FCC RF Test Report

APPLICANT	:	Xiaomi Communications Co., Ltd.
EQUIPMENT	:	Mobile Phone
BRAND NAME	:	Xiaomi
MODEL NAME	:	M2011K2G
FCC ID	:	2AFZZK2G
STANDARD	:	47 CFR Part 2, 22, 24, 27
CLASSIFICATION	:	PCS Licensed Transmitter Held to Ear (PCE)

The product was received on Oct. 23, 2020 and completely tested on Dec. 11, 2020. We, Sporton International (KunShan) Inc., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.26-2015 and shown compliance with the applicable technical standards.

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

Jason Jia

Reviewed by: Jason Jia / Supervisor

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Approved by: James Huang / Manager

ACCREDITED
Cert #5145.02

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APPENDIX A. TEST RESULTS OF CONDUCTED TEST

APPENDIX B. TEST RESULTS OF RADIATED TEST

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG0O2312E	Rev. 01	Initial issue of report	Dec. 17, 2020

SUMMARY OF TEST RESULT

Report Section	FCC Rule	Description	Limit	Result	Remark
3.4	§2.1046	Conducted Output Power	Reporting Only	PASS	-
	§27.50(h)(2)	Equivalent Isotropic Radiated Power (5G NR n41)	EIRP < 2Watt		
	§27.50(j)(3)	Equivalent Isotropic Radiated Power (5G NR n77)	EIRP < 1Watt		
3.5	N/A	Peak-to-Average Ratio	<13 dB	PASS	-
3.6	§2.1049	Occupied Bandwidth	Reporting Only	PASS	-
3.7	§2.1051 §27.53(l)(2)	Conducted Band Edge Measurement (5G NR n77)	< 43+10log10(P[Watts])	PASS	-
	§27.53(m)(4)	Conducted Band Edge Measurement (5G NR n41)	§27.53(m)(4)		
3.8	§2.1051 §27.53(l)(2)	Conducted Spurious Emission (5G NR n77)	< 43+10log10(P[Watts])	PASS	-
	§2.1051 §27.53(m)(4)	Conducted Spurious Emission (5G NR n41)	< 55+10$\log_{10}$(P[Watts])		
3.9	§2.1055 §27.54	Frequency Stability Temperature & Voltage	Within Authorized Band	PASS	-
4.4	§2.1053 §27.53(l)(2)	Radiated Spurious Emission (5G NR n77)	< 43+10$\log_{10}$(P[Watts])	PASS	Under limit 33.58 dB at 10190.400 MHz
	§2.1053 §27.53(m)(4)	Radiated Spurious Emission (5G NR n41)	< 55+10$\log_{10}$(P[Watts])		

1 General Description

1.1 Applicant

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.2 Manufacturer

Xiaomi Communications Co., Ltd.
#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	Mobile Phone
Brand Name	Xiaomi
Model Name	M2011K2G
FCC ID	2AFZZK2G
EUT supports Radios application	GSM/WCDMA/LTE/5GNR/NFC WLAN 2.4GHz 802.11b/g/n HT20/HT40 WLAN 2.4GHz 802.11ax HE20/HE40 WLAN 5GHz 802.11a/n HT20/HT40 WLAN 5GHz 802.11ac VHT20/VHT40/VHT80/VHT160 WLAN 5GHz 802.11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE GNSS
IMEI Code	Conducted : 868285059998003 Radiation : 868285059998011
HW Version	P2
SW Version	MIUI12
EUT Stage	Identical Prototype

Remark:

1. Only 5G NR bands are tested in this report, all the other RF bands are tested in the other reports separately.
2. There are two types of EUT, the sample 1 is 6+128GB capacity and the sample 2 is 8+256GB capacity. According to the difference, we only choose sample 1 to perform full tests.

1.4 Product Specification of Equipment Under Test

Standards-related Product Specification	
Tx Frequency	5G NR n41: 2506.02 MHz ~ 2679.99 MHz 5G NR n77: 3710.01 MHz ~ 3970.02 MHz
Rx Frequency	5G NR n41: 2506.02 MHz ~ 2679.99 MHz 5G NR n77: 3710.01 MHz ~ 3970.02 MHz
Bandwidth	n41 : 20MHz / 30Mhz / 40MHz / 50MHz / 60MHz / 80MHz / 90MHz / 100MHz n77: 20MHz / 30MHz / 40MHz / 60MHz / 80MHz / 100MHz
Antenna Gain	n41: -1.28 dBi n77: -2.42 dBi
Type of Modulation	CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM DFT-s-OFDM: PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Note:

1. For Ant2& Ant4 & Ant3 & Ant6 & Ant9, the whole testing has assessed Ant2/Ant9 by referring to the higher conducted power.
2. 5G NR n41/n77 support UL MIMO mode, and only supports CP-OFDM modulation in UL MIMO mode.
3. The Maximum ERP/EIRP is calculated from Max Output power and Max antenna gain, only the maximum ERP/EIRP is shown in the report.
4. 5G NR n41/n77/ supports SA mode only.
5. 5G NR n77 supports HPUE.

1.5 Modification of EUT

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

1.6 Maximum ERP/EIRP Power, Frequency Tolerance, and Emission Designator

5G NR n41		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
100	2546.01 ~ 2640.00	95M7G7D	0.2291	96M5W7D	0.1652
Frequency Tolerance (ppm)		0.0022			

5G NR n41_UL_MIMO		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
100	2546.01 ~ 2640.00	97M3G7D	0.2944	98M3W7D	0.2564
Frequency Tolerance (ppm)		0.0028			

5G NR n77		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
100	3750.00 ~ 3930.00	96M9G7D	0.2500	97M7W7D	0.2118
Frequency Tolerance (ppm)		0.0034			

5G NR n77_UL_MIMO		QPSK		16QAM	
BW (MHz)	Frequency Range (MHz)	Emission Designator (99%OBW)	Maximum EIRP(W)	Emission Designator (99%OBW)	Maximum EIRP(W)
100	3750.00 ~ 3930.00	97M7G7D	0.3631	98M3W7D	0.3357
Frequency Tolerance (ppm)		0.0034			

1.7 Testing Location

Sporton International (Kunshan) Inc. is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.02.

Test Firm	Sporton International (Kunshan) Inc.		
Test Site Location	No. 1098, Pengxi North Road, Kunshan Economic Development Zone Jiangsu Province 215300 People's Republic of China TEL : +86-512-57900158 FAX : +86-512-57900958		
Test Site No.	**Sporton Site No.**	**FCC Designation No.**	**FCC Test Firm Registration No.**
	03CH04-KS TH01-KS	CN1257	314309

1.8 Test Software

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

1.9 Applicable Standards

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

- 47 CFR Part 2, 22, 24, 27
- ANSI C63.26-2015
- FCC KDB 971168 D01 Power Meas License Digital Systems v03r01
- FCC KDB 412172 D01 Determining ERP and EIRP v01r01

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

Antenna port conducted and radiated test items 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 (Y plane) were recorded in this report.

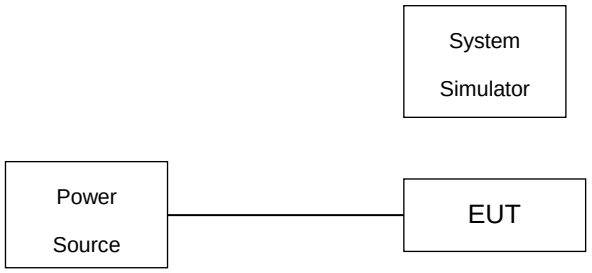
The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported.

Orthogonal Planes of EUT	X Plane	Y Plane	Z Plane

Test Items	5G NR	Bandwidth (MHz)						Modulation					RB #		Test Channel		
		5	10	15	20	30-90	100	PI/2 BPSK	QPSK	16QAM	64QAM	256QAM	1	Full	L	M	H
Max. Output Power	n41	-	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
	n77	-	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Peak-to-Average Ratio	n41	-	-	-			v	v	v	v	v	v		v		v	
	n77	-	-	-			v	v	v	v	v	v		v		v	
26dB and 99% Bandwidth	n41	-	-	-			v		v	v				v		v	
	n77	-	-	-			v		v	v				v		v	
Conducted Band Edge	n41	-	-	-	v	v	v	v	v	v	v	v	v	v	v		v
	n77	-	-	-	v	v	v	v	v	v	v	v	v	v	v		v
Conducted Spurious Emission	n41	-	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
	n77	-	-	-	v	v	v	v	v	v	v	v	v	v	v	v	v
Frequency Stability	n41	-	-	-	v			v						v		v	
	n77	-	-	-	v			v						v		v	
E.R.P / E.I.R.P	n41	-	-	-			v	v	v	v	v	v	v	v	v	v	v
	n77	-	-	-			v	v	v	v	v	v	v	v	v	v	v
Radiated Spurious Emission	n41	Worst Case														v	
	n77	Worst Case														v	
Note	1. The mark "**v** " means that this configuration is chosen for testing 2. The mark "-" means that this bandwidth is not supported.																

	3. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst case emissions are reported. 4. For modulation of CP-OFDM and DFT-s-OFDM, the maximum power of CP-OFDM is lower than DFT-s-OFDM modulation, therefore, we chose higher power (DFT-s-OFDM modulation) to perform all tests and show in the report. 5. Based on engineering evaluation, only the worst modulation test results are shown in the report .

2.2 Connection Diagram of Test System



This example is connection diagram of EUT test configurations.

. For detail, please refer to test mode configuration and setup photographs for each test item.

2.3 Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	DC Power Supply	GW	GPS-3030D	N/A	N/A	Unshielded, 1.8 m
2.	LTE Base Station	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
3.	NR Base Station	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
4.	Fixture	INTEL	NGFF Card Carrier	N/A	N/A	N/A

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.

Offset = RF cable loss.

Following shows an offset computation example with cable loss 6.4 dB.

Example :

Offset(dB) = RF cable loss(dB).

= 6.4 (dB)

2.5 Frequency List of Low/Middle/High Channels

5G NR n41 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	509202	518598	528000
	Frequency	2546.01	2592.99	2640
90	Channel	508200	518598	528996
	Frequency	2541	2592.99	2644.98
80	Channel	507204	518598	529998
	Frequency	2536.02	2592.99	2649.99
60	Channel	505200	518598	531996
	Frequency	2526	2592.99	2659.98
50	Channel	504204	518598	532998
	Frequency	2521.02	2592.99	2664.99
40	Channel	503202	518598	534000
	Frequency	2516.01	2592.99	2670
30	Channel	502200	518598	534996
	Frequency	2511	2592.99	2674.98
20	Channel	501204	518598	535998
	Frequency	2506.02	2592.99	2679.99

5G NR n77 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930
80	Channel	649334	656000	662668
	Frequency	3740.01	3840	3940.02
60	Channel	648668	656000	663334
	Frequency	3730.02	3840	3950.01
40	Channel	648000	656000	664000
	Frequency	3720	3840	3960
30	Channel	647668	656000	664334
	Frequency	3715.02	3840	3965.01
20	Channel	647334	656000	664668
	Frequency	3710.01	3840	3970.02

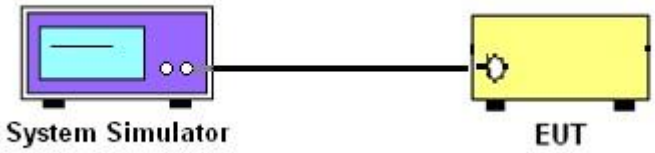
3 Conducted Test Items

3.1 Measuring Instruments

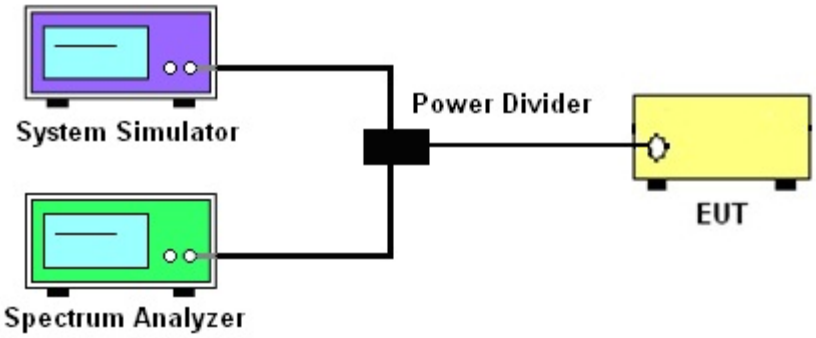
See list of measuring instruments of this test report.

3.2 Test Setup

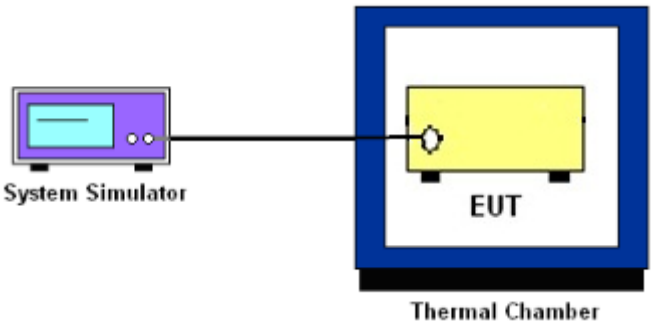
3.2.1 Conducted Output Power



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



3.2.3 Frequency Stability



3.3 Test Result of Conducted Test

Please refer to Appendix A.

3.4 Conducted Output Power and ERP/EIRP

3.4.1 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 5G NR n41.

The EIRP of mobile transmitters must not exceed 1 Watts for 5G NR n77.

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

3.4.2 Test Procedures

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

3.5 Peak-to-Average Ratio

3.5.1 Description of the PAR Measurement

Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

3.5.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.2.6 (PAPR).
2. The EUT was connected to spectrum and system simulator via a power divider.
3. Set EUT in maximum power output.
4. Set the RBW = 1MHz, VBW = 3MHz, Detector = Peak, Trace mode = max hold, Set span ≥ 2 × OBW in spectrum analyzer.
5. Set the RBW = 1MHz, VBW = 3MHz, Detector = power averaging, Trace mode = max hold, Set span ≥ 2 × OBW in spectrum analyzer.
6. Add [10 log (1/duty cycle)] to the measured maximum power level to compute the average power during continuous transmission.
7. PAPR (dB) = P_{Pk} (dBm) − P_{Avg} (dBm)

   where

   PAPR peak-to-average power ratio, in dB

   P_{Pk} measured peak power level, in dBm

   P_{Avg} measured average power level, in dBm
8. Record the deviation as Peak to Average Ratio.

3.6 Occupied Bandwidth

3.6.1 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.

3.6.2 Test Procedures

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

3.7 Conducted Band Edge

3.7.1 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.

27.53(l)(2)

For mobile operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed −13 dBm/MHz. Compliance with this paragraph is based on the use of measurement instrumentation employing a resolution bandwidth of 1 megahertz or greater. However, in the 1 megahertz bands immediately outside and adjacent to the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be either one percent of the emission bandwidth of the fundamental emission of the transmitter or 350 kHz. In the bands between 1 and 5 MHz removed from the licensee's frequency block, the minimum resolution bandwidth for the measurement shall be 500 kHz.

3.7.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW >= 1% EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.

   Example:

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

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

   = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB) = -13dBm.
9. For 5G NR n41, the other 40 dB, and 55 dB have additionally applied same calculation above.

3.8 Conducted Spurious Emission

3.8.1 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 5G NR n41:

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.

3.8.2 Test Procedures

1. The testing follows ANSI C63.26 section 5.7
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz.
7. Set spectrum analyzer with RMS detector.
8. Taking the record of maximum spurious emission.
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
10. The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
11. For 5G NR n41
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [55+ 10log(P)] (dB)
    = [30+ 10log(P)] (dBm) - [55+ 10log(P)] (dB)
    = -25dBm.

3.9 Frequency Stability

3.9.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.9.2 Test Procedures for Temperature Variation

1. The testing follows ANSI C63.26 section 5.6.4
2. The EUT was set up in the thermal chamber and connected with the system simulator.
3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
4. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

3.9.3 Test Procedures for Voltage Variation

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

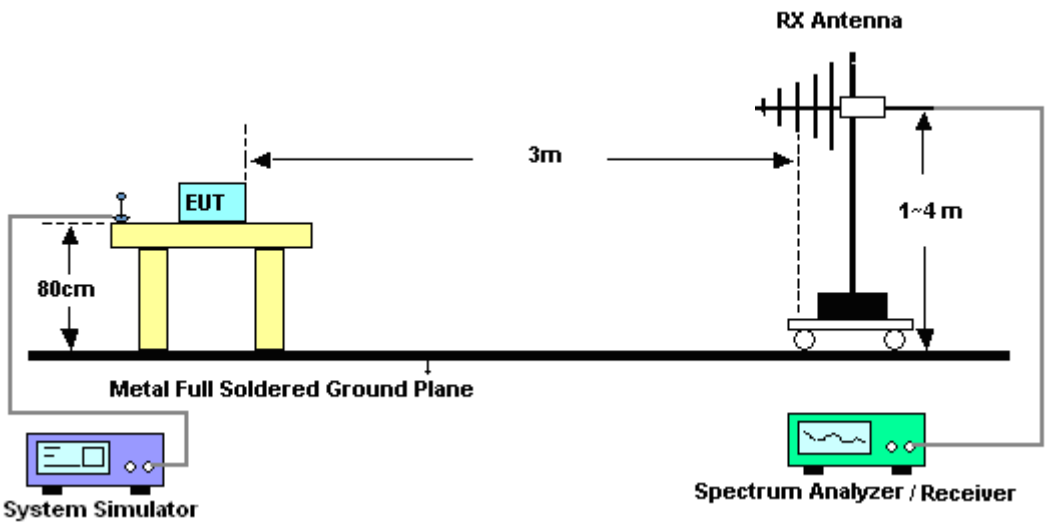
4 Radiated Test Items

4.1 Measuring Instruments

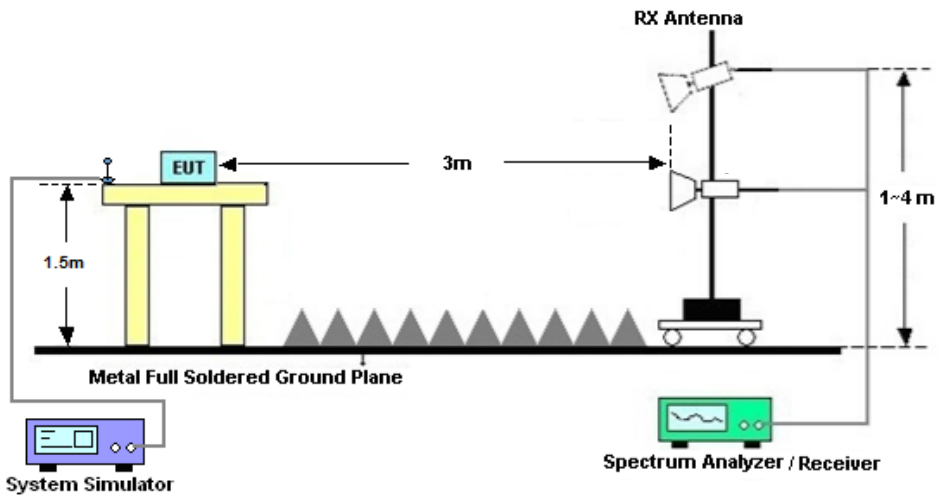
See list of measuring instruments of this test report.

4.2 Test Setup

4.2.1 For radiated test from 30MHz to 1GHz



4.2.2 For radiated test above 1GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission

The radiated spurious emission was measured by substitution method according to ANSI C63.26. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For 5G NR n41

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.

4.4.2 Test Procedures

1. The testing follows ANSI C63.26 Section 5.5
2. The EUT was placed on a turntable with 0.8 meter height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
3. The EUT was set 3 meters from the receiving antenna mounted on the antenna tower.
4. The table was rotated 360 degrees to determine the position of the highest spurious emission.
5. The height of the receiving antenna is varied between 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
6. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
7. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
8. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
9. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
10. EIRP (dBm) = S.G. Power – Tx Cable Loss + Tx Antenna Gain
11. ERP (dBm) = EIRP - 2.15
12. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
    The limit line is derived from 43 + 10log(P)dB below the transmitter power P(Watts)
    = P(W)- [43 + 10log(P)] (dB)
    = [30 + 10log(P)] (dBm) - [43 + 10log(P)] (dB)
    = -13dBm.
13. For 5G NR n41:
    The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)The limit line is derived from 55 + 10log(P)dB below the transmitter power P(Watts)

5 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101040	10Hz~40GHz	Nov. 02, 2020	Nov. 26, 2020~ Dec. 11, 2020	Nov. 01, 2021	Conducted (TH01-KS)
Thermal Chamber	Ten Billion	TTC-B3S	TBN-960502	-40~+150°C	Oct. 27, 2020	Nov. 26, 2020~ Dec. 11, 2020	Oct. 26, 2021	Conducted (TH01-KS)
EXA Spectrum Analyzer	Keysight	N9010A	MY55150244	10Hz-44G,MAX 30dB	Apr. 15, 2020	Nov. 28, 2020	Apr. 14, 2021	Radiation (03CH04-KS)
Bilog Antenna	TeseQ	CBL6111D	49922	30MHz-1GHz	Jan. 03, 2020	Nov. 28, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Horn Antenna	Schwarzbeck	BBHA9120D	1356	1GHz~18GHz	Apr. 20, 2020	Nov. 28, 2020	Apr. 19, 2021	Radiation (03CH04-KS)
SHF-EHF Horn	Com-power	AH-840	101115	18GHz~40GHz	Nov. 09, 2020	Nov. 28, 2020	Nov. 08, 2021	Radiation (03CH04-KS)
Amplifier	SONOMA	310N	187289	9KHz-1GHz	Jan. 03, 2020	Nov. 28, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Amplifier	MITEQ	EM18G40G GA	060728	18~40GHz	Jan. 08, 2020	Nov. 28, 2020	Jan. 07, 2021	Radiation (03CH04-KS)
high gain Amplifier	MITEQ	AMF-7D-00 101800-30-1 0P	2025788	1Ghz-18Ghz	Jan. 03, 2020	Nov. 28, 2020	Jan. 02, 2021	Radiation (03CH04-KS)
Amplifier	Keysight	83017A	MY57280106	500MHz~26.5GHz	Oct. 14, 2020	Nov. 28, 2020	Oct. 13, 2021	Radiation (03CH04-KS)
AC Power Source	Chroma	61601	F104090004	N/A	NCR	Nov. 28, 2020	NCR	Radiation (03CH04-KS)
Turn Table	ChamPro	EM 1000-T	060762-T	0~360 degree	NCR	Nov. 28, 2020	NCR	Radiation (03CH04-KS)
Antenna Mast	ChamPro	EM 1000-A	060762-A	1 m~4 m	NCR	Nov. 28, 2020	NCR	Radiation (03CH04-KS)

NCR: No Calibration Required

6 Uncertainty of Evaluation

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

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.3dB**

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

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

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

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

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power and EIRP)

5G NR n41										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Gain	EIRP	EIRP	EIRP
Channel				509202	518598	528000		L	M	H
Frequency (MHz)				2546.01	2592.99	2640				
100	PI/2 BPSK	1	1	24.23	23.85	24.83	-1.28	0.1972	0.1807	0.2265
100	QPSK	1	1	24.38	23.60	24.75	-1.28	0.2042	0.1706	0.2223
100	QPSK	1	137	24.40	24.11	24.64		0.2051	0.1919	0.2168
100	QPSK	1	271	24.36	23.36	24.88		0.2032	0.1614	0.2291
100	QPSK	135	0	23.55	23.26	23.72	-1.28	0.1687	0.1578	0.1754
100	QPSK	135	69	24.52	24.12	24.77		0.2109	0.1923	0.2234
100	QPSK	135	138	23.42	23.06	24.00		0.1637	0.1507	0.1871
100	QPSK	270	0	23.63	23.33	23.96	-1.28	0.1718	0.1603	0.1854
100	16QAM	1	1	22.56	23.46	22.85	-1.28	0.1343	0.1652	0.1435
100	64QAM	1	1	22.03	22.02	22.67	-1.28	0.1189	0.1186	0.1377
100	256QAM	1	1	20.10	20.15	20.18	-1.28	0.0762	0.0771	0.0776
Channel				508200	518598	528996	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2541	2592.99	2644.98				
90	QPSK	1	1	23.55	23.12	23.89	-1.28	0.1687	0.1528	0.1824
90	16QAM	1	1	22.45	22.89	23.22	-1.28	0.1309	0.1449	0.1563
Channel				507204	518598	529998	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2536.02	2592.99	2649.99				
80	QPSK	1	1	23.78	23.11	23.79	-1.28	0.1778	0.1524	0.1782
80	16QAM	1	1	23.15	22.89	23.25	-1.28	0.1538	0.1449	0.1574
Channel				505200	518598	531996	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2526	2592.99	2659.98				
60	QPSK	1	1	23.86	23.78	23.84	-1.28	0.1811	0.1778	0.1803
60	16QAM	1	1	23.22	23.24	23.23	-1.28	0.1563	0.1570	0.1567

Channel				504204	518598	532998	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2521.02	2592.99	2664.99				
50	QPSK	1	1	23.85	23.89	23.84	-1.28	0.1807	0.1824	0.1803
50	16QAM	1	1	23.44	23.41	23.27	-1.28	0.1644	0.1633	0.1581
Channel				503202	518598	534000	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2516.01	2592.99	2670				
40	QPSK	1	1	23.78	23.65	23.74	-1.28	0.1778	0.1726	0.1762
40	16QAM	1	1	23.27	23.26	23.28	-1.28	0.1581	0.1578	0.1585
Channel				502200	518598	534996	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2511	2592.99	2674.98				
30	QPSK	1	1	23.75	23.45	23.89	-1.28	0.1766	0.1648	0.1824
30	16QAM	1	1	23.46	23.28	23.45	-1.28	0.1652	0.1585	0.1648
Channel				501204	518598	535998	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				2506.02	2592.99	2679.99				
20	QPSK	1	1	23.77	23.43	23.89	-1.28	0.1774	0.1641	0.1824
20	16QAM	1	1	23.33	23.31	23.34	-1.28	0.1603	0.1596	0.1607

5G NR n77										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Gain	EIRP	EIRP	EIRP
Channel				650000	656000	662000		L	M	H
Frequency (MHz)				3750	3840	3930				
100	PI/2 BPSK	1	1	26.12	26.22	26.19	-2.42	0.2344	0.2399	0.2382
100	QPSK	1	1	26.31	26.40	26.26	-2.42	0.2449	0.2500	0.2421
100	QPSK	1	137	26.03	26.18	26.08		0.2296	0.2377	0.2323
100	QPSK	1	271	26.12	26.22	26.09		0.2344	0.2399	0.2328
100	QPSK	135	0	25.13	25.36	25.56	-2.42	0.1866	0.1968	0.2061
100	QPSK	135	69	26.12	26.08	26.13		0.2344	0.2323	0.2350
100	QPSK	135	138	25.08	25.22	25.32		0.1845	0.1905	0.1950
100	QPSK	270	0	25.06	25.16	25.25	-2.42	0.1837	0.1879	0.1919
100	16QAM	1	1	25.32	25.55	25.68	-2.42	0.1950	0.2056	0.2118
100	64QAM	1	1	23.68	23.36	23.77	-2.42	0.1337	0.1242	0.1365
100	256QAM	1	1	21.58	21.68	21.72	-2.42	0.0824	0.0843	0.0851

Channel				649334	656000	662668	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				3740.01	3840	3940.02				
80	QPSK	1	1	26.05	26.11	26.01	-2.42	0.2307	0.2339	0.2286
80	16QAM	1	1	25.22	25.21	25.18	-2.42	0.1905	0.1901	0.1888
Channel				648668	656000	663334	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				3730.02	3840	3950.01				
60	QPSK	1	1	26.03	26.01	26.03	-2.42	0.2296	0.2286	0.2296
60	16QAM	1	1	25.22	25.35	25.45	-2.42	0.1905	0.1963	0.2009
Channel				648000	656000	664000	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				3720	3840	3960				
40	QPSK	1	1	26.25	26.28	26.23	-2.42	0.2415	0.2432	0.2404
40	16QAM	1	1	25.29	25.37	25.45	-2.42	0.1936	0.1972	0.2009
Channel				647668	656000	664334	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				3715.02	3840	3965.01				
30	QPSK	1	1	26.22	26.23	26.27	-2.42	0.2399	0.2404	0.2427
30	16QAM	1	1	25.33	25.52	25.45	-2.42	0.1954	0.2042	0.2009
Channel				647334	656000	664668	Gain	EIRP	EIRP	EIRP
Frequency (MHz)				3710.01	3840	3970.02				
20	QPSK	1	1	26.33	26.25	26.38	-2.42	0.2460	0.2415	0.2489
20	16QAM	1	1	25.44	25.58	25.64	-2.42	0.2004	0.2070	0.2099

5G NR n41_UL MIMO										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	DG	EIRP	EIRP	EIRP
Channel				509202	518598	528000		L	M	H
Frequency (MHz)				2546.01	2592.99	2640				
100	QPSK	1	1	22.86	22.63	22.96	1.73	0.2877	0.2729	0.2944
100	QPSK	1	271	22.36	22.32	22.53		0.2564	0.2541	0.2667
100	QPSK	137	68	22.62	22.53	22.56		0.2723	0.2667	0.2685
100	QPSK	1	0	22.23	21.16	21.44	1.73	0.2489	0.1945	0.2075
100	QPSK	1	272	20.92	20.86	21.16		0.1841	0.1816	0.1945
100	QPSK	273	0	21.06	21.03	21.13		0.1901	0.1888	0.1932
100	16QAM	1	1	22.36	21.06	22.36	1.73	0.2564	0.1901	0.2564
100	64QAM	1	1	20.79	20.58	21.11	1.73	0.1786	0.1702	0.1923
100	256QAM	1	1	17.65	17.55	18.12	1.73	0.0867	0.0847	0.0966
Channel				508200	518598	528996	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2541	2592.99	2644.98				
90	QPSK	1	1	22.63	22.76	22.82	1.73	0.2729	0.2812	0.2851
90	16QAM	1	1	22.31	22.24	22.34	1.73	0.2535	0.2495	0.2553
Channel				507204	518598	529998	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2536.02	2592.99	2649.99				
80	QPSK	1	1	22.32	22.56	22.68	1.73	0.2541	0.2685	0.2761
80	16QAM	1	1	22.16	22.22	22.16	1.73	0.2449	0.2483	0.2449
Channel				505200	518598	531996	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2526	2592.99	2659.98				
60	QPSK	1	1	22.36	22.65	22.77	1.73	0.2564	0.2742	0.2818
60	16QAM	1	1	22.09	22.13	22.12	1.73	0.2410	0.2432	0.2427
Channel				504204	518598	532998	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2521.02	2592.99	2664.99				
50	QPSK	1	1	22.52	22.79	22.32	1.73	0.2661	0.2831	0.2541
50	16QAM	1	1	22.23	22.16	22.24	1.73	0.2489	0.2449	0.2495
Channel				503202	518598	534000	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2516.01	2592.99	2670				
40	QPSK	1	1	22.65	22.71	22.92	1.73	0.2742	0.2780	0.2917

40	16QAM	1	1	22.34	22.24	22.28	1.73	0.2553	0.2495	0.2518
Channel				501204	518598	535998	DG	EIRP	EIRP	EIRP
Frequency (MHz)				2506.02	2592.99	2679.99				
20	QPSK	1	1	22.63	22.85	22.93	1.73	0.2729	0.2871	0.2924
20	16QAM	1	1	22.23	22.31	22.19	1.73	0.2489	0.2535	0.2466

Note：1. Directional gain(DG) = G_{ANT} + 10 log(2) dBi

2.Combine MIMO Power(dBm)= $10*\log[10^{(\text{MIMO Ant 2 Power})/10} + 10^{(\text{MIMO Ant 4 Power})/10}]$ (dBm);Only the combine MIMO power show in the report

5G NR n77_UL MIMO										
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	DG	EIRP	EIRP	EIRP
Channel				650000	656000	662000		L	M	H
Frequency (MHz)				3750	3840	3930				
100	QPSK	1	1	24.82	25.01	24.62	0.59	0.3475	0.3631	0.3319
100	QPSK	1	271	24.85	24.88	24.77		0.3499	0.3524	0.3436
100	QPSK	137	68	24.87	24.95	24.79		0.3516	0.3581	0.3451
100	QPSK	1	0	23.03	22.96	22.72	0.59	0.2301	0.2265	0.2143
100	QPSK	1	272	22.91	22.98	22.91		0.2239	0.2275	0.2239
100	QPSK	273	0	23.43	23.44	23.31		0.2523	0.2529	0.2455
100	16QAM	1	1	24.38	24.67	24.33	0.59	0.3141	0.3357	0.3105
100	64QAM	1	1	22.98	23.18	22.76	0.59	0.2275	0.2382	0.2163
100	256QAM	1	1	19.77	19.87	19.81	0.59	0.1086	0.1112	0.1096
Channel				649334	656000	662668	DG	EIRP	EIRP	EIRP
Frequency (MHz)				3740.01	3840	3940.02				
80	QPSK	1	1	24.68	24.91	24.68	0.59	0.3365	0.3548	0.3365
80	16QAM	1	1	24.26	24.51	24.34	0.59	0.3055	0.3236	0.3112
Channel				648668	656000	663334	DG	EIRP	EIRP	EIRP
Frequency (MHz)				3730.02	3840	3950.01				
60	QPSK	1	1	24.99	25.12	24.52	0.59	0.3614	0.3724	0.3243
60	16QAM	1	1	24.64	24.37	24.46	0.59	0.3334	0.3133	0.3199
Channel				648000	656000	664000	DG	EIRP	EIRP	EIRP
Frequency (MHz)				3720	3840	3960				
40	QPSK	1	1	24.53	24.79	24.38	0.59	0.3251	0.3451	0.3141
40	16QAM	1	1	24.22	24.26	24.29	0.59	0.3027	0.3055	0.3076
Channel				647668	656000	664334	DG	EIRP	EIRP	EIRP

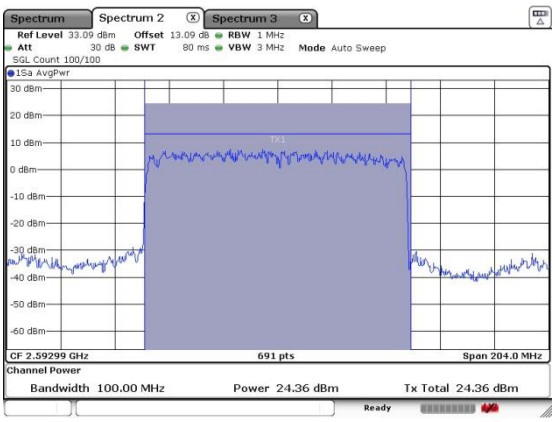
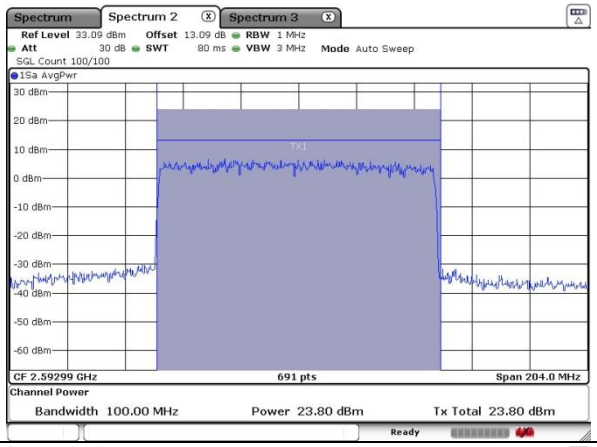
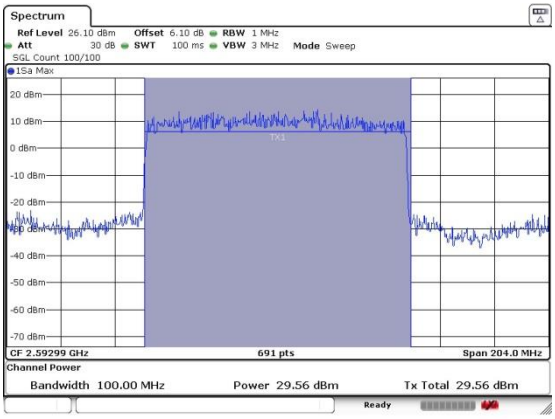
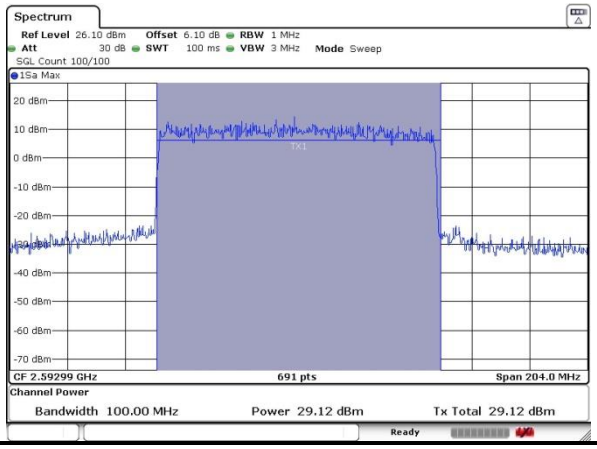
Frequency (MHz)				3715.02	3840	3965.01				
30	QPSK	1	1	24.73	24.66	24.59	0.59	0.3404	0.3350	0.3296
30	16QAM	1	1	24.36	24.35	24.27	0.59	0.3126	0.3119	0.3062
Channel				647334	656000	664668	DG	EIRP	EIRP	EIRP
Frequency (MHz)				3710.01	3840	3970.02				
20	QPSK	1	1	24.55	24.87	24.68	0.59	0.3266	0.3516	0.3365
20	16QAM	1	1	24.26	24.28	24.19	0.59	0.3055	0.3069	0.3006

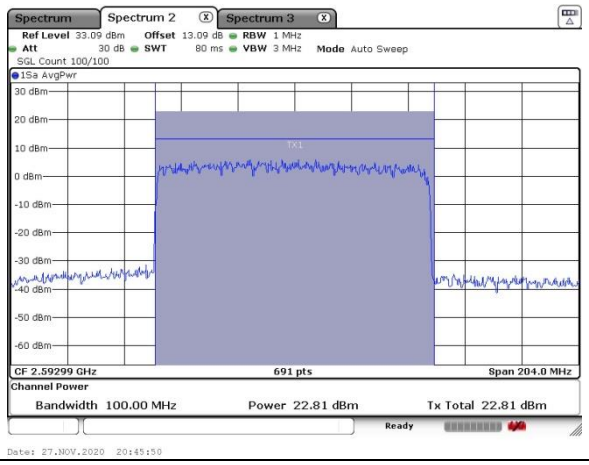
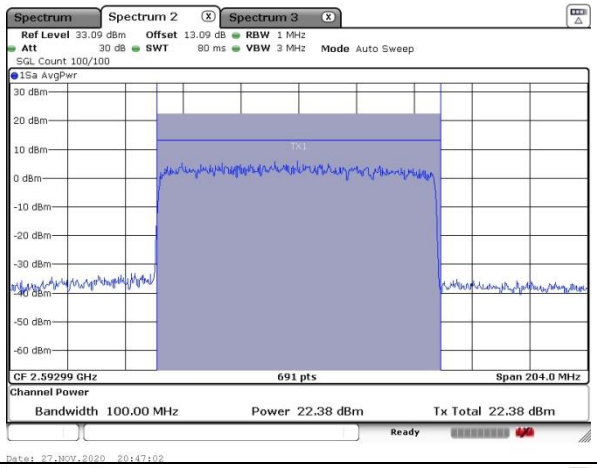
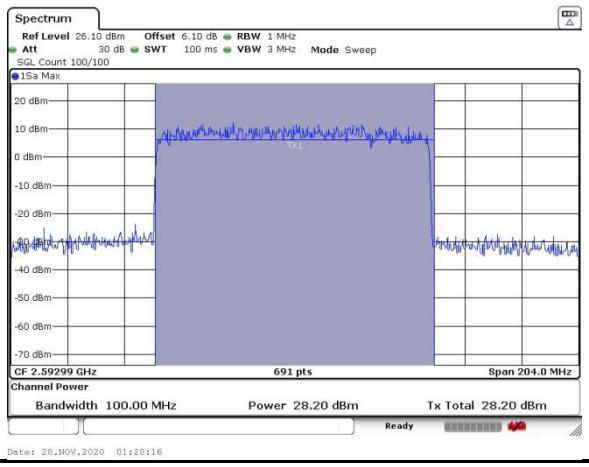
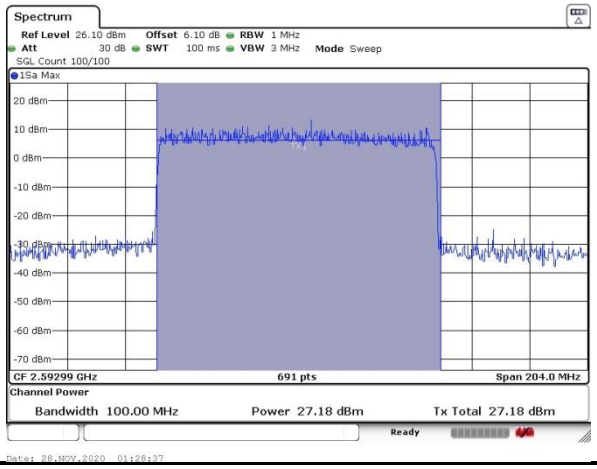
Note：
1. Directional gain(DG) = G_{ANT} + 10 log(2) dBi
2. Combine MIMO Power(dBm)= $10*\log[10^{(\text{MIMO Ant 9 Power})/10} + 10^{(\text{MIMO Ant 6 Power})/10}]$ (dBm); Only the combine MIMO power show in the report

5G NR n41

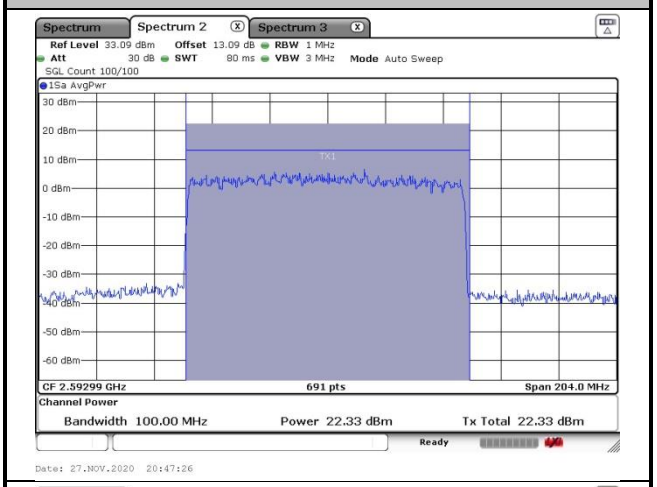
Peak-to-Average Ratio

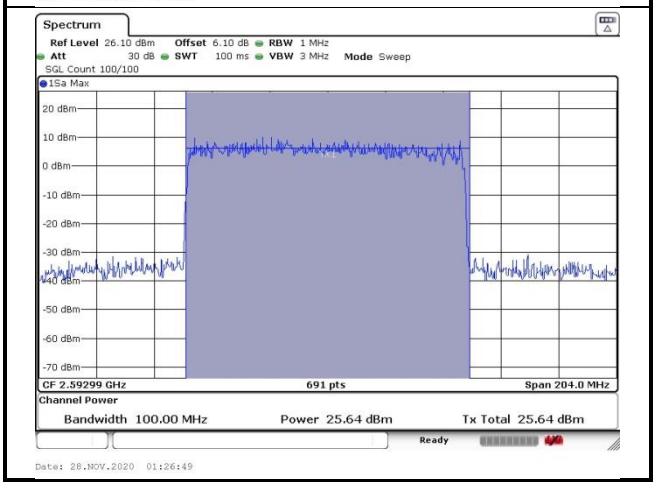
Mode	N 41 / 100MHz					
Mod.	BPSK	QPSK	16QAM	64QAM	256QAM	Limit: 13dB
RB Size	Full RB	Full RB	Full RB	Full RB	Full RB	Result
Middle CH	5.2	5.32	5.39	4.8	3.31	PASS

NR 100MHz / BPSK	NR 100MHz / QPSK
Middle Channel / 270RB0	Middle Channel / 270RB0
	
	

NR 100MHz / 16QAM	NR 100MHz / 64QAM
Middle Channel / 270RB0	Middle Channel / 270RB0
	
	

NR 100MHz / 256QAM
Middle Channel / 270RB0

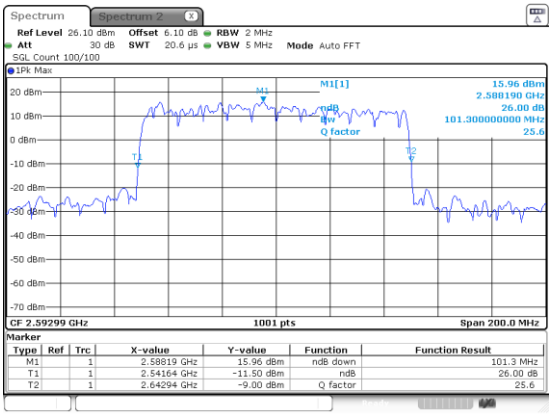


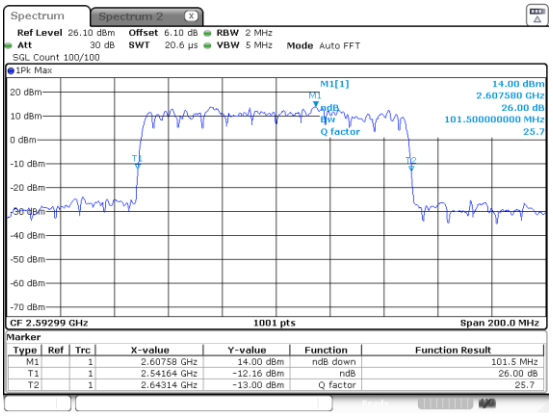


26dB Bandwidth

Mode	N 41 : 26dB BW(MHz)				
BW	100MHz				
Mod.		QPSK	16QAM		
Middle CH		101.30	101.50		

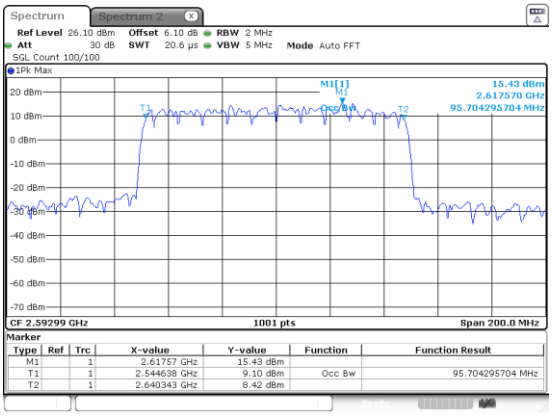
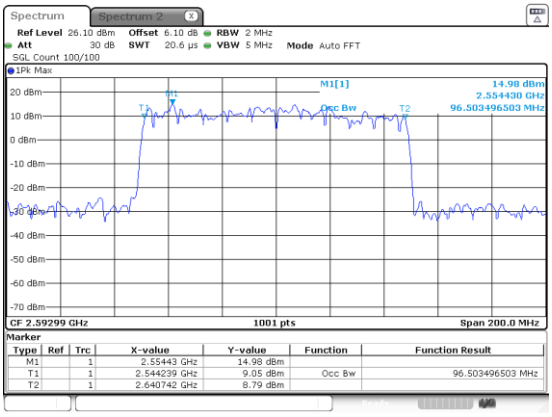
n41A	
NR 100MHz	
Middle Channel / QPSK	Middle Channel / 16Q





Occupied Bandwidth

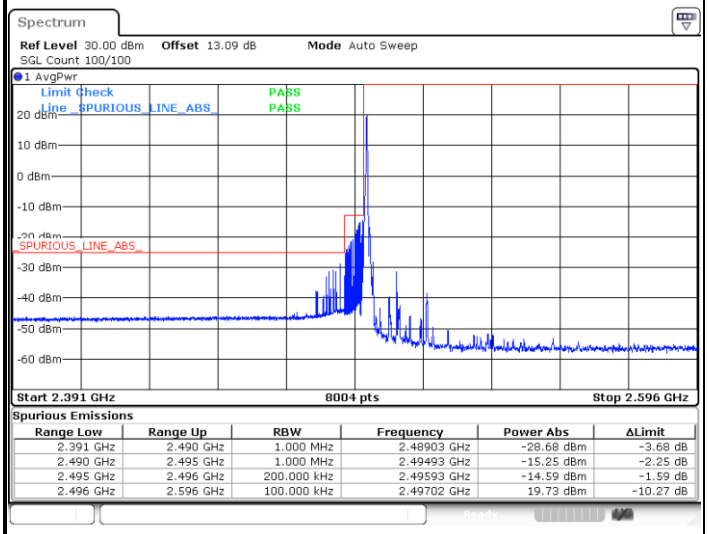
Mode	N 41 : OB BW(MHz)				
BW	100MHz				
Mod.		QPSK	16Q		
Middle CH		95.704	96.503		

n41A	
NR 100MHz	
Middle Channel / QPSK	Middle Channel / 16Q
	

Conducted Band Edge

NR 20MHz

20M-L-1RB0-B



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48903 GHz	-28.68 dBm	-3.68 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49493 GHz	-15.25 dBm	-2.25 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49593 GHz	-14.59 dBm	-1.59 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49702 GHz	19.73 dBm	-10.27 dB

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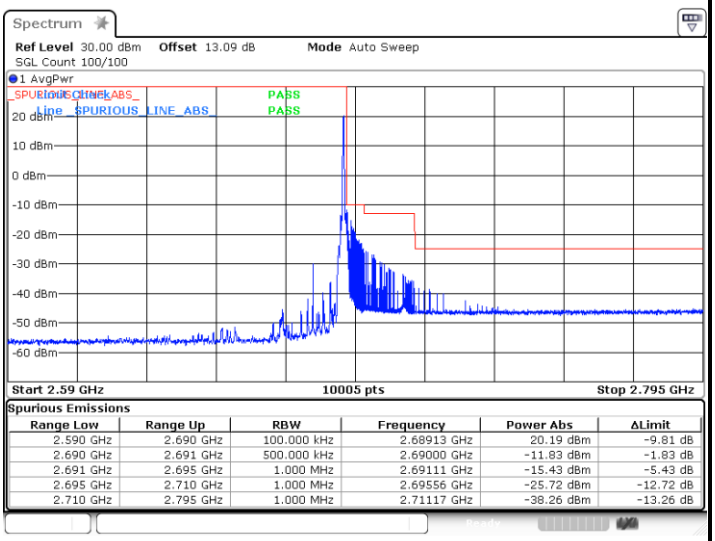
20M-H-1RBMAX-B



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68913 GHz	20.19 dBm	-9.81 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-11.83 dBm	-1.83 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69111 GHz	-15.43 dBm	-5.43 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69556 GHz	-25.72 dBm	-12.72 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71117 GHz	-38.26 dBm	-13.26 dB

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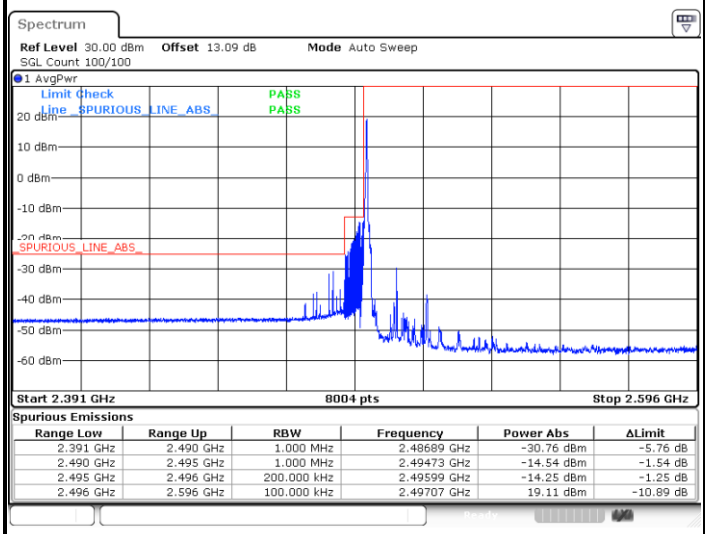
20M-L-1RB0-Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48689 GHz	-30.76 dBm	-5.76 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49473 GHz	-14.54 dBm	-1.54 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49599 GHz	-14.25 dBm	-1.25 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49707 GHz	19.11 dBm	-10.89 dB

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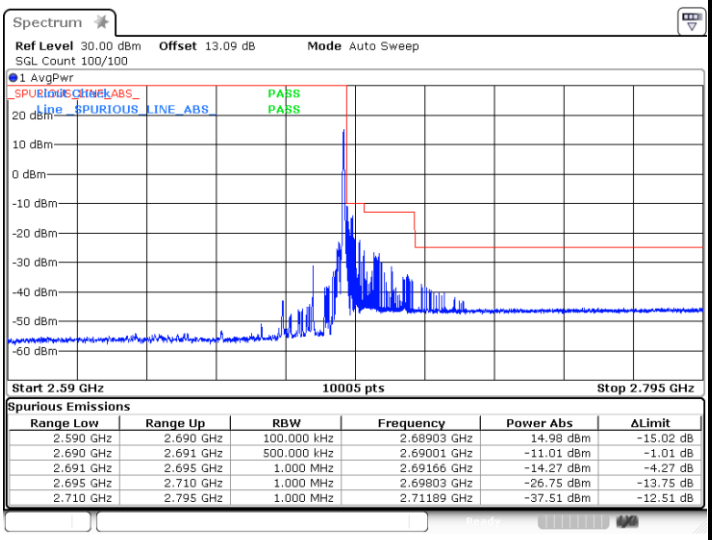
20M-H-1RBMAX-Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68903 GHz	14.98 dBm	-15.02 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69001 GHz	-11.01 dBm	-1.01 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69166 GHz	-14.27 dBm	-4.27 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69803 GHz	-26.75 dBm	-13.75 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71189 GHz	-37.51 dBm	-12.51 dB

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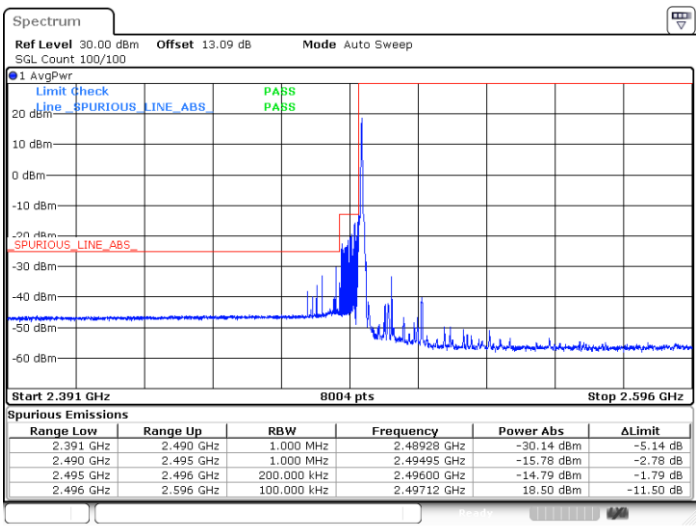
NR 20MHz

20M-L-1RB0-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48928 GHz	-30.14 dBm	-5.14 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49495 GHz	-15.78 dBm	-2.78 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49600 GHz	-14.79 dBm	-1.79 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49712 GHz	18.50 dBm	-11.50 dB

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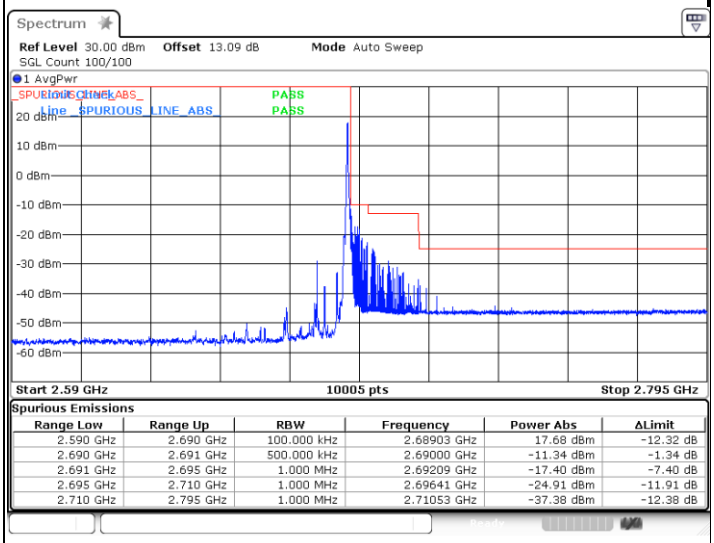
20M-H-1RBMAX-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68903 GHz	17.68 dBm	-12.32 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-11.34 dBm	-1.34 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69209 GHz	-17.40 dBm	-7.40 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69641 GHz	-24.91 dBm	-11.91 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71053 GHz	-37.38 dBm	-12.38 dB

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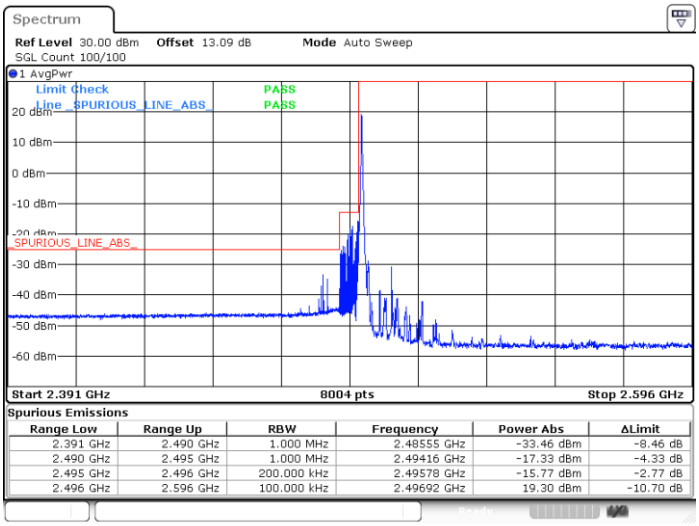
20M-L-1RB0-64Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48555 GHz	-33.46 dBm	-8.46 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49416 GHz	-17.33 dBm	-4.33 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49578 GHz	-15.77 dBm	-2.77 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49692 GHz	19.30 dBm	-10.70 dB

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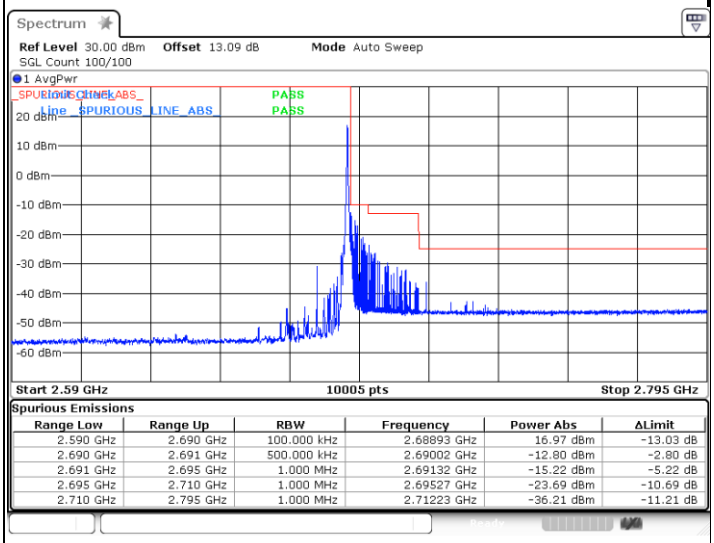
20M-H-1RBMAX-64Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68893 GHz	16.97 dBm	-13.03 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69002 GHz	-12.80 dBm	-2.80 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69132 GHz	-15.22 dBm	-5.22 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69527 GHz	-23.69 dBm	-10.69 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71223 GHz	-36.21 dBm	-11.21 dB

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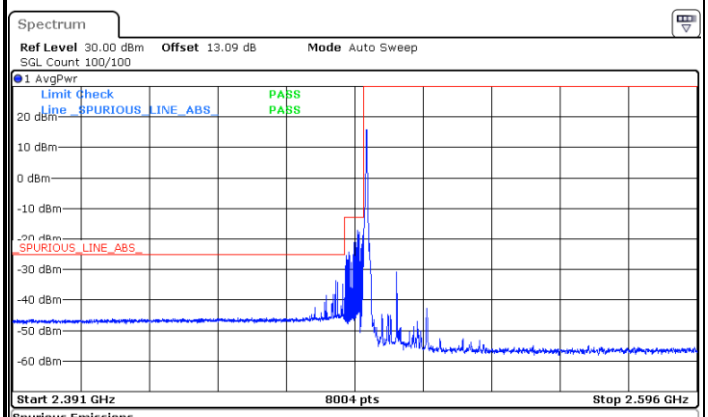
NR 20MHz

20M-L-1RB0-256Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48769 GHz	-33.57 dBm	-8.57 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49426 GHz	-17.08 dBm	-4.08 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49599 GHz	-17.90 dBm	-4.90 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49692 GHz	15.77 dBm	-14.23 dB

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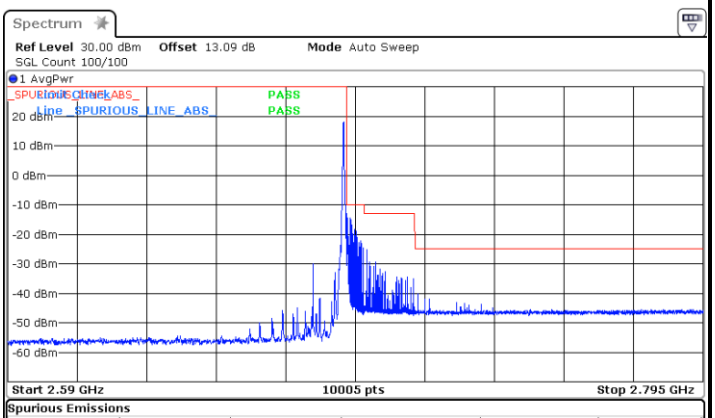
20M-H-1RBMAX-256Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68908 GHz	18.16 dBm	-11.84 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-13.09 dBm	-3.09 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69105 GHz	-14.33 dBm	-4.33 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69583 GHz	-25.30 dBm	-12.30 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71087 GHz	-40.15 dBm	-15.15 dB

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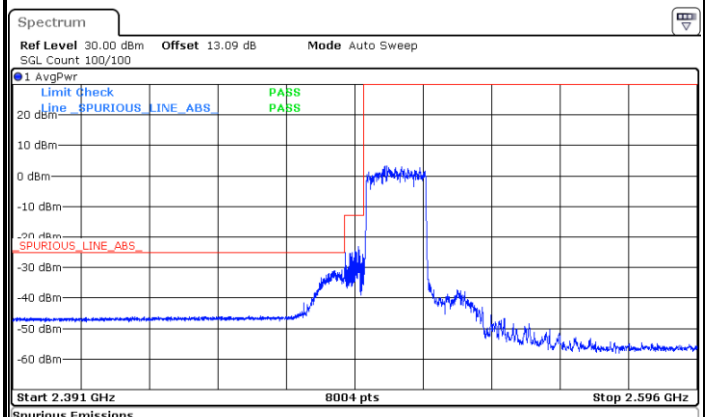
20M-L-FULLRB-B



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48948 GHz	-30.92 dBm	-5.92 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49465 GHz	-23.03 dBm	-10.03 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49588 GHz	-25.56 dBm	-12.56 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.50247 GHz	3.36 dBm	-26.64 dB

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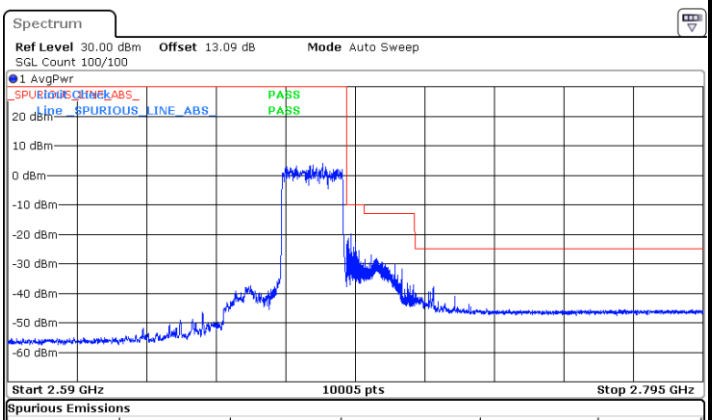
20M-H-FULLRB-B



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68278 GHz	4.06 dBm	-25.94 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69055 GHz	-21.38 dBm	-11.38 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69133 GHz	-19.76 dBm	-9.76 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69716 GHz	-27.15 dBm	-14.15 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71559 GHz	-37.73 dBm	-12.73 dB

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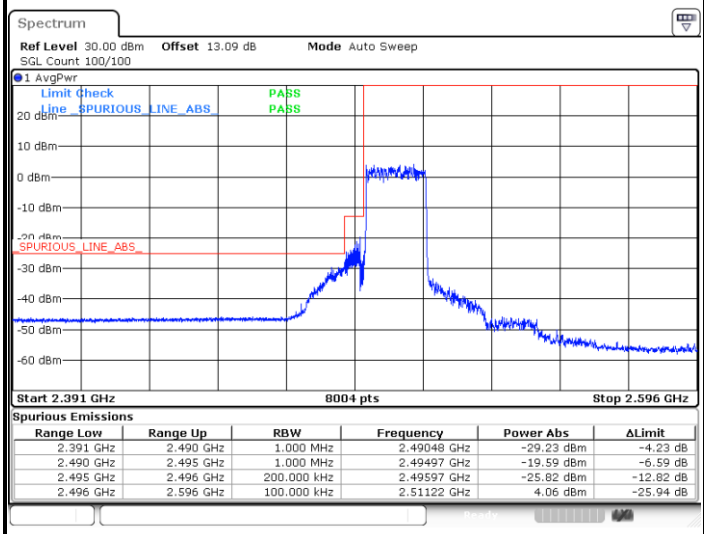
20M-L-FULLRB-Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49048 GHz	-29.23 dBm	-4.23 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49497 GHz	-19.59 dBm	-6.59 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49597 GHz	-25.82 dBm	-12.82 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51122 GHz	4.06 dBm	-25.94 dB

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20M-H-FULLRB-Q

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68348 GHz	4.46 dBm	-25.54 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69036 GHz	-23.51 dBm	-13.51 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69116 GHz	-23.80 dBm	-13.80 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69647 GHz	-27.63 dBm	-14.63 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71147 GHz	-38.60 dBm	-13.60 dB

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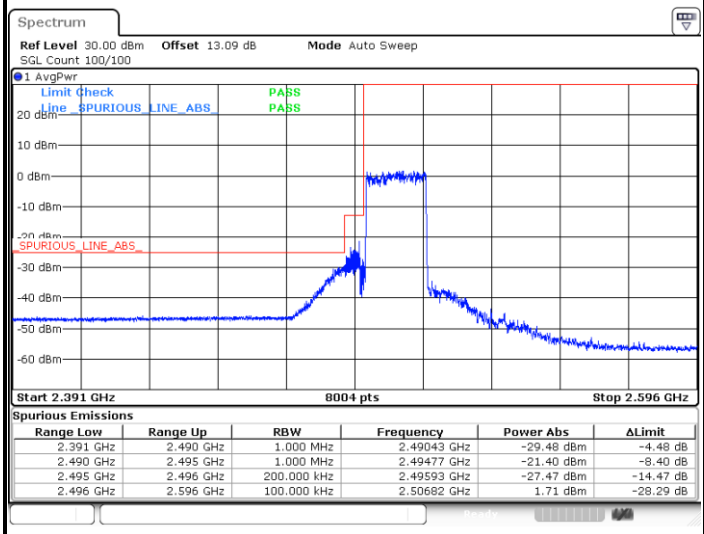
20M-L-FULLRB-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49043 GHz	-29.48 dBm	-4.48 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49477 GHz	-21.40 dBm	-8.40 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49593 GHz	-27.47 dBm	-14.47 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.50682 GHz	1.71 dBm	-28.29 dB

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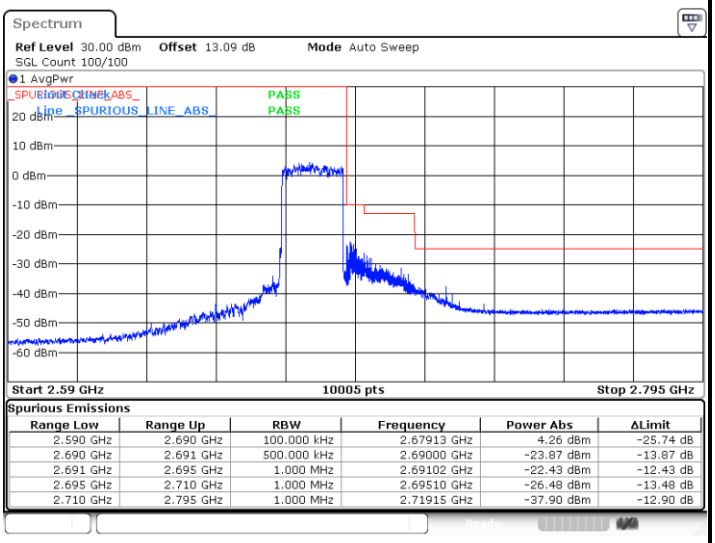
20M-H-FULLRB-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.67913 GHz	4.26 dBm	-25.74 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-23.87 dBm	-13.87 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69102 GHz	-22.43 dBm	-12.43 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69510 GHz	-26.48 dBm	-13.48 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71915 GHz	-37.90 dBm	-12.90 dB

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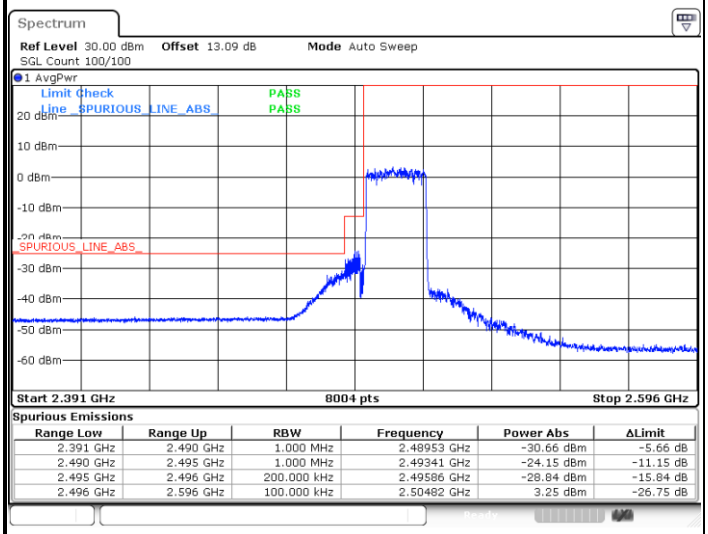
20M-L-FULLRB-64Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48953 GHz	-30.66 dBm	-5.66 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49341 GHz	-24.15 dBm	-11.15 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49586 GHz	-28.84 dBm	-15.84 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.50482 GHz	3.25 dBm	-26.75 dB

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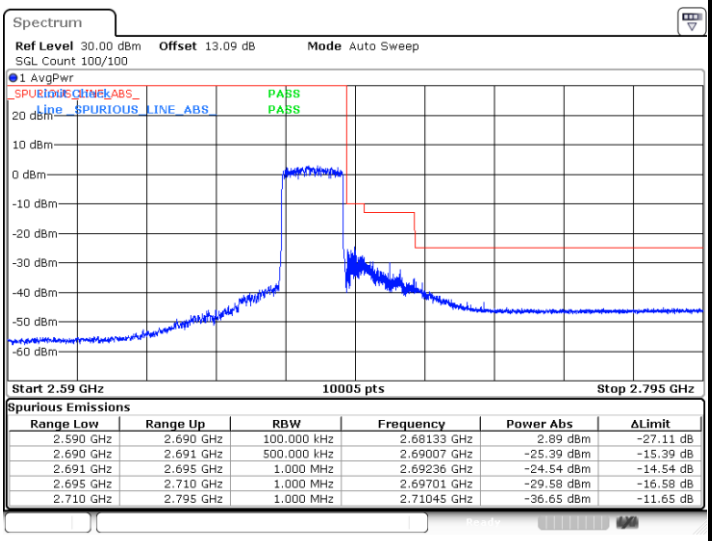
20M-H-FULLRB-64Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68133 GHz	2.89 dBm	-27.11 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69007 GHz	-25.39 dBm	-15.39 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69236 GHz	-24.54 dBm	-14.54 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69701 GHz	-29.58 dBm	-16.58 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71045 GHz	-36.65 dBm	-11.65 dB

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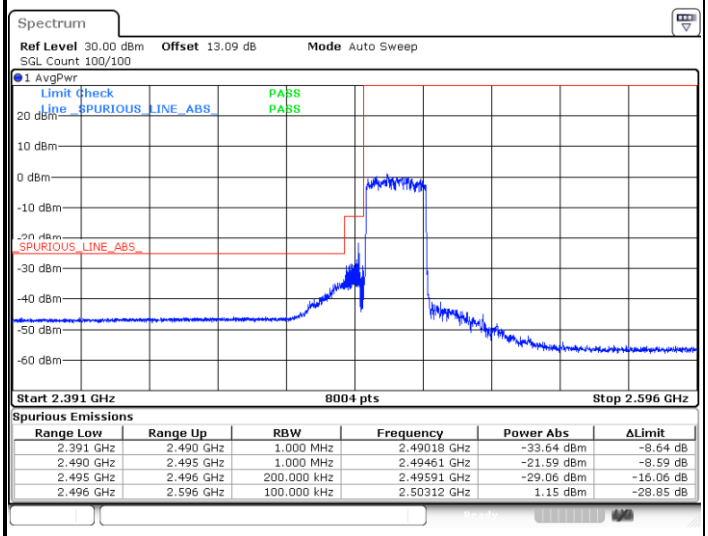
20M-L-FULLRB-256Q

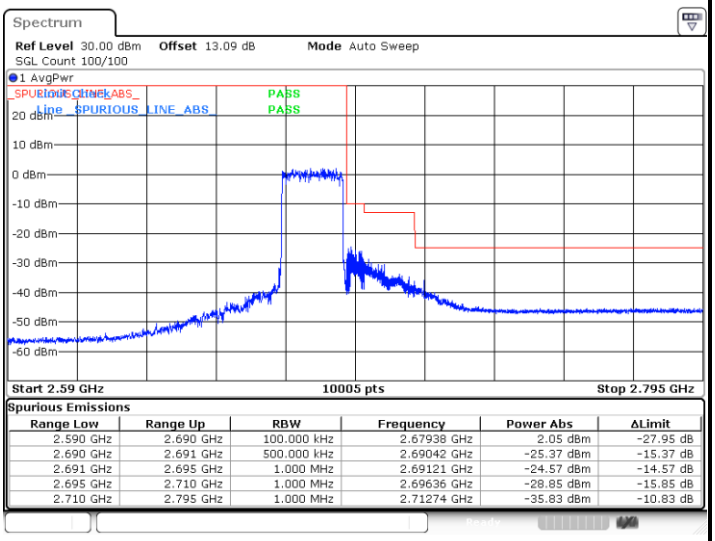


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49018 GHz	-33.64 dBm	-8.64 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49461 GHz	-21.59 dBm	-8.59 dB
2.495 GHz	2.496 GHz	200.000 kHz	2.49591 GHz	-29.06 dBm	-16.06 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.50312 GHz	1.15 dBm	-28.85 dB

Date: 26.NOV.2020 22:58:25

20M-H-FULLRB-256Q



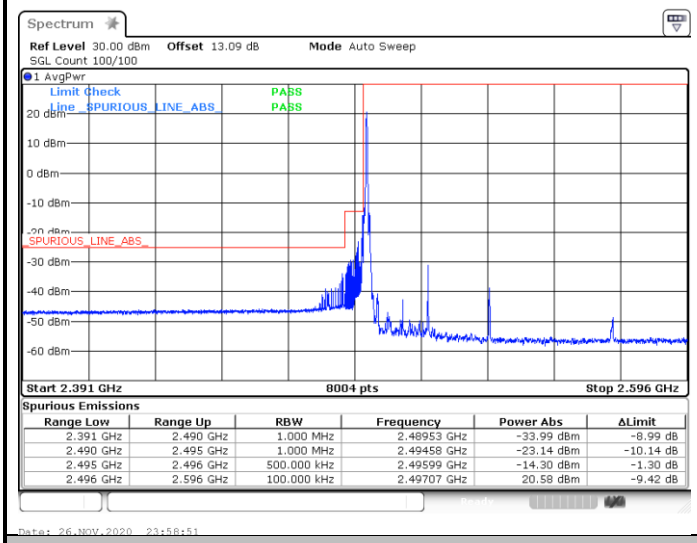
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.67938 GHz	2.05 dBm	-27.95 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69042 GHz	-25.37 dBm	-15.37 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69121 GHz	-24.57 dBm	-14.57 dB
2.695 GHz	2.710 GHz	1.000 MHz	2.69636 GHz	-28.85 dBm	-15.85 dB
2.710 GHz	2.795 GHz	1.000 MHz	2.71274 GHz	-35.83 dBm	-10.83 dB

Date: 26.NOV.2020 23:40:04

NR 40MHz

40M-L-1RB0-B

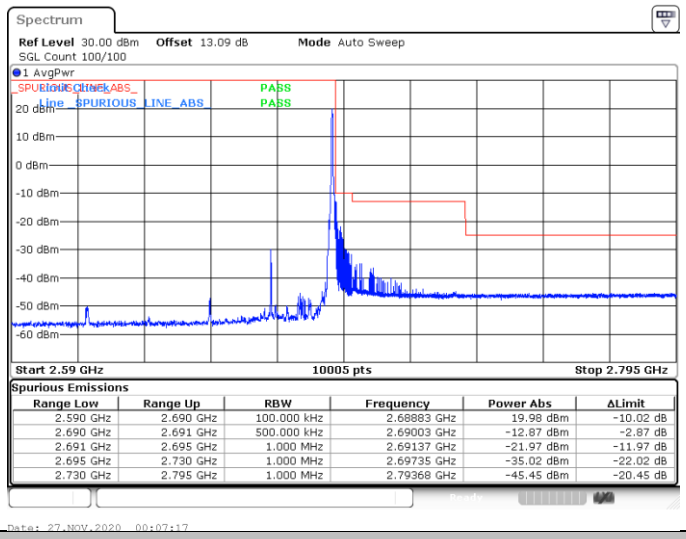


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48953 GHz	-33.99 dBm	-8.99 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49458 GHz	-23.14 dBm	-10.14 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-14.30 dBm	-1.30 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49707 GHz	20.58 dBm	-9.42 dB

Date: 26.NOV.2020 23:58:51

40M-H-1RBMAX-B

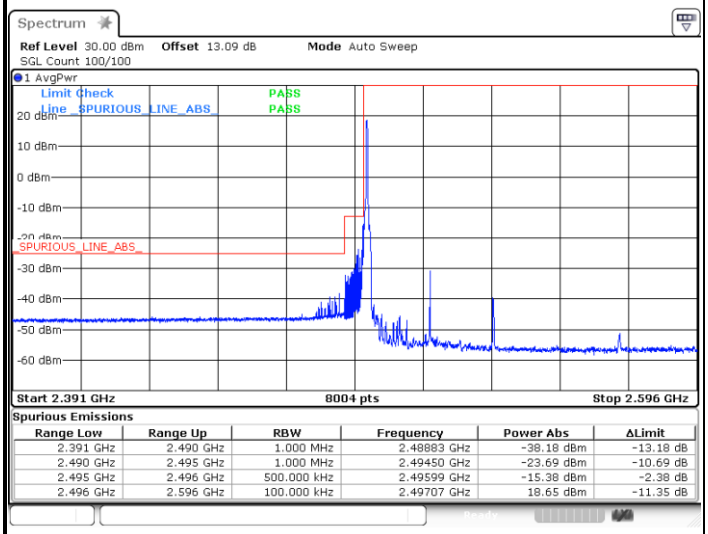


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68883 GHz	19.98 dBm	-10.02 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69003 GHz	-12.87 dBm	-2.87 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69137 GHz	-21.97 dBm	-11.97 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69735 GHz	-35.02 dBm	-22.02 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.79368 GHz	-45.45 dBm	-20.45 dB

Date: 27.NOV.2020 00:07:17

40M-L-1RB0-Q

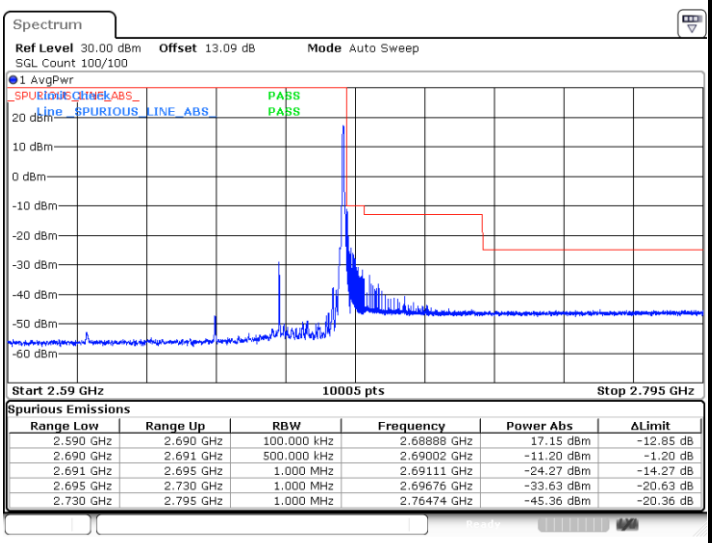


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48883 GHz	-38.18 dBm	-13.18 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49450 GHz	-23.69 dBm	-10.69 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-15.38 dBm	-2.38 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49707 GHz	18.65 dBm	-11.35 dB

Date: 26.NOV.2020 23:59:24

40M-H-1RBMAX-Q

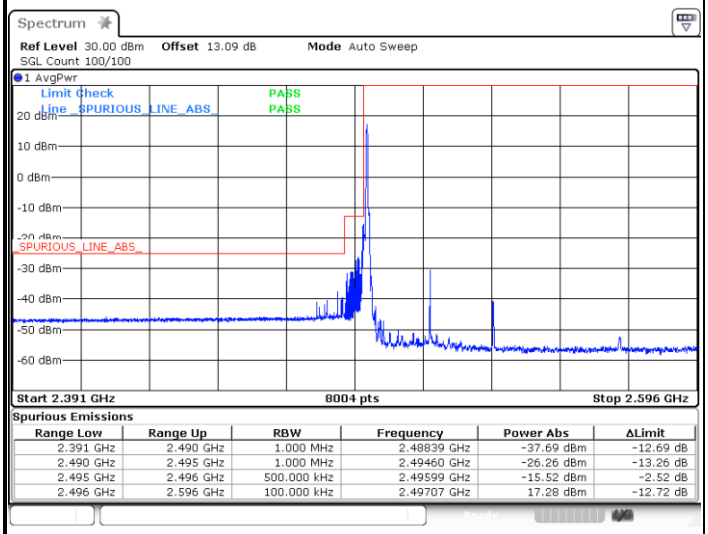


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68888 GHz	17.15 dBm	-12.85 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69002 GHz	-11.20 dBm	-1.20 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69111 GHz	-24.27 dBm	-14.27 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69676 GHz	-33.63 dBm	-20.63 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.76474 GHz	-45.36 dBm	-20.36 dB

Date: 27.NOV.2020 00:07:37

40M-L-1RB0-16Q

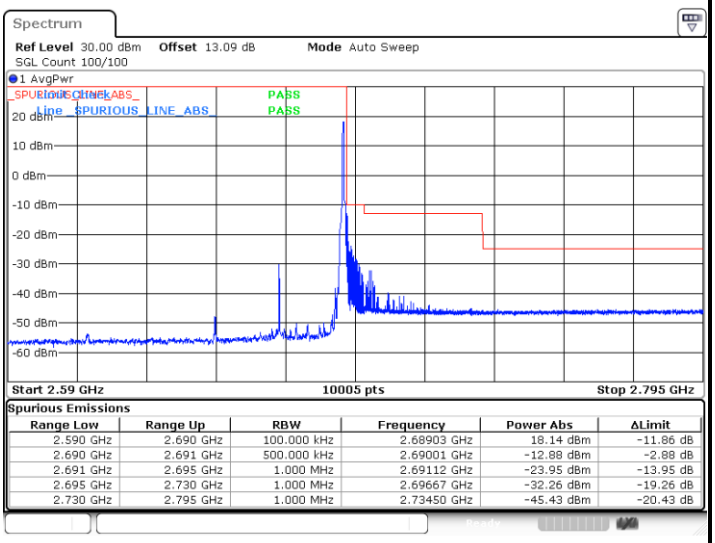


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48839 GHz	-37.69 dBm	-12.69 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49460 GHz	-26.26 dBm	-13.26 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-15.52 dBm	-2.52 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49707 GHz	17.28 dBm	-12.72 dB

Date: 27.NOV.2020 00:07:30

40M-H-1RBMAX-16Q

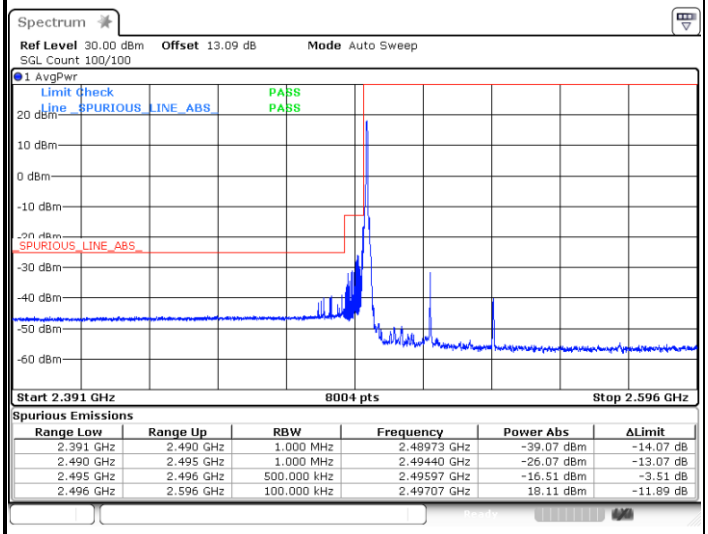


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68903 GHz	18.14 dBm	-11.86 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69001 GHz	-12.88 dBm	-2.88 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69112 GHz	-23.95 dBm	-13.95 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69667 GHz	-32.26 dBm	-19.26 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.73450 GHz	-45.43 dBm	-20.43 dB

Date: 27.NOV.2020 00:07:53

40M-L-1RB0-64Q

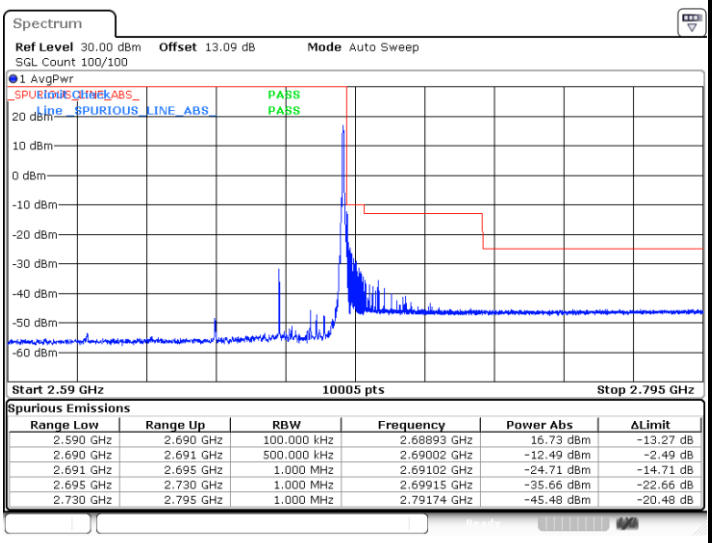


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48973 GHz	-39.07 dBm	-14.07 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49440 GHz	-26.07 dBm	-13.07 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49597 GHz	-16.51 dBm	-3.51 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49707 GHz	18.11 dBm	-11.89 dB

Date: 27.NOV.2020 00:01:04

40M-H-1RBMAX-64Q

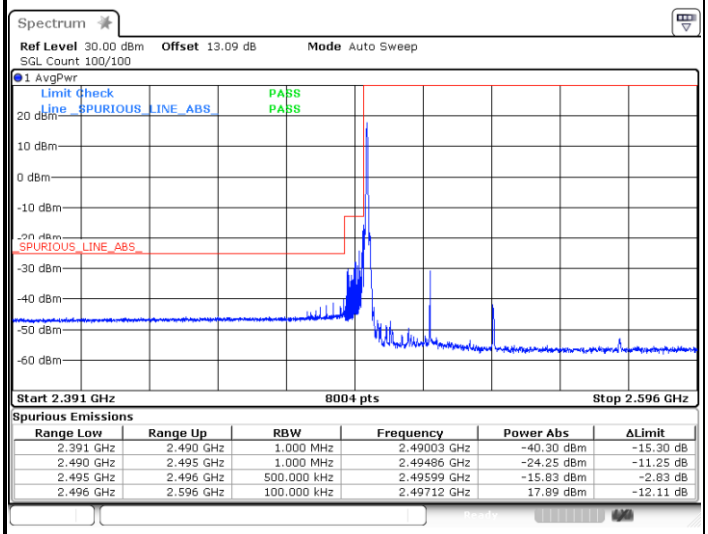


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68893 GHz	16.73 dBm	-13.27 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69002 GHz	-12.49 dBm	-2.49 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69102 GHz	-24.71 dBm	-14.71 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69915 GHz	-35.66 dBm	-22.66 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.79174 GHz	-45.48 dBm	-20.48 dB

Date: 27.NOV.2020 00:08:08

40M-L-1RB0-256Q

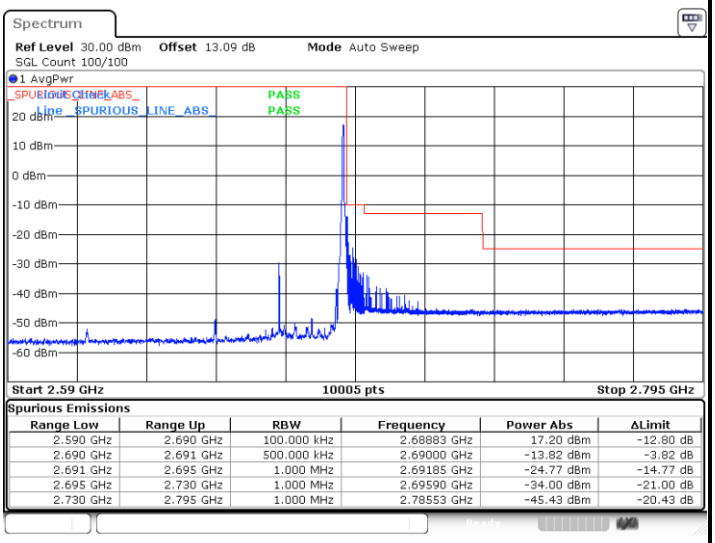


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49003 GHz	-40.30 dBm	-15.30 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49486 GHz	-24.25 dBm	-11.25 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-15.83 dBm	-2.83 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49712 GHz	17.89 dBm	-12.11 dB

Date: 27.NOV.2020 00:01:30

40M-H-1RBMAX-256Q

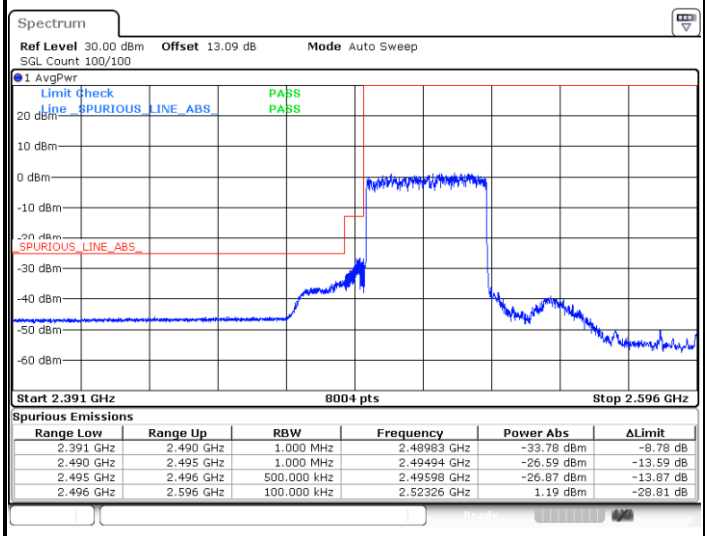


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68883 GHz	17.20 dBm	-12.80 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-13.82 dBm	-3.82 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69185 GHz	-24.77 dBm	-14.77 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69590 GHz	-34.00 dBm	-21.00 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.78553 GHz	-45.43 dBm	-20.43 dB

Date: 27.NOV.2020 00:08:23

40M-L-FULLRB-B

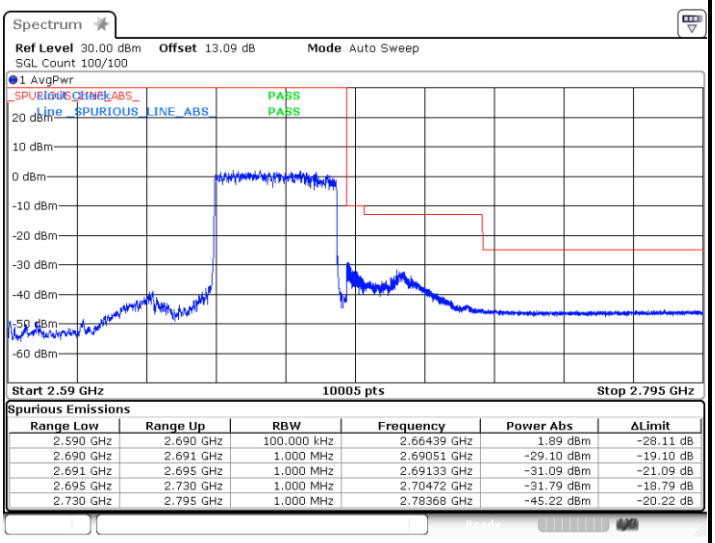


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48983 GHz	-33.78 dBm	-8.78 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49494 GHz	-26.59 dBm	-13.59 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49598 GHz	-26.87 dBm	-13.87 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.52326 GHz	1.19 dBm	-28.81 dB

Date: 26.NOV.2020 23:48:55

40M-H-FULLRB-B

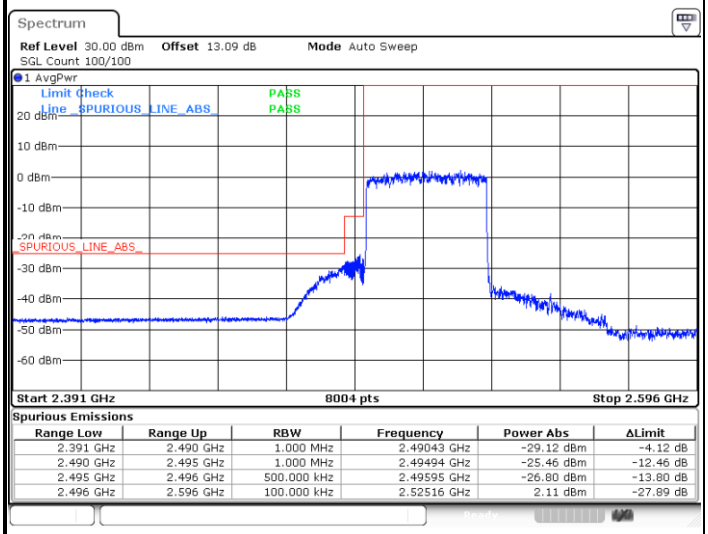


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66439 GHz	1.89 dBm	-28.11 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69051 GHz	-29.10 dBm	-19.10 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69133 GHz	-31.09 dBm	-21.09 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.70472 GHz	-31.79 dBm	-18.79 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.78368 GHz	-45.22 dBm	-20.22 dB

Date: 27.NOV.2020 00:04:07

40M-L-FULLRB-Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49043 GHz	-29.12 dBm	-4.12 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49494 GHz	-25.46 dBm	-12.46 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49595 GHz	-26.80 dBm	-13.80 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.52516 GHz	2.11 dBm	-27.89 dB

Date: 26.NOV.2020 23:49:53

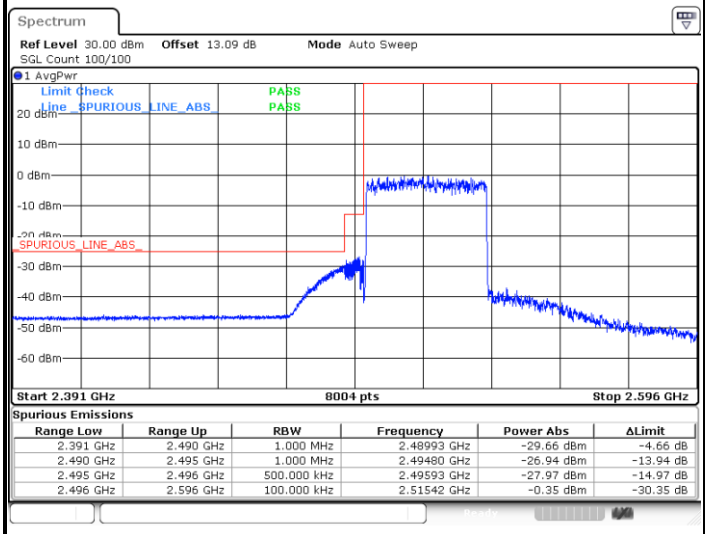
40M-H-FULLRB-Q

Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.67013 GHz	2.91 dBm	-27.09 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69082 GHz	-27.17 dBm	-17.17 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69146 GHz	-28.71 dBm	-18.71 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69679 GHz	-31.22 dBm	-18.22 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.73229 GHz	-43.89 dBm	-18.89 dB

Date: 27.NOV.2020 00:05:12

40M-L-FULLRB-16Q

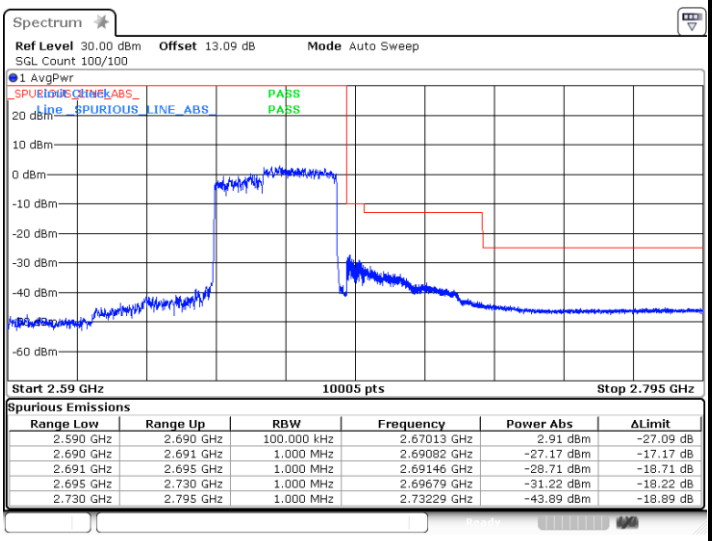


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48993 GHz	-29.66 dBm	-4.66 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49480 GHz	-26.94 dBm	-13.94 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49593 GHz	-27.97 dBm	-14.97 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51542 GHz	-0.35 dBm	-30.35 dB

Date: 26.NOV.2020 23:50:48

40M-H-FULLRB-16Q

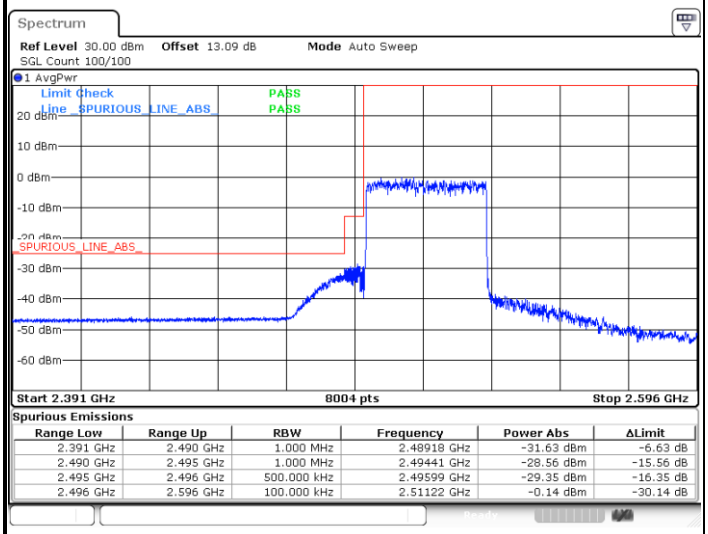


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.67013 GHz	2.91 dBm	-27.09 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69082 GHz	-27.17 dBm	-17.17 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69146 GHz	-28.71 dBm	-18.71 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69679 GHz	-31.22 dBm	-18.22 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.73229 GHz	-43.89 dBm	-18.89 dB

Date: 27.NOV.2020 00:05:12

40M-L-FULLRB-64Q

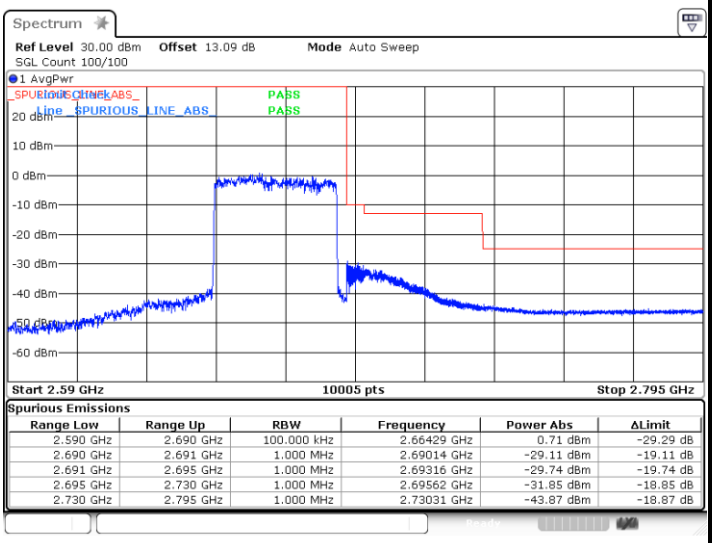


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48918 GHz	-31.63 dBm	-6.63 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49441 GHz	-28.56 dBm	-15.56 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-29.35 dBm	-16.35 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51122 GHz	-0.14 dBm	-30.14 dB

Date: 26.NOV.2020 23:53:41

40M-H-FULLRB-64Q

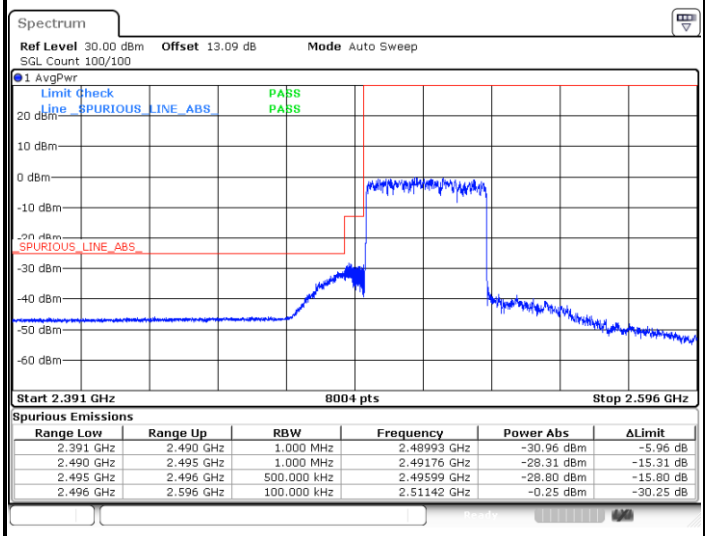


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66429 GHz	0.71 dBm	-29.29 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69014 GHz	-29.11 dBm	-19.11 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69316 GHz	-29.74 dBm	-19.74 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69562 GHz	-31.85 dBm	-18.85 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.73031 GHz	-43.87 dBm	-18.87 dB

Date: 27.NOV.2020 00:05:58

40M-L-FULLRB-256Q

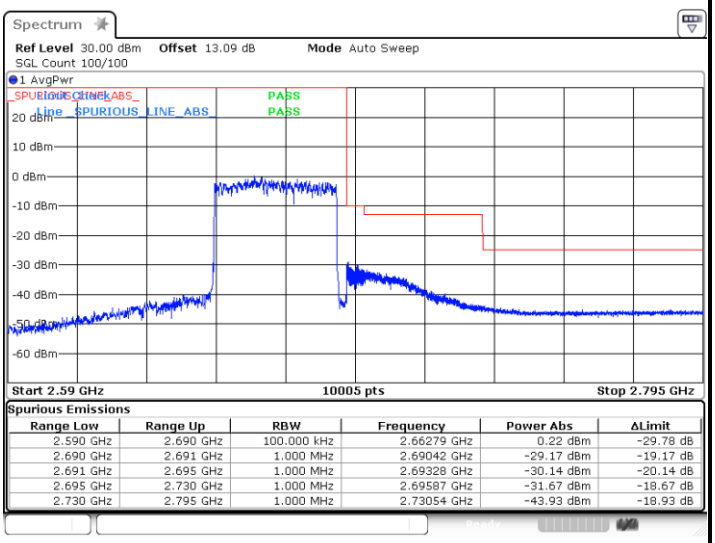


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48993 GHz	-30.96 dBm	-5.96 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49176 GHz	-28.31 dBm	-15.31 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-28.80 dBm	-15.80 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51142 GHz	-0.25 dBm	-30.25 dB

Date: 26.NOV.2020 23:53:59

40M-H-FULLRB-256Q



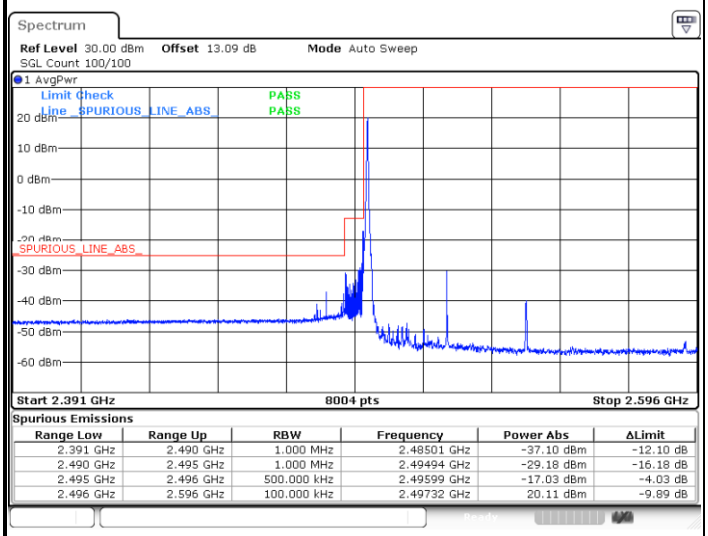
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66279 GHz	0.22 dBm	-29.78 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69042 GHz	-29.17 dBm	-19.17 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69328 GHz	-30.14 dBm	-20.14 dB
2.695 GHz	2.730 GHz	1.000 MHz	2.69587 GHz	-31.67 dBm	-18.67 dB
2.730 GHz	2.795 GHz	1.000 MHz	2.73054 GHz	-43.93 dBm	-18.93 dB

Date: 27.NOV.2020 00:06:22

NR 50MHz

50M-L-1RB0-B

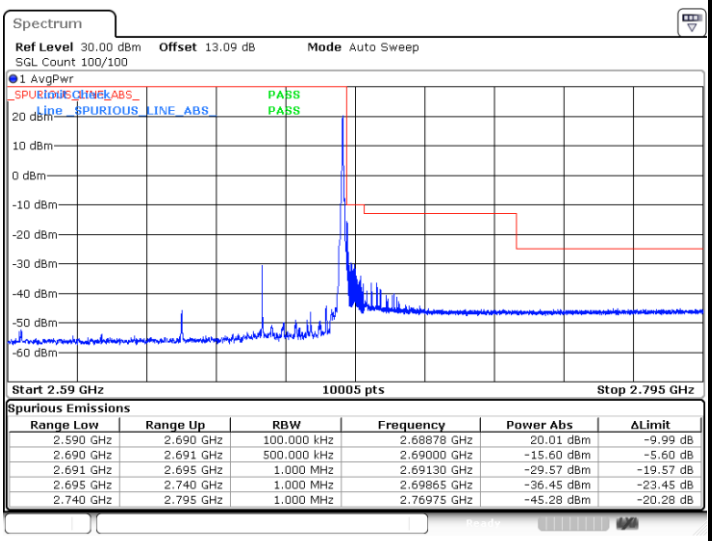


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48501 GHz	-37.10 dBm	-12.10 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49494 GHz	-29.18 dBm	-16.18 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-17.03 dBm	-4.03 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49732 GHz	20.11 dBm	-9.89 dB

Date: 27.NOV.2020 00:12:00

50M-H-1RBMAX-B

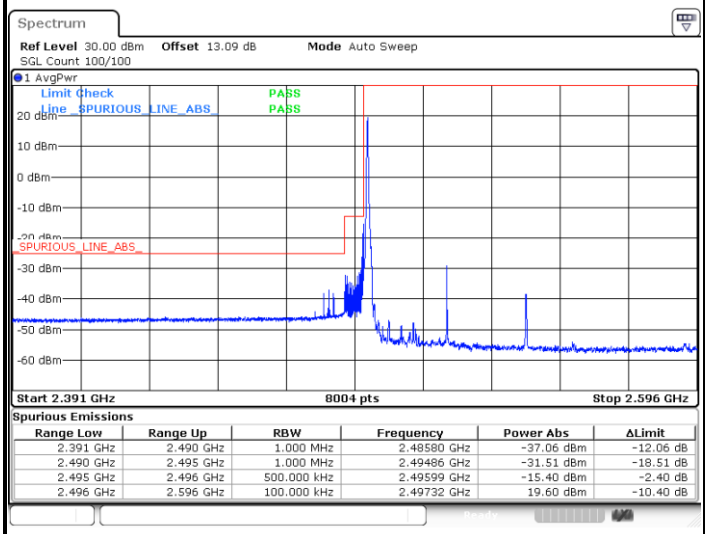


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68878 GHz	20.01 dBm	-9.99 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69000 GHz	-15.60 dBm	-5.60 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69130 GHz	-29.57 dBm	-19.57 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69865 GHz	-36.45 dBm	-23.45 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.76975 GHz	-45.28 dBm	-20.28 dB

Date: 27.NOV.2020 00:17:34

50M-L-1RB0-Q

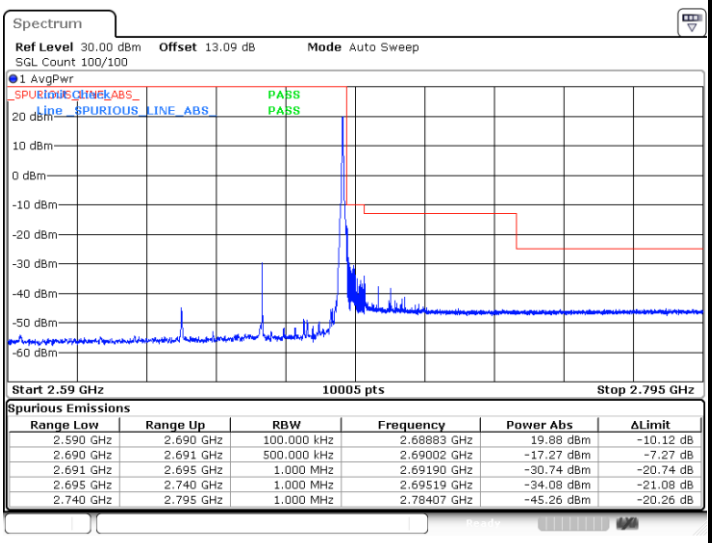


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48580 GHz	-37.06 dBm	-12.06 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49486 GHz	-31.51 dBm	-18.51 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-15.40 dBm	-2.40 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49732 GHz	19.60 dBm	-10.40 dB

Date: 27.NOV.2020 00:13:01

50M-H-1RBMAX-Q

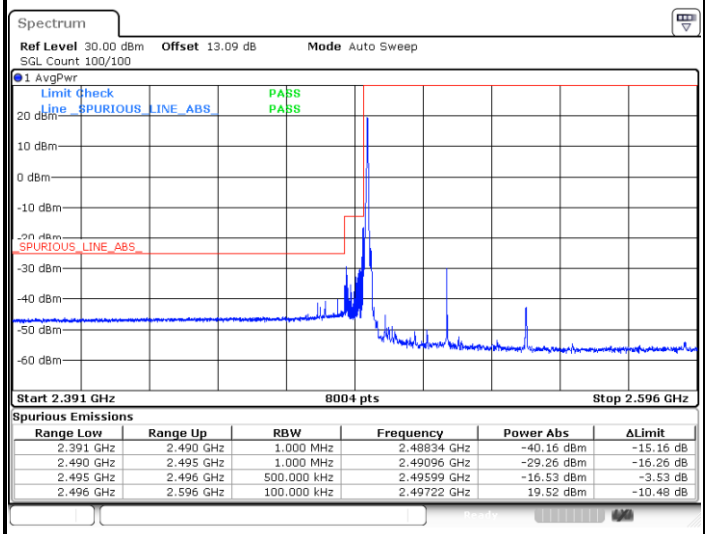


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68883 GHz	19.88 dBm	-10.12 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69002 GHz	-17.27 dBm	-7.27 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69190 GHz	-30.74 dBm	-20.74 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69519 GHz	-34.08 dBm	-21.08 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.78407 GHz	-45.26 dBm	-20.26 dB

Date: 27.NOV.2020 00:17:50

50M-L-1RB0-16Q

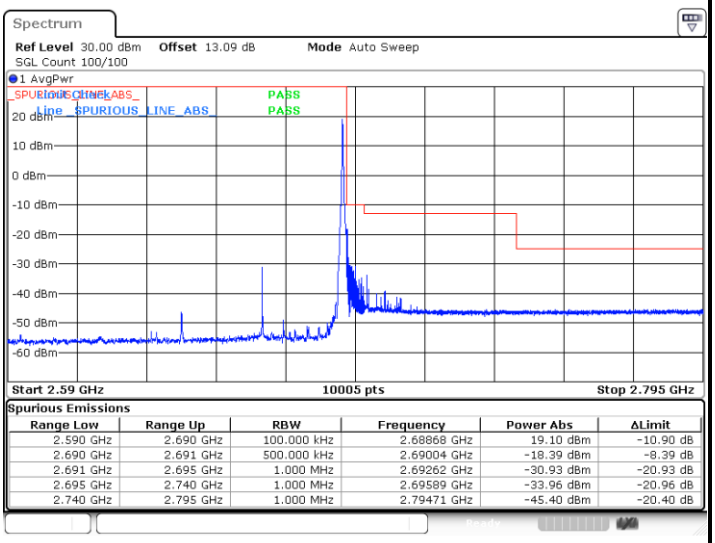


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48834 GHz	-40.16 dBm	-15.16 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49096 GHz	-29.26 dBm	-16.26 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49599 GHz	-16.53 dBm	-3.53 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49722 GHz	19.52 dBm	-10.48 dB

Date: 27.NOV.2020 00:13:18

50M-H-1RBMAX-16Q

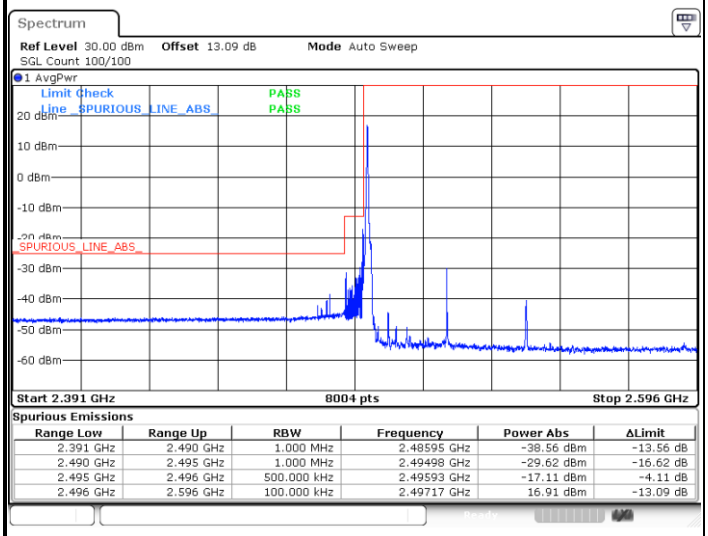


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68868 GHz	19.10 dBm	-10.90 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69004 GHz	-18.39 dBm	-8.39 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69262 GHz	-30.93 dBm	-20.93 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69589 GHz	-33.96 dBm	-20.96 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.79471 GHz	-45.40 dBm	-20.40 dB

Date: 27.NOV.2020 00:18:05

50M-L-1RB0-64Q

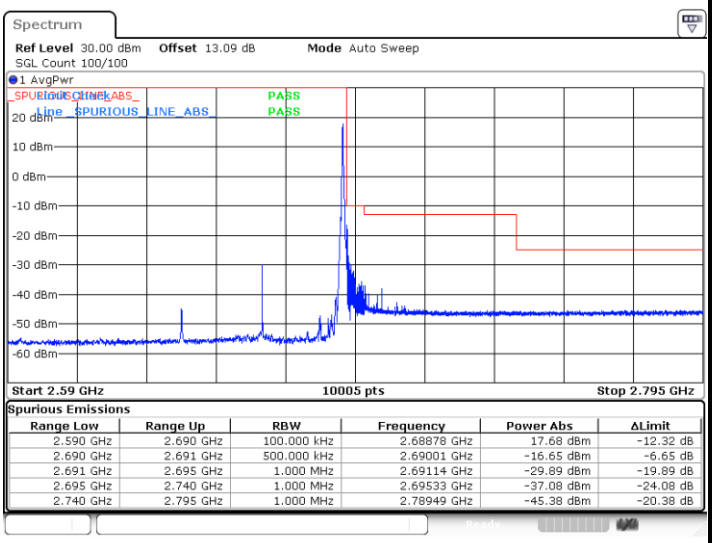


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48595 GHz	-38.56 dBm	-13.56 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49498 GHz	-29.62 dBm	-16.62 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49593 GHz	-17.11 dBm	-4.11 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49717 GHz	16.91 dBm	-13.09 dB

Date: 27.NOV.2020 00:13:34

50M-H-1RBMAX-64Q

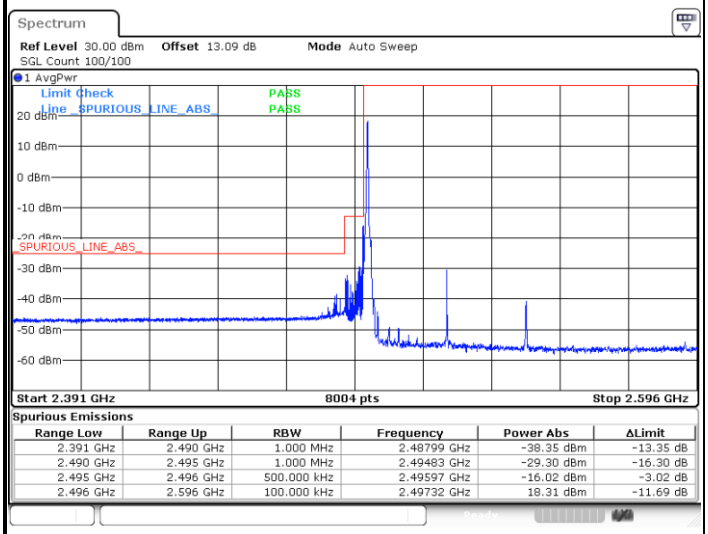


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68878 GHz	17.68 dBm	-12.32 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69001 GHz	-16.65 dBm	-6.65 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69114 GHz	-29.89 dBm	-19.89 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69533 GHz	-37.08 dBm	-24.08 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.78949 GHz	-45.38 dBm	-20.38 dB

Date: 27.NOV.2020 00:18:24

50M-L-1RB0-256Q

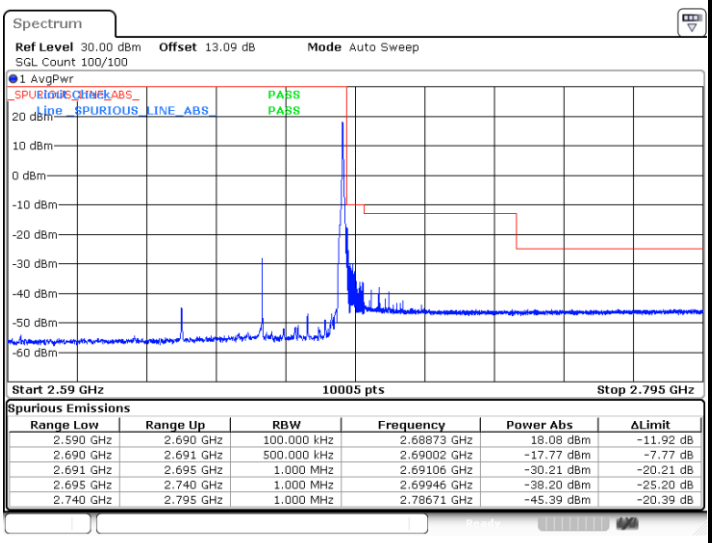


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48799 GHz	-38.35 dBm	-13.35 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49483 GHz	-29.30 dBm	-16.30 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49597 GHz	-16.02 dBm	-3.02 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.49732 GHz	18.31 dBm	-11.69 dB

Date: 27.NOV.2020 00:13:50

50M-H-1RBMAX-256Q

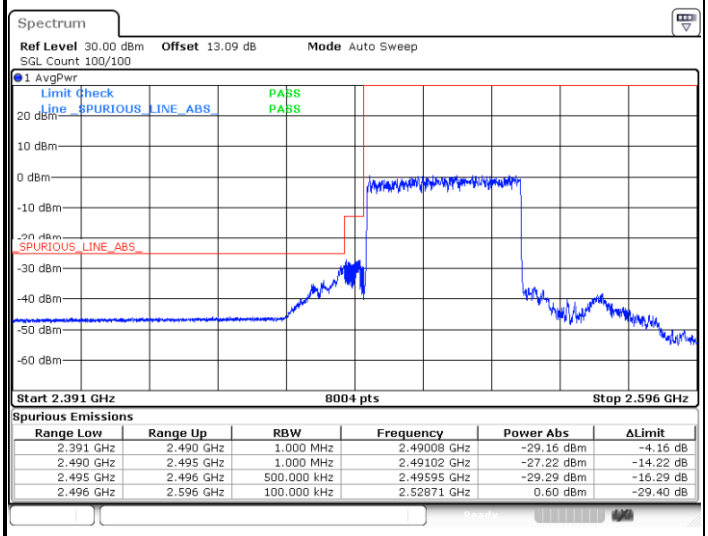


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68873 GHz	18.08 dBm	-11.92 dB
2.690 GHz	2.691 GHz	500.000 kHz	2.69002 GHz	-17.77 dBm	-7.77 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69106 GHz	-30.21 dBm	-20.21 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69946 GHz	-38.20 dBm	-25.20 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.78671 GHz	-45.39 dBm	-20.39 dB

Date: 27.NOV.2020 00:18:38

50M-L-FULLRB-B

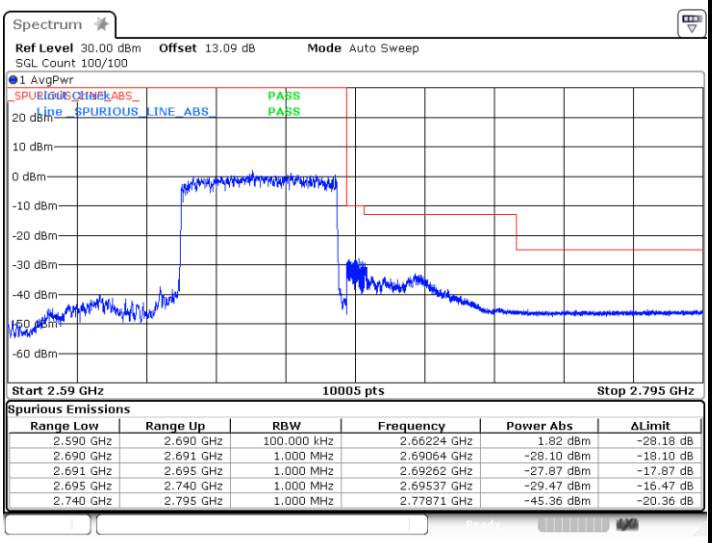


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49008 GHz	-29.16 dBm	-4.16 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49102 GHz	-27.22 dBm	-14.22 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49595 GHz	-29.29 dBm	-16.29 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.52871 GHz	0.60 dBm	-29.40 dB

Date: 27.NOV.2020 00:09:40

50M-H-FULLRB-B

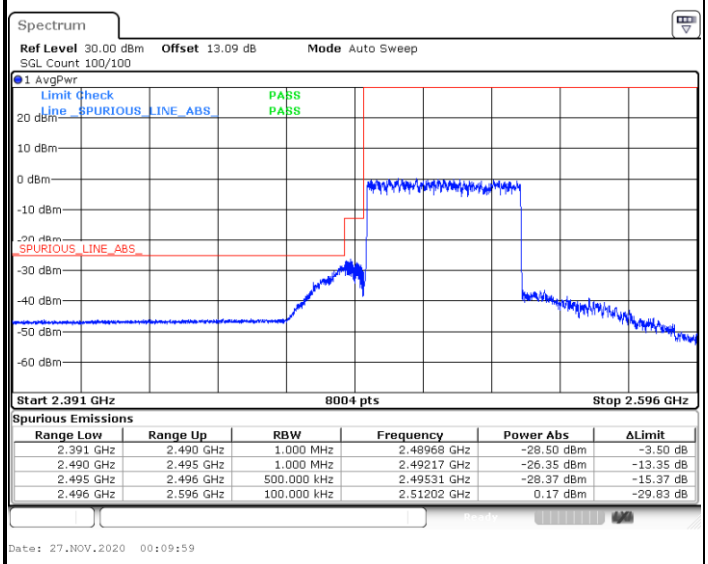


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66224 GHz	1.82 dBm	-28.18 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69064 GHz	-28.10 dBm	-18.10 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69262 GHz	-27.87 dBm	-17.87 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69537 GHz	-29.47 dBm	-16.47 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.77871 GHz	-45.36 dBm	-20.36 dB

Date: 27.NOV.2020 00:15:24

50M-L-FULLRB-Q

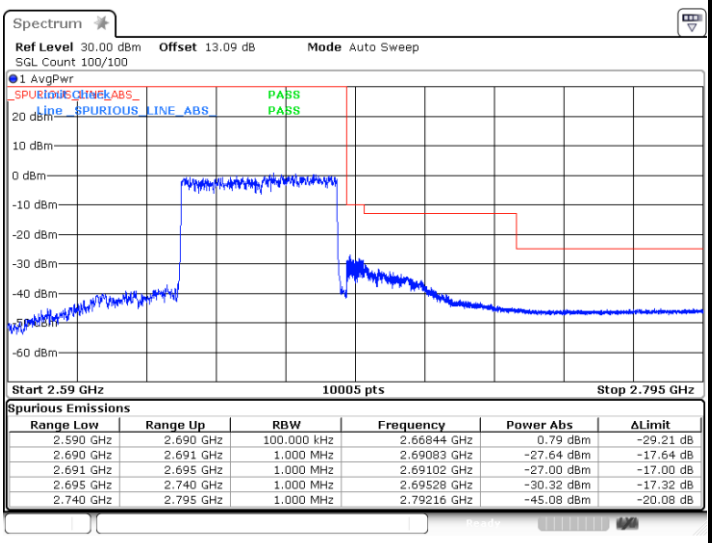


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48968 GHz	-28.50 dBm	-3.50 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49217 GHz	-26.35 dBm	-13.35 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49531 GHz	-28.37 dBm	-15.37 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51202 GHz	0.17 dBm	-29.83 dB

Date: 27.NOV.2020 00:09:59

50M-H-FULLRB-Q

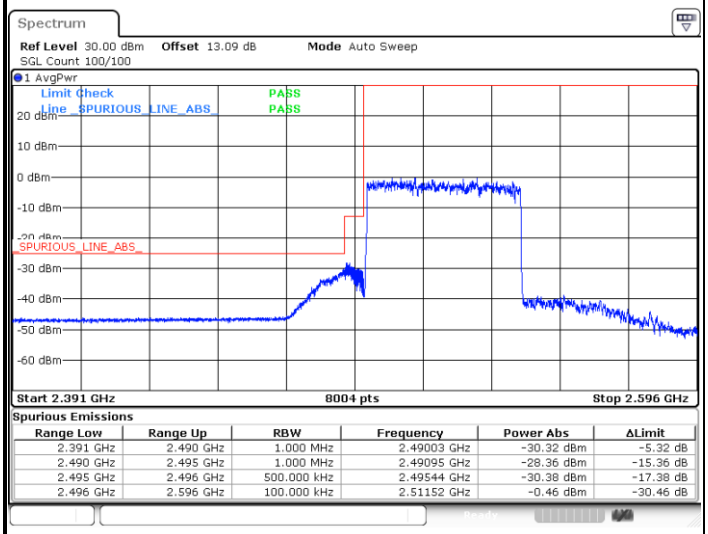


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66844 GHz	0.79 dBm	-29.21 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69083 GHz	-27.64 dBm	-17.64 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69102 GHz	-27.00 dBm	-17.00 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69528 GHz	-30.32 dBm	-17.32 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.79216 GHz	-45.08 dBm	-20.08 dB

Date: 27.NOV.2020 00:15:45

50M-L-FULLRB-16Q

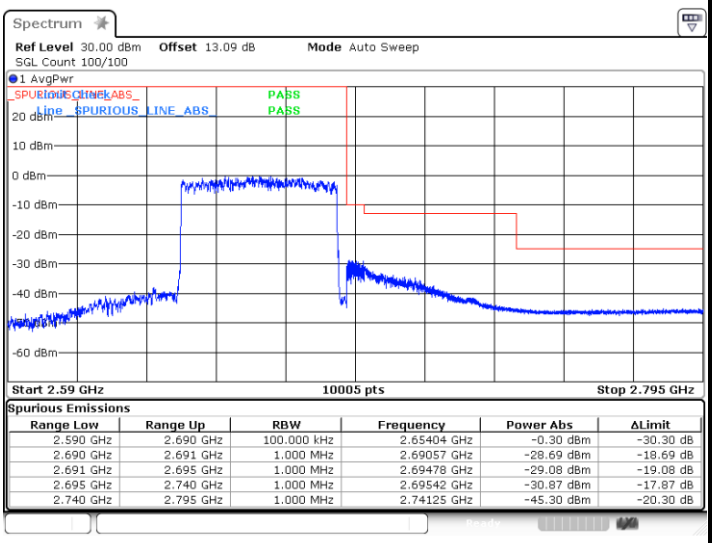


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49003 GHz	-30.32 dBm	-5.32 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49095 GHz	-28.36 dBm	-15.36 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49544 GHz	-30.38 dBm	-17.38 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.51152 GHz	-0.46 dBm	-30.46 dB

Date: 27.NOV.2020 00:10:50

50M-H-FULLRB-16Q

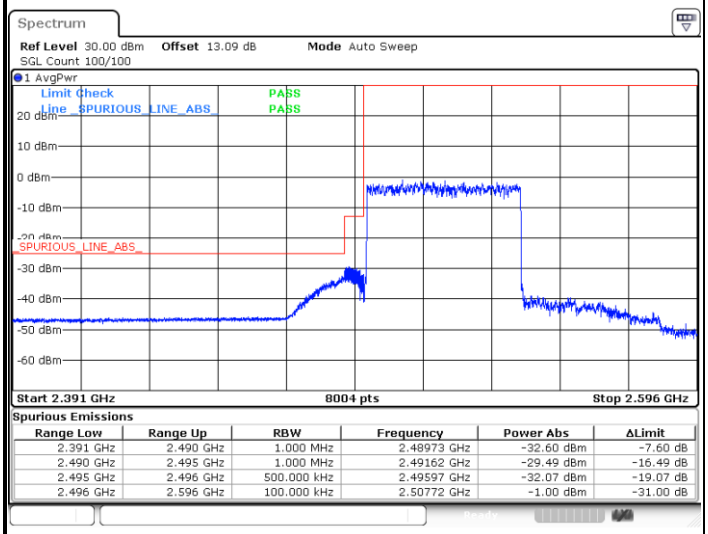


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.65404 GHz	-0.30 dBm	-30.30 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69057 GHz	-28.69 dBm	-18.69 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69478 GHz	-29.08 dBm	-19.08 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69542 GHz	-30.87 dBm	-17.87 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.74125 GHz	-45.30 dBm	-20.30 dB

Date: 27.NOV.2020 00:16:03

50M-L-FULLRB-64Q

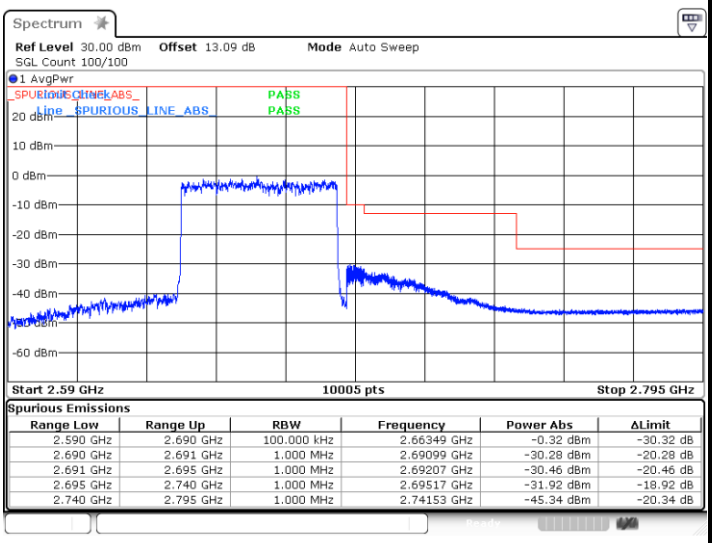


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48973 GHz	-32.60 dBm	-7.60 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49162 GHz	-29.49 dBm	-16.49 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49597 GHz	-32.07 dBm	-19.07 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.50772 GHz	-1.00 dBm	-31.00 dB

Date: 27.NOV.2020 00:11:09

50M-H-FULLRB-64Q

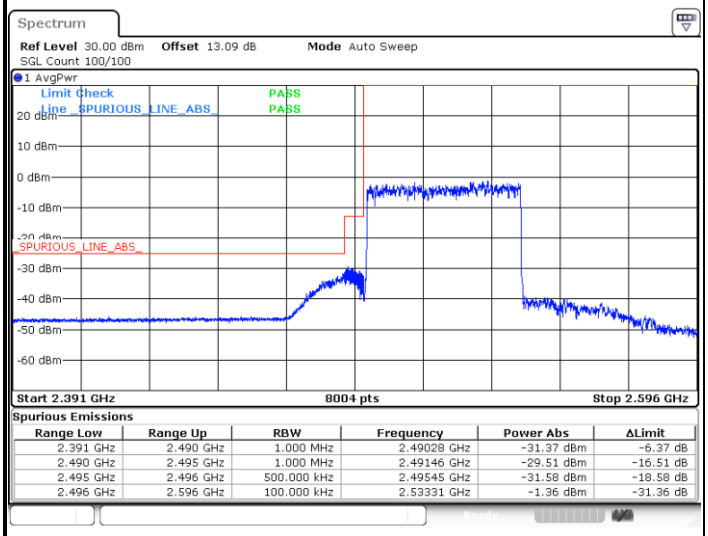


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.66349 GHz	-0.32 dBm	-30.32 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69099 GHz	-30.28 dBm	-20.28 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69207 GHz	-30.46 dBm	-20.46 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69517 GHz	-31.92 dBm	-18.92 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.74153 GHz	-45.34 dBm	-20.34 dB

Date: 27.NOV.2020 00:16:27

50M-L-FULLRB-256Q

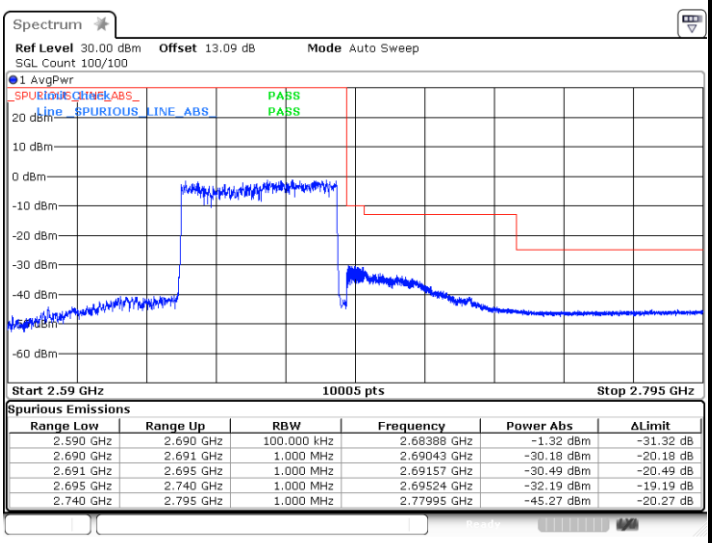


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.49028 GHz	-31.37 dBm	-6.37 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49146 GHz	-29.51 dBm	-16.51 dB
2.495 GHz	2.496 GHz	500.000 kHz	2.49545 GHz	-31.58 dBm	-18.58 dB
2.496 GHz	2.596 GHz	100.000 kHz	2.53331 GHz	-1.36 dBm	-31.36 dB

Date: 27.NOV.2020 00:11:26

50M-H-FULLRB-256Q



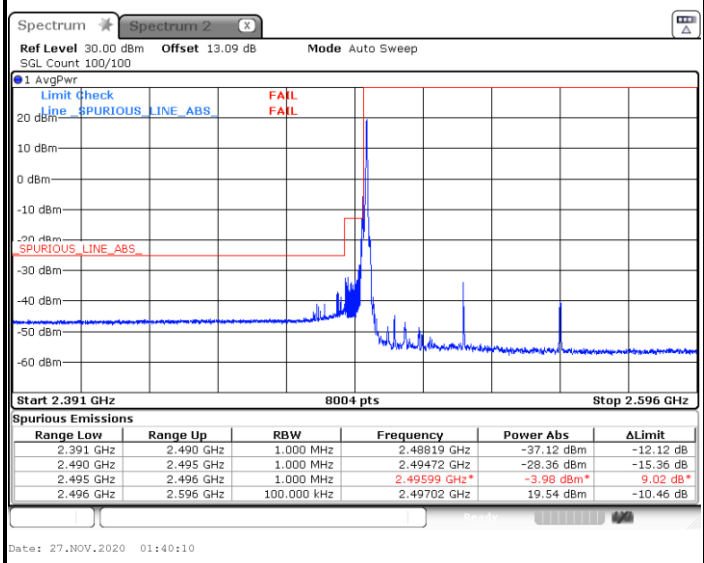
Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68388 GHz	-1.32 dBm	-31.32 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69043 GHz	-30.18 dBm	-20.18 dB
2.691 GHz	2.695 GHz	1.000 MHz	2.69157 GHz	-30.49 dBm	-20.49 dB
2.695 GHz	2.740 GHz	1.000 MHz	2.69524 GHz	-32.19 dBm	-19.19 dB
2.740 GHz	2.795 GHz	1.000 MHz	2.77995 GHz	-45.27 dBm	-20.27 dB

Date: 27.NOV.2020 00:16:47

NR 60MHz

60M-L-1RB0-B

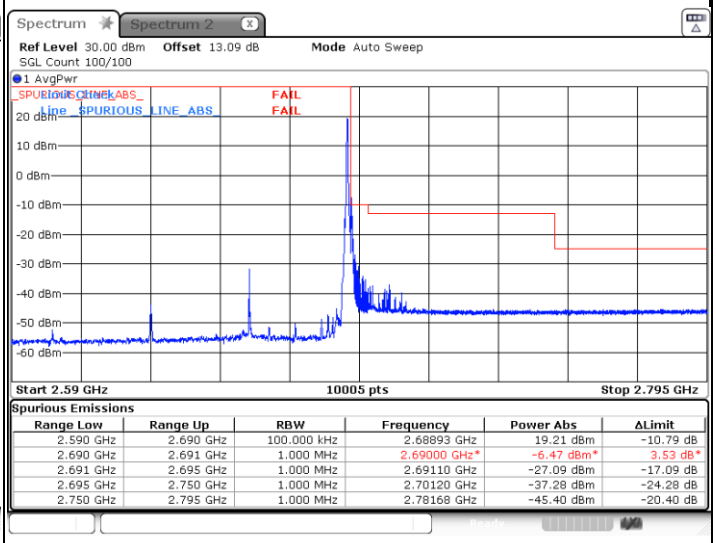


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48819 GHz	-37.12 dBm	-12.12 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49472 GHz	-28.36 dBm	-15.36 dB
2.495 GHz	2.496 GHz	1.000 MHz	2.49599 GHz*	-3.98 dBm*	9.02 dB*
2.496 GHz	2.596 GHz	100.000 kHz	2.49702 GHz	19.54 dBm	-10.46 dB

Date: 27.NOV.2020 01:40:10

60M-H-1RBMAX-B

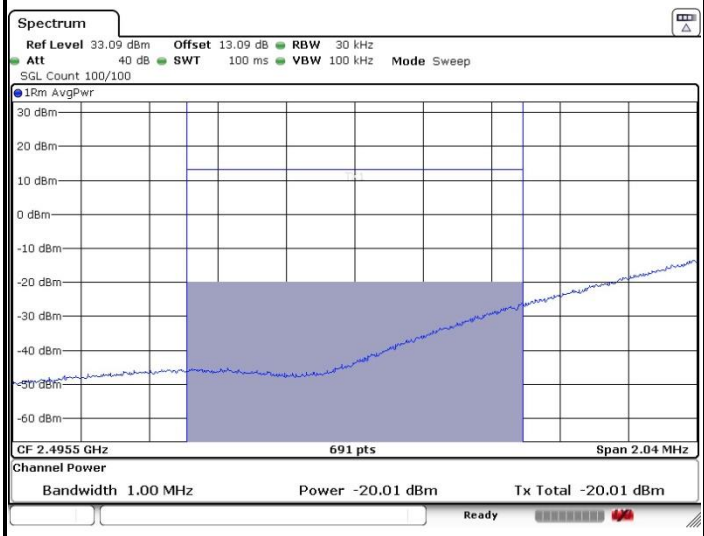


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68893 GHz	19.21 dBm	-10.79 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69000 GHz*	-6.47 dBm*	3.53 dB*
2.691 GHz	2.695 GHz	1.000 MHz	2.69110 GHz	-27.09 dBm	-17.09 dB
2.695 GHz	2.750 GHz	1.000 MHz	2.70120 GHz	-37.28 dBm	-24.28 dB
2.750 GHz	2.795 GHz	1.000 MHz	2.78168 GHz	-45.40 dBm	-20.40 dB

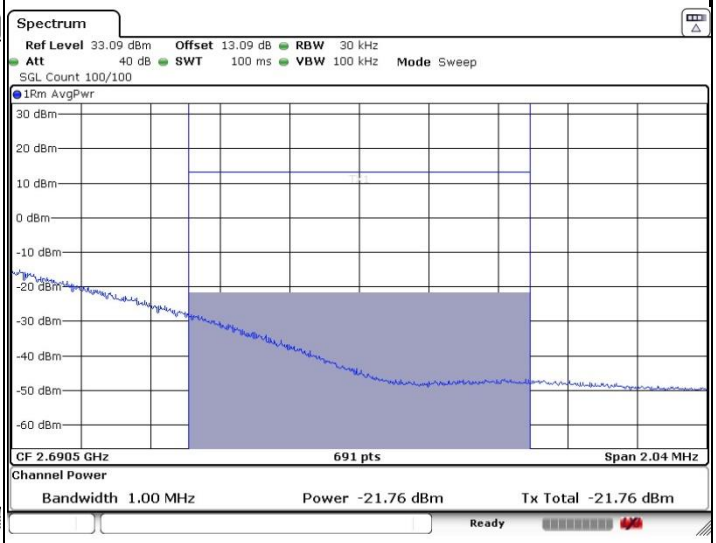
Date: 27.NOV.2020 02:07:27

Channel power < -13dBm PASS



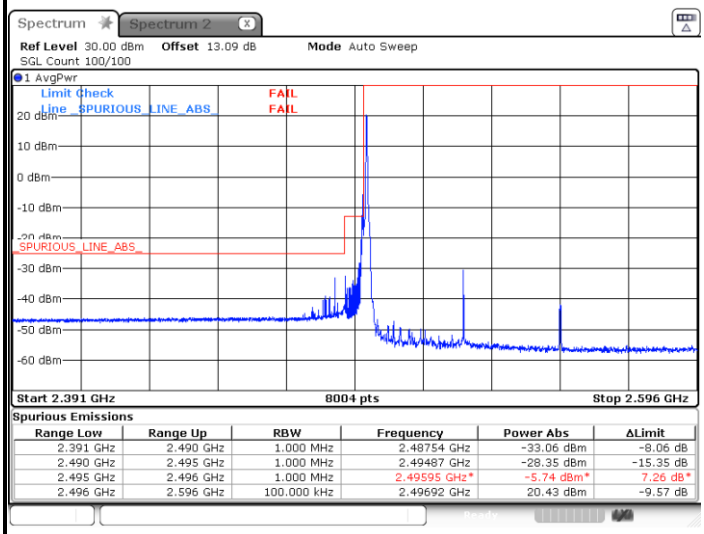
Date: 27.NOV.2020 02:21:35

Channel power < -10dBm PASS



Date: 27.NOV.2020 02:20:21

60M-L-1RB0-Q

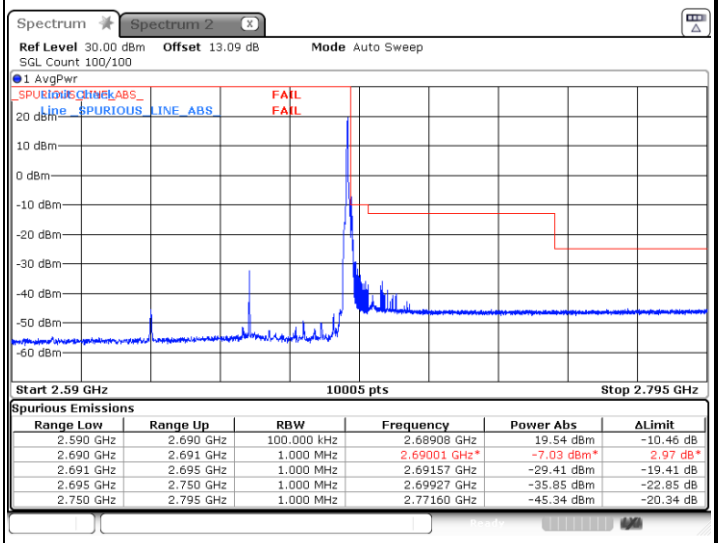


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48754 GHz	-33.06 dBm	-8.06 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49487 GHz	-28.35 dBm	-15.35 dB
2.495 GHz	2.496 GHz	1.000 MHz	2.49595 GHz*	-5.74 dBm*	7.26 dB*
2.496 GHz	2.596 GHz	100.000 kHz	2.49692 GHz	20.43 dBm	-9.57 dB

Date: 27.NOV.2020 01:40:50

60M-H-1RBMAX-Q

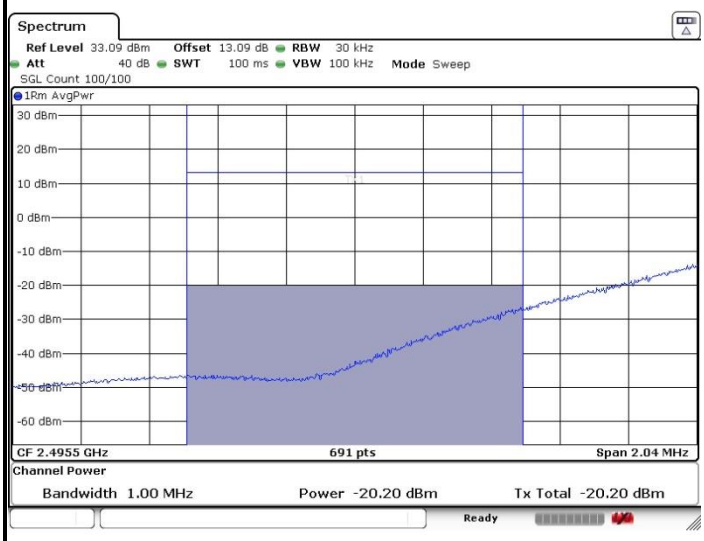


Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68908 GHz	19.54 dBm	-10.46 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69001 GHz*	-7.03 dBm*	2.97 dB*
2.691 GHz	2.695 GHz	1.000 MHz	2.69157 GHz	-29.41 dBm	-19.41 dB
2.695 GHz	2.750 GHz	1.000 MHz	2.69927 GHz	-35.85 dBm	-22.85 dB
2.750 GHz	2.795 GHz	1.000 MHz	2.77160 GHz	-45.34 dBm	-20.34 dB

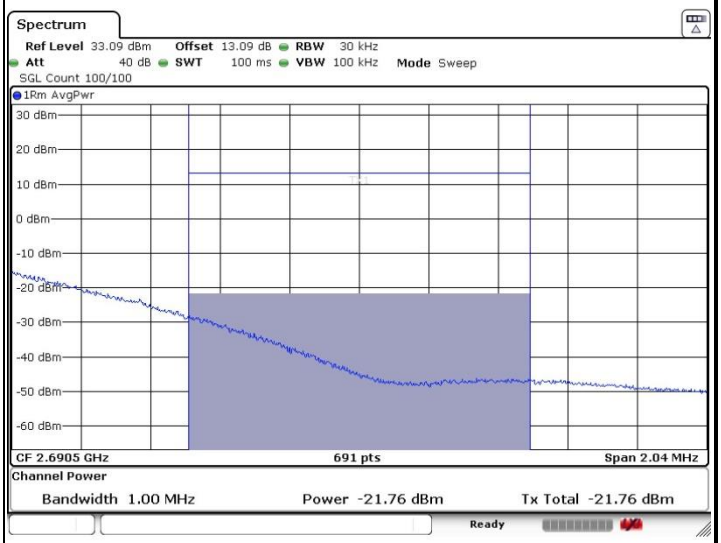
Date: 27.NOV.2020 02:08:14

Channel power < -13dBm PASS



Date: 27.NOV.2020 02:22:25

Channel power < -10dBm PASS



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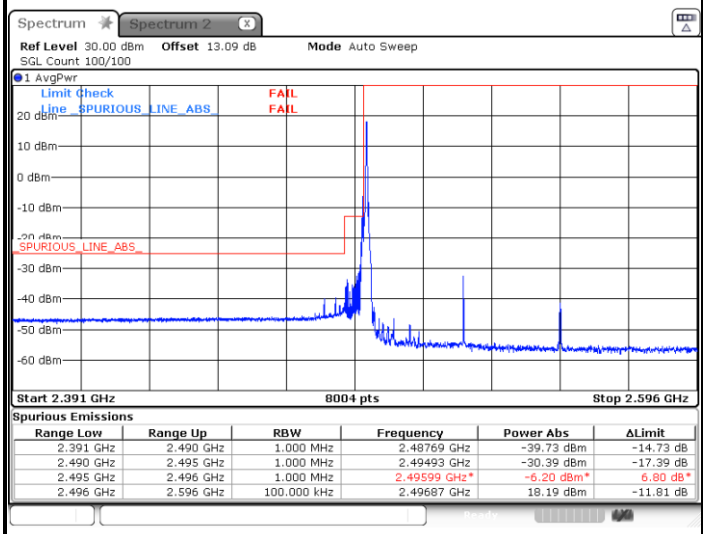
60M-L-1RB0-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.391 GHz	2.490 GHz	1.000 MHz	2.48769 GHz	-39.73 dBm	-14.73 dB
2.490 GHz	2.495 GHz	1.000 MHz	2.49493 GHz	-30.39 dBm	-17.39 dB
2.495 GHz	2.496 GHz	1.000 MHz	2.49599 GHz*	-6.20 dBm*	6.80 dB*
2.496 GHz	2.596 GHz	100.000 kHz	2.49687 GHz	18.19 dBm	-11.81 dB

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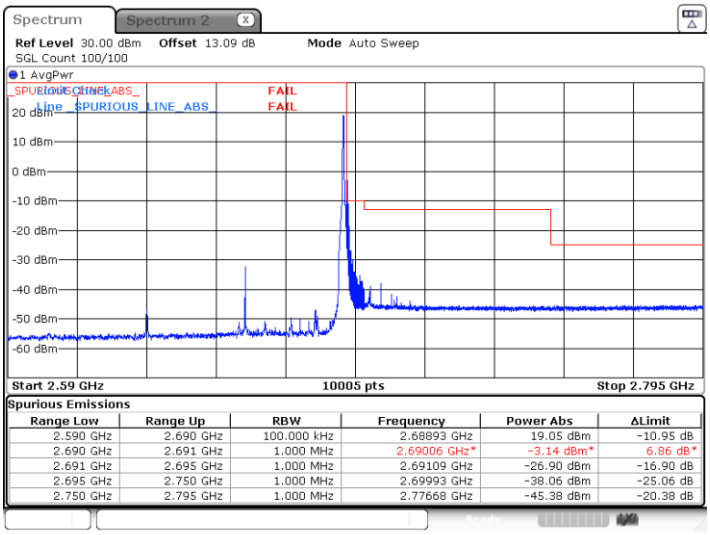
60M-H-1RBMAX-16Q



Spurious Emissions

Range Low	Range Up	RBW	Frequency	Power Abs	ΔLimit
2.590 GHz	2.690 GHz	100.000 kHz	2.68893 GHz	19.05 dBm	-10.95 dB
2.690 GHz	2.691 GHz	1.000 MHz	2.69006 GHz*	-3.14 dBm*	6.86 dB*
2.691 GHz	2.695 GHz	1.000 MHz	2.69109 GHz	-26.90 dBm	-16.90 dB
2.695 GHz	2.750 GHz	1.000 MHz	2.69993 GHz	-38.06 dBm	-25.06 dB
2.750 GHz	2.795 GHz	1.000 MHz	2.77668 GHz	-45.38 dBm	-20.38 dB

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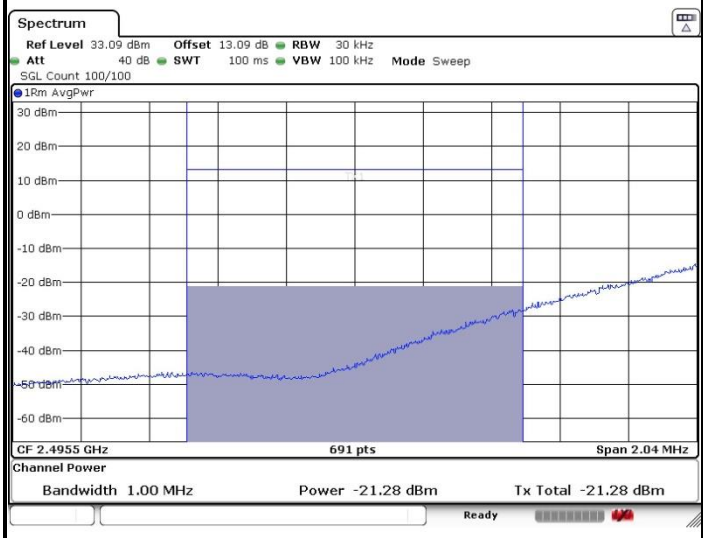
Channel power < -13dBm PASS



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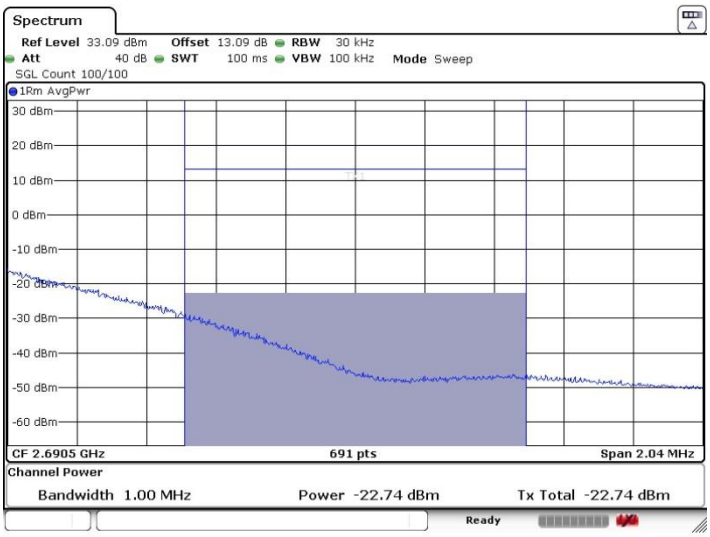
Channel power < -10dBm PASS



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