FCC RADIO TEST REPORT

FCC ID	**:**	**S9GR760**
Equipment	**:**	**R760 Access Point**
Brand Name	**:**	**RUCKUS**
Model Name	**:**	**R760**
Applicant	**:**	**Ruckus Wireless Inc. 350 W. Java Dr., Sunnyvale CA 94089 USA**
Manufacturer	**:**	**Ruckus Wireless Inc. 350 W. Java Dr., Sunnyvale CA 94089 USA**
Standard	**:**	**FCC Part 15 Subpart E §15.407**

The product was received on Jul. 28, 2021 and testing was performed from Aug. 15, 2021 to Feb. 07, 2023. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 from Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Lance Tang

Approved by: Lance Tang

Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FR210728001-04D	01	Initial issue of report	Feb. 20, 2023
FR210728001-04D	02	Revise Summary note, section 2.2, section 3.3.5 and section 3.8.2	Mar. 13, 2023
FR210728001-04D	03	Revise section 2.2 and section 3.8.2	Mar. 16, 2023
FR210728001-04D	04	Revise section 3.3.5 and Appendix E	Mar. 20, 2023

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.403(i) 15.407(a)(10)	26dB Emission Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Reporting only	-
3.2	15.407(a)(8)	Maximum Conducted Output Power	Reporting only	-
3.2	15.407(a)(8)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a)(8)	Fundamental Power Spectral Density	Pass	-
3.4	15.407(b)(6)	In-Band Emissions (Channel Mask)	Pass	-
3.5	15.407(d)(6)	Contention Based Protocol	Pass	-
3.6	15.407(b)	Unwanted Emissions	Pass	0.70 dB under the limit at 5912.680 MHz
3.7	15.207	AC Conducted Emission	Pass	9.27 dB under the limit at 0.369 MHz
3.8	15.203 15.407(a)	Antenna Requirement	Pass	-

Note:

1. This is a variant report by adding Partial RU data. The FR210728001-04D report reuses Full RU and AC Conducted Emission data from the original report number FR210728001F.
2. This test report verifies the software change which is only associated with Partial Loaded RU. The implemented change does not have any impact on or make any difference in DFS and CBP algorithm, the maximum power and antenna design remain identical. Hence the DFS, CBP test results obtained in the original device are still representative for the variant device.

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. Please refer to the section ” Uncertainty of Evaluation ” for measurement uncertainty.
Comments and Explanations:
The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Product Feature of Equipment Under Test

The EUT is an indoor AP with radios including Bluetooth - LE, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax, Wi-Fi 5GHz 802.11a/n/ac/ax, Wi-Fi 6GHz 802.11a/n/ac/ax, 802.15.4 (Zigbee), equipped with integrated antennas configured below:

Antenna Configuration	
Antenna Type	**WLAN 2.4GHz** <Ant. A>: Omni Antenna <Ant. B>: Omni Antenna <Ant. C>: Omni Antenna <Ant. D>: Omni Antenna **WLAN 5GHz** **Radio 1 and Radio 2:** <Ant. A>: Omni Antenna <Ant. B>: Omni Antenna <Ant. C>: Omni Antenna <Ant. D>: Omni Antenna **Radio 3:** <Ant. E>: Omni Antenna <Ant. F>: Omni Antenna <Ant. G>: Omni Antenna <Ant. H>: Omni Antenna **WLAN 6GHz** <Ant. E>: Omni Antenna <Ant. F>: Omni Antenna <Ant. G>: Omni Antenna <Ant. H>: Omni Antenna **Bluetooth-LE:** <Ant. 1>Omni Antenna **Zigbee:** <Ant. 1>Omni Antenna

Antenna information			
5925 MHz ~ 6425 MHz	Peak Gain (dBi)	Vertical	**<Ant. E>:** 3.7 **<Ant. H>:** 3.7
		Horizontal	**<Ant. F>:** 3.8 **<Ant. G>:** 3.8
6425 MHz ~ 6525 MHz	Peak Gain (dBi)	Vertical	**<Ant. E>:** 3.7 **<Ant. H>:** 3.7
		Horizontal	**<Ant. F>:** 3.8 **<Ant. G>:** 3.8
6525 MHz ~ 6875 MHz	Peak Gain (dBi)	Vertical	**<Ant. E>:** 3.7 **<Ant. H>:** 3.7
		Horizontal	**<Ant. F>:** 3.8 **<Ant. G>:** 3.8
6875 MHz ~ 7125 MHz	Peak Gain (dBi)	Vertical	**<Ant. E>:** 3.7 **<Ant. H>:** 3.7
		Horizontal	**<Ant. F>:** 3.8 **<Ant. G>:** 3.8

Remark:

1. The above EUT's information is declared by manufacturer. Please refer to Comments and Explanations in report summary.
2. The device is a special case of MIMO system with four outputs driving a cross-polarized pair of linearly polarized antennas (noted as “vertical” and “horizontal”).

   The antenna printed on the secondary board which is vertically/horizontally mounted on the main board. Horizontal and Vertical antennas are cross-polarization antenna and the transmitter outputs is a 90-degree phase-shifted replica of the other and the phase centers of the two antennas orientations are co-located.

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Location

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	**Sporton Site No.**
	TH01-CA, CO01-CA, 03CH02-CA, DFS01-CA

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

FCC Designation No.: US1250

1.4 Applicable Standards

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

- FCC Part 15 Subpart E
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.
- ANSI C63.10-2013

Remark: All the test items were validated and recorded in accordance with the standards without any modification during the testing.

2 Test Configuration of Equipment Under Test

a. The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction emission (150 kHz to 30 MHz), radiation emission (9 kHz to the 10th harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower). For radiated measurement, , the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.10 exploratory test procedures and only the worst case emissions were reported in this report.

b. AC power line Conducted Emission was tested under maximum output power.

2.1 Carrier Frequency and Channel

BW 20M	**Channel**	1	5	9	13	17	21	25	29
	Freq. (MHz)	5955	5975	5995	6015	6035	6055	6075	6095
BW 40M	**Channel**	3		11		19		27	
	Freq. (MHz)	5965		6005		6045		6085	
BW 80M	**Channel**	7				23			
	Freq. (MHz)	5985				6065			
BW 160M	**Channel**	15							
	Freq. (MHz)	6025							

BW 20M	**Channel**	33	37	41	45	49	53	57	61
	Freq. (MHz)	6115	6135	6155	6175	6195	6215	6235	6255
BW 40M	**Channel**	35		43		51		59	
	Freq. (MHz)	6125		6165		6205		6245	
BW 80M	**Channel**	39				55			
	Freq. (MHz)	6145				6225			
BW 160M	**Channel**	47							
	Freq. (MHz)	6185							

BW 20M	Channel	65	69	73	77	81	85	89	93
	Freq. (MHz)	6275	6295	6315	6335	6355	6375	6395	6415
BW 40M	Channel	67		75		83		91	
	Freq. (MHz)	6285		6325		6365		6405	
BW 80M	Channel	71				87			
	Freq. (MHz)	6305				6385			
BW 160M	Channel	79							
	Freq. (MHz)	6345							

BW 20M	Channel	97	101	105	109	113	117	121	125
	Freq. (MHz)	6435	6455	6475	6495	6515	6535	6555	6575
BW 40M	Channel	99		107		115		123	
	Freq. (MHz)	6445		6485		6525		6565	
BW 80M	Channel	103				119			
	Freq. (MHz)	6465				6545			
BW 160M	Channel	111							
	Freq. (MHz)	6505							

BW 20M	Channel	129	133	137	141	145	149	153	157
	Freq. (MHz)	6595	6615	6635	6655	6675	6695	6715	6735
BW 40M	Channel	131		139		147		155	
	Freq. (MHz)	6605		6645		6685		6725	
BW 80M	Channel	135				151			
	Freq. (MHz)	6625				6705			
BW 160M	Channel	143							
	Freq. (MHz)	6665							

BW 20M	Channel	161	165	169	173	177	181	185	189
	Freq. (MHz)	6755	6775	6795	6815	6835	6855	6875	6895
BW 40M	Channel	163		171		179		187	
	Freq. (MHz)	6765		6805		6845		6885	
BW 80M	Channel	167				183			
	Freq. (MHz)	6785				6865			
BW 160M	Channel	175							
	Freq. (MHz)	6825							

BW 20M	Channel	193	197	201	205	209	213	217	221
	Freq. (MHz)	6915	6935	6955	6975	6995	7015	7035	7055
BW 40M	Channel	195		203		211		219	
	Freq. (MHz)	6925		6965		7005		7045	
BW 80M	Channel	199				215			
	Freq. (MHz)	6945				7025			
BW 160M	Channel	207							
	Freq. (MHz)	6985							

BW 20M	Channel	225	229
	Freq. (MHz)	7075	7095
BW 40M	Channel	227	
	Freq. (MHz)	7085	

2.2 Test Mode

All modulation schemes/data rate are verified by conducted power test case, and the modulation schemes with highest power is used for all test cases. The final test items are considering the modulation schemes and the worst data rates as the table below.

CDD Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ac VHT160 (Covered by HE160)	MCS0
802.11ax HE20	MCS0
802.11ax HE20 partial RU 52*4	MCS0
802.11ax HE20 partial RU 106*2	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

TXBF Mode

Modulation	Data Rate
802.11a	6 Mbps
802.11n HT20 (Covered by HE20)	MCS0
802.11n HT40 (Covered by HE40)	MCS0
802.11ac VHT20 (Covered by HE20)	MCS0
802.11ac VHT40 (Covered by HE40)	MCS0
802.11ac VHT80 (Covered by HE80)	MCS0
802.11ac VHT160 (Covered by HE160)	MCS0
802.11ax HE20	MCS0
802.11ax HE40	MCS0
802.11ax HE80	MCS0
802.11ax HE160	MCS0

Note:

1. Since the verify power, the smaller power can be covered by the higher power. The SISO Mode is covered by MIMO Mode.
2. The 802.11ax covers the 802.11n and 11ac due to same modulation family scheme.
3. Partial RU 52*4 and 106*2 has smallest occupied spectrum BW among supported partial RU configuration.
4. The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance. The 242-tone RU is covered by 20MHz channel, 484-tone RU is covered by 40MHz channel, 996-tone RU is covered by 80MHz channel and 996*2-tone is covered by 160MHz channel.

AC Conducted Emission Test Cases are listed in the following table:

Test Cases	
AC Conducted Emission	Mode 1 : WLAN (2.4GHz) Link + Bluetooth – LE Idle + Zigbee Link + WLAN (5GHz) Radio 2 Link + WLAN (6GHz) Link + AC Adapter + LAN 1 Link + LAN 2 Link + USB Flash Drive (Load) Mode 2 : WLAN (2.4GHz) Link + Bluetooth – LE Idle + Zigbee Link + WLAN (5GHz) Radio 3 Link + WLAN (5GHz) (Iron 5G -QPQ190) Link + AC Adapter + LAN1 Link + LAN 2 Link + USB Flash Drive (Load) Mode 3 : WLAN (2.4GHz) Link + Bluetooth – LE Link + Zigbee Idle + WLAN (5GHz) Radio 2 Link + WLAN (6GHz) Link + AC Adapter + LAN 1 Link + LAN 2 Link + USB Flash Drive (Load)
Remark: The worst case of Conducted Emission is mode 1; only the test data of it was reported.	

RF test channels are listed in the following table:

Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11a	802.11a	802.11a	802.11a
L	Low	001	097	117	189
M	Middle	045	105	149	209
H	High	093	113	181	229
Straddle		-	-	185	-

Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE20	802.11ax HE20	802.11ax HE20	802.11ax HE20
L	Low	001	097	117	189
M	Middle	045	105	149	209
H	High	093	113	181	229
Straddle		-	-	185	-

Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE40	802.11ax HE40	802.11ax HE40	802.11ax HE40
L	Low	003	099	123	195
M	Middle	043	-	147	211
H	High	091	107	179	227
Straddle		-	115	187	-

Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE80	802.11ax HE80	802.11ax HE80	802.11ax HE80
L	Low	007	103	135	199
M	Middle	039		151	-
H	High	087		167	215
Straddle		-	119	183	-

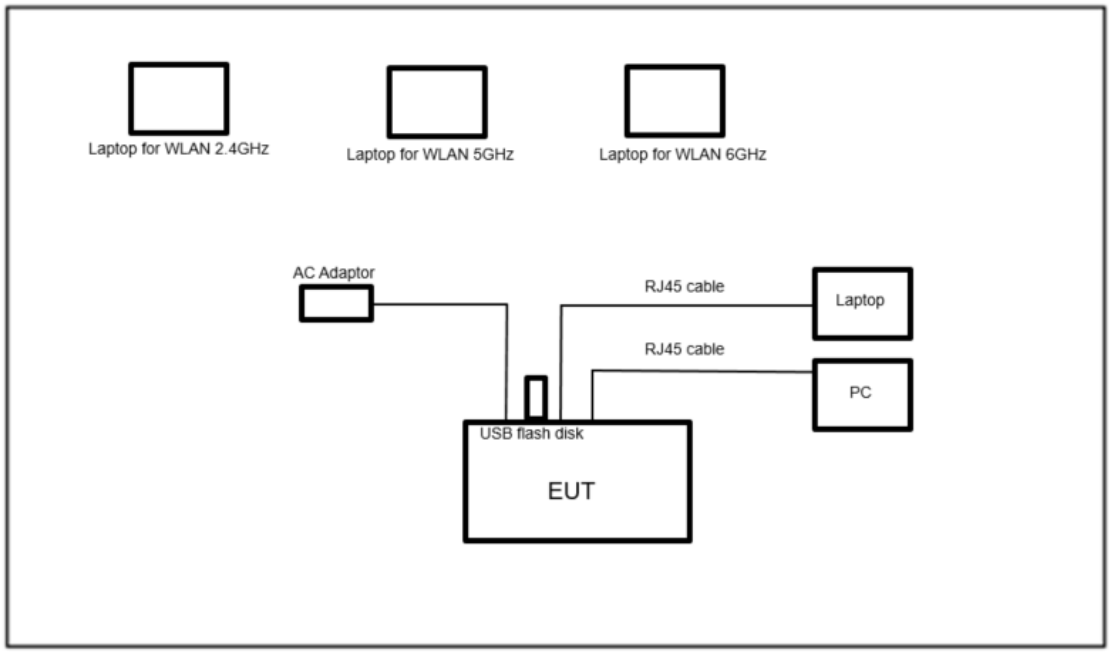
Ch. #		UNII-5 (5925-6425 MHz)	UNII-6 (6425-6525 MHz)	UNII-7 (6525-6875 MHz)	UNII-8 (6875-7125 MHz)
		802.11ax HE160	802.11ax HE160	802.11ax HE160	802.11ax HE160
L	Low	015	-	143	207
M	Middle	047			
H	High	079			
Straddle		-	111	175	-

Remark:

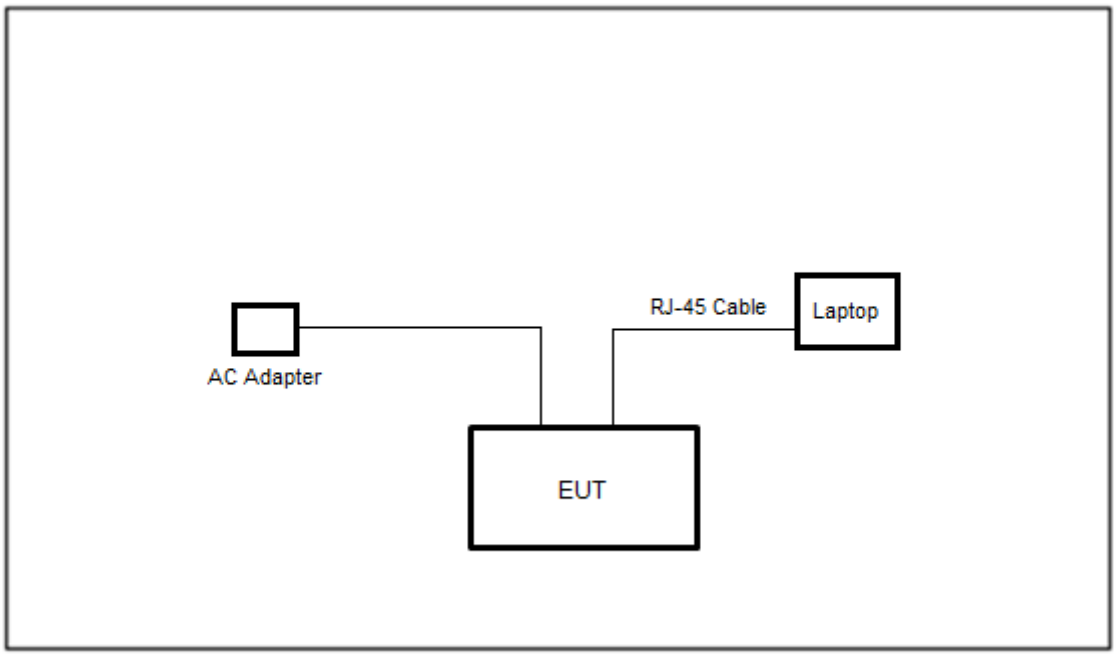
1. For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.
2. RF power on each chain in MIMO mode is greater than SISO mode. The SISO Mode is covered by MIMO Mode.
3. After preliminary scan designated by the manufacturer, CDD mode is determined to be the worst case compared to Beamforming mode, hence, all the radiated test is performed in CDD mode.
4. The setup method between CDD and Beamforming mode is identical except that one of the polarizations is disabled while Beamforming mode is activated so both modes share the same conducted power table. The only difference is how directional gain is calculated between two modes.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<Radiated Emission Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Notebook	ACER	Altos PS548-G1	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
2.	Notebook	LENOVO	80RU	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
3.	Notebook	MSI	MS-17F3	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
4.	Notebook	Lenovo	SL11H55466	TP00116F	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
5.	PC	Fractal	FD-C-DEF7A-01 (NETINTX550TR Intel X550T2BLK)	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8m
6.	USB Flash drive	SanDisk	N/A	N/A	N/A	N/A
7.	AC Adaptor	Ruckus	740-64277-001	N/A	N/A	AC I/P: Unshielded, 1.2m

2.5 EUT Operation Test Setup

The RF test items, utility “PuTTY Release 0.75” and “QSPR Version 5.0-00197” were installed in Notebook which was programmed in order to make the EUT get into the engineering modes to provide channel selection, power level, data rate and the application type and for continuous transmitting signals.

2.6 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.

Example :
The spectrum analyzer offset is derived from RF cable loss and attenuator factor.
Offset = RF cable loss + attenuator factor.
Following shows an offset computation example with cable loss 4.2 dB and 10dB attenuator.

Offset(dB) = RF cable loss(dB) + attenuator factor(dB).
= 4.2 + 10 = 14.2 (dB)

3 Test Result

3.1 26dB & 99% Occupied Bandwidth Measurement

3.1.1 Limit of 26dB & 99% Occupied Bandwidth

<FCC 14-30 CFR 15.407>

(a)(10) The maximum transmitter channel bandwidth for U-NII devices in the 5.925-7.125 GHz band is 320 megahertz.

3.1.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.1.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01. Section C) Emission bandwidth
2. Set RBW = approximately 1% of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold
6. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.
7. For 99% Bandwidth Measurement, the spectrum analyzer's resolution bandwidth (RBW) is set 1-5% of the emission bandwidth and set the Video bandwidth (VBW) ≥ 3 * RBW.
8. Measure and record the results in the test report.

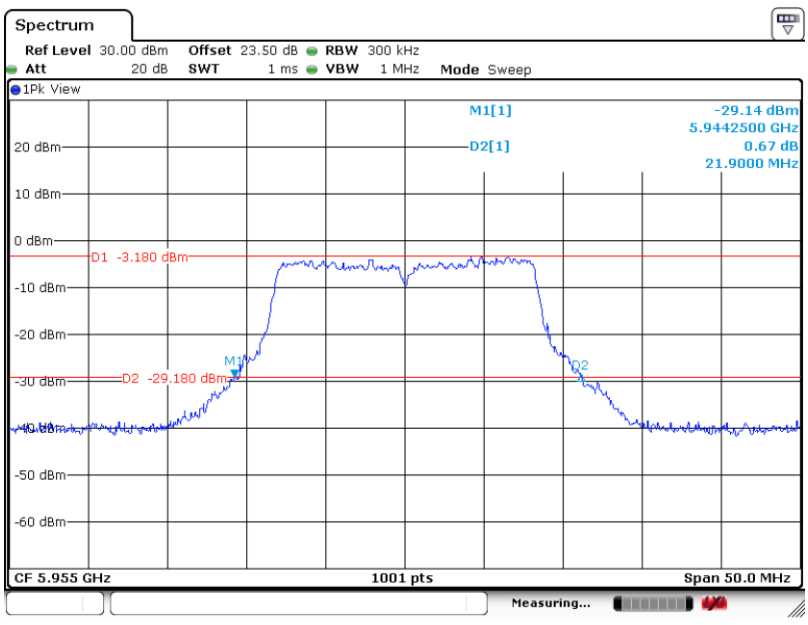
3.1.4 Test Setup

3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

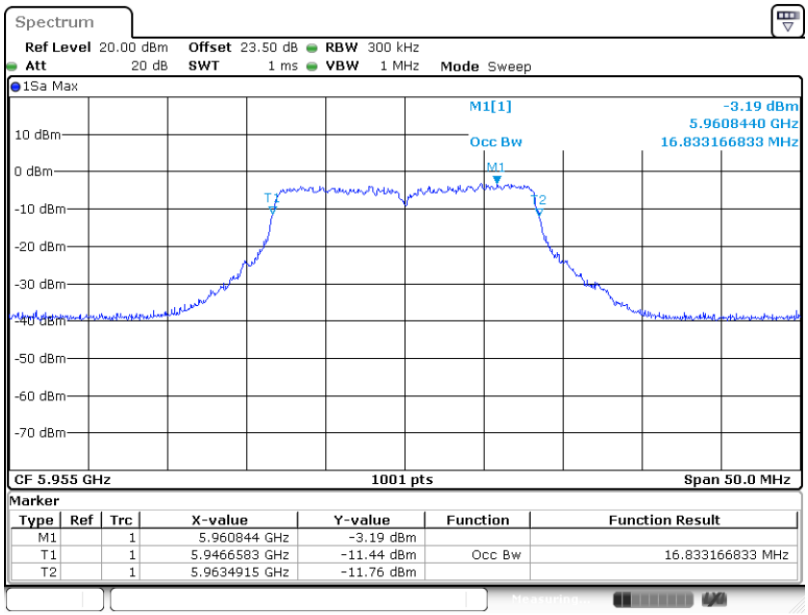
Please refer to Appendix A.

<802.11a 5955MHz>

26dB Bandwidth



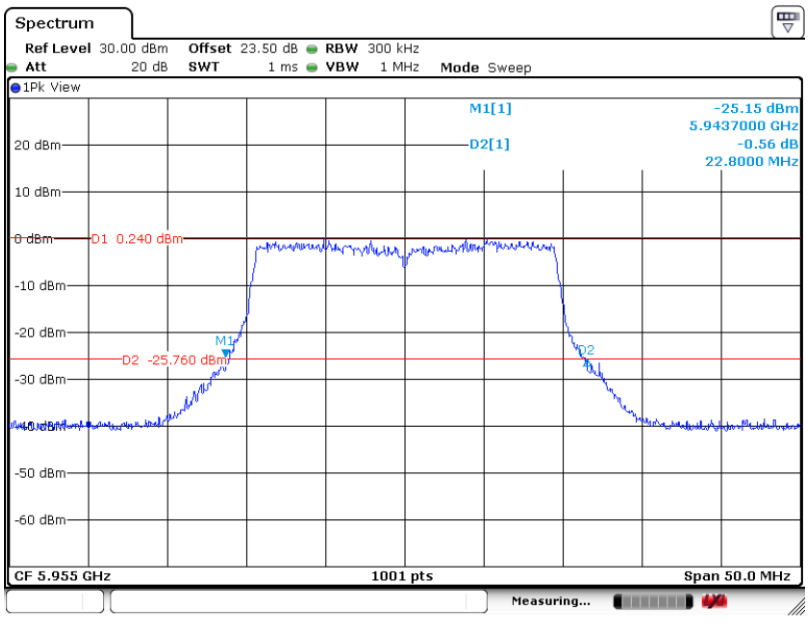
99% Occupied Bandwidth



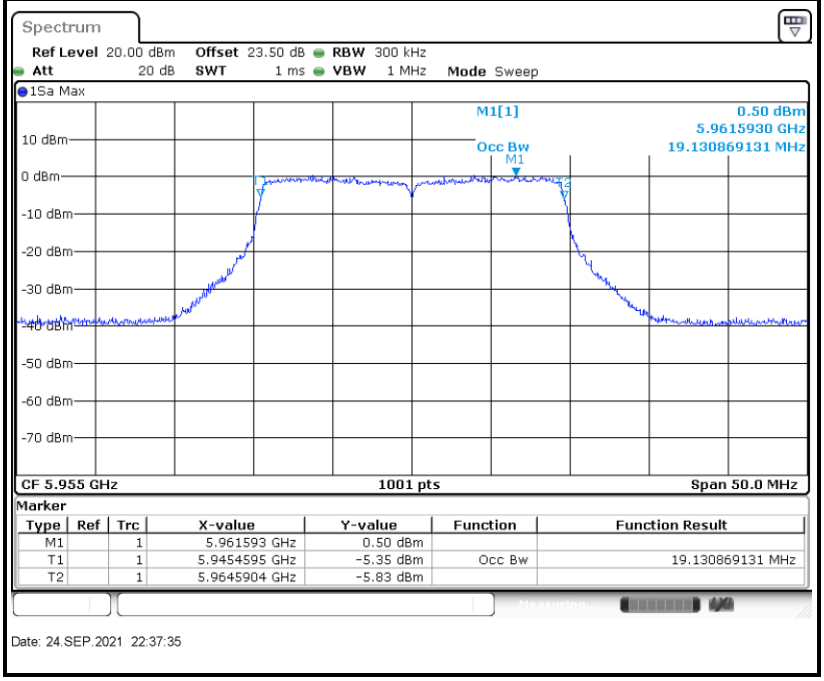
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE 20 5955MHz>

26dB Bandwidth



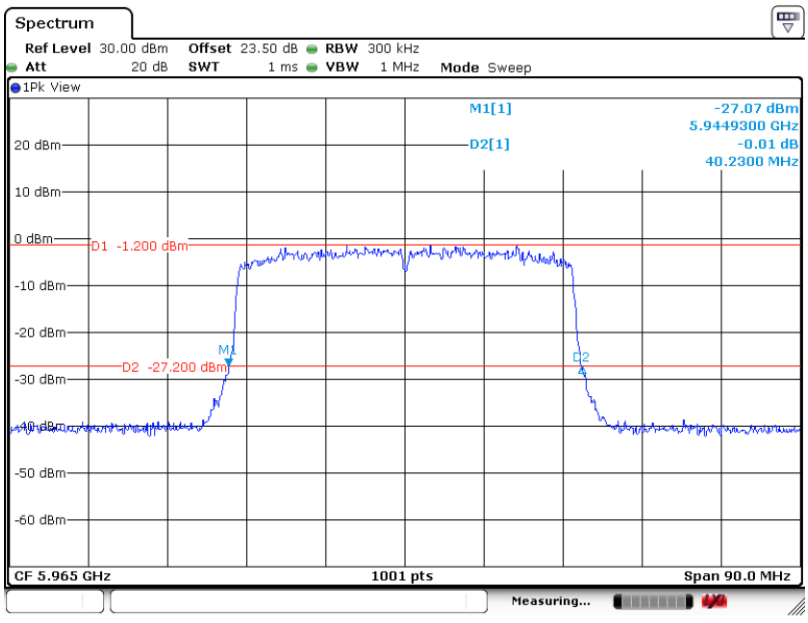
99% Occupied Bandwidth



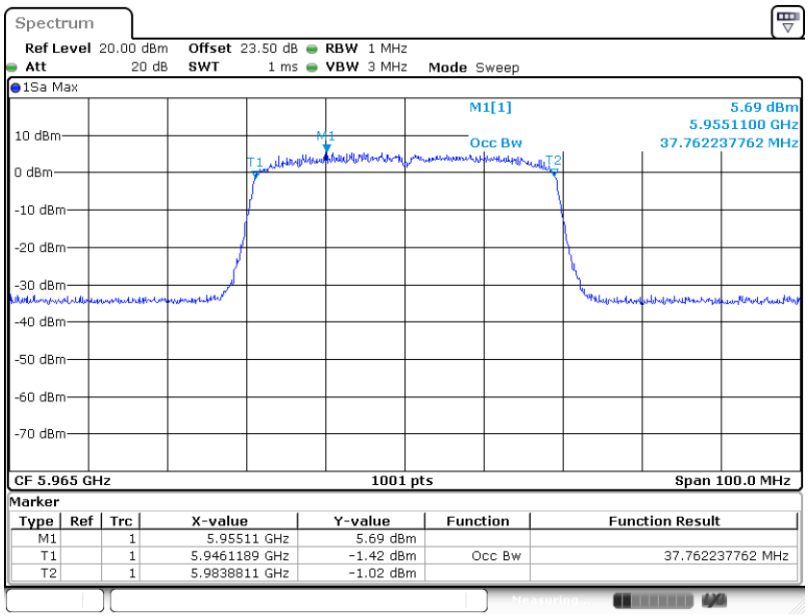
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE 40 5965MHz>

26dB Bandwidth



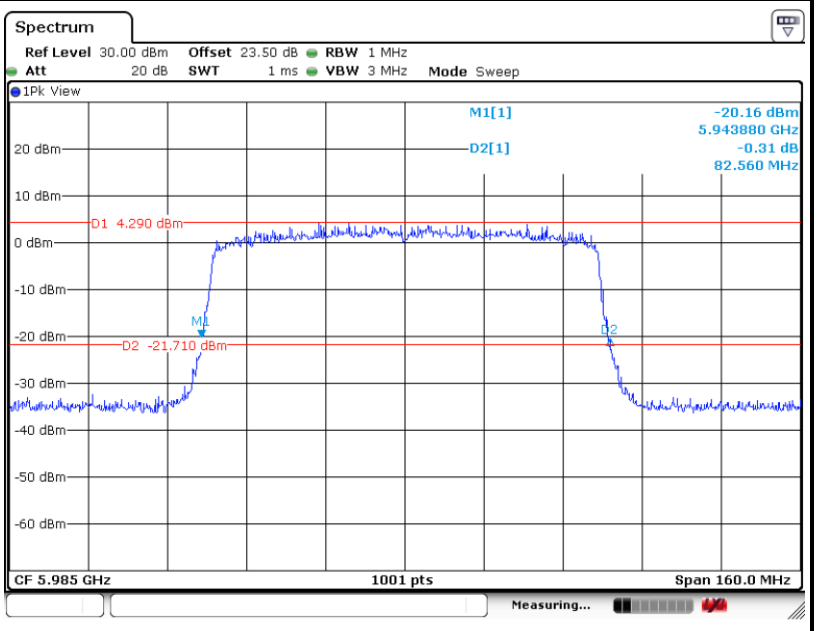
99% Occupied Bandwidth



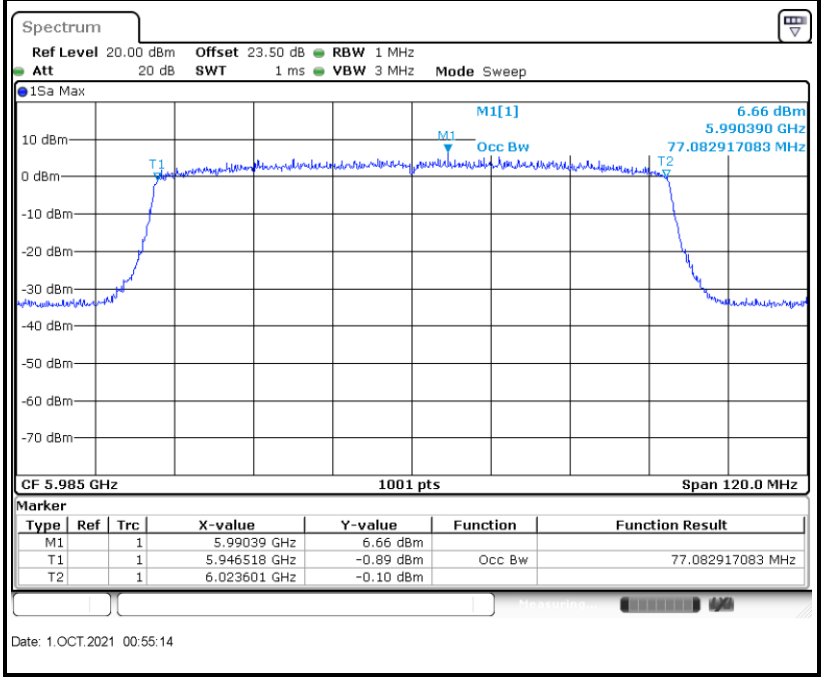
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE 80 5985MHz>

26dB Bandwidth



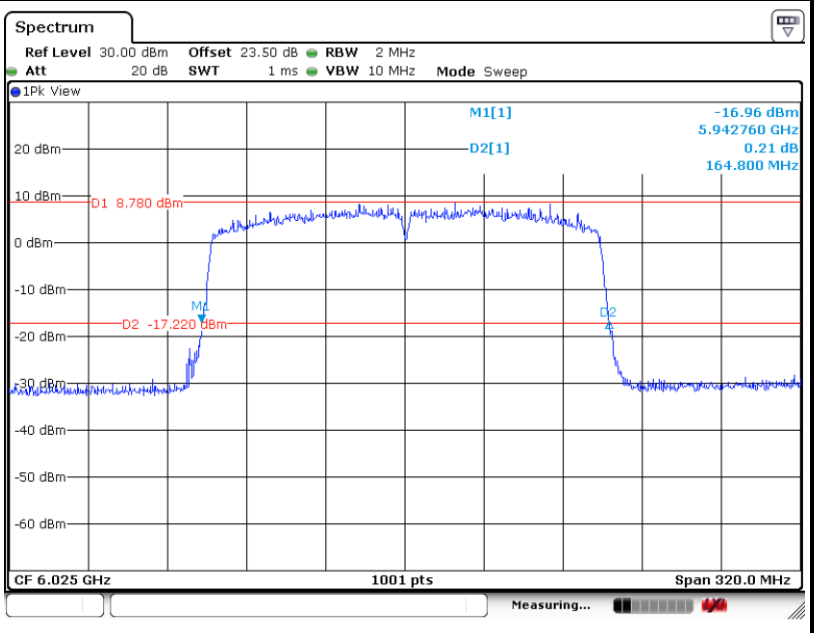
99% Occupied Bandwidth



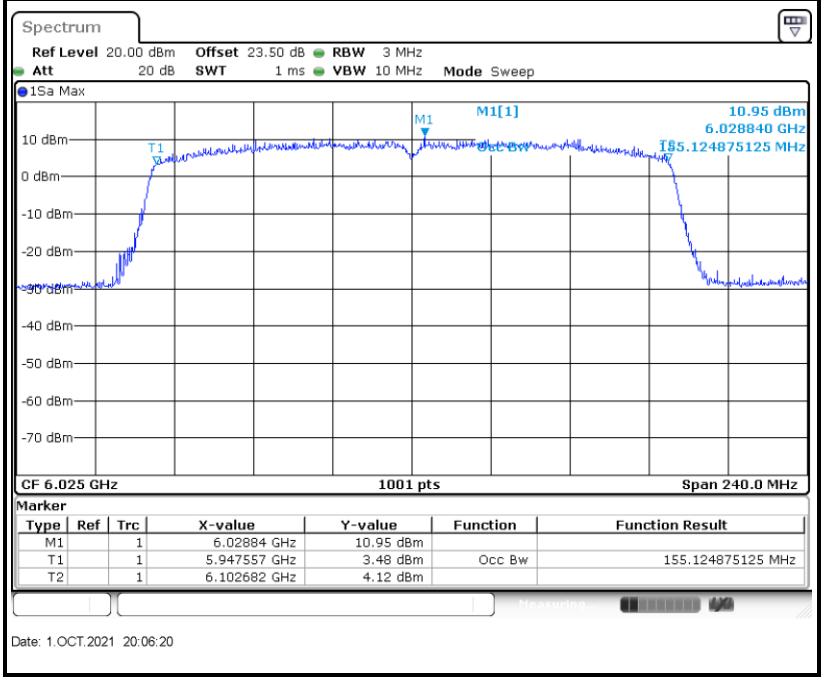
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE 160 6025MHz>

26dB Bandwidth



99% Occupied Bandwidth



Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

3.2 Maximum conducted Output Power and Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC 14-30 CFR 15.407>

(a)(5) For an indoor access point operating in the 5.925-7.125 GHz band, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

3.2.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.2.3 Test Procedures

<CDD Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter.
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

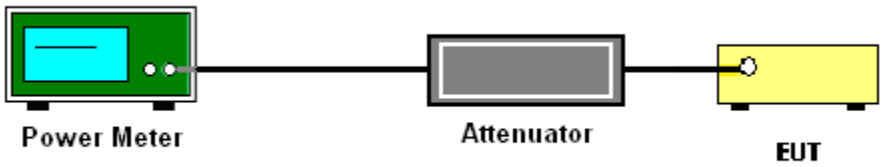
<TXBF Modes>

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Method PM-G (Measurement using a gated RF average power meter):

1. Measurement is performed using a wideband RF power meter.
2. The EUT is configured to transmit at its maximum power control level.
3. Measure the average power of the transmitter
4. Since the measurement is made only during the ON time of the transmitter, no duty cycle correction factor is required.
5. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

3.2.4 Test Setup



3.2.5 Test Result of Fundamental Maximum EIRP

Please refer to Appendix A.

3.3 Fundamental Power Spectral Density Measurement

3.3.1 Limit of Fundamental Power Spectral Density

<FCC 14-30 CFR 15.407>

(a)(5) For an indoor access point operating in the 5.925-7.125 GHz band, the maximum power spectral density must not exceed 5 dBm e.i.r.p. in any 1-megahertz band. In addition, the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm.

3.3.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.3.3 Test Procedures

The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

Section F) Maximum power spectral density.

<CDD Modes>

 # Method SA-2 #

(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

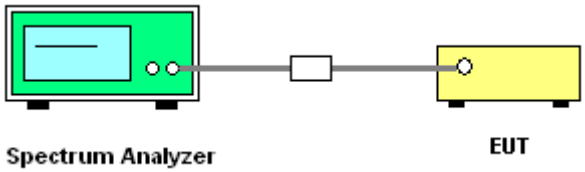
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times. For example, add 10 log(1/0.25) = 6 dB if the duty cycle is 25 percent.

1. The RF output of EUT was connected to the spectrum analyzer by a low loss cable.
2. Each plot has already offset with cable loss, and attenuator loss. Measure the PPSD and record it.
3. For MIMO mode, calculation method follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

   Method (a): Measure and sum the spectra across the outputs.

   The total final Power Spectral Density is from a device with 2 transmitter outputs. The spectrum measurements of the individual outputs are all performed with the same span and number of points; the spectrum value in the first spectral bin of output 1 is summed with that in the first spectral bin of output 2 to obtain the value for the first frequency bin of the summed spectrum.

3.3.4 Test Setup

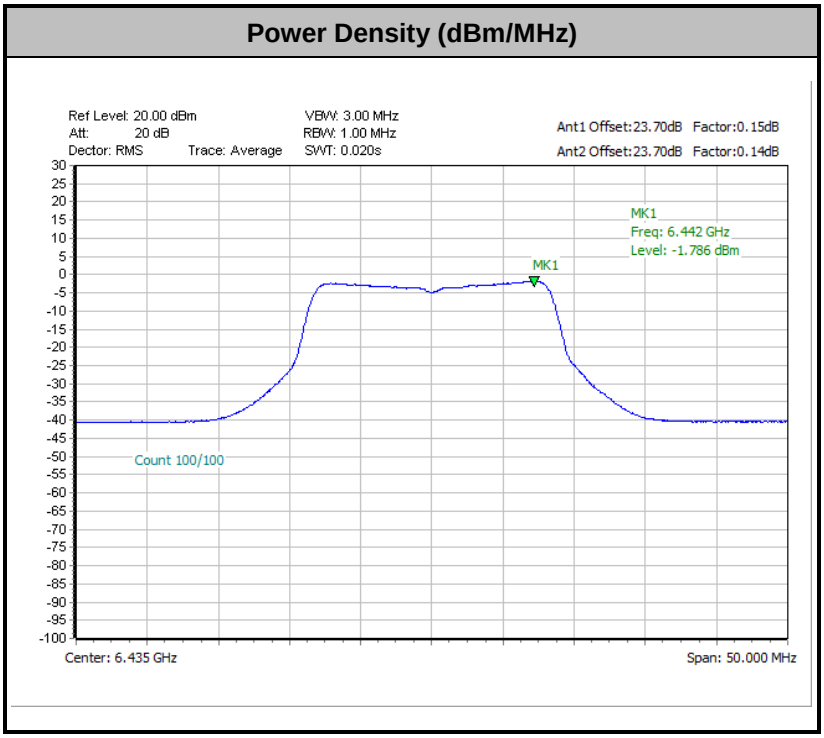


3.3.5 Test Result of Power Spectral Density

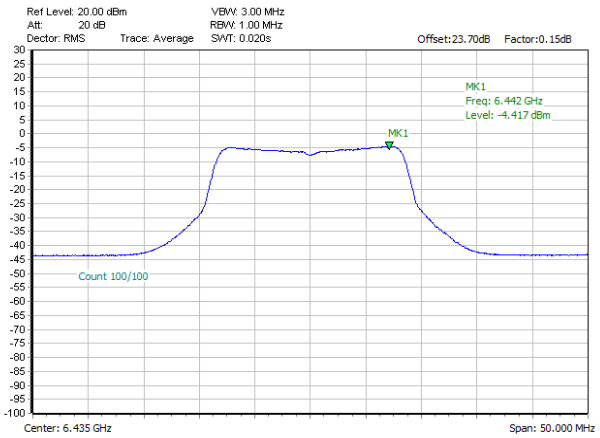
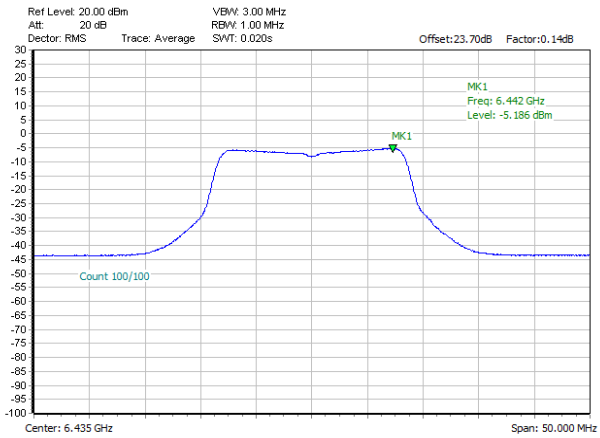
Please refer to Appendix A.

<802.11a Mode>

Power Density (dBm/MHz)

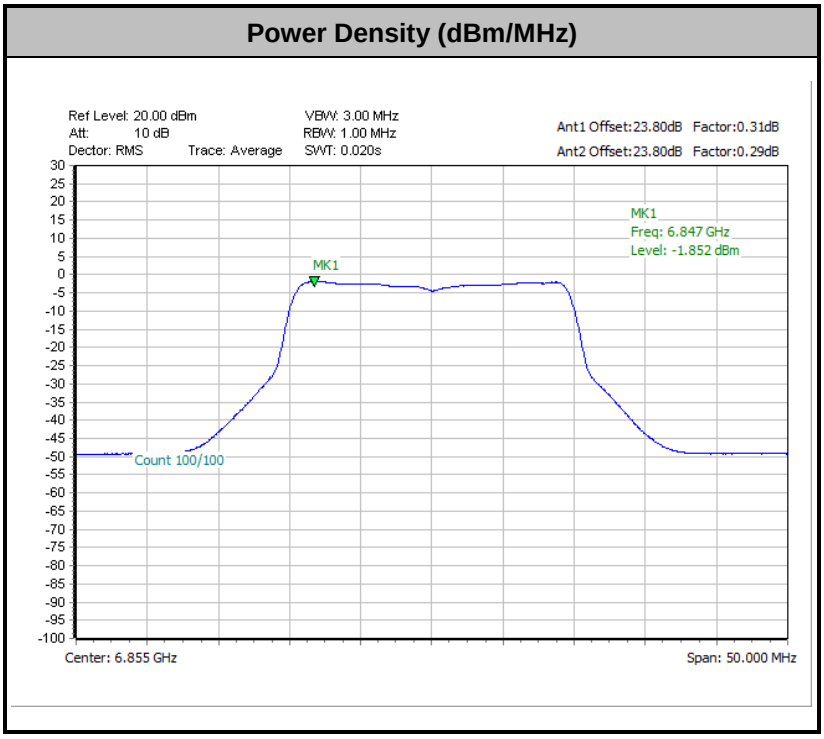


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

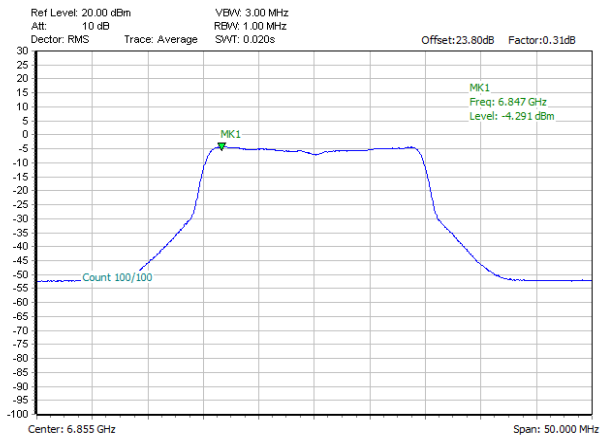
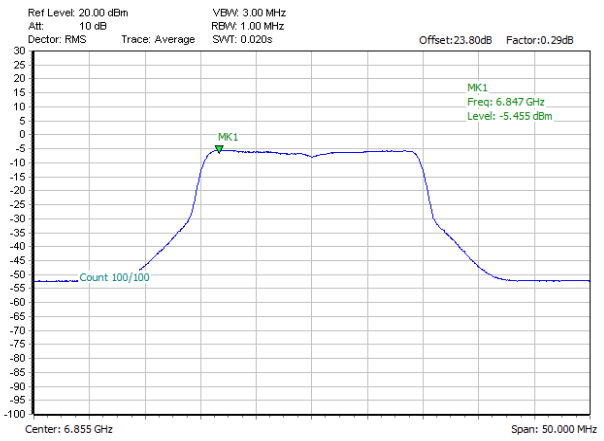
Power Density Trace 1 (Ant E)	Power Density Trace 2 (Ant H)
	

<802.11ax HE20 Full RU Modes>

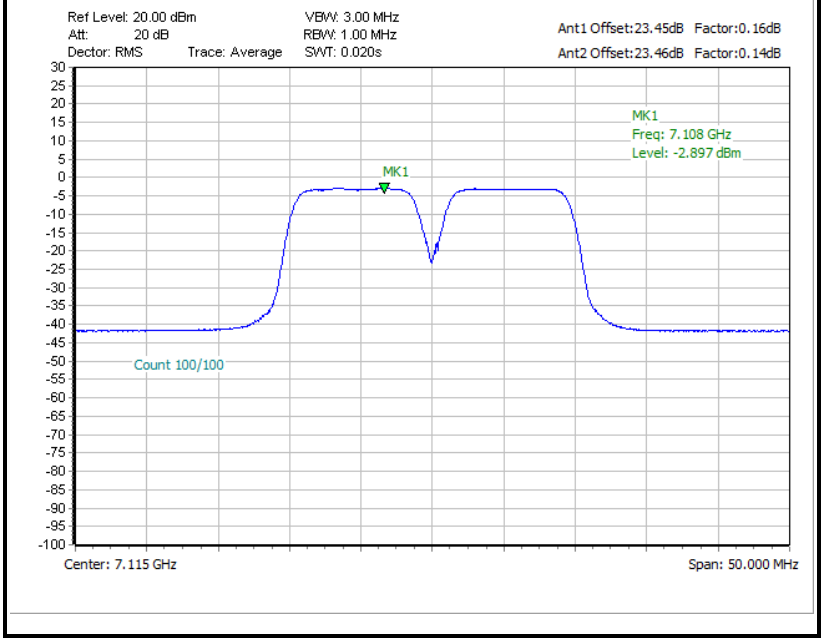
Power Density (dBm/MHz)



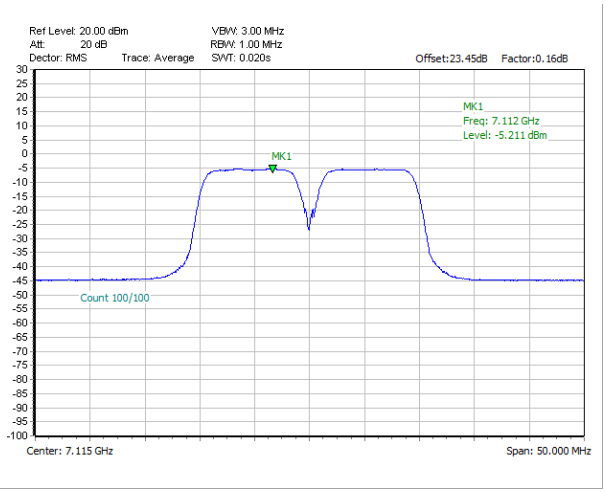
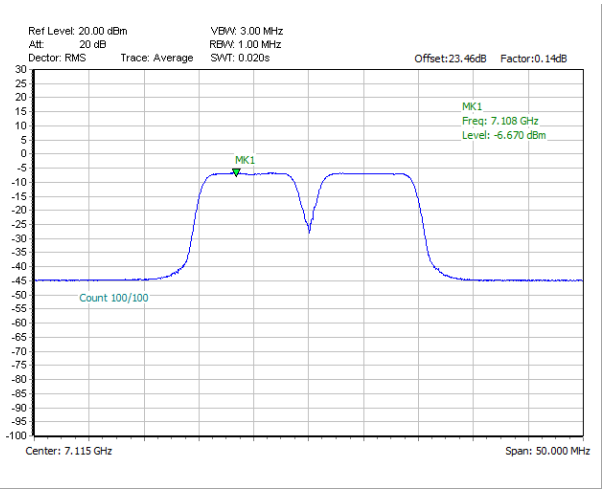
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Trace 1 (Ant F)	Power Density Trace 2 (Ant G)
	

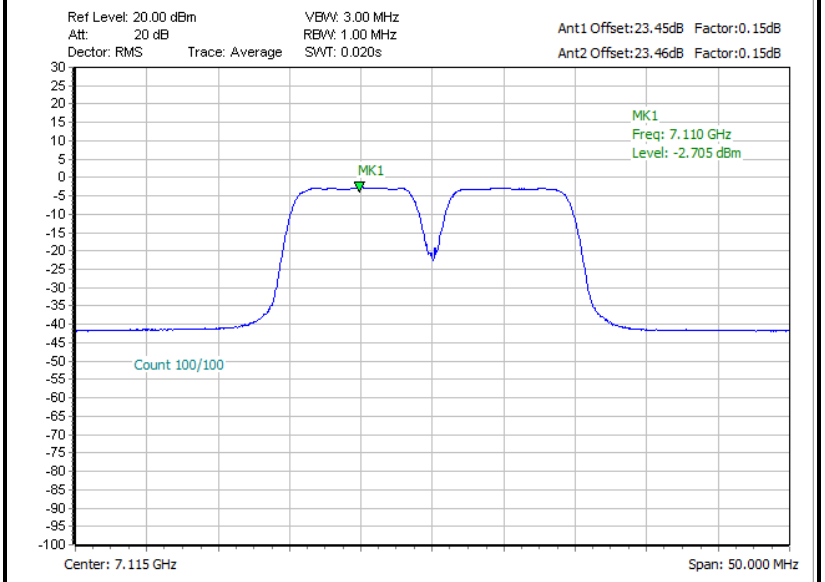
<802.11ax HE20 Partial 52RU*4 Modes>

Power Density (dBm/MHz)


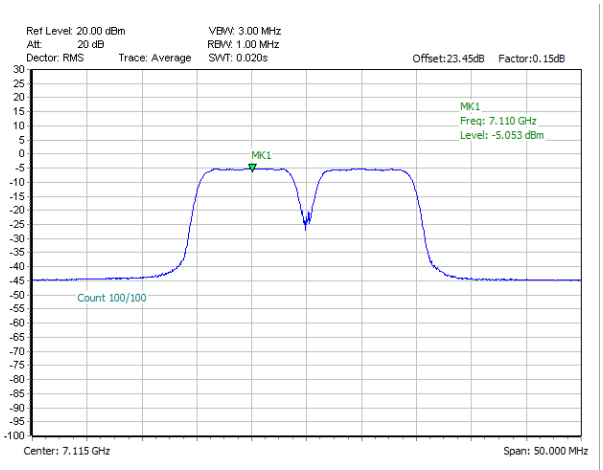
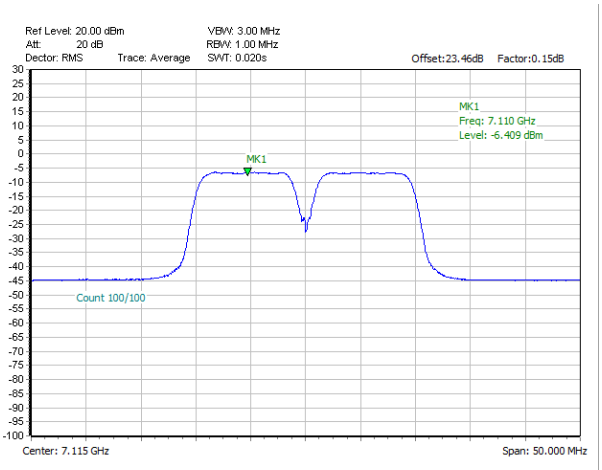
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Trace 1 (Ant E)	Power Density Trace 2 (Ant H)
	

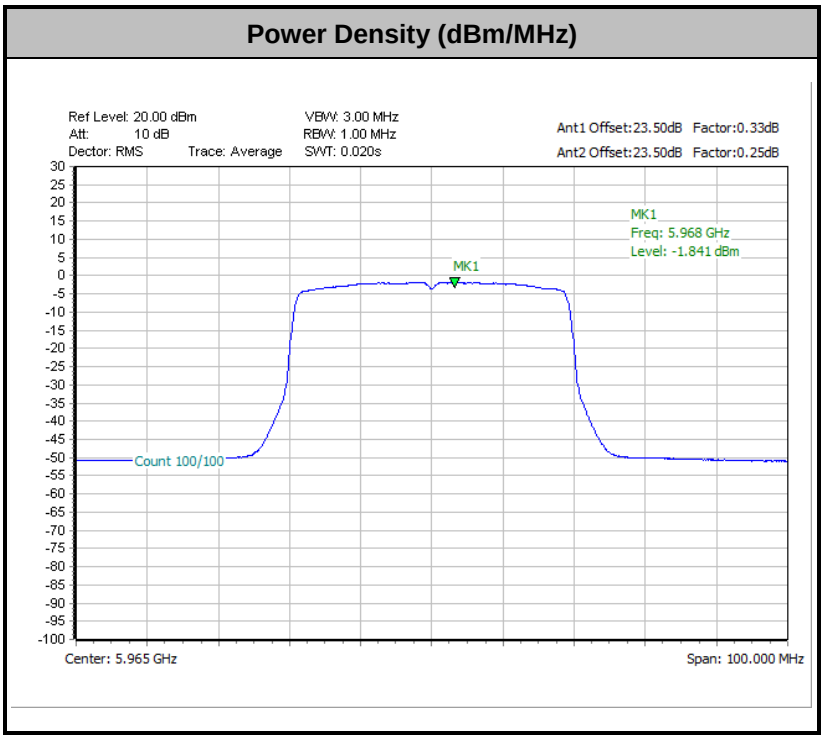
<802.11ax HE20 Partial 106RU*2 Modes>

Power Density (dBm/MHz)


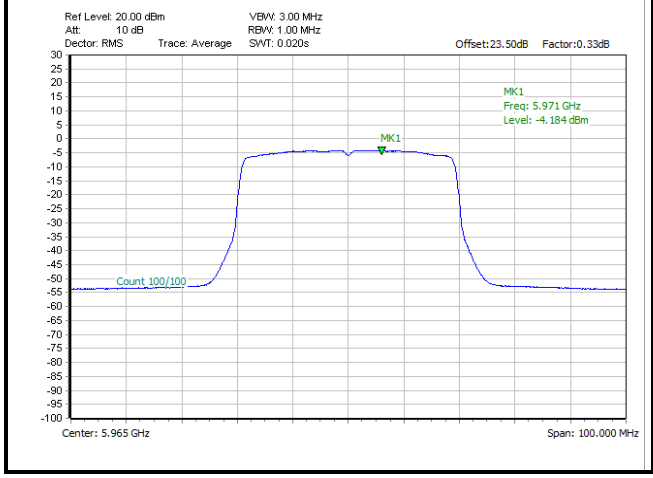
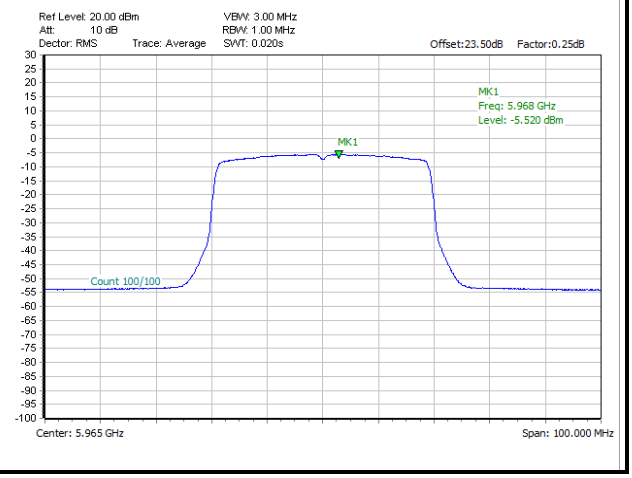
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Trace 1 (Ant E)	Power Density Trace 2 (Ant H)
	

<802.11ax HE40 Modes>

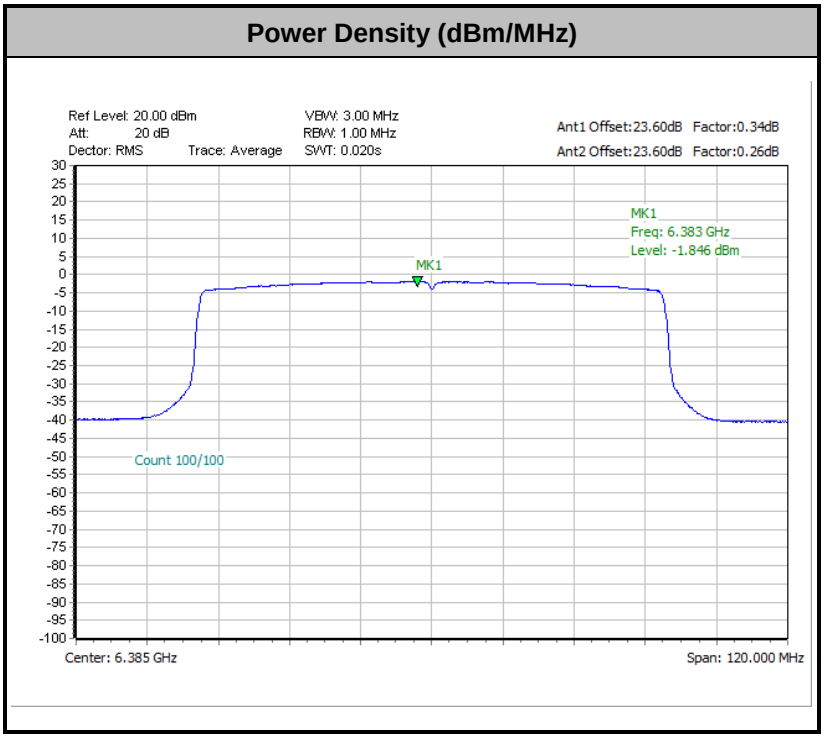
Power Density (dBm/MHz)


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

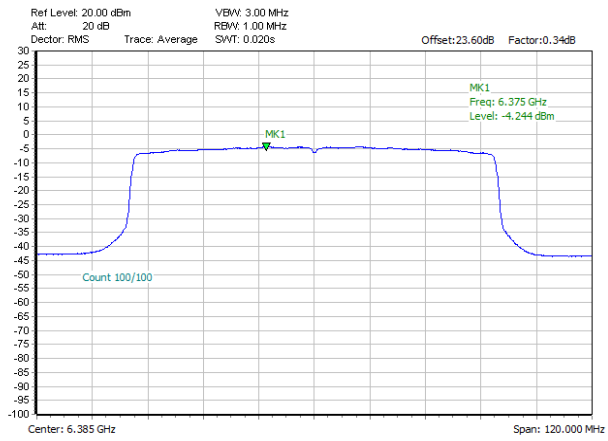
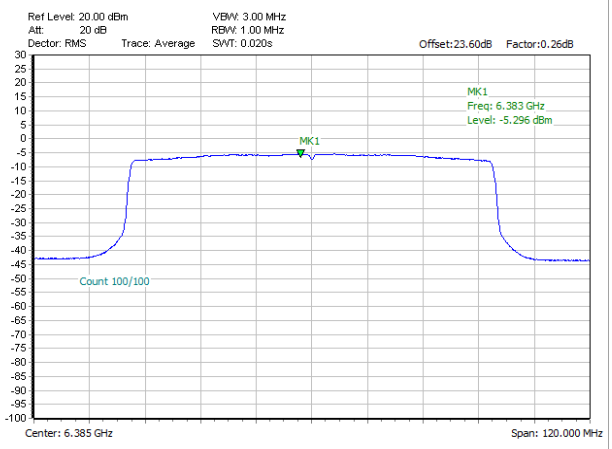
Power Density Trace 1 (Ant F)	Power Density Trace 2 (Ant G)
	

<802.11ax HE80 Modes>

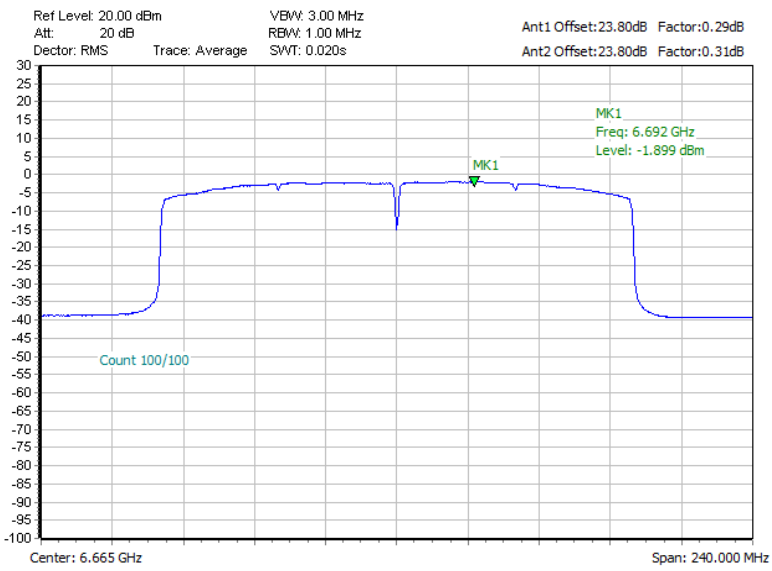
Power Density (dBm/MHz)



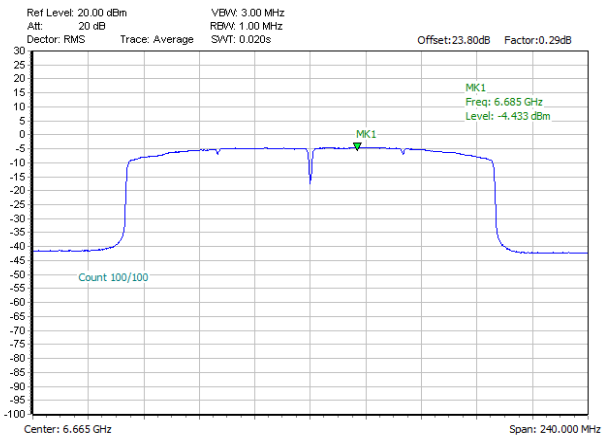
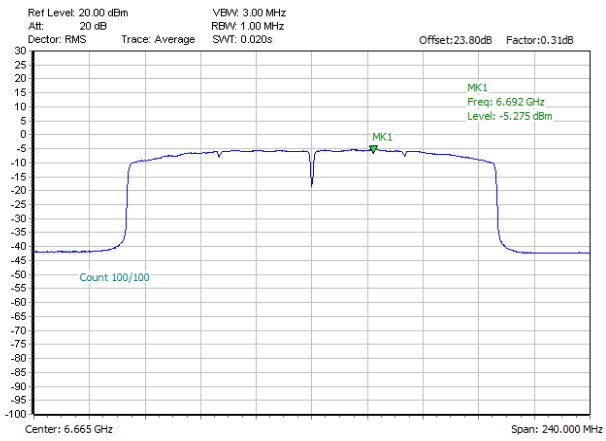
Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Trace 1 (Ant F)	Power Density Trace 2 (Ant G)
	

<802.11ax HE160 Modes>

Power Density (dBm/MHz)


Remark: The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Trace 1 (Ant F)	Power Density Trace 2 (Ant G)
	

3.4 In-Band Emissions (Channel Mask)

3.4.1 Limit of Unwanted Emissions

<FCC 14-30 CFR 15.407>

(a)(6) For transmitters operating within the 5.925-7.125 GHz bands: Power spectral density must be suppressed by 20 dB at 1 MHz outside of channel edge, by 28 dB at one channel bandwidth from the channel center, and by 40 dB at one- and one-half times the channel bandwidth away from channel center. At frequencies between one megahertz outside an unlicensed device's channel edge and one channel bandwidth from the center of the channel, the limits must be linearly interpolated between 20 dB and 28 dB suppression, and at frequencies between one and one- and one-half times an unlicensed device's channel bandwidth, the limits must be linearly interpolated between 28 dB and 40 dB suppression. Emissions removed from the channel center by more than one- and one-half times the channel bandwidth must be suppressed by at least 40 dB.

3.4.2 Measuring Instruments

Please refer to the measuring equipment list in this test report.

3.4.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v01.

Section J) In-Band Emissions.

1. Take nominal bandwidth as reference channel bandwidth provided that 26 dB emission bandwidth is always larger than nominal bandwidth
2. Measure the power spectral density (which will be used for emissions mask reference) using the following procedure:
   a) Set the span to encompass the entire 26 dB EBW of the signal.
   b) Set RBW = same RBW used for 26 dB EBW measurement.
   c) Set VBW ≥ 3 X RBW
   d) Number of points in sweep ≥ [2 X span / RBW].
   e) Sweep time = auto.
   f) Detector = RMS (i.e., power averaging)
   g) Trace average at least 100 traces in power averaging (rms) mode.
   h) Use the peak search function on the instrument to find the peak of the spectrum.
3. Using the measuring equipment limit line function, develop the emissions mask based on the following requirements. The emissions power spectral density must be reduced below the peak power spectral density (in dB) as follows:
   a. Suppressed by 20 dB at 1 MHz outside of the channel edge.
   b. Suppressed by 28 dB at one channel bandwidth from the channel center.
   c. Suppressed by 40 dB at one- and one-half times the channel bandwidth from the channel center.

4. Adjust the span to encompass the entire mask as necessary.
5. Clear trace.
6. Trace average at least 100 traces in power averaging (rms) mode.
7. Adjust the reference level as necessary so that the crest of the channel touches the top of the emission mask.

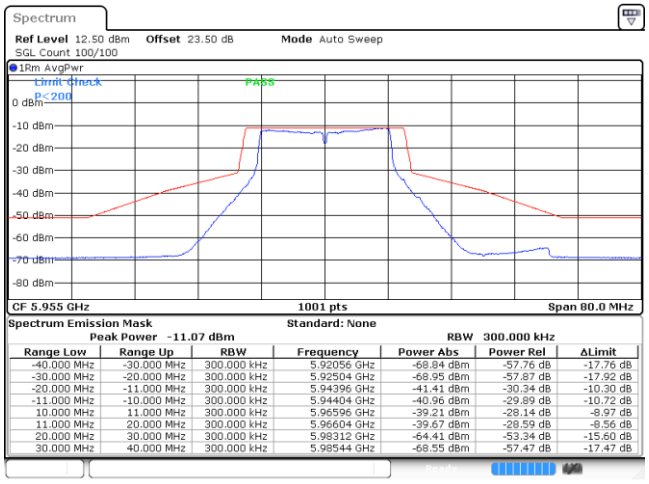
3.4.4 Test Setup

3.4.5 Test Result

MIMO <Ant. E+H(E)>

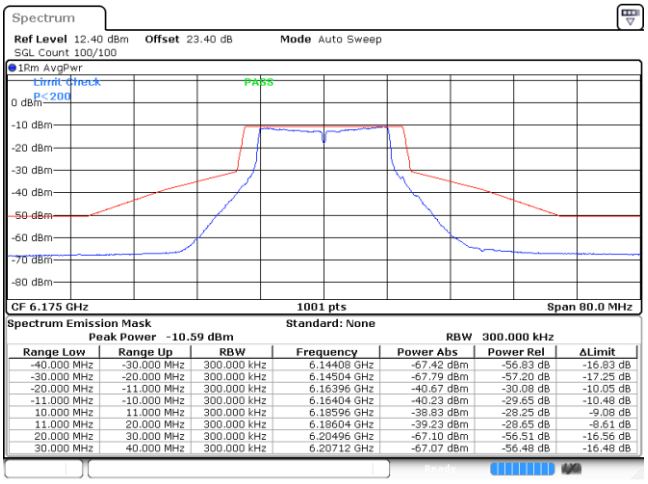
EUT Mode :	802.11a

Plot on Channel 5955MHz



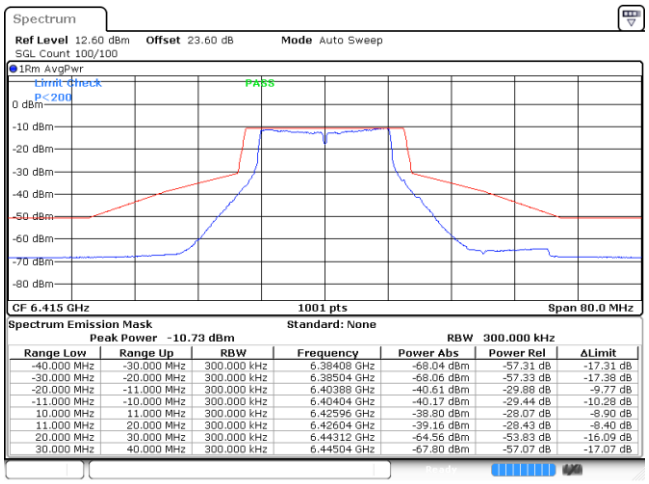
Date: 1.NOV.2021 19:45:44

Plot on Channel 6175MHz



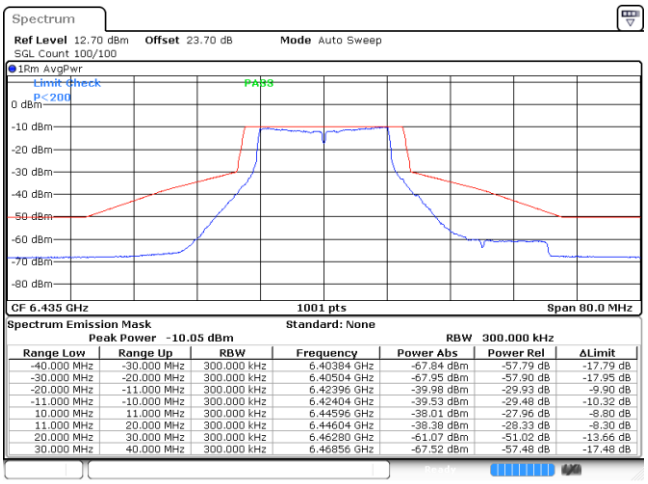
Date: 1.NOV.2021 20:00:42

Plot on Channel 6415MHz



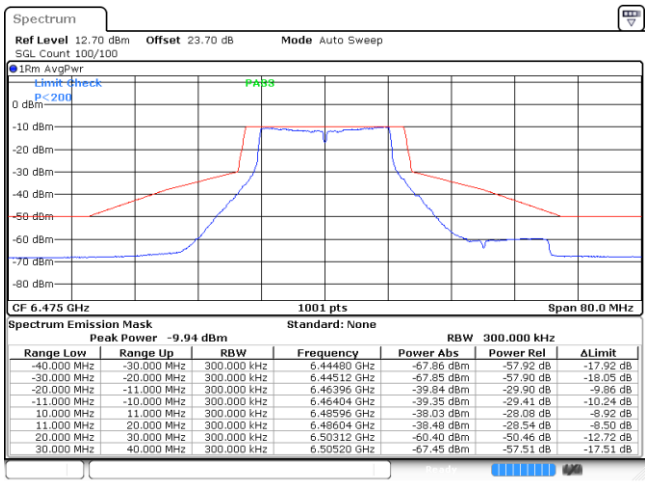
Date: 1.NOV.2021 21:52:06

Plot on Channel 6435MHz



Date: 2.NOV.2021 23:14:02

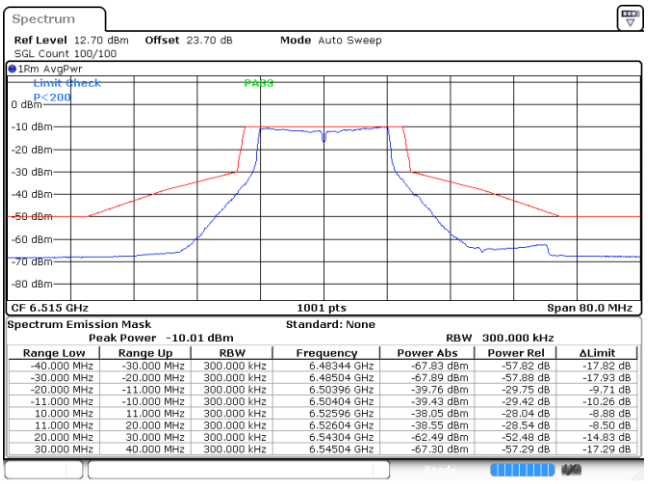
Plot on Channel 6475MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.44480 GHz	-67.86 dBm	-57.92 dB	-17.92 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.44512 GHz	-67.85 dBm	-57.90 dB	-18.05 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.46396 GHz	-39.84 dBm	-29.90 dB	-9.86 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.46404 GHz	-39.35 dBm	-29.41 dB	-10.24 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.48596 GHz	-38.03 dBm	-28.08 dB	-8.92 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.48604 GHz	-38.48 dBm	-28.54 dB	-8.50 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.50312 GHz	-60.40 dBm	-50.46 dB	-12.72 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.50520 GHz	-67.45 dBm	-57.51 dB	-17.51 dB

Date: 9.NOV.2021 22:42:08

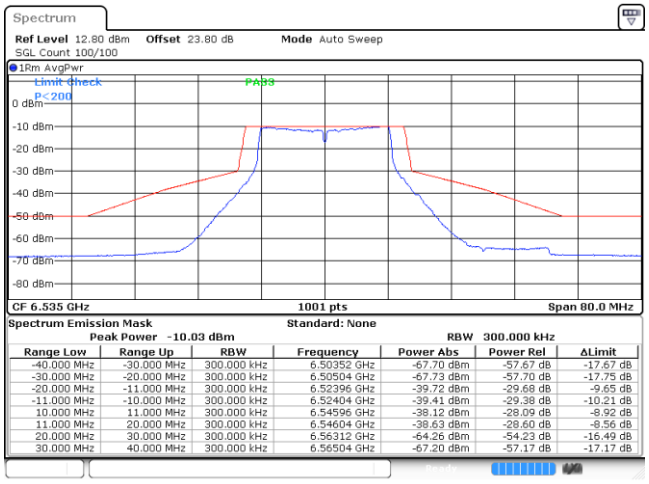
Plot on Channel 6515MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.48344 GHz	-67.83 dBm	-57.82 dB	-17.82 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.48504 GHz	-67.89 dBm	-57.88 dB	-17.93 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.50396 GHz	-39.76 dBm	-29.75 dB	-9.71 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.50404 GHz	-39.43 dBm	-29.42 dB	-10.26 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.52596 GHz	-38.05 dBm	-28.04 dB	-8.88 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.52604 GHz	-38.55 dBm	-28.54 dB	-8.50 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.54304 GHz	-62.49 dBm	-52.48 dB	-14.83 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.54504 GHz	-67.30 dBm	-57.29 dB	-17.29 dB

Date: 9.NOV.2021 23:03:28

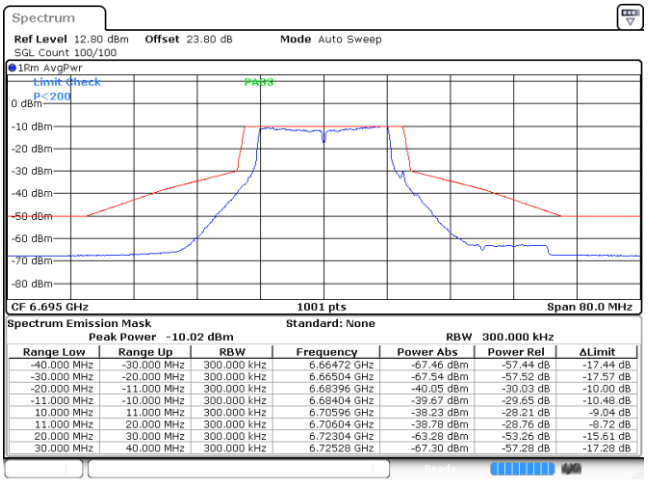
Plot on Channel 6535MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.50352 GHz	-67.70 dBm	-57.67 dB	-17.67 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.50504 GHz	-67.73 dBm	-57.70 dB	-17.75 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.52396 GHz	-39.72 dBm	-29.68 dB	-9.65 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.52404 GHz	-39.41 dBm	-29.38 dB	-10.21 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.54596 GHz	-38.12 dBm	-28.09 dB	-8.92 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.54604 GHz	-38.63 dBm	-28.60 dB	-8.56 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.56312 GHz	-64.26 dBm	-54.23 dB	-16.49 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.56504 GHz	-67.20 dBm	-57.17 dB	-17.17 dB

Date: 9.NOV.2021 23:35:50

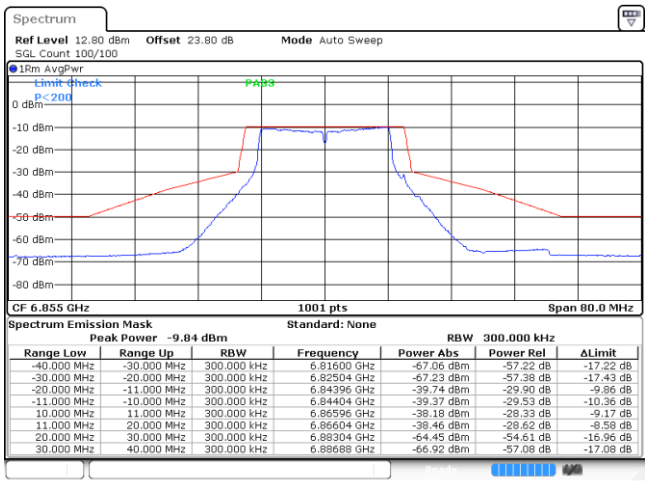
Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66472 GHz	-67.46 dBm	-57.44 dB	-17.44 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.66504 GHz	-67.54 dBm	-57.52 dB	-17.57 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.68396 GHz	-40.05 dBm	-30.03 dB	-10.00 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-39.67 dBm	-29.65 dB	-10.48 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-38.23 dBm	-28.21 dB	-9.04 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70604 GHz	-38.78 dBm	-28.76 dB	-8.72 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.72304 GHz	-63.28 dBm	-53.26 dB	-15.61 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72528 GHz	-67.30 dBm	-57.28 dB	-17.28 dB

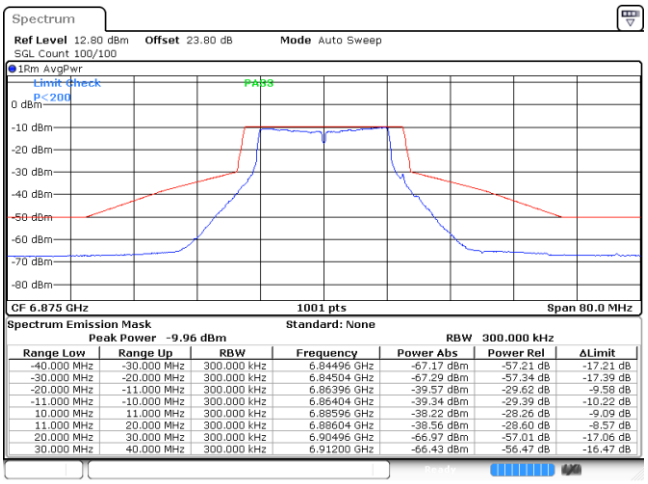
Date: 10.NOV.2021 00:01:06

Plot on Channel 6855MHz



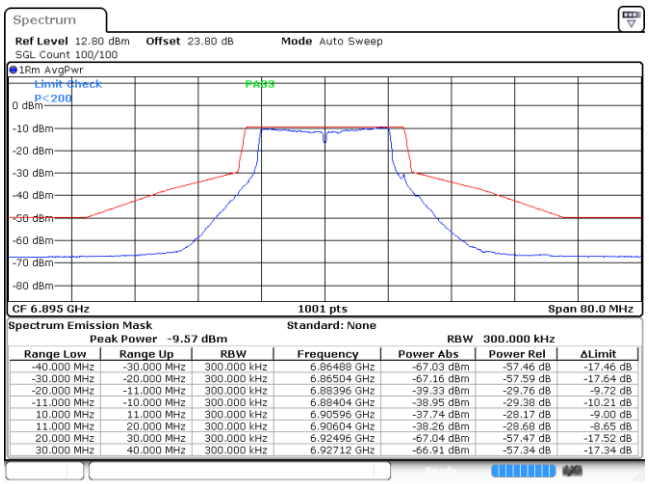
Date: 10.NOV.2021 00:16:48

Plot on Channel 6875MHz



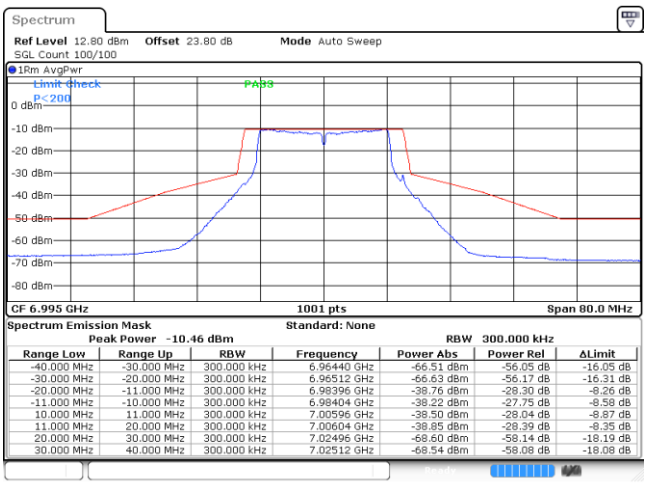
Date: 10.NOV.2021 00:49:08

Plot on Channel 6895MHz



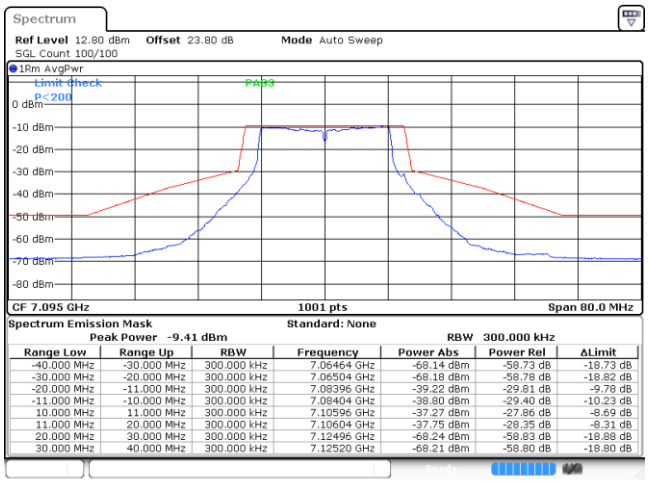
Date: 10.NOV.2021 01:11:13

Plot on Channel 6995MHz



Date: 10.NOV.2021 01:28:49

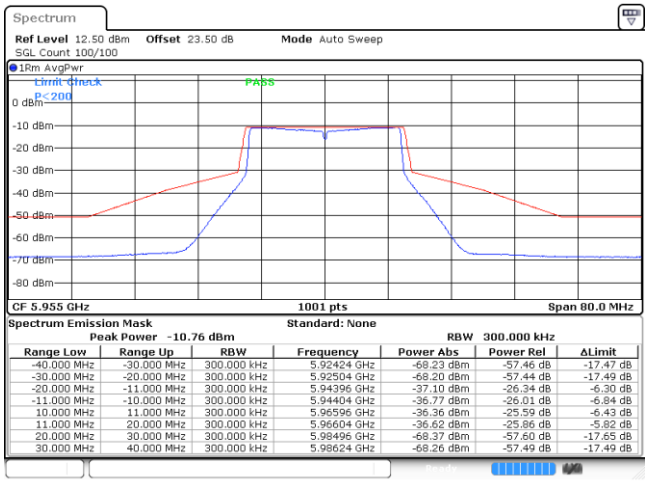
Plot on Channel 7095MHz



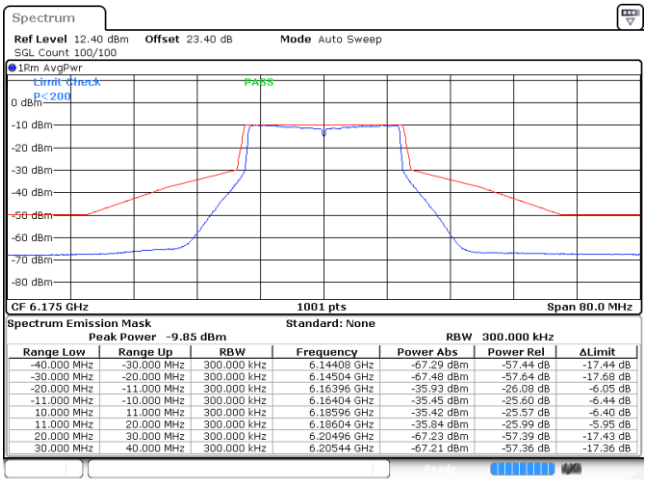
Date: 23.NOV.2021 19:25:58

EUT Mode :	802.11ax HE20 Full RU

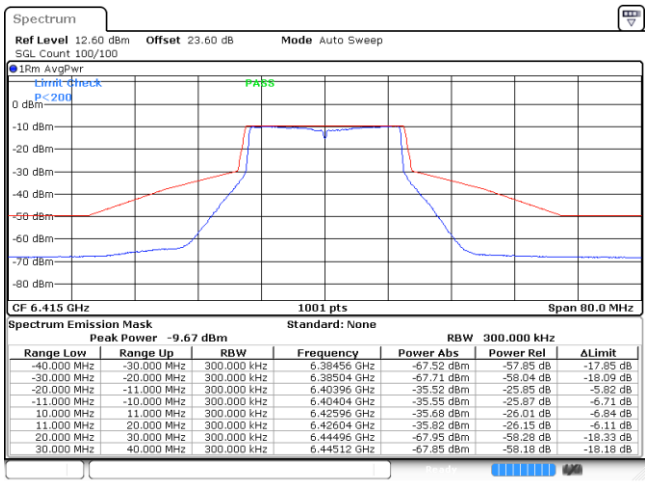
Plot on Channel 5955MHz



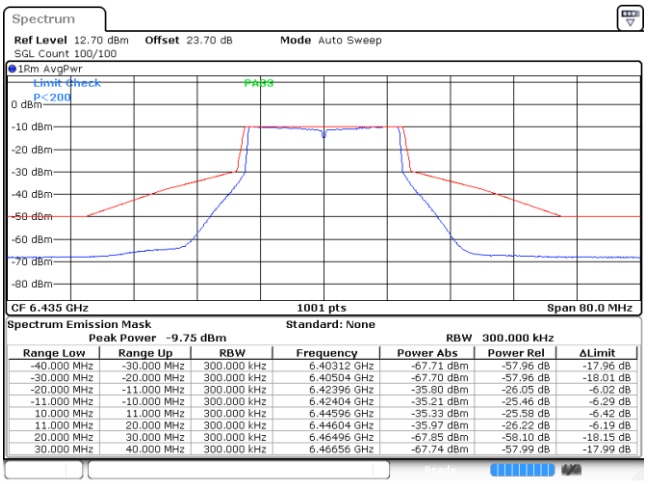
Plot on Channel 6175MHz



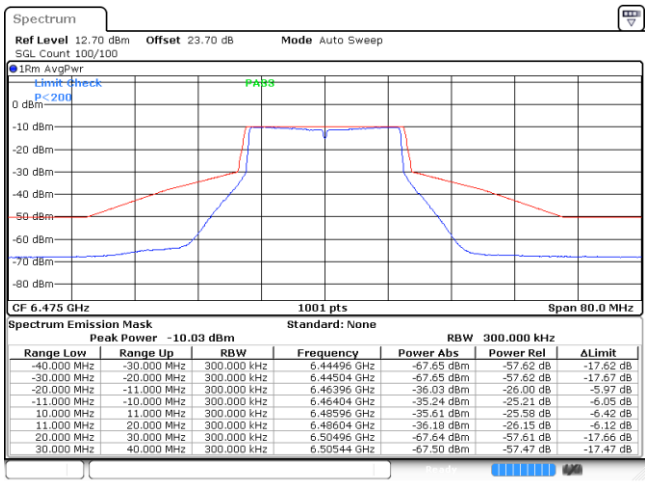
Plot on Channel 6415MHz



Plot on Channel 6435MHz

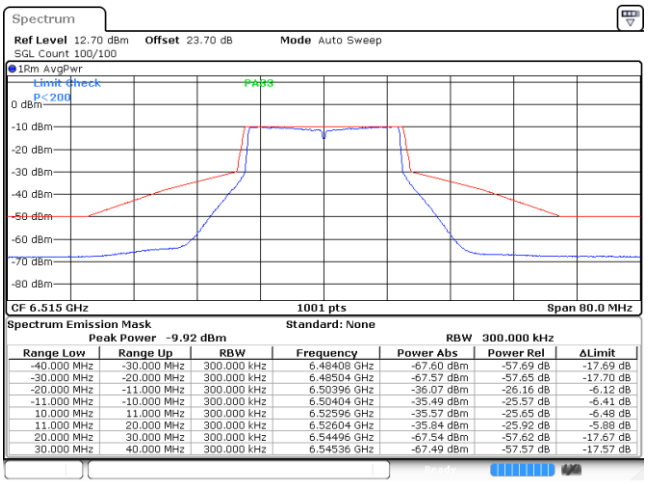


Plot on Channel 6475MHz



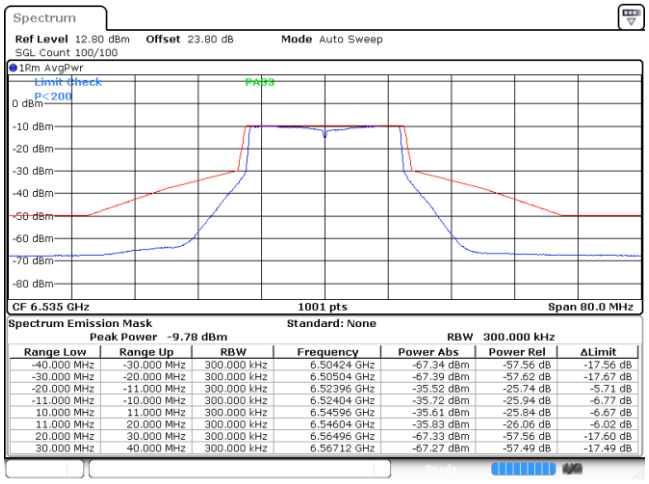
Date: 25.SEP.2021 00:17:11

Plot on Channel 6515MHz



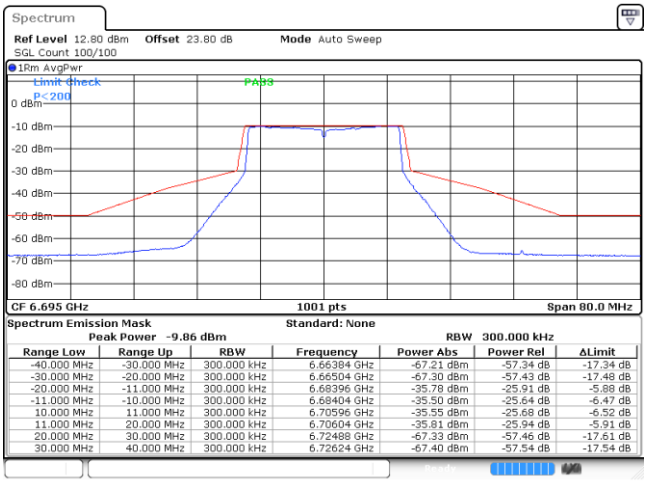
Date: 25.SEP.2021 00:46:21

Plot on Channel 6535MHz



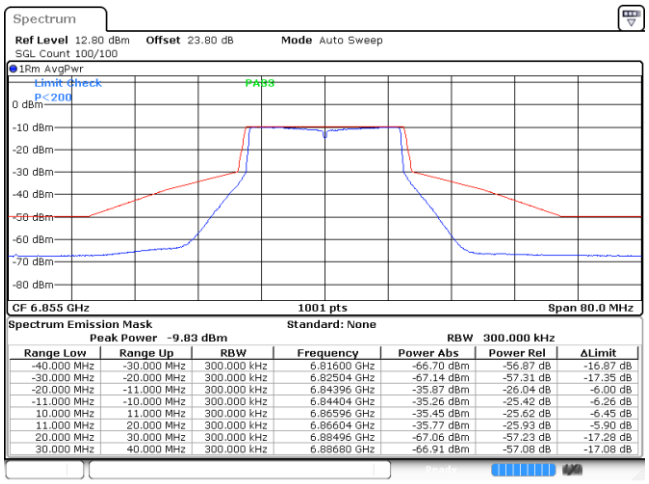
Date: 25.SEP.2021 01:21:07

Plot on Channel 6695MHz



Date: 25.SEP.2021 01:41:09

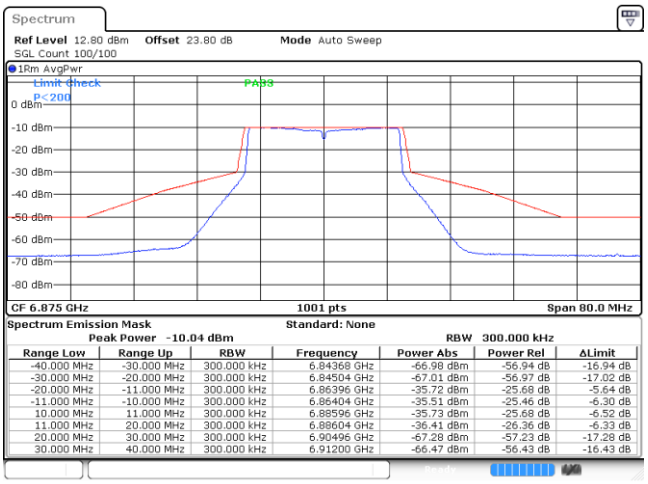
Plot on Channel 6855MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.81600 GHz	-66.70 dBm	-56.87 dB	-16.87 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.82504 GHz	-67.14 dBm	-57.31 dB	-17.35 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.84396 GHz	-35.87 dBm	-26.04 dB	-6.00 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-35.26 dBm	-25.42 dB	-6.26 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-35.45 dBm	-25.62 dB	-6.45 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.86604 GHz	-35.77 dBm	-25.93 dB	-5.90 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.88496 GHz	-67.06 dBm	-57.23 dB	-17.28 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88680 GHz	-66.91 dBm	-57.08 dB	-17.08 dB

Date: 25.SEP.2021 01:55:43

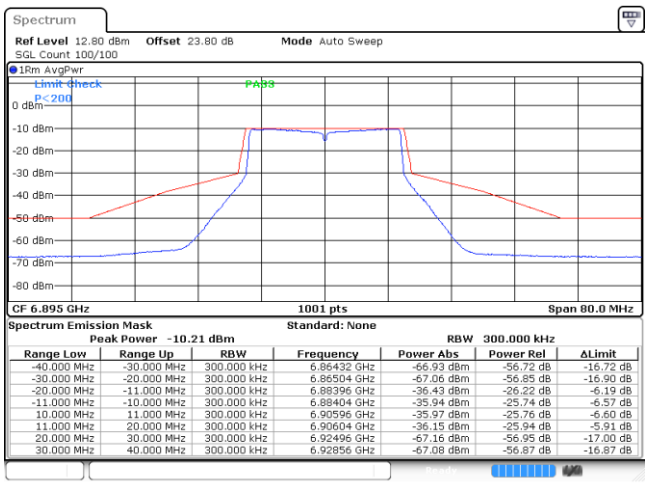
Plot on Channel 6875MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.84368 GHz	-66.98 dBm	-56.94 dB	-16.94 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.84504 GHz	-67.01 dBm	-56.97 dB	-17.02 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.86396 GHz	-35.72 dBm	-25.68 dB	-5.64 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.86404 GHz	-35.51 dBm	-25.46 dB	-6.30 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.88596 GHz	-35.73 dBm	-25.68 dB	-6.52 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.88604 GHz	-36.41 dBm	-26.36 dB	-6.33 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.90496 GHz	-67.28 dBm	-57.23 dB	-17.28 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.91200 GHz	-66.47 dBm	-56.43 dB	-16.43 dB

Date: 25.SEP.2021 02:15:08

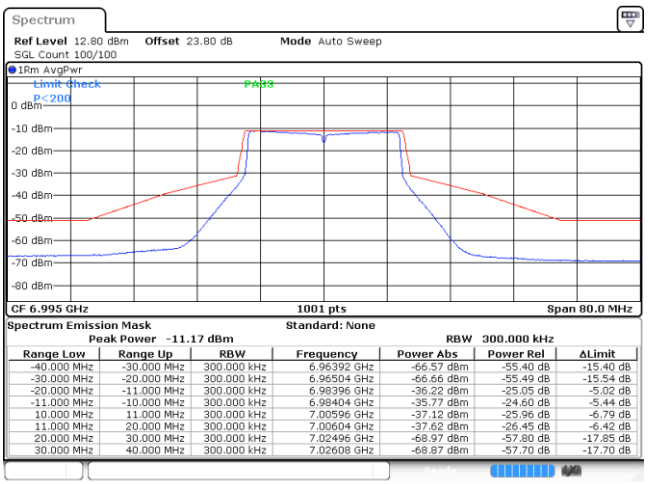
Plot on Channel 6895MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.86432 GHz	-66.93 dBm	-56.72 dB	-16.72 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.86504 GHz	-67.06 dBm	-56.85 dB	-16.90 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.88396 GHz	-36.43 dBm	-26.22 dB	-6.19 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.88404 GHz	-35.94 dBm	-25.74 dB	-6.57 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.90596 GHz	-35.97 dBm	-25.76 dB	-6.60 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.90604 GHz	-36.15 dBm	-25.94 dB	-5.91 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.92496 GHz	-67.16 dBm	-56.95 dB	-17.00 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.92856 GHz	-67.08 dBm	-56.87 dB	-16.87 dB

Date: 27.SEP.2021 18:38:25

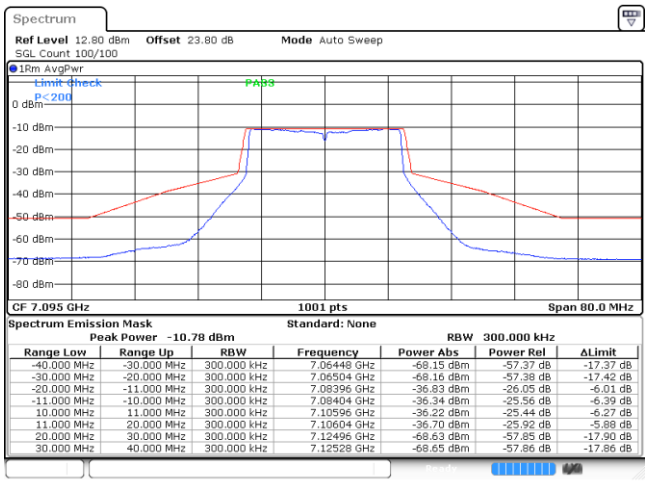
Plot on Channel 6995MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.96392 GHz	-66.57 dBm	-55.40 dB	-15.40 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.96504 GHz	-66.66 dBm	-55.49 dB	-15.54 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.98396 GHz	-36.22 dBm	-25.05 dB	-5.02 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.98404 GHz	-35.77 dBm	-24.60 dB	-5.44 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.00596 GHz	-37.12 dBm	-25.96 dB	-6.79 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.00604 GHz	-37.62 dBm	-26.45 dB	-6.42 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.02496 GHz	-68.97 dBm	-57.80 dB	-17.85 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.02608 GHz	-68.87 dBm	-57.70 dB	-17.70 dB

Date: 30.SEP.2021 19:08:26

Plot on Channel 7095MHz

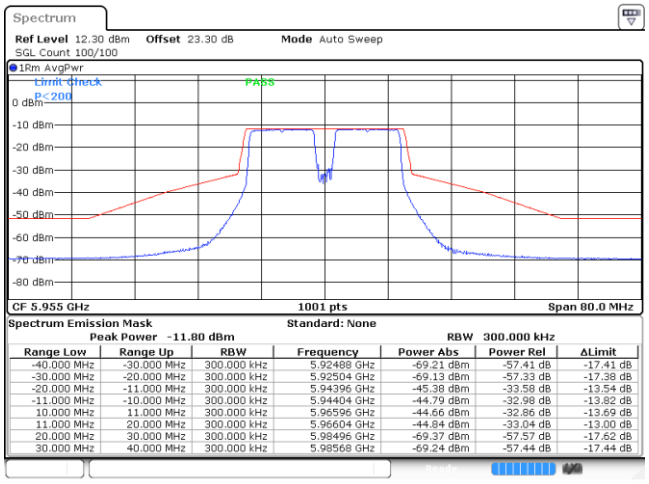


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	7.06448 GHz	-68.15 dBm	-57.37 dB	-17.37 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	7.06504 GHz	-68.16 dBm	-57.38 dB	-17.42 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	7.08396 GHz	-36.83 dBm	-26.05 dB	-6.01 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	7.08404 GHz	-36.34 dBm	-25.56 dB	-6.39 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.10596 GHz	-36.22 dBm	-25.44 dB	-6.27 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.10604 GHz	-36.70 dBm	-25.92 dB	-5.88 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.12496 GHz	-68.63 dBm	-57.85 dB	-17.90 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.12528 GHz	-68.65 dBm	-57.86 dB	-17.86 dB

Date: 30.SEP.2021 19:29:30

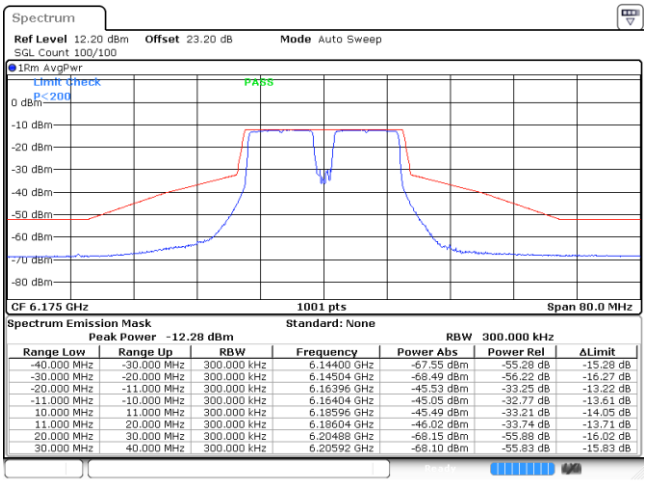
EUT Mode :	802.11ax HE20 52RU*4

Plot on Channel 5955MHz



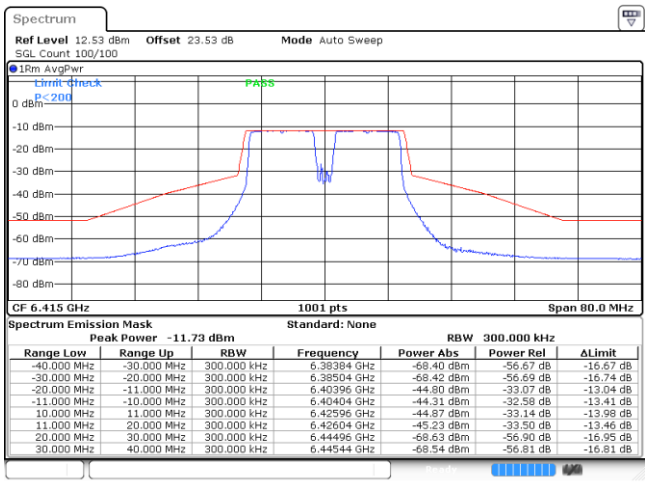
Date: 7.DEC.2022 23:20:31

Plot on Channel 6175MHz



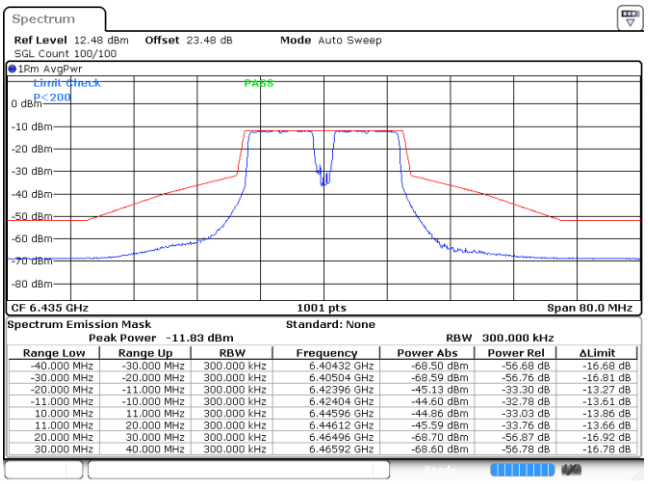
Date: 7.DEC.2022 23:52:42

Plot on Channel 6415MHz



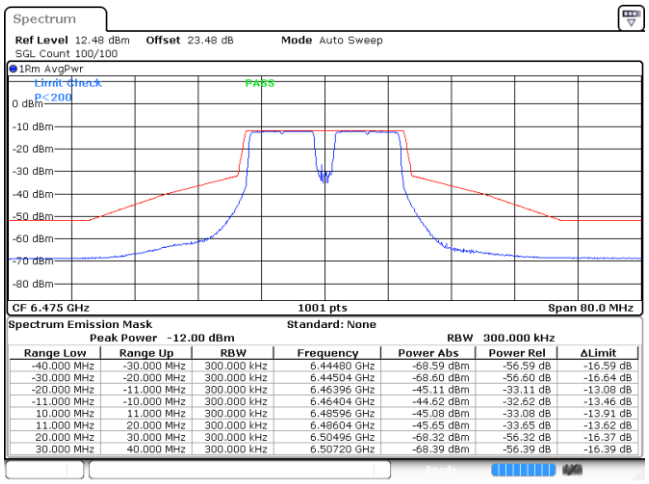
Date: 7.DEC.2022 23:58:00

Plot on Channel 6435MHz



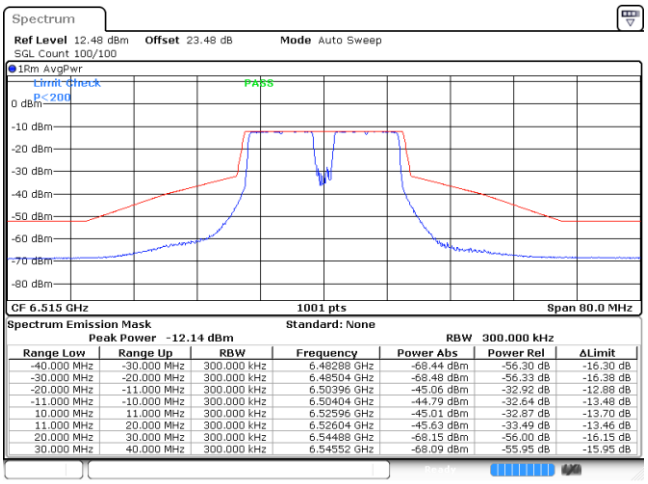
Date: 8.DEC.2022 00:19:19

Plot on Channel 6475MHz



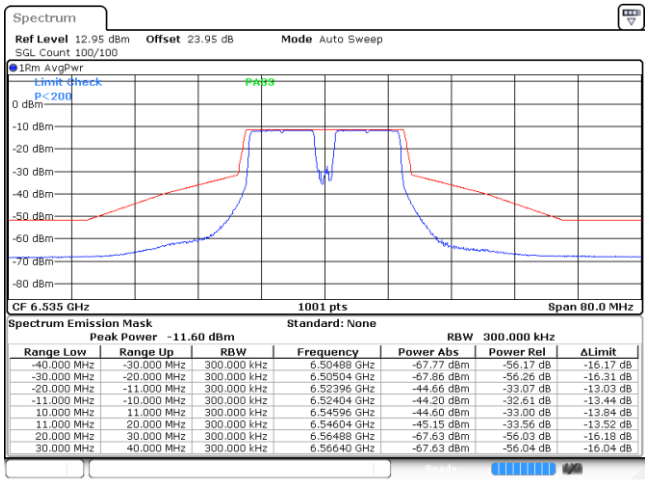
Date: 8.DEC.2022 00:23:21

Plot on Channel 6515MHz



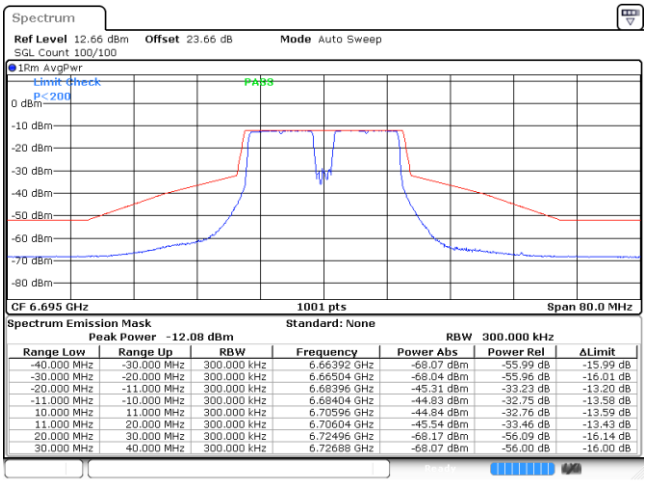
Date: 8.DEC.2022 00:36:24

Plot on Channel 6535MHz



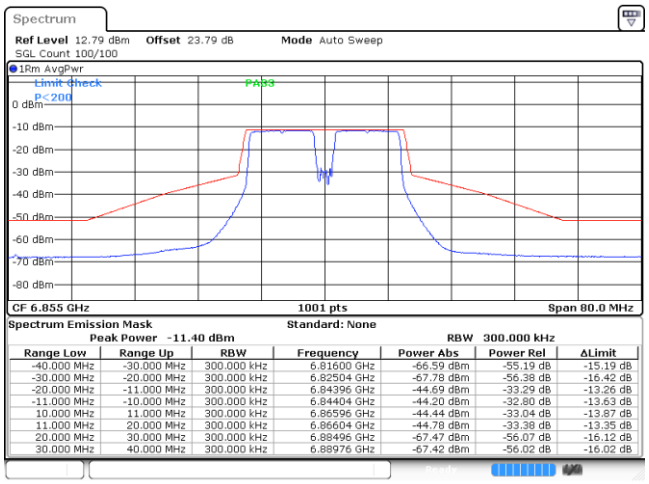
Date: 8.DEC.2022 00:43:47

Plot on Channel 6695MHz



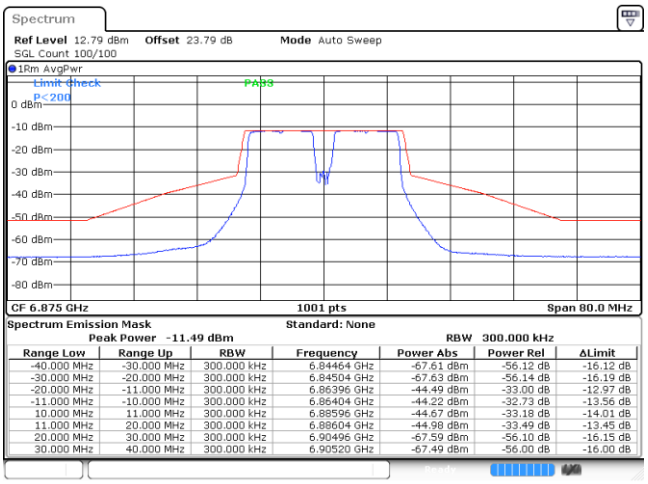
Date: 8.DEC.2022 00:59:35

Plot on Channel 6855MHz



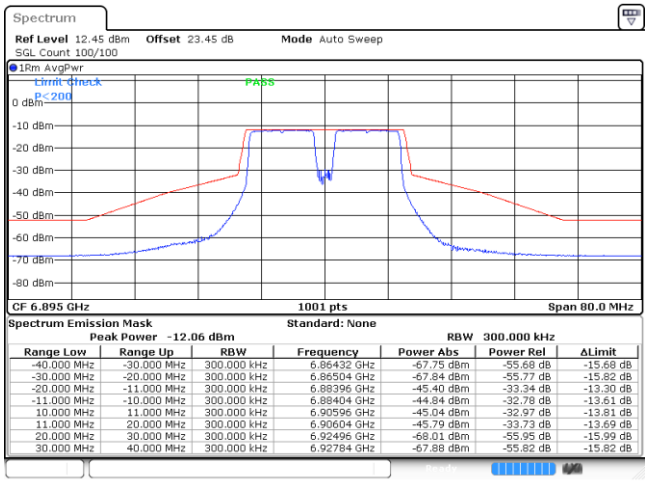
Date: 8.DEC.2022 01:03:32

Plot on Channel 6875MHz



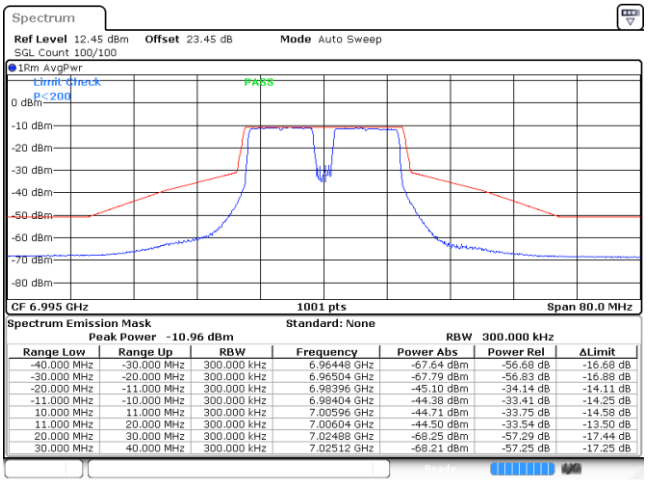
Date: 8.DEC.2022 01:15:10

Plot on Channel 6895MHz



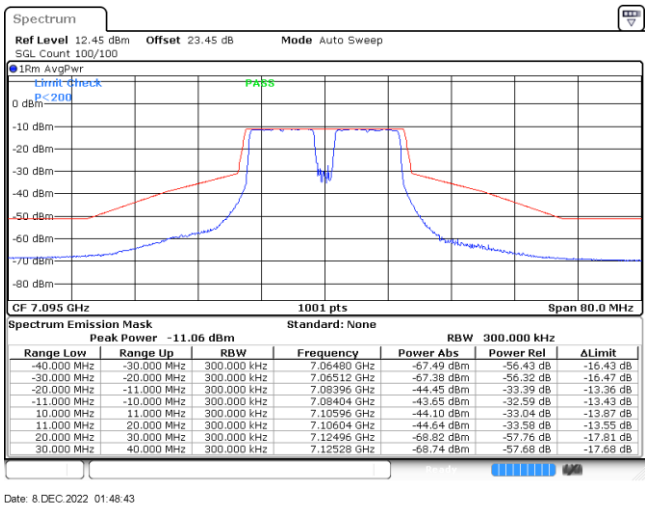
Date: 8.DEC.2022 01:31:09

Plot on Channel 6995MHz



Date: 8.DEC.2022 01:44:02

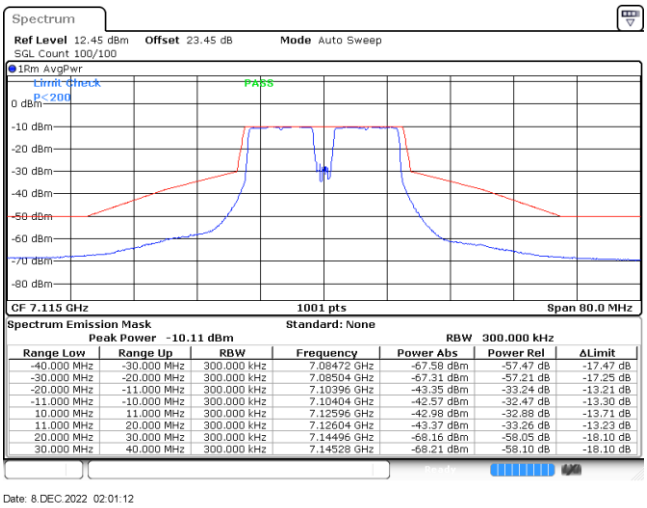
Plot on Channel 7095MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	7.06480 GHz	-67.49 dBm	-56.43 dB	-16.43 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	7.06512 GHz	-67.38 dBm	-56.32 dB	-16.47 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	7.08396 GHz	-44.45 dBm	-33.39 dB	-13.36 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	7.08404 GHz	-43.65 dBm	-32.59 dB	-13.43 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.10596 GHz	-44.10 dBm	-33.04 dB	-13.87 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.10604 GHz	-44.64 dBm	-33.58 dB	-13.55 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.12496 GHz	-68.82 dBm	-57.76 dB	-17.81 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.12528 GHz	-68.74 dBm	-57.68 dB	-17.68 dB

Date: 8.DEC.2022 01:48:43

Plot on Channel 7115MHz

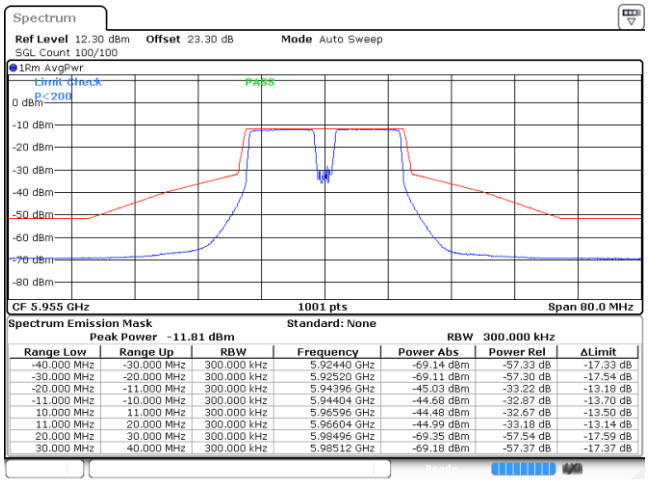


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	7.08472 GHz	-67.58 dBm	-57.47 dB	-17.47 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	7.08504 GHz	-67.31 dBm	-57.21 dB	-17.25 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	7.10396 GHz	-43.35 dBm	-33.24 dB	-13.21 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	7.10404 GHz	-42.57 dBm	-32.47 dB	-13.30 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.12596 GHz	-42.98 dBm	-32.88 dB	-13.71 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.12604 GHz	-43.37 dBm	-33.26 dB	-13.23 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.14496 GHz	-68.16 dBm	-58.05 dB	-18.10 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.14528 GHz	-68.21 dBm	-58.10 dB	-18.10 dB

Date: 8.DEC.2022 02:01:12

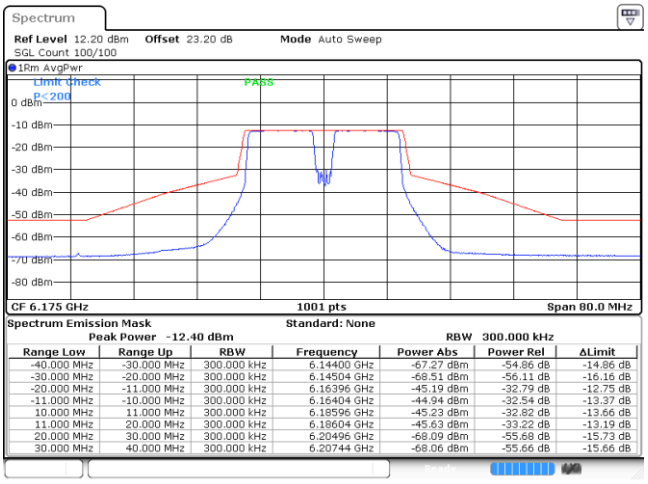
EUT Mode :	802.11ax HE20 106RU*2

Plot on Channel 5955MHz



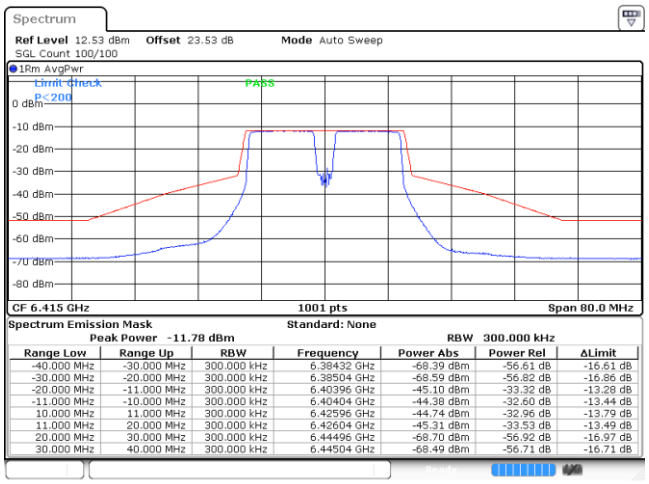
Date: 8.DEC.2022 18:41:12

Plot on Channel 6175MHz



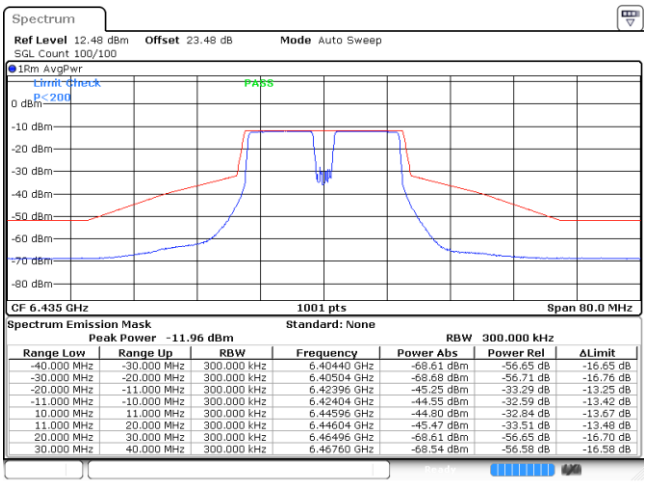
Date: 8.DEC.2022 18:49:51

Plot on Channel 6415MHz



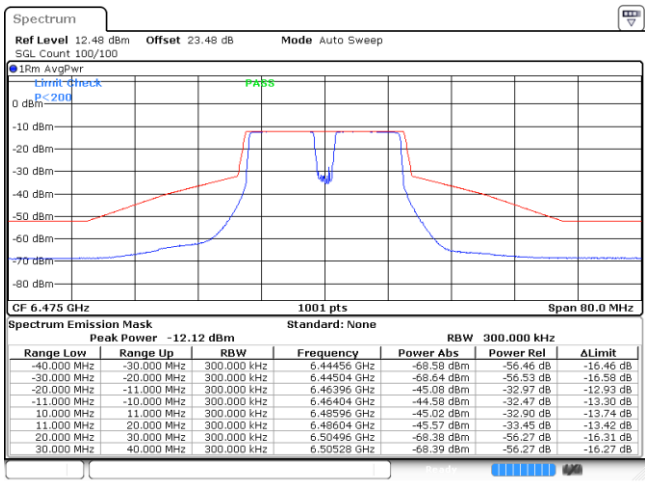
Date: 8.DEC.2022 19:00:59

Plot on Channel 6435MHz



Date: 8.DEC.2022 19:11:57

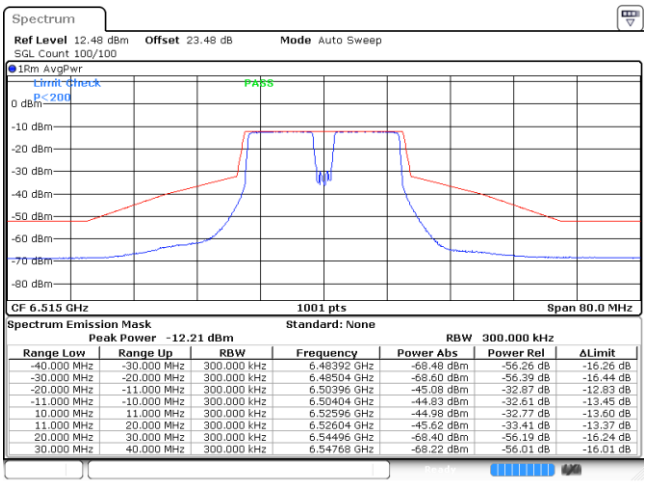
Plot on Channel 6475MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.44456 GHz	-68.58 dBm	-56.46 dB	-16.46 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.44504 GHz	-68.64 dBm	-56.53 dB	-16.58 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.46396 GHz	-45.08 dBm	-32.97 dB	-12.93 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.46404 GHz	-44.58 dBm	-32.47 dB	-13.30 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.48596 GHz	-45.02 dBm	-32.90 dB	-13.74 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.48604 GHz	-45.57 dBm	-33.45 dB	-13.42 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.50496 GHz	-68.38 dBm	-56.27 dB	-16.31 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.50528 GHz	-68.39 dBm	-56.27 dB	-16.27 dB

Date: 8.DEC.2022 19:25:41

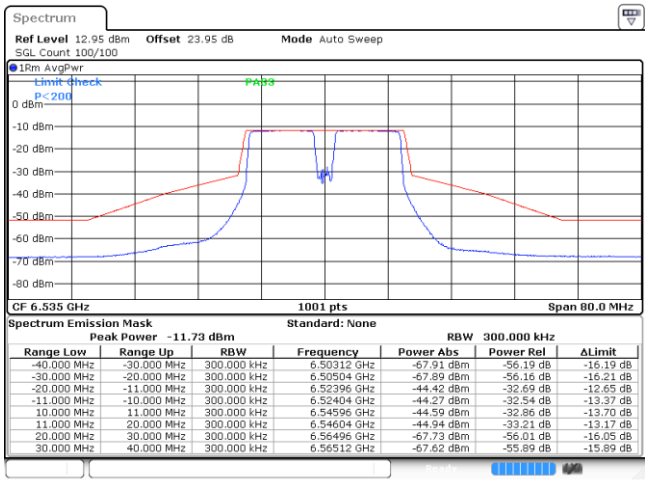
Plot on Channel 6515MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.48392 GHz	-68.48 dBm	-56.26 dB	-16.26 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.48504 GHz	-68.60 dBm	-56.39 dB	-16.44 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.50396 GHz	-45.08 dBm	-32.87 dB	-12.83 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.50404 GHz	-44.83 dBm	-32.61 dB	-13.45 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.52596 GHz	-44.98 dBm	-32.77 dB	-13.60 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.52604 GHz	-45.62 dBm	-33.41 dB	-13.37 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.54496 GHz	-68.40 dBm	-56.19 dB	-16.24 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.54768 GHz	-68.22 dBm	-56.01 dB	-16.01 dB

Date: 8.DEC.2022 19:34:51

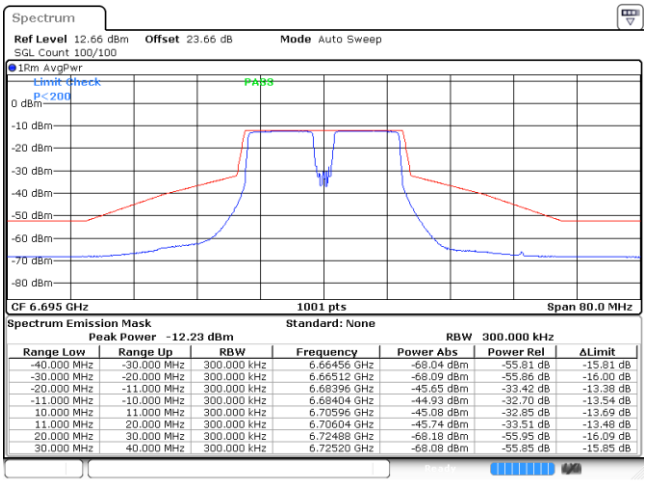
Plot on Channel 6535MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.50312 GHz	-67.91 dBm	-56.19 dB	-16.19 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.50504 GHz	-67.89 dBm	-56.16 dB	-16.21 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.52396 GHz	-44.42 dBm	-32.69 dB	-12.65 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.52404 GHz	-44.27 dBm	-32.54 dB	-13.37 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.54596 GHz	-44.59 dBm	-32.86 dB	-13.70 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.54604 GHz	-44.94 dBm	-33.21 dB	-13.17 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.56496 GHz	-67.73 dBm	-56.01 dB	-16.05 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.56512 GHz	-67.62 dBm	-55.89 dB	-15.89 dB

Date: 8.DEC.2022 19:38:20

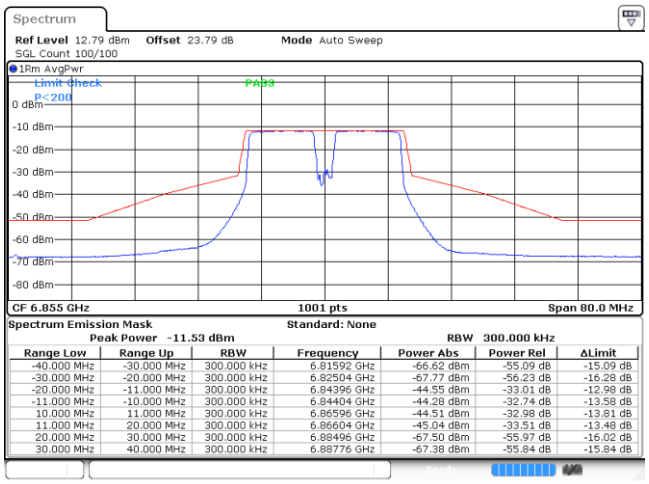
Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66456 GHz	-68.04 dBm	-55.81 dB	-15.81 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.66512 GHz	-68.09 dBm	-55.86 dB	-16.00 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.68396 GHz	-45.65 dBm	-33.42 dB	-13.38 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-44.93 dBm	-32.70 dB	-13.54 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-45.08 dBm	-32.85 dB	-13.69 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70604 GHz	-45.74 dBm	-33.51 dB	-13.48 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.72488 GHz	-68.18 dBm	-55.95 dB	-16.09 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72520 GHz	-68.08 dBm	-55.85 dB	-15.85 dB

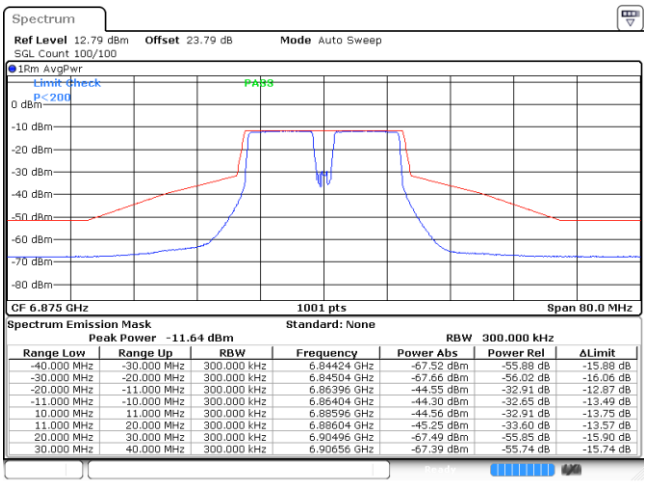
Date: 8.DEC.2022 19:47:12

Plot on Channel 6855MHz



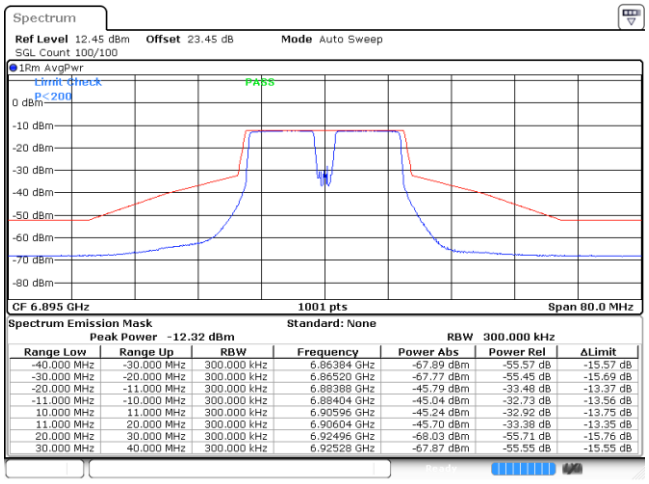
Date: 8.DEC.2022 19:51:10

Plot on Channel 6875MHz



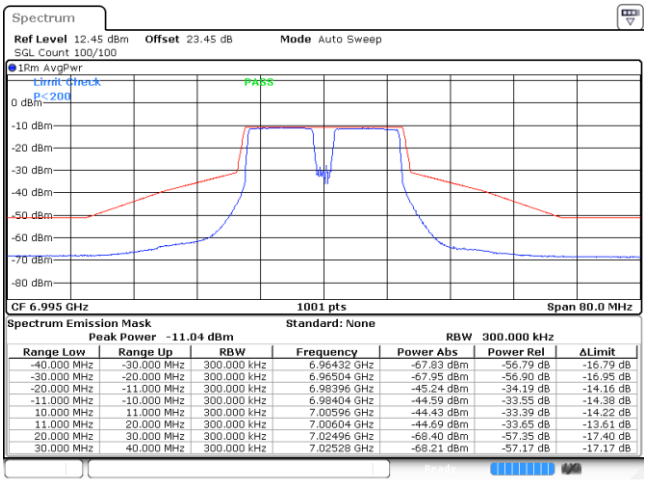
Date: 8.DEC.2022 20:04:53

Plot on Channel 6895MHz



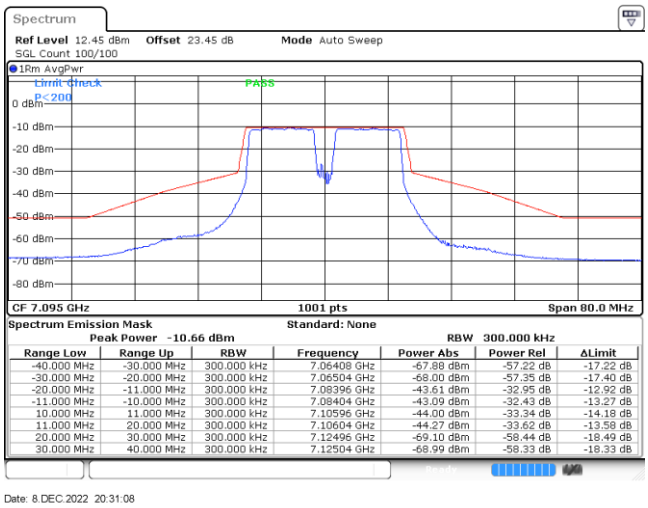
Date: 8.DEC.2022 20:13:01

Plot on Channel 6995MHz



Date: 8.DEC.2022 20:27:20

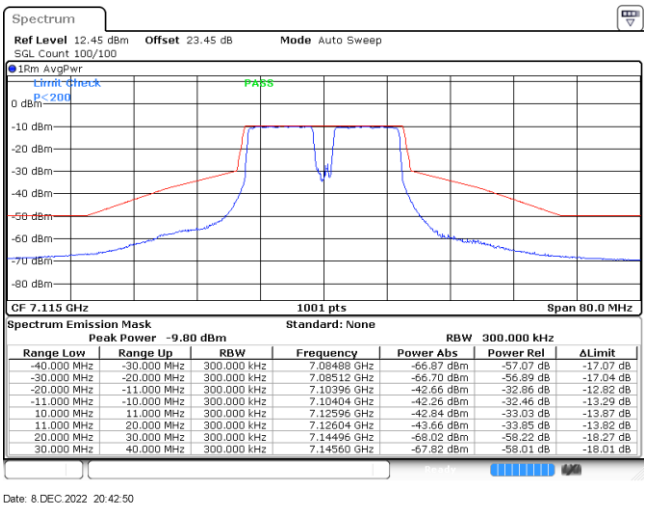
Plot on Channel 7095MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	7.06408 GHz	-67.88 dBm	-57.22 dB	-17.22 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	7.06504 GHz	-68.00 dBm	-57.35 dB	-17.40 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	7.08396 GHz	-43.61 dBm	-32.95 dB	-12.92 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	7.08404 GHz	-43.09 dBm	-32.43 dB	-13.27 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.10596 GHz	-44.00 dBm	-33.34 dB	-14.18 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.10604 GHz	-44.27 dBm	-33.62 dB	-13.58 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.12496 GHz	-69.10 dBm	-58.44 dB	-18.49 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.12504 GHz	-68.99 dBm	-58.33 dB	-18.33 dB

Date: 8.DEC.2022 20:31:08

Plot on Channel 7115MHz

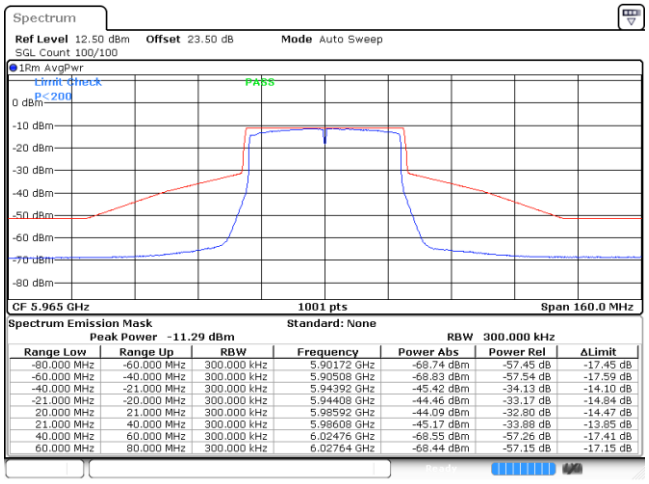


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	7.08488 GHz	-66.87 dBm	-57.07 dB	-17.07 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	7.08512 GHz	-66.70 dBm	-56.89 dB	-17.04 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	7.10396 GHz	-42.66 dBm	-32.86 dB	-12.82 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	7.10404 GHz	-42.26 dBm	-32.46 dB	-13.29 dB
10.000 MHz	11.000 MHz	300.000 kHz	7.12596 GHz	-42.84 dBm	-33.03 dB	-13.87 dB
11.000 MHz	20.000 MHz	300.000 kHz	7.12604 GHz	-43.66 dBm	-33.85 dB	-13.82 dB
20.000 MHz	30.000 MHz	300.000 kHz	7.14496 GHz	-68.02 dBm	-58.22 dB	-18.27 dB
30.000 MHz	40.000 MHz	300.000 kHz	7.14560 GHz	-67.82 dBm	-58.01 dB	-18.01 dB

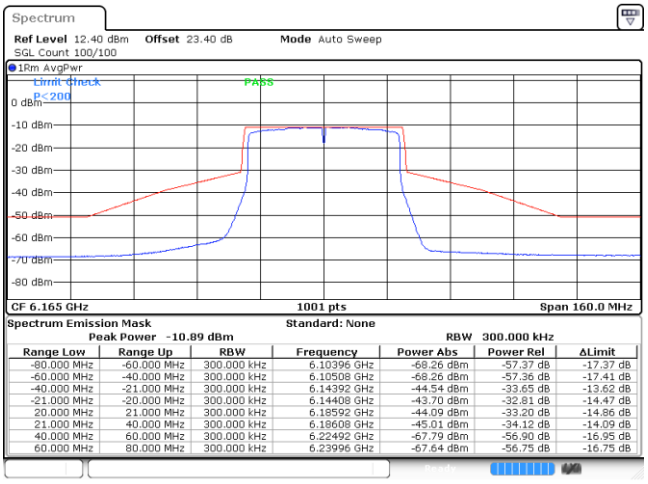
Date: 8.DEC.2022 20:42:50

EUT Mode :	802.11ax HE40

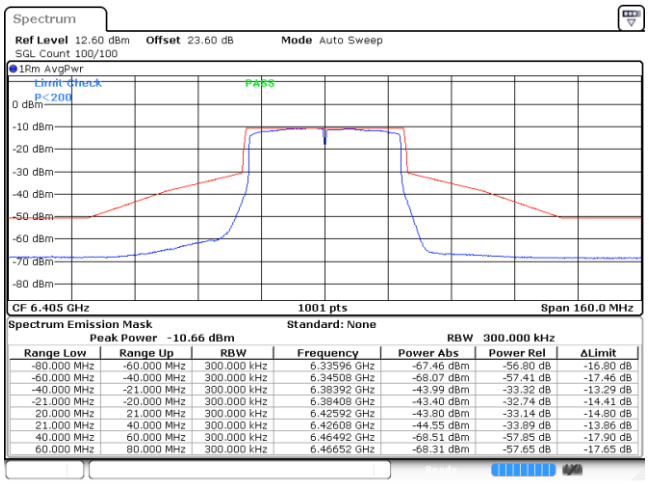
Plot on Channel 5965MHz



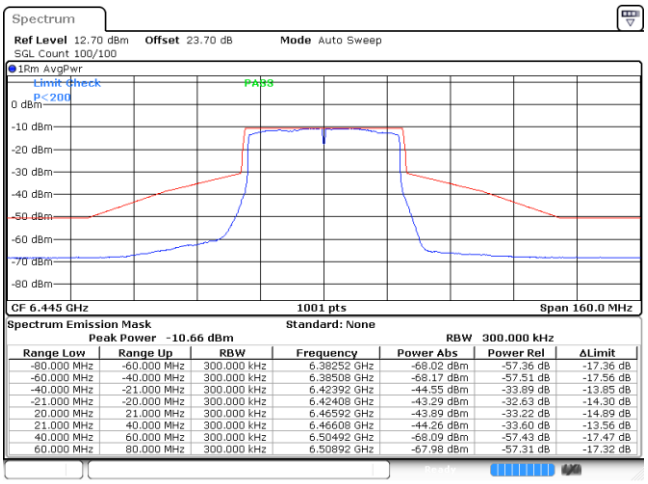
Plot on Channel 6165MHz



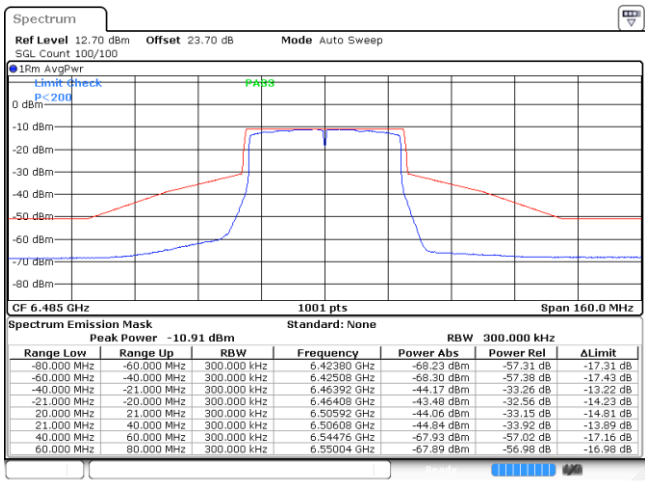
Plot on Channel 6405MHz



Plot on Channel 6445MHz

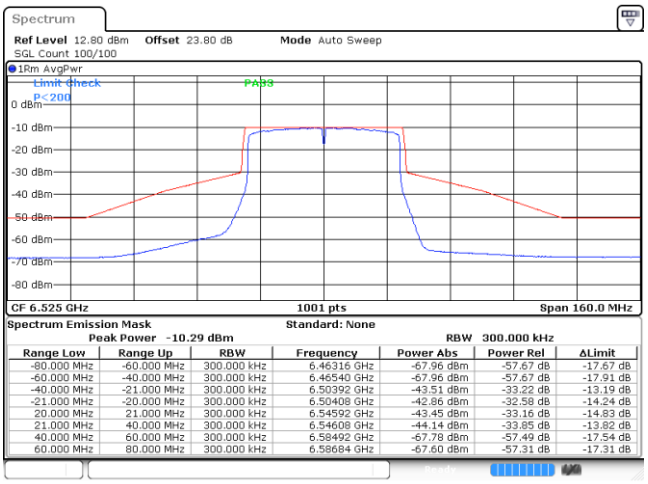


Plot on Channel 6485MHz



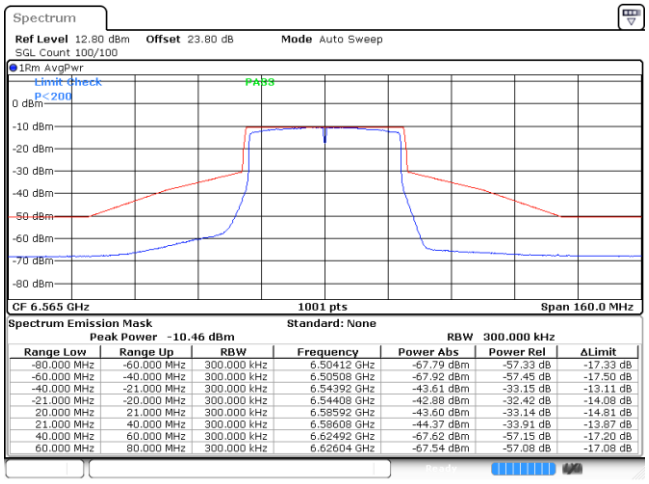
Date: 30.SEP.2021 22:40:36

Plot on Channel 6525MHz



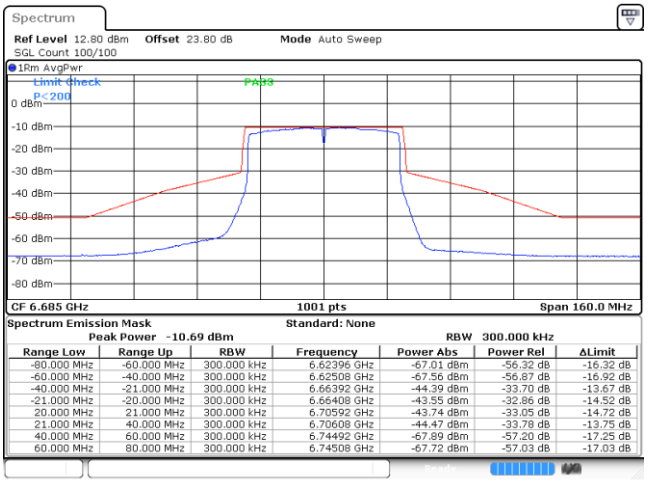
Date: 30.SEP.2021 22:54:26

Plot on Channel 6565MHz



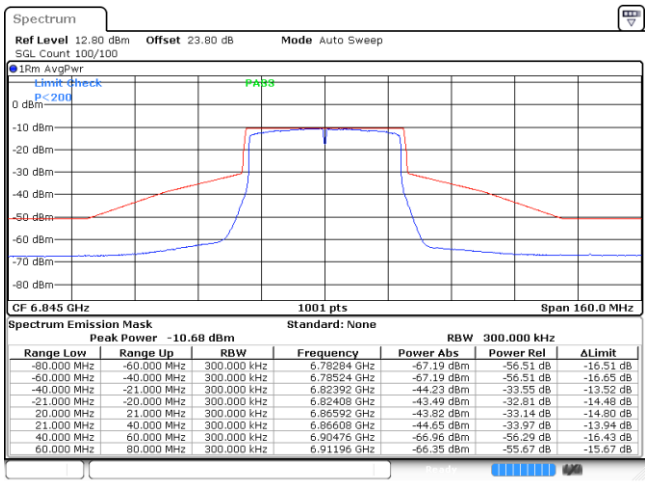
Date: 30.SEP.2021 23:08:25

Plot on Channel 6685MHz



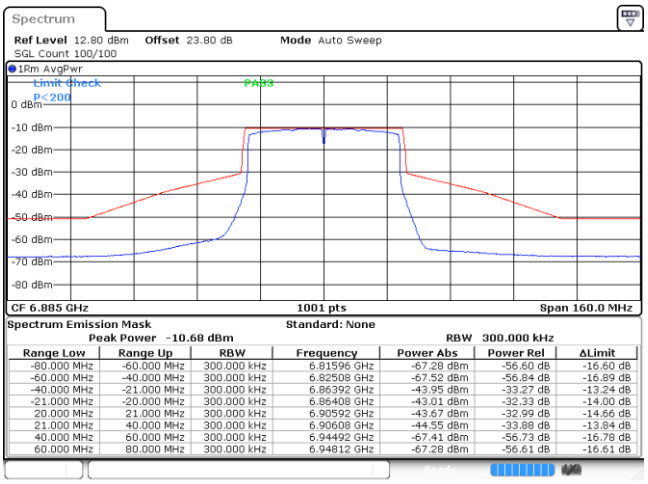
Date: 30.SEP.2021 23:23:42

Plot on Channel 6845MHz



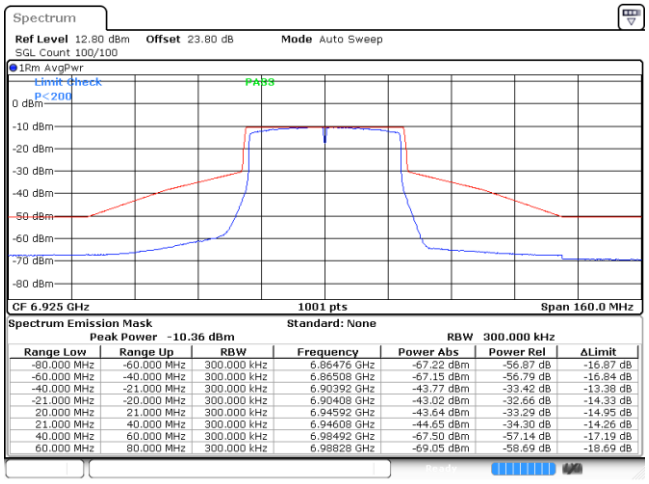
Date: 30.SEP.2021 23:39:19

Plot on Channel 6885MHz



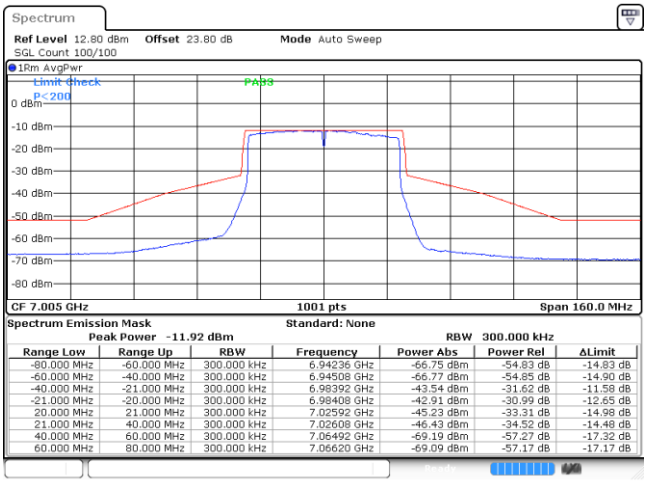
Date: 30.SEP.2021 23:55:18

Plot on Channel 6925MHz



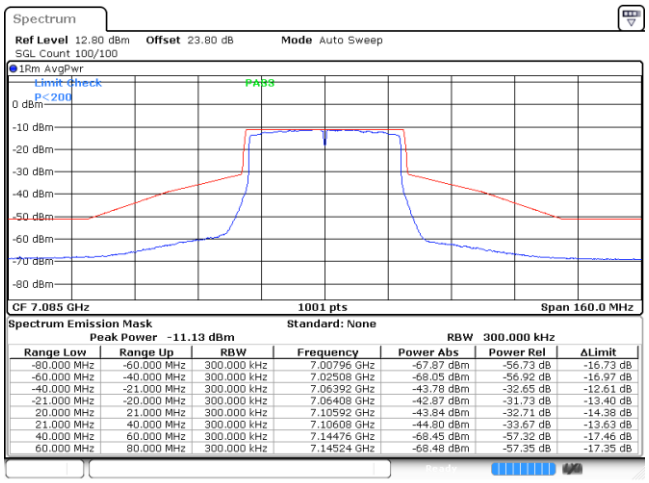
Date: 1.OCT.2021 00:10:10

Plot on Channel 7005MHz



Date: 1.OCT.2021 00:25:32

Plot on Channel 7085MHz



Date: 1.OCT.2021 00:39:09