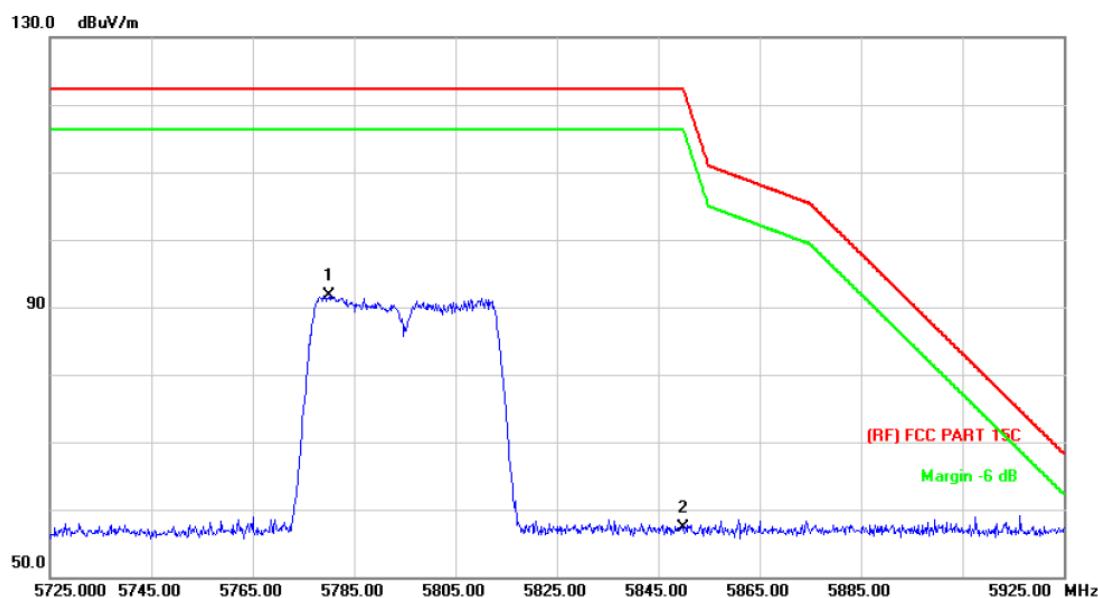


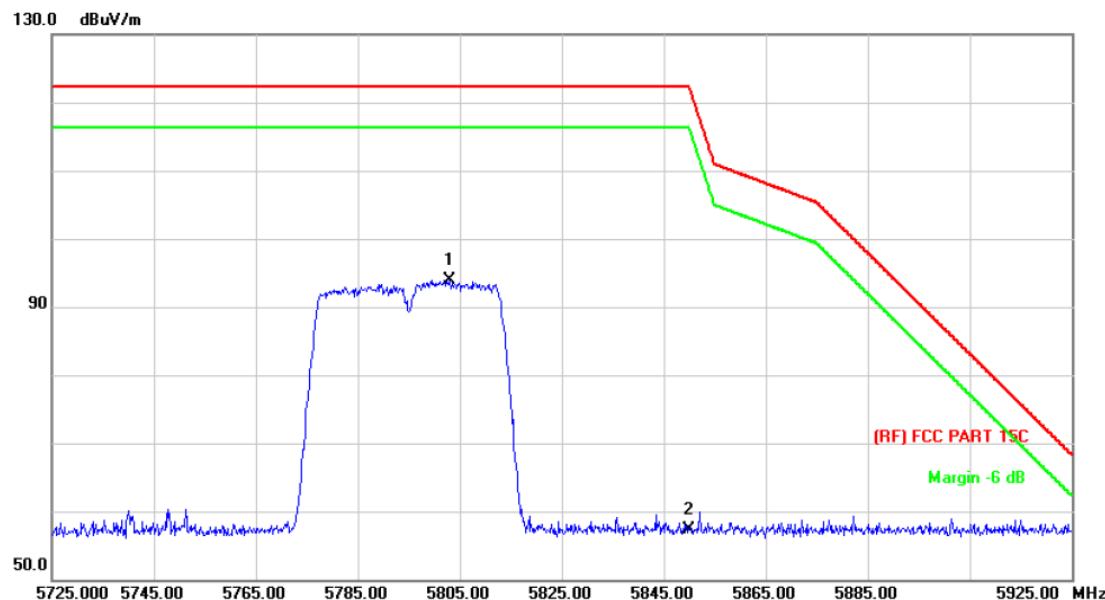
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11ac(VHT40) Mode 5795 MHz (U-NII-3)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	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

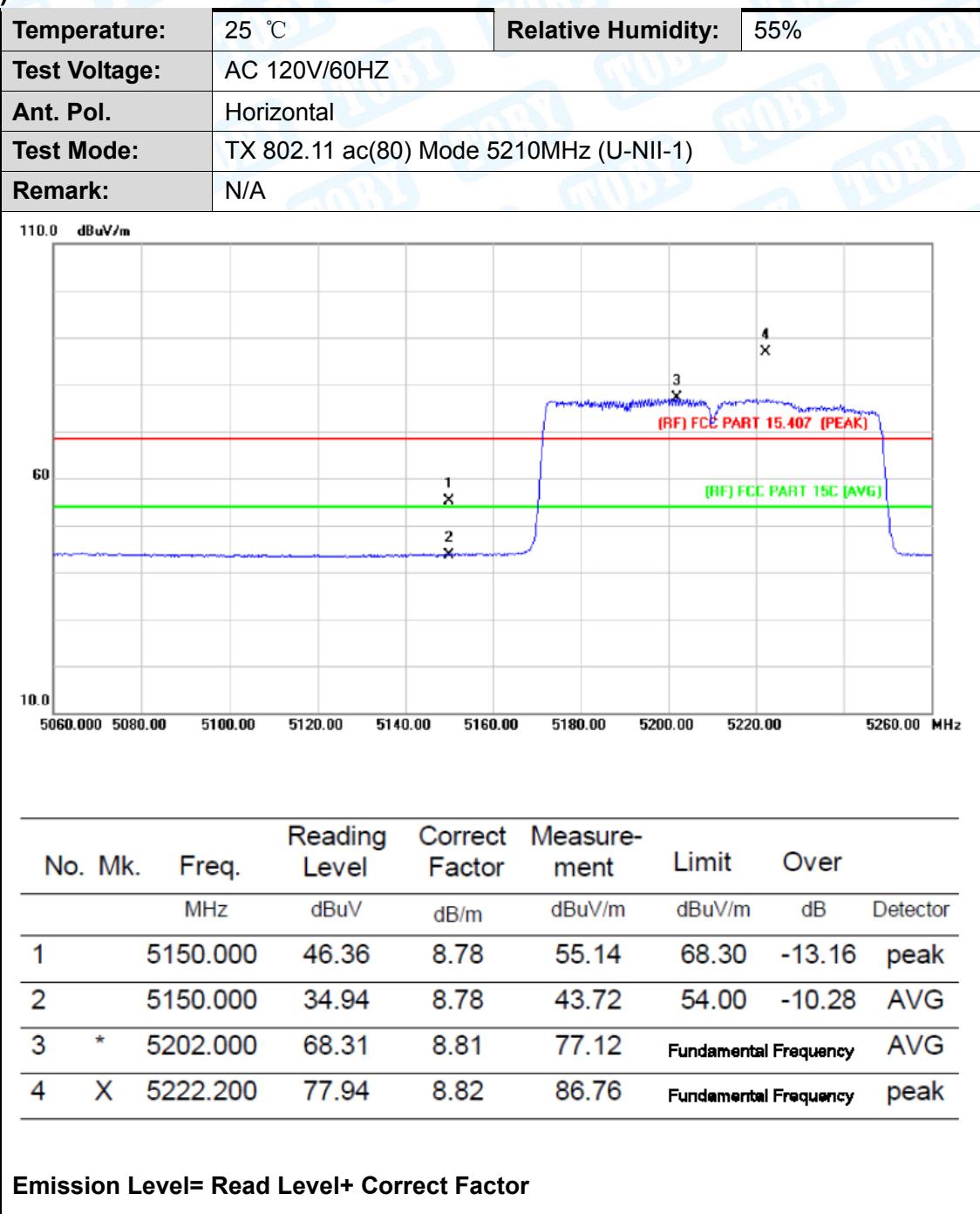
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11ac(VHT40) Mode 5795 MHz (U-NII-3)		
Remark:	N/A		



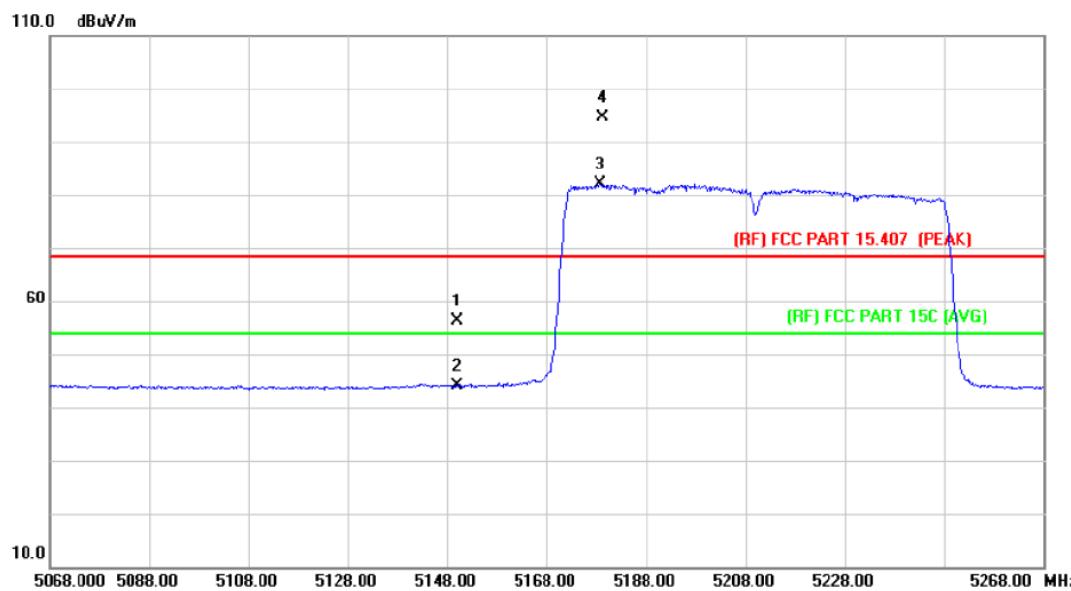
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over
		MHz	dBuV	dB/m	dBuV/m	dB	Detector
1	*	5803.000	83.85	10.00	93.85	122.30	-28.45 peak
2		5850.000	47.11	10.13	57.24	122.30	-65.06 peak

Emission Level= Read Level+ Correct Factor

ac(80)



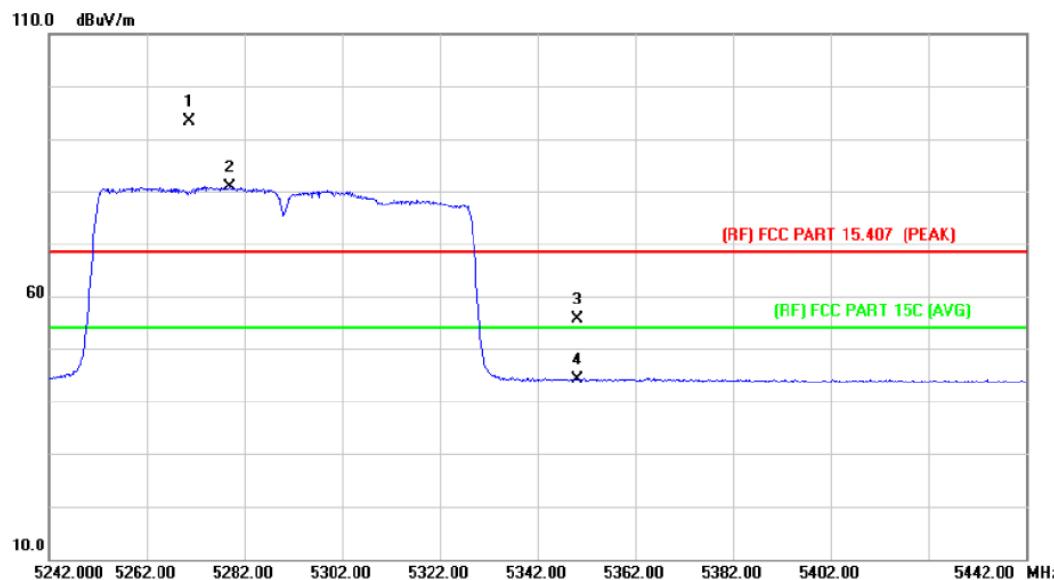
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60HZ		
Ant. Pol.	Vertical		
Test Mode:	TX 802.11 ac(80) Mode 5210MHz (U-NII-1)		
Remark:	N/A		



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	
		MHz	dBuV	dB/m	dBuV/m	dBuV/m	dB	Detector
1		5150.000	47.66	8.78	56.44	68.30	-11.86	peak
2		5150.000	35.28	8.78	44.06	54.00	-9.94	AVG
3	*	5178.800	73.32	8.79	82.11	Fundamental Frequency		AVG
4	X	5179.400	85.81	8.79	94.60	Fundamental Frequency		peak

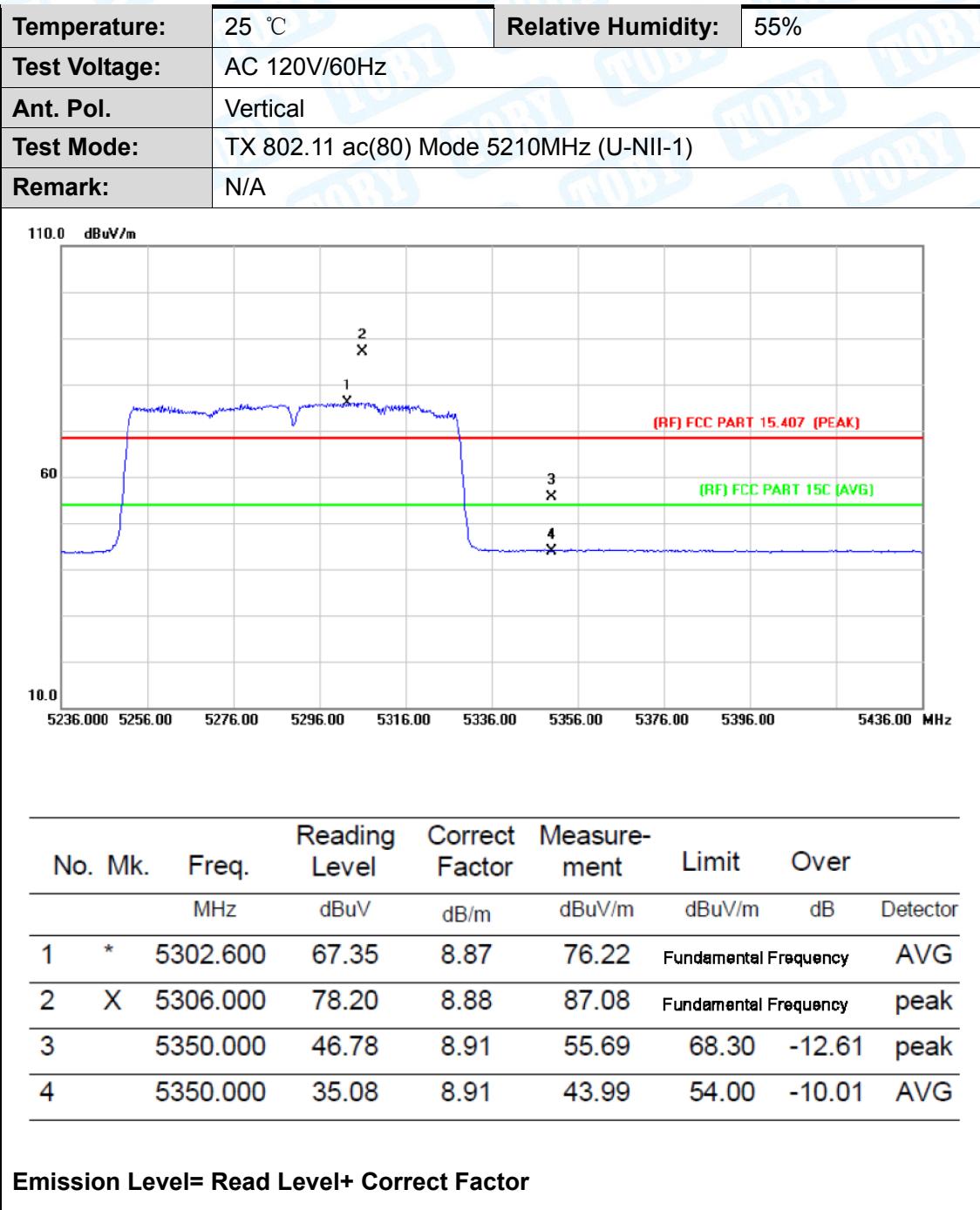
Emission Level= Read Level+ Correct Factor

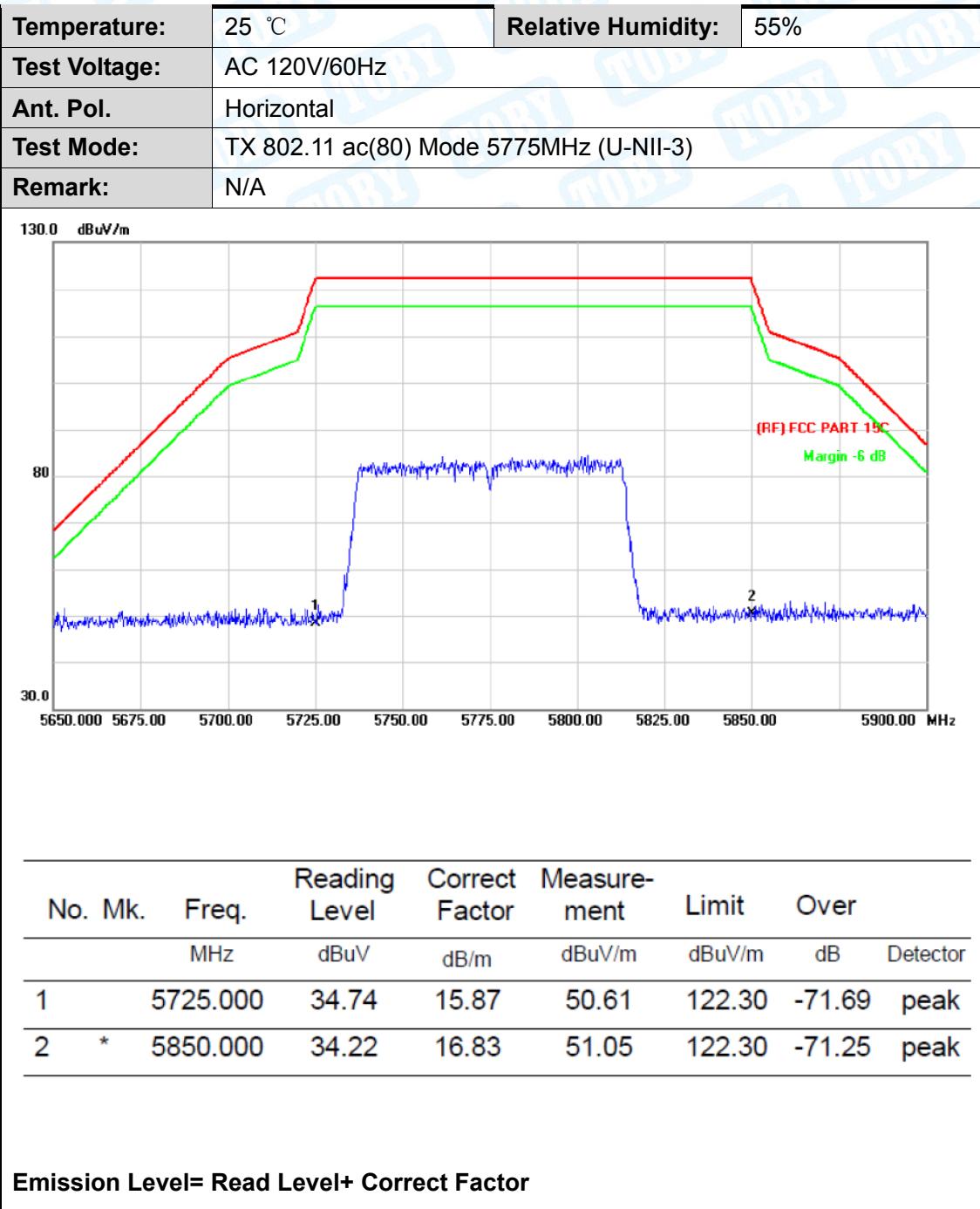
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Ant. Pol.	Horizontal		
Test Mode:	TX 802.11 ac(80) Mode 5210MHz (U-NII-1)		
Remark:	N/A		

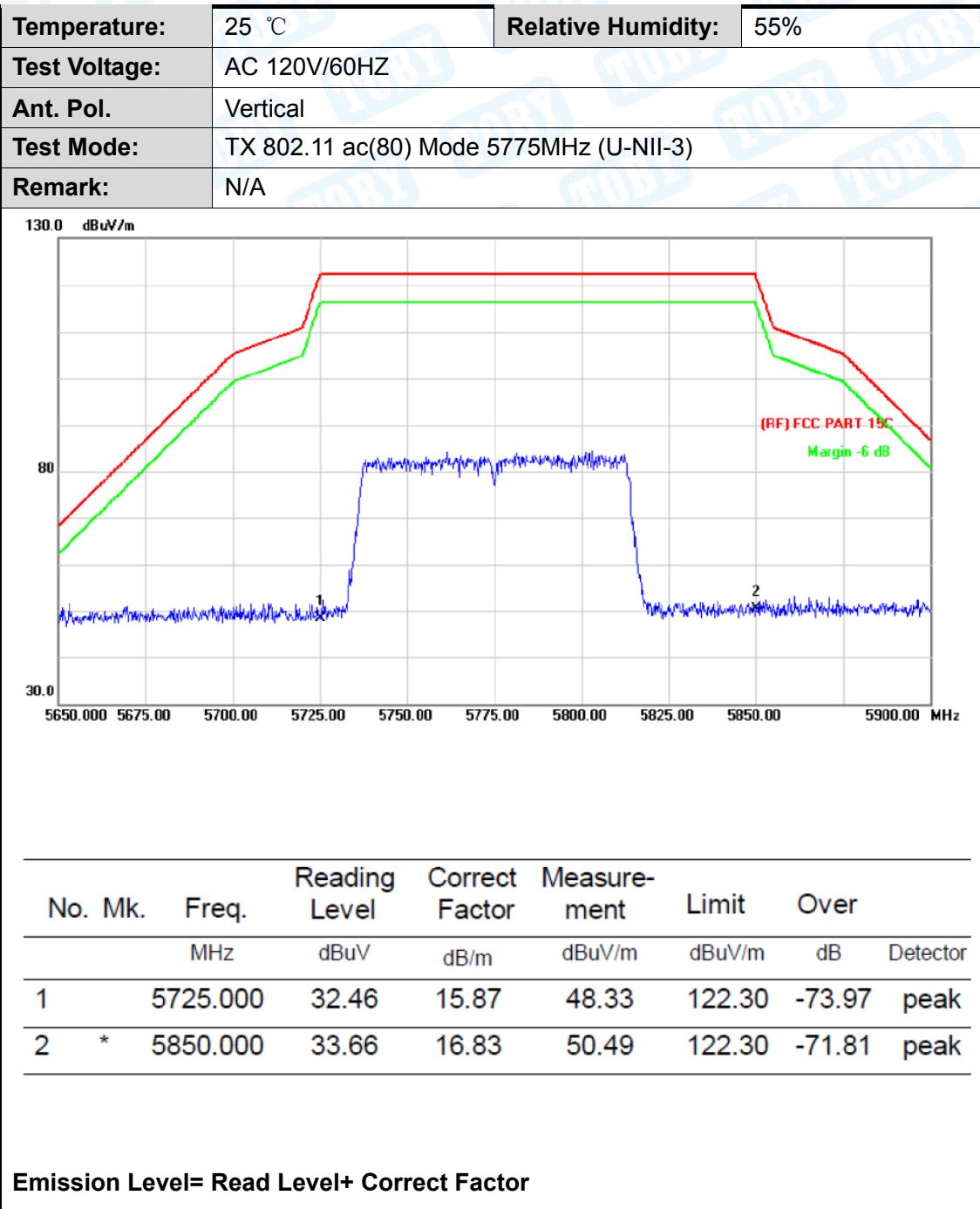


No.	Mk.	Freq. MHz	Reading Level dB <sub>B</sub> V	Correct Factor dB/m	Measure- ment dB <sub>B</sub> V/m	Limit dB <sub>B</sub> V/m	Over Detector
1	X	5270.600	84.60	8.85	93.45	Fundamental Frequency	peak
2	*	5279.000	71.96	8.86	80.82	Fundamental Frequency	AVG
3		5350.000	46.68	8.91	55.59	68.30	-12.71 peak
4		5350.000	35.11	8.91	44.02	54.00	-9.98 AVG

Emission Level= Read Level+ Correct Factor

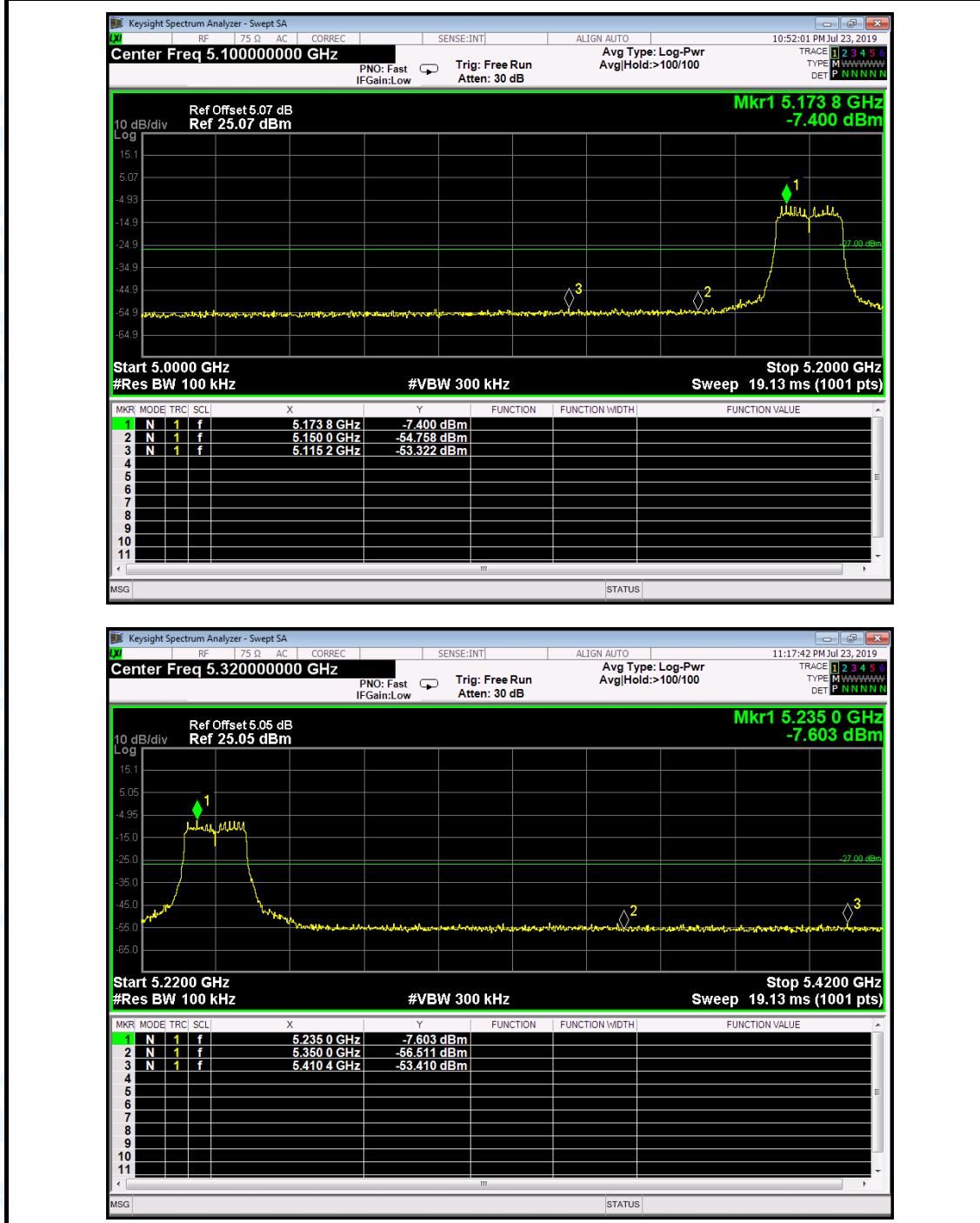


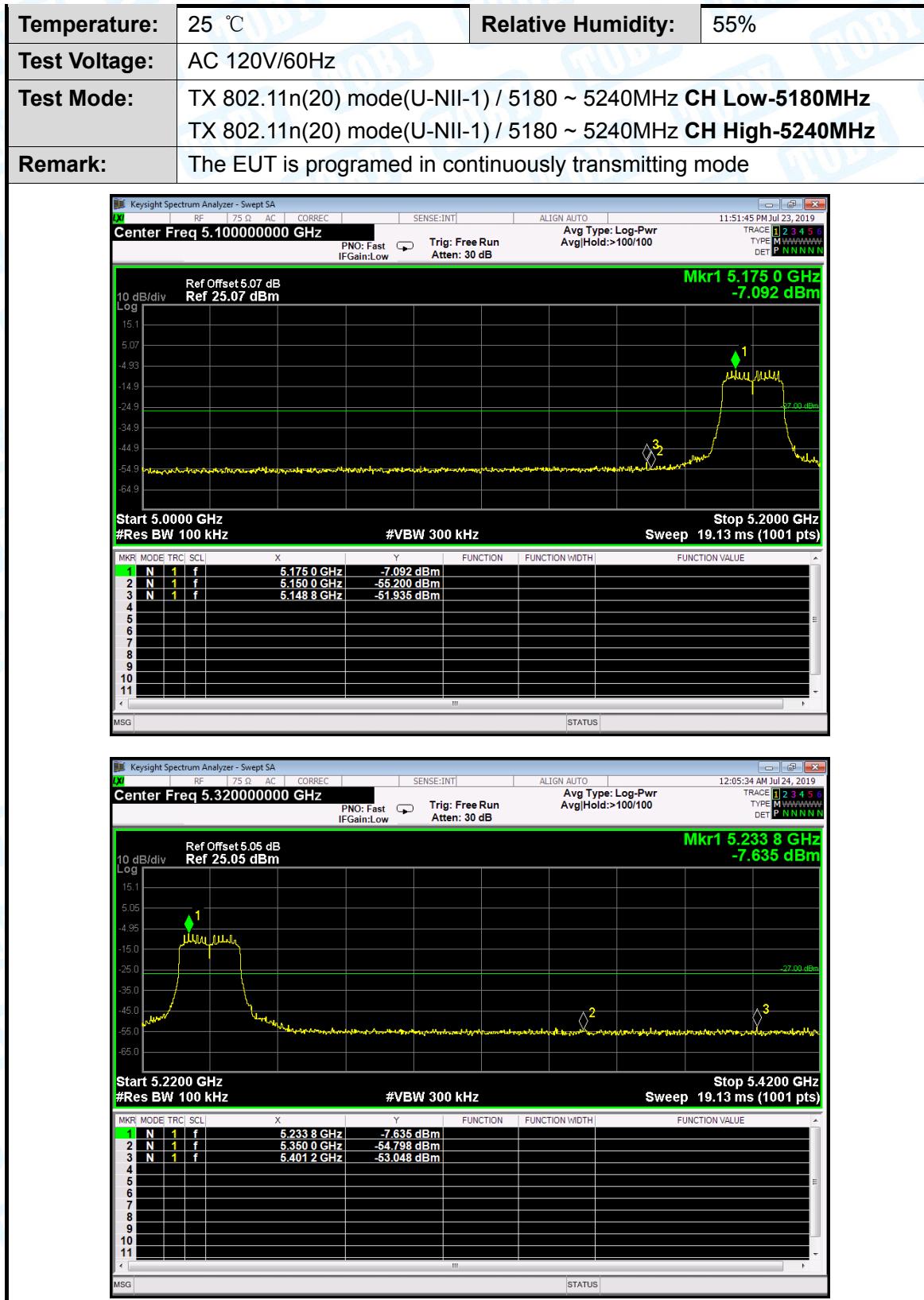


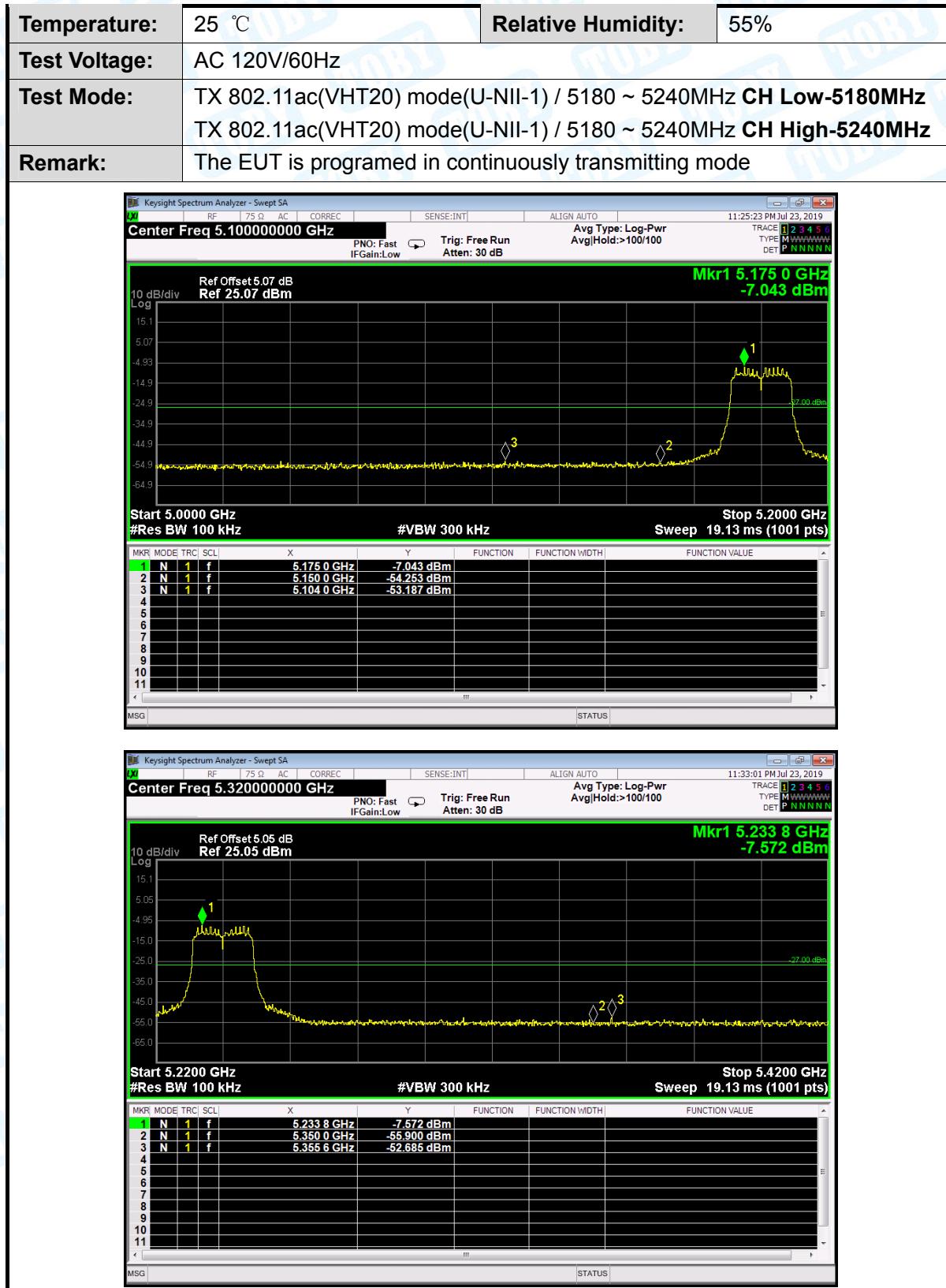


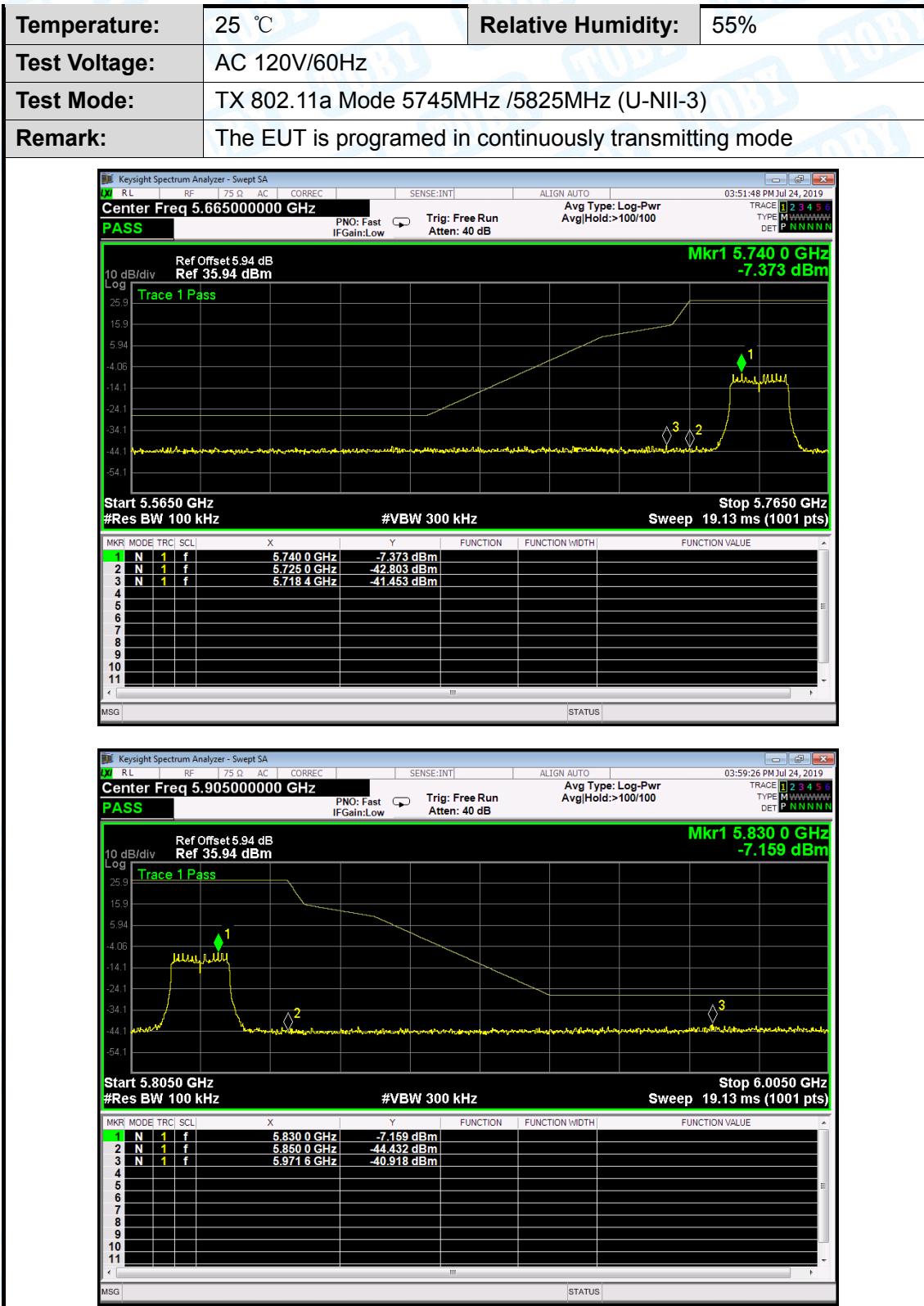
## (2) Conducted Test

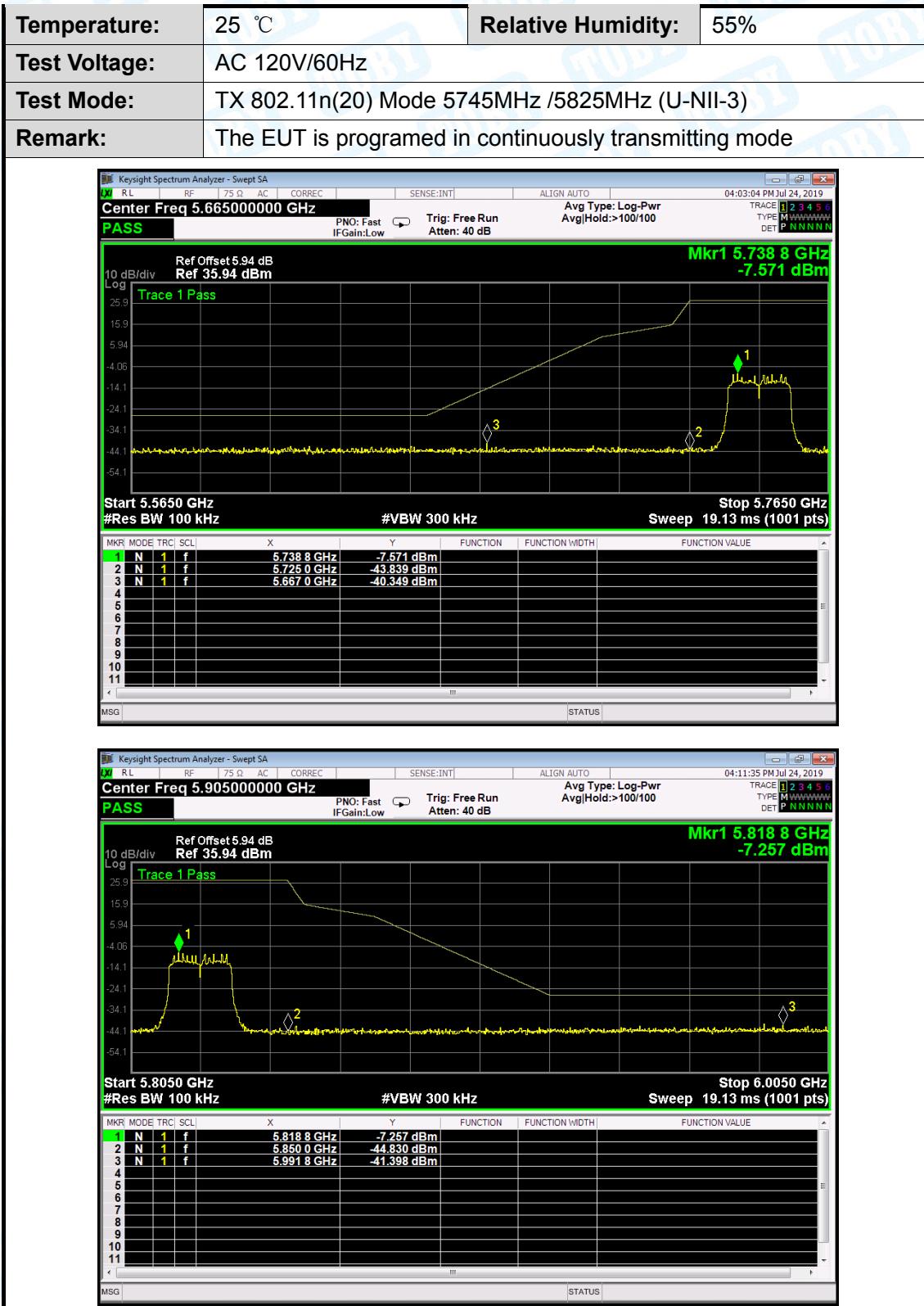
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a mode(U-NII-1) / 5180 ~ 5240MHz CH Low-5180MHz TX 802.11a mode(U-NII-1) / 5180 ~ 5240MHz CH High-5240MHz		
Remark:	The EUT is programmed in continuously transmitting mode		

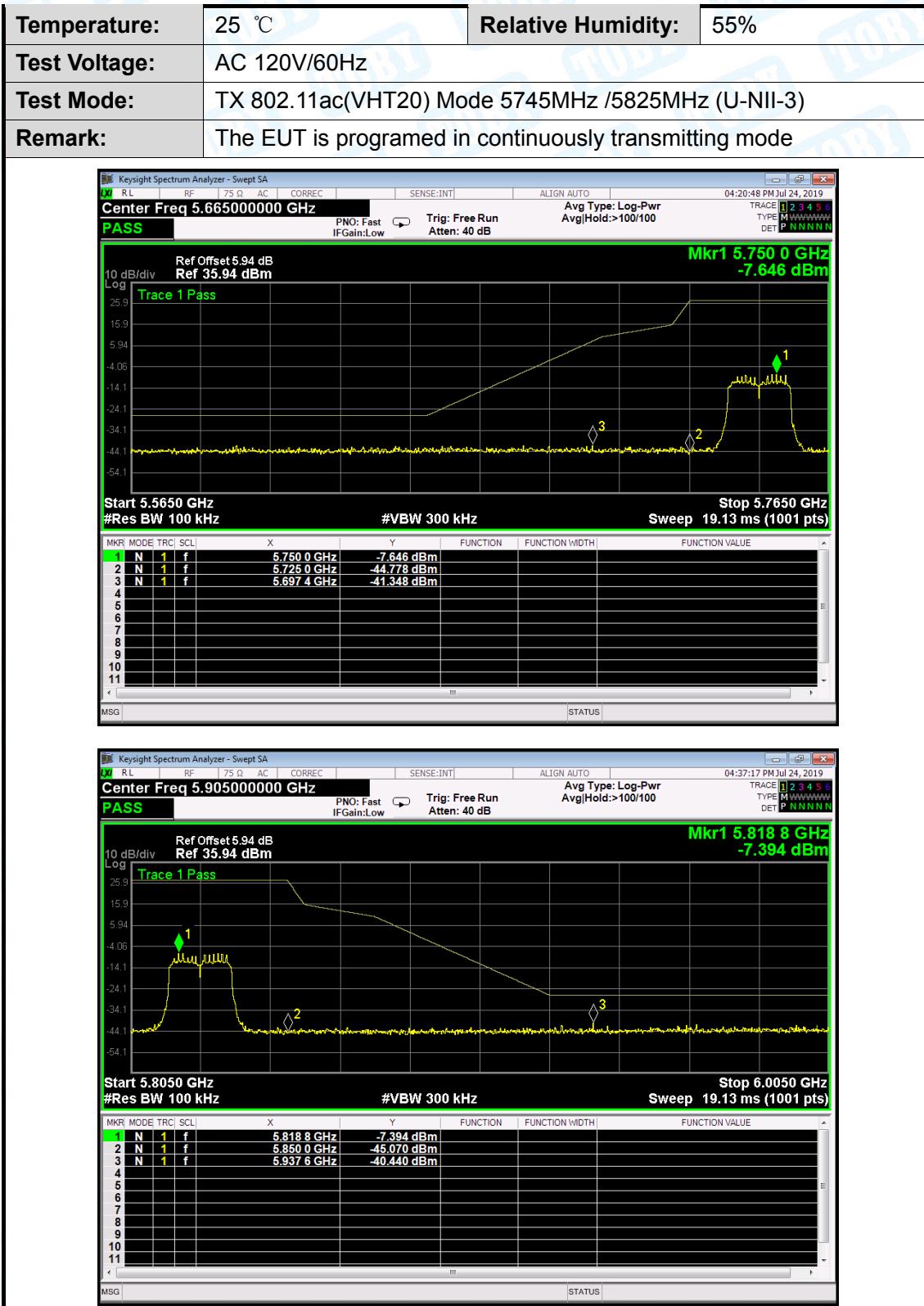


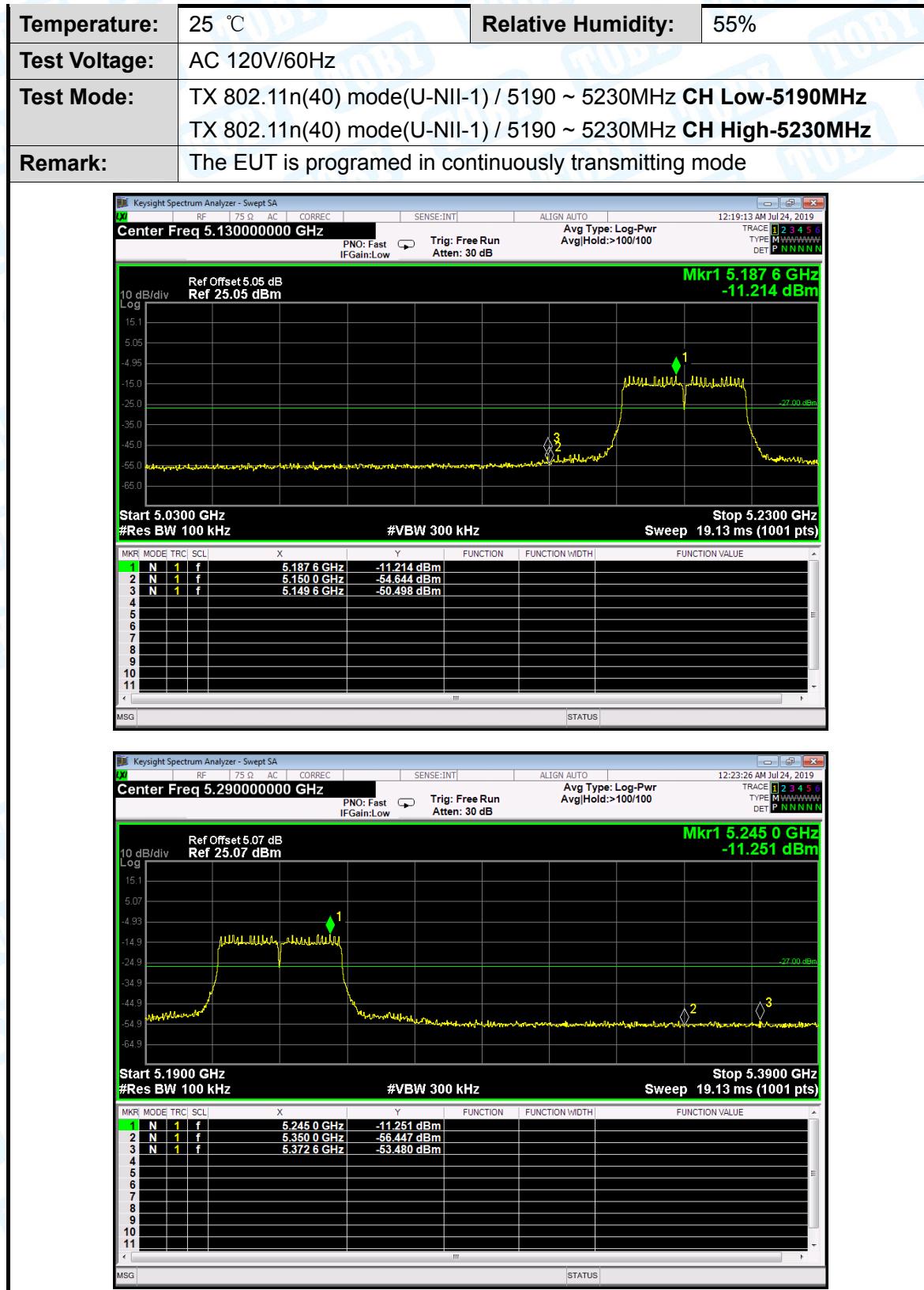


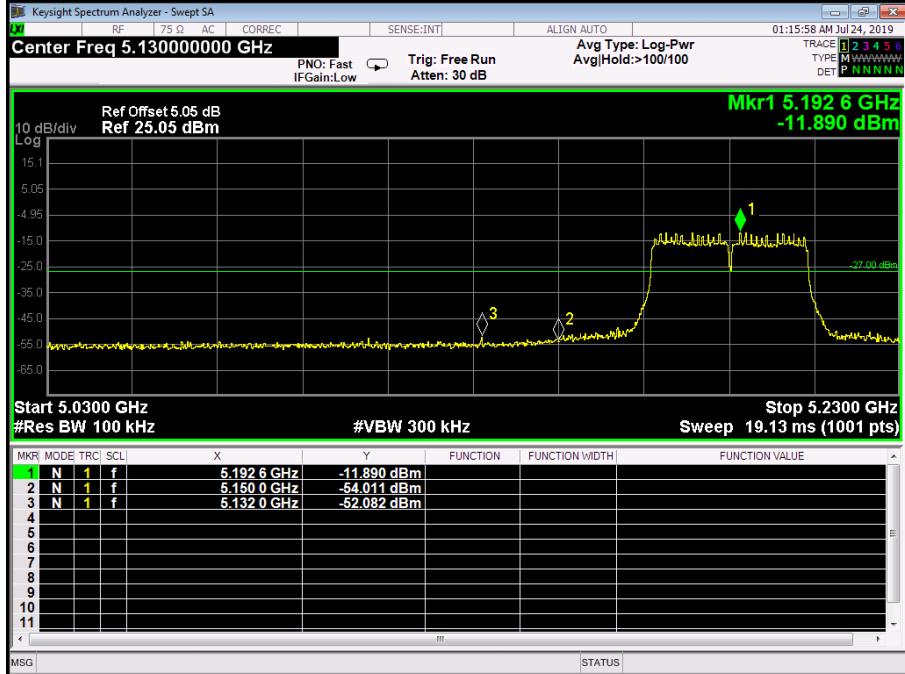
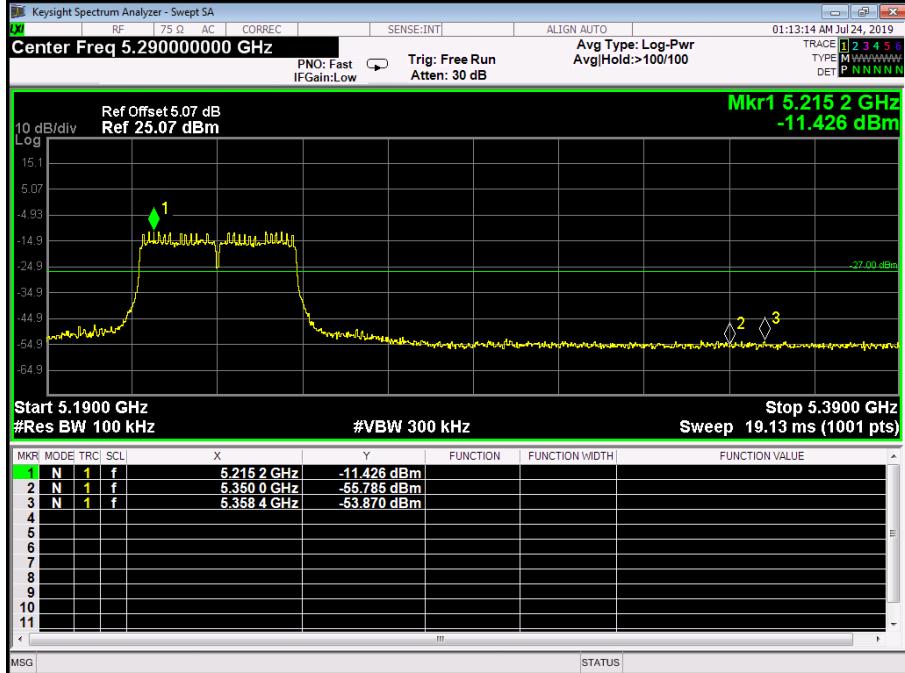


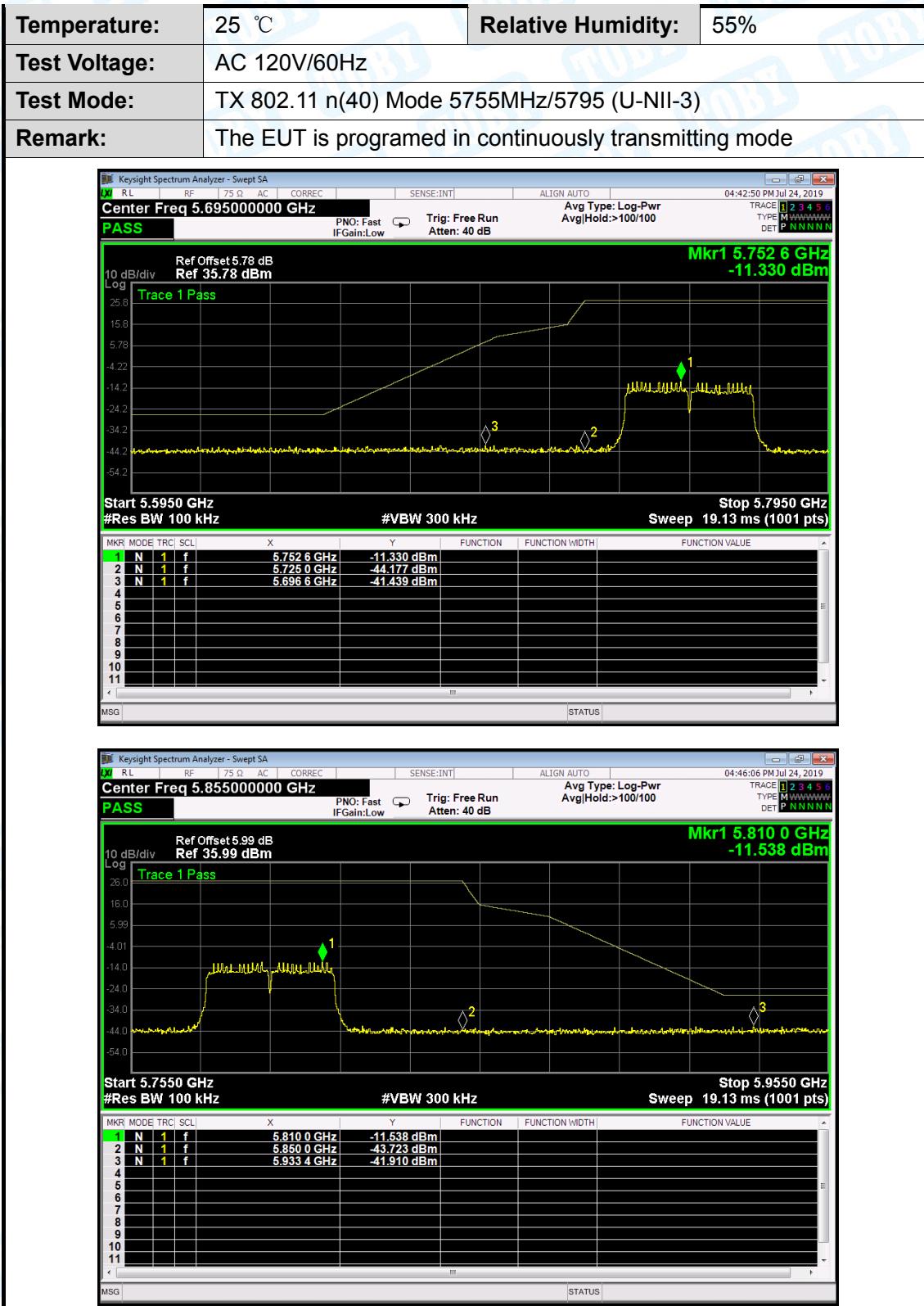


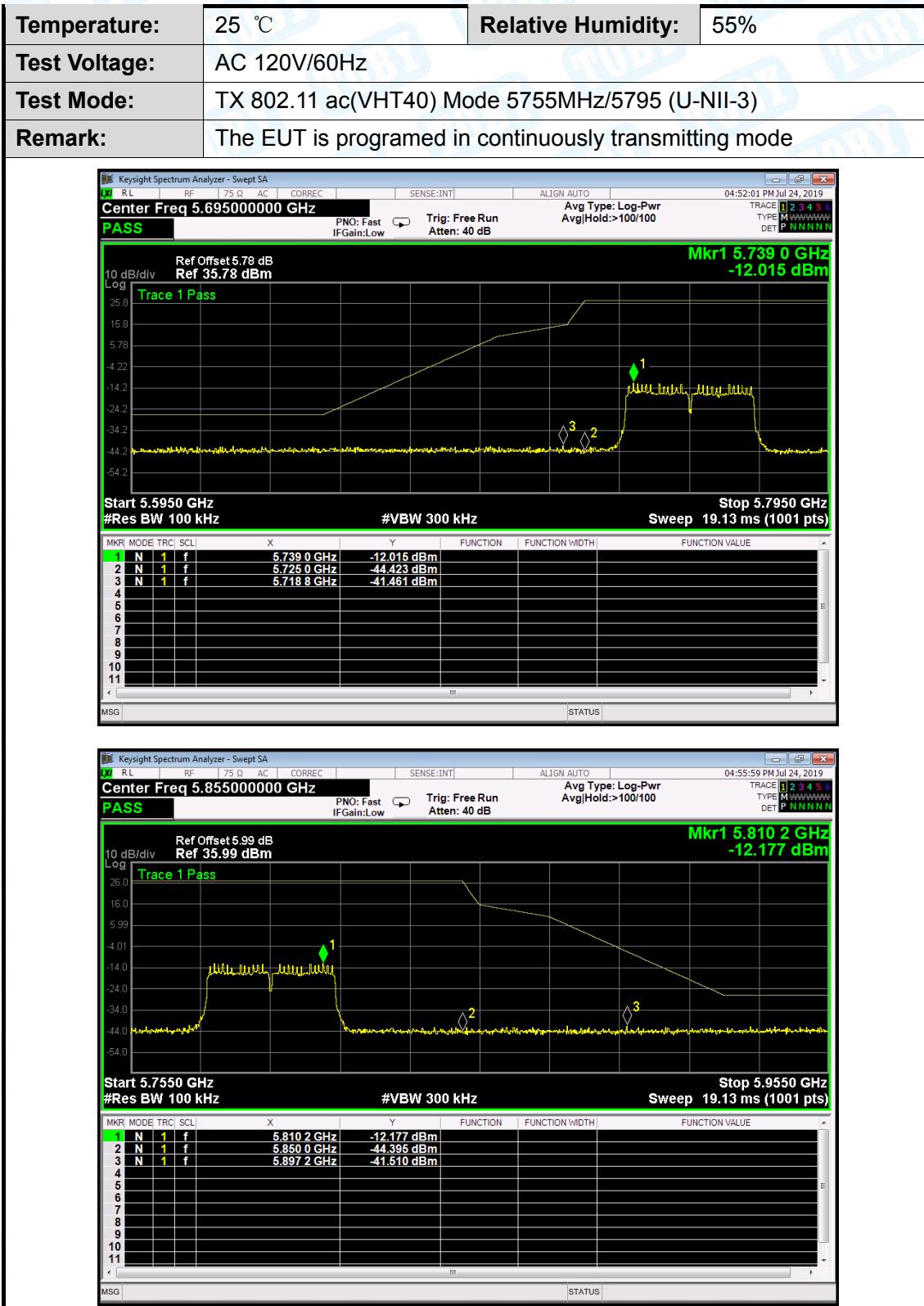


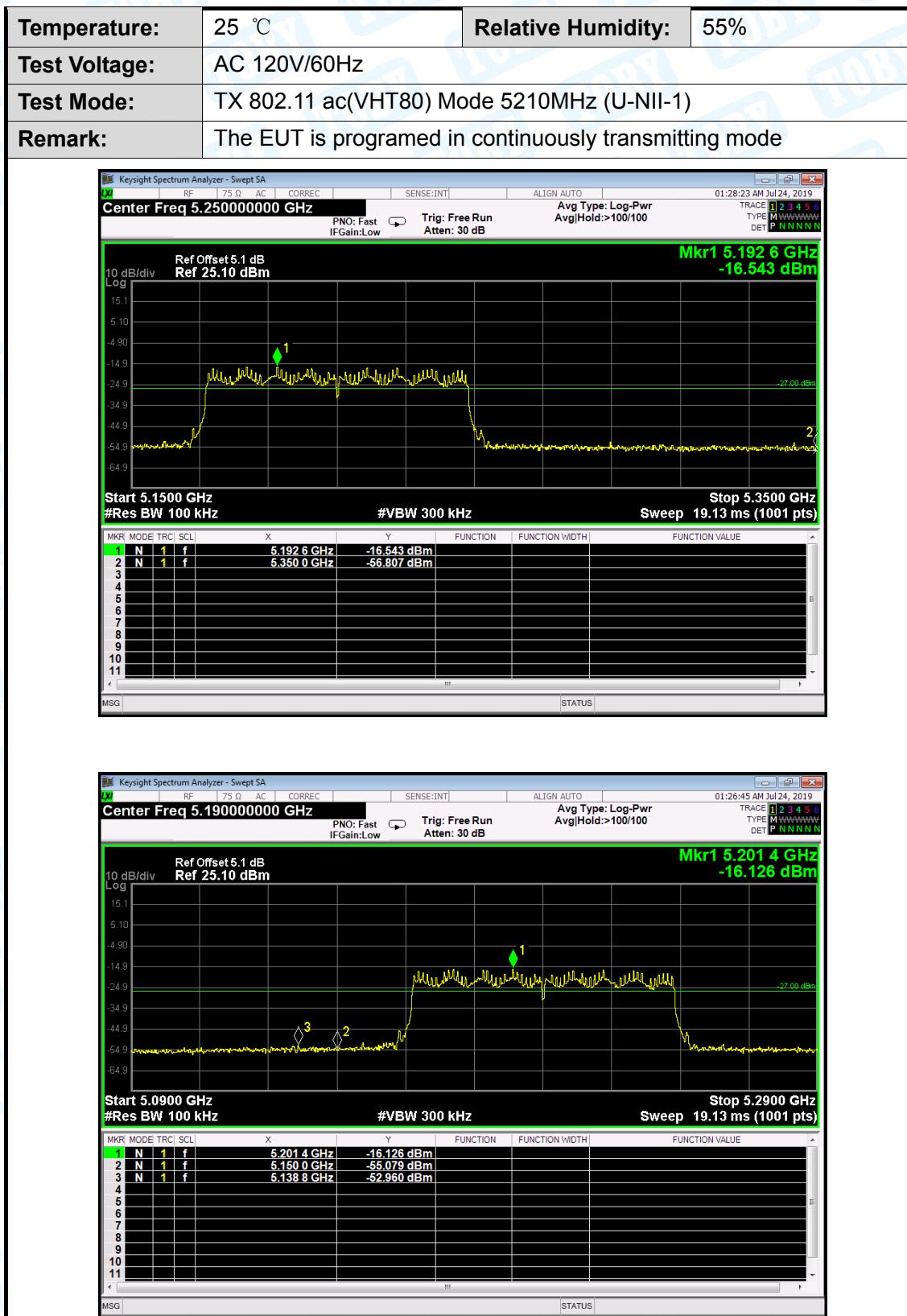


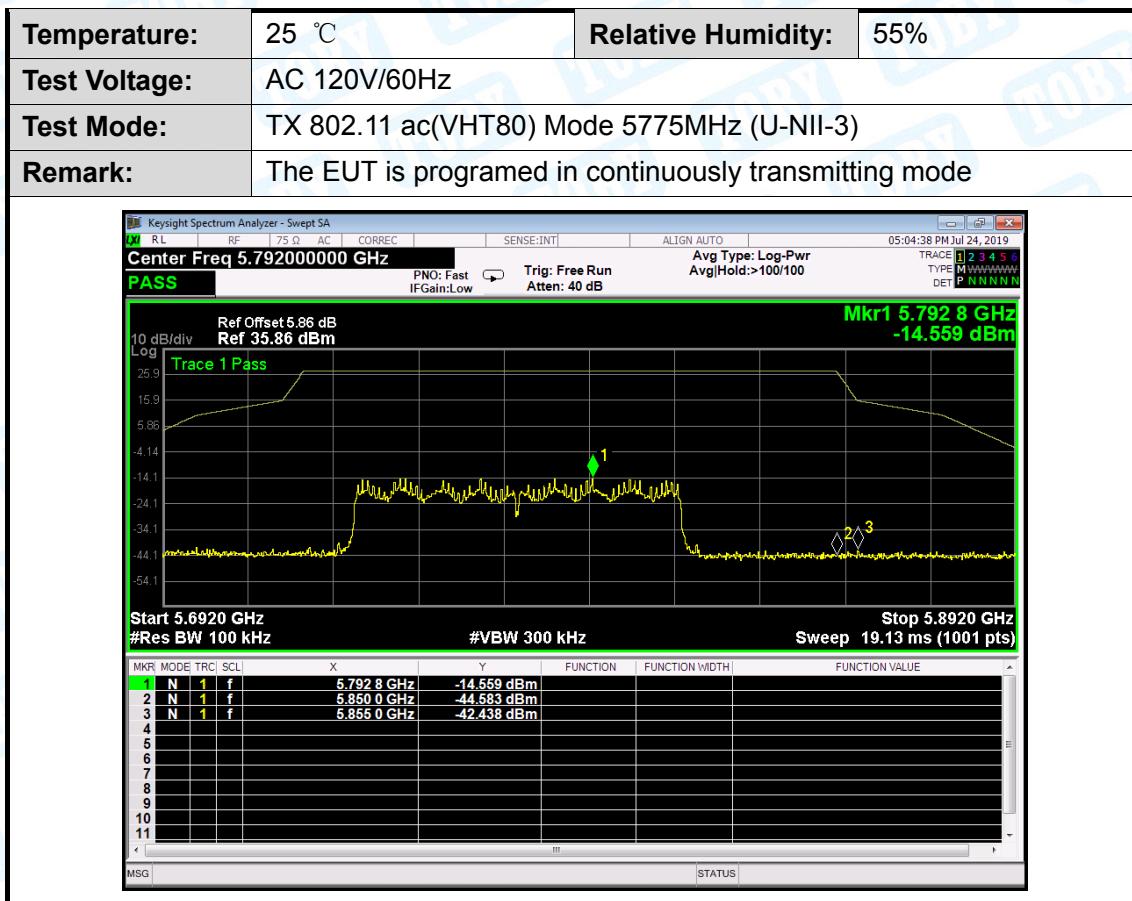


Temperature:	25 °C	Relative Humidity:	55%			
Test Voltage:	AC 120V/60Hz					
Test Mode:	TX 802.11ac(VHT40) mode(U-NII-1) / 5190 ~ 5230MHz <b>CH</b> <b>Low-5190MHz</b> TX 802.11ac(VHT40) mode(U-NII-1) / 5190 ~ 5230MHz <b>CH</b> <b>High-5230MHz</b>					
Remark:	The EUT is programed in continuously transmitting mode					
 Mkr1 5.192 6 GHz -11.890 dBm Mkr2 5.150 0 GHz -54.011 dBm Mkr3 5.132 0 GHz -52.082 dBm						
 Mkr1 5.215 2 GHz -11.426 dBm Mkr2 5.350 0 GHz -55.785 dBm Mkr3 5.368 4 GHz -53.870 dBm						







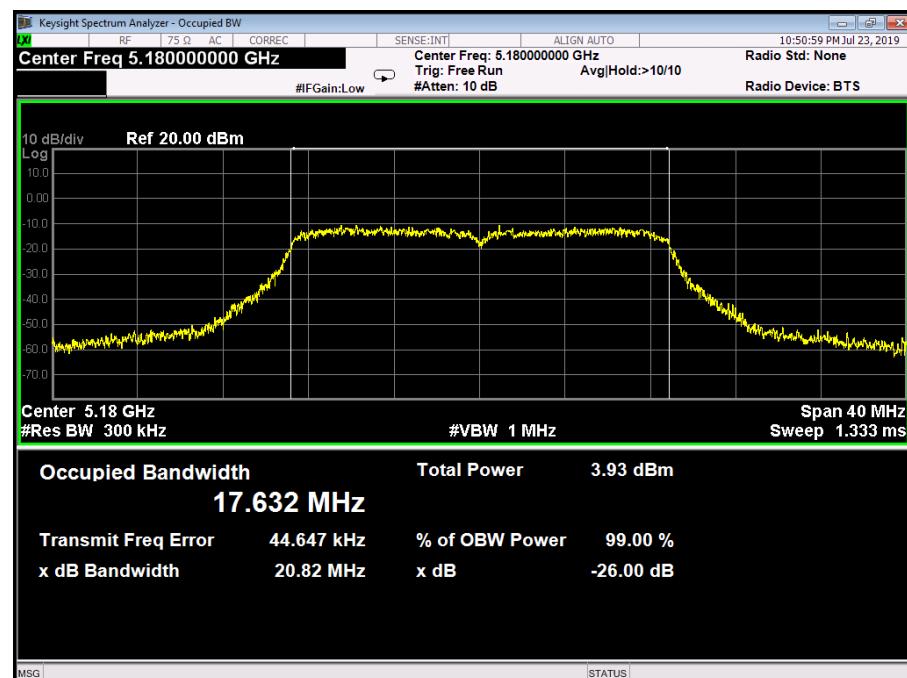


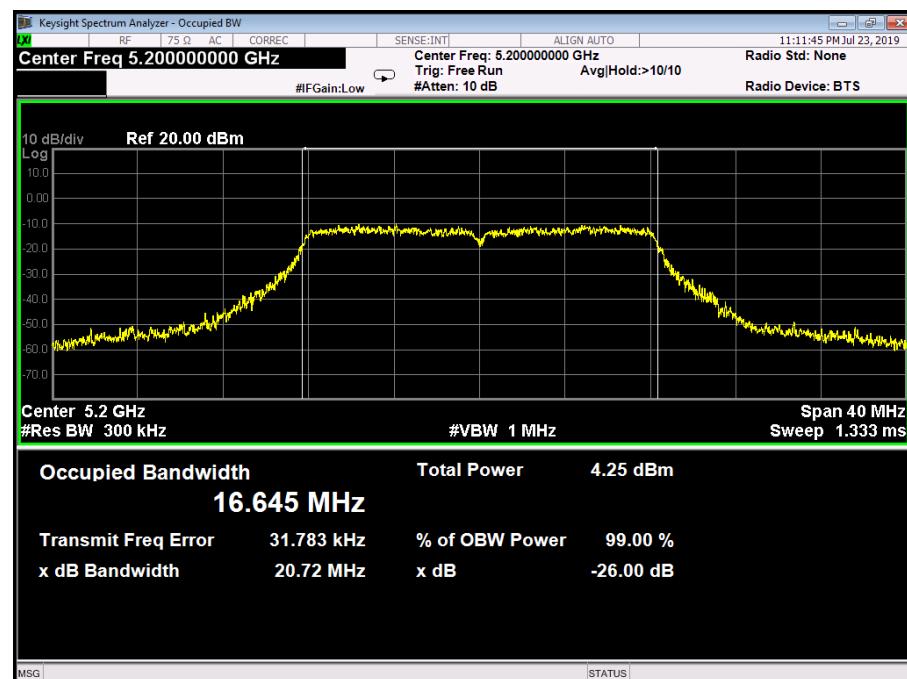
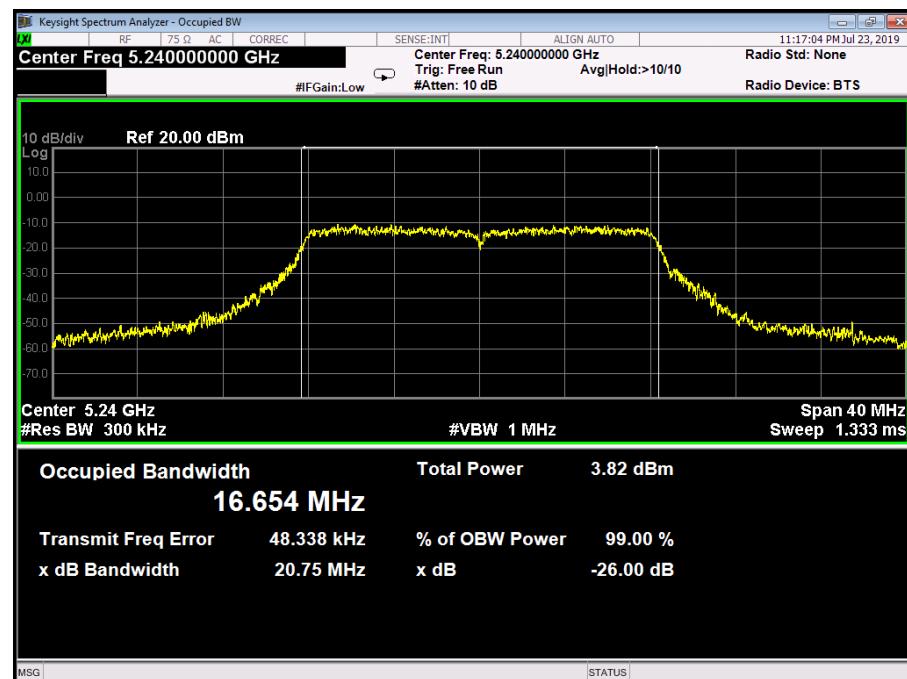
## Attachment D-- Bandwidth Test Data

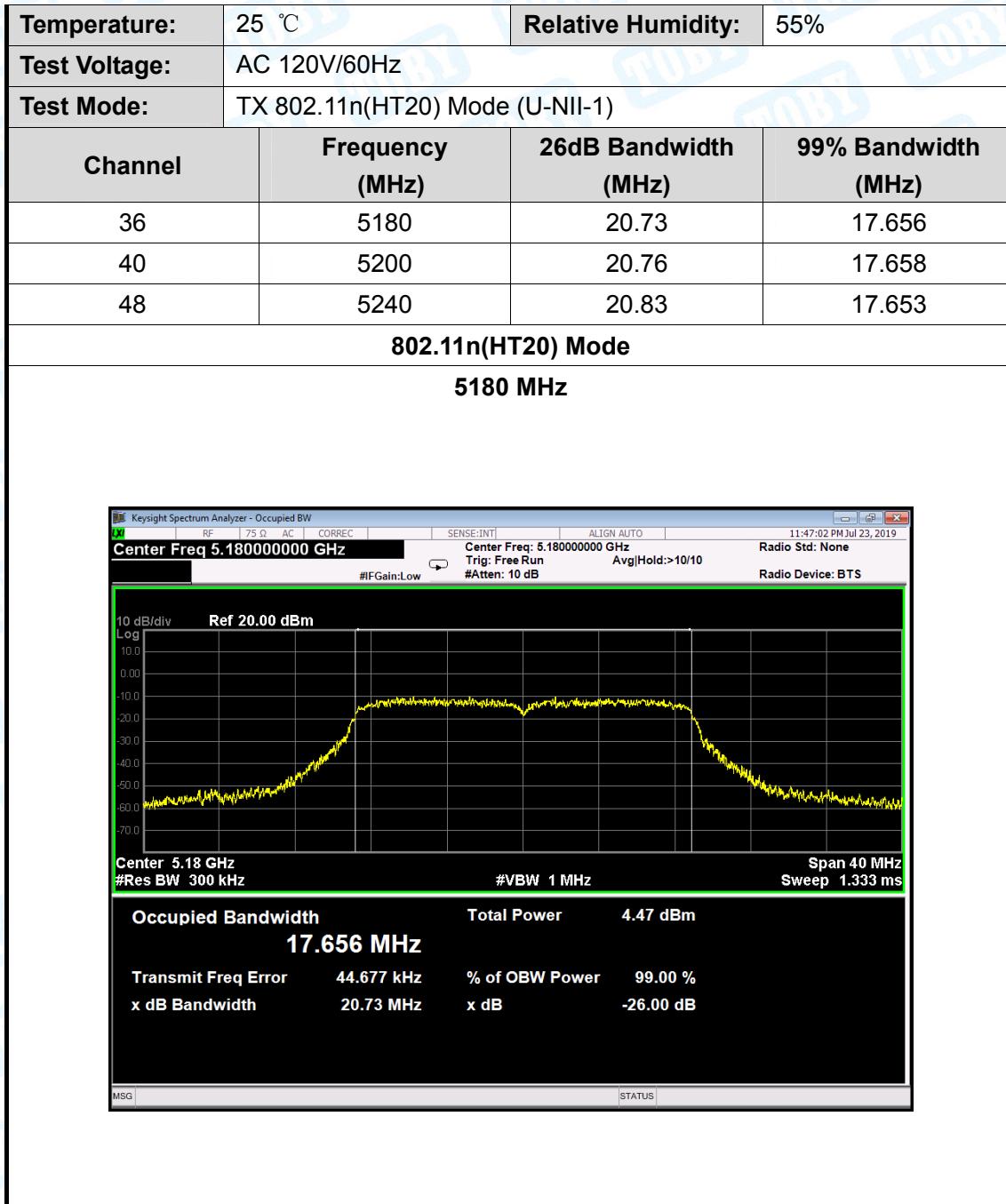
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11a Mode (U-NII-1)		
Channel	Frequency (MHz)	26dB Bandwidth (MHz)	99% Bandwidth (MHz)
36	5180	20.82	17.632
40	5200	20.72	16.645
48	5240	20.75	16.654

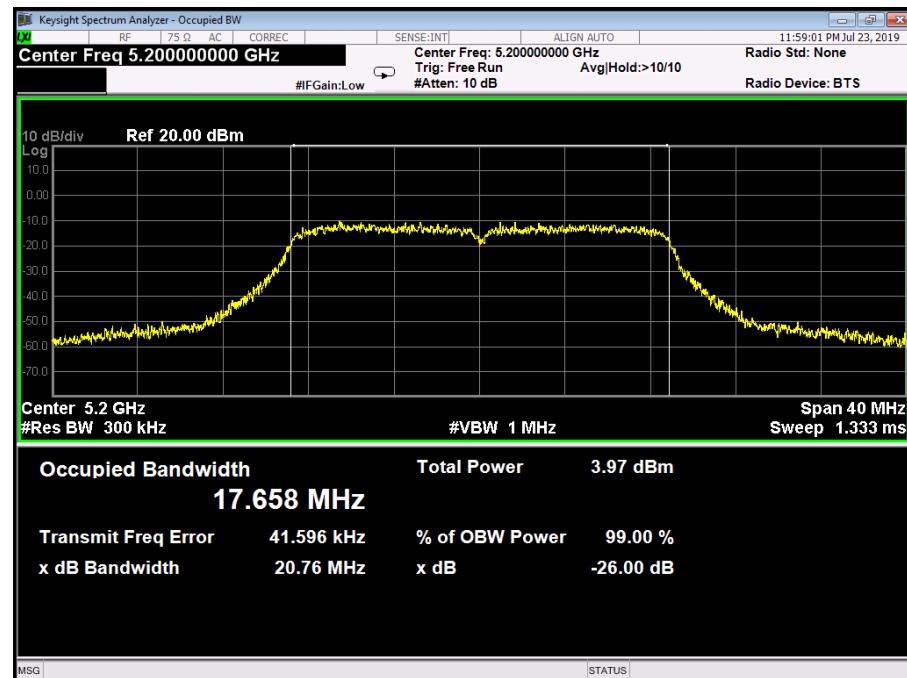
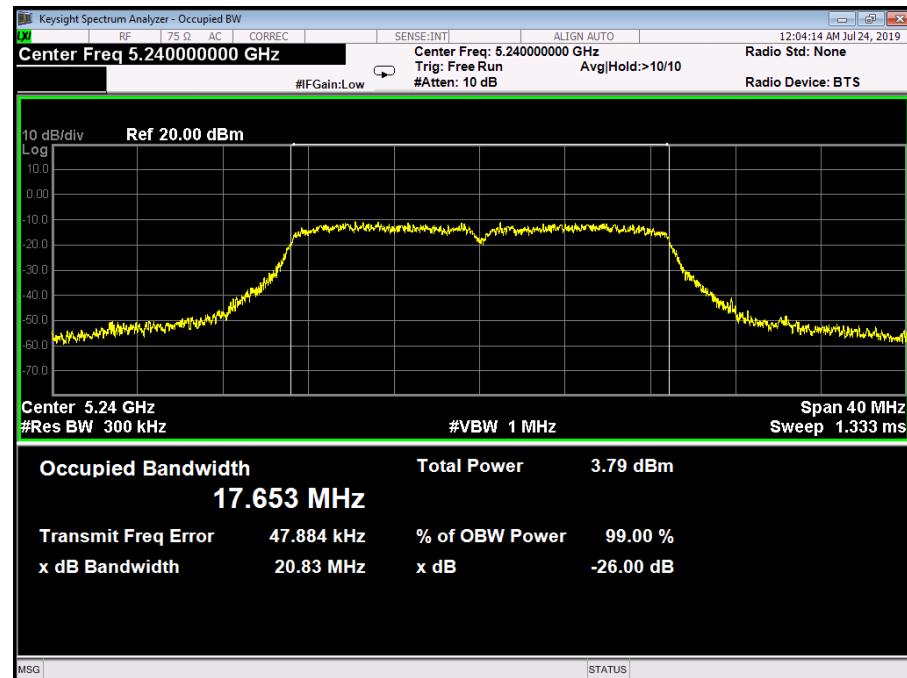
802.11a Mode

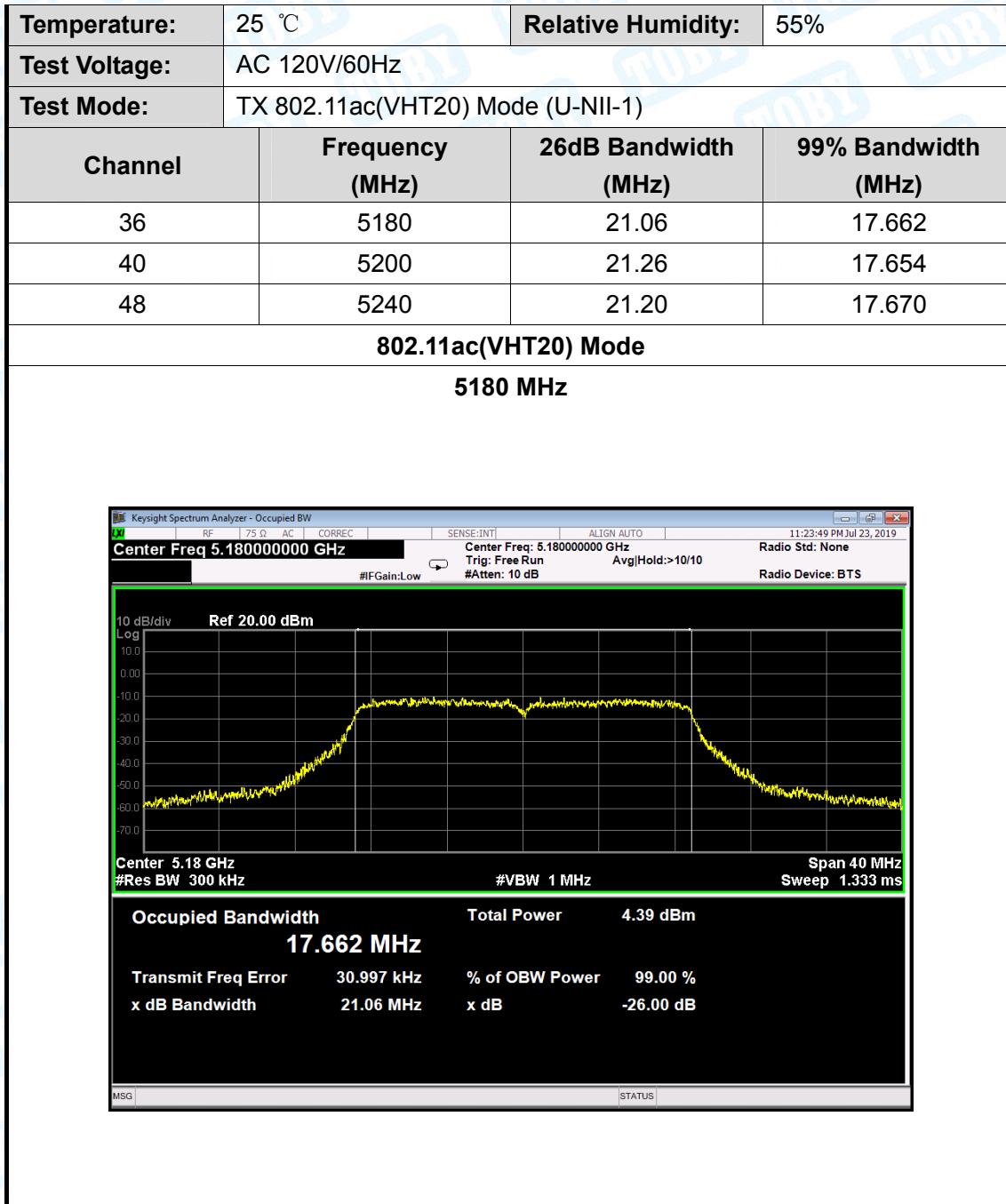
5180 MHz

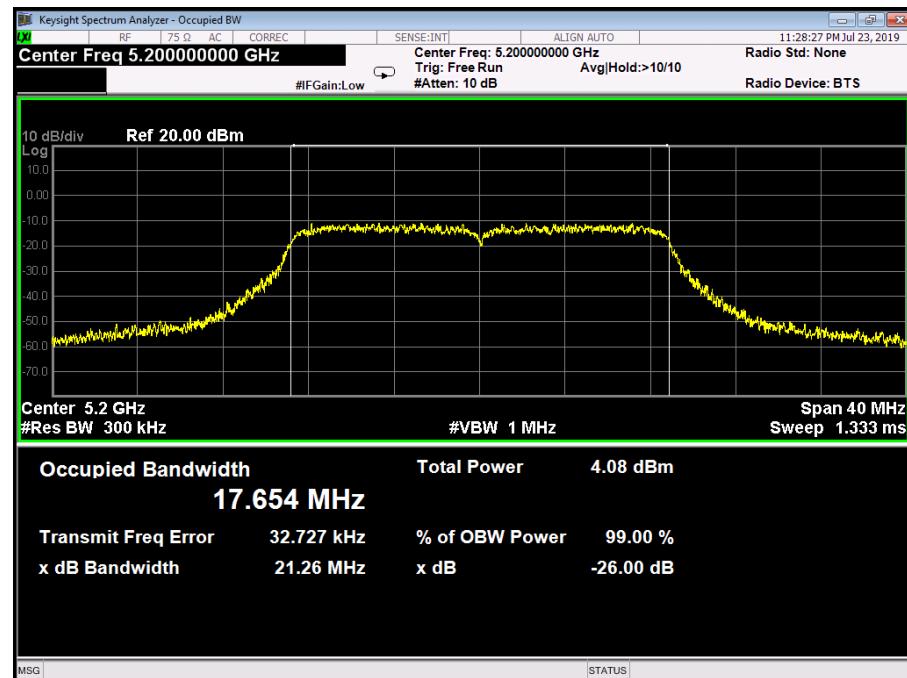
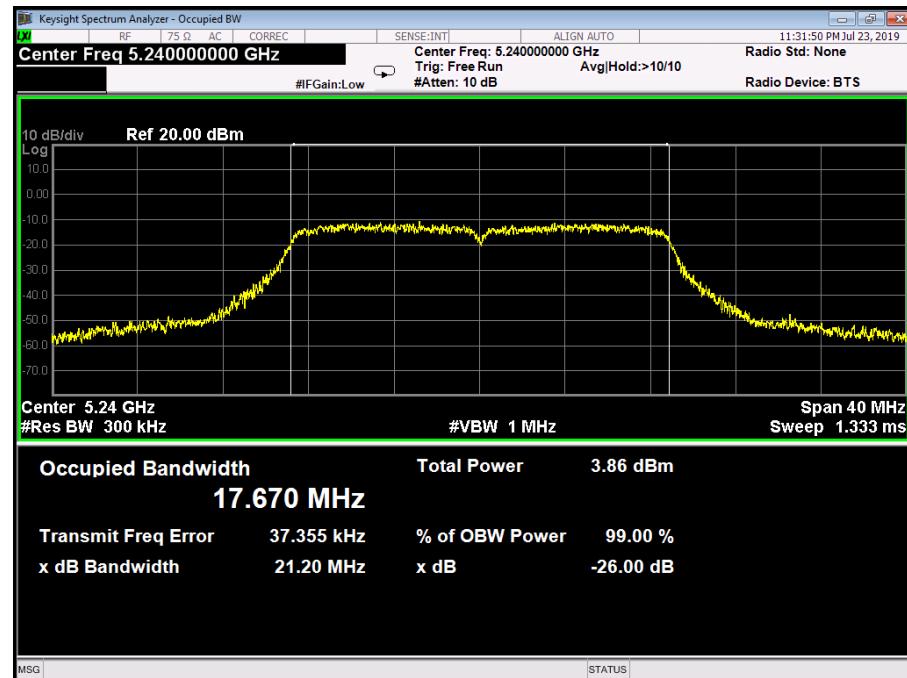


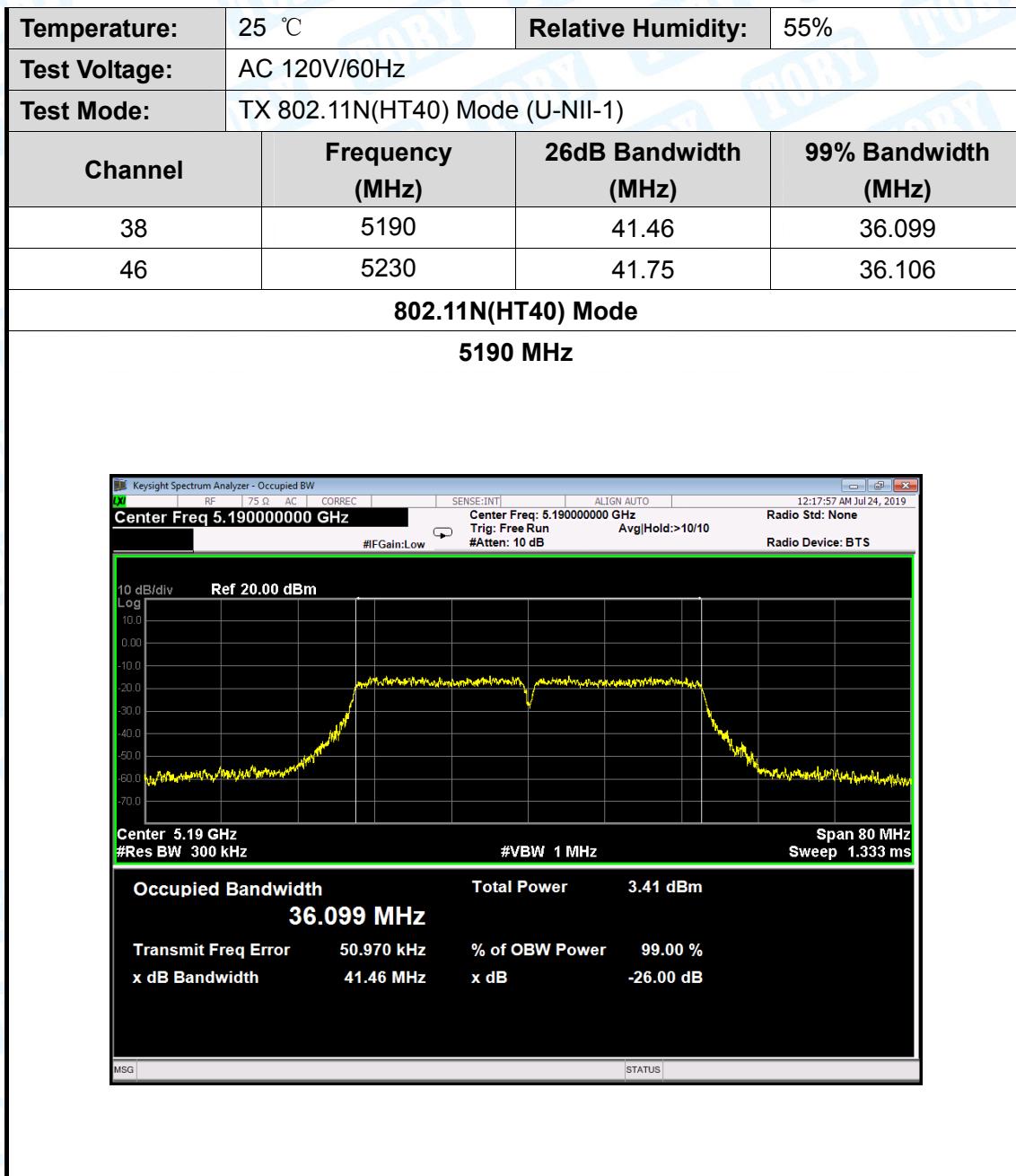
**802.11a Mode****5200 MHz****802.11a Mode****5240 MHz**

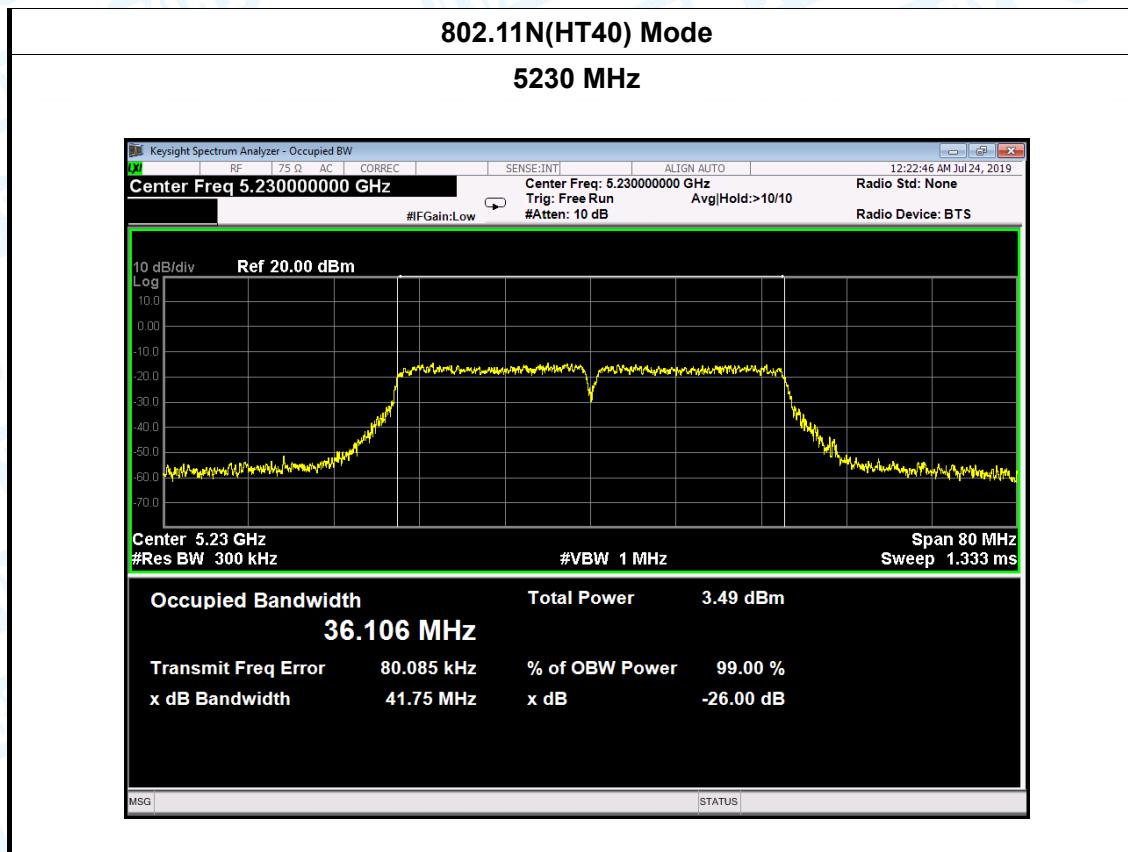


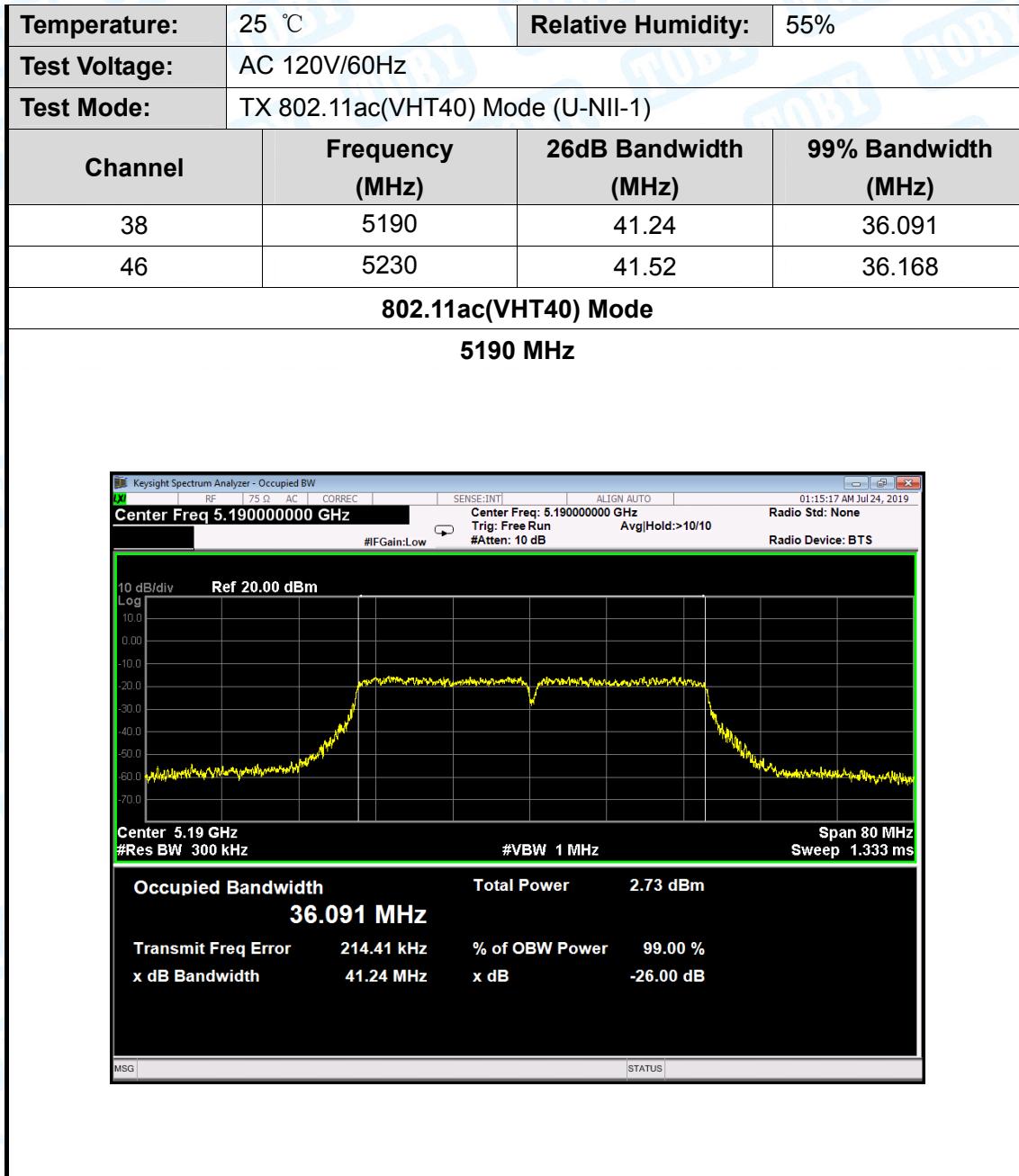
**802.11n(HT20) Mode****5200 MHz****802.11n(HT20) Mode****5240 MHz**

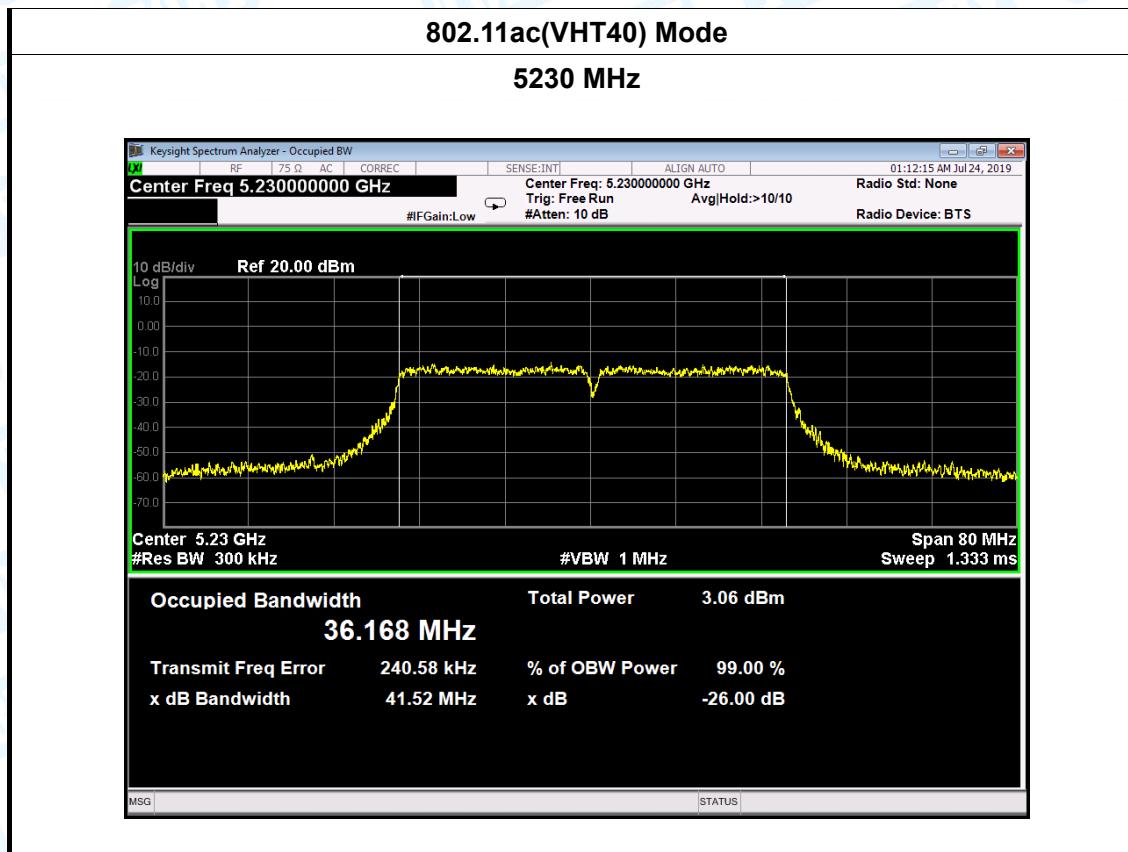


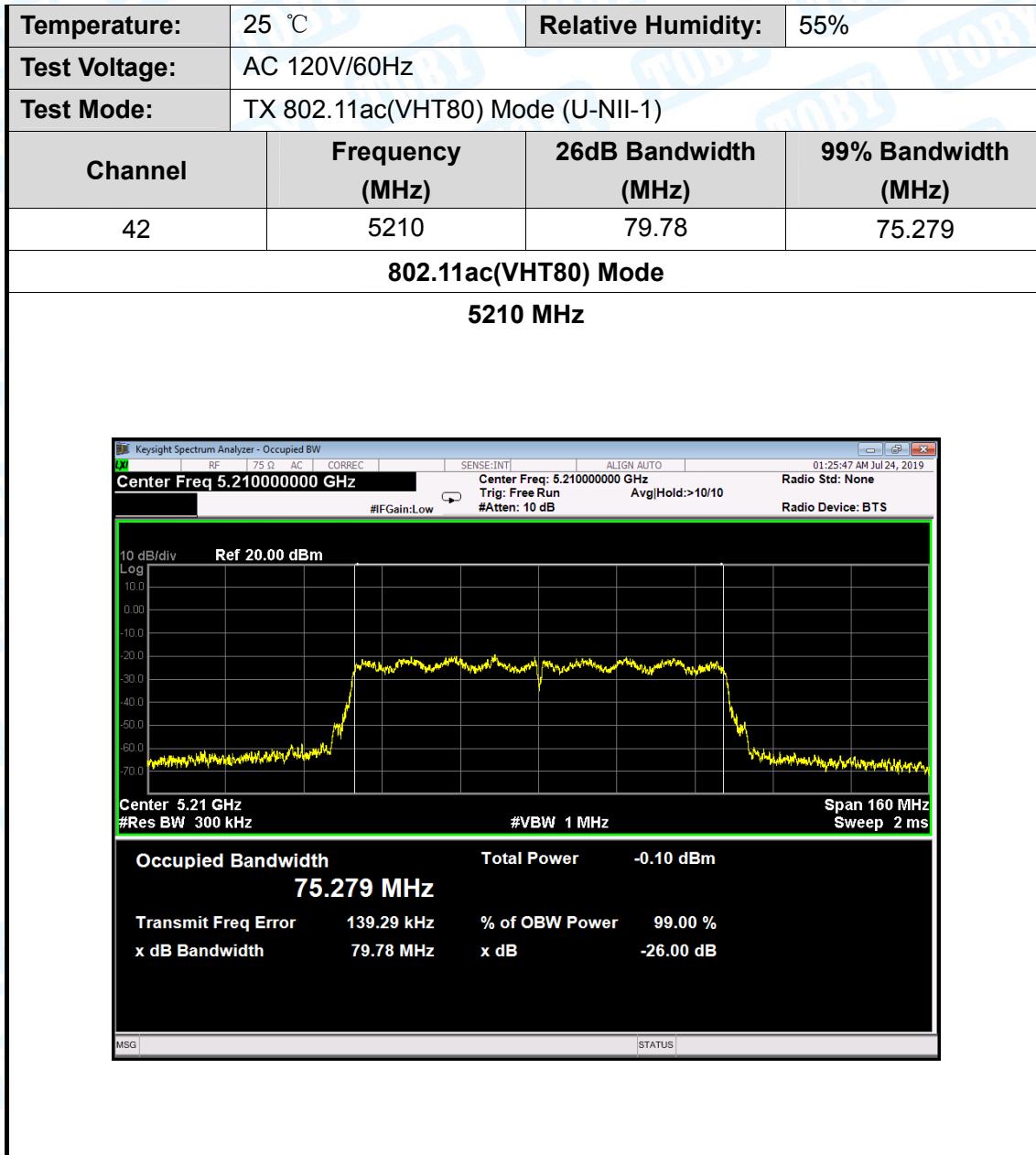
**802.11ac(VHT20) Mode****5200 MHz****802.11ac(VHT20) Mode****5240 MHz**

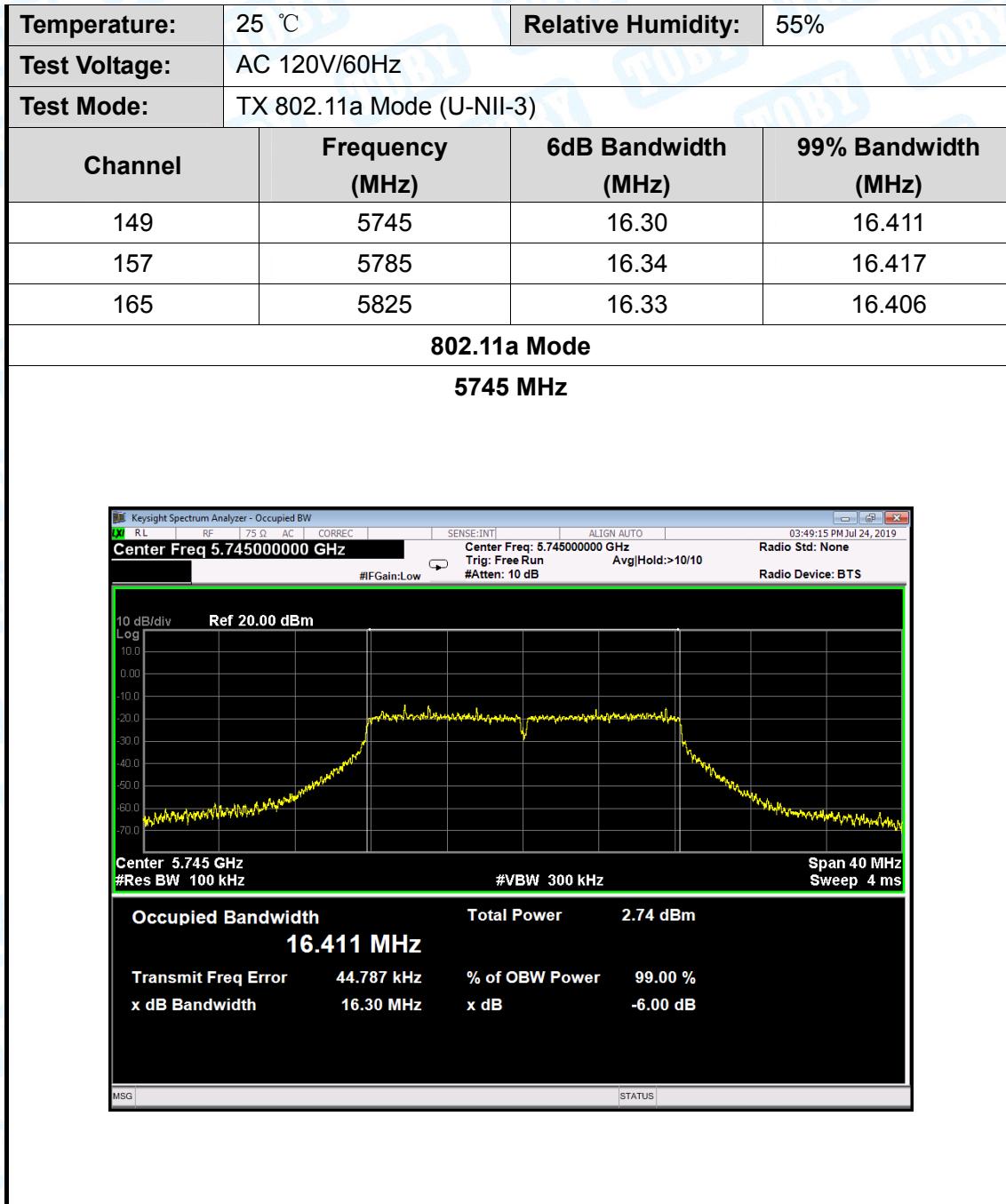


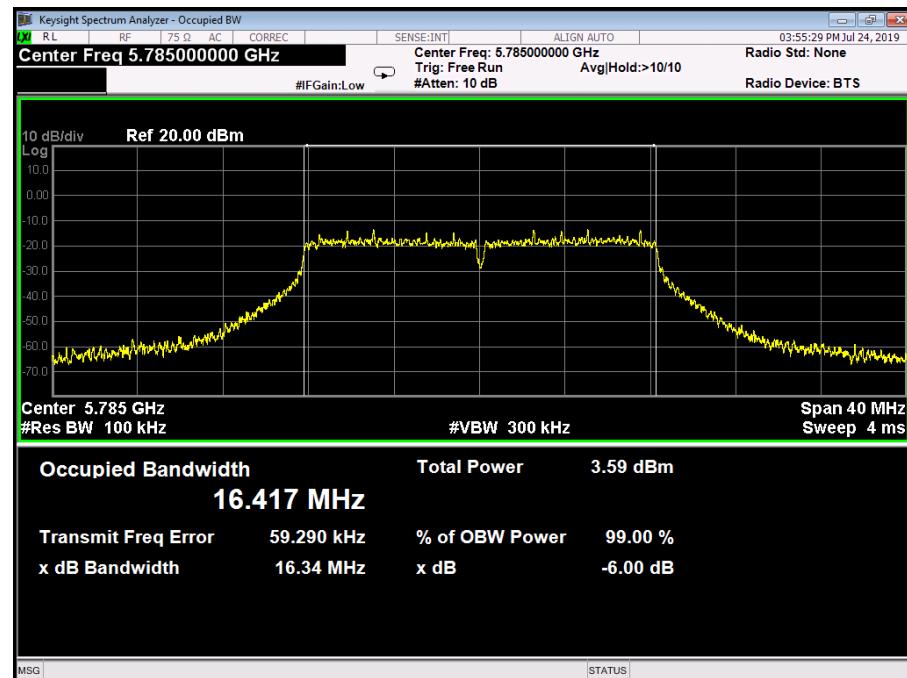
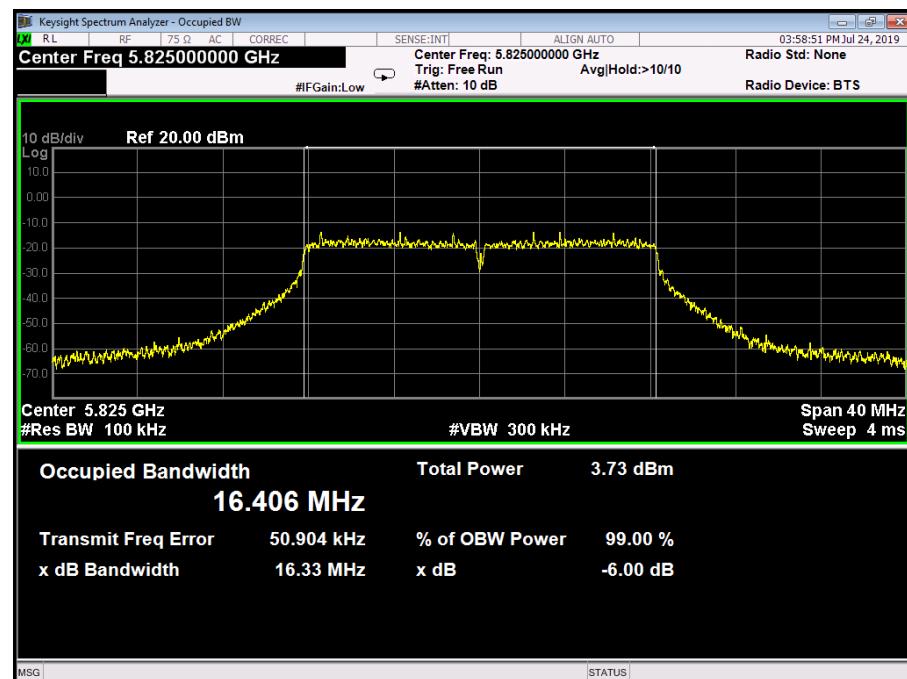




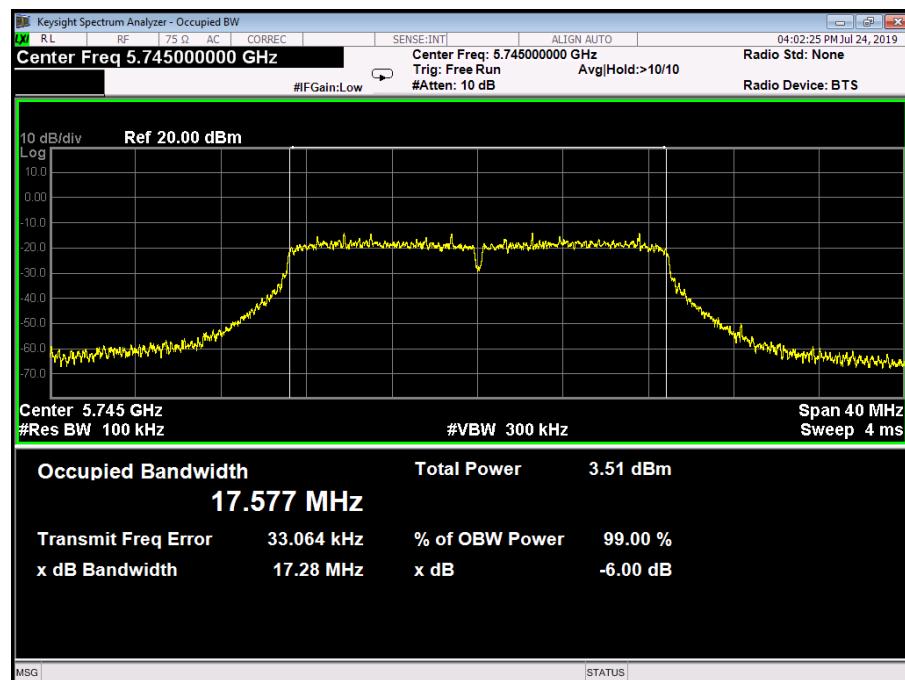


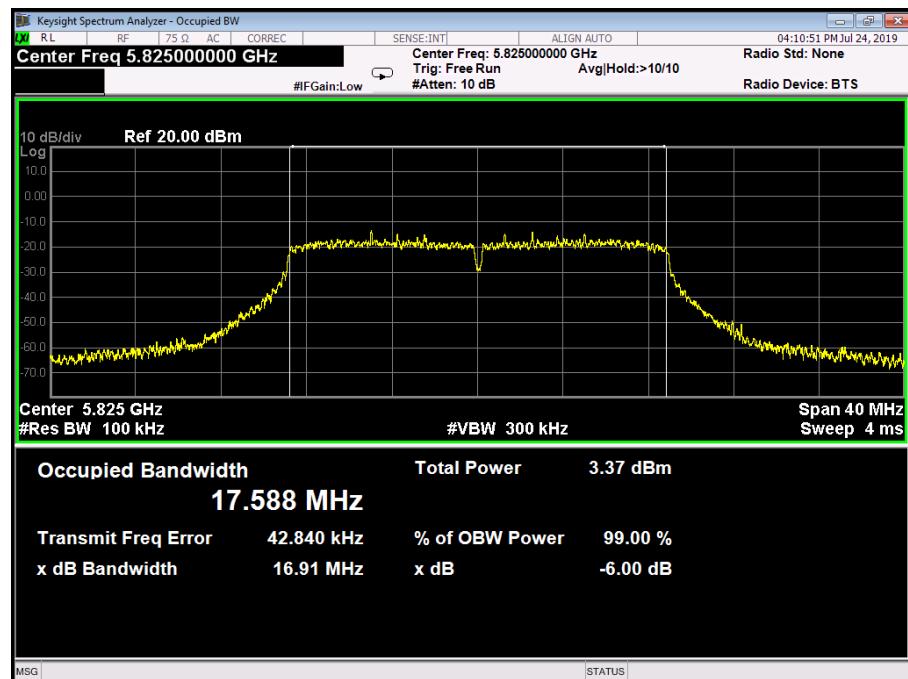


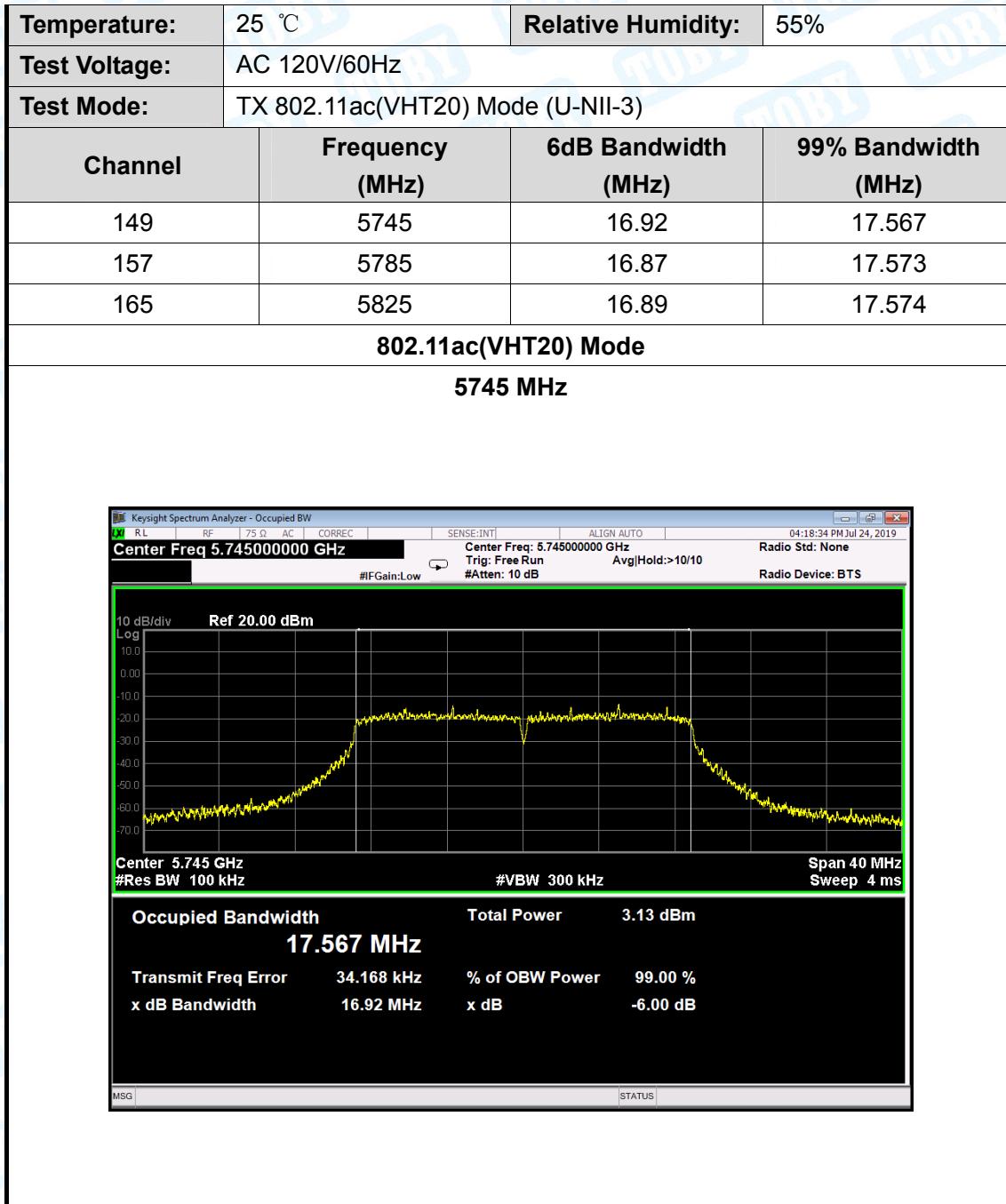


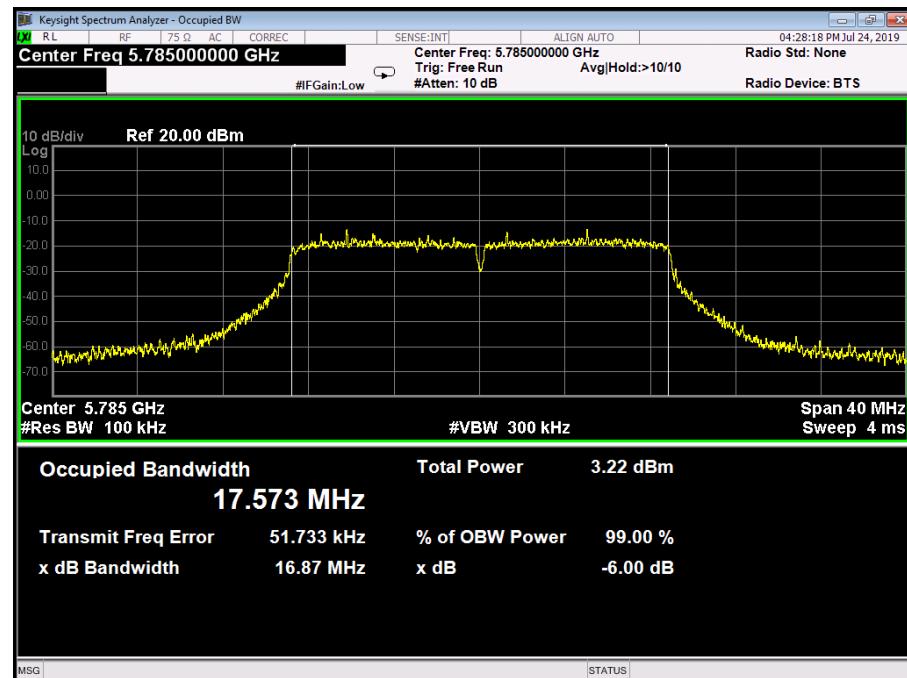
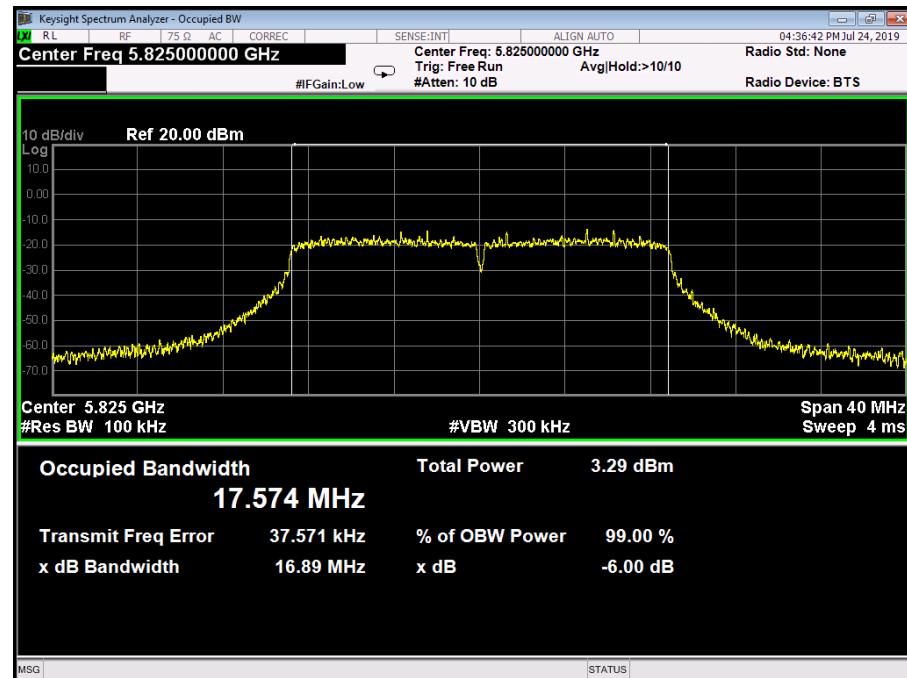
**802.11a Mode****5785 MHz****802.11a Mode****5825 MHz**

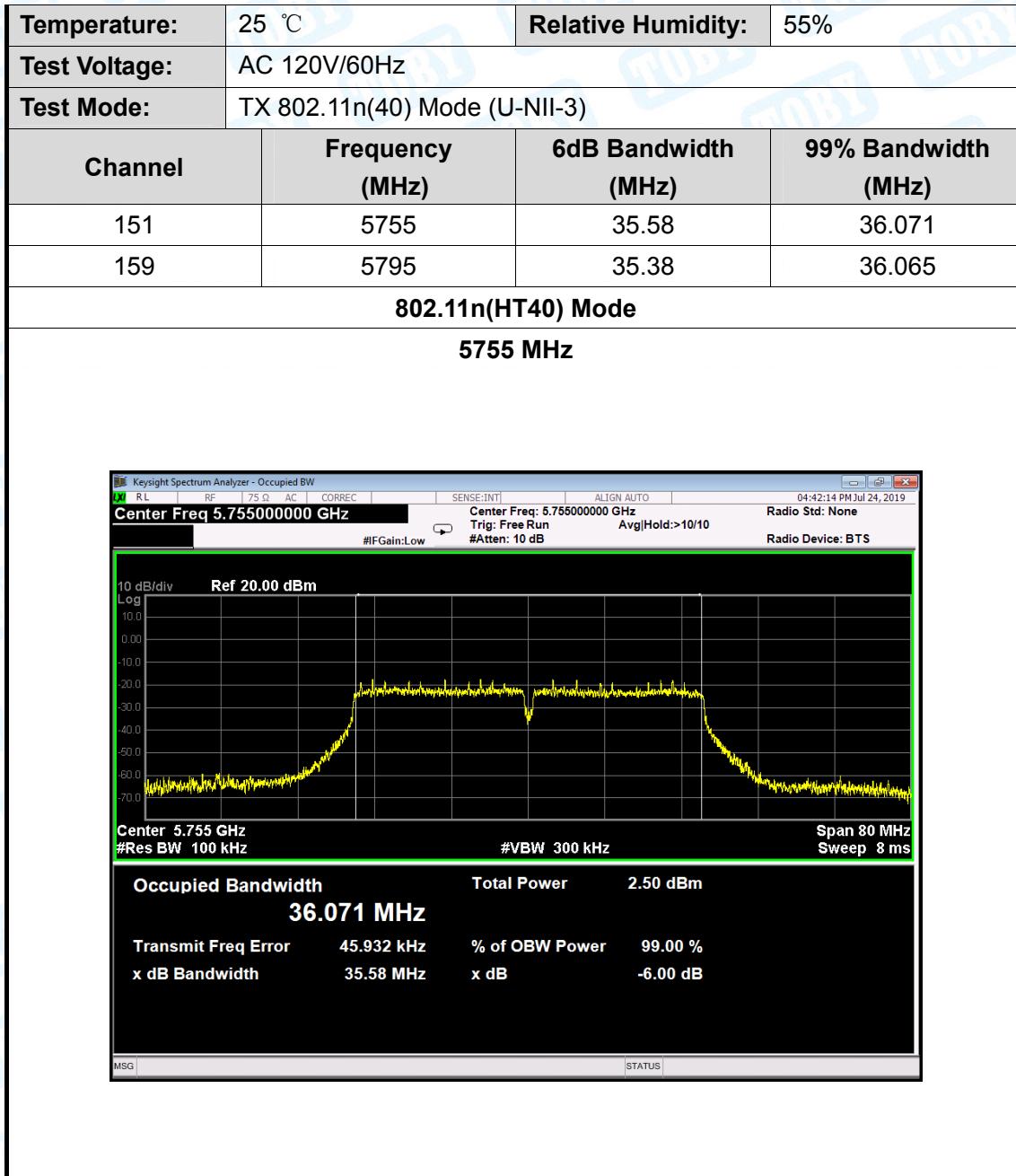
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
Test Mode:	TX 802.11n(20) Mode (U-NII-3)		
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	99% Bandwidth (MHz)
149	5745	17.28	17.577
165	5825	16.91	17.588

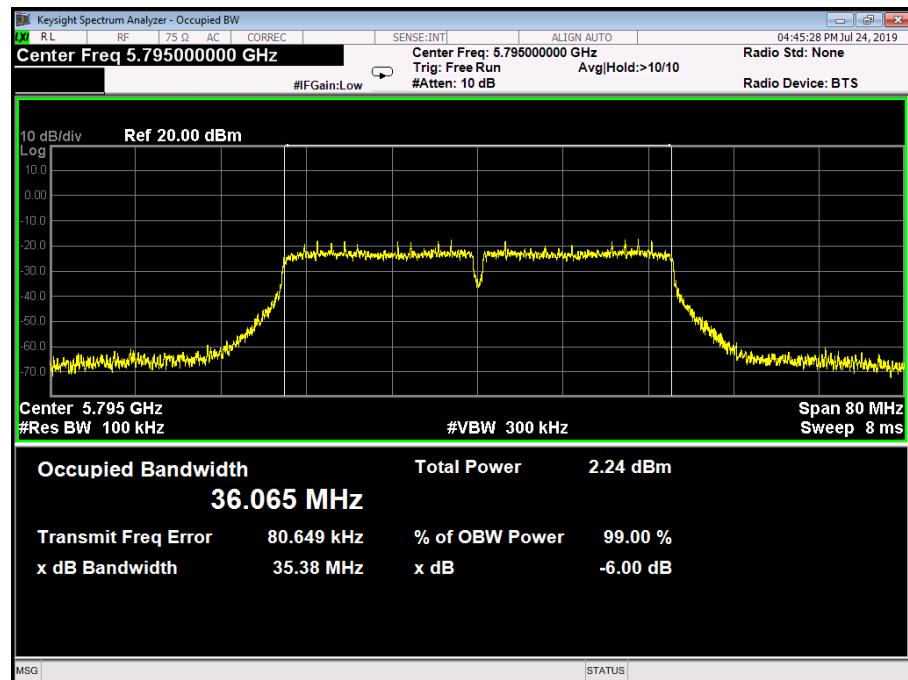
**802.11n(HT20) Mode****5745 MHz****802.11n(HT20) Mode****5825 MHz**

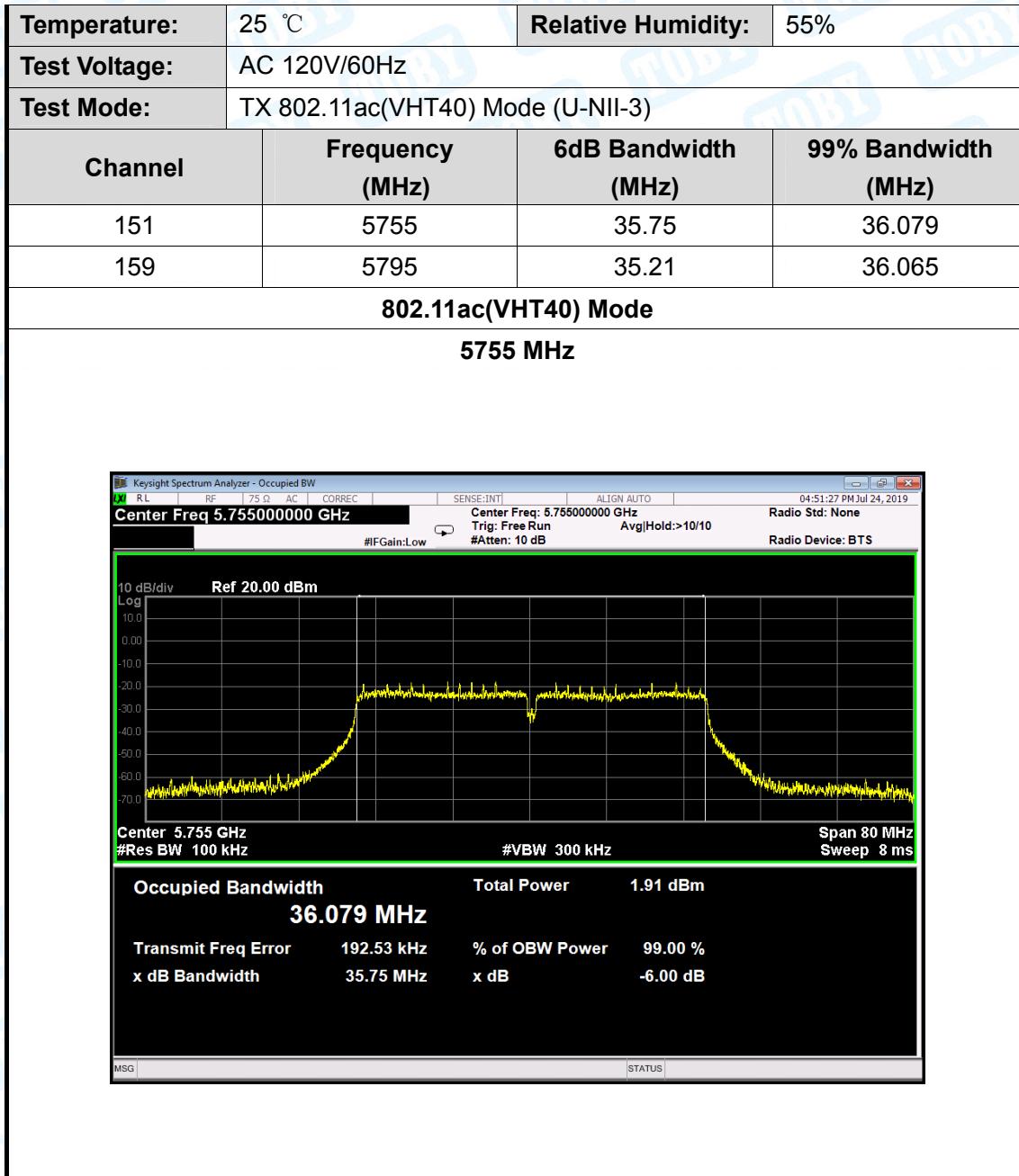


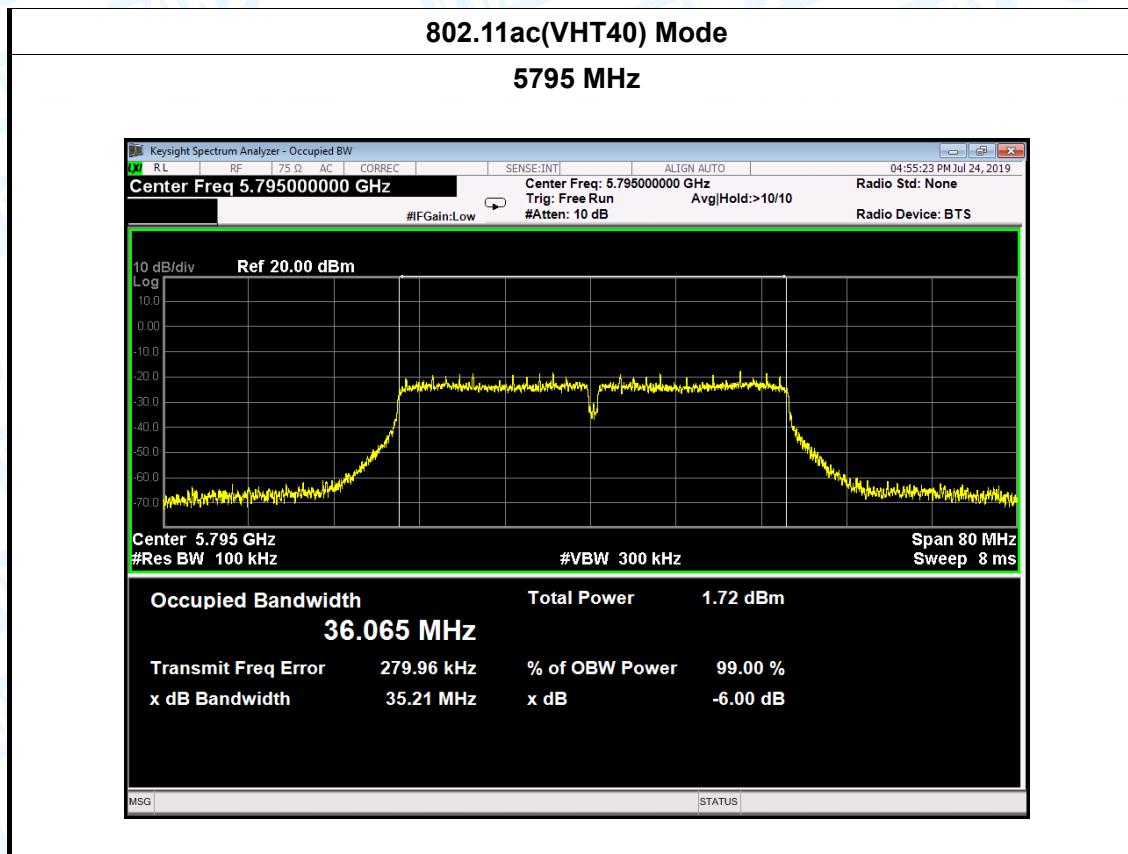


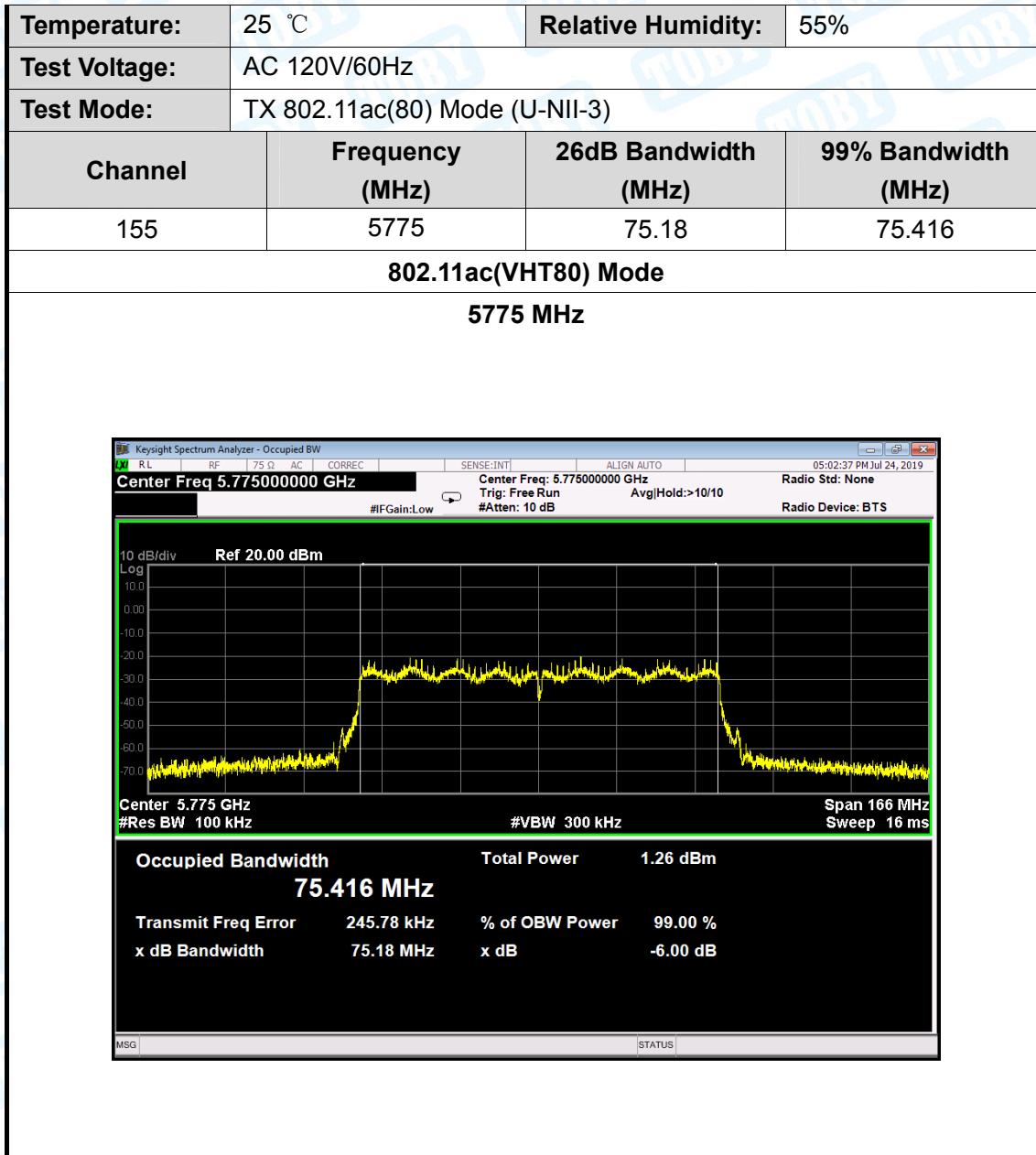
**802.11ac(VHT20) Mode****5785 MHz****802.11ac(VHT20) Mode****5825 MHz**



**802.11n(HT40) Mode****5795 MHz**





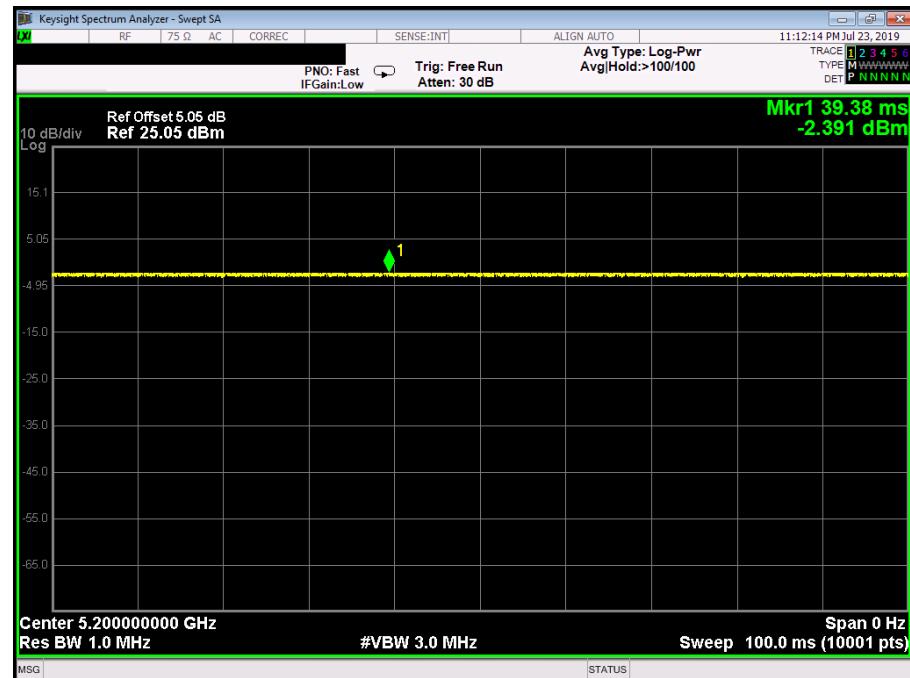
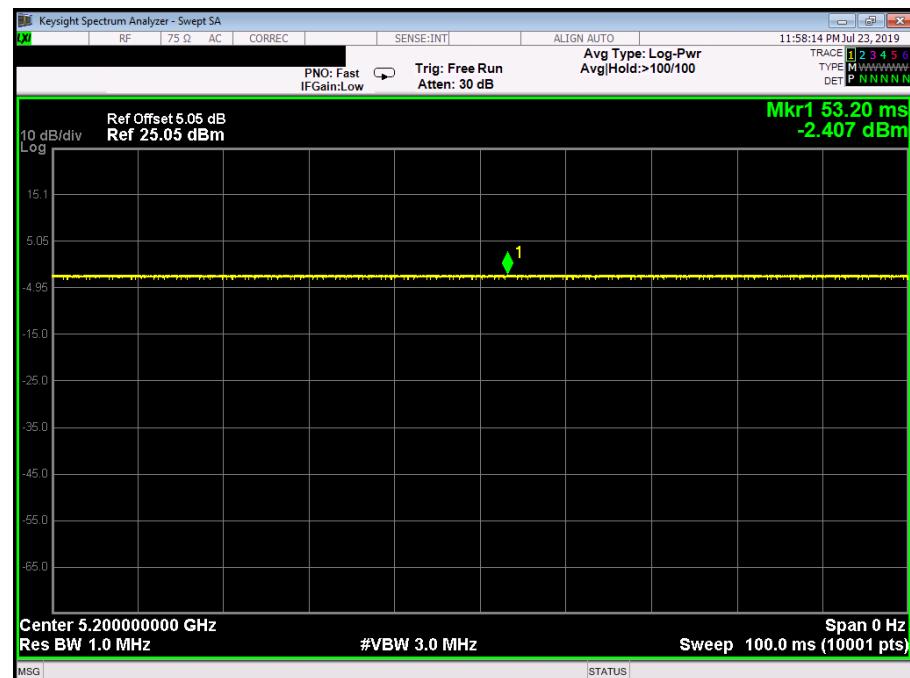


## Attachment E-- Output Power Test Data

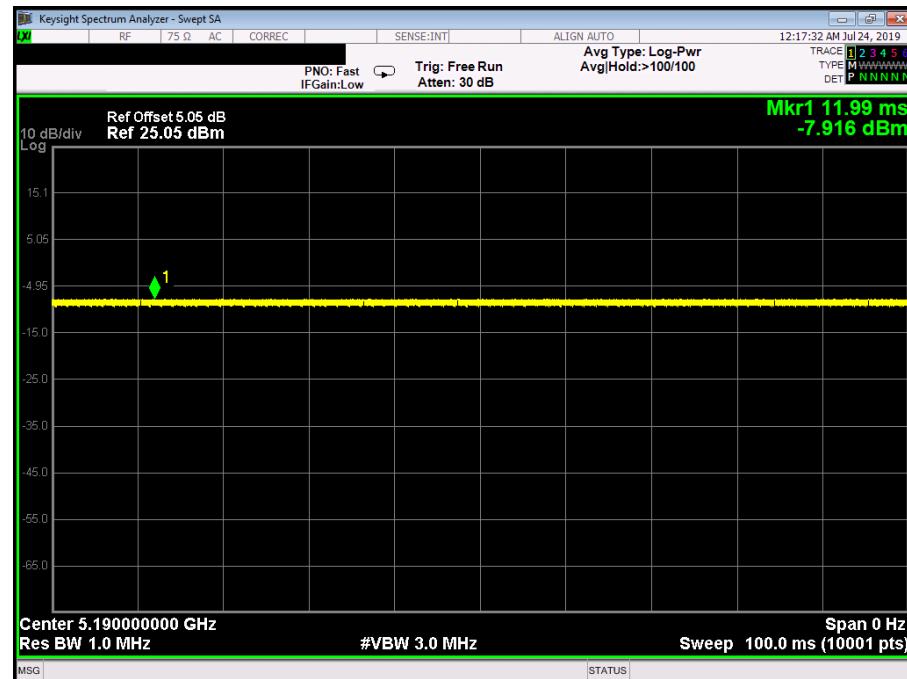
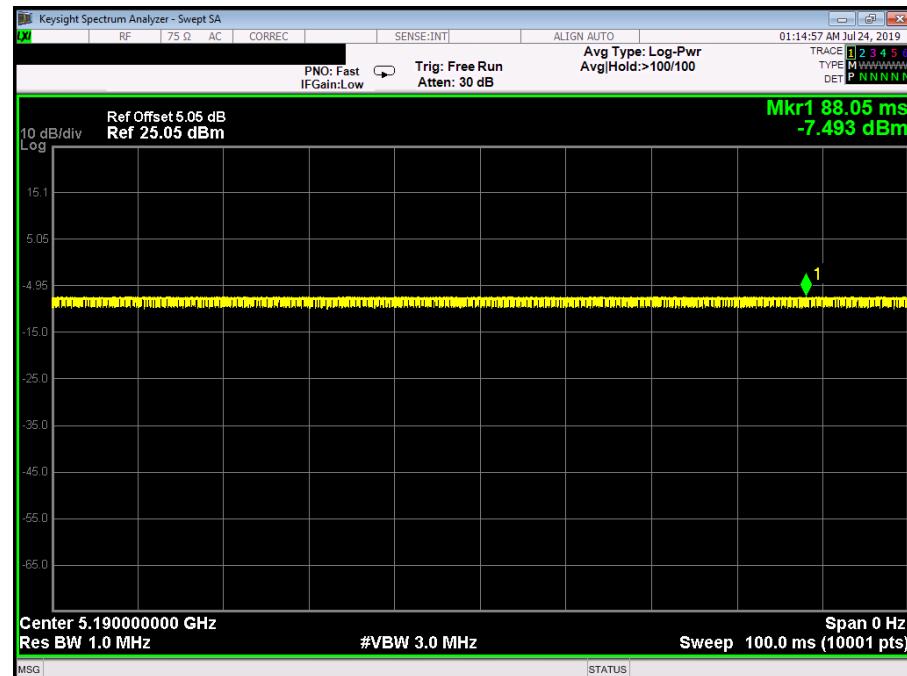
Temperature:	25 °C	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
U-NII-1					
Test Mode	Frequency (MHz)	Test Data			24
		Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	
802.11a	5180	6.33	0	6.33	
	5200	6.38	0	6.38	
	5240	6.30	0	6.30	
802.11n (HT20)	5180	6.86	0	6.86	
	5200	6.34	0	6.34	
	5240	6.09	0	6.09	
802.11ac (VHT20)	5180	6.82	0	6.82	
	5200	6.43	0	6.43	
	5240	6.25	0	6.25	
802.11n (HT40)	5190	6.66	0	6.66	
	5230	6.85	0	6.85	
802.11 ac(VHT40)	5190	6.20	0	6.20	
	5230	6.52	0	6.52	
802.11 ac(VHT80)	5210	4.17	0	4.17	
Result: PASS					
Please see below plots					

Temperature:	25 °C	Relative Humidity:	55%		
Test Voltage:	AC 120V/60Hz				
<b>U-NII-3</b>					
Test Mode	Frequency (MHz)	Test Data			
		Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)  30
802.11a	5745	6.11	0	6.11	
	5785	6.78	0	6.78	
	5825	6.84	0	6.84	
802.11n (HT20)	5745	6.61	0	6.61	
	5785	6.56	0	6.56	
	5825	6.45	0	6.45	
802.11ac (HT20)	5745	6.18	0	6.18	
	5785	6.27	0	6.27	
	5825	6.36	0	6.36	
802.11n (HT40)	5755	6.37	0	6.37	
	5795	6.39	0	6.39	
802.11 ac(40)	5755	6.52	0	6.52	
	5795	6.45	0	6.45	
802.11 ac(80)	5775	6.17	0	6.17	
<b>Result: PASS</b>					
Please see below plots					

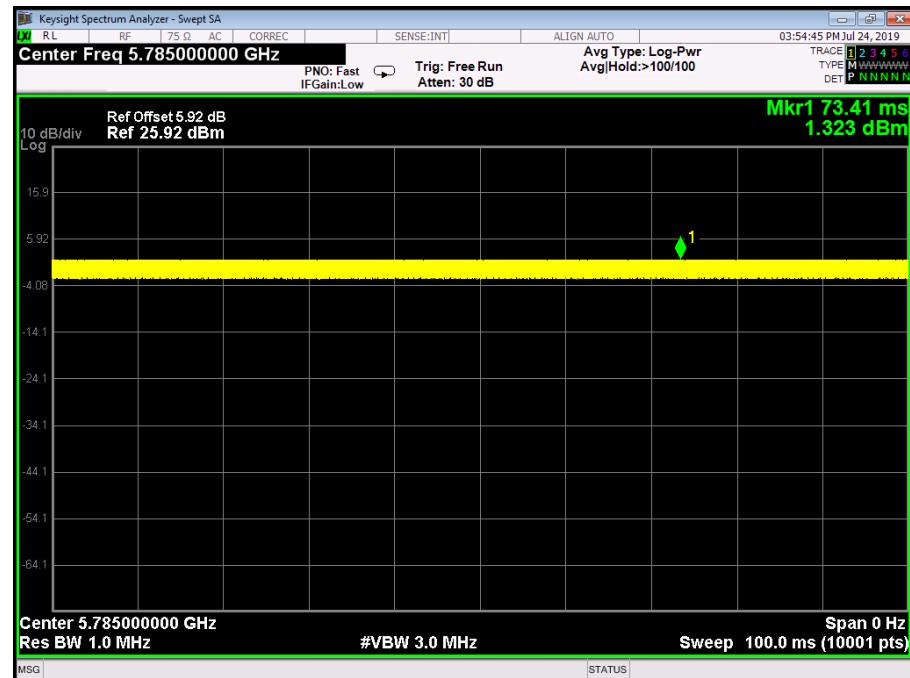
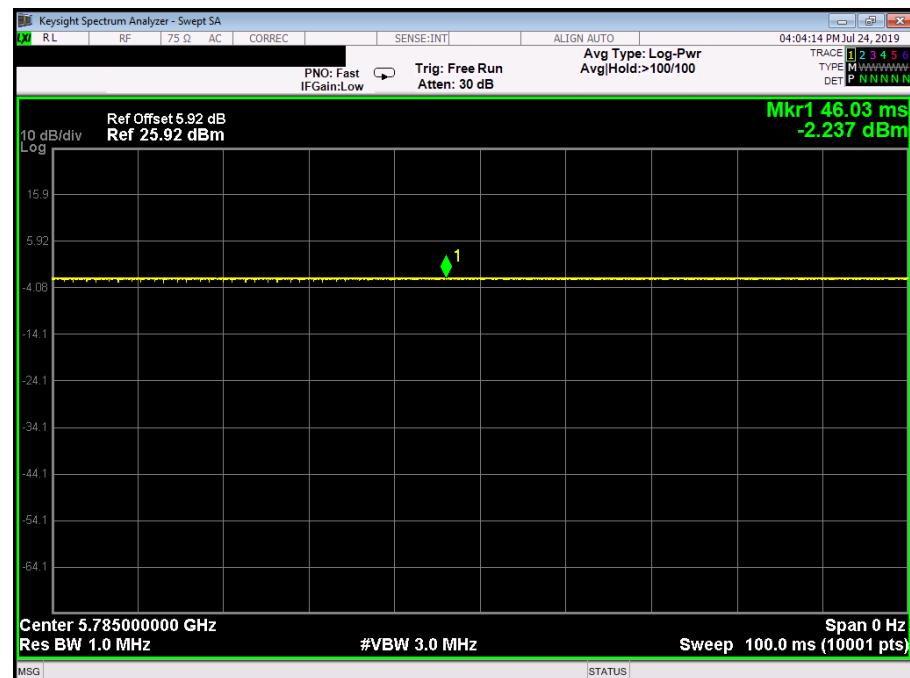
Test Mode		Duty cycle
U-NII-1	802.11 a	>98%
	802.11 n(HT20)	
	802.11 ac(VHT20)	
	802.11 n(HT40)	
	802.11 ac(VHT40)	
	802.11 ac(VHT80)	
U-NII-3	802.11 a	>98%
	802.11 n(HT20)	
	802.11 ac(VHT20)	
	802.11 n(HT40)	
	802.11 ac(VHT40)	
	802.11 ac(VHT80)	

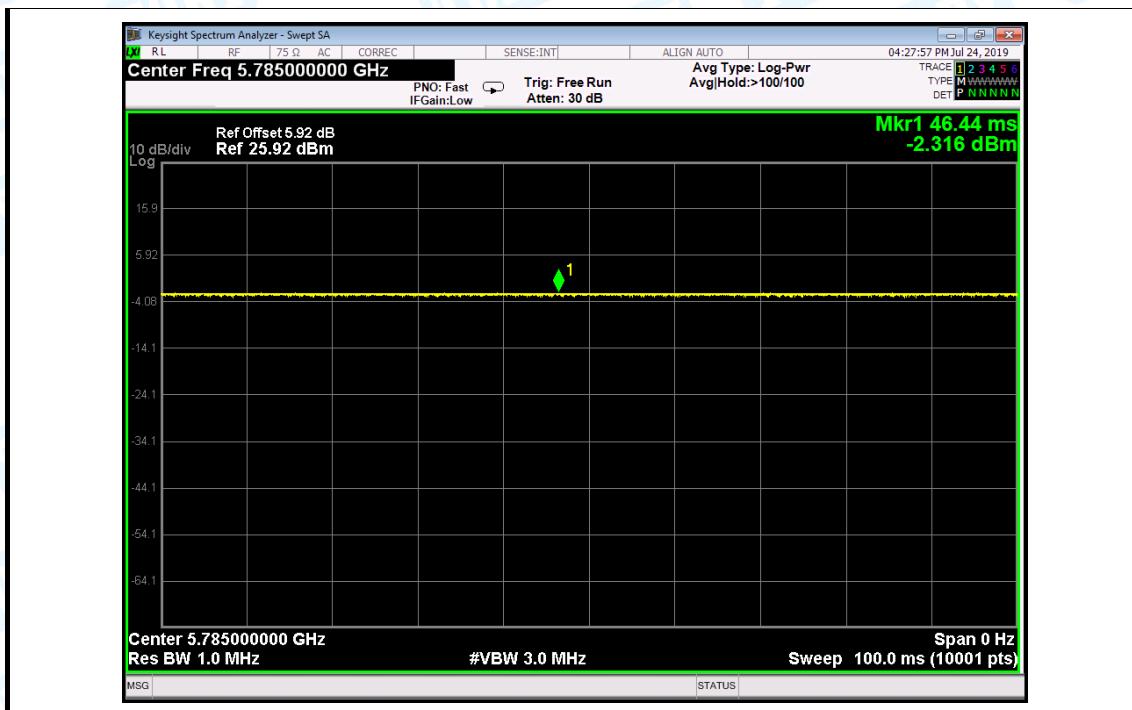
**U-NII-1 802.11 a 5200 MHz****U-NII-1 802.11n(HT20) 5200 MHz****U-NII-1 802.11ac(VHT20) 5200 MHz**

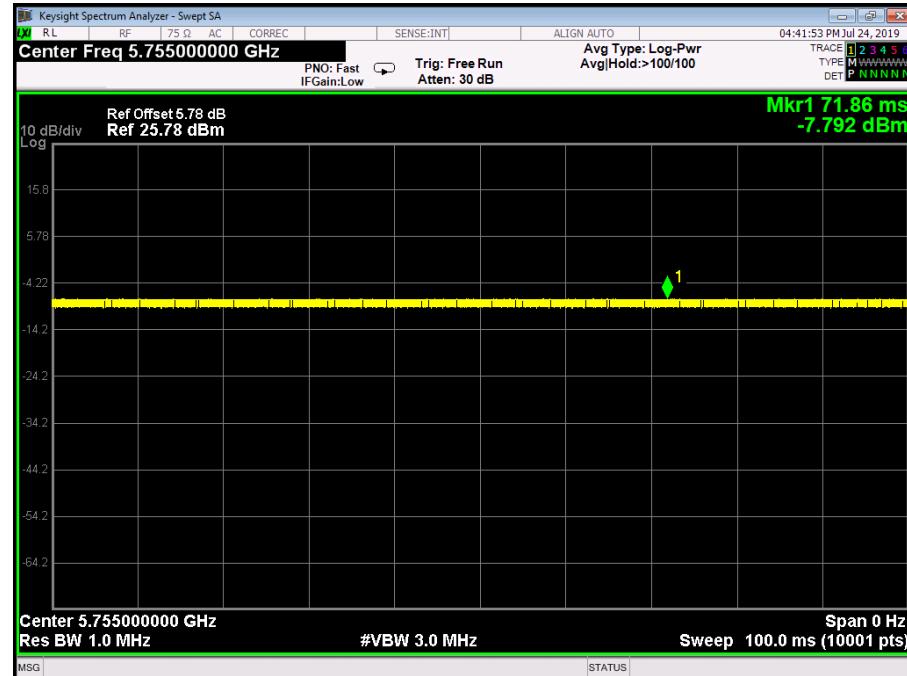
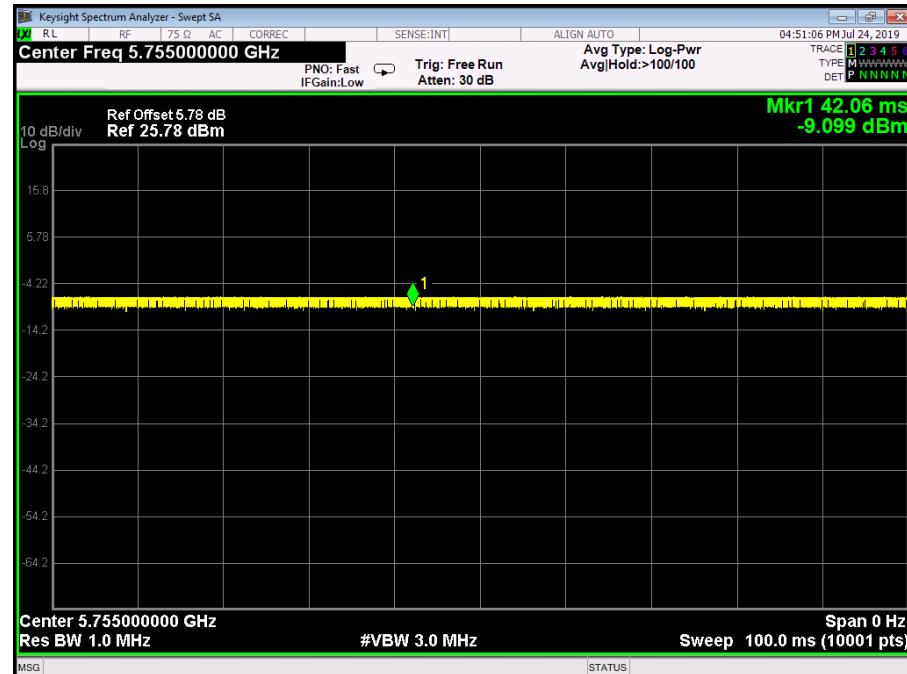


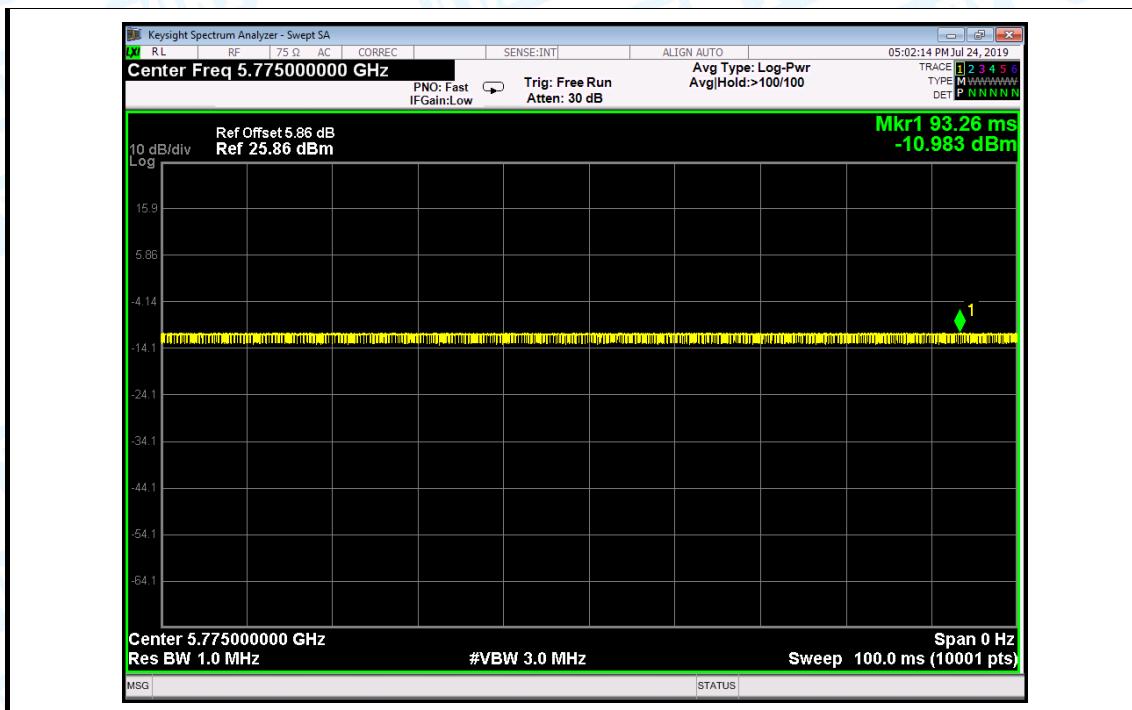
**U-NII-1 802.11 n(HT40) 5190 MHz****U-NII-1 802.11 ac(VHT40) 5190 MHz****U-NII-1 802.11ac(VHT80) 5210 MHz**



**U-NII-3 802.11 a 5785 MHz****U-NII-3 802.11n(HT20) 5785 MHz****U-NII-3 802.11ac(VHT20) 5785 MHz**

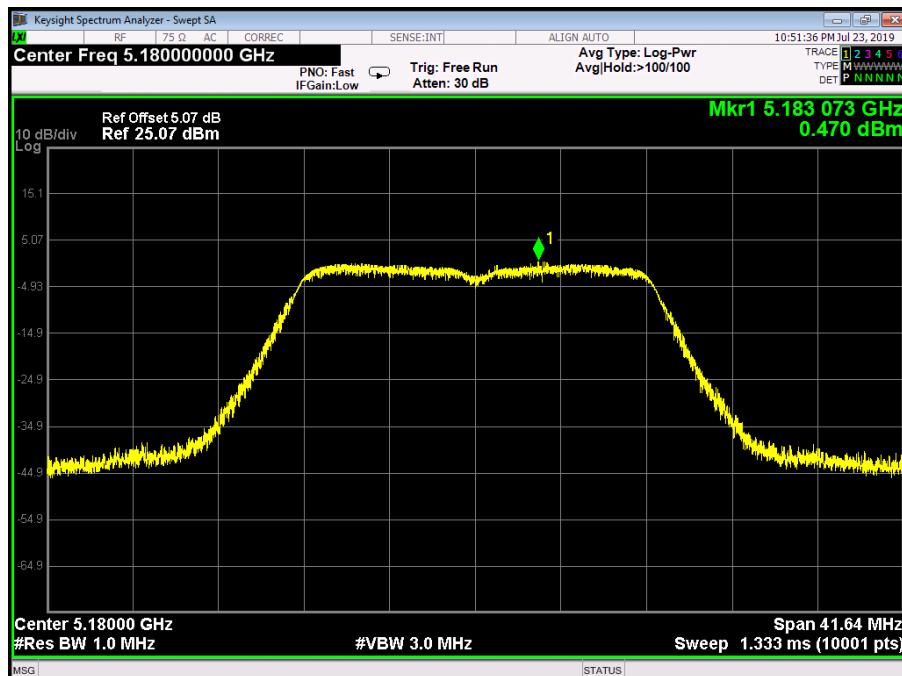
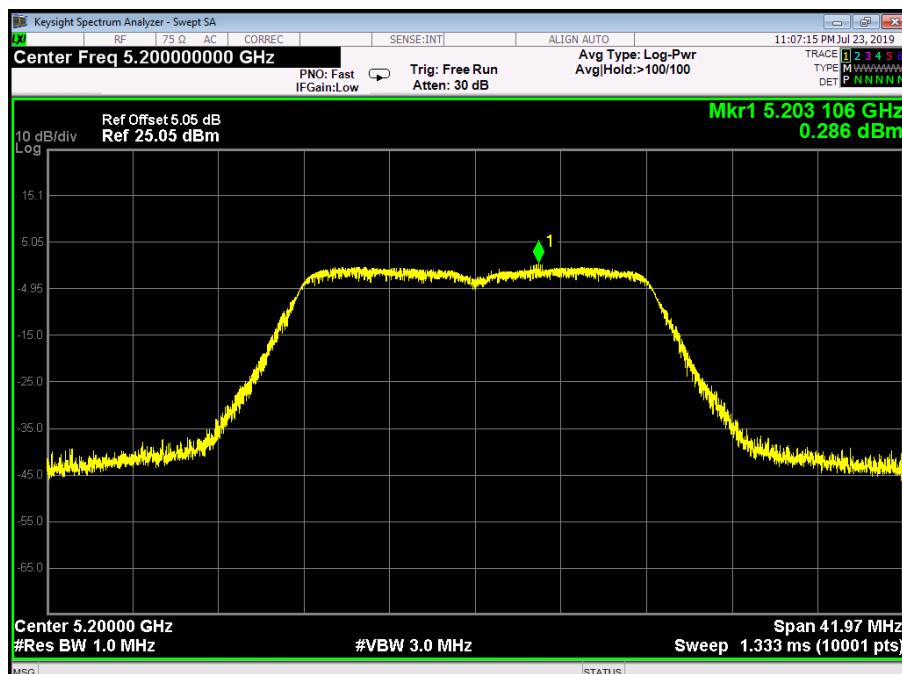


**U-NII-3 802.11 n(HT40) 5755 MHz****U-NII-3 802.11 ac(VHT40) 5755 MHz****U-NII-3 802.11ac(VHT80) 5775 MHz**

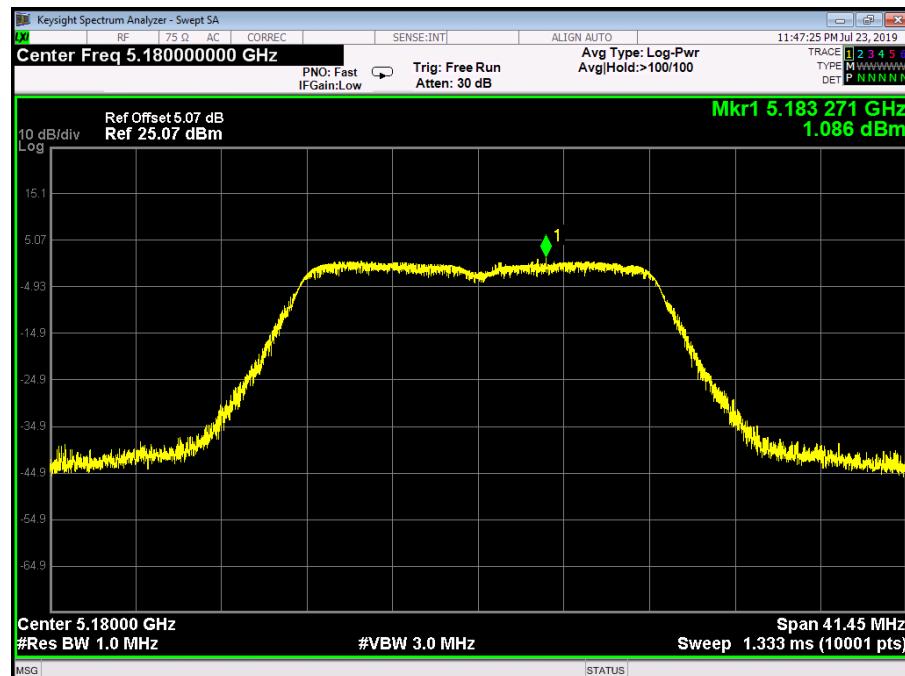
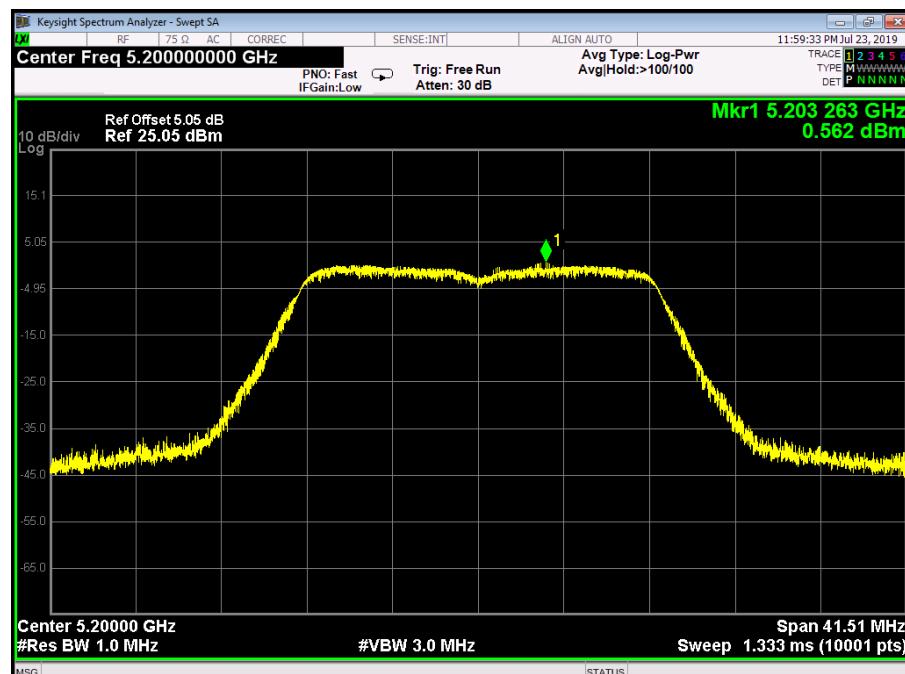


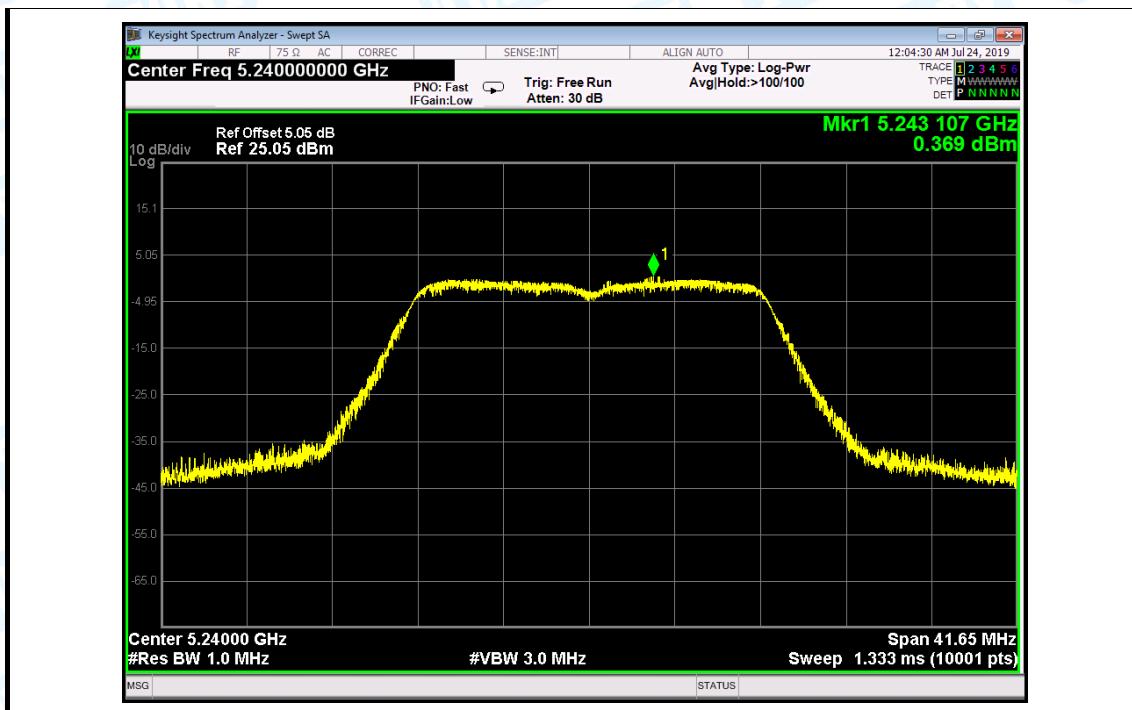
## Attachment F-- Power Spectral Density Test Data

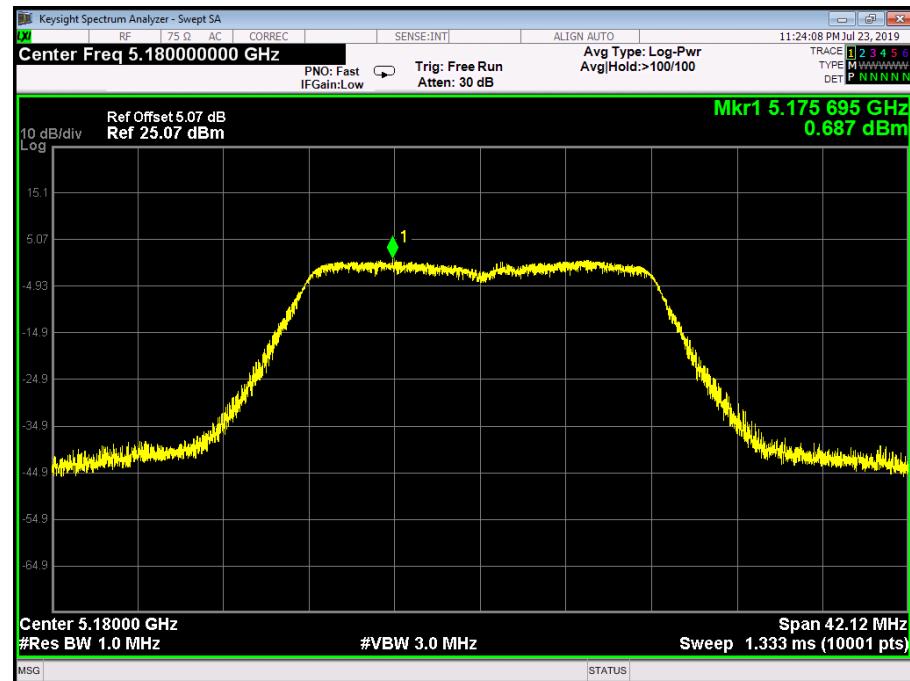
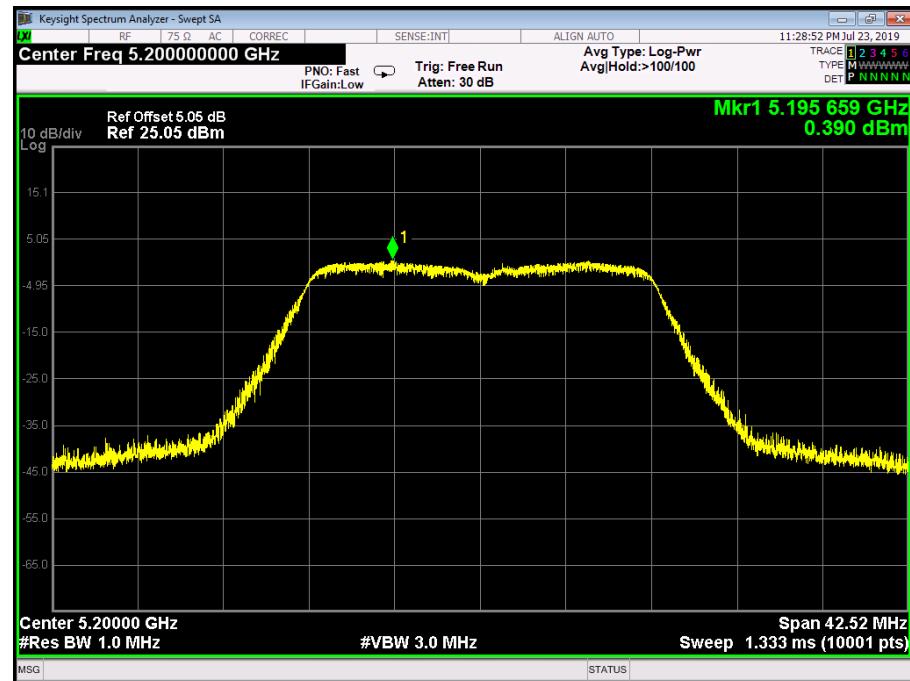
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
U-NII-1			
Test Mode	Frequency (MHz)	Test Data	Limit (dBm/MHz)
		Power Density (dBm/MHz)	
802.11a	5180	0.470	11
	5200	0.286	
	5240	1.094	
802.11n (HT20)	5180	1.086	
	5200	0.562	
	5240	0.369	
802.11ac (HT20)	5180	0.687	
	5200	0.390	
	5240	0.096	
802.11n (HT40)	5190	-2.829	
	5230	-2.544	
802.11ac(40)	5190	-3.913	
	5230	-3.675	
802.11ac(80)	5210	-8.725	
Result: PASS			
Test plots please refer to below pages:			

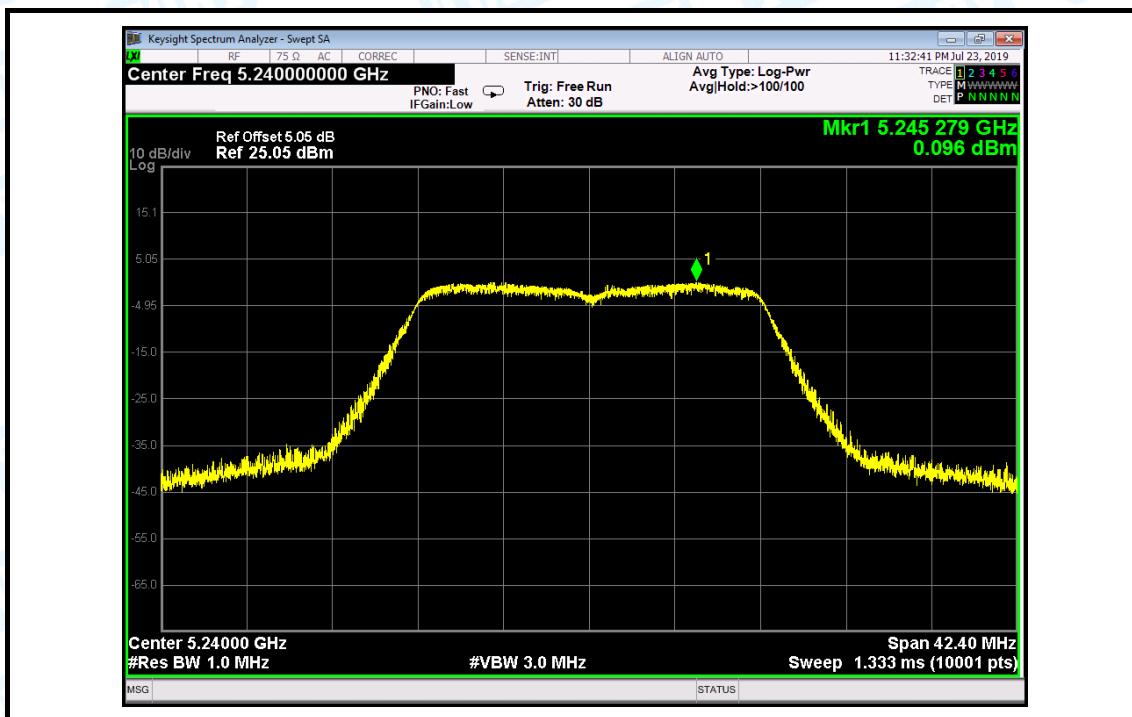
**802.11 a 5180 MHz****802.11 a 5200 MHz****802.11 a 5240 MHz**

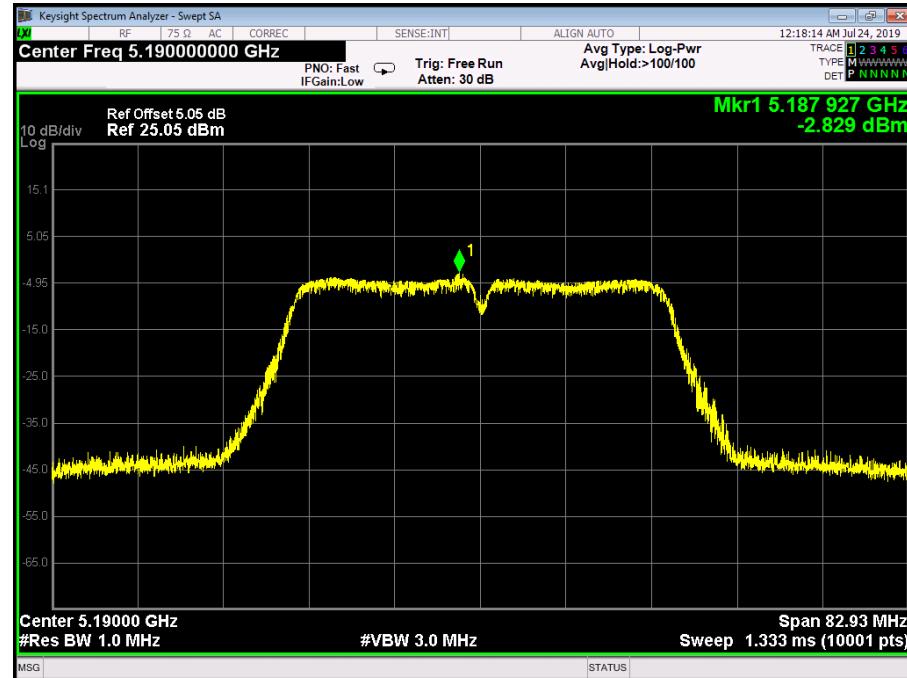
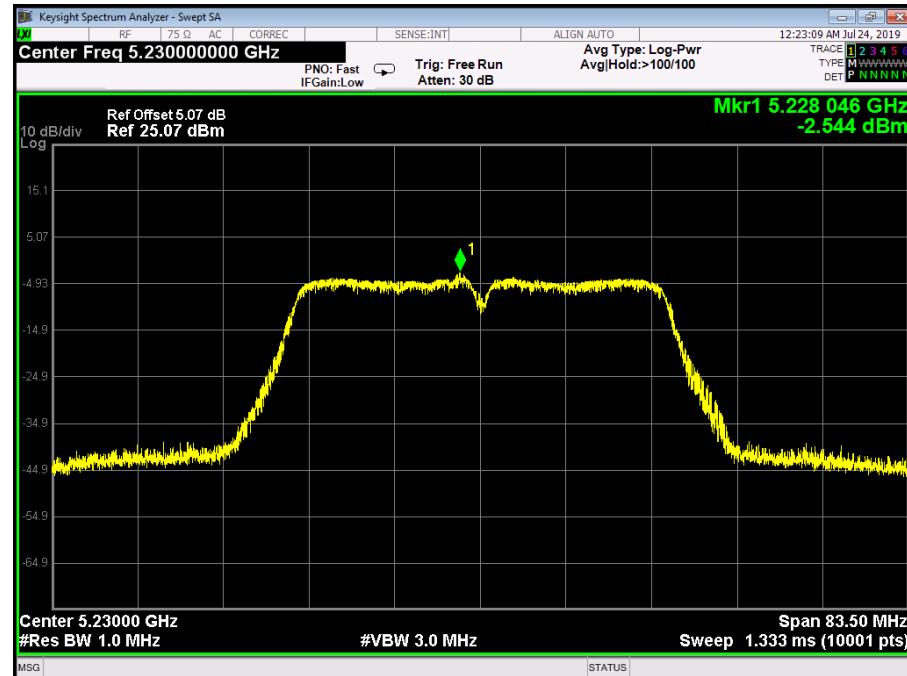


**802.11 n(20) 5180 MHz****802.11 n(20) 5200 MHz****802.11 n(20) 5240 MHz**

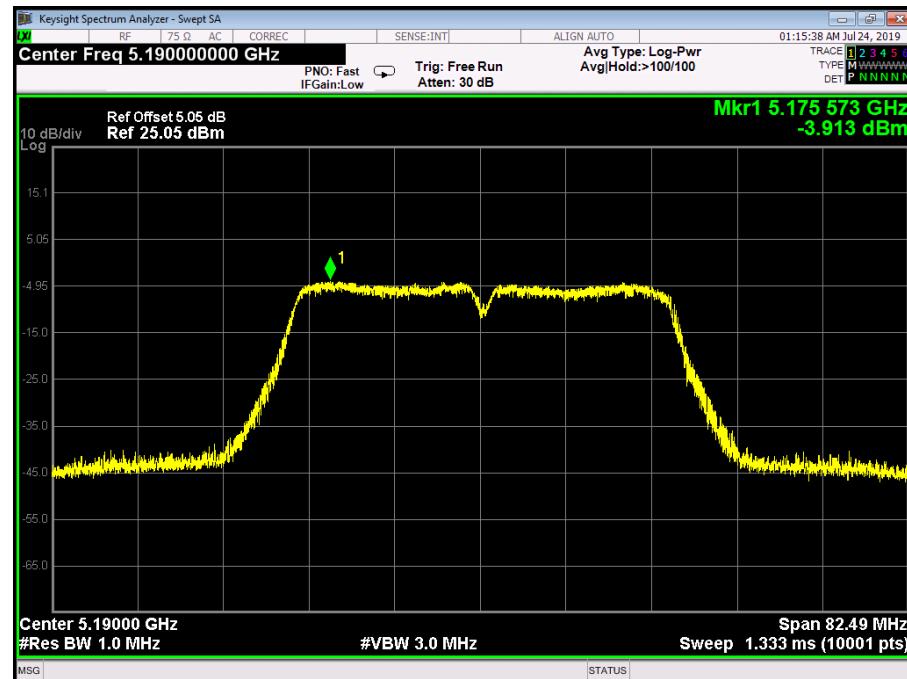


**802.11 ac(20) 5180 MHz****802.11 ac(20) 5200 MHz****802.11 ac(20) 5240 MHz**

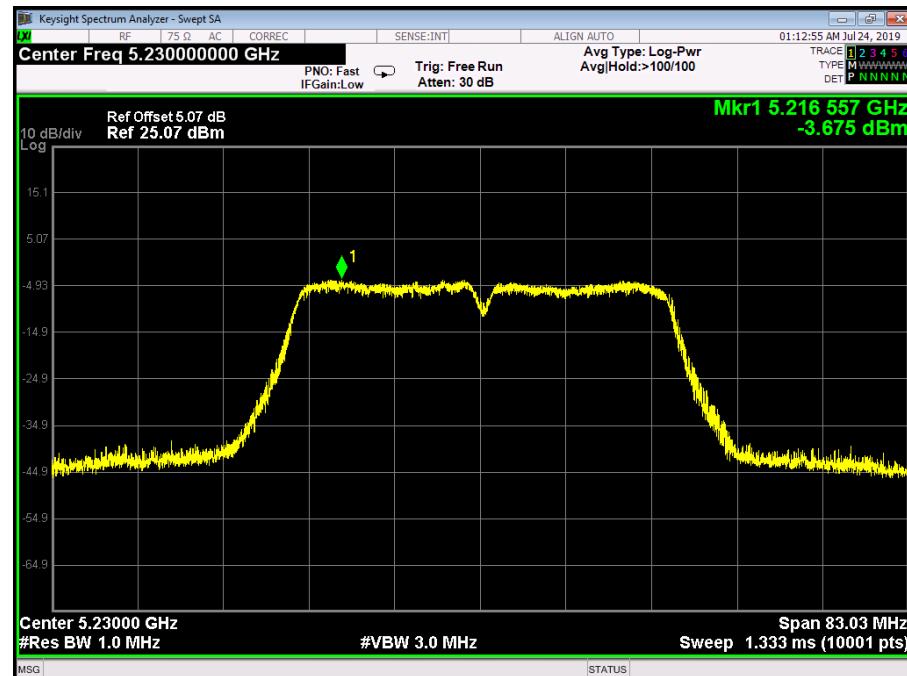


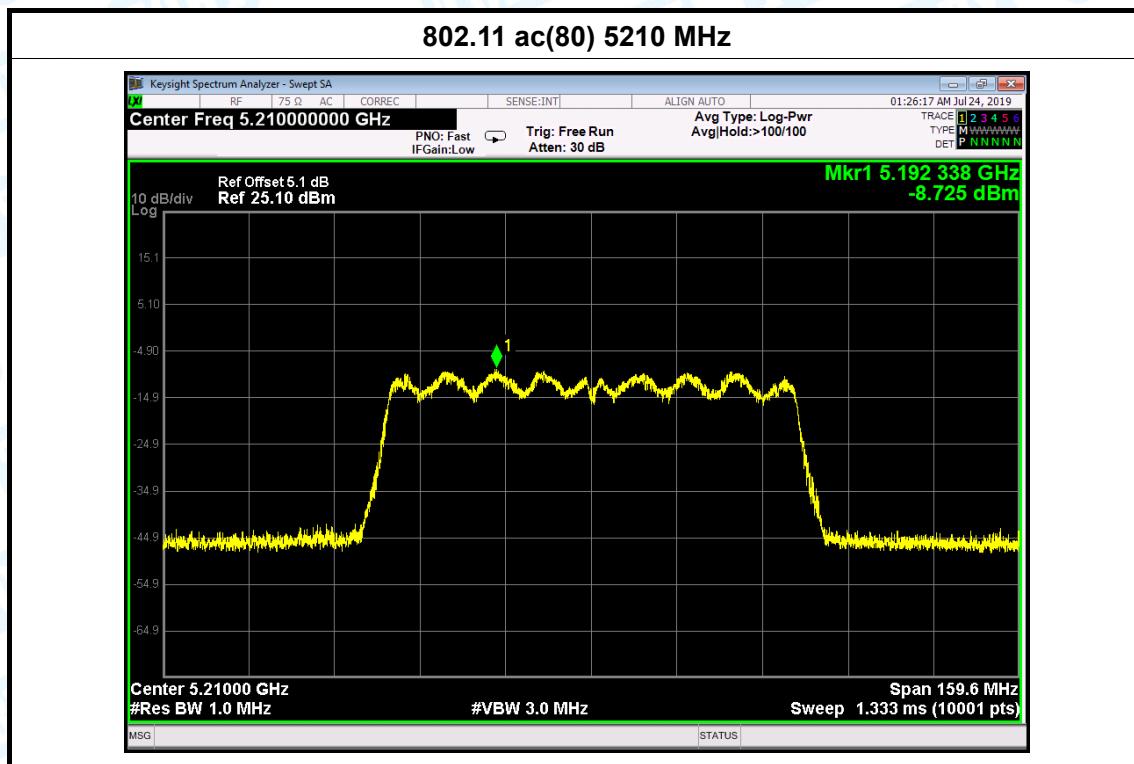
**802.11 n(40) 5190 MHz****802.11 n(40) 5230 MHz**

## 802.11 ac(40) 5190 MHz

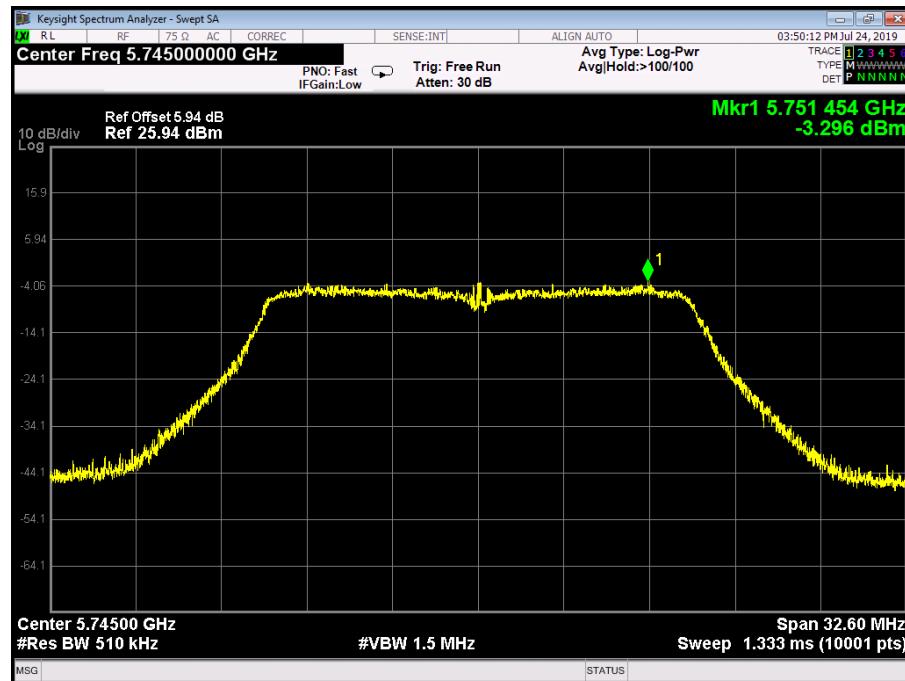
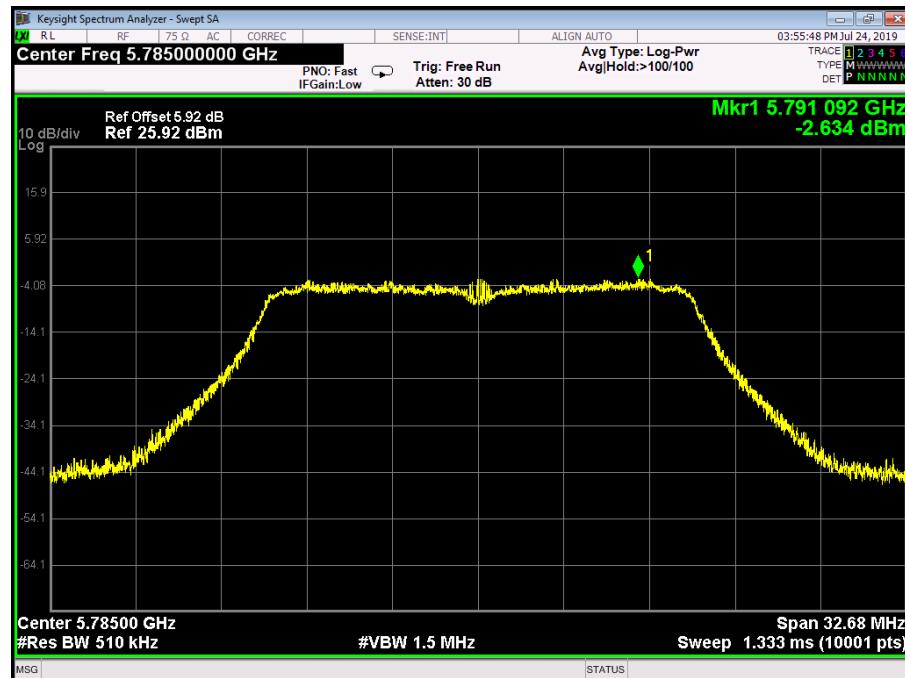


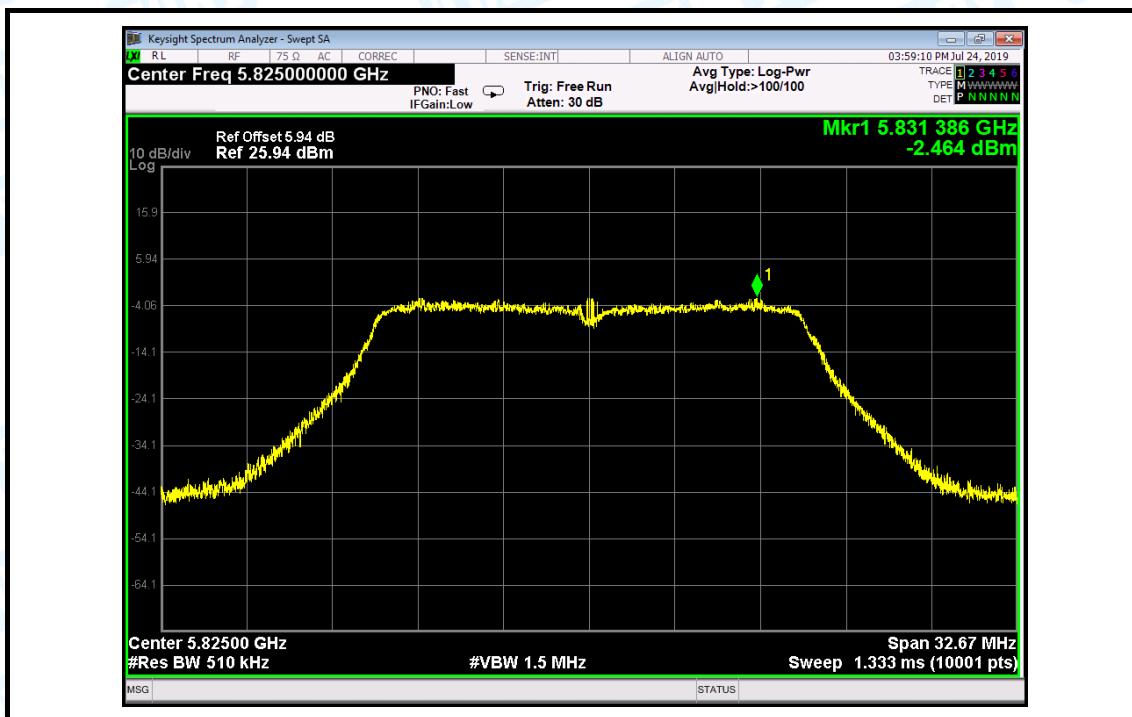
## 802.11 ac(40) 5230 MHz

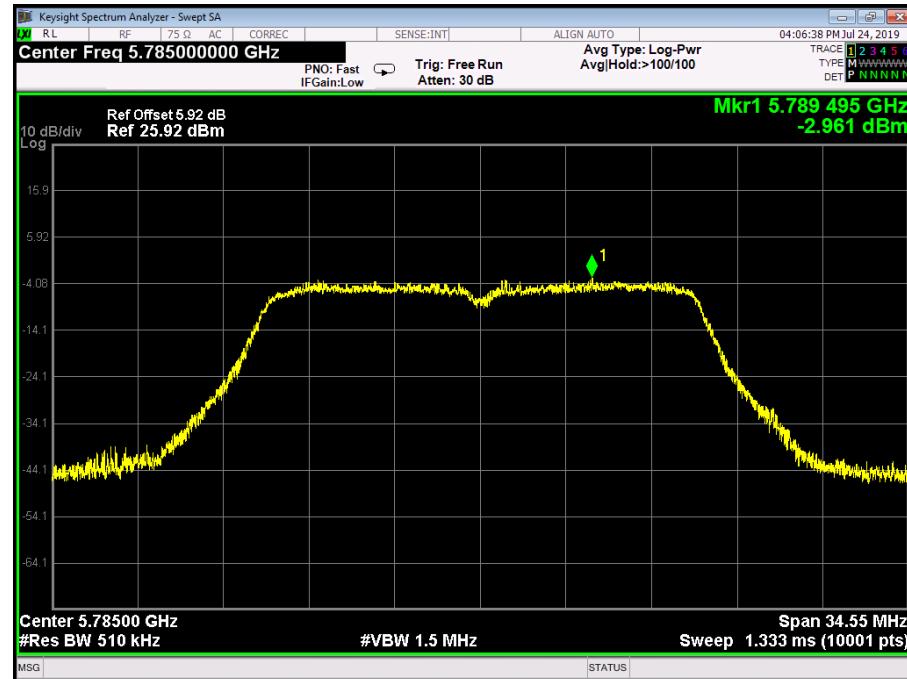




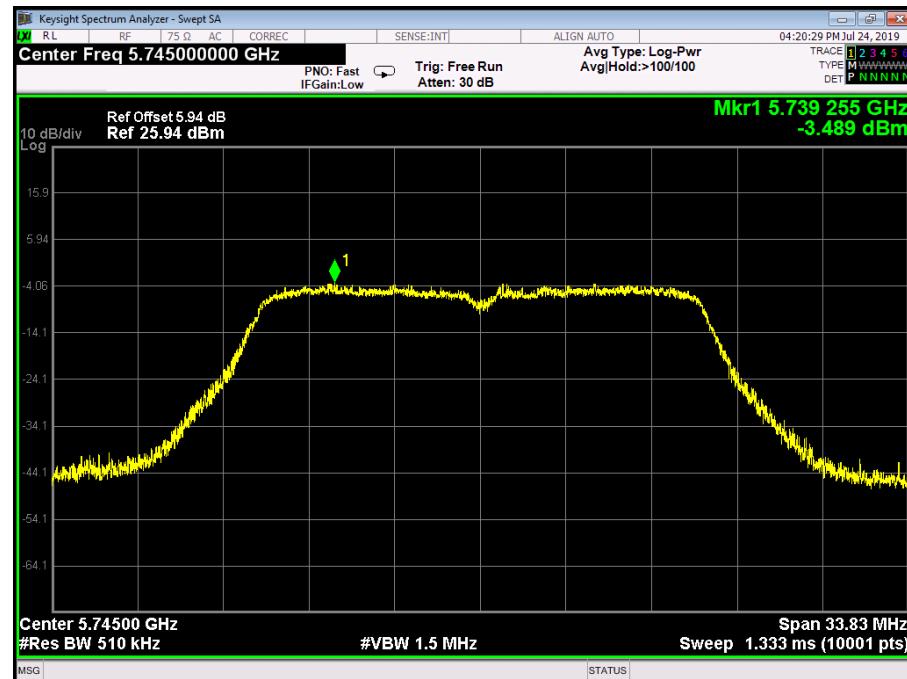
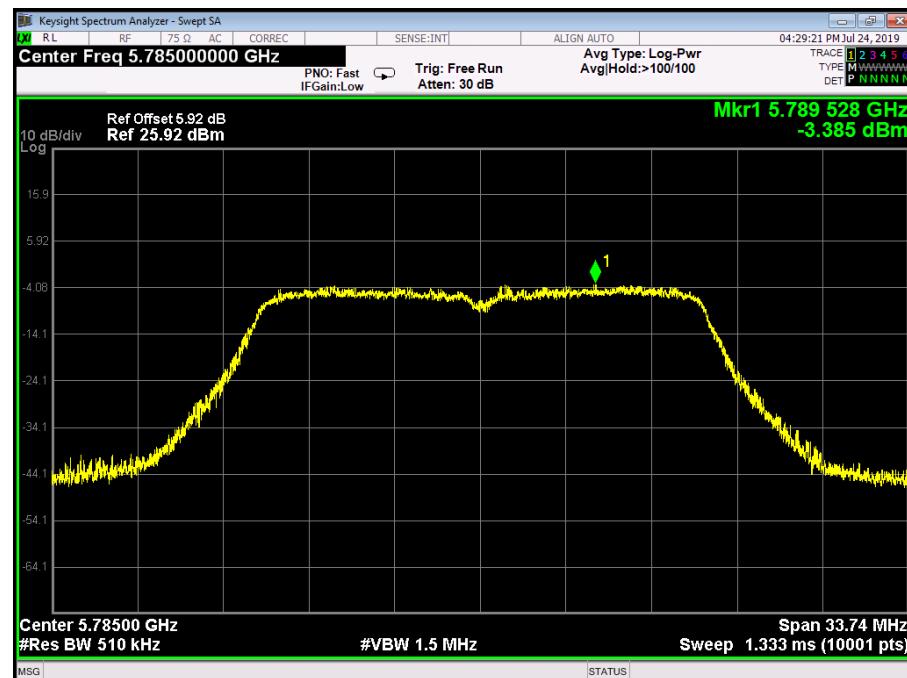
Temperature:	25 °C	Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz		
<b>U-NII-3</b>			
Test Mode	Frequency (MHz)	Test Data	Limit (dBm/500kHz)
		Power Density (dBm/500kHz)	
802.11a	5745	-3.296	30
	5785	-2.634	
	5825	-2.464	
802.11n (HT20)	5745	-3.027	
	5785	-2.961	
	5825	-2.971	
802.11ac (HT20)	5745	-3.489	
	5785	-3.385	
	5825	-3.277	
802.11n (HT40)	5755	-7.171	
	5795	-7.429	
802.11ac(40)	5755	-7.252	
	5795	-7.426	
802.11ac(80)	5775	-10.413	
Result: <b>PASS</b>			
Test plots please refer to below pages:			

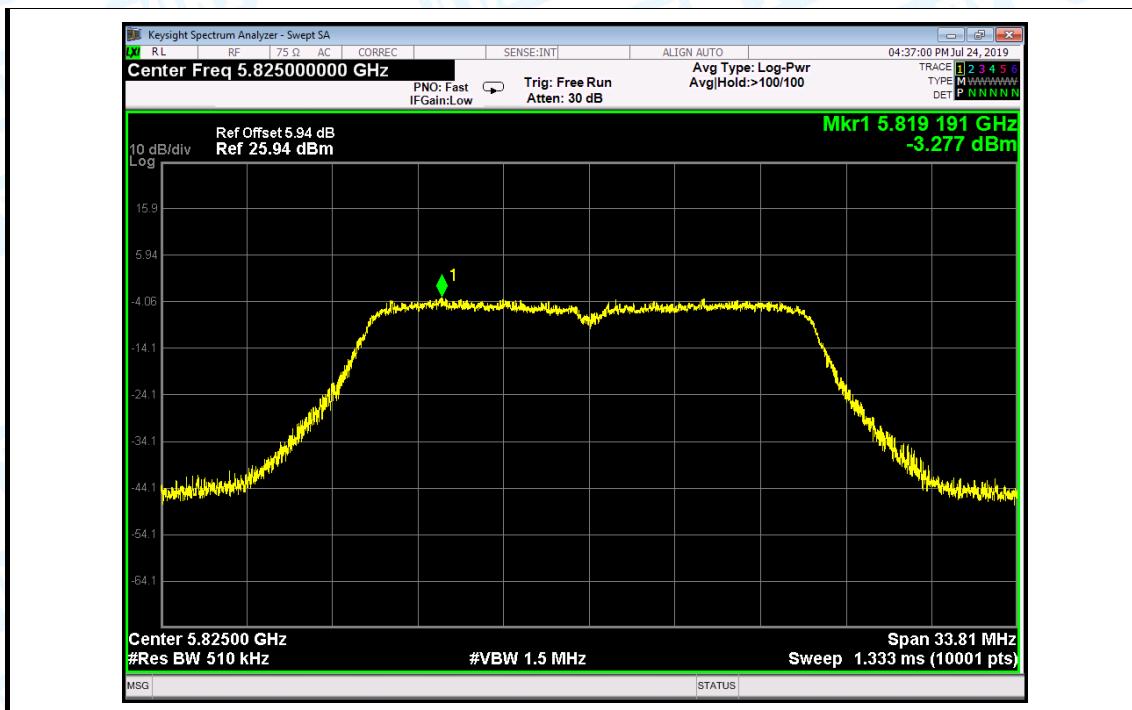
**802.11 a 5745 MHz****802.11 a 5785 MHz****802.11 a 5825 MHz**

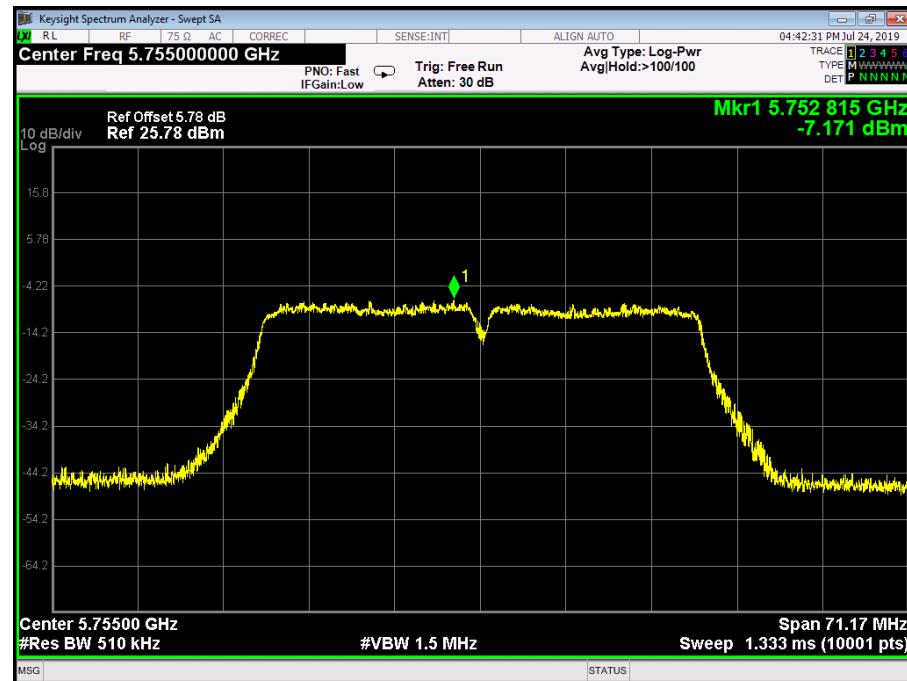
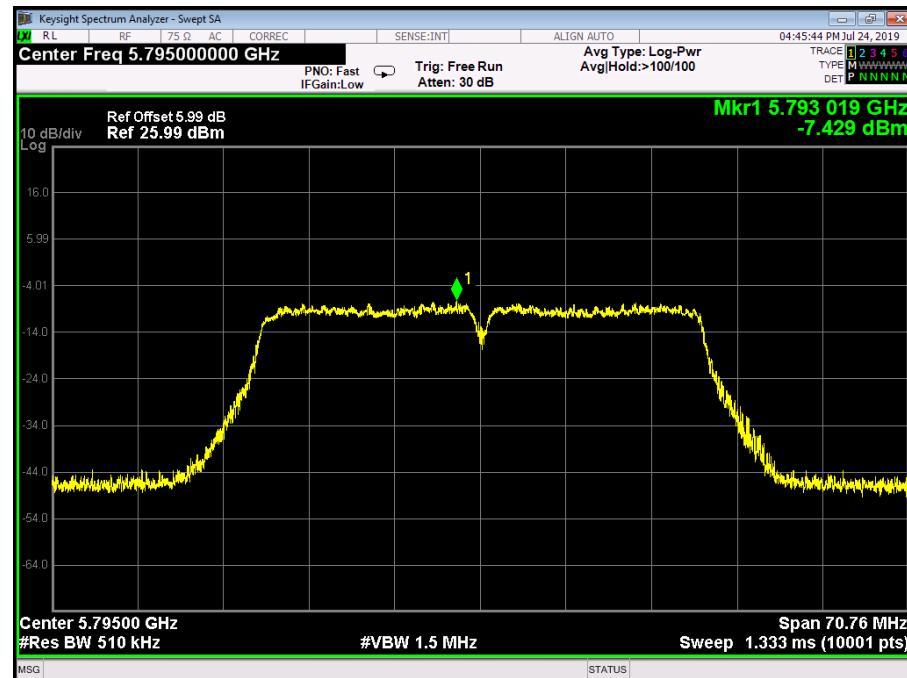


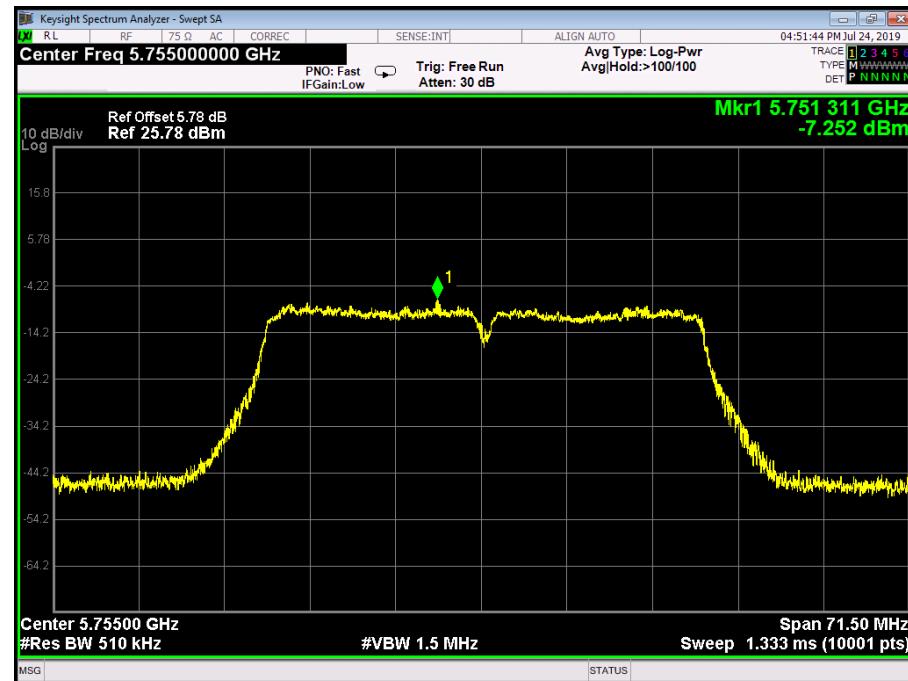
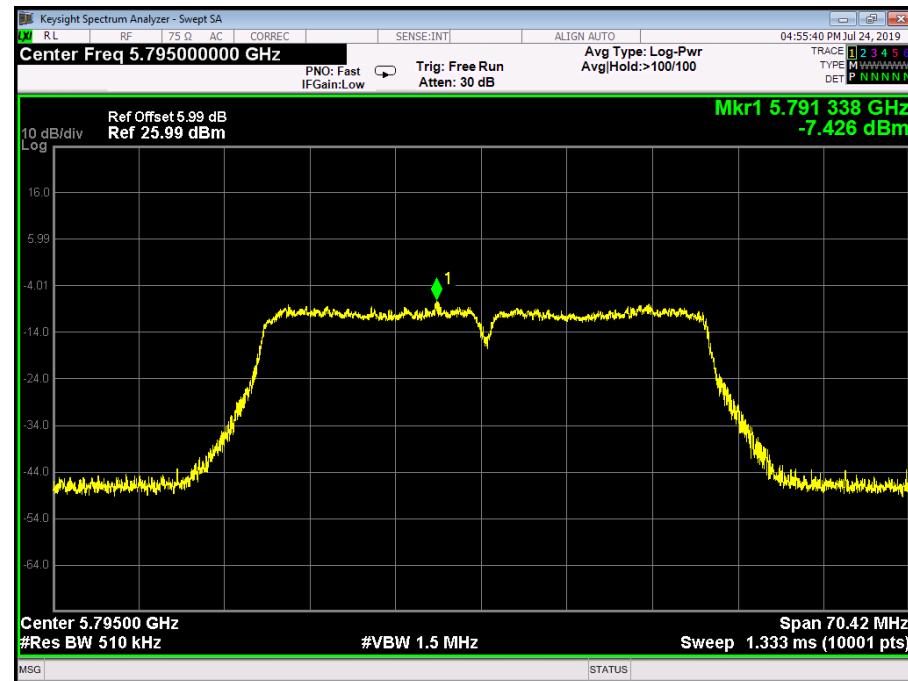
**802.11 n(20) 5745 MHz****802.11 n(20) 5785 MHz****802.11 n(20) 5825 MHz**

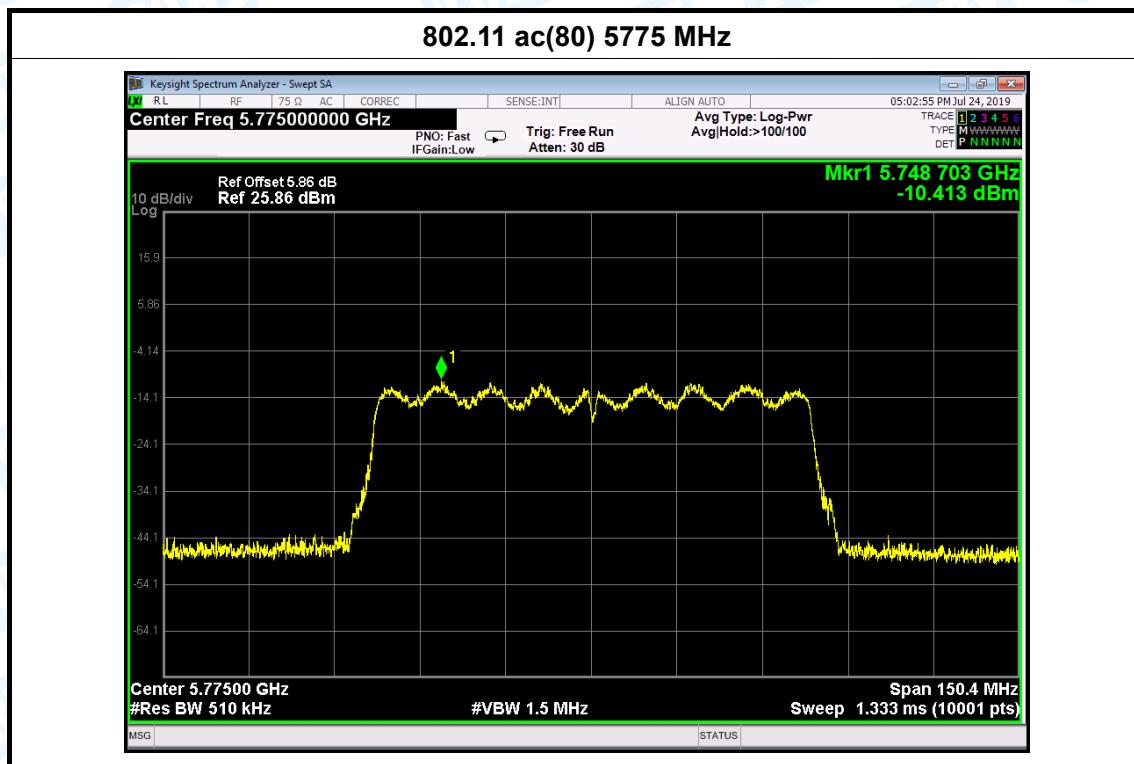


**802.11 ac(20) 5745 MHz****802.11 ac(20) 5785 MHz****802.11 ac(20) 5825 MHz**



**802.11 n(40) 5755 MHz****802.11 n(40) 5795 MHz**

**802.11 ac(40) 5755 MHz****802.11 ac(40) 5795 MHz**



**Attachment G-- Frequency Stability Measurement Test Data**

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 low channel

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

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

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