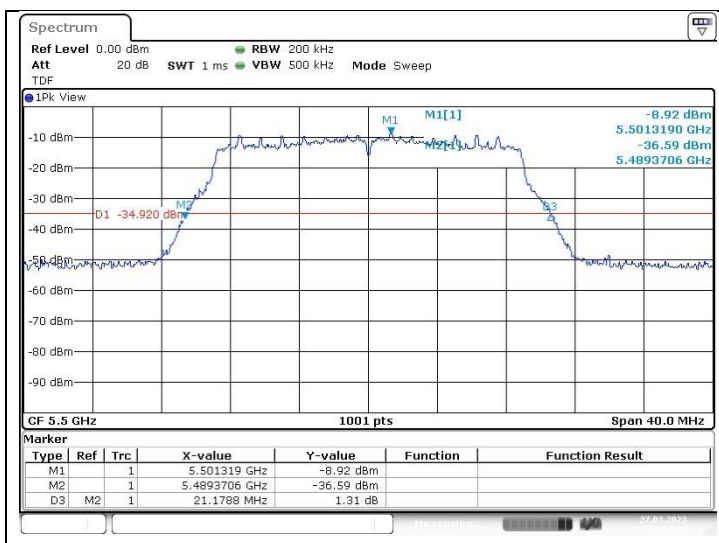
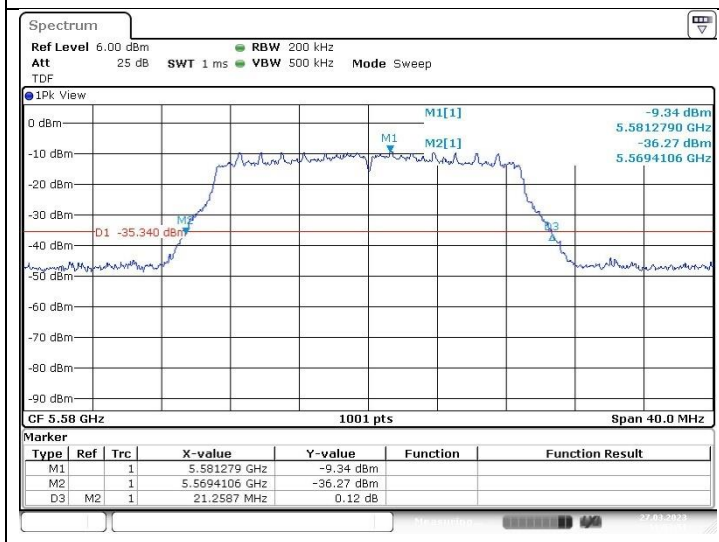


802.11ac_VHT20 (Band 2C)

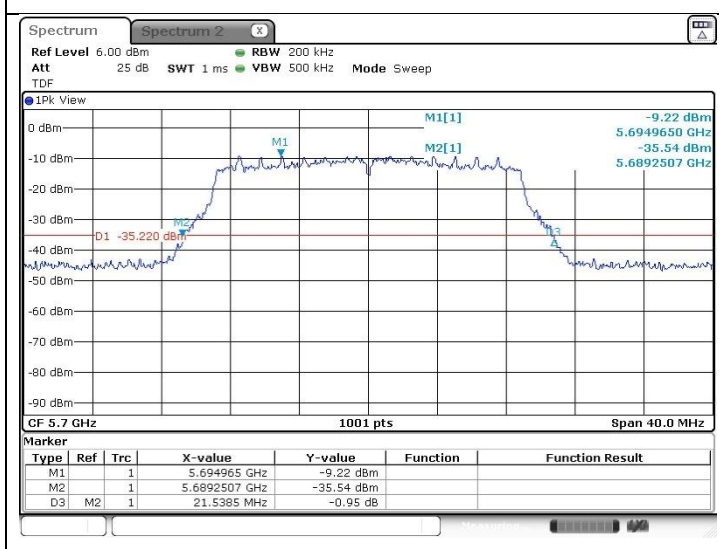
Low Channel
(5 500 MHz)



Middle Channel
(5 580 MHz)

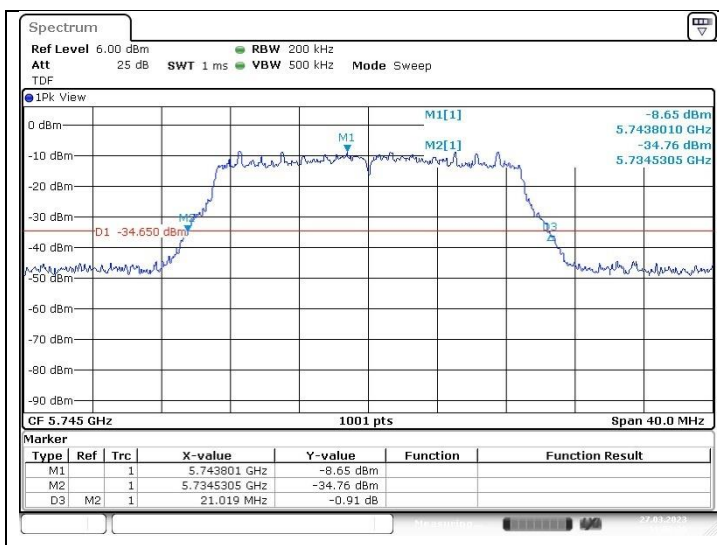


High Channel
(5 700 MHz)

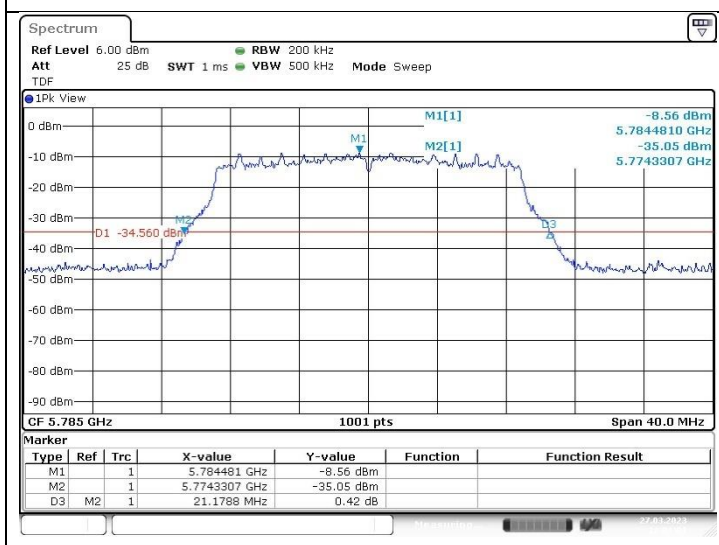


802.11ac_VHT20 (Band 3)

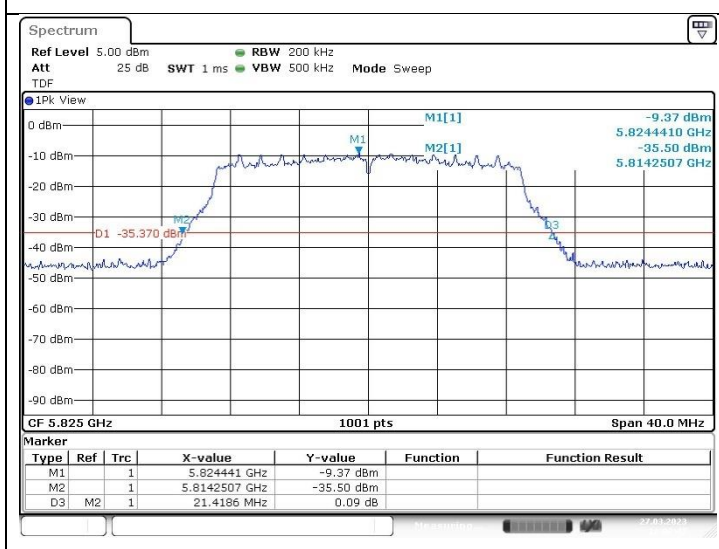
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

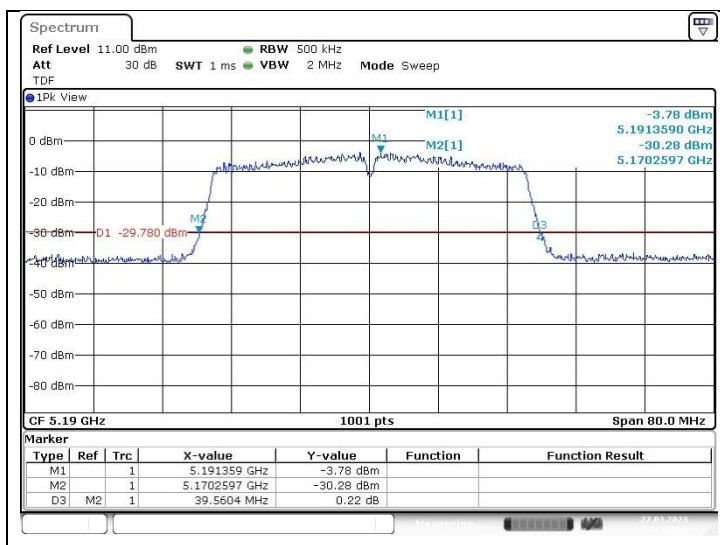


High Channel
(5 825 MHz)

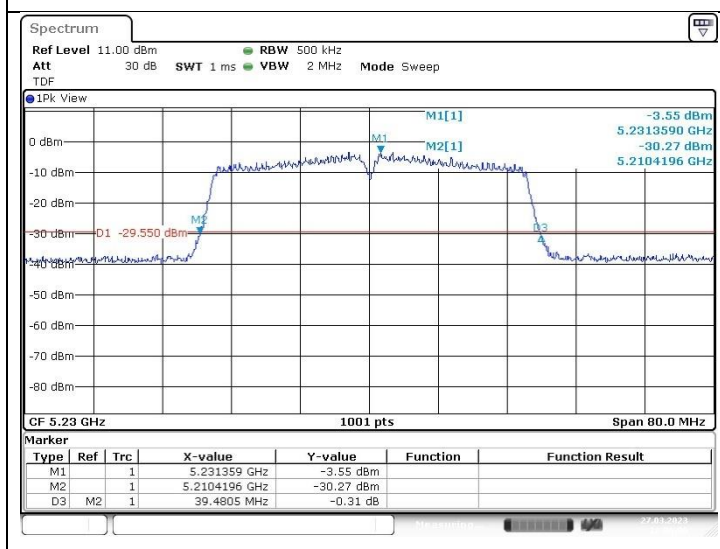


802.11ac_VHT40 (Band 1)

Low Channel
(5 190 MHz)

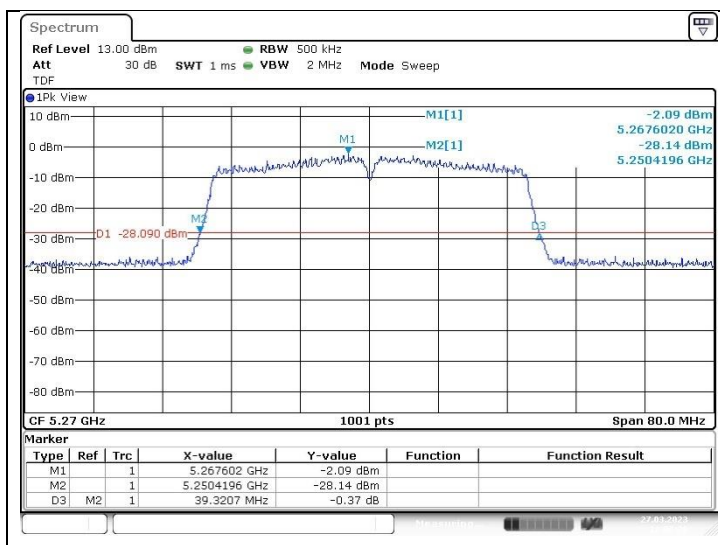


High Channel
(5 230 MHz)

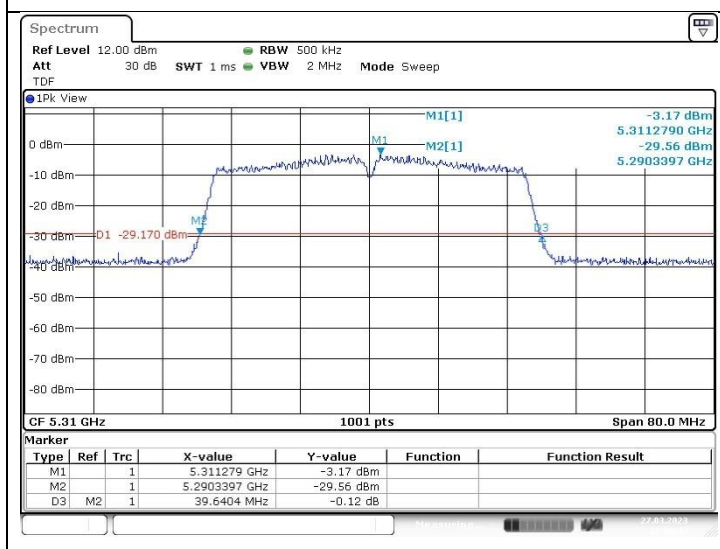


802.11ac_VHT40 (Band 2A)

Low Channel
(5 270 MHz)

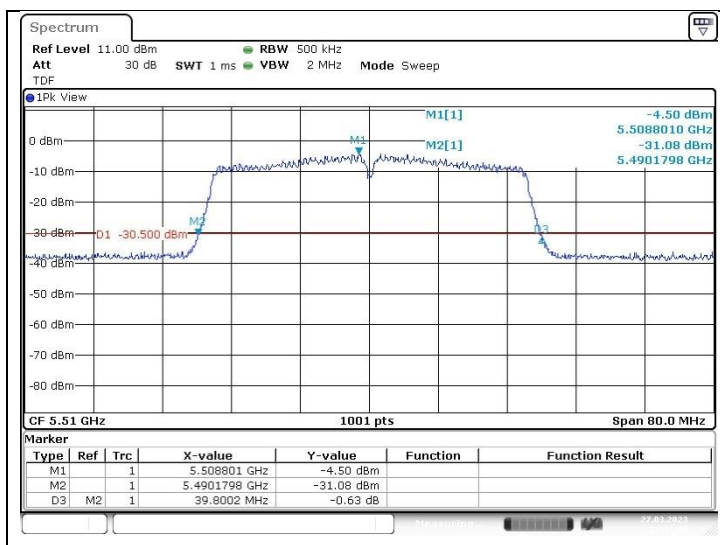


High Channel
(5 310 MHz)

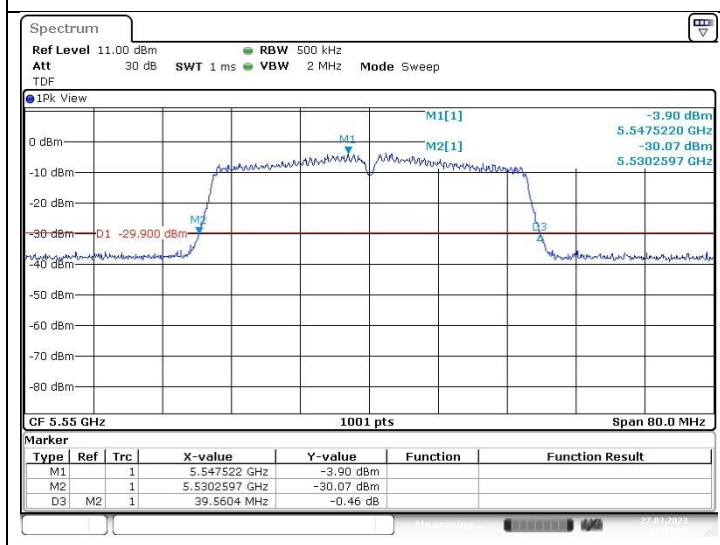


802.11ac_VHT40 (Band 2C)

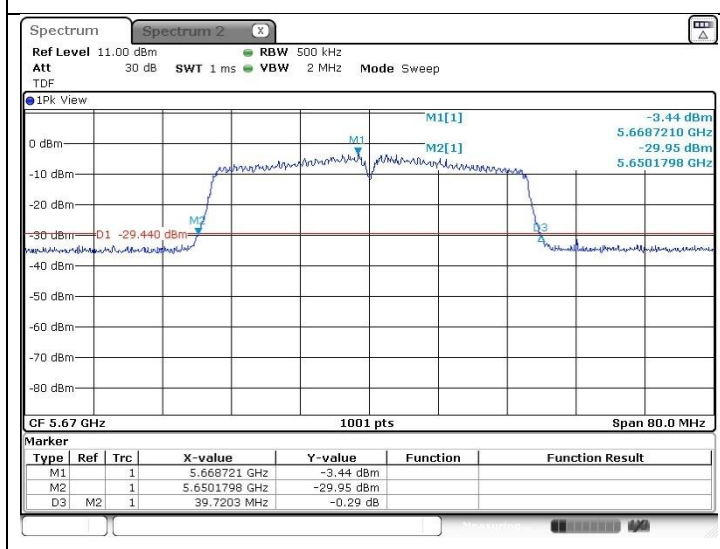
Low Channel
 (5 510 MHz)



Middle Channel
 (5 550 MHz)

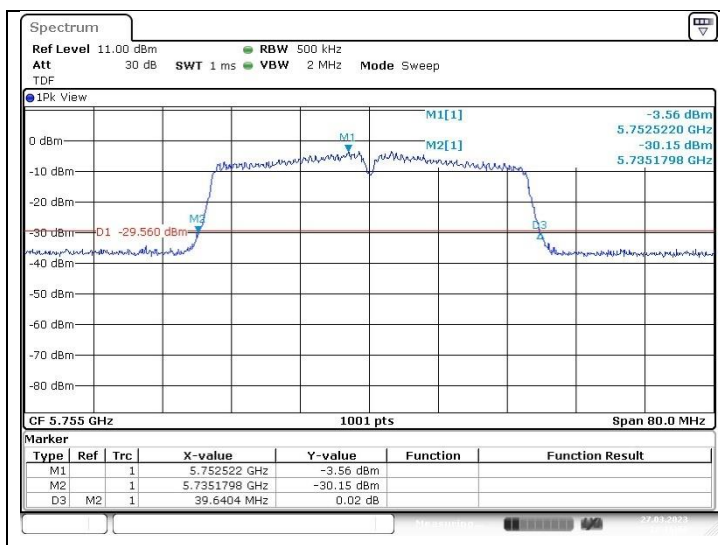


High Channel
 (5 670 MHz)

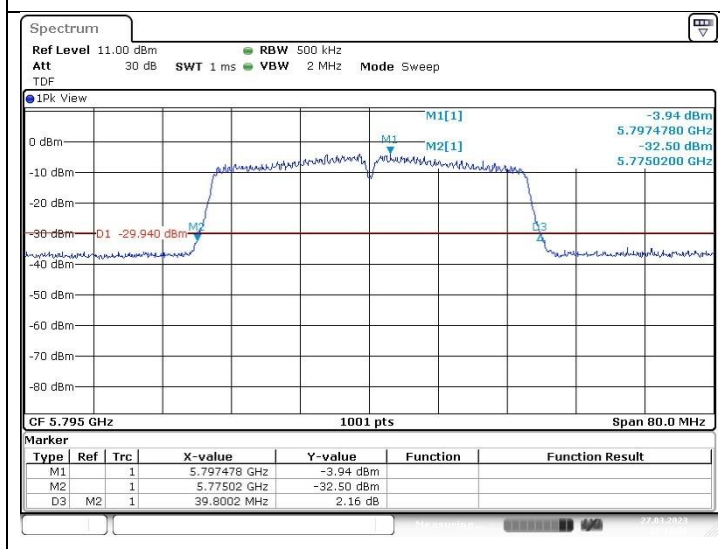


802.11ac_VHT40 (Band 3)

Low Channel
(5 755 MHz)

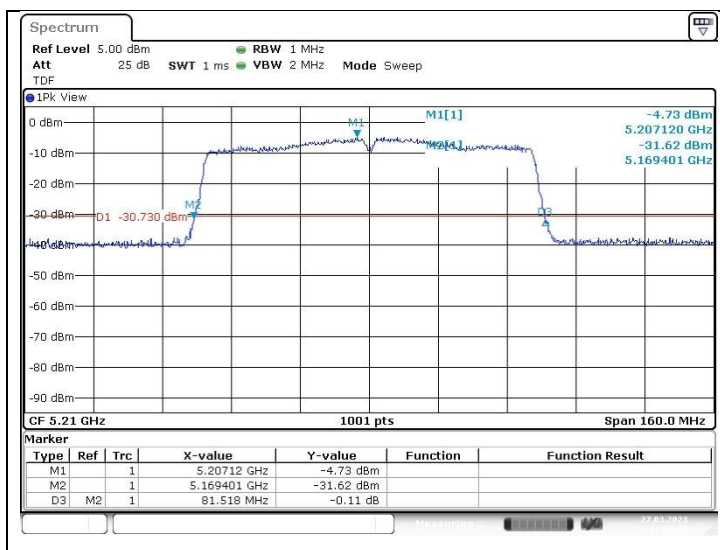


High Channel
(5 795 MHz)



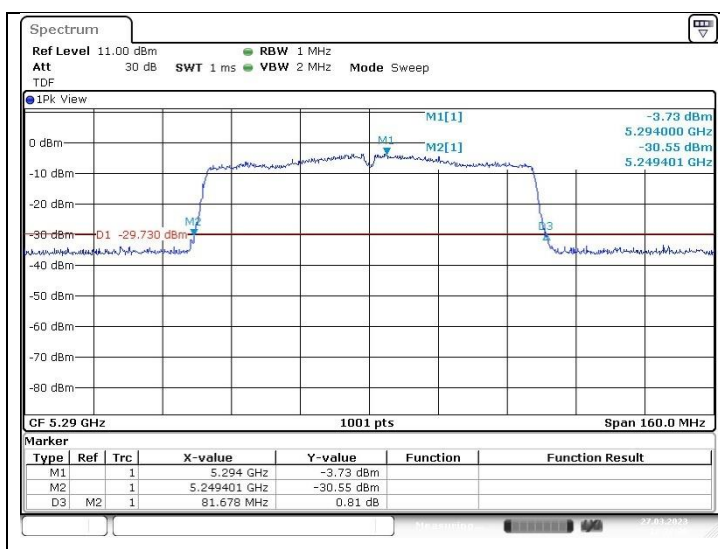
802.11ac_VHT80 (Band 1)

Middle Channel
 (5 210 MHz)



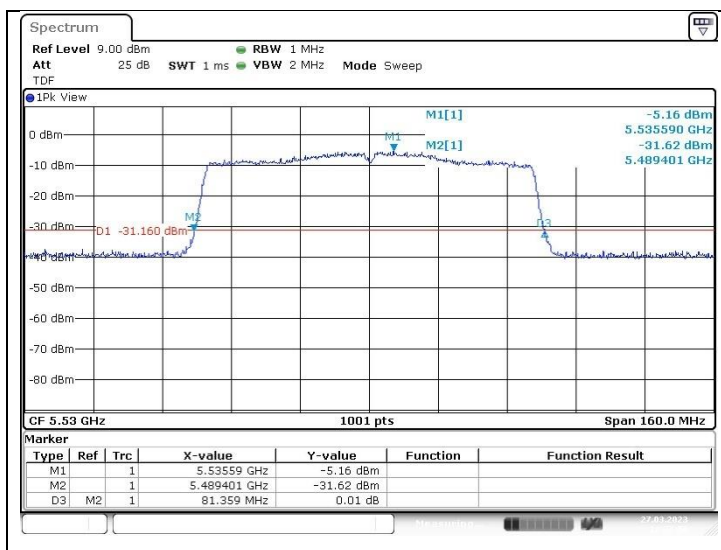
802.11ac_VHT80 (Band 2A)

Middle Channel
 (5 290 MHz)



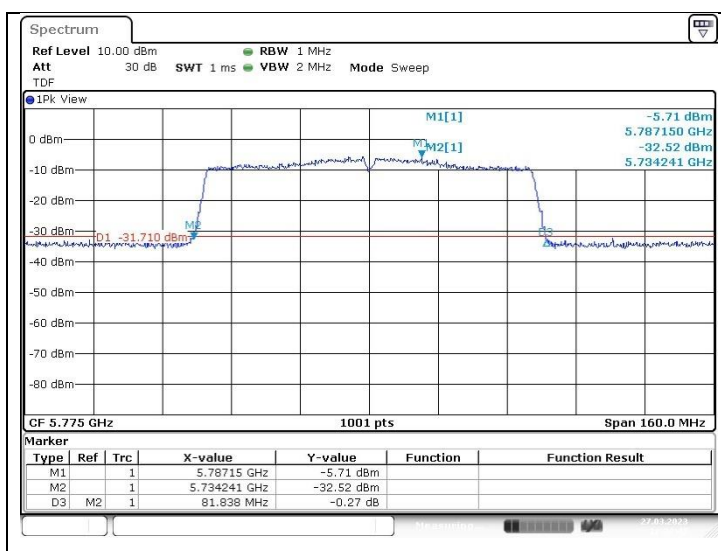
802.11ac_VHT80 (Band 2C)

Low Channel
 (5 530 MHz)



802.11ac_VHT80 (Band 3)

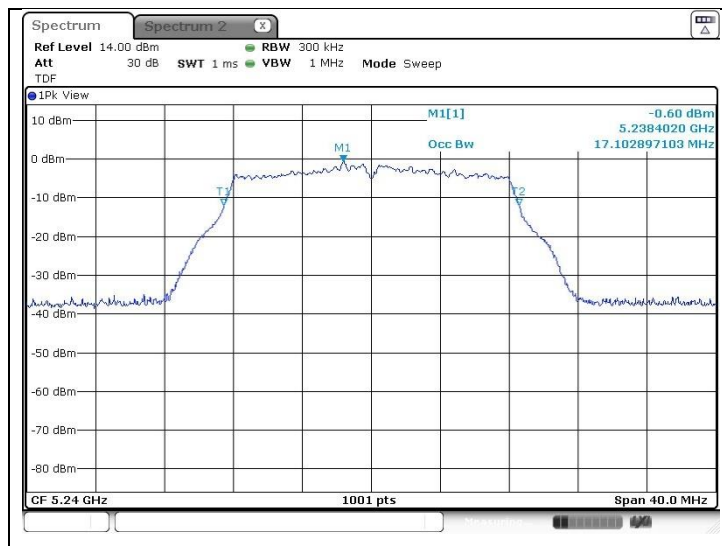
Middle Channel
 (5 775 MHz)



99 % Bandwidth

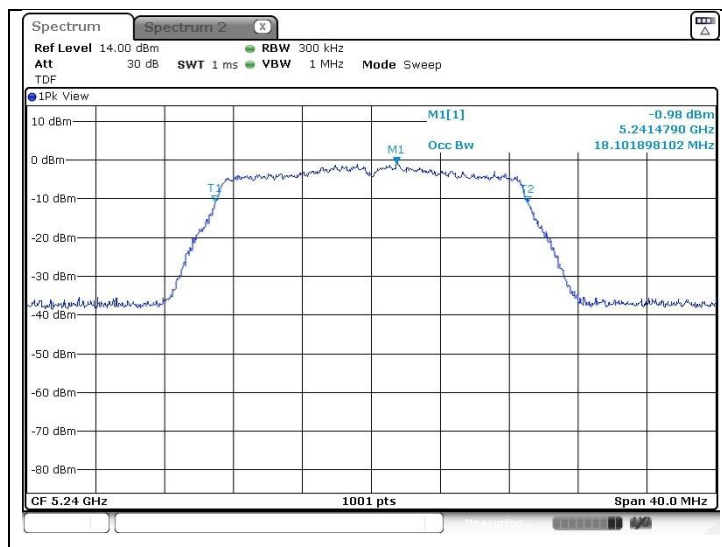
SISO_Core 0
802.11a (Band 1)

High Channel
 (5 240 MHz)



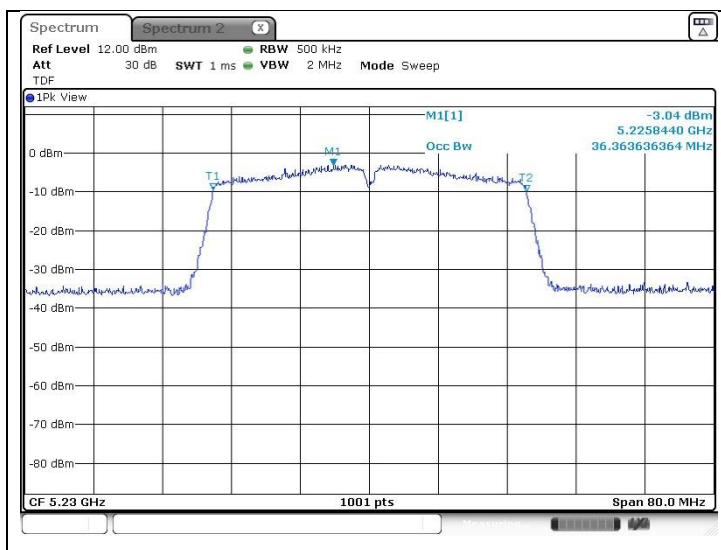
802.11ac_VHT20 (Band 1)

High Channel
 (5 240 MHz)



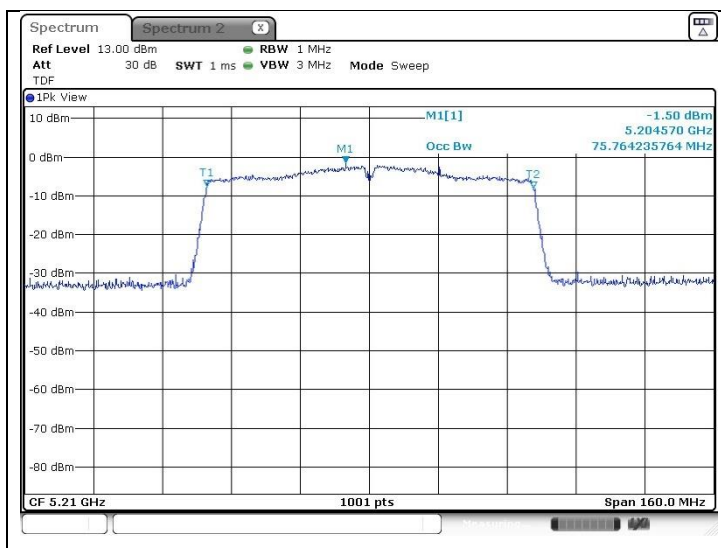
802.11n_HT40 (Band 1)

High Channel
 (5 230 MHz)



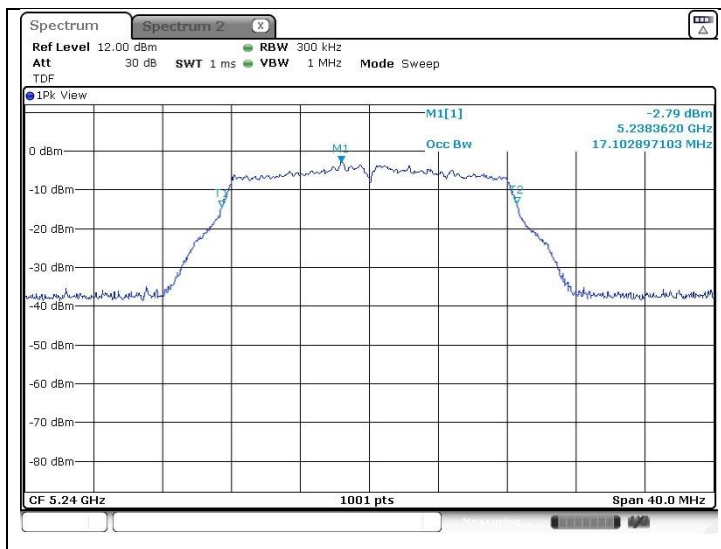
802.11ac_VHT80 (Band 1)

Middle Channel
 (5 210 MHz)

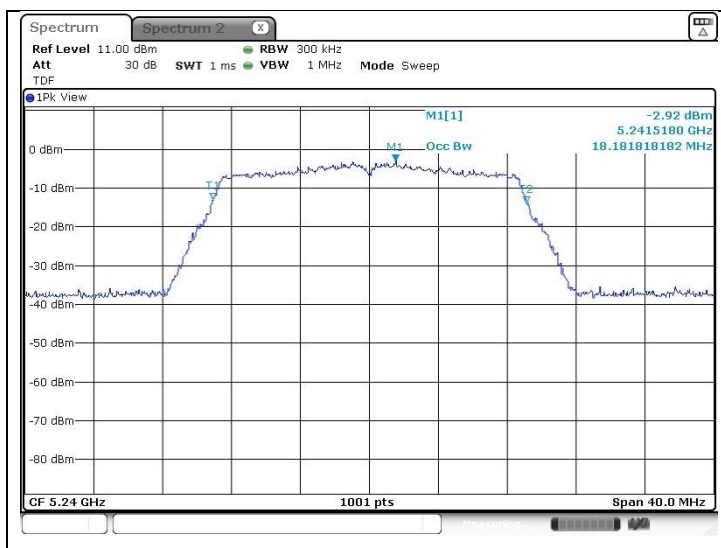


SISO_Core 1
802.11a (Band 1)

High Channel
(5 240 MHz)

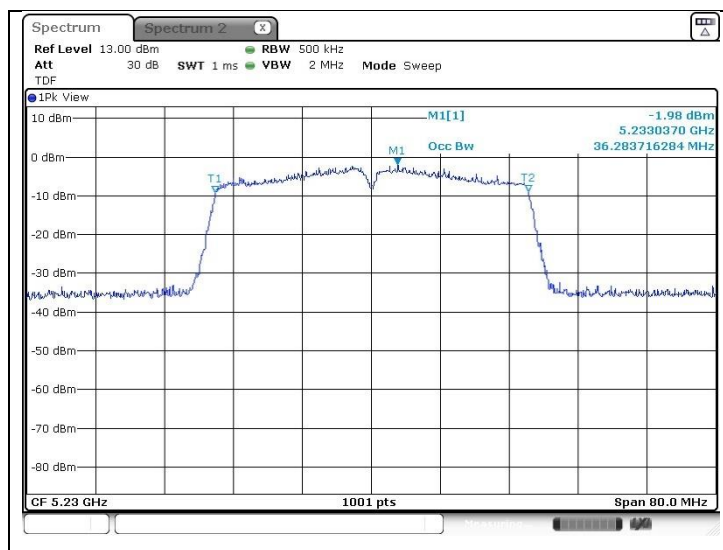


802.11ac_VHT20 (Band 1)
High Channel
(5 240 MHz)



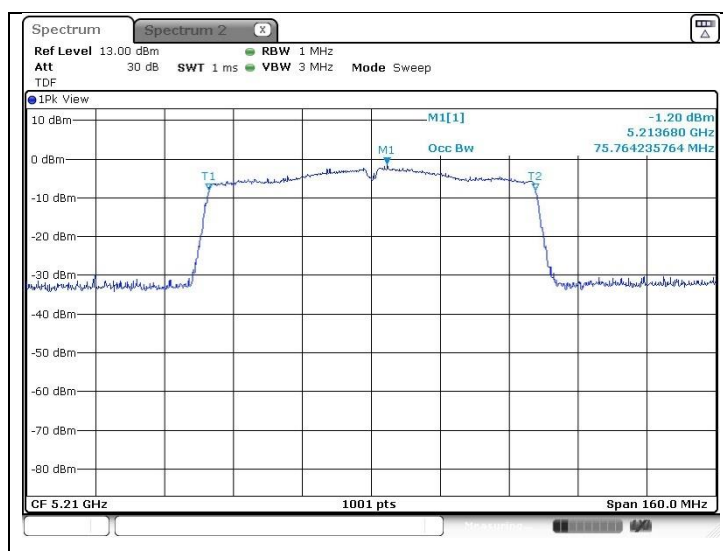
802.11n_HT40 (Band 1)

High Channel
(5 230 MHz)



802.11ac_VHT80 (Band 1)

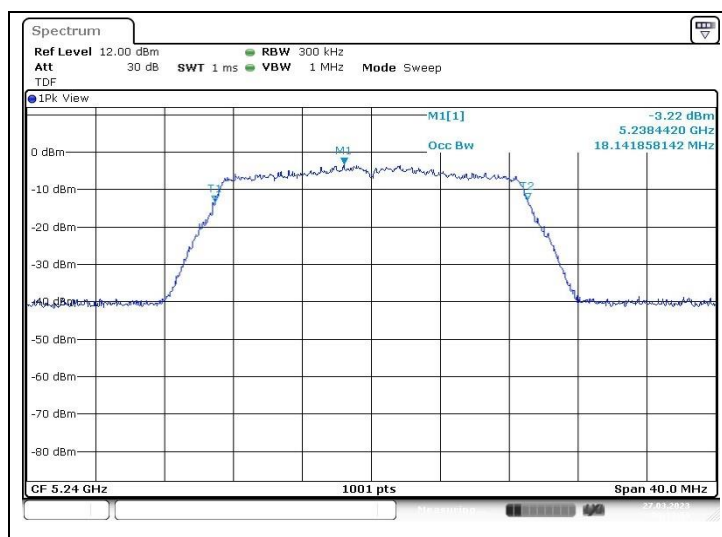
Middle Channel
(5 210 MHz)



MIMO_Core 0

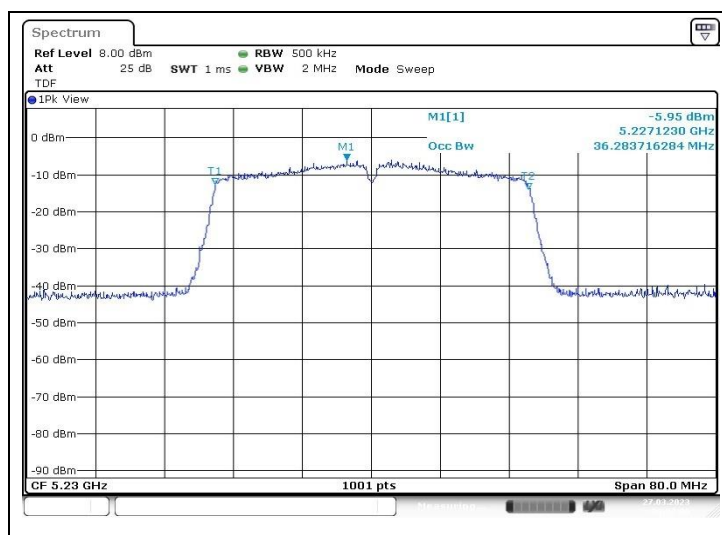
802.11ac_VHT20 (Band 1)

High Channel
(5 240 MHz)



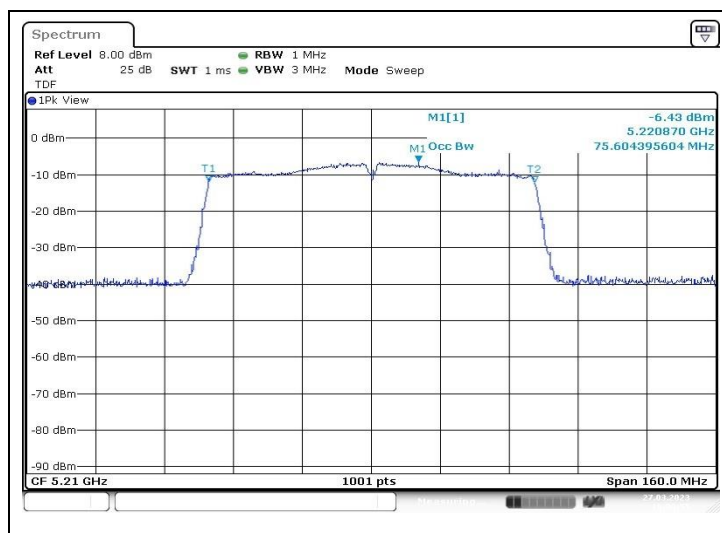
802.11ac_VHT40 (Band 1)

High Channel
(5 230 MHz)



802.11ac_VHT80 (Band 1)

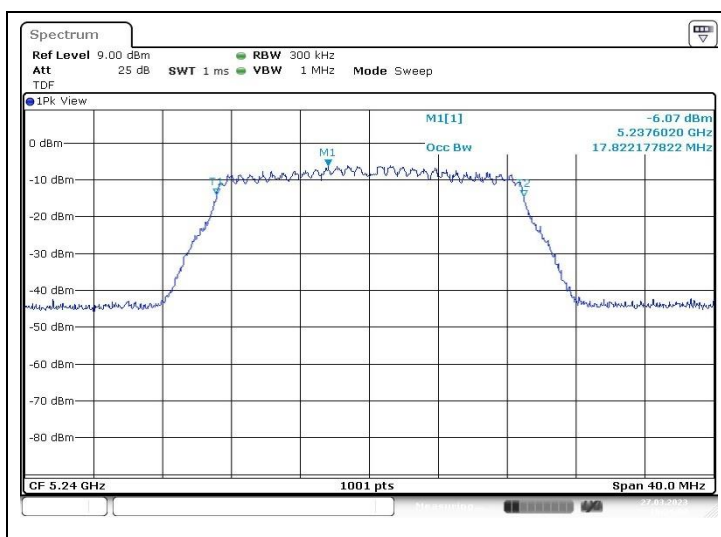
Middle Channel
(5 210 MHz)



MIMO_Core 1

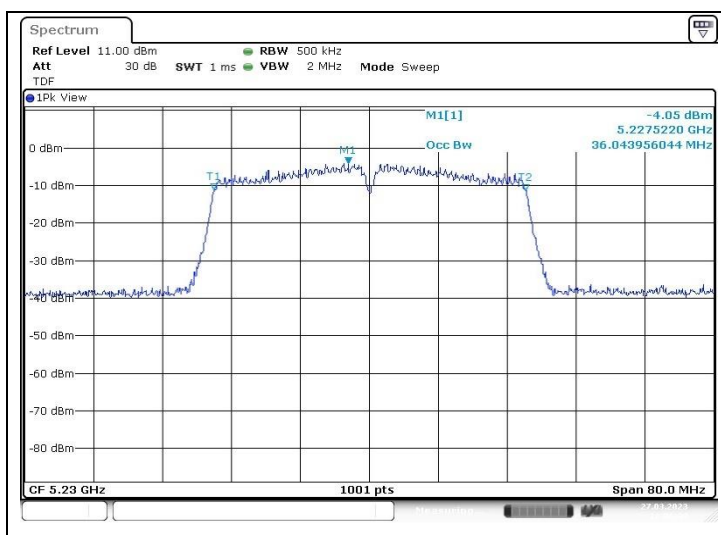
802.11ac_VHT20 (Band 1)

High Channel
(5 240 MHz)



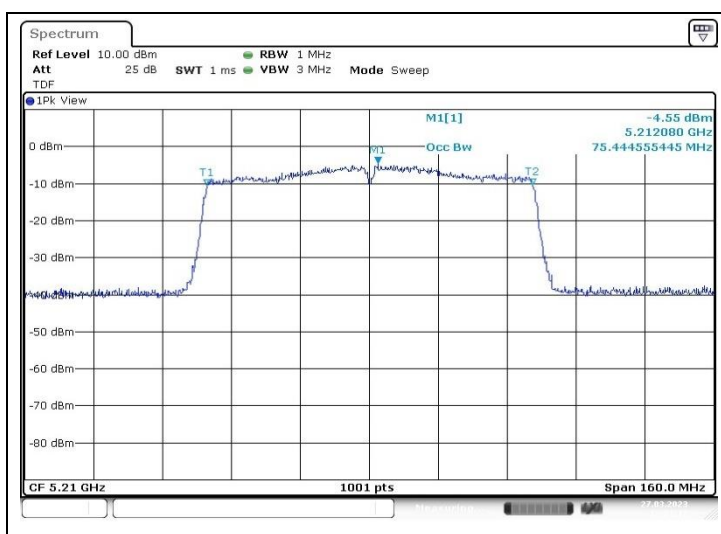
802.11ac_VHT40 (Band 1)

High Channel
(5 230 MHz)



802.11ac_VHT80 (Band 1)

Middle Channel
(5 210 MHz)

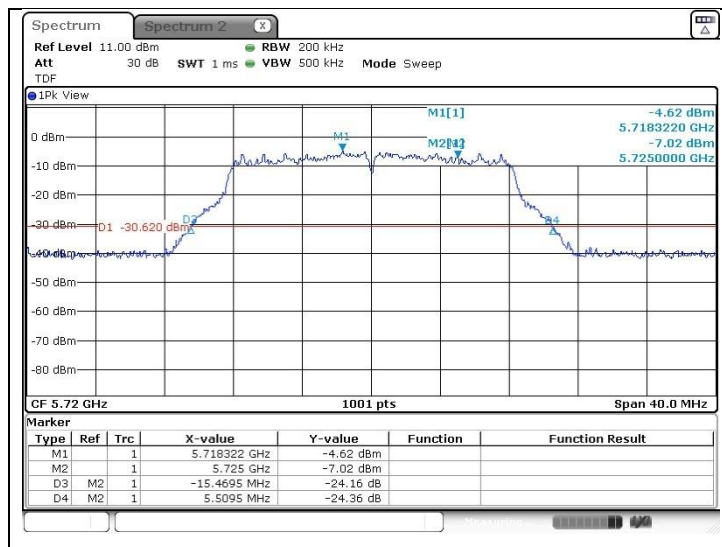


Band-crossing channels

SISO_Core 0

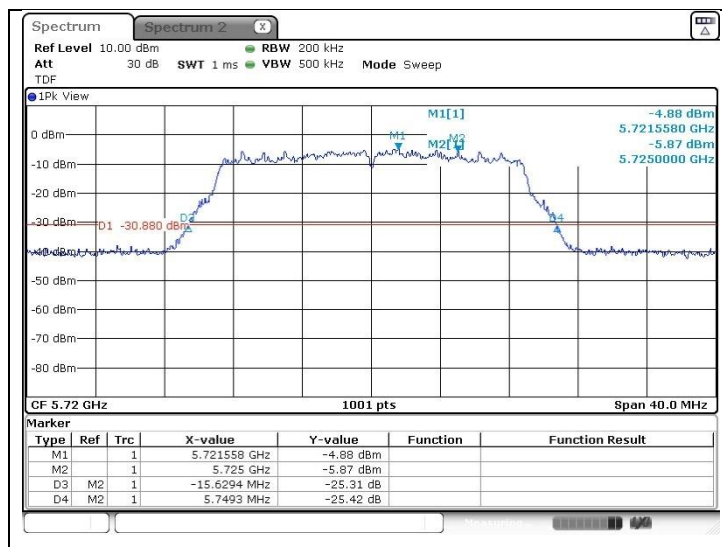
802.11a (Band 2C)

High Channel
(5 720 MHz)



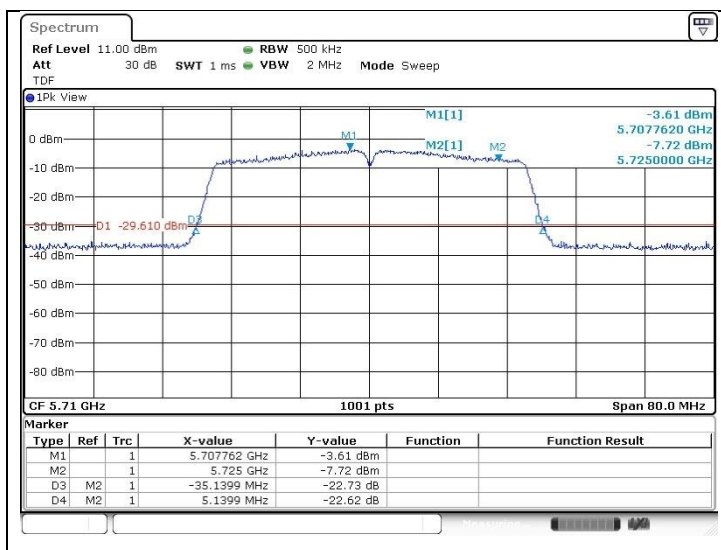
802.11ac_VHT20 (Band 2C)

High Channel
(5 720 MHz)



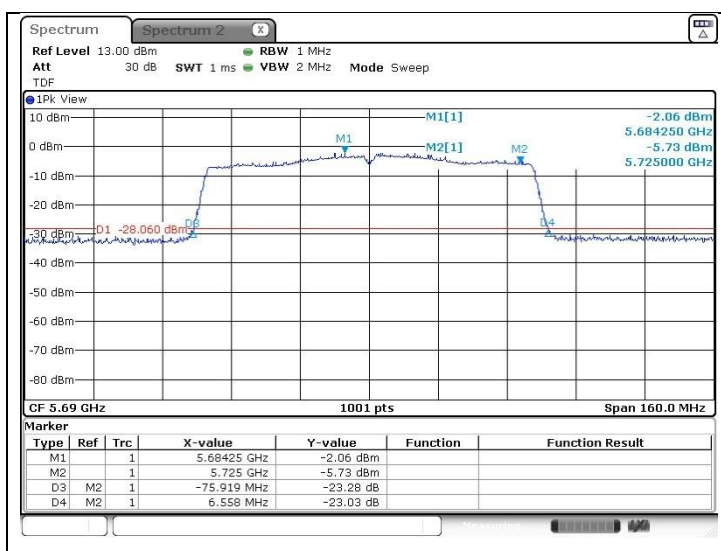
802.11n_HT40 (Band 2C)

High Channel
(5 710 MHz)



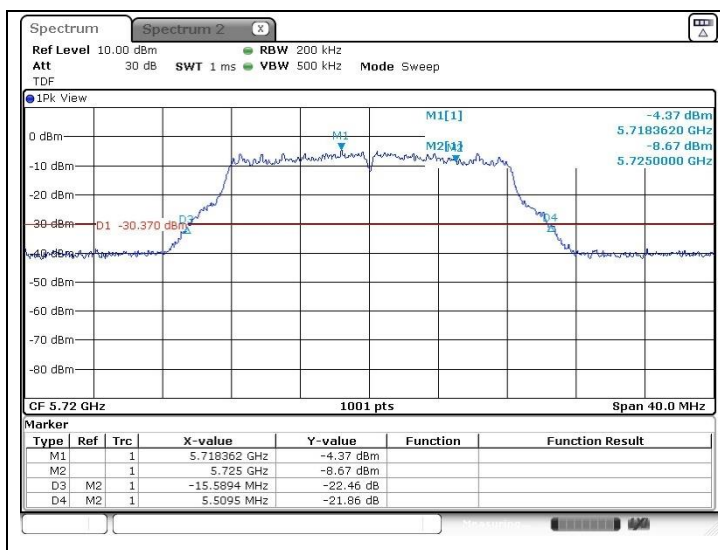
802.11ac_VHT80 (Band 2C)

Middle Channel
(5 690 MHz)



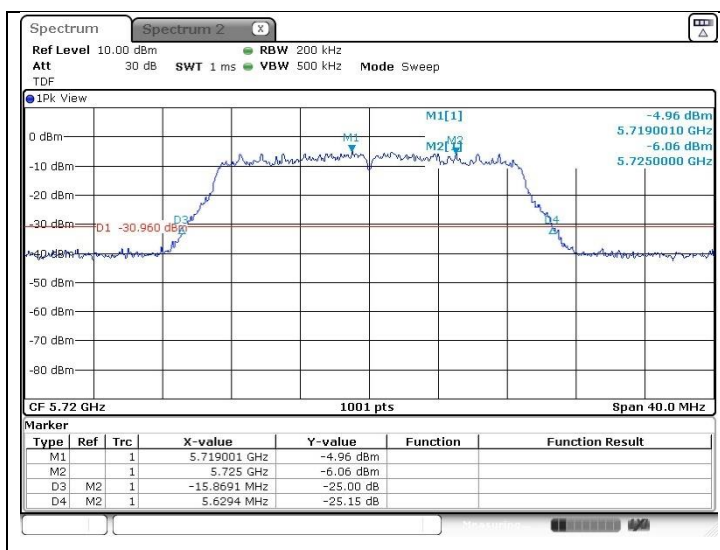
SISO_Core 1
802.11a (Band 2C)

High Channel
(5 720 MHz)



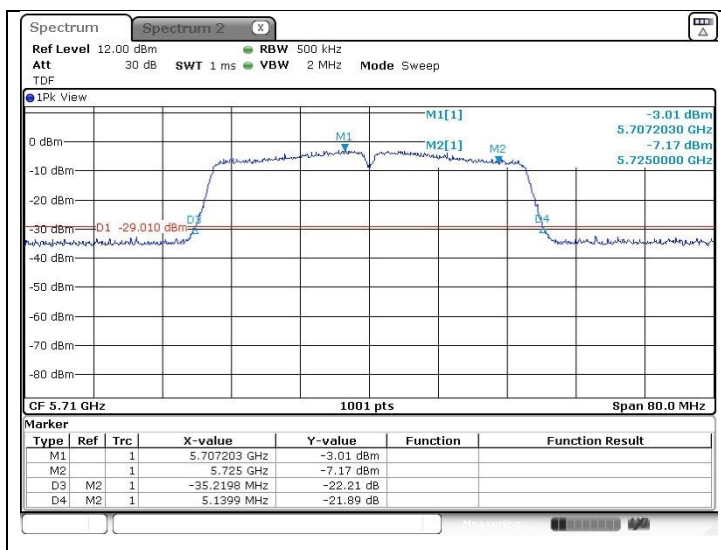
802.11ac_VHT20 (Band 2C)

High Channel
(5 720 MHz)



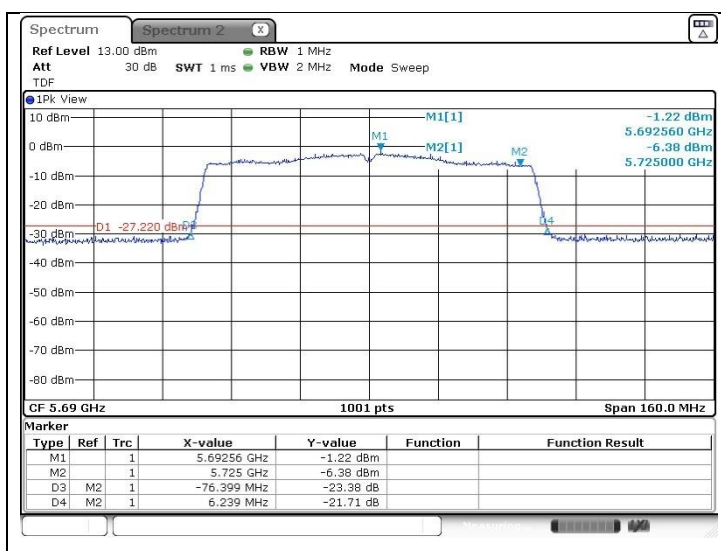
802.11n_HT40 (Band 2C)

High Channel
(5 710 MHz)



802.11ac_VHT80 (Band 2C)

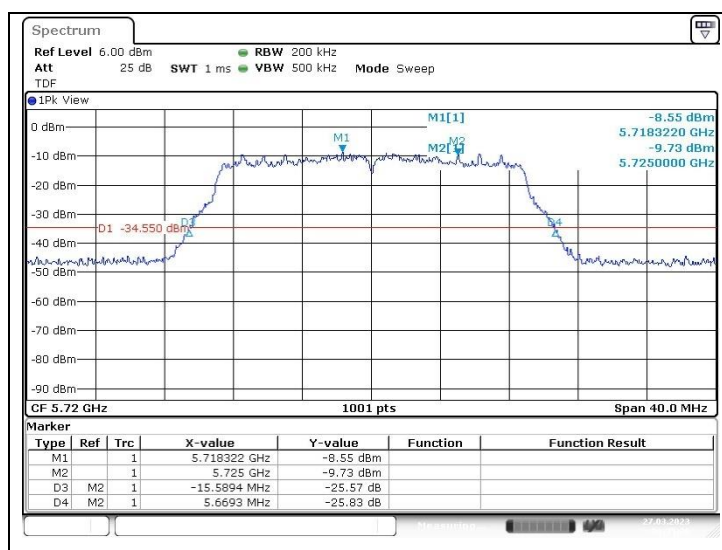
Middle Channel
(5 690 MHz)



MIMO_Core 0

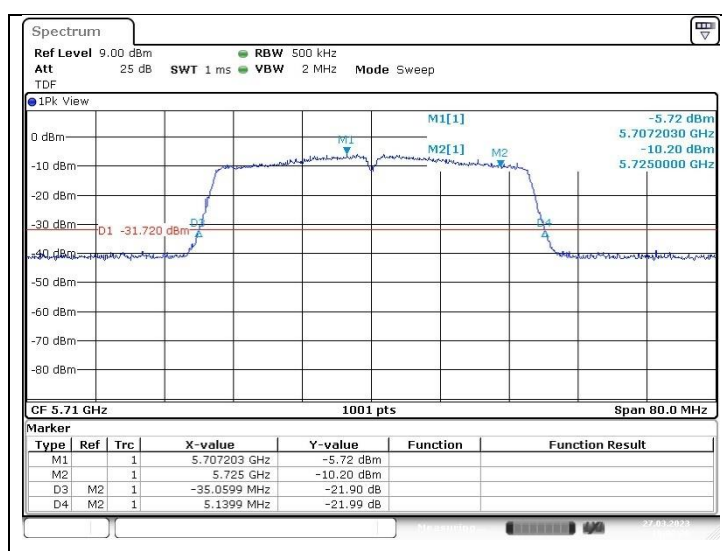
802.11ac_VHT20 (Band 2C)

High Channel
(5 720 MHz)



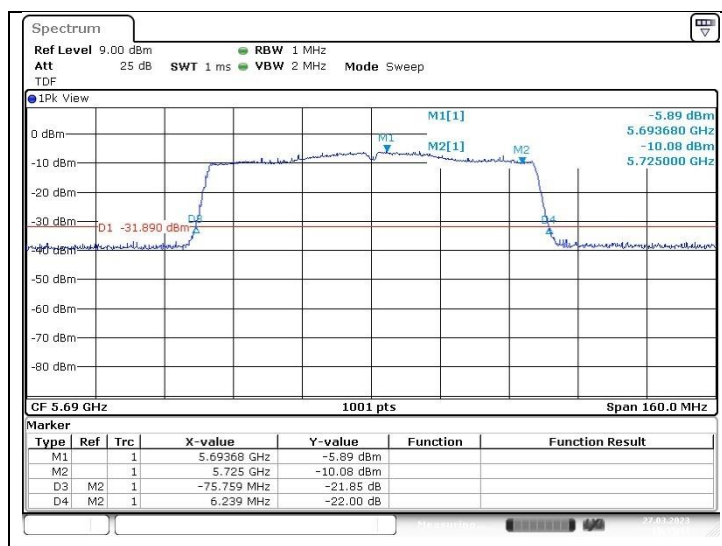
802.11ac_VHT40 (Band 2C)

High Channel
(5 710 MHz)



802.11ac_VHT80 (Band 2C)

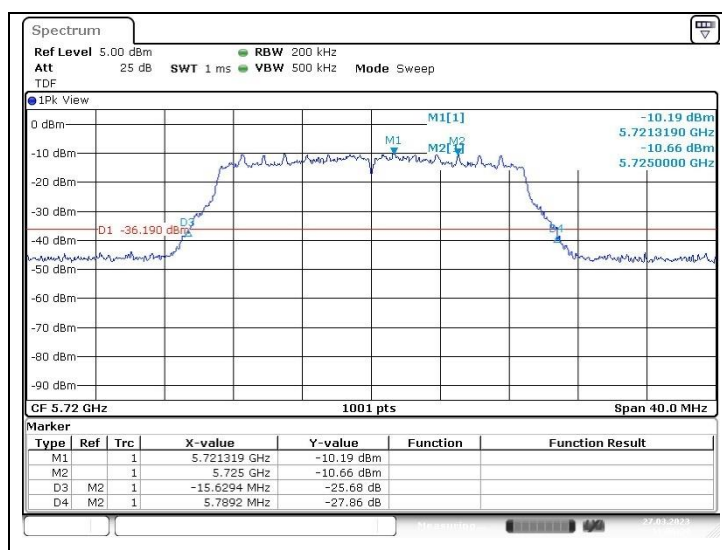
Middle Channel
(5 690 MHz)



MIMO_Core 1

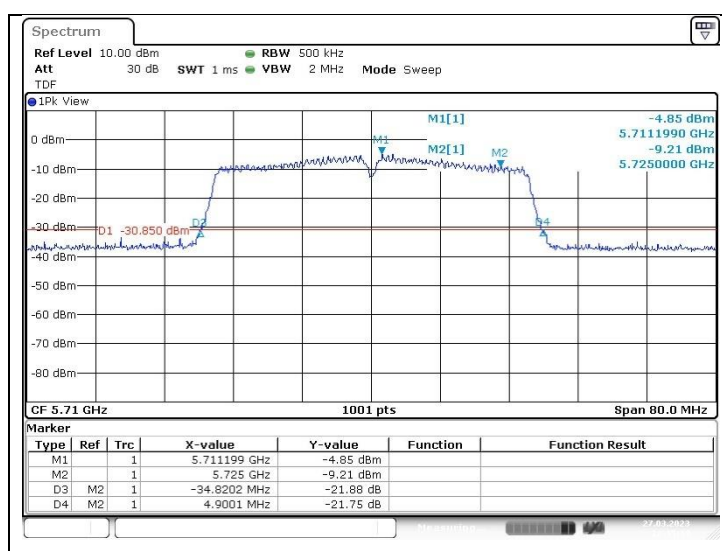
802.11ac_VHT20 (Band 2C)

High Channel
(5 720 MHz)



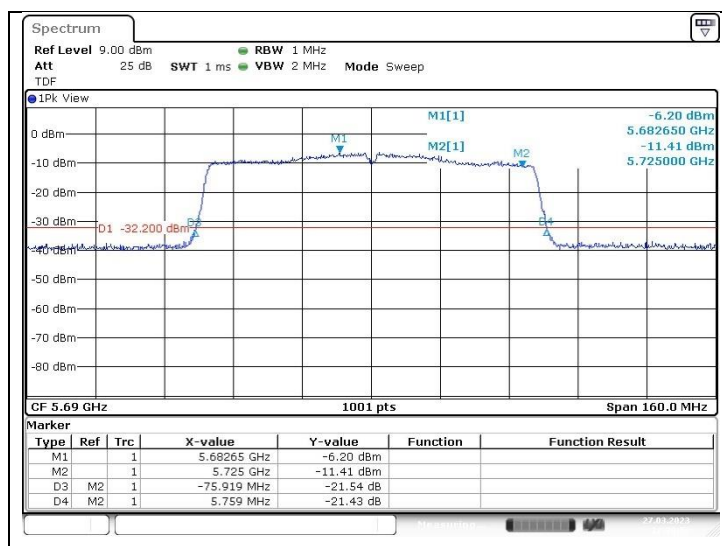
802.11ac_VHT40 (Band 2C)

High Channel
(5 710 MHz)



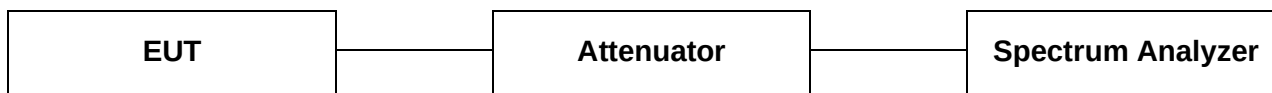
802.11ac_VHT80 (Band 2C)

Middle Channel
(5 690 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.

Remark;

In case of band crossing channels 138, 142 and 144, the measurement is complied with section III.A of KDB 789033 D02 General UNII Test Procedures New Rules v02r01.

4.4. Test Result

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

- SISO

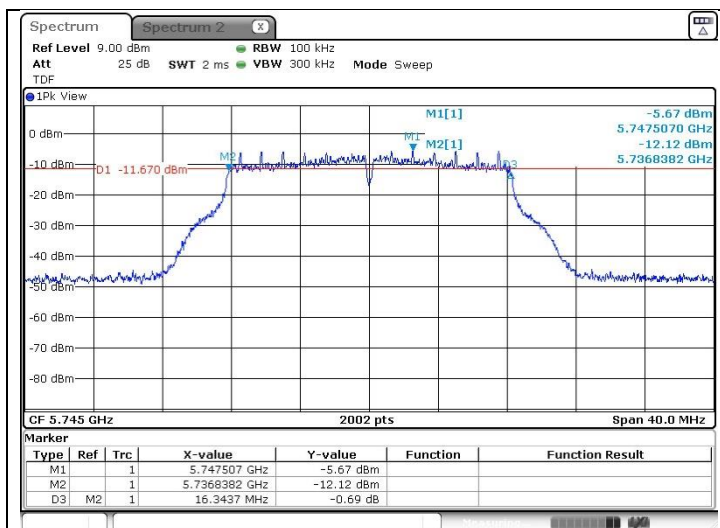
Band	Mode	Frequency (MHz)	Ch.	Data Rate (Mbps)	6 dB Bandwidth (MHz)		Minimum Bandwidth (kHz)
					Core 0	Core 1	
U-NII 3	11a	5 745	149	6 Mbps	16.344	16.344	500
		5 785	157		16.324	16.344	
		5 825	165		16.344	16.344	
	11ac_VHT20	5 745	149	MCS0	17.582	17.602	
		5 785	157		17.582	17.582	
		5 825	165		17.582	17.582	
	11n_HT40	5 755	151	MCS0	35.525	35.724	
		5 795	159		35.844	35.724	
	11ac_VHT80	5 775	155	MCS0	75.285	75.684	
U-NII 3 (Band- crossing channels)	11a	5 720	144	6 Mbps	3.182	3.182	
	11ac_VHT20	5 720	144	MCS0	3.801	3.801	
	11n_HT40	5 710	142	MCS0	2.962	2.922	
	11ac_VHT80	5 690	138	MCS0	2.842	2.682	

- MIMO

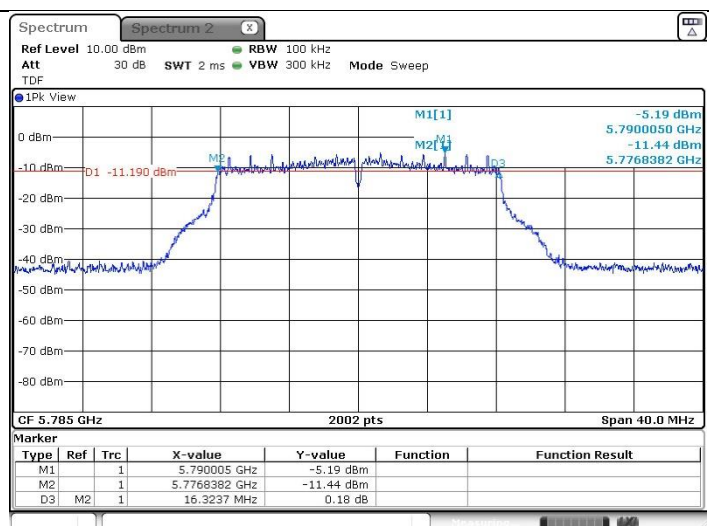
Band	Mode	Frequency (MHz)	Ch.	Data Rate (Mbps)	6 dB Bandwidth (MHz)		Minimum Bandwidth (kHz)
					Core 0	Core 1	
U-NII 3	11ac_VHT20	5 745	149	MCS0	17.582	17.602	500
		5 785	157		17.582	17.602	
		5 825	165		17.582	17.602	
	11ac_VHT40	5 755	151	MCS0	35.445	35.804	
		5 795	159		35.644	36.364	
	11ac_VHT80	5 775	155	MCS0	75.285	75.365	
U-NII 3 (Band- crossing channels)	11ac_VHT20	5 720	144	MCS0	3.781	3.801	
	11ac_VHT40	5 710	142	MCS0	2.842	2.642	
	11ac_VHT80	5 690	138	MCS0	2.762	2.682	

- Test plots
SISO_Core 0
802.11a (Band 3)

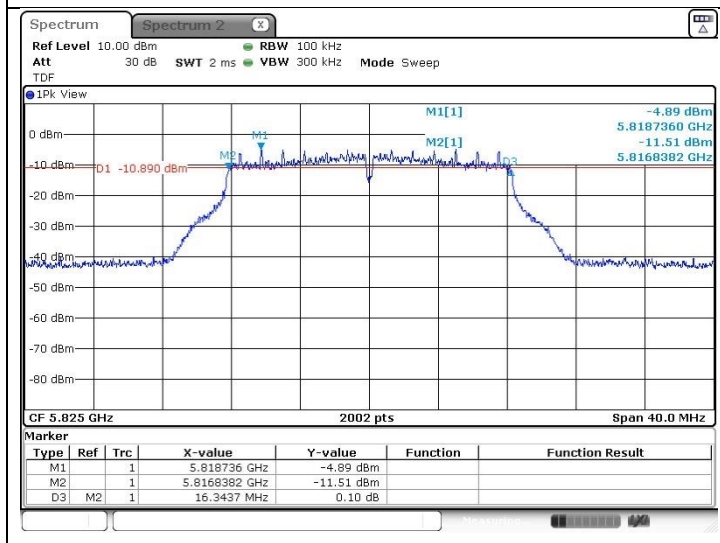
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

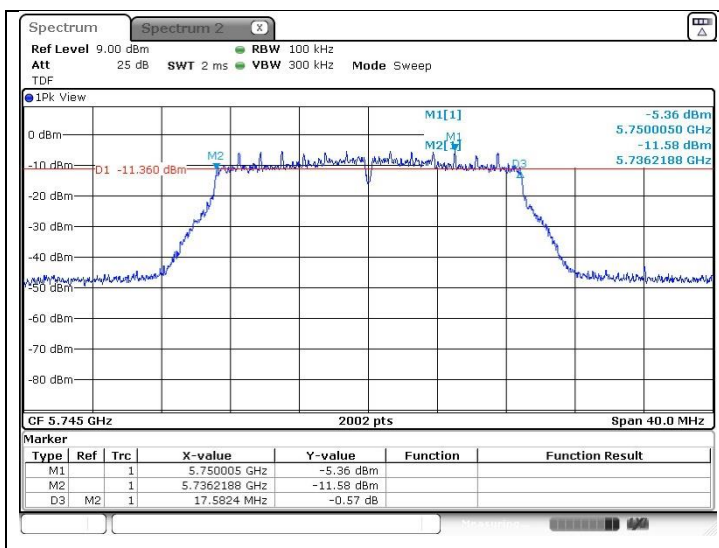


High Channel
(5 825 MHz)

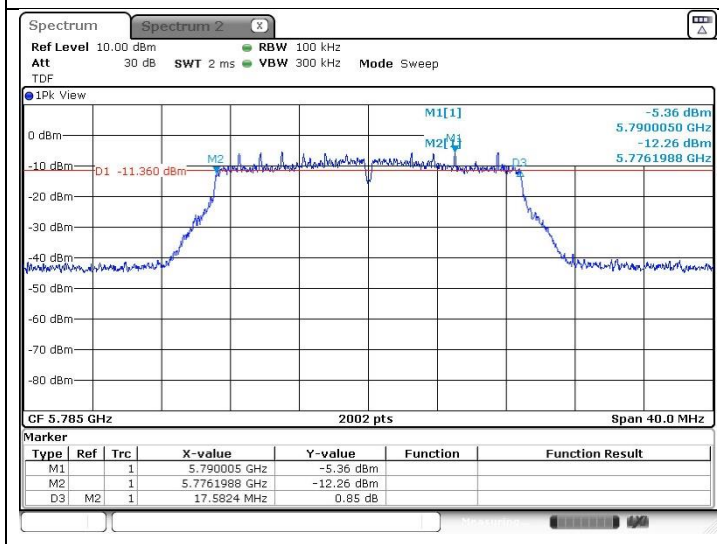


802.11ac_VHT20 (Band 3)

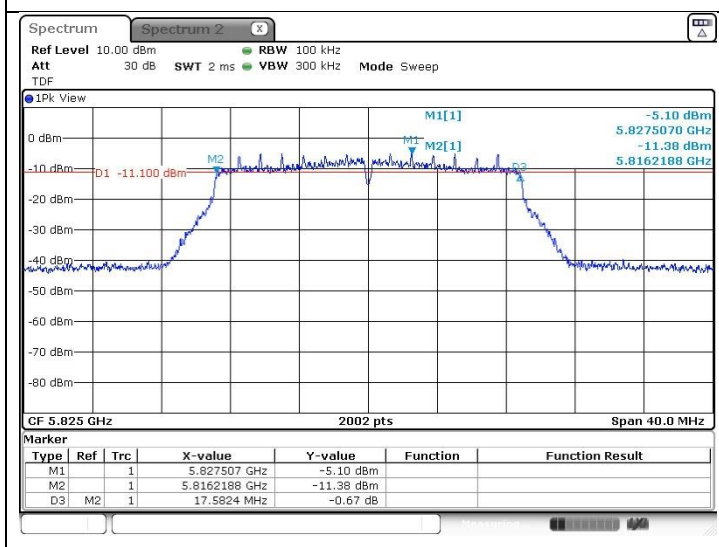
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

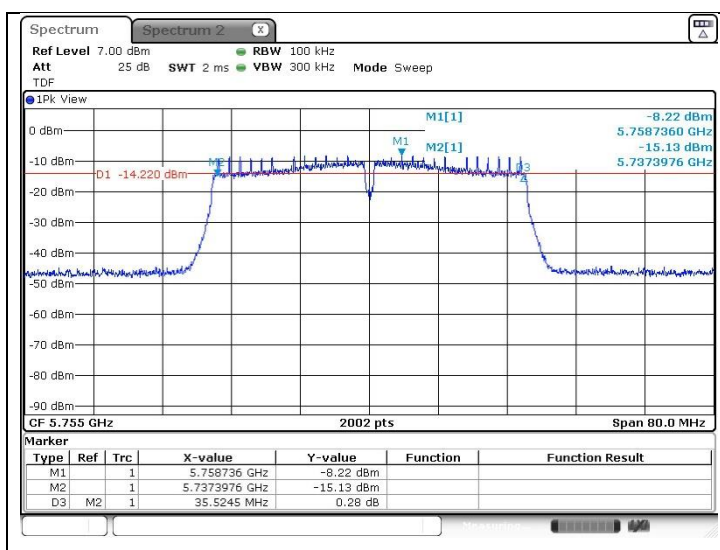


High Channel
(5 825 MHz)

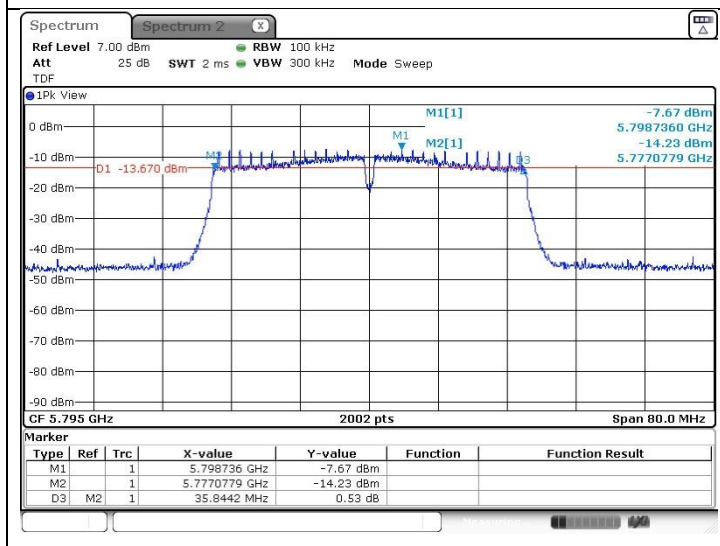


802.11n_HT40 (Band 3)

Low Channel
(5 755 MHz)

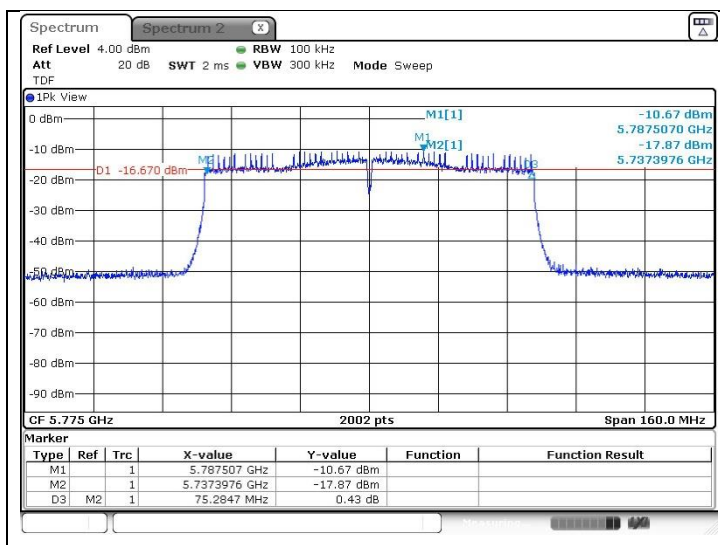


High Channel
(5 795 MHz)



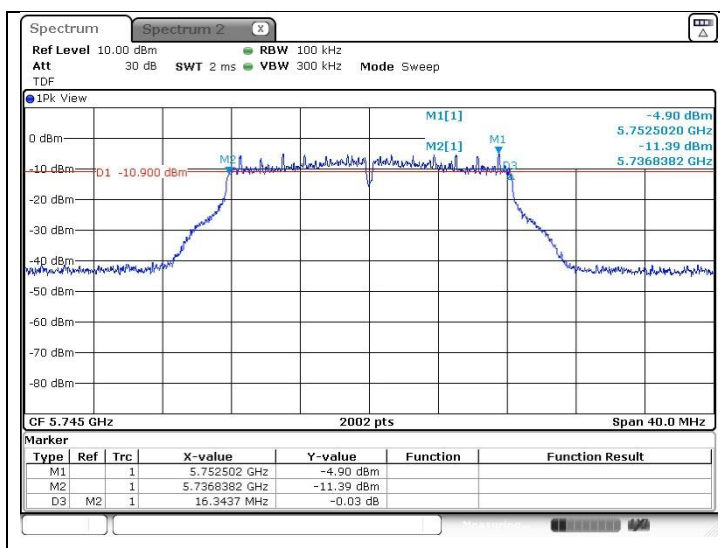
802.11ac_VHT80 (Band 3)

Middle Channel
(5 775 MHz)

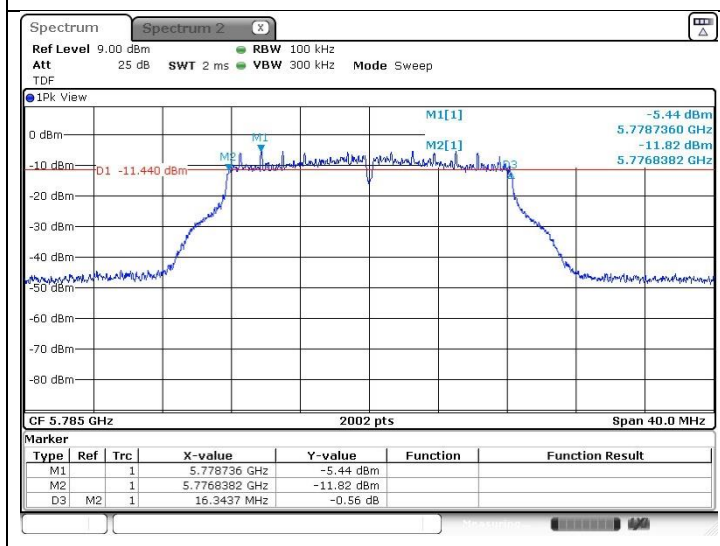


SISO_Core 1 802.11a (Band 3)

Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)



High Channel
(5 825 MHz)

