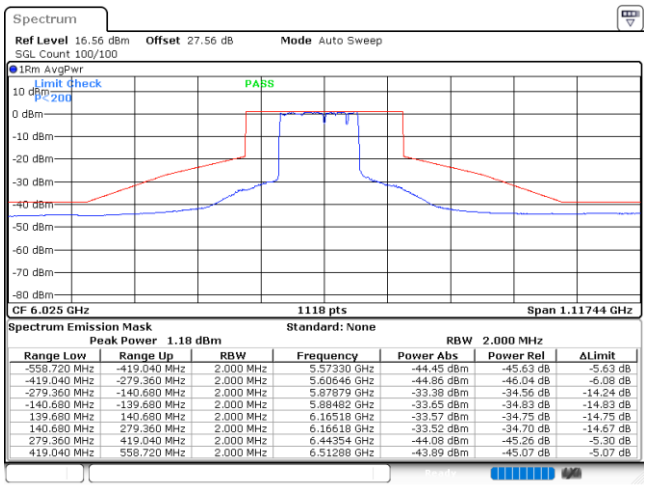
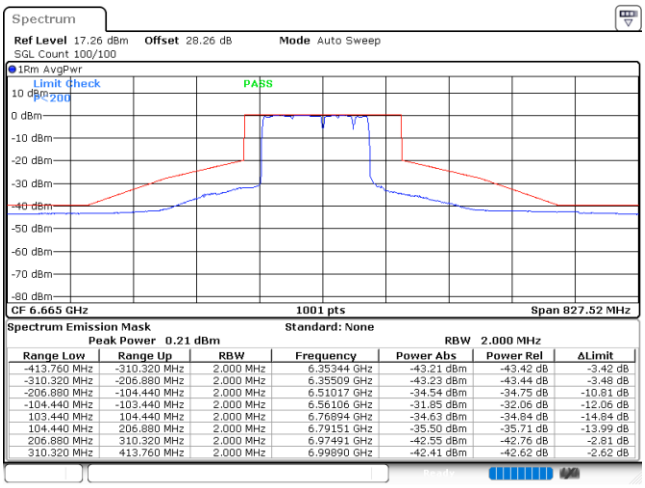
EUT Mode :	802.11be EHT160 Puncture 20RU128

Plot on Channel 6025 MHz

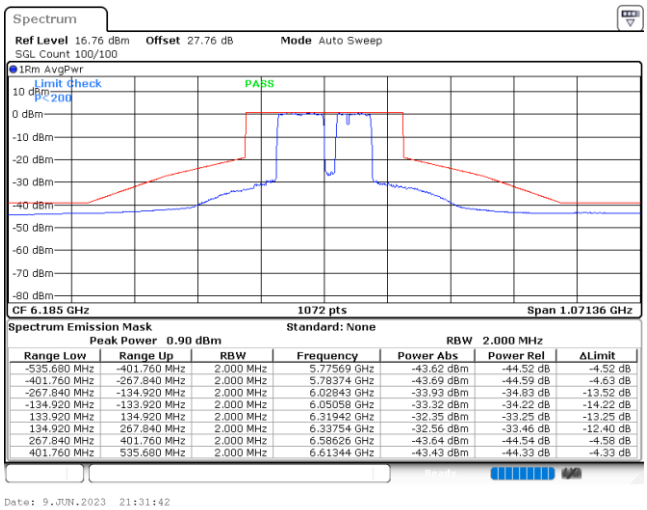


Plot on Channel 6665 MHz



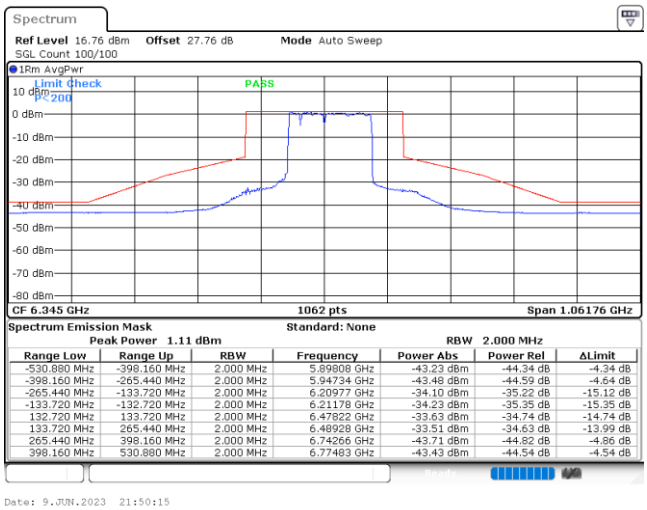
EUT Mode :	802.11be EHT160 Puncture 20RU16

Plot on Channel 6185 MHz



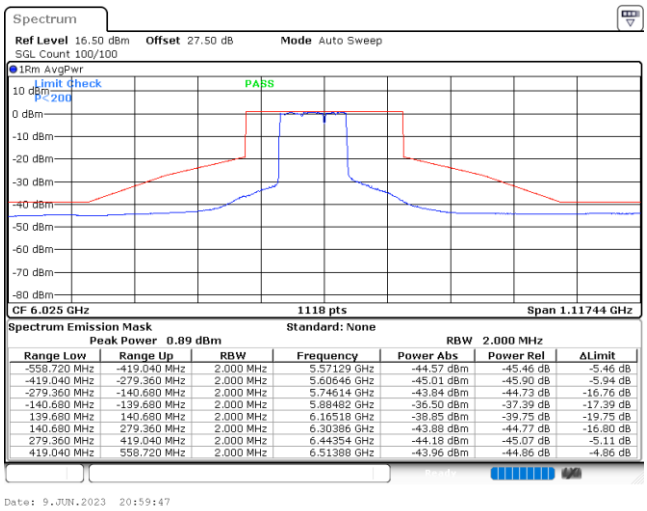
EUT Mode :	802.11be EHT160 Puncture 20RU1

Plot on Channel 6345 MHz

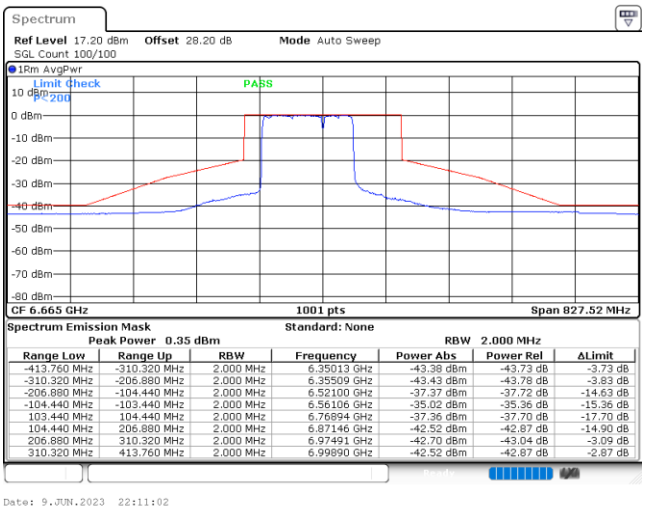


EUT Mode :	802.11be EHT160 Puncture 40RU192

Plot on Channel 6025 MHz

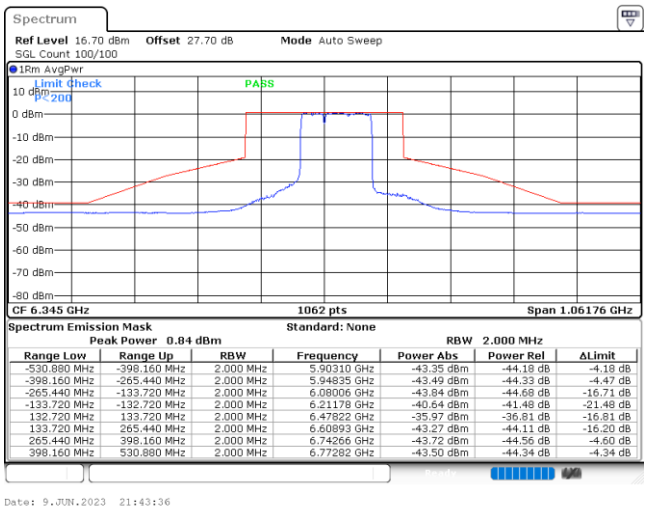


Plot on Channel 6665 MHz



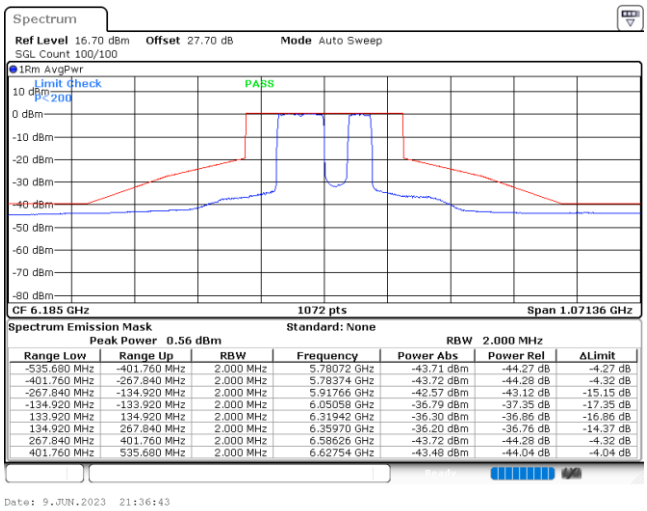
EUT Mode :	802.11be EHT160 Puncture 40RU3

Plot on Channel 6345 MHz



EUT Mode :	802.11be EHT160 Puncture 40RU48

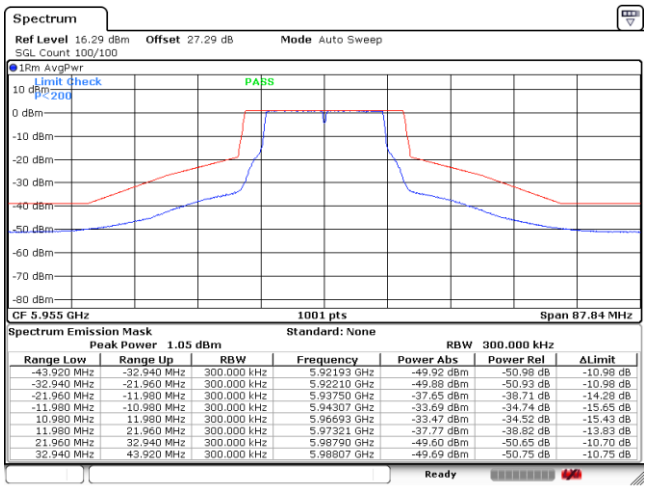
Plot on Channel 6185 MHz



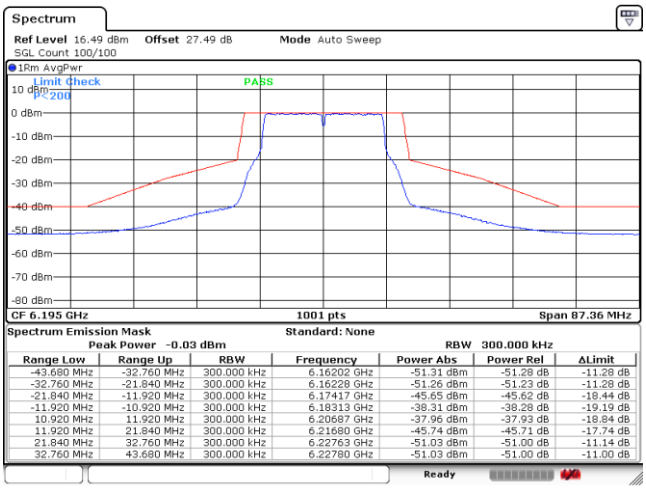
MIMO <Ant. 3+4(4)>

EUT Mode :	802.11a

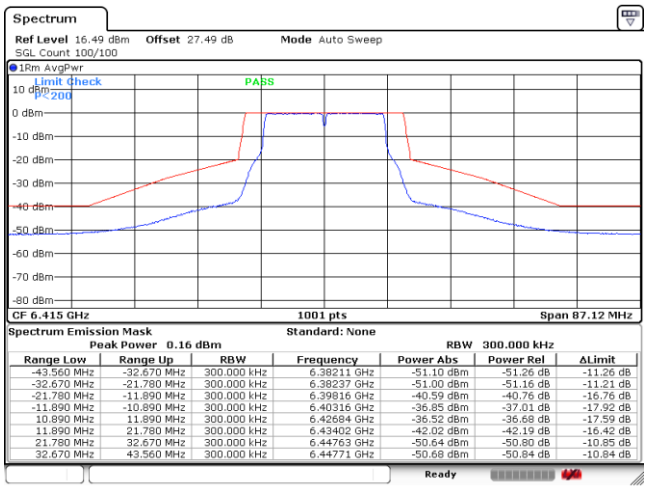
Plot on Channel 5955MHz



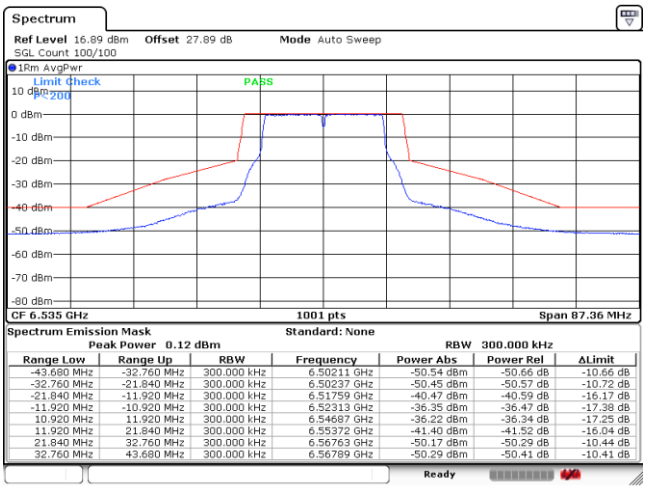
Plot on Channel 6195MHz



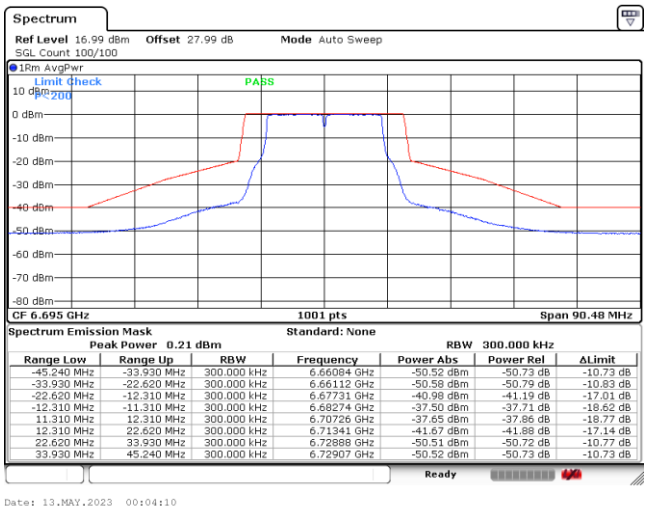
Plot on Channel 6415MHz



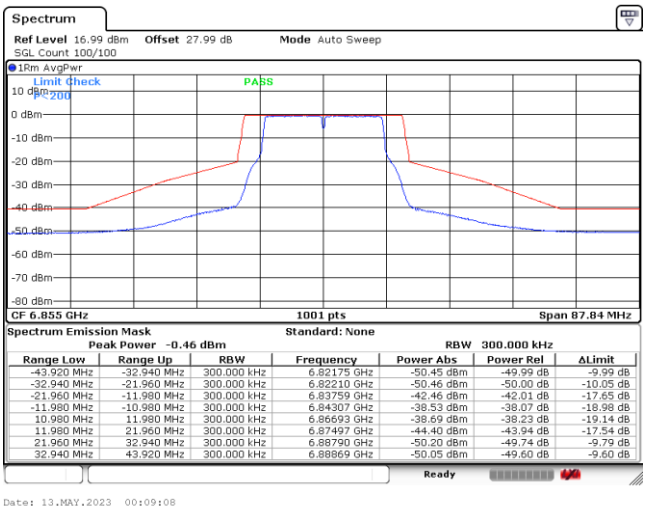
Plot on Channel 6535MHz



Plot on Channel 6695MHz

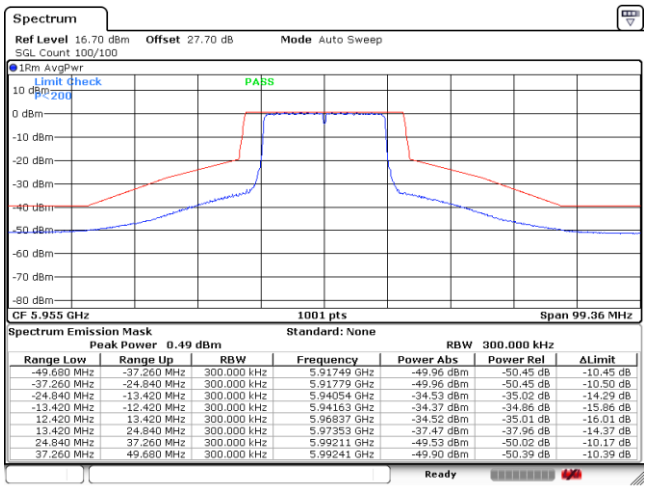


Plot on Channel 6855MHz

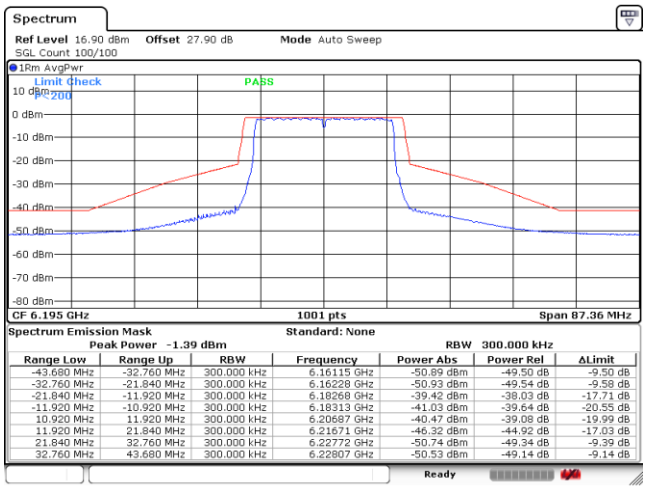


EUT Mode :	802.11be EHT20 Full RU

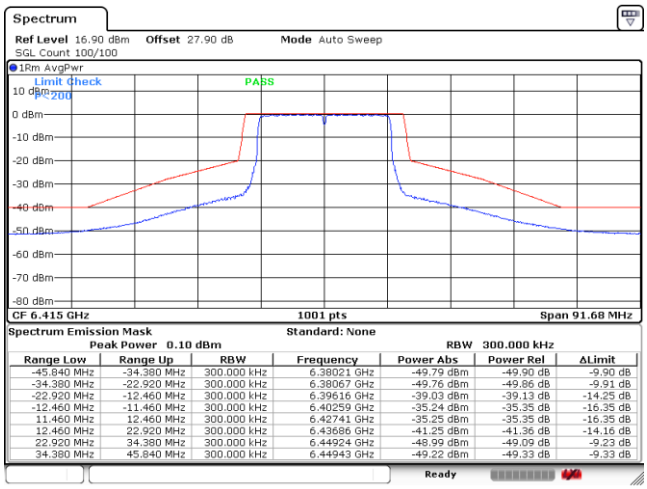
Plot on Channel 5955 MHz



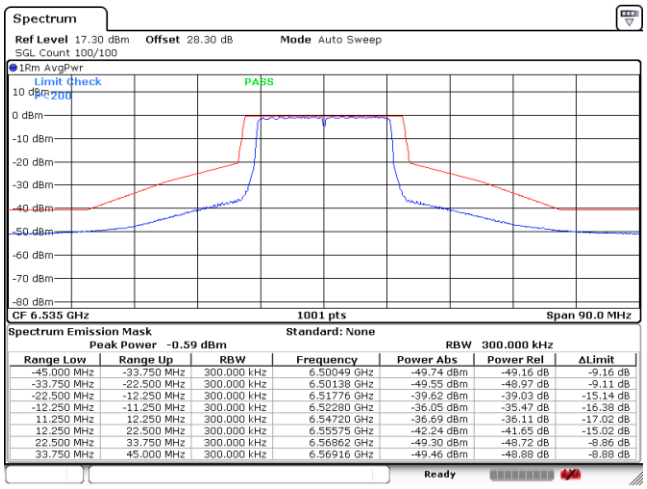
Plot on Channel 6195 MHz



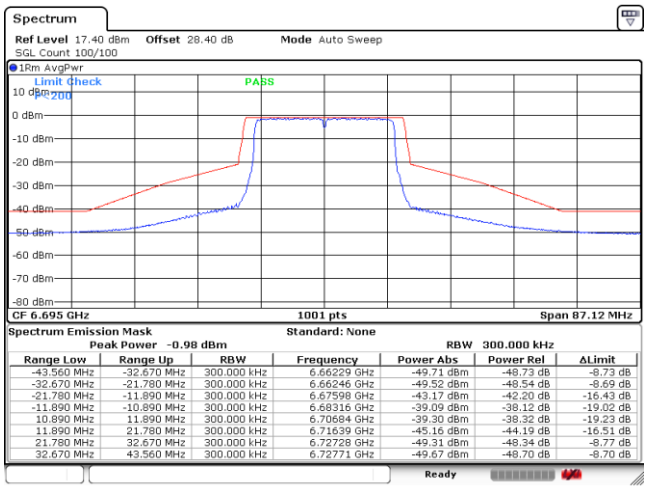
Plot on Channel 6415 MHz



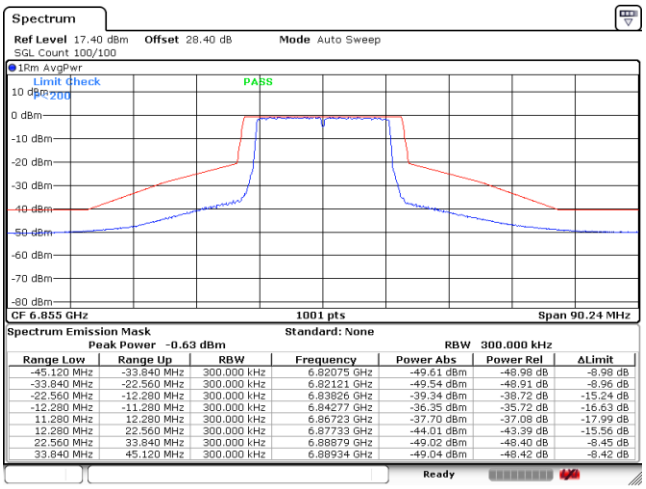
Plot on Channel 6535 MHz



Plot on Channel 6695 MHz

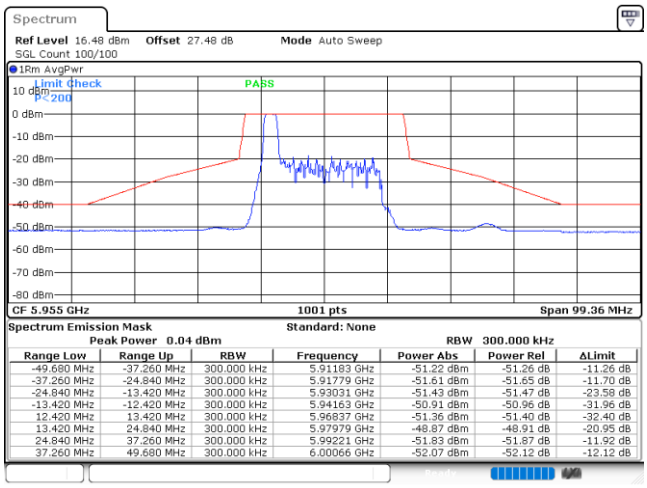


Plot on Channel 6855 MHz

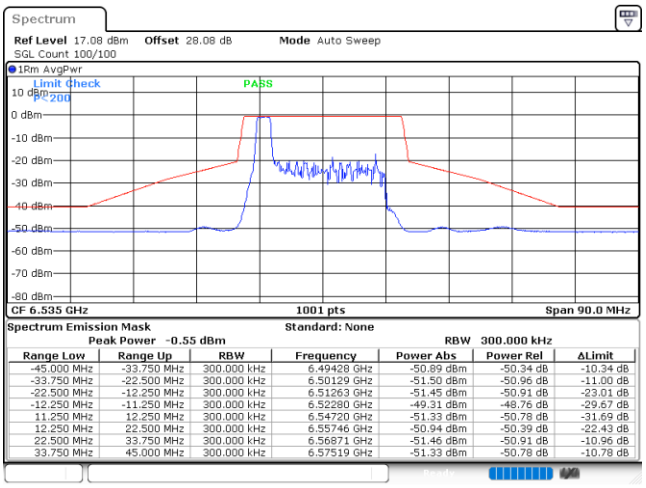


EUT Mode :	802.11be EHT20 26RU0

Plot on Channel 5955 MHz

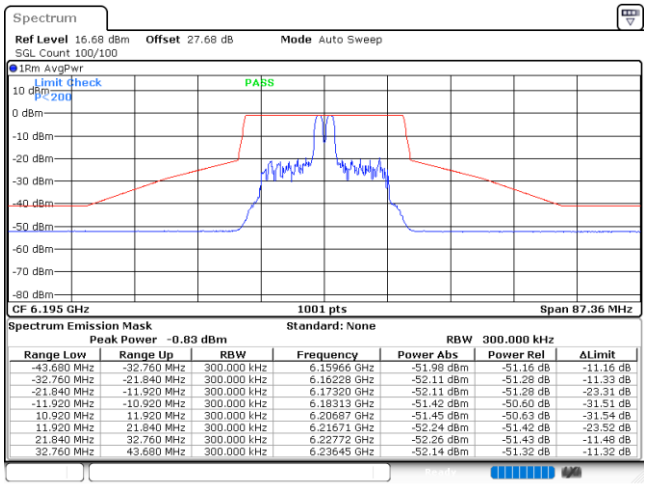


Plot on Channel 6535 MHz

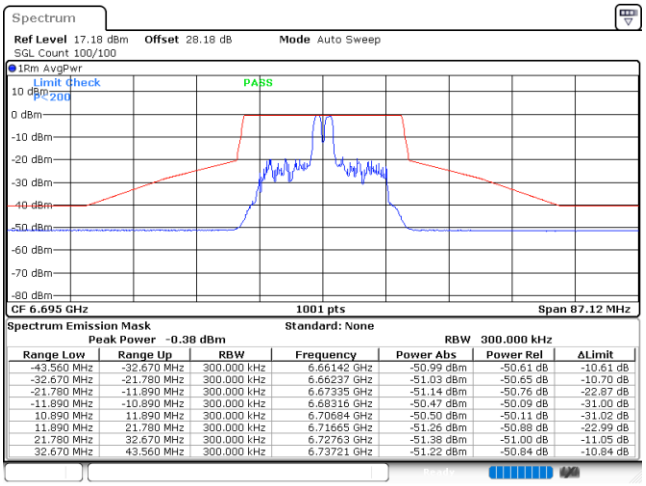


EUT Mode :	802.11be EHT20 26RU4

Plot on Channel 6195 MHz

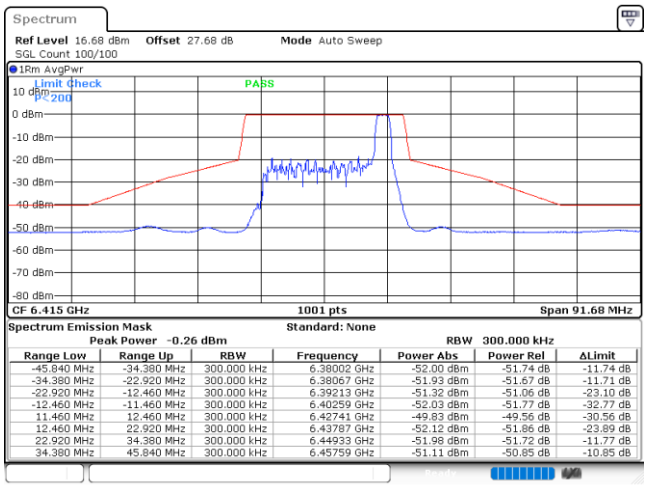


Plot on Channel 6695 MHz

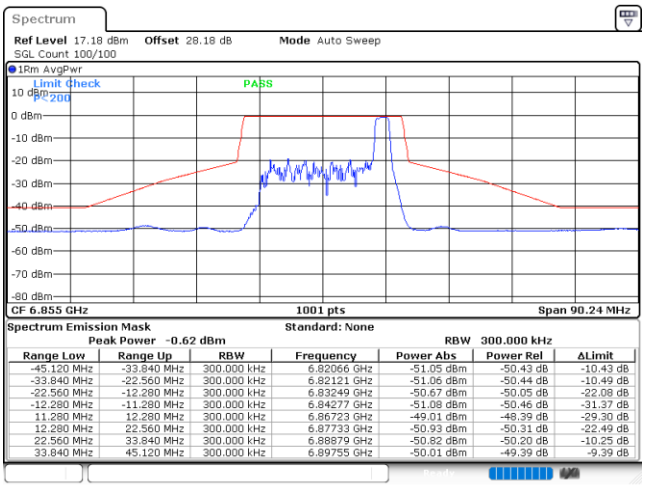


EUT Mode :	802.11be EHT20 26RU8

Plot on Channel 6415 MHz

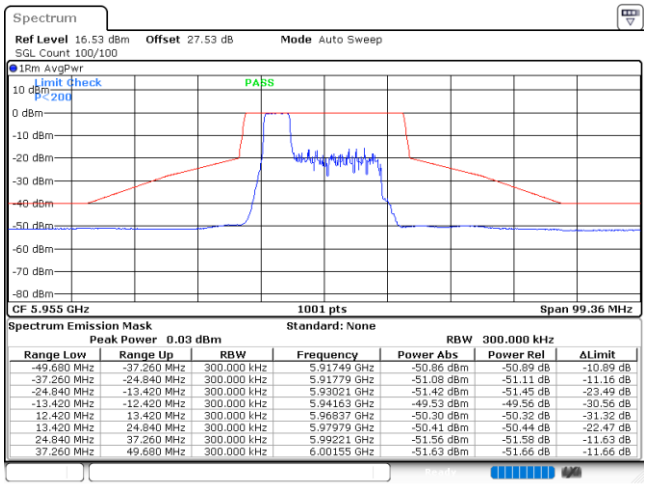


Plot on Channel 6855 MHz

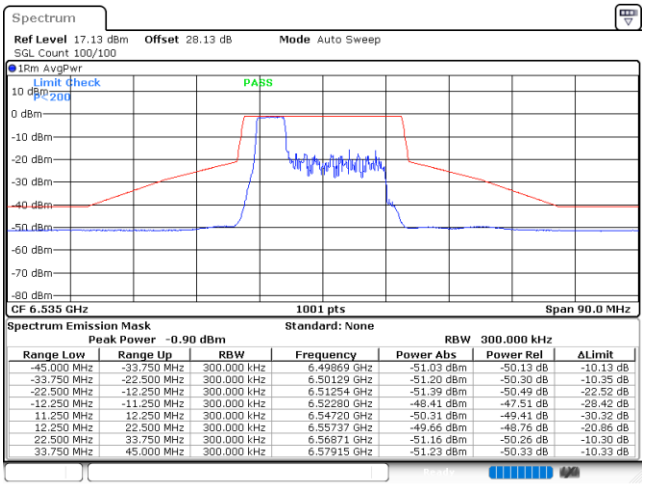


EUT Mode :	802.11be EHT20 52RU37

Plot on Channel 5955 MHz

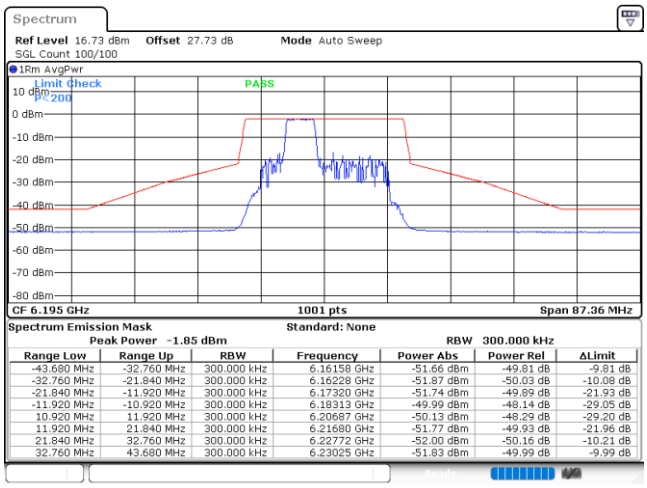


Plot on Channel 6535 MHz

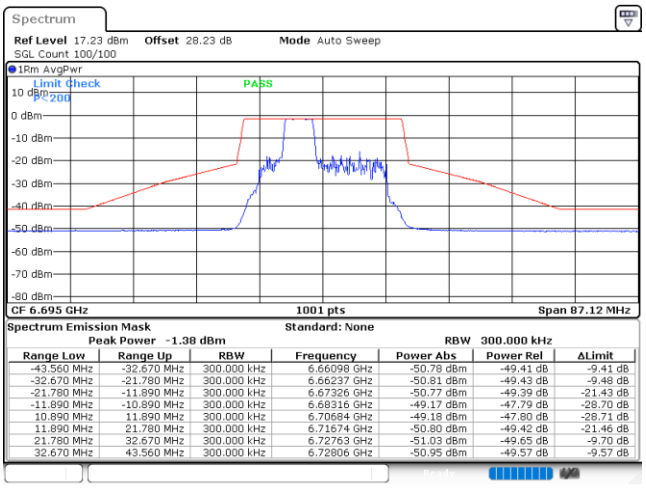


EUT Mode :	802.11be EHT20 52RU38

Plot on Channel 6195 MHz

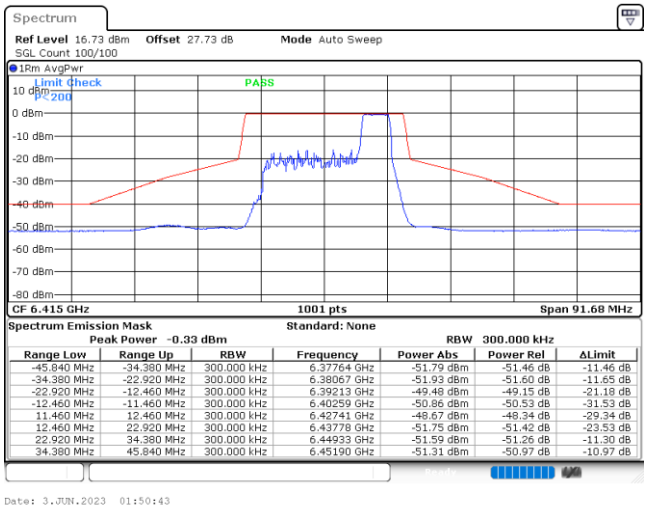


Plot on Channel 6695 MHz

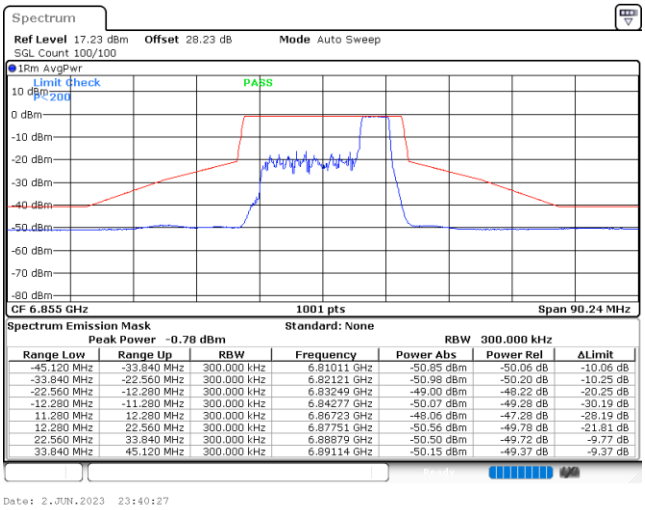


EUT Mode :	802.11be EHT20 52RU40

Plot on Channel 6415 MHz

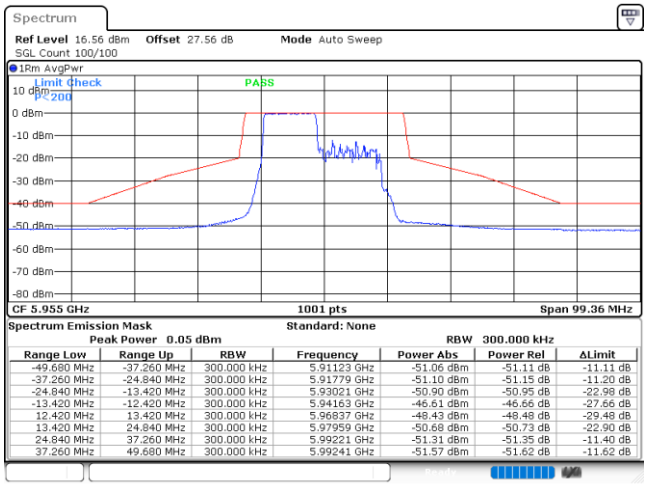


Plot on Channel 6855 MHz

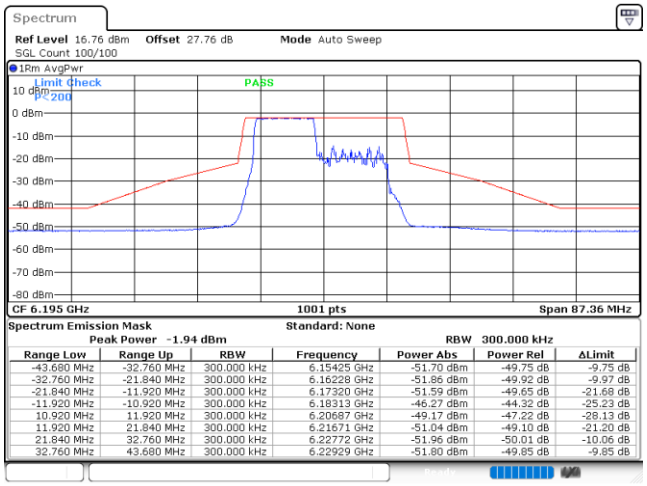


EUT Mode :	802.11be EHT20 106RU53

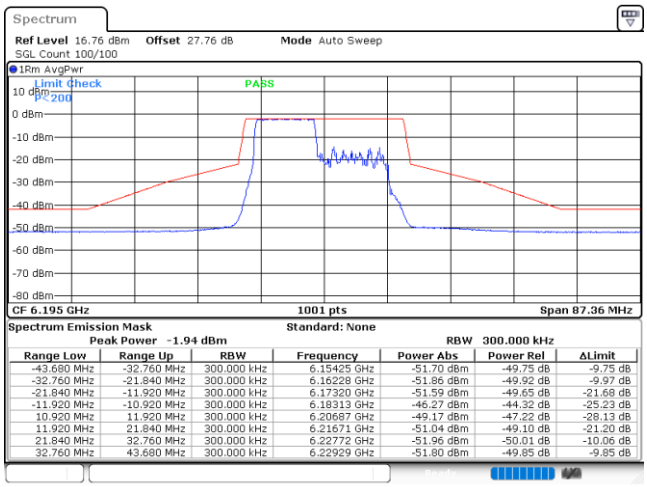
Plot on Channel 5955 MHz



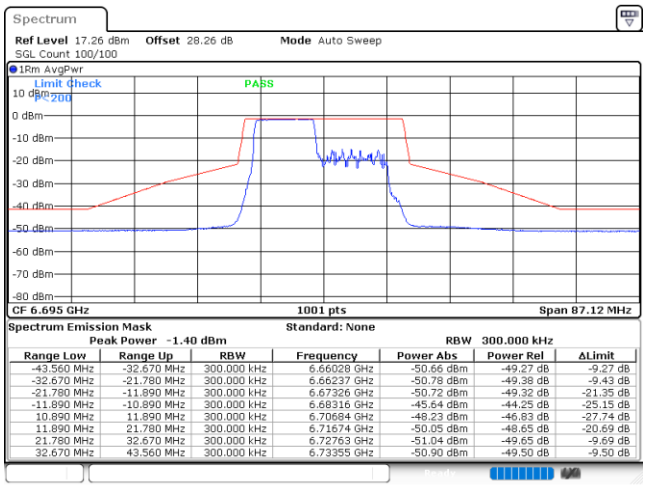
Plot on Channel 6195 MHz



Plot on Channel 6535 MHz

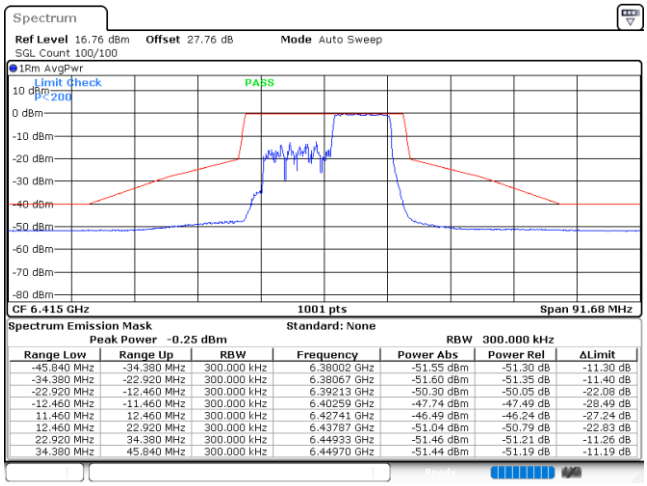


Plot on Channel 6695 MHz

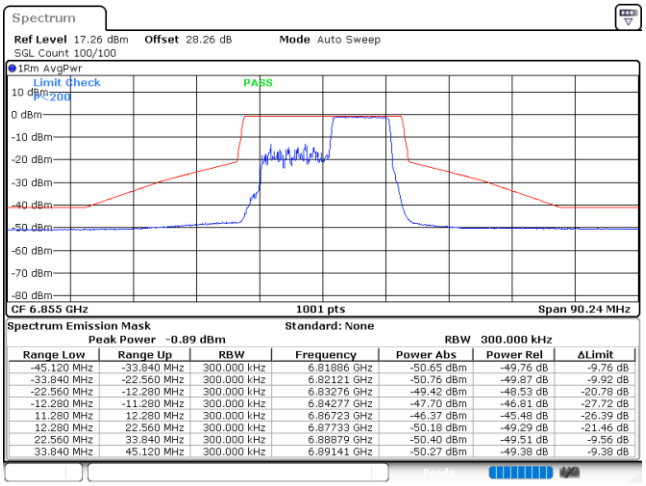


EUT Mode :	802.11be EHT20 106RU54

Plot on Channel 6415 MHz

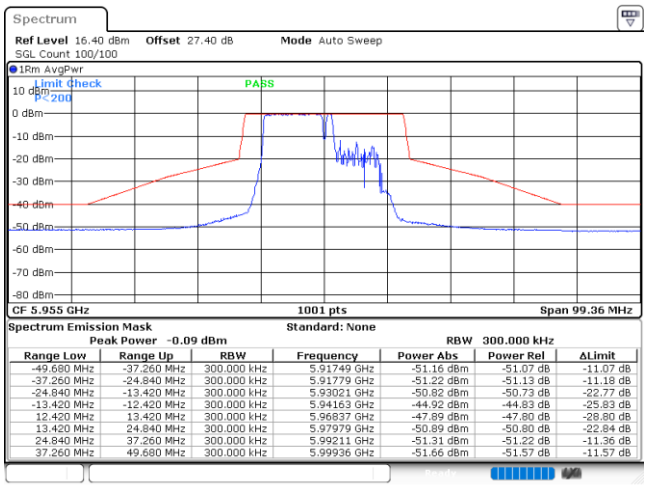


Plot on Channel 6855 MHz

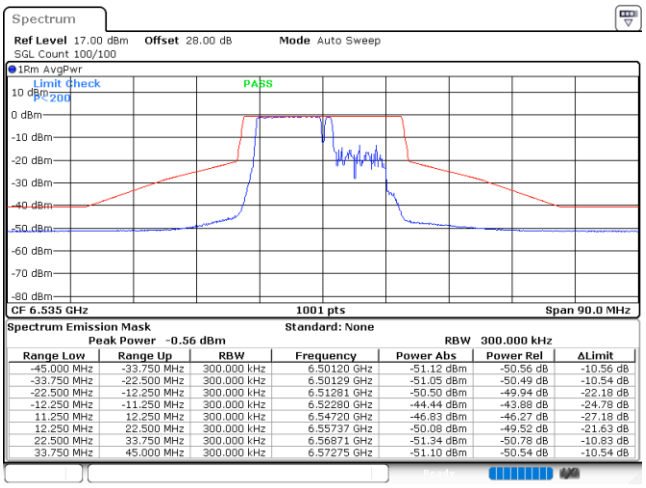


EUT Mode :	802.11be EHT20 MRU 106T+26T82

Plot on Channel 5955 MHz

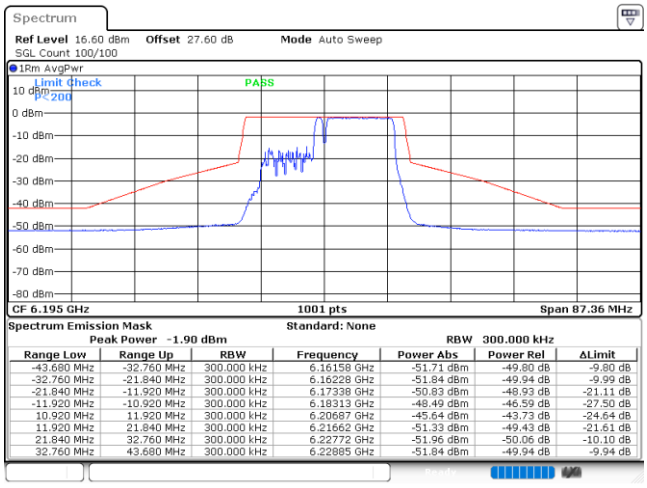


Plot on Channel 6535 MHz

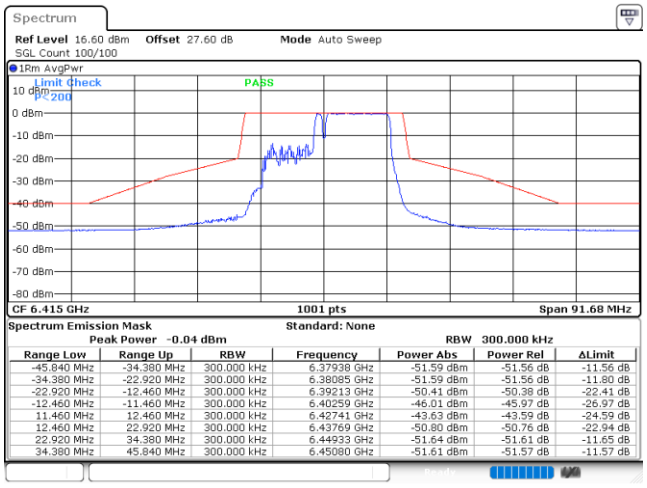


EUT Mode :	802.11be EHT20 MRU 106T+26T83

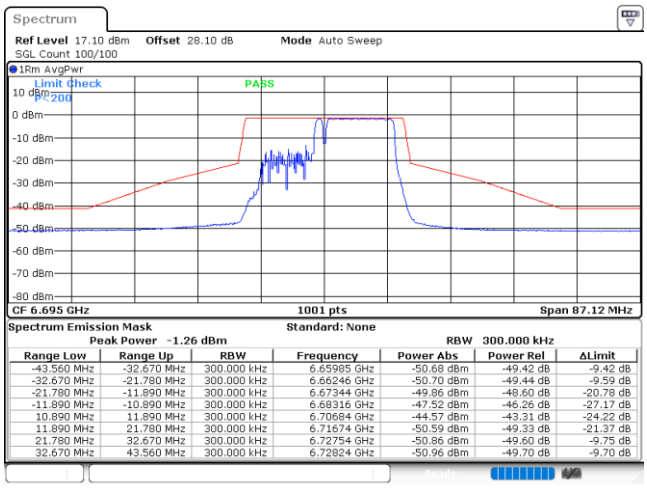
Plot on Channel 6195 MHz



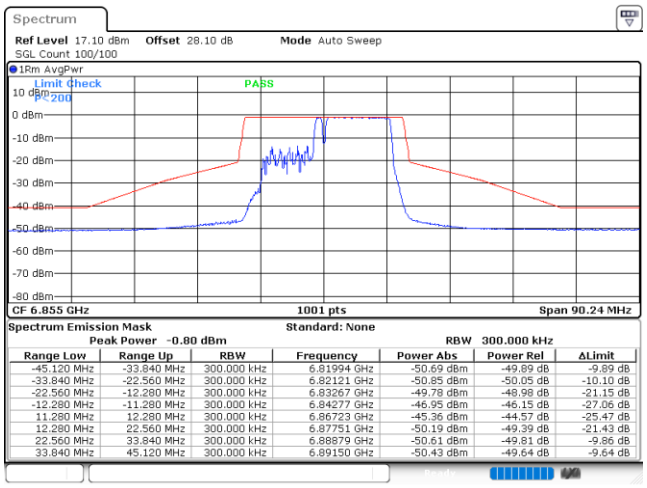
Plot on Channel 6415 MHz



Plot on Channel 6695 MHz

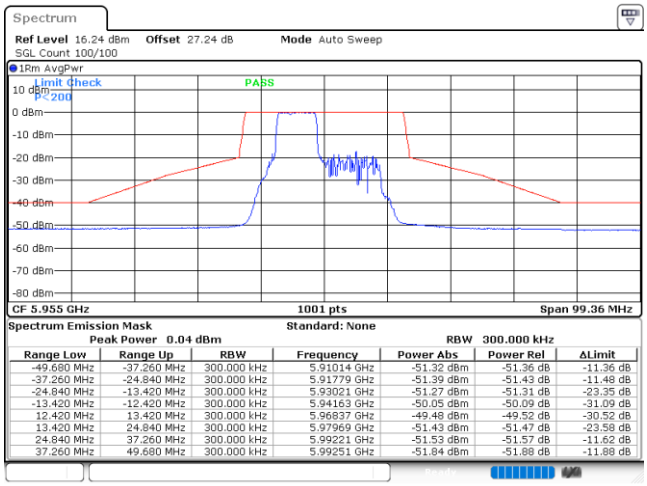


Plot on Channel 6855 MHz

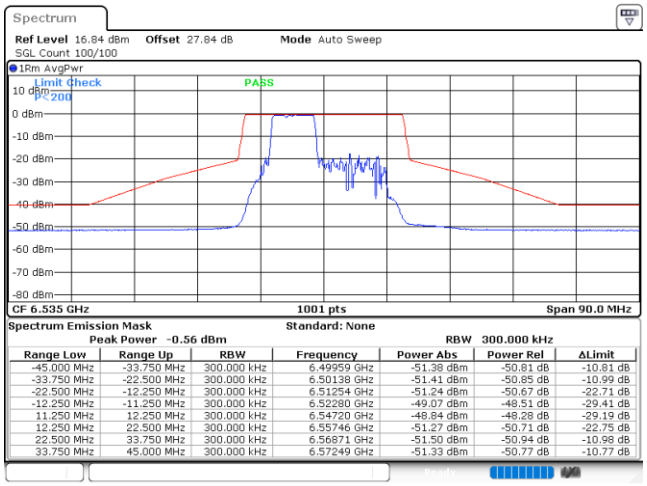


EUT Mode :	802.11be EHT20 MRU 52T+26T70

Plot on Channel 5955 MHz

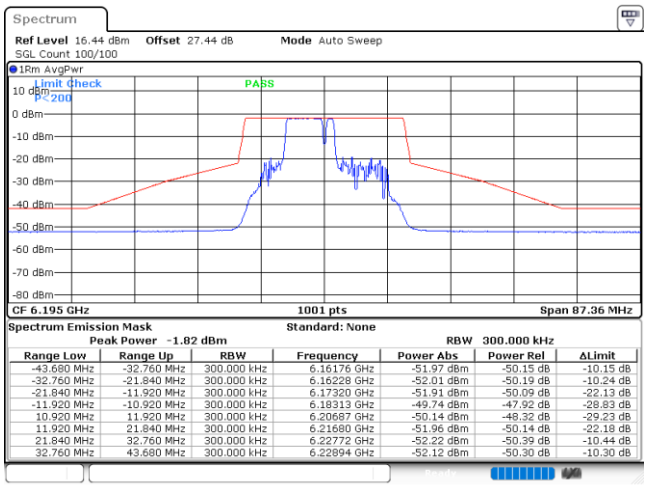


Plot on Channel 6535 MHz

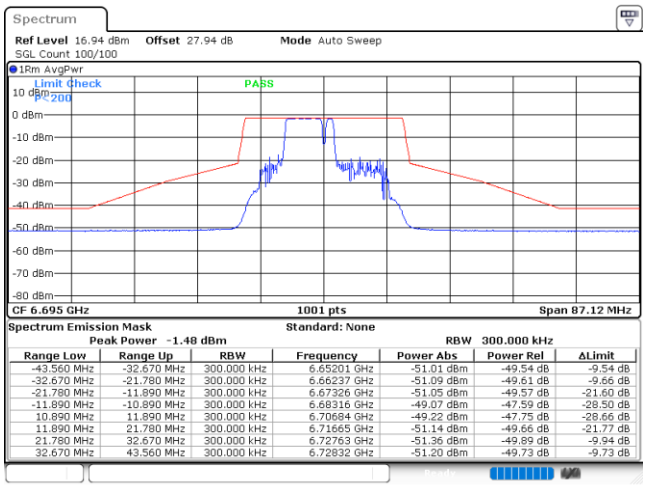


EUT Mode :	802.11be EHT20 MRU 52T+26T71

Plot on Channel 6195 MHz

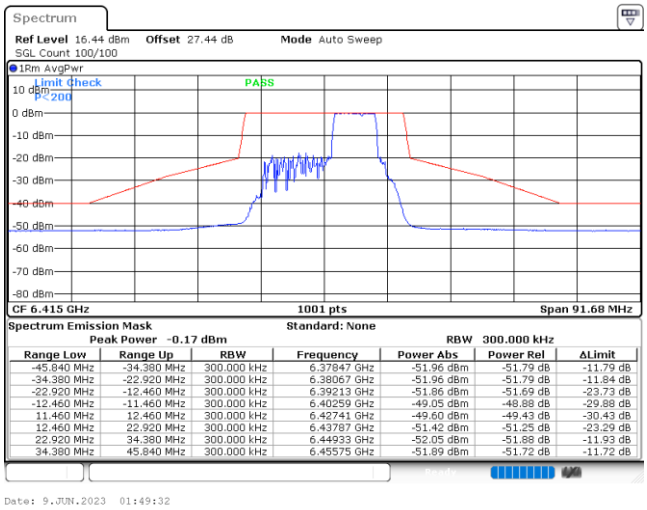


Plot on Channel 6695 MHz

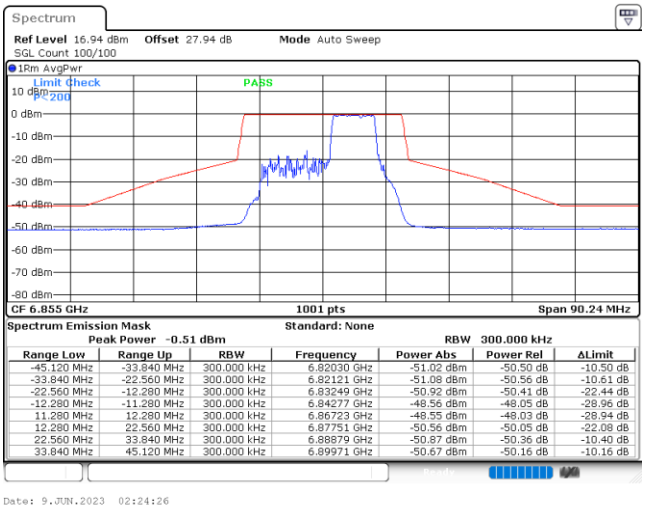


EUT Mode :	802.11be EHT20 MRU 52T+26T72

Plot on Channel 6415 MHz

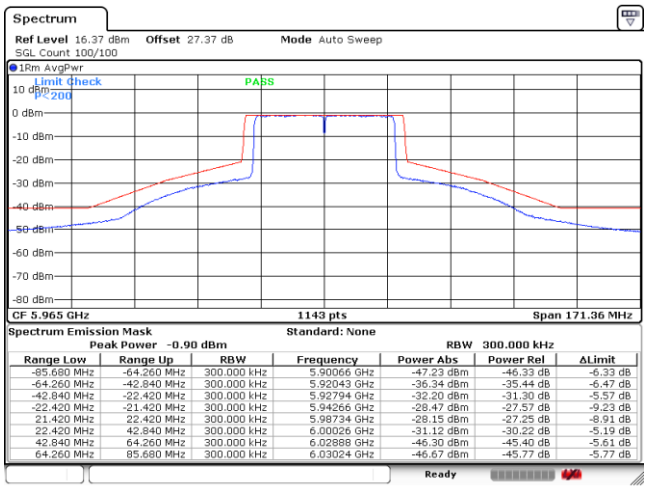


Plot on Channel 6855 MHz



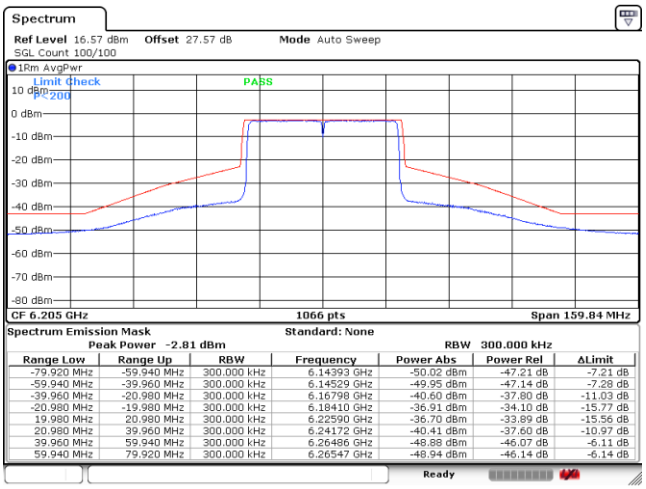
EUT Mode :	802.11be EHT40 Full RU

Plot on Channel 5965 MHz



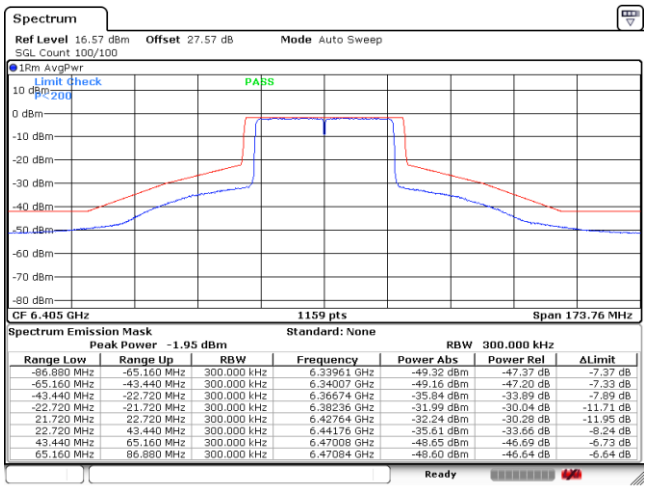
Date: 13.MAY.2023 02:02:30

Plot on Channel 6205 MHz



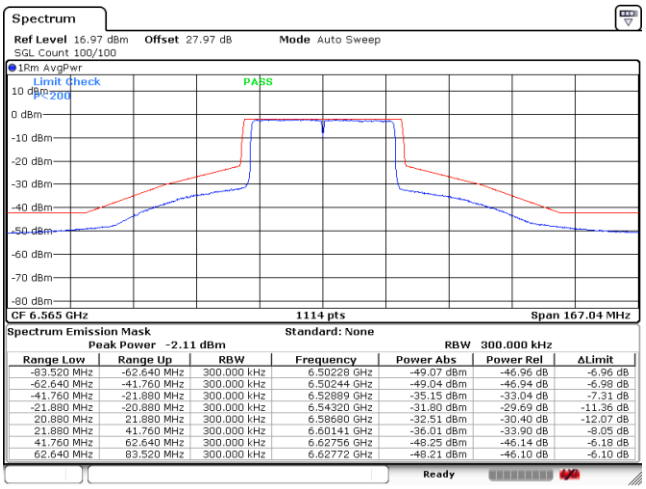
Date: 13.MAY.2023 02:08:14

Plot on Channel 6405 MHz



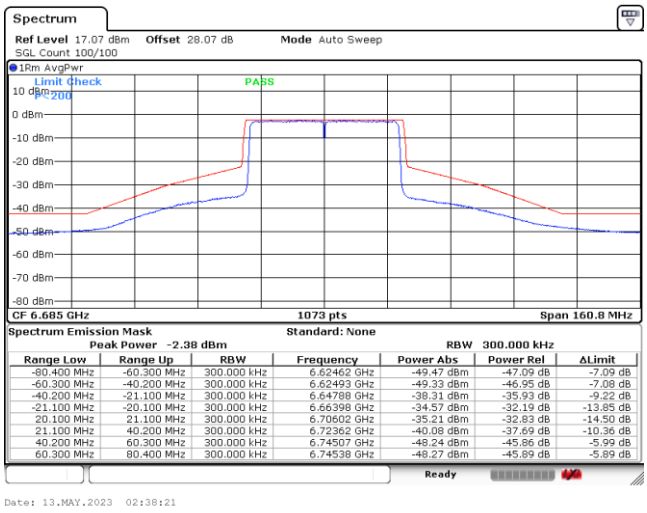
Date: 13.MAY.2023 02:16:44

Plot on Channel 6565 MHz

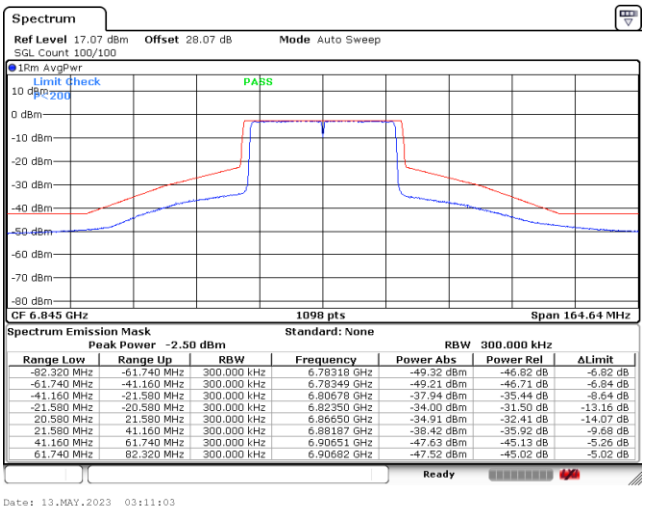


Date: 13.MAY.2023 03:21:25

Plot on Channel 6685 MHz

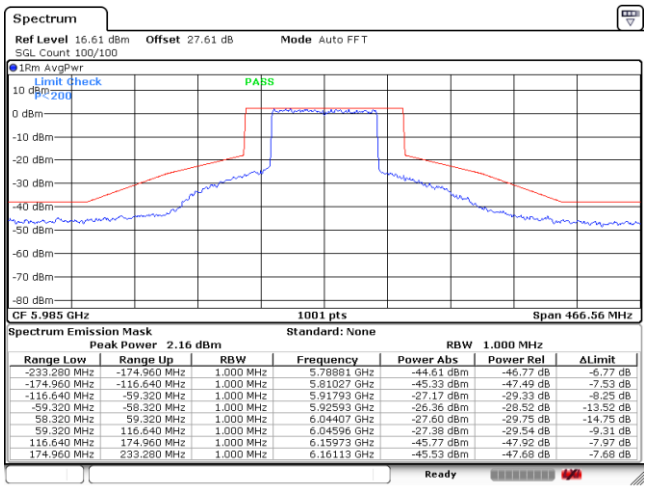


Plot on Channel 6845 MHz



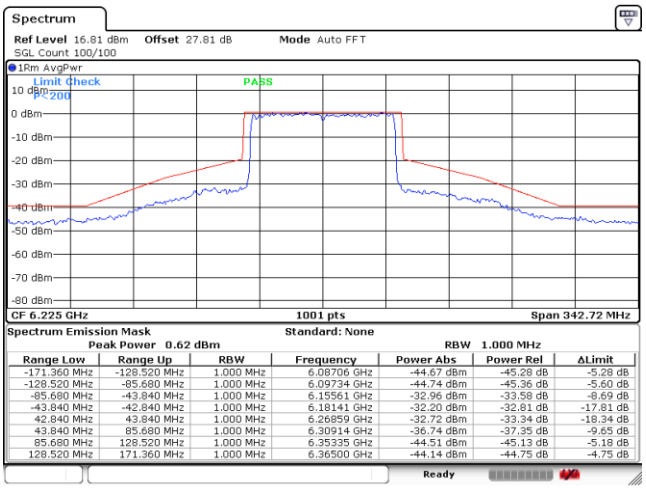
EUT Mode :	802.11be EHT80 Full RU

Plot on Channel 5985 MHz



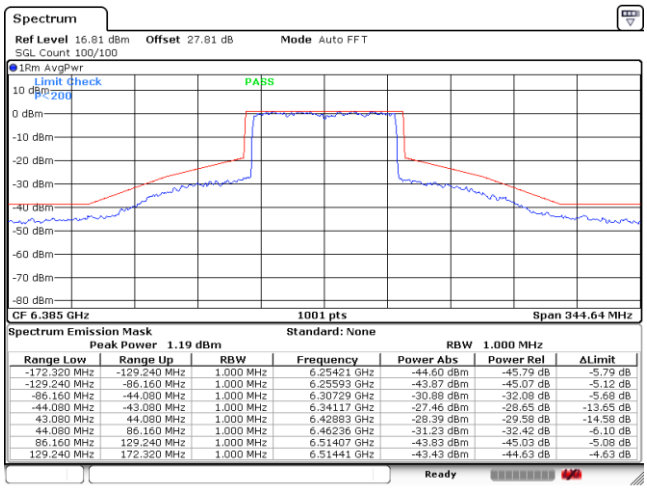
Date: 13.MAY.2023 03:49:56

Plot on Channel 6225 MHz



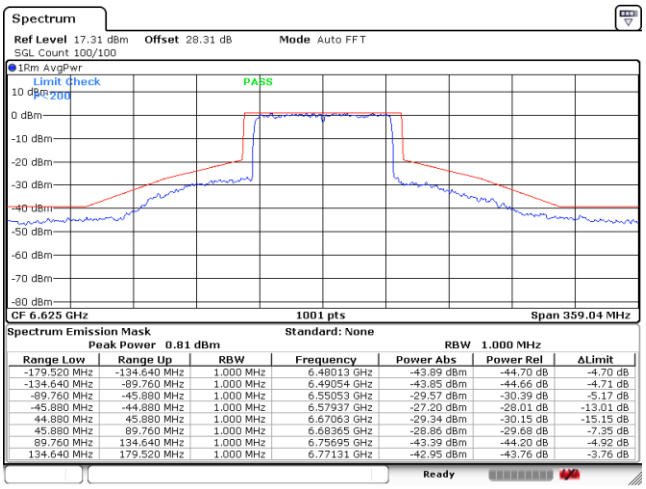
Date: 13.MAY.2023 04:05:27

Plot on Channel 6385 MHz



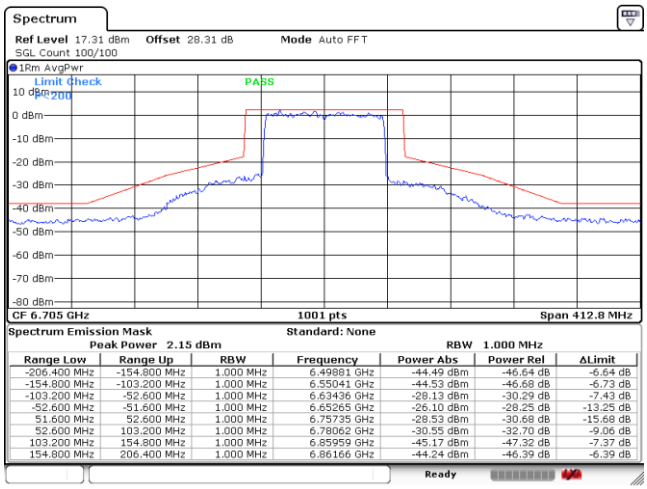
Date: 13.MAY.2023 04:12:49

Plot on Channel 6625 MHz

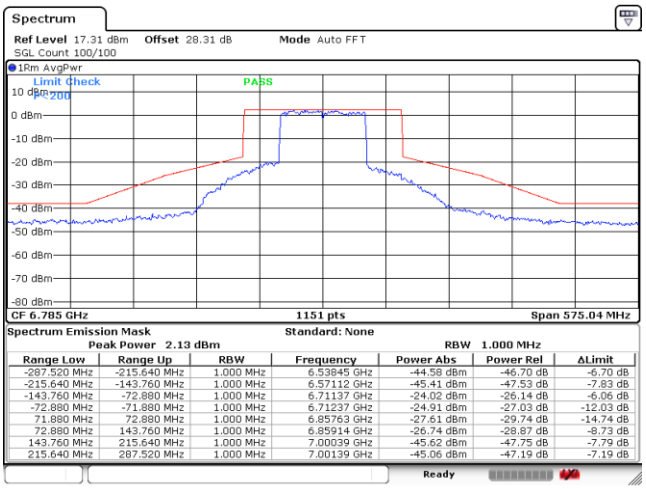


Date: 13.MAY.2023 04:17:50

Plot on Channel 6705 MHz

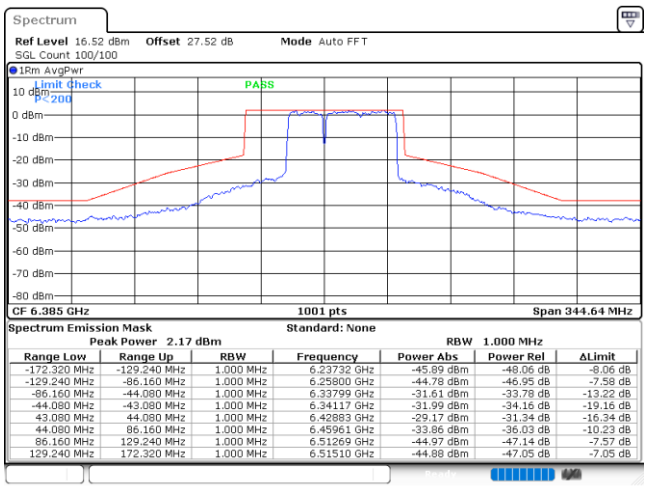


Plot on Channel 6785 MHz

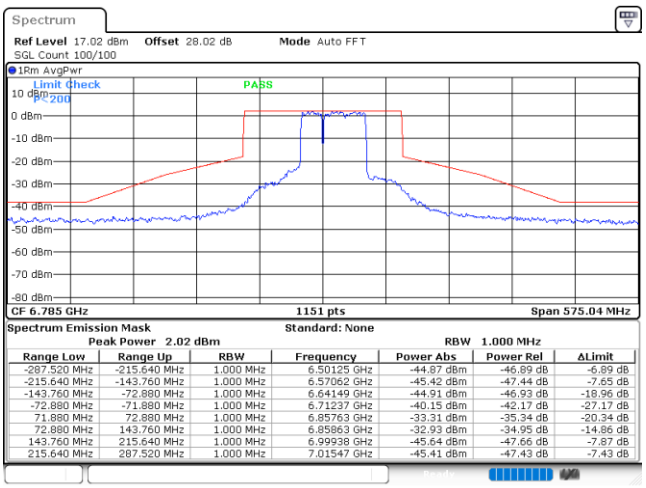


EUT Mode :	802.11be EHT80 Puncture 20RU1

Plot on Channel 6385 MHz

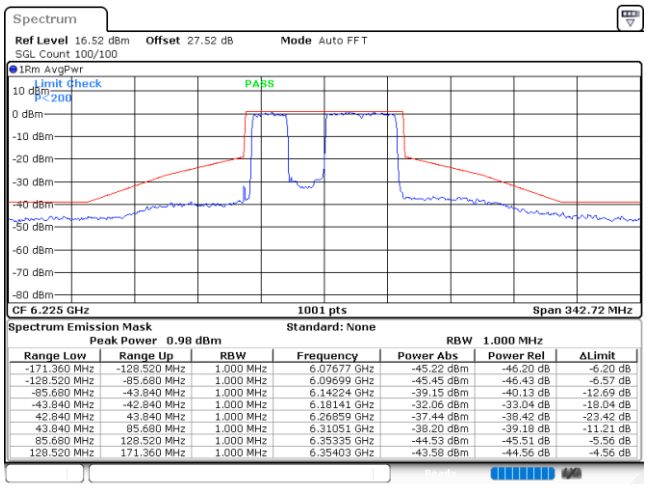


Plot on Channel 6785 MHz

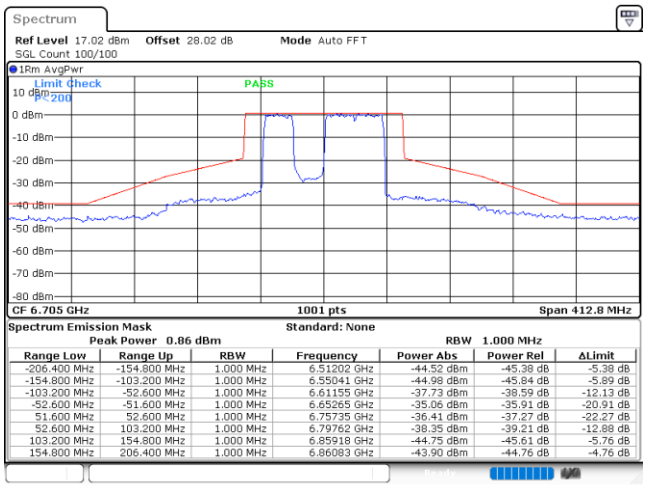


EUT Mode :	802.11be EHT80 Puncture 20RU2

Plot on Channel 6225 MHz

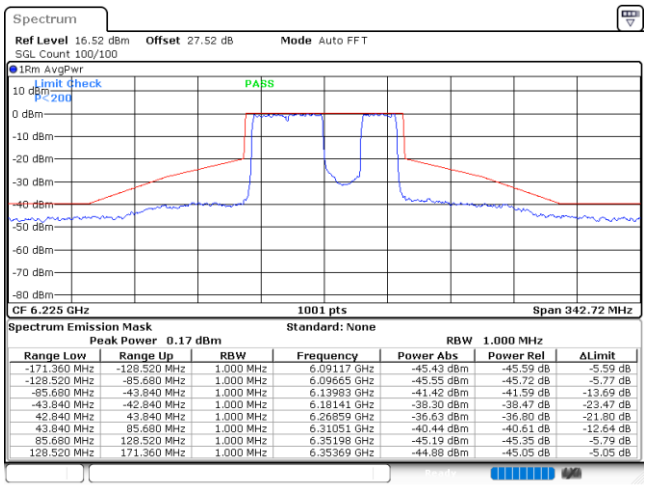


Plot on Channel 6705 MHz

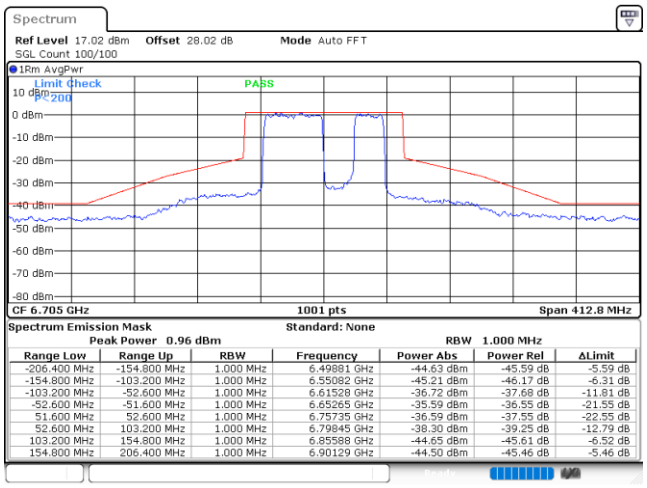


EUT Mode :	802.11be EHT80 Puncture 20RU4

Plot on Channel 6225 MHz

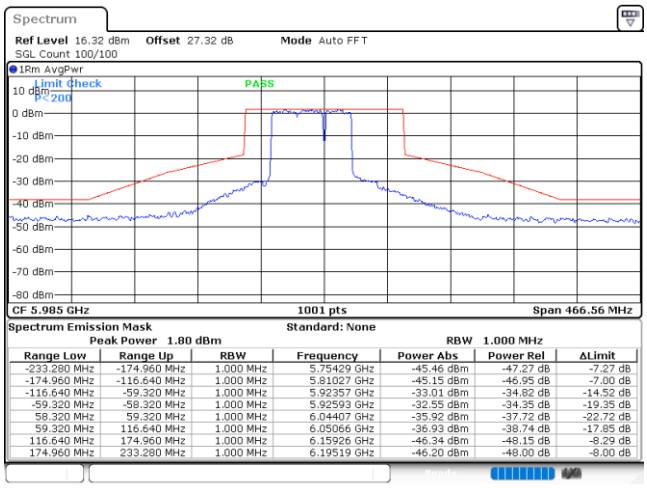


Plot on Channel 6705 MHz



EUT Mode :	802.11be EHT80 Puncture 20RU8

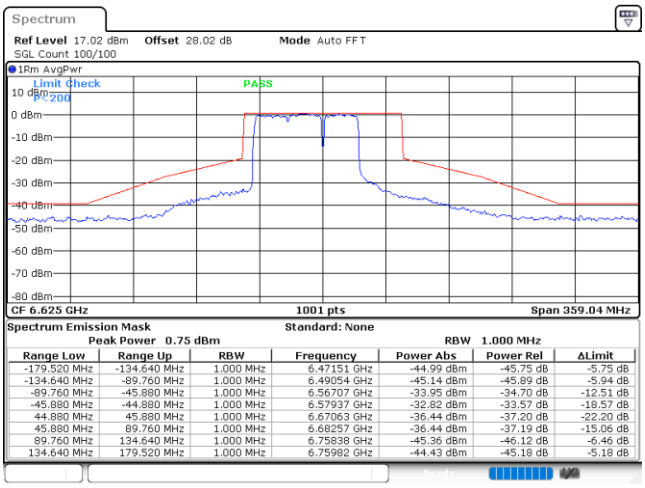
Plot on Channel 5985 MHz



Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-233.280 MHz	-174.960 MHz	1.000 MHz	5.75429 GHz	-45.46 dBm	-47.27 dB	-7.27 dB
-174.960 MHz	-116.640 MHz	1.000 MHz	5.81027 GHz	-45.15 dBm	-46.95 dB	-7.00 dB
-116.640 MHz	-59.320 MHz	1.000 MHz	5.92357 GHz	-33.01 dBm	-34.82 dB	-14.52 dB
-59.320 MHz	-58.320 MHz	1.000 MHz	5.92593 GHz	-32.55 dBm	-34.35 dB	-19.35 dB
58.320 MHz	59.320 MHz	1.000 MHz	6.04407 GHz	-35.92 dBm	-37.72 dB	-22.72 dB
59.320 MHz	116.640 MHz	1.000 MHz	6.05066 GHz	-36.93 dBm	-38.74 dB	-17.85 dB
116.640 MHz	174.960 MHz	1.000 MHz	6.15926 GHz	-46.34 dBm	-48.15 dB	-8.29 dB
174.960 MHz	233.280 MHz	1.000 MHz	6.19519 GHz	-46.20 dBm	-48.00 dB	-8.00 dB

Date: 9.JUN.2023 19:25:23

Plot on Channel 6625 MHz

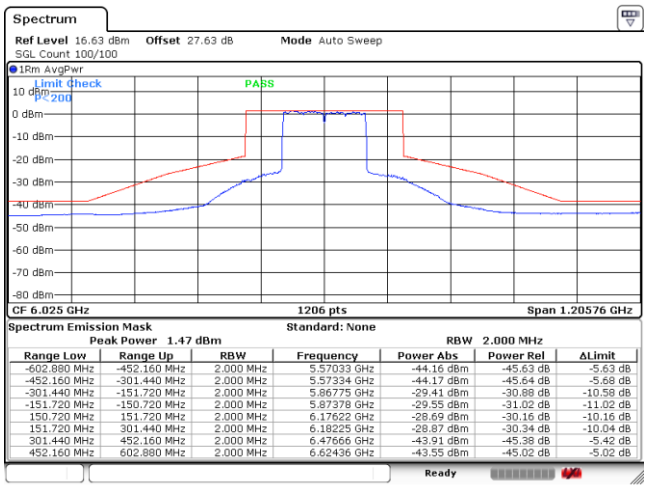


Range Low	Range Up	RBW	Frequency	Power Abs	Power Rel	ΔLimit
-179.520 MHz	-134.640 MHz	1.000 MHz	6.47151 GHz	-44.99 dBm	-45.75 dB	-5.75 dB
-134.640 MHz	-89.760 MHz	1.000 MHz	6.49054 GHz	-45.14 dBm	-45.89 dB	-5.94 dB
-89.760 MHz	-45.880 MHz	1.000 MHz	6.56707 GHz	-33.95 dBm	-34.70 dB	-12.51 dB
-45.880 MHz	-44.880 MHz	1.000 MHz	6.57937 GHz	-32.82 dBm	-33.57 dB	-18.57 dB
44.880 MHz	45.880 MHz	1.000 MHz	6.67063 GHz	-36.44 dBm	-37.20 dB	-22.20 dB
45.880 MHz	89.760 MHz	1.000 MHz	6.68257 GHz	-36.44 dBm	-37.19 dB	-15.06 dB
89.760 MHz	134.640 MHz	1.000 MHz	6.75838 GHz	-45.36 dBm	-46.12 dB	-6.46 dB
134.640 MHz	179.520 MHz	1.000 MHz	6.75982 GHz	-44.43 dBm	-45.18 dB	-5.18 dB

Date: 9.JUN.2023 20:05:19

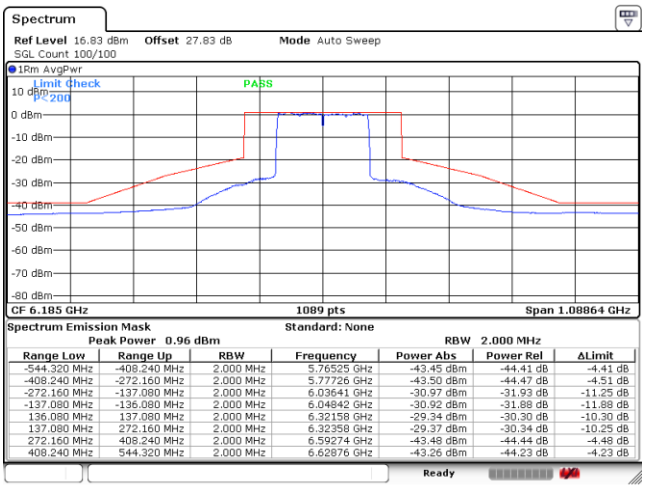
EUT Mode :	802.11be EHT160 Full RU

Plot on Channel 6025 MHz



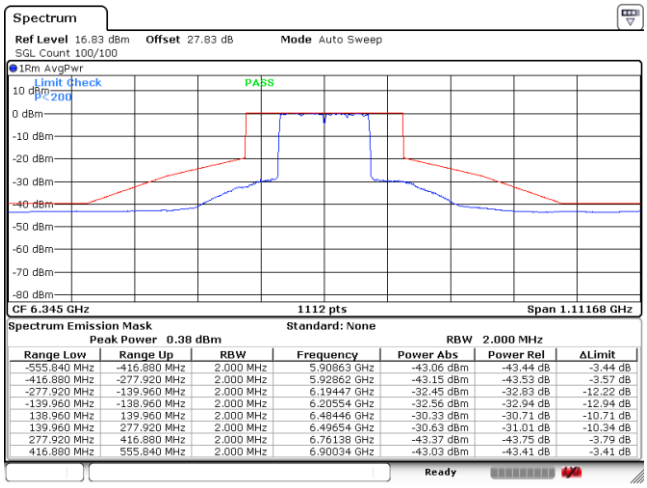
Date: 18.MAY.2023 06:10:22

Plot on Channel 6185 MHz



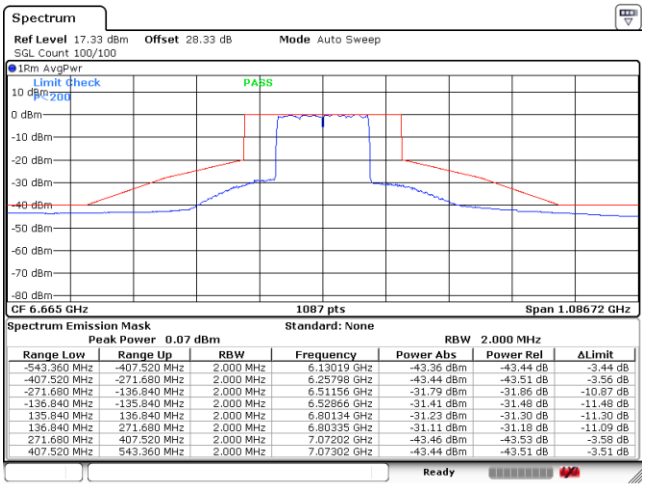
Date: 18.MAY.2023 06:13:57

Plot on Channel 6345 MHz



Date: 18.MAY.2023 06:18:37

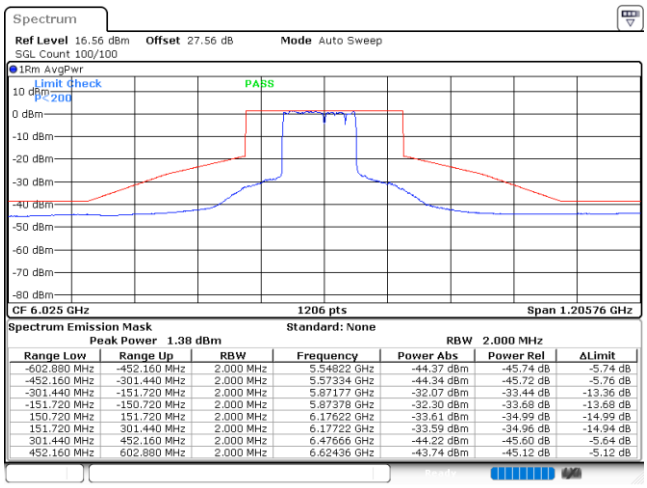
Plot on Channel 6665 MHz



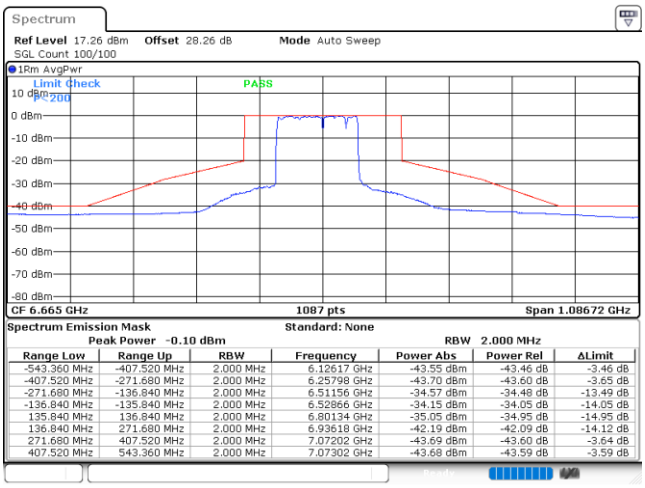
Date: 18.MAY.2023 06:24:33

EUT Mode :	802.11be EHT160 Puncture 20RU128

Plot on Channel 6025 MHz

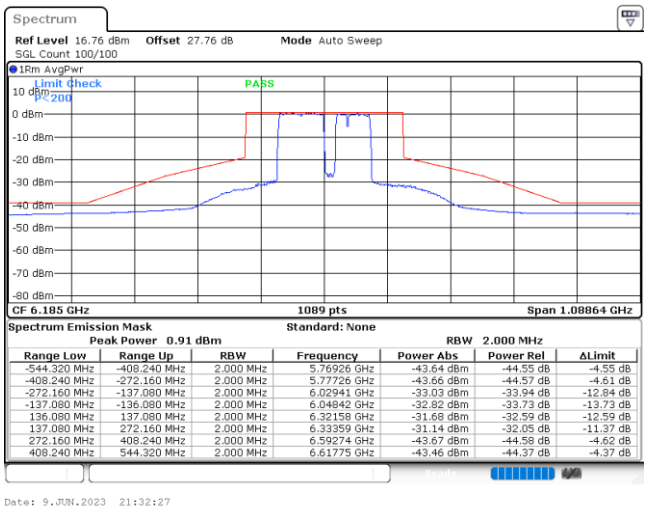


Plot on Channel 6665 MHz



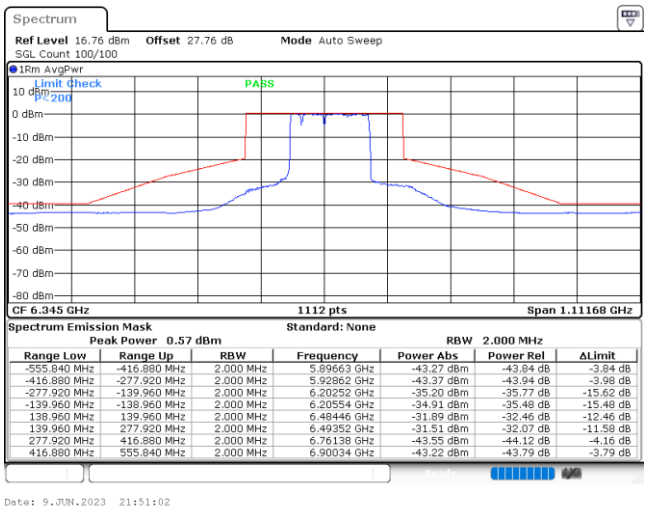
EUT Mode :	802.11be EHT160 Puncture 20RU16

Plot on Channel 6185 MHz



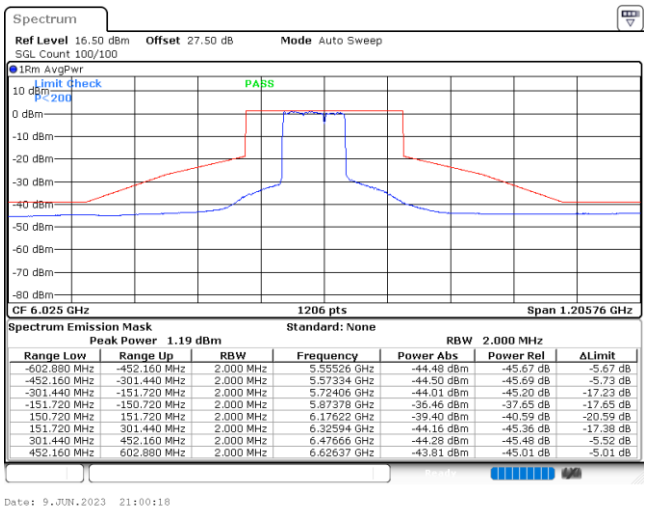
EUT Mode :	802.11be EHT160 Puncture 20RU1

Plot on Channel 6345 MHz

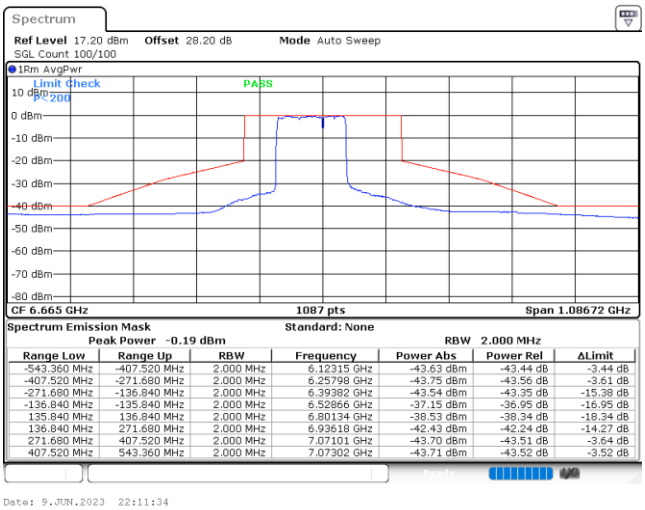


EUT Mode :	802.11be EHT160 Puncture 40RU192

Plot on Channel 6025 MHz

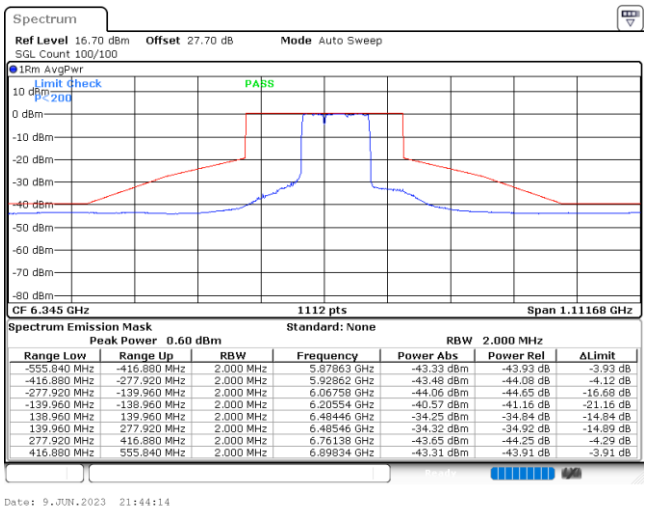


Plot on Channel 6665 MHz



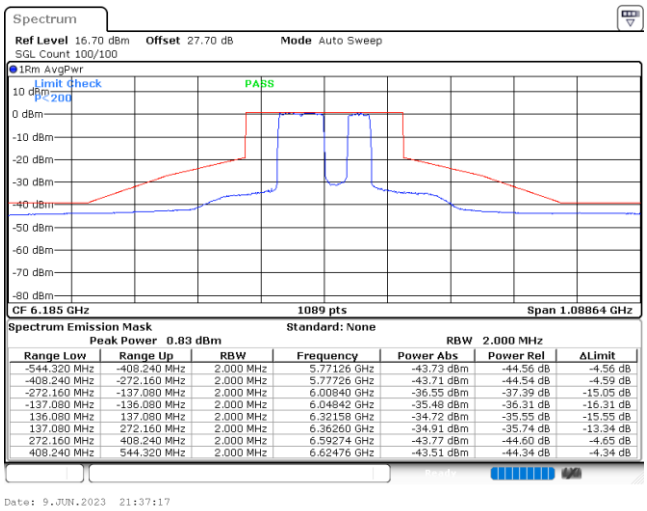
EUT Mode :	802.11be EHT160 Puncture 40RU3

Plot on Channel 6345 MHz



EUT Mode :	802.11be EHT160 Puncture 40RU48

Plot on Channel 6185 MHz



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 v01 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.

$$E=\frac{1000000\sqrt{30P}}{3}$$ μV/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 v02r01. 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 ≥ 3 MHz
   - Detector = Peak
   - Sweep time = auto
   - Trace mode = max hold

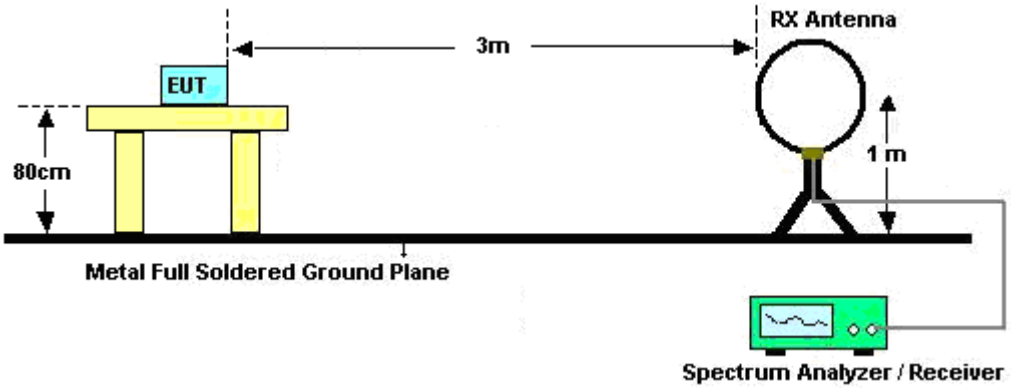
   (3) Procedures for Average Unwanted Emissions Measurements Above 1000MHz

   - RBW = 1 MHz
   - VBW = 10 Hz, when duty cycle is no less than 98 percent.
   - VBW ≥ 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.

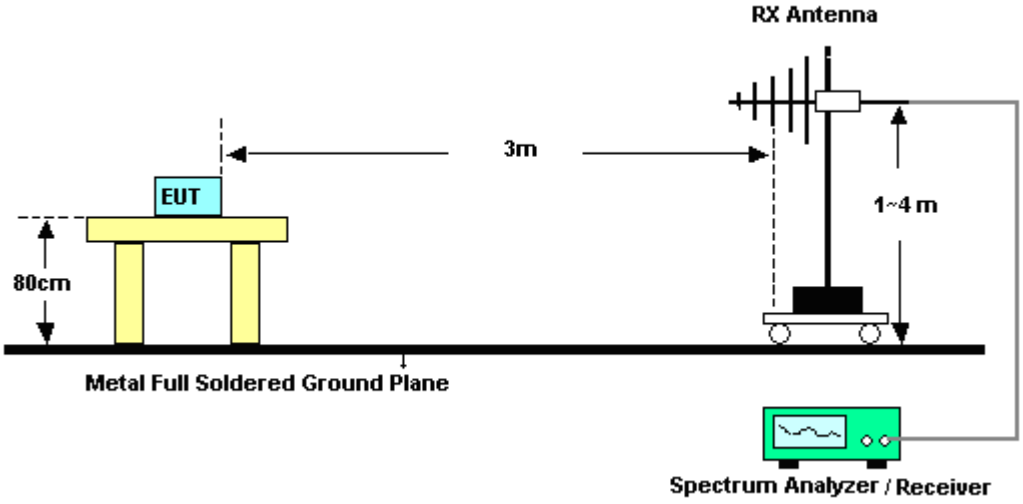
2. The EUT is placed on a turntable with 0.8 meter for frequency below 1 GHz and 1.5 meter for frequency above 1 GHz respectively above ground.
3. The EUT is set 3 meters away from the receiving antenna which is mounted on the top of a variable height antenna tower.
4. The antenna is a broadband antenna 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

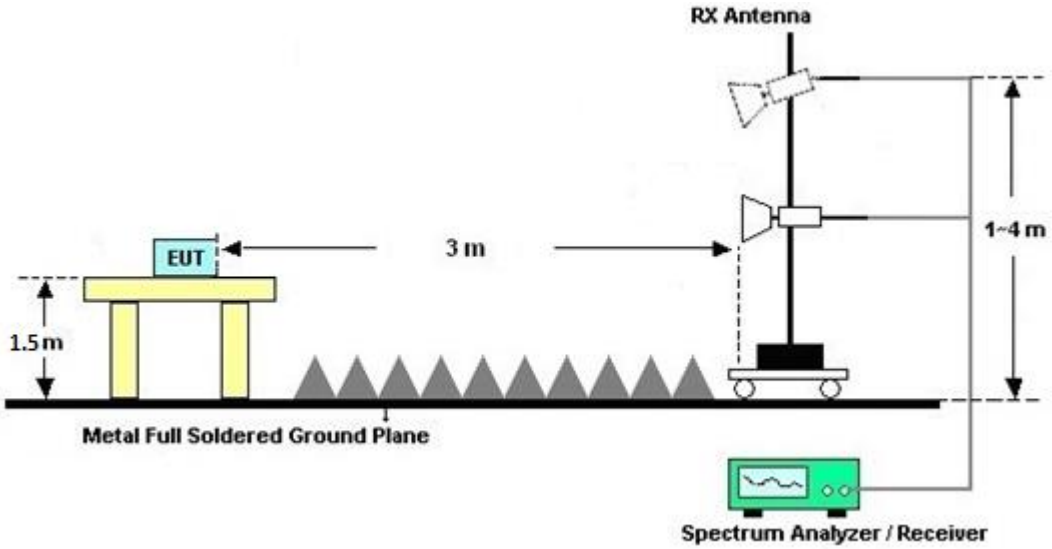
For radiated emissions below 30MHz



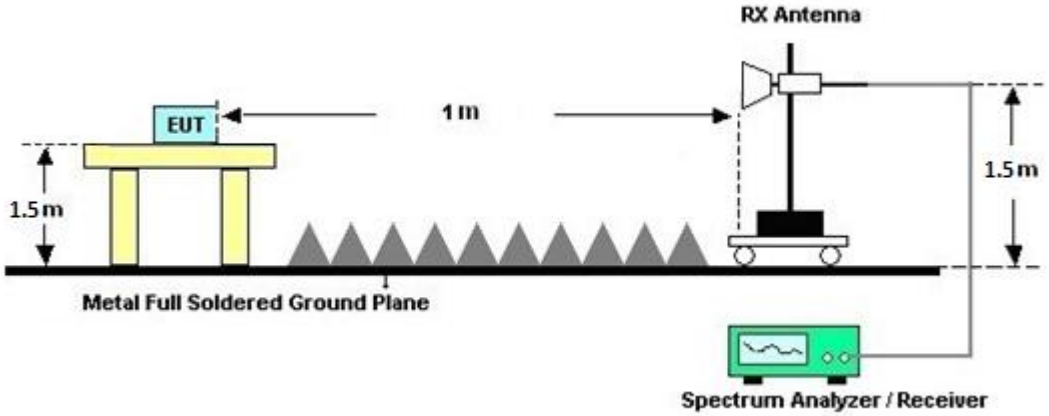
For radiated emissions from 30MHz to 1GHz



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 C and D.

3.5.7 Duty Cycle

Please refer to Appendix E.

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

Please refer to Appendix C and D.

3.6 AC Conducted Emission Measurement

3.6.1 Limit of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56*	56 to 46*
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

3.6.2 Measuring Instruments

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

3.6.3 Test Procedures

1. The EUT is placed 0.4 meter away from the conducting wall of the shielding room, and is kept at least 80 centimeters from any other grounded conducting surface.
2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
3. All the support units are connecting to the other LISN.
4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
6. Both Line and Neutral shall be tested in order to find out the maximum conducted emission.
7. The frequency range from 150 kHz to 30 MHz is scanned.
8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.