



FCC RADIO TEST REPORT

FCC ID : S9GR770
Equipment : R770 Access Point
Brand Name : RUCKUS
Model Name : R770
Applicant : Ruckus Wireless LLC
350 W. Java Dr., Sunnyvale CA 94089 USA
Manufacturer : Ruckus Wireless LLC
350 W. Java Dr., Sunnyvale CA 94089 USA
Standard : FCC Part 15 Subpart E §15.407

The product was received on Jan. 03, 2024 and testing was performed from Feb. 18, 2025 to May 19, 2025. 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.

Approved by: Neil Kao

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035



Table of Contents

History of this test report.....	3
Summary of Test Result.....	4
1 General Description	5
1.1 Product Feature of Equipment Under Test.....	5
1.2 Modification of EUT	7
1.3 Testing Location	7
1.4 Applicable Standards.....	7
2 Test Configuration of Equipment Under Test	8
2.1 Carrier Frequency and Channel	8
2.2 Test Mode.....	10
2.3 Connection Diagram of Test System.....	11
2.4 Support Unit used in test configuration and system	11
2.5 EUT Operation Test Setup	11
3 Test Result	12
3.1 26dB & 99% Occupied Bandwidth Measurement	12
3.2 Fundamental Maximum EIRP Measurement	13
3.3 Fundamental Power Spectral Density Measurement	14
3.4 In-Band Emissions (Channel Mask)	16
3.5 Unwanted Emissions Measurement	18
3.6 Antenna Requirements	22
4 List of Measuring Equipment.....	23
5 Measurement Uncertainty	24
Appendix A. Conducted Test Results	
Appendix B. Radiated Spurious Emission Test Data	
Appendix C. Duty Cycle Plots	
Appendix D. Setup Photographs	



History of this test report

Report No.	Version	Description	Issue Date
FR230524001-06D	01	Initial issue of report	May 13, 2025
FR230524001-06D	02	Revising Appendix A1, A2 and List of Measuring Equipment. This report is an updated version, replacing the report issued on May 13, 2025	May 20, 2025

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.1	15.407(a)(10)	26dB Emission Bandwidth	Pass	-
3.1	2.1049	99% Occupied Bandwidth	Pass	-
3.2	15.407(a)(7)	Fundamental Maximum EIRP	Pass	-
3.3	15.407(a)(7)	Fundamental Power Spectral Density	Pass	-
3.5	15.407(b)(6)	In-Band Emissions (Channel Mask)	Pass	-
-	15.407(d)(6)	Contention Based Protocol	Pass	See Note
3.5	15.407(b)	Unwanted Emissions	Pass	-
-	15.207	AC Conducted Emission	Pass	See Note
3.6	15.203 15.407(a)	Antenna Requirement	Pass	-

Note:

1. This is a variant report by replacing RF filter and change of small components, such as Resistor, Capacitors, and inductors. All the test cases were performed on original report which can be referred to Sporton Report Number FR230524001F. Based on the original report, the test cases were verified.
2. The firmware and software is identical for the CBP mechanism, hence no additional performance checks are needed, the results can refer to the report of FR230524001E.

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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty".

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature
General Specs Bluetooth-LE, Wi-Fi 2.4GHz 802.11b/g/n/ac/ax/be, Wi-Fi 5GHz 802.11a/n/ac/ax/be, Wi-Fi 6GHz 802.11a/n/ac/ax/be, GPS and ZigBee.
Antenna Type WLAN: <Ant. A>: Omni-Directional Antenna <Ant. B>: Omni-Directional Antenna <Ant. C>: Omni-Directional Antenna <Ant. D>: Omni-Directional Antenna <Ant. E>: Omni-Directional Antenna <Ant. F>: Omni-Directional Antenna

Antenna information		
5925 MHz ~ 6425 MHz	Peak Gain (dBi)	<Ant. E>: 3.7 <Ant. F>: 3.0
6525 MHz ~ 6875 MHz	Peak Gain (dBi)	<Ant. E>: 3.2 <Ant. F>: 4.1

Remark:

1. The device is a special case of MIMO system with two outputs driving a cross-polarized pair of linearly polarized antennas which are vertically/horizontally mounted on the PCB board as indicated in equipment photo exhibits.
2. Horizontal and vertical antennas are cross-polarized antennas and the transmitting outputs are a 90-degree phase-shifted replica against the other and the phase centers of the two antennas' orientation are co-located.
3. Directional gain of EHT320 is determined by maximum gain of each occupied frequency band.
4. The EUT information mentioned or listed above is declared by the manufacturer.

1.1.1 Antenna Directional Gain

Follows FCC KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)c)i)

Cross-polarized antennas. For a system in which the antennas have fixed orientations relative to one another that ensure that the antennas are cross-polarized regardless of any user actions, the directional gain is computed as follows.

- (i) Cross-polarized antennas with $N_{ANT} = 2$. In the case of a transmitter with only two outputs driving a pair of antennas that are cross-polarized (e.g., vertical and horizontal or left-circular and right-circular), directional gain is the gain of an individual antenna. If the two antennas have different gains, the larger gain applies.

The directional gain "DG" is calculated as following table.

			DG for Power	DG for PSD	Power Limit Reduction	PSD Limit Reduction
	Ant E (dBi)	Ant F (dBi)	(dBi)	(dBi)	(dB)	(dB)
5925 MHz~6425 MHz	3.70	3.00	3.70	3.70	0.00	0.00
6525 MHz~6875 MHz	3.20	4.10	4.10	4.10	0.00	0.00

Calculation example:

If a device has two cross-polarized antenna, $G_{ANTE} = 3.70\text{dBi}$; $G_{ANTF} = 3.00\text{dBi}$

Directional gain of power measurement = $\max(3.70, 3.00) = 3.70\text{ dBi}$

Directional gain of PSD measurement = $\max(3.70, 3.00) = 3.00\text{ dBi}$

Power and PSD limit reduction = Directional gain – 6dBi, (min = 0)



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, 03CH02-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 v03.
- ♦ 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: 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.

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 320M	Channel	31							
	Freq. (MHz)	6105							

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 320M	Channel	63							
	Freq. (MHz)	6265							



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	123		
	Freq. (MHz)	6565		

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				-			
	Freq. (MHz)	6785				-			

2.2 Test Mode

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

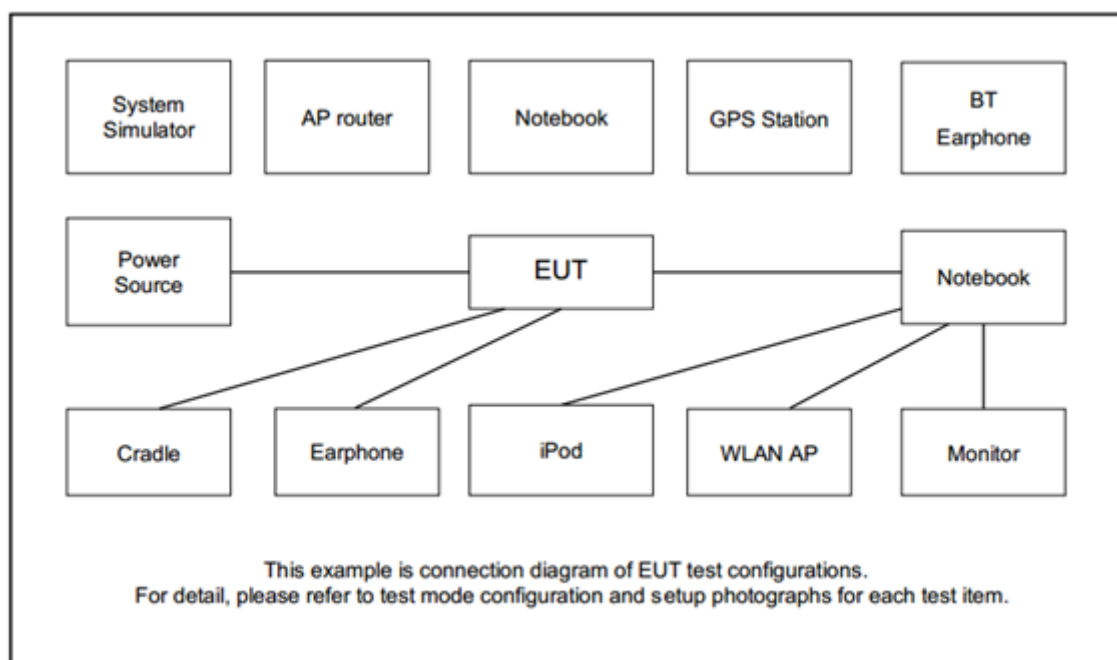
MIMO Mode

Specification	MCS index /Data Rate
802.11a	6 Mbps
802.11be EHT20	MCS0
802.11be EHT40	MCS0
802.11be EHT80	MCS0
802.11be EHT160	MCS0
802.11be EHT320	MCS0

Remark:

- 1 Based on the manufacturer's declaration, 802.11be covers the 802.11n, 11ac and 11ax due to the same modulation family scheme. For 802.11be, only full resource unit assignment mode is tested since the EUT does not support partial resource unit assignment mode.
- 2 Based on the manufacturer's declaration, RF power on each chain in MIMO mode is parameterized to be greater than the power in SISO mode, giving the condition that the SISO Mode is covered by MIMO Mode which is deemed the worst case selected for testing.
- 3 The EUT information mentioned or listed above is declared by the manufacturer.
- 4 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 The detailed radiated test modes are shown in Appendix B.

2.3 Connection Diagram of Test System



2.4 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model Name	FCC ID	Data Cable	Power Cord
1.	Laptop	DELL	Latitue 5410	N/A	N/A	AC I/P: Unshielded, 1.2 m DC O/P: Shielded, 1.8 m
2.	POE Adapter	Ruckus	GRT-480125A	NA	N/A	N/A

2.5 EUT Operation Test Setup

The RF test items, utility "QSPR V6.00.00169.2 and QUTS Version1.18.2.17" 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.

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.

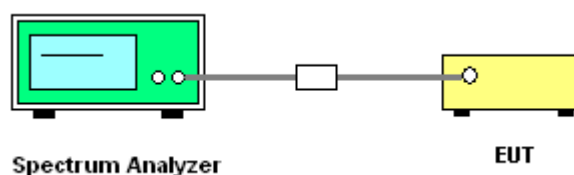
3.1.2 Measuring Instruments

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 v03. 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) $\geq 3 * \text{RBW}$.
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.

3.2 Fundamental Maximum EIRP Measurement

3.2.1 Limit of Fundamental Maximum EIRP

<FCC 14-30 CFR 15.407>

For an indoor access point operating in the 5.925-7.125 GHz band. In addition, 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.

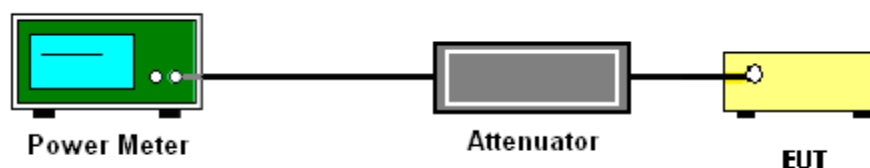
3.2.3 Test Procedures

The testing follows Method PM-G of FCC KDB 789033 D02 General UNII Test Procedures New Rules v03.

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>

The maximum power spectral density must not exceed 5 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 v03.

Section F) Maximum power spectral density.

Method SA-2

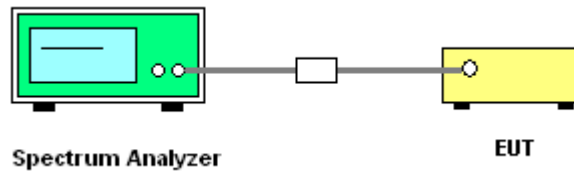
(trace averaging across on and off times of the EUT transmissions, followed by duty cycle correction).

- Measure the duty cycle.
 - Set span to encompass the entire emission bandwidth (EBW) of the signal.
 - Set RBW = 1 MHz.
 - Set VBW \geq 3 MHz.
 - Number of points in sweep \geq 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.



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.

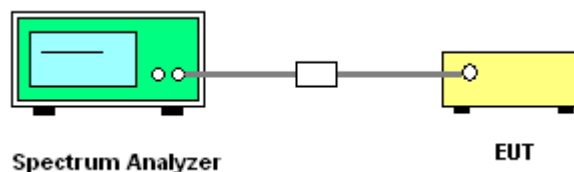
3.4.3 Test Procedures

The testing follows FCC KDB 987594 D02 U-NII 6GHz EMC Measurement v03.

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 $\geq 3 \times$ RBW
 - d) Number of points in sweep $\geq [2 \times \text{span} / \text{RBW}]$.
 - 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 of In-Band Emissions (Channel Mask)

Please refer to Appendix A.

3.5 Unwanted Emissions Measurement

This section is to measure unwanted emissions through radiated measurement for band edge spurious emissions and out of band emissions measurement.

3.5.1 Limit of Unwanted Emissions

- (1) For transmitters operating within the 5.925-7.125 GHz band: Any emissions outside of the 5.925-7.125 GHz band must not exceed an e.i.r.p. of -27 dBm/MHz.

EIRP (dBm)	Field Strength at 3m (dBμV/m)
- 27 (RMS)	68.3
- 7 (Peak)	88.3

According 987594 D02 U-NII 6GHz EMC Measurement v03 section G:

Unwanted emissions outside of restricted bands are measured with a RMS detector.

In addition, 15.35(b) applies where the peak emissions must be limited to no more than 20 dB above the average limit

- (2) Unwanted spurious emissions fallen in restricted bands shall comply with the general field strength limits as below table:

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 – 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30.0	30	30
30 – 88	100	3
88 – 216	150	3
216 - 960	200	3
Above 960	500	3

Note: The following formula is used to convert the EIRP to field strength.

$$E = \frac{1000000\sqrt{30P}}{3} \mu\text{V/m, where P is the eirp (Watts)}$$

3.5.2 Measuring Instruments

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

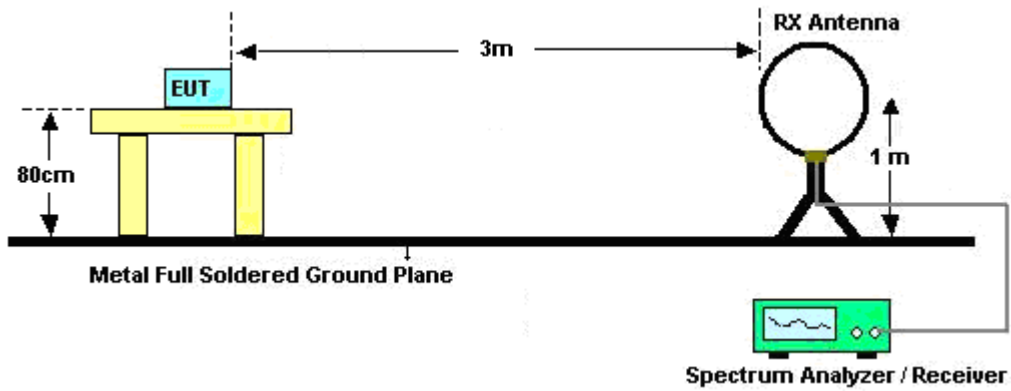
3.5.3 Test Procedures

1. The testing follows FCC KDB 789033 D02 General UNII Test Procedures New Rules v03. Section G) Unwanted emissions measurement.
 - (1) Procedure for Unwanted Emissions Measurements Below 1000MHz
 - RBW = 120 kHz
 - VBW = 300 kHz
 - Detector = Peak
 - Trace mode = max hold
 - (2) Procedure for Peak Unwanted Emissions Measurements Above 1000 MHz
 - RBW = 1 MHz
 - VBW \geq 3 MHz
 - Detector = Peak
 - Sweep time = auto
 - Trace mode = max hold
 - (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz
 - RBW = 1 MHz
 - VBW = 10 Hz, when duty cycle is no less than 98 percent.
 - VBW \geq 1/T, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna and its height is adjusted between one meter and four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
5. For each suspected emission, the EUT is arranged to its worst case and then adjust the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
6. Radiated testing below 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading.

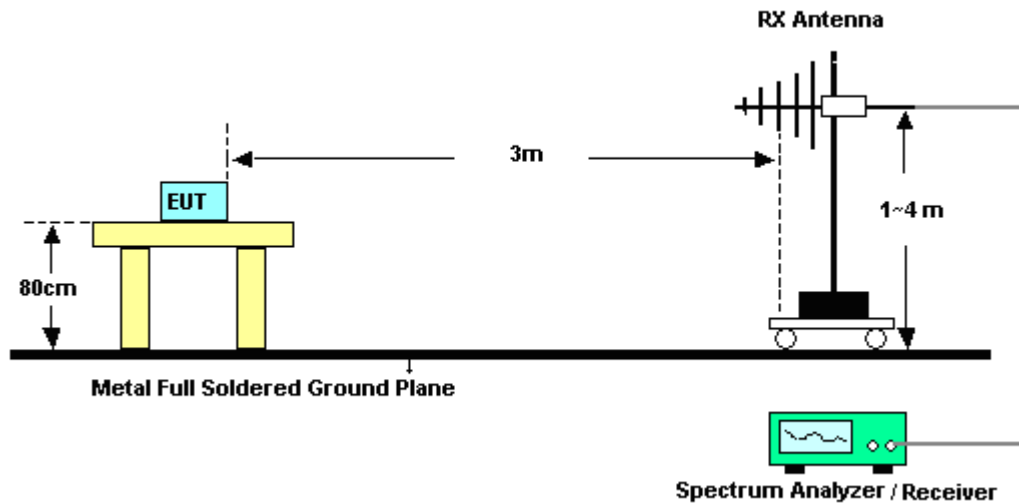
When there is no suspected emission found and the emission level is with at least 6 dB margin against QP limit line, the position is marked as “-”.
7. Radiated testing above 1 GHz is performed by adjusting the antenna tower from 1 m to 4 m and by rotating the turn table from 0 degree to 360 degrees to find the peak maximum hold reading for scanning all frequencies. When there is no suspected emission found and the harmonic emission level is with at least 6 dB margin against average limit line, the position is marked as “-”.

3.5.4 Test Setup

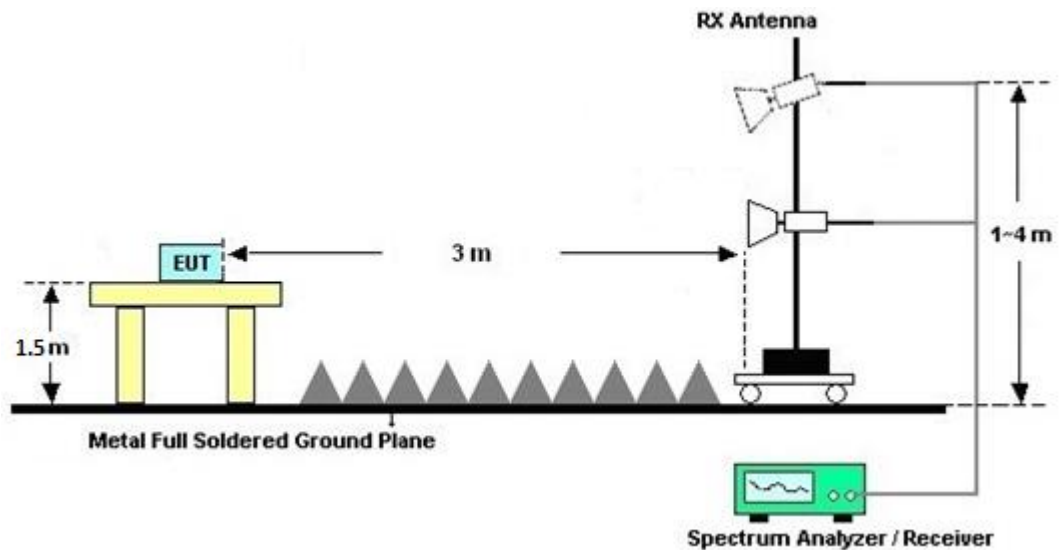
For radiated emissions below 30MHz



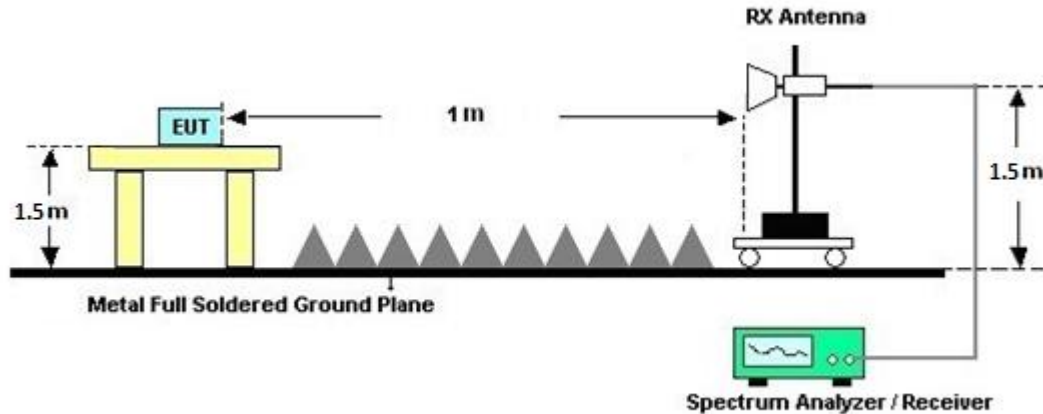
For radiated emissions from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.5.5 Test Results of Radiated Spurious Emissions (9 kHz ~ 30 MHz)

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

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

3.5.6 Test Result of Radiated Spurious at Band Edges

Please refer to Appendix B.

3.5.7 Duty Cycle

Please refer to Appendix C.

3.5.8 Test Result of Radiated Spurious Emissions (30MHz ~ 10th Harmonic)

Please refer to Appendix B.



3.6 Antenna Requirements

3.6.1 Standard Applicable

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of § 15.211, 15.213, 15.217, 15.219, 15.221, or § 15.236. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with § 15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

3.6.2 Antenna Anti-Replacement Construction

Antenna permanently attached.



4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	6111D	50392	30MHz~1GHz	Aug. 13, 2024	Feb. 28, 2025~ Mar. 07, 2025	Nov. 12, 2025	Radiation (03CH02-CA)
Loop Antenna	R&S	HFH2-Z2E	100840	9kHz~30MHz	May 02, 2024	Feb. 28, 2025~ Mar. 07, 2025	May 01, 2025	Radiation (03CH02-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02140	1GHz~18GHz	Feb. 07, 2025	Feb. 28, 2025~ Mar. 07, 2025	Feb. 06, 2026	Radiation (03CH02-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00841	18GHz~40GHz	Aug. 07, 2024	Feb. 28, 2025~ Mar. 07, 2025	Aug. 06, 2025	Radiation (03CH02-CA)
Amplifier	SONOMA	310N	372240	9kHz~1GHz	Apr. 24, 2024	Feb. 28, 2025~ Mar. 07, 2025	Apr. 23, 2025	Radiation (03CH02-CA)
Filter	Warison	WFIL-H8000-25000F-01	WR32BNW2B1	8GHz High Pass Filter	Jun. 04, 2024	Feb. 28, 2025~ Mar. 07, 2025	Jun. 03, 2025	Radiation (03CH02-CA)
Filter	Wainwright	WLK12-1200-1272-11000-40SS	SN1	1.2GHz Low Pass Filter	Jun. 04, 2024	Feb. 28, 2025~ Mar. 07, 2025	Jun. 03, 2025	Radiation (03CH02-CA)
Preamplifier	Keysight	83017A	MY53270321	1GHz~26.5GHz	Apr. 25, 2024	Feb. 28, 2025~ Mar. 07, 2025	Apr. 24, 2025	Radiation (03CH02-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	EC1900251	1GHz~18GHz	Apr. 24, 2024	Feb. 28, 2025~ Mar. 07, 2025	Apr. 23, 2025	Radiation (03CH02-CA)
Preamplifier	EMEC	EMC18G40G	060726	18G-40G	Apr. 04, 2024	Feb. 28, 2025~ Mar. 07, 2025	Apr. 03, 2025	Radiation (03CH02-CA)
RF Cable	HUBER+SUHNER	SUCOFLEX 102	804209/2, 802406/2, 802875/2, 802952/2	N/A	Oct. 10, 2024	Feb. 28, 2025~ Mar. 07, 2025	Oct. 09, 2025	Radiation (03CH02-CA)
Hygrometer	TESEO	608-H1	45142602	N/A	Aug. 14, 2024	Feb. 28, 2025~ Mar. 07, 2025	Aug. 13, 2025	Radiation (03CH02-CA)
Controller	Chaintek	EM-1000	060876	Control Turn Table & Antenna Mast	N/A	Feb. 28, 2025~ Mar. 07, 2025	N/A	Radiation (03CH02-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Feb. 28, 2025~ Mar. 07, 2025	N/A	Radiation (03CH02-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Feb. 28, 2025~ Mar. 07, 2025	N/A	Radiation (03CH02-CA)
Test Software	Audix E3	E3	N/A	N/A	N/A	Feb. 28, 2025~ Mar. 07, 2025	N/A	Radiation (03CH02-CA)
Hygrometer	Testo	608-H1	45141354	N/A	Aug. 14, 2024	Feb. 18, 2025~ Feb. 25, 2025	Aug. 13, 2025	Conducted (TH01-CA)
Power Sensor	DARE!!	RPR3006W	RPR6W-2101003	10MHz-8GHz	Apr. 25, 2024	Feb. 18, 2025~ Feb. 25, 2025	Apr. 24, 2025	Conducted (TH01-CA)
Spectrum analyzer	Rhodes & Schwarz	FSW43	104042	2Hz~43GHz	Mar. 13, 2025	May 19, 2025	Mar. 12, 2026	Conducted (TH01-CA)
Spectrum analyzer	Rhodes & Schwarz	FSV40	101089	10Hz~40GHz	Apr. 24, 2024	Feb. 18, 2025~ Feb. 25, 2025	Apr. 23, 2025	Conducted (TH01-CA)
Switch Box	EM Electronics	EMSW26	1090304	N/A	Oct. 04, 2024	Feb. 18, 2025~ Feb. 25, 2025	Oct. 03, 2025	Conducted (TH01-CA)

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.0 dB
---	--------

Uncertainty of Radiated Emission Measurement (1000 MHz ~ 18000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.4 dB
---	--------

Uncertainty of Radiated Emission Measurement (18000 MHz ~ 40000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.5 dB
---	--------

Appendix A. Test Result of Conducted Test Items

Test Engineer:	Rebecca Li	Temperature:	21.1~23.5	°C
Test Date:	2025/2/18 ~ 2025/5/19	Relative Humidity:	38.5~56.7	%

TEST RESULTS DATA
26dB and 99% OBW

U-NII-5 MIMO antenna										
Mod.	Data Rate	N _{Tx}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Emission Bandwidth Limit (MHz)	Pass /Fail
					Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	001	5955	17.14	17.10	23.62	23.22	320.00	Pass
11a	6Mbps	2	045	6175	17.13	17.03	23.33	22.39	320.00	Pass
11a	6Mbps	2	093	6415	17.07	17.00	22.98	22.57	320.00	Pass

TEST RESULTS DATA
EIRP Power Table

U-NII-5 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
					Ant E	Ant F	Ant E	Ant F	SUM	Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	001	5955	0.03	0.04	21.51	21.66		3.70	3.00	25.21	24.66	36.00	Pass
11a	6Mbps	2	045	6175	0.03	0.04	21.55	21.97		3.70	3.00	25.25	24.97	36.00	Pass
11a	6Mbps	2	093	6415	0.03	0.04	22.26	22.07		3.70	3.00	25.96	25.07	36.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.
Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.
EIRP of each polarization must individually be below the limit

TEST RESULTS DATA
EIRP Power Spectral Density

U-NII-5 MIMO antenna													
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant E	Ant F	SUM	Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	001	5955	9.89	10.08		3.70	3.00	13.59	13.08	23.00	Pass
11a	6Mbps	2	045	6175	9.49	10.13		3.70	3.00	13.19	13.13	23.00	Pass
11a	6Mbps	2	093	6415	10.07	10.01		3.70	3.00	13.77	13.01	23.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.
Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.
EIRP PSD of each polarization must individually be below the limit

TEST RESULTS DATA
26dB and 99% OBW

U-NII-7 MIMO antenna										
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Emission Bandwidth Limit (MHz)	Pass /Fail
					Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	117	6535	17.24	17.04	23.06	22.87	320.00	Pass
11a	6Mbps	2	149	6695	17.84	17.49	26.22	25.08	320.00	Pass
11a	6Mbps	2	181	6855	17.74	17.20	25.10	23.38	320.00	Pass

TEST RESULTS DATA
EIRP Power Table

U-NII-7 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power (dBm)			DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
					Ant E	Ant F	Ant E	Ant F	SUM	Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	117	6535	0.03	0.04	21.86	21.87		3.20	4.10	25.06	25.97	36.00	Pass
11a	6Mbps	2	149	6695	0.03	0.04	22.20	22.42		3.20	4.10	25.40	26.52	36.00	Pass
11a	6Mbps	2	181	6855	0.03	0.04	22.22	22.44		3.20	4.10	25.42	26.54	36.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.
Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.
EIRP of each polarization must individually be below the limit

TEST RESULTS DATA
EIRP Power Spectral Density

U-NII-7 MIMO antenna															
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	Duty Factor (dB)		Conducted Power Density (dBm/MHz)			DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm)	Pass /Fail
					Ant E	Ant F	Ant E	Ant F	SUM	Ant E	Ant F	Ant E	Ant F		
11a	6Mbps	2	117	6535	0.03	0.04	10.20	10.31		3.20	4.10	13.40	14.41	23.00	Pass
11a	6Mbps	2	149	6695	0.03	0.04	10.04	10.25		3.20	4.10	13.24	14.35	23.00	Pass
11a	6Mbps	2	181	6855	0.03	0.04	9.94	10.31		3.20	4.10	13.14	14.41	23.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.
Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.
EIRP PSD of each polarization must individually be below the limit

TEST RESULTS DATA
26dB and 99% OBW

U-NII-5 MIMO antenna											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Emission Bandwidth Limit (MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	001	5955	Full	19.26	19.27	23.70	24.74	320.00	Pass
EHT20	MCS0	2	045	6175	Full	19.20	19.25	23.46	23.68	320.00	Pass
EHT20	MCS0	2	093	6415	Full	19.20	19.23	23.14	23.37	320.00	Pass
EHT40	MCS0	2	003	5965	Full	38.60	38.54	45.86	45.26	320.00	Pass
EHT40	MCS0	2	043	6165	Full	38.76	38.73	46.91	47.42	320.00	Pass
EHT40	MCS0	2	091	6405	Full	38.71	38.60	46.29	45.70	320.00	Pass
EHT80	MCS0	2	007	5985	Full	77.86	77.84	89.44	88.74	320.00	Pass
EHT80	MCS0	2	039	6145	Full	77.99	77.91	93.63	92.03	320.00	Pass
EHT80	MCS0	2	087	6385	Full	77.96	77.85	90.21	89.60	320.00	Pass
EHT160	MCS0	2	015	6025	Full	157.86	157.86	174.10	172.08	320.00	Pass
EHT160	MCS0	2	047	6185	Full	157.86	157.83	175.01	172.22	320.00	Pass
EHT160	MCS0	2	079	6345	Full	158.07	157.98	177.07	172.51	320.00	Pass

TEST RESULTS DATA
EIRP Power Table

U-NII-5 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	001	5955	Full	0.02	0.02	21.96	22.07	3.70	3.00	25.66	25.07	36.00	Pass
EHT20	MCS0	2	045	6175	Full	0.02	0.02	21.57	21.88	3.70	3.00	25.27	24.88	36.00	Pass
EHT20	MCS0	2	093	6415	Full	0.02	0.02	22.55	22.60	3.70	3.00	26.25	25.60	36.00	Pass
EHT40	MCS0	2	003	5965	Full	0.01	0.01	19.79	20.16	3.70	3.00	23.49	23.16	36.00	Pass
EHT40	MCS0	2	043	6165	Full	0.01	0.01	21.98	22.48	3.70	3.00	25.68	25.48	36.00	Pass
EHT40	MCS0	2	091	6405	Full	0.01	0.01	22.82	22.63	3.70	3.00	26.52	25.63	36.00	Pass
EHT80	MCS0	2	007	5985	Full	0.02	0.02	19.53	19.71	3.70	3.00	23.23	22.71	36.00	Pass
EHT80	MCS0	2	039	6145	Full	0.02	0.02	21.87	22.06	3.70	3.00	25.57	25.06	36.00	Pass
EHT80	MCS0	2	087	6385	Full	0.02	0.02	22.58	22.37	3.70	3.00	26.28	25.37	36.00	Pass
EHT160	MCS0	2	015	6025	Full	0.02	0.02	20.58	20.65	3.70	3.00	24.28	23.65	36.00	Pass
EHT160	MCS0	2	047	6185	Full	0.02	0.02	21.72	22.11	3.70	3.00	25.42	25.11	36.00	Pass
EHT160	MCS0	2	079	6345	Full	0.02	0.02	22.71	22.85	3.70	3.00	26.41	25.85	36.00	Pass
EHT320	MCS0	2	031	6105	Full	0.01	0.02	23.01	22.60	3.70	3.70	26.71	26.30	36.00	Pass
EHT320	MCS0	2	063	6265	Full	0.01	0.02	22.23	23.01	3.70	3.70	25.93	26.71	36.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.

Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.

EIRP of each polarization must individually be below the limit

TEST RESULTS DATA
EIRP Power Spectral Density

U-NII-5 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power Density with Duty Factor (dBm/MHz)		DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm/MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	001	5955	Full	0.02	0.02	9.52	9.78	3.70	3.00	13.22	12.78	23.00	Pass
EHT20	MCS0	2	045	6175	Full	0.02	0.02	8.59	9.37	3.70	3.00	12.29	12.37	23.00	Pass
EHT20	MCS0	2	093	6415	Full	0.02	0.02	9.63	9.87	3.70	3.00	13.33	12.87	23.00	Pass
EHT40	MCS0	2	003	5965	Full	0.01	0.01	4.57	4.70	3.70	3.00	8.27	7.70	23.00	Pass
EHT40	MCS0	2	043	6165	Full	0.01	0.01	6.64	7.15	3.70	3.00	10.34	10.15	23.00	Pass
EHT40	MCS0	2	091	6405	Full	0.01	0.01	7.48	7.39	3.70	3.00	11.18	10.39	23.00	Pass
EHT80	MCS0	2	007	5985	Full	0.02	0.02	1.34	1.40	3.70	3.00	5.04	4.40	23.00	Pass
EHT80	MCS0	2	039	6145	Full	0.02	0.02	3.41	3.58	3.70	3.00	7.11	6.58	23.00	Pass
EHT80	MCS0	2	087	6385	Full	0.02	0.02	3.86	3.86	3.70	3.00	7.56	6.86	23.00	Pass
EHT160	MCS0	2	015	6025	Full	0.02	0.02	-0.50	-0.51	3.70	3.00	3.20	2.49	23.00	Pass
EHT160	MCS0	2	047	6185	Full	0.02	0.02	0.81	1.10	3.70	3.00	4.51	4.10	23.00	Pass
EHT160	MCS0	2	079	6345	Full	0.02	0.02	1.20	1.35	3.70	3.00	4.90	4.35	23.00	Pass
EHT320	MCS0	2	031	6105	Full	0.01	0.02	-0.79	-1.64	3.70	3.70	2.92	2.06	23.00	Pass
EHT320	MCS0	2	063	6265	Full	0.01	0.02	-2.35	-1.61	3.70	3.70	1.35	2.09	23.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.

Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.

EIRP PSD of each polarization must individually be below the limit

TEST RESULTS DATA
26dB and 99% OBW

U-NII-7 MIMO antenna											
Mod.	Data Rate	N _{TX}	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Emission Bandwidth Limit (MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	117	6535	Full	19.24	19.25	22.85	24.61	320.00	Pass
EHT20	MCS0	2	149	6695	Full	19.38	19.35	28.03	31.70	320.00	Pass
EHT20	MCS0	2	181	6855	Full	19.37	19.29	29.32	24.59	320.00	Pass
EHT40	MCS0	2	123	6565	Full	38.66	38.56	46.34	45.44	320.00	Pass
EHT40	MCS0	2	147	6685	Full	38.75	38.71	48.03	45.97	320.00	Pass
EHT40	MCS0	2	179	6845	Full	38.79	38.63	46.53	46.02	320.00	Pass
EHT80	MCS0	2	135	6625	Full	78.00	77.97	91.90	92.32	320.00	Pass
EHT80	MCS0	2	151	6705	Full	78.16	78.11	124.26	95.61	320.00	Pass
EHT80	MCS0	2	167	6785	Full	78.14	77.96	105.05	89.98	320.00	Pass
EHT160	MCS0	2	143	6665	Full	158.36	158.19	178.42	173.71	320.00	Pass

TEST RESULTS DATA
EIRP Power Table

U-NII-7 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	117	6535	Full	0.02	0.02	22.15	21.94	3.20	4.10	25.35	26.04	36.00	Pass
EHT20	MCS0	2	149	6695	Full	0.02	0.02	22.22	22.46	3.20	4.10	25.42	26.56	36.00	Pass
EHT20	MCS0	2	181	6855	Full	0.02	0.02	22.25	22.45	3.20	4.10	25.45	26.55	36.00	Pass
EHT40	MCS0	2	123	6565	Full	0.01	0.01	21.88	21.74	3.20	4.10	25.08	25.84	36.00	Pass
EHT40	MCS0	2	147	6685	Full	0.01	0.01	21.92	21.97	3.20	4.10	25.12	26.07	36.00	Pass
EHT40	MCS0	2	179	6845	Full	0.01	0.01	21.44	21.39	3.20	4.10	24.64	25.49	36.00	Pass
EHT80	MCS0	2	135	6625	Full	0.02	0.02	21.90	22.01	3.20	4.10	25.10	26.11	36.00	Pass
EHT80	MCS0	2	151	6705	Full	0.02	0.02	22.29	22.26	3.20	4.10	25.49	26.36	36.00	Pass
EHT80	MCS0	2	167	6785	Full	0.02	0.02	21.99	21.84	3.20	4.10	25.19	25.94	36.00	Pass
EHT160	MCS0	2	143	6665	Full	0.02	0.02	22.46	22.38	3.20	4.10	25.66	26.48	36.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.

Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.

EIRP of each polarization must individually be below the limit

TEST RESULTS DATA
EIRP Power Spectral Density

U-NII-7 MIMO antenna															
Mod.	Data Rate	NTx	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power Density with Duty Factor (dBm/MHz)		DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm/MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT20	MCS0	2	117	6535	Full	0.02	0.02	9.44	9.64	3.20	4.10	12.64	13.74	23.00	Pass
EHT20	MCS0	2	149	6695	Full	0.02	0.02	9.19	9.52	3.20	4.10	12.39	13.62	23.00	Pass
EHT20	MCS0	2	181	6855	Full	0.02	0.02	9.25	9.74	3.20	4.10	12.45	13.84	23.00	Pass
EHT40	MCS0	2	123	6565	Full	0.01	0.01	6.61	6.58	3.20	4.10	9.81	10.68	23.00	Pass
EHT40	MCS0	2	147	6685	Full	0.01	0.01	6.78	6.90	3.20	4.10	9.98	11.00	23.00	Pass
EHT40	MCS0	2	179	6845	Full	0.01	0.01	6.43	6.43	3.20	4.10	9.63	10.53	23.00	Pass
EHT80	MCS0	2	135	6625	Full	0.02	0.02	3.09	3.21	3.20	4.10	6.29	7.31	23.00	Pass
EHT80	MCS0	2	151	6705	Full	0.02	0.02	3.53	3.63	3.20	4.10	6.73	7.73	23.00	Pass
EHT80	MCS0	2	167	6785	Full	0.02	0.02	3.90	3.61	3.20	4.10	7.10	7.71	23.00	Pass
EHT160	MCS0	2	143	6665	Full	0.02	0.02	1.04	0.94	3.20	4.10	4.24	5.04	23.00	Pass

Note 1: The device has 2 antennas, each of which has one of two polarizations that are orthogonal to one another.
Each polarization has 1 antenna

Note 2: One of the polarization is a 90-degree phase-shifted replica of the other.
EIRP PSD of each polarization must individually be below the limit

TEST RESULTS DATA
26dB EBW and 99% OBW

U-NII-5 / U-NII-7 MIMO antenna											
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	99% Bandwidth (MHz)		26 dB Bandwidth (MHz)		Emission Bandwidth Limit (MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F		
EHT320	MCS0	2	031	6105	Full	317.05	316.50	515.13	512.70	320.00	Pass
EHT320	MCS0	2	063	6265	Full	316.38	316.63	565.89	577.06	320.00	Pass

TEST RESULTS DATA
EIRP Power Table

U-NII-5 / U-NII-7 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power (dBm)		DG (dBi)		EIRP Power (dBm)		EIRP Power Limit (dBm)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT320	MCS0	2	031	6105	Full	0.01	0.02	23.01	22.60	3.70	3.70	26.71	26.30	36.00	Pass
EHT320	MCS0	2	063	6265	Full	0.01	0.02	22.23	23.01	3.70	3.70	25.93	26.71	36.00	Pass

TEST RESULTS DATA
EIRP Power Spectral Density

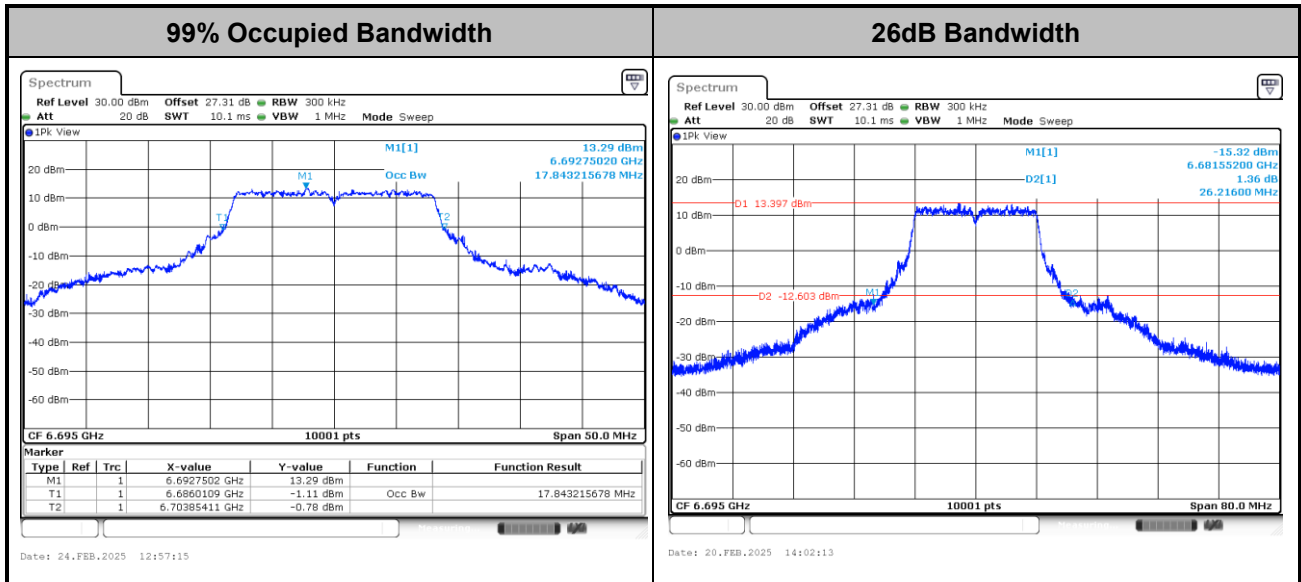
U-NII-5 / U-NII-7 MIMO antenna															
Mod.	Data Rate	NTX	CH.	Freq. (MHz)	RU Config.	Duty Factor (dB)		Conducted Power Density with Duty Factor (dBm/MHz)		DG (dBi)		EIRP Power Density (dBm/MHz)		EIRP Power Density Limit (dBm/MHz)	Pass /Fail
						Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F	Ant. E	Ant. F		
EHT320	MCS0	2	031	6105	Full	0.01	0.02	-0.79	-1.64	3.70	3.70	2.92	2.06	23.00	Pass
EHT320	MCS0	2	063	6265	Full	0.01	0.02	-2.35	-1.61	3.70	3.70	1.35	2.09	23.00	Pass



Test Result of 99% Occupied Bandwidth & 26dB Bandwidth

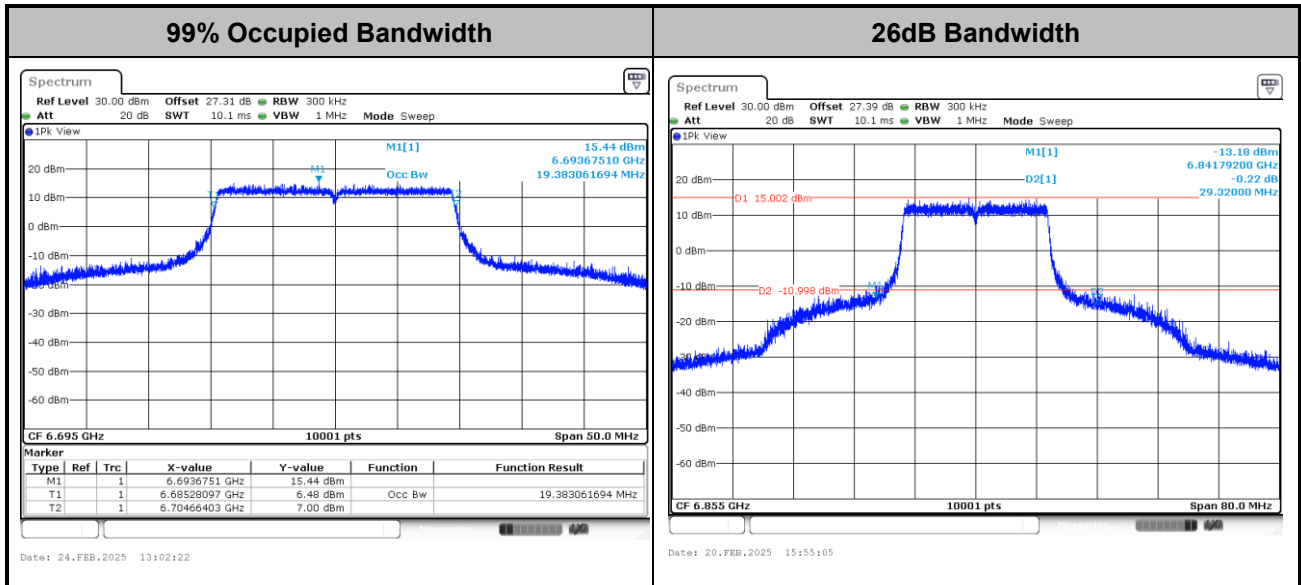
MIMO <Ant. E+F>

<802.11a>



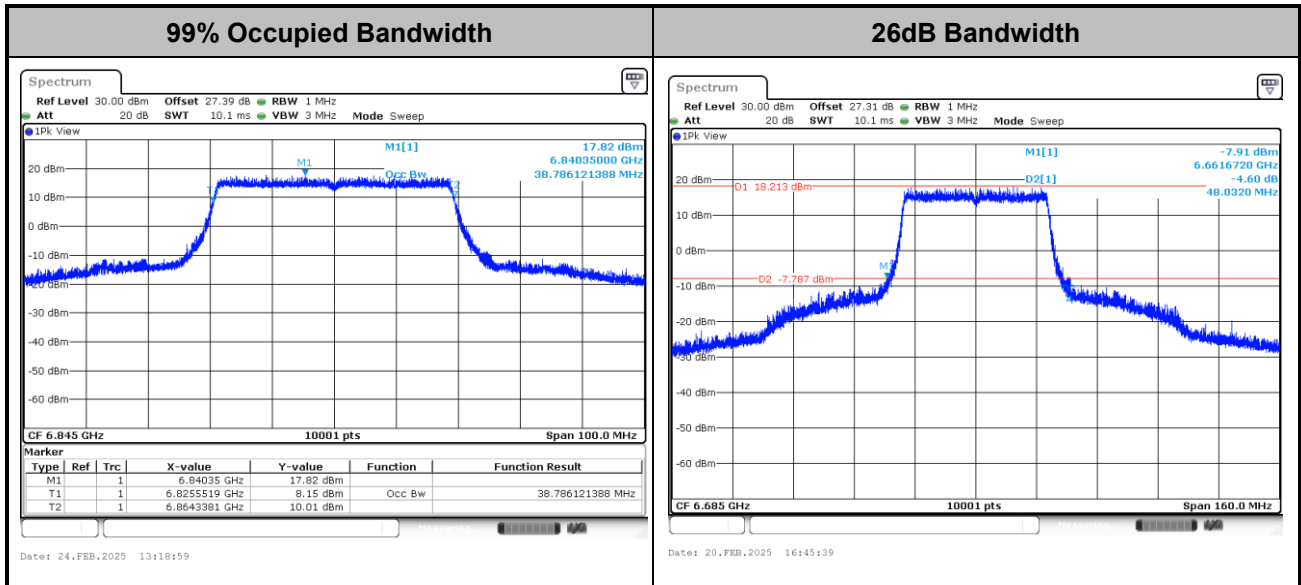
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11be EHT20>



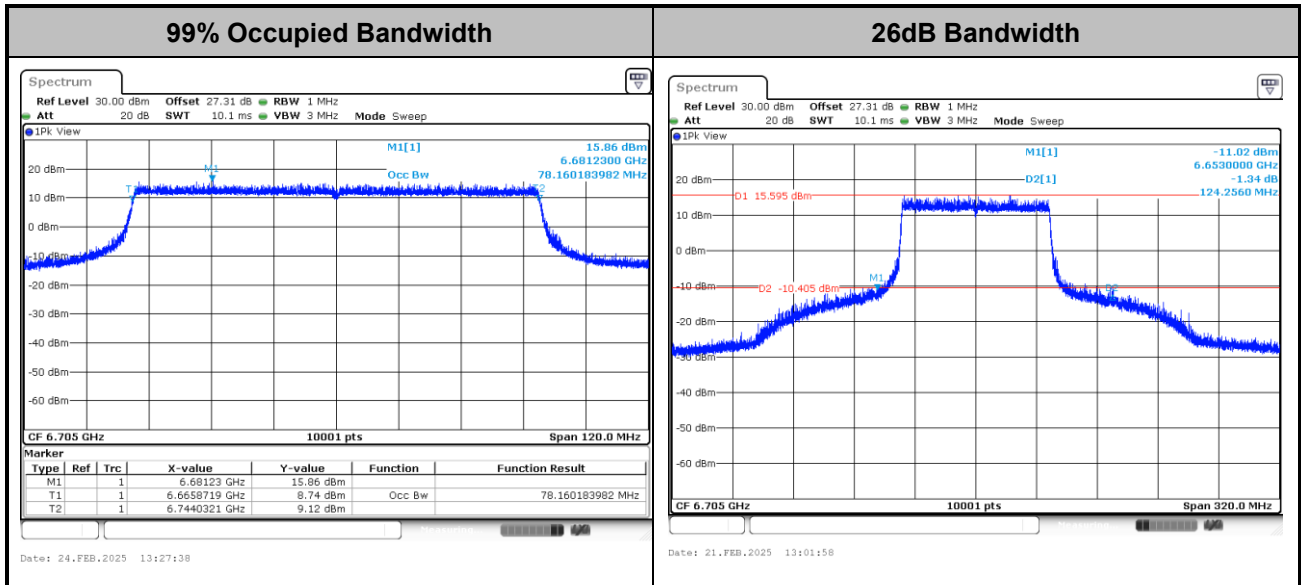
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11be EHT40>



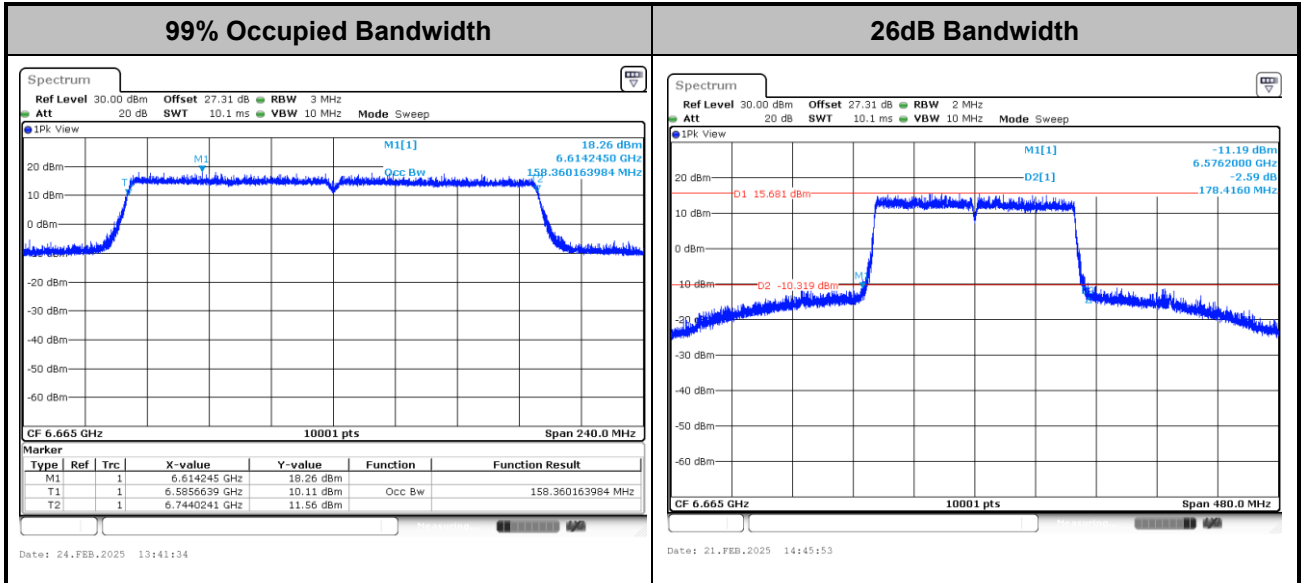
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11be EHT80>



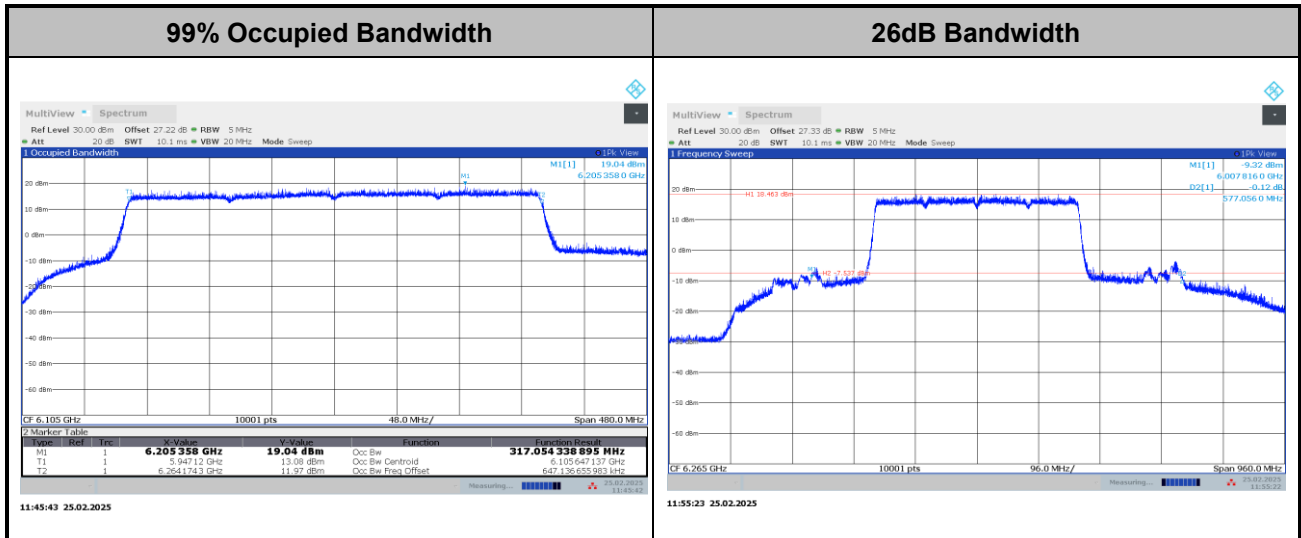
Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

<802.11be EHT160>



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

<802.11be EHT320>

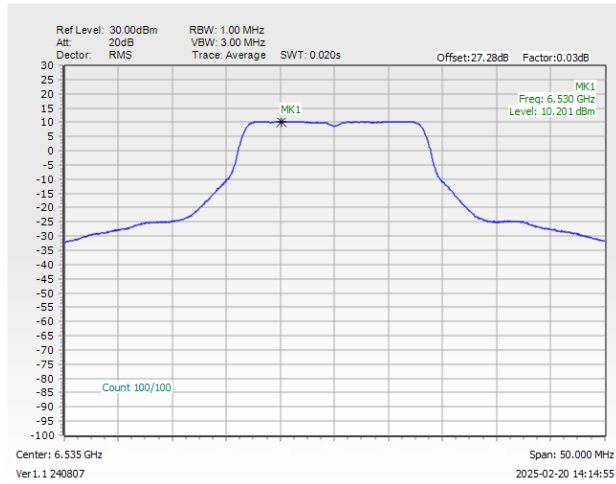


Note: The occupied channel bandwidth is maintained within the band of operation for all of the modulations.

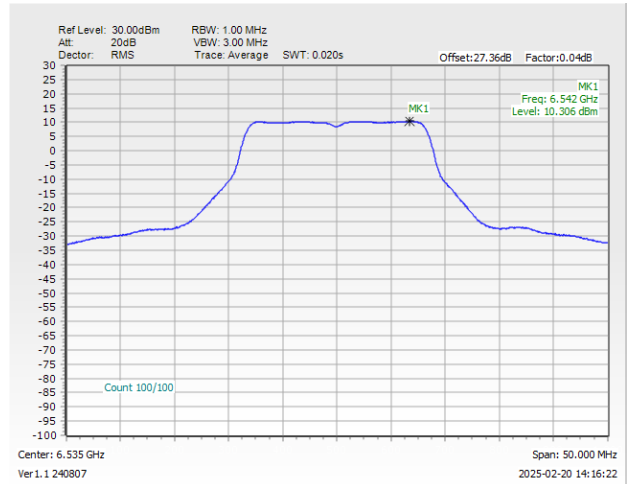
Test Result of Power Spectral Density

<802.11a>

Maximum Power Density Plot Trace 1 (Ant E)

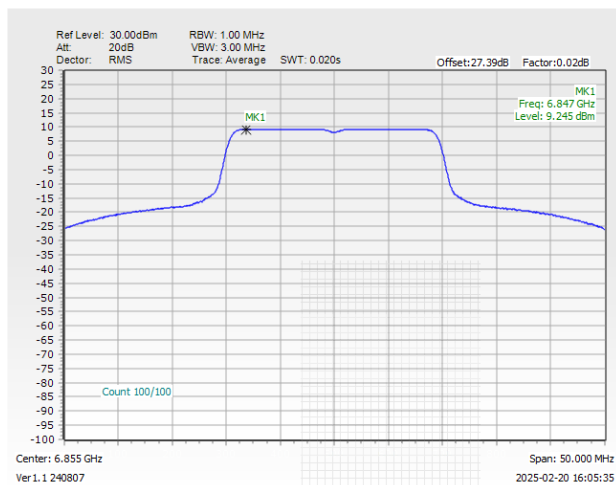


Maximum Power Density Plot Trace 2 (Ant F)

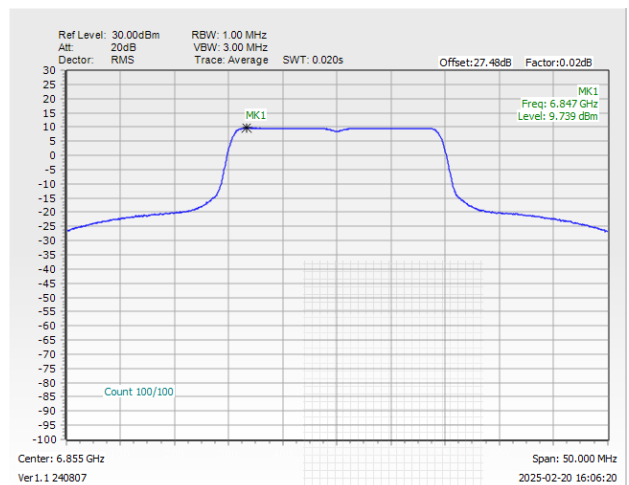


<802.11be EHT20>

Maximum Power Density Plot Trace 1 (Ant E)



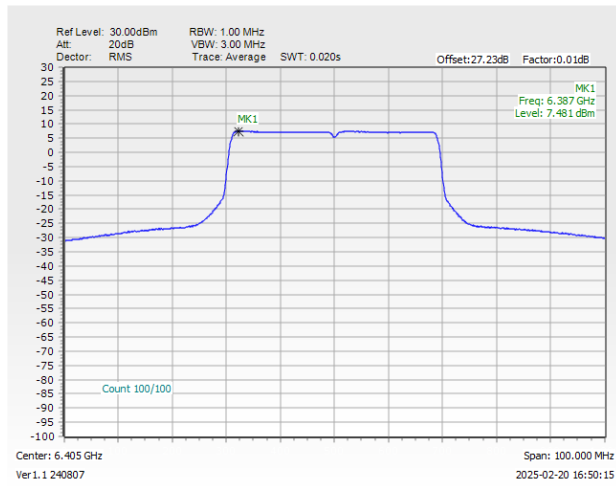
Maximum Power Density Plot Trace 2 (Ant F)



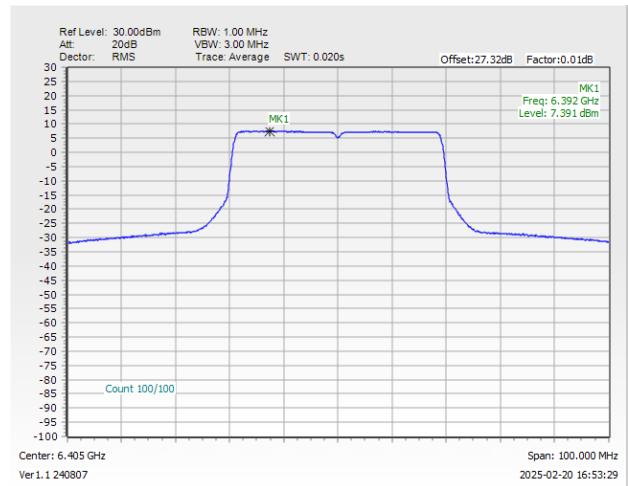


<802.11be EHT40>

Maximum Power Density Plot Trace 1 (Ant E)

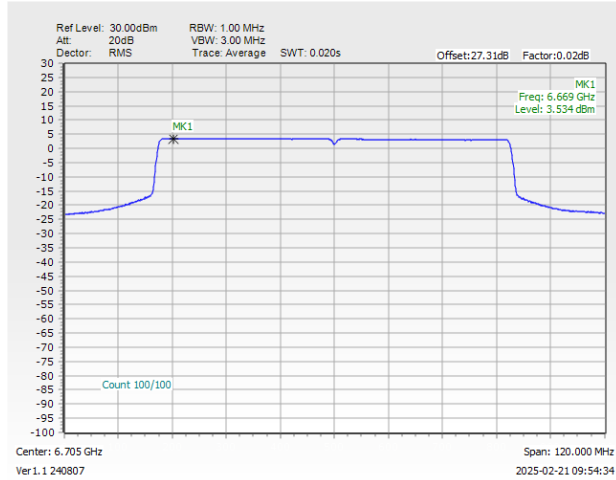


Maximum Power Density Plot Trace 2 (Ant F)

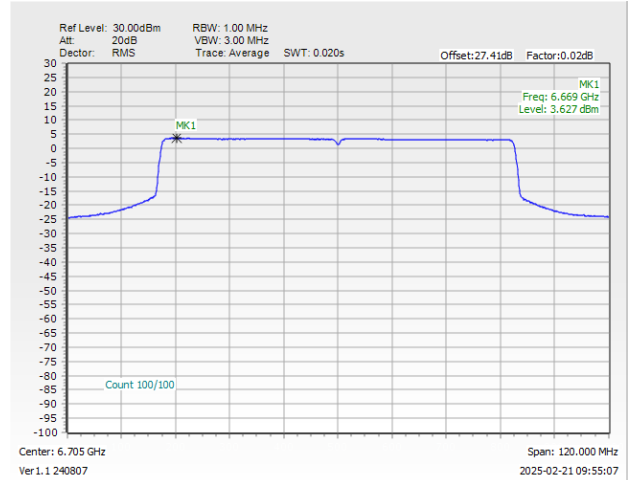


<802.11be EHT80>

Maximum Power Density Plot Trace 1 (Ant E)

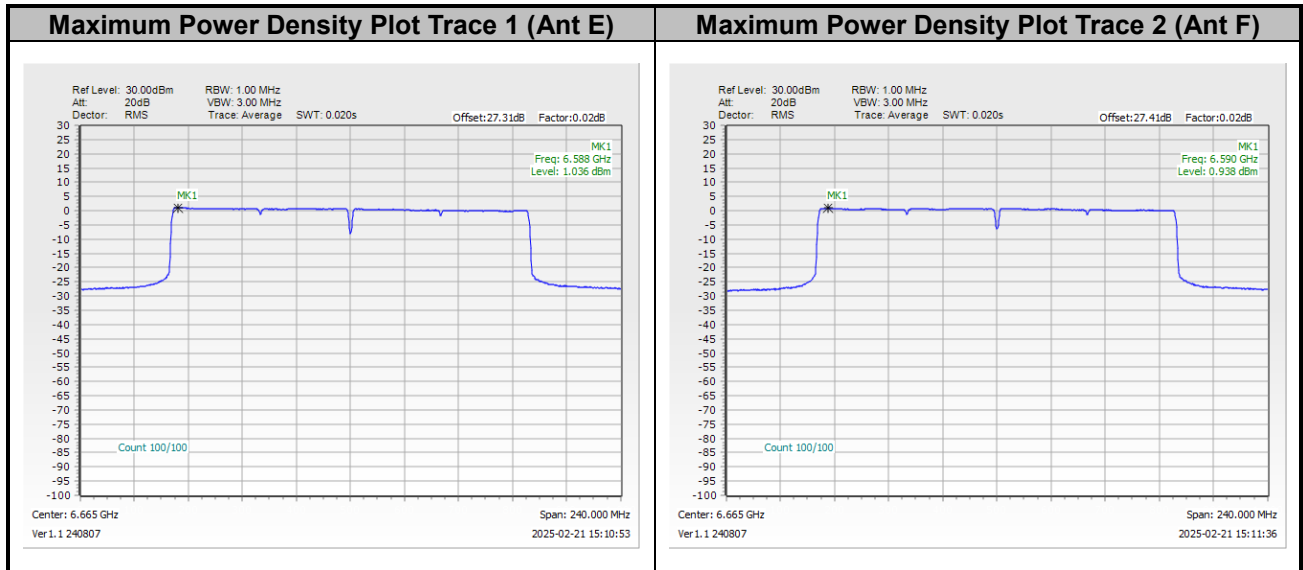


Maximum Power Density Plot Trace 2 (Ant F)

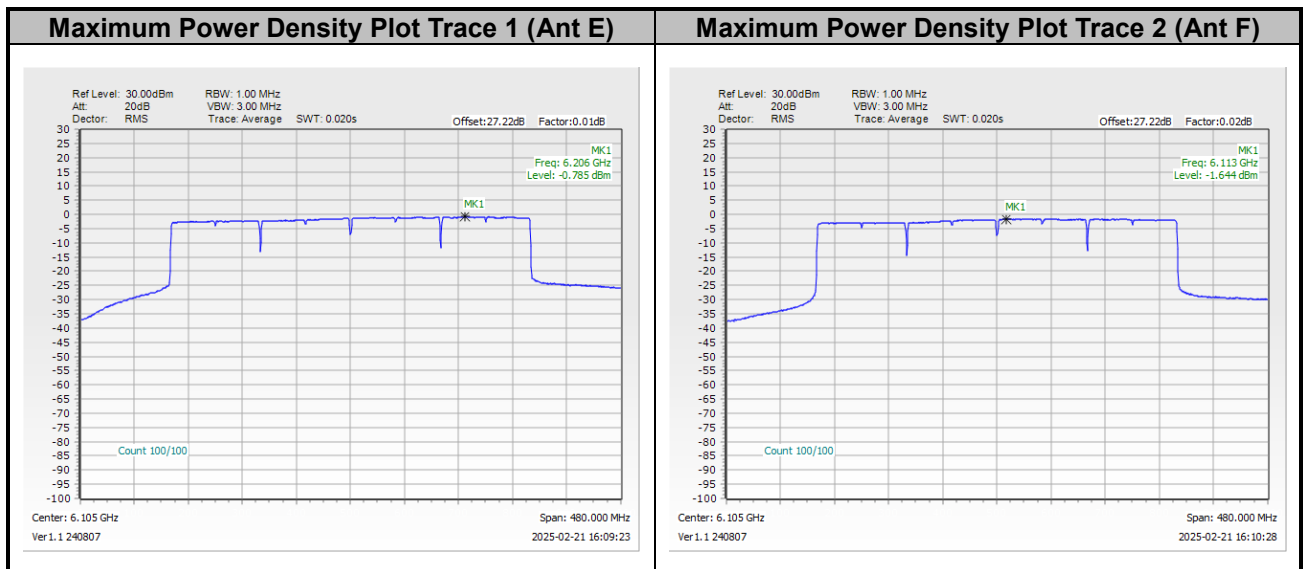




<802.11be EHT160>



<802.11be EHT320>





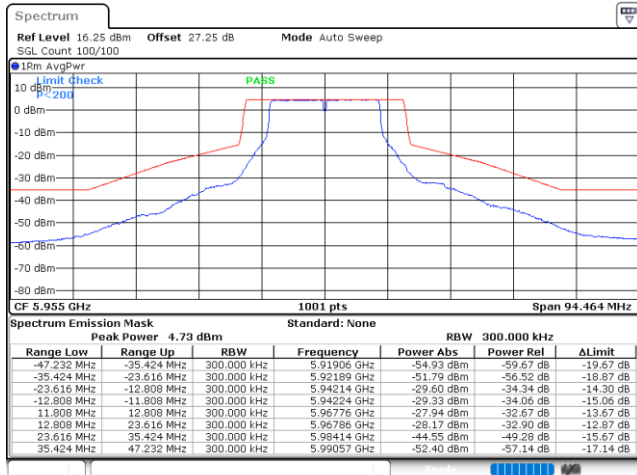
In-Band Emissions (Channel Mask)

MIMO <Ant. E+F(E)>

EUT Mode

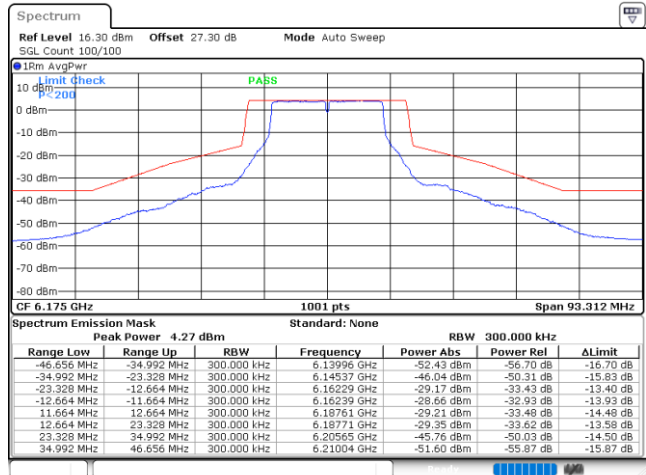
802.11a

Plot on 5955 MHz



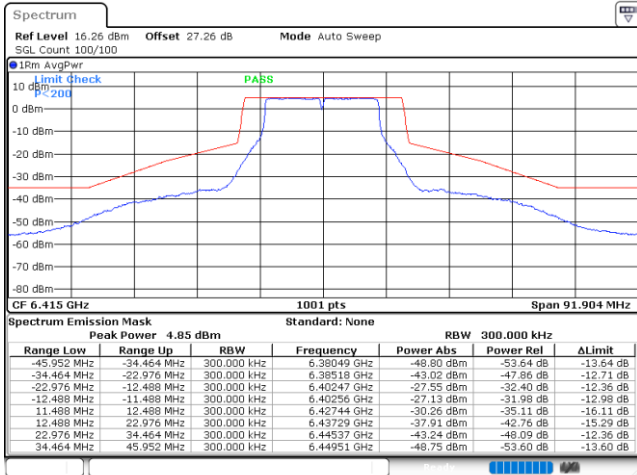
Date: 20.FEB.2025 13:26:03

Plot on 6175 MHz



Date: 20.FEB.2025 13:33:57

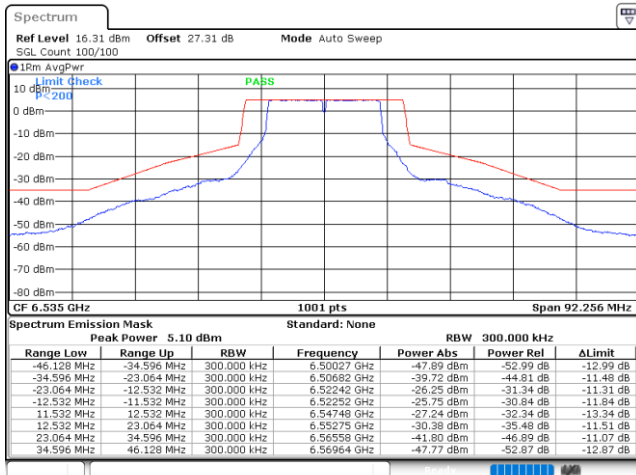
Plot on 6415 MHz



Date: 20.FEB.2025 13:42:09

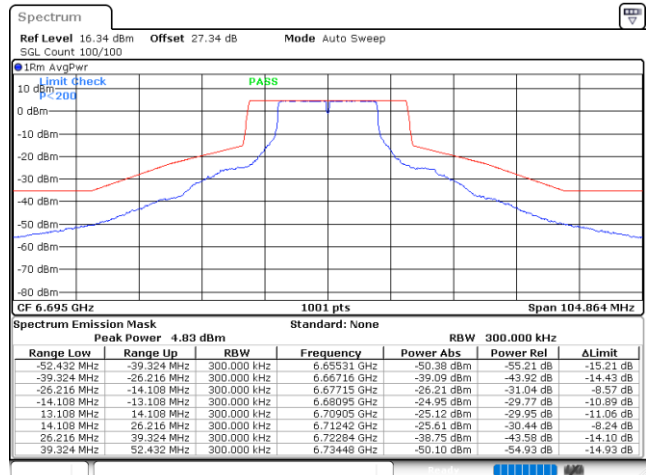


Plot on 6535 MHz



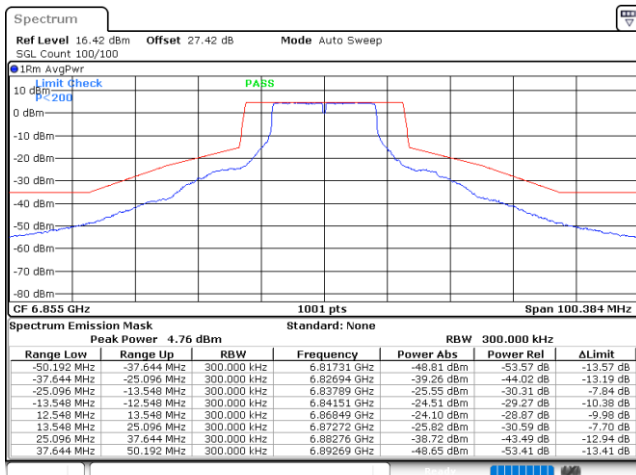
Date: 20.FEB.2025 13:50:44

Plot on 6695 MHz



Date: 20.FEB.2025 14:02:41

Plot on 6855 MHz



Date: 20.FEB.2025 14:09:22

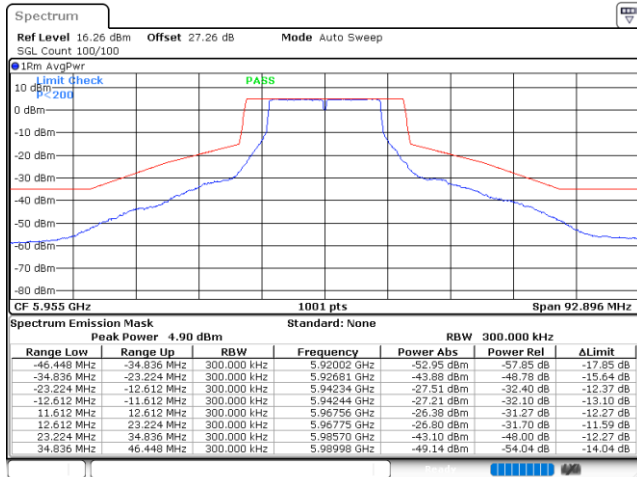


MIMO <Ant. E+F(F)>

EUT Mode

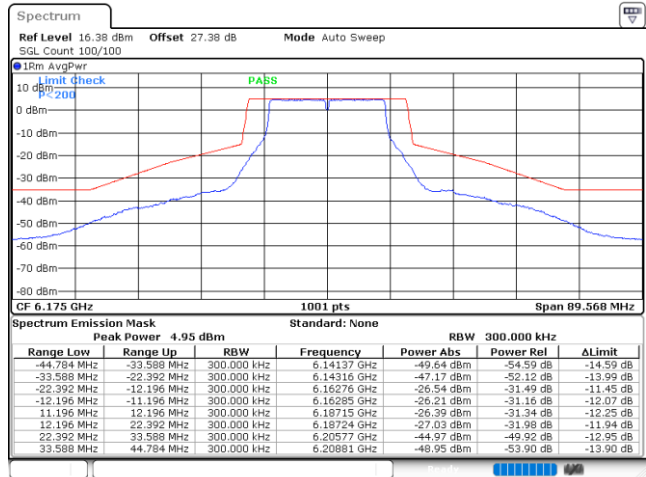
802.11a

Plot on 5955 MHz



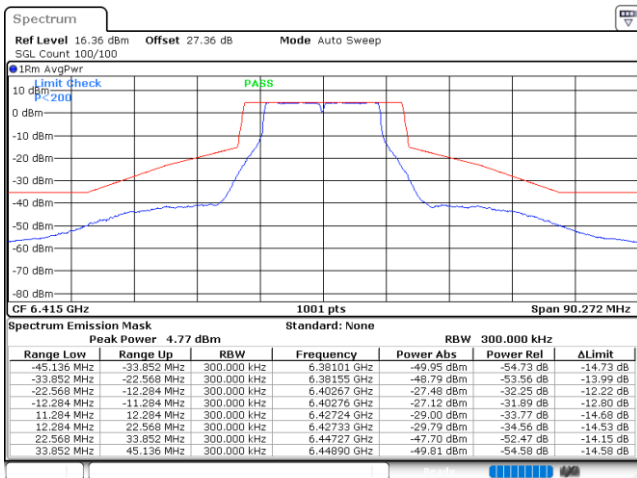
Date: 20.FEB.2025 13:21:38

Plot on 6175 MHz



Date: 20.FEB.2025 13:33:19

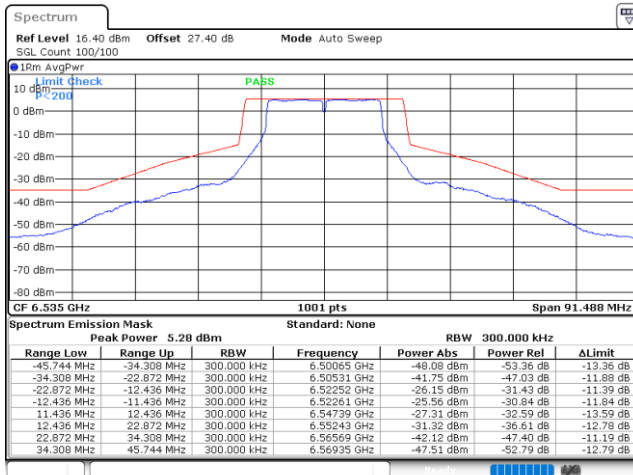
Plot on 6415 MHz



Date: 20.FEB.2025 13:40:08

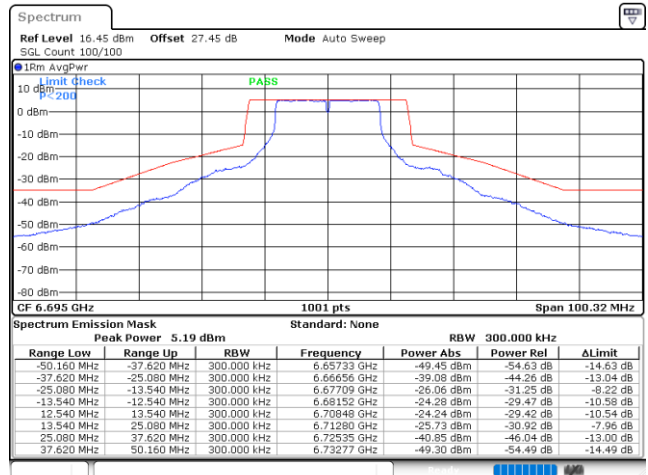


Plot on 6535 MHz



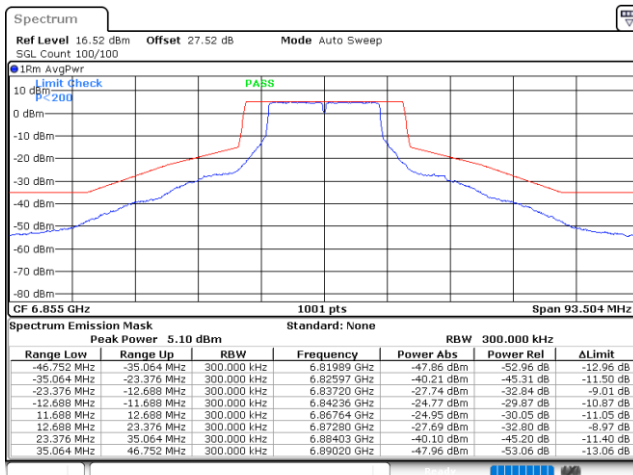
Date: 20.FEB.2025 13:50:02

Plot on 6695 MHz



Date: 20.FEB.2025 14:01:28

Plot on 6855 MHz



Date: 20.FEB.2025 14:08:38

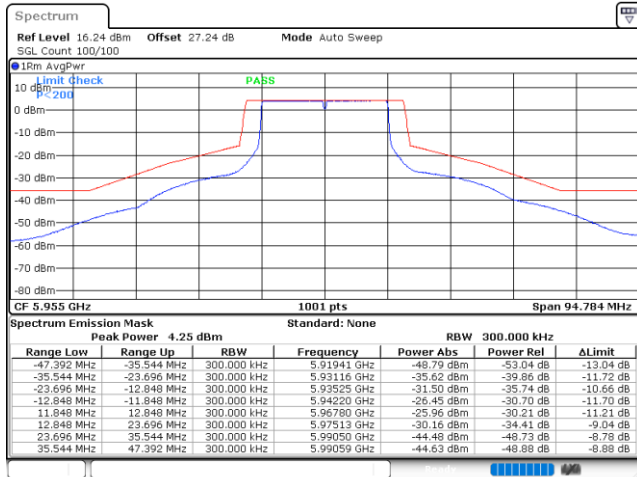


MIMO <Ant. E+F(E)>

EUT Mode

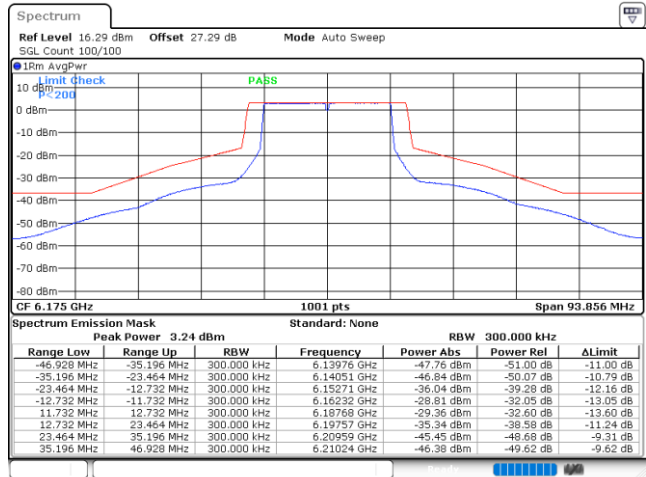
802.11be EHT20 FullRU

Plot on 5955 MHz



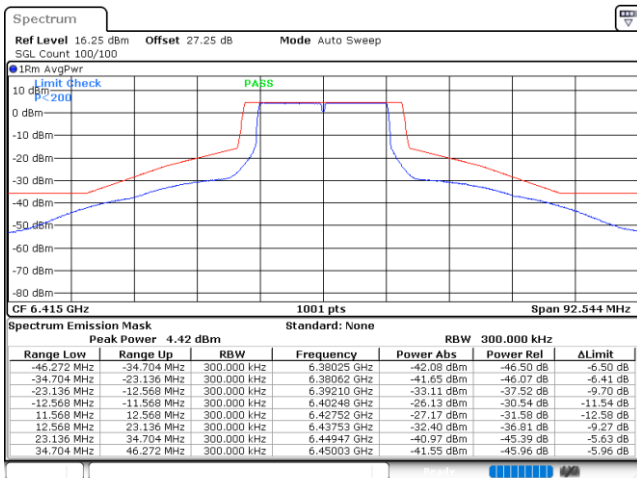
Date: 20.FEB.2025 14:43:09

Plot on 6175 MHz



Date: 20.FEB.2025 15:08:12

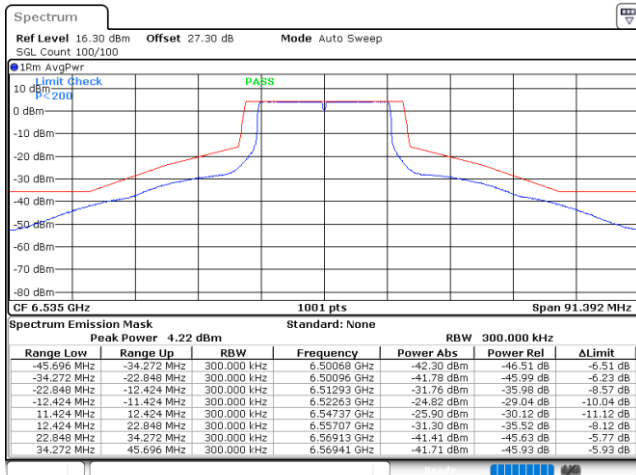
Plot on 6415 MHz



Date: 20.FEB.2025 15:14:21

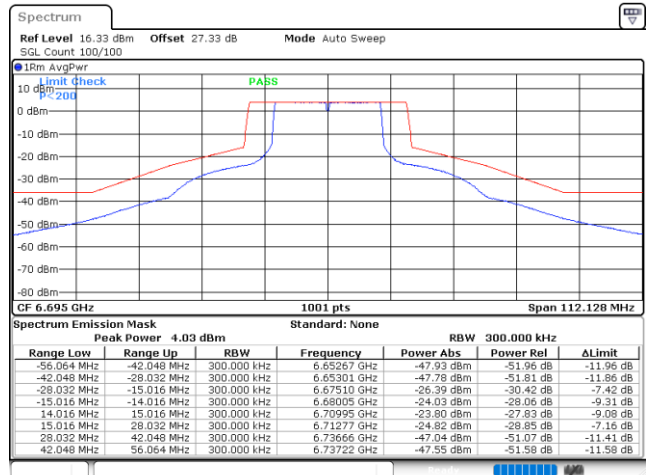


Plot on 6535 MHz



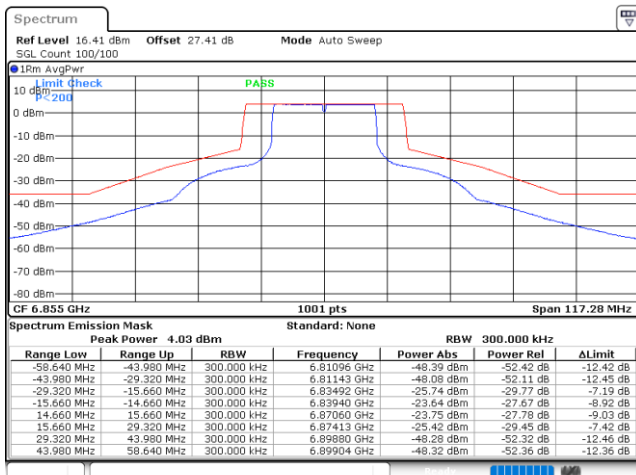
Date: 20.FEB.2025 15:26:57

Plot on 6695 MHz



Date: 20.FEB.2025 15:33:32

Plot on 6855 MHz



Date: 20.FEB.2025 15:55:30

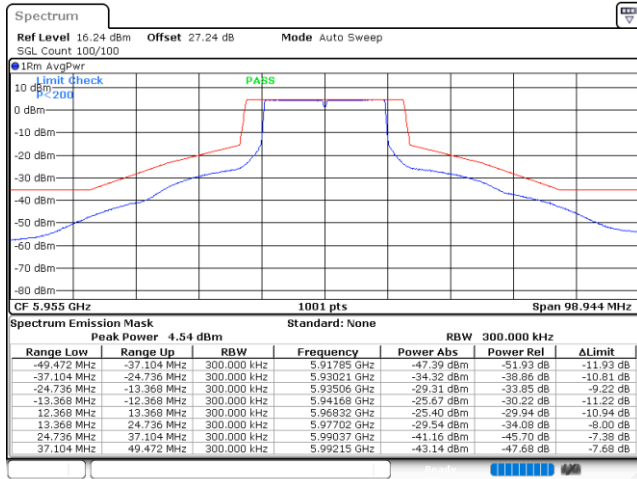


MIMO <Ant. E+F(F)>

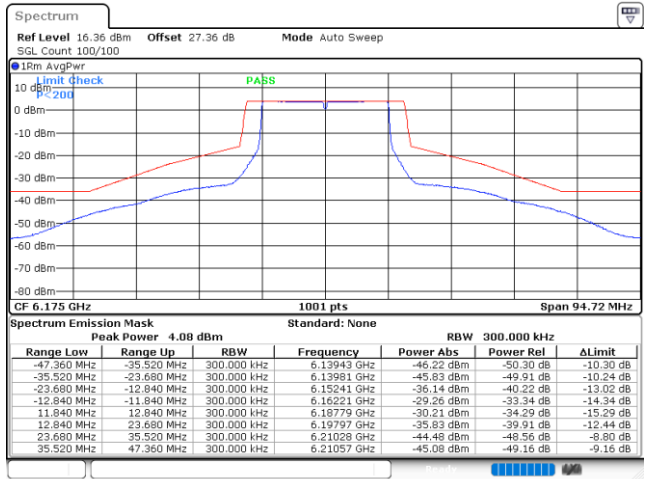
EUT Mode

802.11be EHT20 FullIRU

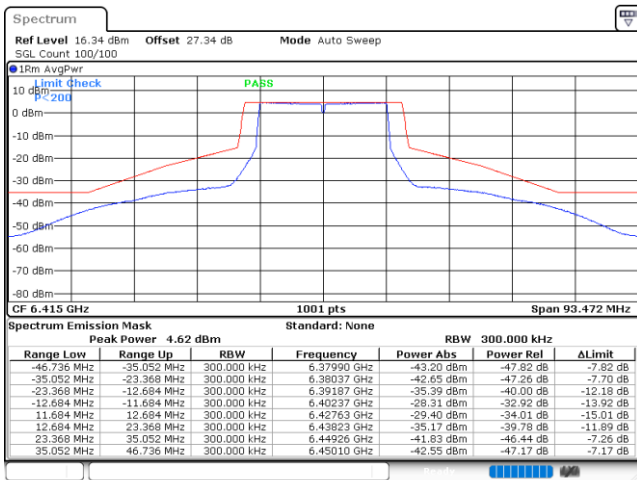
Plot on 5955 MHz



Plot on 6175 MHz

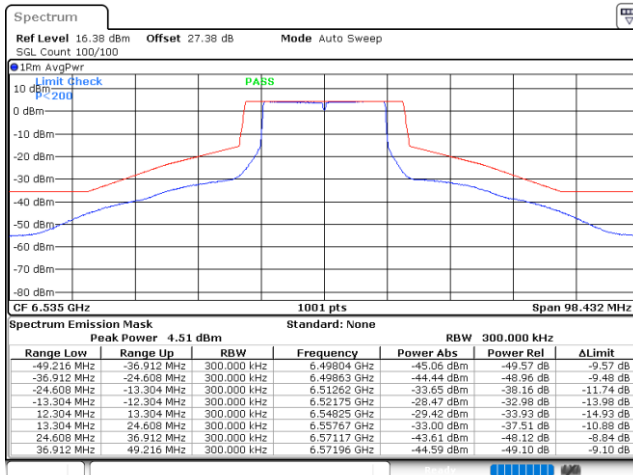


Plot on 6415 MHz



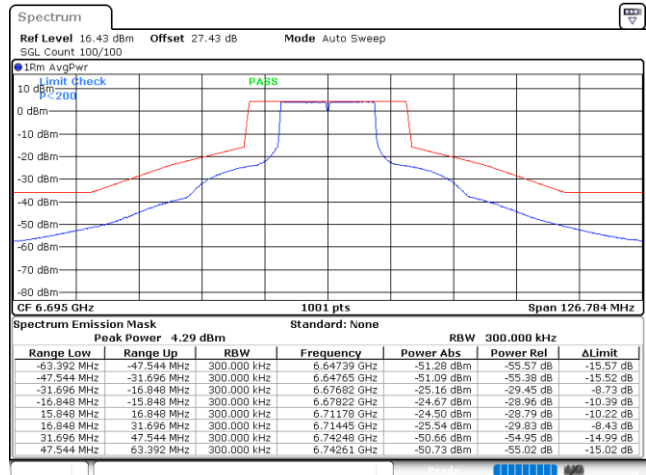


Plot on 6535 MHz



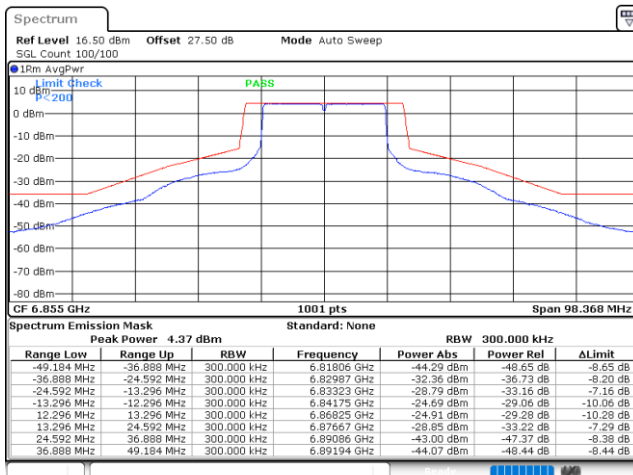
Date: 20.FEB.2025 15:26:01

Plot on 6695 MHz



Date: 20.FEB.2025 15:32:20

Plot on 6855 MHz



Date: 20.FEB.2025 15:42:38

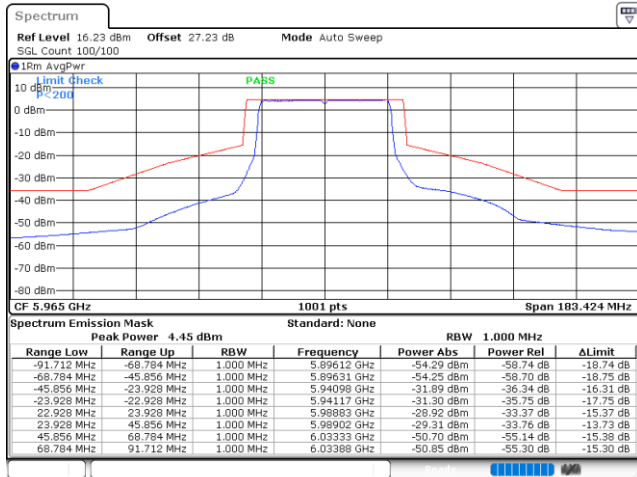


MIMO <Ant. E+F(E)>

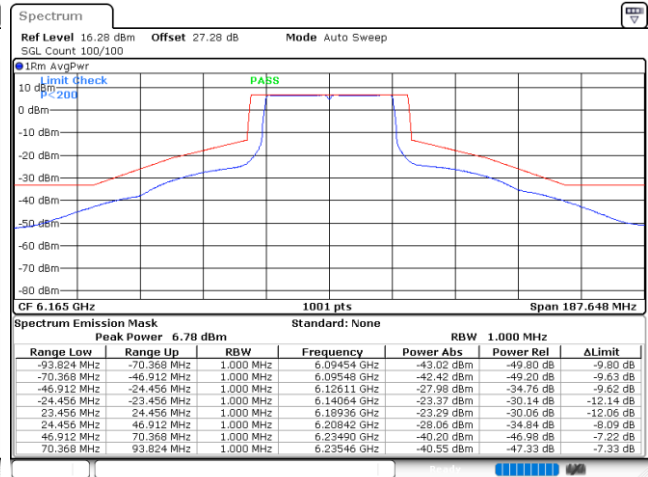
EUT Mode

802.11be EHT40 FullRU

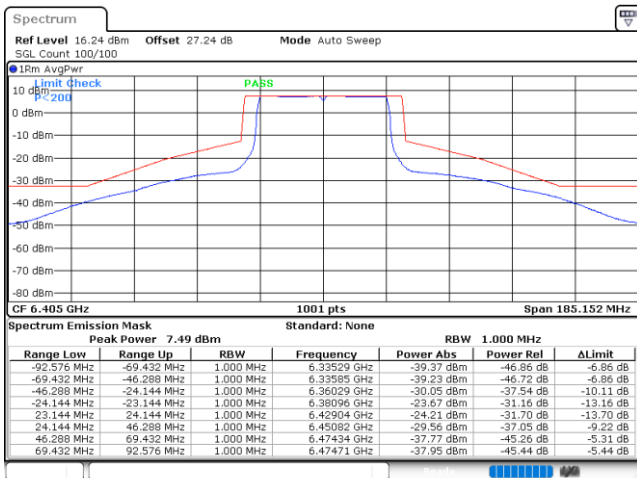
Plot on 5965 MHz



Plot on 6165 MHz

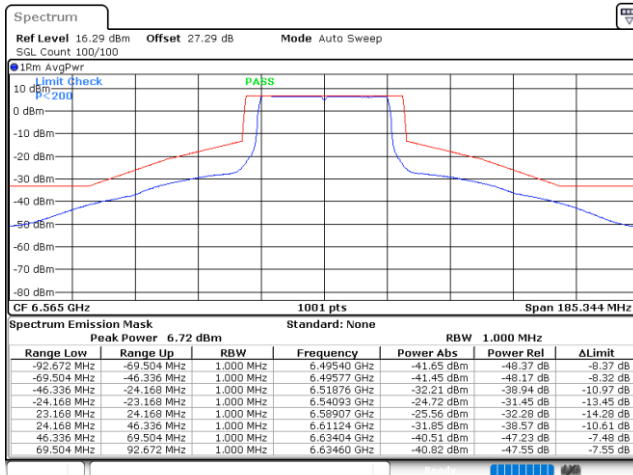


Plot on 6405 MHz



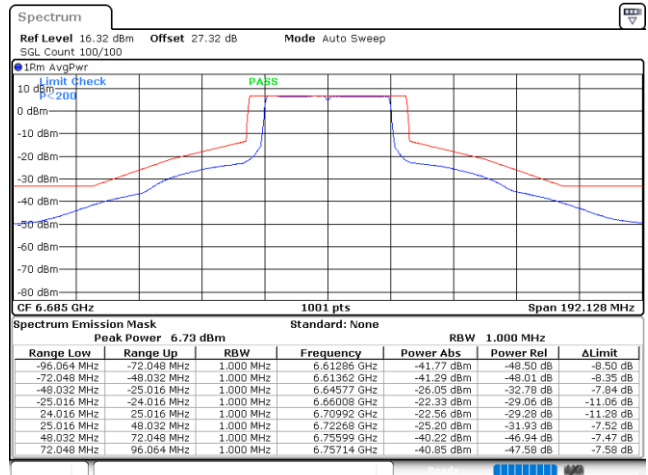


Plot on 6565 MHz



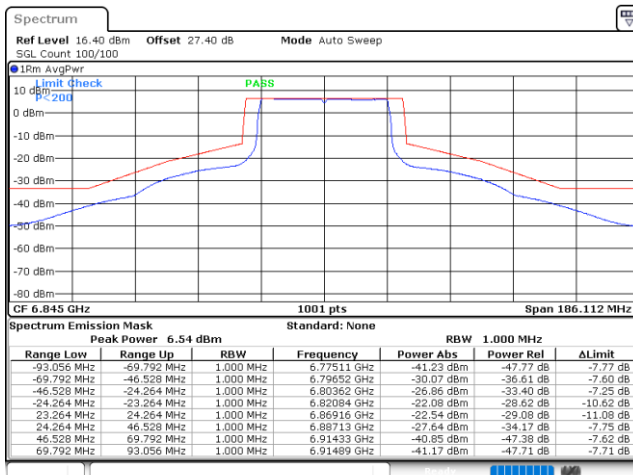
Date: 20.FEB.2025 16:38:02

Plot on 6685 MHz



Date: 20.FEB.2025 16:45:59

Plot on 6845 MHz



Date: 20.FEB.2025 16:58:14

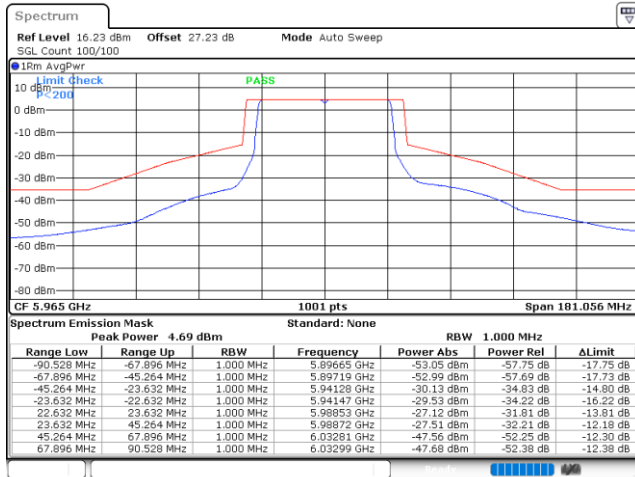


MIMO <Ant. E+F(F)>

EUT Mode

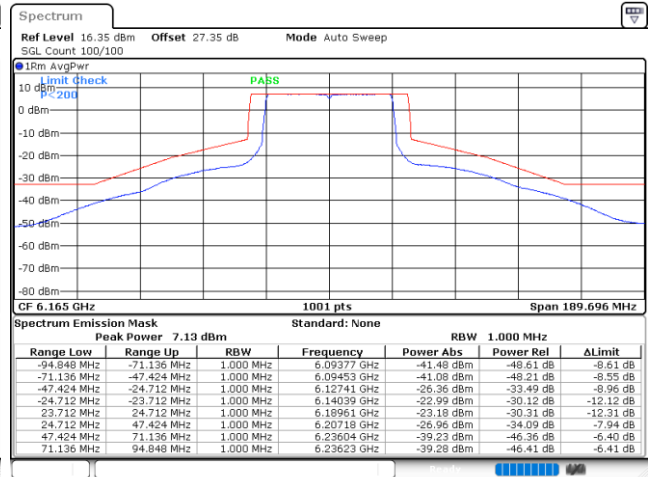
802.11be EHT40 FullIRU

Plot on 5965 MHz



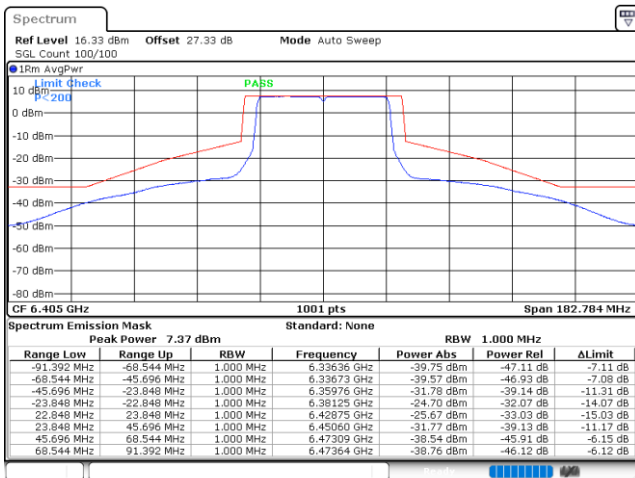
Date: 20.FEB.2025 16:06:50

Plot on 6165 MHz



Date: 20.FEB.2025 16:14:37

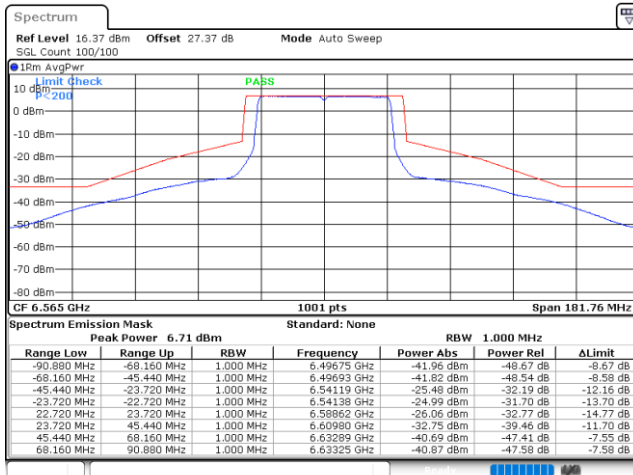
Plot on 6405 MHz



Date: 20.FEB.2025 16:28:01

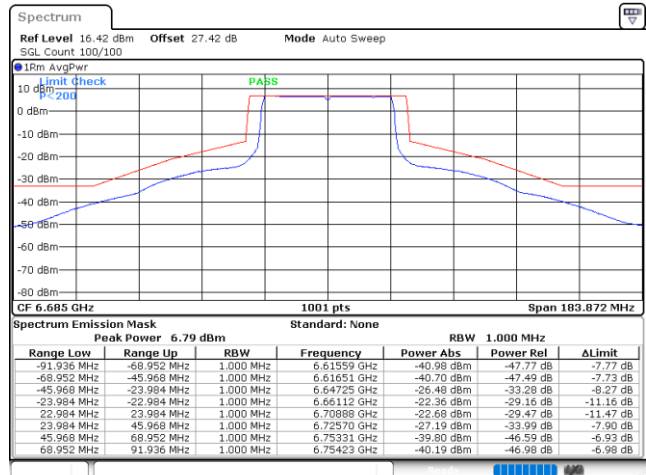


Plot on 6565 MHz



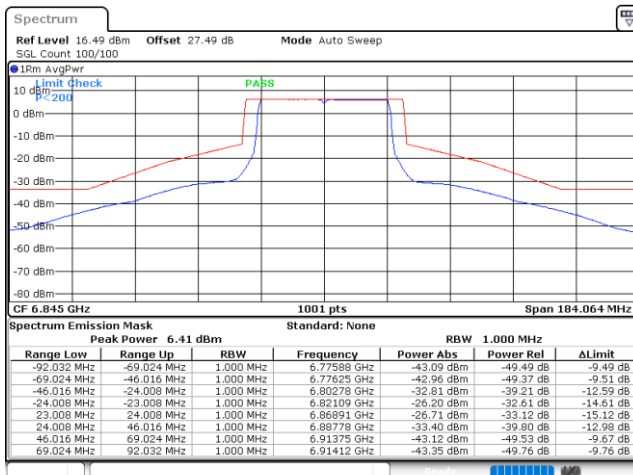
Date: 20.FEB.2025 16:37:15

Plot on 6685 MHz



Date: 20.FEB.2025 16:45:16

Plot on 6845 MHz



Date: 20.FEB.2025 16:57:18

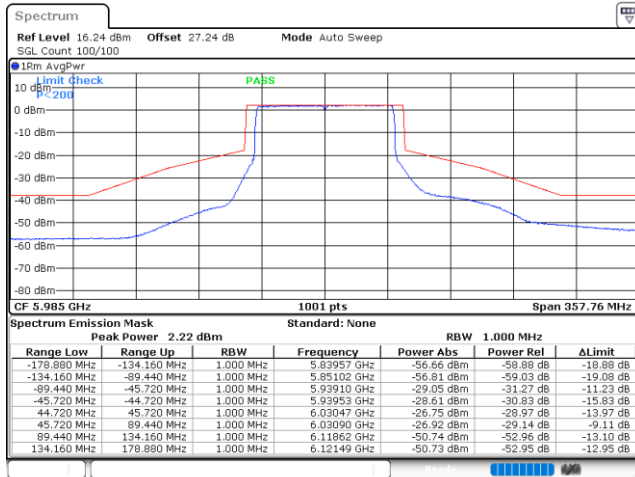


MIMO <Ant. E+F(E)>

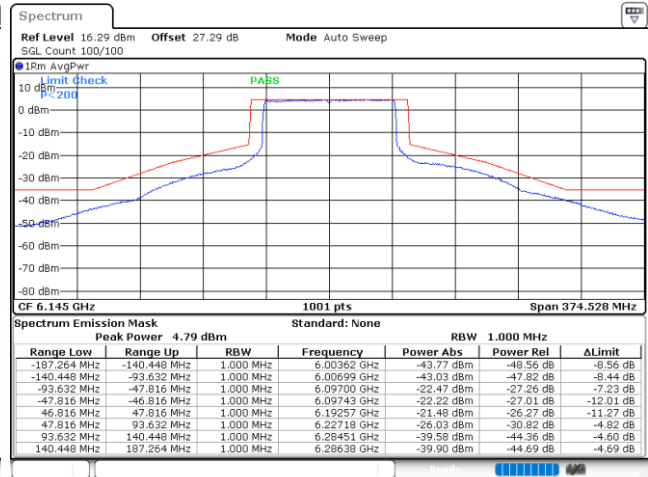
EUT Mode

802.11be EHT80 FullRU

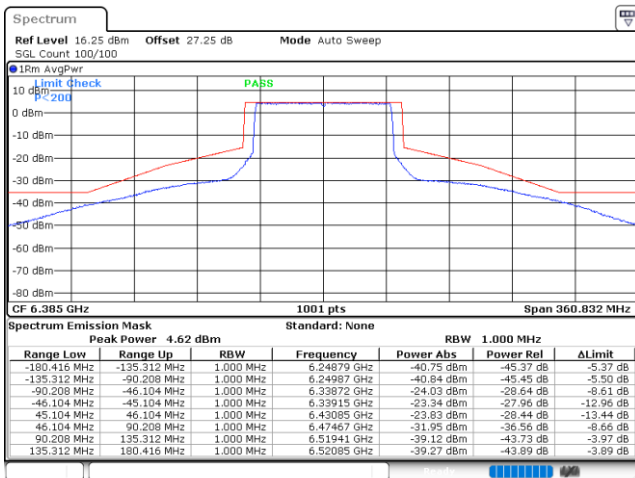
Plot on 5985 MHz



Plot on 6145 MHz

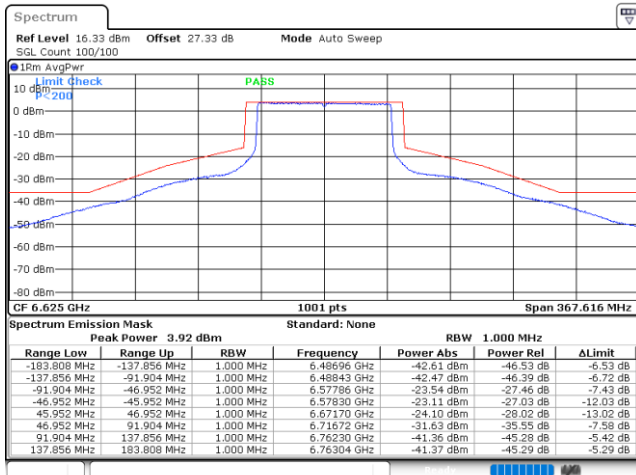


Plot on 6385 MHz



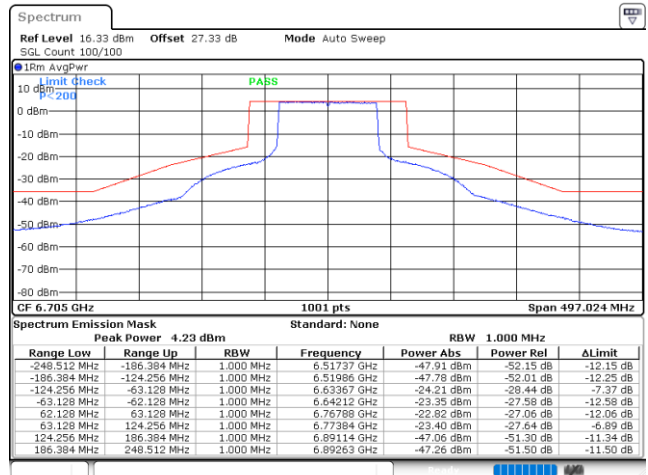


Plot on 6625 MHz



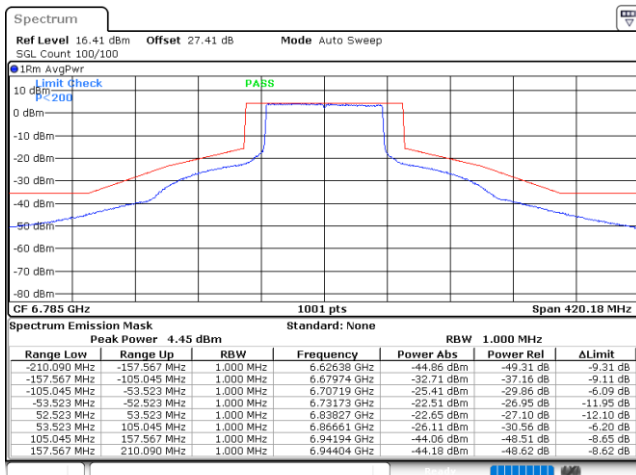
Date: 21.FEB.2025 13:07:34

Plot on 6705 MHz



Date: 21.FEB.2025 13:02:26

Plot on 6785 MHz



Date: 21.FEB.2025 13:00:52

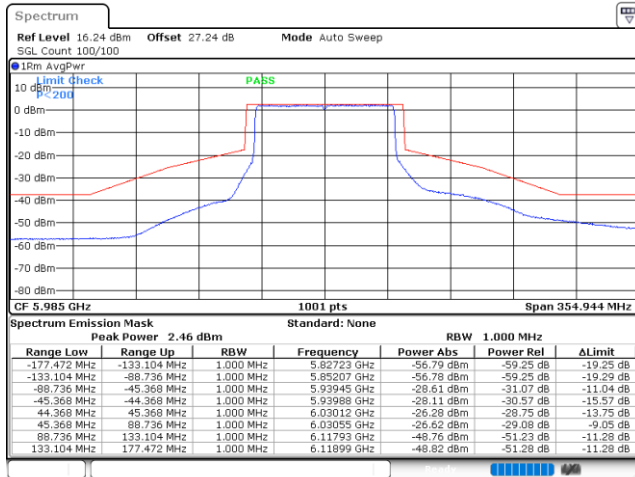


MIMO <Ant. E+F(F)>

EUT Mode

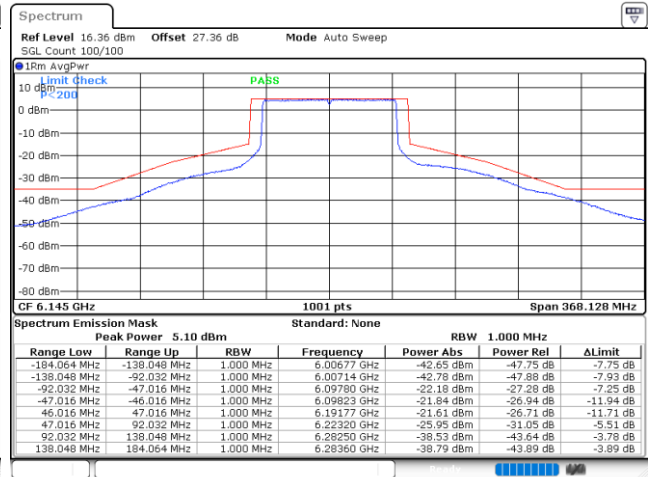
802.11be EHT80 FullRU

Plot on 5985 MHz



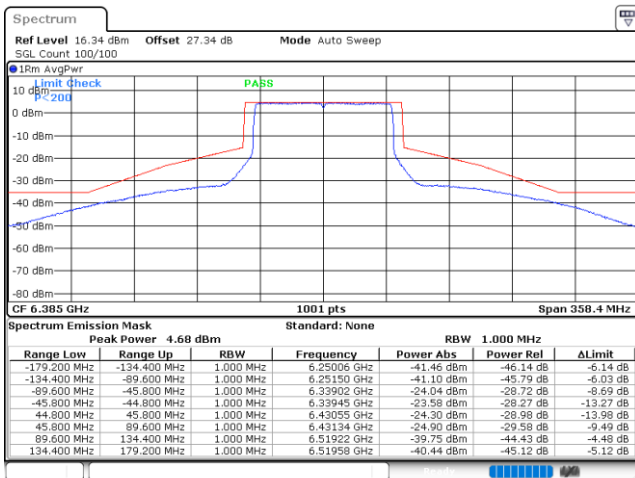
Date: 21.FEB.2025 13:16:26

Plot on 6145 MHz



Date: 21.FEB.2025 13:12:10

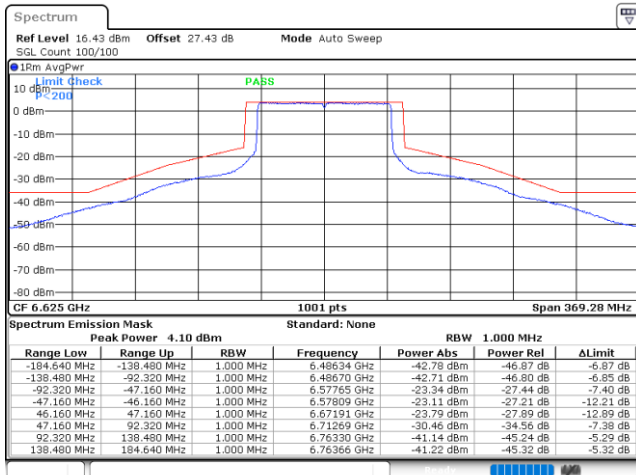
Plot on 6385 MHz



Date: 21.FEB.2025 13:10:33

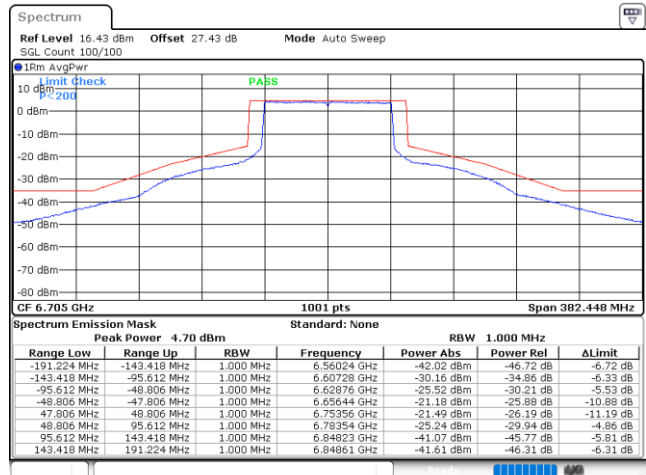


Plot on 6625 MHz



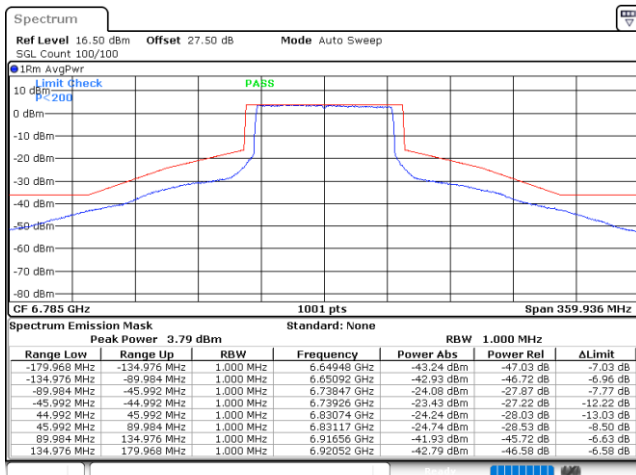
Date: 21.FEB.2025 13:06:59

Plot on 6705 MHz



Date: 21.FEB.2025 13:05:55

Plot on 6785 MHz



Date: 21.FEB.2025 12:55:34

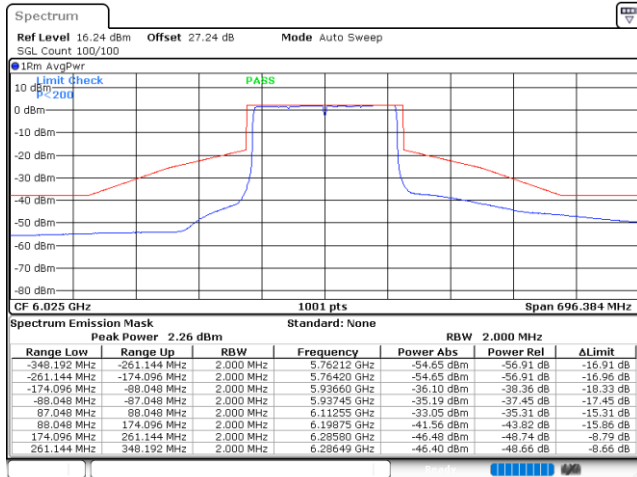


MIMO <Ant. E+F(E)>

EUT Mode

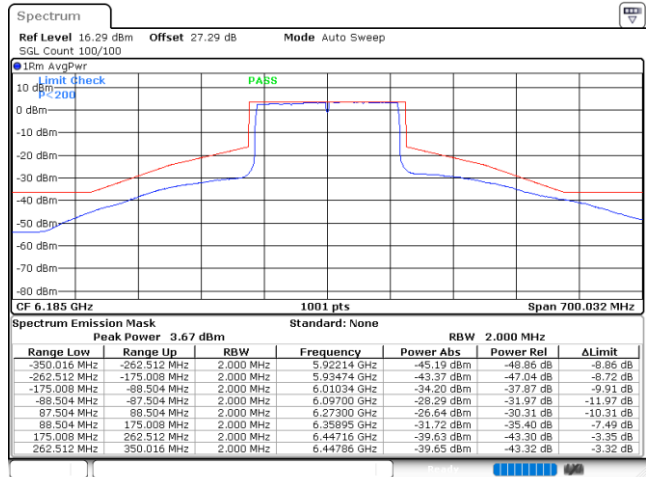
802.11be EHT160 FullIRU

Plot on 6025 MHz



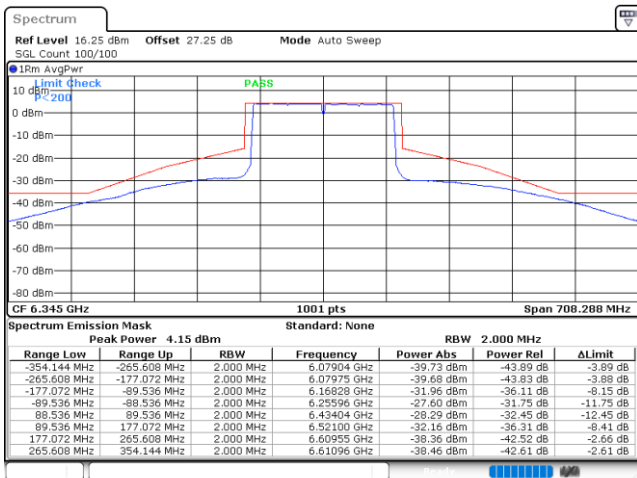
Date: 21.FEB.2025 14:07:52

Plot on 6185 MHz



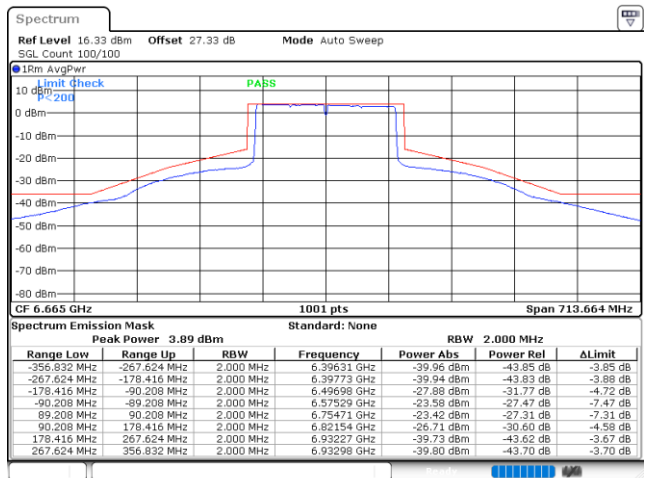
Date: 21.FEB.2025 14:21:52

Plot on 6345 MHz



Date: 21.FEB.2025 14:28:48

Plot on 6665 MHz



Date: 21.FEB.2025 14:46:18

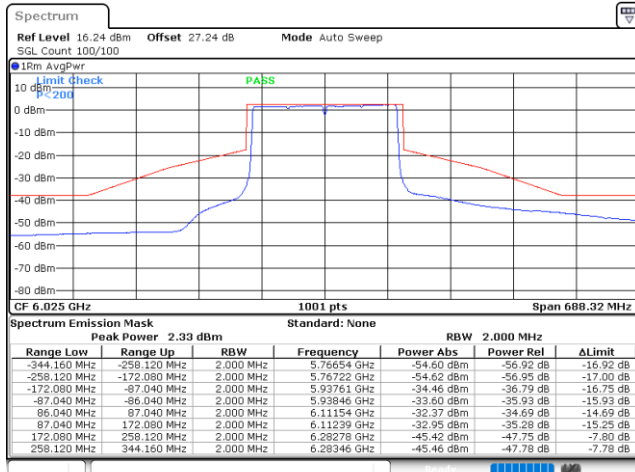


MIMO <Ant. E+F(F)>

EUT Mode

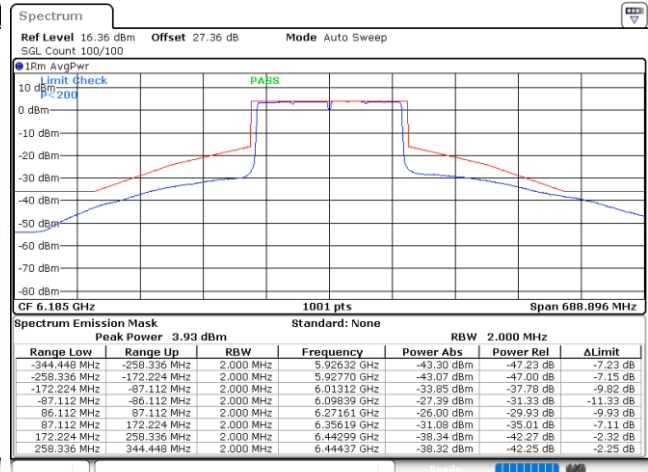
802.11be EHT160 FullIRU

Plot on 6025 MHz



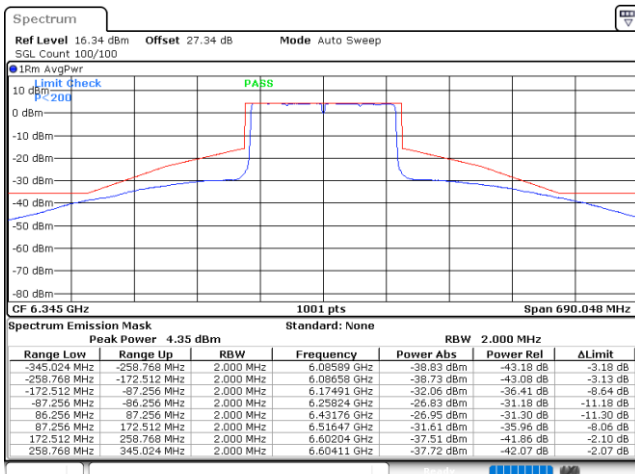
Date: 21.FEB.2025 14:06:57

Plot on 6185 MHz



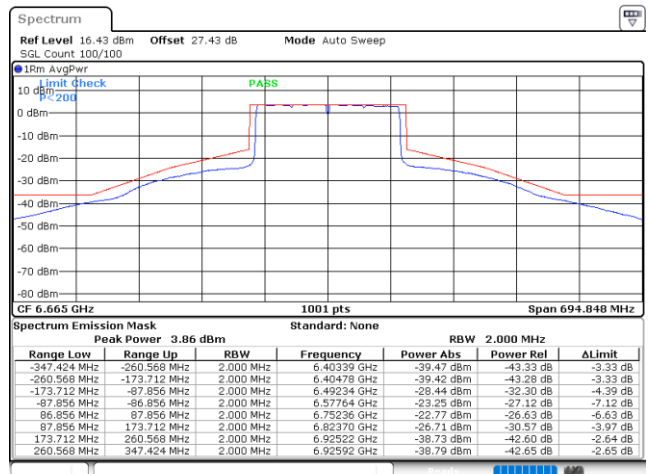
Date: 21.FEB.2025 14:20:13

Plot on 6345 MHz



Date: 21.FEB.2025 14:28:05

Plot on 6665 MHz



Date: 21.FEB.2025 14:45:27

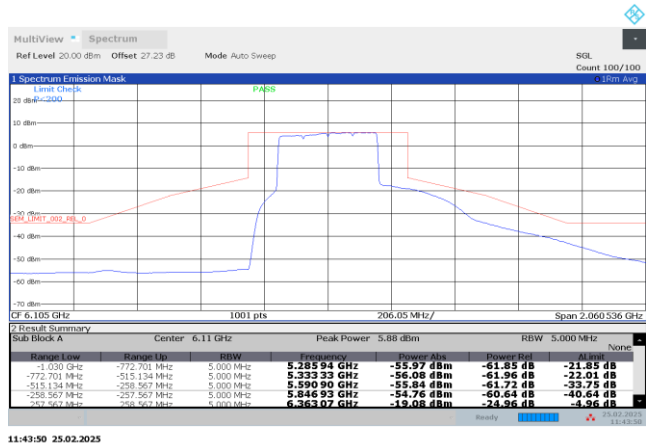


MIMO <Ant. E+F(E)>

EUT Mode

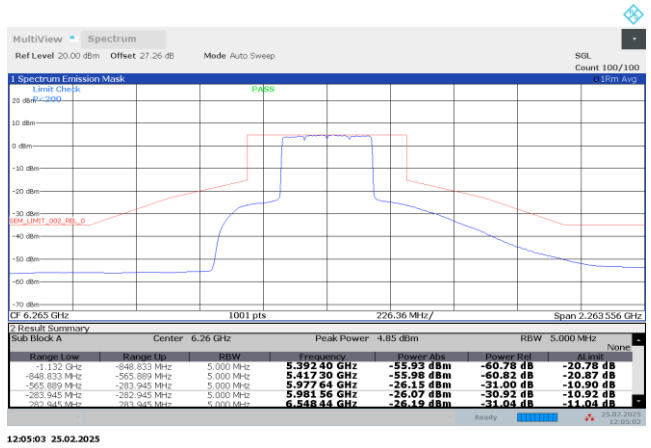
802.11be EHT320 FullIRU

Plot on 6105 MHz

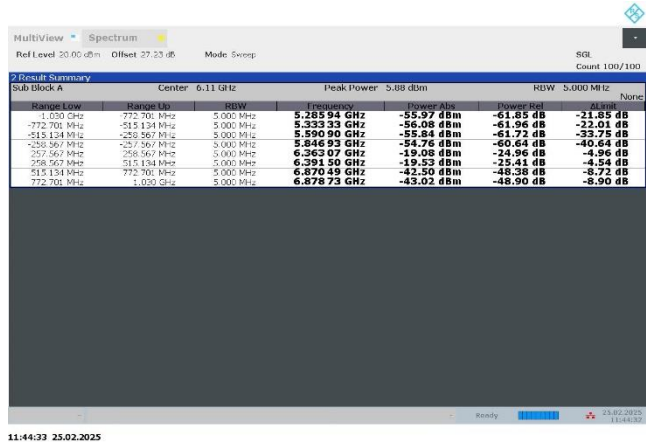


11:43:50 25.02.2025

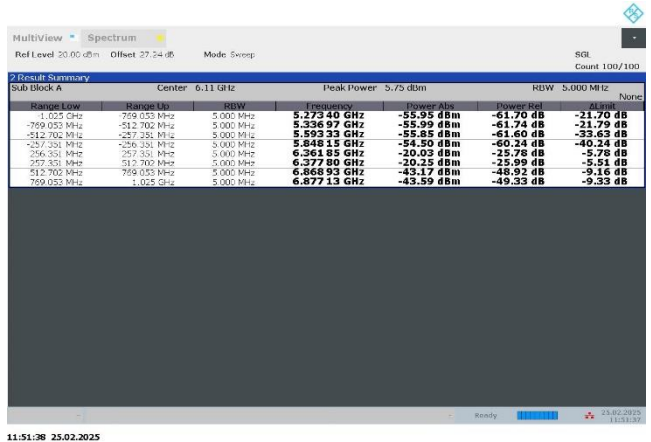
Plot on 6265 MHz



12:05:03 25.02.2025



11:44:33 25.02.2025



11:51:38 25.02.2025