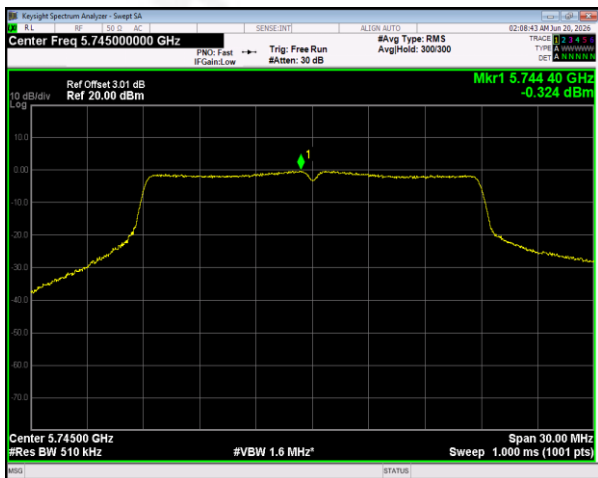
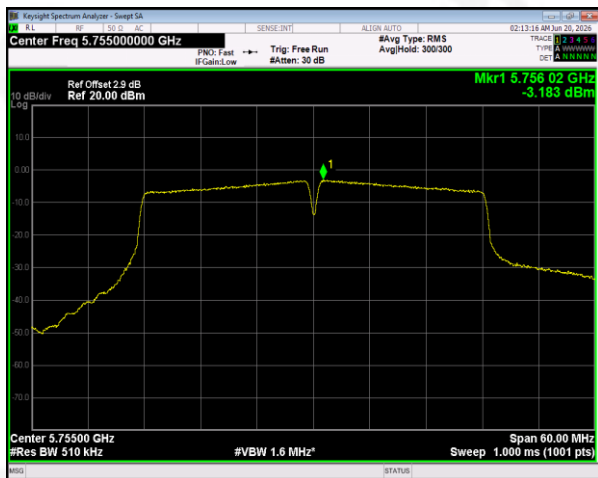




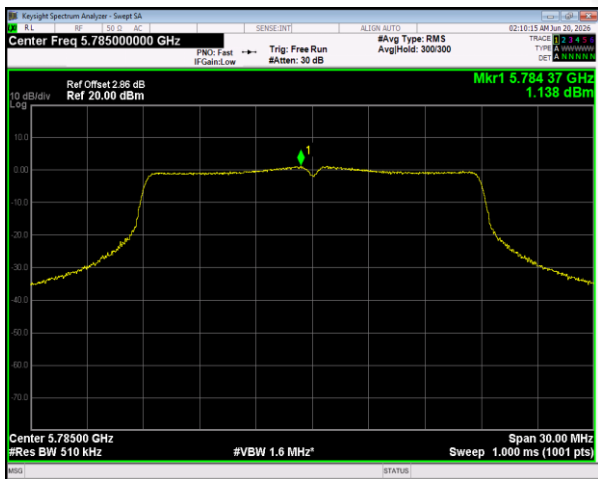
(802.11ac20) PSD plot on channel 149



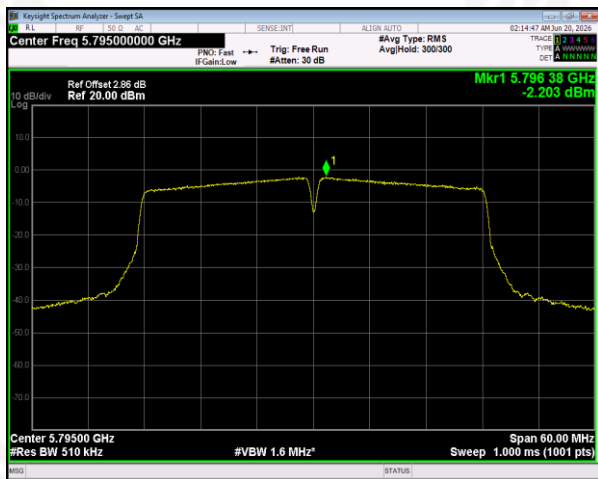
(802.11ac40) PSD plot on channel 151



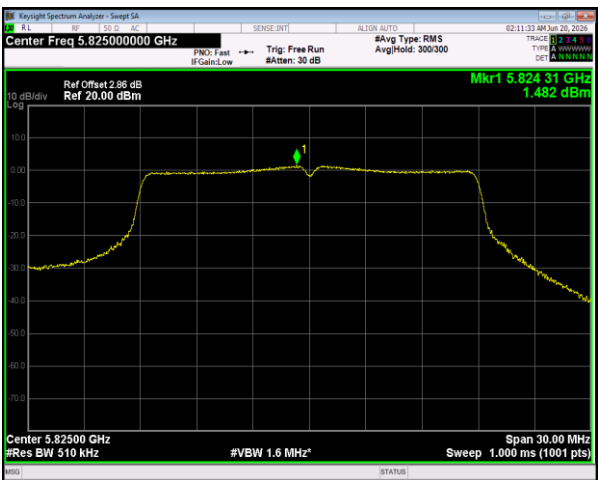
(802.11ac20) PSD plot on channel 157



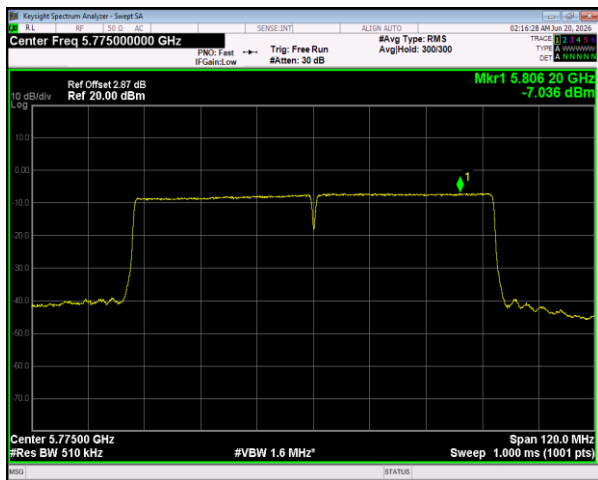
(802.11ac40) PSD plot on channel 159



(802.11ac20) PSD plot on channel 165



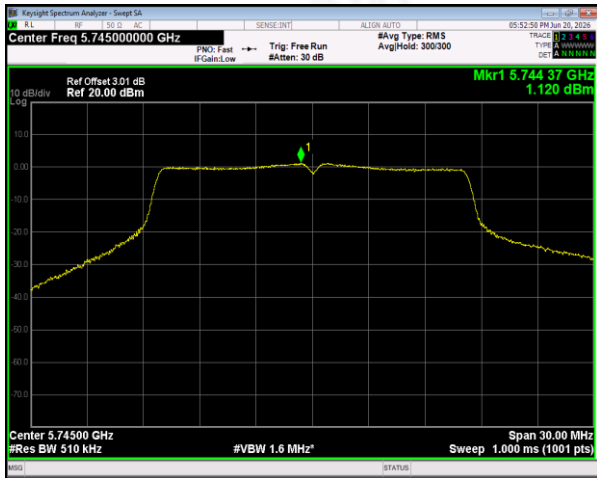
(802.11ac80) PSD plot on channel 155



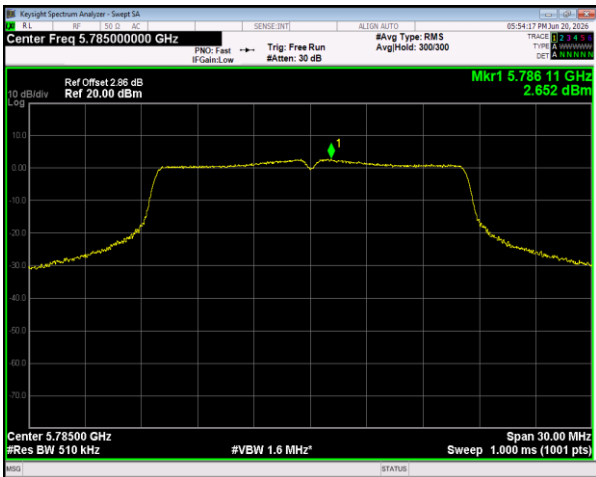


Antenna B

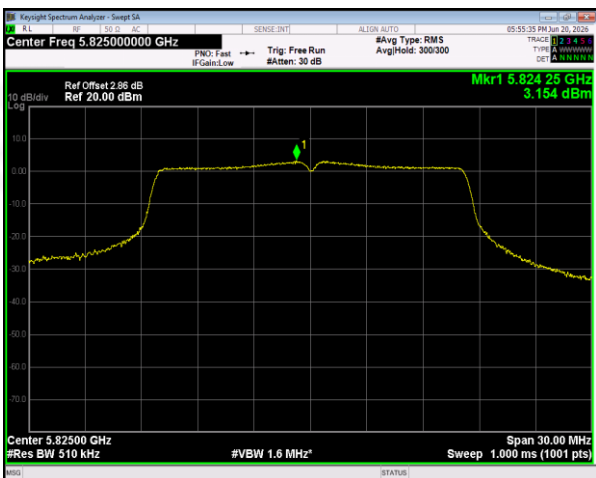
(802.11a) PSD plot on channel 149



(802.11a) PSD plot on channel 157

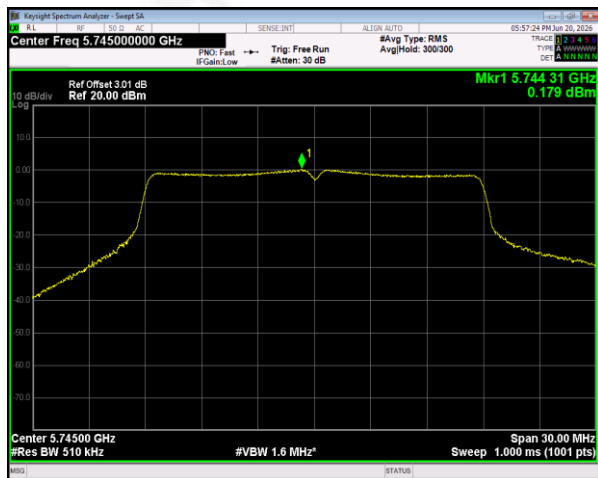


(802.11a) PSD plot on channel 165

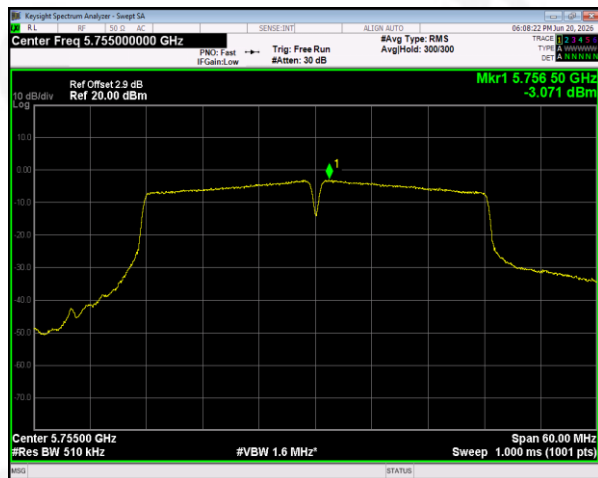




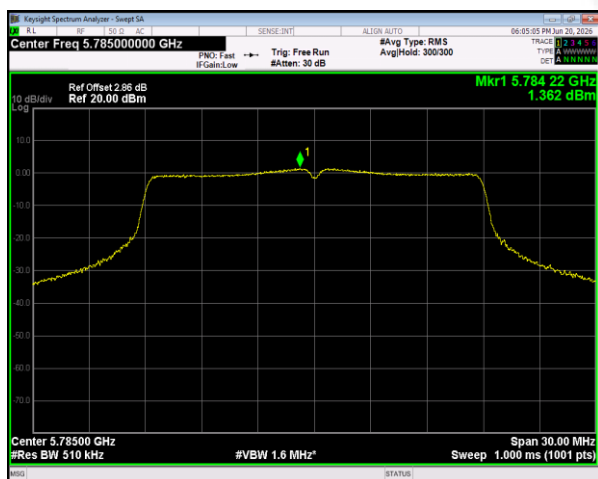
(802.11n20) PSD plot on channel 149



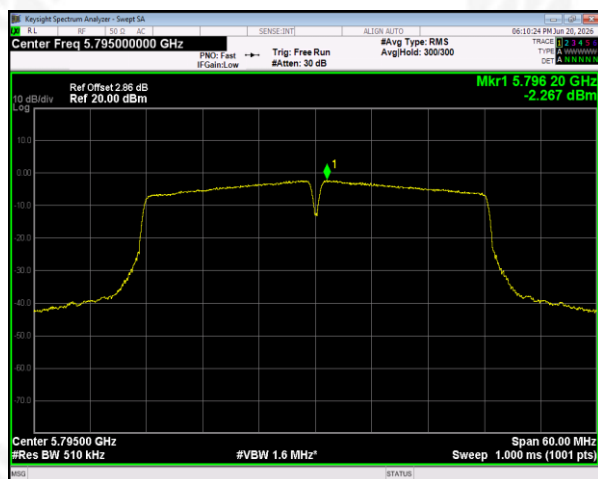
(802.11n40) PSD plot on channel 151



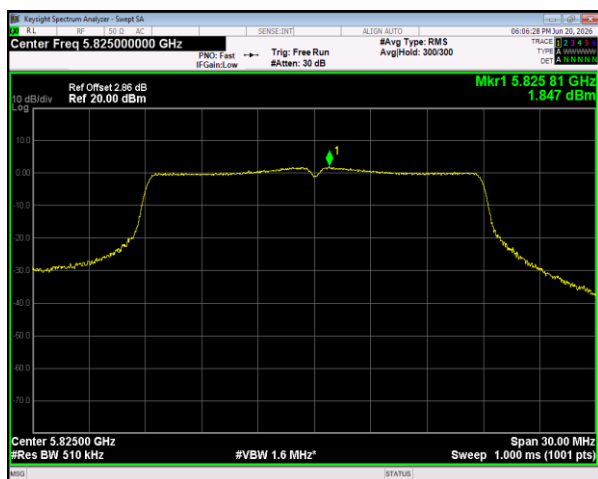
(802.11n20) PSD plot on channel 157



(802.11n40) PSD plot on channel 159

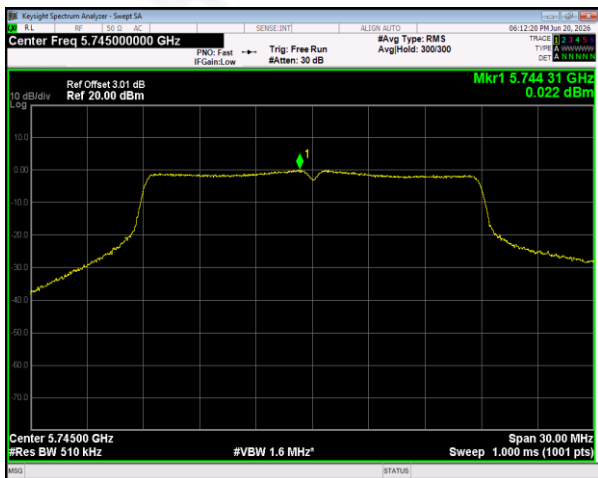


(802.11n20) PSD plot on channel 165

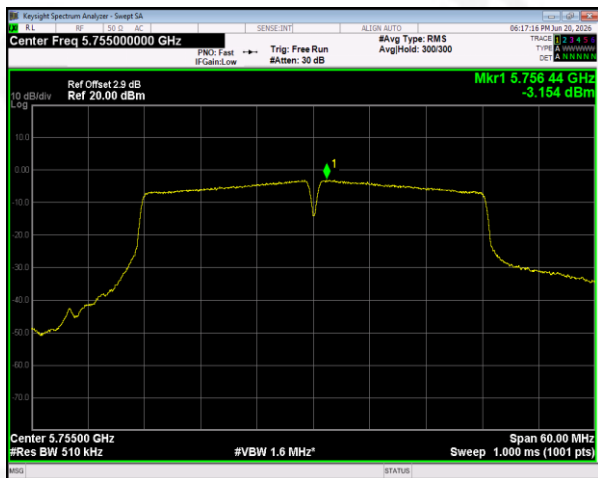




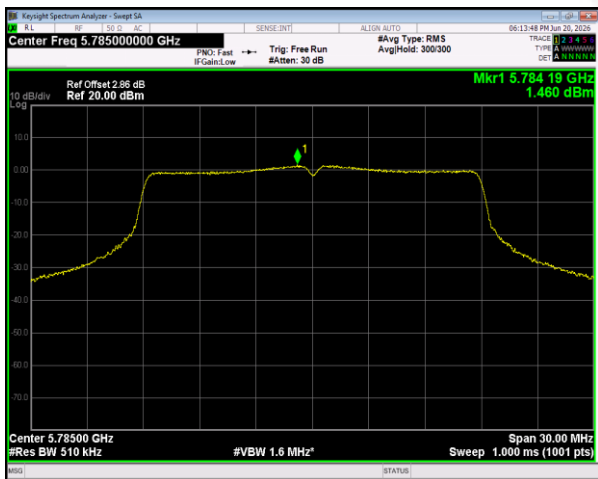
(802.11ac20) PSD plot on channel 149



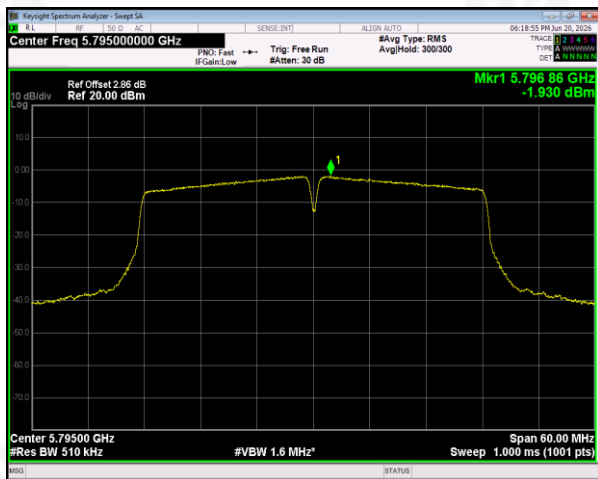
(802.11ac40) PSD plot on channel 151



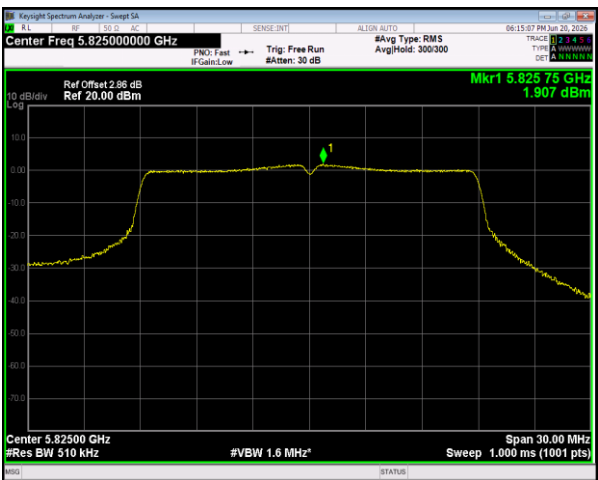
(802.11ac20) PSD plot on channel 157



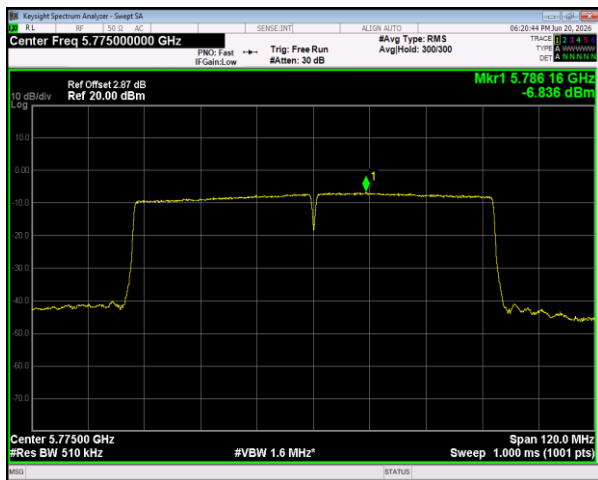
(802.11ac40) PSD plot on channel 159



(802.11ac20) PSD plot on channel 165



(802.11ac80) PSD plot on channel 155





6. 26DB EMISSION BANDWIDTH & 6DB OCCUPIED BANDWIDTH

6.1 APPLIED PROCEDURES / LIMIT

The maximum power spectral density is measured as a conducted emission by direct connection of a calibrated test instrument to the equipment under test. If the device cannot be connected directly, alternative techniques acceptable to the Commission may be used. Measurements in the 5.725-5.85 GHz band, the minimum bandwidth 6 dB bandwidth of U-NII devices shall be at least 500KHz. Measurements in the 5.15-5.25 GHz, 5.25-5.35 GHz, and the 5.47-5.725 GHz bands are made over a bandwidth of 1 MHz or the 26 dB emission bandwidth of the device, whichever is less. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full reference bandwidth.

6.2 TEST PROCEDURE

1) Emission bandwidth for the band 5.725 GHz to 5.85 GHz.

The following procedure shall be used for measuring this bandwidth:

- a) Set RBW = 100 kHz.
- b) Set the video bandwidth (VBW) $\geq 3 \times \text{RBW}$.
- c) Detector = Peak.
- d) Trace mode = max-hold.
- e) Sweep = No faster than coupled (auto) time.
- f) Allow the trace to stabilize.
- g) Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

2) Emission bandwidth for all other bands 5.15 GHz to 5.35 GHz.

The procedure for this method is as follows:

- a) Set RBW = shall be in the range of 1% to 5% of the emission bandwidth.
- b) Set the VBW $\geq \text{RBW}$.
- c) Detector = peak.
- d) Trace mode = max-hold.
- e) 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 instrument. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is in the range of 1% to 5%.

Note: The automatic bandwidth measurement capability of a spectrum analyzer or an EMI receiver may be employed if it implements the functionality described in the preceding items.

6.3 EUT OPERATION CONDITIONS

The EUT tested system was configured as the statements of 6.2 Unless otherwise a special operating condition is specified in the follows during the testing.



6.4 TEST RESULTS

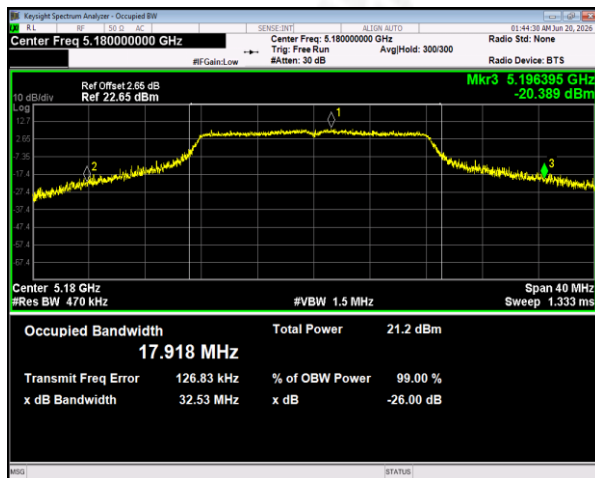
Temperature :	26 °C	Relative Humidity :	54%
Pressure :	101kPa	Test Voltage :	AC 120V/60Hz
Test Band :	5.2G		

5.2G					
Test mode	Test Channel (MHz)	26dB Emission Bandwidth (MHz)		Limit(KHz)	Result
		ANT A	ANT B		
802.11a	5180	32.53	28.64	N/A	Pass
	5200	34.02	29.86		
	5240	23.33	29.63		
802.11n20	5180	33.81	29.62	N/A	Pass
	5200	38.63	29.99		
	5240	24.08	27.93		
802.11n40	5190	56.05	48.84	N/A	Pass
	5230	41.22	40.69		
802.11ac20	5180	35.68	32.77	N/A	Pass
	5200	38.23	38.2		
	5240	23.58	31.76		
802.11ac40	5190	53.5	52.81	N/A	Pass
	5230	41.36	41.25		
802.11ac80	5210	107.1	105.1	N/A	Pass

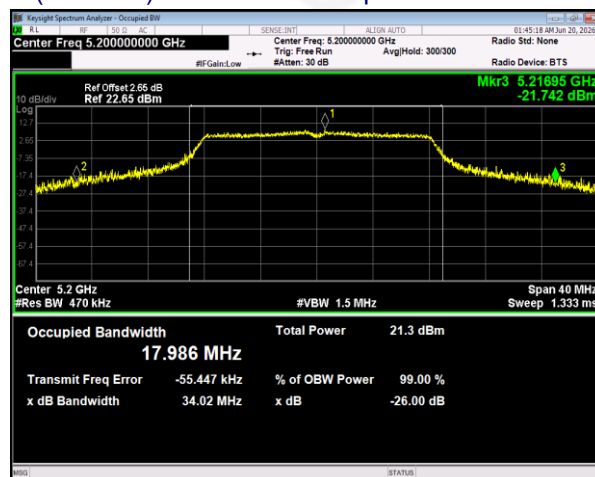


5.2G Test plot

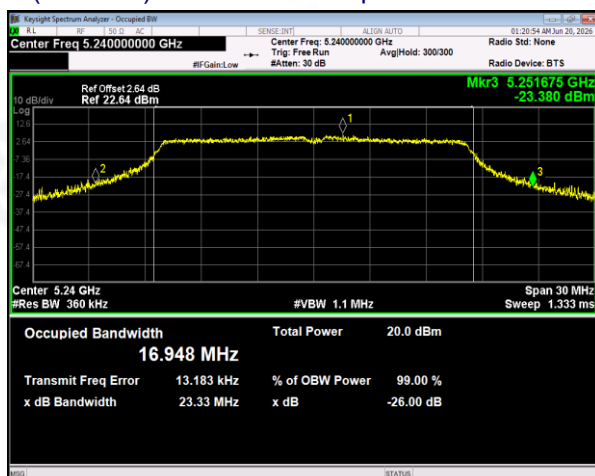
(802.11 a) 26dB Bandwidth plot on channel 36



(802.11 a) 26dB Bandwidth plot on channel 48



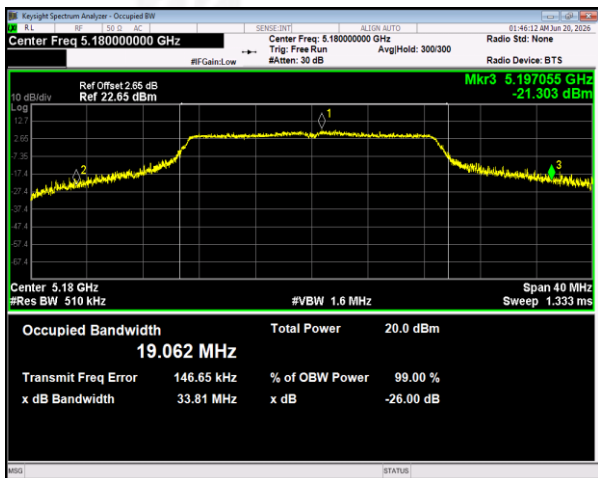
(802.11 a) 26dB Bandwidth plot on channel 48



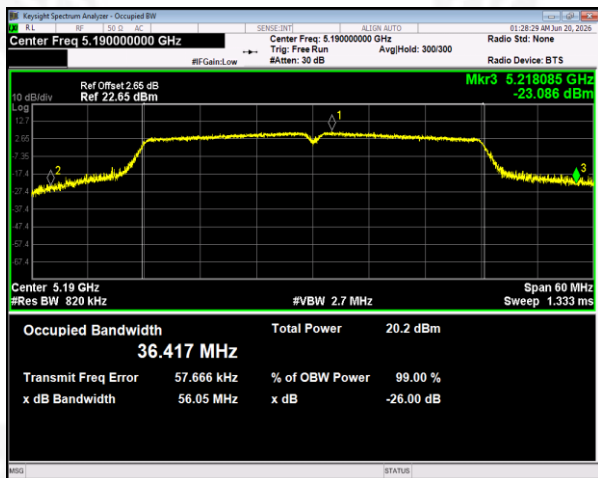


5.2G Test plot

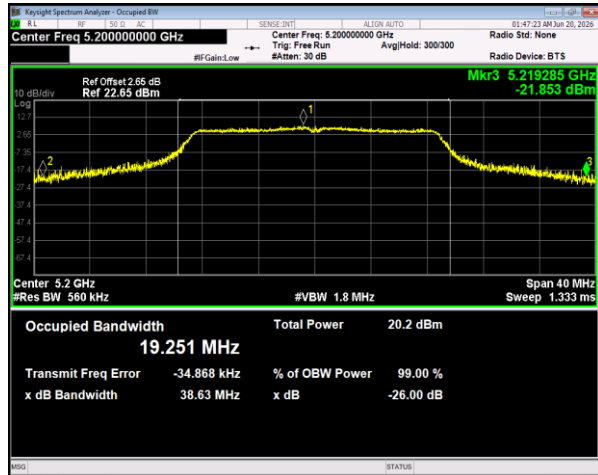
(802.11 n20) 26dB Bandwidth plot on channel 36



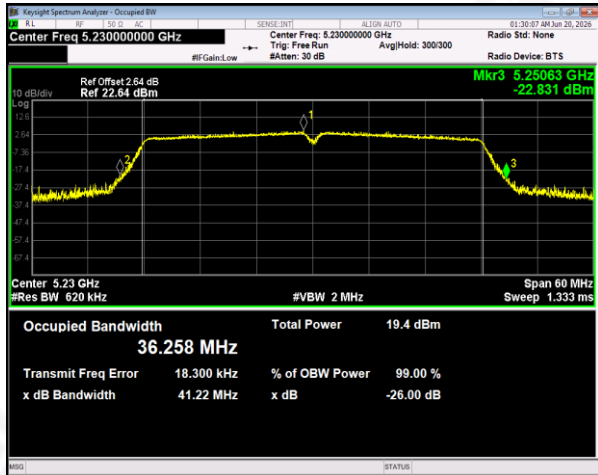
(802.11 n40) 26dB Bandwidth plot on channel 38



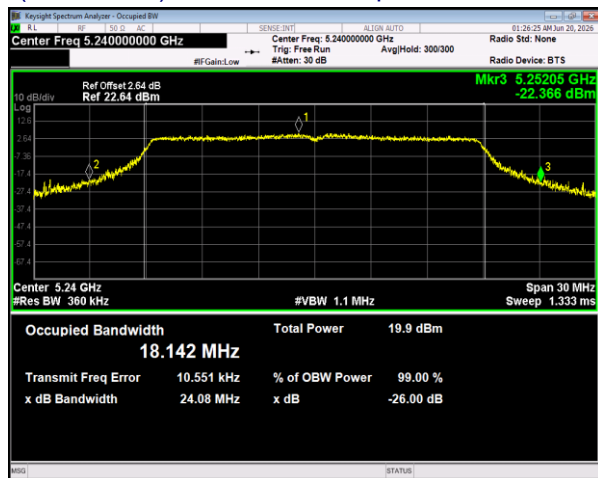
(802.11 n20) 26dB Bandwidth plot on channel 40



(802.11 n40) 26dB Bandwidth plot on channel 46



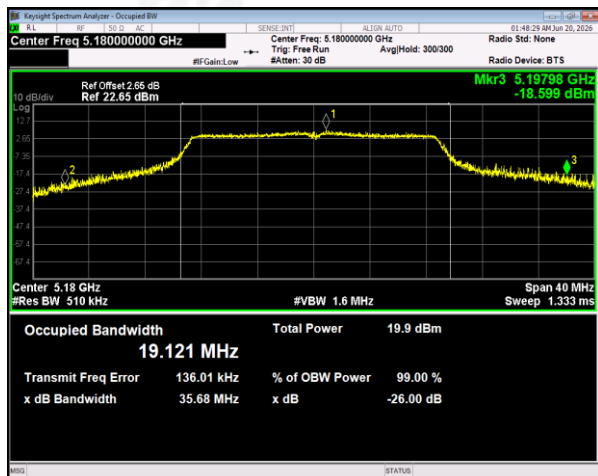
(802.11 n20) 26dB Bandwidth plot on channel 48



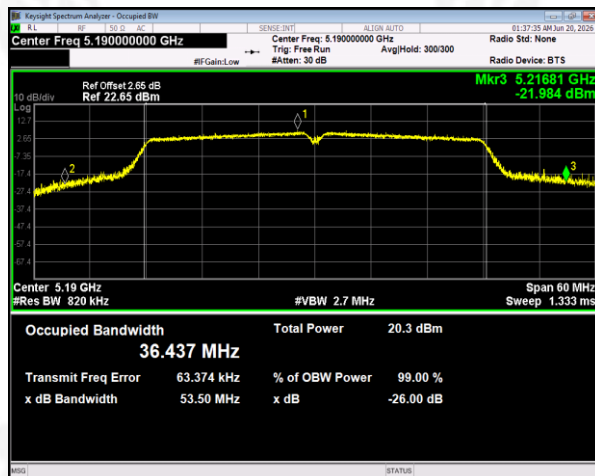


5.2G Test plot

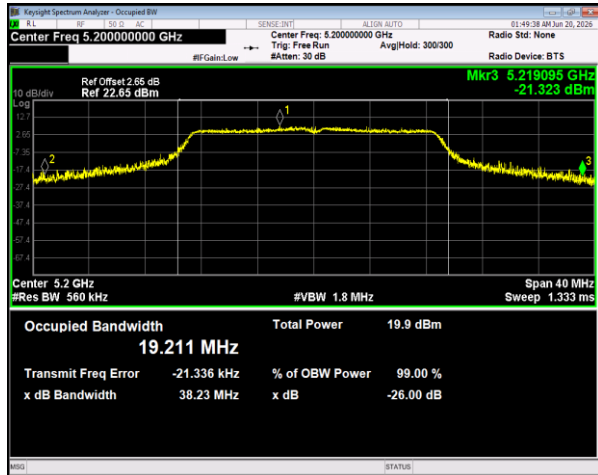
(802.11 ac20) 26dB Bandwidth plot on channel 36



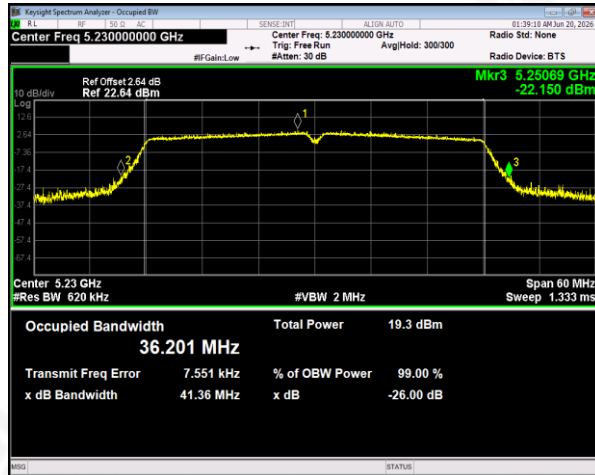
(802.11 ac40) 26dB Bandwidth plot on channel 38



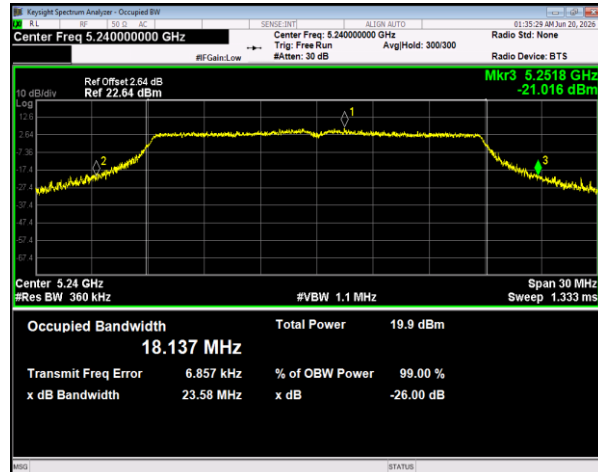
(802.11 ac20) 26dB Bandwidth plot on channel 40



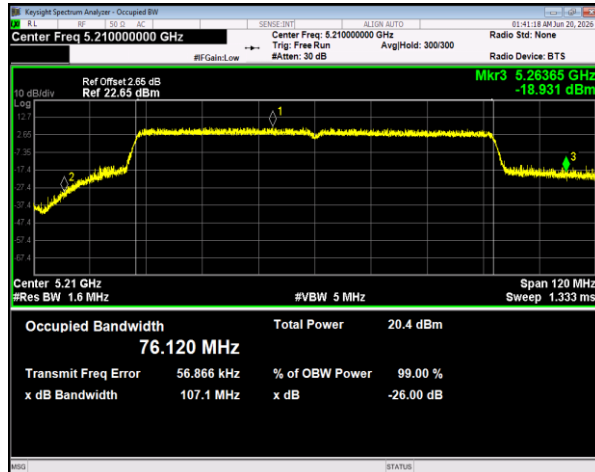
(802.11 ac40) 26dB Bandwidth plot on channel 46



(802.11 ac20) 26dB Bandwidth plot on channel 48



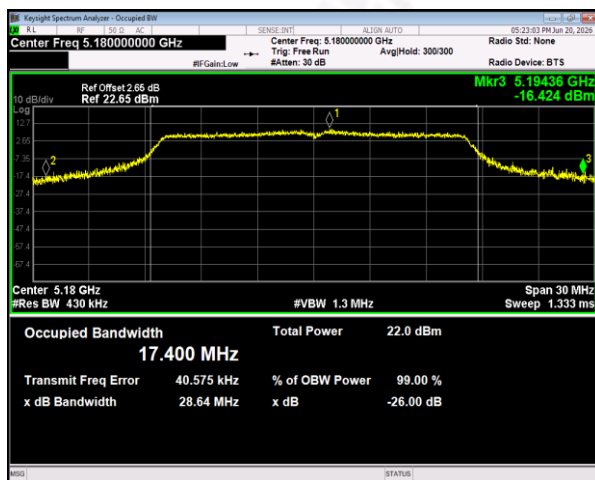
(802.11 ac80) 26dB Bandwidth plot on channel 42



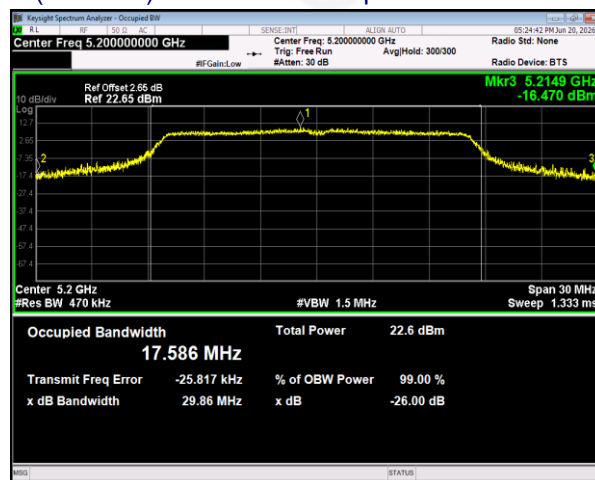


5.2G Test plot

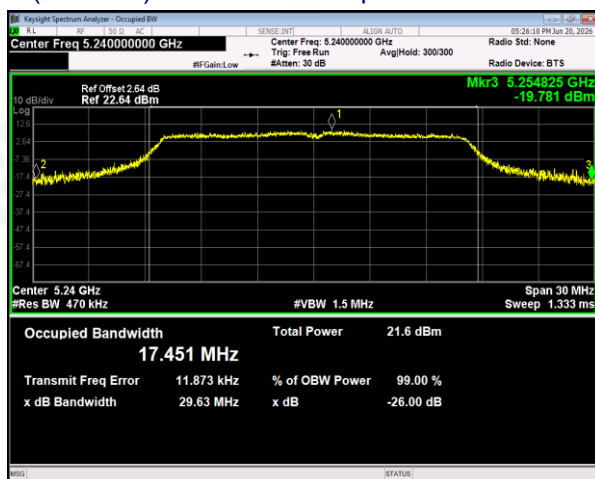
(802.11 a) 26dB Bandwidth plot on channel 36



(802.11 a) 26dB Bandwidth plot on channel 48



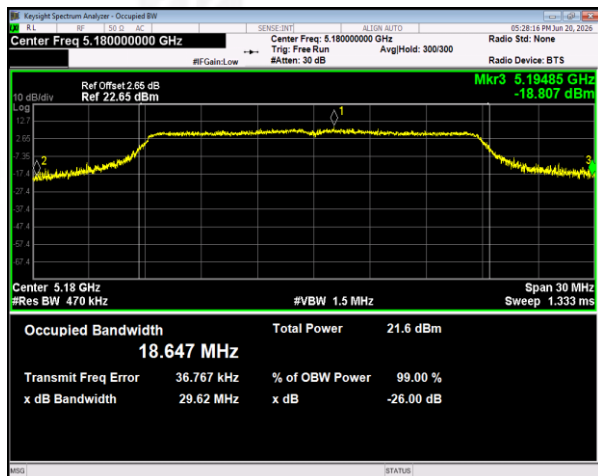
(802.11 a) 26dB Bandwidth plot on channel 48



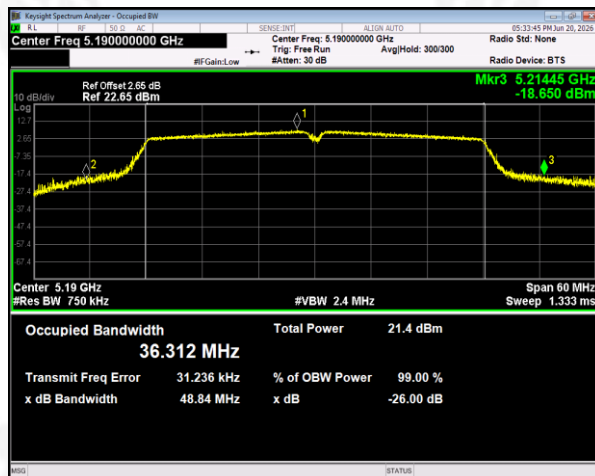


5.2G Test plot

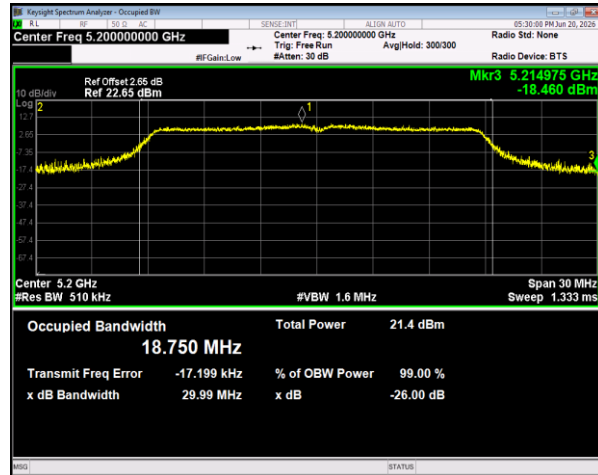
(802.11 n20) 26dB Bandwidth plot on channel 36



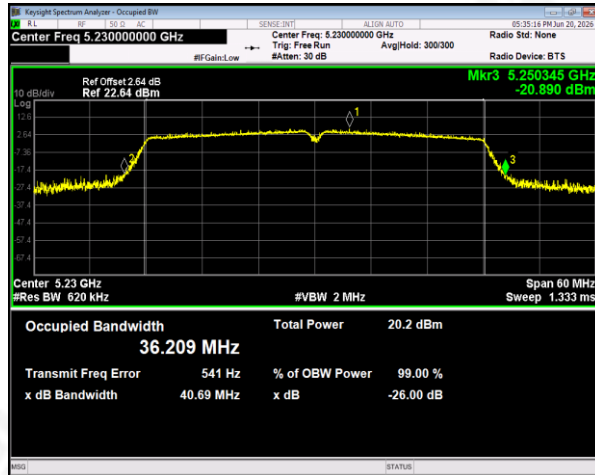
(802.11 n40) 26dB Bandwidth plot on channel 38



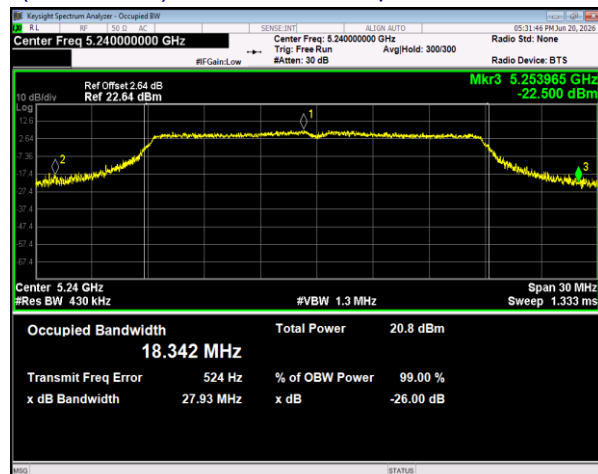
(802.11 n20) 26dB Bandwidth plot on channel 40



(802.11 n40) 26dB Bandwidth plot on channel 46



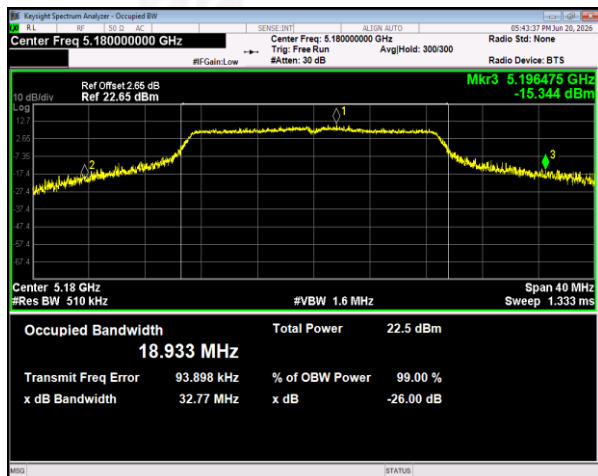
(802.11 n20) 26dB Bandwidth plot on channel 48



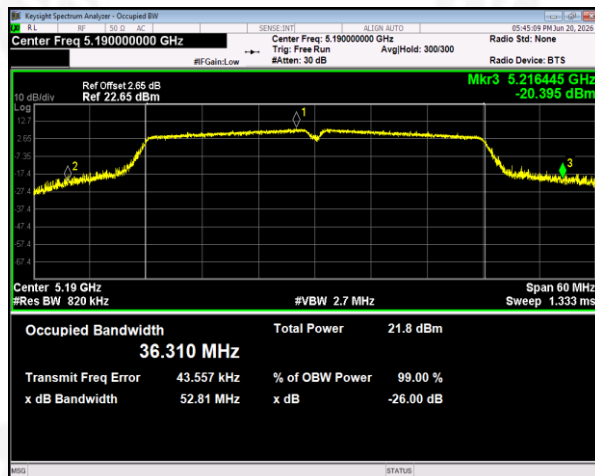


5.2G Test plot

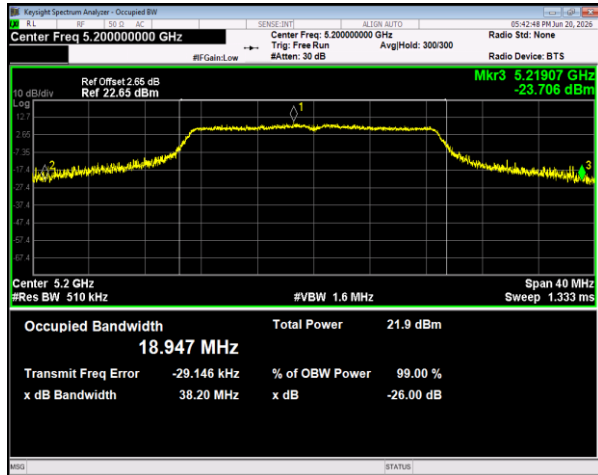
(802.11 ac20) 26dB Bandwidth plot on channel 36



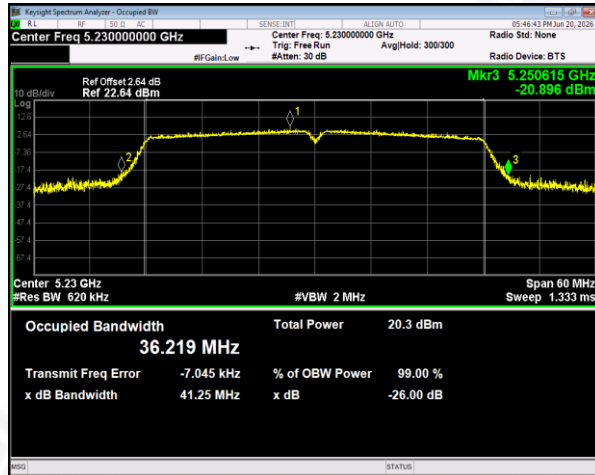
(802.11 ac40) 26dB Bandwidth plot on channel 38



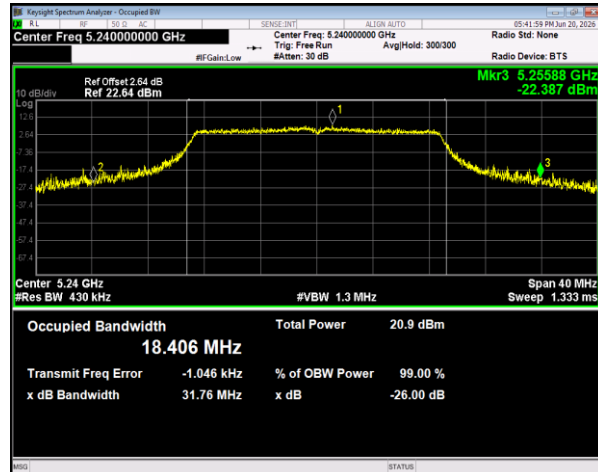
(802.11 ac20) 26dB Bandwidth plot on channel 40



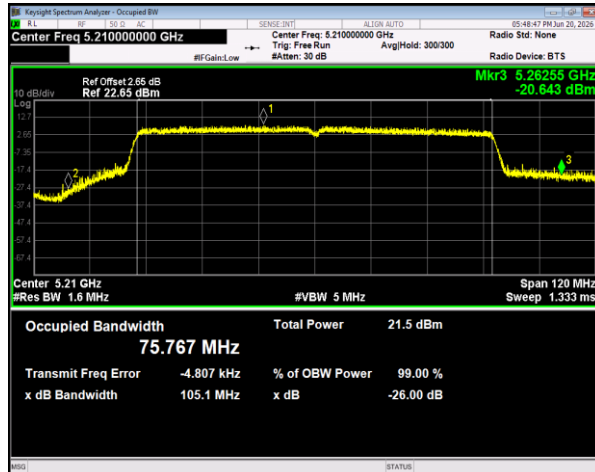
(802.11 ac40) 26dB Bandwidth plot on channel 46



(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		

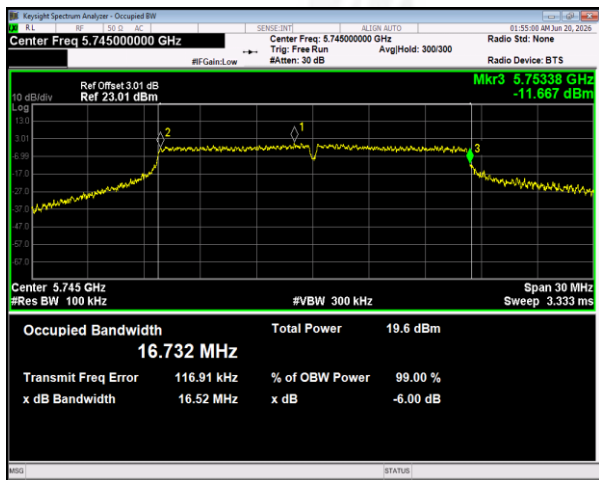
5.8G					
Test mode	Test Channel (MHz)	6dB Emission Bandwidth (MHz)		Limit(KHz)	Result
		ANT A	ANT B		
802.11a	5745	16.52	16.5	>500	Pass
	5785	16.44	16.43		
	5825	16.5	16.45		
802.11n20	5745	17.77	17.81	>500	Pass
	5785	17.75	17.72		
	5825	17.72	17.76		
802.11n40	5755	36.35	36.34	>500	Pass
	5795	36.33	36.07		
802.11ac20	5745	17.75	17.79	>500	Pass
	5785	17.72	17.75		
	5825	17.74	17.73		
802.11ac40	5755	36.38	36.35	>500	Pass
	5795	36.34	36.09		
802.11ac80	5775	76.54	76.41	>500	Pass

Antenna A

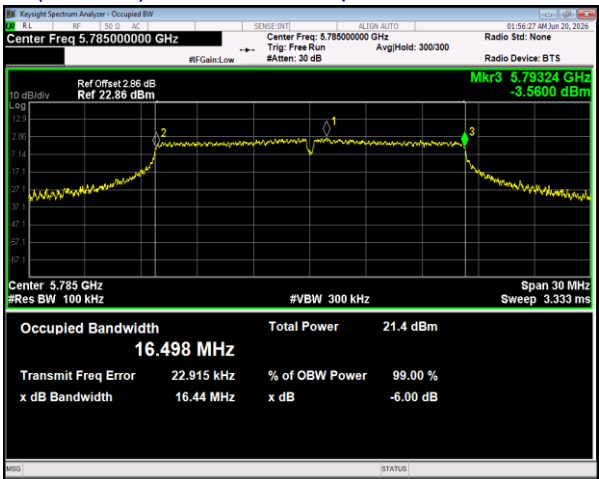


5.8G Test plot

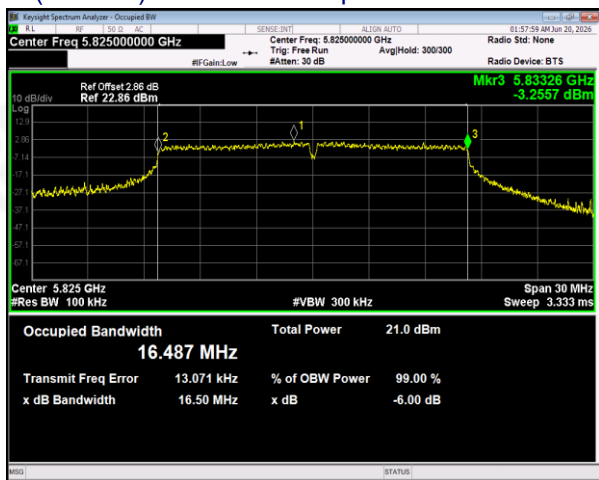
(802.11a) 6dB Bandwidth plot on channel 149



(802.11a) 6dB Bandwidth plot on channel 157



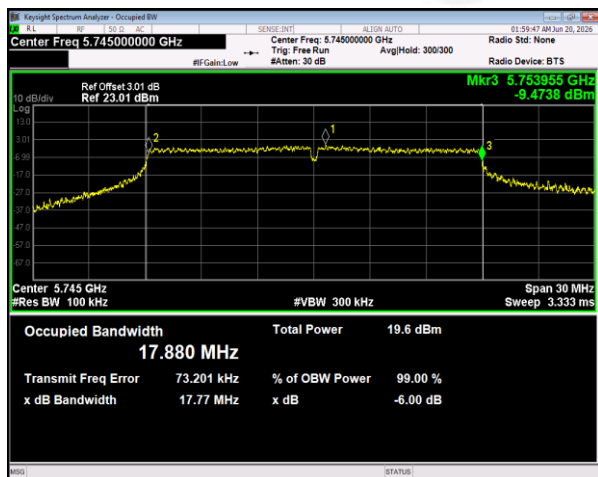
(802.11a) 6dB Bandwidth plot on channel 165



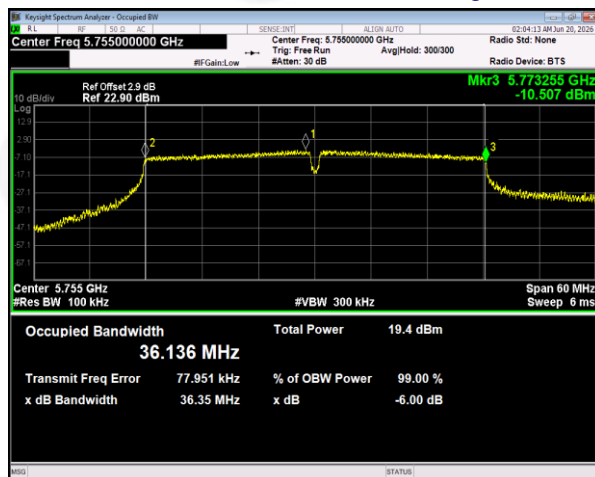
5.8G Test plot

(802.11n20) 6dB Bandwidth plot on channel 149

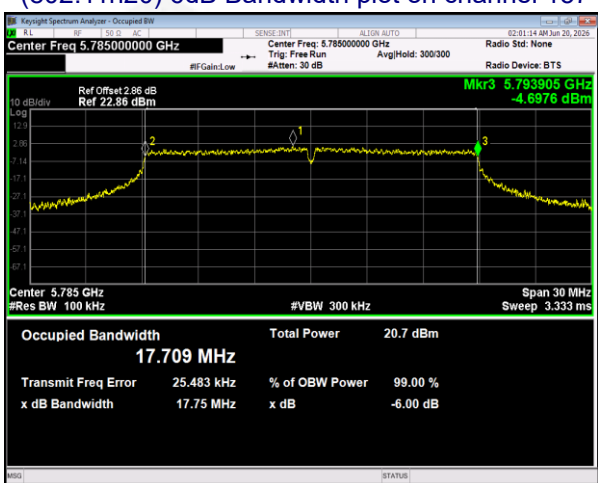
(802.11n40) 6dB Bandwidth plot on channel 151



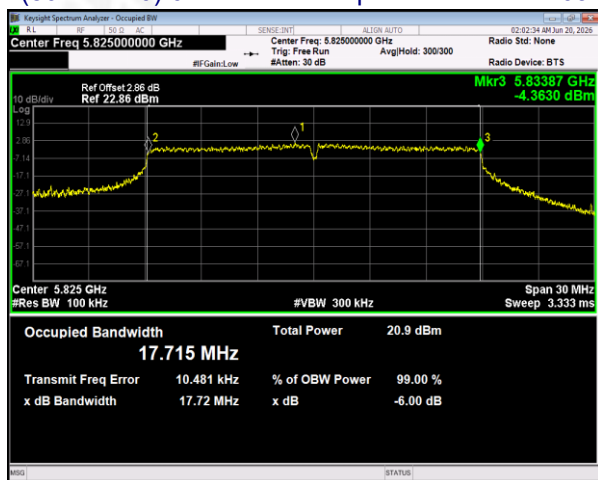
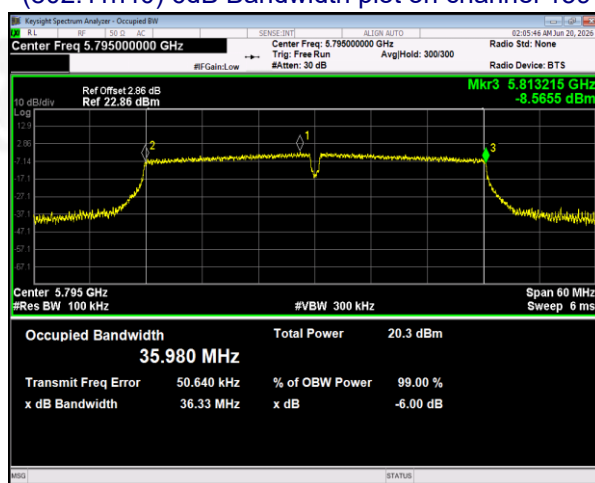
(802.11n20) 6dB Bandwidth plot on channel 157



(802.11n40) 6dB Bandwidth plot on channel 159



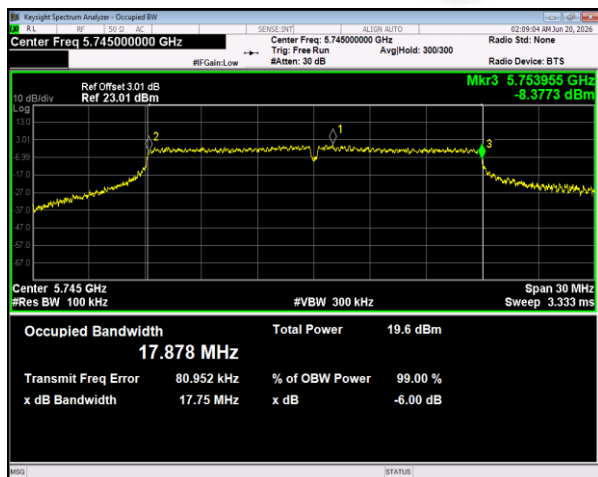
(802.11n20) 6dB Bandwidth plot on channel 165



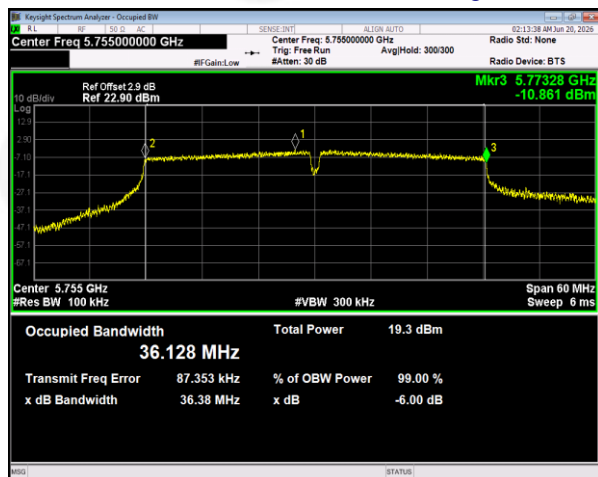
5.8G Test plot

(802.11ac20) 6dB Bandwidth plot on channel 149

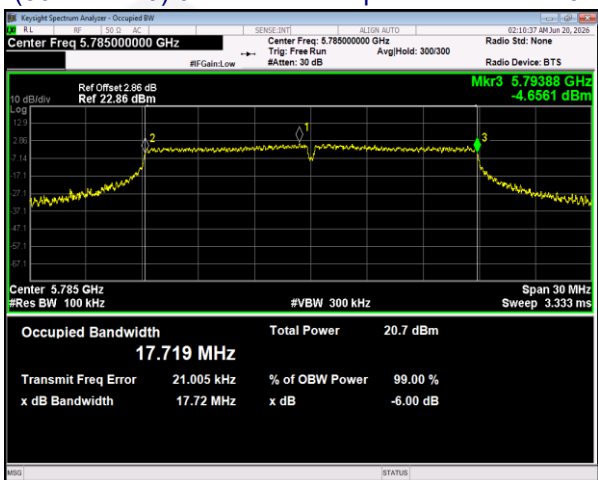
(802.11ac40) PSD plot on channel 151



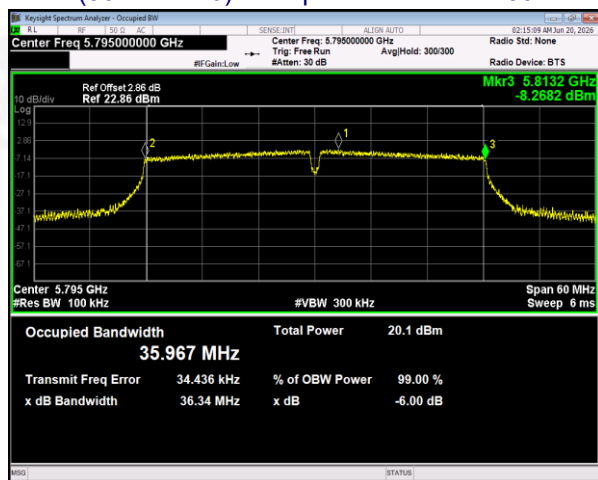
(802.11ac20) 6dB Bandwidth plot on channel 157



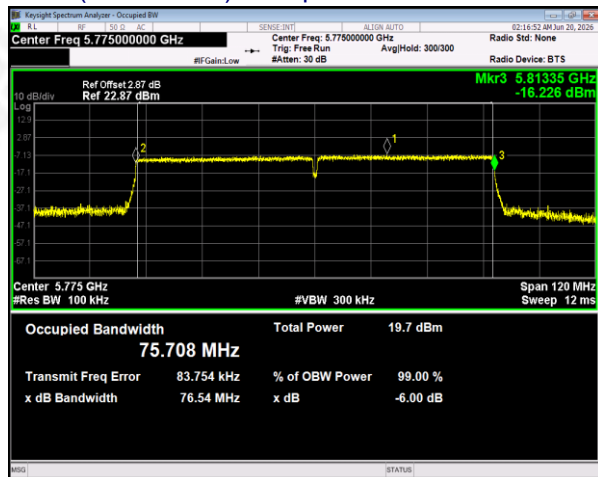
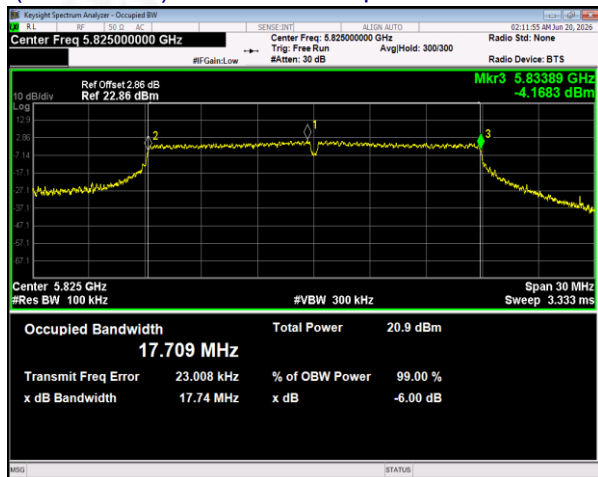
(802.11ac40) PSD plot on channel 159



(802.11ac20) 6dB Bandwidth plot on channel 165



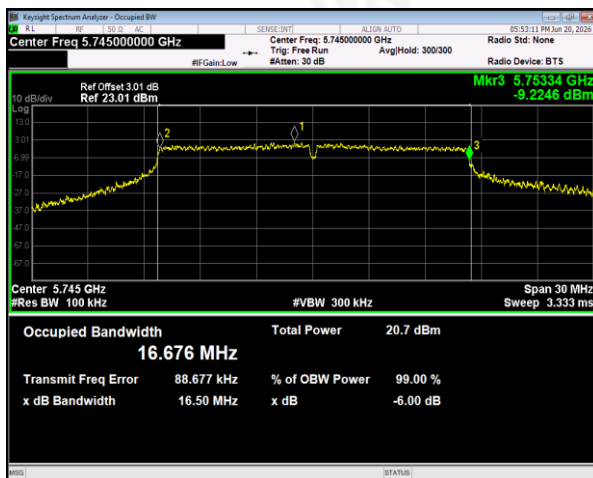
(802.11ac80) PSD plot on channel 155



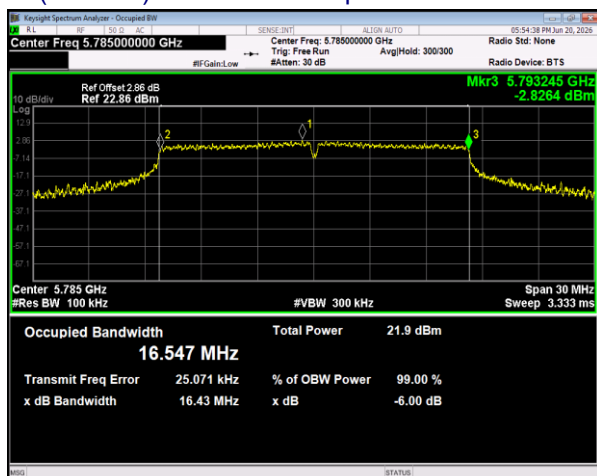


5.8G Test plot

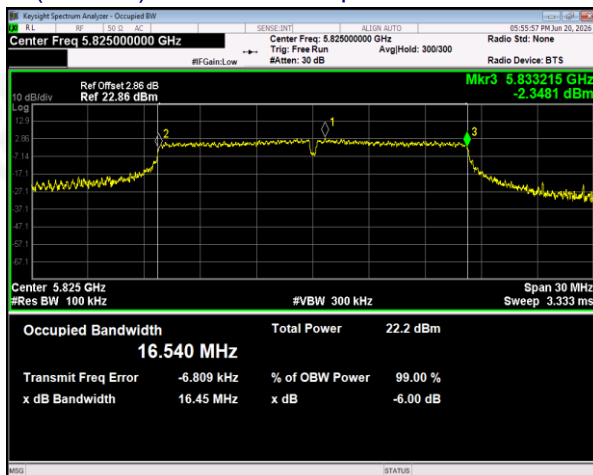
(802.11a) 6dB Bandwidth plot on channel 149



(802.11a) 6dB Bandwidth plot on channel 157



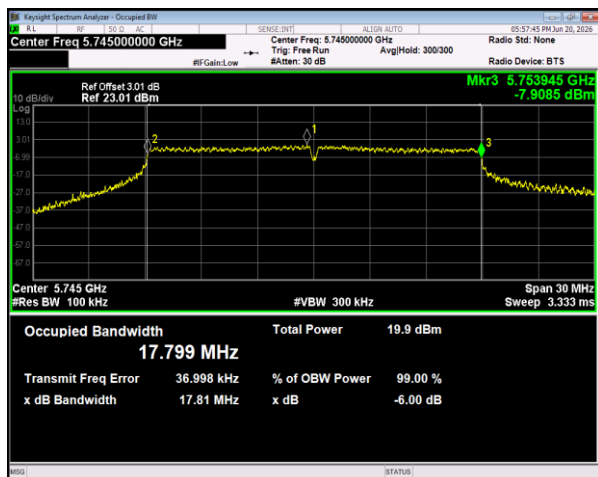
(802.11a) 6dB Bandwidth plot on channel 165



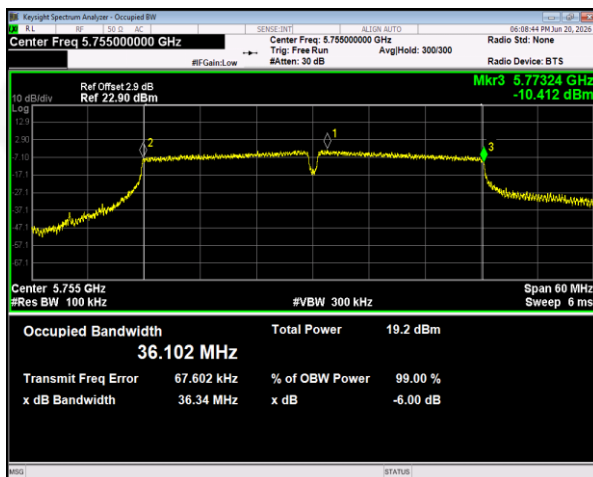
5.8G Test plot



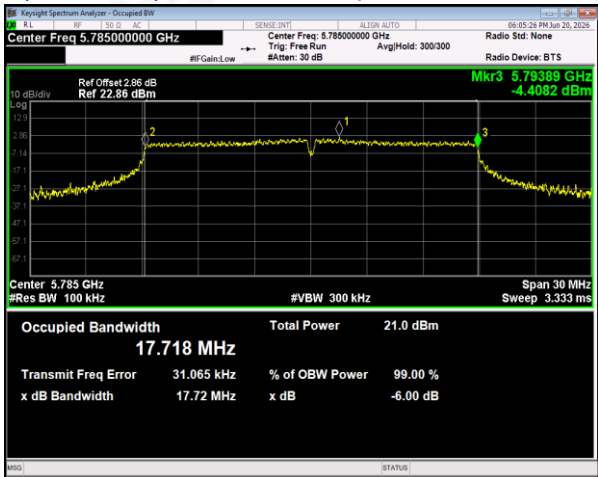
(802.11n20) 6dB Bandwidth plot on channel 149



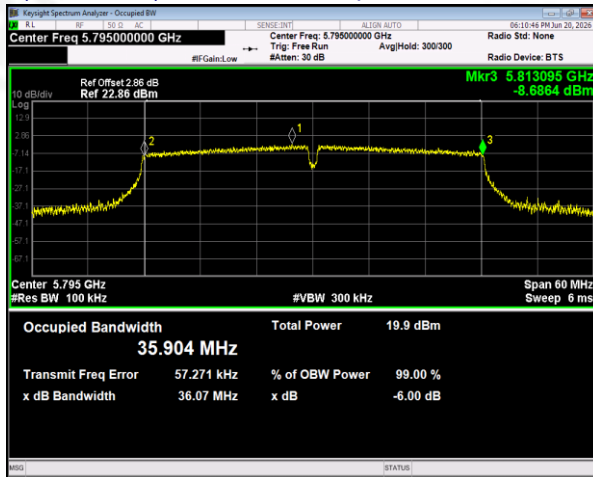
(802.11n40) 6dB Bandwidth plot on channel 151



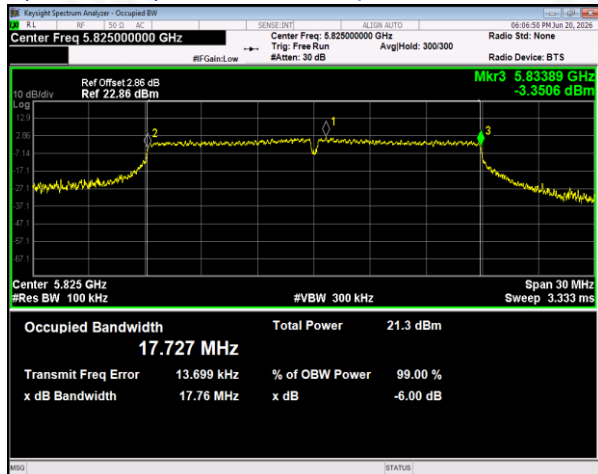
(802.11n20) 6dB Bandwidth plot on channel 157



(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) 6dB Bandwidth plot on channel 151