PSD NVNT ax40 52@37 2422MHz Ant2 MIMO

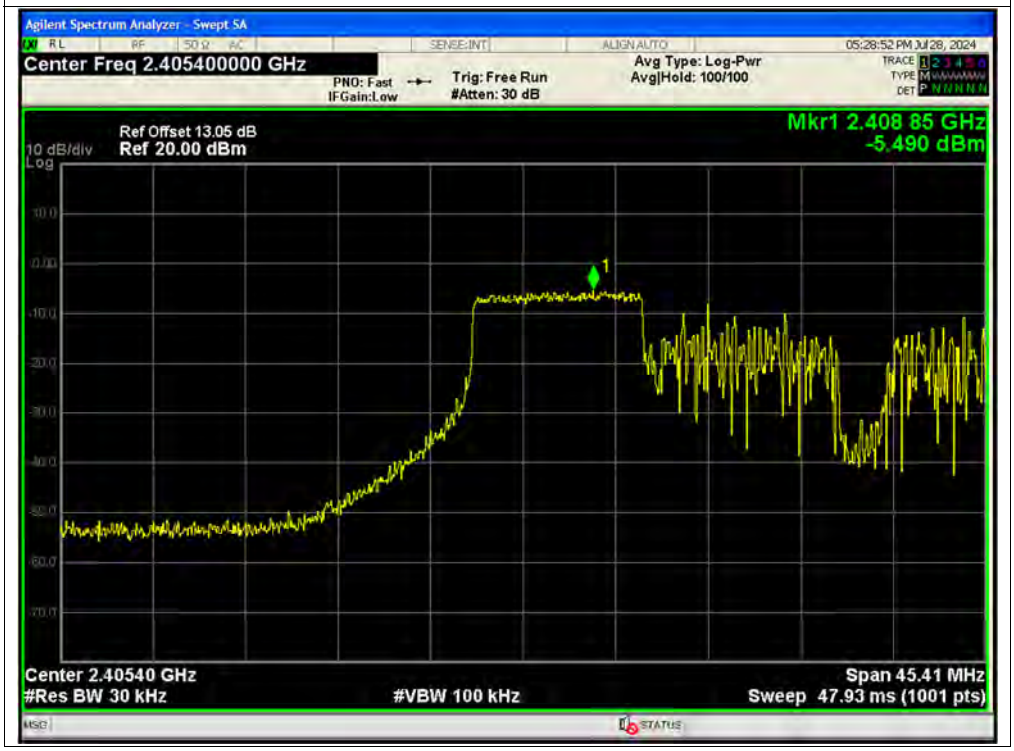
PSD NVNT ax40 52@37 2442MHz Ant1 MIMO

PSD NVNT ax40 52@37 2442MHz Ant2 MIMO

PSD NVNT ax40 52@37 2462MHz Ant1 MIMO

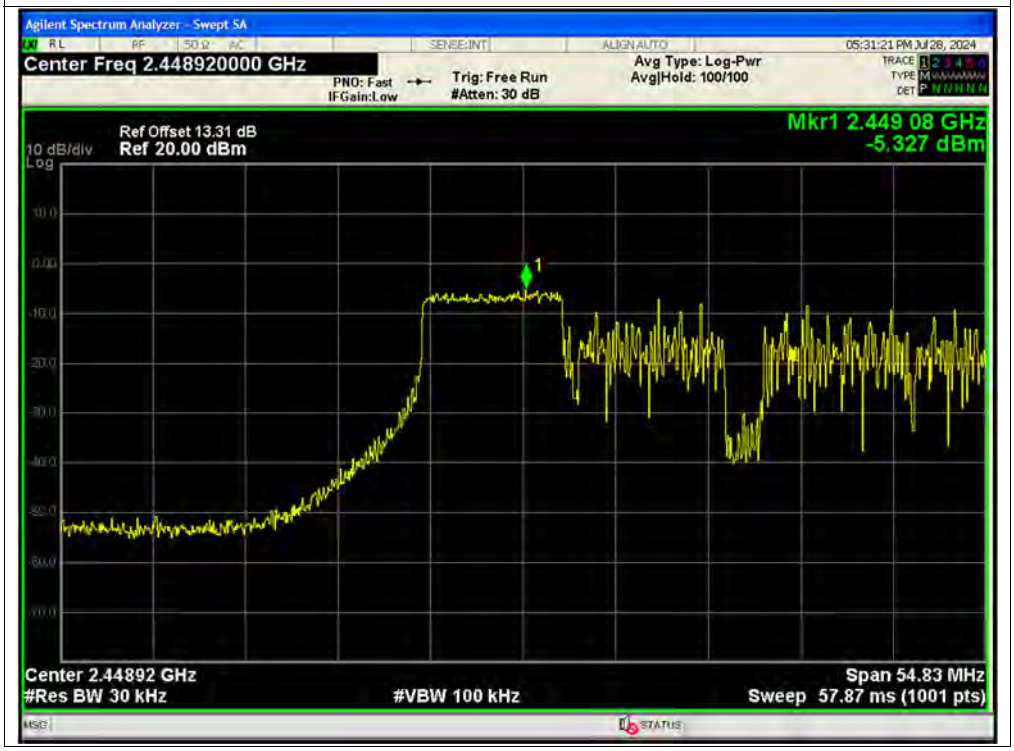
PSD NVNT ax40 52@37 2462MHz Ant2 MIMO

PSD NVNT ax40 106@53 2422MHz Ant1 SISO

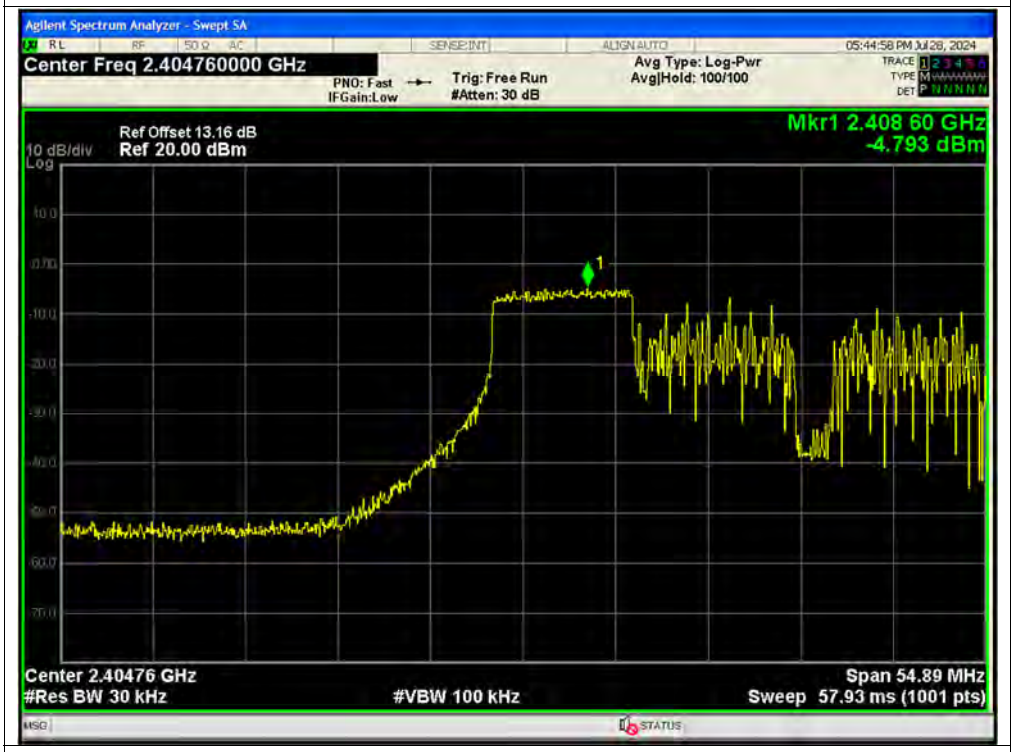


PSD NVNT ax40 106@53 2442MHz Ant1 SISO

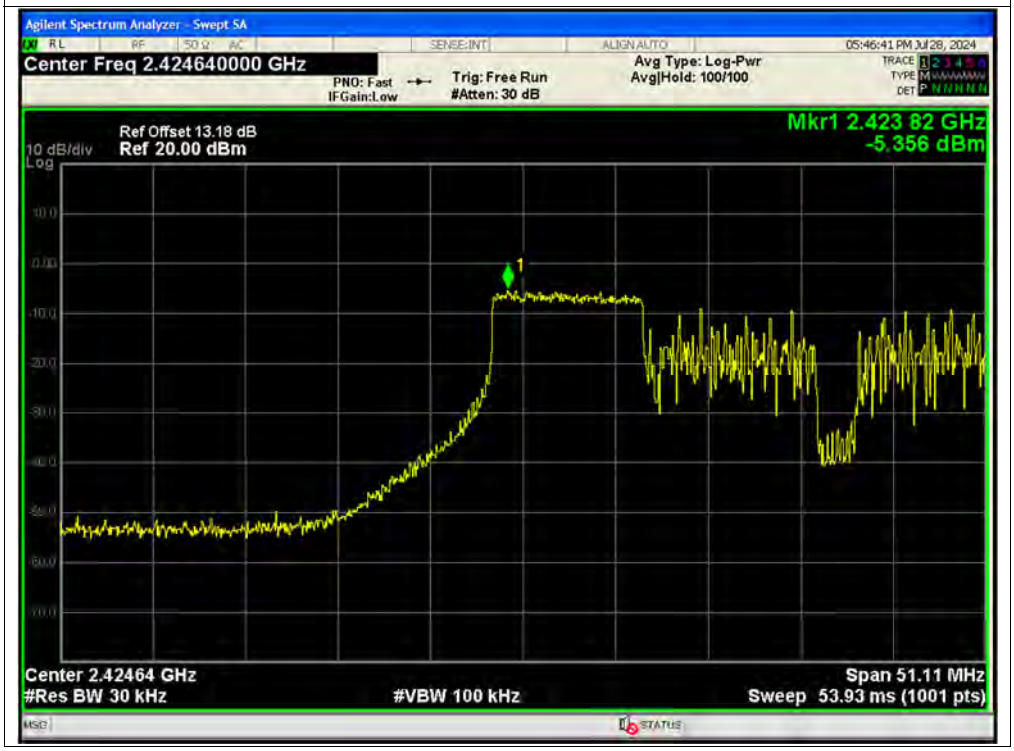
PSD NVNT ax40 106@53 2462MHz Ant1 SISO



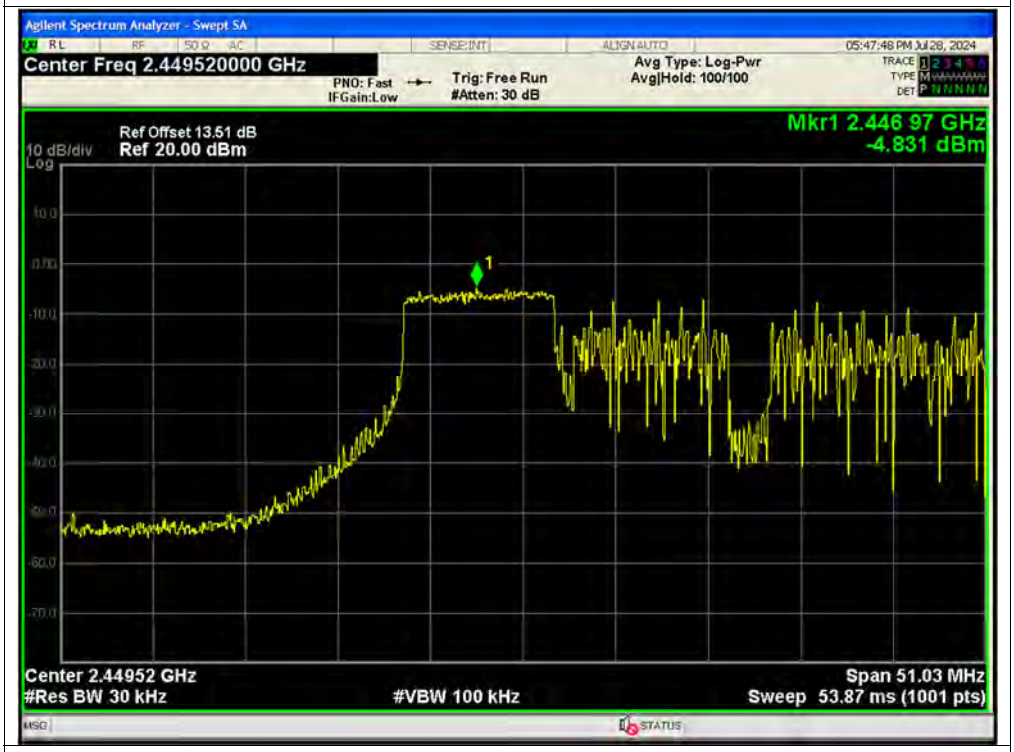
PSD NVNT ax40 106@53 2422MHz Ant2 SISO



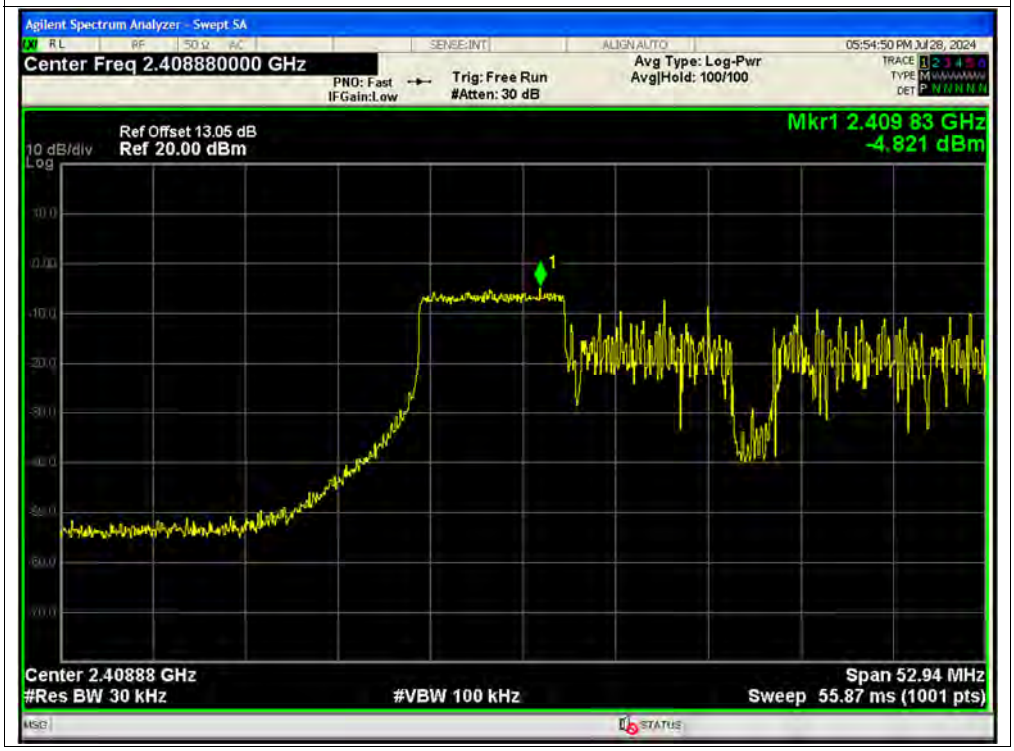
PSD NVNT ax40 106@53 2442MHz Ant2 SISO



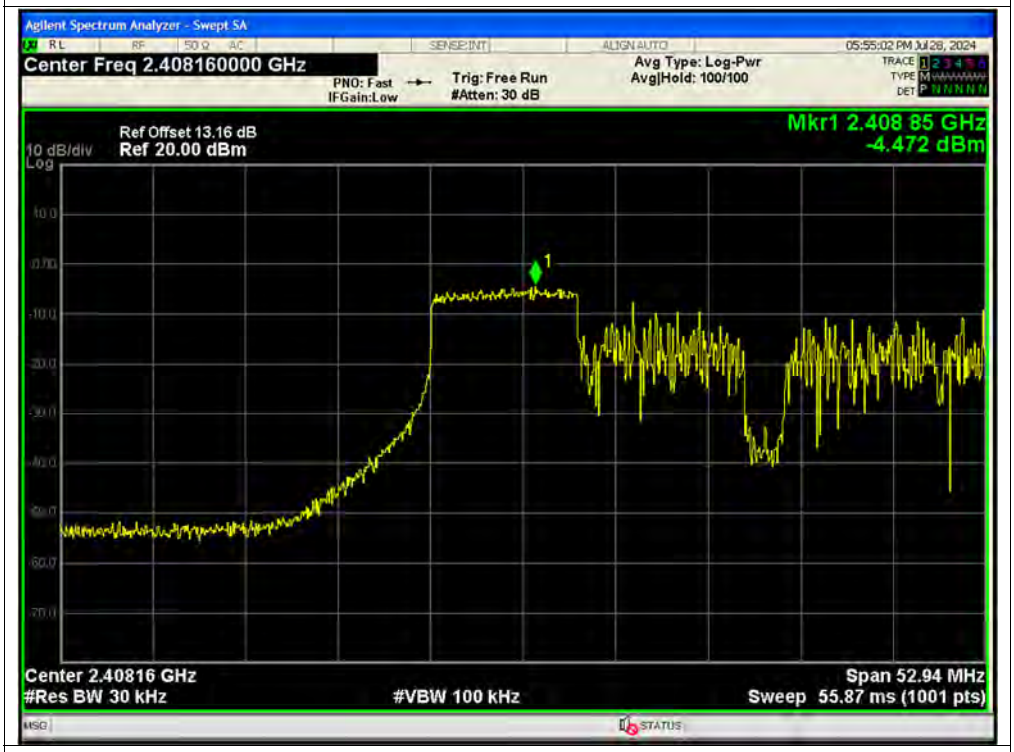
PSD NVNT ax40 106@53 2462MHz Ant2 SISO



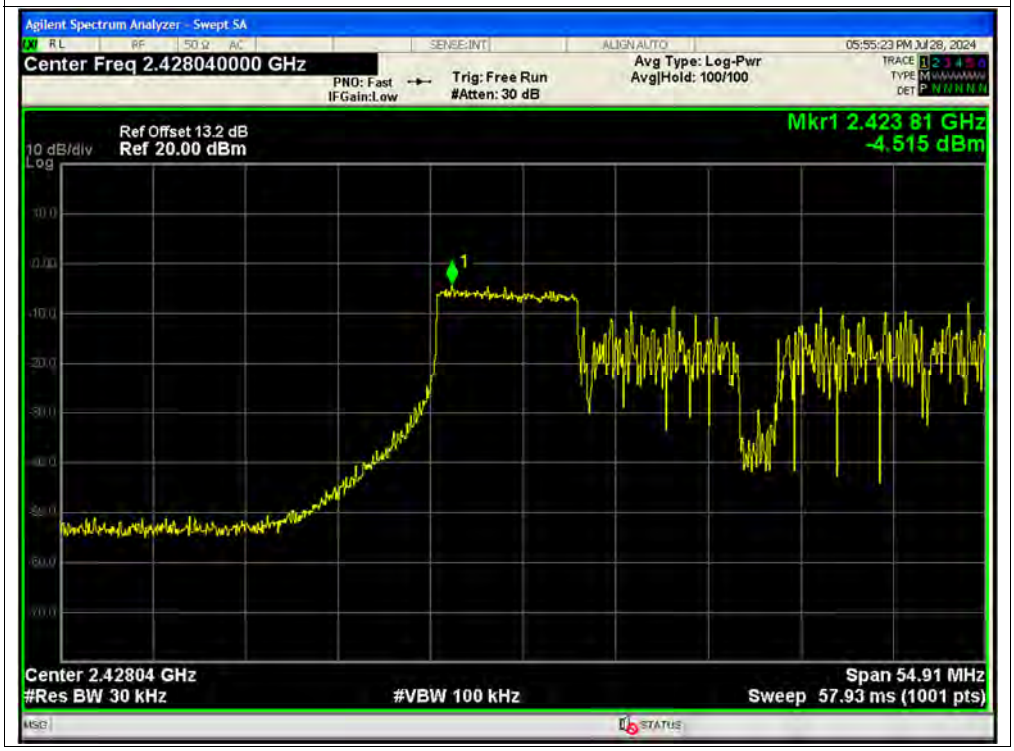
PSD NVNT ax40 106@53 2422MHz Ant1 MIMO



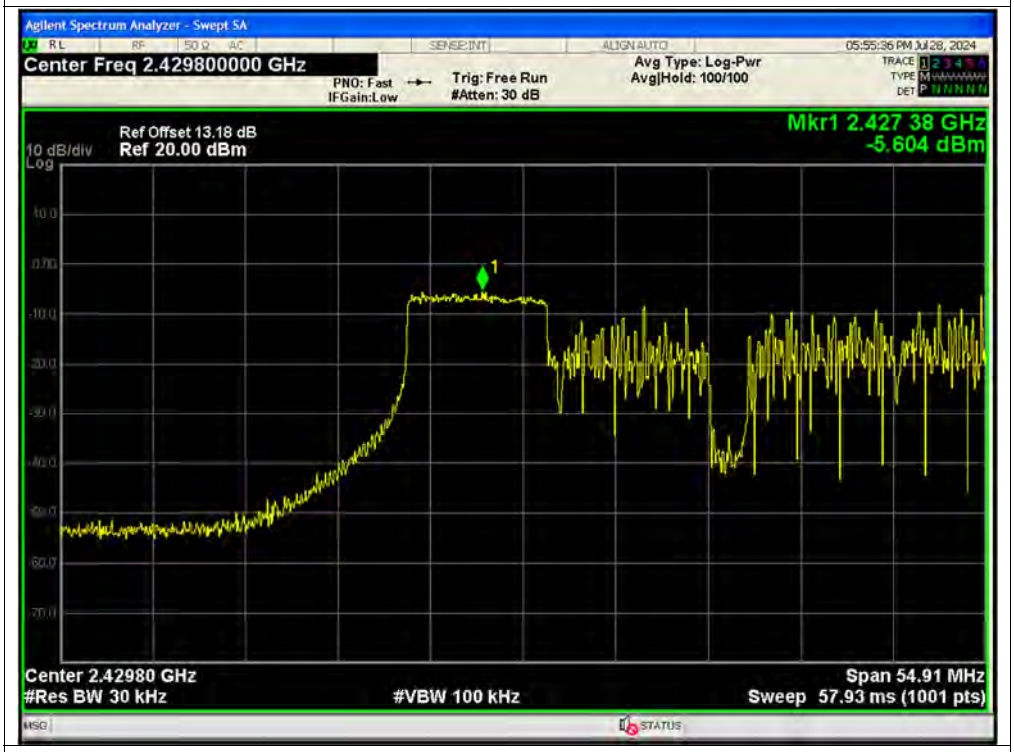
PSD NVNT ax40 106@53 2422MHz Ant2 MIMO



PSD NVNT ax40 106@53 2442MHz Ant1 MIMO

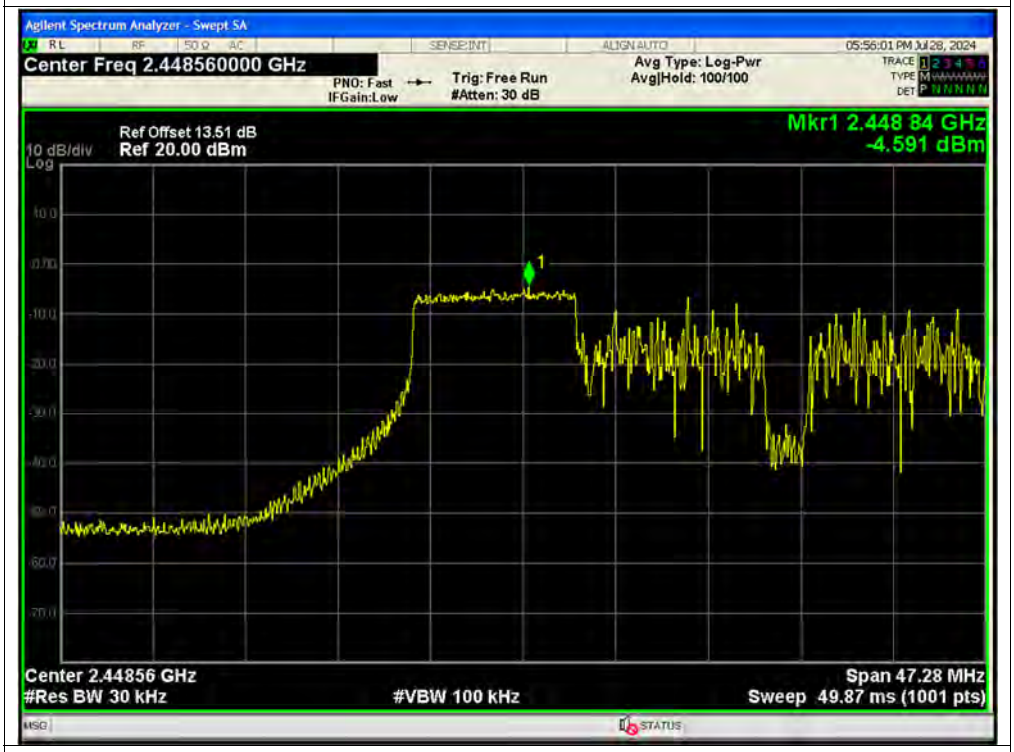


PSD NVNT ax40 106@53 2442MHz Ant2 MIMO

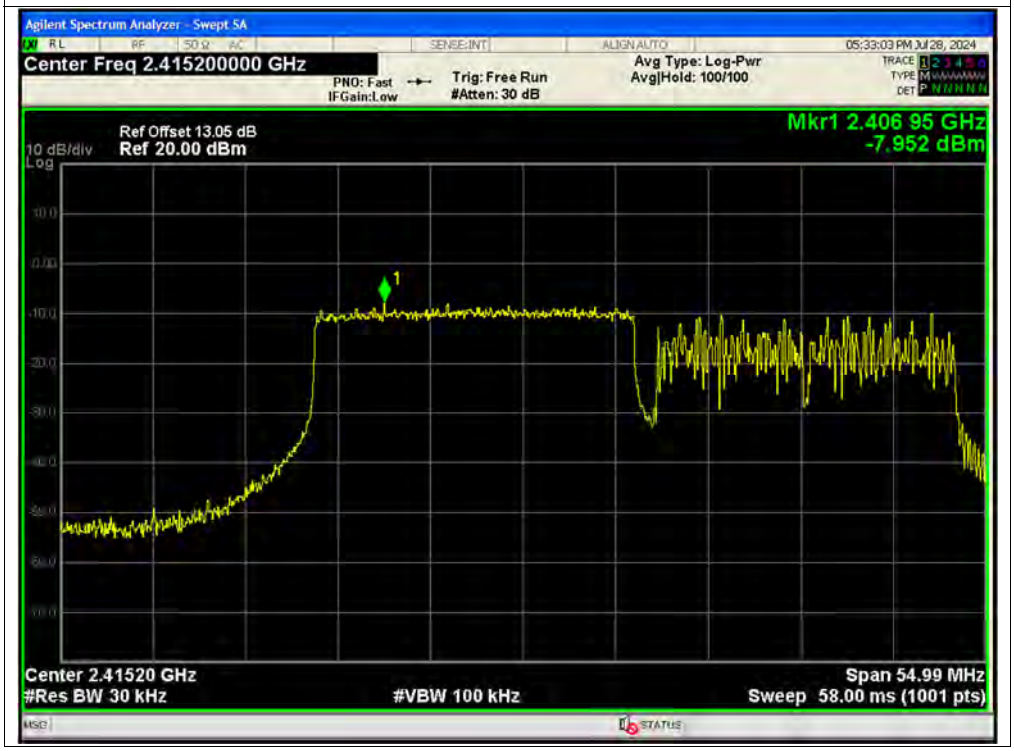


PSD NVNT ax40 106@53 2462MHz Ant1 MIMO

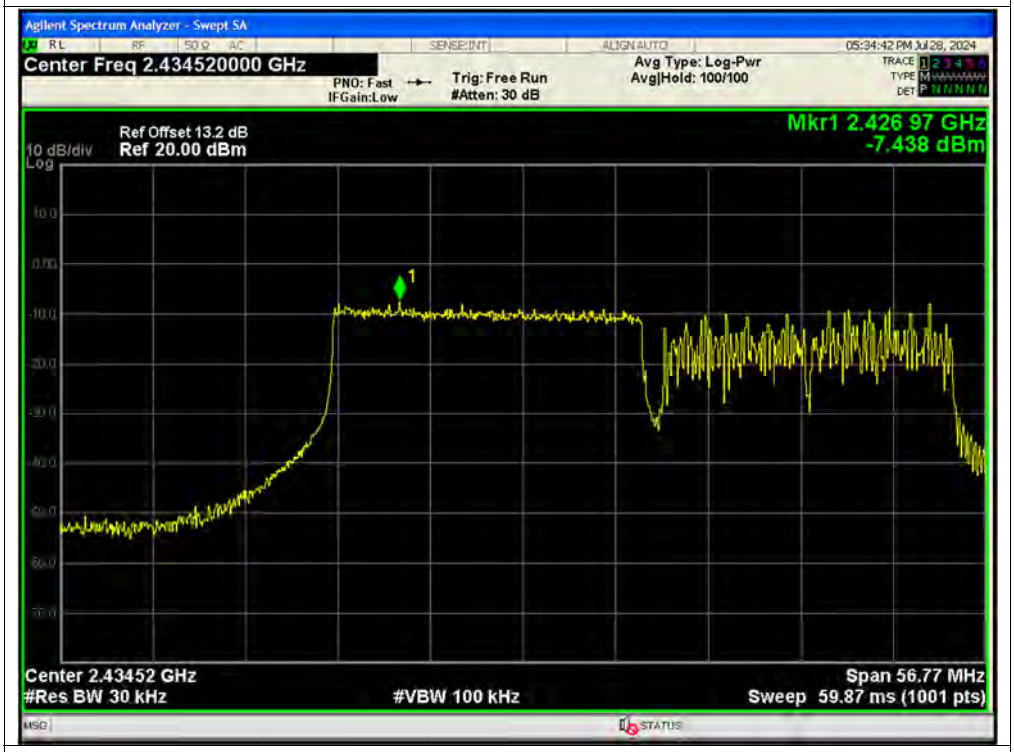
PSD NVNT ax40 106@53 2462MHz Ant2 MIMO



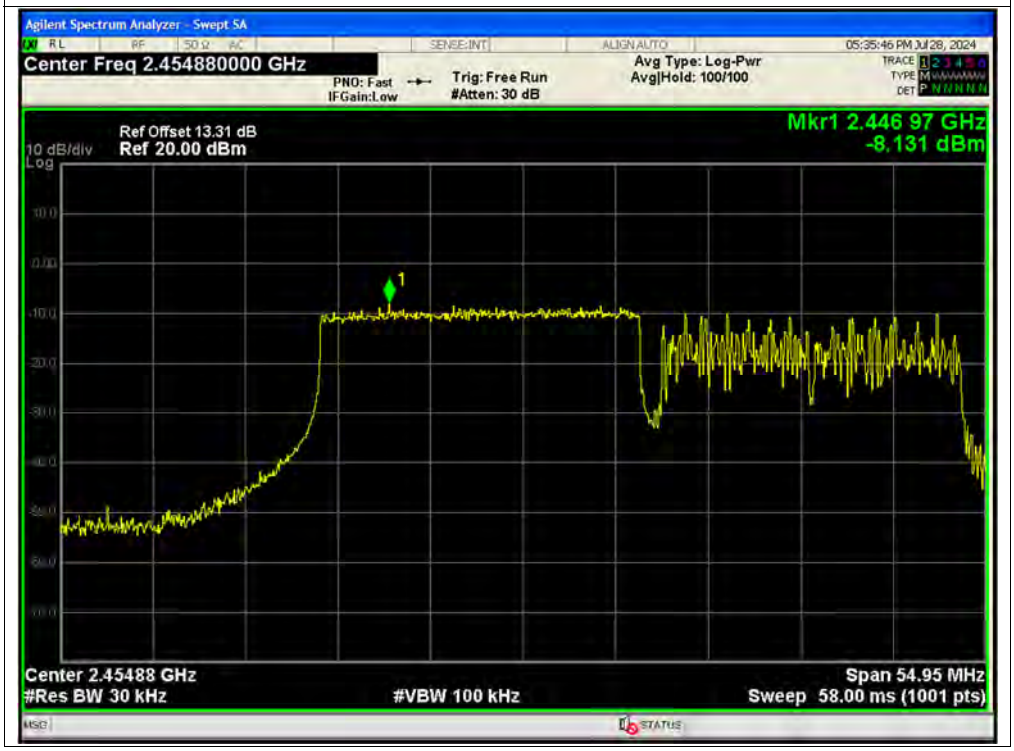
PSD NVNT ax40 242@61 2422MHz Ant1 SISO



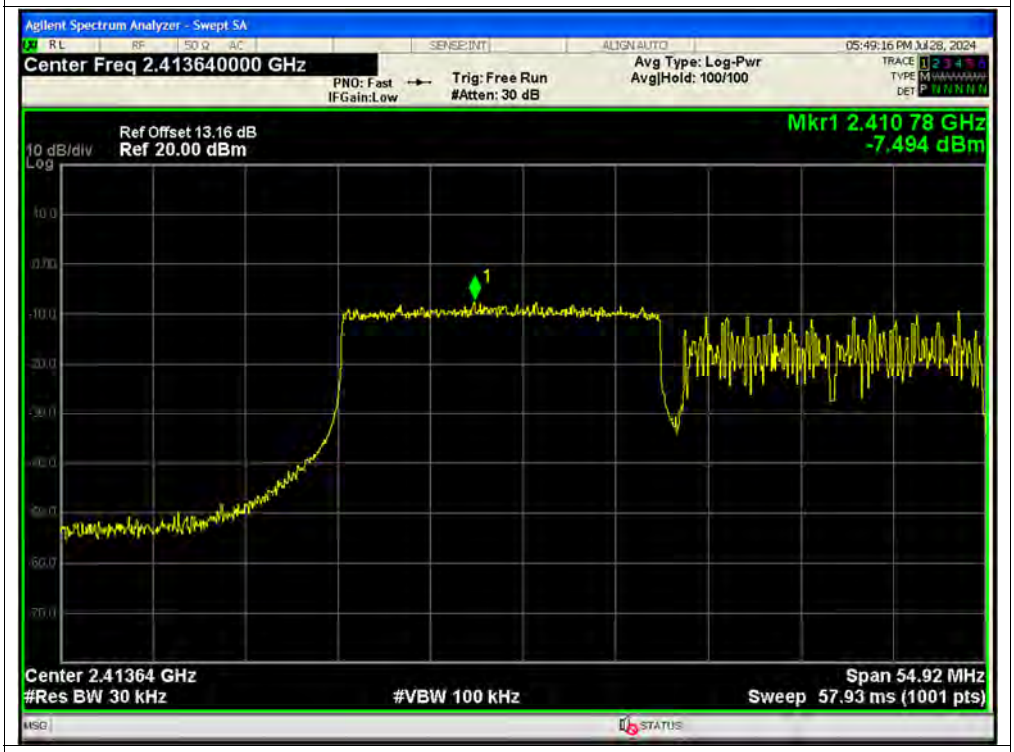
PSD NVNT ax40 242@61 2442MHz Ant1 SISO



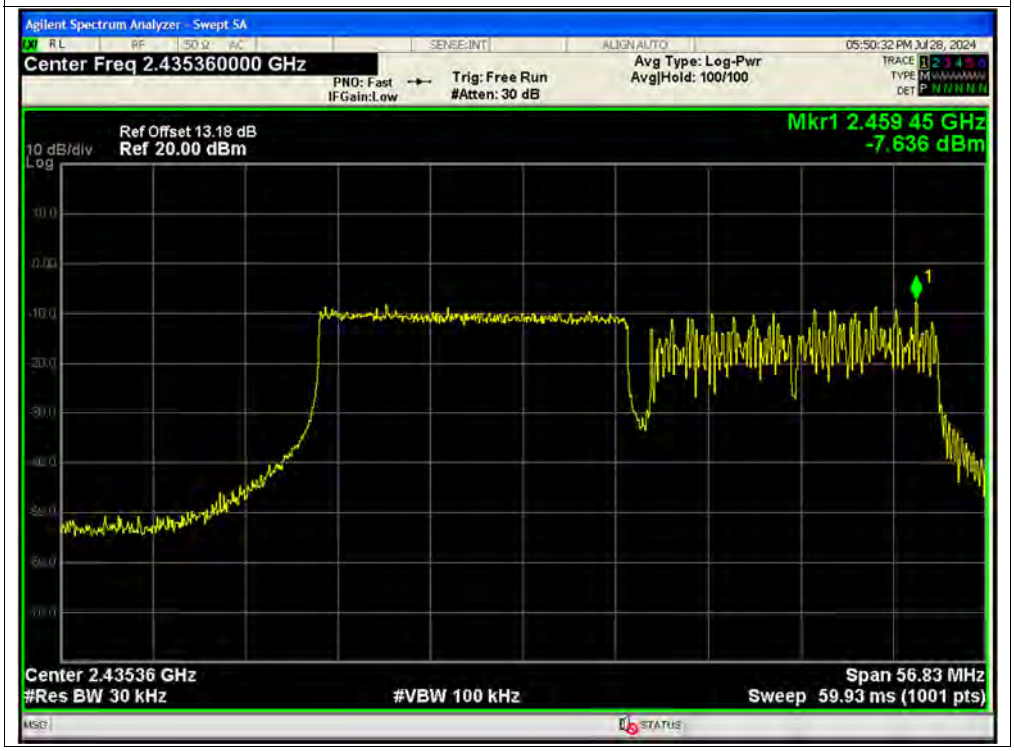
PSD NVNT ax40 242@61 2462MHz Ant1 SISO



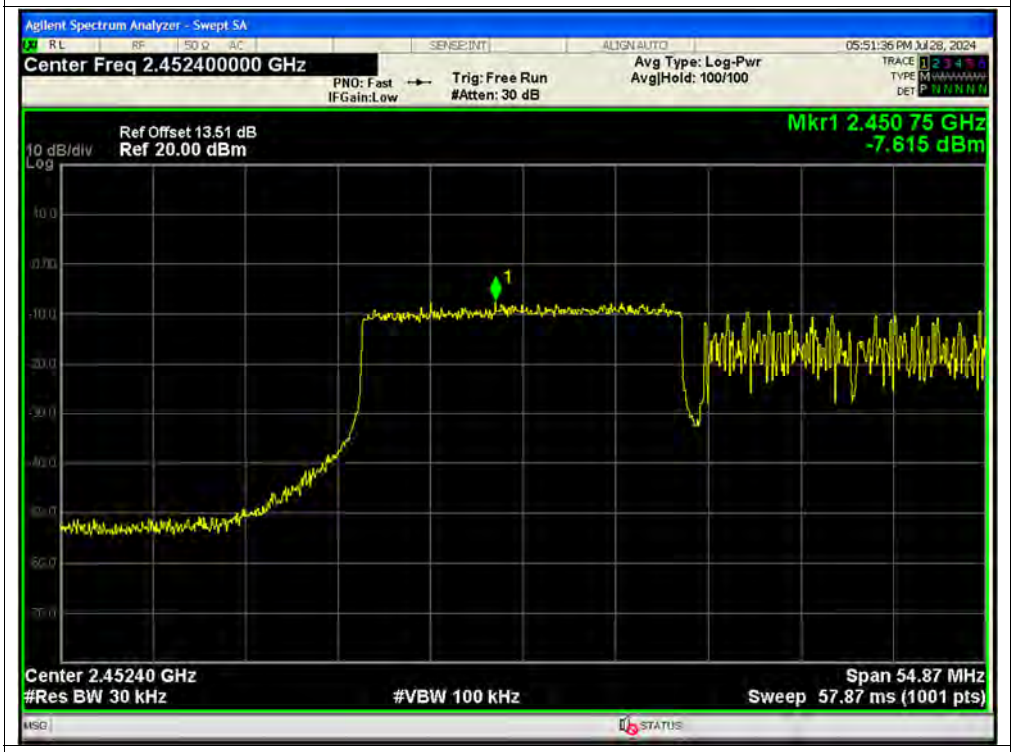
PSD NVNT ax40 242@61 2422MHz Ant2 SISO



PSD NVNT ax40 242@61 2442MHz Ant2 SISO

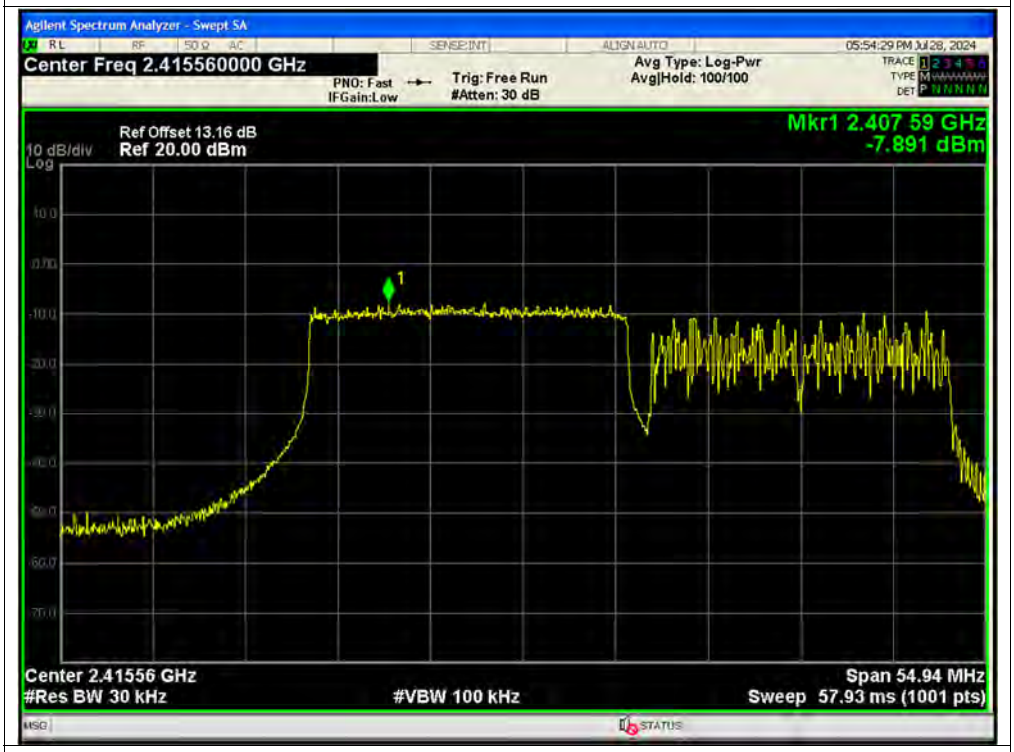


PSD NVNT ax40 242@61 2462MHz Ant2 SISO

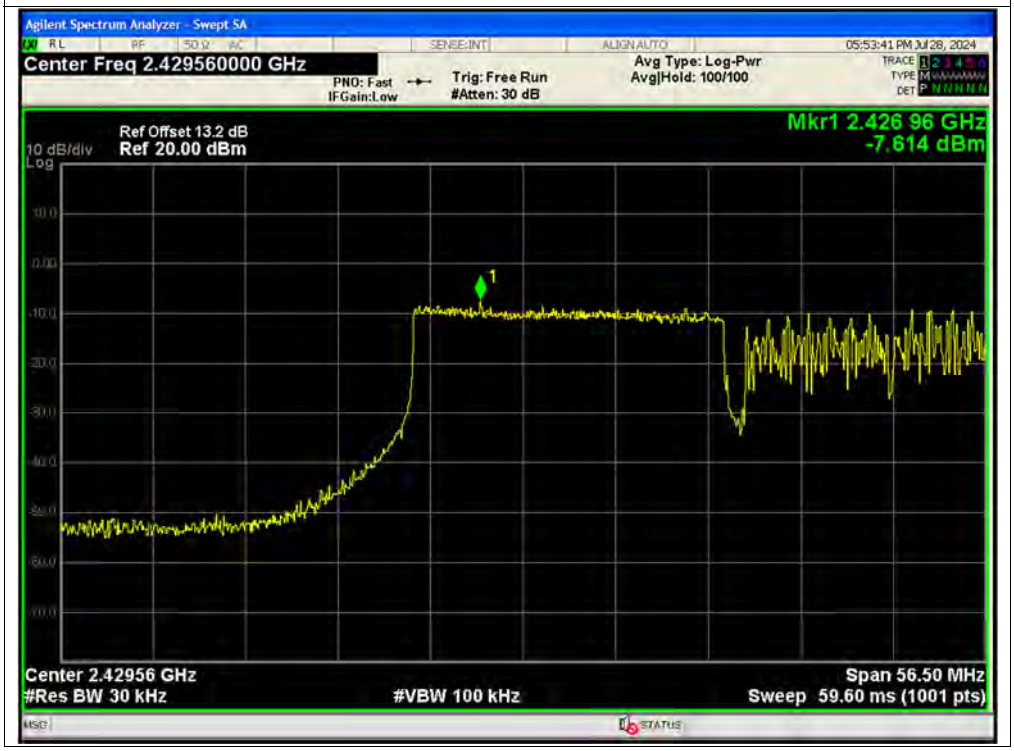


PSD NVNT ax40 242@61 2422MHz Ant1 MIMO

PSD NVNT ax40 242@61 2422MHz Ant2 MIMO

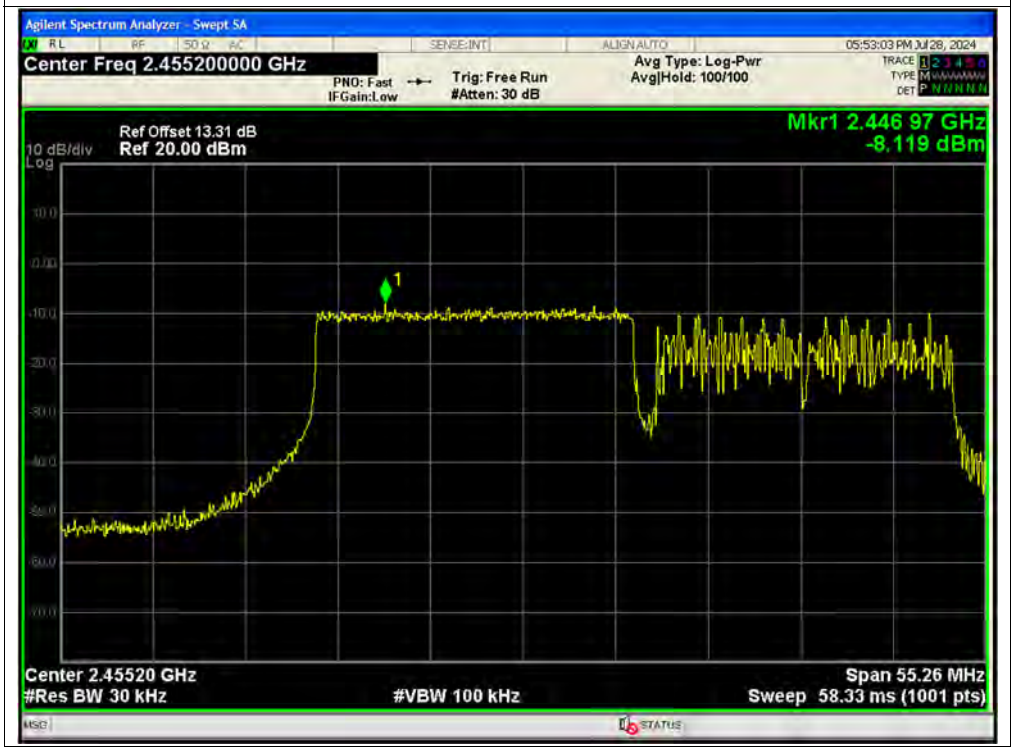


PSD NVNT ax40 242@61 2442MHz Ant1 MIMO

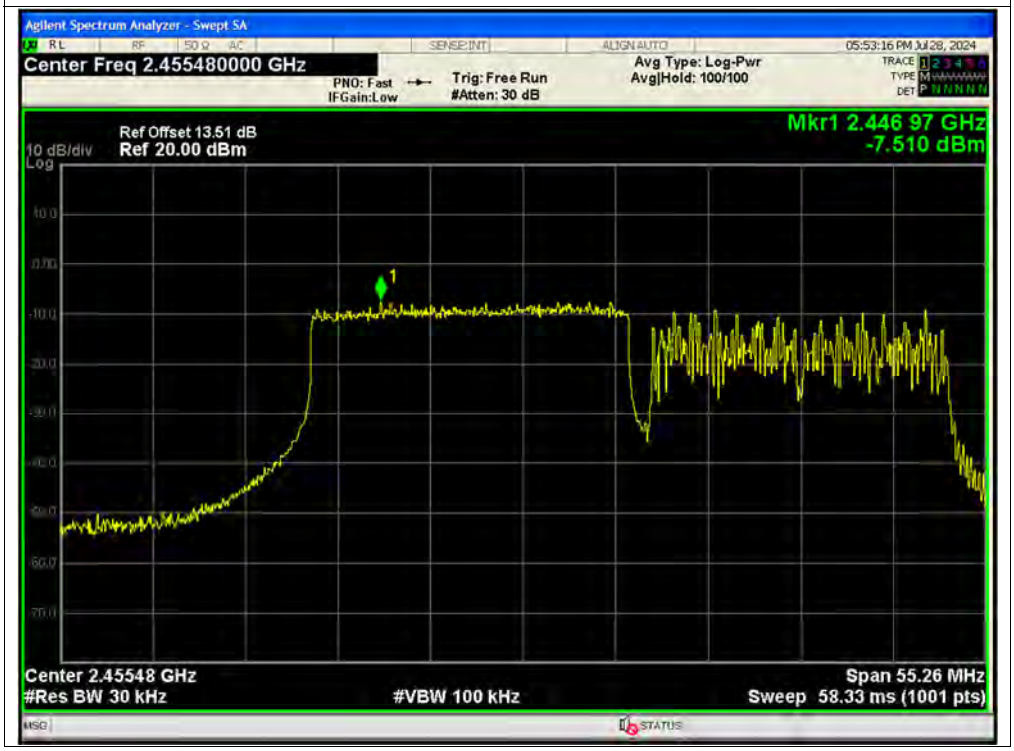


PSD NVNT ax40 242@61 2442MHz Ant2 MIMO

PSD NVNT ax40 242@61 2462MHz Ant1 MIMO



PSD NVNT ax40 242@61 2462MHz Ant2 MIMO



A.8. 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 + PC + PC Adapter + WIFI TX

Test voltage: AC 120V/60Hz

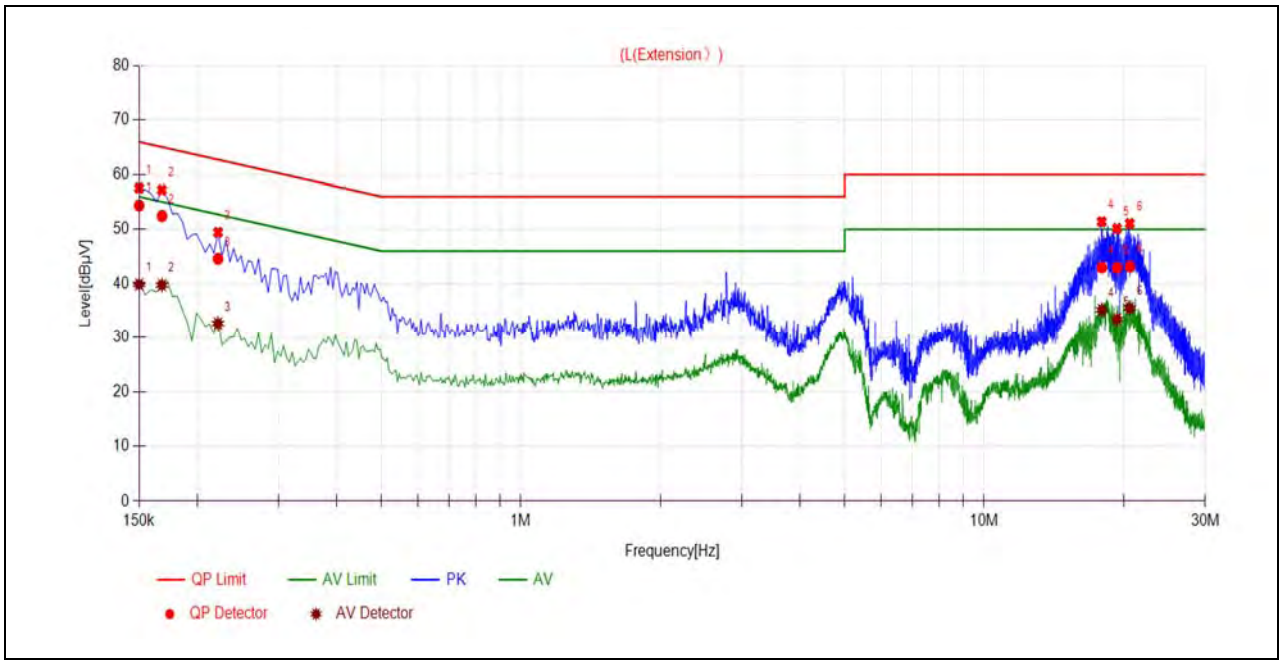
The measurement results are obtained as below:

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

U_R: Receiver Reading

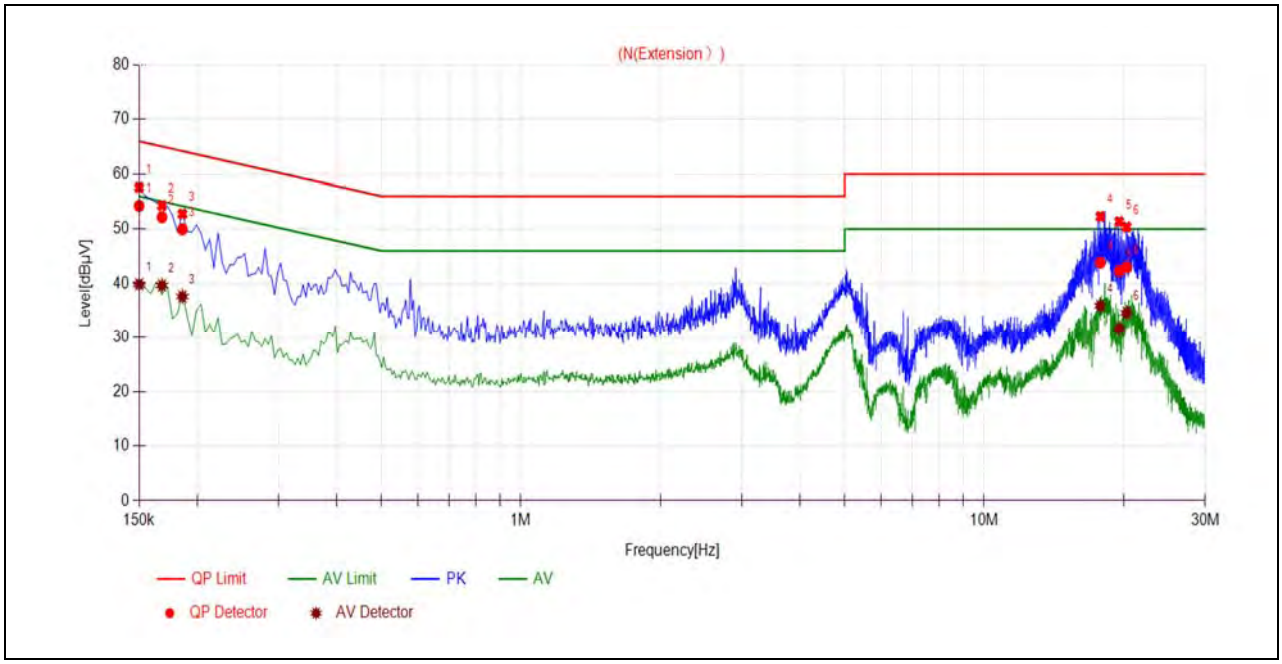
A_{Factor}: Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	54.38	39.89	66.00	39.89	Line	PASS
2	0.1680	52.47	39.76	65.06	39.76		PASS
3	0.2220	44.58	32.64	62.74	32.64		PASS
4	17.9431	43.00	35.18	60.00	35.18		PASS
5	19.3570	42.95	33.46	60.00	33.46		PASS
6	20.6208	43.19	35.50	60.00	35.50		PASS



(N Phase)

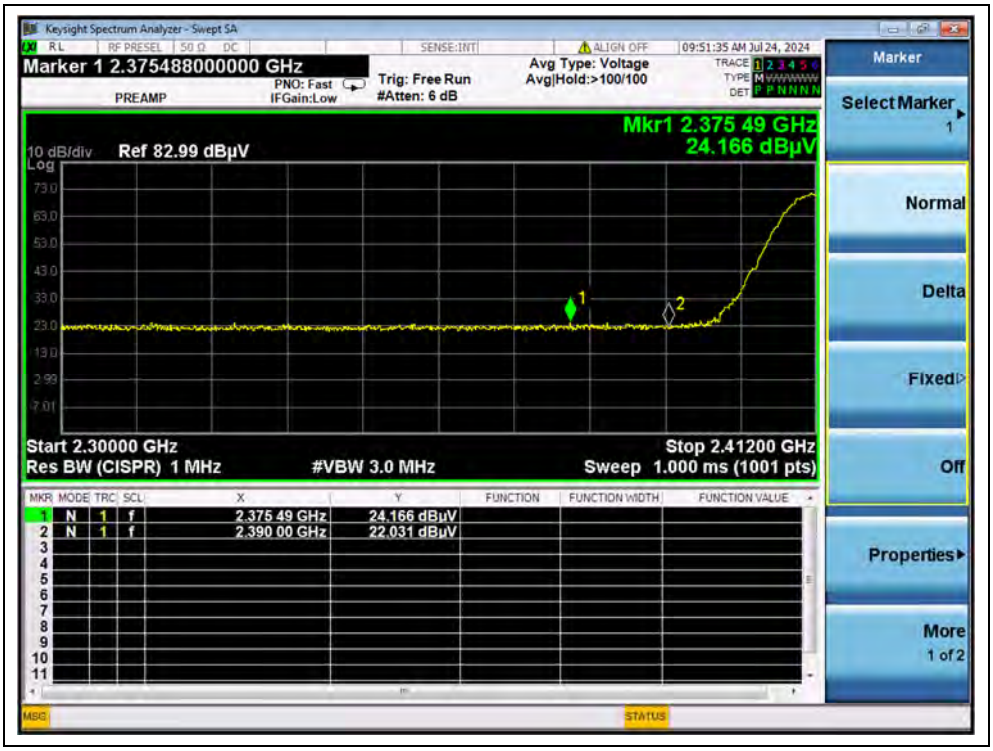
No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	54.24	39.89	66.00	56.00	Neutral	PASS
2	0.1680	52.20	39.67	65.06	55.06		PASS
3	0.1860	49.98	37.63	64.21	54.21		PASS
4	17.8168	43.84	35.94	60.00	50.00		PASS
5	19.5688	42.31	31.68	60.00	50.00		PASS
6	20.3038	43.01	34.61	60.00	50.00		PASS

A.9. Restricted Frequency Bands

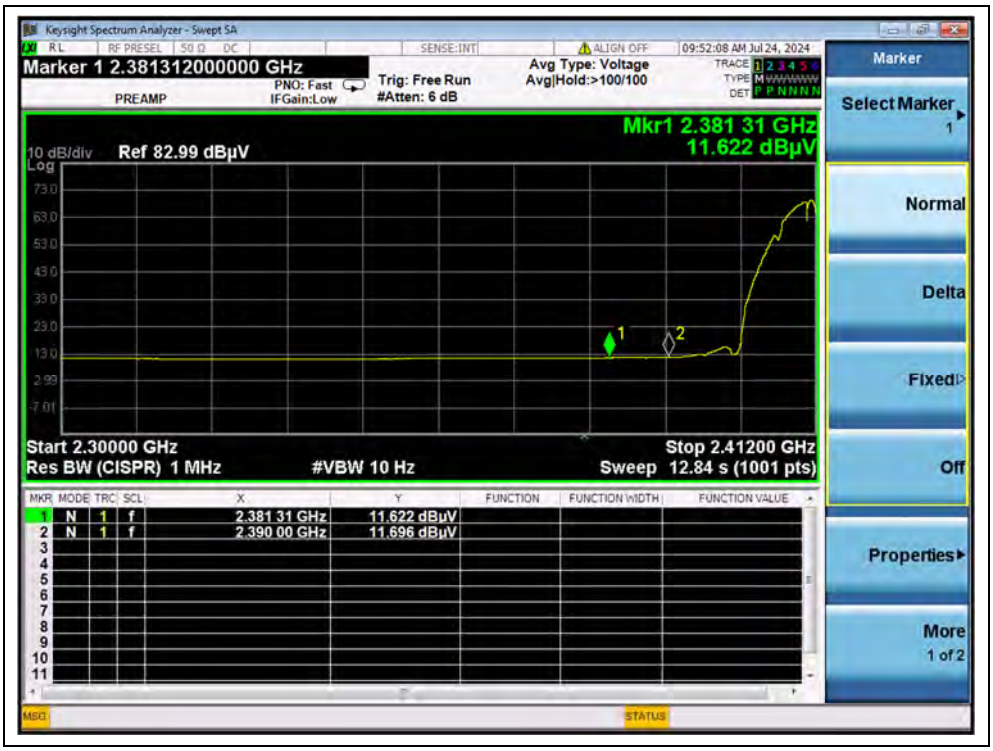
The lowest and highest channels are tested to verify the Restricted Frequency Bands.
The measurement results are obtained as below:
E [dBμV/m] $=U_R + A_T + A_{Factor}$ [dB]; $A_T = L_{Cable\ loss}$ [dB]$-G_{preamp}$ [dB]
A_T: Total correction Factor except Antenna
U_R: Receiver Reading
G_{preamp}: Preamplifier 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 (horizontal) was recorded in this test report.
Note 2: Restricted Frequency Bands were performed in X, Y, Z axis direction, and only the worst axis (X axis) test condition was recorded in this test report.
Note 3: All test modes and bandwidth were considered and evaluated respectively by performing full test, only the worst data were recorded for each bandwidth.

802.11b Mode

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2375.49	PK	24.17	6.74	27.20	58.11	74	PASS
1	2390.00	AV	11.70	6.74	27.20	45.64	54	PASS
13	2483.50	PK	33.76	6.74	27.20	67.70	74	PASS
13	2483.50	AV	14.68	6.74	27.20	48.62	54	PASS



(PEAK, Channel 1, 802.11b)



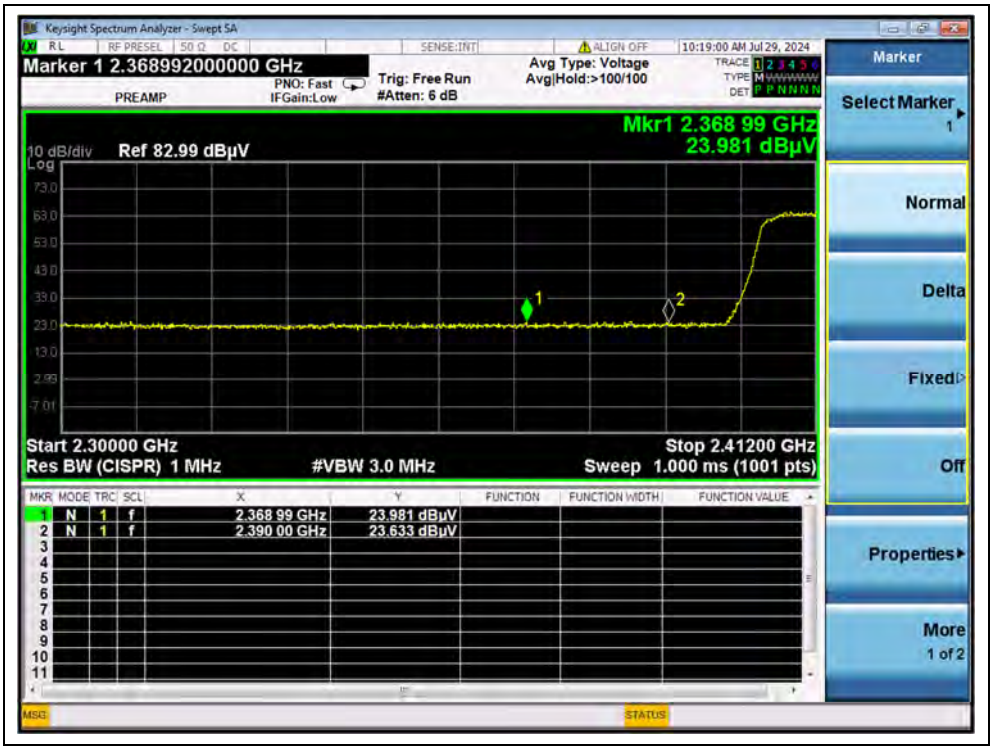
(AVERAGE, Channel 1, 802.11b)

(PEAK, Channel 13, 802.11b)

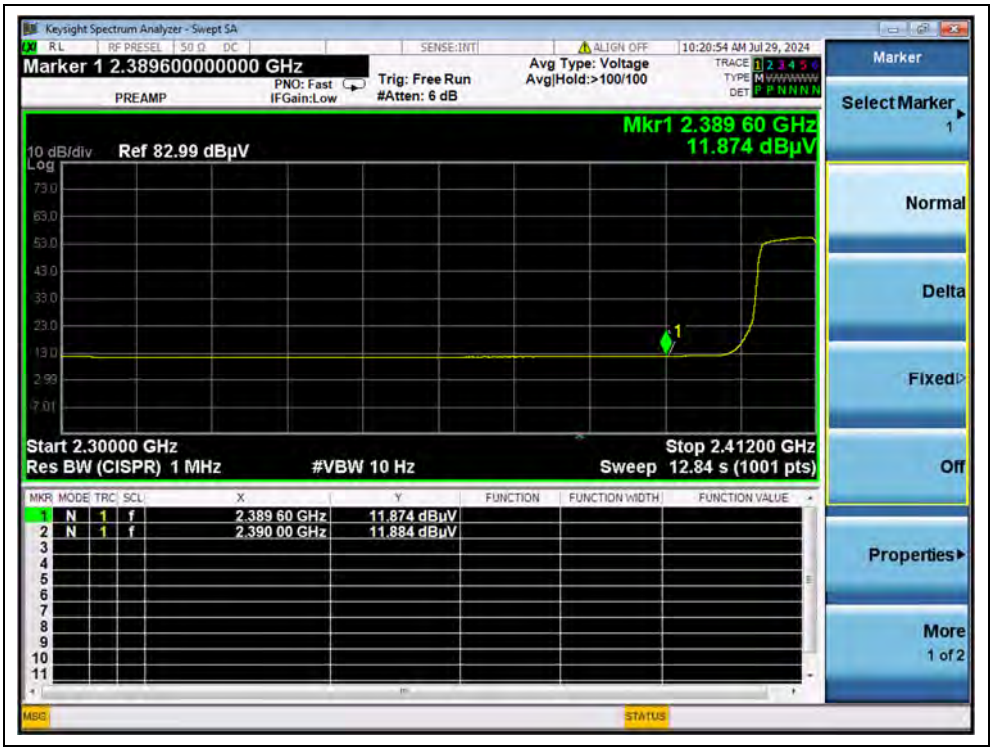
(AVERAGE, Channel 13, 802.11b)

802.11g Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2368.99	PK	23.98	6.74	27.20	57.92	74	PASS
1	2390.00	AV	11.88	6.74	27.20	45.82	54	PASS
13	2483.50	PK	30.74	6.74	27.20	64.68	74	PASS
13	2483.50	AV	15.18	6.74	27.20	49.12	54	PASS

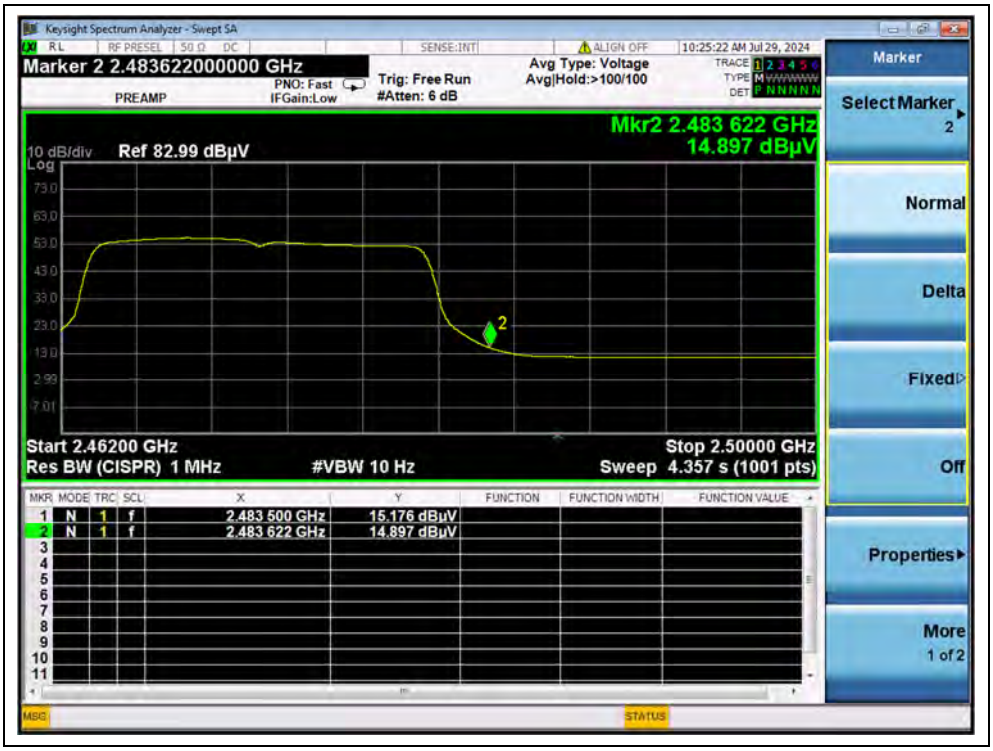


(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)

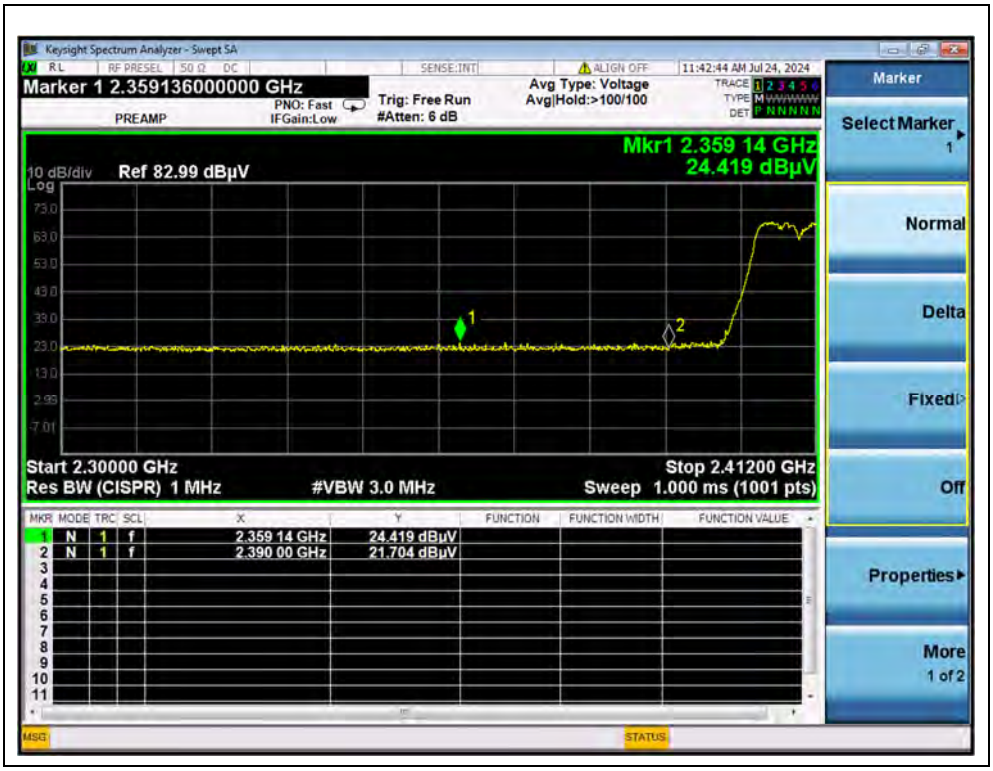
(PEAK, Channel 13, 802.11g)



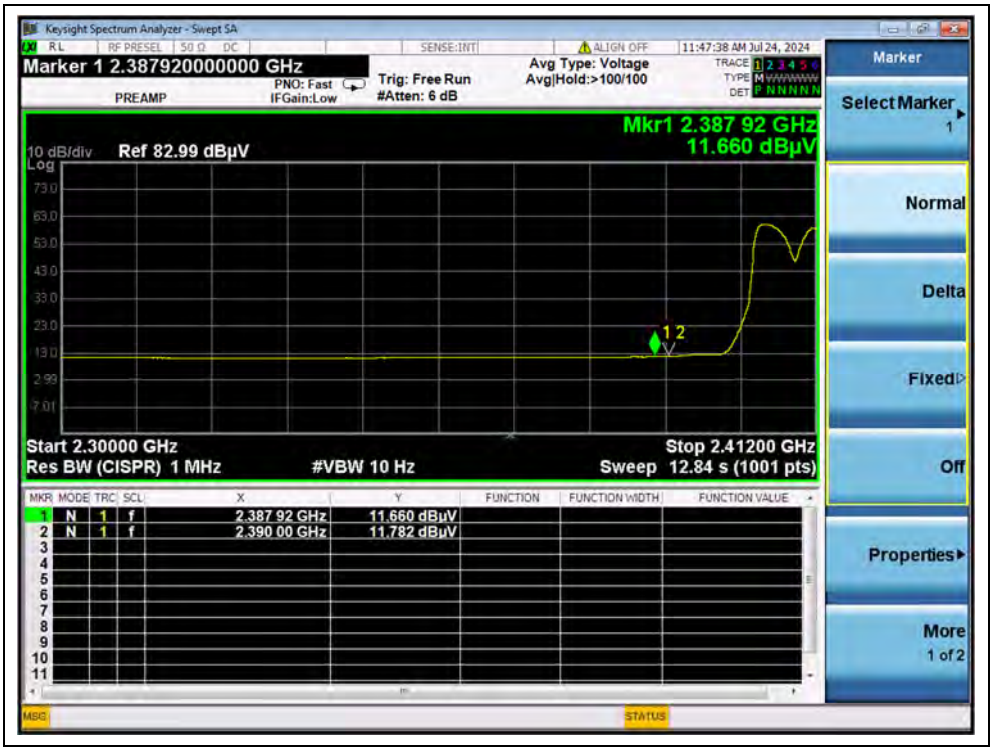
(AVERAGE, Channel 13, 802.11g)

802.11n (HT20) Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2359.14	PK	24.42	6.74	27.20	58.36	74	PASS
1	2390.00	AV	11.78	6.74	27.20	45.72	54	PASS
13	2483.66	PK	31.34	6.74	27.20	65.28	74	PASS
13	2483.50	AV	16.88	6.74	27.20	50.82	54	PASS



(PEAK, Channel 1, 802.11n (HT20))



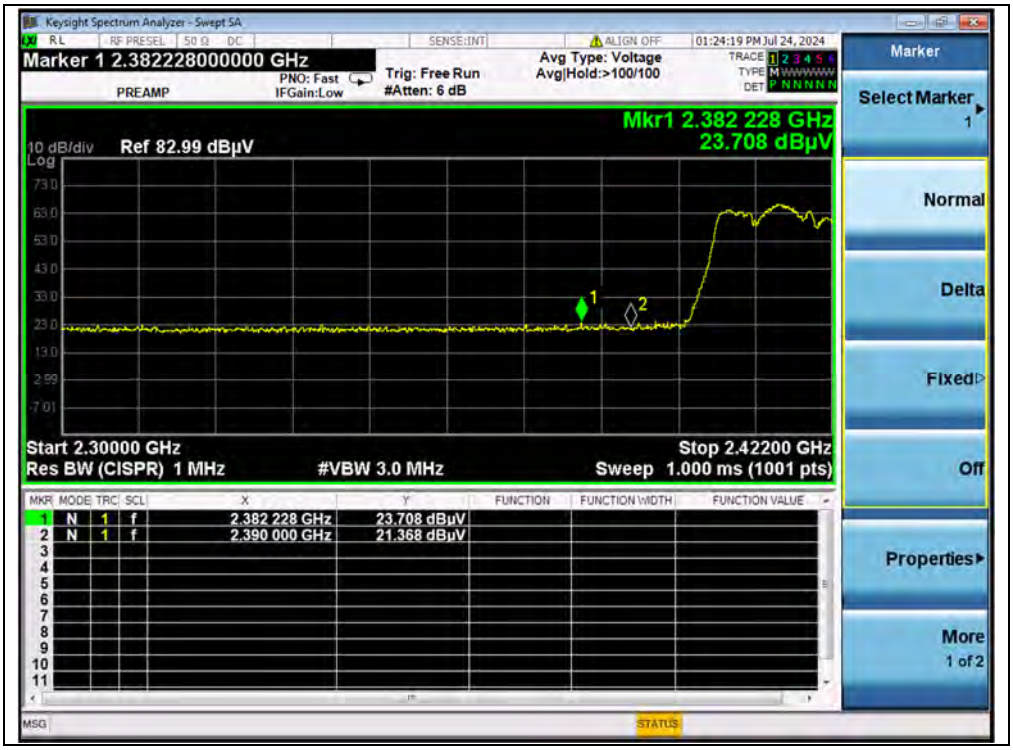
(AVERAGE, Channel 1, 802.11n (HT20))

(PEAK, Channel 13, 802.11n (HT20))

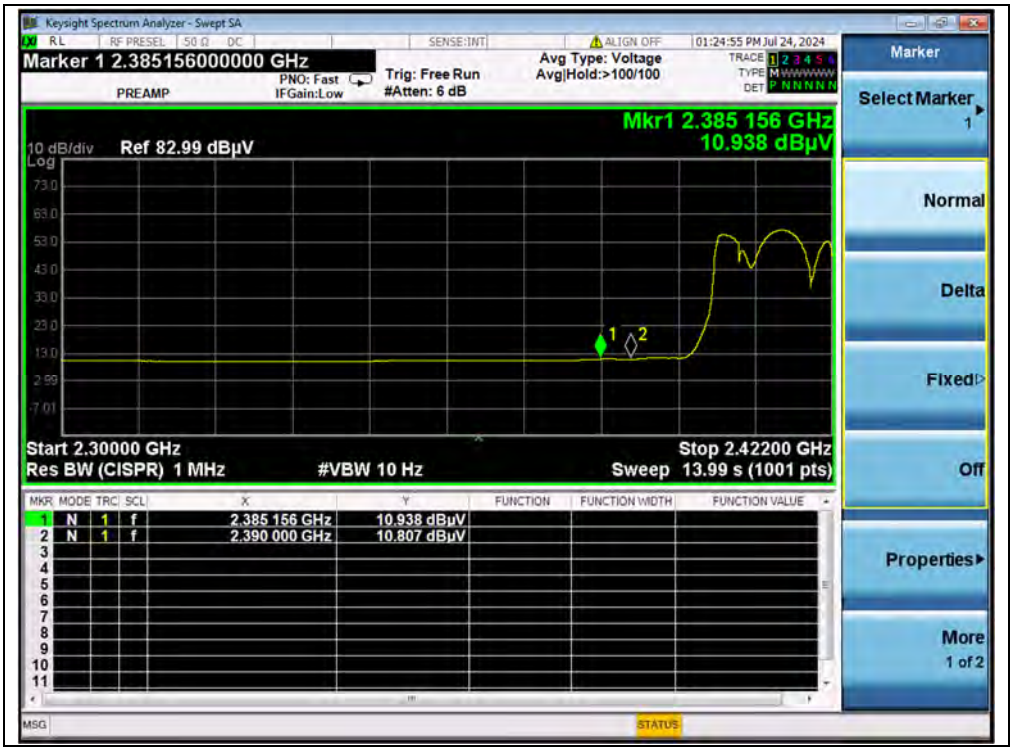
(AVERAGE, Channel 13, 802.11n (HT20))

802.11n (HT40) Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
3	2382.23	PK	23.71	6.74	27.20	57.65	74	PASS
3	2385.16	AV	10.94	6.74	27.20	44.88	54	PASS
11	2483.50	PK	28.94	6.74	27.20	62.88	74	PASS
11	2483.50	AV	14.98	6.74	27.20	48.92	54	PASS

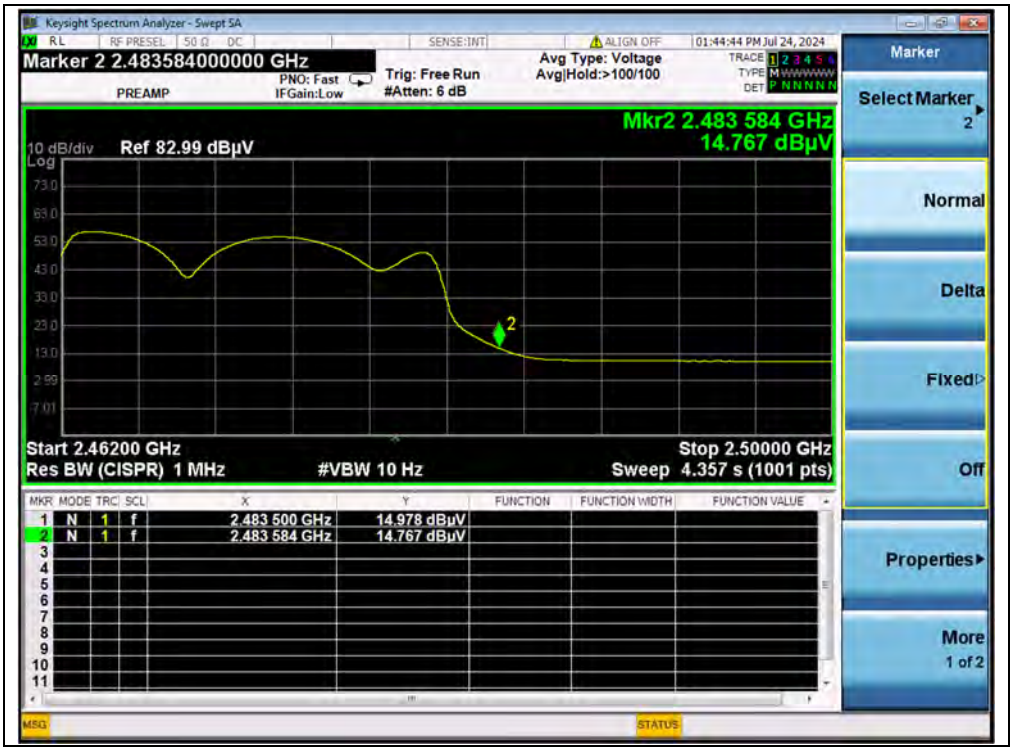


(PEAK, Channel 3, 802.11n (HT40))



(AVERAGE, Channel 3, 802.11n (HT40))

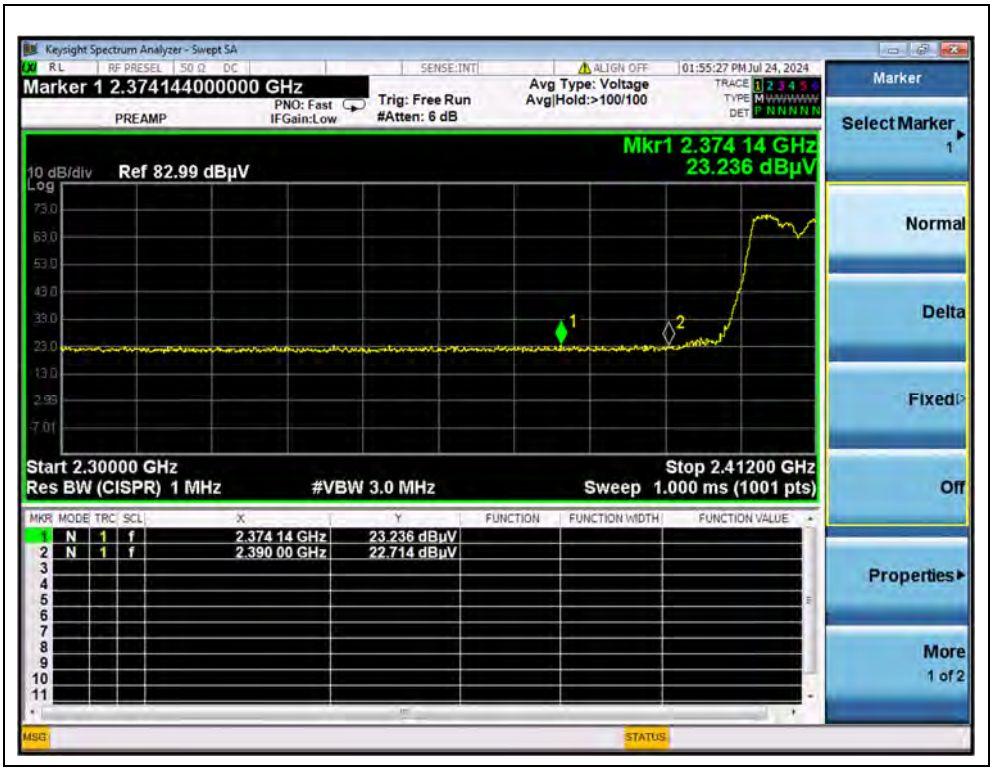
(PEAK, Channel 11, 802.11n (HT40))



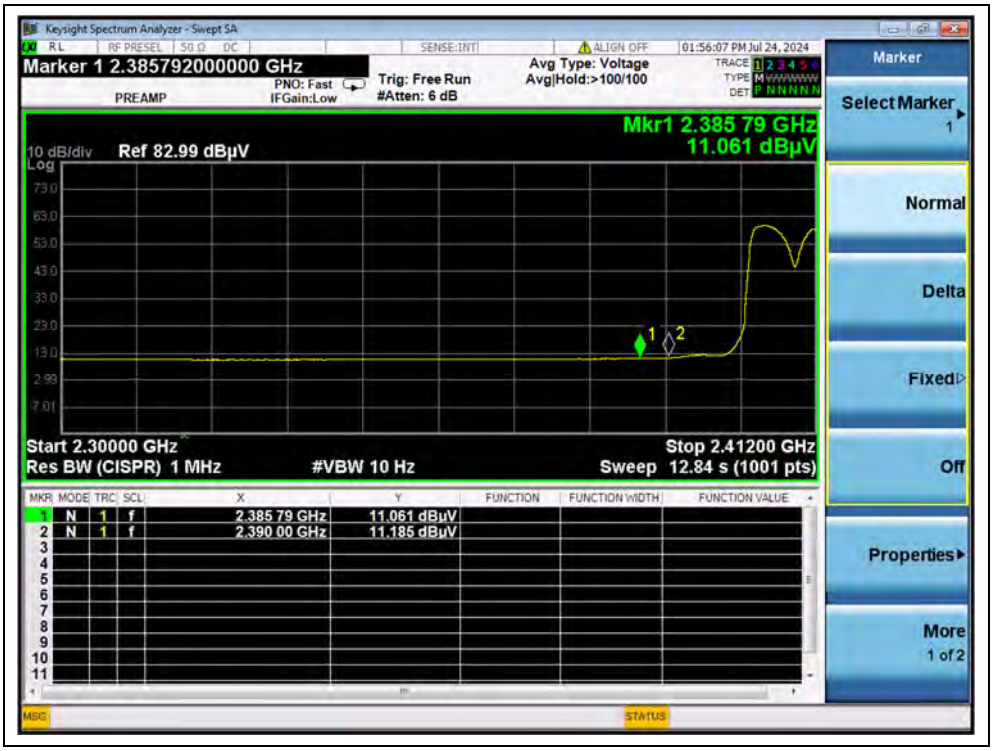
(AVERAGE, Channel 11, 802.11n (HT40))

802.11ax (HEW20) Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2374.14	PK	23.24	6.74	27.20	57.18	74	PASS
1	2390.00	AV	11.19	6.74	27.20	45.13	54	PASS
13	2483.50	PK	36.40	6.74	27.20	70.34	74	PASS
13	2483.50	AV	16.82	6.74	27.20	50.76	54	PASS



(PEAK, Channel 1, 802.11ax (HEW20))



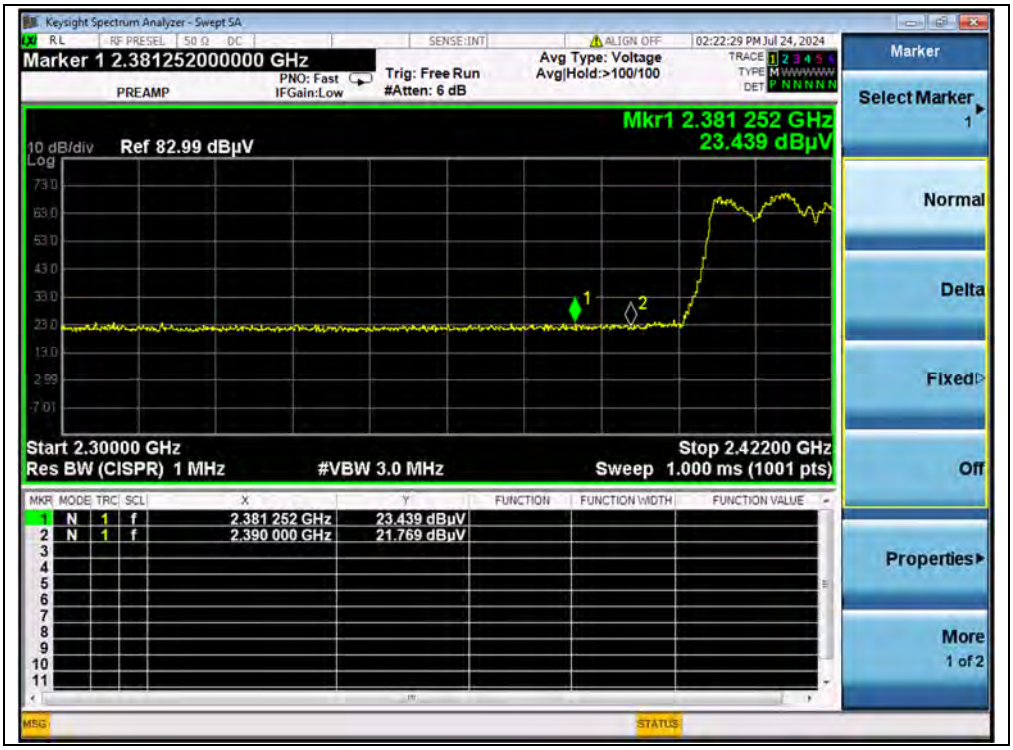
(AVERAGE, Channel 1, 802.11ax (HEW20))

(PEAK, Channel 13, 802.11ax (HEW20))

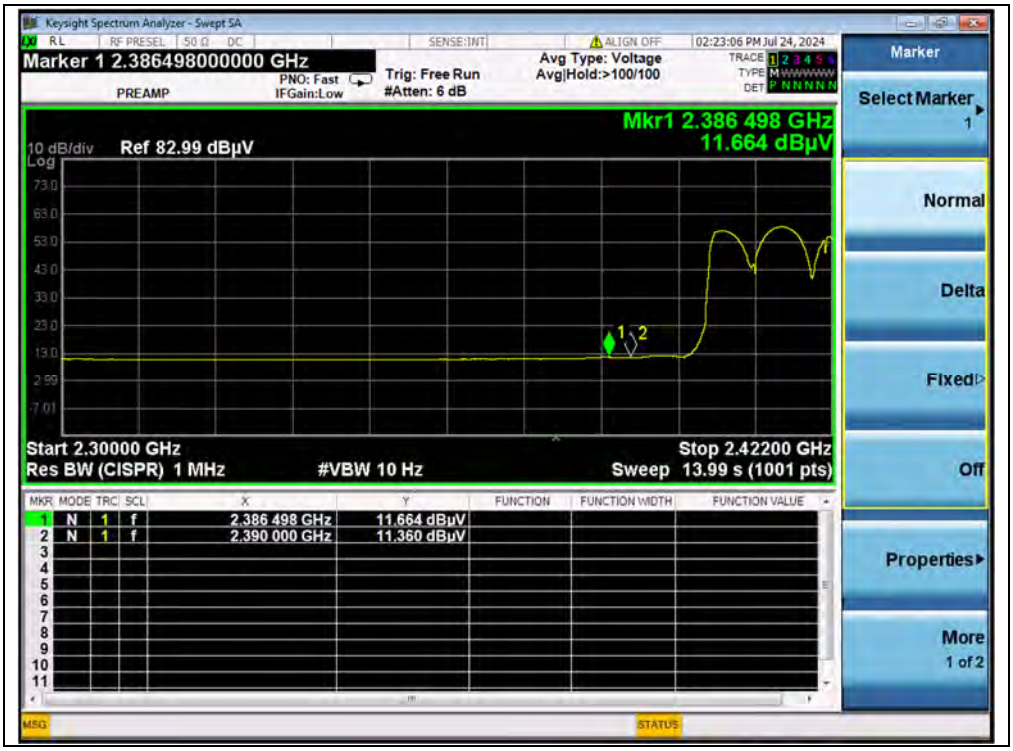
(AVERAGE, Channel 13, 802.11ax (HEW20))

802.11ax (HEW40) Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
3	2381.25	PK	23.44	6.74	27.20	57.38	74	PASS
3	2386.50	AV	11.66	6.74	27.20	45.60	54	PASS
11	2483.70	PK	31.97	6.74	27.20	65.91	74	PASS
11	2483.50	AV	15.35	6.74	27.20	49.29	54	PASS



(PEAK, Channel 3, 802.11ax (HEW40))



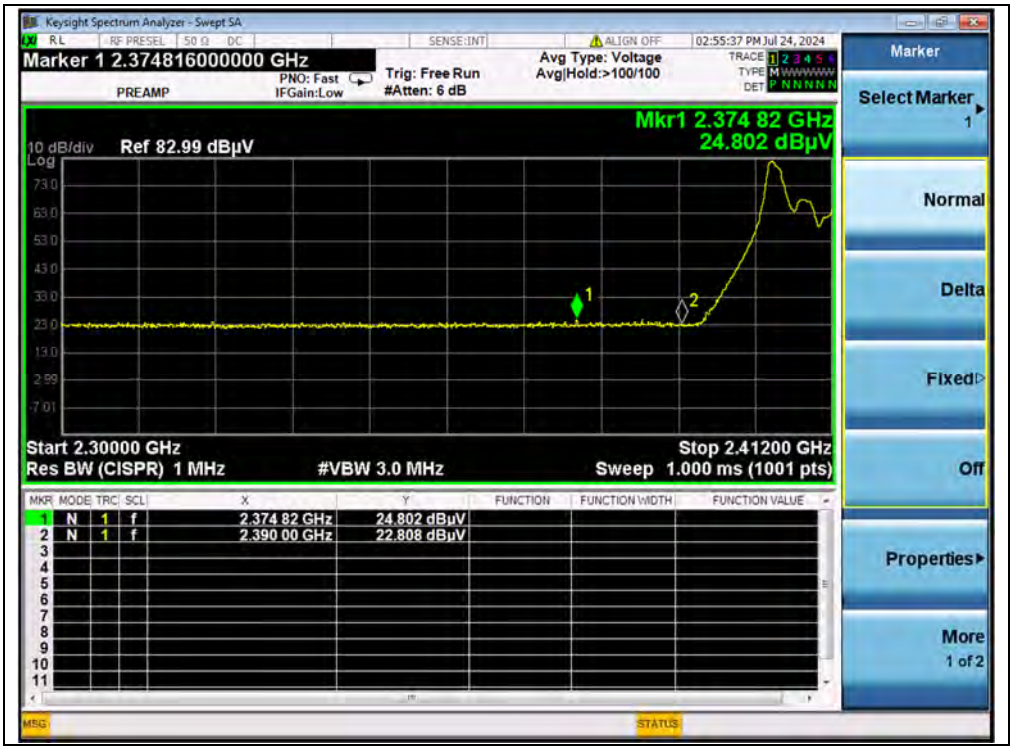
(AVERAGE, Channel 3, 802.11ax (HEW40))

(PEAK, Channel 11, 802.11ax (HEW40))

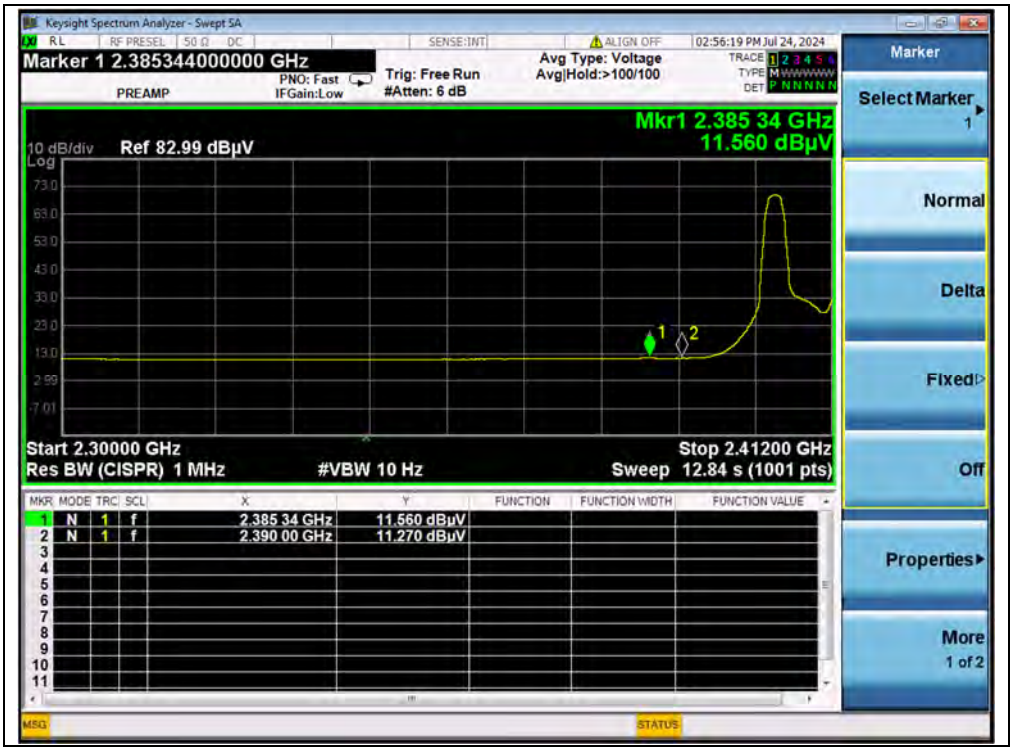
(AVERAGE, Channel 11, 802.11ax (HEW40))

802.11ax (HEW20) RU26 Mode

Channel	Frequency (MHz)	Detector PK/ AV	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
1	2374.82	PK	24.80	6.74	27.20	58.74	74	PASS
1	2385.34	AV	11.56	6.74	27.20	45.50	54	PASS
13	2483.50	PK	33.75	6.74	27.20	67.69	74	PASS
13	2483.50	AV	13.85	6.74	27.20	47.79	54	PASS

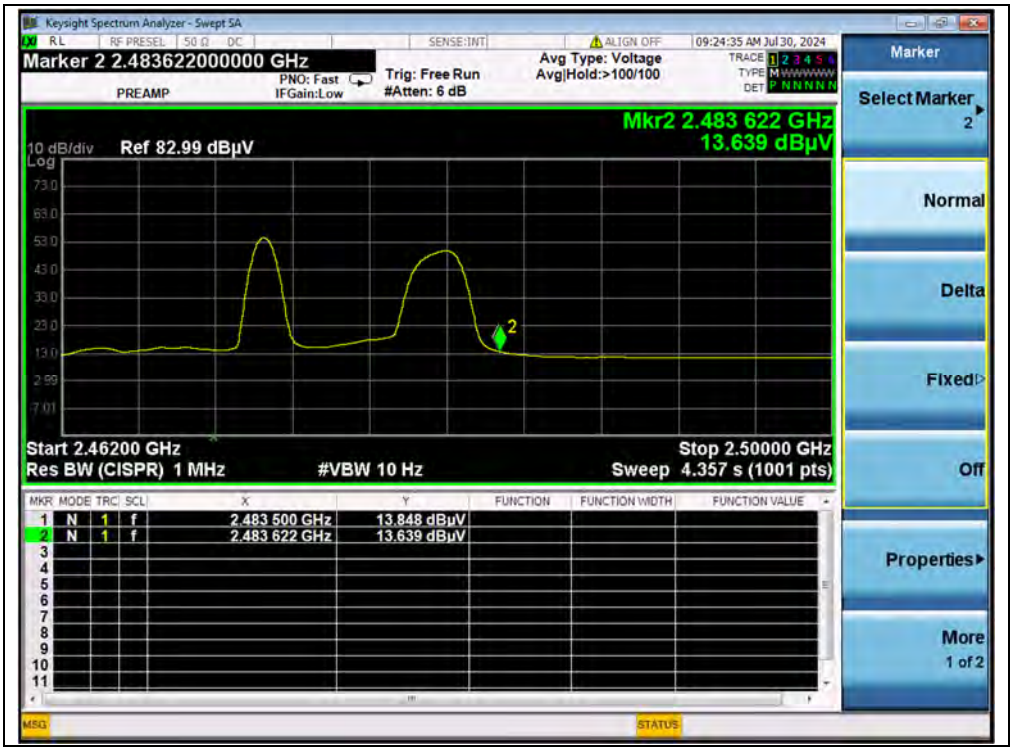


(PEAK, Channel 1, 802.11ax (HEW20) RU26)



(AVERAGE, Channel 1, 802.11ax (HEW20) RU26)

(PEAK, Channel 13, 802.11ax (HEW20) RU26)



(AVERAGE, Channel 13, 802.11ax (HEW20) RU26)

A.10. 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 [dBμV/m] $=U_R + A_T + A_{Factor}$ [dB]; $A_T = L_{Cable\ loss}$ [dB]$-G_{preamp}$ [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 (X axis) test condition was recorded in this test report.

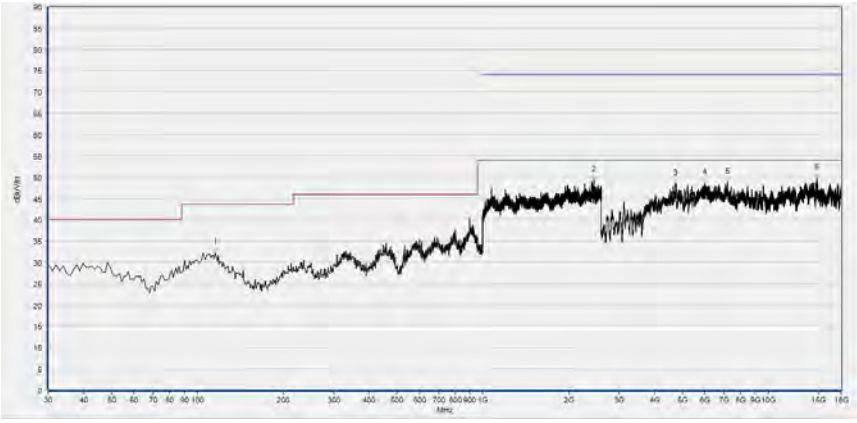
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, 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.

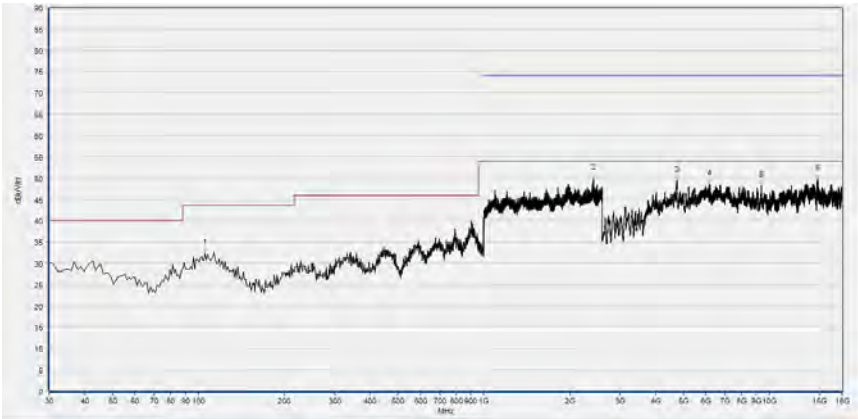
802.11b Mode

Plot for Channel 1



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
115.360	32.23	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2450.667	49.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4734.440	48.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6003.400	48.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7179.960	48.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14821.440	49.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

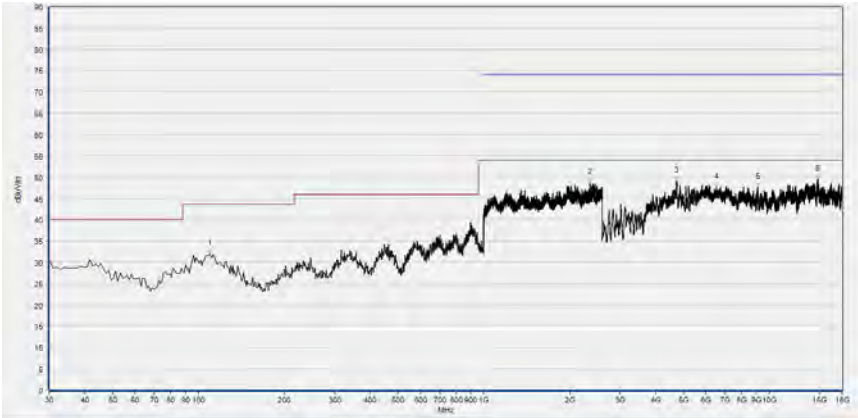
(Antenna Horizontal, 30MHz to 18GHz)



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
105.660	32.35	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2420.800	49.93	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4746.760	49.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6175.880	48.67	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9372.920	48.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14766.000	49.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

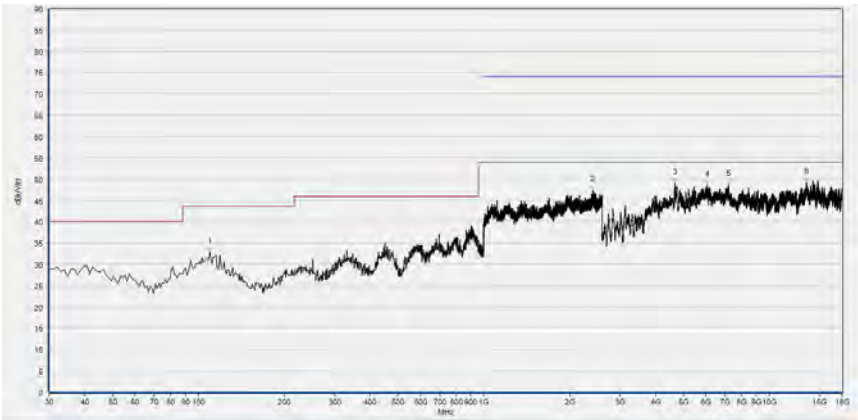
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
109.540	31.96	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2350.933	48.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4740.600	49.17	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6533.160	47.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9108.040	47.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14766.000	49.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

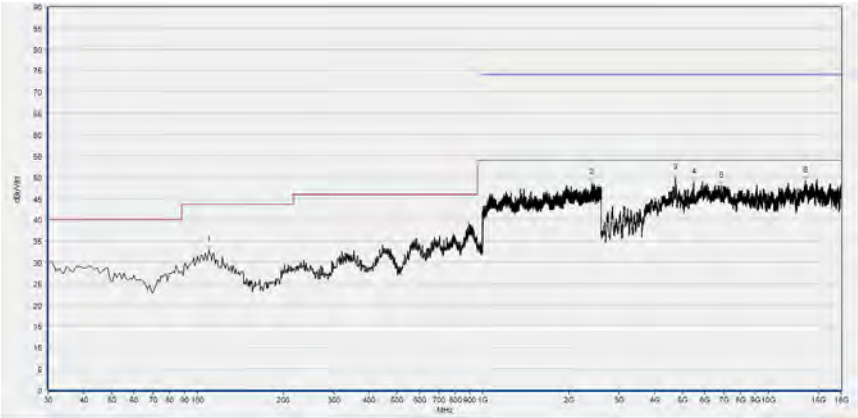
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	32.78	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2406.400	47.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4660.520	49.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6061.920	48.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7216.920	48.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13472.400	49.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

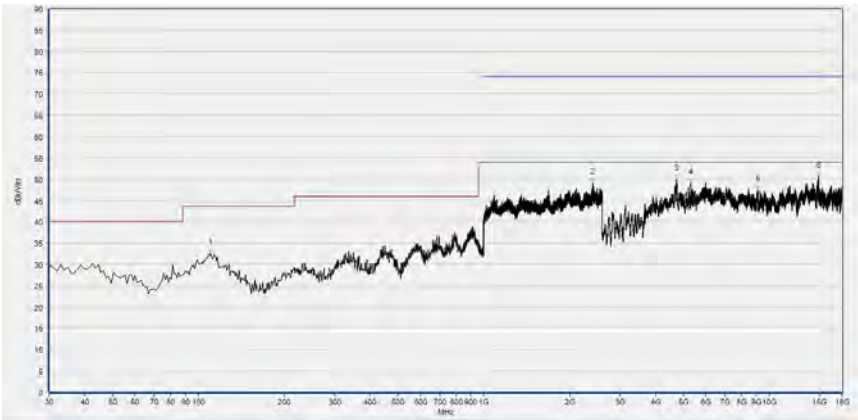
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 13



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
109.540	32.79	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2410.133	48.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	49.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5476.720	48.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6831.920	47.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13509.360	49.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

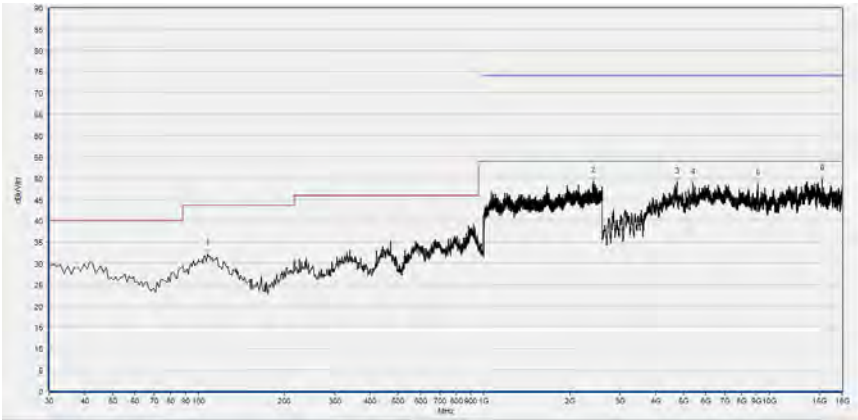


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	32.57	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2404.800	49.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4737.520	49.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5319.640	49.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9095.720	47.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14855.320	50.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

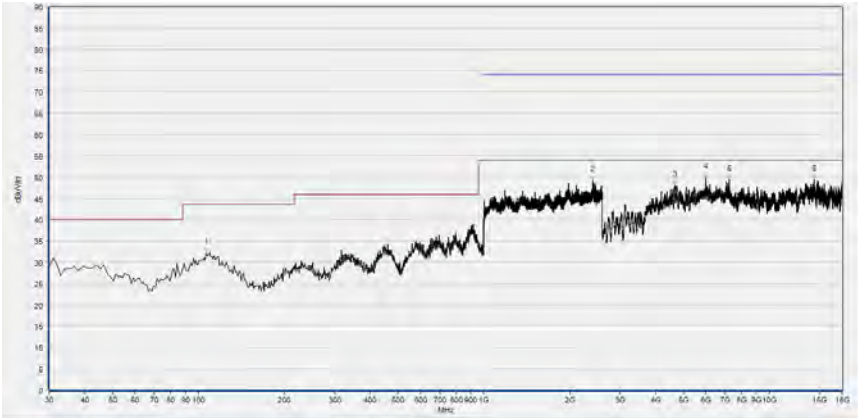
802.11g Mode

Plot for Channel 1



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
107.600	32.10	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2417.600	49.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4743.680	49.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5396.640	48.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9095.720	48.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
15326.560	49.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

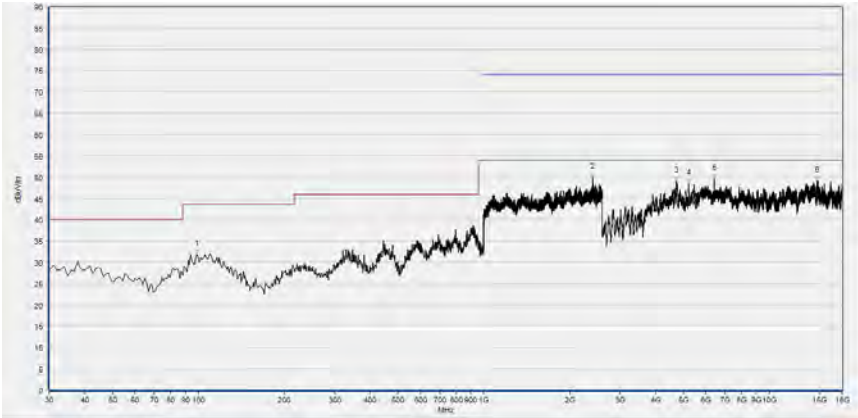
(Antenna Horizontal, 30MHz to 18GHz)



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
106.630	32.16	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2406.400	49.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4660.520	48.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5991.080	49.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7226.160	49.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14381.000	49.47	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

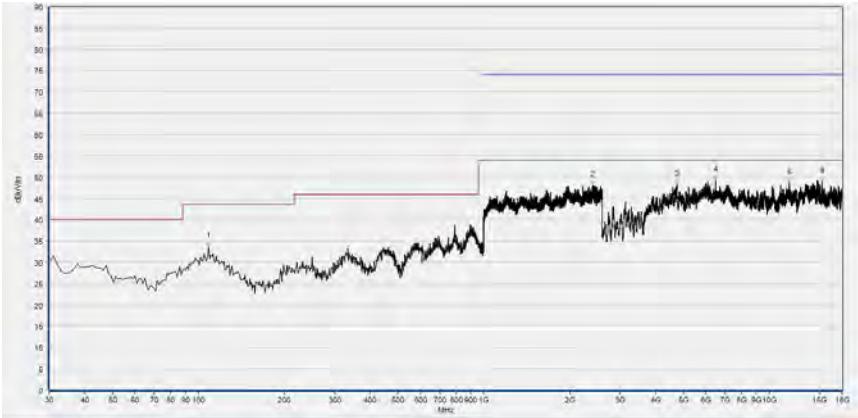
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
98.870	31.78	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2413.333	49.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4731.360	49.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5221.080	48.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6406.880	49.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14753.680	49.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

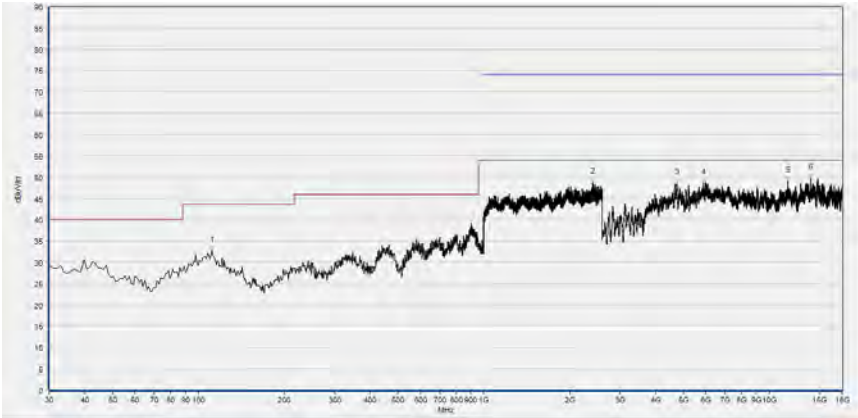
(Antenna Horizontal, 30MHz to 18GHz)



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
108.570	33.76	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2409.600	48.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4746.760	48.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6486.960	49.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11775.320	48.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
15332.720	48.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

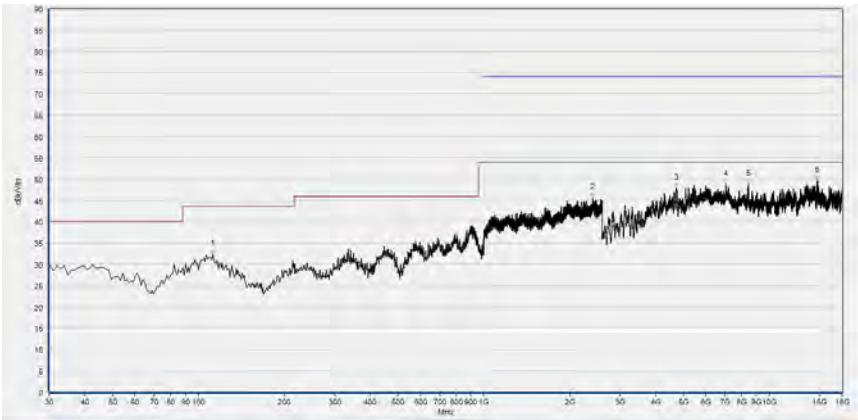
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 13



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
111.480	32.64	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.600	48.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4743.680	48.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5886.360	48.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11587.440	49.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13971.360	49.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

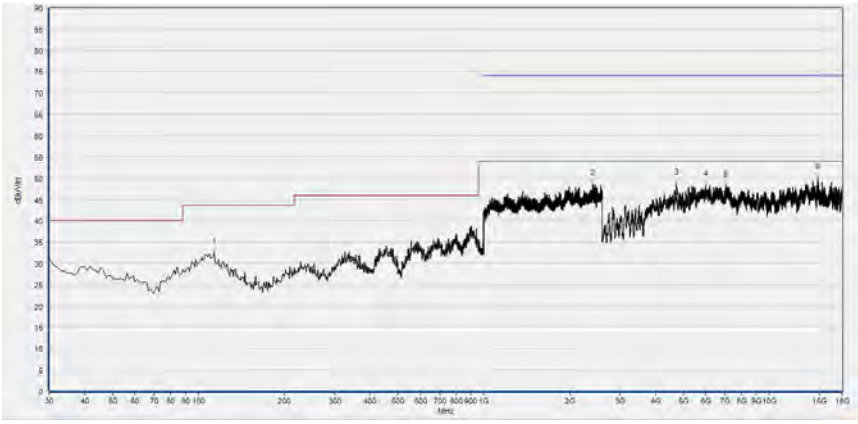


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
112.450	32.28	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2412.267	45.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4740.600	47.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7053.680	48.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8436.600	48.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14750.600	49.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

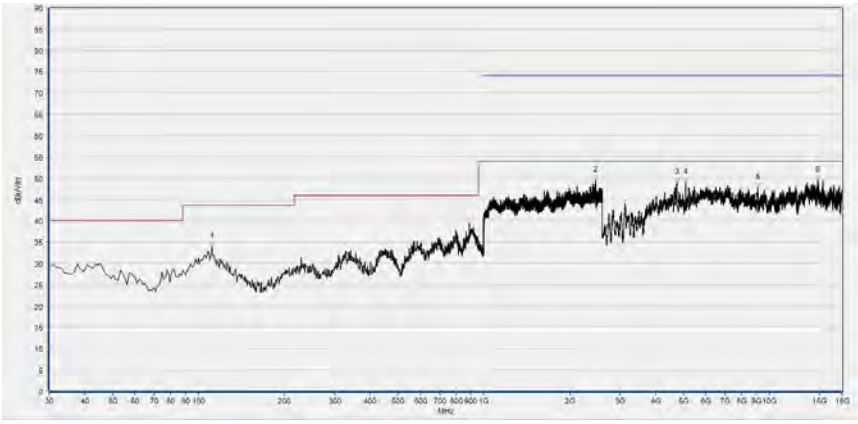
802.11n (HT20) Mode

Plot for Channel 1



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
113.420	32.59	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2410.133	48.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4728.280	48.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5988.000	48.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7047.520	48.30	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14766.000	50.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

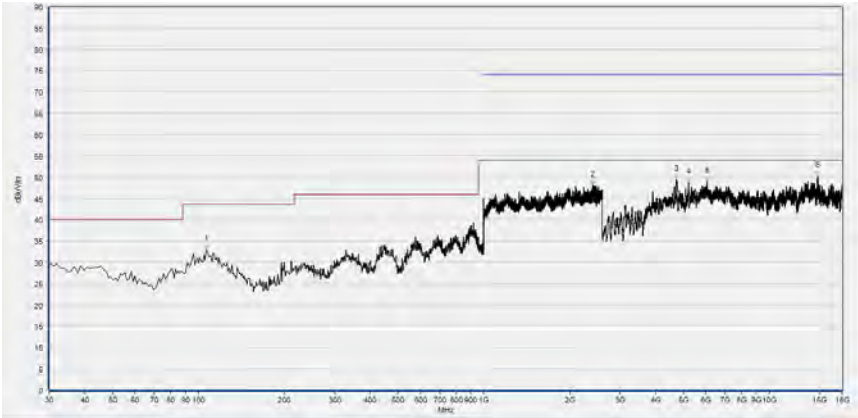
(Antenna Horizontal, 30MHz to 18GHz)



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
111.480	33.81	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2460.800	49.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4743.680	48.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5097.880	48.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9111.120	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14796.800	49.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

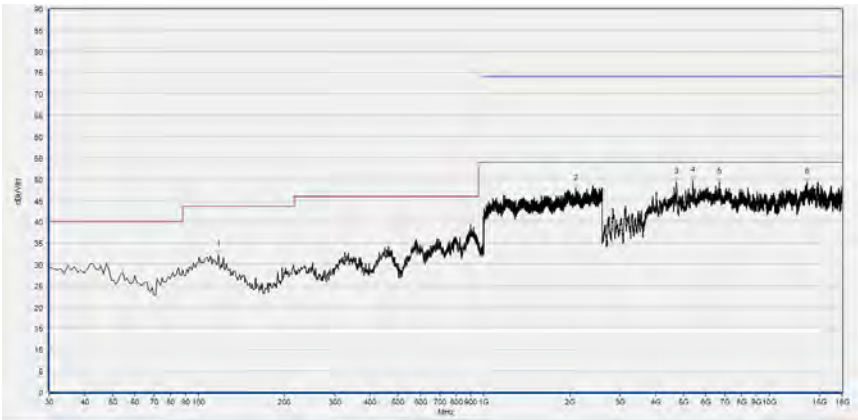
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
106.630	33.06	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2405.867	48.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4731.360	49.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5218.000	48.79	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6043.440	48.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14793.720	50.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

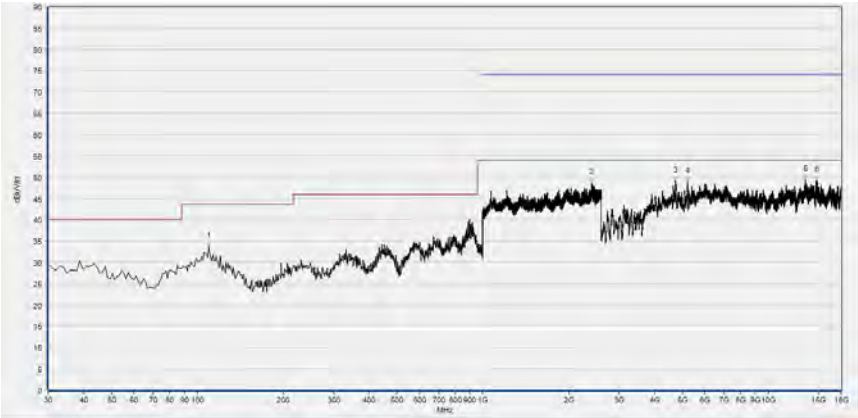
(Antenna Horizontal, 30MHz to 18GHz)



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
117.300	32.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2093.867	47.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4737.520	49.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5390.480	49.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6687.160	49.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13570.960	49.30	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

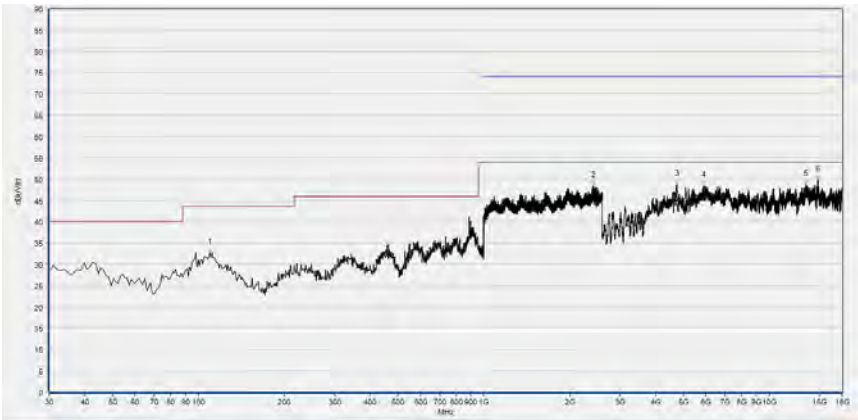
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 13



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
109.540	33.73	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2410.133	48.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4740.600	49.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5218.000	49.01	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13497.040	49.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14818.360	49.19	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

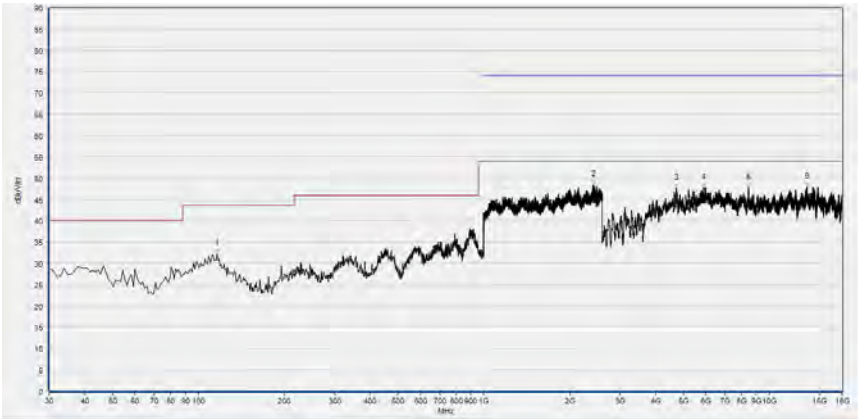


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	32.75	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2417.600	48.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4743.680	48.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5874.040	48.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13453.920	48.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14778.320	49.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

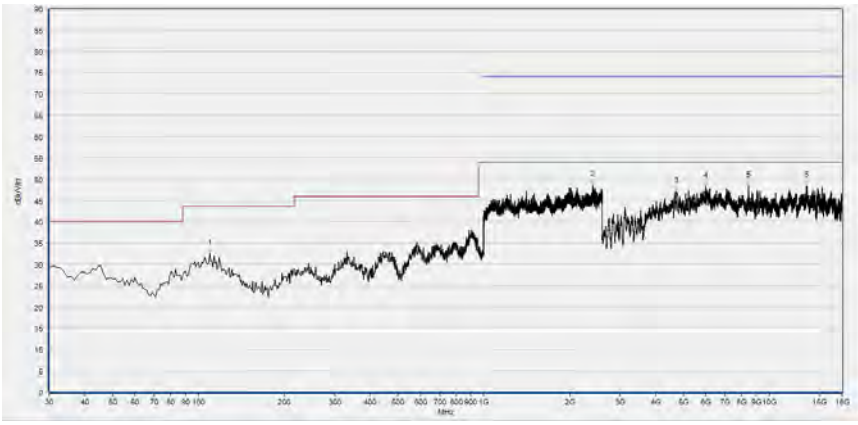
802.11n (HT40) Mode

Plot for Channel 3



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
116.330	32.21	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2417.600	48.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	47.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5889.440	47.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8464.320	47.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13574.040	47.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

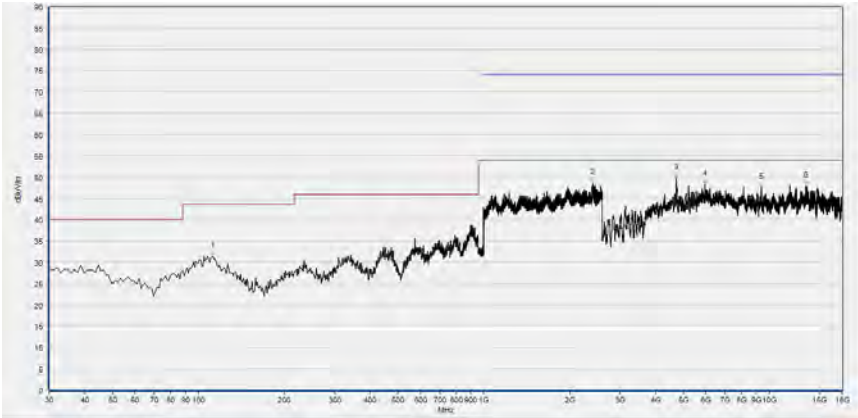
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	32.44	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2414.400	48.61	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4731.360	47.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5997.240	48.28	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8467.400	48.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13460.080	48.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

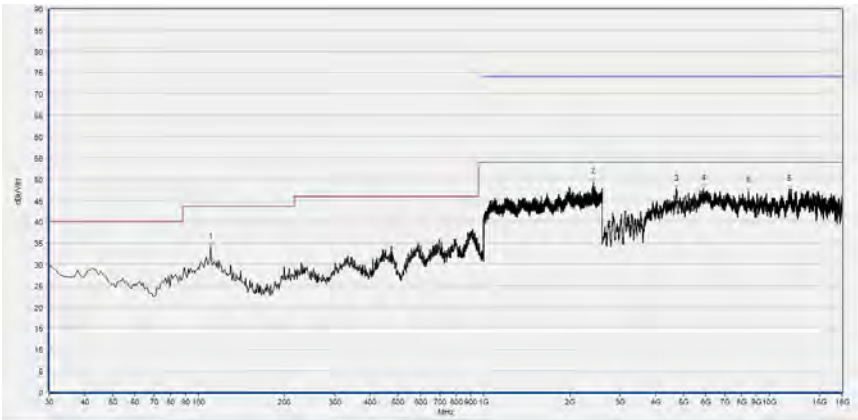
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
112.450	31.36	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.600	48.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4734.440	49.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5954.120	48.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9379.080	47.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13453.920	47.93	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

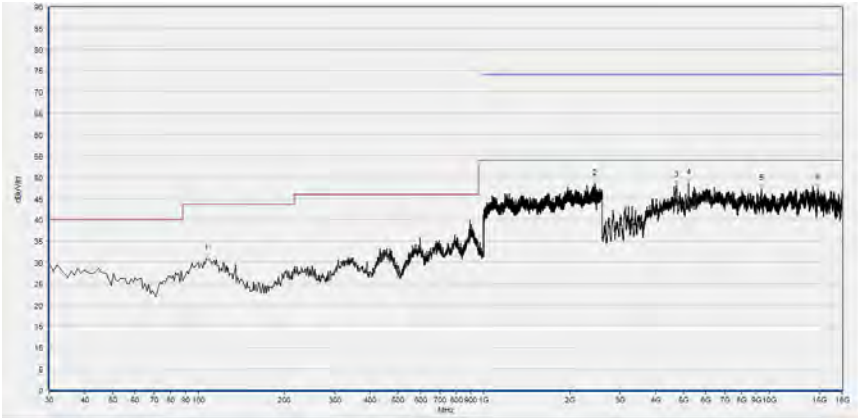
(Antenna Horizontal, 30MHz to 18GHz)



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
110.510	34.09	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2417.067	49.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4728.280	47.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5886.360	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8442.760	47.15	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11766.080	47.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

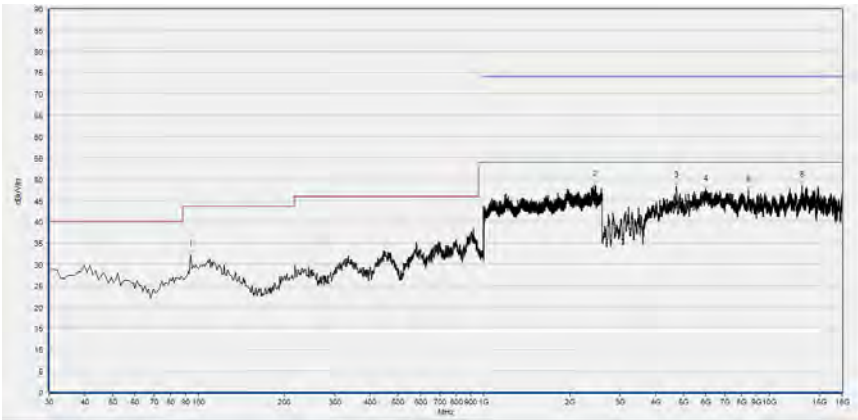
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



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
106.630	30.78	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2452.267	48.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4740.600	48.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5221.080	48.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9366.760	47.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14818.360	47.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

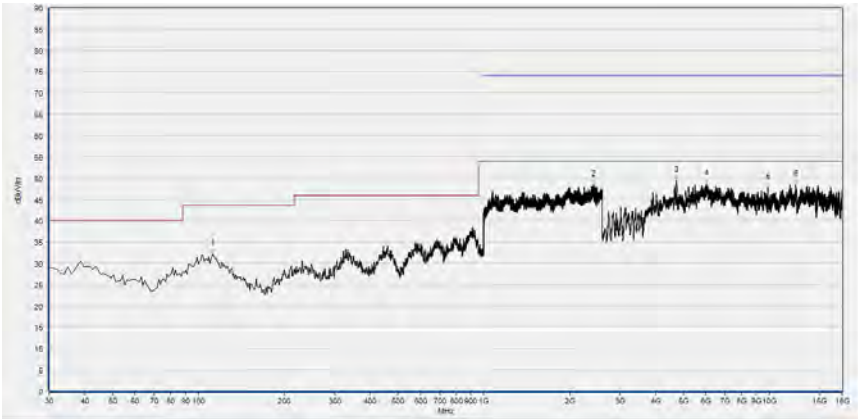


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
94.020	32.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2457.600	48.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4734.440	48.50	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6003.400	47.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8445.840	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13053.520	48.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

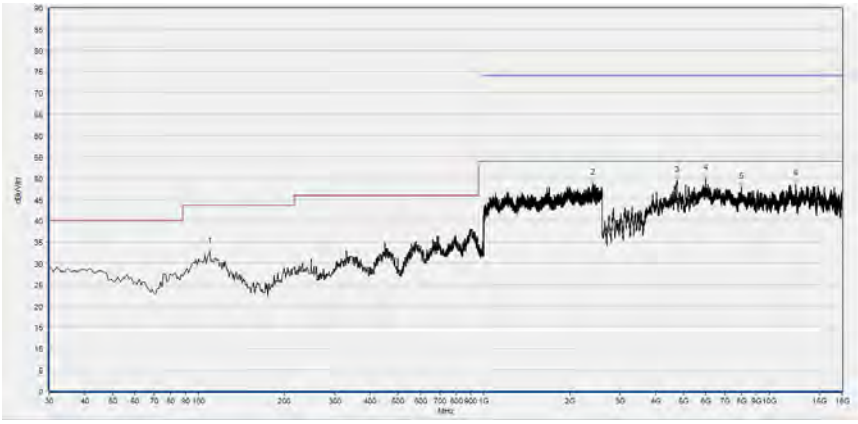
802.11ax (HEW20) Mode

Plot for Channel 1



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
112.450	32.17	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2416.000	48.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4734.440	49.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6018.800	48.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9905.760	47.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12400.560	48.51	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

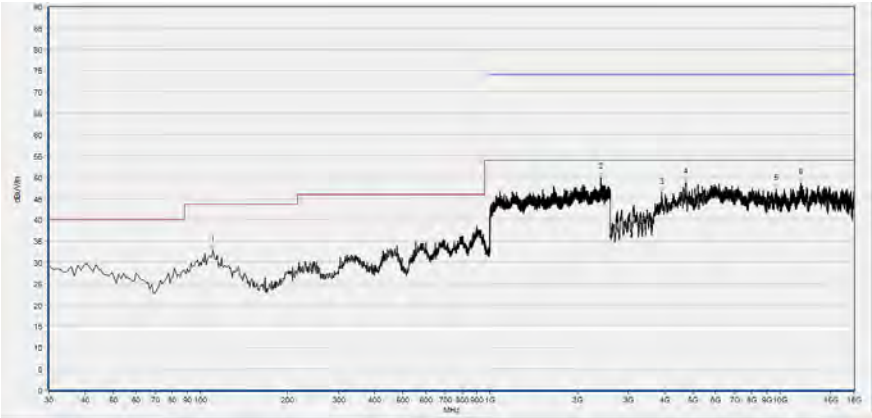
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	32.64	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2413.333	48.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4749.840	49.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5978.760	49.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8002.320	47.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12406.720	48.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

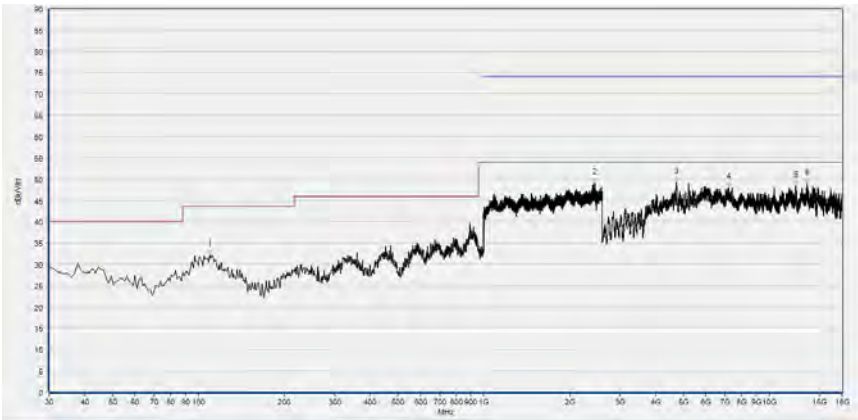
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
110.510	32.83	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2415.467	49.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3915.160	46.47	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	48.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9742.520	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11796.880	48.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

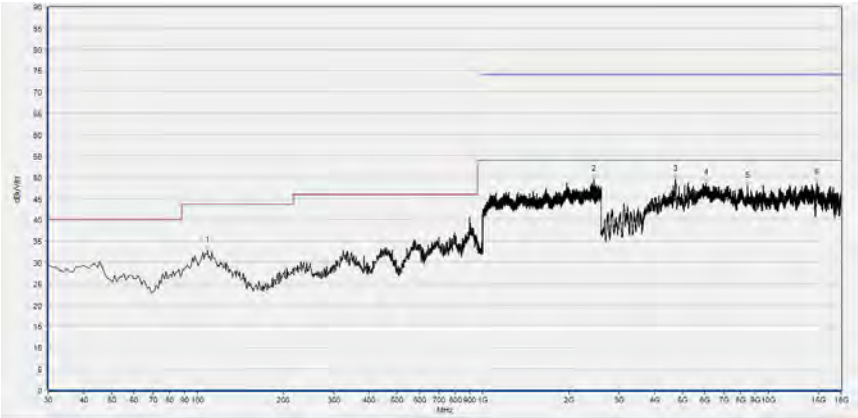
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	32.23	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2452.800	49.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4737.520	49.33	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7189.200	48.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12394.400	48.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13589.440	48.99	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

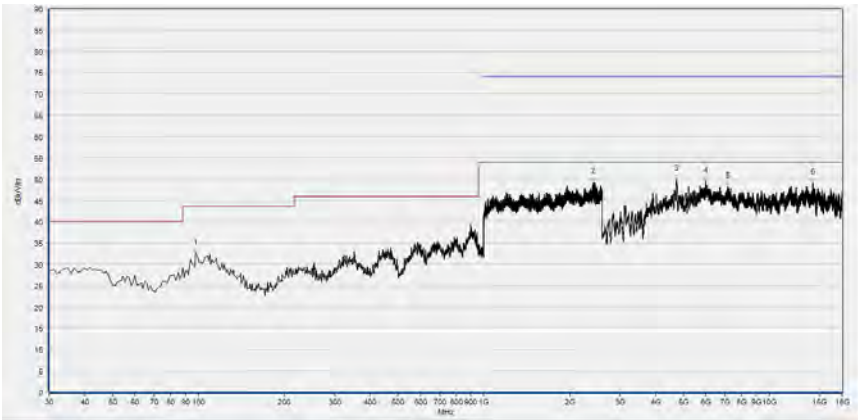
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 13



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
108.570	32.76	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2453.867	49.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4734.440	49.44	N/A	N/A	74.00	N/A	54.00	Horizontal	N/A
6065.000	48.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8467.400	47.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14781.400	48.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

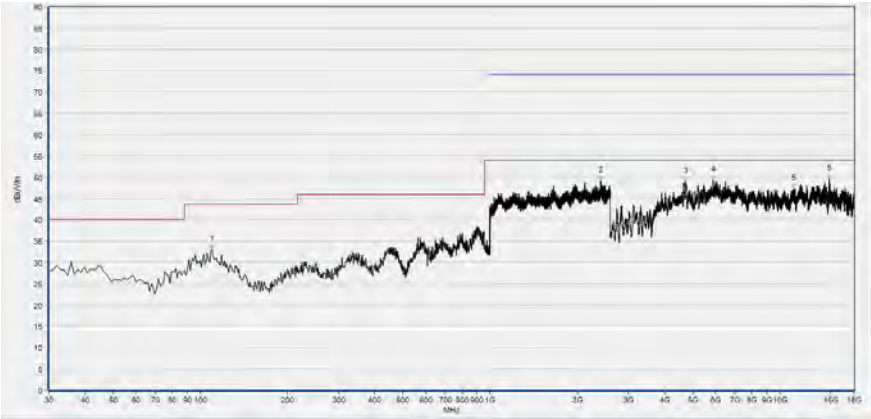


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
97.900	32.49	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2418.667	49.33	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4740.600	49.98	N/A	N/A	74.00	N/A	54.00	Vertical	N/A
5981.840	49.41	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7161.480	48.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14180.800	49.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

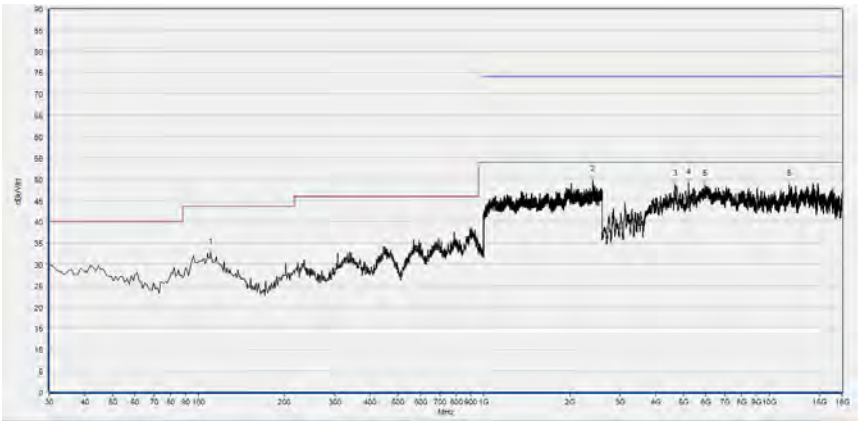
802.11ax (HEW40) Mode

Plot for Channel 3



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
109.540	32.96	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2412.267	49.09	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4728.280	48.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5874.040	49.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11162.400	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14821.440	49.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

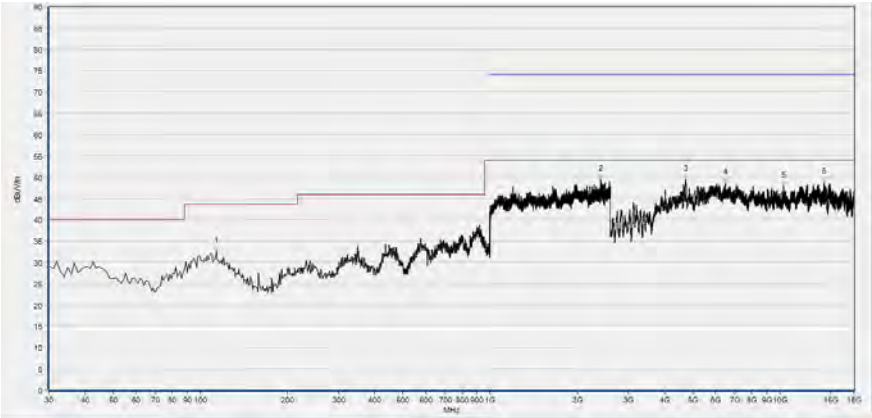
(Antenna Horizontal, 30MHz to 18GHz)



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
110.510	32.71	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2406.400	49.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4660.520	48.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5218.000	49.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5969.520	48.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11784.560	48.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

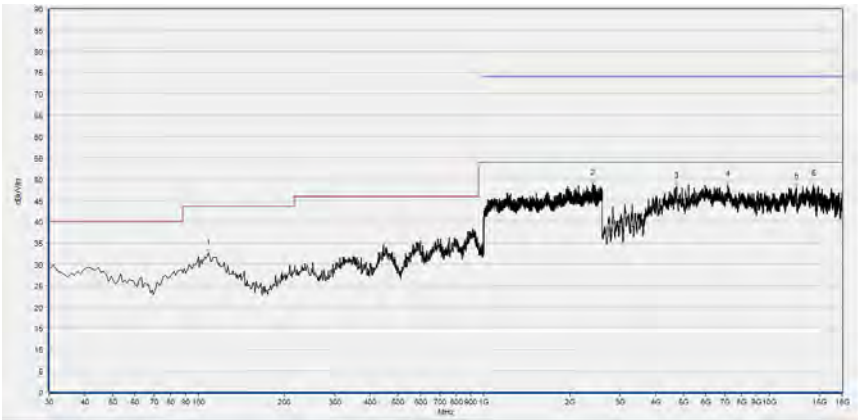
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
113.420	32.56	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2412.800	49.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	49.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6493.120	48.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10287.680	47.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14193.120	48.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

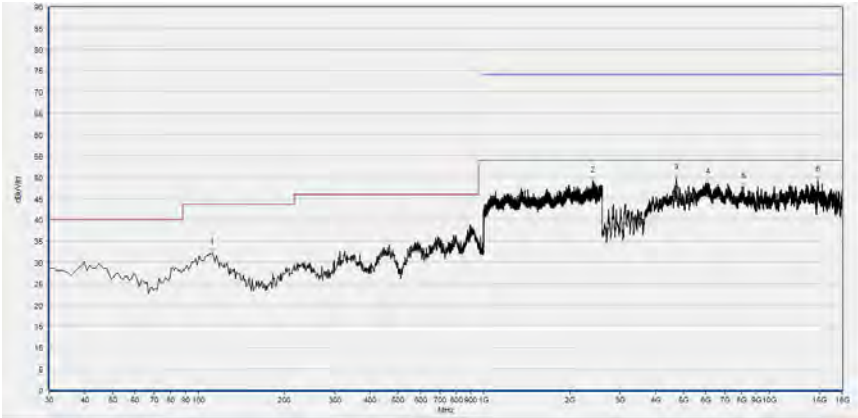
(Antenna Horizontal, 30MHz to 18GHz)



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
108.570	32.45	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2412.800	48.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4731.360	48.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7155.320	48.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12428.280	48.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14260.880	48.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

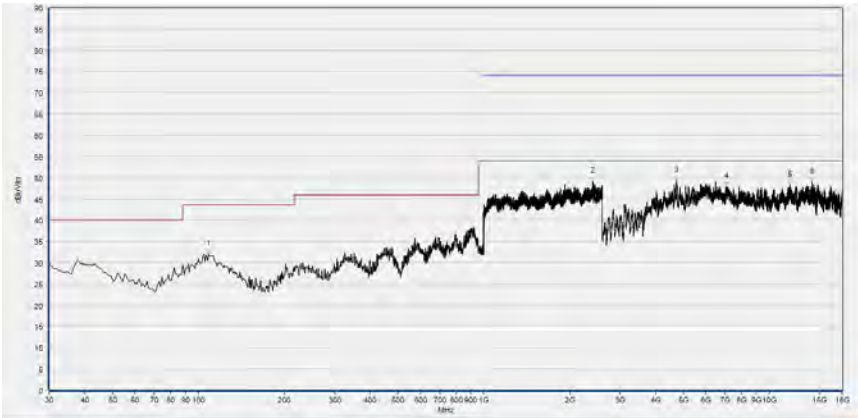
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 11



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
111.480	32.22	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2411.733	49.09	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	49.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6089.640	48.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8113.200	47.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14784.480	49.26	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

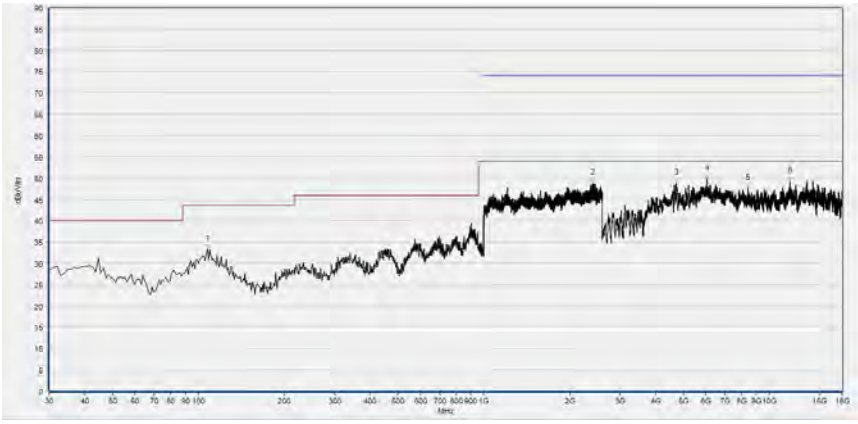


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	32.08	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2402.667	49.05	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4740.600	49.21	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7093.720	47.99	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11796.880	48.27	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14165.400	48.92	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

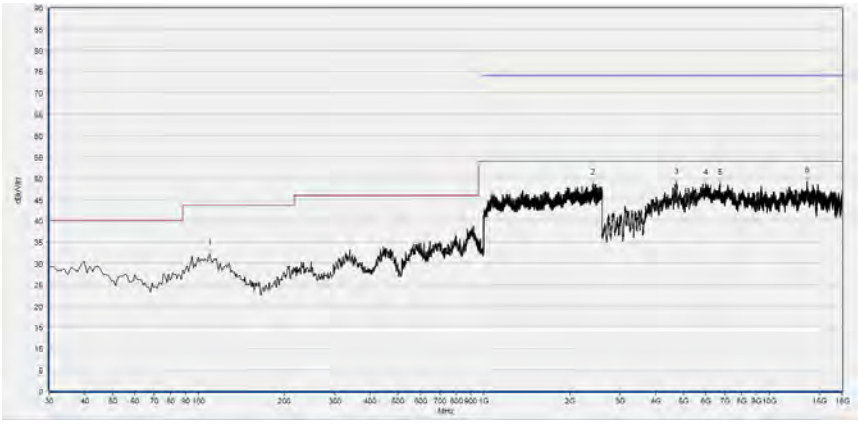
802.11ax (HEW20) RU26 Mode

Plot for Channel 1



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
107.600	33.27	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2403.200	48.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4731.360	48.73	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6049.600	49.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8433.520	47.66	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
11796.880	49.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

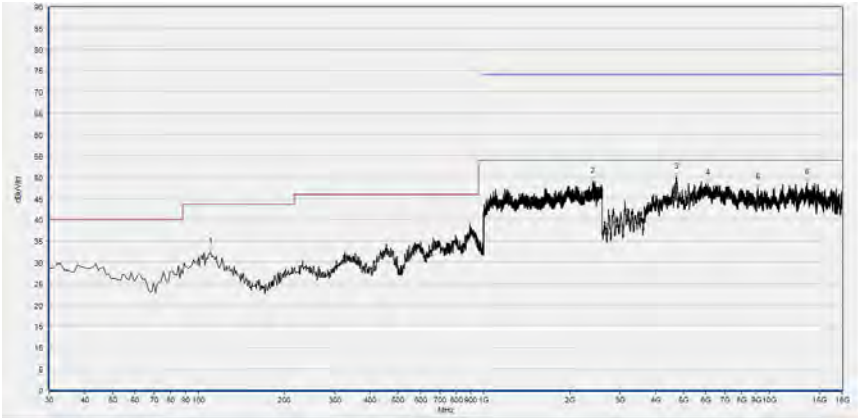
(Antenna Horizontal, 30MHz to 18GHz)



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
109.540	32.18	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2409.600	48.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4740.600	48.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5997.240	48.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6721.040	48.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13589.440	49.31	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

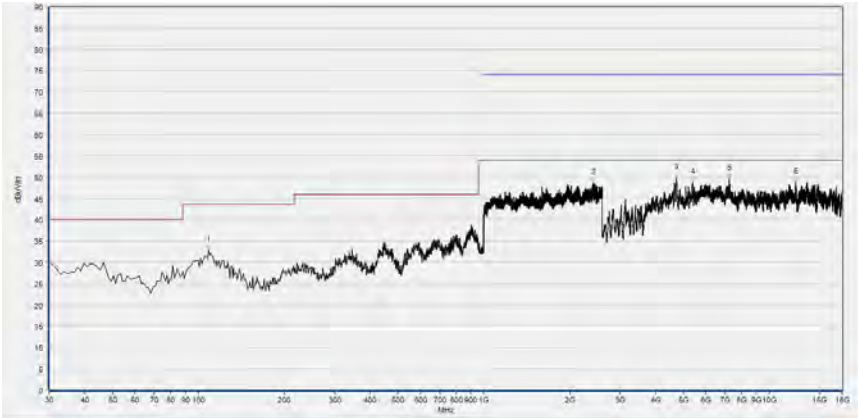
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 7



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
110.510	32.36	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2412.800	48.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4728.280	50.00	N/A	42.86	74.00	N/A	54.00	Horizontal	PASS
6089.640	48.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9138.840	47.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13586.360	48.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

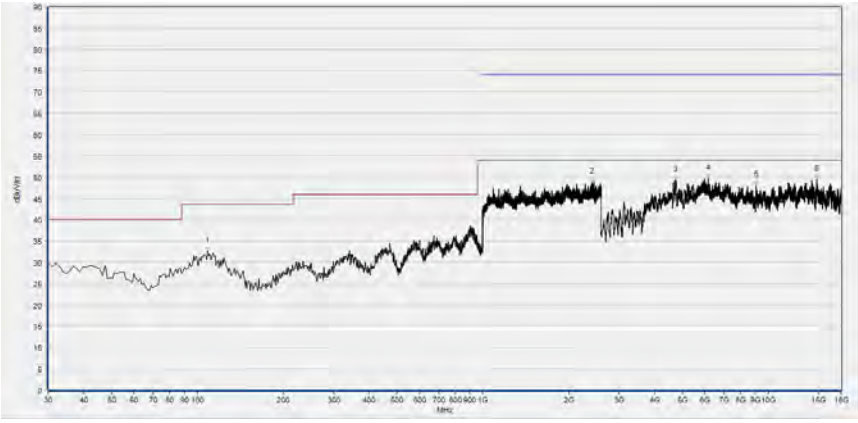
(Antenna Horizontal, 30MHz to 18GHz)



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
108.570	32.80	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2418.133	48.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4734.440	49.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5384.320	48.81	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7229.240	49.55	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12397.480	48.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

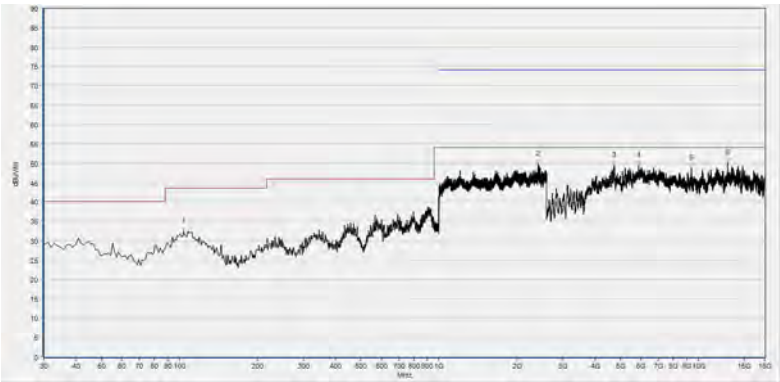
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 13



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
108.570	32.49	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.600	48.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4737.520	49.29	N/A	N/A	74.00	N/A	54.00	Horizontal	N/A
6172.800	49.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9086.480	48.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14815.280	49.45	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
103.720	32.51	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2408.533	49.75	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4737.520	49.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5874.040	49.36	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9376.000	48.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12958.040	50.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT