FCC RADIO TEST REPORT

FCC ID	**:**	**A4RG9FPL**
Equipment	**:**	**Phone**
Model Name	**:**	**G9FPL, G0B96**
Applicant	**:**	**Google LLC 1600 Amphitheatre Parkway, Mountain View, California, 94043 USA**
Standard	**:**	**FCC Part 15 Subpart E §15.407**

The product was received on Nov. 16, 2022 and testing was performed from Nov. 25, 2022 to Dec. 21, 2022. We, Sporton International Inc. Wensan Laboratory, 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 report apply exclusively to the tested model / sample. Without written approval from Sporton International Inc. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory
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History of this test report

Report No.	Version	Description	Issue Date
FR262403-04G	01	Initial issue of report	Feb. 21, 2023
FR262403-04G	02	1. Revise Comments and Explanations and Appendix A, C, D and E 2. Add remark in section 1.2.1	Mar. 09, 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)(7)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a)(7)	Fundamental Power Spectral Density	Pass	-
3.4	15.407(b)(6)	In-Band Emissions (Channel Mask)	Pass	-
-	15.407(d)(6)	Contention Based Protocol	Not Required	Dual Client Standard Client
-	15.407 KDB 987594 D02 Section II. K.	Dual Client Test	Not Required	Dual Client EIRP < 24dBm
3.5	15.407(b)	Unwanted Emissions	Pass	11.54 dB under the limit at 5912.050 MHz
3.6	15.207	AC Conducted Emission	Pass	14.62 dB under the limit at 1.444 MHz
3.7	15.203 15.407(a)	Antenna Requirement	Pass	-

Note: Not required means after assessing, test items are not necessary to carry out.

Declaration of Conformity:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented in accordance with the regulation limits or requirements declared by manufacturers.
   It's means measurement values may risk exceeding the limit of regulation standards, if measurement uncertainty is include in test results.
2. The measurement uncertainty please refer to this report "Uncertainty of Evaluation".

Comments and Explanations:

1. The product specifications of the EUT presented in the report are declared by the manufacturer who shall take full responsibility for the authenticity.
2. The G9FPL and G0B96 are 100% identical in Hardware / Software to each other, and only have different model names for separate marketing purposes. The test samples are all model G9FPL.

Reviewed by: William Chen

Report Producer: Clio Lo

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Phone
Model Name	G9FPL, G0B96
FCC ID	A4RG9FPL
EUT supports Radios application	GSM/EGPRS/WCDMA/HSPA/LTE/5G NR/NFC/GNSS/UWB/ WPT Client WLAN 11b/g/n HT20 WLAN 11a/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 Bluetooth BR/EDR/LE

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

EUT Information List	
S/N	Performed Test Item
2A311FDHS00011	Conducted Measurement
2B021FDHS0005U	Radiated Spurious Emission
2B021FDHS0002Y	Conducted Emission

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx/Rx Frequency Range	5925 MHz ~ 6425 MHz 6525 MHz ~ 6875 MHz
Maximum Output Power	**MIMO <Ant. 3+4>** **<5925 MHz ~ 6425 MHz>** 802.11a: 22.87 dBm / 0.1936 W 802.11ax HE20: 22.26 dBm / 0.1683 W 802.11ax HE40: 22.52 dBm / 0.1786 W 802.11ax HE80: 22.37 dBm / 0.1726 W 802.11ax HE160: 21.66 dBm / 0.1466 W **<6525 MHz ~ 6875 MHz>** 802.11a: 22.75 dBm / 0.1884 W 802.11ax HE20: 21.91 dBm / 0.1552 W 802.11ax HE40: 21.94 dBm / 0.1563 W 802.11ax HE80: 22.05 dBm / 0.1603 W 802.11ax HE160: 21.47 dBm / 0.1403 W

<table>
<tr><th colspan="2">Product Specification is subject to this standard</th></tr>
<tr><td>99% Occupied Bandwidth</td><td>MIMO <Ant. 3>
802.11a: 19.58 MHz
802.11ax HE20: 19.58 MHz
802.11ax HE40: 38.56 MHz
802.11ax HE80: 77.80 MHz
802.11ax HE160: 158.24 MHz
MIMO <Ant. 4>
802.11a: 22.38 MHz
802.11ax HE20: 19.73 MHz
802.11ax HE40: 38.86 MHz
802.11ax HE80: 77.68 MHz
802.11ax HE160: 157.76 MHz</td></tr>
<tr><td>Antenna Type</td><td><5925 MHz ~ 6425 MHz>
<Ant. 3>: Coupling feed Antenna
<Ant. 4>: IFA Antenna
<6525 MHz ~ 6875 MHz>
<Ant. 3>: Coupling feed Antenna
<Ant. 4>: IFA Antenna</td></tr>
<tr><td>Antenna Gain (Open Mode)</td><td><5925 MHz ~ 6425 MHz>
<Ant. 3>: 1.20 dBi
<Ant. 4>: -3.20 dBi
<6525 MHz ~ 6875 MHz>
<Ant. 3>: 1.40 dBi
<Ant. 4>: -5.70 dBi</td></tr>
<tr><td>Antenna Gain (Closed Mode)</td><td><5925 MHz ~ 6425 MHz>
<Ant. 3>: -1.60 dBi
<Ant. 4>: -3.30 dBi
<6525 MHz ~ 6875 MHz>
<Ant. 3>: -3.30 dBi
<Ant. 4>: -5.80 dBi</td></tr>
<tr><td>Type of Modulation</td><td>802.11a : OFDM (BPSK/QPSK/16QAM/64QAM)
802.11ax : OFDMA
(BPSK/QPSK/16QAM/64QAM/256QAM/1024QAM)</td></tr>
<tr><td>Antenna Function Description</td><td><table><tr><th></th><th>Ant. 3</th><th>Ant. 4</th></tr><tr><td>802.11a/ax MIMO</td><td>V</td><td>V</td></tr></table></td></tr>
</table>

Remark:

1. MIMO Ant. 3+4 Directional Gain is a calculated result from MIMO Ant. 3 and MIMO Ant. 4. The formula used in calculation is documented in section 1.2.1.
2. Power of MIMO Ant. 3 + Ant. 4 is a calculated result from sum of the power MIMO Ant. 3 and MIMO Ant. 4.
3. The EUT's information above is declared by manufacturer. Please refer to Comments and Explanations in report summary.

1.2.1 Antenna Directional Gain

<For CDD Mode>

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)f)ii)

Directional gain = G_{ANT} + Array Gain, where Array Gain is as follows:

For power measurements on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$.

G_{ANT} is set equal to the gain of the antenna having the highest gain.

For PSD measurements, the directional gain calculation.

$$DirectionalGain = 10 \cdot \log \left[\frac{\sum_{j=1}^{N_{SS}} \left\{ \sum_{k=1}^{N_{ANT}} g_{j,k} \right\}^2}{N_{ANT}} \right]$$

where

Each antenna is driven by no more than one spatial stream;
N_{SS} = the number of independent spatial streams of data;
N_{ANT} = the total number of antennas
$g_{j,k} = 10^{G_k / 20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;
G_k is the gain in dBi of the kth antenna.

As minimum N_{SS}=1 is supported by EUT, the formula can be simplified as:

Directional gain = $10*\log[(10^{G1/20} + 10^{G2/20} + \ldots + 10^{GN/20})^2 / N_{ANT}]$ dBi

Where G1, G2….GN denote single antenna gain.

The directional gain “DG” is calculated as following table.

	Ant 3 (dBi)	Ant 4 (dBi)	DG for Power (dBi)	DG for PSD (dBi)
5925 MHz ~ 6425 MHz	1.20	-3.20	1.20	2.29
6525 MHz ~ 6875 MHz	1.40	-5.70	1.40	1.57

Calculation example:

If a device has two antenna, G_{ANT1}= 1.20 dBi; G_{ANT2}= -3.20 dBi

Directional gain of power measurement = max(1.20, -3.20) + 0 = 1.20 dBi

Directional gain of PSD derived from formula which is

10 x log { { [10^ (1.20 dBi / 20) + 10^ (-3.20 dBi / 20)] ^ 2 } / 2 }

=2.29 dBi

Note: The antenna gain is from both open mode and close mode with highest number.

1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	CO05-HY (TAF Code: 1190)
Remark	The AC Conducted Emission test item subcontracted to Sporton International Inc. EMC & Wireless Communications Laboratory.

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

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	TH05-HY, 03CH15-HY

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

FCC designation No.: TW1190 and TW3786

1.5 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:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.
3. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

2 Test Configuration of Equipment Under Test

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 (open and close) and EUT antenna in three orthogonal axis (X: flat, Y: portrait, Z: landscape) and accessory (Adapter or Earphone), 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	117	121	125
	Freq. (MHz)	6535	6555	6575
BW 40M	Channel	115	123	
	Freq. (MHz)	6525	6565	
BW 80M	Channel	119		
	Freq. (MHz)	6545		

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
	Freq. (MHz)	6755	6775	6795	6815	6835	6855
BW 40M	Channel	163		171		179	
	Freq. (MHz)	6765		6805		6845	
BW 80M	Channel	167			183		
	Freq. (MHz)	6785			6865		
BW 160M	Channel	175					
	Freq. (MHz)	6825					

2.2 Test Mode

This device support 26/52/106/242/484/996-tone RU but does not support 2x996-tone RU on 160MHz channel.

The PSD of partial RU is reduced to be smaller than full RU according to TCB workshop interim guidance Oct., 2018.

The 242-tone RU is covered by 20MHz channel, 484-tone RU is covered by 40MHz channel and 996-tone RU is covered by 80MHz channel.

The 802.11ax mode is investigated among different tones, full resource units (RU), partial resource units. The partial RU has no higher power than full RU's, thus the full RU is chosen as main test configuration.

The SISO mode conducted power is covered by MIMO mode per chain, so only the MIMO mode is tested.

The final test modes include the worst data rates for each modulation shown in the table below.

MIMO Mode

Modulation	Data Rate
802.11a	**6Mbps**
802.11ax HE20	**MCS0**
802.11ax HE40	**MCS0**
802.11ax HE80	**MCS0**
802.11ax HE160	**MCS0**

Remark: The conducted power level of each chain in MIMO mode is equal or higher than SISO mode.

Test Cases	
AC Conducted Emission	Mode 1 : GSM850 Idle + WLAN (6GHz) Link + Bluetooth Link + USB Cable 1 (Charging from AC Adapter 1)

Remark:
1. For Radiated Test Cases, the tests were performed with Adapter 2 and USB Cable 2.
2. During the preliminary test, both charging modes (Adapter mode and WPT Client mode) were verified. It is determined that the adaptor mode is the worst case for official test.

Based on ANSI C63.10 clause 5.6.2.2, b) spurious emissions,

Measure the mode with the highest output power and the mode with highest output power spectral density for each modulation family.

		5.6.2.2 (b) Spurious Emissions
UNII-5	20MHz	Covered by 160MHz
	40MHz	Covered by 160MHz
	80MHz	Covered by 160MHz
	160MHz	Test
UNII-7	20MHz	Covered by 160MHz
	40MHz	Covered by 160MHz
	80MHz	Covered by 160MHz
	160MHz	Test

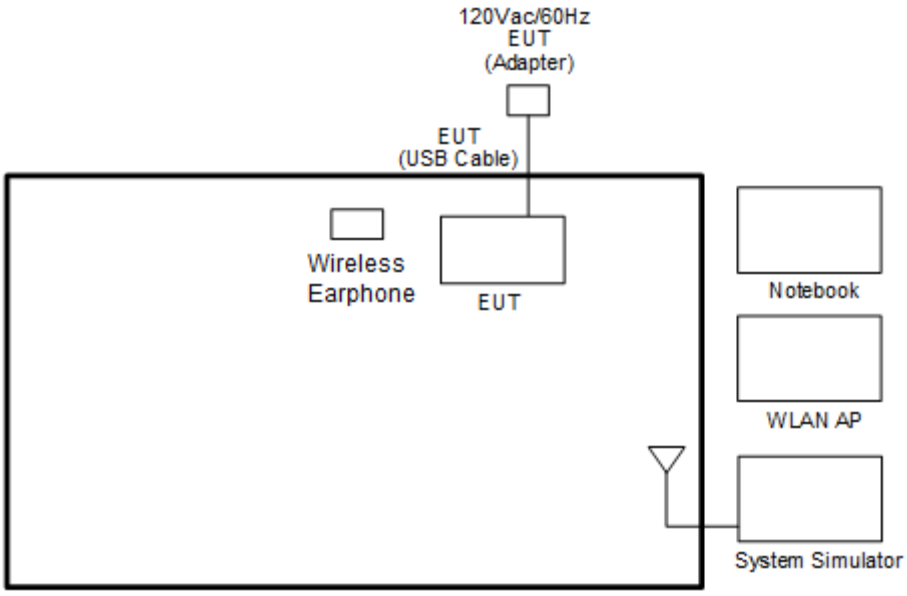
Ch. #		UNII-5 (5925-6425 MHz)			
		802.11ax HE20	802.11ax HE40	802.11ax HE80	802.11ax HE160
L	Low	001	003	007	015
M	Middle	-	-	-	047
H	High	-	-	-	079

Ch. #		UNII-7 (6525-6875 MHz)
		802.11ax HE160
L	Low	143
M	Middle	
H	High	
Straddle		175

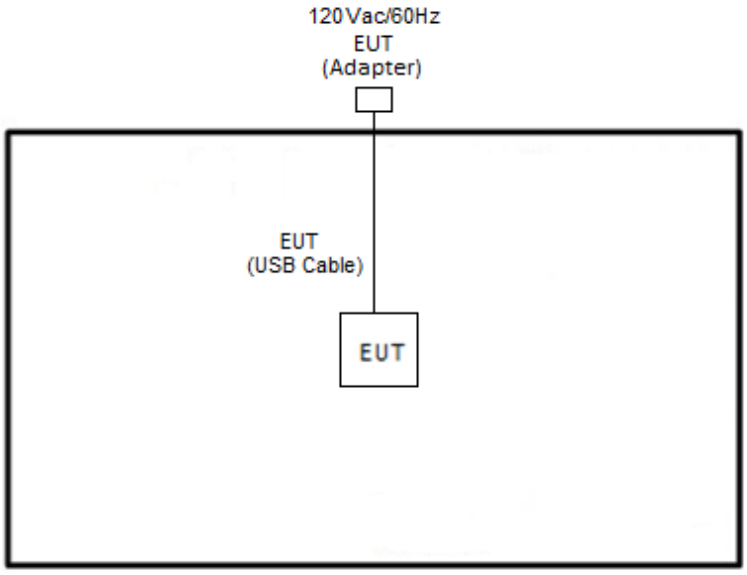
Remark: For radiation spurious emission, the modulation and the data rate picked for testing are determined by the Max. RF conducted power.

2.3 Connection Diagram of Test System

<AC Conducted Emission Mode>



<WLAN Tx Mode>



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8820C	N/A	N/A	Unshielded,1.8m
2.	Wireless Earphone	Google	G1007/G1008	A4RG1007/ A4RG1008	N/A	N/A
3.	WLAN AP	NETGEAR64	RAXE500	N/A	N/A	Unshielded,1.8m
4.	Notebook	Dell	Latitude 3420	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
5.	Notebook	Dell	Latitude 3400	FCC DoC	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m

2.5 EUT Operation Test Setup

The RF test items, utility “Cmd Version 1.0.39” was 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

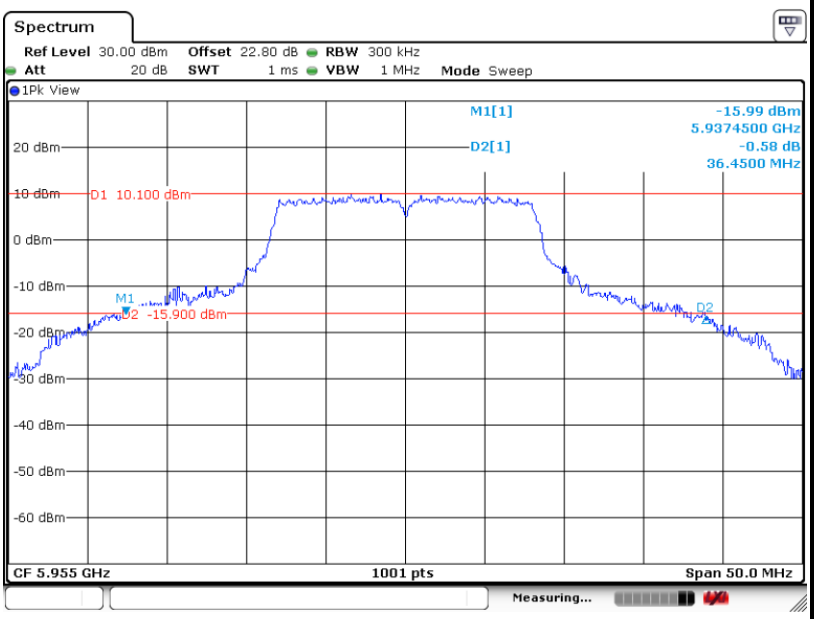
3.1.5 Test Result of 26dB & 99% Occupied Bandwidth

Please refer to Appendix A.

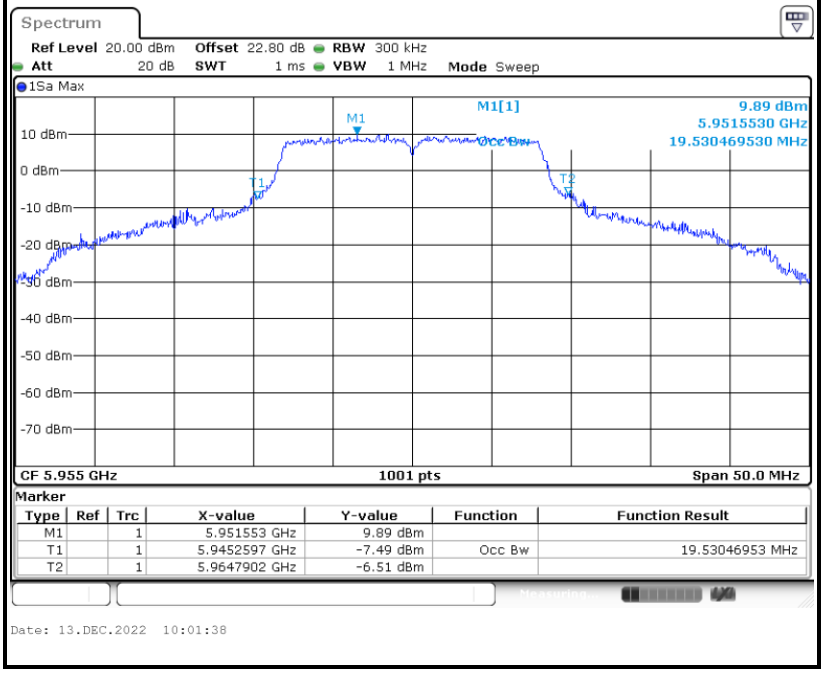
MIMO <Ant. 3+4>

<802.11a>

26dB Bandwidth



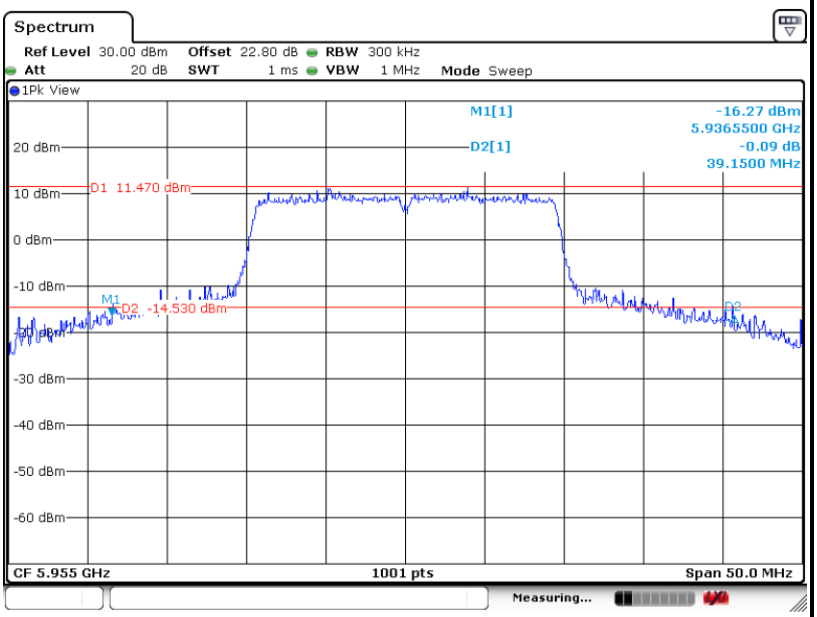
99% Occupied Bandwidth



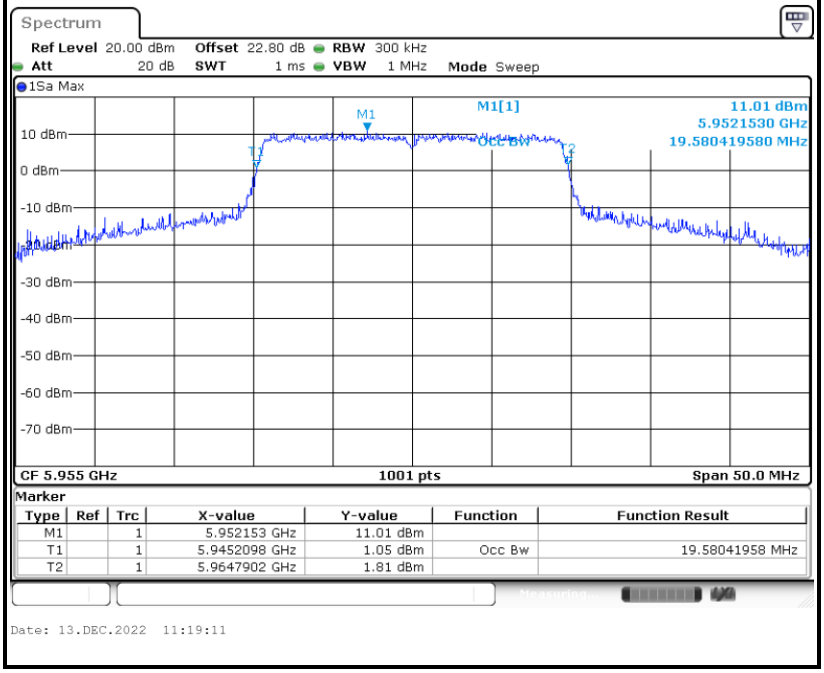
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE20>

26dB Bandwidth



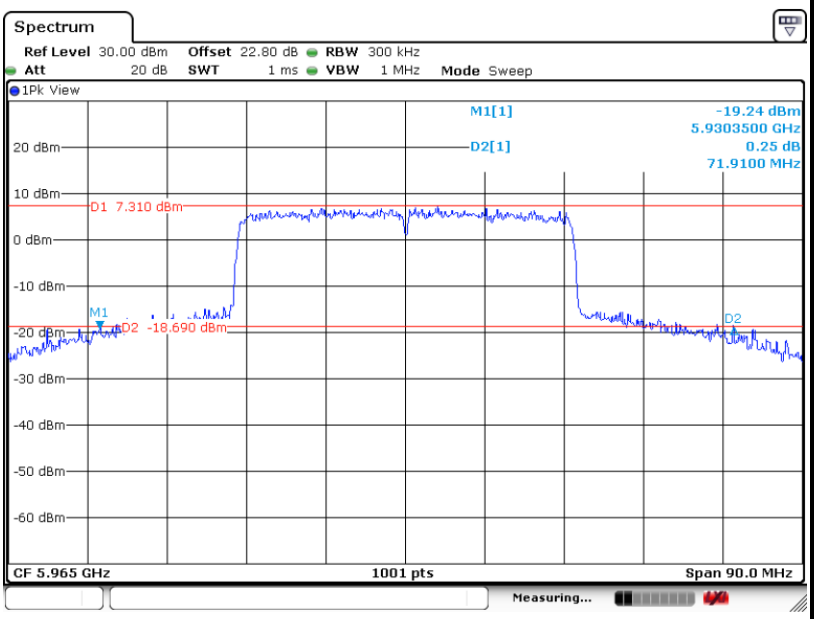
99% Occupied Bandwidth



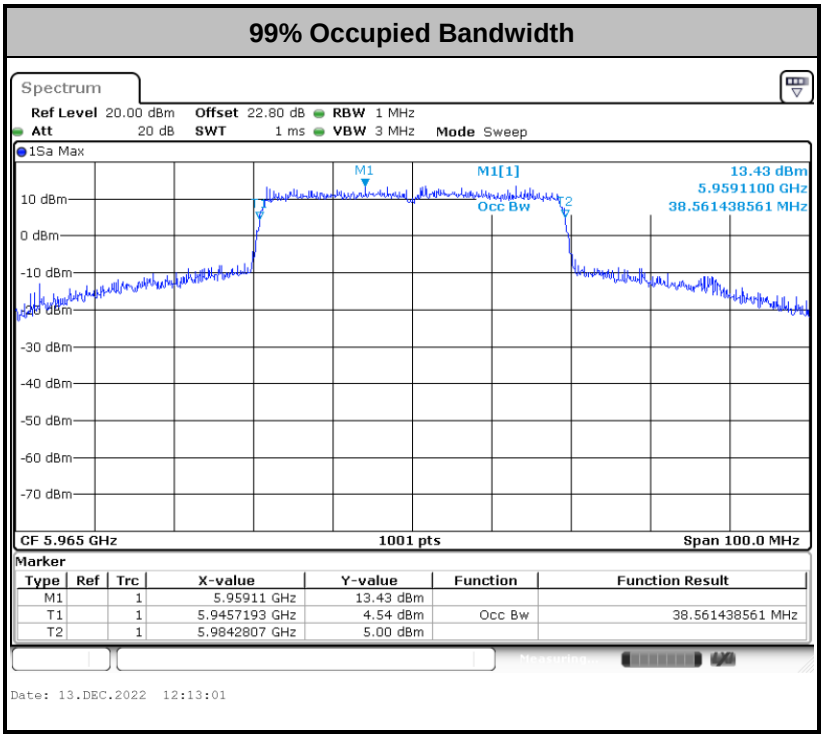
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE40>

26dB Bandwidth



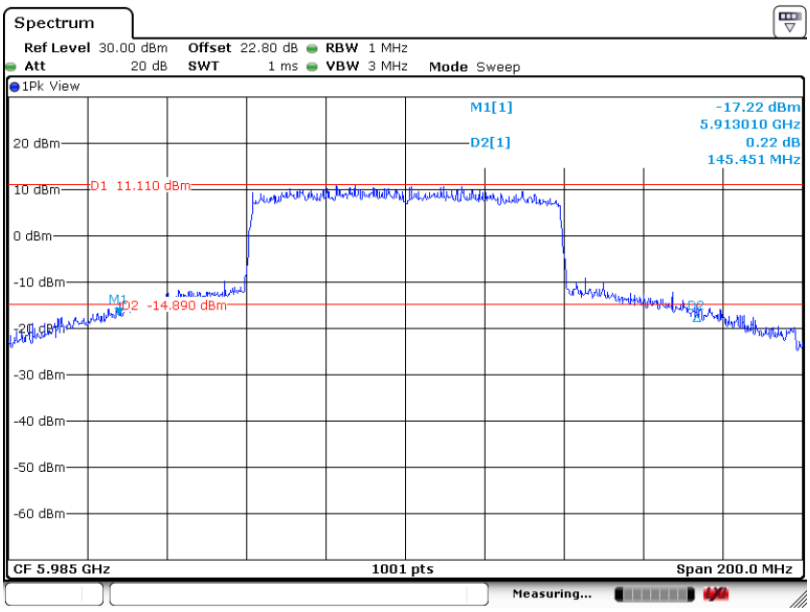
99% Occupied Bandwidth



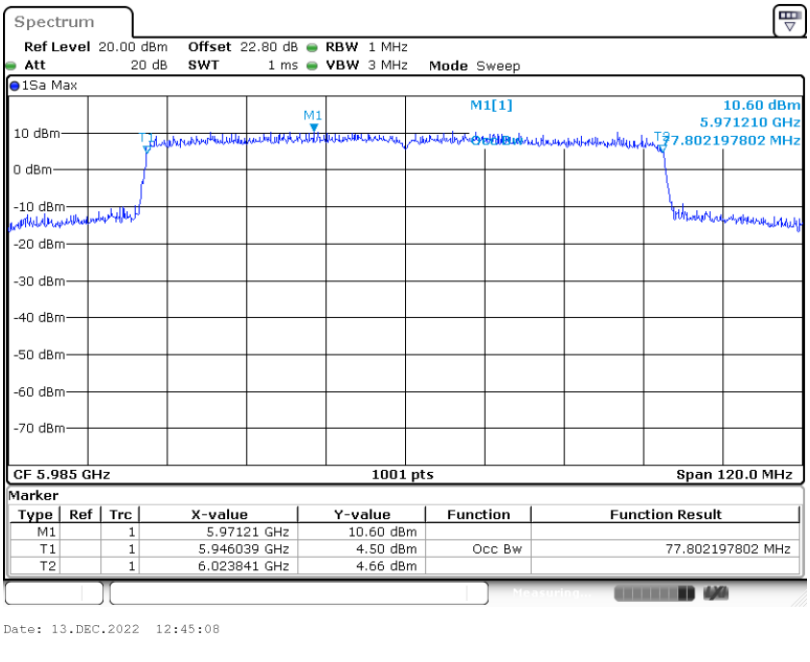
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE80>

26dB Bandwidth



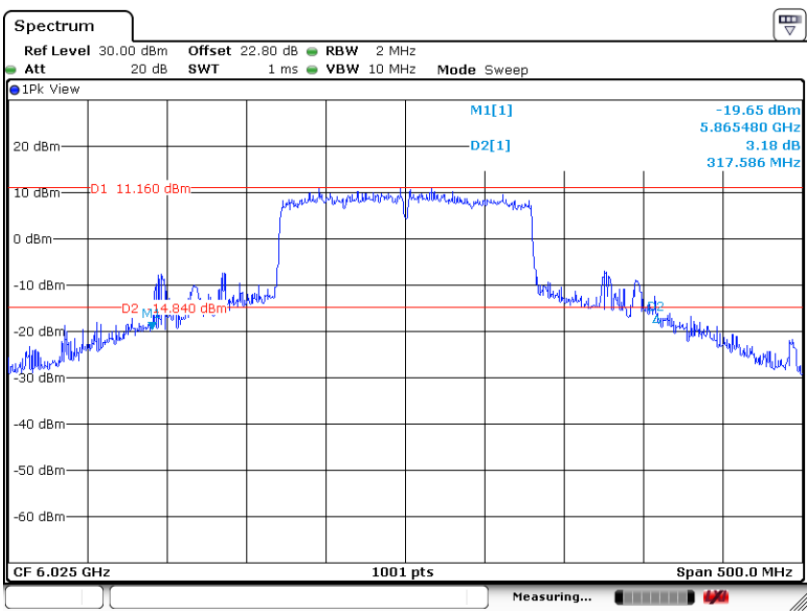
99% Occupied Bandwidth



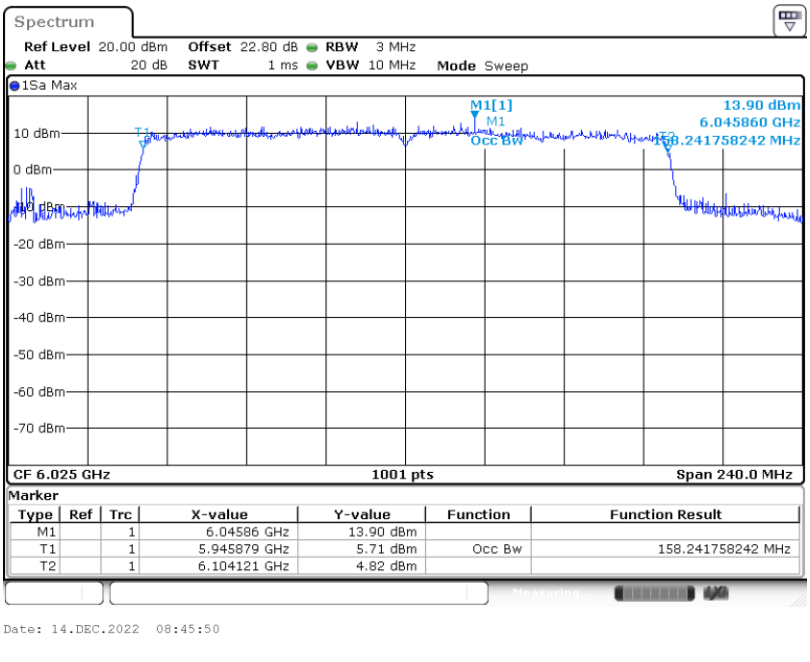
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11ax HE160>

26dB Bandwidth



99% Occupied Bandwidth



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

3.2 Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC 14-30 CFR 15.407>

(a)(7) For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access
point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band, and the maximum e.i.r.p. over the frequency band of operation must not exceed 30 dBm and the device must limit its power to no more than 6 dB below its associated standard power access point's authorized transmit power.

3.2.2 Measuring Instruments

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

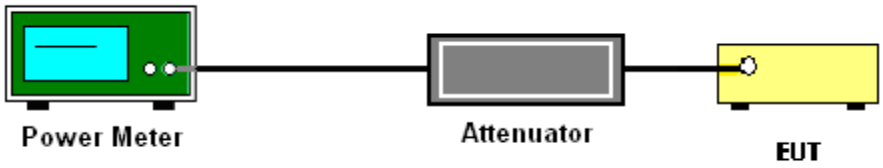
3.2.3 Test Procedures

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)(7) For client devices, except for fixed client devices as defined in this subpart, operating under the control of a standard power access point in 5.925-6.425 GHz and 6.525-6.875 GHz bands, the maximum power spectral density must not exceed 17 dBm e.i.r.p. in any 1-megahertz band.

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.

 # Method SA-2 #

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

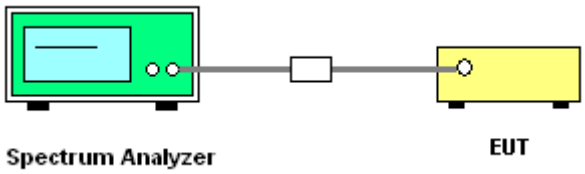
- Measure the duty cycle.
- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1 MHz.
- Set VBW ≥ 3 MHz.
- Number of points in sweep ≥ 2 Span / RBW.
- Sweep time = auto.
- Detector = RMS
- Trace average at least 100 traces in power averaging mode.
- Add 10 log(1/x), 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.

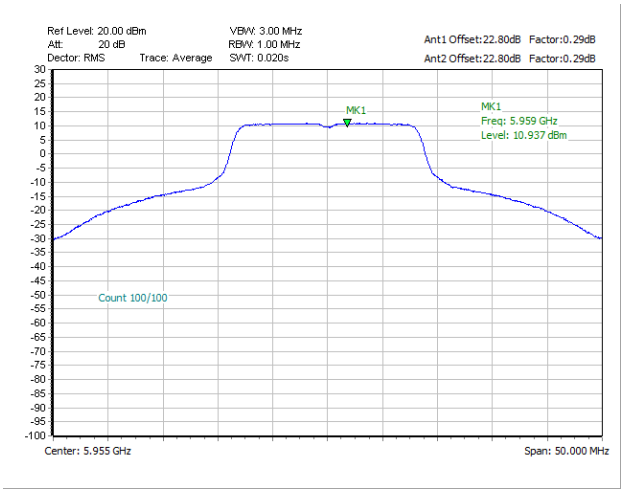
3.3.4 Test Setup



3.3.5 Test Result of Power Spectral Density

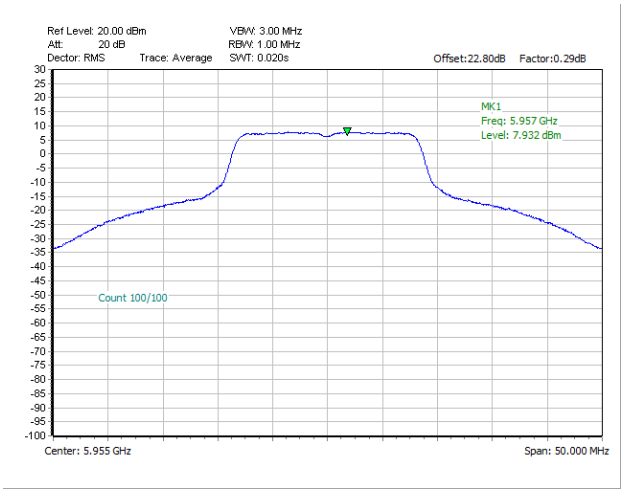
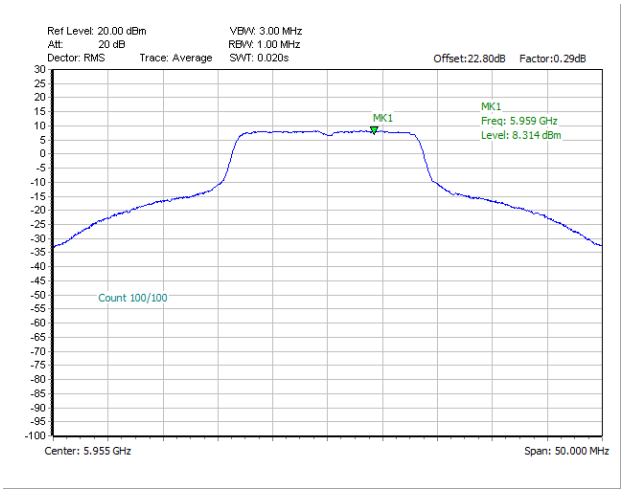
Please refer to Appendix A.

<802.11a>

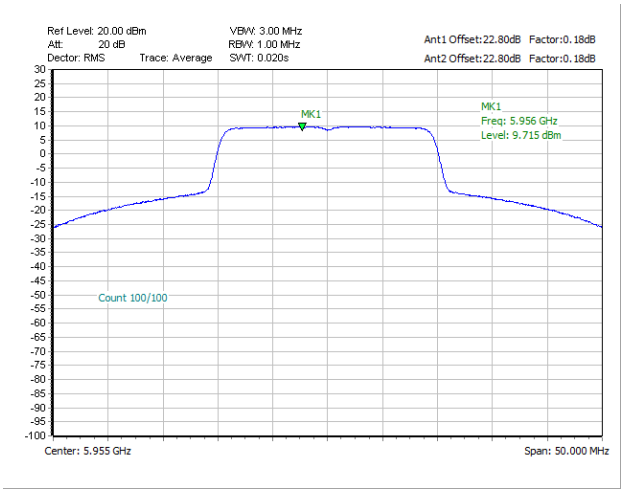
Power Density Plot (dBm/MHz)


Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

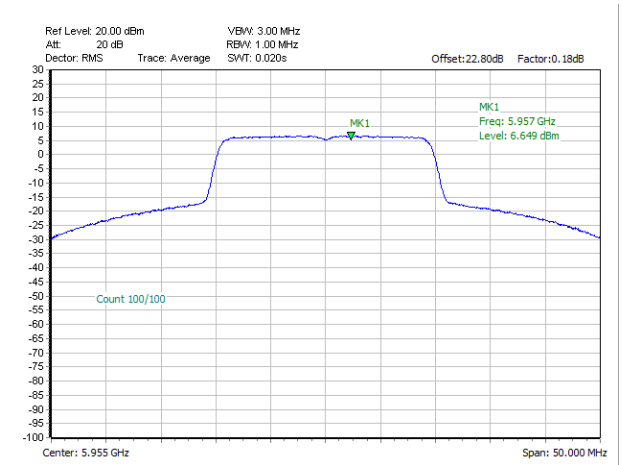
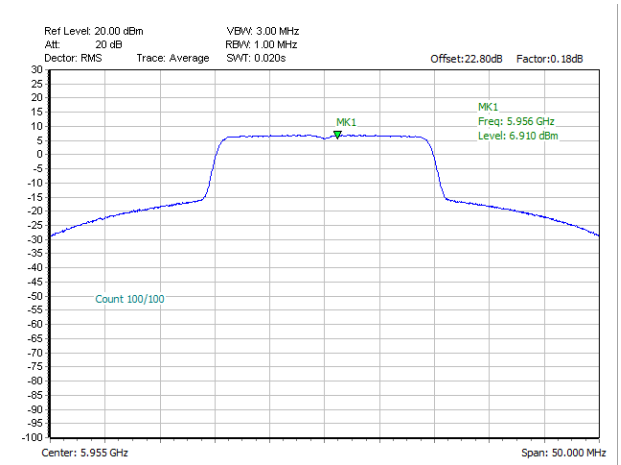
Power Density Plot Trace 1 (Ant 3)	Power Density Plot Trace 2 (Ant 4)
	

<802.11ax HE20>

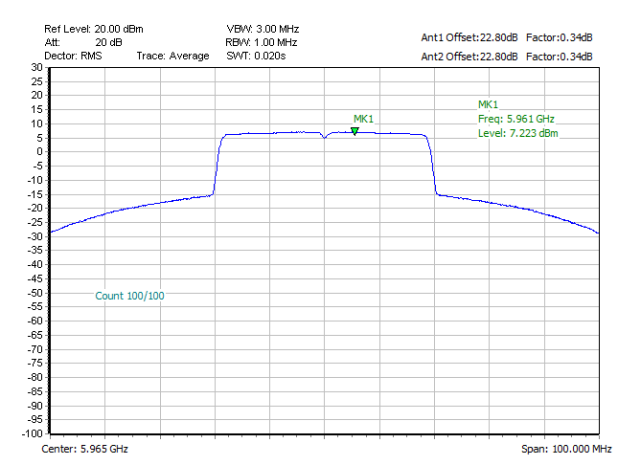
Power Density Plot (dBm/MHz)


Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

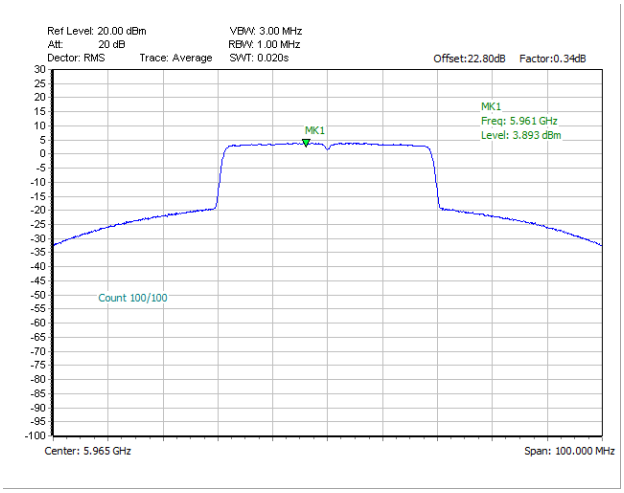
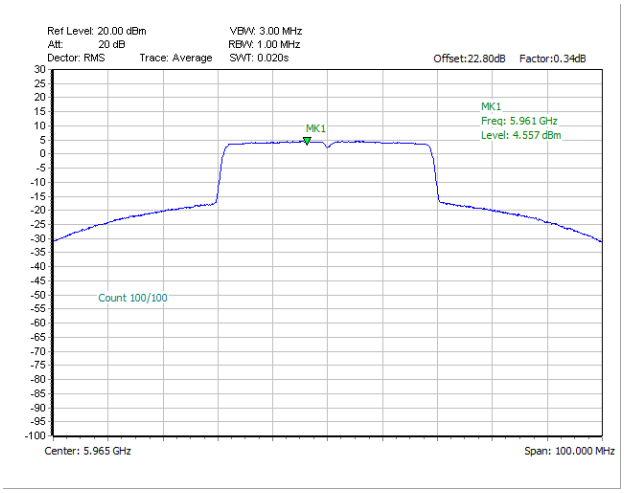
Power Density Plot Trace 1 (Ant 3)	Power Density Plot Trace 2 (Ant 4)
	

<802.11ax HE40>

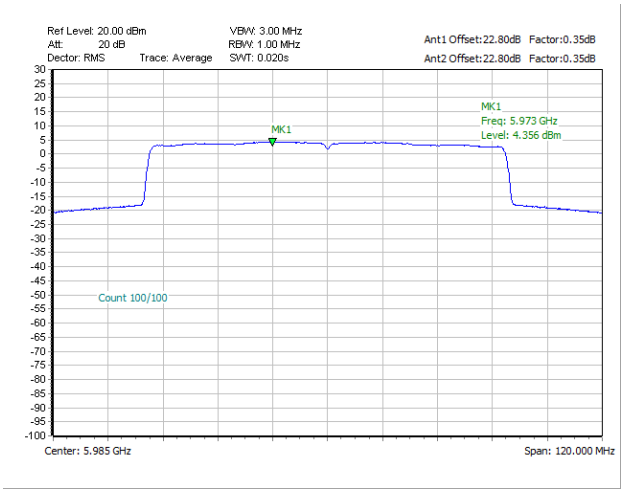
Power Density Plot (dBm/MHz)


Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

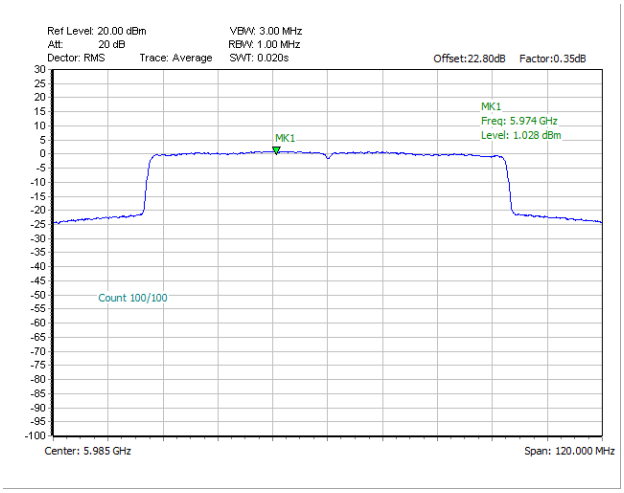
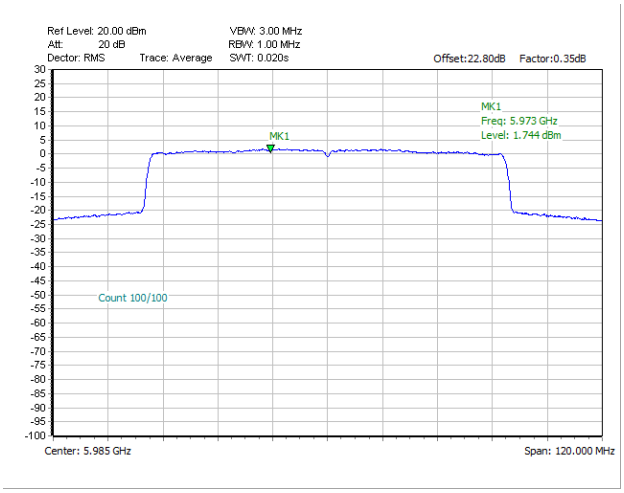
Power Density Plot Trace 1 (Ant 3)	Power Density Plot Trace 2 (Ant 4)
	

<802.11ax HE80>

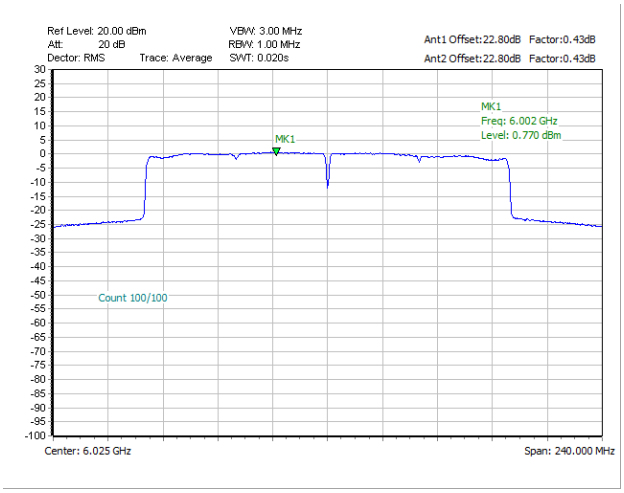
Power Density Plot (dBm/MHz)


Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

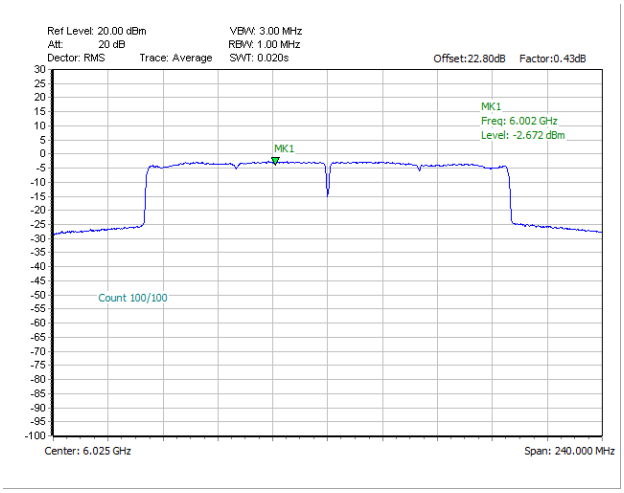
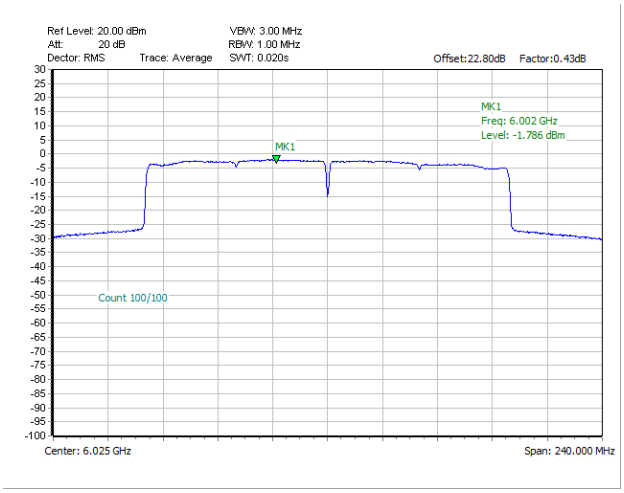
Power Density Plot Trace 1 (Ant 3)	Power Density Plot Trace 2 (Ant 4)
	

<802.11ax HE160>

Power Density Plot (dBm/MHz)


Note:

1. EIRP Power Density (dBm/MHz) = Measured value+ Duty Factor + Directional Gain
2. The test plot is showing a bin by bin combined result mathematically adds two traces.

Power Density Plot Trace 1 (Ant 3)	Power Density Plot Trace 2 (Ant 4)
	

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.

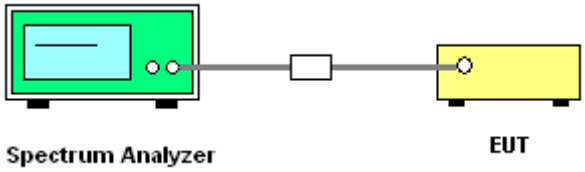
3.4.3 Test Procedures

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

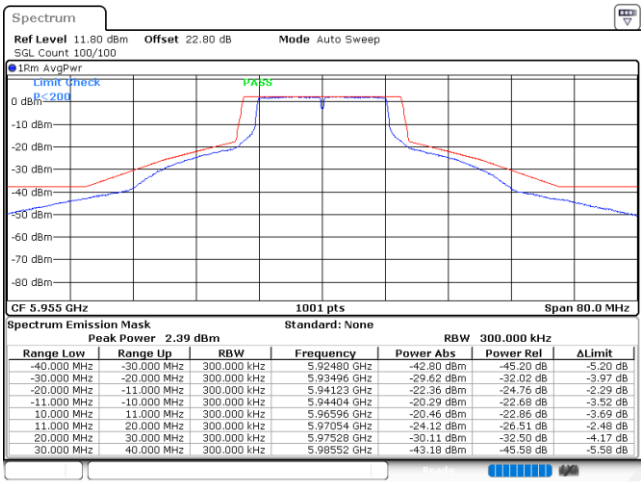


3.4.5 Test Result

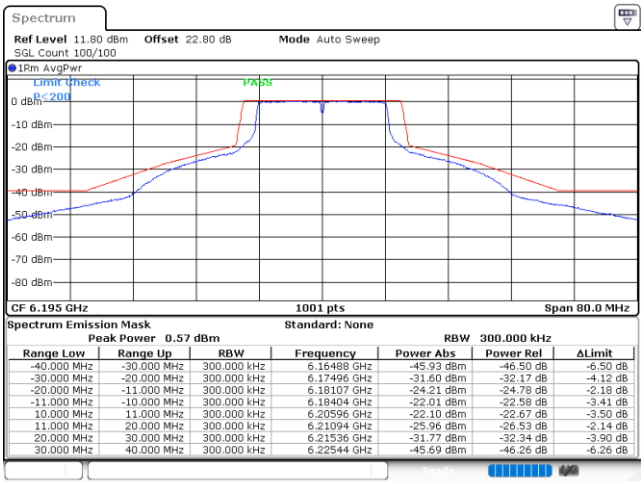
MIMO <Ant. 3+4(3)>

EUT Mode :	802.11a

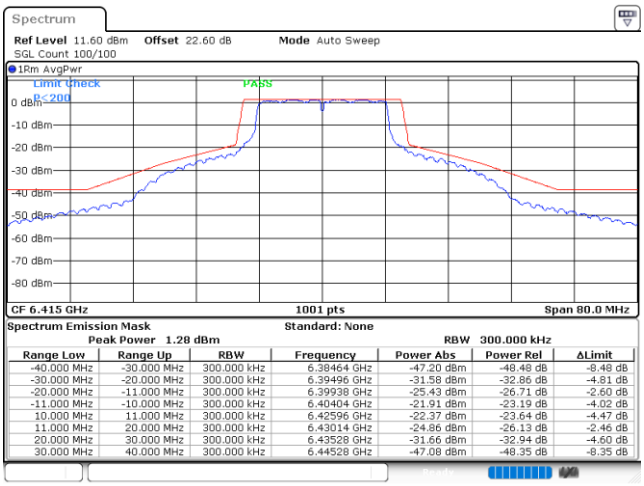
Plot on Channel 5955MHz



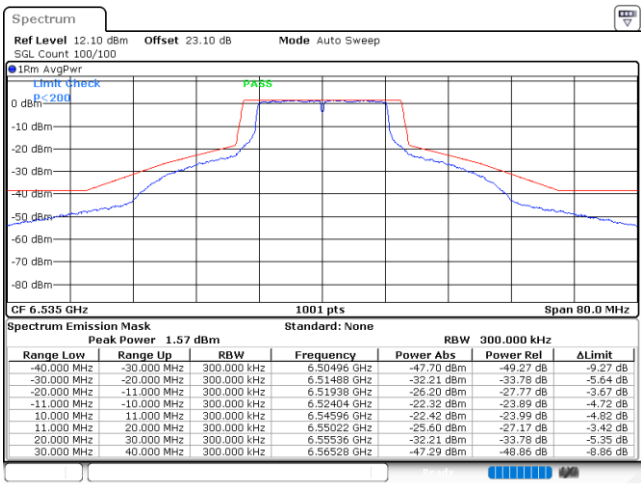
Plot on Channel 6195MHz



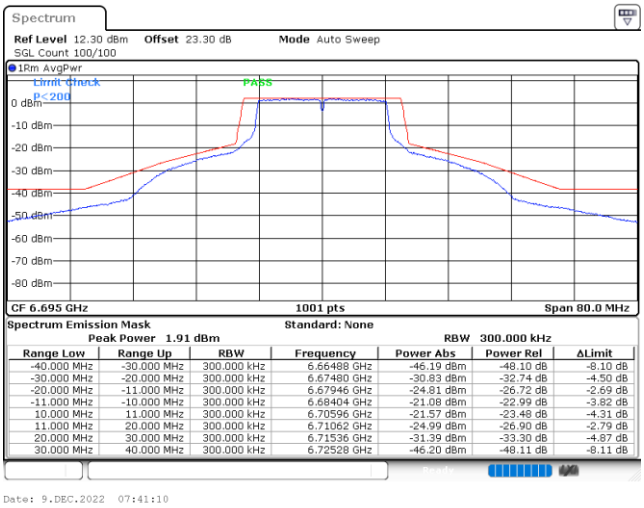
Plot on Channel 6415MHz



Plot on Channel 6535MHz



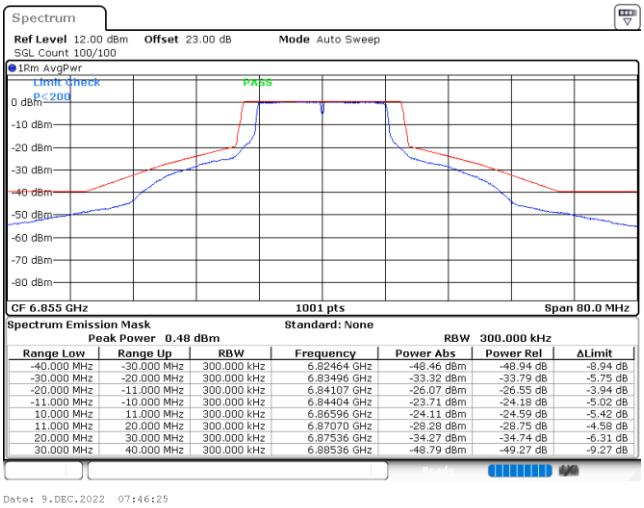
Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66488 GHz	-46.19 dBm	-48.10 dB	-8.10 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.67480 GHz	-30.83 dBm	-32.74 dB	-4.50 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.67946 GHz	-24.81 dBm	-26.72 dB	-2.69 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-21.08 dBm	-22.99 dB	-3.82 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-21.57 dBm	-23.48 dB	-4.31 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.71062 GHz	-24.99 dBm	-26.90 dB	-2.79 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.71536 GHz	-31.39 dBm	-33.30 dB	-4.87 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72528 GHz	-46.20 dBm	-48.11 dB	-8.11 dB

Date: 9.DEC.2022 07:41:10

Plot on Channel 6855MHz

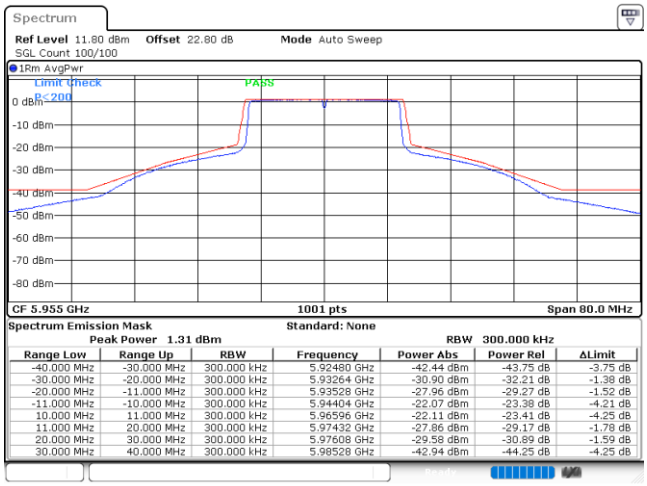


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82464 GHz	-48.46 dBm	-48.94 dB	-8.94 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.83496 GHz	-33.32 dBm	-33.79 dB	-5.75 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.84107 GHz	-26.07 dBm	-26.55 dB	-3.94 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-23.71 dBm	-24.18 dB	-5.02 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-24.11 dBm	-24.59 dB	-5.42 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.87070 GHz	-28.28 dBm	-28.75 dB	-4.58 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.87536 GHz	-34.27 dBm	-34.74 dB	-6.31 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88536 GHz	-48.79 dBm	-49.27 dB	-9.27 dB

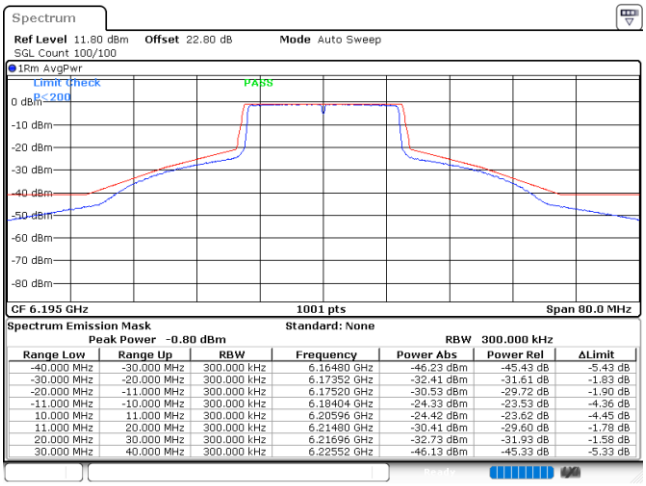
Date: 9.DEC.2022 07:46:25

EUT Mode :	802.11ax HE20 Full RU

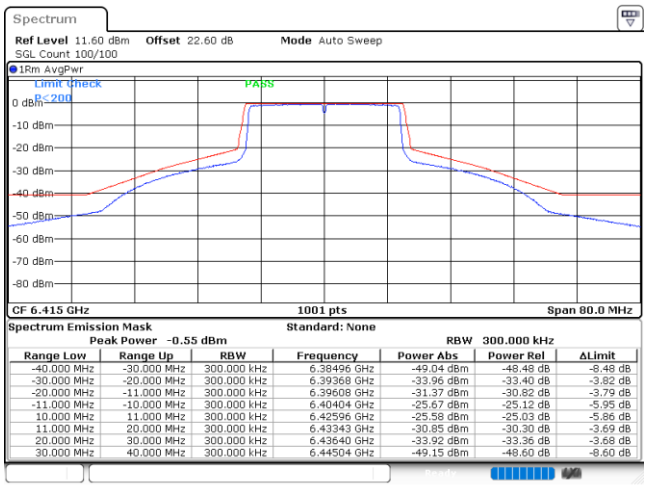
Plot on Channel 5955MHz



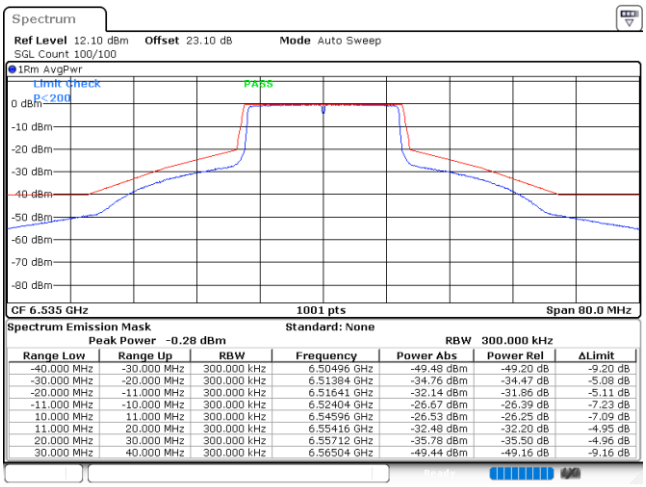
Plot on Channel 6195MHz



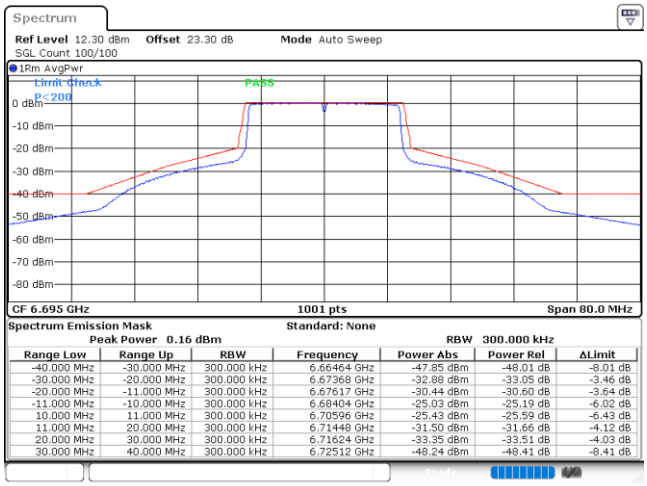
Plot on Channel 6415MHz



Plot on Channel 6535MHz



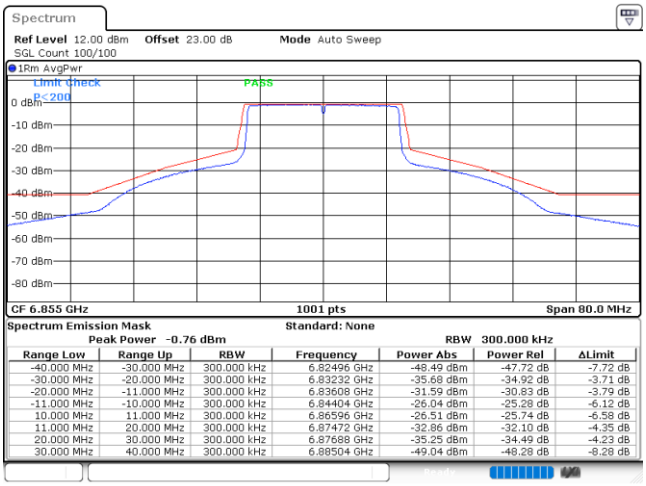
Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66464 GHz	-47.85 dBm	-48.01 dB	-8.01 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.67368 GHz	-32.88 dBm	-33.05 dB	-3.46 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.67617 GHz	-30.44 dBm	-30.60 dB	-3.64 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-25.03 dBm	-25.19 dB	-6.02 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-25.43 dBm	-25.59 dB	-6.43 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.71448 GHz	-31.50 dBm	-31.66 dB	-4.12 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.71624 GHz	-33.35 dBm	-33.51 dB	-4.03 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72512 GHz	-48.24 dBm	-48.41 dB	-8.41 dB

Date: 9.DEC.2022 08:50:28

Plot on Channel 6855MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82496 GHz	-48.49 dBm	-47.72 dB	-7.72 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.83232 GHz	-35.68 dBm	-34.92 dB	-3.71 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.83608 GHz	-31.59 dBm	-30.83 dB	-3.79 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-26.04 dBm	-25.28 dB	-6.12 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-26.51 dBm	-25.74 dB	-6.58 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.87472 GHz	-32.86 dBm	-32.10 dB	-4.35 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.87688 GHz	-35.25 dBm	-34.49 dB	-4.23 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88504 GHz	-49.04 dBm	-48.28 dB	-8.28 dB

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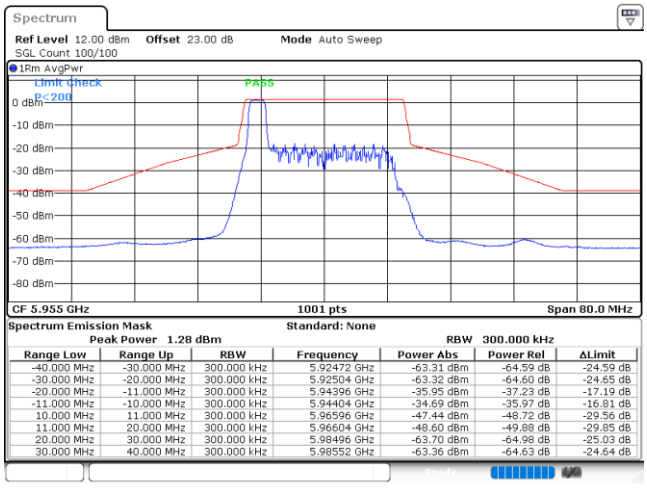
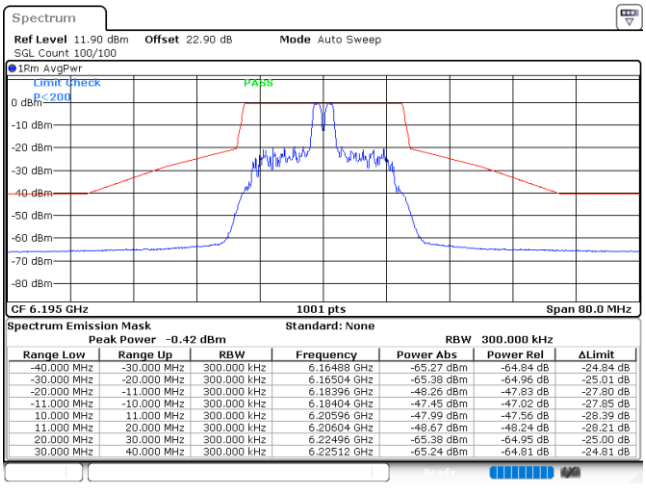
EUT Mode :	802.11ax HE20 26RU

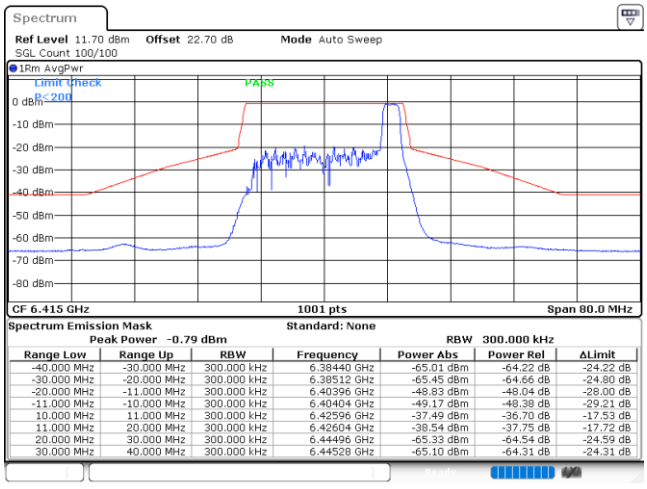
Plot on Channel 5955MHz



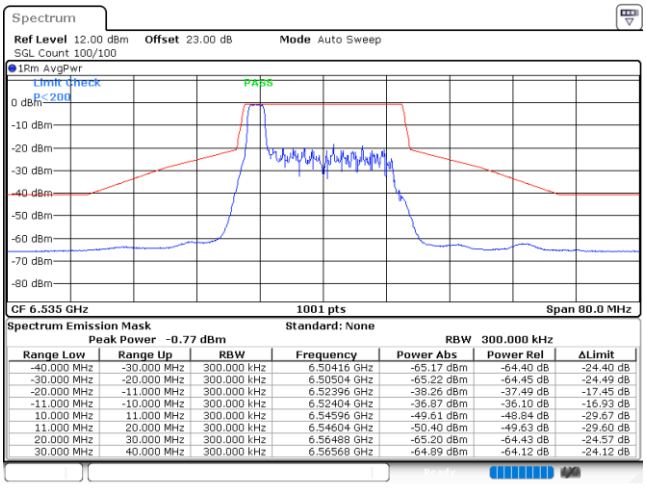
Plot on Channel 6195MHz



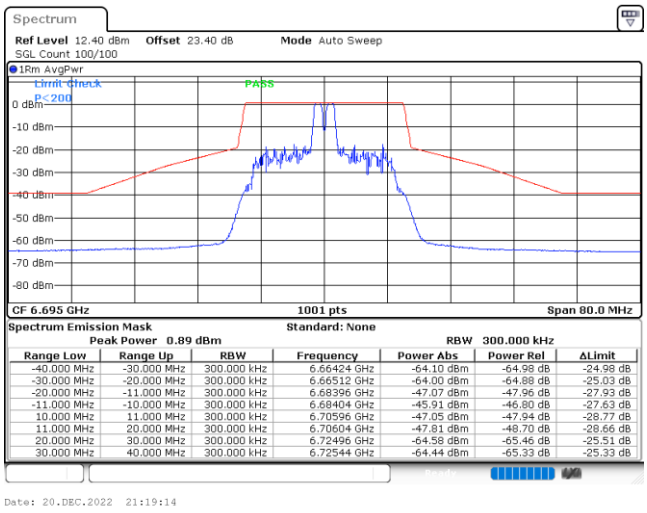
Plot on Channel 6415MHz



Plot on Channel 6535MHz



Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66424 GHz	-64.10 dBm	-64.98 dB	-24.98 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.66512 GHz	-64.00 dBm	-64.88 dB	-25.03 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.68396 GHz	-47.07 dBm	-47.96 dB	-27.93 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-45.91 dBm	-46.80 dB	-27.63 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-47.05 dBm	-47.94 dB	-28.77 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70604 GHz	-47.81 dBm	-48.70 dB	-28.66 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.72496 GHz	-64.58 dBm	-65.46 dB	-25.51 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72544 GHz	-64.44 dBm	-65.33 dB	-25.33 dB

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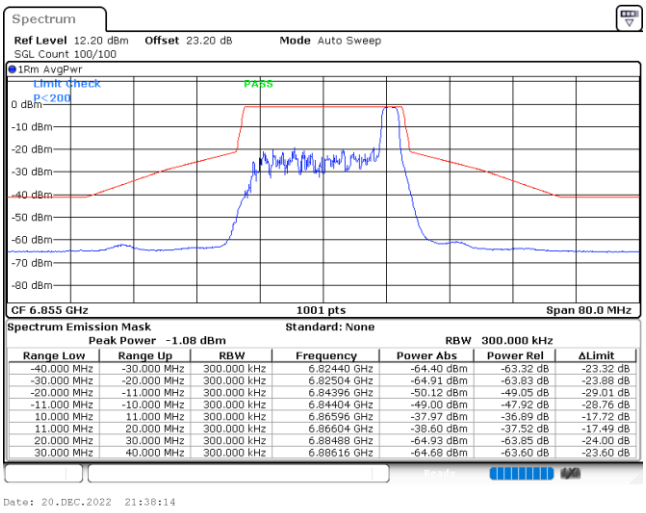
Plot on Channel 6855MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82440 GHz	-64.40 dBm	-63.32 dB	-23.32 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.82504 GHz	-64.91 dBm	-63.83 dB	-23.88 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.84396 GHz	-50.12 dBm	-49.05 dB	-29.01 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-49.00 dBm	-47.92 dB	-28.76 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-37.97 dBm	-36.89 dB	-17.72 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.86604 GHz	-38.60 dBm	-37.52 dB	-17.49 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.88488 GHz	-64.93 dBm	-63.85 dB	-24.00 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88616 GHz	-64.68 dBm	-63.60 dB	-23.60 dB

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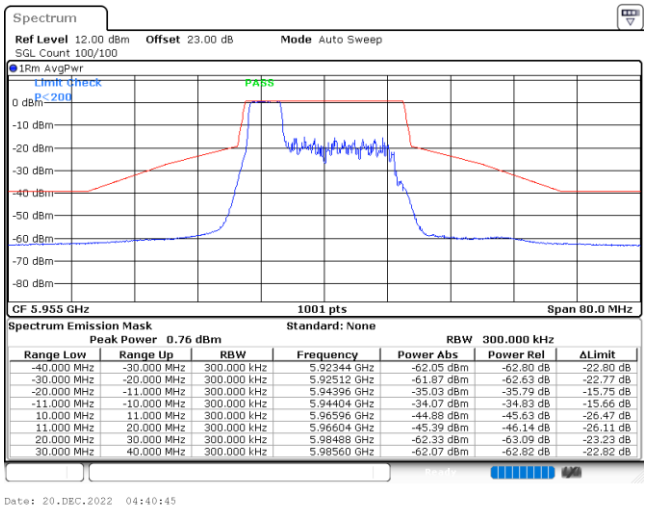
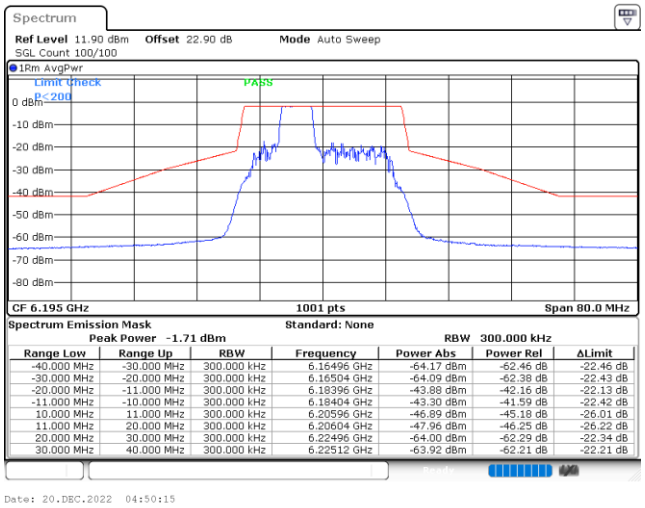
EUT Mode :	802.11ax HE20 52RU

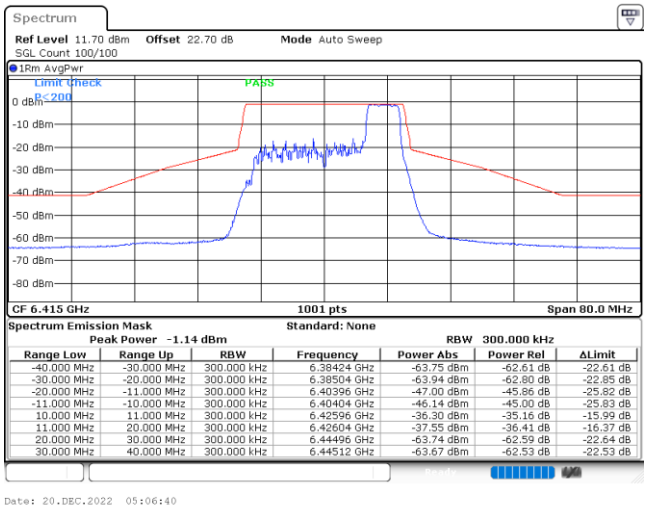
Plot on Channel 5955MHz



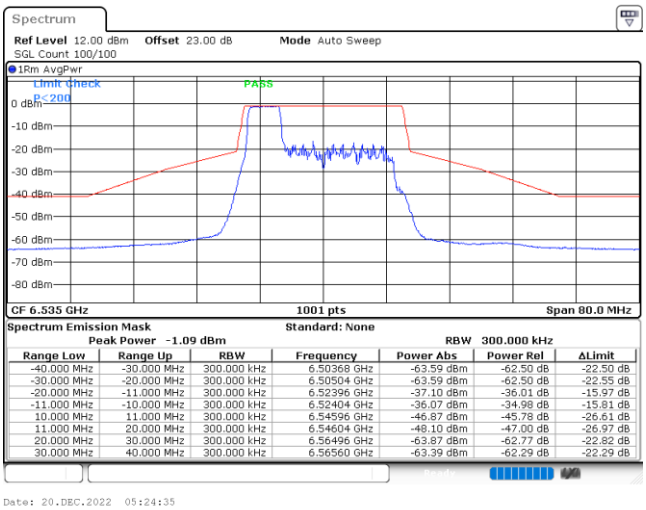
Plot on Channel 6195MHz



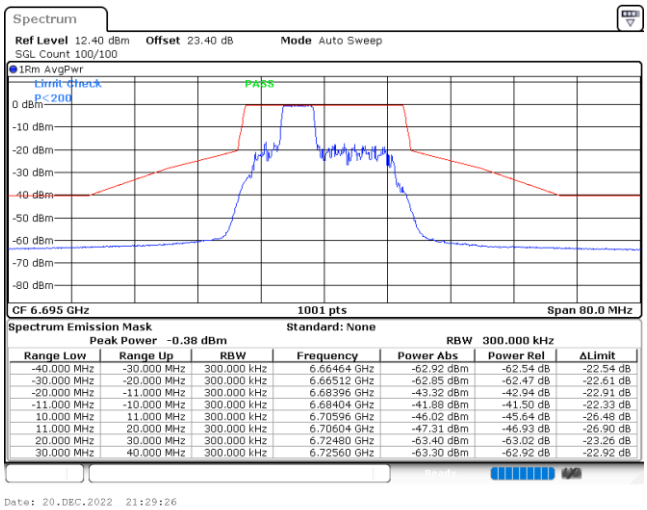
Plot on Channel 6415MHz



Plot on Channel 6535MHz



Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66464 GHz	-62.92 dBm	-62.54 dB	-22.54 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.66512 GHz	-62.85 dBm	-62.47 dB	-22.61 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.68396 GHz	-43.32 dBm	-42.94 dB	-22.91 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-41.88 dBm	-41.50 dB	-22.33 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-46.02 dBm	-45.64 dB	-26.48 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70604 GHz	-47.31 dBm	-46.93 dB	-26.90 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.72480 GHz	-63.40 dBm	-63.02 dB	-23.26 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72560 GHz	-63.30 dBm	-62.92 dB	-22.92 dB

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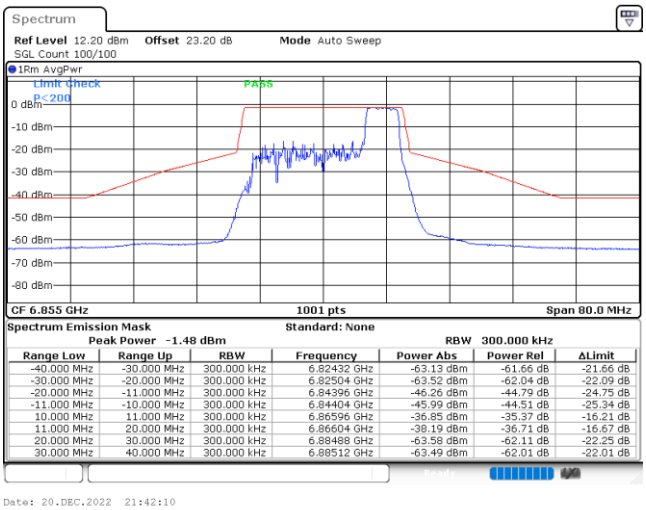
Plot on Channel 6855MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82432 GHz	-63.13 dBm	-61.66 dB	-21.66 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.82504 GHz	-63.52 dBm	-62.04 dB	-22.09 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.84396 GHz	-46.26 dBm	-44.79 dB	-24.75 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-45.99 dBm	-44.51 dB	-25.34 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-36.85 dBm	-35.37 dB	-16.21 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.86604 GHz	-38.19 dBm	-36.71 dB	-16.67 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.88488 GHz	-63.58 dBm	-62.11 dB	-22.25 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88512 GHz	-63.49 dBm	-62.01 dB	-22.01 dB

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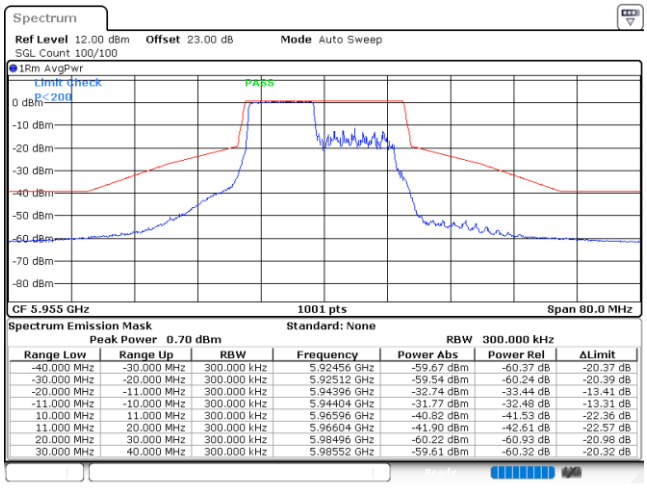
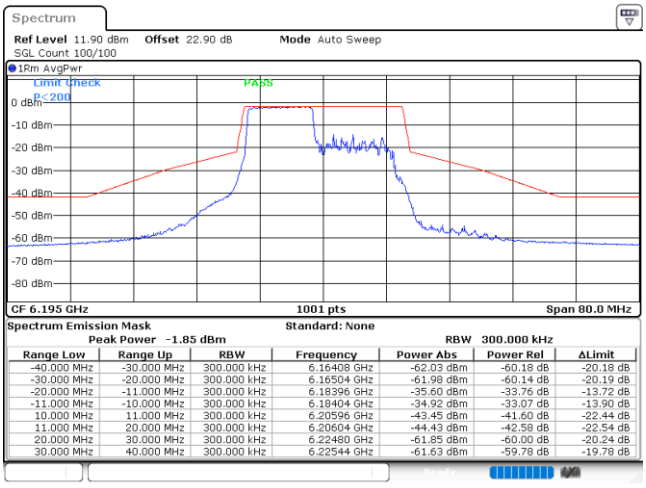
EUT Mode :	802.11ax HE20 106RU

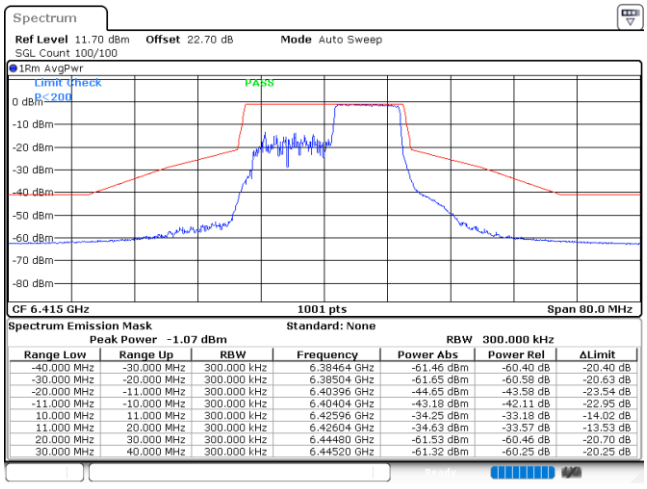
Plot on Channel 5955MHz



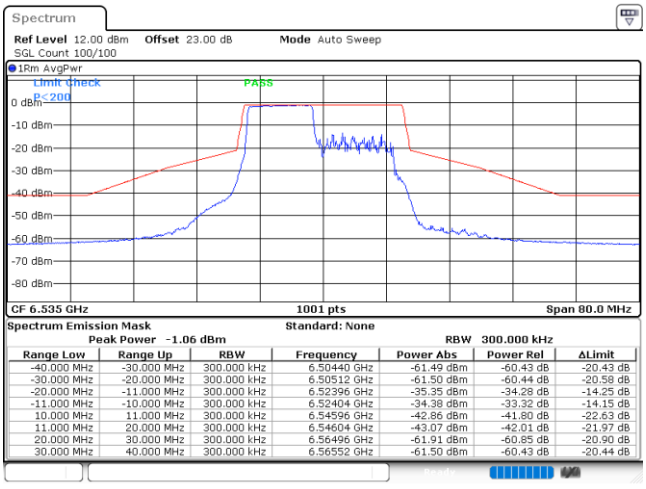
Plot on Channel 6195MHz



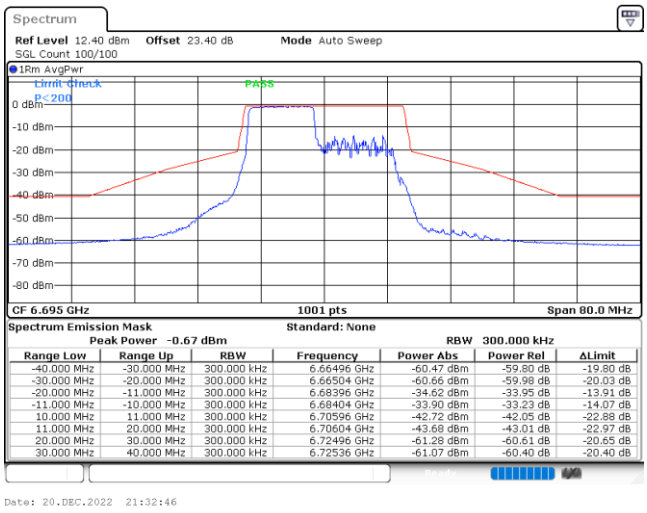
Plot on Channel 6415MHz



Plot on Channel 6535MHz



Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66496 GHz	-60.47 dBm	-59.80 dB	-19.80 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.66504 GHz	-60.66 dBm	-59.98 dB	-20.03 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.68396 GHz	-34.62 dBm	-33.95 dB	-13.91 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-33.90 dBm	-33.23 dB	-14.07 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-42.72 dBm	-42.05 dB	-22.88 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70604 GHz	-43.68 dBm	-43.01 dB	-22.97 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.72496 GHz	-61.28 dBm	-60.61 dB	-20.65 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72536 GHz	-61.07 dBm	-60.40 dB	-20.40 dB

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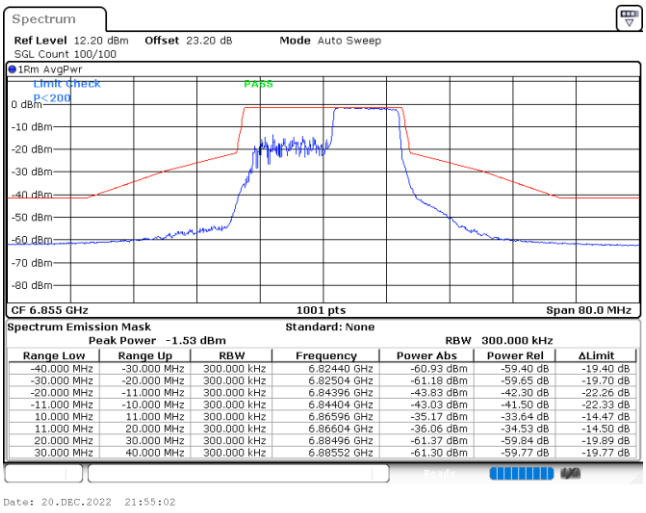
Plot on Channel 6855MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82440 GHz	-60.93 dBm	-59.40 dB	-19.40 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.82504 GHz	-61.18 dBm	-59.65 dB	-19.70 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.84396 GHz	-43.83 dBm	-42.30 dB	-22.26 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-43.03 dBm	-41.50 dB	-22.33 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-35.17 dBm	-33.64 dB	-14.47 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.86604 GHz	-36.06 dBm	-34.53 dB	-14.50 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.88496 GHz	-61.37 dBm	-59.84 dB	-19.89 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88552 GHz	-61.30 dBm	-59.77 dB	-19.77 dB

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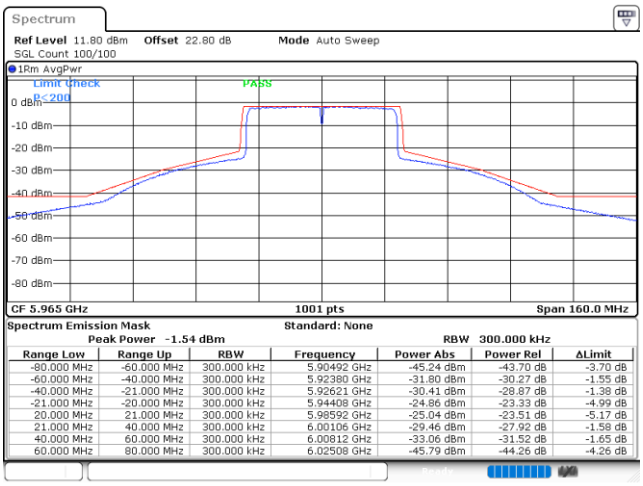
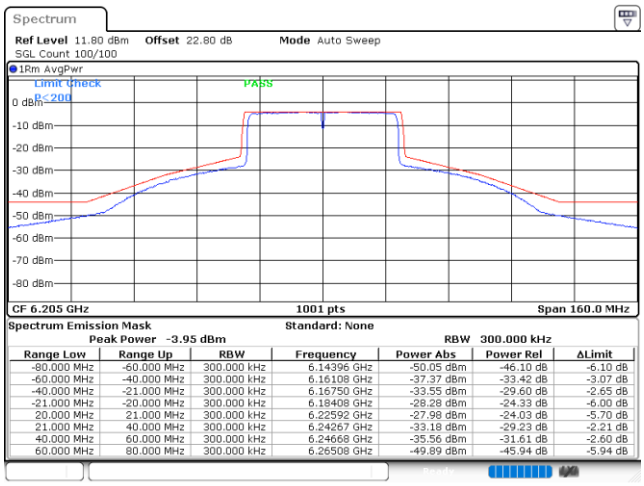
EUT Mode :	802.11ax HE40

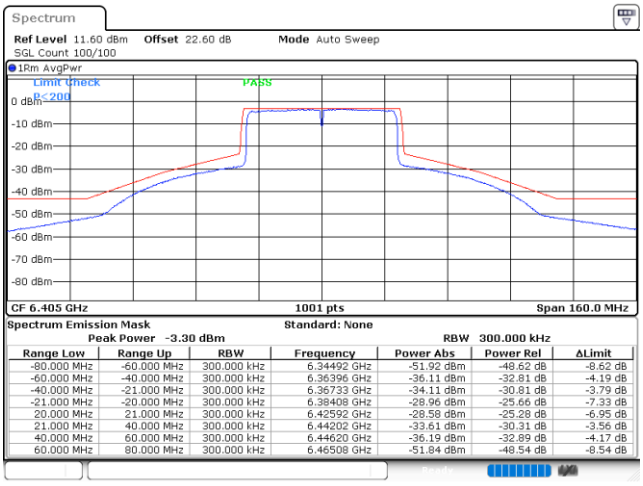
Plot on Channel 5965MHz



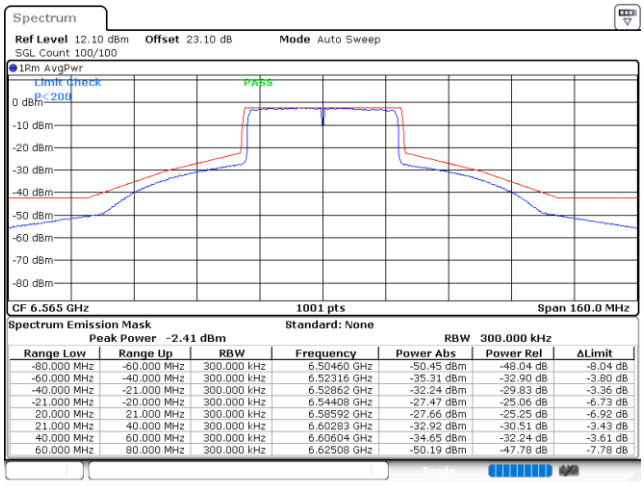
Plot on Channel 6205MHz



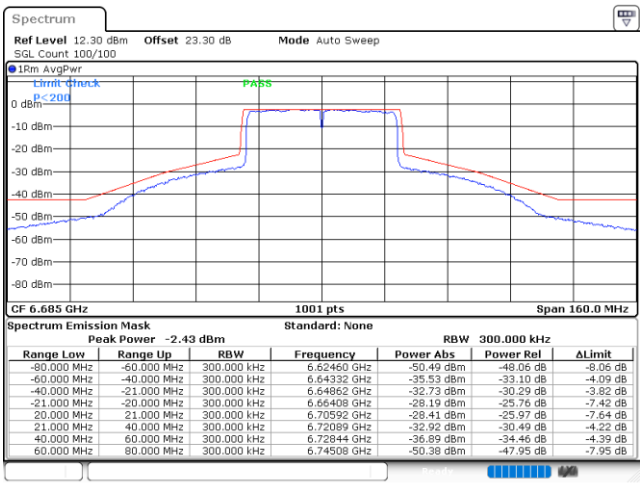
Plot on Channel 6405MHz



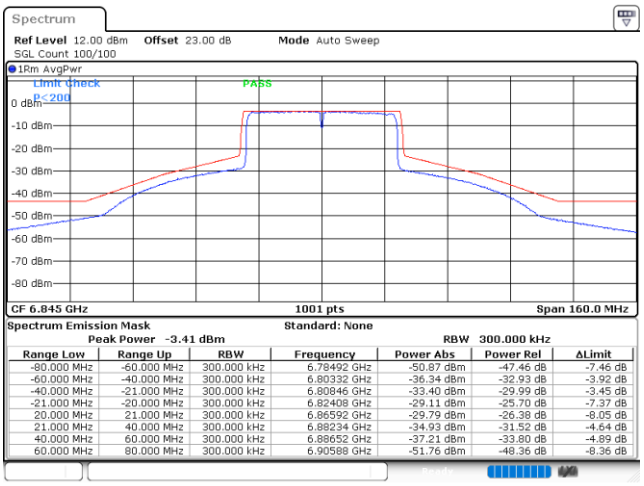
Plot on Channel 6565MHz



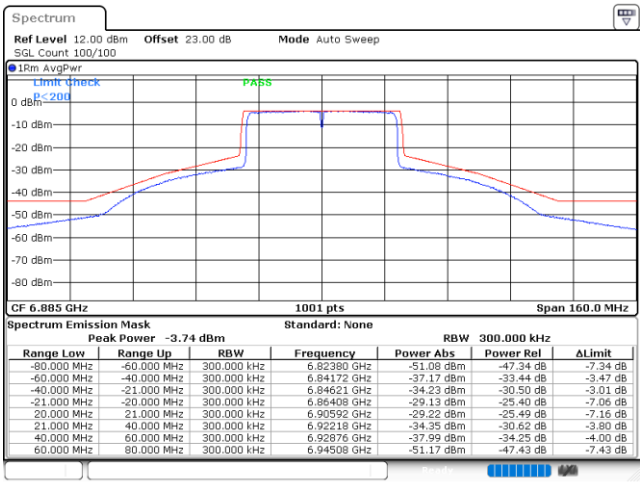
Plot on Channel 6685MHz



Plot on Channel 6845MHz

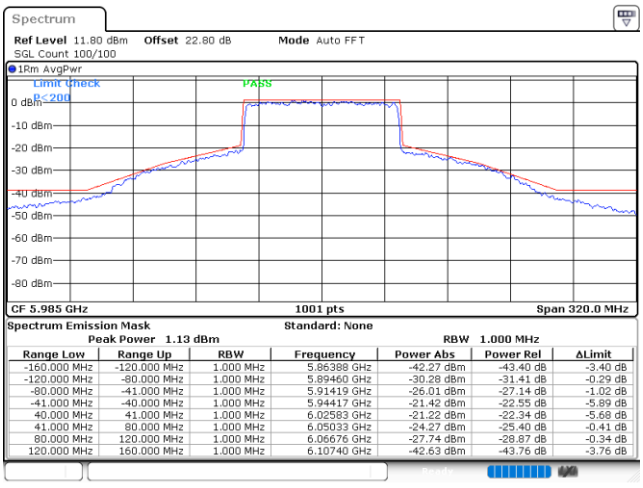


Plot on Channel 6885MHz



EUT Mode :	802.11ax HE80

Plot on Channel 5985MHz



Spectrum Emission Mask Standard: None
Peak Power 1.13 dBm RBW 1.000 MHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	5.86388 GHz	-42.27 dBm	-43.40 dB	-3.40 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	5.89460 GHz	-30.28 dBm	-31.41 dB	-0.29 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	5.91419 GHz	-26.01 dBm	-27.14 dB	-1.02 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	5.94417 GHz	-21.42 dBm	-22.55 dB	-5.89 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.02583 GHz	-21.22 dBm	-22.34 dB	-5.68 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.05033 GHz	-24.27 dBm	-25.40 dB	-0.41 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.06676 GHz	-27.74 dBm	-28.87 dB	-0.34 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.10740 GHz	-42.63 dBm	-43.76 dB	-3.76 dB

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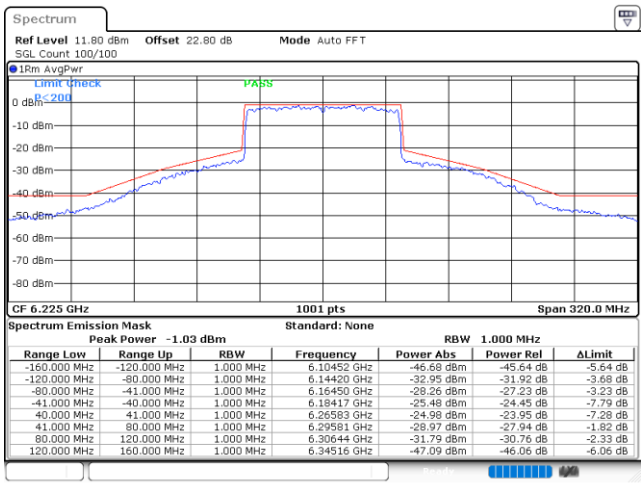
Plot on Channel 6225MHz



Spectrum Emission Mask Standard: None
Peak Power -1.03 dBm RBW 1.000 MHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.10452 GHz	-46.68 dBm	-45.64 dB	-5.64 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.14420 GHz	-32.95 dBm	-31.92 dB	-3.68 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.16450 GHz	-28.26 dBm	-27.23 dB	-3.23 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.18417 GHz	-25.48 dBm	-24.45 dB	-7.79 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.26583 GHz	-24.98 dBm	-23.95 dB	-7.28 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.29581 GHz	-28.97 dBm	-27.94 dB	-1.82 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.30644 GHz	-31.79 dBm	-30.76 dB	-2.33 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.34516 GHz	-47.09 dBm	-46.06 dB	-6.06 dB

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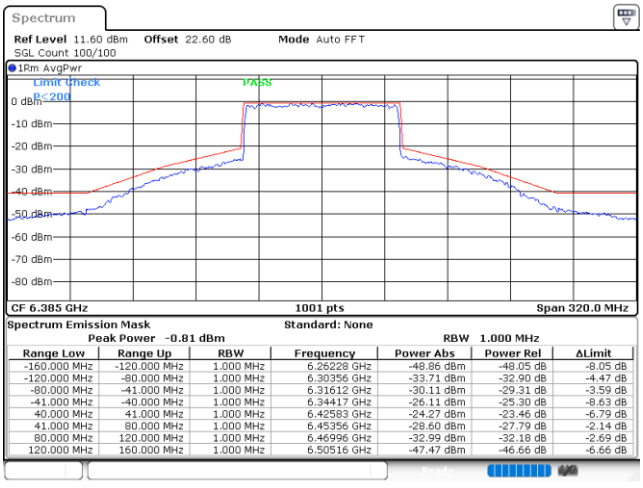
Plot on Channel 6385MHz



Spectrum Emission Mask Standard: None
Peak Power -0.81 dBm RBW 1.000 MHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.26228 GHz	-48.86 dBm	-48.05 dB	-8.05 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.30356 GHz	-33.71 dBm	-32.90 dB	-4.47 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.31612 GHz	-30.11 dBm	-29.31 dB	-3.59 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.34417 GHz	-26.11 dBm	-25.30 dB	-8.63 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.42583 GHz	-24.27 dBm	-23.46 dB	-6.79 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.45356 GHz	-28.60 dBm	-27.79 dB	-2.14 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.46996 GHz	-32.99 dBm	-32.18 dB	-2.69 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.50516 GHz	-47.47 dBm	-46.66 dB	-6.66 dB

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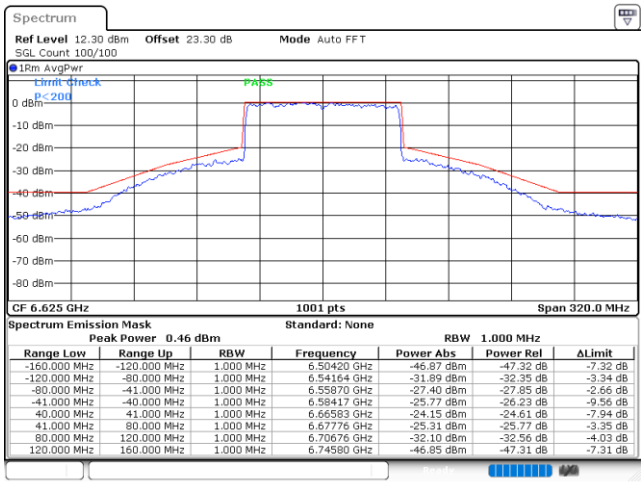
Plot on Channel 6625MHz

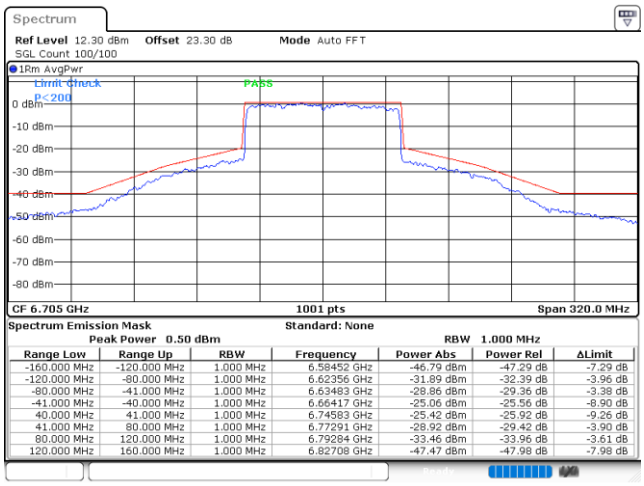


Spectrum Emission Mask Standard: None
Peak Power 0.46 dBm RBW 1.000 MHz

Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.50420 GHz	-46.87 dBm	-47.32 dB	-7.32 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.54164 GHz	-31.89 dBm	-32.35 dB	-3.34 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.55870 GHz	-27.40 dBm	-27.85 dB	-2.66 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.58417 GHz	-25.77 dBm	-26.23 dB	-9.56 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.66583 GHz	-24.15 dBm	-24.61 dB	-7.94 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.67776 GHz	-25.31 dBm	-25.77 dB	-3.35 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.70676 GHz	-32.10 dBm	-32.56 dB	-4.03 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.74580 GHz	-46.85 dBm	-47.31 dB	-7.31 dB

Date: 9.DEC.2022 10:59:51

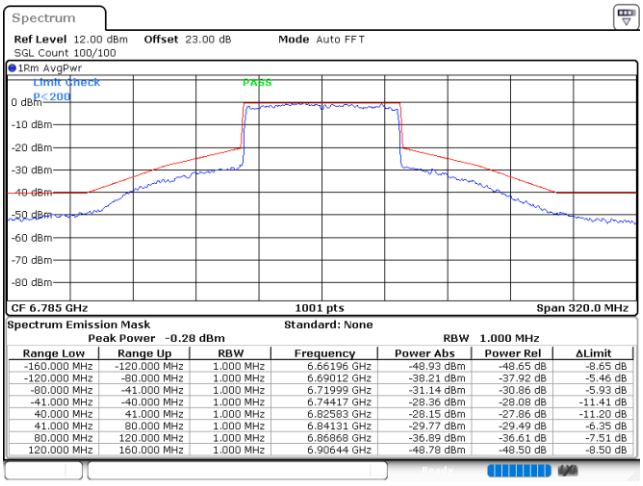
Plot on Channel 6705MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.58452 GHz	-46.79 dBm	-47.29 dB	-7.29 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.62356 GHz	-31.89 dBm	-32.39 dB	-3.96 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.63483 GHz	-28.86 dBm	-29.36 dB	-3.38 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.66417 GHz	-25.06 dBm	-25.56 dB	-8.90 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.74583 GHz	-25.42 dBm	-25.92 dB	-9.26 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.77291 GHz	-28.92 dBm	-29.42 dB	-3.90 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.79284 GHz	-33.46 dBm	-33.96 dB	-3.61 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.82708 GHz	-47.47 dBm	-47.98 dB	-7.98 dB

Date: 9.DEC.2022 11:02:38

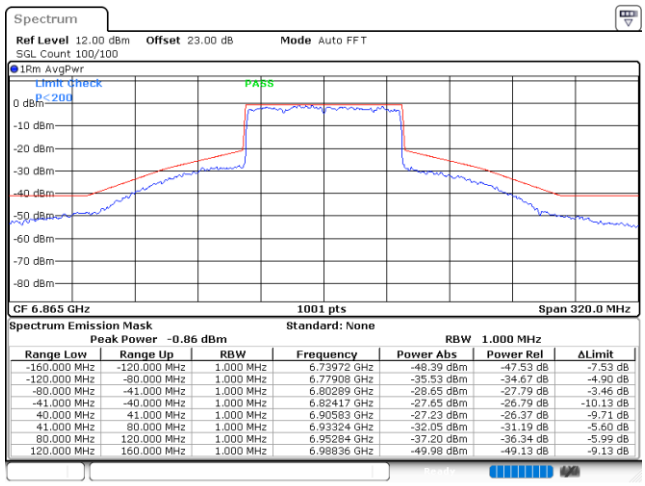
Plot on Channel 6785MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.66196 GHz	-48.93 dBm	-48.65 dB	-8.65 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.69012 GHz	-38.21 dBm	-37.92 dB	-5.46 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.71999 GHz	-31.14 dBm	-30.86 dB	-5.93 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.74417 GHz	-28.36 dBm	-28.08 dB	-11.41 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.82583 GHz	-28.15 dBm	-27.86 dB	-11.20 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.84131 GHz	-29.77 dBm	-29.49 dB	-6.35 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.86868 GHz	-36.89 dBm	-36.61 dB	-7.51 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.90644 GHz	-48.78 dBm	-48.50 dB	-8.50 dB

Date: 9.DEC.2022 11:24:39

Plot on Channel 6865MHz

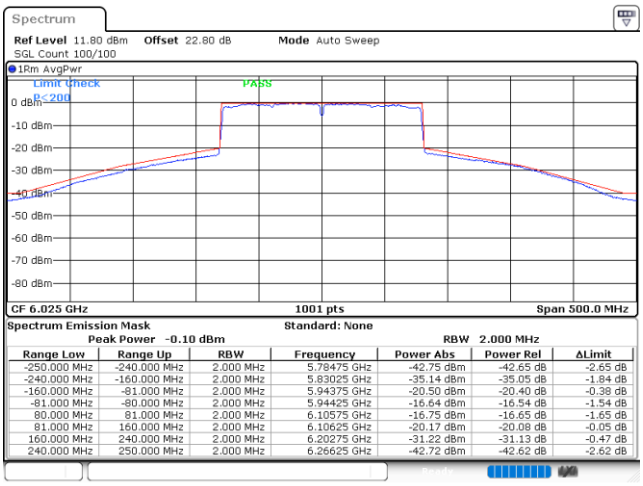


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-160.000 MHz	-120.000 MHz	1.000 MHz	6.73972 GHz	-48.39 dBm	-47.53 dB	-7.53 dB
-120.000 MHz	-80.000 MHz	1.000 MHz	6.77908 GHz	-35.53 dBm	-34.67 dB	-4.90 dB
-80.000 MHz	-41.000 MHz	1.000 MHz	6.80289 GHz	-28.65 dBm	-27.79 dB	-3.46 dB
-41.000 MHz	-40.000 MHz	1.000 MHz	6.82417 GHz	-27.65 dBm	-26.79 dB	-10.13 dB
40.000 MHz	41.000 MHz	1.000 MHz	6.90583 GHz	-27.23 dBm	-26.37 dB	-9.71 dB
41.000 MHz	80.000 MHz	1.000 MHz	6.93324 GHz	-32.05 dBm	-31.19 dB	-5.60 dB
80.000 MHz	120.000 MHz	1.000 MHz	6.95284 GHz	-37.20 dBm	-36.34 dB	-5.99 dB
120.000 MHz	160.000 MHz	1.000 MHz	6.98836 GHz	-49.98 dBm	-49.13 dB	-9.13 dB

Date: 9.DEC.2022 11:29:10

EUT Mode :	802.11ax HE160

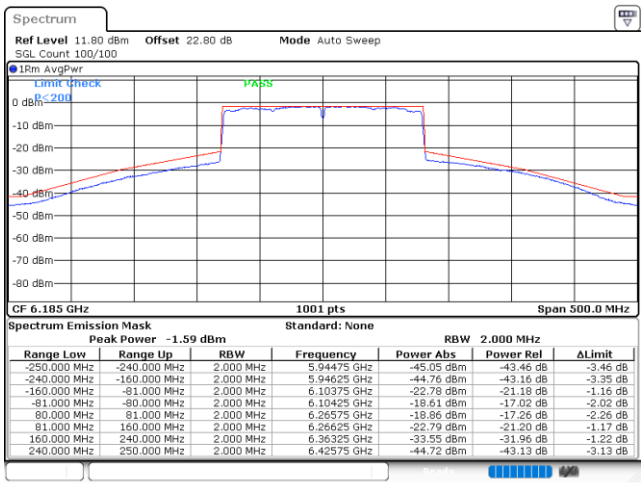
Plot on Channel 6025MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-250.000 MHz	-240.000 MHz	2.000 MHz	5.78475 GHz	-42.75 dBm	-42.65 dB	-2.65 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.83025 GHz	-35.14 dBm	-35.05 dB	-1.84 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	5.94375 GHz	-20.50 dBm	-20.40 dB	-0.38 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	5.94425 GHz	-16.64 dBm	-16.54 dB	-1.54 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.10575 GHz	-16.75 dBm	-16.65 dB	-1.65 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.10625 GHz	-20.17 dBm	-20.08 dB	-0.05 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.20275 GHz	-31.22 dBm	-31.13 dB	-0.47 dB
240.000 MHz	250.000 MHz	2.000 MHz	6.26625 GHz	-42.72 dBm	-42.62 dB	-2.62 dB

Date: 9.DEC.2022 11:50:52

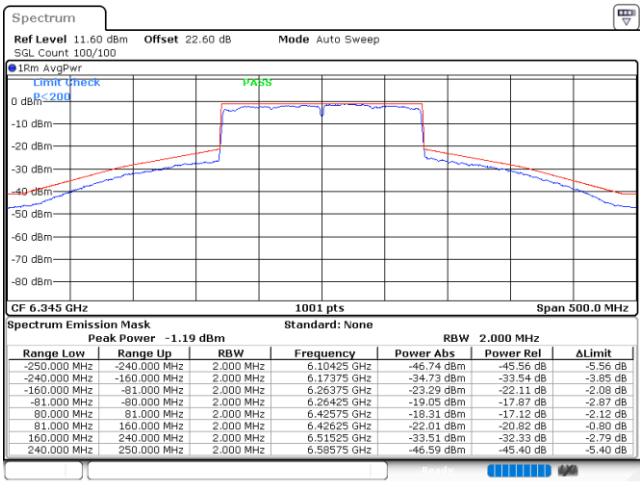
Plot on Channel 6185MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-250.000 MHz	-240.000 MHz	2.000 MHz	5.94475 GHz	-45.05 dBm	-43.46 dB	-3.46 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	5.94625 GHz	-44.76 dBm	-43.16 dB	-3.35 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.10375 GHz	-22.78 dBm	-21.18 dB	-1.16 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.10425 GHz	-18.61 dBm	-17.02 dB	-2.02 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.26575 GHz	-18.86 dBm	-17.26 dB	-2.26 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.26625 GHz	-22.79 dBm	-21.20 dB	-1.17 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.36325 GHz	-33.55 dBm	-31.96 dB	-1.22 dB
240.000 MHz	250.000 MHz	2.000 MHz	6.42575 GHz	-44.72 dBm	-43.13 dB	-3.13 dB

Date: 9.DEC.2022 12:02:35

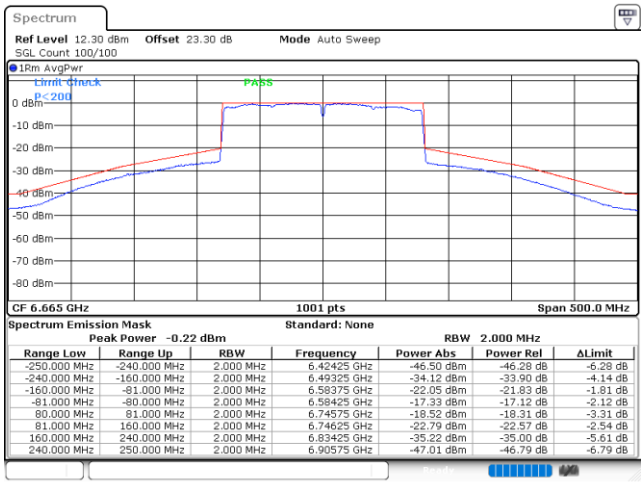
Plot on Channel 6345MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-250.000 MHz	-240.000 MHz	2.000 MHz	6.10425 GHz	-46.74 dBm	-45.56 dB	-5.56 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.17375 GHz	-34.73 dBm	-33.54 dB	-3.85 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.26375 GHz	-23.29 dBm	-22.11 dB	-2.08 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.26425 GHz	-19.05 dBm	-17.87 dB	-2.87 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.42575 GHz	-18.31 dBm	-17.12 dB	-2.12 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.42625 GHz	-22.01 dBm	-20.82 dB	-0.80 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.51525 GHz	-33.51 dBm	-32.33 dB	-2.79 dB
240.000 MHz	250.000 MHz	2.000 MHz	6.58575 GHz	-46.59 dBm	-45.40 dB	-5.40 dB

Date: 9.DEC.2022 12:08:05

Plot on Channel 6665MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-250.000 MHz	-240.000 MHz	2.000 MHz	6.42425 GHz	-46.50 dBm	-46.28 dB	-6.28 dB
-240.000 MHz	-160.000 MHz	2.000 MHz	6.49325 GHz	-34.12 dBm	-33.90 dB	-4.14 dB
-160.000 MHz	-81.000 MHz	2.000 MHz	6.58375 GHz	-22.05 dBm	-21.83 dB	-1.81 dB
-81.000 MHz	-80.000 MHz	2.000 MHz	6.58425 GHz	-17.33 dBm	-17.12 dB	-2.12 dB
80.000 MHz	81.000 MHz	2.000 MHz	6.74575 GHz	-18.52 dBm	-18.31 dB	-3.31 dB
81.000 MHz	160.000 MHz	2.000 MHz	6.74625 GHz	-22.79 dBm	-22.57 dB	-2.54 dB
160.000 MHz	240.000 MHz	2.000 MHz	6.83425 GHz	-35.22 dBm	-35.00 dB	-5.61 dB
240.000 MHz	250.000 MHz	2.000 MHz	6.90575 GHz	-47.01 dBm	-46.79 dB	-6.79 dB

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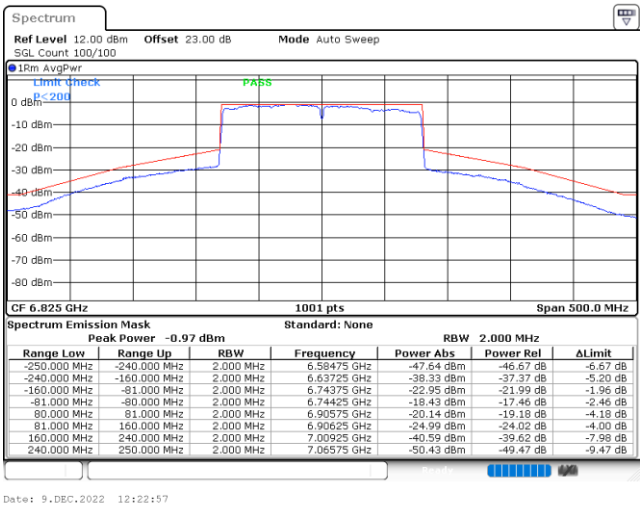
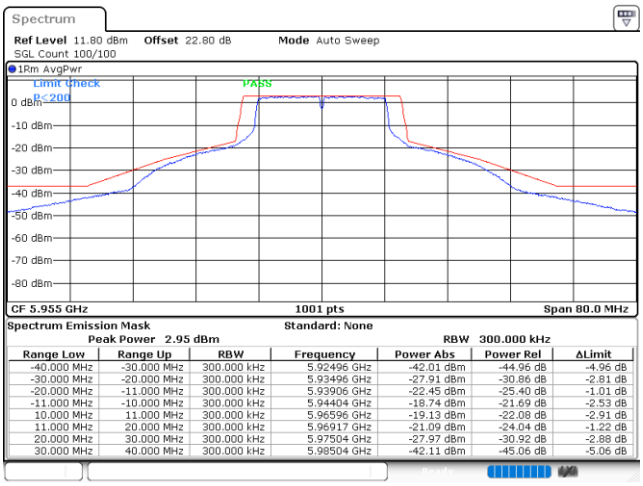
Plot on Channel 6825MHz



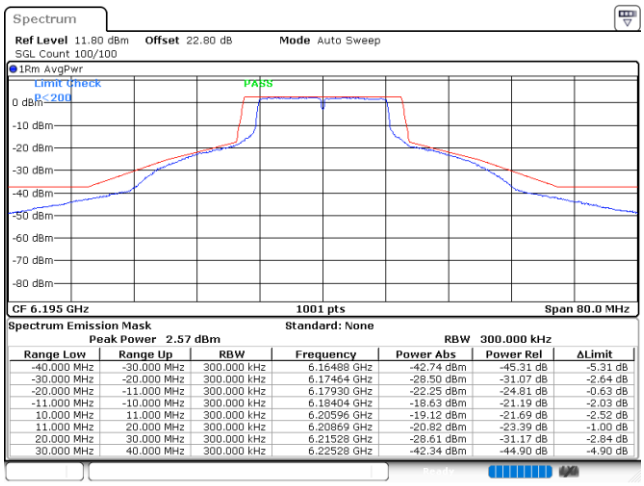
MIMO <Ant. 3+4(4)>

EUT Mode :	802.11a

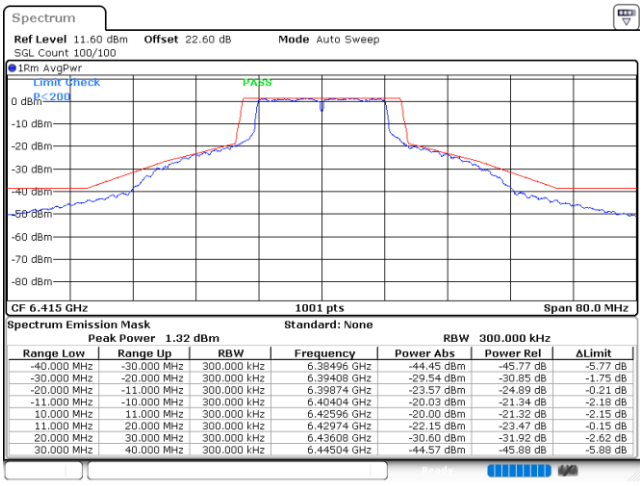
Plot on Channel 5955MHz



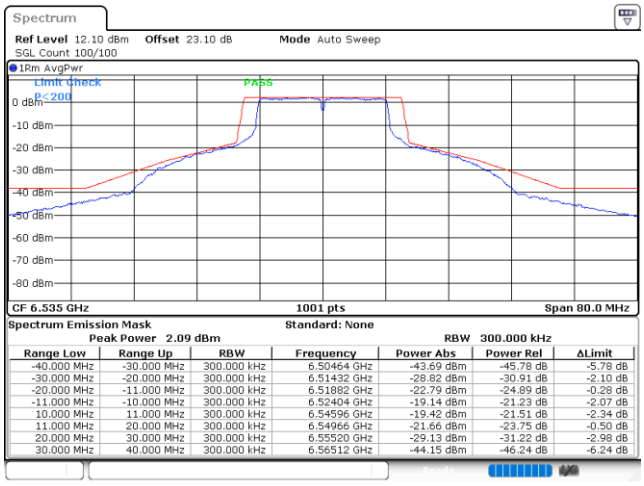
Plot on Channel 6195MHz



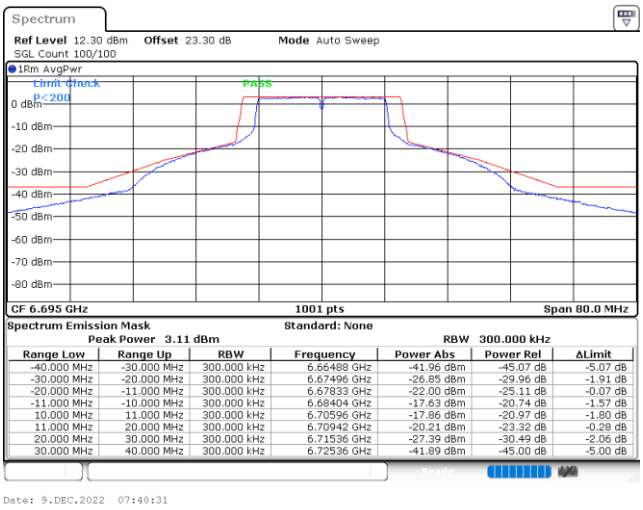
Plot on Channel 6415MHz



Plot on Channel 6535MHz



Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66488 GHz	-41.96 dBm	-45.07 dB	-5.07 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.67496 GHz	-26.85 dBm	-29.96 dB	-1.91 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.67833 GHz	-22.00 dBm	-25.11 dB	-0.07 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-17.63 dBm	-20.74 dB	-1.57 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-17.86 dBm	-20.97 dB	-1.80 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.70942 GHz	-20.21 dBm	-23.32 dB	-0.28 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.71536 GHz	-27.39 dBm	-30.49 dB	-2.06 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72536 GHz	-41.89 dBm	-45.00 dB	-5.00 dB

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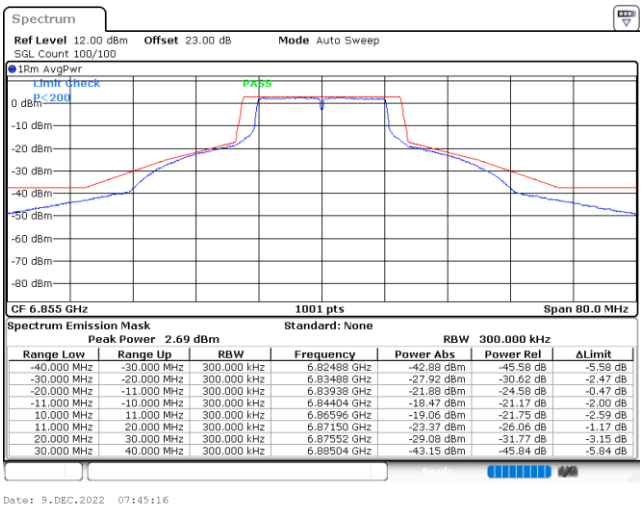
Plot on Channel 6855MHz

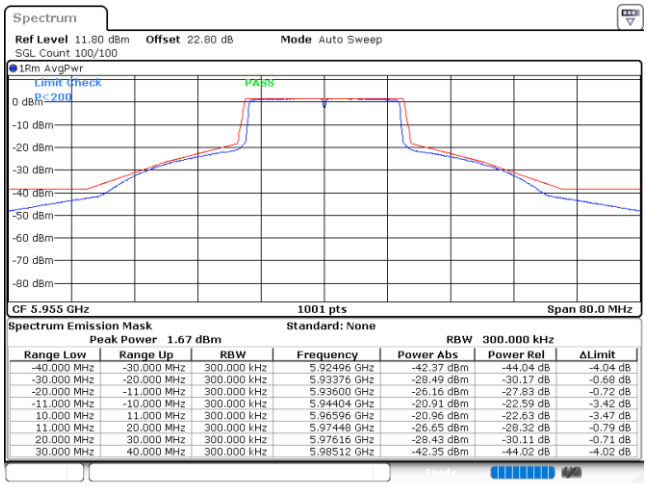


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82488 GHz	-42.88 dBm	-45.58 dB	-5.58 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.83488 GHz	-27.92 dBm	-30.62 dB	-2.47 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.83938 GHz	-21.88 dBm	-24.58 dB	-0.47 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-18.47 dBm	-21.17 dB	-2.00 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-19.06 dBm	-21.75 dB	-2.59 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.87150 GHz	-23.37 dBm	-26.06 dB	-1.17 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.87552 GHz	-29.08 dBm	-31.77 dB	-3.15 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88504 GHz	-43.15 dBm	-45.84 dB	-5.84 dB

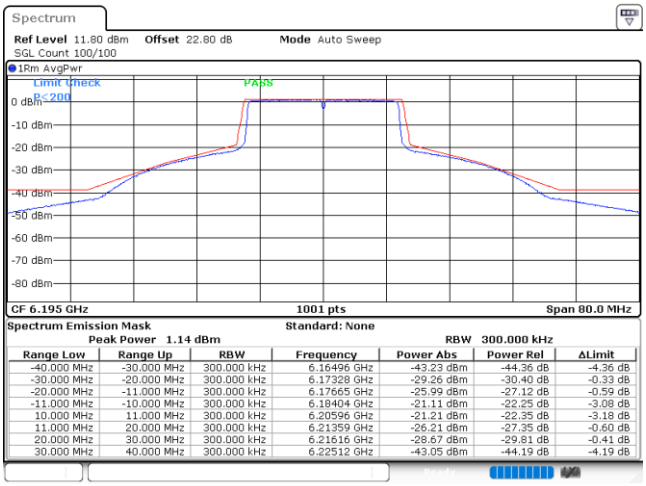
Date: 9.DEC.2022 07:45:16

EUT Mode :	802.11ax HE20 Full RU

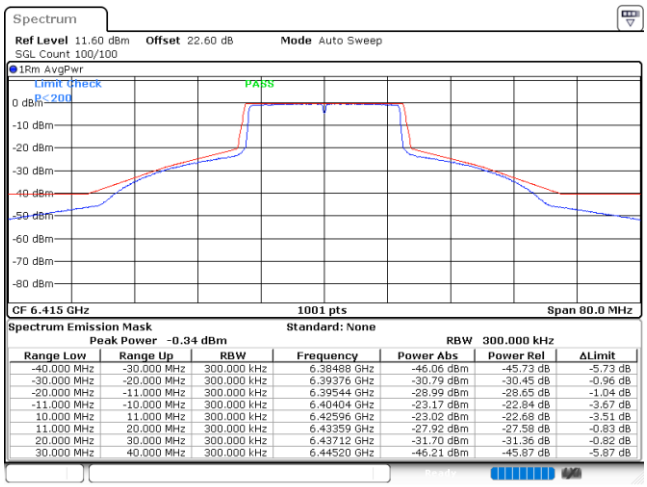
Plot on Channel 5955MHz



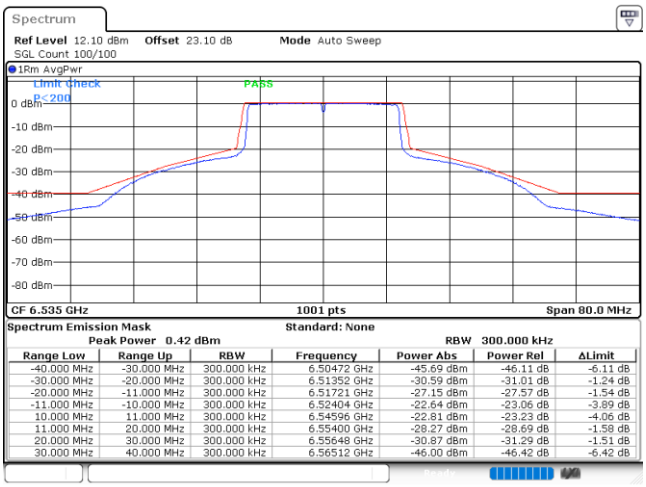
Plot on Channel 6195MHz



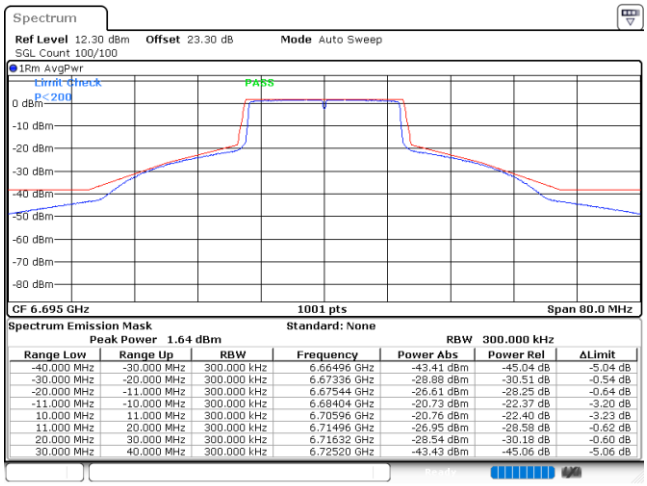
Plot on Channel 6415MHz



Plot on Channel 6535MHz



Plot on Channel 6695MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.66496 GHz	-43.41 dBm	-45.04 dB	-5.04 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.67336 GHz	-28.88 dBm	-30.51 dB	-0.54 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.67544 GHz	-26.61 dBm	-28.25 dB	-0.64 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.68404 GHz	-20.73 dBm	-22.37 dB	-3.20 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.70596 GHz	-20.76 dBm	-22.40 dB	-3.23 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.71496 GHz	-26.95 dBm	-28.58 dB	-0.62 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.71632 GHz	-28.54 dBm	-30.18 dB	-0.60 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.72520 GHz	-43.43 dBm	-45.06 dB	-5.06 dB

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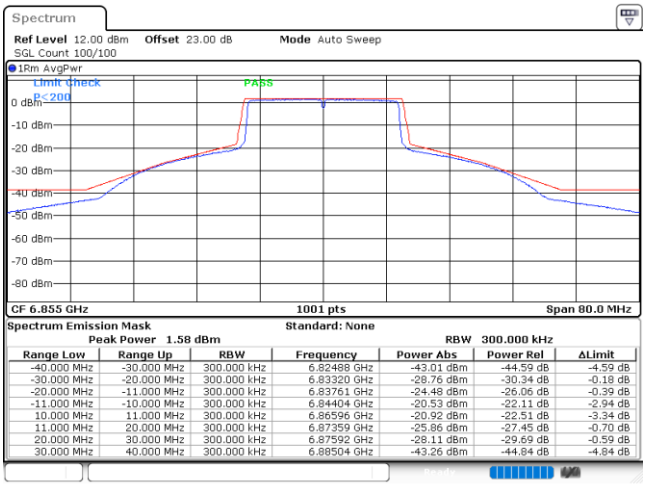
Plot on Channel 6855MHz

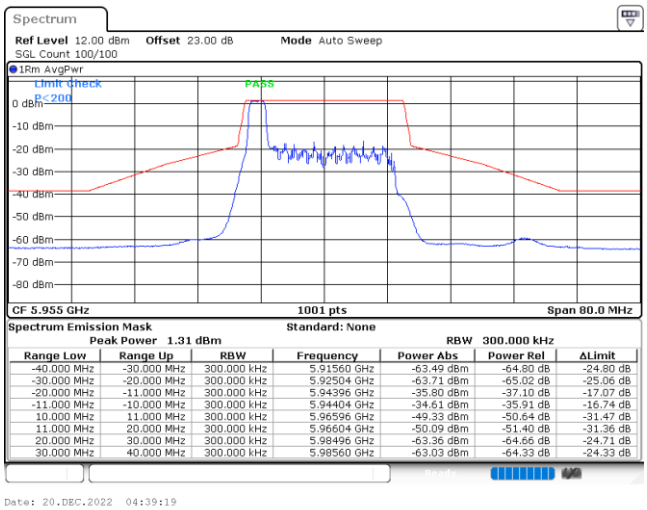


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-40.000 MHz	-30.000 MHz	300.000 kHz	6.82488 GHz	-43.01 dBm	-44.59 dB	-4.59 dB
-30.000 MHz	-20.000 MHz	300.000 kHz	6.83320 GHz	-28.76 dBm	-30.34 dB	-0.18 dB
-20.000 MHz	-11.000 MHz	300.000 kHz	6.83761 GHz	-24.48 dBm	-26.06 dB	-0.39 dB
-11.000 MHz	-10.000 MHz	300.000 kHz	6.84404 GHz	-20.53 dBm	-22.11 dB	-2.94 dB
10.000 MHz	11.000 MHz	300.000 kHz	6.86596 GHz	-20.92 dBm	-22.51 dB	-3.34 dB
11.000 MHz	20.000 MHz	300.000 kHz	6.87359 GHz	-25.86 dBm	-27.45 dB	-0.70 dB
20.000 MHz	30.000 MHz	300.000 kHz	6.87592 GHz	-28.11 dBm	-29.69 dB	-0.59 dB
30.000 MHz	40.000 MHz	300.000 kHz	6.88504 GHz	-43.26 dBm	-44.84 dB	-4.84 dB

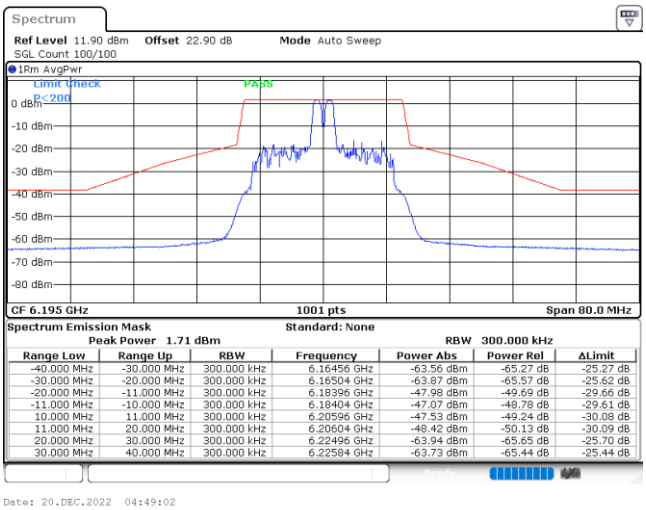
Date: 9.DEC.2022 09:20:38

EUT Mode :	802.11ax HE20 26RU

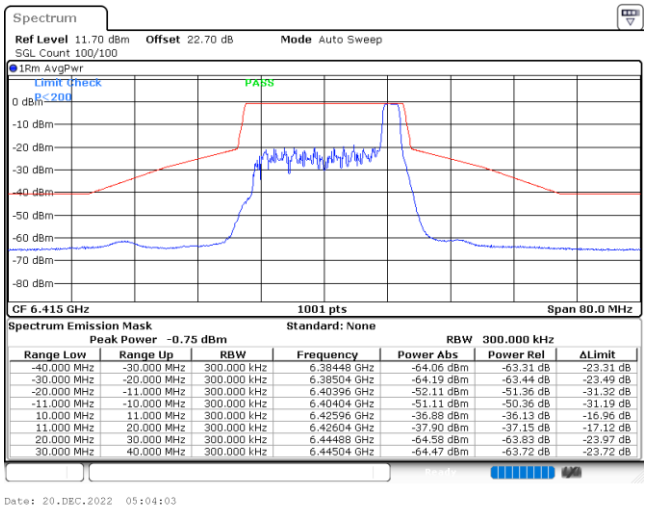
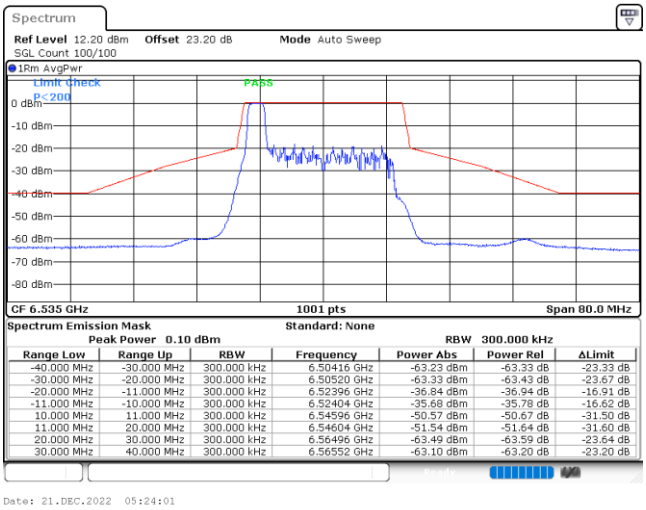
Plot on Channel 5955MHz



Plot on Channel 6195MHz



Plot on Channel 6415MHz



Plot on Channel 6535MHz