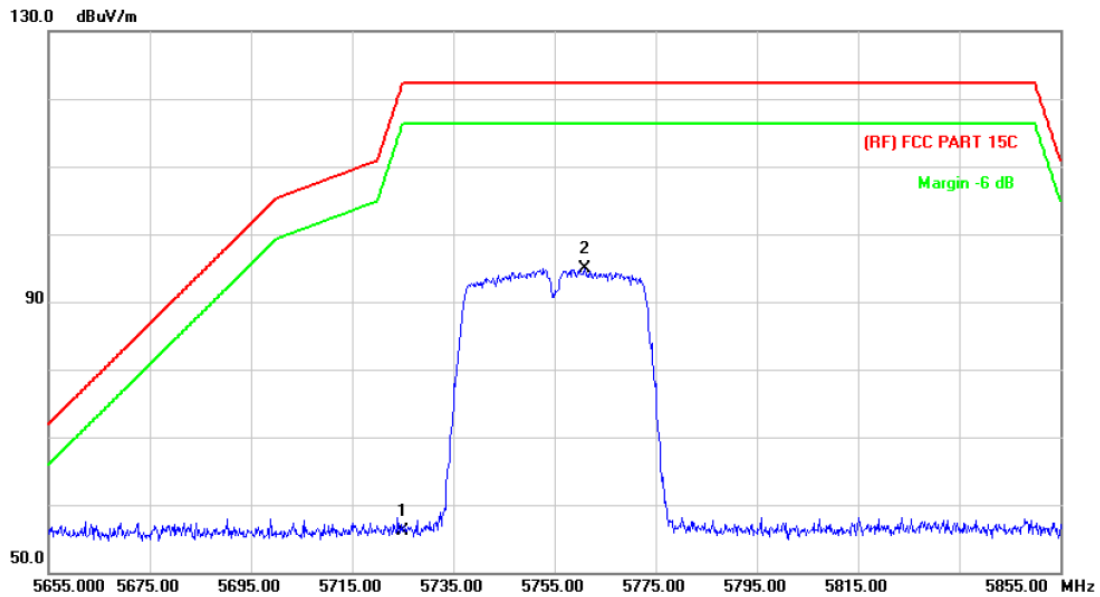


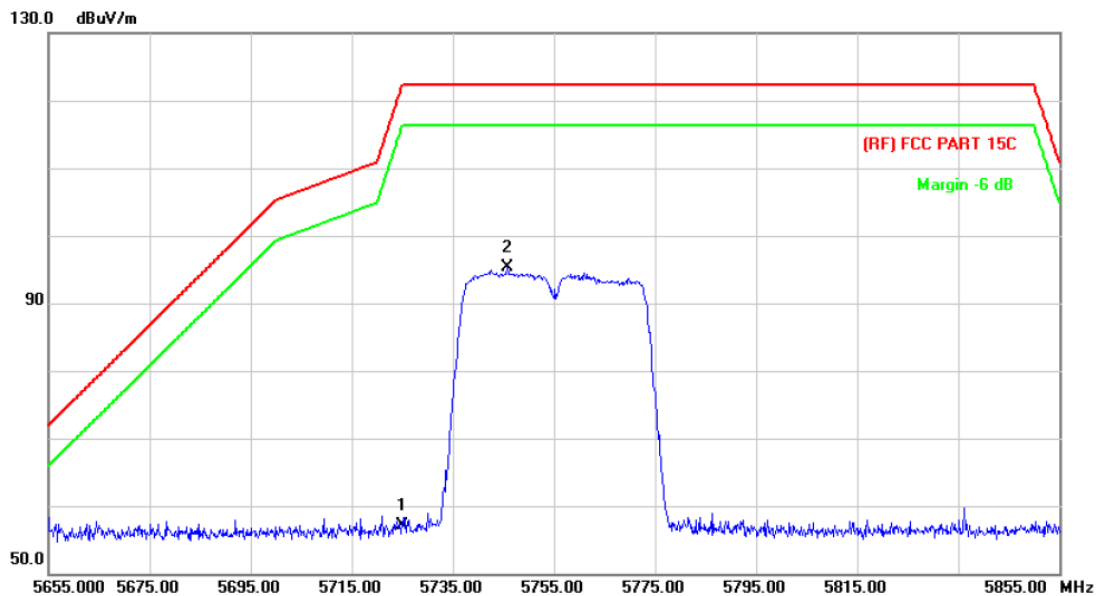
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5755 MHz (U-NII-3)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5725.000	46.28	9.78	56.06	122.30	-66.24	peak
2	*	5761.000	85.11	9.87	94.98	122.30	-27.32	peak

Emission Level= Read Level+ Correct Factor

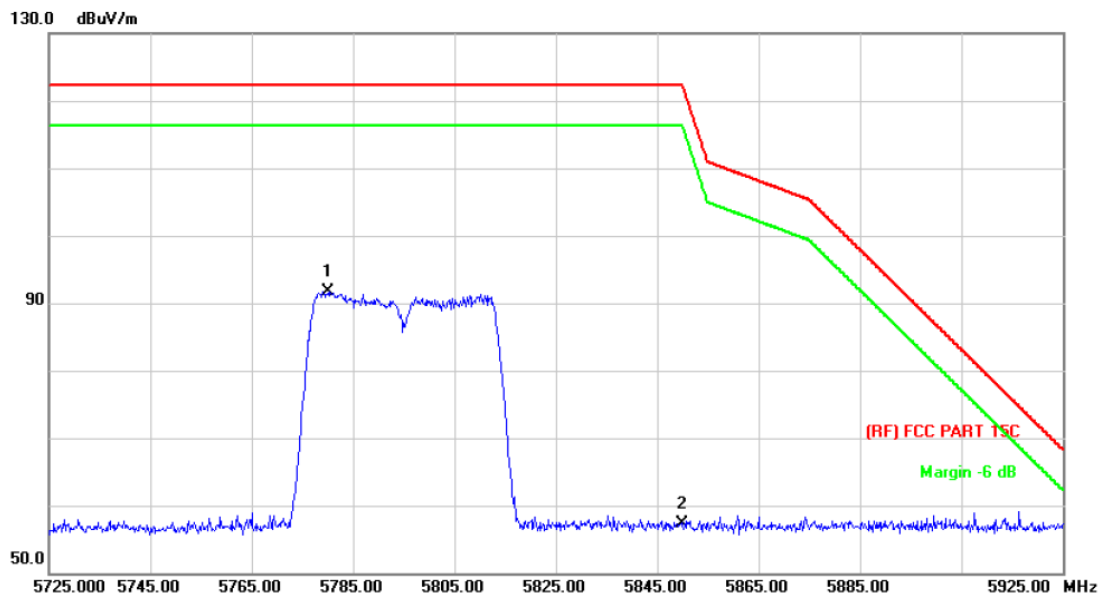
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5755 MHz (U-NII-3)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		5725.000	47.23	9.78	57.01	122.30	-65.29	peak
2	*	5745.800	85.43	9.83	95.26	122.30	-27.04	peak

Emission Level= Read Level+ Correct Factor

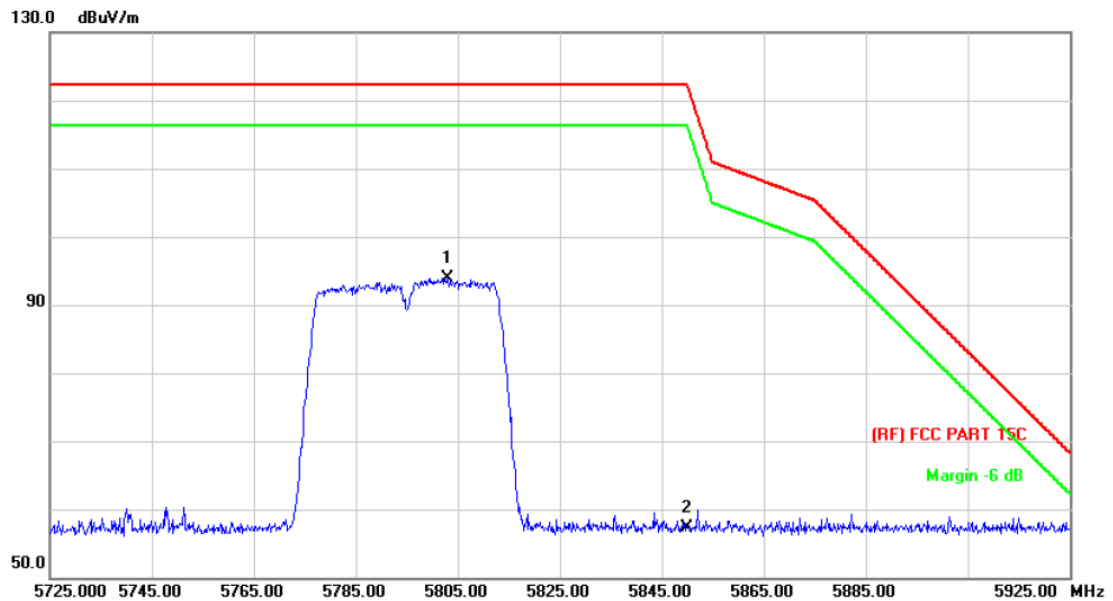
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5795 MHz (U-NII-3)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1	*	5780.200	81.79	9.93	91.72	122.30	-30.58	peak
2		5850.000	47.20	10.13	57.33	122.30	-64.97	peak

Emission Level= Read Level+ Correct Factor

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5795 MHz (U-NII-3)		
Remark:	N/A		

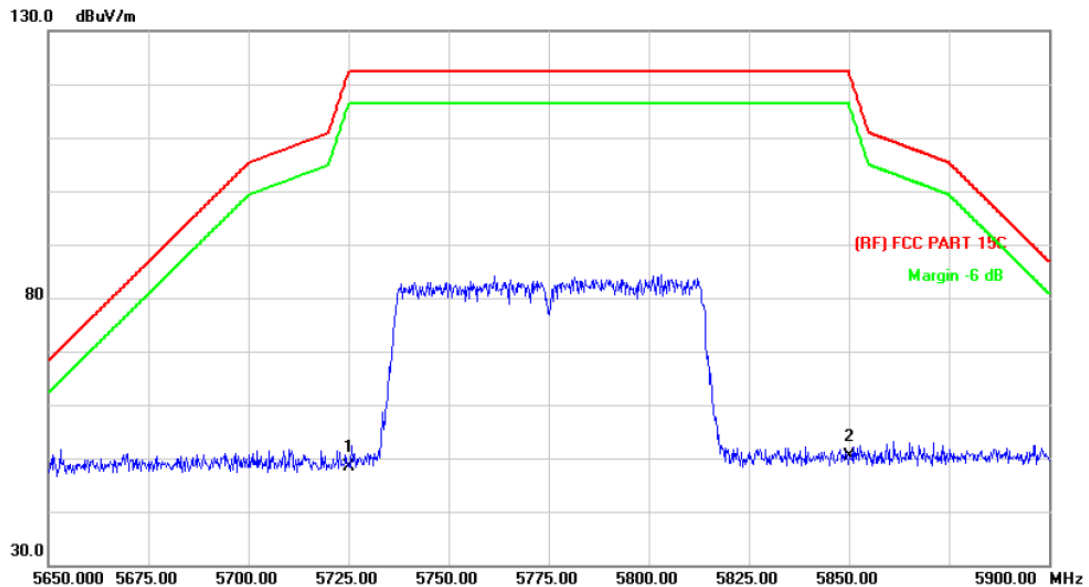


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1	*	5803.000	83.85	10.00	93.85	122.30	-28.45	peak
2		5850.000	47.11	10.13	57.24	122.30	-65.06	peak

Emission Level= Read Level+ Correct Factor

ac(VHT80)

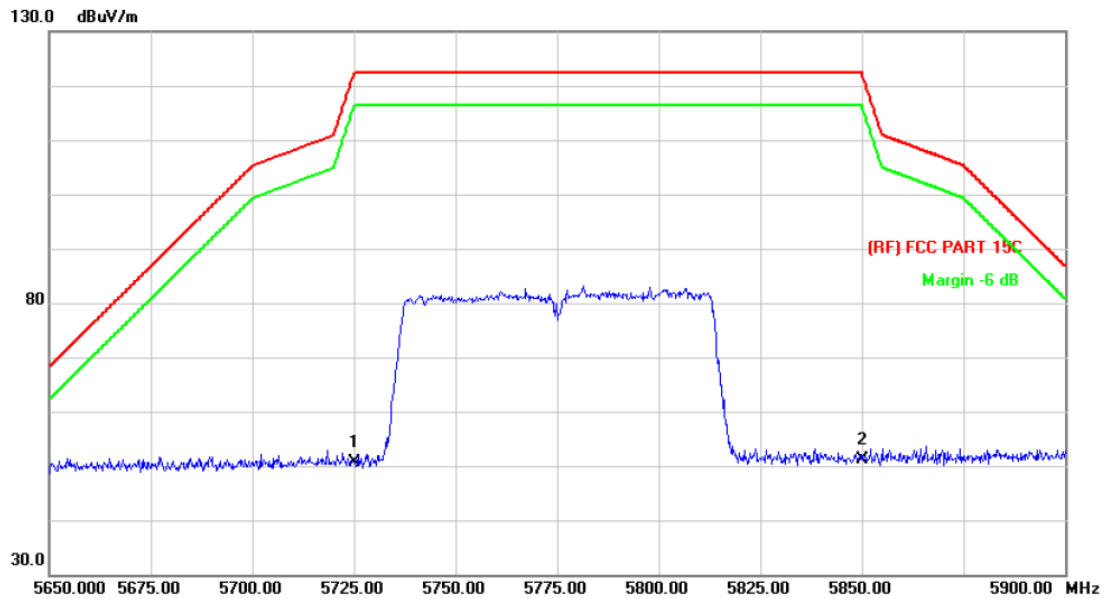
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 ac(80) Mode 5775MHz (U-NII-3)		
Remark:	N/A		



No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		5725.000	32.46	15.87	48.33	122.30	-73.97	peak
2	*	5850.000	33.66	16.83	50.49	122.30	-71.81	peak

Emission Level= Read Level+ Correct Factor

Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11 ac(80) Mode 5775MHz (U-NII-3)		
Remark:	N/A		

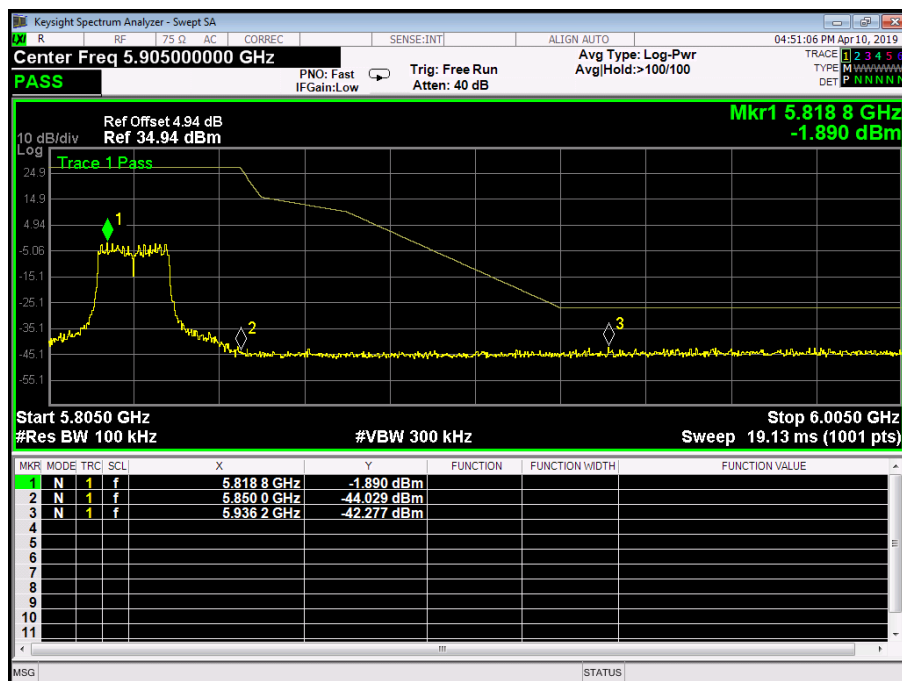
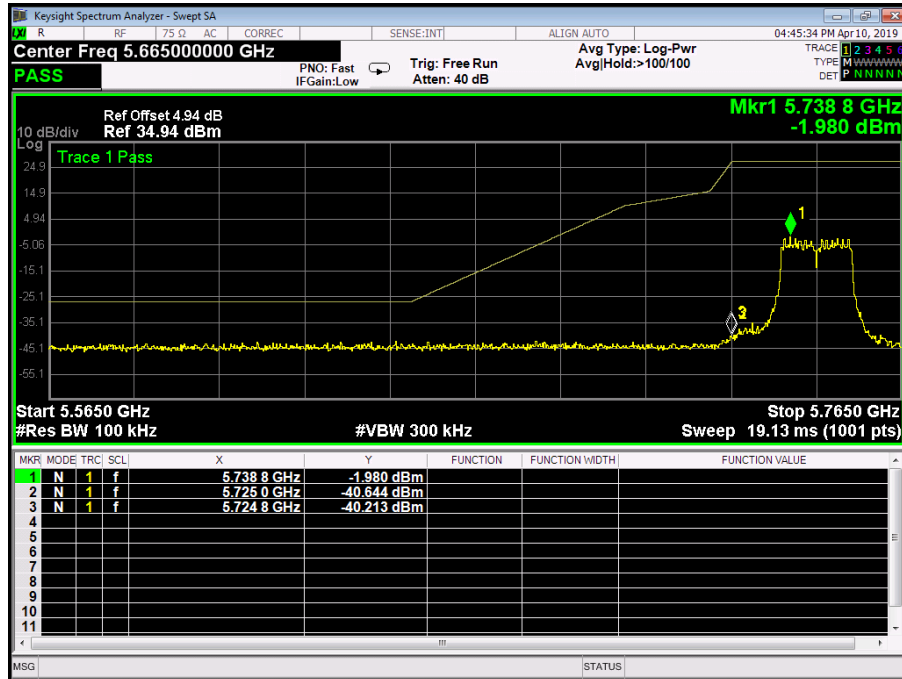


No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB/m	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Detector
1		5725.000	34.74	15.87	50.61	122.30	-71.69	peak
2	*	5850.000	34.22	16.83	51.05	122.30	-71.25	peak

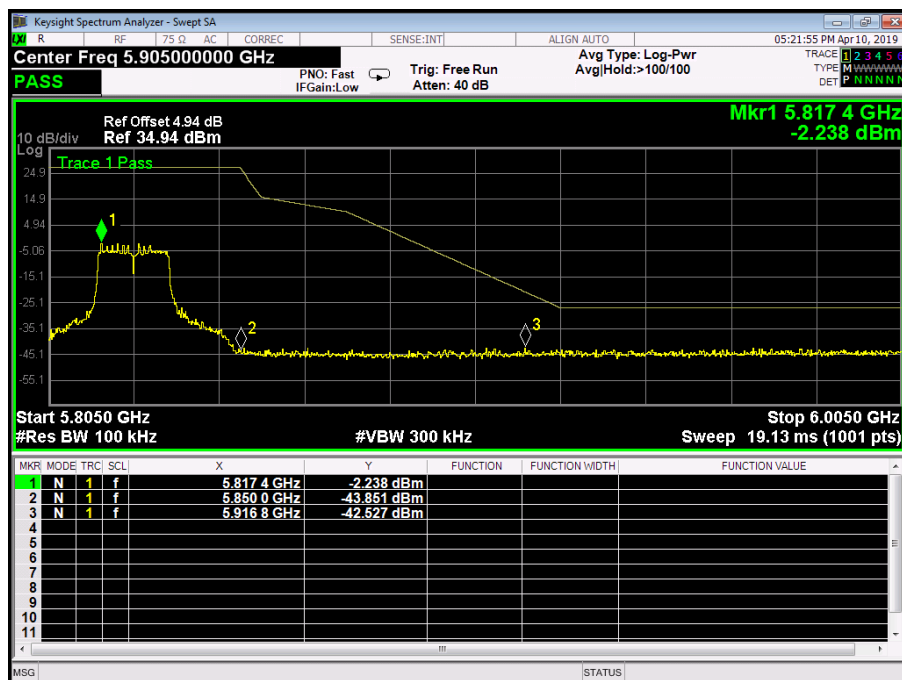
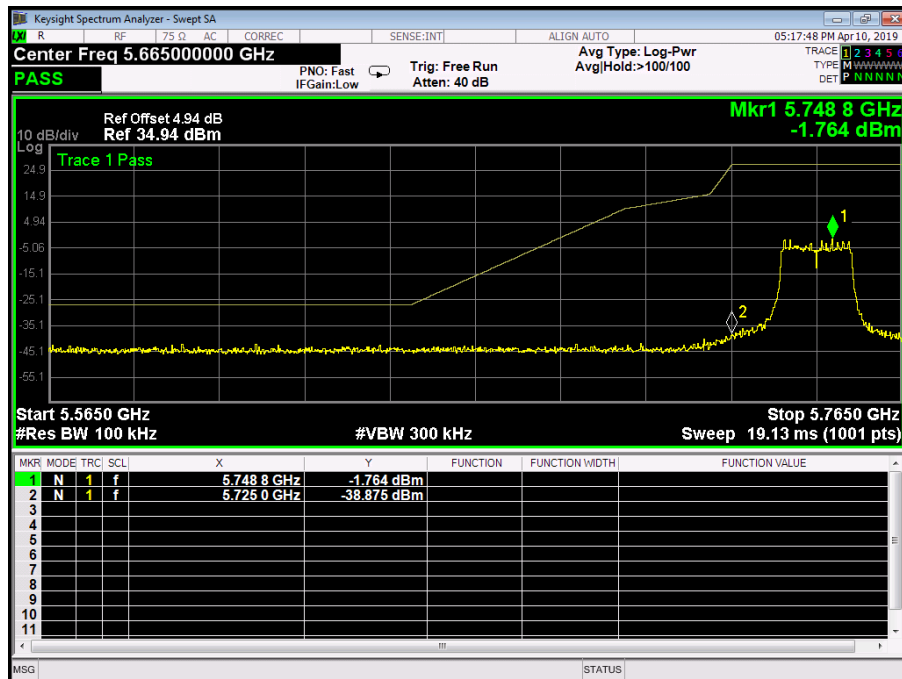
Emission Level= Read Level+ Correct Factor

(2) Conducted Test

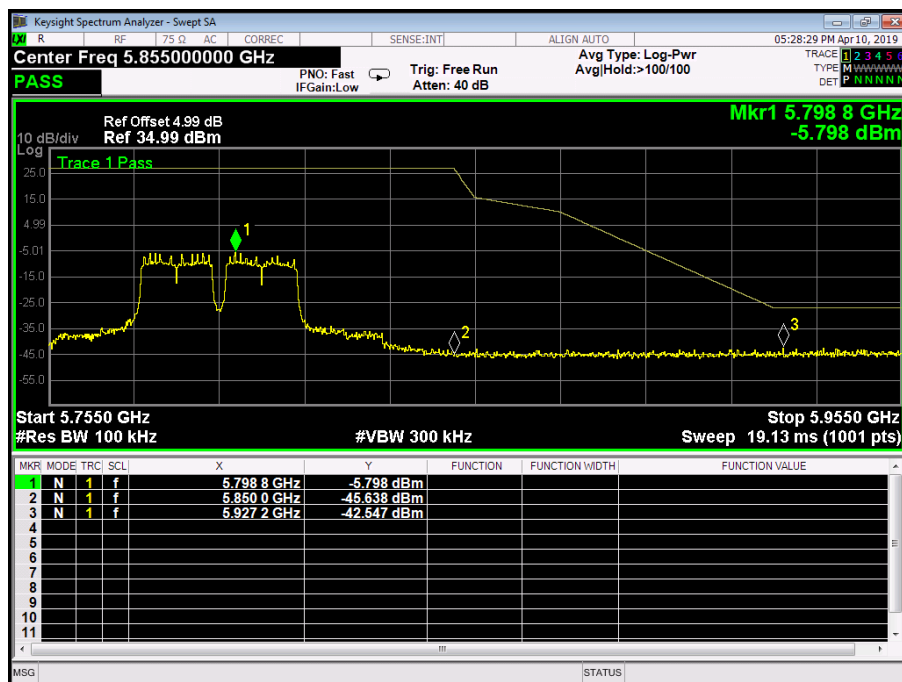
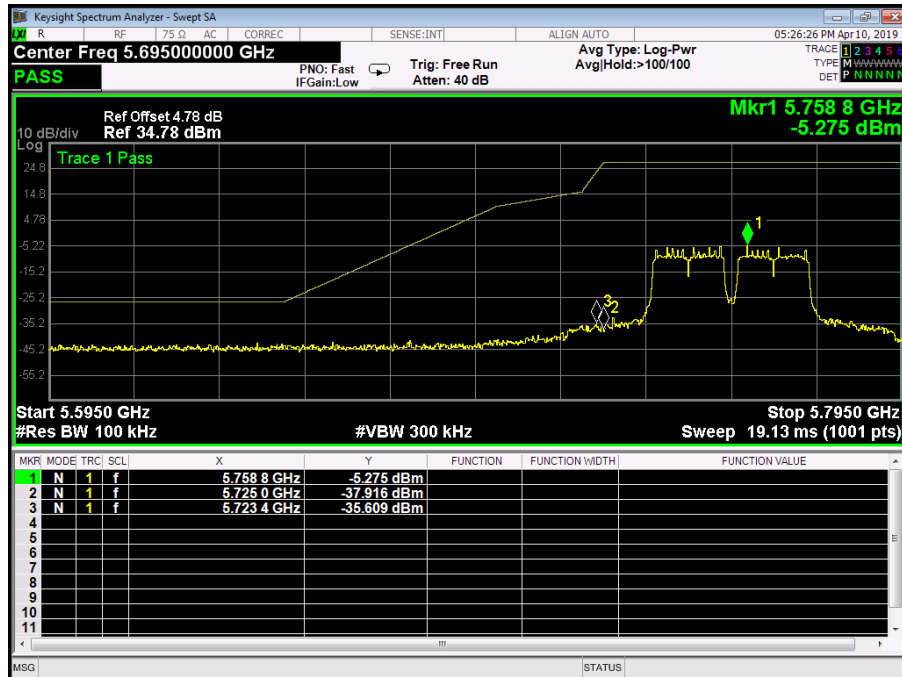
(3) Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a Mode 5745MHz /5825MHz (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



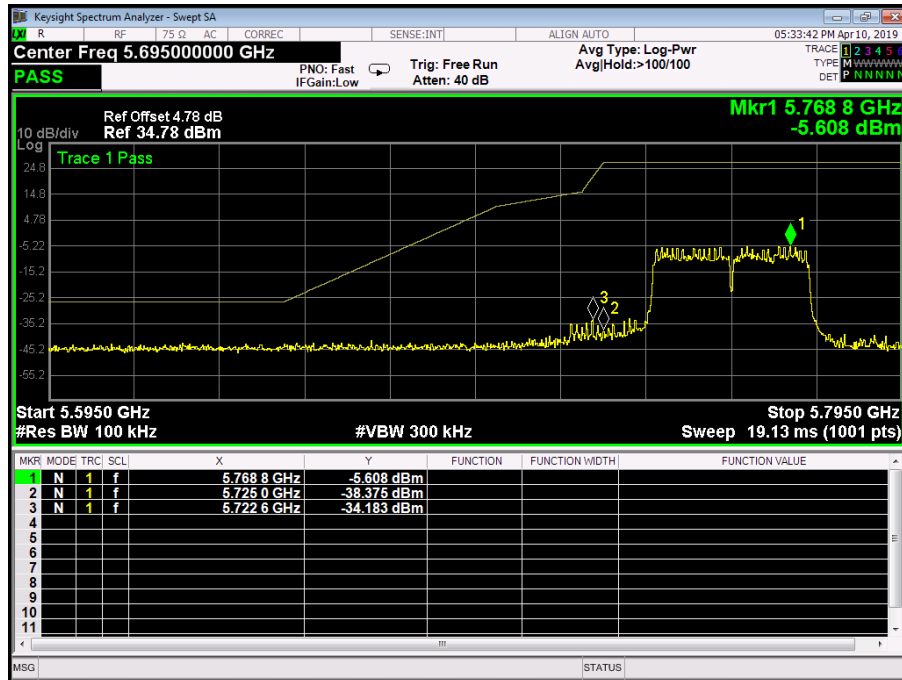
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(20) Mode 5745MHz /5825MHz (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



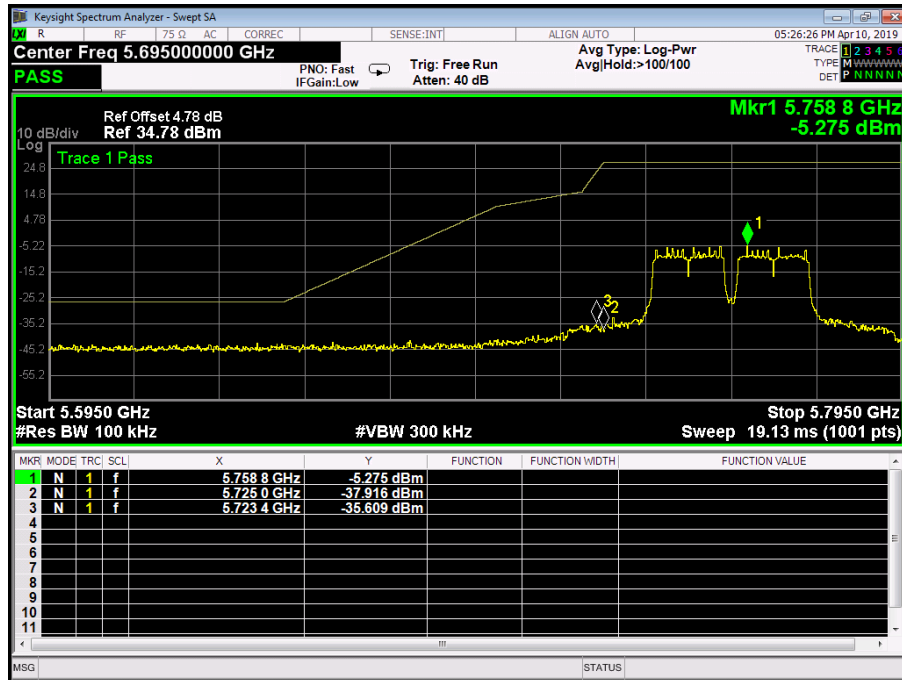
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11ac(VHT20) Mode 5745MHz /5825MHz (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



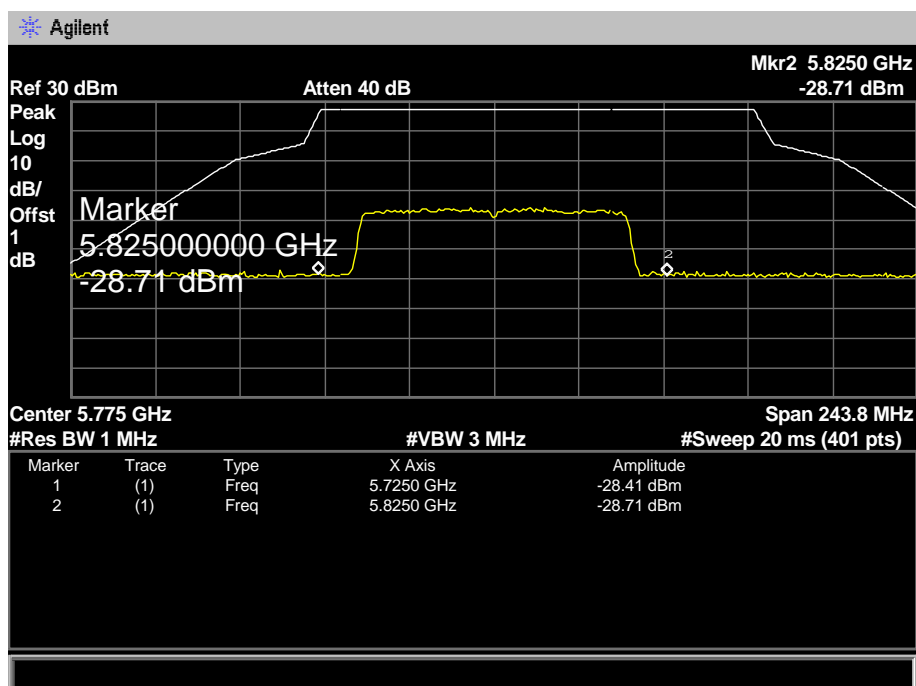
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11 n(40) Mode 5755MHz/5795 (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11 ac(VHT40) Mode 5755MHz/5795 (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11 ac(80) Mode 5775MHz (U-NII-3)		
Remark:	The EUT is programed in continuously transmitting mode		



Attachment D-- Bandwidth Test Data

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)	Limit (KHz)
149	5745	16.37	16.368	≥500
157	5785	16.41	16.421	≥500
165	5825	16.35	16.385	≥500

802.11a Mode

5745 MHz

Keysight Spectrum Analyzer - Occupied BW

04:45:01 PM Apr 10, 2019

Center Freq 5.745000000 GHz

Center Freq: 5.745000000 GHz

Trig: Free Run

#Atten: 30 dB

Radio Std: None

Radio Device: BTS

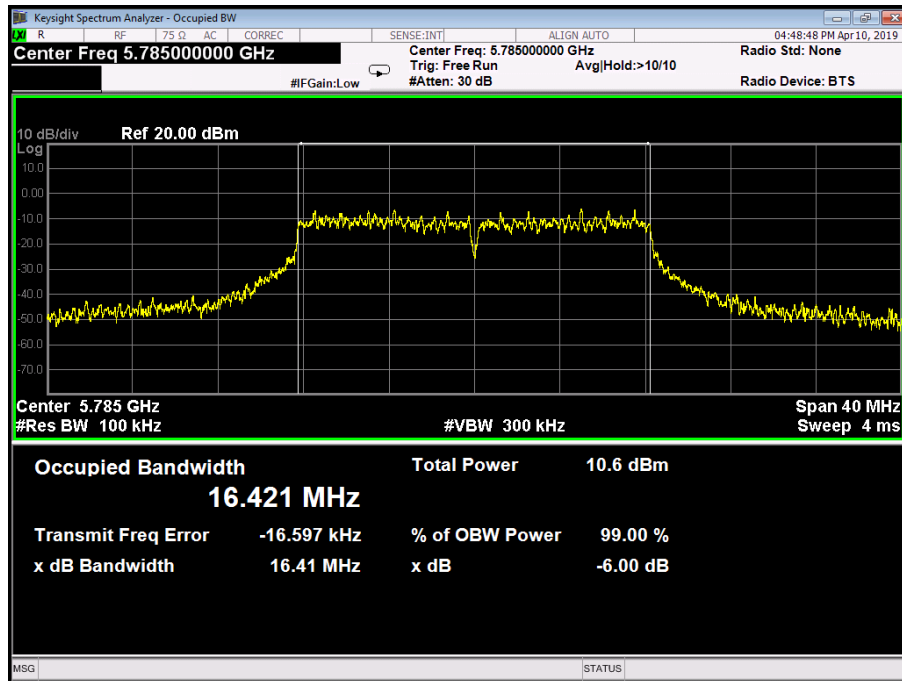
10 dB/div

Ref 20.00 dBm

Log

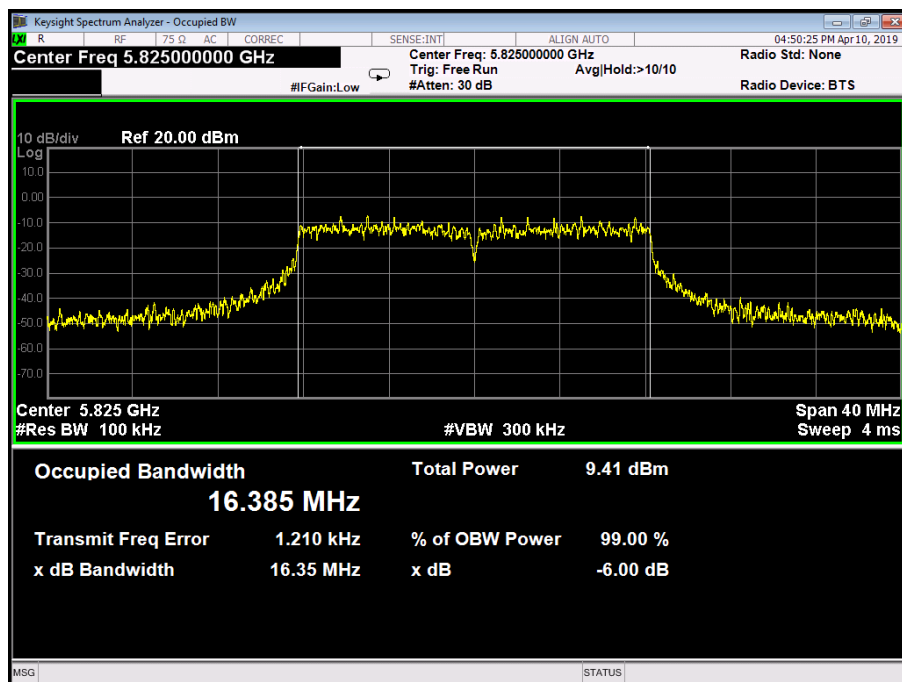
802.11a Mode

5785 MHz



802.11a Mode

5825 MHz



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)	Limit (KHz)
149	5745	17.23	17.493	≥500
157	5785	17.25	17.538	≥500
165	5825	16.36	17.552	≥500

802.11a Mode

5745 MHz

Keysight Spectrum Analyzer - Occupied BW

Center Freq 5.745000000 GHz

Center Freq: 5.745000000 GHz

Trig: Free Run

#Gain:Low

Trig: Free Run

#Atten: 30 dB

Avg|Hold:>10/10

Radio Std: None

Radio Device: BTS

10 dB/div

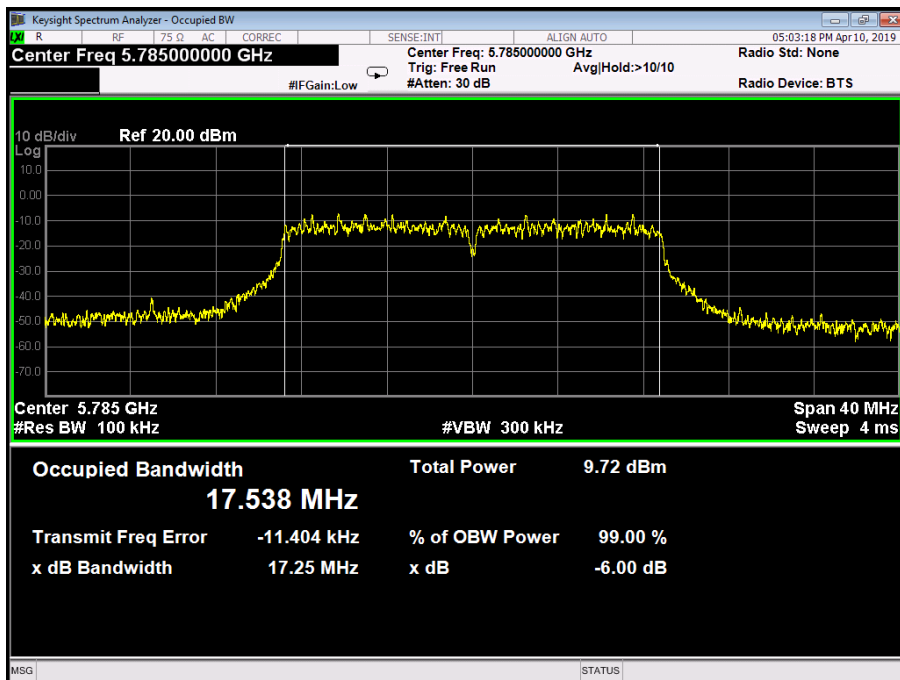
Ref 20.00 dBm

Log

</

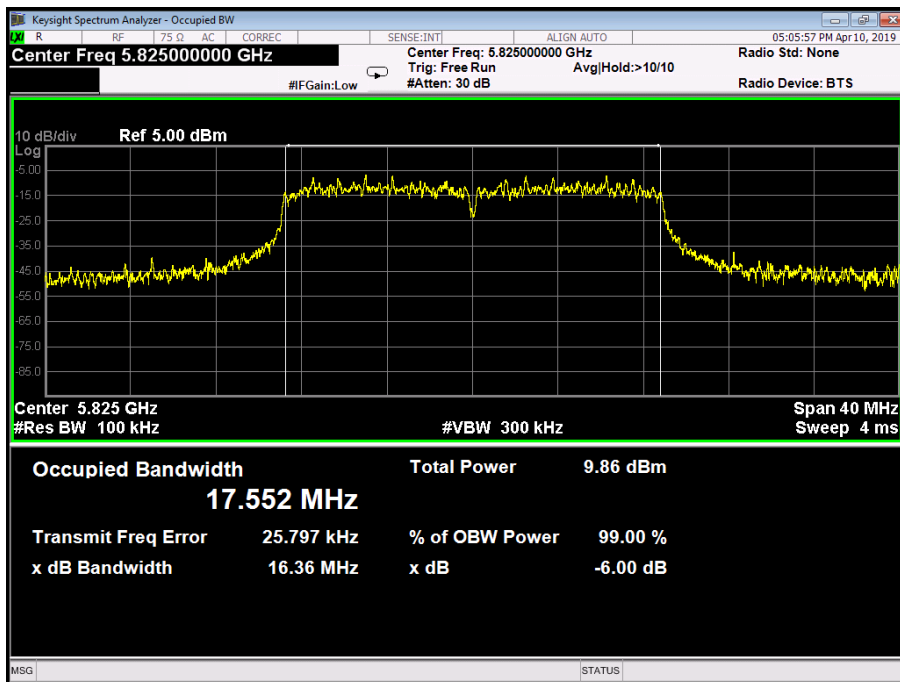
802.11a Mode

5785 MHz



802.11a Mode

5825 MHz



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)	Limit (KHz)
149	5745	16.32	16.434	≥500
157	5785	16.35	16.446	≥500
165	5825	16.28	16.484	≥500

802.11a Mode

5745 MHz

Keysight Spectrum Analyzer - Occupied BW

RF

75 Ω

AC

CORREC

SENSE:INT

ALIGN: AUTO

05:11:56 PM Apr 10, 2019

Center Freq 5.745000000 GHz

Center Freq: 5.745000000 GHz

Trig: Free Run

Avg/Hold: >10/10

Radio Std: None

#IFGain: Low

#Atten: 30 dB

Radio Device: BTS

10 dB/div

Ref 20.00 dBm

Log

-70.0

-60.0

-50.0

-40.0

-30.0

-20.0

-10.0

0.00

10.0

Center 5.745 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 40 MHz

Sweep 4 ms

Occupied Bandwidth

16.434 MHz

Total Power

9.93 dBm

Transmit Freq Error

-5.630 kHz

% of OBW Power

99.00 %

x dB Bandwidth

16.32 MHz

x dB

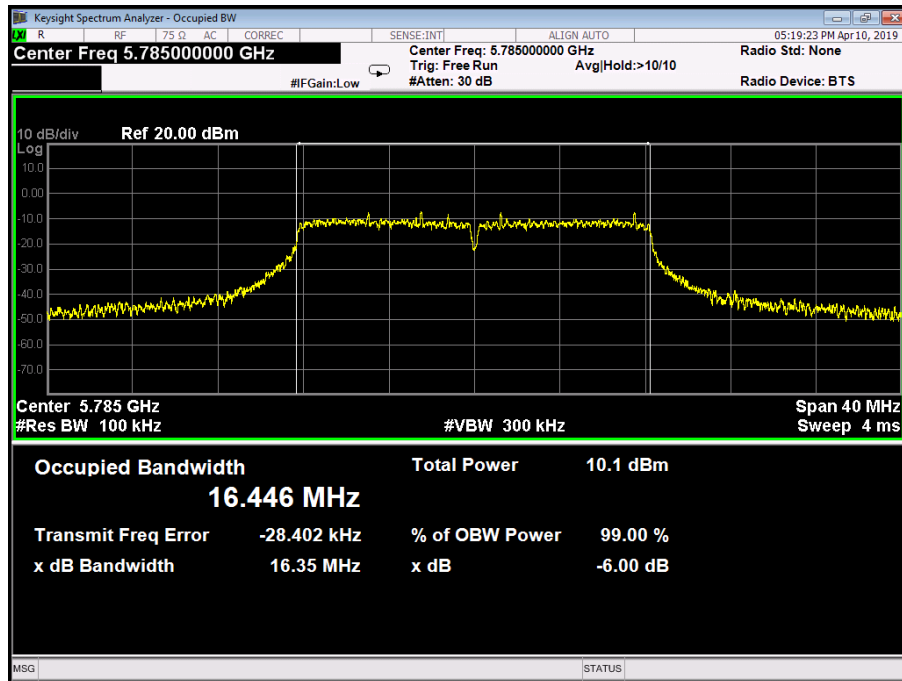
-6.00 dB

MSG

STATUS

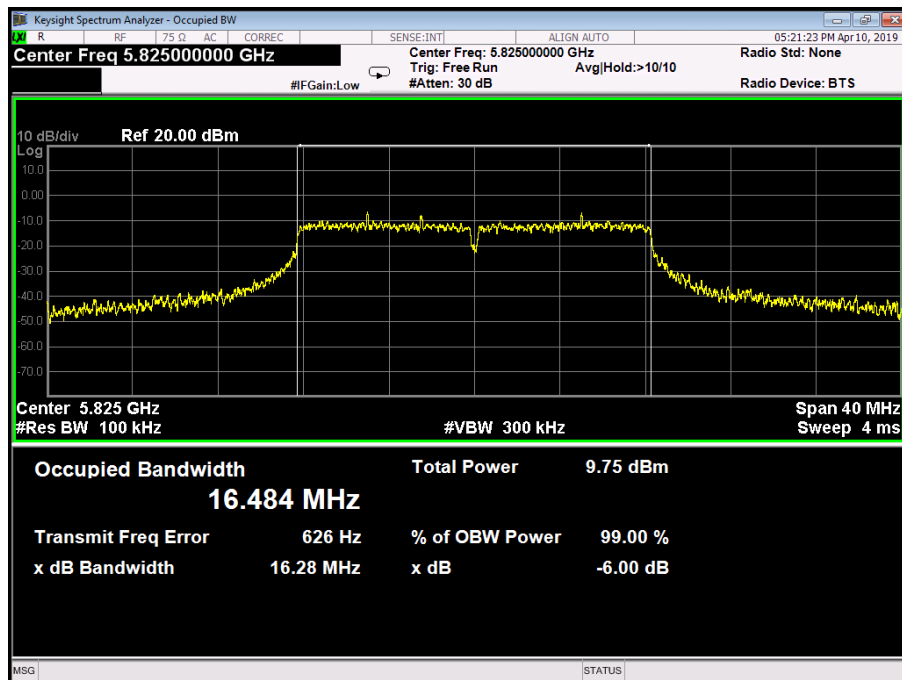
802.11a Mode

5785 MHz



802.11a Mode

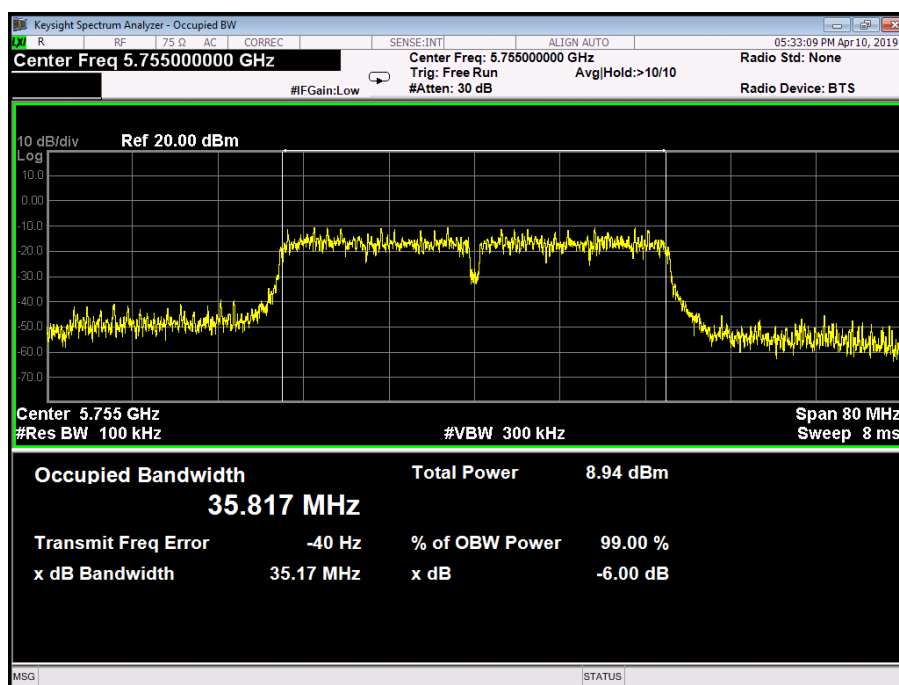
5825 MHz



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)	Limit (KHz)	
151	5755	35.17	35.817	≥500	
159	5795	35.62	35.967	≥500	

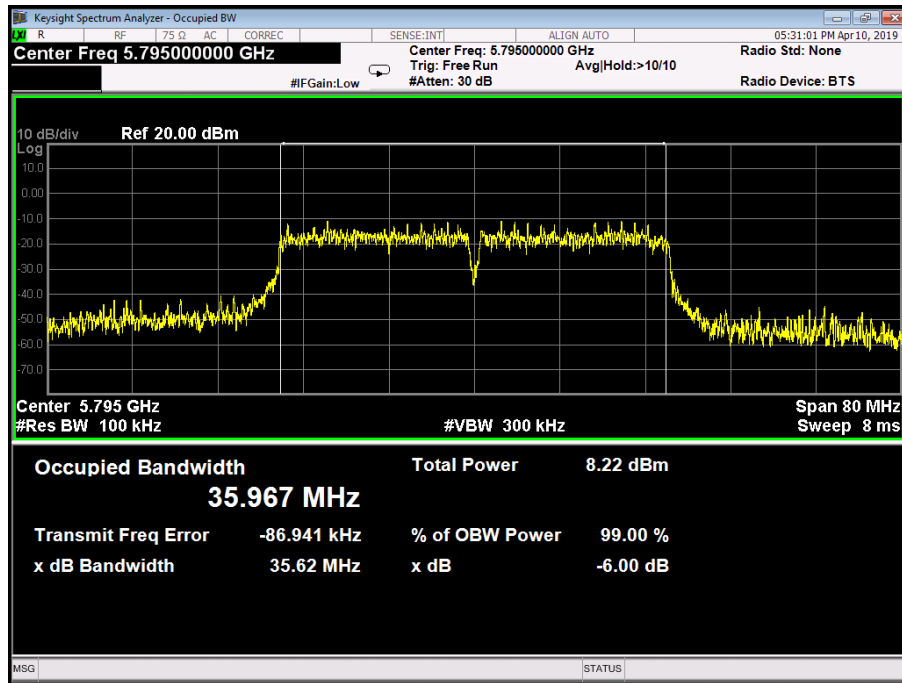
802.11n(HT40) Mode

5755 MHz



802.11n(HT40) Mode

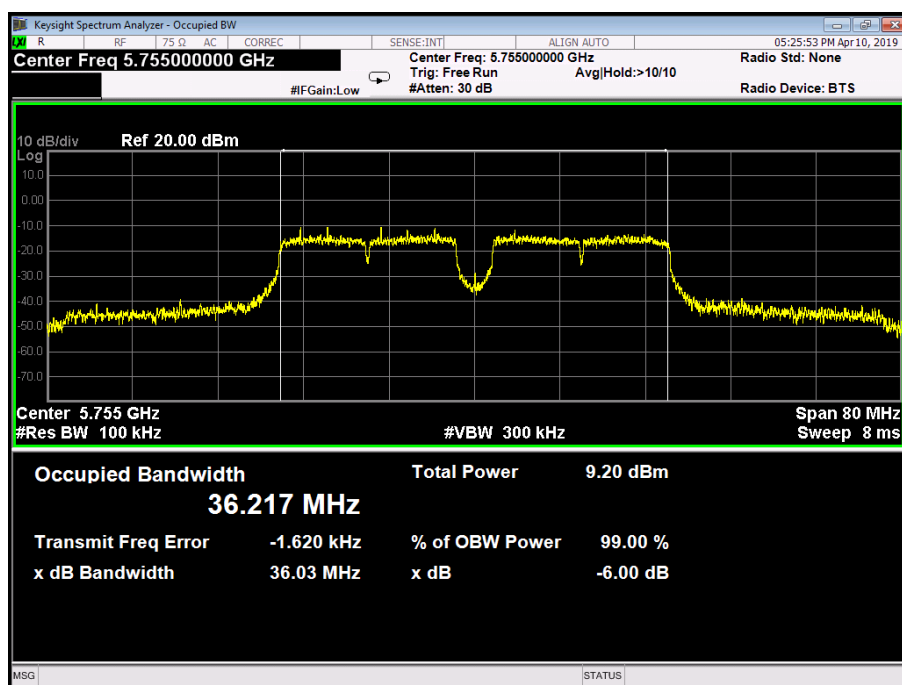
5795 MHz



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)	Limit (KHz)	
151	5755	36.03	36.217	≥500	
159	5795	35.47	36.186	≥500	

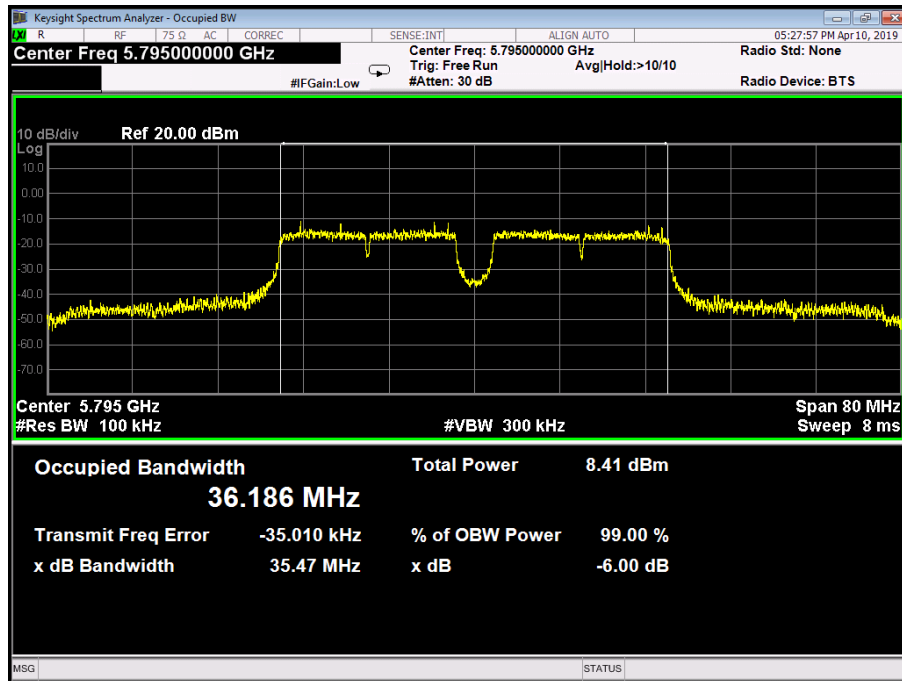
802.11ac(VHT40) Mode

5755 MHz



802.11ac(VHT40) Mode

5795 MHz



Temperature:	25 °C	Relative Humidity:	55%	
Test Voltage:	AC 120V/60Hz			
Test Mode:	TX 802.11ac(80) Mode (U-NII-3)			
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)	Limit (KHz)
155	5775	74.39	75.238	≥500

802.11ac(80) Mode

5775 MHz

Keysight Spectrum Analyzer - Occupied BW

Center Freq 5.775000000 GHz

Center Freq: 5.775000000 GHz

Trig: Free Run

#Atten: 30 dB

Align Auto

Avg|Hold: >10/10

Radio Std: None

Radio Device: BTS

#IF Gain: Low

10 dB/div

Ref 20.00 dBm

Log

10.0

0.00

-10.0

-20.0

-30.0

-40.0

-50.0

-60.0

-70.0

Center 5.775 GHz

#Res BW 100 kHz

#VBW 300 kHz

Span 160 MHz

Sweep 15.33 ms

Occupied Bandwidth

75.238 MHz

Total Power

8.56 dBm

Transmit Freq Error

-129.22 kHz

% of OBW Power

99.00 %

x dB Bandwidth

74.39 MHz

x dB

-6.00 dB

MSG

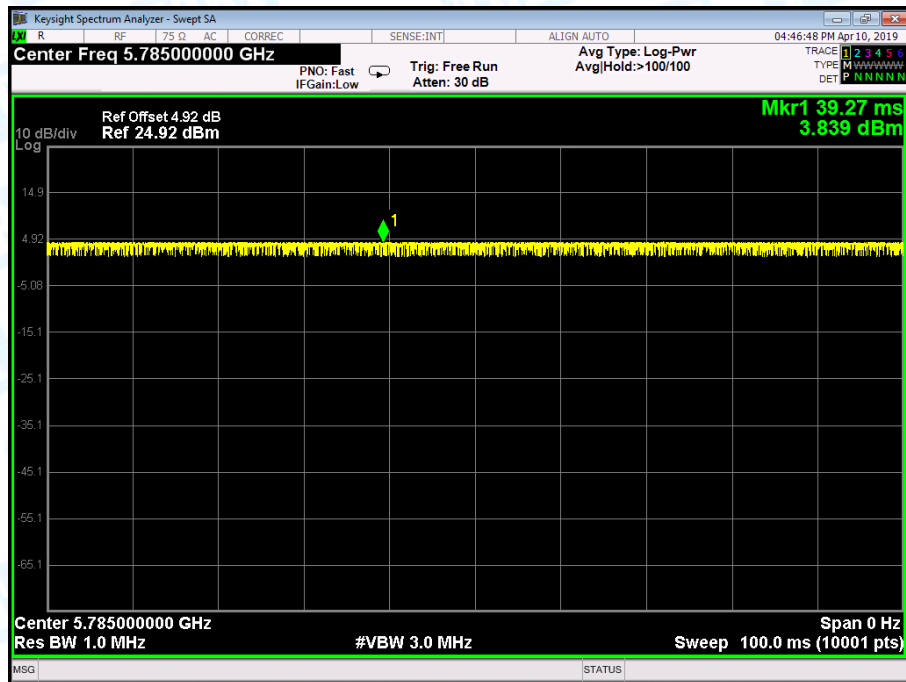
STATUS

Attachment E-- Output Power Test Data

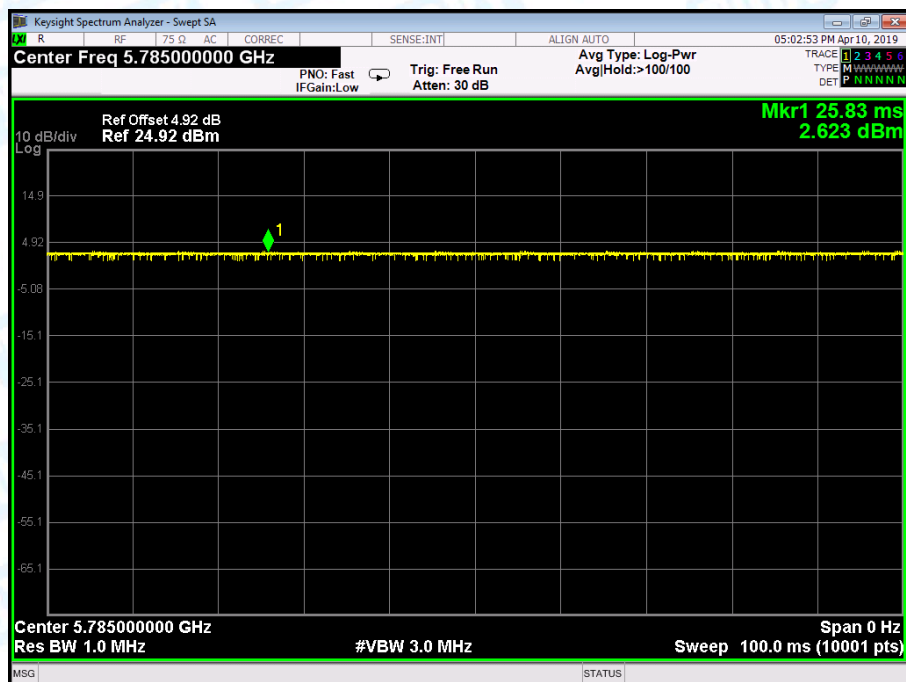
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
U-NII-3			
Test Mode	Frequency (MHz)	Test Data	Limit (dBm)
		Conducted Power (dBm)	
802.11a	5745	13.69	30
	5785	13.30	
	5825	13.63	
802.11n (HT20)	5745	13.40	
	5785	13.72	
	5825	13.24	
802.11ac (HT20)	5745	13.42	
	5785	13.12	
	5825	13.21	
802.11n (HT40)	5755	12.59	
	5795	12.40	
802.11 ac(40)	5755	12.73	
	5795	12.07	
802.11 ac(80)	5775	11.72	
Result: PASS			

Test Mode		Duty cycle
U-NII-3	802.11 a	>98%
	802.11 n(HT20)	
	802.11 ac(HT20)	
	802.11 n(HT40)	
	802.11 ac(HT40)	
	802.11 ac(HT80)	
Please see the next plots.		

802.11 a 5785MHz U-NII-3



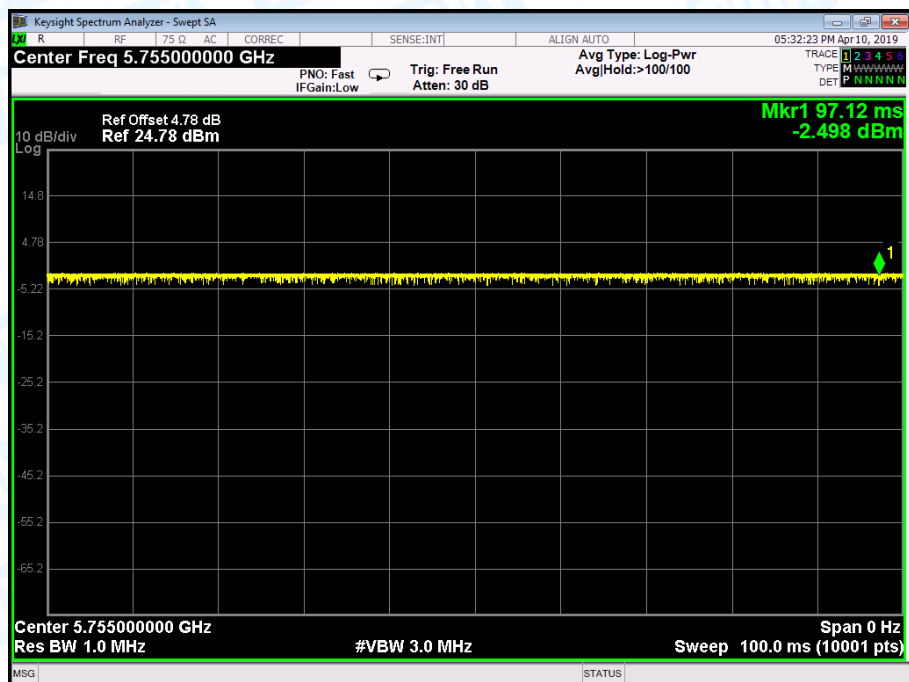
802.11 n(HT20) 5785MHz U-NII-3



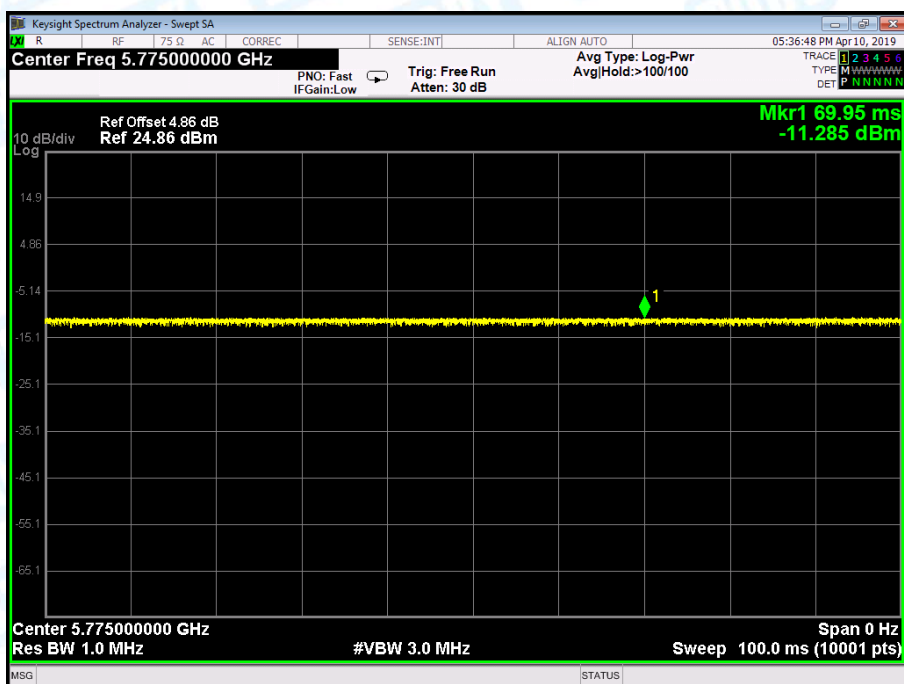
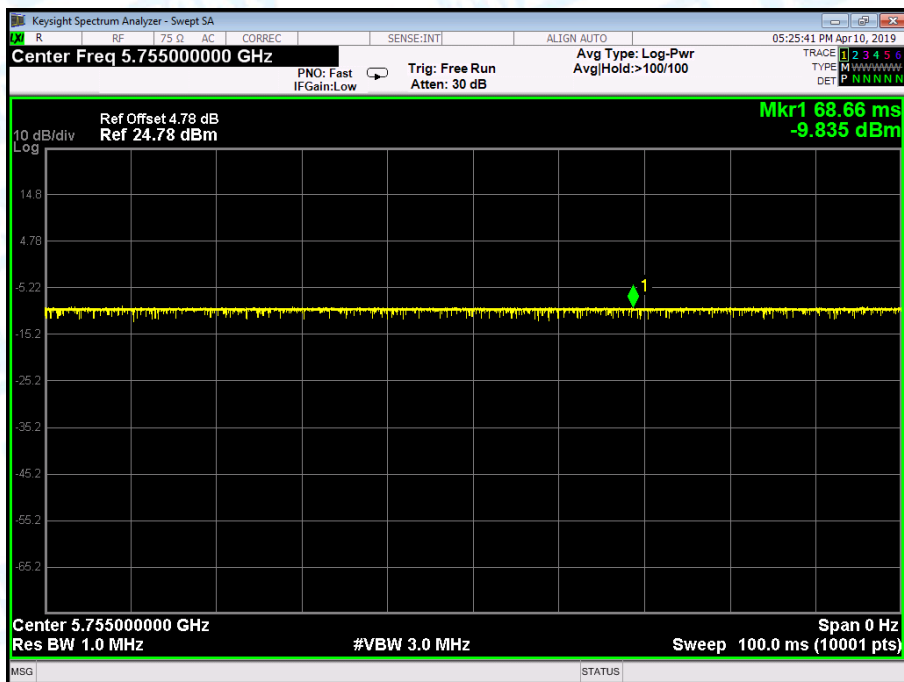
802.11 ac(HT20) 5785MHz U-NII-3



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



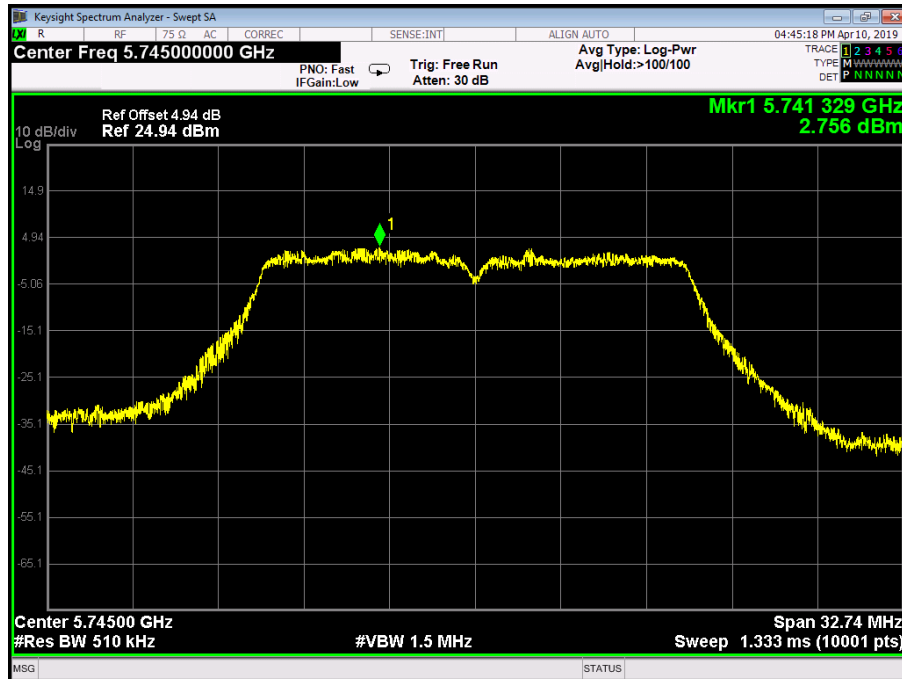
802.11 ac(HT80) 5775MHz U-NII-3



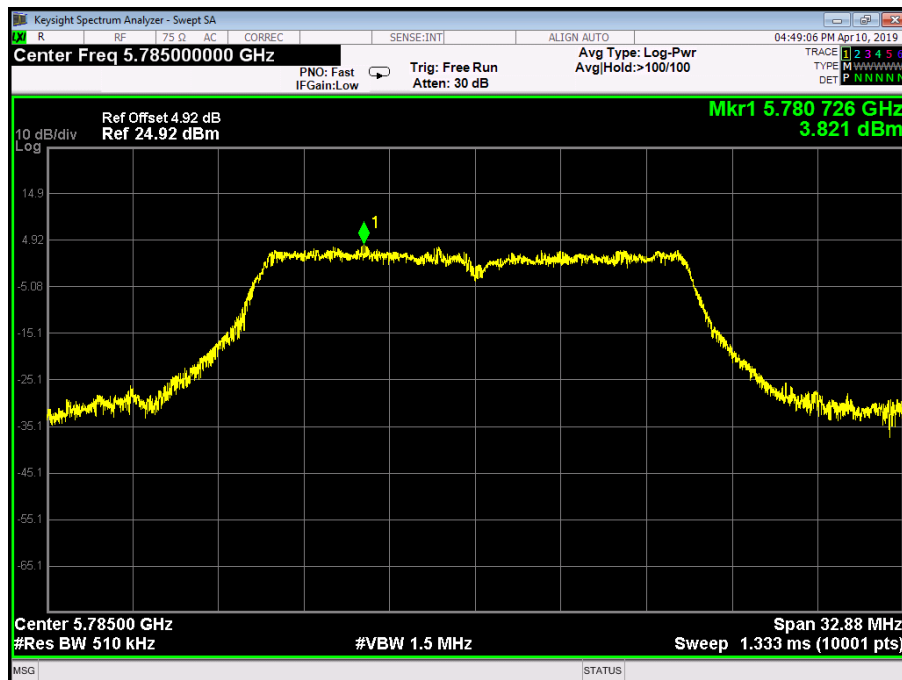
Attachment F-- Power Spectral Density Test Data

Temperature:	25 °C	Relative Humidity:	55%	
Test Voltage:	AC 120V/60Hz			
U-NII-3				
Test Mode	Frequency (MHz)	Test Data	Limit (dBm/500KHz)	
		Power Density (dBm/500KHz)		
802.11a	5745	2.756	29.5	
	5785	3.821		
	5825	3.602		
802.11n (HT20)	5745	4.167		
	5785	2.690		
	5825	3.215		
802.11ac (HT20)	5745	2.652		
	5785	3.665		
	5825	2.585		
802.11n (HT40)	5755	0.461		
	5795	-1.146		
802.11ac(40)	5755	-0.402		
	5795	-1.090		
802.11ac(80)	5775	-3.781		
Result: PASS				
Test plots please refer to below pages:				

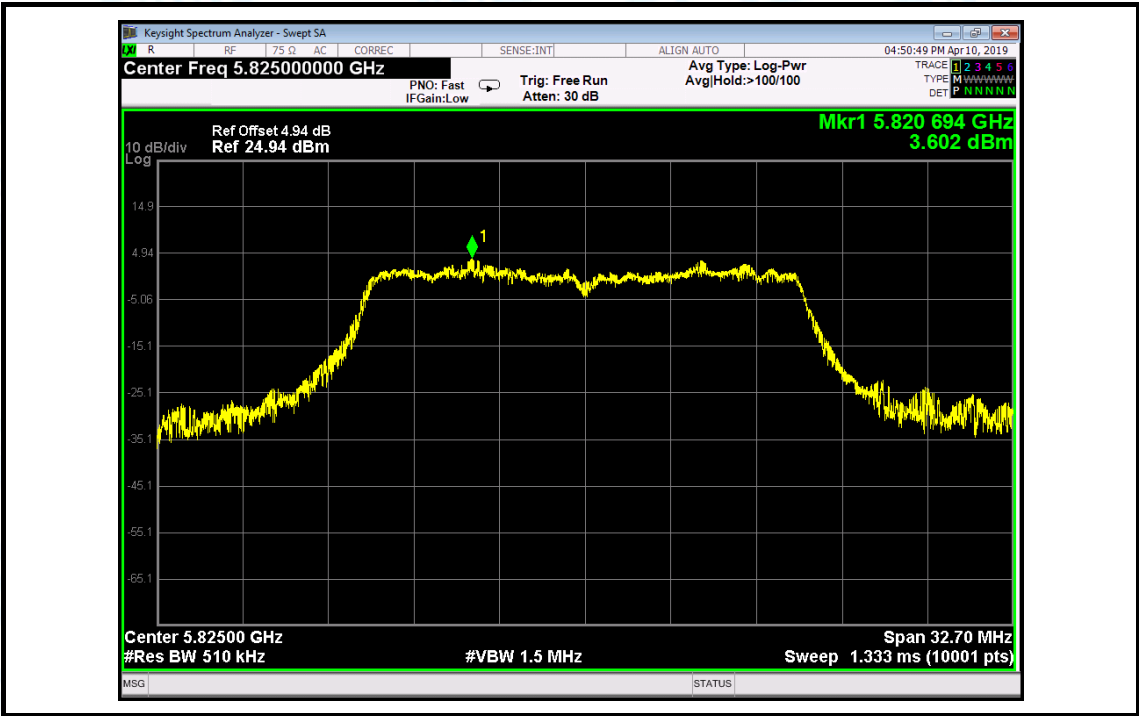
802.11 a 5745 MHz



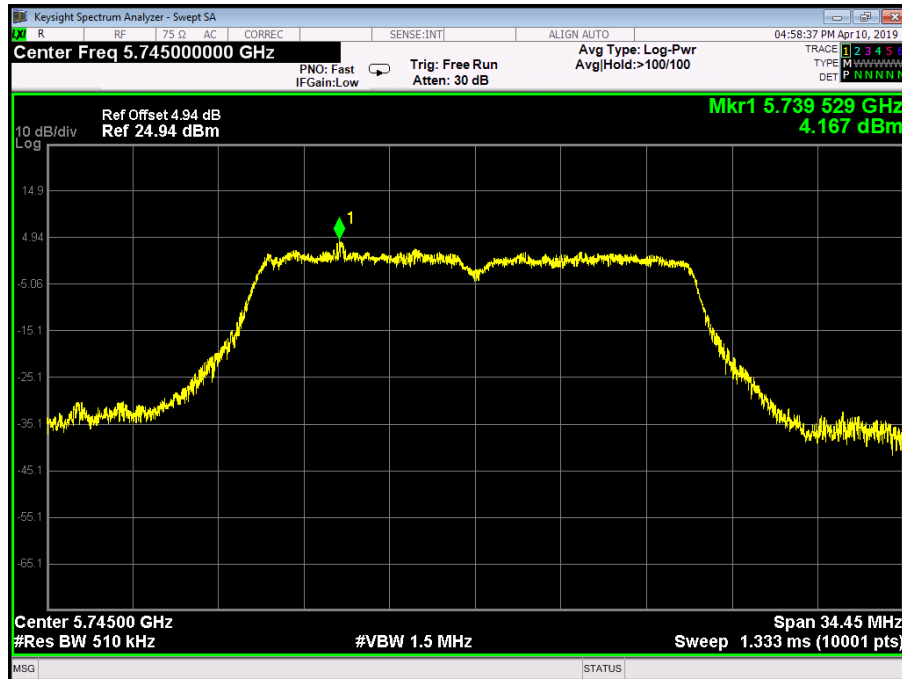
802.11 a 5785 MHz



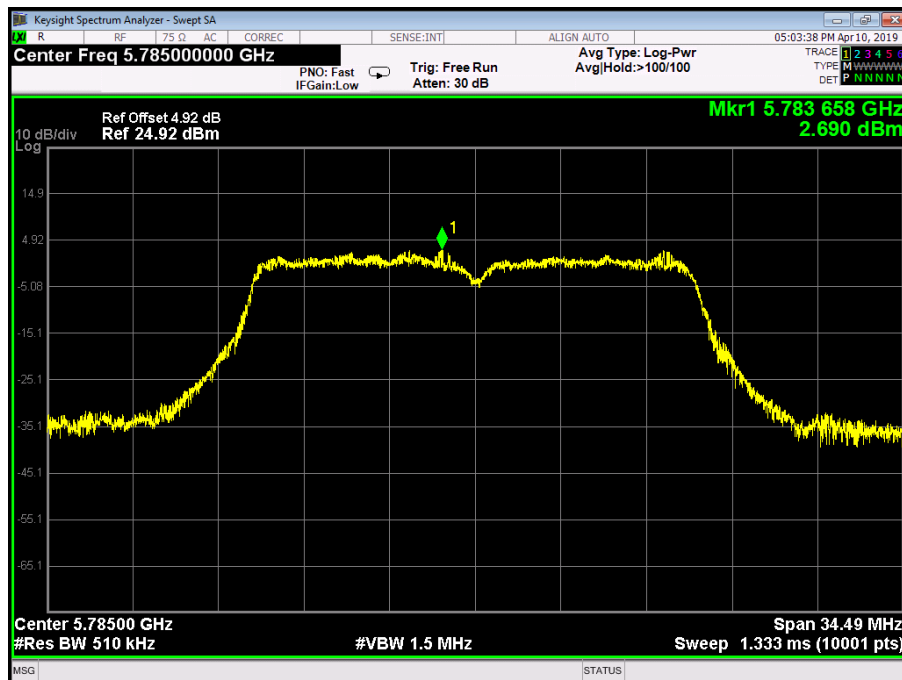
802.11 a 5825 MHz



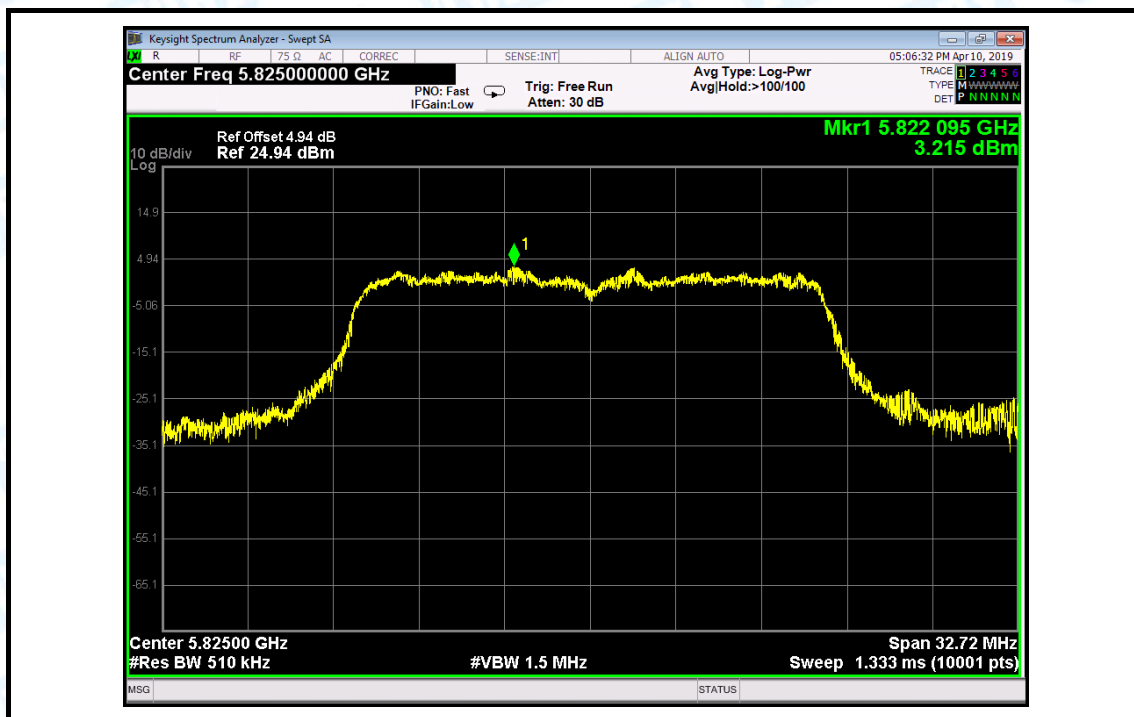
802.11 n(20) 5745 MHz



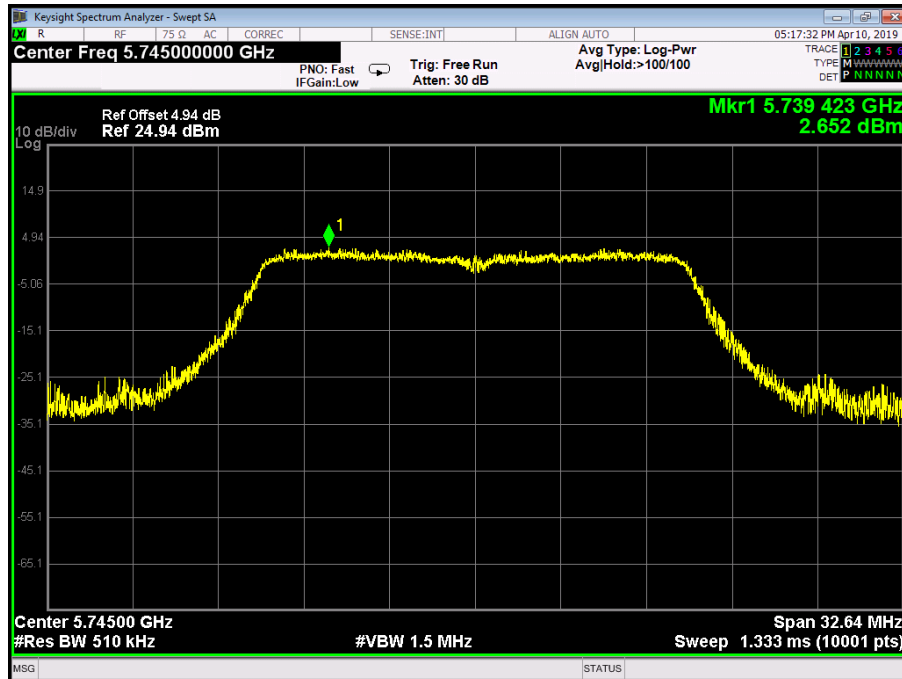
802.11 n(20) 5785 MHz



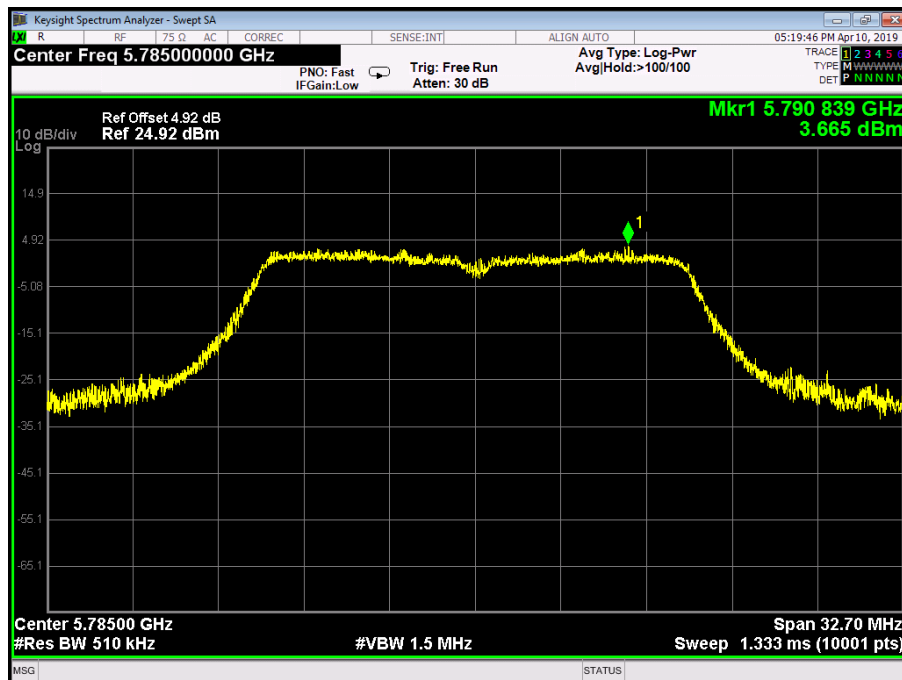
802.11 n(20) 5825 MHz



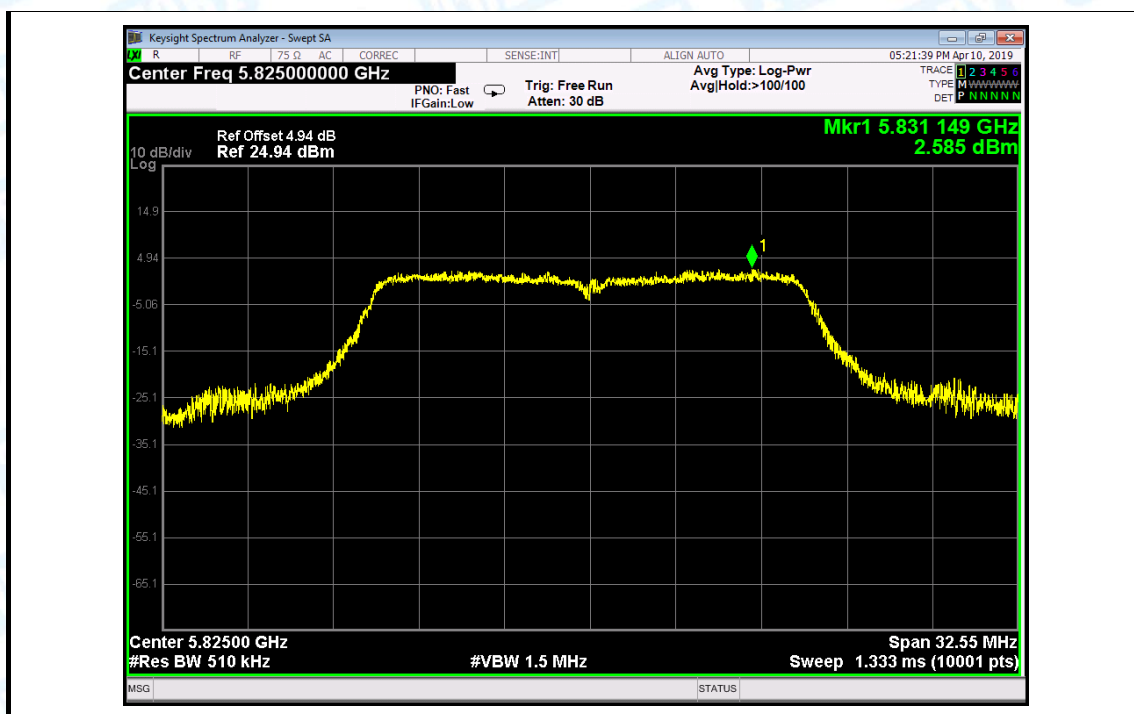
802.11 ac(20) 5745 MHz



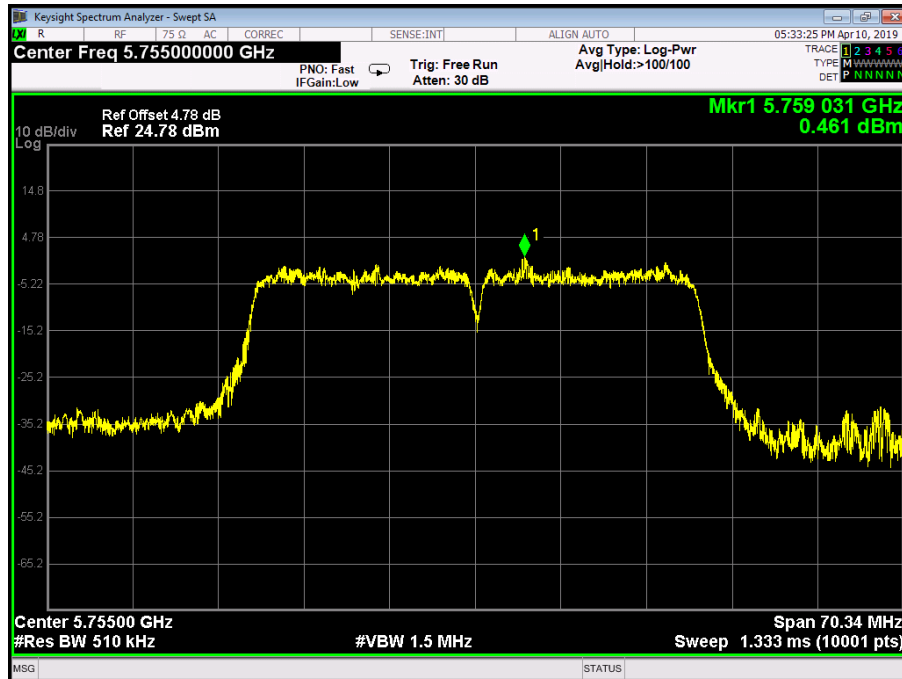
802.11 ac(20) 5785 MHz



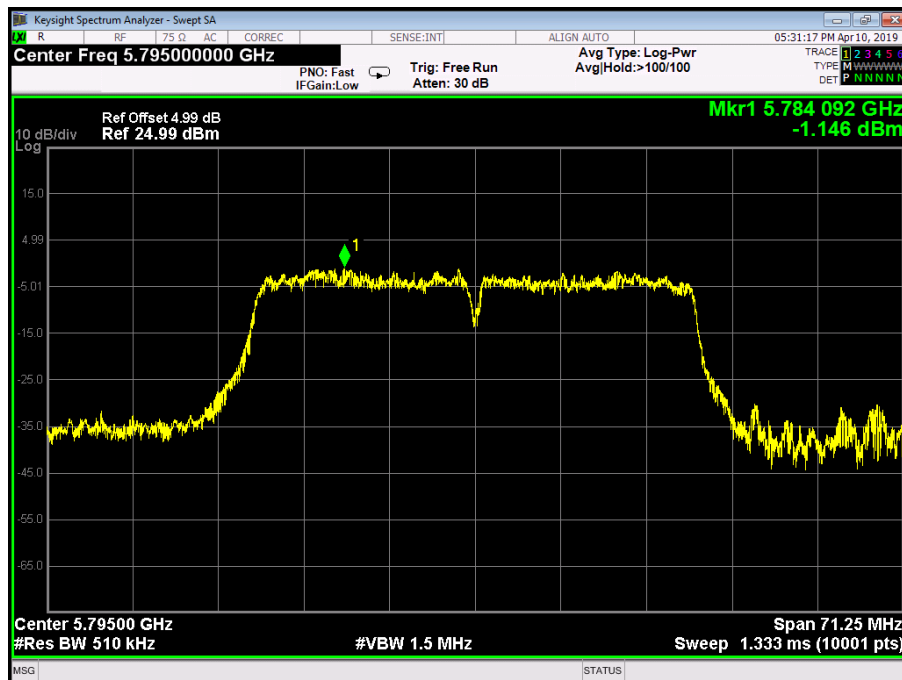
802.11 ac(20) 5825 MHz



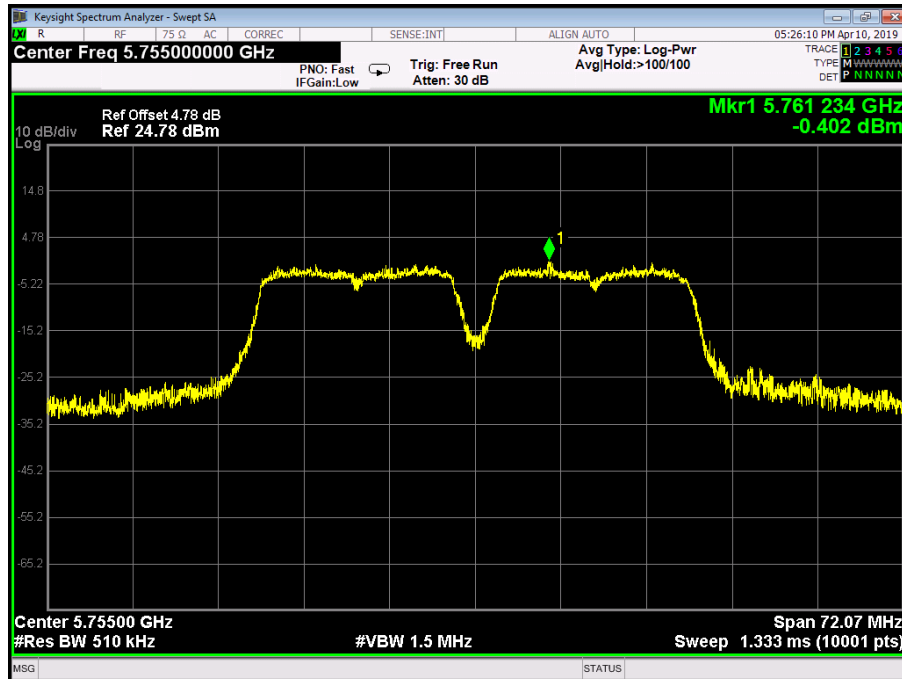
802.11 n(40) 5755 MHz



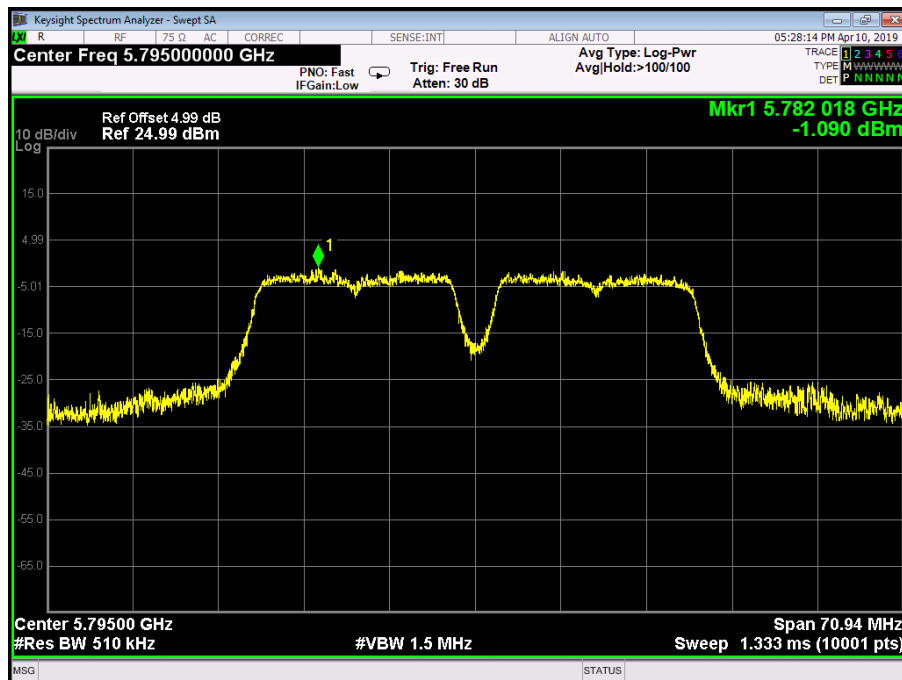
802.11 n(40) 5795 MHz



802.11 ac(40) 5755 MHz



802.11 ac(40) 5795 MHz



802.11 ac(80) 5775 MHz



Attachment G-- Frequency Stability Measurement Test Data

801.11a U-NII-3: 5745 MHz	
Voltage vs. Frequency Stability	
Voltage (V)	Measurement Frequency (MHz)
240	5745.0086
120	5745.0092
100	5745.0098
Max. Deviation (MHz)	0.0098
Max. Deviation (ppm)	1.71
Temperature vs. Frequency Stability	
Temperature (°C)	Measurement Frequency (MHz)
0	5745.0023
10	5745.0016
20	5745.0018
30	5745.0026
40	5745.0033
50	5745.0068
Max. Deviation (MHz)	0.0068
Max. Deviation (ppm)	1.18
Limit (ppm)	20
Result	Pass

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

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