



FCC RADIO TEST REPORT

FCC ID : A4RG4S1M
Equipment : Phone
Model Name : GR0M2, G4S1M
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, California, 94043 USA
Standard : FCC 47 CFR Part 2, 22(H), 24(E), 27

The product was received on Dec. 11, 2020 and testing was started from Dec. 12, 2020 and completed on Feb. 09, 2021. 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 variant 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.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory

No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)



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Appendix A. Test Results of Conducted Test

Appendix B. Test Results of Radiated Test



History of this test report

Report No.	Version	Description	Issued Date
FG001508-01	01	Initial issue of report	Apr. 07, 2021



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Reporting only	-
	§22.913 (a)(2)	Effective Radiated Power (Band 5) (Band 26)	Pass	
	§27.50 (b)(10) §27.50 (c)(10)	Effective Radiated Power (Band 12) (Band 13) (Band 17) (Band 71)		
	§24.232 (c) §27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 2) (Band 25) (Band 7) (Band 38) (Band 41)		
	§27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)		
3.3	§24.232 (d) §27.50 (d)(5)	Peak-to-Average Ratio	Pass	-
3.4	§2.1049	Occupied Bandwidth	Reporting only	-
3.5	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2)(4) §27.53 (g) §27.53 (h)	Conducted Band Edge Measurement (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Band Edge Measurement (Band 7) (Band 38) (Band 41)		
3.6	§2.1051 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (g) §27.53 (h)	Conducted Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	-
	§2.1051 §27.53 (m)(4)	Conducted Spurious Emission (Band 7) (Band 38) (Band 41)		
3.7	§2.1055 §22.355 §24.235 §27.54	Frequency Stability Temperature & Voltage	Pass	-



Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
4.2	§2.1053 §22.917 (a) §24.238 (a) §27.53 (c)(2) §27.53 (f) §27.53 (g) §27.53 (h)	Radiated Spurious Emission (Band 2) (Band 4) (Band 5) (Band 12) (Band 13) (Band 17) (Band 25) (Band 26) (Band 66) (Band 71)	Pass	Under limit 32.60 dB at 7811.000 MHz & 5100.000 MHz for Primary Antenna
	§2.1051 §27.53 (m)(4)	Radiated Spurious Emission (Band 7) (Band 38) (Band 41)		Under limit 29.70 dB at 5170.000 MHz for ASDIV Antenna

Remark:

1. This is a variant report which can be referred Product Equality Declaration. After spot-checking the tests, the parent test results were worse than variant test results, thus this test report was reused parent test data, all the test cases were performed on original report which can be referred to Sporton Report Number FG093032-02B and FG001507-01.
2. The test report only present the test data of LTE Band 7C and Band 38 (HPUE).

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: Yimin Ho



1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	GR0M2, G4S1M
FCC ID	A4RG4S1M
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/NFC/GNSS WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80 Bluetooth BR/EDR/LE

Remark: The above EUT's information was declared by manufacturer.

EUT Information List	
S/N	Performed Test Item
0B271FQCB00030	Conducted Measurement ERP/EIRP
0C141FQCB00044	Radiated Spurious Emission



1.2 Product Specification of Equipment Under Test

Product Specification subjective to this standard	
Tx Frequency	LTE Band 2: 1850.7 MHz ~ 1909.3 MHz LTE Band 4: 1710.7 MHz ~ 1754.3 MHz LTE Band 5: 824.7 MHz ~ 848.3 MHz LTE Band 7: 2502.5 MHz ~ 2567.5 MHz LTE Band 12: 699.7 MHz ~ 715.3 MHz LTE Band 13: 779.5 MHz ~ 784.5 MHz LTE Band 17: 706.5 MHz ~ 713.5 MHz LTE Band 25: 1850.7MHz ~ 1914.3 MHz LTE Band 26: 824.7MHz ~ 848.3 MHz LTE Band 38: 2572.5 MHz ~ 2617.5 MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 1710.7 MHz ~ 1779.3 MHz LTE Band 71: 665.5 MHz ~ 695.5 MHz
Rx Frequency	LTE Band 2: 1930.7 MHz ~ 1989.3 MHz LTE Band 4: 2110.7 MHz ~ 2154.3 MHz LTE Band 5: 869.7 MHz ~ 893.3 MHz LTE Band 7: 2622.5MHz ~ 2687.5 MHz LTE Band 12: 729.7 MHz ~ 745.3 MHz LTE Band 13: 748.5 MHz ~ 753.5 MHz LTE Band 17: 736.5 MHz ~ 743.5 MHz LTE Band 25: 1930.7MHz ~ 1994.3 MHz LTE Band 26: 869.7MHz ~ 893.3MHz LTE Band 38: 2572.5MHz ~ 2617.5MHz LTE Band 41: 2498.5 MHz ~ 2687.5 MHz LTE Band 66: 2110.7 MHz ~ 2179.3 MHz LTE Band 71: 619.5 MHz ~ 649.5 MHz
Bandwidth	LTE Band 2: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 4: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 5: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 7: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 12: 1.4MHz / 3MHz / 5MHz / 10MHz LTE Band 13: 5MHz / 10MHz LTE Band 17: 5MHz / 10MHz LTE Band 25: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 26: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz LTE Band 38: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 41: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 66: 1.4MHz / 3MHz / 5MHz / 10MHz / 15MHz / 20MHz LTE Band 71: 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Primary Antenna> <Ant. 2> LTE Band 7C : 25.17 dBm LTE Band 38 : 26.32 dBm for HPUE <ASDIV Antenna> <Ant. 0> LTE Band 7C : 25.55 dBm LTE Band 38 : 25.58 dBm for HPUE



Product Specification subjective to this standard	
Antenna Type	<Primary Antenna> <Ant. 0>: Monopole with aperture Antenna type <Ant. 2>: IFA Antenna type <ASDIV Antenna> <Ant. 0>: Monopole with aperture Antenna type <Ant. 1>: Monopole with aperture Antenna type
Type of Modulation	QPSK / 16QAM / 64QAM

<Primary Antenna>

Radio Tech	Band Number	Antenna name	Gain
LTE	B2	Ant 2	1
LTE	B4	Ant 2	-0.6
LTE	B5	Ant 0	-5.7
LTE	B7	Ant 2	0.2
LTE	B12	Ant 0	-6.7
LTE	B13	Ant 0	-6
LTE	B17	Ant 0	-6.6
LTE	B25	Ant 2	1
LTE	B26	Ant 0	-5.7
LTE	B38	Ant 2	-0.1
	B38_HPUE	Ant 2	-0.1
LTE	B41	Ant 2	0.2
	B41_HPUE		
LTE	B66	Ant 2	-0.6
LTE	B71	Ant 0	-7.2

<ASDIV Antenna>

Radio Tech	Band Number	Antenna name	Gain
LTE	B2	Ant 0	-3.6
LTE	B4	Ant 0	-3.5
LTE	B5	Ant 1	-6.5
LTE	B7	Ant 0	-4.5
LTE	B12	Ant 1	-7.3
LTE	B13	Ant 1	-6.3
LTE	B17	Ant 1	-7.3
LTE	B25	Ant 0	-3.6
LTE	B26	Ant 1	-6.5
LTE	B38	Ant 0	-5.7
	B38_HPUE	Ant 0	-5.7
LTE	B41	Ant 0	-5.5
	B41_HPUE		
LTE	B66	Ant 0	-3.5
LTE	B71	Ant 1	-9.2

Remark: The above EUT's information was declared by manufacturer. Please refer to Comments and Explanations in report summary.



1.3 Modification of EUT

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

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	Sporton Site No.
	TH05-HY
Test Engineer	Luffy Lin
Temperature	23 ~ 24 °C
Relative Humidity	53 ~ 56 %

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	Sporton Site No.
	03CH13-HY (TAF Code: 3786)
Test Engineer	Daniel Lee, Jacky, Wilson Wu
Temperature	20 ~ 25 °C
Relative Humidity	50 ~ 60 %
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC Designation No.: TW1190 and TW0007



1.5 Applicable Standards

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

- ♦ ANSI C63.26-2015
- ♦ ANSI / TIA-603-E
- ♦ FCC 47 CFR Part 2, 22(H), 24(E), 27
- ♦ 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. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.
3. The TAF code is not including all the FCC KDB listed without accreditation.



2 Test Configuration of Equipment Under Test

2.1 Test Mode

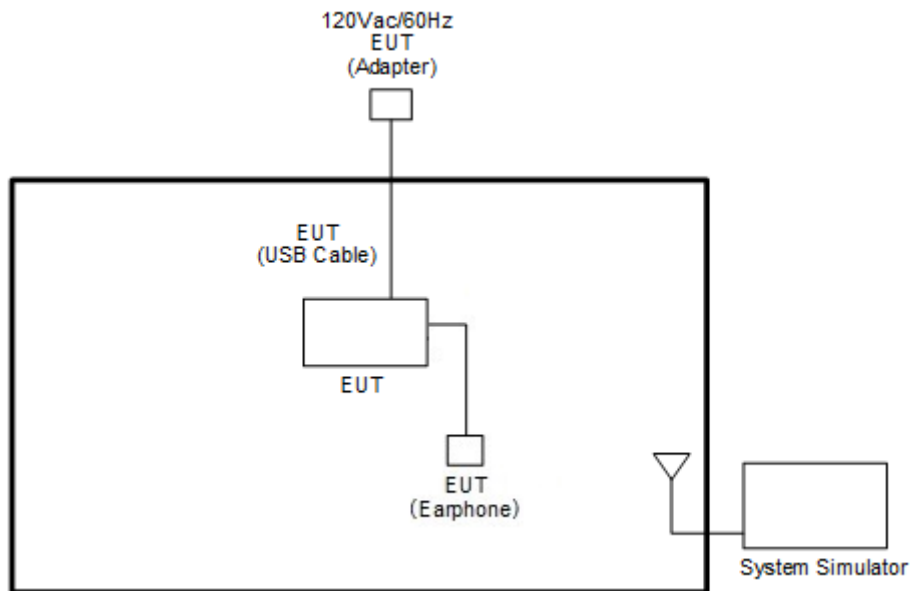
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

For radiated measurement, pre-scanned in three orthogonal panels, X, Y, Z. The worst cases (Primary Antenna: X plane for LTE Band 7C, 38_HPUE ; ASDIV Antenna: X plane for LTE Band 7C, Z plane for LTE Band 38_HPUE) were recorded in this report.

Test Items	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	38	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	38	-	-				v	v	v	v			v		v	
26dB and 99% Bandwidth	38	-	-	v	v	v	v	v	v	v			v		v	
Conducted Band Edge	38	-	-	v	v	v	v	v	v	v	v		v	v		v
Conducted Spurious Emission	38	-	-	v	v	v	v	v				v		v	v	v
Frequency Stability	38	-	-		v			v					v		v	
E.R.P / E.I.R.P	38	-	-	v	v	v	v	v	v	v	Max. Power					
Radiated Spurious Emission	38	Worst Case											v	v	v	
Remark	<ol style="list-style-type: none"> The mark "v" means that this configuration is chosen for testing The mark "-" means that this bandwidth is not supported. 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. All the radiated test cases were performed with Adapter 1 and USB Cable 1. 															

Test Items	Band	Bandwidth (MHz)										Modulation			RB #			Test Channel		
		20+20	20+15	15+20	20+10	10+20	20+5	5+20	15+15	15+10	10+15	QPSK	16QAM	64QAM	1	Half	Full	L	M	H
Max. Output Power	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v	v	v	v	v	v
26dB and 99% Bandwidth	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v			v			v
Conducted Band Edge	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	v		v	v		v
Conducted Spurious Emission	7_CA	v	v	v	v	v	-	-	v	v	-	v			v			v	v	v
E.I.R.P.	7_CA	v	v	v	v	v	-	-	v	v	-	v	v	v	Max. Power					
Radiated Spurious Emission	7_CA	Worst Case															v	v	v	
Remark	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. 4. All the radiated test cases were performed with Adapter 1 and USB Cable 1.																			

2.2 Connection Diagram of Test System





2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	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.

$$\text{Offset} = \text{RF cable loss} + \text{attenuator factor}.$$

Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Example :

$$\begin{aligned} \text{Offset(dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)}. \\ &= 4.2 + 10 = 14.2 \text{ (dB)} \end{aligned}$$

2.5 Frequency List of Low/Middle/High Channels

LTE Band 38 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	37850	38000	38150
	Frequency	2580.0	2595.0	2610.0
15	Channel	37825	38000	38175
	Frequency	2577.5	2595.0	2612.5
10	Channel	37800	38000	38200
	Frequency	2575.0	2595.0	2615.0
5	Channel	37775	38000	38225
	Frequency	2572.5	2595.0	2617.5



LTE Band 7 Channel and Frequency List					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	20850	21001	21152
		Frequency	2510.0	2525.1	2540.2
	SCC	Channel	21048	21199	21350
		Frequency	2529.8	2544.9	2560.0
20 + 15	PCC	Channel	20850	21026	21201
		Frequency	2510.0	2527.6	2545.1
	SCC	Channel	21021	21197	21372
		Frequency	2527.1	2544.7	2562.2
15 + 20	PCC	Channel	20828	21003	21179
		Frequency	2507.8	2525.3	2542.9
	SCC	Channel	20999	21174	21350
		Frequency	2524.9	2542.4	2560.0
20 + 10	PCC	Channel	20850	21051	21251
		Frequency	2510.0	2530.1	2550.1
	SCC	Channel	20994	21195	21395
		Frequency	2524.4	2544.5	2564.5
10 + 20	PCC	Channel	20805	21006	21206
		Frequency	2505.5	2525.6	2545.6
	SCC	Channel	20949	21150	21350
		Frequency	2519.9	2540.0	2560.0
15 + 15	PCC	Channel	20825	21025	21225
		Frequency	2507.5	2527.5	2547.5
	SCC	Channel	20975	21175	21375
		Frequency	2522.5	2542.5	2562.5
15 + 10	PCC	Channel	20825	21051	21277
		Frequency	2507.5	2530.1	2552.7
	SCC	Channel	20945	21171	21397
		Frequency	2519.5	2542.1	2564.7

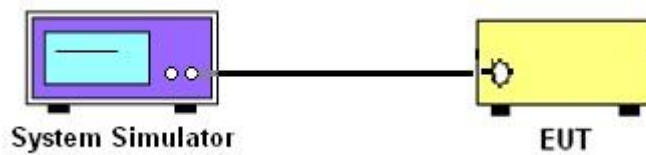
3 Conducted Test Items

3.1 Measuring Instruments

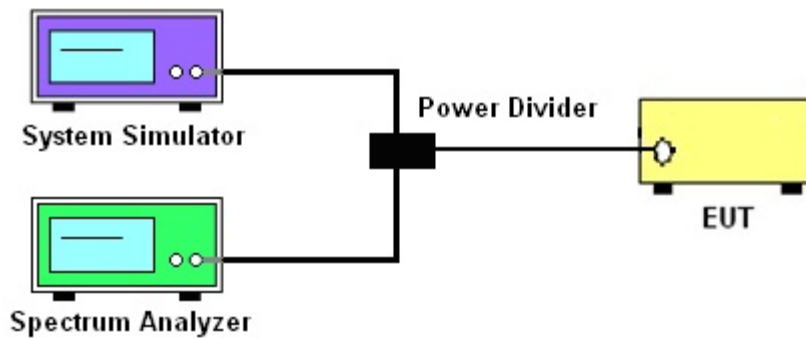
See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Peak-to-Average Ratio, Occupied Bandwidth ,Conducted Band-Edge 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/EIRP

3.2.1 Description of the Conducted Output Power Measurement and ERP/EIRP Measurement

A system simulator was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 7 and Band 38

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 the system simulator.
2. Set EUT at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



3.3 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

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.



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

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.



3.5 Conducted Band Edge

3.5.1 Description of Conducted Band Edge Measurement

27.53(m)(4)

For mobile digital stations, the attenuation factor shall be not less than $40 + 10 \log (P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10 \log (P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10 \log (P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that $43 + 10 \log (P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10 \log (P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

3.5.2 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 \geq 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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)

For LTE Band 7, 38

The other 40 dB, and 55 dB have additionally applied same calculation above.



3.6 Conducted Spurious Emission

3.6.1 Description of Conducted Spurious Emission Measurement

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

For LTE Band 7, 38

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

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

3.6.2 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 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 $43 + 10\log(P)$ dB below the transmitter power P(Watts)
For LTE Band 7, 38
The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)



3.7 Frequency Stability

3.7.1 Description of Frequency Stability Measurement

27.54

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

3.7.2 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 system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.7.3 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 $20\pm 5^{\circ}\text{C}$ and connected with the system simulator.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

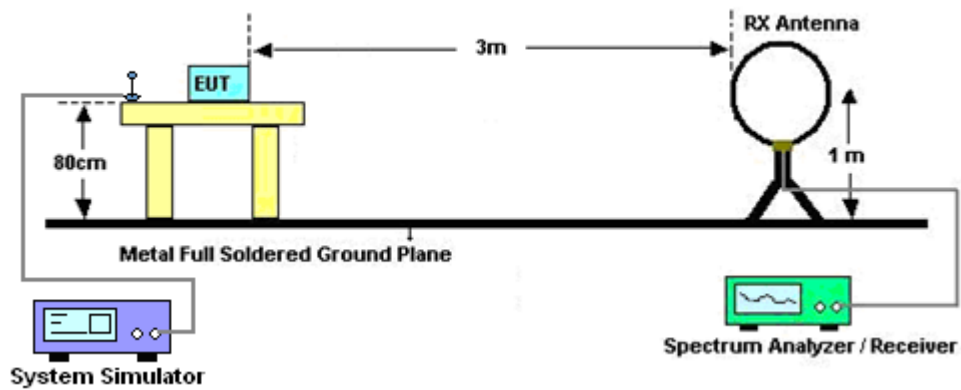
4 Radiated Test Items

4.1 Measuring Instruments

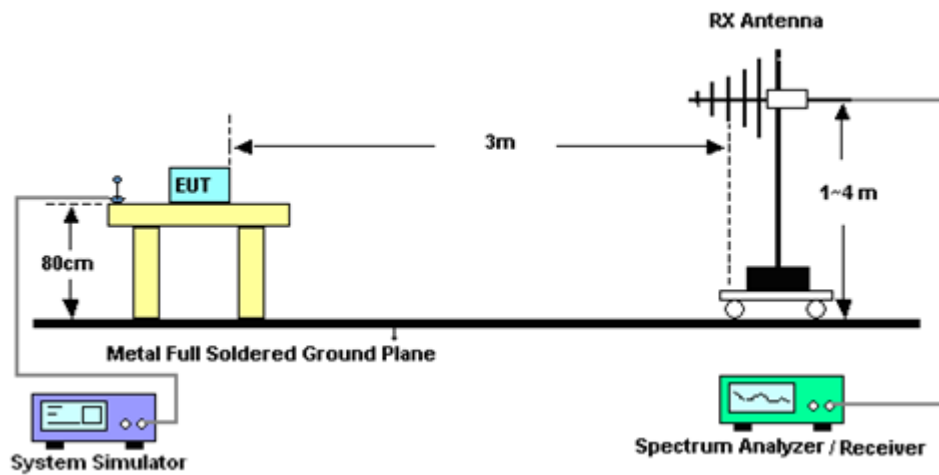
See list of measuring instruments of this test report.

4.1.1 Test Setup

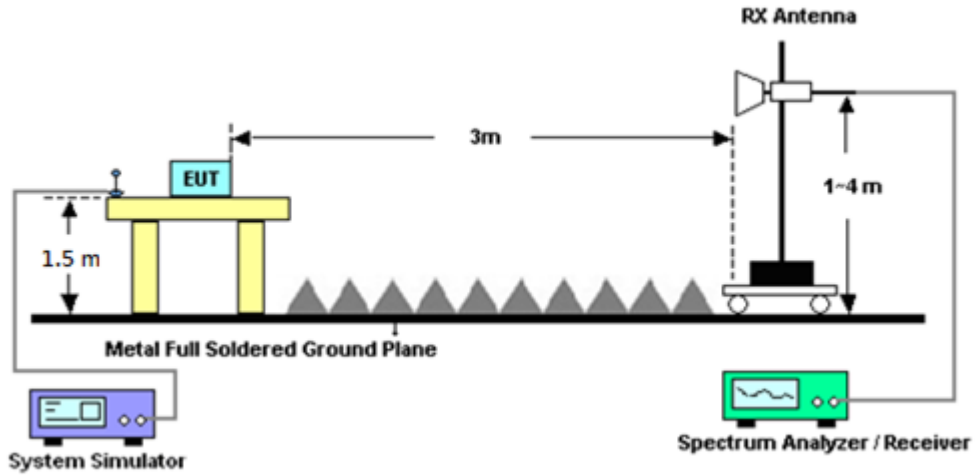
For radiated test below 30MHz



For radiated test from 30MHz to 1GHz



For radiated test above 1GHz



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.



4.2 Radiated Spurious Emission Measurement

4.2.1 Description of Radiated Spurious Emission Measurement

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.

For LTE Band 7, 38

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

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.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

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

For LTE Band 7, 38

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

EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain

ERP (dBm) = EIRP - 2.15



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Base Station (Measure)	Anritsu	MT8821C	6262002534 1	N/A	Oct. 06, 2020	Dec. 12, 2020~ Jan. 16, 2021	Oct. 05, 2021	Conducted (TH05-HY)
Spectrum Analyzer	Rohde & Schwarz	FSV40	101909	10Hz~40GHz	May 19, 2020	Dec. 12, 2020~ Jan. 16, 2021	May 18, 2021	Conducted (TH05-HY)
Thermal Chamber	Ten Billion	TTH-D3SP	TBN-930701	N/A	Aug. 05, 2020	Dec. 12, 2020~ Jan. 16, 2021	Aug. 04, 2021	Conducted (TH05-HY)
Programmable Power Supply	GW Instek	PSS-2005	EL890094	1V~20V 0.5A~5A	Oct. 05, 2020	Dec. 12, 2020~ Jan. 16, 2021	Oct. 04, 2021	Conducted (TH05-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 11, 2020	Dec. 12, 2020~ Jan. 09, 2021	Jan. 10, 2021	Conducted (TH05-HY)
Coupler	Warison	20dB 25W SMA Directional Coupler	#B	1-18GHz	Jan. 09, 2021	Jan. 10, 2021~ Jan. 16, 2021	Jan. 08, 2022	Conducted (TH05-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100488	9 kHz~30 MHz	Jul. 14, 2020	Jan. 12, 2021~ Feb. 09, 2021	Jul. 13, 2021	Radiation (03CH13-HY)
Amplifier	Sonoma-Instrument	310 N	187282	9KHz~1GHz	Dec. 16, 2020	Jan. 12, 2021~ Feb. 09, 2021	Dec. 15, 2021	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N 1D01N-06	40103&07	30MHz to 1GHz	Apr. 29, 2020	Jan. 12, 2021~ Feb. 09, 2021	Apr. 28, 2021	Radiation (03CH13-HY)
Bilog Antenna	TESEQ	CBL 6111D&00800N 1D01N-06	41912 & 07	30MHz to 1GHz	Apr. 29, 2020	Jan. 12, 2021~ Feb. 09, 2021	Apr. 28, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1212	1GHz ~ 18GHz	May 20, 2020	Jan. 12, 2021~ Feb. 09, 2021	May 19, 2021	Radiation (03CH13-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-1241	1GHz ~ 18GHz	Jul. 15, 2020	Jan. 12, 2021~ Feb. 09, 2021	Jul. 14, 2021	Radiation (03CH13-HY)
Preamplifier	MITEQ	AMF-7D-00101 800-30-10P	1590074	1GHz~18GHz	May 19, 2020	Jan. 12, 2021~ Feb. 09, 2021	May 18, 2021	Radiation (03CH13-HY)
Preamplifier	Keysight	83017A	MY5327014 7	1GHz~26.5GHz	Oct. 28, 2020	Jan. 12, 2021~ Feb. 09, 2021	Oct. 27, 2021	Radiation (03CH13-HY)
Signal Generator	Anritsu	MG3694C	163401	0.1Hz~40GHz	Feb. 15, 2020	Jan. 12, 2021~ Feb. 09, 2021	Feb. 14, 2021	Radiation (03CH13-HY)
Spectrum Analyzer	Keysight	N9010A	MY5537052 6	10Hz~44GHz	Mar. 20, 2020	Jan. 12, 2021~ Feb. 09, 2021	Mar. 19, 2021	Radiation (03CH13-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 12, 2021~ Feb. 09, 2021	N/A	Radiation (03CH13-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 12, 2021~ Feb. 09, 2021	N/A	Radiation (03CH13-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 12, 2021~ Feb. 09, 2021	N/A	Radiation (03CH13-HY)
Software	Audix	E3 6.2009-8-24	RK-000992	N/A	N/A	Jan. 12, 2021~ Feb. 09, 2021	N/A	Radiation (03CH13-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz ~ 40GHz	Dec. 11, 2020	Jan. 12, 2021~ Feb. 09, 2021	Dec. 10, 2021	Radiation (03CH13-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0030/126E	30M-18G	Feb. 12, 2020	Jan. 12, 2021~ Feb. 09, 2021	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	804793/4	30M-18G	Feb. 12, 2020	Jan. 12, 2021~ Feb. 09, 2021	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30M~40GHz	Feb. 25, 2020	Jan. 12, 2021~ Feb. 09, 2021	Feb. 24, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	MY4274/2	30M~40GHz	Mar. 12, 2020	Jan. 12, 2021~ Feb. 09, 2021	Mar. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY24961/4	30M-18G	Feb. 12, 2020	Jan. 12, 2021~ Feb. 09, 2021	Feb. 11, 2021	Radiation (03CH13-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104	MY9837/4P E	9kHz~30MHz	Mar. 12, 2020	Jan. 12, 2021~ Feb. 09, 2021	Mar. 11, 2021	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA91705 84	18GHz- 40GHz	Dec. 11, 2020	Jan. 12, 2021~ Feb. 09, 2021	Dec. 10, 2021	Radiation (03CH13-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	BBHA91709 80	18GHz~40GHz	Jan. 11, 2021	Jan. 12, 2021~ Feb. 09, 2021	Jan. 10, 2022	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-2700- 3000-18000-60 SS	SN2	3GHz High Pass Filter	Jul. 13, 2020	Jan. 12, 2021~ Feb. 09, 2021	Jul. 12, 2021	Radiation (03CH13-HY)
Filter	Wainwright	WHKX12-1080- 1200-15000-60 SS	SN3	1.2GHz High Pass Filter	Jul. 02, 2020	Jan. 12, 2021~ Feb. 09, 2021	Jul. 01, 2021	Radiation (03CH13-HY)
Hygrometer	TECPEL	DTM-303A	TP190075	N/A	Apr. 23, 2020	Jan. 12, 2021~ Feb. 09, 2021	Apr. 22, 2021	Radiation (03CH13-HY)



6 Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.10
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.12
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.77
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Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power & EIRP)

<Primary Antenna>

LTE Band 38 Maximum Average Power [dBm] (GT - LC = -0.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	26.15	26.16	26.14	26.22	0.4188
20	1	49		26.13	26.16	26.09		
20	1	99		26.28	26.32	26.24		
20	50	0		25.38	25.43	25.42		
20	50	24		25.37	25.43	25.44		
20	50	50		25.44	25.48	25.39		
20	100	0		25.42	25.43	25.42		
20	1	0	16-QAM	25.46	25.56	25.54	25.48	0.3532
20	1	49		25.52	25.58	25.50		
20	1	99		25.45	25.53	25.52		
20	50	0		24.37	24.45	24.45		
20	50	24		24.47	24.48	24.45		
20	50	50		24.48	24.52	24.43		
20	100	0		24.39	24.44	24.46		
20	1	0	64-QAM	24.27	24.36	24.37	24.34	0.2716
20	1	49		24.44	24.44	24.34		
20	1	99		24.42	24.44	24.33		
20	50	0		23.43	23.46	23.45		
20	50	24		23.43	23.45	23.47		
20	50	50		23.53	23.54	23.42		
20	100	0		23.41	23.46	23.43		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -0.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	26.28	26.27	26.17	26.20	0.4169
15	1	37		26.27	26.11	26.17		
15	1	74		26.30	26.27	26.15		
15	36	0		25.50	25.43	25.41		
15	36	20		25.50	25.42	25.39		
15	36	39		25.48	25.48	25.37		
15	75	0		25.50	25.43	25.40		
15	1	0	16-QAM	25.63	25.57	25.50	25.53	0.3573
15	1	37		25.57	25.56	25.44		
15	1	74		25.63	25.56	25.50		
15	36	0		24.52	24.41	24.37		
15	36	20		24.51	24.38	24.36		
15	36	39		24.47	24.46	24.32		
15	75	0		24.53	24.41	24.41		
15	1	0	64-QAM	24.39	24.30	24.34	24.38	0.2742
15	1	37		24.46	24.41	24.36		
15	1	74		24.48	24.43	24.32		
15	36	0		23.58	23.45	23.41		
15	36	20		23.54	23.45	23.41		
15	36	39		23.53	23.49	23.39		
15	75	0		23.54	23.42	23.42		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -0.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	26.18	26.27	26.14	26.17	0.4140
10	1	25		26.20	26.09	26.08		
10	1	49		26.26	26.26	26.14		
10	25	0		25.41	25.33	25.40		
10	25	12		25.43	25.40	25.37		
10	25	25		25.48	25.44	25.28		
10	50	0		25.42	25.40	25.36		
10	1	0	16-QAM	25.54	25.51	25.49	25.50	0.3548
10	1	25		25.52	25.49	25.35		
10	1	49		25.60	25.55	25.44		
10	25	0		24.42	24.40	24.28		
10	25	12		24.49	24.36	24.30		
10	25	25		24.37	24.36	24.24		
10	50	0		24.43	24.40	24.37		
10	1	0	64-QAM	24.39	24.21	24.27	24.38	0.2742
10	1	25		24.42	24.35	24.36		
10	1	49		24.48	24.38	24.27		
10	25	0		23.56	23.38	23.41		
10	25	12		23.49	23.35	23.33		
10	25	25		23.43	23.39	23.29		
10	50	0		23.53	23.37	23.35		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -0.1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	26.20	26.22	26.07	26.18	0.4150
5	1	12		26.22	26.02	26.17		
5	1	24		26.28	26.20	26.06		
5	12	0		25.46	25.34	25.37		
5	12	7		25.44	25.33	25.29		
5	12	13		25.40	25.43	25.32		
5	25	0		25.50	25.43	25.32		
5	1	0	16-QAM	25.59	25.47	25.48	25.52	0.3565
5	1	12		25.56	25.52	25.40		
5	1	24		25.62	25.53	25.43		
5	12	0		24.50	24.34	24.36		
5	12	7		24.41	24.38	24.28		
5	12	13		24.38	24.45	24.27		
5	25	0		24.50	24.32	24.34		
5	1	0	64-QAM	24.30	24.27	24.26	24.32	0.2704
5	1	12		24.42	24.40	24.35		
5	1	24		24.38	24.41	24.23		
5	12	0		23.54	23.42	23.33		
5	12	7		23.49	23.38	23.31		
5	12	13		23.49	23.41	23.36		
5	25	0		23.52	23.32	23.34		
Limit	EIRP < 2W			Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = 0.2 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	100	0	100	0	QPSK	21.22	21.12	21.09	24.99	0.3155
20+20	1	0	1	99		16.38	16.42	16.58		
20+20	1	99	1	0		24.79	24.78	24.73		
20+20	100	0	100	0	16-QAM	19.27	20.06	20.22	24.59	0.2877
20+20	1	0	1	99		17.06	17.33	17.35		
20+20	1	99	1	0		24.38	24.28	24.39		
20+20	100	0	100	0	64-QAM	21.15	21.18	21.35	22.36	0.1722
20+20	1	0	1	99		16.65	17.06	17.65		
20+20	1	99	1	0		21.86	20.85	22.16		
20+15	100	0	75	0	QPSK	23.06	23.03	23.11	25.18	0.3296
20+15	1	0	1	74		16.53	17.02	16.63		
20+15	1	99	1	0		24.98	24.88	24.68		
20+15	100	0	75	0	16-QAM	22.03	21.98	22.36	24.48	0.2805
20+15	1	0	1	74		16.99	17.02	16.96		
20+15	1	99	1	0		24.23	24.22	24.28		
20+15	100	0	75	0	64-QAM	20.97	21.22	20.77	21.53	0.1422
20+15	1	0	1	74		17.03	17.03	16.82		
20+15	1	99	1	0		21.33	21.01	21.11		
15+20	75	0	100	0	QPSK	23.35	23.31	23.24	25.37	0.3443
15+20	1	0	1	99		16.58	16.86	16.78		
15+20	1	74	1	0		25.17	25.11	24.79		
15+20	75	0	100	0	16-QAM	22.16	22.07	22.16	25.02	0.3177
15+20	1	0	1	99		17.56	17.22	17.03		
15+20	1	74	1	0		24.82	24.33	24.35		
15+20	75	0	100	0	64-QAM	21.33	20.94	21.03	22.23	0.1671
15+20	1	0	1	99		17.11	17.06	17.03		
15+20	1	74	1	0		22.03	20.73	21.98		
Limit	EIRP < 2W					Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = 0.2 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+10	100	0	75	0	QPSK	23.06	22.88	22.97	25.18	0.3296
20+10	1	0	1	74		16.67	16.57	16.56		
20+10	1	99	1	0		24.98	24.76	24.76		
20+10	100	0	75	0	16-QAM	22.06	22.03	22.06	24.85	0.3055
20+10	1	0	1	74		17.06	17.06	17.03		
20+10	1	99	1	0		24.65	24.22	24.63		
20+10	100	0	75	0	64-QAM	21.27	20.88	20.76	21.78	0.1507
20+10	1	0	1	74		16.98	16.78	16.69		
20+10	1	99	1	0		21.58	20.03	21.56		
10+20	75	0	100	0	QPSK	23.13	23.22	23.05	25.16	0.3281
10+20	1	0	1	99		16.72	16.98	16.85		
10+20	1	74	1	0		24.89	24.96	24.96		
10+20	75	0	100	0	16-QAM	22.17	22.33	22.35	24.85	0.3055
10+20	1	0	1	99		17.01	17.55	17.15		
10+20	1	74	1	0		24.51	24.65	24.24		
10+20	75	0	100	0	64-QAM	21.03	21.03	20.96	22.07	0.1611
10+20	1	0	1	99		16.99	18.11	17.22		
10+20	1	74	1	0		21.48	20.98	21.87		
15+15	75	0	100	0	QPSK	23.07	25.13	23.12	25.33	0.3412
15+15	1	0	1	99		16.86	16.66	16.58		
15+15	1	74	1	0		24.98	24.79	24.86		
15+15	75	0	100	0	16-QAM	22.16	22.16	22.13	24.71	0.2958
15+15	1	0	1	99		17.22	17.01	17.06		
15+15	1	74	1	0		24.35	24.33	24.51		
15+15	75	0	100	0	64-QAM	21.01	20.98	21.03	21.96	0.1570
15+15	1	0	1	99		16.98	16.99	17.11		
15+15	1	74	1	0		21.44	20.76	21.76		
Limit	EIRP < 2W					Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = 0.2 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
15+10	75	0	100	0	QPSK	23.01	23.14	23.02	25.08	0.3221
15+10	1	0	1	99		16.53	16.68	16.76		
15+10	1	74	1	0		24.88	24.63	24.83		
15+10	75	0	100	0	16-QAM	22.32	22.06	22.16	24.86	0.3062
15+10	1	0	1	99		17.03	17.82	17.22		
15+10	1	74	1	0		24.55	24.55	24.66		
15+10	75	0	100	0	64-QAM	20.98	21.12	21.06	22.25	0.1679
15+10	1	0	1	99		16.96	17.03	17.06		
15+10	1	74	1	0		21.06	20.66	22.05		
Limit	EIRP < 2W					Result			Pass	



<ASDIV Antenna>

LTE Band 38 Maximum Average Power [dBm] (GT - LC = -5.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	25.58	25.48	25.40	19.88	0.0973
20	1	49		25.53	25.47	25.33		
20	1	99		25.52	25.43	25.38		
20	50	0		24.88	24.74	24.67		
20	50	24		24.87	24.72	24.65		
20	50	50		24.84	24.76	24.63		
20	100	0		24.86	24.71	24.67		
20	1	0	16-QAM	24.96	24.85	24.77	19.26	0.0843
20	1	49		24.91	24.87	24.66		
20	1	99		24.88	24.77	24.71		
20	50	0		23.91	23.77	23.71		
20	50	24		23.93	23.75	23.68		
20	50	50		23.88	23.82	23.66		
20	100	0		23.92	23.73	23.70		
20	1	0	64-QAM	23.75	23.66	23.63	18.07	0.0641
20	1	49		23.76	23.69	23.55		
20	1	99		23.77	23.70	23.56		
20	50	0		22.95	22.78	22.71		
20	50	24		22.91	22.77	22.69		
20	50	50		22.90	22.81	22.69		
20	100	0		22.90	22.77	22.68		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -5.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	25.53	25.48	25.40	19.83	0.0962
15	1	37		25.43	25.41	25.33		
15	1	74		25.42	25.38	25.38		
15	36	0		24.82	24.66	24.63		
15	36	20		24.84	24.70	24.59		
15	36	39		24.74	24.66	24.60		
15	75	0		24.77	24.65	24.67		
15	1	0	16-QAM	24.89	24.75	24.77	19.19	0.0830
15	1	37		24.87	24.81	24.56		
15	1	74		24.84	24.72	24.63		
15	36	0		23.84	23.72	23.65		
15	36	20		23.90	23.71	23.68		
15	36	39		23.78	23.72	23.57		
15	75	0		23.85	23.64	23.70		
15	1	0	64-QAM	23.73	23.66	23.62	18.06	0.0640
15	1	37		23.72	23.68	23.47		
15	1	74		23.76	23.67	23.47		
15	36	0		22.90	22.77	22.67		
15	36	20		22.83	22.76	22.66		
15	36	39		22.86	22.81	22.63		
15	75	0		22.81	22.74	22.64		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -5.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	25.57	25.47	25.35	19.87	0.0971
10	1	25		25.44	25.37	25.29		
10	1	49		25.49	25.41	25.35		
10	25	0		24.85	24.70	24.64		
10	25	12		24.84	24.65	24.62		
10	25	25		24.78	24.67	24.58		
10	50	0		24.83	24.66	24.58		
10	1	0	16-QAM	24.90	24.77	24.73	19.20	0.0832
10	1	25		24.83	24.78	24.66		
10	1	49		24.84	24.70	24.63		
10	25	0		23.86	23.68	23.70		
10	25	12		23.88	23.71	23.58		
10	25	25		23.86	23.77	23.58		
10	50	0		23.87	23.71	23.62		
10	1	0	64-QAM	23.65	23.65	23.61	18.01	0.0632
10	1	25		23.66	23.59	23.51		
10	1	49		23.71	23.61	23.48		
10	25	0		22.94	22.77	22.64		
10	25	12		22.81	22.70	22.63		
10	25	25		22.90	22.76	22.65		
10	50	0		22.83	22.73	22.63		
Limit	EIRP < 2W			Result			Pass	



LTE Band 38 Maximum Average Power [dBm] (GT - LC = -5.7 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	25.55	25.40	25.37	19.85	0.0966
5	1	12		25.43	25.44	25.26		
5	1	24		25.51	25.39	25.29		
5	12	0		24.82	24.71	24.57		
5	12	7		24.81	24.65	24.62		
5	12	13		24.80	24.73	24.53		
5	25	0		24.81	24.63	24.59		
5	1	0	16-QAM	24.92	24.84	24.69	19.22	0.0836
5	1	12		24.81	24.83	24.59		
5	1	24		24.81	24.72	24.62		
5	12	0		23.85	23.69	23.61		
5	12	7		23.91	23.71	23.65		
5	12	13		23.85	23.72	23.61		
5	25	0		23.85	23.67	23.65		
5	1	0	64-QAM	23.70	23.62	23.57	18.07	0.0641
5	1	12		23.75	23.65	23.46		
5	1	24		23.77	23.66	23.55		
5	12	0		22.88	22.74	22.66		
5	12	7		22.88	22.67	22.63		
5	12	13		22.86	22.74	22.67		
5	25	0		22.87	22.69	22.67		
Limit	EIRP < 2W			Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = -4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	100	0	100	0	QPSK	22.03	21.98	21.93	20.88	0.1225
20+20	1	0	1	99		17.38	17.56	17.36		
20+20	1	99	1	0		25.38	25.28	25.33		
20+20	100	0	100	0	16-QAM	21.06	20.93	20.95	20.66	0.1164
20+20	1	0	1	99		18.11	18.21	18.04		
20+20	1	99	1	0		25.16	25.06	25.02		
20+20	100	0	100	0	64-QAM	21.51	21.53	21.56	17.76	0.0597
20+20	1	0	1	99		17.84	17.84	17.94		
20+20	1	99	1	0		22.26	21.65	22.23		
20+15	100	0	75	0	QPSK	23.63	23.74	23.53	20.85	0.1216
20+15	1	0	1	74		17.04	17.38	17.16		
20+15	1	99	1	0		25.35	25.19	25.13		
20+15	100	0	75	0	16-QAM	22.62	22.57	22.50	20.29	0.1069
20+15	1	0	1	74		17.54	17.33	17.17		
20+15	1	99	1	0		24.79	24.56	24.61		
20+15	100	0	75	0	64-QAM	21.51	21.33	20.83	17.24	0.0530
20+15	1	0	1	74		17.46	17.33	17.25		
20+15	1	99	1	0		21.74	21.06	21.68		
15+20	75	0	100	0	QPSK	23.73	23.52	23.62	20.83	0.1211
15+20	1	0	1	99		17.08	17.12	17.06		
15+20	1	74	1	0		25.33	25.32	25.22		
15+20	75	0	100	0	16-QAM	22.63	22.57	22.58	20.43	0.1104
15+20	1	0	1	99		17.73	17.65	17.48		
15+20	1	74	1	0		24.93	24.81	24.75		
15+20	75	0	100	0	64-QAM	21.52	21.33	21.39	17.91	0.0618
15+20	1	0	1	99		17.38	17.45	17.36		
15+20	1	74	1	0		22.41	20.87	22.18		
Limit	EIRP < 2W					Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = -4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+10	100	0	75	0	QPSK	23.49	23.36	23.41	20.76	0.1191
20+10	1	0	1	74		17.05	17.08	16.96		
20+10	1	99	1	0		25.26	25.16	25.22		
20+10	100	0	75	0	16-QAM	22.54	22.54	22.51	20.32	0.1076
20+10	1	0	1	74		17.51	17.55	17.43		
20+10	1	99	1	0		24.81	24.36	24.82		
20+10	100	0	75	0	64-QAM	21.38	21.35	21.04	17.42	0.0552
20+10	1	0	1	74		17.43	17.43	17.24		
20+10	1	99	1	0		21.84	20.54	21.92		
10+20	75	0	100	0	QPSK	23.57	23.59	23.49	20.82	0.1208
10+20	1	0	1	99		17.16	17.36	17.06		
10+20	1	74	1	0		25.32	25.22	25.23		
10+20	75	0	100	0	16-QAM	22.65	22.62	22.64	20.28	0.1067
10+20	1	0	1	99		17.56	17.63	17.32		
10+20	1	74	1	0		24.72	24.78	24.61		
10+20	75	0	100	0	64-QAM	21.15	21.42	21.34	17.57	0.0571
10+20	1	0	1	99		17.42	18.36	17.64		
10+20	1	74	1	0		21.53	21.24	22.07		
15+15	75	0	100	0	QPSK	23.57	25.55	23.51	21.05	0.1274
15+15	1	0	1	99		17.04	17.01	16.97		
15+15	1	74	1	0		25.29	25.17	25.18		
15+15	75	0	100	0	16-QAM	22.63	22.59	22.54	20.26	0.1062
15+15	1	0	1	99		17.65	17.38	17.33		
15+15	1	74	1	0		24.76	24.76	24.72		
15+15	75	0	100	0	64-QAM	21.26	21.13	21.24	17.46	0.0557
15+15	1	0	1	99		17.45	17.25	17.37		
15+15	1	74	1	0		21.56	21.02	21.96		
Limit	EIRP < 2W					Result			Pass	



LTE Band 7C_CA Maximum Average Power [dBm] (GT - LC = -4.5 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
15+10	75	0	100	0	QPSK	23.58	23.55	23.46	20.83	0.1211
15+10	1	0	1	99		17.09	17.02	17.03		
15+10	1	74	1	0		25.33	24.92	25.14		
15+10	75	0	100	0	16-QAM	22.62	22.58	22.53	20.37	0.1089
15+10	1	0	1	99		17.43	17.94	17.58		
15+10	1	74	1	0		24.86	24.87	24.83		
15+10	75	0	100	0	64-QAM	21.38	21.43	21.46	17.98	0.0628
15+10	1	0	1	99		17.35	17.39	17.44		
15+10	1	74	1	0		21.48	20.96	22.48		
Limit	EIRP < 2W					Result			Pass	



LTE Band 7C

26dB Bandwidth

Mode	LTE Band 7C : 26dB BW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.91	25.33	30.51	34.83
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.03	34.90	39.80	

Mode	LTE Band 7C : 26dB BW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.73	25.13	30.45	34.90
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	30.09	34.90	39.64	

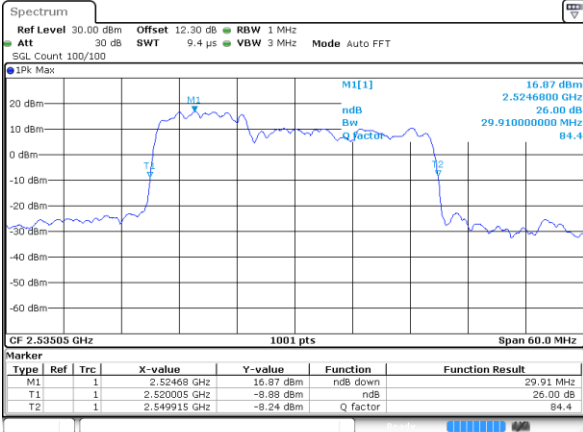
Mode	LTE Band 7C : 26dB BW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	29.79	25.13	30.45	34.76
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	N/A
Middle CH	29.97	34.90	39.64	



LTE Band 7C

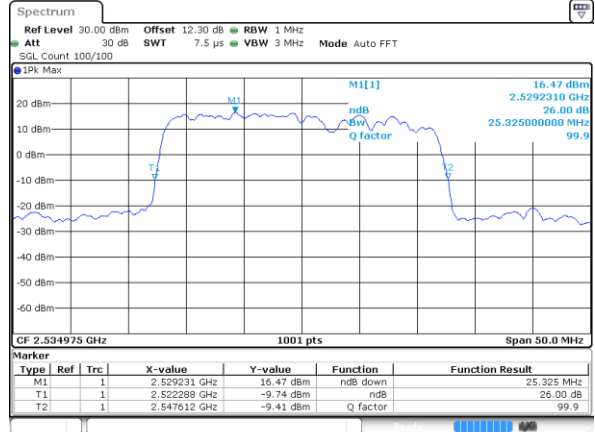
QPSK

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10:02:57

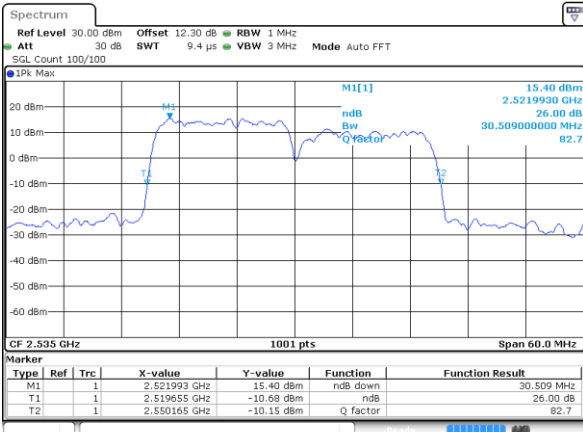
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23:07:48

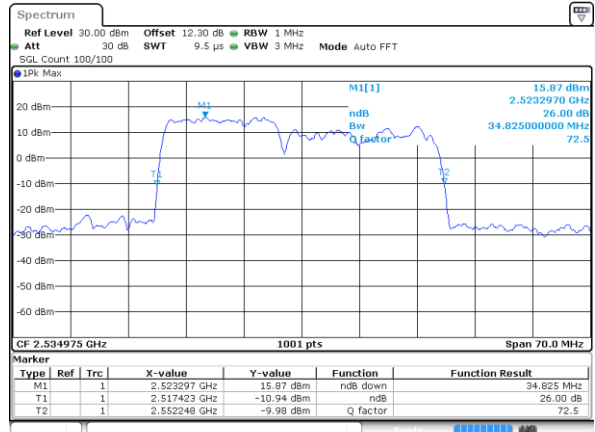
QPSK

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09:10:16

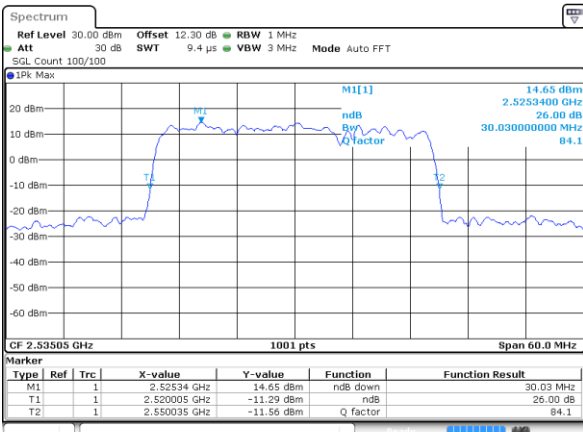
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00:33:53

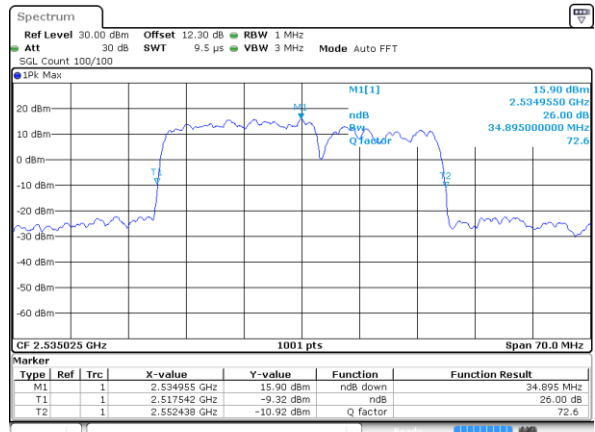
QPSK

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09:35:49

Middle Channel / 20MHz+15MHz



Date: 12 DEC 2020 00:01:28

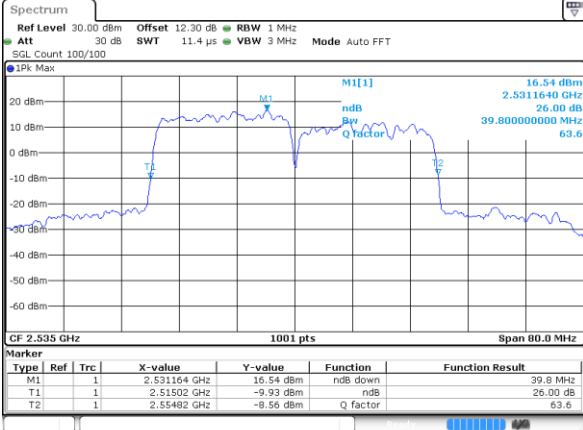


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A



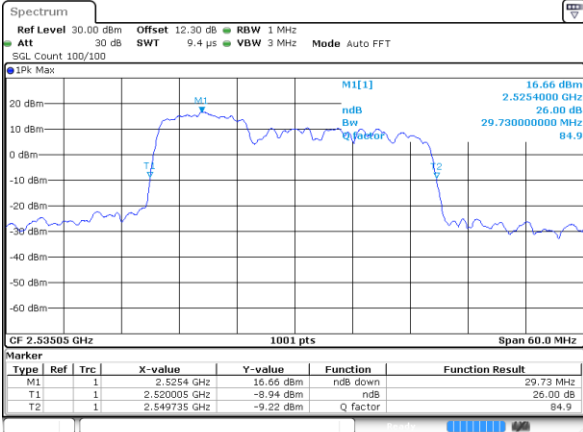
Date: 11 DEC 2020 22:39:30



LTE Band 7C

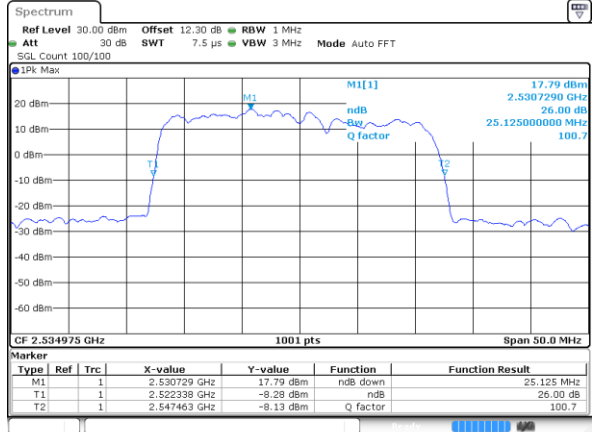
16QAM

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10 02 34

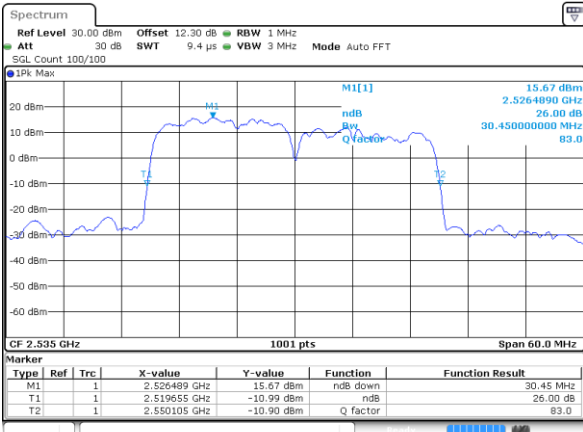
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23 07 25

16QAM

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09 09 53

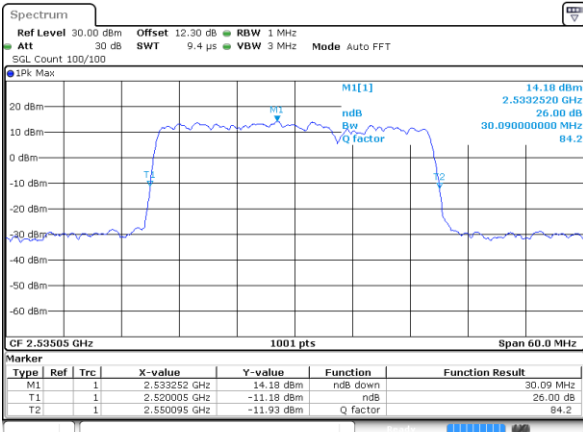
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00 33 30

16QAM

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09 35 26

Middle Channel / 20MHz+15MHz



Date: 12 DEC 2020 00 01 05

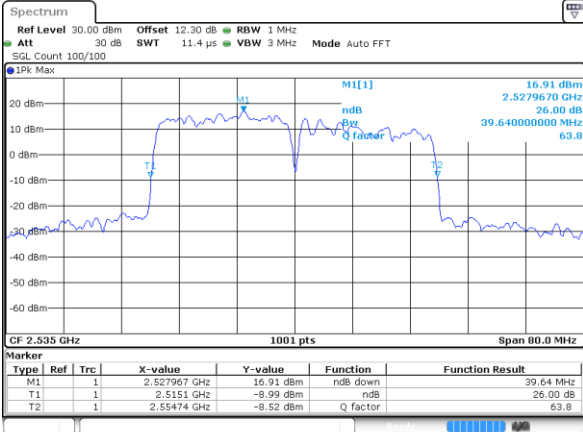


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



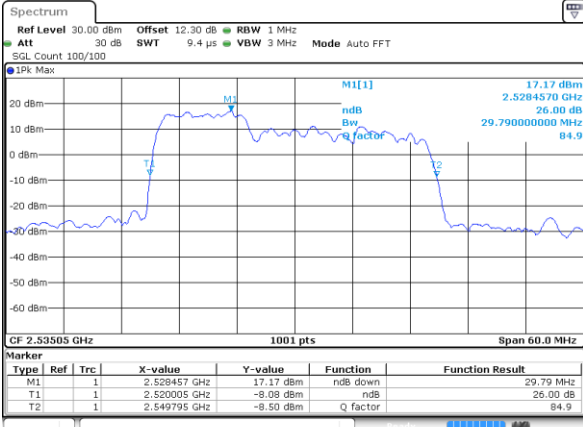
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LTE Band 7C

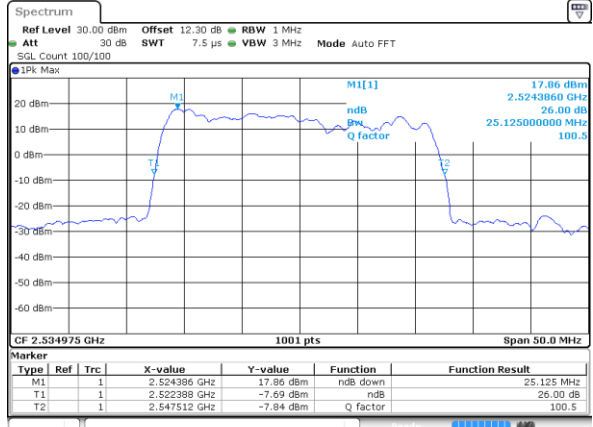
64QAM

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10:02:11

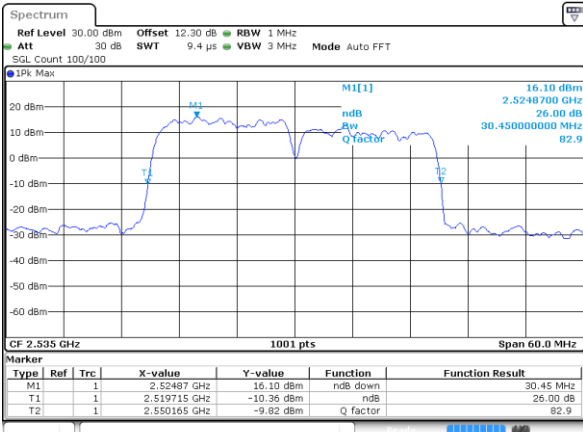
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23:07:02

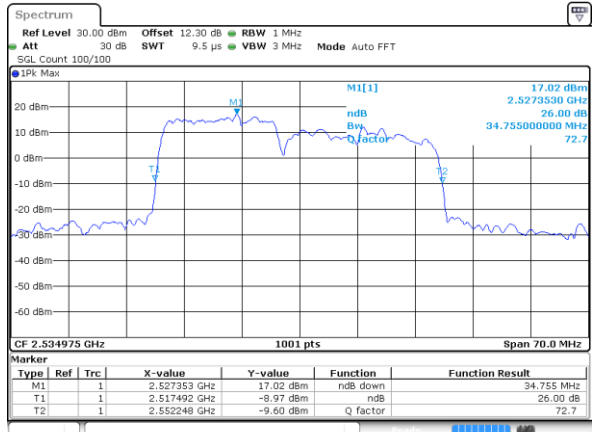
64QAM

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09:09:30

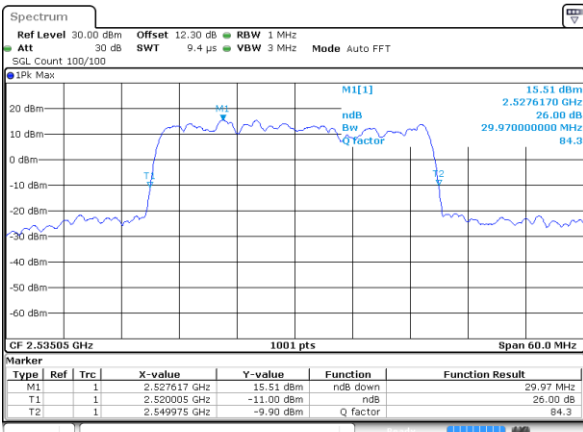
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00:33:07

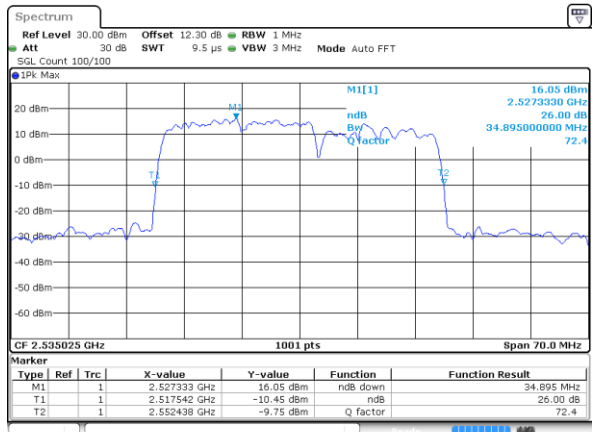
64QAM

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09:35:03

Middle Channel / 20MHz+15MHz



Date: 12 DEC 2020 00:00:42

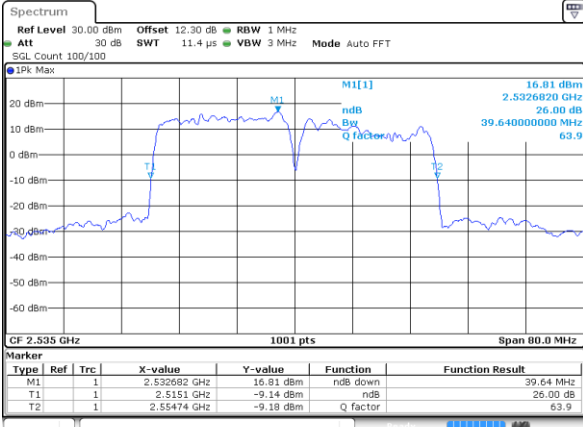


LTE Band 7C

64QAM

Middle Channel / 20MHz+20MHz

N/A



Date: 11 DEC 2020 22:38:44



Occupied Bandwidth

Mode	LTE Band 7C : 99%OBW(MHz)			
QPSK				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	27.99	23.33	28.53	32.24
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Middle CH	28.05	32.87	37.16	

Mode	LTE Band 7C : 99%OBW(MHz)			
16QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	27.99	23.38	28.23	32.66
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Middle CH	27.87	32.73	37.08	

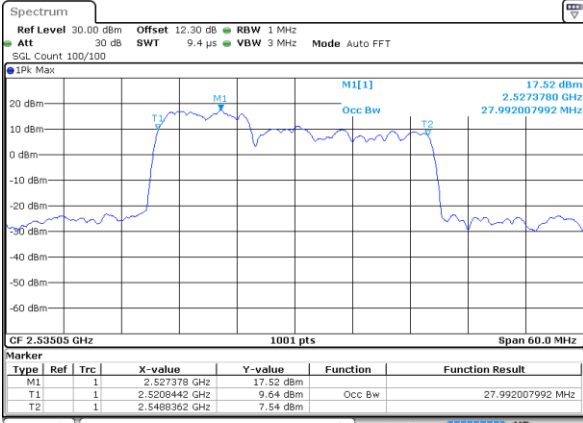
Mode	LTE Band 7C : 99%OBW(MHz)			
64QAM				
BW	10MHz+20MHz	15MHz+10MHz	15MHz+15MHz	15MHz+20MHz
Middle CH	27.81	23.48	28.53	32.38
BW	20MHz+10MHz	20MHz+15MHz	20MHz+20MHz	
Middle CH	27.99	32.59	37.64	



LTE Band 7C

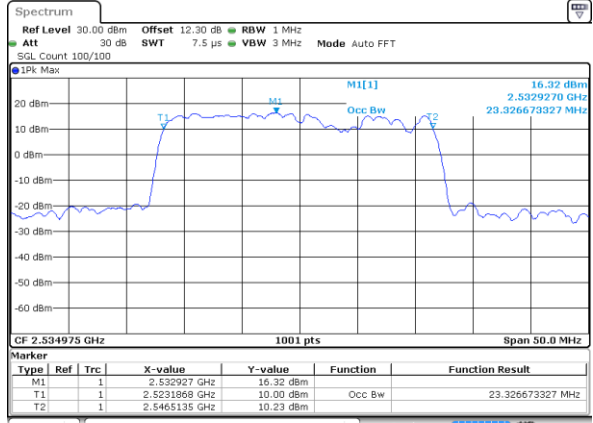
QPSK

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10:01:03

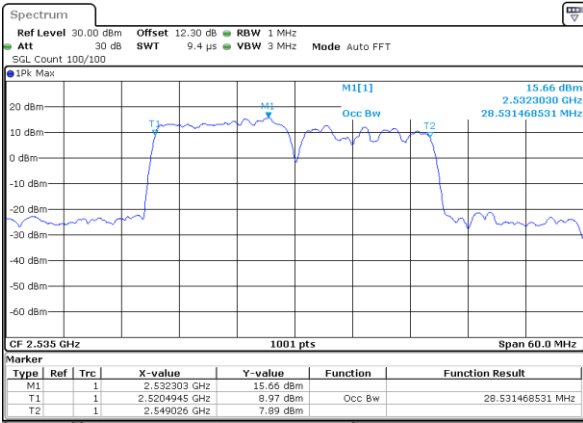
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23:05:54

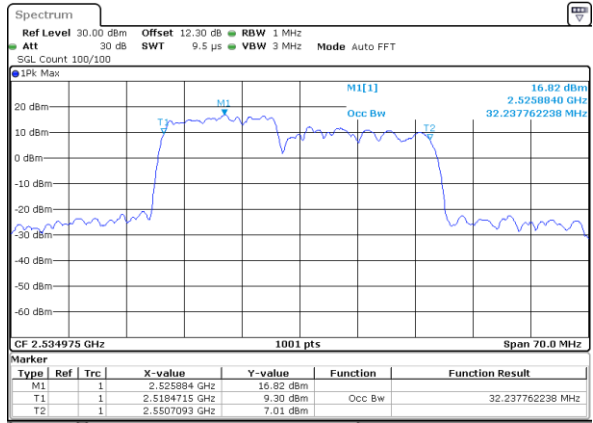
QPSK

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09:08:22

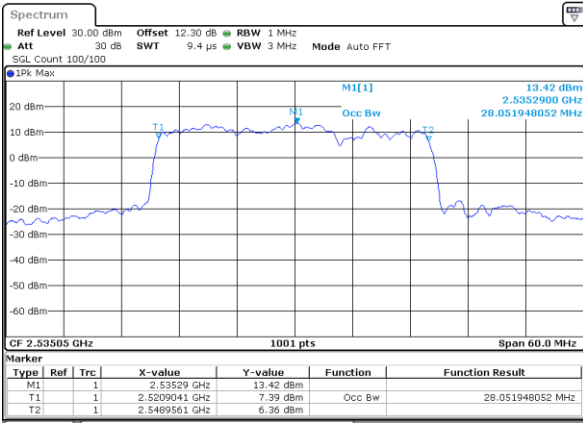
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00:31:59

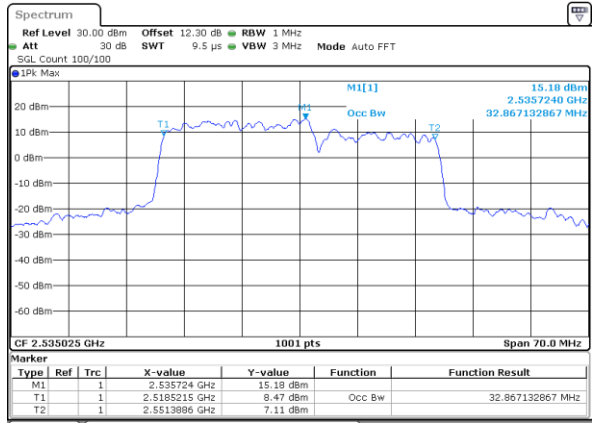
QPSK

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09:33:54

Middle Channel / 20MHz+15MHz



Date: 11 DEC 2020 23:59:33

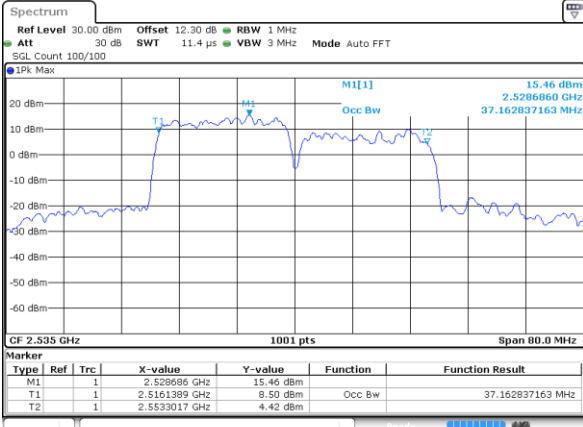


LTE Band 7C

QPSK

Middle Channel / 20MHz+20MHz

N/A



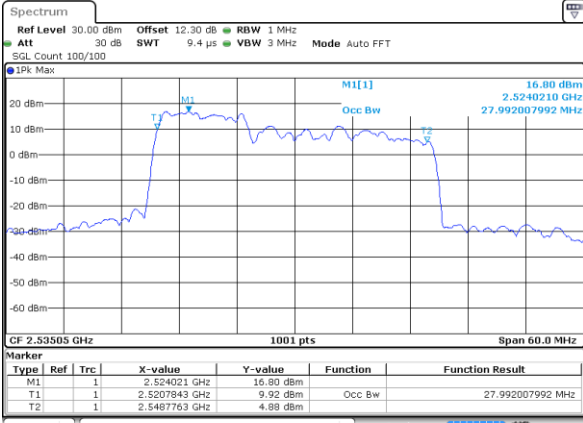
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LTE Band 7C

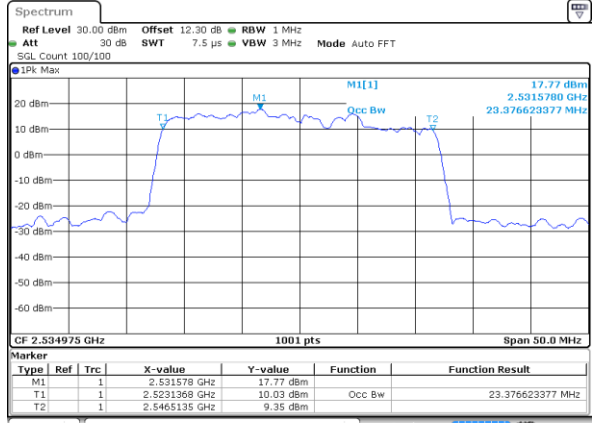
16QAM

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10:01:26

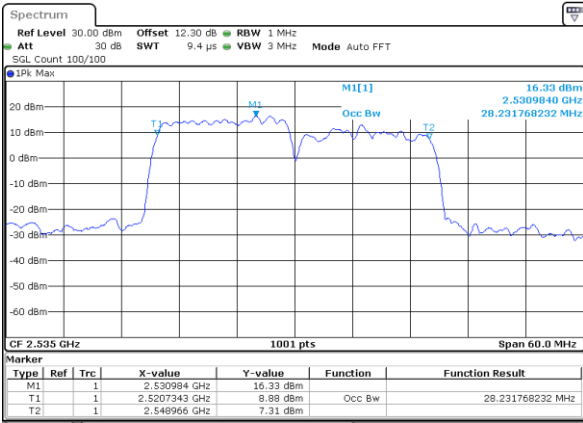
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23:06:17

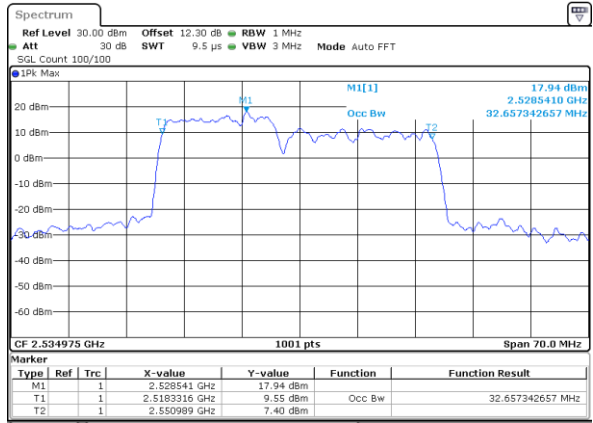
16QAM

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09:08:45

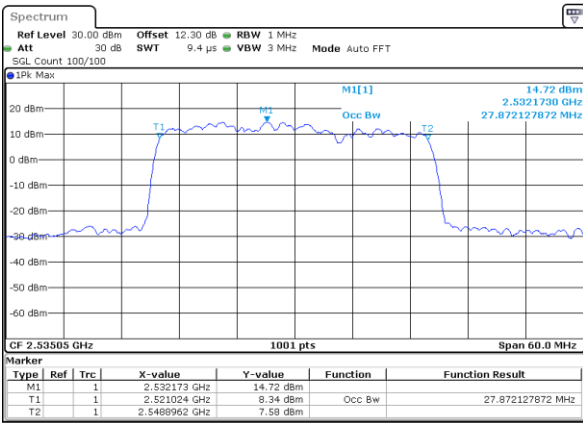
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00:32:22

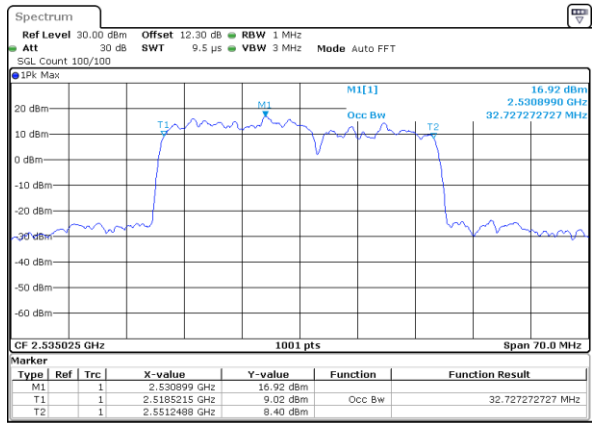
16QAM

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09:34:17

Middle Channel / 20MHz+15MHz



Date: 11 DEC 2020 23:58:56

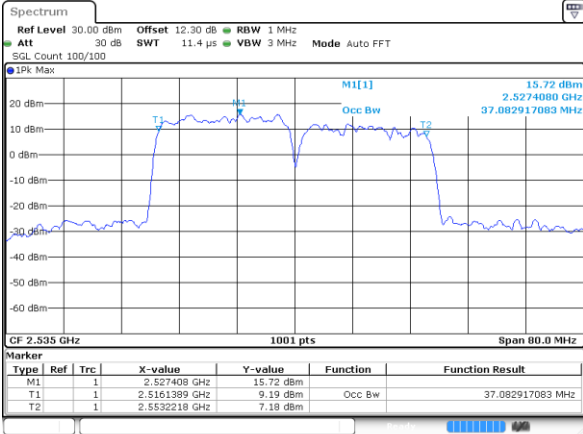


LTE Band 7C

16QAM

Middle Channel / 20MHz+20MHz

N/A



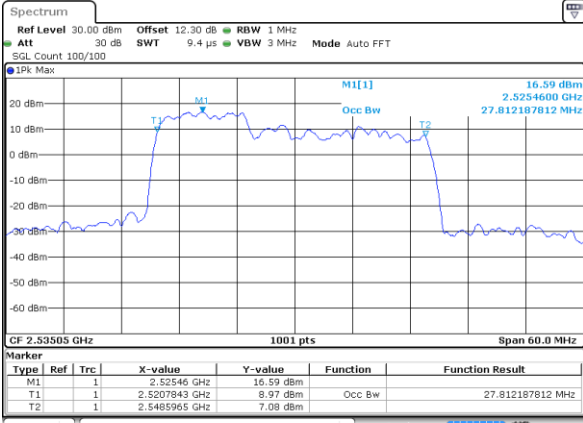
Date: 11 DEC 2020 22:37:58



LTE Band 7C

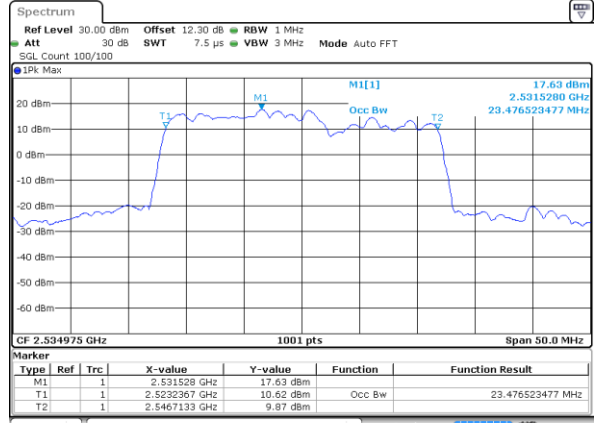
64QAM

Middle Channel / 10MHz+20MHz



Date: 12 DEC 2020 10:01:49

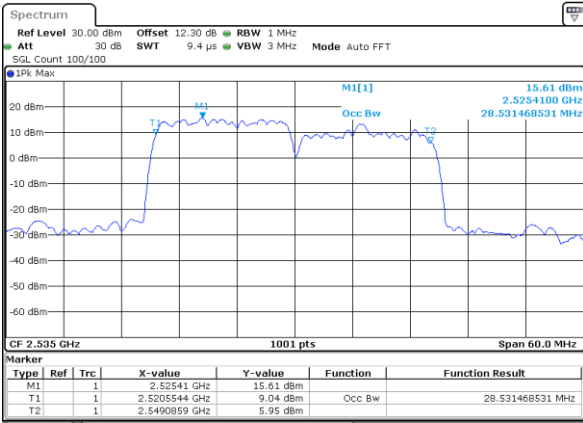
Middle Channel / 15MHz+10MHz



Date: 11 DEC 2020 23:06:40

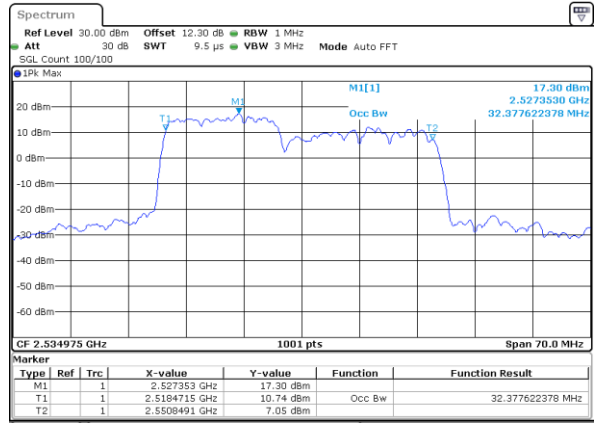
64QAM

Middle Channel / 15MHz+15MHz



Date: 12 DEC 2020 09:09:08

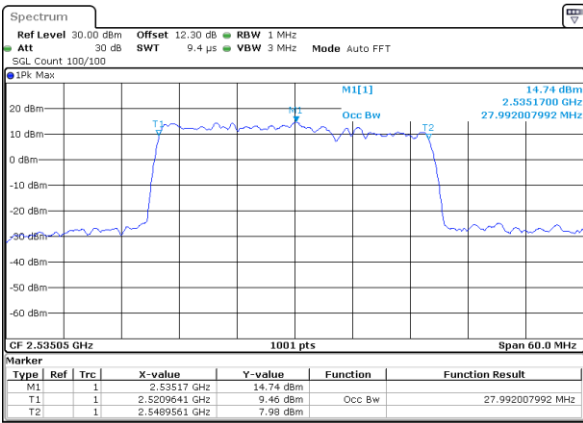
Middle Channel / 15MHz+20MHz



Date: 12 DEC 2020 00:32:45

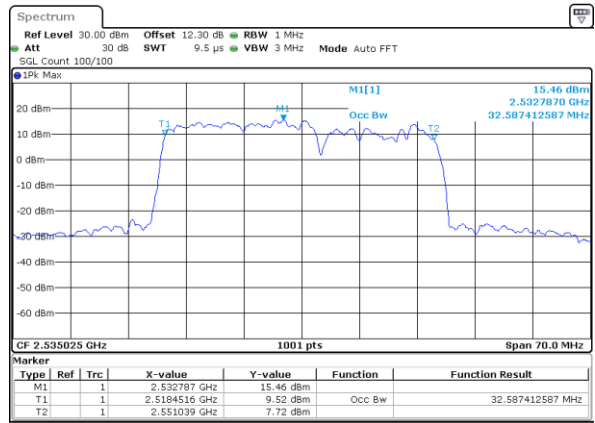
64QAM

Middle Channel / 20MHz+10MHz



Date: 12 DEC 2020 09:34:40

Middle Channel / 20MHz+15MHz



Date: 12 DEC 2020 00:00:19

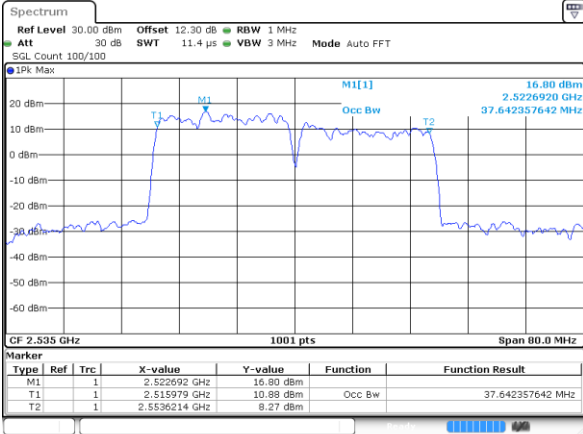


LTE Band 7C

64QAM

Middle Channel / 20MHz+20MHz

N/A



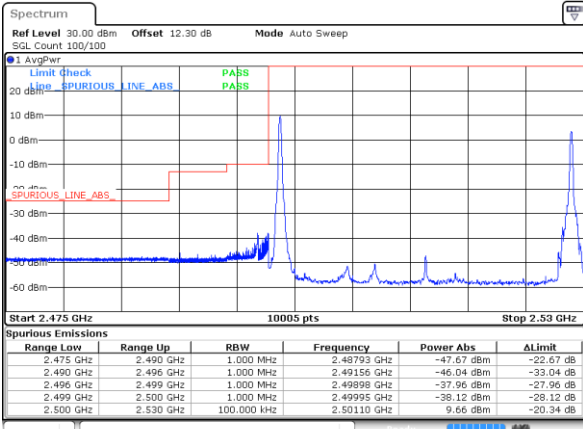


Conducted Band Edge

LTE Band 7C / 10MHz+20MHz

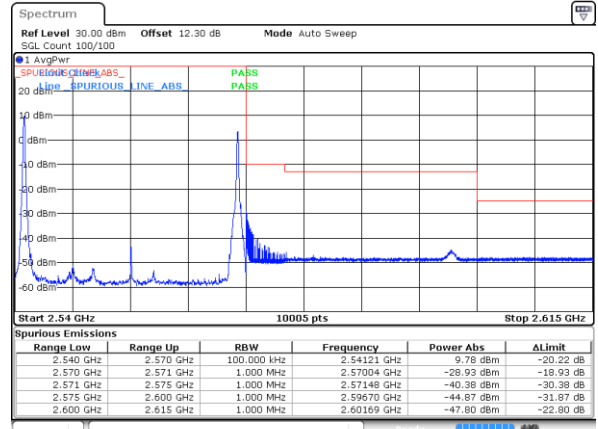
QPSK

Lowest Band Edge / 1RB0 and 1RB9



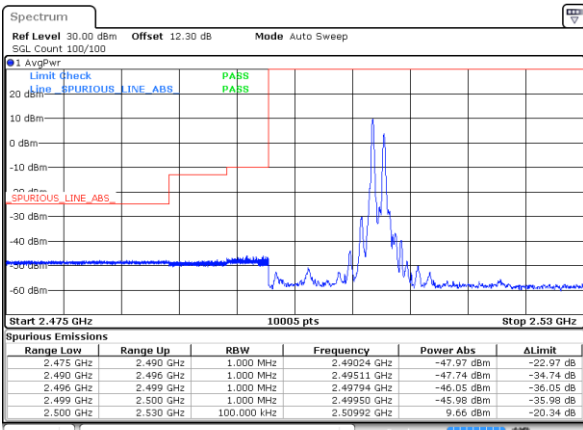
Date: 12 DEC 2020 09:54:27

Highest Band Edge / 1RB0 and 1RB9



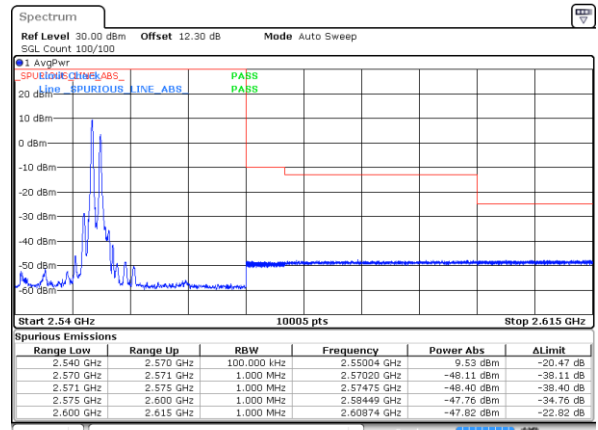
Date: 12 DEC 2020 10:08:54

Lowest Band Edge / 1RB49 and 1RB0



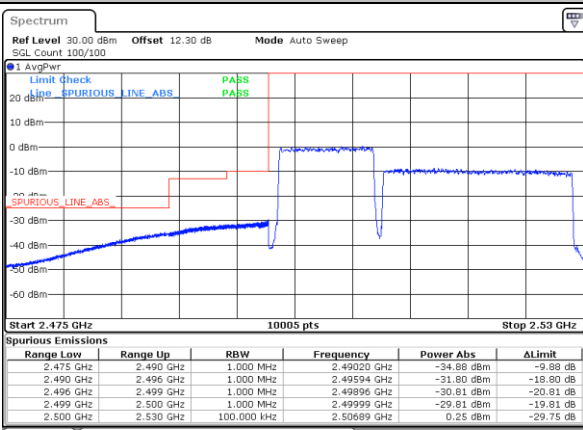
Date: 12 DEC 2020 09:55:05

Highest Band Edge / 1RB49 and 1RB0



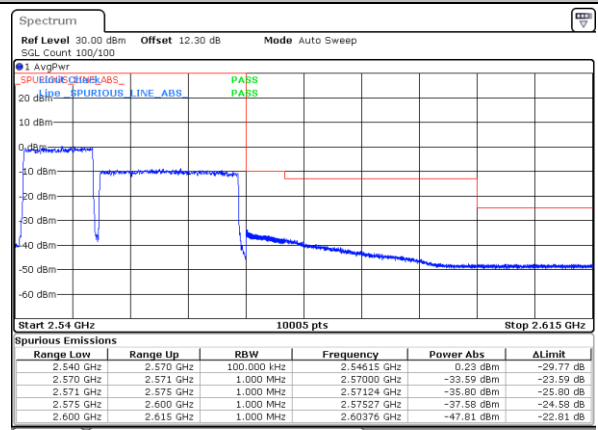
Date: 12 DEC 2020 10:10:28

Lowest Band Edge / Full RB



Date: 12 DEC 2020 09:51:10

Highest Band Edge / Full RB



Date: 12 DEC 2020 10:08:15

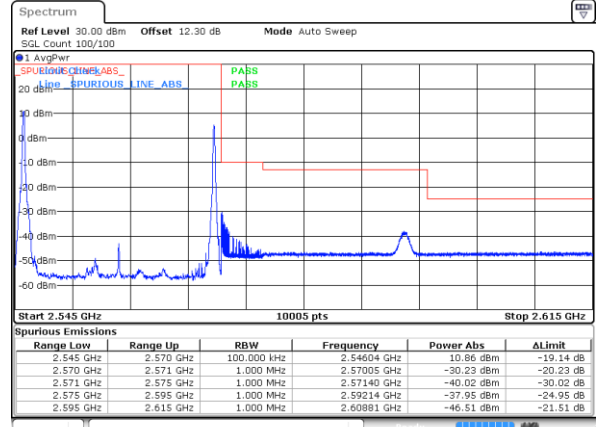
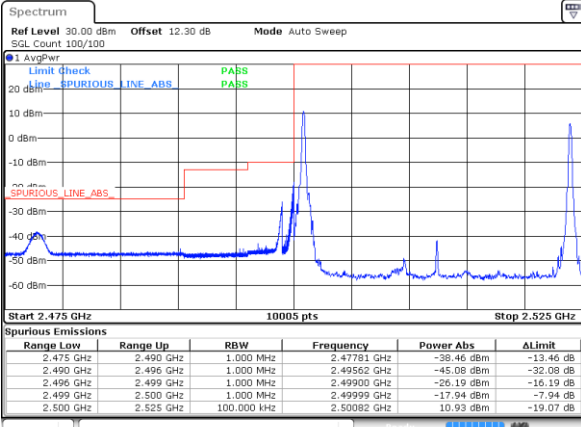


LTE Band 7C / 15MHz+10MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

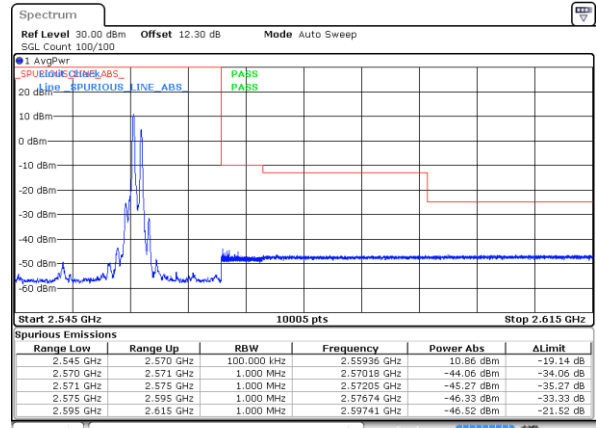
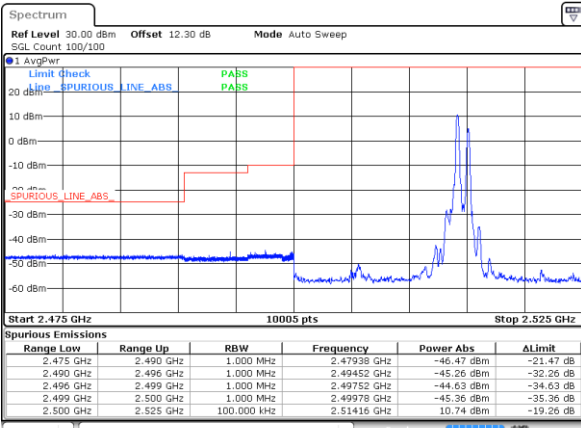


Date: 11 DEC 2020 22:59:40

Date: 11 DEC 2020 23:21:41

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

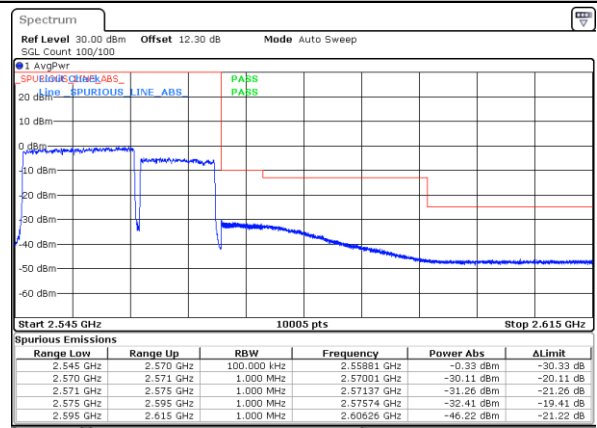
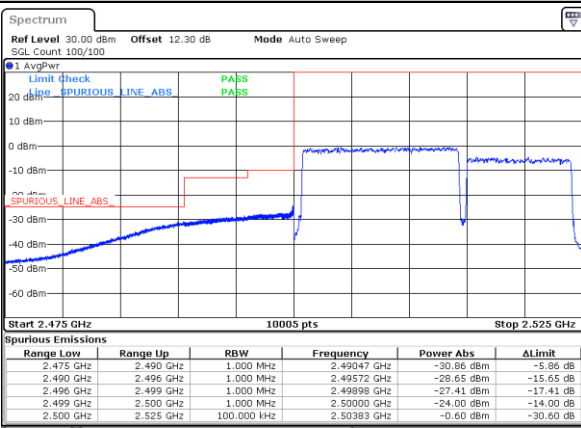


Date: 11 DEC 2020 23:00:19

Date: 11 DEC 2020 23:24:55

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11 DEC 2020 22:56:23

Date: 11 DEC 2020 23:21:02

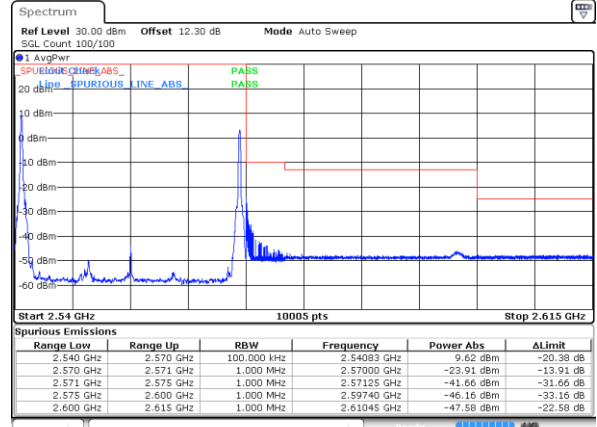
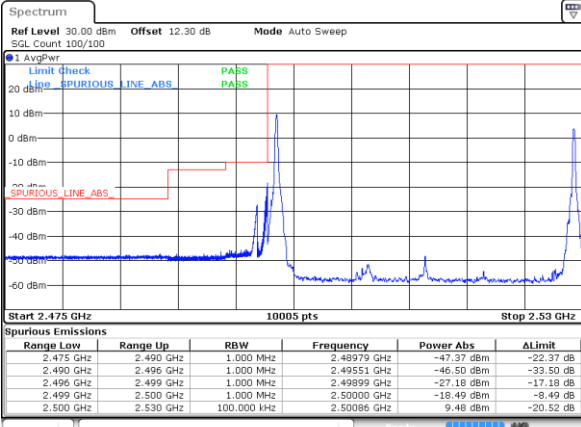


LTE Band 7C / 15MHz+15MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB74

Highest Band Edge / 1RB0 and 1RB74

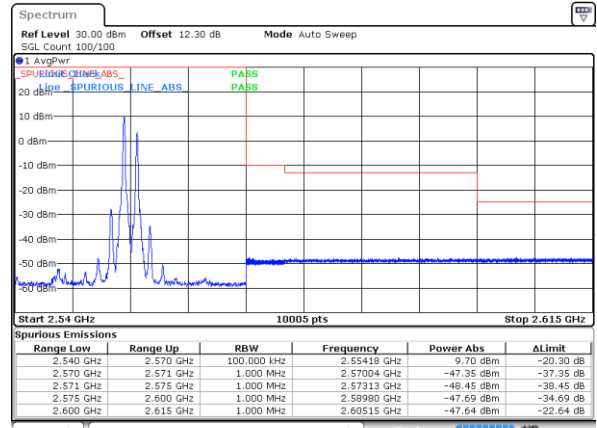
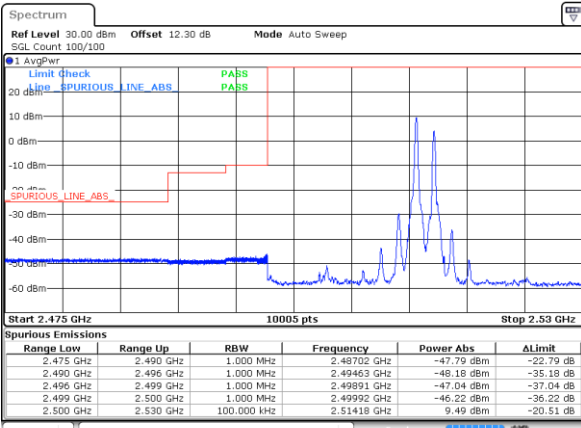


Date: 12 DEC 2020 09:00:54

Date: 12 DEC 2020 09:16:39

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

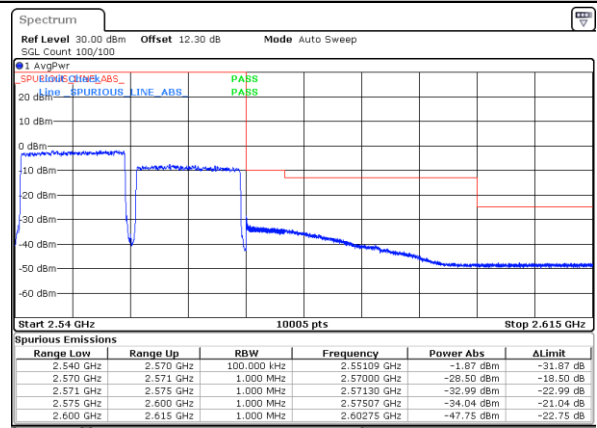
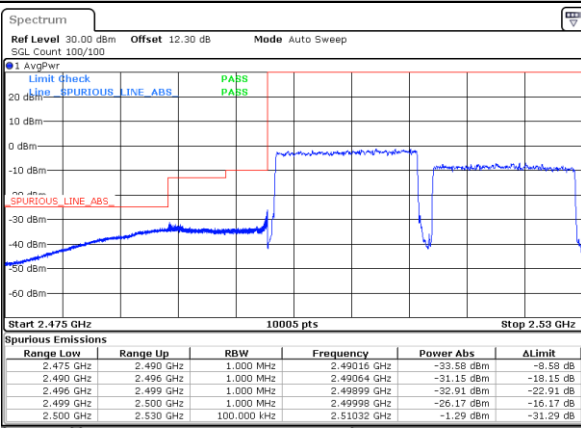


Date: 12 DEC 2020 09:01:33

Date: 12 DEC 2020 09:19:52

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 08:57:37

Date: 12 DEC 2020 09:16:00

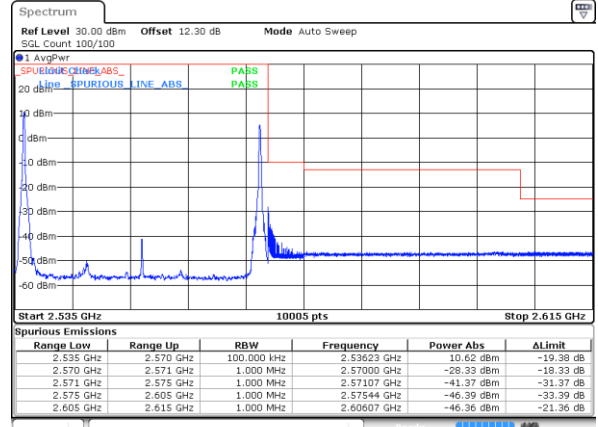
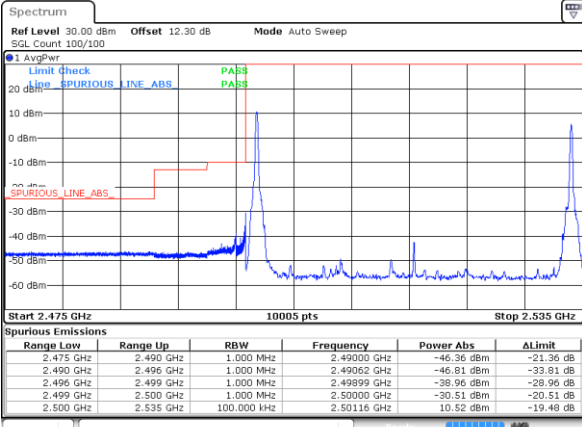


LTE Band 7C / 15MHz+20MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB99

Highest Band Edge / 1RB0 and 1RB99

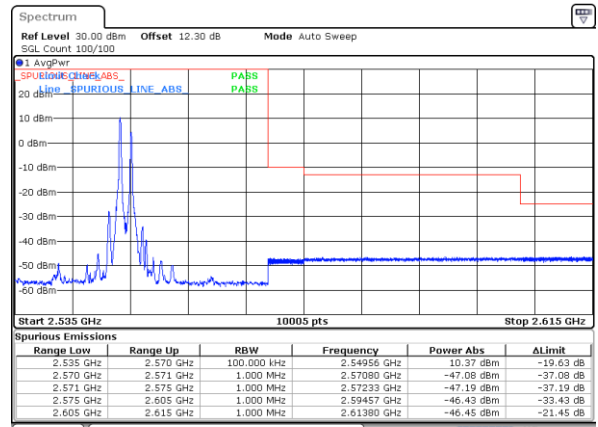
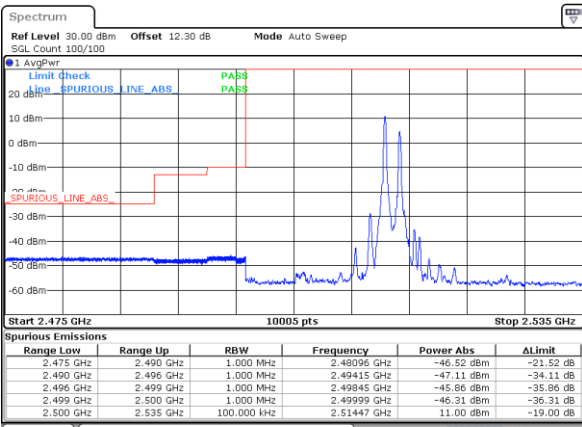


Date: 12 DEC 2020 00:24:42

Date: 12 DEC 2020 00:41:05

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

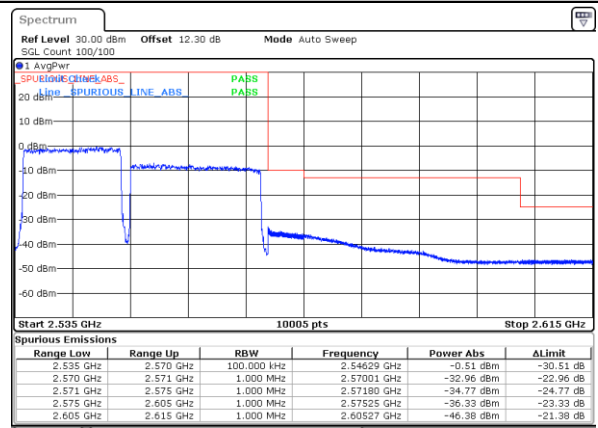
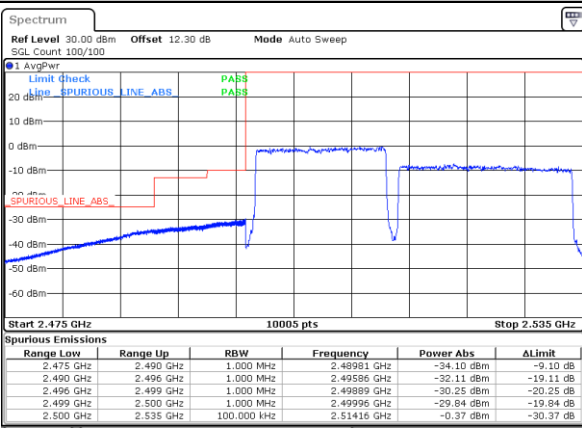


Date: 12 DEC 2020 00:25:21

Date: 12 DEC 2020 00:44:18

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 00:21:25

Date: 12 DEC 2020 00:40:26

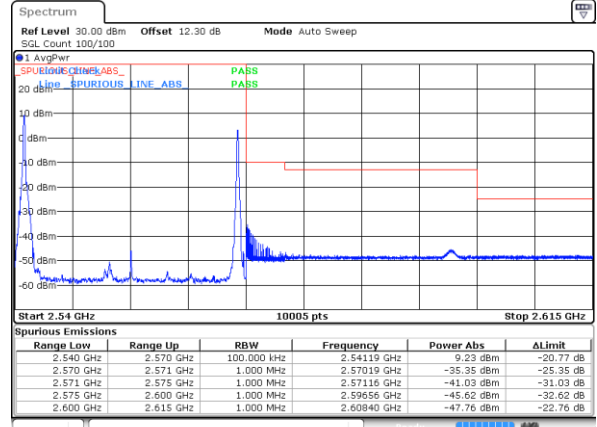
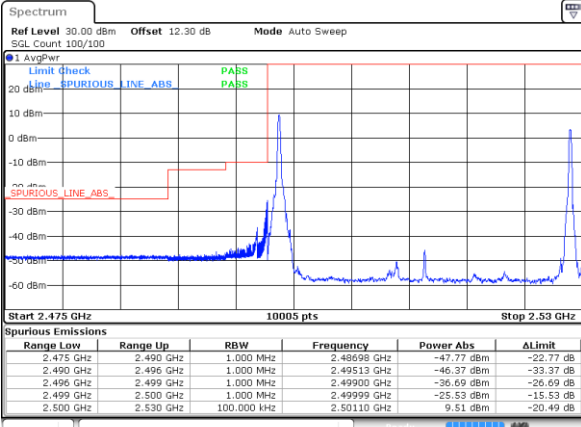


LTE Band 7C / 20MHz+10MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

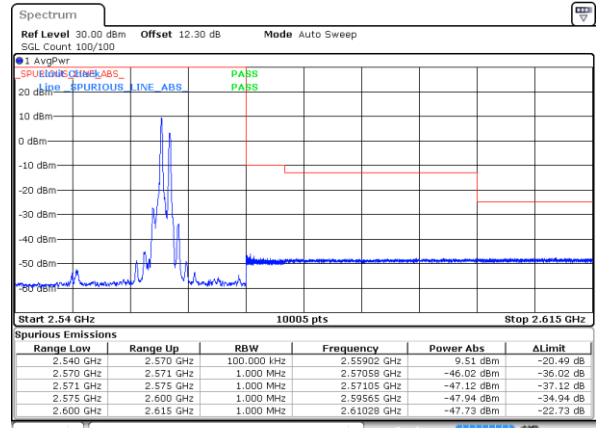
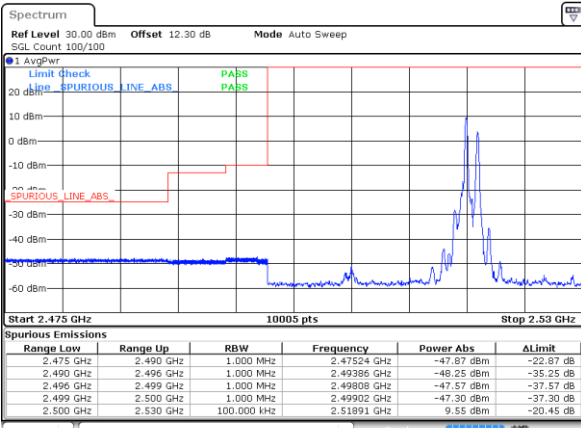


Date: 12 DEC 2020 09:27:50

Date: 12 DEC 2020 09:43:12

Lowest Band Edge / 1RB99 and 1RB0

Highest Band Edge / 1RB99 and 1RB0

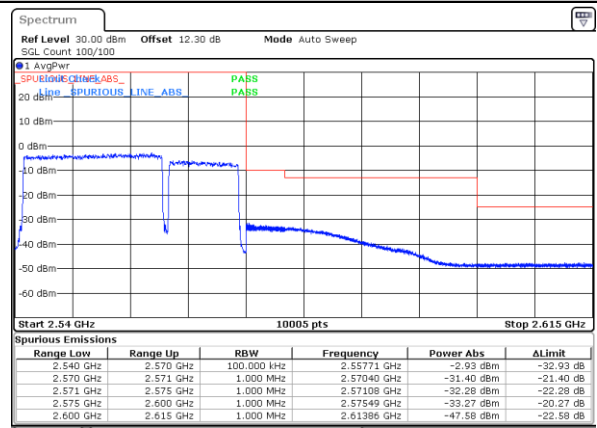
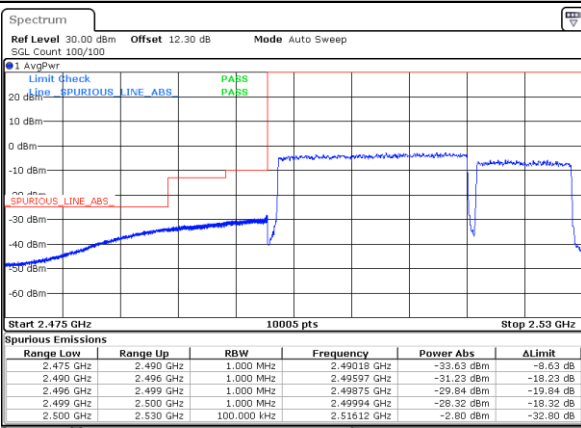


Date: 12 DEC 2020 09:28:29

Date: 12 DEC 2020 09:46:26

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 09:24:33

Date: 12 DEC 2020 09:42:33

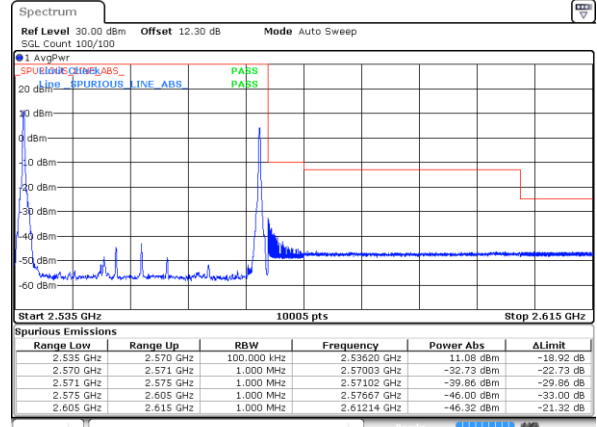
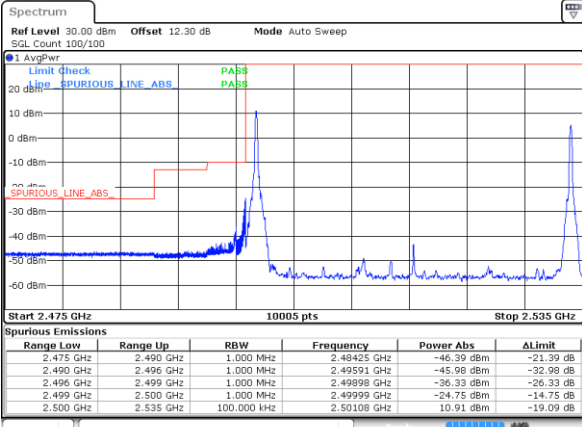


LTE Band 7C / 20MHz+15MHz

QPSK

Lowest Band Edge / 1RB0 and 1RB74

Highest Band Edge / 1RB0 and 1RB74

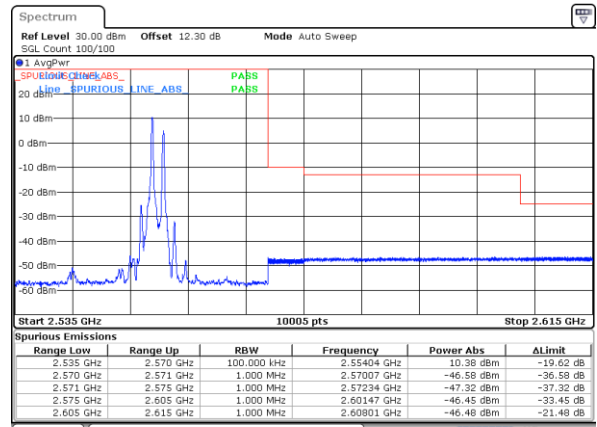
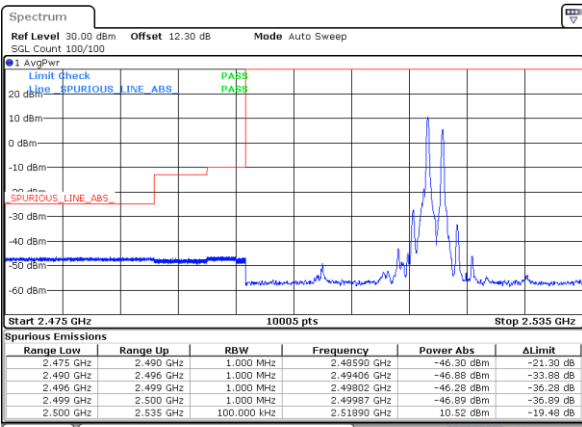


Date: 11 DEC 2020 23:53:01

Date: 12 DEC 2020 00:08:02

Lowest Band Edge / 1RB99 and 1RB0

Highest Band Edge / 1RB99 and 1RB0

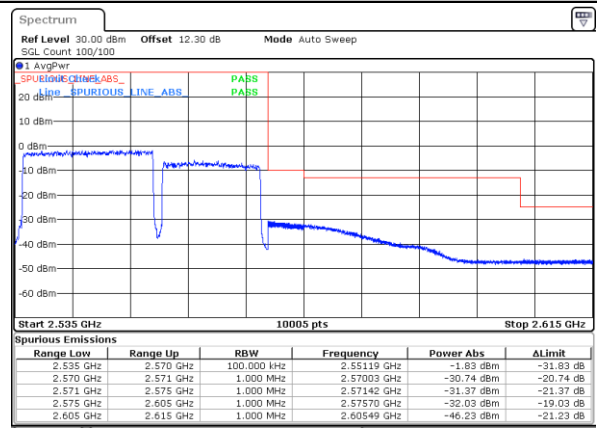
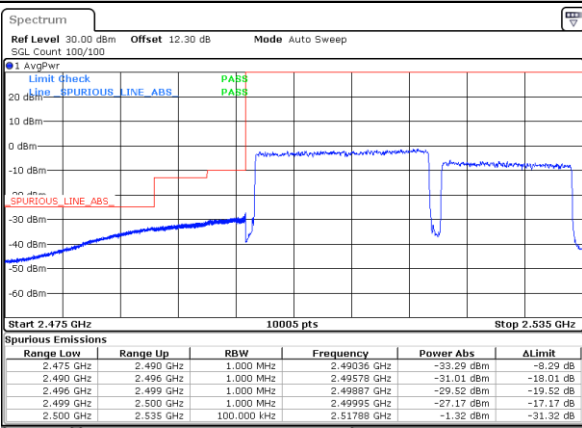


Date: 11 DEC 2020 23:53:39

Date: 12 DEC 2020 00:11:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11 DEC 2020 23:49:44

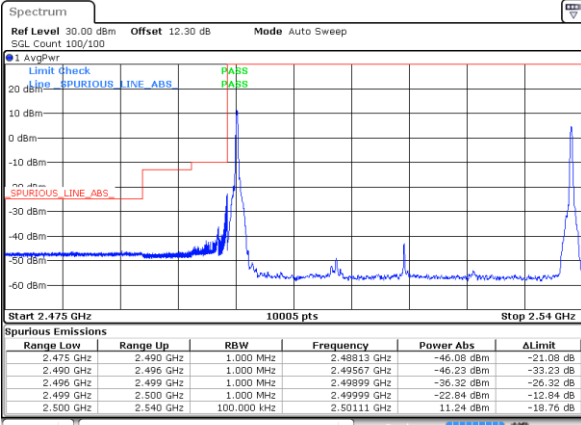
Date: 12 DEC 2020 00:07:23



LTE Band 7C / 20MHz+20MHz

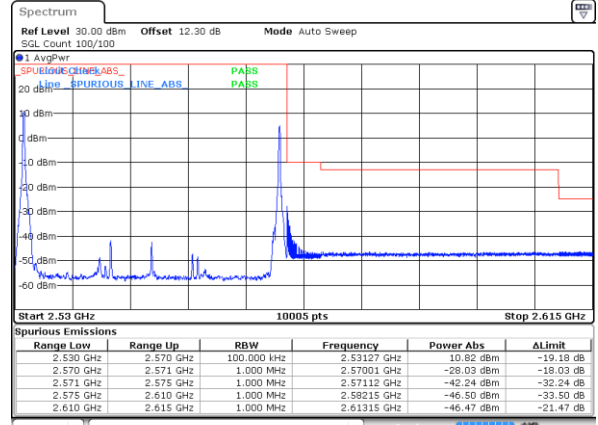
QPSK

Lowest Band Edge / 1RB0 and 1RB99



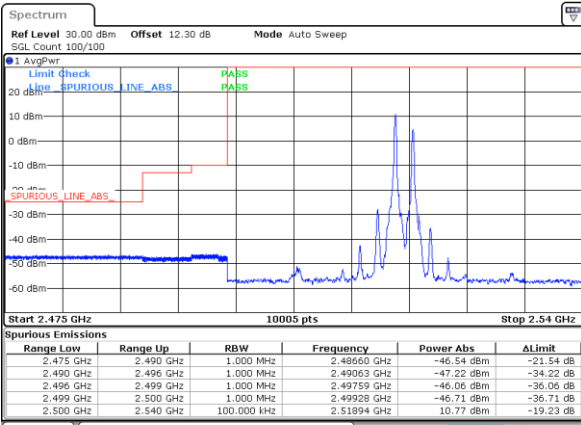
Date: 11 DEC 2020 22:46:40

Highest Band Edge / 1RB0 and 1RB99



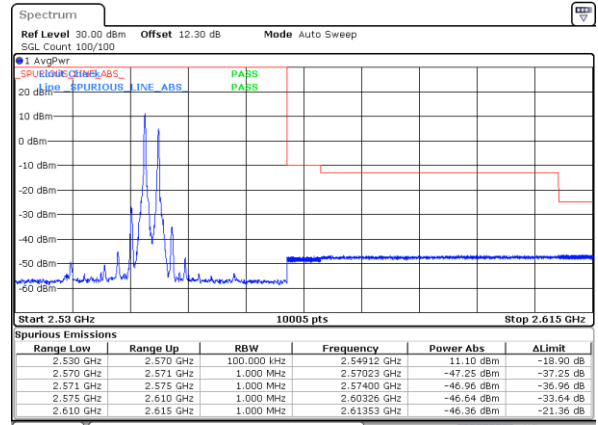
Date: 11 DEC 2020 22:28:47

Lowest Band Edge / 1RB99 and 1RB0



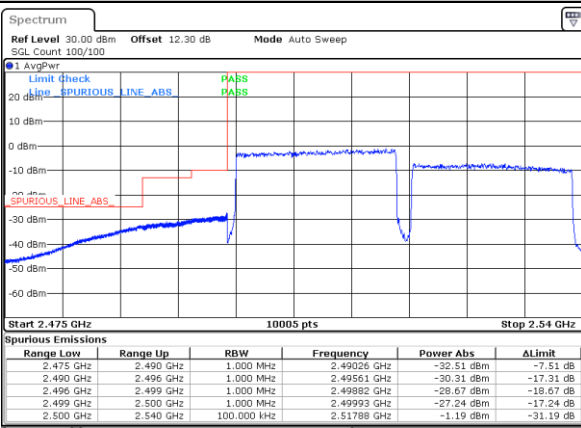
Date: 11 DEC 2020 22:47:19

Highest Band Edge / 1RB99 and 1RB0



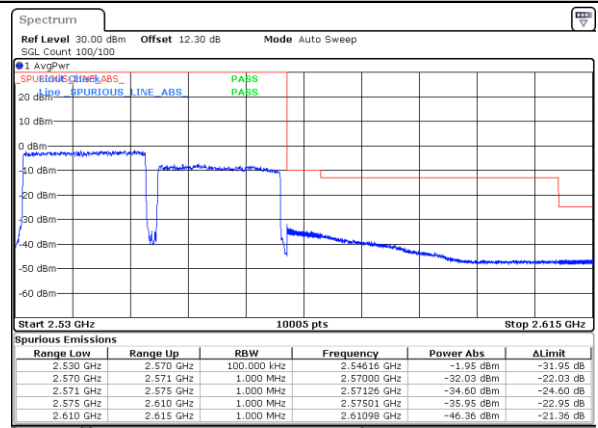
Date: 11 DEC 2020 22:30:21

Lowest Band Edge / Full RB



Date: 11 DEC 2020 22:43:23

Highest Band Edge / Full RB



Date: 11 DEC 2020 22:28:08

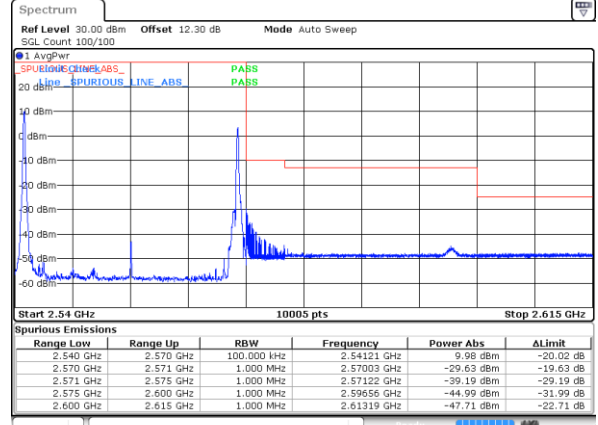
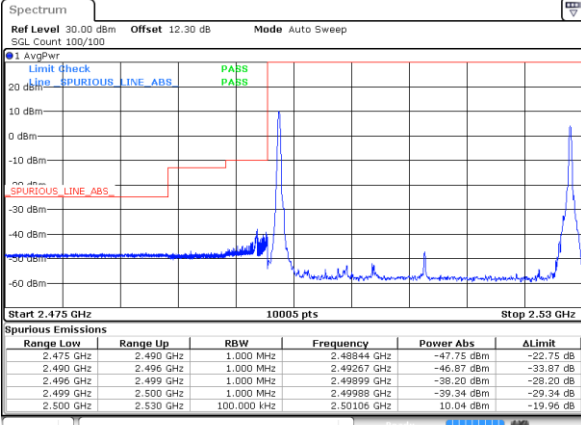


LTE Band 7C / 10MHz+20MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB99

Highest Band Edge / 1RB0 and 1RB99

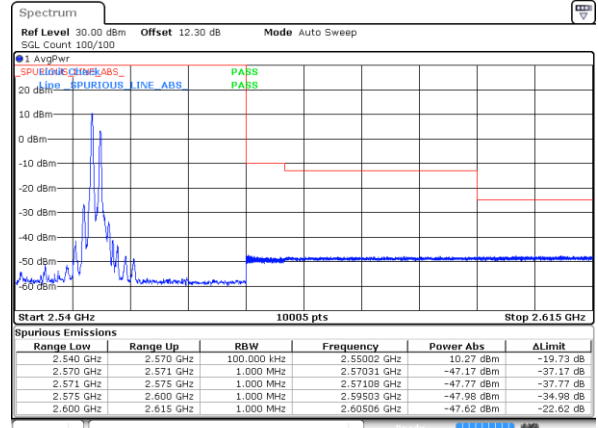
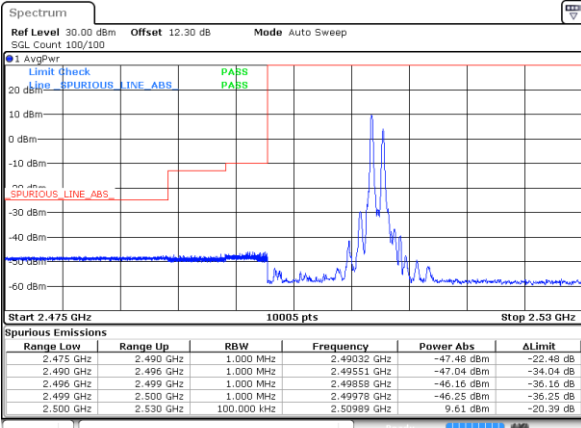


Date: 12 DEC 2020 09:53:47

Date: 12 DEC 2020 10:09:33

Lowest Band Edge / 1RB49 and 1RB0

Highest Band Edge / 1RB49 and 1RB0

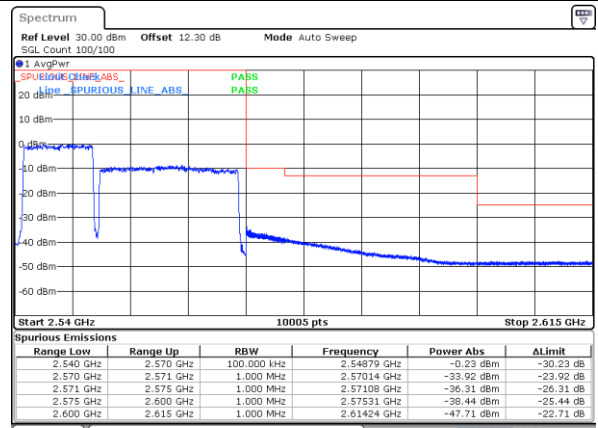
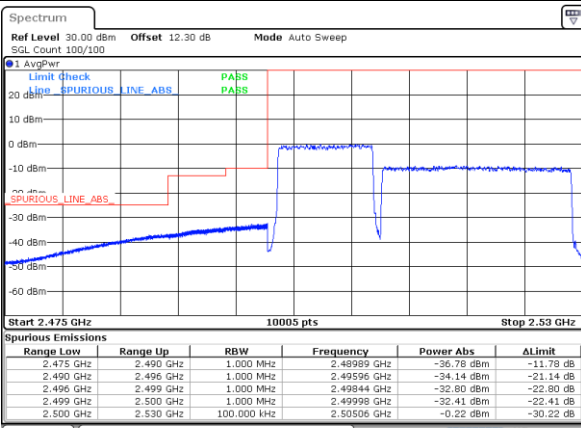


Date: 12 DEC 2020 09:55:45

Date: 12 DEC 2020 10:11:29

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 09:51:49

Date: 12 DEC 2020 10:07:36

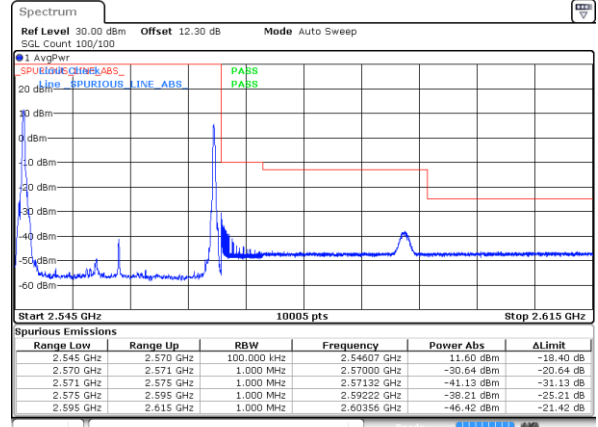
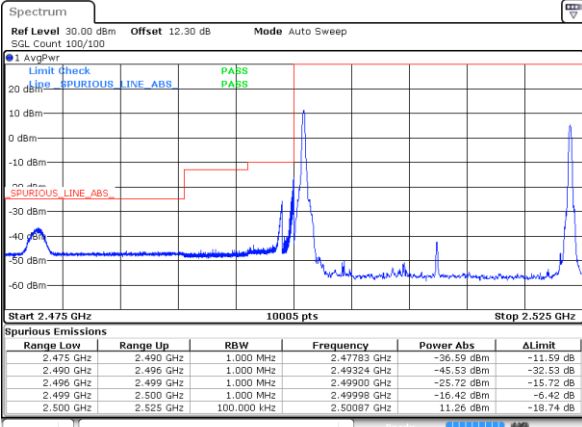


LTE Band 7C / 15MHz+10MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

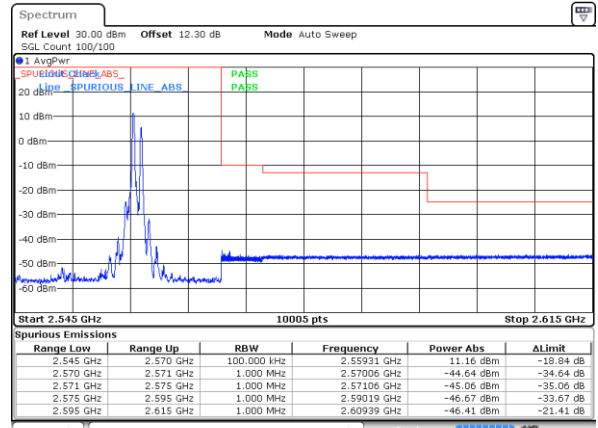
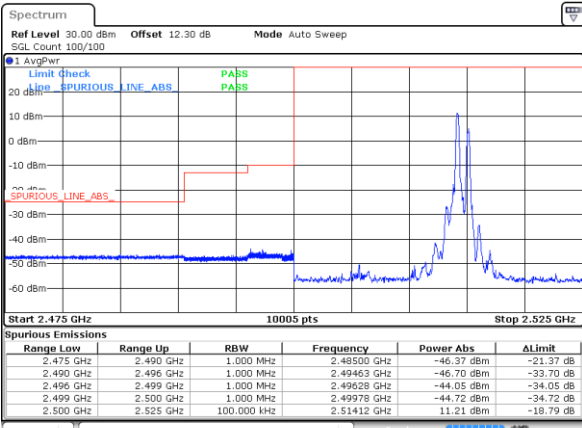


Date: 11 DEC 2020 22:59:01

Date: 11 DEC 2020 23:22:20

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

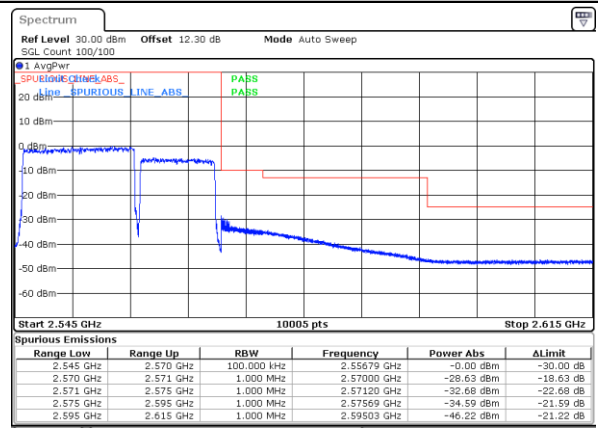
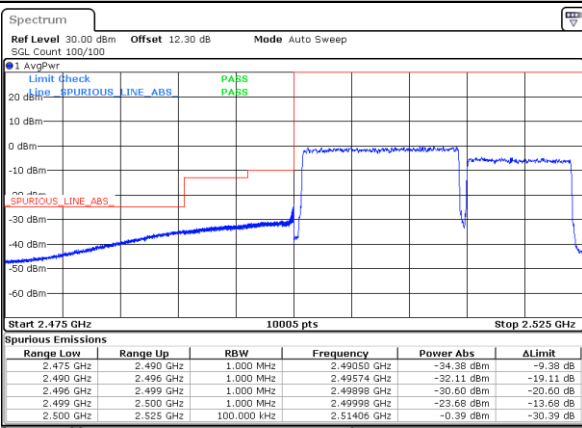


Date: 11 DEC 2020 23:00:58

Date: 11 DEC 2020 23:24:16

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 11 DEC 2020 22:57:02

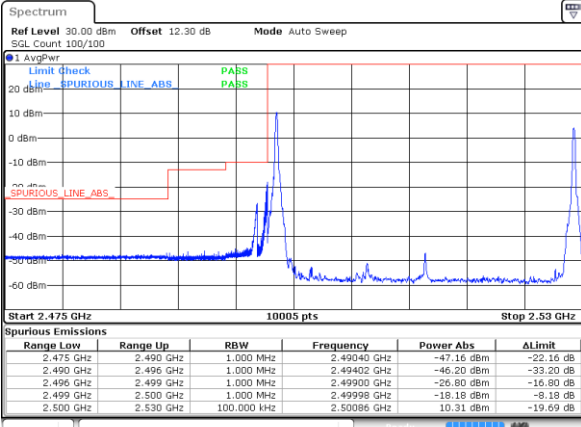
Date: 11 DEC 2020 23:20:23



LTE Band 7C / 15MHz+15MHz

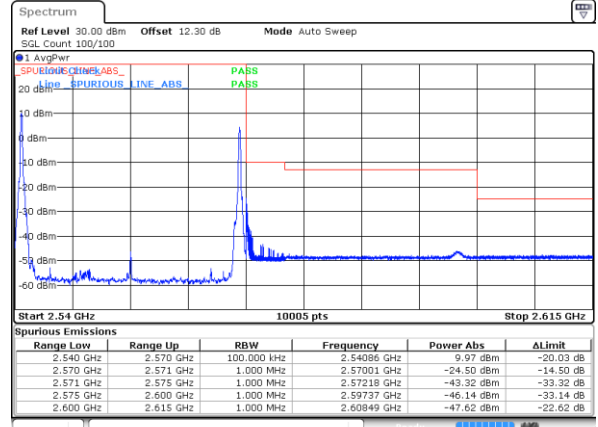
16QAM

Lowest Band Edge / 1RB0 and 1RB74



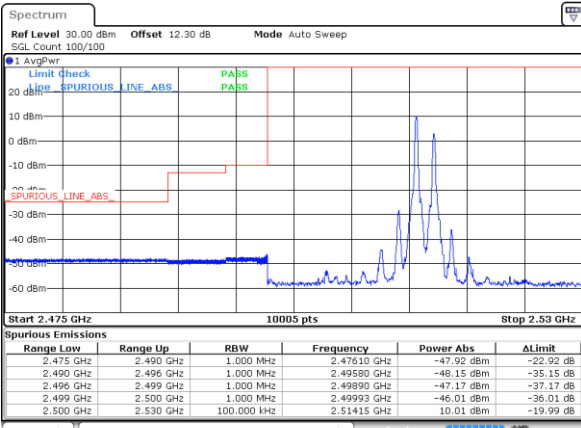
Date: 12 DEC 2020 09:00:15

Highest Band Edge / 1RB0 and 1RB74



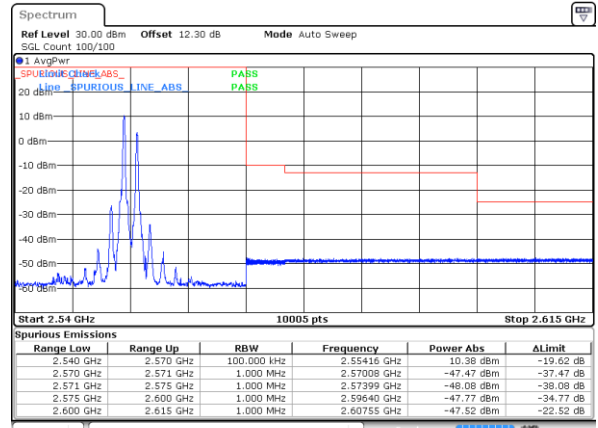
Date: 12 DEC 2020 09:17:18

Lowest Band Edge / 1RB74 and 1RB0



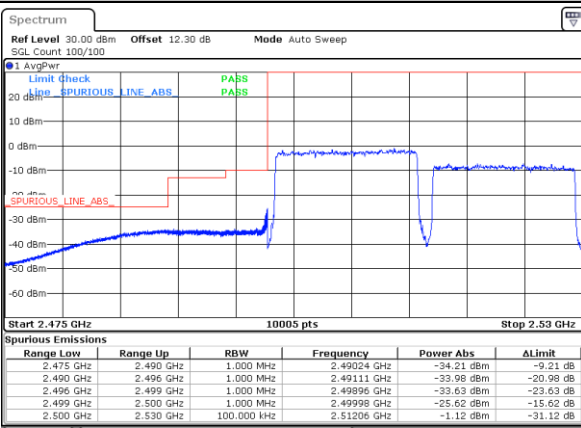
Date: 12 DEC 2020 09:02:12

Highest Band Edge / 1RB74 and 1RB0



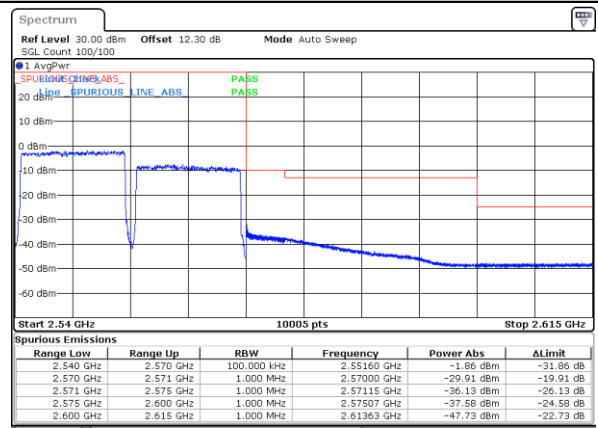
Date: 12 DEC 2020 09:19:13

Lowest Band Edge / Full RB



Date: 12 DEC 2020 08:58:16

Highest Band Edge / Full RB



Date: 12 DEC 2020 09:15:21

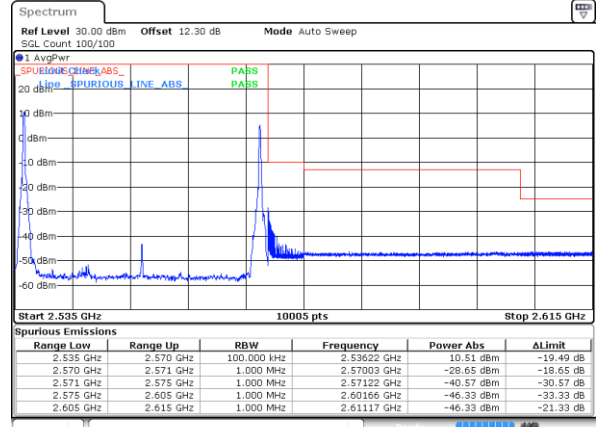
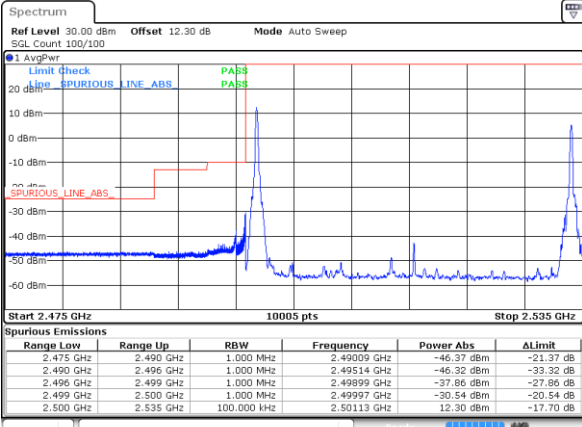


LTE Band 7C / 15MHz+20MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB99

Highest Band Edge / 1RB0 and 1RB99

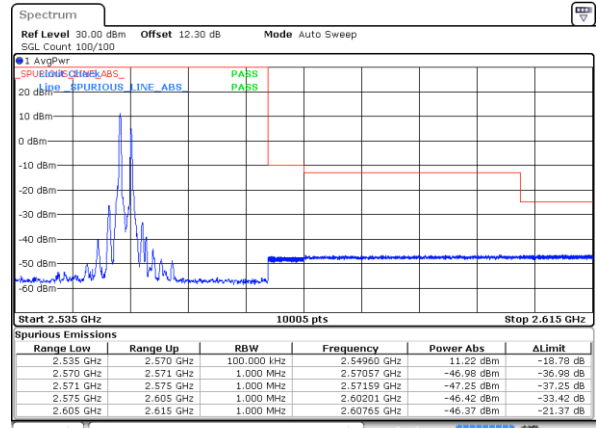
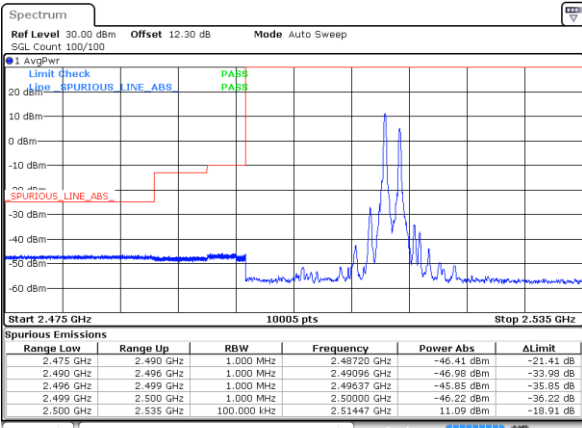


Date: 12 DEC 2020 00:24:03

Date: 12 DEC 2020 00:41:44

Lowest Band Edge / 1RB74 and 1RB0

Highest Band Edge / 1RB74 and 1RB0

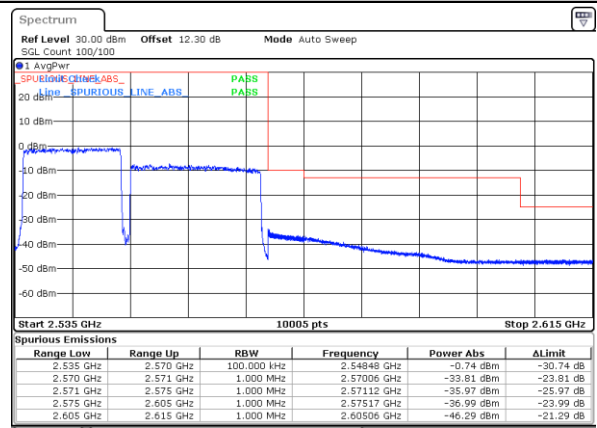
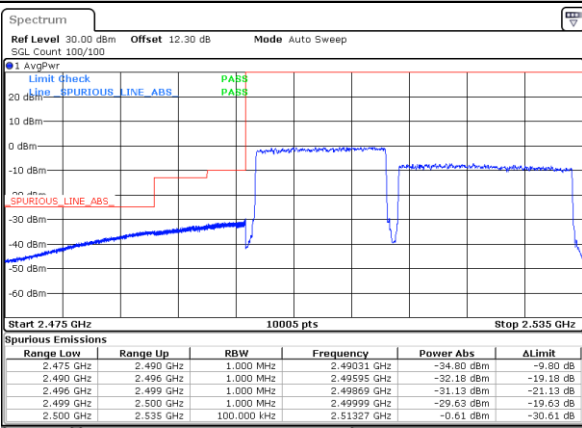


Date: 12 DEC 2020 00:26:00

Date: 12 DEC 2020 00:43:40

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 00:22:05

Date: 12 DEC 2020 00:39:47

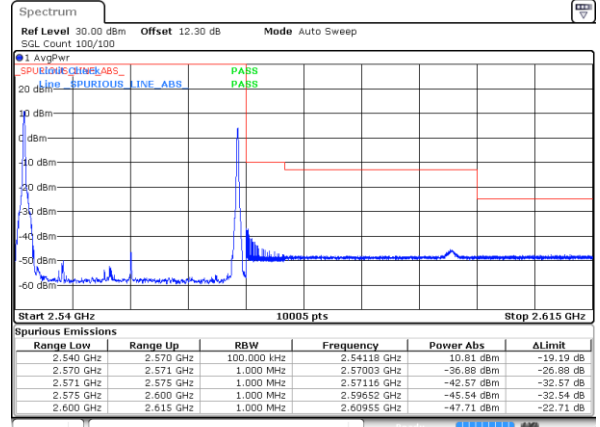
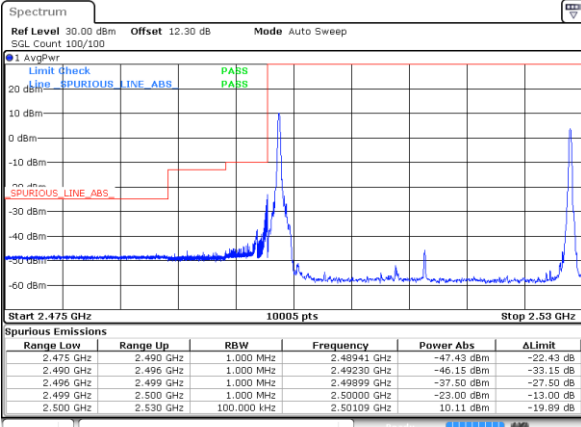


LTE Band 7C / 20MHz+10MHz

16QAM

Lowest Band Edge / 1RB0 and 1RB49

Highest Band Edge / 1RB0 and 1RB49

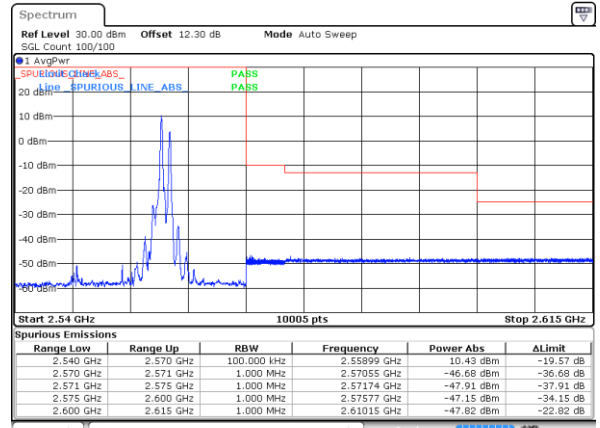
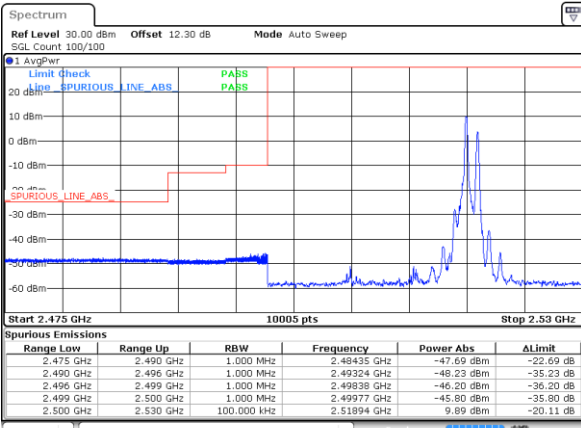


Date: 12 DEC 2020 09:27:11

Date: 12 DEC 2020 09:43:51

Lowest Band Edge / 1RB99 and 1RB0

Highest Band Edge / 1RB99 and 1RB0

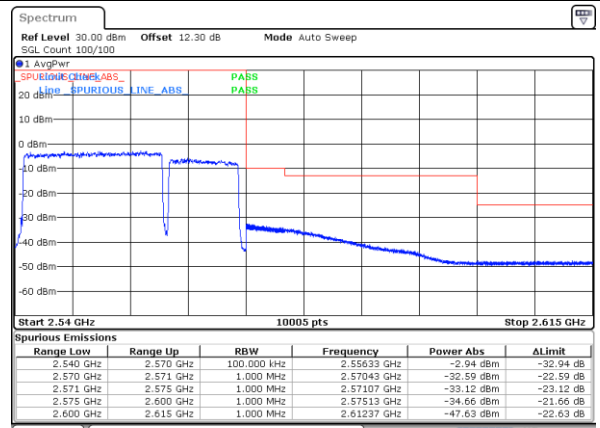
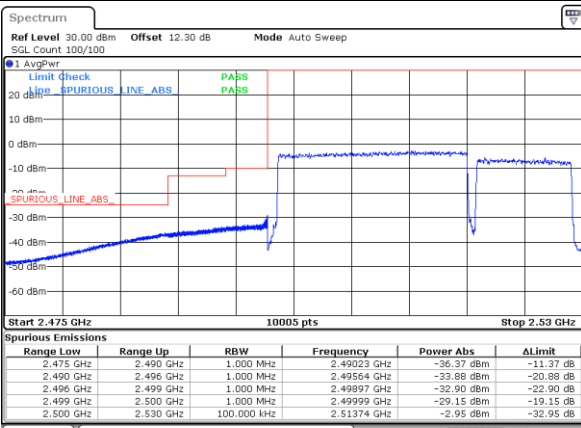


Date: 12 DEC 2020 09:29:08

Date: 12 DEC 2020 09:45:47

Lowest Band Edge / Full RB

Highest Band Edge / Full RB



Date: 12 DEC 2020 09:25:13

Date: 12 DEC 2020 09:41:54