

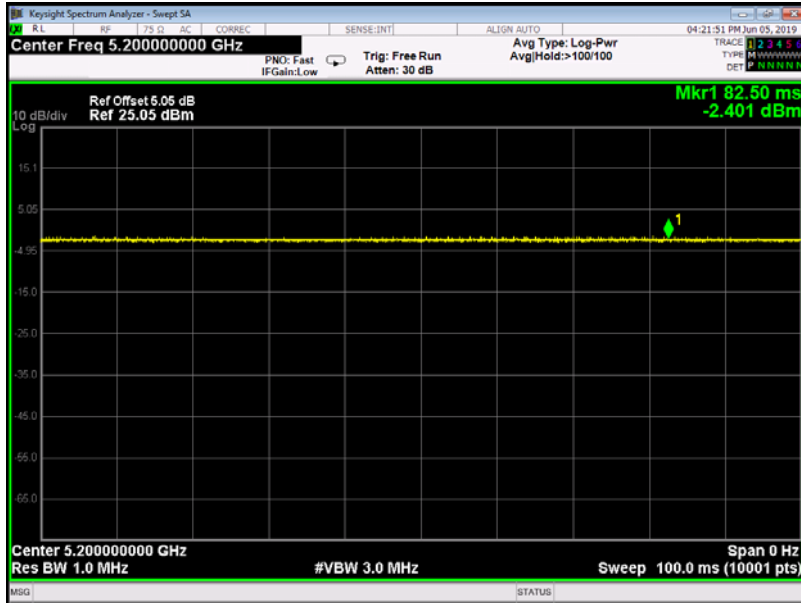
Attachment E-- Peak Output Power Test Data

Temperature:	25 °C	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
U-NII-1						
Test Mode	Frequency (MHz)	Test Data			Limit (dBm)	
		Conducted Power (dBm)		Duty Factor (dB)		Total Power (dBm)
		Ant. main	Ant. aux			
802.11a	5180	6.98	6.86	0	---	
	5200	6.95	6.49	0	---	
	5240	6.96	6.78	0	---	
802.11n (HT20)	5180	3.96	3.76	0	6.87	
	5200	3.98	3.68	0	6.84	
	5240	3.94	3.72	0	6.84	
802.11ac (VHT20)	5180	3.92	3.68	0	6.81	
	5200	3.89	3.65	0	6.78	
	5240	3.87	3.74	0	6.82	
802.11n (HT40)	5190	3.85	3.82	0	6.85	
	5230	3.86	3.84	0	6.86	
802.11ac(VHT40)	5190	3.89	3.85	0	6.88	
	5230	3.92	3.74	0	6.84	
802.11ac(VHT80)	5210	3.91	3.47	0	6.71	
Result: PASS						
<p>Remark: The EUT incorporates a MIMO function. Physically, the EUT provides two antennas for transmitting and receiving.</p> <p>When Main ANT. and Aux ANT. transmitting simultaneously, the total Antenna Gain=Main Gain + Aux Gani =5.01 dBi<6 dBi.</p> <p>So $P_{out} = P_{limit}$</p>						

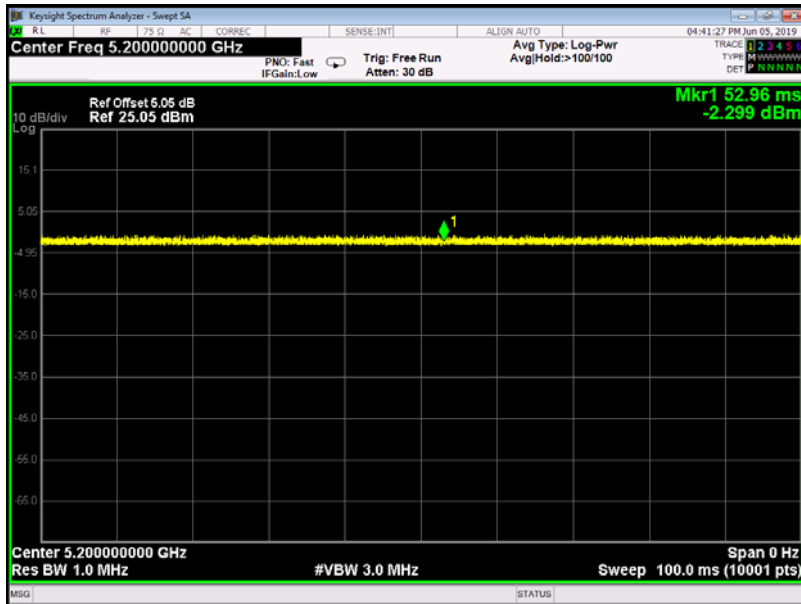
Temperature:	25 °C	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
U-NII-3						
Test Mode	Frequency (MHz)	Test Data			Limit (dBm)	
		Conducted Power (dBm)		Duty Factor (dB)		Total Power (dBm)
		Ant. main	Ant. aux			
802.11a	5745	6.92	6.88	0	30	
	5785	6.89	6.90	0		
	5825	6.95	6.87	0		
802.11n (HT20)	5745	3.94	3.83	0		
	5785	3.99	3.74	0		
	5825	3.97	3.65	0		
802.11ac (VHT20)	5745	3.91	3.57	0		
	5785	3.87	3.65	0		
	5825	3.79	3.78	0		
802.11n (HT40)	5755	3.92	3.68	0		
	5795	3.79	3.75	0		
802.11 ac(VHT40)	5755	3.86	3.84	0		
	5795	3.88	3.74	0		
802.11 ac(VHT80)	5775	3.83	3.8	0		
Result: PASS						
<p>Remark: The EUT incorporates a MIMO function. Physically, the EUT provides two antennas for transmitting and receiving.</p> <p>When Main ANT. and Aux ANT. transmitting simultaneously, the total Antenna Gain=Main Gain + Aux Gani =5.01 dBi<6 dBi.</p> <p>So $P_{out} = P_{limit}$</p>						

Test Mode		Duty cycle
U-NII-1	802.11 a	>98%
	802.11 n(HT20)	
	802.11 ac(VHT20)	
	802.11 n(HT40)	
	802.11 ac(HT40)	
	802.11 ac(VHT80)	
U-NII-3	802.11 a	
	802.11 n(HT20)	
	802.11 ac(VHT20)	
	802.11 n(HT40)	
	802.11 ac(VHT40)	
	802.11 ac(VHT80)	
Please see the next plots.		

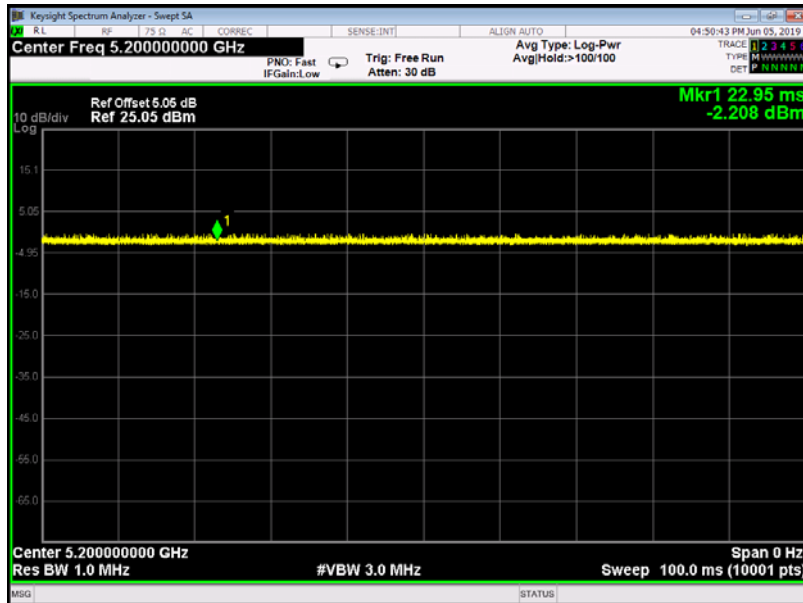
802.11 a 5200MHz U-NII-1



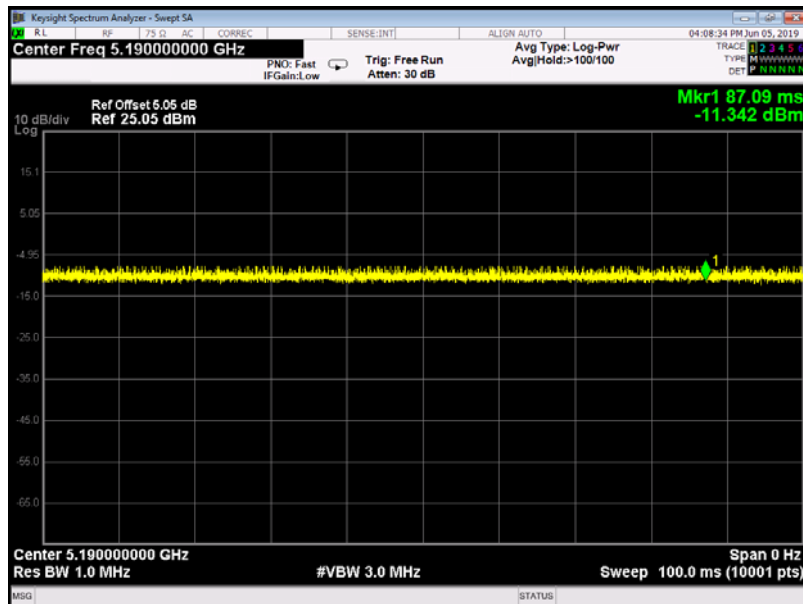
802.11 n(HT20) 5200MHz U-NII-1



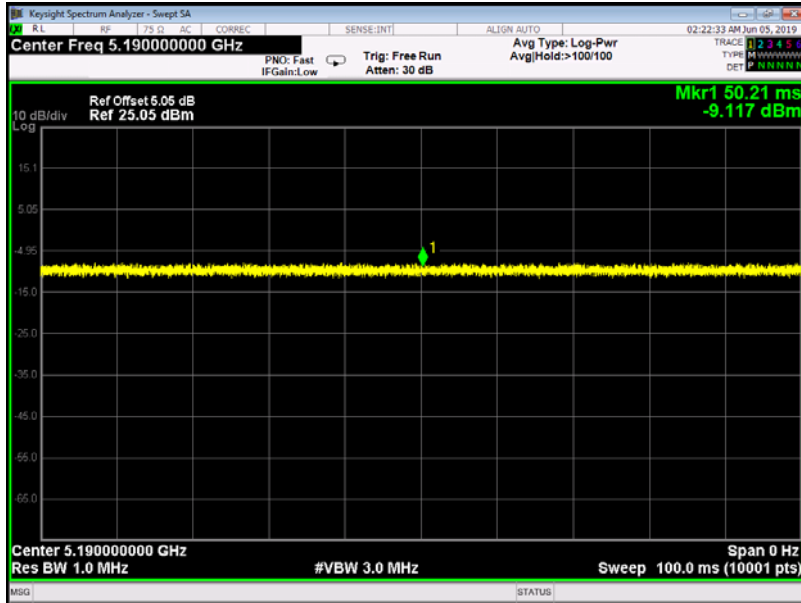
802.11 ac(VHT20) 5200MHz U-NII-1



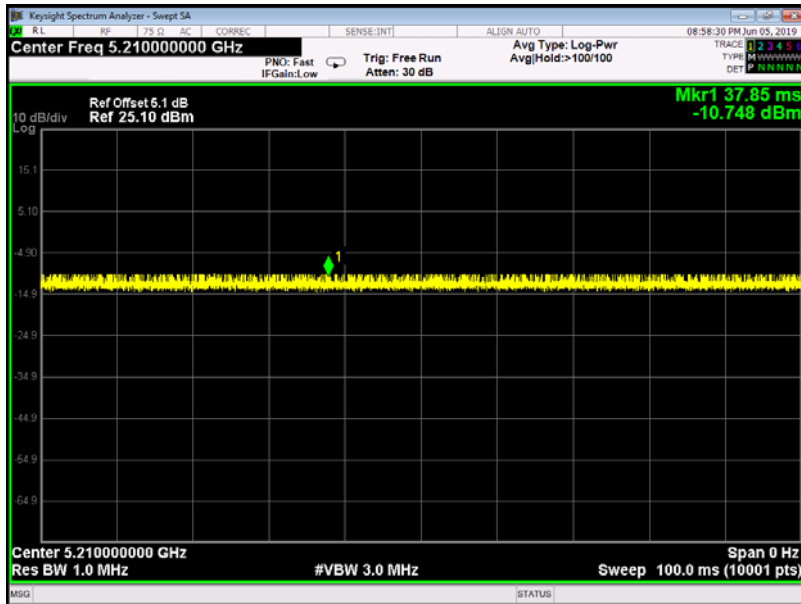
802.11 n(HT40) 5190MHz U-NII-1



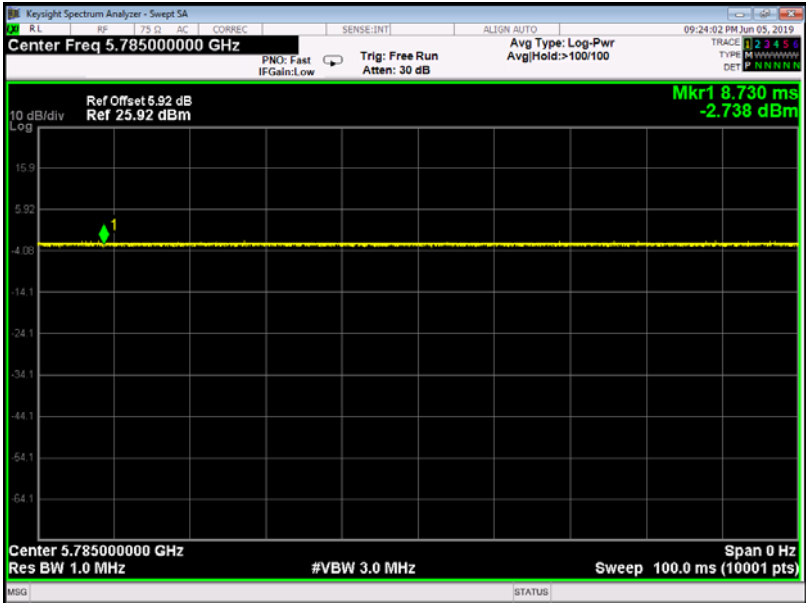
802.11 ac(VHT40) 5190MHz U-NII-1



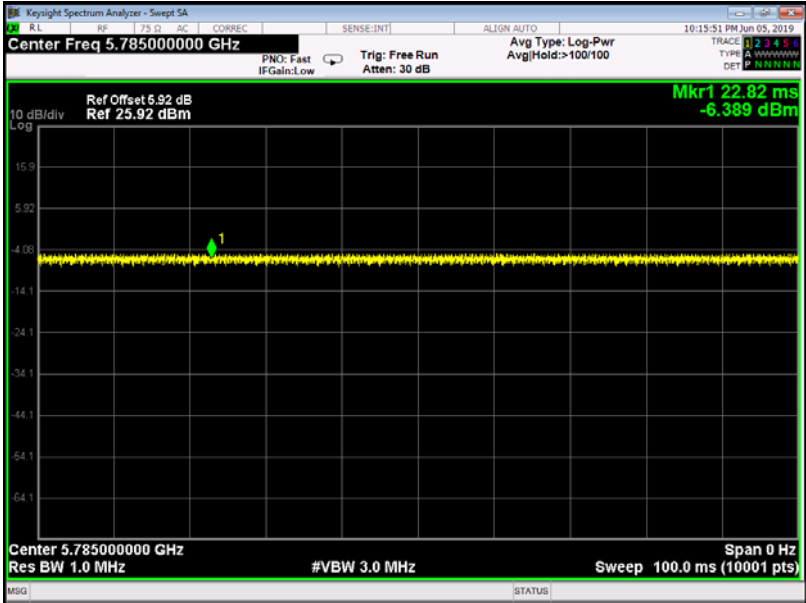
802.11 ac(VHT80) 5210MHz U-NII-1



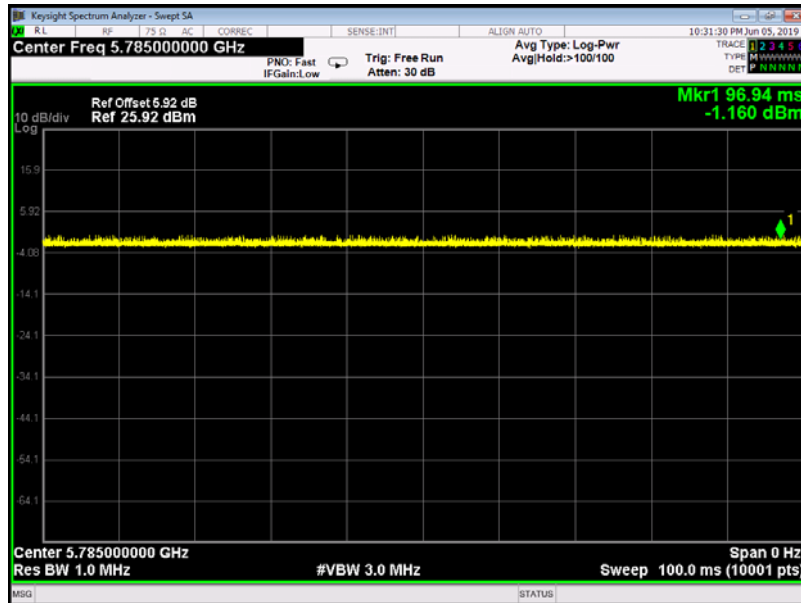
802.11 a 5785MHz U-NII-3



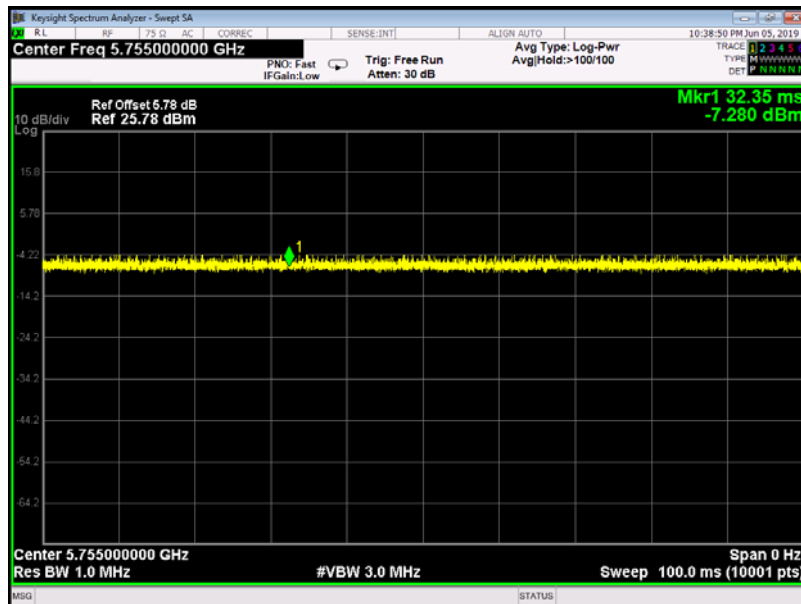
802.11 n(HT20) 5785MHz U-NII-3



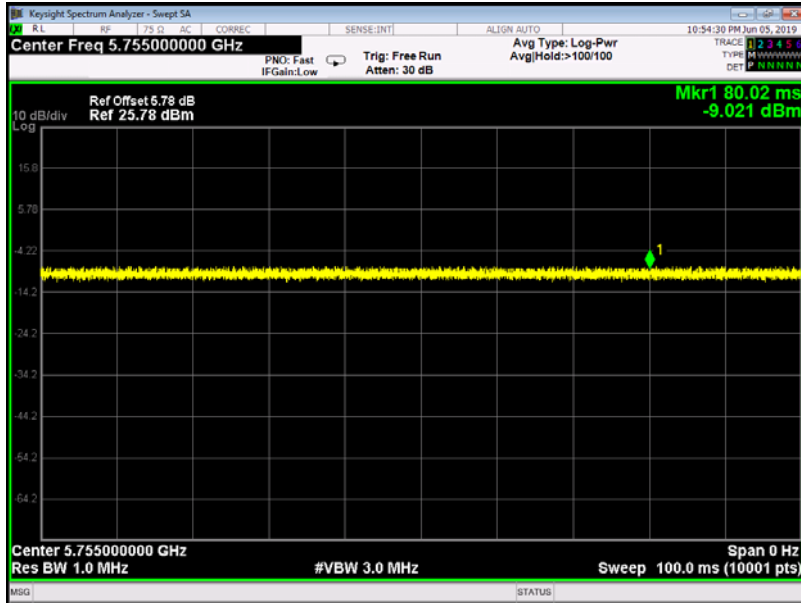
802.11 ac(VHT20) 5785MHz U-NII-3



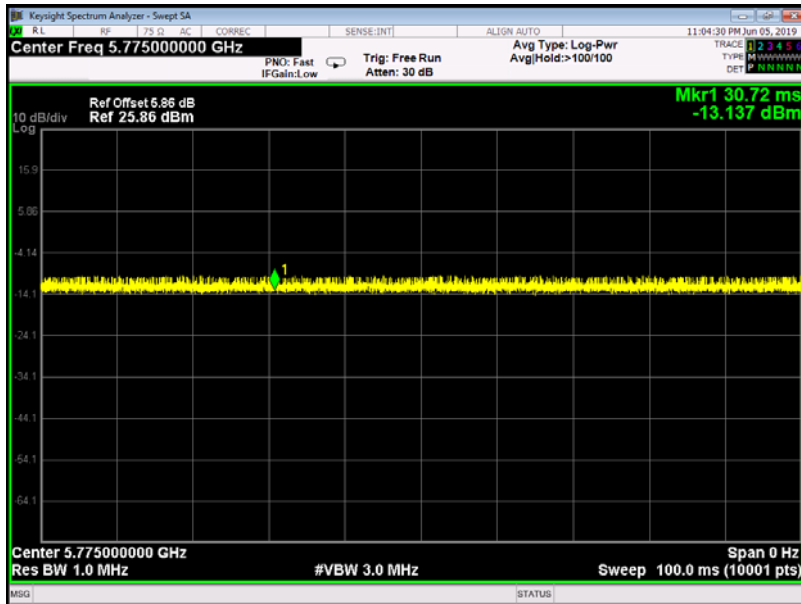
802.11 n(HT40) 5755MHz U-NII-3



802.11 ac(VHT40) 5755MHz U-NII-3



802.11 ac(VHT80) 5775MHz U-NII-3

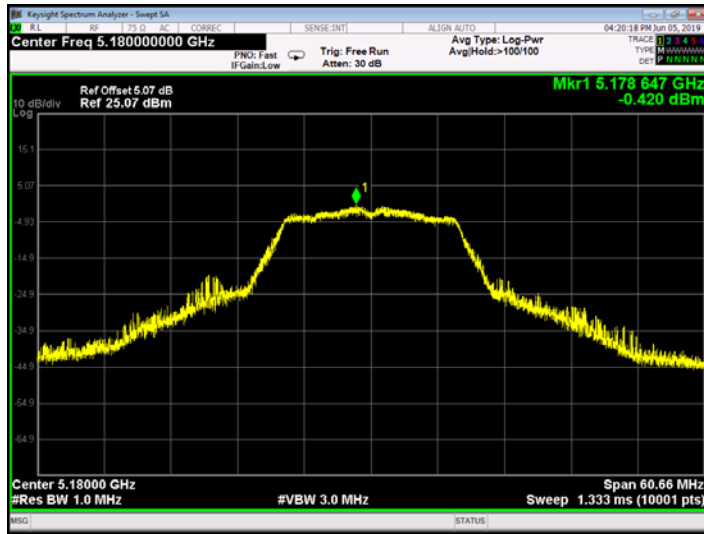


Attachment F-- Power Spectral Density Test Data

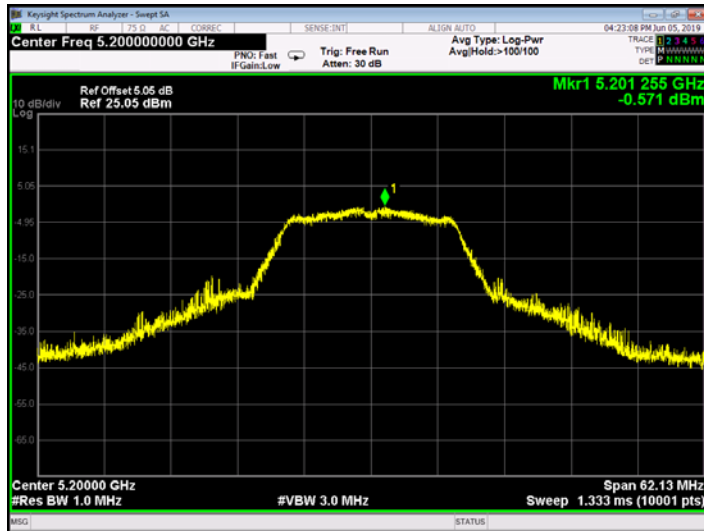
Temperature:	25 °C	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
U-NII-1						
Test Mode	Frequency (MHz)	Test Data				Limit (dBm/MHz)
		Main ANT. (dBm/MHz)	AUX ANT. (dBm/MHz)	Duty Factor (dB)	Total Power (dBm/MHz)	
802.11a	5180	-0.420	-0.425	0		11
	5200	-0.571	-0.525	0	---	
	5240	-0.019	0.091	0	---	
802.11n (HT20)	5180	-1.071	-1.008	0	1.971	
	5200	-0.805	-0.612	0	2.303	
	5240	-0.340	-0.405	0	2.638	
802.11ac (VHT20)	5180	-0.995	-1.058	0	1.984	
	5200	-0.921	-1.321	0	1.894	
	5240	-0.421	-0.283	0	2.659	
802.11n (HT40)	5190	-6.630	-6.363	0	-3.484	
	5230	-6.340	-5.778	0	-3.040	
802.11ac(VHT40)	5190	-6.156	-6.228	0	-3.182	
	5230	-5.668	-5.932	0	-2.788	
802.11ac(VHT80)	5210	-8.387	-9.573	0	-5.929	
Result: PASS						
<p>Remark: The EUT incorporates a MIMO function. Physically, the EUT provides two antennas for transmitting and receiving.</p> <p>When Main ANT. and Aux ANT. transmitting simultaneously, the total Antenna Gain=Main Gain + Aux Gani =5.01 dBi<6 dBi.</p> <p>So $P_{out} = P_{limit}$</p>						

Main Antenna

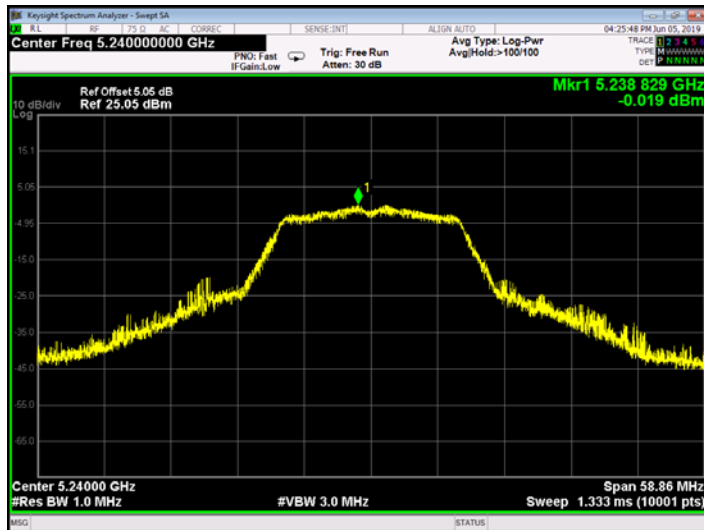
802.11 a 5180 MHz



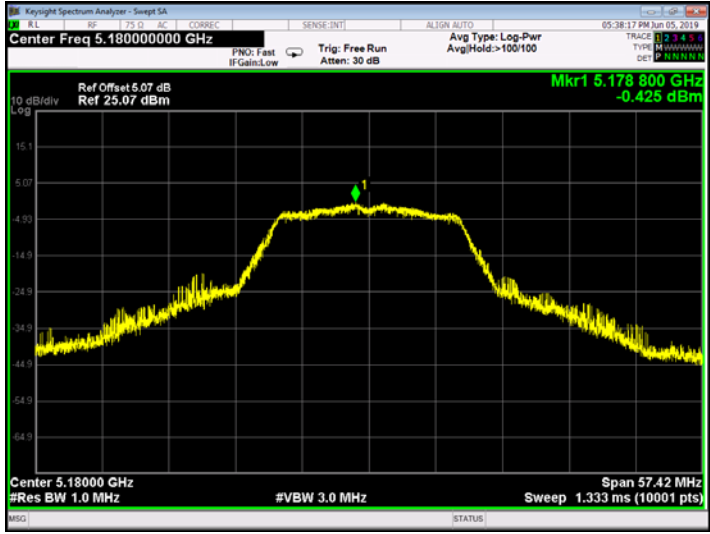
802.11 a 5200 MHz



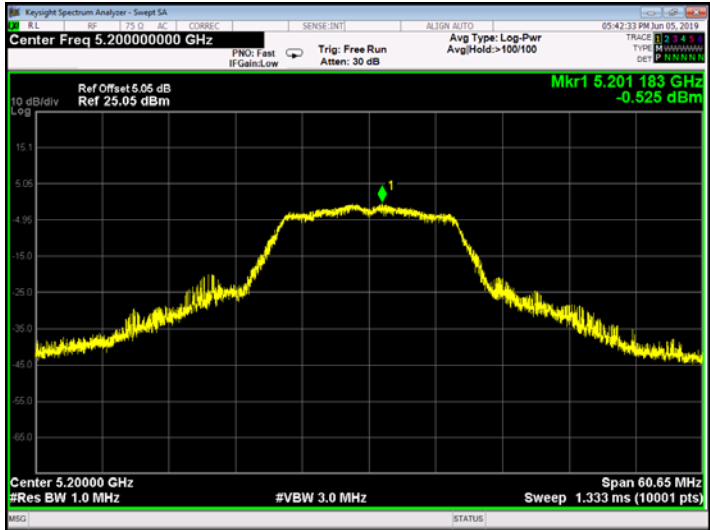
802.11 a 5240 MHz



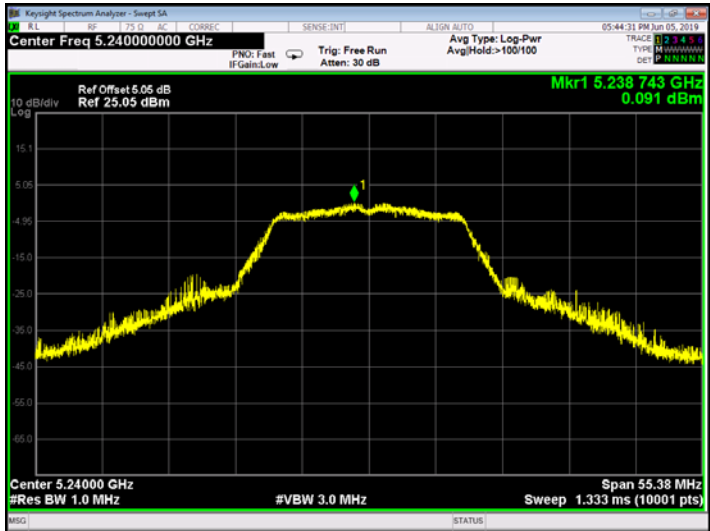
AUX Antenna
802.11 a 5180 MHz



802.11 a 5200 MHz

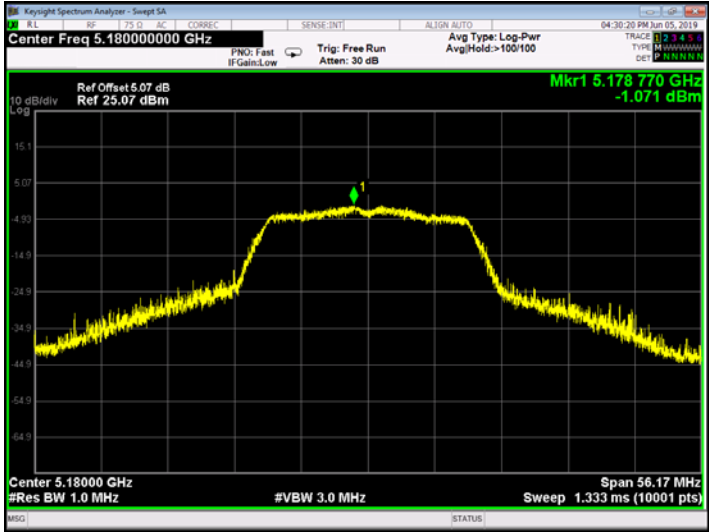


802.11 a 5240 MHz

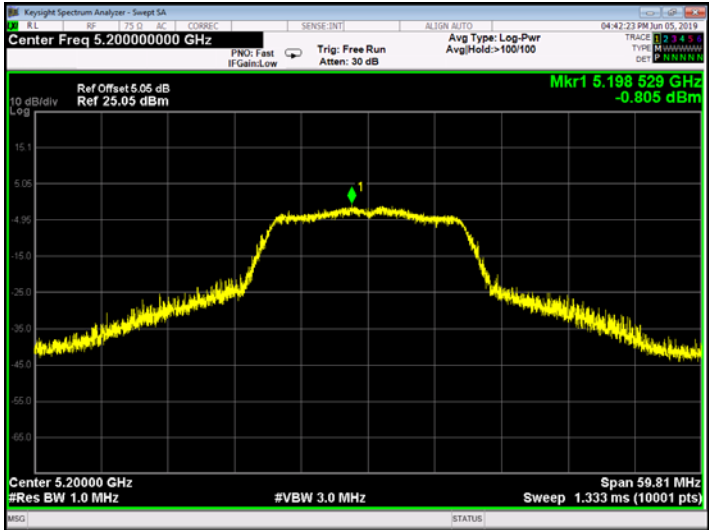


Main Antenna

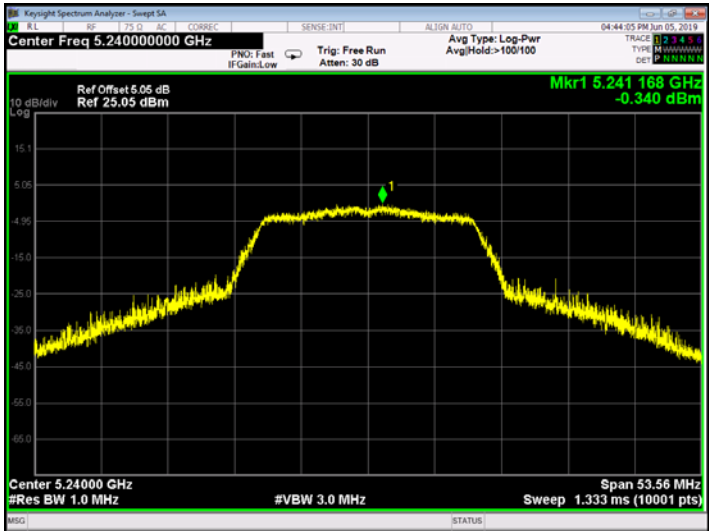
802.11 n(HT20) 5180 MHz



802.11 n(HT20) 5200 MHz

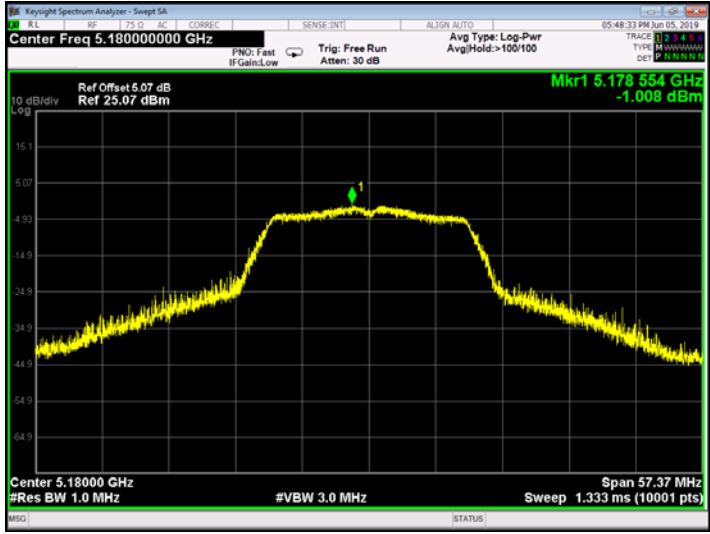


802.11 n(HT20) 5240 MHz

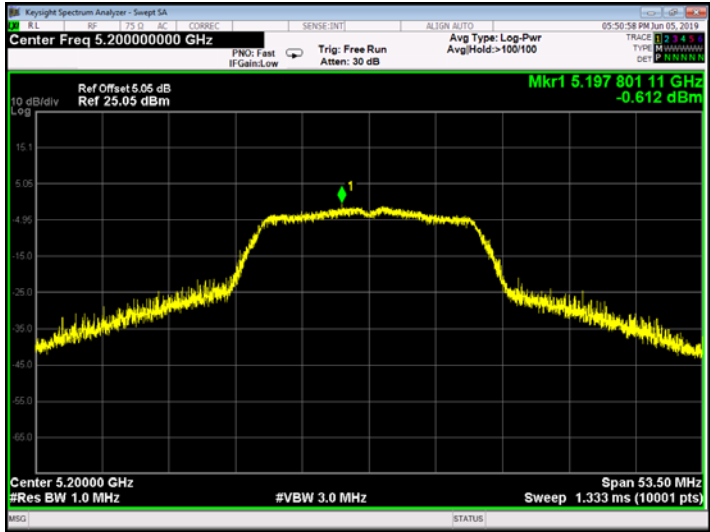


AUX Antenna

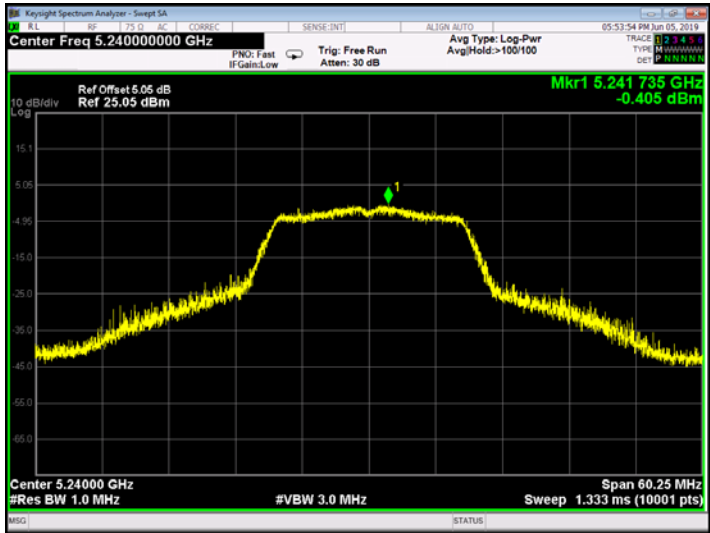
802.11 n(HT20) 5180 MHz

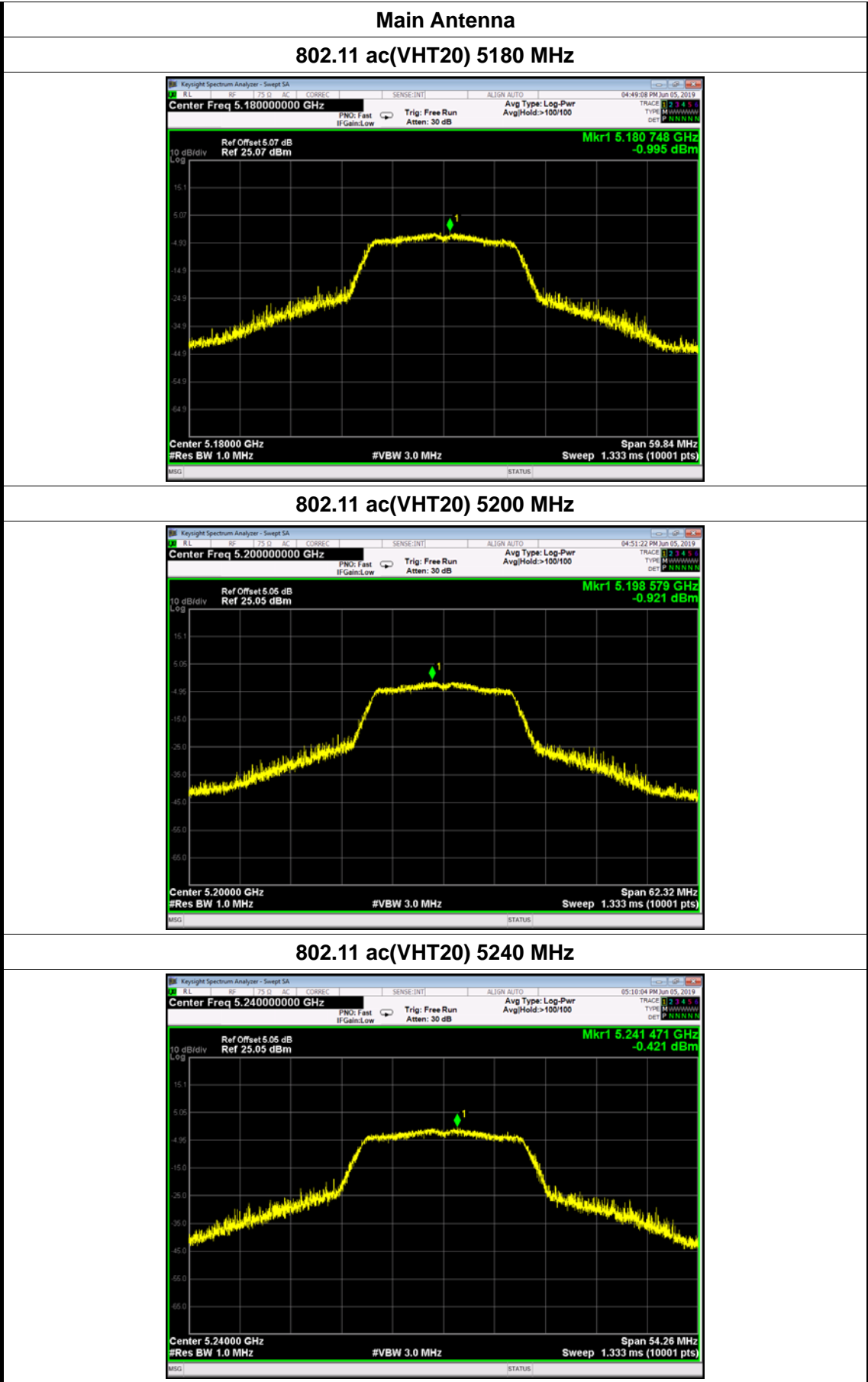


802.11 n(HT20) 5200 MHz



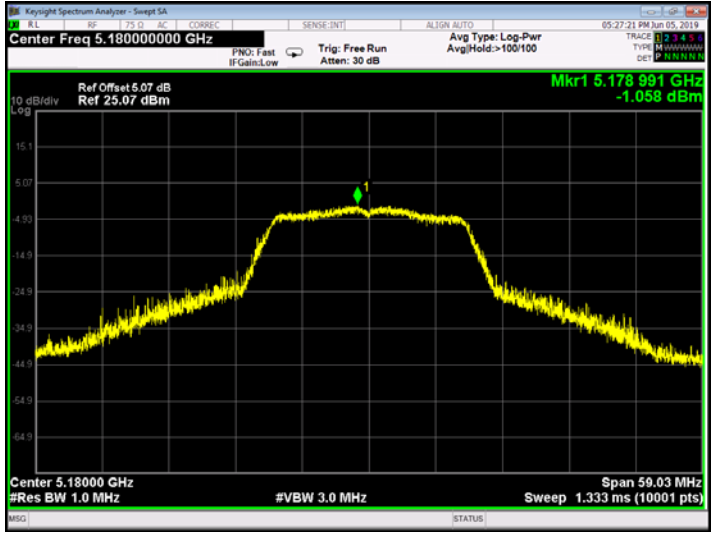
802.11 n(HT20) 5240 MHz



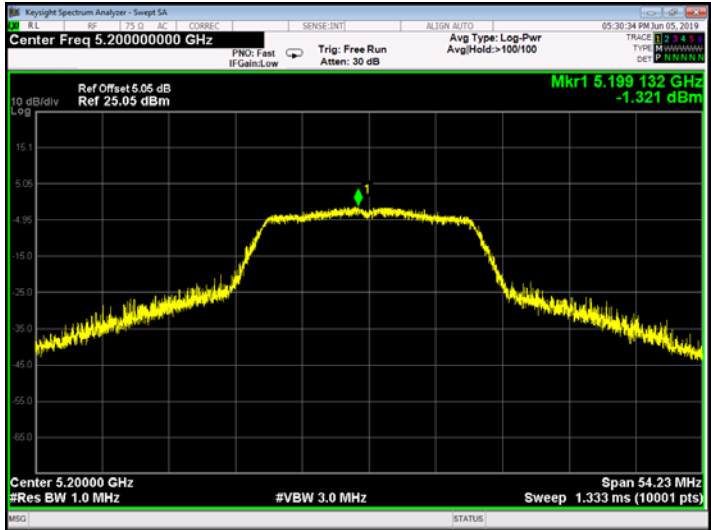


AUX Antenna

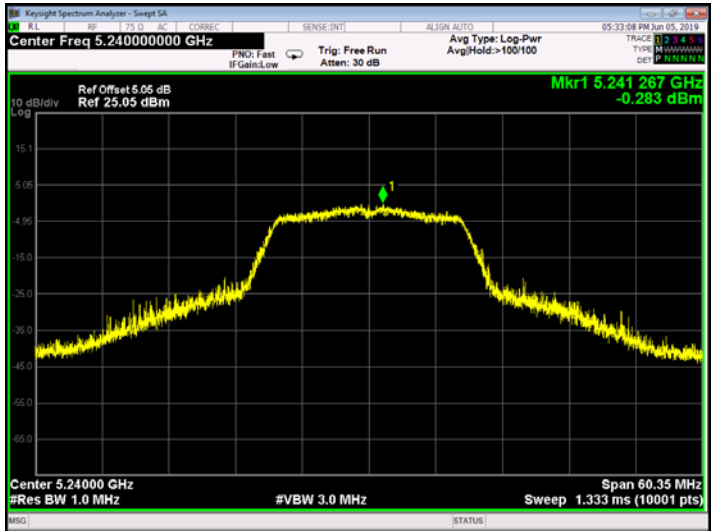
802.11 ac(VHT20) 5180 MHz



802.11 ac(VHT20) 5200 MHz

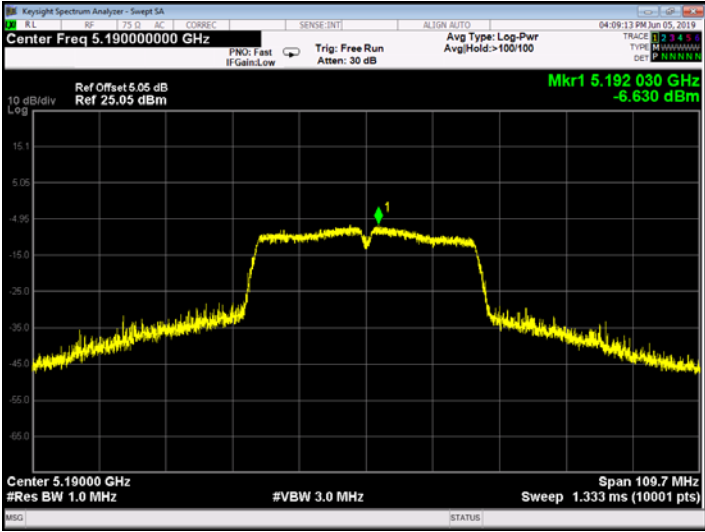


802.11 ac(VHT20) 5240 MHz

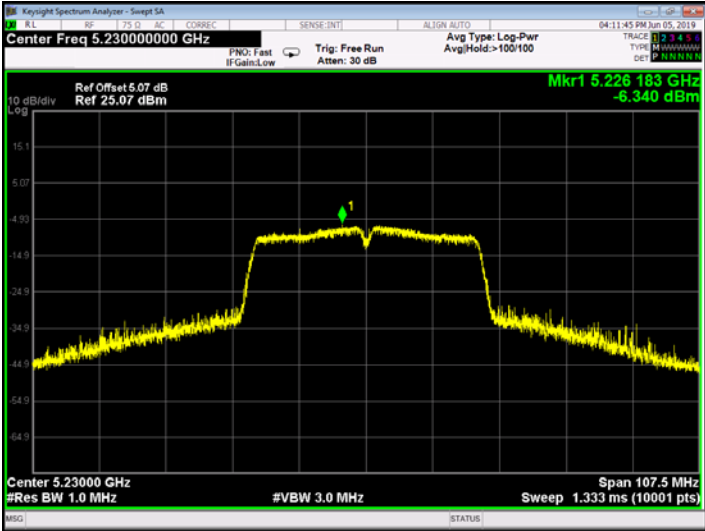


Main Antenna

802.11 n(HT40) 5190 MHz

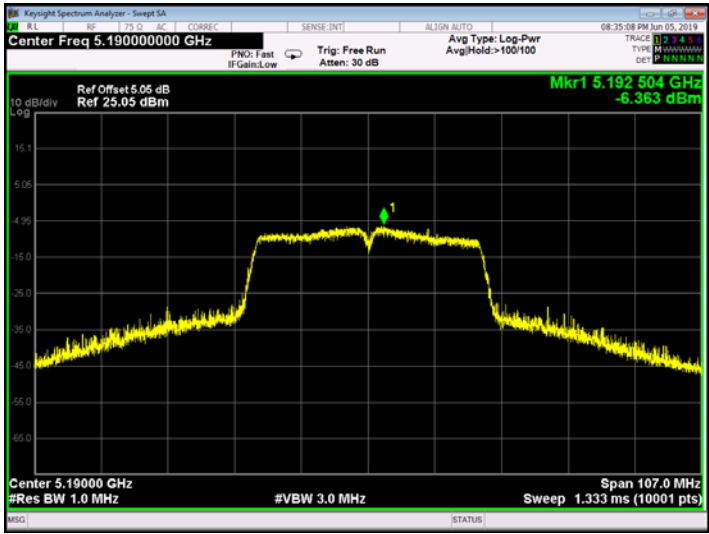


802.11 n(HT40) 5230 MHz

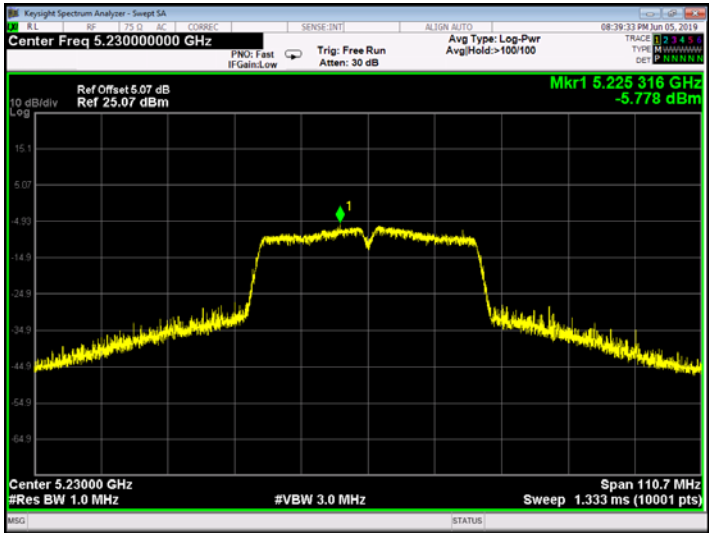


AUX Antenna

802.11 n(HT40) 5190 MHz

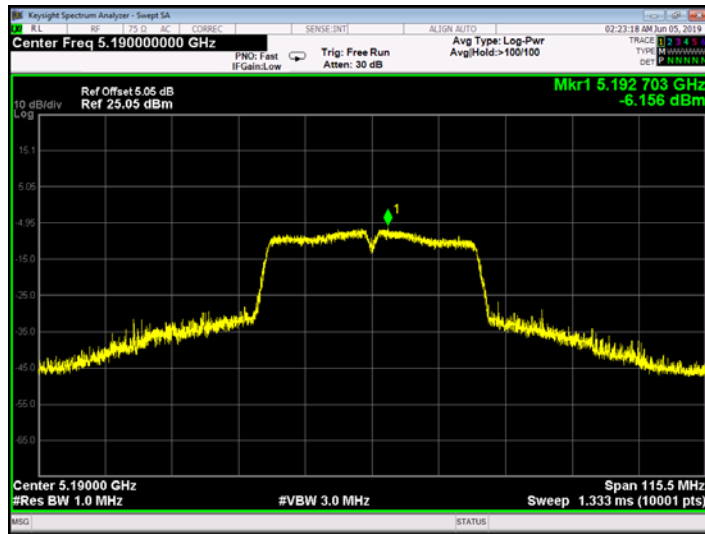


802.11 n(HT40) 5230 MHz

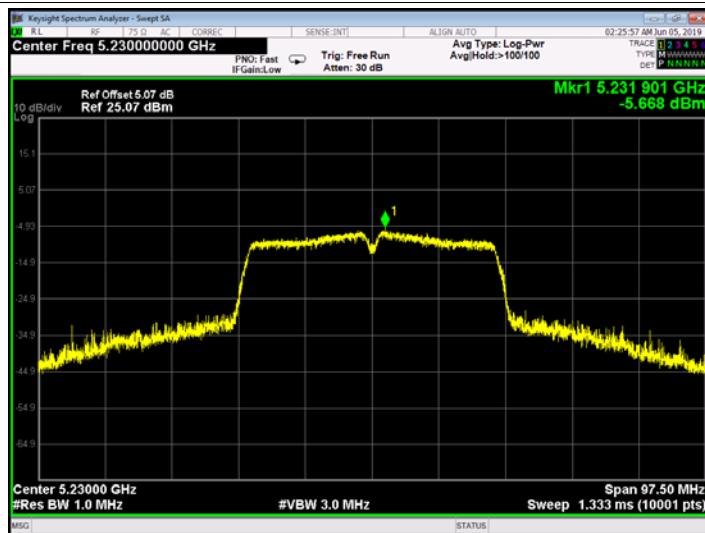


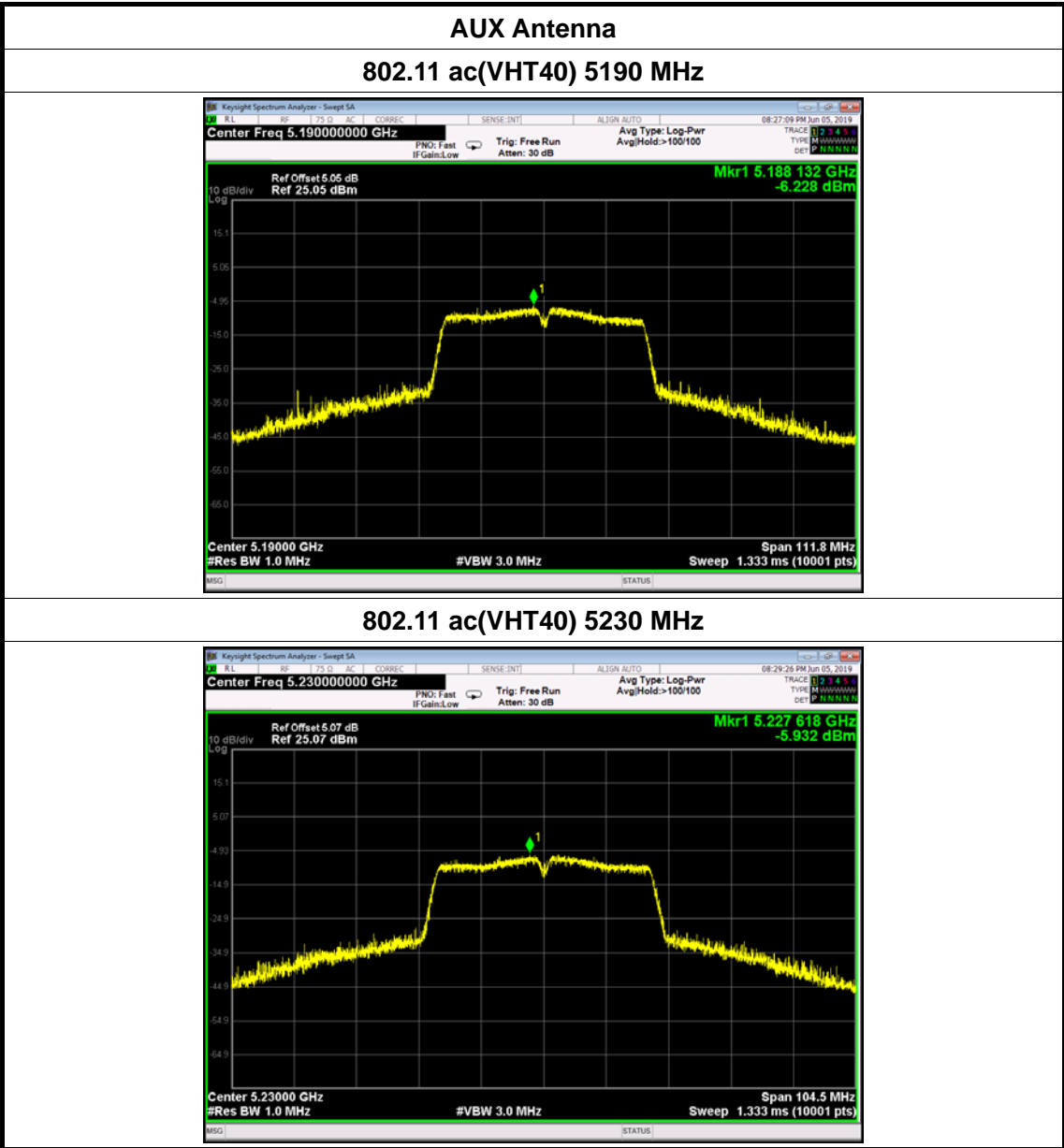
Main Antenna

802.11 ac(VHT40) 5190 MHz



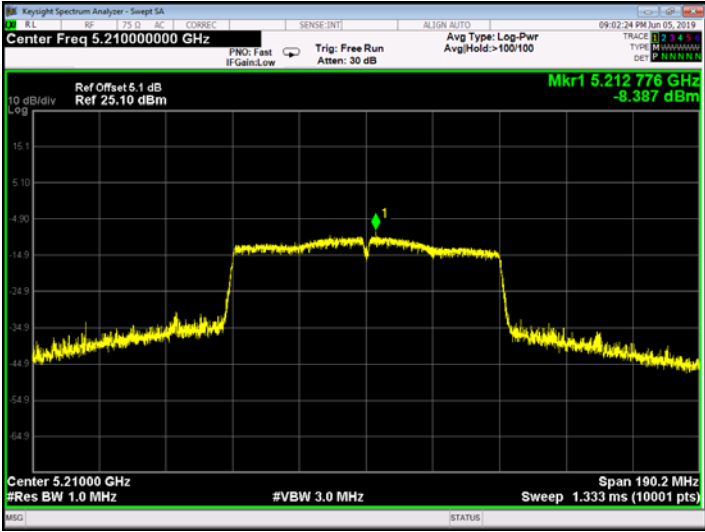
802.11 ac(VHT40) 5230 MHz





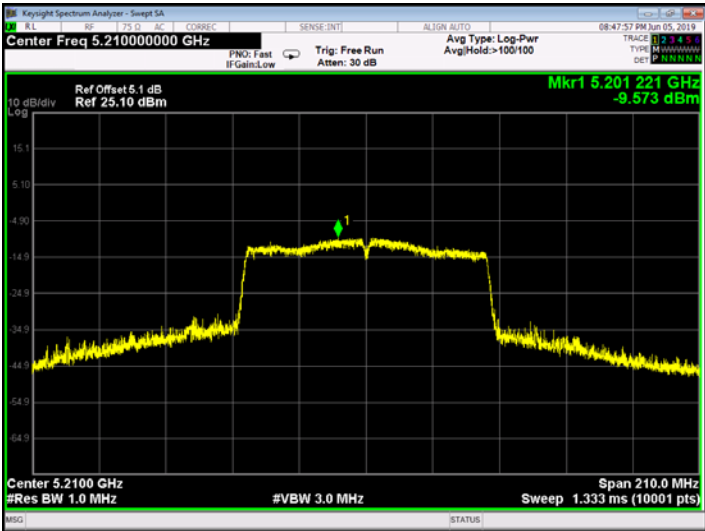
Main Antenna

802.11 ac(VHT80) 5210 MHz



AUX Antenna

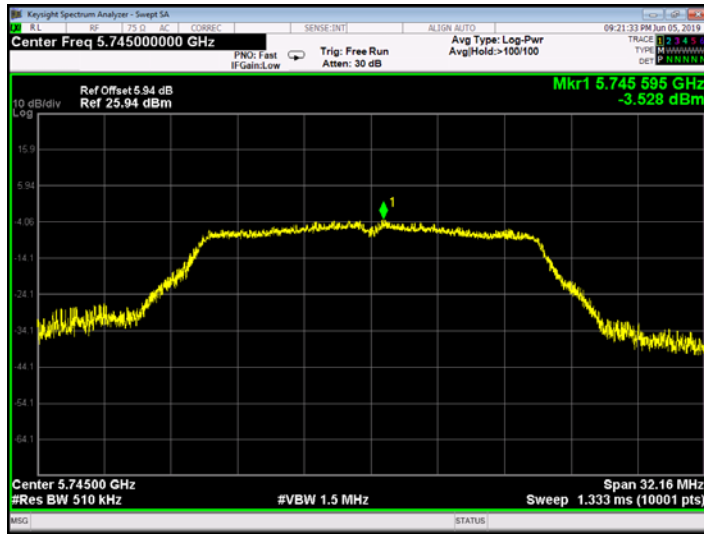
802.11 ac(VHT80) 5210 MHz



Temperature:	25 °C	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
U-NII-3						
Test Mode	Frequency (MHz)	Test Data				Limit (dBm/500KHz)
		Main ANT. (dBm/500KHz)	AUX ANT. (dBm/500KHz)	Duty Factor (dB)	Total Power (dBm/500KHz)	
802.11a	5745	-3.528	-3.483	0	---	30
	5785	-3.654	-3.528	0	---	
	5825	-4.551	-4.037	0	---	
802.11n (HT20)	5745	-3.739	-3.135	0	-0.416	
	5785	-4.141	-4.212	0	-1.166	
	5825	-4.825	-4.037	0	-1.403	
802.11ac (VHT20)	5745	-2.988	-3.731	0	-0.333	
	5785	-3.836	-3.667	0	-0.740	
	5825	-4.668	-3.444	0	-1.003	
802.11n (HT40)	5755	-9.297	-9.402	0	-6.339	
	5795	-10.644	-9.109	0	-6.799	
802.11 ac(VHT40)	5755	-9.378	-9.474	0	-6.415	
	5795	-9.029	-10.007	0	-6.480	
802.11 ac(VHT80)	5775	-12.223	-12.599	0	-9.397	
Result: PASS						
<p>Remark: The EUT incorporates a MIMO function. Physically, the EUT provides two antennas for transmitting and receiving.</p> <p>When Main ANT. and Aux ANT. transmitting simultaneously, the total Antenna Gain=Main Gain + Aux Gani =5.01 dBi<6 dBi.</p> <p>So $P_{out} = P_{limit}$</p>						

Main Antenna

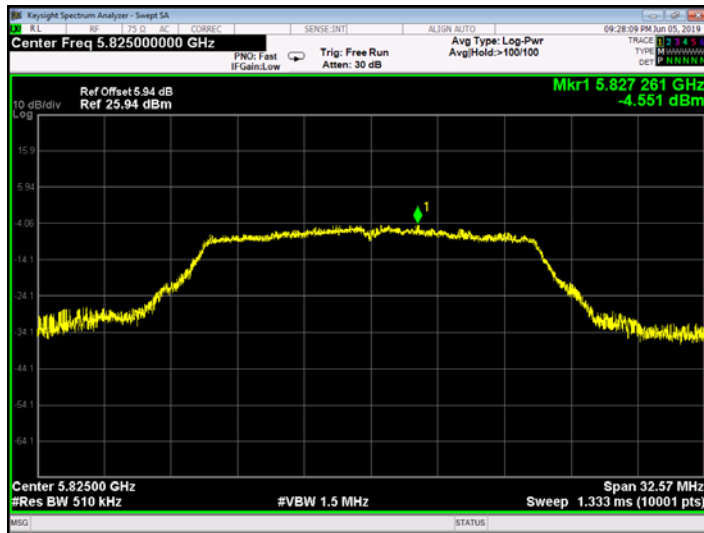
802.11 a 5745 MHz



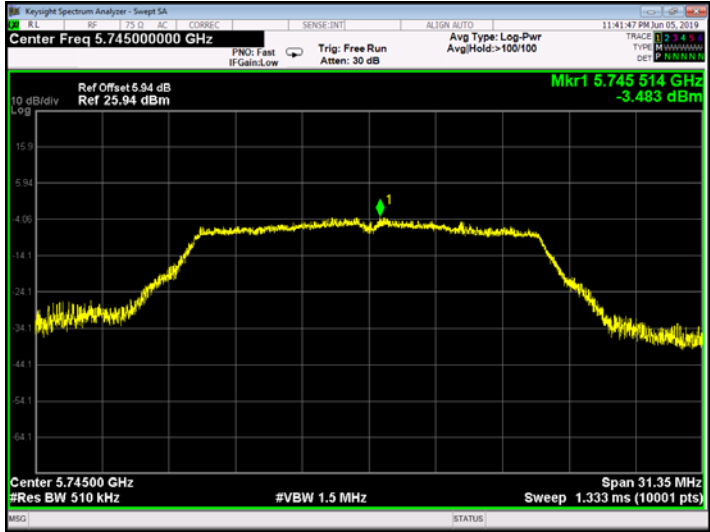
802.11 a 5785 MHz



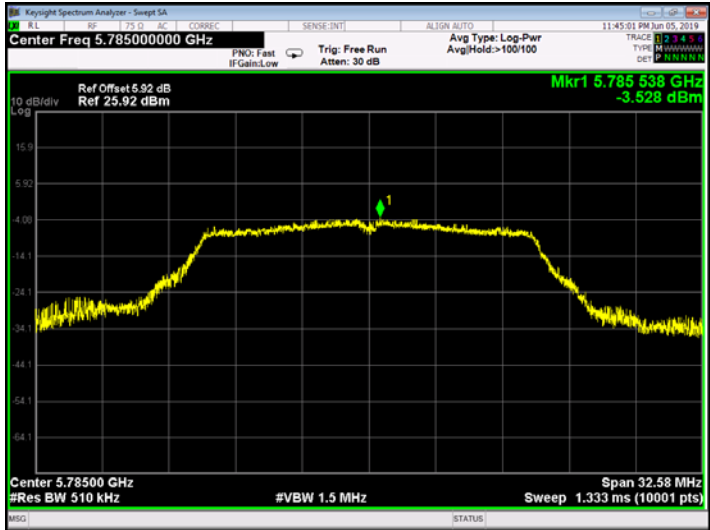
802.11 a 5825 MHz



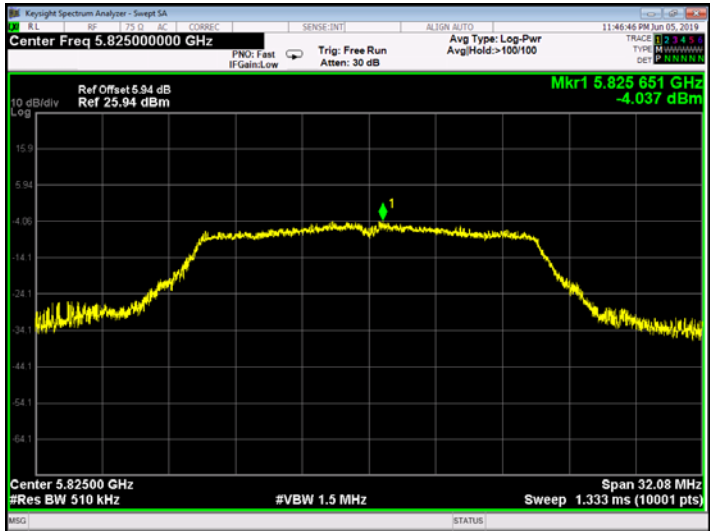
AUX Antenna
802.11 a 5745 MHz



802.11 a 5785 MHz

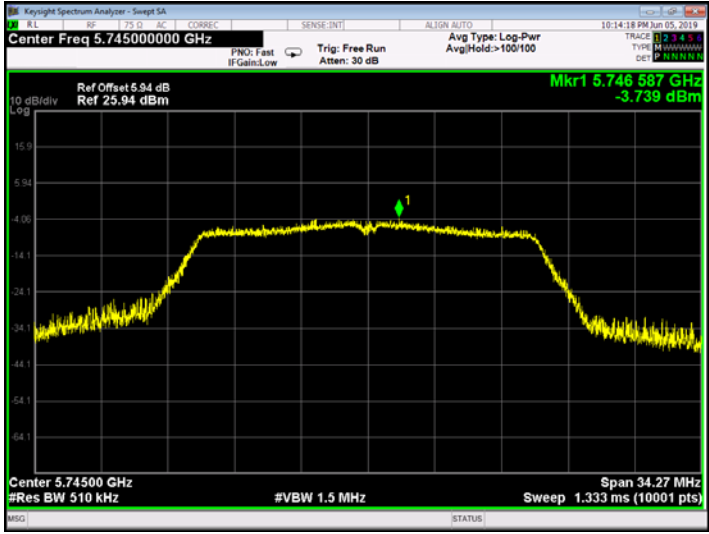


802.11 a 5825 MHz

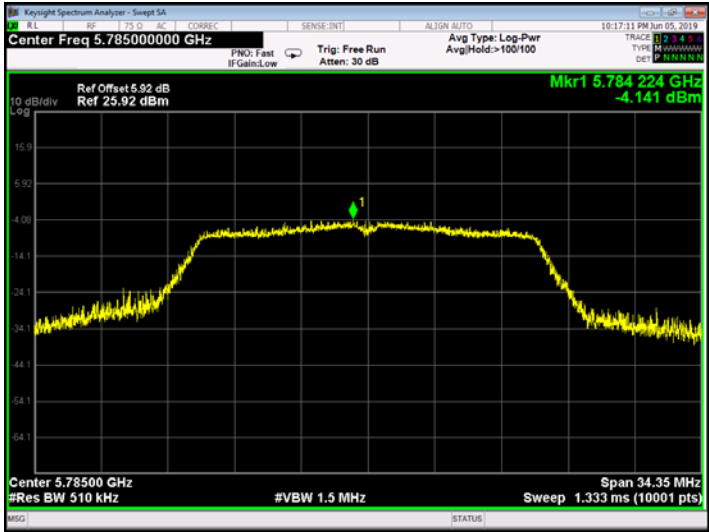


Main Antenna

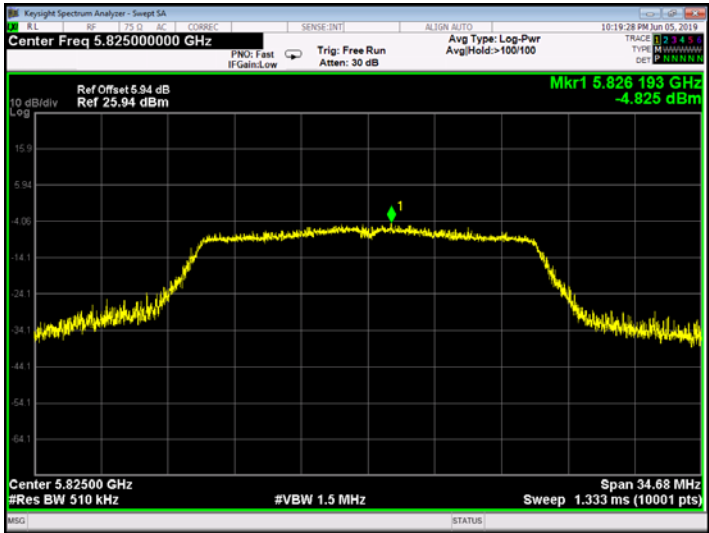
802.11 n(HT20) 5745 MHz



802.11 n(HT20) 5785 MHz

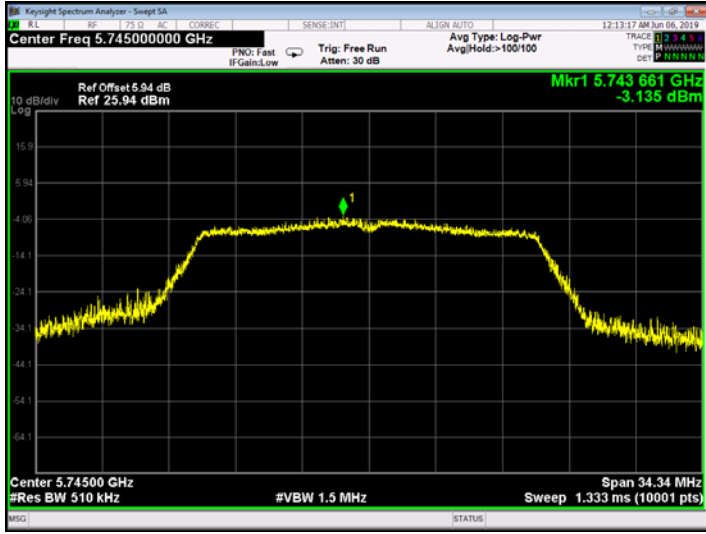


802.11 n(HT20) 5825 MHz

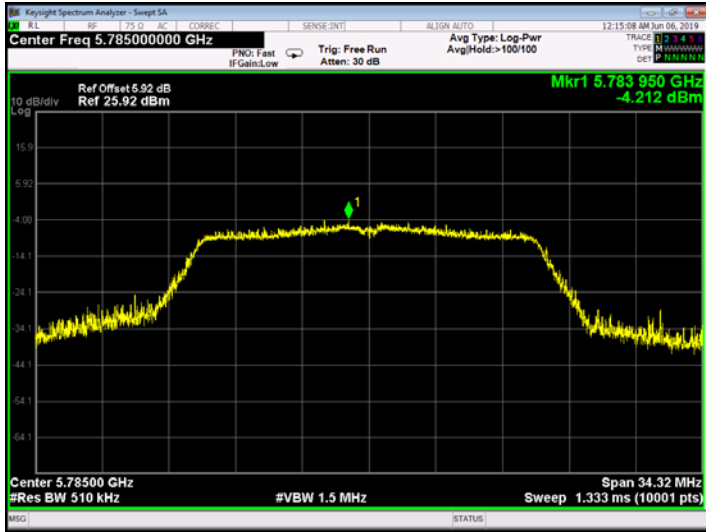


AUX Antenna

802.11 n(HT20) 5745 MHz



802.11 n(HT20) 5785 MHz

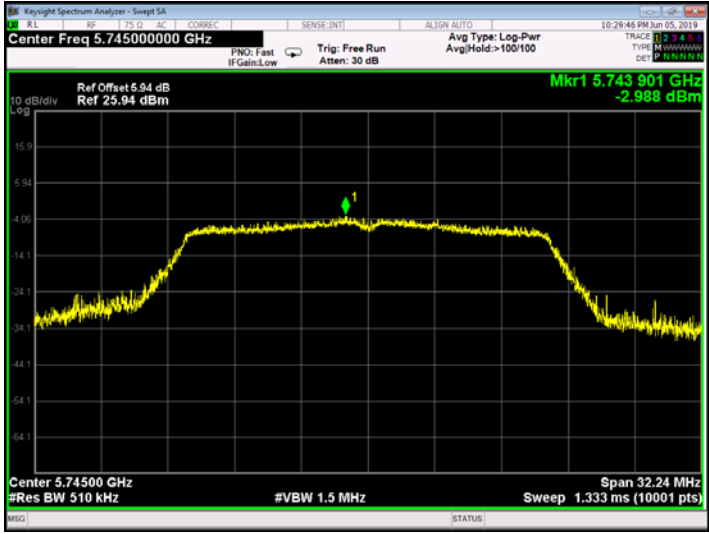


802.11 n(HT20) 5825 MHz

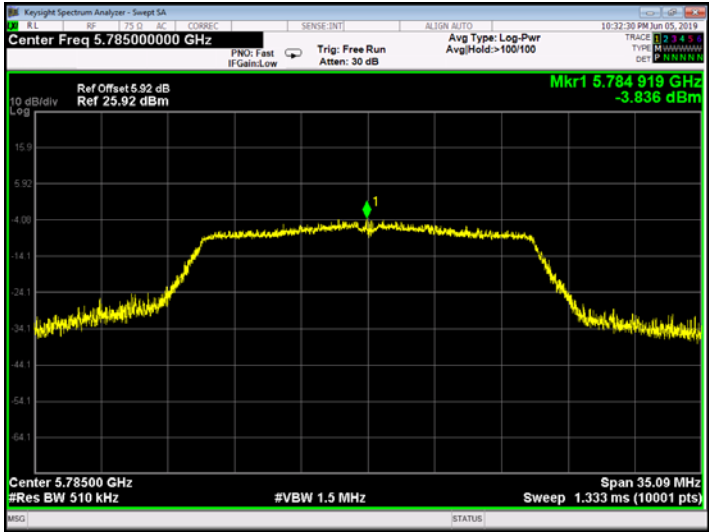


Main Antenna

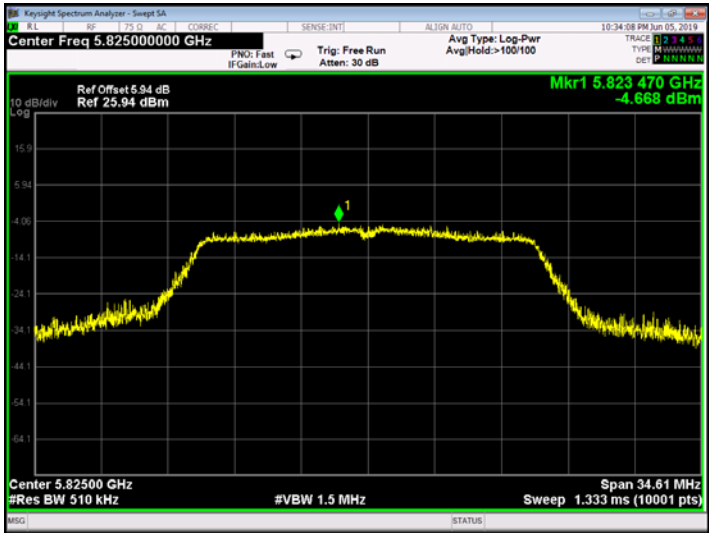
802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 55785 MHz

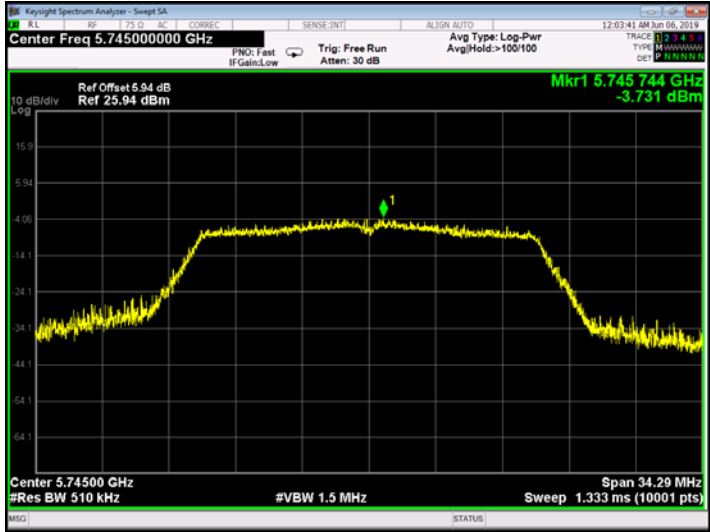


802.11 ac(VHT20) 5825 MHz

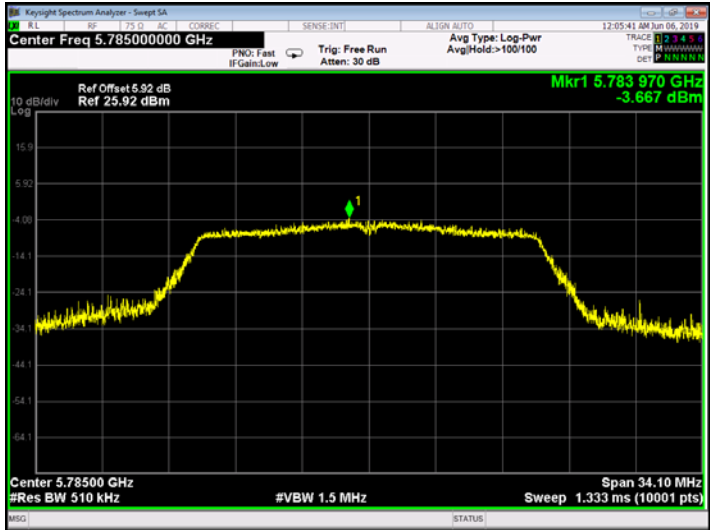


AUX Antenna

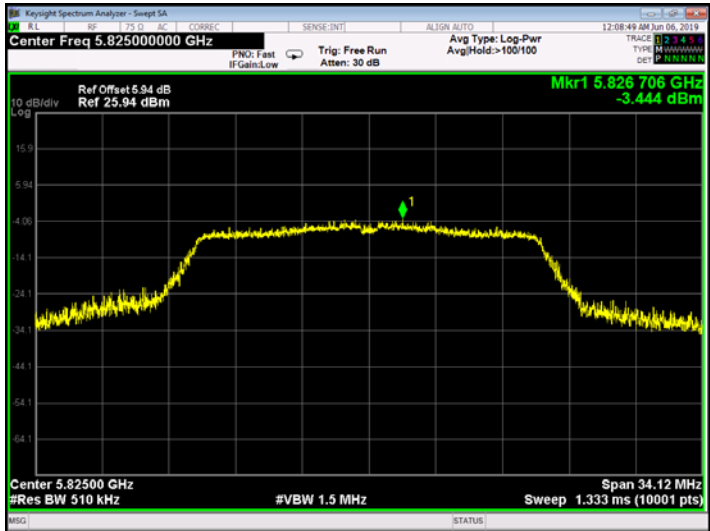
802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 5785 MHz

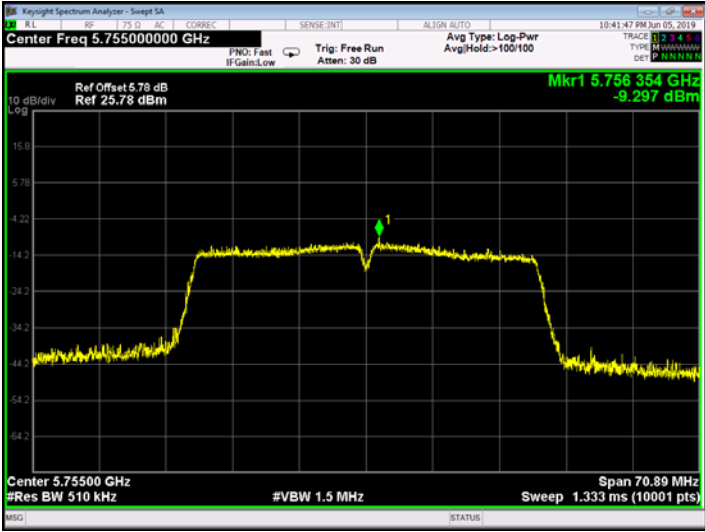


802.11 ac(VHT20) 5825 MHz

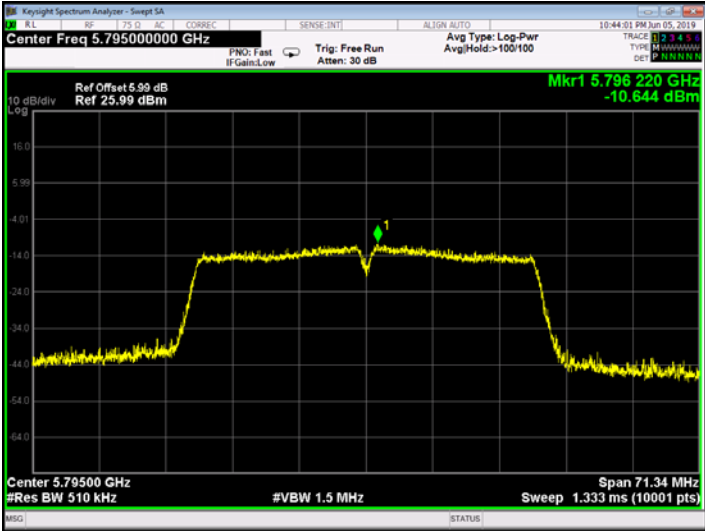


Main Antenna

802.11 n(HT40) 5755 MHz

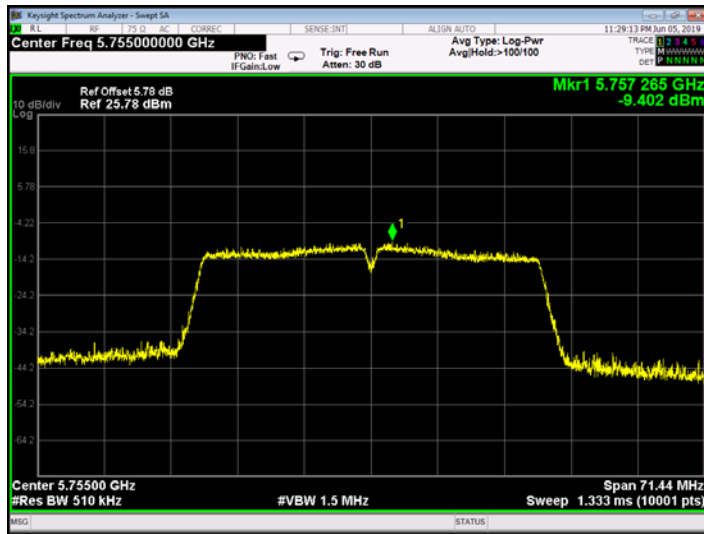


802.11 n(HT40) 5795 MHz

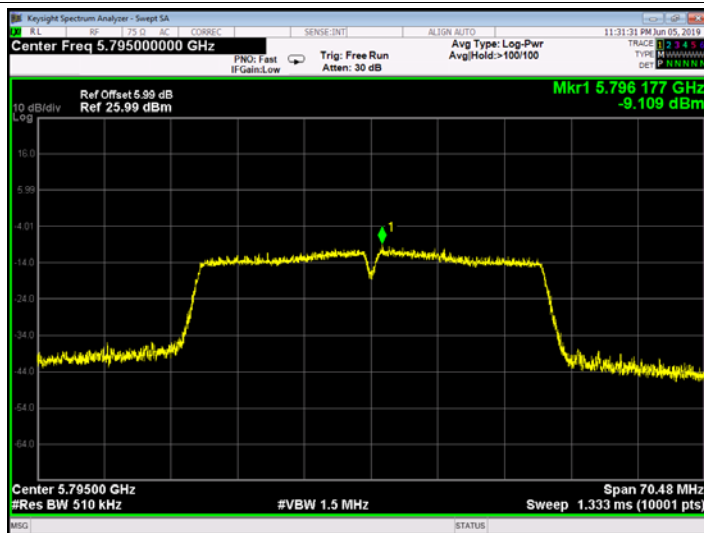


AUX Antenna

802.11 n(HT40) 5755 MHz



802.11 n(HT40) 5795 MHz

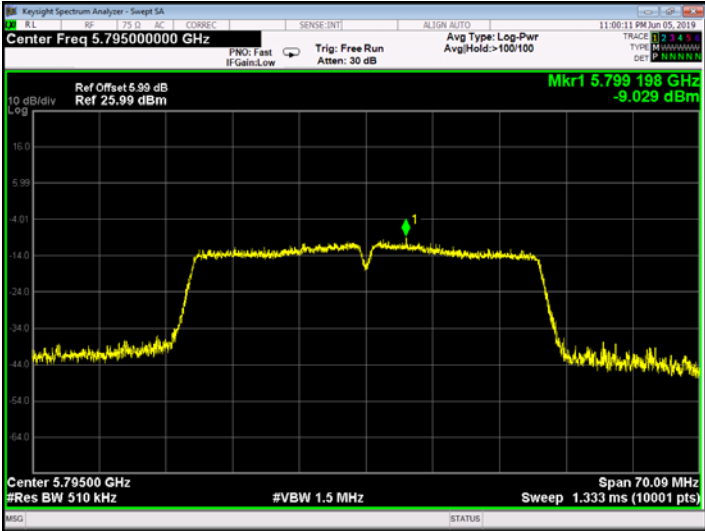


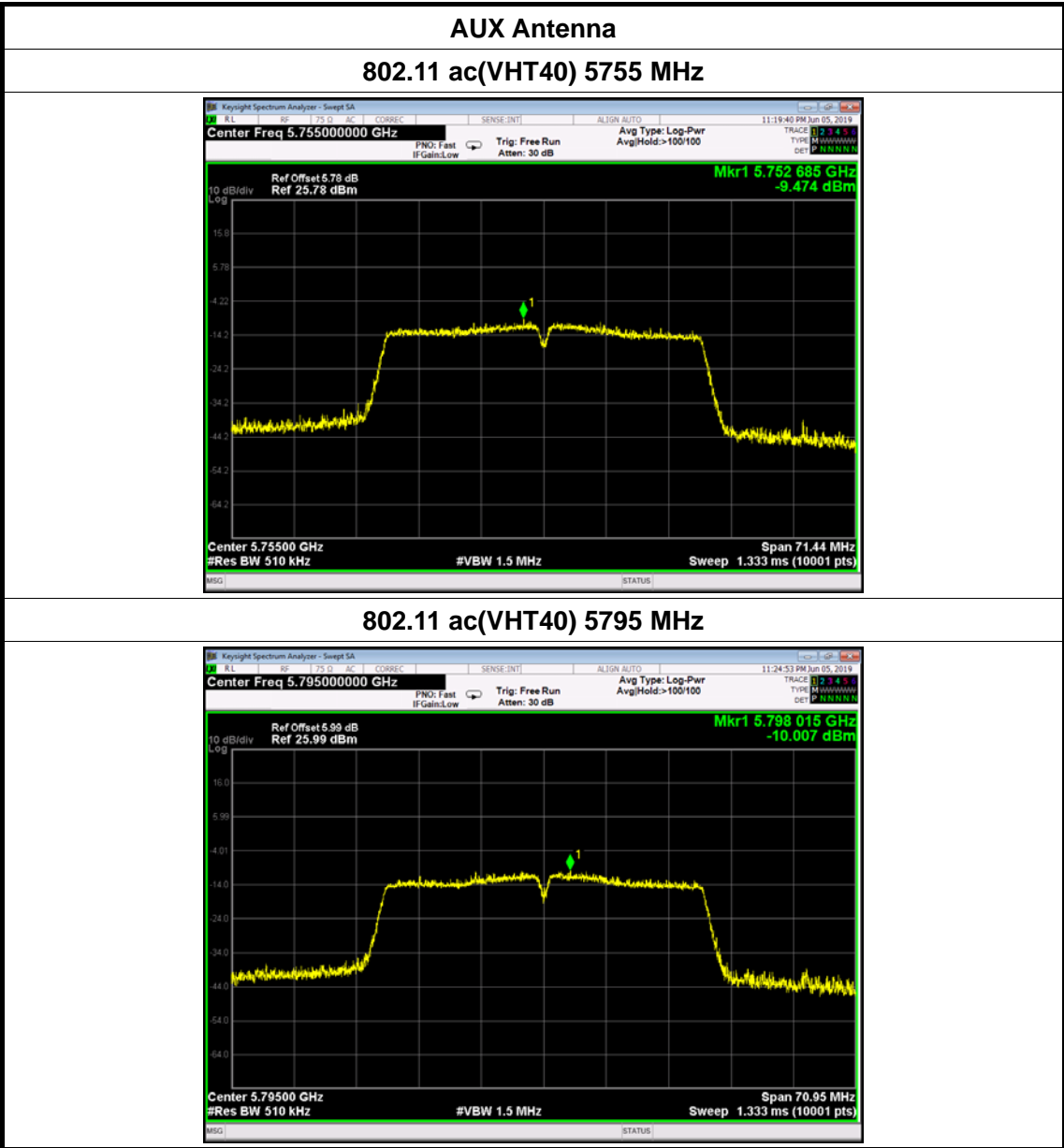
Main Antenna

802.11 ac(VHT40) 5755 MHz



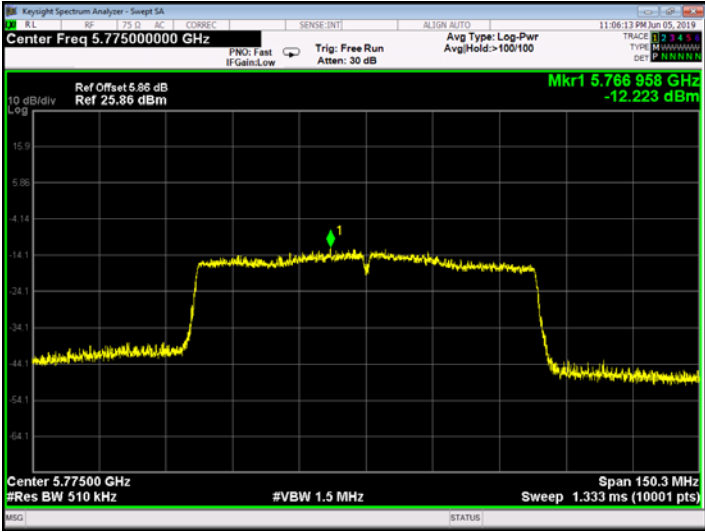
802.11 ac(VHT40) 5795 MHz





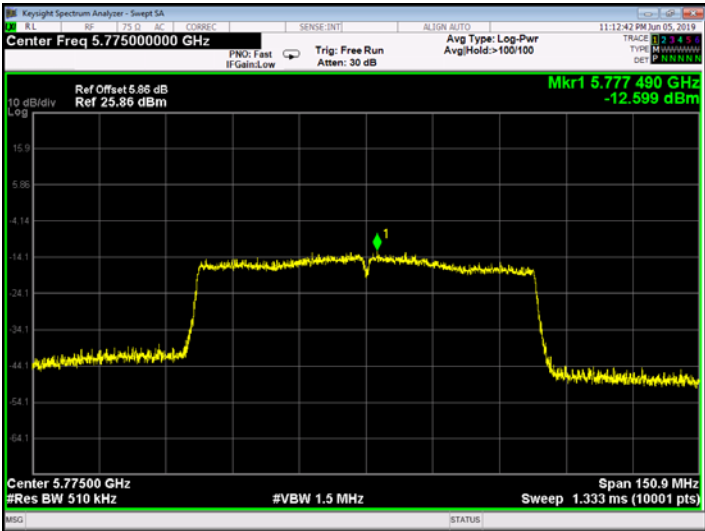
Main Antenna

802.11 ac(VHT80) 5775 MHz



AUX Antenna

802.11 ac(VHT80) 5775 MHz



Attachment G----Frequency Stability Measurement Data

801.11a U-NII-1: 5180 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
132	5179.9536
120	5179.9554
118	5179.9562
Max. Deviation (MHz)	0.0464
Max. Deviation (ppm)	8.96
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5179.9557
10	5179.9585
20	5179.9593
30	5179.9573
40	5179.9596
50	5179.9596
Max. Deviation (MHz)	0.0443
Max. Deviation (ppm)	8.55
Limit (ppm)	20
Result	Pass

801.11a U-NII-3: 5745 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
132	5744.9586
120	5744.9562
118	5744.9558
Max. Deviation (MHz)	0.0442
Max. Deviation (ppm)	7.69
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5744.9523
10	5744.9516
20	5744.9518
30	5744.9526
40	5744.9533
50	5744.9568
Max. Deviation (MHz)	0.0484
Max. Deviation (ppm)	8.42
Limit (ppm)	20
Result	Pass

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