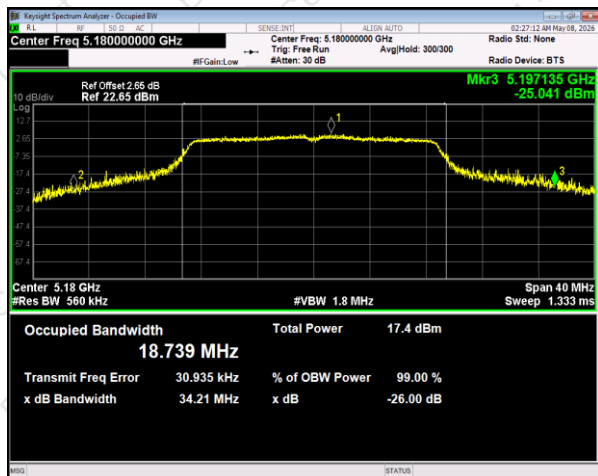


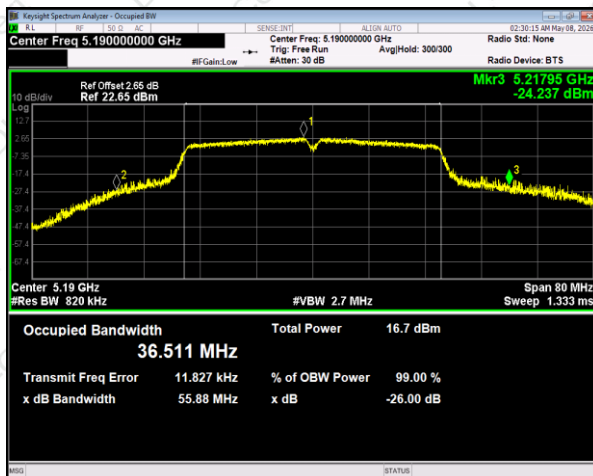


5.2G Test plot

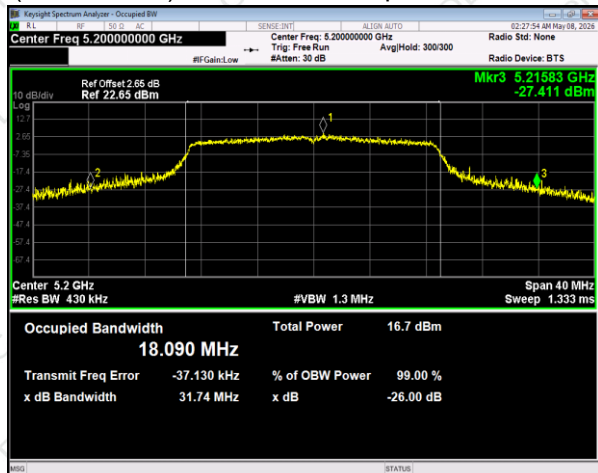
(802.11 ac20) 26dB Bandwidth plot on channel 36



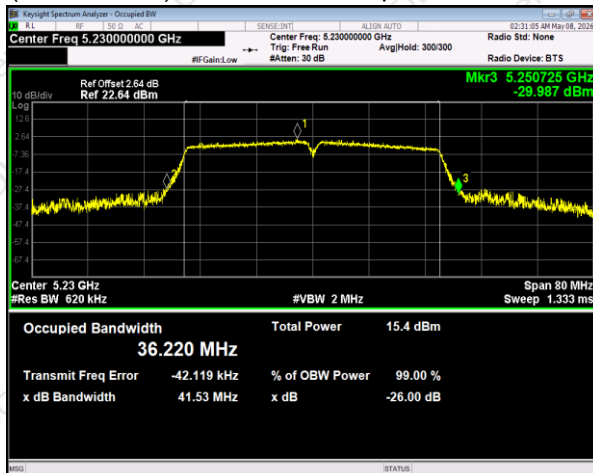
(802.11 ac40) 26dB Bandwidth plot on channel 38



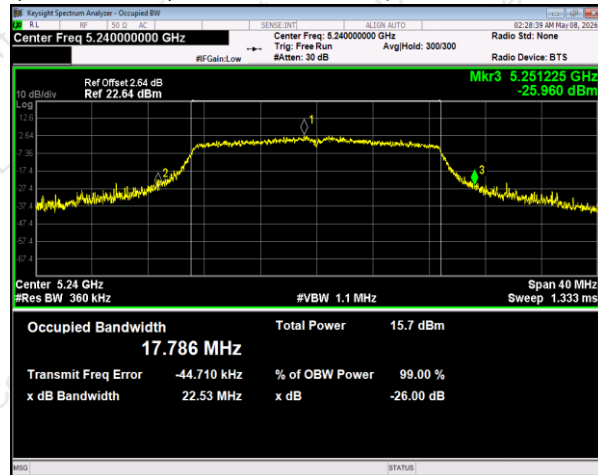
(802.11 ac20) 26dB Bandwidth plot on channel 40



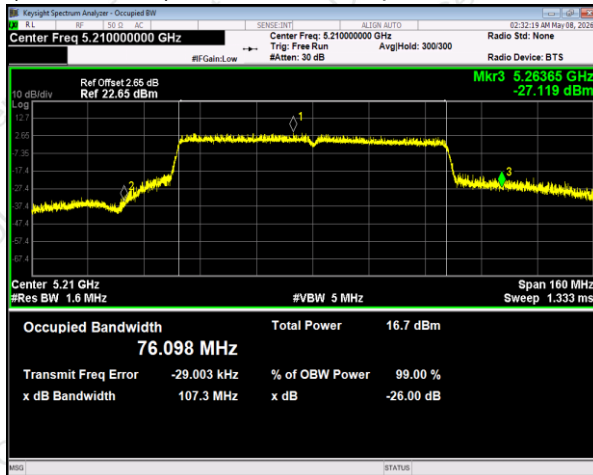
(802.11 ac40) 26dB Bandwidth plot on channel 46



(802.11 ac20) 26dB Bandwidth plot on channel 48



(802.11 ac80) 26dB Bandwidth plot on channel 42





Temperature :	26 °C	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V/60Hz
Test Band :	5.8G		

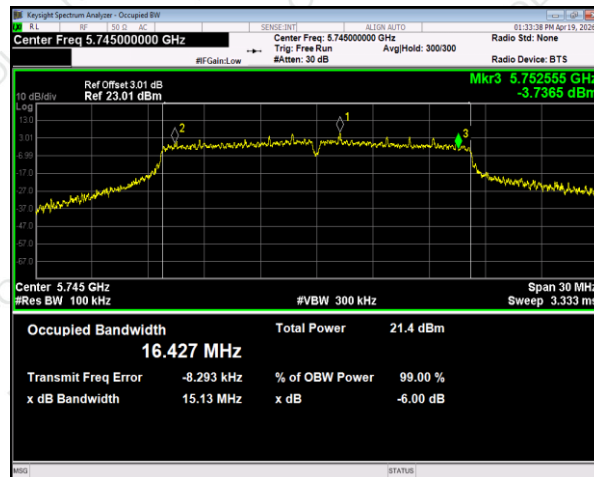
5.8G					
Test mode	Test Channel (MHz)	6dB Emission Bandwidth (MHz)		Limit(KHz)	Result
		ANT A	ANT B		
802.11a	5745	15.07	15.13	>500	Pass
	5785	13.85	15.04		
	5825	14.96	15.07		
802.11n20	5745	15.07	15.11	>500	Pass
	5785	15.1	13.81		
	5825	15.12	15.13		
802.11n40	5755	35.12	35.11	>500	Pass
	5795	35.04	35.07		
802.11ac20	5745	16.91	15.07	>500	Pass
	5785	15.09	15.11		
	5825	15.13	15.1		
802.11ac40	5755	35.08	35.13	>500	Pass
	5795	35.09	35.09		
802.11ac80	5775	75.75	75.71	>500	Pass



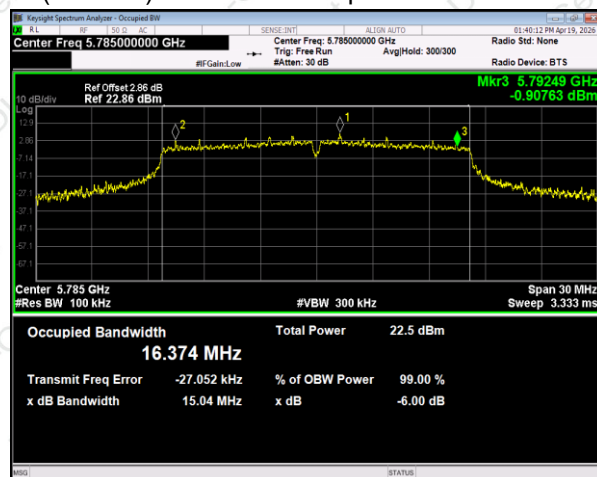
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

5.8G Test plot

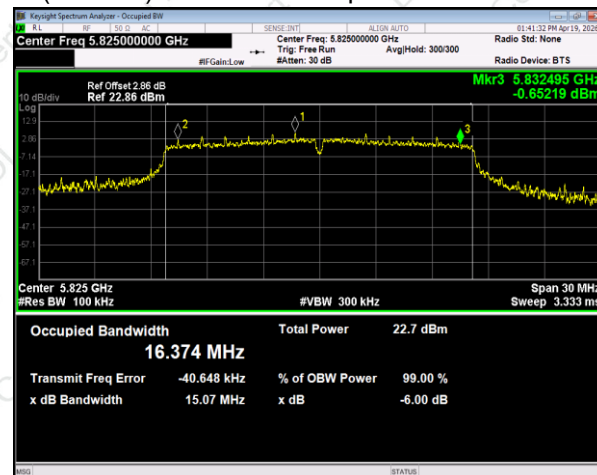
(802.11a) 6dB Bandwidth plot on channel 149



(802.11a) 6dB Bandwidth plot on channel 157



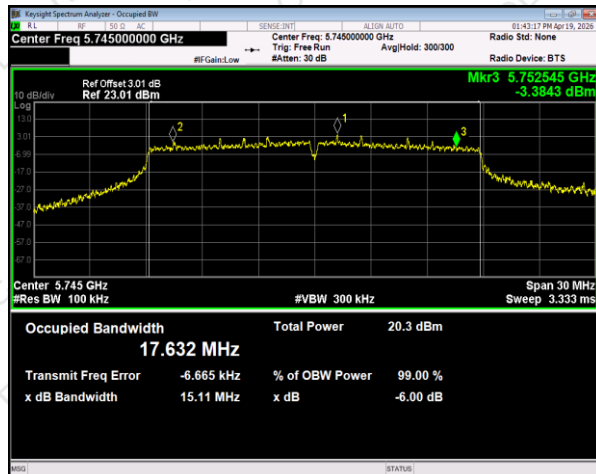
(802.11a) 6dB Bandwidth plot on channel 165



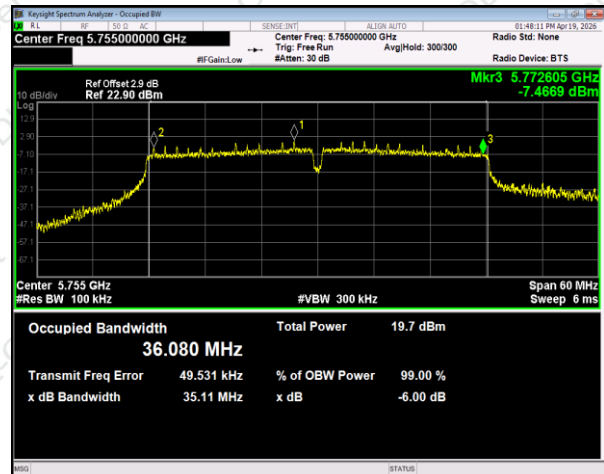


5.8G Test plot

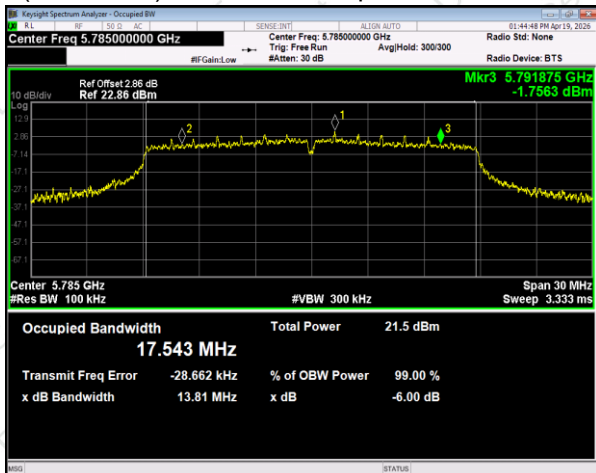
(802.11n20) 6dB Bandwidth plot on channel 149



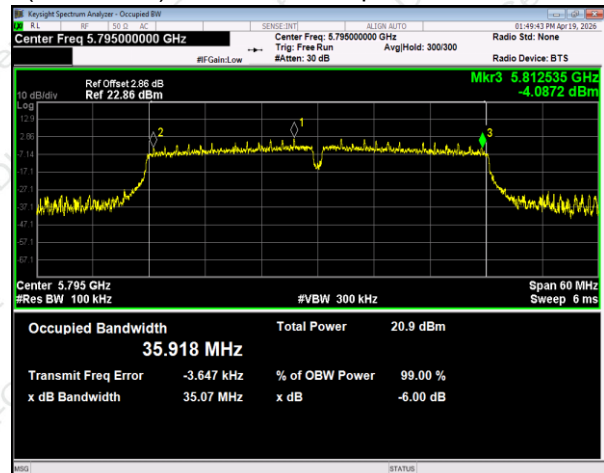
(802.11n40) 6dB Bandwidth plot on channel 151



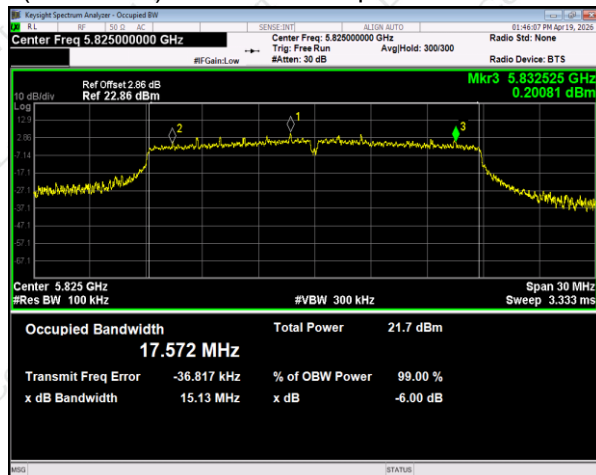
(802.11n20) 6dB Bandwidth plot on channel 157



(802.11n40) 6dB Bandwidth plot on channel 159



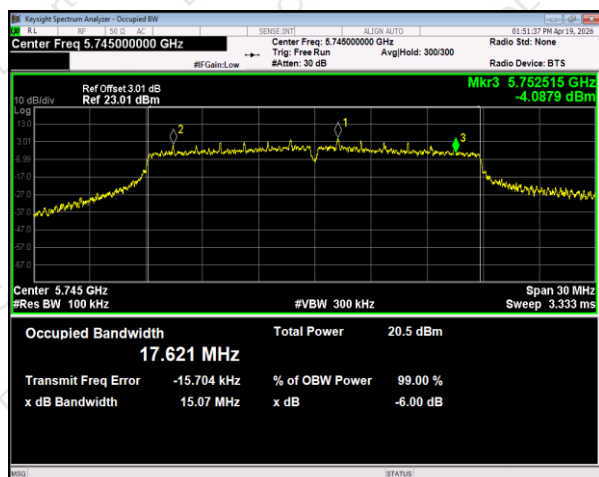
(802.11n20) 6dB Bandwidth plot on channel 165



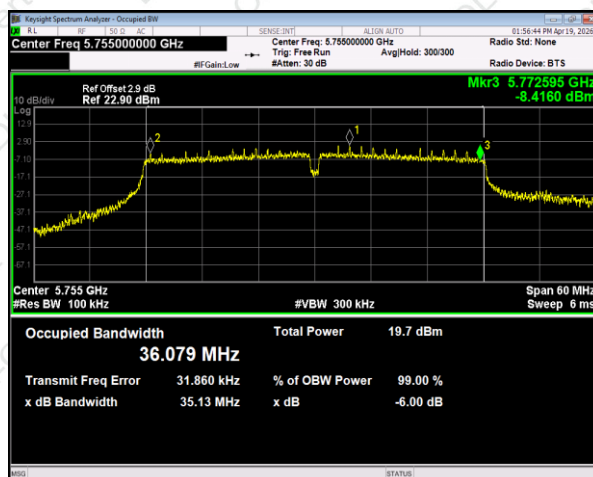


5.8G Test plot

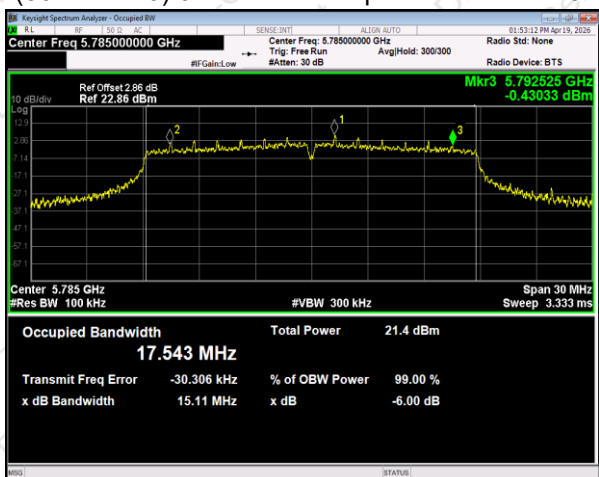
(802.11ac20) 6dB Bandwidth plot on channel 149



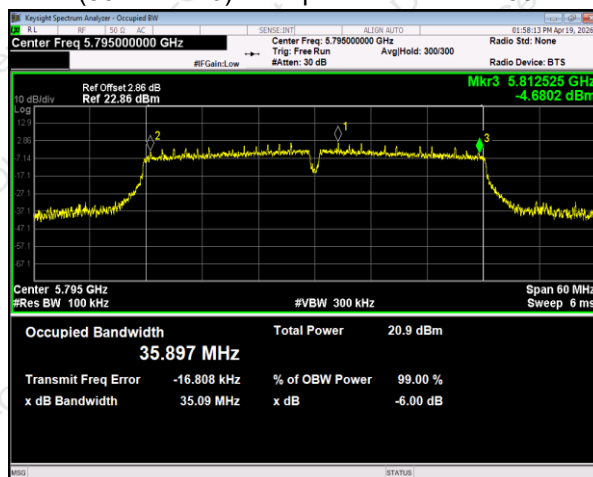
(802.11ac40) PSD plot on channel 151



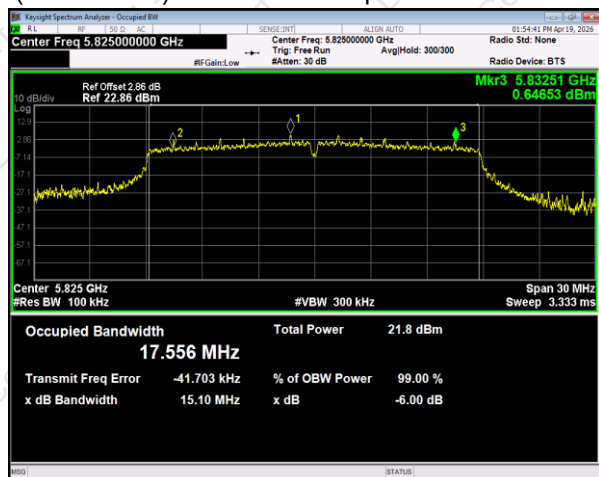
(802.11ac20) 6dB Bandwidth plot on channel 157



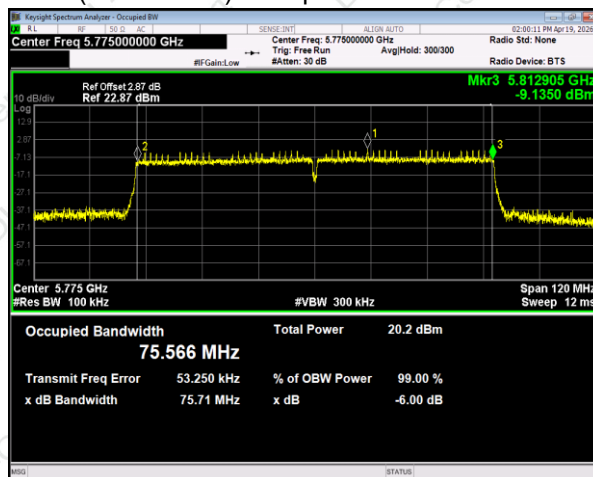
(802.11ac40) PSD plot on channel 159



(802.11ac20) 6dB Bandwidth plot on channel 165



(802.11ac80) PSD plot on channel 155





7. MAXIMUM CONDUCTED OUTPUT POWER

7.1 PPLIED PROCEDURES / LIMIT

According to FCC §15.407

The maximum conducted output power should not exceed:

Frequency Band(MHz)	Limit
5150~5250	250mW
5725~5850	1W

7.2 TEST PROCEDURE

Method PM is Measurement using an RF average power meter. The procedure for this method is as follows:

- Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the following conditions are satisfied:
 - The EUT is configured to transmit continuously, or to transmit with a constant duty cycle.
 - At all times when the EUT is transmitting, it shall be transmitting at its maximum power control level.
 - The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
- If the transmitter does not transmit continuously, measure the duty cycle D of the transmitter output signal as described in 12.2.
- Measure the average power of the transmitter. This measurement is an average over both the ON and OFF periods of the transmitter.
- Correct the measurement in dBm by adding $[10 \log (1 / D)]$, where D is the duty cycle {e.g., $[10 \log (1 / 0.25)]$, if the duty cycle is 25%}.

7.3 DEVIATION FROM STANDARD

No deviation.

7.4 TEST SETUP



7.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 7.4 Unless otherwise a special operating condition is specified in the follows during the testing.



7.6 TEST RESULTS

Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Band :	5.2G		

5.2G						
Test mode	Test Channel (MHz)	Output power (dBm)			Limit (dBm)	Result
		ANT A	ANT B	Total		
802.11a	5180	13.3	14.77	/	23.98	Pass
	5200	13.18	14.6	/	23.98	Pass
	5240	12.99	14.21	/	23.98	Pass
802.11n20	5180	11.97	14.06	16.15	23.98	Pass
	5200	12.07	14.21	16.28	23.98	Pass
	5240	11.07	13.23	15.29	23.98	Pass
802.11n40	5190	9.98	12.25	14.27	23.98	Pass
	5230	9.82	10.64	13.26	23.98	Pass
802.11ac20	5180	12.24	13.91	16.17	23.98	Pass
	5200	11.26	13.96	15.83	23.98	Pass
	5240	11.7	13.25	15.55	23.98	Pass
802.11ac40	5190	10.82	11.79	14.34	23.98	Pass
	5230	10.33	11.37	13.89	23.98	Pass
802.11ac80	5210	7.46	8.86	11.23	23.98	Pass



Temperature :	26 °C	Relative Humidity :	54%
Pressure :	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Band :	5.8G		

5.8G						
Test mode	Test Channel (MHz)	Output power (dBm)			Limit (dBm)	Result
		ANT A	ANT B	Total		
802.11a	5745	13.15	13.35	/	30	Pass
	5785	14.08	14.49	/	30	Pass
	5825	14.33	14.73	/	30	Pass
802.11n20	5745	11.78	12.21	15.01	30	Pass
	5785	12.87	13.17	16.03	30	Pass
	5825	13.29	13.6	16.46	30	Pass
802.11n40	5755	10.03	9.63	12.84	30	Pass
	5795	10.61	10.73	13.68	30	Pass
802.11ac20	5745	12.05	12	15.04	30	Pass
	5785	13.04	13.32	16.19	30	Pass
	5825	13.36	13.57	16.48	30	Pass
802.11ac40	5755	10.37	10.02	13.21	30	Pass
	5795	11.35	11.69	14.53	30	Pass
802.11ac80	5775	8.98	9.53	12.27	30	Pass



8. OUT OF BAND EMISSIONS

8.1 APPLICABLE STANDARD

According to FCC §15.407(b)

Undesirable emission limits. Except as shown in paragraph (b)(7) of this section, the maximum emissions outside of the frequency bands of operation shall be attenuated in accordance with the following limits:

(1) For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

(2)

(i) All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

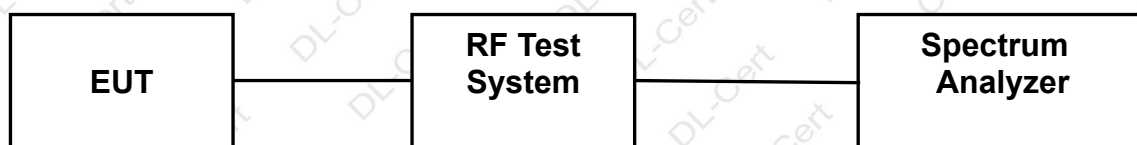
8.2 TEST PROCEDURE

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT without connection to measurement instrument. Turn on the EUT and connect its antenna terminal to measurement instrument via a low loss cable. Then set it to any one measured frequency within its operating range, and make sure the instrument is operated in its linear range.
3. Set RBW of spectrum analyzer to 1 MHz with a convenient frequency span.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

8.3 DEVIATION FROM STANDARD

No deviation.

8.4 TEST SETUP



8.5 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 8.4 Unless otherwise a special operating condition is specified in the follows during the testing.

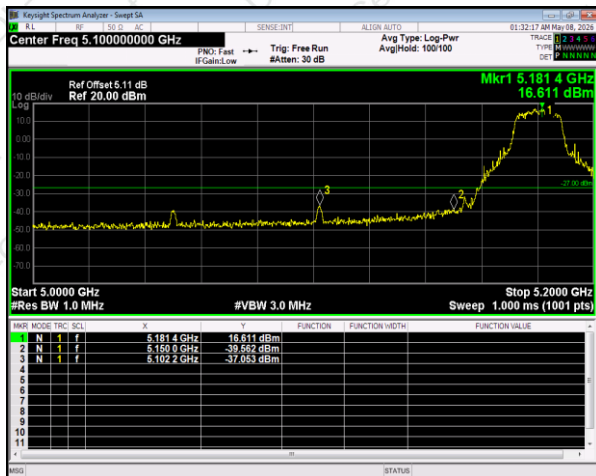


8.6 TEST RESULTS

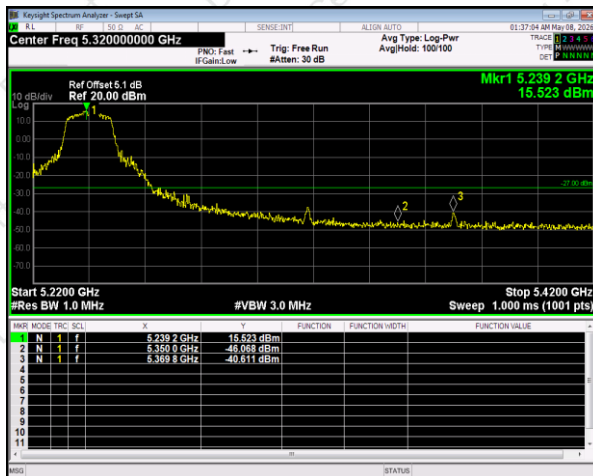
Note: A(B) Represent the value of antenna A and B, The worst data is Antenna B, only shown Antenna B Plot.

5.180~5.240 GHz

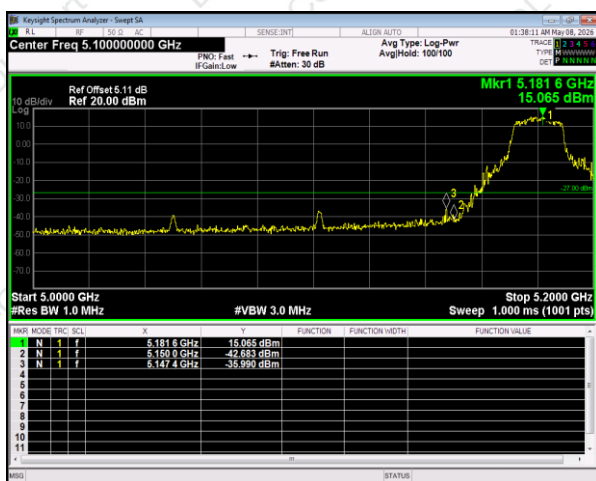
(802.11a) Band Edge, Left Side



(802.11a) Band Edge, Right Side



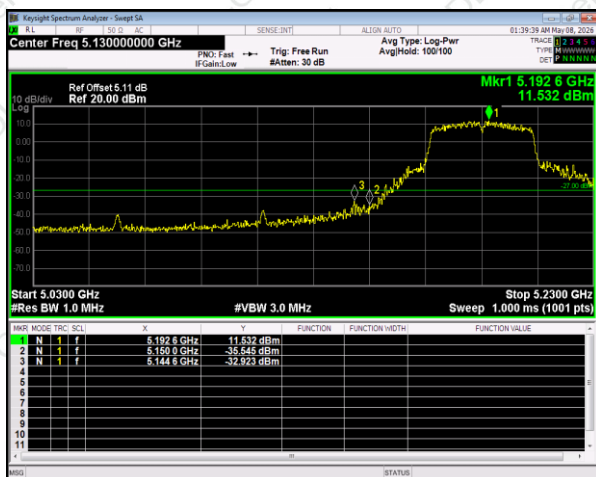
(802.11n20) Band Edge, Left Side



(802.11n20) Band Edge, Right Side



(802.11n40) Band Edge, Left Side

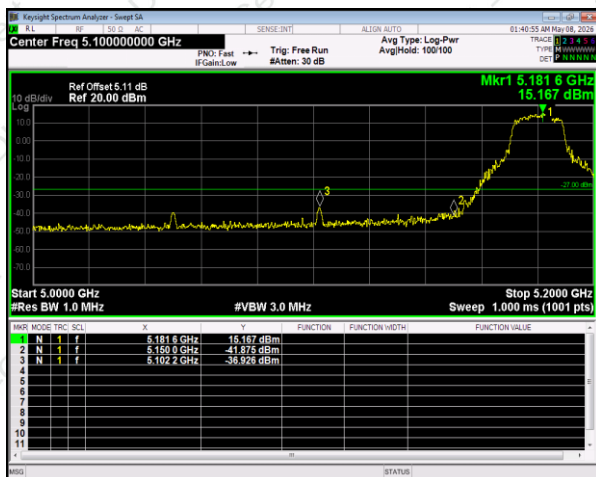


(802.11n40) Band Edge, Right Side

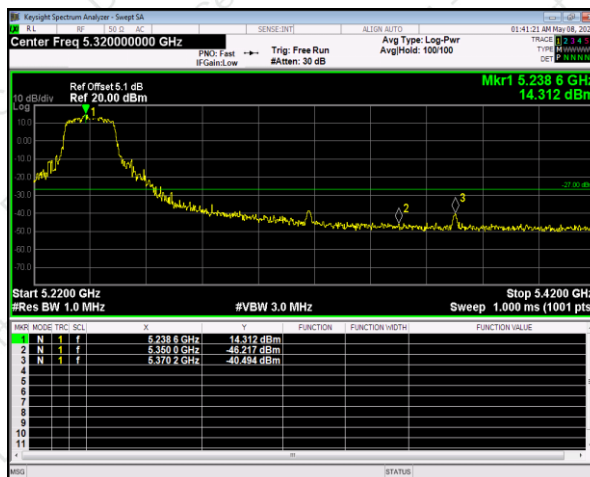




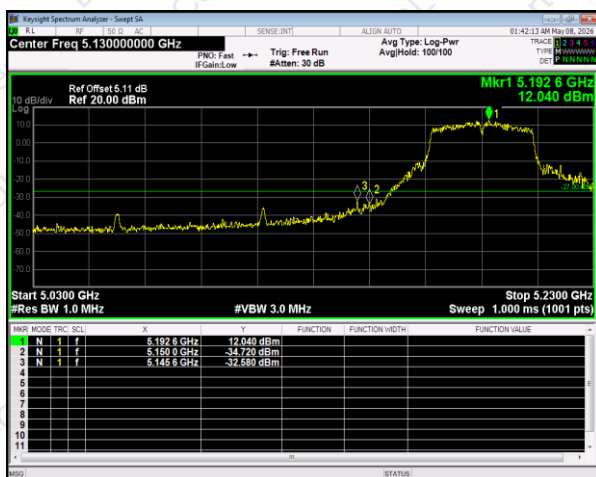
(802.11ac20) Band Edge, Left Side



(802.11ac20) Band Edge, Right Side



(802.11ac40) Band Edge, Left Side



(802.11ac40) Band Edge, Right Side

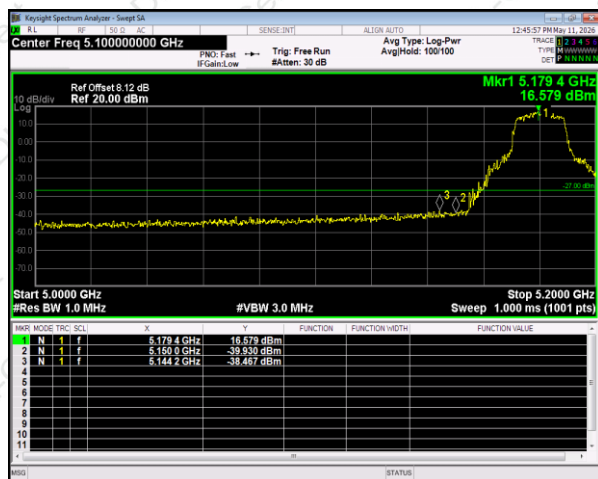


(802.11ac80) Band Edge





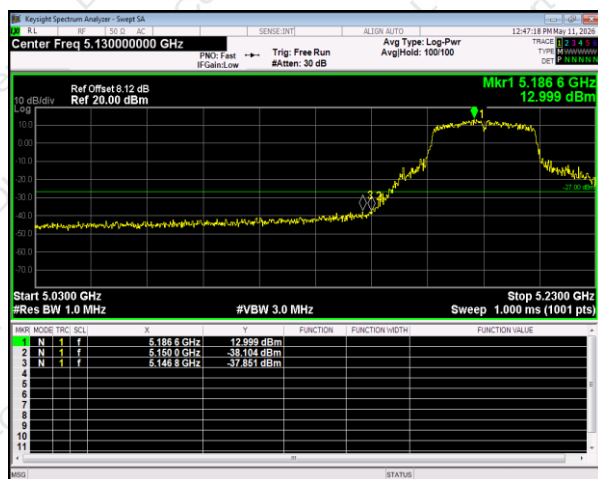
(802.11n20 MIMO) Band Edge, Left Side



(802.11n20 MIMO) Band Edge, Right Side



(802.11n40 MIMO) Band Edge, Left Side

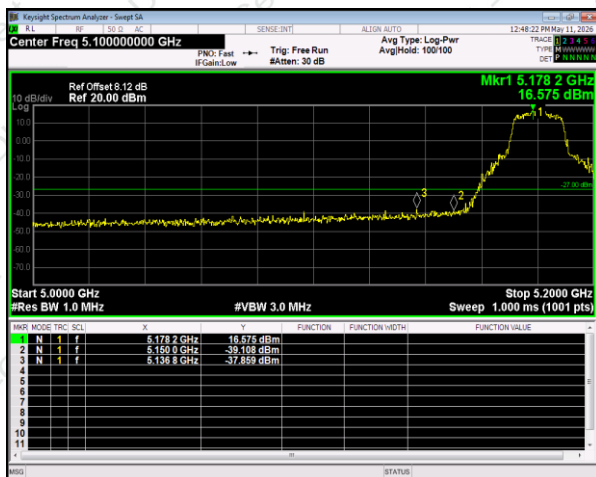


(802.11n40 MIMO) Band Edge, Right Side





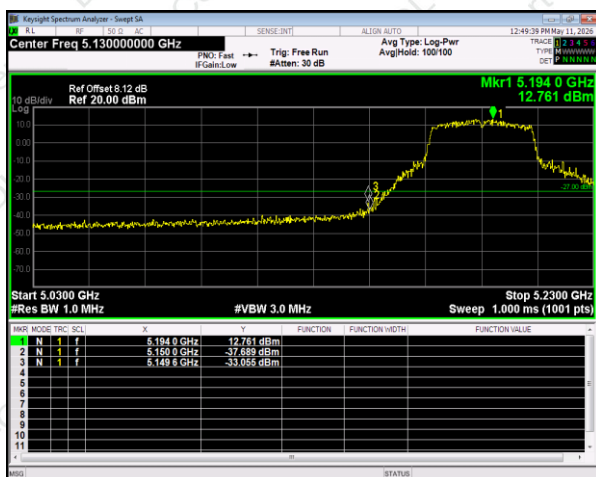
(802.11ac20 MIMO) Band Edge, Left Side



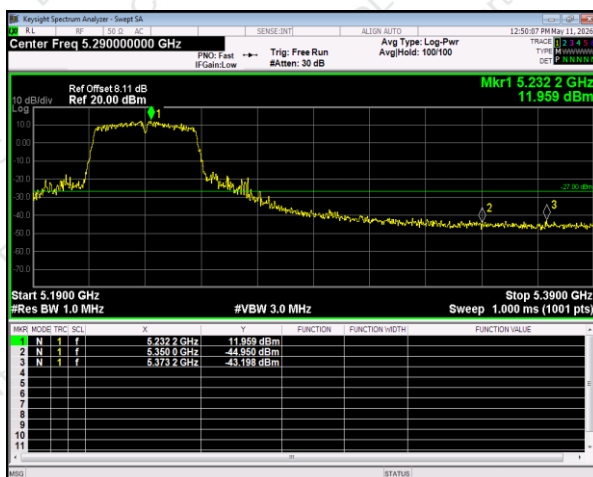
(802.11ac20 MIMO) Band Edge, Right Side



(802.11ac40 MIMO) Band Edge, Left Side



(802.11ac40 MIMO) Band Edge, Right Side



(802.11ac80 MIMO) Band Edge

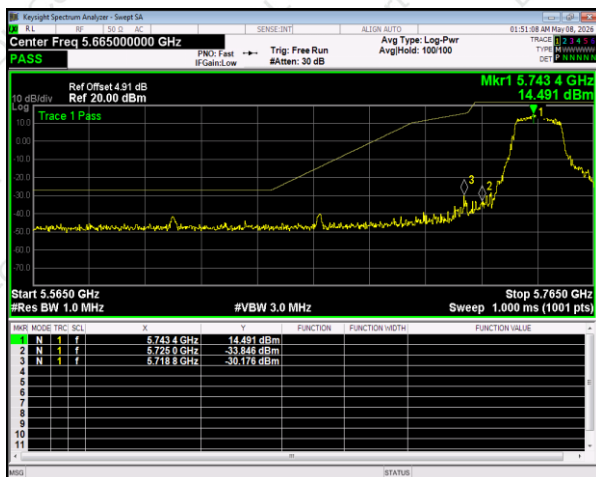




Note: A(B) Represent the value of antenna A and B, The worst data is Antenna A, only shown Antenna A Plot.

5.745~5.825 GHz

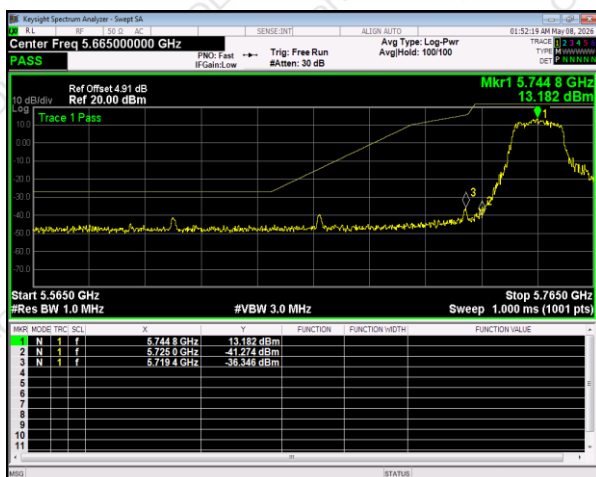
(802.11a) Band Edge, Left Side



(802.11a) Band Edge, Right Side



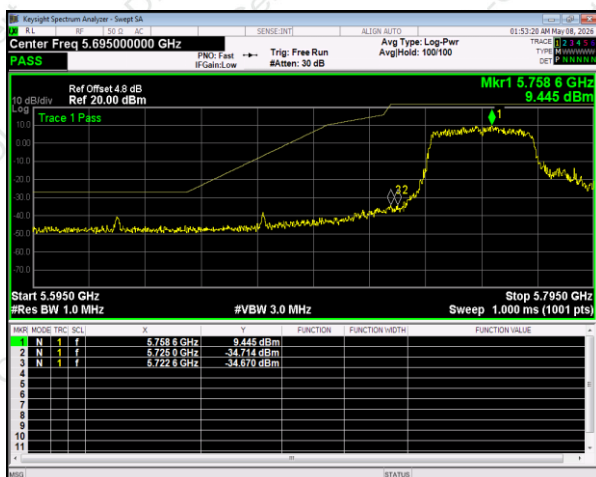
(802.11n20) Band Edge, Left Side



(802.11n20) Band Edge, Right Side



(802.11n40) Band Edge, Left Side

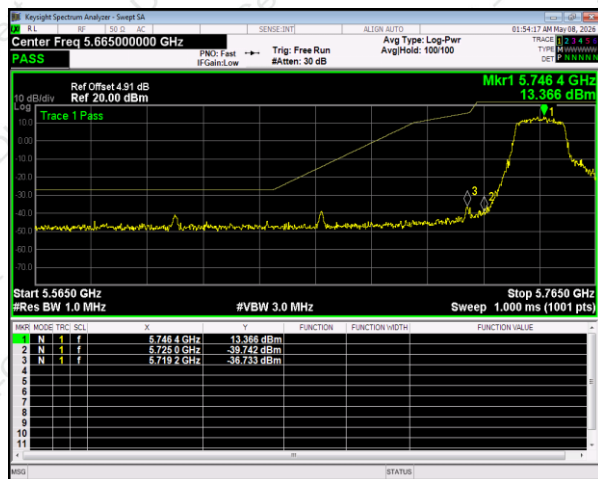


(802.11n40) Band Edge, Right Side





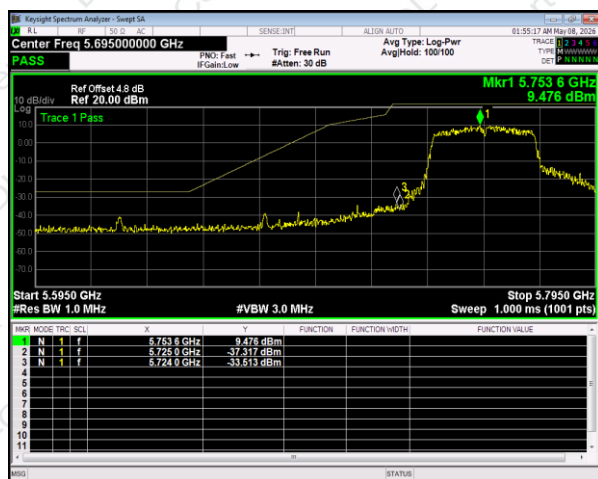
(802.11ac20) Band Edge, Left Side



(802.11ac20) Band Edge, Right Side



(802.11ac40) Band Edge, Left Side



(802.11ac40) Band Edge, Right Side

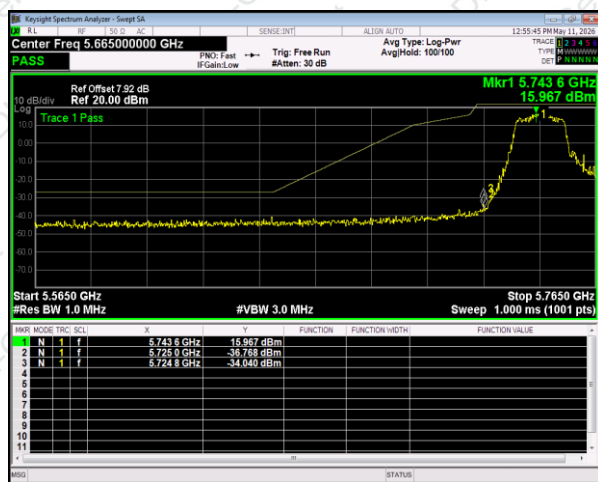


(802.11ac80) Band Edge





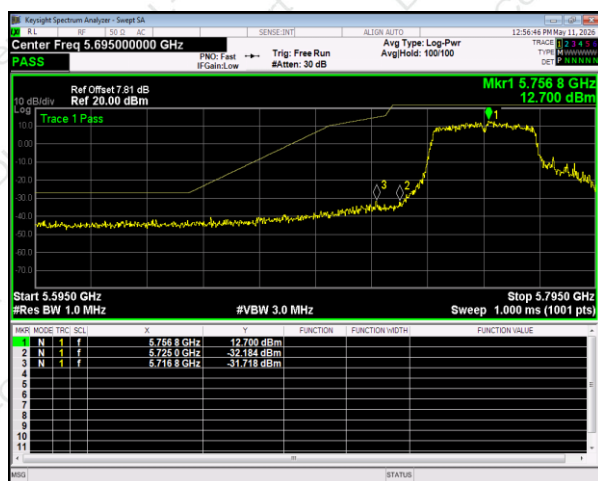
(802.11n20 MIMO) Band Edge, Left Side



(802.11n20 MIMO) Band Edge, Right Side



(802.11n40 MIMO) Band Edge, Left Side



(802.11n40 MIMO) Band Edge, Right Side

