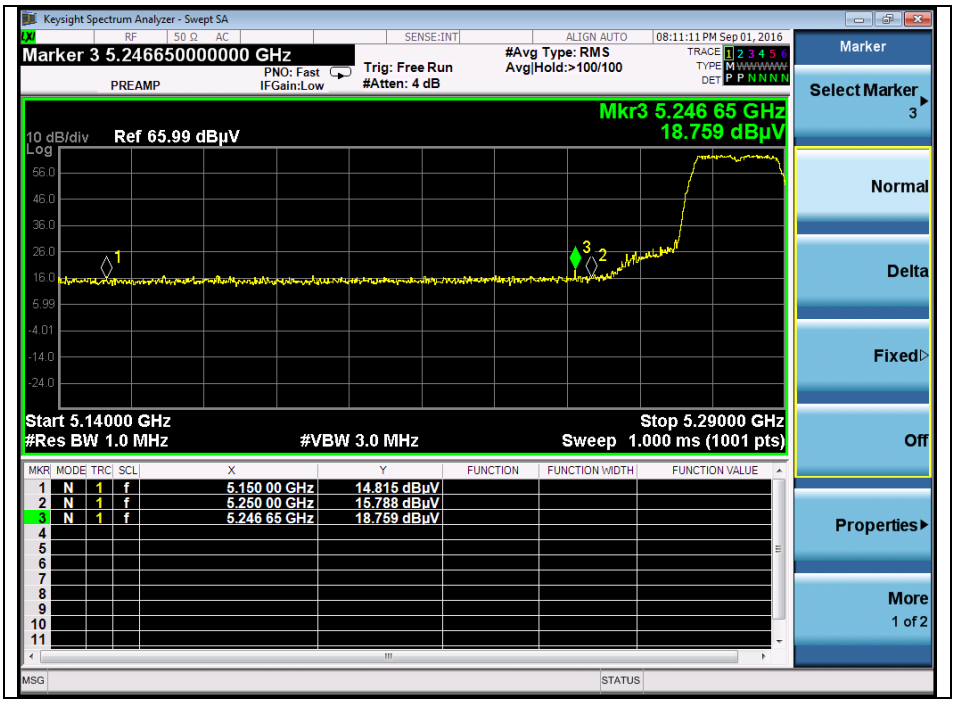
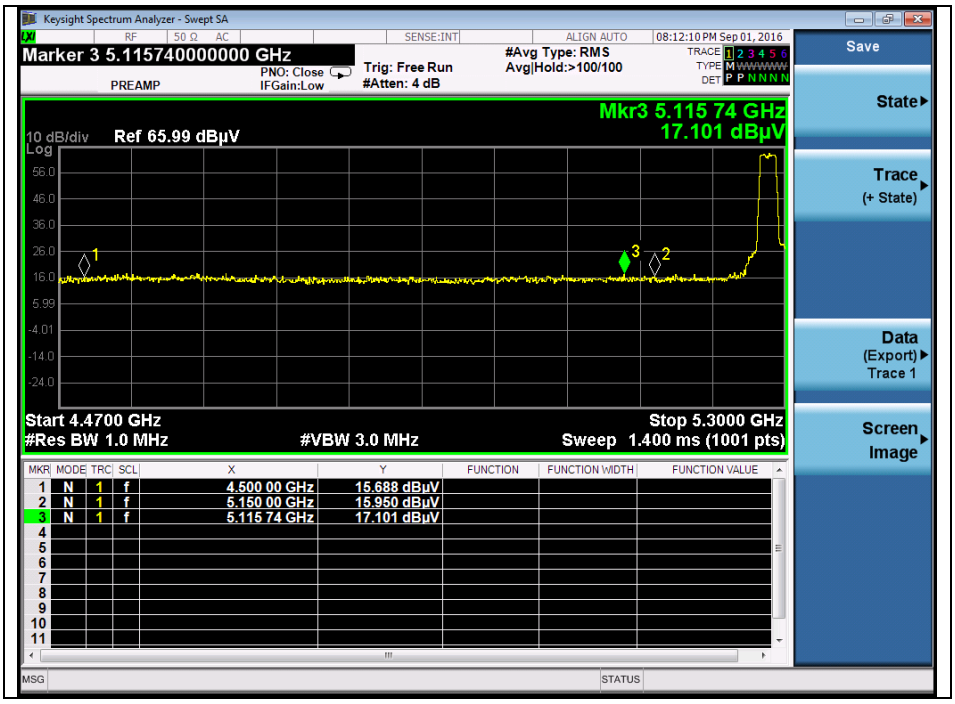
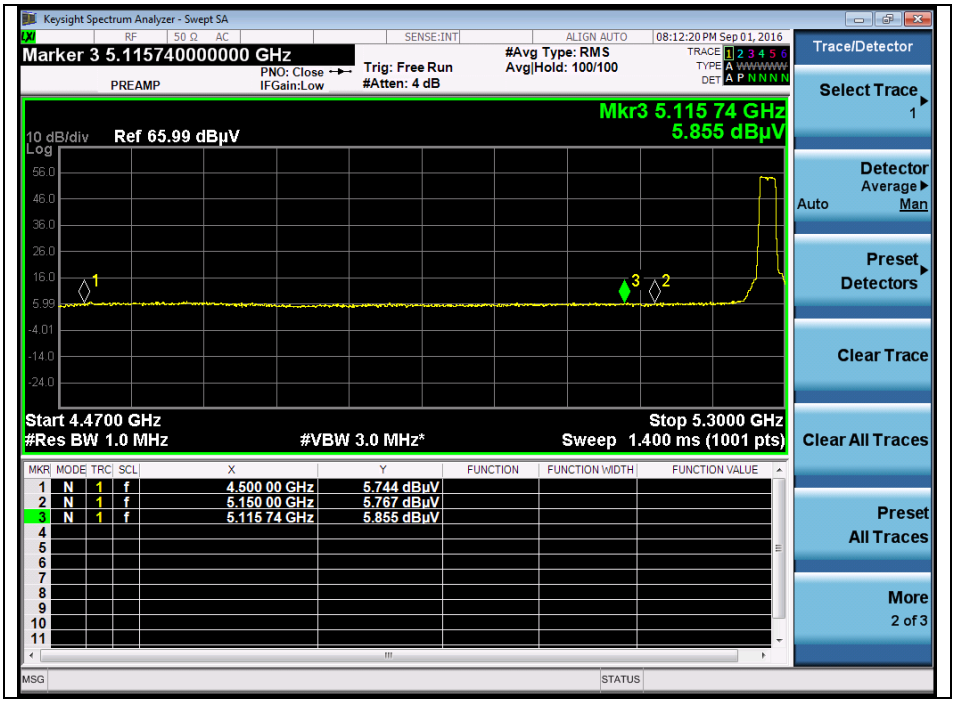
OFDM : 802.11n_HT20(MCS0)

Low channel band edge (Peak) - Band 2A



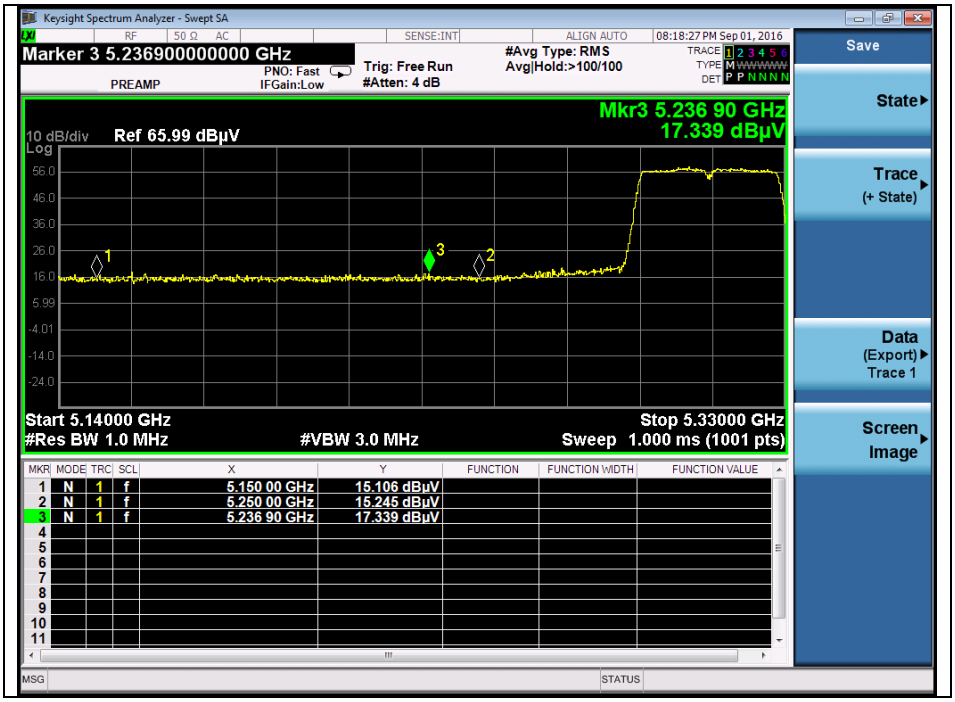


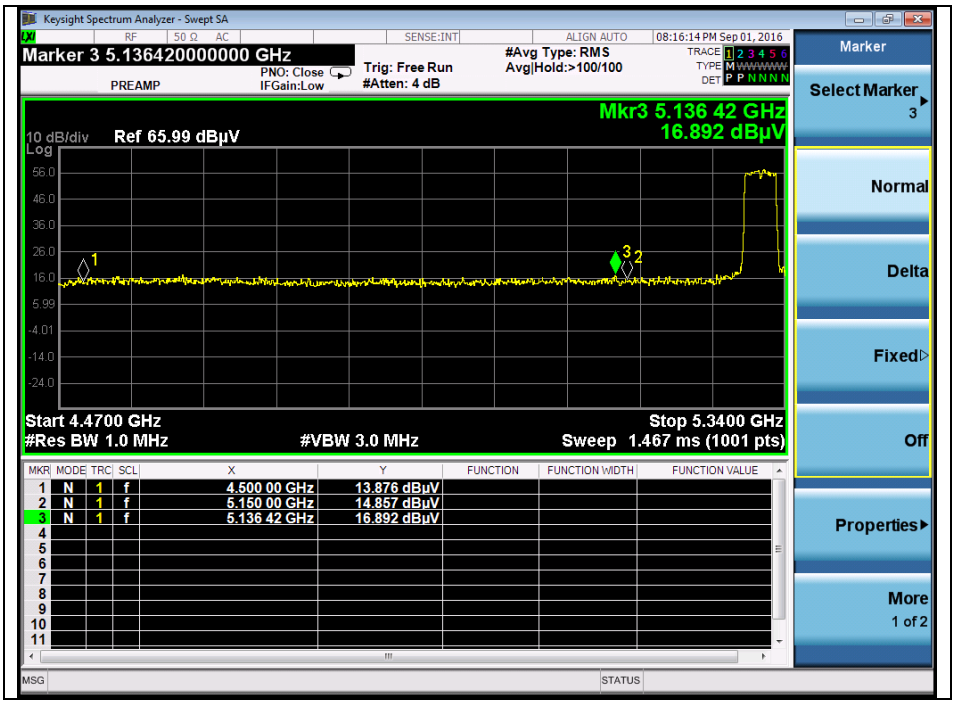
Low channel band edge (Average) - Band 2A



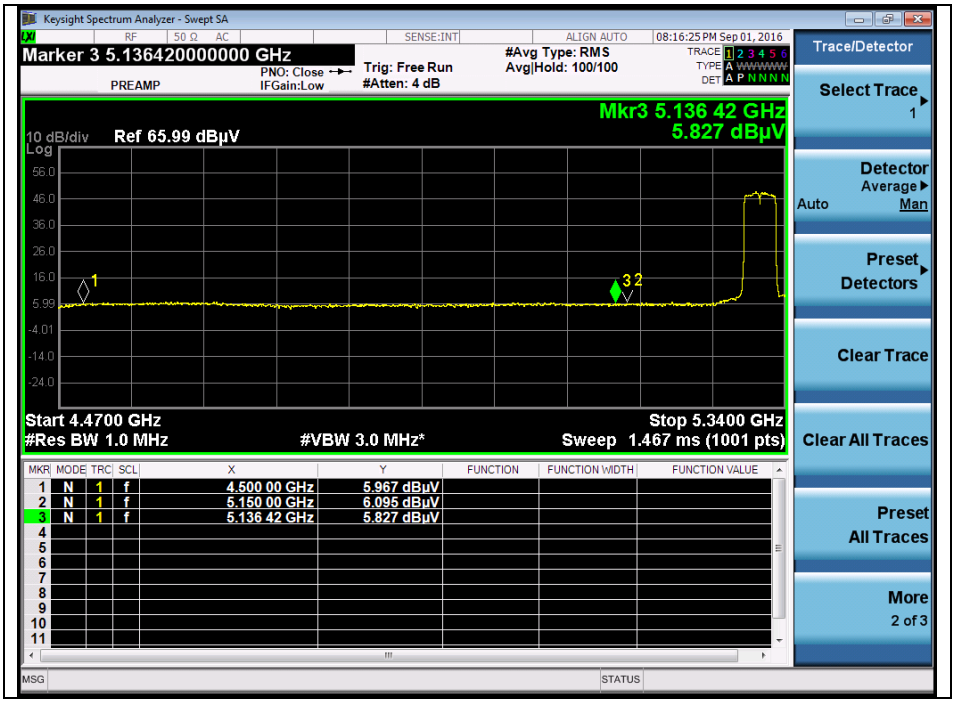
OFDM : 802.11n_HT40(MCS0)

Low channel band edge (Peak) - Band 2A



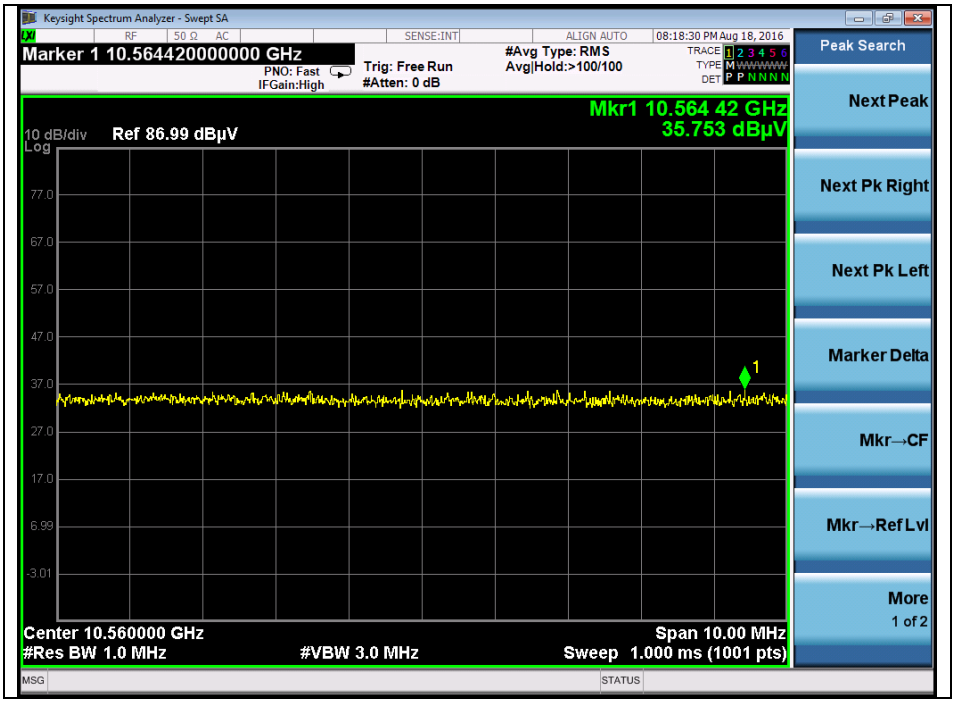


Low channel band edge (Average) - Band 2A



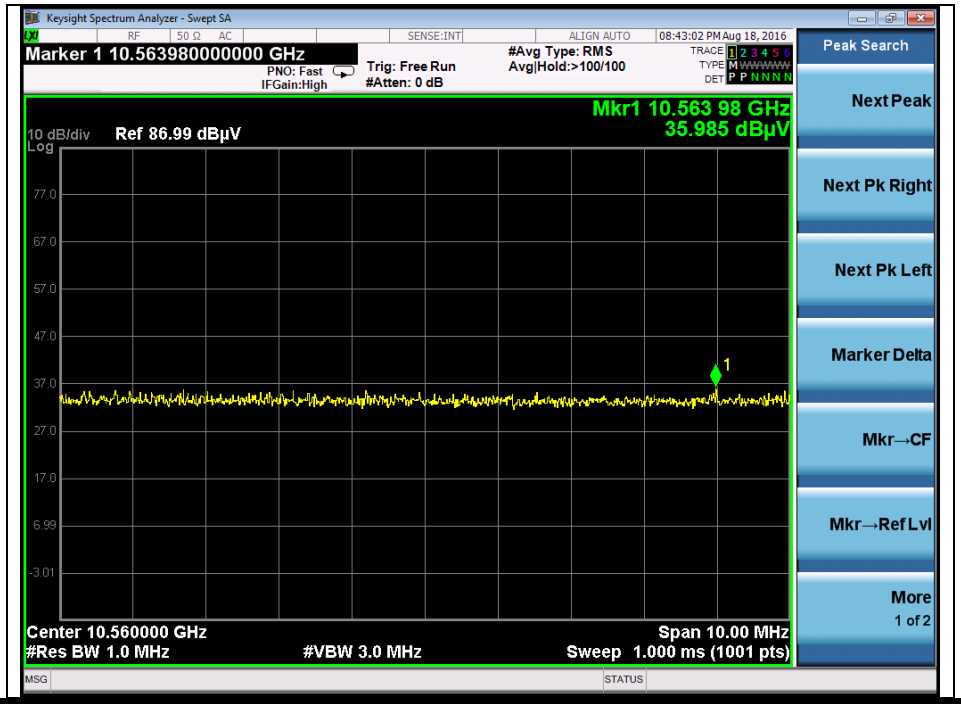
OFDM : 802.11a(6 Mbps)

Low channel 2nd harmonic (Peak) - Band 2A



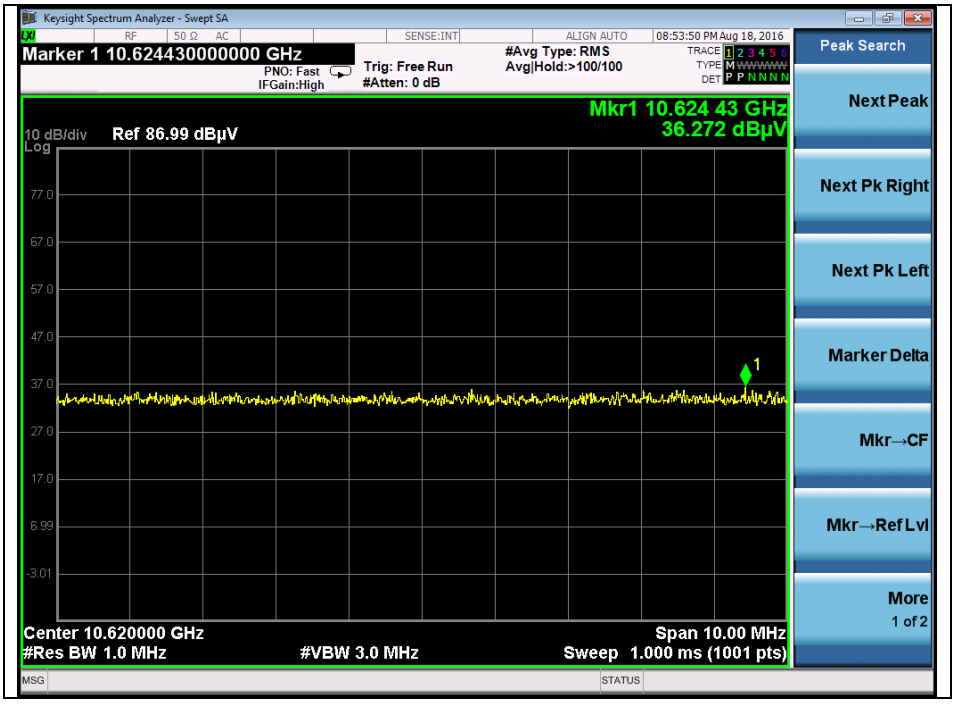
OFDM : 802.11n_HT20(MCS0)

Low channel 2nd harmonic (Peak) - Band 2A

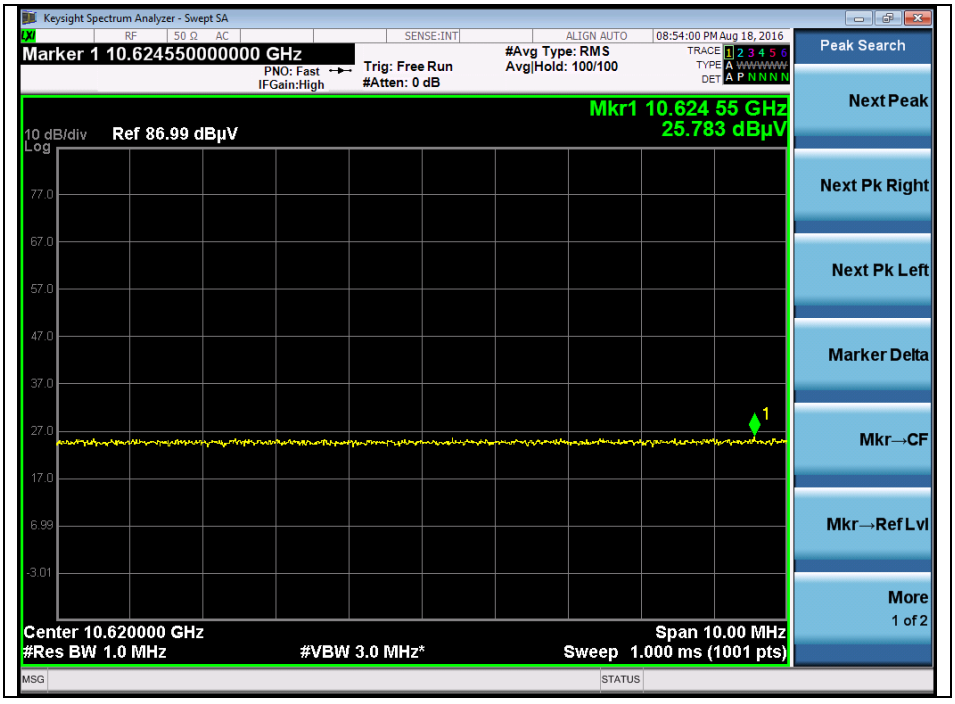


OFDM : 802.11n_HT40(MCS0)

Low channel 2nd harmonic (Peak) - Band 2A

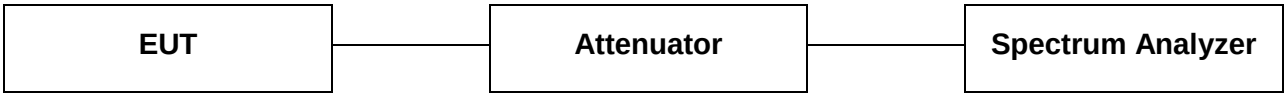


Low channel 2nd harmonic (Average) - Band 2A



3. 99 % Bandwidth & 26 dB Bandwidth

3.1. Test setup



3.2. Limit

None; for reporting purpose only.

3.3. Test procedure

All data rates and modes were investigated for this test. The full data for the worst case data rate are reported in this section.

3.3.1. 99 % Bandwidth

The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
The resolution bandwidth (RBW) shall be in the range of 1 % to 5 % of the occupied bandwidth (OBW) and video bandwidth (VBW) shall be approximately 3 x RBW. Detector = sampling, Trace mode = max hold.
The trace data points are recovered and are directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5 % of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency).
This frequency is then recorded.

In the result,
- DFS requirements are not applicable in the 5 150 ㎒ - 5 250 ㎒.

3.3.2. 26 dB Bandwidth

1. This measurement settings are specified in section C.1 of KDB 789033 D02 v01r03.
2. Set RBW : approximately 1 % of the emission bandwidth.
3. Set the VBW > RBW.
4. Detector = Peak.
5. Trace mode = max hold.
6. Measure the maximum width of the emission that is 26 dB down from the maximum of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

Remark;
In case of band crossing channels 138, 142 and 144, the measurement is complied with section D of KDB 644545 D03 v01.

3.4. Test result

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

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	99 % Bandwidth (㎒)	26 ㏈ Bandwidth (㎒)
11a	U-NII 1	5 180	36	6	17.192	21.499
		5 200	40	6	17.192	21.499
		5 240	48	6	17.077	21.499
	U-NII 2A	5 260	52	6	17.135	21.459
		5 280	56	6	17.135	21.538
		5 300	60	6	17.250	21.499
		5 320	64	6	17.135	21.538
	U-NII 2C	5 500	100	6	17.192	21.499
		5 580	116	6	17.077	21.578
		5 720	140	6	17.192	21.658
	U-NII 3	5 745	149	6	17.135	21.658
		5 785	157	6	17.192	21.658
		5 825	165	6	17.135	21.618

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	99 % Bandwidth (㎒)	26 ㏈ Bandwidth (㎒)
11n_HT20	U-NII 1	5 180	36	MCS0	18.119	21.738
		5 200	40	MCS0	18.234	21.818
		5 240	48	MCS0	18.061	21.618
	U-NII 2A	5 260	52	MCS0	18.061	21.698
		5 280	56	MCS0	18.061	21.618
		5 300	60	MCS0	18.234	21.538
		5 320	64	MCS0	18.177	21.778
	U-NII 2C	5 500	100	MCS0	18.177	21.738
		5 580	116	MCS0	18.119	21.698
		5 720	140	MCS0	18.177	21.978
	U-NII 3	5 745	149	MCS0	18.177	21.818
		5 785	157	MCS0	18.177	21.618
		5 825	165	MCS0	18.119	21.738

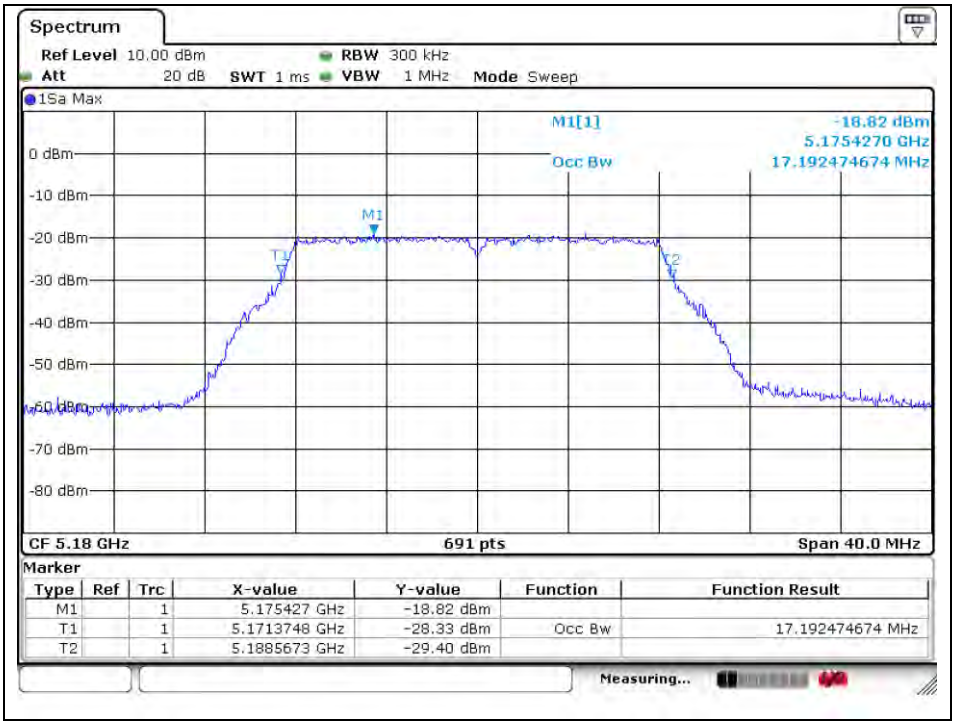
Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	99 % Bandwidth (㎒)	26 ㏈ Bandwidth (㎒)
11n_HT40	U-NII 1	5 190	38	MCS0	36.700	40.599
		5 230	46	MCS0	36.585	40.599
	U-NII 2A	5 270	54	MCS0	36.585	40.599
		5 310	62	MCS0	36.585	40.679
	U-NII 2C	5 510	102	MCS0	36.585	40.599
		5 550	110	MCS0	36.700	40.519
		5 710	134	MCS0	36.700	40.440
	U-NII 3	5 755	151	MCS0	36.469	40.599
		5 795	159	MCS0	36.585	40.440
Mode	**Band**	**Frequency (㎒)**	**Ch.**	**Data Rate (Mbps)**	**99 % Bandwidth (㎒)**	**26 ㏈ Bandwidth (㎒)**
11ac_VHT80	U-NII 1	5 210	42	MCS0	75.948	82.480
	U-NII 2A	5 290	58	MCS0	75.948	82.800
	U-NII 2C	5 530	106	MCS0	75.948	82.480
		5 690	138	MCS0	75.716	82.800
	U-NII 3	5 775	155	MCS0	75.948	82.480

Band	Mode	Frequency (㎒)	Ch.	Data Rate (Mbps)	26 ㏈ Bandwidth (㎒)
U-NII 2C (Band-crossing channel)	11a	5 720	144	6	15.669
	11n_HT20	5 720	144	MCS0	15.869
	11n_HT40	5 710	142	MCS0	35.220
	11ac_VHT80	5 690	138	MCS0	76.720

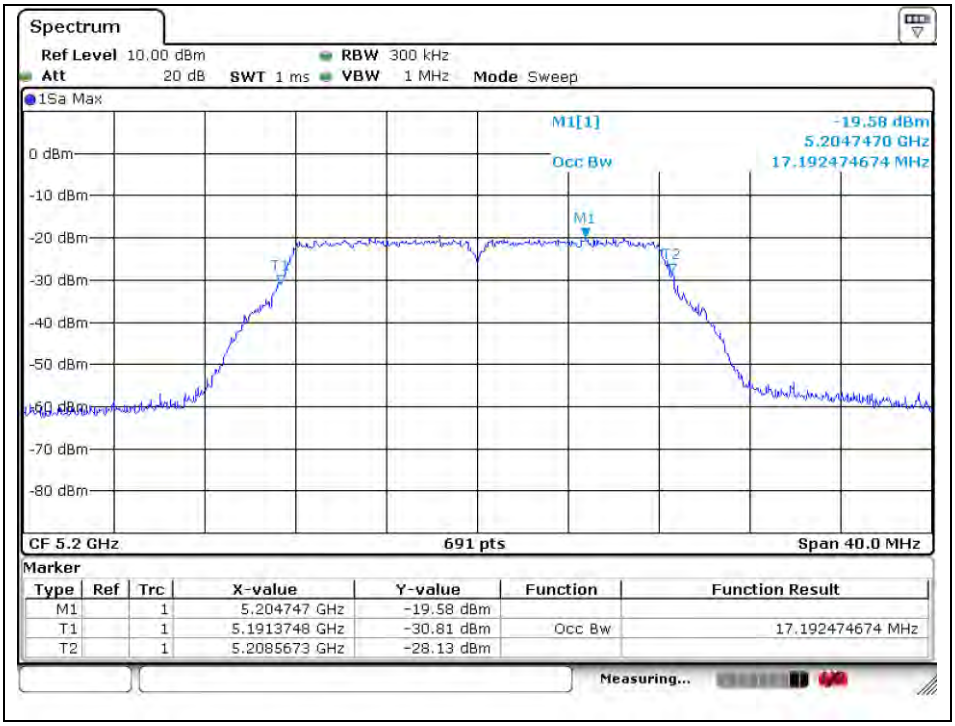
99 % Bandwidth

802.11a (Band 1)

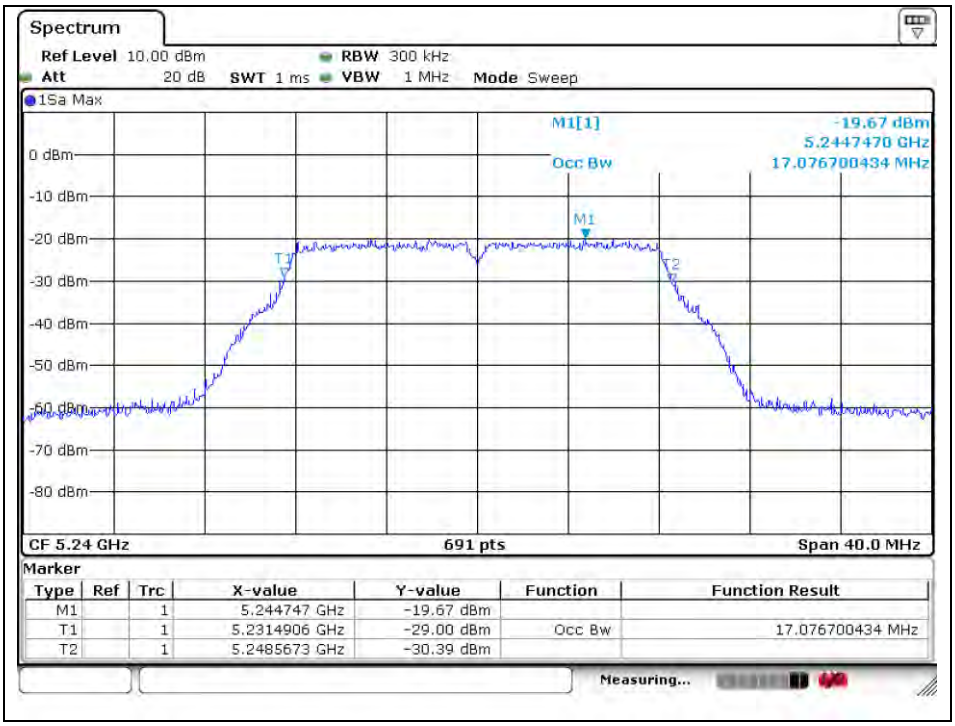
Low channel (5 180 ㎒)



Middle channel (5 200 ㎒)

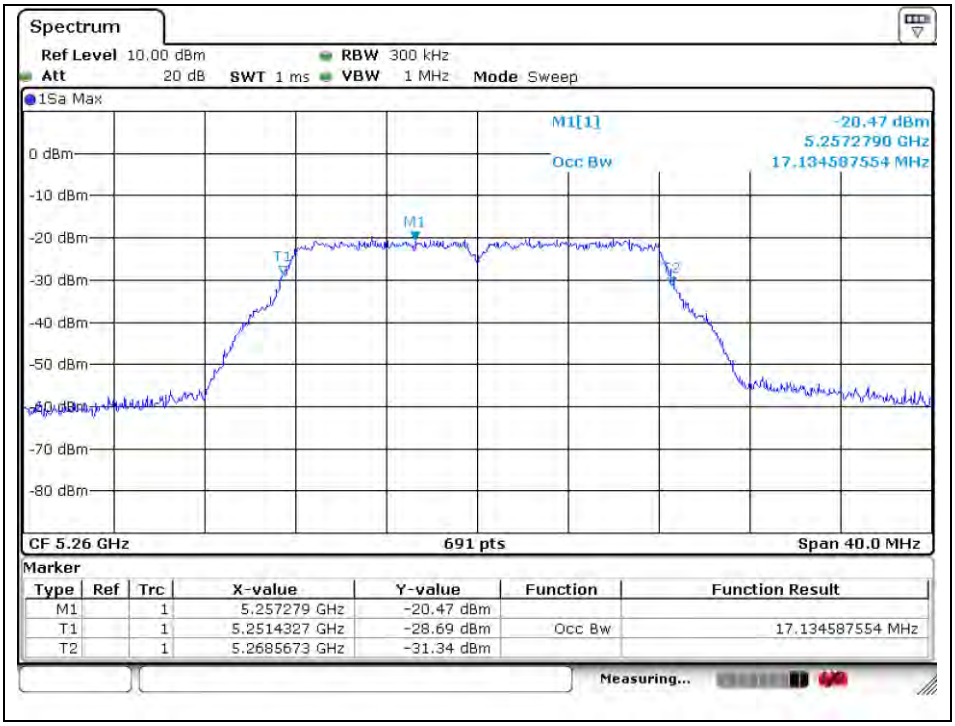


High channel (5 240 ㎒)

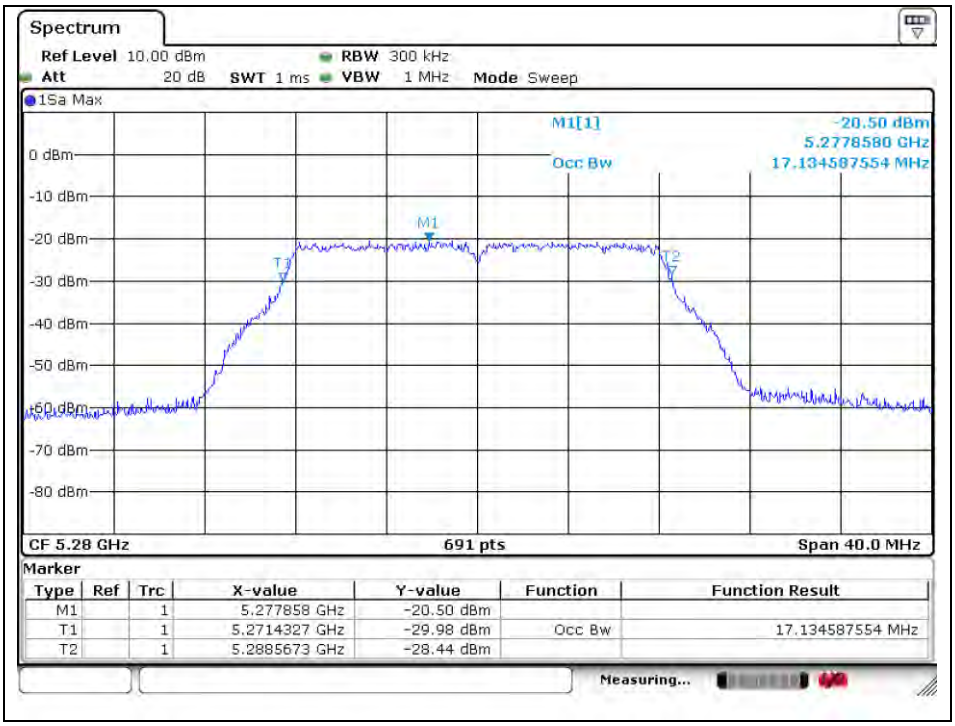


802.11a (Band 2A)

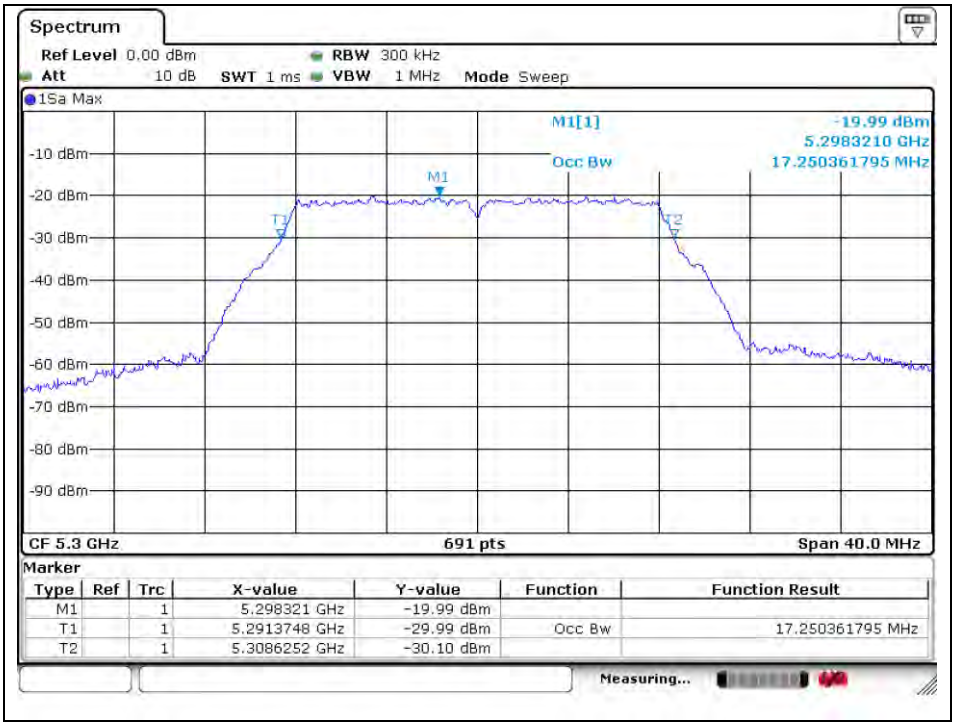
Low channel (5 260 ㎒)



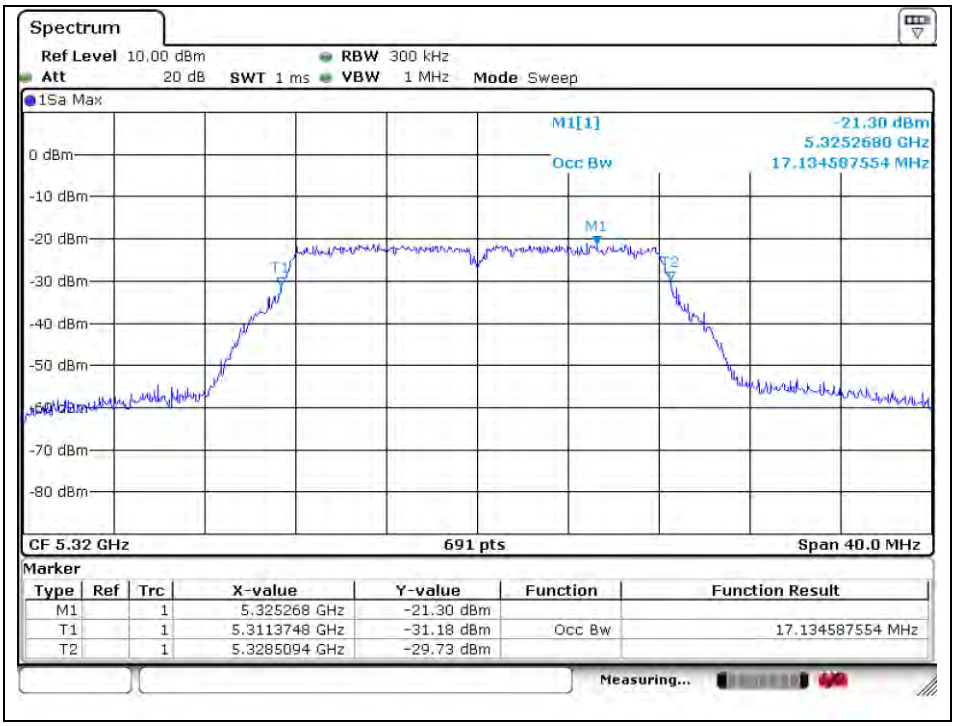
Low channel (5 280 ㎒)



Middle channel (5 300 ㎒)

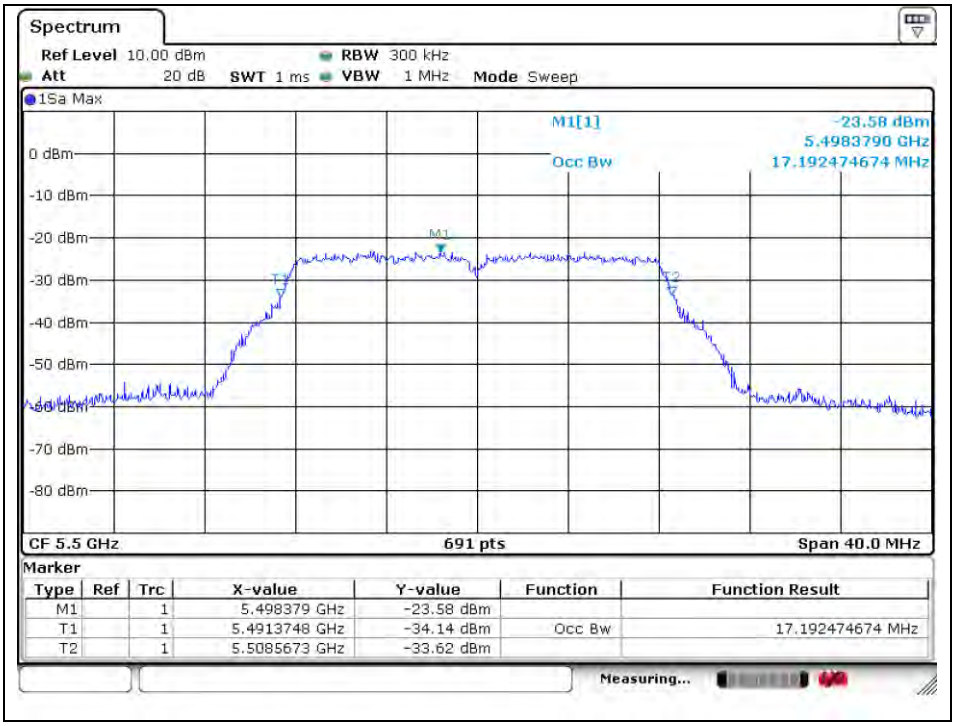


High channel (5 320 ㎒)

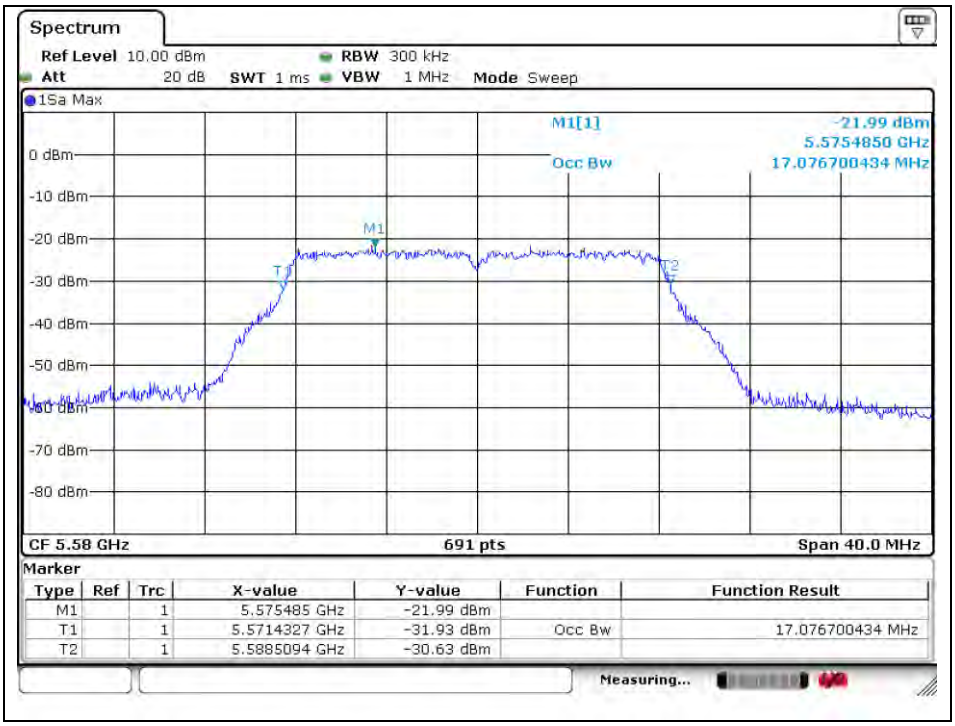


802.11a (Band 2C)

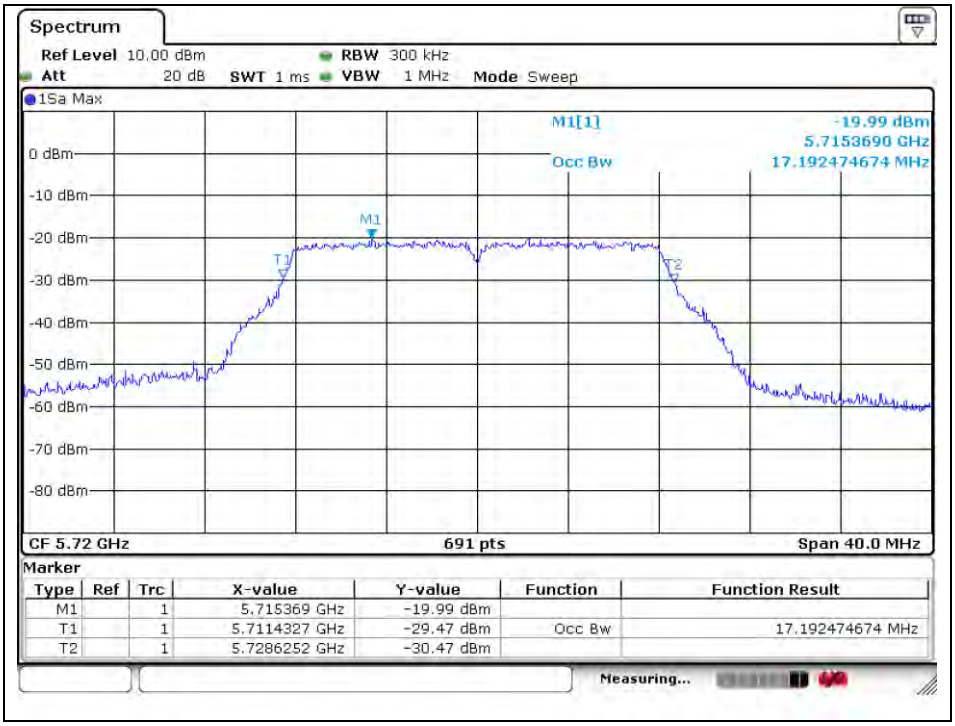
Low channel (5 500 ㎒)



Middle channel (5 580 ㎒)

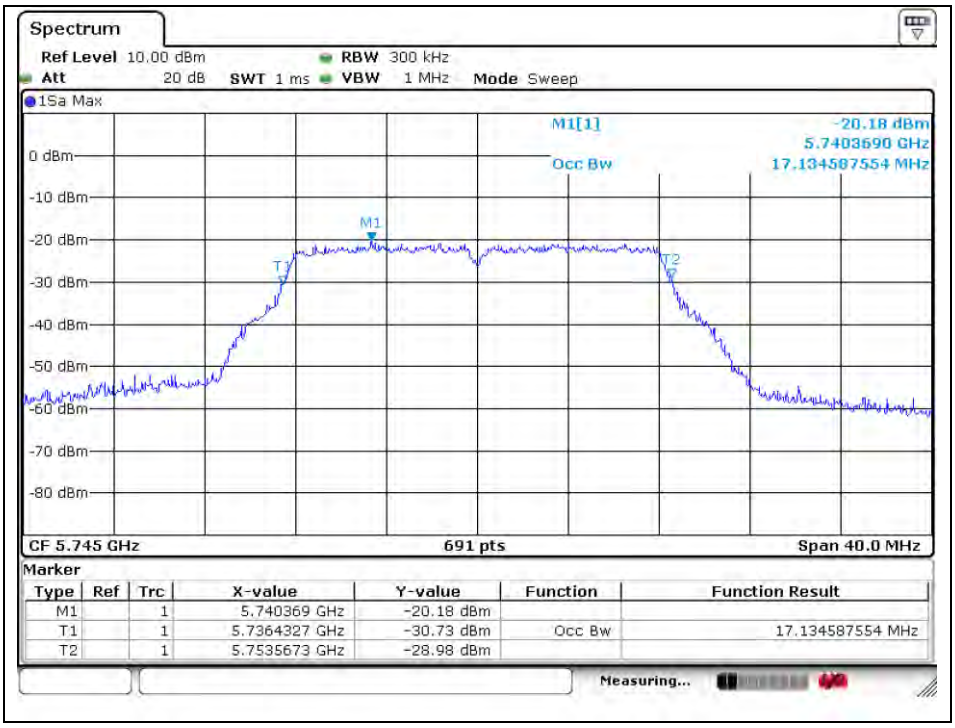


High channel (5 720 ㎒)

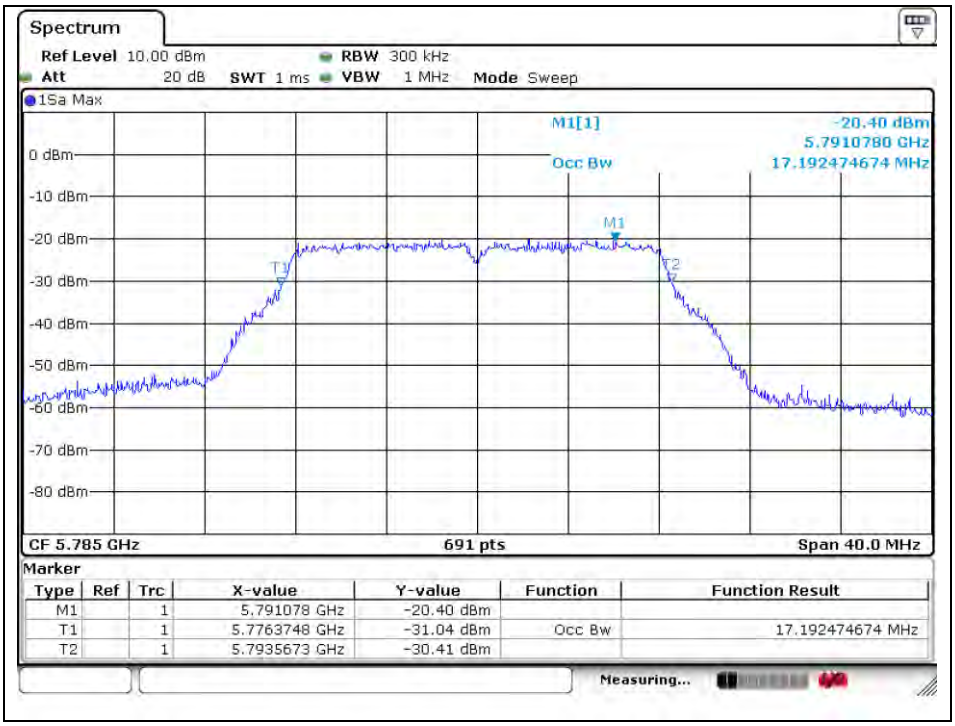


802.11a (Band 3)

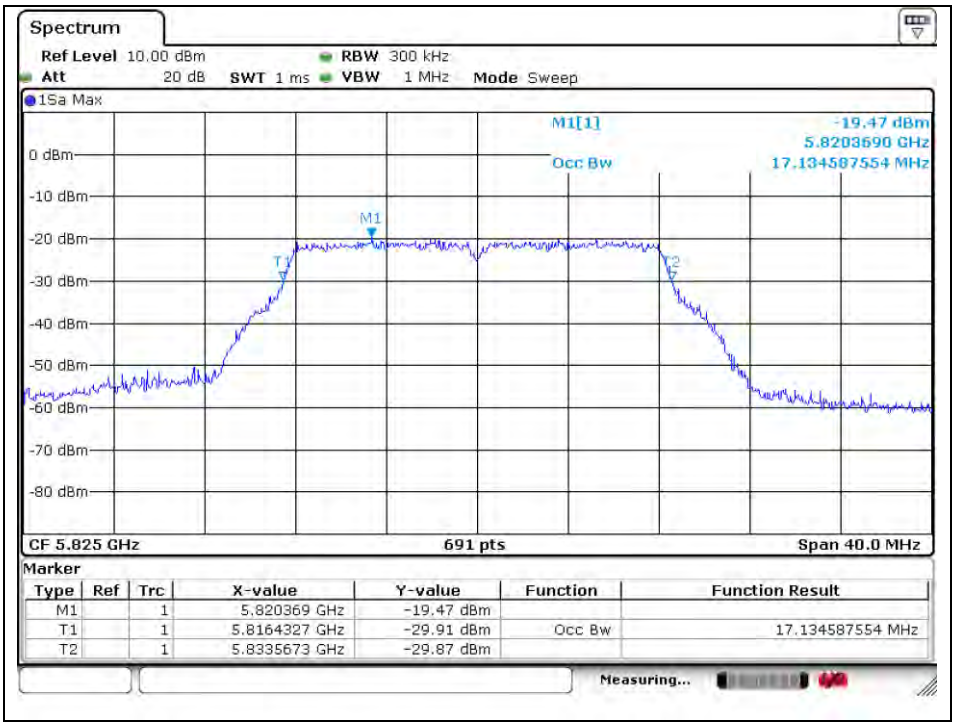
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

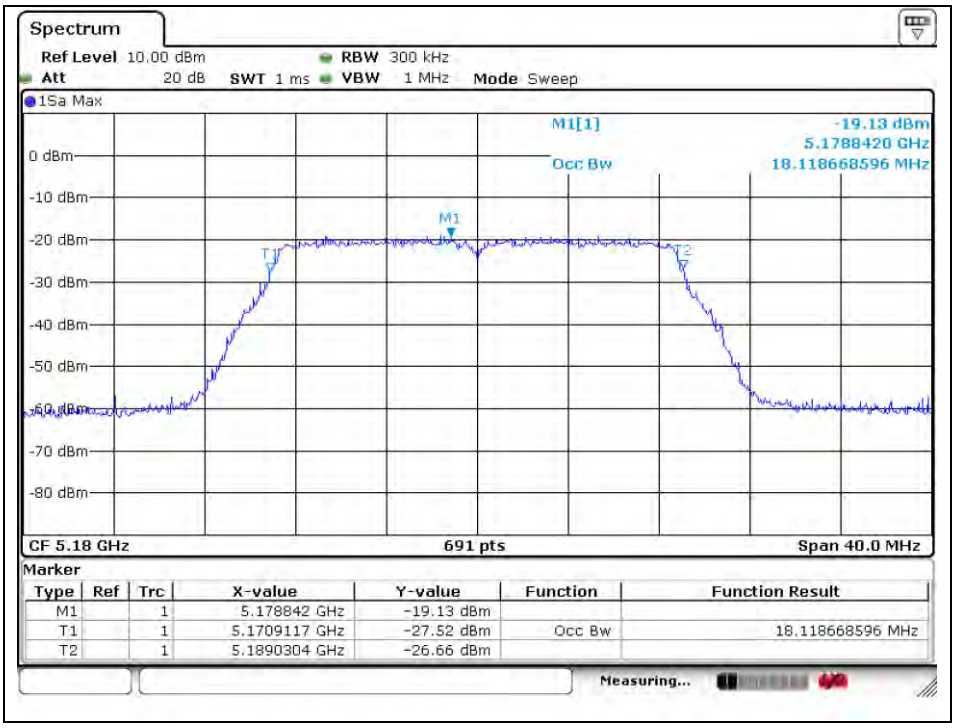


High channel (5 825 ㎒)

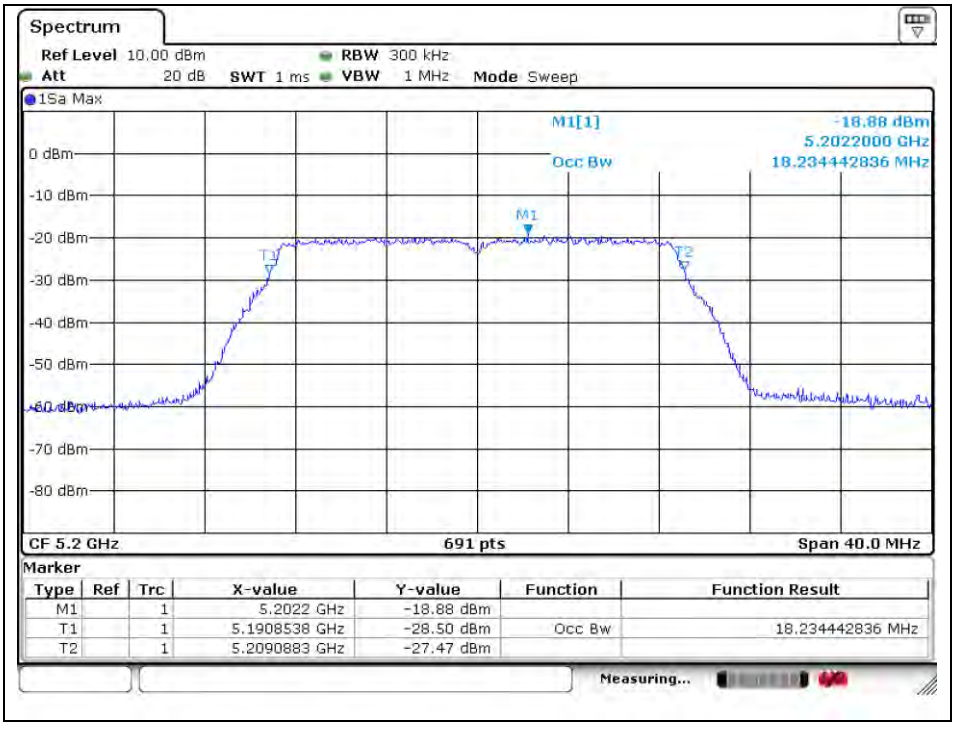


802.11n_HT20 (Band 1)

Low channel (5 180 ㎒)



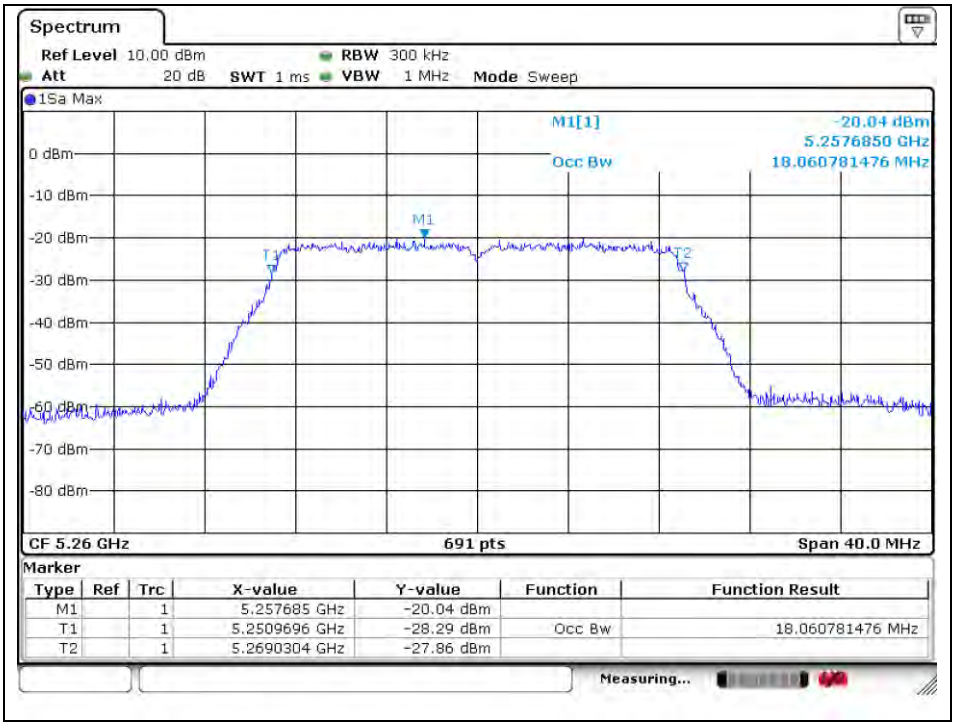
Middle channel (5 200 ㎒)



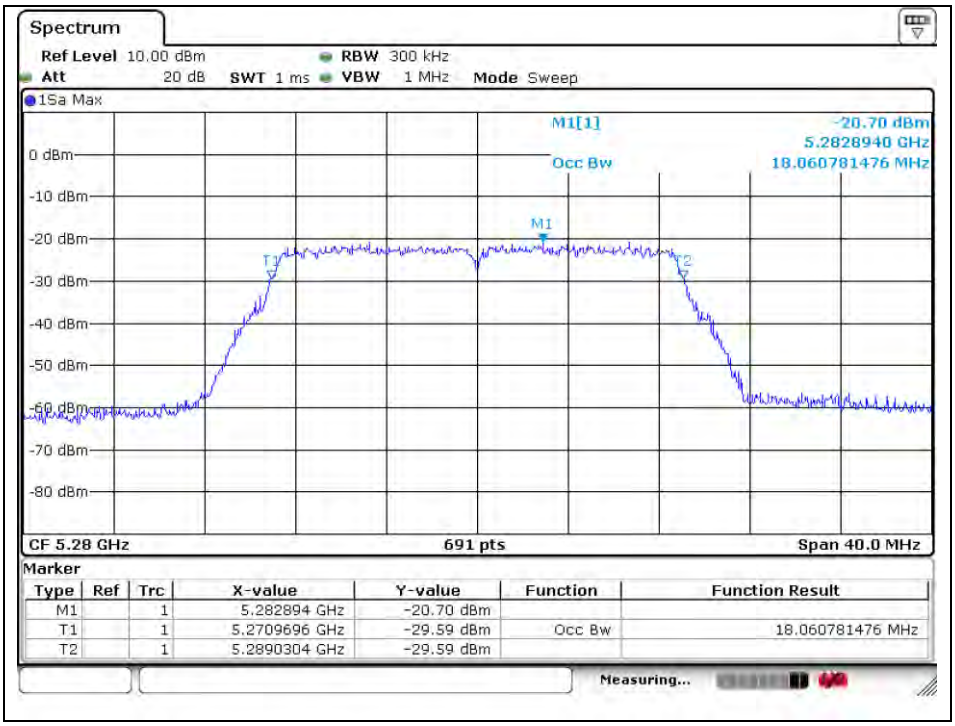
High channel (5 240 ㎒)

802.11n_HT20 (Band 2A)

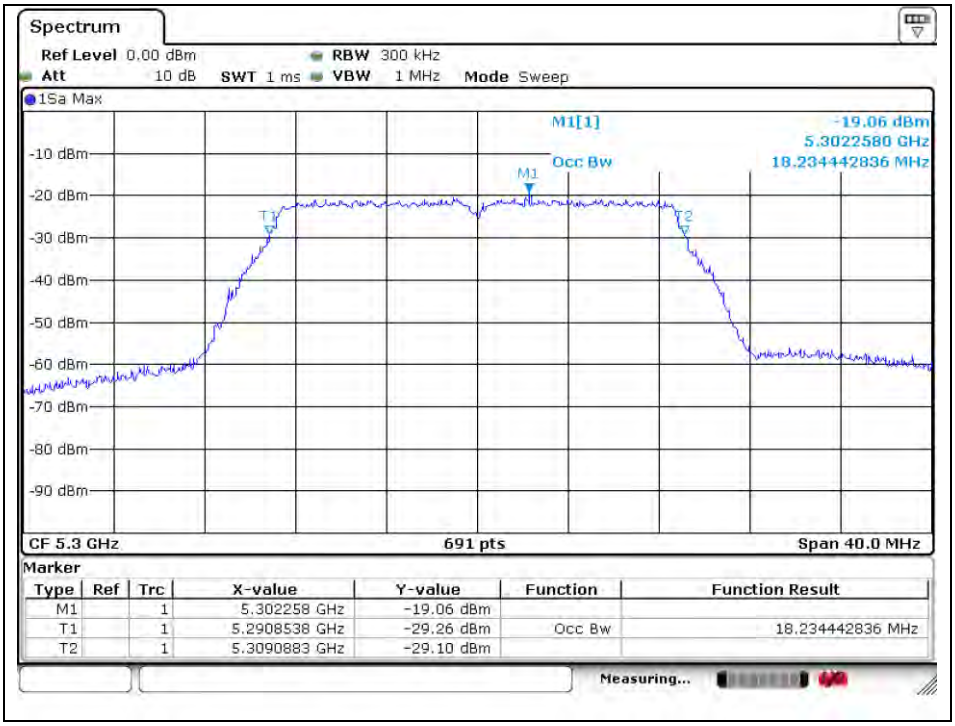
Low channel (5 260 ㎒)



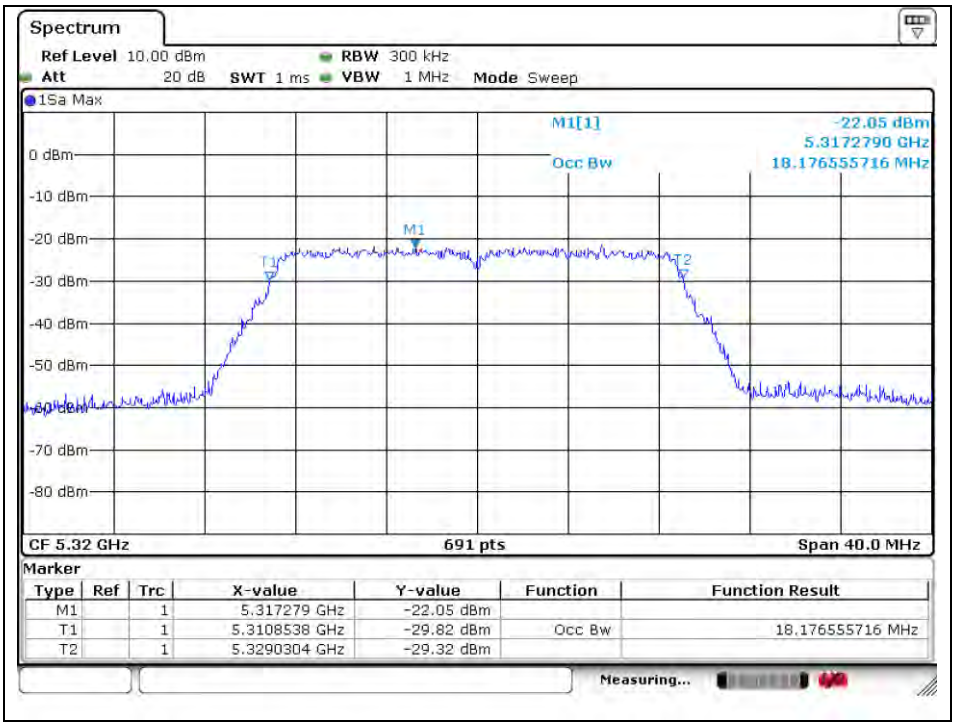
Low channel (5 280 ㎒)



Middle channel (5 300 ㎒)

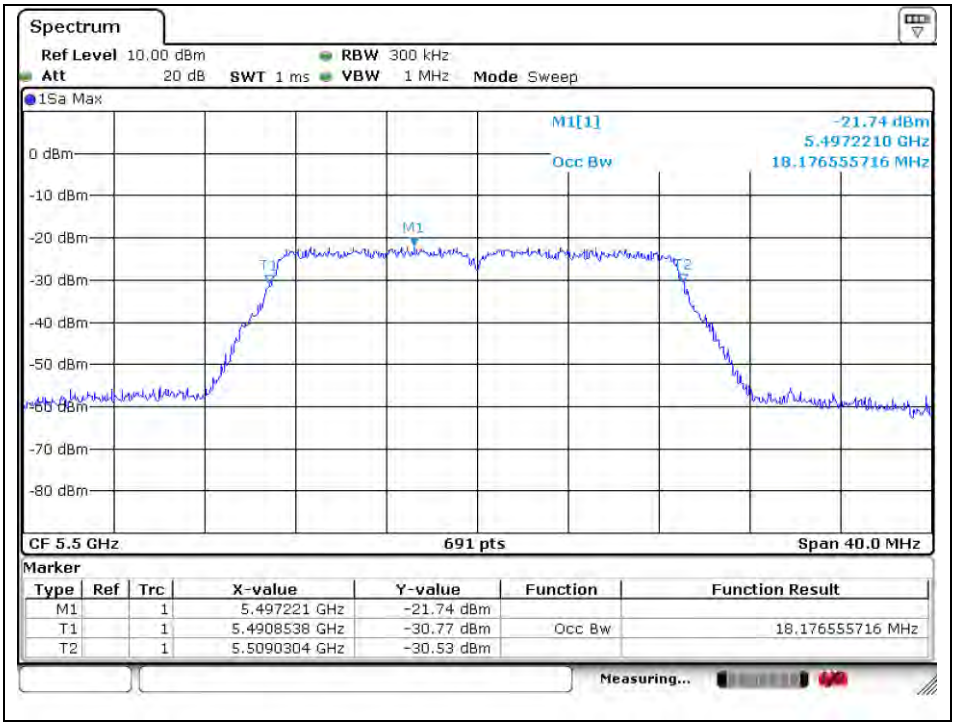


High channel (5 320 ㎒)

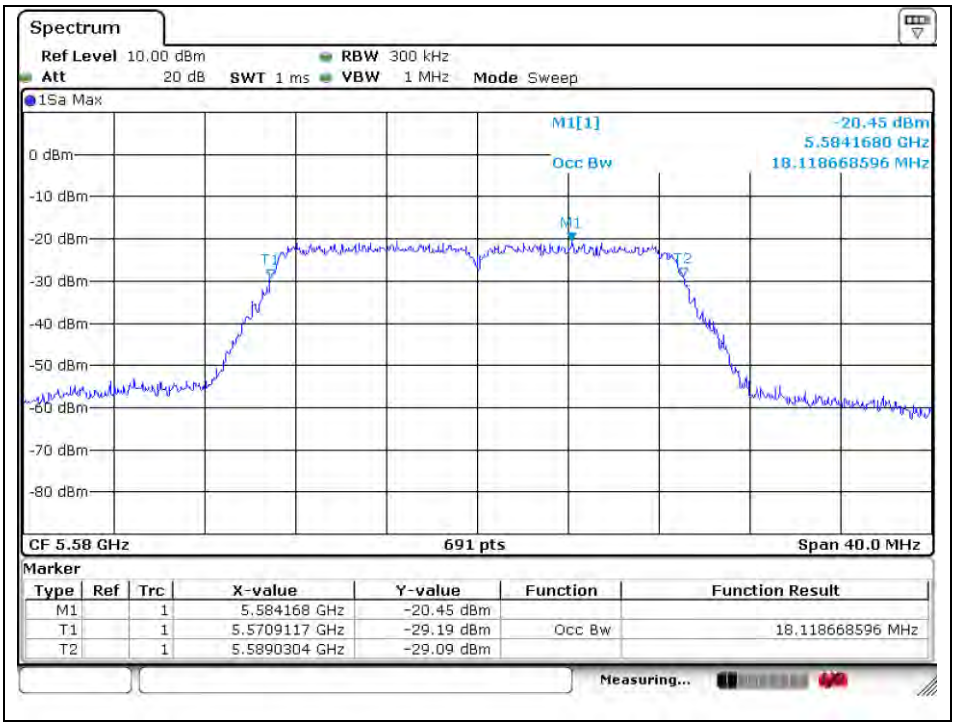


802.11n_HT20 (Band 2C)

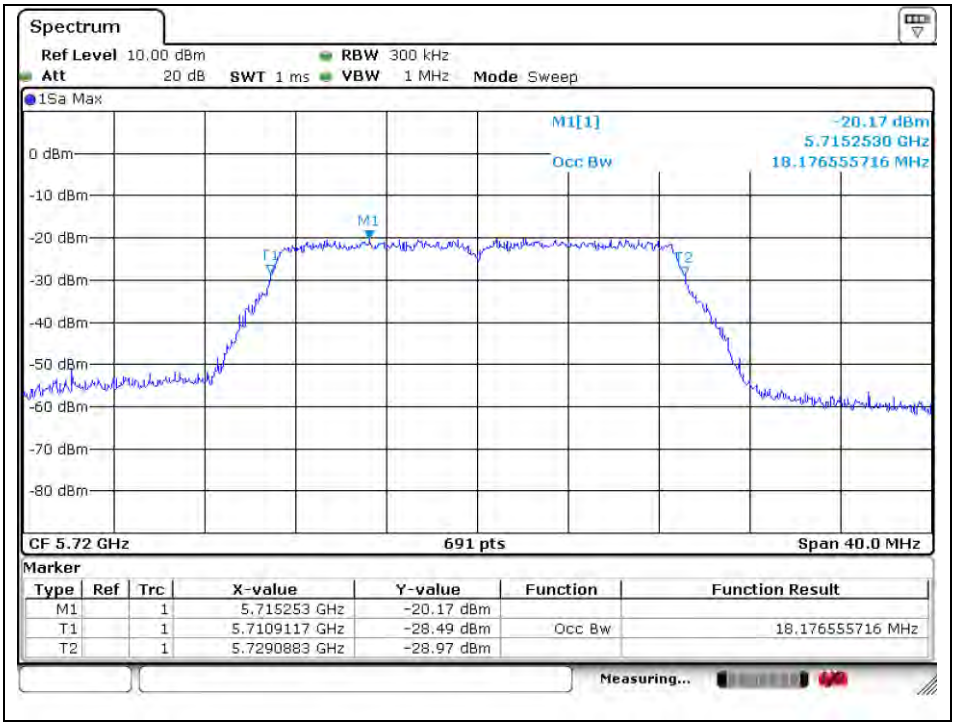
Low channel (5 500 ㎒)



Middle channel (5 580 ㎒)

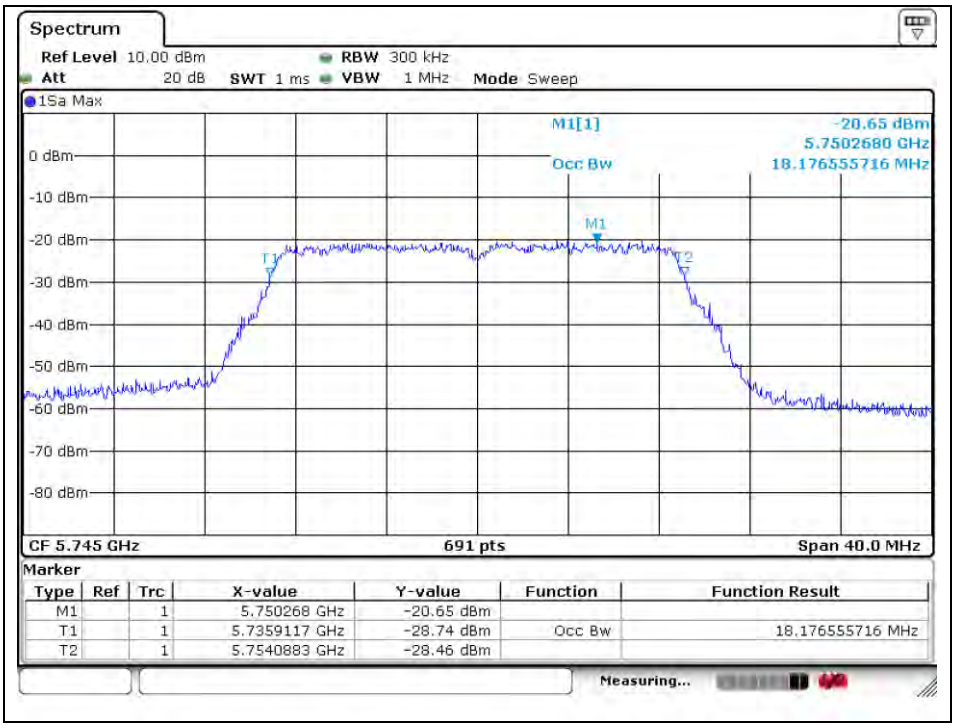


High channel (5 720 ㎒)

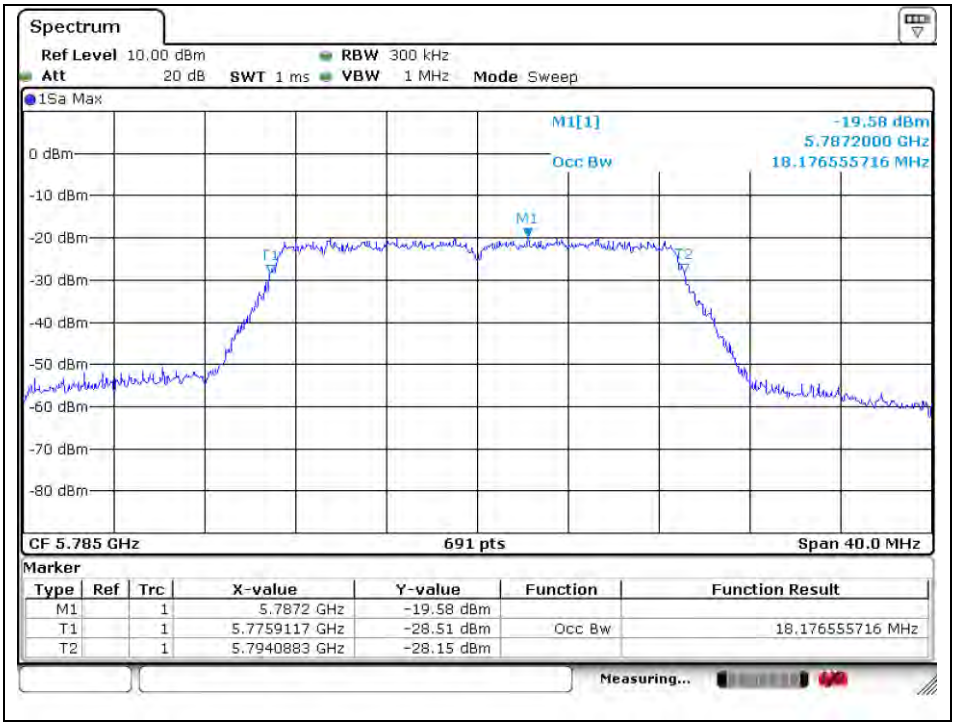


802.11n_HT20 (Band 3)

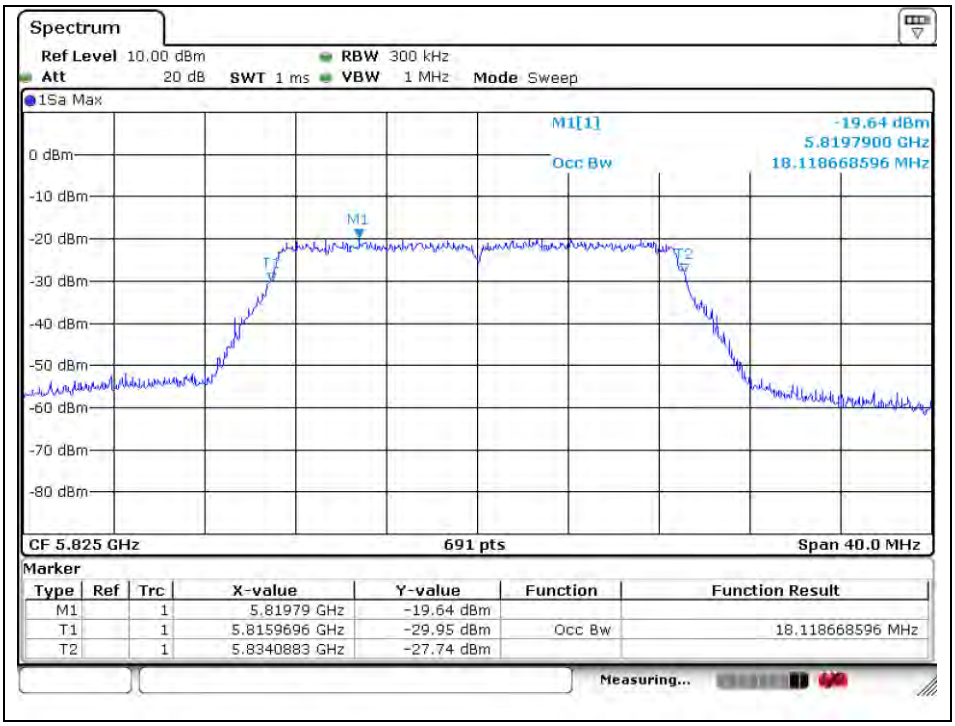
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

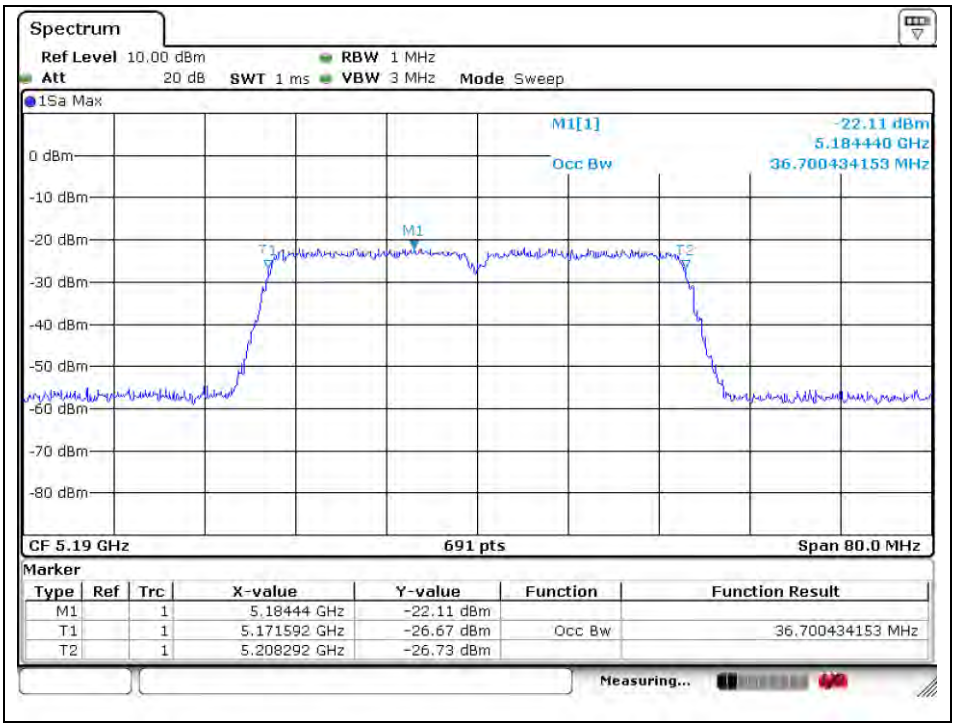


High channel (5 825 ㎒)

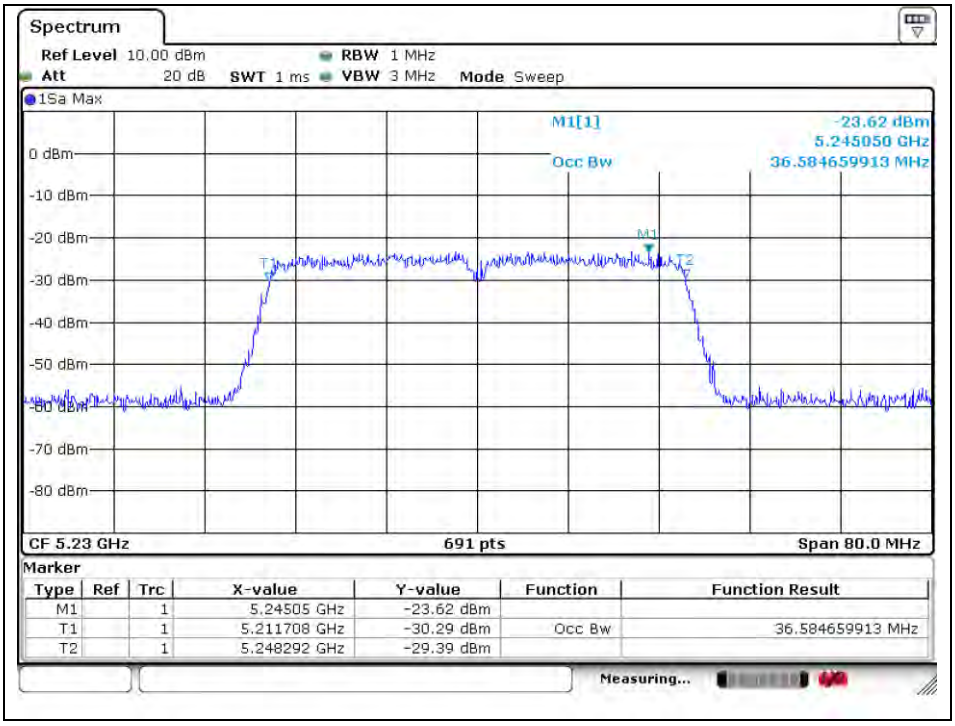


802.11n_HT40 (Band 1)

Low channel (5 190 ㎒)

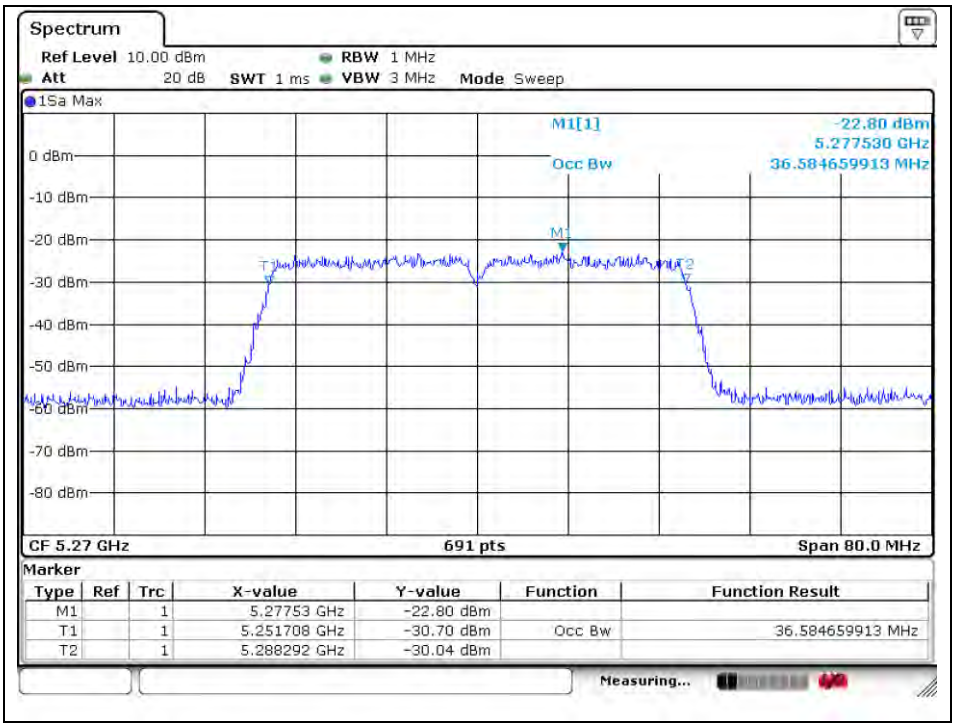


High channel (5 230 ㎒)

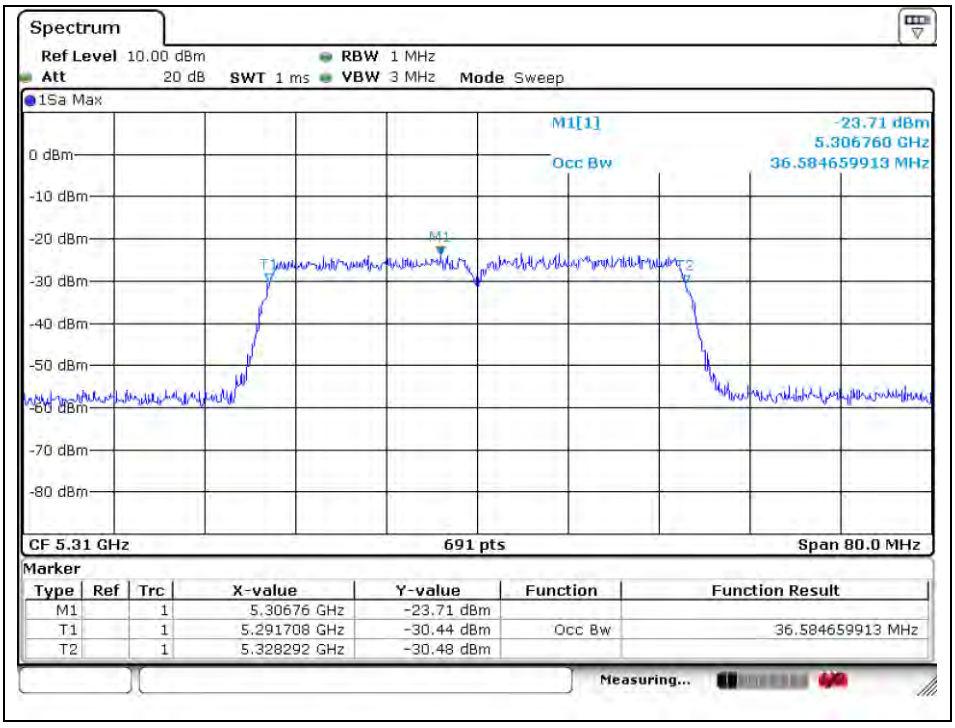


802.11n_HT40 (Band 2A)

Low channel (5 270 ㎒)

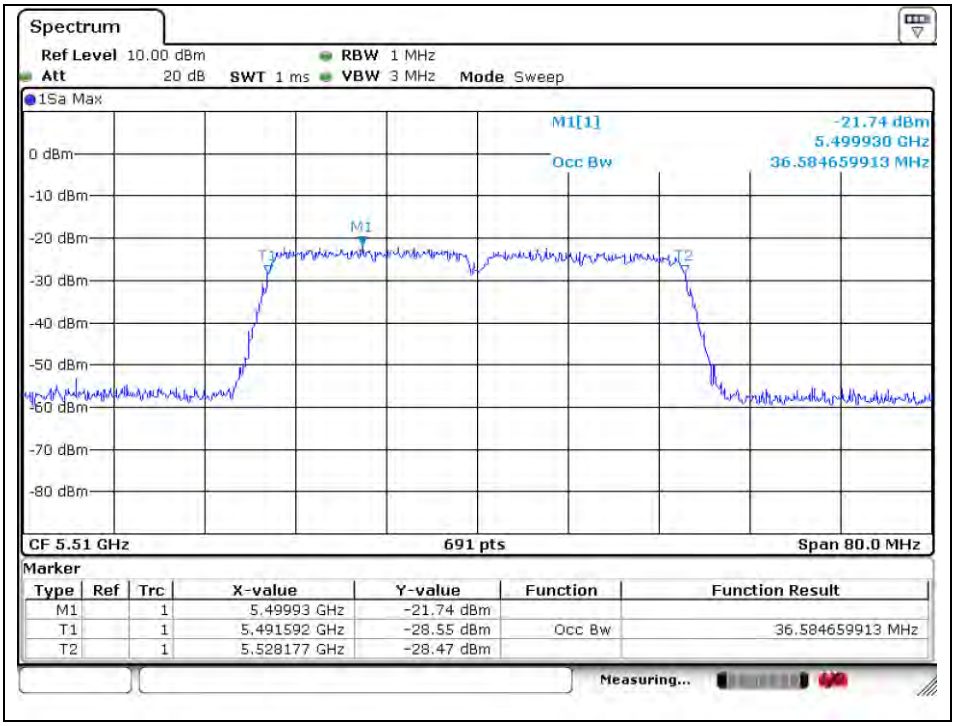


High channel (5 310 ㎒)

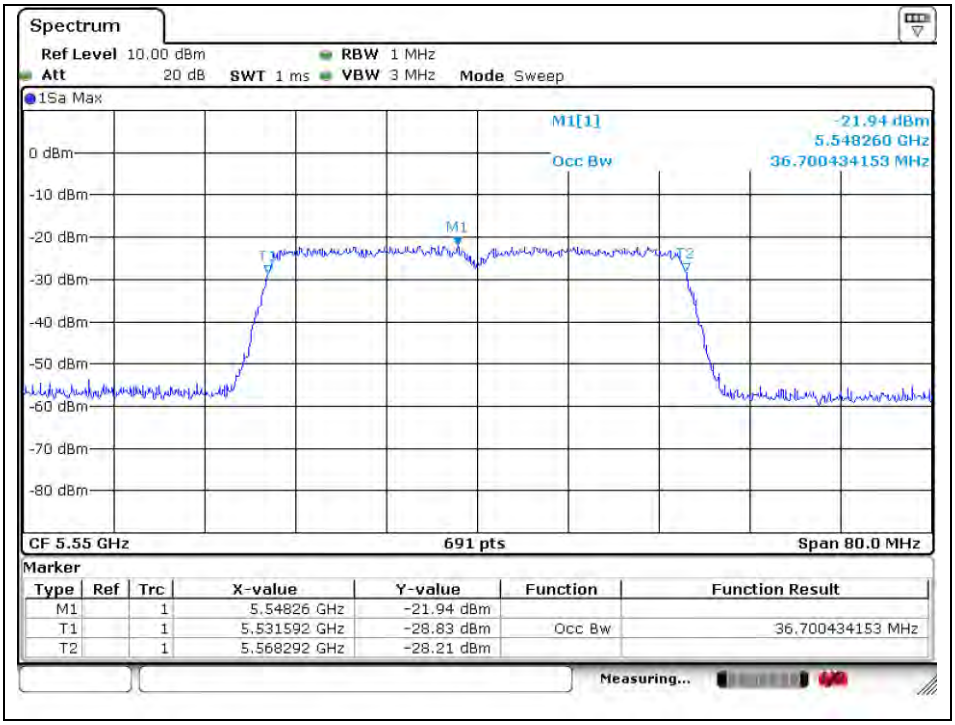


802.11n_HT40 (Band 2C)

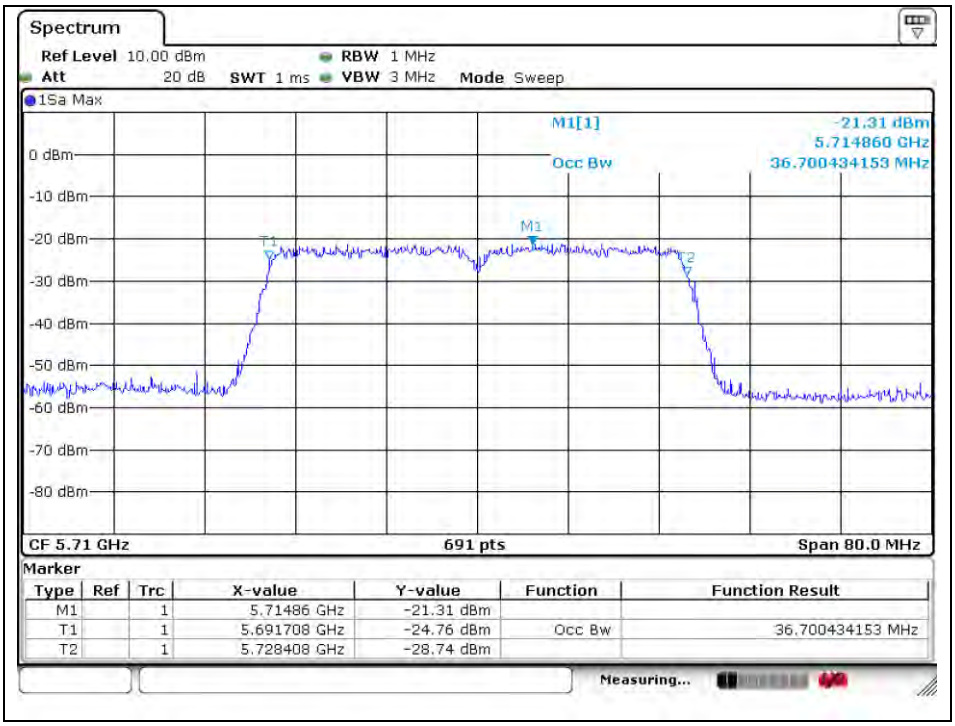
Low channel (5 510 ㎒)



Middle channel (5 550 ㎒)

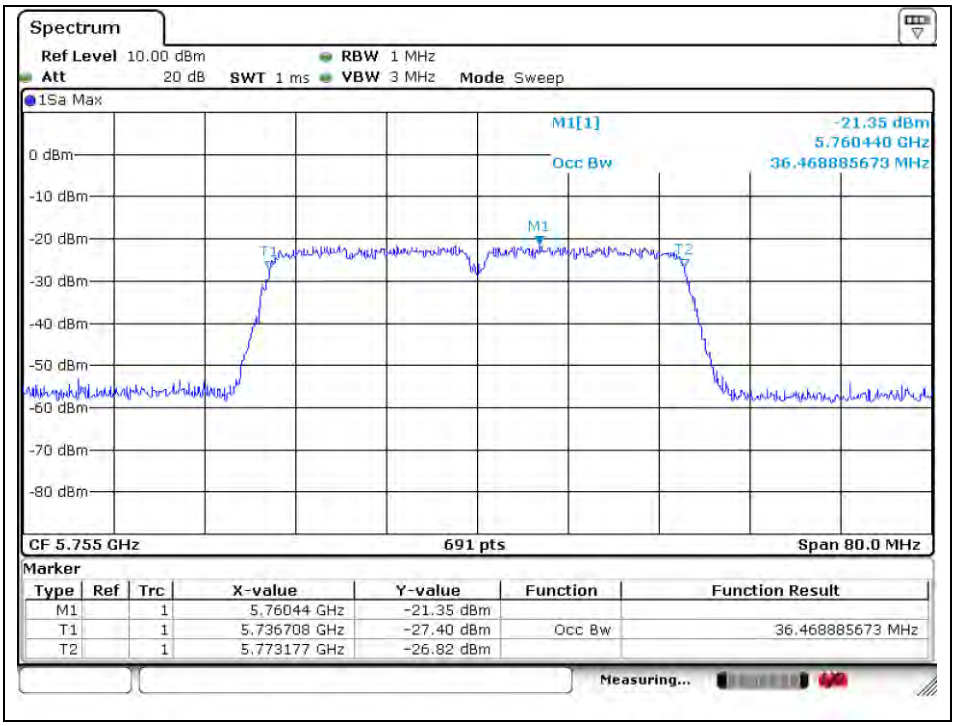


High channel (5 710 ㎒)

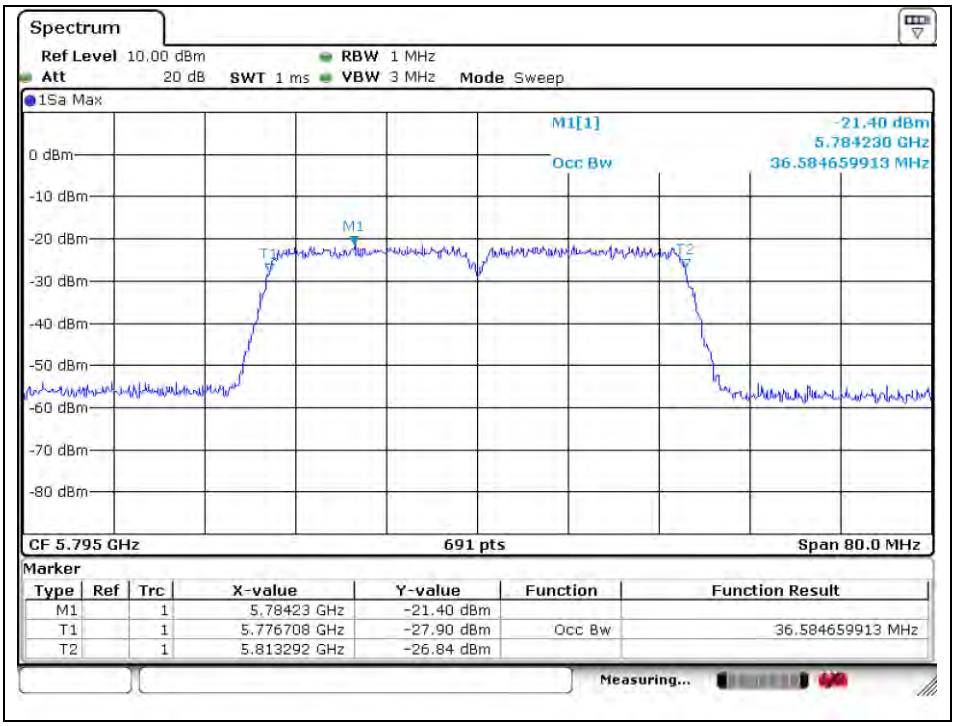


802.11n_HT40 (Band 3)

Low channel (5 755 ㎒)

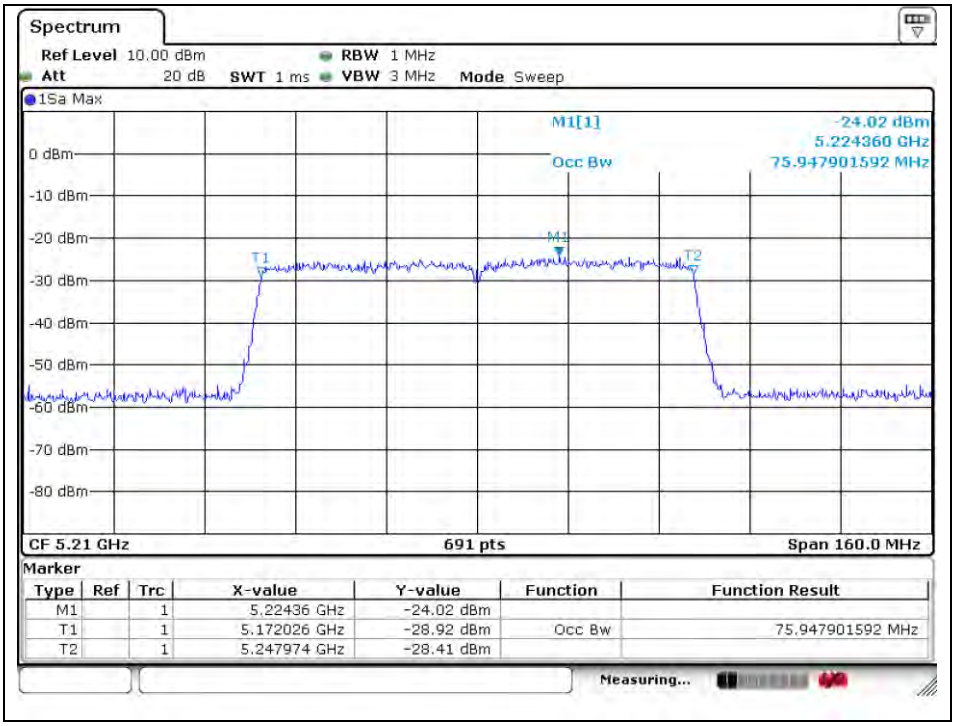


High channel (5 795 ㎒)



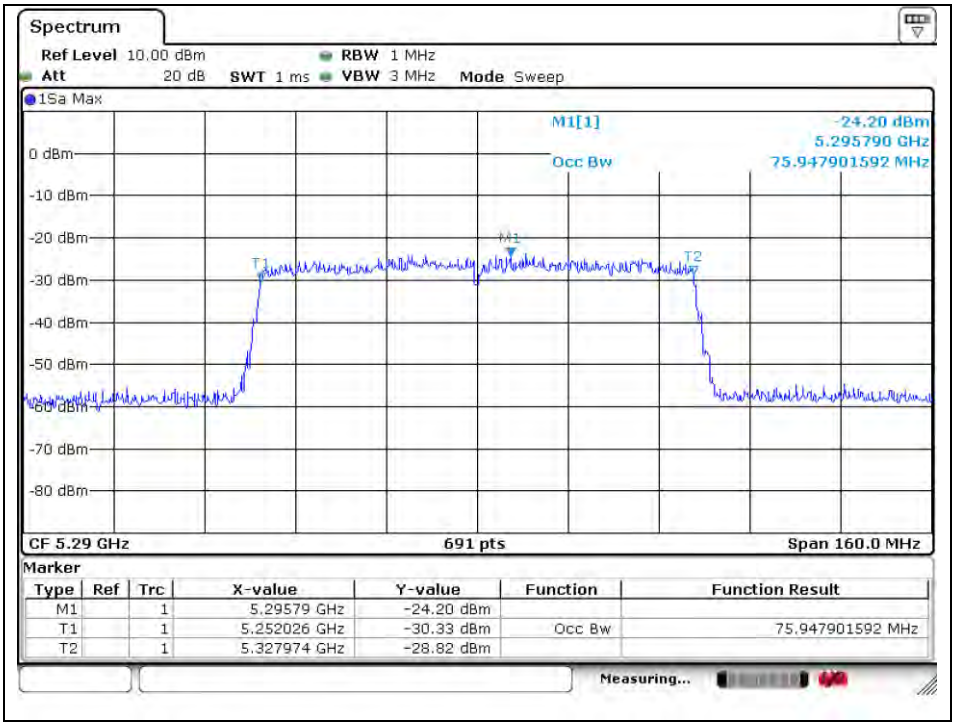
802. 11ac_VHT80 (Band 1)

Middle channel (5 210 ㎒)



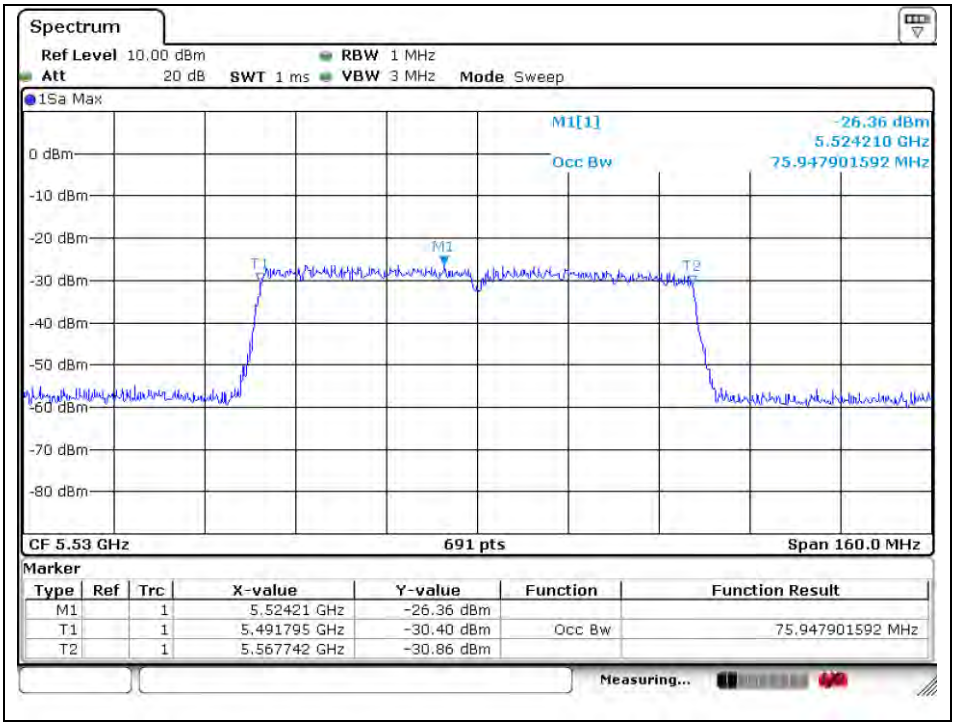
802. 11ac_VHT80 (Band 2A)

Middle channel (5 290 ㎒)



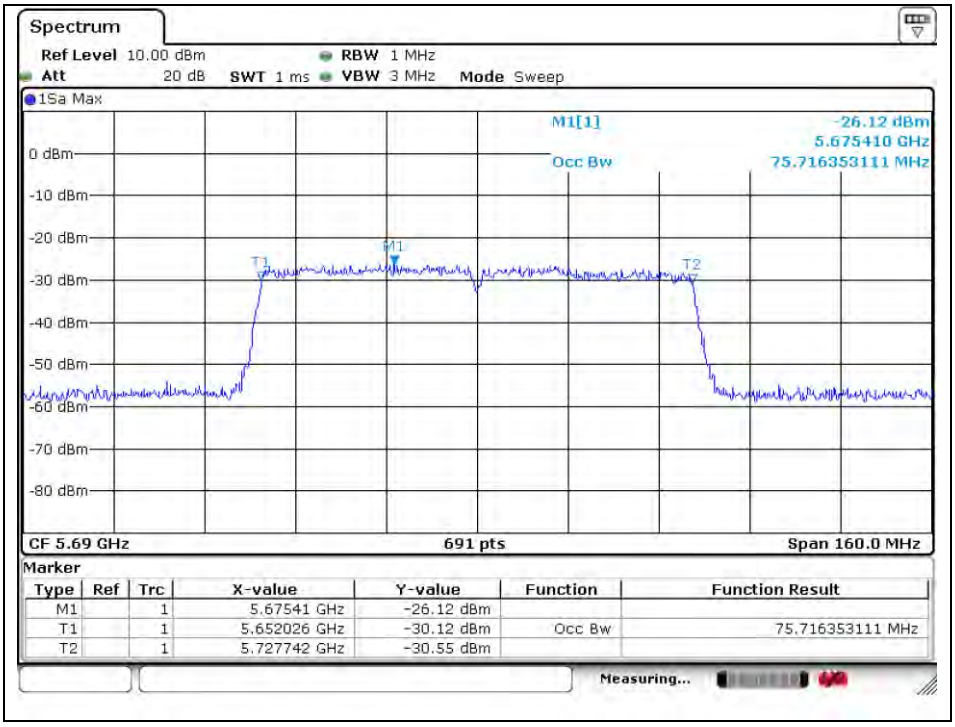
802. 11ac_VHT80 (Band 2C)

Low channel (5 530 ㎒)



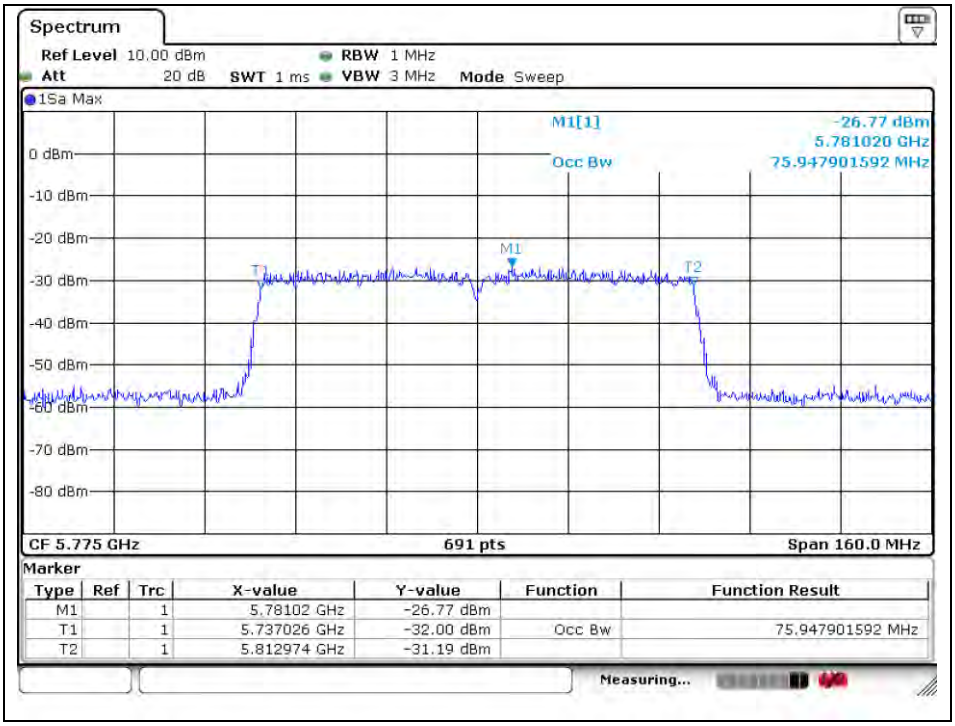
802. 11ac_VHT80 (Band 2C)

High channel (5 690 ㎒)



802. 11ac_VHT80 (Band 3)

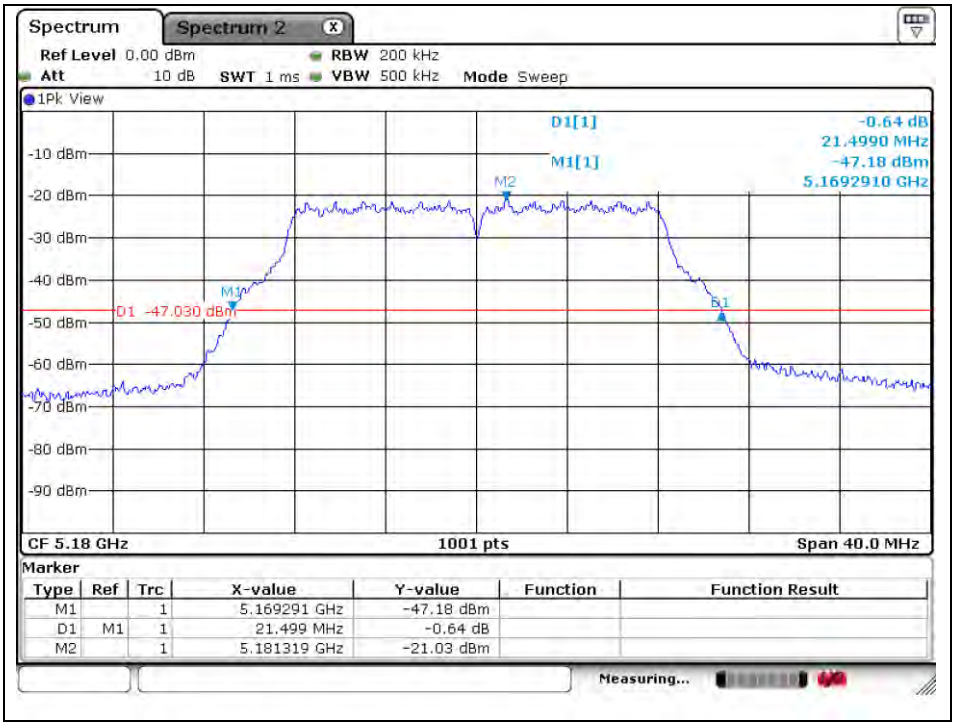
Middle channel (5 775 ㎒)



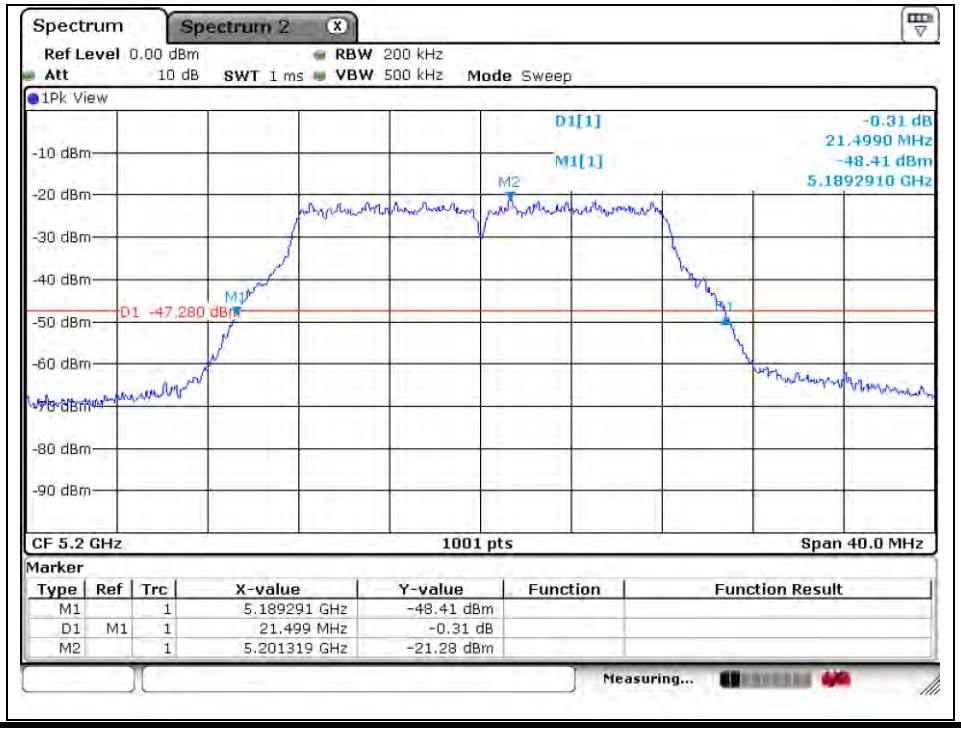
26 dB Bandwidth

802.11a (Band 1)

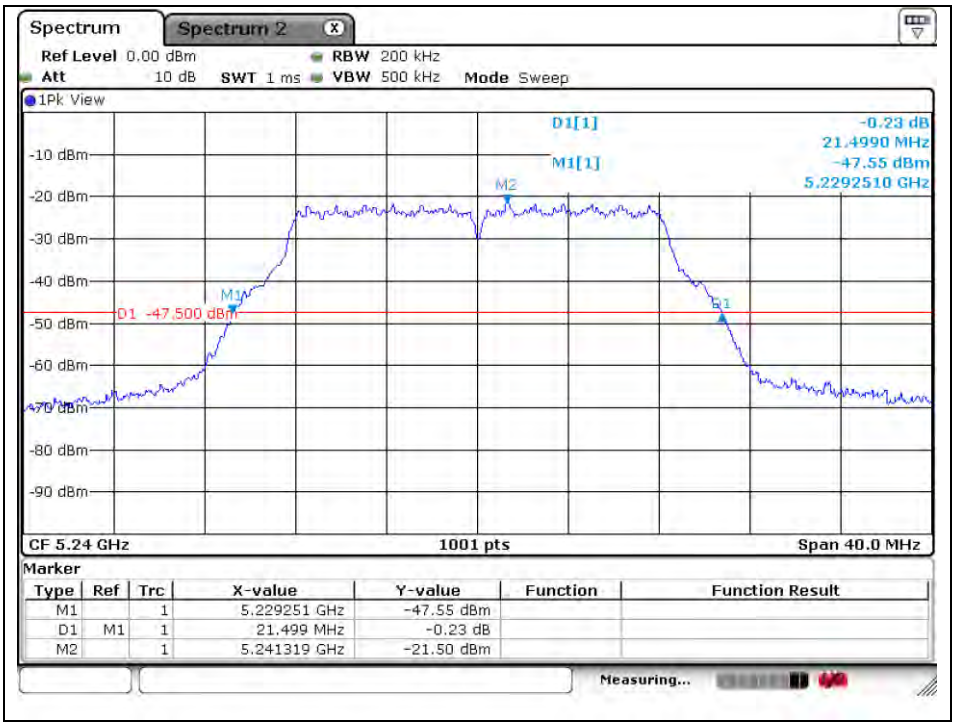
Low channel (5 180 ㎒)



Middle channel (5 200 ㎒)

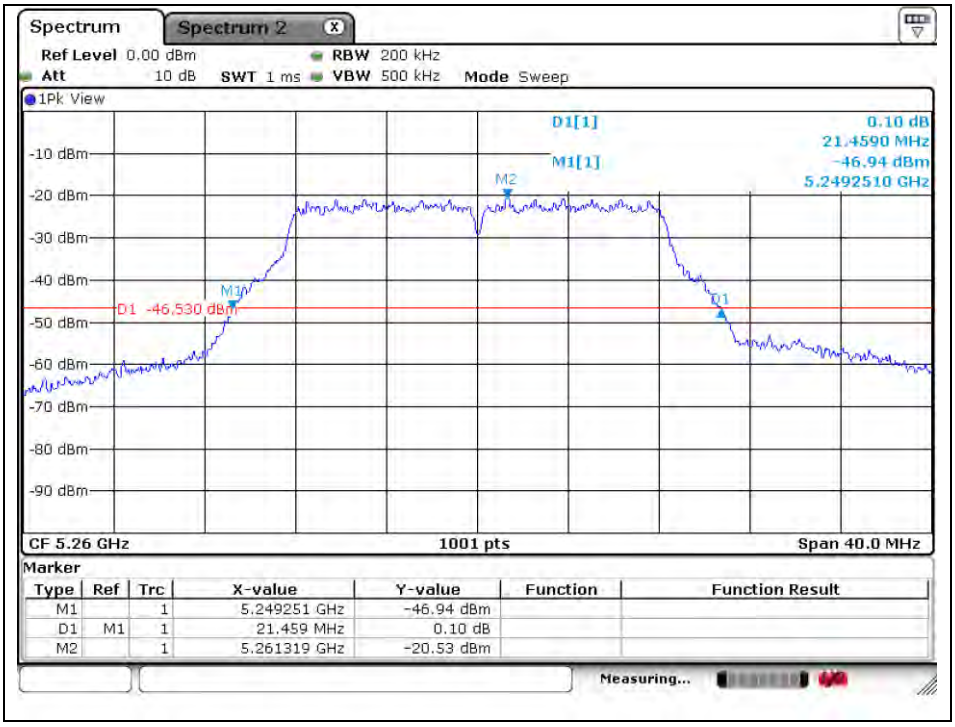


High channel (5 240 ㎒)

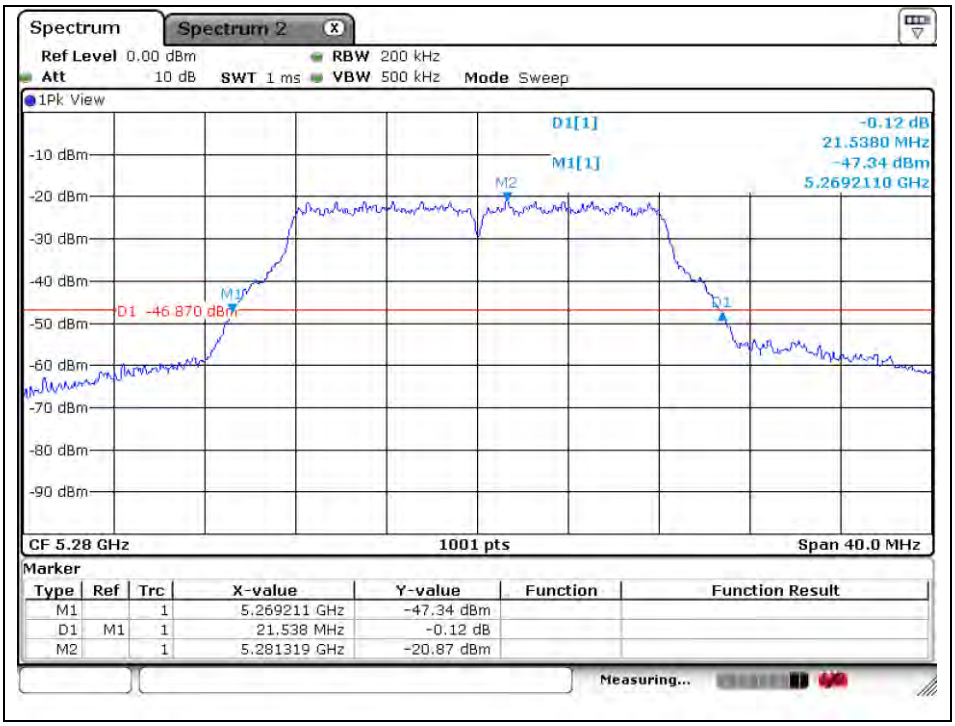


802.11a (Band 2A)

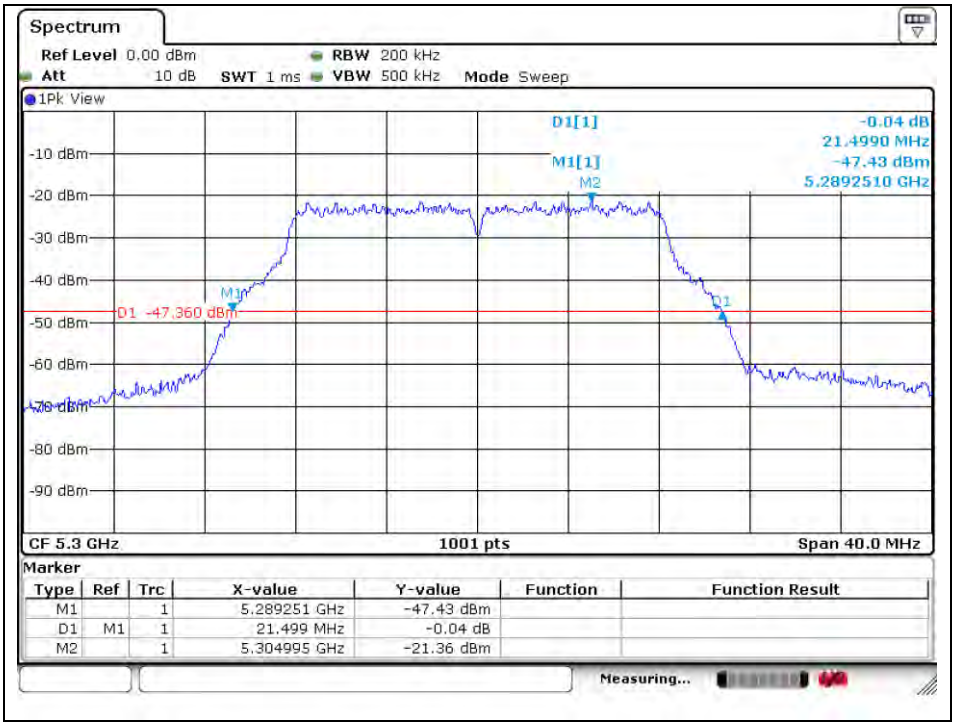
Low channel (5 260 ㎒)



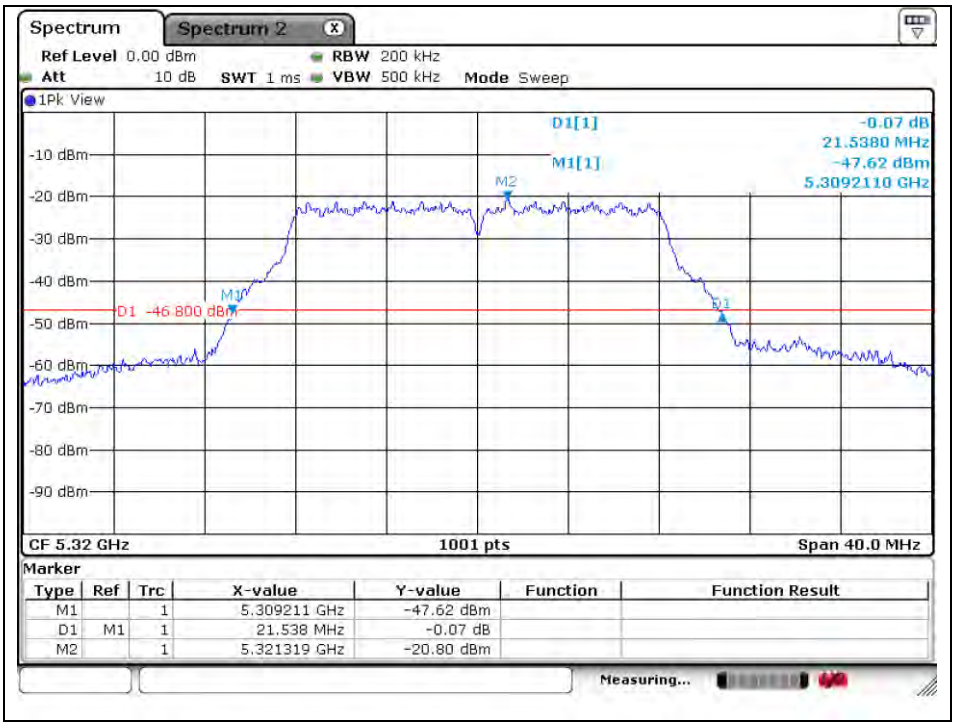
Low channel (5 280 ㎒)



Middle channel (5 300 ㎒)

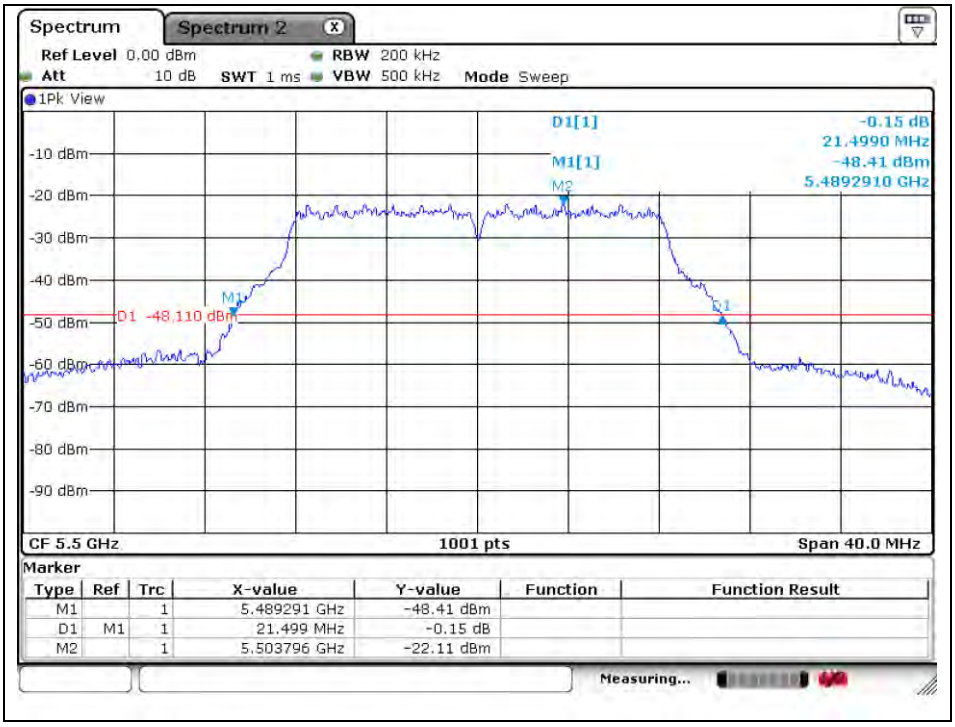


High channel (5 320 ㎒)

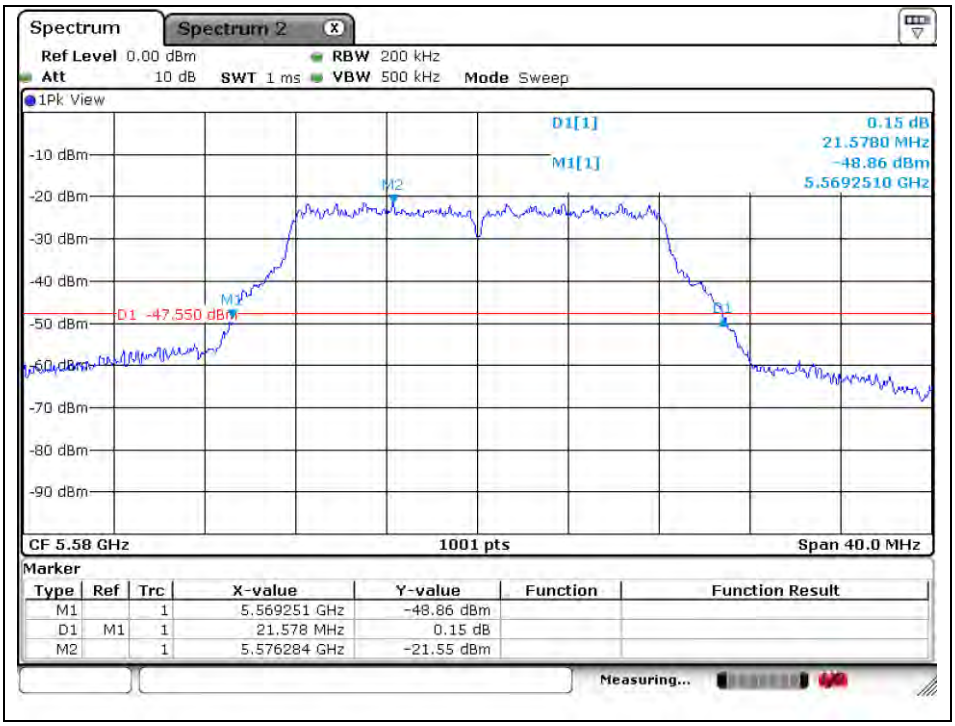


802.11a (Band 2C)

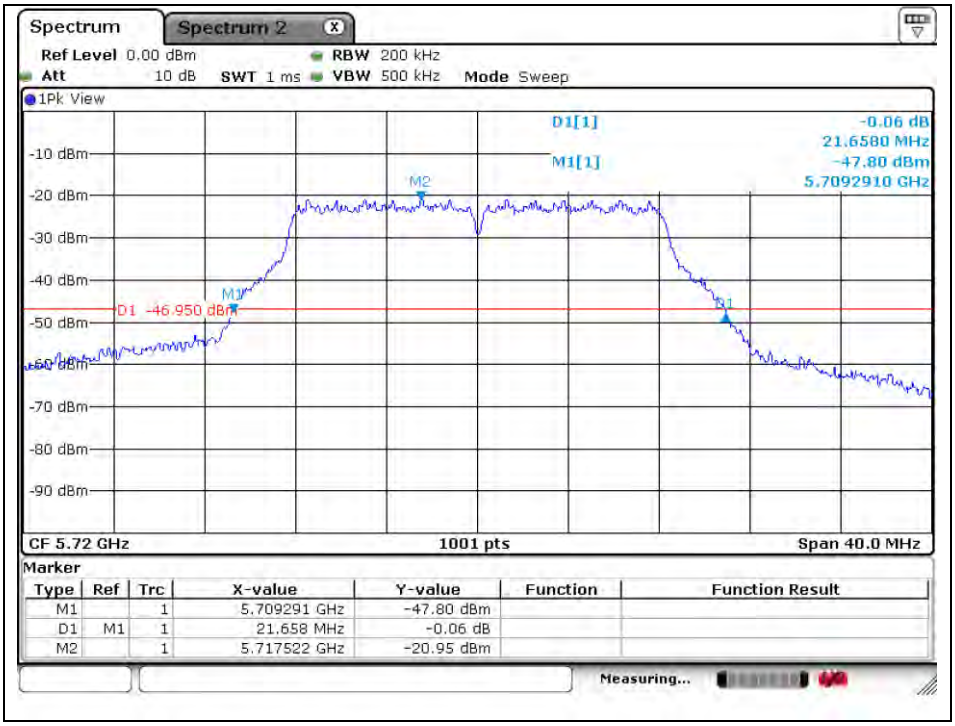
Low channel (5 500 ㎒)



Middle channel (5 580 ㎒)

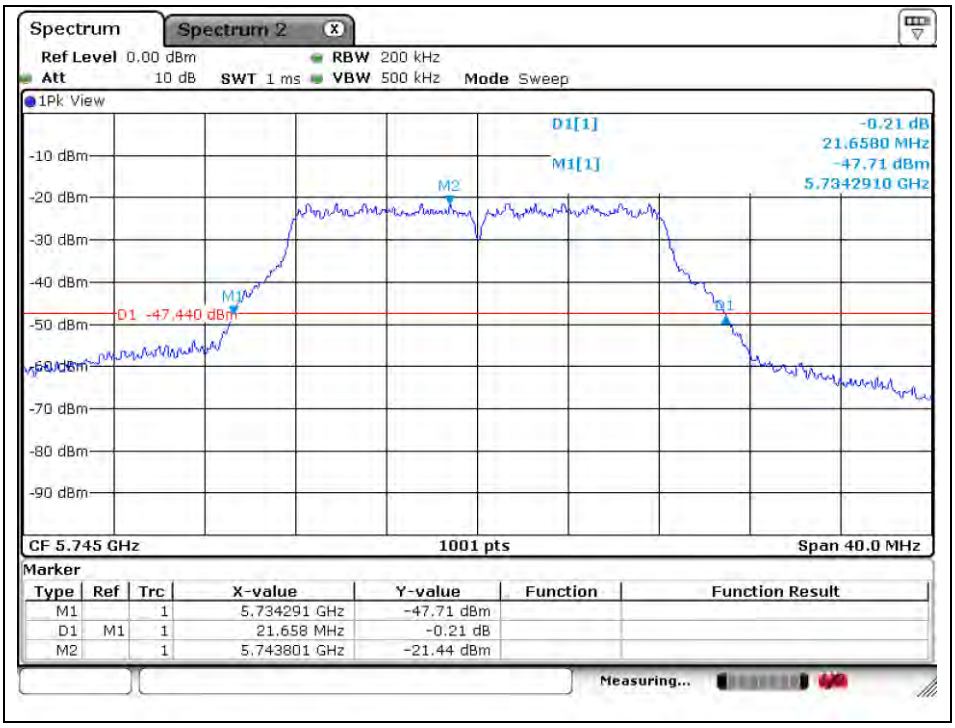


High channel (5 720 ㎒)

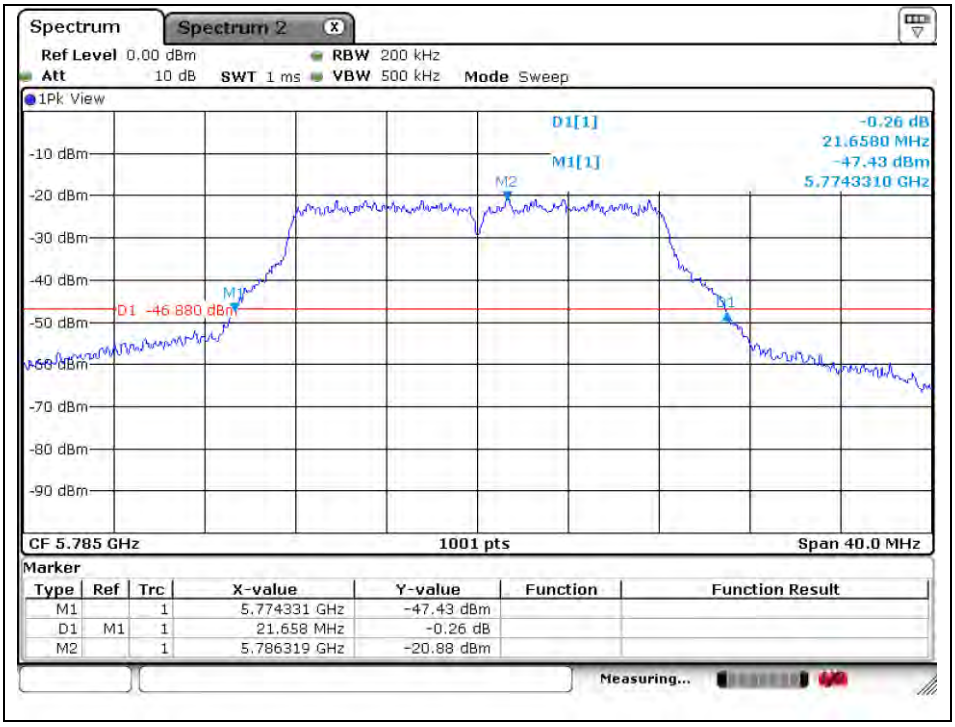


802.11a (Band 3)

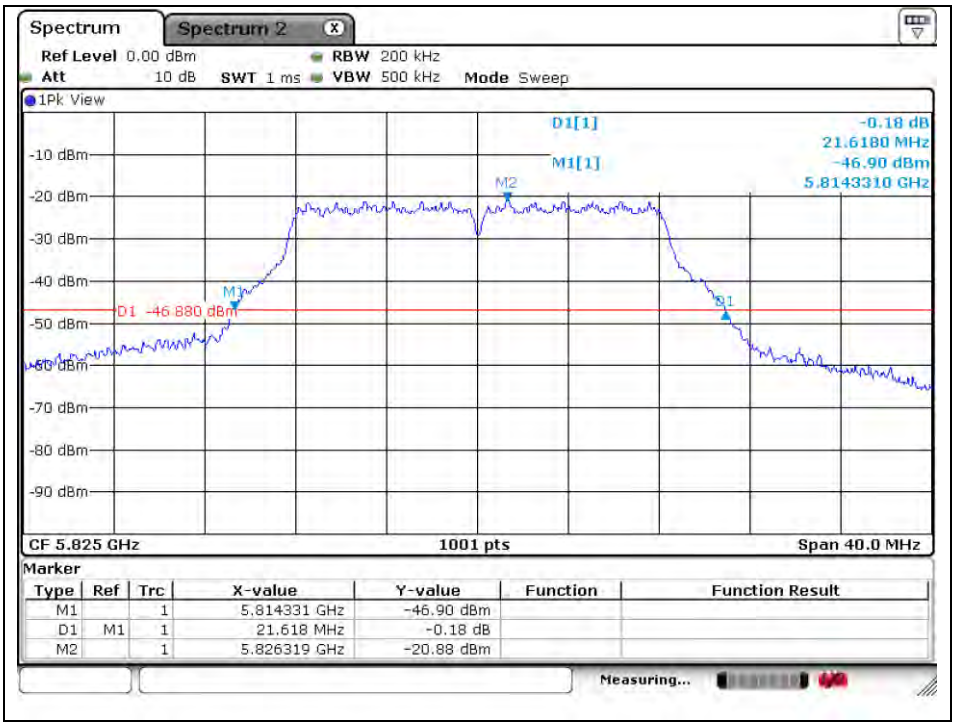
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

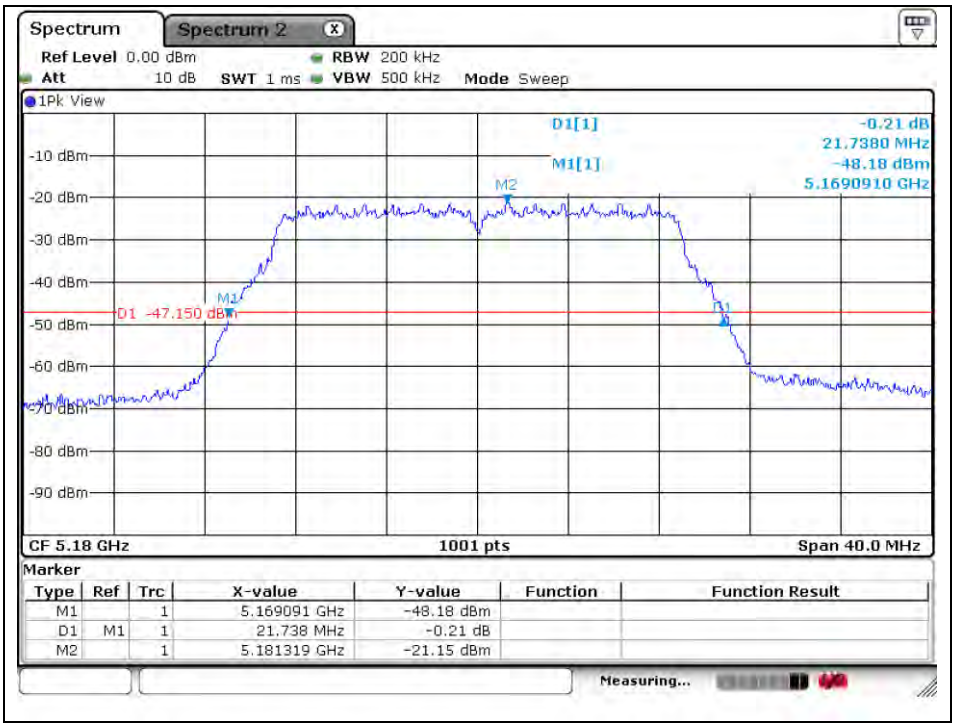


High channel (5 825 ㎒)

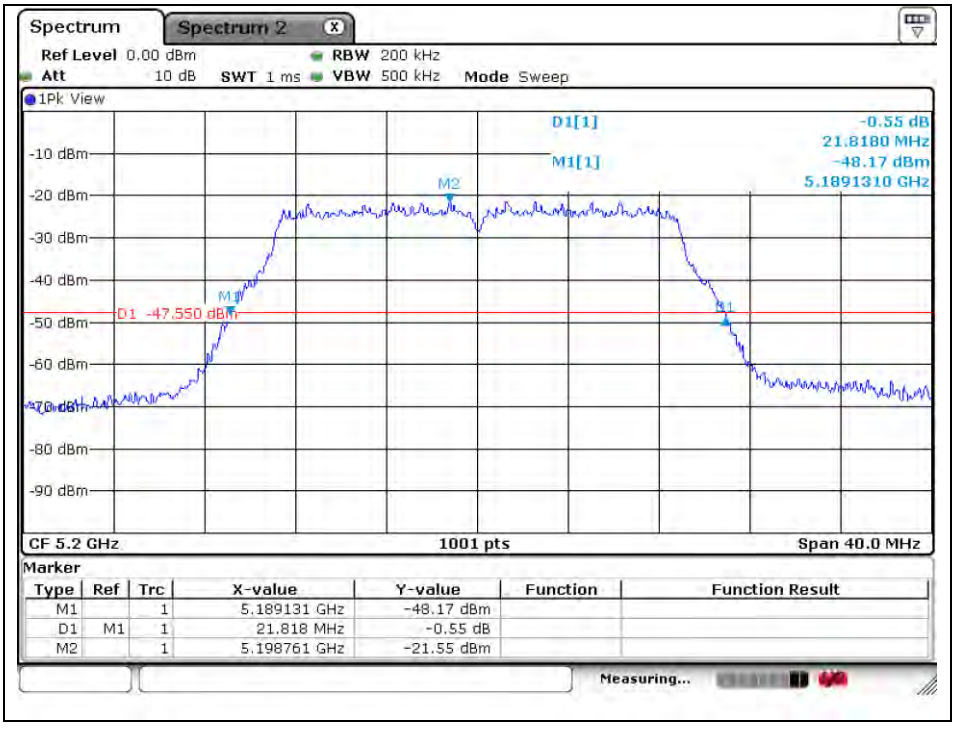


802.11n_HT20 (Band 1)

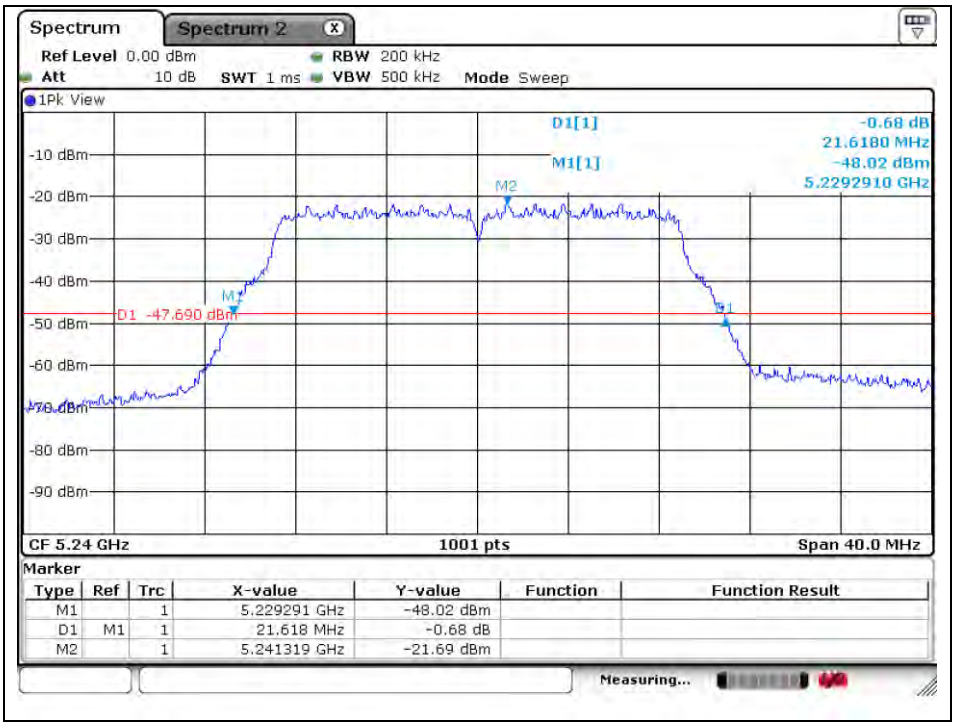
Low channel (5 180 ㎒)



Middle channel (5 200 ㎒)

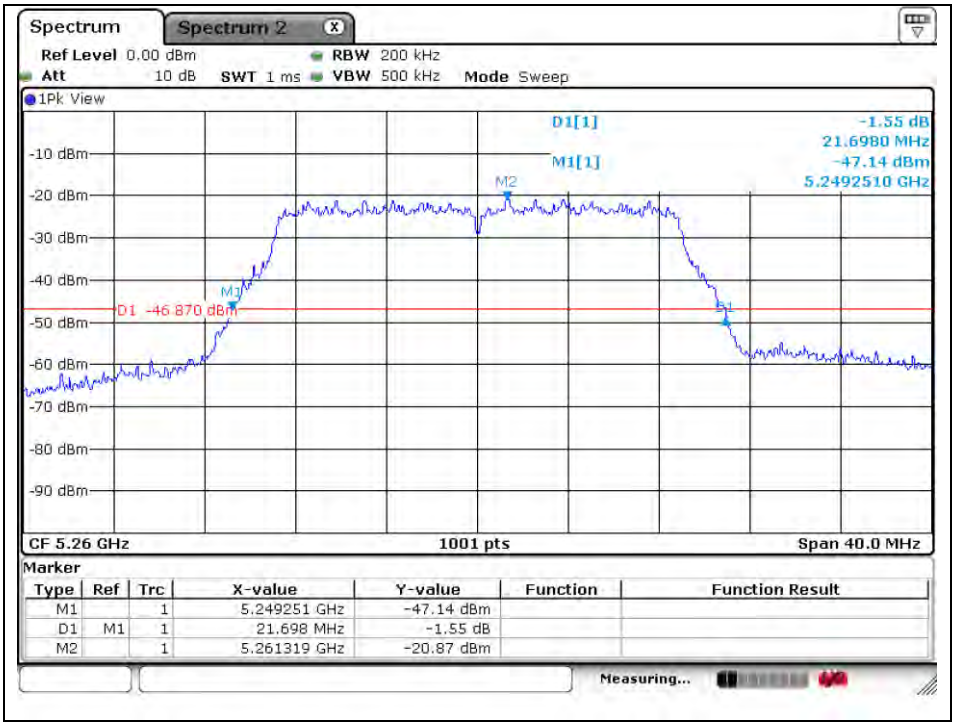


High channel (5 240 ㎒)

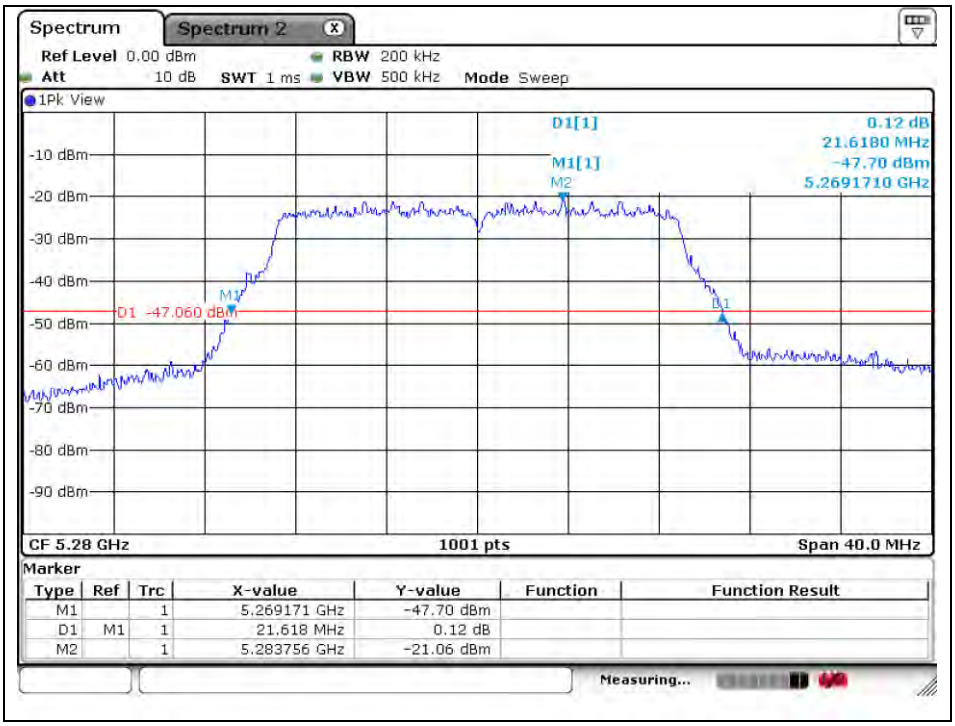


802.11n_HT20 (Band 2A)

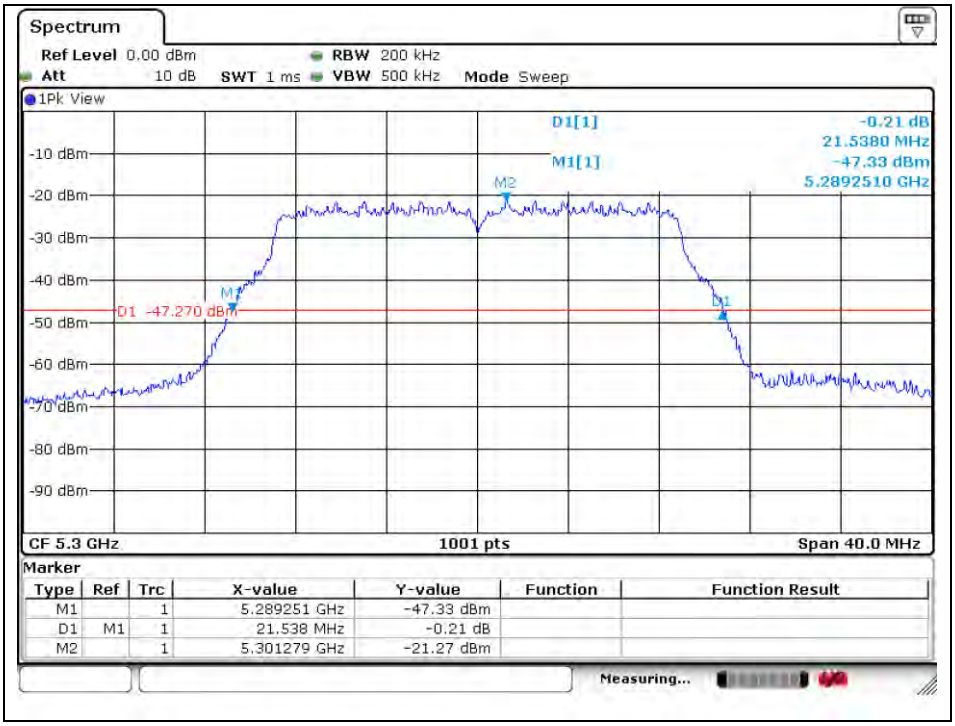
Low channel (5 260 ㎒)



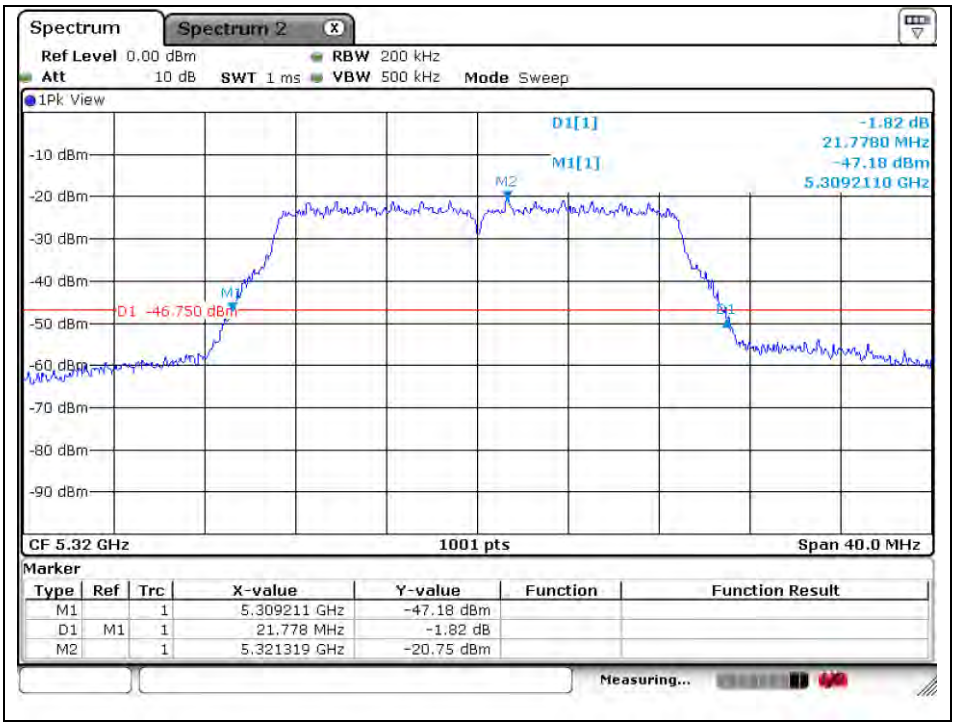
Low channel (5 280 ㎒)



Middle channel (5 300 ㎒)

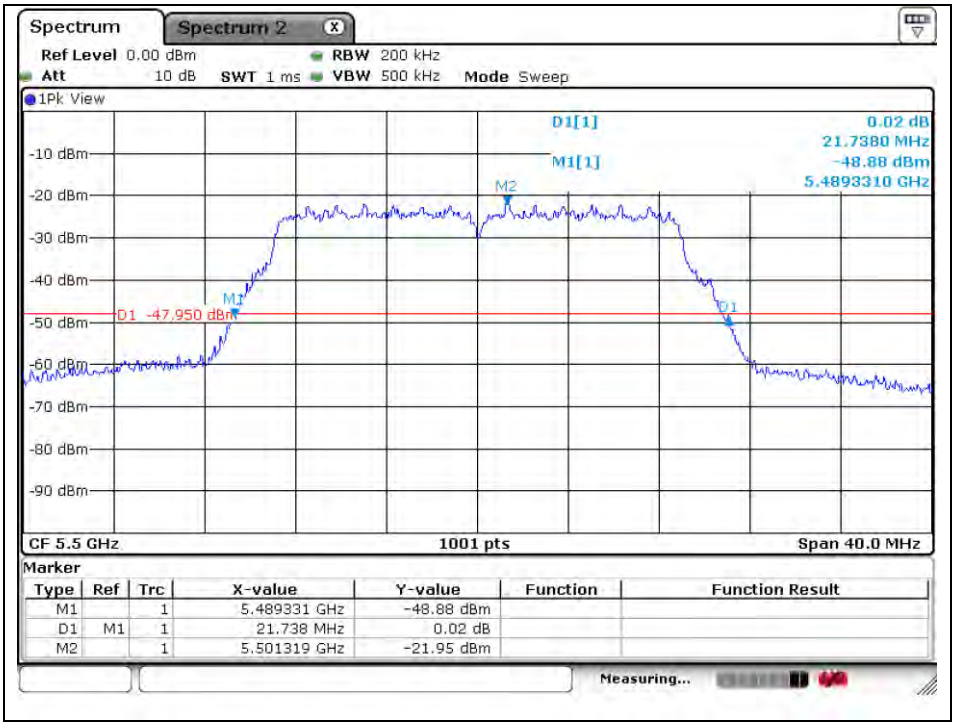


High channel (5 320 ㎒)

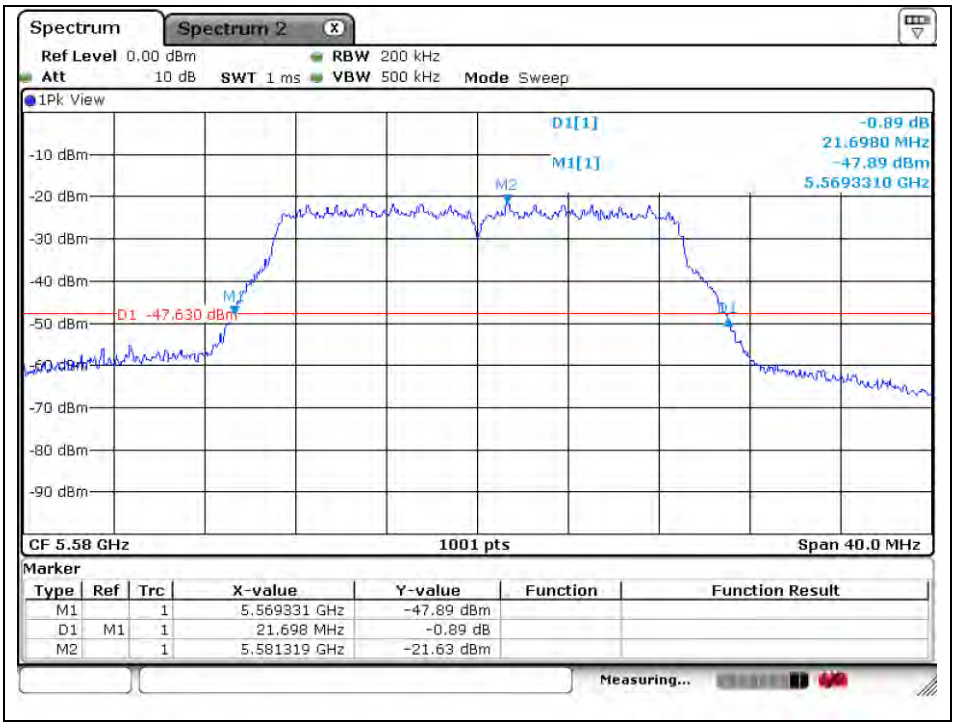


802.11n_HT20 (Band 2C)

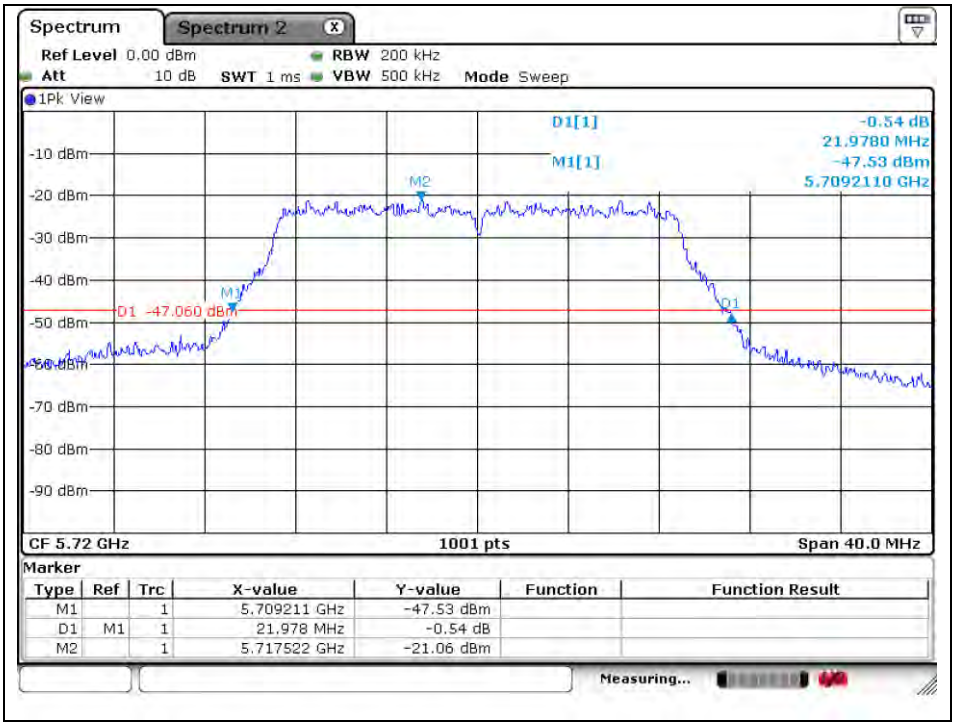
Low channel (5 500 ㎒)



Middle channel (5 580 ㎒)

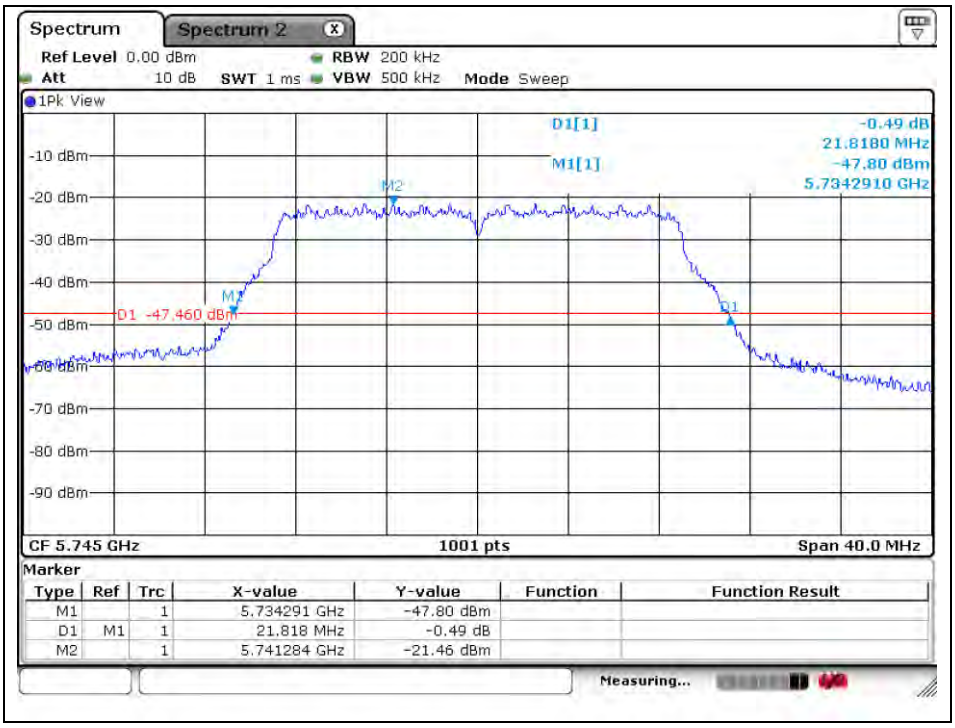


High channel (5 720 ㎒)

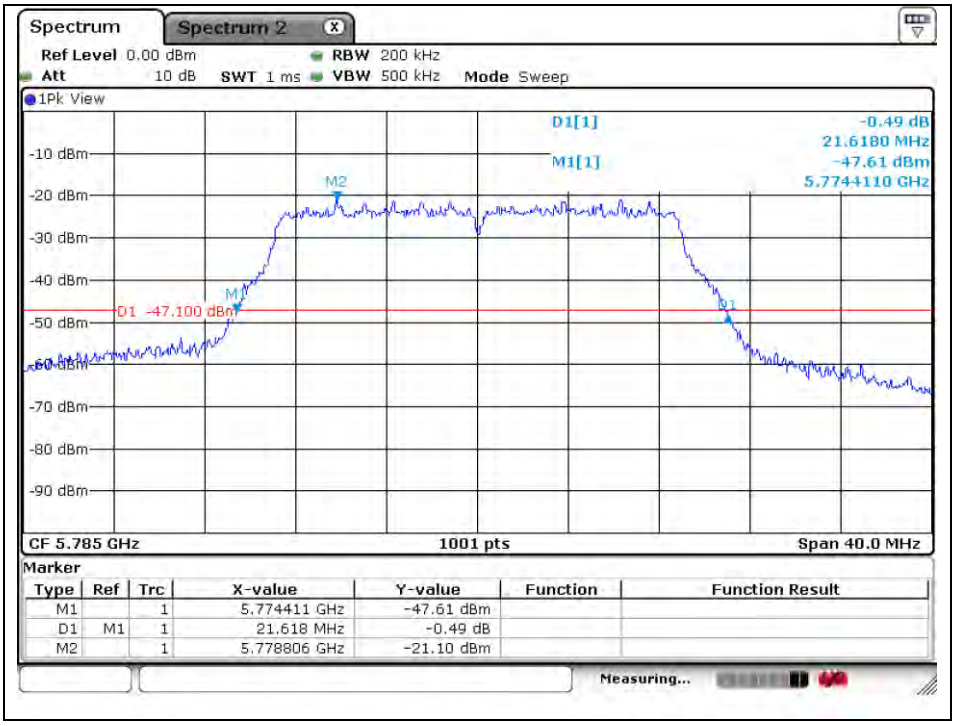


802.11n_HT20 (Band 3)

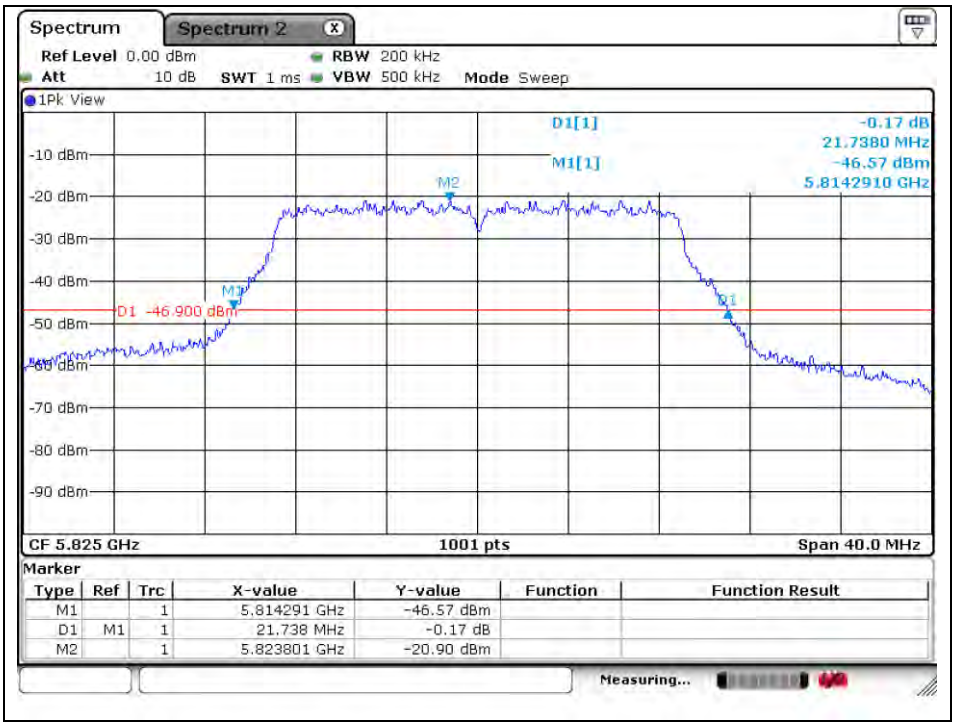
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

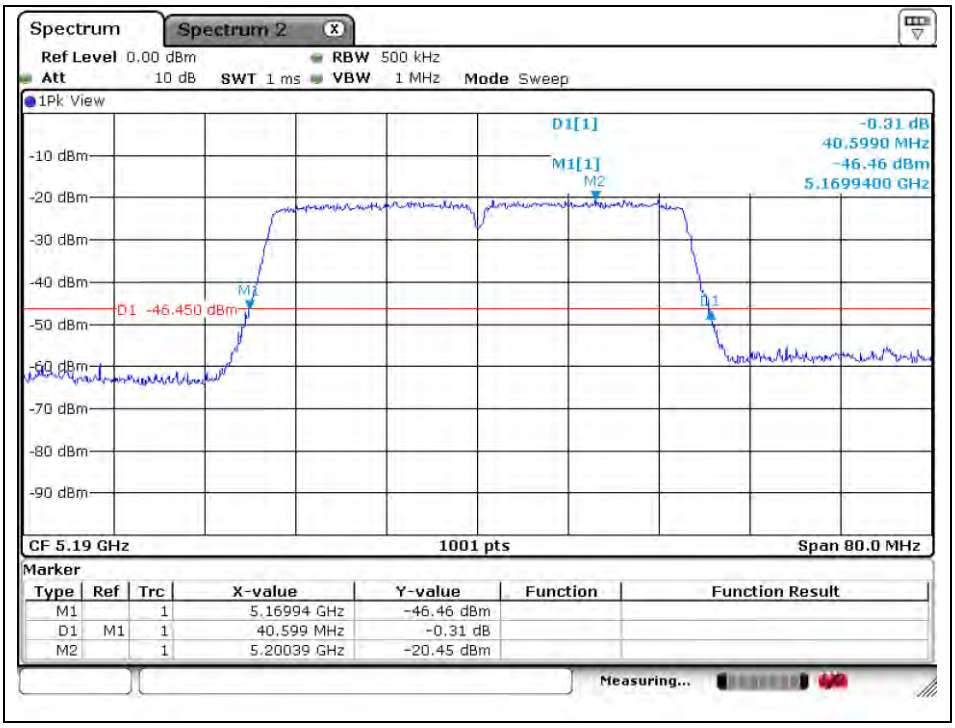


High channel (5 825 ㎒)

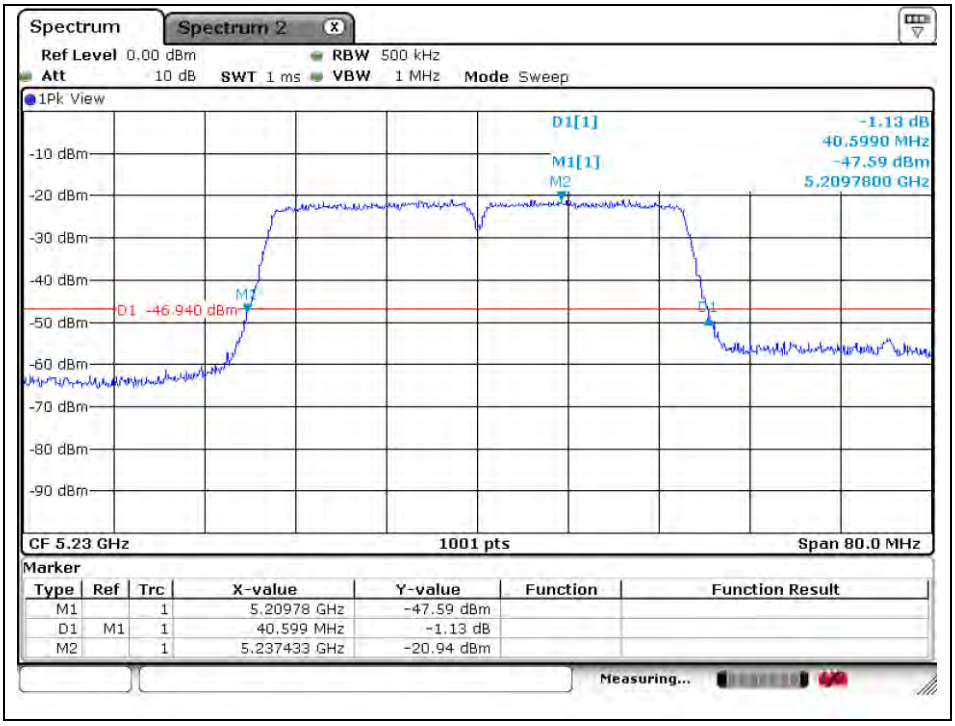


802.11n_HT40 (Band 1)

Low channel (5 190 ㎒)

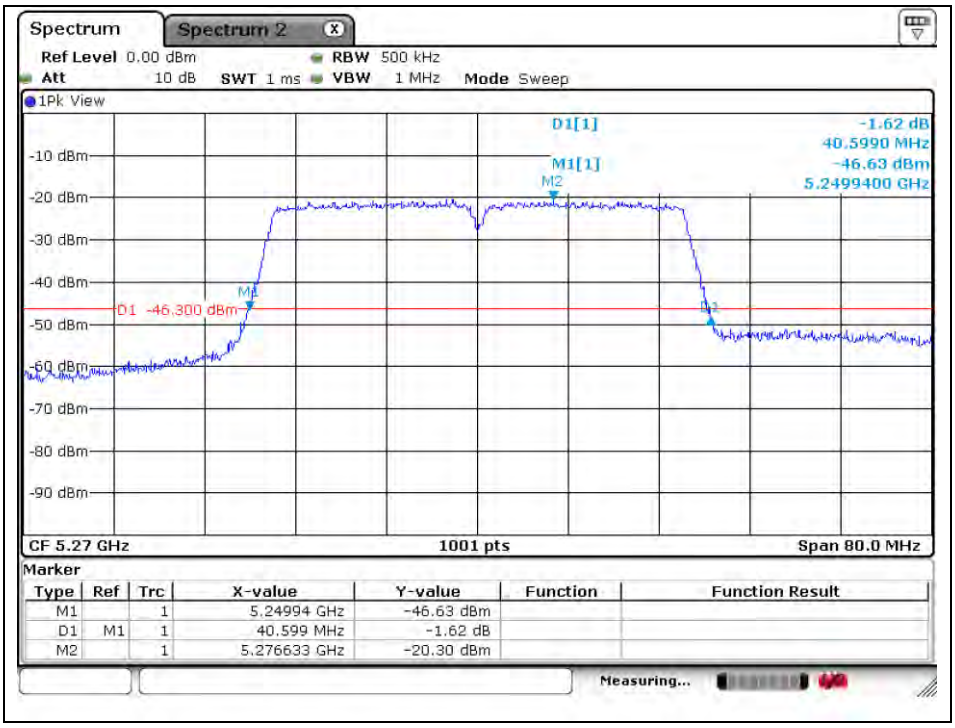


High channel (5 230 ㎒)

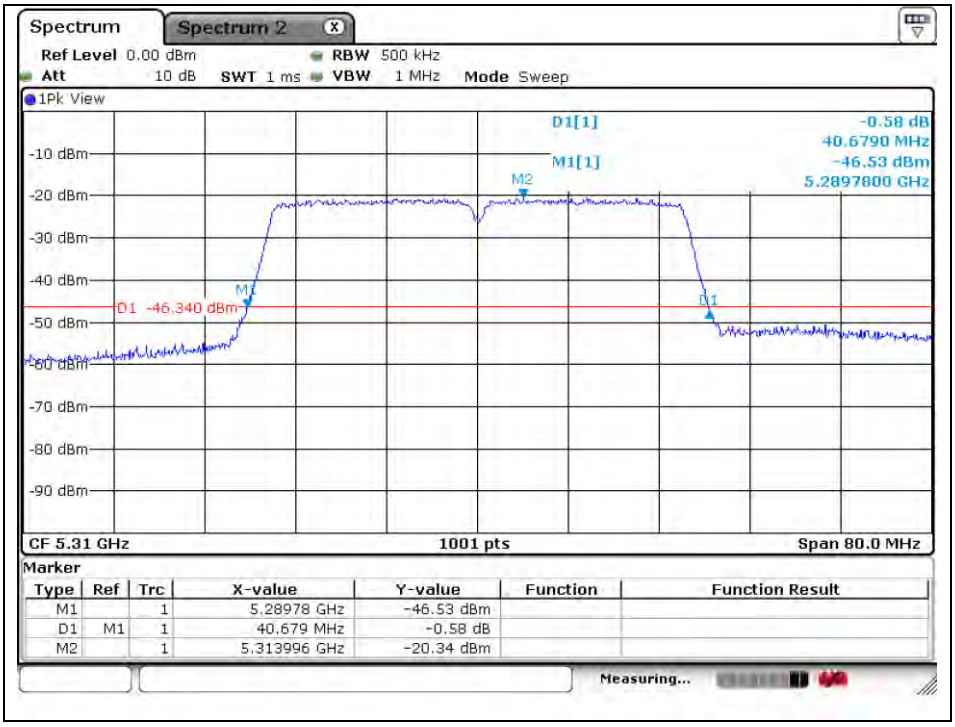


802.11n_HT40 (Band 2A)

Low channel (5 270 ㎒)

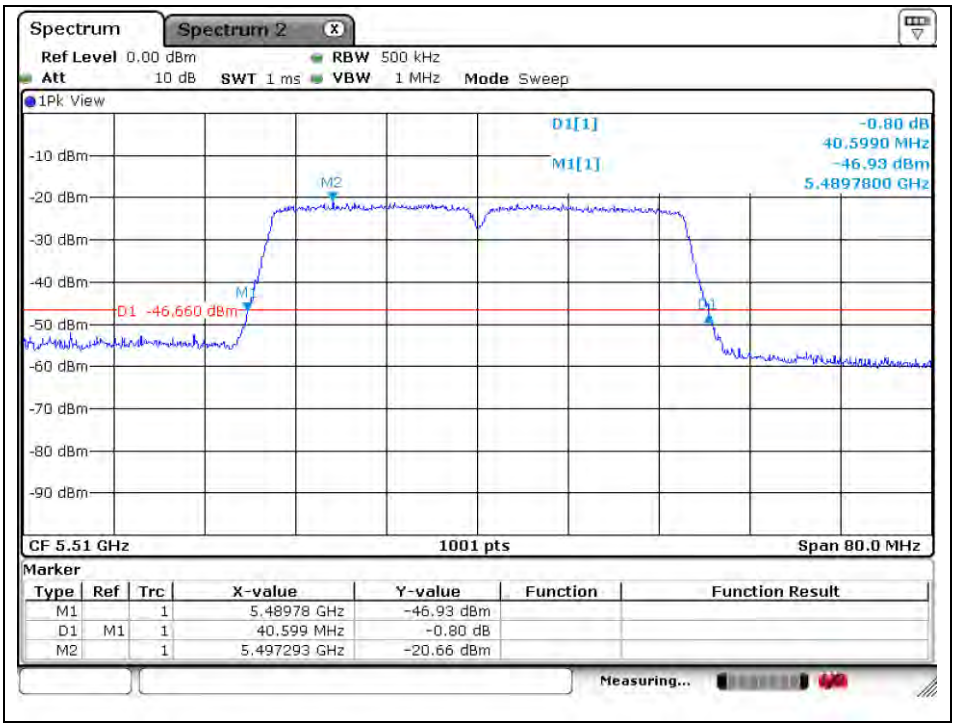


High channel (5 310 ㎒)

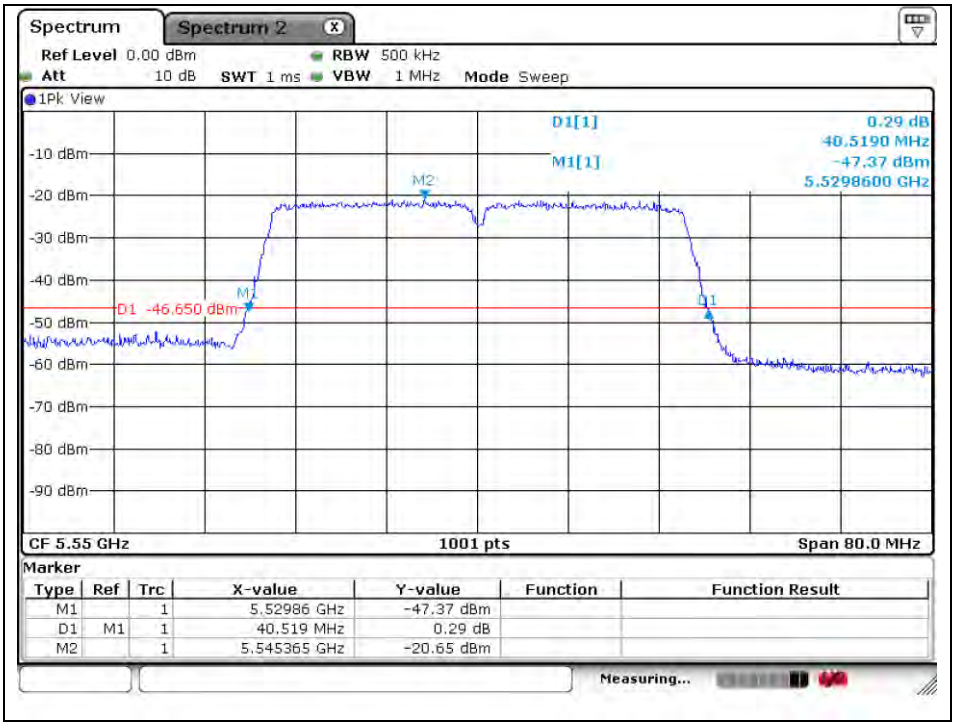


802.11n_HT40 (Band 2C)

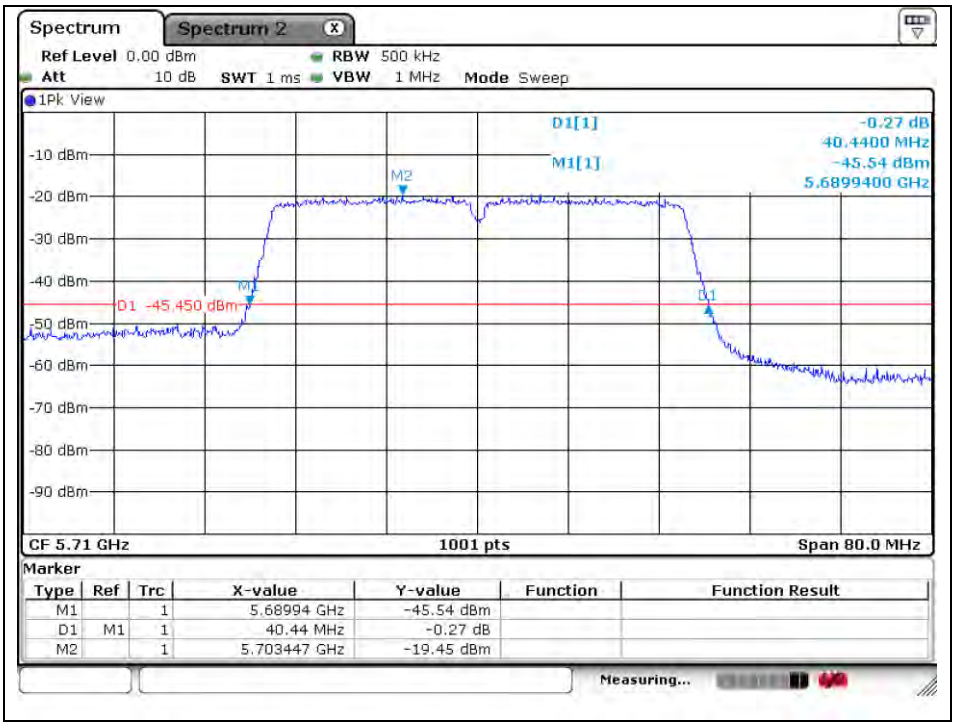
Low channel (5 510 ㎒)



Middle channel (5 550 ㎒)

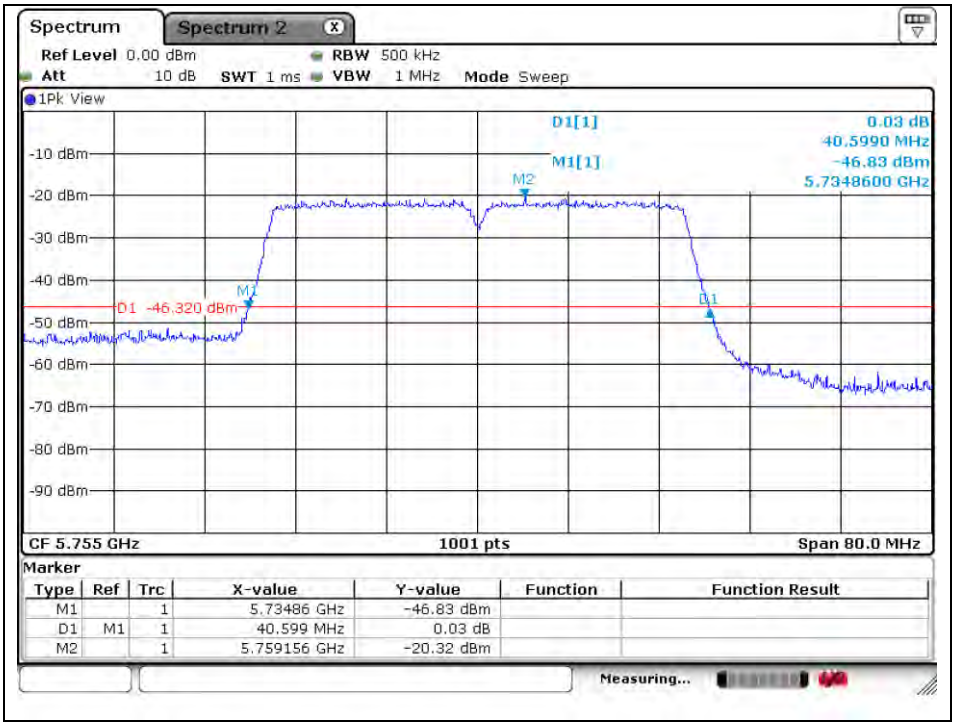


High channel (5 710 ㎒)

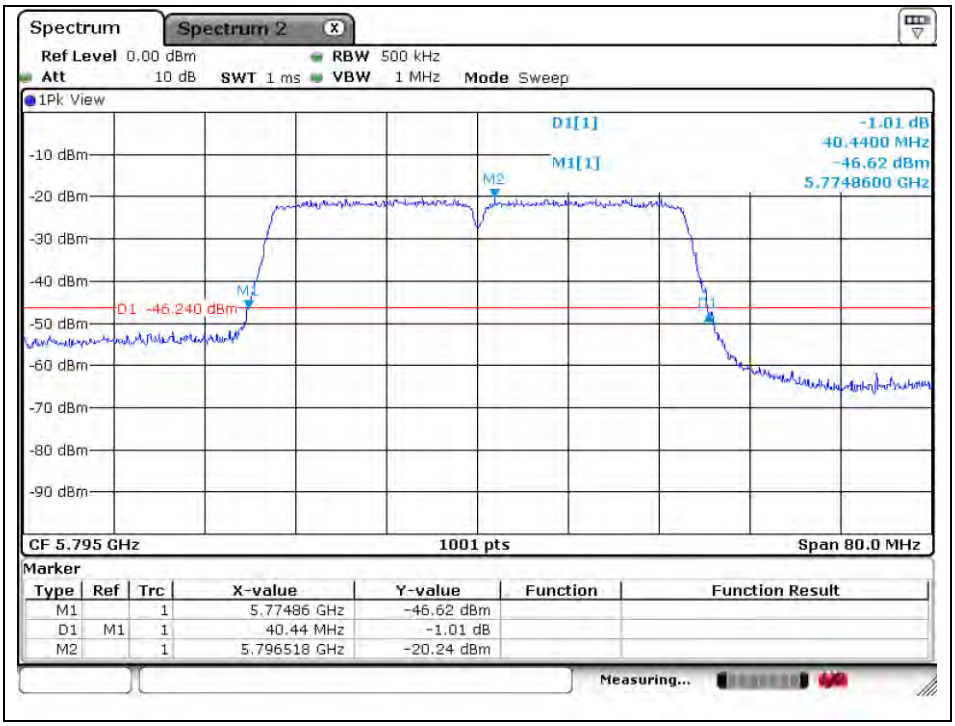


802.11n_HT40 (Band 3)

Low channel (5 755 ㎒)

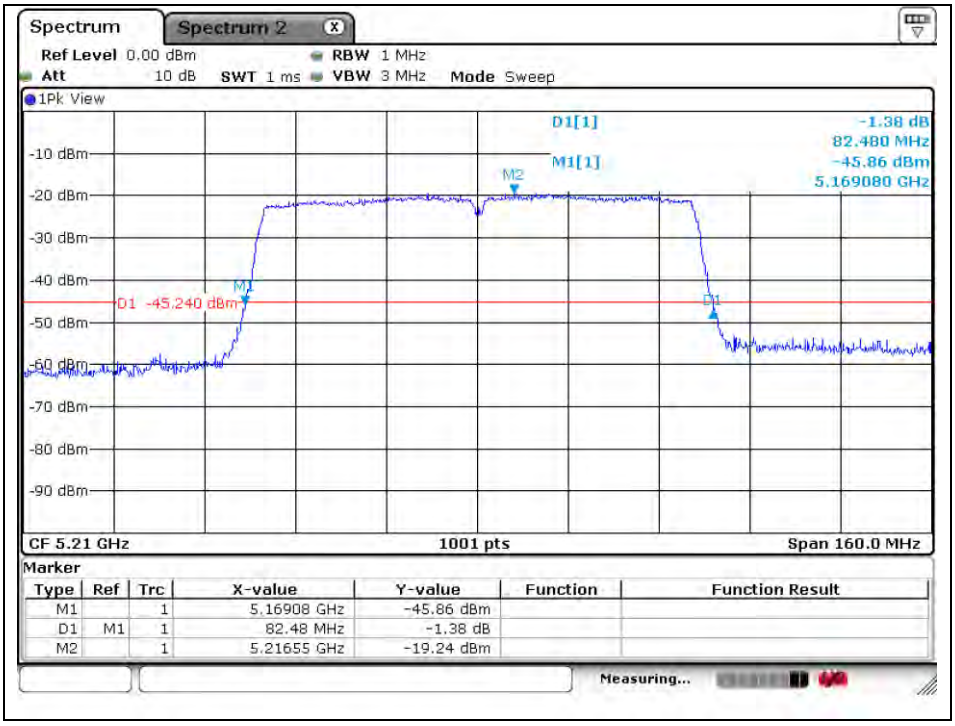


High channel (5 795 ㎒)



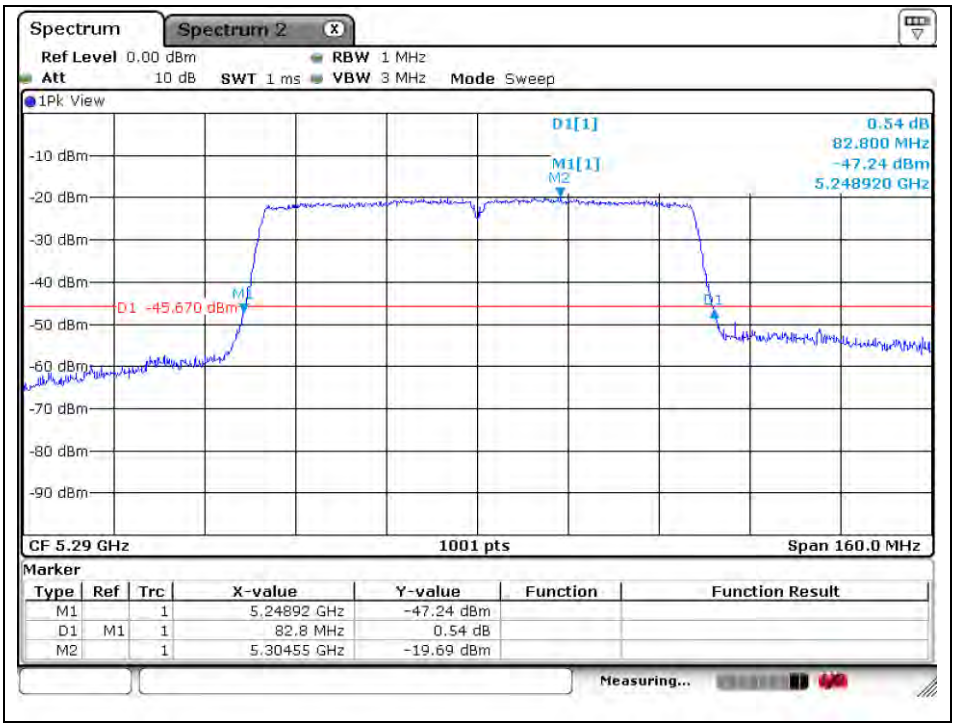
802.11ac_VHT80 (Band 1)

Middle channel (5 210 ㎒)



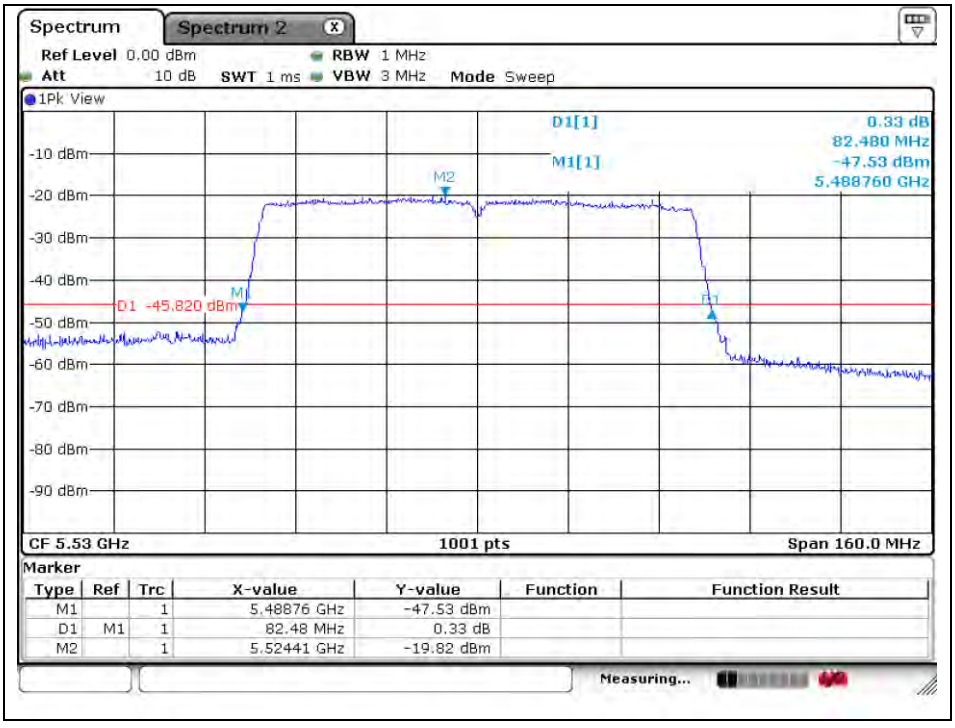
802.11ac_VHT80 (Band 2A)

Middle channel (5 290 ㎒)

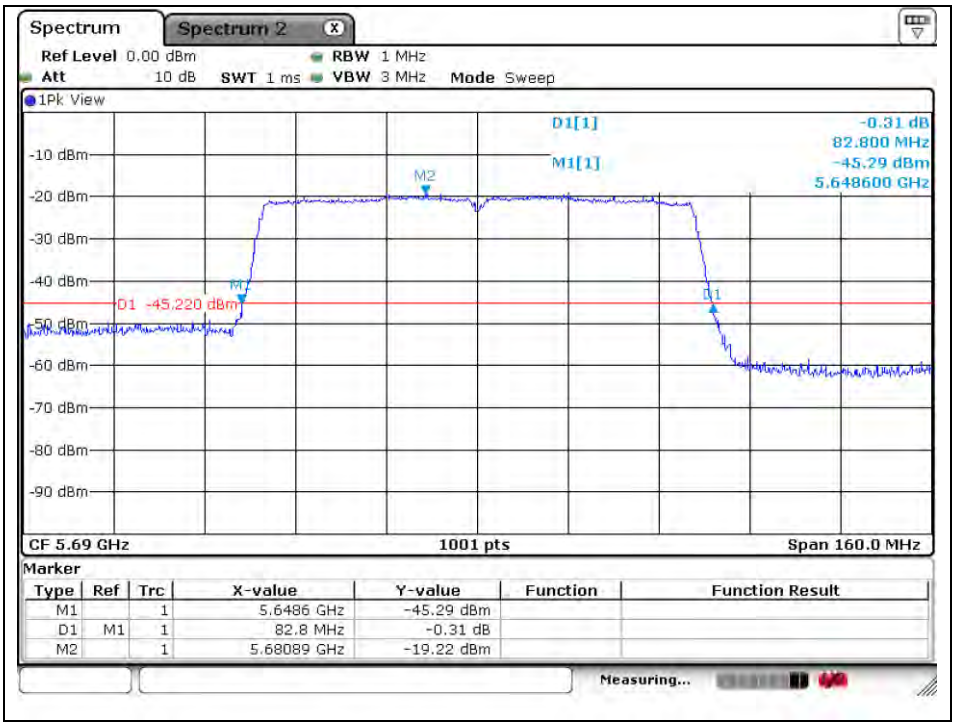


802.11ac_VHT80 (Band 2C)

Low channel (5 530 ㎒)

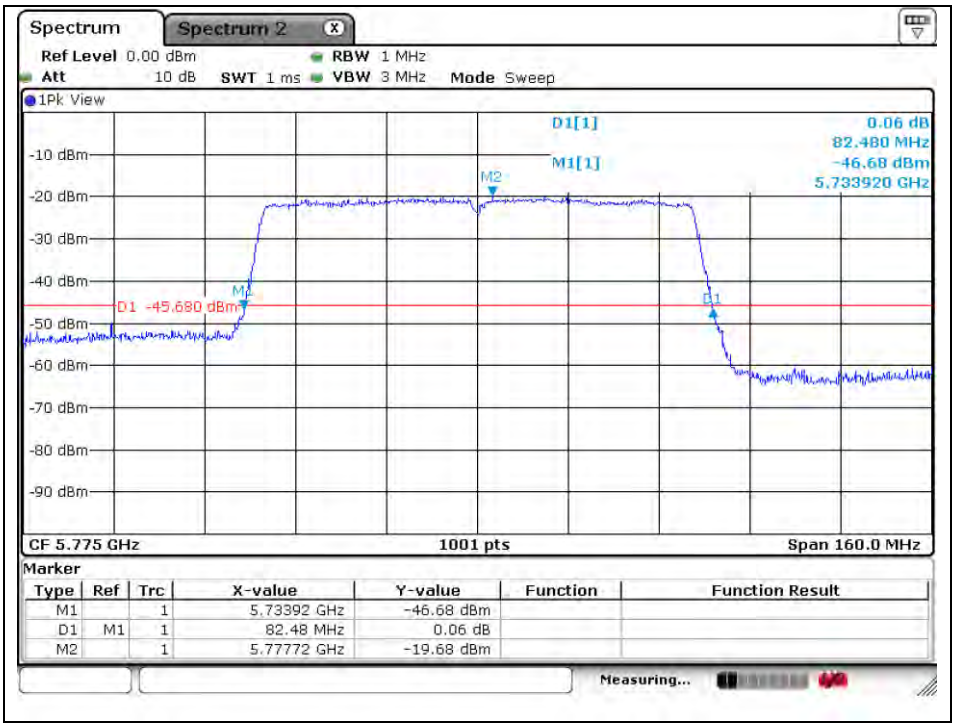


High channel (5 690 ㎒)



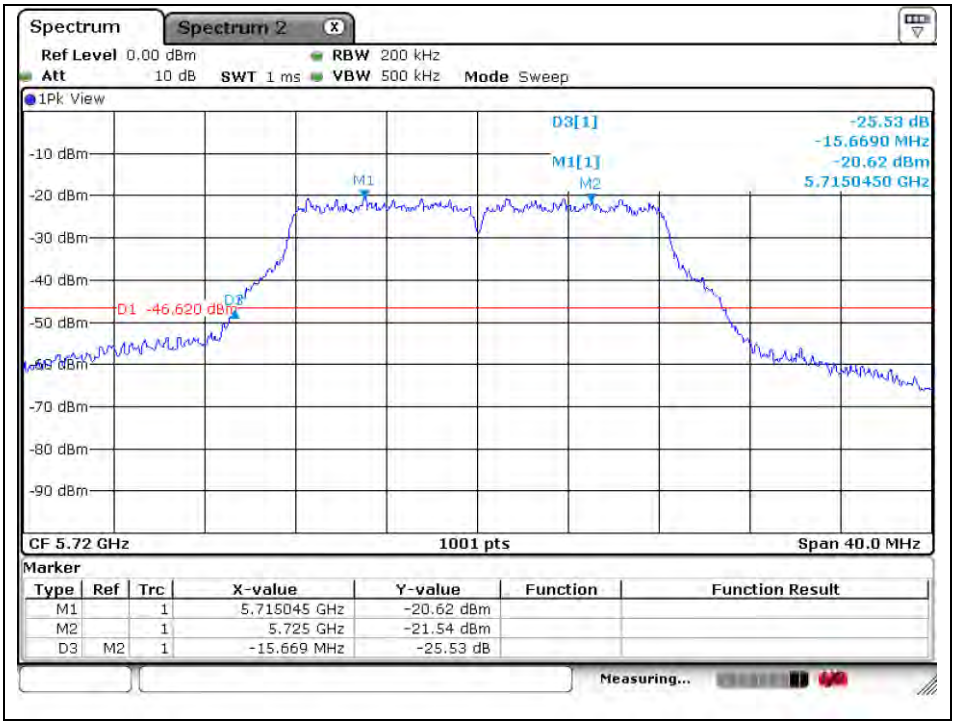
802. 11ac_VHT80 (Band 3)

Middle channel (5 775 ㎒)

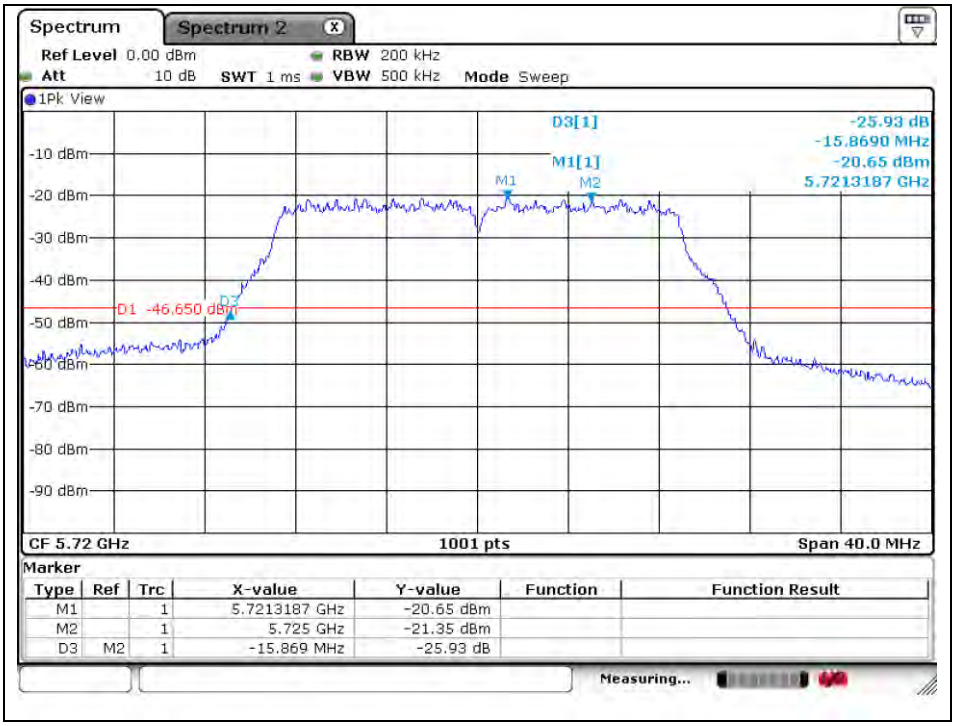


Band-crossing channels

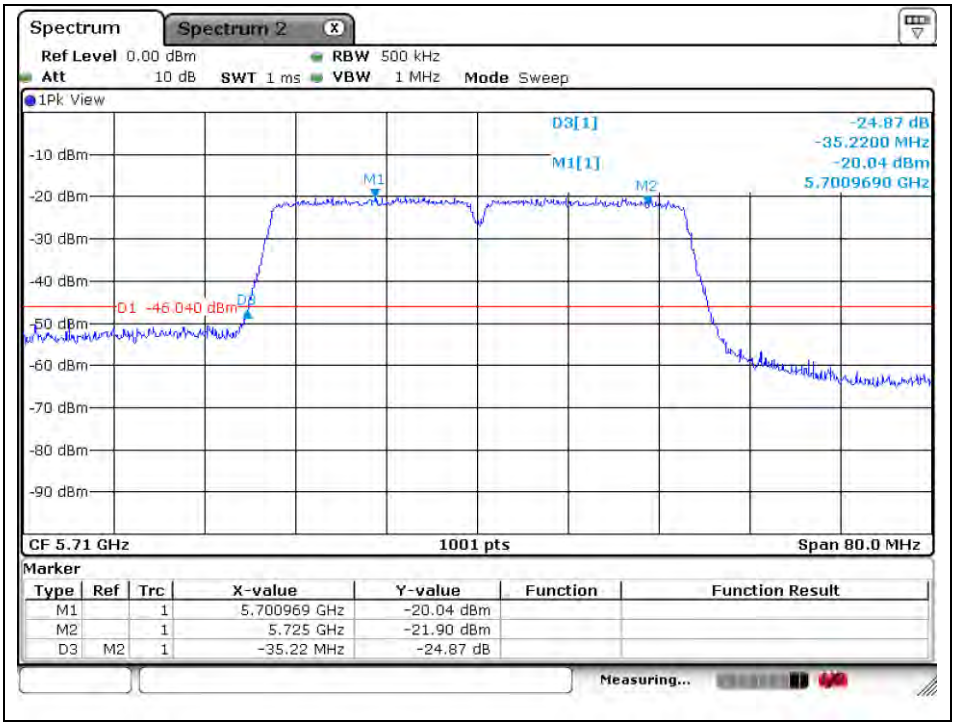
802.11a (5 720 ㎒)



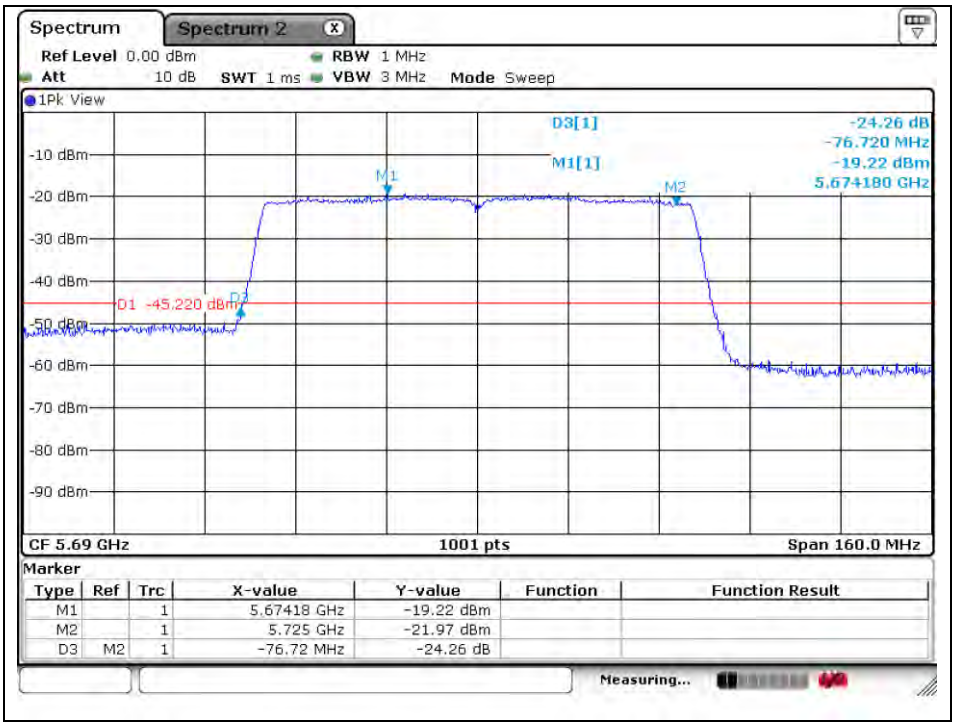
802.11n_HT20 (5 720 ㎒)



802.11n_HT40 (5 710 ㎒)

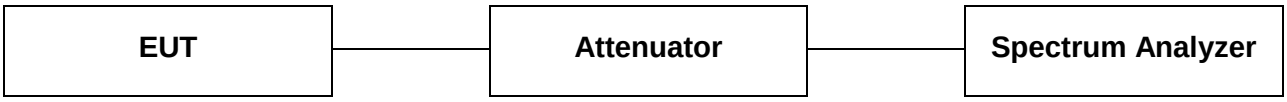


802.11ac_VHT80 (5 690 ㎒)



4. 6 dB bandwidth

4.1. Test setup



4.2. Limit

FCC

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

IC

According to RSS-247 Issue 1, 6.2.4(1), for equipment operating in the band 5 725-5 850 ㎒ the minimum 6 dB Bandwidth shall be at least 500 ㎑.

4.3. Test procedure

All data rates and modes were investigated for this test. The full data for the worst case data rate are reported in this section.

1. This measurement settings are specified in section C.2 of KDB 789033 D02 v01r03.
2. Set RBW: 100 ㎑.
3. Set the video bandwidth (VBW) ≥ 3 x 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 D of KDB 644545 D03 v01.

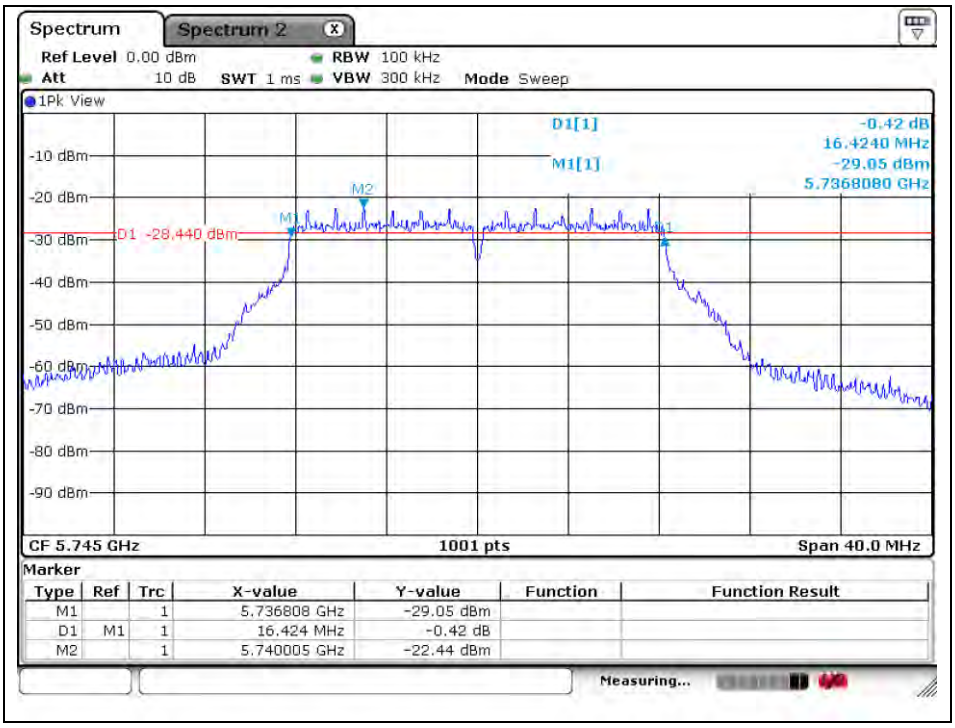
4.4. Test result

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

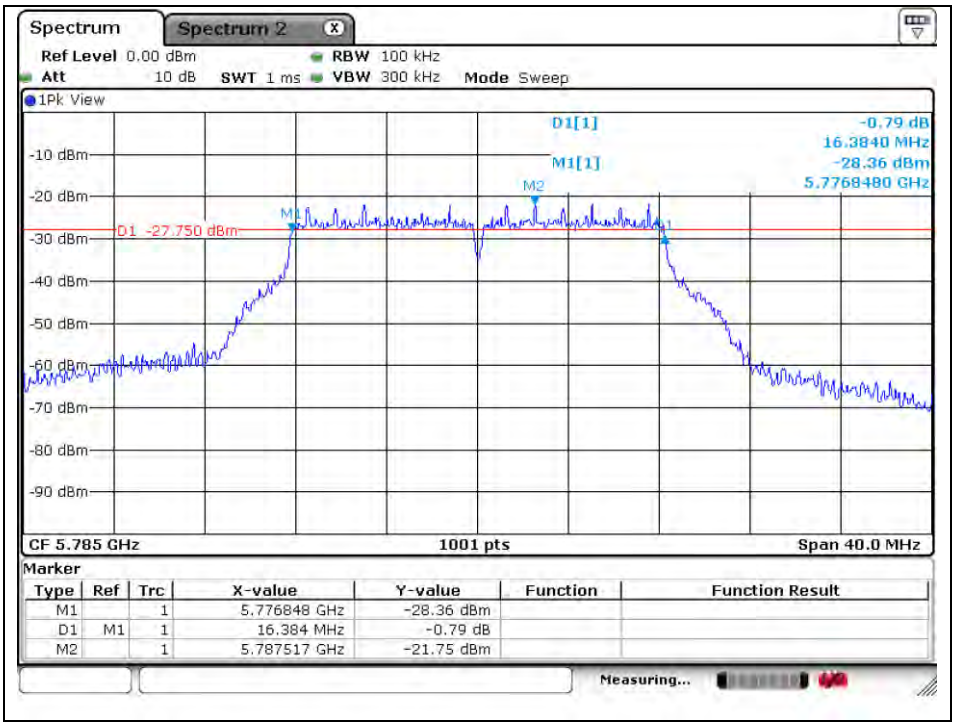
Band	Mode	Frequency (㎒)	Ch.	Data Rate (Mbps)	6 ㏈ Bandwidth (㎒)	Minimum Bandwidth (㎑)
U-NII 3	11a	5 745	149	6	16.424	500
		5 785	157	6	16.384	
		5 825	165	6	16.424	
	11n_HT20	5 745	149	MCS0	17.662	
		5 785	157	MCS0	17.662	
		5 825	165	MCS0	17.662	
	11n_HT40	5 755	151	MCS0	36.523	
		5 795	159	MCS0	36.444	
	11ac_VHT80	5 775	155	MCS0	75.920	
U-NII 3 (Band-Crossing channels)	11a	5 720	144	6	3.232	
	11n_HT20	5 720	144	MCS0	3.871	
	11n_HT40	5 710	142	MCS0	3.302	
	11ac_VHT80	5 690	138	MCS0	3.200	

802.11a (Band 3)

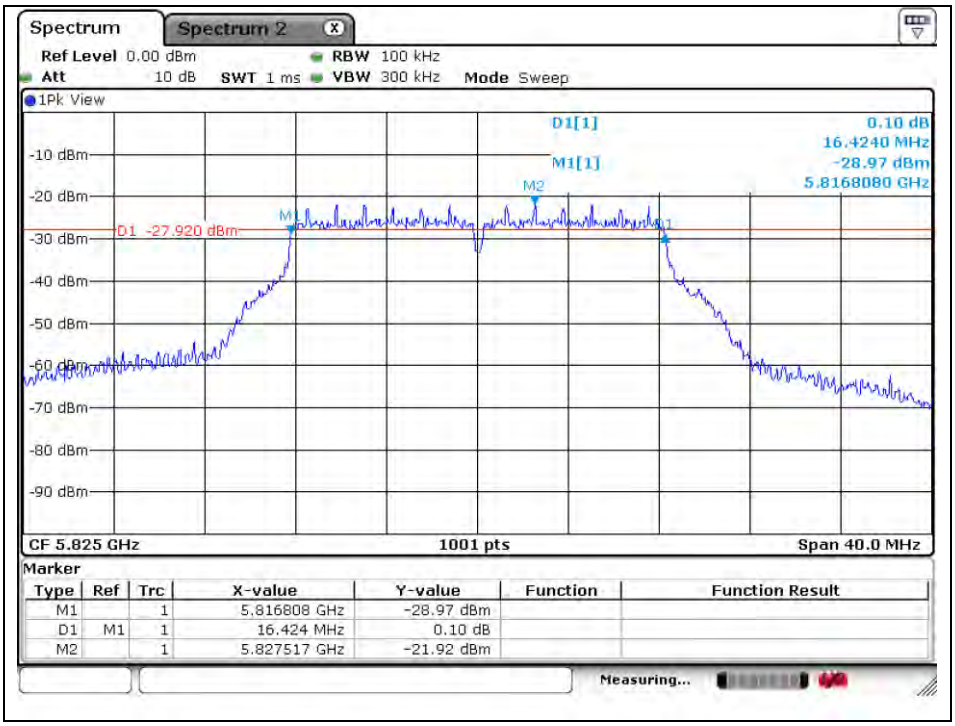
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

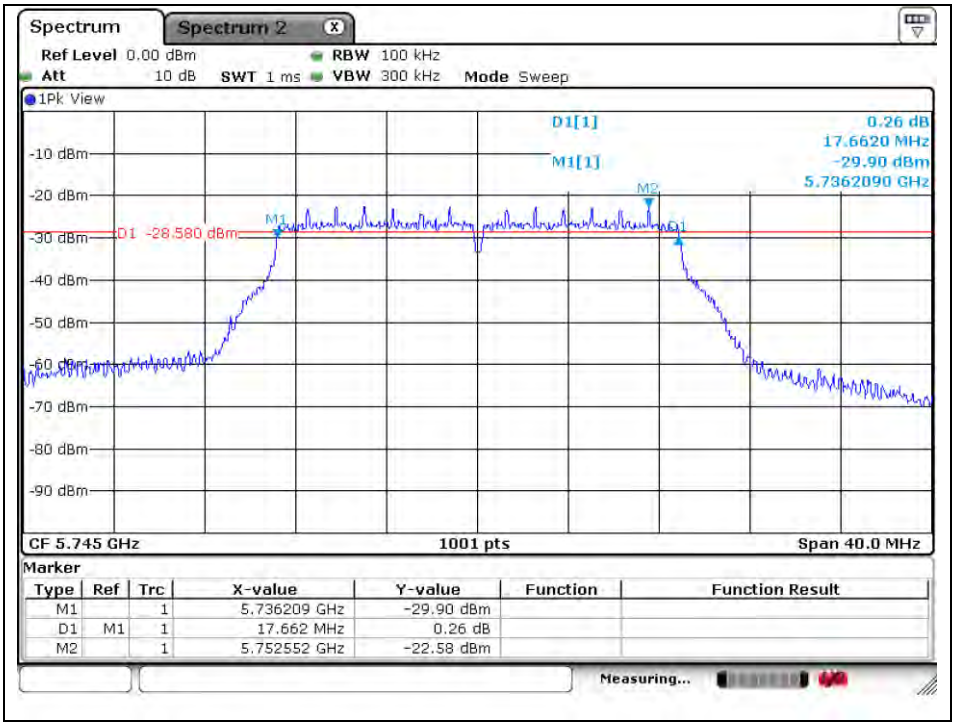


High channel (5 825 ㎒)

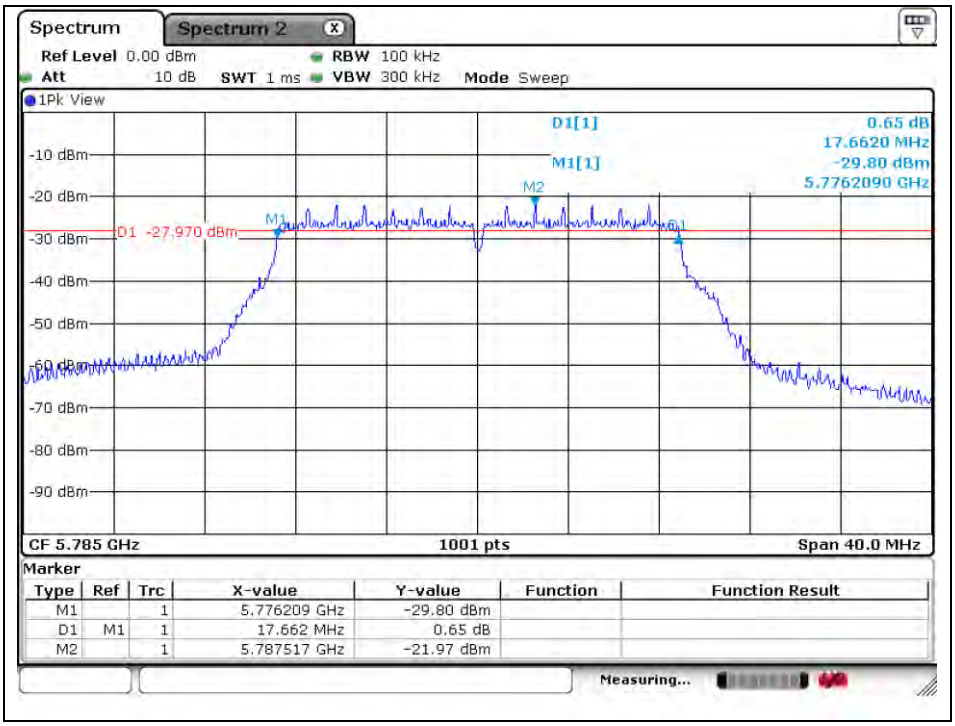


802.11n_HT20 (Band 3)

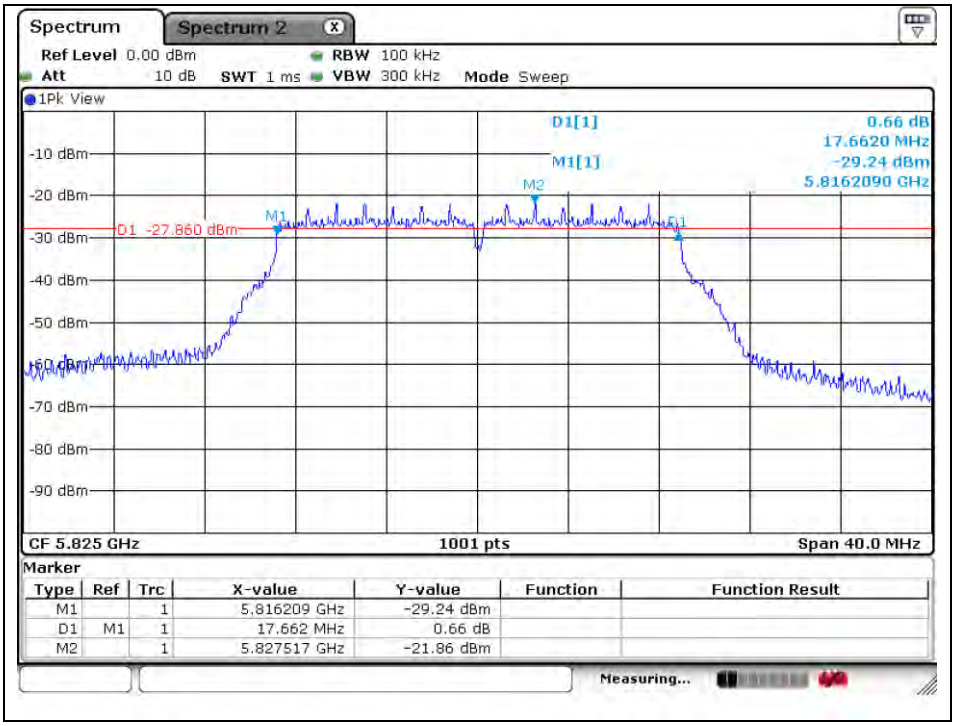
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

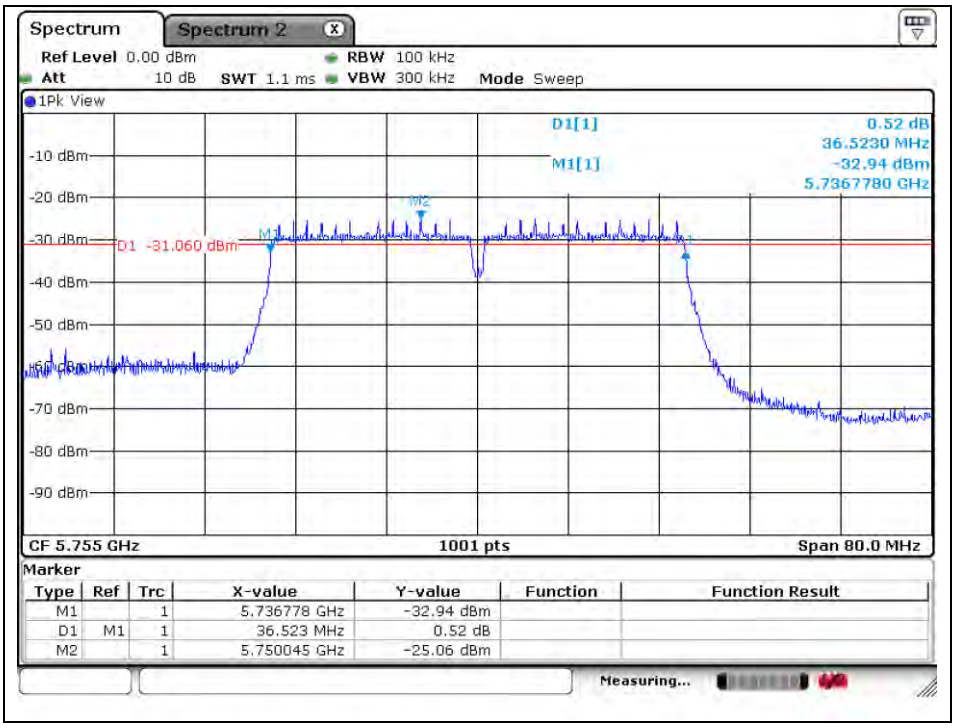


High channel (5 825 ㎒)

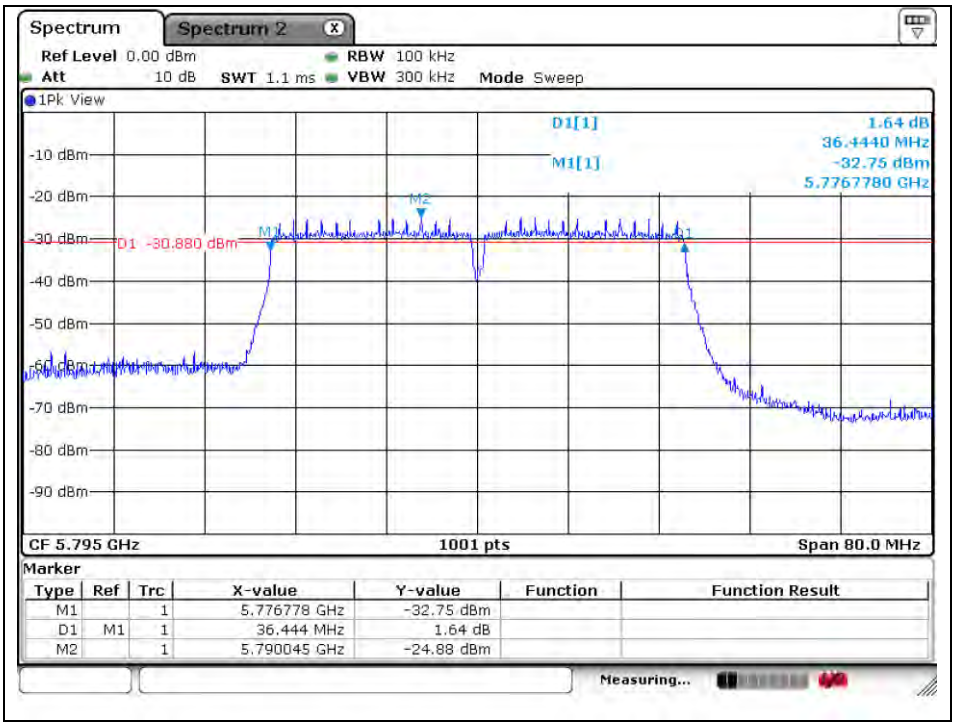


802.11n_HT40 (Band 3)

Low channel (5 755 ㎒)

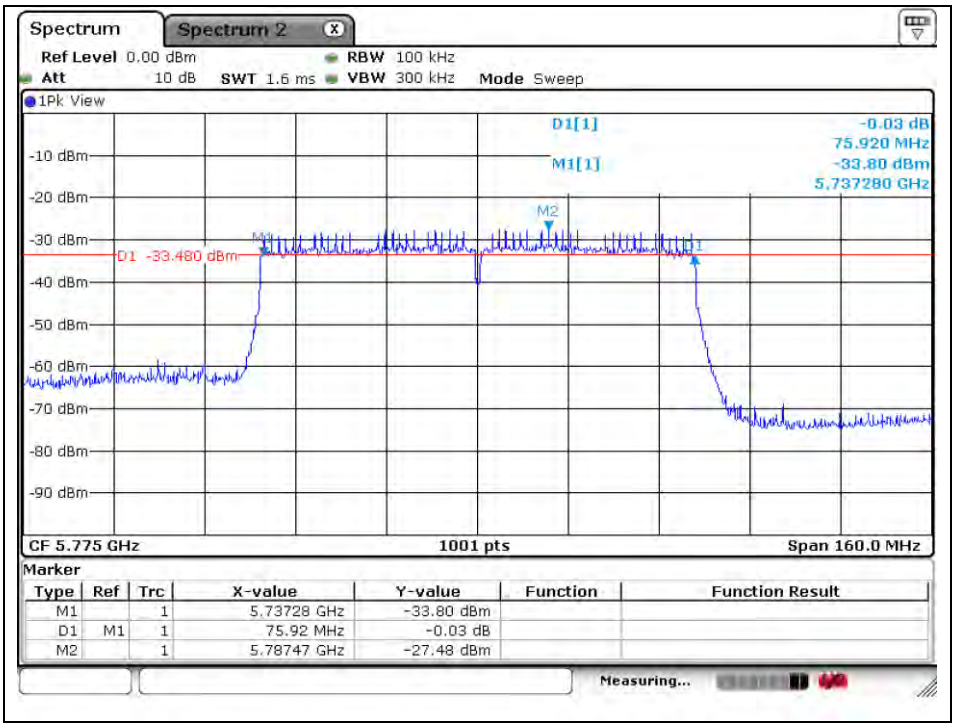


High channel (5 795 ㎒)



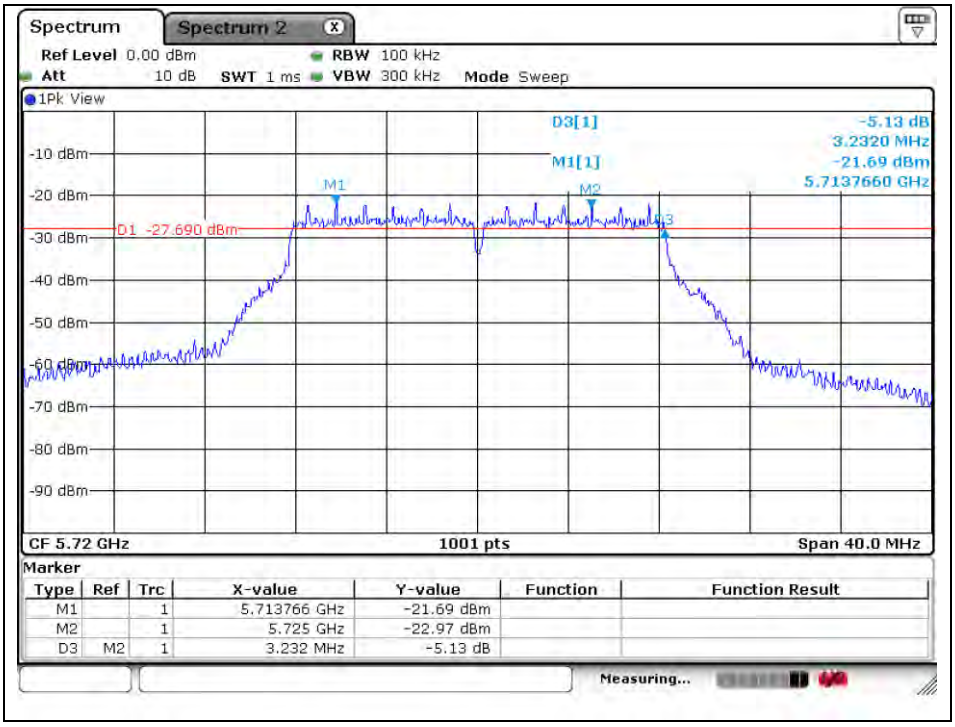
802.11ac_VHT80 (Band 3)

Middle channel (5 775 ㎒)

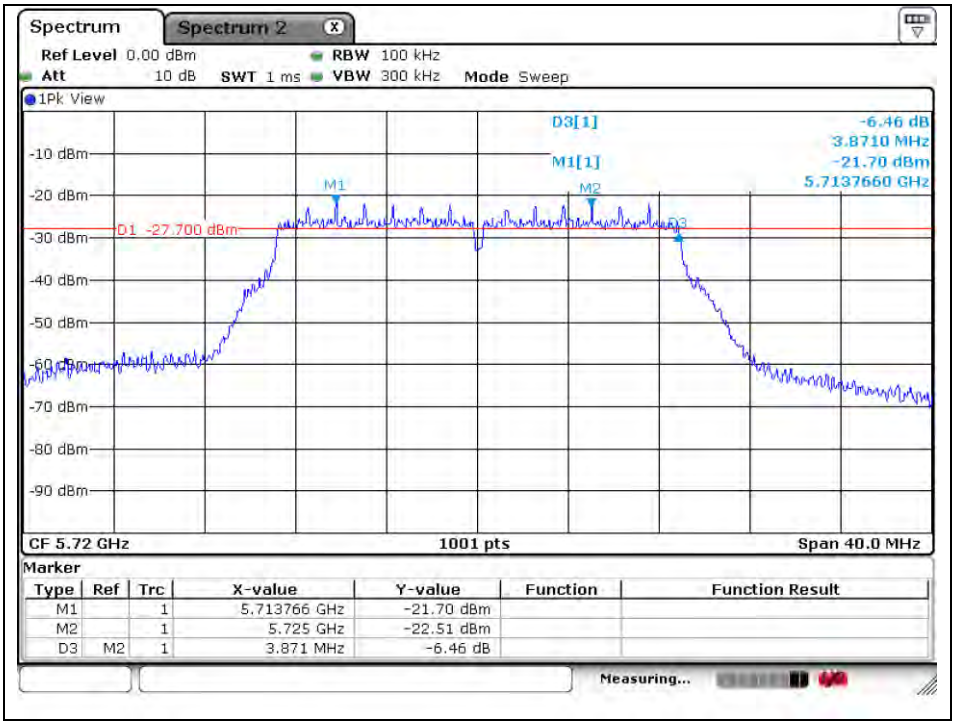


Band-crossing channels

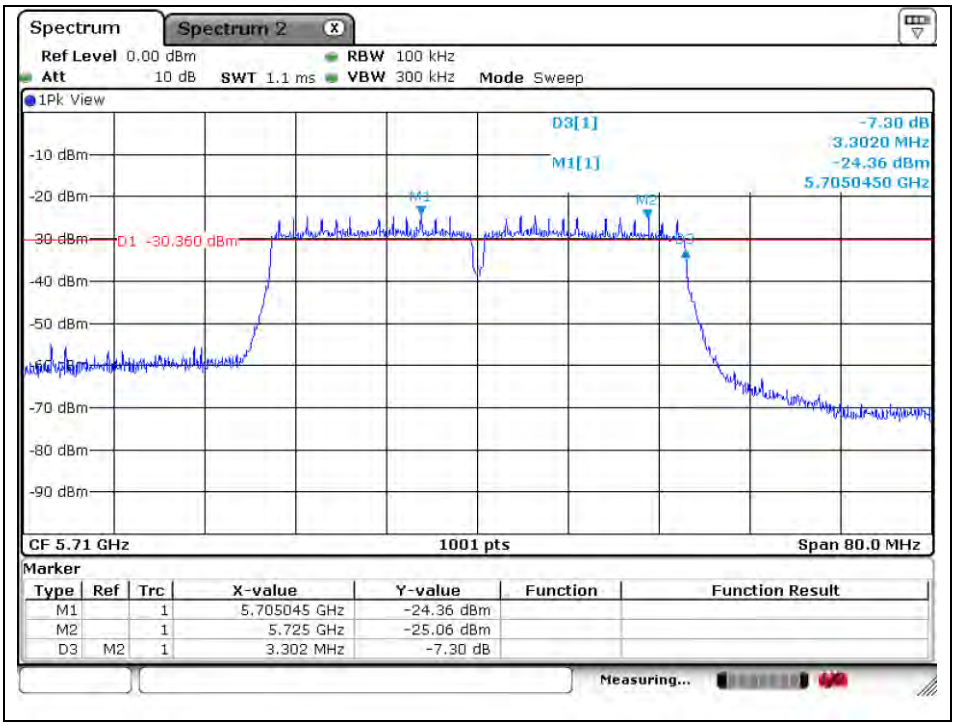
802.11a (5 720 ㎒)



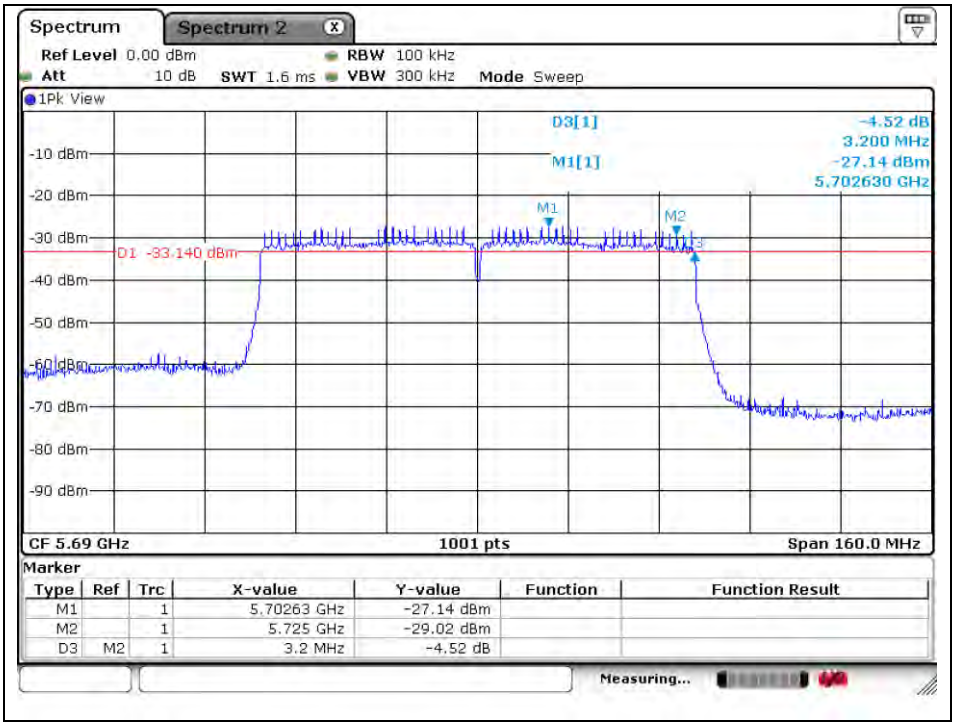
802.11n_HT20 (5 720 ㎒)



802.11n_HT40 (5 710 ㎒)

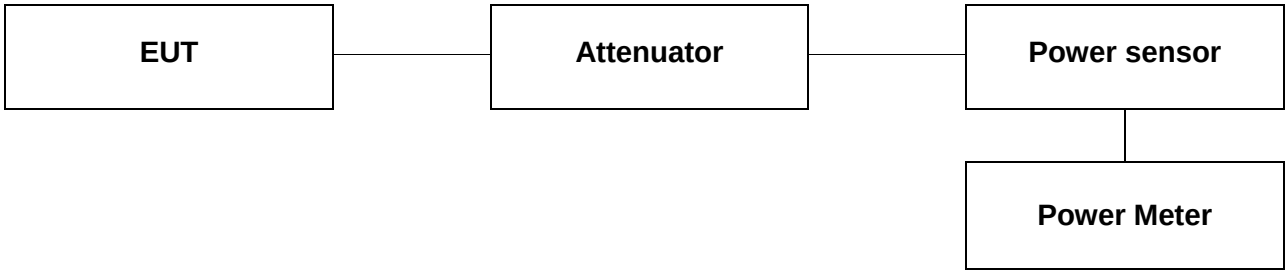


802.11ac_VHT80 (5 690 ㎒)



5. Maximum Conducted Output Power

5.1. Test setup



5.2. Limit

FCC

15.407 (a)(1)(iv)

For client devices in the 5.15-5.25 ㎓ band, the maximum conducted output power over the frequency band of operation shall not exceed 250 ㎽ provided the maximum antenna gain does not exceed 6 ㏈i. In addition, the maximum power spectral density shall not exceed 11 ㏈m in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i.

15.407 (a)(2)

For the 5.25-5.35 ㎓ and 5.47-5.725 ㎓ bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 ㎽ or 11 ㏈m + 10 log B, where B is the 26 ㏈ emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 ㏈m in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i.

15.407 (a)(3)

For the band 5.725-5.85 ㎓, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 ㏈m in any 500-㎑ band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i. However, fixed point-to point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 ㏈ i without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC

RSS-247 Issue 1, 6.2.2 (1) Band 5 250-5 350 ㎒

The maximum conducted output power shall not exceed 250 ㎽ or 11 + 10 $\log_{10}$B, ㏈m, whichever is less. The power spectral density shall not exceed 11 ㏈m in any 1.0 ㎒ band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, ㏈m, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 ㎽ shall implement TPC in order to have the capability to operate at least 6 ㏈ below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Issue 1, 6.2.3 (1) Band 5 470-5 600 ㎒ and 5 650-5 725 ㎒

The maximum conducted output power shall not exceed 250 ㎽ or 11 + 10 $\log_{10}$B, ㏈m, whichever is less. The power spectral density shall not exceed 11 ㏈m in any 1.0 ㎒ band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, ㏈m, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 ㎽ shall implement TPC in order to have the capability to operate at least 6 ㏈ below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Issue 1, 6.2.4 (1) Band 5 725-5 850 ㎒

For equipment operating in the band 5 725-5 850 ㎒, the minimum 6 ㏈ bandwidth shall be at least 500 ㎑. The maximum conducted output power shall not exceed 1 W. The power spectral density shall not exceed 30 ㏈m in any 500 ㎑ band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 ㏈i without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint[3] systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

5.3. Test procedure

1. This measurement settings are specified in section E.3.a and E.2.c of KDB 789033 02 v01r03.
2. Measurements may be performed using a wideband RF power meter with a thermocouple detector or equivalent if all of the conditions listed below are satisfied.
   - The EUT is configured to transmit continuously or to transmit with a consistent duty cycle.
   - At all times when the EUT is transmitting, it must be transmitting at its maximum power control level.
   - The integration period of the power meter exceeds the repetition period of the transmitted signal by at least a factor of five.
3. If the transmitter does not transmit continuously, measure the duty cycle, x, of the transmitter output signal as described in section II.B.
4. Measure the average power of the transmitter. This measurement is an average over both the on and off periods of the transmitter.
5. Adjust the measurement in dBm by adding 10 log (1/x) where x is the duty cycle (e.g., 10 log(1/0.25) if the duty cycle is 25 %).

Remark;
In case of band crossing channels 138, 142 and 144, the measurement is complied with section E.2.d of KDB 789033 02 v01r03 and section D of KDB 644545 03 v01.

5.4. Test result

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

Mode	Band	Frequency (㎒)	Conducted Power (dB m)			
			Data Rate [Mbps]	Average Power (dB m)	Duty Correction Factor (dB)	Average Power Result (dB m)
11a	U-NII 1	5 180	6	13.14	0.32	13.46
		5 200	6	12.18	0.32	12.50
		5 240	6	12.30	0.32	12.62
	U-NII 2A	5 260	6	12.17	0.32	12.49
		5 280	6	12.25	0.32	12.57
		5 300	6	12.18	0.32	12.50
		5 320	6	12.13	0.32	12.45
	U-NII 2C	5 500	6	11.29	0.32	11.61
		5 580	6	12.12	0.32	12.44
		5 720	6	12.62	0.32	12.94
	U-NII 3	5 745	6	12.28	0.32	12.60
		5 785	6	12.55	0.32	12.87
		5 825	6	12.65	0.32	12.97

FCC Limit

Band	Conducted Power Limit (dB m)					
	Frequency (㎒)	Fixed Limit (dB m)	26 dB BW (㎒)	11+10LogB (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 1	5 180	23.98			2.42	23.98
	5 200					
	5 240					
U-NII 2A	5 260	23.98	21.459	24.32	2.42	23.98
	5 280		21.538	24.33		23.98
	5 320		21.538	24.33		23.98
U-NII 2C	5 500	23.98	21.499	24.32	-0.85	23.98
	5 580		21.578	24.34		23.98
	5 720		21.658	24.36		23.98
U-NII 3	5 745	30			-2.39	30
	5 785					
	5 825					

IC Limit

Band	Conducted Power Limit (dB m)					
	Frequency (㎒)	Fixed Limit (dB m)	99 % BW (㎒)	11+10Log$_{10}$B (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 2A	5 280	23.98	17.135	23.34	2.42	23.34
	5 300		17.250	22.37		22.37
	5 320		17.135	23.34		23.34
U-NII 2C	5 500	23.98	17.192	23.35	-0.85	23.35
	5 580		17.077	23.32		23.32
	5 720		17.192	23.35		23.35
U-NII 3	5 745	30			-2.39	30
	5 785					
	5 825					

Remark:

1. Result (dB m) = Average Power(dB m) + Duty Correction Factor (dB)

Mode	Band	Frequency (㎒)	Conducted Power (㏈m)			
			Data Rate [Mbps]	Average Power (㏈m)	Duty Correction Factor (㏈)	Average Power Result (㏈m)
11n_HT20	U-NII 1	5 180	MCS0	12.85	0.32	13.17
		5 200	MCS0	12.20	0.32	12.52
		5 240	MCS0	12.08	0.32	12.40
	U-NII 2A	5 260	MCS0	12.39	0.32	12.71
		5 280	MCS0	12.21	0.32	12.53
		5 300	MCS0	12.10	0.32	12.42
		5 320	MCS0	11.99	0.32	12.31
	U-NII 2C	5 500	MCS0	11.29	0.32	11.61
		5 580	MCS0	11.92	0.32	12.24
		5 720	MCS0	12.49	0.32	12.81
	U-NII 3	5 745	MCS0	12.50	0.32	12.82
		5 785	MCS0	12.30	0.32	12.62
		5 825	MCS0	12.52	0.32	12.84

FCC Limit

Band	Conducted Power Limit (㏈m)					
	Frequency (㎒)	Fixed Limit (㏈m)	26 ㏈ BW (㎒)	11+10LogB (㏈m)	Antenna gain (㏈i)	Limit (㏈m)
U-NII 1	5 180	23.98			2.42	23.98
	5 200					
	5 240					
U-NII 2A	5 260	23.98	21.698	24.36	2.42	23.98
	5 280		21.618	24.35		23.98
	5 320		21.778	24.38		23.98
U-NII 2C	5 500	23.98	21.738	24.37	-0.85	23.98
	5 580		21.698	24.36		23.98
	5 720		21.978	24.42		23.98
U-NII 3	5 745	30			-2.39	30
	5 785					
	5 825					

IC Limit

Band	Conducted Power Limit (dB m)					
	Frequency (㎒)	Fixed Limit (dB m)	99 % BW (㎒)	11+10Log$_{10}$B (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 2A	5 280	23.98	18.061	23.57	2.42	23.57
	5 300		18.234	22.61		22.61
	5 320		18.177	23.60		23.60
U-NII 2C	5 500	23.98	18.177	23.60	-0.85	23.60
	5 580		18.119	23.58		23.58
	5 720		18.177	23.60		23.60
U-NII 3	5 745	30			-2.39	30
	5 785					
	5 825					

Remark:

1. Result (dB m) = Average Power(dB m) + Duty Correction Factor (dB)

Mode	Band	Frequency (㎒)	Conducted Power (㏈m)			
			Data Rate [Mbps]	Average Power (㏈m)	Duty Correction Factor (㏈)	Average Power Result (㏈m)
11n_HT40	U-NII 1	5 190	MCS0	7.85	0.60	8.45
		5 230	MCS0	7.32	0.60	7.92
	U-NII 2A	5 270	MCS0	8.48	0.60	9.08
		5 310	MCS0	7.86	0.60	8.46
	U-NII 2C	5 510	MCS0	6.69	0.60	7.29
		5 550	MCS0	7.34	0.60	7.94
		5 710	MCS0	8.08	0.60	8.68
	U-NII 3	5 755	MCS0	7.79	0.60	8.39
		5 795	MCS0	7.74	0.60	8.34

FCC Limit

Band	Conducted Power Limit (㏈m)					
	Frequency (㎒)	Fixed Limit (㏈m)	26 ㏈ BW (㎒)	11+10LogB (㏈m)	Antenna gain (㏈i)	Limit (㏈m)
U-NII 1	5 190	23.98			2.42	23.98
	5 230					
U-NII 2A	5 270	23.98	40.599	27.09	2.42	23.98
	5 310		40.679	27.09		23.98
U-NII 2C	5 510	23.98	40.599	27.09	-0.85	23.98
	5 550		40.519	27.08		23.98
	5 710		40.440	27.07		23.98
U-NII 3	5 755	30			-2.39	30
	5 955					

IC Limit

Band	Conducted Power Limit (㏈m)					
	Frequency (㎒)	Fixed Limit (㏈m)	99 % BW (㎒)	11+10Log$_{10}$B (㏈m)	Antenna gain (㏈i)	Limit (㏈m)
U-NII 2A	5 310	23.98	36.585	26.63	2.42	23.98
U-NII 2C	5 510	23.98	36.585	26.63	-0.85	23.98
	5 550		36.700	26.65		23.98
	5 710		36.700	26.65		23.98
U-NII 3	5 755	30			-2.39	30
	5 955					

Remark:

1. Result (㏈m) = Average Power(㏈m) + Duty Correction Factor (㏈)

Mode	Band	Frequency (㎒)	Conducted Power (dB m)			
			Data Rate [Mbps]	Average Power (dB m)	Duty Correction Factor (dB)	Average Power Result (dB m)
11ac_VHT80	U-NII 1	5 210	MCS0	8.71	1.19	9.90
	U-NII 2A	5 290	MCS0	8.10	1.19	9.29
	U-NII 2C	5 530	MCS0	7.93	1.19	9.12
		5 690	MCS0	8.98	1.19	10.17
	U-NII 3	5 775	MCS0	9.10	1.19	10.29

FCC Limit

Band	Conducted Power Limit (dB m)					
	Frequency (㎒)	Fixed Limit (dB m)	26 dB BW (㎒)	11+10LogB (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 1	5 210	23.98			2.42	23.98
U-NII 2A	5 290	23.98	82.800	30.18	2.42	23.98
U-NII 2C	5 530	23.98	82.480	30.16	-0.85	23.98
	5 690		82.800	30.18		23.98
U-NII 3	5 775	30			-2.39	30

IC Limit

Band	Conducted Power Limit (dB m)					
	Frequency (㎒)	Fixed Limit (dB m)	99 % BW (㎒)	11+10Log$_{10}$B (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 2C	5 530	23.98	75.948	29.81	-0.85	23.98
	5 690		75.716	29.79		23.98
U-NII 3	5 775	30			-2.39	30

Remark:

1. Result (dB m) = Average Power (dB m) + Duty Correction Factor (dB)

-Band-crossing channels

Band	Mode	Frequency (㎒)	Conducted Power (dB m)			
			Data Rate [Mbps]	Average Power (dB m)	Duty Correction Factor (dB)	Average Power Result (dB m)
U-NII 2C	11a	5 720	6	11.97	0.32	12.29
U-NII 3			6	5.28		5.60
U-NII 2C	11n_HT20	5 720	MCS0	11.14	0.32	11.46
U-NII 3			MCS0	5.54		5.86
U-NII 2C	11n_HT40	5 710	MCS0	7.74	0.60	8.34
U-NII 3			MCS0	-2.55		-1.95
U-NII 2C	11ac_VHT80	5 690	MCS0	6.50	1.19	7.69
U-NII 3			MCS0	-8.53		-7.34

Band	Mode	Conducted Power Limit (dB m)					
		Frequency (㎒)	Fixed Limit (dB m)	26 dB BW (㎒)	11+10LogB (dB m)	Antenna gain (dB i)	Limit (dB m)
U-NII 2C	11a	5 720	23.98	15.669	22.95	-0.85	22.95
U-NII 3							30
U-NII 2C	11n_HT20	5 720	23.98	15.869	22.01	-0.85	22.01
U-NII 3							30
U-NII 2C	11n_HT40	5 710	23.98	35.220	25.47	-0.85	23.98
U-NII 3							30
U-NII 2C	11ac_VHT80	5 690	23.98	76.720	28.85	-0.85	23.98
U-NII 3							30

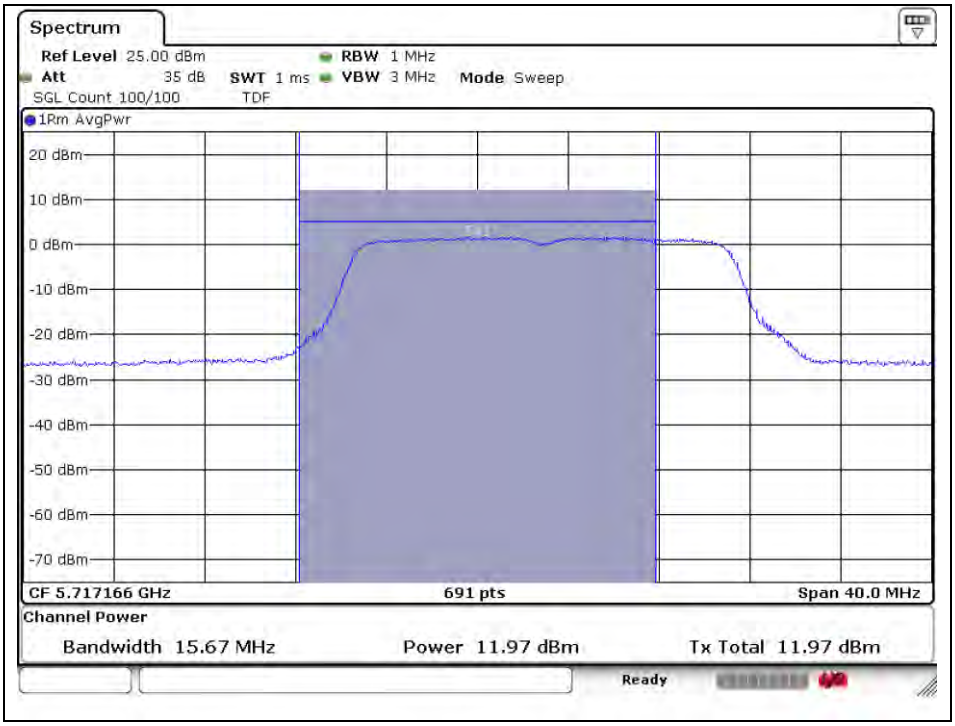
Remark:

1. Result (dB m) = Average Power(dB m) + Duty Correction Factor (dB)

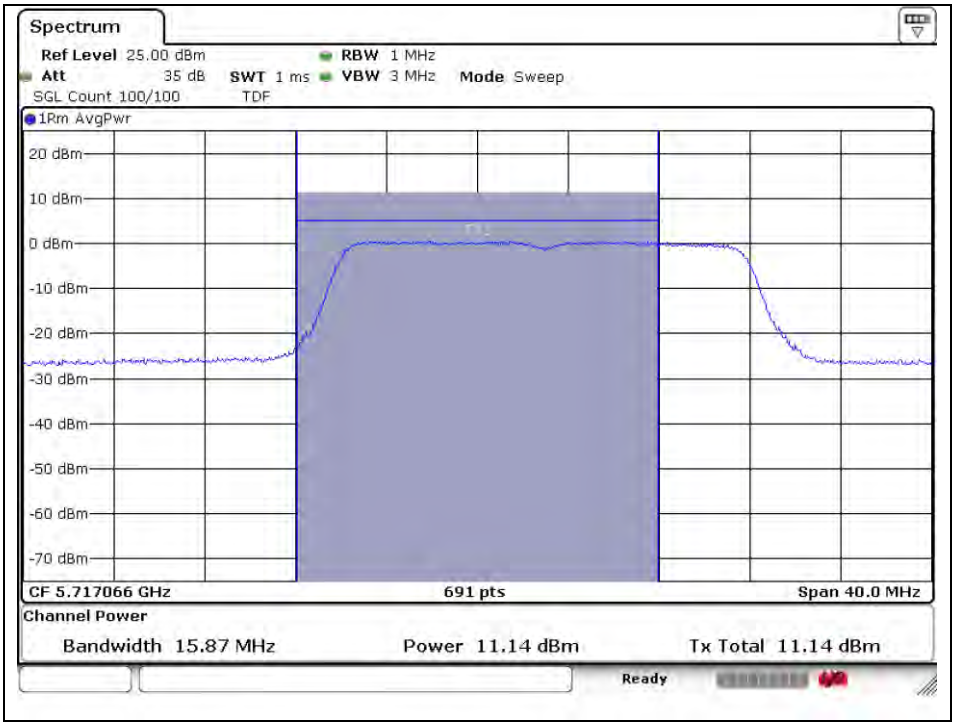
Band-crossing channels

U-NII 2C

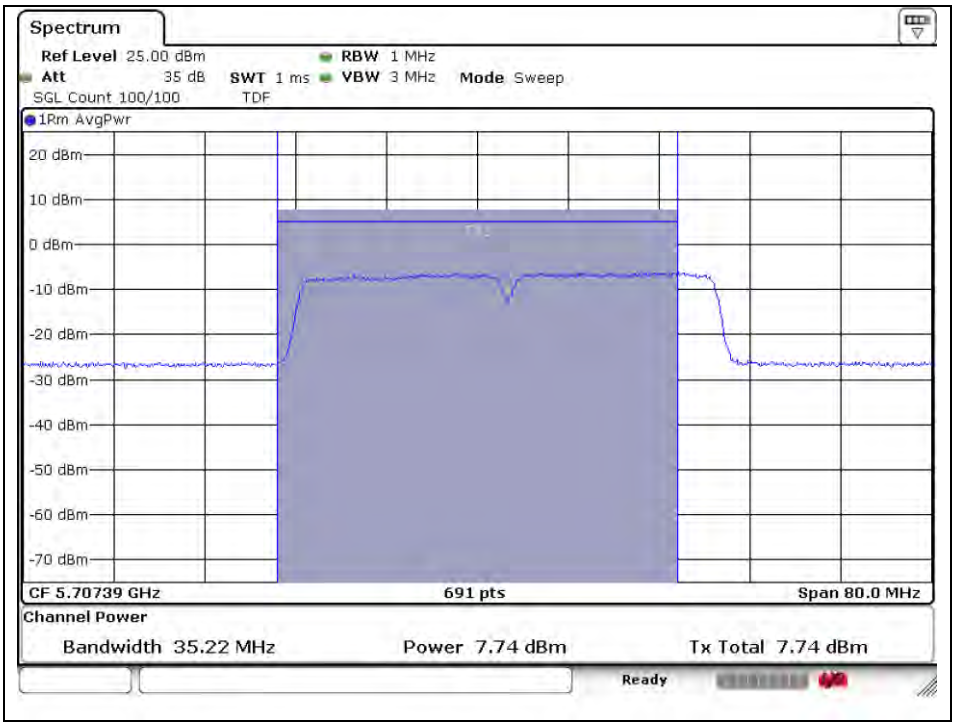
802.11a (5 720 ㎒)



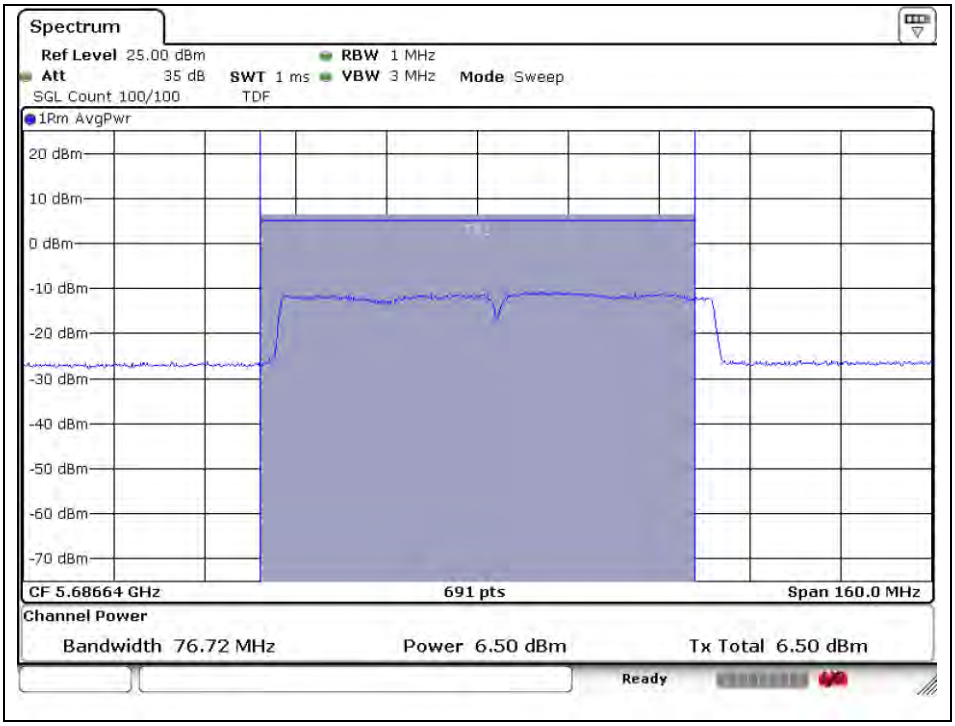
802.11n_HT20 (5 720 ㎒)



802.11n_HT40 (5 710 ㎒)

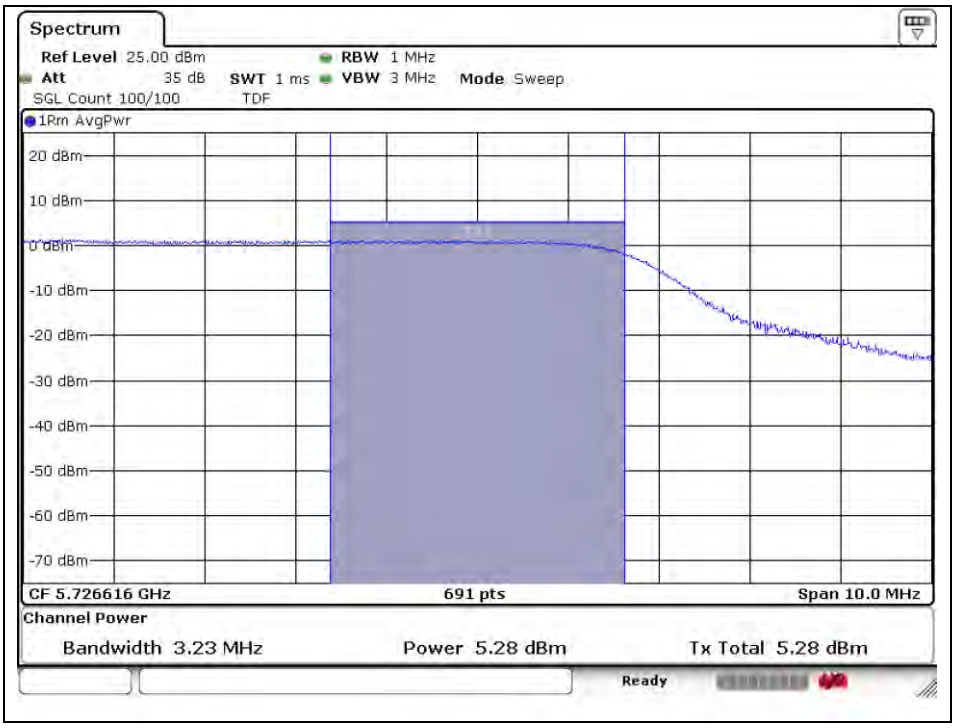


802.11ac_VHT80 (5 690 ㎒)



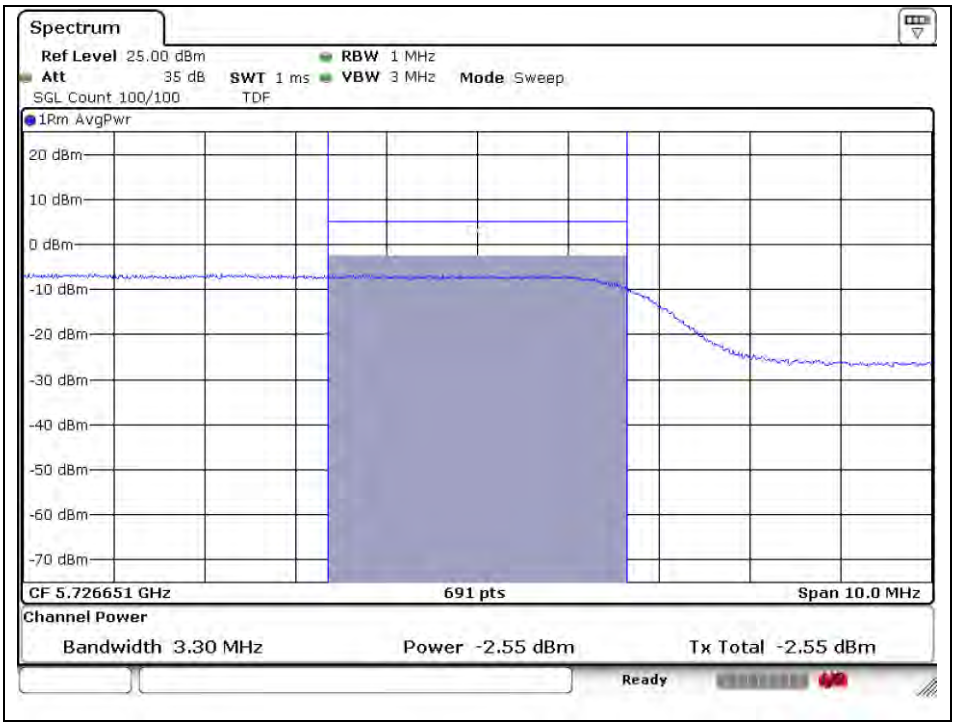
U-NII 3

802.11a (5 720 ㎒)

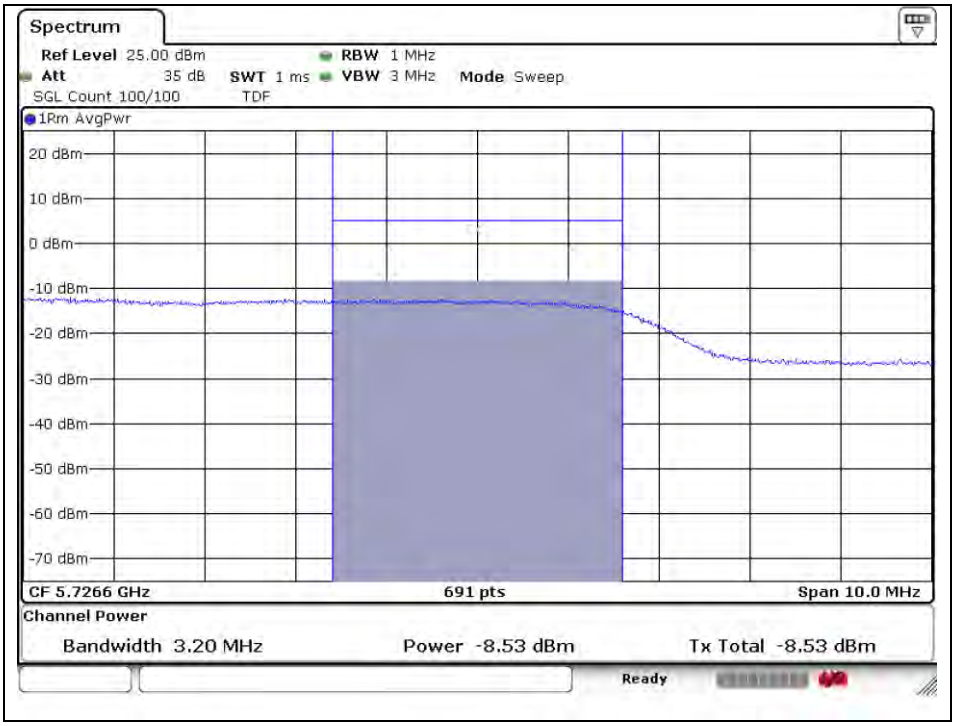


802.11n_HT20 (5 720 ㎒)

802.11n_HT40 (5 710 ㎒)

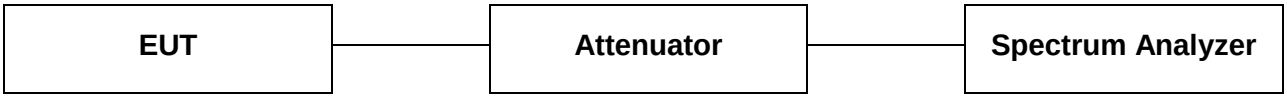


802.11ac_VHT80 (5 690 ㎒)



6. Peak Power Spectral Density

6.1. Test setup



6.2. Limit

FCC

15.407 (a)(1)(iv)

For client devices in the 5.15-5.25 ㎓ band, the maximum conducted output power over the frequency band of operation shall not exceed 250 ㎽ provided the maximum antenna gain does not exceed 6 ㏈i. In addition, the maximum power spectral density shall not exceed 11 ㏈m in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i.

15.407 (a)(2)

For the 5.25-5.35 ㎓ and 5.47-5.725 ㎓ bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 ㎽ or 11 ㏈m + 10 log B, where B is the 26 ㏈ emission bandwidth in megahertz. In addition, the maximum power spectral density shall not exceed 11 ㏈m in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i.

15.407 (a)(3)

For the band 5.725-5.85 ㎓, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 ㏈m in any 500-㎑ band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i. However, fixed point-to point U-NII devices operating in this band may employ transmitting antennas with directional gain greater than 6 ㏈ i without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

IC

RSS-247 Issue 1, 6.2.2 (1) Band 5 250-5 350 ㎒

The maximum conducted output power shall not exceed 250 ㎽ or 11 + 10 $\log_{10}$B, ㏈m, whichever is less. The power spectral density shall not exceed 11 ㏈m in any 1.0 ㎒ band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, ㏈m, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 ㎽ shall implement TPC in order to have the capability to operate at least 6 ㏈ below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Issue 1, 6.2.3 (1) Band 5 470-5 600 ㎒ and 5 650-5 725 ㎒

The maximum conducted output power shall not exceed 250 ㎽ or 11 + 10 $\log_{10}$B, ㏈m, whichever is less. The power spectral density shall not exceed 11 ㏈m in any 1.0 ㎒ band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 $\log_{10}$B, ㏈m, whichever is less. B is the 99 % emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 ㎽ shall implement TPC in order to have the capability to operate at least 6 ㏈ below the maximum permitted e.i.r.p. of 1 W.

RSS-247 Issue 1, 6.2.4 (1) Band 5 725-5 850 ㎒

For equipment operating in the band 5 725-5 850 ㎒, the minimum 6 ㏈ bandwidth shall be at least 500 ㎑. The maximum conducted output power shall not exceed 1 W. The power spectral density shall not exceed 30 ㏈m in any 500 ㎑ band. If transmitting antennas of directional gain greater than 6 ㏈i are used, both the maximum conducted output power and the power spectral density shall be reduced by the amount in ㏈ that the directional gain of the antenna exceeds 6 ㏈i. However, fixed point-to-point devices operating in this band may employ transmitting antennas with directional gain greater than 6 ㏈i without any corresponding reduction in transmitter conducted power. Fixed point-to-point operations exclude the use of point-to-multipoint[3] systems, omnidirectional applications and multiple collocated transmitters transmitting the same information.

6.3. Test procedure

All data rates and modes were investigated for this test. The full data for the worst case data rate are reported in this section.

1. This measurement settings are specified in section F of KDB 789033 D02 v01r03.
2. Create an average power spectrum for the EUT operating mode being tested by following the instructions in section II.E.2. for measuring maximum conducted output power using a spectrum analyzer or EMI receiver: select the appropriate test method (SA-1, SA-2, SA-3, or alternatives to each) and apply it up to, but not including, the step labeled, “Compute power…”. (This procedure is required even if the maximum conducted output power measurement was performed using a power meter, method PM.)
3. Use the peak search function on the instrument to find the peak of the spectrum and record its value.
4. Make the following adjustments to the peak value of the spectrum, if applicable:

a) **If Method SA-2 or SA-2 Alternative was used, add 10 log(1/x), where x is the duty cycle, to the peak of the spectrum.**
b) If Method SA-3 Alternative was used and the linear mode was used in step II.E.2.g)(viii), add 1 ㏈ to the final result to compensate for the difference between linear averaging and power averaging.

5. The result is the Maximum PSD over 1 ㎒ reference bandwidth.
6. For devices operating in the bands 5.15-5.25 ㎓, 5.25-5.35 ㎓, and 5.47-5.725 ㎓, the above procedures make use of 1 ㎒ RBW to satisfy directly the 1 ㎒ reference bandwidth specified in § 15.407(a)(5). For devices operating in the band 5.725-5.85 ㎓, the rules specify a measurement bandwidth of 500 ㎑. Many spectrum analyzers do not have 500 ㎑ RBW, thus a narrower RBW may need to be used. The rules permit the use of a RBWs less than 1 ㎒, or 500 ㎑, “provided that the measured power is integrated over the full reference bandwidth” to show the total power over the specified measurement bandwidth (*i.e.,* 1 ㎒, or 500 ㎑). If measurements are performed using a reduced resolution bandwidth (< 1 ㎒, or < 500 ㎑) and integrated over 1 ㎒, or 500 ㎑ bandwidth, the following adjustments to the procedures apply:

a) Set RBW ≥ 1/*T*, where *T* is defined in section II.B.I.a).
b) Set VBW ≥ 3 RBW.
c) If measurement bandwidth of Maximum PSD is specified in 500 ㎑, add 10log(500 ㎑/RBW) to the measured result, whereas RBW (< 500 ㎑) is the reduced resolution bandwidth of the spectrum analyzer set during measurement.
d) If measurement bandwidth of Maximum PSD is specified in 1 ㎒, add 10log(1 ㎒/RBW) to the measured result, whereas RBW (< 1 ㎒) is the reduced resolution bandwidth of spectrum analyzer set during measurement.
e) Care must be taken to ensure that the measurements are performed during a period of continuous transmission or are corrected upward for duty cycle.

Note: As a practical matter, it is recommended to use reduced RBW of 100 ㎑ for the sections 5.c) and 5.d) above, since RBW = 100 ㎑ is available on nearly all spectrum analyzers.

Remark;
In case of band crossing channels 138, 142 and 144, the measurement is complied with section D of KDB 644545 D03 v01.

6.4. Test result

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

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Factor (dB)	Final PPSD (dB m)	Limit (dB m/1 ㎒)
11a	U-NII 1	5 180	36	6	-0.57	0.32	-0.25	11
		5 200	40	6	-0.51	0.32	-0.19	
		5 240	48	6	-0.83	0.32	-0.51	
	U-NII 2A	5 260	52	6	0.06	0.32	0.38	
		5 280	56	6	-0.23	0.32	0.09	
		5 300	60	6	0.36	0.32	0.68	
		5 320	64	6	-0.05	0.32	0.27	
	U-NII 2C	5 500	100	6	-1.27	0.32	-0.95	
		5 580	116	6	-0.93	0.32	-0.61	
		5 720	140	6	-0.08	0.32	0.24	
	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Factor (dB)	Final PPSD (dB m)	Limit (dB m/500 ㎑)
	U-NII 3	5 745	149	6	-3.61	0.32	-3.29	30
		5 785	157	6	-3.18	0.32	-2.86	
		5 825	165	6	-3.26	0.32	-2.94	

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Factor (dB)	Final PPSD (dB m)	Limit (dB m/1 ㎒)
11n_HT20	U-NII 1	5 180	36	MCS0	-0.58	0.32	-0.26	11
		5 200	40	MCS0	-0.99	0.32	-0.67	
		5 240	48	MCS0	-1.36	0.32	-1.04	
	U-NII 2A	5 260	52	MCS0	-0.42	0.32	-0.10	
		5 280	56	MCS0	-0.69	0.32	-0.37	
		5 300	60	MCS0	0.46	0.32	0.78	
		5 320	64	MCS0	-0.55	0.32	-0.23	
	U-NII 2C	5 500	100	MCS0	-1.65	0.32	-1.33	
		5 580	116	MCS0	-1.18	0.32	-0.86	
		5 720	140	MCS0	-0.30	0.32	0.02	
	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Factor (dB)	Final PPSD (dB m)	Limit (dB m/500 ㎑)
	U-NII 3	5 745	149	MCS0	-4.01	0.32	-3.69	30
		5 785	157	MCS0	-3.38	0.32	-3.06	
		5 825	165	MCS0	-3.49	0.32	-3.17	

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (㏈m)	Duty Factor (㏈)	Final PPSD (㏈m)	Limit (㏈m/1㎒)
11n_HT40	U-NII 1	5 190	38	MCS0	-8.04	0.60	-7.44	11
		5 230	40	MCS0	-8.39	0.60	-7.79	
	U-NII 2A	5 270	54	MCS0	-7.40	0.60	-6.80	
		5 310	62	MCS0	-7.57	0.60	-6.97	
	U-NII 2C	5 510	102	MCS0	-8.39	0.60	-7.79	
		5 550	110	MCS0	-8.12	0.60	-7.52	
		5 710	134	MCS0	-7.26	0.60	-6.66	
	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (㏈m)	Duty Factor (㏈)	Final PPSD (㏈m)	Limit (㏈m/500㎑)
	U-NII 3	5 755	151	MCS0	-10.51	0.60	-9.91	30
		5 795	159	MCS0	-10.56	0.60	-9.96	

Mode	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (㏈m)	Duty Factor (㏈)	Final PPSD (㏈m)	Limit (㏈m/1㎒)
11ac_VHT80	U-NII 1	5 210	42	MCS0	-12.03	1.19	-10.84	11
	U-NII 2A	5 290	58	MCS0	-11.15	1.19	-9.96	
	U-NII 2C	5 530	106	MCS0	-11.95	1.19	-10.76	
		5 690	138	MCS0	-10.68	1.19	-9.49	
	Band	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (㏈m)	Duty Factor (㏈)	Final PPSD (㏈m)	Limit (㏈m/500㎑)
	U-NII 3	5 775	155	MCS0	-13.47	1.19	-12.28	30

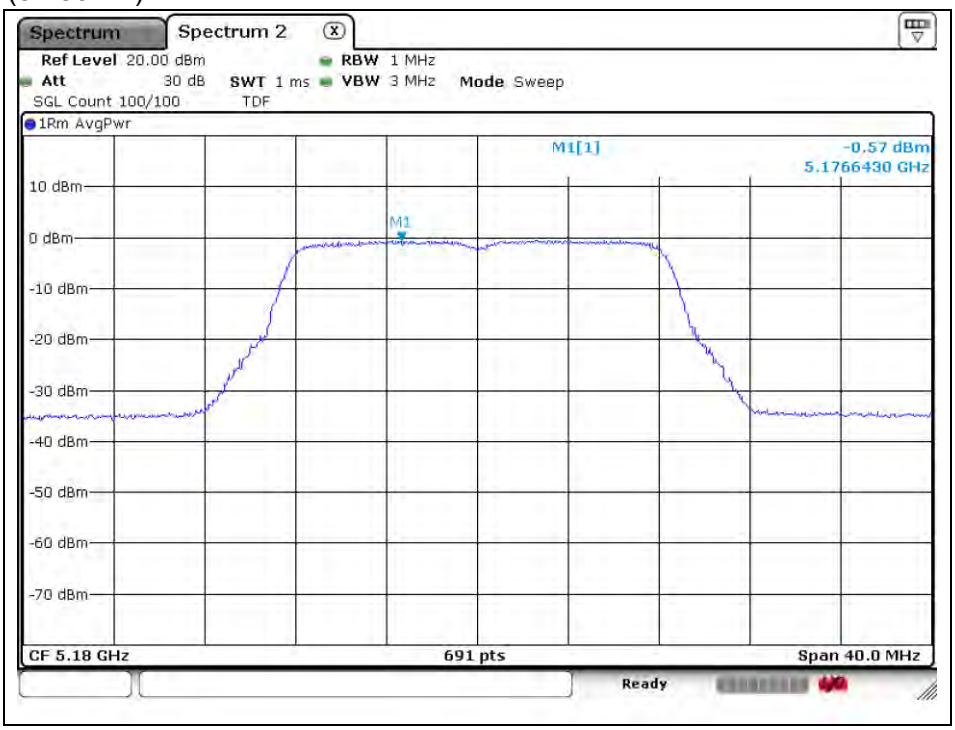
Band-crossing channels

Band	Mode	Frequency (㎒)	Ch.	Data Rate (Mbps)	Measured PPSD (㏈m)	Duty Factor (㏈)	Final PPSD (㏈m)	Limit (㏈m/500㎑)
U-NII 3	11a	5 720	144	6	-3.05	0.32	-2.73	30
	11n_HT20	5 720	144	MCS0	-3.46	0.32	-3.14	
	11n_HT40	5 710	142	MCS0	-11.12	0.60	-10.52	
	11ac_VHT80	5 690	138	MCS0	-16.94	1.19	-15.75	

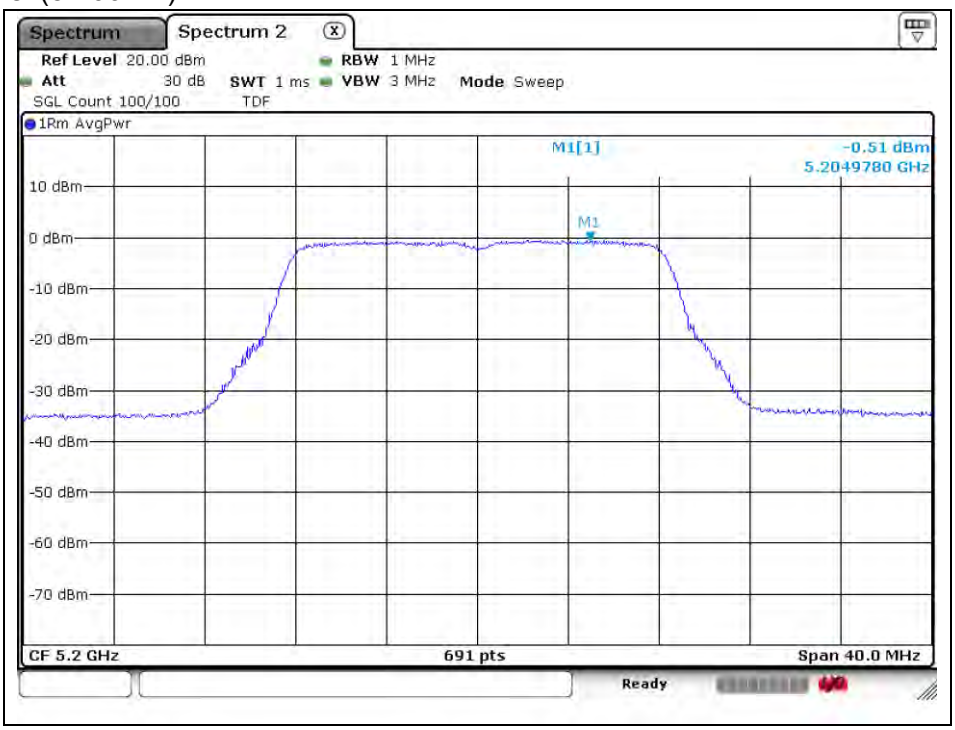
Remark:
Final PPSD = Measured PPSD + Duty Factor

802.11a (Band 1)

Low channel (5 180 ㎒)



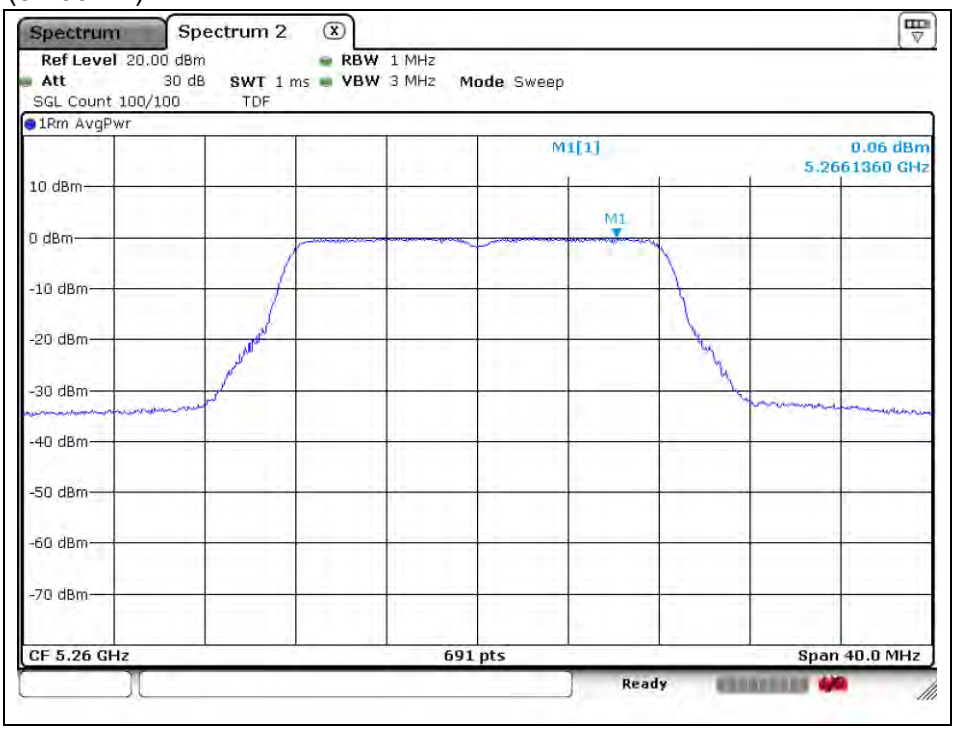
Middle channel (5 200 ㎒)



High channel (5 240 ㎒)

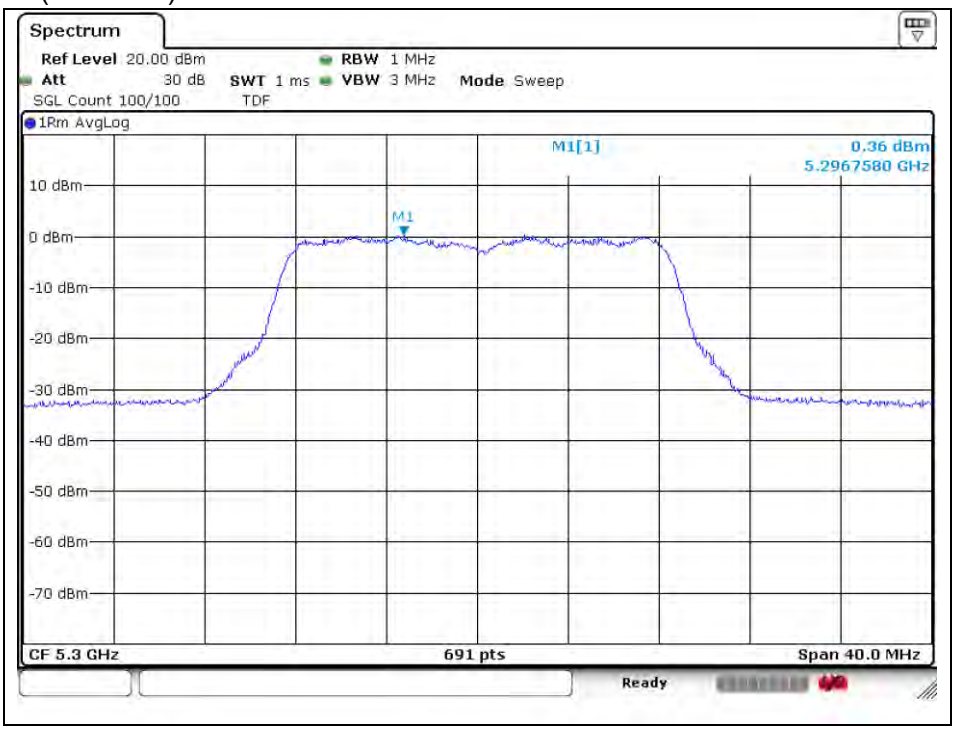
802.11a (Band 2A)

Low channel (5 260 ㎒)

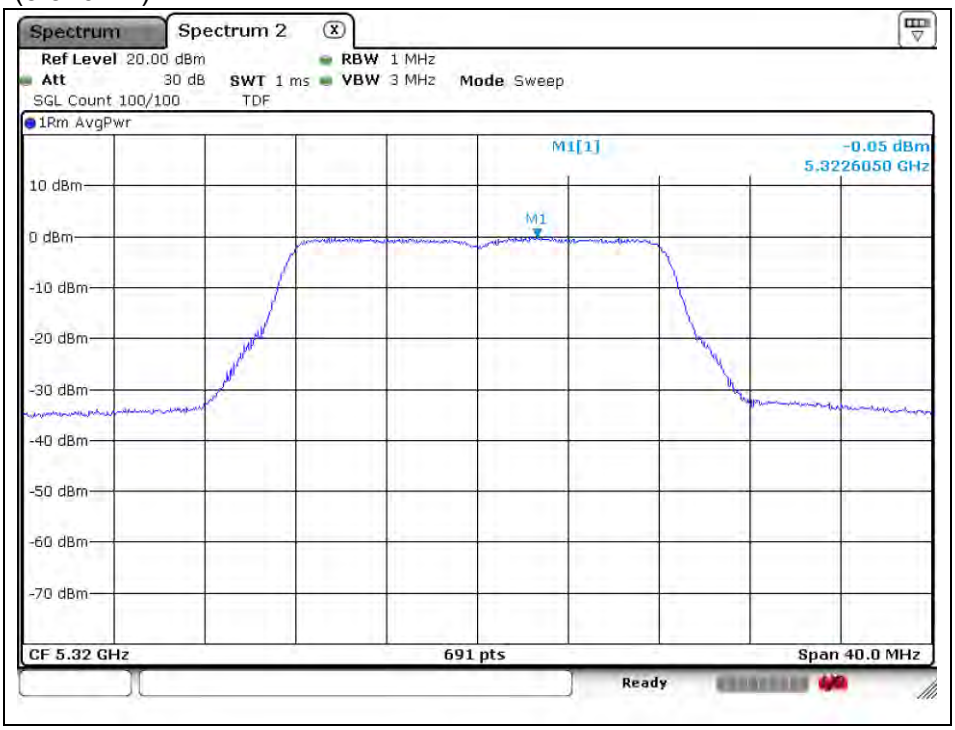


Low channel (5 280 ㎒)

Middle channel (5 300 ㎒)



High channel (5 320 ㎒)

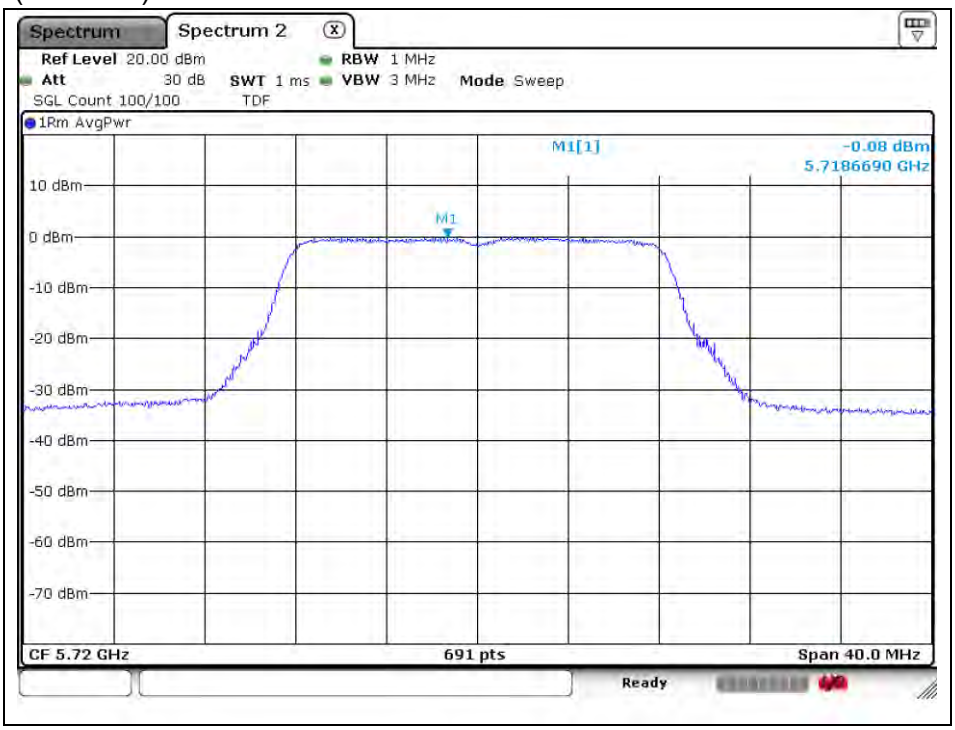


802.11a (Band 2C)

Low channel (5 500 ㎒)

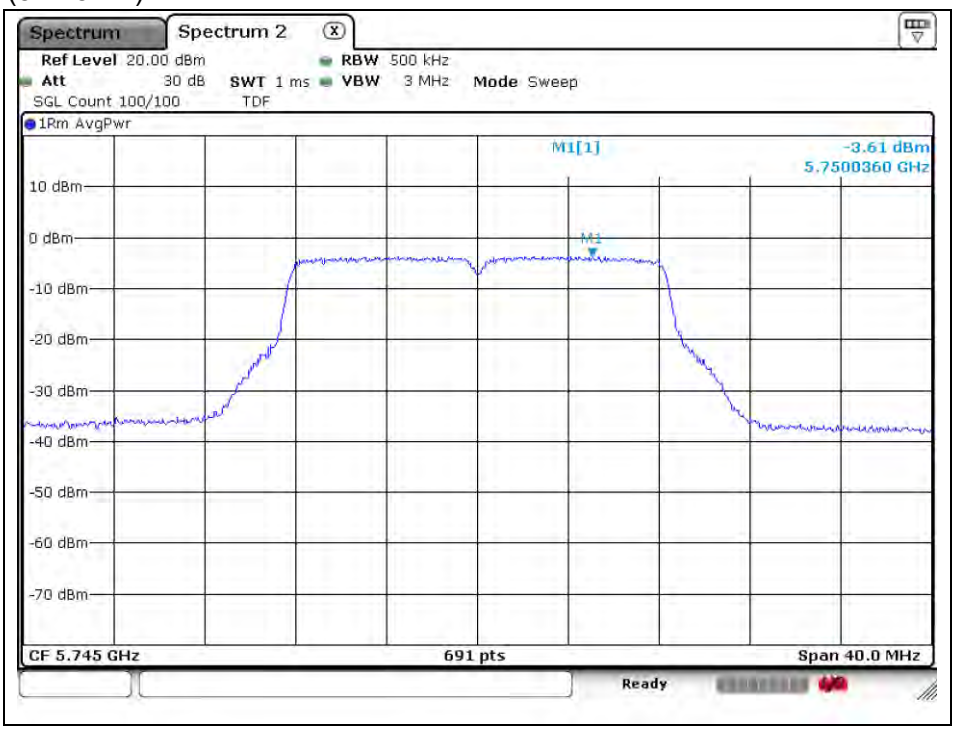
Middle channel (5 580 ㎒)

High channel (5 720 ㎒)

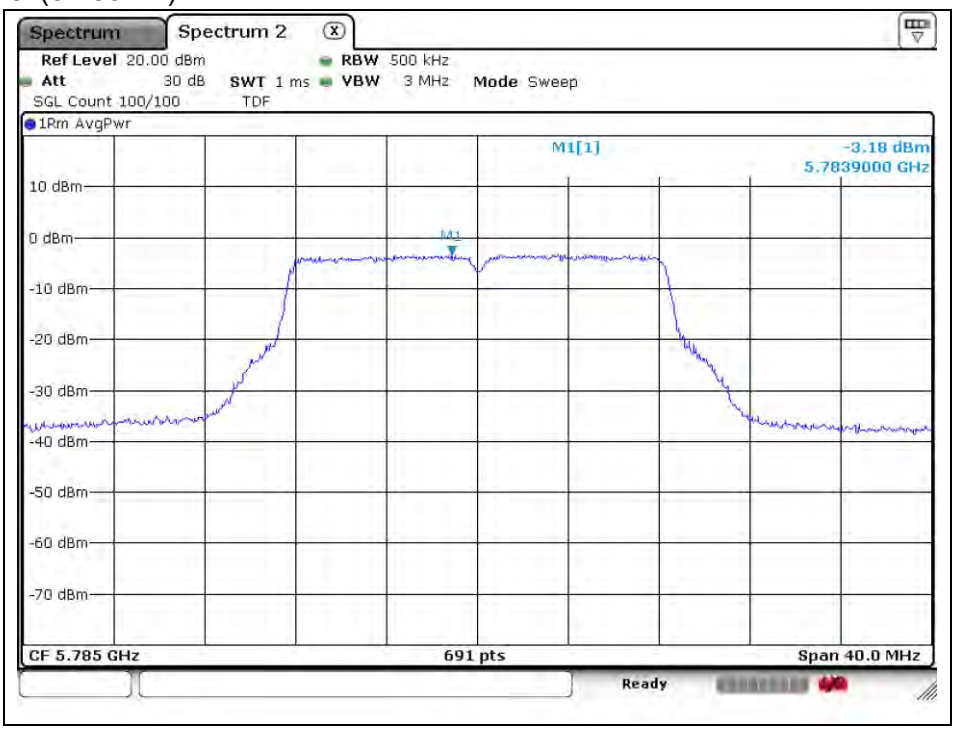


802.11a (Band 3)

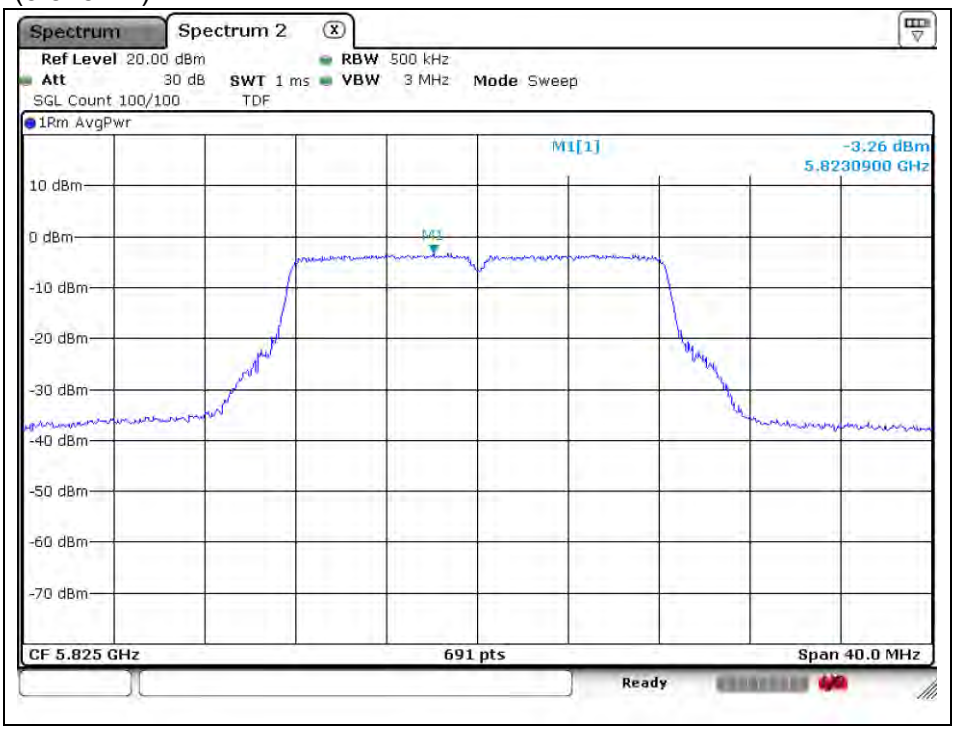
Low channel (5 745 ㎒)



Middle channel (5 785 ㎒)

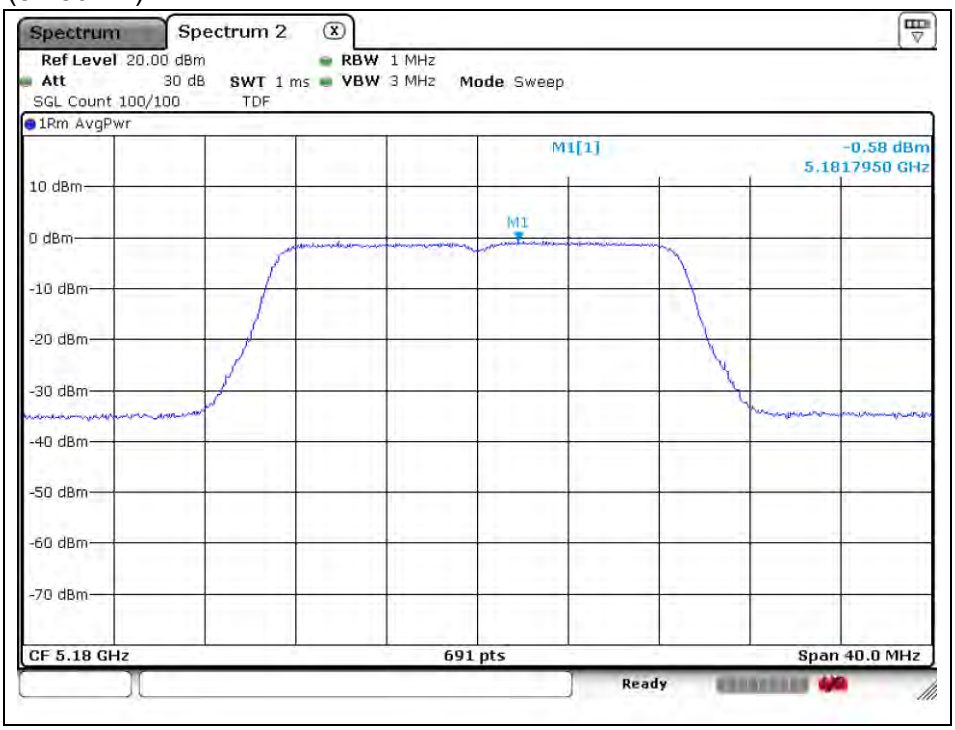


High channel (5 825 ㎒)

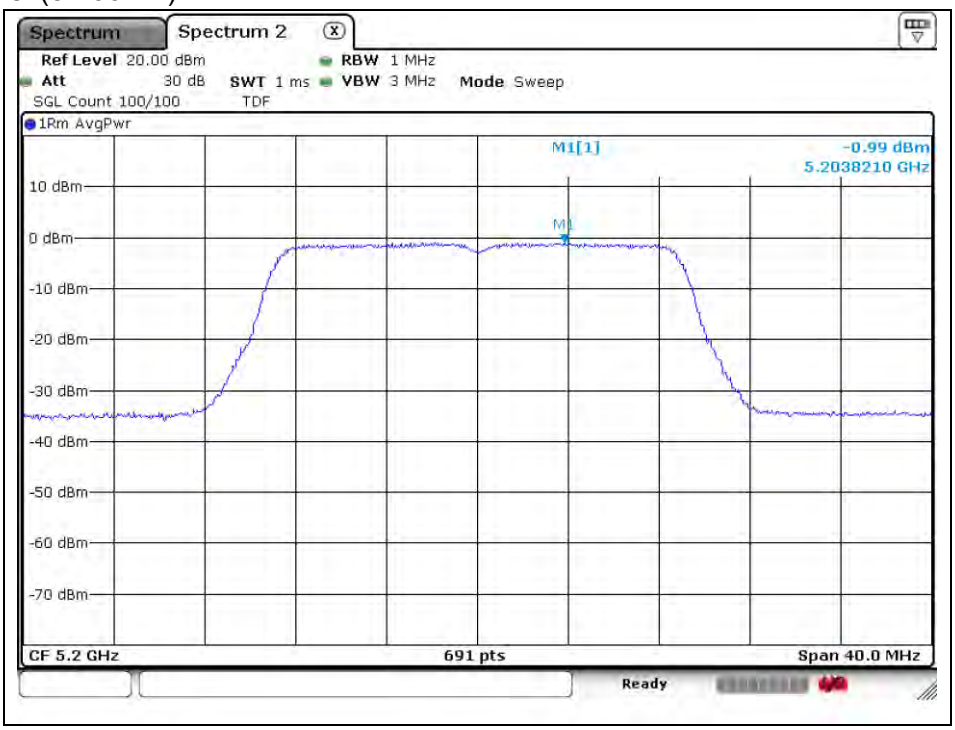


802.11n_HT20 (Band 1)

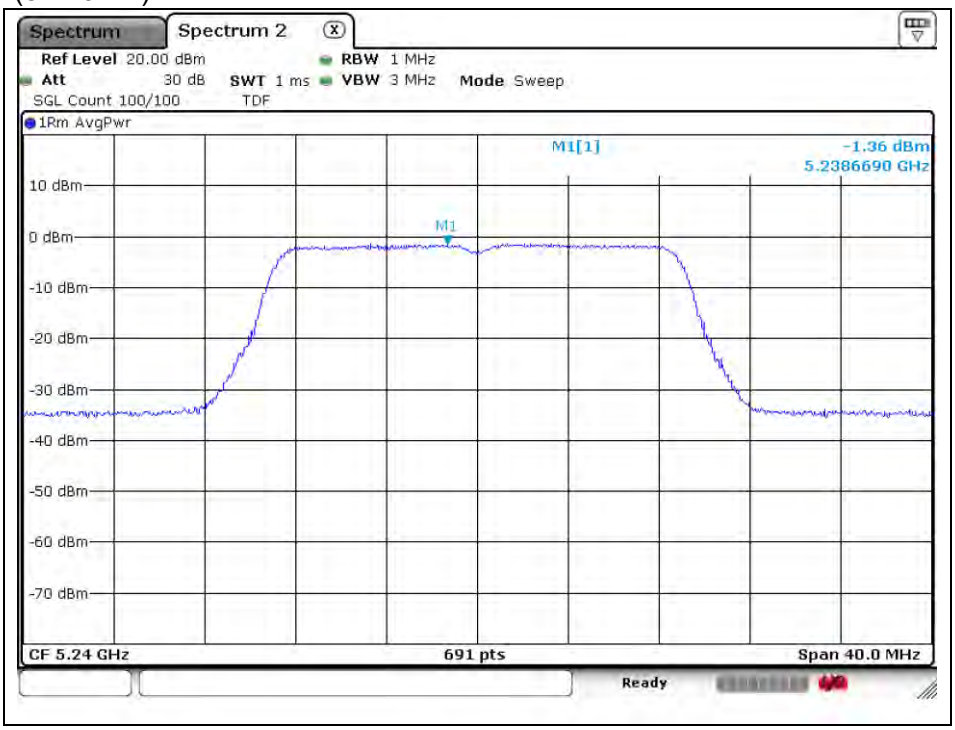
Low channel (5 180 ㎒)



Middle channel (5 200 ㎒)

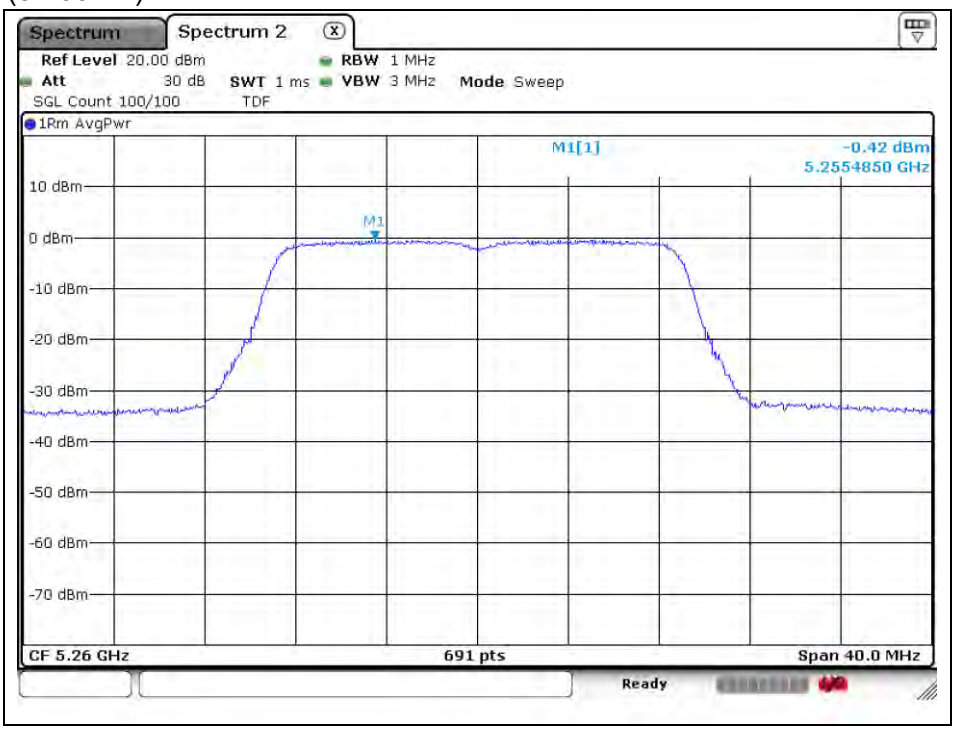


High channel (5 240 ㎒)



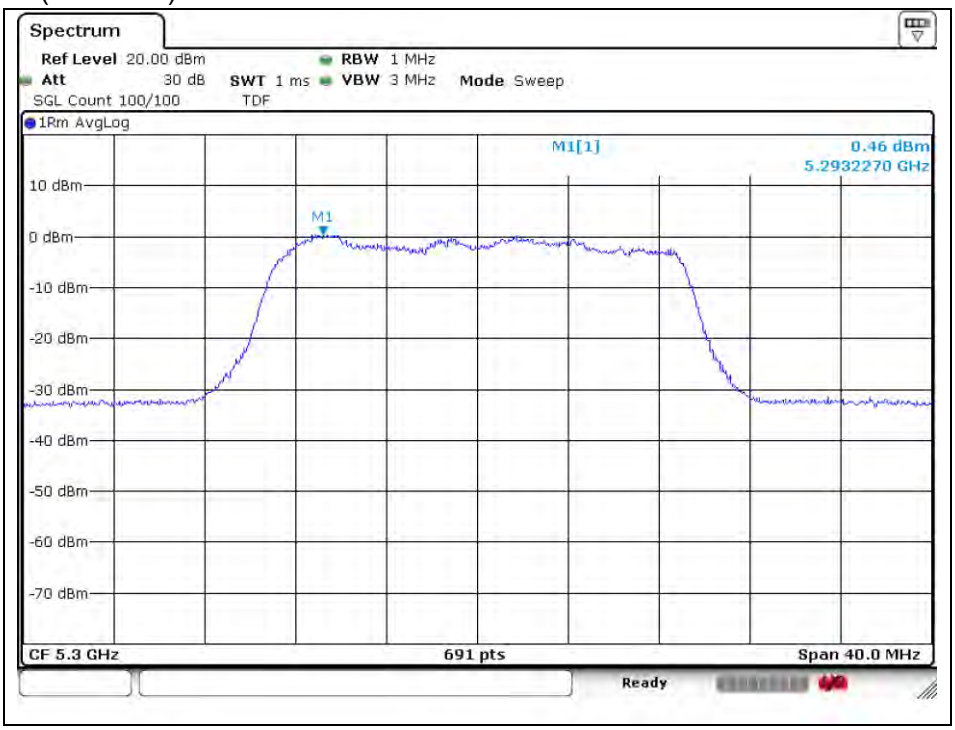
802.11n_HT20 (Band 2A)

Low channel (5 260 ㎒)

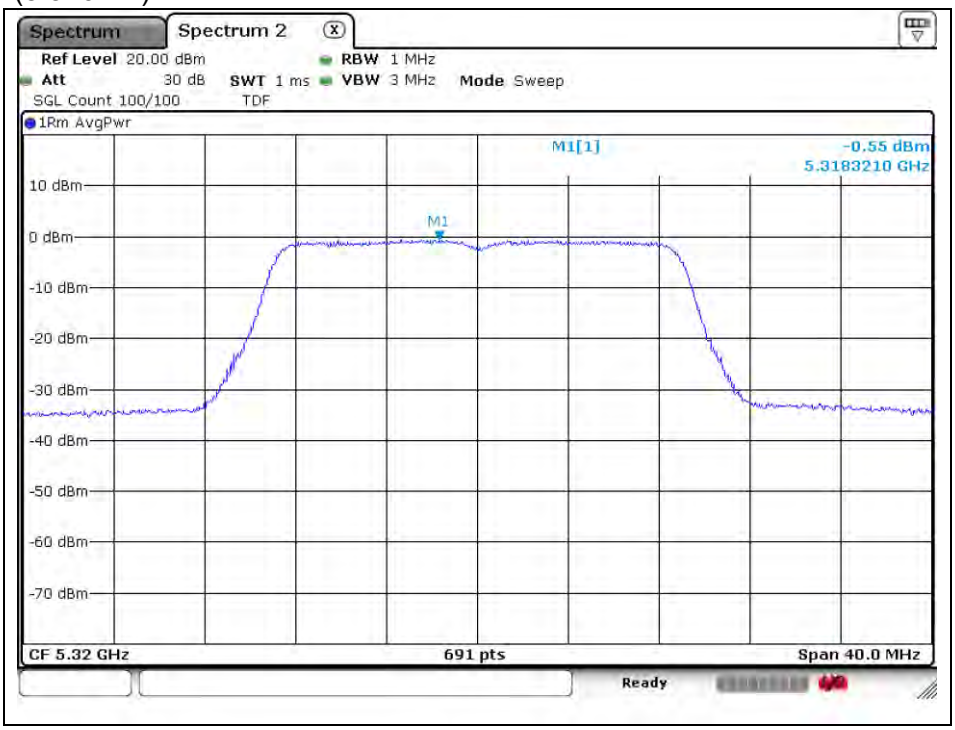


Low channel (5 280 ㎒)

Middle channel (5 300 ㎒)

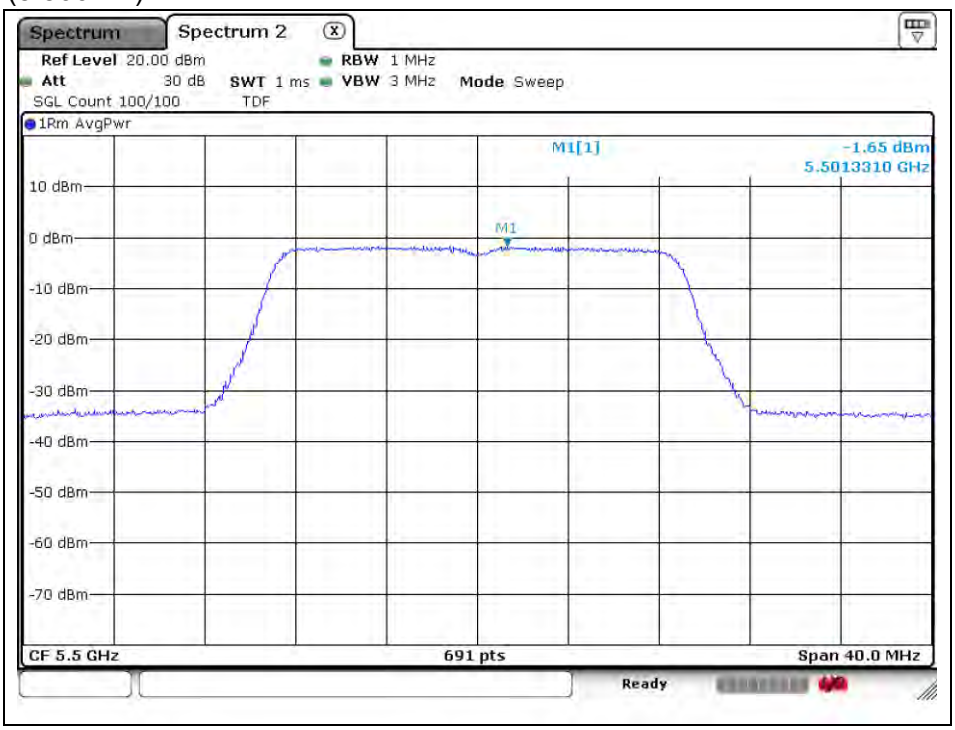


High channel (5 320 ㎒)

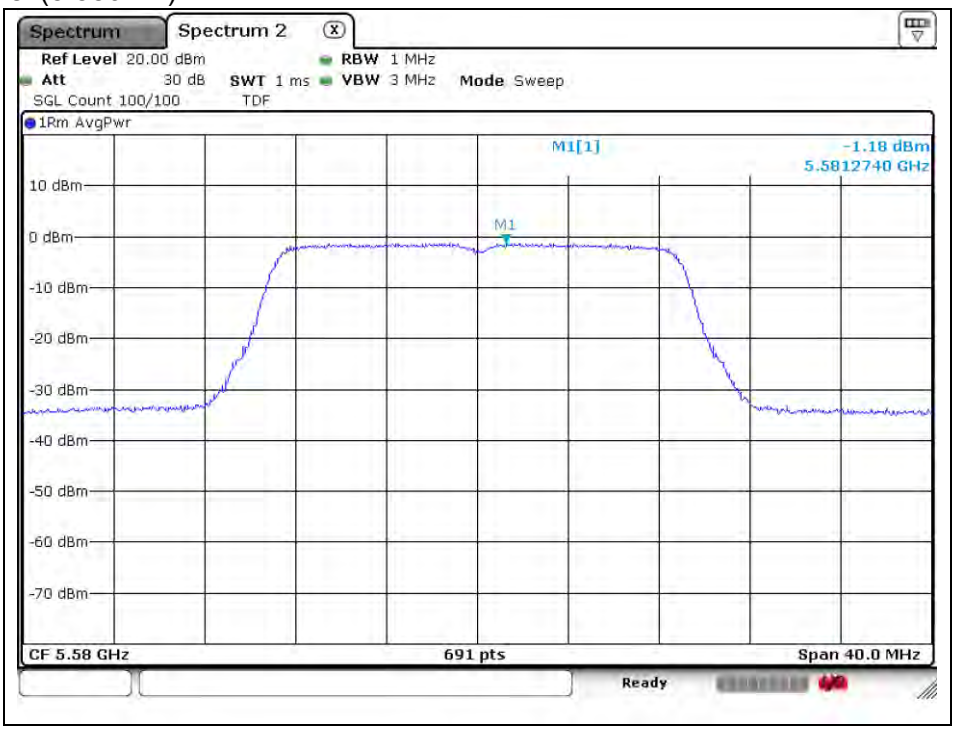


802.11n_HT20 (Band 2C)

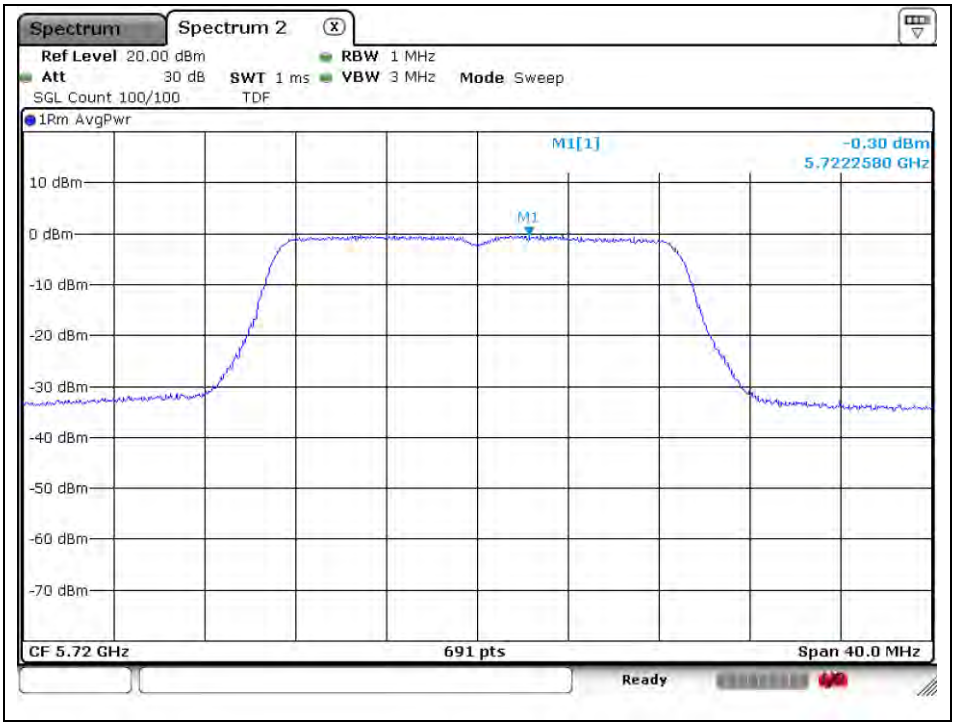
Low channel (5 500 ㎒)



Middle channel (5 580 ㎒)



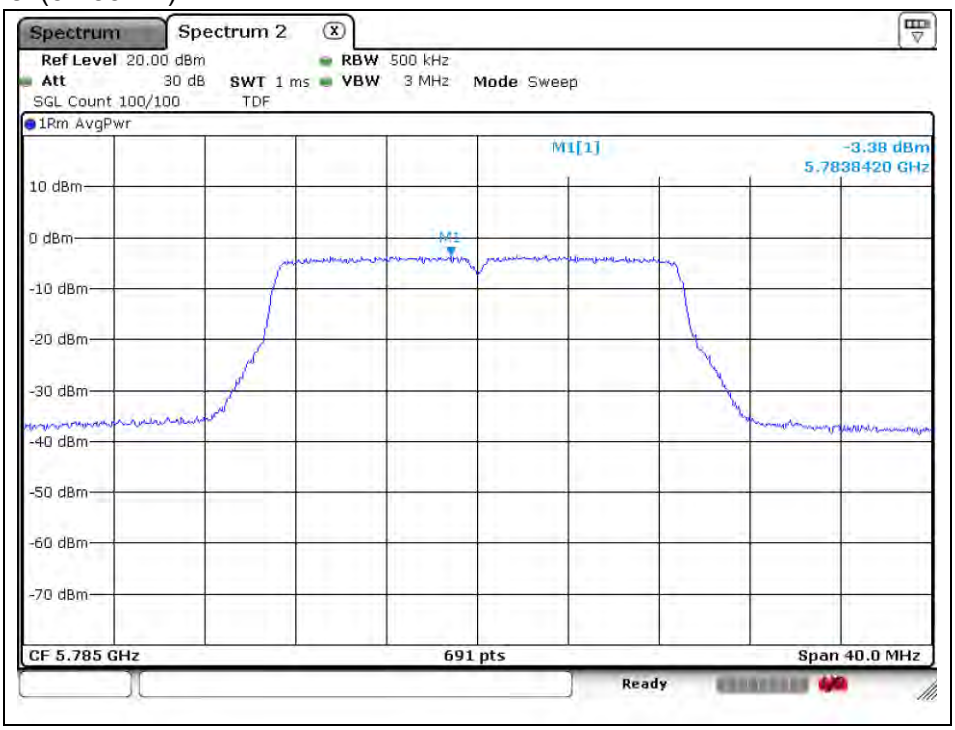
High channel (5 720 ㎒)



802.11n_HT20 (Band 3)

Low channel (5 745 ㎒)

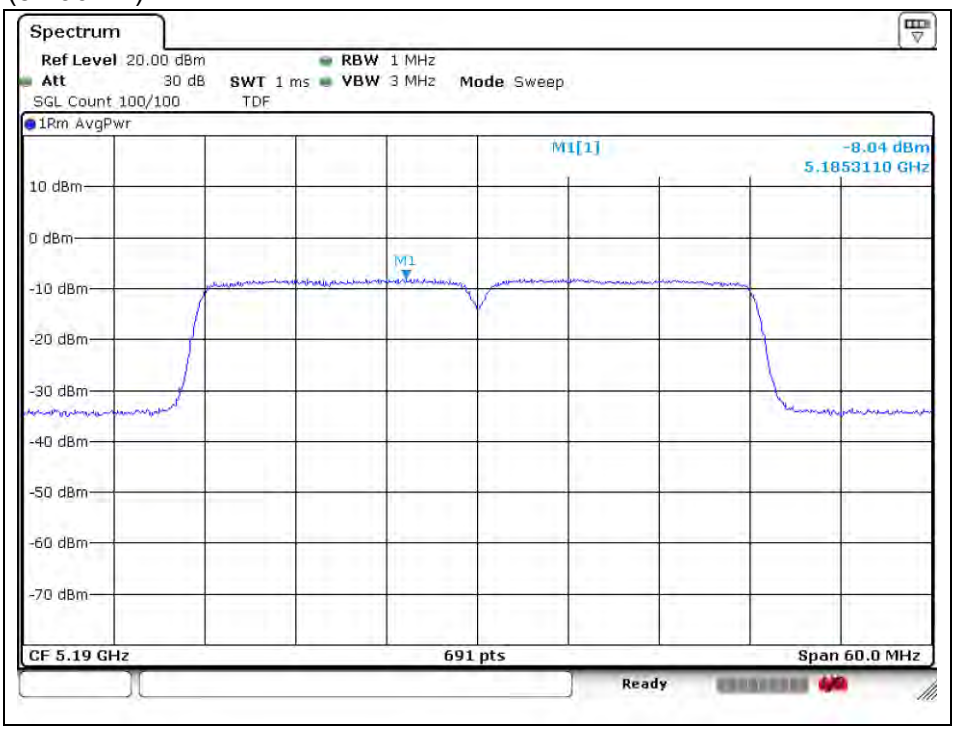
Middle channel (5 785 ㎒)



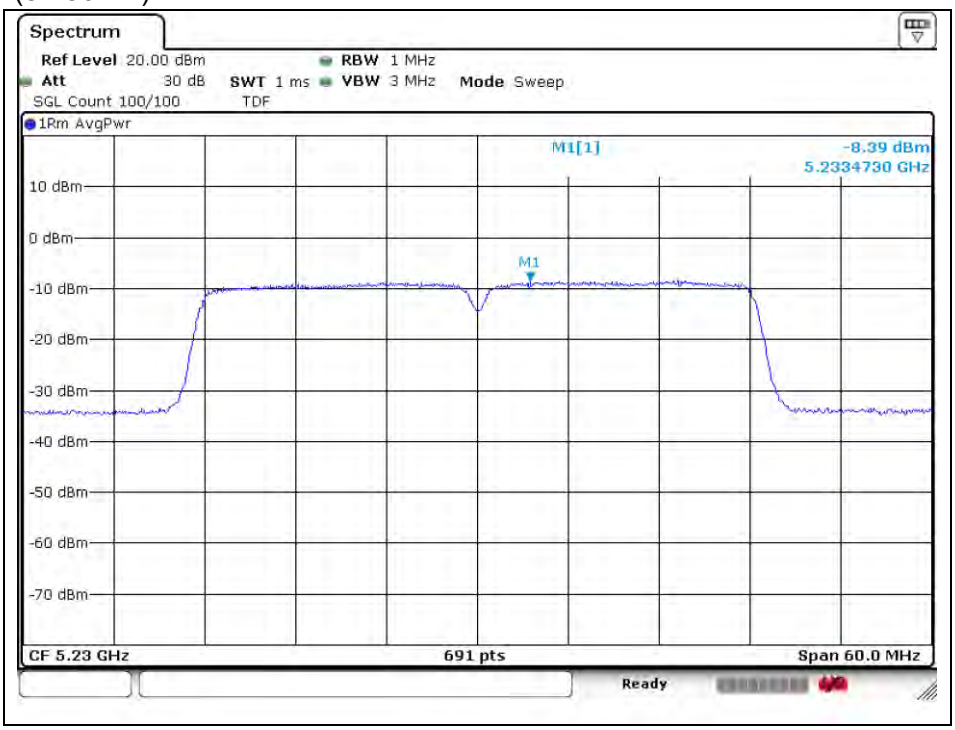
High channel (5 825 ㎒)

802.11n_HT40 (Band 1)

Low channel (5 190 ㎒)

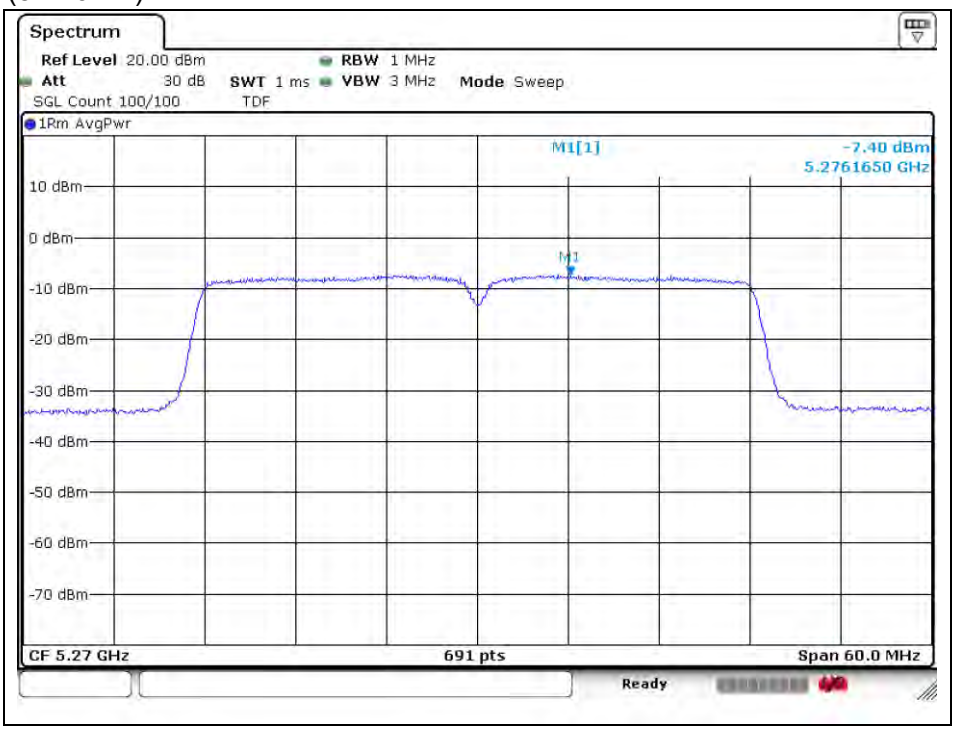


High channel (5 230 ㎒)

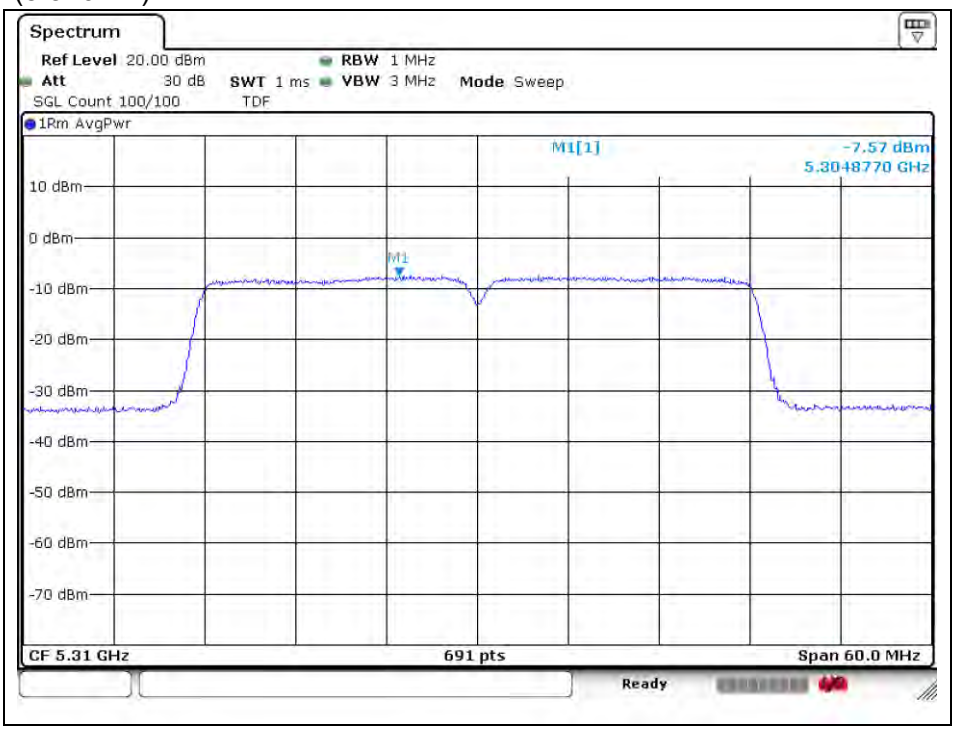


802.11n_HT40 (Band 2A)

Low channel (5 270 ㎒)

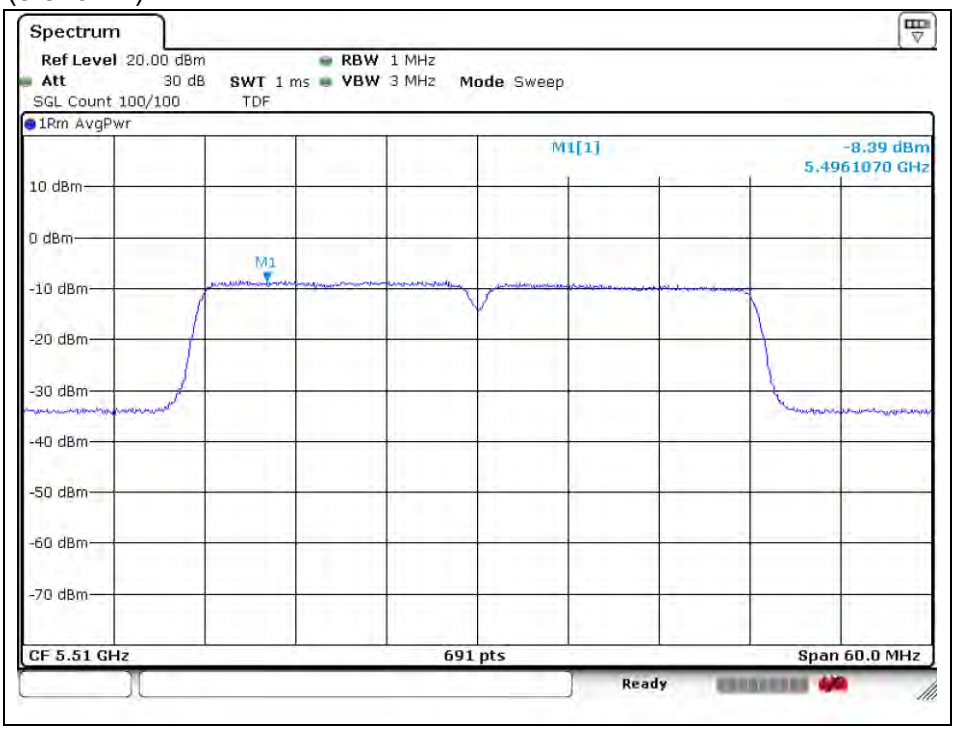


High channel (5 310 ㎒)

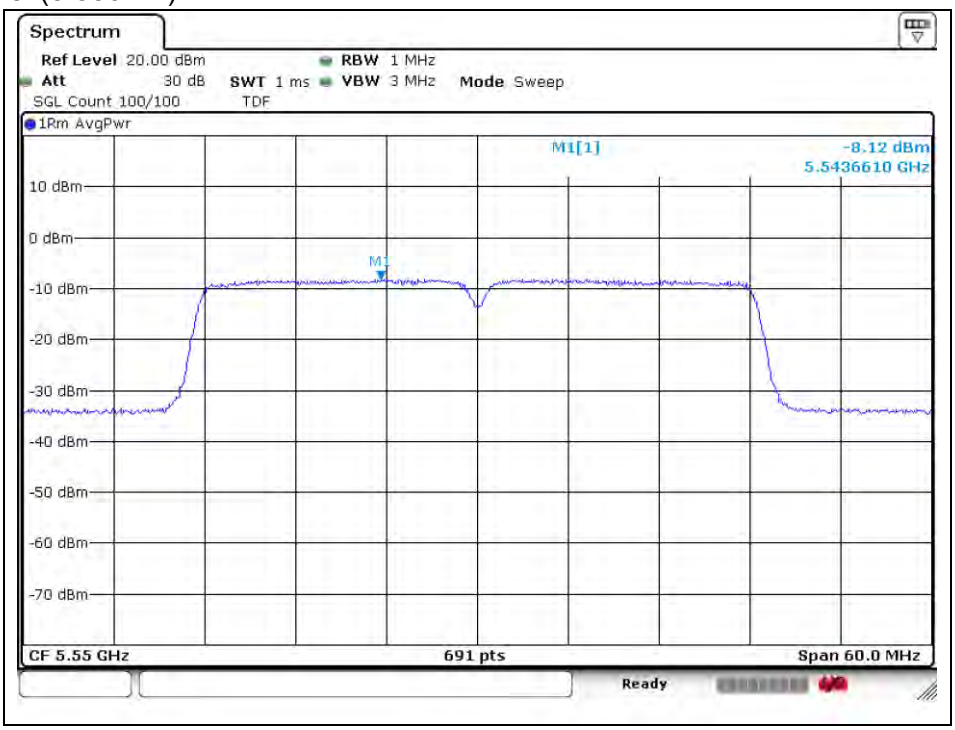


802.11n_HT40 (Band 2C)

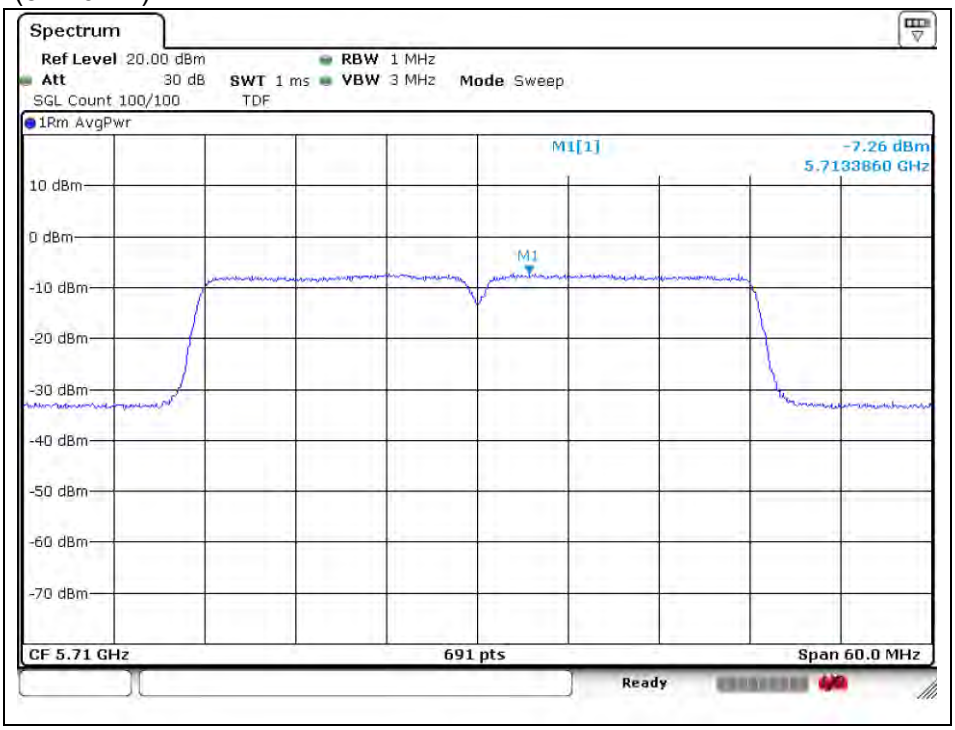
Low channel (5 510 ㎒)



Middle channel (5 550 ㎒)

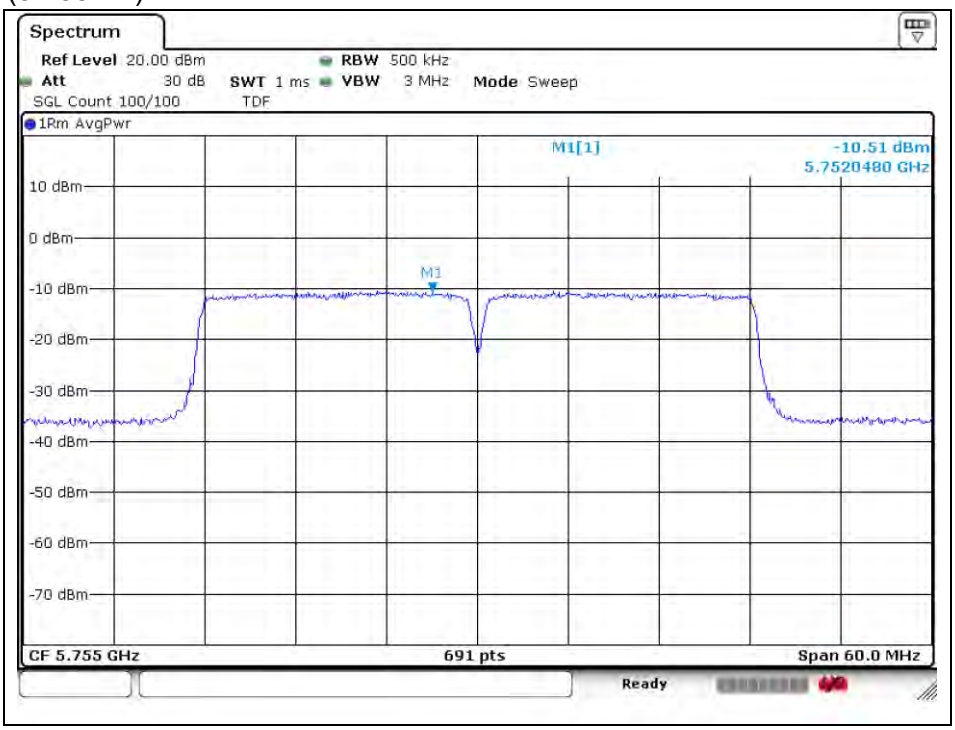


High channel (5 710 ㎒)

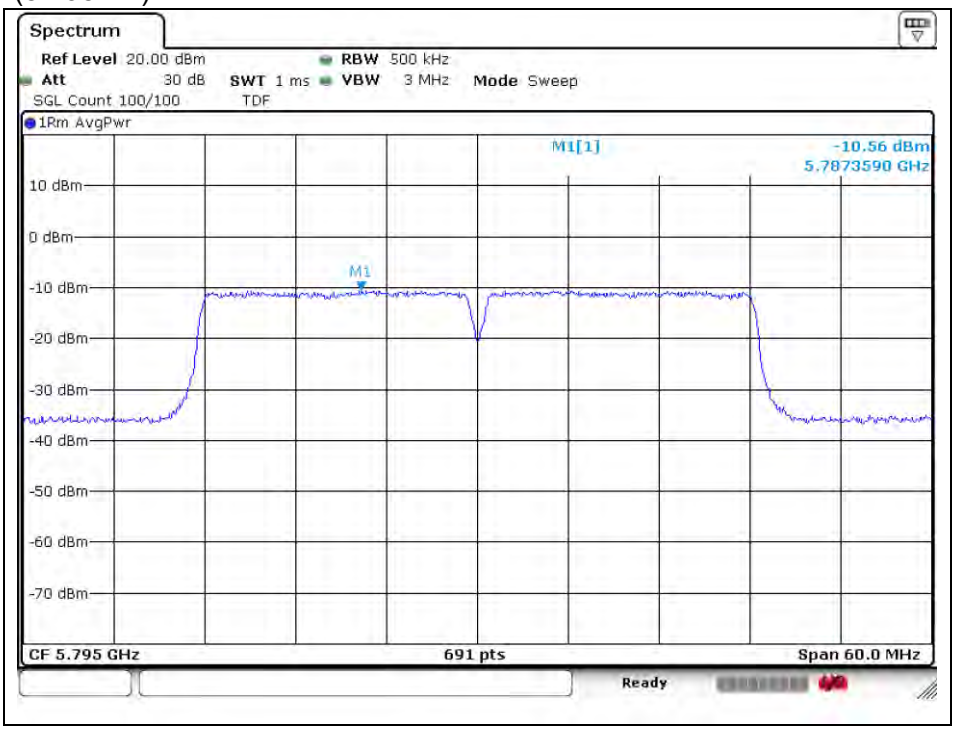


802.11n_HT40 (Band 3)

Low channel (5 755 ㎒)

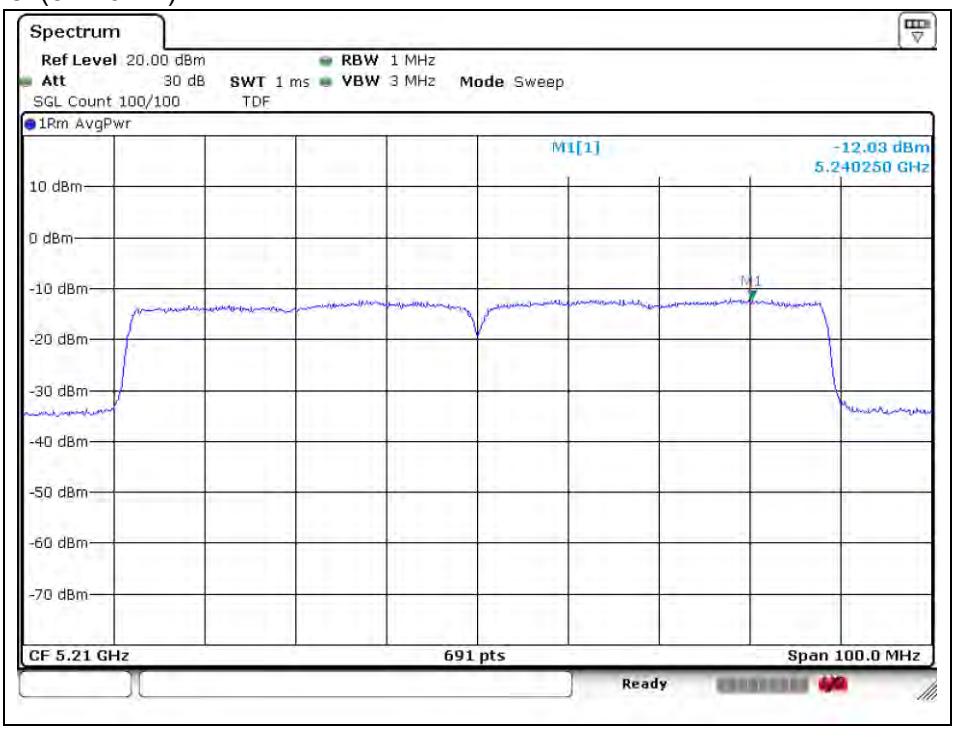


High channel (5 795 ㎒)



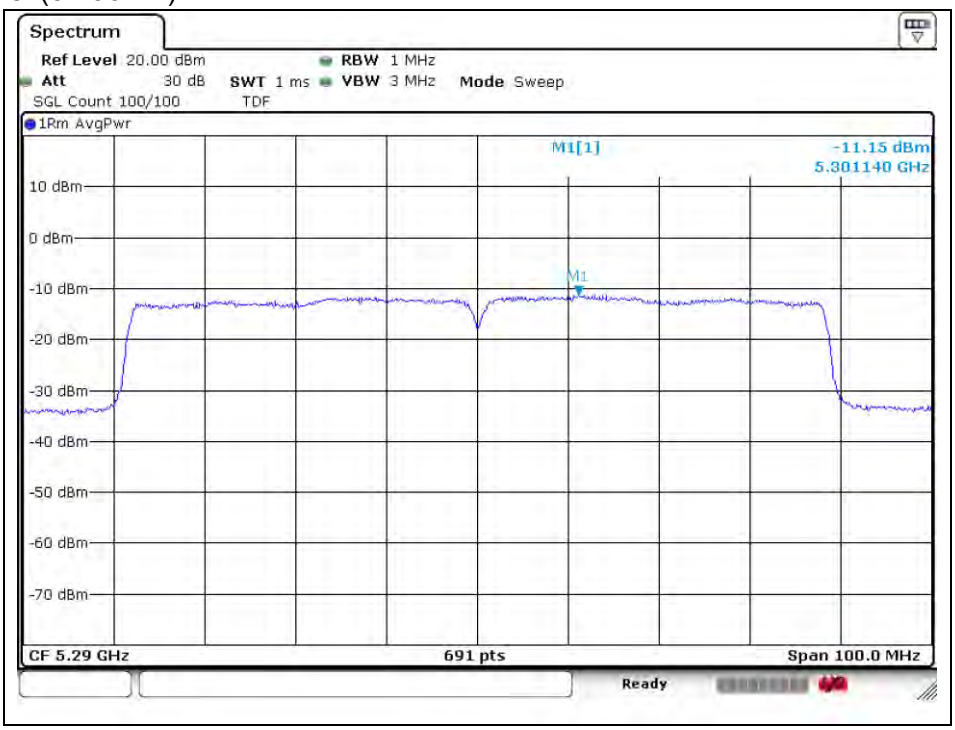
802.11ac_VHT80 (Band 1)

Middle channel (5 210 ㎒)



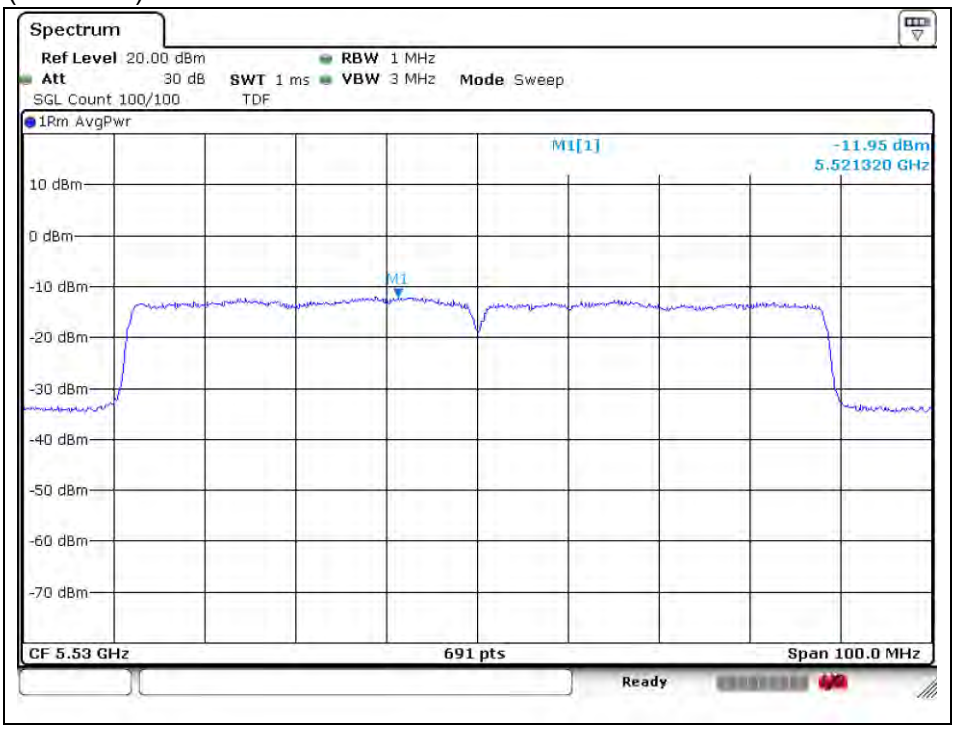
802.11ac_VHT80 (Band 2A)

Middle channel (5 290 ㎒)

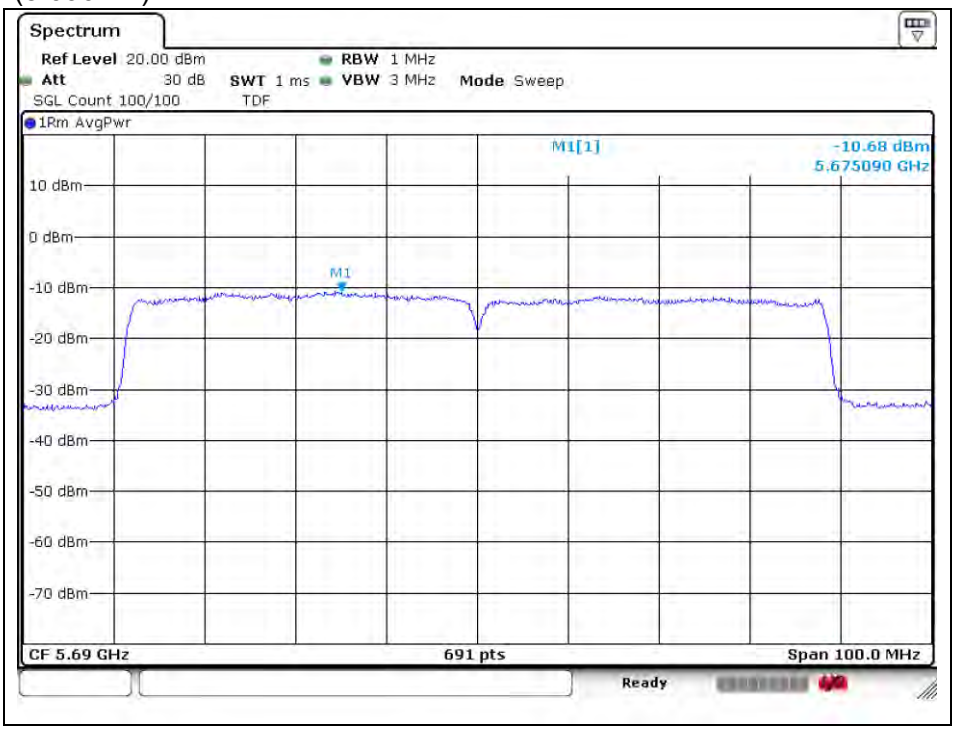


802.11ac_VHT80 (Band 2C)

Low channel (5 530 ㎒)

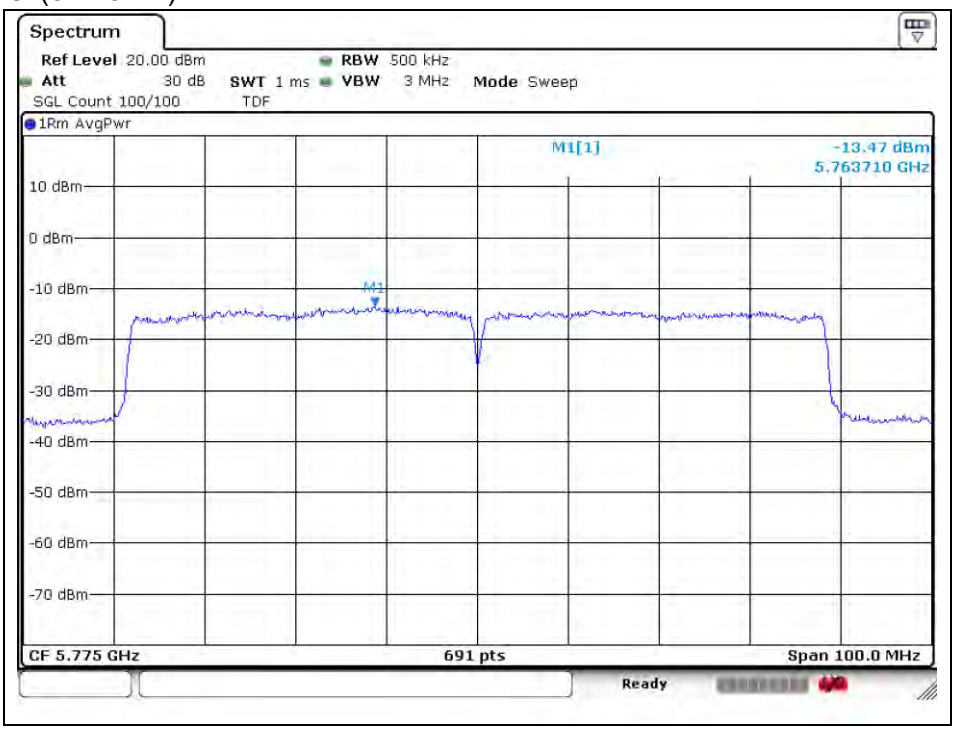


High channel (5 690 ㎒)



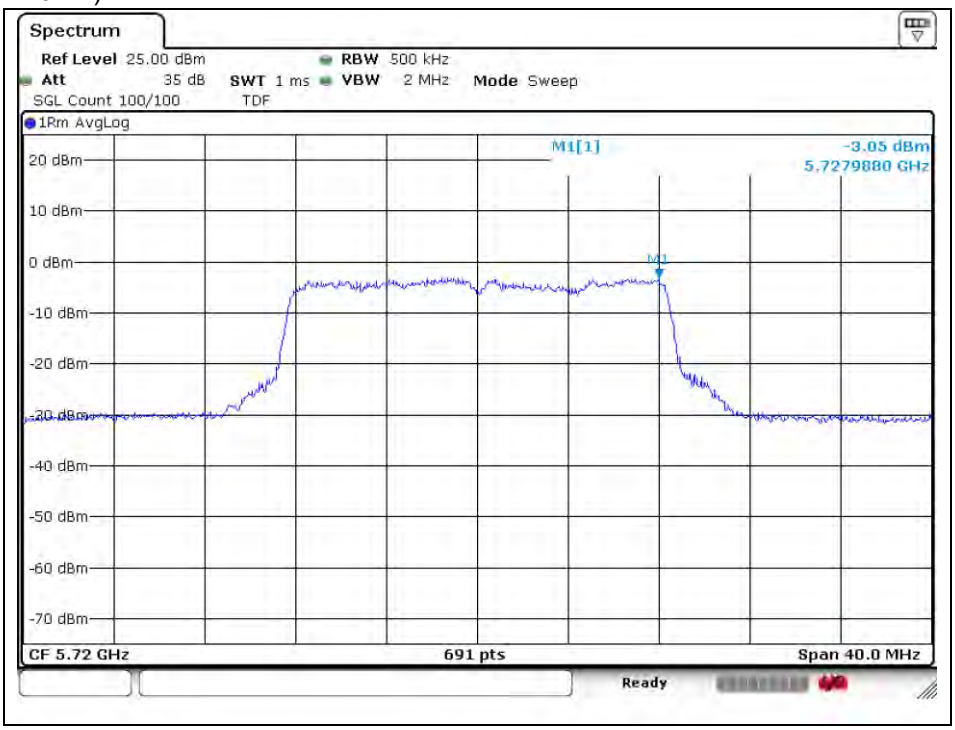
802.11ac_VHT80 (Band 3)

Middle channel (5 775 ㎒)

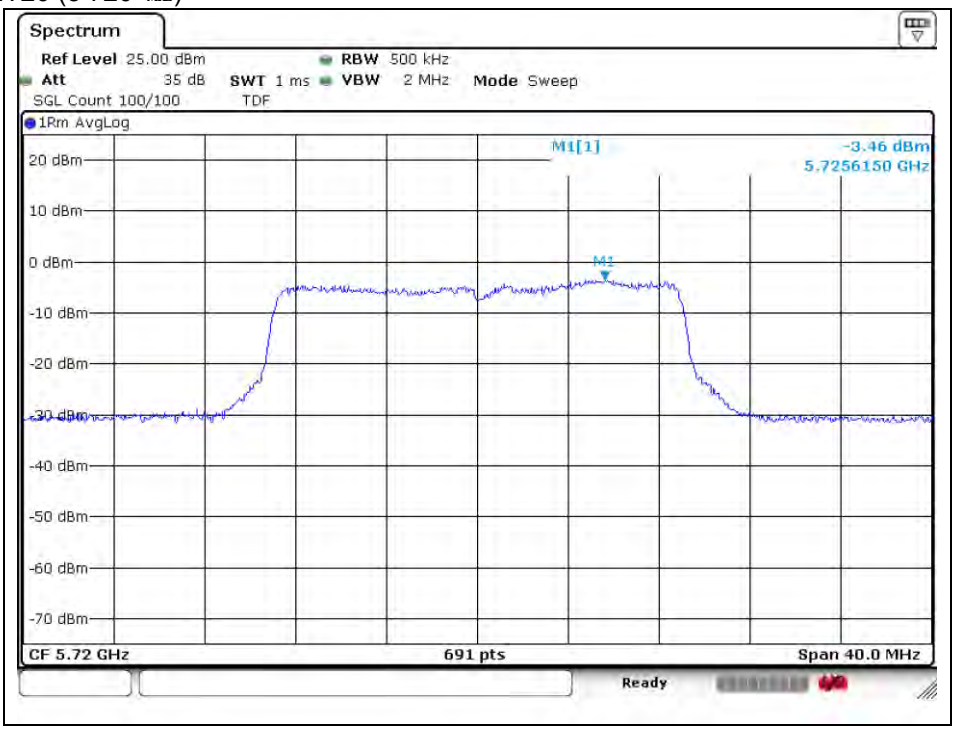


Band-crossing channels

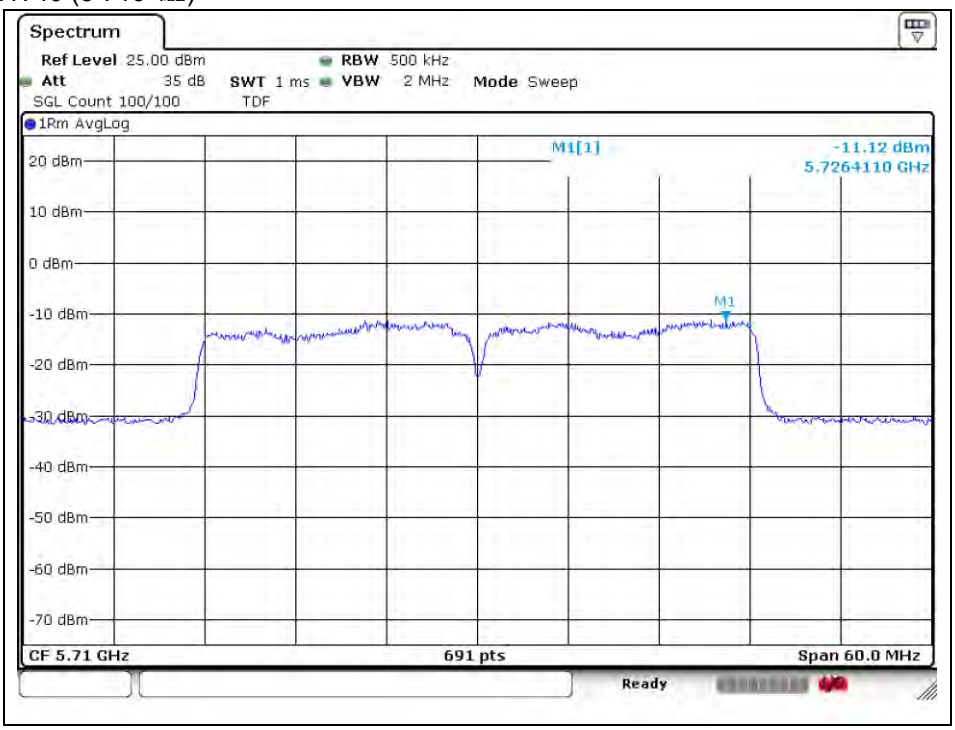
U-NII 3 11a (5 720 ㎒)



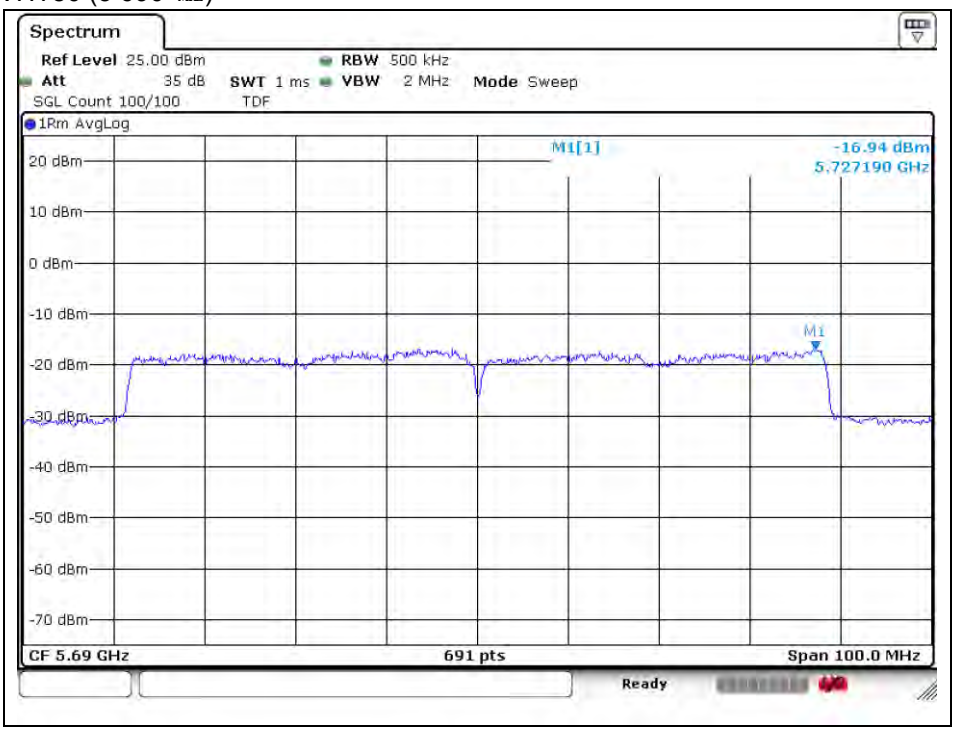
U-NII 3 11n_HT20 (5 720 ㎒)



U-NII 3 11n_HT40 (5 710 ㎒)



U-NII 3 11ac_VHT80 (5 690 ㎒)



7. Antenna Requirement

7.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section §15.407 (a) if transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the gain of the antenna exceeds 6 dBi.

7.2. Antenna Connected Construction

Antenna used in this product is Dipole type and peak max gain of antenna as below.

Band	5 180 ㎒ - 5 320 ㎒	5 500 ㎒ - 5 720 ㎒	5 745 ㎒ - 5 825 ㎒
Mode	11a/n_HT20, HT40, 11ac_VHT20, VHT40, VHT80		
Gain	2.42 dBi	-0.85 dBi	-2.39 dBi

- End of the Test Report -