

Test mode: 11n_HT40

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Cycle Correction Factor (dB)	Final PPSD (dB m)	Limit (dB m/1 MHz)			
U-NII 1	5 190	38	MCS2	-8.46	1.50	-6.96	11			
	5 230	46		-8.51		-7.01				
U-NII 2A	5 270	54		-8.54		-7.04				
	5 310	62		-7.56		-6.06				
U-NII 2C	5 510	102		-8.44		-6.94				
	5 550	110		-8.56		-7.06				
	5 670	134		-7.44		-5.94				
Band	Frequency (MHz)	Ch.		Data Rate (Mbps)		Measured PPSD (dB m)		Duty Cycle Correction Factor (dB)	Final PPSD (dB m)	Limit (dB m/500 kHz)
U-NII 3	5 755	151		MCS2		-10.46		1.50	-8.96	30
	5 795	159	-10.45		-8.95					

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Final PPSD (dB m)	Antenna Gain (dB i)	E.I.R.P. PPSD (dB m)	IC Limit (dB m/1 MHz)
U-NII 1	5 190	38	MCS2	-6.96	1.90	-5.06	10
	5 230	46		-7.01		-5.11	
U-NII 2A	5 270	54		-7.04	2.92	-4.12	N/A
	5 310	62		-6.06		-3.14	
U-NII 2C	5 510	102		-6.94	3.55	-3.39	
	5 550	110		-7.06		-3.51	
	5 670	134		-5.94		-2.39	
U-NII 3	5 755	151		-8.96	3.32	-5.64	
	5 795	159		-8.95		-5.63	

Remark;

- Final PPSD (dB m) = Measured PPSD (dB m) + Duty Cycle Correction Factor (dB)
- E.I.R.P. PPSD (dB m) = Final PPSD (dB m) + Antenna Gain (dB i)

Test mode: 11ac_VHT80

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Cycle Correction Factor (dB)	Final PPSD (dB m)	Limit (dB m/1 MHz)
U-NII 1	5 210	42	MCS1	-11.57	1.88	-9.69	11
U-NII 2A	5 290	58		-11.82		-9.94	
U-NII 2C	5 530	106		-11.91		-10.03	
Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Cycle Correction Factor (dB)	Final PPSD (dB m)	Limit (dB m/500 kHz)
U-NII 3	5 775	155	MCS1	-14.22	1.88	-12.34	30

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Final PPSD (dB m)	Antenna Gain (dB i)	E.I.R.P. PPSD (dB m)	IC Limit (dB m/1 MHz)
U-NII 1	5 210	42	MCS1	-9.69	1.90	-7.79	10
U-NII 2A	5 290	58		-9.94	2.92	-7.02	N/A
U-NII 2C	5 530	106		-10.03	3.55	-6.48	
U-NII 3	5 775	155		-12.34	3.32	-9.02	

Remark;

1. Final PPSD (dB m) = Measured PPSD (dB m) + Duty Cycle Correction Factor (dB)
2. E.I.R.P. PPSD (dB m) = Final PPSD (dB m) + Antenna Gain (dB i)

Band-crossing channels

Mode	Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Measured PPSD (dB m)	Duty Cycle Correction Factor (dB)	Final PPSD (dB m)	Limit (dB m/1 MHz or dB m/500 kHz)
11a	U-NII 2C	5 720	144	6	-3.14	0.29	-2.85	11
	U-NII 3				-8.14		-7.85	30
11ac_VHT20	U-NII 2C	5 720	144	MCS2	-4.00	0.84	-3.16	11
	U-NII 3				-8.53		-7.69	30
11n_HT40	U-NII 2C	5 710	142	MCS2	-7.86	1.50	-6.36	11
	U-NII 3				-13.03		-11.53	30
11ac_VHT80	U-NII 2C	5 690	138	MCS1	-11.61	1.88	-9.73	11
	U-NII 3				-16.60		-14.72	30

Remark;

1. Final PPSD (dB m) = Measured PPSD (dB m) + Duty Cycle Correction Factor (dB)

- MIMO

Test mode: 11n_HT20

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0 Measured PPSD (dB m)	Core 1 Measured PPSD (dB m)	Core 0+Core 1 PPSD (dB m)
U-NII 1	5 180	36	MCS13	-11.52	-12.21	-8.84
	5 220	44		-11.59	-11.90	-8.73
	5 240	48		-11.48	-11.31	-8.38
U-NII 2A	5 260	52		-11.83	-11.80	-8.80
	5 300	60		-12.17	-11.71	-8.92
	5 320	64		-12.54	-11.84	-9.17
U-NII 2C	5 500	100		-12.29	-11.88	-9.07
	5 580	116		-11.34	-11.93	-8.61
	5 700	140		-10.66	-10.92	-7.78
U-NII 3	5 745	149		-13.90	-13.76	-10.82
	5 785	157		-13.51	-14.08	-10.78
	5 825	165		-12.73	-13.75	-10.20

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/1 MHz)
U-NII 1	5 180	36	MCS13	-8.84	2.61	-6.23	11
	5 220	44		-8.73		-6.12	
	5 240	48		-8.38		-5.77	
U-NII 2A	5 260	52		-8.80		-6.19	
	5 300	60		-8.92		-6.31	
	5 320	64		-9.17		-6.56	
U-NII 2C	5 500	100		-9.07		-6.46	
	5 580	116		-8.61		-6.00	
	5 700	140		-7.78		-5.17	
Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/500 kHz)
U-NII 3	5 745	149	MCS13	-10.82	2.61	-8.21	29.81
	5 785	157		-10.78		-8.17	
	5 825	165		-10.20		-7.59	

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 Final PPSD (dB m)	Antenna Gain (dB i)	Core 0+Core 1 E.I.R.P. PPSD (dB m)	IC Limit (dB m/1 MHz)
U-NII 1	5 180	36	MCS13	-6.23	4.80	-1.43	10
	5 220	44		-6.12		-1.32	
	5 240	48		-5.77		-0.97	
U-NII 2A	5 260	52		-6.19	5.33	-0.86	N/A
	5 300	60		-6.31		-0.98	
	5 320	64		-6.56		-1.23	
U-NII 2C	5 500	100		-6.46	5.99	-0.47	
	5 580	116		-6.00		-0.01	
	5 700	140		-5.17		0.82	
U-NII 3	5 745	149		-8.21	6.19	-2.02	
	5 785	157		-8.17		-1.98	
	5 825	165		-7.59		-1.40	

Remark;

1. According to KDB 662911, power spectral density of each port (Core 0+Core 1) was combined by using below calculation.
 - PPSD: $10 \log \{10^{(\text{Core 0 PSD} / 10)} + 10^{(\text{Core 1 PSD} / 10)}\}$
 - Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dB i
 - (i) If transmit signals are correlated, then

Directional gain = $10 \log \left[\frac{10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20}}{N_{\text{ANT}}} \right]^2$ dB i [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
2. Final PPSD (dB m) = PPSD (dB m) + Duty Correction Correction Factor (dB)
3. E.I.R.P. PPSD (dB m) = Final PPSD (dB m) + Antenna Gain (dB i)

Test mode: 11ac_VHT40

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0 Measured PPSD (dB m)	Core 1 Measured PPSD (dB m)	Core 0+Core 1 PPSD (dB m)
U-NII 1	5 190	38	MCS3	-14.58	-14.48	-11.52
	5 230	46		-14.23	-15.11	-11.64
U-NII 2A	5 270	54		-14.92	-14.68	-11.79
	5 310	62		-14.81	-14.02	-11.39
U-NII 2C	5 510	102		-14.51	-14.83	-11.66
	5 550	110		-14.29	-15.12	-11.67
	5 670	134		-13.37	-13.78	-10.56
U-NII 3	5 755	151		-16.25	-17.12	-13.65
	5 795	159		-16.03	-17.18	-13.56

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/1 MHz)
U-NII 1	5 190	38	MCS3	-11.52	2.57	-8.95	11
	5 230	46		-11.64		-9.07	
U-NII 2A	5 270	54		-11.79		-9.22	
	5 310	62		-11.39		-8.82	
U-NII 2C	5 510	102		-11.66		-9.09	
	5 550	110		-11.67		-9.10	
	5 670	134		-10.56		-7.99	

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/1 MHz)
U-NII 3	5 755	151	MCS3	-13.65	2.57	-11.08	29.81
	5 795	159		-13.56		-10.99	

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 Final PPSD (dB m)	Antenna Gain (dB i)	Core 0+Core 1 E.I.R.P. PPSD (dB m)	IC Limit (dB m/1 MHz)
U-NII 1	5 190	38	MCS3	-8.95	4.80	-4.15	10
	5 230	46		-9.07		-4.27	
U-NII 2A	5 270	54		-9.22	5.33	-3.89	N/A
	5 310	62		-8.82		-3.49	
U-NII 2C	5 510	102		-9.09	5.99	-3.10	
	5 550	110		-9.10		-3.11	
	5 670	134		-7.99		-2.00	
U-NII 3	5 755	151		-11.08	6.19	-4.89	
	5 795	159		-10.99		-4.80	

Remark;

1. According to KDB 662911, power spectral density of each port (Core 0+Core 1) was combined by using below calculation.
 - PPSD: $10 \log \{10^{(\text{Core 0 PSD} / 10)} + 10^{(\text{Core 1 PSD} / 10)}\}$
 - Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dB i
 - (i) If transmit signals are correlated, then

Directional gain = $10 \log \left[\frac{(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2}{N_{\text{ANT}}} \right]$ dB i [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
2. Final PPSD (dB m) = PPSD (dB m) + Duty Correction Correction Factor (dB)
3. E.I.R.P. PPSD (dB m) = Final PPSD (dB m) + Antenna Gain (dB i)

Test mode: 11ac_VHT80

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0 Measured PPSD (dB m)	Core 1 Measured PPSD (dB m)	Core 0+Core 1 PPSD (dB m)
U-NII 1	5 210	42	MCS6	-17.35	-18.94	-15.06
U-NII 2A	5 290	58		-17.23	-18.32	-14.73
U-NII 2C	5 530	106		-17.08	-18.64	-14.78
U-NII 3	5 775	155		-20.40	-21.18	-17.76

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/1 MHz)
U-NII 1	5 210	42	MCS6	-15.06	4.09	-10.97	11
U-NII 2A	5 290	58		-14.73		-10.64	
U-NII 2C	5 530	106		-14.78		-10.69	
Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/500 kHz)
U-NII 3	5 775	155	MCS6	-17.76	4.09	-13.67	29.81

Band	Frequency (MHz)	Ch.	Data Rate (Mbps)	Core 0+Core 1 Final PPSD (dB m)	Antenna Gain (dB i)	Core 0+Core 1 E.I.R.P. PPSD (dB m)	IC Limit (dB m/1 MHz)
U-NII 1	5 210	42	MCS6	-10.97	4.80	-6.17	10
U-NII 2A	5 290	58		-10.64	5.33	-5.31	N/A
U-NII 2C	5 530	106		-10.69	5.99	-4.70	
U-NII 3	5 775	155		-13.67	6.19	-7.48	

Remark;

1. According to KDB 662911, power spectral density of each port (Core 0+Core 1) was combined by using below calculation.
 - PPSD: $10 \log \{10^{(Core\ 0\ PSD / 10)} + 10^{(Core\ 1\ PSD / 10)}\}$
 - Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dB i
 - (i) If transmit signals are correlated, then
 Directional gain = $10 \log \left[\frac{(10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20})^2}{N_{ANT}} \right]$ dB i [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
2. Final PPSD (dB m) = PPSD (dB m) + Duty Cycle Correction Factor (dB)
3. E.I.R.P. PPSD (dB m) = Final PPSD (dB m) + Antenna Gain (dB i)

Band-crossing channels

Mode	Band	Frequency (MHz)	Data Rate (Mbps)	Core 0 PPSD (dB m)	Core 1 PPSD (dB m)	Core 0+Core 1 PPSD (dB m)
11n_HT20	U-NII 2C	5 720	MCS13	-10.28	-10.83	-7.54
	U-NII 3			-12.82	-13.51	-10.14
11ac_VHT40	U-NII 2C	5 710	MCS3	-13.06	-13.95	-10.47
	U-NII 3			-16.68	-16.40	-13.53
11ac_VHT80	U-NII 2C	5 690	MCS6	-17.63	-18.01	-14.81
	U-NII 3			-18.68	-19.78	-16.18

Mode	Band	Frequency (MHz)	Data Rate (Mbps)	Core 0+Core 1 PPSD (dB m)	Duty Cycle Correction Factor (dB)	Core 0+Core 1 Final PPSD (dB m)	Limit (dB m/1 MHz or dB m/500 kHz)
11n_HT20	U-NII 2C	5 720	MCS13	-7.54	2.61	-4.93	11
	U-NII 3			-10.14	2.61	-7.53	29.81
11ac_VHT40	U-NII 2C	5 710	MCS3	-10.47	2.57	-7.90	11
	U-NII 3			-13.53	2.57	-10.96	29.81
11ac_VHT80	U-NII 2C	5 690	MCS6	-14.81	4.09	-10.72	11
	U-NII 3			-16.18	4.09	-12.09	29.81

Remark;

1. According to KDB 662911, power spectral density of each port (Core 0+Core 1) was combined by using below calculation.
 - PPSD: $10 \log \{10^{(\text{Core 0 PSD} / 10)} + 10^{(\text{Core 1 PSD} / 10)}\}$
 - Unequal antenna gains, with equal transmit powers. For antenna gains given by G_1, G_2, \dots, G_N dB i
 - (i) If transmit signals are correlated, then

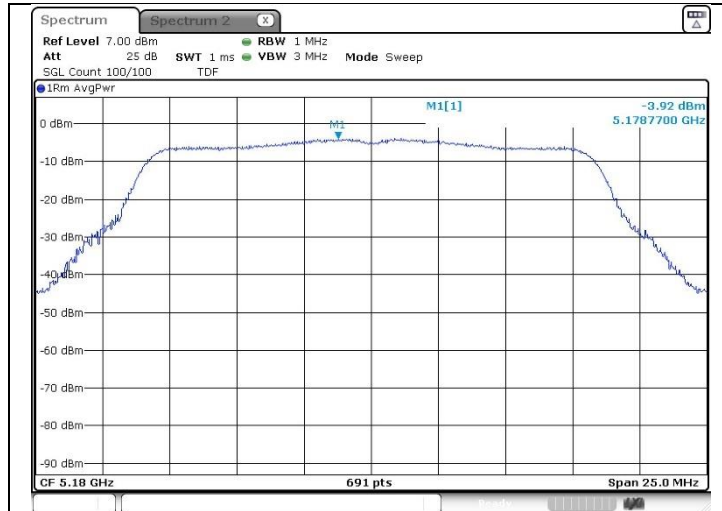
$$\text{Directional gain} = 10 \log \left[\frac{10^{G_1/20} + 10^{G_2/20} + \dots + 10^{G_N/20}}{N_{\text{ANT}}} \right]^2$$
 dB i [Note the "20"s in the denominator of each exponent and the square of the sum of terms; the object is to combine the signal levels coherently.]
2. PPSD: $10 \log \{10^{(\text{Core 0 PSD} / 10)} + 10^{(\text{Core 1 PSD} / 10)}\}$
3. Final PPSD (dB m) = PPSD (dB m) + Duty Correction Correction Factor (dB)

- Test plots

- SISO_Core 0

802.11a (Band 1)

Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

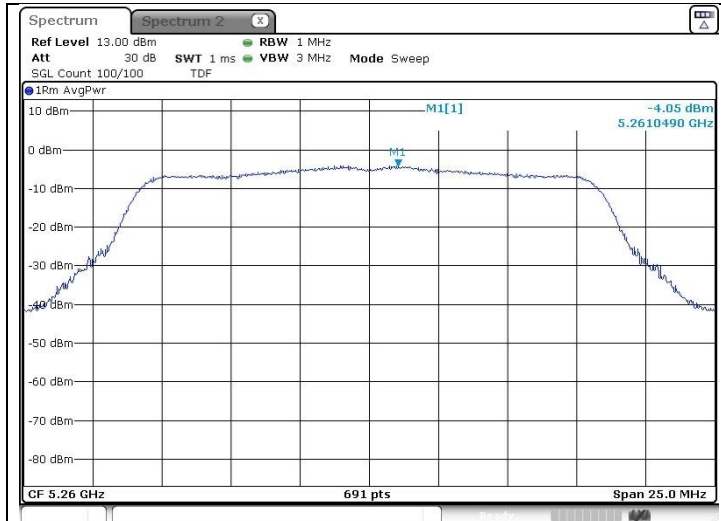


High Channel
(5 240 MHz)



802.11a (Band 2A)

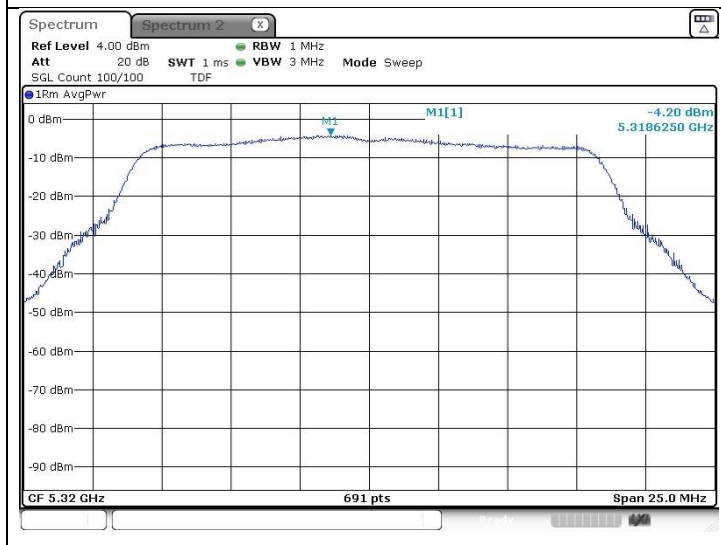
Low Channel
(5 260 MHz)



Middle Channel
(5 300 MHz)



High Channel
(5 320 MHz)

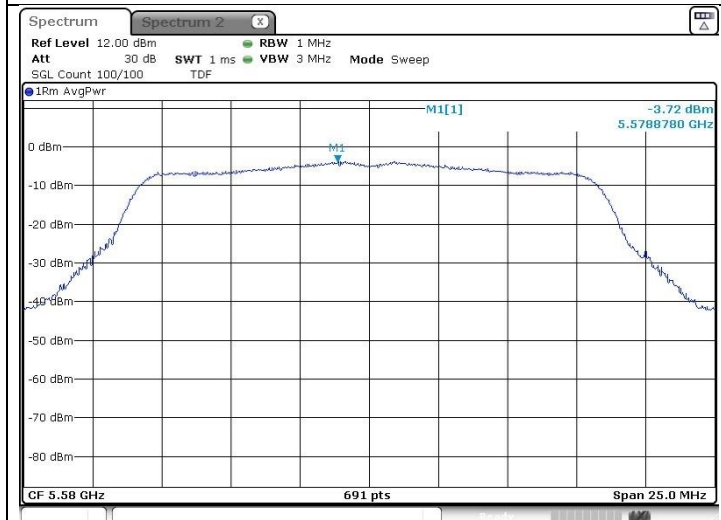


802.11a (Band 2C)

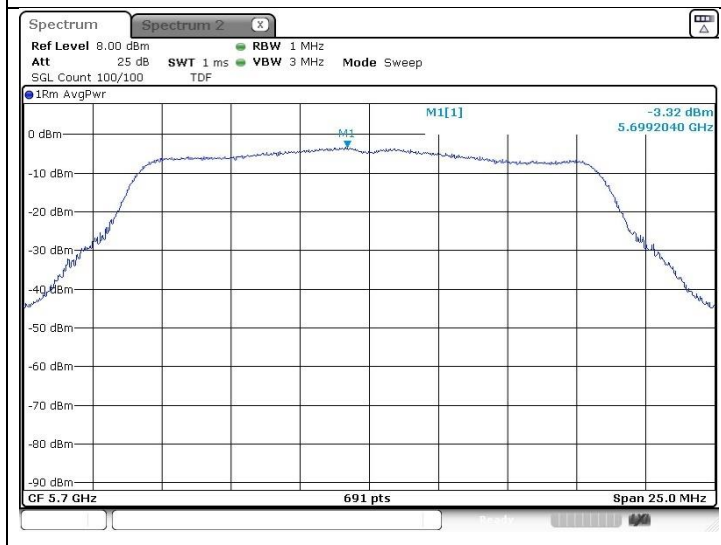
Low Channel
(5 500 MHz)



Middle Channel
(5 580 MHz)

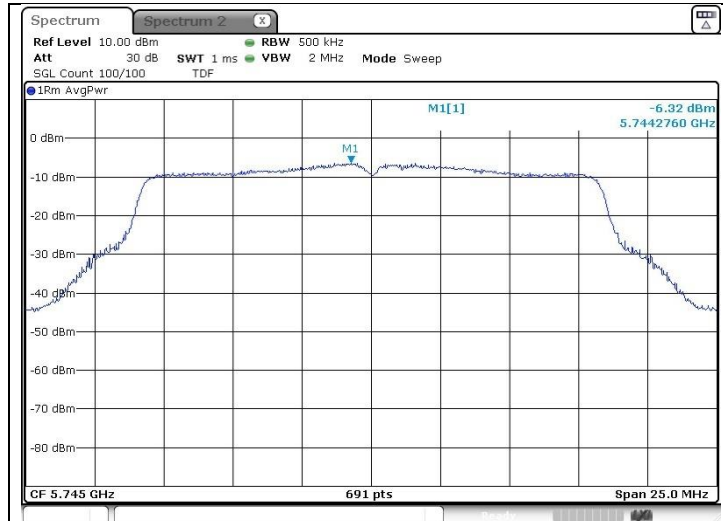


High Channel
(5 700 MHz)

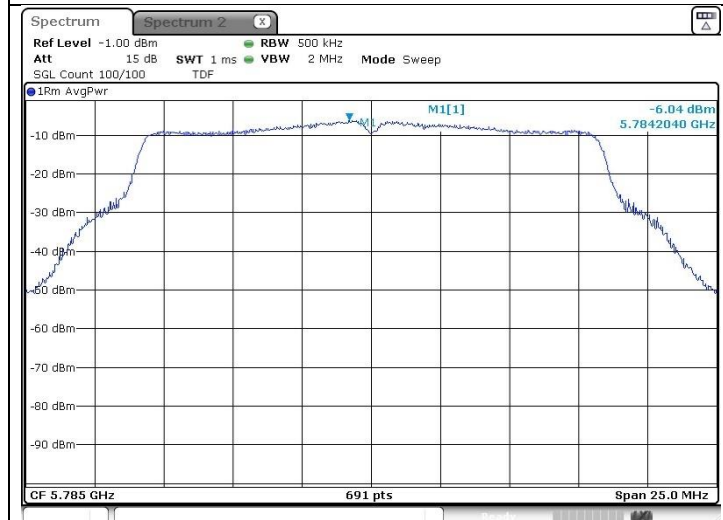


802.11a (Band 3)

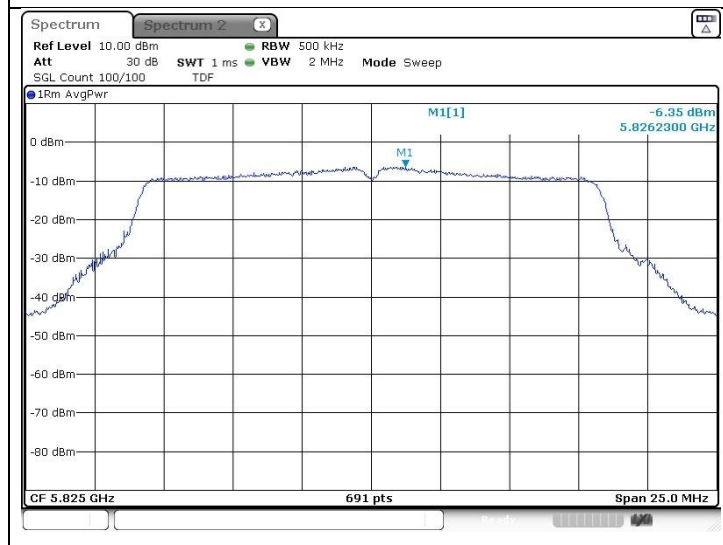
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)



High Channel
(5 825 MHz)

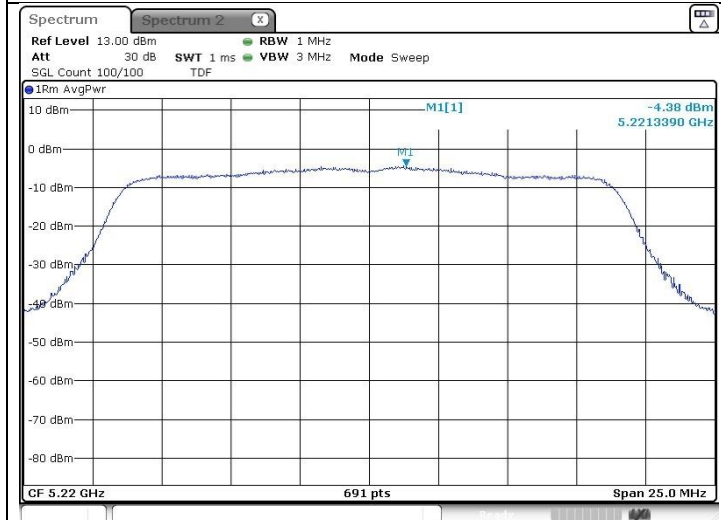


802.11n_HT20 (Band 1)

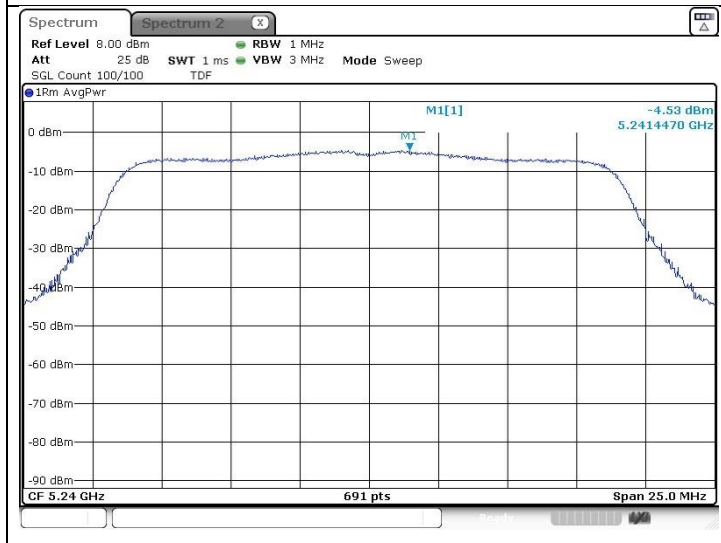
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

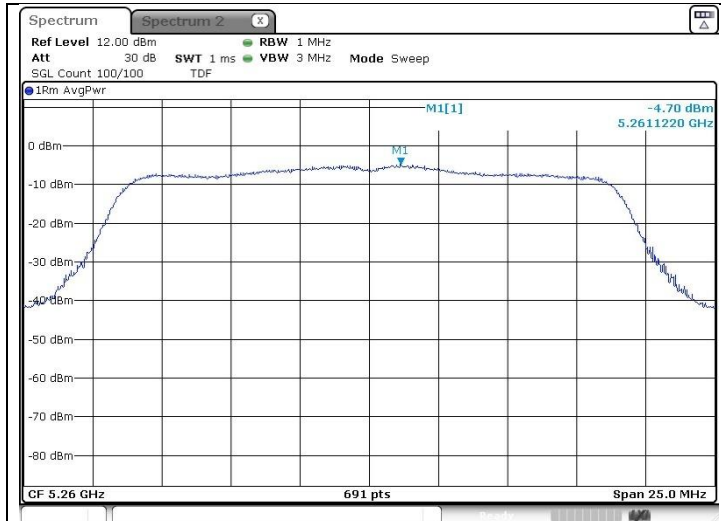


High Channel
(5 240 MHz)

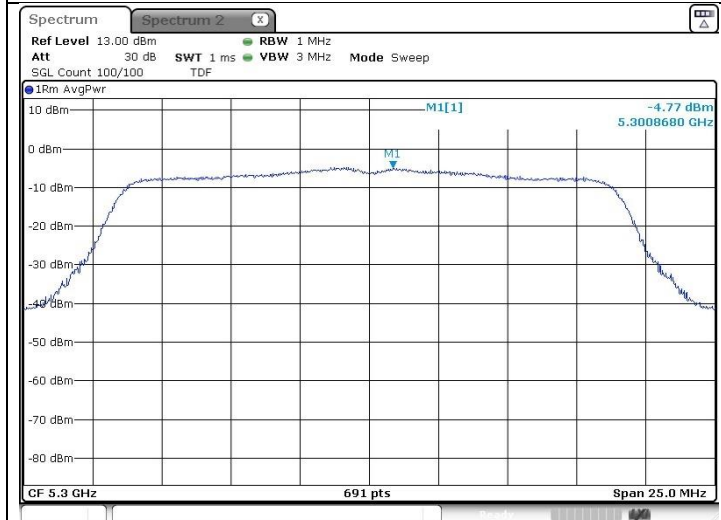


802.11n_HT20 (Band 2A)

Low Channel
(5 260 MHz)



Middle Channel
(5 300 MHz)

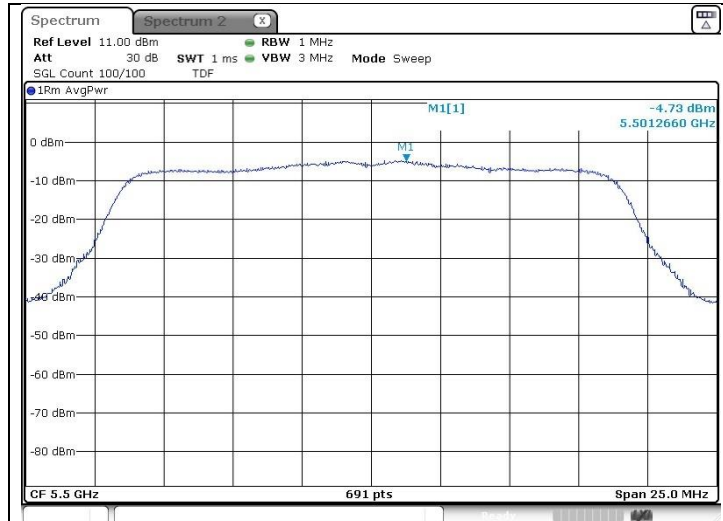


High Channel
(5 320 MHz)

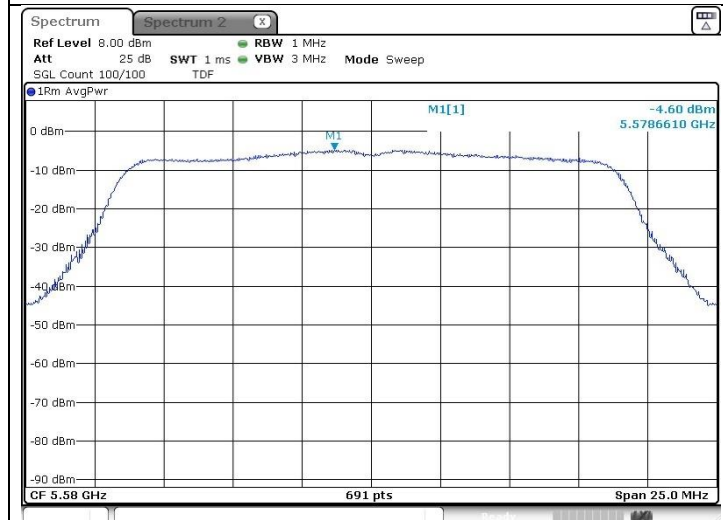


802.11n_HT20 (Band 2C)

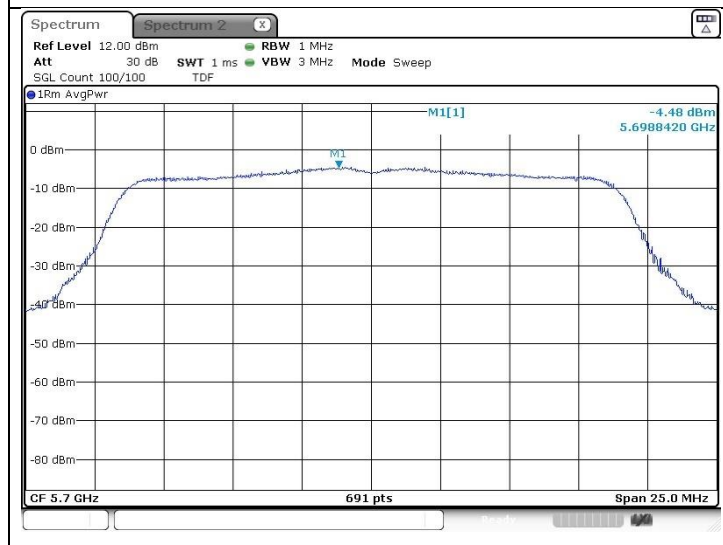
Low Channel
(5 500 MHz)



Middle Channel
(5 580 MHz)



High Channel
(5 700 MHz)

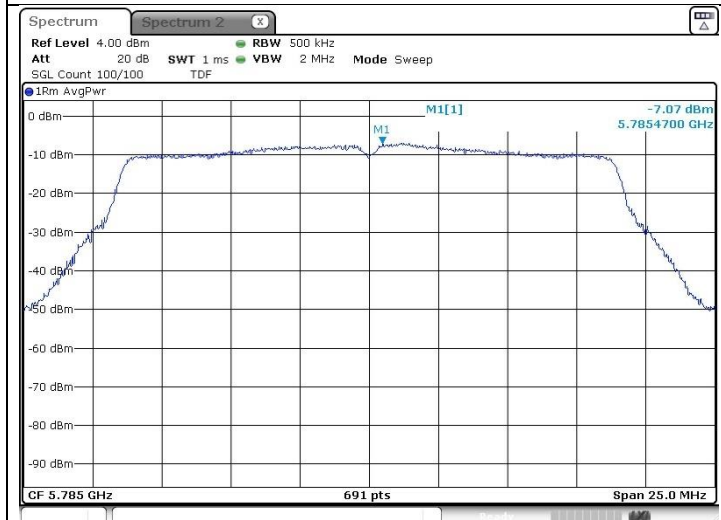


802.11n_HT20 (Band 3)

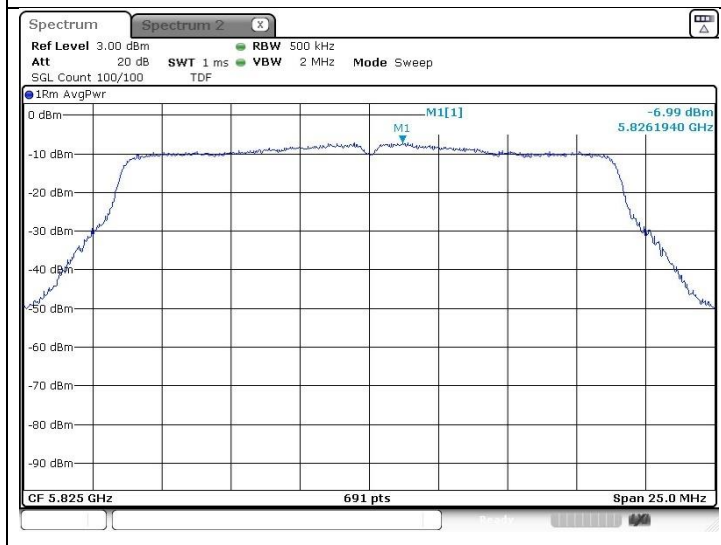
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

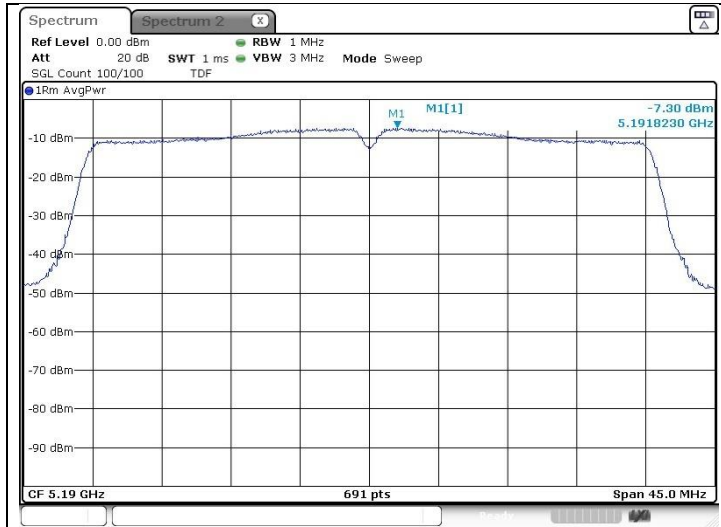


High Channel
(5 825 MHz)

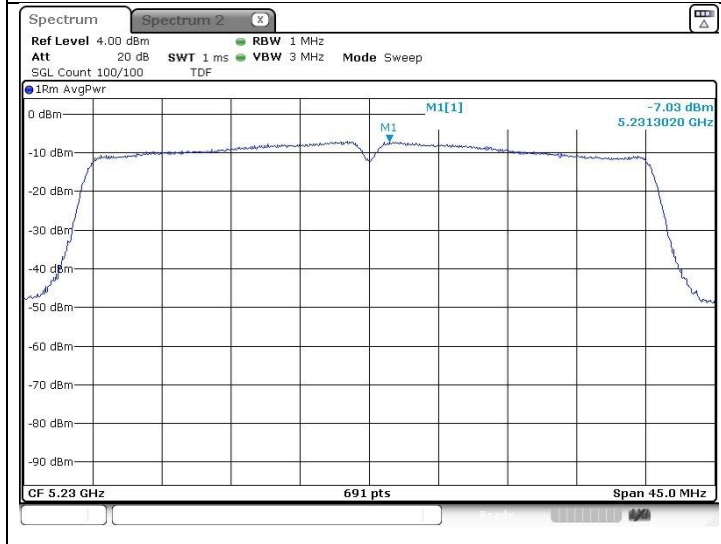


802.11n_HT40 (Band 1)

Low Channel
(5 190 MHz)

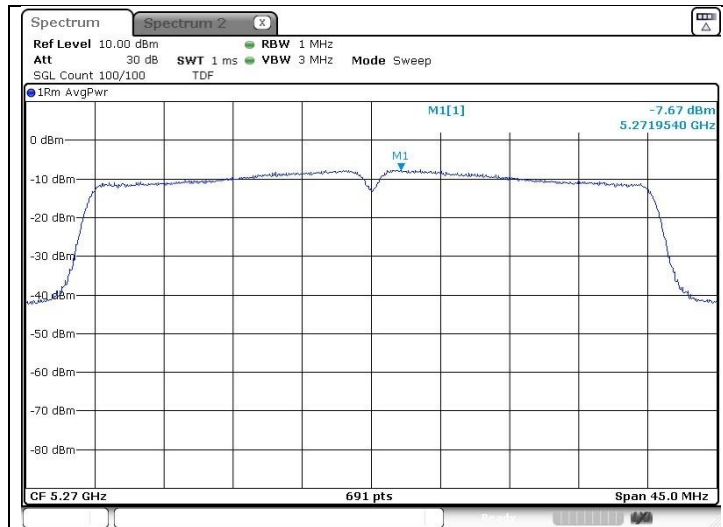


High Channel
(5 230 MHz)

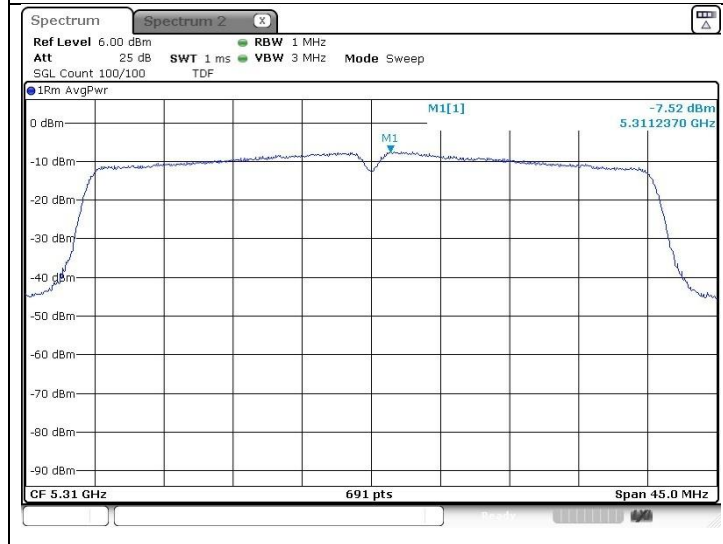


802.11n_HT40 (Band 2A)

Low Channel
(5 270 MHz)

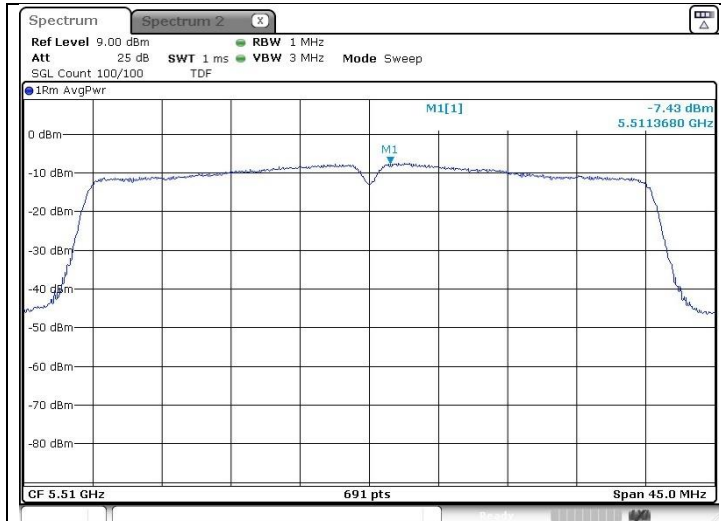


High Channel
(5 310 MHz)

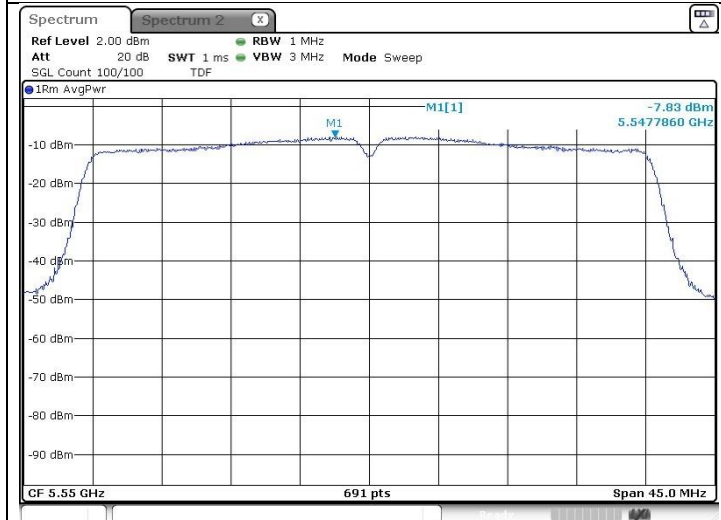


802.11n_HT40 (Band 2C)

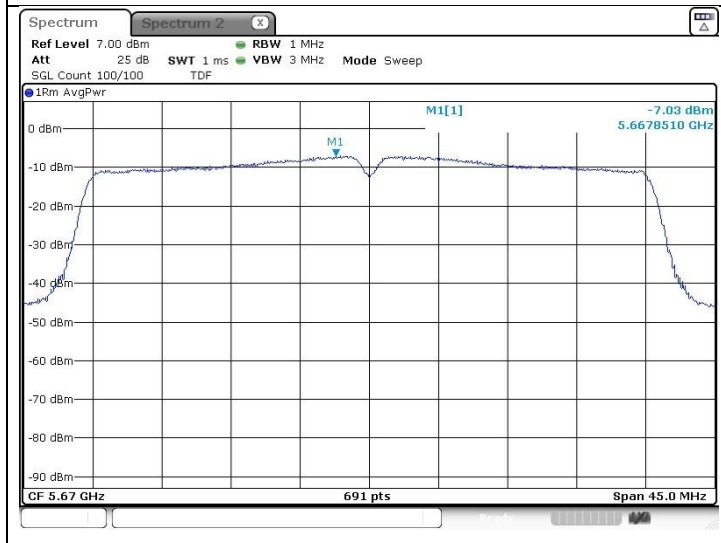
Low Channel
(5 510 MHz)



Middle Channel
(5 550 MHz)

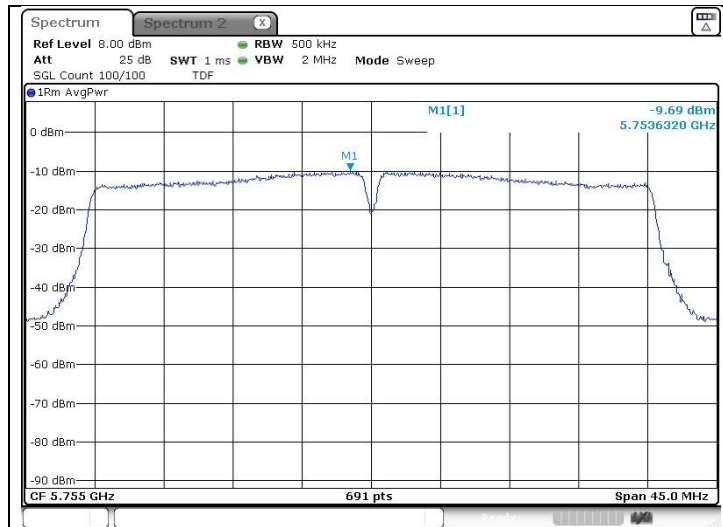


High Channel
(5 670 MHz)

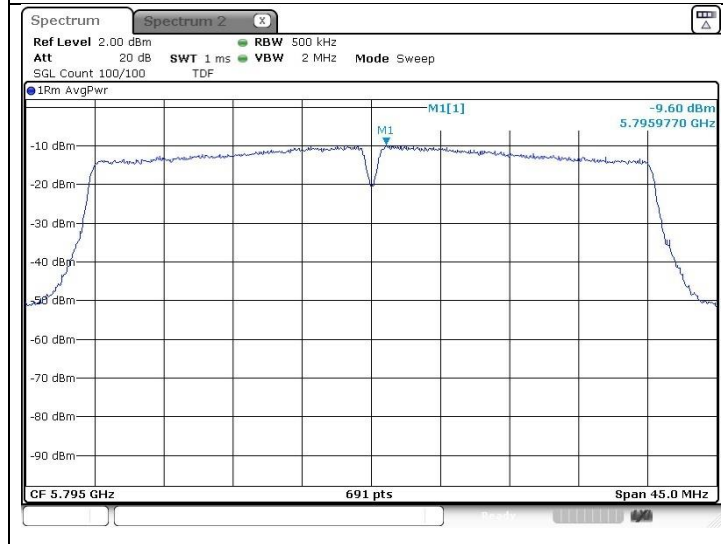


802.11n_HT40 (Band 3)

Low Channel
(5 755 MHz)

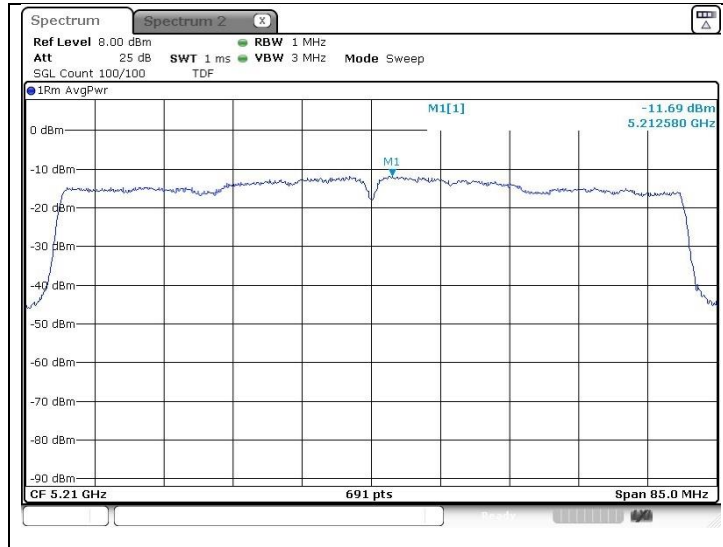


High Channel
(5 795 MHz)



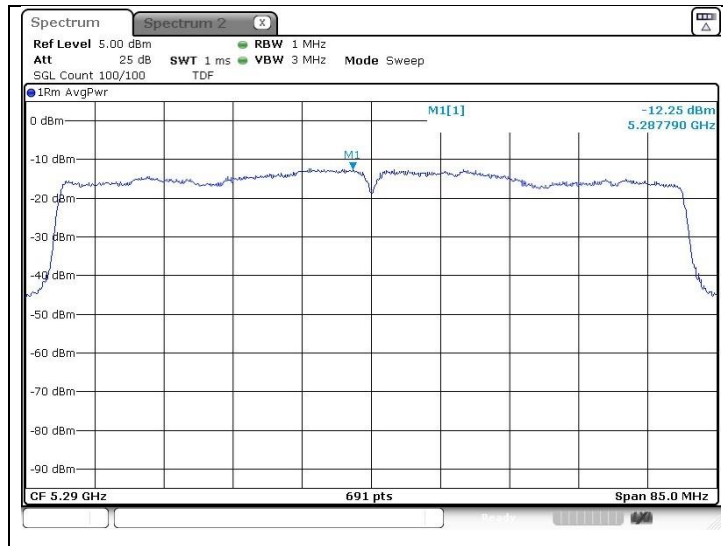
802.11ac_VHT80 (Band 1)

Middle Channel
(5 210 MHz)



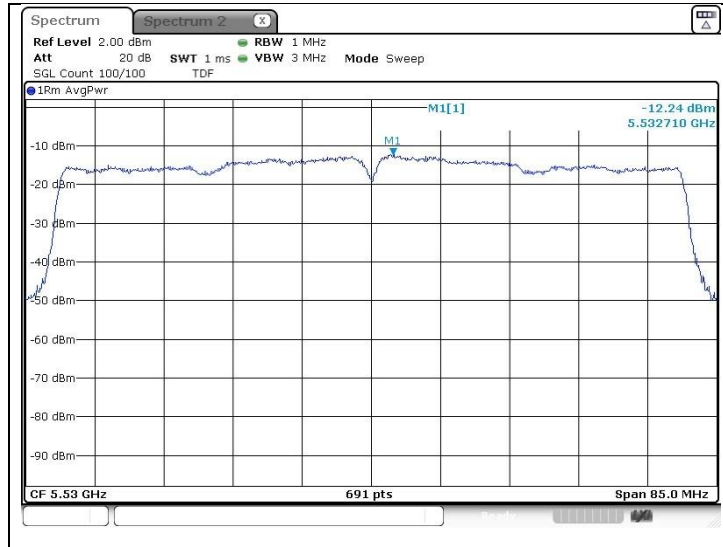
802.11ac_VHT80 (Band 2A)

Middle Channel
(5 290 MHz)



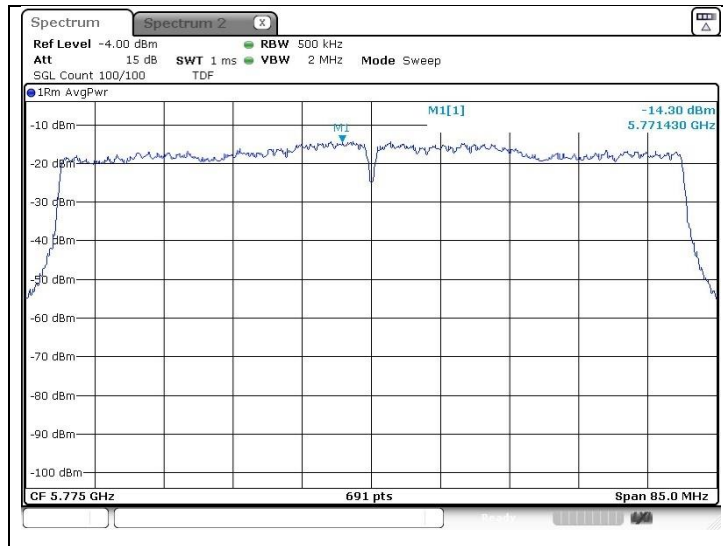
802.11ac_VHT80 (Band 2C)

Low Channel
(5 530 MHz)



802.11ac_VHT80 (Band 3)

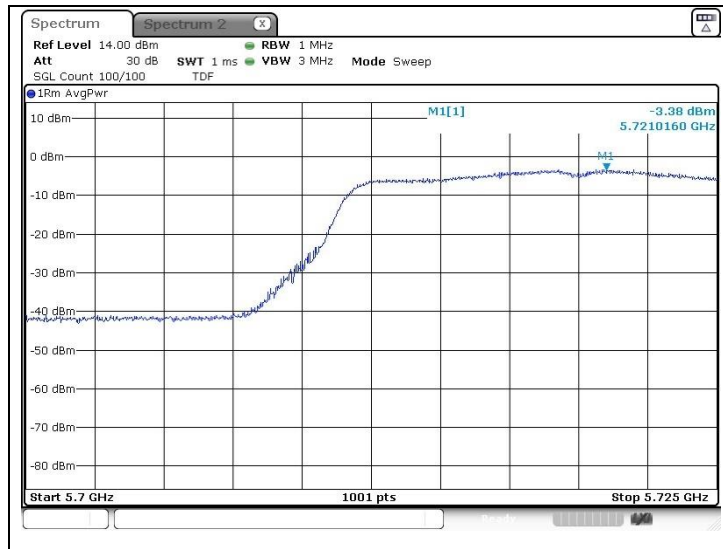
Middle Channel
(5 775 MHz)



Band-crossing channels

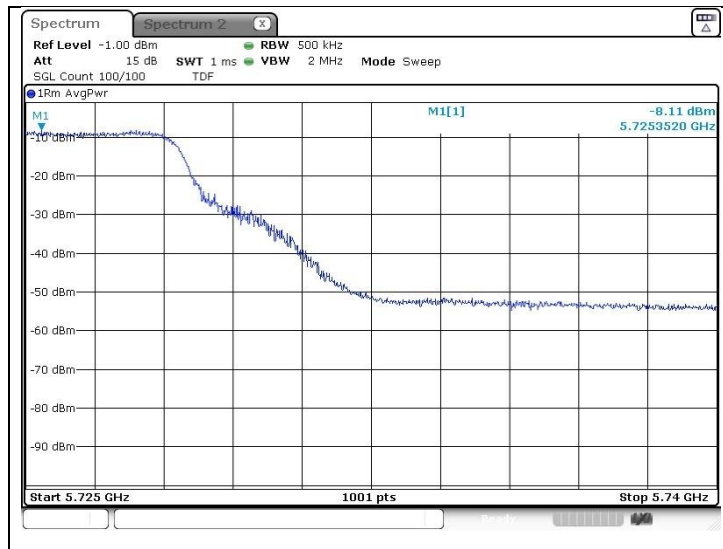
802.11a (Band 2C)

High Channel
(5 720 MHz)



802.11a (Band 3)

High Channel
(5 720 MHz)



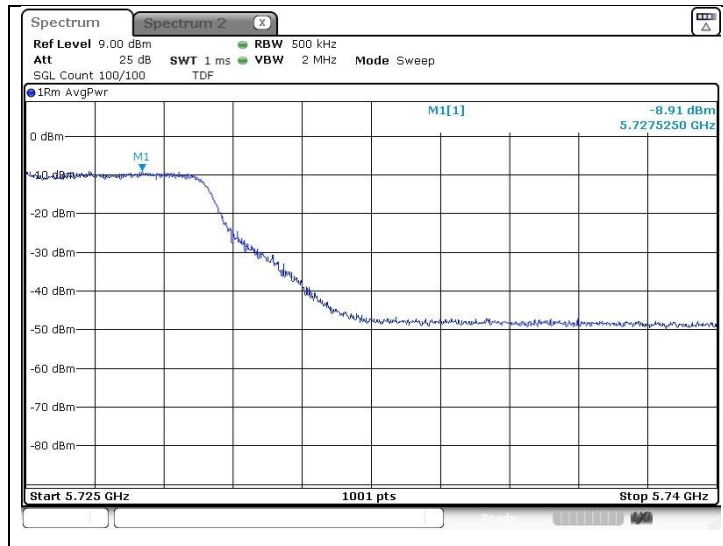
802.11n_HT20 (Band 2C)

High Channel
 (5 720 MHz)



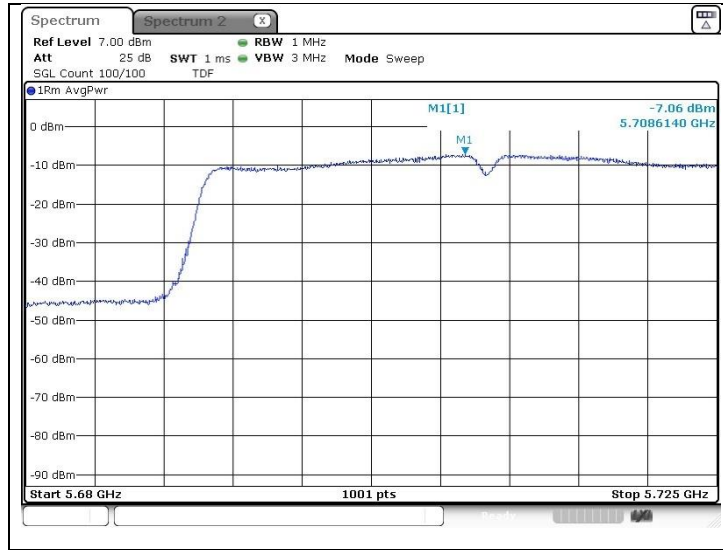
802.11n_HT20 (Band 3)

High Channel
 (5 720 MHz)



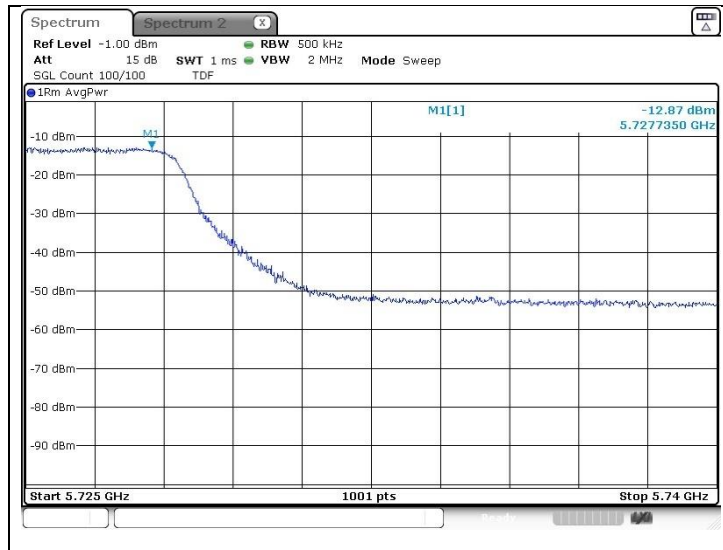
802.11n_HT40 (Band 2C)

High Channel
(5 710 MHz)



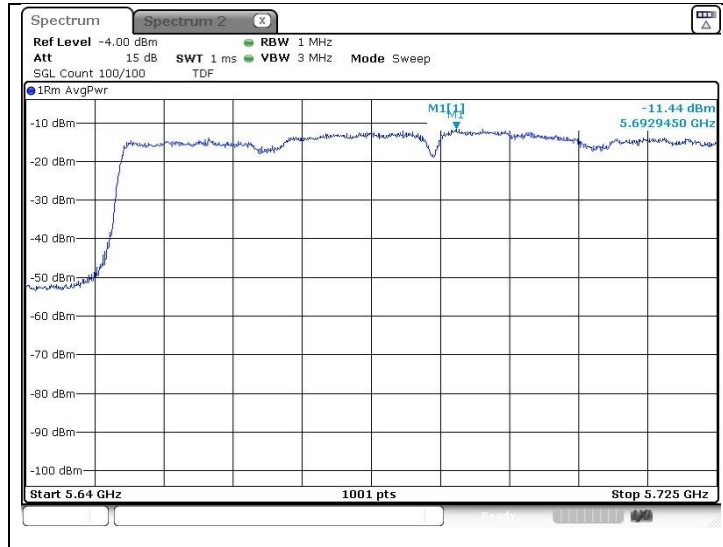
802.11n_HT40 (Band 3)

High Channel
(5 710 MHz)



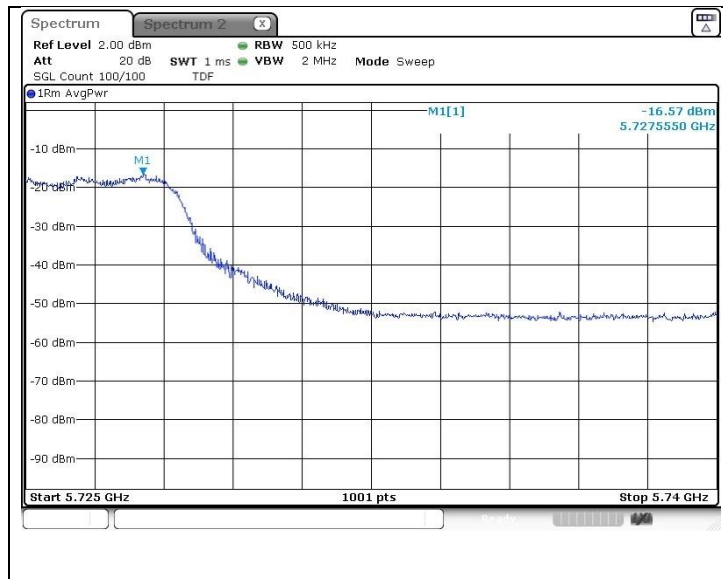
802.11ac_VHT80 (Band 2C)

Middle Channel
(5 690 MHz)



802.11ac_VHT80 (Band 3)

Middle Channel
(5 690 MHz)



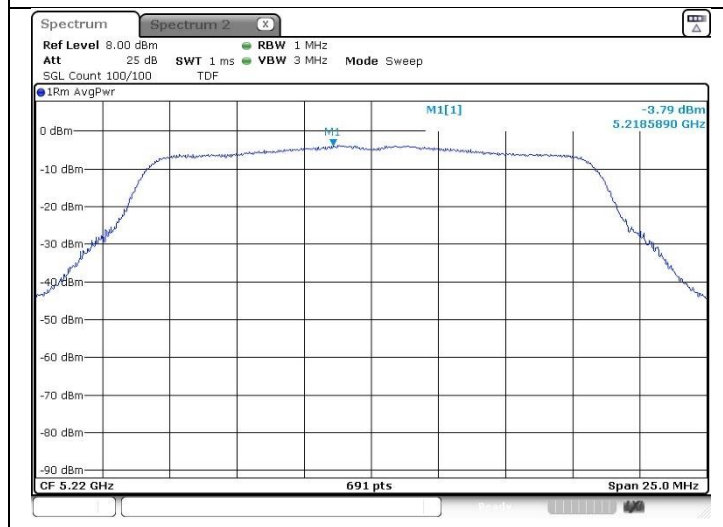
- SISO_Core 1

802.11a (Band 1)

Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)



High Channel
(5 240 MHz)



802.11a (Band 2A)

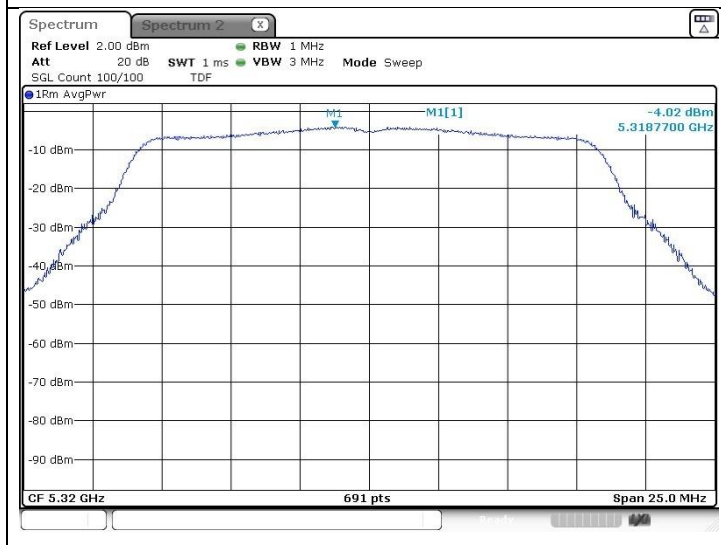
Low Channel
(5 260 MHz)



Middle Channel
(5 300 MHz)



High Channel
(5 320 MHz)



802.11a (Band 2C)

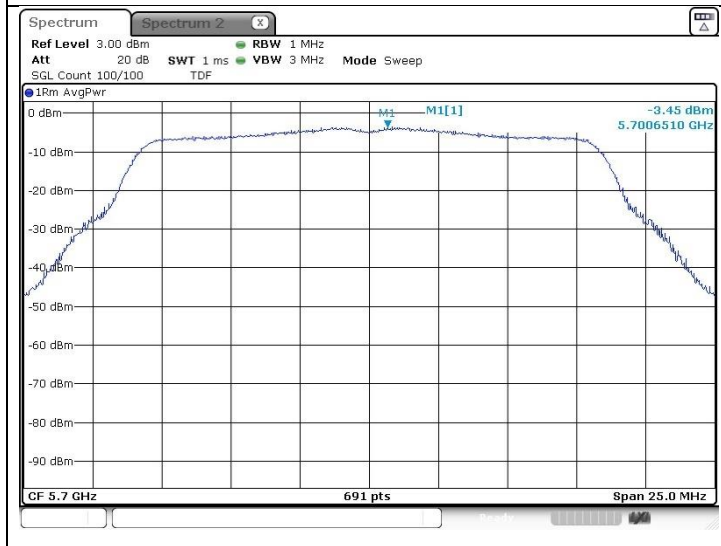
Low Channel
(5 500 MHz)



Middle Channel
(5 580 MHz)



High Channel
(5 700 MHz)

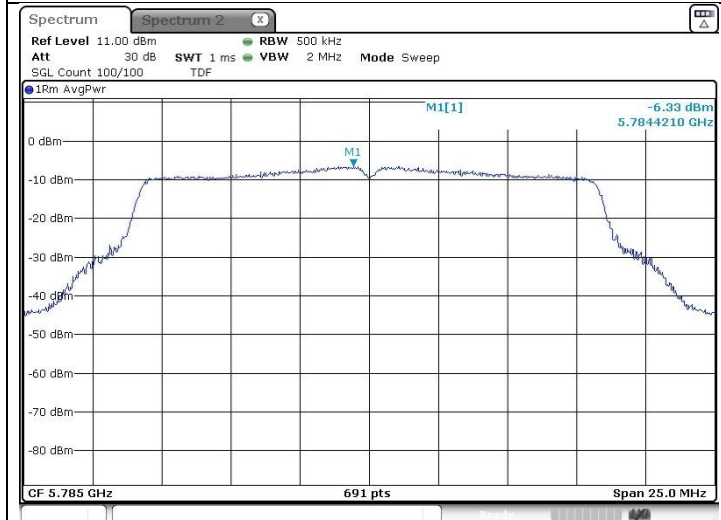


802.11a (Band 3)

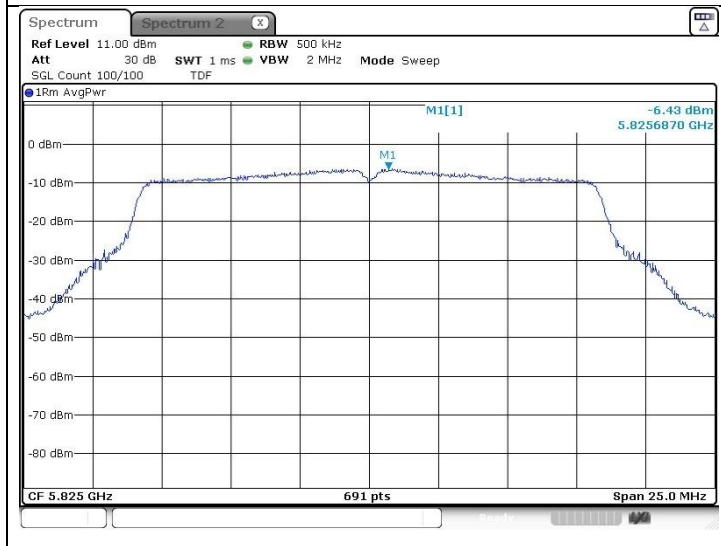
Low Channel
(5 745 MHz)



Middle Channel
(5 785 MHz)

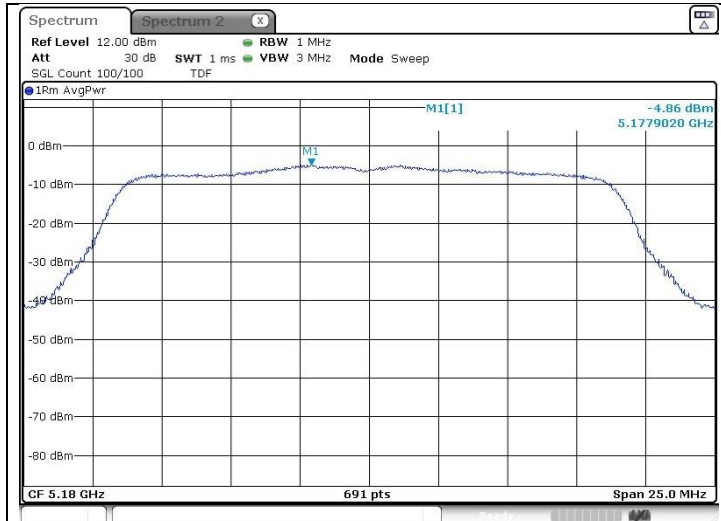


High Channel
(5 825 MHz)

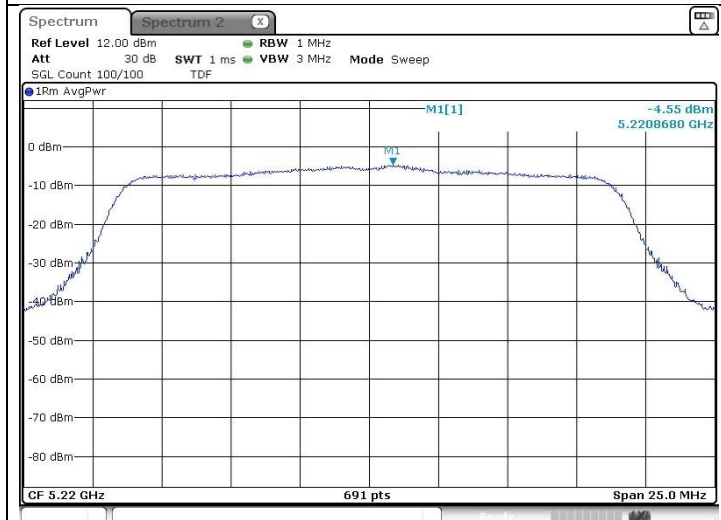


802.11ac_VHT20 (Band 1)

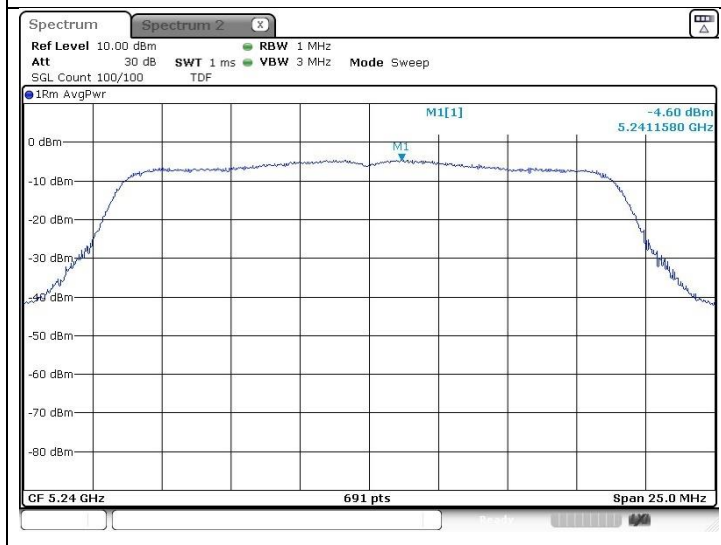
Low Channel
(5 180 MHz)



Middle Channel
(5 220 MHz)

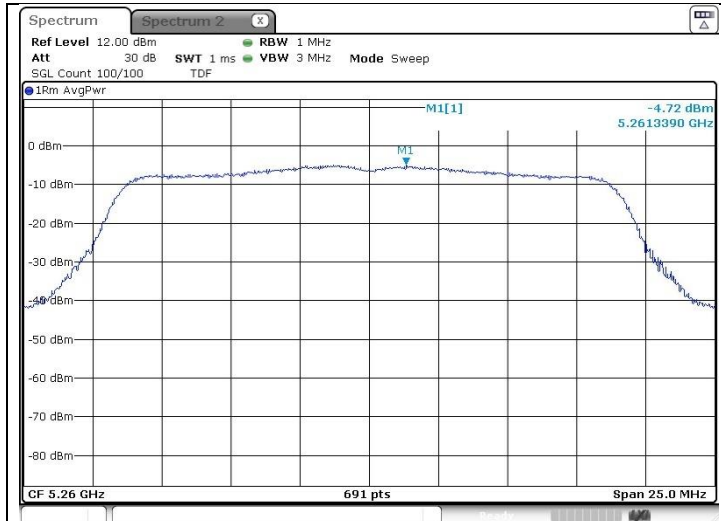


High Channel
(5 240 MHz)



802.11ac_VHT20 (Band 2A)

Low Channel
(5 260 MHz)



Middle Channel
(5 300 MHz)

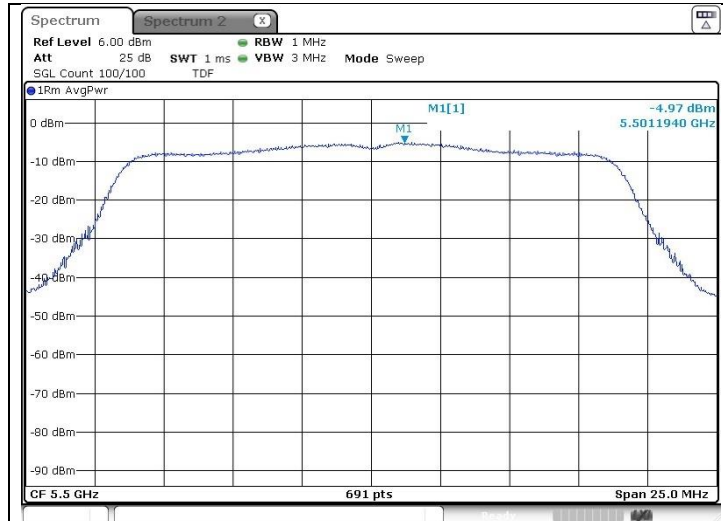


High Channel
(5 320 MHz)

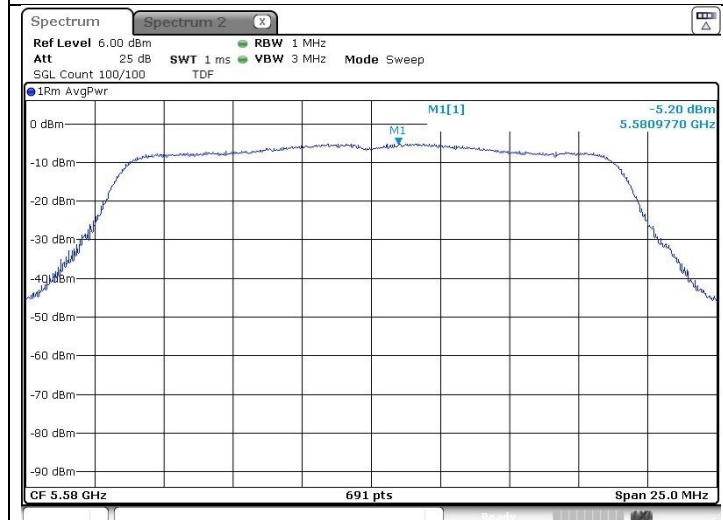


802.11ac_VHT20 (Band 2C)

Low Channel
(5 500 MHz)



Middle Channel
(5 580 MHz)



High Channel
(5 700 MHz)

