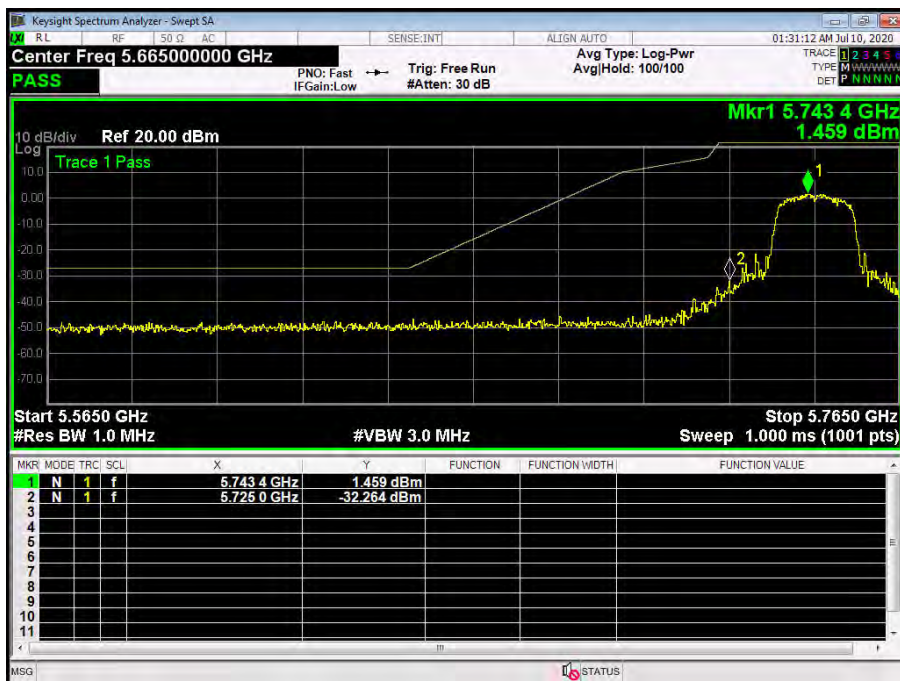
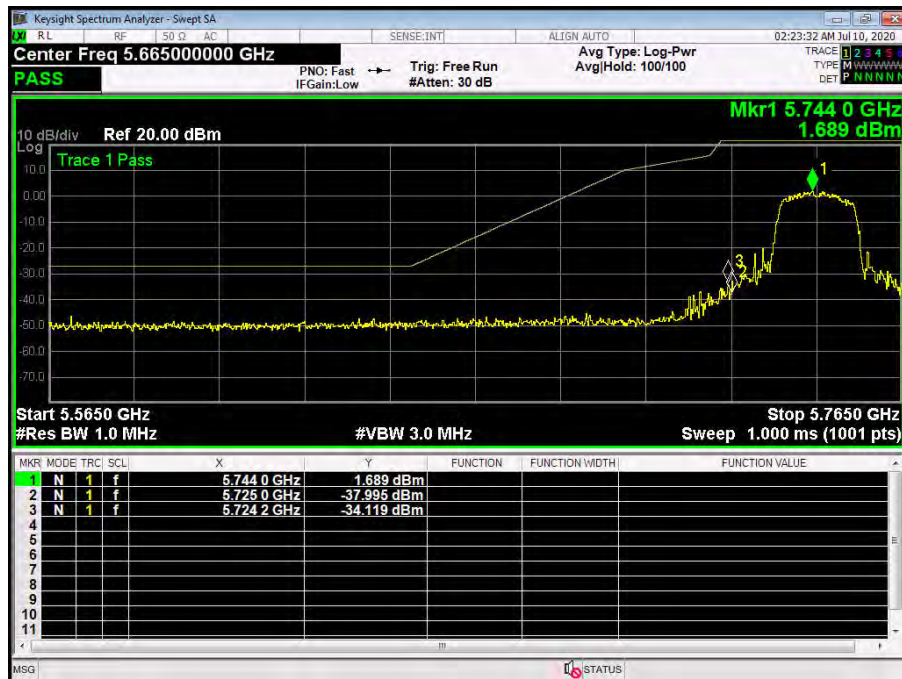


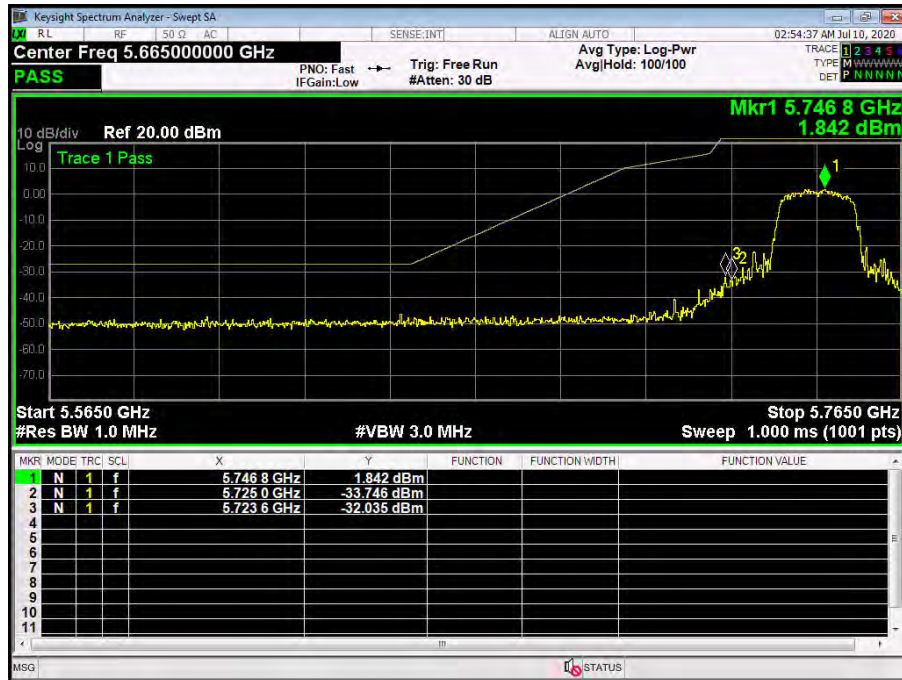
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11a Mode 5745MHz/5825MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT20) Mode 5745MHz/5825MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz/5825MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11 n(HT40) Mode 5755MHz/5795MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT40) Mode 5755MHz/5795MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT80) Mode 5775MHz (U-NII-3)		
Remark:	The EUT is programmed in continuously transmitting mode		

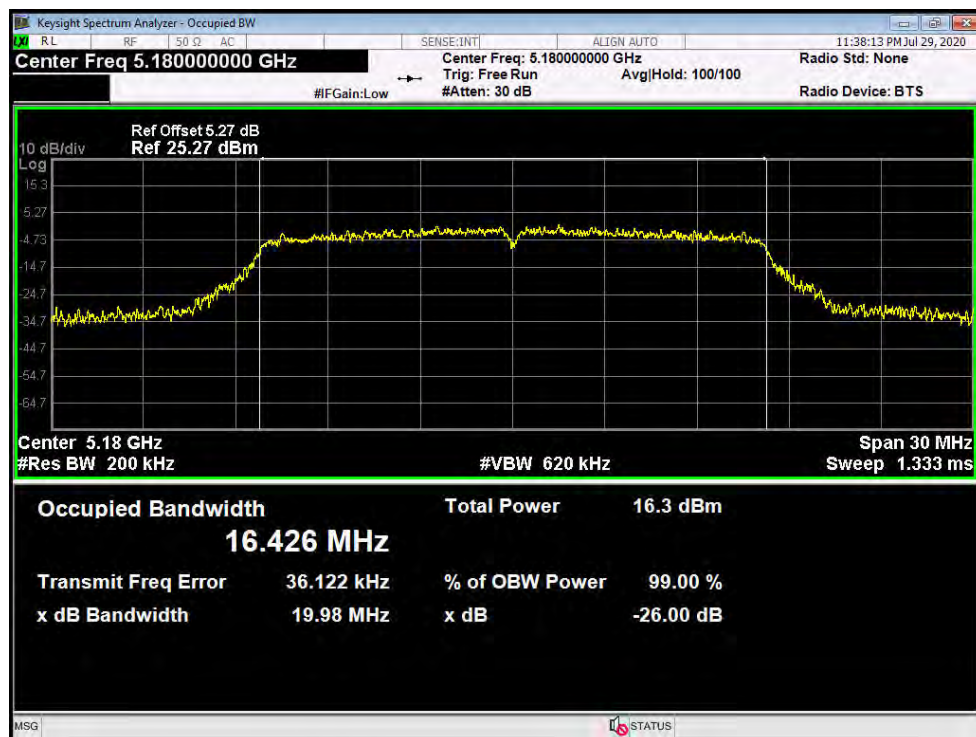


Attachment D--Bandwidth Test Data

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11a Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	19.98	16.426
40	5200	19.70	16.404
48	5240	19.68	16.454

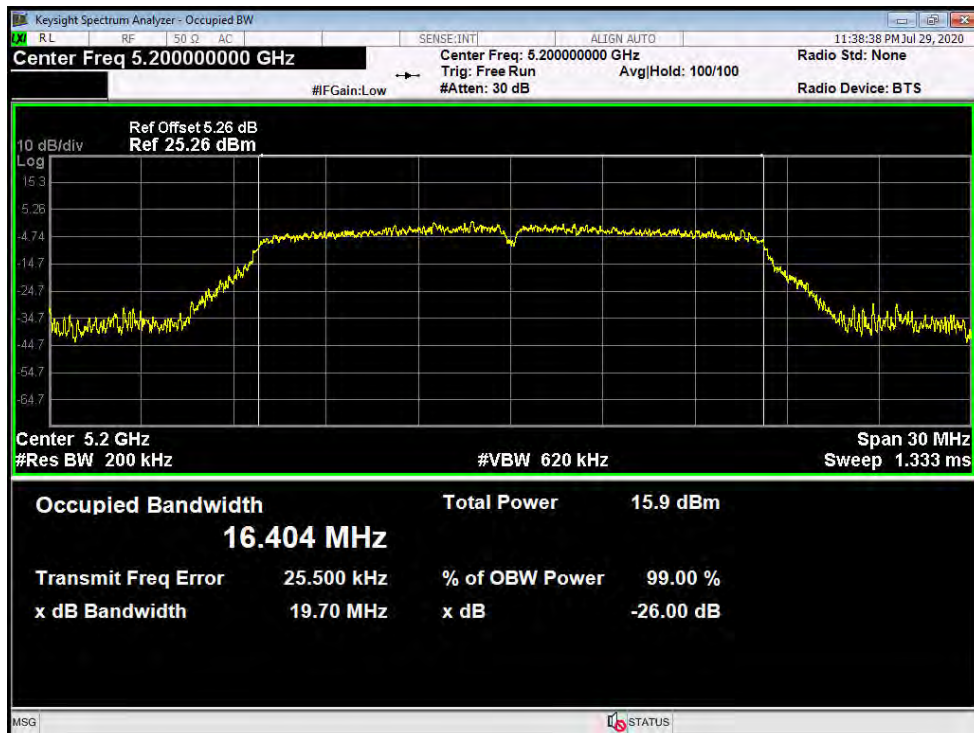
802.11a Mode

5180 MHz



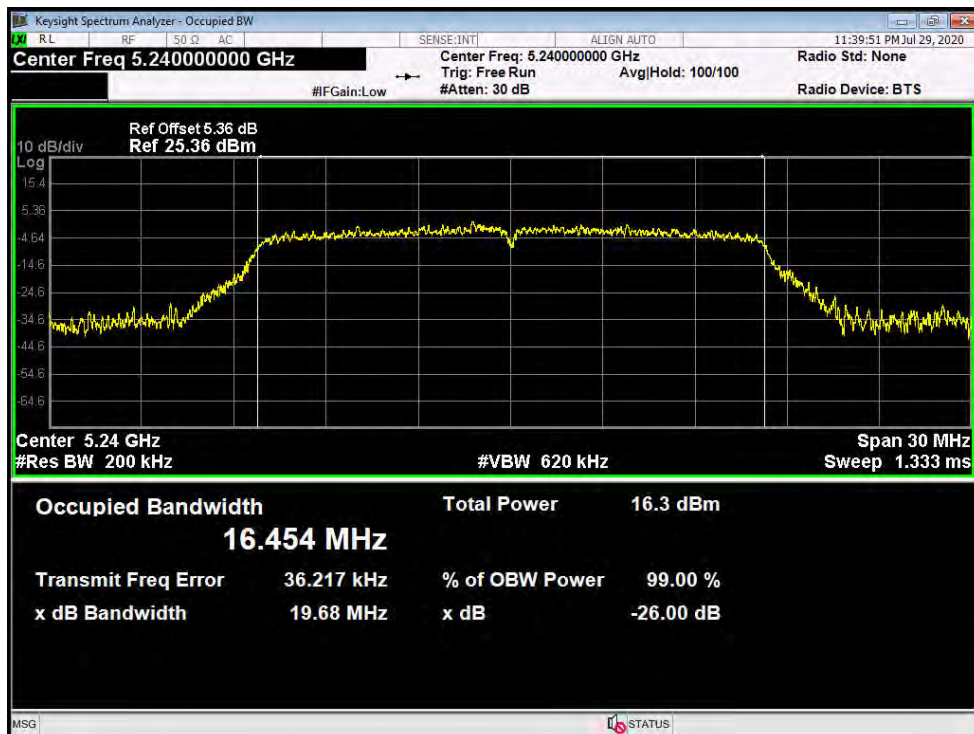
802.11a Mode

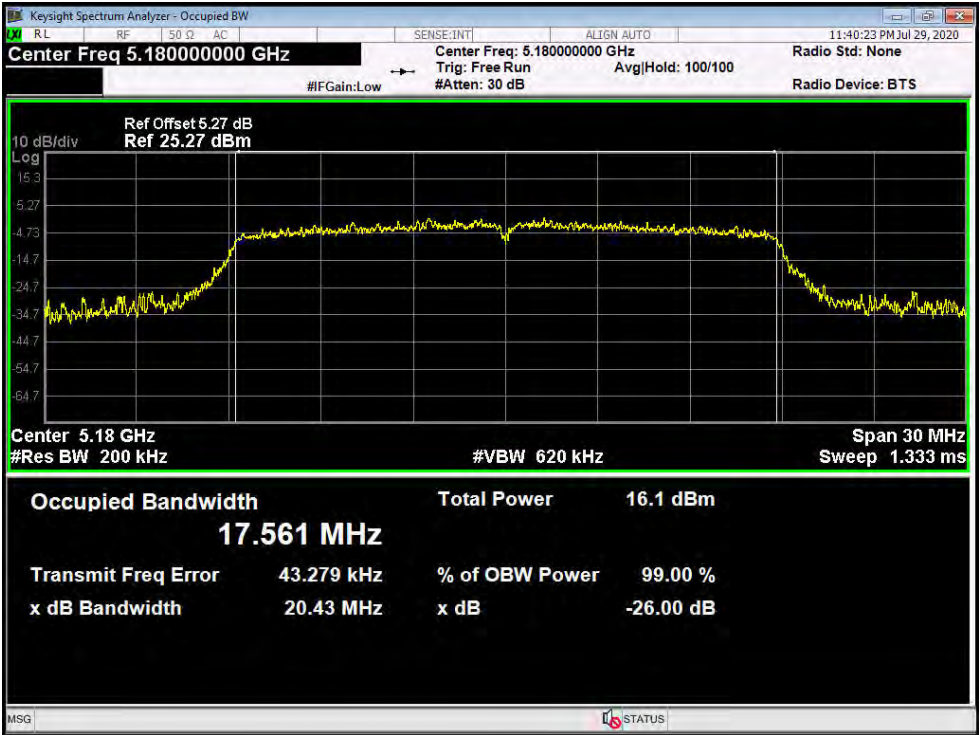
5200 MHz



802.11a Mode

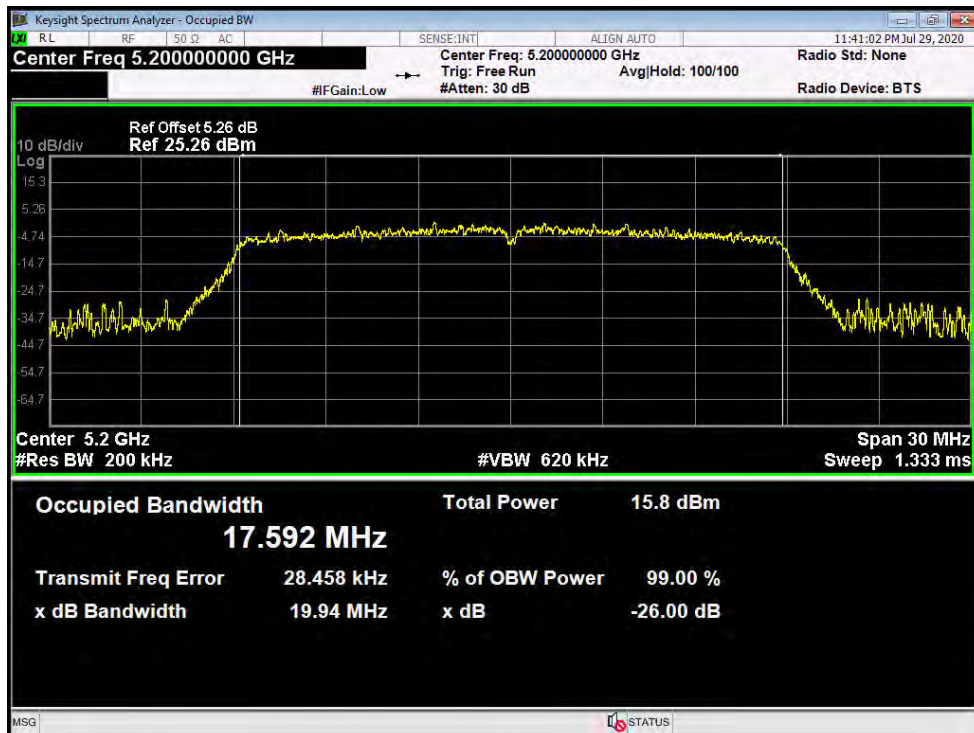
5240 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT20) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	20.43	17.561
40	5200	19.94	17.592
48	5240	20.43	17.556
802.11n(HT20) Mode			
5180 MHz			
 The screenshot shows the Keysight Spectrum Analyzer interface. The main display shows a signal at 5.18 GHz with a 17.561 MHz occupied bandwidth. The signal is centered at 5.180000000 GHz. The reference level is 25.27 dBm. The span is 30 MHz. The resolution bandwidth is 200 kHz. The video bandwidth is 620 kHz. The sweep time is 1.333 ms. The signal is identified as a Transmit Freq Error of 43.279 kHz. The percentage of OBW power is 99.00%. The x dB bandwidth is 20.43 MHz. The x dB is -26.00 dB.			

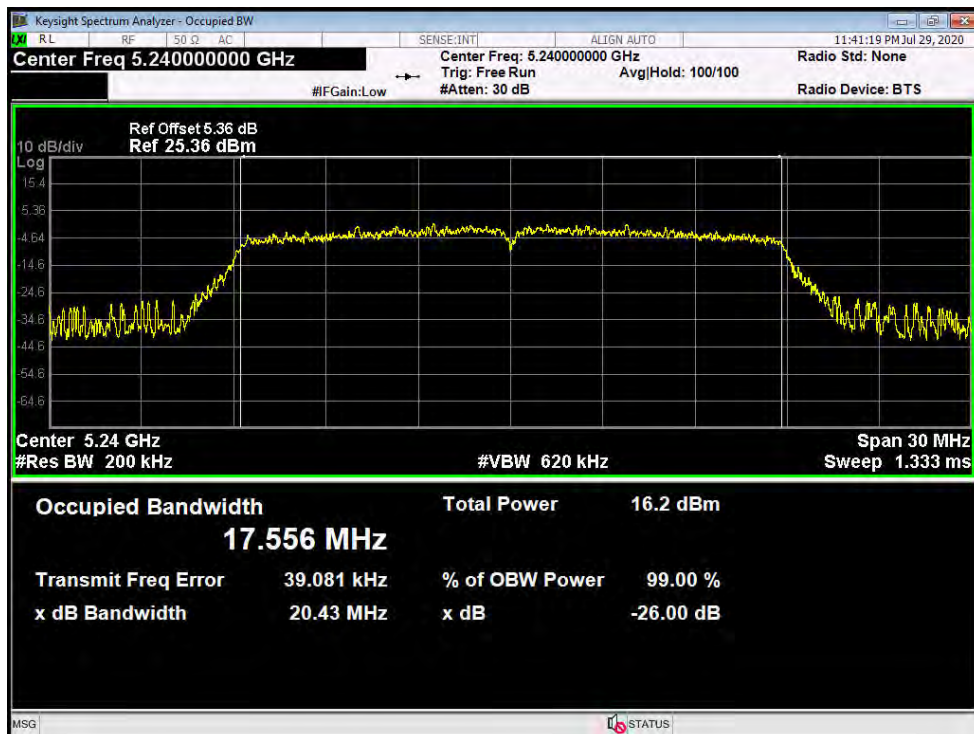
802.11n(HT20) Mode

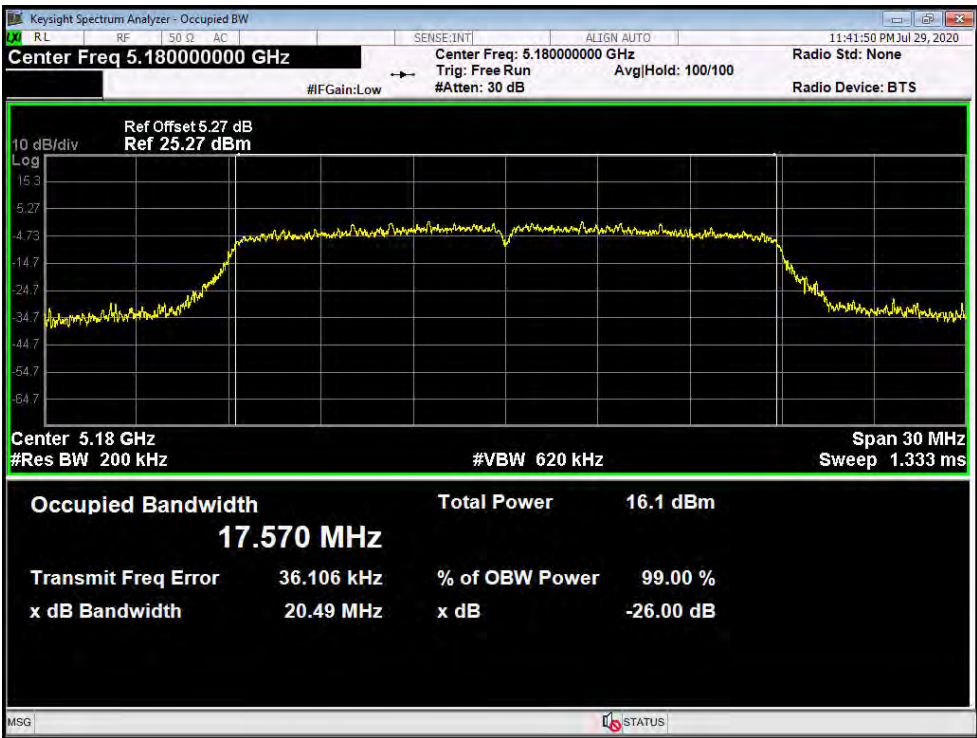
5200 MHz



802.11n(HT20) Mode

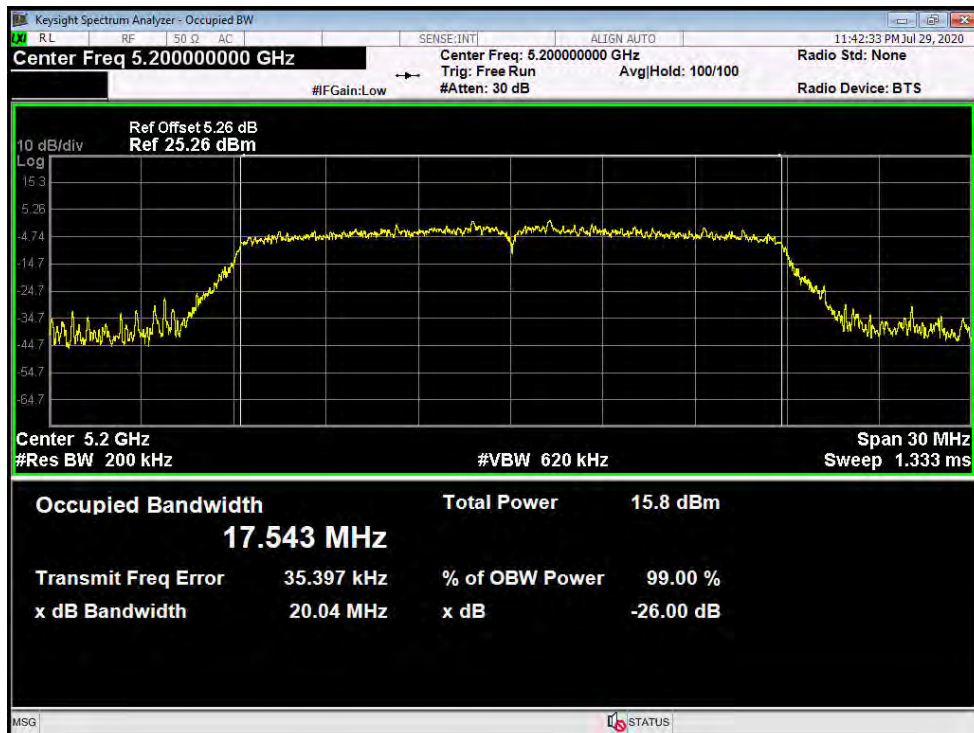
5240 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	20.49	17.570
40	5200	20.04	17.543
48	5240	20.09	17.559
802.11ac(VHT20) Mode			
5180 MHz			
			

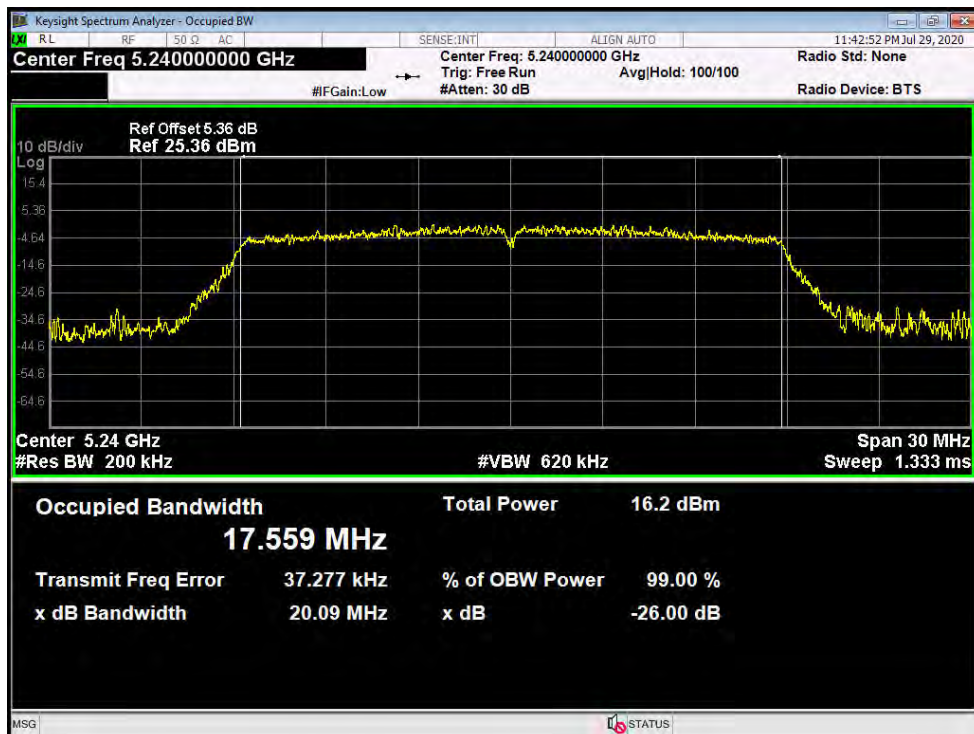
802.11ac(VHT20) Mode

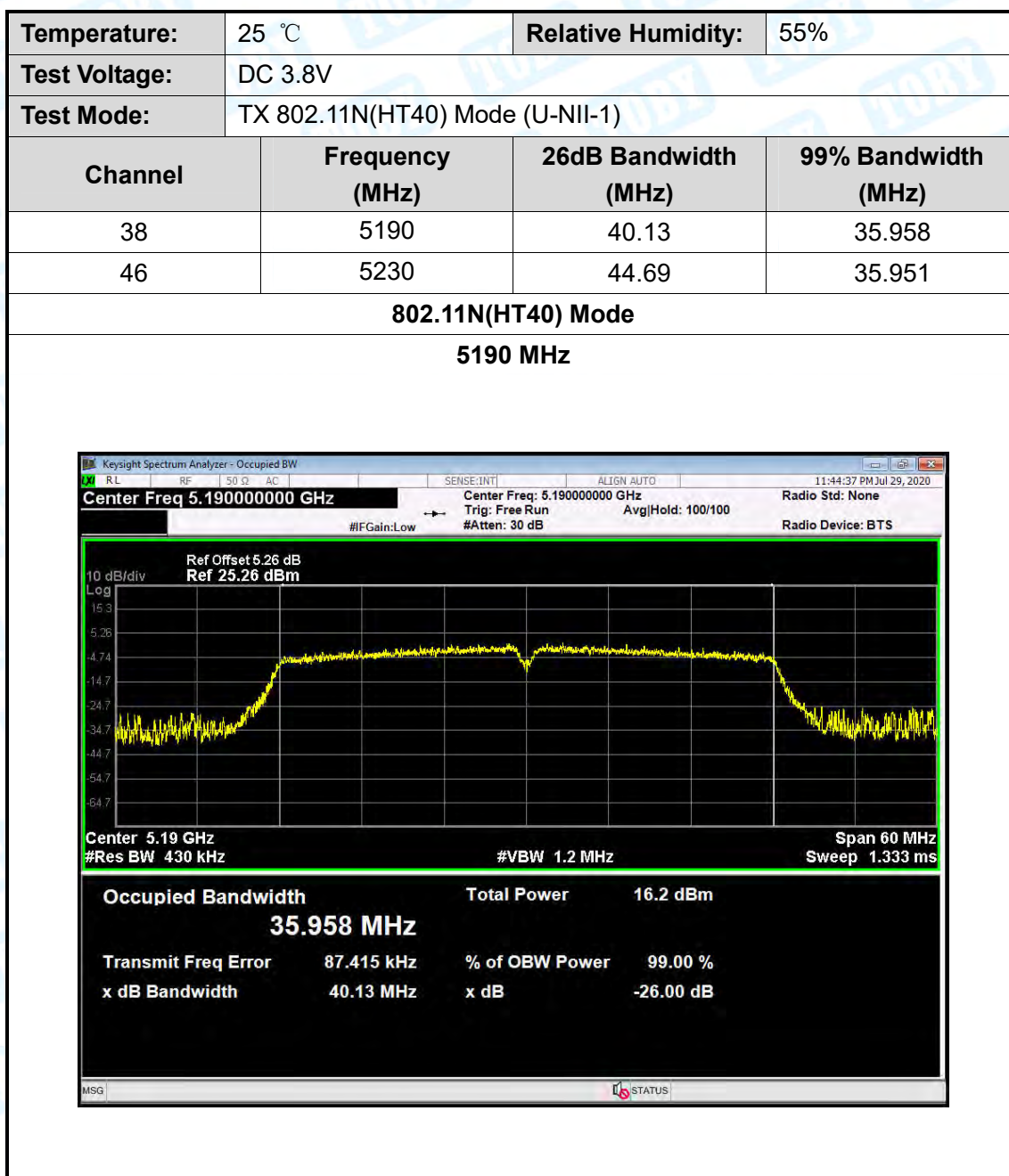
5200 MHz



802.11ac(VHT20) Mode

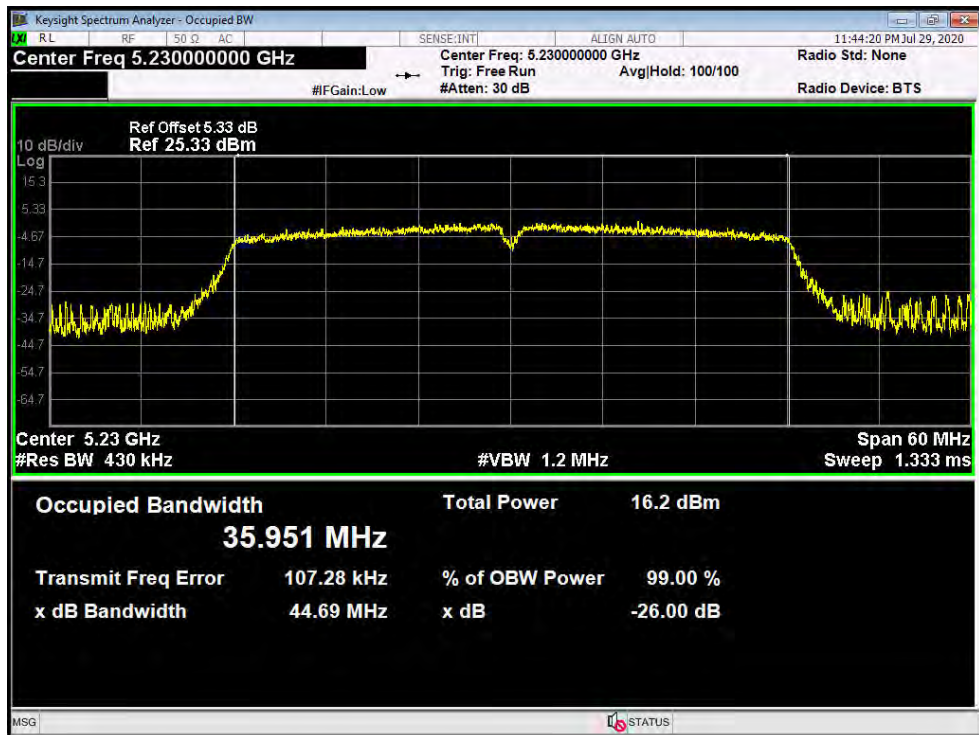
5240 MHz

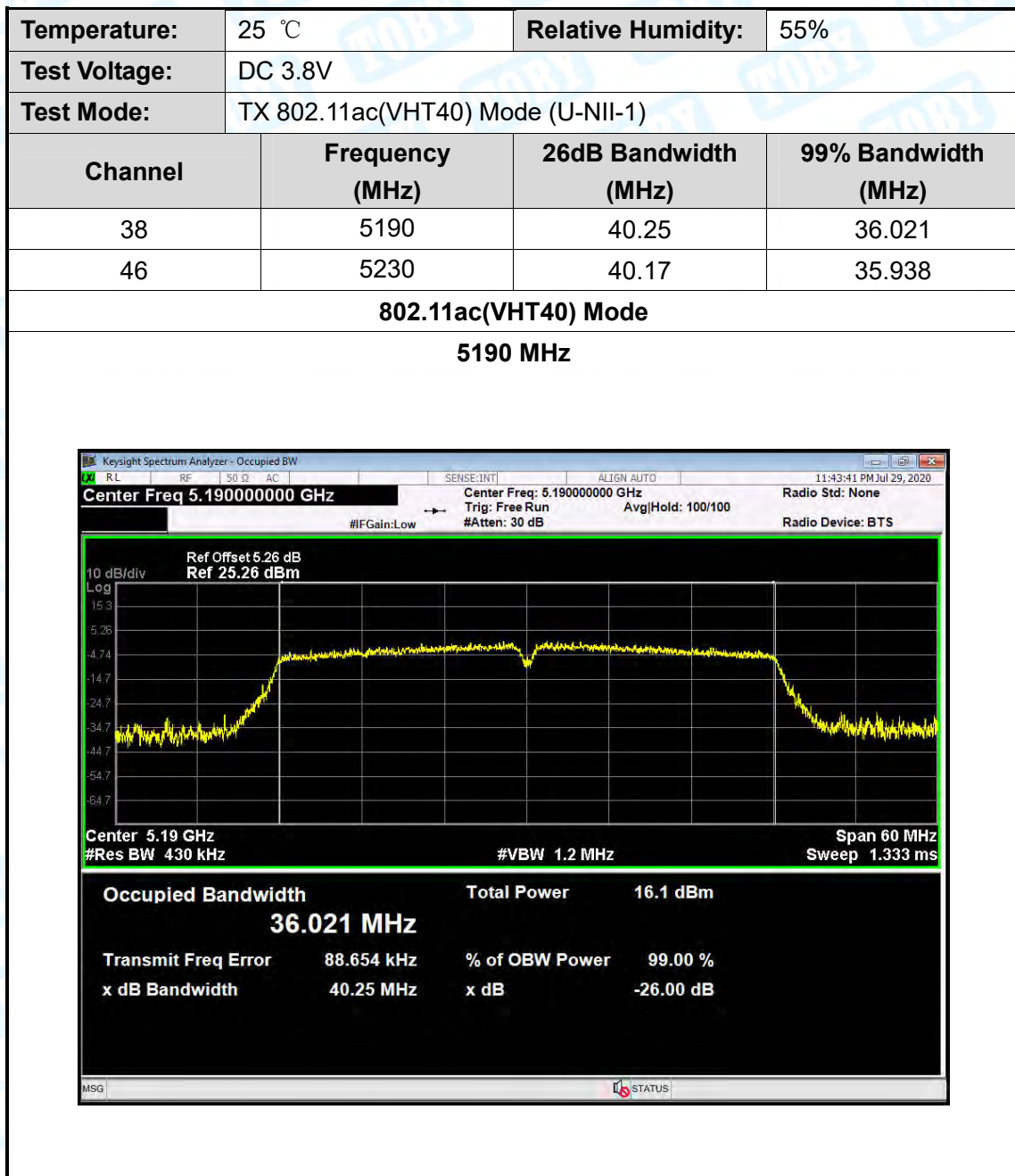




802.11N(HT40) Mode

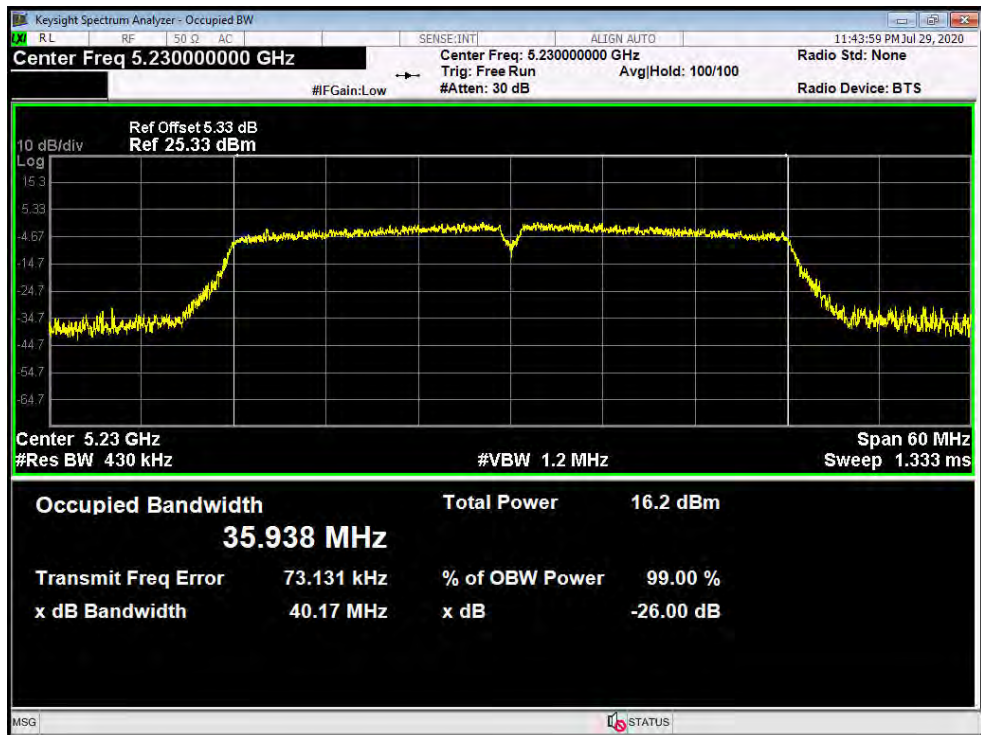
5230 MHz

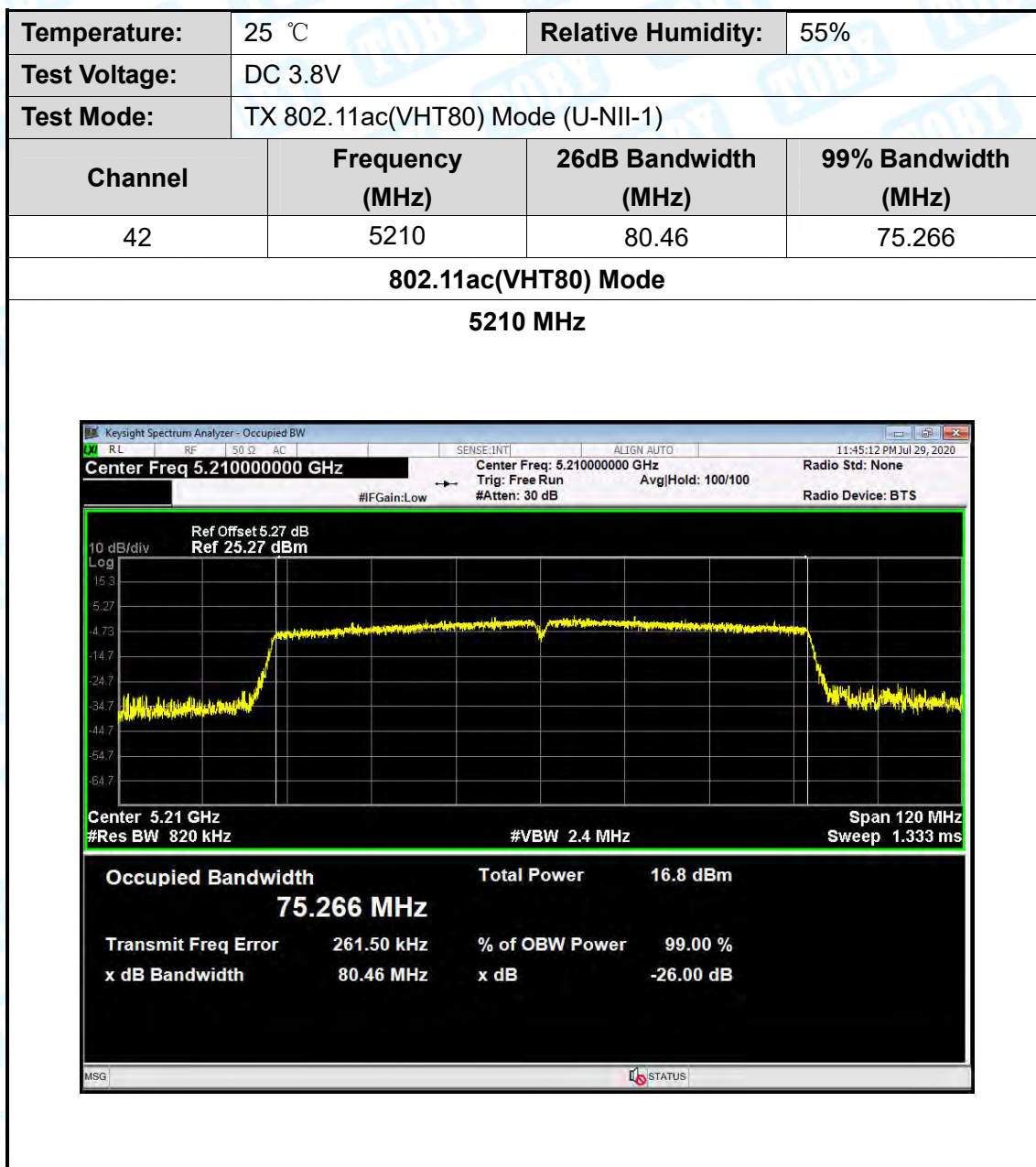


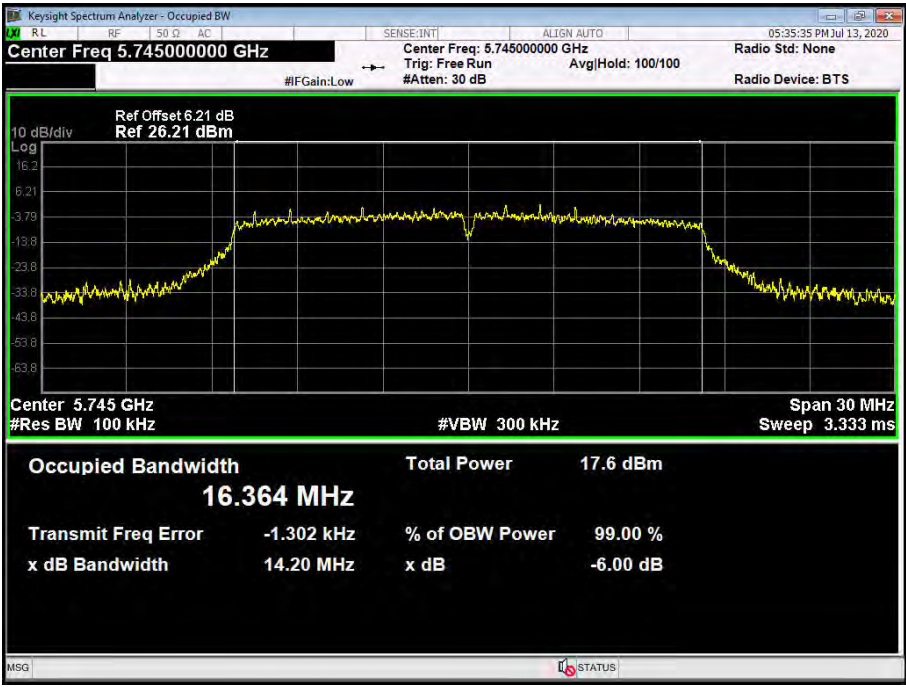


802.11ac(VHT40) Mode

5230 MHz

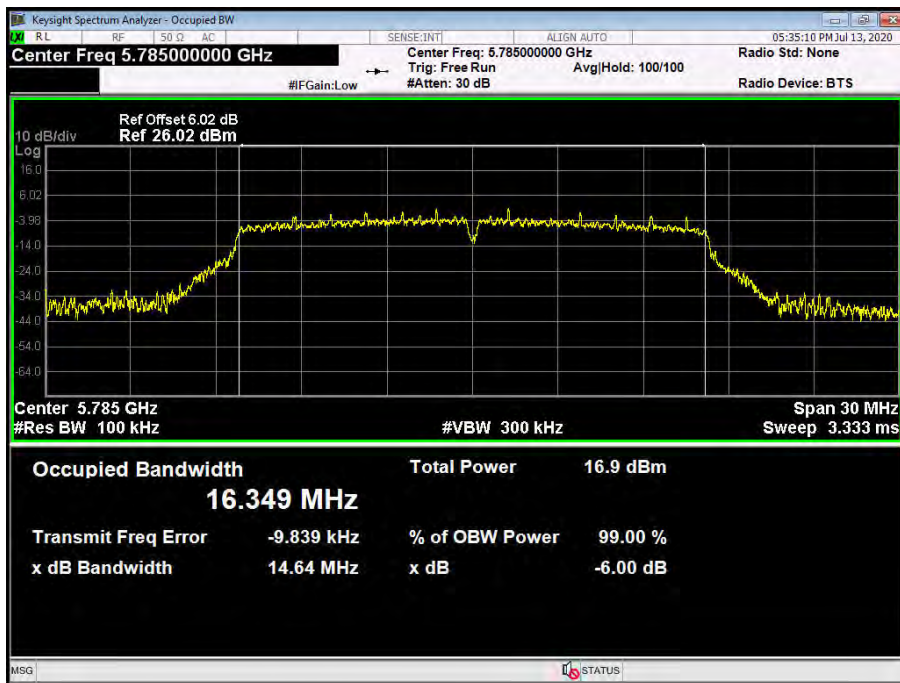




Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11a Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	14.20	16.364
157	5785	14.64	16.349
165	5825	15.13	16.374
802.11a Mode			
5745 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.745000000 GHz Center Freq: 5.745000000 GHz Trig: Free Run #Atten: 30 dB Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 6.21 dB Ref 26.21 dBm 10 dB/div Log Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 3.333 ms Occupied Bandwidth 16.364 MHz Total Power 17.6 dBm Transmit Freq Error -1.302 kHz % of OBW Power 99.00 % x dB Bandwidth 14.20 MHz x dB -6.00 dB			

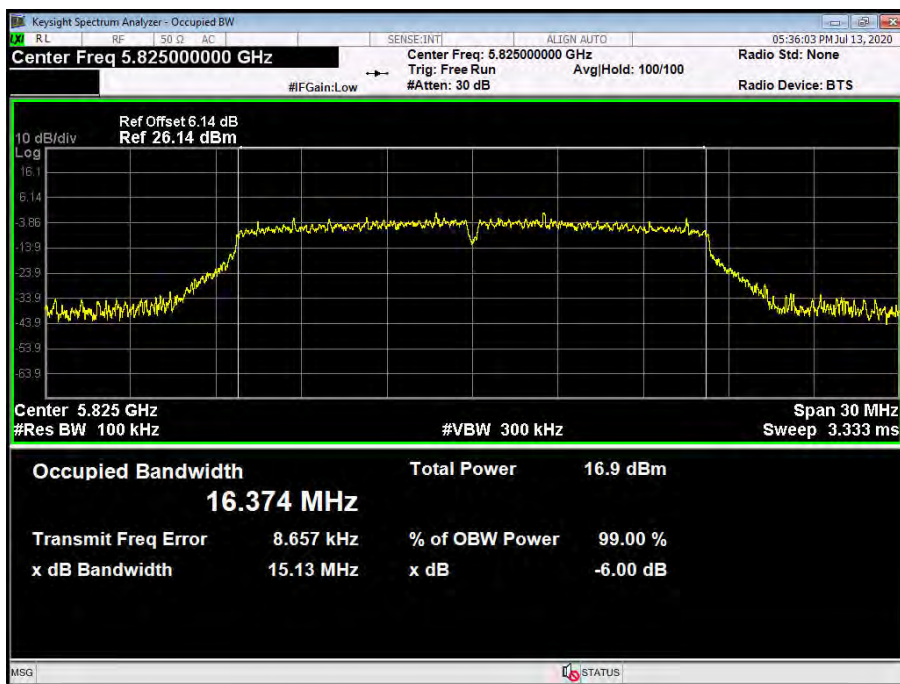
802.11a Mode

5785 MHz



802.11a Mode

5825 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	15.08	17.562
157	5785	15.06	17.534
165	5825	15.03	17.536

802.11n(HT20) Mode

5745 MHz

Occupied Bandwidth
17.562 MHz

Total Power 17.6 dBm

Transmit Freq Error -5.239 kHz

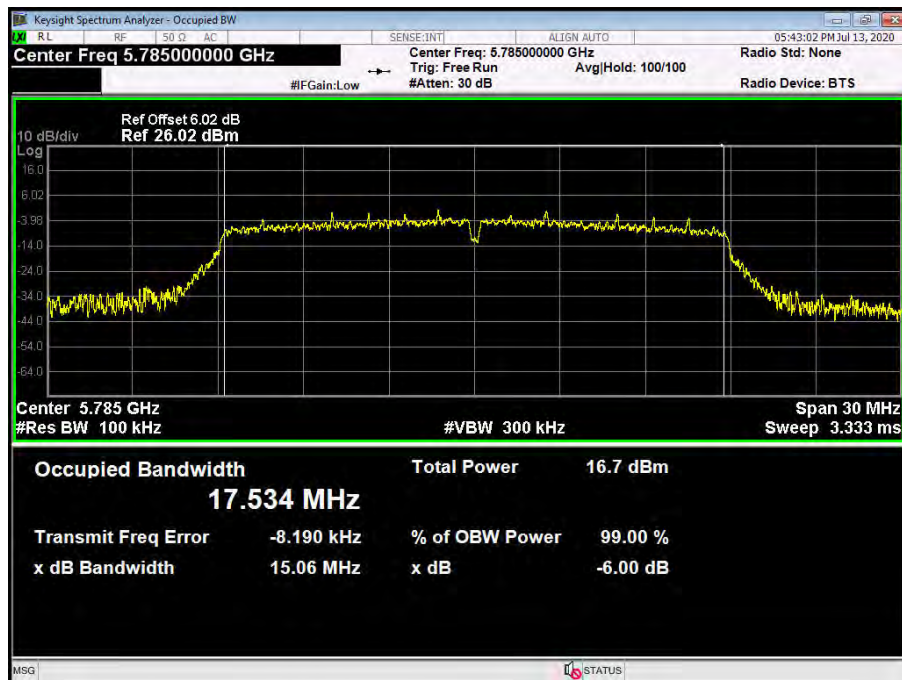
% of OBW Power 99.00 %

x dB Bandwidth 15.08 MHz

x dB -6.00 dB

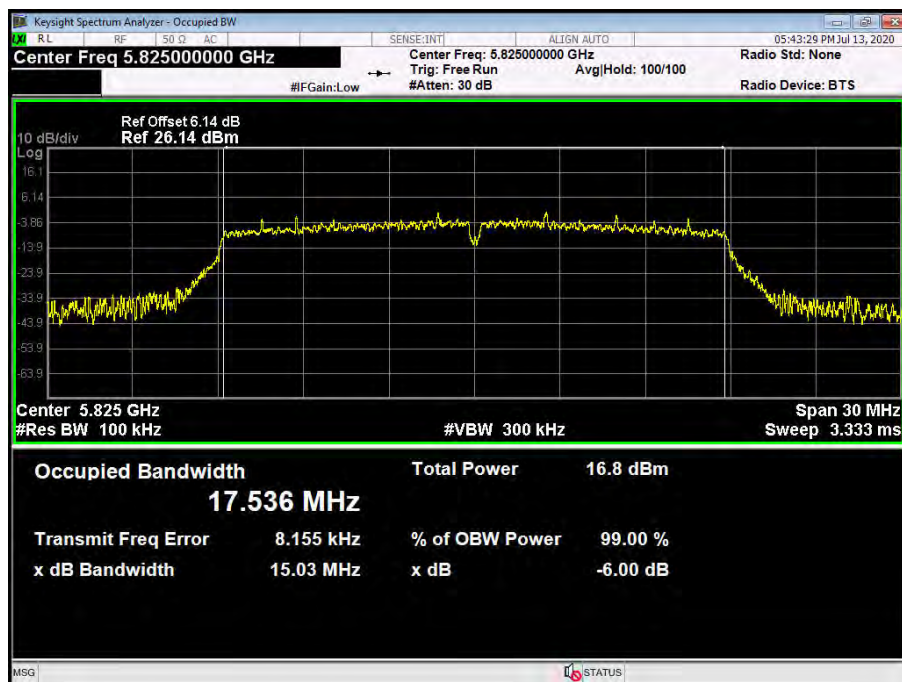
802.11n(HT20) Mode

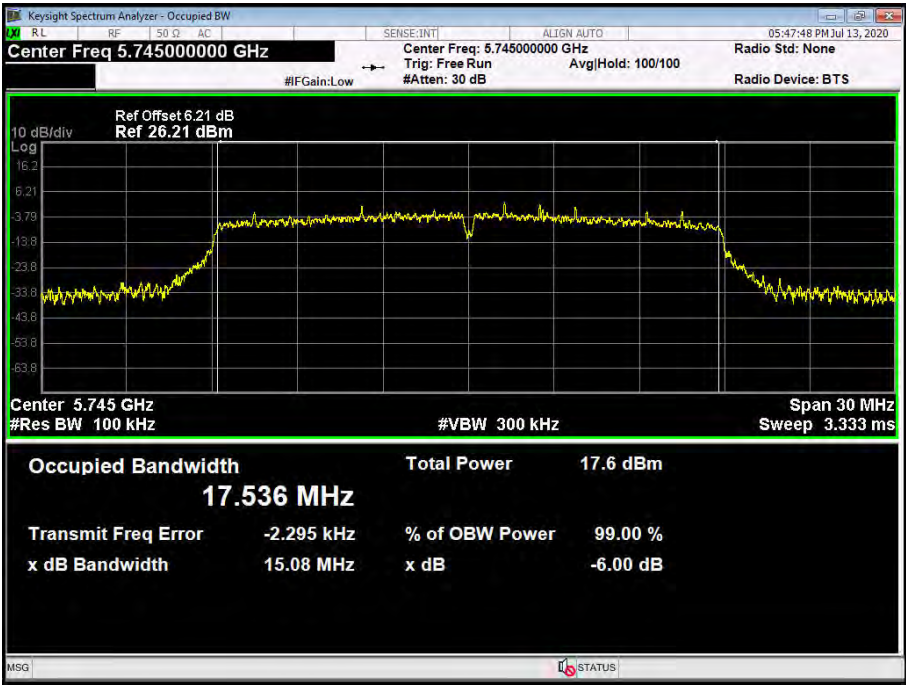
5785 MHz



802.11n(HT20) Mode

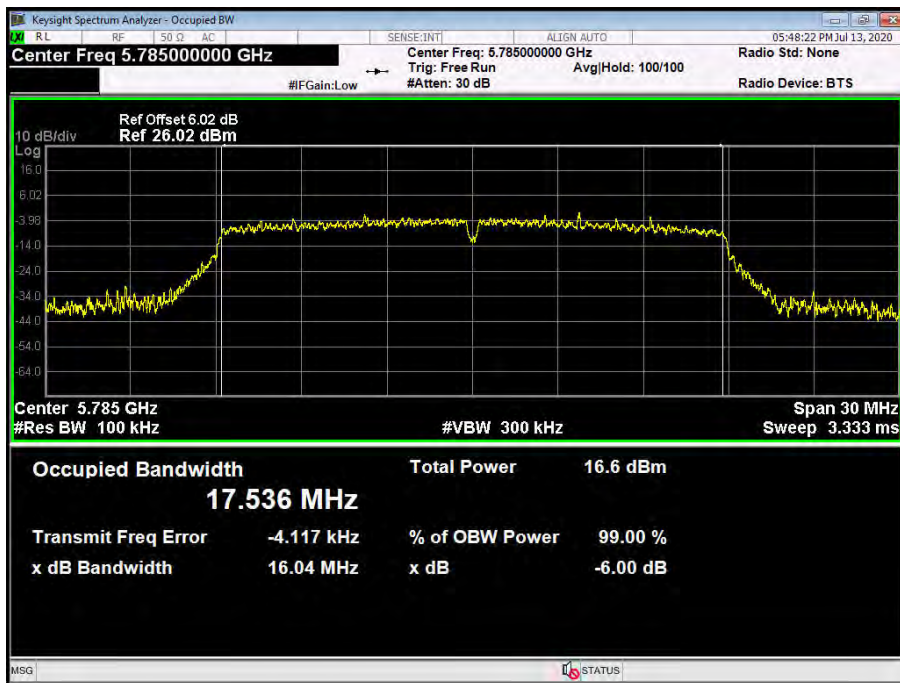
5825 MHz



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	15.08	17.536
157	5785	16.04	17.536
165	5825	15.11	17.535
802.11ac(VHT20) Mode			
5745 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq 5.745000000 GHz Center Freq: 5.745000000 GHz Trig: Free Run #Gain: Low #Atten: 30 dB Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 6.21 dB Ref 26.21 dBm 10 dB/div Log Center 5.745 GHz #Res BW 100 kHz #VBW 300 kHz Span 30 MHz Sweep 3.333 ms Occupied Bandwidth 17.536 MHz Total Power 17.6 dBm Transmit Freq Error -2.295 kHz % of OBW Power 99.00 % x dB Bandwidth 15.08 MHz x dB -6.00 dB			

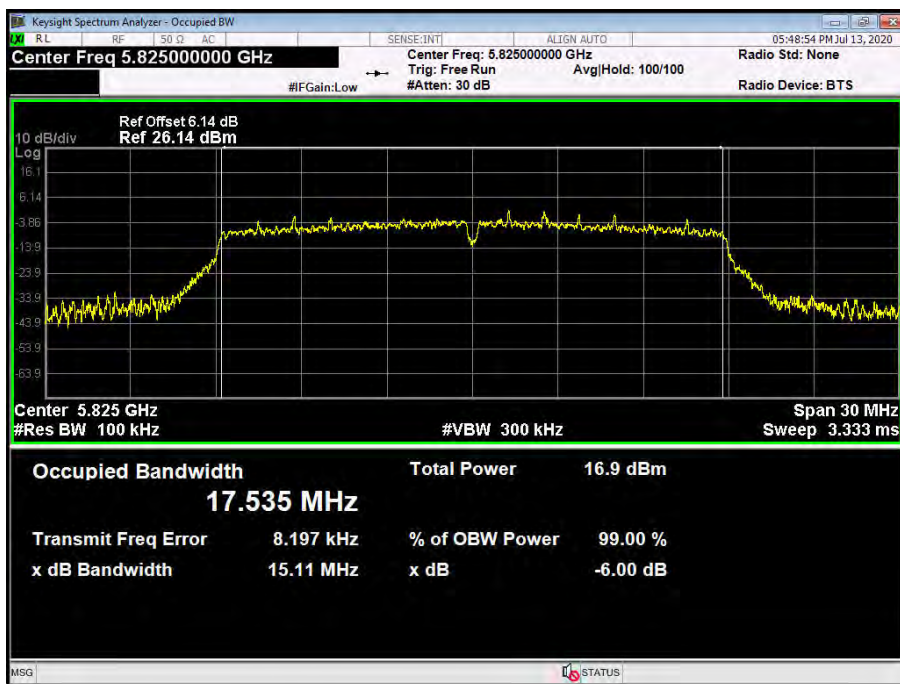
802.11ac(VHT20) Mode

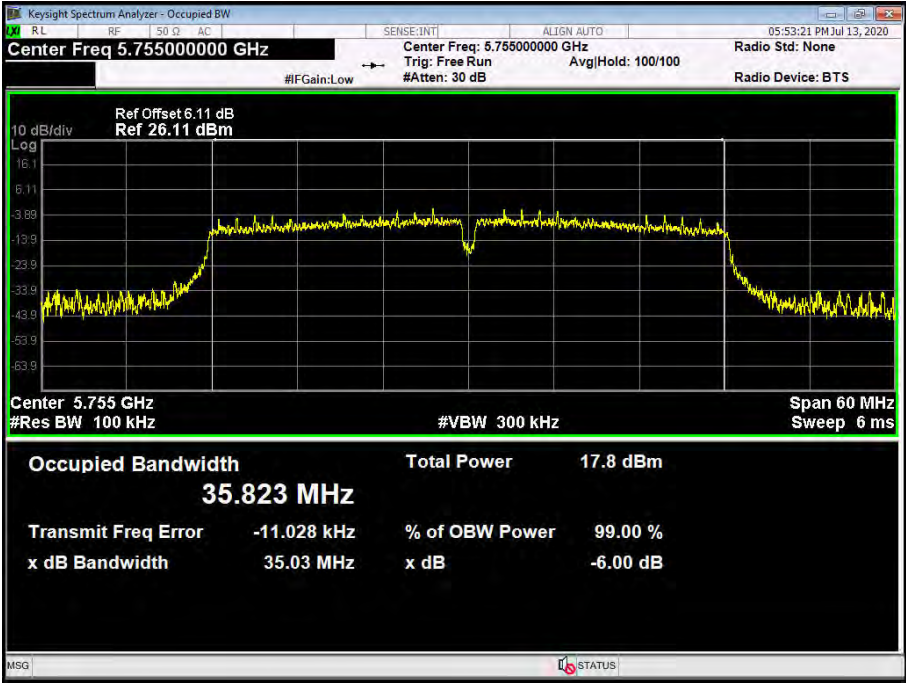
5785 MHz



802.11ac(VHT20) Mode

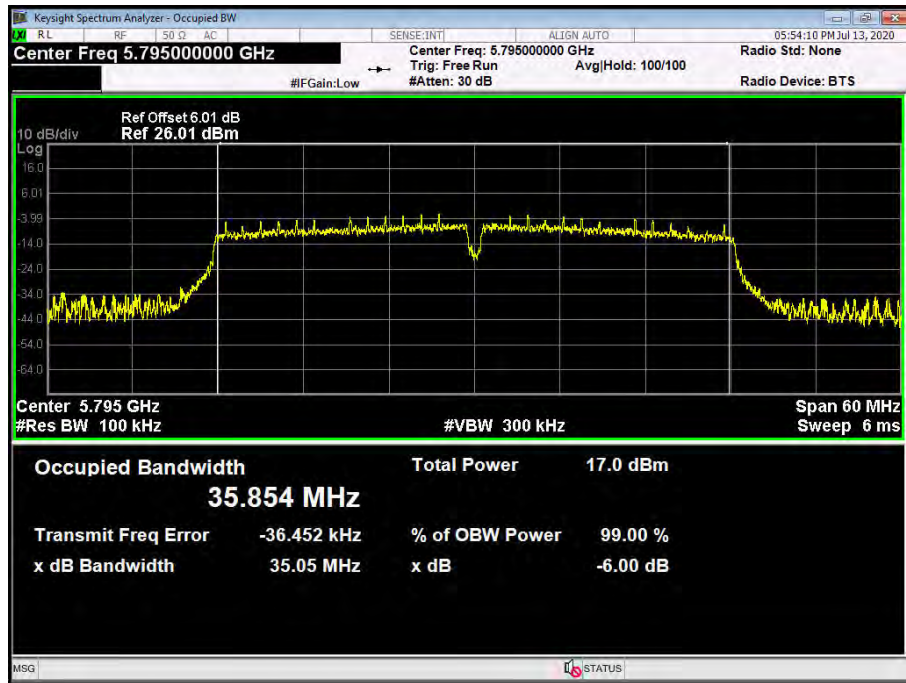
5825 MHz

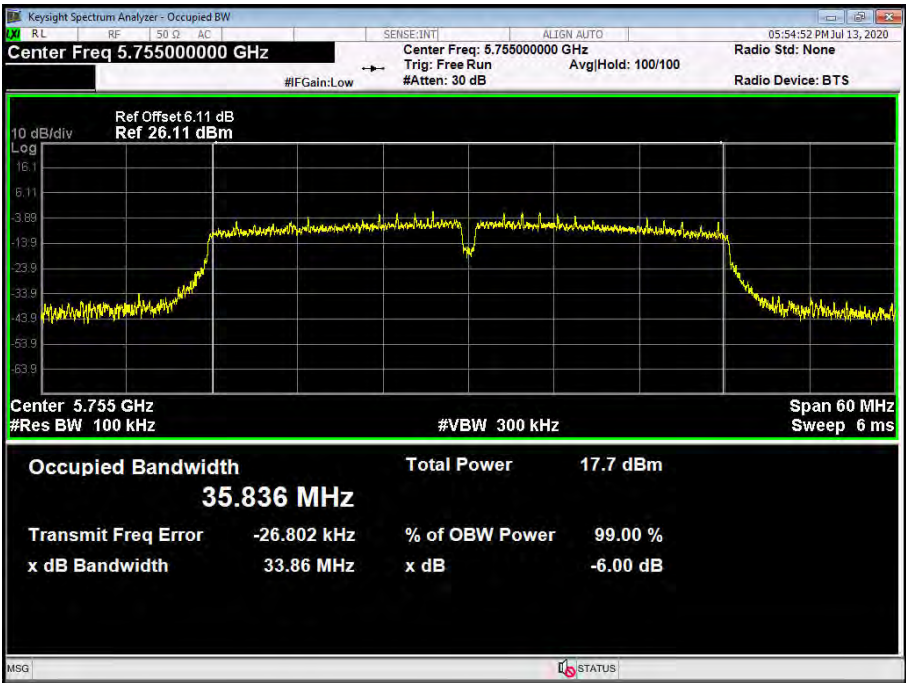


Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11n(HT40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	35.03	35.823
159	5795	35.05	35.854
802.11n(HT40) Mode			
5755 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq: 5.755000000 GHz Trig: Free Run Avg/Hold: 100/100 Radio Std: None Radio Device: BTS Ref Offset 6.11 dB Ref 26.11 dBm Center 5.755 GHz #Res BW 100 kHz #VBW 300 kHz Span 60 MHz Sweep 6 ms Occupied Bandwidth 35.823 MHz Total Power 17.8 dBm Transmit Freq Error -11.028 kHz % of OBW Power 99.00 % x dB Bandwidth 35.03 MHz x dB -6.00 dB			

802.11n(HT40) Mode

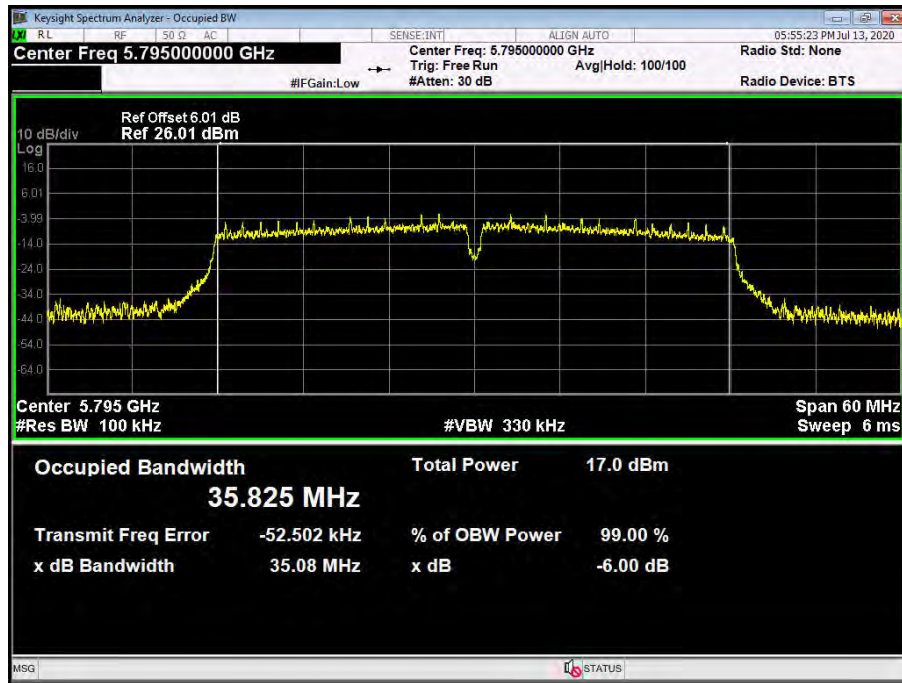
5795 MHz

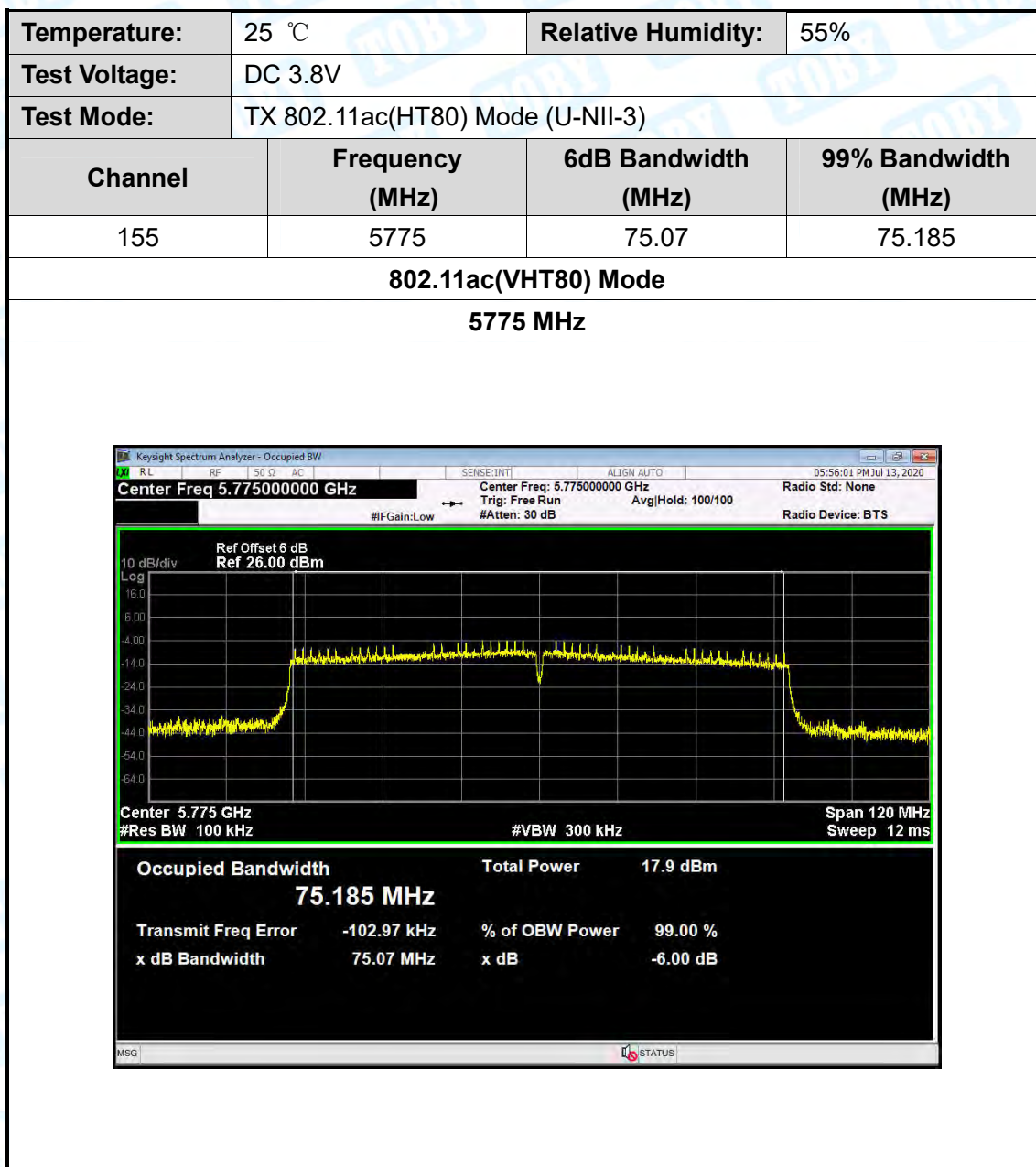


Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
Test Mode:	TX 802.11ac(VHT40) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
151	5755	33.86	35.836
159	5795	35.08	35.825
802.11ac(VHT40) Mode			
5755 MHz			
 Keysight Spectrum Analyzer - Occupied BW Center Freq: 5.755000000 GHz Ref Offset: 6.11 dB Ref: 26.11 dBm Occupied Bandwidth: 35.836 MHz Total Power: 17.7 dBm Transmit Freq Error: -26.802 kHz x dB Bandwidth: 33.86 MHz % of OBW Power: 99.00 % x dB: -6.00 dB			

802.11ac(VHT40) Mode

5795 MHz





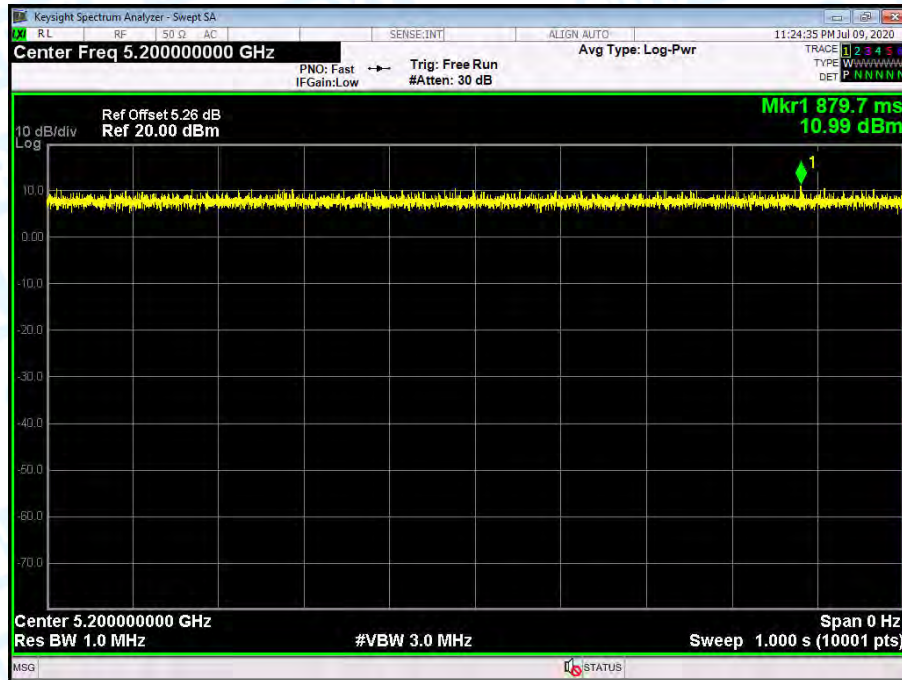
Attachment E--AVG Output Power Test Data

Temperature:	25 °C	Relative Humidity:	55%		
Test Voltage:	DC 3.8V				
U-NII-1					
Test Mode	Frequency (MHz)	Test Data			Limit (dBm)
		Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	
802.11a	5180	12.42	0	12.42	24
	5200	12.24	0	12.24	
	5240	12.41	0	12.41	
802.11n (HT20)	5180	10.22	0	10.22	
	5200	10.26	0	10.26	
	5240	10.21	0	10.21	
802.11ac (VHT20)	5180	12.44	0	12.44	
	5200	12.41	0	12.41	
	5240	12.53	0	12.53	
802.11n (HT40)	5190	12.33	0	12.33	
	5230	11.12	0	11.12	
802.11 ac(VHT40)	5190	12.29	0	12.29	
	5230	10.13	0	10.13	
802.11 ac(VHT80)	5210	11.92	0	11.92	
Result: PASS					
Remark: the Directional Gain=1.15dBi<6 dBi. So P _{out} =P _{limit} =24dBm					

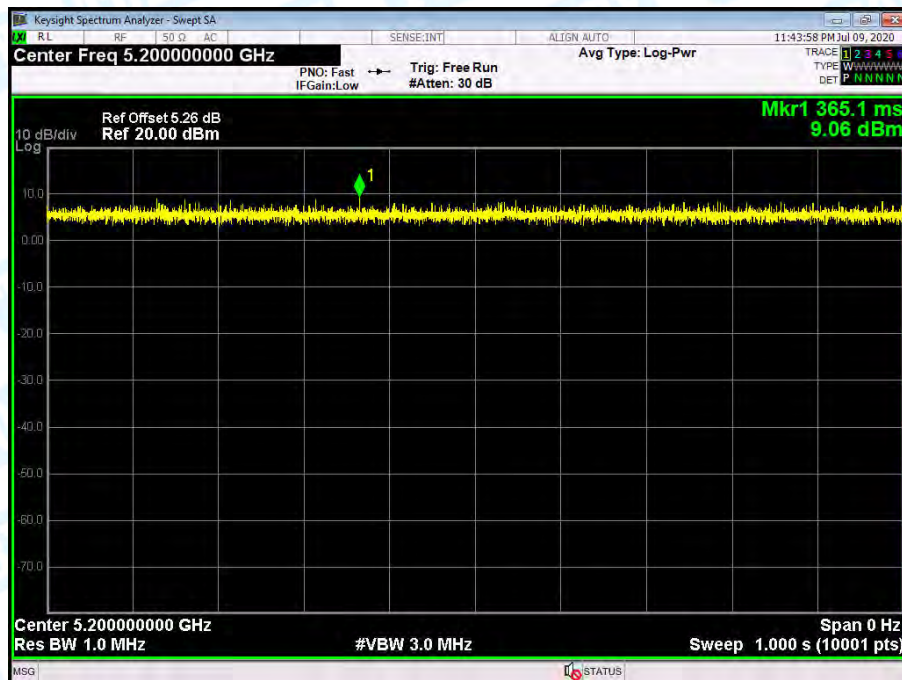
Temperature:	25 ℃	Relative Humidity:	55%			
Test Voltage:	DC 3.8V					
U-NII-3						
Test Mode	Frequency (MHz)	Test Data			Limit (dBm)	
		Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)		
802.11a	5745	10.56	0	10.56	30	
	5785	9.16	0	9.16		
	5825	9.57	0	9.57		
802.11n (HT20)	5745	10.34	0	10.34		
	5785	9.14	0	9.14		
	5825	9.46	0	9.46		
802.11ac (VHT20)	5745	10.53	0	10.53		
	5785	9.27	0	9.27		
	5825	9.54	0	9.54		
802.11n (HT40)	5755	10.10	0	10.10		
	5795	9.10	0	9.10		
802.11ac(VHT40)	5755	10.01	0	10.01		
	5795	9.22	0	9.22		
802.11ac(VHT80)	5775	9.62	0	9.62		
Result: PASS						
Remark: the Directional Gain=1.15dBi<6 dBi. So P _{out} =P _{limit} =30dBm						

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(VHT40)	
	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.		

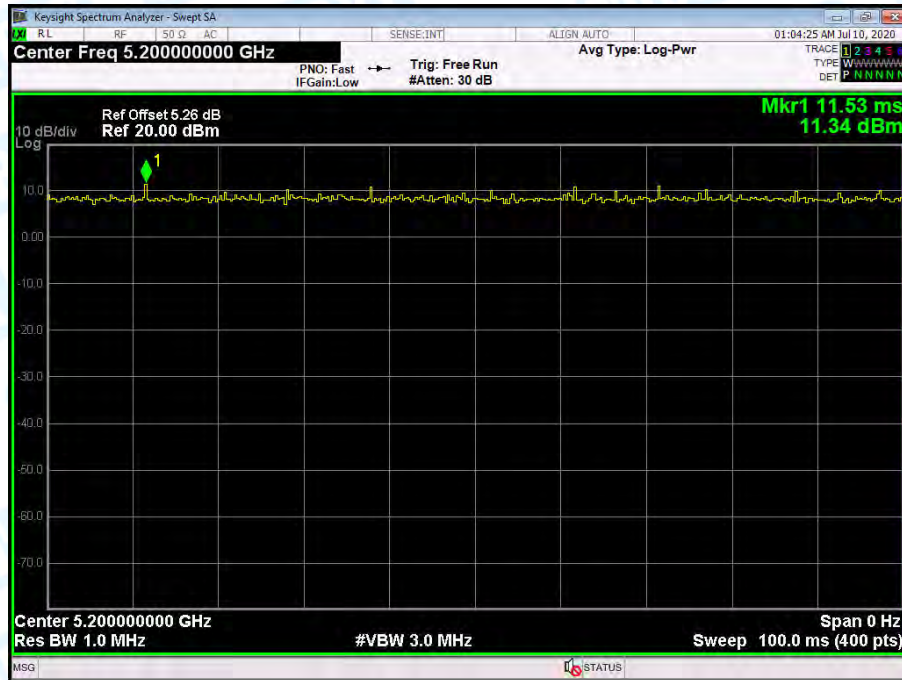
802.11 a 5200MHz U-NII-1



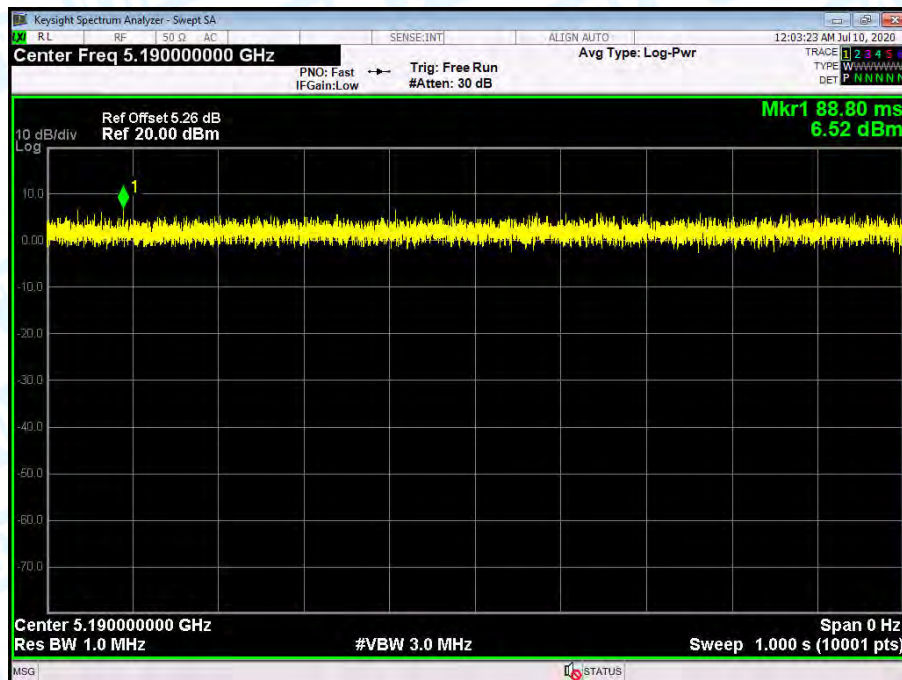
802.11 n(HT20) 5200MHz U-NII-1



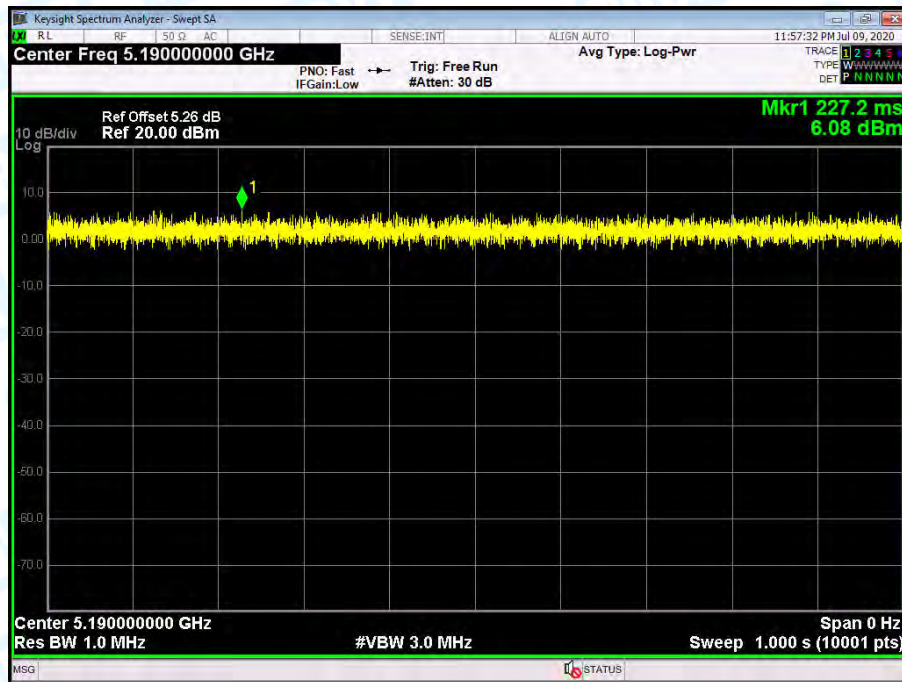
802.11 ac(HT20) 5200MHz U-NII-1



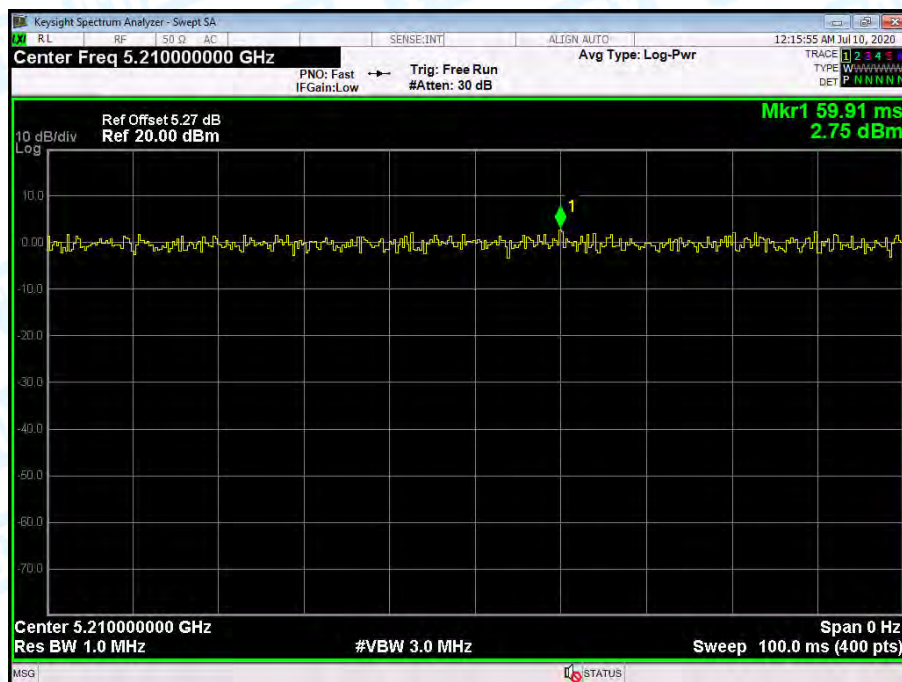
802.11 n(HT40) 5190MHz U-NII-1



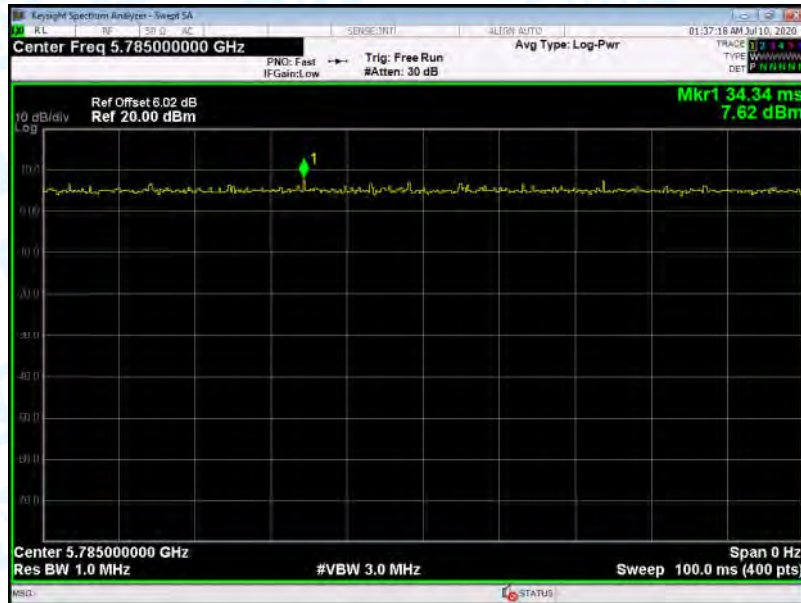
802.11 ac(VHT40) 5190MHz U-NII-1



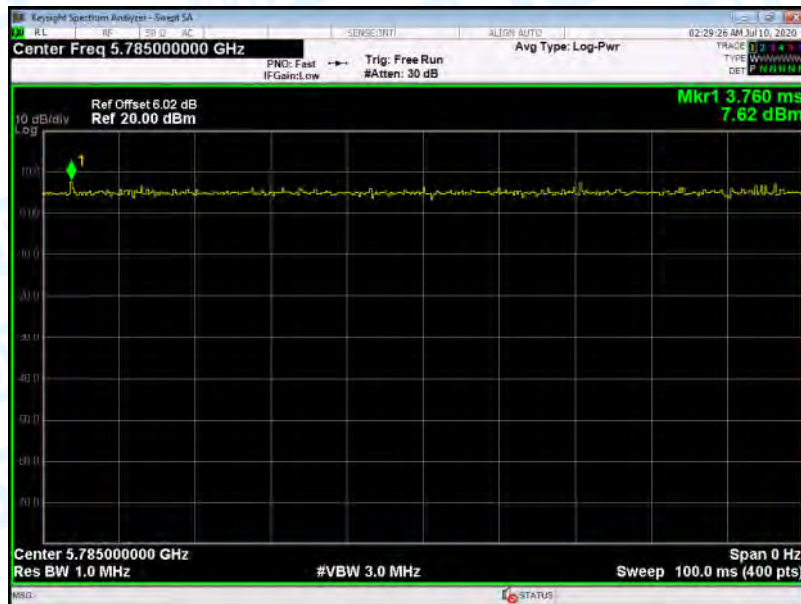
802.11 ac(HT80) 5210MHz U-NII-1



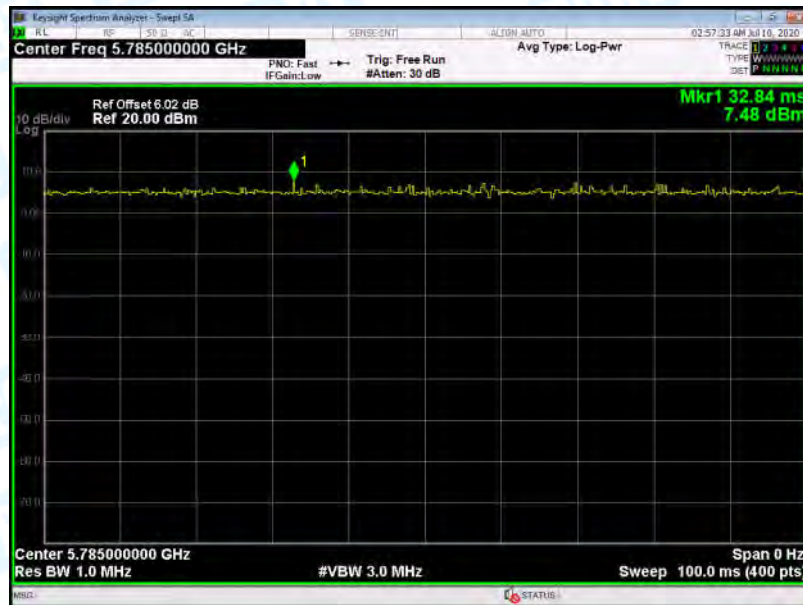
802.11 a 5785MHz U-NII-3



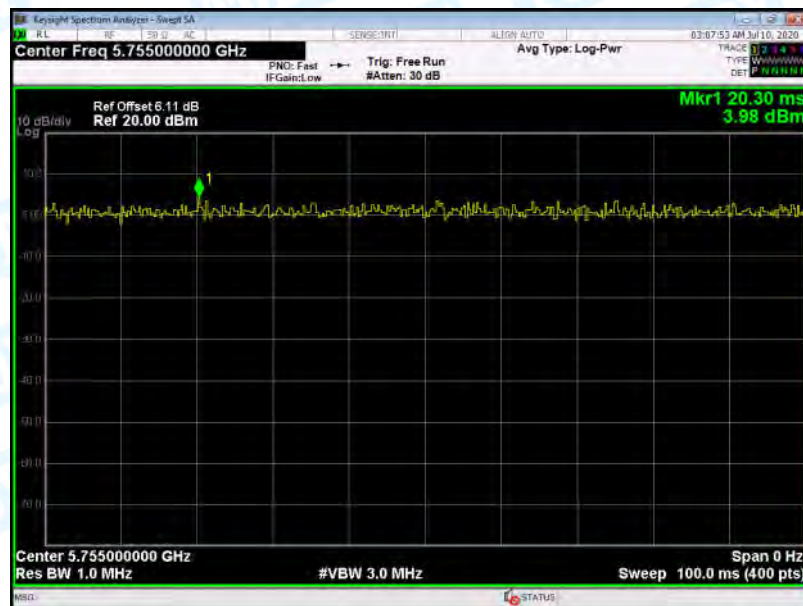
802.11 n(HT20) 5785MHz U-NII-3



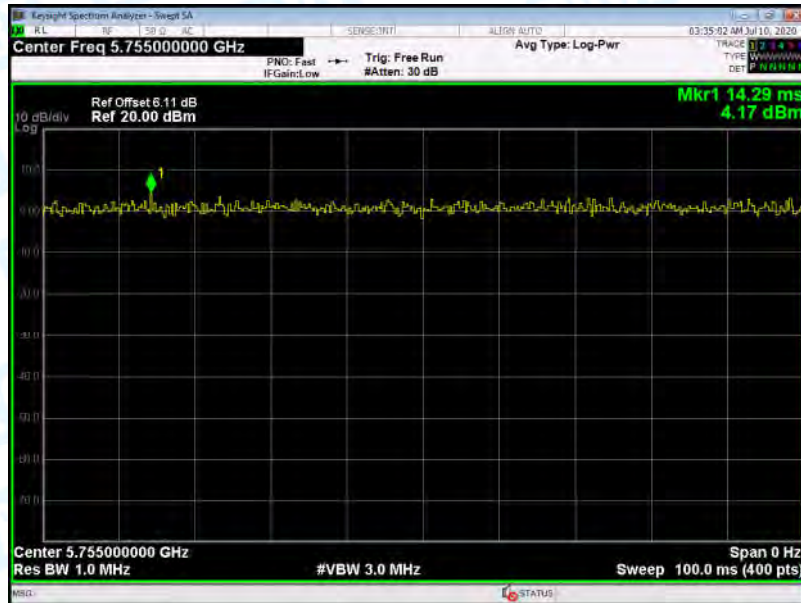
802.11 ac(VHT20) 5785MHz U-NII-3



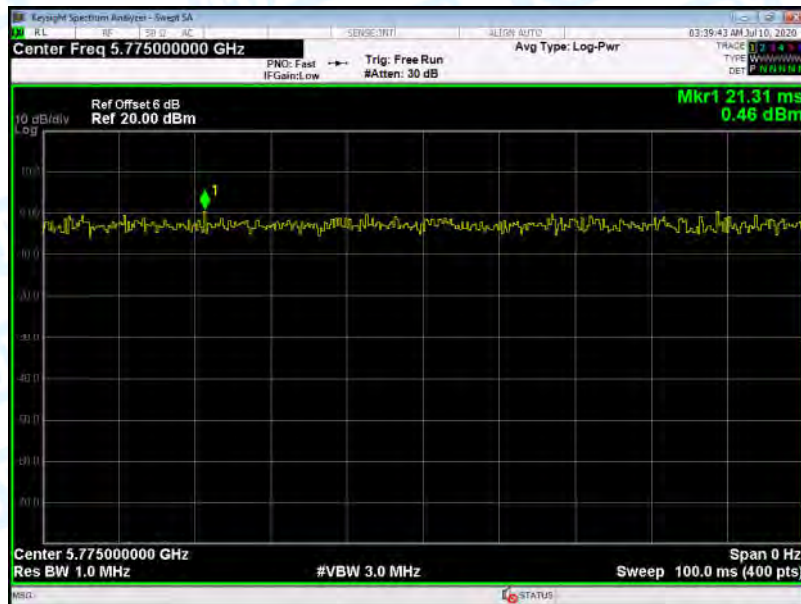
802.11 n(HT40) 5755MHz U-NII-3



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



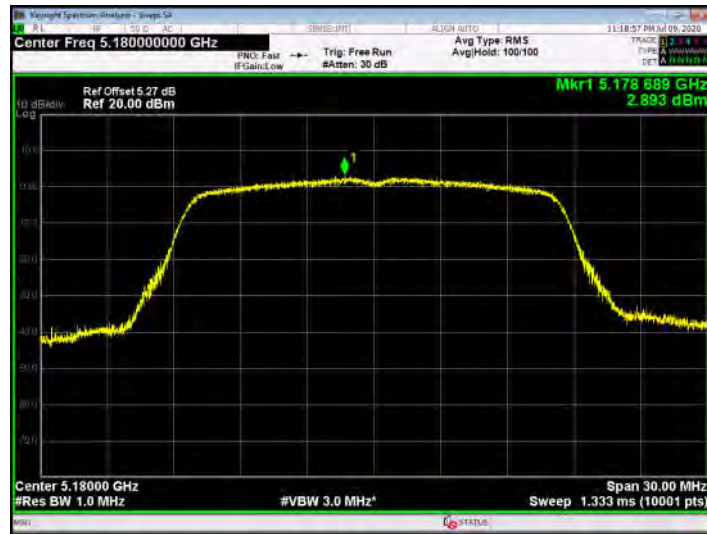
802.11 ac(VHT80) 5775MHz U-NII-3



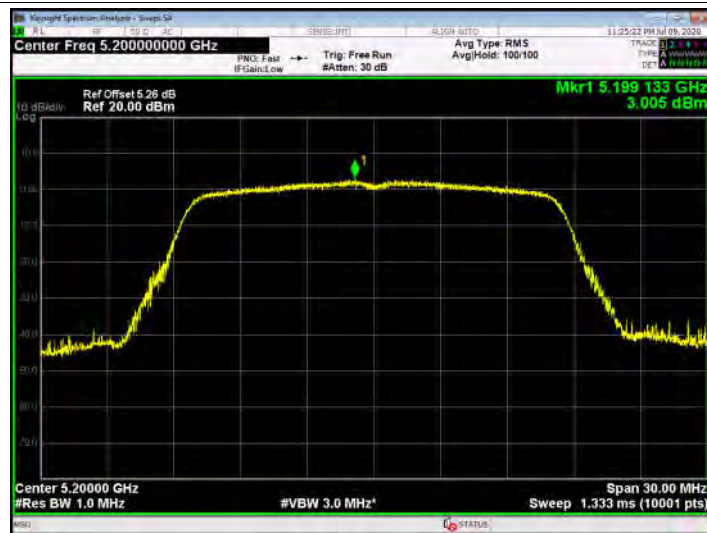
Attachment F-- Power Spectral Density Test Data

Temperature:	25 °C	Relative Humidity:	55%	
Test Voltage:	DC 3.8V			
U-NII-1				
Test Mode	Frequency (MHz)	Test Data	Limit (dBm/MHz)	
		Power Density (dBm/MHz)		
802.11a	5180	2.893	11	
	5200	3.005		
	5240	2.755		
802.11n (HT20)	5180	2.524		
	5200	0.383		
	5240	0.410		
802.11ac (VHT20)	5180	2.503		
	5200	2.674		
	5240	2.727		
802.11n (HT40)	5190	-0.545		
	5230	-1.676		
802.11ac(VHT40)	5190	-0.264		
	5230	-0.382		
802.11ac(VHT80)	5210	-3.773		
Result: PASS				
Remark: the Directional Gain=1.15dBi<6 dBi. So P _{out} =P _{limit}				
Test plots please refer to below pages:				

802.11 a 5180 MHz



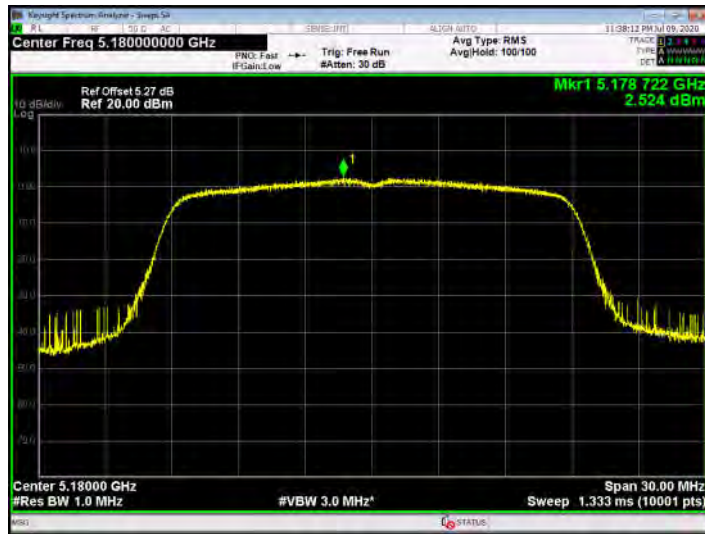
802.11 a 5200 MHz



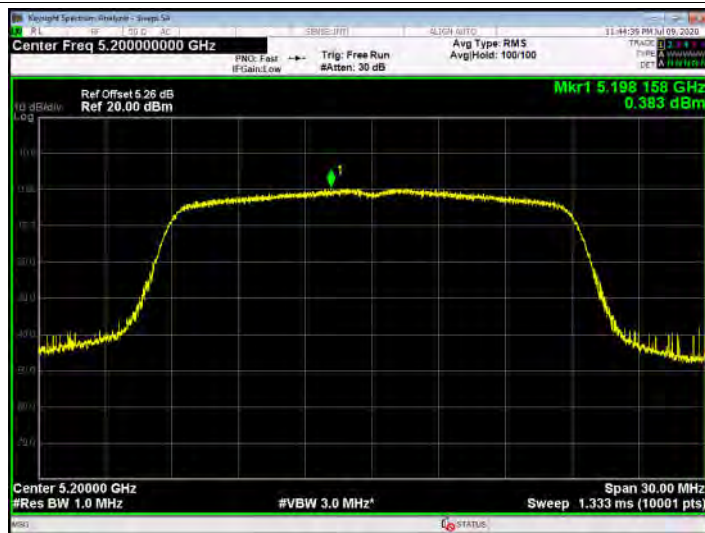
802.11 a 5240 MHz



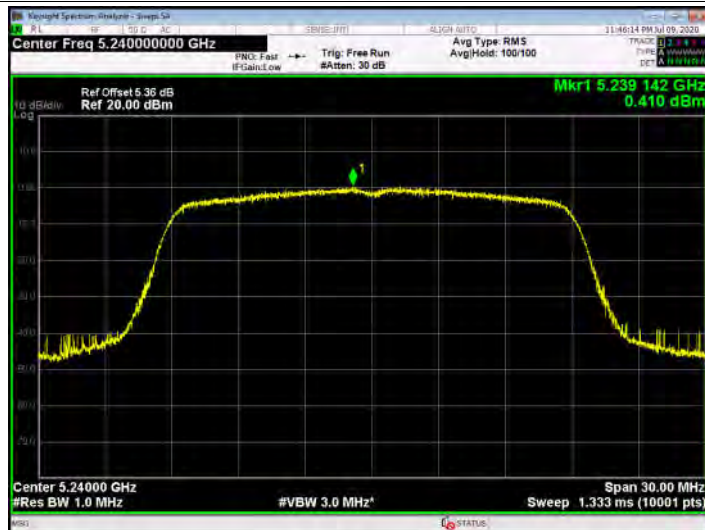
802.11 n(HT20) 5180 MHz



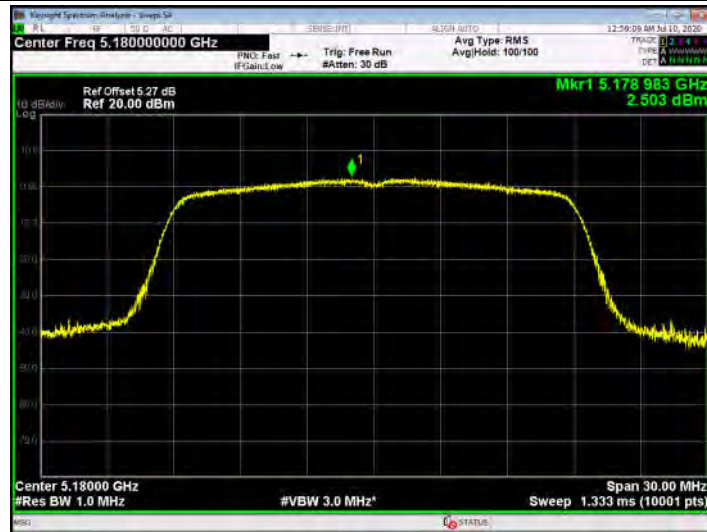
802.11 n(HT20) 5200 MHz



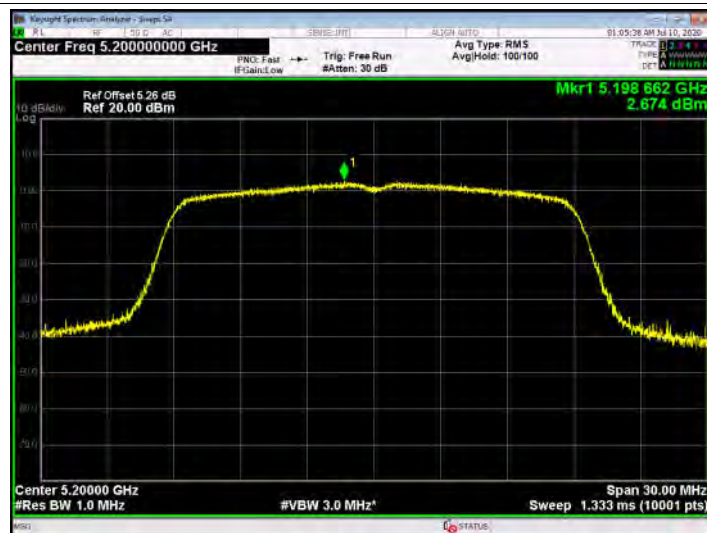
802.11 n(HT20) 5240 MHz



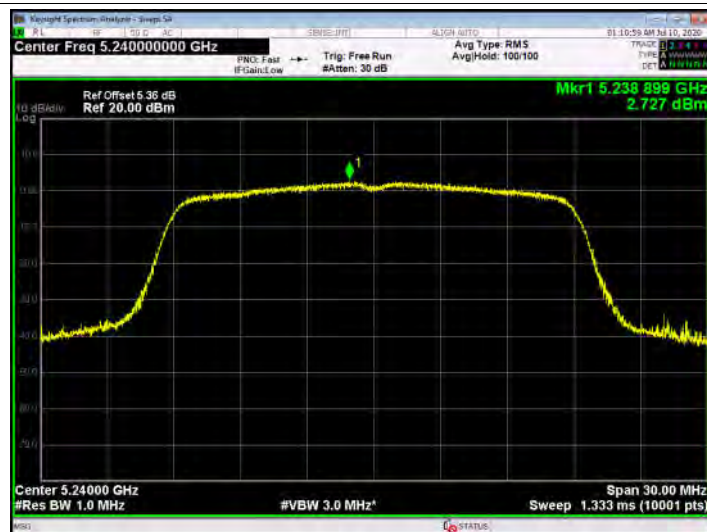
802.11 ac(VHT20) 5180 MHz



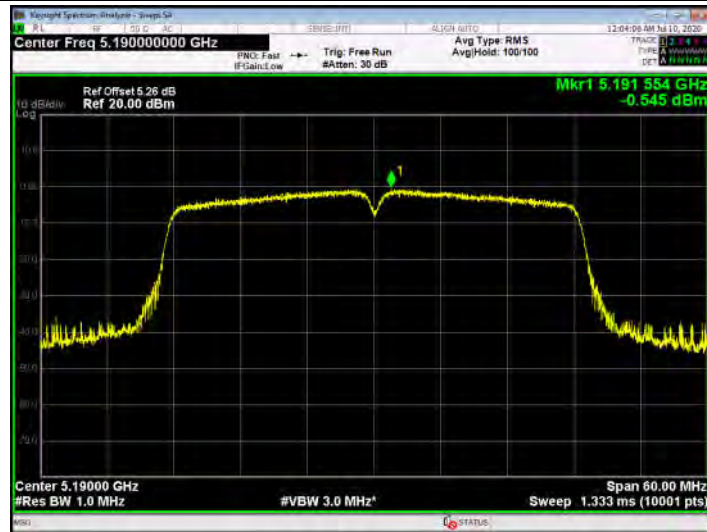
802.11 ac(VHT20) 5200 MHz



802.11 ac(VHT20) 5240 MHz



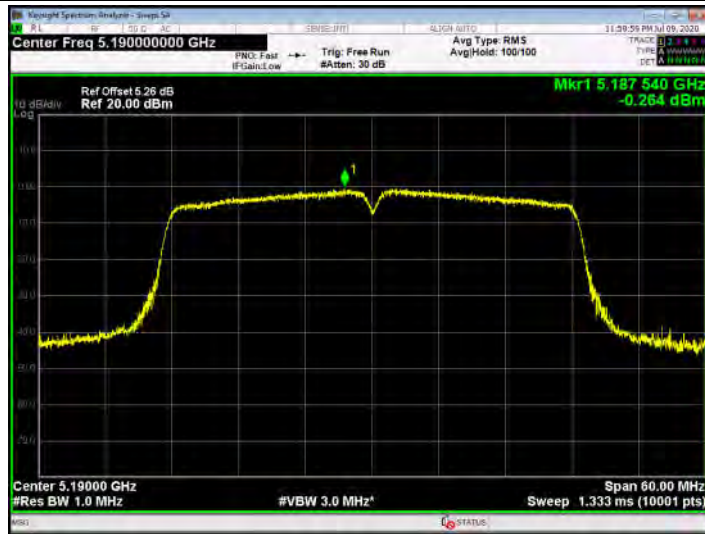
802.11 n(HT40) 5190 MHz



802.11 n(HT40) 5230 MHz



802.11 ac(VHT40) 5190 MHz



802.11 ac(VHT40) 5230 MHz

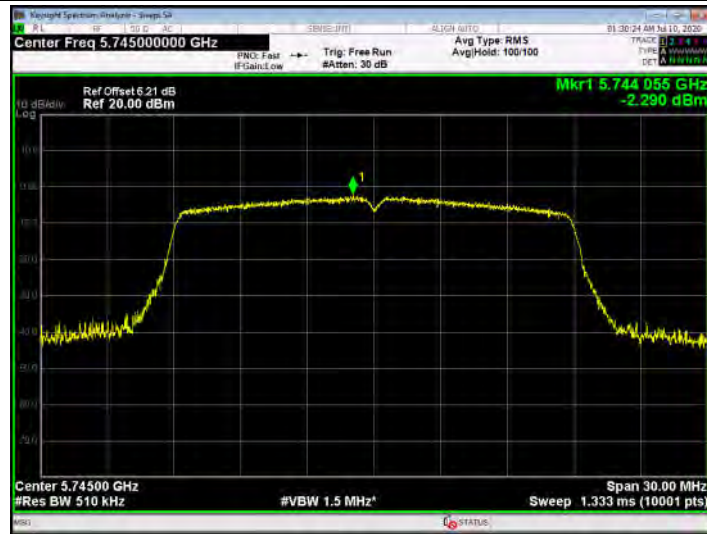


802.11 ac(VHT80) 5210 MHz

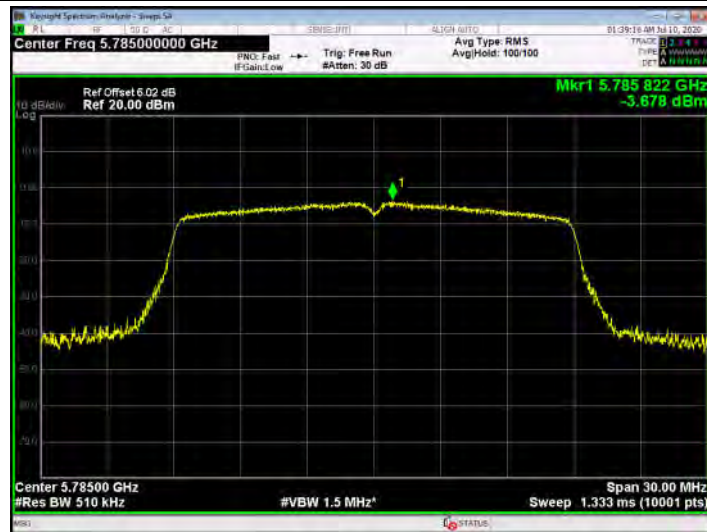


Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	DC 3.8V		
U-NII-3			
Test Mode	Frequency (MHz)	Test Data	Limit (dBm/500KHz)
		Power Density (dBm/500KHz)	
802.11a	5745	-2.290	30
	5785	-3.678	
	5825	-3.390	
802.11n (HT20)	5745	-2.353	
	5785	-3.689	
	5825	-3.253	
802.11ac (VHT20)	5745	-1.858	
	5785	-3.387	
	5825	-3.232	
802.11n (HT40)	5755	-5.543	
	5795	-6.686	
802.11ac(VHT40)	5755	-5.559	
	5795	-6.530	
802.11ac(VHT80)	5775	-9.272	
Result: PASS			
Remark: the Directional Gain=1.15dBi<6 dBi. So P _{out} =P _{limit}			
Test plots please refer to below pages:			

802.11 a 5745 MHz



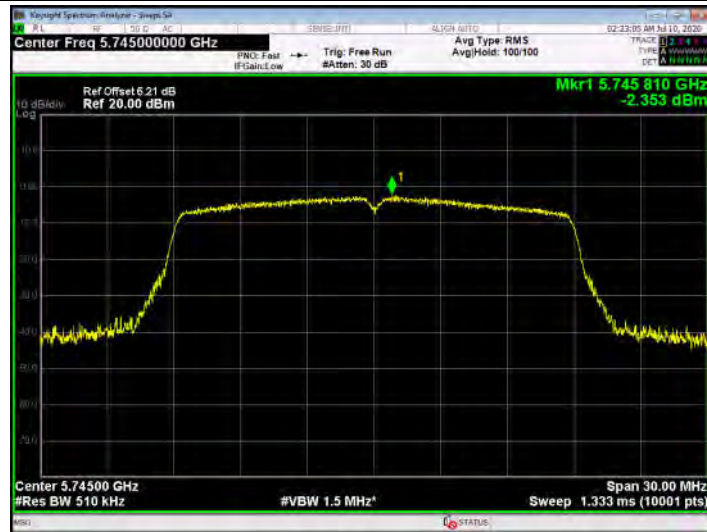
802.11 a 5785 MHz



802.11 a 5825 MHz



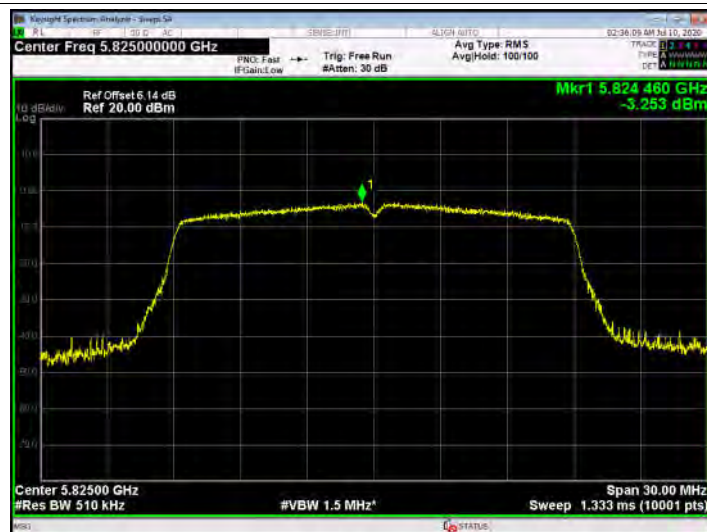
802.11 n(HT20) 5745 MHz



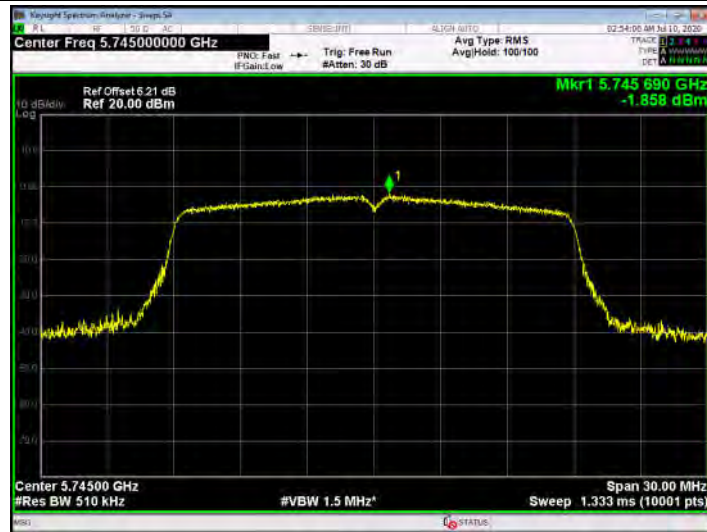
802.11 n(HT20) 5785 MHz



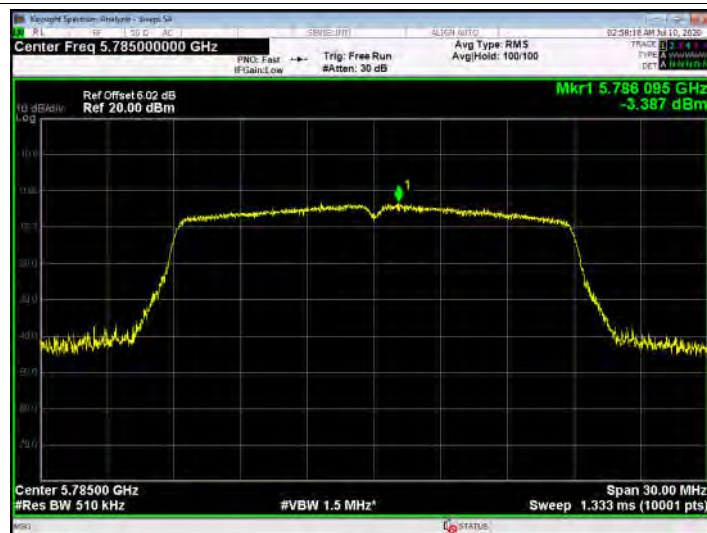
802.11 n(HT20) 5825 MHz



802.11 ac(VHT20) 5745 MHz



802.11 ac(VHT20) 5785 MHz



802.11 ac(VHT20) 5825 MHz



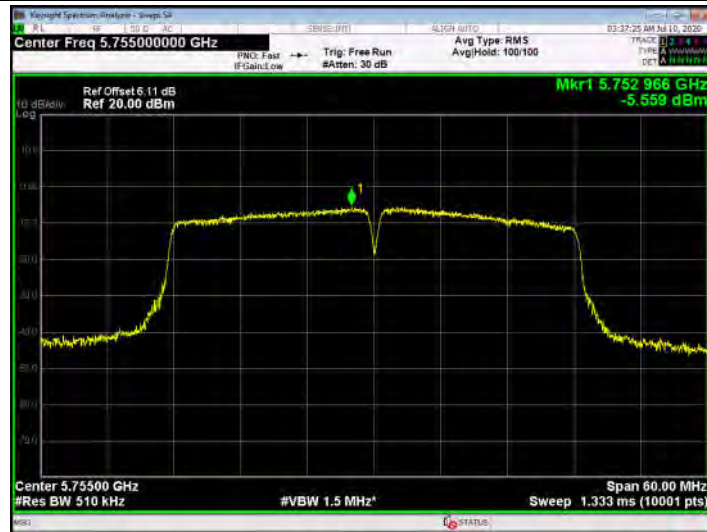
802.11 n(HT40) 5755 MHz



802.11 n(HT40) 5795 MHz



802.11 ac(VHT40) 5755 MHz



802.11 ac(VHT40) 5795 MHz



802.11 ac(VHT80) 5775 MHz



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	5180.0400
120	5180.0300
118	5180.0500
Limit Range (MHz)	5150-5250
Result	PASS
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5180.0500
10	5180.0300
20	5180.0200
30	5180.0300
40	5180.0500
50	5180.0400
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	5745.0300
120	5745.0400
118	5744.0500
Limit Range (MHz)	5725-5850
Result	PASS
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5745.0200
10	5745.0600
20	5745.0300
30	5745.0400
40	5745.0700
50	5745.0600
Limit Range (MHz)	5725-5850
Result	PASS

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