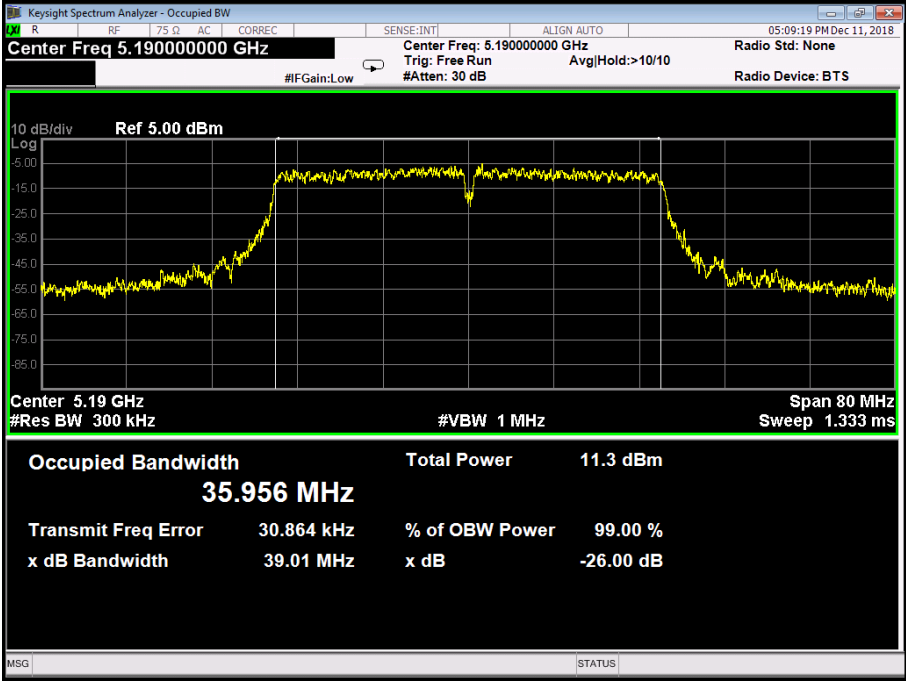


ANT 0:

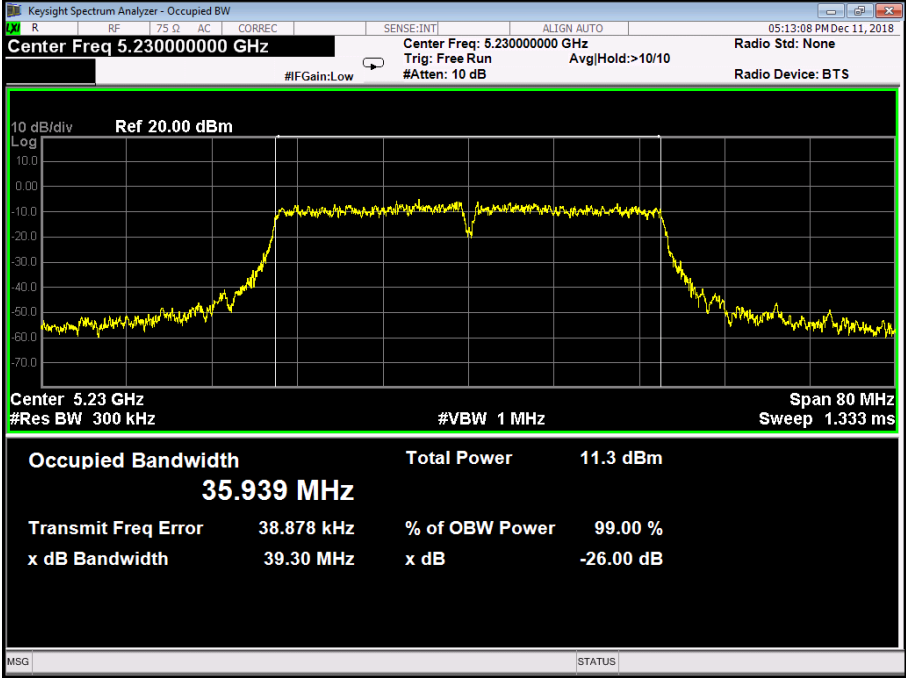
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT40) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
38	5190	39.01	35.956
46	5230	39.30	35.939

802.11N(HT40) Mode

5190 MHz



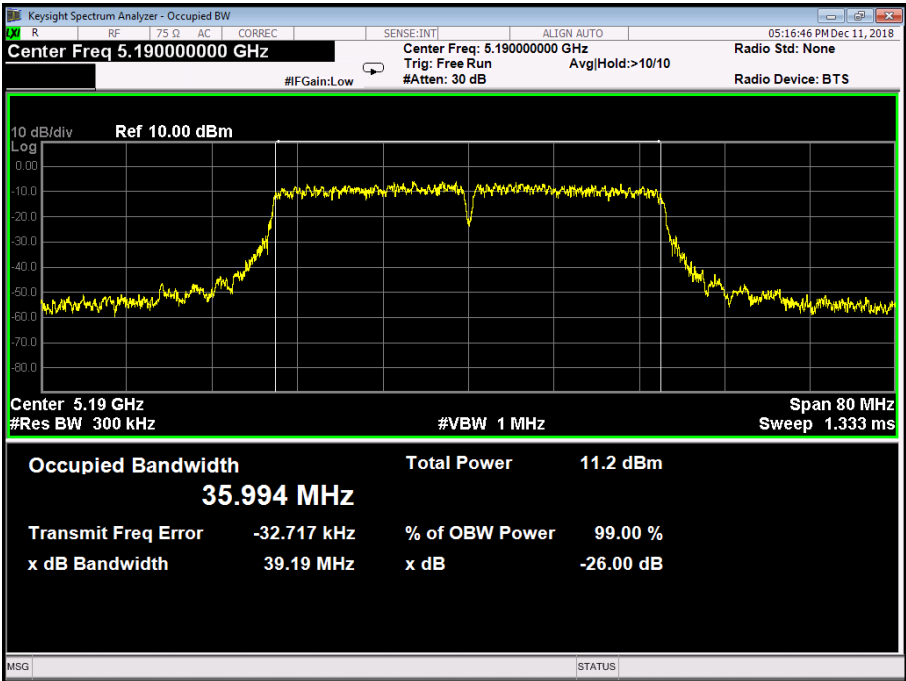
802.11N(HT40) Mode
5230 MHz



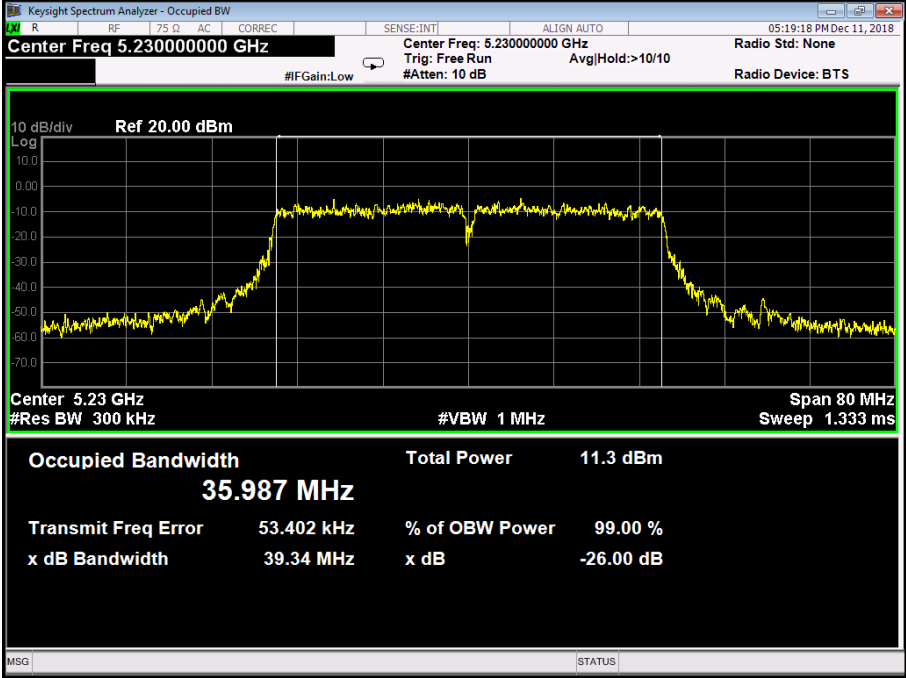
ANT 0:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT40) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
38	5190	39.19	35.994
46	5230	39.34	35.987

**802.11ac(VHT40) Mode
5190 MHz**



802.11ac(VHT40) Mode
5230 MHz

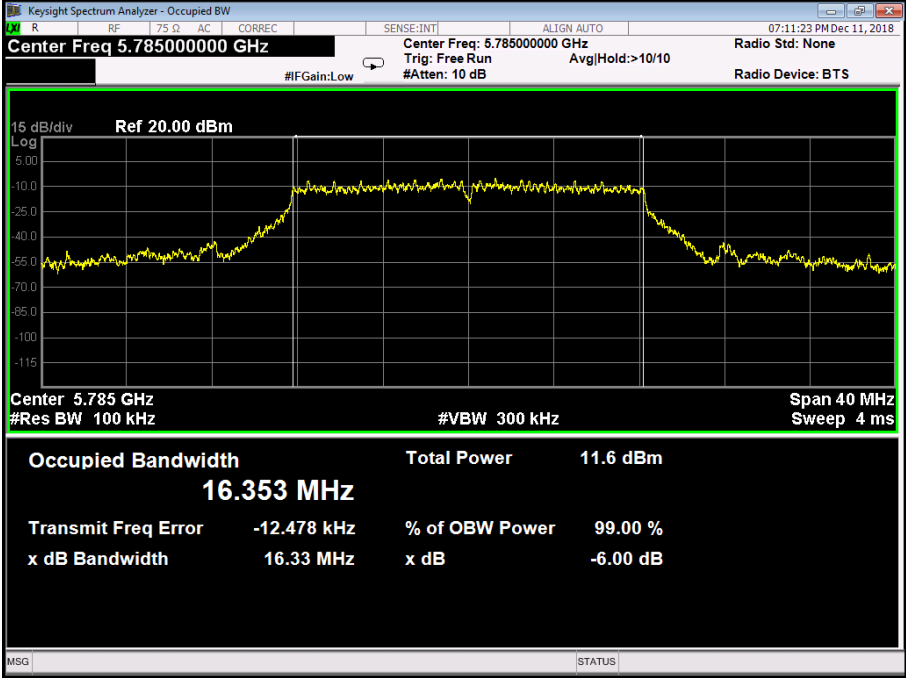


ANT 0:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	16.38	16.335
157	5785	16.33	16.353
165	5825	15.35	16.332
802.11a Mode			
5745 MHz			
Occupied Bandwidth		Total Power	12.2 dBm
16.335 MHz			
Transmit Freq Error	-23.110 kHz	% of OBW Power	99.00 %
x dB Bandwidth	16.38 MHz	x dB	-6.00 dB

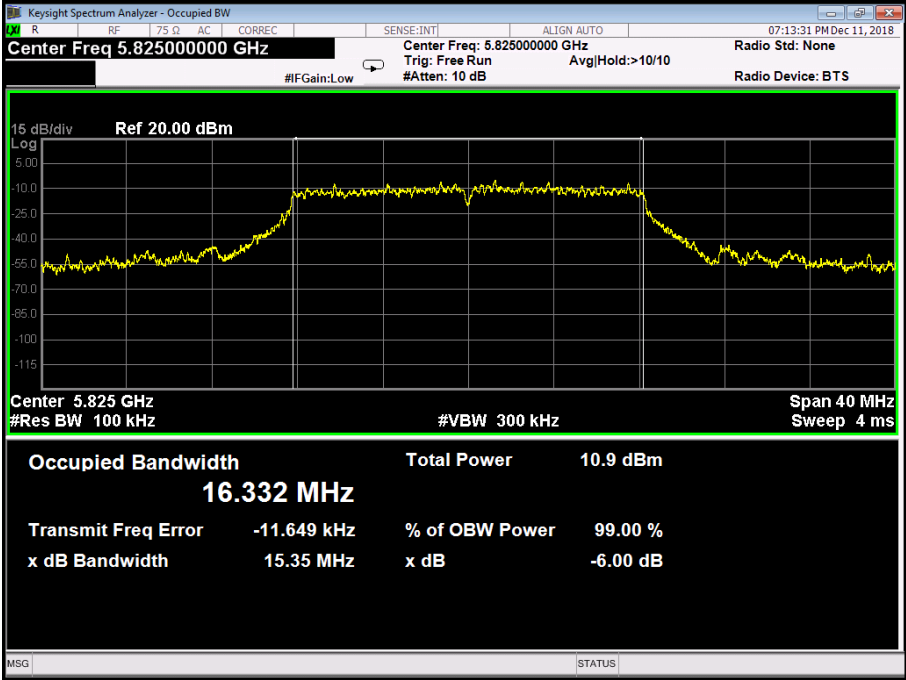
802.11a Mode

5785 MHz

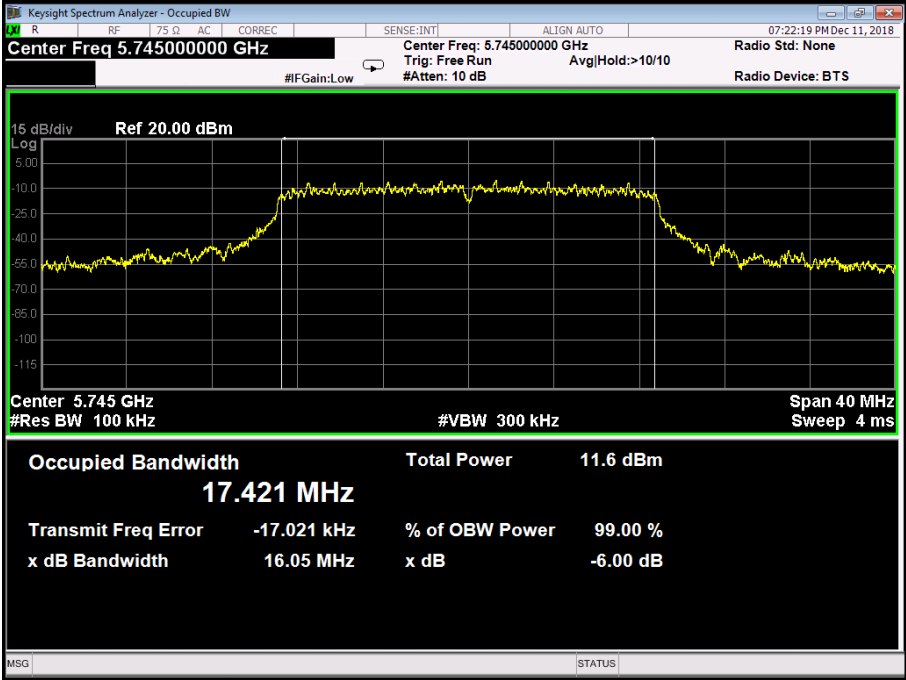


802.11a Mode

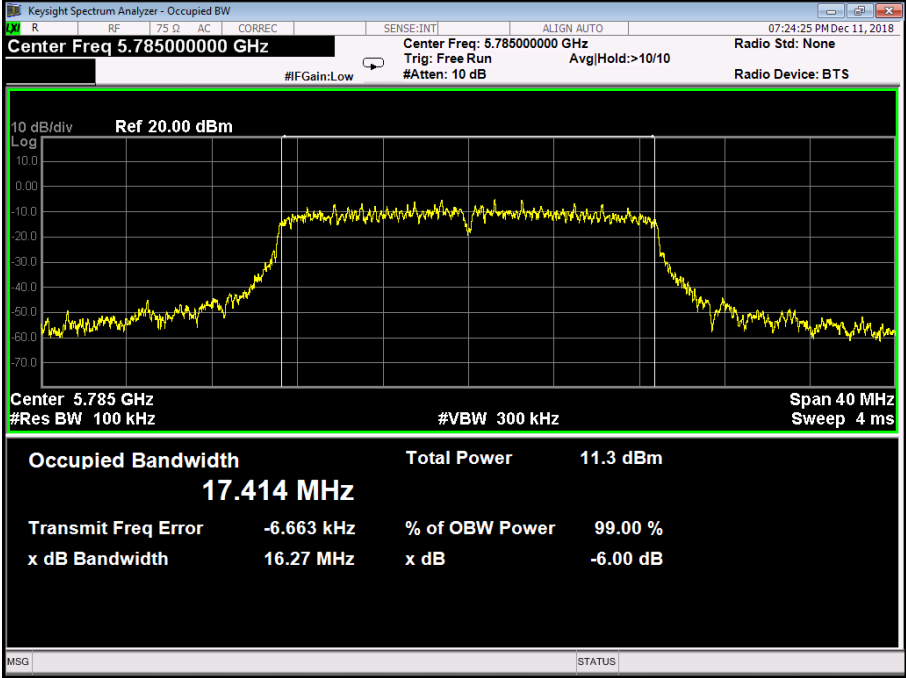
5825 MHz



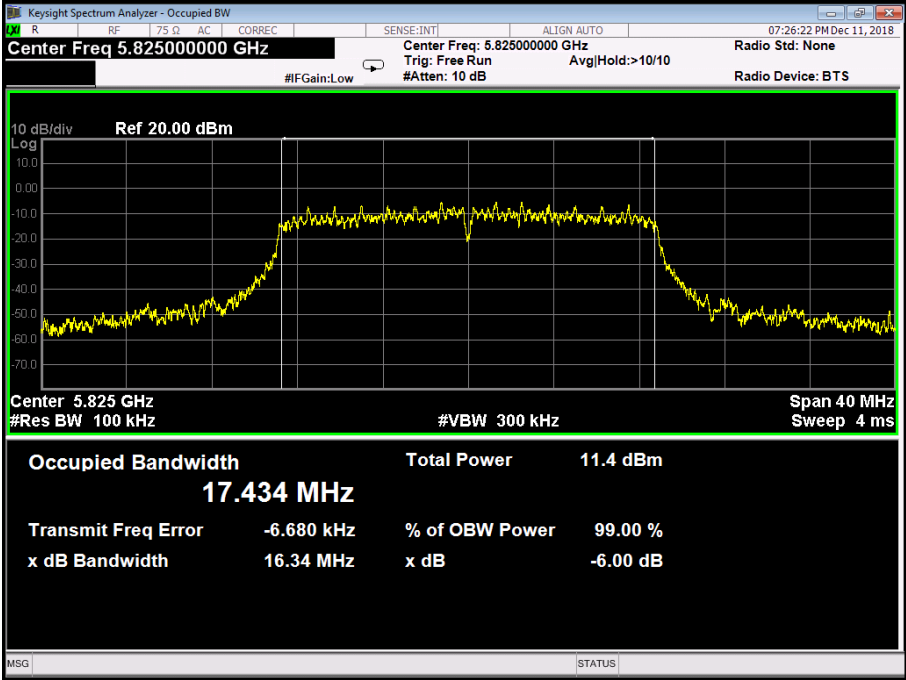
ANT 0:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	16.05	17.421
157	5785	16.27	17.414
165	5825	16.34	17.434
802.11n(HT20) Mode			
5745 MHz			
 <p>The screenshot shows a Keysight Spectrum Analyzer interface. The main display is a log-frequency plot with a center frequency of 5.745 GHz. The signal is centered at 5.745 GHz with a 16.05 MHz 6dB bandwidth and a 17.421 MHz 99% bandwidth. The total power is 11.6 dBm. The plot shows a signal with a 16.05 MHz 6dB bandwidth and a 17.421 MHz 99% bandwidth. The total power is 11.6 dBm. The plot shows a signal with a 16.05 MHz 6dB bandwidth and a 17.421 MHz 99% bandwidth. The total power is 11.6 dBm.</p>			

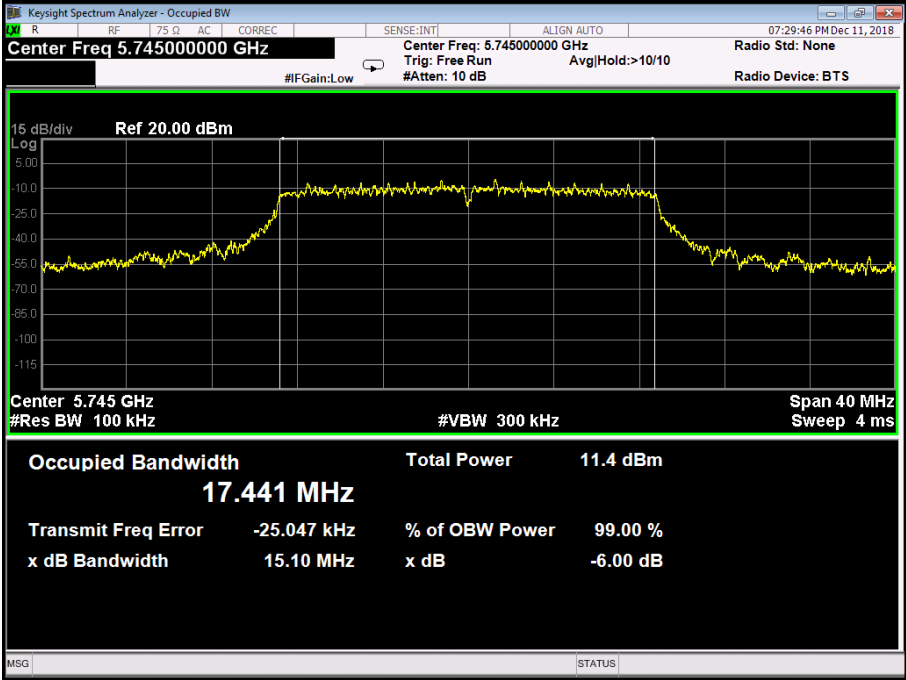
802.11n(HT20) Mode
5785 MHz



802.11n(HT20) Mode
5825 MHz

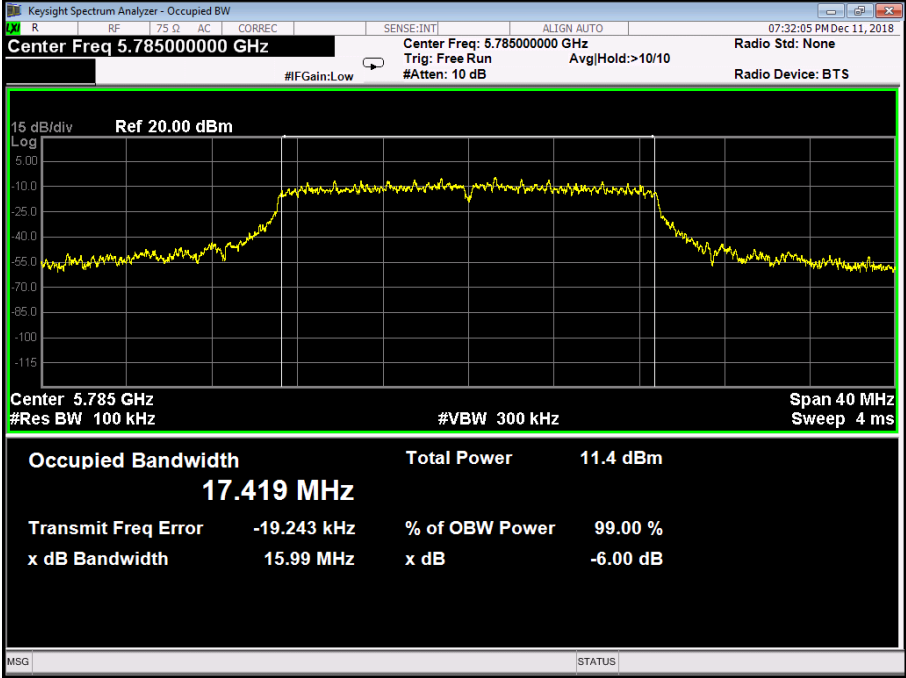


ANT 0:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	15.10	17.441
157	5785	15.99	17.419
165	5825	15.59	17.507
802.11ac(VHT20) Mode			
5745 MHz			
			

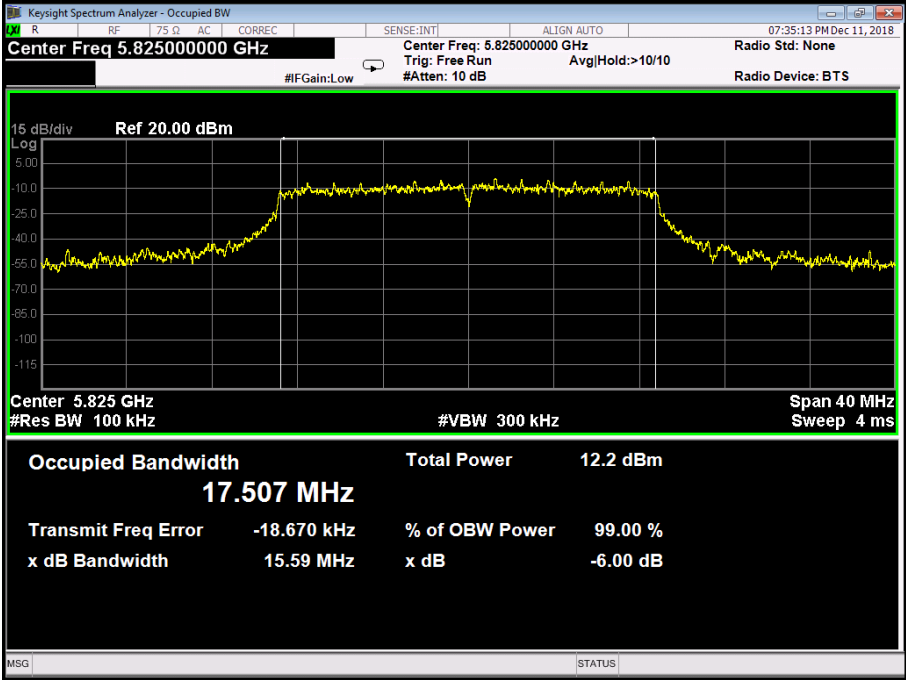
802.11ac(VHT20) Mode

5785 MHz



802.11ac(VHT20) Mode

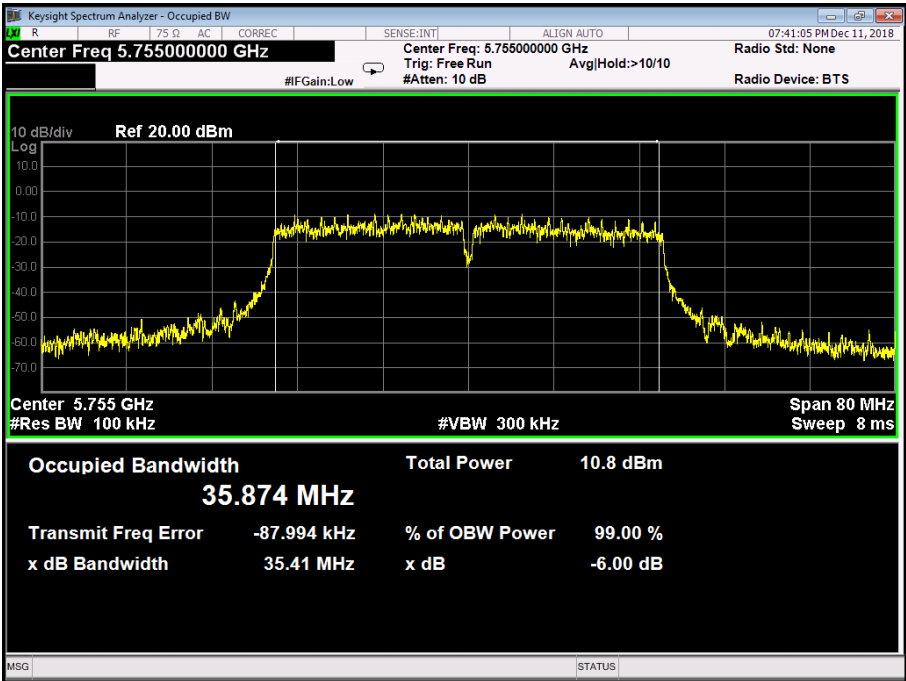
5825 MHz



ANT 0:

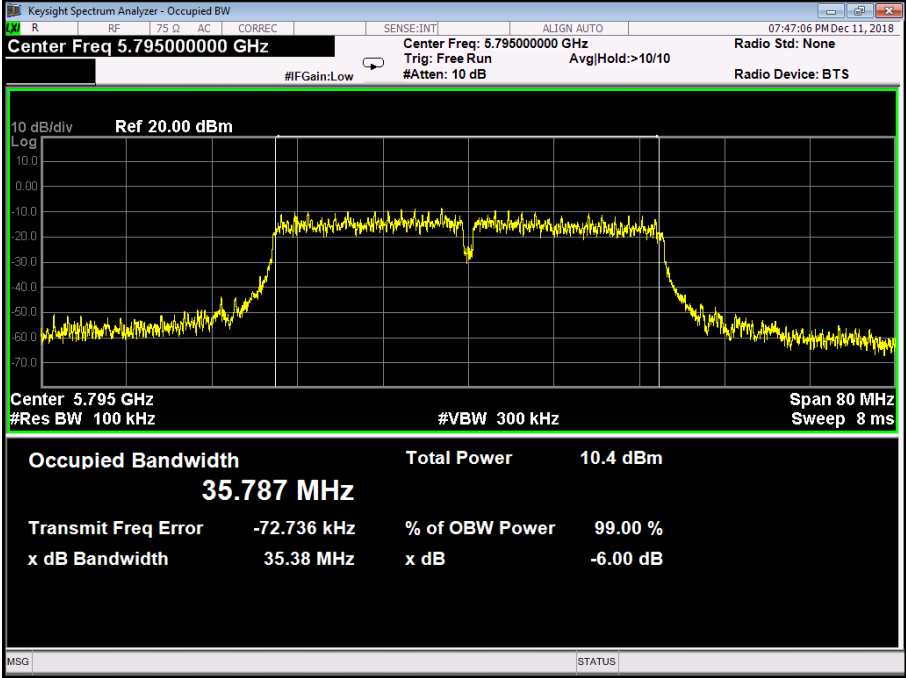
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	35.41	35.874
159	5795	35.38	35.787

**802.11n(HT40) Mode
5755 MHz**



802.11n(HT40) Mode

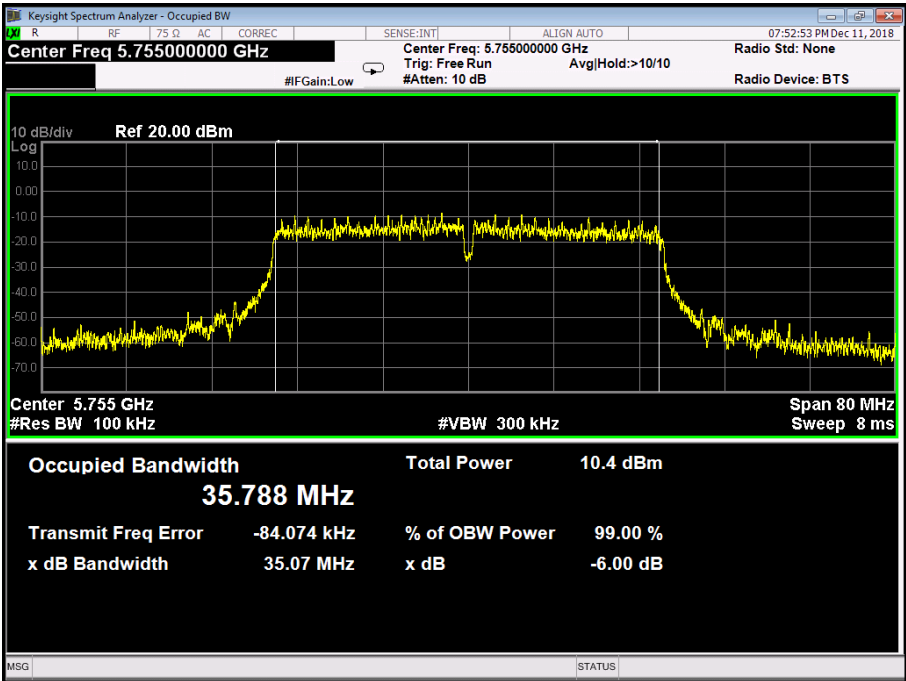
5795 MHz



ANT 0:

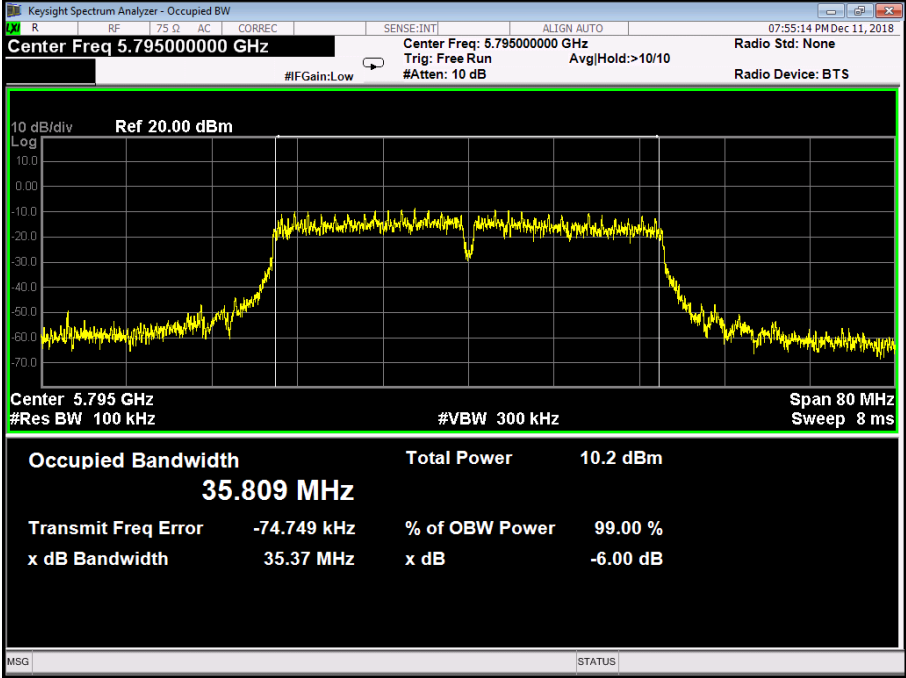
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	35.07	35.788
159	5795	35.37	35.809

**802.11ac(VHT40) Mode
5755 MHz**

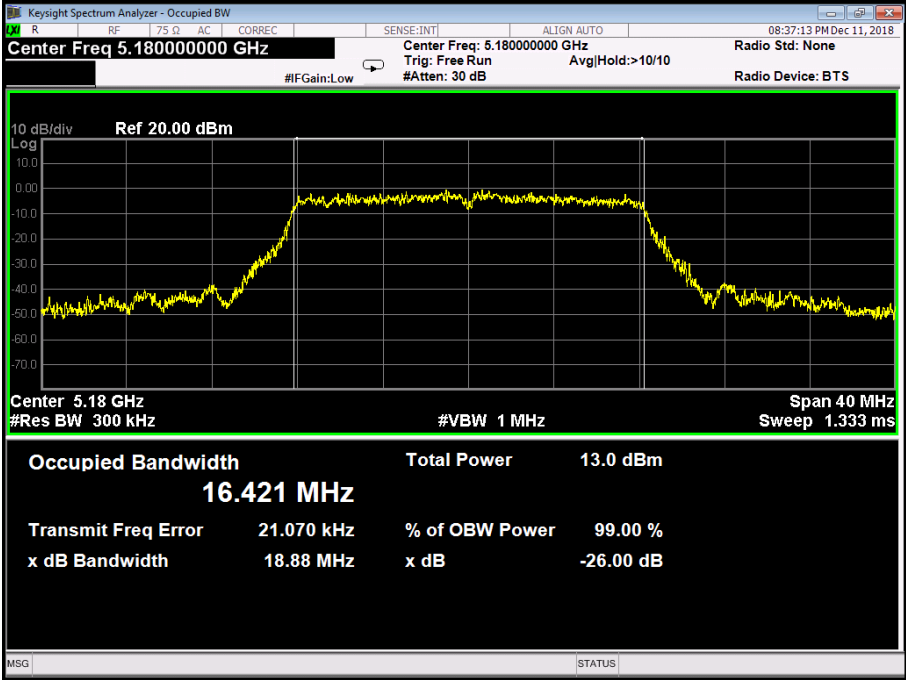


802.11ac(VHT40) Mode

5795 MHz

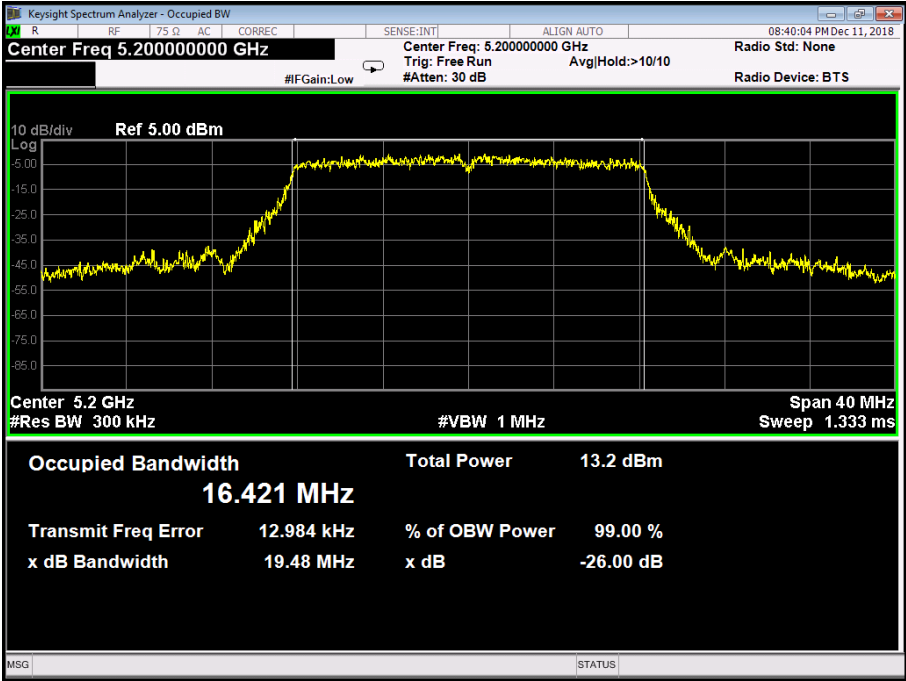


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	18.88	16.421
40	5200	19.48	16.421
48	5240	19.37	16.379
802.11a Mode			
5180 MHz			
			

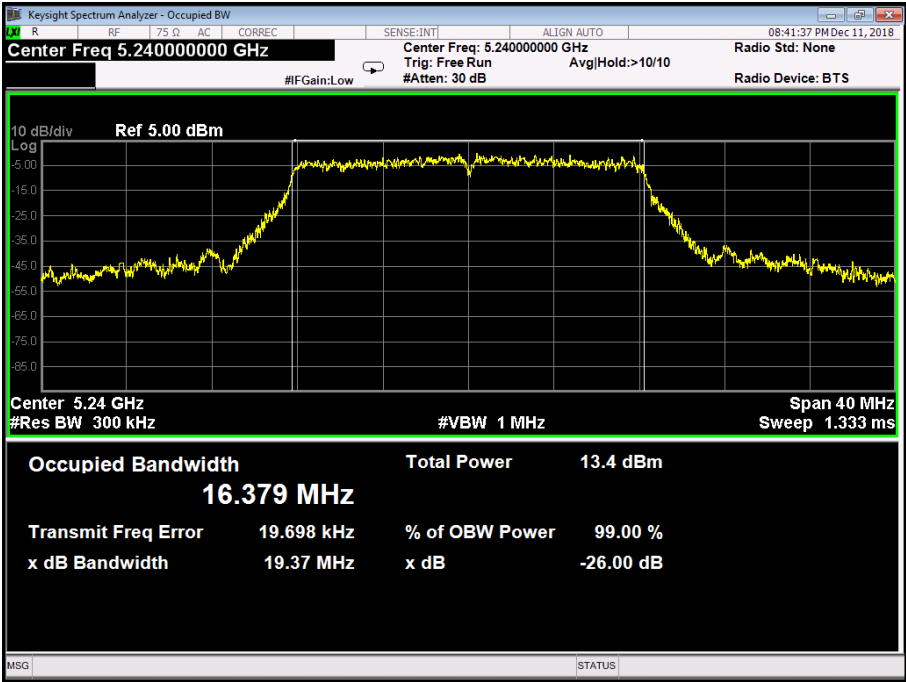
802.11a Mode

5200 MHz

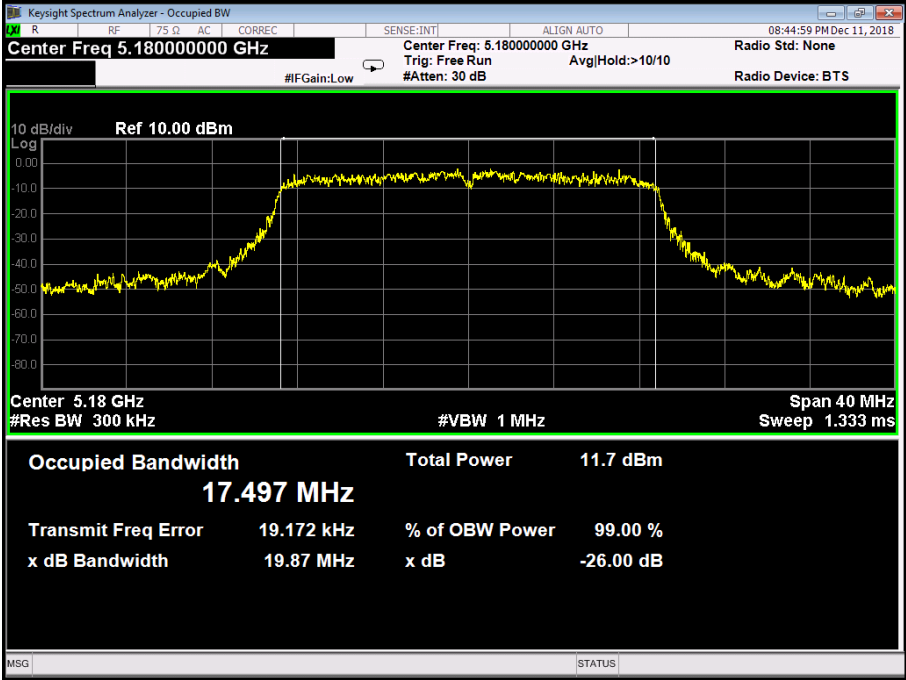


802.11a Mode

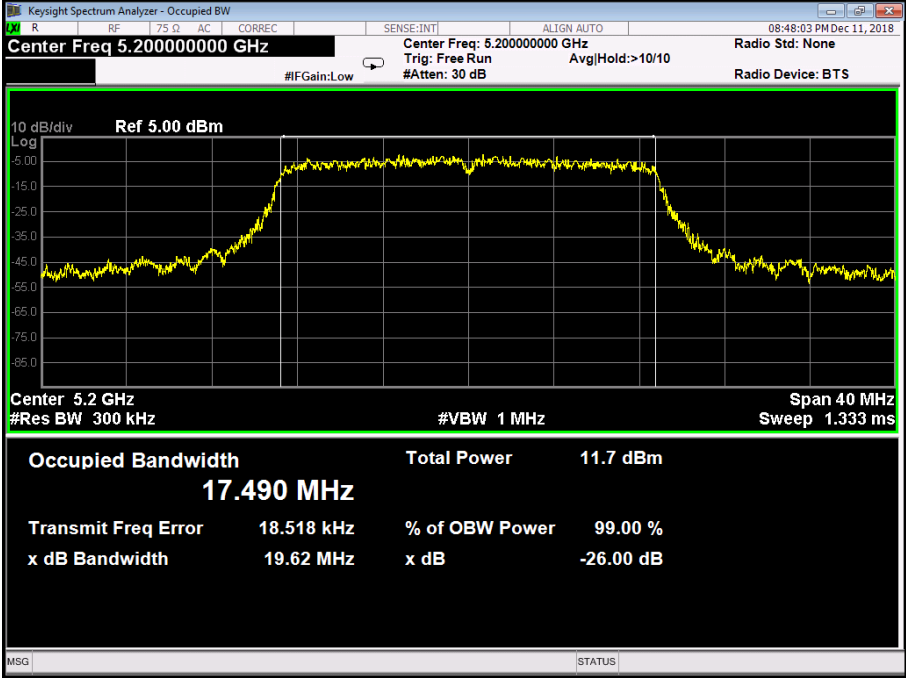
5240 MHz



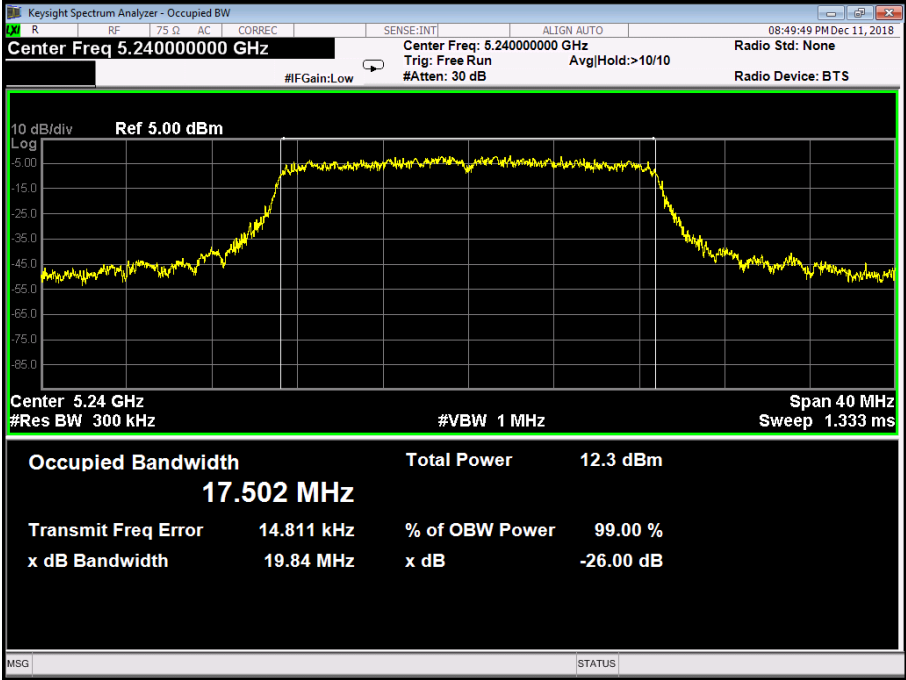
ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(HT20) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	19.87	17.497
40	5200	19.62	17.490
48	5240	19.84	17.502
802.11n(HT20) Mode			
5180 MHz			
			

**802.11n(HT20) Mode
5200 MHz**



**802.11n(HT20) Mode
5240 MHz**

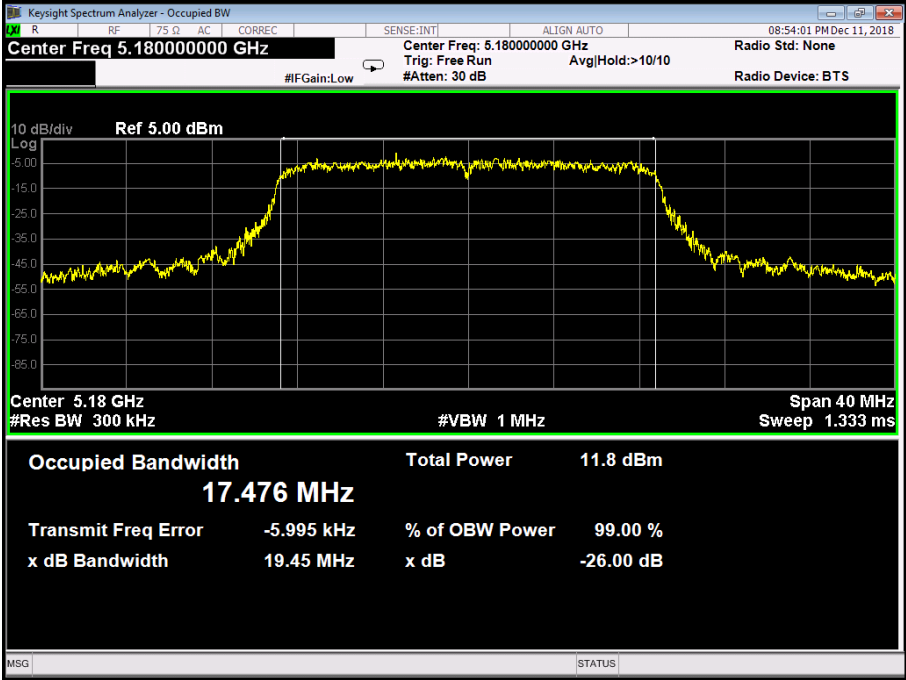


ANT 1:

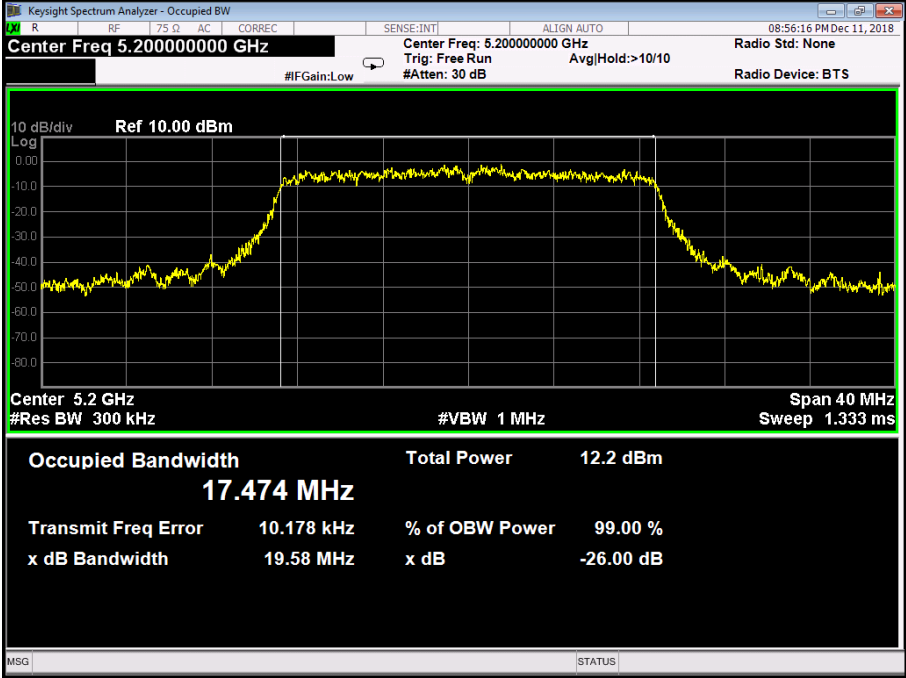
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	19.45	17.476
40	5200	19.58	17.474
48	5240	19.45	17.463

802.11ac(VHT20) Mode

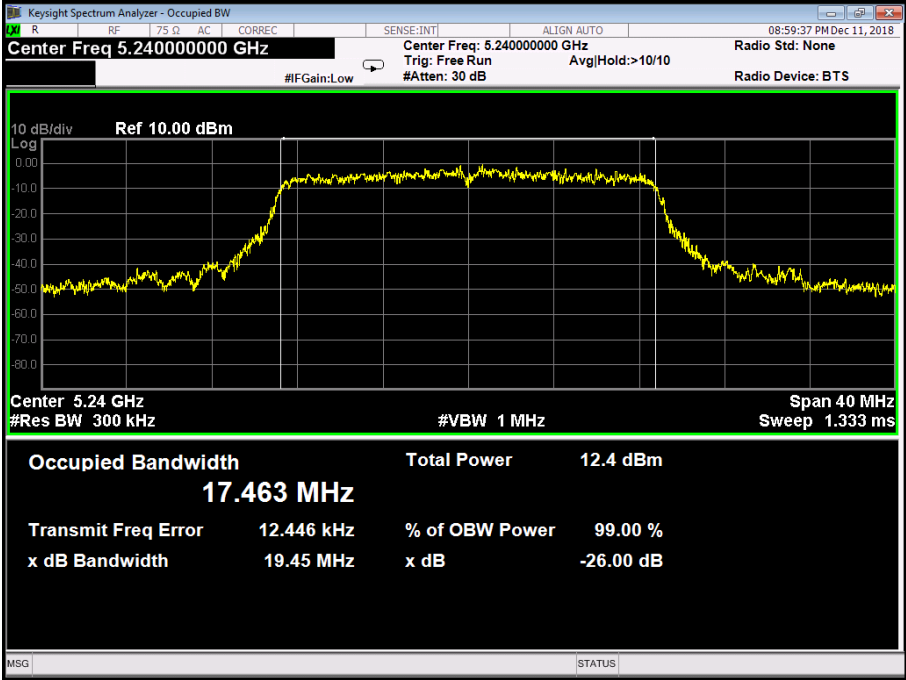
5180 MHz



802.11ac(VHT20) Mode
5200 MHz



802.11ac(VHT20) Mode
5240 MHz

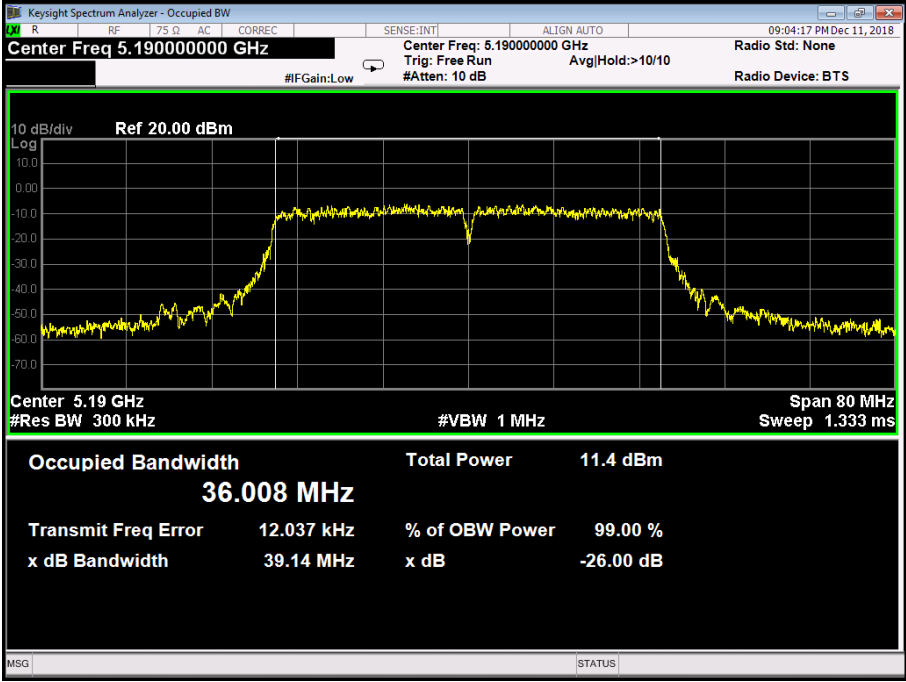


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11N(HT40) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
38	5190	39.14	36.008
46	5230	39.10	36.035

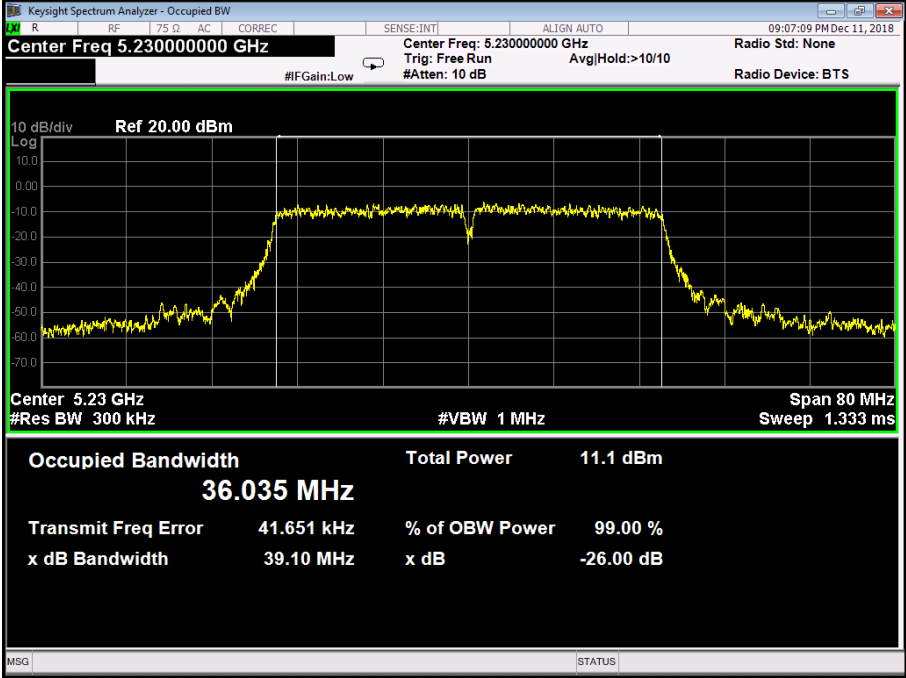
802.11N(HT40) Mode

5190 MHz



802.11N(HT40) Mode

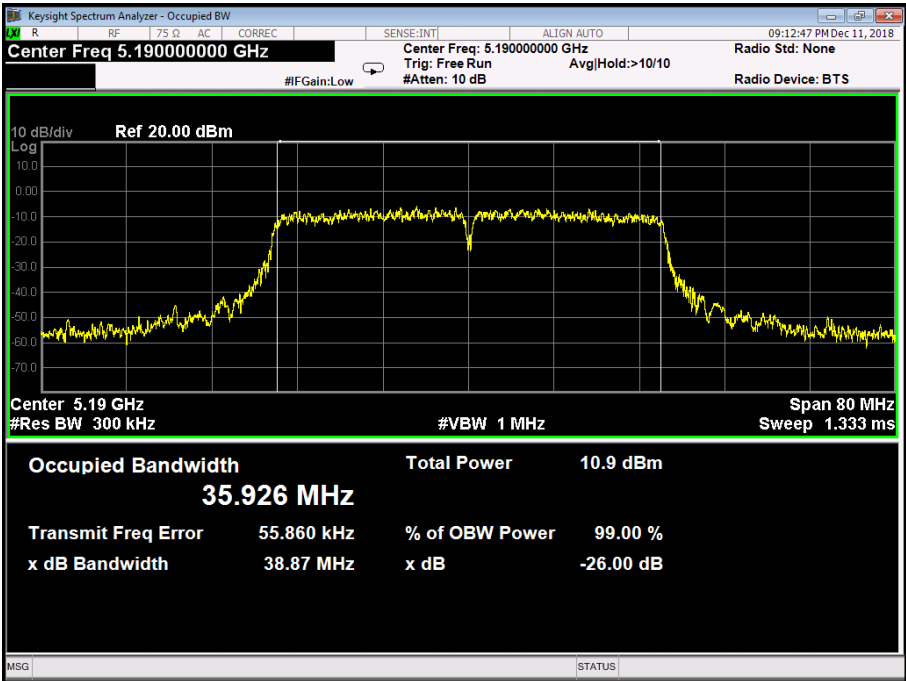
5230 MHz



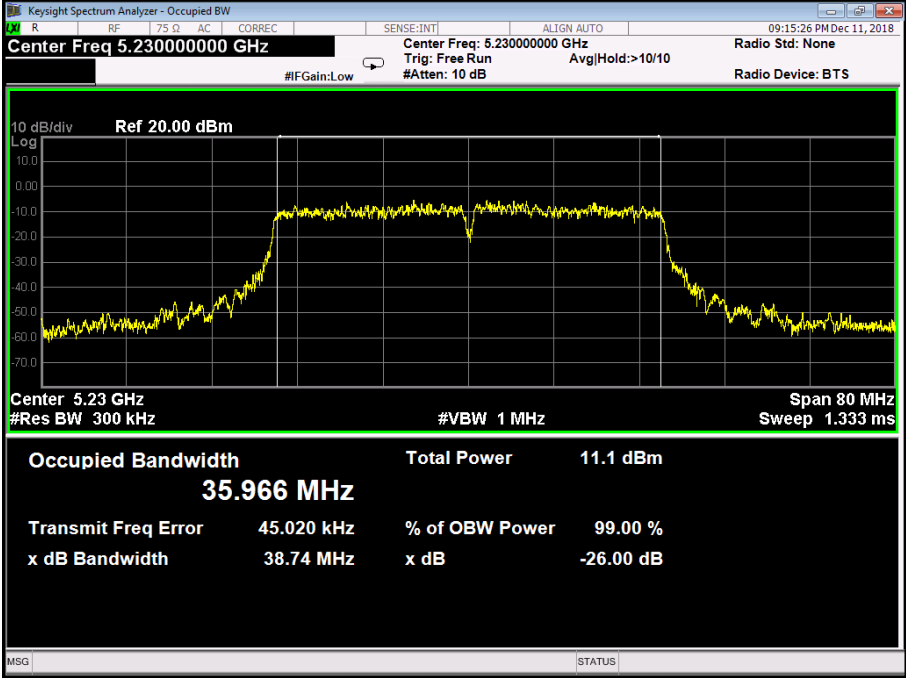
ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT40) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
38	5190	38.87	35.926
46	5230	38.74	35.966

**802.11ac(VHT40) Mode
5190 MHz**



802.11ac(VHT40) Mode
5230 MHz

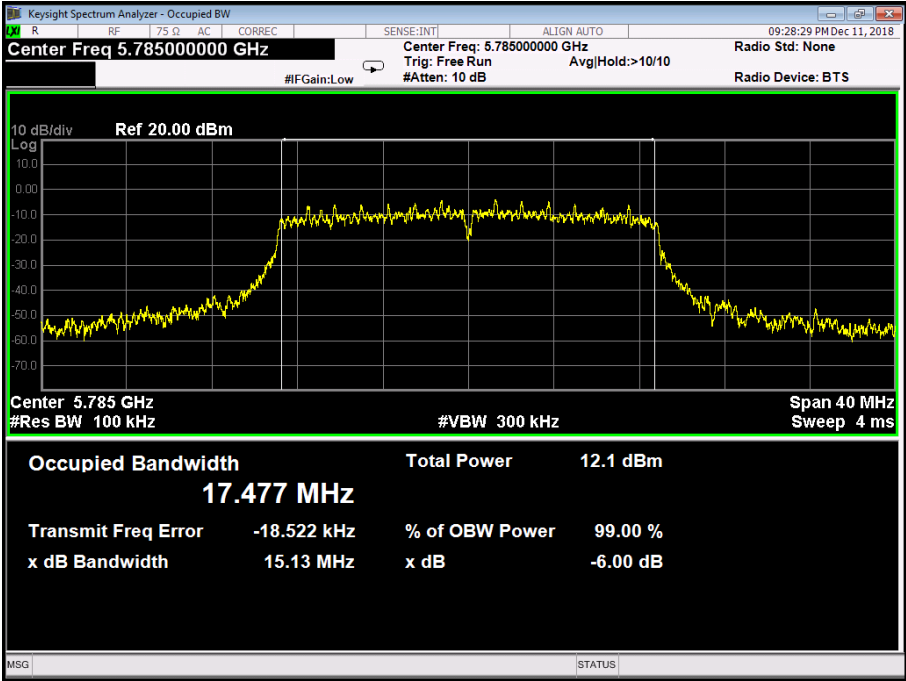


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	16.58	17.455
157	5785	15.13	17.477
165	5825	15.14	17.437
802.11a Mode			
5745 MHz			
Occupied Bandwidth	Total Power	12.7 dBm	
17.455 MHz			
Transmit Freq Error	-22.439 kHz	% of OBW Power	99.00 %
x dB Bandwidth	16.58 MHz	x dB	-6.00 dB

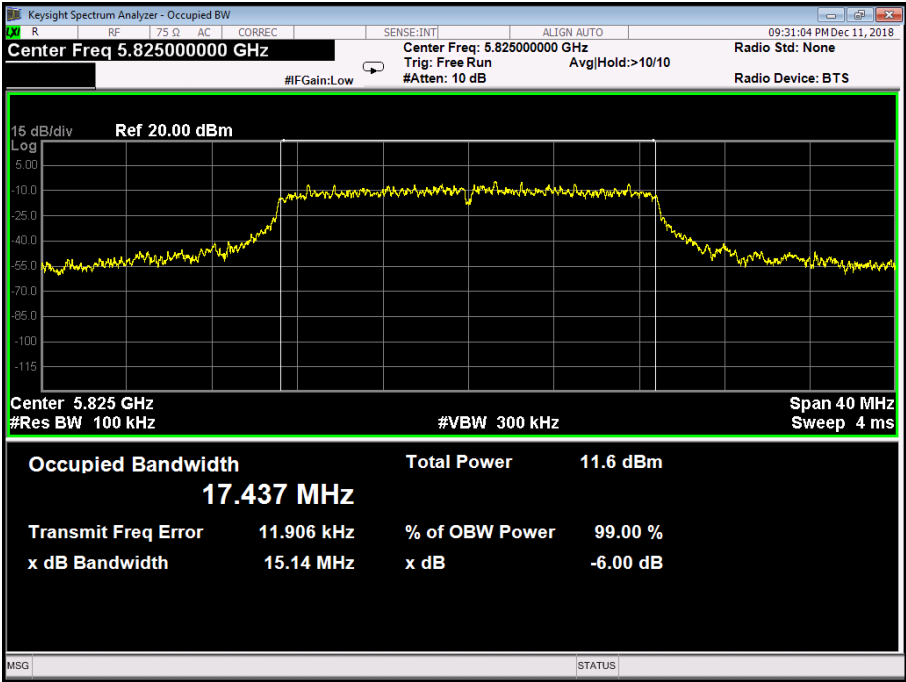
802.11a Mode

5785 MHz

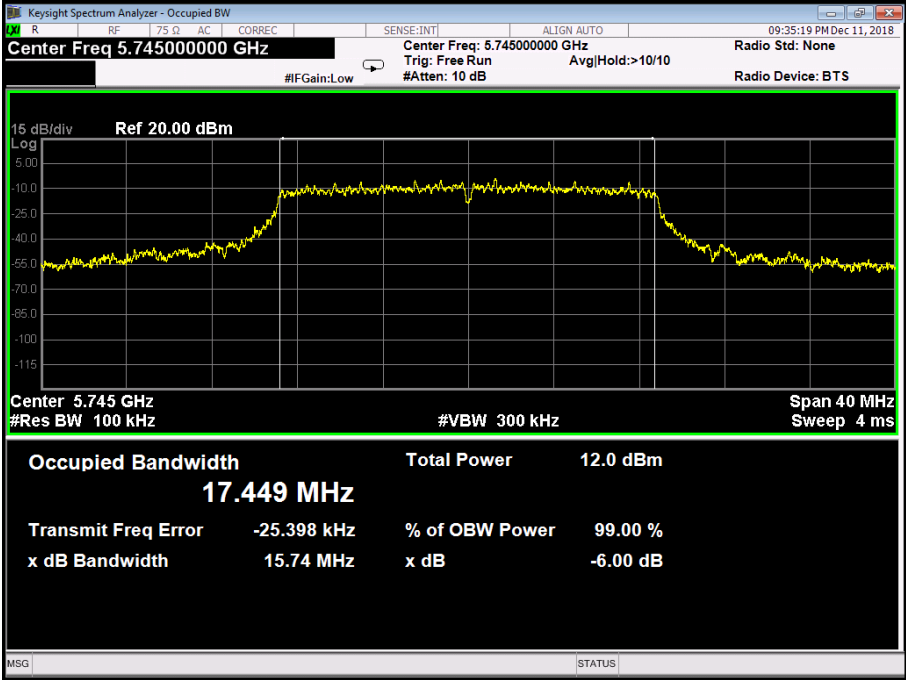


802.11a Mode

5825 MHz

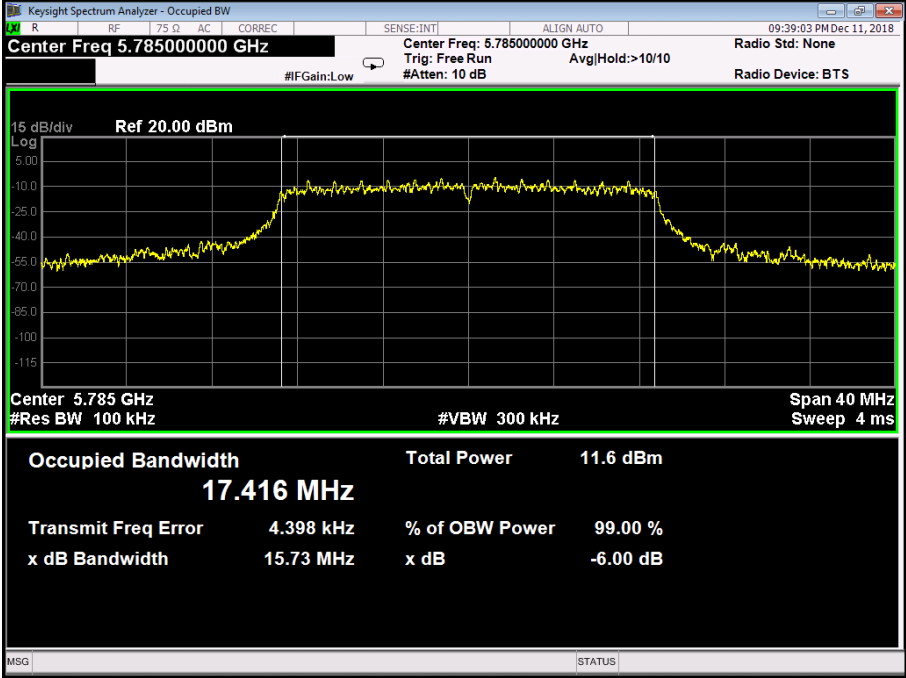


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	15.74	17.449
157	5785	15.73	17.416
165	5825	15.30	17.444
802.11n(HT20) Mode			
5745 MHz			
			

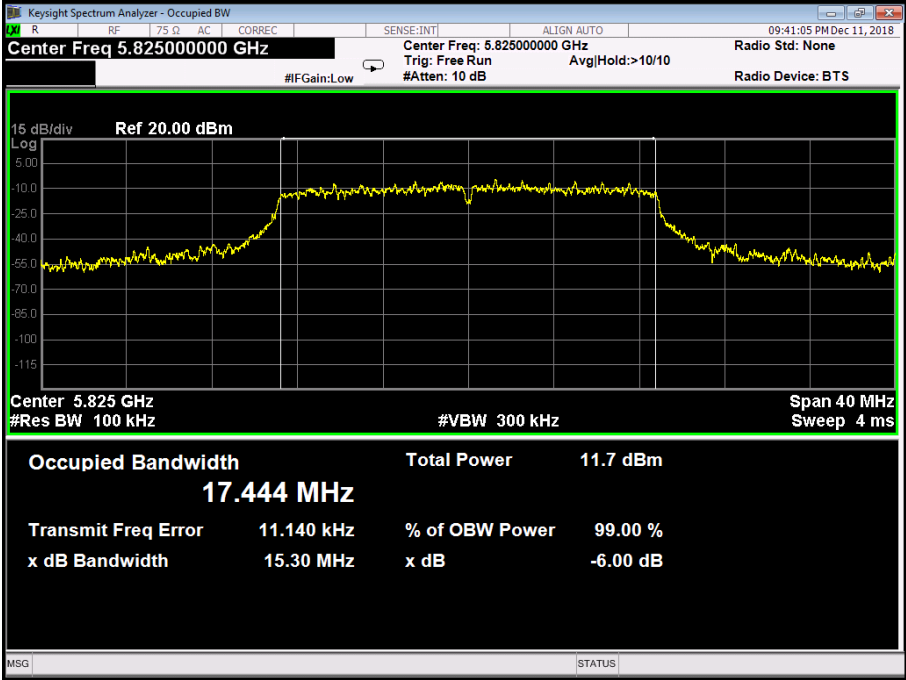
802.11n(HT20) Mode

5785 MHz

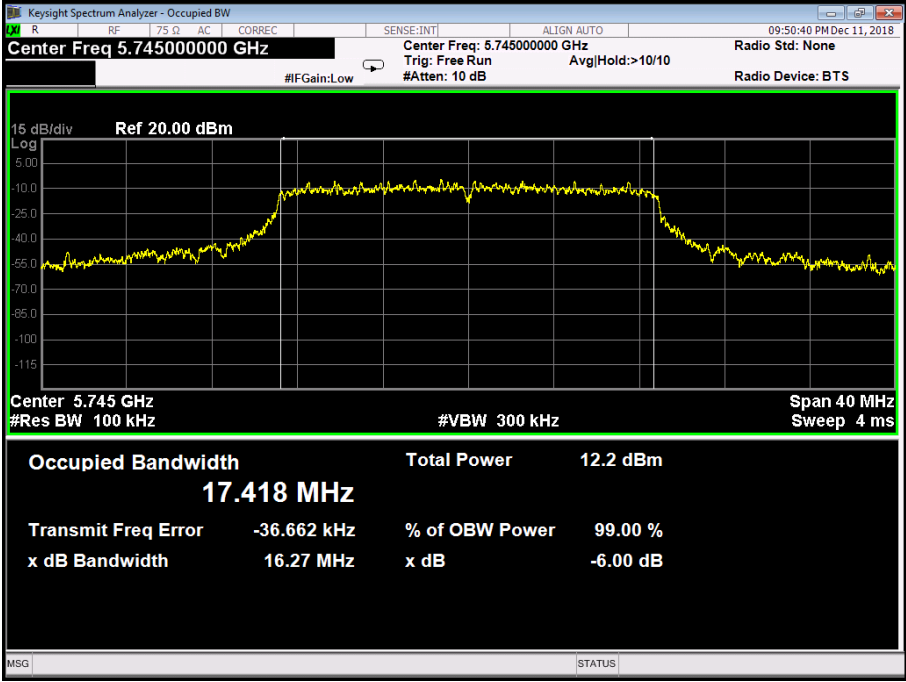


802.11n(HT20) Mode

5825 MHz

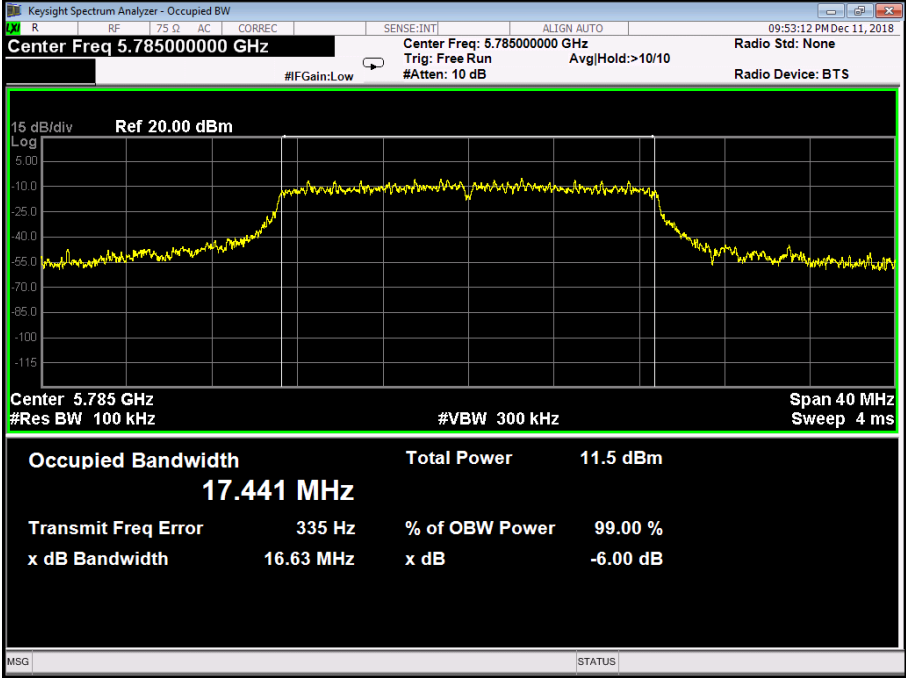


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	16.27	17.418
157	5785	16.63	17.441
165	5825	15.71	17.432
802.11ac(VHT20) Mode			
5745 MHz			
			

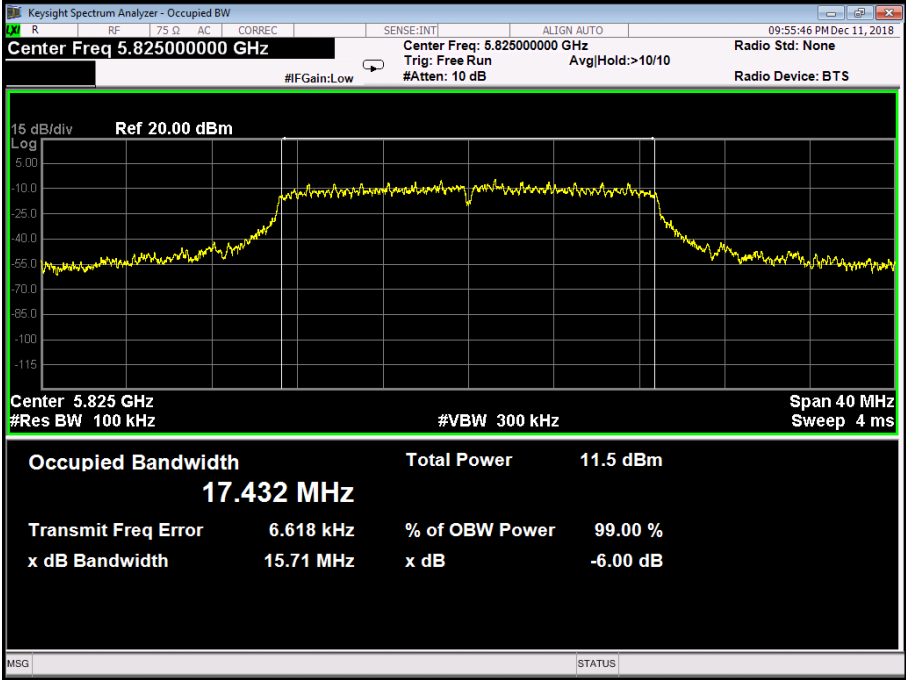
802.11ac(VHT20) Mode

5785 MHz



802.11ac(VHT20) Mode

5825 MHz

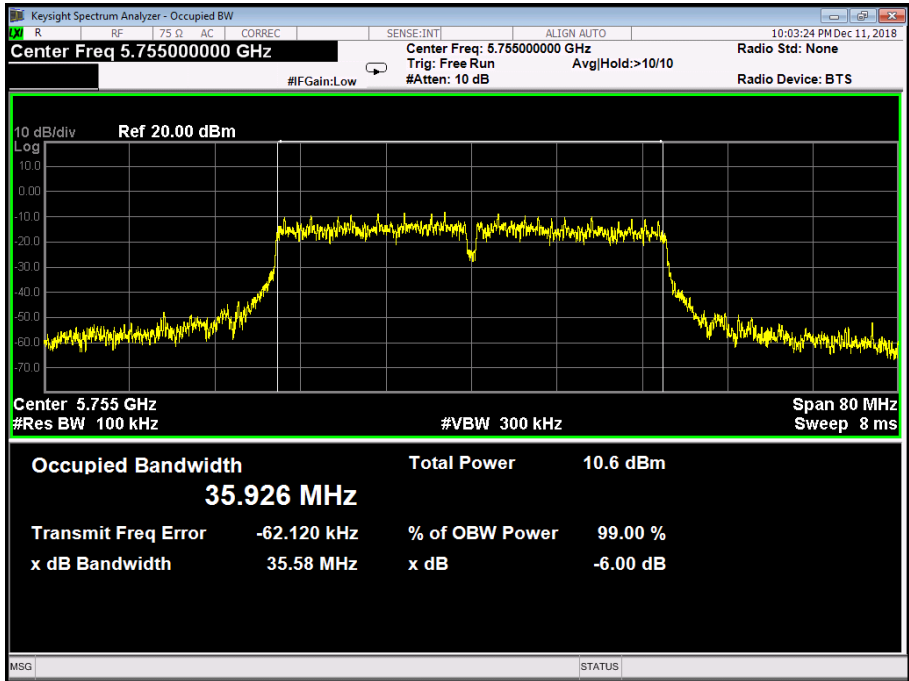


ANT 1:

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	35.58	35.926
159	5795	35.13	35.803

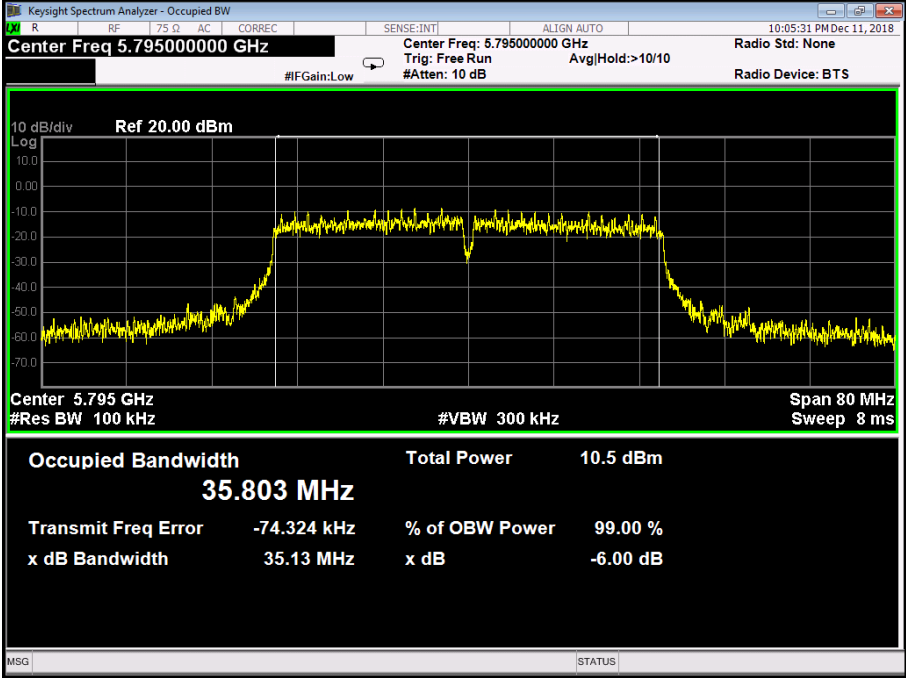
802.11n(HT40) Mode

5755 MHz



802.11n(HT40) Mode

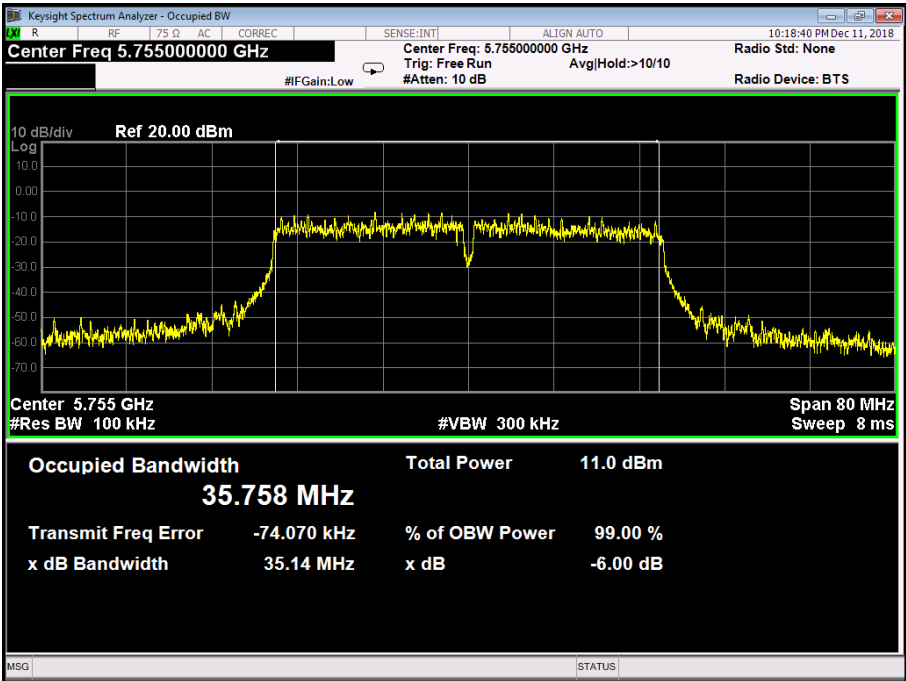
5795 MHz



ANT 1:

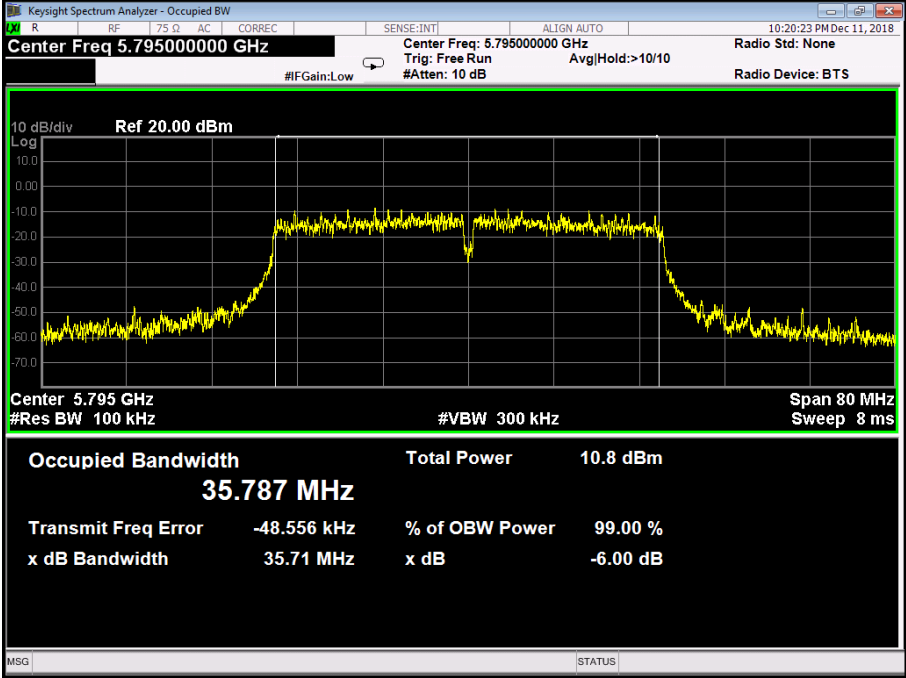
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	35.14	35.758
159	5795	35.71	35.787

**802.11ac(VHT40) Mode
5755 MHz**



802.11ac(VHT40) Mode

5795 MHz



Attachment E-- Output Power Test Data

Note : GANT =6dBi, Array Gain=10log(NANT/NSS)=3.01dBi, Directional Gain=GANT + Array Gain=8.01dBi, 8.01dBi >6dBi

so limit=24-(8.01-6)=21.99dBm for U-NII 1, 30-(8.01-6)=27.99dBm for U-NII 3

Type	Bands	Channel	Output power Ant 0 (dBm)	Output power Ant 1 (dBm)	Output power Total (dBm)	Limit (dBm)	Result
802.11a	U-NII 1	36	16.11	15.19	/	21.99	Pass
		40	15.76	15.25	/		
		48	16.38	15.65	/		
	U-NII 3	149	16.63	16.44	/	27.99	
		157	16.26	16.25	/		
		165	16.69	16.67	/		
802.11n(HT20) MIMO	U-NII 1	36	15.28	15.89	18.61	21.99	Pass
		40	14.93	15.03	17.99		
		48	15.44	14.70	18.10		
	U-NII 3	149	15.34	15.62	18.49	27.99	
		157	15.57	15.40	18.50		
		165	15.47	15.89	18.70		
802.11n(HT40) MIMO	U-NII 1	38	15.83	15.22	18.11	21.99	Pass
		46	15.37	14.34	17.90		
	U-NII 3	151	15.44	14.12	17.84	27.99	
		159	15.25	14.23	17.78		
802.11ac(HT20) MIMO	U-NII 1	36	14.65	14.48	17.58	21.99	Pass
		40	14.93	14.42	17.69		
		48	15.07	14.58	17.84		
	U-NII 3	149	15.93	15.43	18.70	27.99	
		157	15.82	15.42	18.63		
		165	16.66	15.12	18.97		
802.11ac(HT40) MIMO	U-NII 1	38	15.51	15.83	18.68	21.99	Pass
		46	15.75	15.14	18.47		
	U-NII 3	151	15.88	15.81	18.86	27.99	
		159	15.96	15.51	18.75		

Test Mode		Duty cycle
U-NII-1	802.11 a	>98%
	802.11 n(HT20)	
	802.11 ac(HT20)	
	802.11 n(HT40)	
	802.11 ac(HT40)	
U-NII-3	802.11 a	
	802.11 n(HT20)	
	802.11 ac(HT20)	
	802.11 n(HT40)	
	802.11 ac(HT40)	

Attachment F-- Power Spectral Density Test Data

Note : GANT =6dBi, Array Gain=10log(NANT/NSS)=3.01dBi, Directional Gain=GANT + Array Gain=8.01dBi, 8.01dBi >6dBi so limit=11-(8.01-6)=8.99dBm for U-NII 1

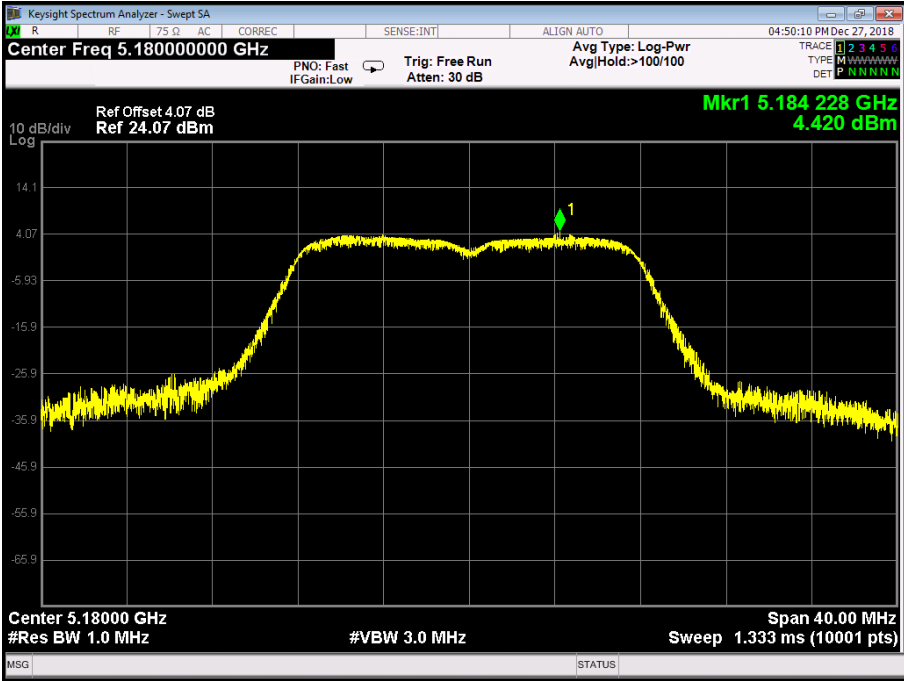
Type	Bands	Channel	Power Spectral Density Ant 0 (dBm/MHz)	Power Spectral Density Ant 1 (dBm/MHz)	Power Spectral Density Total (dBm/1MHz)	Limit (dBm/MHz)	Result
802.11a SISO	U-NII 1	36	4.420	3.718	/	8.99	Pass
		40	3.778	3.016	/		
		48	4.181	3.302	/		
802.11n (VHT20) MIMO	U-NII 1	36	3.966	3.992	6.989		
		40	3.392	3.345	6.379		
		48	3.698	2.546	6.170		
802.11n (VHT40) MIMO	U-NII 1	38	3.102	3.489	6.310		
		46	3.039	3.290	6.177		
802.11ac (VHT20) MIMO	U-NII 1	36	3.949	3.848	6.909		
		40	3.269	3.085	6.188		
		48	3.679	3.626	6.663		
802.11ac (VHT40) MIMO	U-NII 1	38	3.195	3.343	6.280		
		46	3.132	3.331	6.243		

Type	Bands	Channel	Power Spectral Density Ant 0 (dBm/500KHz)	Power Spectral Density Ant 1 (dBm/500KHz)	Power Spectral Density Total (dBm/500KHz)	Limit (dBm/500KHz)	Result
802.11a SISO	U-NII 3	149	7.414	6.724	/	27.99	Pass
		157	6.115	6.508	/		
		165	5.713	5.286	/		
802.11n (HT20) MIMO	U-NII 3	149	4.728	5.984	8.412		
		157	5.704	5.291	8.513		
		165	5.631	5.583	8.617		
802.11n (HT40) MIMO	U-NII 3	151	2.394	1.882	5.156		
		159	1.511	1.838	4.688		
802.11ac (HT20) MIMO	U-NII 3	149	5.195	6.316	8.802		
		157	4.954	5.180	8.079		
		165	6.278	5.766	9.040		
802.11ac (HT40) MIMO	U-NII 3	151	1.438	2.176	4.833		
		159	2.436	2.074	5.269		

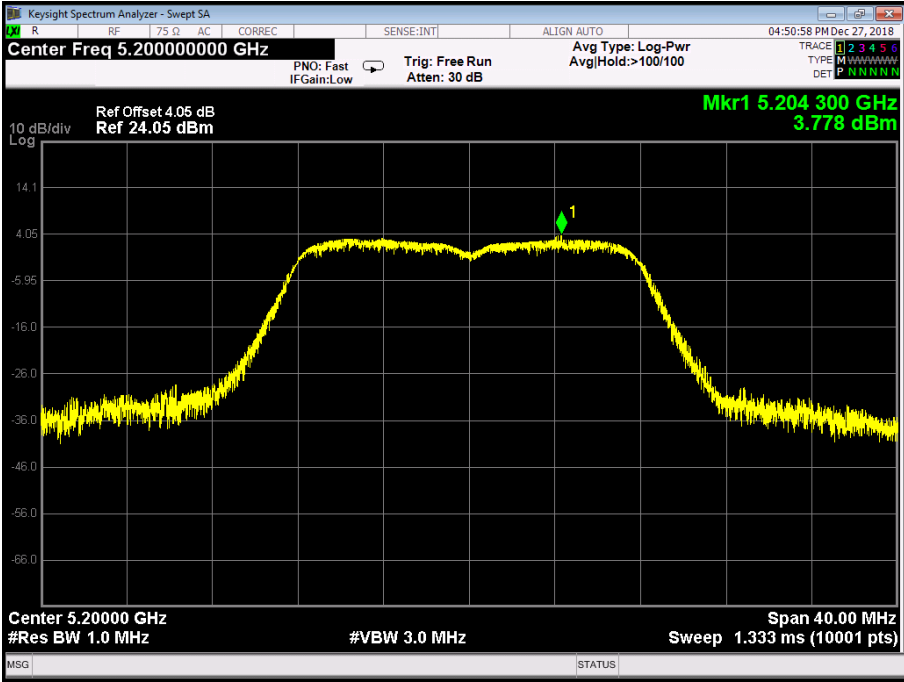
Note : GANT =6dBi, Array Gain=10log(NANT/NSS)=3.01dBi, Directional Gain=GANT + Array Gain=8.01dBi, 8.01dBi >6dBi so limit=30-(8.01-6)=27.99dBm for U-NII 3

ANT 0:

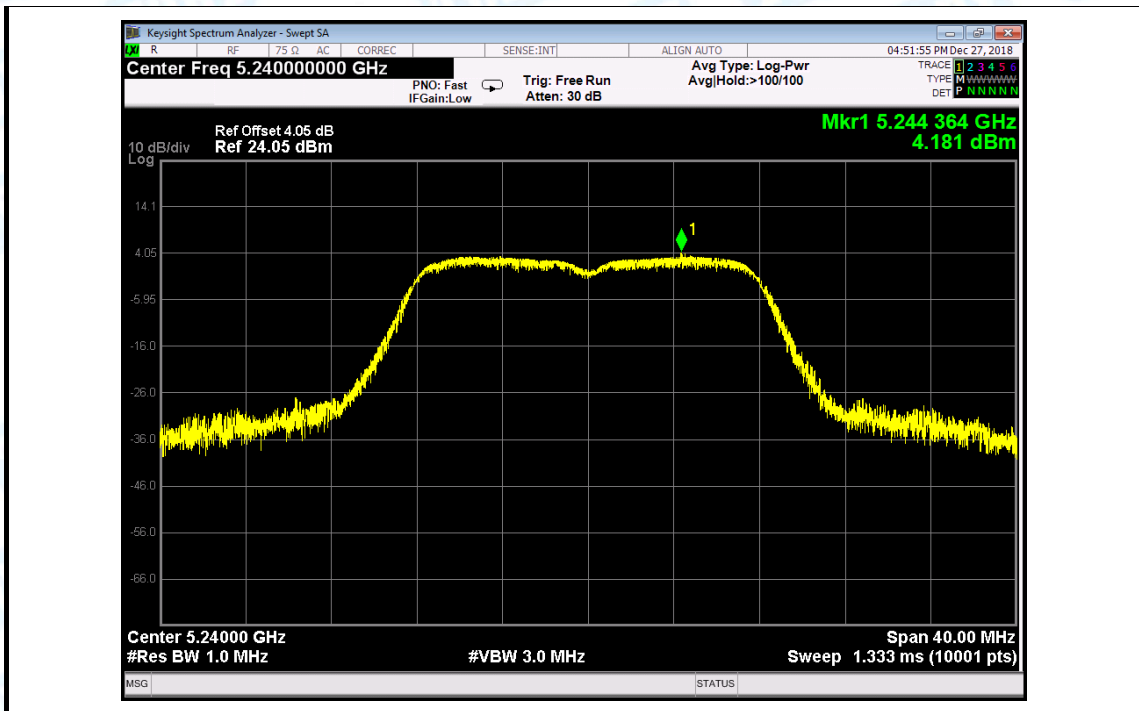
802.11 a 5180 MHz



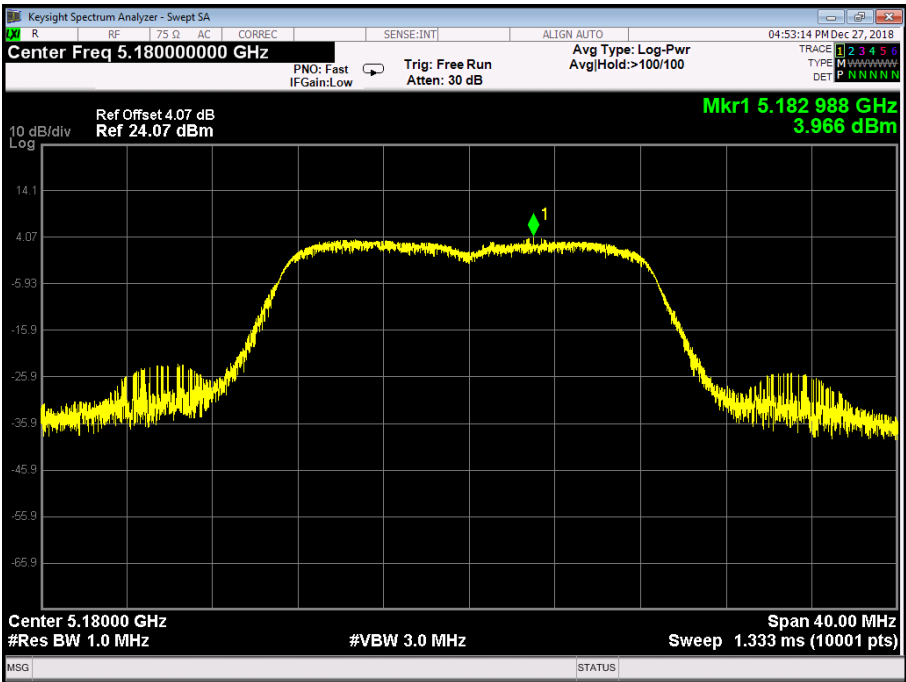
802.11 a 5200 MHz



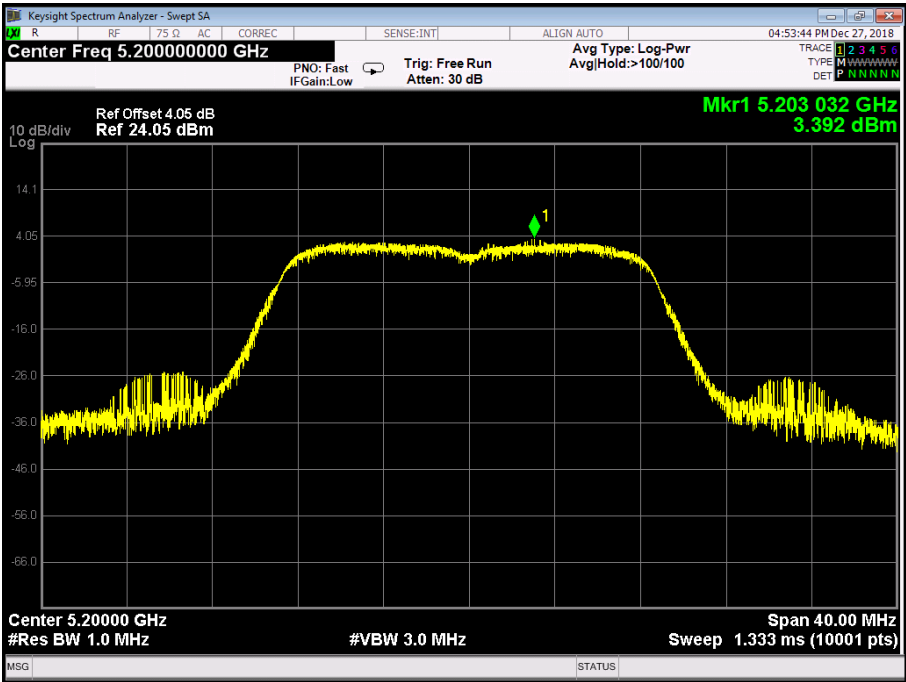
802.11 a 5240 MHz



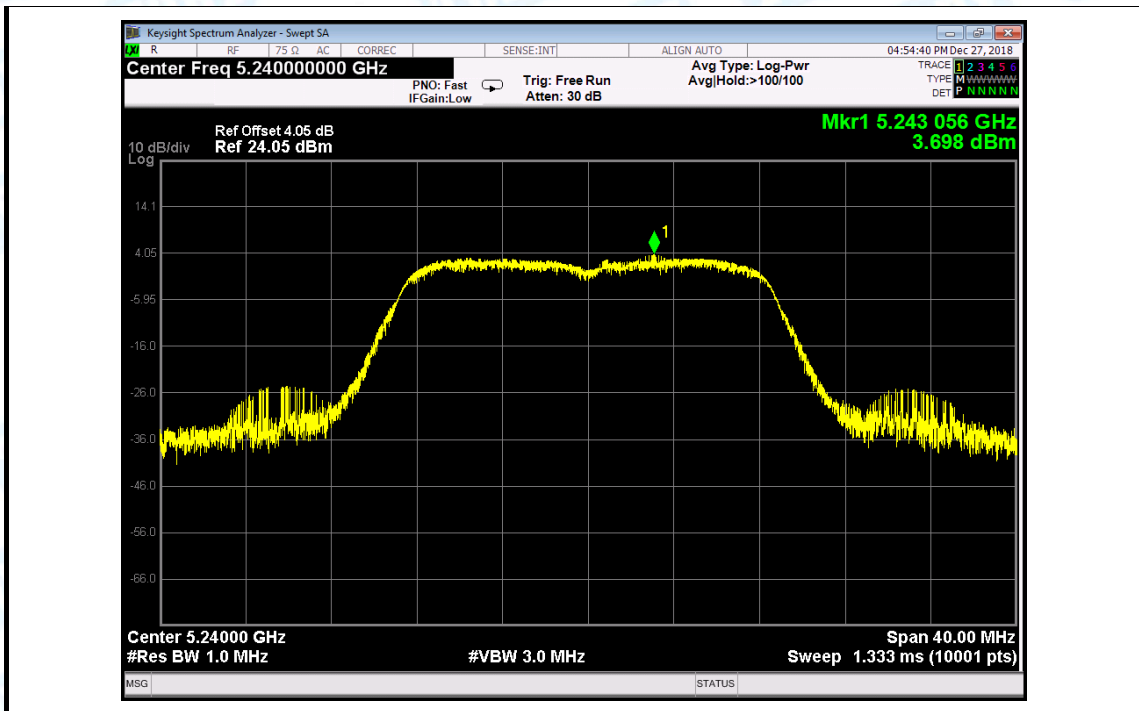
802.11 n(20) 5180 MHz



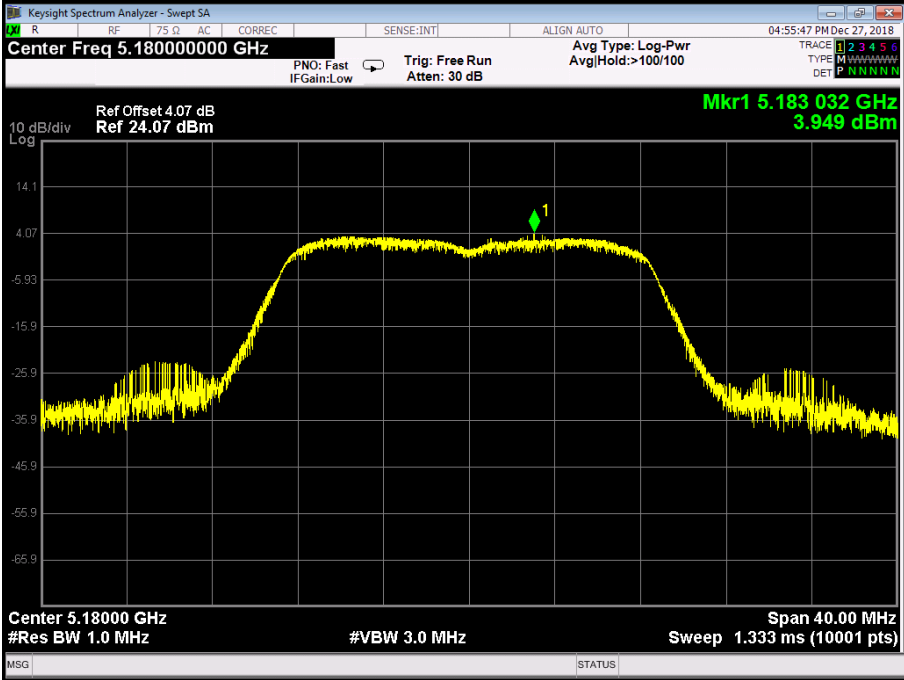
802.11 n(20) 5200 MHz



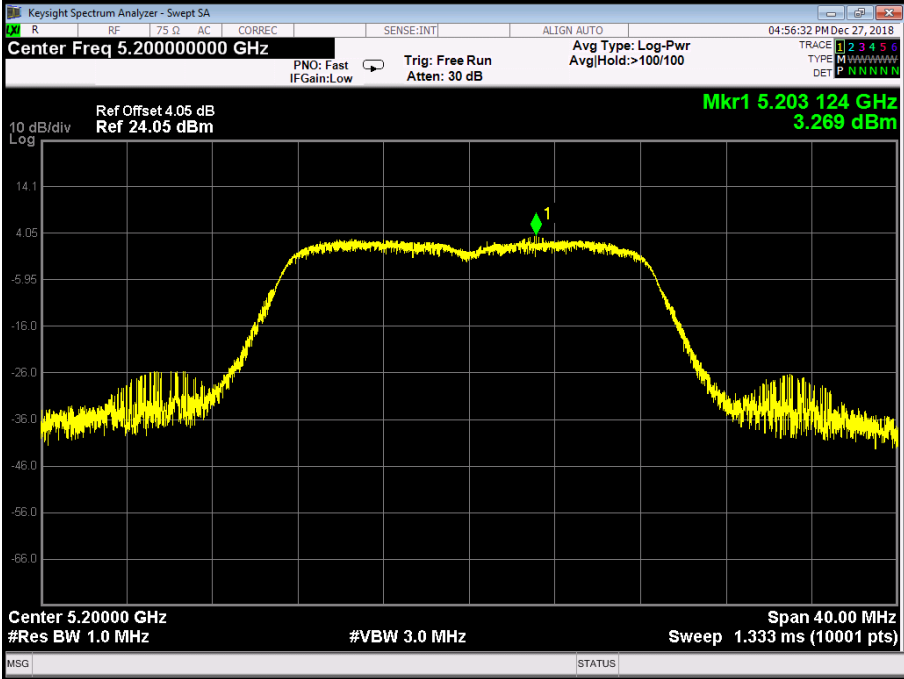
802.11 n(20) 5240 MHz



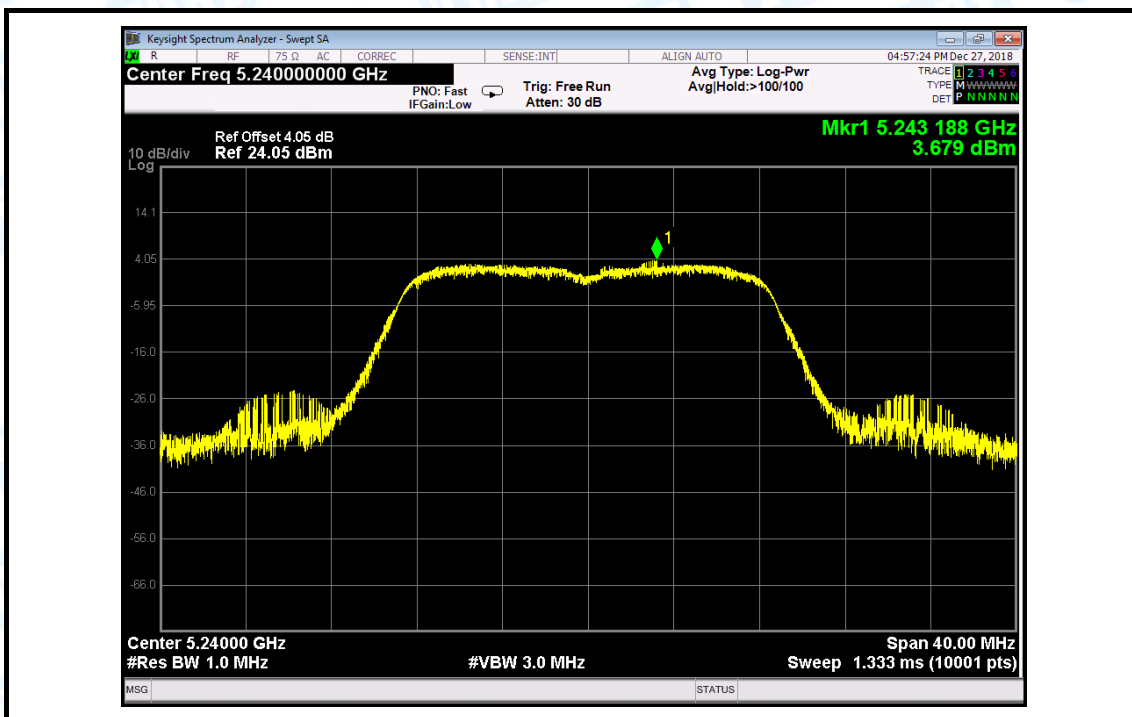
802.11 ac(VHT20) 5180 MHz



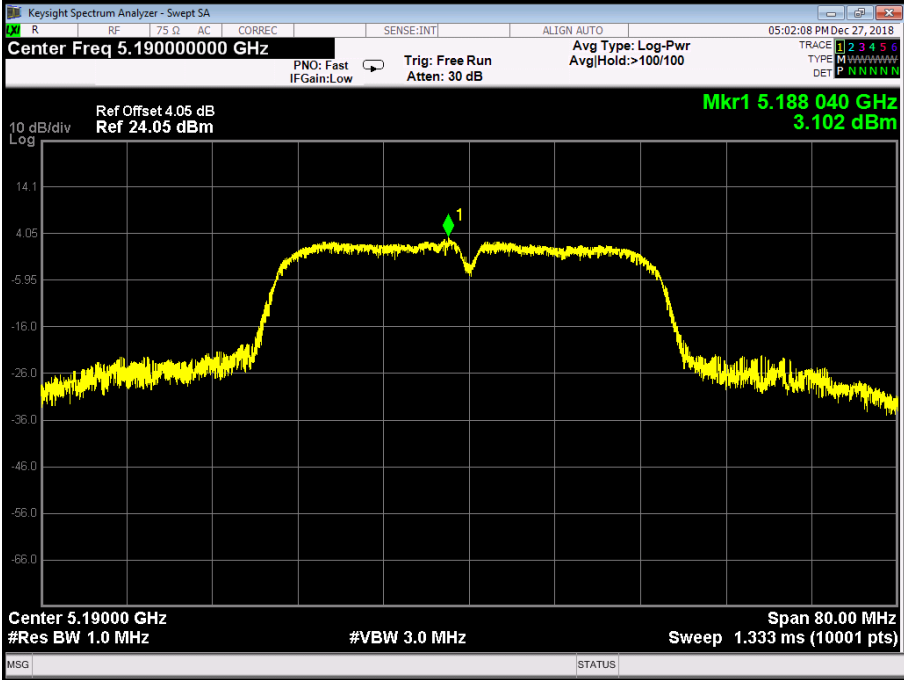
802.11 ac(VHT20) 5200 MHz



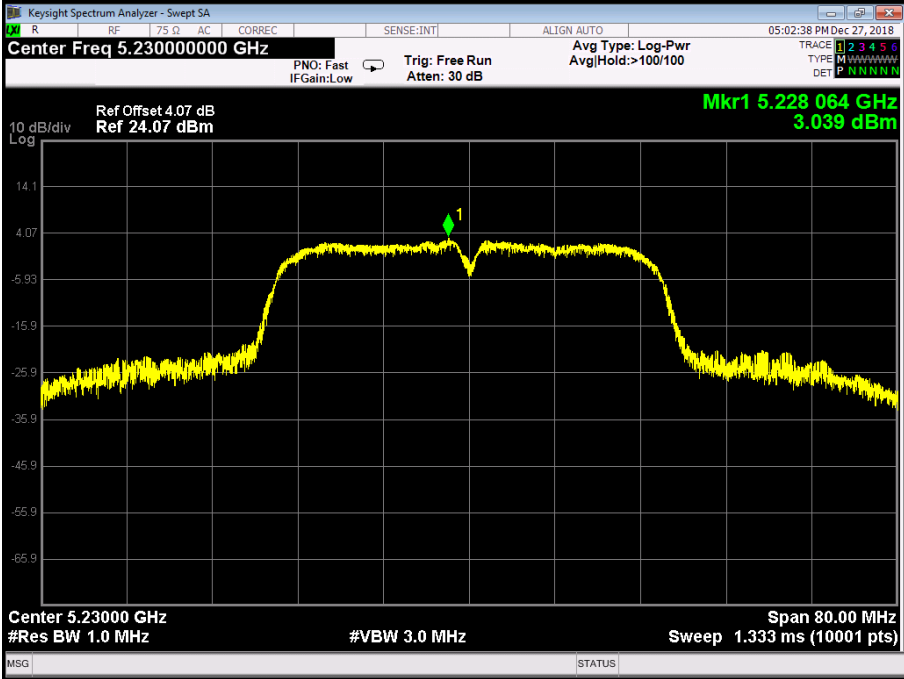
802.11 ac(VHT20) 5240 MHz



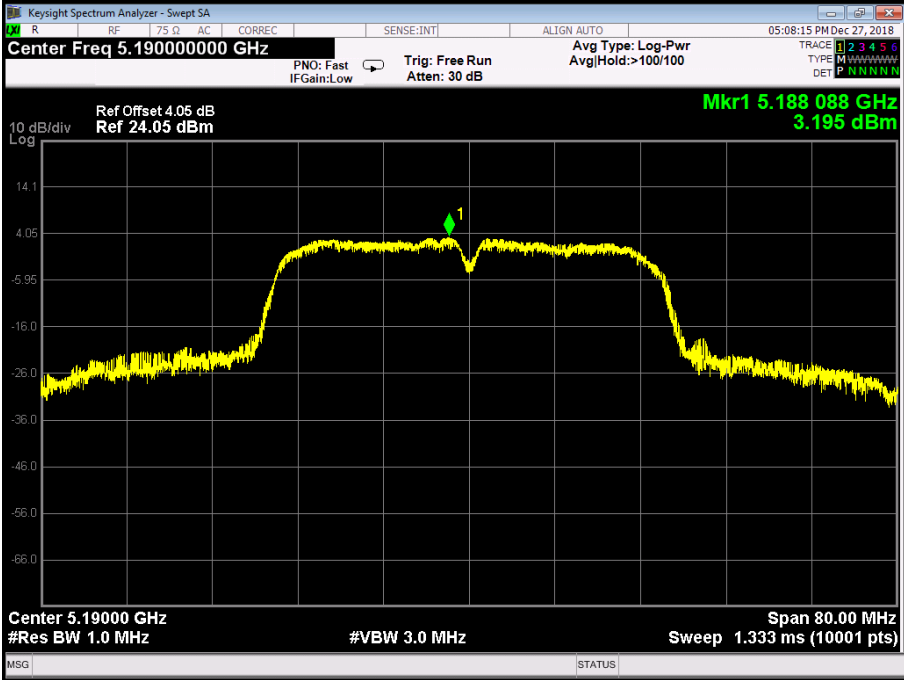
802.11 n(40) 5190 MHz



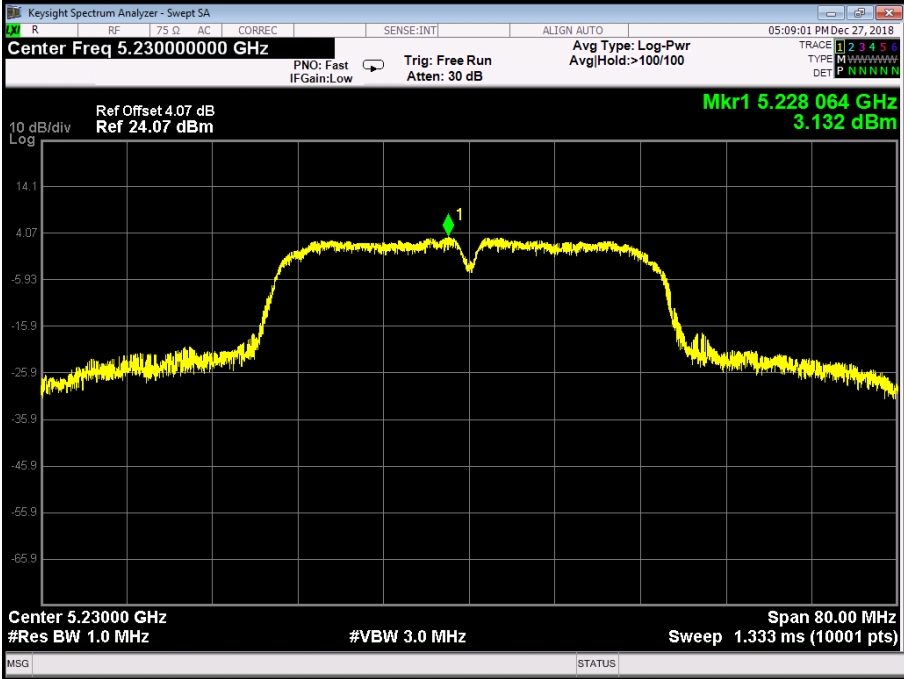
802.11 n(40) 5230 MHz



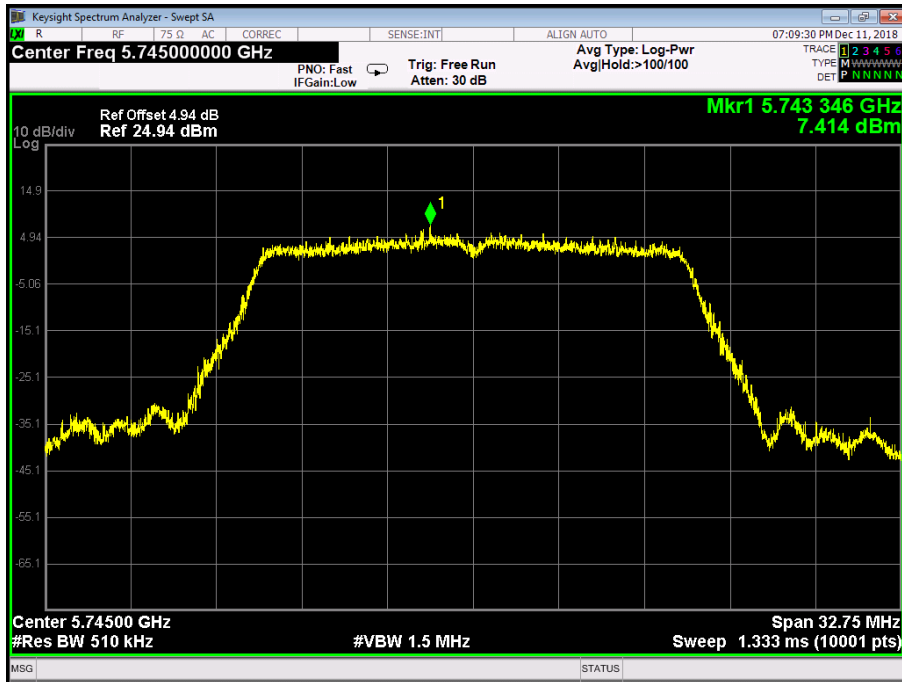
802.11 ac(VHT40) 5190 MHz



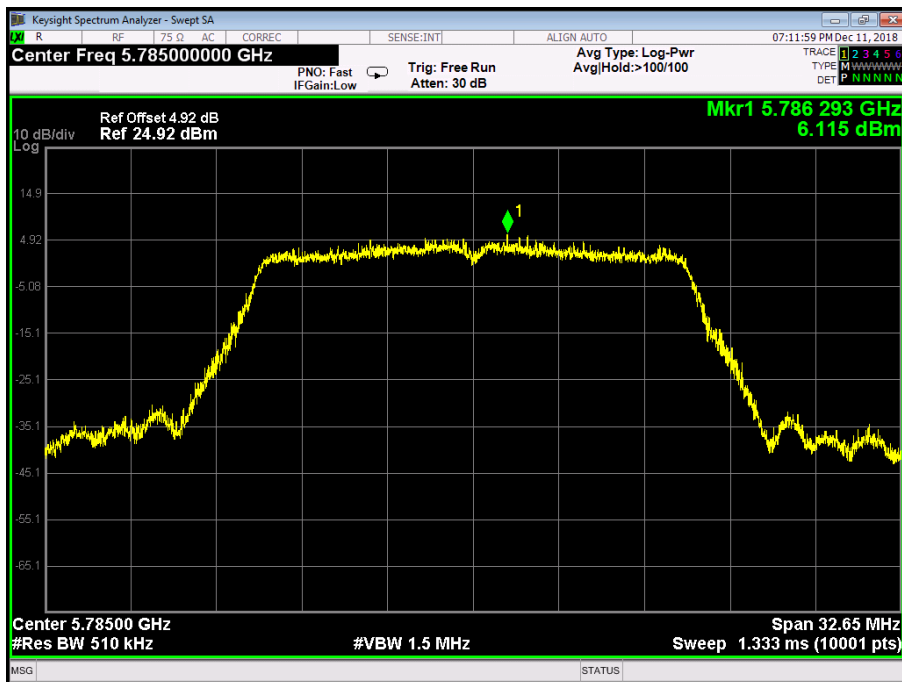
802.11 ac(VHT40) 5230 MHz



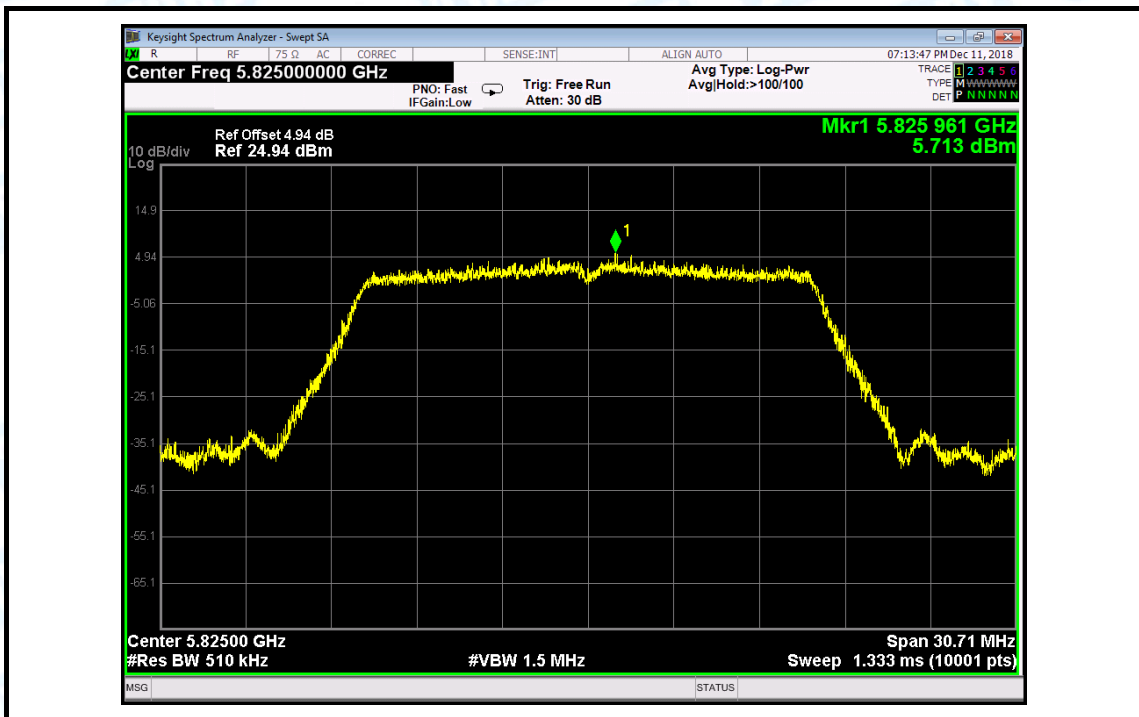
802.11 a 5745 MHz



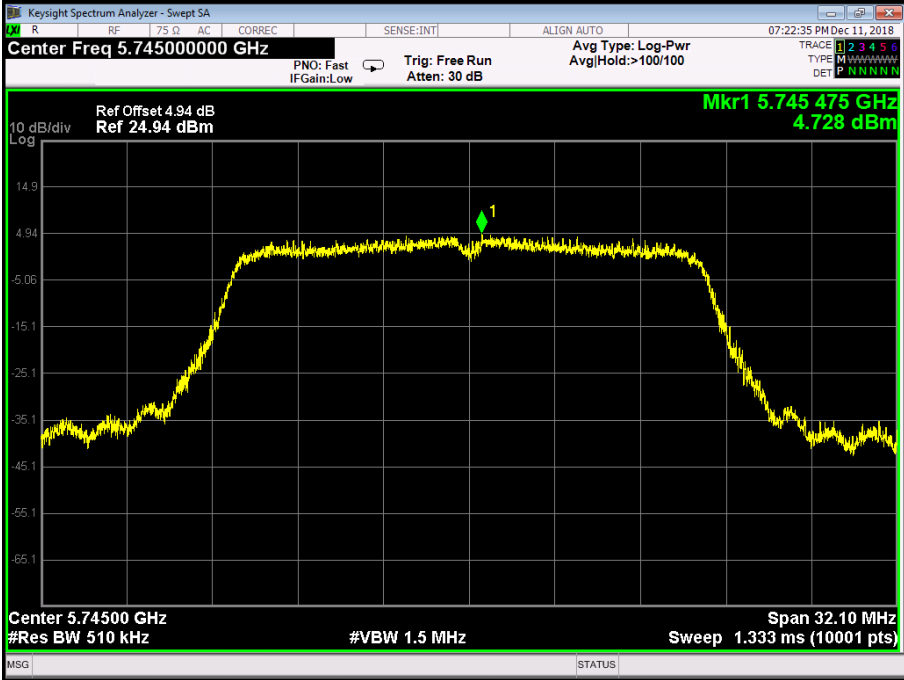
802.11 a 5785 MHz



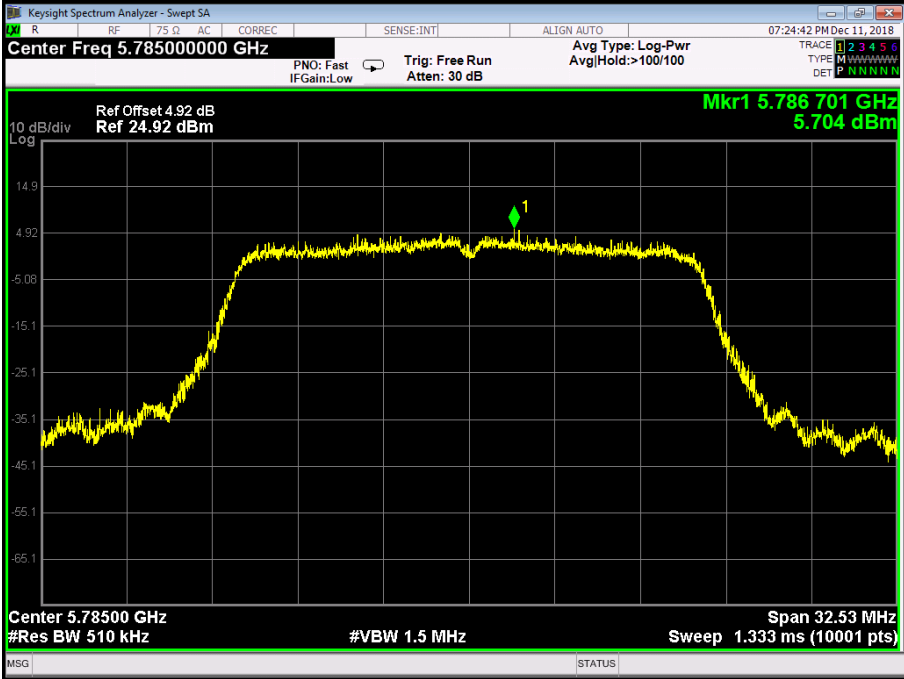
802.11 a 5825 MHz



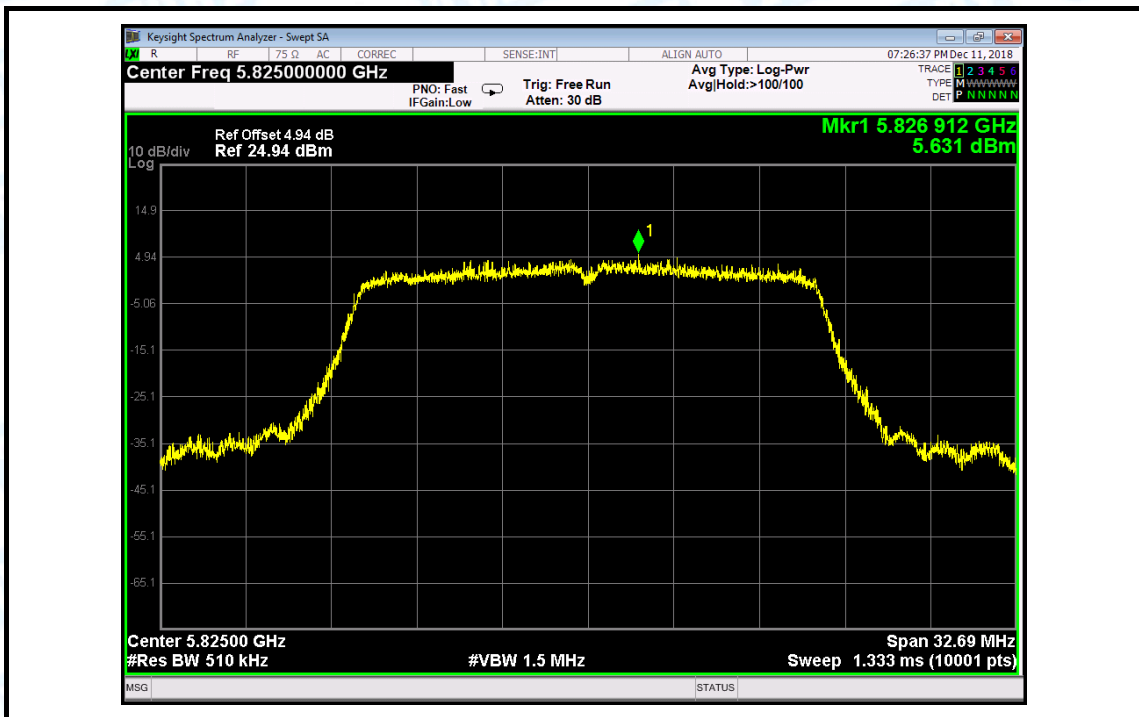
802.11 n(20) 5745 MHz



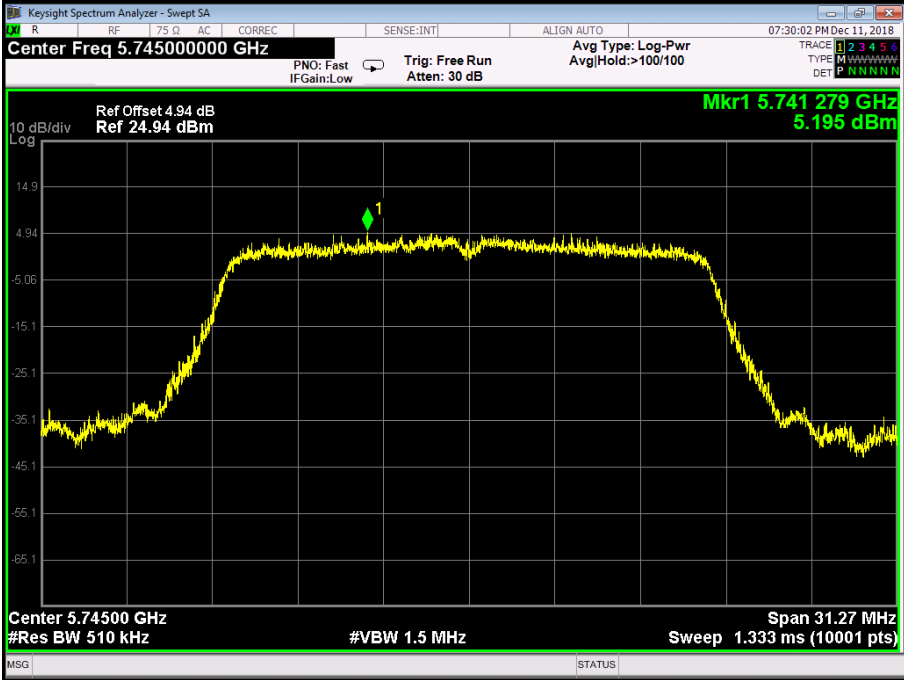
802.11 n(20) 5785 MHz



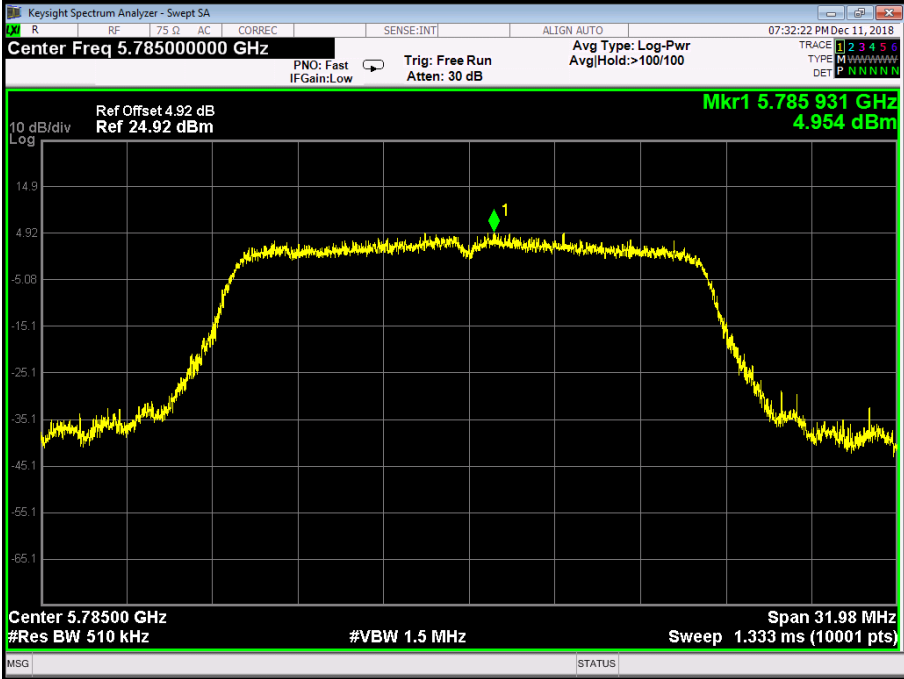
802.11 n(20) 5825 MHz



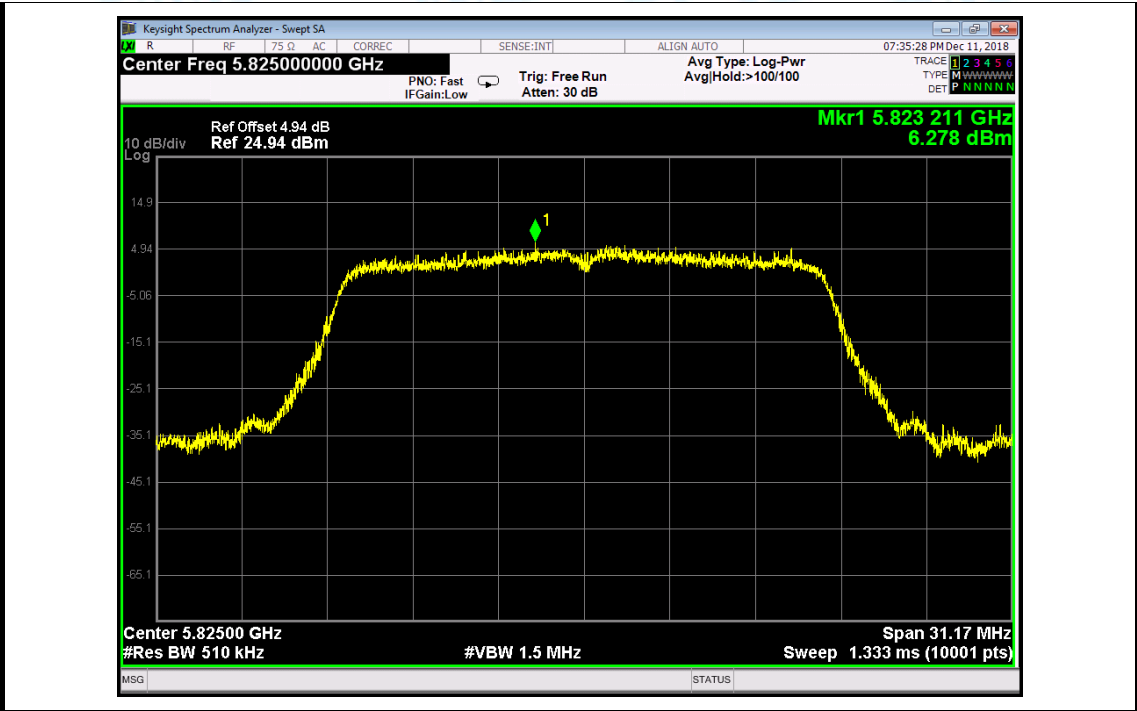
802.11 ac(VHT20) 5745 MHz



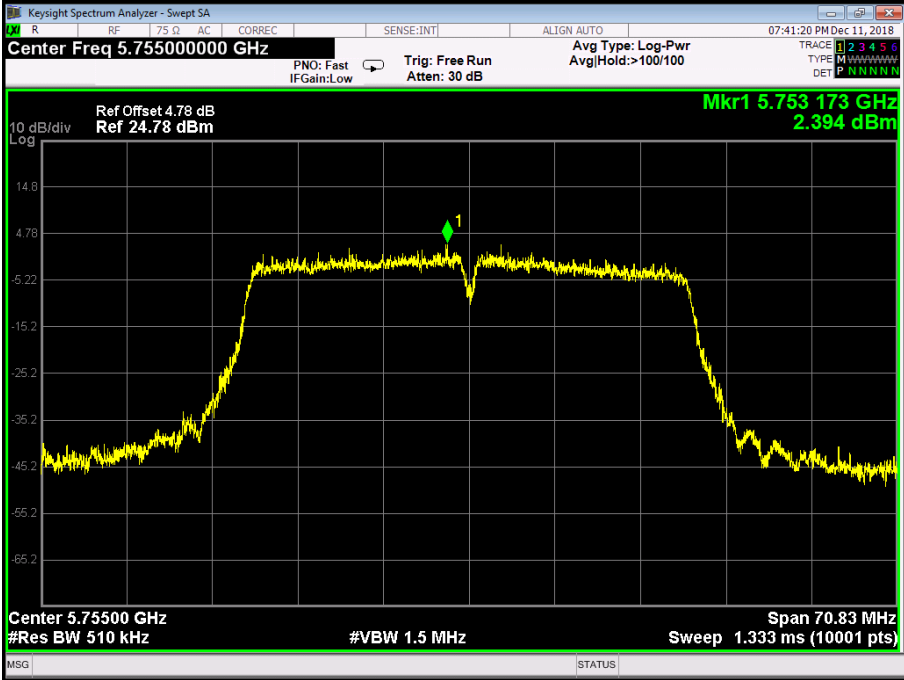
802.11 ac(VHT20) 5785 MHz



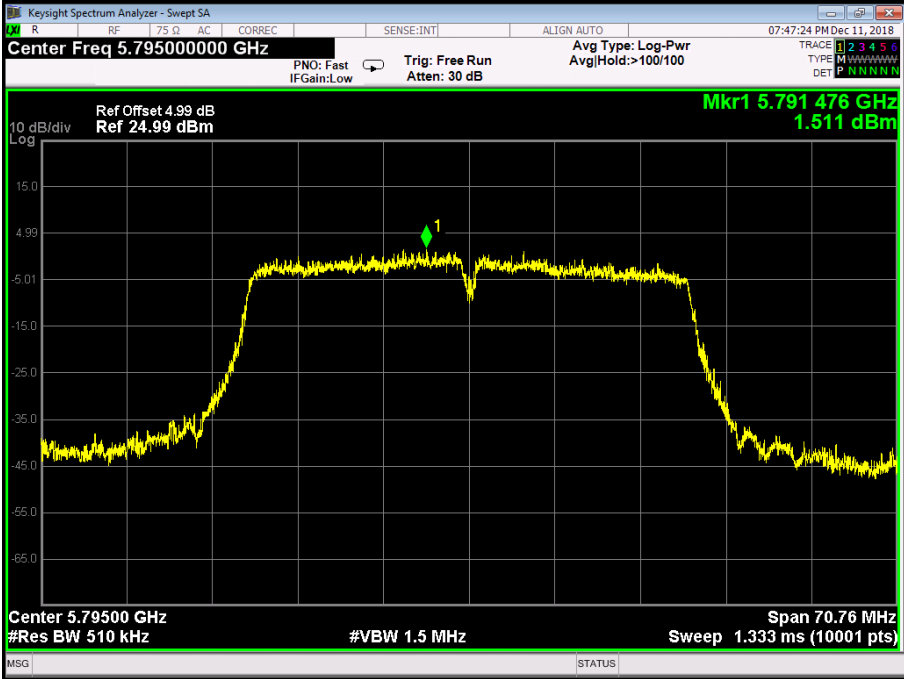
802.11 ac(VHT20) 5825 MHz



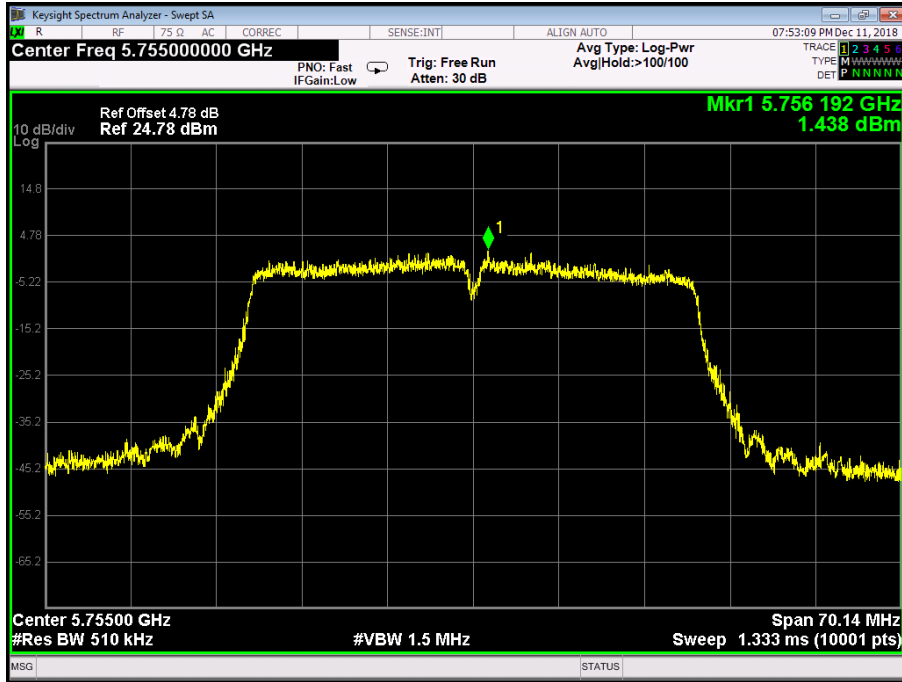
802.11 n(40) 5755 MHz



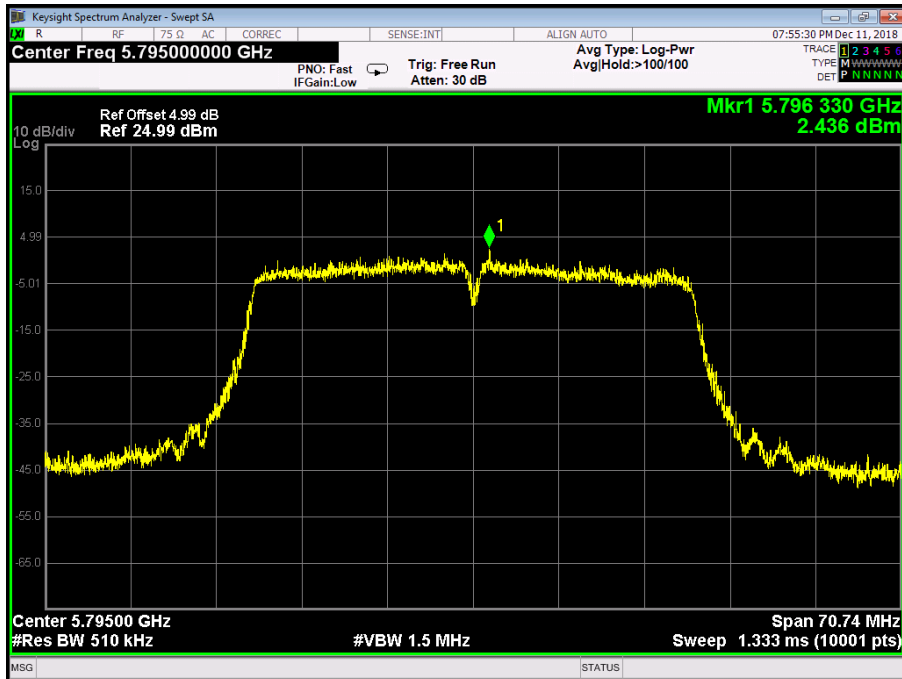
802.11 n(40) 5795 MHz



802.11 ac(VHT40) 5755 MHz

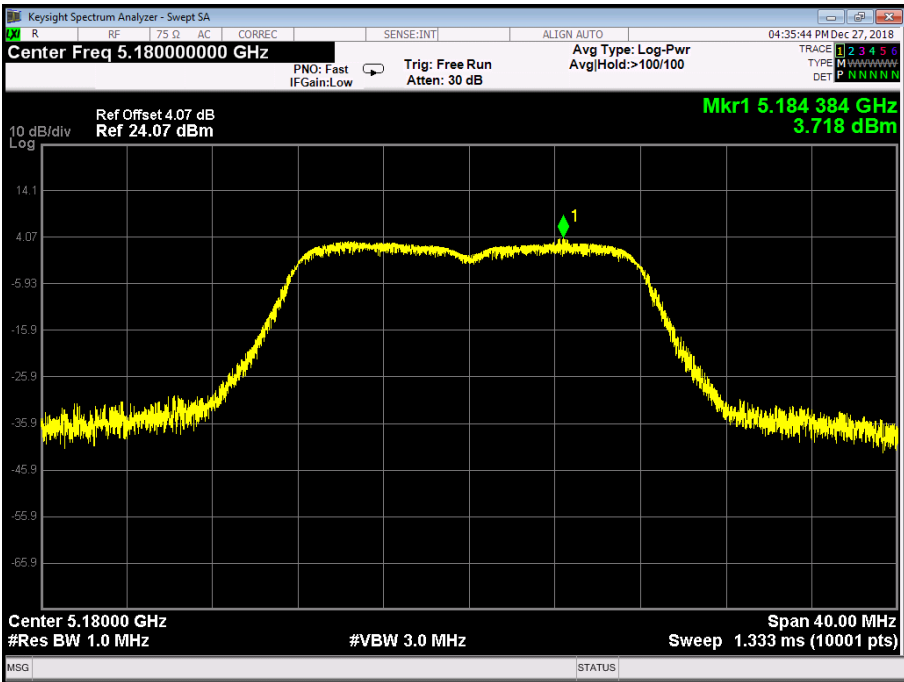


802.11 ac(VHT40) 5795 MHz

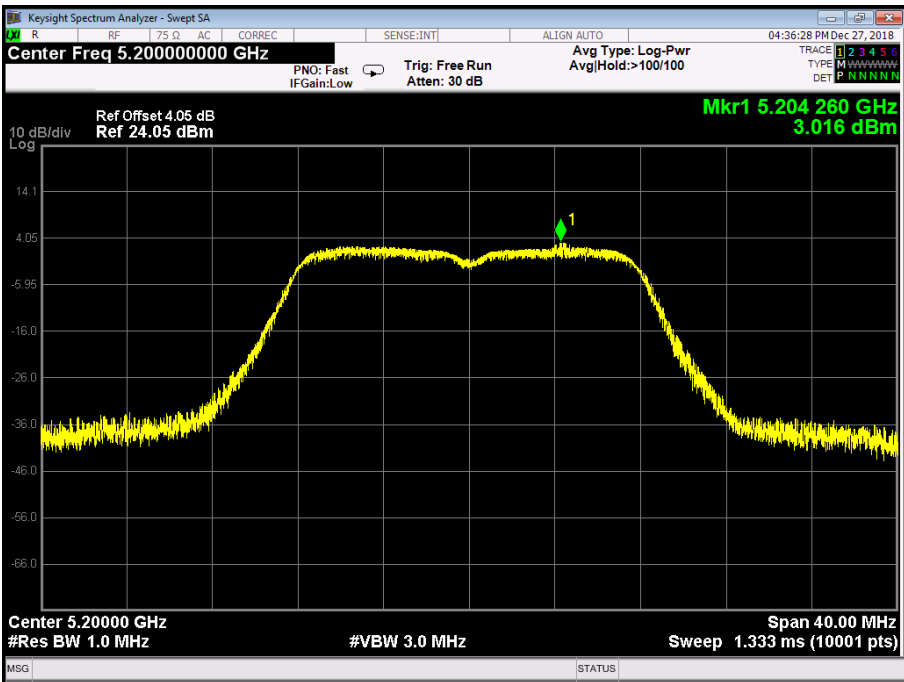


ANT 1:

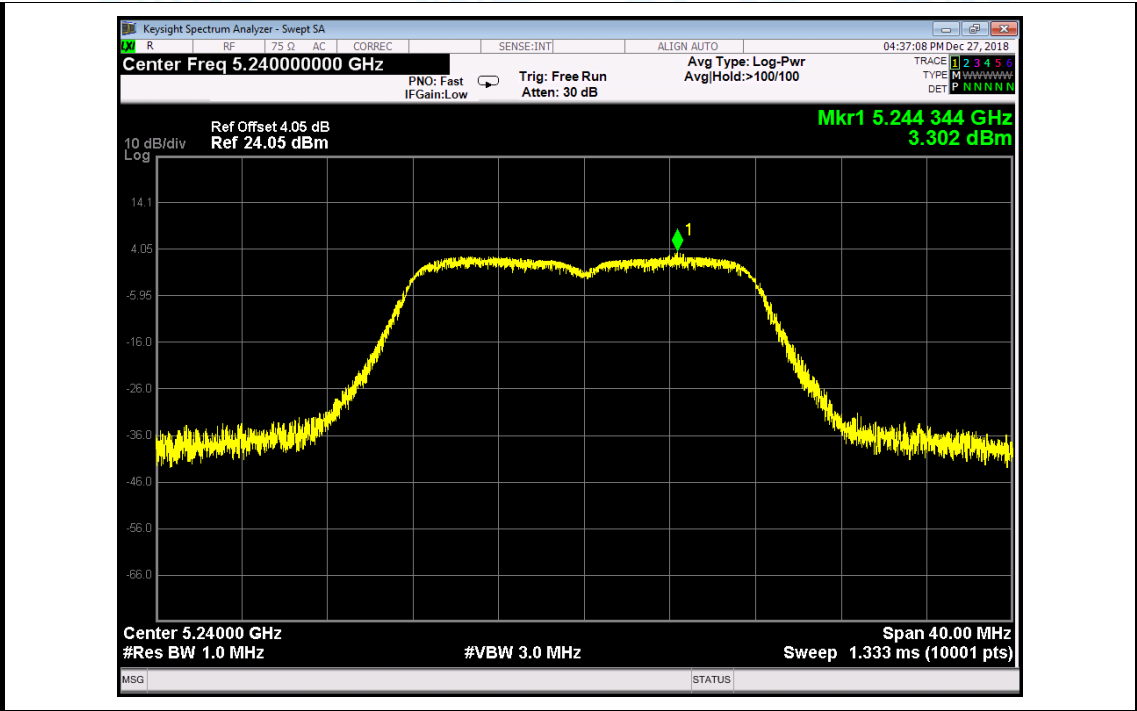
802.11 a 5180 MHz



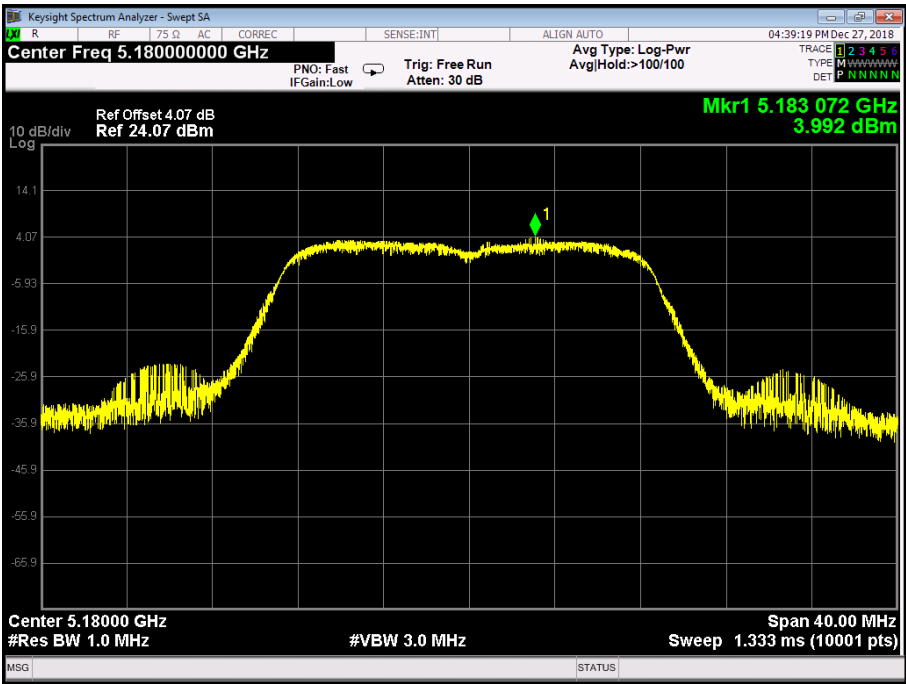
802.11 a 5200 MHz



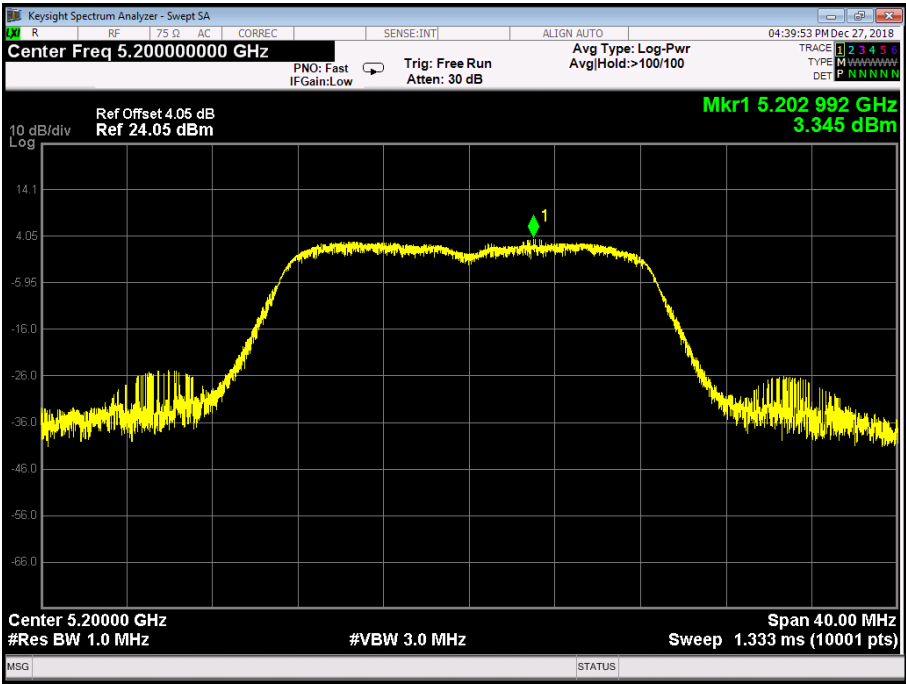
802.11 a 5240 MHz



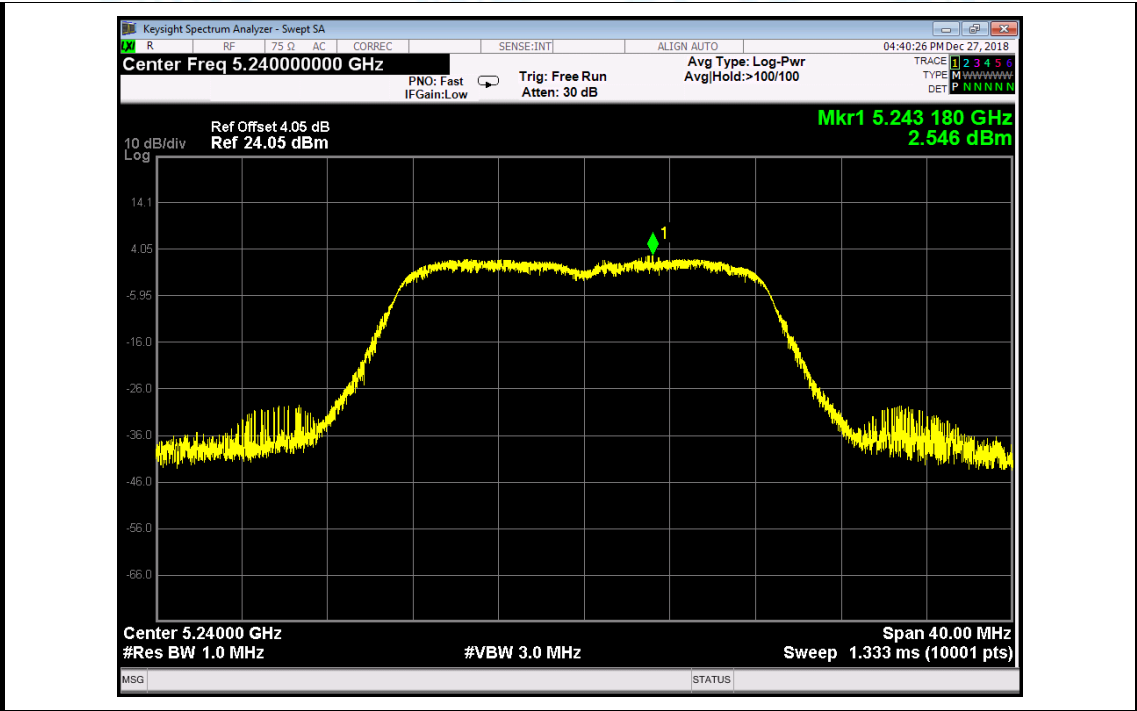
802.11 n(20) 5180 MHz



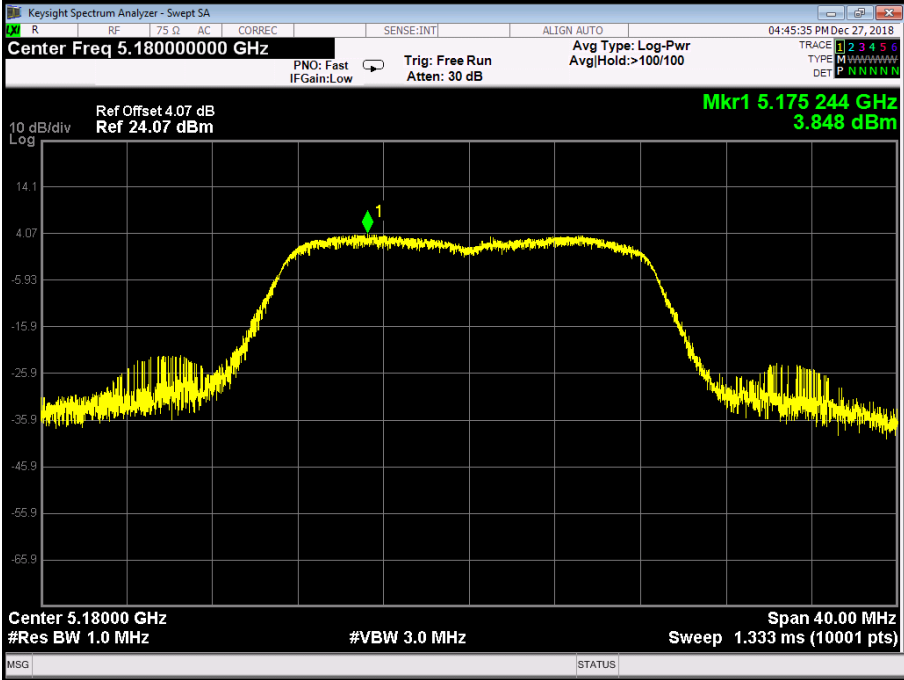
802.11 n(20) 5200 MHz



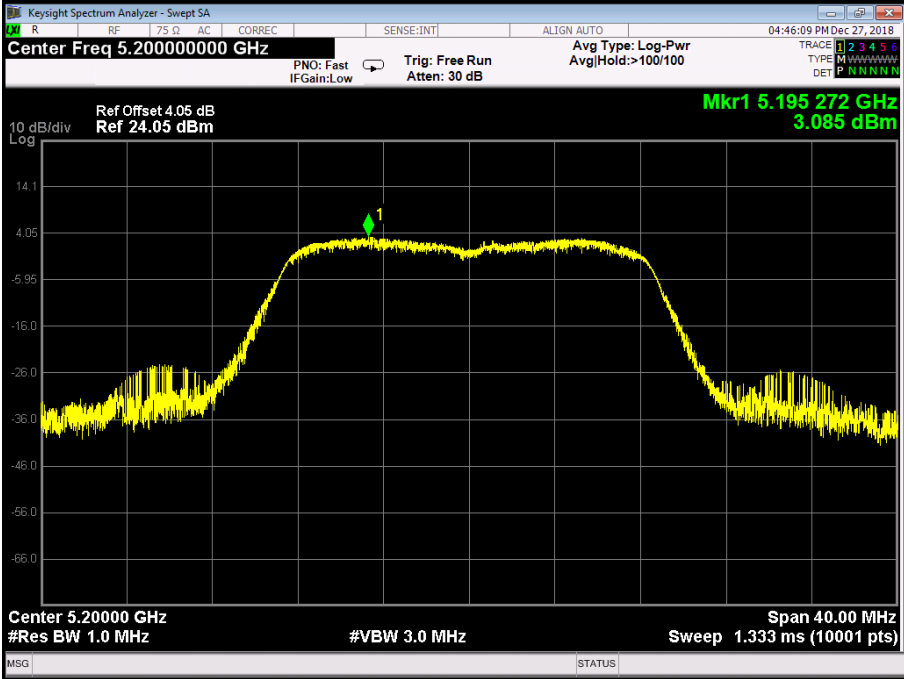
802.11 n(20) 5240 MHz



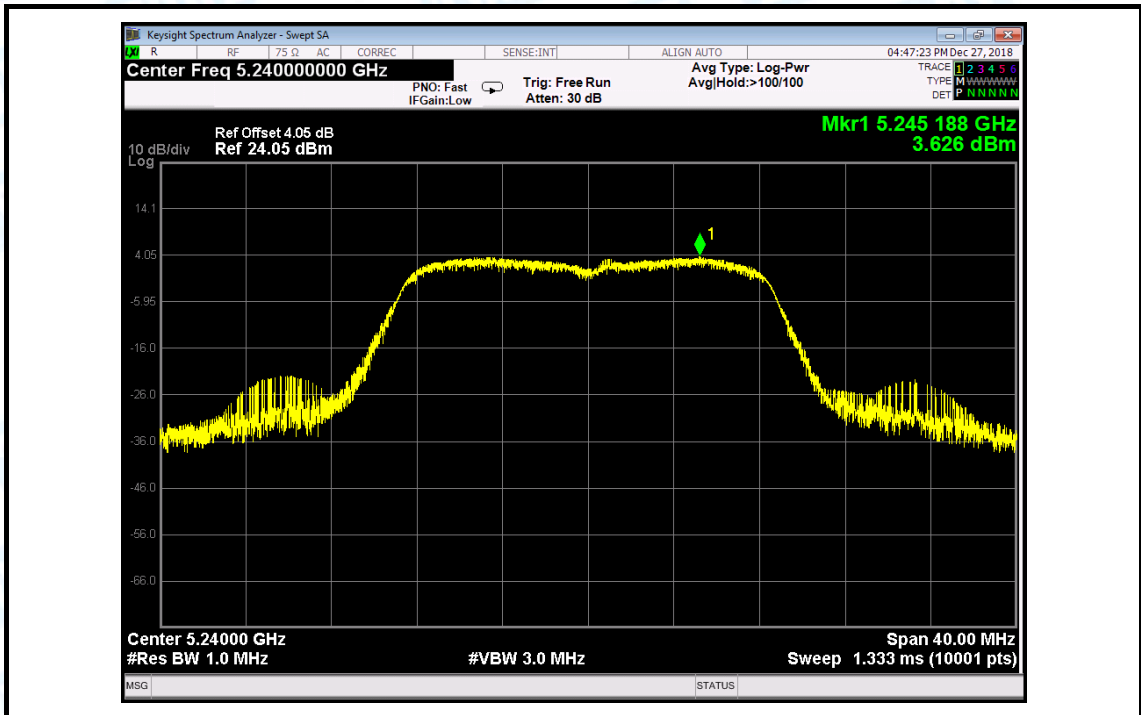
802.11 ac(VHT20) 5180 MHz



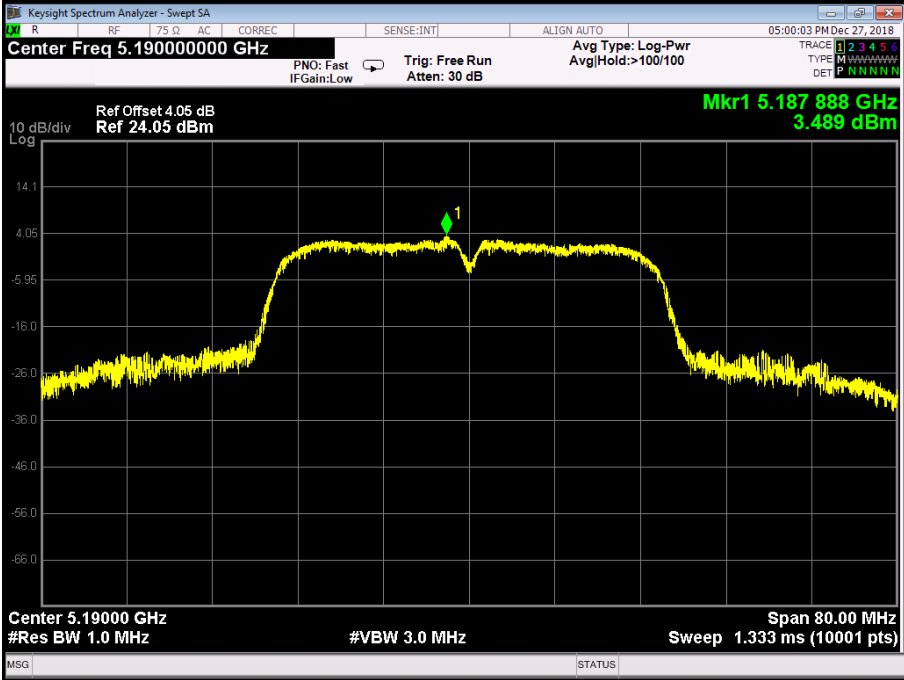
802.11 ac(VHT20) 5200 MHz



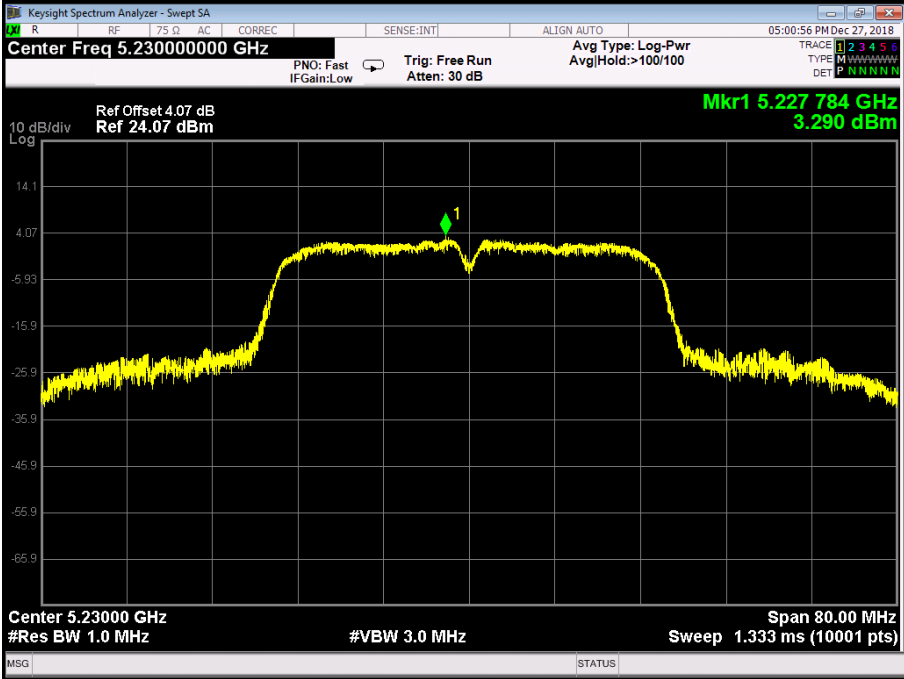
802.11 ac(VHT20) 5240 MHz



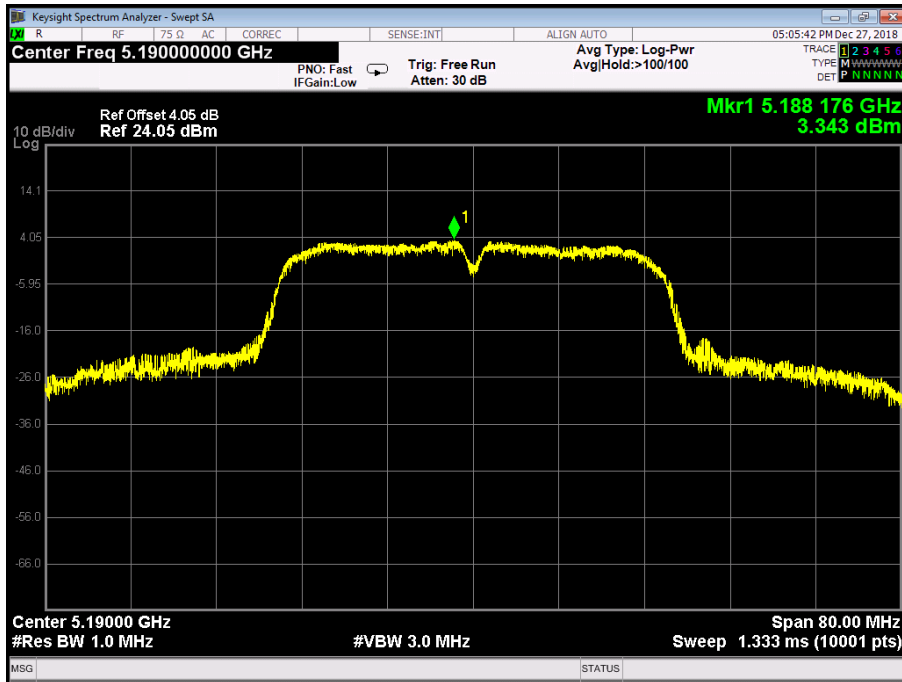
802.11 n(40) 5190 MHz



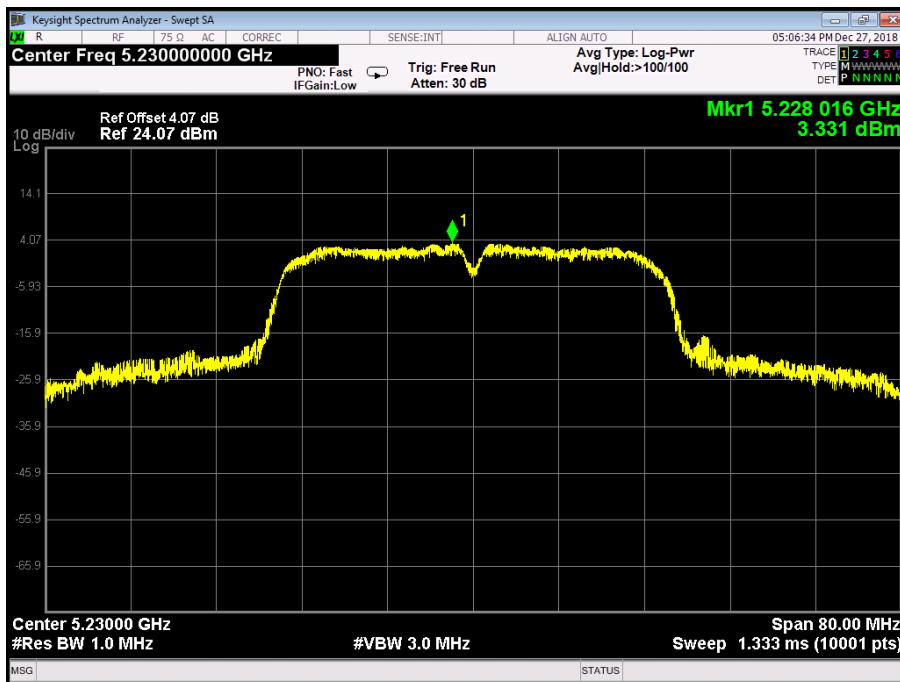
802.11 n(40) 5230 MHz



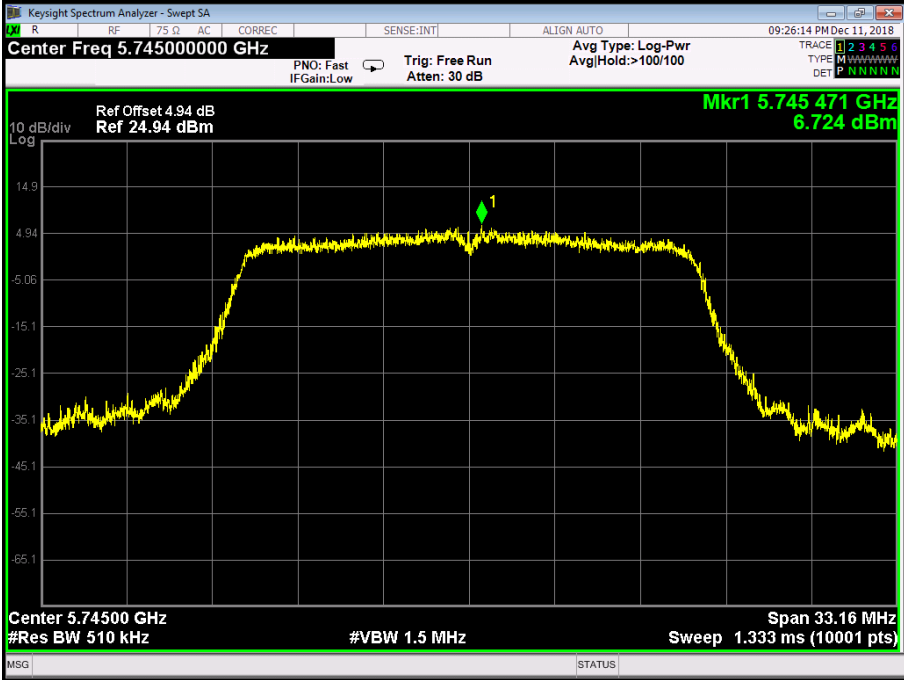
802.11 ac(VHT40) 5190 MHz



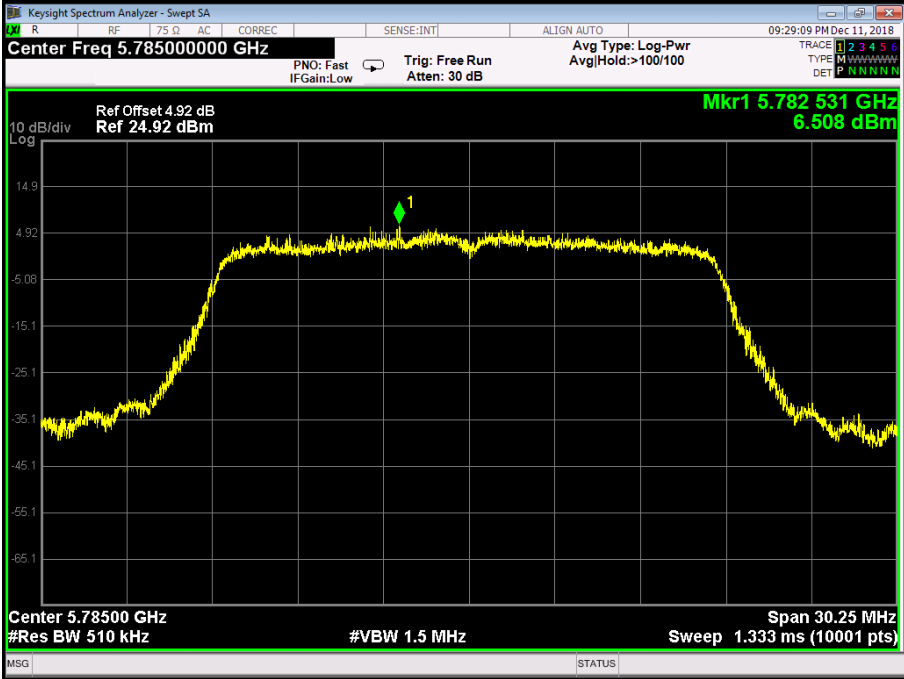
802.11 ac(VHT40) 5230 MHz



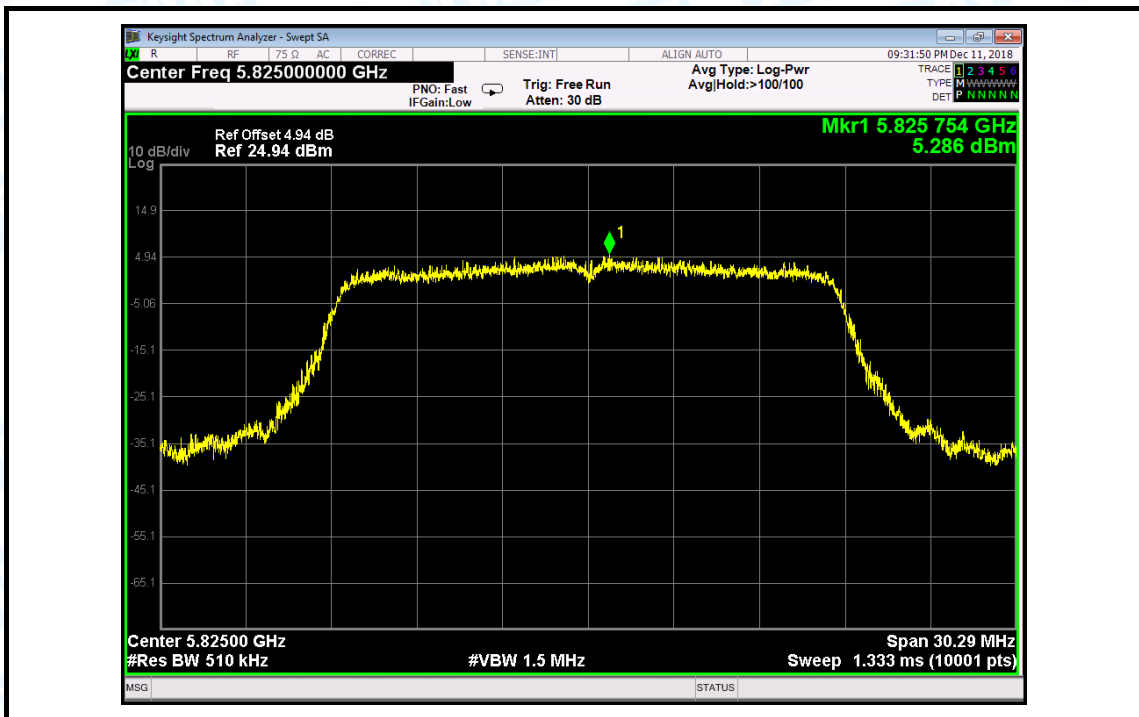
802.11 a 5745 MHz



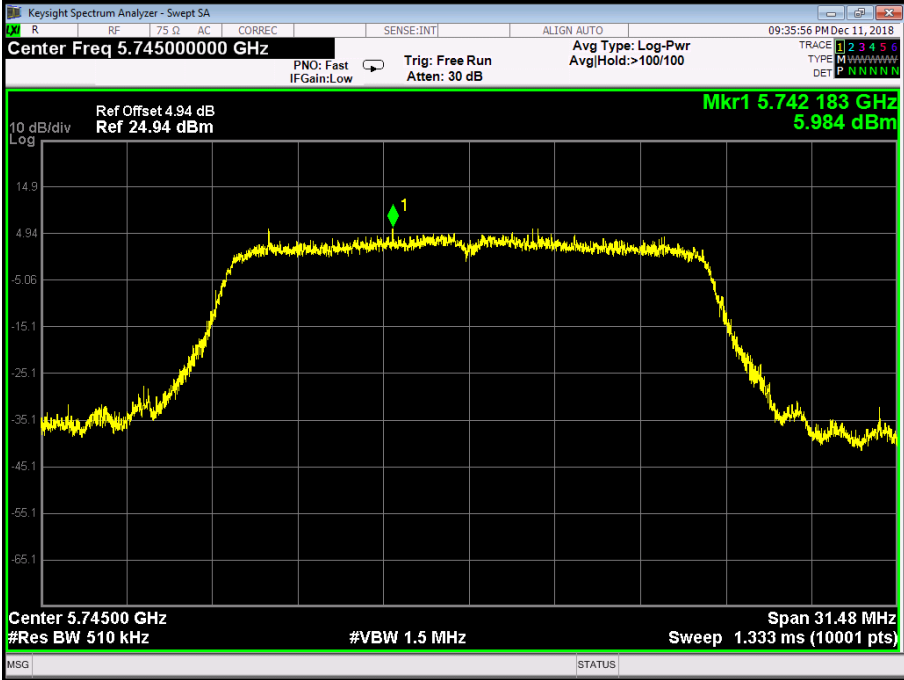
802.11 a 5785 MHz



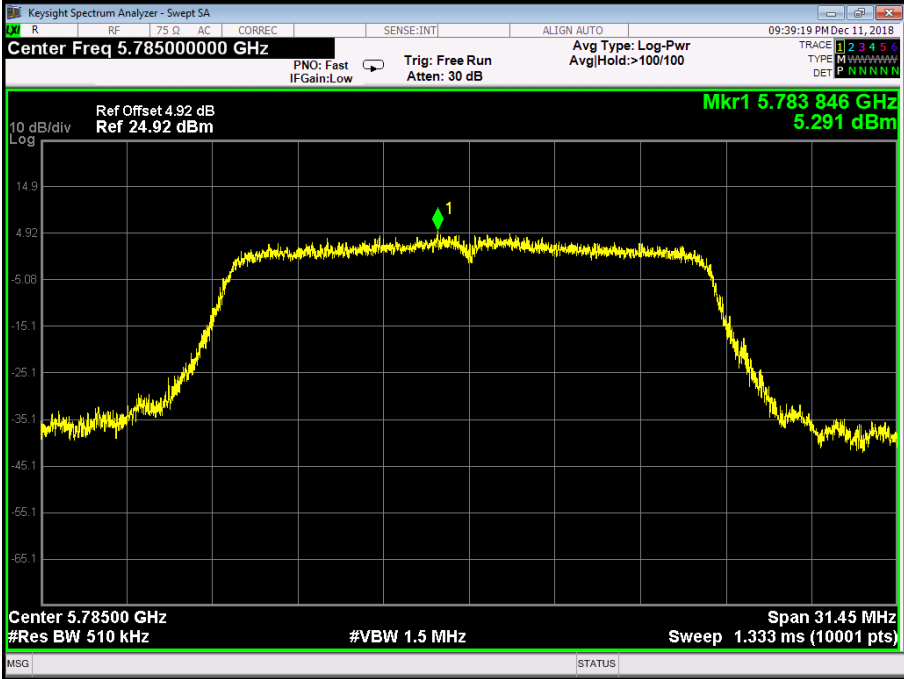
802.11 a 5825 MHz



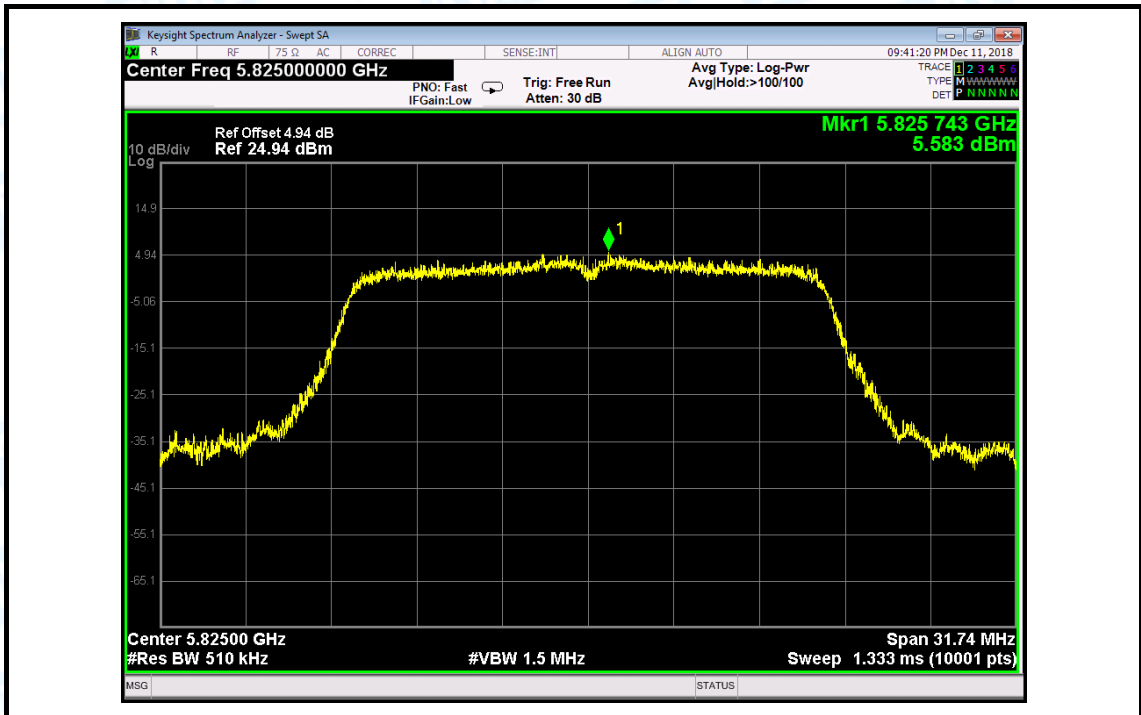
802.11 n(20) 5745 MHz



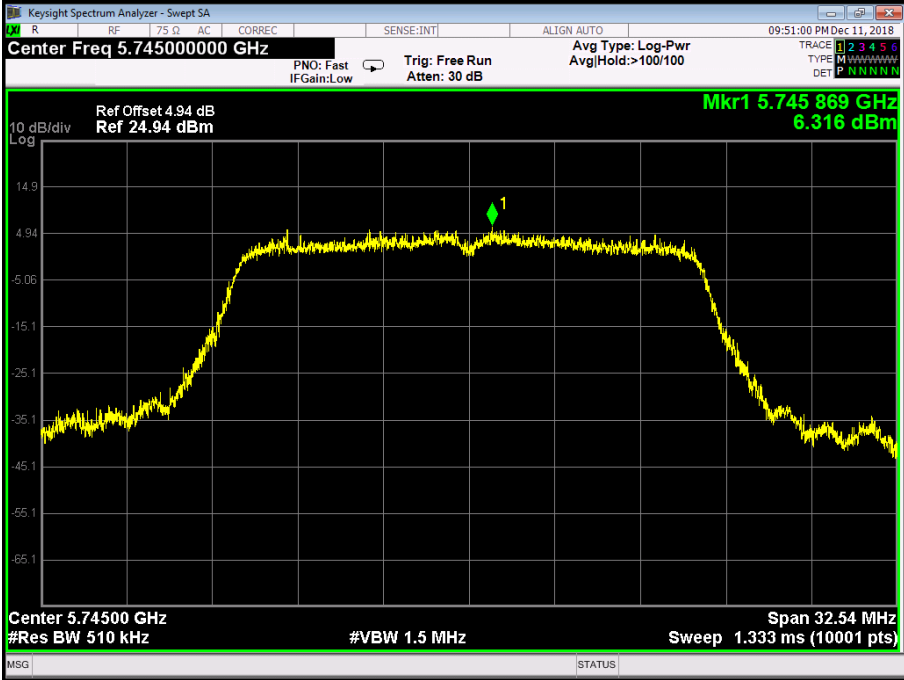
802.11 n(20) 5785 MHz



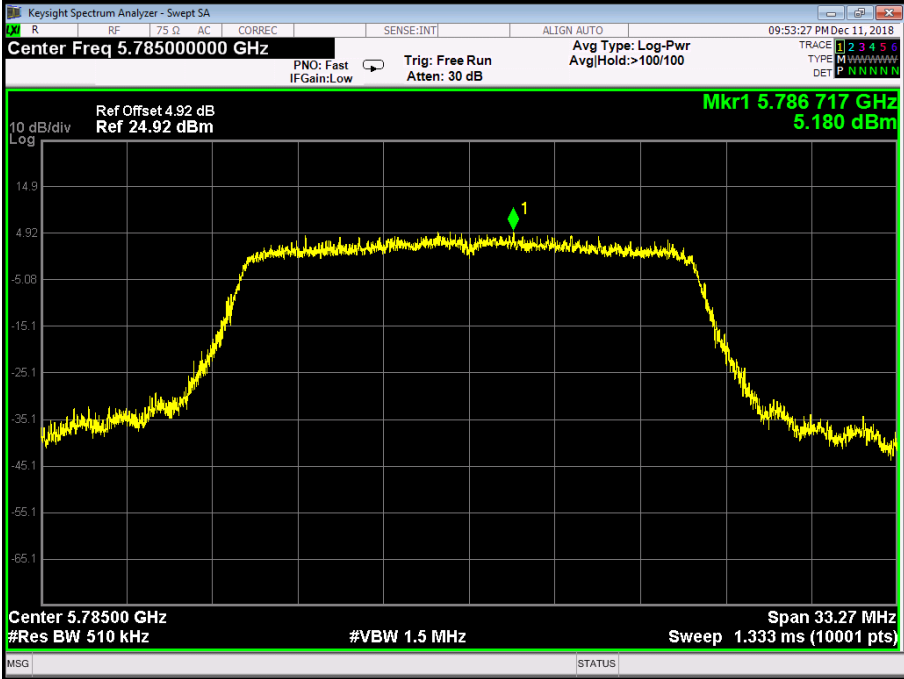
802.11 n(20) 5825 MHz



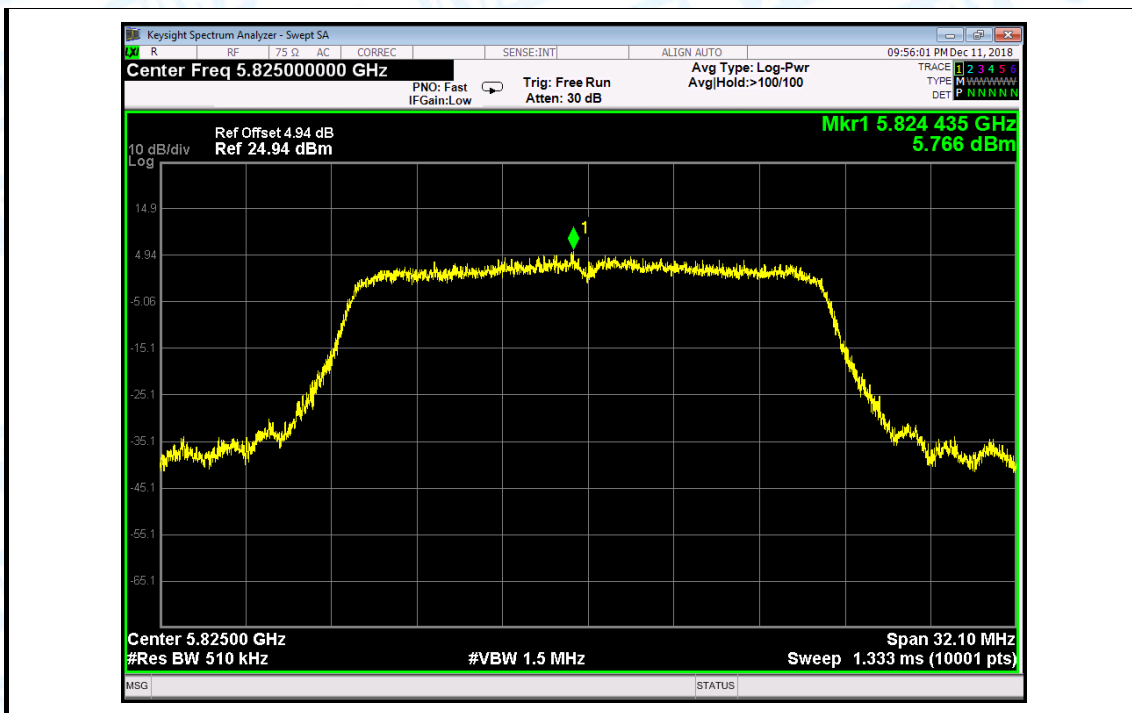
802.11 ac(VHT20) 5745 MHz



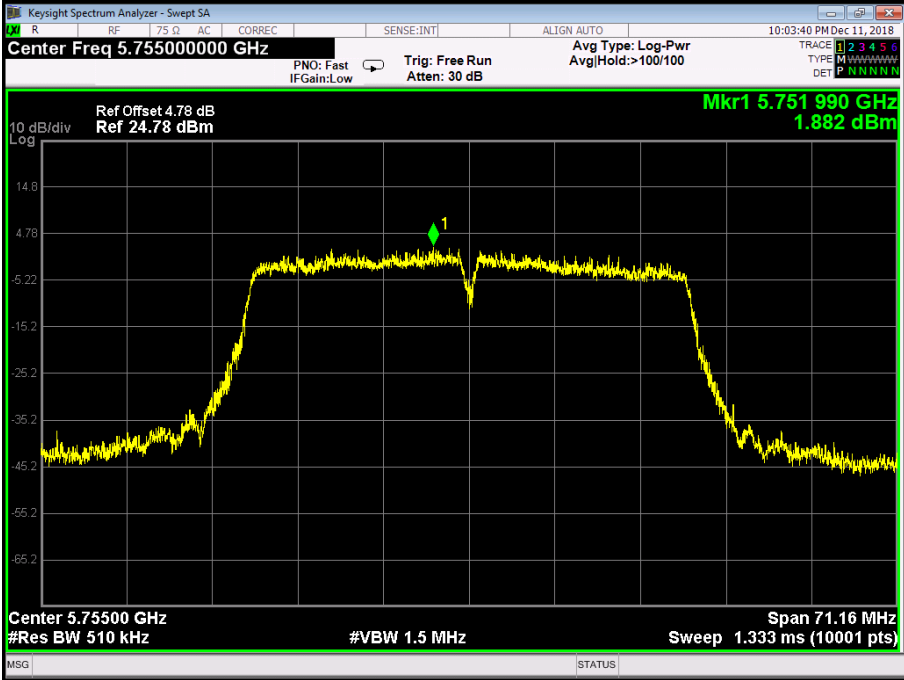
802.11 ac(VHT20) 5785 MHz



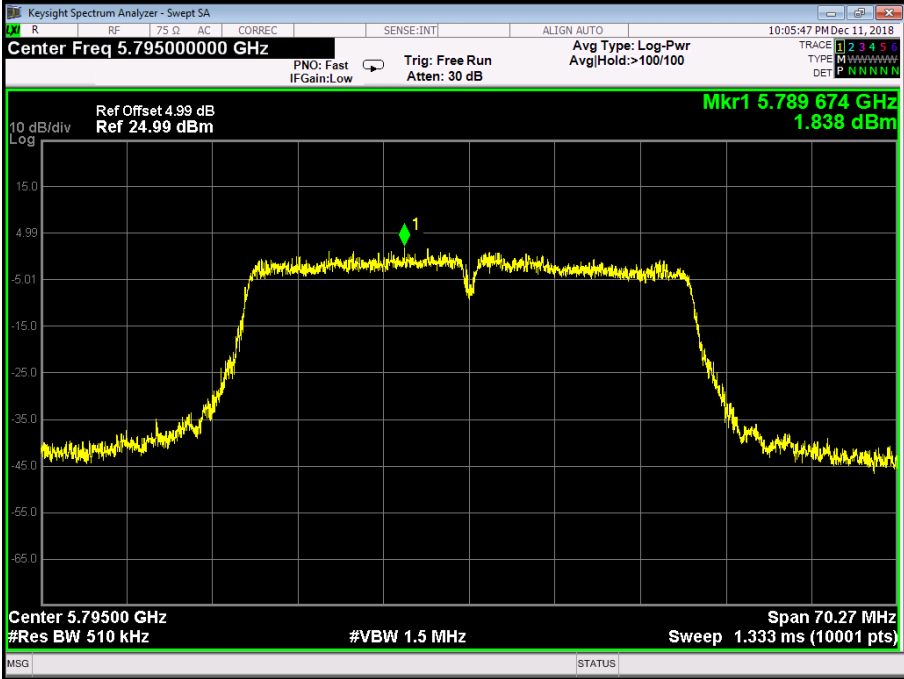
802.11 ac(VHT20) 5825 MHz



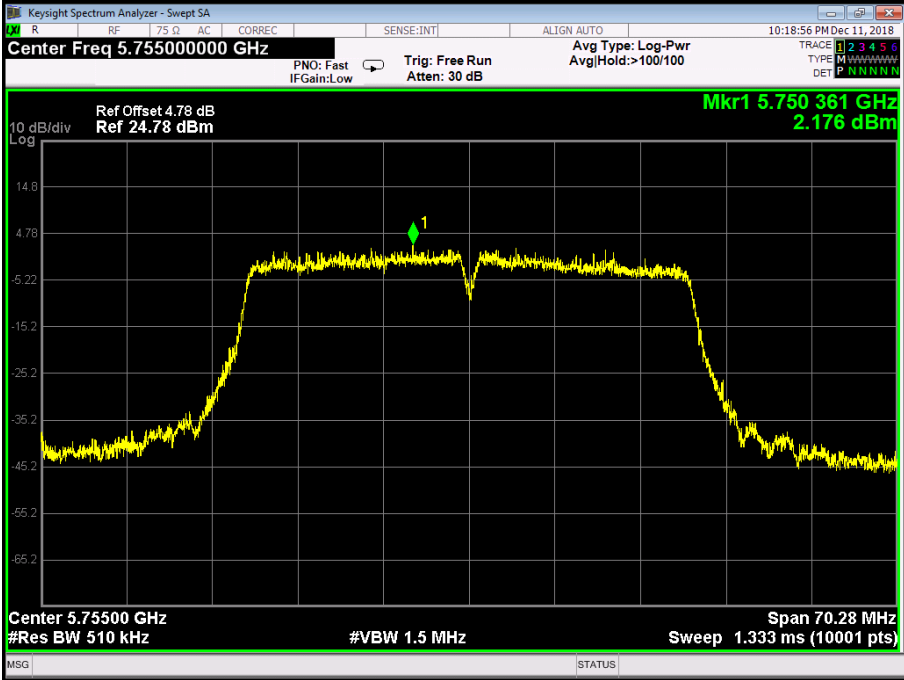
802.11 n(40) 5755 MHz



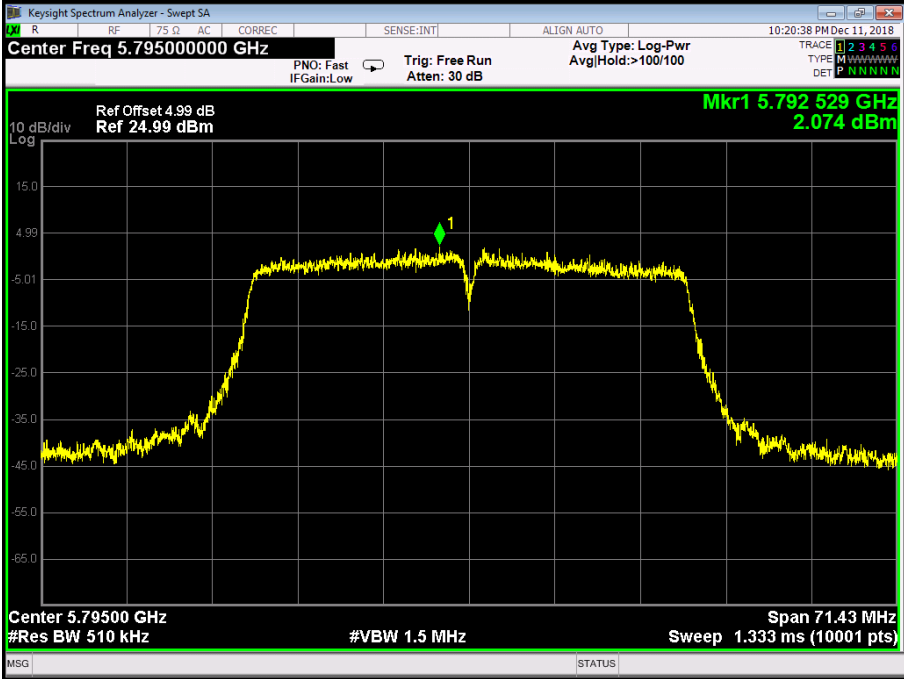
802.11 n(40) 5795 MHz



802.11 ac(VHT40) 5755 MHz



802.11 ac(VHT40) 5795 MHz



Attachment G-- Frequency Stability Measurement Test Data

ANT 0:

801.11a U-NII-1: 5180 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
240	5179.9926
120	5179.9954
100	5179.9975
Max. Deviation (MHz)	0.0074
Max. Deviation (ppm)	-1.42
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5179.9928
10	5179.9947
20	5179.9966
30	5179.9973
40	5179.9978
50	5179.9988
Max. Deviation (MHz)	0.0072
Max. Deviation (ppm)	-1.38
Limit (ppm)	20
Result	Pass

Remark: Worst case at 802.11a U-NII-1 middle channel

ANT 1:

801.11a U-NII-1: 5180 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
240	5179.9936
120	5179.9951
100	5179.9947
Max. Deviation (MHz)	0.0064
Max. Deviation (ppm)	-1.24
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5179.9964
10	5179.9946
20	5179.9951
30	5179.9941
40	5179.9974
50	5179.9986
Max. Deviation (MHz)	0.0059
Max. Deviation (ppm)	-1.14
Limit (ppm)	20
Result	Pass

Remark: Worst case at 802.11a U-NII-1 middle channel

ANT 0 & ANT 1:

801.11a U-NII-3: 5745 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
240	5745.0087
120	5745.0096
100	5745.0091
Max. Deviation (MHz)	0.0096
Max. Deviation (ppm)	1.67
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5745.0041
10	5745.0042
20	5745.0019
30	5745.0024
40	5745.0034
50	5745.0061
Max. Deviation (MHz)	0.0061
Max. Deviation (ppm)	1.06
Limit (ppm)	20
Result	Pass

Remark: Worst case at 802.11a U-NII-3 middle channel

-----END OF REPORT-----