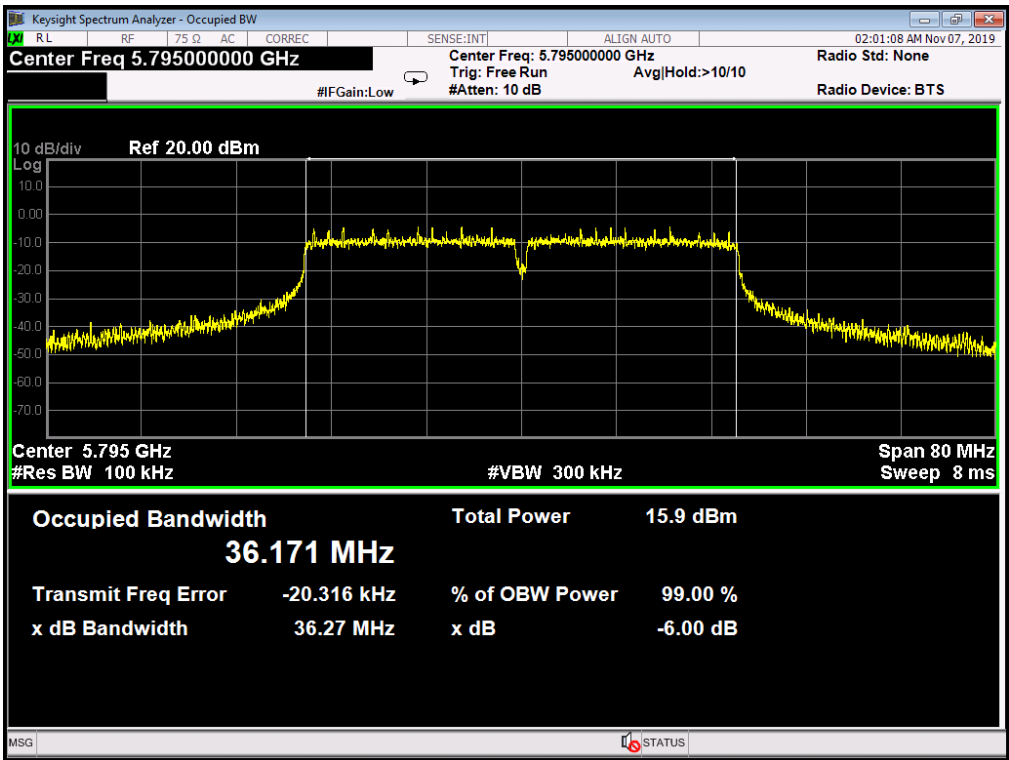
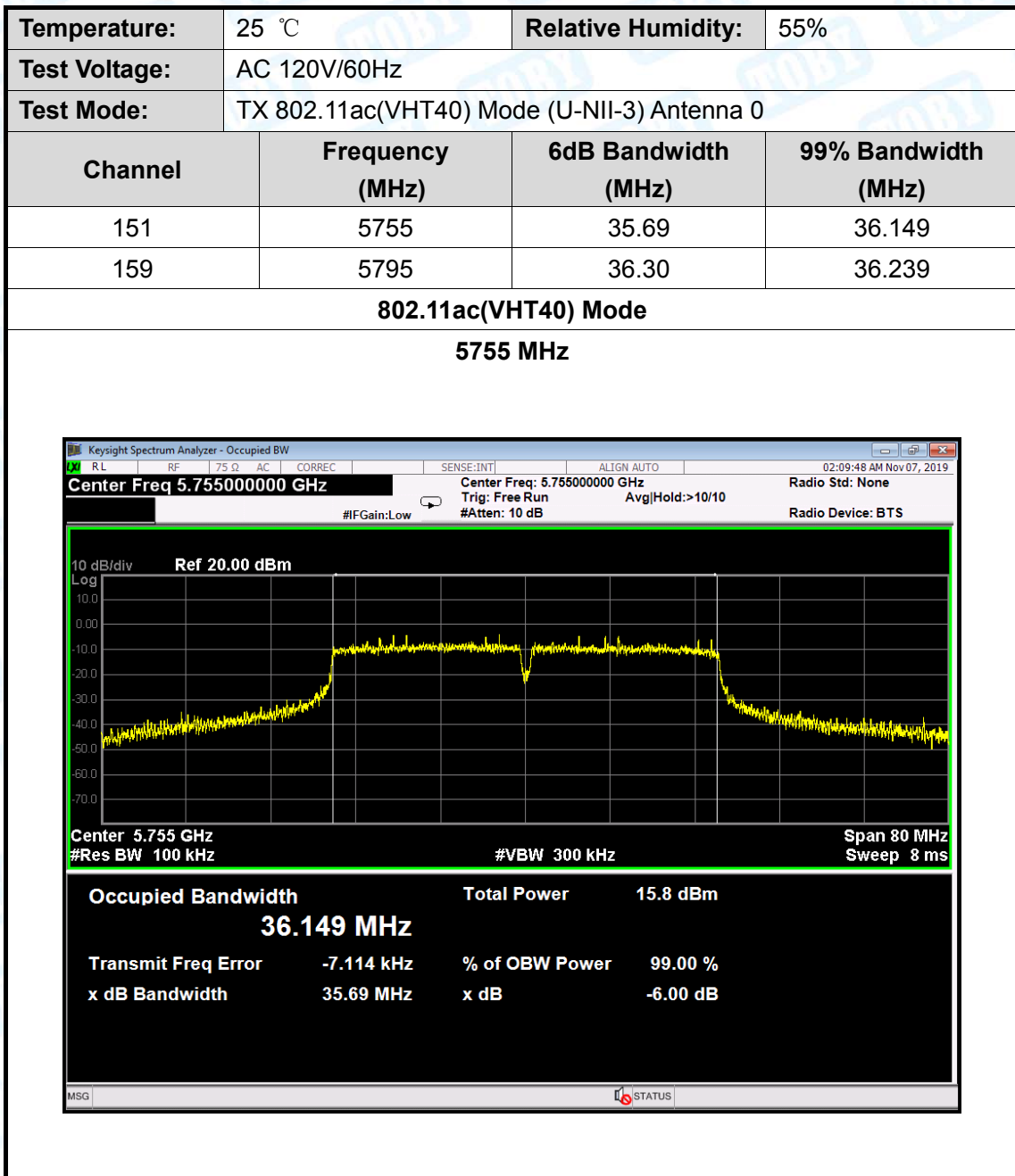


802.11n(HT40) Mode

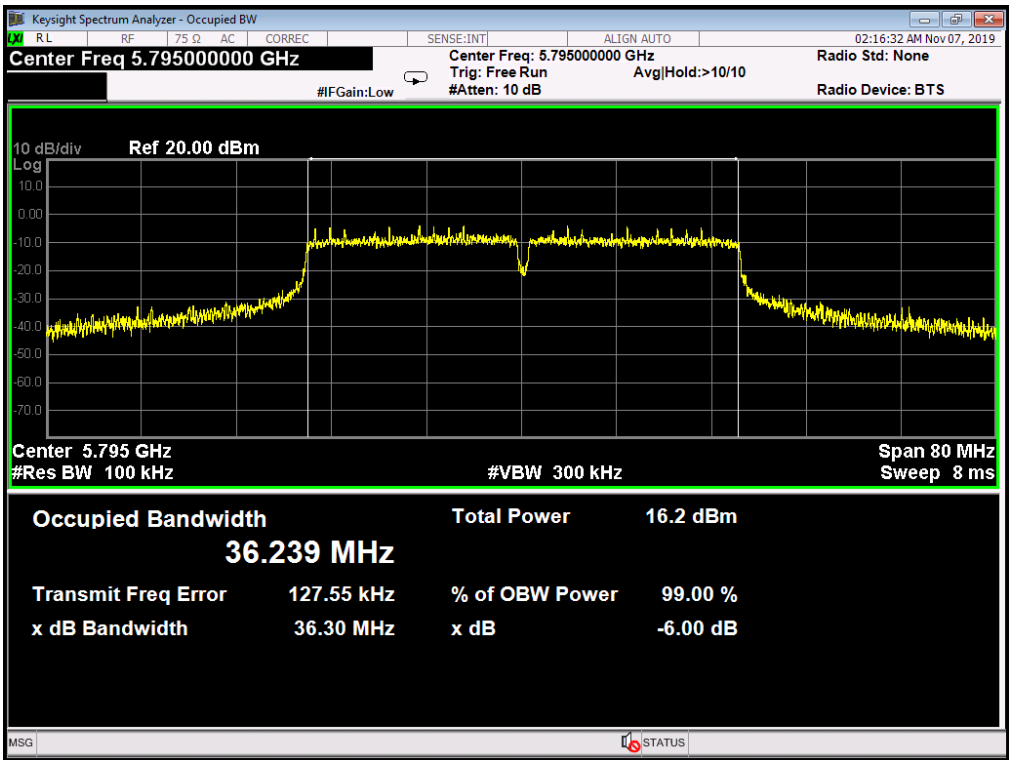
5795 MHz

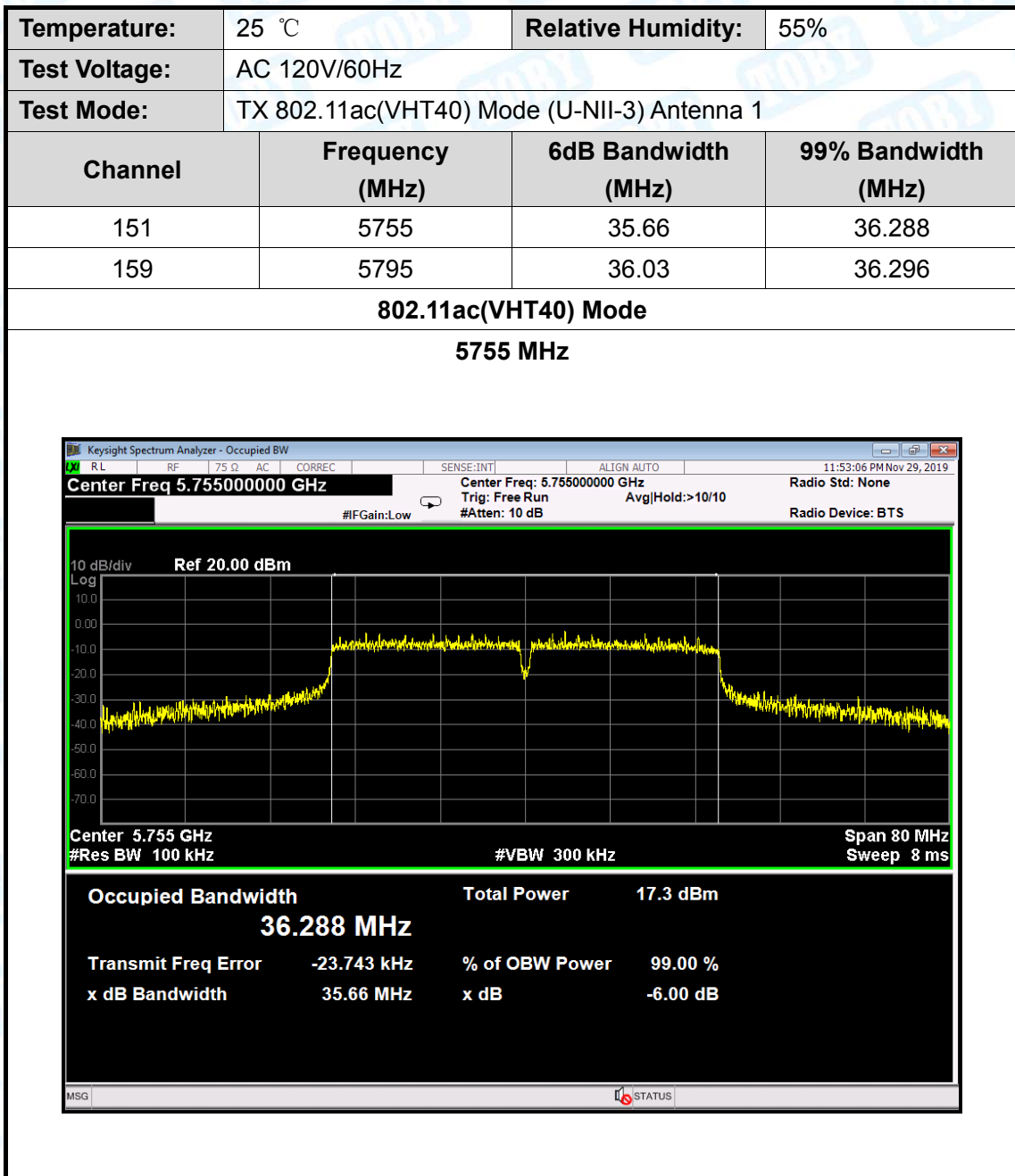




802.11ac(VHT40) Mode

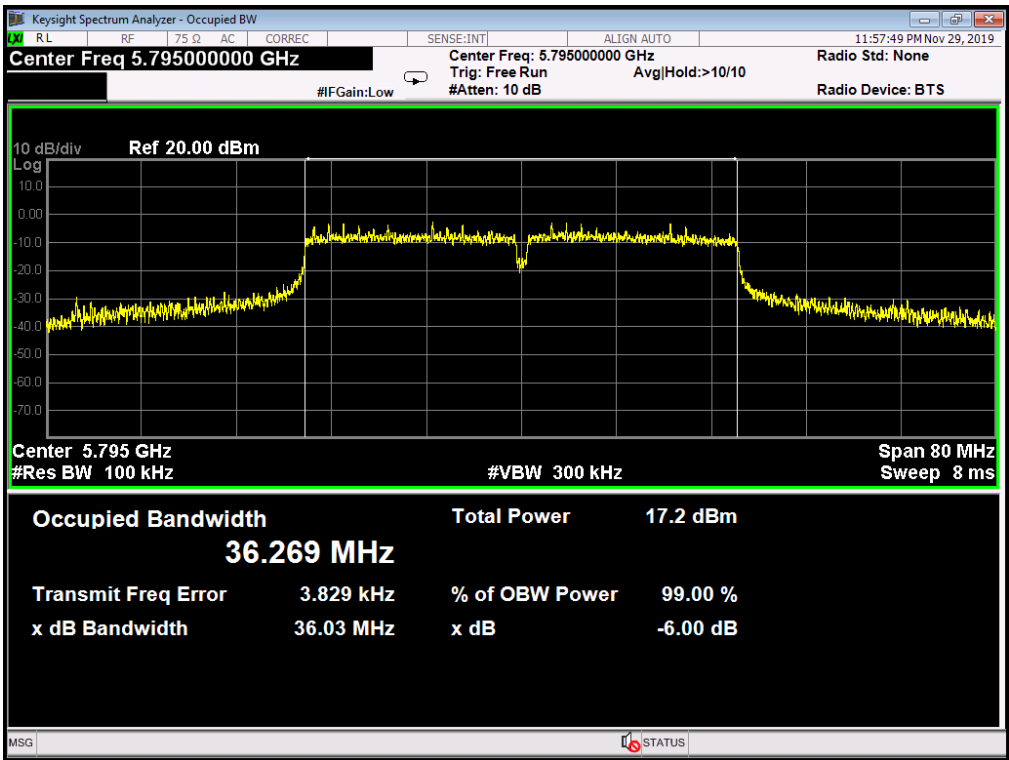
5795 MHz

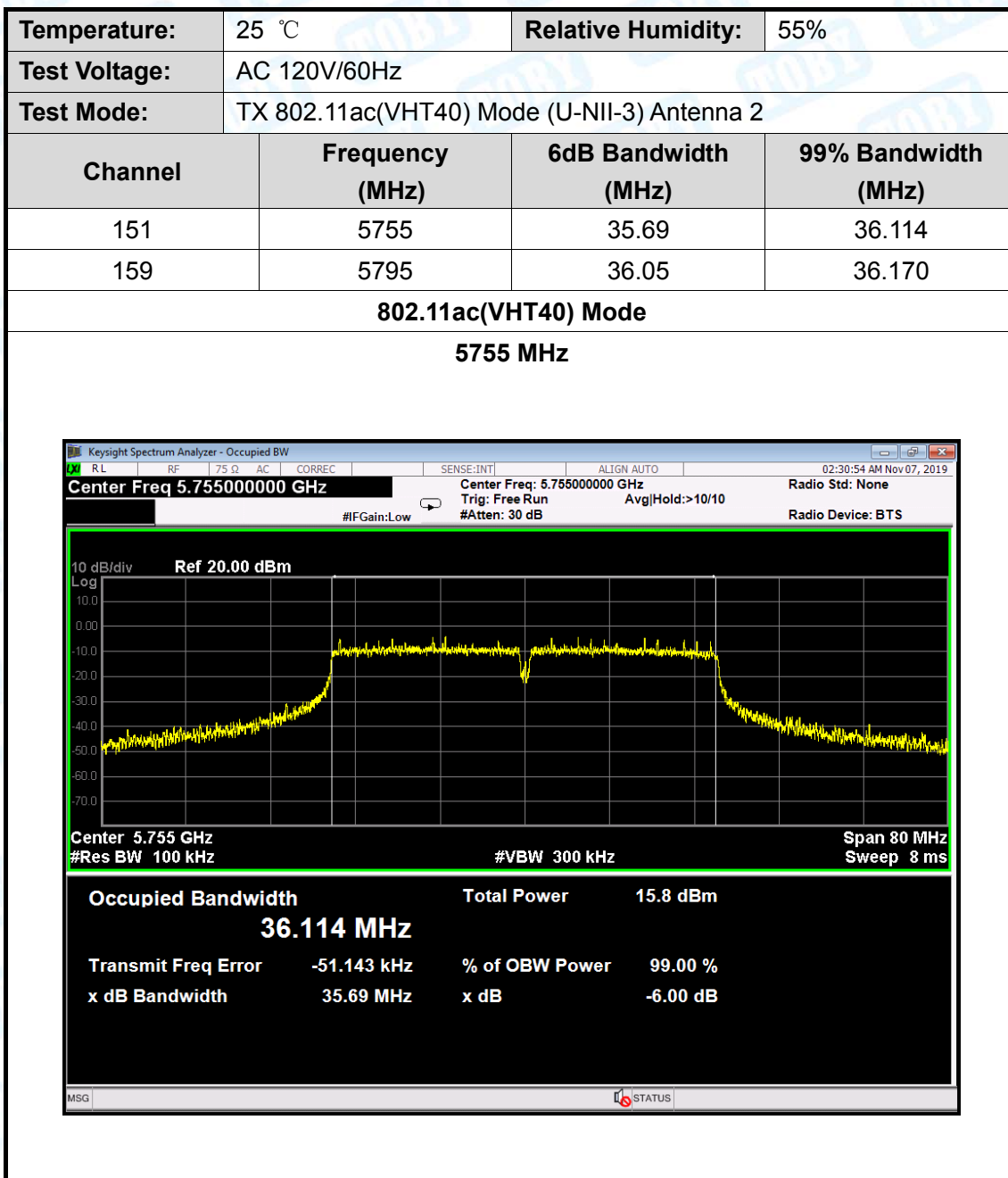




802.11ac(VHT40) Mode

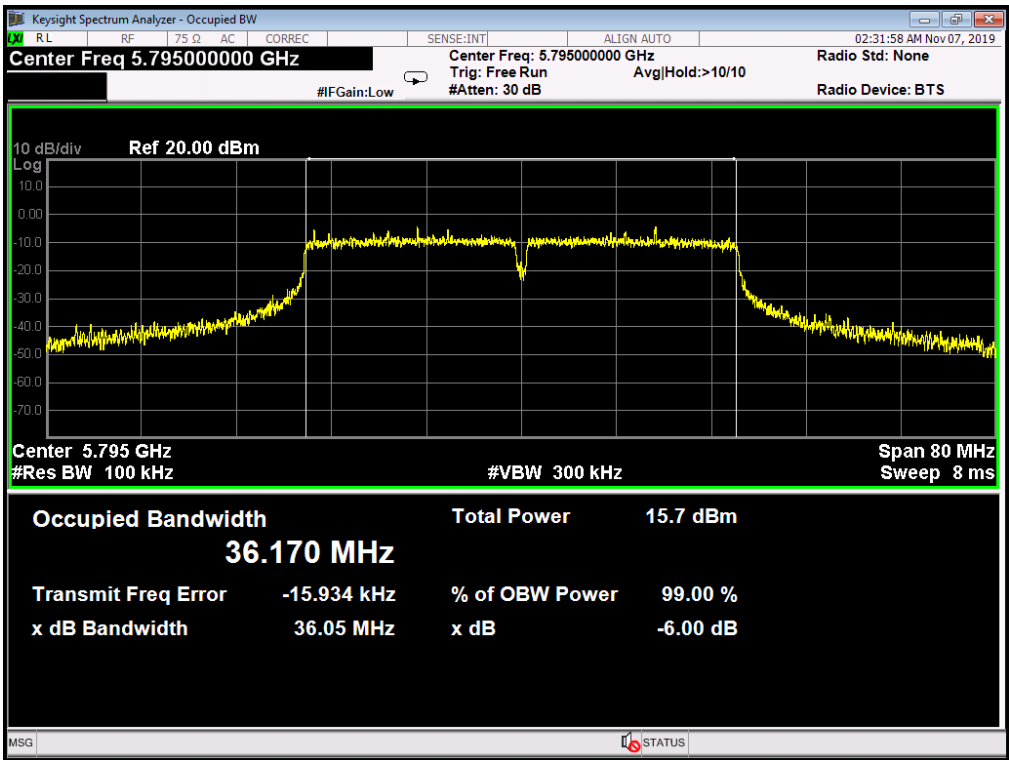
5795 MHz

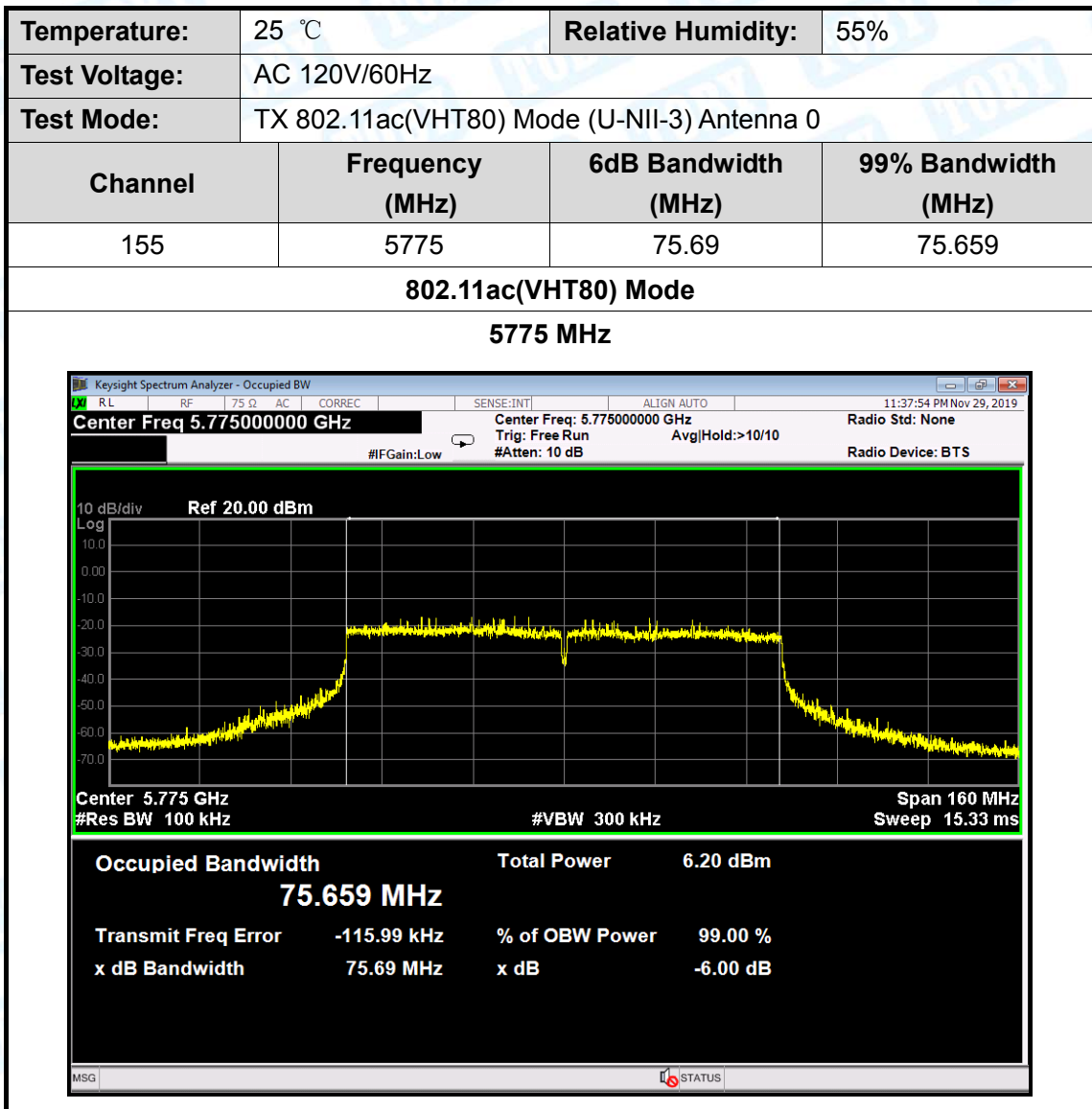


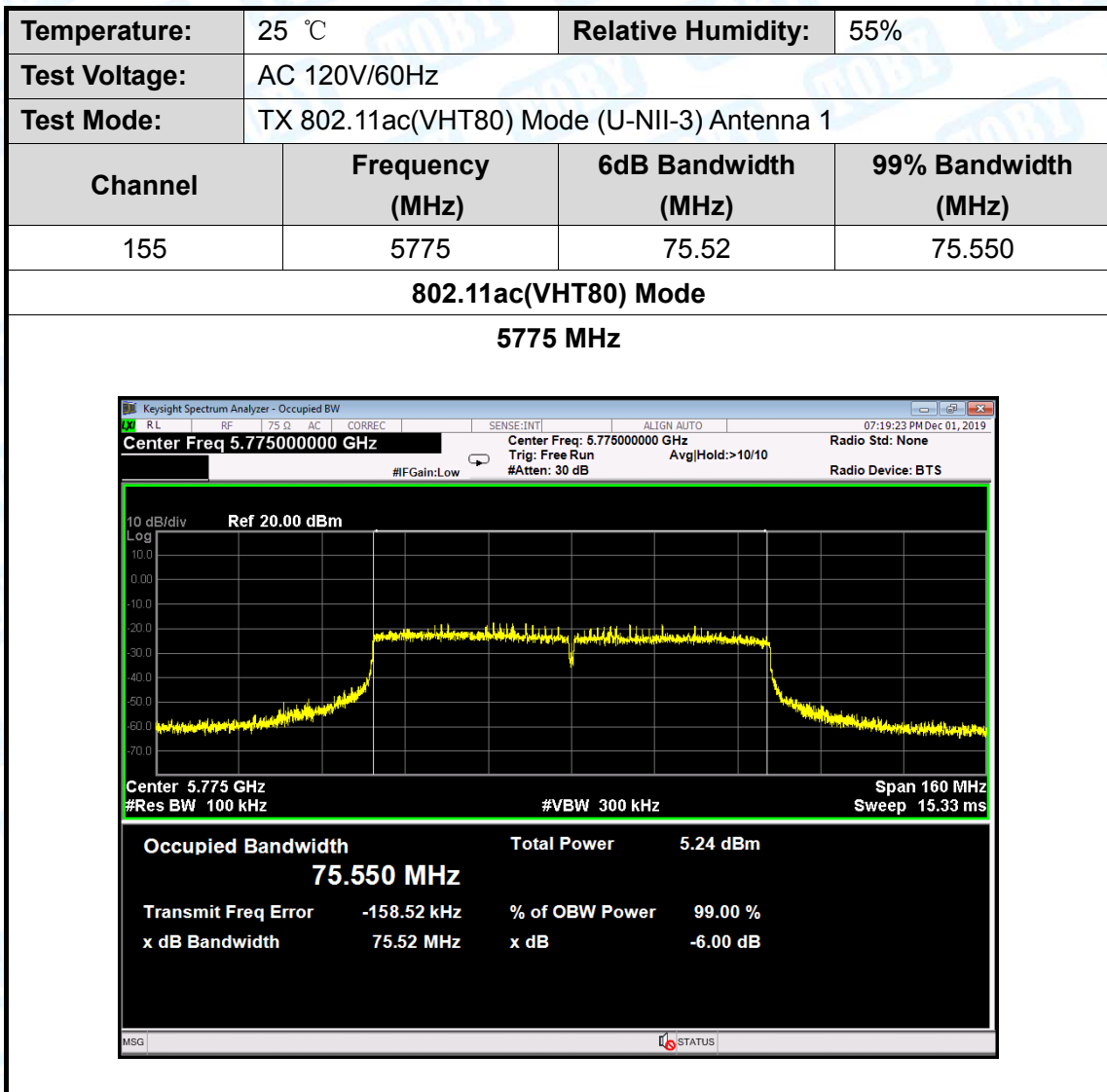


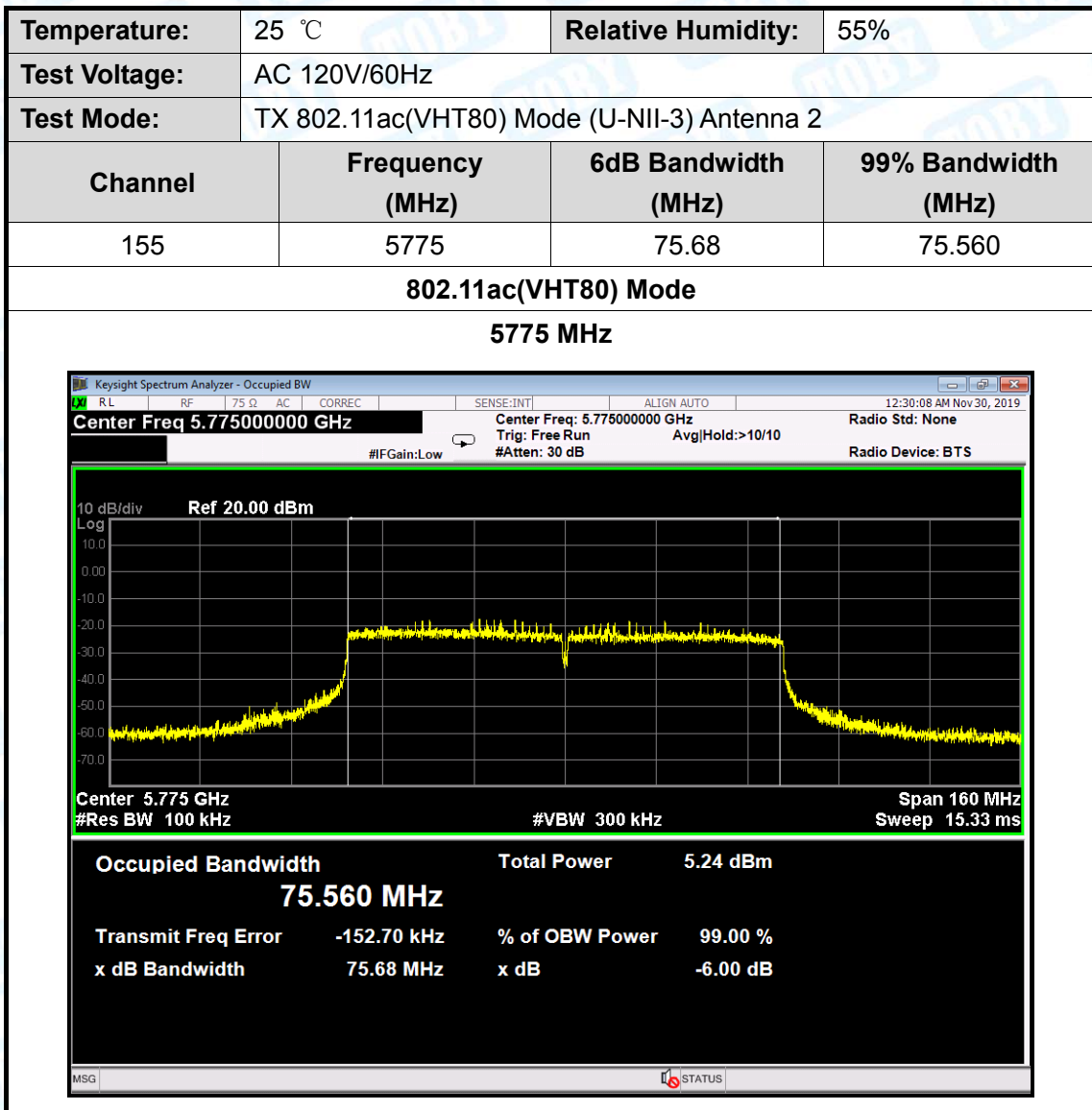
802.11ac(VHT40) Mode

5795 MHz









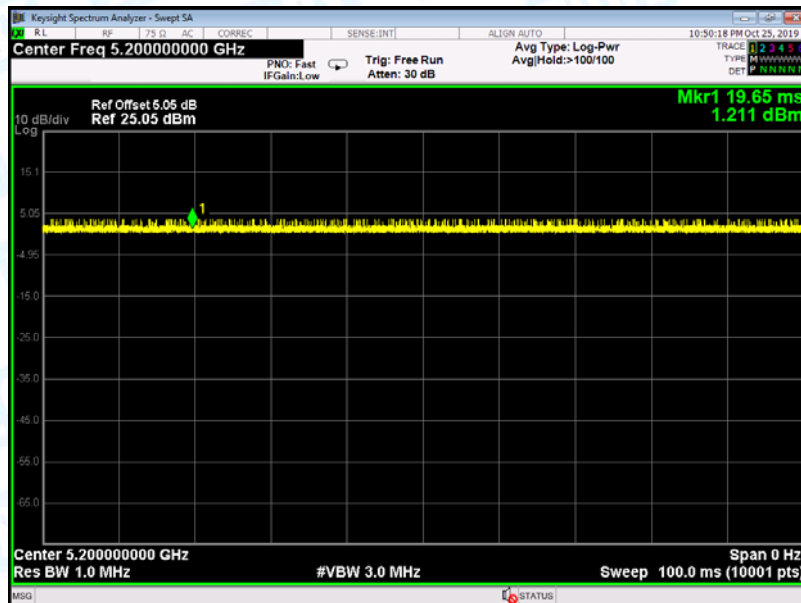
Attachment E--AVG Output Power Test Data

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. 0	Ant. 1	Ant. 2					
802.11a	5180	12.51	12.39	14.35	0	---	30		
	5200	11.52	11.70	14.28	0	---			
	5240	12.43	12.26	14.38	0	---			
802.11n (HT20)	5180	11.81	12.82	12.26	0	17.08	29.73		
	5200	12.29	12.30	14.38	0	17.88			
	5240	12.40	12.70	14.40	0	18.03			
802.11ac (VHT20)	5180	10.53	9.83	10.46	0	15.05			
	5200	9.10	8.93	11.41	0	14.74			
	5240	9.24	9.07	11.34	0	14.79			
802.11n (HT40)	5190	11.77	12.52	12.64	0	17.10			
	5230	11.08	11.89	12.15	0	16.50			
802.11 ac(VHT40)	5190	12.43	12.62	12.31	0	17.23			
	5230	13.71	11.11	13.96	0	17.87			
802.11 ac(VHT80)	5210	13.08	11.54	12.05	0	17.04			
Result: PASS									
Remark: The EUT incorporates a MIMO function. Physically, the EUT provides three antennas for transmitting and receiving.									
When ANT. 0, ANT. 1 and ANT. 2 transmitting simultaneously, the total Antenna Gain= ANT. 0 n Gain + ANT. 1 Gain+ANT. 2 Gain =6.27 dBi>6 dBi.									
So P _{out} = P _{limit} -(G _{TX} -6)]=24-0.27=23.73dBm									

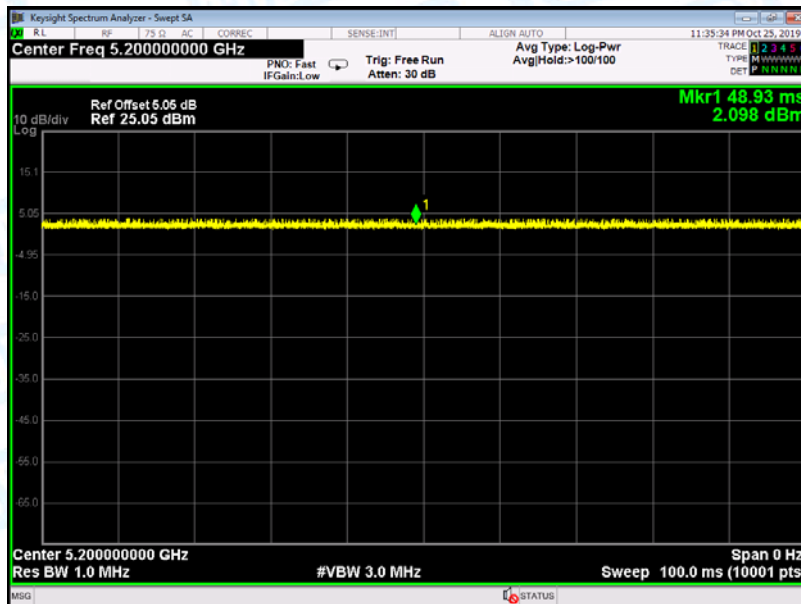
Temperature:		25 °C			Relative Humidity:		55%	
Test Voltage:		AC 120V/60Hz						
U-NII-3								
Test Mode	Frequency (MHz)	Test Data					Limit (dBm)	
		Conducted Power (dBm)			Duty Factor (dB)	Total Power (dBm)		
		Ant. 0	Ant. 1	Ant. 2				
802.11a	5745	22.51	21.01	22.18	0	---	30	
	5785	21.32	20.46	22.41	0	---		
	5825	21.00	20.83	21.83	0	---		
802.11n (HT20)	5745	21.40	20.52	22.21	0	26.20	29.73	
	5785	20.33	20.07	21.25	0	25.35		
	5825	20.03	19.35	21.34	0	25.09		
802.11ac (VHT20)	5745	21.55	20.86	20.60	0	25.79		
	5785	20.93	19.74	20.78	0	25.29		
	5825	19.79	19.86	21.23	0	25.12		
802.11n (HT40)	5755	20.80	21.29	22.03	0	26.17		
	5795	21.39	21.48	21.44	0	26.21		
802.11 ac(VHT40)	5755	21.55	20.54	20.34	0	25.61		
	5795	21.43	20.62	21.34	0	25.91		
802.11 ac(VHT80)	5775	12.14	11.12	11.23	0	16.29		
Result: PASS								
Remark: The EUT incorporates a MIMO function. Physically, the EUT provides three antennas for transmitting and receiving. When ANT. 0, ANT. 1 and ANT. 2 transmitting simultaneously, the total Antenna Gain= ANT. 0 n Gain + ANT. 1 Gain+ANT. 2 Gain =6.27 dBi>6 dBi. So P _{out} = P _{limit} -(G _{TX} -6)]=24-0.27=23.73dBm								

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.		

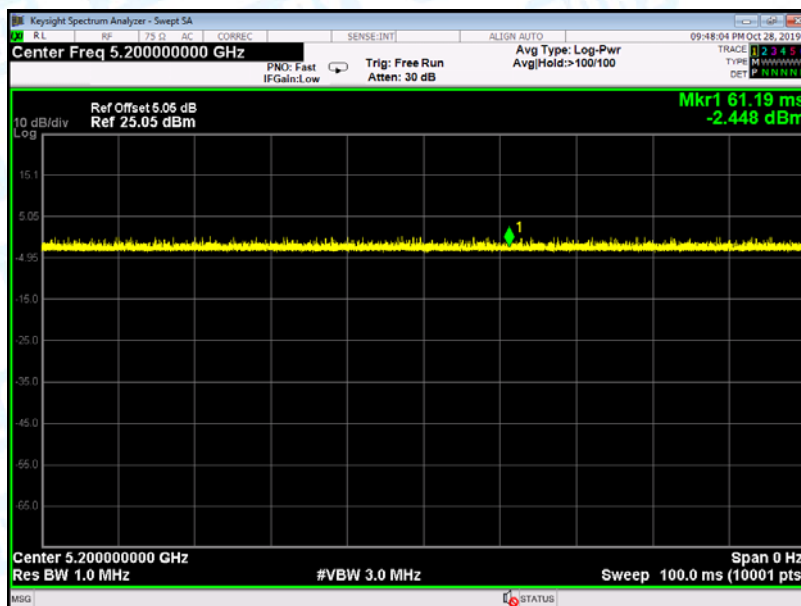
802.11 a 5200MHz U-NII-1



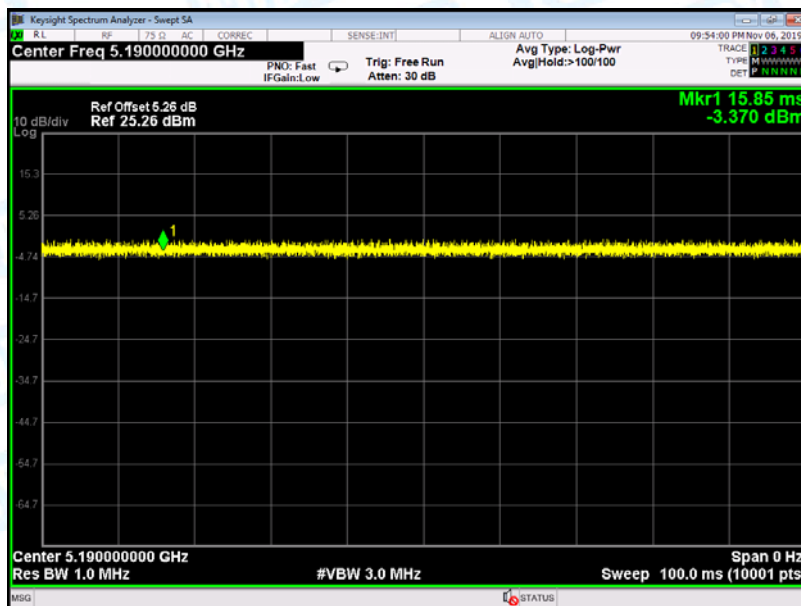
802.11 n(HT20) 5200MHz U-NII-1



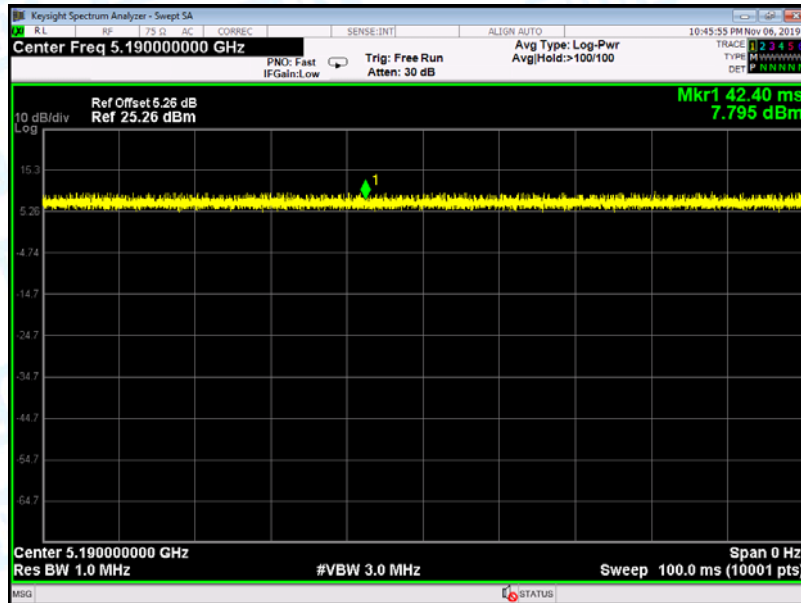
802.11 ac(VHT20) 5200MHz U-NII-1



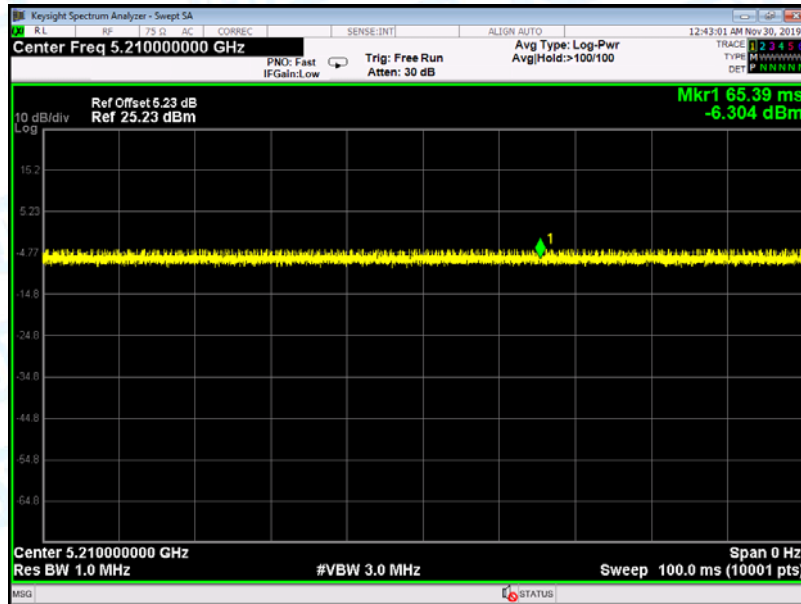
802.11 n(HT40) 5190MHz U-NII-1



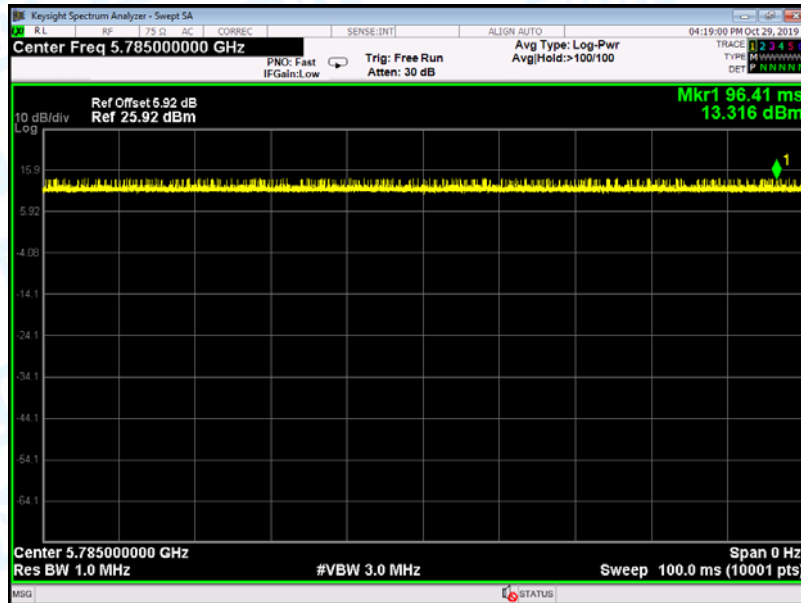
802.11 ac(VHT40) 5190MHz U-NII-1



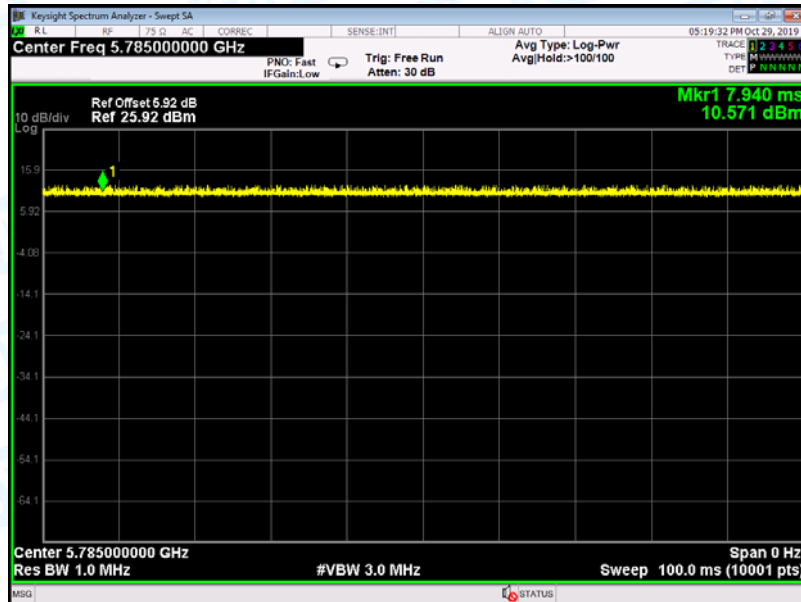
802.11 ac(VHT80) 5210MHz U-NII-1



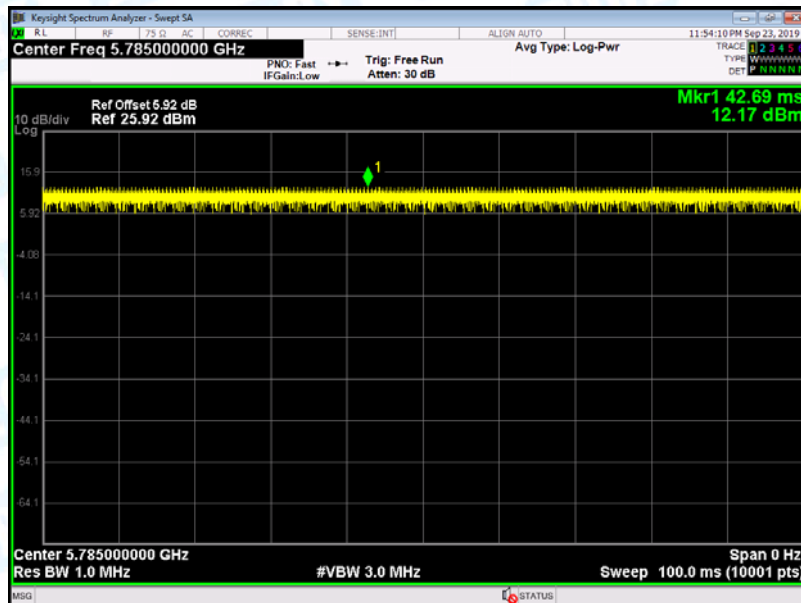
802.11 a 5785MHz U-NII-3



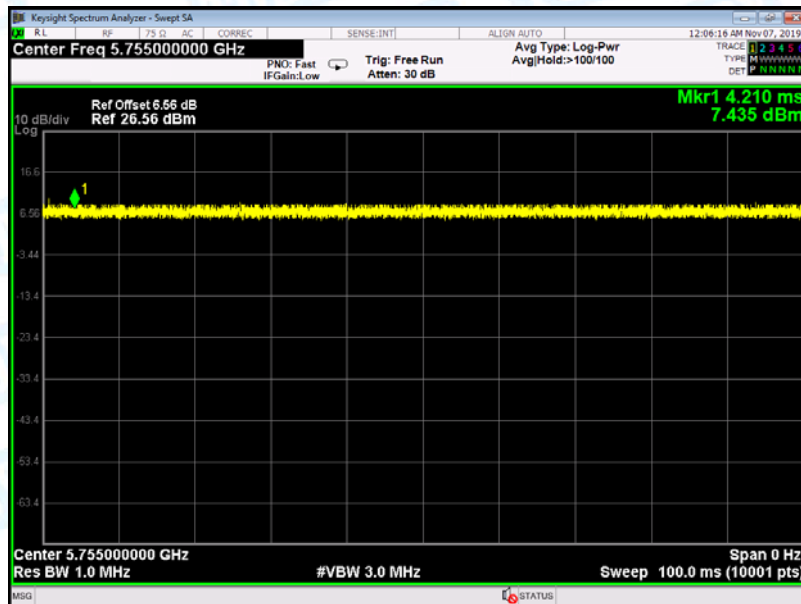
802.11 n(HT20) 5785MHz U-NII-3



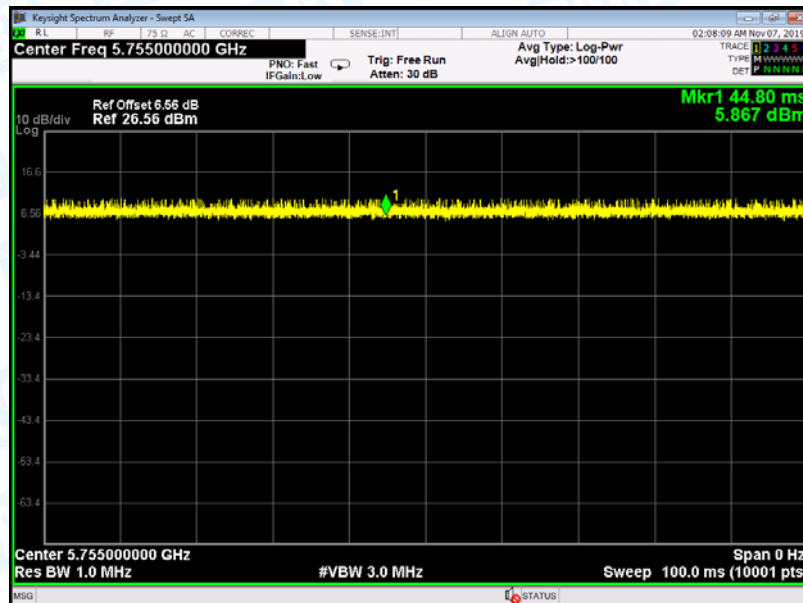
802.11 ac(VHT20) 5785MHz U-NII-3



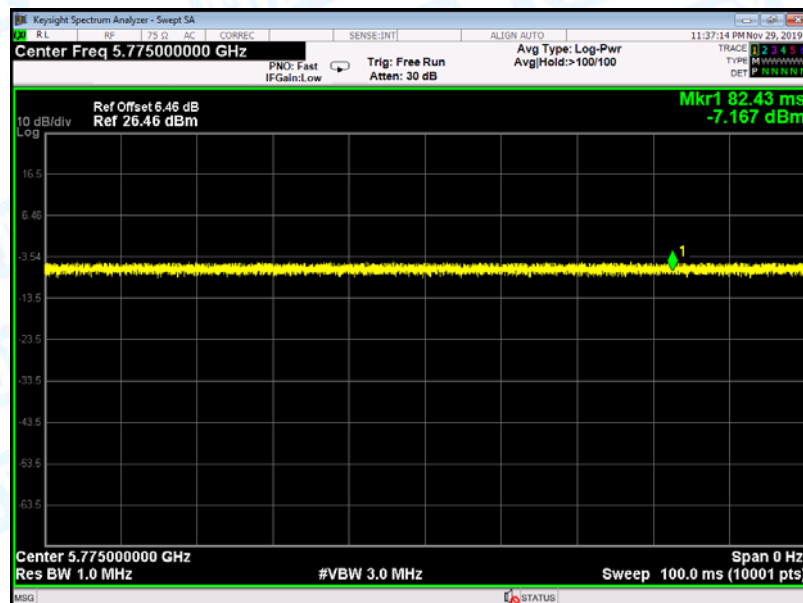
802.11 n(HT40) 5755MHz U-NII-3



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



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

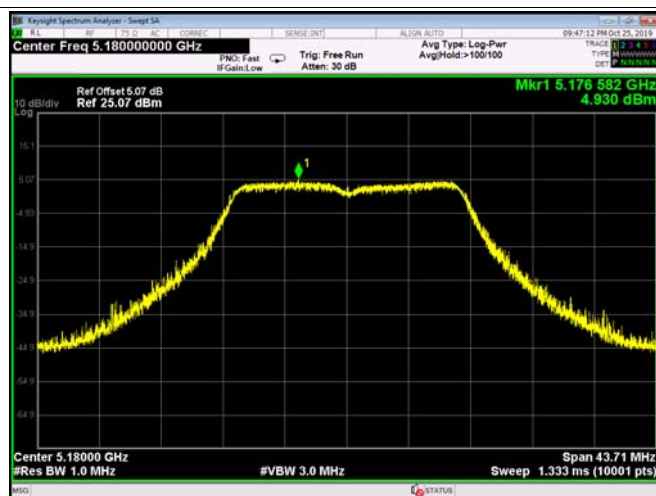


Attachment F-- Power Spectral Density Test Data

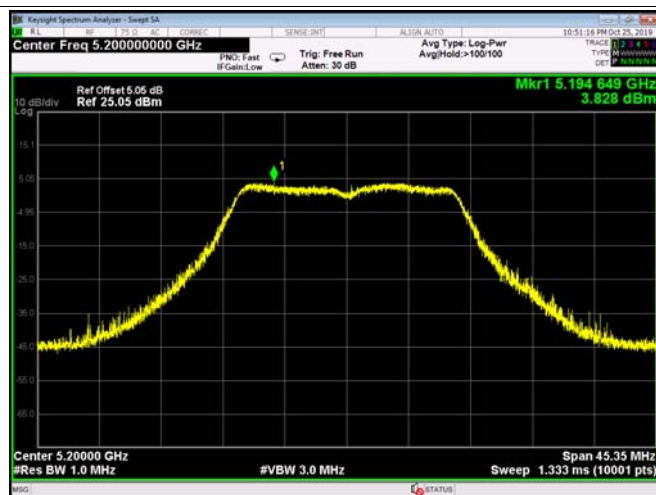
Temperature:		25 °C			Relative Humidity:		55%	
Test Voltage:		AC 120V/60Hz						
U-NII-1								
Test Mode	Frequency (MHz)	Test Data					Limit (dBm/MHz)	
		ANT.0 (dBm/MHz)	ANT.1 (dBm/MHz)	ANT.2 (dBm/MHz)	Duty Factor (dB)	Total Power (dBm/MHz)		
802.11a	5180	4.930	5.356	7.377	0		17	
	5200	3.828	5.702	8.045	0	---		
	5240	4.707	5.074	7.535	0	---		
802.11n (HT20)	5180	4.643	5.661	5.707	0	10.135	16.73	
	5200	4.581	5.192	7.197	0	10.577		
	5240	3.402	5.228	7.362	0	10.402		
802.11ac (VHT20)	5180	2.053	0.850	4.958	0	7.747		
	5200	2.521	1.334	4.080	0	7.562		
	5240	2.038	2.275	4.414	0	7.818		
802.11n (HT40)	5190	1.782	2.163	3.574	0	7.348		
	5230	0.441	1.931	1.948	0	6.266		
802.11 ac(VHT40)	5190	3.164	3.613	4.019	0	8.384		
	5230	3.426	1.409	4.058	0	7.875		
802.11 ac(VHT80)	5210	0.254	-0.890	0.015	0	4.592		
Result: PASS								
Remark: The EUT incorporates a MIMO function. Physically, the EUT provides three antennas for transmitting and receiving.								
When ANT. 0, ANT. 1 and ANT. 2 transmitting simultaneously, the total Antenna Gain= ANT. 0 n Gain + ANT. 1 Gain+ANT. 2 Gain =6.27 dBi>6 dBi.								
So P _{out} = P _{limit} -(G _{TX} -6)] =17-0.27=10.73								

Antenna 0

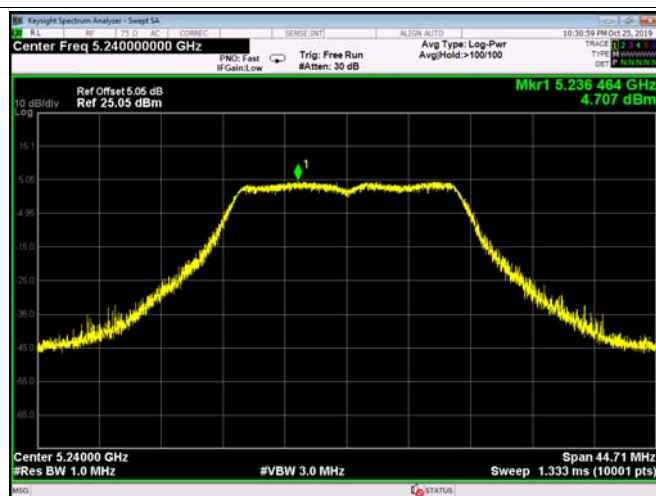
802.11 a 5180 MHz



802.11 a 5200 MHz

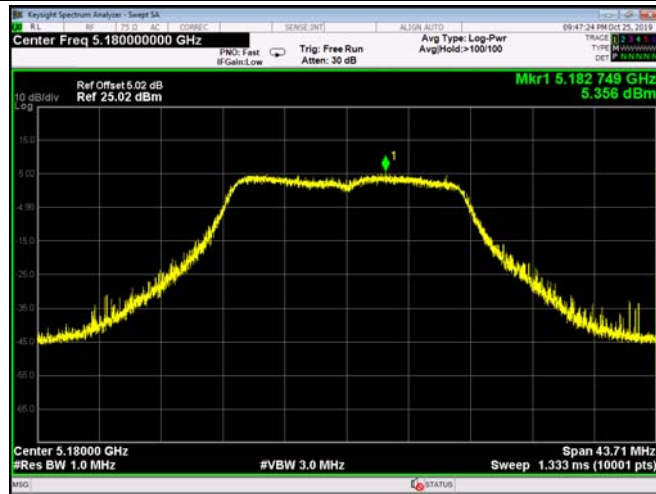


802.11 a 5240 MHz

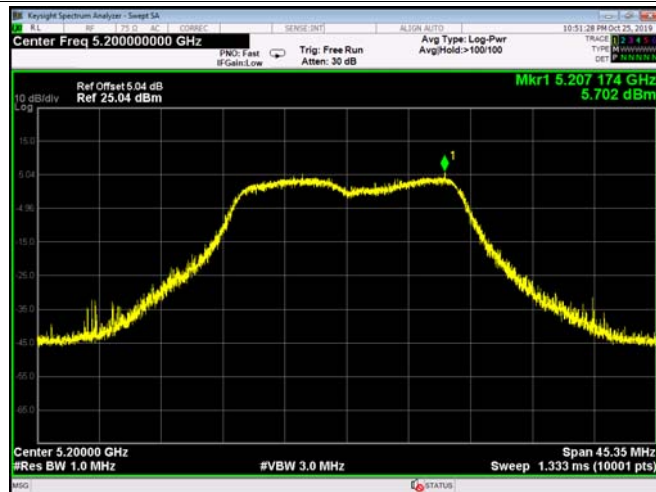


Antenna 1

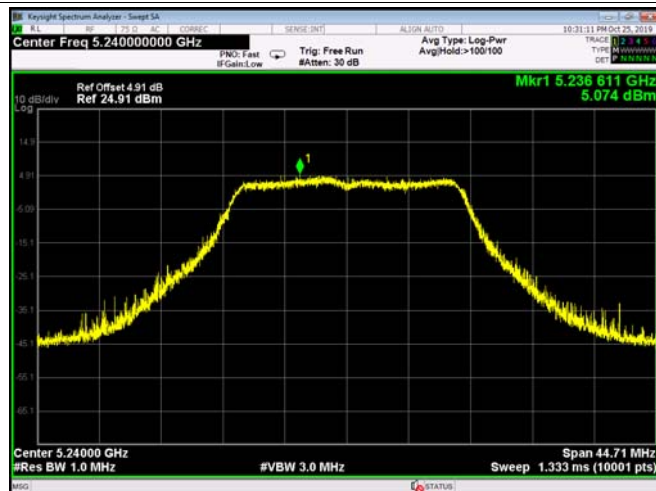
802.11 a 5180 MHz



802.11 a 5200 MHz

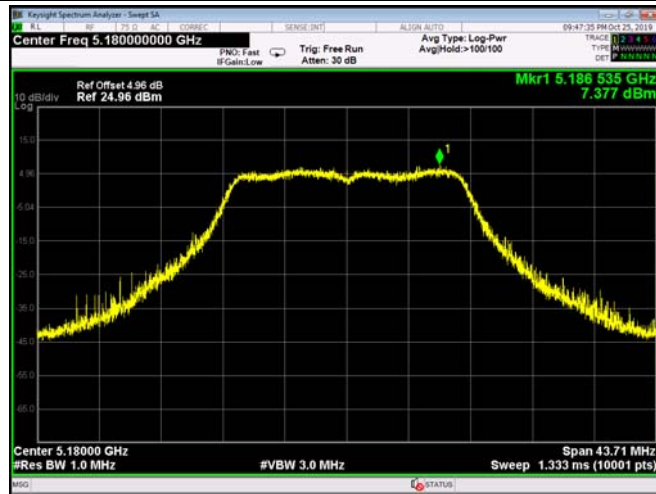


802.11 a 5240 MHz

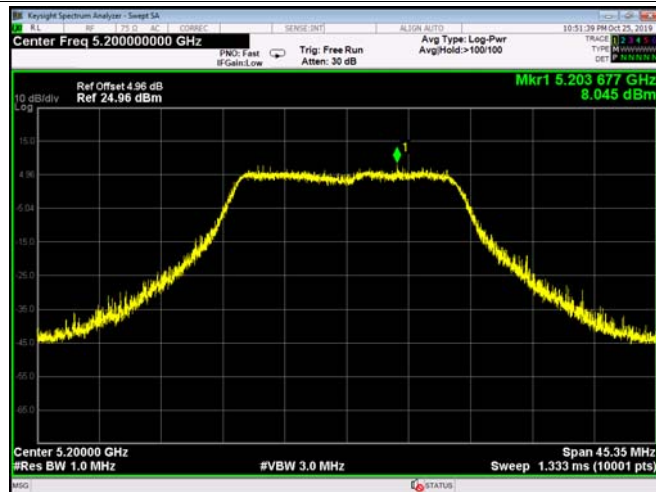


Antenna 2

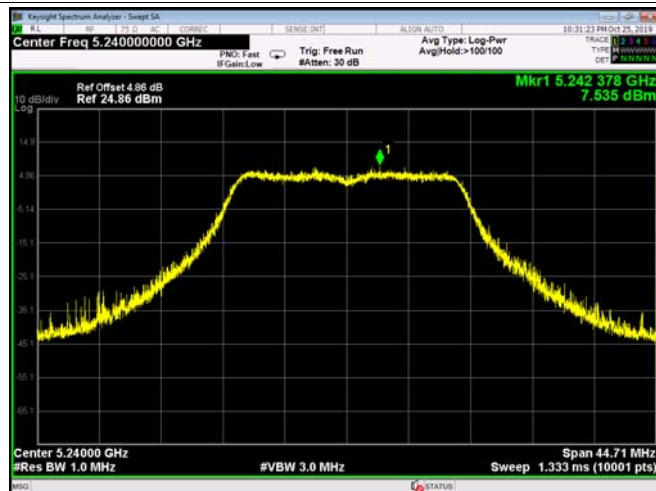
802.11 a 5180 MHz



802.11 a 5200 MHz

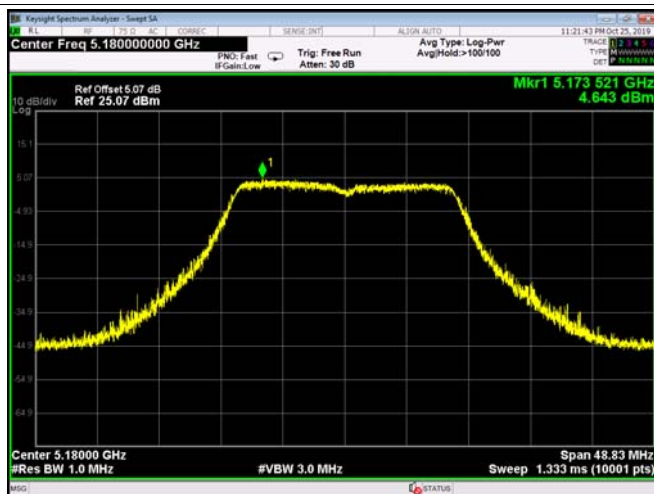


802.11 a 5240 MHz

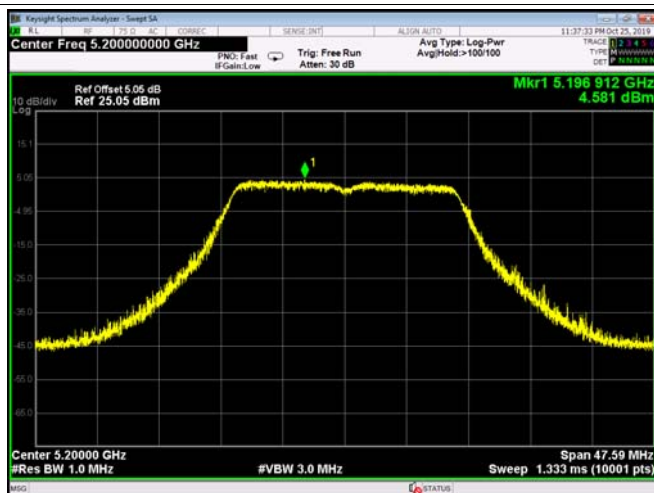


Antenna 0

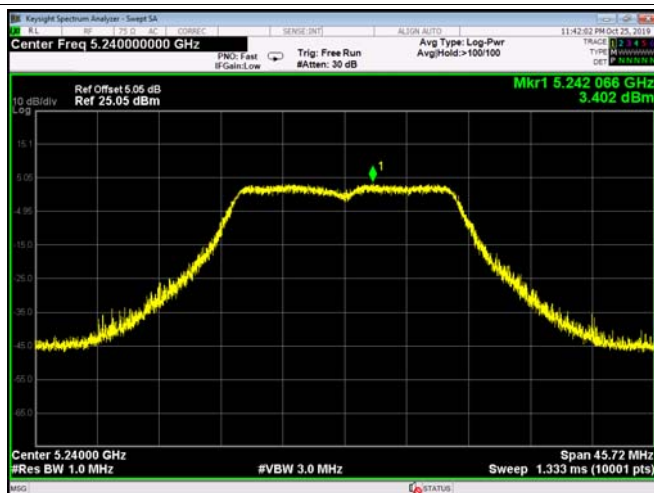
802.11 n(HT20) 5180 MHz



802.11 n(HT20) 5200 MHz

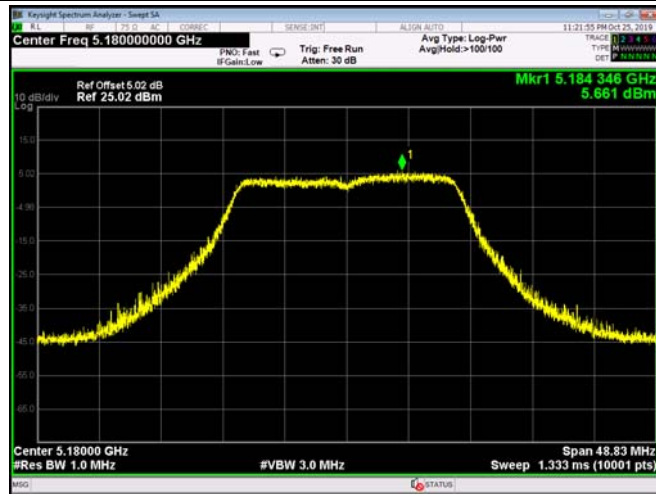


802.11 n(HT20) 5240MHz

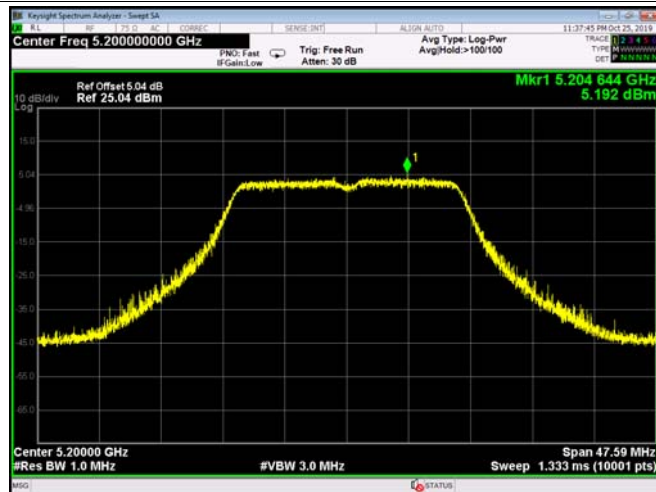


Antenna 1

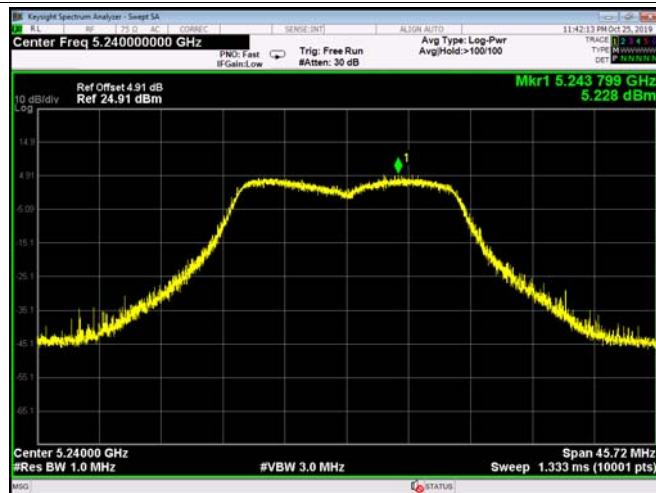
802.11 n(HT20) 5180 MHz



802.11 n(HT20) 5200 MHz

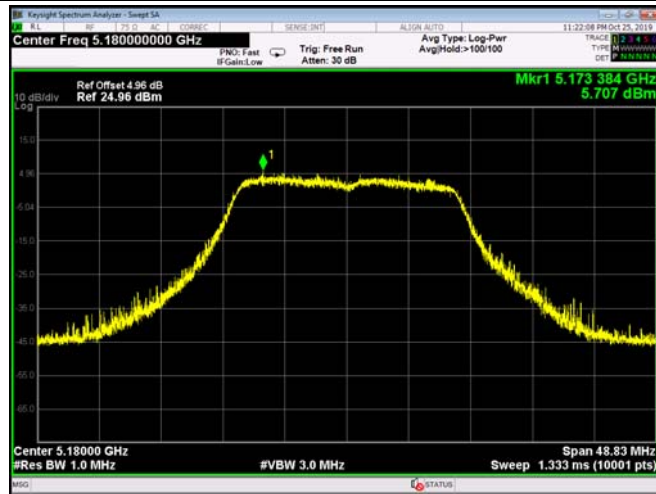


802.11 n(HT20) 5240 MHz

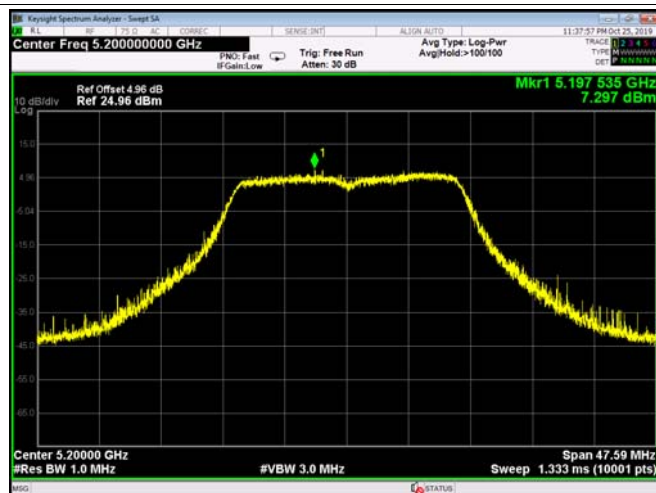


Antenna 2

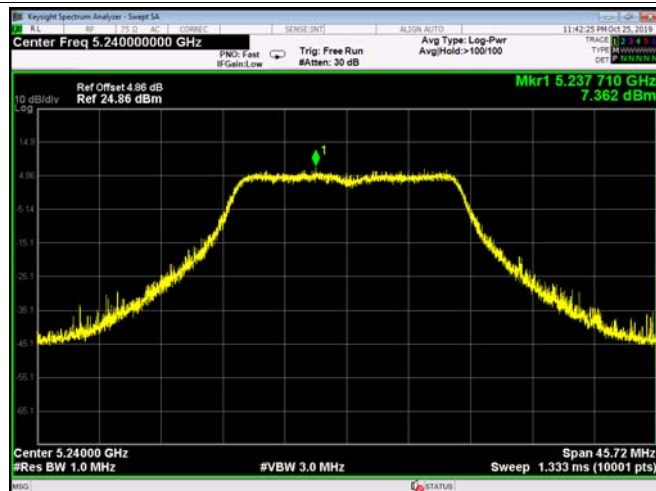
802.11 n(HT20) 5180 MHz



802.11 n(HT20) 5200 MHz

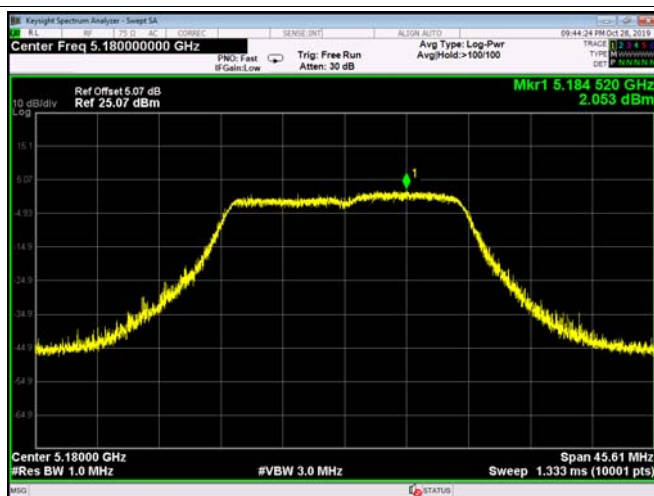


802.11 n(HT20) 5240 MHz

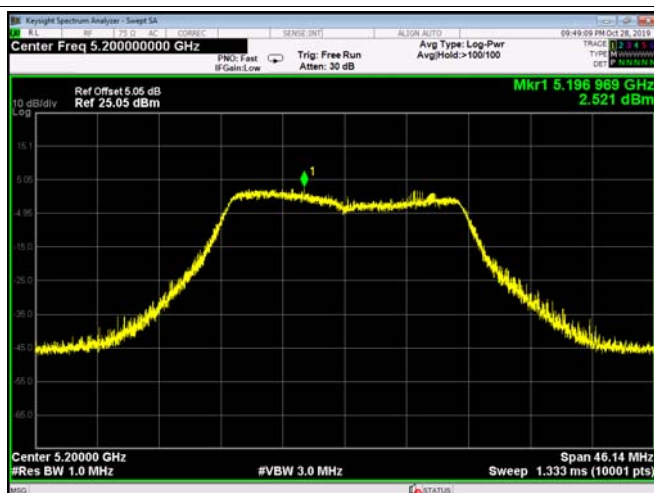


Antenna 0

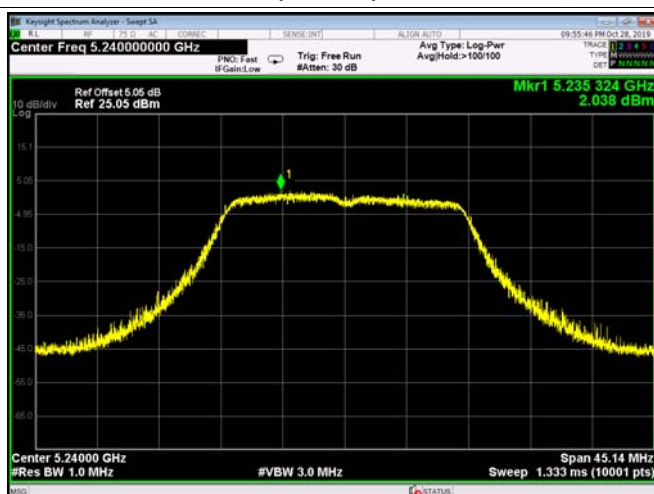
802.11 ac(VHT20) 5180 MHz



802.11 ac(VHT20) 5200 MHz

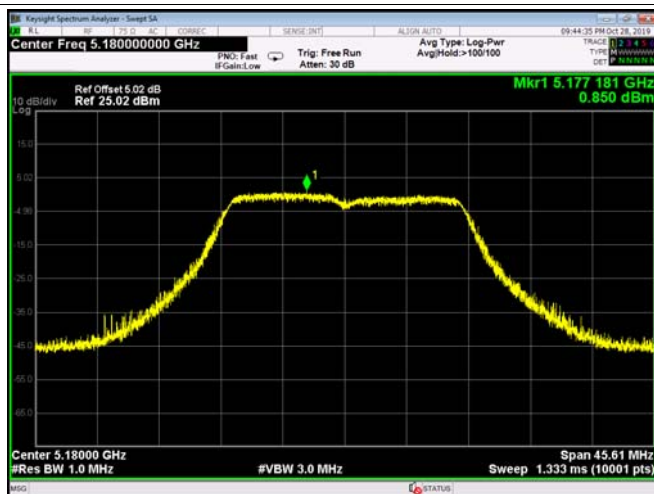


802.11 ac(VHT20) 5240 MHz

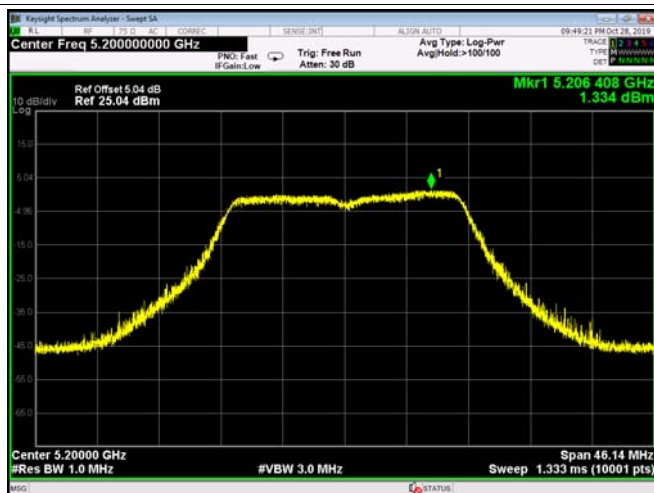


Antenna 1

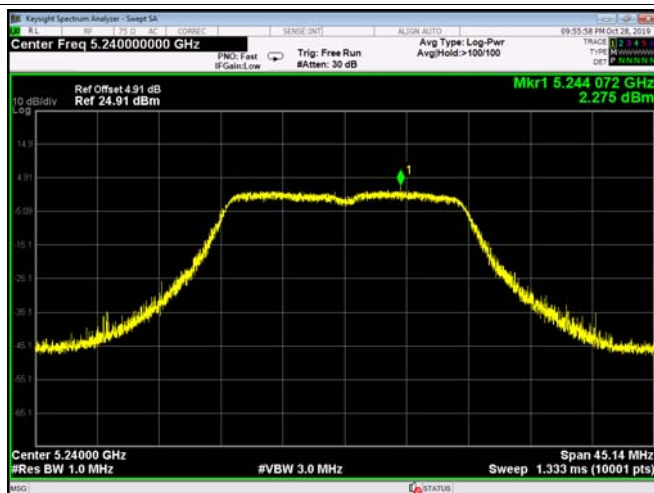
802.11 ac(VHT20) 5180 MHz



802.11 ac(VHT20) 5200 MHz

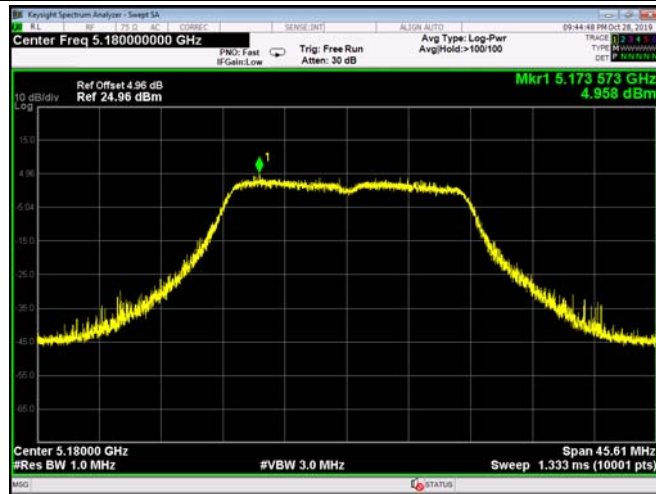


802.11 ac(VHT20) 5240 MHz

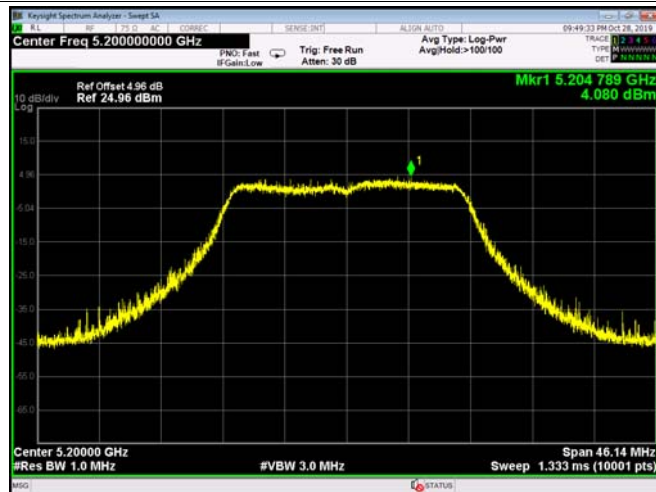


Antenna 2

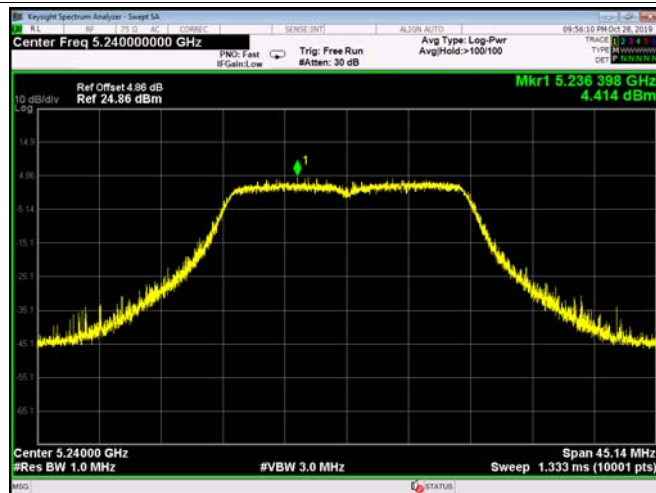
802.11 ac(VHT20) 5180 MHz



802.11 ac(VHT20) 5200 MHz

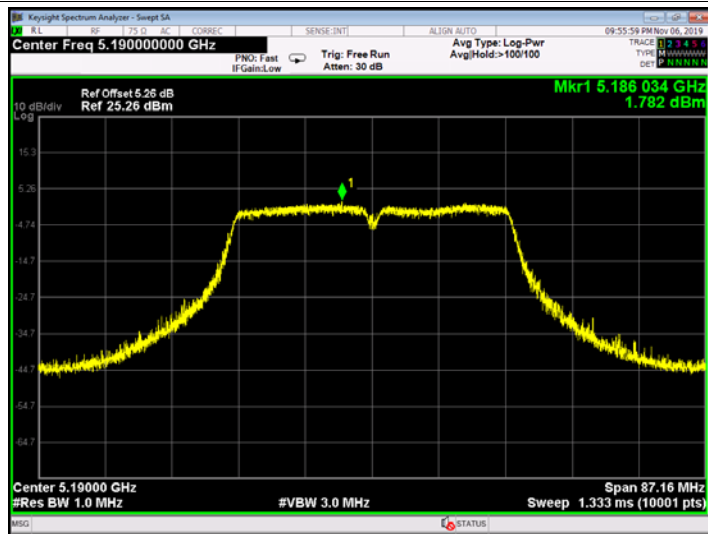


802.11 ac(VHT20) 5240 MHz

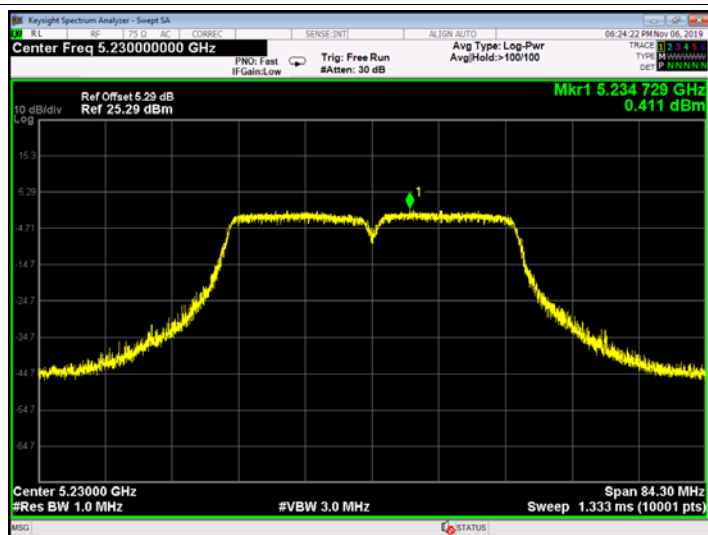


Antenna 0

802.11 n(HT40) 5190 MHz

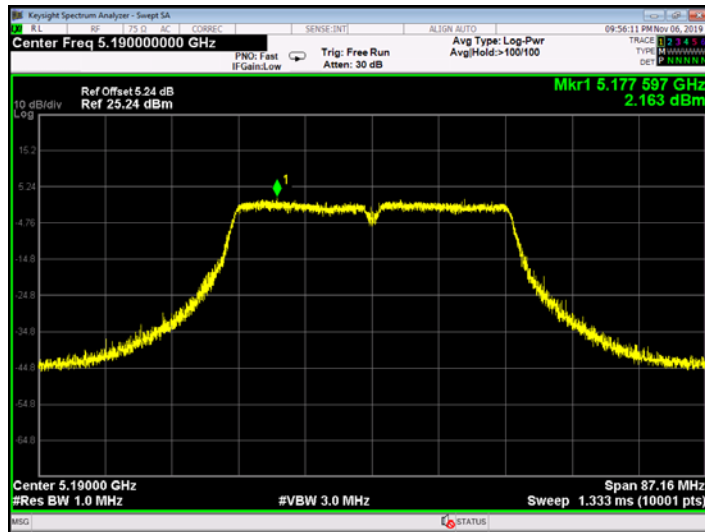


802.11 n(HT40) 5230 MHz

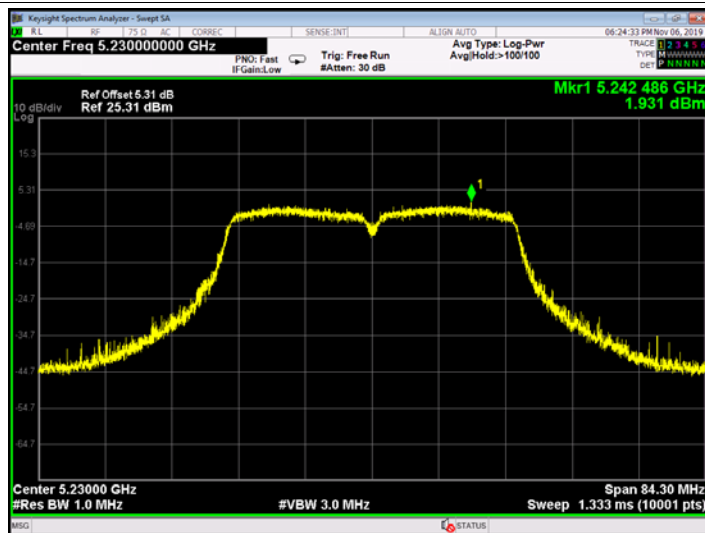


Antenna 1

802.11 n(HT40) 5190 MHz

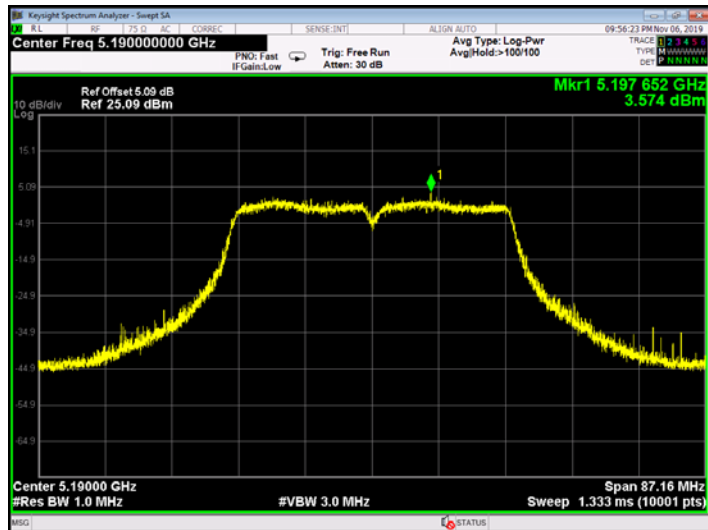


802.11 n(HT40) 5230 MHz

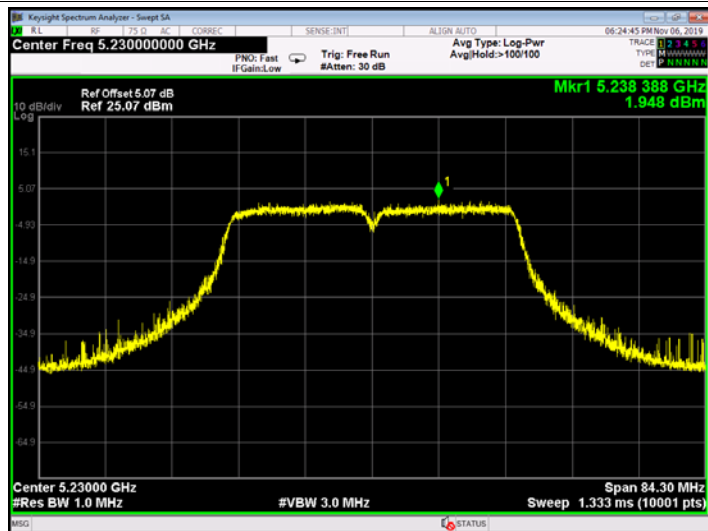


Antenna 2

802.11 n(HT40) 5190 MHz

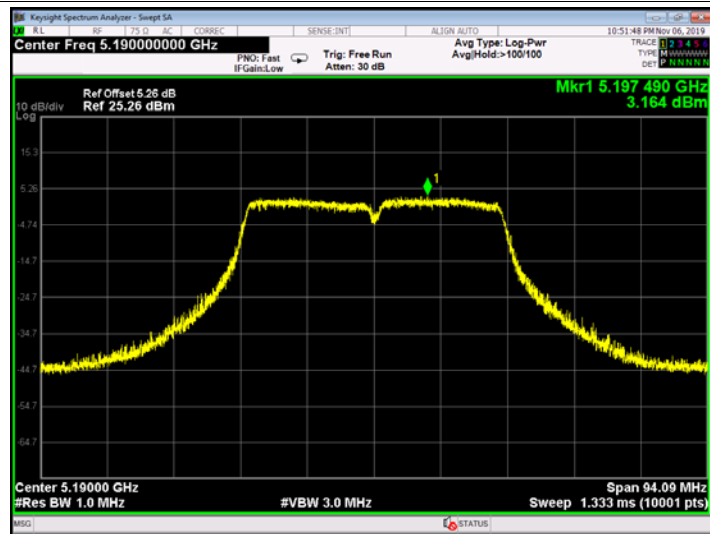


802.11 n(HT40) 5230 MHz

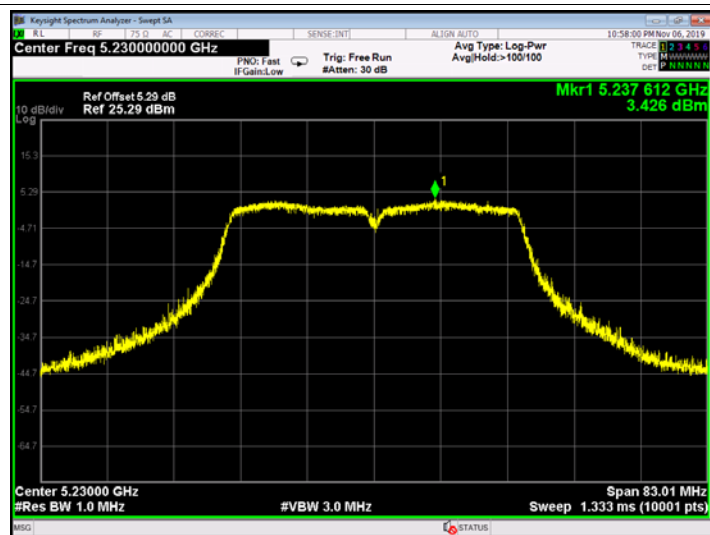


Antenna 0

802.11 ac(VHT40) 5190 MHz

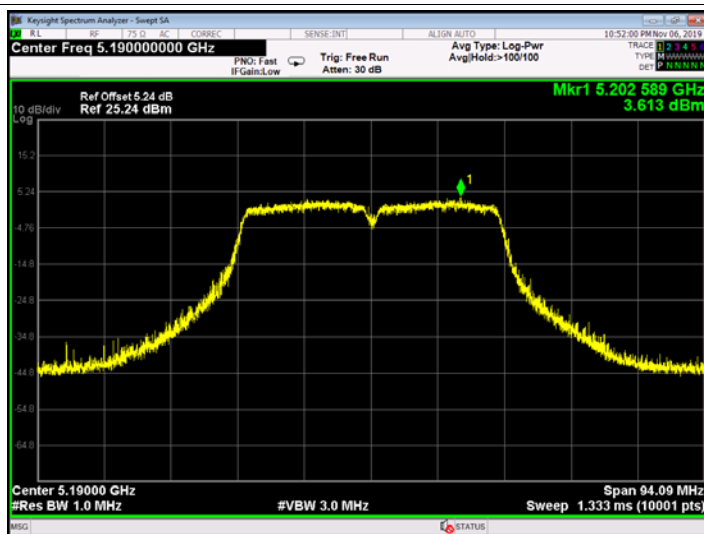


802.11 ac(VHT40) 5230 MHz

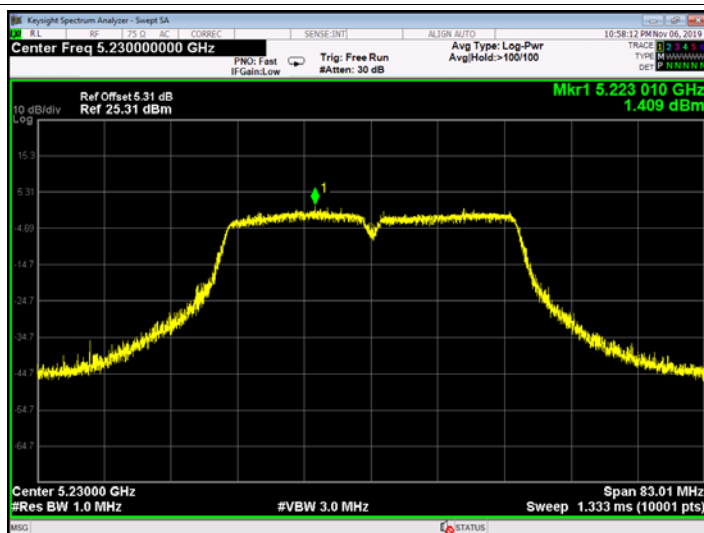


Antenna 1

802.11 ac(VHT40) 5190 MHz

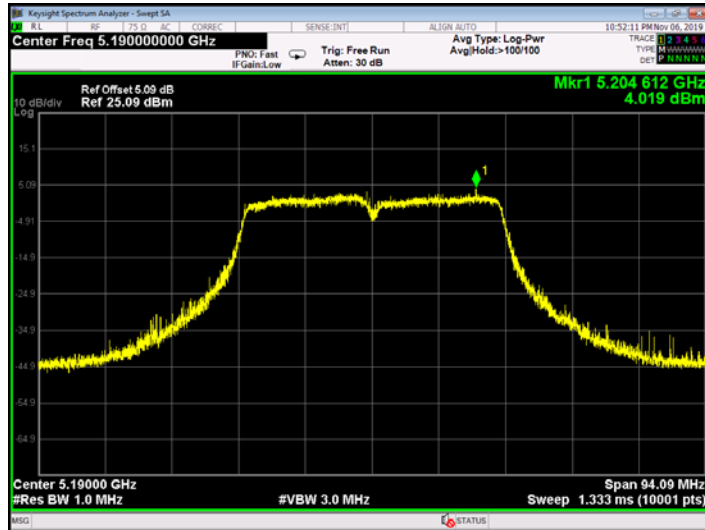


802.11 ac(VHT40) 5230 MHz

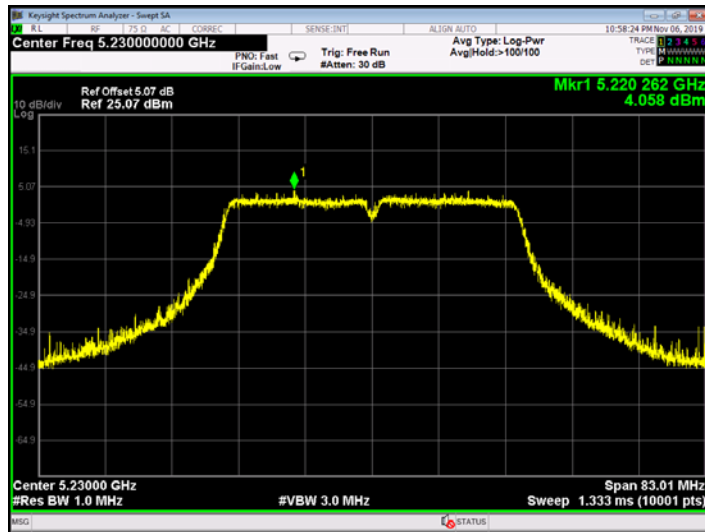


Antenna 2

802.11 ac(VHT40) 5190 MHz

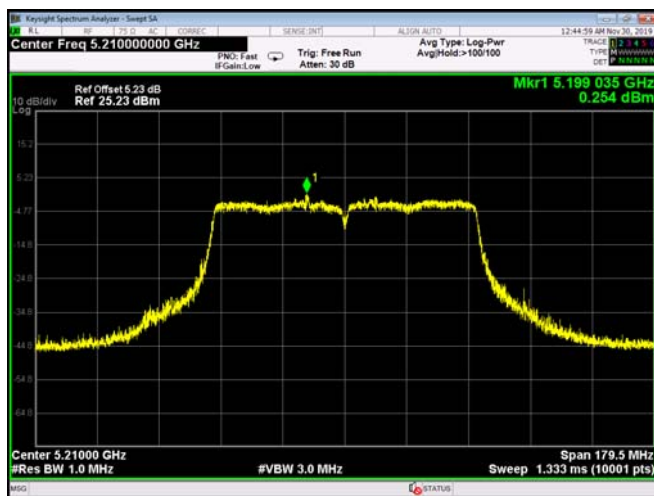


802.11 ac(VHT40) 5230 MHz

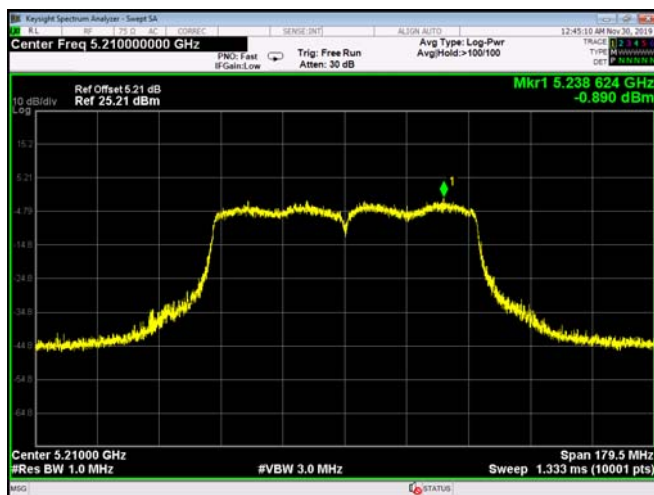


802.11 ac(VHT80) 5210 MHz

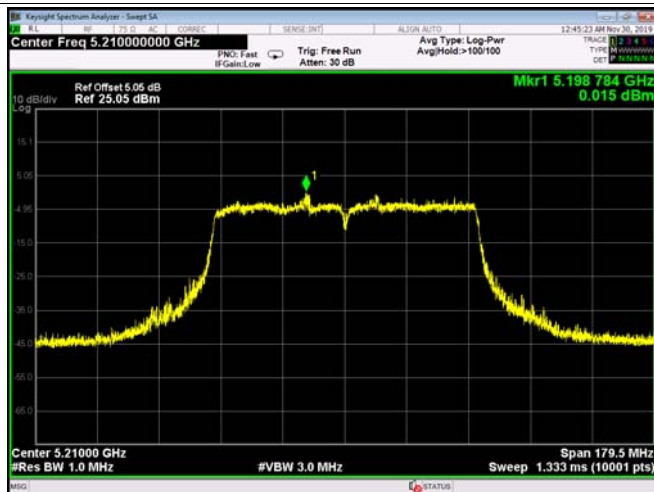
Antenna 0



Antenna 1



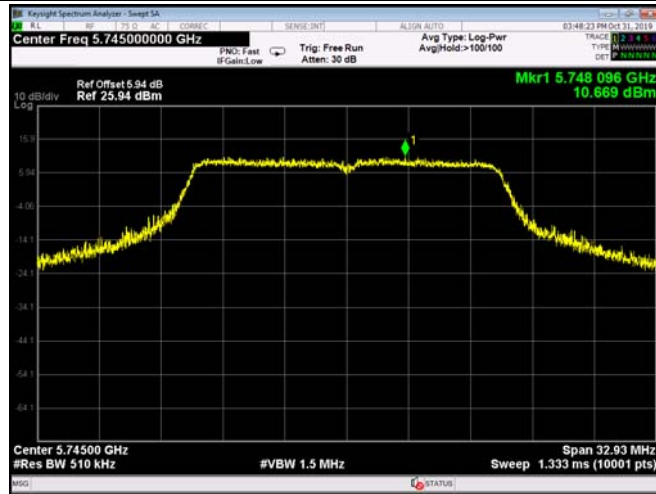
Antenna 2



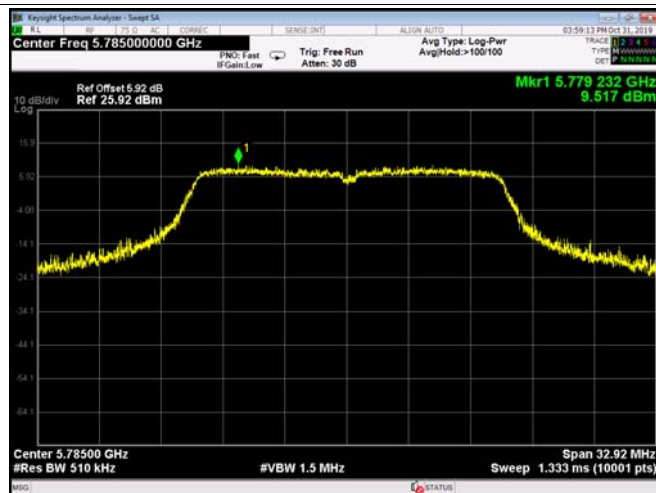
Temperature:		25 °C			Relative Humidity:		55%	
Test Voltage:		AC 120V/60Hz						
U-NII-3								
Test Mode	Frequency (MHz)	Test Data					Limit (dBm/500KHz)	
		ANT.0 (dBm/500KHz)	ANT.1 (dBm/500KHz)	ANT.2 (dBm/500KHz)	Duty Factor (dB)	Total Power (dBm/500KHz)		
802.11a	5745	10.669	10.913	11.333	0	---	30	
	5785	9.517	9.385	11.408	0	---		
	5825	8.749	9.140	11.888	0	---		
802.11n (HT20)	5745	10.037	9.486	9.606	0	14.488	29.73	
	5785	9.864	10.048	10.048	0	14.759		
	5825	8.672	8.977	10.794	0	14.357		
802.11ac (VHT20)	5745	10.505	9.633	9.621	0	14.711		
	5785	10.104	8.712	10.668	0	14.675		
	5825	9.192	8.796	10.878	0	14.491		
802.11n (HT40)	5755	6.798	6.914	8.308	0	12.167		
	5795	7.229	7.324	8.142	0	12.356		
802.11 ac(VHT40)	5755	7.840	7.160	8.248	0	12.544		
	5795	7.436	7.838	7.478	0	12.359		
802.11 ac(VHT80)	5775	-2.526	-3.402	-4.605	0	1.342		
Result: PASS								
Remark: The EUT incorporates a MIMO function. Physically, the EUT provides three antennas for transmitting and receiving.								
When ANT. 0, ANT. 1 and ANT. 2 transmitting simultaneously, the total Antenna Gain= ANT. 0 n Gain + ANT. 1 Gain+ANT. 2 Gain =6.27 dBi>6 dBi.								
So P _{out} = P _{limit} -(G _{TX} -6)]=30-0.27=29.73dBm								

Antenna 0

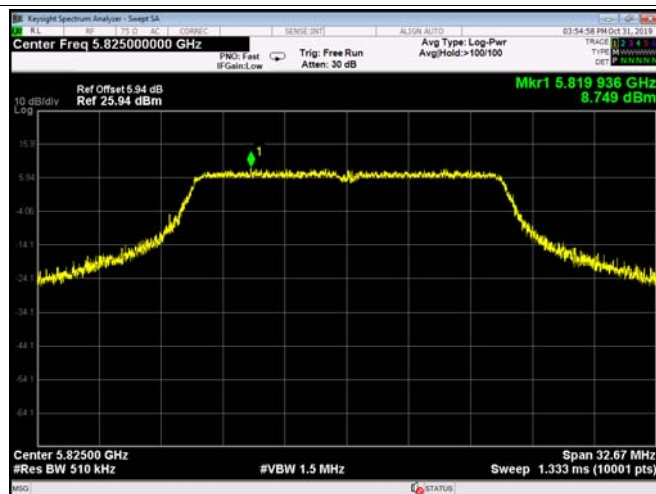
802.11 a 5745 MHz



802.11 a 5785 MHz

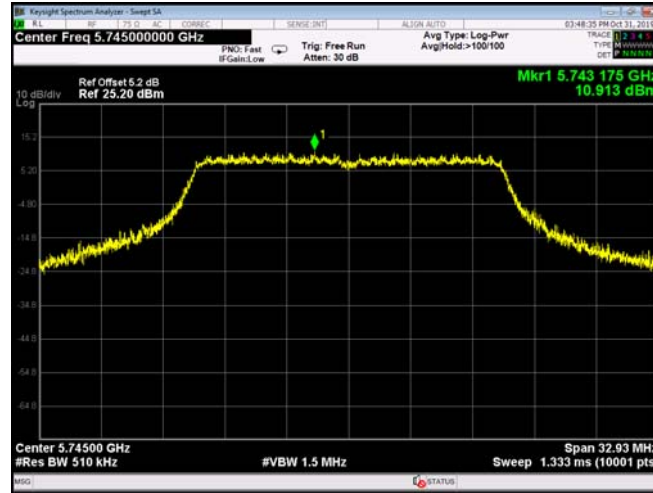


802.11 a 5825 MHz

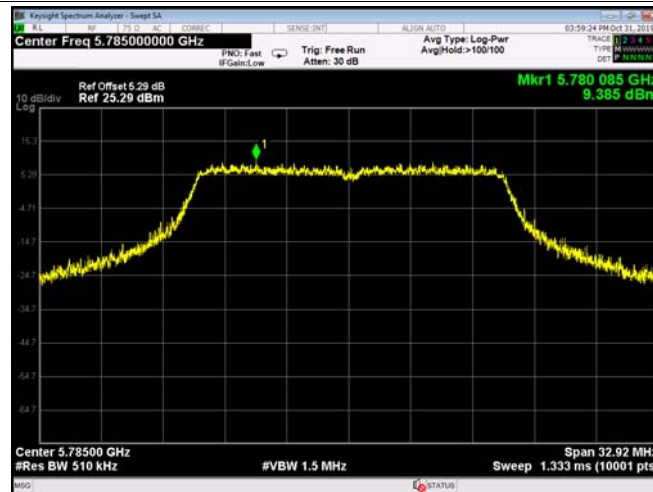


Antenna 1

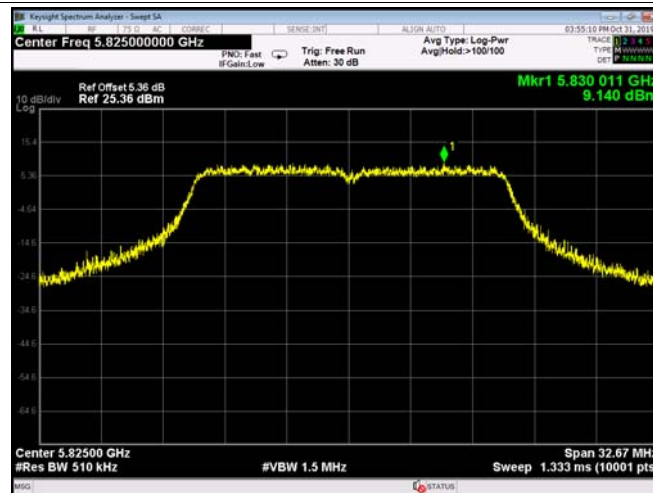
802.11 a 5745 MHz



802.11 a 5785 MHz

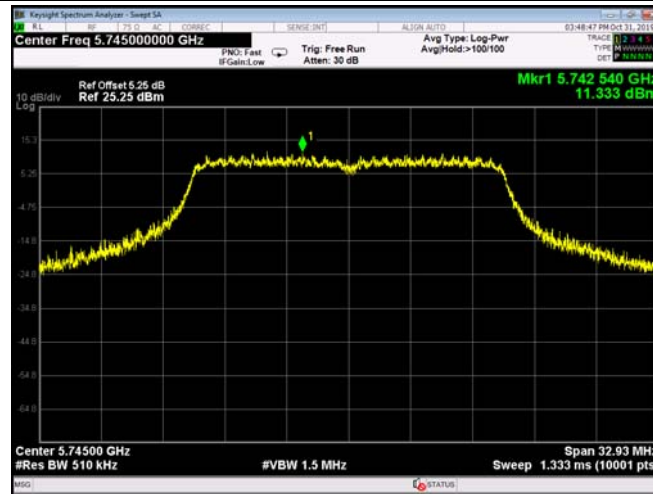


802.11 a 5825 MHz

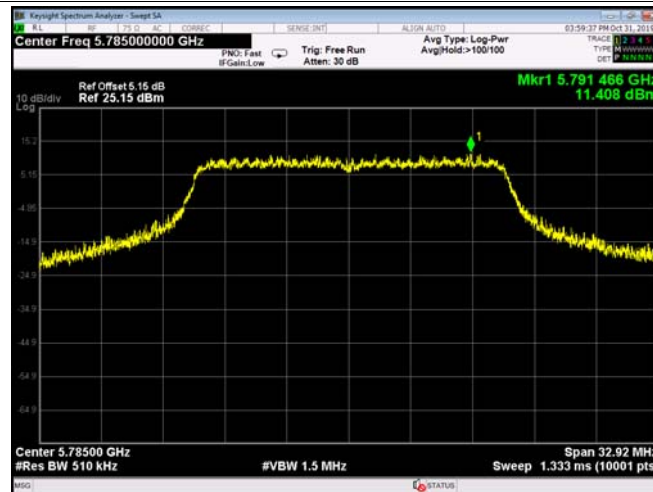


Antenna 2

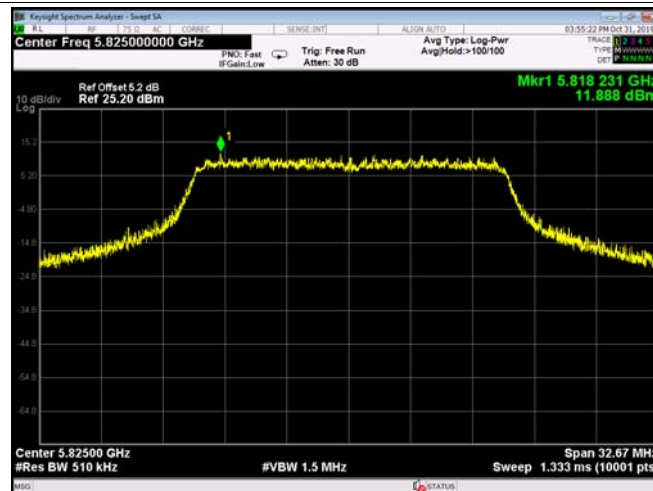
802.11 a 5745 MHz



802.11 a 5785 MHz

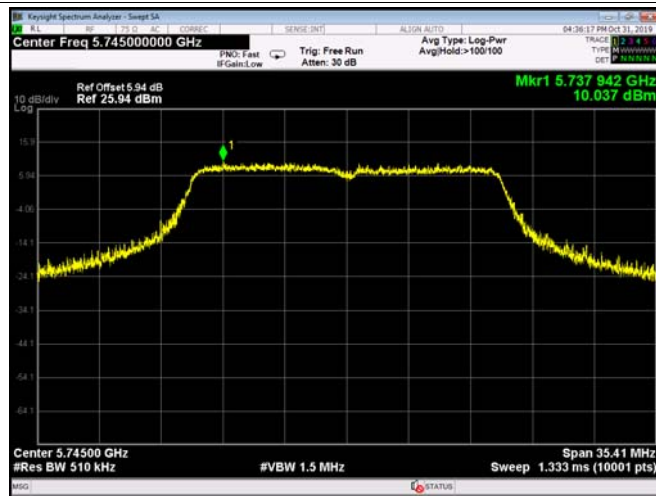


802.11 a 5825 MHz

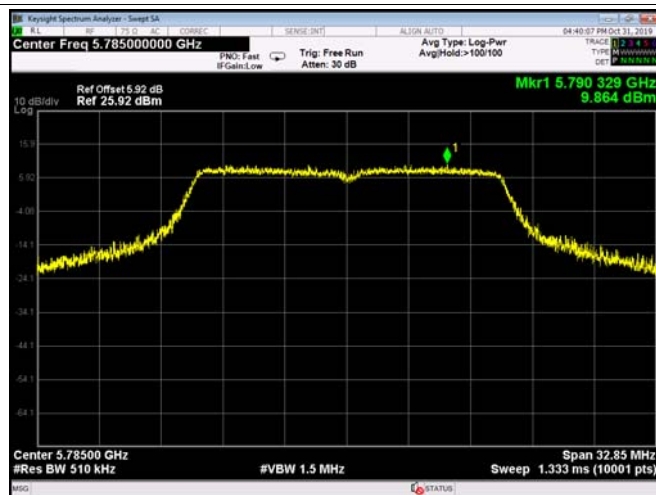


Antenna 0

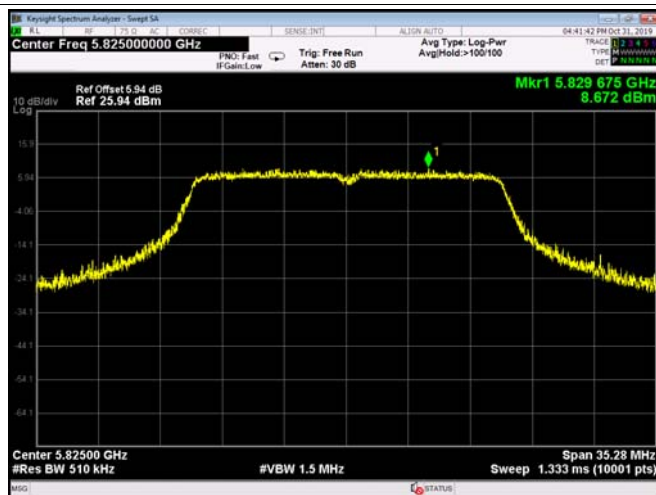
802.11 n(HT20) 5745 MHz



802.11 n(HT20) 5785 MHz

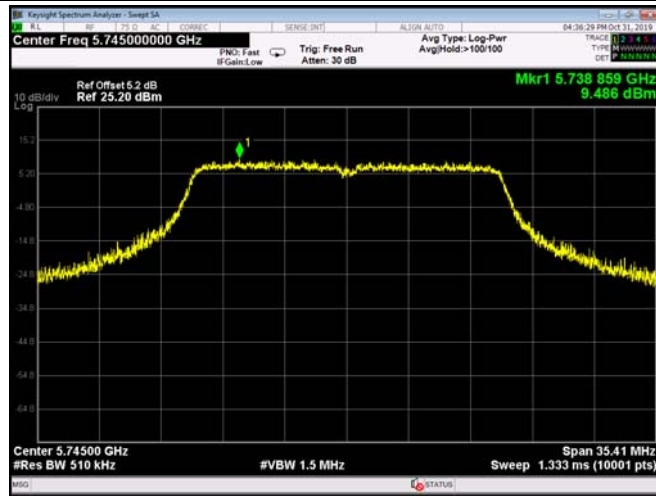


802.11 n(HT20) 5825 MHz

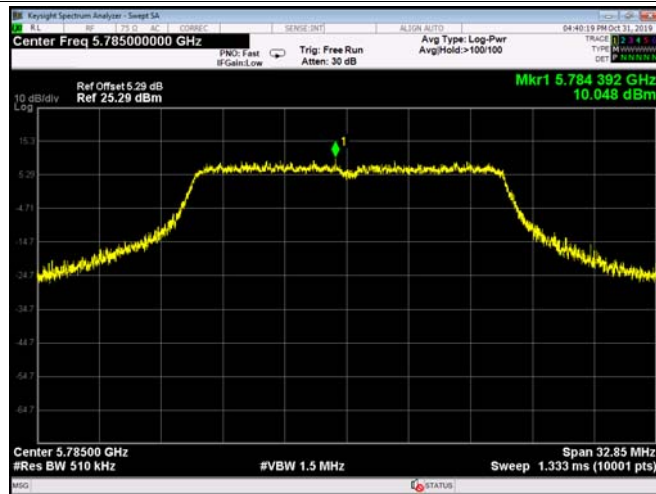


Antenna 1

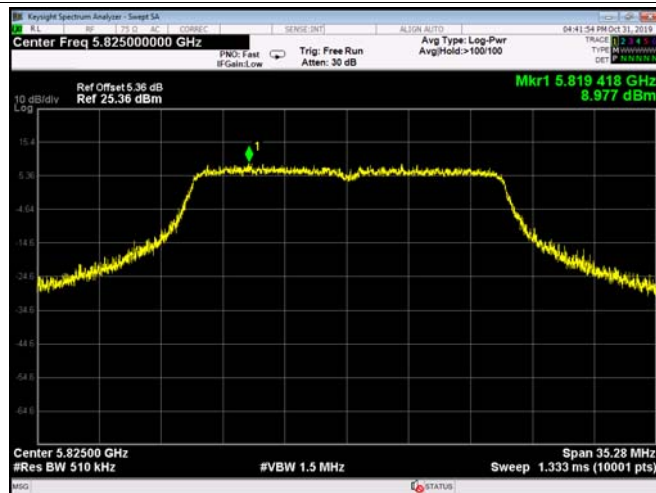
802.11 n(HT20) 5745 MHz



802.11 n(HT20) 5785 MHz

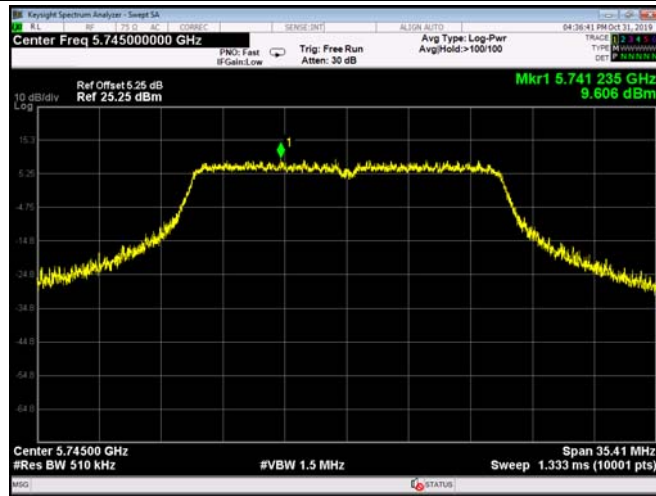


802.11 n(HT20) 5825 MHz

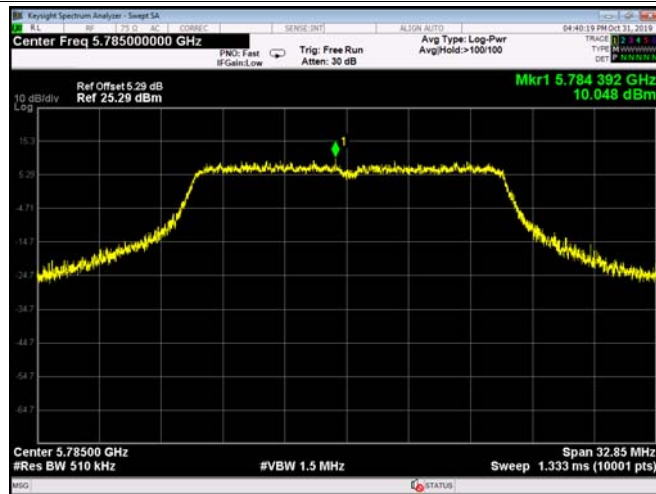


Antenna 2

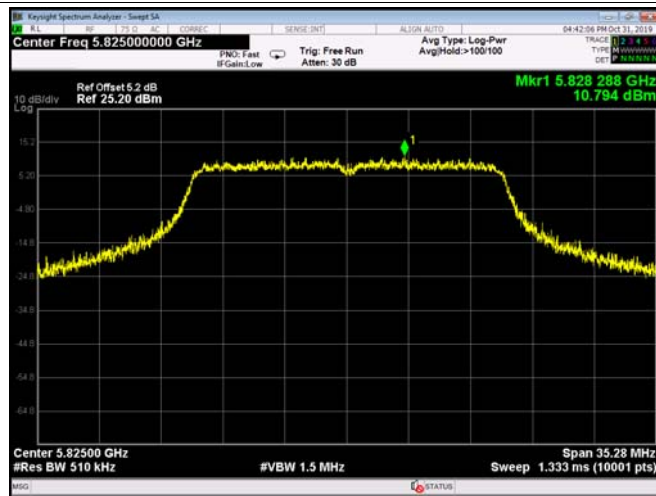
802.11 n(HT20) 5745 MHz



802.11 n(HT20) 5785 MHz

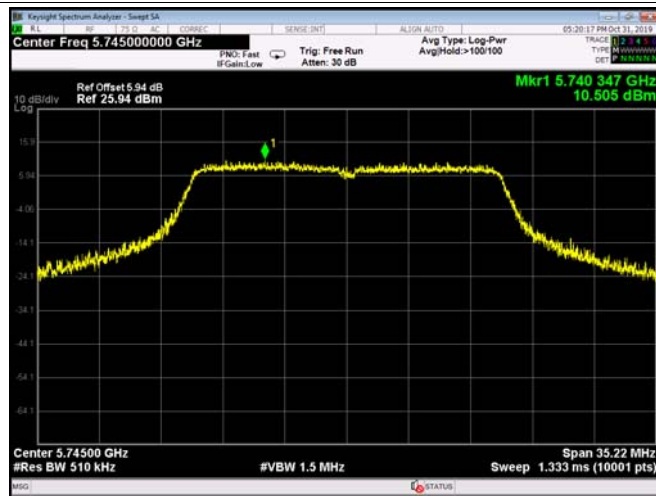


802.11 n(HT20) 5825 MHz

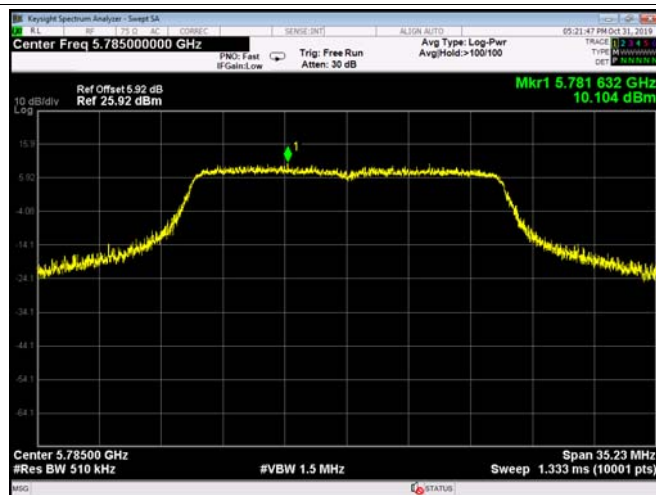


Antenna 0

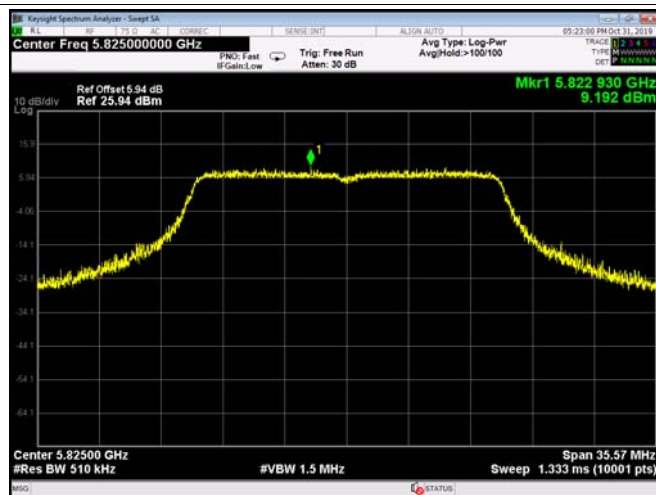
802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 5785 MHz

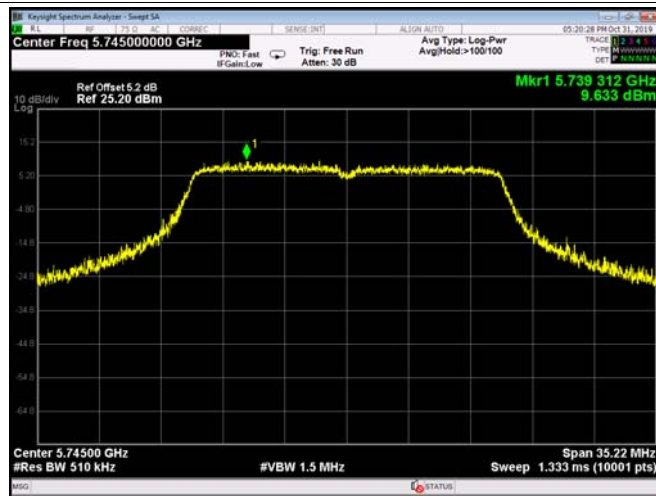


802.11 ac(VHT20) 5825 MHz

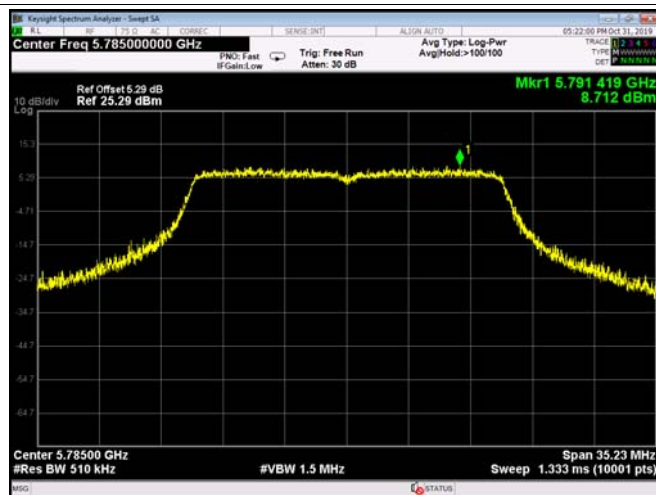


Antenna 1

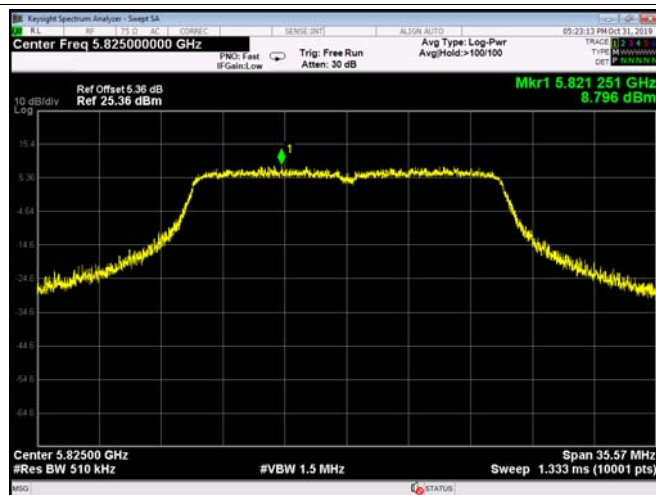
802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 5785 MHz

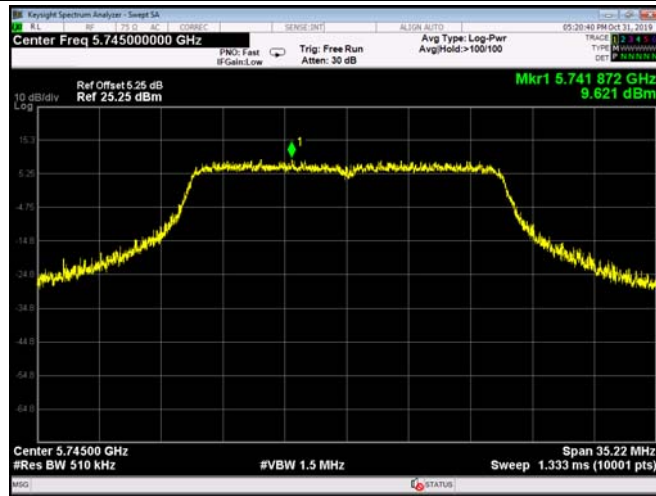


802.11 ac(VHT20) 5825 MHz

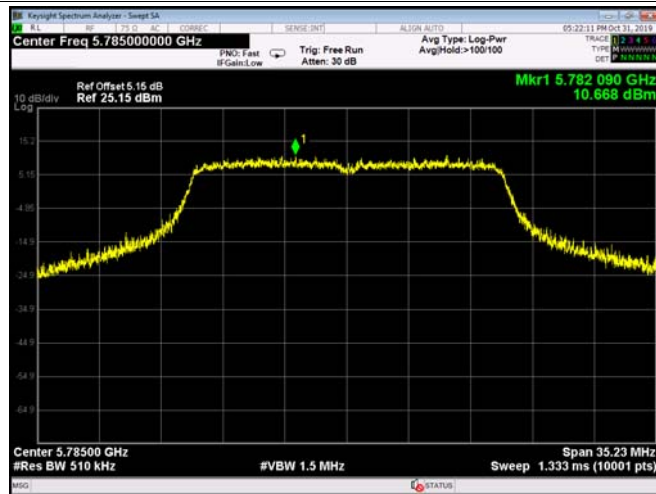


Antenna 2

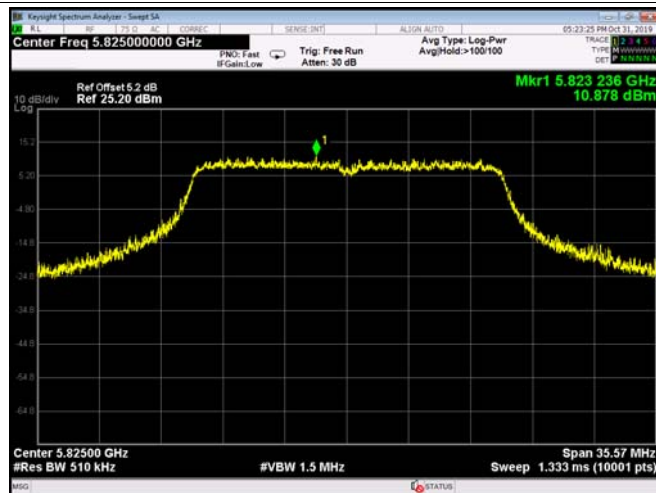
802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 5785 MHz

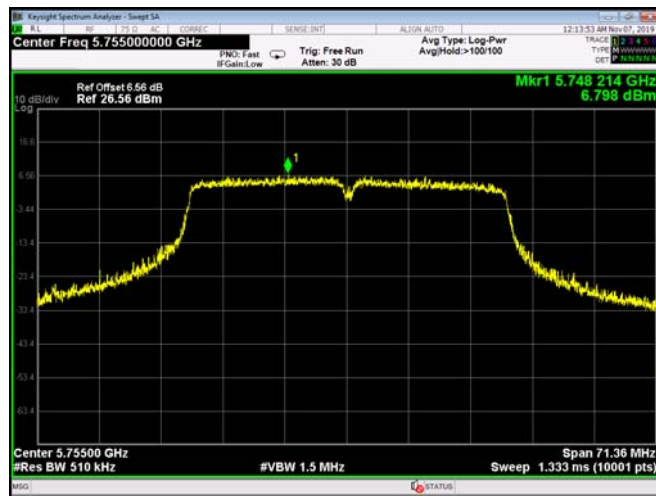


802.11 ac(VHT20) 5825 MHz



Antenna 0

802.11 n(HT40) 5755 MHz

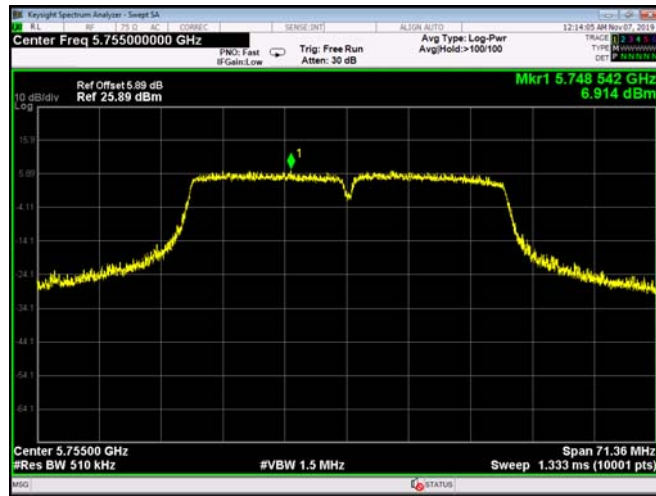


802.11 n(HT40) 5795 MHz

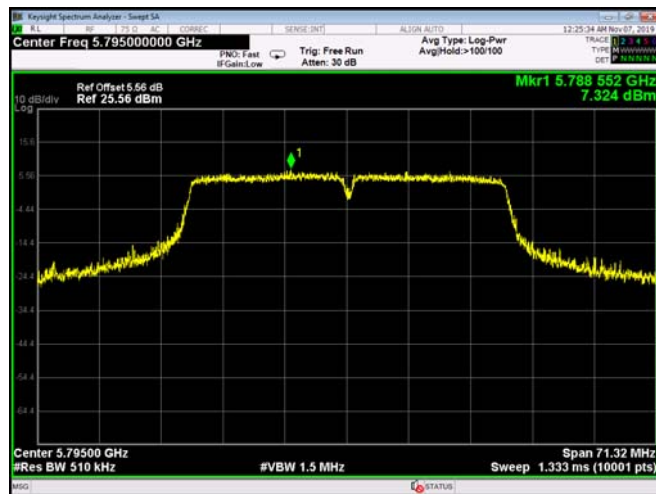


Antenna 1

802.11 n(HT40) 5755 MHz

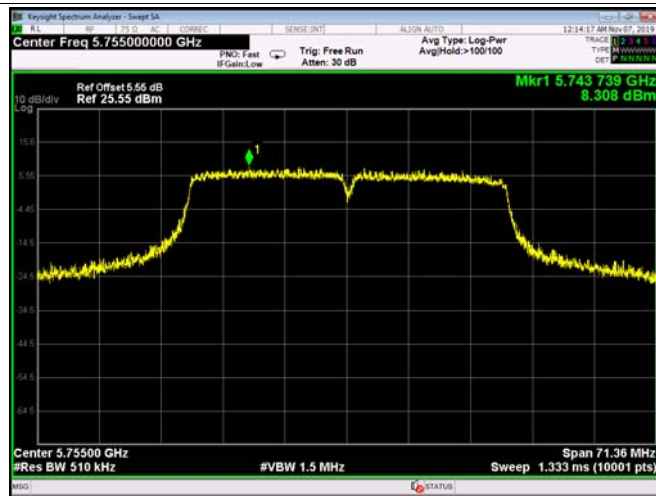


802.11 n(HT40) 5795 MHz

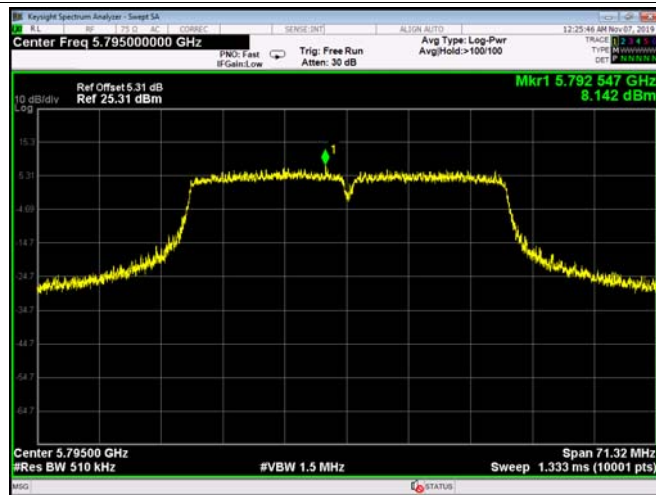


Antenna 2

802.11 n(HT40) 5755 MHz



802.11 n(HT40) 5795 MHz

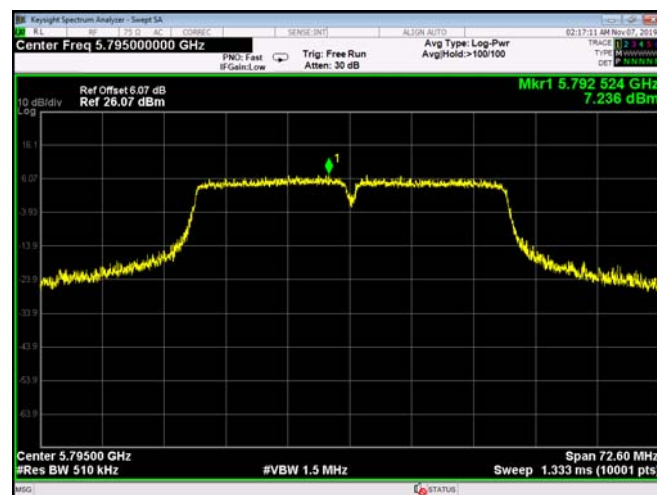


Antenna 0

802.11 ac(VHT40) 5755 MHz

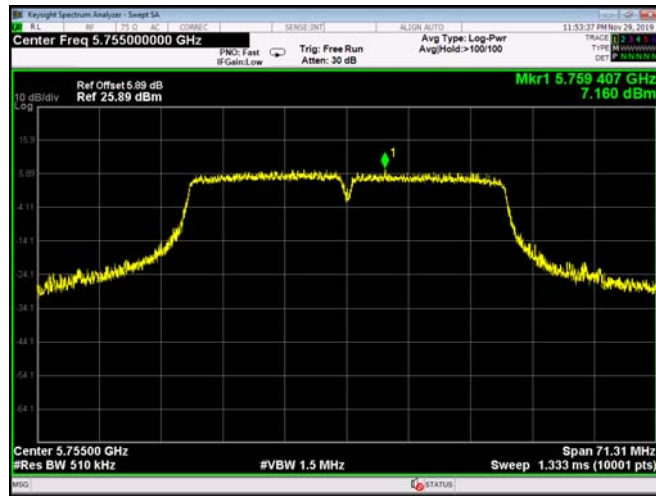


802.11 ac(VHT40) 5795 MHz

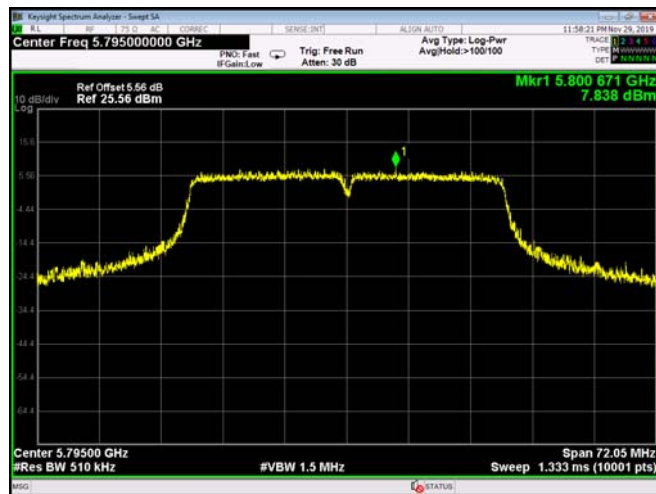


Antenna 1

802.11 ac(VHT40) 5755 MHz

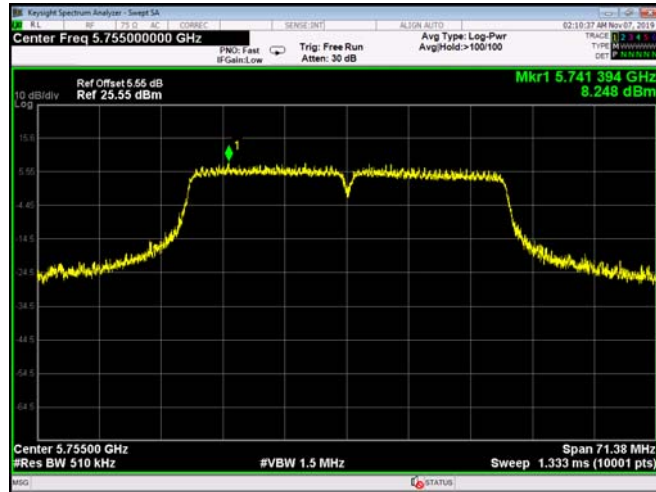


802.11 ac(VHT40) 5795 MHz

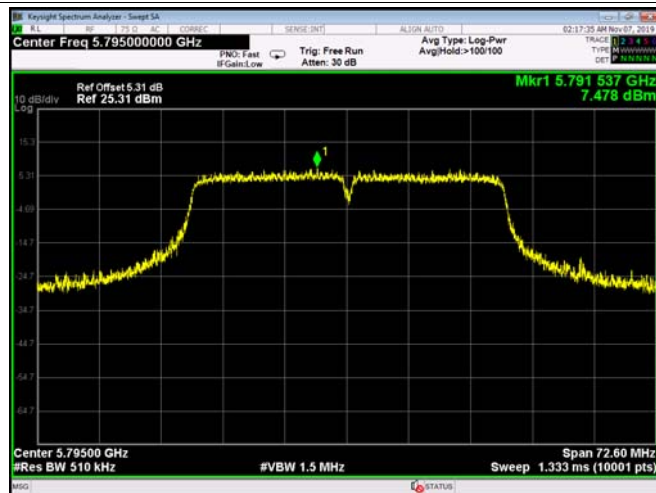


Antenna 2

802.11 ac(VHT40) 5755 MHz

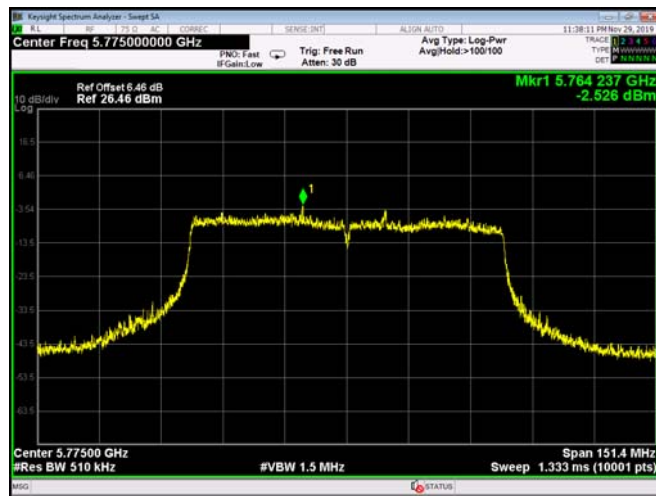


802.11 ac(VHT40) 5795 MHz

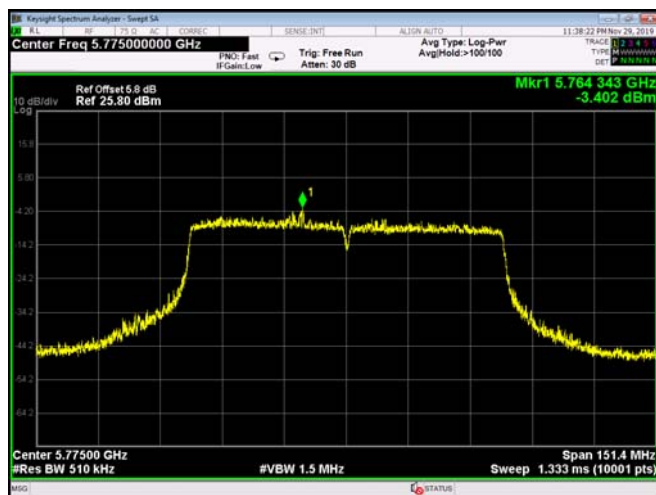


802.11 ac(VHT80) 5775 MHz

Antenna 0



Antenna 1



Antenna 2



Attachment G----Frequency Stability Measurement Data

Only show the worst case 802.11 a Mode 5180MHz.

801.11a U-NII-1: 5180 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
132	5180.0500
120	5180.0400
118	5180.0400
Limit Range (MHz)	5150-5250
Result	PASS
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5180.0100
10	5180.0300
20	5180.0400
30	5180.0300
40	5180.0400
50	5180.0200
Limit Range (MHz)	5150-5250
Result	PASS

Only show the worst case 802.11 a Mode 5745MHz.

801.11a U-NII-3: 5745 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
132	5745.0800
120	5745.1000
118	5744.0600
Limit Range (MHz)	5725-5850
Result	PASS
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5745.0500
10	5745.0700
20	5745.1000
30	5745.0600
40	5745.0800
50	5745.1000
Limit Range (MHz)	5725-5850
Result	PASS

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