FCC RF Test Report

APPLICANT	**: Bullitt Group**
EQUIPMENT	**: Rugged Smart Phone**
BRAND NAME	**: CAT**
MODEL NAME	**: S42**
FCC ID	**: ZL5S42**
STANDARD	**: 47 CFR Part 2, 90(R)**
CLASSIFICATION	**: PCS Licensed Transmitter Held to Ear (PCE)**

The product was received on May 22, 2020 and completely tested on Jun. 12, 2020. We, Sporton International (ShenZhen) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Reviewed by: Derreck Chen / Supervisor

Approved by: Eric Shih / Manager

ACCREDITED Cert #5145.01

Sporton International (ShenZhen) Inc.
1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055 People's Republic of China

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG052014-01C	Rev. 01	Initial issue of report	Jul. 10, 2020

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	PASS	-
	§90.542 (a)(7)	Effective Radiated Power	ERP < 3Watt	PASS	-
3.3	-	Peak-to-Average Ratio	Reporting only	PASS	-
3.4	§2.1049	Occupied Bandwidth	Reporting only	PASS	-
3.5	§2.1053 §90.543 (e)(2)(3)	Conducted Band Edge Measurement	Refer standard	PASS	-
3.6	§2.1051 §90.210(n)	Emission Mask	Mask B	PASS	-
3.7	§2.1053 §90.543 (e)(3)	Conducted Spurious Emission	< $43+10\log_{10}$(P[Watts])	PASS	-
3.8	§2.1055 §90.539 (e)	Frequency Stability Temperature & Voltage	< ±1.25 ppm	PASS	-
4.4	§2.1053 §90.543 (e)(3) §90.543 (f)	Radiated Spurious Emission	< $43+10\log_{10}$(P[Watts])	PASS	Under limit 22.47 dB at 1577.000 MHz

Declaration of Conformity:
The test results with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
Comments and Explanations:
The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

1 General Description

1.1 Applicant

Bullitt Group

One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

1.2 Manufacturer

Bullitt Group

One Valpy, Valpy Street, Reading, Berkshire, England RG1 1AR

1.3 Feature of Equipment Under Test

Product Feature	
Equipment	Rugged Smart Phone
Brand Name	CAT
Model Name	S42
FCC ID	ZL5S42
Tx Frequency	LTE Band 14: 790.5 MHz ~ 795.5 MHz
Rx Frequency	LTE Band 14: 760.5 MHz ~ 765.5 MHz
Bandwidth	5MHz / 10MHz
Maximum Output Power to Antenna	Top Antenna : 22.83 dBm Bottom Antenna : 22.83 dBm
Antenna Gain	Bottom /Top Antenna :-0.3 dBi
Type of Modulation	QPSK / 16QAM / 64QAM
IMEI Code	Conducted: 359145660002957/359145660006958 Radiation: 359145660001934/359145660005935
HW Version	V1.0
SW Version	LTE_C01091.10_NE_S42G_0.030.00
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
2. The Maximum ERP/EIRP is calculated from Max Output power and Max antenna gain.

1.4 Maximum ERP Power, Frequency Tolerance, and Emission Designator

LTE Band 14		QPSK			16QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	790.5~795.5	4M50G7D	-	0.1072	4M50W7D	-	0.0946
10	793	9M05G7D	0.0045	0.1091	8M97W7D	-	0.0957

LTE Band 14		64QAM		
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Frequency Tolerance (ppm)	Maximum ERP(W)
5	790.5~795.5	4M52W7D	-	0.0710
10	793	8M97W7D	-	0.0675

1.5 Testing Site

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

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

Test Firm	Sporton International (Shenzhen) Inc.		
Test Site Location	No. 3 Bldg the third floor of south, Shahe River west, Fengzeyuan Warehouse, Nanshan Shenzhen, 518055 People's Republic of China TEL: +86-755-33202398		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	03CH04-SZ	CN1256	421272

1.6 Test Software

Item	Site	Manufacture	Name	Version
1.	03CH04-SZ	AUDIX	E3	6.2009-8-24

1.7 Applied Standards

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

- 47 CFR Part 2, Part 90(R)
- ANSI C63.26
- KDB 971168 D01 Power Meas License Digital Systems v03r01
- KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

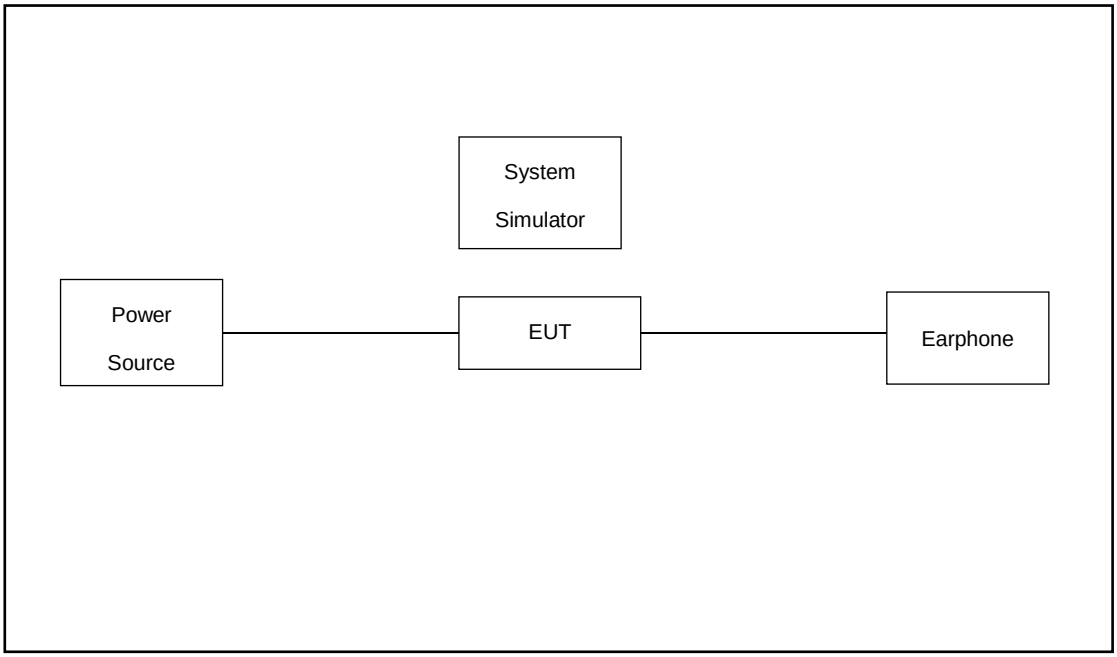
2.1 Test Mode

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

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	14	-	-	V	-	-	-	V	V	V	V	V	V	V	V	V
	14	-	-		V	-	-	V	V	V	V	V	V		V	
Peak-to-Average Ratio	14	-	-		V	-	-	V	V	V	V		V		V	
26dB and 99% Bandwidth	14	-	-	V		-	-	V	V	V			V	V	V	V
	14	-	-		V	-	-	V	V	V			V		V	
Conducted Band Edge	14	-	-	V		-	-	V	V	V	V		V	V		V
	14	-	-		V	-	-	V	V	V	V		V		V	
Emission Mask	14	-	-	V		-	-	V	V	V	V		V	V	V	V
	14	-	-		V	-	-	V	V	V	V		V		V	
Conducted Spurious Emission	14	-	-	V		-	-	V	V	V	V			V	V	V
	14	-	-		V	-	-	V	V	V	V				V	
Frequency Stability	14	-	-		V	-	-	V					V		V	
E.R.P	14	-	-	V		-	-	V	V	V	V			V	V	V
	14	-	-		V	-	-	V	V	V	V				V	
Radiated Spurious Emission	14	-	-	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

2.4 Measurement Results Explanation Example

For all conducted test items:

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

Example :

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

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 4 dB and 10dB attenuator.

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

= 4 + 10 = 14(dB)

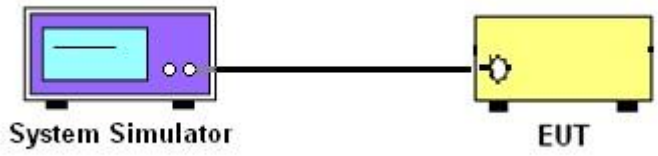
3 Conducted Test Items

3.1 Measuring Instruments

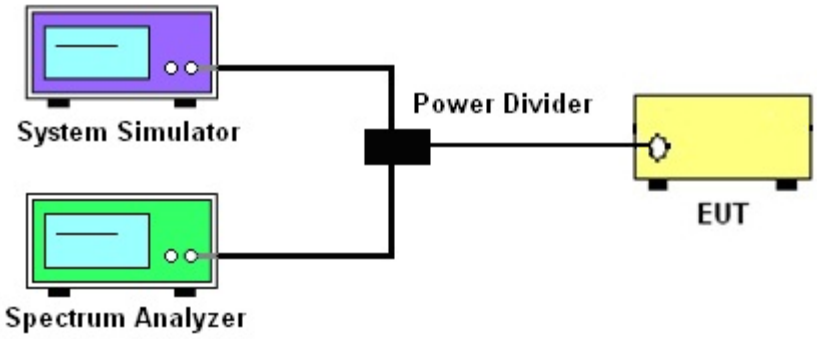
See list of measuring instruments of this test report.

3.1.1 Test Setup

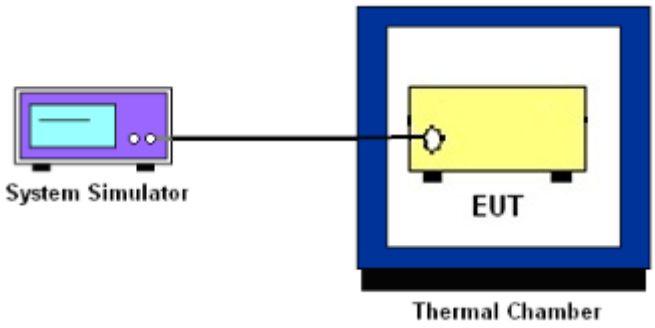
3.1.2 Conducted Output Power



3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge, Emission Mask, and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power and ERP

3.2.1 Description of the Conducted Output Power Measurement and ERP

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.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 14.

According to KDB 412172 D01 Power Approach,

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

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

3.2.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2
2. The transmitter output port was connected to the system simulator.
3. Set EUT at maximum power through the system simulator.
4. Select lowest, middle, and highest channels for each band and different modulation.
5. Measure and record the power level from the system simulator.

3.3 Peak-to-Average Ratio

3.3.1 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.

3.3.2 Test Procedures

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.

3.4 Occupied Bandwidth

3.4.1 Description of Occupied Bandwidth Measurement

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

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

3.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.4
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.
4. The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.
5. Set the detection mode to peak, and the trace mode to max hold.
6. Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace. (this is the reference value)
7. Determine the “-26 dB down amplitude” as equal to (Reference Value – X).
8. Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the “–X dB down amplitude” determined in step 6. If a marker is below this “-X dB down amplitude” value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.
9. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

3.5 Conducted Band Edge Measurement

3.5.1 Description of Conducted Band Edge Measurement

For operations in the 758-768 MHz and the 788-798 MHz bands

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 76 + 10 log (P) dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least 43 + 10 log (P) dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set spectrum analyzer with RMS detector.
5. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
6. Checked that all the results comply with the emission limit line.

   Example:

   The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)

   = P(W)- [43 + 10log(P)] (dB)

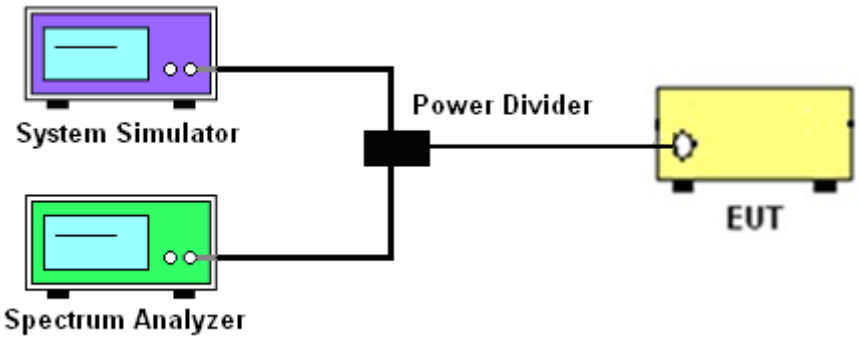
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.

3.6 Emission Mask

3.6.1 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The power of the modulated signal was measured on a spectrum analyzer using an RMS and 10 second sweep time in order to maximize the level.
3. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

3.6.2 Test Setup



3.7 Conducted Spurious Emission Measurement

3.7.1 Description of Conducted Spurious Emission Measurement

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

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

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and base station via power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's, for under 1GHz RBW = 100kHz, VBW = 300kHz and for above 1GHz RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. Set spectrum analyzer with RMS detector.
8. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
9. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
   = P(W)- [43 + 10log(P)] (dB)
   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
   = -13dBm.

3.8 Frequency Stability Measurement

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±1.25 ppm of the center frequency.

3.8.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. 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.
4. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.8.3 Test Procedures for Voltage Variation

1. The testing follows ANSI C63.26 section 5.6.5.
2. The EUT was placed in a temperature chamber at 20±5°C and connected with the system simulator.
3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value for other than hand carried battery equipment.
4. For hand carried, battery powered equipment, reduce the primary ac or dc supply voltage to the

   battery operating end point, which shall be specified by the manufacturer.
5. The variation in frequency was measured for the worst case.

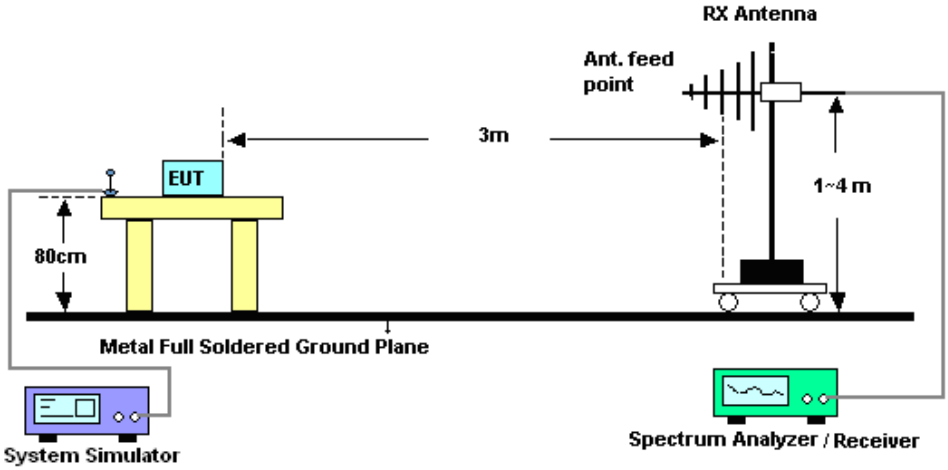
4 Radiated Test Items

4.1 Measuring Instruments

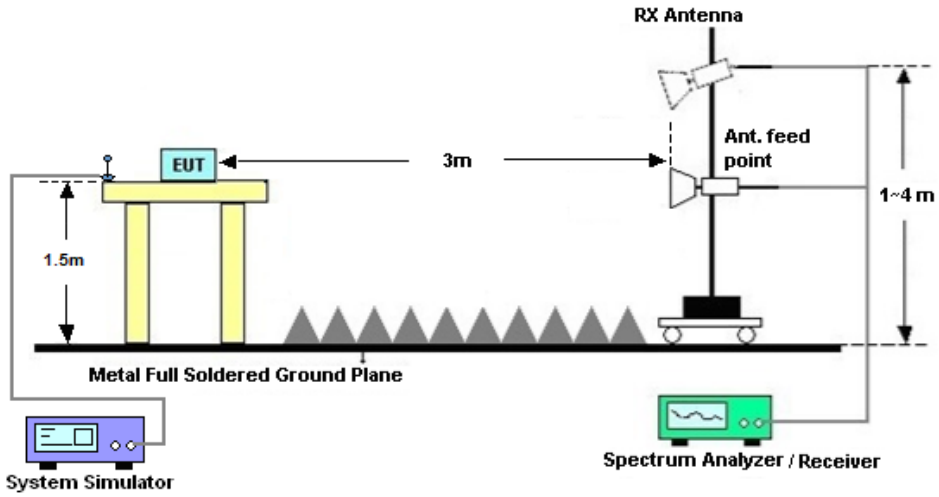
See list of measuring instruments of this test report.

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 C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1559–1610 MHz shall be limited to -70 dBW/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dBW EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 16, 2020	Jun. 08, 2020~ Jun. 11, 2020	Apr. 15, 2021	Conducted (TH01-SZ)
DC Power Supply	GWINSTEK	AnritsuGPS-3030D	EM882636	Max 30V	Apr. 16, 2020	Jun. 08, 2020~ Jun. 11, 2020	Apr. 15, 2021	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Dec. 26, 2019	Jun. 08, 2020~ Jun. 11, 2020	Dec. 25, 2020	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Apr. 17, 2020	Jun. 12, 2020	Apr. 16, 2021	Radiation (03CH04-SZ)
Bilog Antenna	TeseQ	CBL6111D	41909	30MHz~1GHz	Aug. 27, 2019	Jun. 12, 2020	Aug. 26, 2020	Radiation (03CH04-SZ)
Double Ridge Horn Antenna	SCHWARZBECK	BBHA9120D	9120D-1474	1GHz~18GHz	Apr. 01, 2020	Jun. 12, 2020	Mar. 31, 2021	Radiation (03CH04-SZ)
Horn Antenna	SCHWARZBECK	BBHA9170	9170#679	15GHz~40GHz	Apr. 17, 2020	Jun. 12, 2020	Apr. 16, 2021	Radiation (03CH04-SZ)
Amplifier	Burgeon	BPA-530	102211	0.01Hz ~3000MHz	Oct. 18, 2019	Jun. 12, 2020	Oct. 17, 2020	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	AMF-7D-00101800-30-10P-R	1943528	1GHz~18GHz	Oct. 18, 2019	Jun. 12, 2020	Oct. 17, 2020	Radiation (03CH04-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 22, 2019	Jun. 12, 2020	Jul. 21, 2020	Radiation (03CH04-SZ)
Amplifier	Agilent Technologies	83017A	MY53270156	500MHz~26.5GHz	Aug. 26, 2019	Jun. 12, 2020	Aug. 25, 2020	Radiation (03CH04-SZ)
AC Power Source	Chroma	61601	N/A	N/A	NCR	Jun. 12, 2020	NCR	Radiation (03CH04-SZ)
Turn Table	EM	EM1000	N/A	0~360 degree	NCR	Jun. 12, 2020	NCR	Radiation (03CH04-SZ)
Antenna Mast	EM	EM1000	N/A	1 m~4 m	NCR	Jun. 12, 2020	NCR	Radiation (03CH04-SZ)

NCR: No Calibration Required

6 Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**2.8dB**

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.1dB**

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

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

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

LTE Band 14 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
5	1	0	QPSK	22.48	22.51	22.52
5	1	12		22.67	22.75	22.69
5	1	24		22.47	22.52	22.52
5	12	0		21.69	21.69	21.69
5	12	7		21.66	21.75	21.75
5	12	13		21.67	21.59	21.61
5	25	0		21.64	21.70	21.79
5	1	0	16-QAM	21.83	21.87	22.10
5	1	12		21.90	22.21	21.85
5	1	24		21.85	22.01	21.69
5	12	0		20.61	20.70	20.72
5	12	7		20.76	20.72	20.67
5	12	13		20.68	20.56	20.48
5	25	0		20.73	20.72	20.51
5	1	0	64QAM	20.58	20.69	20.67
5	1	12		20.96	20.72	20.92
5	1	24		20.82	20.80	20.53
5	12	0		19.69	19.68	19.76
5	12	7		19.80	19.79	19.76
5	12	13		19.65	19.78	19.48
5	25	0		19.73	19.66	19.60

LTE Band 14 Maximum Average Power [dBm]						
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0	QPSK		22.54	
10	1	25			22.83	
10	1	49			22.58	
10	25	0			21.62	
10	25	12			21.72	
10	25	25			21.56	
10	50	0			21.68	
10	1	0	16-QAM		22.12	
10	1	25			22.26	
10	1	49			21.60	
10	25	0			20.77	
10	25	12			20.73	
10	25	25			20.64	
10	50	0			20.61	
10	1	0	64QAM		20.74	
10	1	25			20.69	
10	1	49			20.43	
10	25	0			19.80	
10	25	12			19.65	
10	25	25			19.71	
10	50	0			19.66	

Note: The Maximum Conducted Power of Bottom Antenna is shown in this report.

ERP

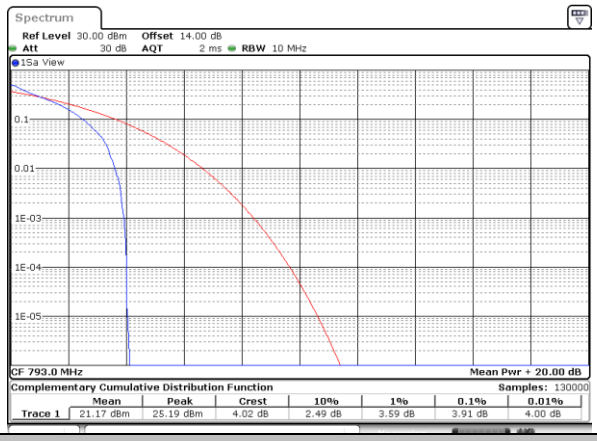
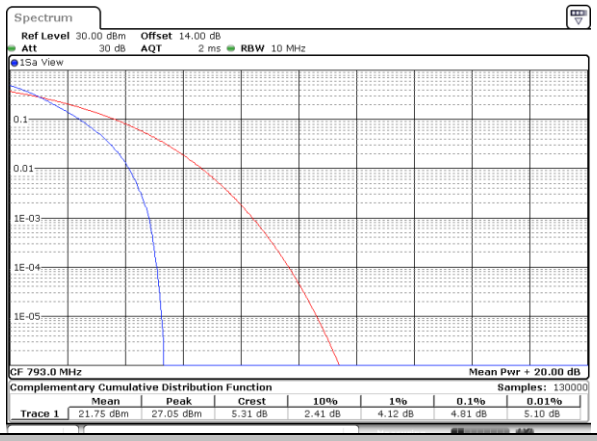
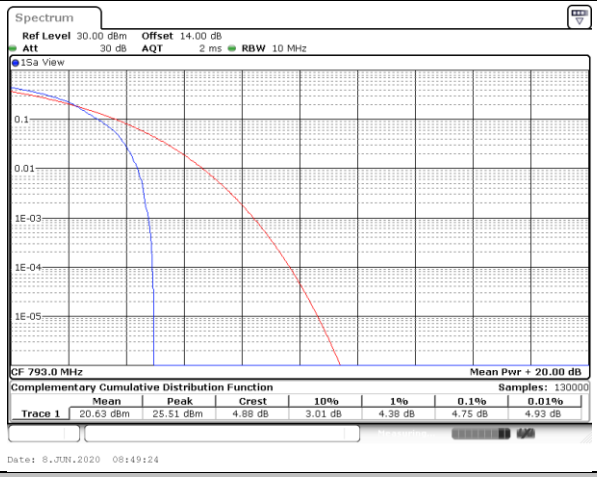
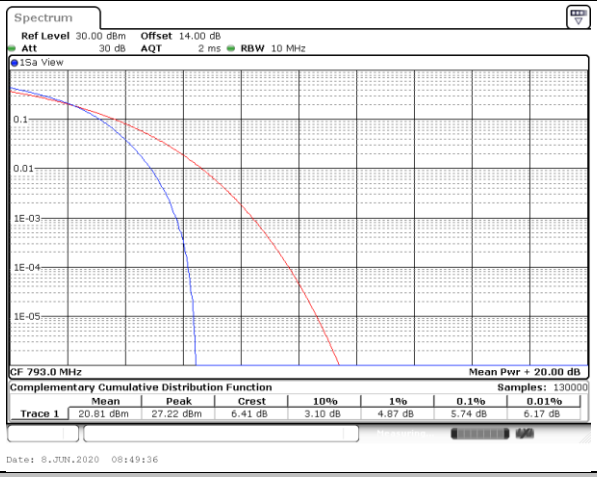
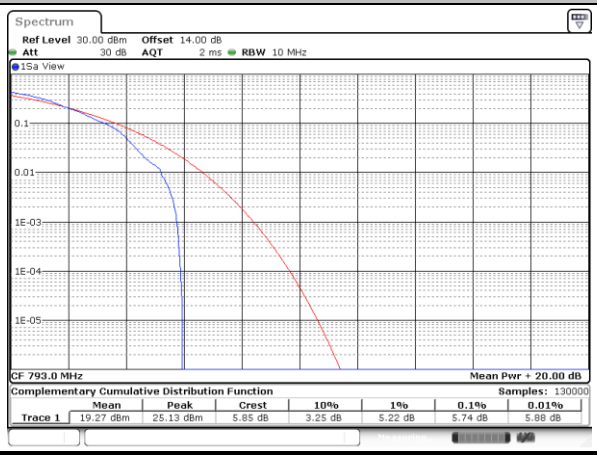
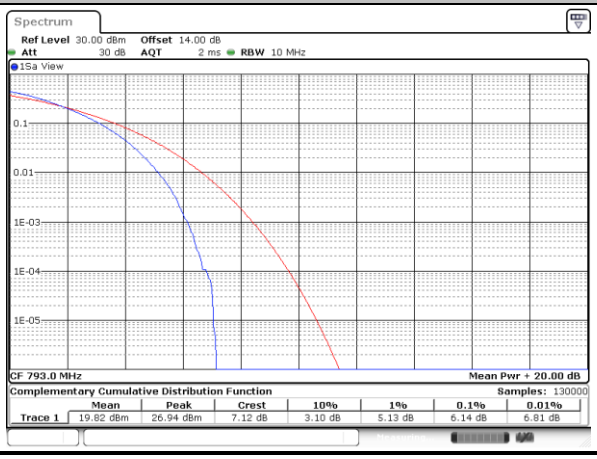
LTE Band 14 (G_T - L_C = -0.30 dBi) QPSK						
Bandwidth	5M			10M		
Channel	23305	23330	23355		23330	
	(Low)	(Mid)	(High)		(Mid)	
Frequency (MHz)	790.5	793	795.5		793	
Conducted Power (dBm)	22.67	22.75	22.69		22.83	
Conducted Power (Watts)	0.1849	0.1884	0.1858		0.1919	
ERP(dBm)	20.22	20.30	20.24		20.38	
ERP(Watts)	0.1052	0.1072	0.1057		0.1091	

LTE Band 14 (G_T - L_C = -0.30 dBi) 16QAM						
Bandwidth	5M			10M		
Channel	23305	23330	23355		23330	
	(Low)	(Mid)	(High)		(Mid)	
Frequency (MHz)	790.5	793	795.5		793	
Conducted Power (dBm)	21.90	22.21	21.85		22.26	
Conducted Power (Watts)	0.1549	0.1663	0.1531		0.1683	
ERP(dBm)	19.45	19.76	19.40		19.81	
ERP(Watts)	0.0881	0.0946	0.0871		0.0957	

LTE Band 14 (G_T - L_C = -0.30 dBi) 64QAM						
Bandwidth	**5M**				**10M**	
Channel	**23305**	**23330**	**23355**		**23330**	
	(Low)	**(Mid)**	**(High)**		**(Mid)**	
Frequency (MHz)	**790.5**	**793**	**795.5**		**793**	
Conducted Power (dBm)	20.96	20.72	20.92		20.74	
Conducted Power (Watts)	0.1247	0.1180	0.1236		0.1186	
ERP(dBm)	18.51	18.27	18.47		18.29	
ERP(Watts)	0.0710	0.0671	0.0703		0.0675	

Peak-to-Average Ratio

Mode	LTE Band 14 / 10MHz				
Mod.	QPSK		16QAM		Limit: 13dB
RB Size	1RB	Full RB	1RB	Full RB	Result
Lowest CH	-	-	-	-	PASS
Middle CH	3.91	4.81	4.75	5.74	
Highest CH	-	-	-	-	
Mode	LTE Band 14 / 10MHz				
Mod.	64QAM				Limit: 13dB
RB Size	1RB	Full RB			Result
Lowest CH	-	-	-	-	PASS
Middle CH	5.74	6.14	-	-	
Highest CH	-	-	-	-	

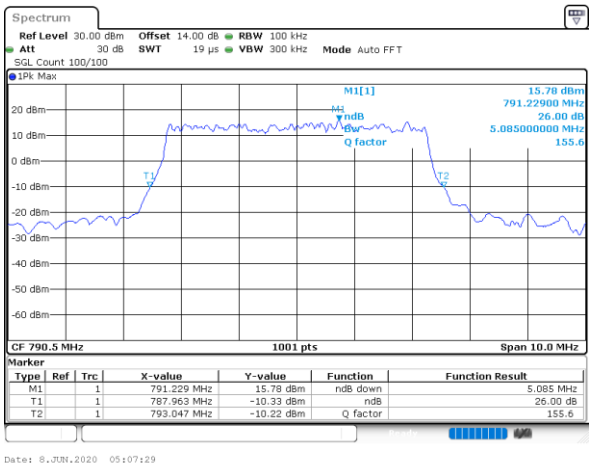
LTE Band 14 / 10MHz / QPSK	
Middle Channel/ 1RB	**Middle Channel / Full RB**
	
LTE Band 14 / 10MHz / 16QAM	
Middle Channel/ 1RB	**Middle Channel / Full RB**
	
LTE Band 14 / 10MHz / 64QAM	
Middle Channel/ 1RB	**Middle Channel / Full RB**
	

26dB Bandwidth

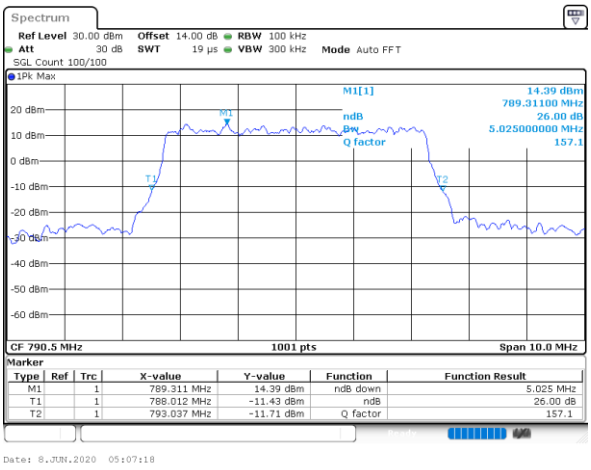
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH					5.09	5.03						
Middle CH					5.07	5.05	9.87	9.91				
Highest CH					4.95	5.07						
Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH					4.95							
Middle CH					5.12		10.01					
Highest CH					4.87							

LTE Band 14

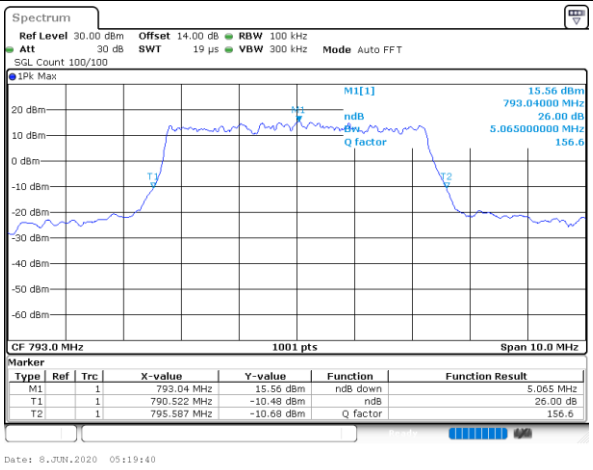
Lowest Channel / 5MHz / QPSK



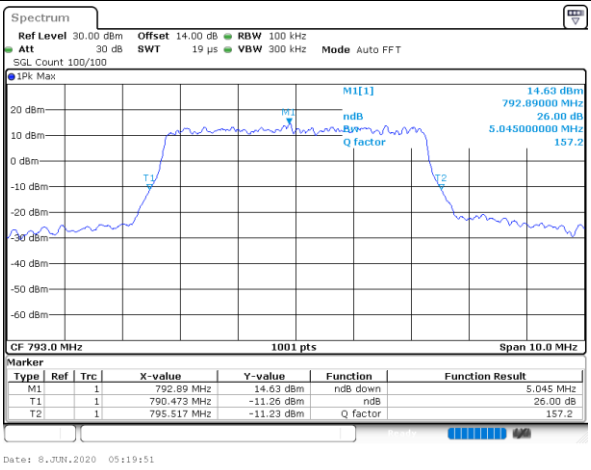
Lowest Channel / 5MHz / 16QAM



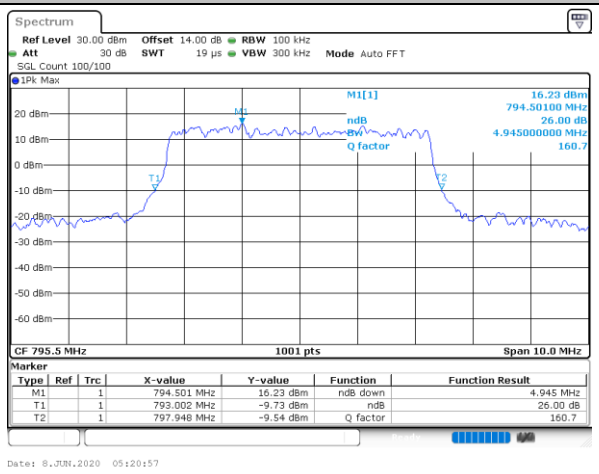
Middle Channel / 5MHz / QPSK



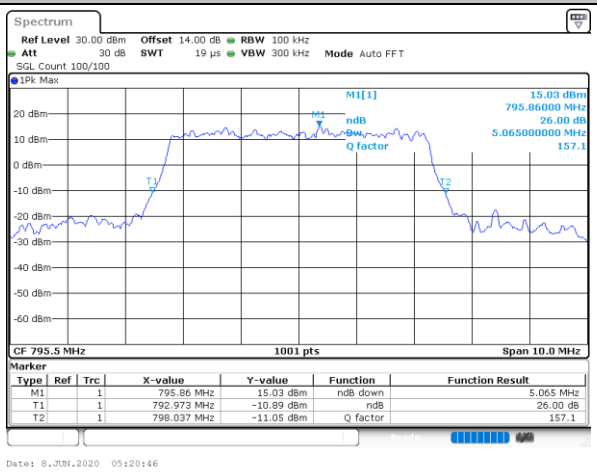
Middle Channel / 5MHz / 16QAM



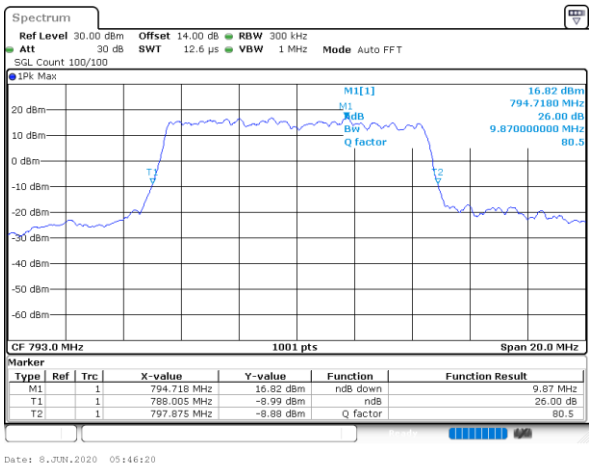
Highest Channel / 5MHz / QPSK

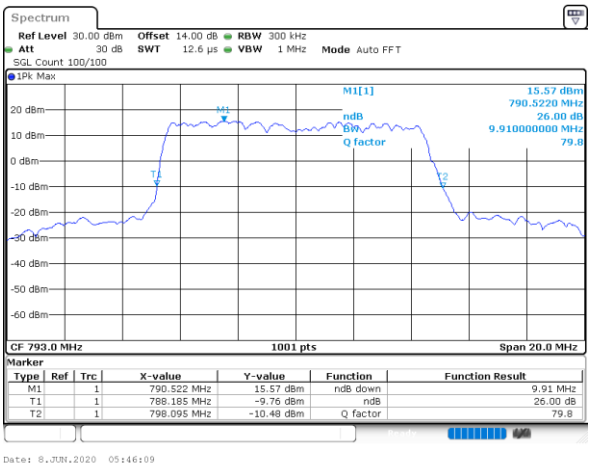


Highest Channel / 5MHz / 16QAM



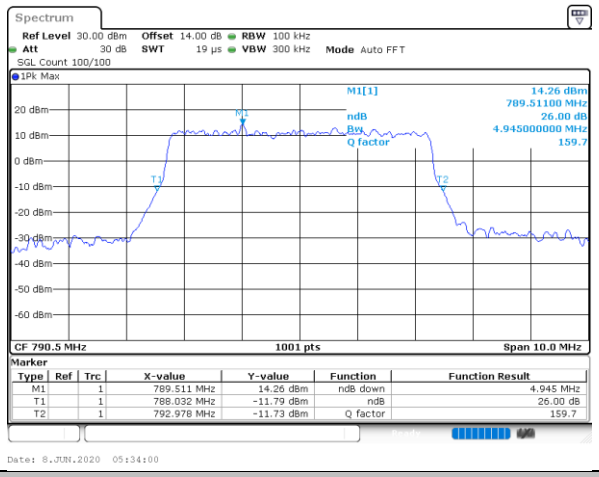
LTE Band 14	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**



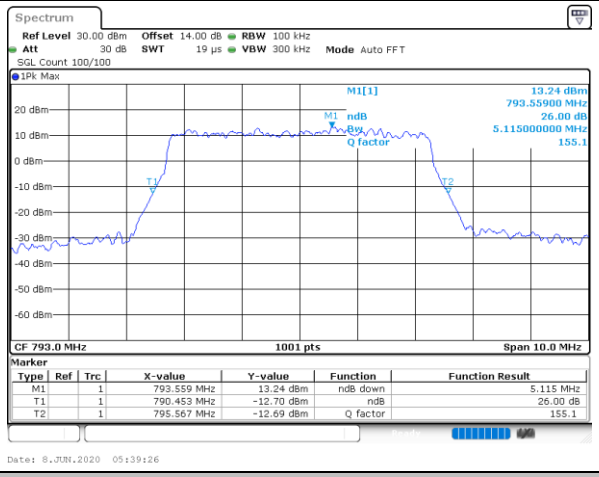


LTE Band 14

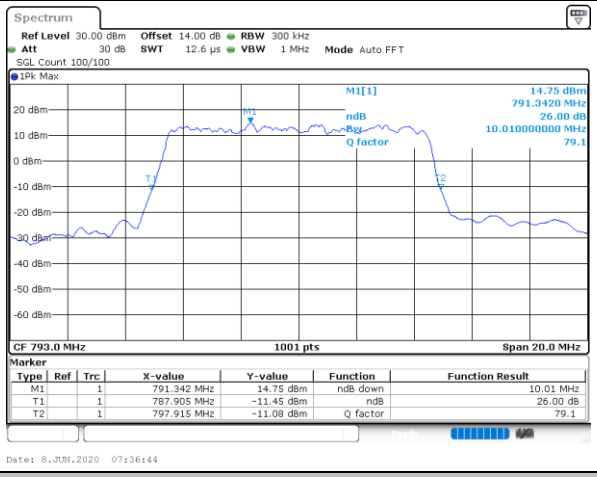
Lowest Channel / 5MHz / 64QAM



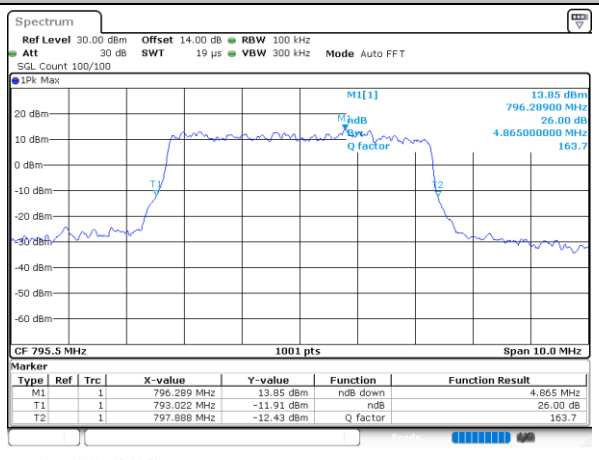
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



Highest Channel / 5MHz / 64QAM

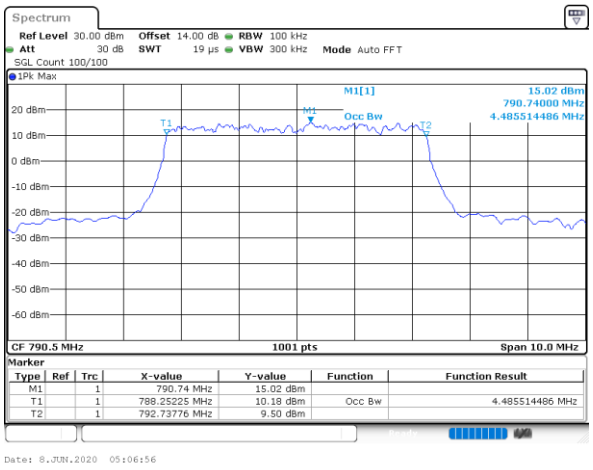


Occupied Bandwidth

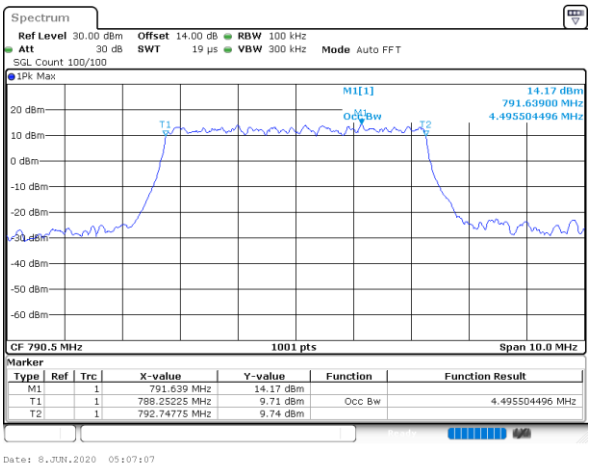
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.49	4.50			-	-	-	-
Middle CH	-	-	-	-	4.49	4.47	9.05	8.97	-	-	-	-
Highest CH	-	-	-	-	4.50	4.48			-	-	-	-
Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz		3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	64QAM		64QAM		64QAM		64QAM		64QAM		64QAM	
Lowest CH	-	-	-	-	4.52	-	-	-	-	-	-	-
Middle CH	-	-	-	-	4.51	-	8.97	-	-	-	-	-
Highest CH	-	-	-	-	4.51	-	-	-	-	-	-	-

LTE Band 14

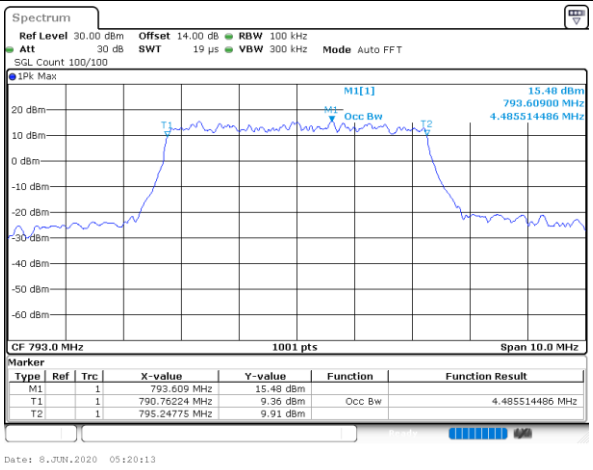
Lowest Channel / 5MHz / QPSK



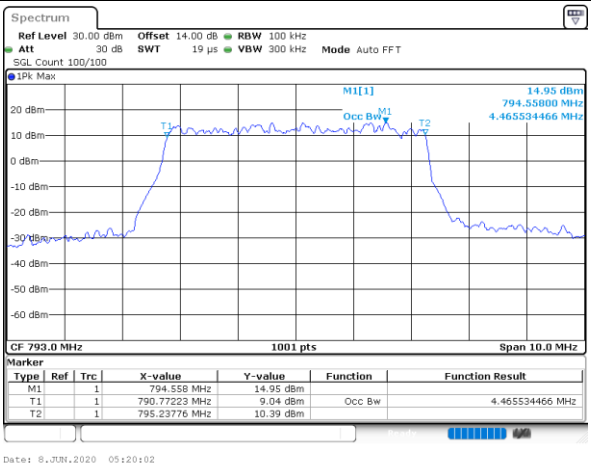
Lowest Channel / 5MHz / 16QAM



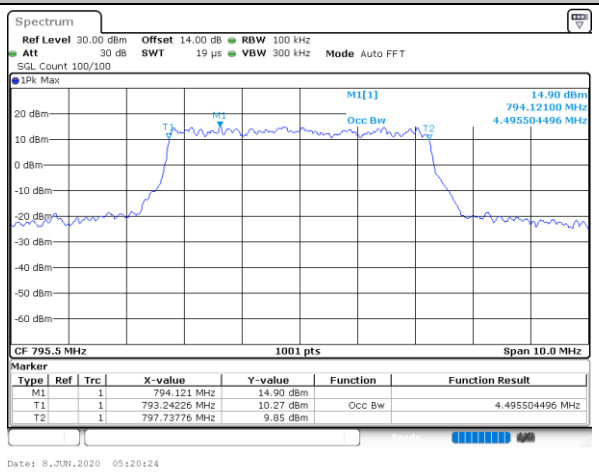
Middle Channel / 5MHz / QPSK



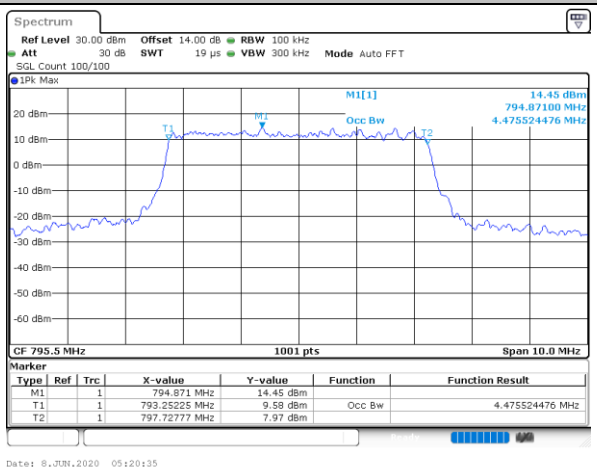
Middle Channel / 5MHz / 16QAM

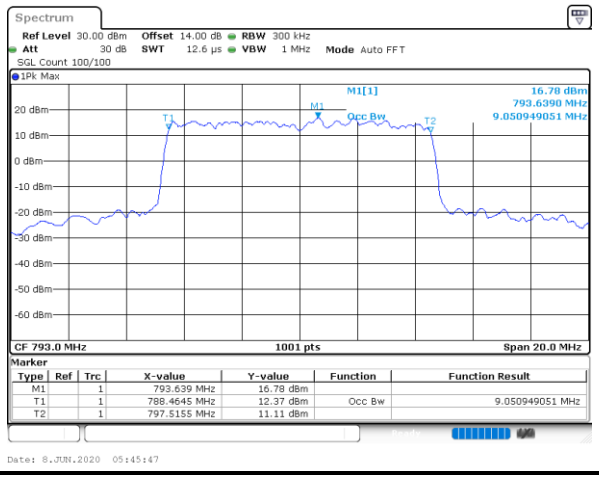
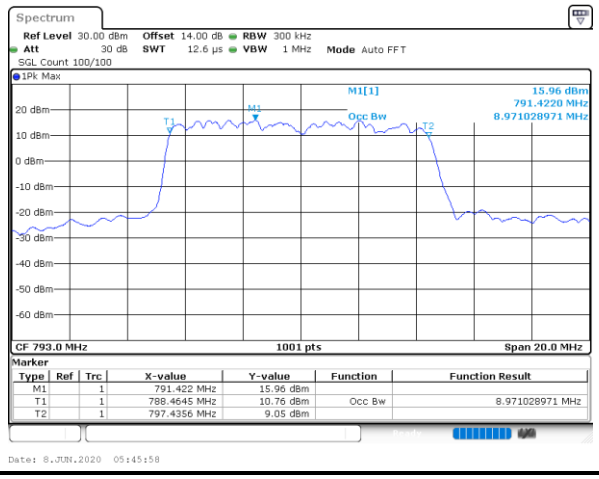


Highest Channel / 5MHz / QPSK



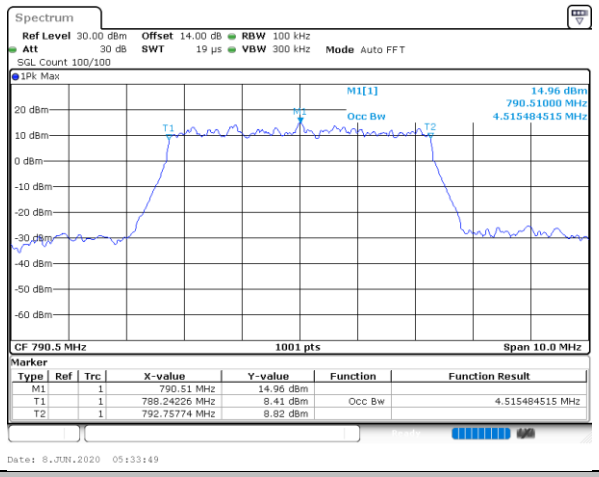
Highest Channel / 5MHz / 16QAM



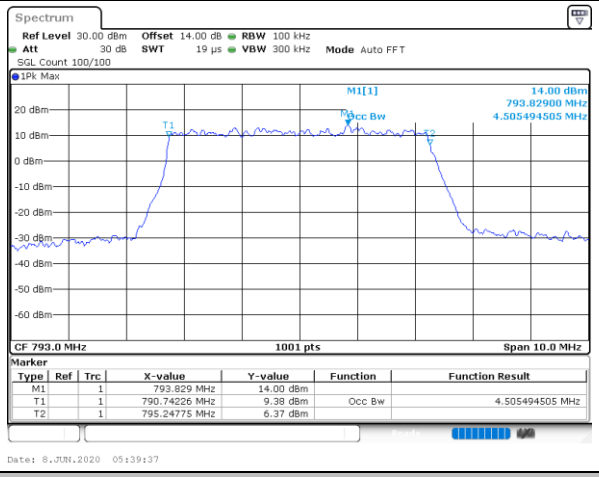
LTE Band 14	
Middle Channel / 10MHz / QPSK	**Middle Channel / 10MHz / 16QAM**
	

LTE Band 14

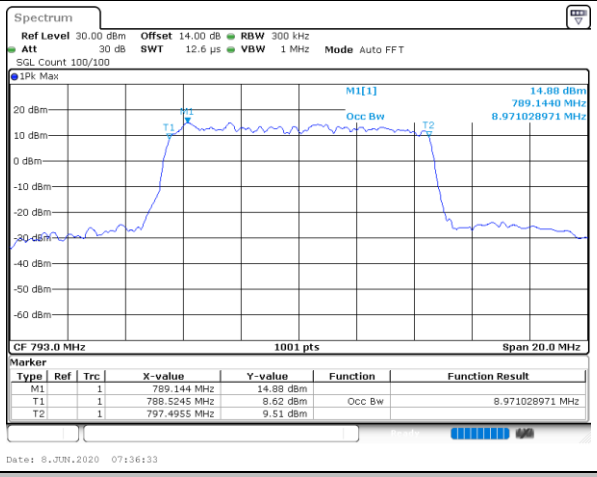
Lowest Channel / 5MHz / 64QAM



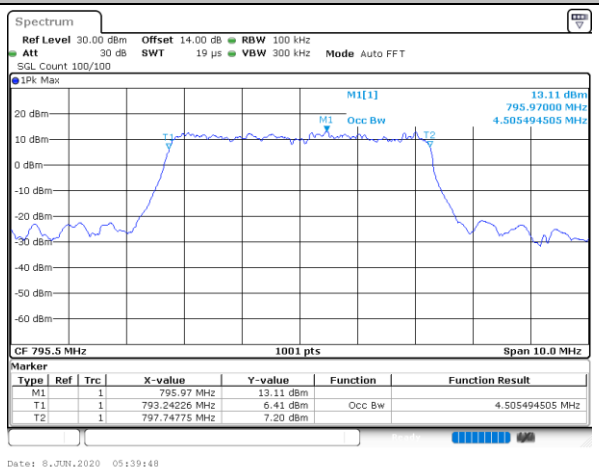
Middle Channel / 5MHz / 64QAM



Middle Channel / 10MHz / 64QAM



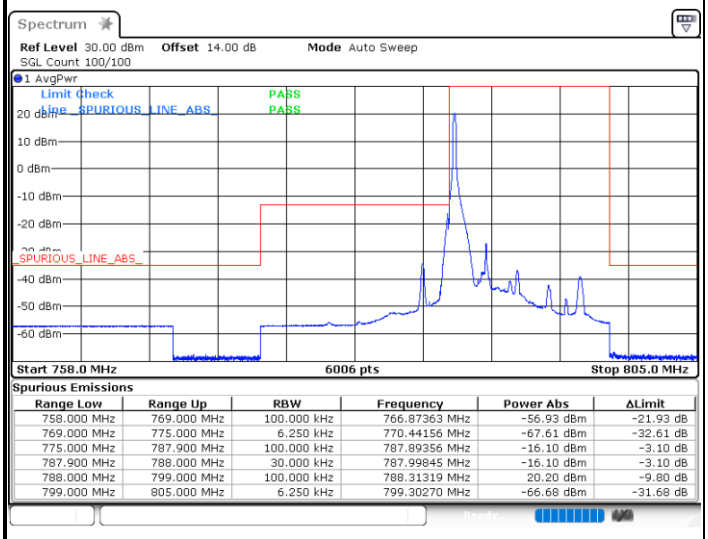
Highest Channel / 5MHz / 64QAM



Conducted Band Edge

LTE Band 14 / 5MHz / QPSK

Lowest Band Edge / 1 RB

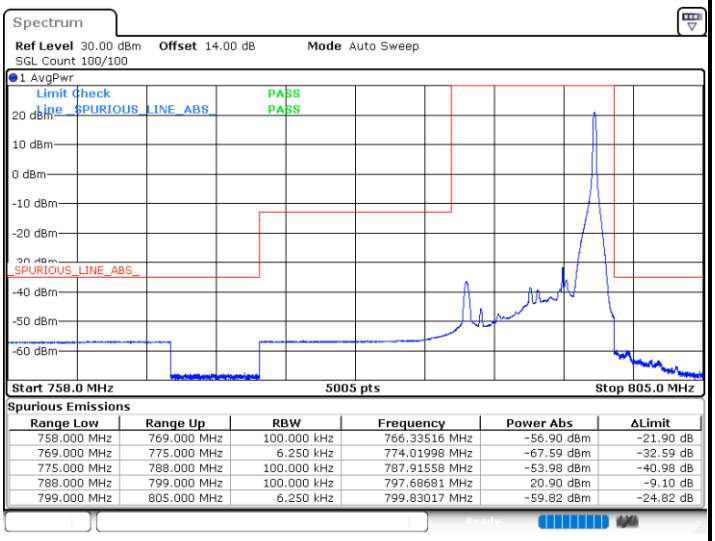


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	766.87363 MHz	-56.93 dBm	-21.93 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.44156 MHz	-67.61 dBm	-32.61 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-16.10 dBm	-3.10 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99845 MHz	-16.10 dBm	-3.10 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.31319 MHz	20.20 dBm	-9.80 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.30270 MHz	-66.68 dBm	-31.68 dB

Date: 10.JUN.2020 04:00:58

Highest Band Edge / 1 RB

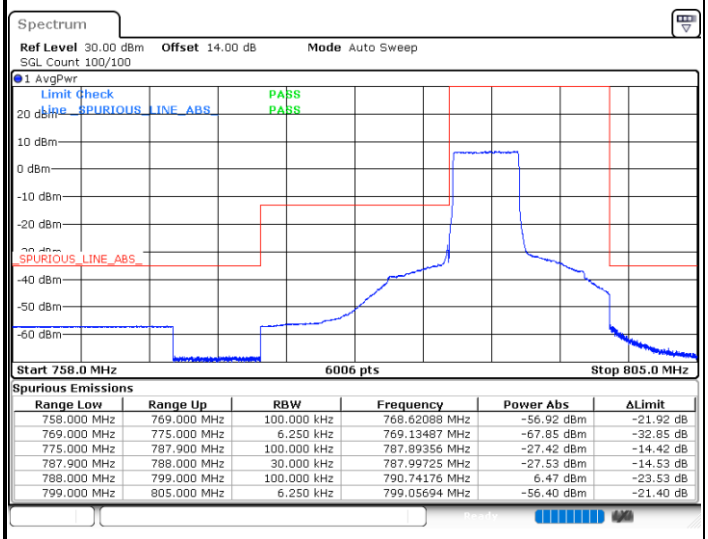


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	766.33516 MHz	-56.90 dBm	-21.90 dB
769.000 MHz	775.000 MHz	6.250 kHz	774.01998 MHz	-67.59 dBm	-32.59 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.91558 MHz	-53.98 dBm	-40.98 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.68681 MHz	20.90 dBm	-9.10 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.83017 MHz	-59.82 dBm	-24.82 dB

Date: 8.JUN.2020 08:27:04

Lowest Band Edge / Full RB

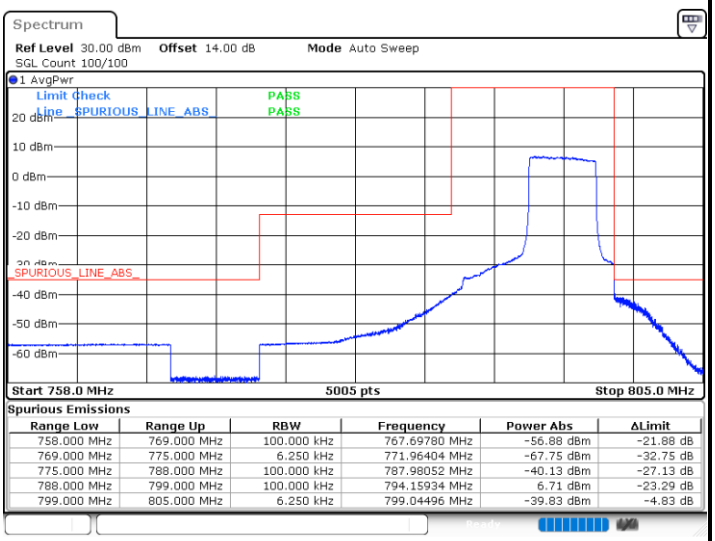


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	768.62088 MHz	-56.92 dBm	-21.92 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.13487 MHz	-67.85 dBm	-32.85 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-27.42 dBm	-14.42 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99725 MHz	-27.53 dBm	-14.53 dB
788.000 MHz	799.000 MHz	100.000 kHz	790.74176 MHz	6.47 dBm	-23.53 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.05694 MHz	-56.40 dBm	-21.40 dB

Date: 8.JUN.2020 08:03:01

Highest Band Edge / Full RB



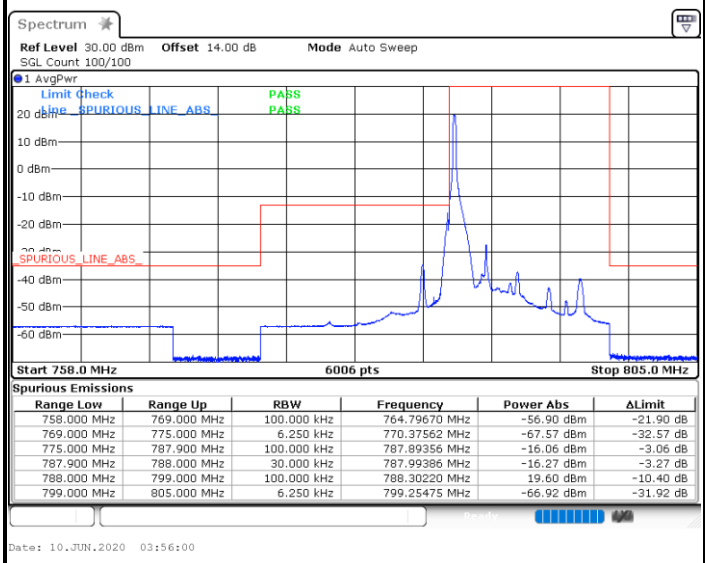
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	767.69780 MHz	-56.88 dBm	-21.88 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.96404 MHz	-67.75 dBm	-32.75 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.98052 MHz	-40.13 dBm	-27.13 dB
788.000 MHz	799.000 MHz	100.000 kHz	794.15934 MHz	6.71 dBm	-23.29 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.04496 MHz	-39.83 dBm	-4.83 dB

Date: 8.JUN.2020 08:07:39

LTE Band 14 / 5MHz / 16QAM

Lowest Band Edge /1 RB

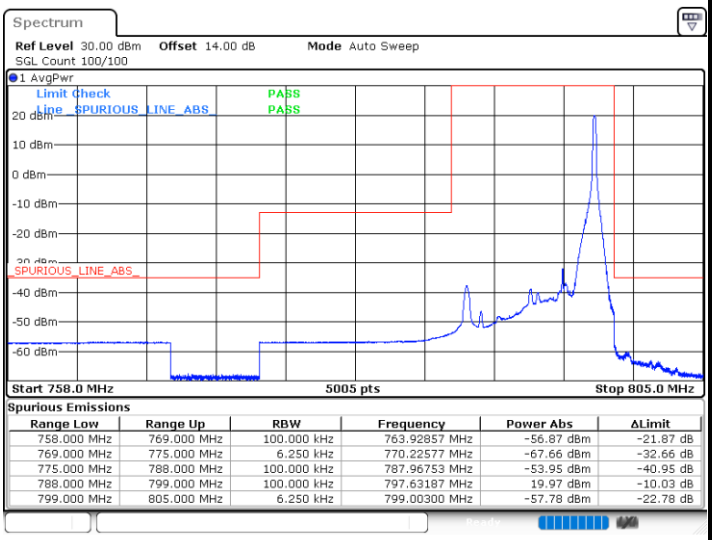


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	764.79670 MHz	-56.90 dBm	-21.90 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.37562 MHz	-67.57 dBm	-32.57 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-16.06 dBm	-3.06 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99386 MHz	-16.27 dBm	-3.27 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.30220 MHz	19.60 dBm	-10.40 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.25475 MHz	-66.92 dBm	-31.92 dB

Date: 10.JUN.2020 03:56:00

Highest Band Edge / 1 RB

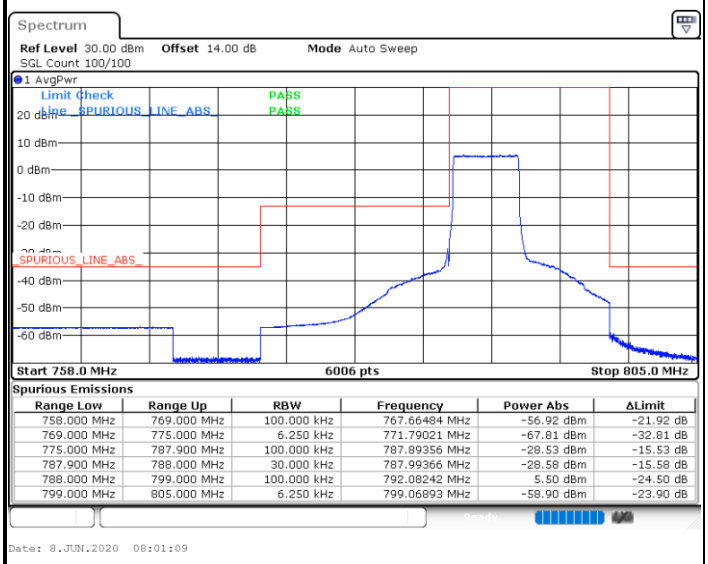


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	763.92857 MHz	-56.87 dBm	-21.87 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.22577 MHz	-67.66 dBm	-32.66 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.96753 MHz	-53.95 dBm	-40.95 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.63187 MHz	19.97 dBm	-10.03 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.00300 MHz	-57.78 dBm	-22.78 dB

Date: 8.JUN.2020 08:28:56

Lowest Band Edge / Full RB

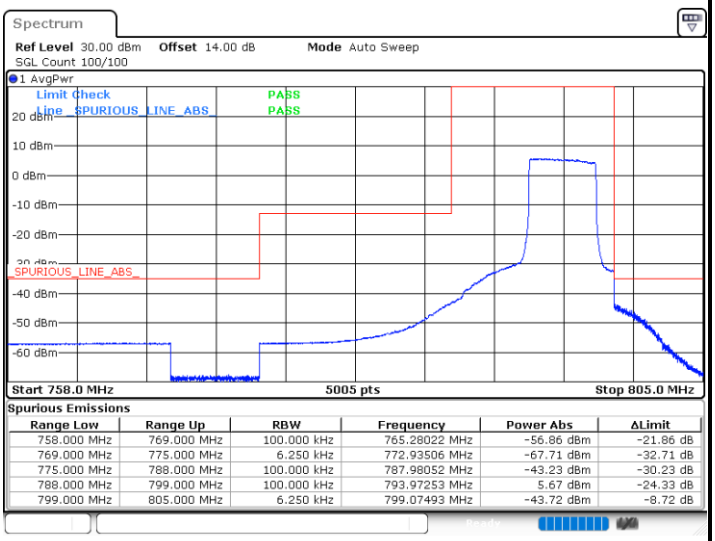


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	767.66484 MHz	-56.92 dBm	-21.92 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.79021 MHz	-67.81 dBm	-32.81 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-28.53 dBm	-15.53 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99366 MHz	-28.58 dBm	-15.58 dB
788.000 MHz	799.000 MHz	100.000 kHz	792.08242 MHz	5.50 dBm	-24.50 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.06893 MHz	-58.90 dBm	-23.90 dB

Date: 8.JUN.2020 08:01:09

Highest Band Edge / Full RB



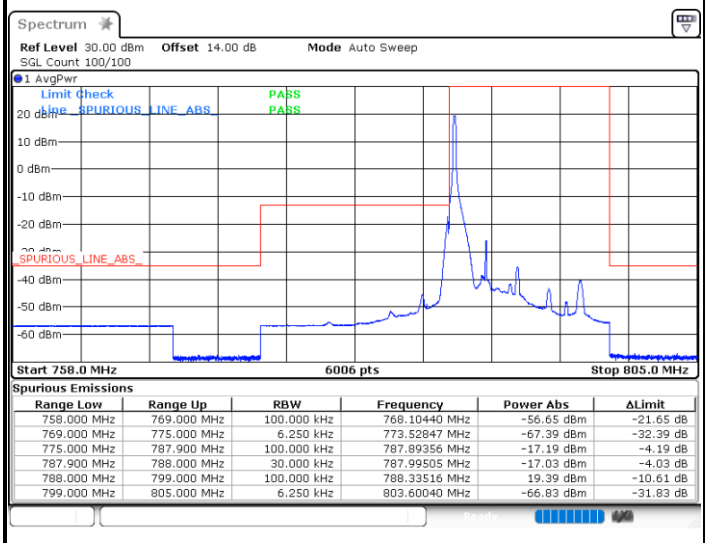
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	765.28022 MHz	-56.86 dBm	-21.86 dB
769.000 MHz	775.000 MHz	6.250 kHz	772.93506 MHz	-67.71 dBm	-32.71 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.98052 MHz	-43.23 dBm	-30.23 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.97253 MHz	5.67 dBm	-24.33 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.07493 MHz	-43.72 dBm	-8.72 dB

Date: 8.JUN.2020 08:10:12

LTE Band 14 / 5MHz / 64QAM

Lowest Band Edge / 1 RB

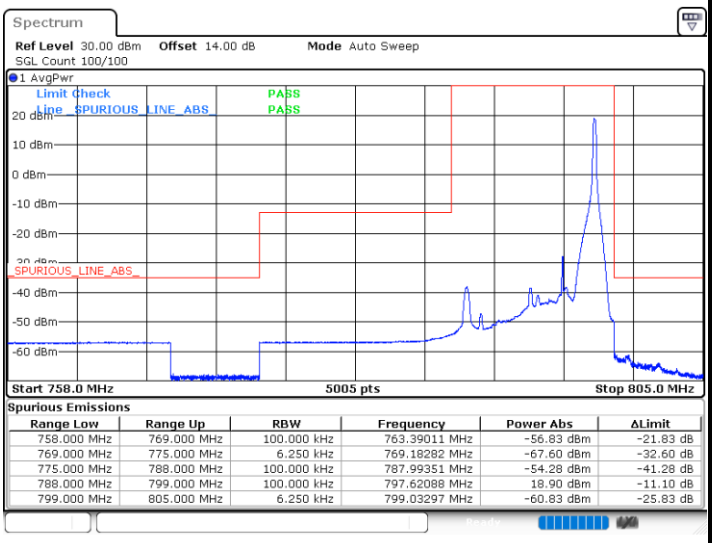


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	768.10440 MHz	-56.65 dBm	-21.65 dB
769.000 MHz	775.000 MHz	6.250 kHz	773.52847 MHz	-67.39 dBm	-32.39 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-17.19 dBm	-4.19 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99505 MHz	-17.03 dBm	-4.03 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.33516 MHz	19.39 dBm	-10.61 dB
799.000 MHz	805.000 MHz	6.250 kHz	803.60040 MHz	-66.83 dBm	-31.83 dB

Date: 11.JUN.2020 04:29:51

Highest Band Edge / 1 RB

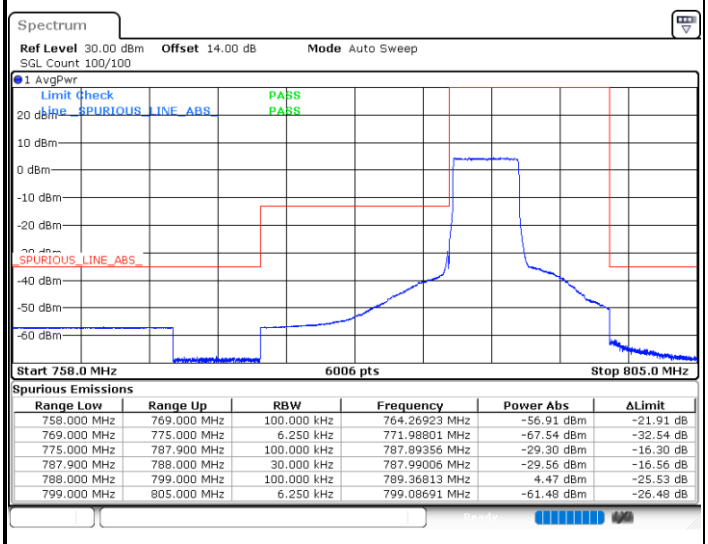


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	763.39011 MHz	-56.83 dBm	-21.83 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.18282 MHz	-67.60 dBm	-32.60 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.99351 MHz	-54.28 dBm	-41.28 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.62088 MHz	18.90 dBm	-11.10 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.03297 MHz	-60.83 dBm	-25.83 dB

Date: 8.JUN.2020 08:30:50

Lowest Band Edge / Full RB

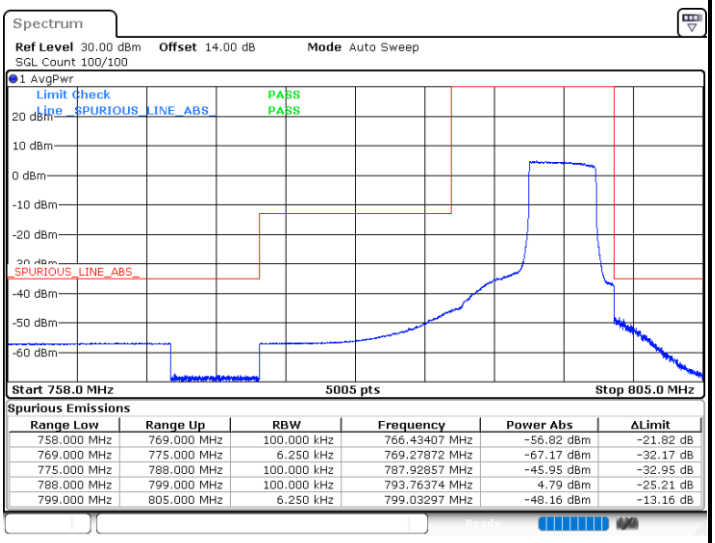


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	764.26923 MHz	-56.91 dBm	-21.91 dB
769.000 MHz	775.000 MHz	6.250 kHz	771.98801 MHz	-67.54 dBm	-32.54 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-29.30 dBm	-16.30 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99006 MHz	-29.56 dBm	-16.56 dB
788.000 MHz	799.000 MHz	100.000 kHz	789.36813 MHz	4.47 dBm	-25.53 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.08691 MHz	-61.48 dBm	-26.48 dB

Date: 8.JUN.2020 07:57:29

Highest Band Edge / Full RB

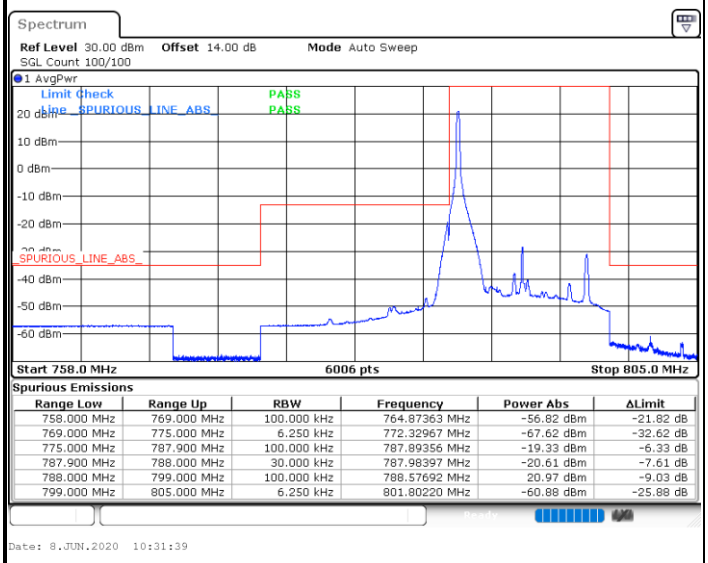


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	766.43407 MHz	-56.82 dBm	-21.82 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.27872 MHz	-67.17 dBm	-32.17 dB
775.000 MHz	788.000 MHz	100.000 kHz	787.92857 MHz	-45.95 dBm	-32.95 dB
788.000 MHz	799.000 MHz	100.000 kHz	793.76374 MHz	4.79 dBm	-25.21 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.03297 MHz	-48.16 dBm	-13.16 dB

Date: 8.JUN.2020 08:12:15

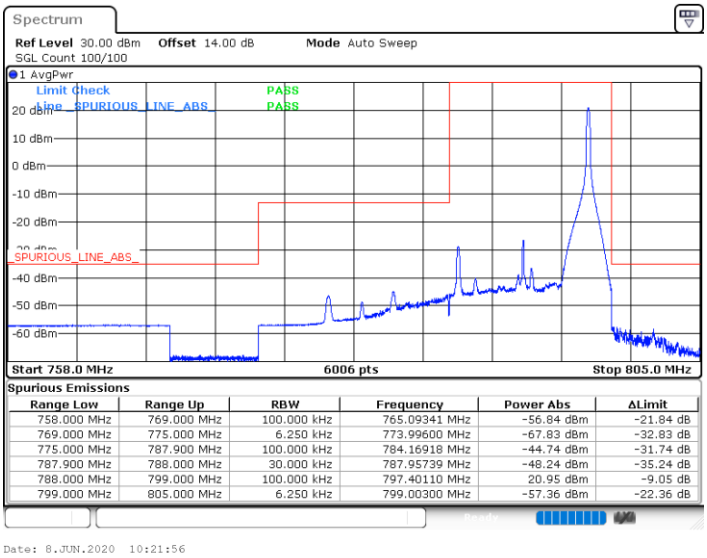
LTE Band 14 / 10MHz / QPSK	
Lowest Band Edge / 1 RB	**Highest Band Edge / 1 RB**



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	764.87363 MHz	-56.82 dBm	-21.82 dB
769.000 MHz	775.000 MHz	6.250 kHz	772.32967 MHz	-67.62 dBm	-32.62 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-19.33 dBm	-6.33 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.98397 MHz	-20.61 dBm	-7.61 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.57692 MHz	20.97 dBm	-9.03 dB
799.000 MHz	805.000 MHz	6.250 kHz	801.80220 MHz	-60.88 dBm	-25.88 dB

Date: 8.JUN.2020 10:31:39

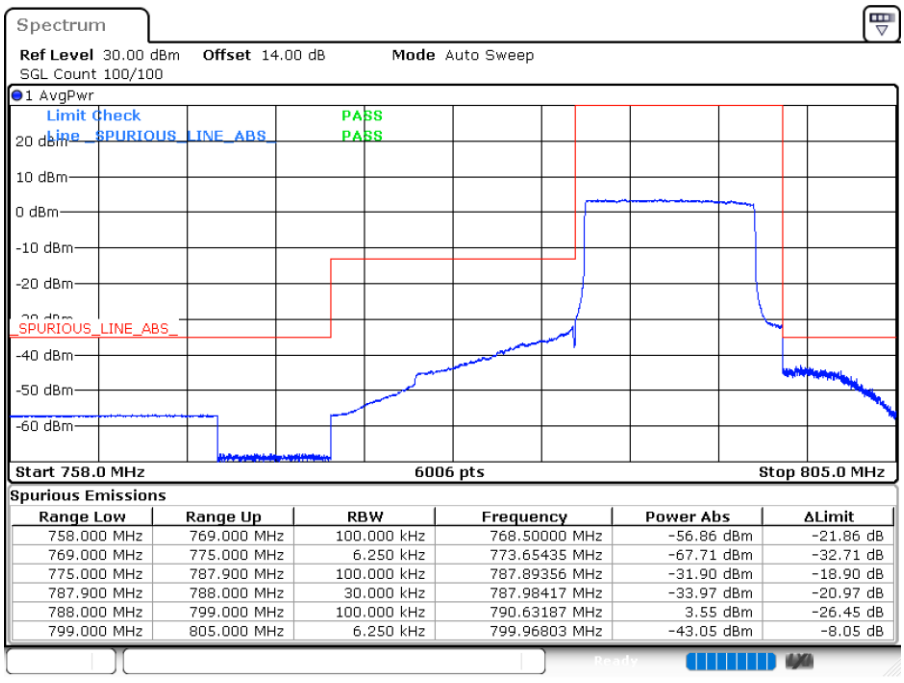


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	765.09341 MHz	-56.84 dBm	-21.84 dB
769.000 MHz	775.000 MHz	6.250 kHz	773.99600 MHz	-67.83 dBm	-32.83 dB
775.000 MHz	787.900 MHz	100.000 kHz	784.16918 MHz	-44.74 dBm	-31.74 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.95739 MHz	-48.24 dBm	-35.24 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.40110 MHz	20.95 dBm	-9.05 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.00300 MHz	-57.36 dBm	-22.36 dB

Date: 8.JUN.2020 10:21:56

Band Edge / Full RB



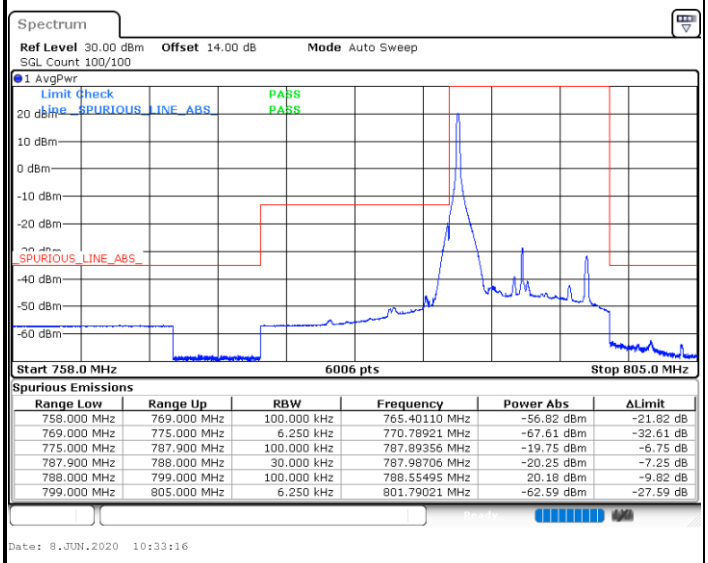
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	768.50000 MHz	-56.86 dBm	-21.86 dB
769.000 MHz	775.000 MHz	6.250 kHz	773.65435 MHz	-67.71 dBm	-32.71 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-31.90 dBm	-18.90 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.98417 MHz	-33.97 dBm	-20.97 dB
788.000 MHz	799.000 MHz	100.000 kHz	790.63187 MHz	3.55 dBm	-26.45 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.96803 MHz	-43.05 dBm	-8.05 dB

Date: 8.JUN.2020 08:54:19

LTE Band 14 / 10MHz / 16QAM

Lowest Band Edge / 1 RB

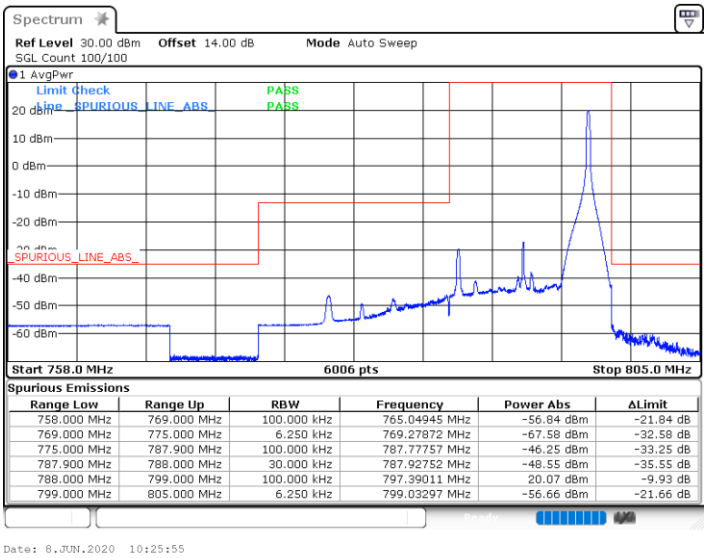


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	765.40110 MHz	-56.82 dBm	-21.82 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.78921 MHz	-67.61 dBm	-32.61 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-19.75 dBm	-6.75 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.98706 MHz	-20.25 dBm	-7.25 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.55495 MHz	20.18 dBm	-9.82 dB
799.000 MHz	805.000 MHz	6.250 kHz	801.79021 MHz	-62.59 dBm	-27.59 dB

Date: 8.JUN.2020 10:33:16

Highest Band Edge / 1 RB

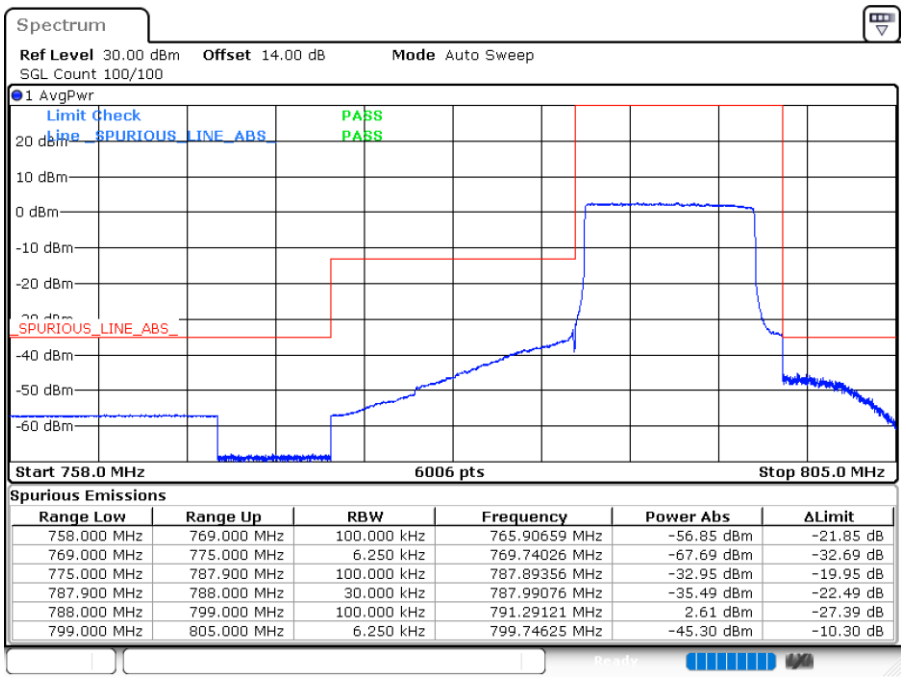


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	765.04945 MHz	-56.84 dBm	-21.84 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.27872 MHz	-67.58 dBm	-32.58 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.77757 MHz	-46.25 dBm	-33.25 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.92752 MHz	-48.55 dBm	-35.55 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.39011 MHz	20.07 dBm	-9.93 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.03297 MHz	-56.66 dBm	-21.66 dB

Date: 8.JUN.2020 10:25:55

Band Edge / Full RB



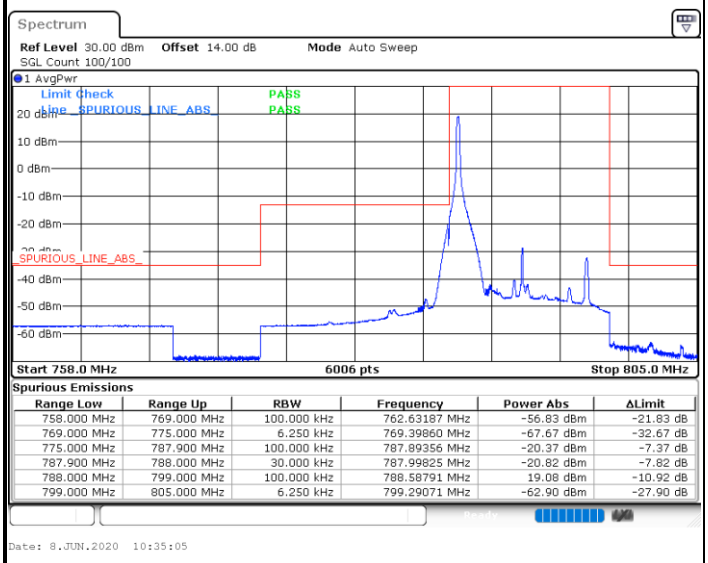
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	765.90659 MHz	-56.85 dBm	-21.85 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.74026 MHz	-67.69 dBm	-32.69 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-32.95 dBm	-19.95 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99076 MHz	-35.49 dBm	-22.49 dB
788.000 MHz	799.000 MHz	100.000 kHz	791.29121 MHz	2.61 dBm	-27.39 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.74625 MHz	-45.30 dBm	-10.30 dB

Date: 8.JUN.2020 08:56:13

LTE Band 14 / 10MHz / 64QAM

Lowest Band Edge / 1 RB

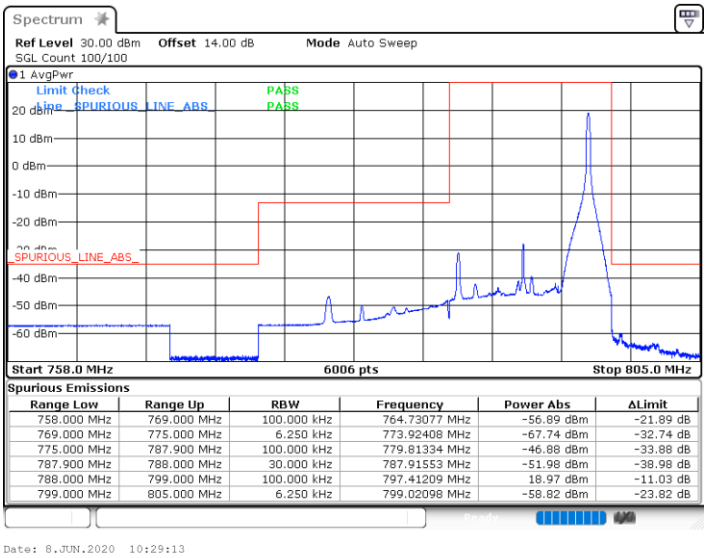


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	762.63187 MHz	-56.83 dBm	-21.83 dB
769.000 MHz	775.000 MHz	6.250 kHz	769.39860 MHz	-67.67 dBm	-32.67 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-20.37 dBm	-7.37 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.99825 MHz	-20.82 dBm	-7.82 dB
788.000 MHz	799.000 MHz	100.000 kHz	788.58791 MHz	19.08 dBm	-10.92 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.29071 MHz	-62.90 dBm	-27.90 dB

Date: 8.JUN.2020 10:35:05

Highest Band Edge / 1 RB

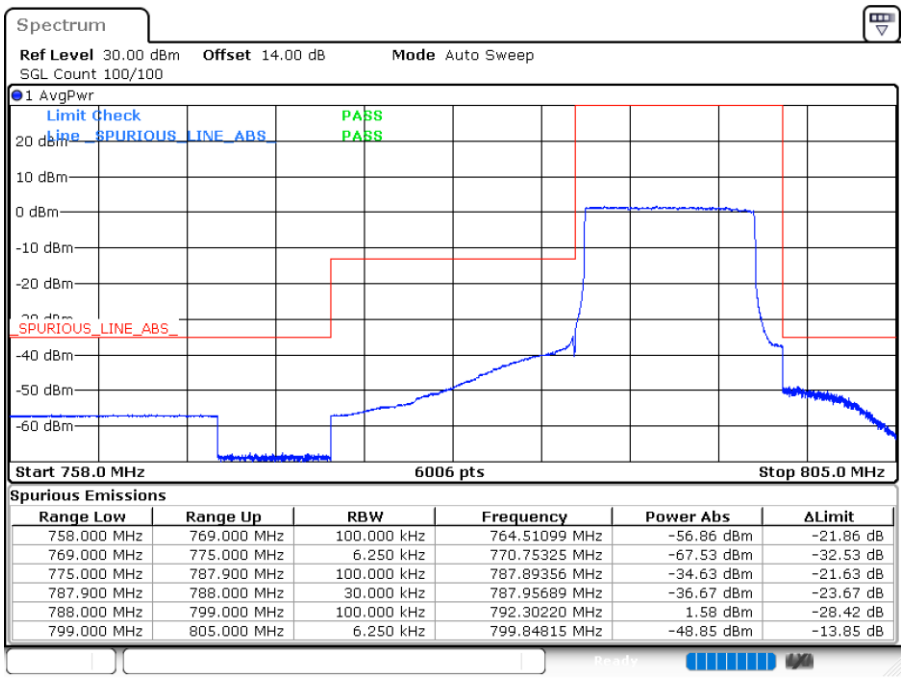


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	764.73077 MHz	-56.89 dBm	-21.89 dB
769.000 MHz	775.000 MHz	6.250 kHz	773.92408 MHz	-67.74 dBm	-32.74 dB
775.000 MHz	787.900 MHz	100.000 kHz	779.81334 MHz	-46.88 dBm	-33.88 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.91553 MHz	-51.98 dBm	-38.98 dB
788.000 MHz	799.000 MHz	100.000 kHz	797.41209 MHz	18.97 dBm	-11.03 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.02098 MHz	-58.82 dBm	-23.82 dB

Date: 8.JUN.2020 10:29:13

Band Edge / Full RB



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
758.000 MHz	769.000 MHz	100.000 kHz	764.51099 MHz	-56.86 dBm	-21.86 dB
769.000 MHz	775.000 MHz	6.250 kHz	770.75325 MHz	-67.53 dBm	-32.53 dB
775.000 MHz	787.900 MHz	100.000 kHz	787.89356 MHz	-34.63 dBm	-21.63 dB
787.900 MHz	788.000 MHz	30.000 kHz	787.95689 MHz	-36.67 dBm	-23.67 dB
788.000 MHz	799.000 MHz	100.000 kHz	792.30220 MHz	1.58 dBm	-28.42 dB
799.000 MHz	805.000 MHz	6.250 kHz	799.84815 MHz	-48.85 dBm	-13.85 dB

Date: 8.JUN.2020 08:57:49