



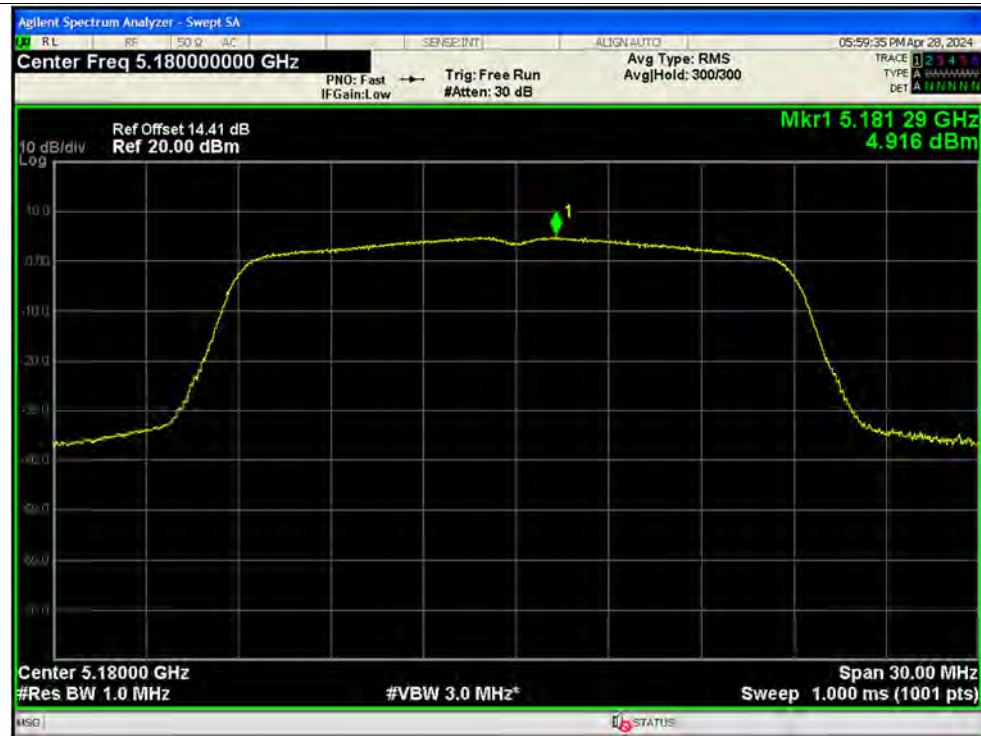
PSD NVNT n20 5785MHz Ant1 SISO



PSD NVNT n20 5825MHz Ant1 SISO



PSD NVNT n20 5180MHz Ant2 SISO



PSD NVNT n20 5220MHz Ant2 SISO



PSD NVNT n20 5240MHz Ant2 SISO

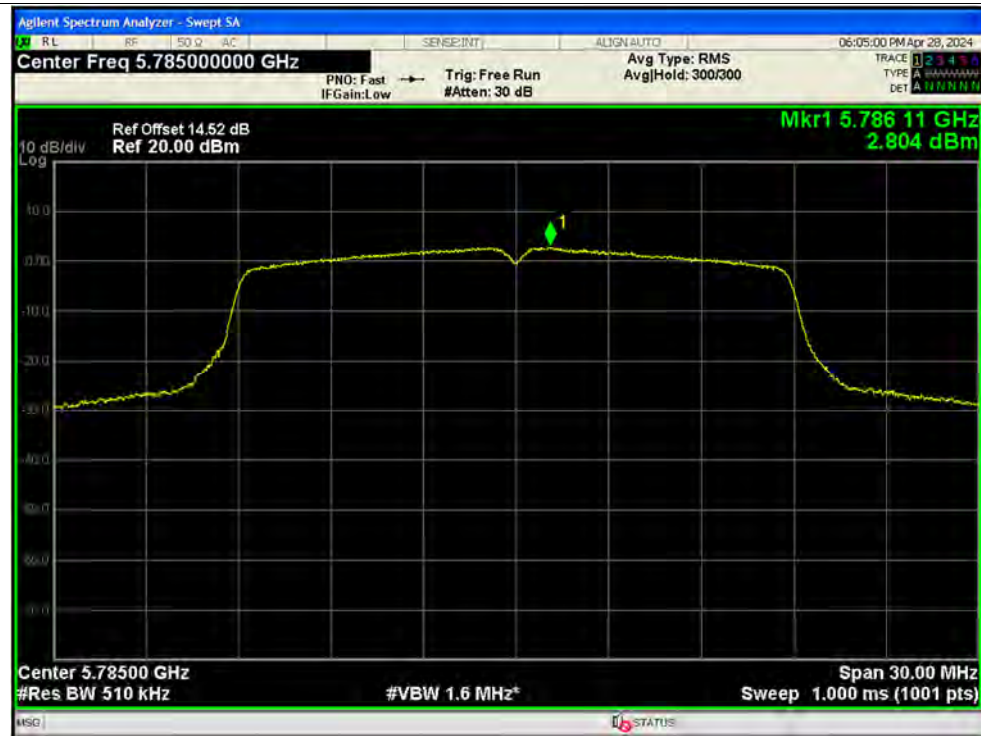


PSD NVNT n20 5745MHz Ant2 SISO





PSD NVNT n20 5785MHz Ant2 SISO



PSD NVNT n20 5825MHz Ant2 SISO



PSD NVNT n20 5180MHz Ant1 MIMO



PSD NVNT n20 5180MHz Ant2 MIMO



PSD NVNT n20 5220MHz Ant1 MIMO



PSD NVNT n20 5220MHz Ant2 MIMO



PSD NVNT n20 5240MHz Ant1 MIMO



PSD NVNT n20 5240MHz Ant2 MIMO



PSD NVNT n20 5745MHz Ant1 MIMO



PSD NVNT n20 5745MHz Ant2 MIMO



PSD NVNT n20 5785MHz Ant1 MIMO



PSD NVNT n20 5785MHz Ant2 MIMO



PSD NVNT n20 5825MHz Ant1 MIMO



PSD NVNT n20 5825MHz Ant2 MIMO





PSD NVNT n40 5190MHz Ant1 SISO



PSD NVNT n40 5230MHz Ant1 SISO





PSD NVNT n40 5755MHz Ant1 SISO



PSD NVNT n40 5795MHz Ant1 SISO



PSD NVNT n40 5190MHz Ant2 SISO



PSD NVNT n40 5230MHz Ant2 SISO



PSD NVNT n40 5755MHz Ant2 SISO



PSD NVNT n40 5795MHz Ant2 SISO



PSD NVNT n40 5190MHz Ant1 MIMO



PSD NVNT n40 5190MHz Ant2 MIMO



PSD NVNT n40 5230MHz Ant1 MIMO



PSD NVNT n40 5230MHz Ant2 MIMO



PSD NVNT n40 5755MHz Ant1 MIMO



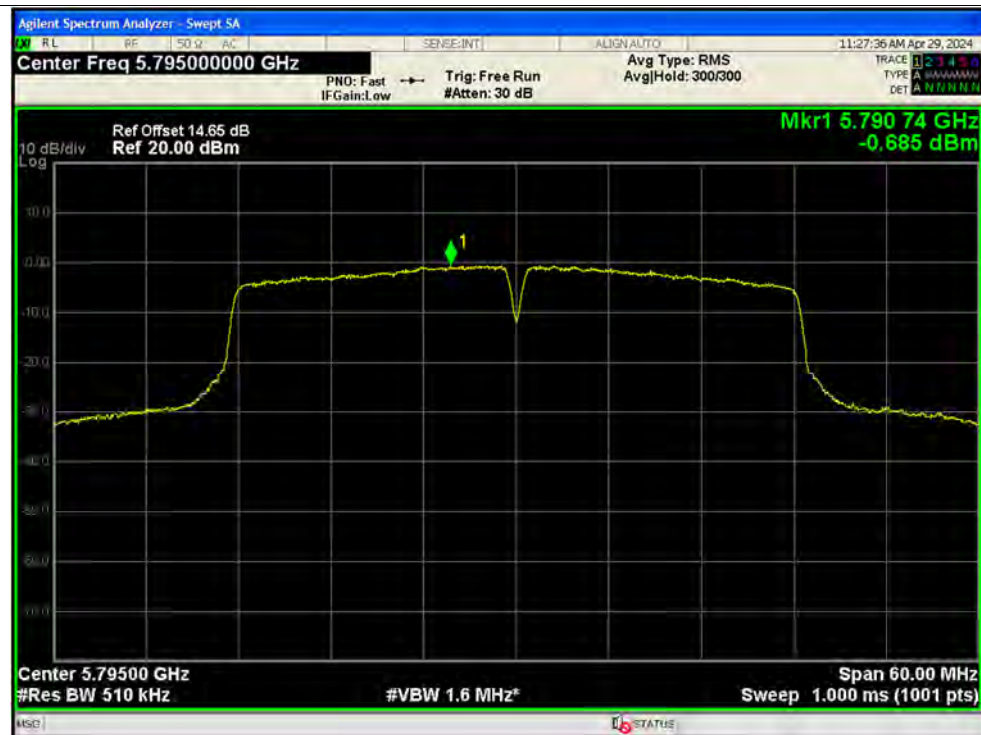
PSD NVNT n40 5755MHz Ant2 MIMO



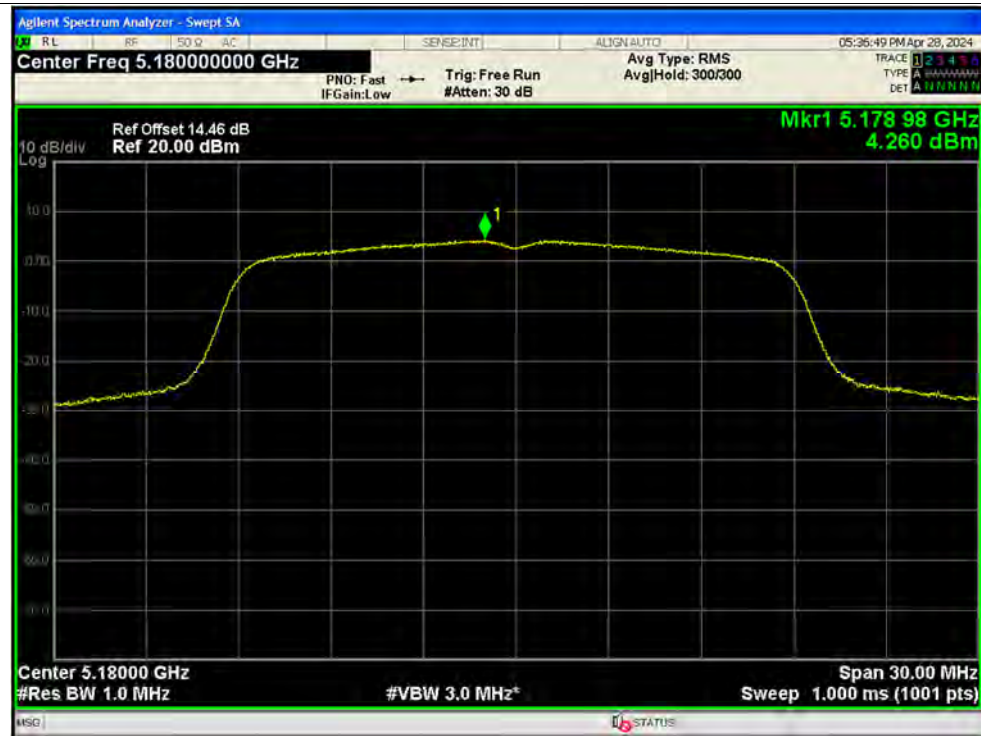
PSD NVNT n40 5795MHz Ant1 MIMO



PSD NVNT n40 5795MHz Ant2 MIMO



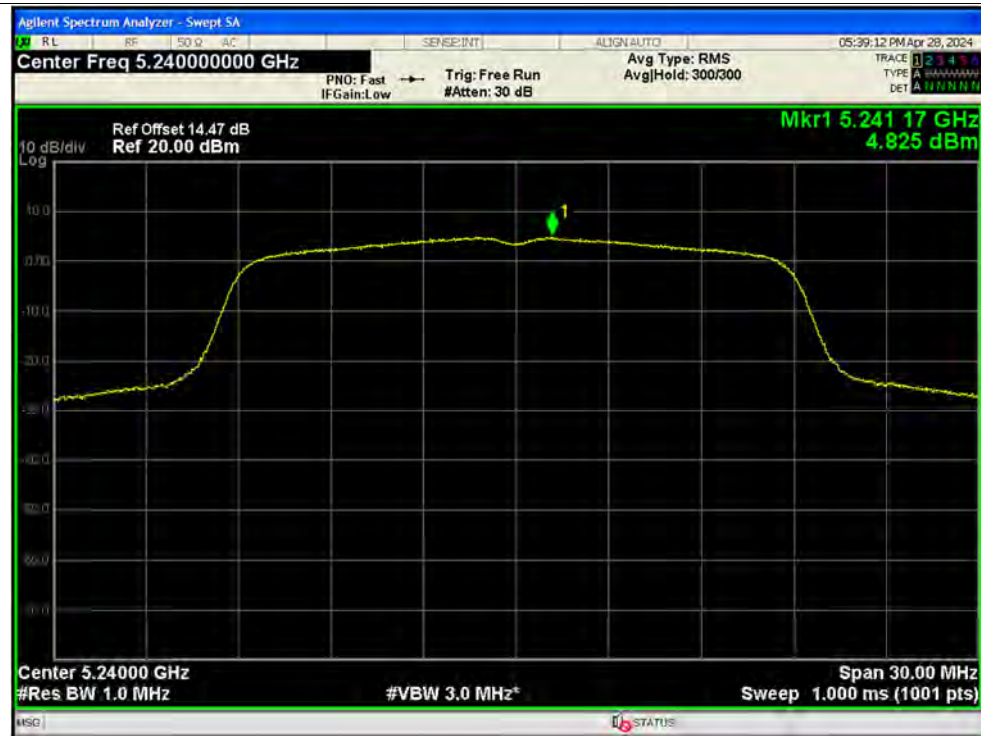
PSD NVNT ac20 5180MHz Ant1 SISO



PSD NVNT ac20 5220MHz Ant1 SISO



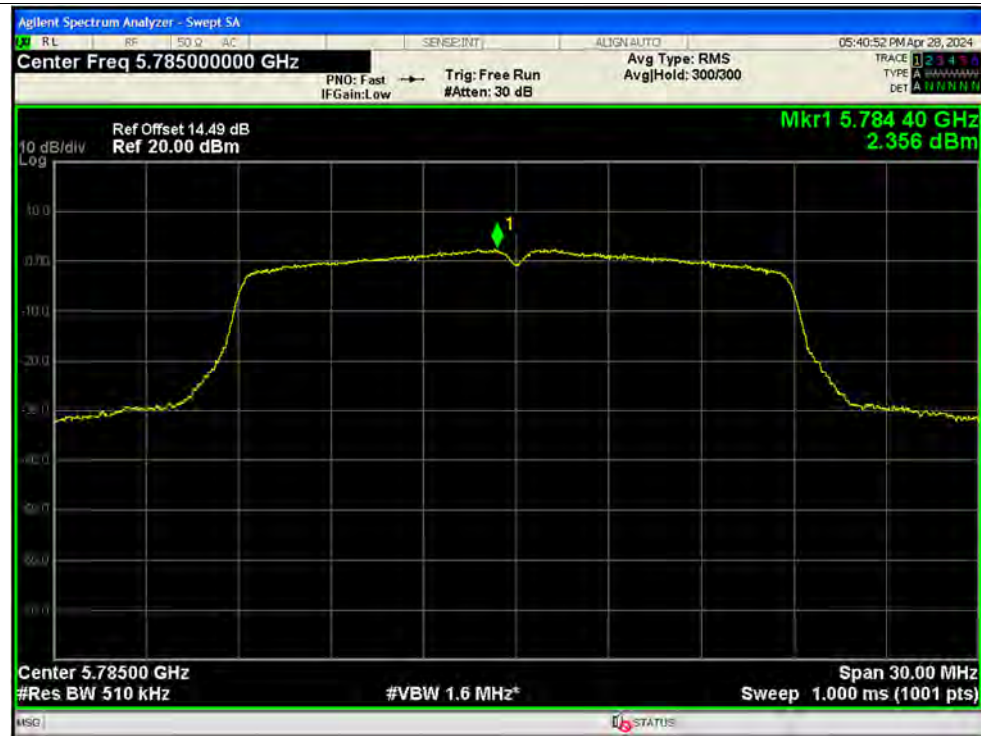
PSD NVNT ac20 5240MHz Ant1 SISO



PSD NVNT ac20 5745MHz Ant1 SISO



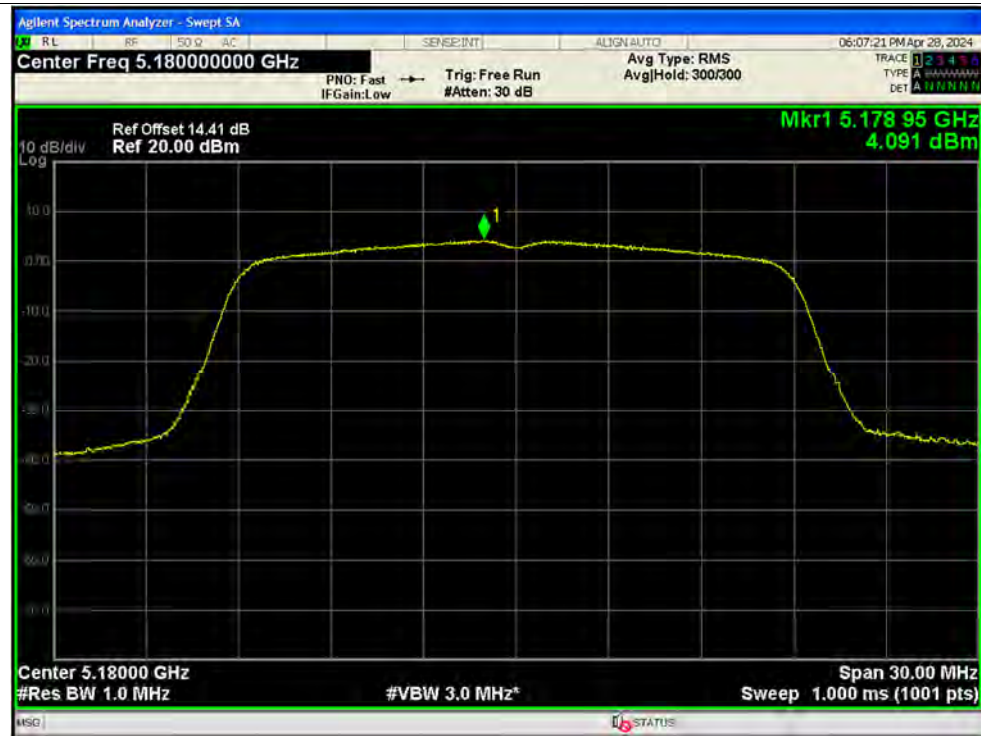
PSD NVNT ac20 5785MHz Ant1 SISO



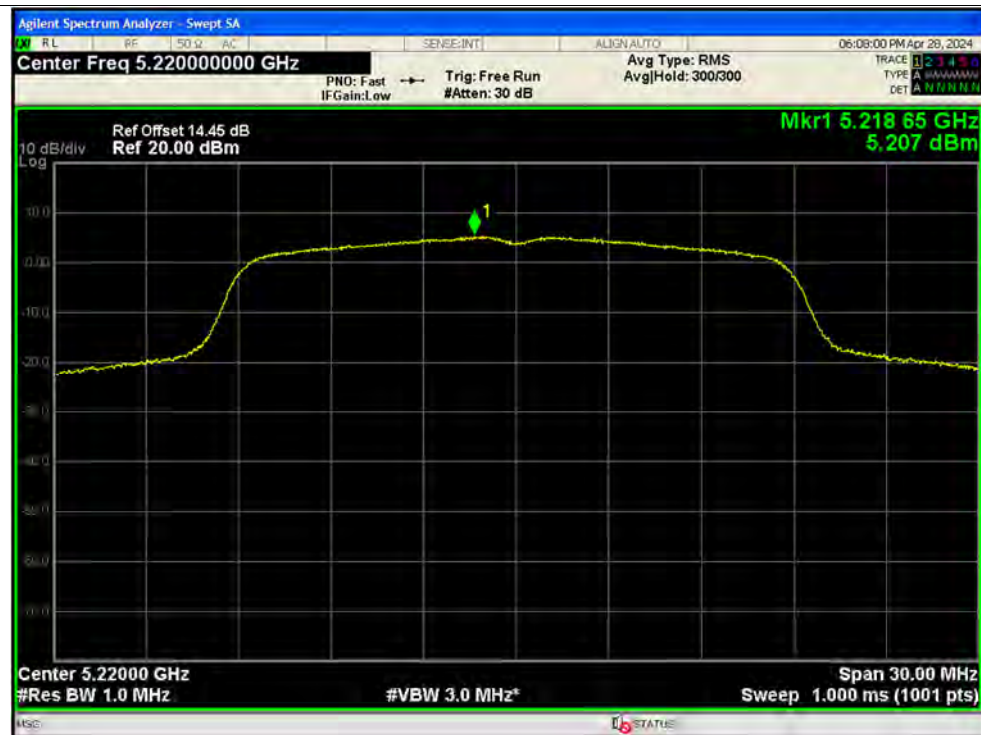
PSD NVNT ac20 5825MHz Ant1 SISO



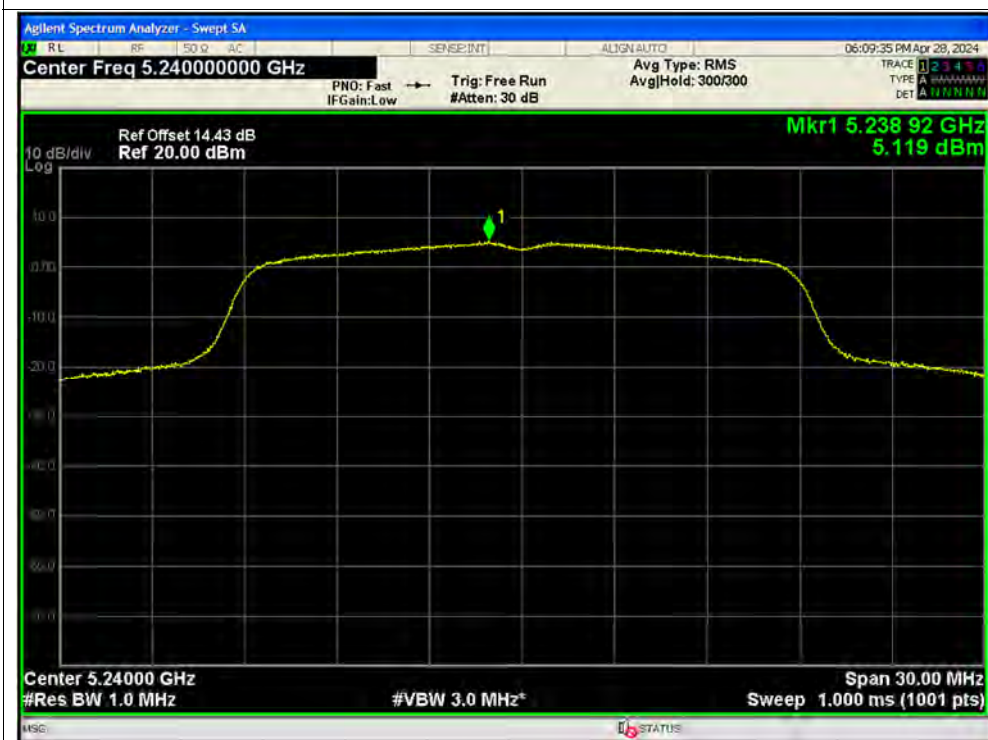
PSD NVNT ac20 5180MHz Ant2 SISO



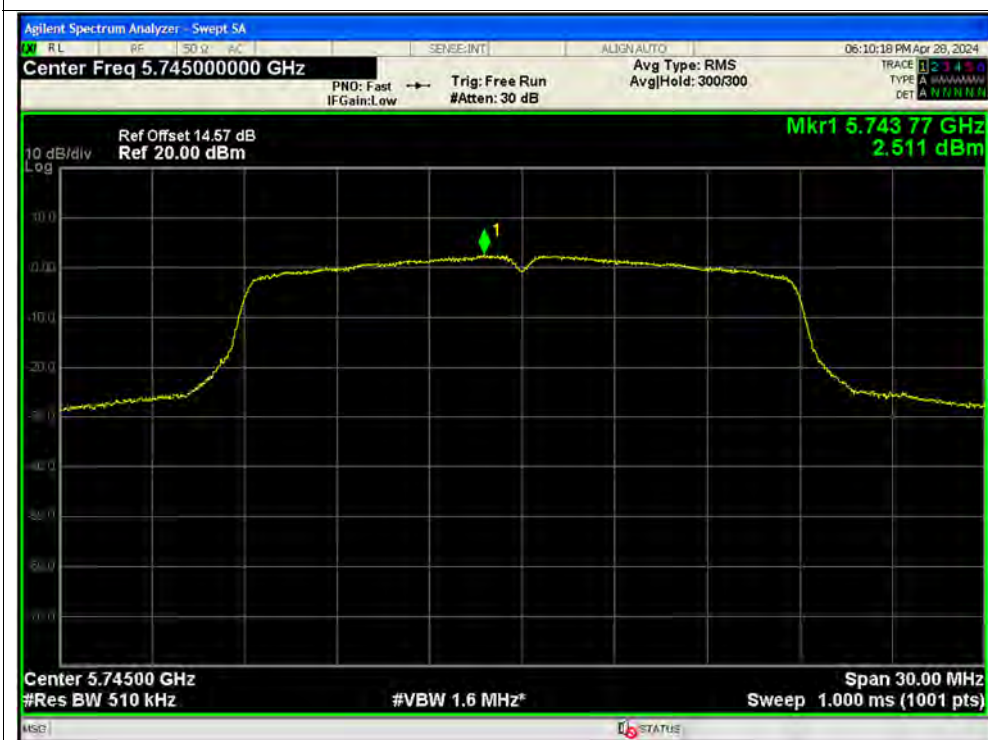
PSD NVNT ac20 5220MHz Ant2 SISO



PSD NVNT ac20 5240MHz Ant2 SISO



PSD NVNT ac20 5745MHz Ant2 SISO



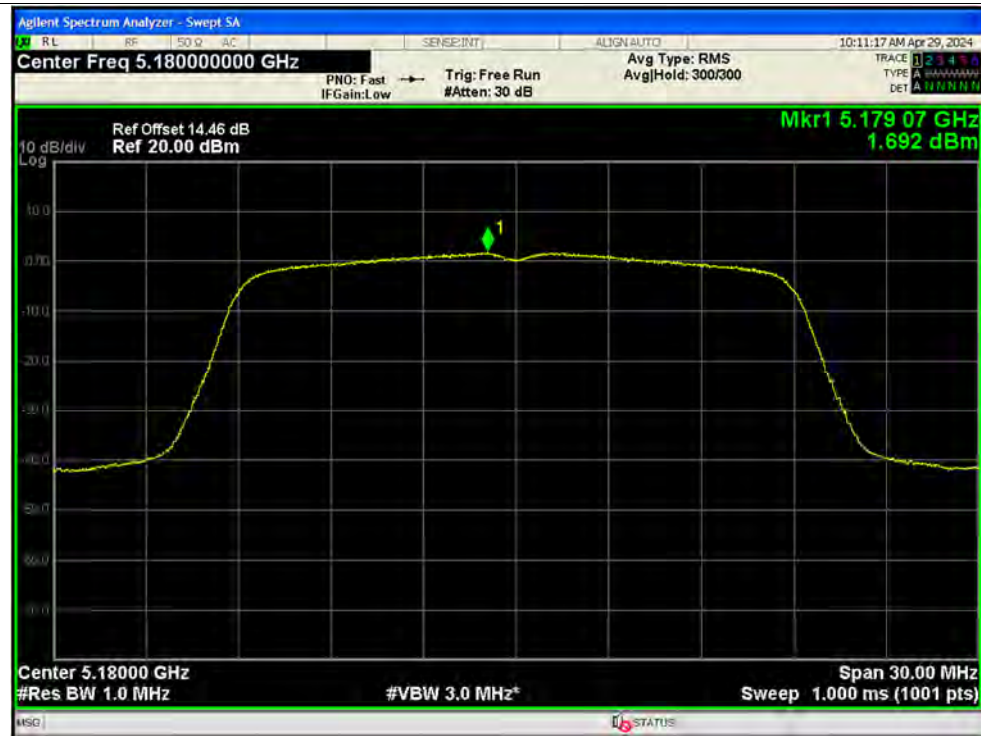
PSD NVNT ac20 5785MHz Ant2 SISO



PSD NVNT ac20 5825MHz Ant2 SISO



PSD NVNT ac20 5180MHz Ant1 MIMO



PSD NVNT ac20 5180MHz Ant2 MIMO



PSD NVNT ac20 5220MHz Ant1 MIMO



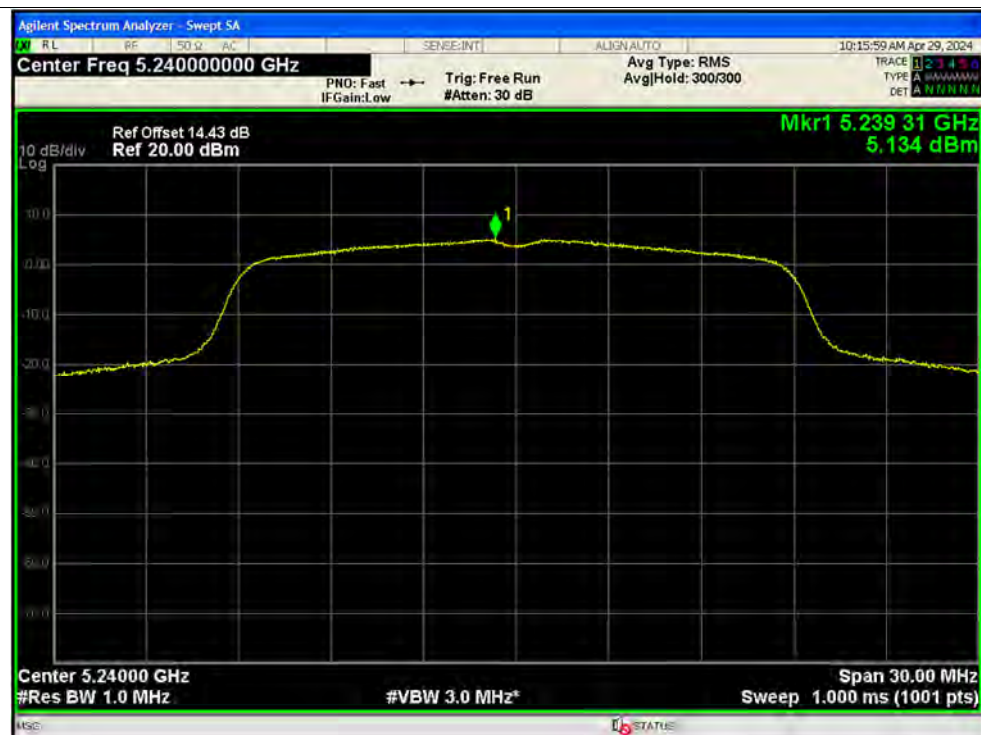
PSD NVNT ac20 5220MHz Ant2 MIMO



PSD NVNT ac20 5240MHz Ant1 MIMO



PSD NVNT ac20 5240MHz Ant2 MIMO



PSD NVNT ac20 5745MHz Ant1 MIMO



PSD NVNT ac20 5745MHz Ant2 MIMO



PSD NVNT ac20 5785MHz Ant1 MIMO



PSD NVNT ac20 5785MHz Ant2 MIMO



PSD NVNT ac20 5825MHz Ant1 MIMO



PSD NVNT ac20 5825MHz Ant2 MIMO



PSD NVNT ac40 5190MHz Ant1 SISO



PSD NVNT ac40 5230MHz Ant1 SISO



PSD NVNT ac40 5755MHz Ant1 SISO



PSD NVNT ac40 5795MHz Ant1 SISO



PSD NVNT ac40 5190MHz Ant2 SISO



PSD NVNT ac40 5230MHz Ant2 SISO



PSD NVNT ac40 5755MHz Ant2 SISO



PSD NVNT ac40 5795MHz Ant2 SISO



PSD NVNT ac40 5190MHz Ant1 MIMO



PSD NVNT ac40 5190MHz Ant2 MIMO



PSD NVNT ac40 5230MHz Ant1 MIMO



PSD NVNT ac40 5230MHz Ant2 MIMO



PSD NVNT ac40 5755MHz Ant1 MIMO



PSD NVNT ac40 5755MHz Ant2 MIMO



PSD NVNT ac40 5795MHz Ant1 MIMO



PSD NVNT ac40 5795MHz Ant2 MIMO



PSD NVNT ac80 5210MHz Ant1 SISO



PSD NVNT ac80 5775MHz Ant1 SISO



PSD NVNT ac80 5210MHz Ant2 SISO



PSD NVNT ac80 5775MHz Ant2 SISO





PSD NVNT ac80 5210MHz Ant1 MIMO



PSD NVNT ac80 5210MHz Ant2 MIMO



PSD NVNT ac80 5775MHz Ant1 MIMO



PSD NVNT ac80 5775MHz Ant2 MIMO



**A.5. Frequency Stability**

Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
20C 100V	Carrier	5180	Ant1	5180.03	30000	5.79	25	Pass
20C 220V	Carrier	5180	Ant1	5180.04	40000	7.72	25	Pass
20C 240V	Carrier	5180	Ant1	5180.035	35000	6.76	25	Pass
0C 220V	Carrier	5180	Ant1	5180.036	36000	6.95	25	Pass
10C 220V	Carrier	5180	Ant1	5180.038	38000	7.34	25	Pass
30C 220V	Carrier	5180	Ant1	5180.042	42000	8.11	25	Pass
40C 220V	Carrier	5180	Ant1	5180.044	44000	8.49	25	Pass
20C 100V	Carrier	5745	Ant1	5745.009	9000	1.57	25	Pass
20C 220V	Carrier	5745	Ant1	5745.027	27000	4.7	25	Pass
20C 240V	Carrier	5745	Ant1	5745.017	17000	2.96	25	Pass
0C 220V	Carrier	5745	Ant1	5745.021	21000	3.66	25	Pass
10C 220V	Carrier	5745	Ant1	5745.024	24000	4.18	25	Pass
30C 220V	Carrier	5745	Ant1	5745.03	30000	5.22	25	Pass
40C 220V	Carrier	5745	Ant1	5745.032	32000	5.57	25	Pass



A.6. Conducted Emission

The maximum conducted interference is searched using Peak (PK), if the emission levels more than the AV and QP limits, and that have narrow margins from the AV and QP limits will be re-measured with AV and QP detectors. Tests for both L phase and N phase lines of the power mains connected to the EUT are performed. Set RBW=9kHz, VBW=30kHz. Refer to recorded points and plots below.

Note: Both of the test voltage AC 120V/60Hz and AC 230V/50Hz were considered and tested respectively, only the results of the worst case AC 120V/60Hz were recorded in this report.

A. Test Setup:

Test Mode: EUT+ RJ45 Cable + PC Adapter + PC + WIFI TX

Test voltage: AC 120V/60Hz

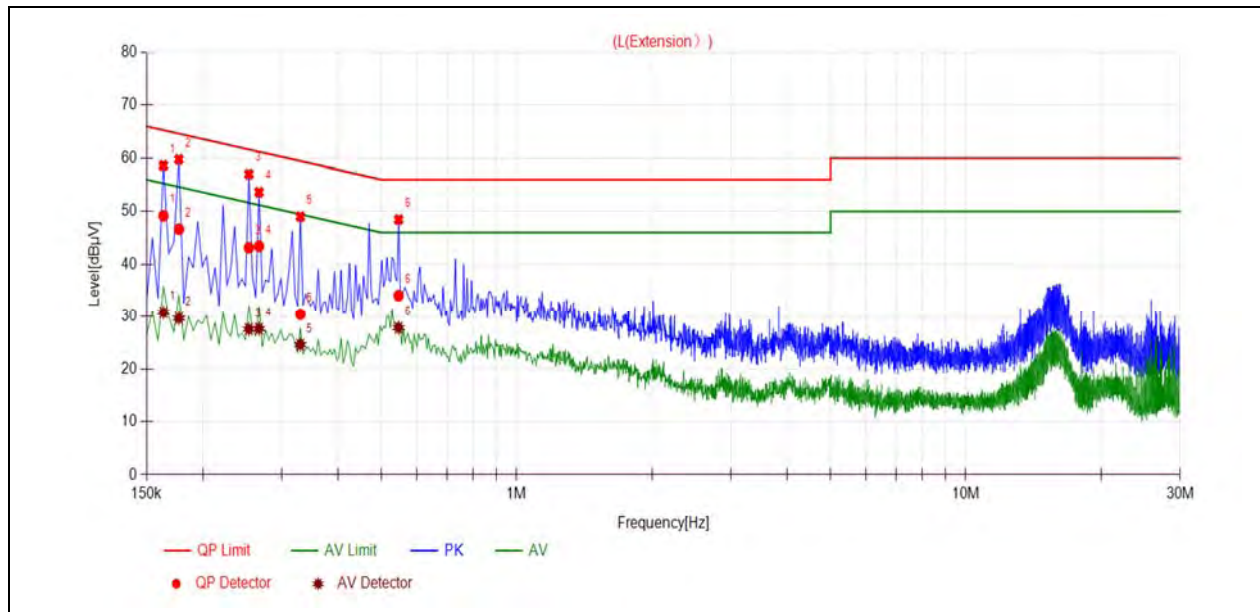
The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V]} = U_R + L_{\text{Cable loss [dB]} + A_{\text{Factor}}$$

U_R : Receiver Reading

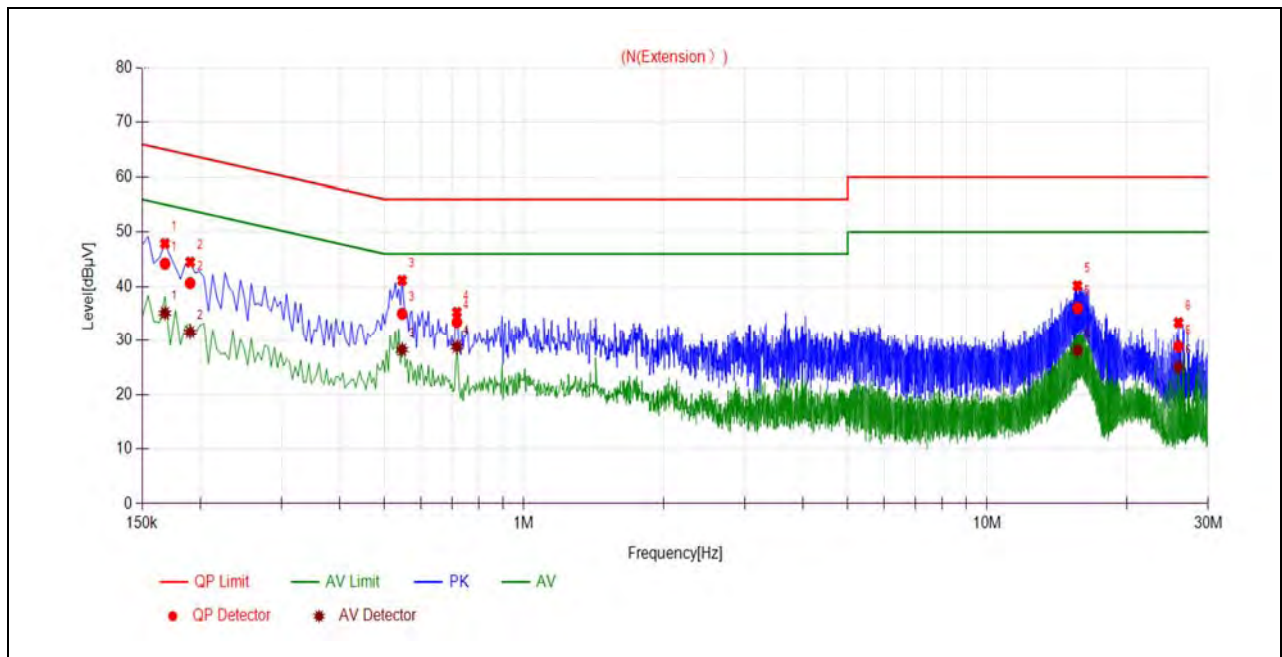
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1635	49.17	30.80	65.28	55.28	Line	PASS
2	0.1771	46.64	29.68	64.62	54.62		PASS
3	0.2533	43.15	27.56	61.65	51.65		PASS
4	0.2669	43.42	27.65	61.21	51.21		PASS
5	0.3299	30.43	24.60	59.45	49.45		PASS
6	0.5457	34.05	27.83	56.00	46.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1680	44.19	35.12	65.06	55.06	Neutral	PASS
2	0.1904	40.64	31.60	64.02	54.02		PASS
3	0.5460	35.00	28.26	56.00	46.00		PASS
4	0.7169	33.45	28.81	56.00	46.00		PASS
5	15.6756	36.04	28.08	60.00	50.00		PASS
6	25.8800	28.85	25.04	60.00	50.00		PASS



A.7. Restricted Frequency Bands

The lowest and highest channels are tested to verify the Restricted Frequency Bands.

The measurement results are obtained as below:

$$E \text{ [dB}\mu\text{V/m]} = U_R + A_T + A_{\text{Factor}} \text{ [dB]}; A_T = L_{\text{Cable loss}} \text{ [dB]} - G_{\text{preamp}} \text{ [dB]}$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

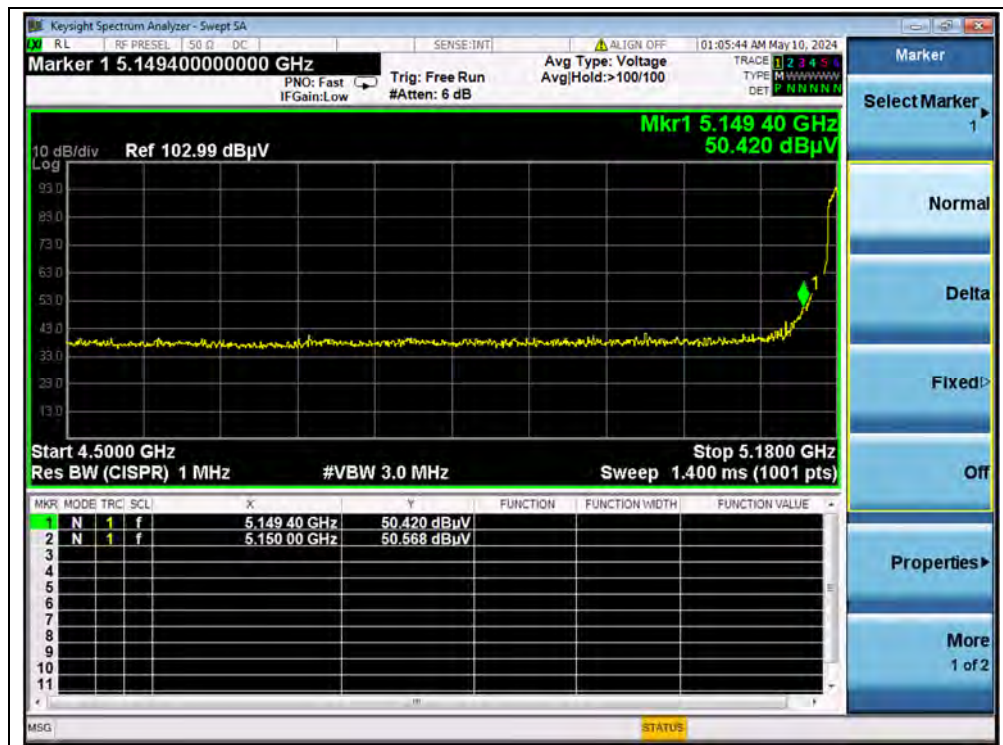
A_{Factor} : Antenna Factor at 3m

Note 1: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (vertical) was recorded in this test report.

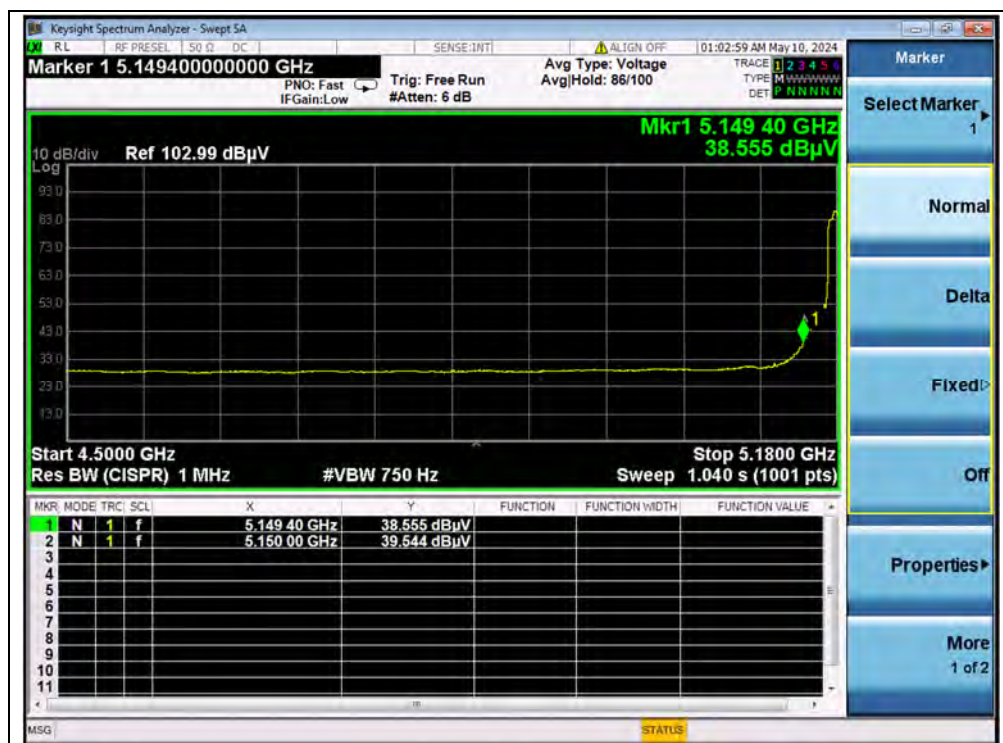
Note 2 All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

802.11a Mode

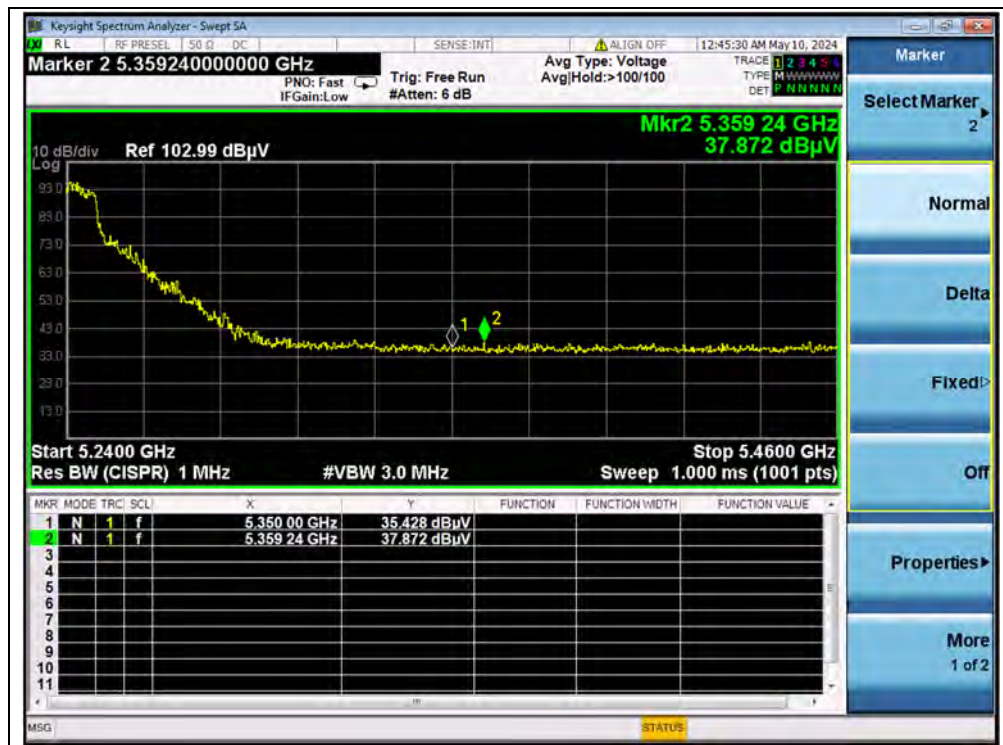
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB @3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
36	5150.00	PK	50.57	-21.29	32.20	61.48	74	PASS
36	5150.00	AV	39.54	-21.29	32.20	50.45	54	PASS
48	5359.24	PK	37.87	-21.29	32.20	48.78	74	PASS
48	5352.86	AV	27.58	-21.29	32.20	38.49	54	PASS
149	5725.00	PK	72.15	-21.11	32.20	83.24	122.23	PASS
165	5850.00	PK	64.94	-21.11	32.20	76.03	122.23	PASS



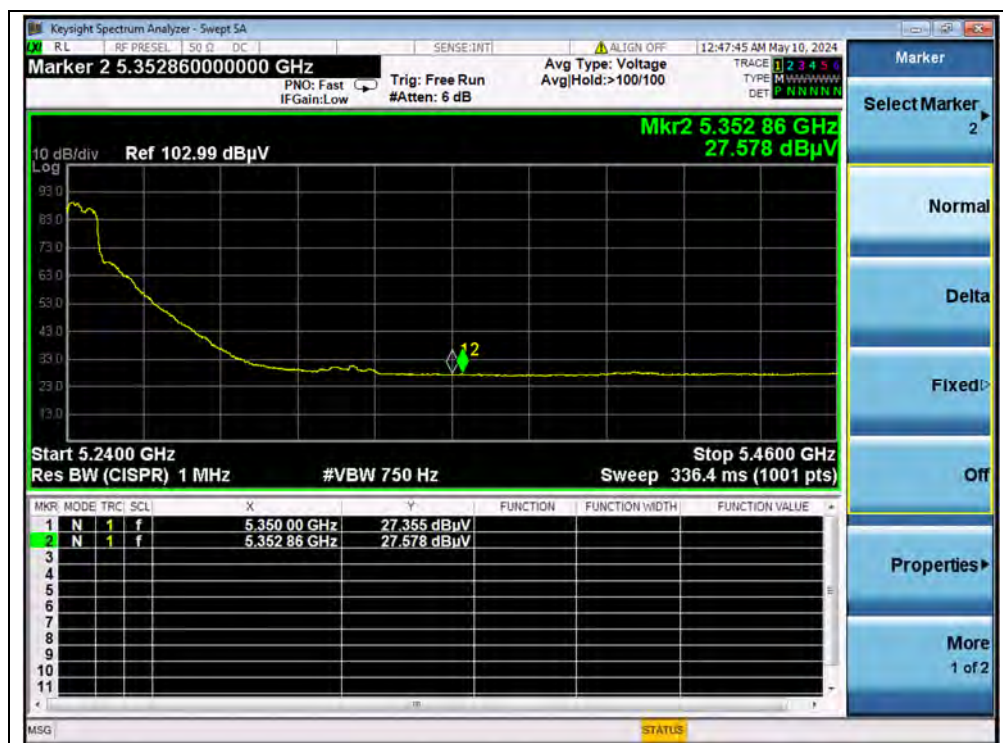
(PEAK, Channel 36, 802.11a)



(AVERAGE, Channel 36, 802.11a)



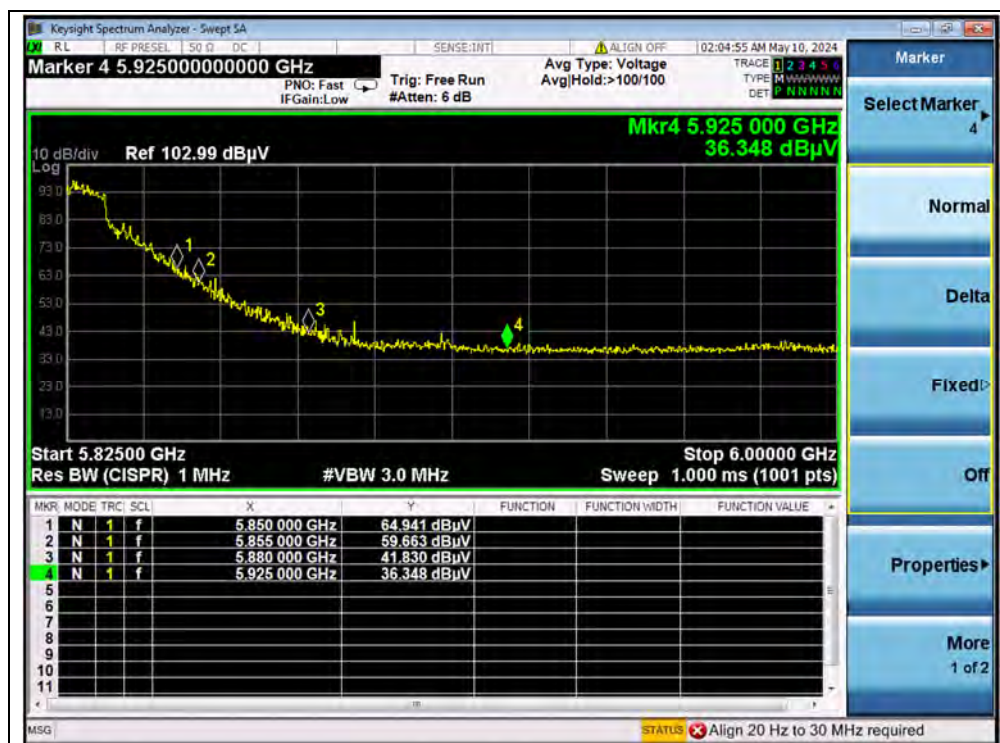
(PEAK, Channel 48, 802.11a)



(AVERAGE, Channel 48, 802.11a)



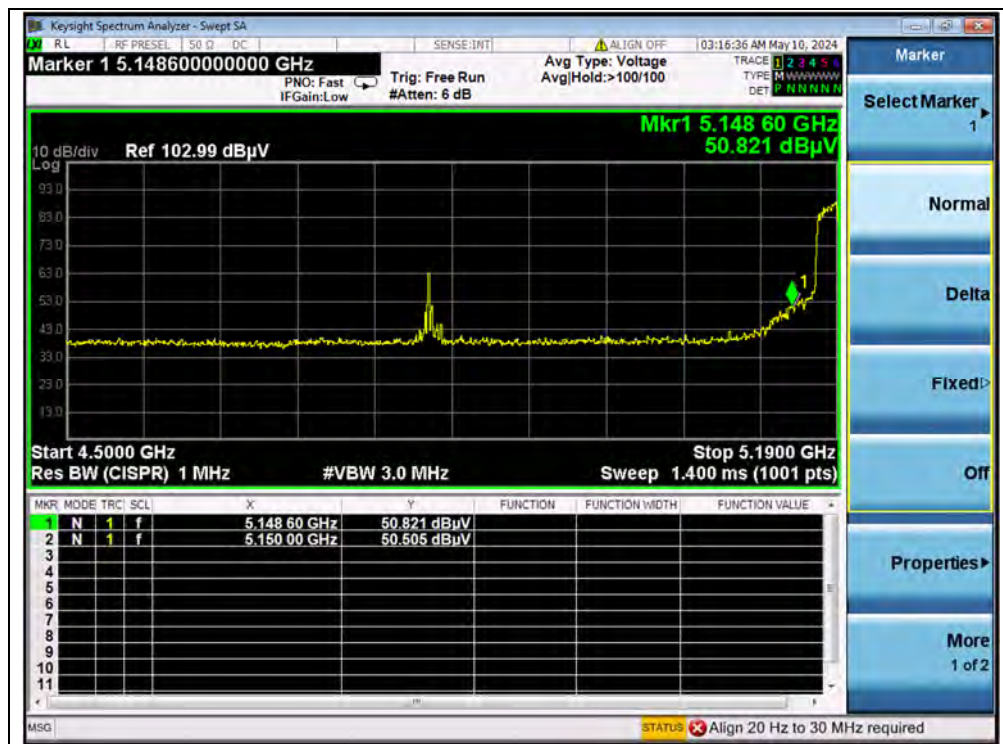
(PEAK, Channel 149, 802.11a)



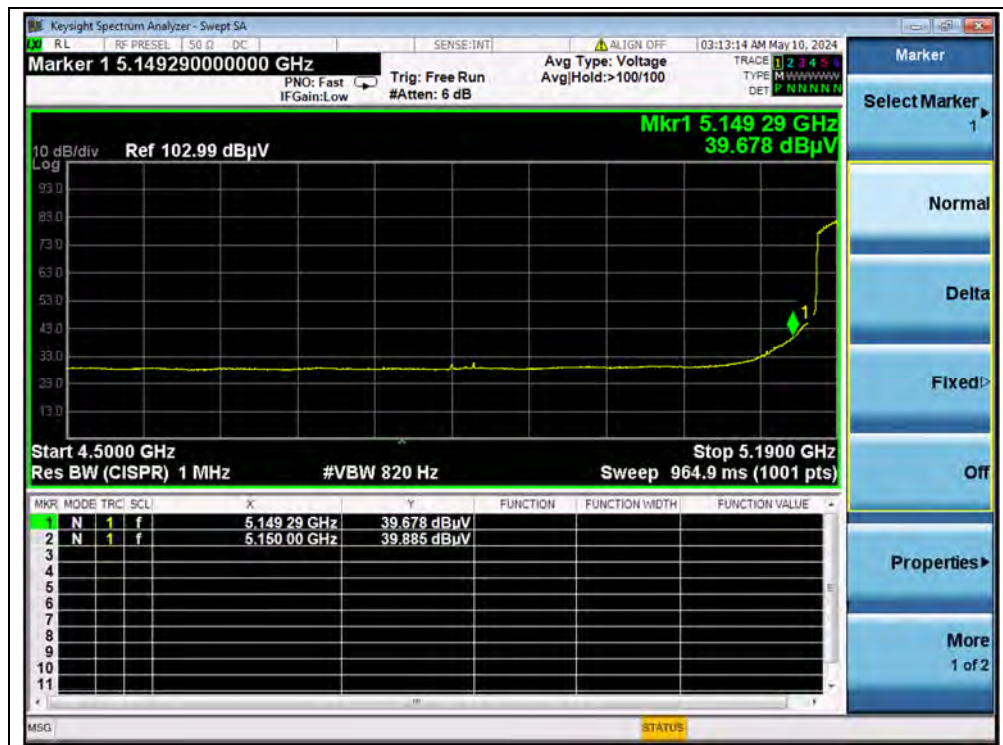
(PEAK, Channel 165, 802.11a)

**802.11n (HT40) Mode**

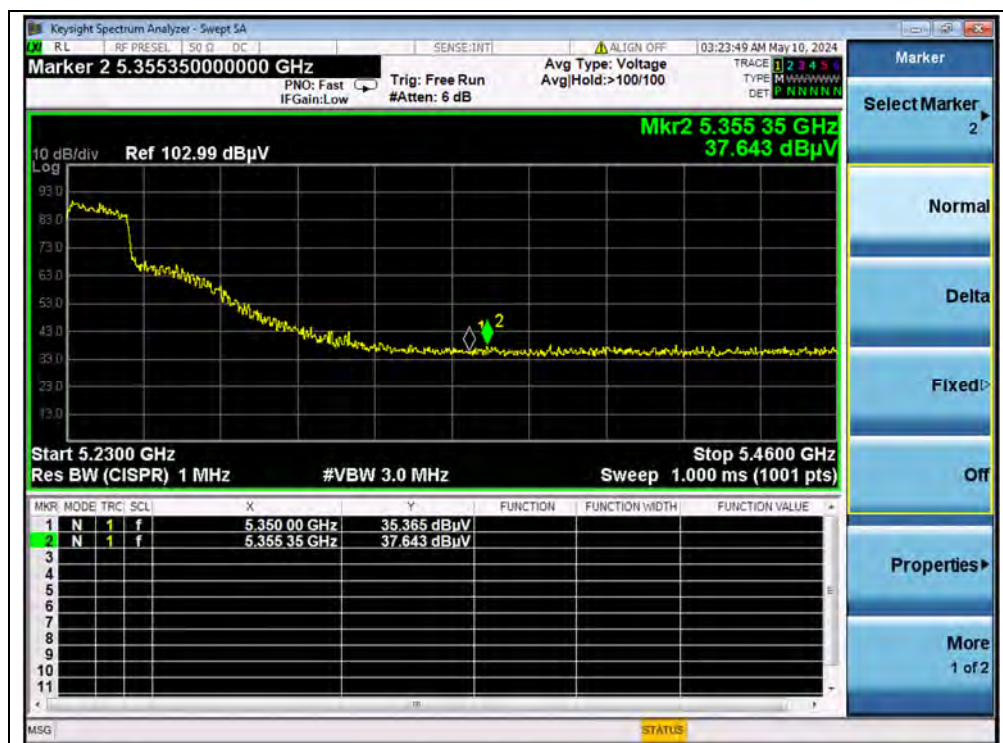
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB @3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
38	5148.60	PK	50.82	-21.29	32.20	61.73	74	PASS
38	5150.00	AV	39.89	-21.29	32.20	50.80	54	PASS
46	5355.35	PK	37.64	-21.29	32.20	48.55	74	PASS
46	5351.90	AV	27.71	-21.29	32.20	38.62	54	PASS
151	5725.00	PK	56.20	-21.11	32.20	67.29	122.23	PASS
159	5850.00	PK	41.12	-21.11	32.20	52.21	122.23	PASS



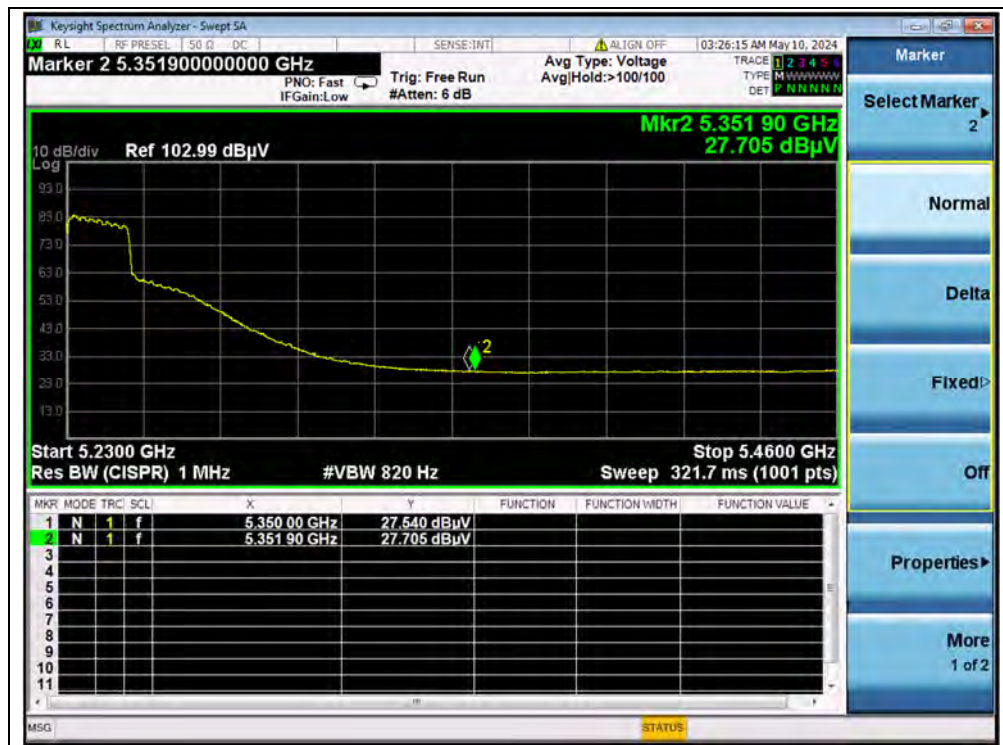
(PEAK, Channel 38, 802.11n (HT40))



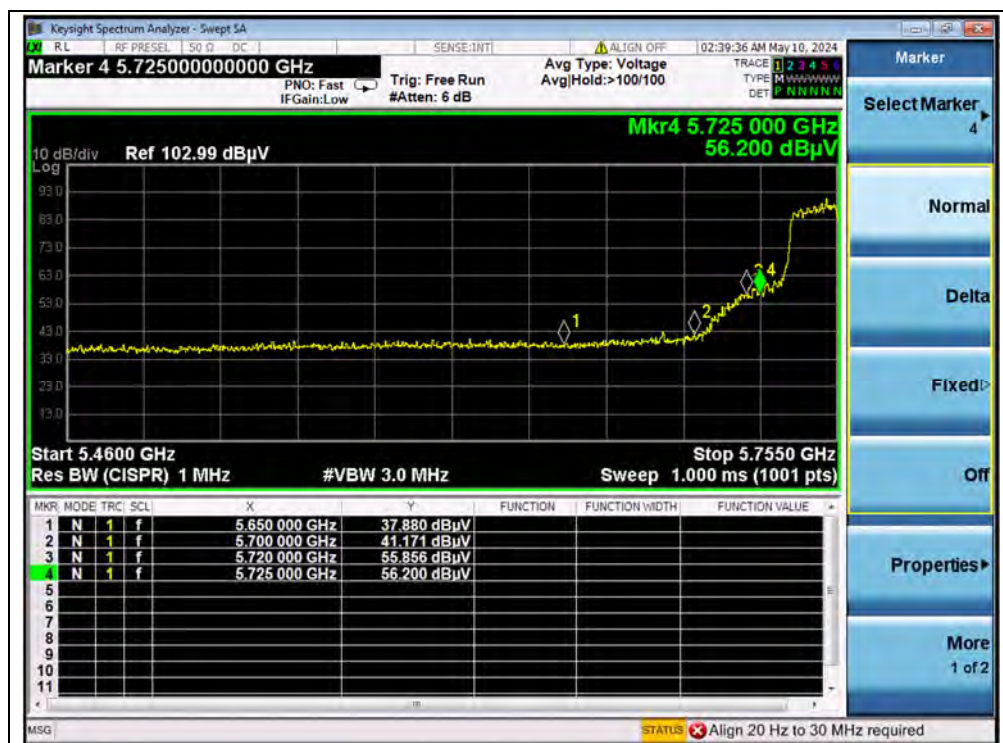
(AVERAGE, Channel 38, 802.11n (HT40))



(PEAK, Channel 46, 802.11n (HT40))



(AVERAGE, Channel 46, 802.11n (HT40))



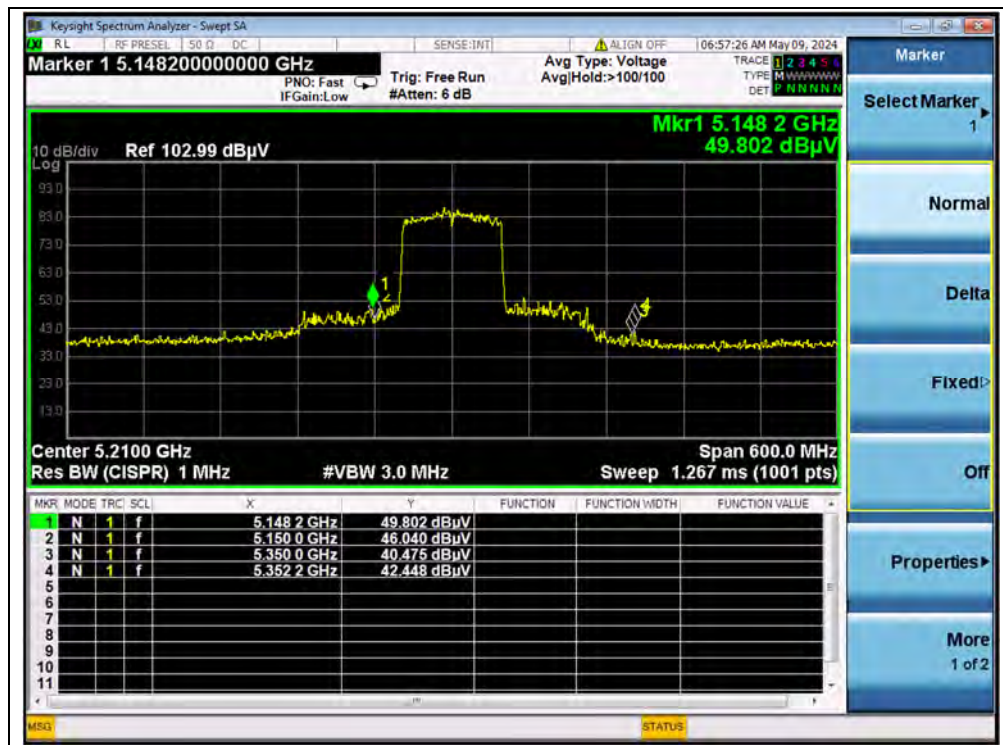
(PEAK, Channel 151, 802.11n (HT40))



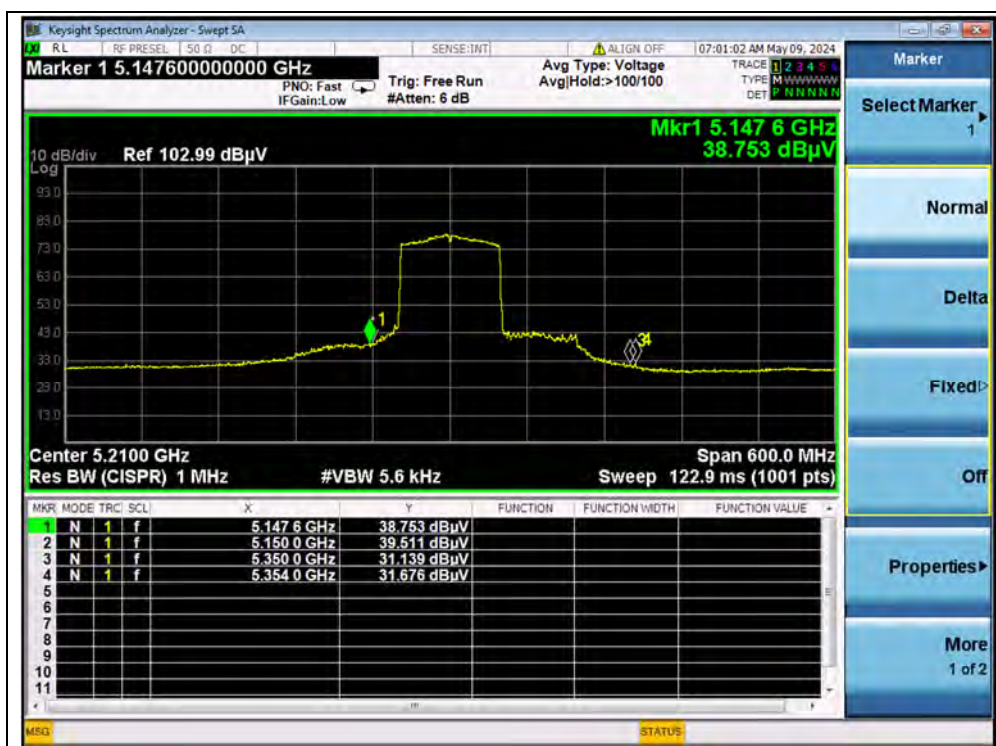
(PEAK, Channel 159, 802.11n (HT40))

**802.11ac (VHT80) Mode**

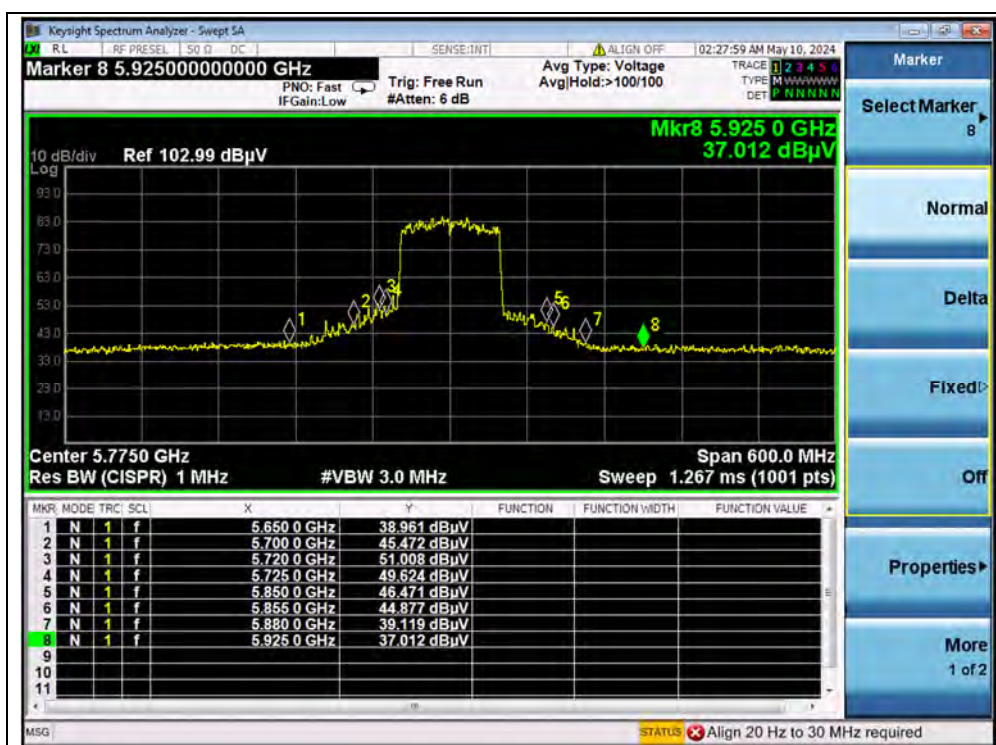
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB @3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
42	5148.20	PK	49.80	-21.29	32.20	60.71	74	PASS
42	5150.00	AV	39.51	-21.29	32.20	50.42	54	PASS
42	5352.20	PK	42.45	-21.29	32.20	53.36	74	PASS
42	5354.00	AV	31.68	-21.29	32.20	42.59	54	PASS
155	5720.00	PK	51.01	-21.11	32.20	62.10	110.83	PASS
155	5850.00	PK	46.47	-21.11	32.20	57.56	122.23	PASS



(PEAK, Channel 42, 802.11ac (VHT80))



(AVERAGE, Channel 42, 802.11ac (VHT80))



(PEAK, Channel 155, 802.11ac (VHT80))



A.8. Radiated Emission

According to ANSI C63.10, because of peak detection will yield amplitudes equal to or greater than amplitudes measured with the quasi-peak (or average) detector, the measurement data from a spectrum analyzer peak detector will represent the worst-case results, if the peak measured value complies with the quasi-peak (or average) limit, it is unnecessary to perform an quasi-peak measurement (or average).

The measurement results are obtained as below:

$$E [\text{dB}\mu\text{V/m}] = U_R + A_T + A_{\text{Factor}} [\text{dB}]; A_T = L_{\text{Cable loss}} [\text{dB}] - G_{\text{preamp}} [\text{dB}]$$

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

During the test, the total correction Factor A_T and A_{Factor} were built in test software.

Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

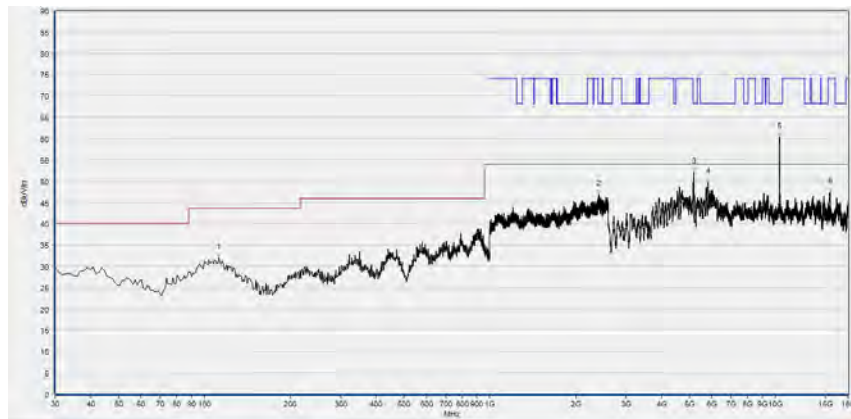
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 40GHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note 4: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

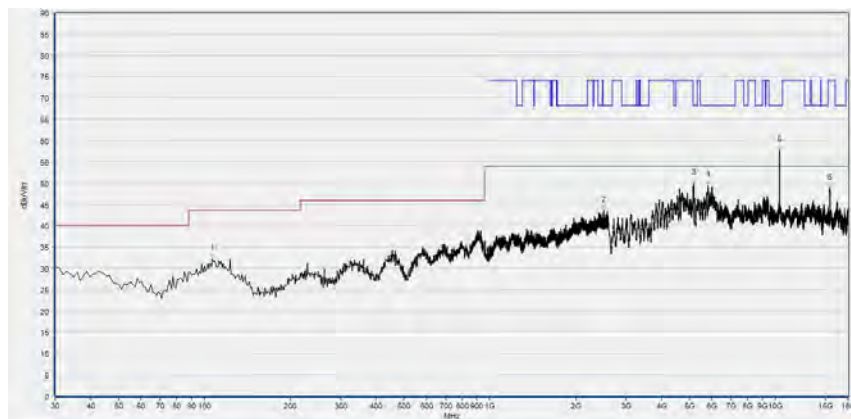
**802.11a Mode**

Plot for Channel 36



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	32.03	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2407.936	46.99	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5178.476	52.14	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5825.405	49.76	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10356.991	60.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
15544.749	47.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

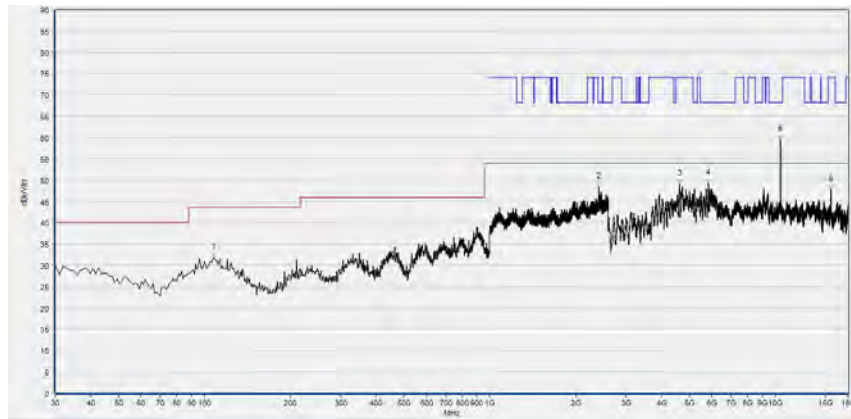
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
106.707	32.17	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2513.571	43.55	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5178.476	49.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5825.405	49.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10366.233	57.65	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15529.346	48.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

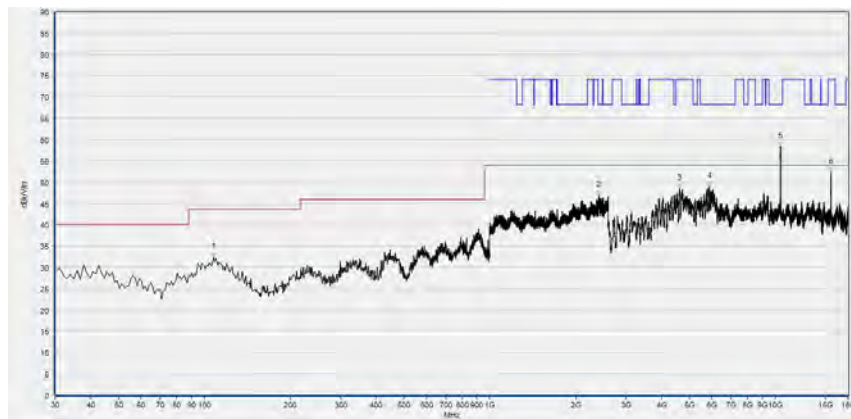
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 44



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.678	31.79	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2406.335	48.37	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4620.884	49.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5828.486	49.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10440.168	59.45	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
15661.812	47.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

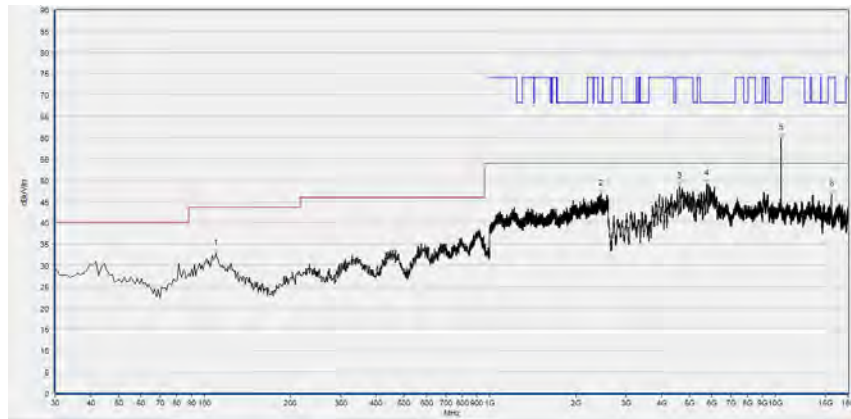
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.678	32.35	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2408.469	46.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4620.884	48.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5893.179	48.88	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10437.087	58.27	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15658.732	52.23	N/A	39.42	74.00	N/A	54.00	Vertical	PASS

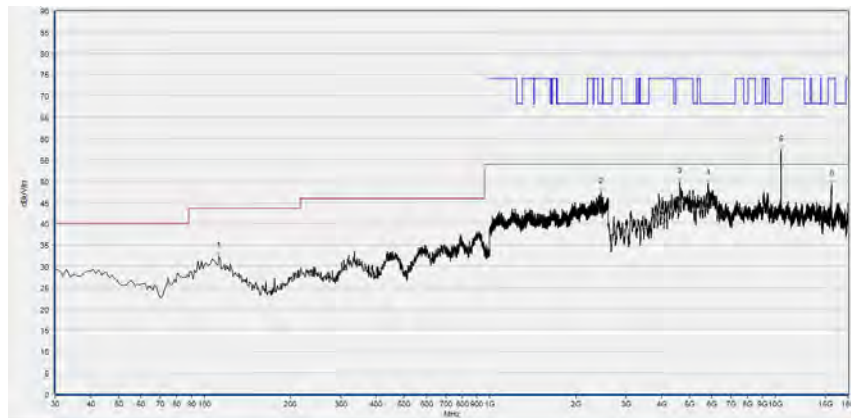
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 48



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.620	32.63	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2449.550	46.83	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4627.045	48.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5745.309	49.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10477.135	59.76	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
15723.425	46.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

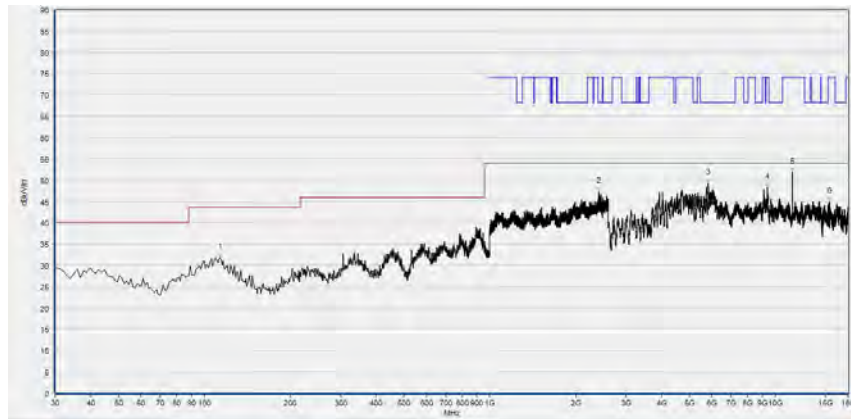
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	32.37	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2457.553	47.37	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4630.126	49.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5831.566	49.38	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10486.377	57.26	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15723.425	49.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

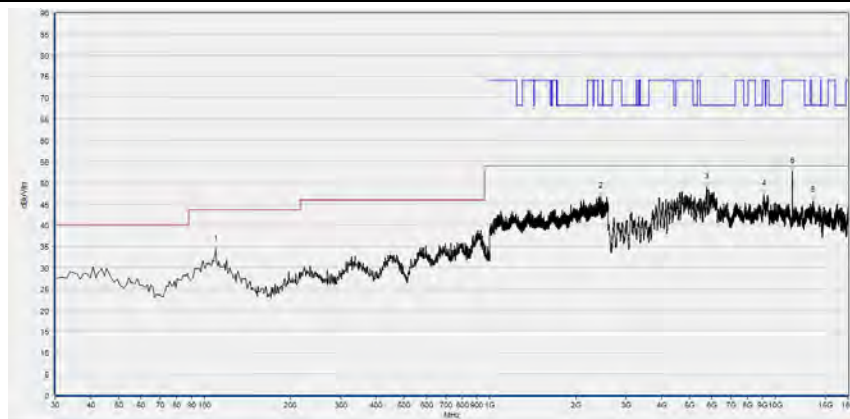
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 149



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
113.504	31.78	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.003	47.24	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
5822.324	49.26	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9402.000	48.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11490.658	51.82	N/A	42.87	74.00	N/A	54.00	Horizontal	PASS
15520.104	44.87	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

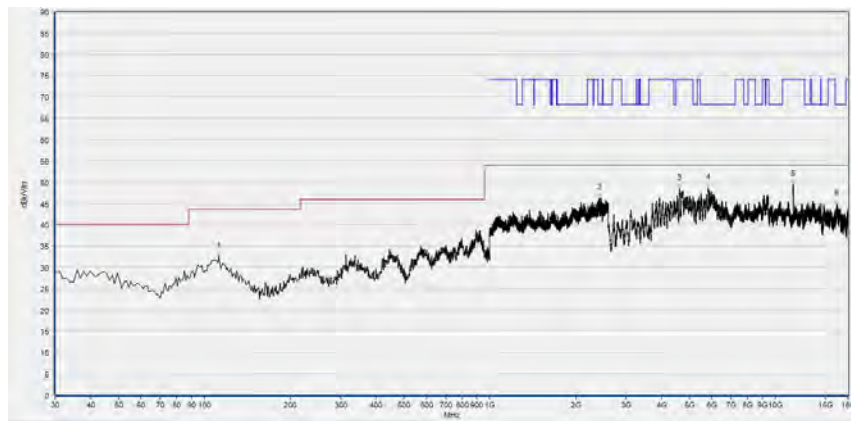
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.620	34.13	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2447.416	46.79	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5742.228	48.92	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9130.906	47.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11487.578	52.65	N/A	42.91	74.00	N/A	54.00	Vertical	PASS
13570.074	45.80	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

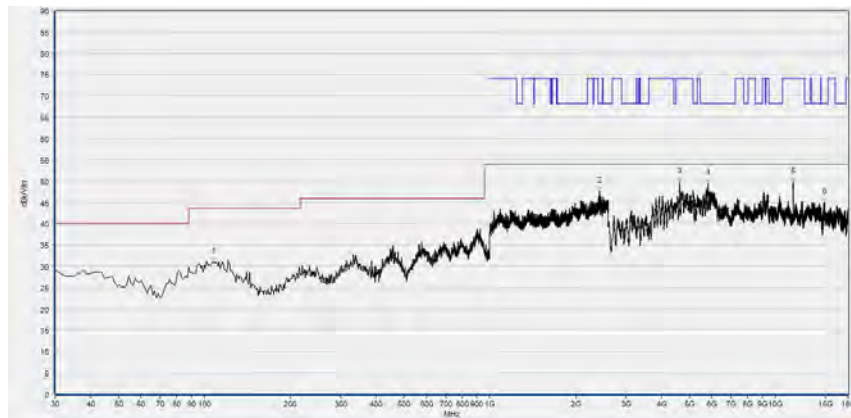
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 157



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	32.50	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2418.606	46.18	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4620.884	48.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5822.324	48.62	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
11567.674	49.50	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16425.805	44.78	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

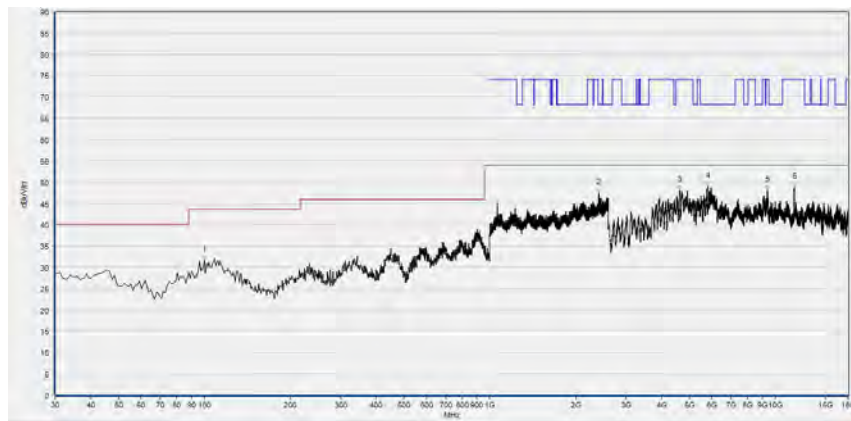
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.678	31.05	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2417.539	47.58	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4630.126	49.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5828.486	49.43	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
11570.754	49.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14851.610	45.01	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

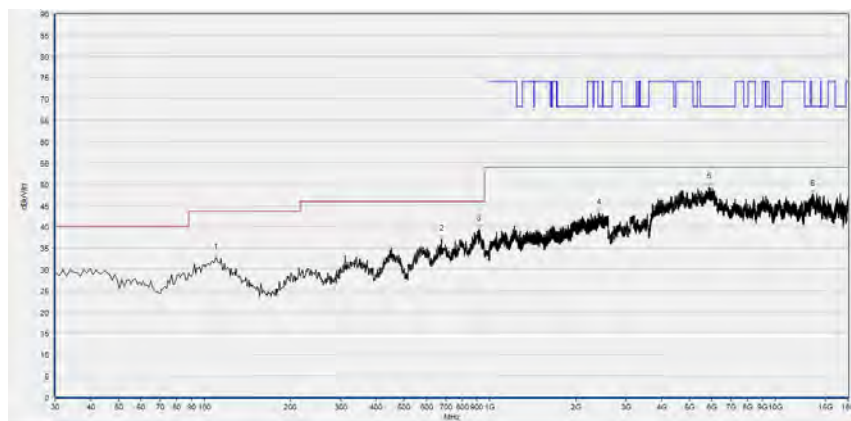
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 165



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
99.910	31.62	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2414.872	47.46	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4630.126	48.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5828.486	48.91	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9389.678	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11650.850	48.82	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

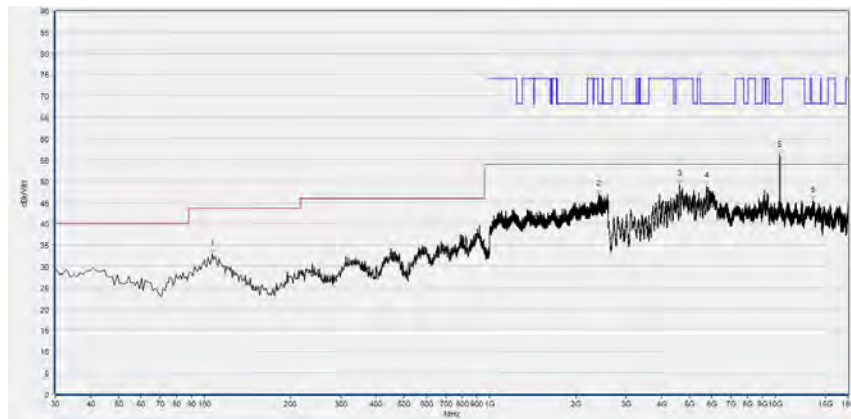


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.620	32.70	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
676.667	37.03	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
914.555	39.41	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
2403.134	43.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5837.728	49.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
13489.978	47.65	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

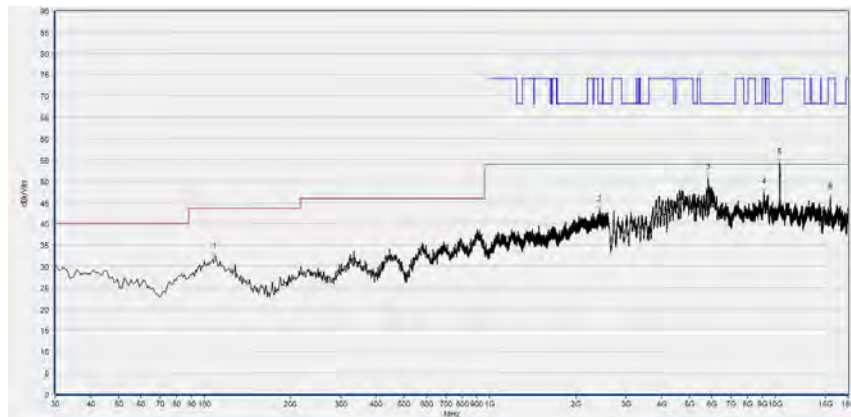
**802.11n (HT40) mode**

Plot for Channel 38



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
106.707	32.83	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.537	46.89	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4623.965	49.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5745.309	48.73	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10378.556	56.04	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
13576.235	45.43	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

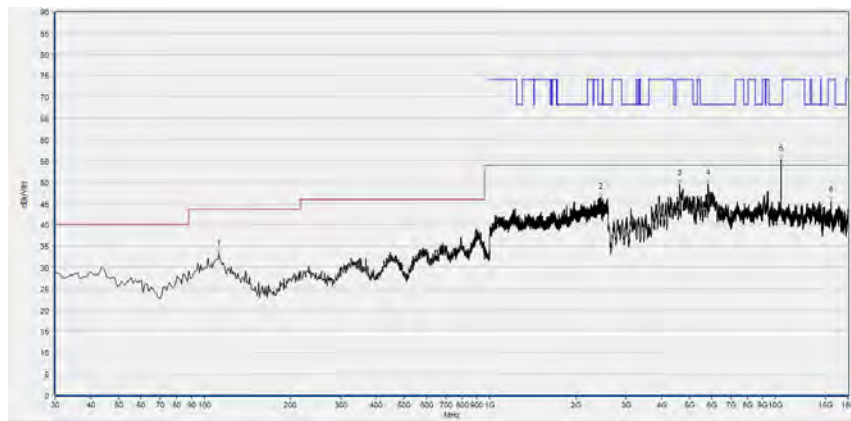
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.649	32.12	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2420.207	43.20	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
5825.405	50.84	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9109.342	47.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10378.556	54.36	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15575.555	46.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

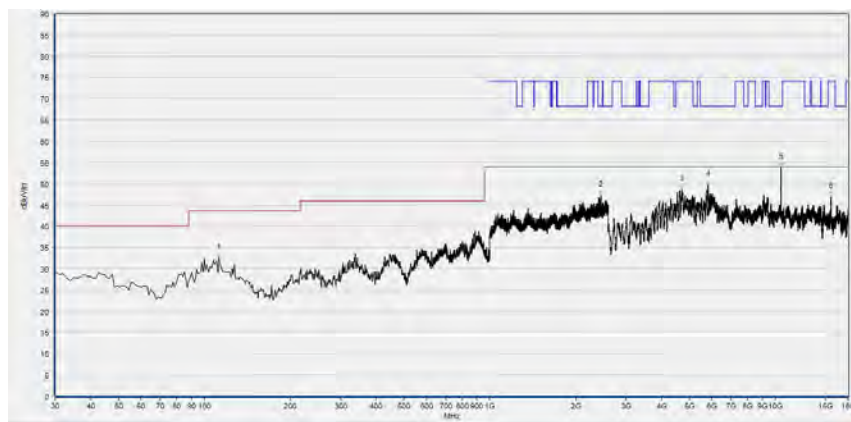
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 46



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	33.17	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2455.952	46.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4630.126	49.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5813.083	49.65	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10458.652	55.30	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
15689.538	45.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

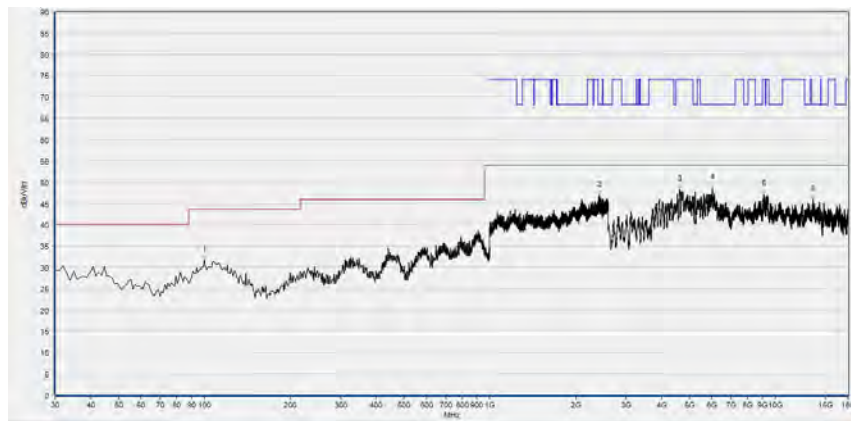


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	32.53	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2456.485	47.26	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4694.819	48.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5822.324	49.78	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
10455.571	53.73	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
15692.619	46.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

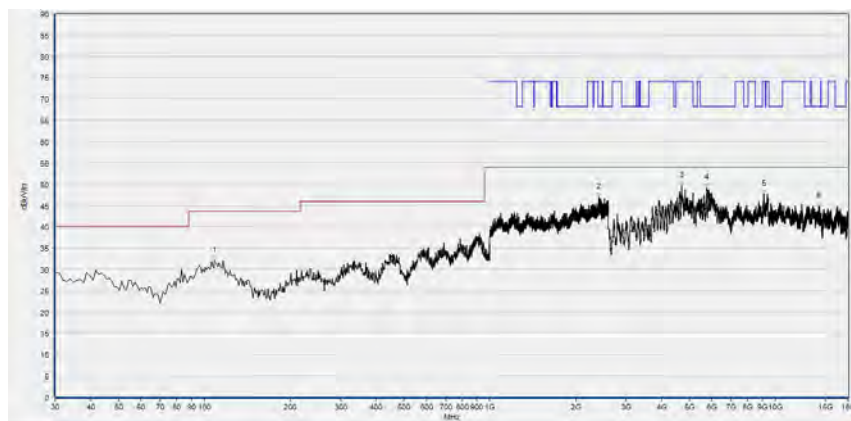


Plot for Channel 151



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
99.910	31.60	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2415.939	46.85	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4627.045	48.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6019.484	48.56	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9124.745	47.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13557.752	46.00	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

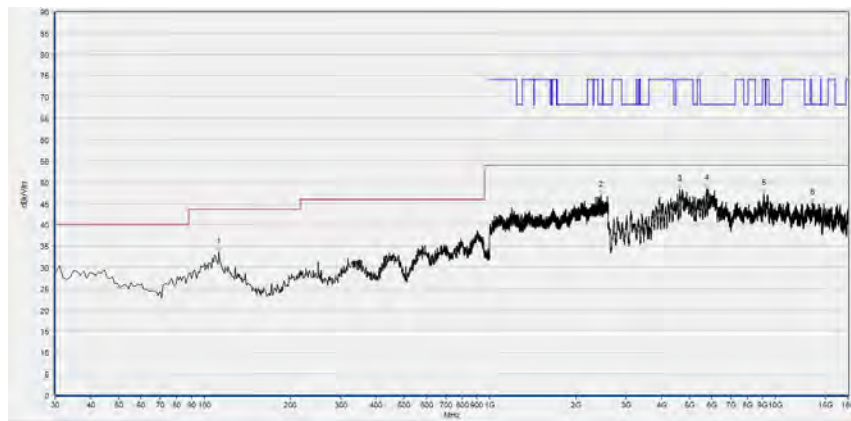
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.649	32.02	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2412.204	46.97	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4697.900	49.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5745.309	49.13	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9124.745	47.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14229.326	44.75	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

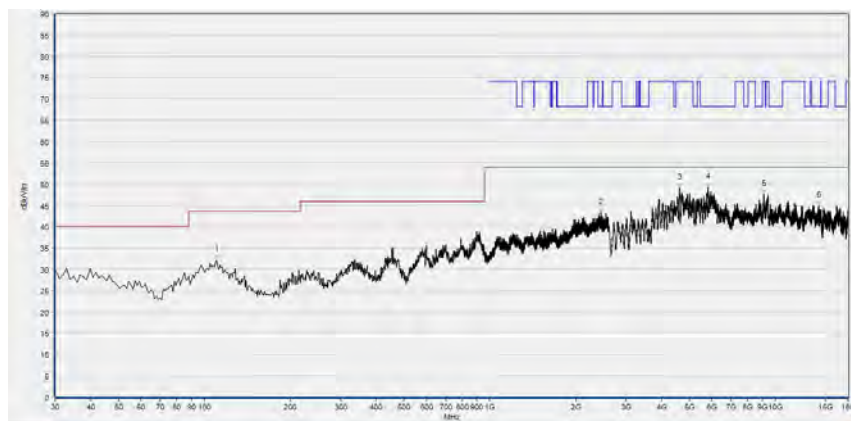
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 159



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.533	33.58	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2457.553	46.89	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4623.965	48.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5736.067	48.37	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9121.664	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13474.575	45.05	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

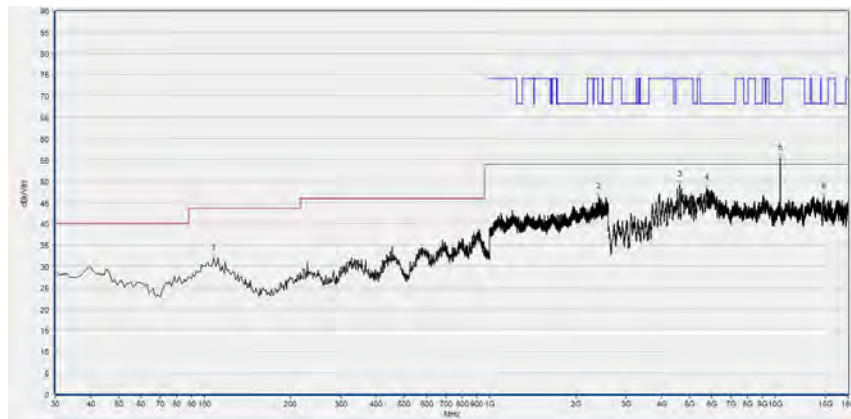


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.591	32.20	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2452.751	43.25	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
4627.045	49.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5828.486	49.21	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9097.019	47.66	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14247.810	44.98	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

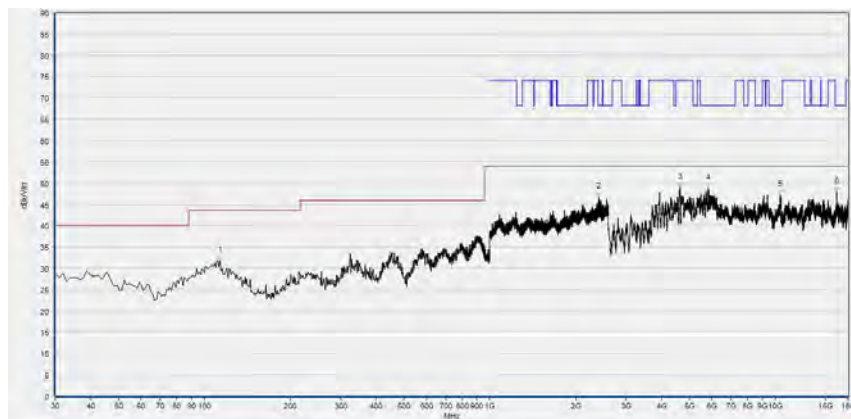
**802.11ac (VHT80) Mode**

Plot for Channel 42



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.678	31.81	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2406.869	46.21	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4627.045	49.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5739.148	48.35	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
10418.604	55.30	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
14774.595	46.32	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

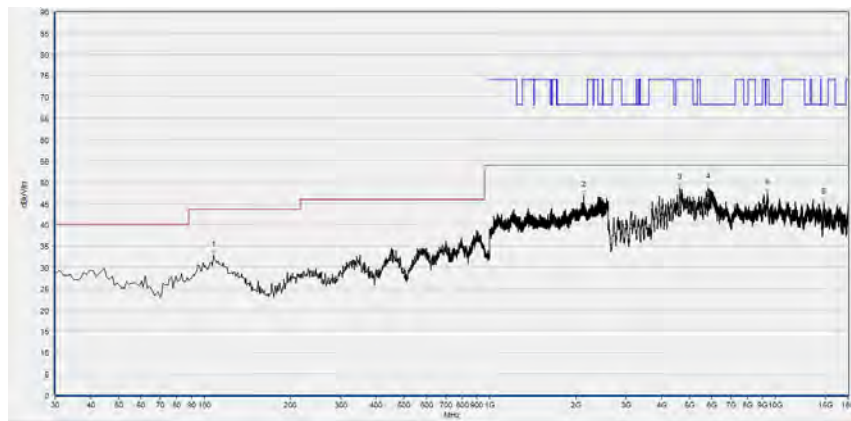
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
113.504	31.85	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2407.402	46.68	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
4633.207	48.88	N/A	N/A	N/A	46.00	N/A	Vertical	PASS
5831.566	48.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10434.007	47.34	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
16404.241	47.89	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

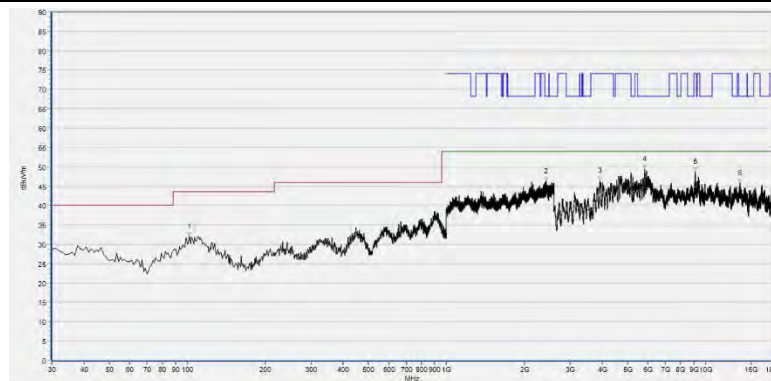
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 155



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.678	32.81	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2137.979	46.93	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
4630.126	48.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5828.486	48.72	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS
9371.194	47.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14808.482	45.33	N/A	N/A	68.23	N/A	N/A	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
101.852	31.97	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2415.939	46.28	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
3918.504	46.40	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5825.405	49.51	N/A	N/A	68.23	N/A	N/A	Vertical	PASS
9127.826	48.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13579.316	45.73	N/A	N/A	68.23	N/A	N/A	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT