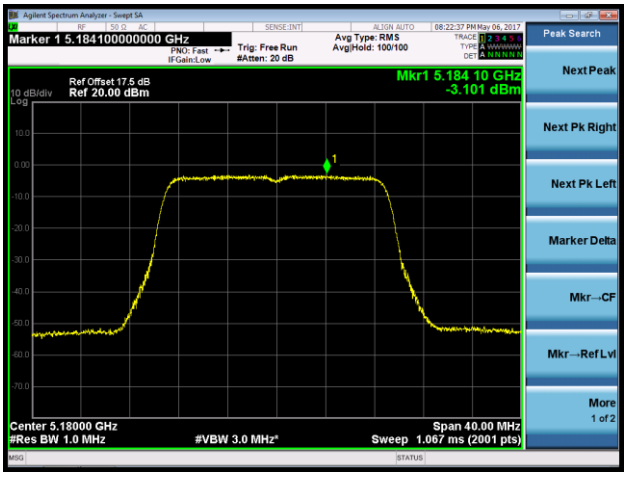
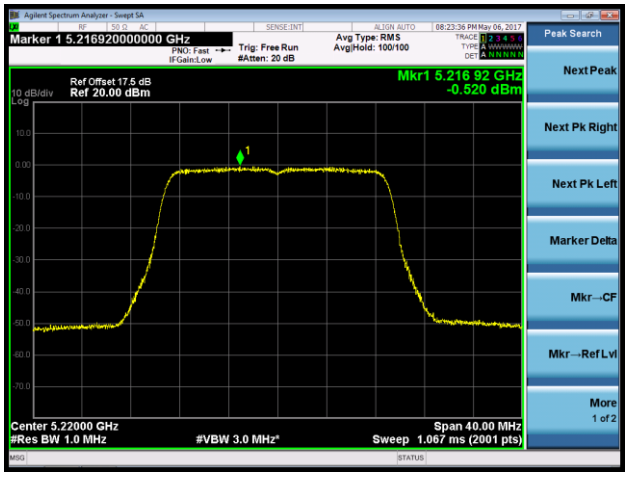
802.11n-HT20 Power Spectral Density - Ant 0

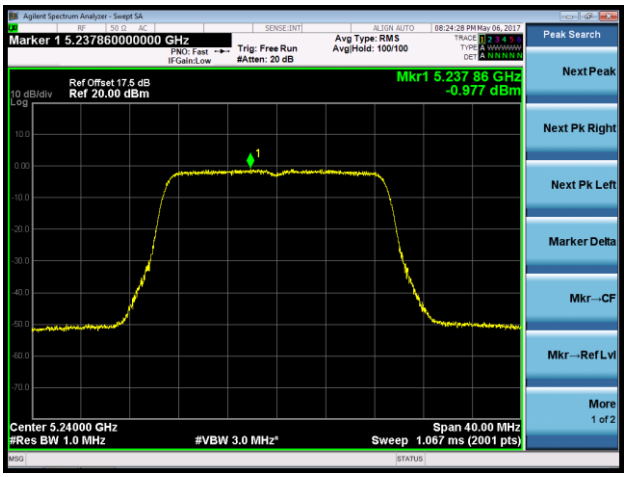
Channel 36 (5180MHz)



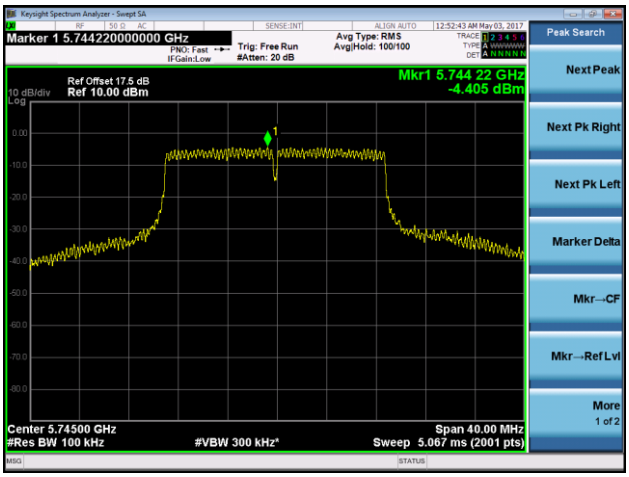
Channel 44 (5220MHz)



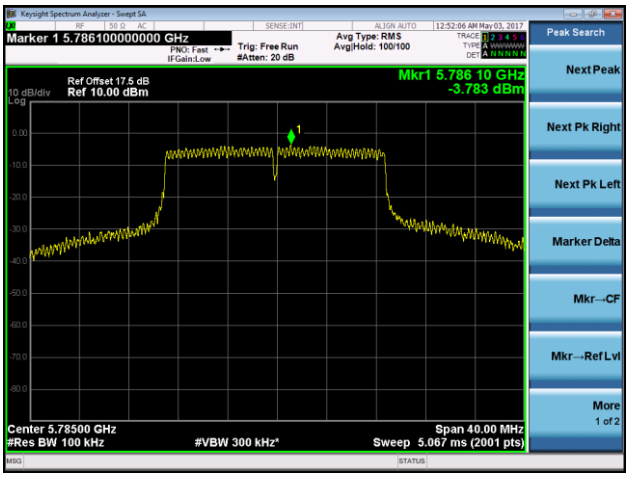
Channel 48 (5240MHz)



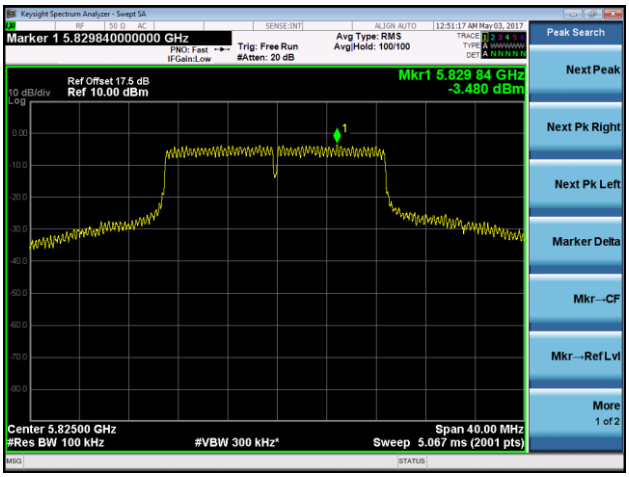
Channel 149 (5745MHz)

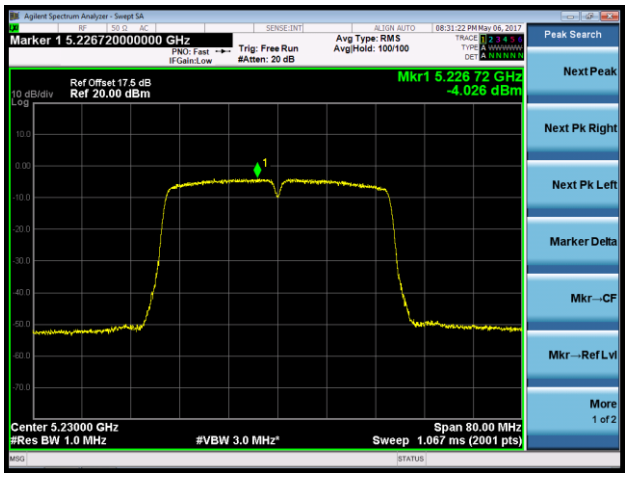
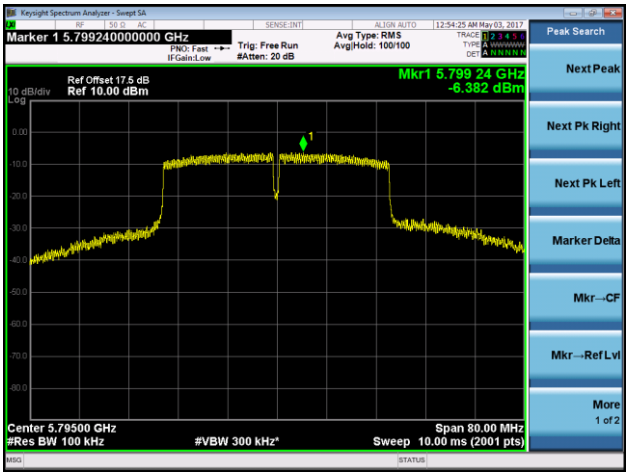


Channel 157 (5785MHz)



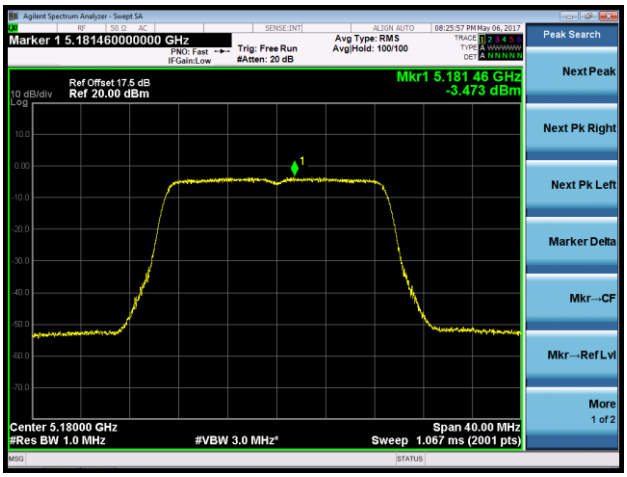
Channel 165 (5825MHz)



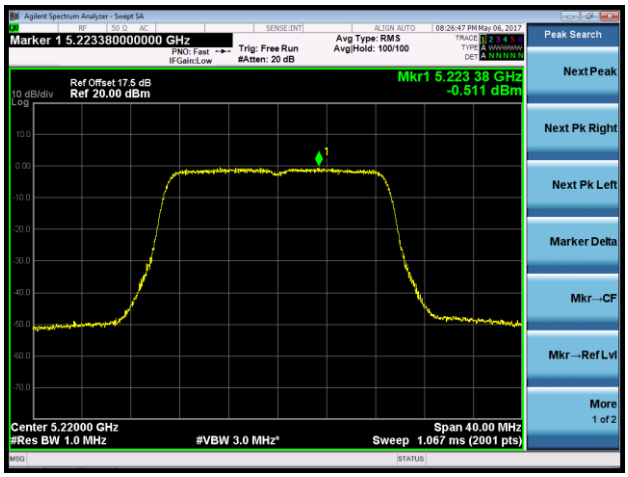
802.11n-HT40 Power Spectral Density - Ant 0	
Channel 38 (5190MHz)	**Channel 46 (5230MHz)**
	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
	

802.11ac-VHT20 Power Spectral Density - Ant 0

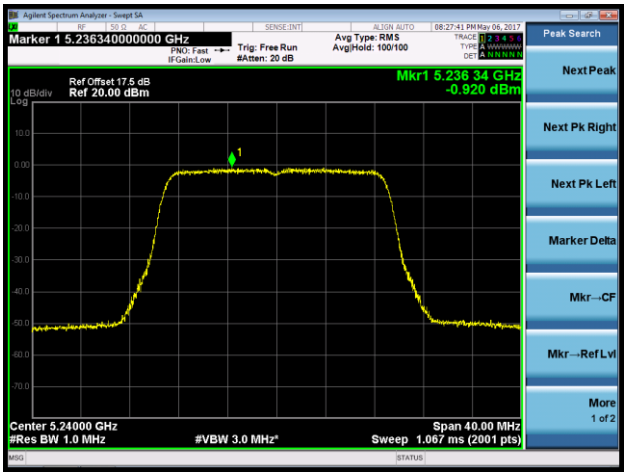
Channel 36 (5180MHz)



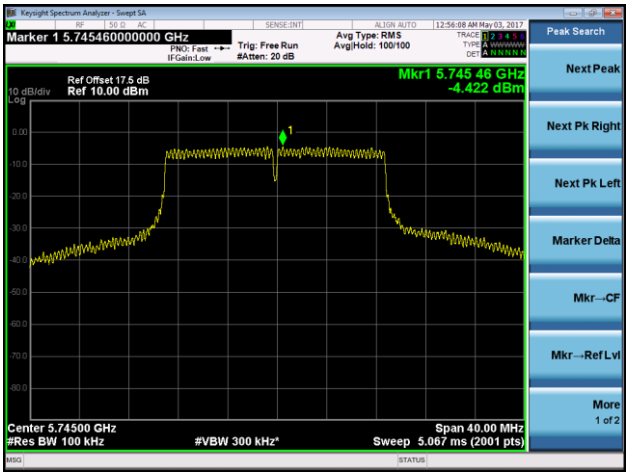
Channel 44 (5220MHz)



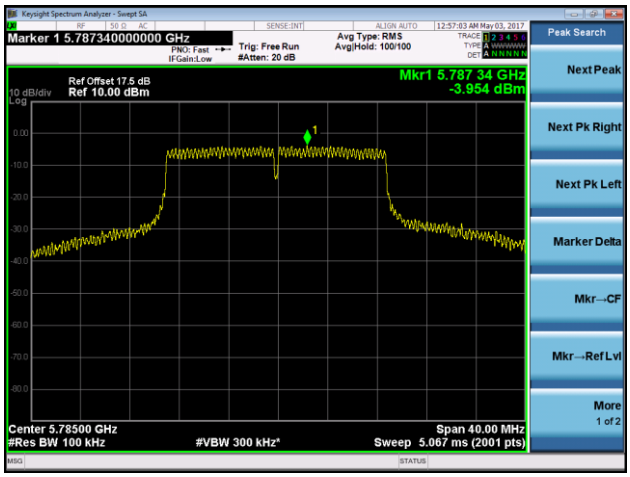
Channel 48 (5240MHz)



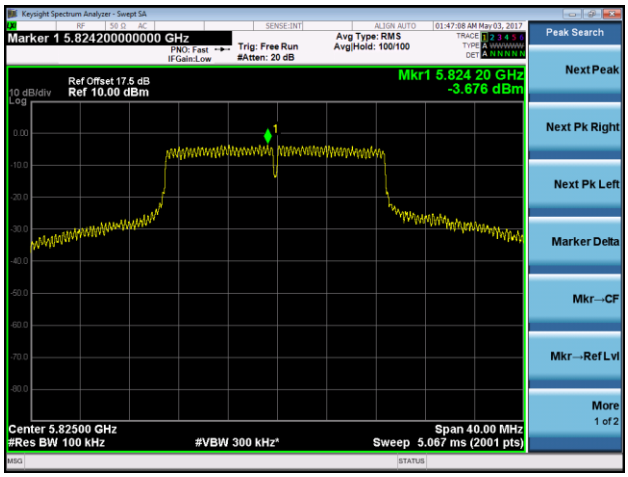
Channel 149 (5745MHz)



Channel 157 (5785MHz)



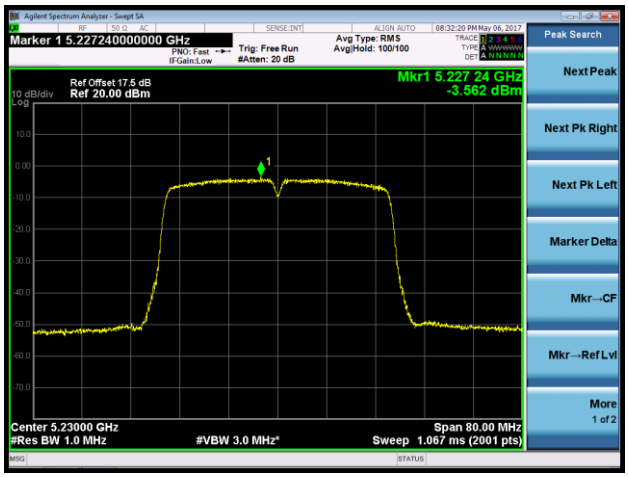
Channel 165 (5825MHz)



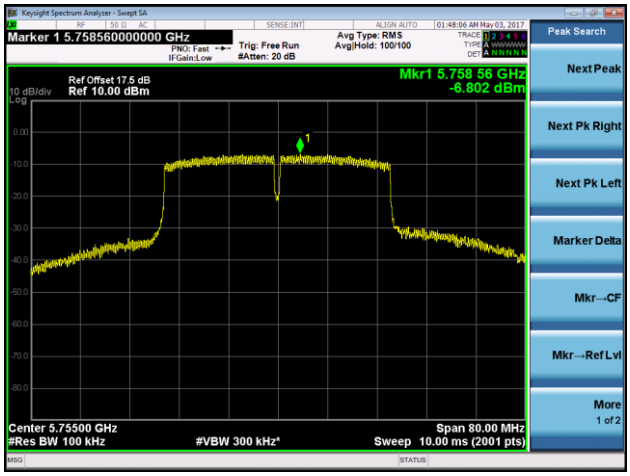
802.11ac-VHT40 Power Spectral Density - Ant 0

Channel 38 (5190MHz)

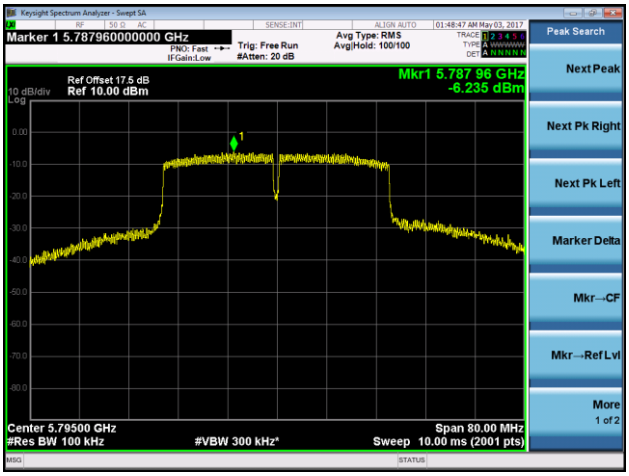
Channel 46 (5230MHz)



Channel 151 (5755MHz)

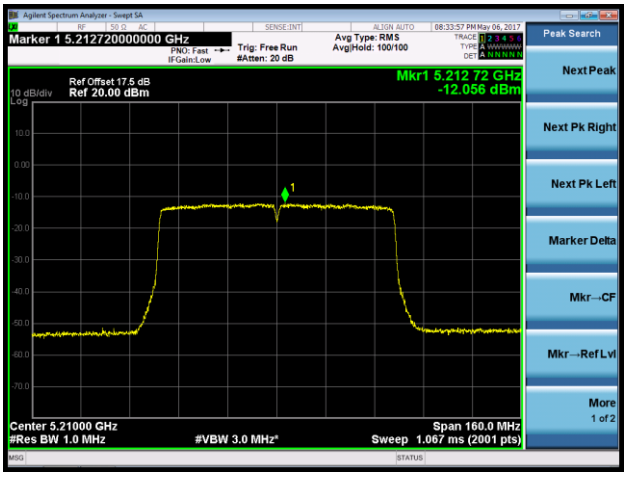


Channel 159 (5795MHz)

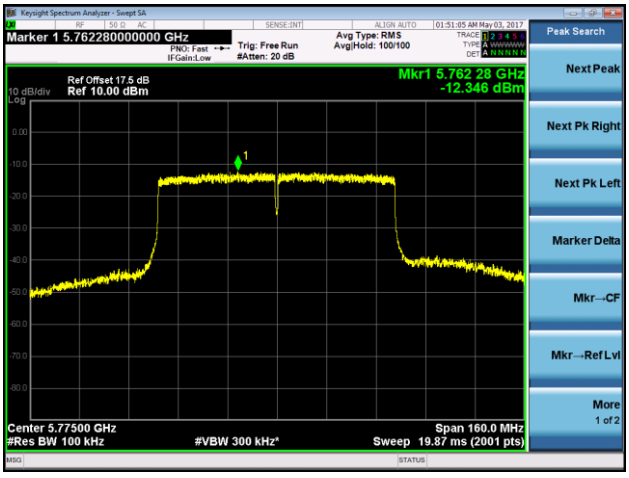


802.11ac-VHT80 Power Spectral Density - Ant 0

Channel 42 (5210MHz)

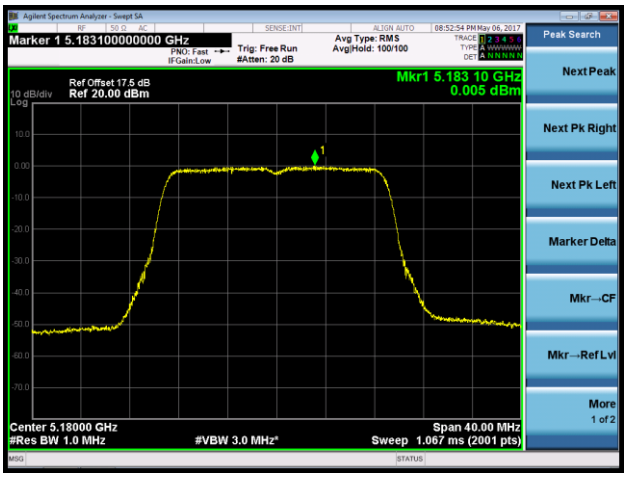


Channel 155 (5775MHz)

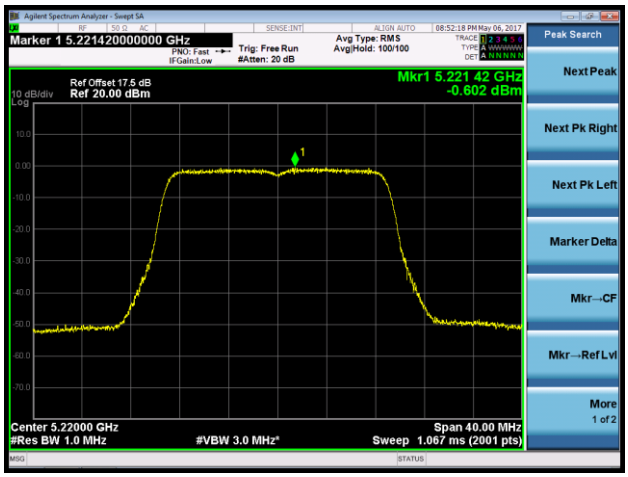


802.11n-HT20 Power Spectral Density - Ant 0 / Ant 0 + 1

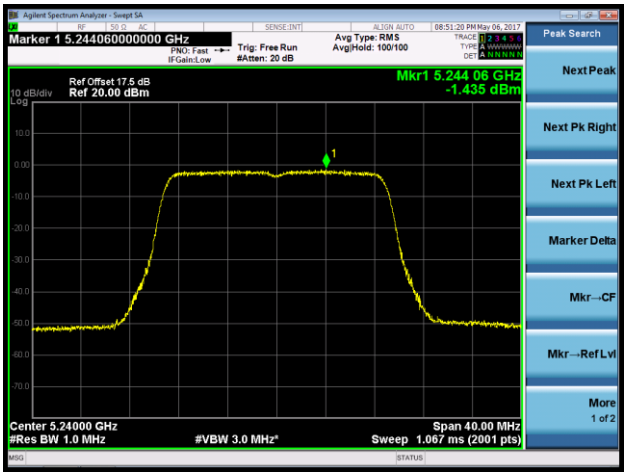
Channel 36 (5180MHz)



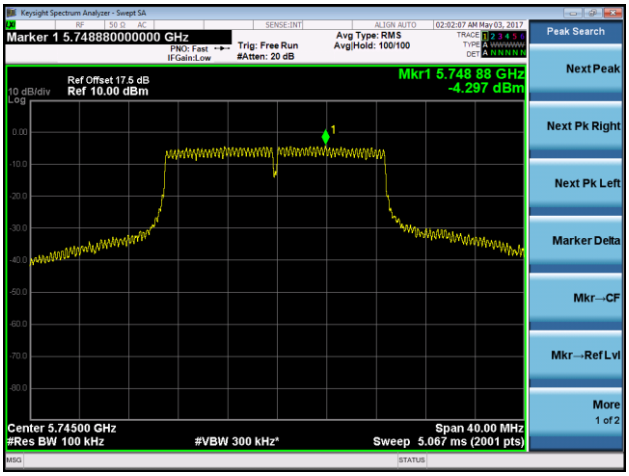
Channel 44 (5220MHz)



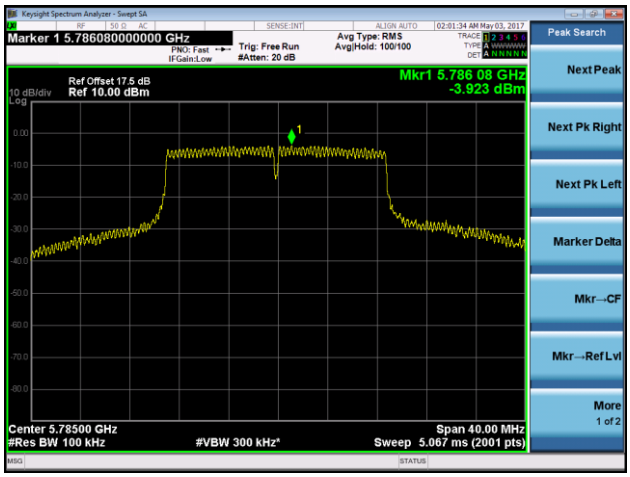
Channel 48 (5240MHz)



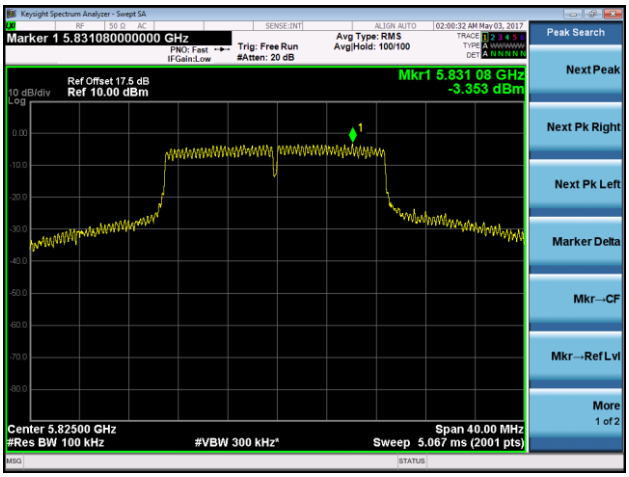
Channel 149 (5745MHz)

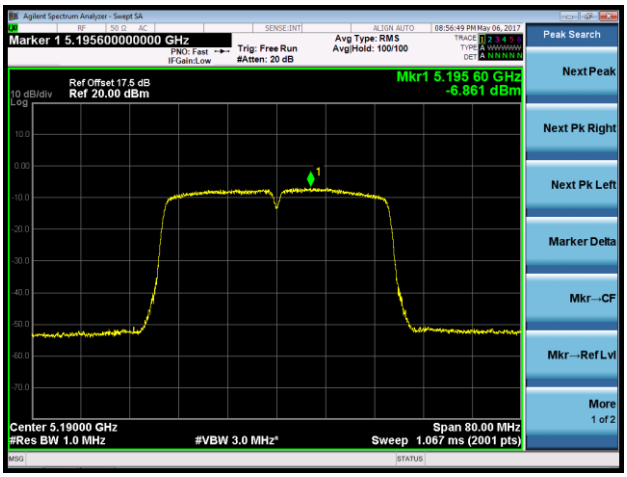
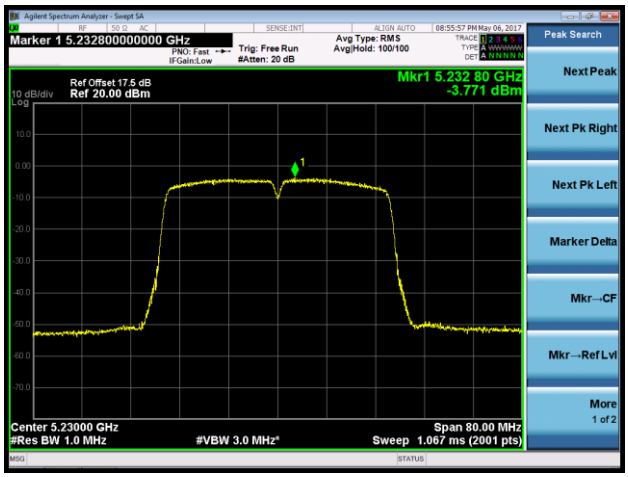
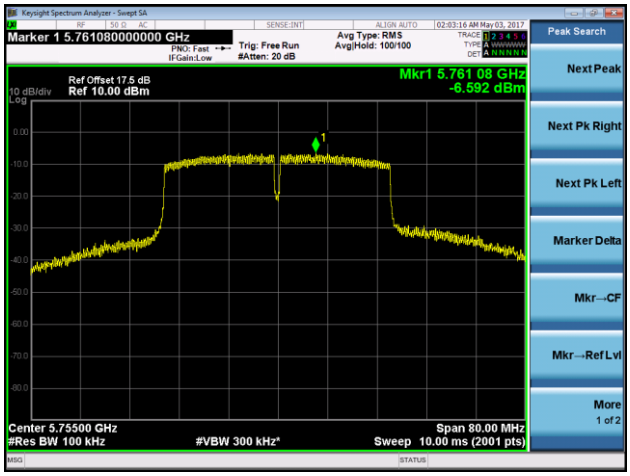
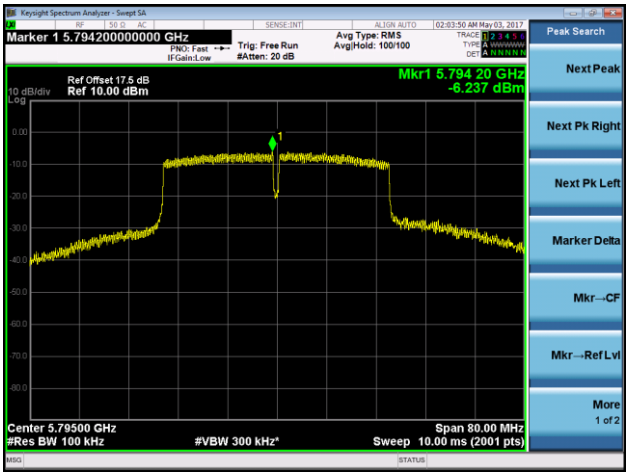


Channel 157 (5785MHz)



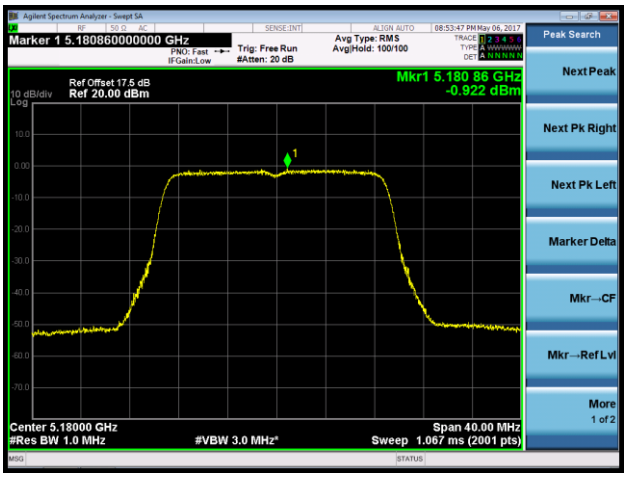
Channel 165 (5825MHz)



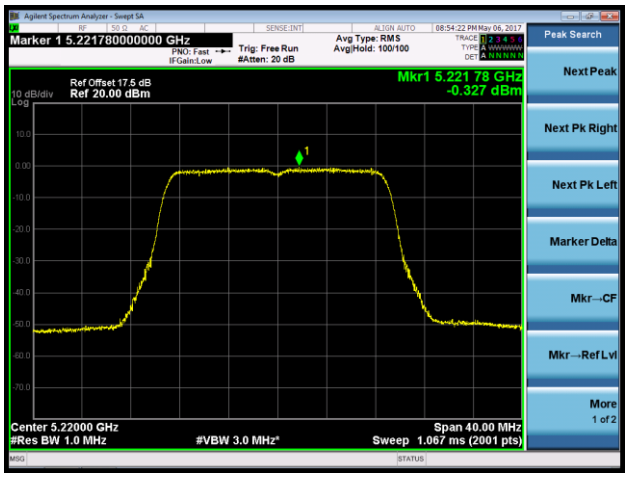
802.11n-HT40 Power Spectral Density - Ant 0 / Ant 0 + 1	
Channel 38 (5190MHz)	**Channel 46 (5230MHz)**
	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
	

802.11ac-VHT20 Power Spectral Density - Ant 0 / Ant 0 + 1

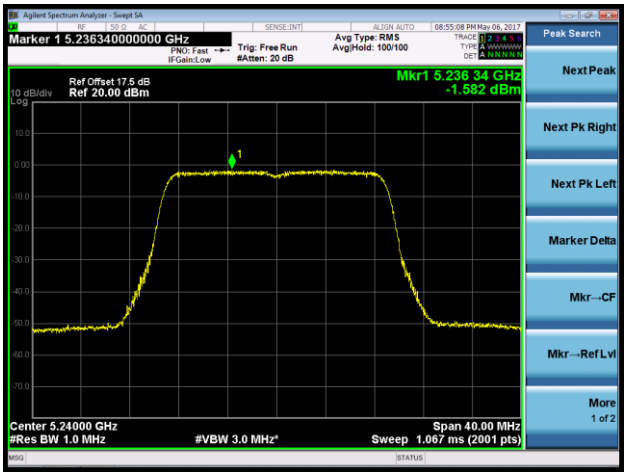
Channel 36 (5180MHz)



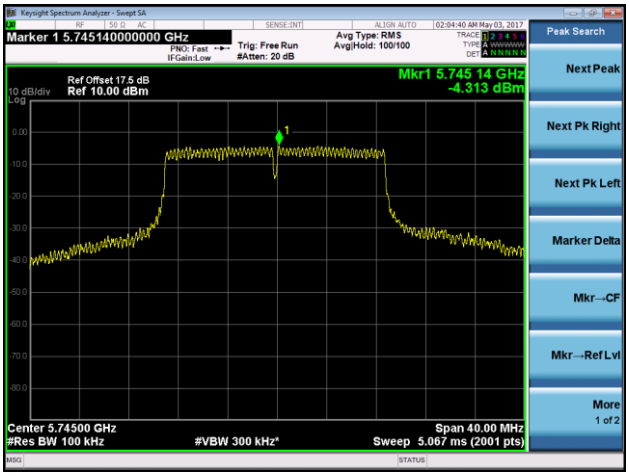
Channel 44 (5220MHz)



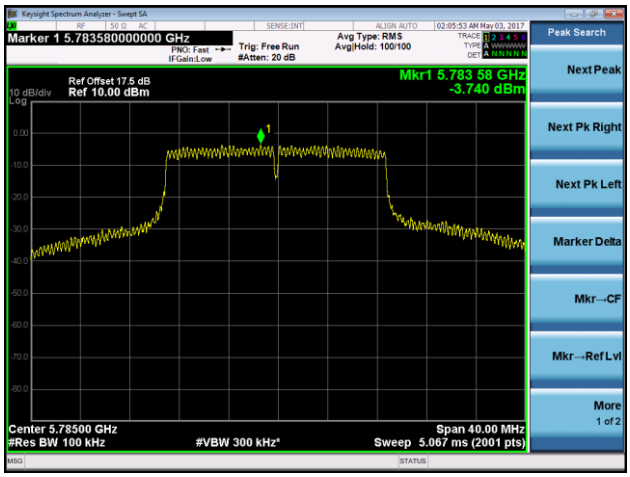
Channel 48 (5240MHz)



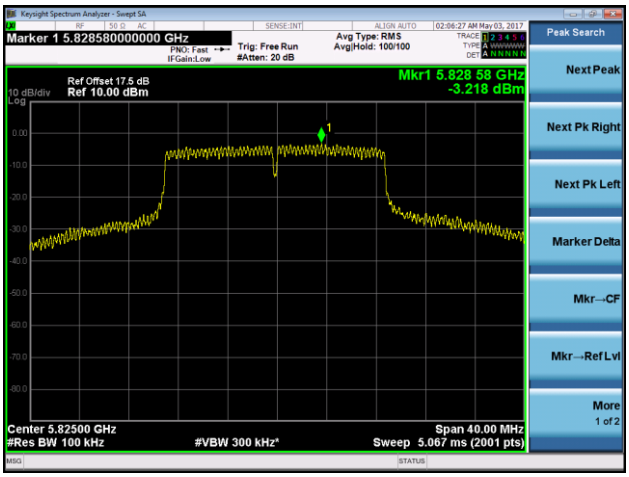
Channel 149 (5745MHz)

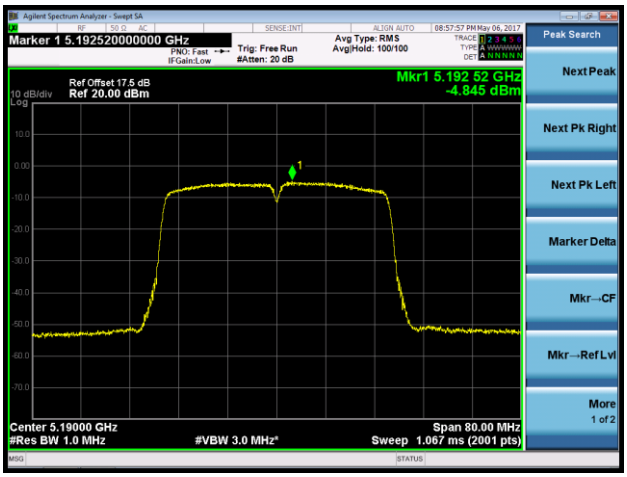
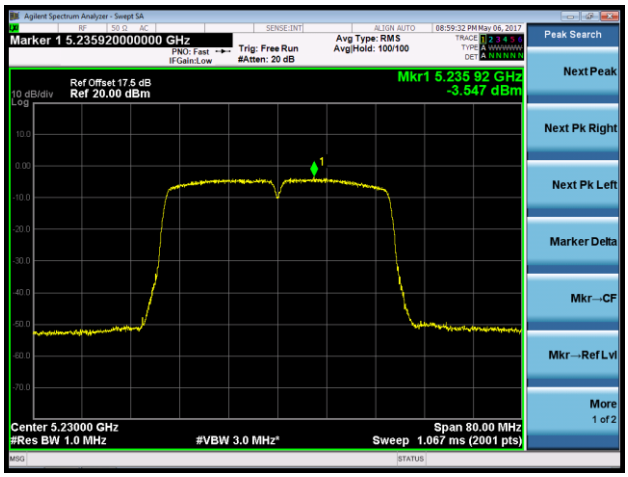
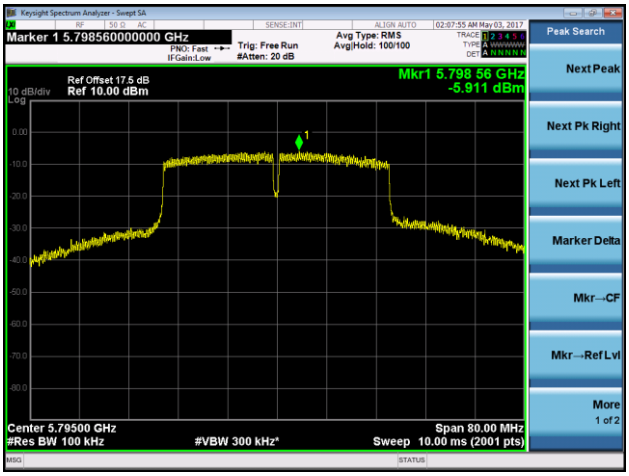
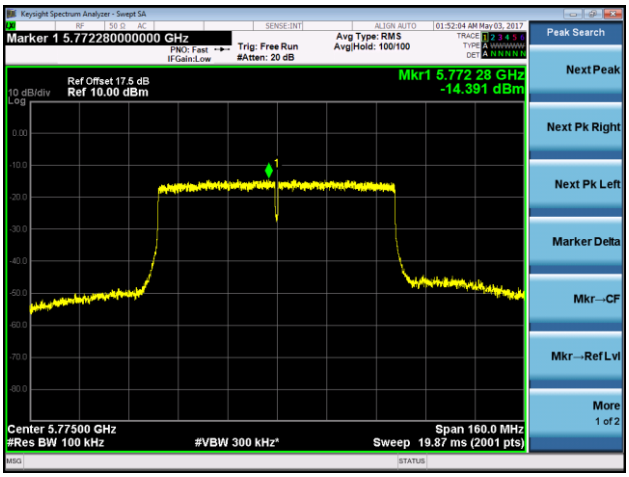


Channel 157 (5785MHz)



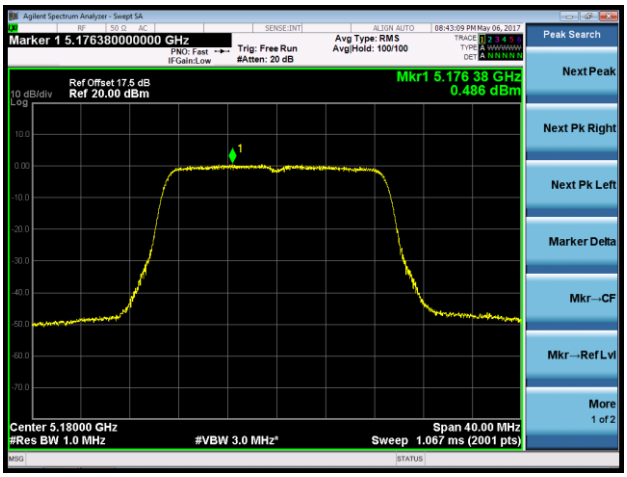
Channel 165 (5825MHz)



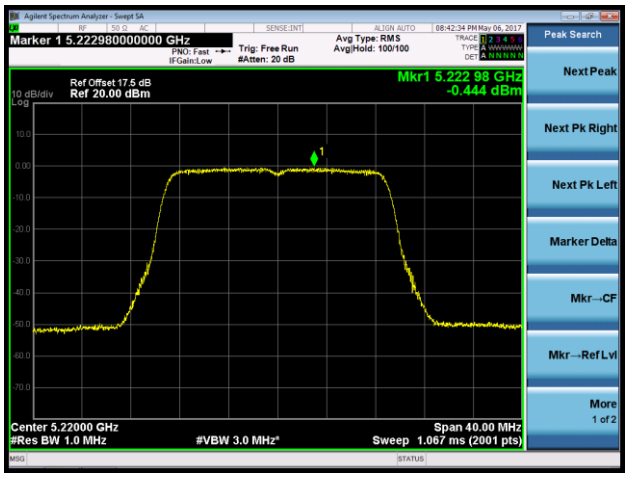
802.11ac-VHT40 Power Spectral Density - Ant 0 / Ant 0 + 1	
Channel 38 (5190MHz)	**Channel 46 (5230MHz)**
	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
	
802.11ac-VHT80 Power Spectral Density - Ant 0 / Ant 0 + 1	
Channel 42 (5210MHz)	**Channel 155 (5775MHz)**
	

802.11n-HT20 Power Spectral Density - Ant 1 / Ant 0 + 1

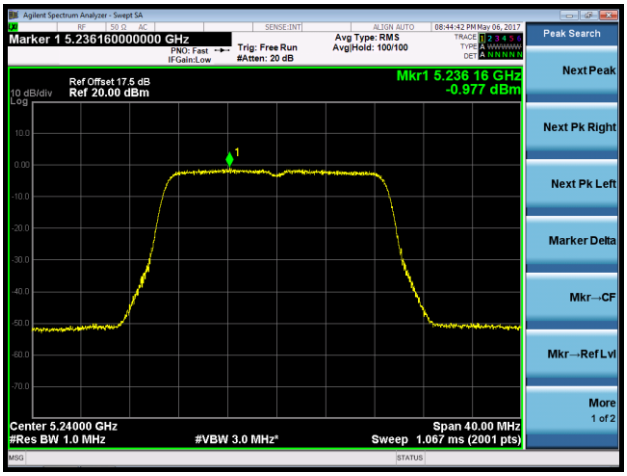
Channel 36 (5180MHz)



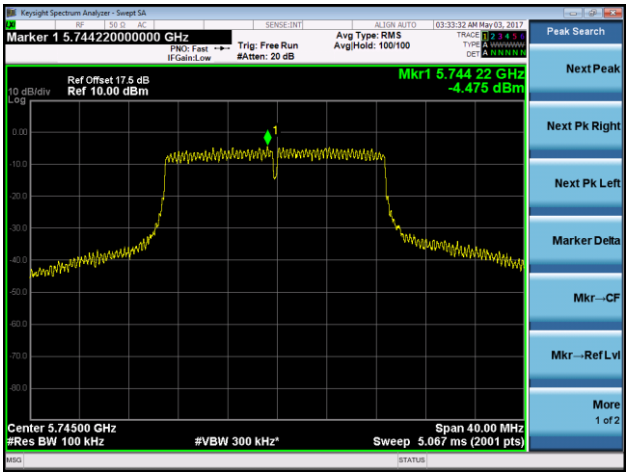
Channel 44 (5220MHz)



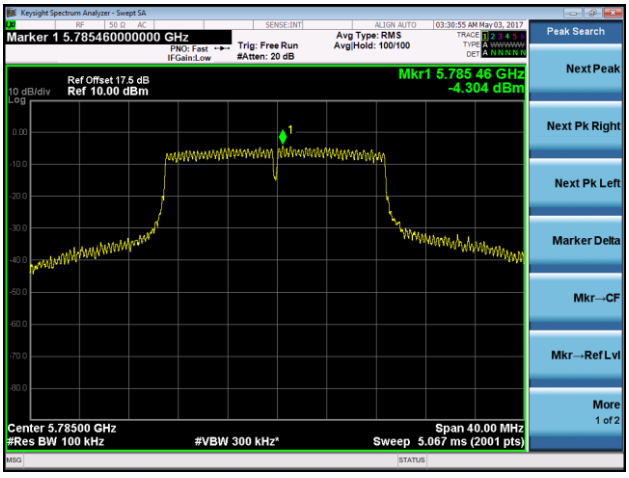
Channel 48 (5240MHz)



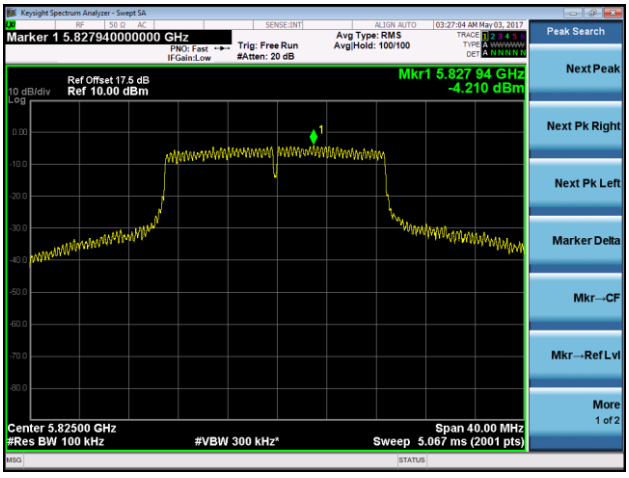
Channel 149 (5745MHz)

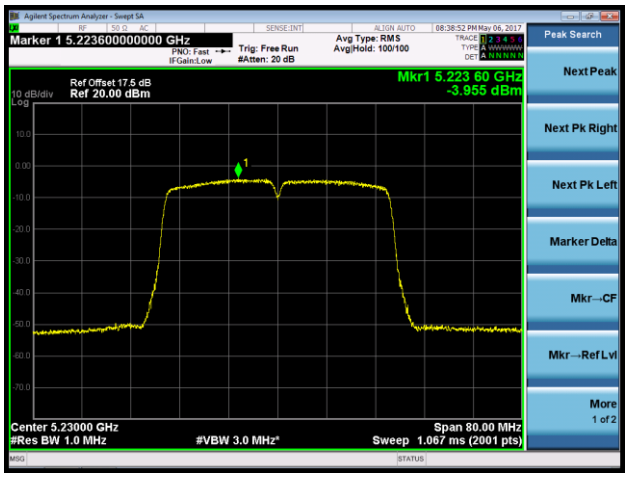
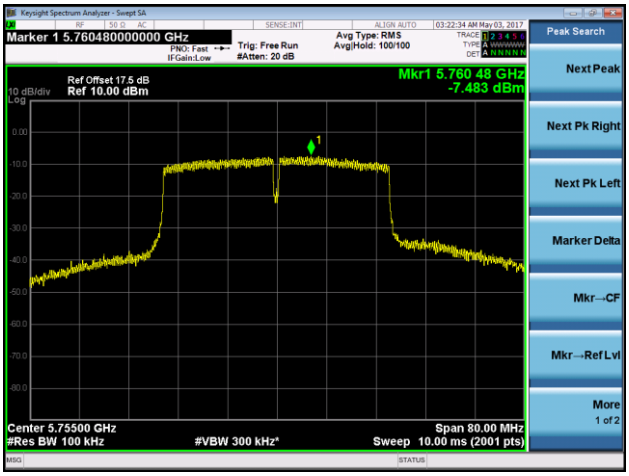
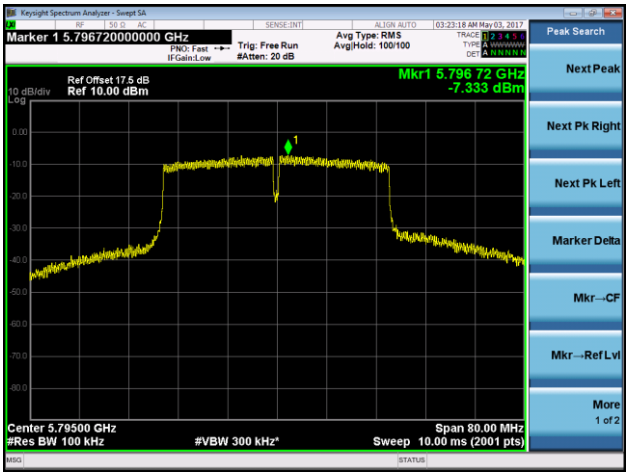


Channel 157 (5785MHz)



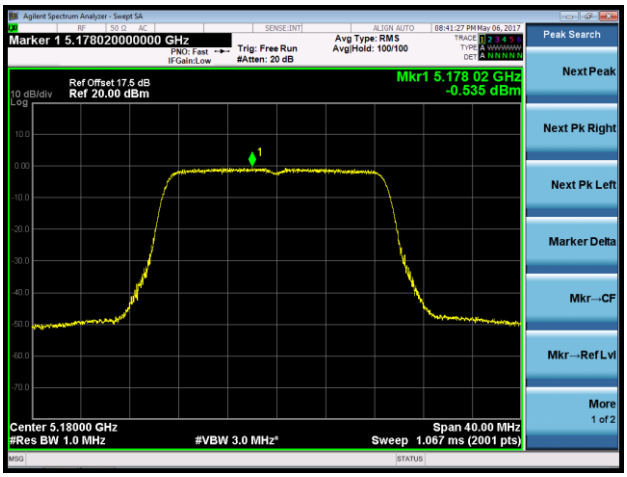
Channel 165 (5825MHz)



802.11n-HT40 Power Spectral Density - Ant 1 / Ant 0 + 1	
Channel 38 (5190MHz)	**Channel 46 (5230MHz)**
	
Channel 151 (5755MHz)	**Channel 159 (5795MHz)**
	

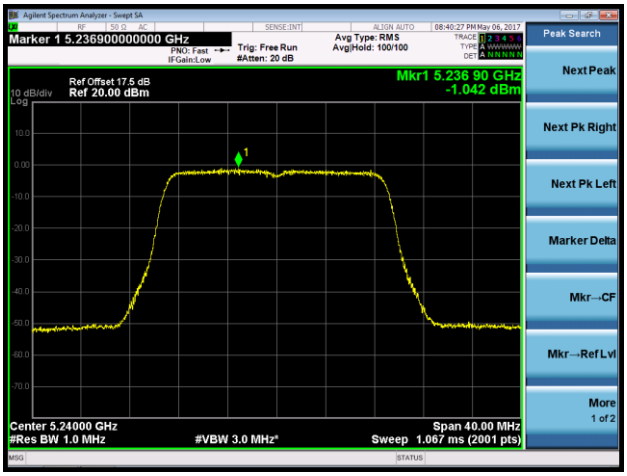
802.11ac-VHT20 Power Spectral Density - Ant 1 / Ant 0 + 1

Channel 36 (5180MHz)

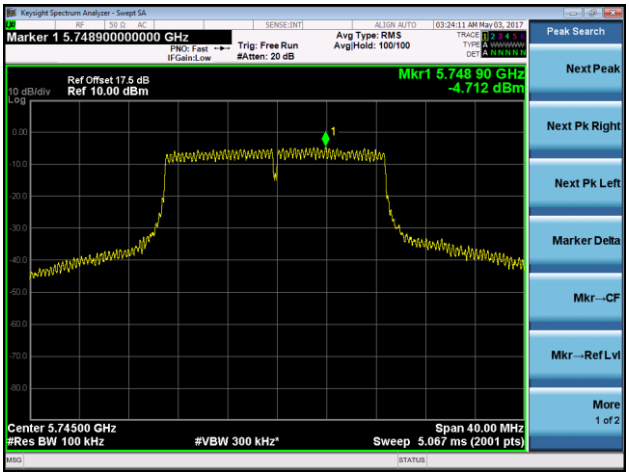


Channel 44 (5220MHz)

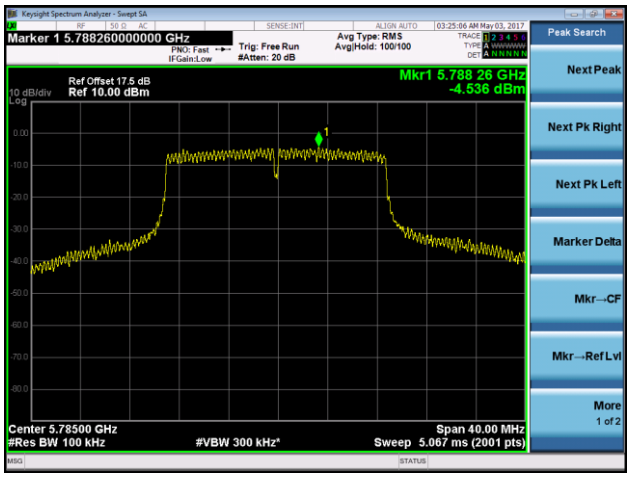
Channel 48 (5240MHz)



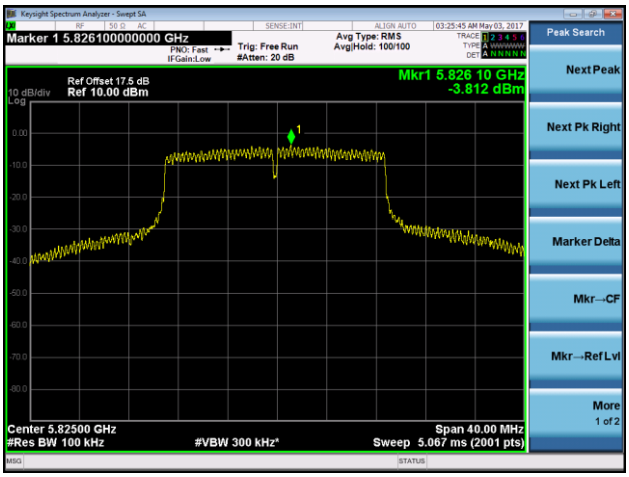
Channel 149 (5745MHz)

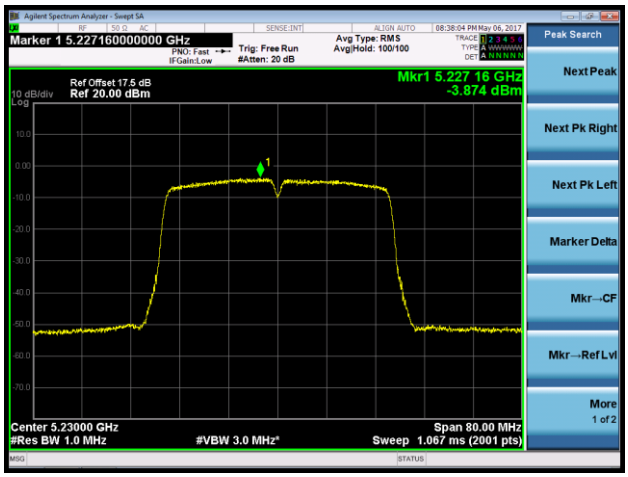
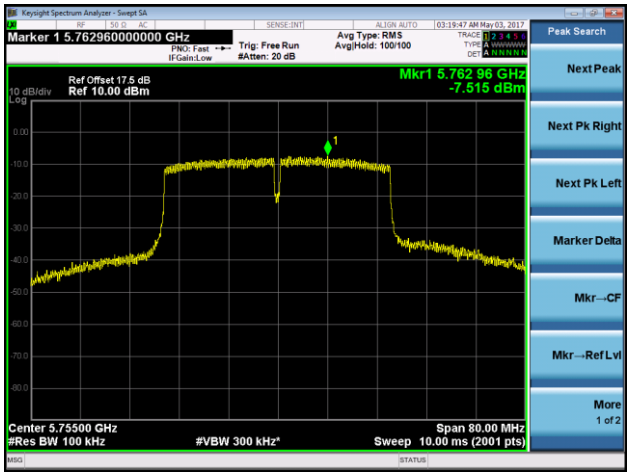
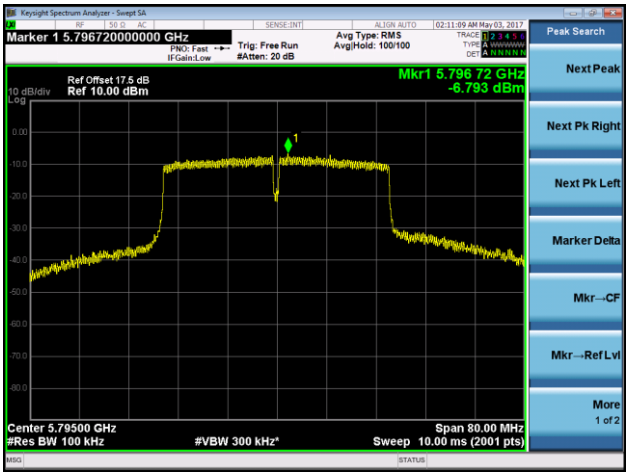
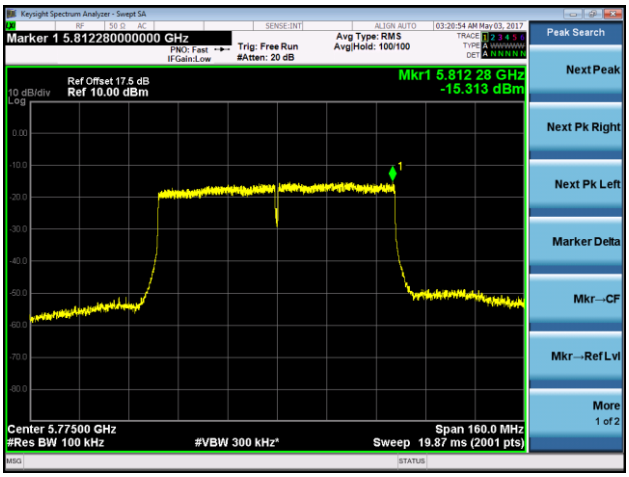


Channel 157 (5785MHz)



Channel 165 (5825MHz)



802.11ac-VHT40 Power Spectral Density - Ant 1 / Ant 0 + 1	
Channel 38 (5190MHz)	Channel 46 (5230MHz)
	
Channel 151 (5755MHz)	Channel 159 (5795MHz)
	
802.11ac-VHT80 Power Spectral Density - Ant 1 / Ant 0 + 1	
Channel 42 (5210MHz)	Channel 155 (5775MHz)
	

7.7. Frequency Stability Measurement

7.7.1. Test Limit

Manufactures of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

7.7.2. Test Procedure Used

Frequency Stability Under Temperature Variations:

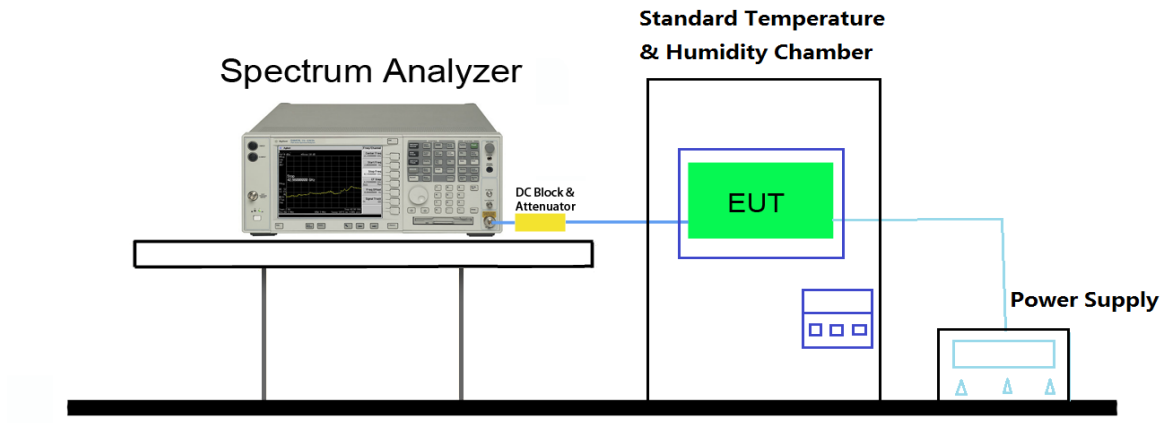
The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to highest. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C decreased per stage until the lowest temperature reached.

Frequency Stability Under Voltage Variations:

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation (±15%) and endpoint, record the maximum frequency change.

7.7.3. Test Setup



7.7.4. Test Result

Test Engineer	Milo Li	Temperature	-30 ~ 50°C
Test Time	2017/04/29	Relative Humidity	48 ~ 55%RH
Test Mode	5180MHz (Carrier Mode)	Test Site	TR3

Voltage (%)	Power (VAC)	Temp (°C)	Frequency Tolerance (ppm)			
			0 minutes	2 minutes	5 minutes	10 minutes
100%	120	- 30	-2.78	-2.64	-2.35	-2.26
		- 20	-3.02	-3.11	-3.23	-3.45
		- 10	-3.29	-3.33	-3.65	-3.46
		0	-4.29	-4.01	-4.45	-4.37
		+ 10	-4.65	-4.33	-4.75	-4.95
		+ 20 (Ref)	-5.22	-5.12	-5.34	-5.32
		+ 30	-5.93	-5.99	-5.67	-5.76
		+ 40	-6.32	-6.47	-6.46	-6.56
		+ 50	-7.23	-7.65	-7.32	-7.65
115%	138	+ 20	-5.83	-5.45	-5.65	-5.23
85%	102	+ 20	-4.88	-4.67	-4.73	-4.57

Note: Frequency Tolerance (ppm) = {[Measured Frequency (Hz) - Declared Frequency (Hz)] / Declared Frequency (Hz)} *10^6.

7.8. Radiated Spurious Emission Measurement

7.8.1. Test Limit

All out of band emissions appearing in a restricted band as specified in Section 15.205 of the Title 47 CFR must not exceed the limits shown in Table per Section 15.209.

FCC Part 15 Subpart C Paragraph 15.209		
Frequency [MHz]	Field Strength [uV/m]	Measured Distance [Meters]
0.009 - 0.490	2400/F (kHz)	300
0.490 - 1.705	24000/F (kHz)	30
1.705 - 30	30	30
30 - 88	100	3
88 - 216	150	3
216 - 960	200	3
Above 960	500	3

7.8.2. Test Procedure Used

KDB 789033 D02v01r04 – Section G

7.8.3. Test Setting

Peak Measurements above 1GHz

1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = peak
5. Sweep time = auto couple
6. Trace mode = max hold
7. Trace was allowed to stabilize

Quasi-Peak Measurements below 1GHz

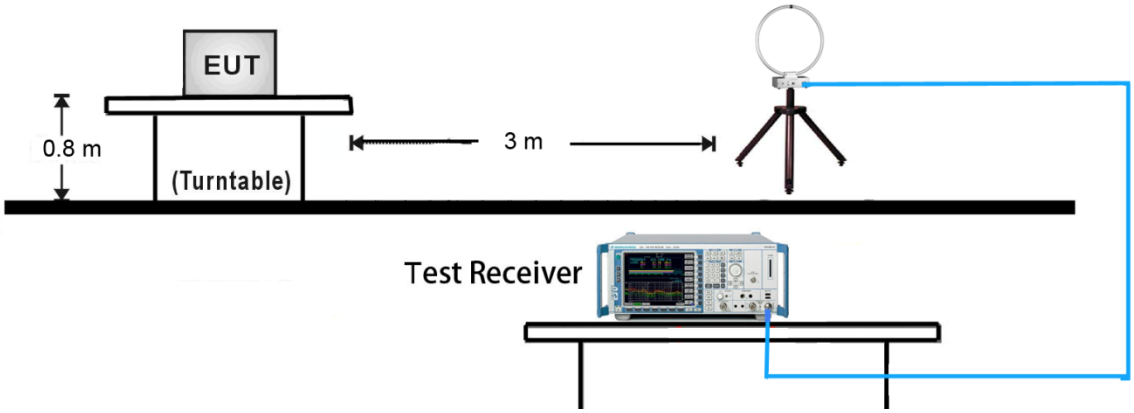
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. Span was set greater than 1MHz
3. RBW = 120 kHz
4. Detector = CISPR quasi-peak
5. Sweep time = auto couple
6. Trace was allowed to stabilize

Average Measurements above 1GHz (Method AD)

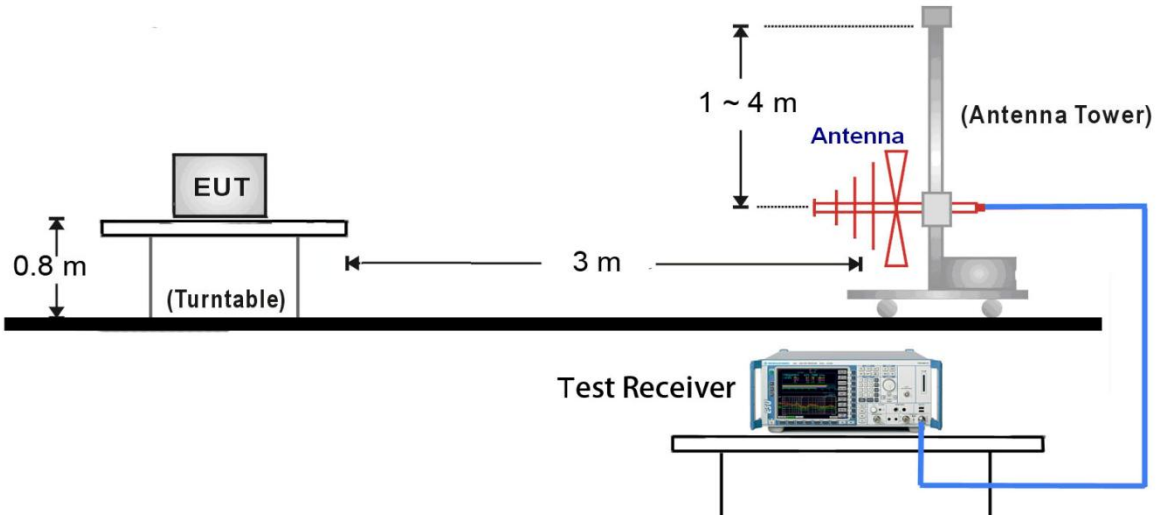
1. Analyzer center frequency was set to the frequency of the radiated spurious emission of interest
2. RBW = 1MHz
3. VBW = 3MHz
4. Detector = power average (Average)
5. Number of measurement points = 1001 (Number of points must be > 2 x span/RBW)
6. Sweep time = auto
7. Trace was averaged over at 100 sweeps

7.8.4. Test Setup

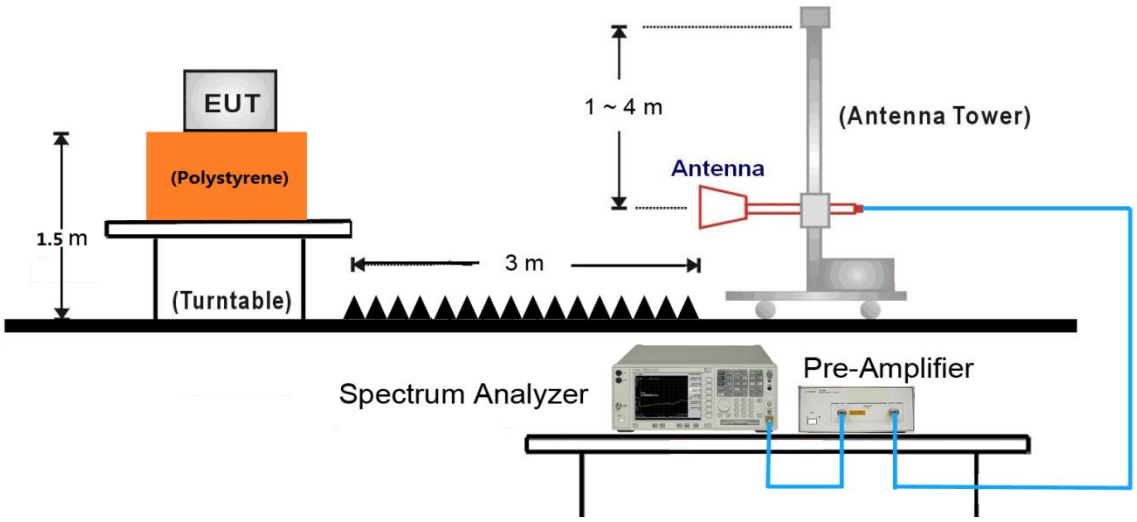
9kHz ~ 30MHz Test Setup:



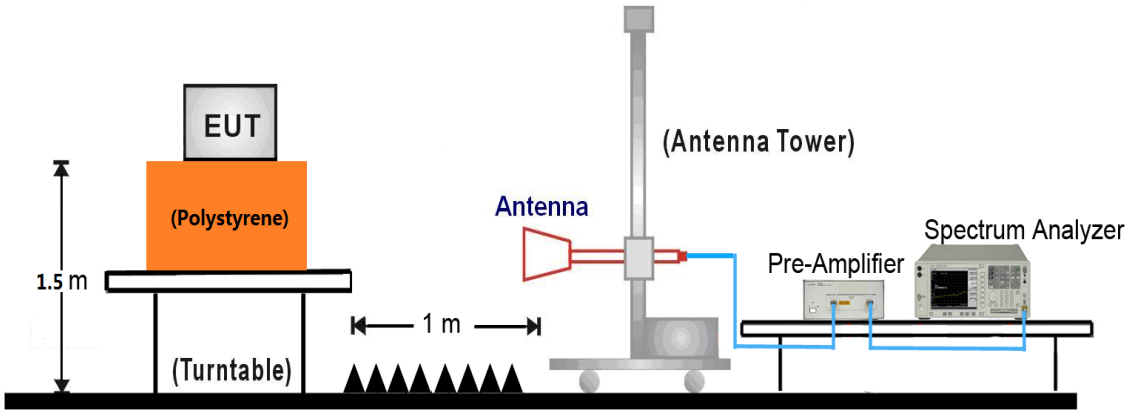
30MHz ~ 1GHz Test Setup:



1GHz ~18GHz Test Setup:



18GHz ~40GHz Test Setup:



7.8.5. Test Result

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	36	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7579.0	34.9	8.2	43.1	74.0	-30.9	Peak	Horizontal
*	8633.0	34.7	8.8	43.5	68.2	-24.7	Peak	Horizontal
*	9780.5	32.9	11.4	44.3	68.2	-23.9	Peak	Horizontal
	11718.5	33.3	12.0	45.3	74.0	-28.7	Peak	Horizontal
	7579.0	34.9	8.2	43.1	74.0	-30.9	Peak	Vertical
*	8633.0	34.7	8.8	43.5	68.2	-24.7	Peak	Vertical
*	9780.5	32.9	11.4	44.3	68.2	-23.9	Peak	Vertical
	11718.5	33.3	12.0	45.3	74.0	-28.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	44	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	9160.0	33.8	9.8	43.6	74.0	-30.4	Peak	Horizontal
*	9823.0	32.9	11.6	44.5	68.2	-23.7	Peak	Horizontal
*	10435.0	45.7	12.0	57.7	68.2	-10.5	Peak	Horizontal
	11259.5	34.7	12.4	47.1	74.0	-26.9	Peak	Horizontal
	7519.5	34.6	8.3	42.9	74.0	-31.1	Peak	Vertical
*	8667.0	34.2	8.9	43.1	68.2	-25.1	Peak	Vertical
*	9695.5	33.3	10.9	44.2	68.2	-24.0	Peak	Vertical
	11030.0	33.0	13.0	46.0	74.0	-28.0	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	48	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8293.0	33.8	8.0	41.8	74.0	-32.2	Peak	Horizontal
*	9746.5	33.8	11.3	45.1	68.2	-23.1	Peak	Horizontal
*	10477.5	47.8	12.2	60.0	68.2	-8.2	Peak	Horizontal
	11659.0	33.2	12.3	45.5	74.0	-28.5	Peak	Horizontal
	7570.5	34.6	8.2	42.8	74.0	-31.2	Peak	Vertical
*	8633.0	33.7	8.8	42.5	68.2	-25.7	Peak	Vertical
*	9678.5	33.6	10.9	44.5	68.2	-23.7	Peak	Vertical
	11072.5	33.8	12.9	46.7	74.0	-27.3	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	149	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7664.0	44.0	8.0	52.0	74.0	-22.0	Peak	Horizontal
*	8684.0	34.5	9.0	43.5	68.2	-24.7	Peak	Horizontal
*	9780.5	32.7	11.4	44.1	68.2	-24.1	Peak	Horizontal
	11489.0	53.3	12.8	66.1	74.0	-7.9	Peak	Horizontal
	11490.0	40.8	12.8	53.6	54.0	-0.4	Average	Horizontal
*	7664.0	38.4	8.0	46.4	74.0	-27.6	Peak	Vertical
*	8701.0	33.4	9.0	42.4	68.2	-25.8	Peak	Vertical
	9721.0	32.8	11.1	43.9	68.2	-24.3	Peak	Vertical
*	11489.0	50.5	12.8	63.3	74.0	-10.7	Peak	Vertical
*	11489.9	40.0	12.8	52.8	54.0	-1.2	Average	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	157	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7715.0	45.0	8.0	53.0	74.0	-21.0	Peak	Horizontal
*	8777.5	33.4	8.9	42.3	68.2	-25.9	Peak	Horizontal
*	9678.5	33.4	10.9	44.3	68.2	-23.9	Peak	Horizontal
	11565.5	50.8	12.7	63.5	74.0	-10.5	Peak	Horizontal
	11569.9	37.2	12.7	49.9	54.0	-4.1	Average	Horizontal
	8242.0	34.3	8.1	42.4	74.0	-31.6	Peak	Vertical
*	8624.5	34.0	8.8	42.8	68.2	-25.4	Peak	Vertical
*	9797.5	32.8	11.5	44.3	68.2	-23.9	Peak	Vertical
	11569.8	33.5	12.7	46.2	54.0	-7.8	Average	Vertical
	11574.0	47.2	12.6	59.8	74.0	-14.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11a - Ant 0	Test Site:	AC1
Test Channel:	165	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7587.5	33.9	8.2	42.1	74.0	-31.9	Peak	Horizontal
*	7766.0	42.9	8.2	51.1	68.2	-17.1	Peak	Horizontal
*	8888.0	34.1	9.2	43.3	68.2	-24.9	Peak	Horizontal
	11560.0	38.5	12.7	51.2	54.0	-2.8	Average	Horizontal
	11650.5	50.8	12.3	63.1	74.0	-10.9	Peak	Horizontal
	8191.0	32.8	8.3	41.1	74.0	-32.9	Peak	Vertical
*	8837.0	33.0	9.1	42.1	68.2	-26.1	Peak	Vertical
*	9814.5	31.7	11.6	43.3	68.2	-24.9	Peak	Vertical
	11650.0	34.1	12.3	46.4	54.0	-7.6	Average	Vertical
	11650.5	46.2	12.3	58.5	74.0	-15.5	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	36	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8199.5	33.8	8.3	42.1	74.0	-31.9	Peak	Horizontal
*	8820.0	33.9	9.0	42.9	68.2	-25.3	Peak	Horizontal
*	10350.0	39.4	12.2	51.6	68.2	-16.6	Peak	Horizontal
	11676.0	33.1	12.1	45.2	74.0	-28.8	Peak	Horizontal
	8165.5	33.9	8.4	42.3	74.0	-31.7	Peak	Vertical
*	8735.0	33.6	8.9	42.5	68.2	-25.7	Peak	Vertical
*	9831.5	31.7	11.6	43.3	68.2	-24.9	Peak	Vertical
	11132.0	32.1	12.7	44.8	74.0	-29.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	44	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8318.5	33.7	8.0	41.7	74.0	-32.3	Peak	Horizontal
*	9678.5	32.9	10.9	43.8	68.2	-24.4	Peak	Horizontal
*	10435.0	45.9	12.0	57.9	68.2	-10.3	Peak	Horizontal
	11259.5	32.4	12.4	44.8	74.0	-29.2	Peak	Horizontal
	8199.5	33.4	8.3	41.7	74.0	-32.3	Peak	Vertical
*	8811.5	32.6	9.0	41.6	68.2	-26.6	Peak	Vertical
*	9823.0	31.1	11.6	42.7	68.2	-25.5	Peak	Vertical
	11081.0	32.4	12.9	45.3	74.0	-28.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	48	Test Engineer:	Alex Ma
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8216.5	33.7	8.3	42.0	74.0	-32.0	Peak	Horizontal
*	9712.5	32.7	11.0	43.7	68.2	-24.5	Peak	Horizontal
*	10486.0	48.0	12.3	60.3	68.2	-7.9	Peak	Horizontal
	11174.5	32.3	12.6	44.9	74.0	-29.1	Peak	Horizontal
	8250.5	33.8	8.1	41.9	74.0	-32.1	Peak	Vertical
*	8888.0	33.3	9.2	42.5	68.2	-25.7	Peak	Vertical
*	9780.5	31.4	11.4	42.8	68.2	-25.4	Peak	Vertical
	11089.5	32.6	12.8	45.4	74.0	-28.6	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	149	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7664.0	42.3	8.0	50.3	74.0	-23.7	Peak	Horizontal
*	8811.5	32.7	9.0	41.7	68.2	-26.5	Peak	Horizontal
*	9823.0	31.5	11.6	43.1	68.2	-25.1	Peak	Horizontal
	11489.0	52.7	12.8	65.5	74.0	-8.5	Peak	Horizontal
	11489.6	40.2	12.8	53.0	54.0	-1.0	Average	Horizontal
	8242.0	33.4	8.1	41.5	74.0	-32.5	Peak	Vertical
*	8769.0	33.1	9.0	42.1	68.2	-26.1	Peak	Vertical
*	9806.0	31.3	11.5	42.8	68.2	-25.4	Peak	Vertical
	11489.0	48.6	12.8	61.4	74.0	-12.6	Peak	Vertical
	11489.1	39.7	12.8	52.5	54.0	-1.5	Average	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	157	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7715.0	44.2	8.0	52.2	74.0	-21.8	Peak	Horizontal
*	8777.5	32.9	8.9	41.8	68.2	-26.4	Peak	Horizontal
*	9925.0	31.7	11.5	43.2	68.2	-25.0	Peak	Horizontal
	11565.5	50.0	12.7	62.7	74.0	-11.3	Peak	Horizontal
	11569.7	38.3	12.7	51.0	54.0	-3.0	Average	Horizontal
	8208.0	32.7	8.3	41.0	74.0	-33.0	Peak	Vertical
*	8777.5	32.3	8.9	41.2	68.2	-27.0	Peak	Vertical
*	9865.5	32.3	11.6	43.9	68.2	-24.3	Peak	Vertical
	11565.5	48.1	12.7	60.8	74.0	-13.2	Peak	Vertical
	11569.2	32.4	12.7	45.1	54.0	-8.9	Average	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT20 - Ant 0	Test Site:	AC1
Test Channel:	165	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	7647.0	33.5	8.0	41.5	74.0	-32.5	Peak	Horizontal
*	7766.0	40.8	8.2	49.0	68.2	-19.2	Peak	Horizontal
*	8760.5	33.3	9.0	42.3	68.2	-25.9	Peak	Horizontal
	11649.7	36.9	12.3	49.2	54.0	-4.8	Average	Horizontal
	11650.5	49.3	12.3	61.6	74.0	-12.4	Peak	Horizontal
	8157.0	32.9	8.4	41.3	74.0	-32.7	Peak	Vertical
*	8760.5	32.9	9.0	41.9	68.2	-26.3	Peak	Vertical
*	9814.5	31.6	11.6	43.2	68.2	-25.0	Peak	Vertical
	11650.5	45.6	12.3	57.9	74.0	-16.1	Peak	Vertical
	11659.7	31.4	12.3	43.7	54.0	-10.3	Average	Vertical

Note 1: "*" is not in restricted band, its limit is -27dBm/MHz or -17dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a "conversion" factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT40 - Ant 0	Test Site:	AC1
Test Channel:	38	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8165.5	33.8	8.4	42.2	74.0	-31.8	Peak	Horizontal
*	8811.5	33.5	9.0	42.5	68.2	-25.7	Peak	Horizontal
*	9814.5	32.1	11.6	43.7	68.2	-24.5	Peak	Horizontal
	11072.5	33.1	12.9	46.0	74.0	-28.0	Peak	Horizontal
	8199.5	33.5	8.3	41.8	74.0	-32.2	Peak	Vertical
*	8888.0	32.6	9.2	41.8	68.2	-26.4	Peak	Vertical
*	9848.5	31.5	11.6	43.1	68.2	-25.1	Peak	Vertical
	11217.0	32.4	12.4	44.8	74.0	-29.2	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)

Test Mode:	802.11n-HT40 - Ant 0	Test Site:	AC1
Test Channel:	46	Test Engineer:	Jone Zhang
Remark:	1. Average measurement was not performed if peak level lower than average limit. 2. Other frequency was 20dB below limit line within 1-18GHz, there is not show in the report.		

Mark	Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
	8276.0	33.5	8.1	41.6	74.0	-32.4	Peak	Horizontal
*	9678.5	33.1	10.9	44.0	68.2	-24.2	Peak	Horizontal
*	10469.0	38.0	12.1	50.1	68.2	-18.1	Peak	Horizontal
	11387.0	32.7	12.6	45.3	74.0	-28.7	Peak	Horizontal
	8242.0	33.9	8.1	42.0	74.0	-32.0	Peak	Vertical
*	8692.5	33.7	9.0	42.7	68.2	-25.5	Peak	Vertical
*	9789.0	32.3	11.4	43.7	68.2	-24.5	Peak	Vertical
	11191.5	32.8	12.5	45.3	74.0	-28.7	Peak	Vertical

Note 1: “*” is not in restricted band, its limit is -27dBm/MHz. At a distance of 3 meters, the field strength limit in dBμV/m can be determined by adding a “conversion” factor of 95.2dB to the EIRP limit of -27dBm/MHz to obtain the limit for out of band spurious emissions.

Note 2: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB)

Factor (dB) = Cable Loss (dB) + Antenna Factor (dB/m) - Pre_Amplifier Gain (dB)