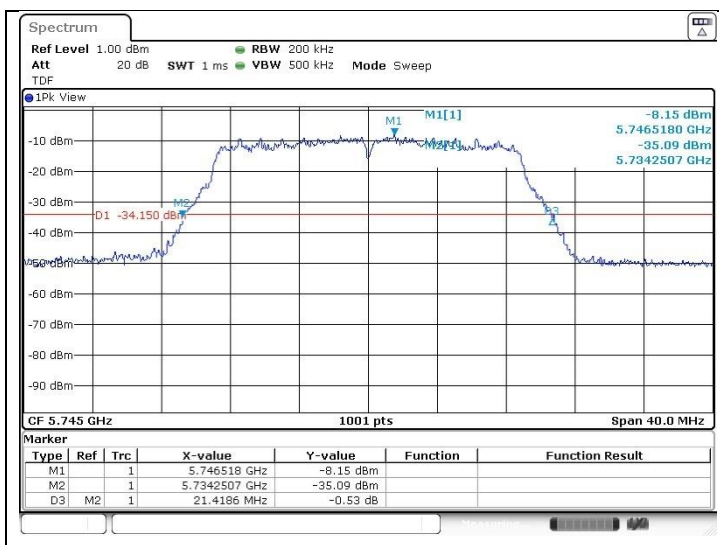
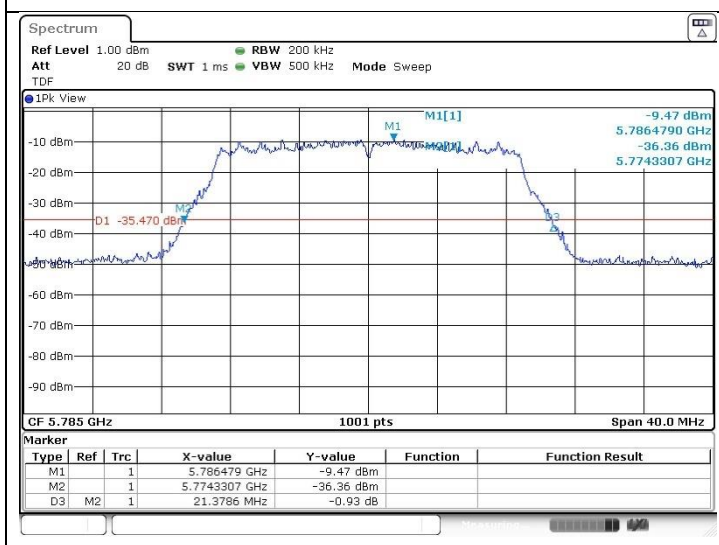


802.11ac_VHT20 (Band 3)

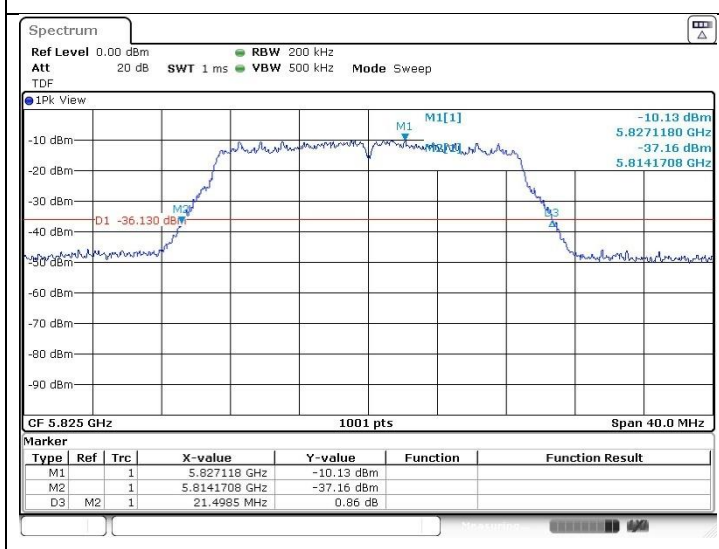
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

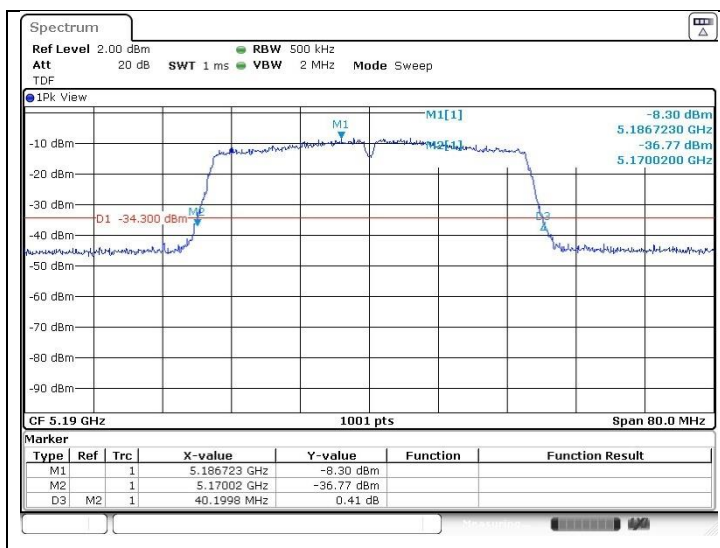


High Channel
(5 825 MHz)

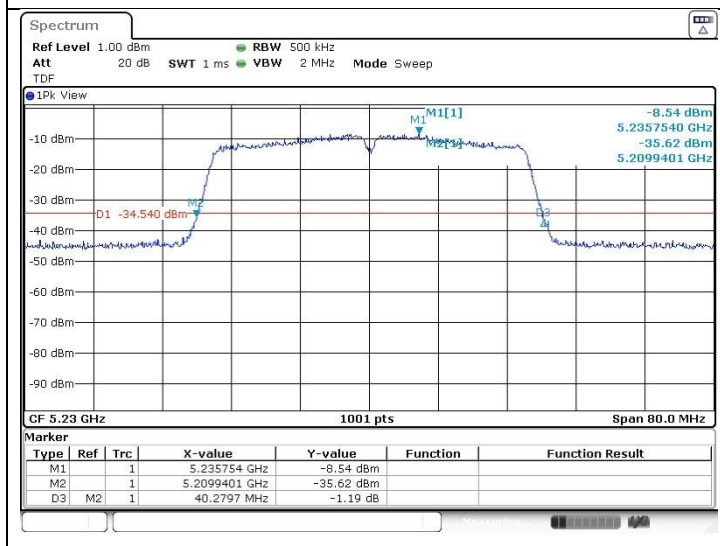


802.11ac_VHT40 (Band 1)

Low Channel
(5 190 MHz)

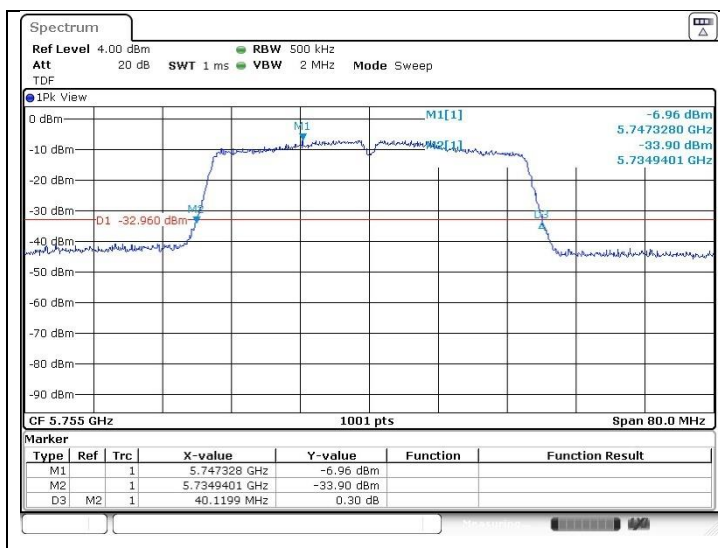


High Channel
(5 230 MHz)

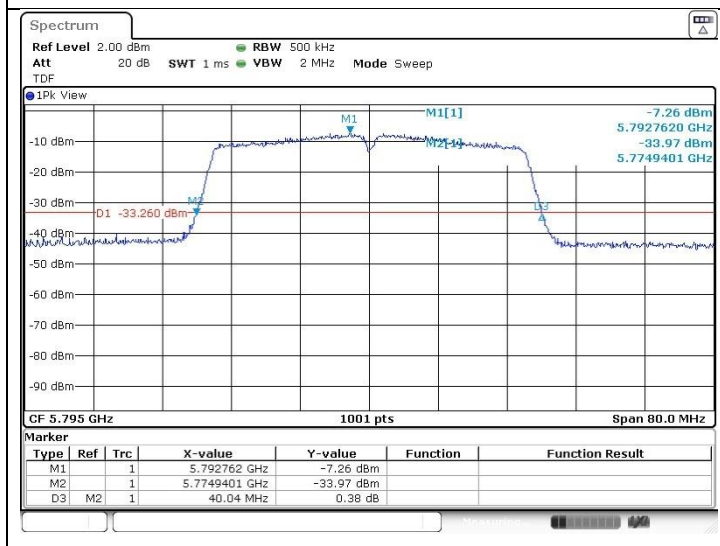


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)

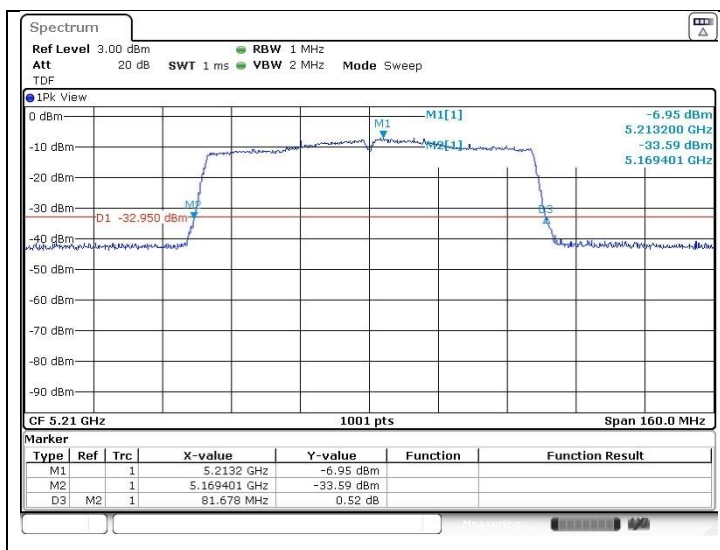


High Channel
(5 795 MHz)



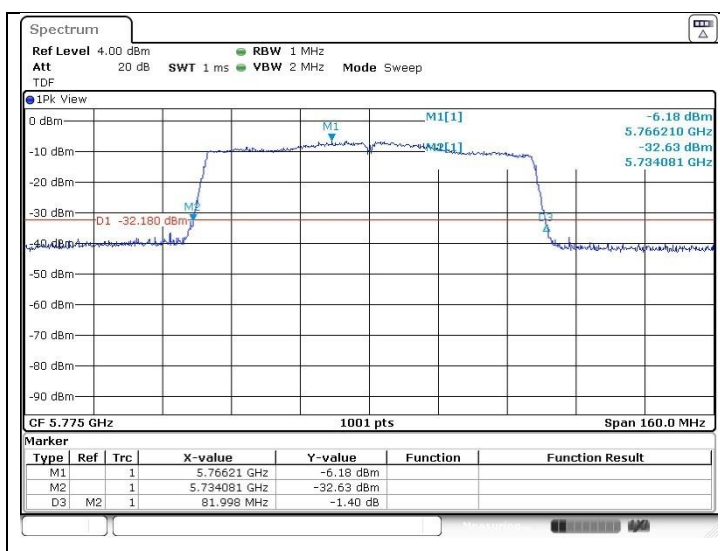
802.11ac_VHT80 (Band 1)

Middle Channel
 (5 210 MHz)



802.11ac_VHT80 (Band 3)

Middle Channel
 (5 775 MHz)

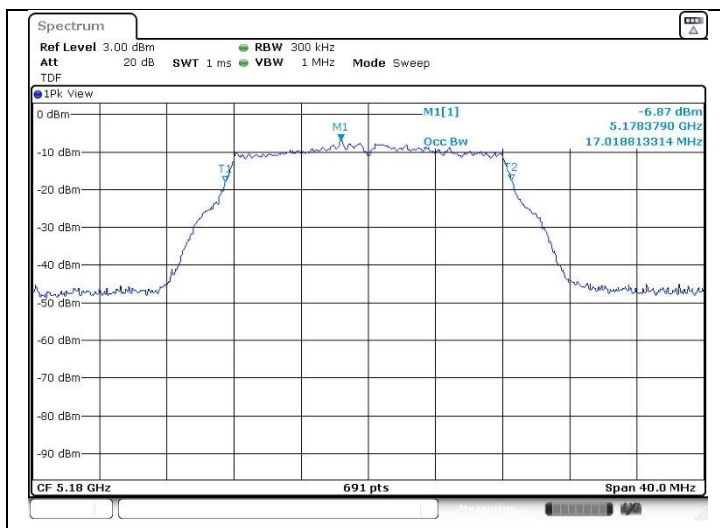


- MIMO_Ant.1

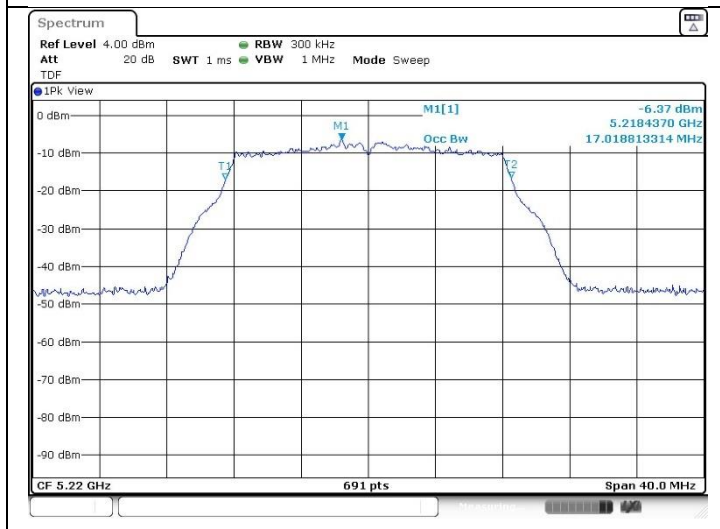
99 % Bandwidth

802.11a (Band 1)

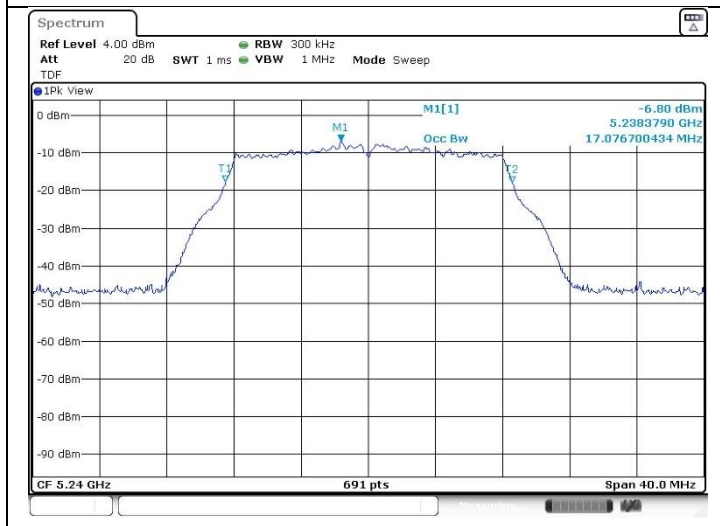
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

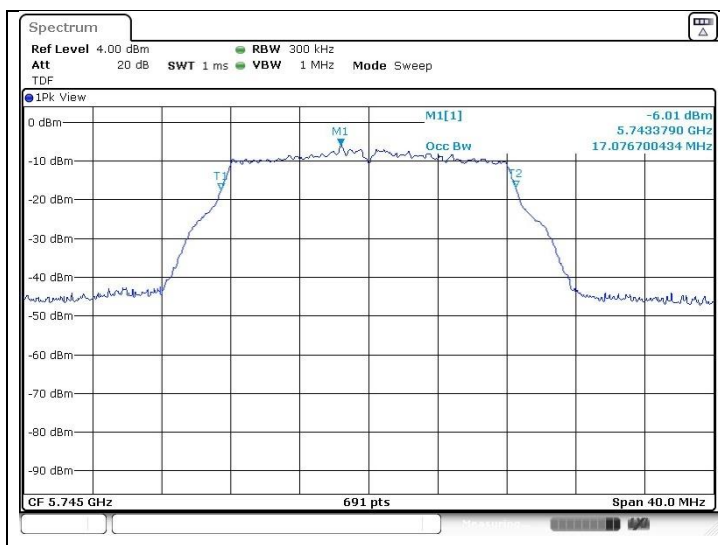


High Channel
(5 240 MHz)

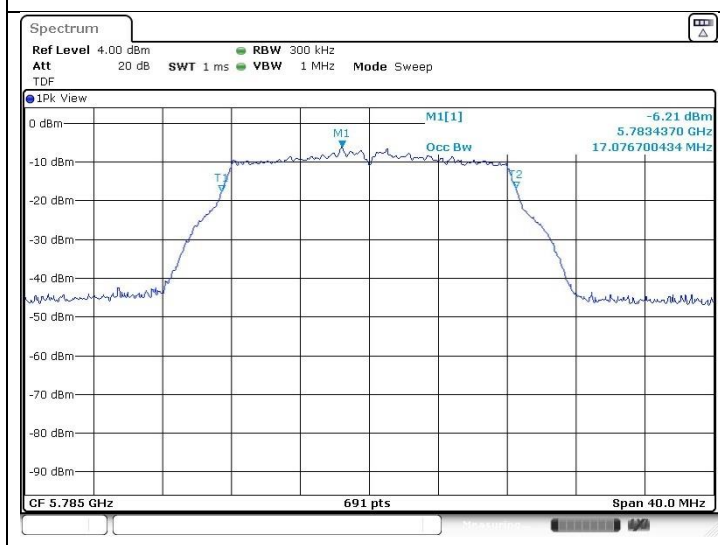


802.11a (Band 3)

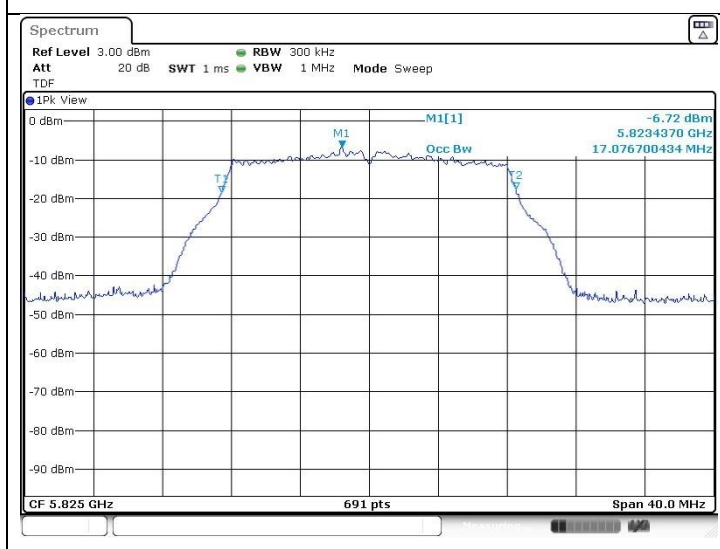
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

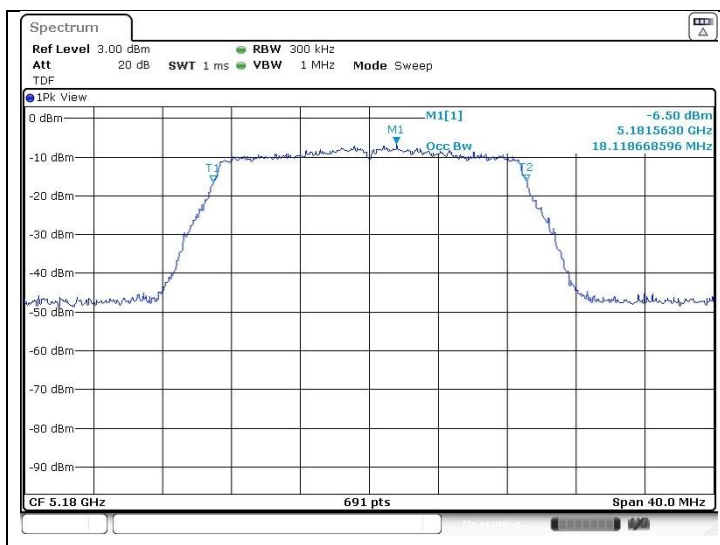


High Channel
(5 825 MHz)

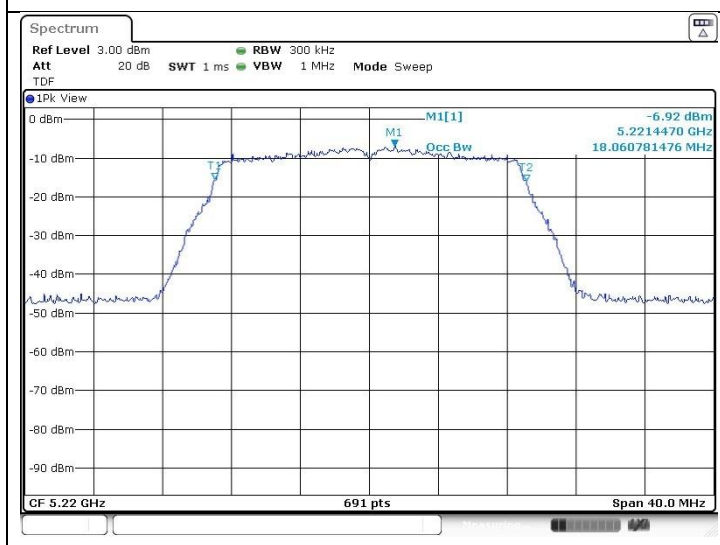


802.11ac_VHT20 (Band 1)

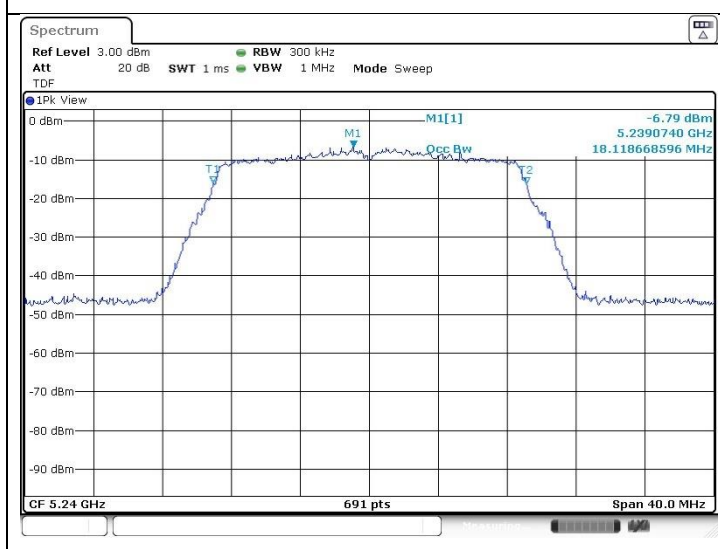
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

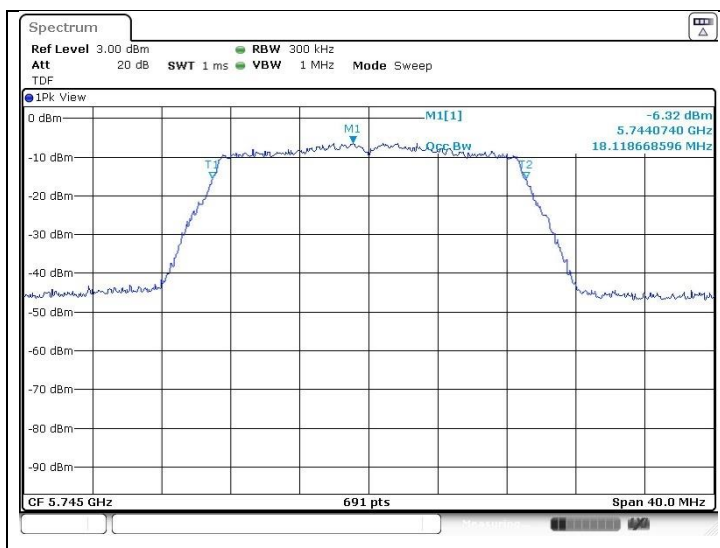


High Channel
(5 240 MHz)



802.11ac_VHT20 (Band 3)

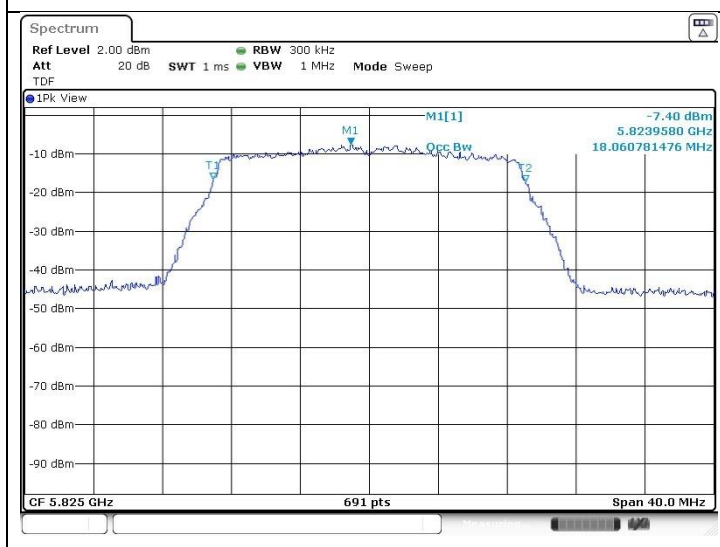
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

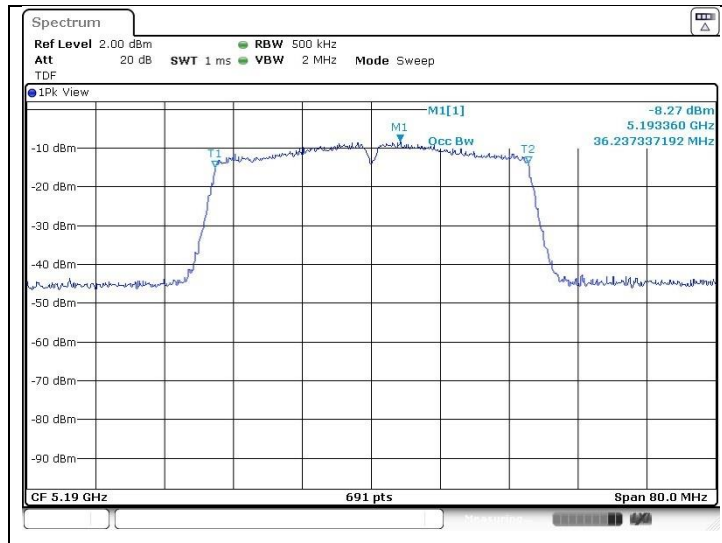


High Channel
(5 825 MHz)

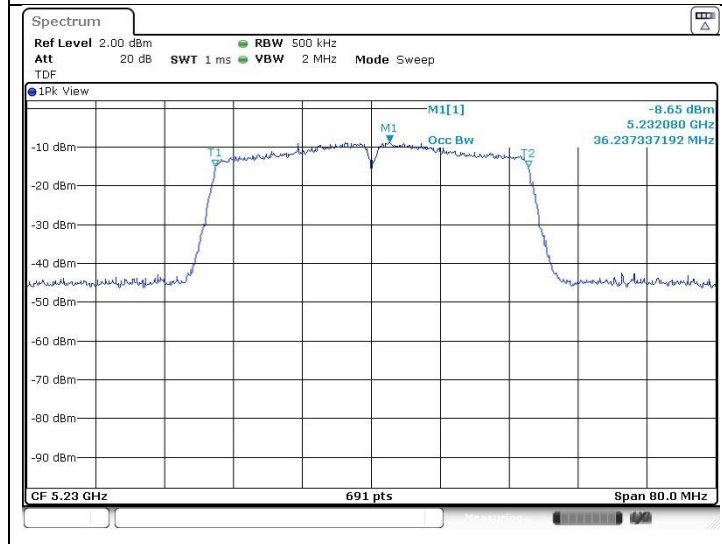


802.11ac_VHT40 (Band 1)

Low Channel
(5 190 MHz)

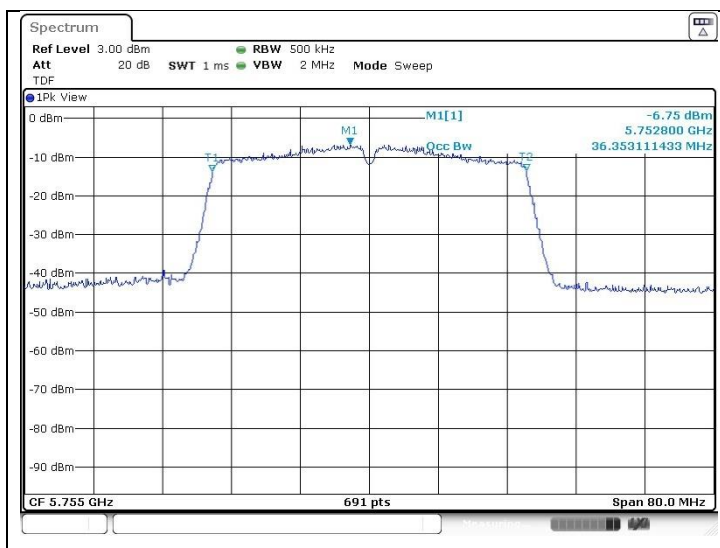


High Channel
(5 230 MHz)

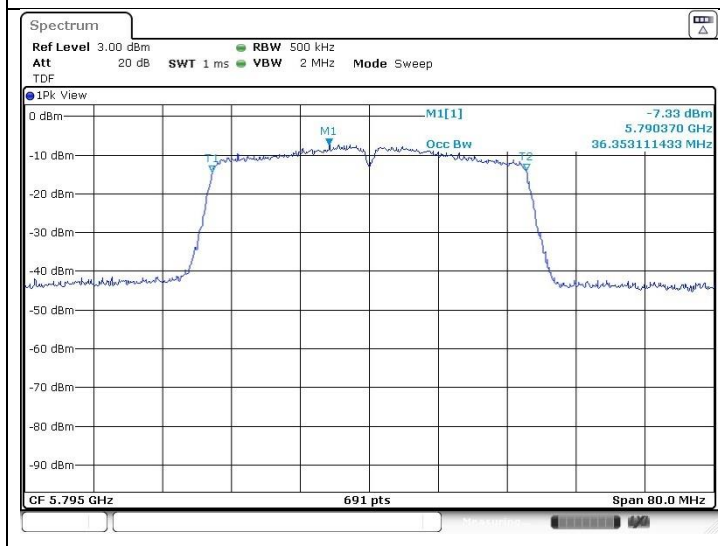


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)

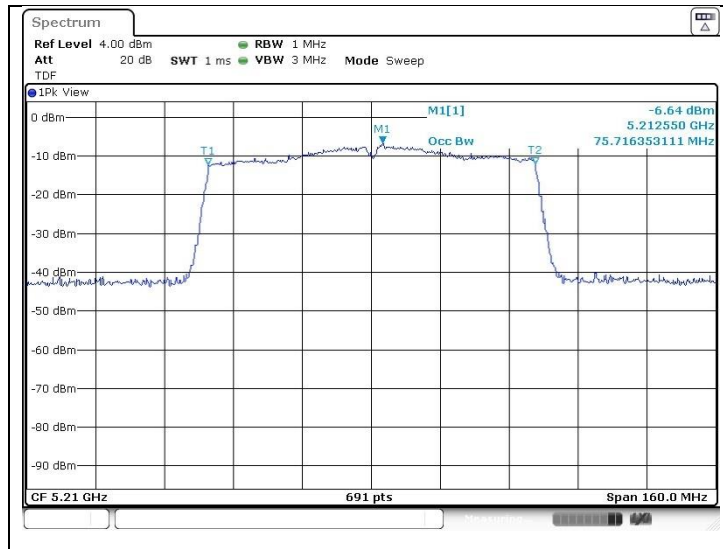


High Channel
(5 795 MHz)



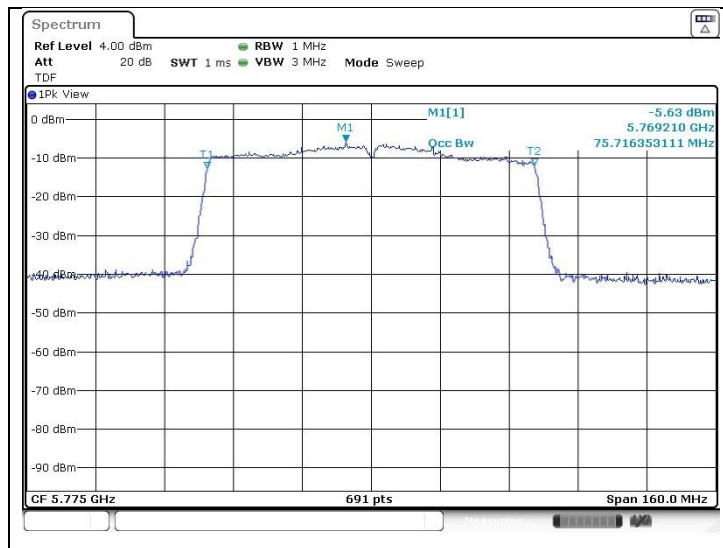
802.11ac_VHT80 (Band 1)

Middle Channel
 (5 210 MHz)



802.11ac_VHT80 (Band 3)

Middle Channel
 (5 775 MHz)

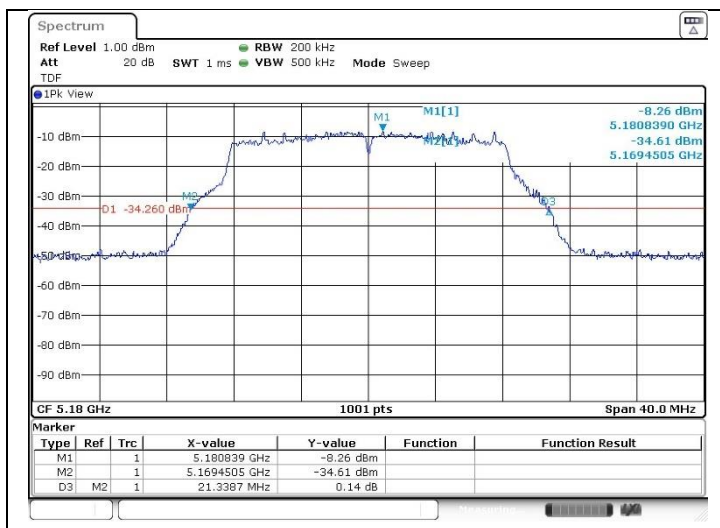


- MIMO_Ant.2

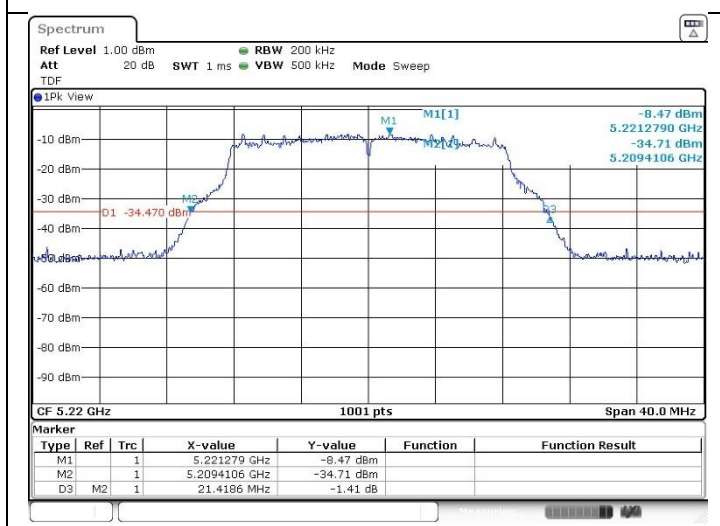
26 dB Bandwidth

802.11a (Band 1)

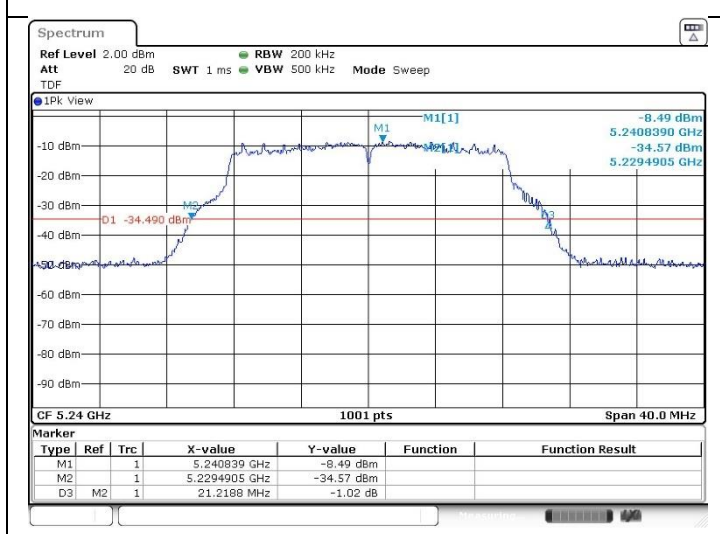
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

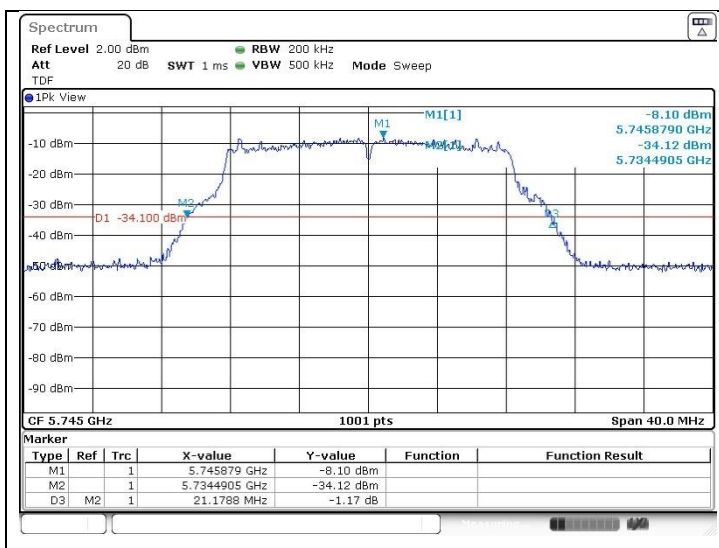


High Channel
(5 240 MHz)

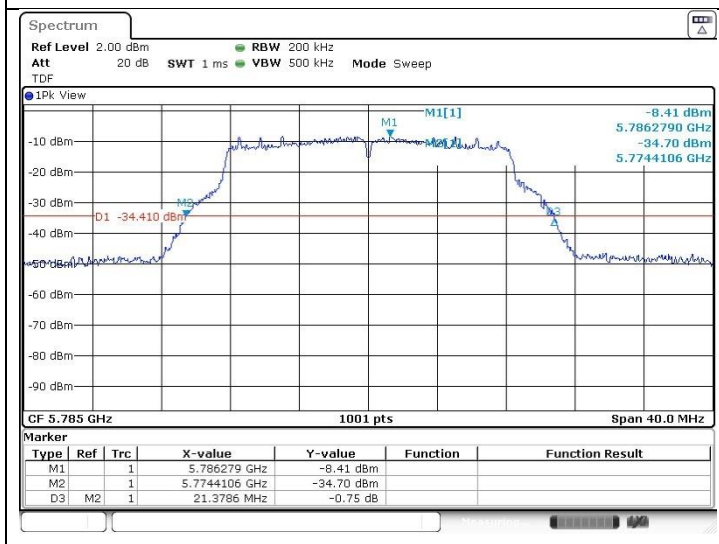


802.11a (Band 3)

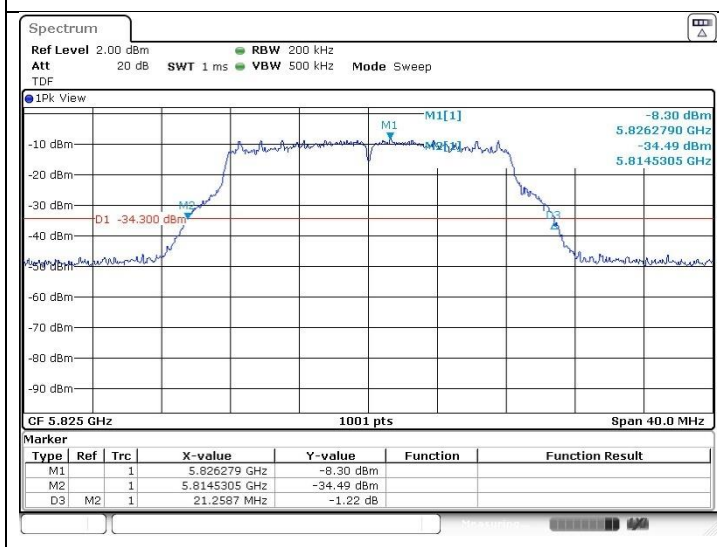
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

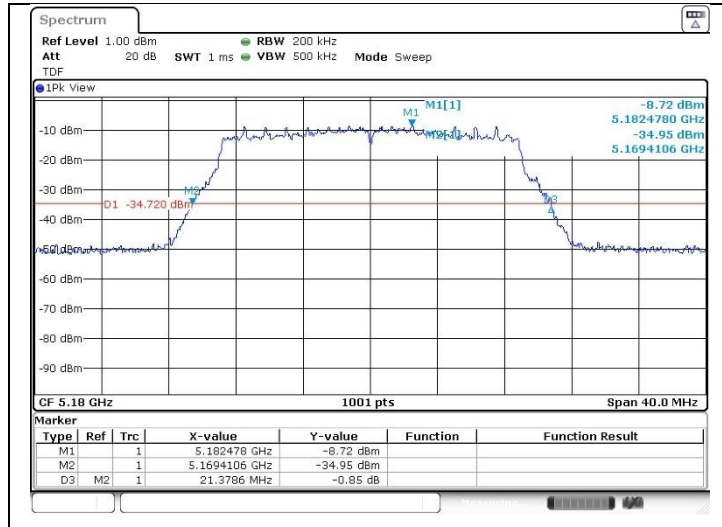


High Channel
(5 825 MHz)

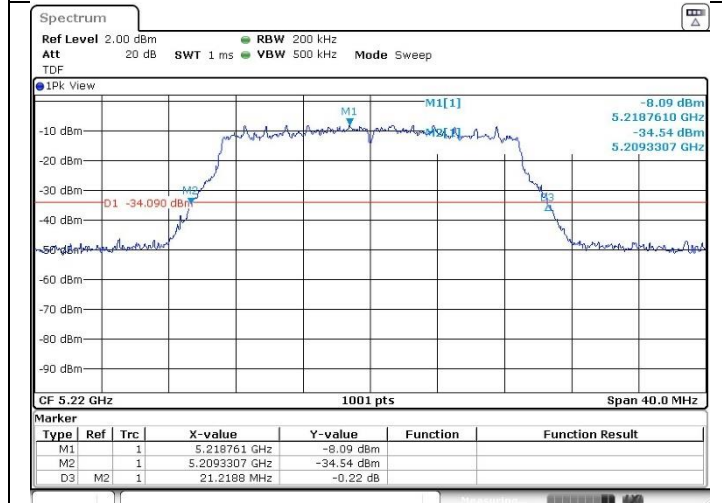


802.11ac_VHT20 (Band 1)

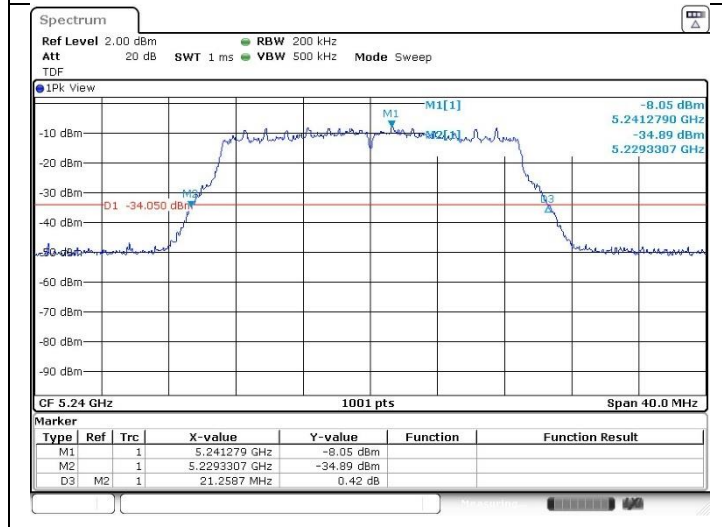
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

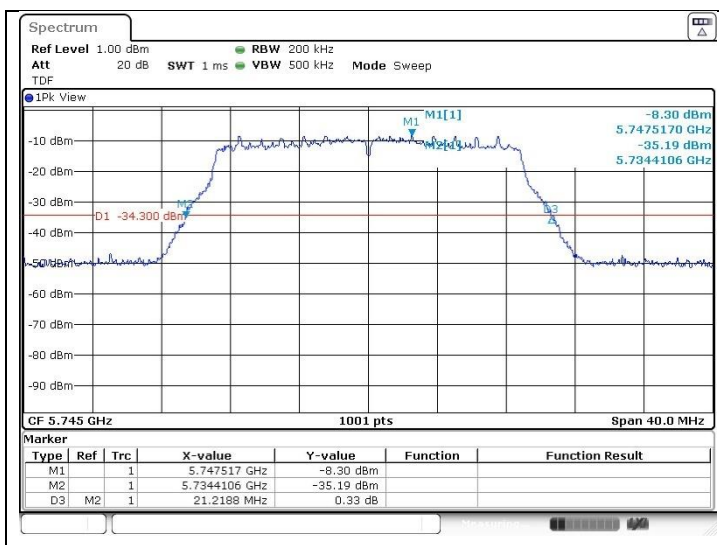


High Channel
(5 240 MHz)

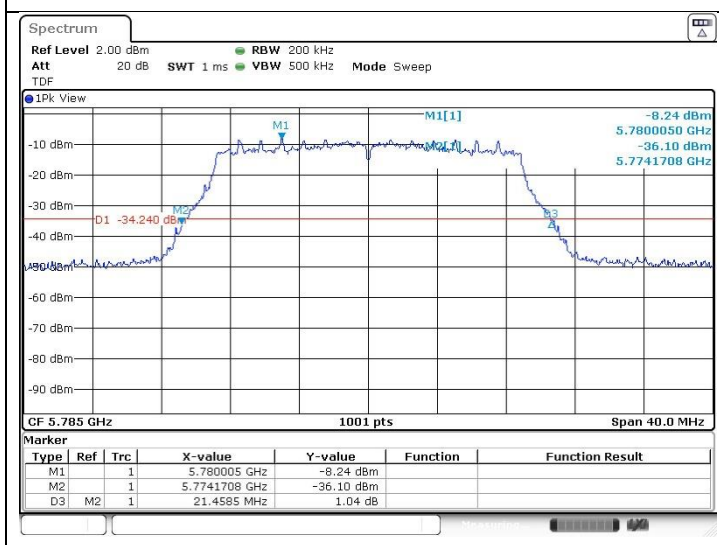


802.11ac_VHT20 (Band 3)

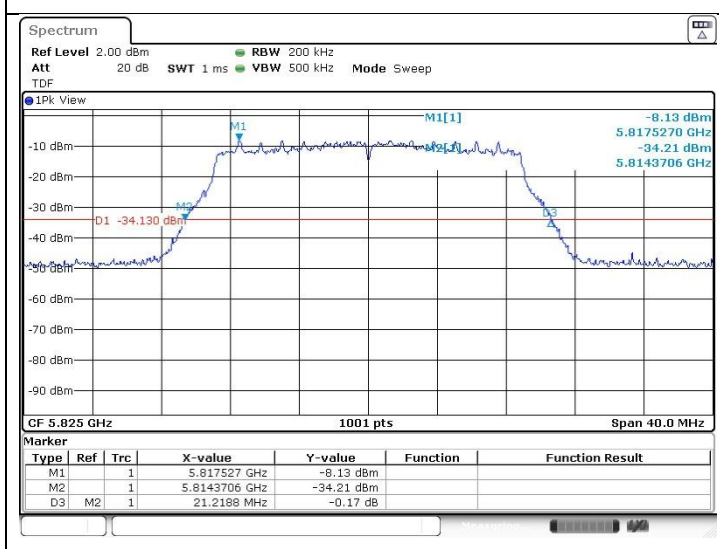
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

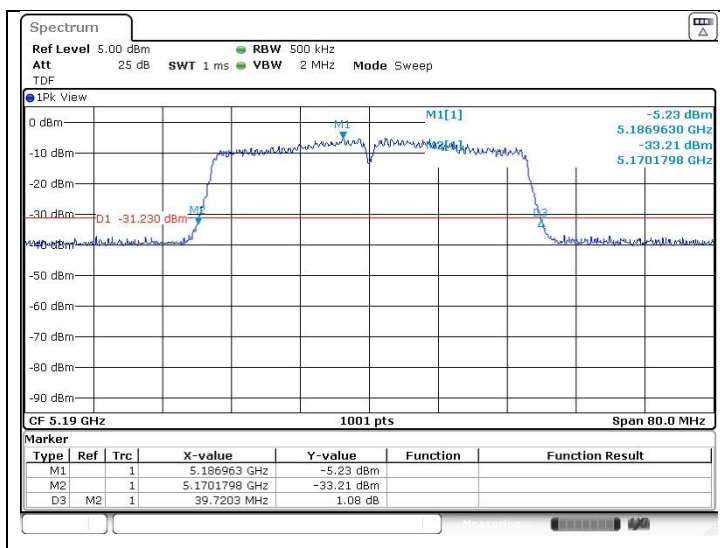


High Channel
(5 825 MHz)

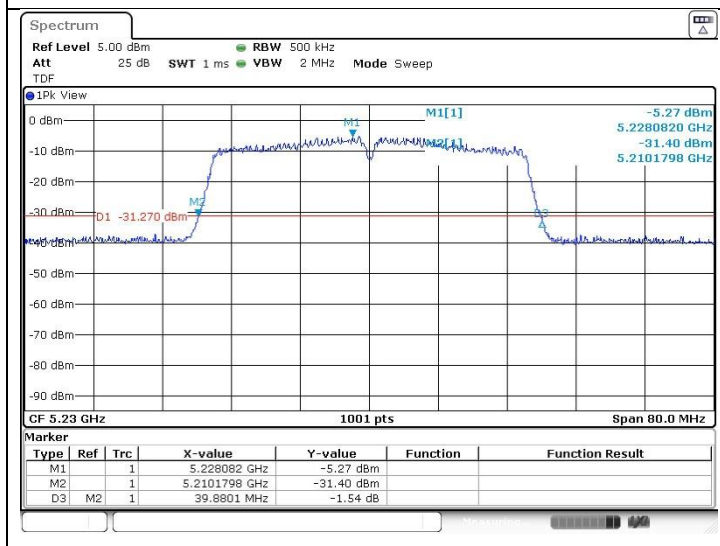


802.11ac_VHT40 (Band 1)

Low Channel
(5 190 MHz)

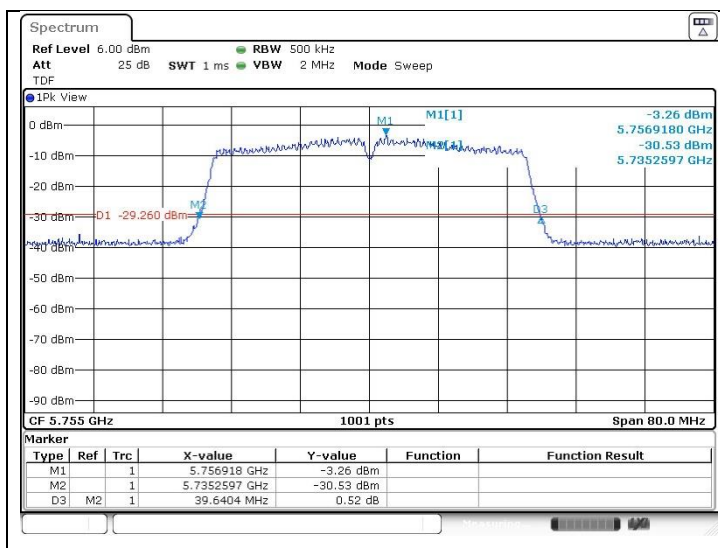


High Channel
(5 230 MHz)

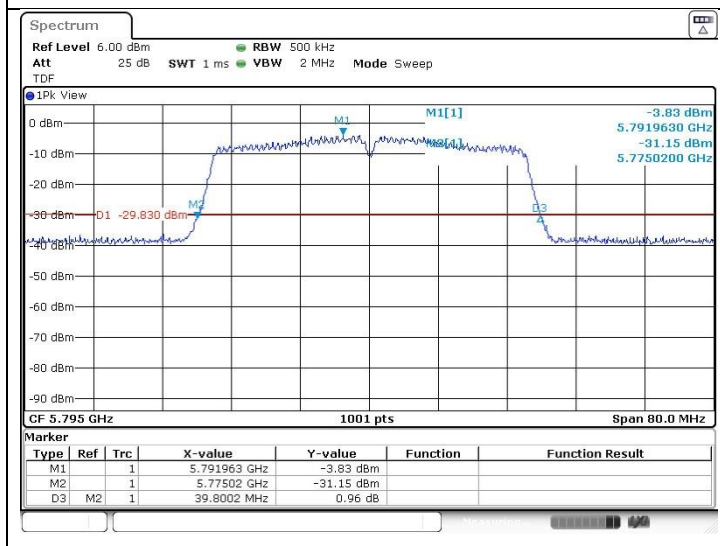


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)

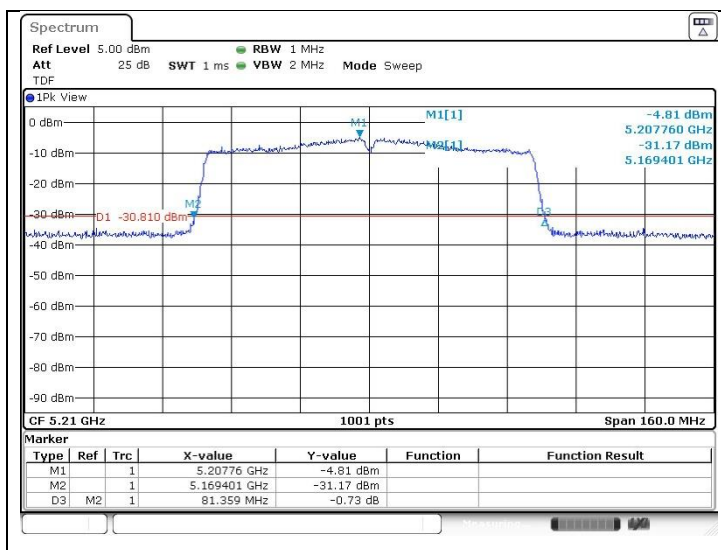


High Channel
(5 795 MHz)



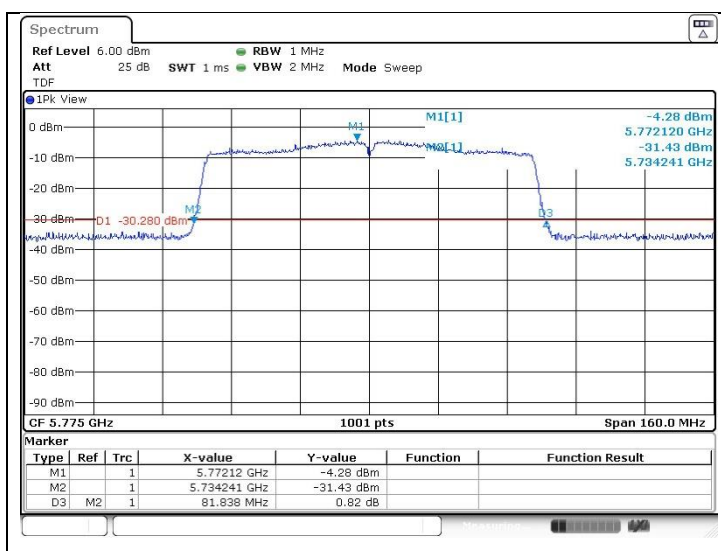
802.11ac_VHT80 (Band 1)

Middle Channel
(5 210 MHz)



802.11ac_VHT80 (Band 3)

Middle Channel
(5 775 MHz)

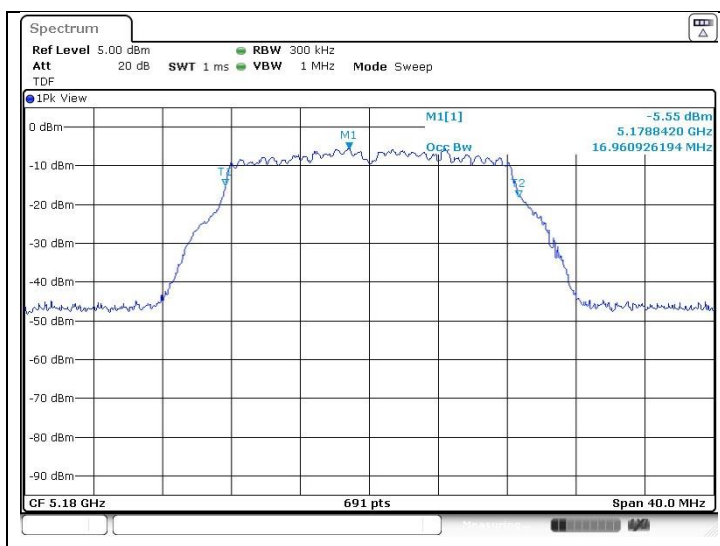


- MIMO_Ant.2

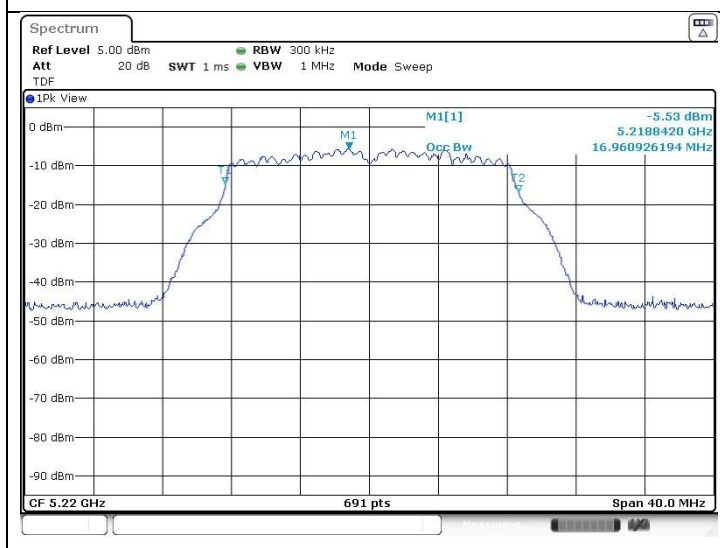
99 % Bandwidth

802.11a (Band 1)

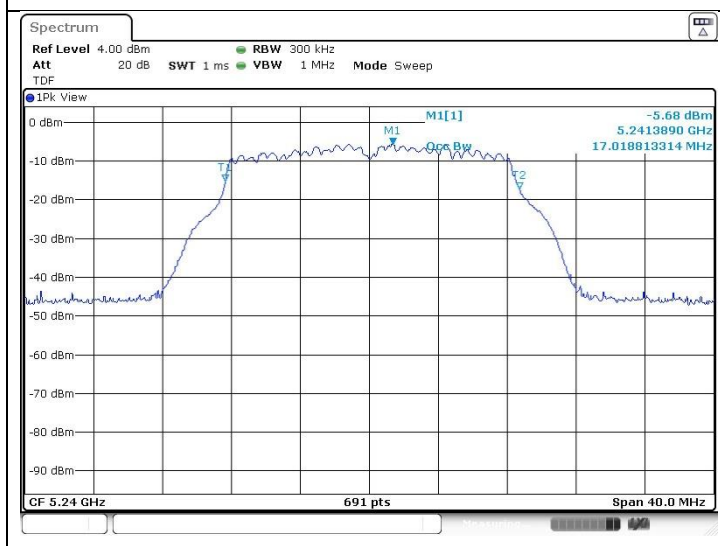
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

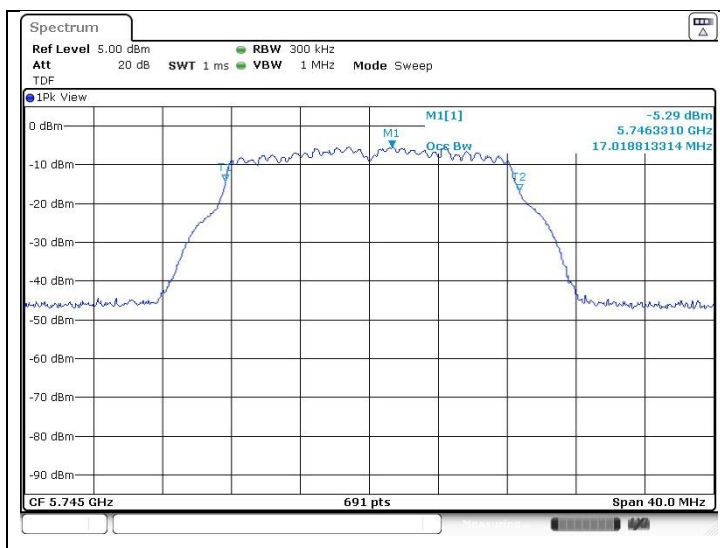


High Channel
(5 240 MHz)

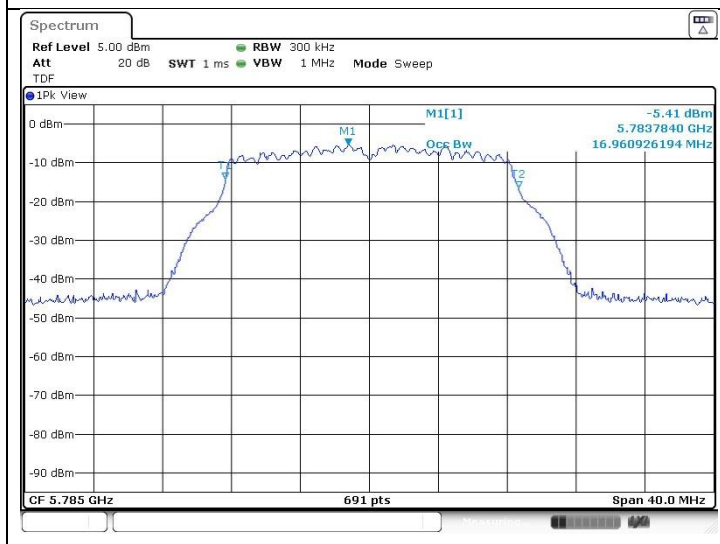


802.11a (Band 3)

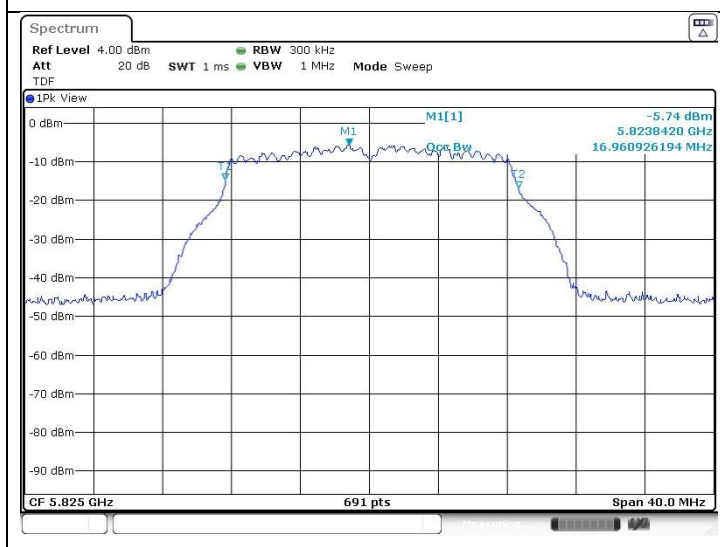
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

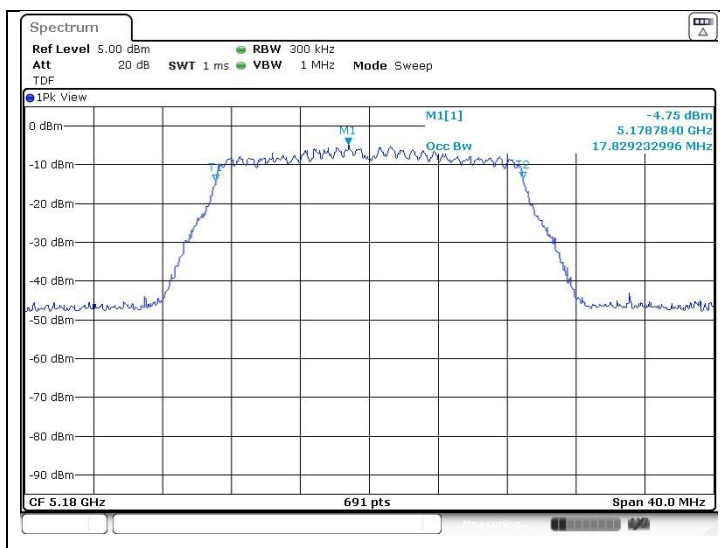


High Channel
(5 825 MHz)

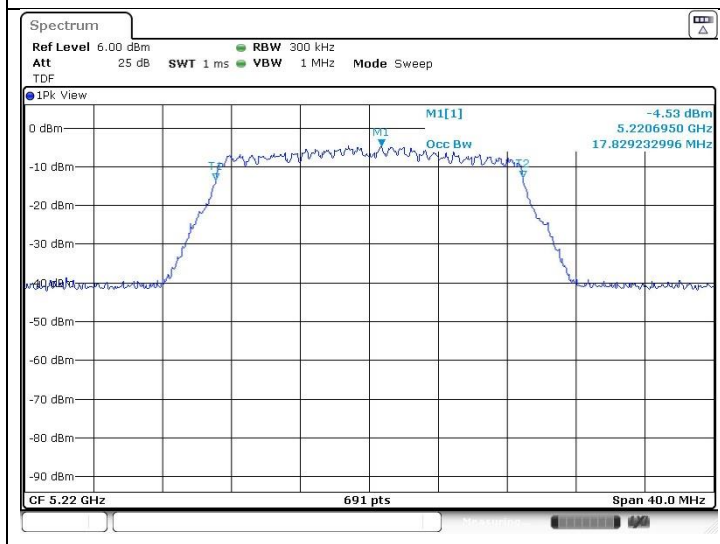


802.11ac_VHT20 (Band 1)

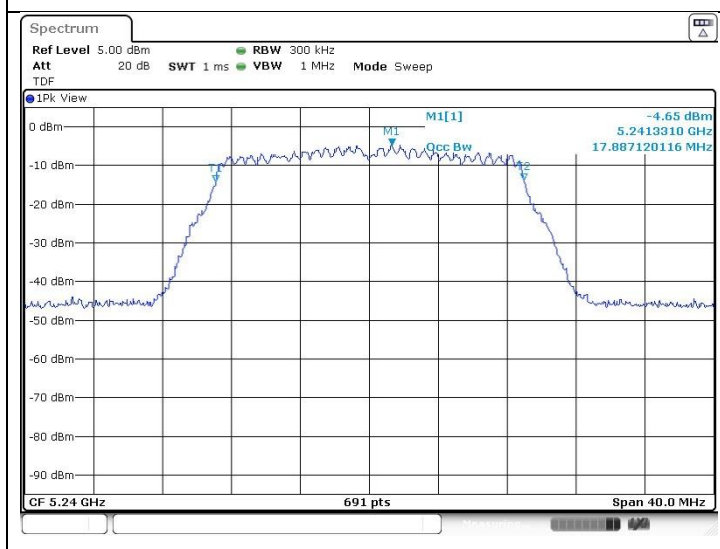
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

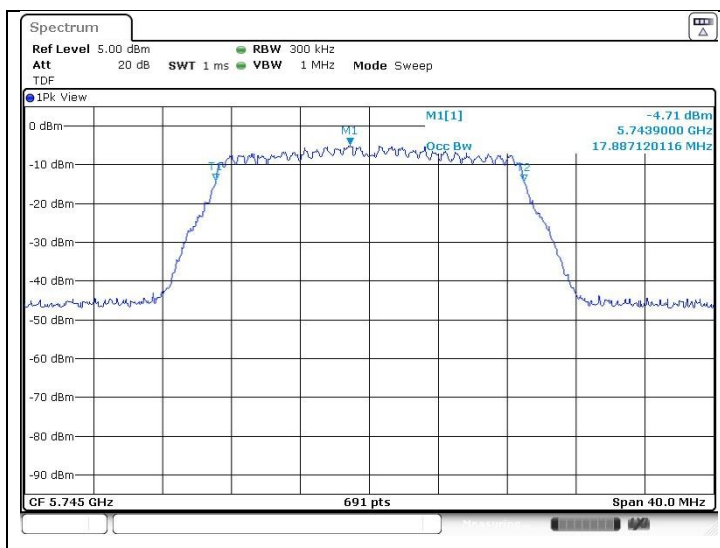


High Channel
(5 240 MHz)

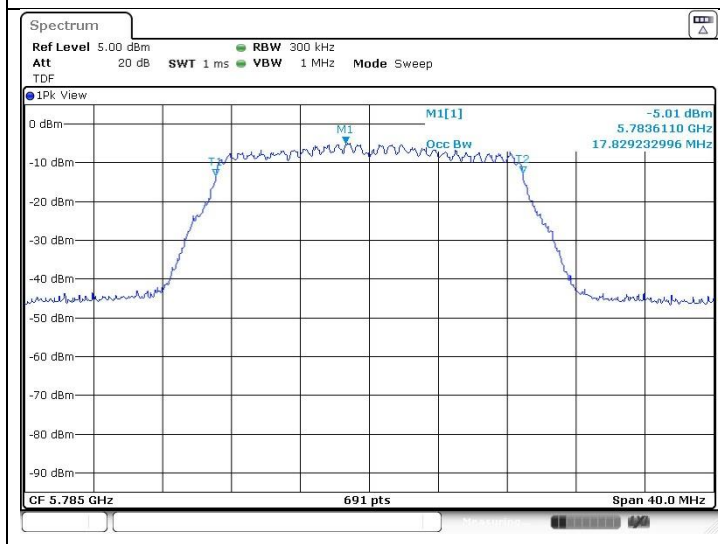


802.11ac_VHT20 (Band 3)

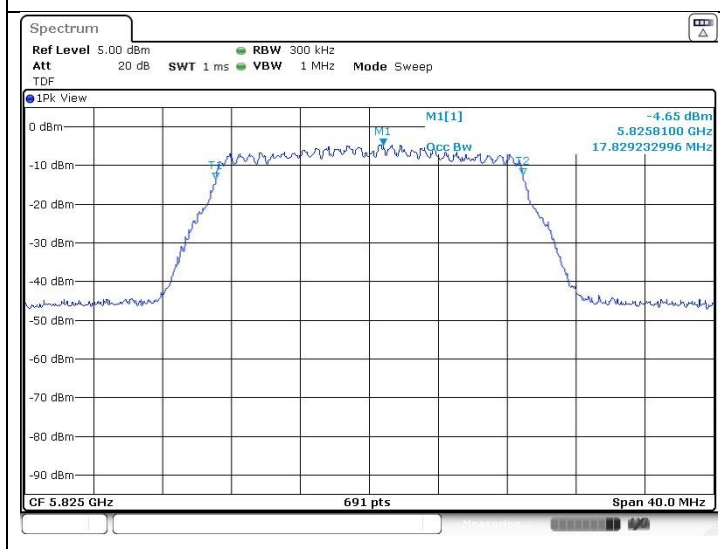
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

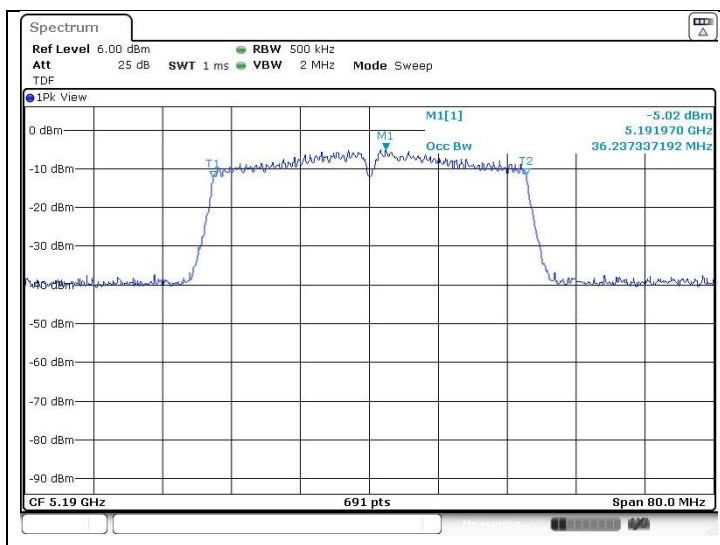


High Channel
(5 825 MHz)

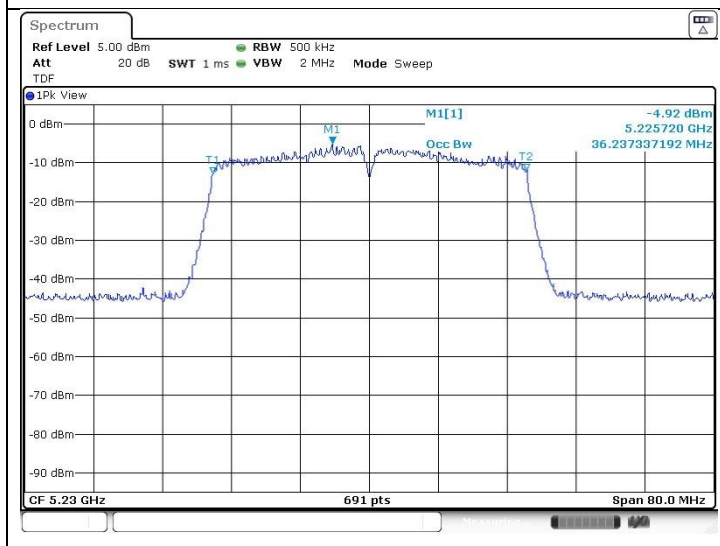


802.11ac_VHT40 (Band 1)

Low Channel
 (5 190 MHz)

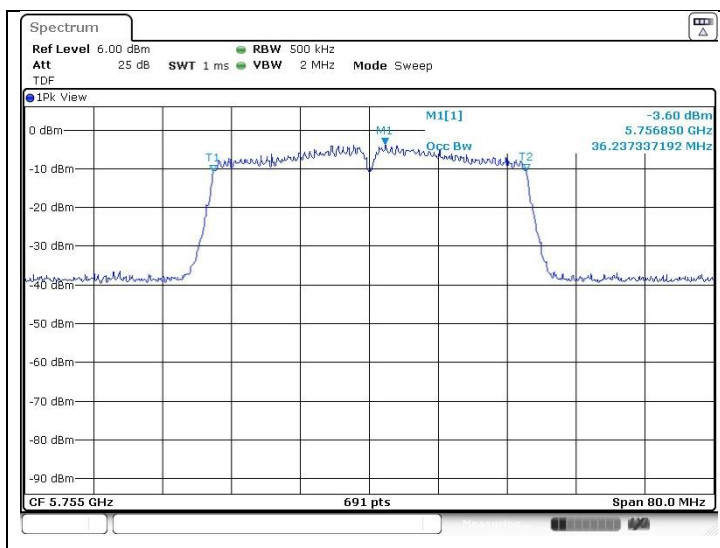


High Channel
 (5 230 MHz)

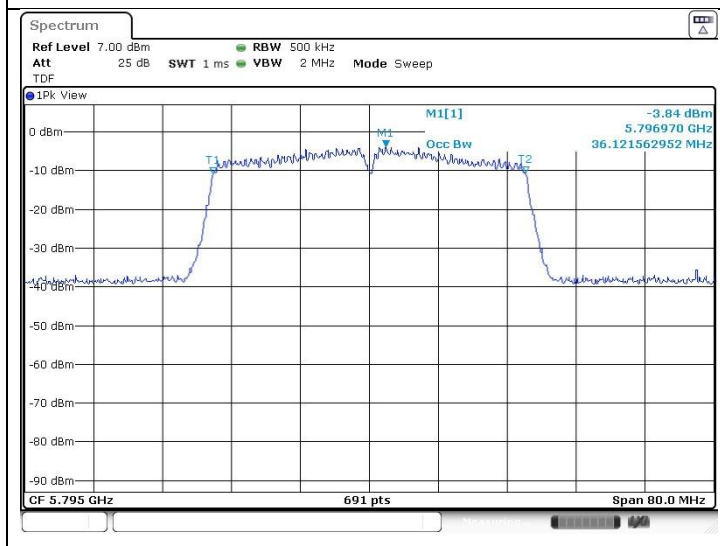


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)

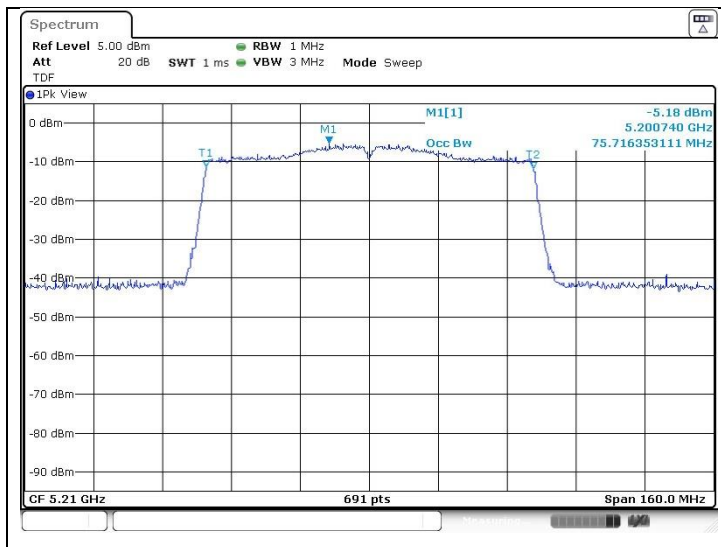


High Channel
(5 795 MHz)



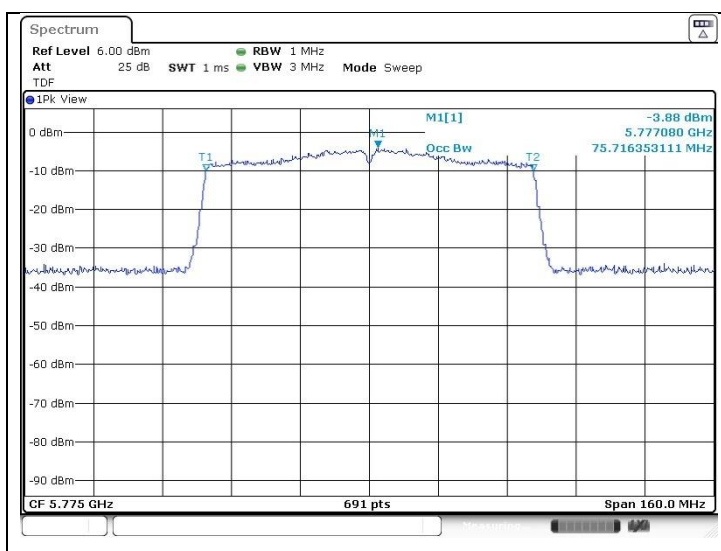
802.11ac_VHT80 (Band 1)

Middle Channel
 (5 210 MHz)



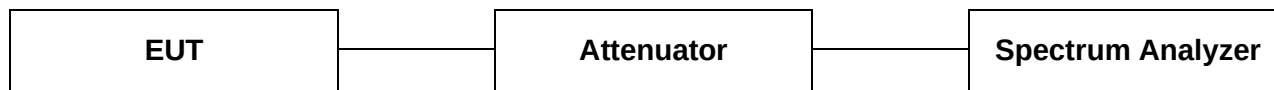
802.11ac_VHT80 (Band 3)

Middle Channel
 (5 775 MHz)



4. 6 dB Bandwidth

4.1. Test Setup



4.2. Limit

According to §15.407(e), within the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz.

4.3. Test Procedure

1. This measurement settings are specified in section II.C.2 of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
2. Set RBW = 100 kHz.
3. Set the video bandwidth (VBW) $\geq 3 \times$ RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Sweep = auto couple.
7. Allow the trace to stabilize.
8. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

4.4. Test Result

Ambient temperature : (23 ± 1) °C
 Relative humidity : 47 % R.H.

- SISO_Ant.1

Band	Mode	Frequency (MHz)	Ch.	Data Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Bandwidth (kHz)
U-NII 3	11a	5 745	149	6	16.344	500
		5 785	157		16.384	
		5 825	165		16.324	
	11ac_VHT20	5 745	149	MCS0	17.602	
		5 785	157		17.562	
		5 825	165		17.343	
	11ac_VHT40	5 755	151	MCS0	35.445	
		5 795	159		35.564	
	11ac_VHT80	5 775	155	MCS0	75.604	

- SISO_Ant.2

Band	Mode	Frequency (MHz)	Ch.	Data Rate (Mbps)	6 dB Bandwidth (MHz)	Minimum Bandwidth (kHz)
U-NII 3	11a	5 745	149	6	16.324	500
		5 785	157		16.344	
		5 825	165		16.324	
	11ac_VHT20	5 745	149	MCS0	17.602	
		5 785	157		17.582	
		5 825	165		17.582	
	11ac_VHT40	5 755	151	MCS0	35.724	
		5 795	159		35.764	
	11ac_VHT80	5 775	155	MCS0	75.285	

- MIMO

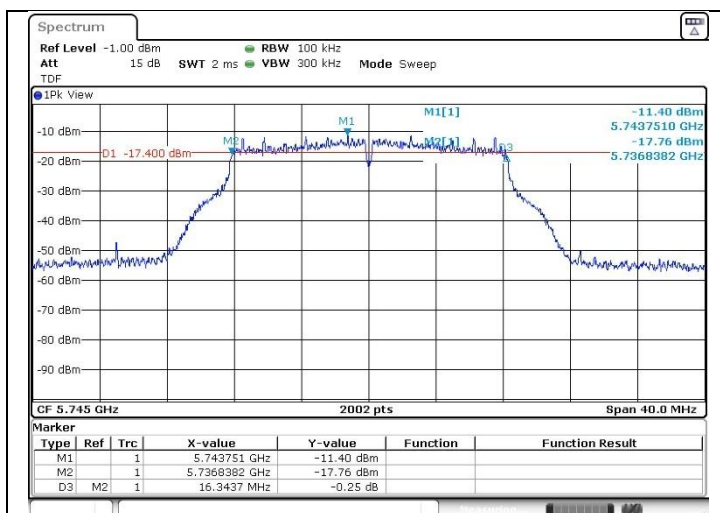
Band	Mode	Frequency (MHz)	Ch.	Data Rate (Mbps)	6 dB Bandwidth (MHz)		Minimum Bandwidth (kHz)
					ANT 1	ANT 2	
U-NII 3	11a	5 745	149	6	16.344	16.364	500
		5 785	157		16.344	16.364	
		5 825	165		16.344	16.344	
	11ac_VHT20	5 745	149	MCS0	17.602	17.602	
		5 785	157		17.582	17.602	
		5 825	165		17.562	17.602	
	11ac_VHT40	5 755	151	MCS0	35.804	36.364	
		5 795	159		35.804	35.804	
	11ac_VHT80	5 775	155	MCS0	75.604	75.365	

- Test plots

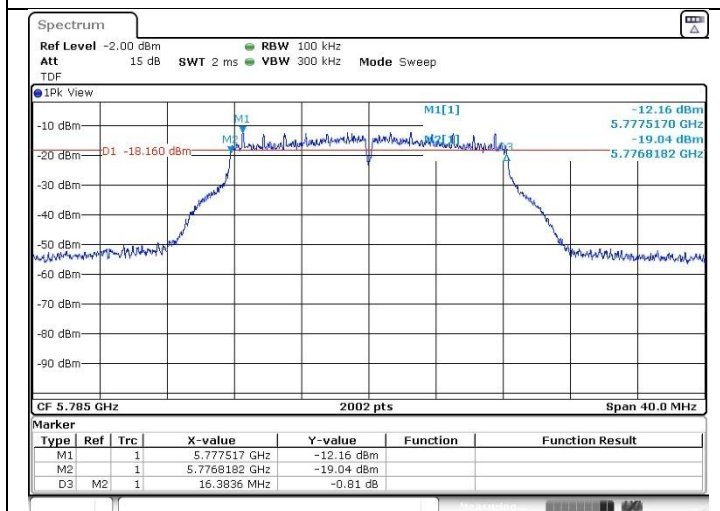
- SISO_Ant.1

802.11a (Band 3)

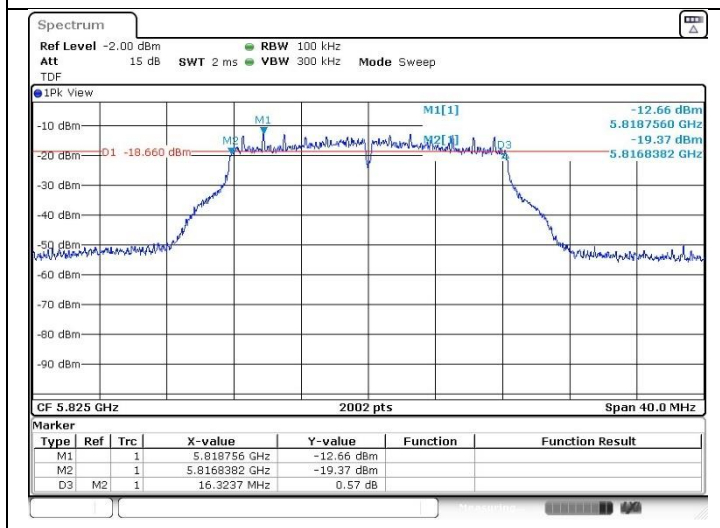
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

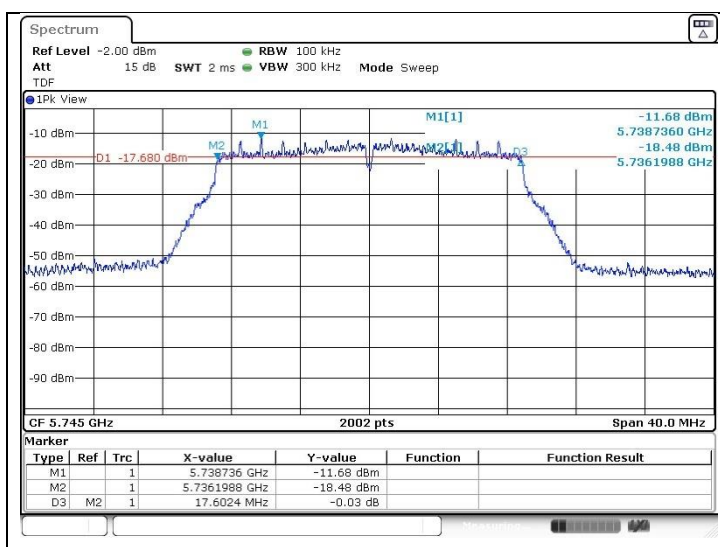


High Channel
(5 825 MHz)

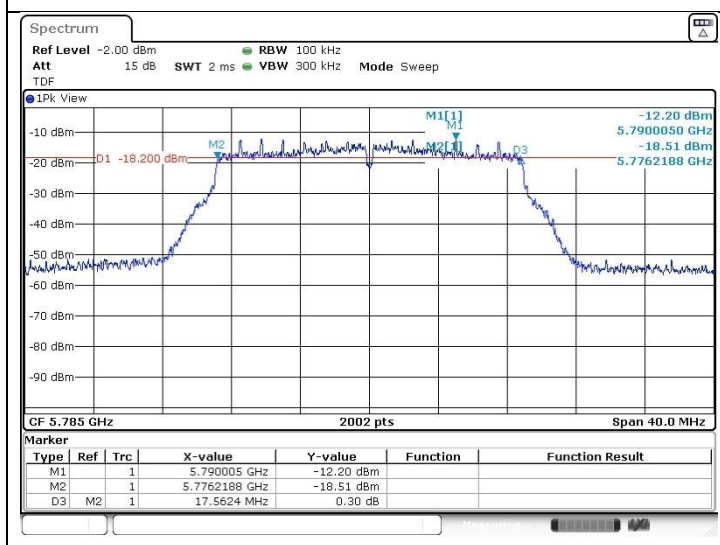


802.11ac_VHT20 (Band 3)

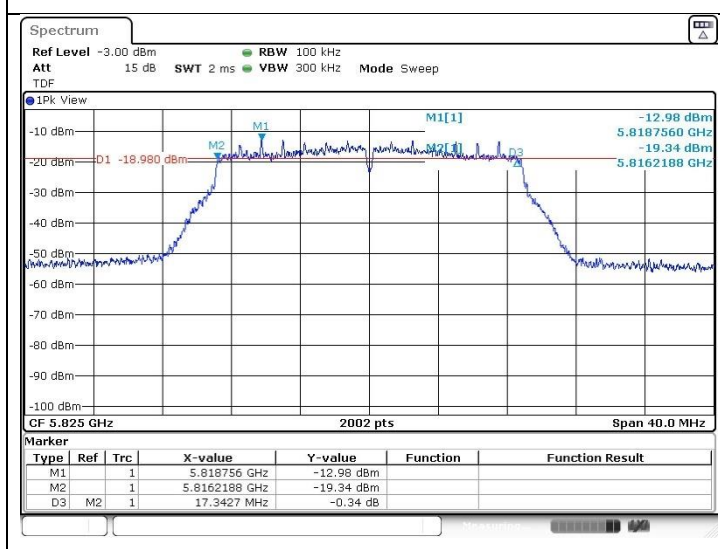
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

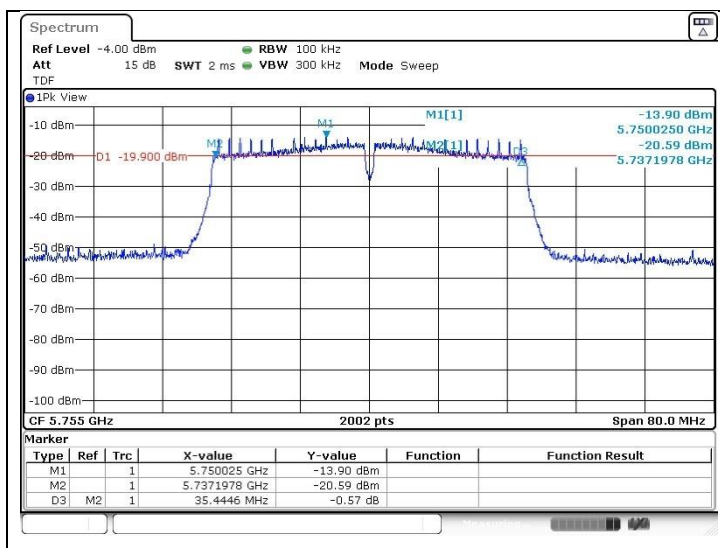


High Channel
(5 825 MHz)

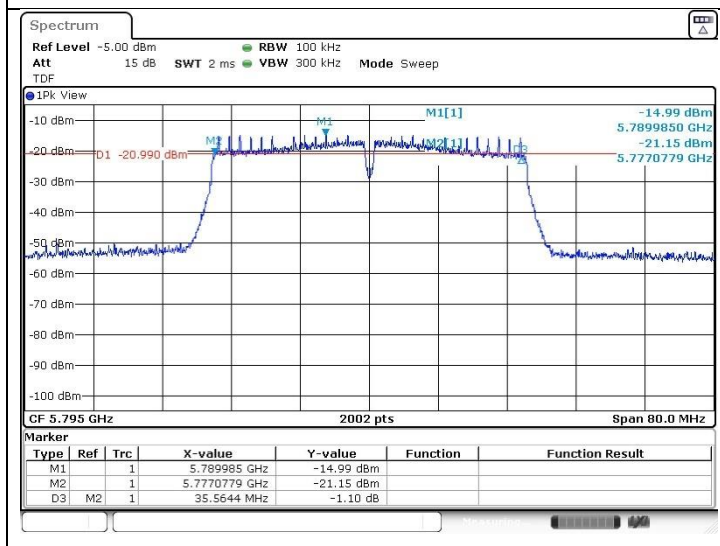


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)



High Channel
(5 795 MHz)



802.11ac_VHT80 (Band 3)

Middle Channel
(5 775 MHz)

