

Report No.: FG041648-02D



FCC RADIO TEST REPORT

FCC ID : PKRISGM2100

Equipment : Wireless Hotspot Modem

Brand Name : Inseego **Model Name** : M2100 **Marketing Name** : M2100

Applicant : Inseego Corporation

9710 Scranton Road Suite 200,

San Diego,, CA 92121

Manufacturer : Inseego Corporation

9710 Scranton Road Suite 200,

San Diego,, CA 92121

Standard : FCC 47 CFR Part 2, 90(R)

The product was received on May 15, 2020 and testing was started from Jul. 02, 2020 and completed on Jul. 27, 2020. We, SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E 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. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

TEL: 886-3-327-3456

Louis Win

SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City, Taiwan (R.O.C.)

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Report Version : 01

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History of this test report

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Report No.	Version	Description	Issued Date
FG041648-02D	01	Initial issue of report	Jul, 28, 2020

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Summary of Test Result

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Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
3.2	§90.542 (a)(7)	Effective Radiated Power	Pass	-
3.3	-	Peak-to-Average Ratio	Reporting only	-
3.4	§2.1049	Occupied Bandwidth	Reporting only	-
3.5	§2.1053 §90.543 (e)(2)	Conducted Band Edge Measurement	Pass	-
3.6	§2.1051 §90.210 (n)	Emission Mask	Pass	-
3.7	§2.1053 §90.543 (e)(3)	Conducted Spurious Emission	Pass	-
3.8	§2.1055 §90.539 (e)	Frequency Stability Temperature & Voltage	Pass	-
4.2	§2.1053 §90.543 (e)(3) §90.543 (f)	Radiated Spurious Emission	Pass	Under limit 18.81 dB at 1584.000 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.

Reviewed by: Wii Chang Report Producer: Lucy Wu

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1 General Description

1.1 Product Feature of Equipment Under Test

WCDMA/LTE/5G NR, Wi-Fi 2.4GHz 802.11b/g/n/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, and GNSS.

Product Specification subjective to this standard					
	WWAN: Fixed Internal Antenna WLAN				
Antenna Type	<ant. 1="">: Fixed Internal Antenna</ant.>				
	<ant. 2="">: Fixed Internal Antenna GPS: Fixed Internal Antenna</ant.>				

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1.2 Modification of EUT

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

1.3 Testing Site

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory					
	No.52, Huaya 1st Rd., Guishan Dist.,					
Test Site Location	Taoyuan City, Taiwan (R.O.C.)					
rest Site Location	TEL: +886-3-327-3456					
	FAX: +886-3-328-4978					
Test Site No.	Sporton Site No.					
rest site No.	TH05-HY					
Test Engineer	Benjamin Lin					
Temperature 21~23°C						
Relative Humidity	51~55%					

Test Site	SPORTON INTERNATIONAL INC. EMC & Wireless Communications Laboratory						
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.						
rest site No.	03CH12-HY						
Test Engineer	Jack Cheng, Lance Chiang and Chuan Chu						
Temperature	24.3~26.4°ℂ						
Relative Humidity	58~66%						

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: TW1190 and TW0007

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1.4 Applied Standards

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

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- ANSI C63.26-2015
- FCC 47 CFR Part 2, Part 90(R)
- ANSI / TIA-603-E
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01

Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. The TAF code is not including all the FCC KDB listed without accreditation.

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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.

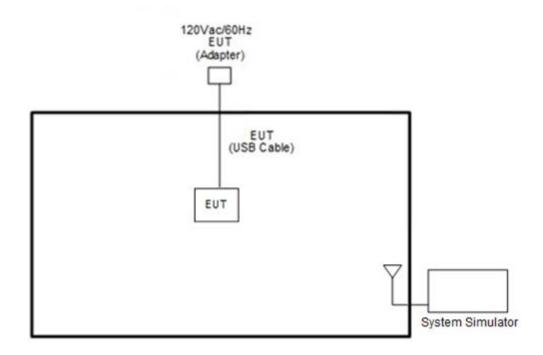
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For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Y plane) were recorded in this report.

Conducted			Bar	ndwid	lth (M	lHz)			Modu	lation		RB#			Test Channel		
Test Cases	Band	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	256QAM	1	Half	Full	L	М	Н
Max. Output Power	14	1	•	>	V	-	1	٧	v	v	v	٧	v	٧	>	v	v
Peak-to-Average Ratio	14	ı	ı		V	-	ı	٧	v	v	v	>		٧		v	
26dB and 99% Bandwidth	14	ı	ı	>	V	-	ı	٧	v	v	v			٧	>	v	v
Conducted Band Edge	14	ı	•	>	٧	-	1	V	v	v	v	>		٧	>		v
Emission Mask	14	ı	ı	>	V	-	ı	٧	v	v	v	>		٧	>	v	v
Conducted Spurious Emission	14		-	v	v	-	-	v	v	v	٧	v			v	v	v
Frequency Stability	14	-	-		v	-	-	v						v		v	
E.R.P	14		-	v	v	-	-	v	v	v	٧	٧			V	v	v
Radiated Spurious Emission	14 Worst Case										٧	v	v				
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 test under different RB size/offset and modulations in exploratory test. Subsequently, only the vemissions are reported. 4. All the radiated test cases were performed with Battery 2.																	

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2.2 Connection Diagram of Test System



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2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	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 and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

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

Offset = RF cable loss + attenuator factor.

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

Example:

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

= 4.5 + 10 = 14.5 (dB)

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2.5 Frequency List of Low/Middle/High Channels

LTE Band 14 Channel and Frequency List							
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest			
10	Channel	-	23330	-			
10	Frequency	-	793	-			
E	Channel	23305	23330	23355			
5	Frequency	790.5	793	795.5			

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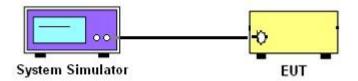
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

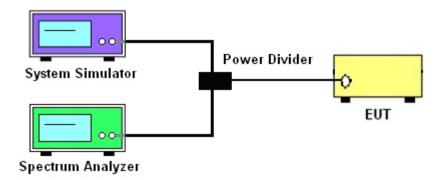
3.1.1 Test Setup

3.1.2 Conducted Output Power

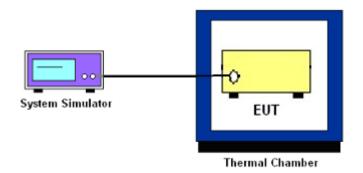


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3.1.3 Peak-to-Average Ratio, Occupied Bandwidth, Conducted Band-Edge, Emission Mask, and Conducted Spurious Emission



3.1.4 Frequency Stability



3.1.5 Test Result of Conducted Test

Please refer to Appendix A.

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3.2 Conducted Output Power Measurement and ERP

3.2.1 Description of the Conducted Output Power Measurement and ERP 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.

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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 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.
- 4. Measure and record the power level from the system simulator.

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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.

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3.3.2 Test Procedures

The testing follows ANSI C63.26-2015 Section 5.2.6

- 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.

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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.

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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

The testing follows ANSI C63.26-2015 Section 5.4.3 (26dB) and Section 5.4.4 (99OB)

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. 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.
- 3. 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.
- 4. Set the detection mode to peak, and the trace mode to max hold.
- 5. 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)
- 6. Determine the "-26 dB down amplitude" as equal to (Reference Value X).
- 7. 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.
- 8. Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

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3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

90.543(e)

(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.

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- (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

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

- 1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
- 2. The band edges of low and high channels for the highest RF powers were measured.
- 3. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
- 4. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
- 5. Set spectrum analyzer with RMS detector.
- 6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
- 7. Checked that all the results comply with the emission limit line.

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

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3.6 Emission Mask

3.6.1 Description of Emissions Mask Measurement

Transmitters designed must meet the emission mask comply with the emission mask provisions of FCC Part 90.210(n).

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3.6.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.0.

- 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.

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3.7 Conducted Spurious Emission

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.

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

3.7.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 6.1.

- 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.
- 6. Set spectrum analyzer with RMS detector.
- 7. Taking the record of maximum spurious emission.
- 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)

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3.8 Frequency Stability

3.8.1 Description of Frequency Stability Measurement

The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

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3.8.2 Test Procedures for Temperature Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

- 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.

3.8.3 Test Procedures for Voltage Variation

The testing follows FCC KDB 971168 D01 v03r01 Section 9.0.

- 1. The EUT was placed in a temperature chamber at 20±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.

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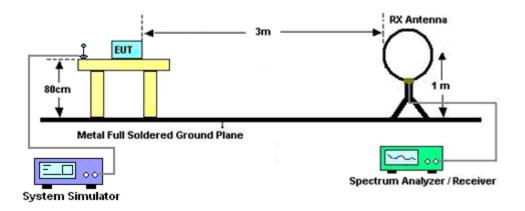
4 Radiated Test Items

4.1 Measuring Instruments

See list of measuring instruments of this test report.

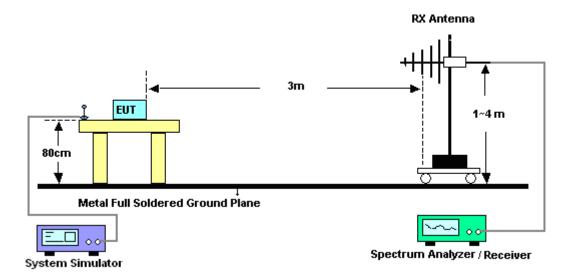
4.1.1 Test Setup

For radiated emissions below 30MHz



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For radiated test from 30MHz to 1GHz



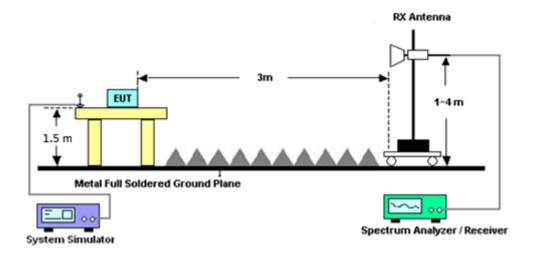
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For radiated test above 1GHz



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4.1.2 Test Result of Radiated Test

Please refer to Appendix B.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is a comparison data of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

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4.2 Radiated Spurious Emission

4.2.1 Description of Radiated Spurious Emission

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

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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.

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

4.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI / TIA-603-E Section 2.2.12.

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

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5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Base Station (Measure)	Anritsu	MT8821C	626202528 0	LTE FDD/TDD with 44) /LTE-3CC DLCA,2CC ULCA	Oct. 25, 2019	Jul. 04, 2020~ Jul. 27, 2020	Oct. 24, 2020	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101908	10Hz~40GHz	May 13, 2020	Jul. 04, 2020~ Jul. 27, 2020	May 12, 2021	Conducted (TH05-HY)
Temperature Chamber	ESPEC	SH-641	92013720	-40°C ~90°C	Sep. 02, 2019	Jul. 04, 2020~ Jul. 27, 2020	Sep. 01, 2020	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 09, 2019	Jul. 04, 2020~ Jul. 27, 2020	Oct. 08, 2020	Conducted (TH05-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#A	1-18GHz	Jan. 13, 2020	Jul. 04, 2020~ Jul. 27, 2020	Jan. 12, 2021	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Dec. 26, 2019	Jul. 02, 2020~ Jul. 19, 2020	Dec. 25, 2020	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N -06	37059 & 01	30MHz~1GHz	Oct. 12, 2019	Jul. 02, 2020~ Jul. 19, 2020	Oct. 11, 2020	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-132 8	1GHz~18GHz	Nov. 14, 2019	Jul. 02, 2020~ Jul. 19, 2020	Nov. 13, 2020	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	BBHA9170 584	18GHz~40GHz	Dec. 10, 2019	Jul. 02, 2020~ Jul. 19, 2020	Dec. 09, 2020	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 25, 2020	Jul. 02, 2020~ Jul. 19, 2020	Mar. 24, 2021	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A023 75	1GHz~26.5GHz	Mar. 26, 2020	Jul. 02, 2020~ Jul. 19, 2020	Mar. 25, 2021	Radiation (03CH12-HY)
Preamplifier	Jet-Power	JPA0118-55-30 3K	171000180 0054002	1GHz~18GHz	Aug. 06, 2019	Jul. 02, 2020~ Jul. 19, 2020	Aug. 05, 2020	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 13, 2019	Jul. 02, 2020~ Jul. 19, 2020	Dec. 12, 2020	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY534701 18	10Hz~44GHz	Mar. 12, 2020	Jul. 02, 2020~ Jul. 19, 2020	Mar. 11, 2021	Radiation (03CH12-HY)
Signal Generator	Rohde & Schwarz	SMB100A	101107	100kHz~40GHz	Aug. 27, 2019	Jul. 02, 2020~ Jul. 19, 2020	Aug. 26, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 12, 2019	Jul. 02, 2020~ Jul. 19, 2020	Dec. 11, 2020	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Feb. 25, 2020	Jul. 02, 2020~ Jul. 19, 2020	Feb. 24, 2021	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	800740/2	30MHz~40GHz	Feb. 25, 2020	Jul. 02, 2020~ Jul. 19, 2020	Feb. 24, 2021	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP140349	N/A	Oct. 25, 2019	Jul. 02, 2020~ Jul. 19, 2020	Oct. 24, 2020	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jul. 02, 2020~ Jul. 19, 2020	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jul. 02, 2020~ Jul. 19, 2020	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jul. 02, 2020~ Jul. 19, 2020	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-00098 9	N/A	N/A	Jul. 02, 2020~ Jul. 19, 2020	N/A	Radiation (03CH12-HY)

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6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.24
Confidence of 95% (U = 2Uc(y))	3.24

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

Measuring Uncertainty for a Level of	3.62
Confidence of 95% (U = 2Uc(y))	3.02

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

Measuring Uncertainty for a Level of	4.06
Confidence of 95% (U = 2Uc(y))	4.00

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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power)

		LTE	Band 14 Ma	ximum Average Po	ower [dBm]	
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest
10	1	0			22.76	
10	1	25			22.75	
10	1	49			22.72	
10	25	0	QPSK		21.79	
10	25	12			21.80	
10	25	25			21.86	
10	50	0			21.80	
10	1	0			22.14	
10	1	25			22.14	
10	1	49			22.11	
10	25	0	16-QAM		20.80	
10	25	12			20.79	
10	25	25			20.85	
10	50	0		_	20.80	_
10	1	0		<u>-</u>	21.06	_
10	1	25			21.10	
10	1	49			21.01	
10	25	0	64-QAM		19.81	
10	25	12			19.83	
10	25	25			19.88	
10	50	0			19.83	
10	1	0			18.49	
10	1	25			18.47	
10	1	49			18.40	
10	25	0	256-QAM		18.38	
10	25	12			18.20	
10	25	25			18.39	
10	50	0			18.32	



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		LTE	Band 14 Ma	ximum Average Po	wer [dBm]					
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest				
5	1	0		22.62	22.76	22.69				
5	1	12		22.65	22.69	22.73				
5	1	24		22.52	22.52	22.57				
5	12	0	QPSK	21.70	21.79	21.77				
5	12	7		21.62	21.68	21.65				
5	12	13		21.67	21.68	21.70				
5	25	0		21.79	21.67	21.64				
5	1	0		21.94	22.09	21.96				
5	1	12		22.00	22.01	22.02				
5	1	24		22.07	22.11	22.01				
5	12	0	16-QAM	20.66	20.62	20.61				
5	12	7	-	20.59	20.74	20.72				
5	12	13		20.68	20.85	20.65				
5	25	0		20.68	20.76	20.65				
5	1	0		21.01	20.94	20.88				
5	1	12		20.98	20.97	20.91				
5	1	24	64-QAM	20.89	20.98	20.98				
5	12	0		19.63	19.71	19.67				
5	12	7		19.80	19.69	19.67				
5	12	13		19.75	19.78	19.85				
5	25	0		19.72	19.79	19.73				
5	1	0		17.87	17.90	17.94				
5	1	12		17.77	17.89	17.84				
5	1	24		17.77	17.81	17.84				
5	12	0	256-QAM	17.69	17.75	17.80				
5	12	7		17.77	17.82	17.81				
5	12	13		17.85	17.78	17.89				
5	25	0		17.76	17.75	17.88				

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LTE Band 14

Peak-to-Average Ratio

Mode		LTE Band 14 / 10MHz								
Mod.	QP	SK	160	Limit: 13dB						
RB Size	1RB Full RB		1RB	Full RB	Result					
Lowest CH			-	-						
Middle CH	3.48	4.64	4.43	5.59	PASS					
Highest CH	-	-	-	-						
Mode		LTE Band 14 / 10MHz								
Mod.	64Q	AM	256	Limit: 13dB						
RB Size	1RB	Full RB	1RB	Full RB	Result					
Lowest CH	-	-	-	-						
Middle CH	7.22	6.41	5.80	6.38	PASS					
Highest CH	-	-	-	-						

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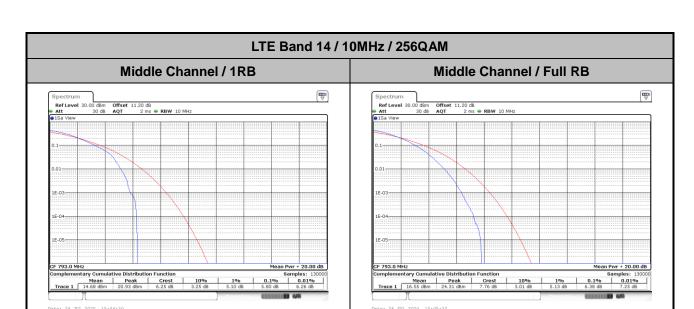
LTE Band 14 / 10MHz / QPSK Middle Channel / 1RB Middle Channel / Full RB Ref Level 30.00 dBm Offset 11.20 dB AQT 2 ms | Samples: 130000 | 0.1% | 0.01% | | 3.48 dB | 3.51 dB Samples: 130000 0.1% 0.01% 4.64 dB 4.84 dB LTE Band 14 / 10MHz / 16QAM Middle Channel / 1RB Middle Channel / Full RB Ref Level 30.00 dBm Ref Level 30.00 dBm Offset 11.20 dB AQT 2 ms ● RBW 10 MHz Offset 11.20 dB AQT 2 ms ■ RBW 10 MHz | 0.1% | 0.01% | 5.59 dB | 5.86 dR 0.1% 0.01% 4.43 dB 4.49 dB LTE Band 14 / 10MHz / 64QAM Middle Channel / 1RB Middle Channel / Full RB 8amples: 13000 0.1% 0.01% 7.22 dB 7.33 dB

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26dB Bandwidth

Mode	LTE Band 14 : 26dB BW(MHz)											
BW	1.4	ИHz	3MHz		5MHz		10MHz		15MHz		20MHz	
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.93	4.91	-	-	-	-	-	-
Middle CH	-	-	-	-	4.88	4.92	9.67	9.89	-	-	-	-
Highest CH	-	-	-	-	4.92	4.87	-	-	-	-	-	-
Mode					LTE Ba	and 14 :	26dB BV	V(MHz)				
BW	1.4	ИHz	3M	lHz	5MHz 10MHz			15MHz		20MHz		
Mod.	64QAM	256 QAM	64QAM	256 QAM	64QAM	256QA M	64QAM	256 QAM	64QAM	256 QAM	64QAM	256 QAM
Lowest CH	-	-	-	-	4.94	4.87	-	-	-	-	-	-
Middle CH	-	-	-	-	4.91	4.89	9.97	9.67	-	-	-	-
Highest CH	-	-	-	-	4.86	4.88	-	-	-	-	-	-

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Report No.: FG041648-02D LTE Band 14 Lowest Channel / 5MHz / QPSK Lowest Channel / 5MHz / 16QAM Ref Level 30.00 dbm Offset 11.20 db e RBW 100 kHz
Ref Level 30.00 dbm Offset 11.20 db e RBW 100 kHz
Act 30 db SWT 19 µs e VBW 300 kHz Mode Auto FFT
SGL Count 100/100 13.88 dBm 791.43900 MHz 26.00 dB 4.925000000 MHz 13.12 dBr 788.99200 MH 26.00 di M1[1] M1[1] 40 dBm Function Result 4.905 MHz 26.00 dB 160.9
 Marker
 Trc
 X-value
 Y-value
 Function

 M1
 1
 791.439 MHz
 13.88 dism
 nd8 down

 T1
 1
 789.032 MHz
 12.42 dism
 nd8

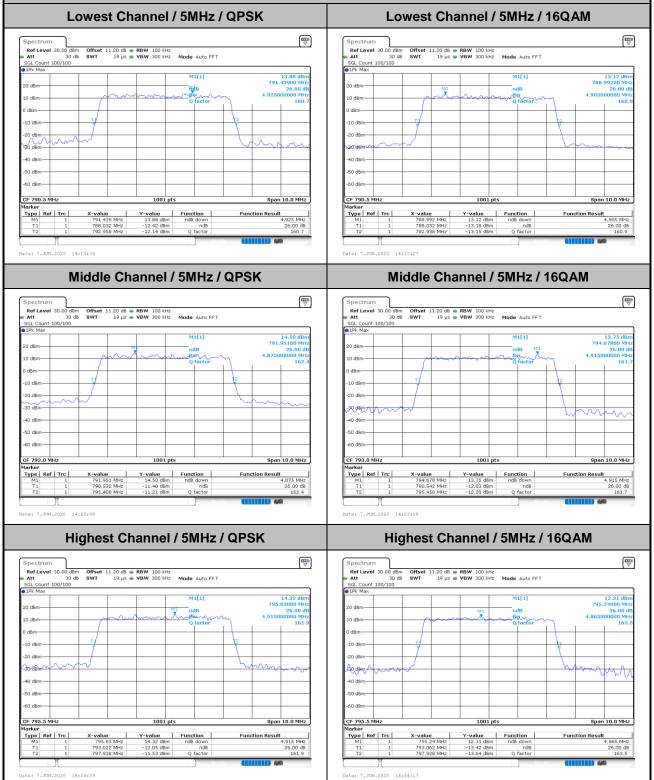
 T2
 1
 792.958 MHz
 -12.14 dism
 Q factor
 Function Result 4.925 MHz
 Type
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 788.992 MHz
 13.12 dBm
 ndB down
 Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM Ref Level 30.00 dBm
Att 30 dB
SGL Count 100/100 11.20 dB **RBW** 100 kHz 19 μs **VBW** 300 kHz **Mode** Auto FFT Offset 11.20 dB ● RBW 100 kHz SWT 19 µs ● VBW 300 kHz Mode Auto FFT 14.50 dBr 791.95100 MF 13.75 dBr 794.67800 MH 20 dBm-161. -10 dBm--30 d8m-40 dBm-50 dBm -50 dBm-
 X-value
 Y-value
 Function

 794.678 MHz
 13.75 dBm
 nd8 down

 790.542 MHz
 -12.03 dBm
 nd8

 795.458 MHz
 -12.20 dBm
 Q factor
 Type Ref Trc Date: 7.JUN.2020 14:23:08 Date: 7.JUN.2020 14:23:19 Highest Channel / 5MHz / 16QAM Highest Channel / 5MHz / QPSK Ref Level 3.0.0 dBm Offset 11.20 dB @ RBW 100 kHz
Ref Level 3.0.0 dB WY 19 µs @ VBW 300 kHz Mode Auto FFT
SGL Count 100/100
1Pk Max 12.31 dBn 795.24000 MH: 26.00 dE M1[1] M1[1] 10 dBm-161 163.



Date: 7.JUN.2020 14:42:49

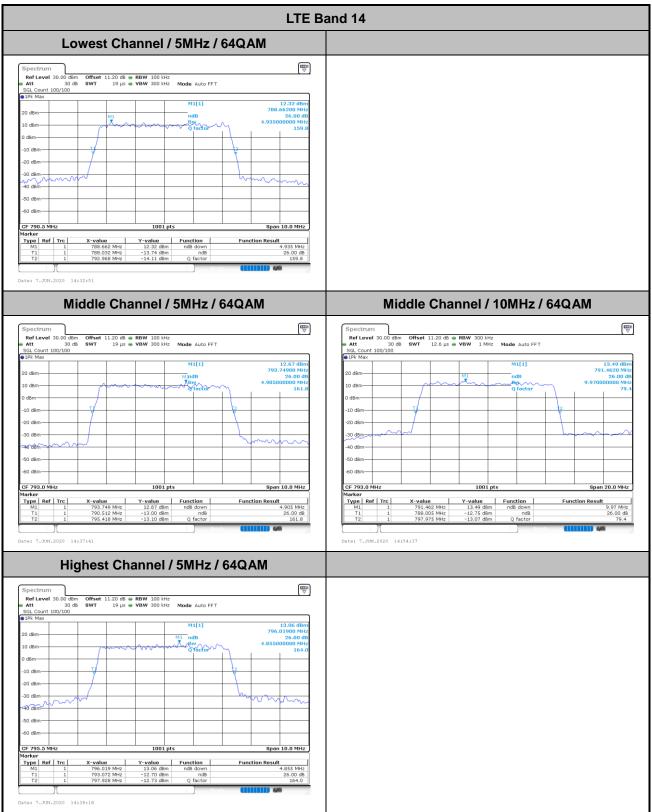
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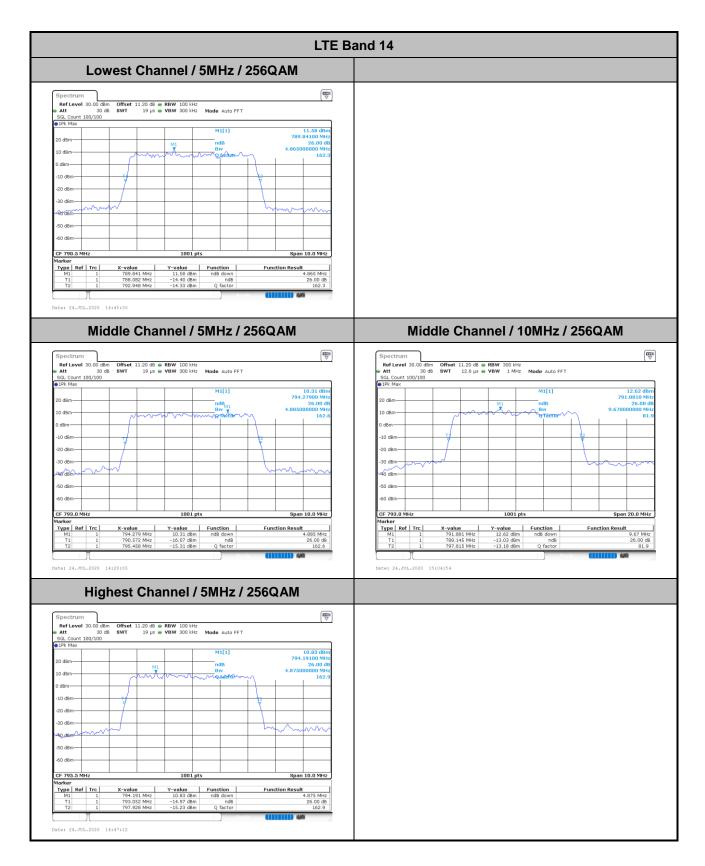
Date: 7.JUN.2020

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Occupied Bandwidth

Mode	LTE Band 14 : 99%OBW(MHz)											
BW	1.4MHz 3N			MHz 5MHz		10MHz		15MHz		20MHz		
Mod.	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM	QPSK	16QAM
Lowest CH	-	-	-	-	4.50	4.50	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.50	9.07	9.05	-	-	-	-
Highest CH	-	-	-	-	4.50	4.49	-	-	-	-	-	-
Mode					LTE Ba	and 14 :	99%OBV	V(MHz)				
BW	1.4	ИHz	3M	lHz	5MHz 10MHz			15MHz		20MHz		
Mod.	64QAM	256QA M	64QAM	256 QAM	64QAM	256 QAM	64QAM	256QA M	64QAM	256 QAM	64QAM	256 QAM
Lowest CH	-	-	-	-	4.53	4.49	-	-	-	-	-	-
Middle CH	-	-	-	-	4.50	4.48	9.03	8.97	-	-	-	-
Highest CH	-	-	-	-	4.49	4.48	-	-	-	-	-	-

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FAX: 886-3-328-4978

LTE Band 14 Lowest Channel / 5MHz / QPSK Lowest Channel / 5MHz / 16QAM Ref Level 30.00 dBm Offset 11.20 dB ● RBW 100 kHz
Att 30 dB SWT 19 μs ● VBW 300 kHz Mode Auto FFT
SGL Count 100/100
11Pk Max 13.38 dBn 789.64100 MH 4.495504496 MH M1[1] 14.09 dBr 788.80200 MH 4.495504496 MH M1[1] 10 dBm dBm--20 dBm--340 BHC-30 dBm 40 dBm Span 10.0 MHz
 Marker
 Type | Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 788.802 MHz
 14.09 dbm
 Punction
 11.00 dbm
 11.00 dbm
 Punction Result

 T1
 1
 788.2522 MHz
 9.38 dbm
 Occ 8w
 4.495504

 T2
 1
 792.74775 MHz
 8.77 dbm
 Occ 8w
 4.495504

 Type
 Ref
 Trc
 X-value
 Y-value
 Function
 Function Result

 M1
 1
 789.641 MHz
 13.38 dBm
 Function
 789.641 MHz 13.38 dBm 788.25225 MHz 8.70 dBm Occ Bw 792.74775 MHz 7.97 dBm 4.495504496 MHz 4.495504496 MHz Middle Channel / 5MHz / QPSK Middle Channel / 5MHz / 16QAM Reflevel 3.00 dbm Offset 11.20 db • RBW 100 kHz
Att 30 db SWT 19 µs • VBW 300 kHz Mode Auto FFT
SGL Count 100/100
10°R Max 14.02 dBr 791.11200 MH 4.495504496 MH 20 dBm--10 dBm--20 dBm--40 dBm--50 dBm -50 dBm-
 X-value
 Y-value
 Function

 791.112 MHz
 14.02 dBm
 0 Cc Bw

 790.75225 MHz
 8.73 dBm
 0 Cc Bw

 795.24775 MHz
 8.16 dBm
 0 Cc Bw

 Marker
 Trppe
 Ref
 Trc
 X-value
 Y-value
 Function

 M1
 1
 792.6 MHz
 13.70 dbm
 13.70 dbm

 T1
 1
 790.75225 MHz
 8.12 dbm
 Occ 8w

 T2
 1
 795.24775 MHz
 8.06 dbm
 8.06 dbm
 Type Ref Trc 4.495504496 MHz 4.495504496 MHz Date: 7.JUN.2020 14:23:42 Date: 7.JUN.2020 14:23:30 Highest Channel / 5MHz / QPSK Highest Channel / 5MHz / 16QAM M1[1] M1[1] 10 dBm--10 dBm -20 dBm an dam--50 dBm -60 dBm--60 dBm-1001 pts 1001 pts Type | Ref | Trc |
 X-value
 Y-value
 Function

 796.589 MHz
 14.57 dBm
 Occ Bw

 793.25225 MHz
 8.60 dBm
 Occ Bw

 797.74775 MHz
 8.24 dBm

 Marker
 Y-value
 Y-value
 Function

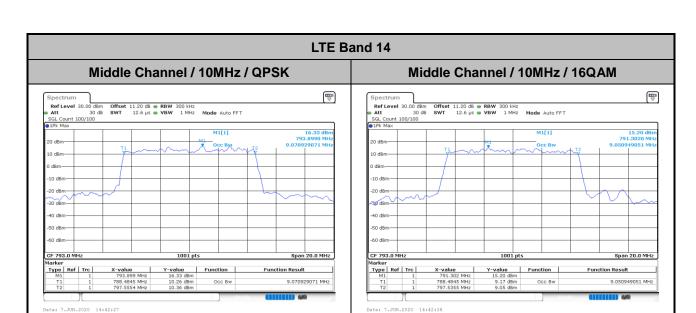
 M1
 1
 797.058 MHz
 13.20 dbm

 T1
 1
 793.2522 MHz
 8.04 dbm
 Occ Bw

 T2
 1
 797.73776 MHz
 7.49 dbm
 Occ Bw
 Function Result Function Result 4.495504496 MHz 4.485514486 MHz

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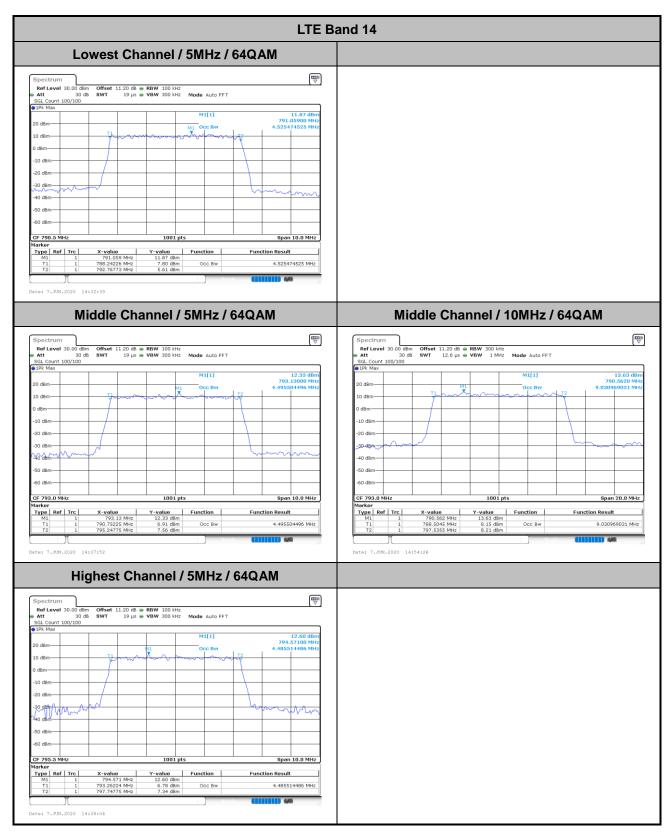
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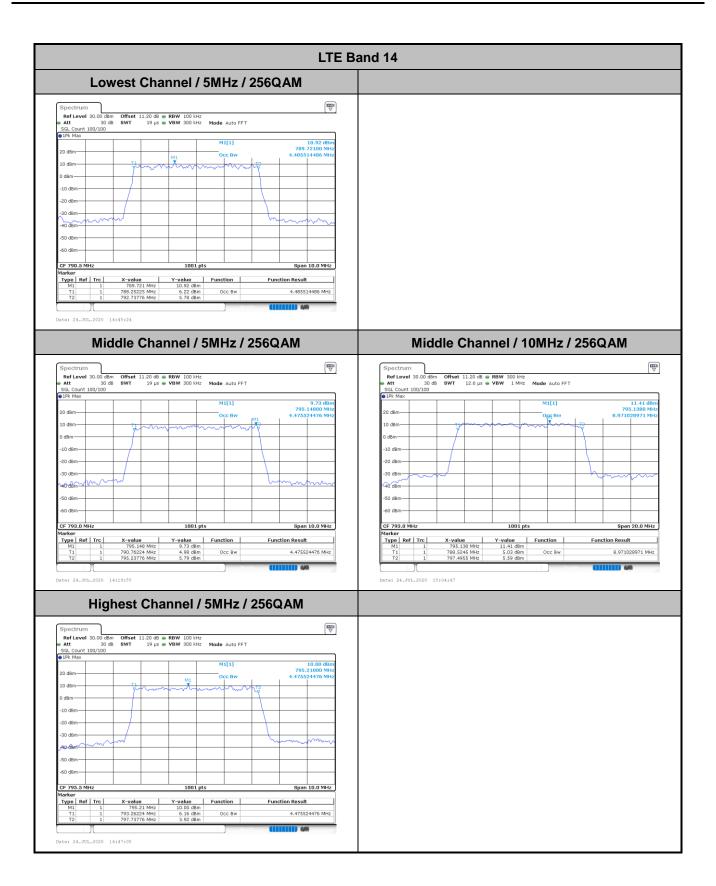
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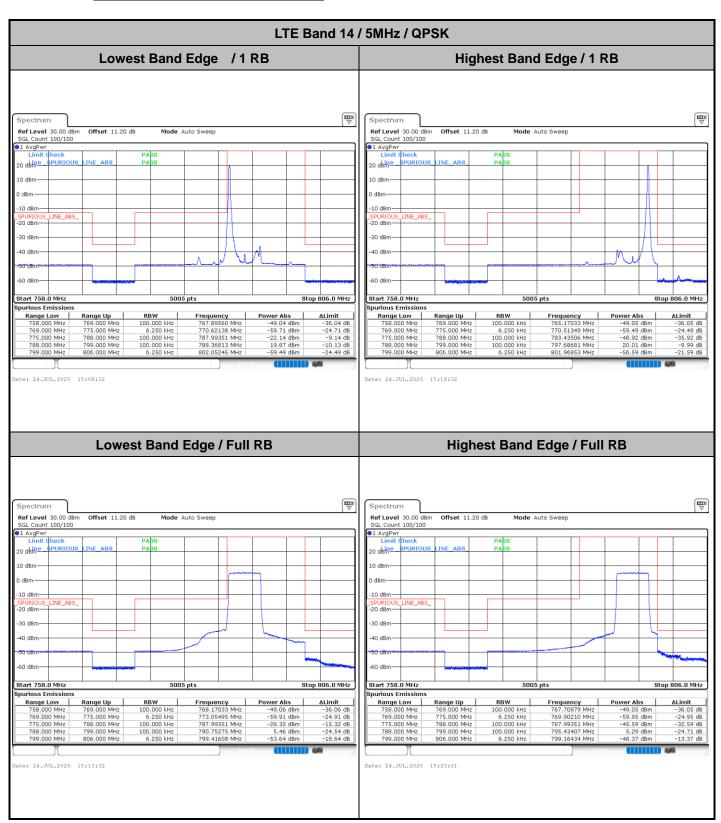
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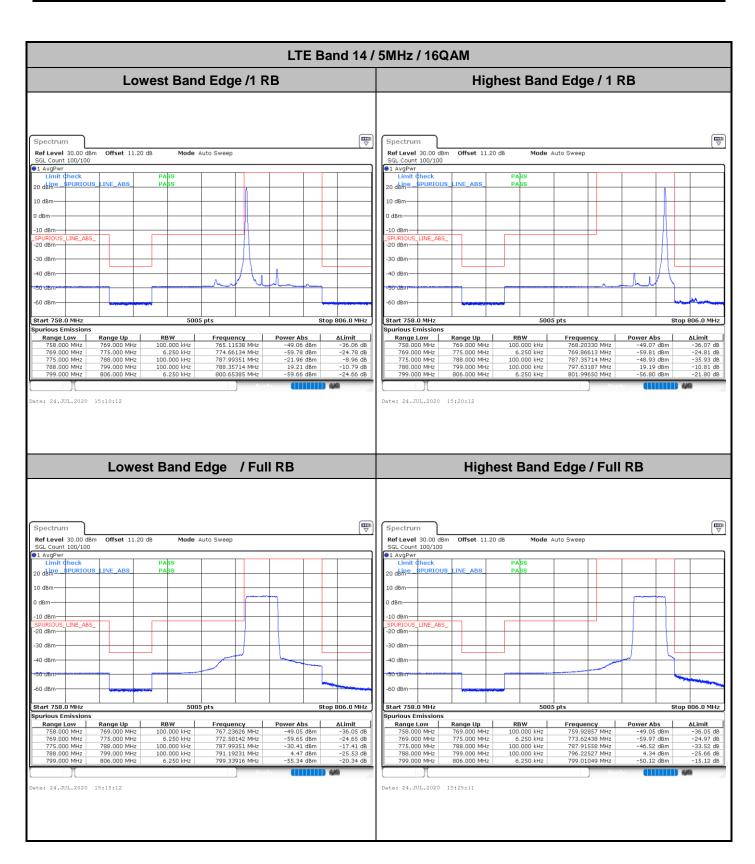
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Conducted Band Edge

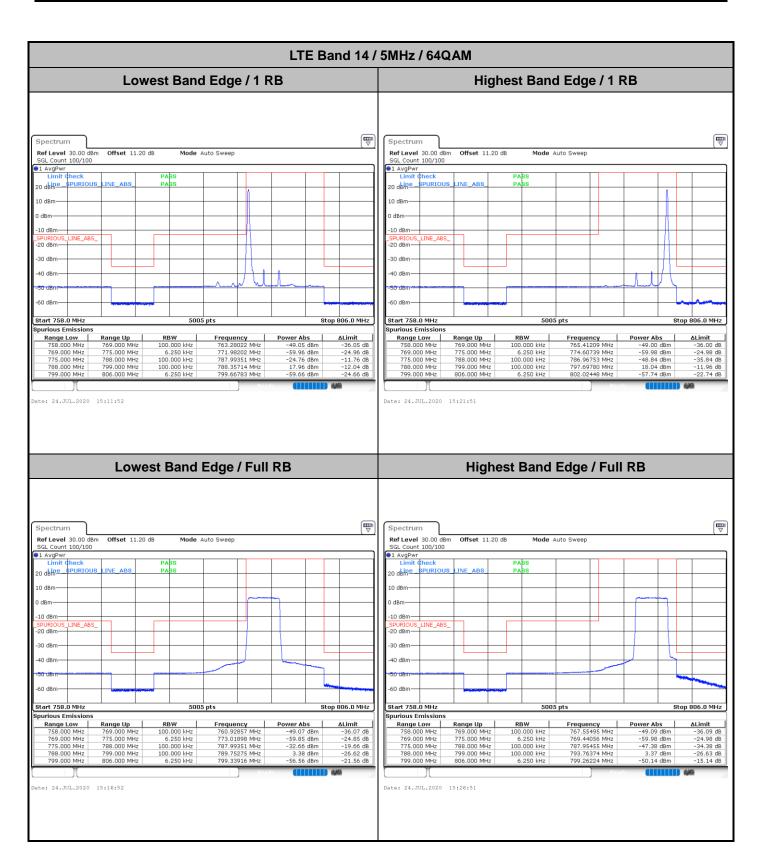


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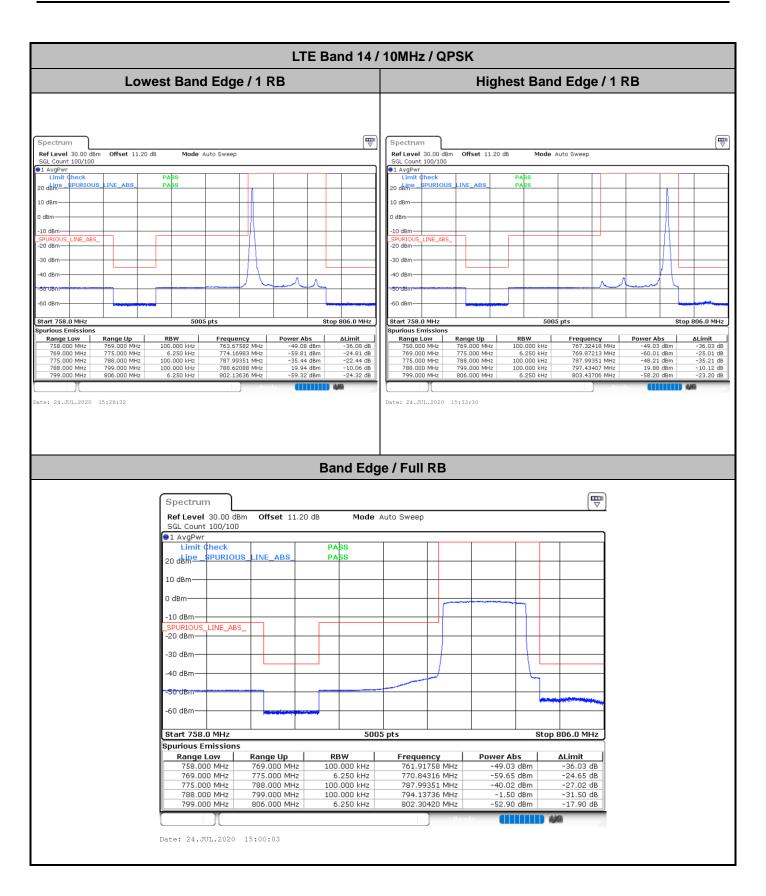


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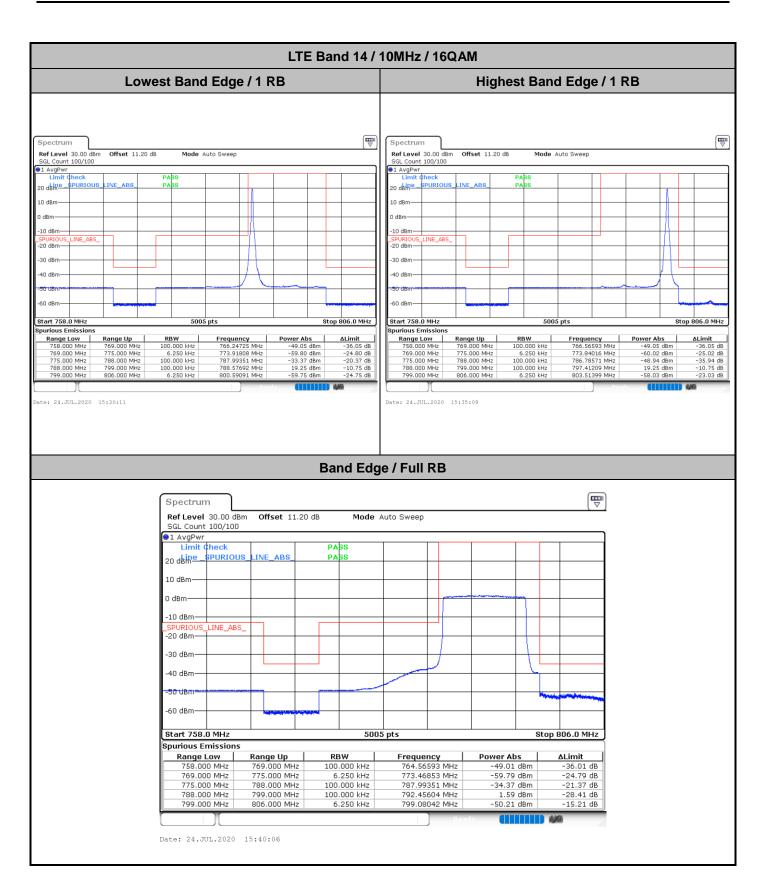
LTE Band 14 / 5MHz / 256QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum Ref Level 30.00 dBm SGL Count 100/100 1 AvgPwr Ref Level 30.00 dBm Offset 11.20 dB SGL Count 100/100 Mode Auto Sweep Offset 11.20 dB Mode Auto Sweep ∍1 AvgPw SPURIOUS_LINE_ABS on dine SPURIOUS PASS 20 deine 10 dBm dBm-0 dBm--10 dBm -10 dBm-_LINE_ABS -20 dBm -20 dBm-Start 758.0 MHz Spurious Emissio Start 758.0 MHz 5005 pts Stop 806.0 MHz 5005 pts Stop 806.0 MHz -49.08 dBm -59.55 dBm -27.76 dBm 15.03 dBm -59.75 dBm Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz Frequency
767.35714 MHz
772.91109 MHz
787.99351 MHz
788.34615 MHz
805.08042 MHz Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz RBW 100.000 kHz 6.250 kHz 100.000 kHz 100.000 kHz 6.250 kHz 766.63187 MHz 771.41259 MHz 778.27922 MHz 797.67582 MHz 803.87063 MHz Power Abs -49.01 dBm -59.94 dBm -48.96 dBm 15.15 dBm -58.33 dBm ΔLimit 758.000 MHz Range Low te: 24.JUL.2020 15:54:26 Date: 24.JUL.2020 14:54:35 Lowest Band Edge / Full RB **Highest Band Edge / Full RB** Ref Level 30.00 dBm Offset 11.20 dB Mode Auto Sweep Offset 11.20 dB Mode Auto Sweep SGL Count 100/100 SGL Count 100/100 ●1 AvgPwr Limit Check ∍1 AvgPw 20 dbine SPURIOUS LINE ABS 20 dbine SPURIOUS I PASS -10 dBm -10 dBm-30 dBn -30 dBm Spurious Emissions Range Low 758.000 MHz 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz RBW 100.000 kHz 6.250 kHz 100.000 kHz 100.000 kHz 6.250 kHz Frequency 767.82967 MHz 773.51049 MHz 787.99351 MHz 790.19231 MHz 799.44406 MHz Power Abs
-49.07 dBm
-59.85 dBm
-35.14 dBm
1.49 dBm
-57.23 dBm 758.000 MHz 769.000 MHz 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz RBW 100.000 kHz 6.250 kHz 100.000 kHz 100.000 kHz 6.250 kHz Frequency 764.91758 MHz 774.85315 MHz 787.90260 MHz 794.71978 MHz 799.07343 MHz -49.06 dBm -59.86 dBm -47.68 dBm 1.41 dBm -52.33 dBm ∆Limit -36.06 dB -24.86 dB -34.68 dB -28.59 dB -17.33 dB -36.07 dB -24.85 dB -22.14 dB -28.51 dB -22.23 dB Date: 24.JUL.2020 14:56:34 ate: 24.JUL.2020 15:52:37

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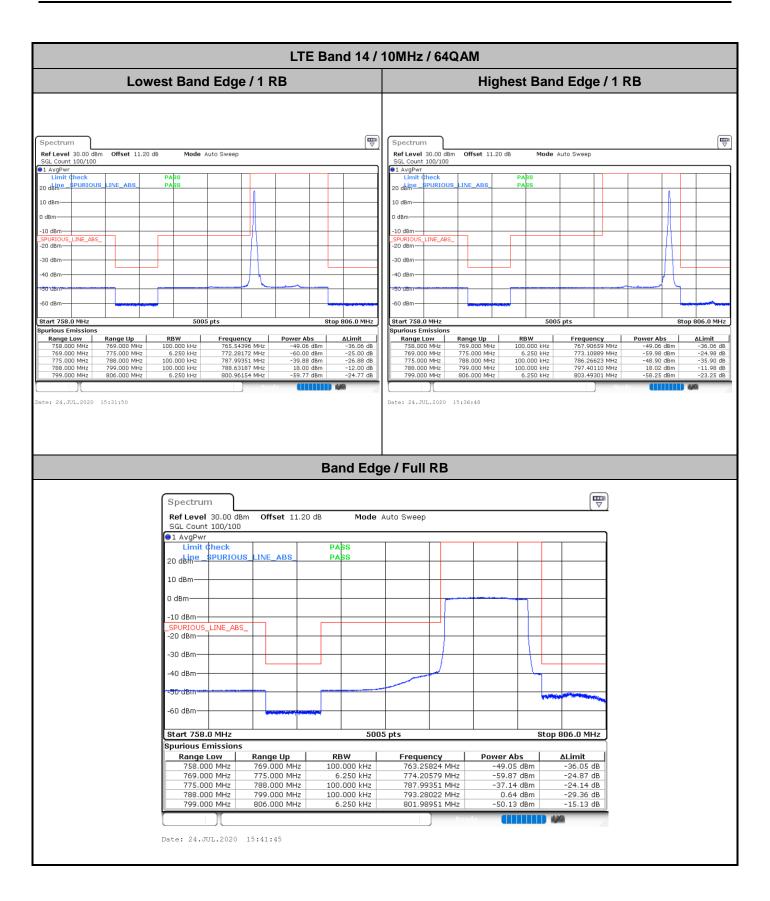
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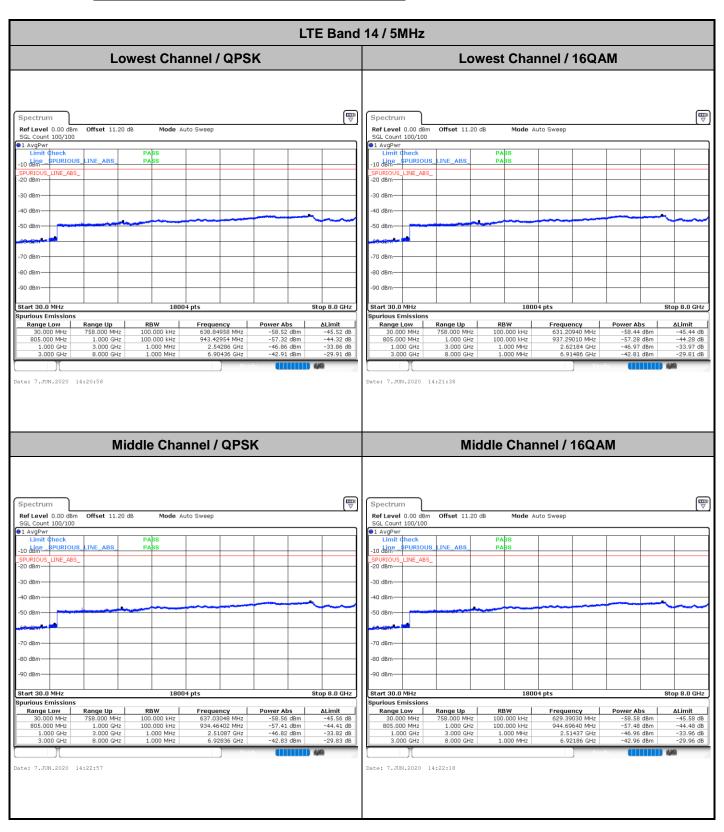
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LTE Band 14 / 10MHz / 256QAM Lowest Band Edge / 1 RB Highest Band Edge / 1 RB Spectrum Ref Level 30.00 dBm SGL Count 100/100 1 AvgPwr Ref Level 30.00 dBm SGL Count 100/100 Offset 11.20 dB Mode Auto Sweep Offset 11.20 dB Mode Auto Sweep ∍1 AvgPw SPURIOUS_LINE_ABS on dkine SPURIOUS 20 deine PASS 10 dBm dBm-0 dBm--10 dBm -10 dBm-INE ABS _LINE_ABS_ -20 dBm -20 dBm-30 dBm Start 758.0 MHz Spurious Emissio Start 758.0 MHz Spurious Emissio 5005 pts Stop 806.0 MHz 5005 pts Stop 806.0 MHz Range Low 758.000 MHz 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz Frequency
764.97253 MHz
770.71728 MHz
787.99351 MHz
788.59890 MHz
801.70280 MHz Power Abs -49.08 dBm -59.76 dBm -42.35 dBm 15.05 dBm -59.79 dBm Range Up 769.000 MHz 775.000 MHz 788.000 MHz 799.000 MHz 806.000 MHz RBW 100.000 kHz 6.250 kHz 100.000 kHz 100.000 kHz 6.250 kHz 767.08242 MHz 769.81219 MHz 784.62987 MHz 797.39011 MHz 803.58392 MHz -49.07 dBm -59.71 dBm -48.95 dBm 15.15 dBm -58.40 dBm ΔLimit Range Low ate: 24.JUL.2020 15:01:44 Date: 24.JUL.2020 15:03:33 Band Edge / Full RB Spectrum Ref Level 30.00 dBm Offset 11.20 dB Mode Auto Sweep SGL Count 100/100 ●1 AvgPwr SPURIOUS_LINE_ABS 20 deine PASS 10 dBm-0 dBm--10 dBm-LINE_ABS -20 dBm--30 dBm -40 dBm--50 dBm -60 dBm-Start 758.0 MHz 5005 pts Stop 806.0 MHz Spurious Emissions Range Low Range Up 769.000 MHz RBW Frequency 761.91758 MHz Power Abs 100.000 kHz -49.03 dBm -59.65 dBm -36.03 dB 758.000 MHz 769.000 MHz 775.000 MHz 6.250 kHz 770.84316 MHz 100.000 kHz 775.000 MHz 788.000 MHz 787.99351 MHz -40.02 dBm -27.02 dB 799.000 MHz 100.000 kHz 794.13736 MHz -1.50 dBm -31.50 dB 799.000 MHz 806,000 MHz 6.250 kHz 802.30420 MHz -52.90 dBm -17.90 dB Date: 24.JUL.2020 15:00:03

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Conducted Spurious Emission



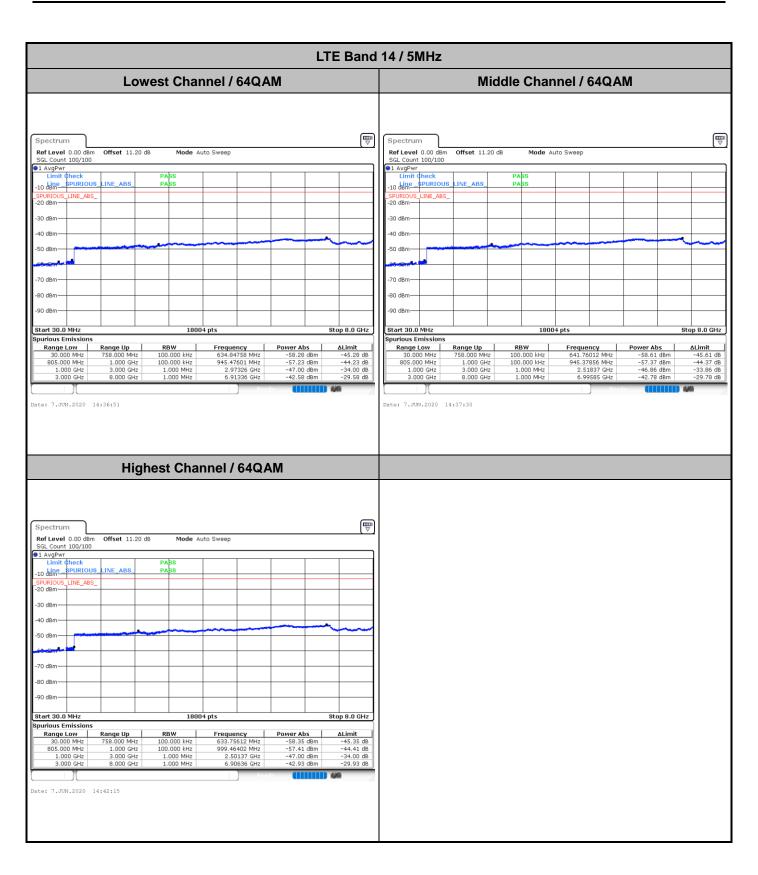
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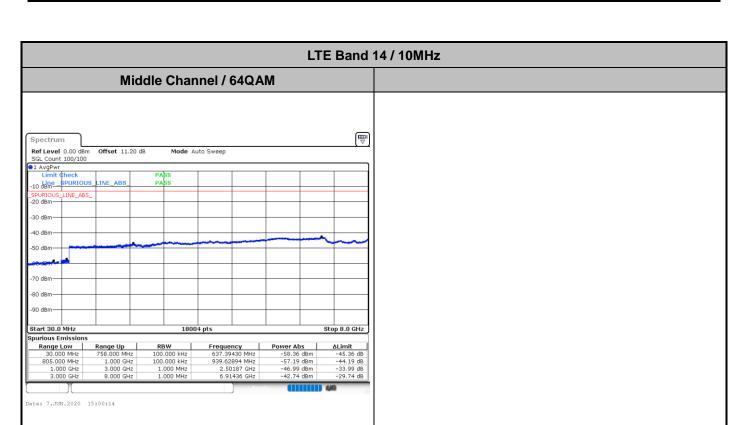
LTE Band 14 / 5MHz **Highest Channel / QPSK Highest Channel / 16QAM** Spectrum Spectrum Ref Level 0.00 dBm Offset 11.20 dB Ref Level 0.00 dBm Offset 11.20 dB Mode Auto Sweep Mode Auto Sweep Count 100/100 SGL Count 100/100 10 dBm SPURIOUS Line SPURIOUS 70 dBm -70 dBm -80 dBm Start 30.0 MHz Stop 8.0 GHz Start 30.0 MHz purious Emission purious Emission: Frequency 643.57921 MHz 953.85682 MHz 2.49288 GHz 6.90186 GHz -58.52 dBm -57.44 dBm -47.07 dBm -42.79 dBm 45.52 dB -44.44 dB -34.07 dB -29.79 dB Frequency 632.30085 MHz 985.33358 MHz 2.94326 GHz 6.89836 GHz -58.53 dBm -57.43 dBm -57.43 dBm -47.06 dBm -42.80 dBm ΔLimit
-45.53 dB
-44.43 dB
-34.06 dB
-29.80 dB Range Low 30.000 MHz 805.000 MHz RBW 100.000 kHz 100.000 kHz RBW 100.000 kHz 100.000 kHz Range Low 30.000 MHz Range Up 758.000 MHz 1.000 MHz 1.000 GHz 3.000 GHz 8.000 GHz 805.000 MHz 1.000 MHz 1.000 MHz 1.000 GHz 3.000 GHz 1.000 MHz 1.000 MHz Date: 7.JUN.2020 14:31:48 Date: 7.JUN.2020 14:32:28 LTE Band 14 / 10MHz Middle Channel / QPSK Middle Channel / 16QAM Spectrum Spectrum Ref Level 0.00 dBm Offset 11.20 dB Mode Auto Sweep Ref Level 0.00 dBm Offset 11.20 dB Mode Auto Sweep SGL Count 100/100 SGL Count 100/100 10 dem SPURIOUS -10 dine -80 dBm 90 dBm Stop 8.0 GHz op 8.0 GHz Start 30.0 MHz Start 30.0 MHz 18004 pt purious Emission: Range Up Frequency 632.66467 MHz 980.36357 MHz 2.49088 GHz 6.91286 GHz 45.44 dB -44.35 dB -33.97 dB -29.90 dB -58.41 dBm -57.31 dBm -46.87 dBm -42.82 dBm RBW 100.000 kHz 100.000 kHz 30.000 MHz 805.000 MHz RBW 100.000 kHz 100.000 kHz Frequency 634.11994 MHz 972.08021 MHz Range Low Power Abs -58.44 dBm **Range Up** 758.000 M ∆Limit -45.41 -58.44 dBm -57.35 dBm -46.97 dBm -42.90 dBm 805.000 MHz 1.000 GHz 3.000 GHz 8.000 GHz 1.000 GHz 3.000 GHz Date: 7.JUN.2020 14:54:15 Date: 7.JUN.2020 14:53:35

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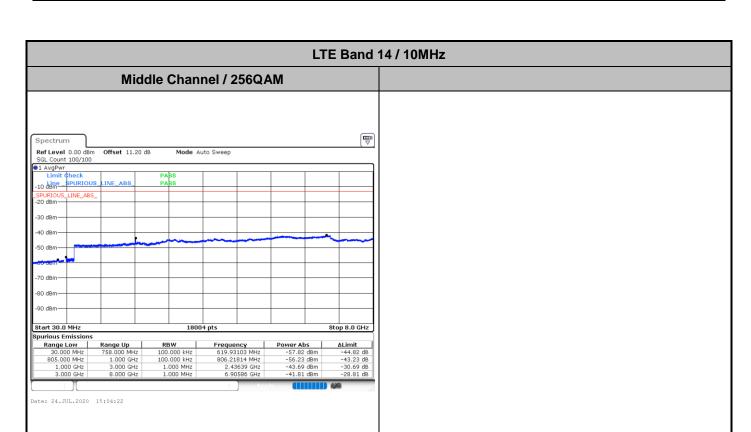
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LTE Band 14 / 5MHz Lowest Channel / 256QAM Middle Channel / 256QAM Spectrum Spectrum Ref Level 0.00 dBm SGL Count 100/100 Ref Level 0.00 dBm SGL Count 100/100 Offset 11.20 dB Mode Auto Sweep Offset 11.20 dB Mode Auto Sweep ●1 AvgPw ∍1 AvgPwr PASS PASS 10 dBm SPURIOUS LINE ABS 10 dem SPURIOUS 40 dBm -50 dBm -50 dBm 70 dBm 80 dBm Start 30.0 MHz Stop 8.0 GHz Start 30.0 MHz 18004 purious Emissions 758.000 MHz 1.000 GHz 3.000 GHz 8.000 GHz Frequency 626.84358 MHz 894.70390 MHz 2.43839 GHz 6.93086 GHz -57.83 dBm -57.04 dBm -44.14 dBm -41.83 dBm Range Low 30.000 MHz 805.000 MHz 1.000 GHz 3.000 GHz 758.000 MHz 1.000 GHz 3.000 GHz 8.000 GHz Frequency 622.84158 MHz 990.01124 MHz 2.43889 GHz 6.99635 GHz RBW 100.000 kHz 100.000 kHz Range Low 30.000 MHz ∆Limit -44.69 Date: 24.JUL.2020 14:25:28 Date: 24.JUL.2020 14:24:13 **Highest Channel / 256QAM** Ref Level 0.00 dBm Offset 11.20 dB Mode Auto Sweep SGL Count 100/100

1 AvgPwr
Limit Check -10 dBm _SPURIOUS_LINE_ABS LINE ABS -30 dBm-40 dBm--50 dBm--70 dBm purious Emissions Frequency 632.30085 MHz 974.61394 MHz 2.43539 GHz 6.99935 GHz RBW 100.000 kHz 100.000 kHz 1.000 MHz 1.000 MHz -57.90 dBm -56.81 dBm -44.22 dBm -41.82 dBm Range Low 30.000 MHz 805.000 MHz 1.000 GHz Range Up 758.000 MHz 1.000 GHz 3.000 GHz -44.90 dB -43.81 dB -31.22 dB -28.82 dB Date: 24.JUL.2020 14:50:35

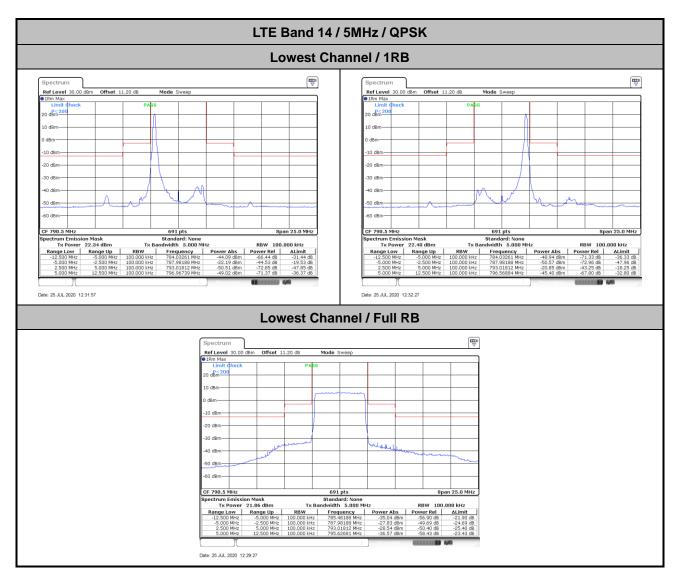
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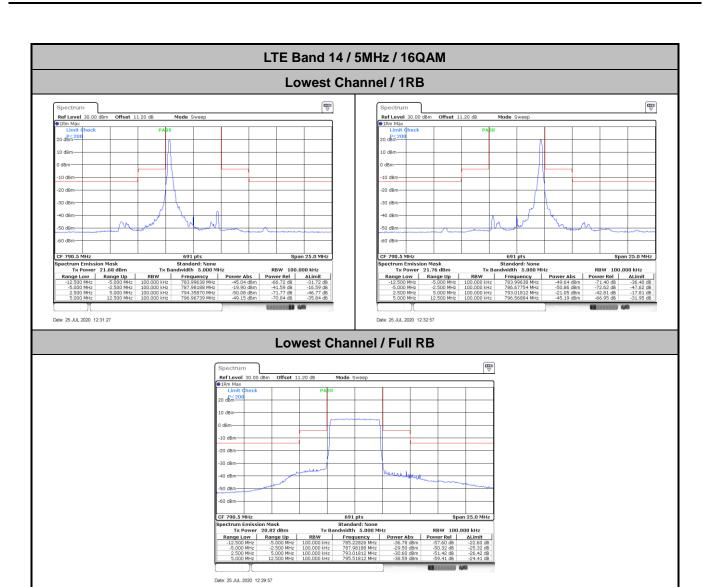


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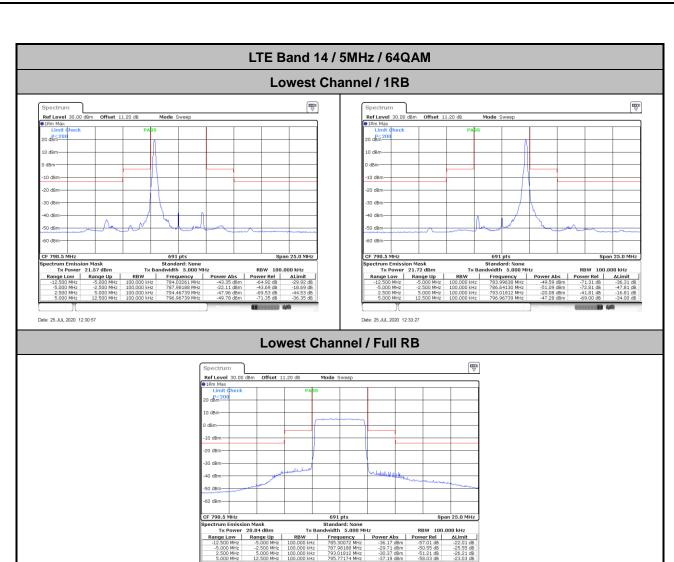




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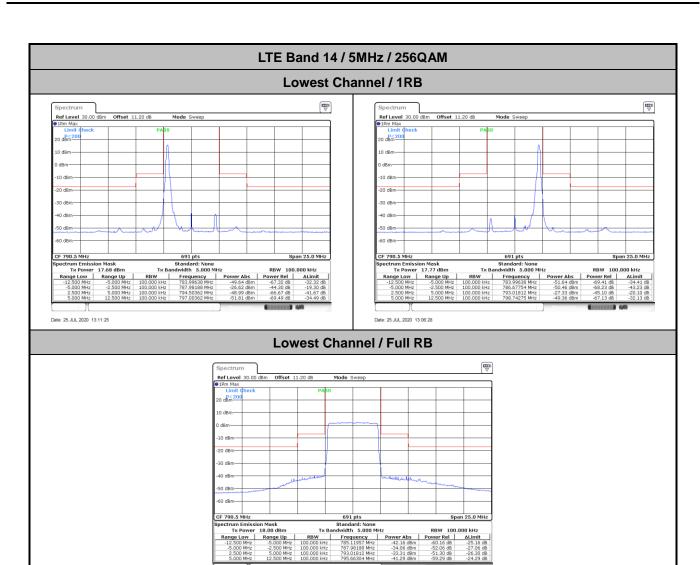


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Date: 25.JUL.2020 13:12:03

LTE Band 14 / 5MHz / QPSK Middle Channel / 1RB Spectrum

Ref Level 30.00 dBm Offset 11.20 dB

1Rm Max Limit 20 dBm 20 dBm² -10 dBm -30 dBm--50 dBm-CF 793.0 MHz
Spectrum Emission Mask
Tx Power 22.33 dBm
Range Low Range Up
-12.500 MHz -5.000 MH | RBW | 100.000 kHz |
Power Rel	ΔLimit
-66.00 dB	-31.00
-44.39 dB	-19.39
-72.52 dB	-47.52
-71.19 dB	-36.19

Report No.: FG041648-02D

Date: 25.JUL.2020 12:37:53