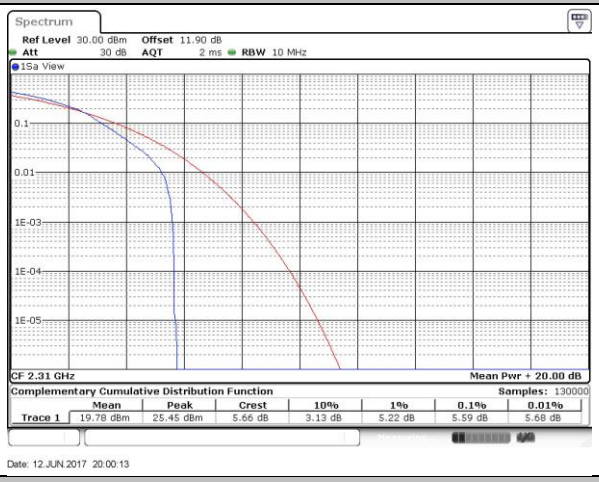
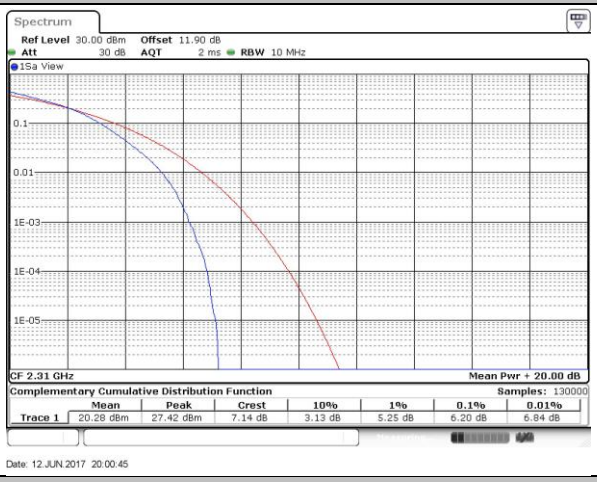
Conducted Output Power(Average power)

LTE Band 30 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	18.53	18.45	18.48
5	1	12		18.40	18.42	18.32
5	1	24		18.43	18.34	18.36
5	12	0		17.53	17.50	17.50
5	12	7		17.45	17.51	17.39
5	12	13		17.46	17.46	17.37
5	25	0		17.43	17.48	17.34
5	1	0	16-QAM	17.84	17.73	17.78
5	1	12		17.70	17.72	17.62
5	1	24		17.71	17.63	17.65
5	12	0		16.58	16.48	16.53
5	12	7		16.46	16.50	16.41
5	12	13		16.46	16.51	16.39
5	25	0		16.44	16.47	16.39
5	1	0	64QAM	16.74	16.66	16.68
5	1	12		16.60	16.64	16.53
5	1	24		16.62	16.56	16.54
5	12	0		15.61	15.52	15.53
5	12	7		15.52	15.54	15.43
5	12	13		15.48	15.50	15.40
5	25	0		15.45	15.49	15.37

10	1	0	QPSK	-	18.62	-
10	1	25			18.43	
10	1	49			18.32	
10	25	0			17.52	
10	25	12			17.47	
10	25	25			17.35	
10	50	0			17.50	
10	1	0	16-QAM		17.89	
10	1	25			17.73	
10	1	49			17.65	
10	25	0			16.51	
10	25	12			16.50	
10	25	25			16.37	
10	50	0			16.51	
10	1	0	64QAM		16.78	
10	1	25			16.60	
10	1	49			16.53	
10	25	0			15.53	
10	25	12			15.51	
10	25	25			15.39	
10	50	0			15.51	

Peak-to-Average Ratio

Mode	LTE Band 30 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	4.55	5.28	5.59	6.2	
Highest CH	-	-	-	-	
Mode	LTE Band 30 / 10MHz				
Mod.	QPSK		64QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	-	-	5.19	6.23	
Highest CH	-	-	-	-	

LTE Band 30 / 10MHz / QPSK	
Middle Channel / 1RB	**Middle Channel / Full RB**
	
LTE Band 30 / 10MHz / 16QAM	
Middle Channel / 1RB	**Middle Channel / Full RB**
	
LTE Band 30 / 10MHz / 64QAM	
Middle Channel / 1RB	**Middle Channel / Full RB**
	

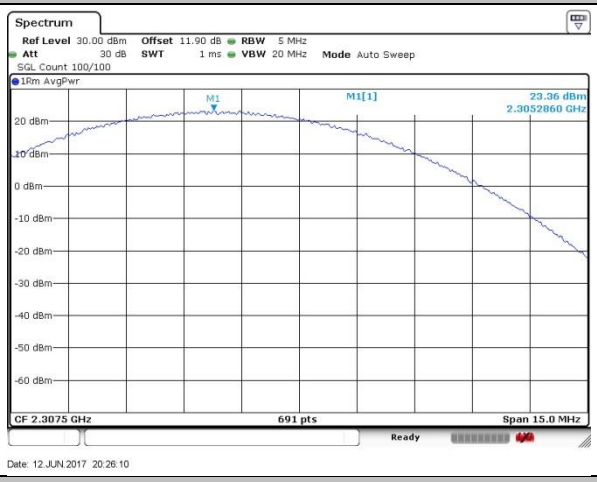
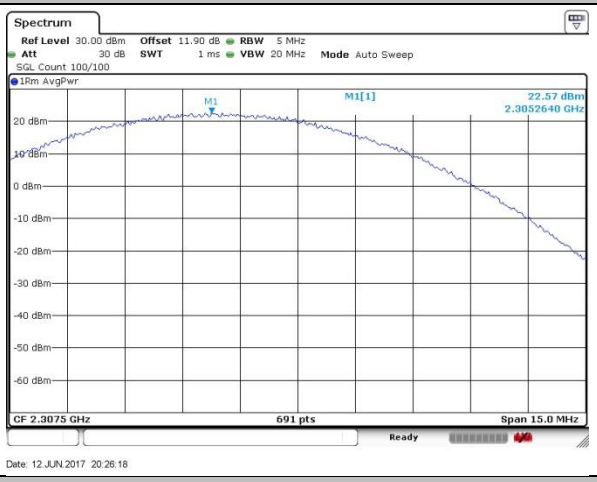
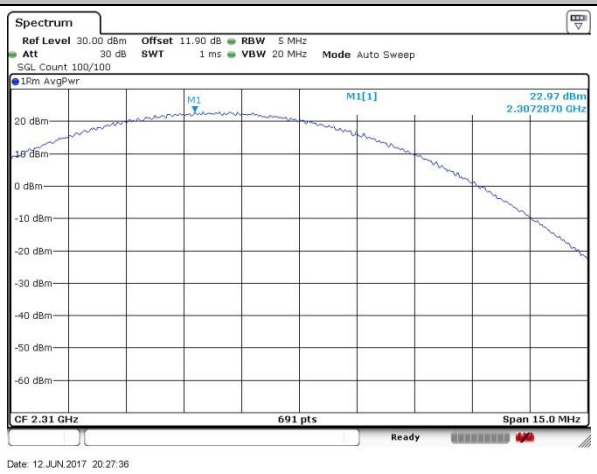
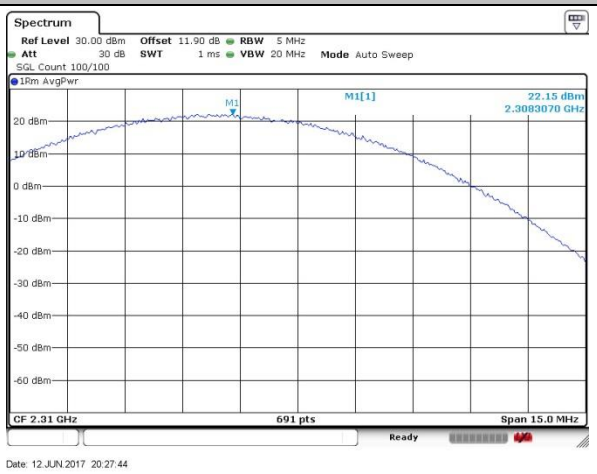
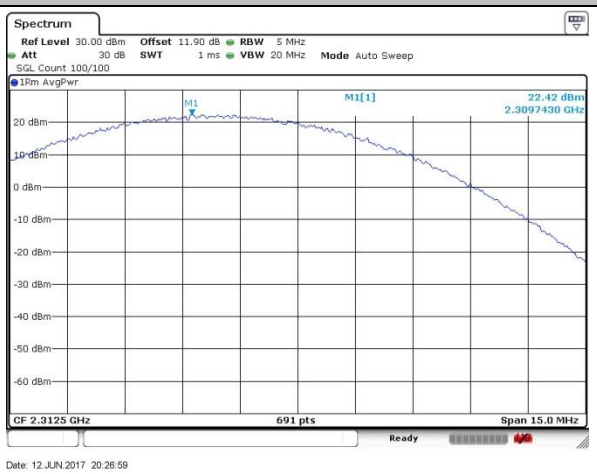
EIRP Power Density

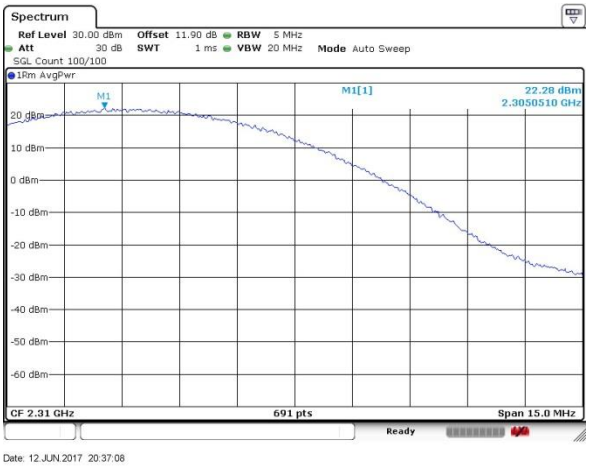
Mode	LTE Band 30 : Conducted Power Density (dBm/5MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					23.36	22.57						
Middle CH					22.97	22.15	23.38	22.28				
Highest CH					23.32	22.42						

Mode	LTE Band 30 : EIRP Power Density (dBm/5MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					18.46	17.67						
Middle CH					18.07	17.25	18.48	17.38				
Highest CH					18.42	17.52						
Antenna Gain	-4.9 dBi											
Limit	250mW / 5MHz = 24dBm / 5MHz											
Result	Pass											

Mode	LTE Band 30 : Conducted Power Density (dBm/5MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH						21.73						
Middle CH						21.68		21.21				
Highest CH						21.7						

Mode	LTE Band 30 : EIRP Power Density (dBm/5MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH						16.83						
Middle CH						16.78		16.61				
Highest CH						16.8						
Antenna Gain	-4.9 dBi											
Limit	250mW / 5MHz = 24dBm / 5MHz											
Result	Pass											

LTE Band 30 / 5MHz	
Lowest Channel / 5MHz / 1RB0 / QPSK	**Lowest Channel / 5MHz / 1RB0 / 16QAM**
	
Middle Channel / 5MHz / 1RB0 / QPSK	**Middle Channel / 5MHz / 1RB0 / 16QAM**
	
Highest Channel / 5MHz / 1RB0 / QPSK	**Highest Channel / 5MHz / 1RB0 / 16QAM**
	

LTE Band 30 / 10MHz	
Lowest Channel / 10MHz / 1RB0 / QPSK	**Lowest Channel / 10MHz / 1RB0 / 16QAM**
	

LTE Band 30 / 5MHz

Lowest Channel / 5MHz / 1RB0 / 64QAM

Middle Channel / 5MHz / 1RB0 / 64QAM

Highest Channel / 5MHz / 1RB0 / 64QAM

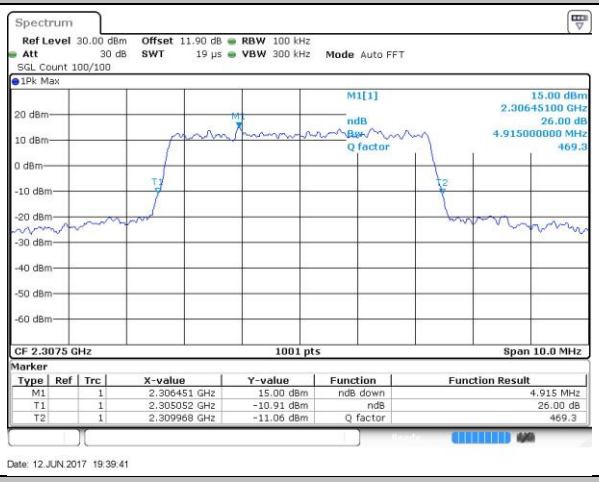
LTE Band 30 / 10MHz
Lowest Channel / 10MHz / 1RB0 / 64QAM


26dB Bandwidth

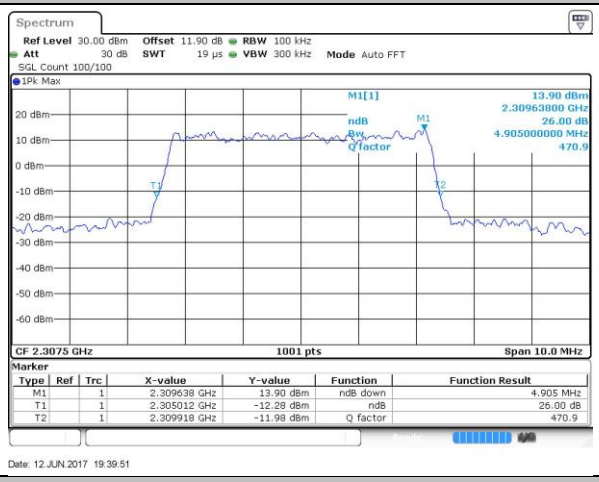
Mode	LTE Band 30 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.915	4.905	-	-	-	-	-	-
Middle CH	-	-	-	-	4.975	4.915	9.67	9.81	-	-	-	-
Highest CH	-	-	-	-	4.935	4.895	-	-	-	-	-	-
Mode	LTE Band 30 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH	-	-	-	-	-	4.945	-	-	-	-	-	-
Middle CH	-	-	-	-	-	4.915	-	9.65	-	-	-	-
Highest CH	-	-	-	-	-	4.825	-	-	-	-	-	-

LTE Band 30

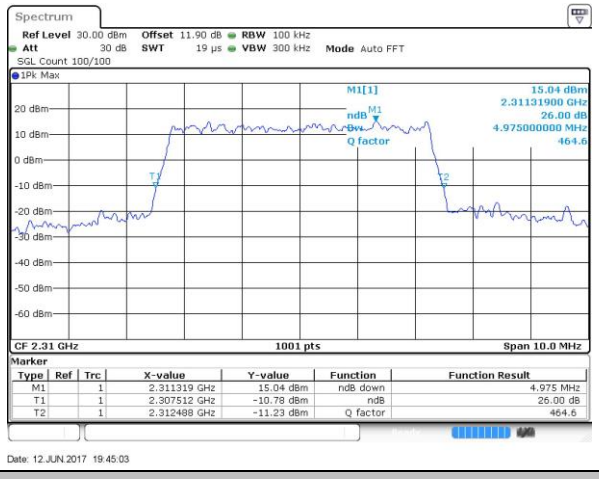
Lowest Channel / 5MHz / QPSK



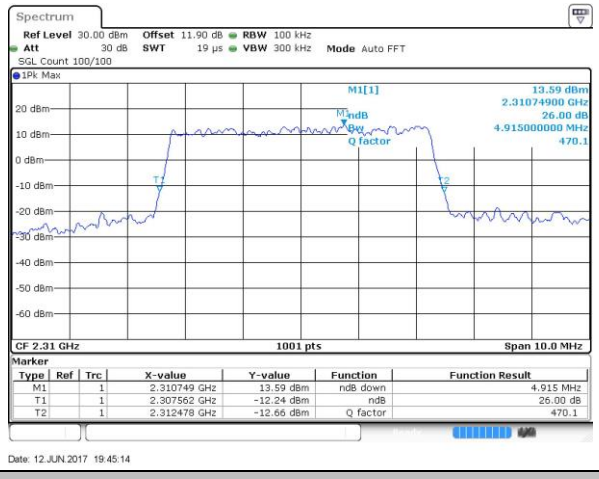
Lowest Channel / 5MHz / 16QAM



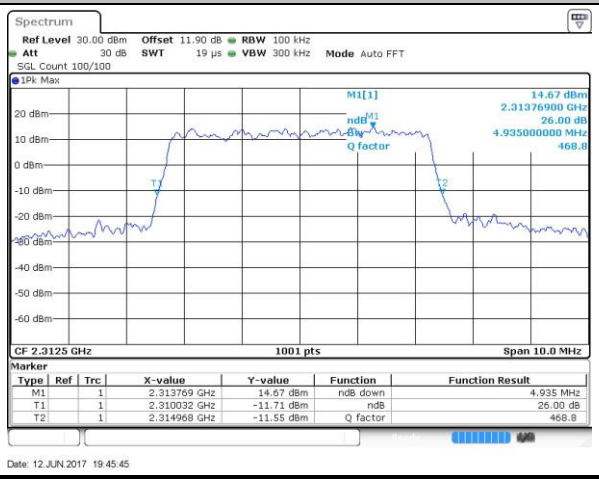
Middle Channel / 5MHz / QPSK



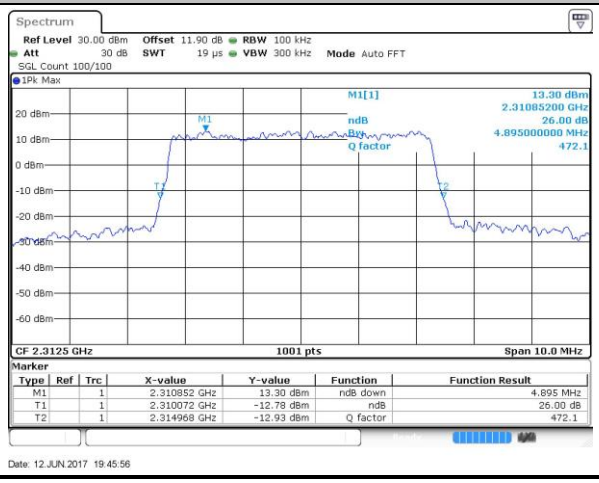
Middle Channel / 5MHz / 16QAM



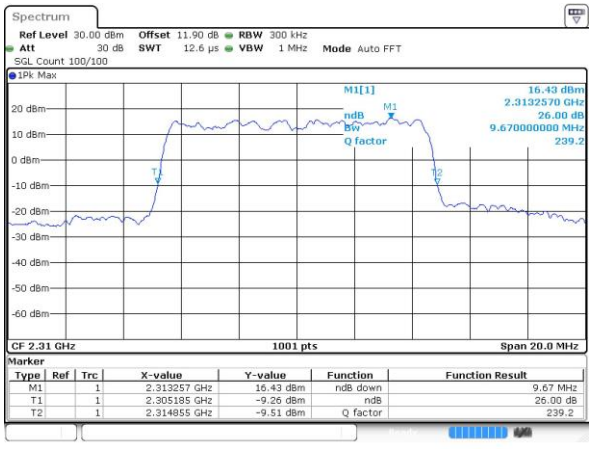
Highest Channel / 5MHz / QPSK

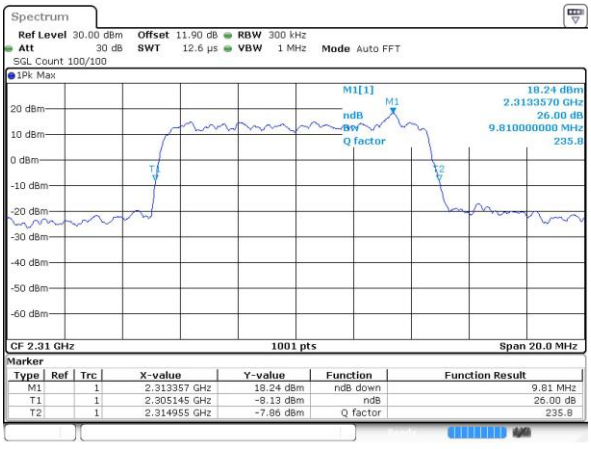


Highest Channel / 5MHz / 16QAM



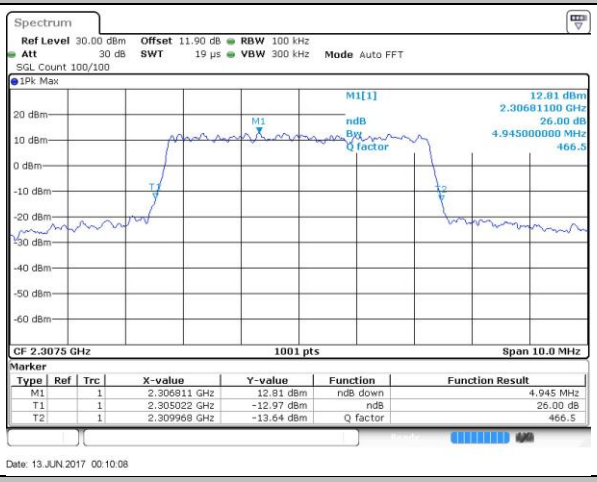
LTE Band 30	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**



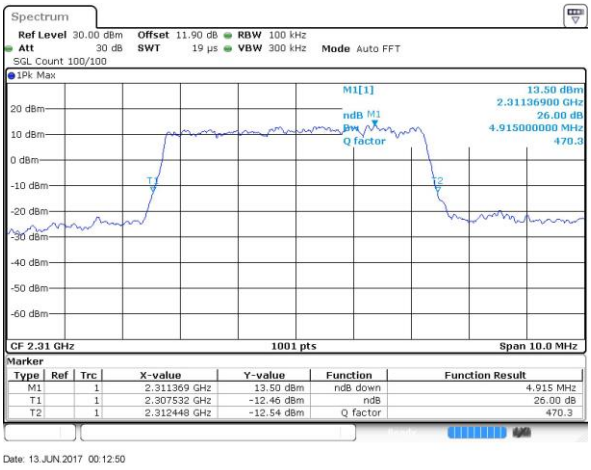


LTE Band 30

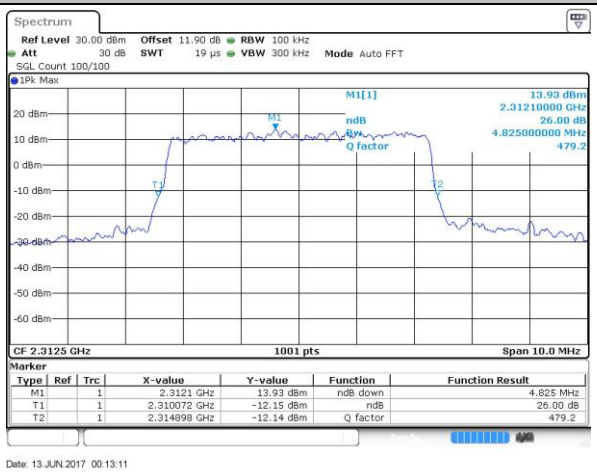
Lowest Channel / 5MHz / 64QAM



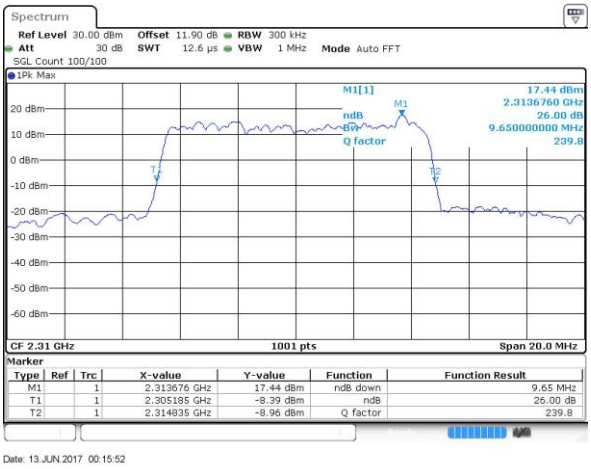
Middle Channel / 5MHz / 64QAM



Highest Channel / 5MHz / 64QAM



LTE Band 30
Middle Channel / 10MHz / 64QAM

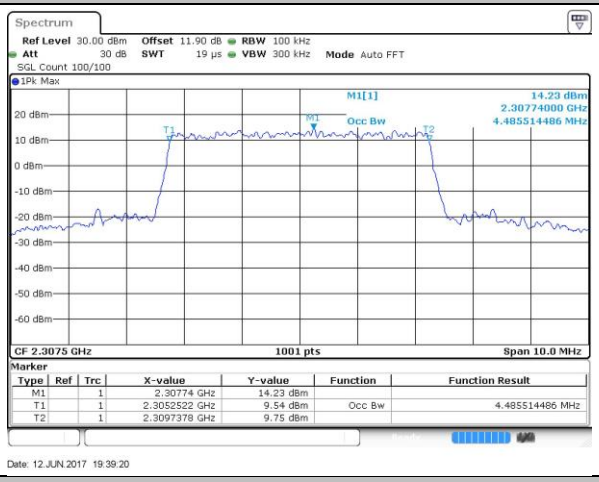


Occupied Bandwidth

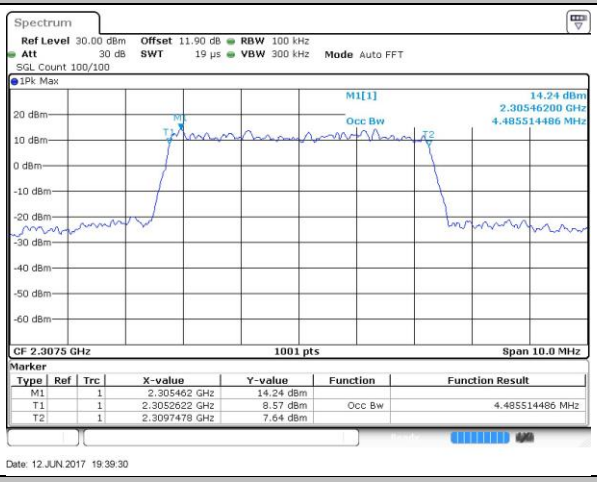
Mode	LTE Band 30 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.5	4.48	9.07	9.01	-	-	-	-
Highest CH	-	-	-	-	4.5	4.5	-	-	-	-	-	-
Mode	LTE Band 30 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM	QPSK	64QAM
Lowest CH	-	-	-	-	-	4.48	-	-	-	-	-	-
Middle CH	-	-	-	-	-	4.49	-	9.05	-	-	-	-
Highest CH	-	-	-	-	-	4.5	-	-	-	-	-	-

LTE Band 30

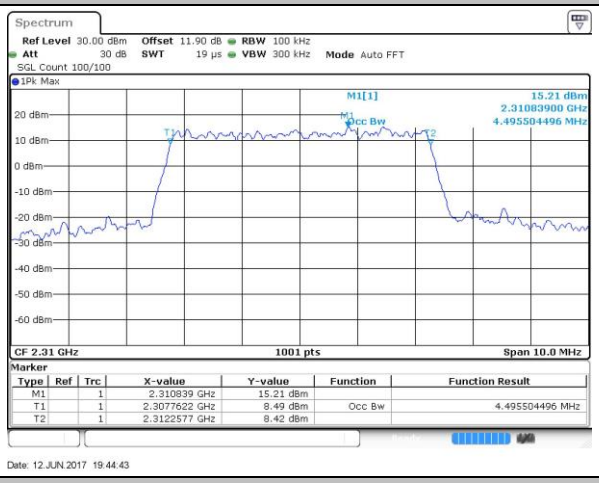
Lowest Channel / 5MHz / QPSK



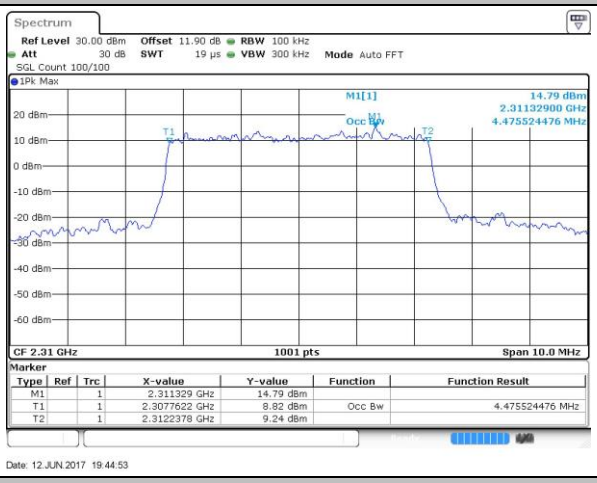
Lowest Channel / 5MHz / 16QAM



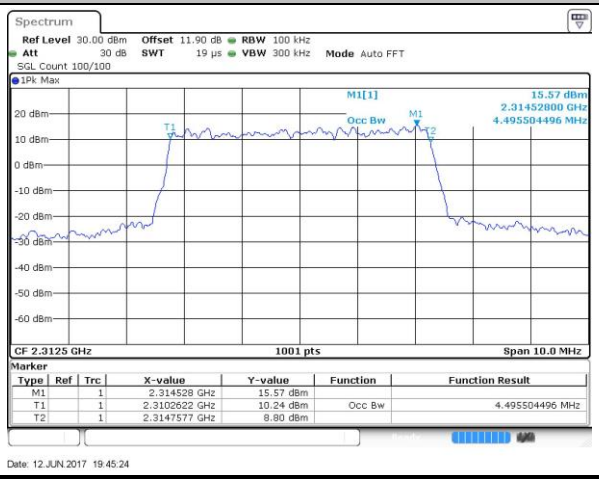
Middle Channel / 5MHz / QPSK



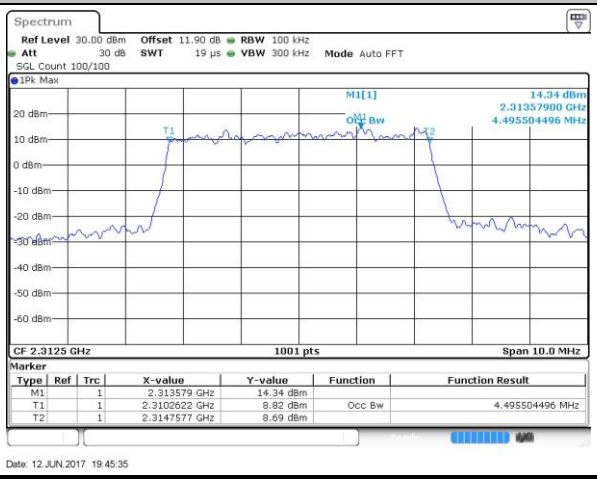
Middle Channel / 5MHz / 16QAM

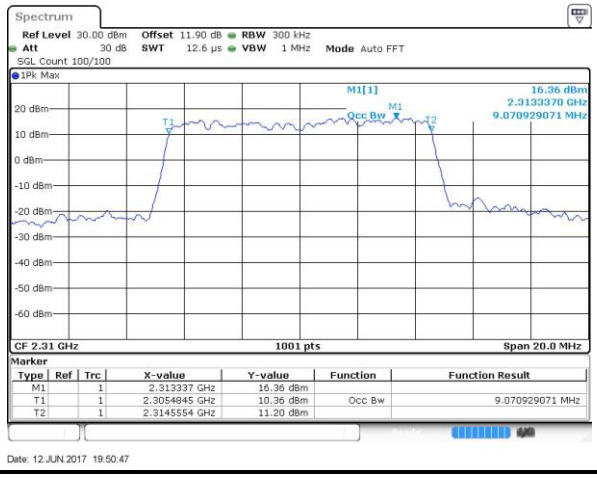
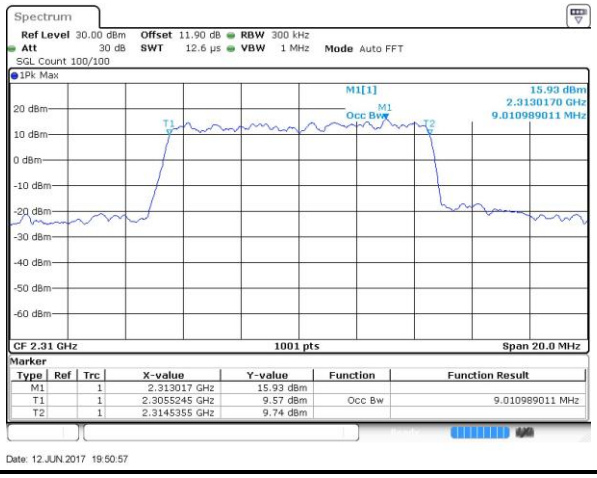


Highest Channel / 5MHz / QPSK



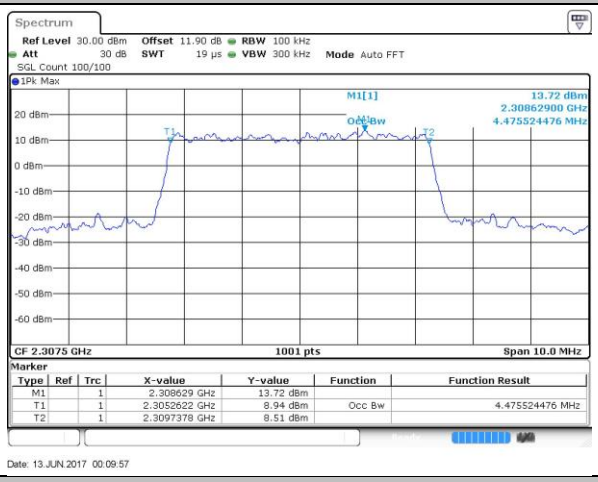
Highest Channel / 5MHz / 16QAM



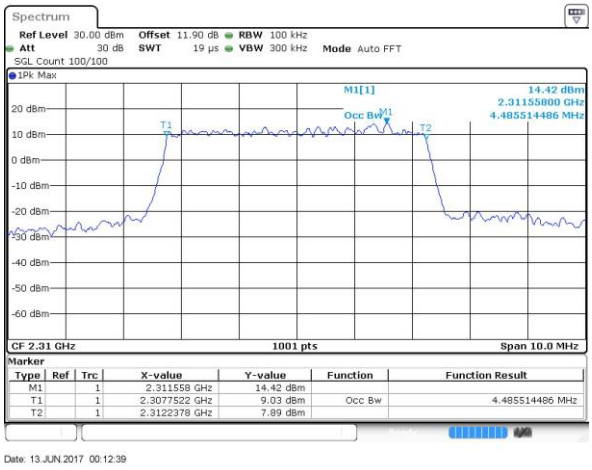
LTE Band 30	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

LTE Band 30

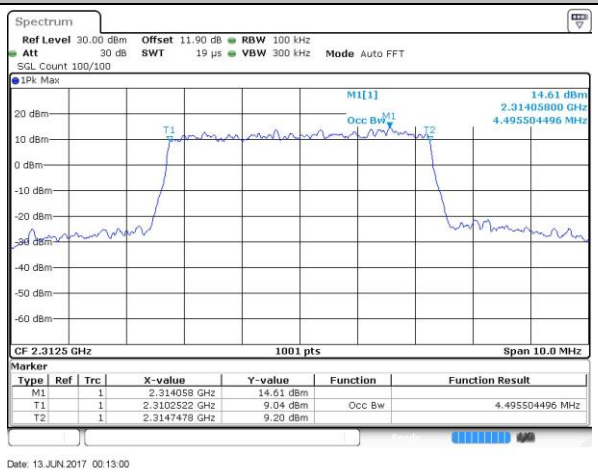
Lowest Channel / 5MHz / 64QAM



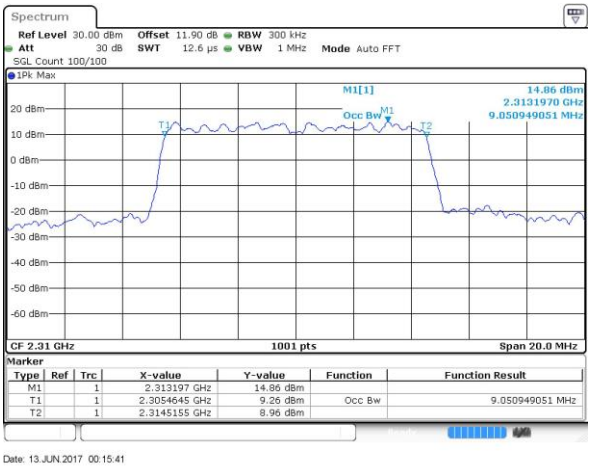
Middle Channel / 5MHz / 64QAM



Highest Channel / 5MHz / 64QAM



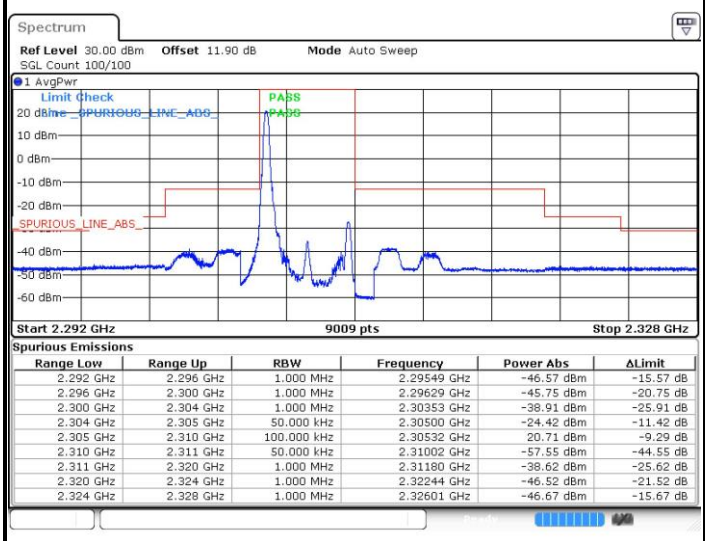
LTE Band 30
Middle Channel / 10MHz / 64QAM



Conducted Band Edge

LTE Band 30 / 5MHz / QPSK

Lowest Band Edge / 1 RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29549 GHz	-46.57 dBm	-15.57 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29629 GHz	-45.75 dBm	-20.75 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30353 GHz	-38.91 dBm	-25.91 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-24.42 dBm	-11.42 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30532 GHz	20.71 dBm	-9.29 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31002 GHz	-57.55 dBm	-44.55 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31180 GHz	-38.62 dBm	-25.62 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32244 GHz	-46.52 dBm	-21.52 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32601 GHz	-46.67 dBm	-15.67 dB

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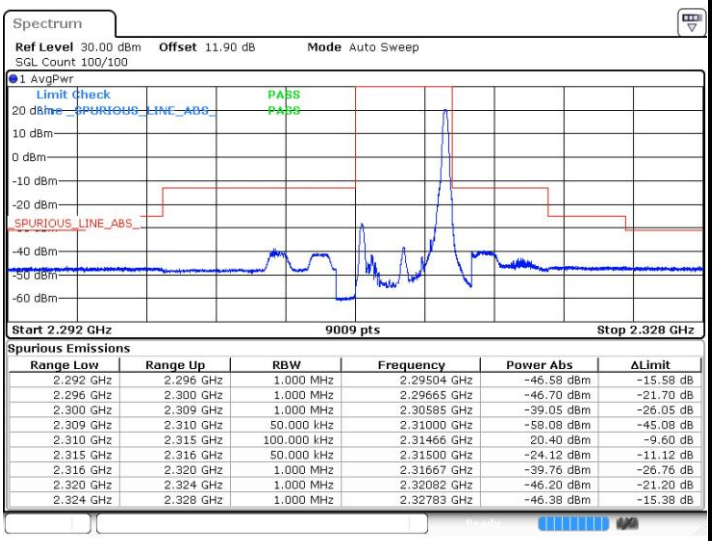
Highest Band Edge / 1 RB

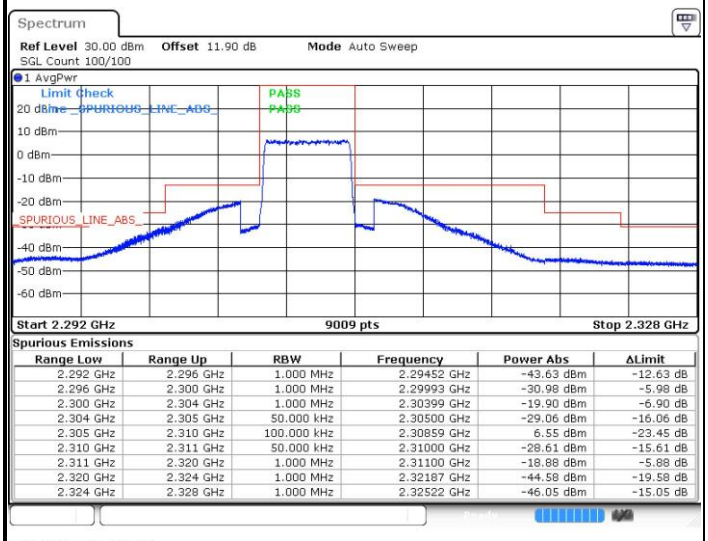


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29504 GHz	-46.58 dBm	-15.58 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29665 GHz	-46.70 dBm	-21.70 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30585 GHz	-39.05 dBm	-26.05 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-58.08 dBm	-45.08 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31466 GHz	20.40 dBm	-9.60 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-24.12 dBm	-11.12 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31667 GHz	-39.76 dBm	-26.76 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32082 GHz	-46.20 dBm	-21.20 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32783 GHz	-46.38 dBm	-15.38 dB

Date: 12.JUN.2017 19:47:05

Lowest Band Edge / Full RB

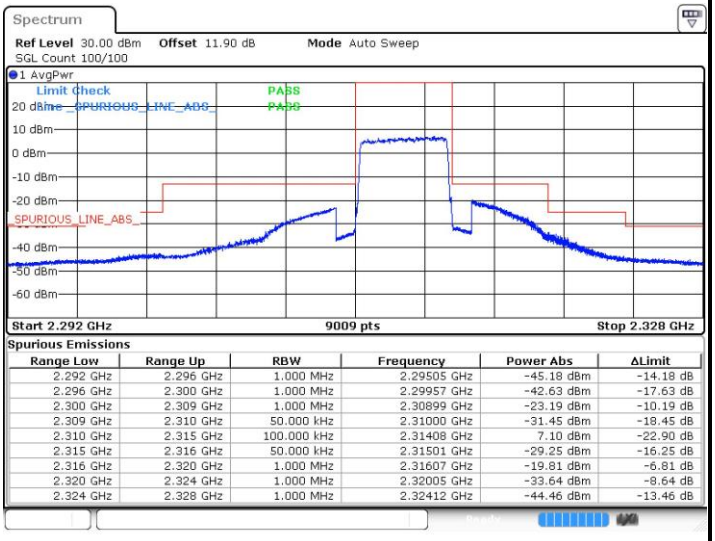


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29452 GHz	-43.63 dBm	-12.63 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29993 GHz	-30.98 dBm	-5.98 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30399 GHz	-19.90 dBm	-6.90 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-29.06 dBm	-16.06 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30859 GHz	6.55 dBm	-23.45 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31000 GHz	-28.61 dBm	-15.61 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31100 GHz	-18.88 dBm	-5.88 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32187 GHz	-44.58 dBm	-19.58 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32522 GHz	-46.05 dBm	-15.05 dB

Date: 12.JUN.2017 19:43:21

Highest Band Edge / Full RB



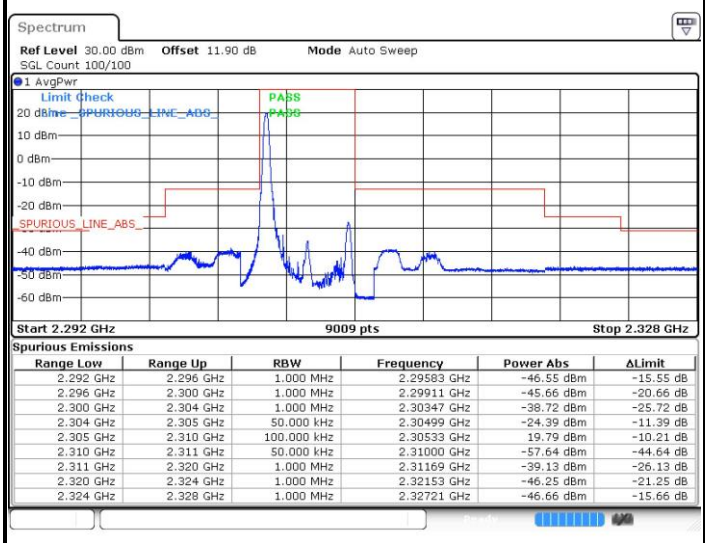
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29505 GHz	-45.18 dBm	-14.18 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29957 GHz	-42.63 dBm	-17.63 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30899 GHz	-23.19 dBm	-10.19 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-31.45 dBm	-18.45 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31408 GHz	7.10 dBm	-22.90 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31501 GHz	-29.25 dBm	-16.25 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31607 GHz	-19.81 dBm	-6.81 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32005 GHz	-33.64 dBm	-8.64 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32412 GHz	-44.46 dBm	-13.46 dB

Date: 12.JUN.2017 19:49:25

LTE Band 30 / 5MHz / 16QAM

Lowest Band Edge / 1RB

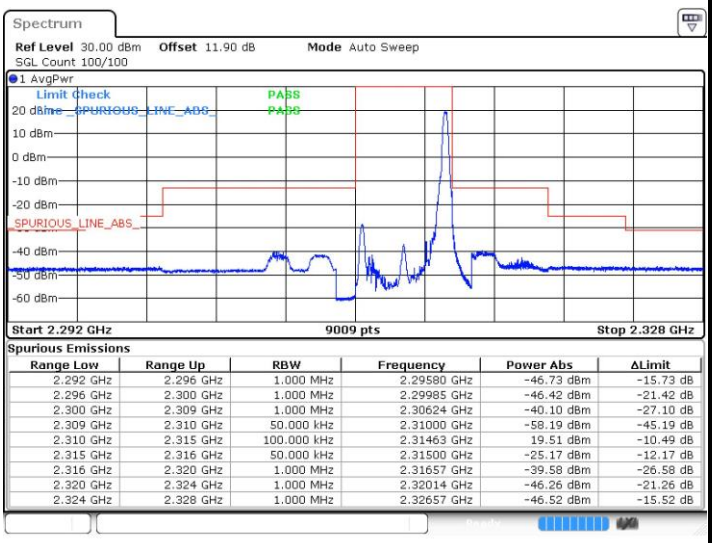


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29583 GHz	-46.55 dBm	-15.55 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29911 GHz	-45.66 dBm	-20.66 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30347 GHz	-38.72 dBm	-25.72 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30499 GHz	-24.39 dBm	-11.39 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30533 GHz	19.79 dBm	-10.21 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31000 GHz	-57.64 dBm	-44.64 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31169 GHz	-39.13 dBm	-26.13 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32153 GHz	-46.25 dBm	-21.25 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32721 GHz	-46.66 dBm	-15.66 dB

Date: 12.JUN.2017 19:42:11

Highest Band Edge / 1 RB

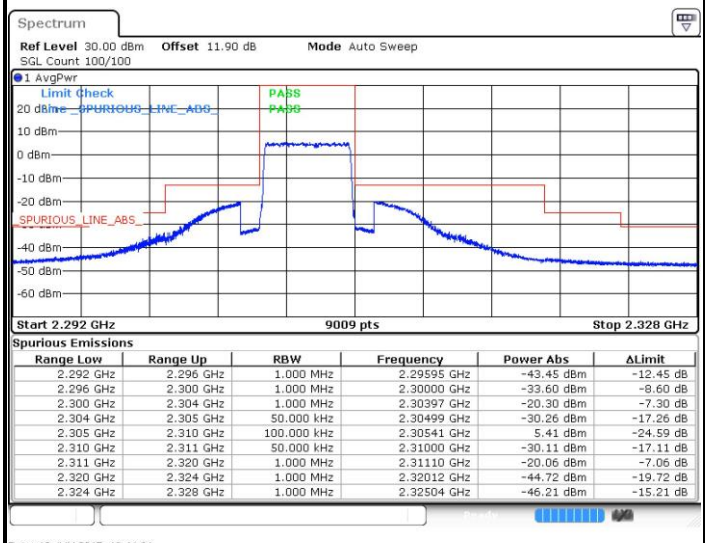


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29580 GHz	-46.73 dBm	-15.73 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29985 GHz	-46.42 dBm	-21.42 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30624 GHz	-40.10 dBm	-27.10 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-58.19 dBm	-45.19 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31463 GHz	19.51 dBm	-10.49 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-25.17 dBm	-12.17 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31657 GHz	-39.58 dBm	-26.58 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32014 GHz	-46.26 dBm	-21.26 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32657 GHz	-46.52 dBm	-15.52 dB

Date: 12.JUN.2017 19:48:15

Lowest Band Edge / Full RB

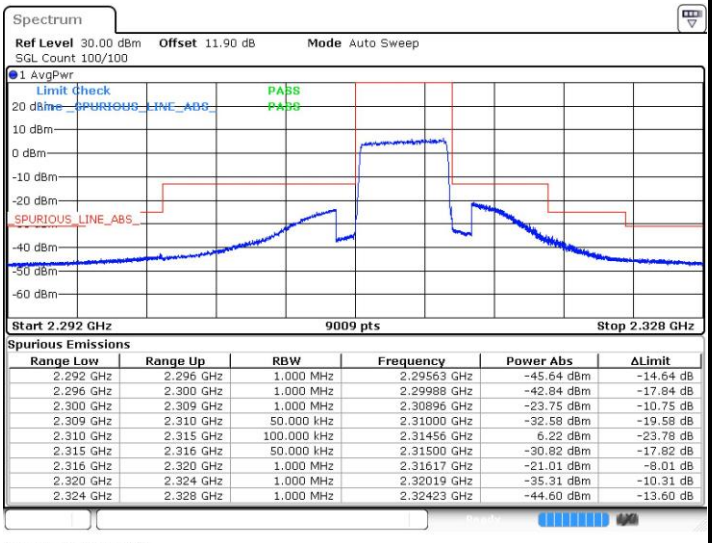


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29595 GHz	-43.45 dBm	-12.45 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.30000 GHz	-33.60 dBm	-8.60 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30397 GHz	-20.30 dBm	-7.30 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30499 GHz	-30.26 dBm	-17.26 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30541 GHz	5.41 dBm	-24.59 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31000 GHz	-30.11 dBm	-17.11 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31110 GHz	-20.06 dBm	-7.06 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32012 GHz	-44.72 dBm	-19.72 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32504 GHz	-46.21 dBm	-15.21 dB

Date: 12.JUN.2017 19:44:31

Highest Band Edge / Full RB



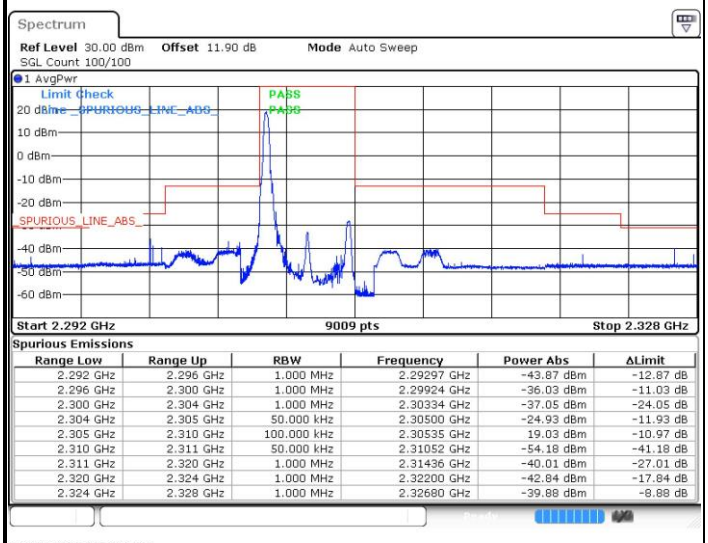
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29563 GHz	-45.64 dBm	-14.64 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29988 GHz	-42.84 dBm	-17.84 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30896 GHz	-23.75 dBm	-10.75 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-32.58 dBm	-19.58 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31456 GHz	6.22 dBm	-23.78 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-30.82 dBm	-17.82 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31617 GHz	-21.01 dBm	-8.01 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32019 GHz	-35.31 dBm	-10.31 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32423 GHz	-44.60 dBm	-13.60 dB

Date: 12.JUN.2017 19:50:35

LTE Band 30 / 5MHz / 64QAM

Lowest Band Edge / 1RB

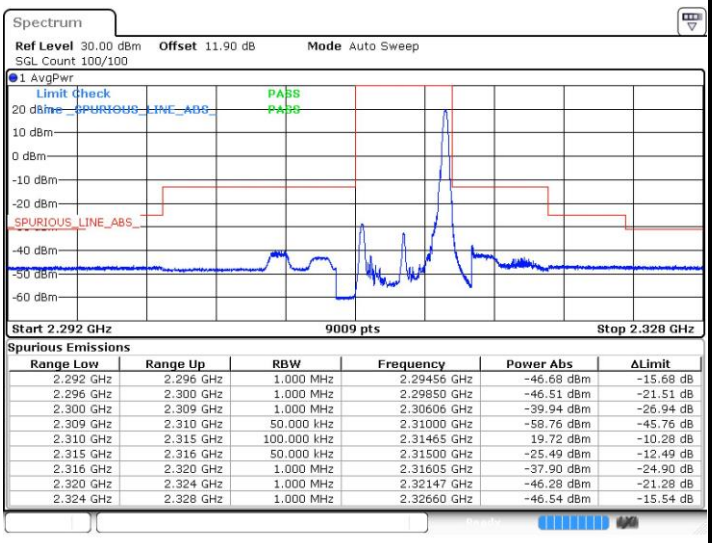


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29297 GHz	-43.87 dBm	-12.87 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29924 GHz	-36.03 dBm	-11.03 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30334 GHz	-37.05 dBm	-24.05 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-24.93 dBm	-11.93 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30535 GHz	19.03 dBm	-10.97 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31052 GHz	-54.18 dBm	-41.18 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31436 GHz	-40.01 dBm	-27.01 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32200 GHz	-42.84 dBm	-17.84 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32680 GHz	-39.88 dBm	-8.88 dB

Date: 13.JUN.2017 00:11:17

Highest Band Edge / 1 RB

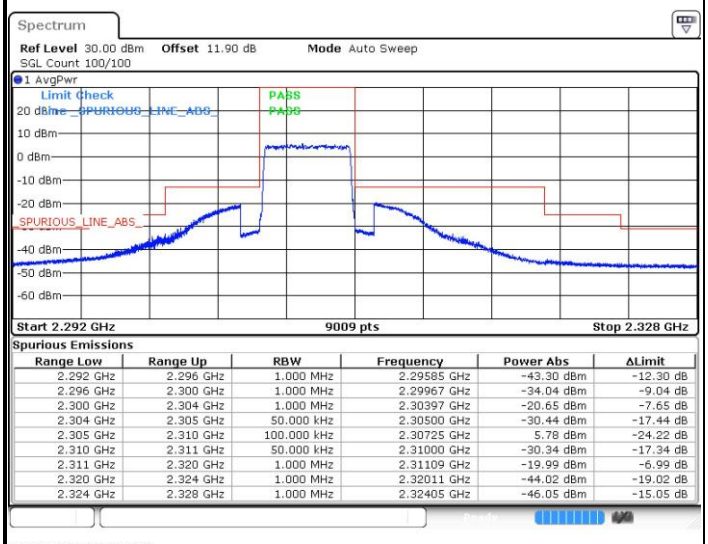


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29456 GHz	-46.68 dBm	-15.68 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29850 GHz	-46.51 dBm	-21.51 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30606 GHz	-39.94 dBm	-26.94 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-58.76 dBm	-45.76 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31465 GHz	19.72 dBm	-10.28 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-25.49 dBm	-12.49 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31605 GHz	-37.90 dBm	-24.90 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32147 GHz	-46.28 dBm	-21.28 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32660 GHz	-46.54 dBm	-15.54 dB

Date: 13.JUN.2017 00:14:20

Lowest Band Edge / Full RB

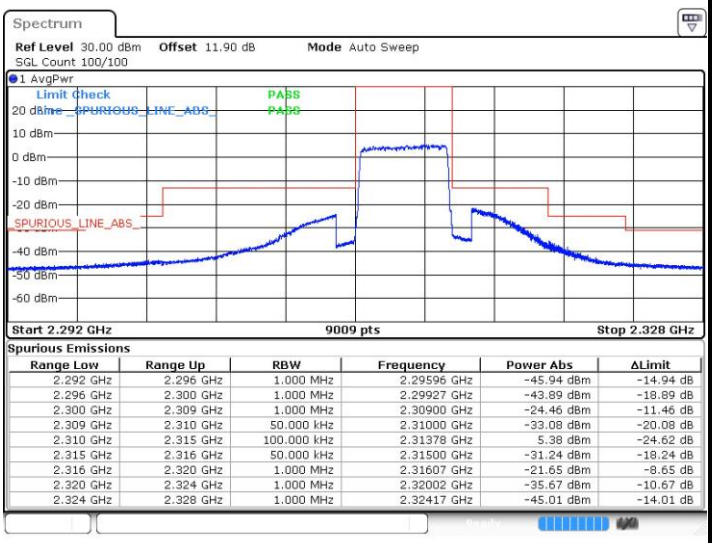


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29585 GHz	-43.30 dBm	-12.30 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29967 GHz	-34.04 dBm	-9.04 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30397 GHz	-20.65 dBm	-7.65 dB
2.304 GHz	2.305 GHz	50.000 kHz	2.30500 GHz	-30.44 dBm	-17.44 dB
2.305 GHz	2.310 GHz	100.000 kHz	2.30725 GHz	5.78 dBm	-24.22 dB
2.310 GHz	2.311 GHz	50.000 kHz	2.31000 GHz	-30.34 dBm	-17.34 dB
2.311 GHz	2.320 GHz	1.000 MHz	2.31109 GHz	-19.99 dBm	-6.99 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32011 GHz	-44.02 dBm	-19.02 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32405 GHz	-46.05 dBm	-15.05 dB

Date: 13.JUN.2017 00:12:28

Highest Band Edge / Full RB



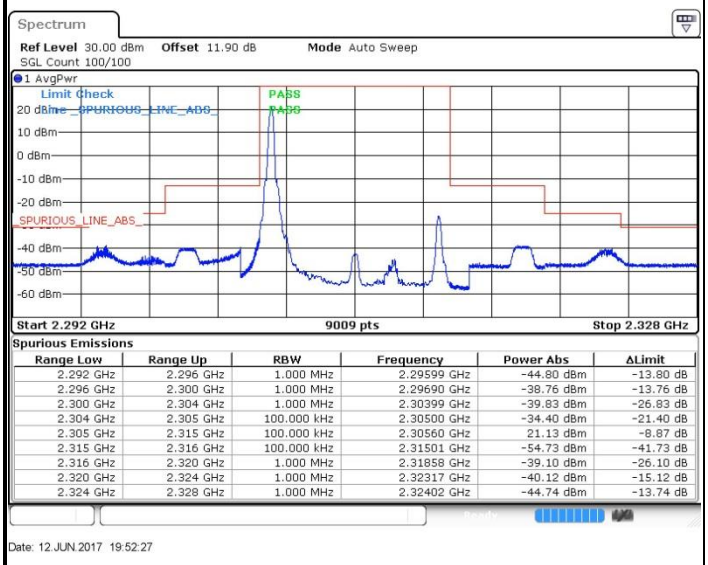
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29596 GHz	-45.94 dBm	-14.94 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29927 GHz	-43.89 dBm	-18.89 dB
2.300 GHz	2.309 GHz	1.000 MHz	2.30900 GHz	-24.46 dBm	-11.46 dB
2.309 GHz	2.310 GHz	50.000 kHz	2.31000 GHz	-33.08 dBm	-20.08 dB
2.310 GHz	2.315 GHz	100.000 kHz	2.31378 GHz	5.38 dBm	-24.62 dB
2.315 GHz	2.316 GHz	50.000 kHz	2.31500 GHz	-31.24 dBm	-18.24 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31607 GHz	-21.65 dBm	-8.65 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32002 GHz	-35.67 dBm	-10.67 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32417 GHz	-45.01 dBm	-14.01 dB

Date: 13.JUN.2017 00:15:30

LTE Band 30 / 10MHz / QPSK

Lowest Band Edge / 1 RB

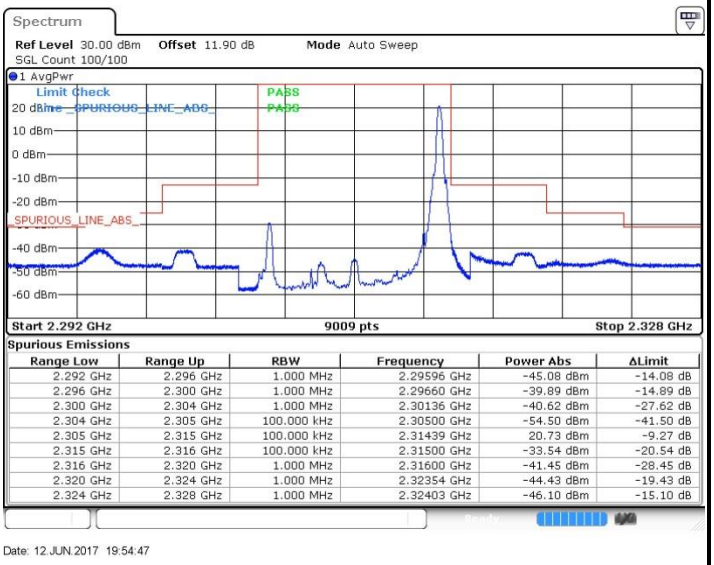


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29599 GHz	-44.80 dBm	-13.80 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29690 GHz	-38.76 dBm	-13.76 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30399 GHz	-39.83 dBm	-26.83 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-34.40 dBm	-21.40 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.30560 GHz	21.13 dBm	-8.87 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31501 GHz	-54.73 dBm	-41.73 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31858 GHz	-39.10 dBm	-26.10 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32317 GHz	-40.12 dBm	-15.12 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32402 GHz	-44.74 dBm	-13.74 dB

Date: 12.JUN.2017 19:52:27

Highest Band Edge / 1 RB

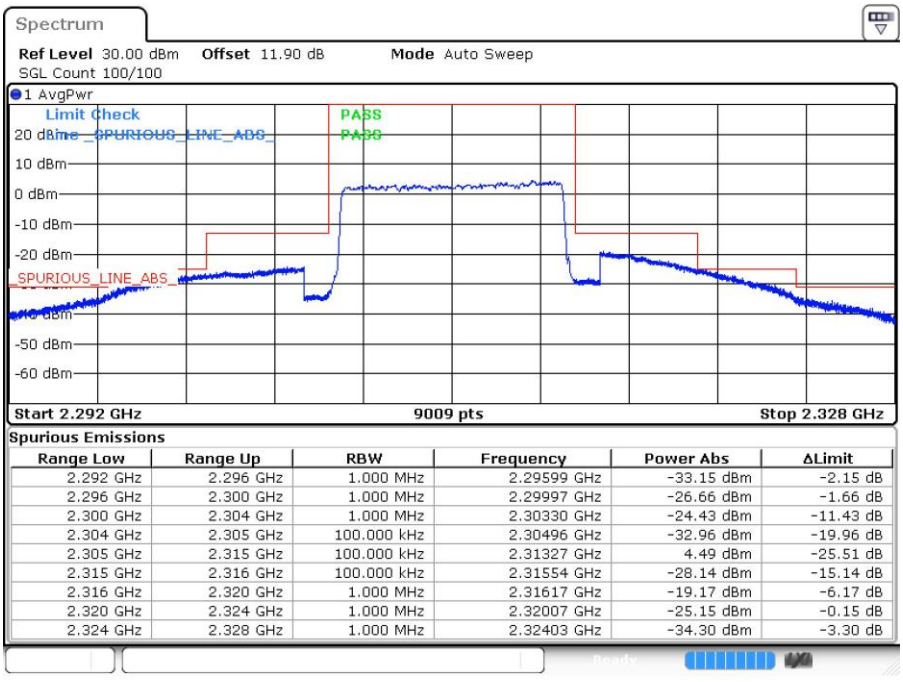


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29596 GHz	-45.08 dBm	-14.08 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29660 GHz	-39.89 dBm	-14.89 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30136 GHz	-40.62 dBm	-27.62 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-54.50 dBm	-41.50 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31439 GHz	20.73 dBm	-9.27 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31500 GHz	-33.54 dBm	-20.54 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31600 GHz	-41.45 dBm	-28.45 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32354 GHz	-44.43 dBm	-19.43 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32403 GHz	-46.10 dBm	-15.10 dB

Date: 12.JUN.2017 19:54:47

Band Edge / Full RB



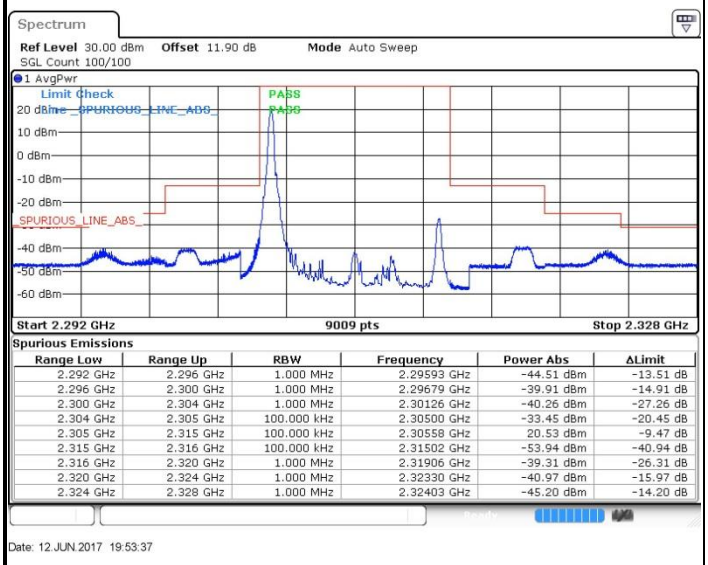
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29599 GHz	-33.15 dBm	-2.15 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29997 GHz	-26.66 dBm	-1.66 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30330 GHz	-24.43 dBm	-11.43 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30496 GHz	-32.96 dBm	-19.96 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31327 GHz	4.49 dBm	-25.51 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31554 GHz	-28.14 dBm	-15.14 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31617 GHz	-19.17 dBm	-6.17 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32007 GHz	-25.15 dBm	-0.15 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32403 GHz	-34.30 dBm	-3.30 dB

Date: 12.JUN.2017 19:57:08

LTE Band 30 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

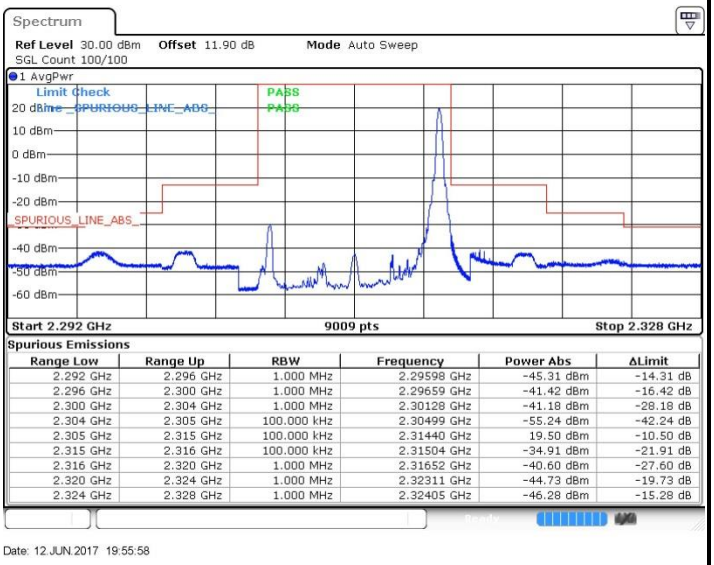


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29593 GHz	-44.51 dBm	-13.51 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29679 GHz	-39.91 dBm	-14.91 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30126 GHz	-40.26 dBm	-27.26 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-33.45 dBm	-20.45 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.30558 GHz	20.53 dBm	-9.47 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31502 GHz	-53.94 dBm	-40.94 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31906 GHz	-39.31 dBm	-26.31 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32330 GHz	-40.97 dBm	-15.97 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32403 GHz	-45.20 dBm	-14.20 dB

Date: 12.JUN.2017 19:53:37

Highest Band Edge / 1 RB

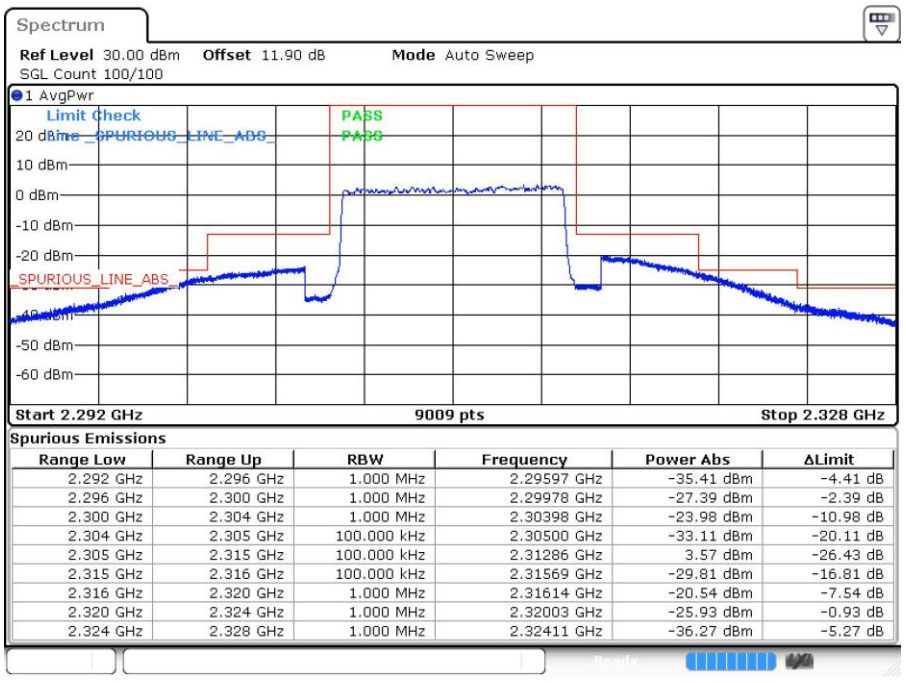


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29598 GHz	-45.31 dBm	-14.31 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29659 GHz	-41.42 dBm	-16.42 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30128 GHz	-41.18 dBm	-28.18 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30499 GHz	-55.24 dBm	-42.24 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31440 GHz	19.50 dBm	-10.50 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31504 GHz	-34.91 dBm	-21.91 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31652 GHz	-40.60 dBm	-27.60 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32311 GHz	-44.73 dBm	-19.73 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32405 GHz	-46.28 dBm	-15.28 dB

Date: 12.JUN.2017 19:55:58

Band Edge / Full RB



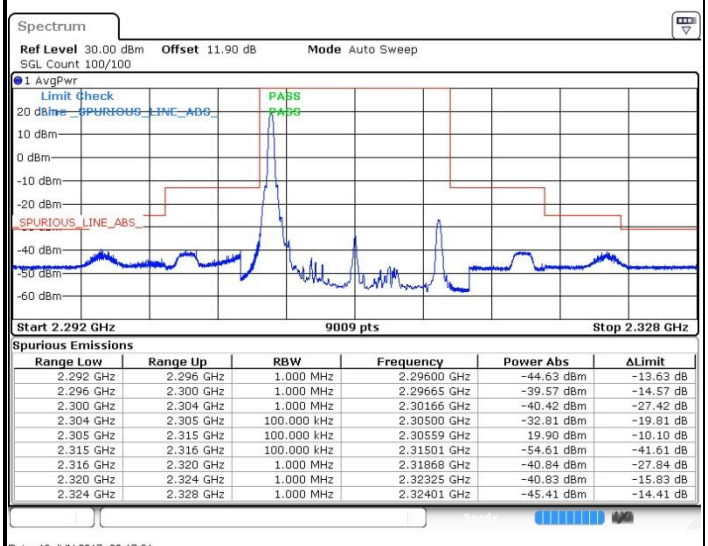
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29597 GHz	-35.41 dBm	-4.41 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29978 GHz	-27.39 dBm	-2.39 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30398 GHz	-23.98 dBm	-10.98 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-33.11 dBm	-20.11 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31286 GHz	3.57 dBm	-26.43 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31569 GHz	-29.81 dBm	-16.81 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31614 GHz	-20.54 dBm	-7.54 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32003 GHz	-25.93 dBm	-0.93 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32411 GHz	-36.27 dBm	-5.27 dB

Date: 12.JUN.2017 19:58:18

LTE Band 30 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

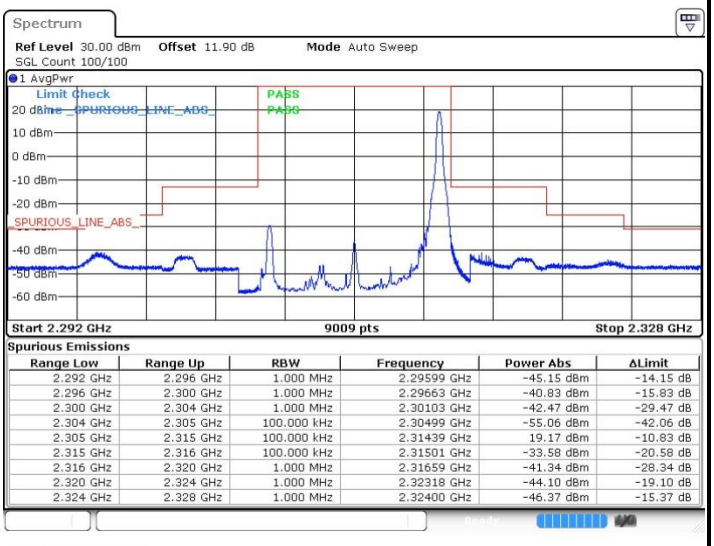


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29600 GHz	-44.63 dBm	-13.63 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29665 GHz	-39.57 dBm	-14.57 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30166 GHz	-40.42 dBm	-27.42 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-32.81 dBm	-19.81 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.30559 GHz	19.90 dBm	-10.10 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31501 GHz	-54.61 dBm	-41.61 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31868 GHz	-40.84 dBm	-27.84 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32325 GHz	-40.83 dBm	-15.83 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32401 GHz	-45.41 dBm	-14.41 dB

Date: 13.JUN.2017 00:17:01

Highest Band Edge / 1 RB

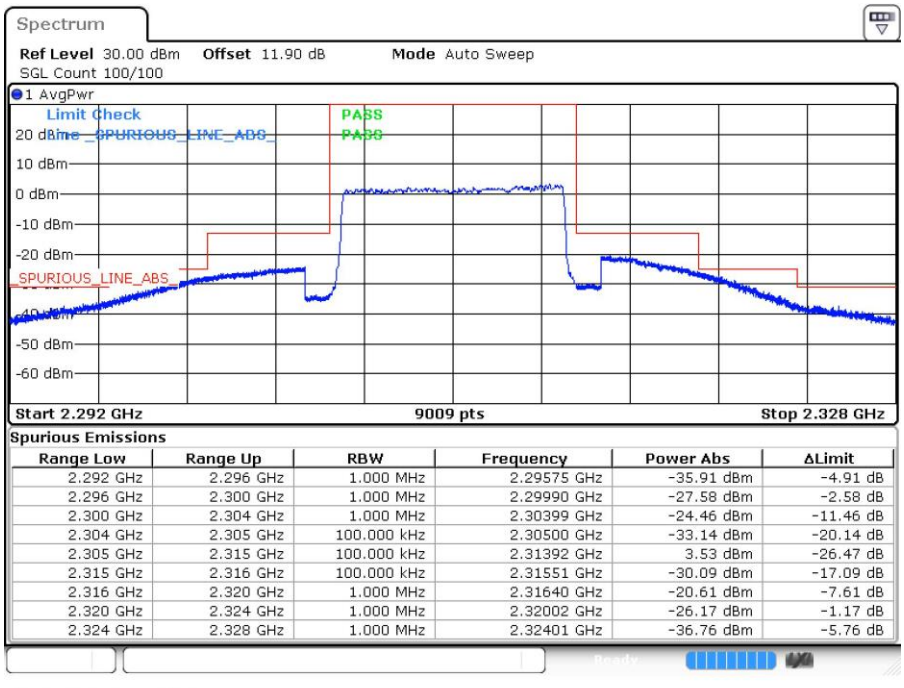


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29599 GHz	-45.15 dBm	-14.15 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29663 GHz	-40.83 dBm	-15.83 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30103 GHz	-42.47 dBm	-29.47 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30499 GHz	-55.06 dBm	-42.06 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31439 GHz	19.17 dBm	-10.83 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31501 GHz	-33.58 dBm	-20.58 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31659 GHz	-41.34 dBm	-28.34 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32318 GHz	-44.10 dBm	-19.10 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32400 GHz	-46.37 dBm	-15.37 dB

Date: 13.JUN.2017 00:18:11

Band Edge / Full RB



Spurious Emissions

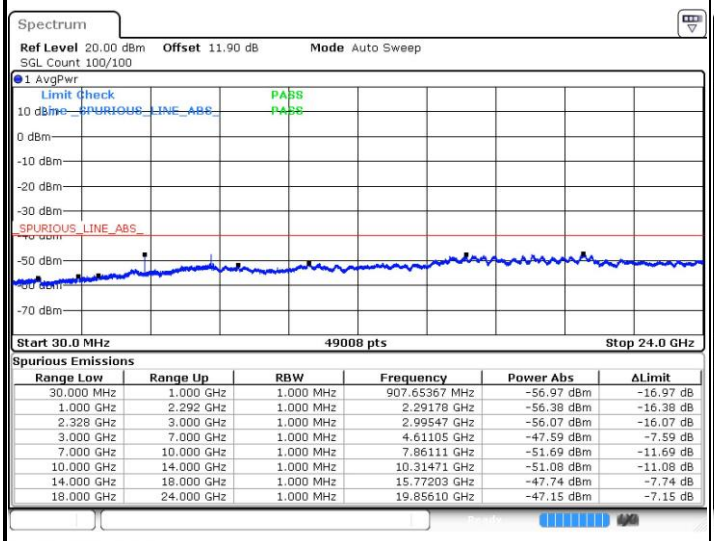
Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.292 GHz	2.296 GHz	1.000 MHz	2.29575 GHz	-35.91 dBm	-4.91 dB
2.296 GHz	2.300 GHz	1.000 MHz	2.29990 GHz	-27.58 dBm	-2.58 dB
2.300 GHz	2.304 GHz	1.000 MHz	2.30399 GHz	-24.46 dBm	-11.46 dB
2.304 GHz	2.305 GHz	100.000 kHz	2.30500 GHz	-33.14 dBm	-20.14 dB
2.305 GHz	2.315 GHz	100.000 kHz	2.31392 GHz	3.53 dBm	-26.47 dB
2.315 GHz	2.316 GHz	100.000 kHz	2.31551 GHz	-30.09 dBm	-17.09 dB
2.316 GHz	2.320 GHz	1.000 MHz	2.31640 GHz	-20.61 dBm	-7.61 dB
2.320 GHz	2.324 GHz	1.000 MHz	2.32002 GHz	-26.17 dBm	-1.17 dB
2.324 GHz	2.328 GHz	1.000 MHz	2.32401 GHz	-36.76 dBm	-5.76 dB

Date: 13.JUN.2017 00:19:22

Conducted Spurious Emission

LTE Band 30 / 5MHz

Lowest Channel / QPSK

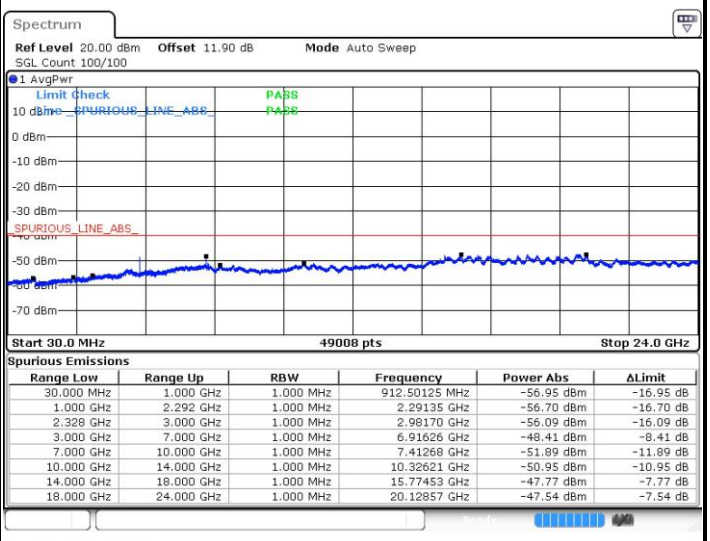


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	907.65367 MHz	-56.97 dBm	-16.97 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.29178 GHz	-56.38 dBm	-16.38 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99547 GHz	-56.07 dBm	-16.07 dB
3.000 GHz	7.000 GHz	1.000 MHz	4.61105 GHz	-47.59 dBm	-7.59 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.86111 GHz	-51.69 dBm	-11.69 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.31471 GHz	-51.08 dBm	-11.08 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77203 GHz	-47.74 dBm	-7.74 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.85610 GHz	-47.15 dBm	-7.15 dB

Date: 12.JUN.2017 20:03:03

Lowest Channel / 16QAM

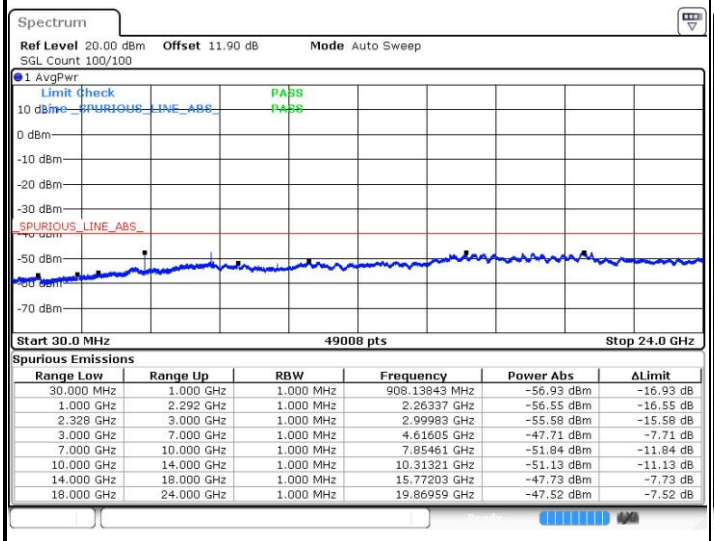


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	912.50125 MHz	-56.95 dBm	-16.95 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.29135 GHz	-56.70 dBm	-16.70 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.98170 GHz	-56.09 dBm	-16.09 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91626 GHz	-48.41 dBm	-8.41 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.41268 GHz	-51.89 dBm	-11.89 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.32621 GHz	-50.95 dBm	-10.95 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77453 GHz	-47.77 dBm	-7.77 dB
18.000 GHz	24.000 GHz	1.000 MHz	20.12857 GHz	-47.54 dBm	-7.54 dB

Date: 12.JUN.2017 20:03:56

Middle Channel / QPSK

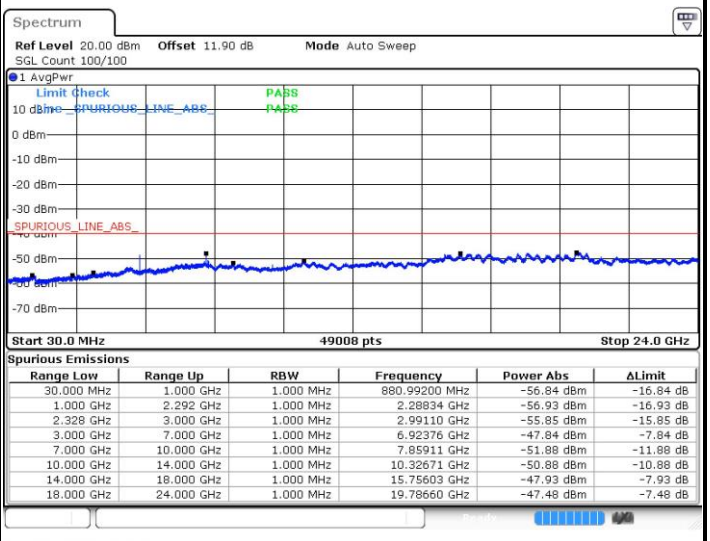


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	908.13843 MHz	-56.93 dBm	-16.93 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.26337 GHz	-56.55 dBm	-16.55 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99983 GHz	-55.58 dBm	-15.58 dB
3.000 GHz	7.000 GHz	1.000 MHz	4.61605 GHz	-47.71 dBm	-7.71 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85461 GHz	-51.84 dBm	-11.84 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.31321 GHz	-51.13 dBm	-11.13 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77203 GHz	-47.73 dBm	-7.73 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.86959 GHz	-47.52 dBm	-7.52 dB

Date: 12.JUN.2017 20:04:50

Middle Channel / 16QAM



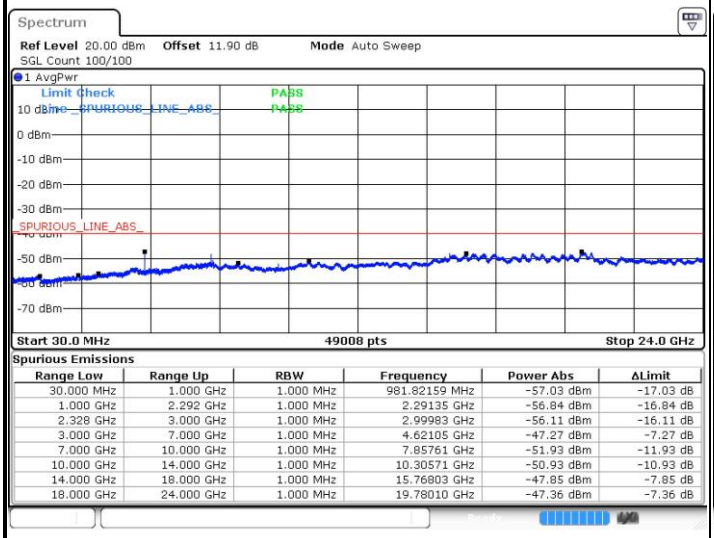
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	880.99200 MHz	-56.84 dBm	-16.84 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.28834 GHz	-56.93 dBm	-16.93 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99110 GHz	-55.85 dBm	-15.85 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92376 GHz	-47.84 dBm	-7.84 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85911 GHz	-51.88 dBm	-11.88 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.32671 GHz	-50.88 dBm	-10.88 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.75603 GHz	-47.93 dBm	-7.93 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.78660 GHz	-47.48 dBm	-7.48 dB

Date: 12.JUN.2017 20:05:44

LTE Band 30 / 5MHz

Highest Channel / QPSK

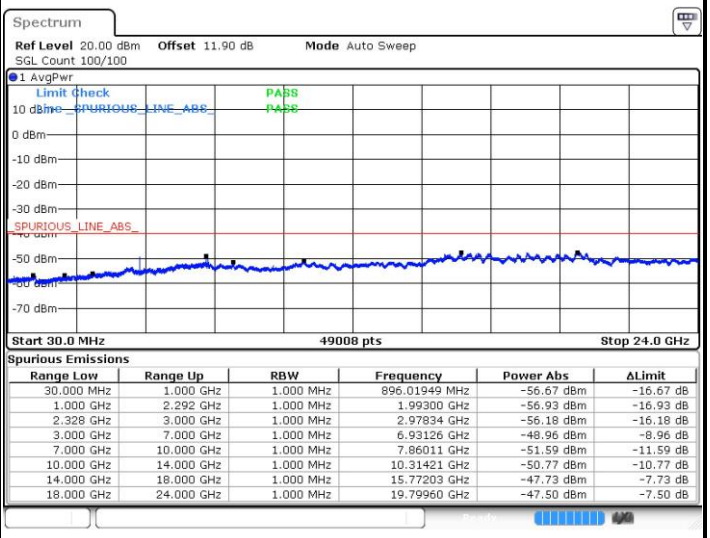


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	981.82159 MHz	-57.03 dBm	-17.03 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.29135 GHz	-56.84 dBm	-16.84 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99983 GHz	-56.11 dBm	-16.11 dB
3.000 GHz	7.000 GHz	1.000 MHz	4.62105 GHz	-47.27 dBm	-7.27 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85761 GHz	-51.93 dBm	-11.93 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.30571 GHz	-50.93 dBm	-10.93 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.76803 GHz	-47.85 dBm	-7.85 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.78010 GHz	-47.36 dBm	-7.36 dB

Date: 12.JUN.2017 20:06:38

Highest Channel / 16QAM



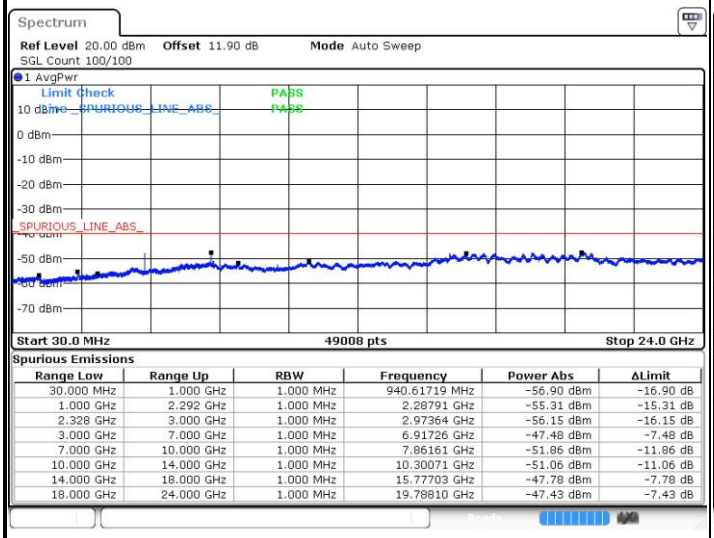
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	896.01949 MHz	-56.67 dBm	-16.67 dB
1.000 GHz	2.292 GHz	1.000 MHz	1.99300 GHz	-56.93 dBm	-16.93 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.97834 GHz	-56.18 dBm	-16.18 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93126 GHz	-48.96 dBm	-8.96 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.86011 GHz	-51.59 dBm	-11.59 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.31421 GHz	-50.77 dBm	-10.77 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77203 GHz	-47.73 dBm	-7.73 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.79960 GHz	-47.50 dBm	-7.50 dB

Date: 12.JUN.2017 20:07:32

LTE Band 30 / 10MHz

Middle Channel / QPSK

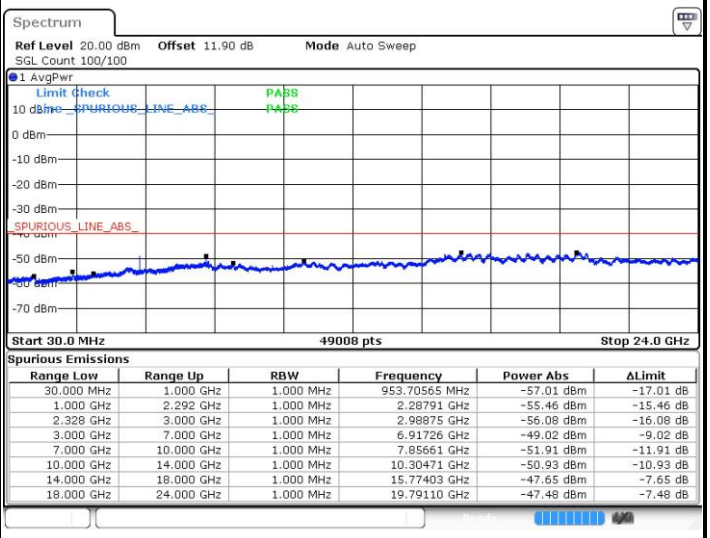


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	940.61719 MHz	-56.90 dBm	-16.90 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.28791 GHz	-55.31 dBm	-15.31 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.97364 GHz	-56.15 dBm	-16.15 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91726 GHz	-47.48 dBm	-7.48 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.86161 GHz	-51.86 dBm	-11.86 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.30071 GHz	-51.06 dBm	-11.06 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77703 GHz	-47.78 dBm	-7.78 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.78810 GHz	-47.43 dBm	-7.43 dB

Date: 12.JUN.2017 20:08:25

Middle Channel / 16QAM



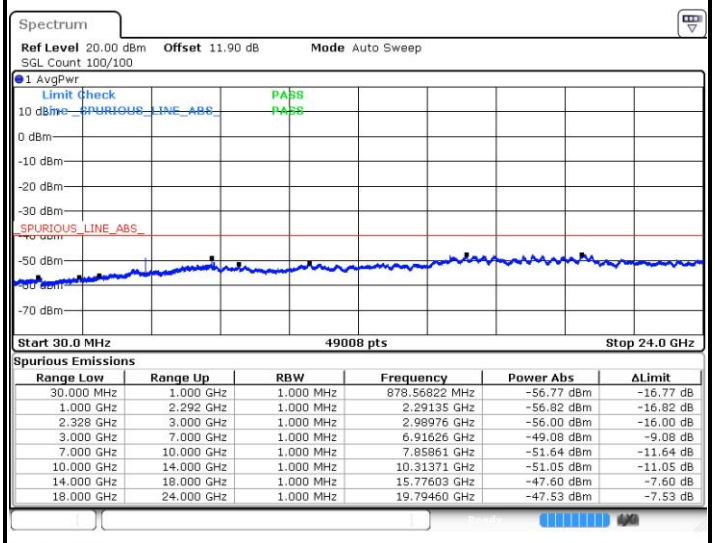
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	953.70565 MHz	-57.01 dBm	-17.01 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.28791 GHz	-55.46 dBm	-15.46 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.98875 GHz	-56.08 dBm	-16.08 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91726 GHz	-49.02 dBm	-9.02 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85661 GHz	-51.91 dBm	-11.91 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.30471 GHz	-50.93 dBm	-10.93 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77403 GHz	-47.65 dBm	-7.65 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.79110 GHz	-47.48 dBm	-7.48 dB

Date: 12.JUN.2017 20:09:19

LTE Band 30 / 5MHz

Lowest Channel / 64QAM

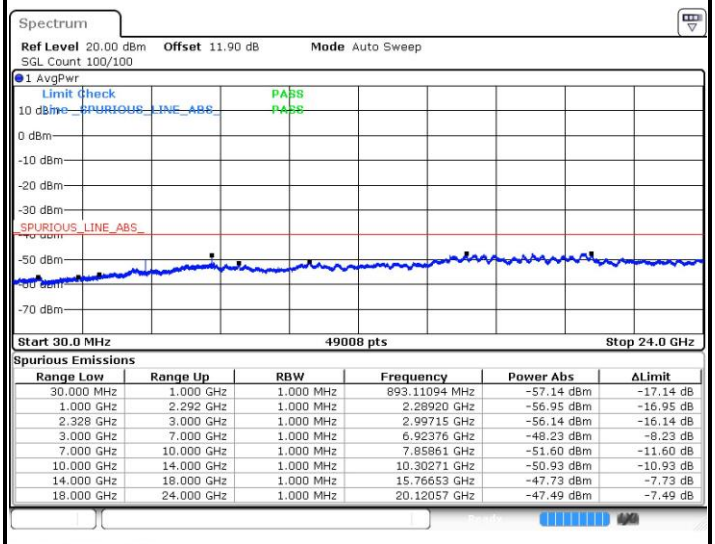


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	878.56822 MHz	-56.77 dBm	-16.77 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.29135 GHz	-56.82 dBm	-16.82 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.98976 GHz	-56.00 dBm	-16.00 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91626 GHz	-49.08 dBm	-9.08 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85861 GHz	-51.64 dBm	-11.64 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.31371 GHz	-51.05 dBm	-11.05 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77603 GHz	-47.60 dBm	-7.60 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.79460 GHz	-47.53 dBm	-7.53 dB

Date: 13.JUN.2017 00:05:00

Middle Channel / 64QAM

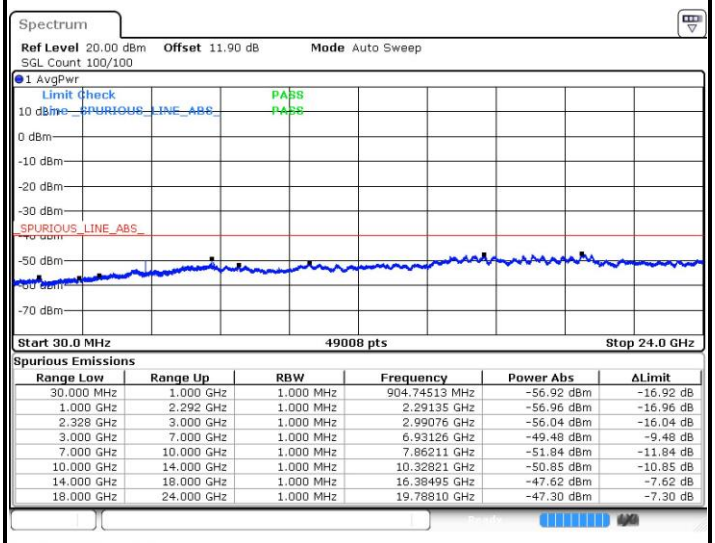


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	893.11094 MHz	-57.14 dBm	-17.14 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.28920 GHz	-56.95 dBm	-16.95 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99715 GHz	-56.14 dBm	-16.14 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.92376 GHz	-48.23 dBm	-8.23 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.85861 GHz	-51.60 dBm	-11.60 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.30271 GHz	-50.93 dBm	-10.93 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.76653 GHz	-47.73 dBm	-7.73 dB
18.000 GHz	24.000 GHz	1.000 MHz	20.12057 GHz	-47.49 dBm	-7.49 dB

Date: 13.JUN.2017 00:05:54

LTE Band 30 / 5MHz
Highest Channel / 64QAM

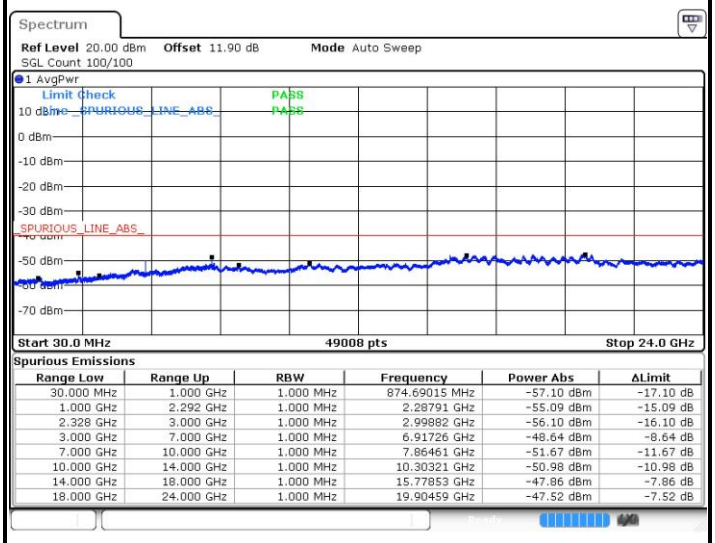


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	904.74513 MHz	-56.92 dBm	-16.92 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.29135 GHz	-56.96 dBm	-16.96 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99076 GHz	-56.04 dBm	-16.04 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.93126 GHz	-49.48 dBm	-9.48 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.86211 GHz	-51.84 dBm	-11.84 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.32821 GHz	-50.85 dBm	-10.85 dB
14.000 GHz	18.000 GHz	1.000 MHz	16.38495 GHz	-47.62 dBm	-7.62 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.78810 GHz	-47.30 dBm	-7.30 dB

Date: 13.JUN.2017 00:06:48

LTE Band 30 / 10MHz
Middle Channel / 64QAM



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
30.000 MHz	1.000 GHz	1.000 MHz	874.69015 MHz	-57.10 dBm	-17.10 dB
1.000 GHz	2.292 GHz	1.000 MHz	2.28791 GHz	-55.09 dBm	-15.09 dB
2.328 GHz	3.000 GHz	1.000 MHz	2.99882 GHz	-56.10 dBm	-16.10 dB
3.000 GHz	7.000 GHz	1.000 MHz	6.91726 GHz	-48.64 dBm	-8.64 dB
7.000 GHz	10.000 GHz	1.000 MHz	7.86461 GHz	-51.67 dBm	-11.67 dB
10.000 GHz	14.000 GHz	1.000 MHz	10.30321 GHz	-50.98 dBm	-10.98 dB
14.000 GHz	18.000 GHz	1.000 MHz	15.77853 GHz	-47.86 dBm	-7.86 dB
18.000 GHz	24.000 GHz	1.000 MHz	19.90459 GHz	-47.52 dBm	-7.52 dB

Date: 13.JUN.2017 00:07:42

Frequency Stability

Test Conditions		LTE Band 30 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 10MHz	Note 2.
		Deviation (ppm)	Result
50	Normal Voltage	0.0005	PASS
40	Normal Voltage	0.0009	
30	Normal Voltage	0.0010	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0003	
0	Normal Voltage	0.0002	
-10	Normal Voltage	0.0006	
-20	Normal Voltage	0.0012	
-30	Normal Voltage	0.0005	
20	Maximum Voltage	0.0003	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0001	

Note:

1. Normal Voltage =3.85 V.；Battery End Point (BEP) =3.6 V.；Maximum Voltage =4.2 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.

Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

LTE Band 30 / 5MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Lowest	4608	-57.65	-40	-17.65	-77.71	-68.94	0.71	12.00	H
	6918	-45.50	-40	-5.50	-68.81	-55.59	0.93	11.02	H
	9225	-48.00	-40	-8.00	-77.01	-58.93	1.09	12.02	H
	4608	-56.44	-40	-16.44	-77.72	-67.73	0.71	12.00	V
	6918	-51.20	-40	-11.20	-75.29	-61.29	0.93	11.02	V
	9225	-48.48	-40	-8.48	-76.92	-59.41	1.09	12.02	V
Middle	4614	-57.43	-40	-17.43	-77.52	-68.72	0.71	12.00	H
	6924	-44.63	-40	-4.63	-67.93	-54.72	0.93	11.02	H
	9234	-47.26	-40	-7.26	-76.25	-58.18	1.09	12.01	H
	4614	-56.19	-40	-16.19	-77.48	-67.48	0.71	12.00	V
	6923	-50.43	-40	-10.43	-74.51	-60.52	0.93	11.02	V
	9234	-48.08	-40	-8.08	-76.5	-59	1.09	12.01	V
Highest	4620	-57.50	-40	-17.50	-77.59	-68.79	0.71	12.00	H
	6930	-43.42	-40	-3.42	-66.81	-53.5	0.93	11.01	H
	9243	-47.80	-40	-7.80	-76.8	-58.71	1.09	12.01	H
	4620	-56.18	-40	-16.18	-77.47	-67.47	0.71	12.00	V
	6930	-49.37	-40	-9.37	-73.53	-59.45	0.93	11.01	V
	9243	-48.57	-40	-8.57	-76.97	-59.48	1.09	12.01	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

LTE Band 30 / 10MHz / QPSK / RB Size 1 Offset 0									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	-57.37	-40	-17.37	-77.43	-68.66	0.71	12.00	H	-57.37
	-45.00	-40	-5.00	-68.31	-55.09	0.93	11.02	H	-45.00
	-47.80	-40	-7.80	-76.81	-58.73	1.09	12.02	H	-47.80
	-56.41	-40	-16.41	-77.69	-67.7	0.71	12.00	V	-56.41
	-50.76	-40	-10.76	-74.85	-60.85	0.93	11.02	V	-50.76
	-48.46	-40	-8.46	-76.9	-59.39	1.09	12.02	V	-48.46

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.