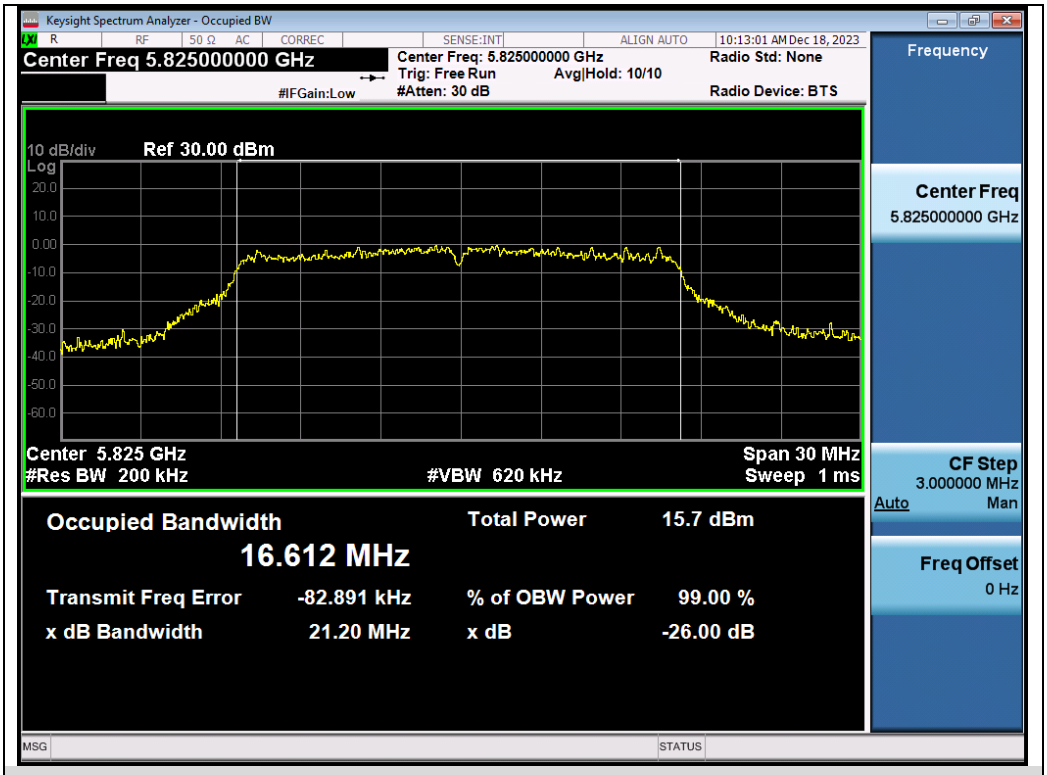
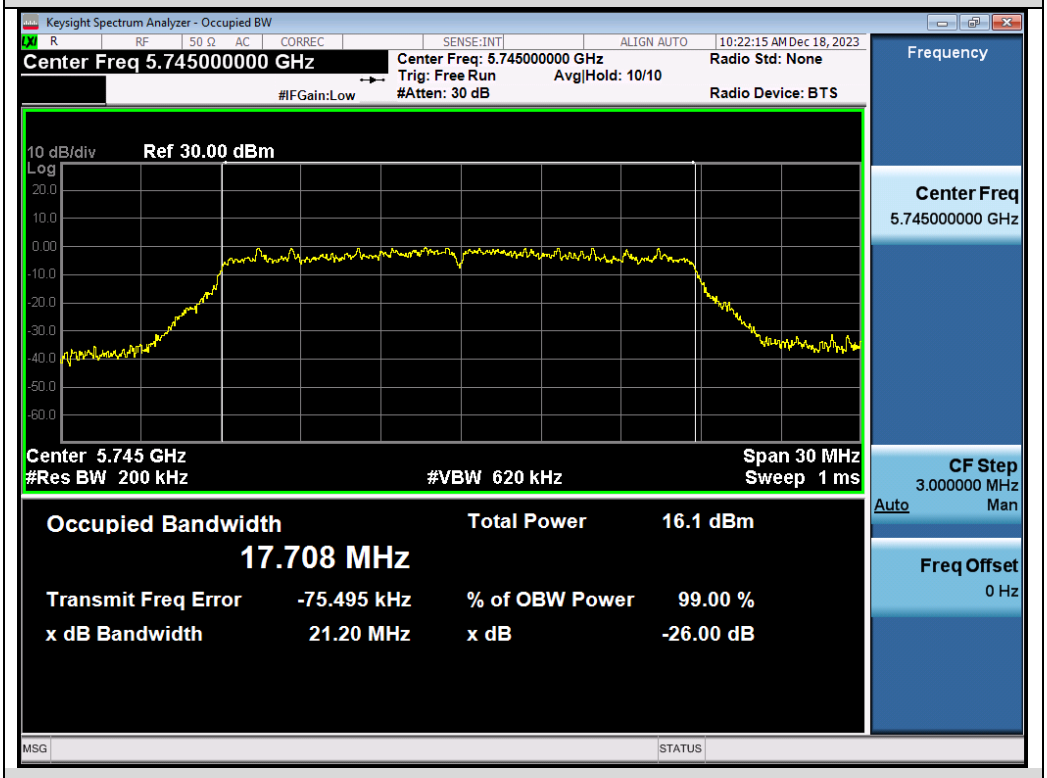
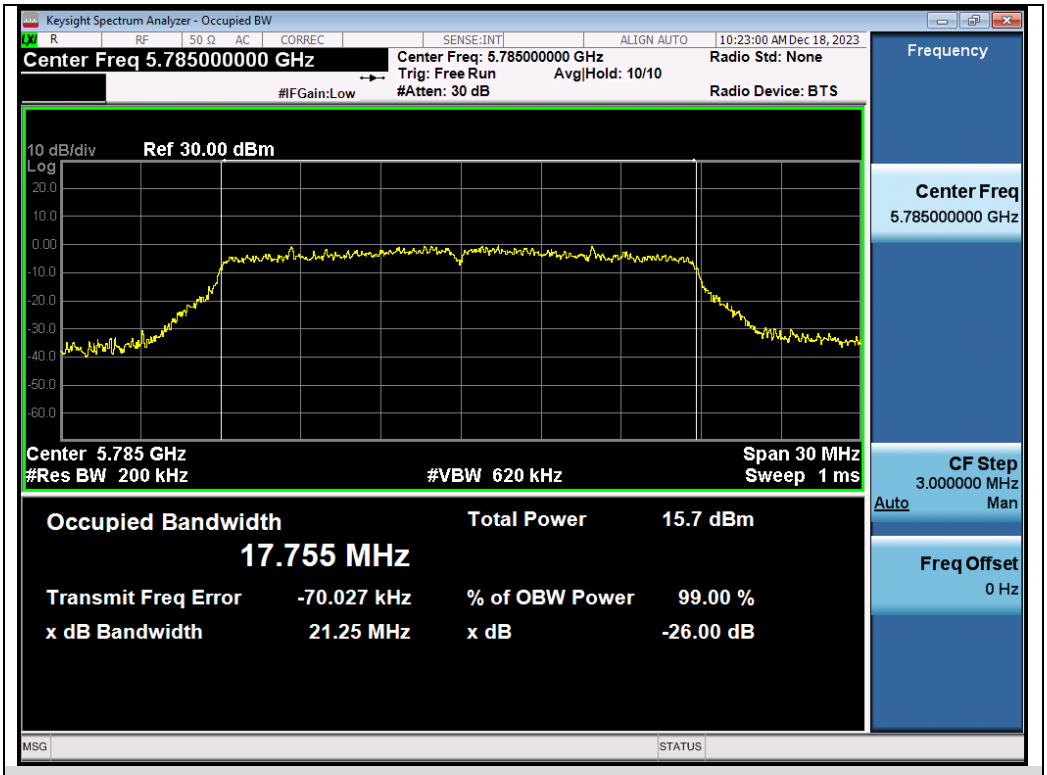


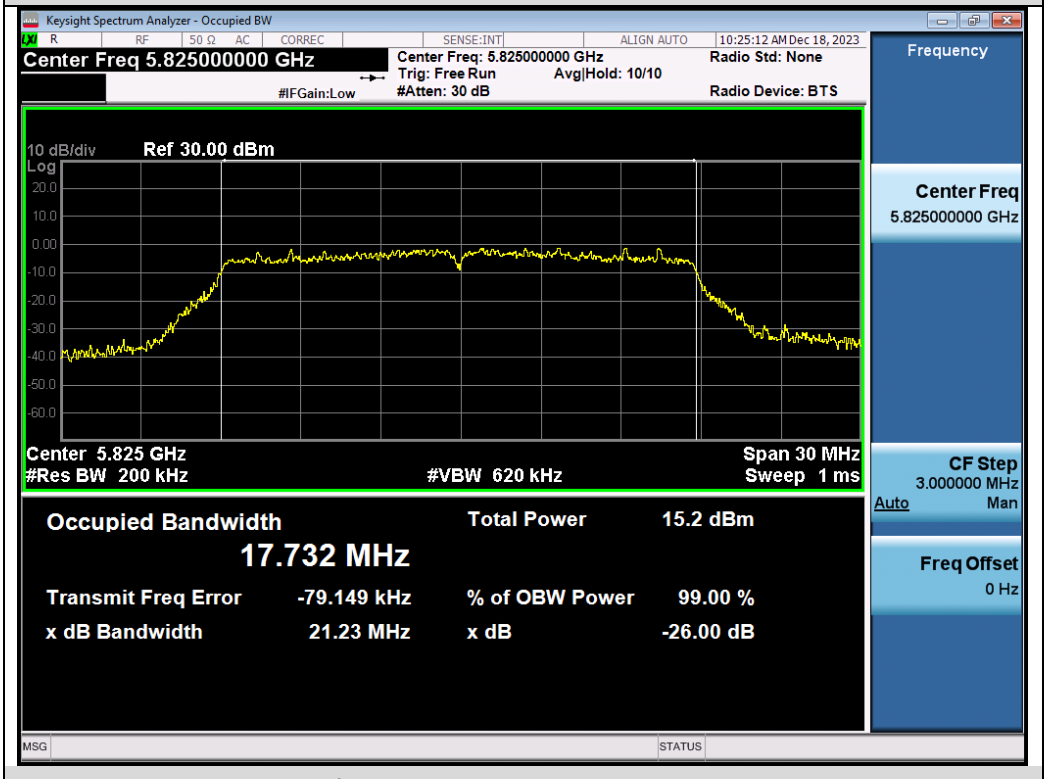
Test_Graph_802.11a_ANT1_5825_6Mbps_OBW



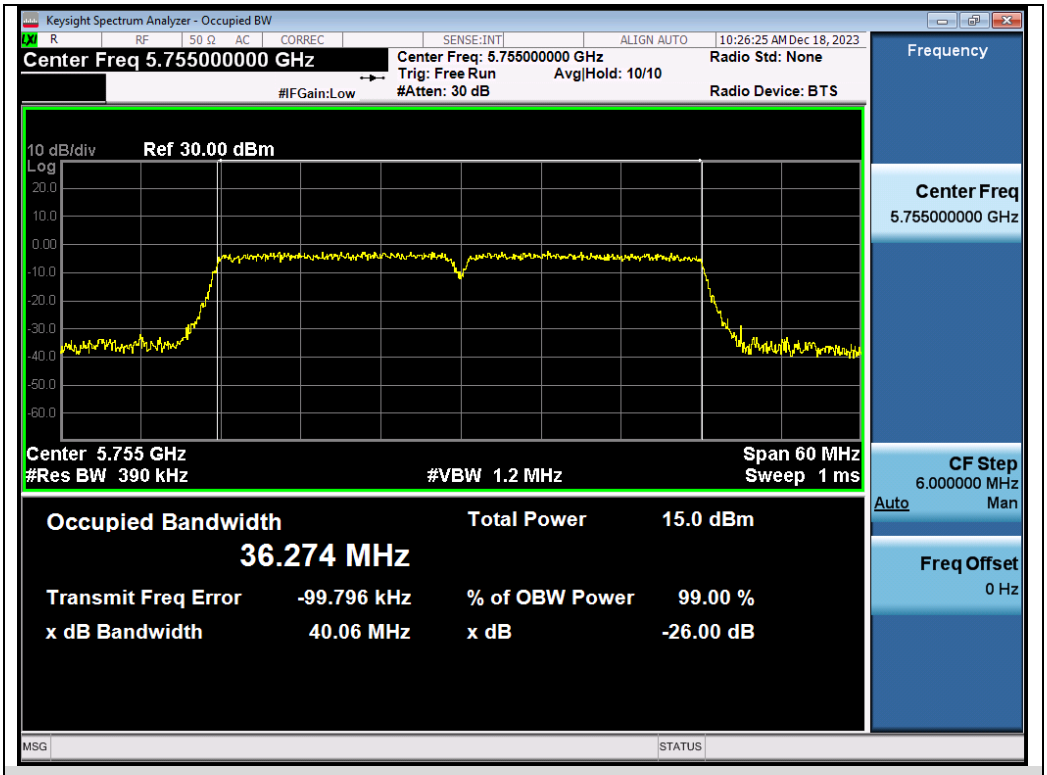
Test_Graph_802.11n20_ANT1_5745_MCS0_OBW



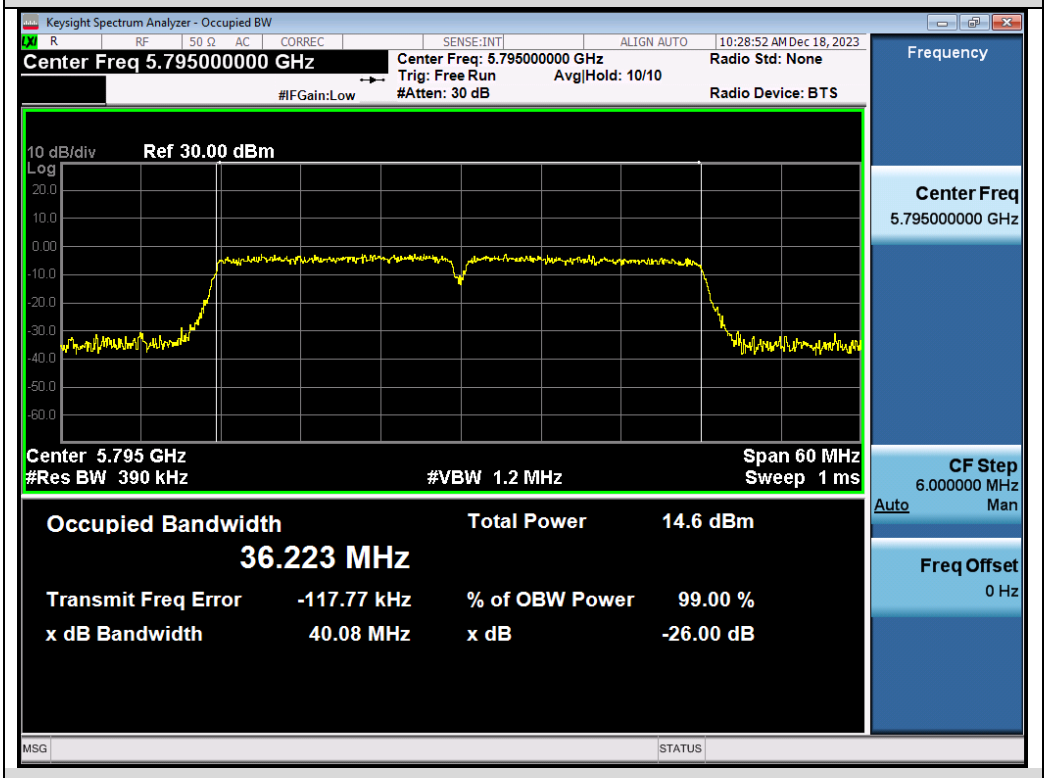
Test_Graph_802.11n20_ANT1_5785_MCS0_OBW



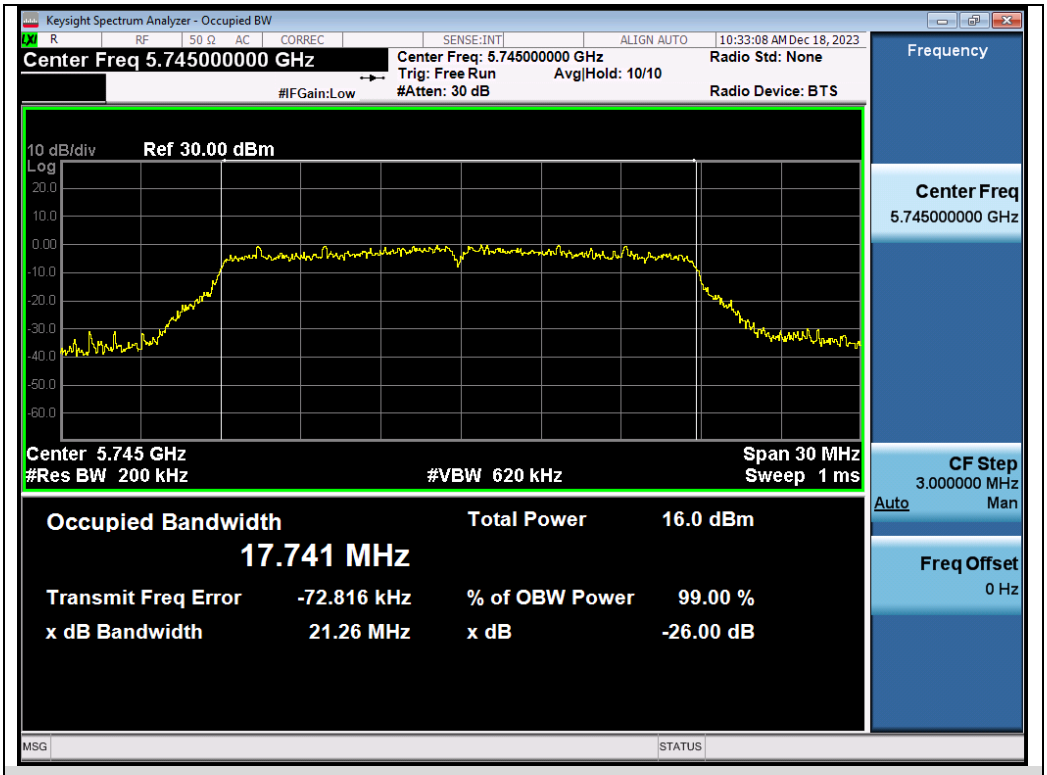
Test_Graph_802.11n20_ANT1_5825_MCS0_OBW



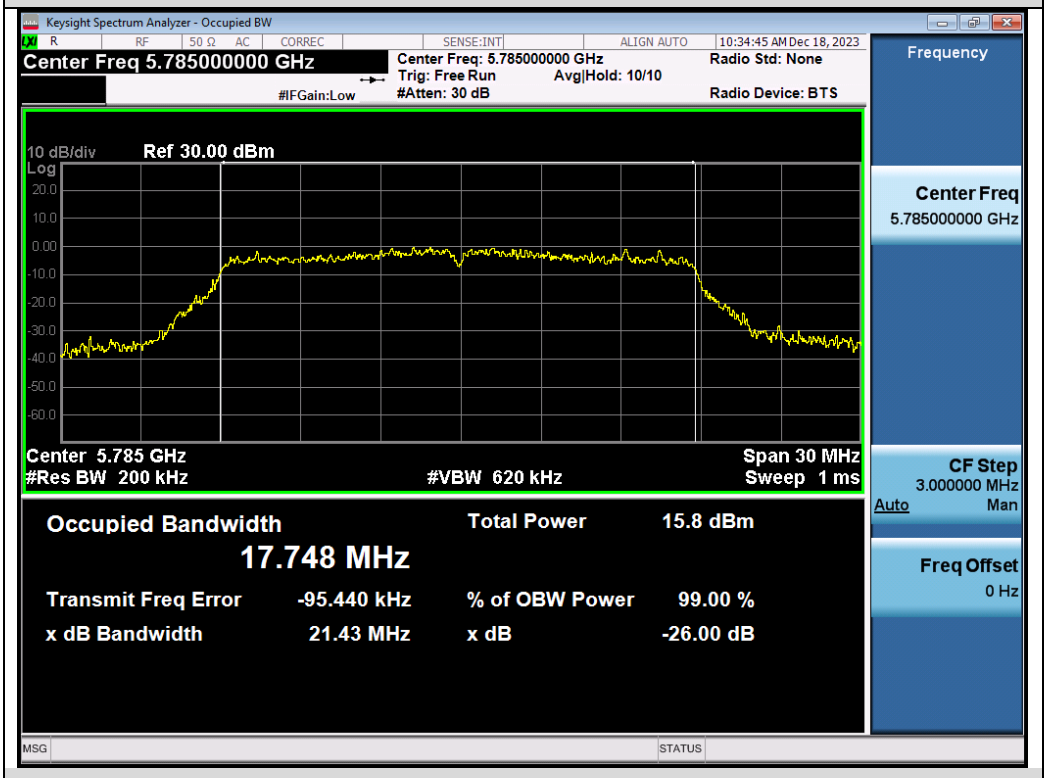
Test_Graph_802.11n40_ANT1_5755_MCS0_OBW



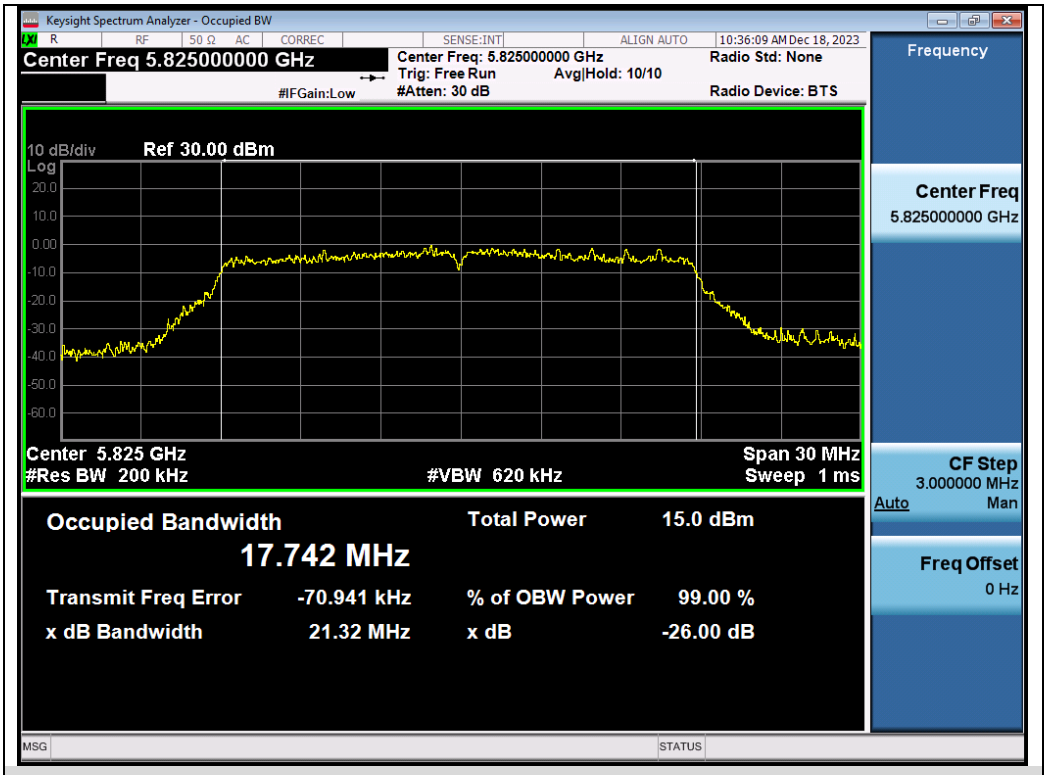
Test_Graph_802.11n40_ANT1_5795_MCS0_OBW



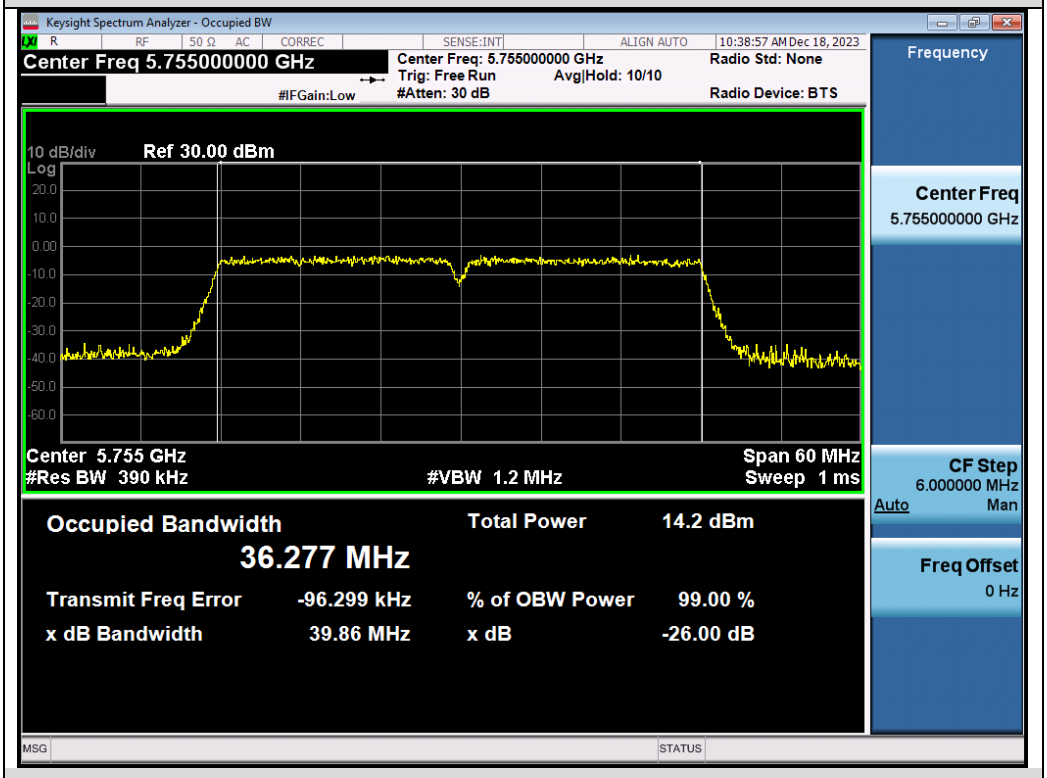
Test_Graph_802.11ac20_ANT1_5745_MCS0_OBW



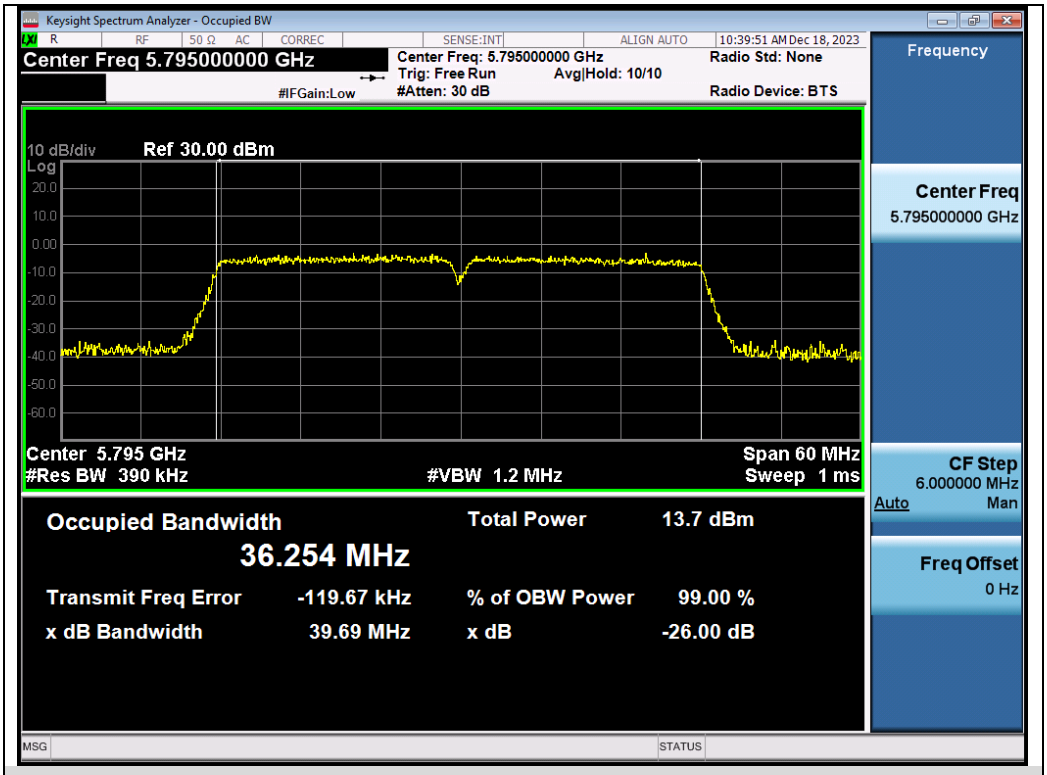
Test_Graph_802.11ac20_ANT1_5785_MCS0_OBW



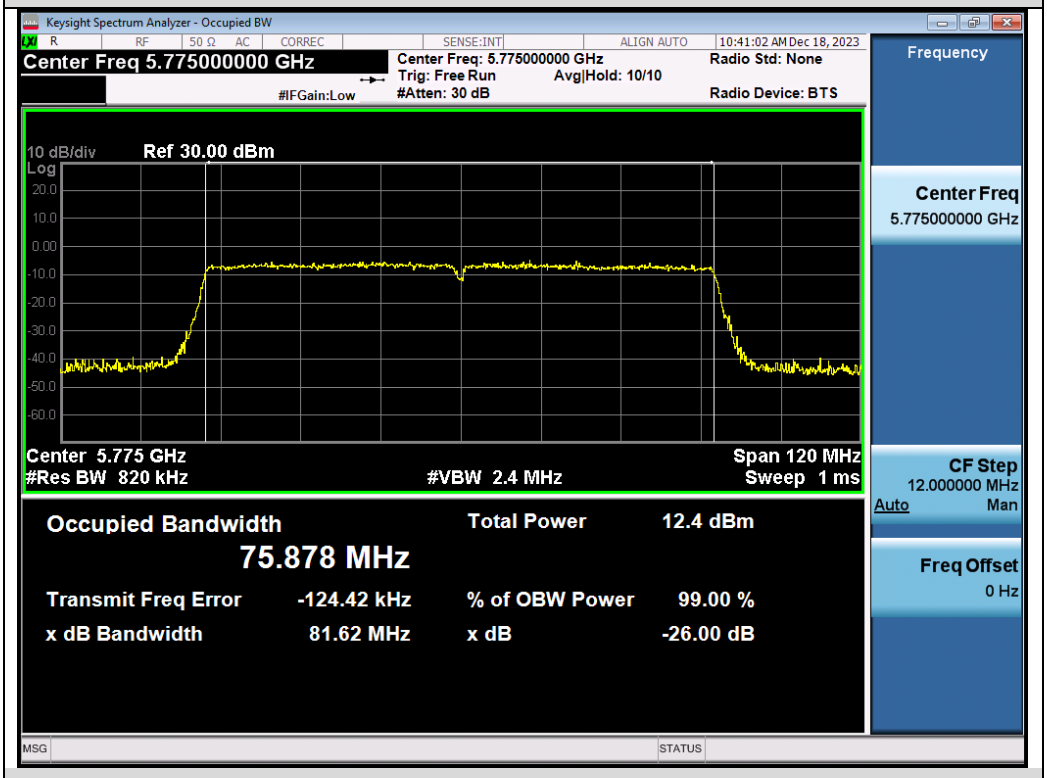
Test_Graph_802.11ac20_ANT1_5825_MCS9_OBW



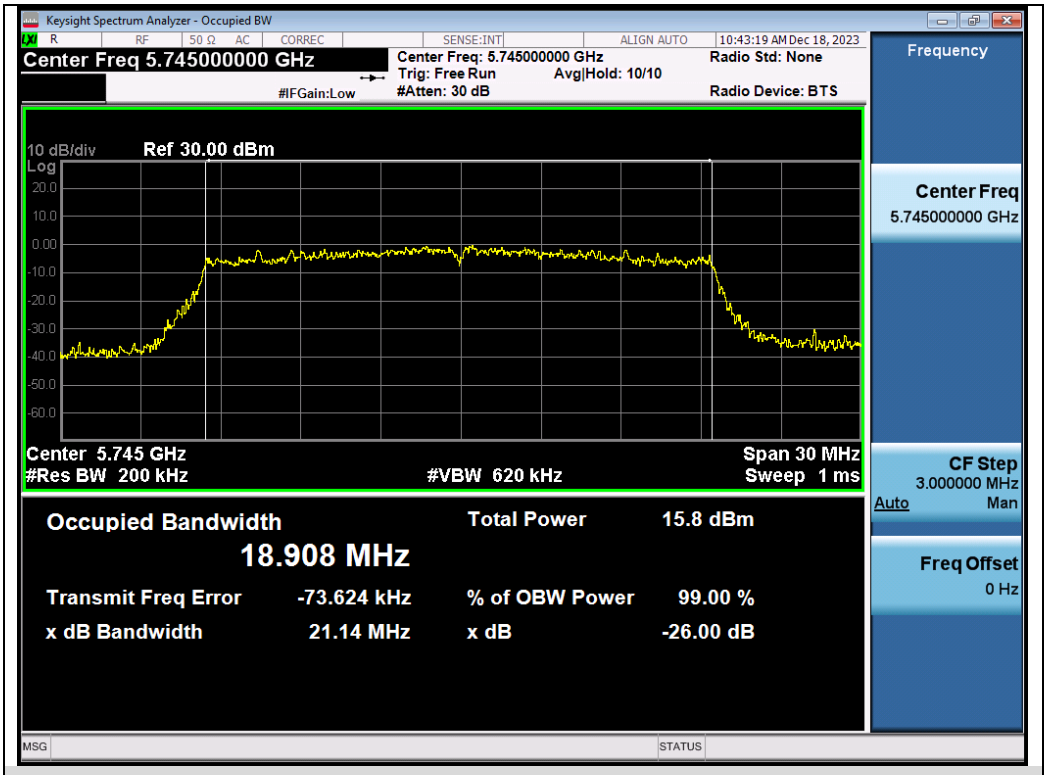
Test_Graph_802.11ac40_ANT1_5755_MCS9_OBW



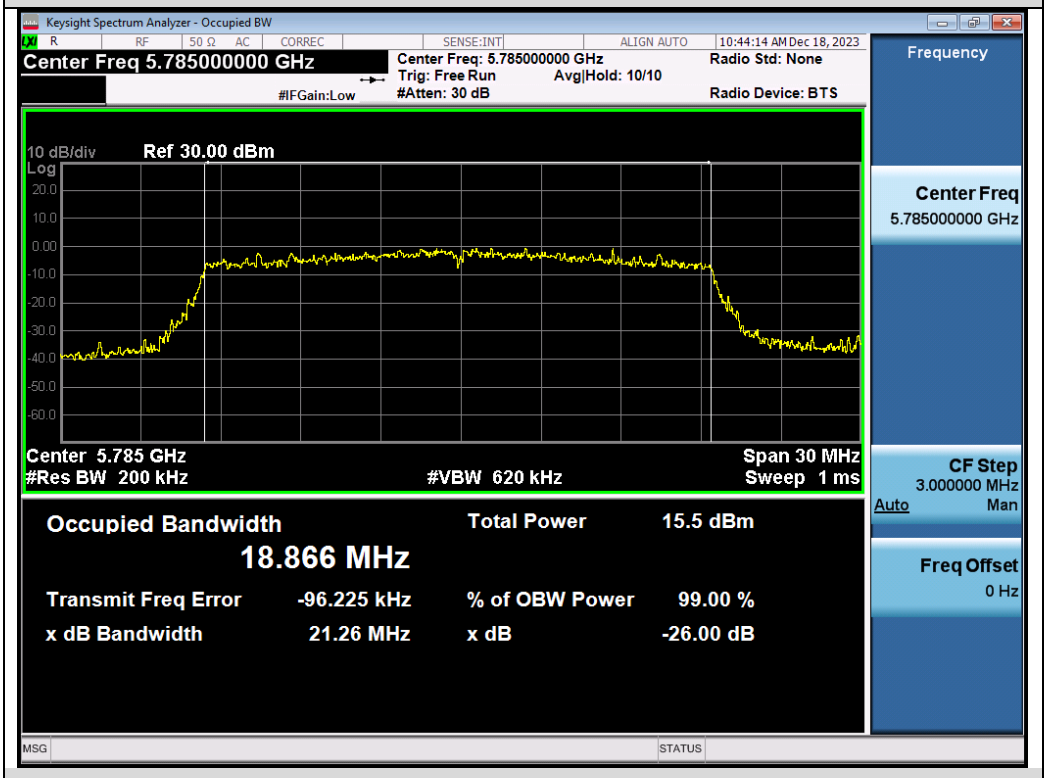
Test_Graph_802.11ac40_ANT1_5795_MCS9_OBW



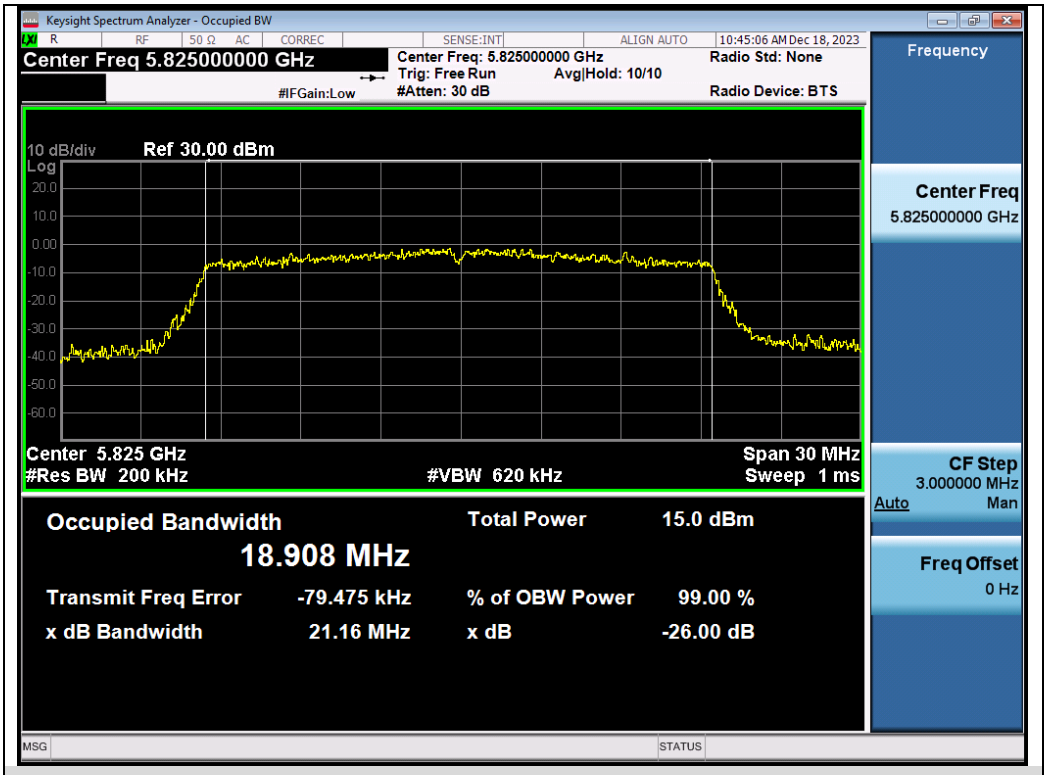
Test_Graph_802.11ac80_ANT1_5775_MCS9_OBW



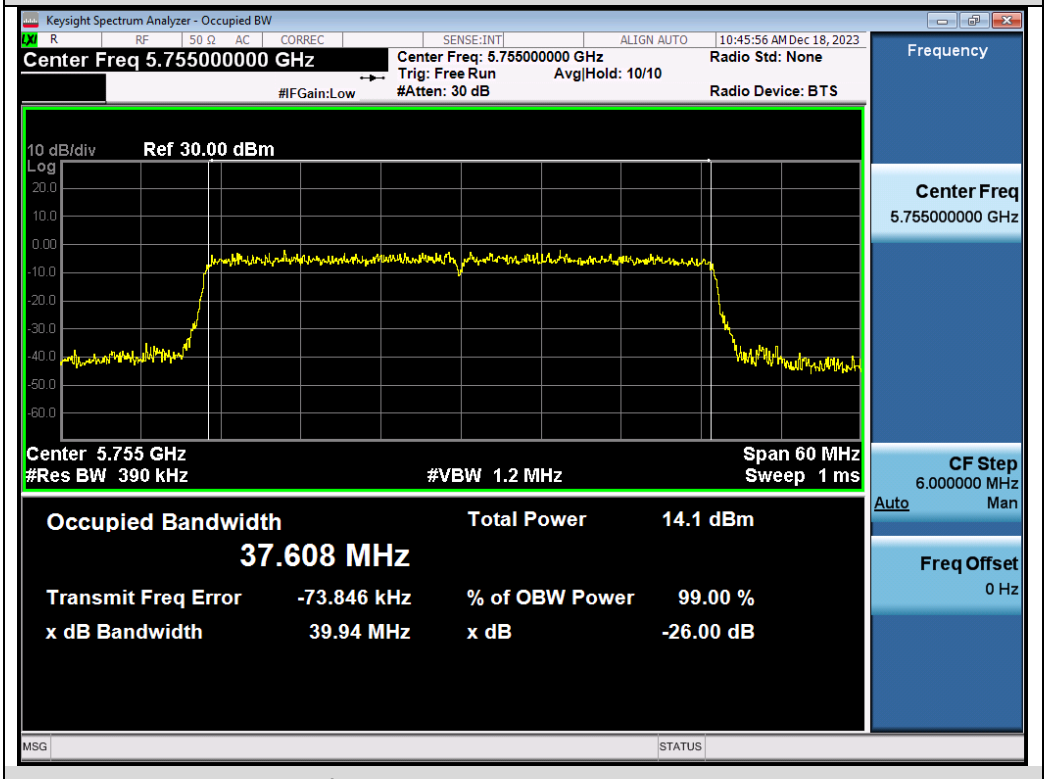
Test_Graph_802.11ax20_ANT1_5745_MCS0_OBW



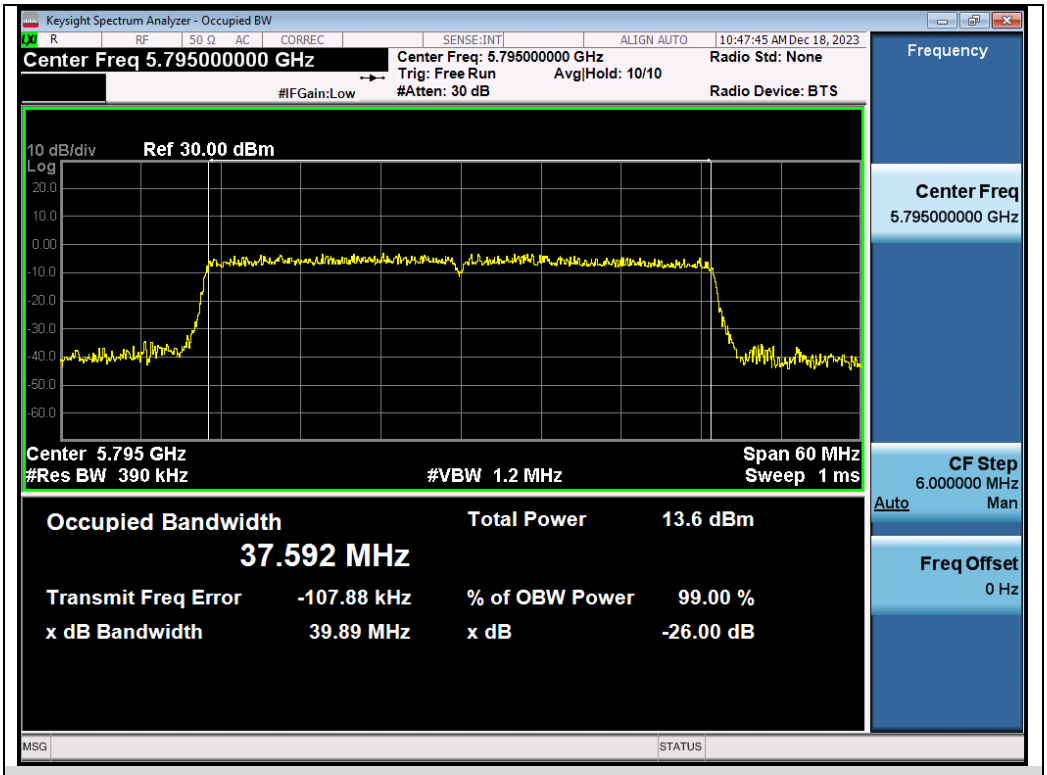
Test_Graph_802.11ax20_ANT1_5785_MCS0_OBW



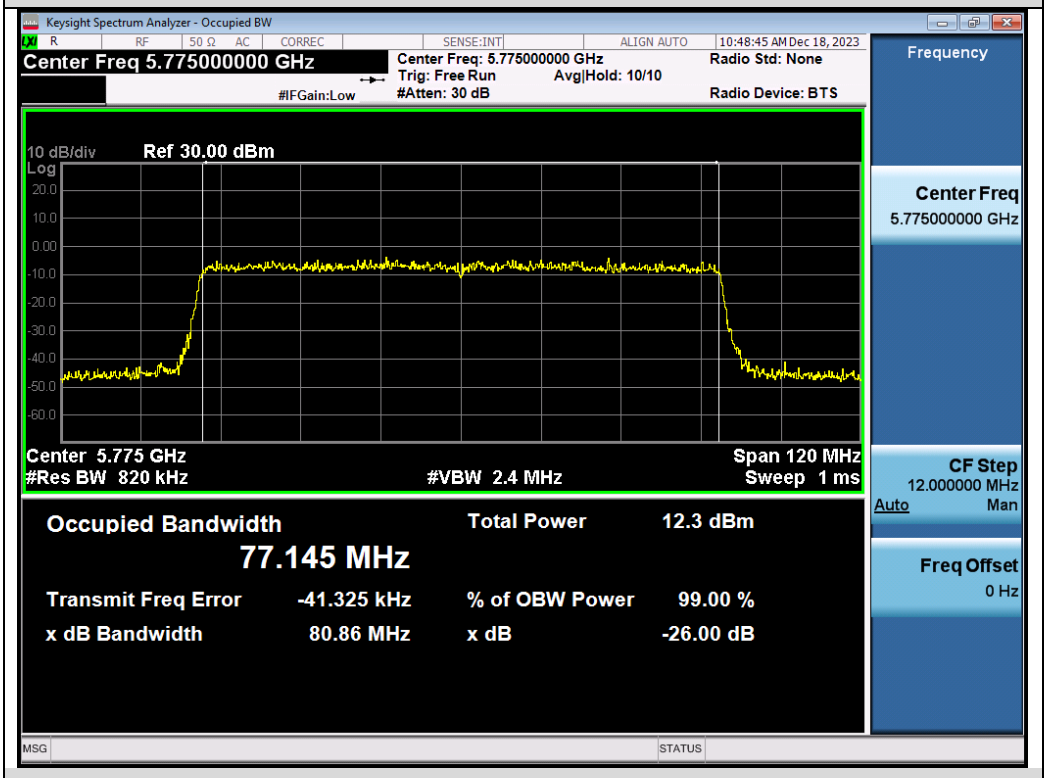
Test_Graph_802.11ax20_ANT1_5825_MCS0_OBW



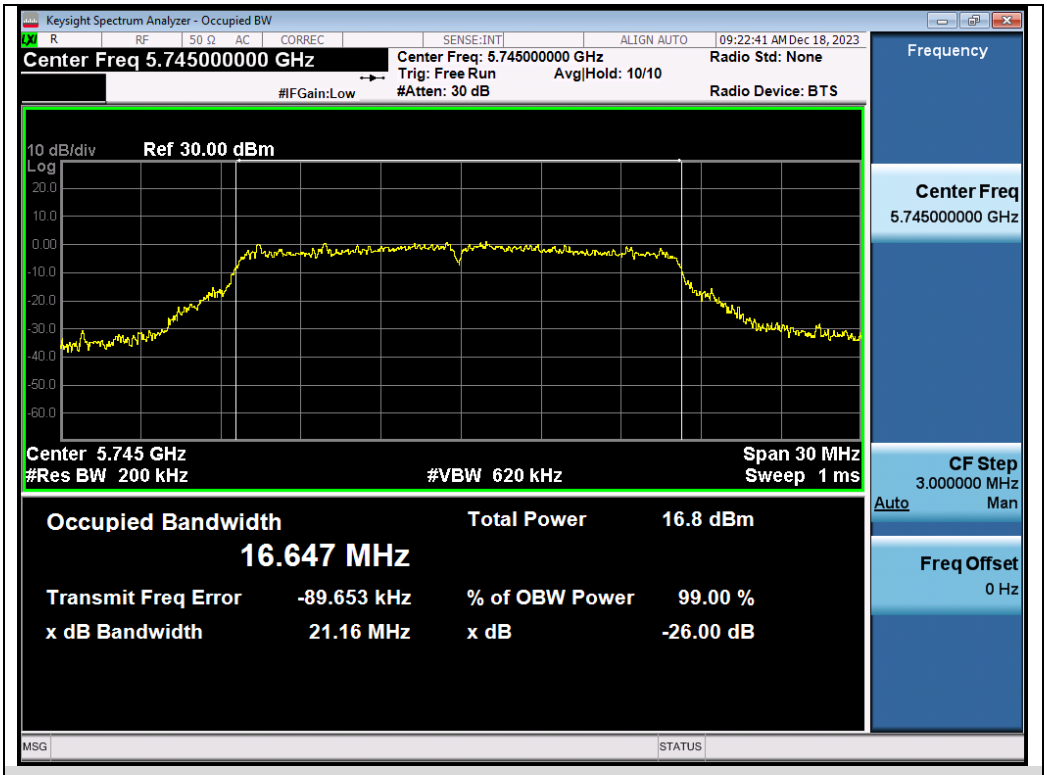
Test_Graph_802.11ax40_ANT1_5755_MCS0_OBW



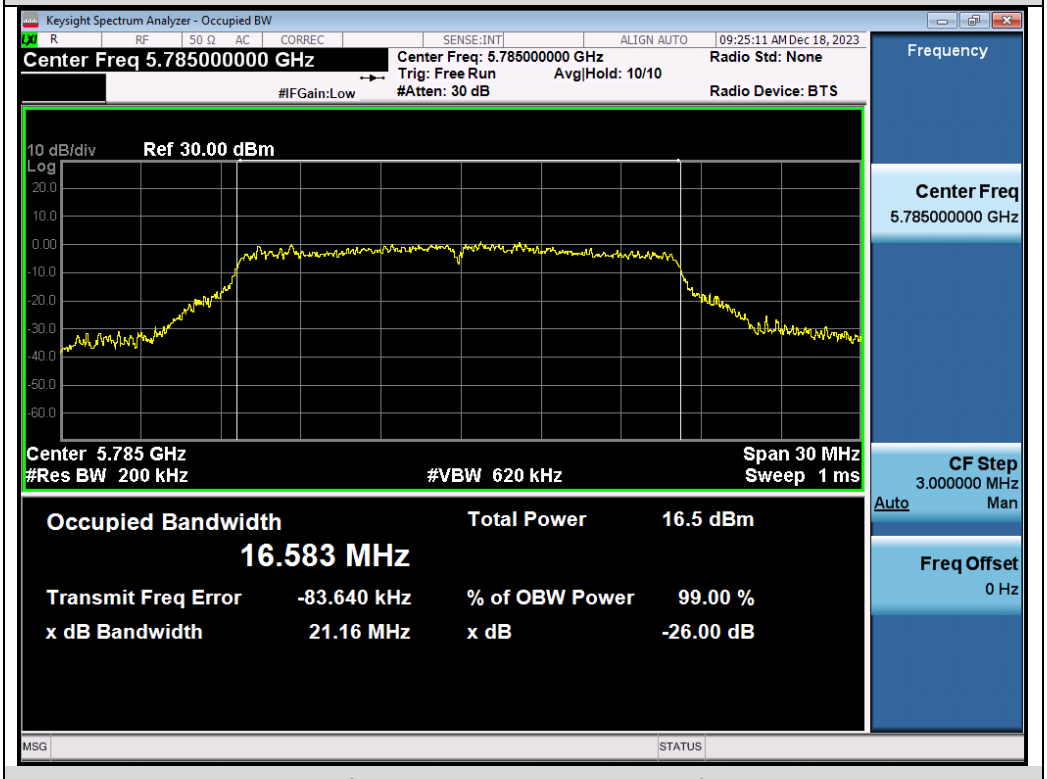
Test_Graph_802.11ax40_ANT1_5795_MCS0_OBW



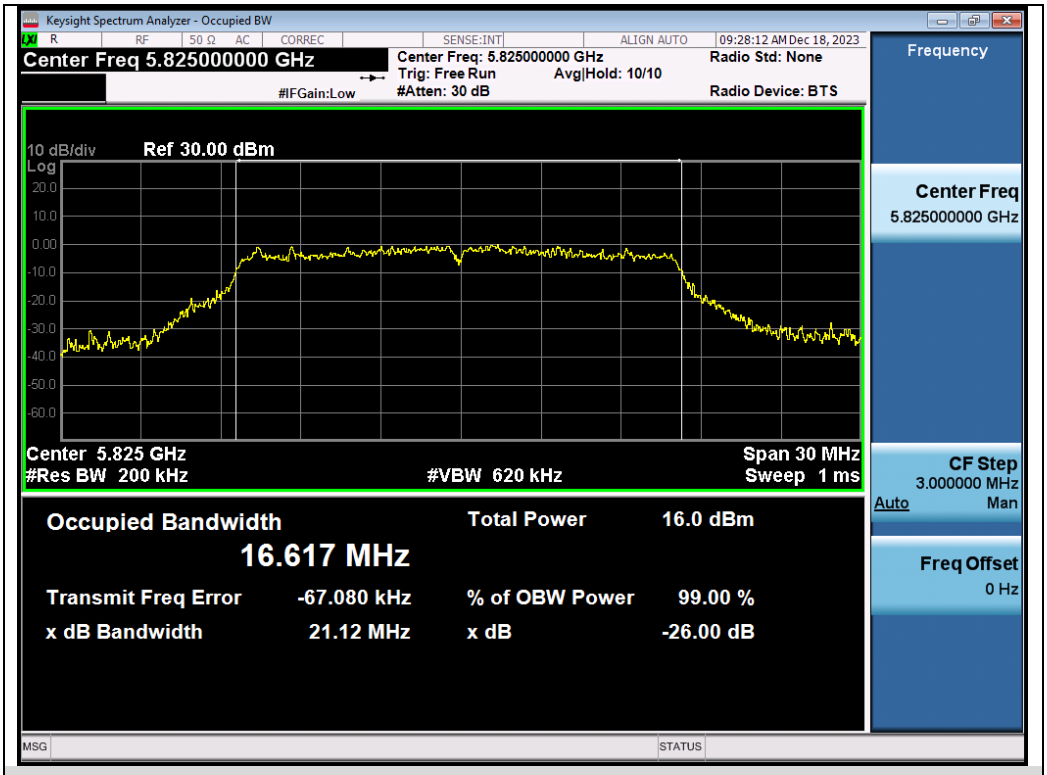
Test_Graph_802.11ax80_ANT1_5775_MCS0_OBW



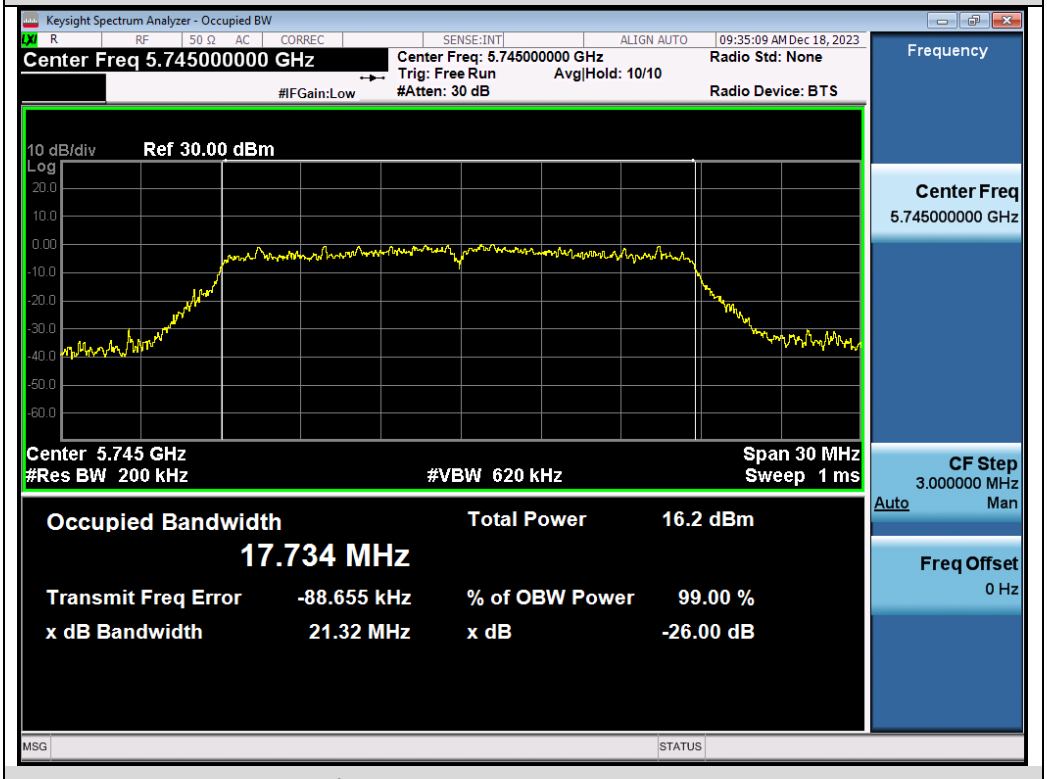
Test_Graph_802.11a_ANT2_5745_6Mbps_OBW



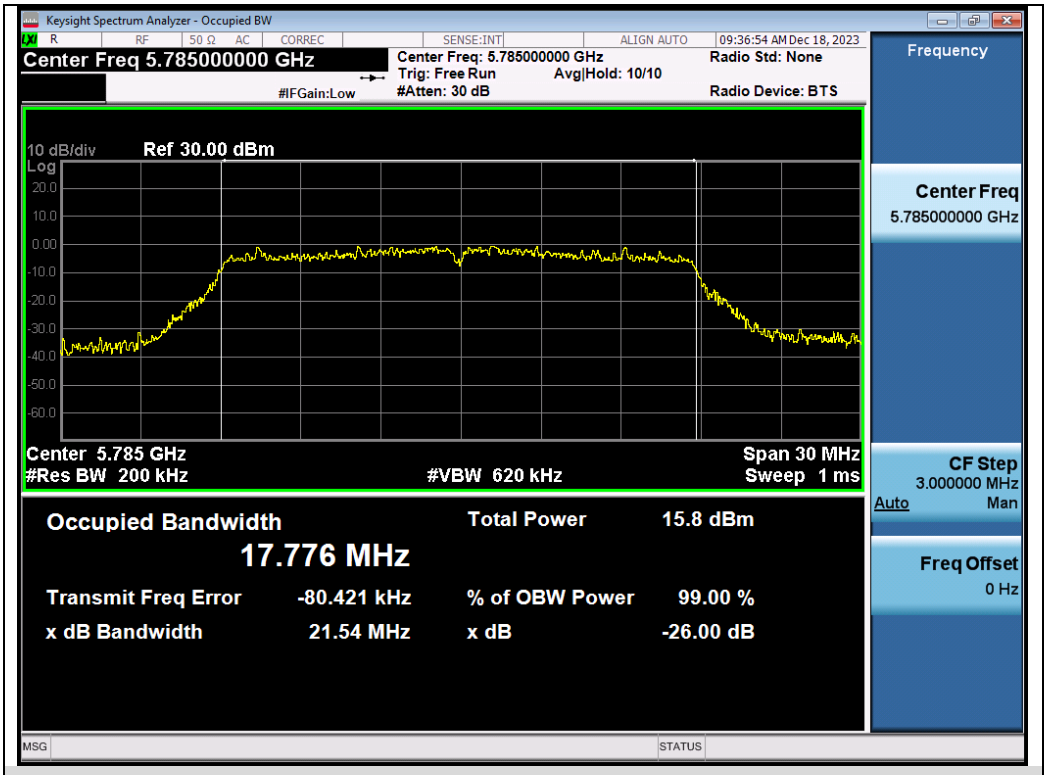
Test_Graph_802.11a_ANT2_5785_6Mbps_OBW



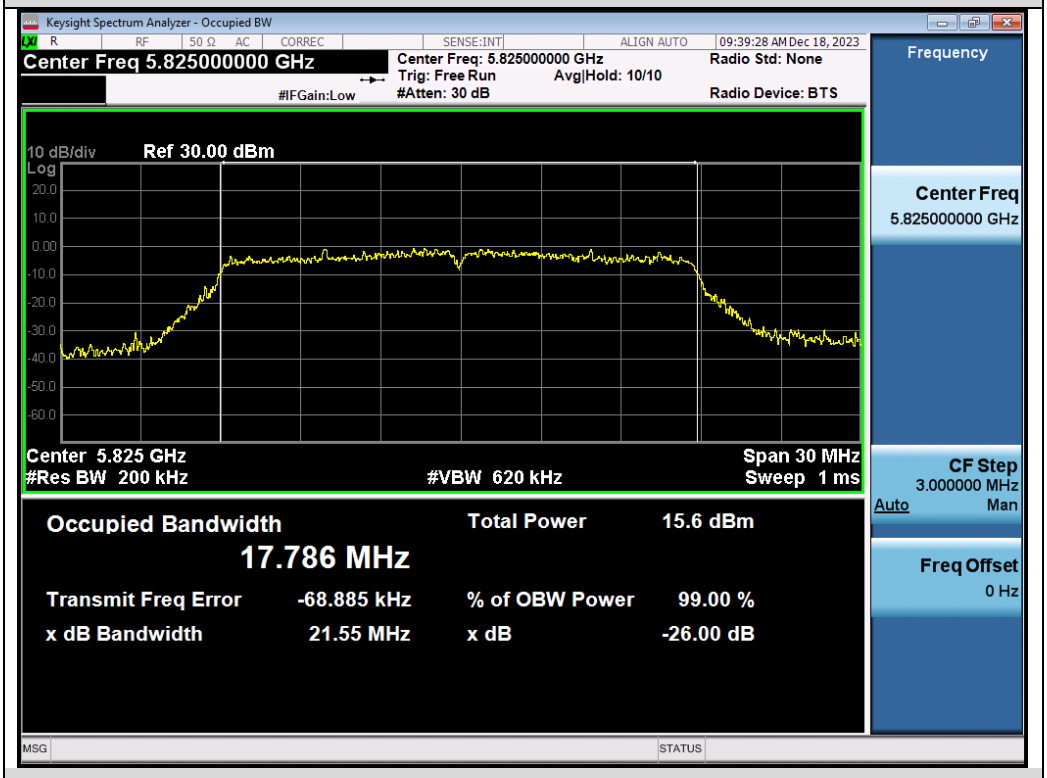
Test_Graph_802.11a_ANT2_5825_6Mbps_OBW



Test_Graph_802.11n20_ANT2_5745_MCS0_OBW



Test_Graph_802.11n20_ANT2_5785_MCS0_OBW



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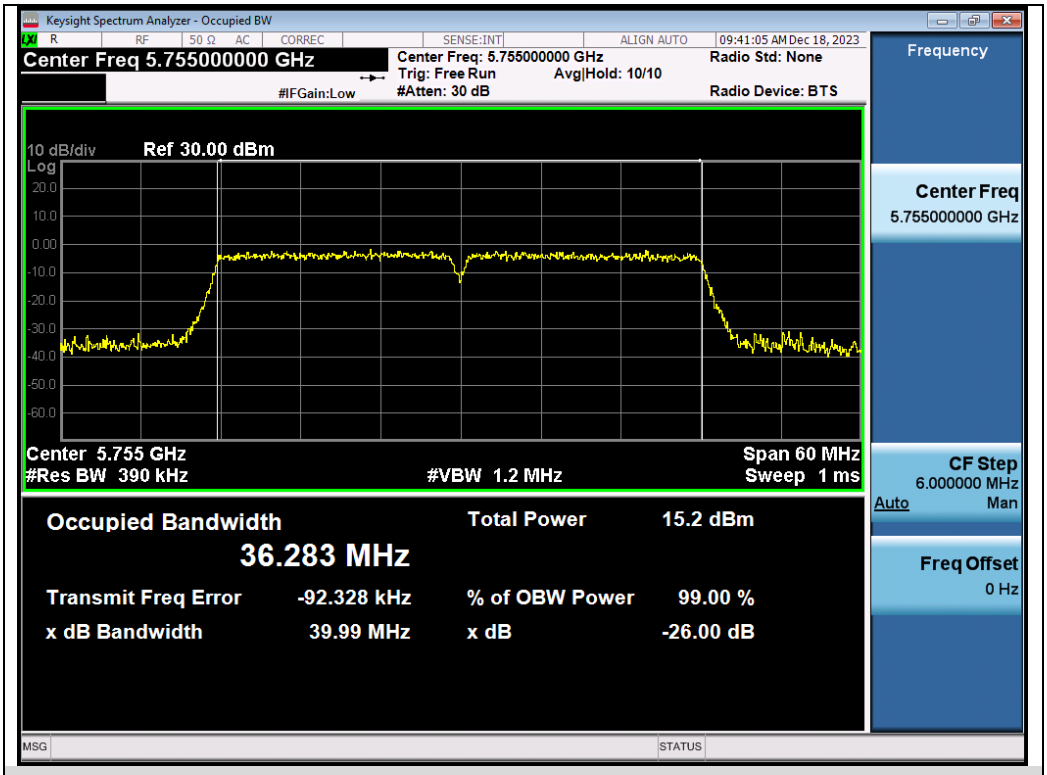
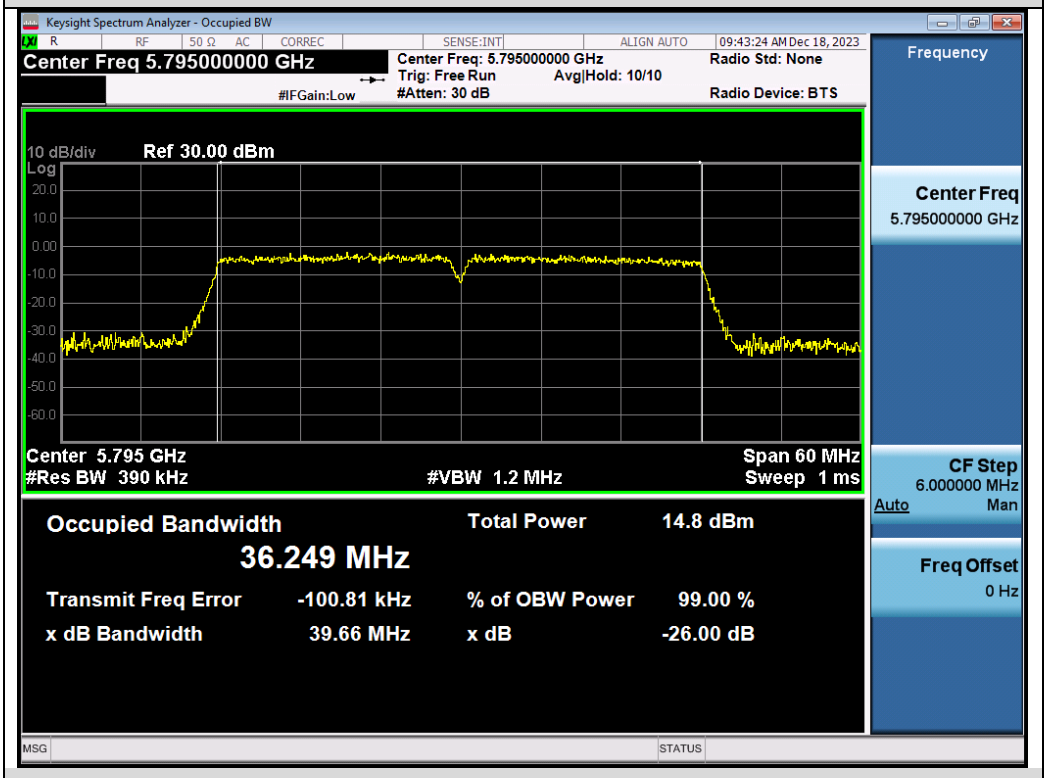
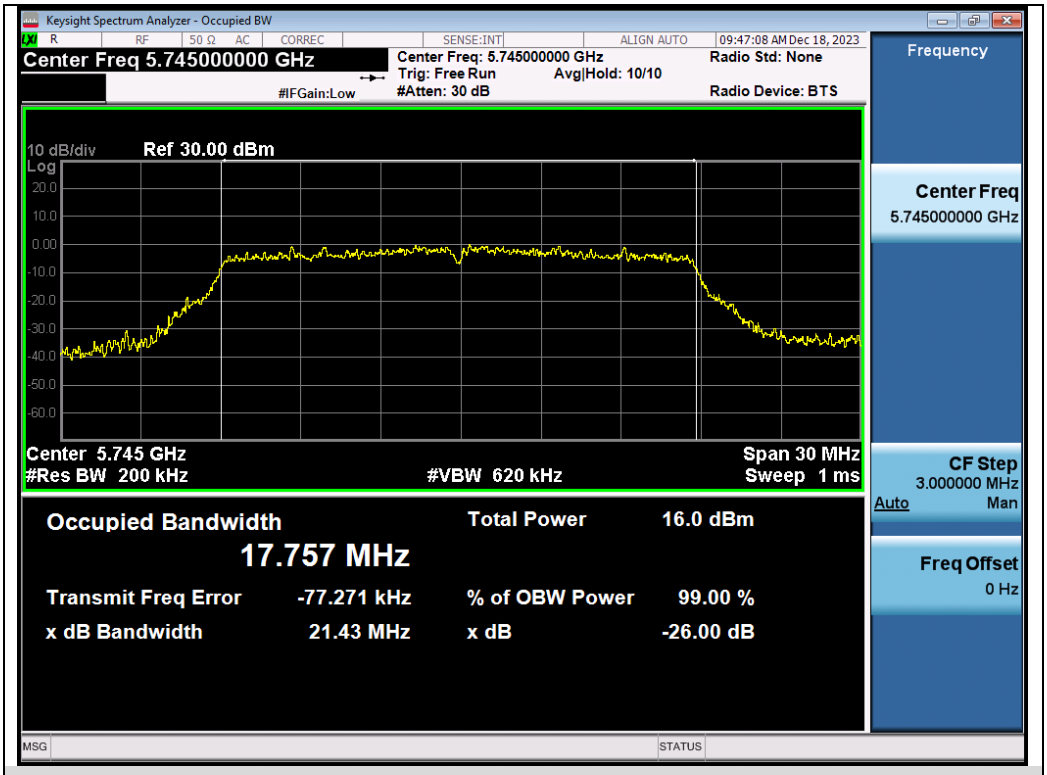


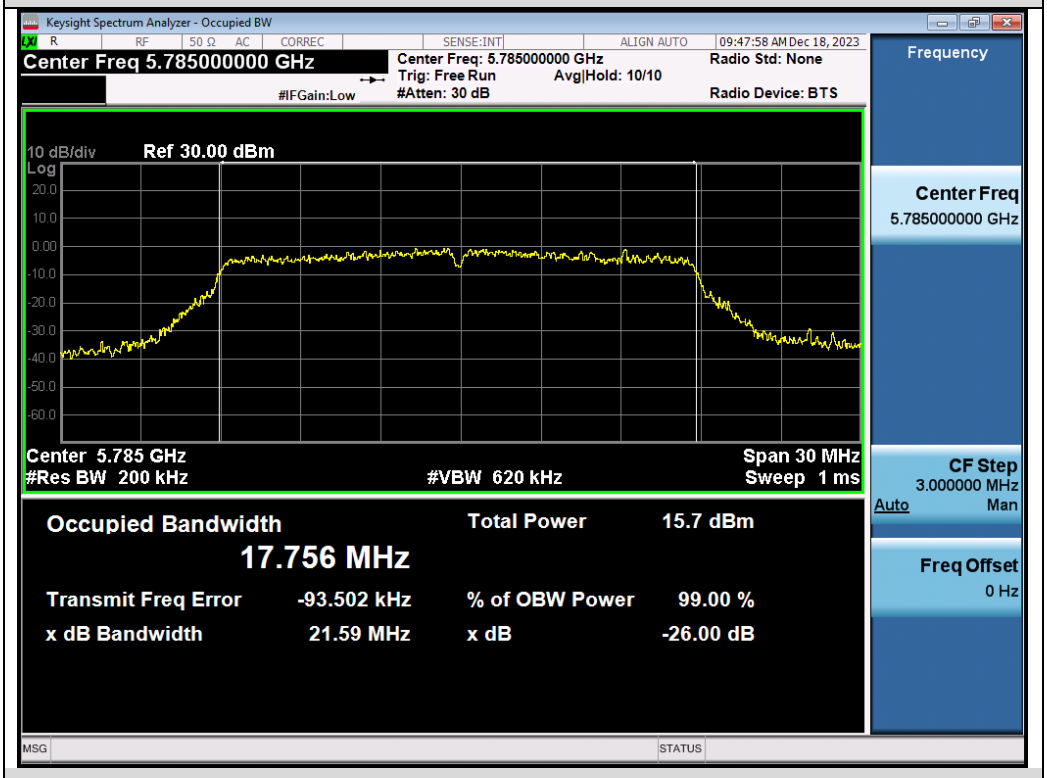
Test_Graph_802.11n40_ANT2_5755_MCS0_OBW



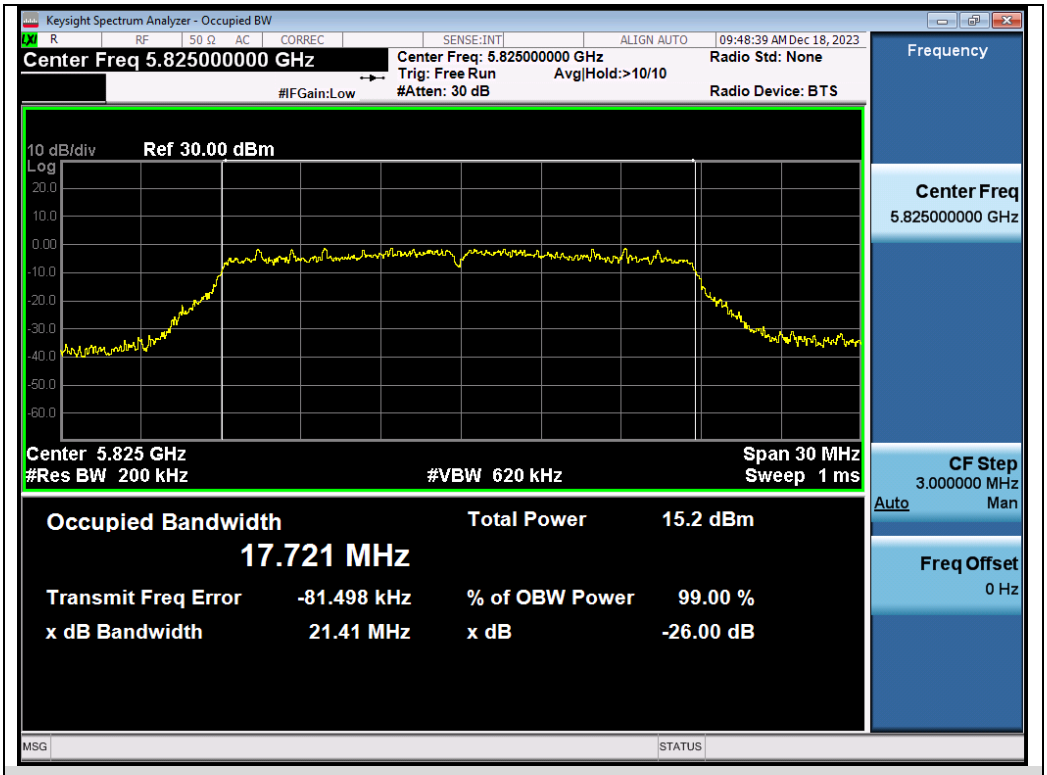
Test_Graph_802.11n40_ANT2_5795_MCS0_OBW



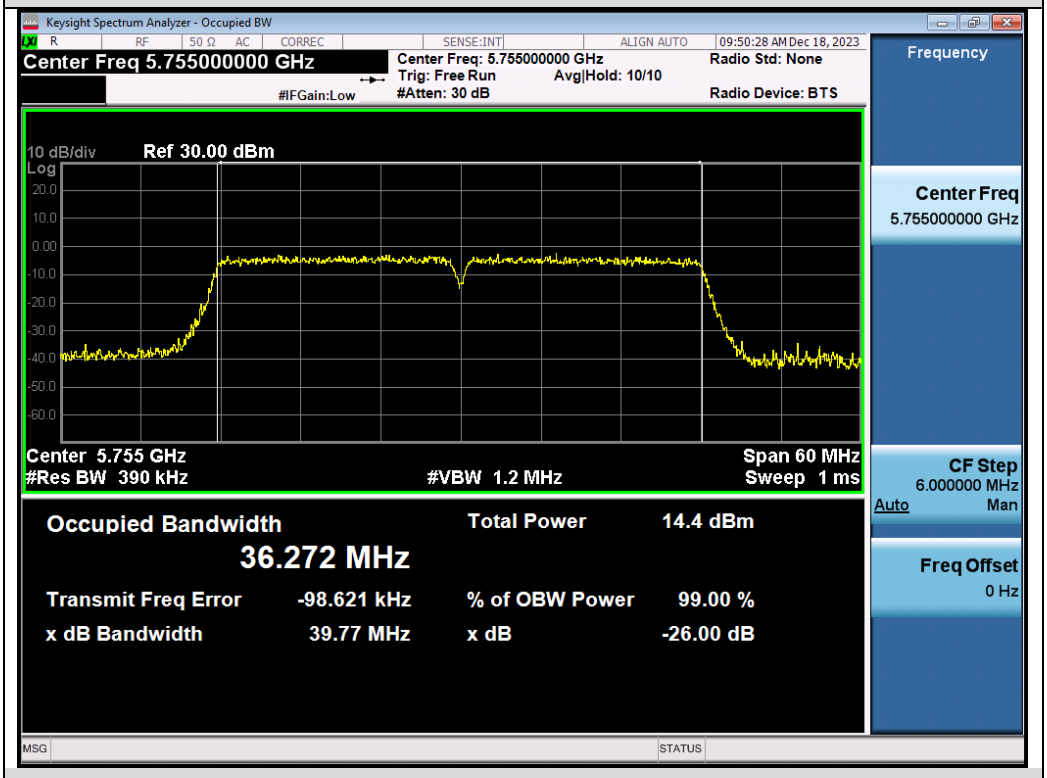
Test_Graph_802.11ac20_ANT2_5745_MCS0_OBW



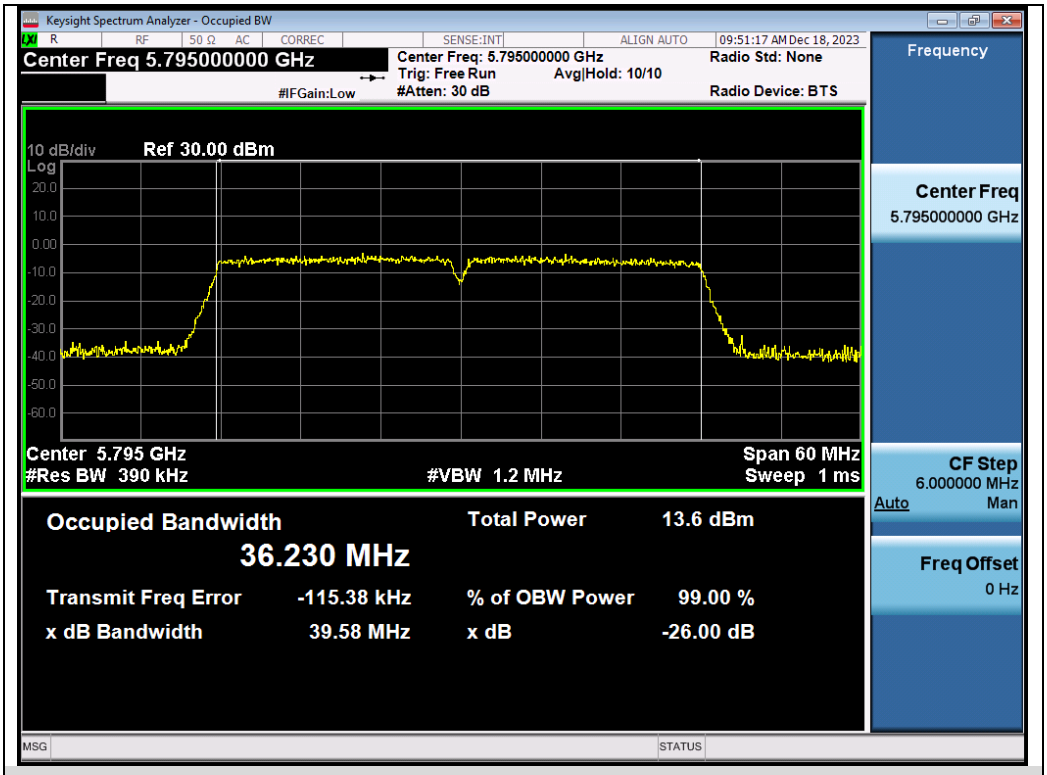
Test_Graph_802.11ac20_ANT2_5785_MCS0_OBW



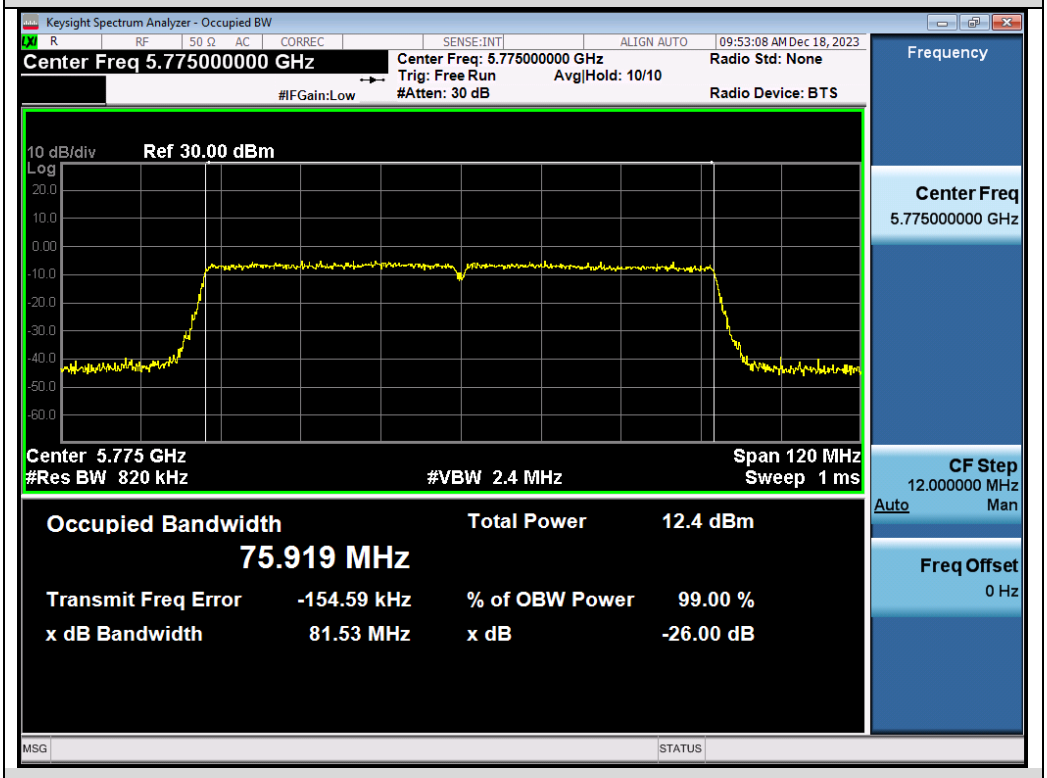
Test_Graph_802.11ac20_ANT2_5825_MCS9_OBW



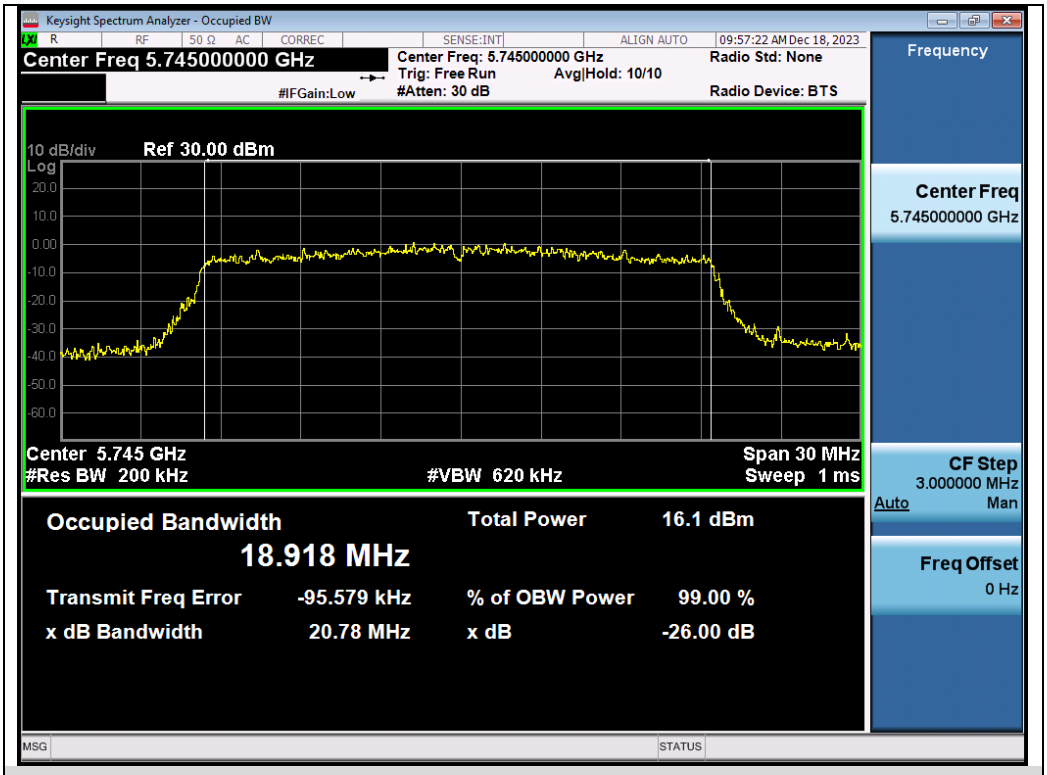
Test_Graph_802.11ac40_ANT2_5755_MCS9_OBW



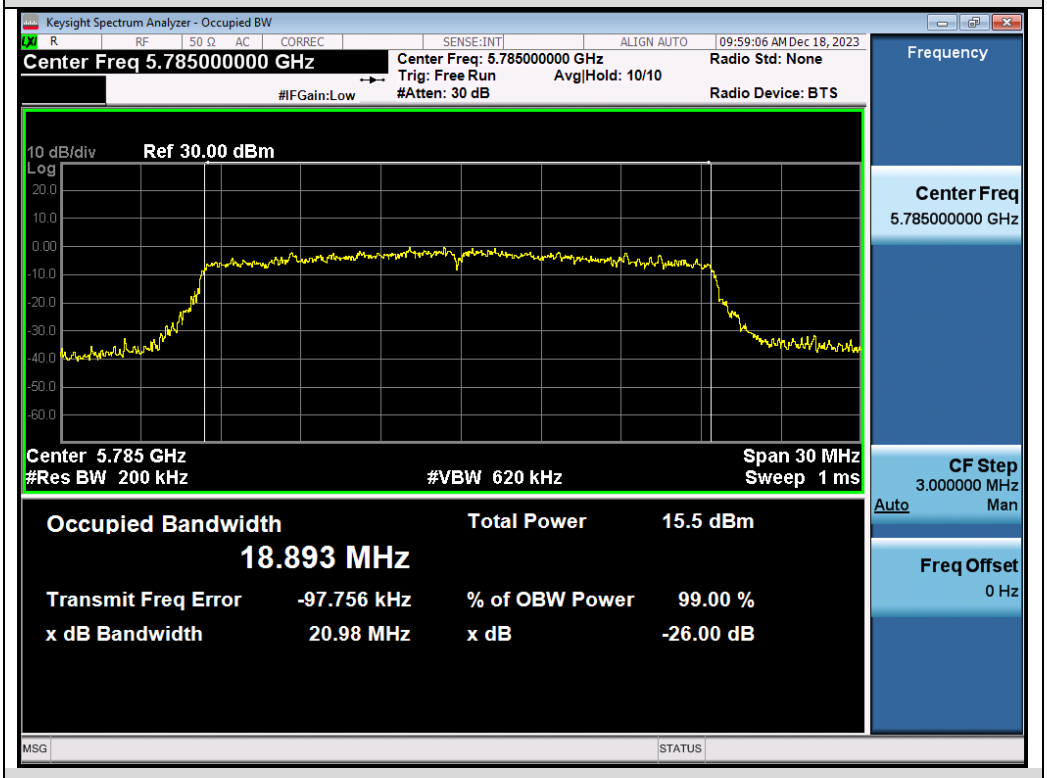
Test_Graph_802.11ac40_ANT2_5795_MCS9_OBW



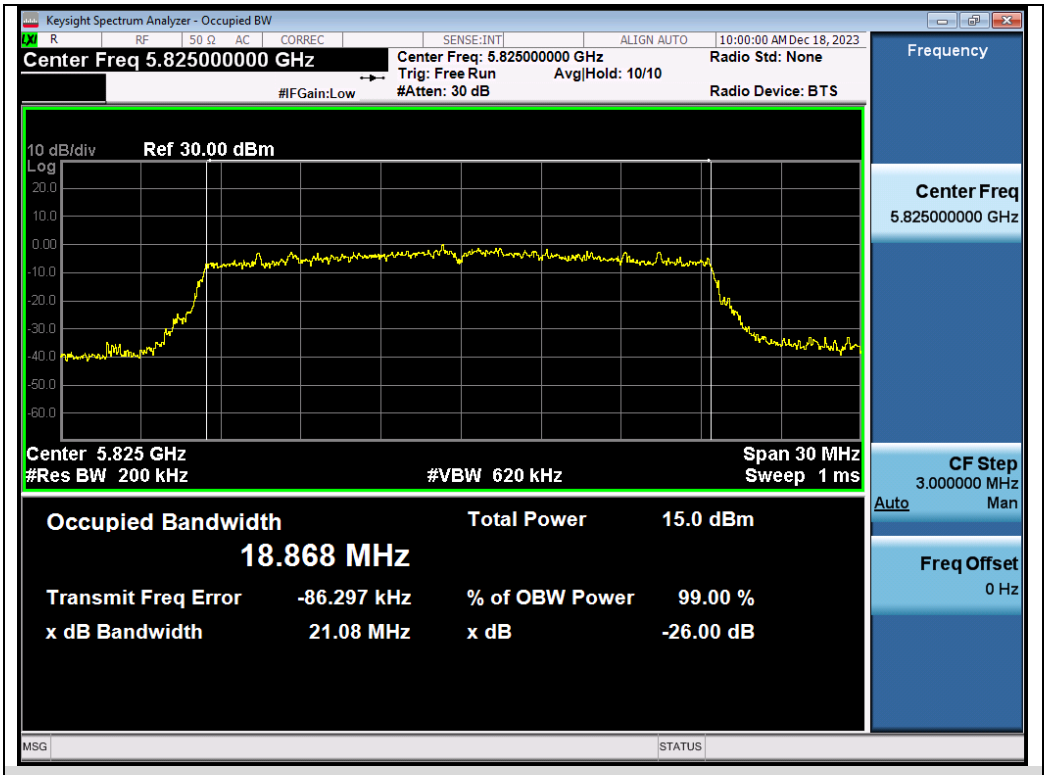
Test_Graph_802.11ac80_ANT2_5775_MCS9_OBW



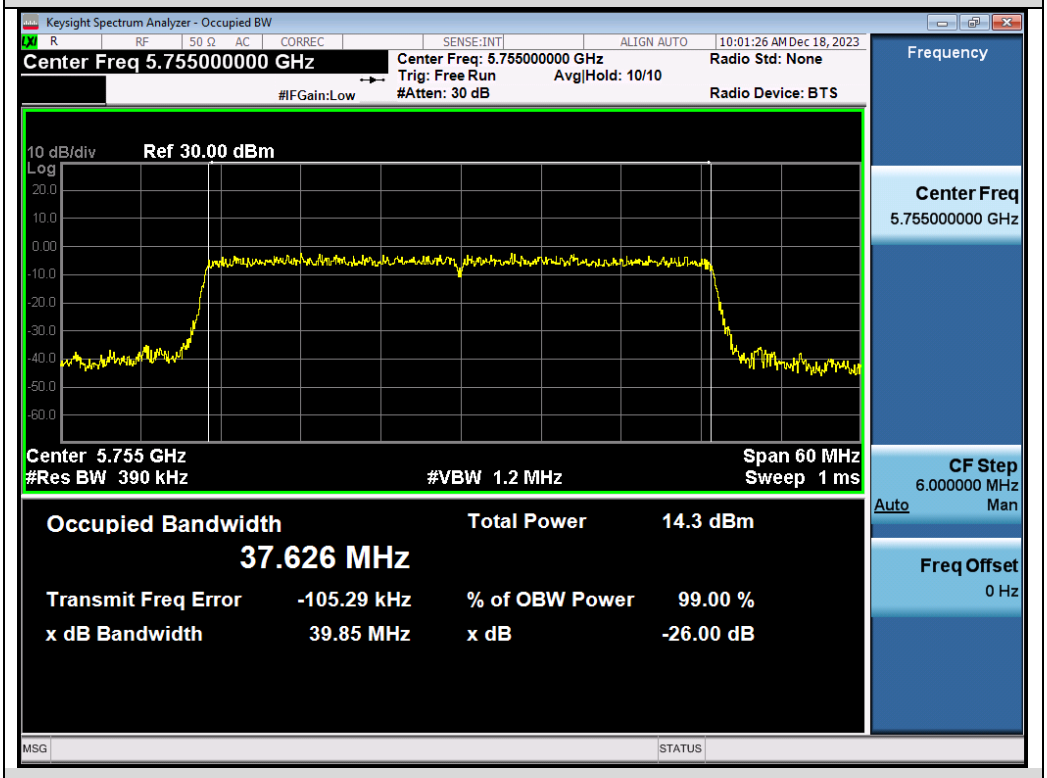
Test_Graph_802.11ax20_ANT2_5745_MCS0_OBW



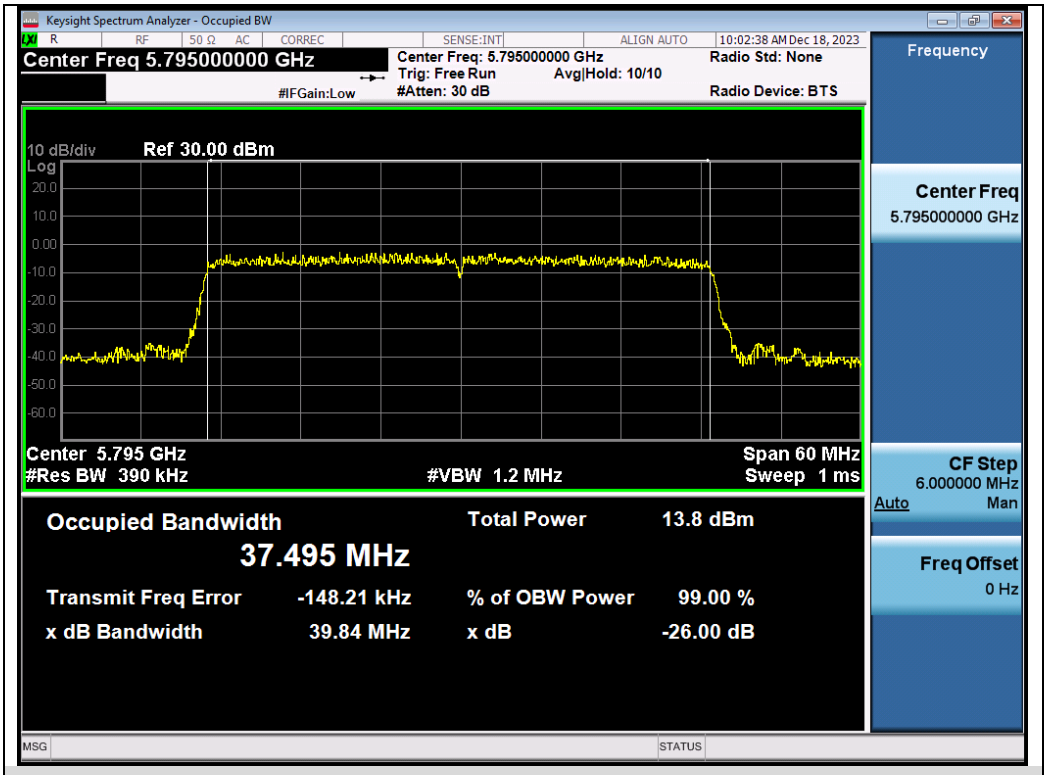
Test_Graph_802.11ax20_ANT2_5785_MCS0_OBW



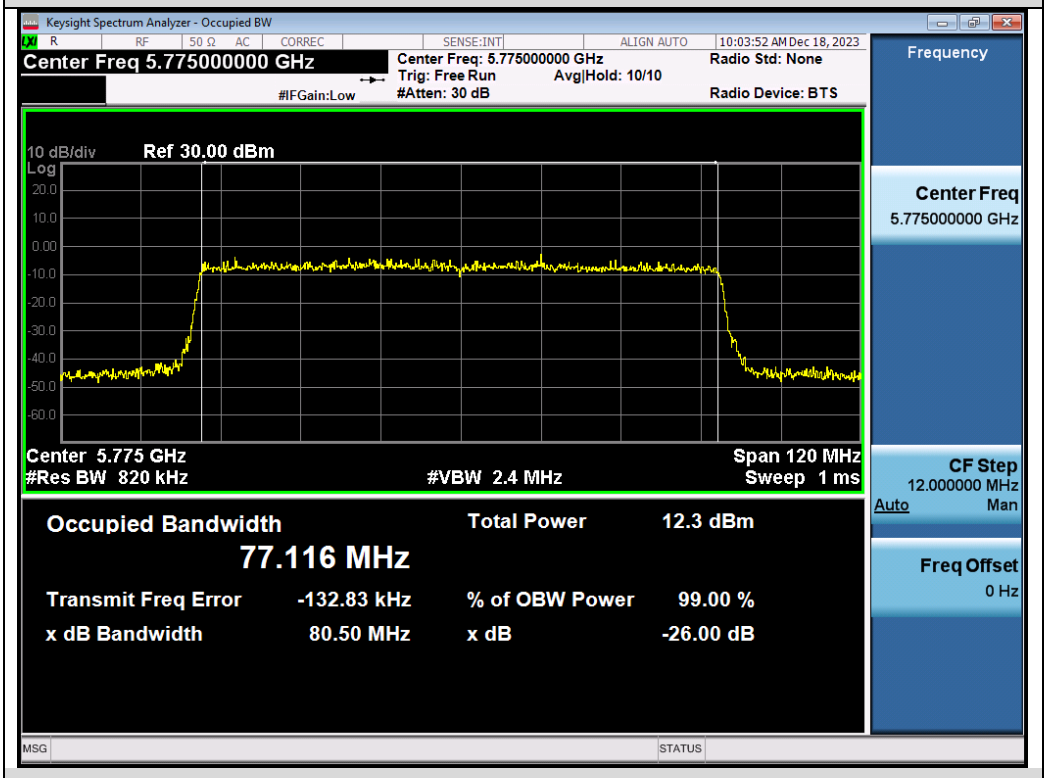
Test_Graph_802.11ax20_ANT2_5825_MCS0_OBW



Test_Graph_802.11ax40_ANT2_5755_MCS0_OBW



Test_Graph_802.11ax40_ANT2_5795_MCS0_OBW



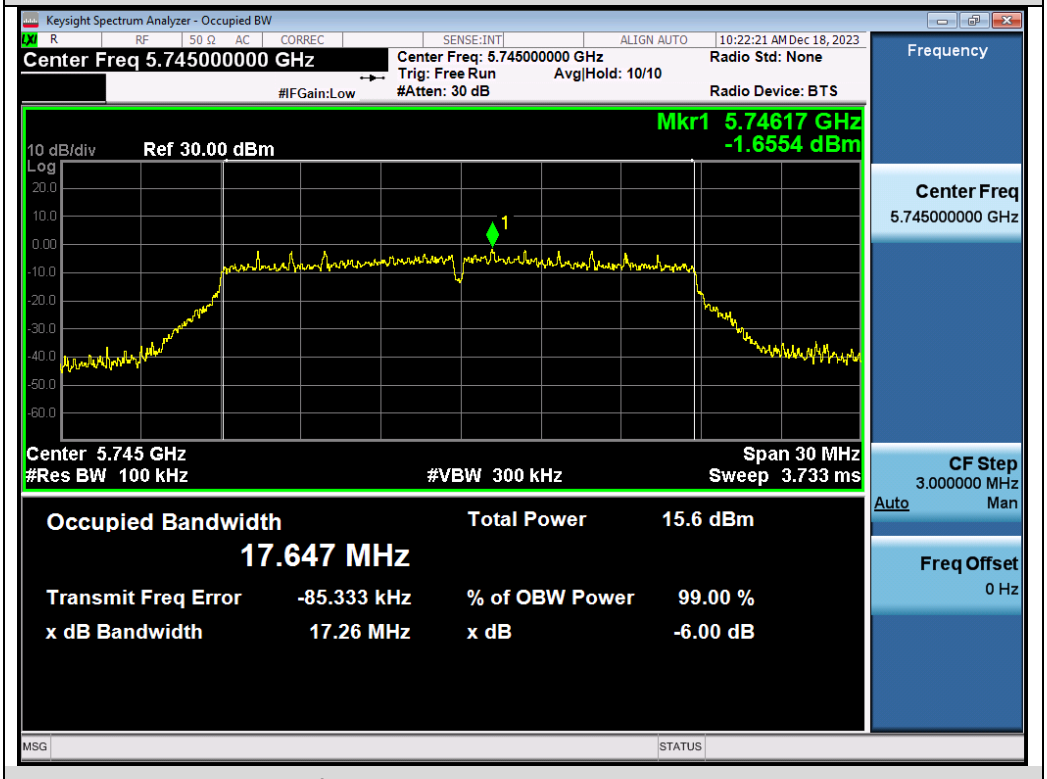
Test_Graph_802.11ax80_ANT2_5775_MCS0_OBW

Test Graphs of DTS Bandwidth for band 5.725-5.85 GHz

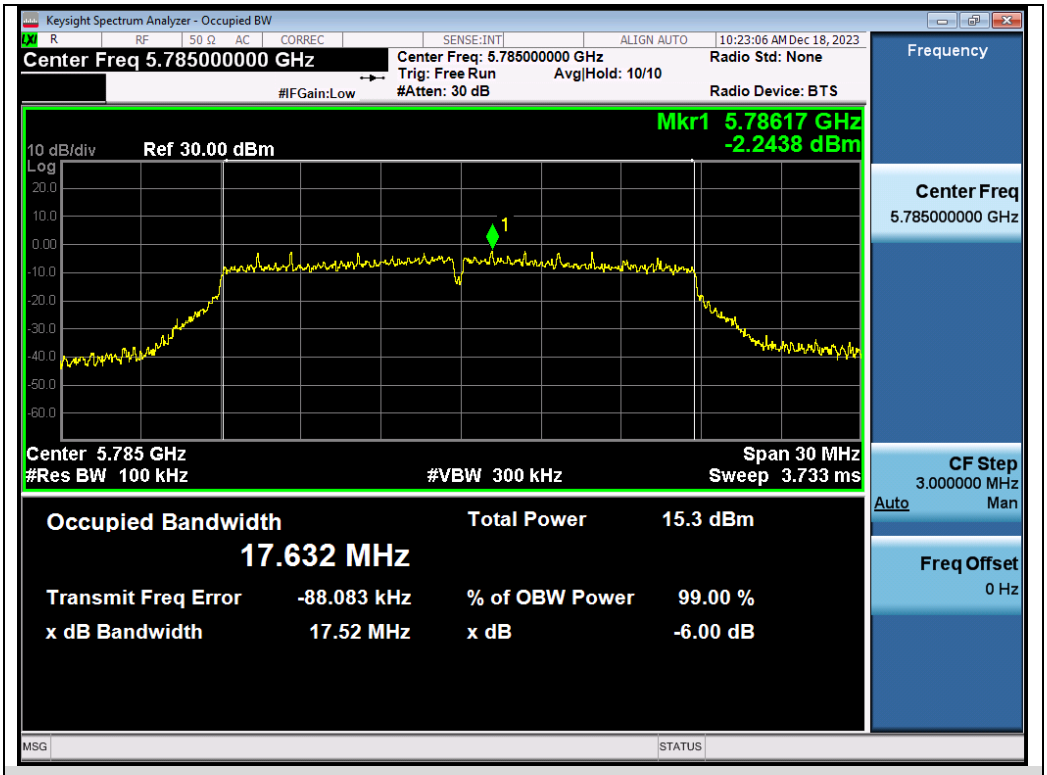
Test_Graph_802.11a_ANT1_5745_6Mbps_DTSBW

Test_Graph_802.11a_ANT1_5785_6Mbps_DTSBW

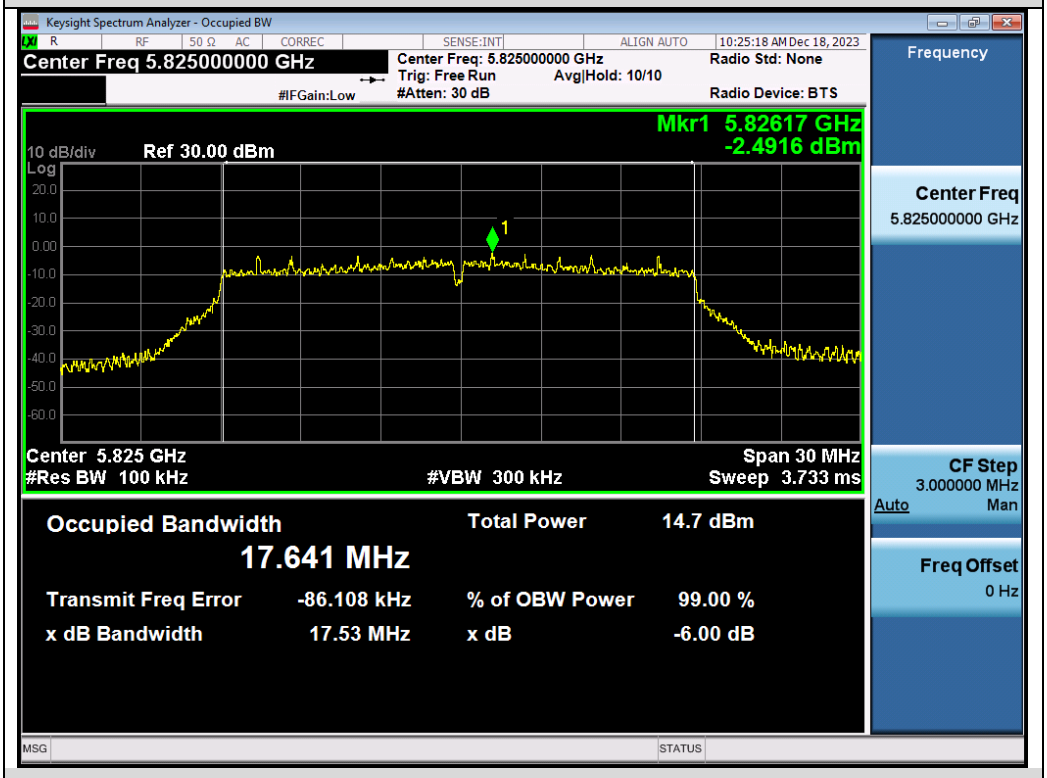
Test_Graph_802.11a_ANT1_5825_6Mbps_DTSBW



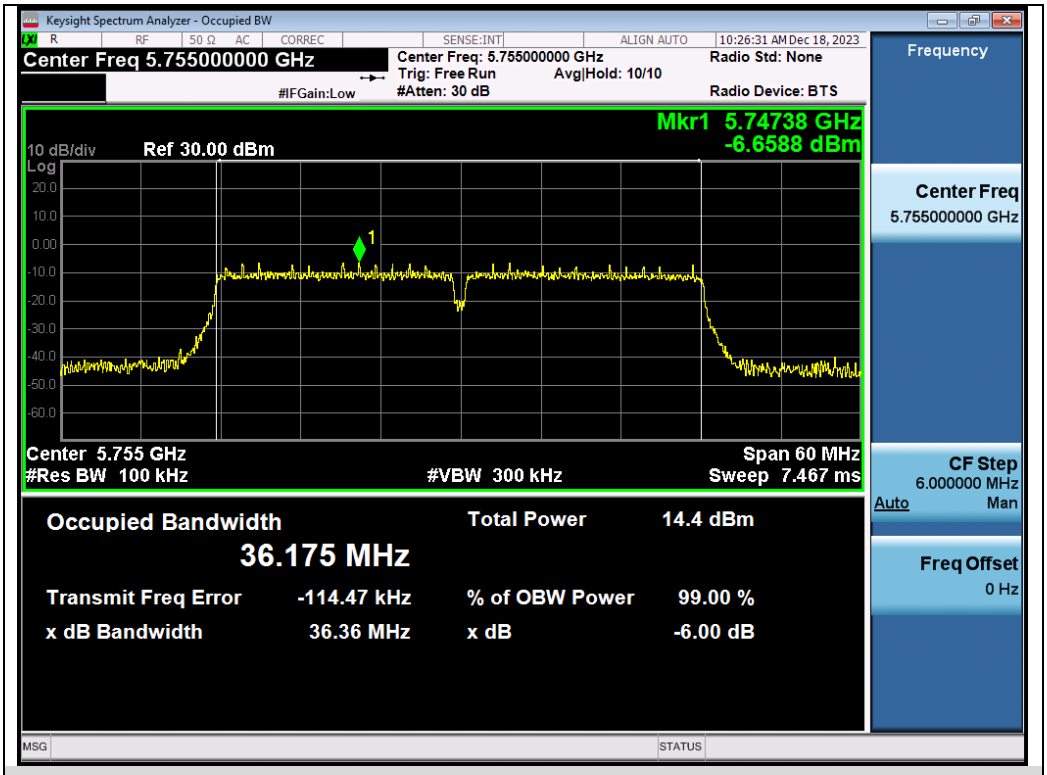
Test_Graph_802.11n20_ANT1_5745_MCS0_DTSBW



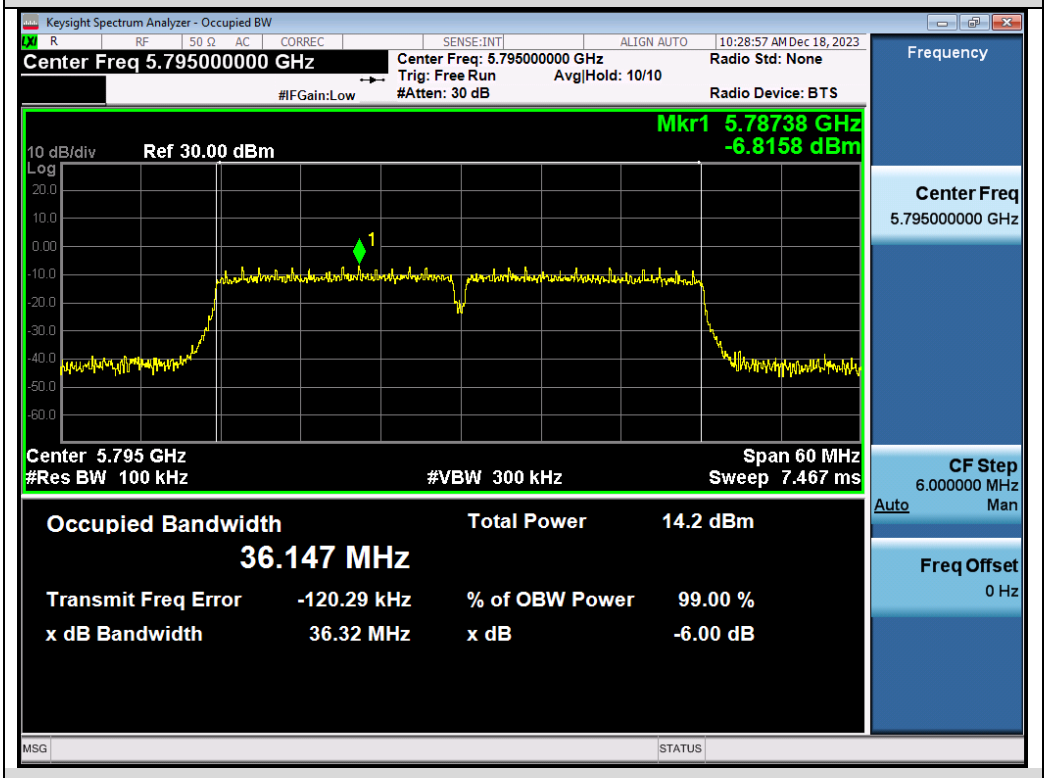
Test_Graph_802.11n20_ANT1_5785_MCS0_DTSBW



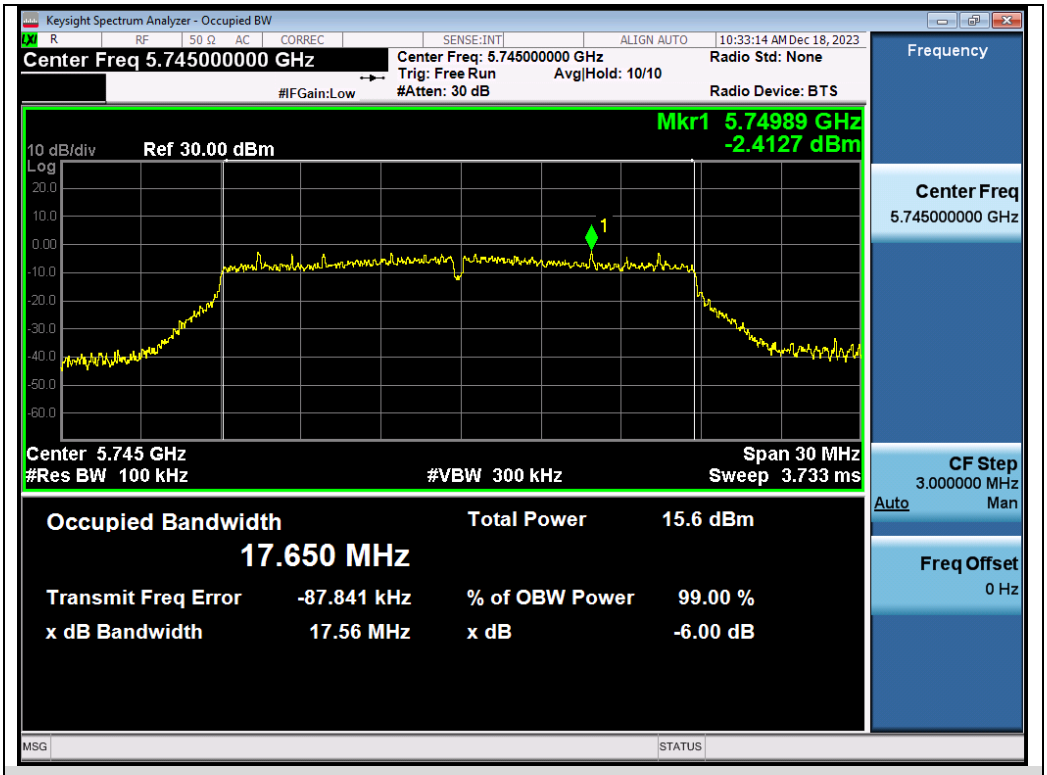
Test_Graph_802.11n20_ANT1_5825_MCS0_DTSBW



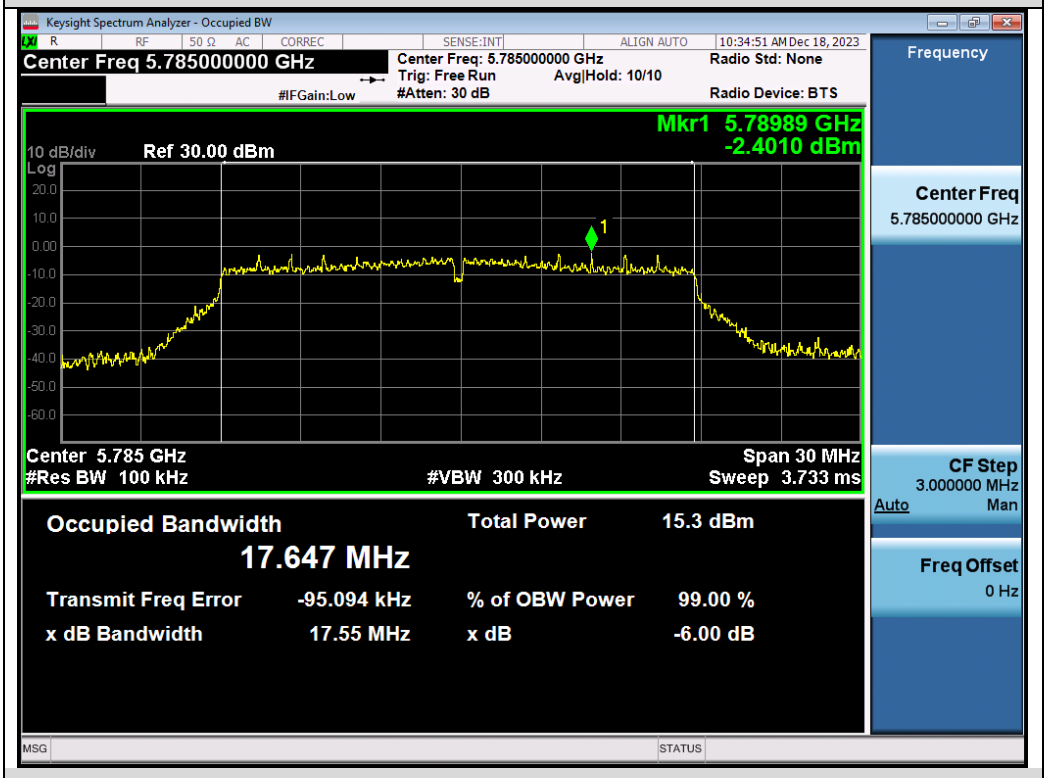
Test_Graph_802.11n40_ANT1_5755_MCS0_DTSBW



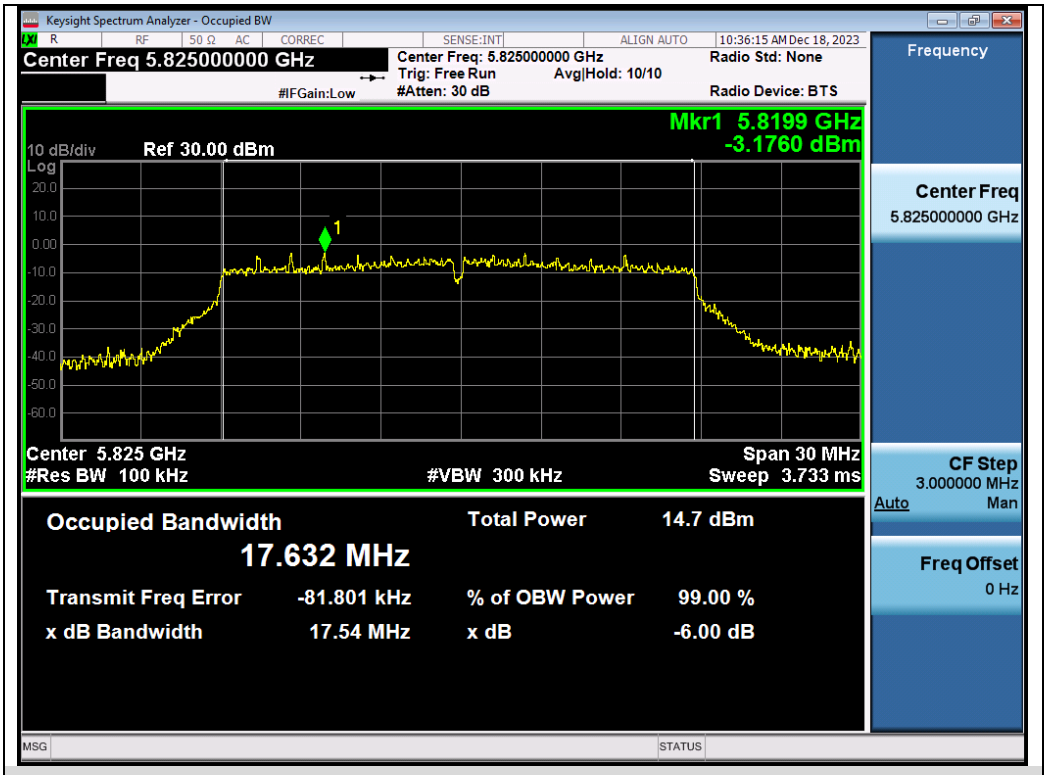
Test_Graph_802.11n40_ANT1_5795_MCS0_DTSBW



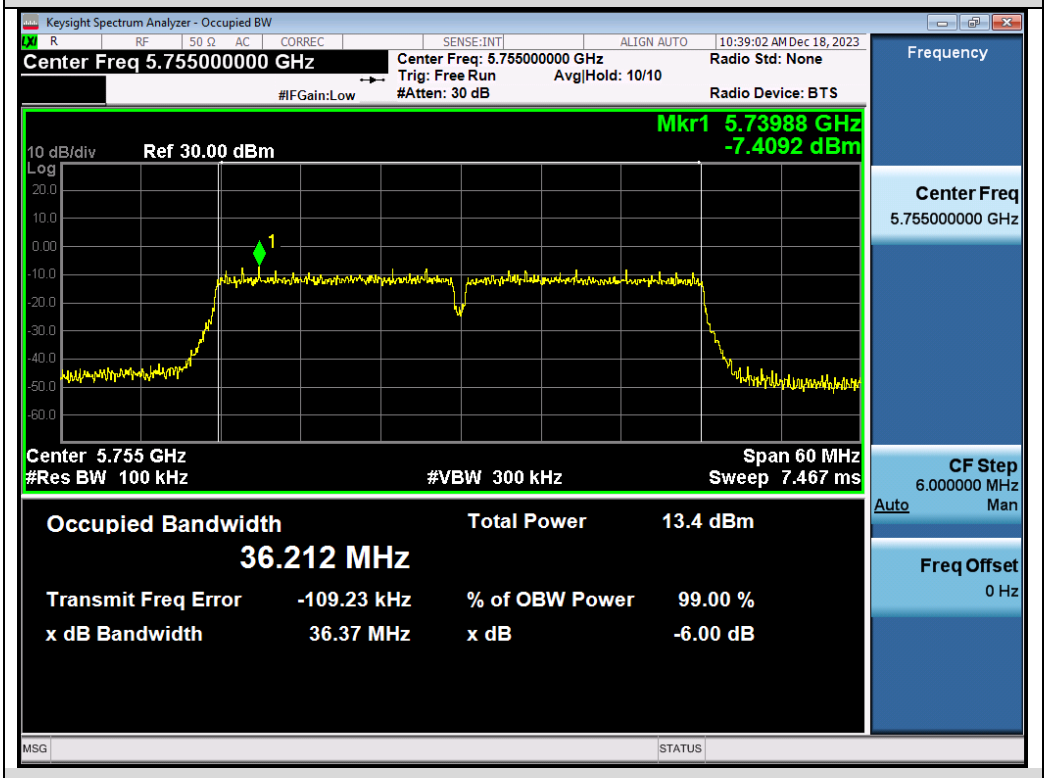
Test_Graph_802.11ac20_ANT1_5745_MCS0_DTSBW



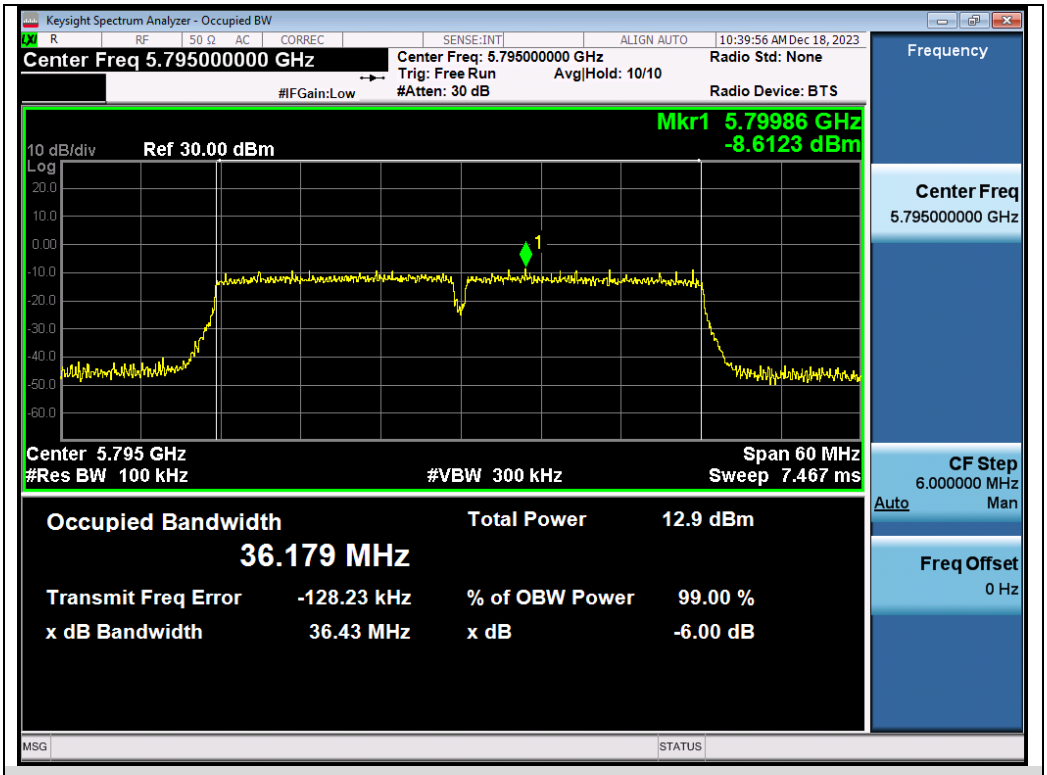
Test_Graph_802.11ac20_ANT1_5785_MCS0_DTSBW



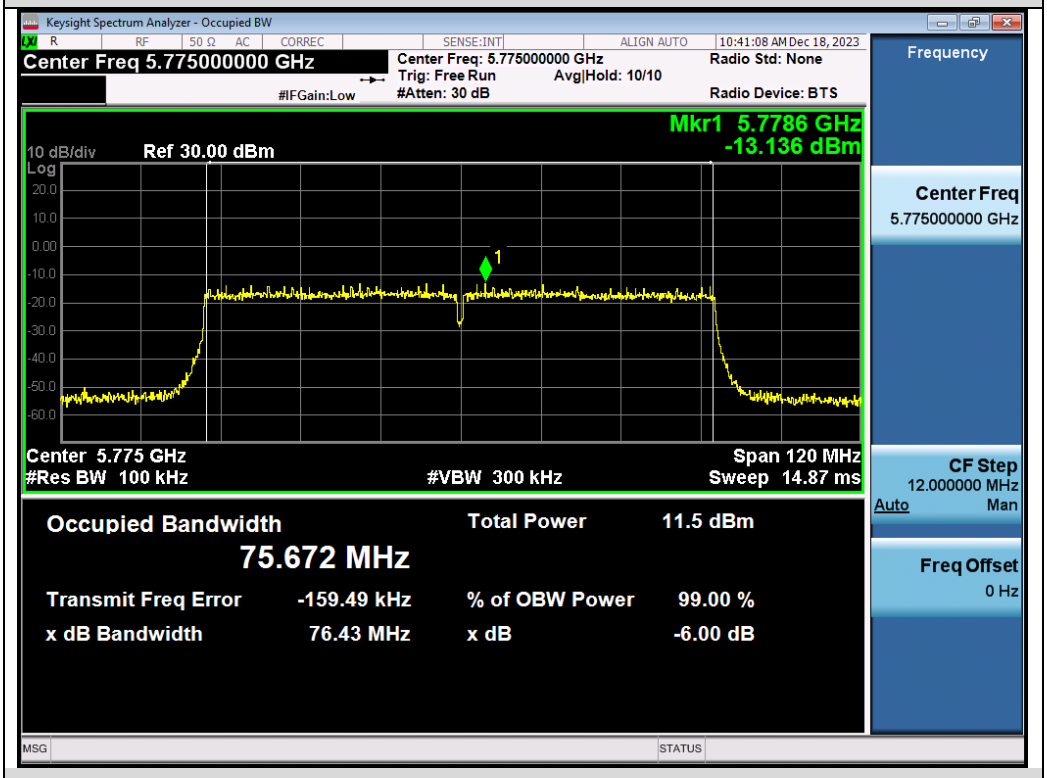
Test_Graph_802.11ac20_ANT1_5825_MCS9_DTSBW



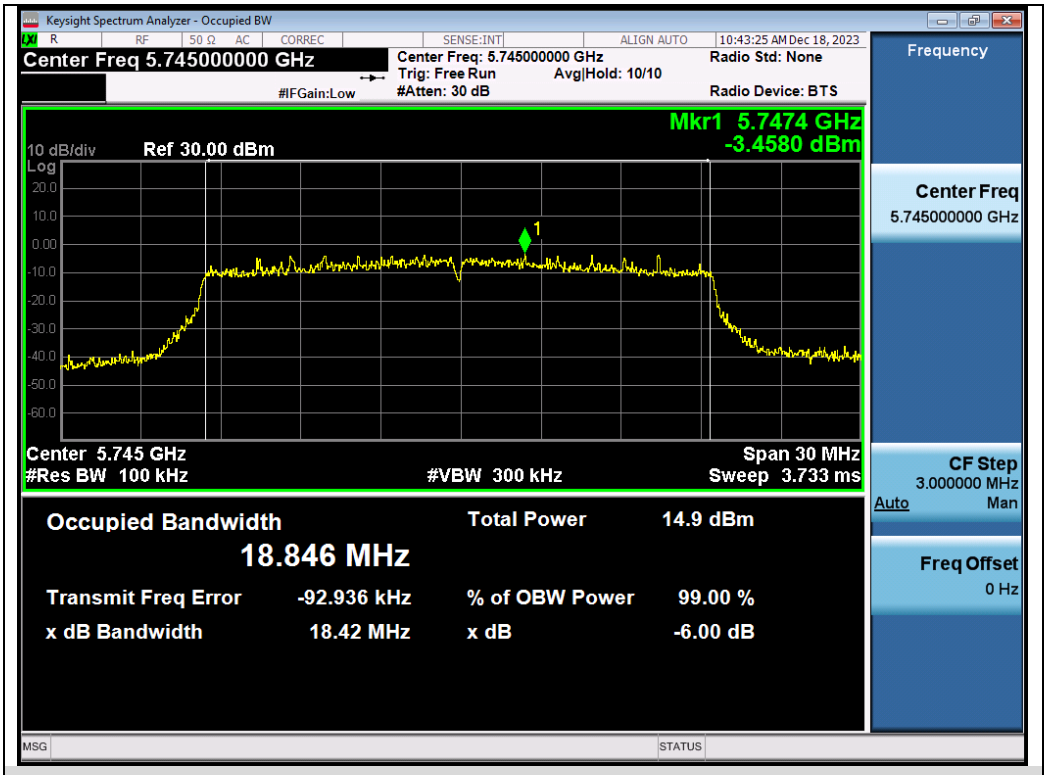
Test_Graph_802.11ac40_ANT1_5755_MCS9_DTSBW



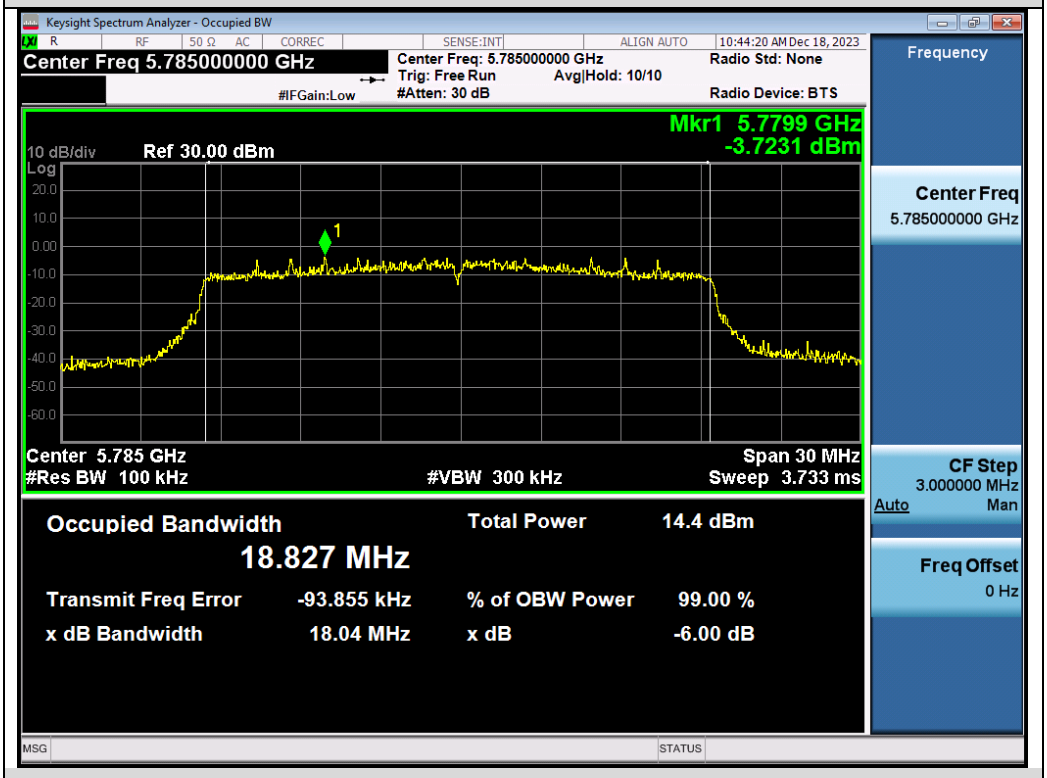
Test_Graph_802.11ac40_ANT1_5795_MCS9_DTSBW



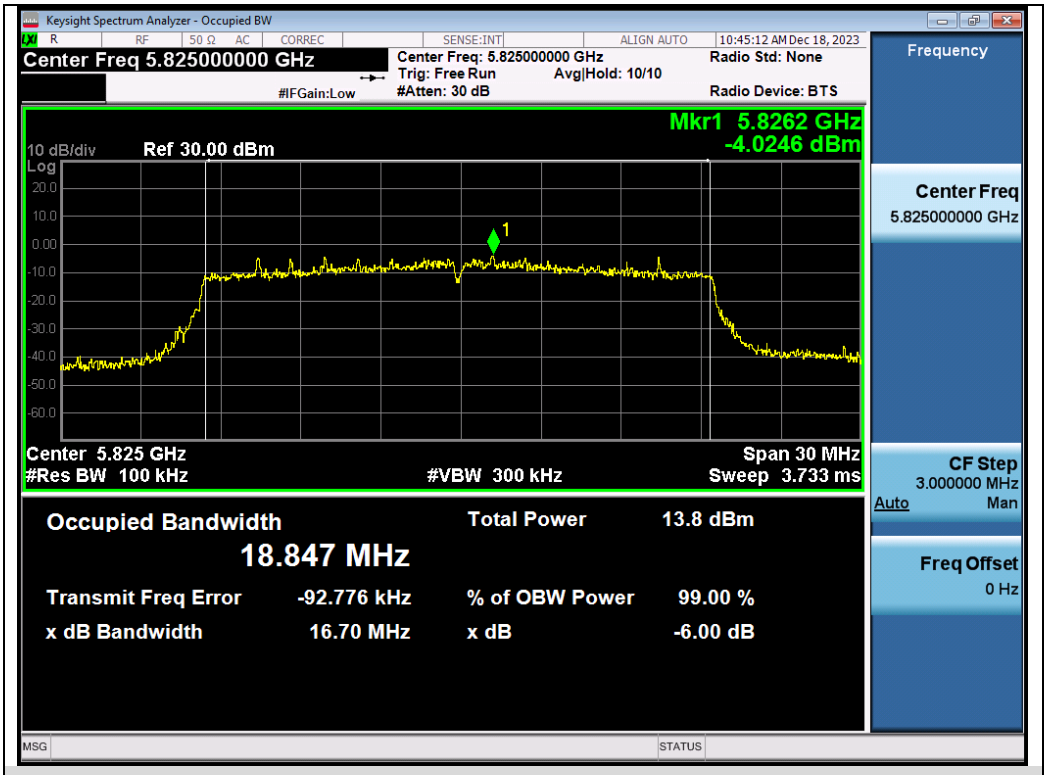
Test_Graph_802.11ac80_ANT1_5775_MCS9_DTSBW



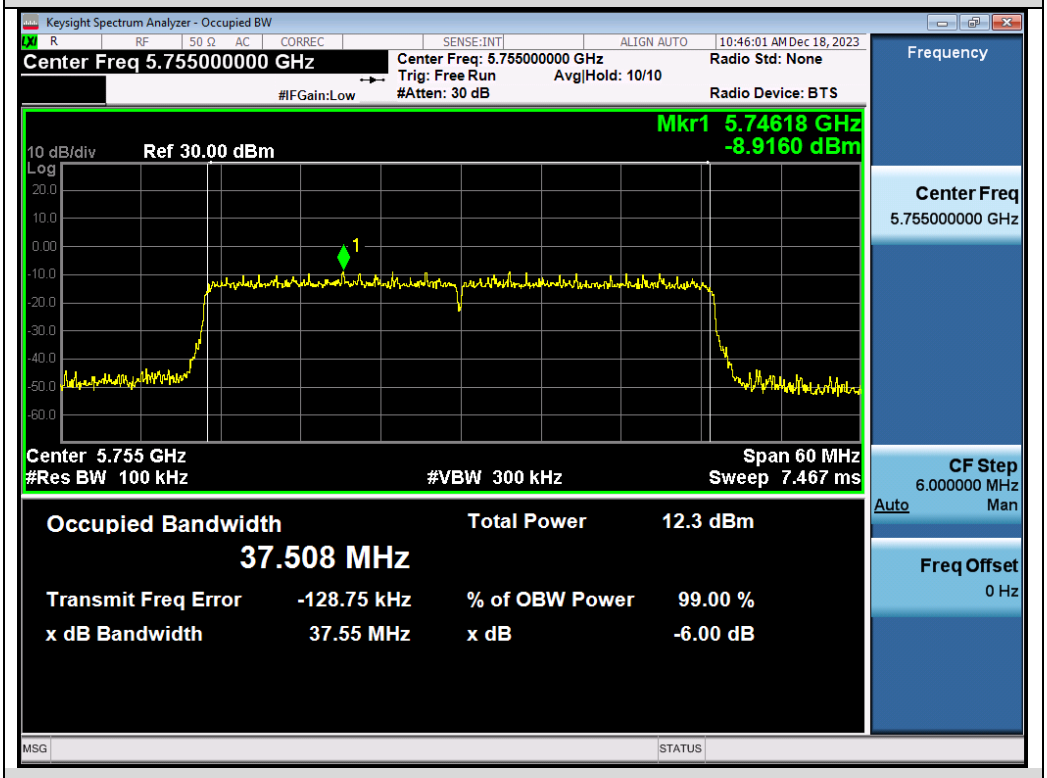
Test_Graph_802.11ax20_ANT1_5745_MCS0_DTSBW



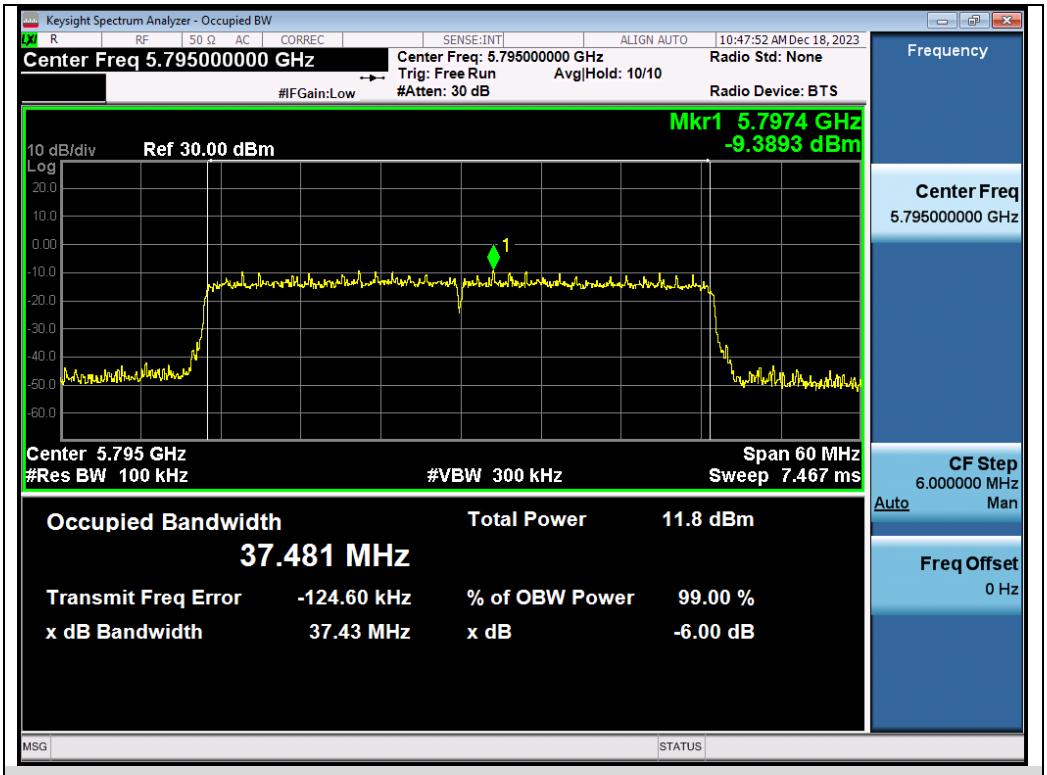
Test_Graph_802.11ax20_ANT1_5785_MCS0_DTSBW



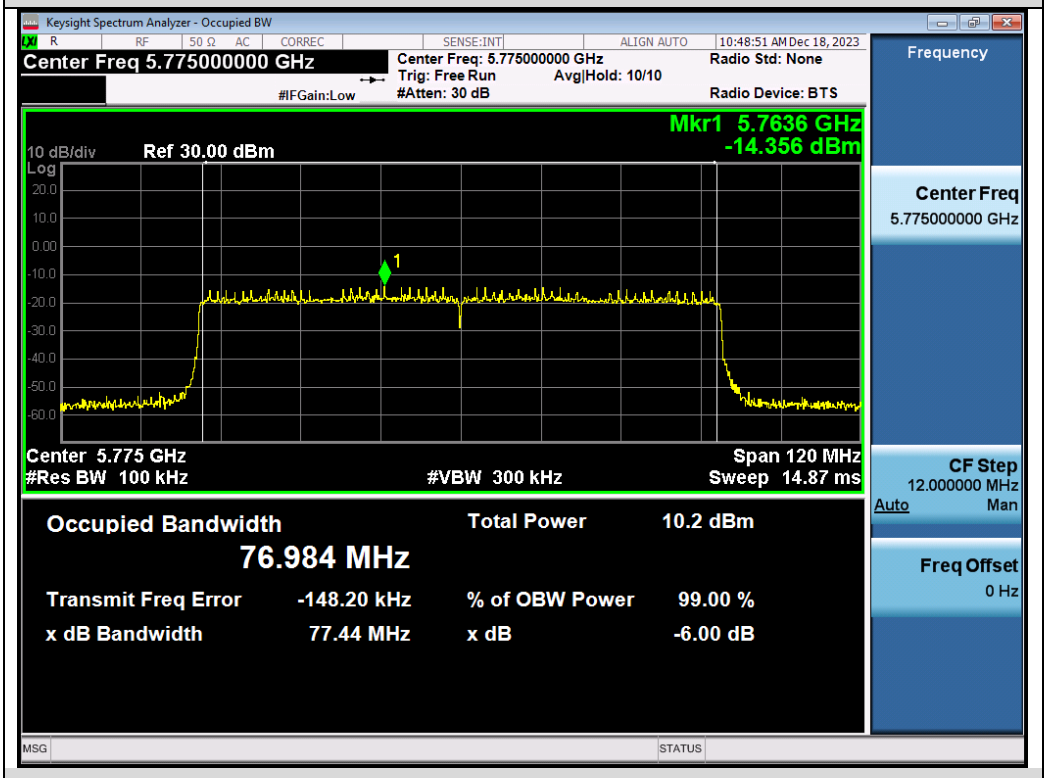
Test_Graph_802.11ax20_ANT1_5825_MCS0_DTSBW



Test_Graph_802.11ax40_ANT1_5755_MCS0_DTSBW

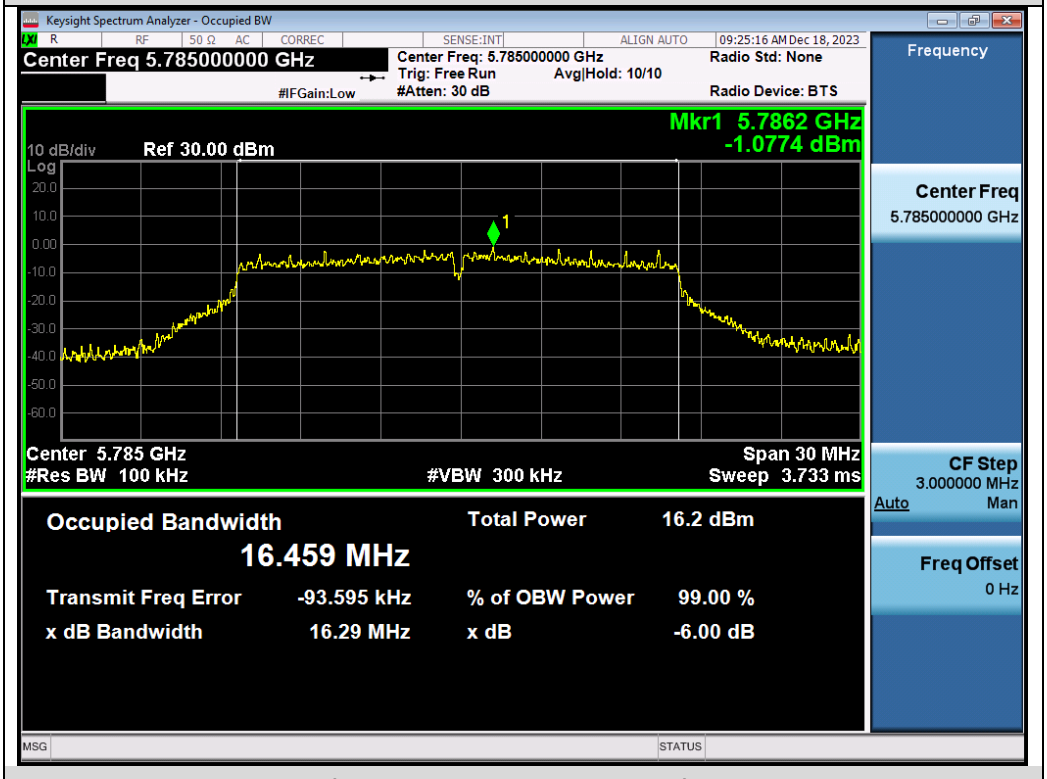


Test_Graph_802.11ax40_ANT1_5795_MCS0_DTSBW



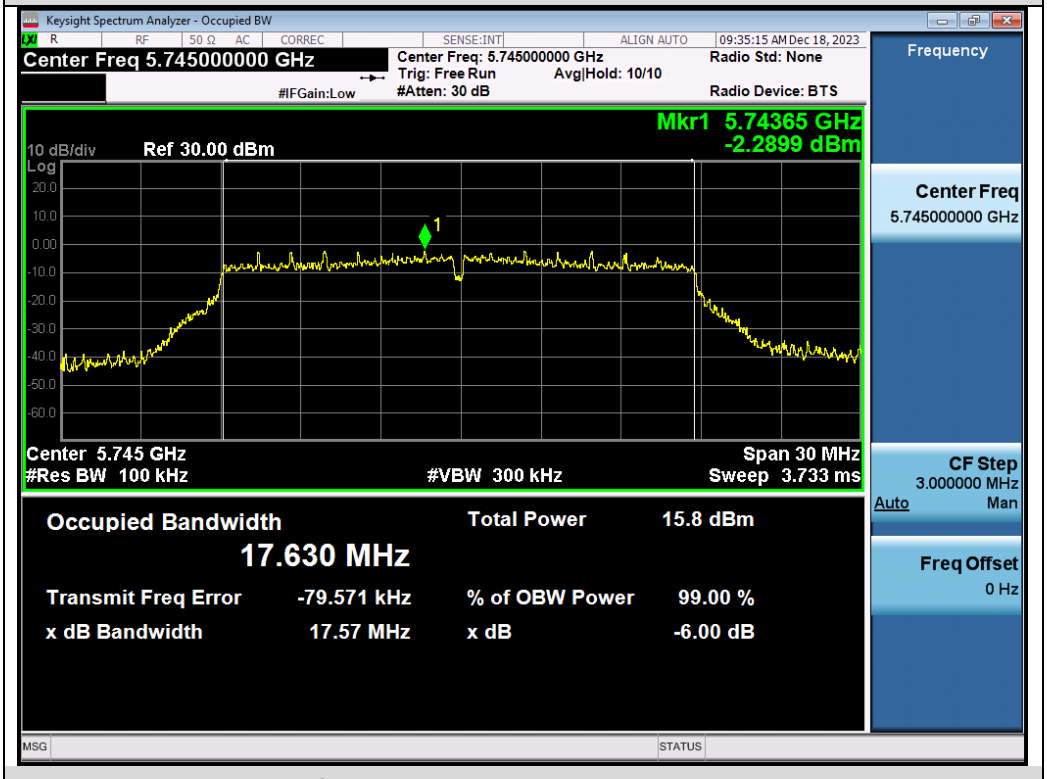
Test_Graph_802.11ax80_ANT1_5775_MCS0_DTSBW

Test_Graph_802.11a_ANT2_5745_6Mbps_DTSBW



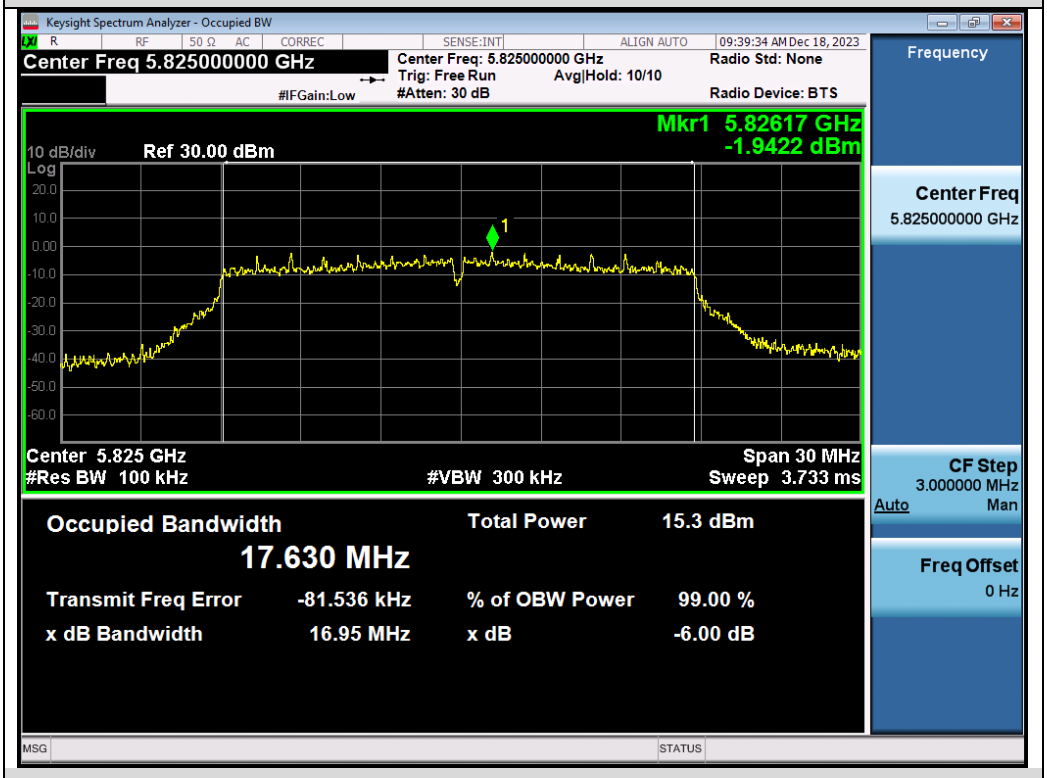
Test_Graph_802.11a_ANT2_5785_6Mbps_DTSBW

Test_Graph_802.11a_ANT2_5825_6Mbps_DTSBW

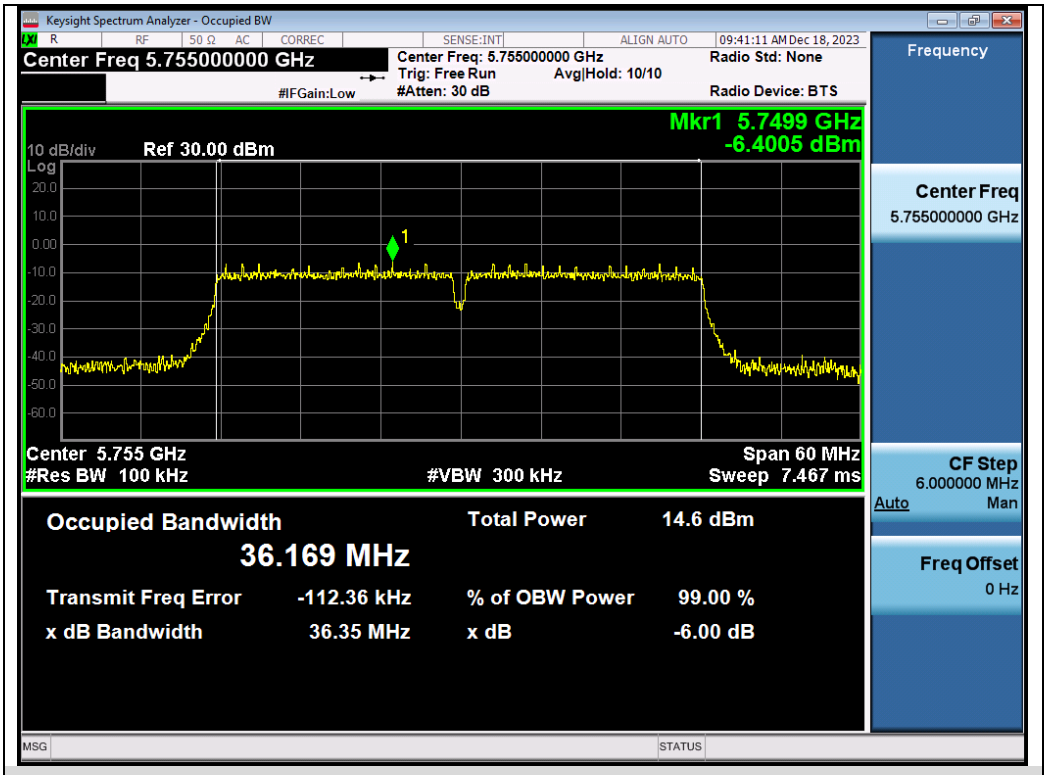


Test_Graph_802.11n20_ANT2_5745_MCS0_DTSBW

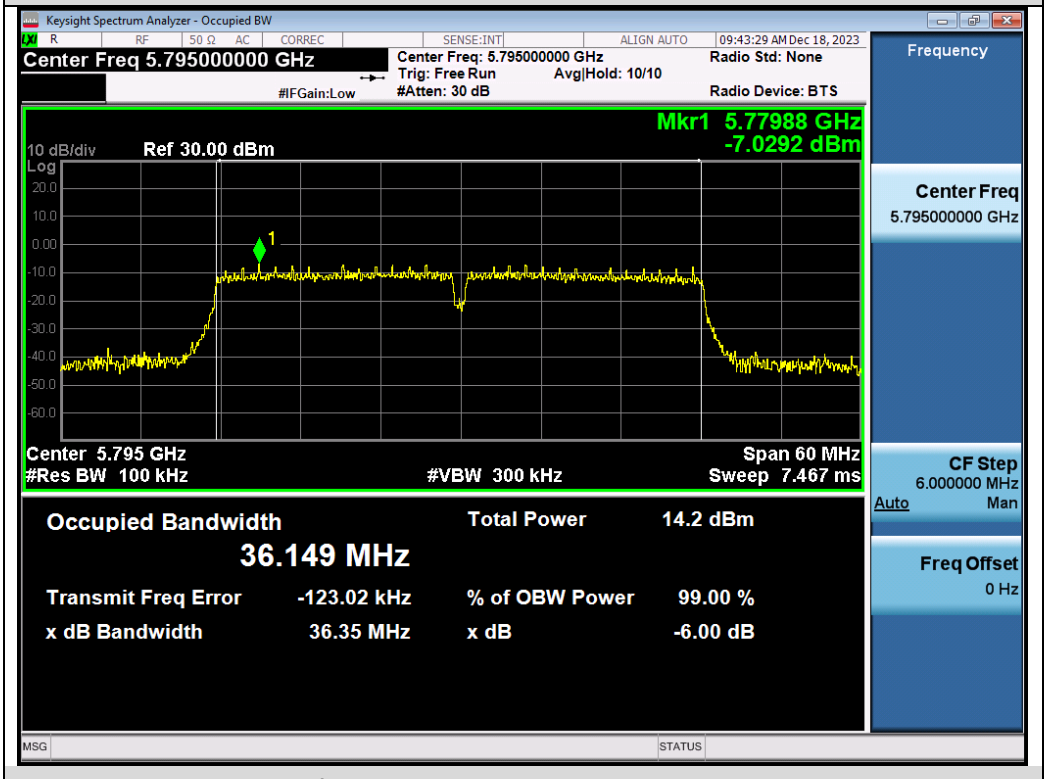
Test_Graph_802.11n20_ANT2_5785_MCS0_DTSBW



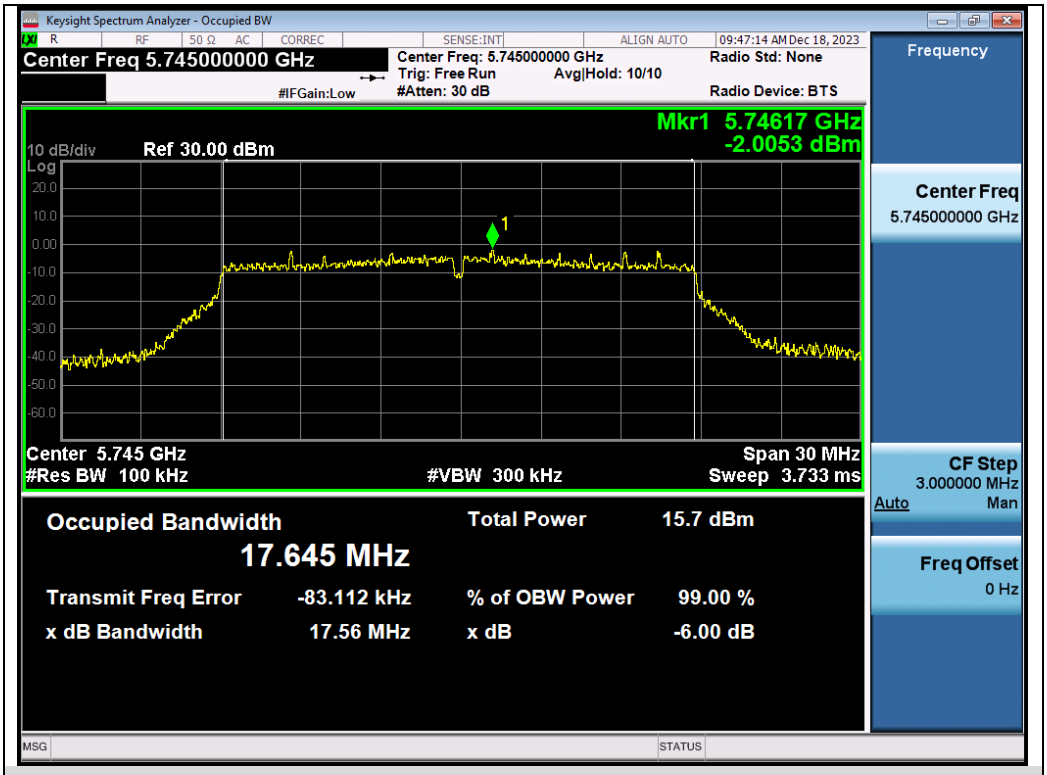
Test_Graph_802.11n20_ANT2_5825_MCS0_DTSBW



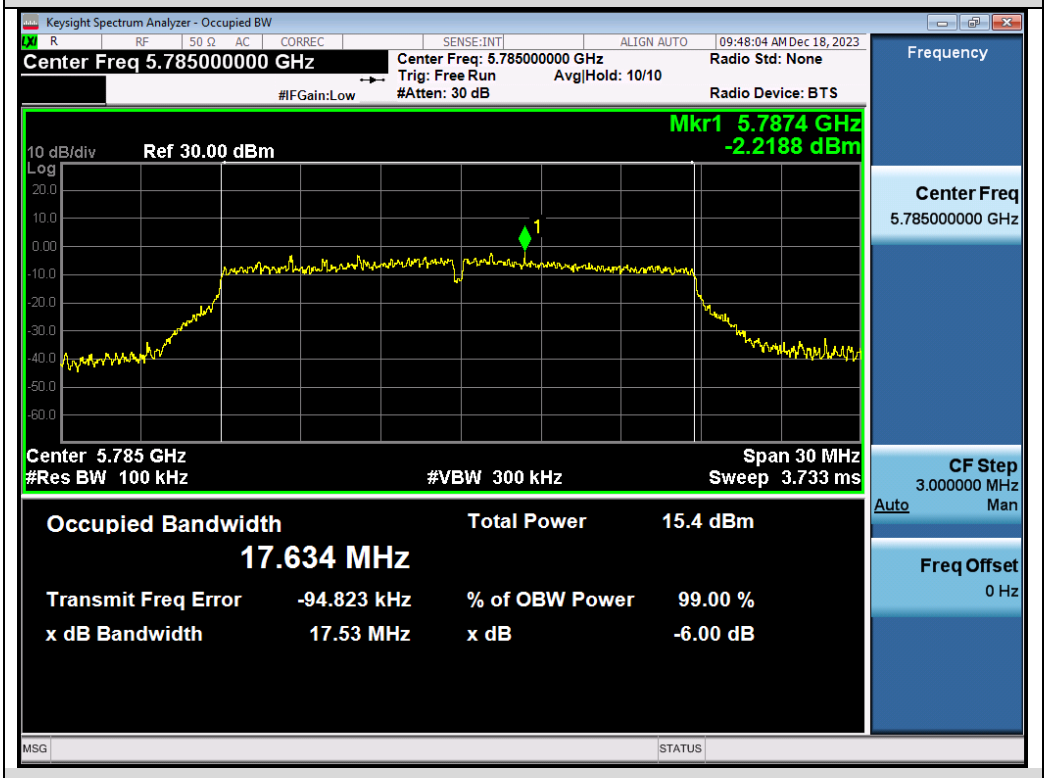
Test_Graph_802.11n40_ANT2_5755_MCS0_DTSBW



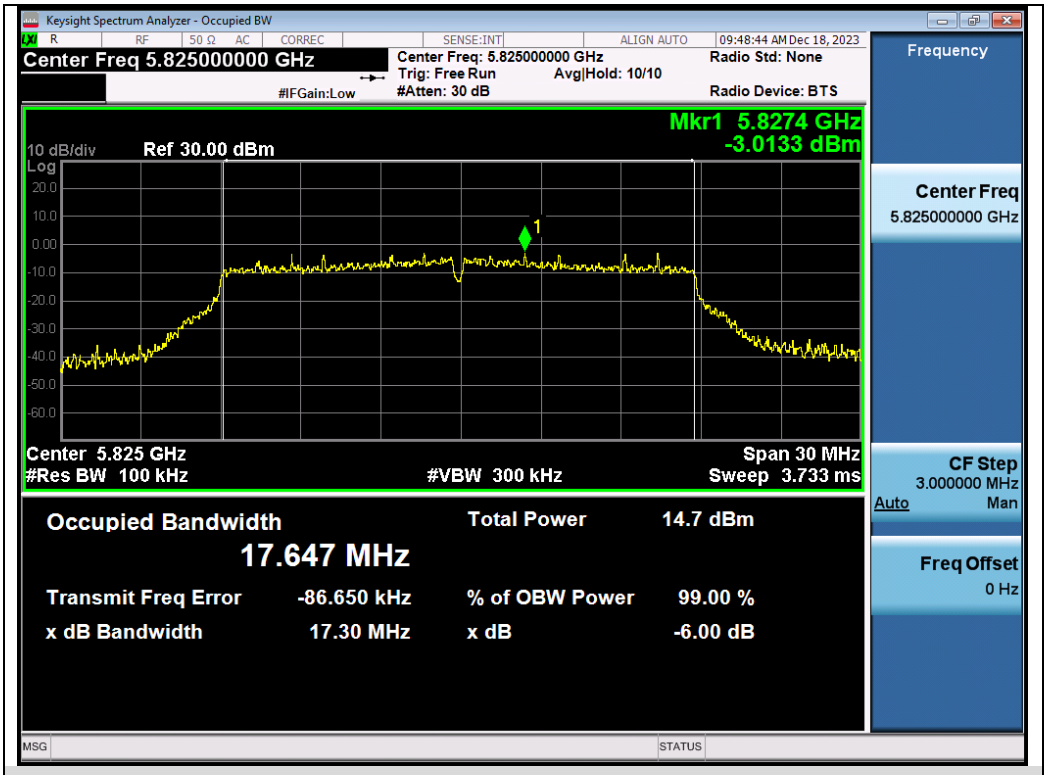
Test_Graph_802.11n40_ANT2_5795_MCS0_DTSBW



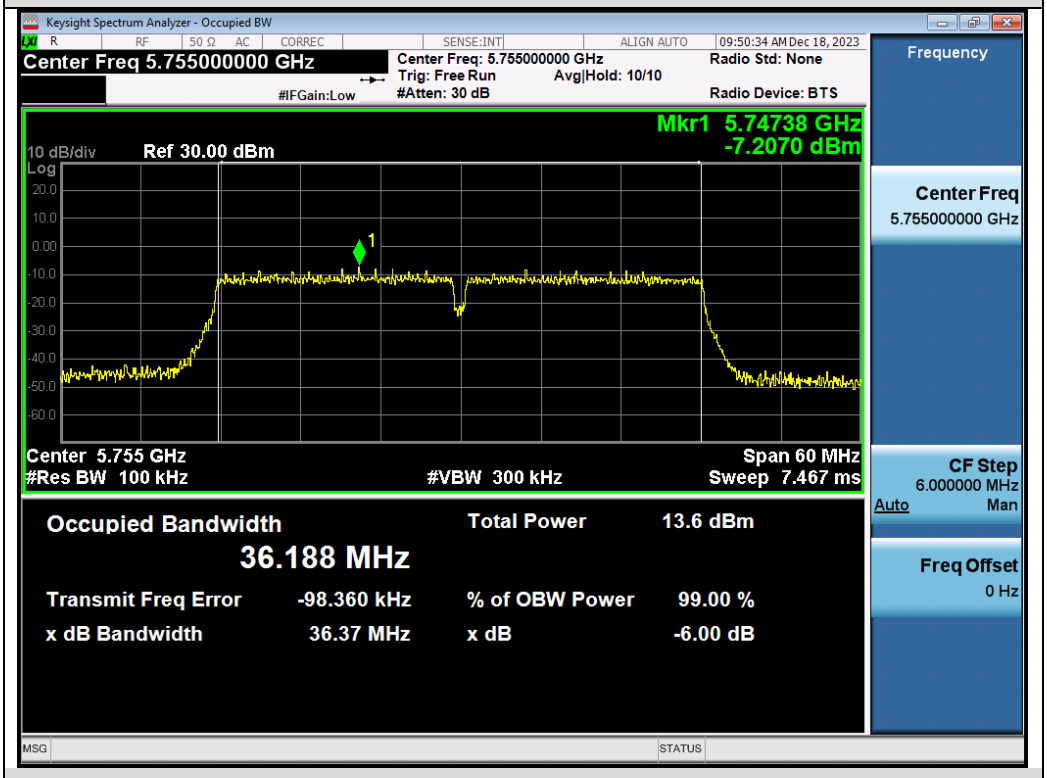
Test_Graph_802.11ac20_ANT2_5745_MCS0_DTSBW



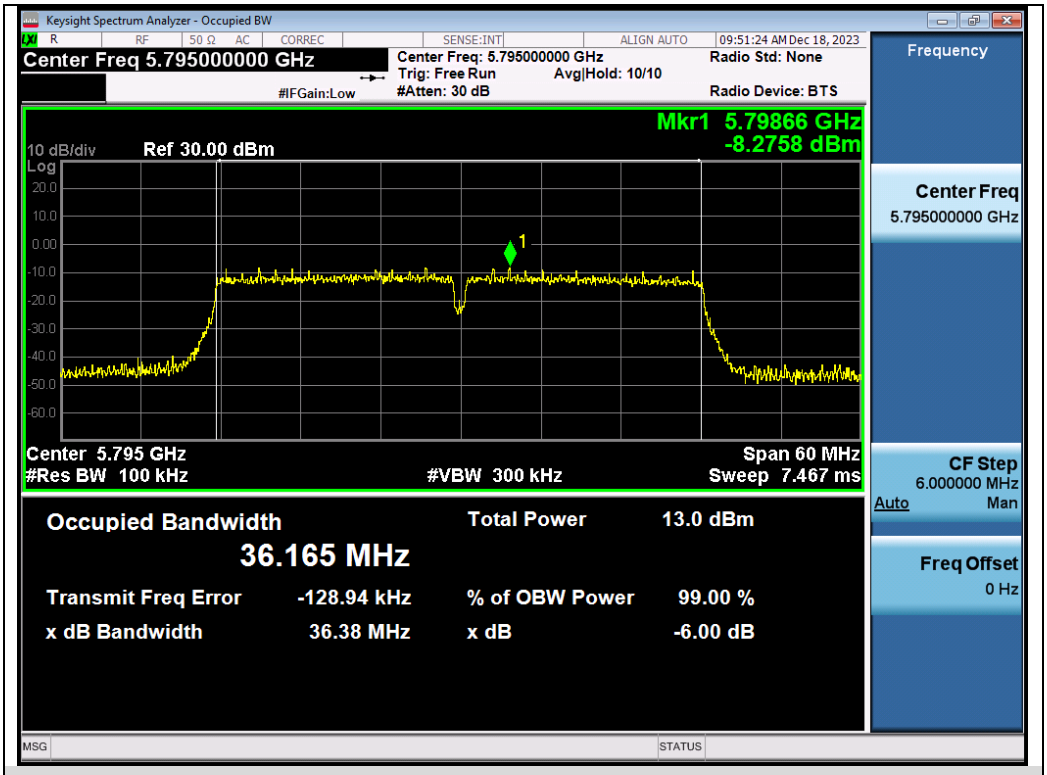
Test_Graph_802.11ac20_ANT2_5785_MCS0_DTSBW



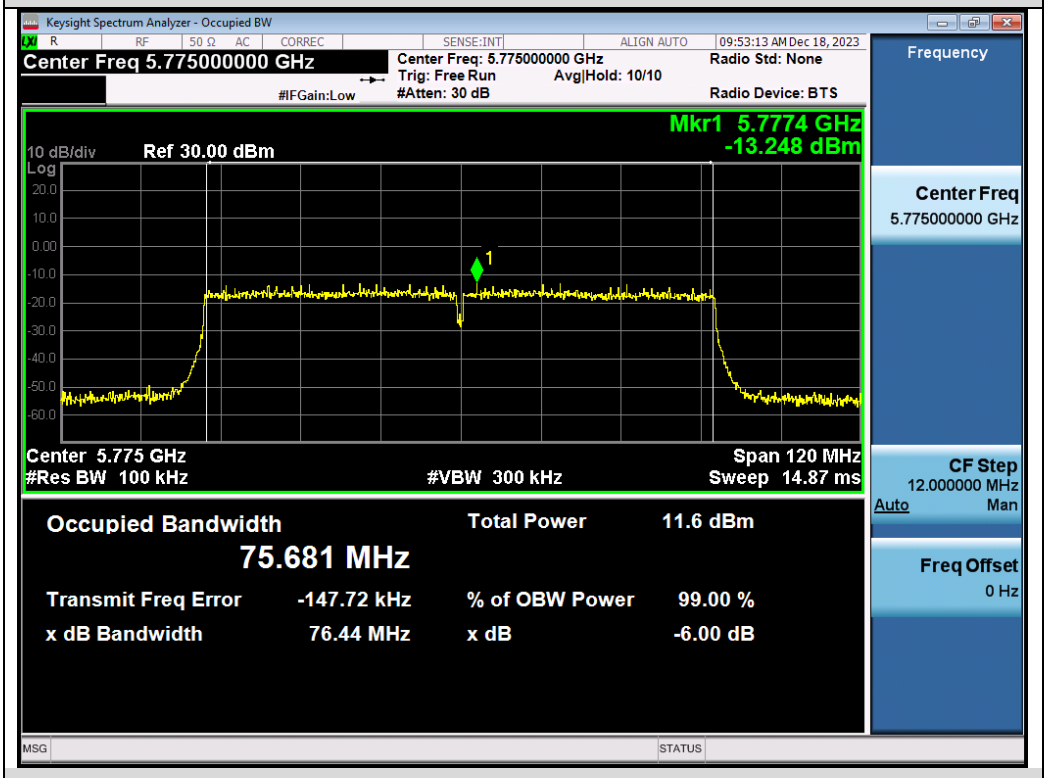
Test_Graph_802.11ac20_ANT2_5825_MCS9_DTSBW



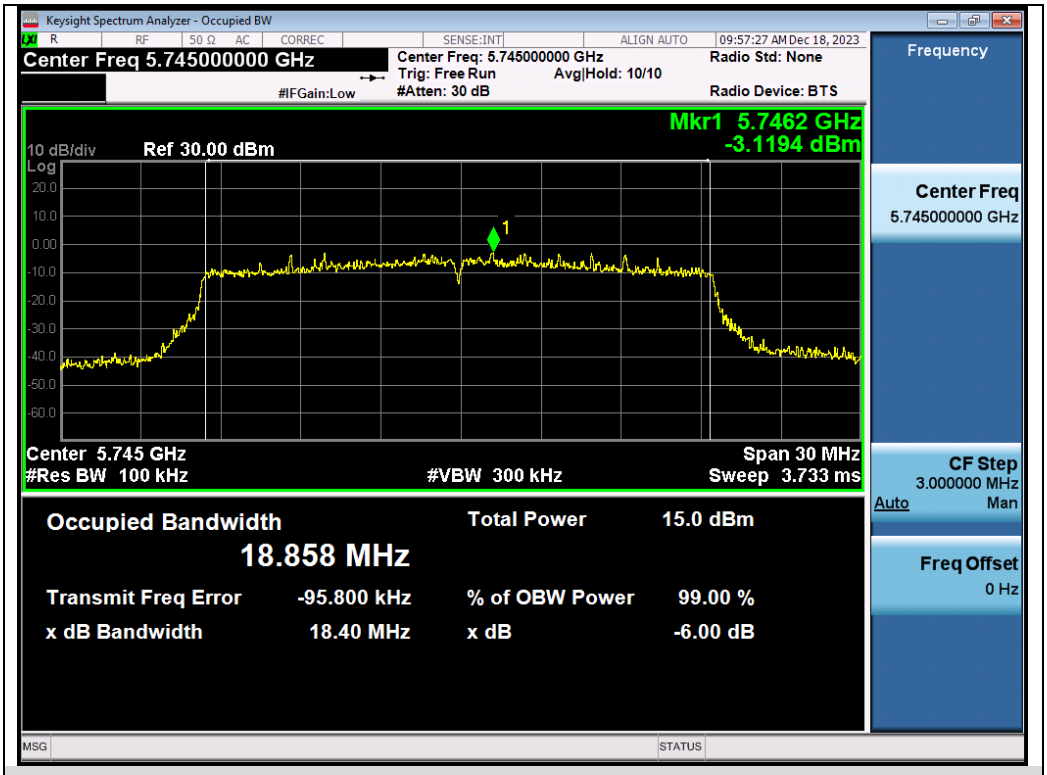
Test_Graph_802.11ac40_ANT2_5755_MCS9_DTSBW



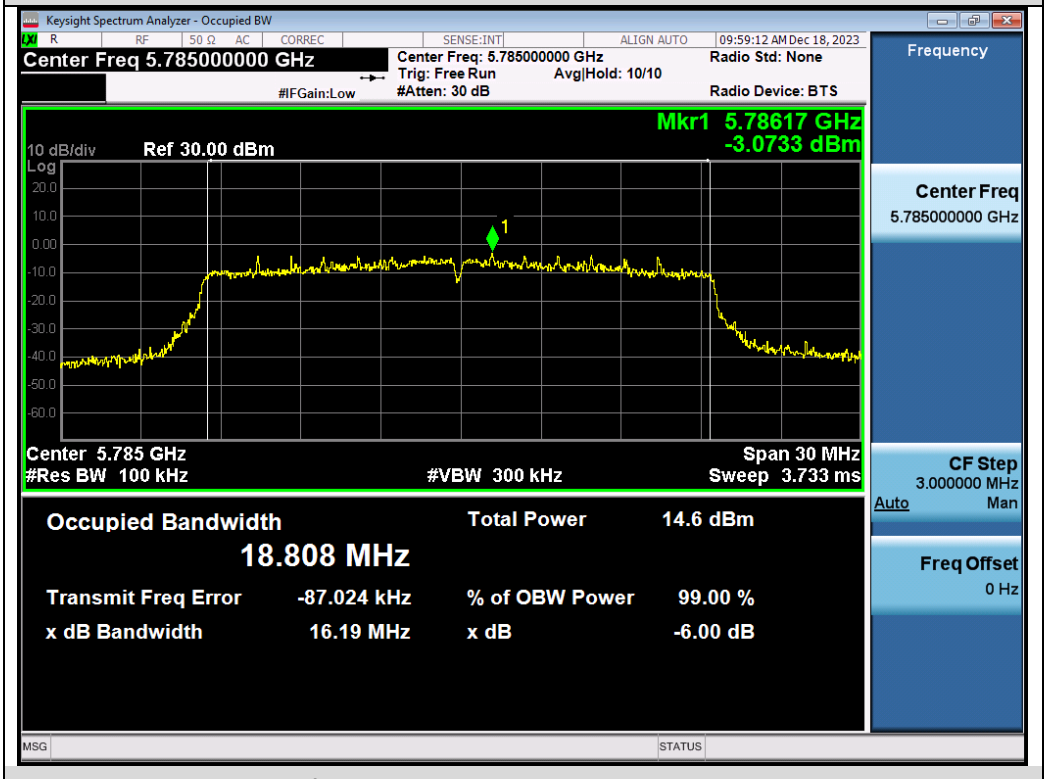
Test_Graph_802.11ac40_ANT2_5795_MCS9_DTSBW



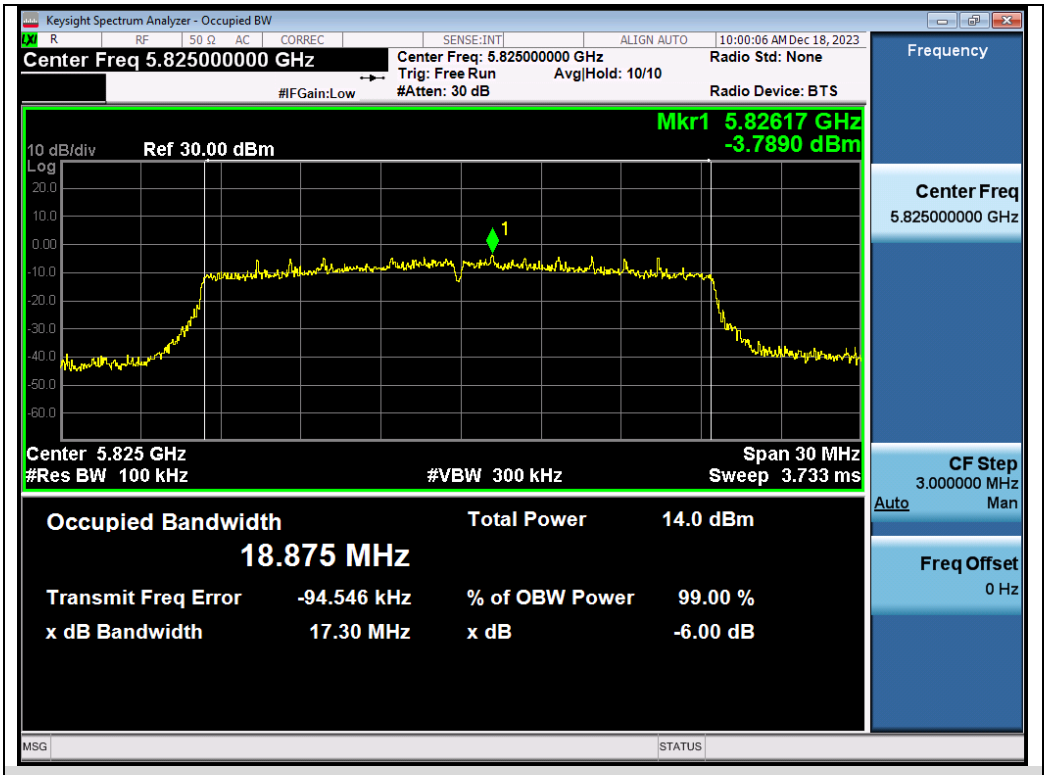
Test_Graph_802.11ac80_ANT2_5775_MCS9_DTSBW



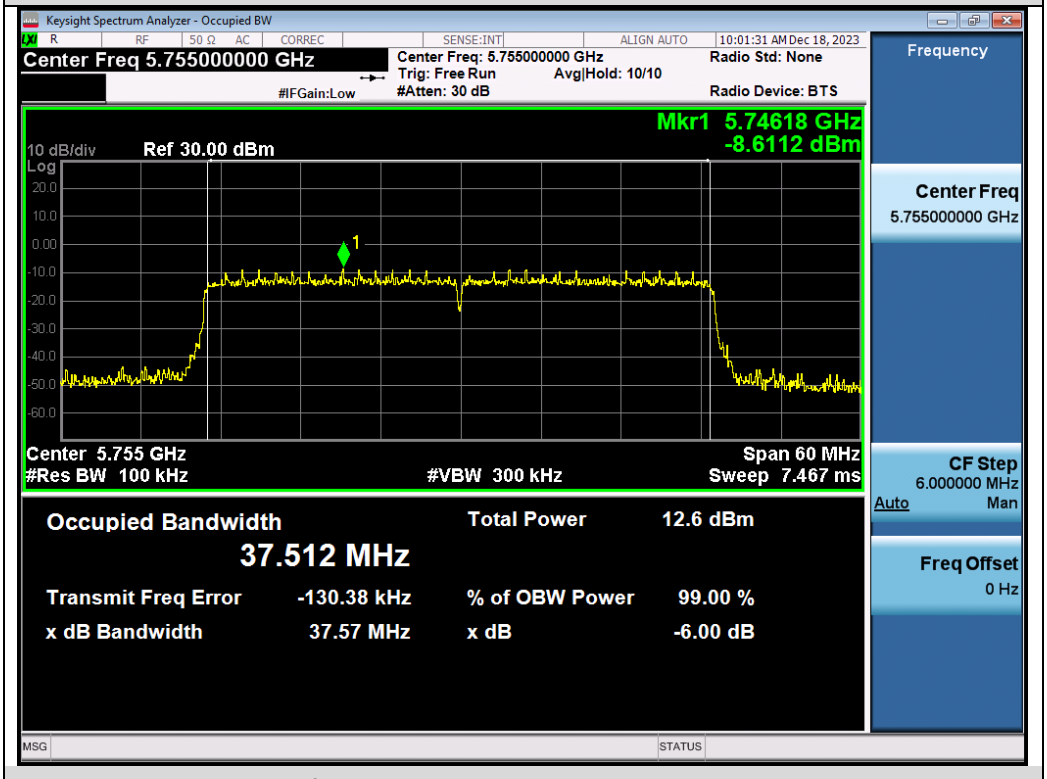
Test_Graph_802.11ax20_ANT2_5745_MCS0_DTSBW



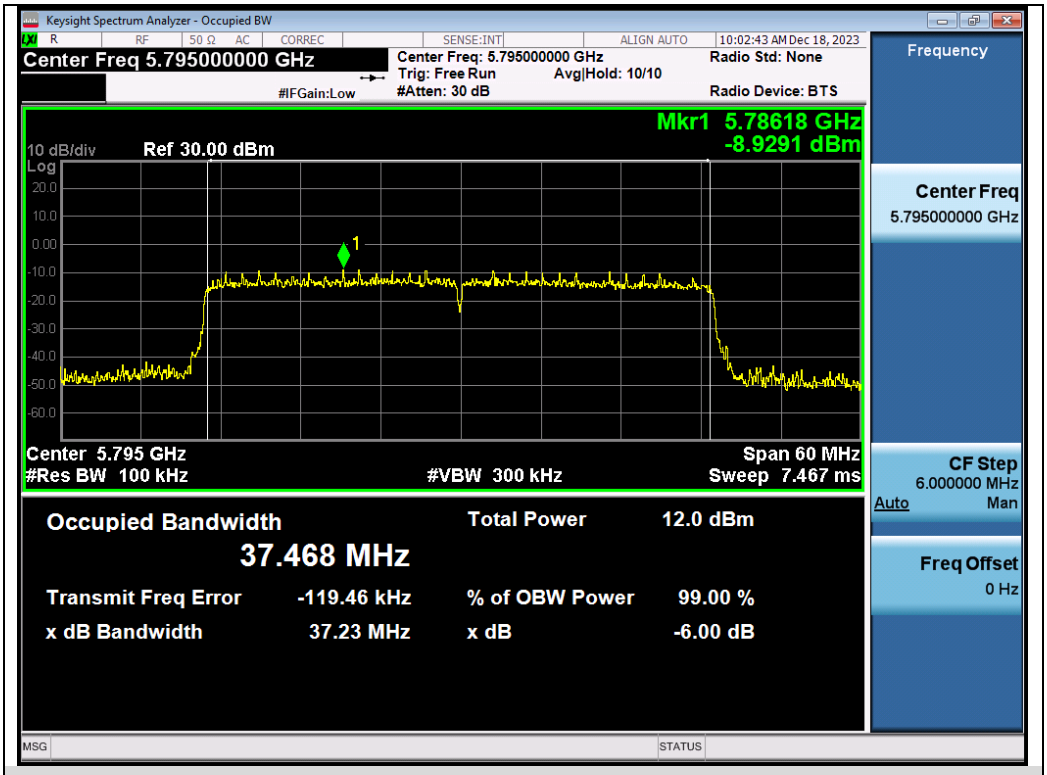
Test_Graph_802.11ax20_ANT2_5785_MCS0_DTSBW



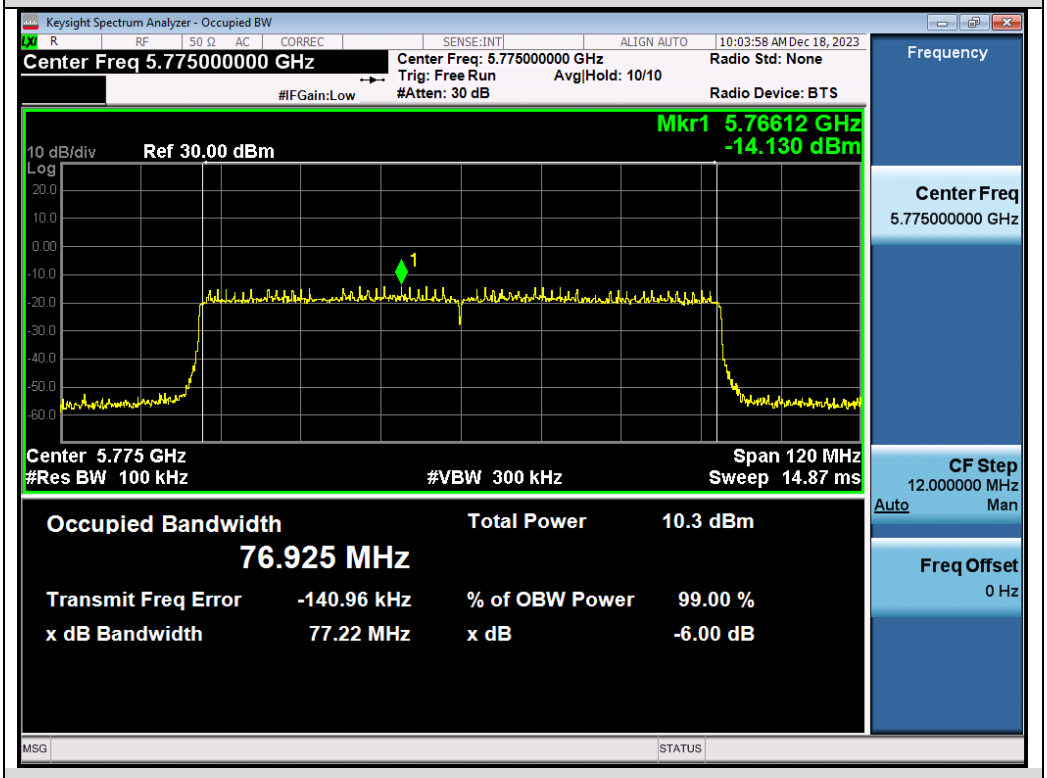
Test_Graph_802.11ax20_ANT2_5825_MCS0_DTSBW



Test_Graph_802.11ax40_ANT2_5755_MCS0_DTSBW



Test_Graph_802.11ax40_ANT2_5795_MCS0_DTSBW



Test_Graph_802.11ax80_ANT2_5775_MCS0_DTSBW

9. Power Spectral Density Measurement

9.1 Provisions Applicable

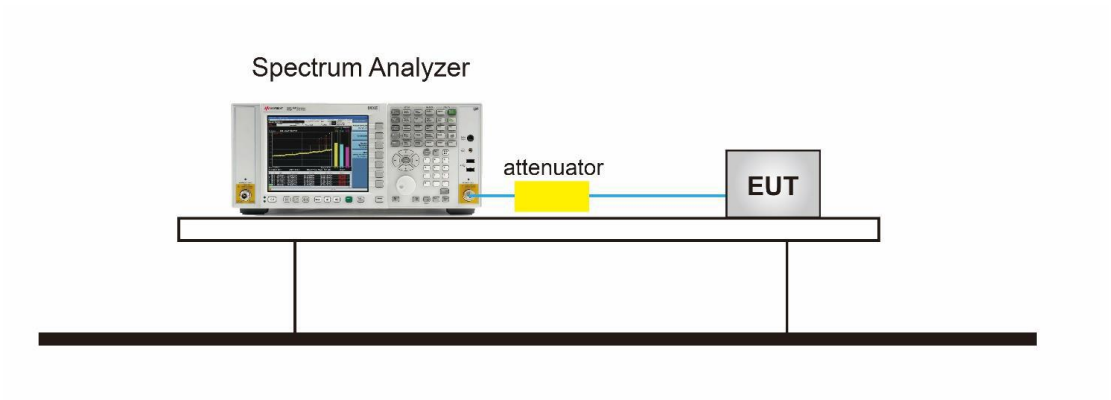
Operation Band	EUT Category		LIMIT
U-NII-1	☐	Outdoor Access Point	17dBm/ MHz
	☐	Fixed point-to-point Access Point	17dBm/ MHz
	☐	Indoor Access Point	17dBm/ MHz
	☒	Client devices	11dBm/ MHz
U-NII-2A	/		11dBm/ MHz
U-NII-2C	/		11dBm/ MHz
U-NII-3	/		30 dBm/500kHz

9.2 Measurement Procedure

☒For Average power spectral density test:

1. Connect EUT RF output port to the Spectrum Analyzer through an RF attenuator.
2. Span was set to encompass the entire 26dB EBW of the signal.
3. RBW = 1MHz.
4. If measurement bandwidth of Maximum PSD is specified in 500 kHz, RBW = 100KHz
5. Set VBW≥[3×RBW].
6. Sweep Time=Auto couple.
7. Detector function=RMS (i.e., power averaging).
8. Trace average at least 100 traces in power averaging (rms) mode.
9. When the measurement bandwidth of Maximum PSD is specified in 100 kHz, add a constant factor 10*log(500kHz/100kHz) = 6.99 dB to the measured result.
10. Determine according to the duty cycle of the equipment: when it is less than 98%, follow the steps below.
11. Add [10 log (1/D)], where D is the duty cycle, to the measured power to compute the average power during the actual transmission times (because the measurement represents an average over both the ON and OFF times of the transmission). For example, add [10 log (1/0.25)] = 6 dB if the duty cycle is 25%.
12. Record the test results in the report.

9.3 Measurement Setup (Block Diagram of Configuration)



9.4 Measurement Result

Test Data of Conducted Output Power Density for band 5.15-5.25 GHz-ANT 1				
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail
802.11a	5180	2.962	11	Pass
	5200	2.411	11	Pass
	5240	1.976	11	Pass
802.11n20	5180	2.793	11	Pass
	5200	2.311	11	Pass
	5240	1.600	11	Pass
802.11n40	5190	-2.641	11	Pass
	5230	-2.884	11	Pass
802.11ac20	5180	1.059	11	Pass
	5200	0.717	11	Pass
	5240	0.499	11	Pass
802.11ac40	5190	-4.411	11	Pass
	5230	-4.724	11	Pass
802.11ac80	5210	-7.790	11	Pass
802.11ax20	5180	-0.101	11	Pass
	5200	-0.241	11	Pass
	5240	-0.629	11	Pass
802.11ax40	5190	-5.103	11	Pass
	5230	-5.704	11	Pass
802.11ax80	5210	-8.485	11	Pass

Test Data of Conducted Output Power Density for band 5.15-5.25 GHz-ANT 2				
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail
802.11a	5180	2.150	11	Pass
	5200	-1.552	11	Pass
	5240	1.328	11	Pass
802.11n20	5180	1.769	11	Pass
	5200	1.605	11	Pass
	5240	1.001	11	Pass
802.11n40	5190	-2.552	11	Pass
	5230	-2.931	11	Pass
802.11ac20	5180	1.065	11	Pass
	5200	0.765	11	Pass
	5240	-0.063	11	Pass
802.11ac40	5190	-4.746	11	Pass
	5230	-5.343	11	Pass
802.11ac80	5210	-8.253	11	Pass
802.11ax20	5180	-0.093	11	Pass
	5200	-0.144	11	Pass
	5240	-0.672	11	Pass
802.11ax40	5190	-5.219	11	Pass
	5230	-5.679	11	Pass
802.11ax80	5210	-8.720	11	Pass

Test Data of Conducted Output Power Density for band 5.725-5.85 GHz-ANT 1					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11a	5745	-7.704	-0.714	30	Pass
	5785	-8.235	-1.245	30	Pass
	5825	-8.650	-1.660	30	Pass
802.11n20	5745	-8.550	-1.560	30	Pass
	5785	-8.900	-1.910	30	Pass
	5825	-9.131	-2.141	30	Pass
802.11n40	5755	-13.432	-6.442	30	Pass
	5795	-13.477	-6.487	30	Pass
802.11ac20	5745	-8.857	-1.867	30	Pass
	5785	-8.921	-1.931	30	Pass
	5825	-9.919	-2.829	30	Pass
802.11ac40	5755	-15.232	-8.242	30	Pass
	5795	-15.335	-8.345	30	Pass
802.11ac80	5775	-18.906	-11.916	30	Pass
802.11ax20	5745	-10.112	-3.122	30	Pass
	5785	-10.671	-3.681	30	Pass
	5825	-11.202	-4.212	30	Pass
802.11ax40	5755	-16.026	-9.036	30	Pass
	5795	-16.316	-9.326	30	Pass
802.11ax80	5775	-18.908	-11.918	30	Pass

Test Data of Conducted Output Power Density for band 5.725-5.85 GHz-ANT 2					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11a	5745	-7.133	-0.143	30	Pass
	5785	-7.634	-0.644	30	Pass
	5825	-8.395	-1.405	30	Pass
802.11n20	5745	-8.333	-1.343	30	Pass
	5785	-8.607	-1.617	30	Pass
	5825	-8.779	-1.789	30	Pass
802.11n40	5755	-13.215	-6.225	30	Pass
	5795	-13.186	-6.196	30	Pass
802.11ac20	5745	-8.830	-1.840	30	Pass
	5785	-9.063	-2.073	30	Pass
	5825	-9.710	-2.720	30	Pass
802.11ac40	5755	-14.995	-8.005	30	Pass
	5795	-15.461	-8.471	30	Pass
802.11ac80	5775	-18.690	-11.700	30	Pass
802.11ax20	5745	-10.256	-3.266	30	Pass
	5785	-10.410	-3.420	30	Pass
	5825	-11.121	-4.131	30	Pass
802.11ax40	5755	-15.530	-8.540	30	Pass
	5795	-16.118	-9.128	30	Pass
802.11ax80	5775	-19.105	-12.115	30	Pass

Test Data of Conducted Output Power Density for band 5.15-5.25 GHz-MIMO				
Test Mode	Test Channel (MHz)	Average Power Density (dBm/MHz)	Limits (dBm/MHz)	Pass or Fail
802.11n20	5180	5.321	11	Pass
	5200	4.983	11	Pass
	5240	4.321	11	Pass
802.11n40	5190	0.414	11	Pass
	5230	0.103	11	Pass
802.11ac20	5180	4.072	11	Pass
	5200	3.751	11	Pass
	5240	3.237	11	Pass
802.11ac40	5190	-1.565	11	Pass
	5230	-2.012	11	Pass
802.11ac80	5210	-5.005	11	Pass
802.11ax20	5180	2.913	11	Pass
	5200	2.818	11	Pass
	5240	2.360	11	Pass
802.11ax40	5190	-2.150	11	Pass
	5230	-2.681	11	Pass
802.11ax80	5210	-5.591	11	Pass

Test Data of Conducted Output Power Density for band 5.725-5.85 GHz-MIMO					
Test Mode	Test Channel (MHz)	Average Power Density (dBm/100kHz)	Average Power Density (dBm/500kHz)	Limits (dBm/500kHz)	Pass or Fail
802.11n20	5745	-5.430	1.560	30	Pass
	5785	-5.741	1.249	30	Pass
	5825	-5.941	1.049	30	Pass
802.11n40	5755	-10.312	-3.322	30	Pass
	5795	-10.319	-3.329	30	Pass
802.11ac20	5745	-5.833	1.157	30	Pass
	5785	-5.981	1.009	30	Pass
	5825	-6.803	0.236	30	Pass
802.11ac40	5755	-12.102	-5.112	30	Pass
	5795	-12.387	-5.397	30	Pass
802.11ac80	5775	-15.786	-8.796	30	Pass
802.11ax20	5745	-7.173	-0.183	30	Pass
	5785	-7.528	-0.538	30	Pass
	5825	-8.151	-1.161	30	Pass
802.11ax40	5755	-12.761	-5.771	30	Pass
	5795	-13.206	-6.216	30	Pass
802.11ax80	5775	-15.995	-9.005	30	Pass

Note:1.Power density(dBm/500kHz) = Power density(dBm/100kHz)+10*log(500/100).

2.The Total PSD(dBm/500kHz) = 10*log $\{10^{(\text{Ant 1 PSD}/10)} + 10^{(\text{Ant 2 PSD}/10)}\}$(dBm/500kHz).

Test Graphs of Conducted Output Power Spectral Density for band 5.15-5.25 GHz

Test_Graph_802.11a_ANT1_5180_6Mbps_PSD

Test_Graph_802.11a_ANT1_5200_6Mbps_PSD

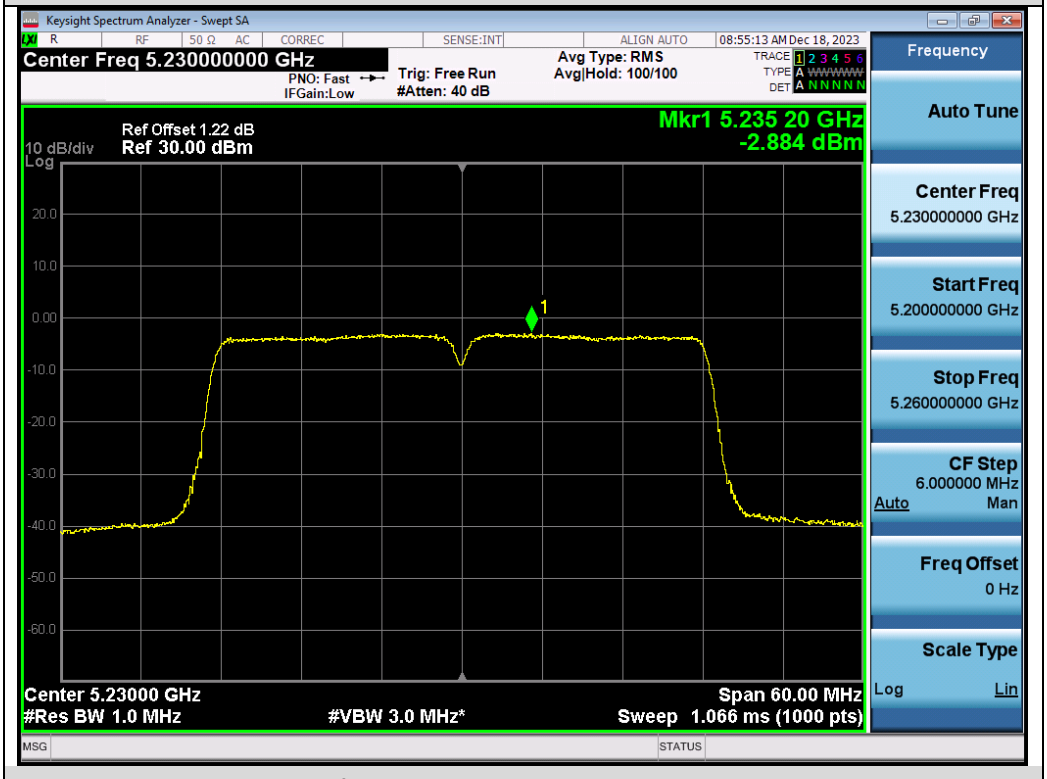
Test_Graph_802.11a_ANT1_5240_6Mbps_PSD

Test_Graph_802.11n20_ANT1_5180_MCS0_PSD

Test_Graph_802.11n20_ANT1_5200_MCS0_PSD

Test_Graph_802.11n20_ANT1_5240_MCS0_PSD

Test_Graph_802.11n40_ANT1_5190_MCS0_PSD

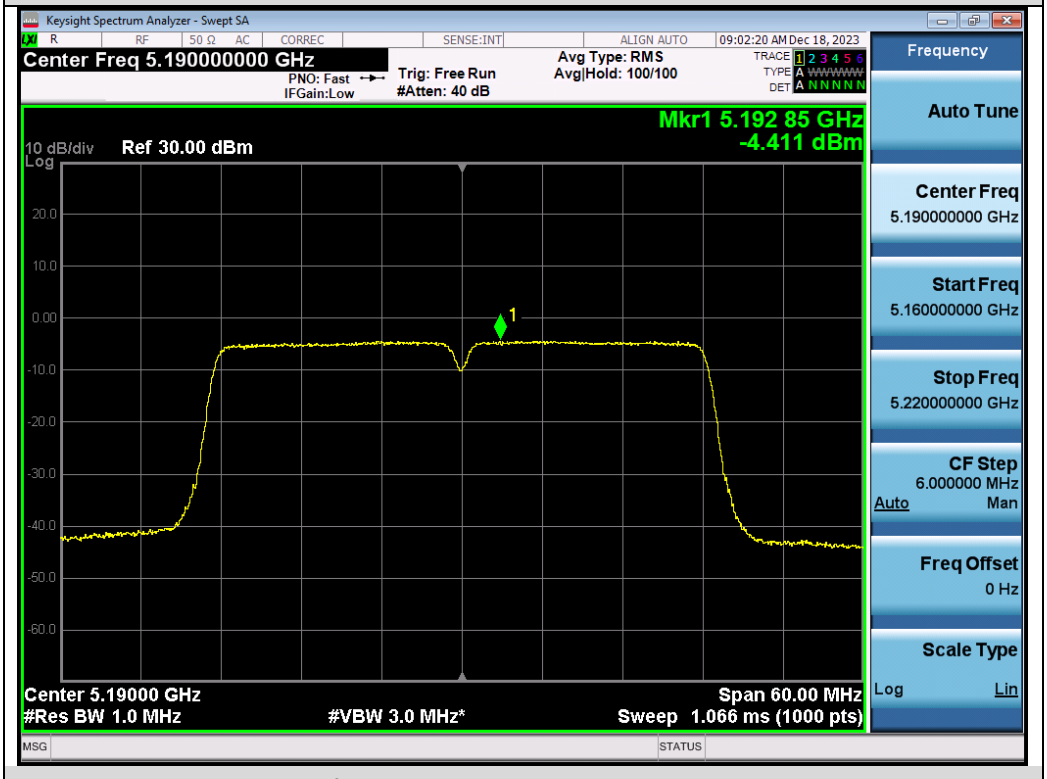


Test_Graph_802.11n40_ANT1_5230_MCS0_PSD

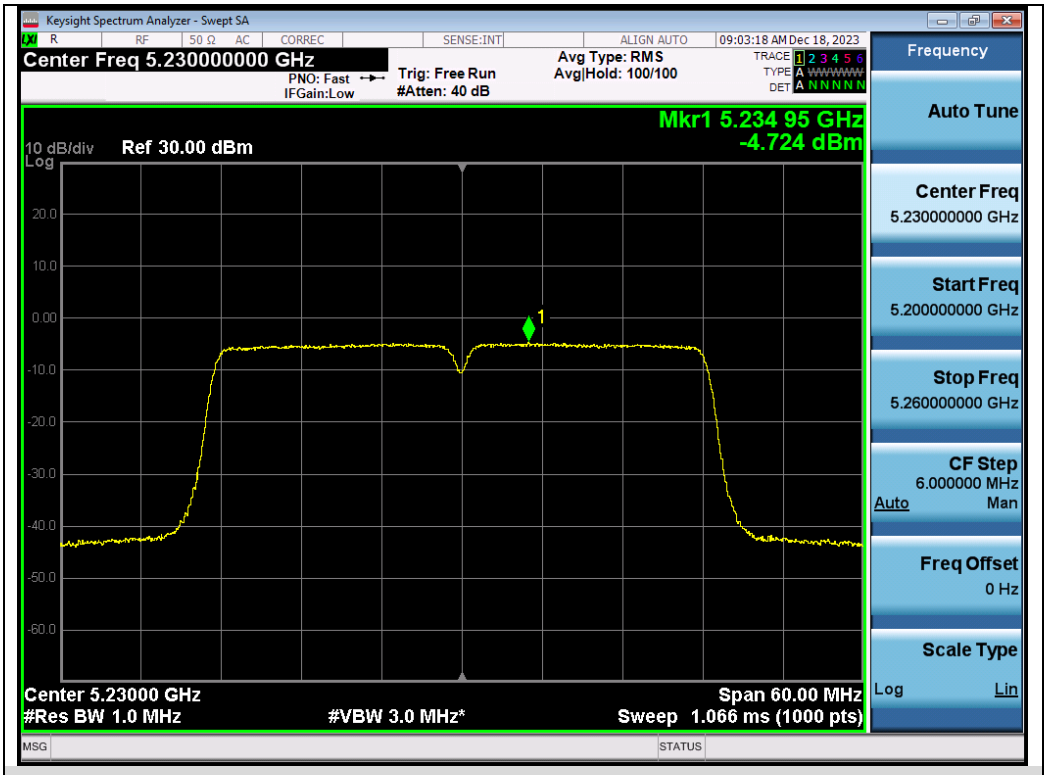
Test_Graph_802.11ac20_ANT1_5180_MCS0_PSD

Test_Graph_802.11ac20_ANT1_5200_MCS0_PSD

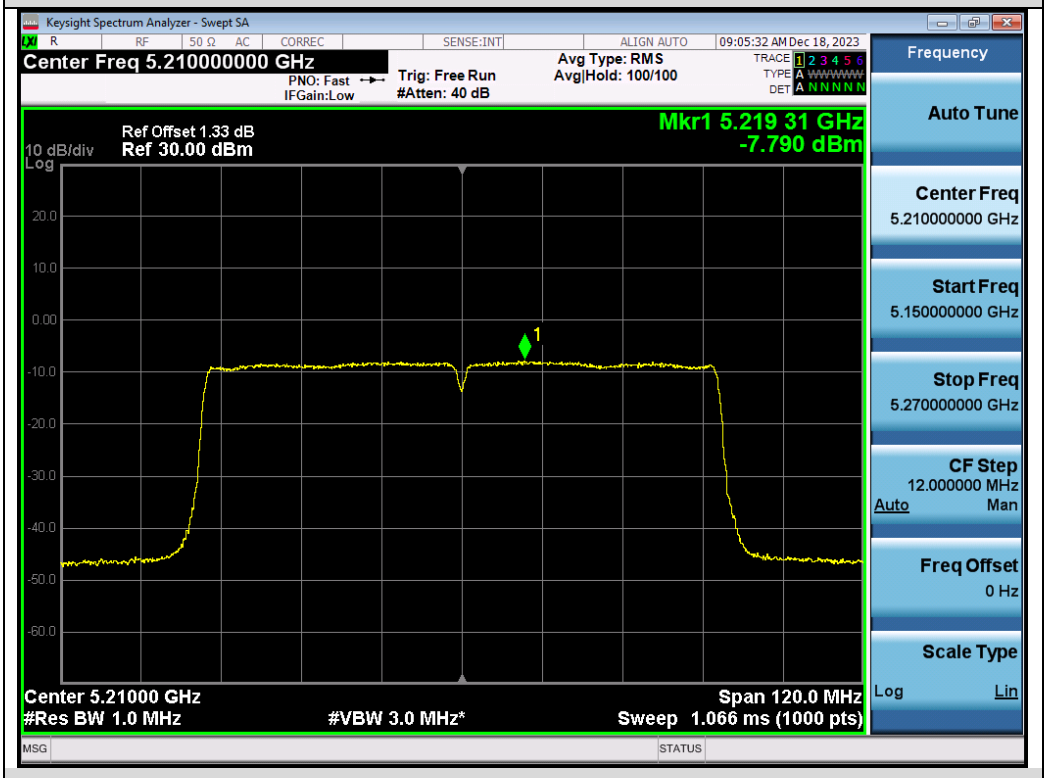
Test_Graph_802.11ac20_ANT1_5240_MCS9_PSD



Test_Graph_802.11ac40_ANT1_5190_MCS9_PSD



Test_Graph_802.11ac40_ANT1_5230_MCS9_PSD

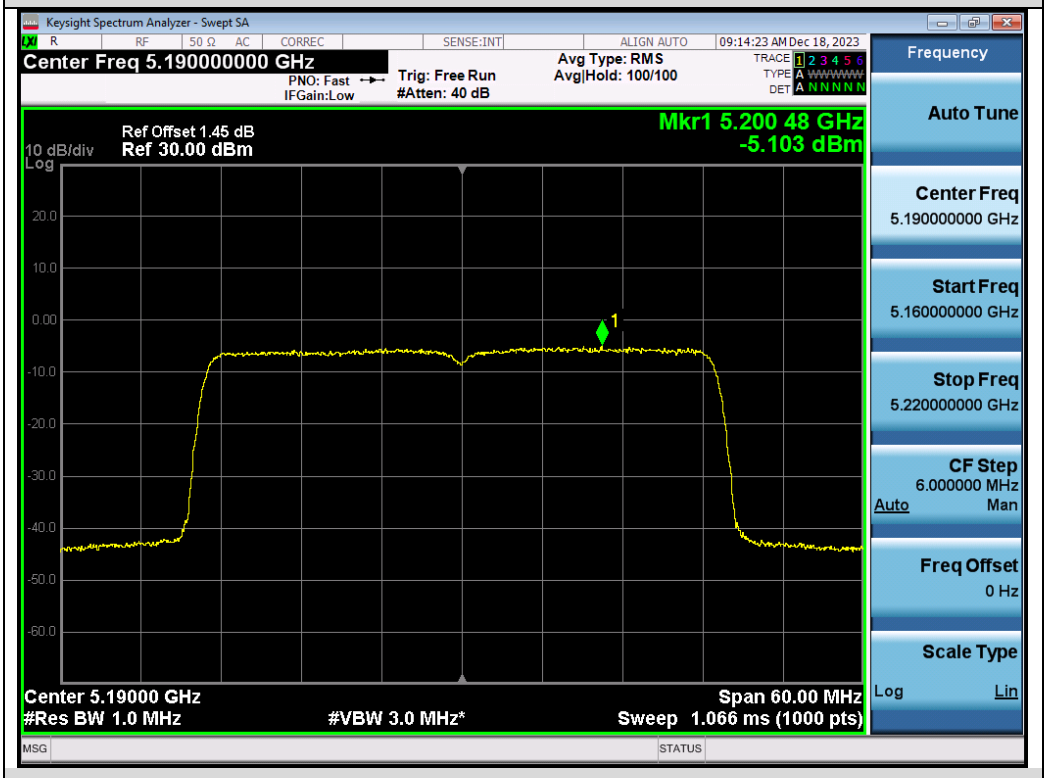


Test_Graph_802.11ac80_ANT1_5210_MCS9_PSD

Test_Graph_802.11ax20_ANT1_5180_MCS0_PSD

Test_Graph_802.11ax20_ANT1_5200_MCS0_PSD

Test_Graph_802.11ax20_ANT1_5240_MCS0_PSD



Test_Graph_802.11ax40_ANT1_5190_MCS0_PSD

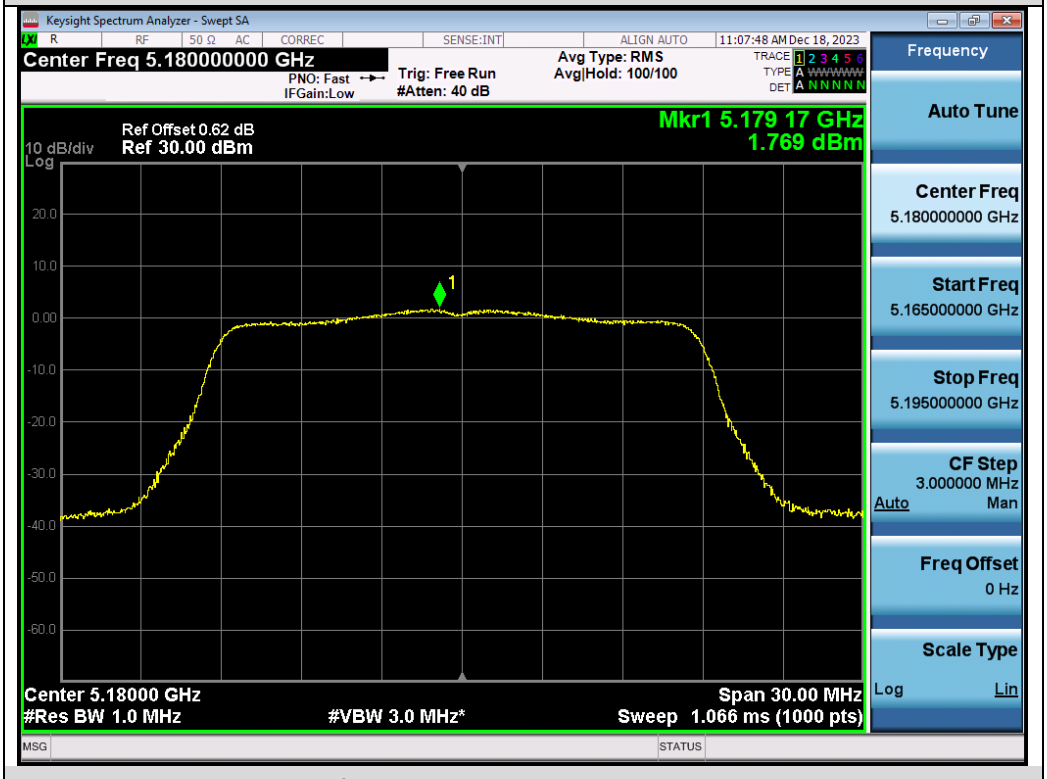
Test_Graph_802.11ax40_ANT1_5230_MCS0_PSD

Test_Graph_802.11ax80_ANT1_5210_MCS0_PSD

Test_Graph_802.11a_ANT2_5180_6Mbps_PSD

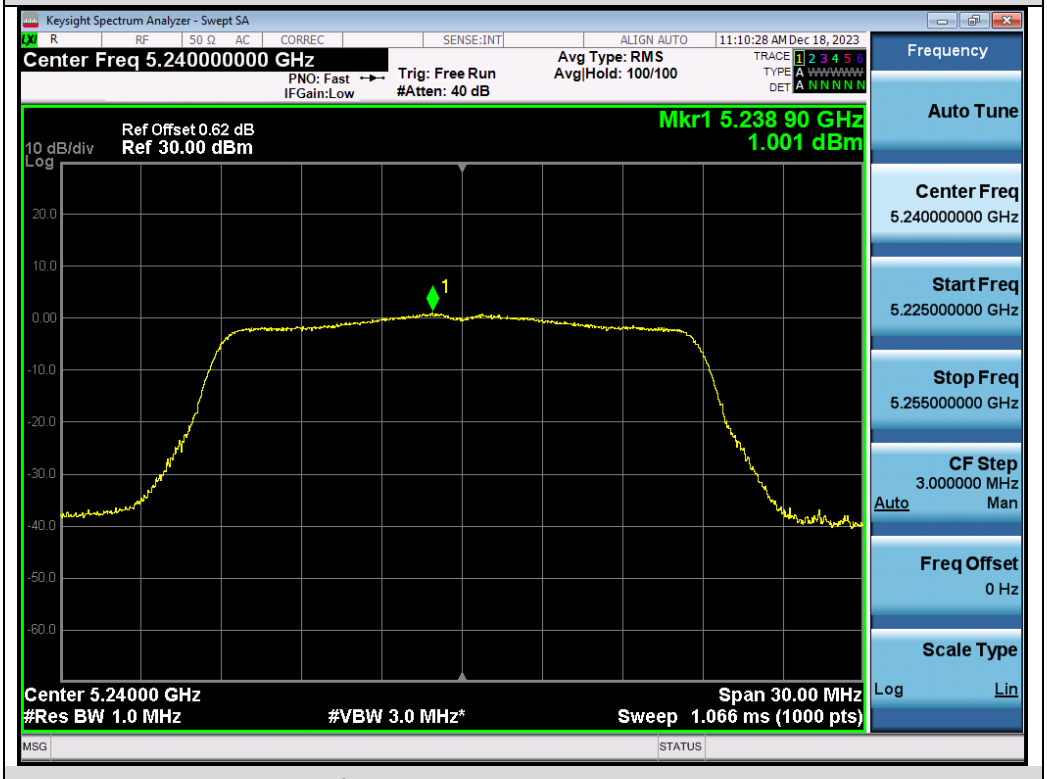
Test_Graph_802.11a_ANT2_5200_6Mbps_PSD

Test_Graph_802.11a_ANT2_5240_6Mbps_PSD



Test_Graph_802.11n20_ANT2_5180_MCS0_PSD

Test_Graph_802.11n20_ANT2_5200_MCS0_PSD



Test_Graph_802.11n20_ANT2_5240_MCS0_PSD