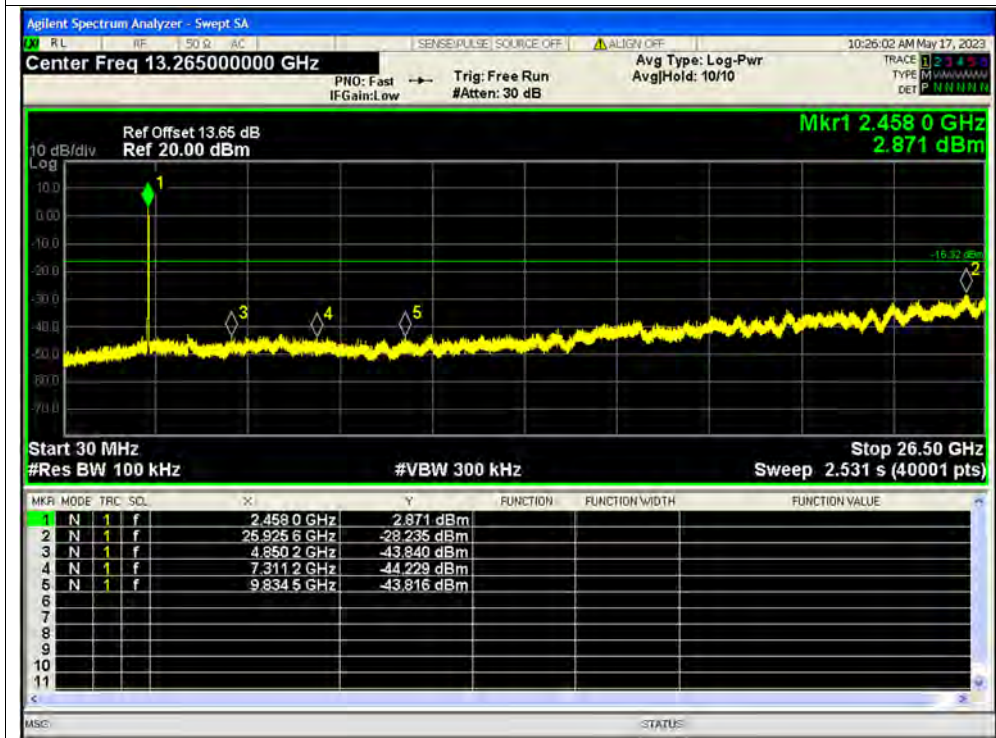




Tx. Spurious NVNT n20 2462MHz Ant1 Ref

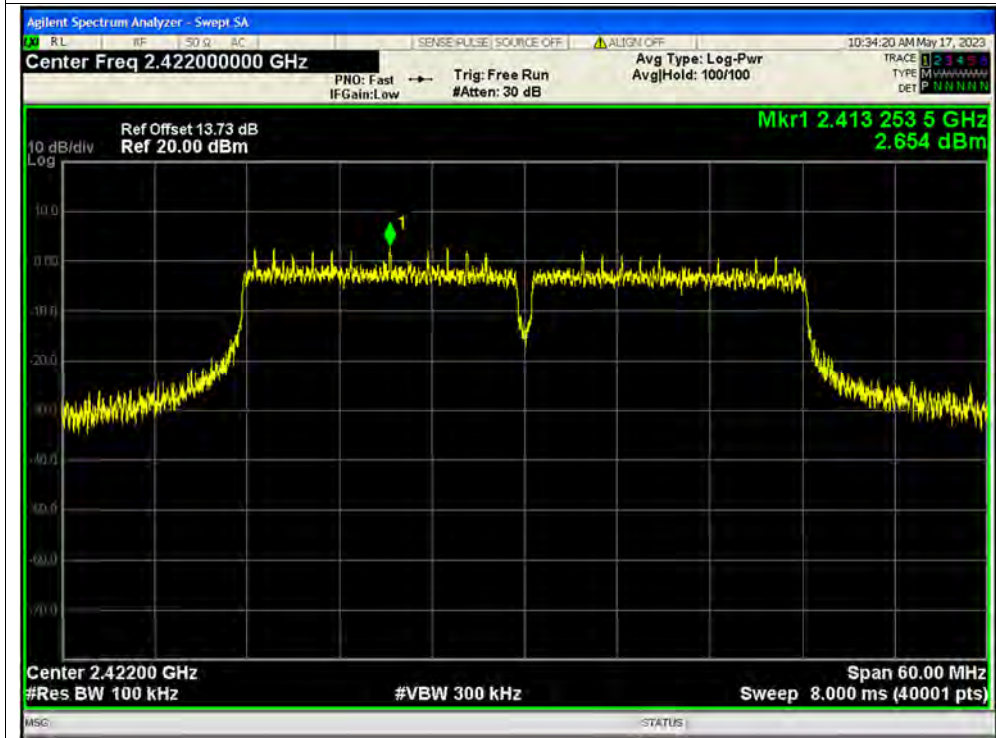


Tx. Spurious NVNT n20 2462MHz Ant1 Emission

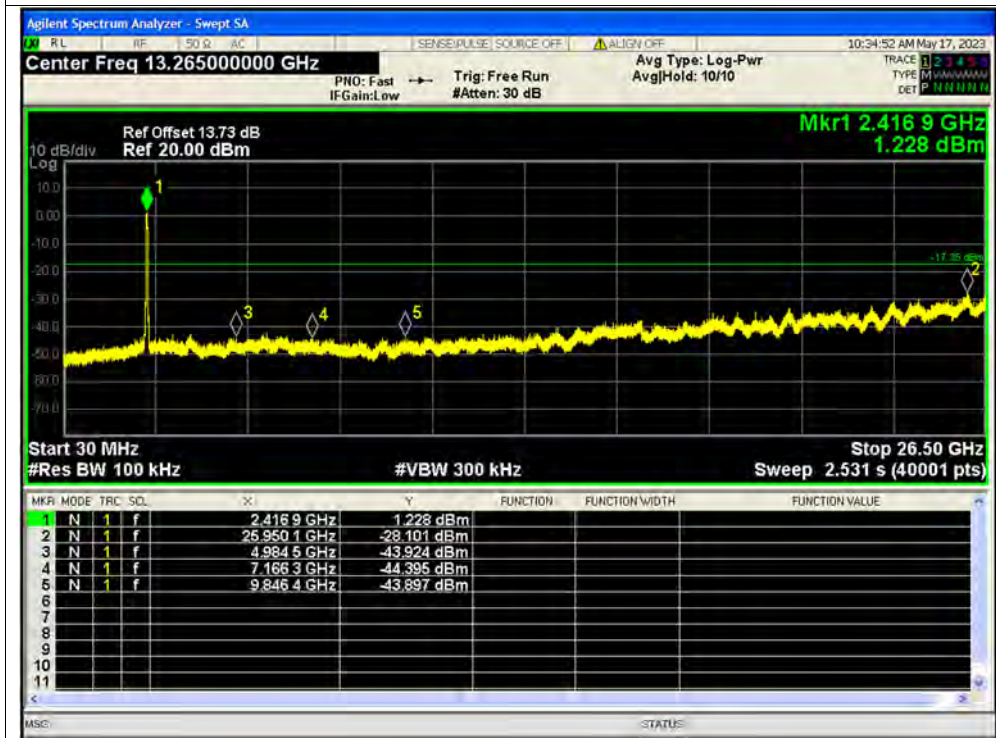




Tx. Spurious NVNT n40 2422MHz Ant1 Ref

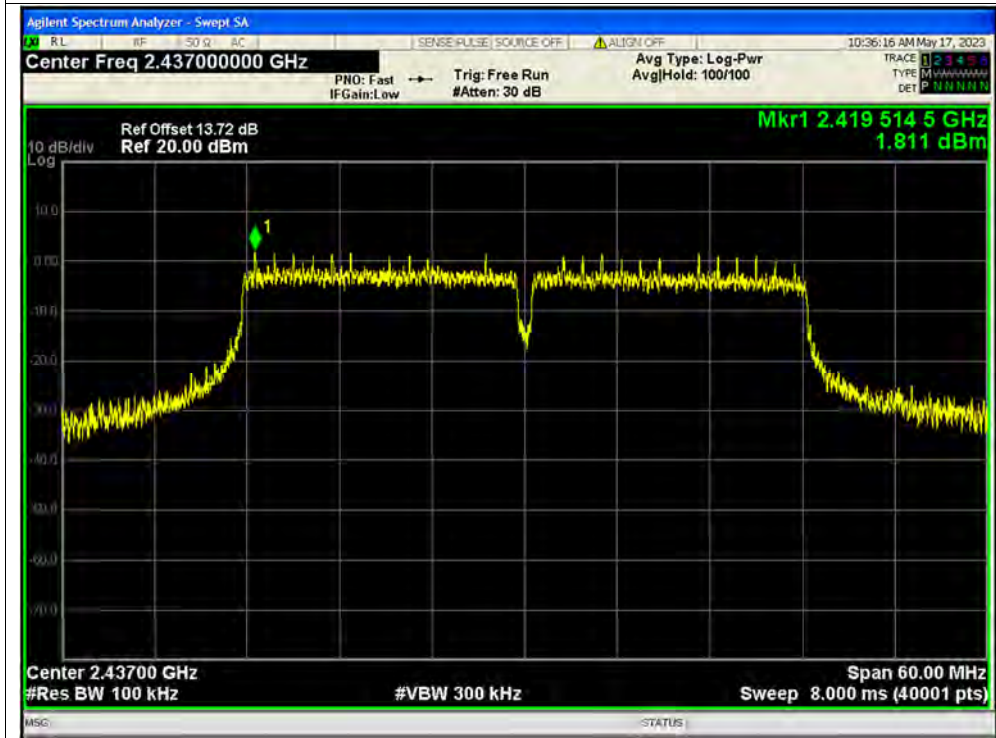


Tx. Spurious NVNT n40 2422MHz Ant1 Emission

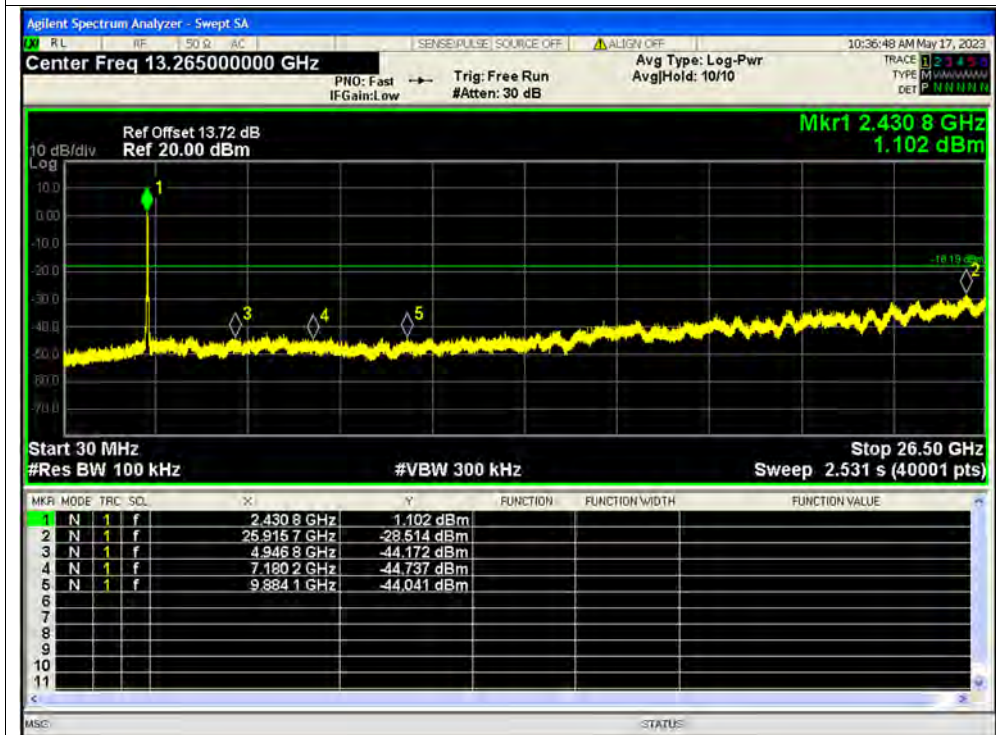




Tx. Spurious NVNT n40 2437MHz Ant1 Ref



Tx. Spurious NVNT n40 2437MHz Ant1 Emission

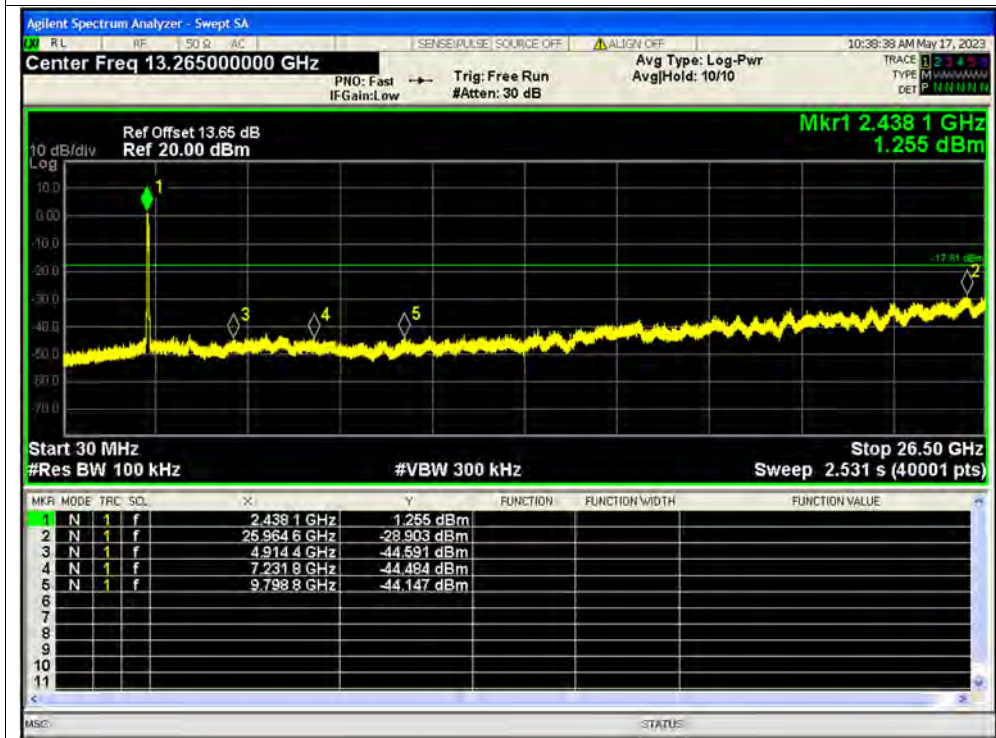




Tx. Spurious NVNT n40 2452MHz Ant1 Ref

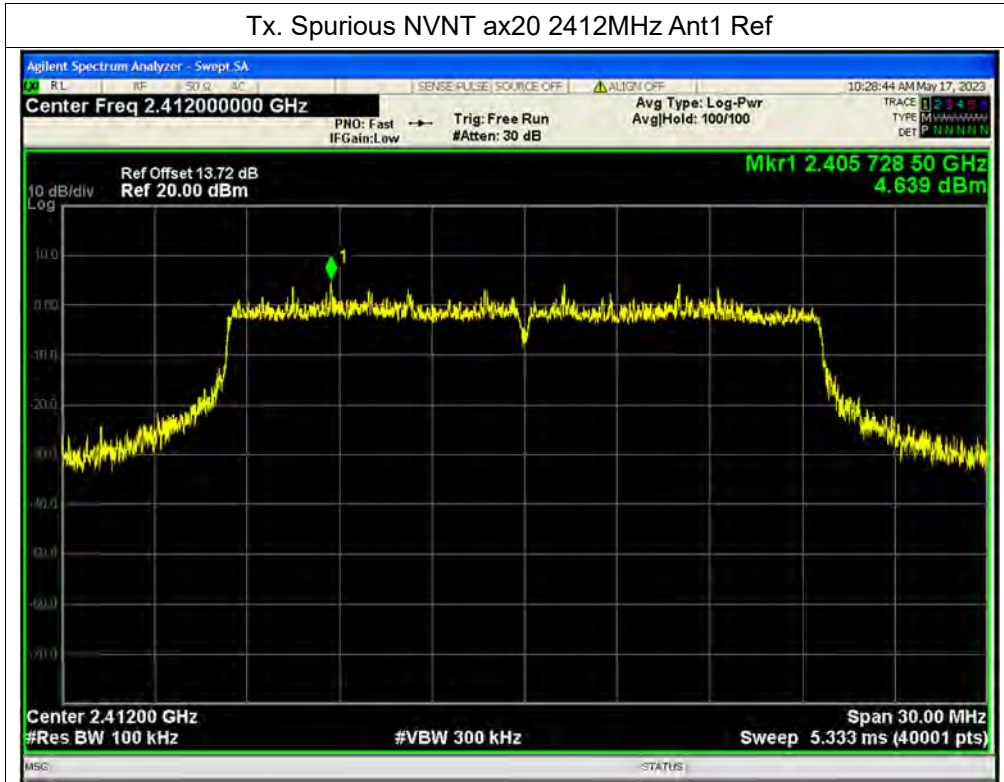


Tx. Spurious NVNT n40 2452MHz Ant1 Emission

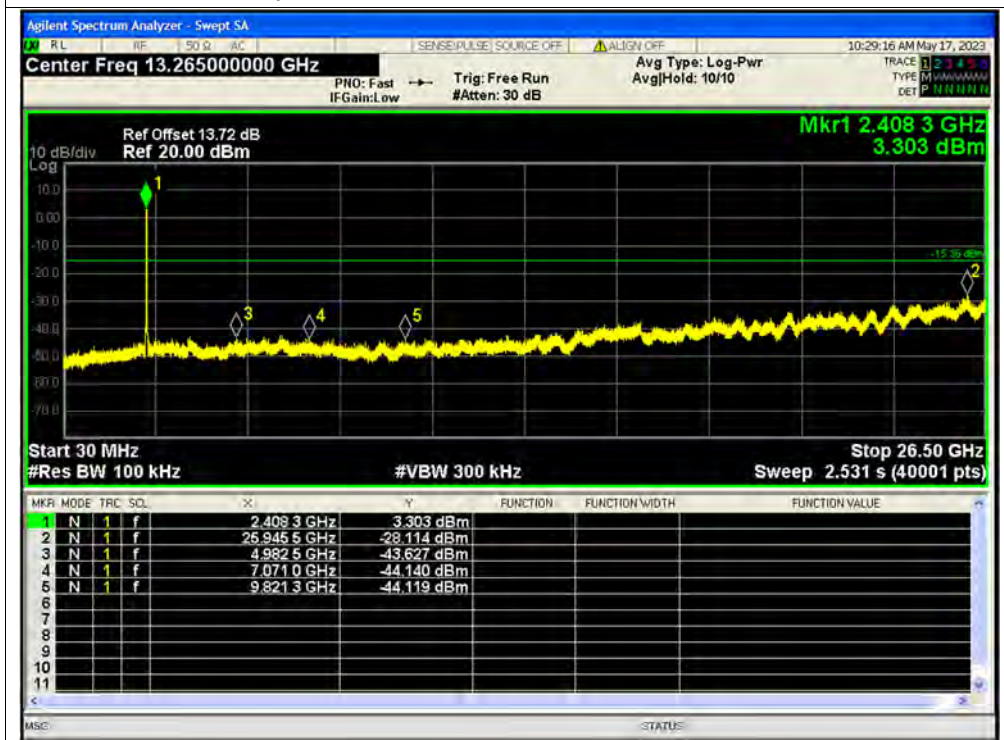




Tx. Spurious NVNT ax20 2412MHz Ant1 Ref

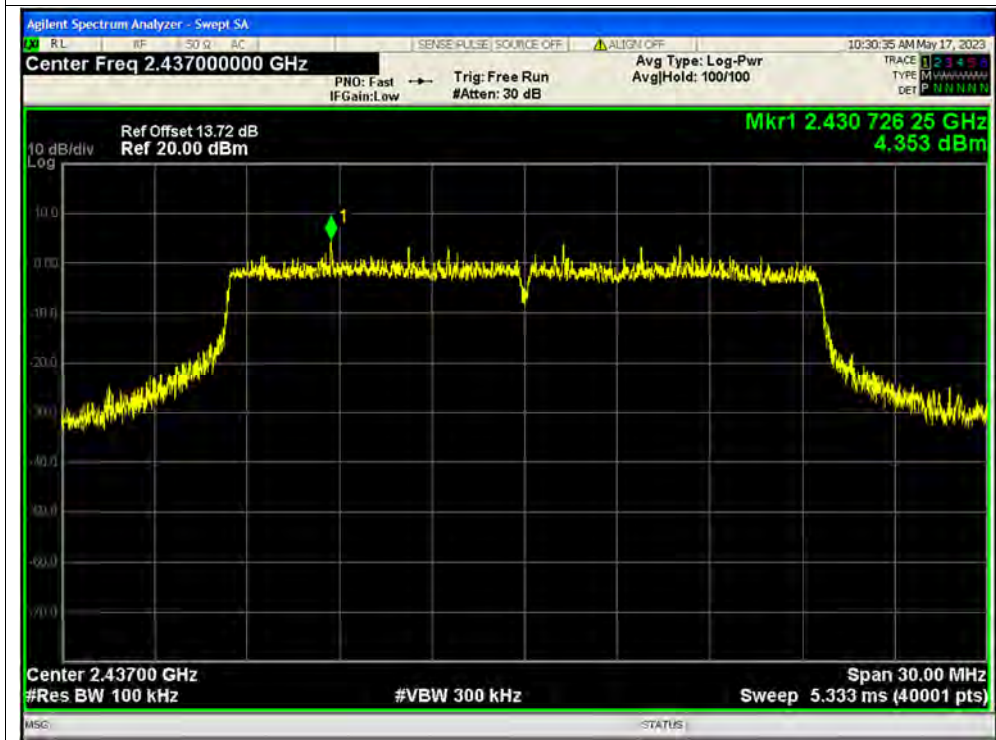


Tx. Spurious NVNT ax20 2412MHz Ant1 Emission

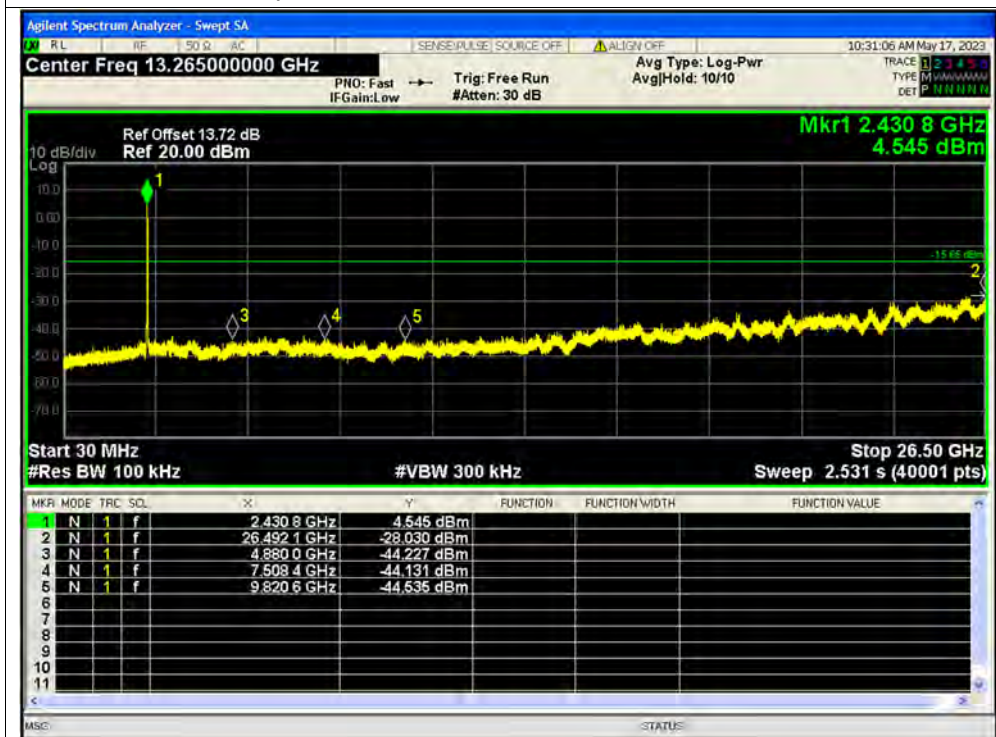




Tx. Spurious NVNT ax20 2437MHz Ant1 Ref



Tx. Spurious NVNT ax20 2437MHz Ant1 Emission

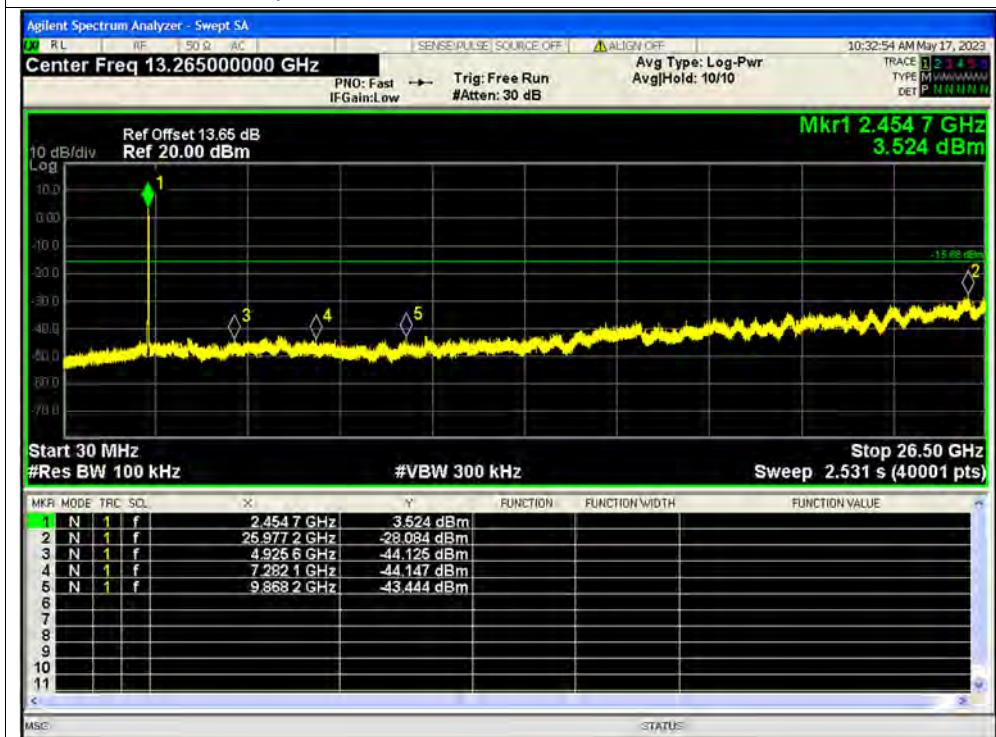




Tx. Spurious NVNT ax20 2462MHz Ant1 Ref

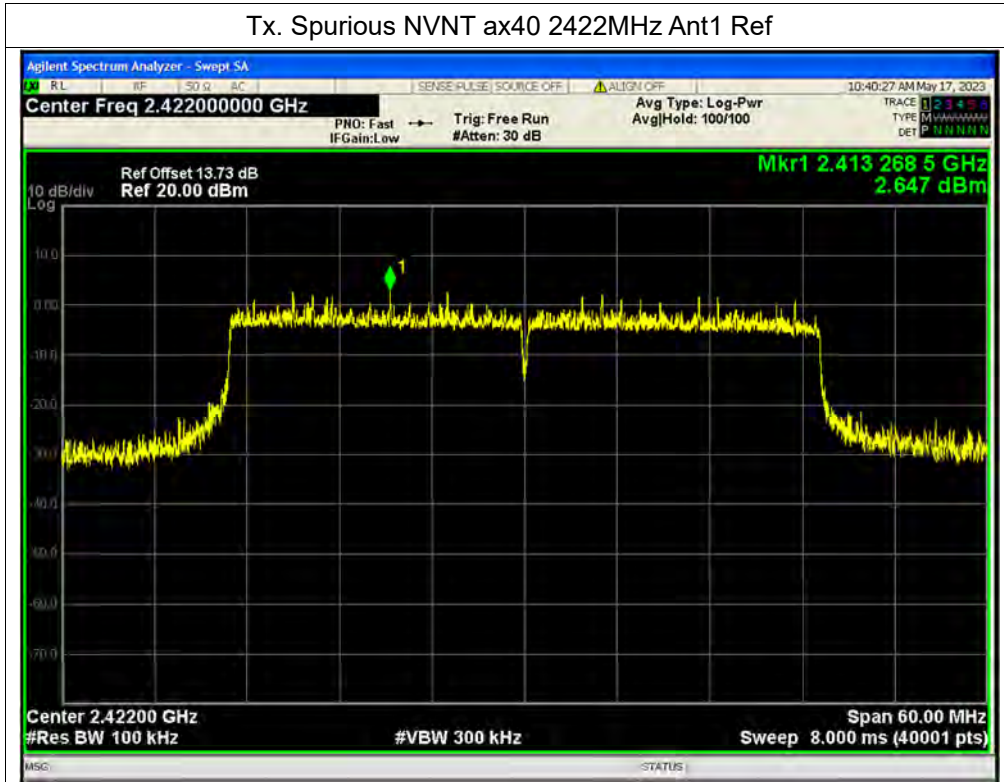


Tx. Spurious NVNT ax20 2462MHz Ant1 Emission

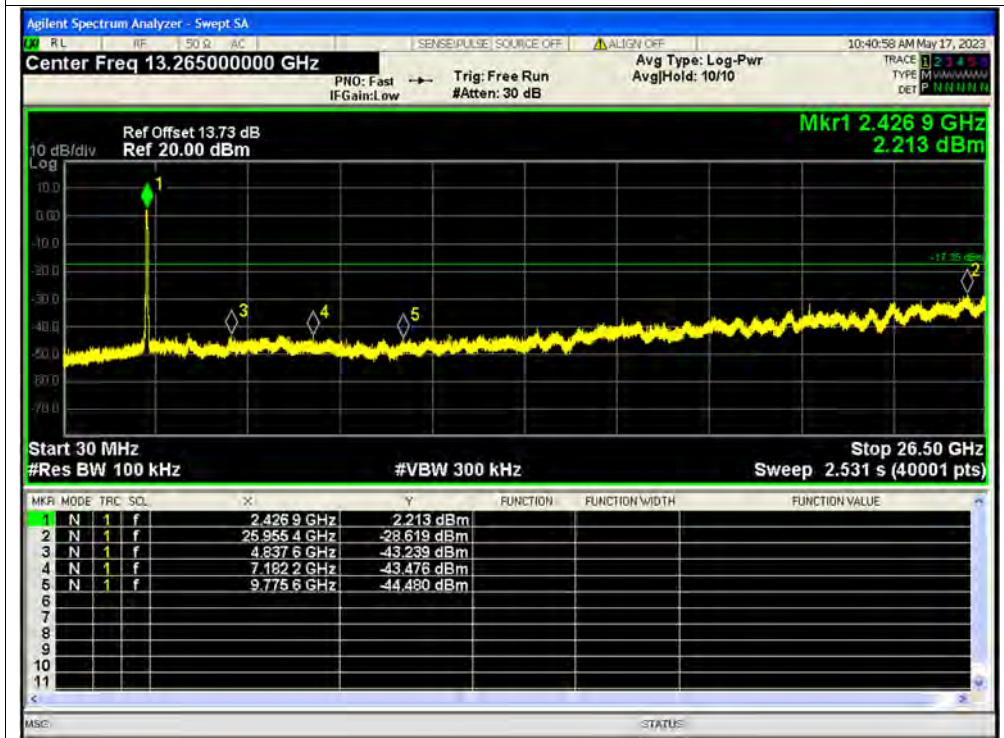




Tx. Spurious NVNT ax40 2422MHz Ant1 Ref



Tx. Spurious NVNT ax40 2422MHz Ant1 Emission

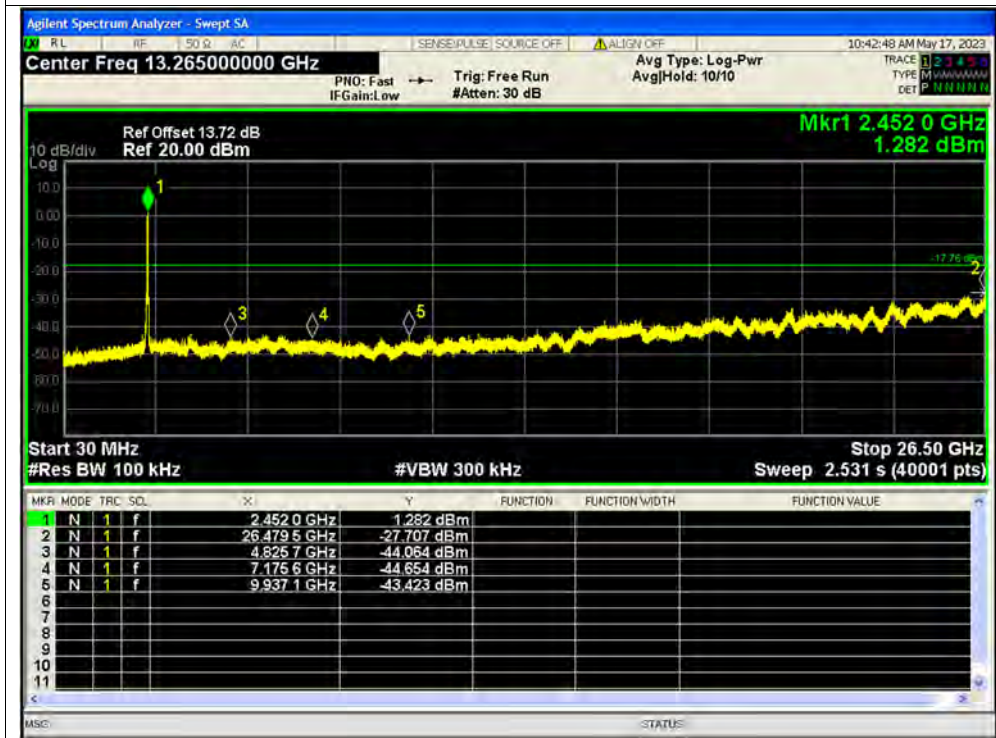




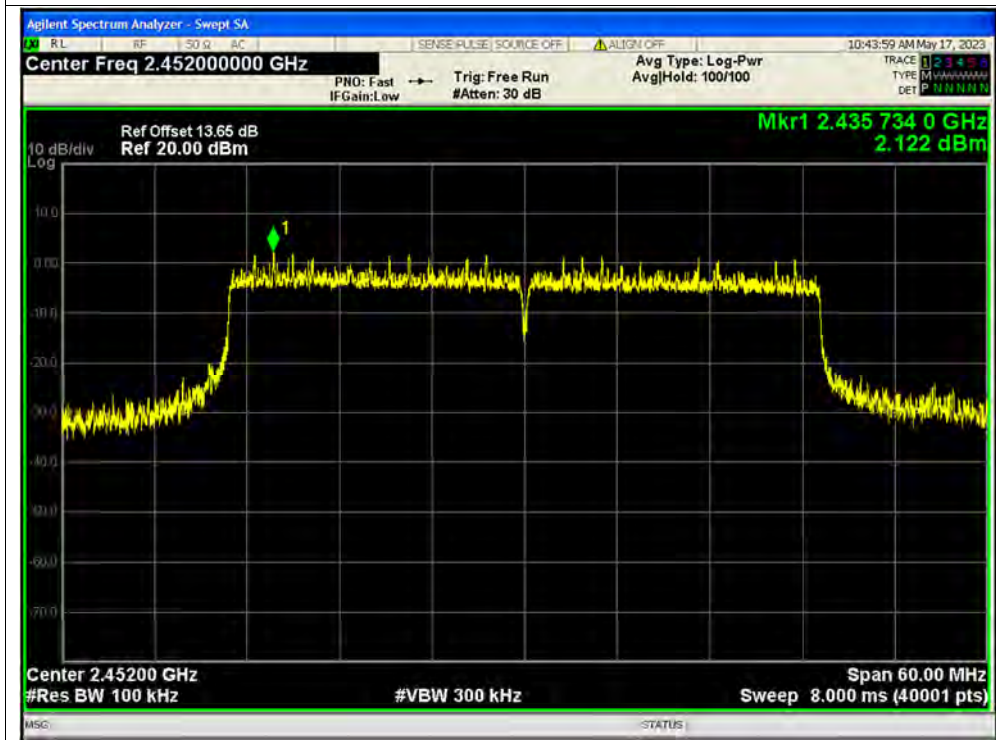
Tx. Spurious NVNT ax40 2437MHz Ant1 Ref



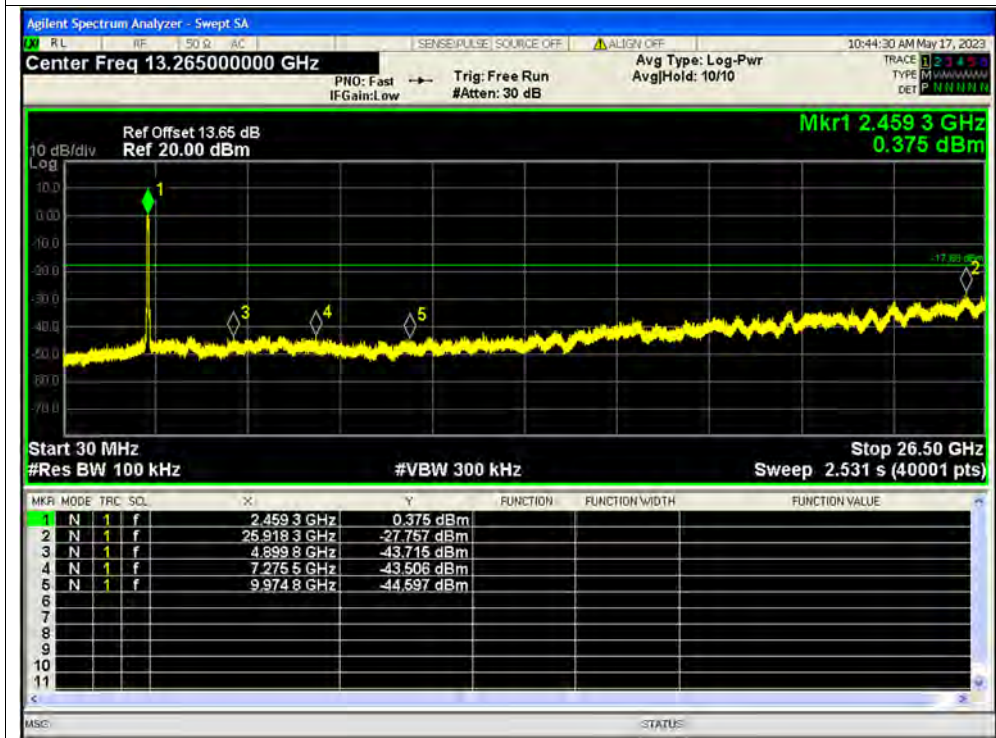
Tx. Spurious NVNT ax40 2437MHz Ant1 Emission



Tx. Spurious NVNT ax40 2452MHz Ant1 Ref



Tx. Spurious NVNT ax40 2452MHz Ant1 Emission



**A.6. Band Edge**

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-43.98	-20	Pass
NVNT	b	2462	Ant1	-54.55	-20	Pass
NVNT	g	2412	Ant1	-27.91	-20	Pass
NVNT	g	2462	Ant1	-39.6	-20	Pass
NVNT	n20	2412	Ant1	-26.29	-20	Pass
NVNT	n20	2462	Ant1	-37.21	-20	Pass
NVNT	n40	2422	Ant1	-27.32	-20	Pass
NVNT	n40	2452	Ant1	-28.88	-20	Pass
NVNT	ax20	2412	Ant1	-27.19	-20	Pass
NVNT	ax20	2462	Ant1	-35.72	-20	Pass
NVNT	ax40	2422	Ant1	-27.17	-20	Pass
NVNT	ax40	2452	Ant1	-27.62	-20	Pass

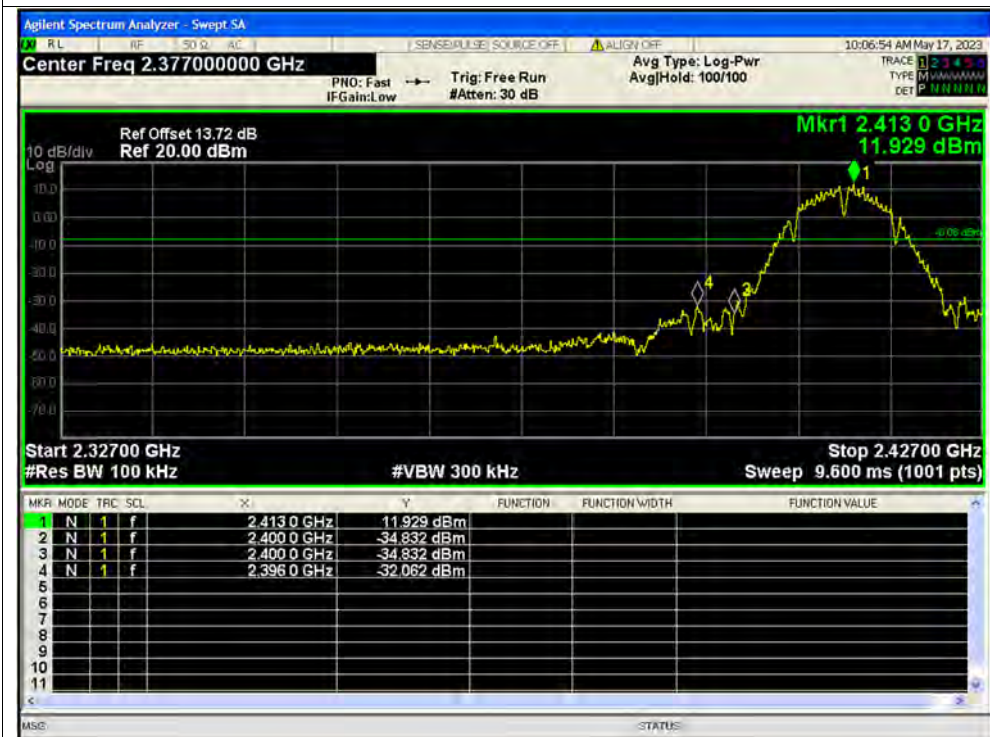


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

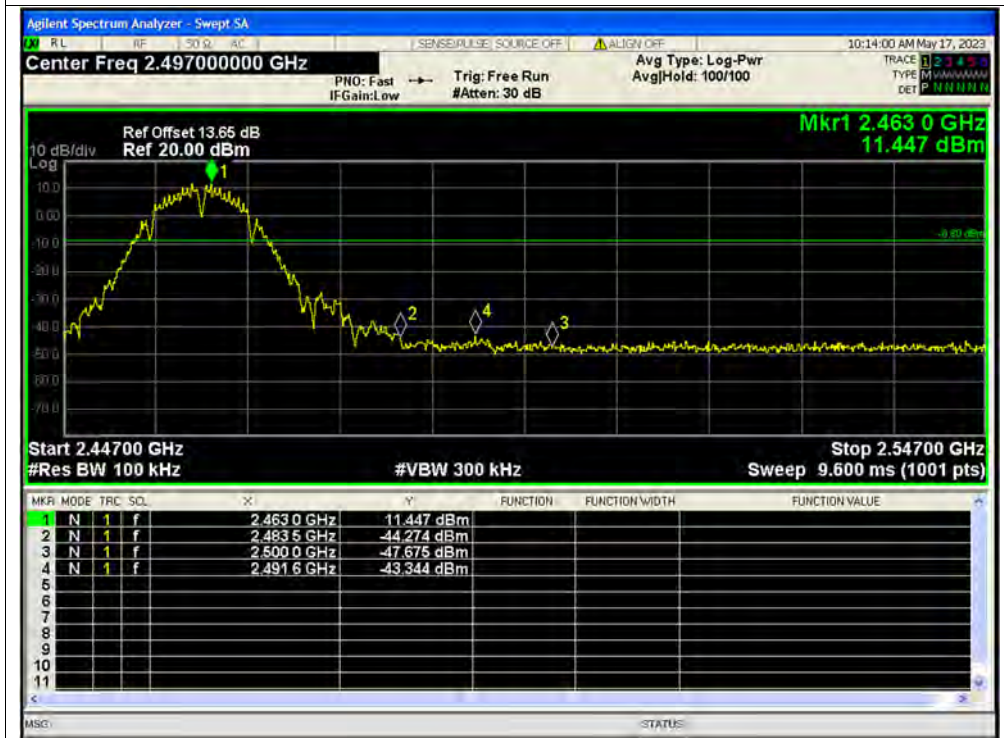




Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission

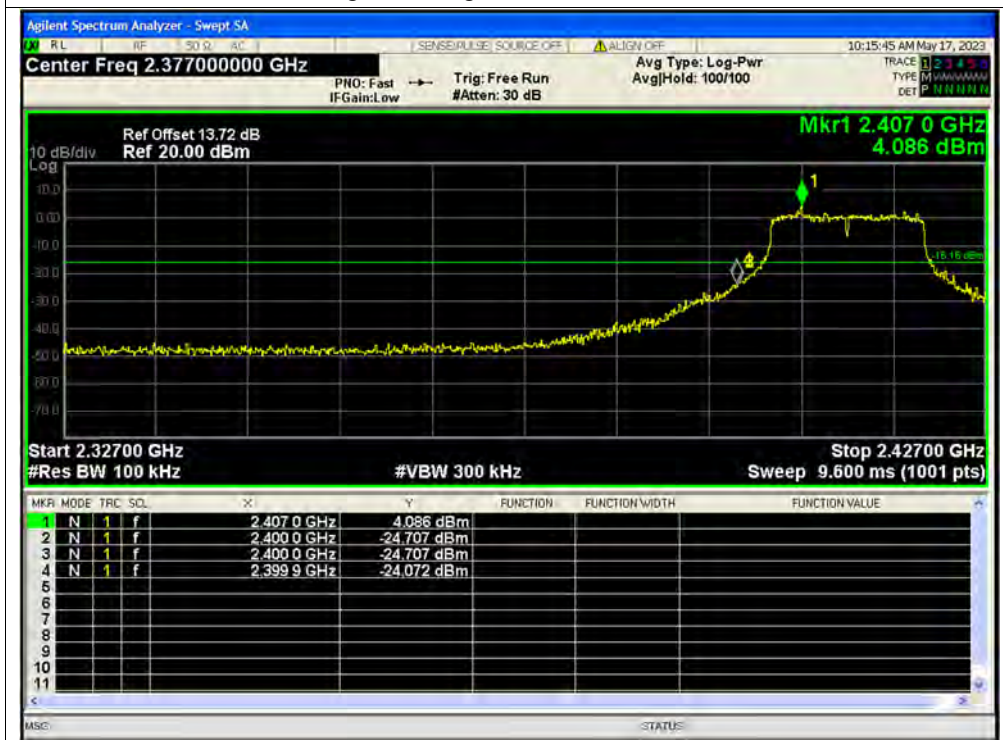




Band Edge NVNT g 2412MHz Ant1 Ref

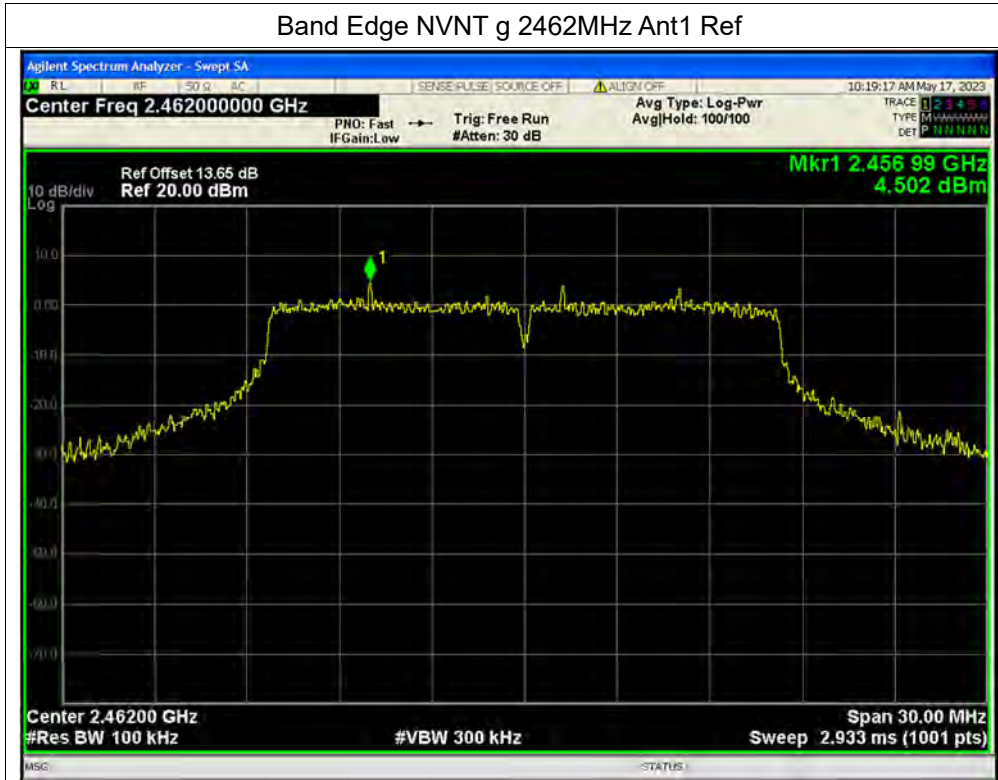


Band Edge NVNT g 2412MHz Ant1 Emission





Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission





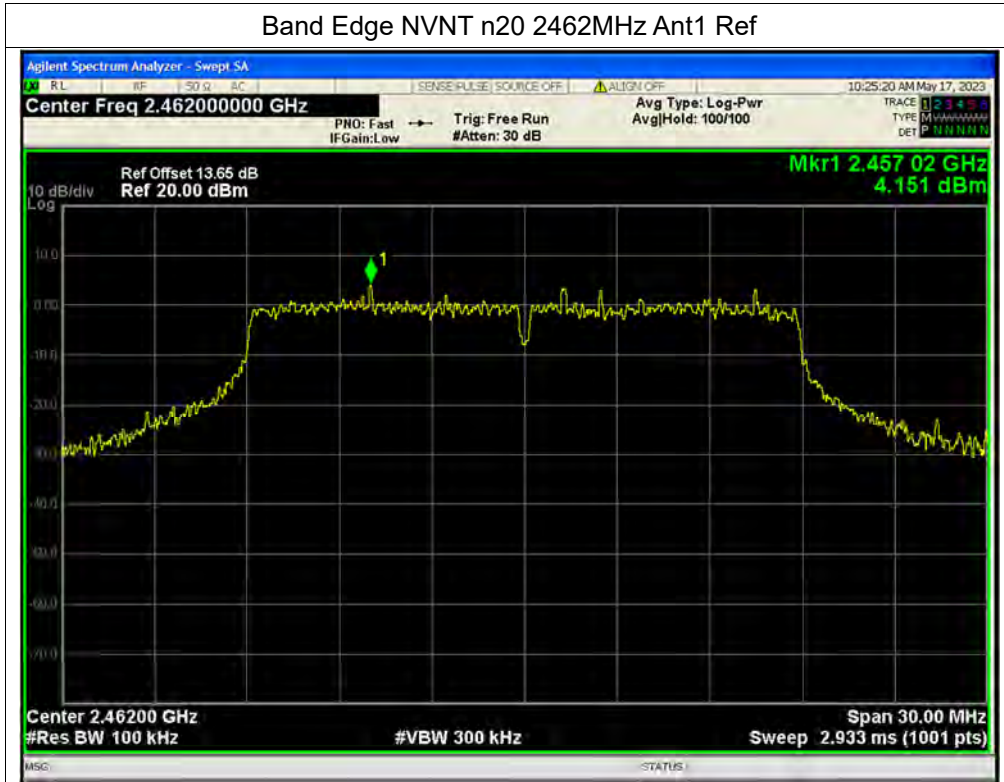
Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission

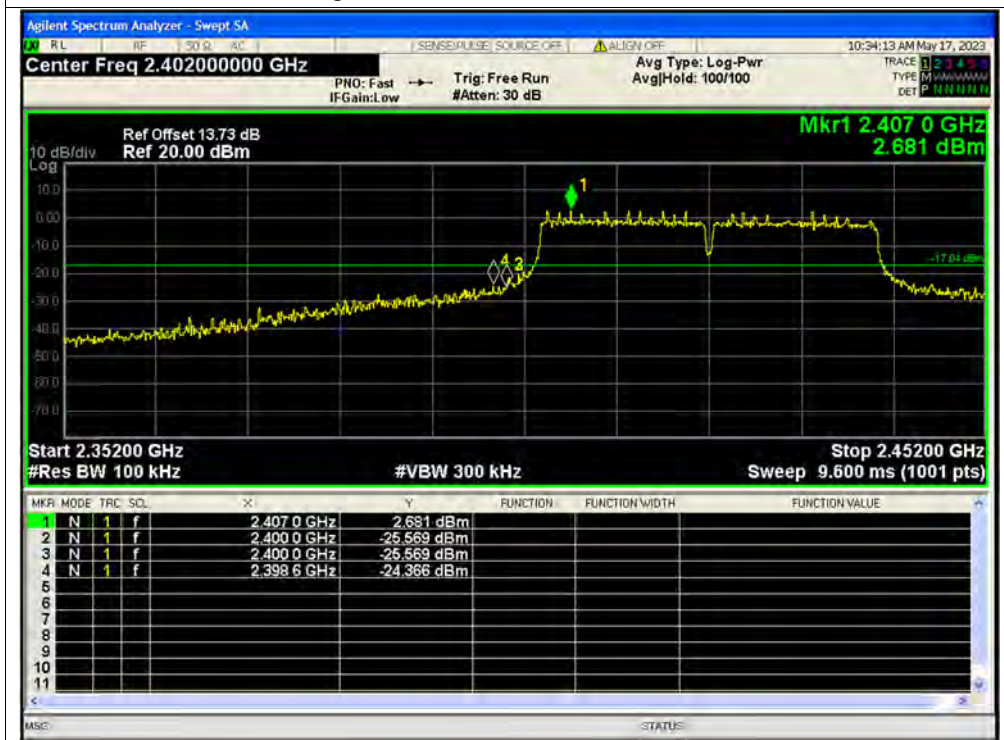




Band Edge NVNT n40 2422MHz Ant1 Ref



Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref

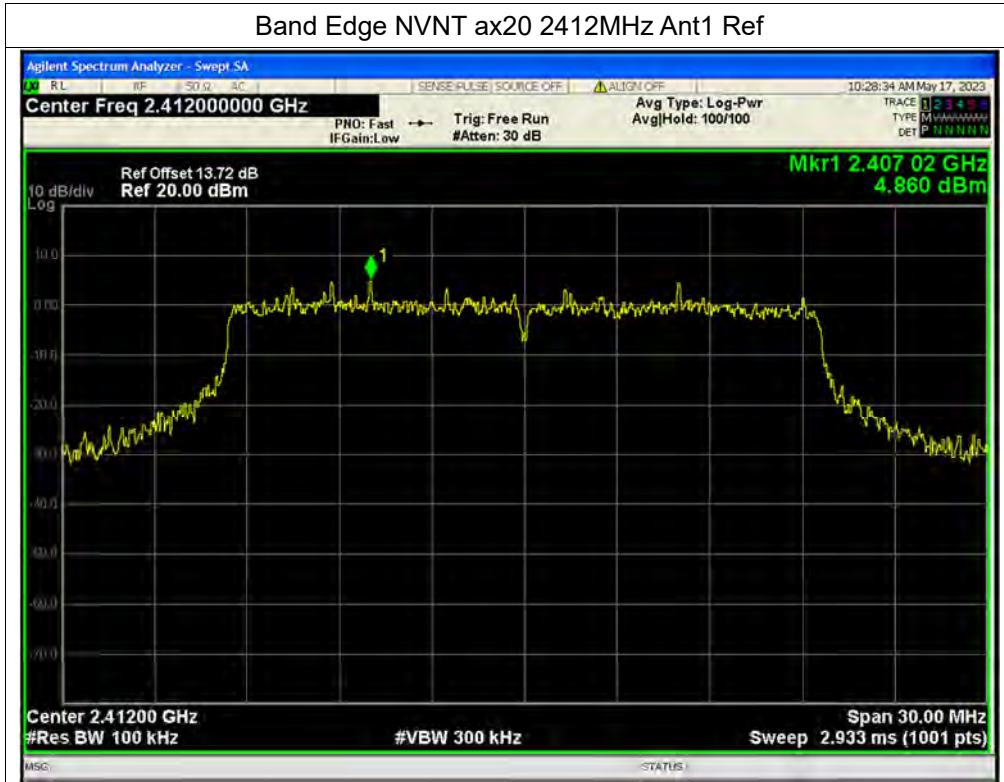


Band Edge NVNT n40 2452MHz Ant1 Emission





Band Edge NVNT ax20 2412MHz Ant1 Ref

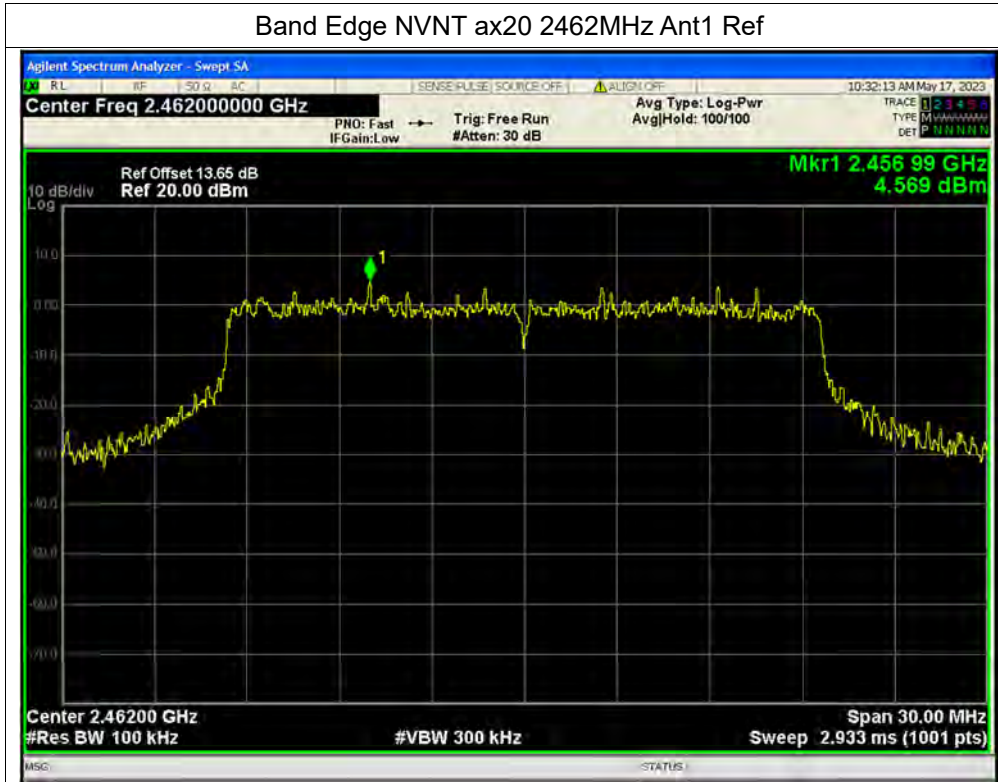


Band Edge NVNT ax20 2412MHz Ant1 Emission

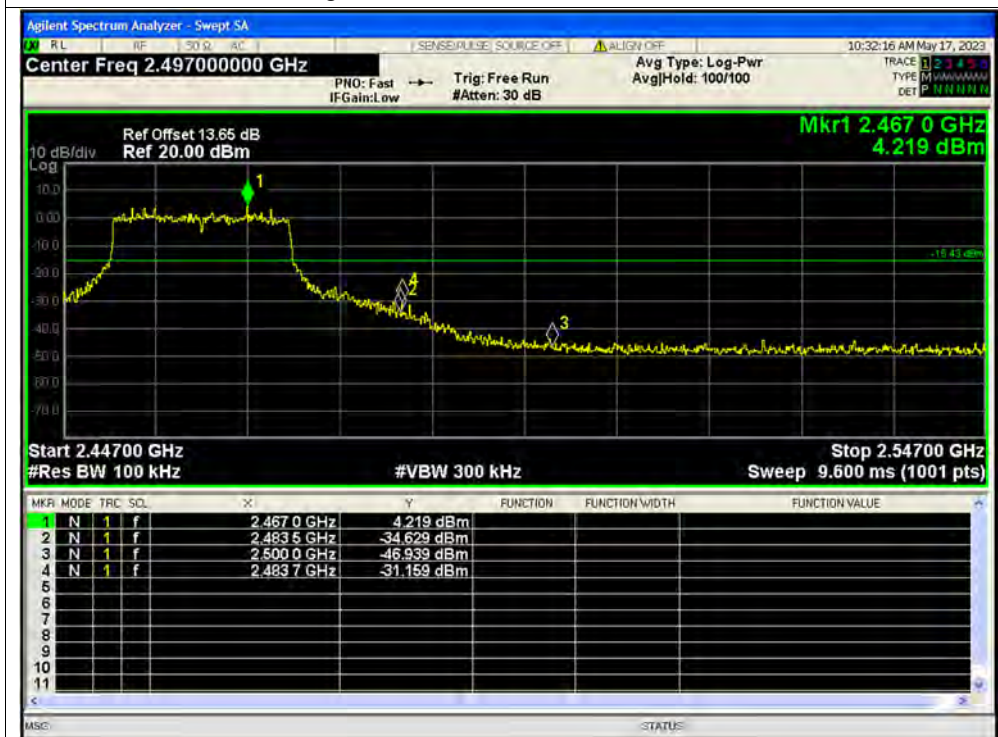




Band Edge NVNT ax20 2462MHz Ant1 Ref



Band Edge NVNT ax20 2462MHz Ant1 Emission

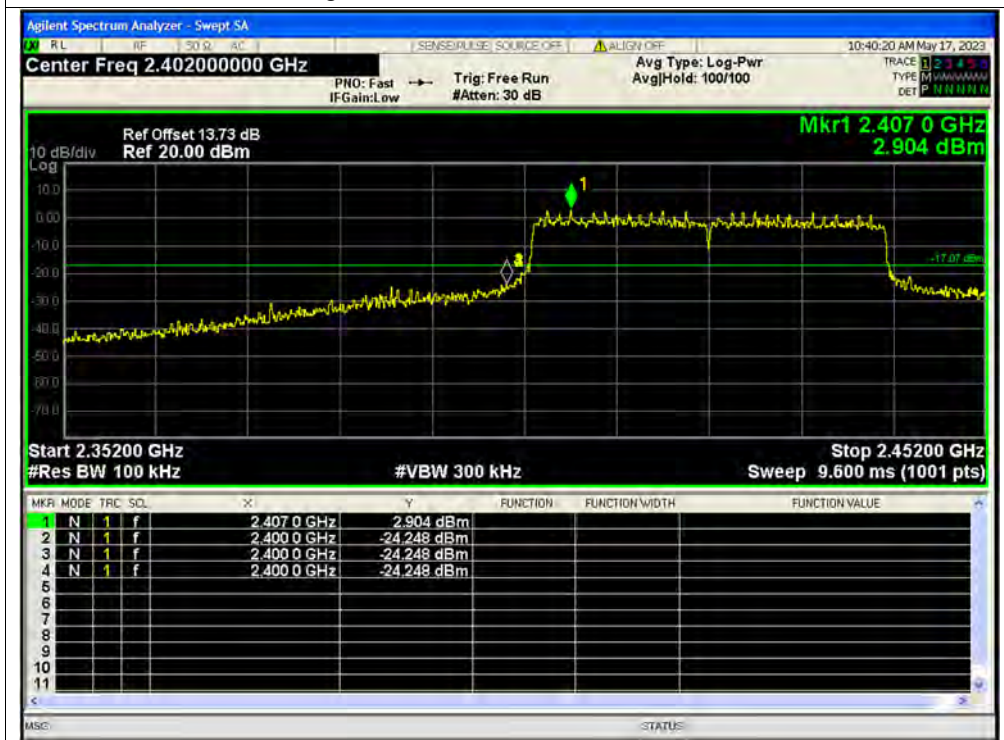




Band Edge NVNT ax40 2422MHz Ant1 Ref



Band Edge NVNT ax40 2422MHz Ant1 Emission





Band Edge NVNT ax40 2452MHz Ant1 Ref



Band Edge NVNT ax40 2452MHz Ant1 Emission



**A.7. Power Spectral Density**

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	2.07	0	2.07	8	Pass
NVNT	b	2437	Ant1	-2.17	0	-2.17	8	Pass
NVNT	b	2462	Ant1	1.58	0	1.58	8	Pass
NVNT	g	2412	Ant1	-10.87	0	-10.87	8	Pass
NVNT	g	2437	Ant1	-10.54	0	-10.54	8	Pass
NVNT	g	2462	Ant1	-10.89	0	-10.89	8	Pass
NVNT	n20	2412	Ant1	-10.35	0	-10.35	8	Pass
NVNT	n20	2437	Ant1	-10.63	0	-10.63	8	Pass
NVNT	n20	2462	Ant1	-10.19	0	-10.19	8	Pass
NVNT	n40	2422	Ant1	-11.61	0	-11.61	8	Pass
NVNT	n40	2437	Ant1	-12.58	0	-12.58	8	Pass
NVNT	n40	2452	Ant1	-12.64	0	-12.64	8	Pass
NVNT	ax20	2412	Ant1	-10.11	0	-10.11	8	Pass
NVNT	ax20	2437	Ant1	-10.48	0	-10.48	8	Pass
NVNT	ax20	2462	Ant1	-11.13	0	-11.13	8	Pass
NVNT	ax40	2422	Ant1	-11.48	0	-11.48	8	Pass
NVNT	ax40	2437	Ant1	-11.75	0	-11.75	8	Pass
NVNT	ax40	2452	Ant1	-11.78	0	-11.78	8	Pass



Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1





PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1

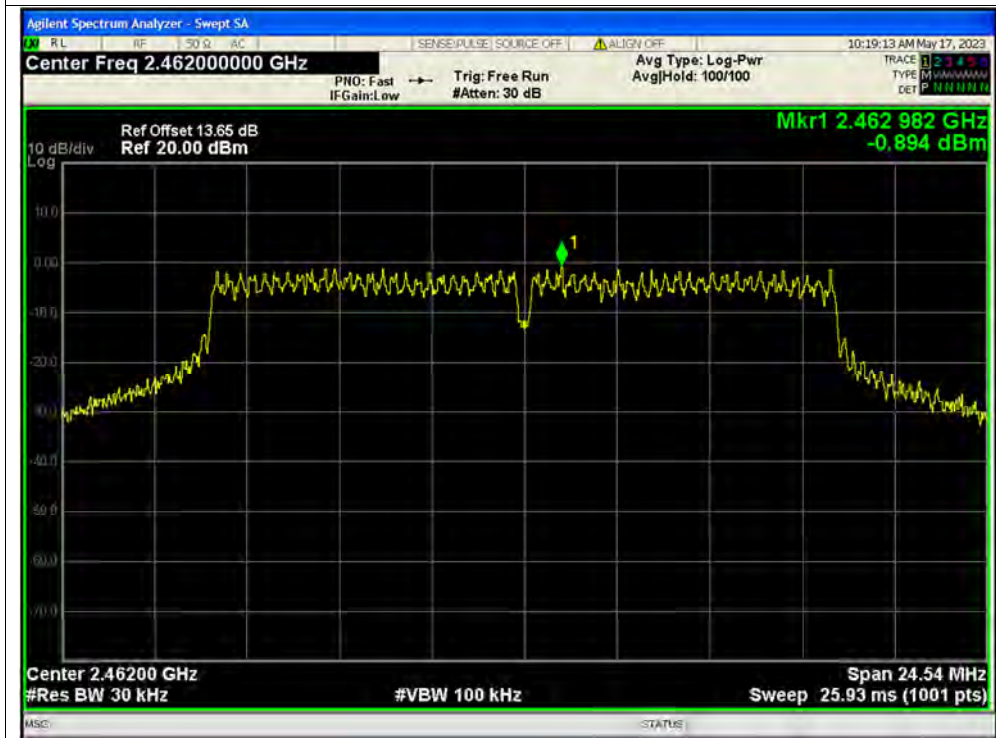




PSD NVNT g 2437MHz Ant1

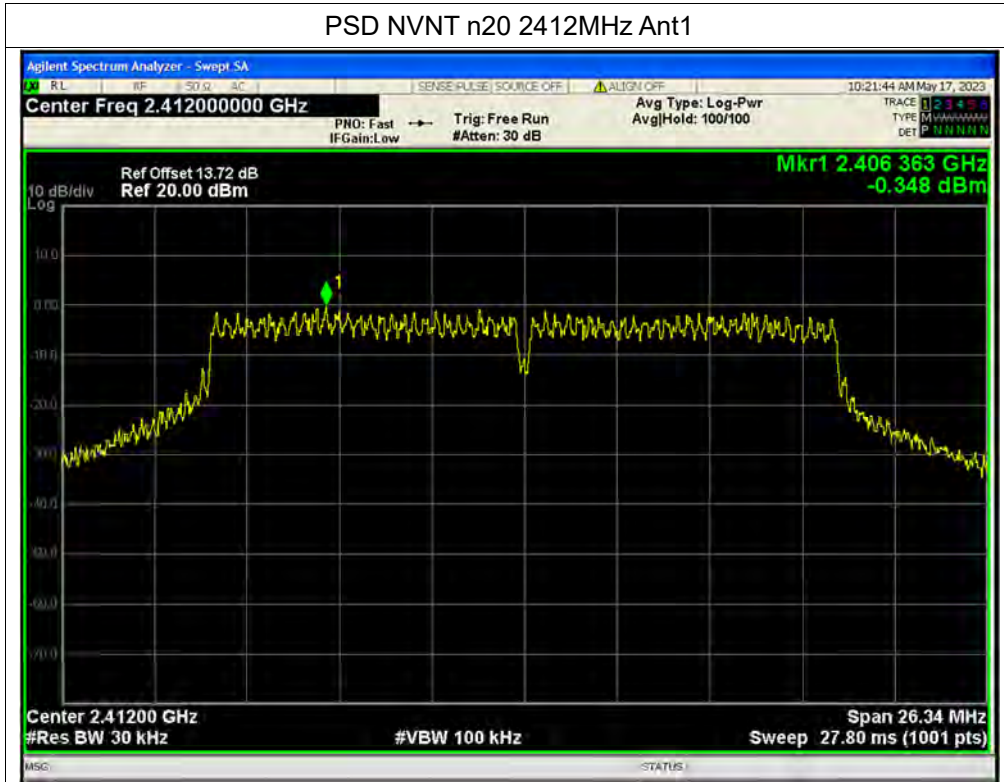


PSD NVNT g 2462MHz Ant1

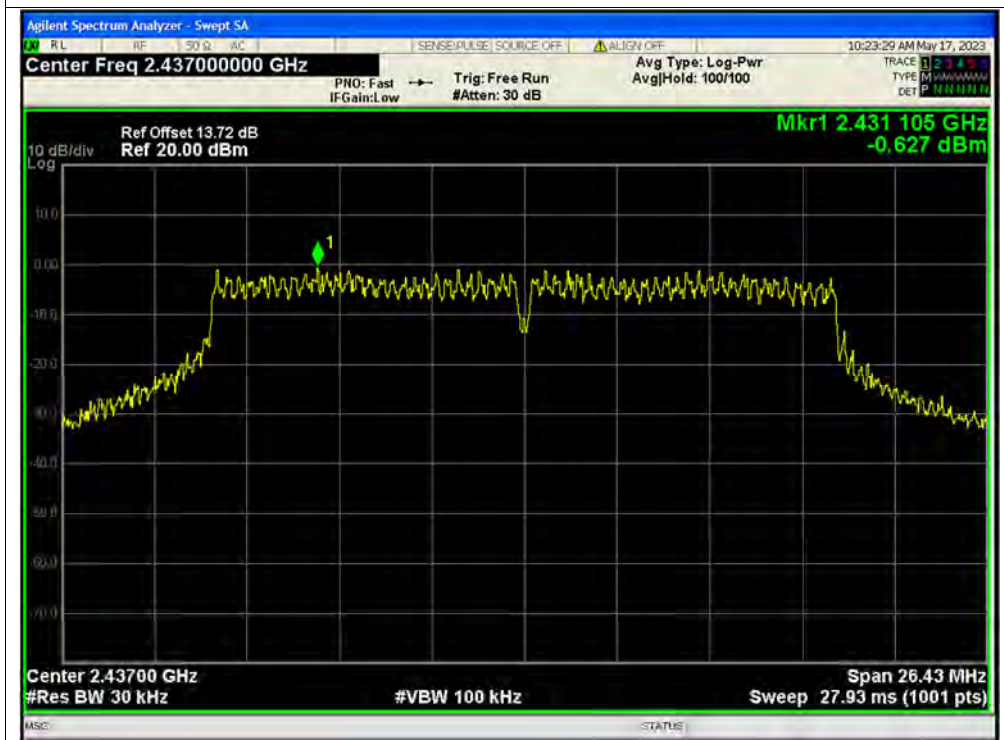




PSD NVNT n20 2412MHz Ant1

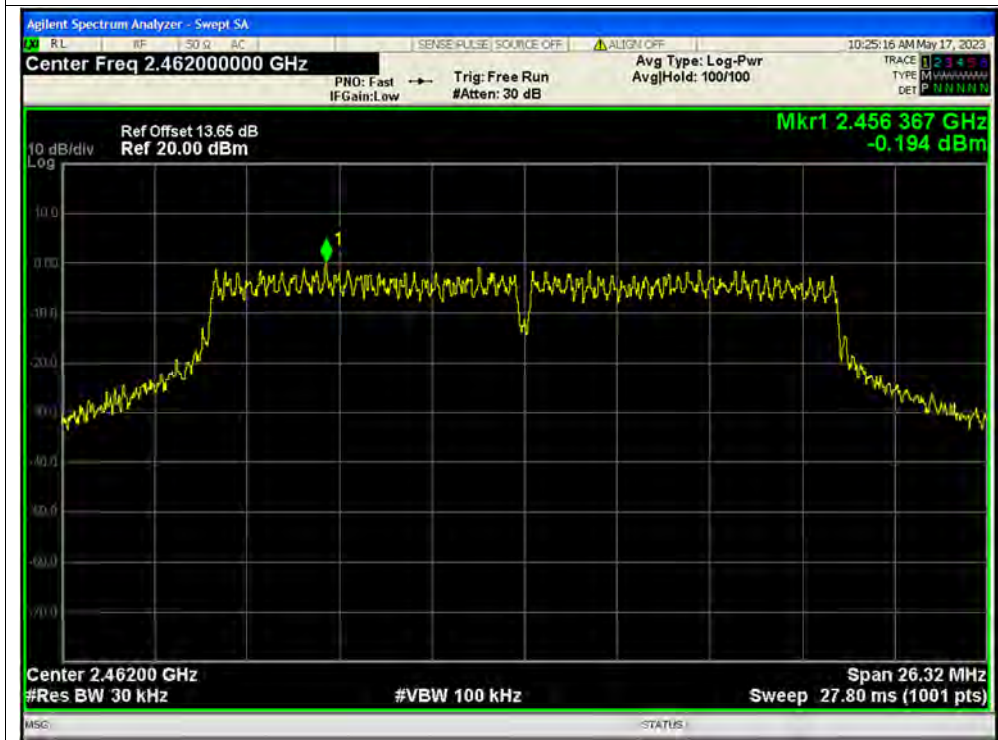


PSD NVNT n20 2437MHz Ant1

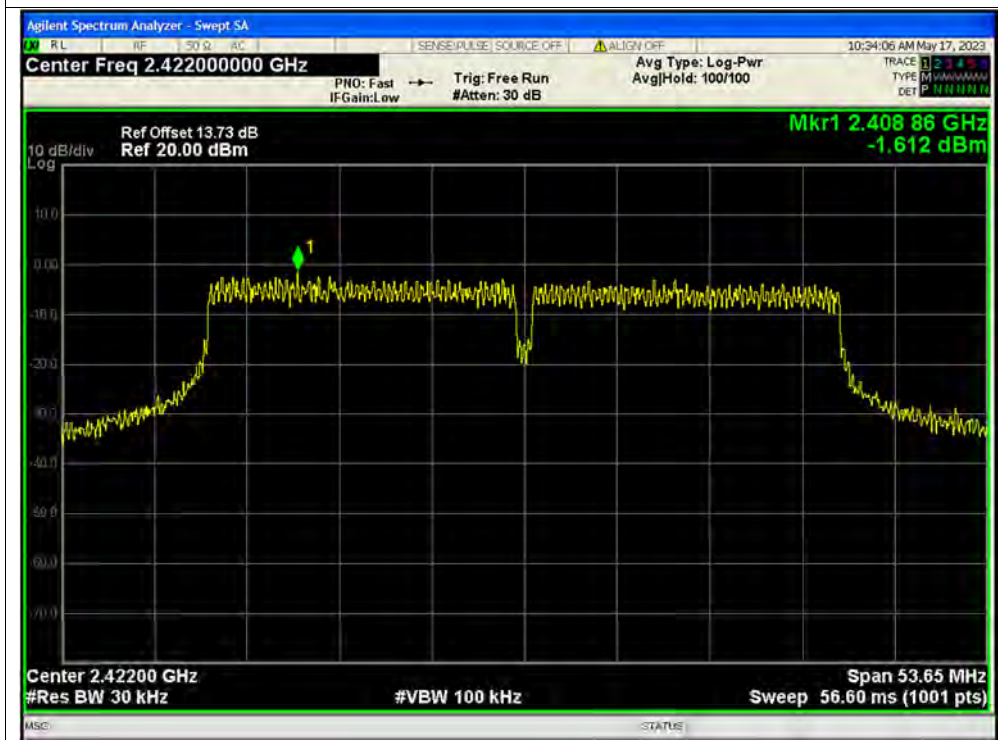




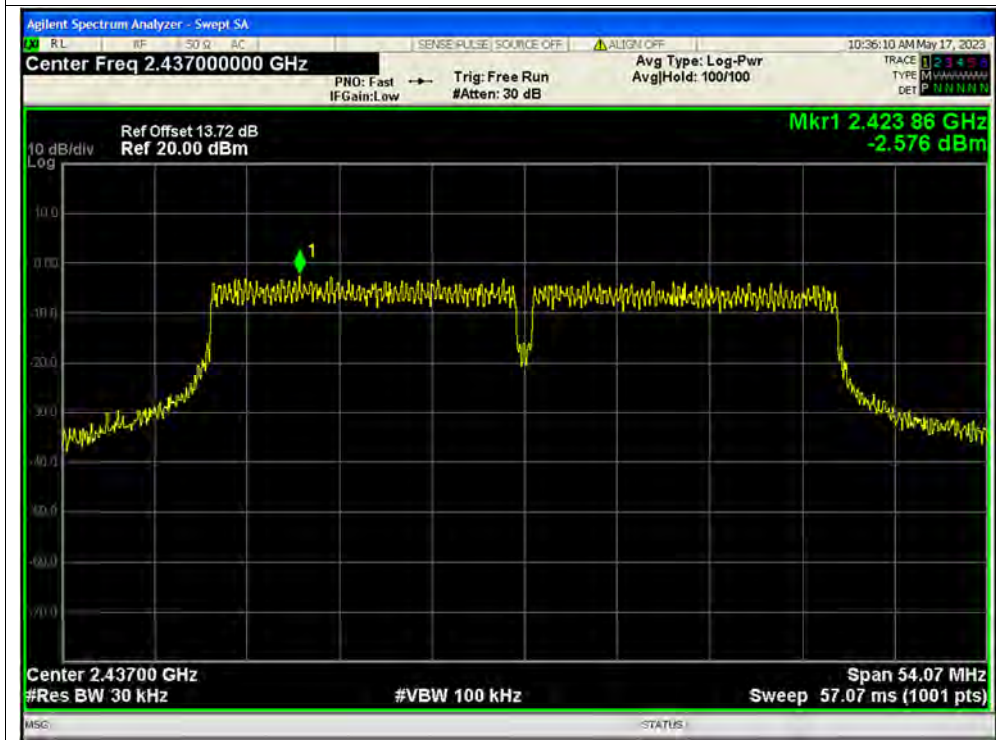
PSD NVNT n20 2462MHz Ant1



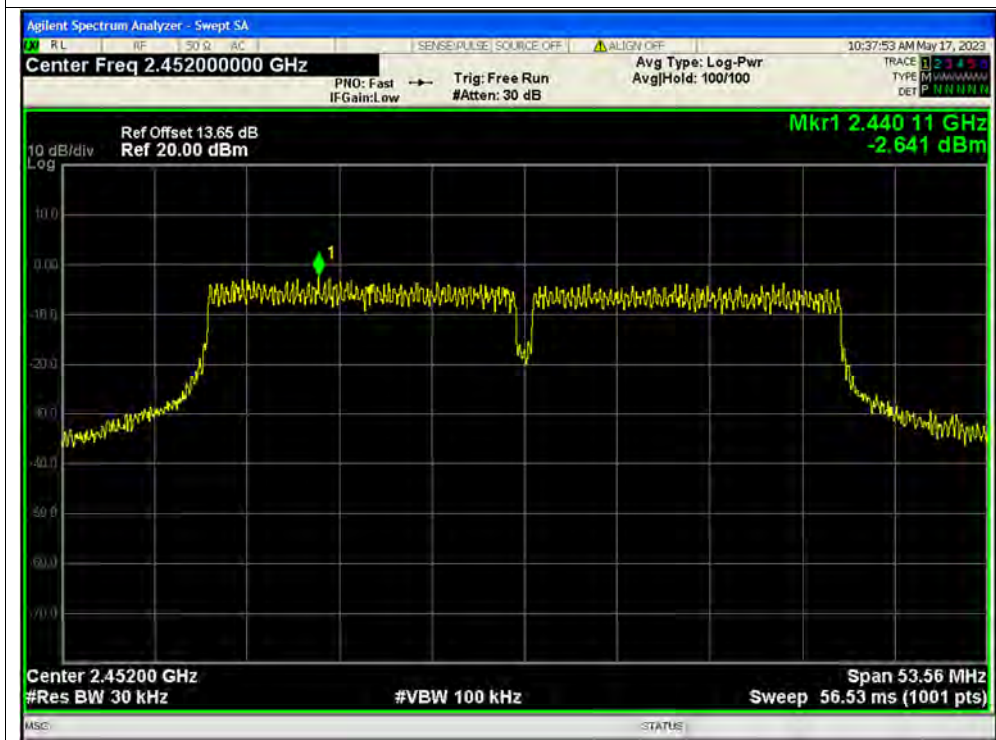
PSD NVNT n40 2422MHz Ant1



PSD NVNT n40 2437MHz Ant1



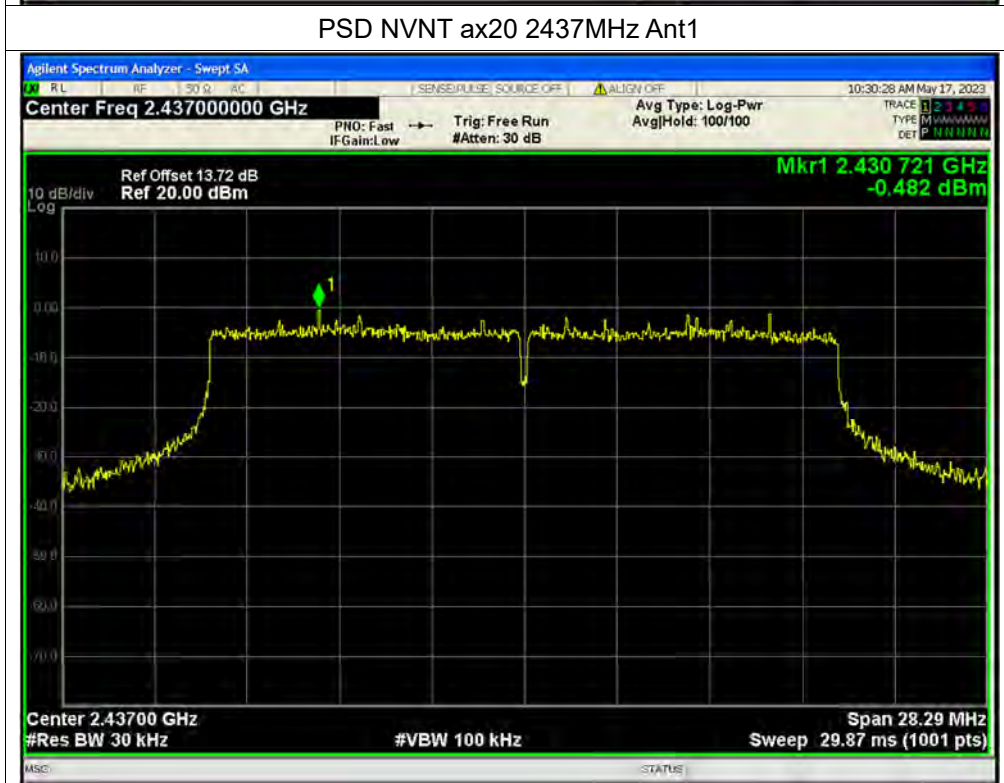
PSD NVNT n40 2452MHz Ant1



PSD NVNT ax20 2412MHz Ant1



PSD NVNT ax20 2437MHz Ant1





PSD NVNT ax20 2462MHz Ant1

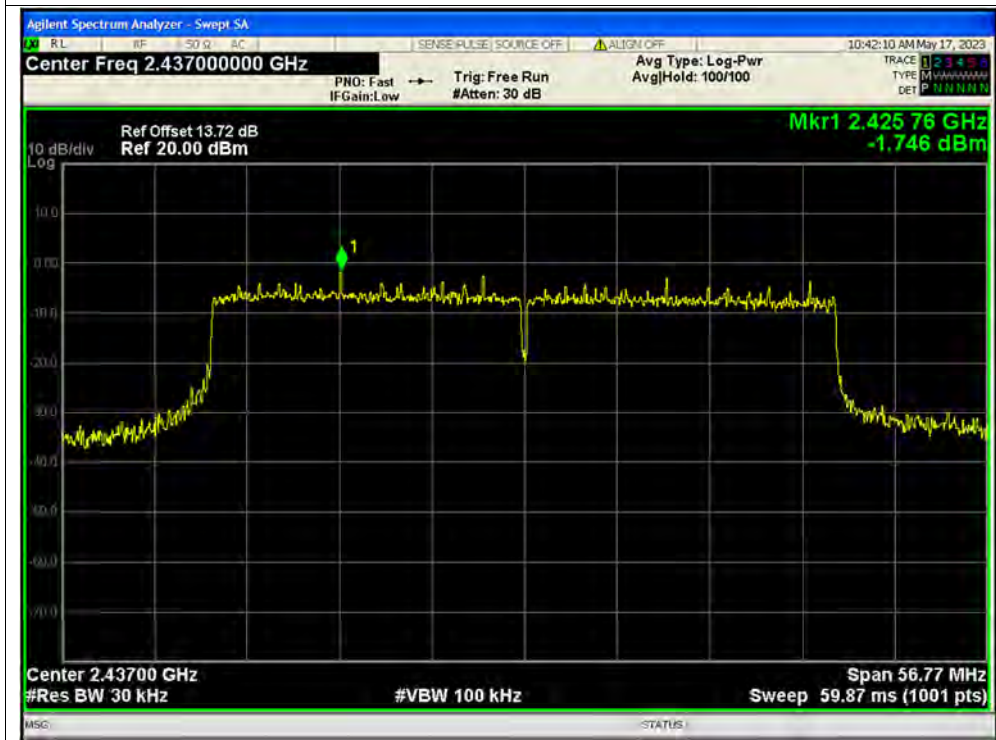


PSD NVNT ax40 2422MHz Ant1





PSD NVNT ax40 2437MHz Ant1



PSD NVNT ax40 2452MHz Ant1





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+ Adapter + PC + PC Adapter + WIFI TX

Test voltage: AC 120V/60Hz

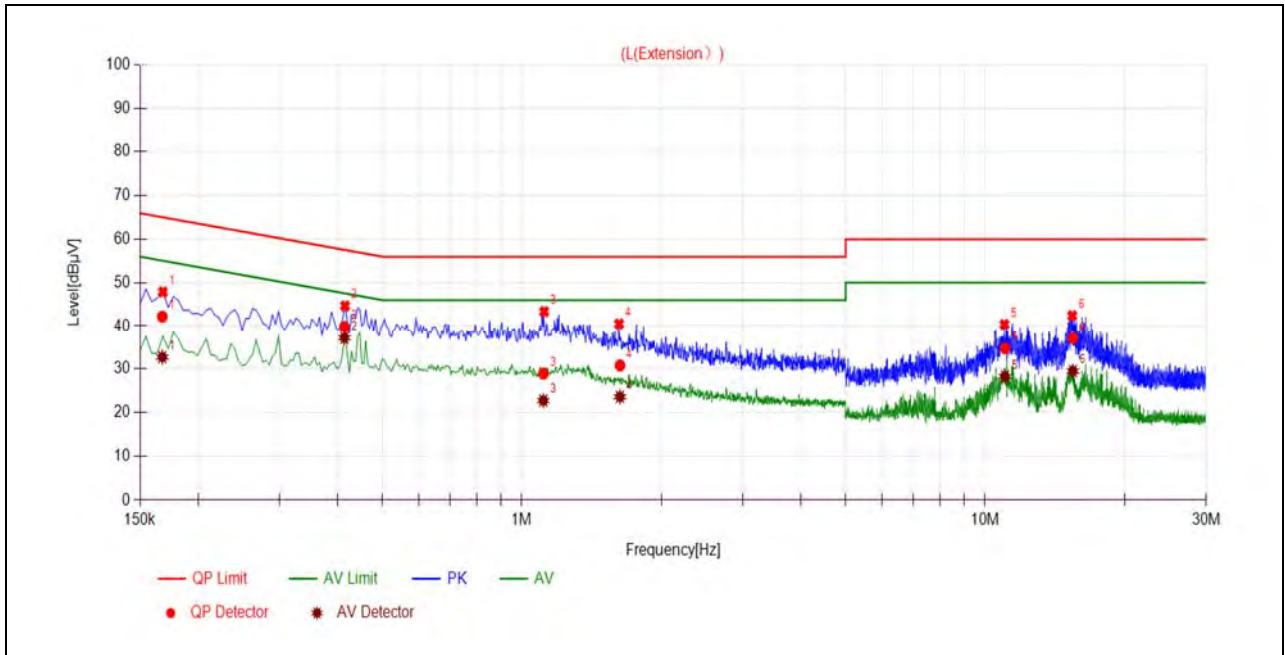
The measurement results are obtained as below:

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

U_R : Receiver Reading

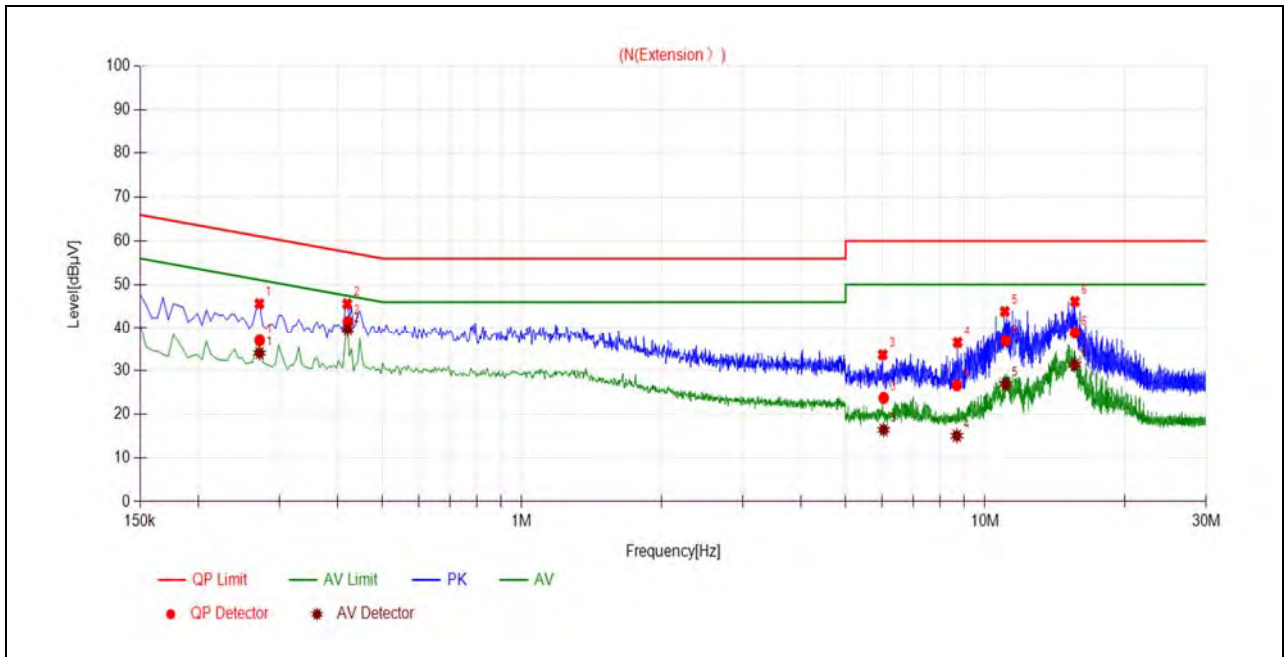
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1675	42.18	32.70	65.08	55.08	Line	PASS
2	0.4141	39.80	37.15	57.57	47.57		PASS
3	1.1129	28.89	22.71	56.00	46.00		PASS
4	1.6288	30.77	23.57	56.00	46.00		PASS
5	11.0422	34.71	28.26	60.00	50.00		PASS
6	15.4708	37.04	29.47	60.00	50.00		PASS



(N Phase)

No.	Fre. (MHz)	Emission Level (dBµV)		Limit (dBµV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1545	37.01	34.07	61.07	51.07	Neutral	PASS
2	0.1688	41.44	39.62	57.42	47.42		PASS
3	0.1816	23.74	16.41	60.00	50.00		PASS
4	0.2269	26.66	15.03	60.00	50.00		PASS
5	0.2454	36.88	26.96	60.00	50.00		PASS
6	0.2854	38.83	31.43	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:

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

A_T : Total correction Factor except Antenna

U_R : Receiver Reading

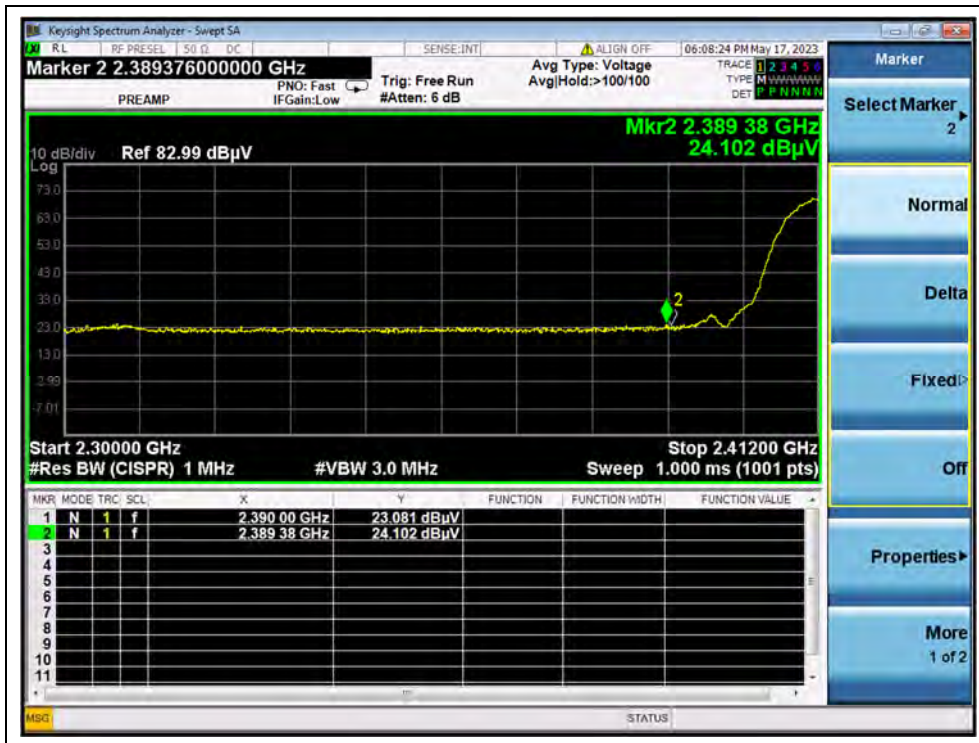
G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

Note: 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.

802.11b Mode

Channel	Frequency (MHz)	Detector	Receiver Reading	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV	U_R (dB μ V)					
1	2389.38	PK	24.10	6.74	27.20	58.04	74	PASS
1	2307.06	AV	13.47	6.74	27.20	47.41	54	PASS
11	2491.83	PK	23.44	6.74	27.20	57.38	74	PASS
11	2488.71	AV	10.68	6.74	27.20	44.62	54	PASS



(PEAK, Channel 1, 802.11b)



(AVERAGE, Channel 1, 802.11b)



(PEAK, Channel 11, 802.11b)

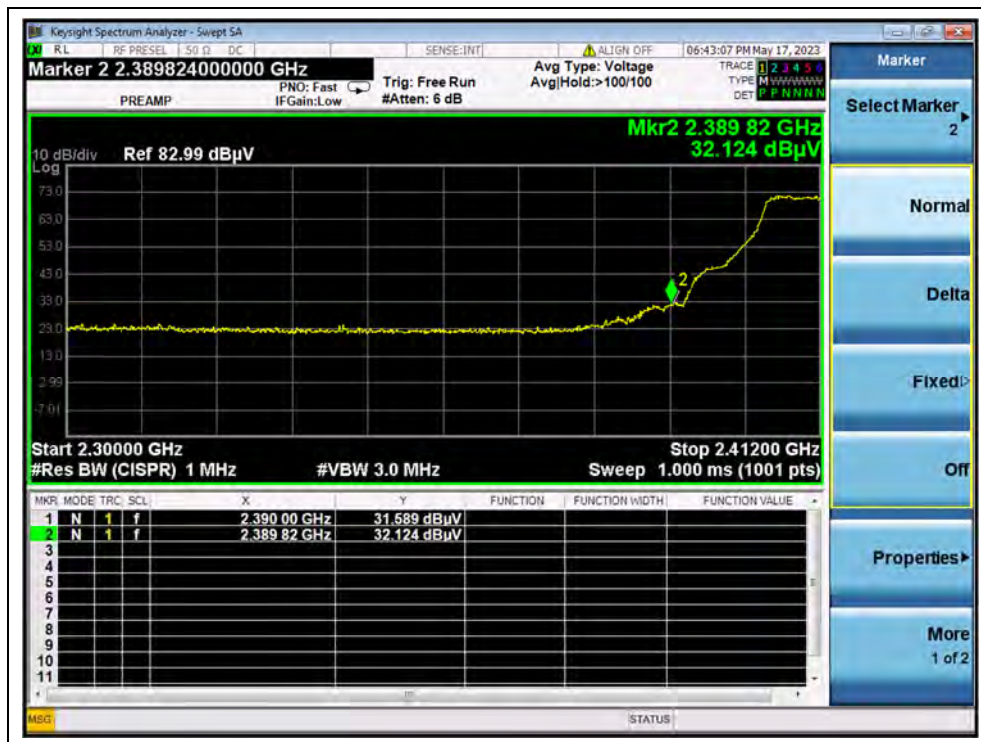


(AVERAGE, Channel 11, 802.11b)



802.11g Mode

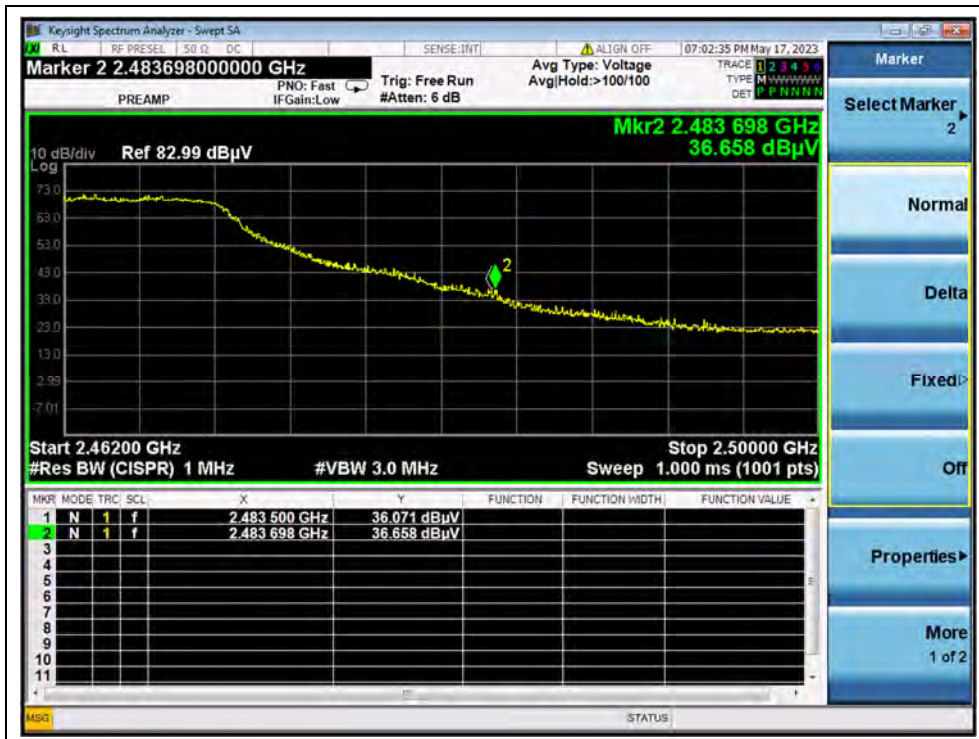
Channel	Frequency (MHz)	Detector	Receiver Reading U _R (dBμV)	A _T (dB)	A _{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
1	2389.82	PK	32.12	6.74	27.20	66.06	74	PASS
1	2390.00	AV	16.12	6.74	27.20	50.06	54	PASS
11	2483.70	PK	36.66	6.74	27.20	70.60	74	PASS
11	2483.50	AV	16.58	6.74	27.20	50.52	54	PASS



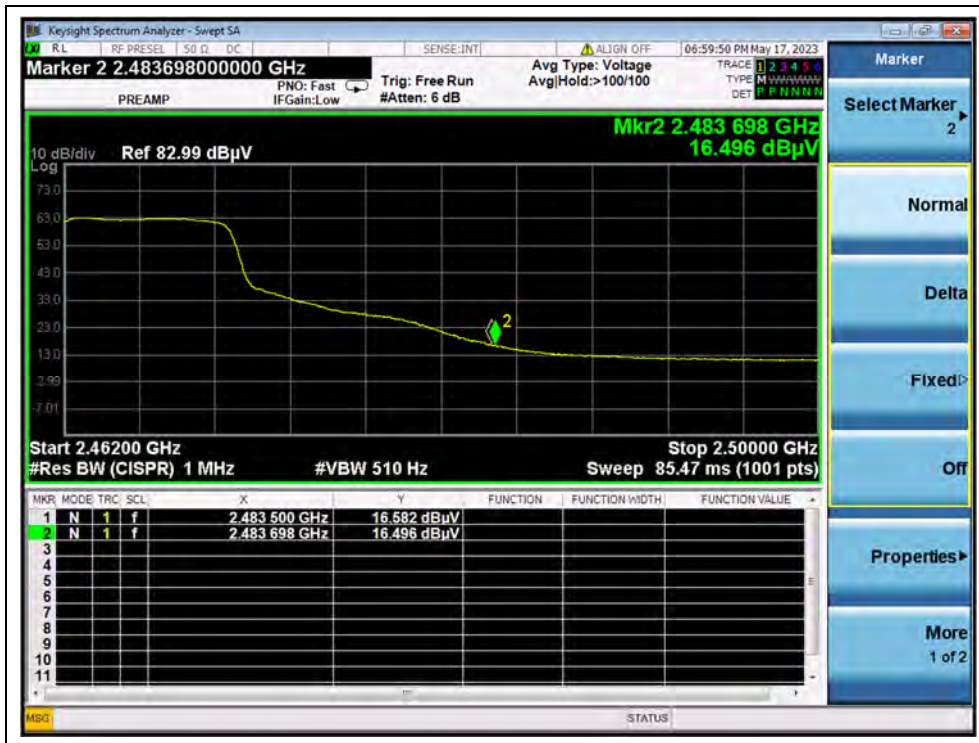
(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)



(PEAK, Channel 11, 802.11g)

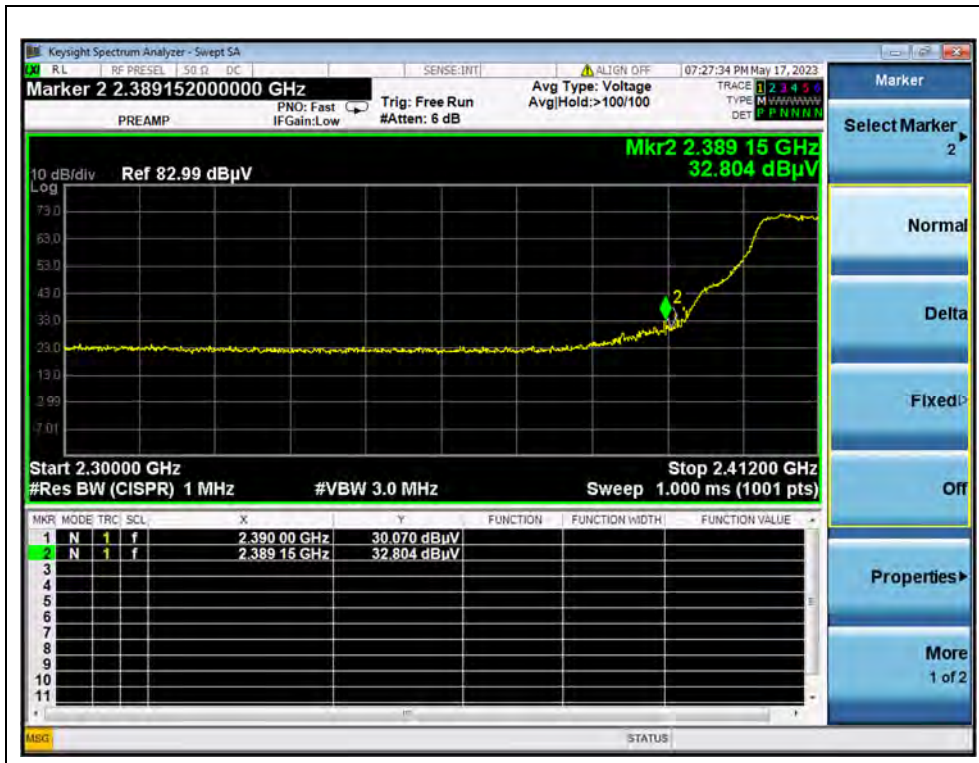


(AVERAGE, Channel 11, 802.11g)

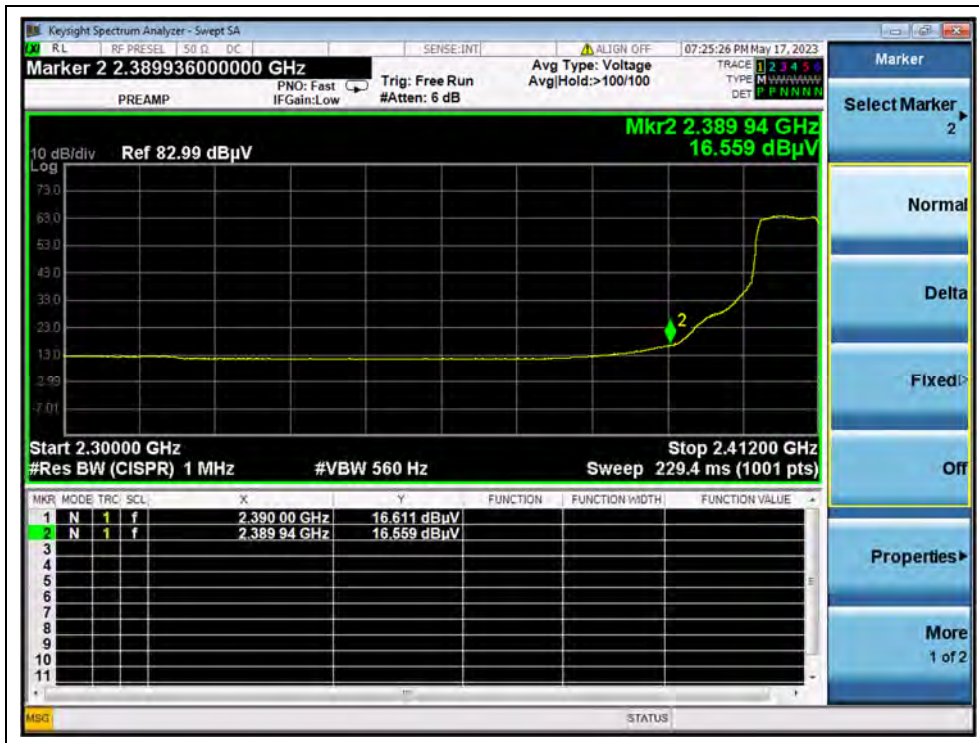


802.11n (HT20) Mode

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						
1	2389.15	PK	32.80	6.74	27.20	66.74	74	PASS
1	2390.00	AV	16.61	6.74	27.20	50.55	54	PASS
11	2484.23	PK	33.70	6.74	27.20	67.64	74	PASS
11	2483.74	AV	14.34	6.74	27.20	48.28	54	PASS



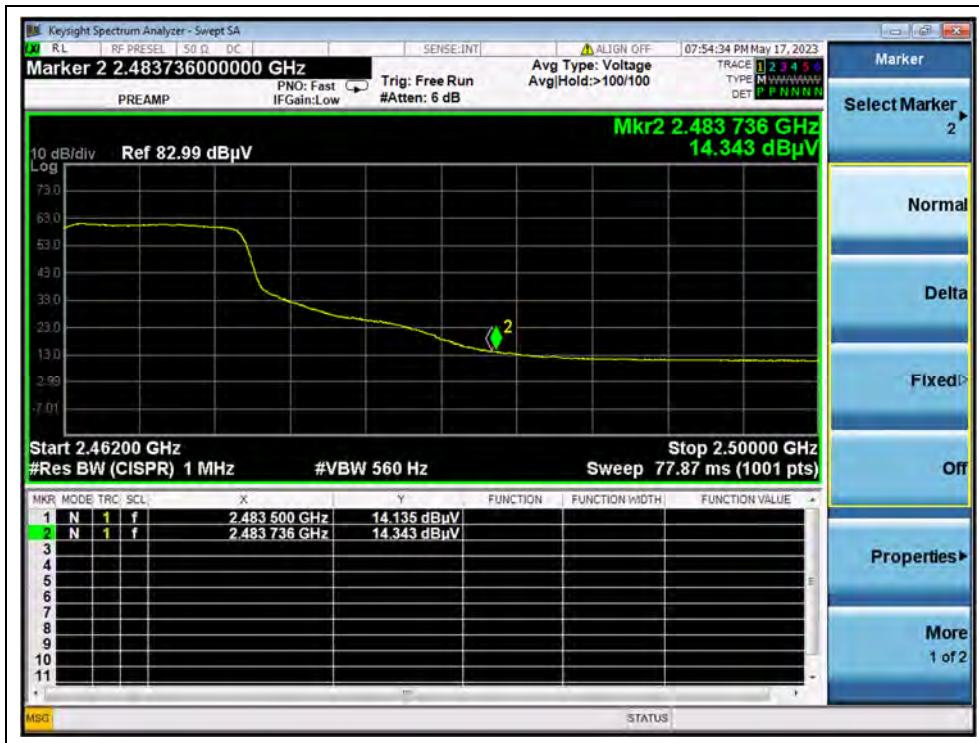
(PEAK, Channel 1, 802.11n (HT20))



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



(PEAK, Channel 11, 802.11n (HT20))

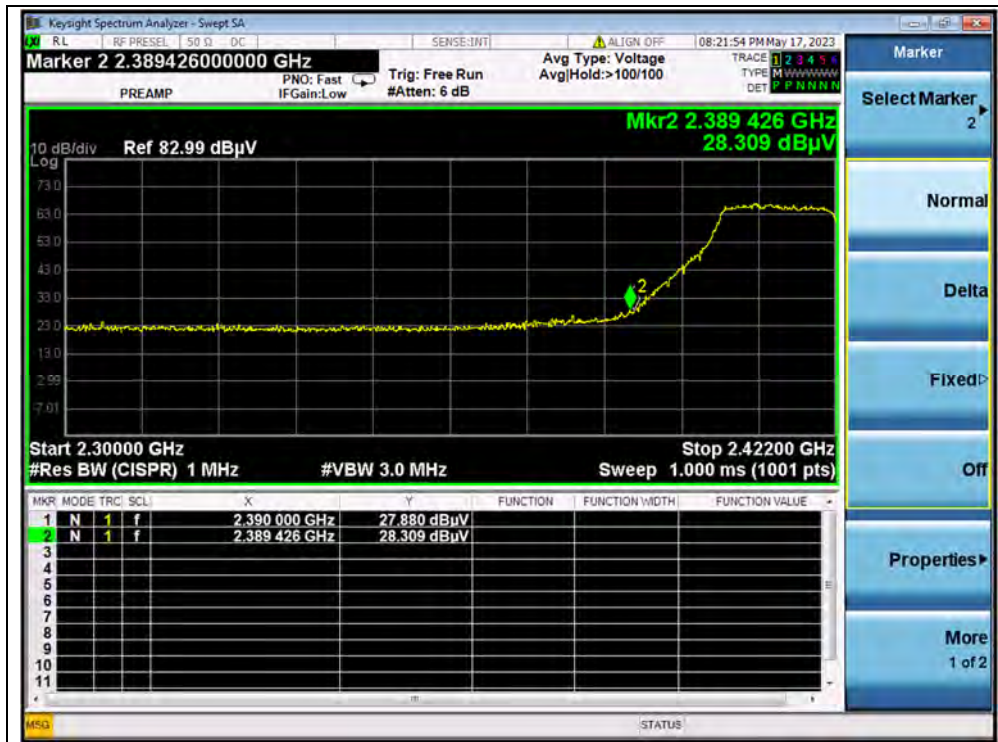


(AVERAGE, Channel 11, 802.11n (HT20))

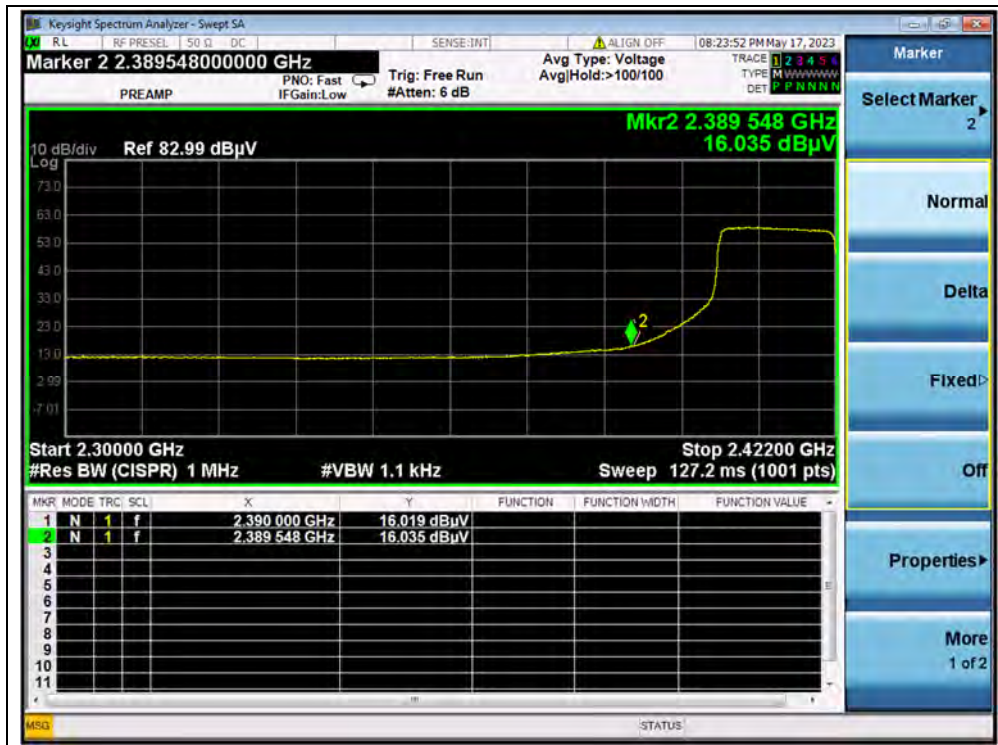


802.11n (HT40) Mode

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						
3	2389.43	PK	28.31	6.74	27.20	62.25	74	PASS
3	2389.55	AV	16.04	6.74	27.20	49.98	54	PASS
9	2483.58	PK	31.15	6.74	27.20	65.09	74	PASS
9	2483.50	AV	17.06	6.74	27.20	51.00	54	PASS



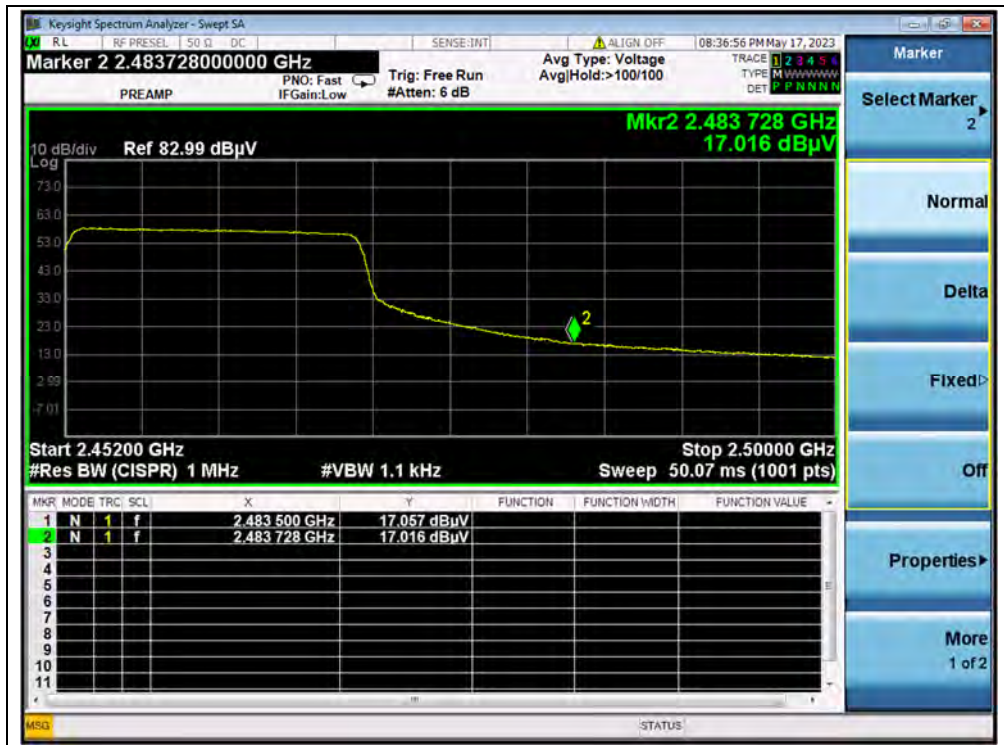
(PEAK, Channel 3, 802.11n (HT40))



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



(PEAK, Channel 9, 802.11n (HT40))

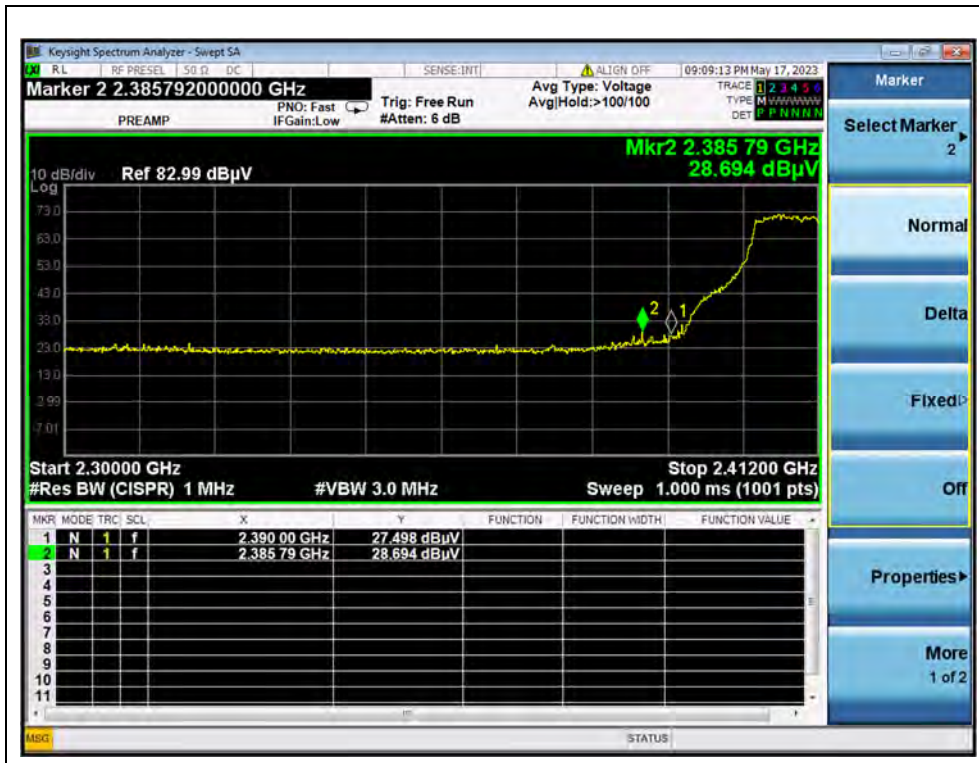


(AVERAGE, Channel 9, 802.11n (HT40))

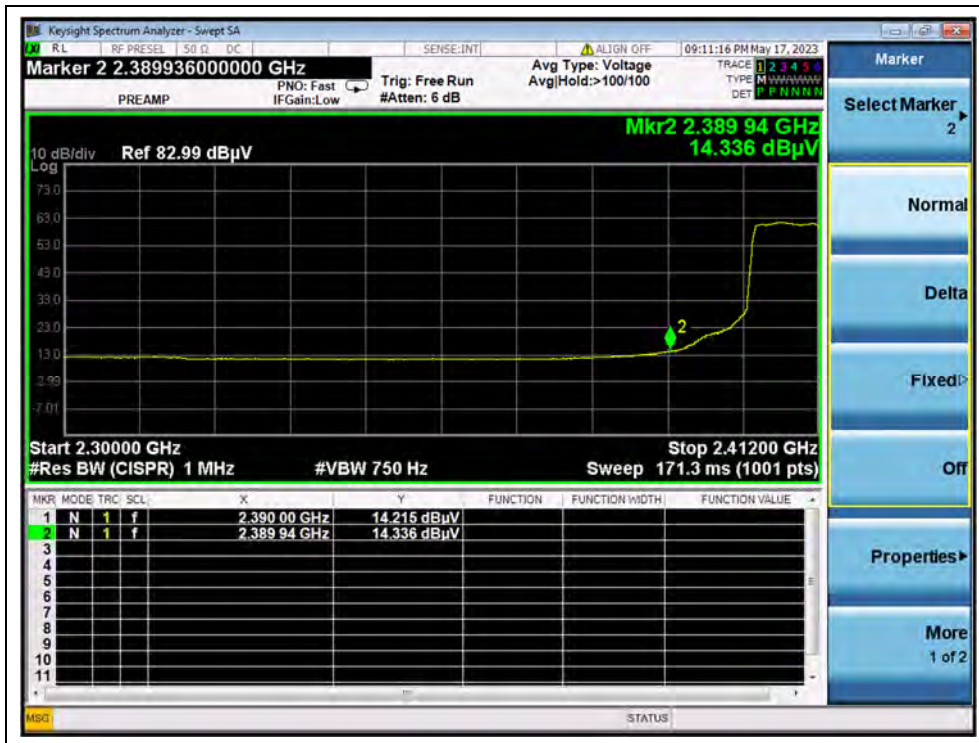


802.11ax (HEW20) Mode

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						
1	2385.79	PK	28.69	6.74	27.20	62.63	74	PASS
1	2389.94	AV	14.34	6.74	27.20	48.28	54	PASS
11	2486.21	PK	32.77	6.74	27.20	66.71	74	PASS
11	2483.66	AV	15.90	6.74	27.20	49.84	54	PASS



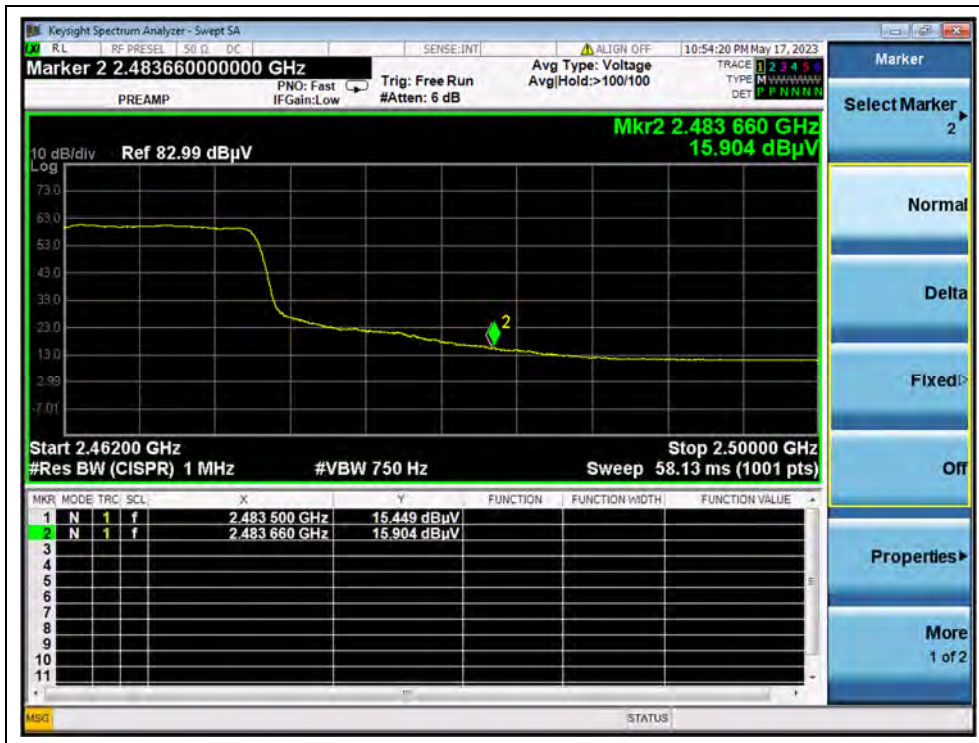
(PEAK, Channel 1, 802.11ax (HEW20))



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



(PEAK, Channel 11, 802.11ax (HEW20))

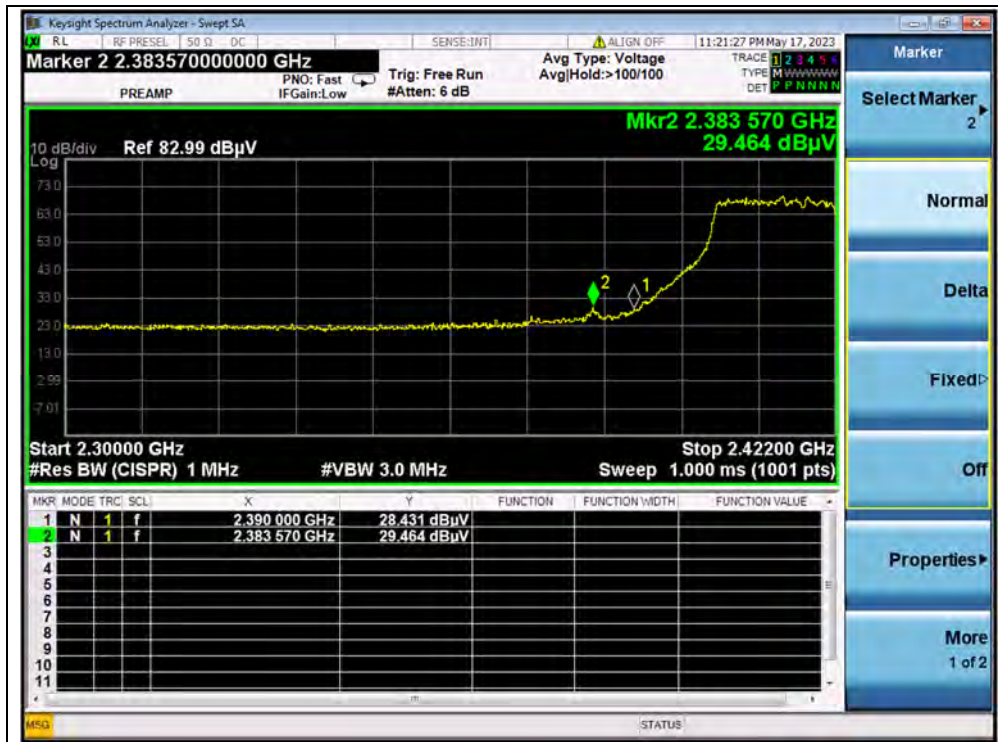


(AVERAGE, Channel 11, 802.11ax (HEW20))

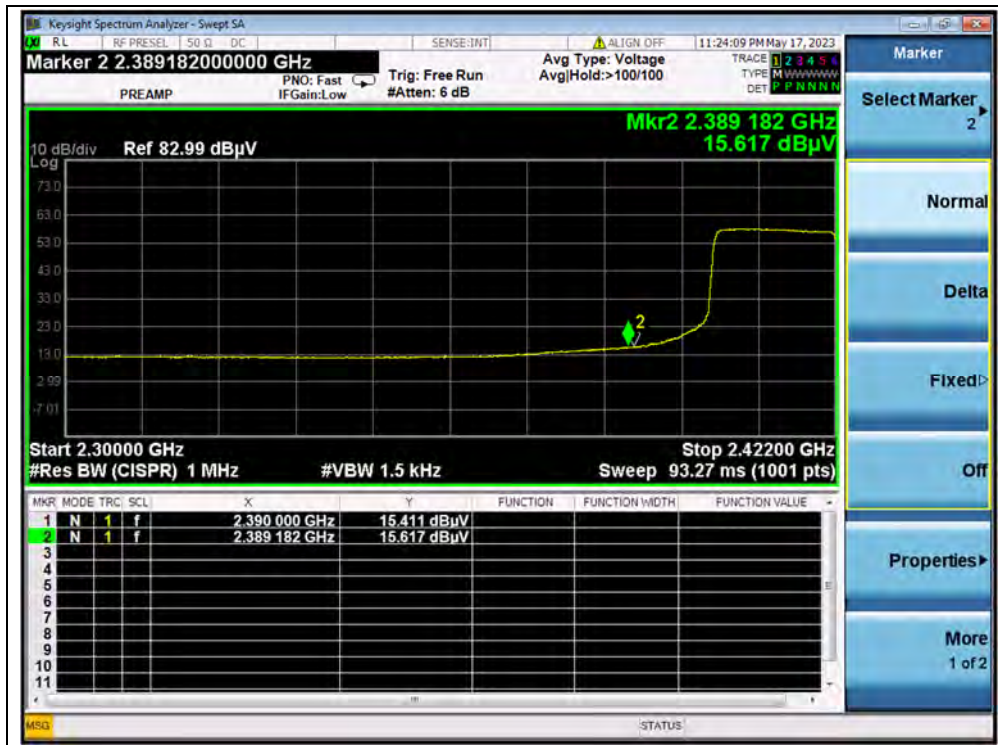


802.11ax (HEW40) Mode

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						
3	2383.57	PK	29.46	6.74	27.20	63.40	74	PASS
3	2389.18	AV	15.62	6.74	27.20	49.56	54	PASS
9	2486.90	PK	32.92	6.74	27.20	66.86	74	PASS
9	2483.58	AV	17.12	6.74	27.20	51.06	54	PASS



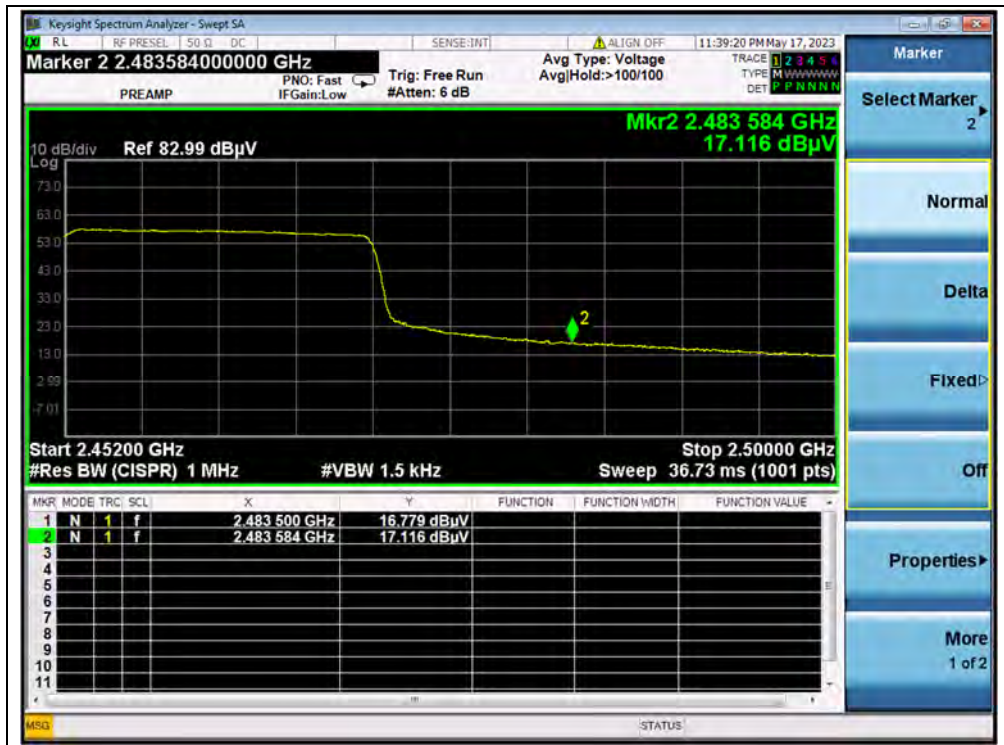
(PEAK, Channel 3, 802.11ax (HEW40))



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



(PEAK, Channel 9, 802.11ax (HEW40))



(AVERAGE, Channel 9, 802.11ax (HEW40))



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:

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

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.

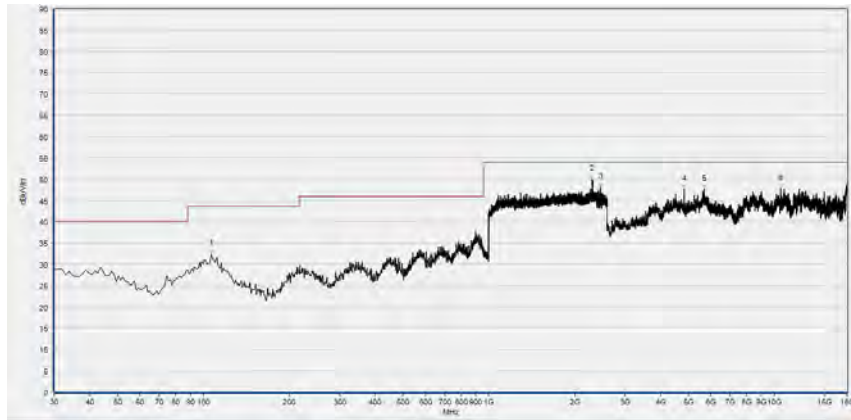
Note2: For the frequency, which started from 9kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit was not recorded.

Note3: For the frequency, which started from 18GHz to 10th harmonic of the highest frequency, was pre-scanned and the result which was 20dB lower than the limit was not recorded.



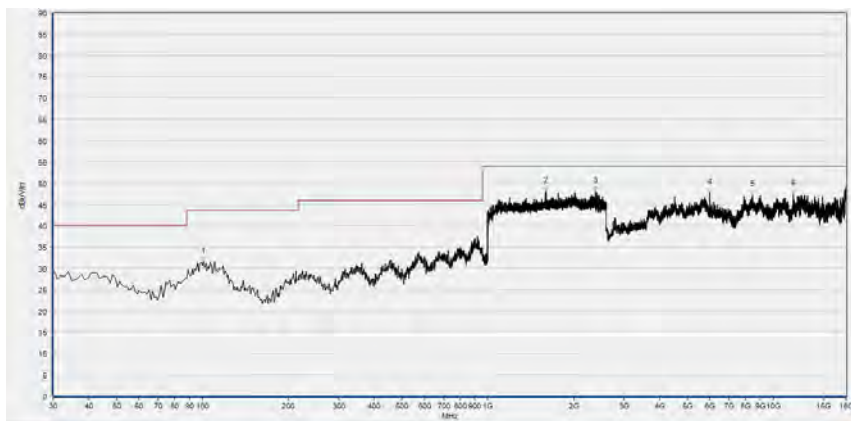
802.11b Mode

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
106.630	32.38	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2305.067	49.87	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2461.333	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4823.760	47.65	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5686.160	47.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10521.760	47.80	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
100.810	31.50	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1599.467	48.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2384.533	48.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	47.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8448.920	47.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11750.680	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

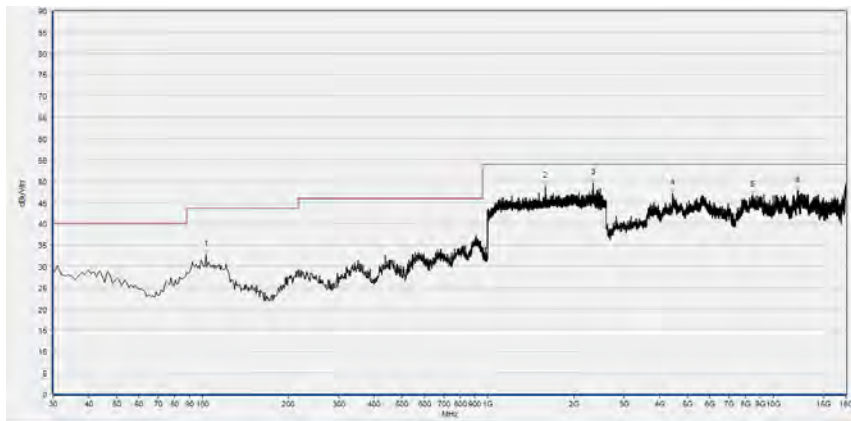
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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	31.38	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1734.933	47.98	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2333.867	50.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5658.440	46.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8458.160	47.84	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12178.800	47.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

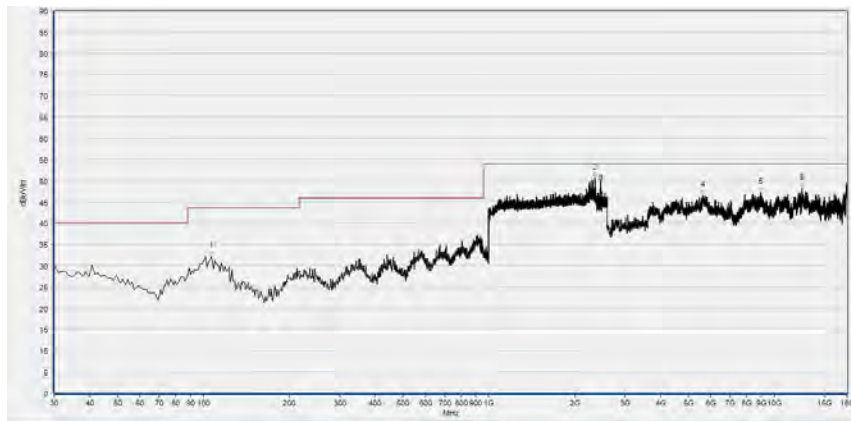
(Antenna Horizontal, 30MHz to 18GHz)



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
102.750	32.69	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1593.067	48.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2334.400	49.62	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4441.840	47.08	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8436.600	46.68	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12154.160	47.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

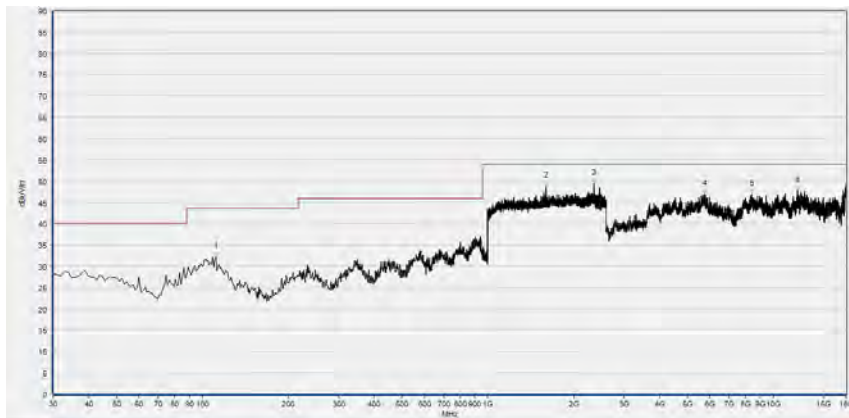
(Antenna Vertical, 30MHz to 18GHz)

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	32.15	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2358.400	50.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2462.400	50.31	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5612.240	46.52	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8944.800	47.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12526.840	48.19	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



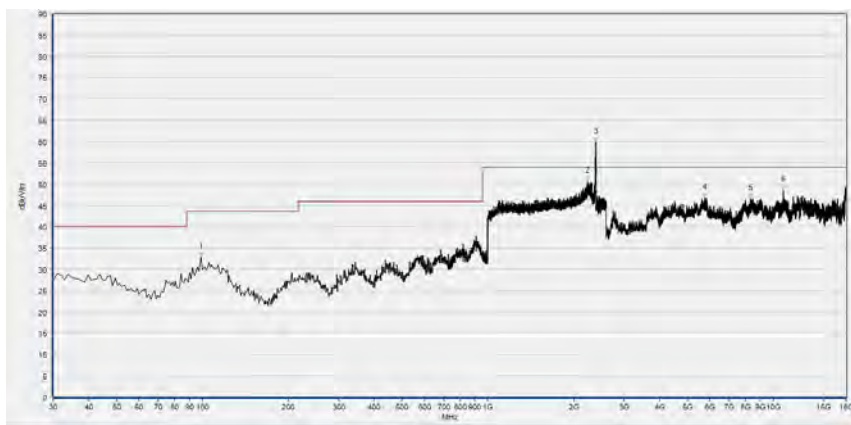
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	32.20	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1599.467	48.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2357.333	49.51	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5760.080	46.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8411.960	46.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12151.080	47.76	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
98.870	32.77	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2235.733	50.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2388.267	59.86	N/A	39.11	74.00	N/A	54.00	Horizontal	PASS
5744.680	46.83	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8328.800	46.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10869.800	48.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

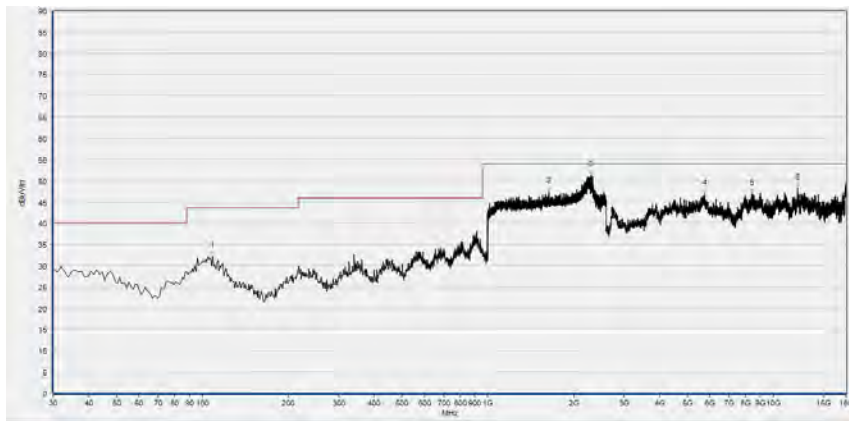
(Antenna Horizontal, 30MHz to 18GHz)



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
116.330	31.49	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1595.200	47.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2387.200	56.07	N/A	37.74	74.00	N/A	54.00	Vertical	PASS
6000.320	46.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8898.600	46.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13118.200	47.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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	32.11	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1635.200	47.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2305.067	51.26	N/A	39.17	74.00	N/A	54.00	Horizontal	PASS
5760.080	47.01	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8393.480	46.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12160.320	48.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

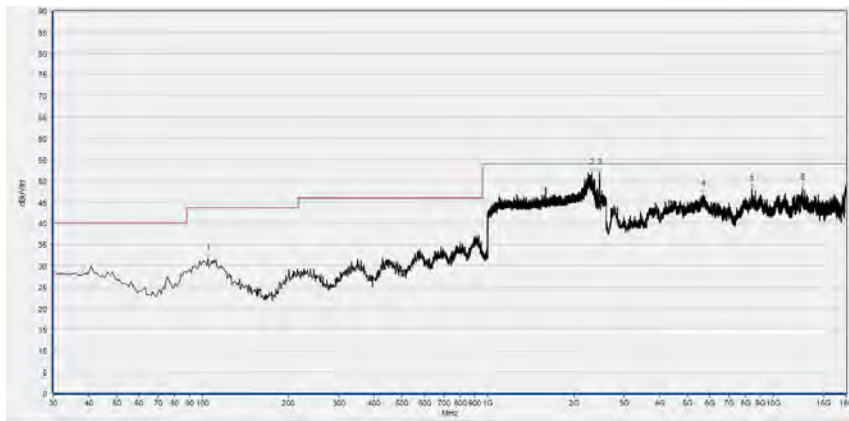
(Antenna Horizontal, 30MHz to 18GHz)



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
113.420	31.14	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1599.467	47.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2257.067	49.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5603.000	47.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8411.960	47.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
16389.160	47.64	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
104.690	31.68	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2309.867	51.72	N/A	39.28	74.00	N/A	54.00	Horizontal	PASS
2464.533	51.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5670.760	46.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8433.520	48.10	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12677.760	48.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

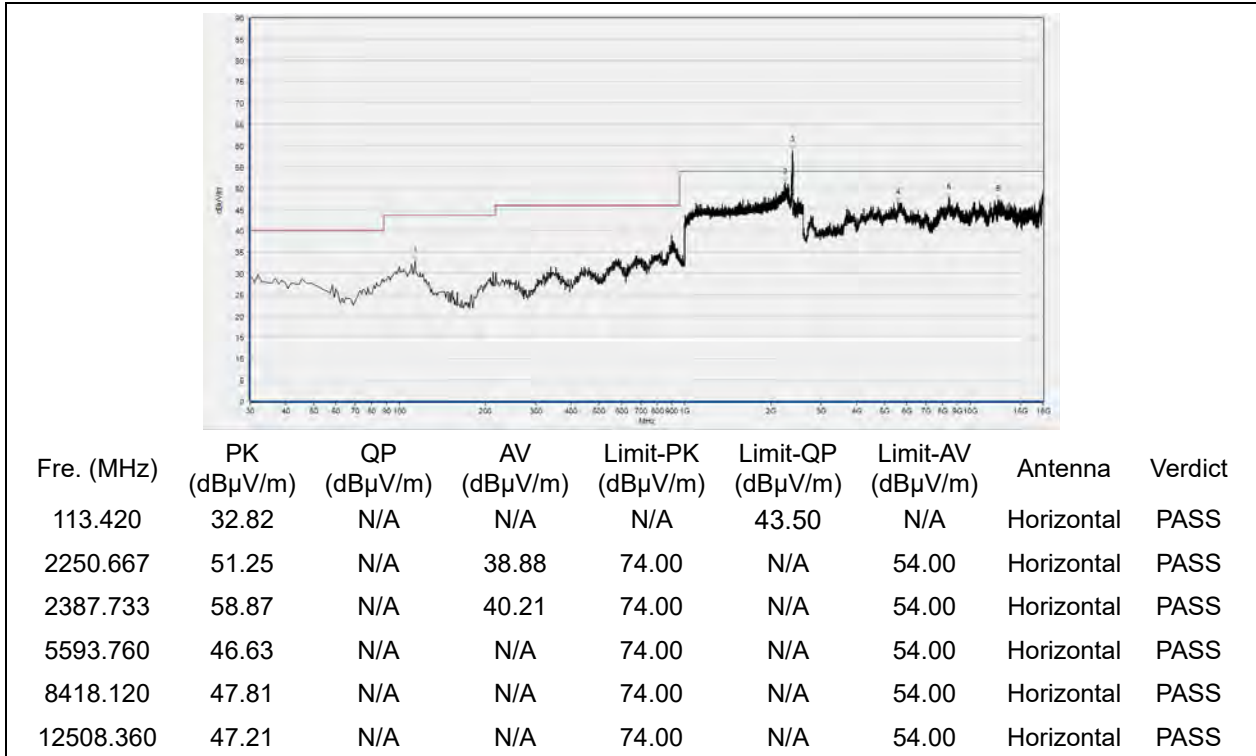


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
106.630	32.25	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1596.800	47.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2227.733	49.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	47.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8569.040	46.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12151.080	47.20	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

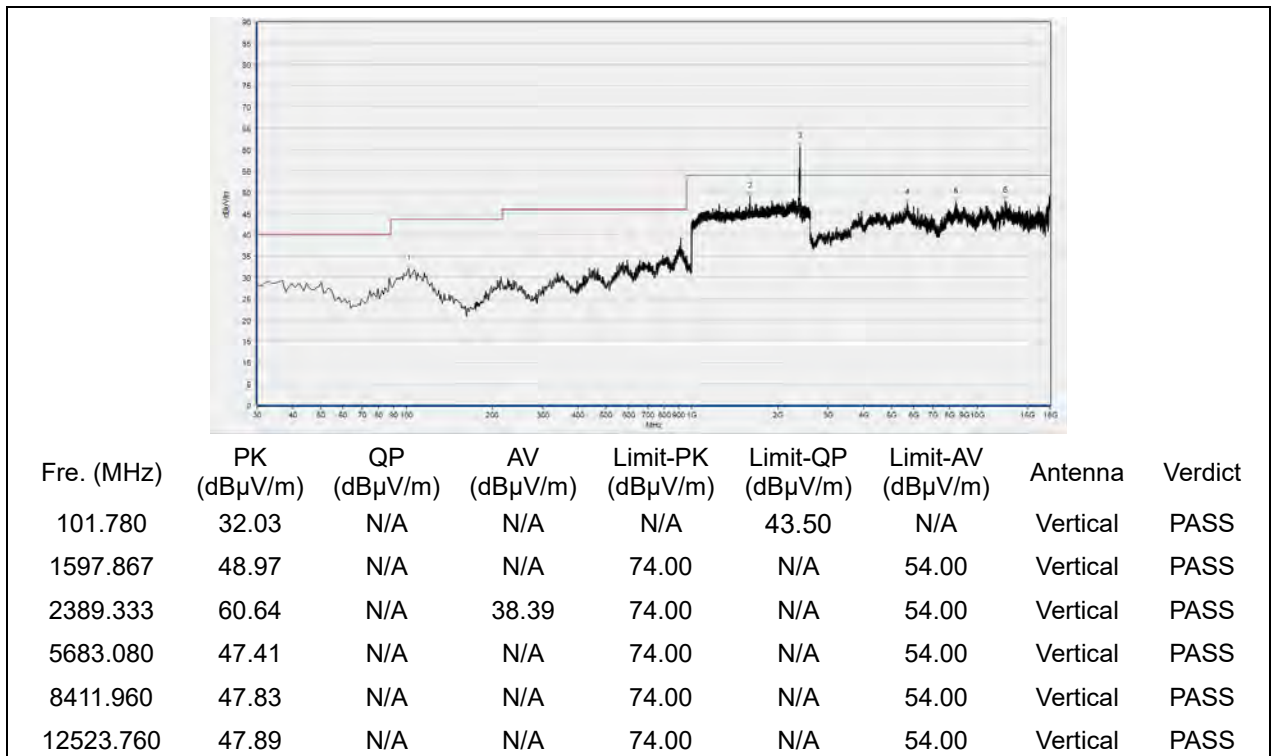
(Antenna Vertical, 30MHz to 18GHz)

802.11n (HT20) Mode

Plot for Channel 1

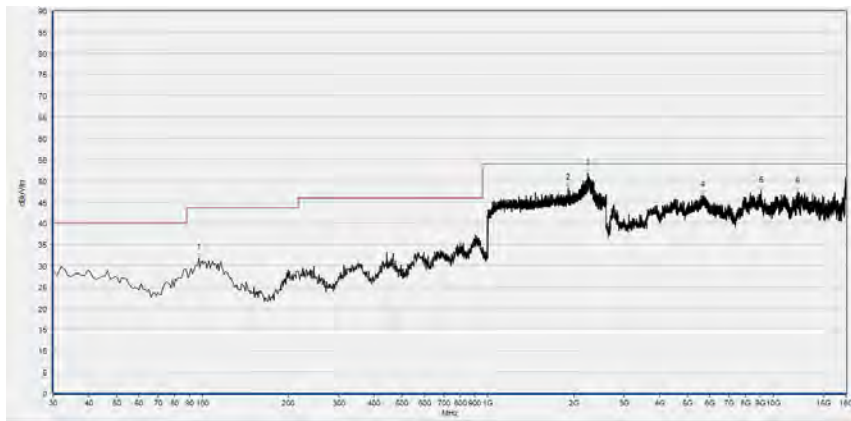


(Antenna Horizontal, 30MHz to 18GHz)



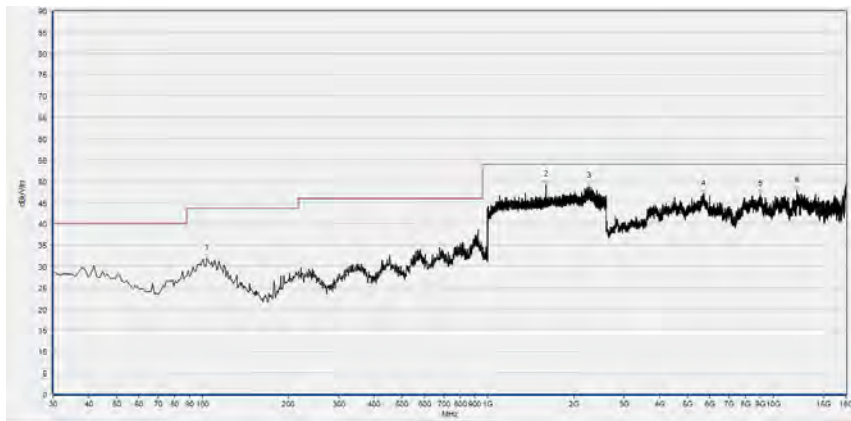
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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
96.930	31.84	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
1913.600	48.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2241.067	51.57	N/A	38.45	74.00	N/A	54.00	Horizontal	PASS
5658.440	46.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9055.680	47.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12141.840	47.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

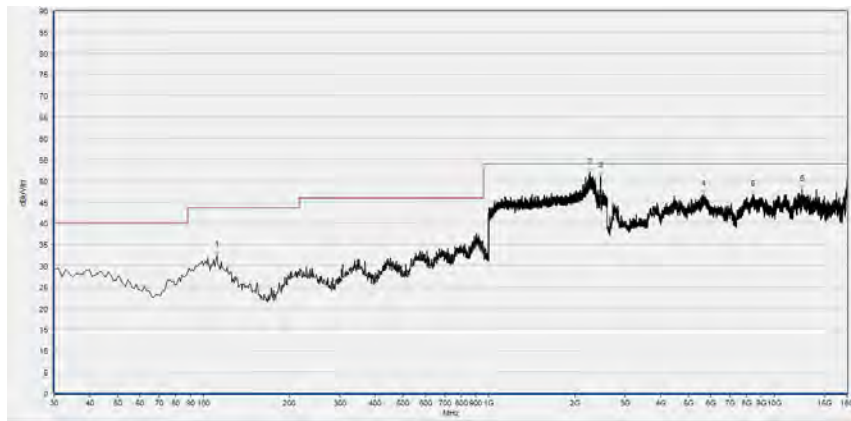
(Antenna Horizontal, 30MHz to 18GHz)



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
103.720	31.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1599.467	49.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2260.800	48.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5670.760	46.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8994.080	46.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12123.360	47.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

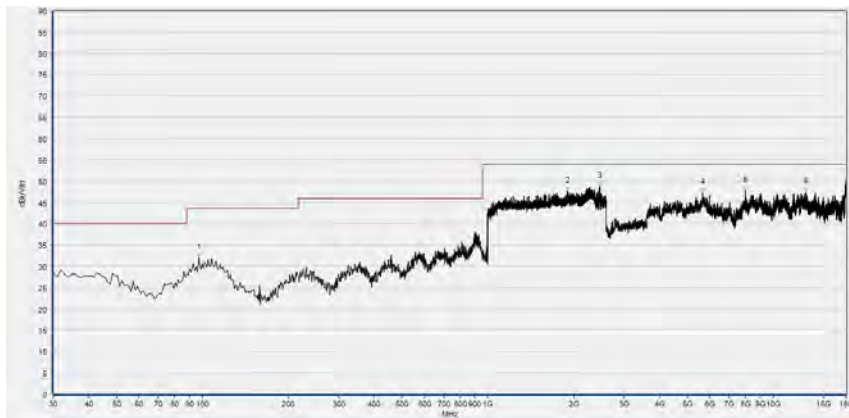
(Antenna Vertical, 30MHz to 18GHz)

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	32.31	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2262.933	51.87	N/A	39.18	74.00	N/A	54.00	Horizontal	PASS
2464.533	51.09	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5658.440	46.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8427.360	46.77	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12529.920	47.93	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

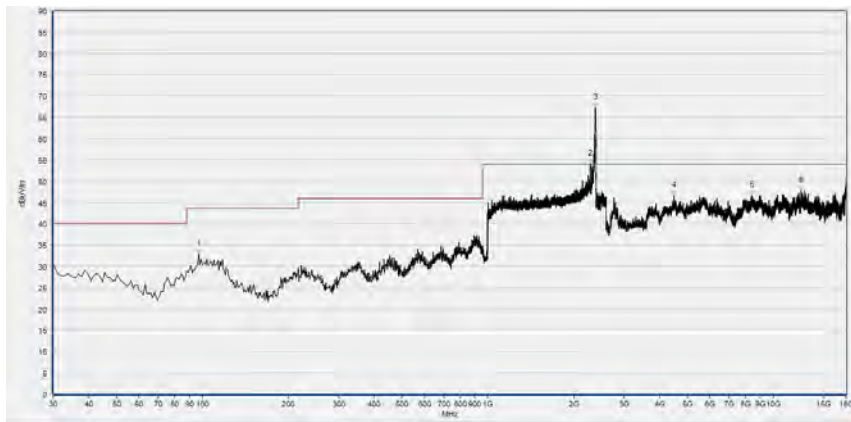


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
96.930	32.02	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1902.933	47.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2463.467	48.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5649.200	47.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7996.160	47.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13068.920	47.48	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

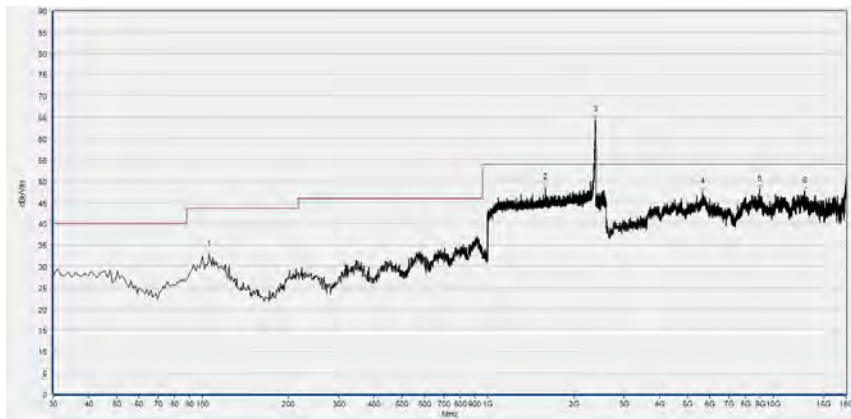
802.11n (HT40) Mode

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
96.930	32.78	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2286.933	53.99	N/A	42.78	74.00	N/A	54.00	Horizontal	PASS
2381.333	67.20	N/A	50.74	74.00	N/A	54.00	Horizontal	PASS
4478.800	46.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8418.120	46.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12520.680	47.81	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

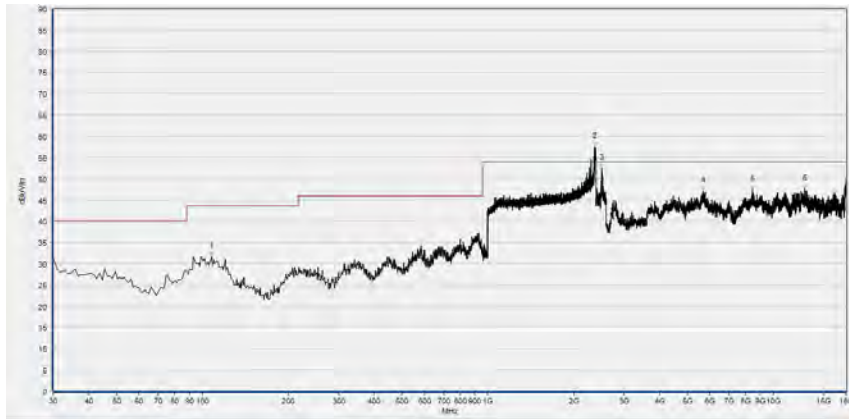
(Antenna Horizontal, 30MHz to 18GHz)



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	32.72	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1594.133	48.35	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2379.733	64.31	N/A	47.97	74.00	N/A	54.00	Vertical	PASS
5661.520	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8941.720	48.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12877.960	47.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

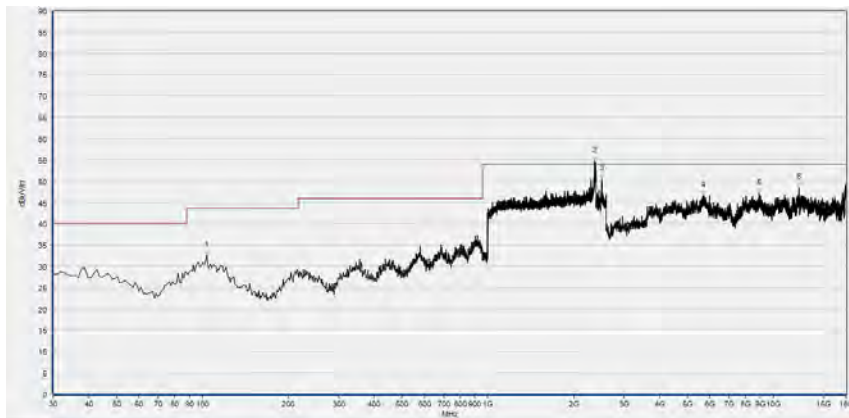
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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	31.65	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2371.200	57.48	N/A	43.31	74.00	N/A	54.00	Horizontal	PASS
2505.067	52.48	N/A	37.66	74.00	N/A	54.00	Horizontal	PASS
5676.920	47.11	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8458.160	47.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12877.960	47.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

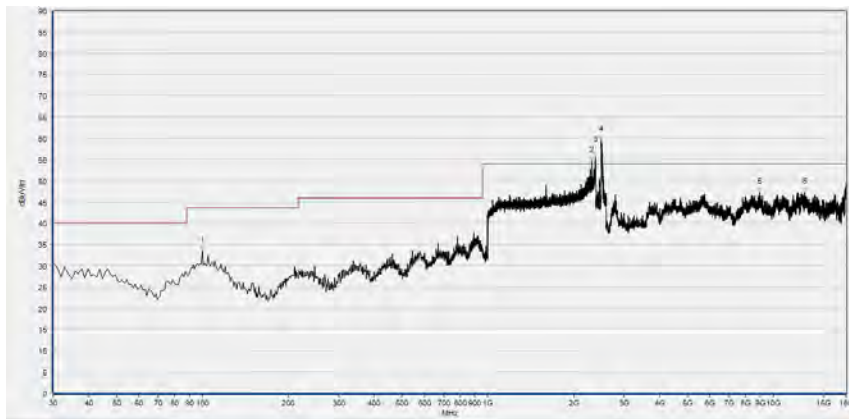
(Antenna Horizontal, 30MHz to 18GHz)



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
103.720	32.50	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2366.933	54.61	N/A	40.97	74.00	N/A	54.00	Vertical	PASS
2508.267	50.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5670.760	46.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8935.560	47.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12292.760	48.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

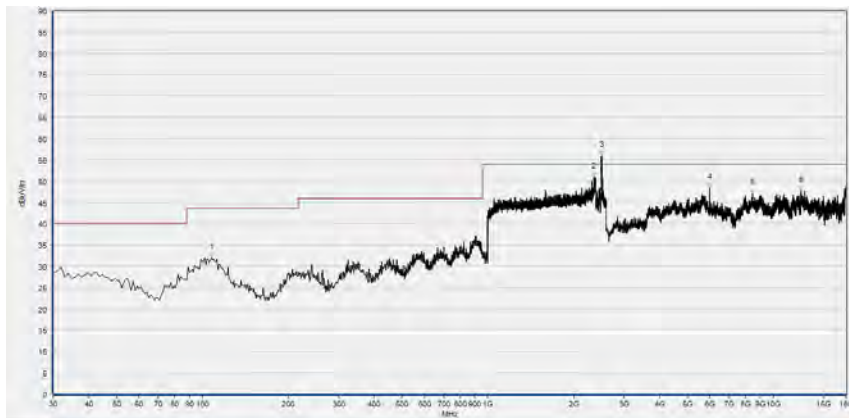
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 9



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
99.840	33.57	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2316.267	54.64	N/A	44.19	74.00	N/A	54.00	Horizontal	PASS
2376.000	55.46	N/A	39.07	74.00	N/A	54.00	Horizontal	PASS
2499.733	59.42	N/A	44.60	74.00	N/A	54.00	Horizontal	PASS
8981.760	47.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12896.440	47.30	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



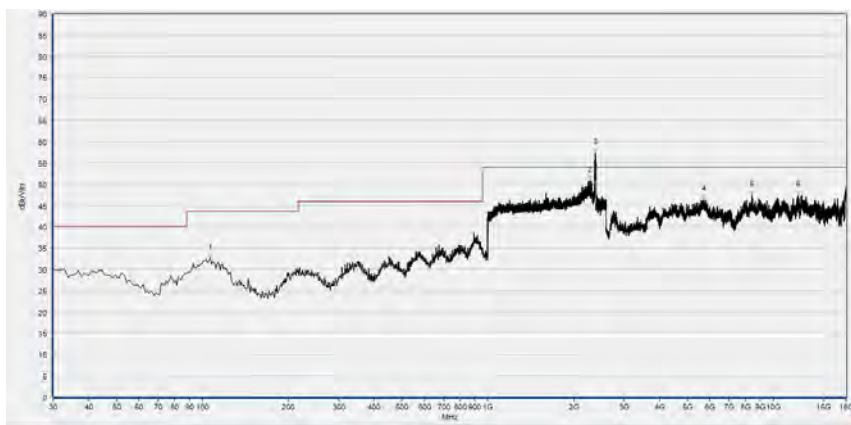
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.600	31.95	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2357.867	50.89	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2502.400	55.92	N/A	40.53	74.00	N/A	54.00	Vertical	PASS
6000.320	48.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8455.080	47.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12499.120	47.84	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



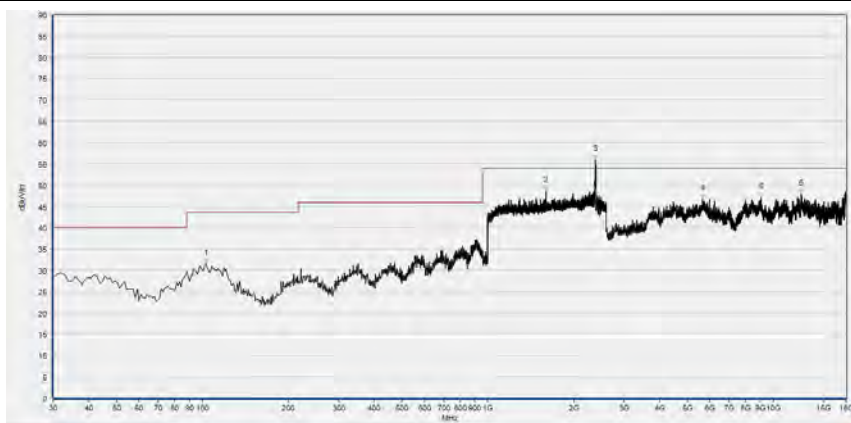
802.11ax (HEW20) Mode

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
106.630	32.56	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2276.800	50.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2387.200	57.25	N/A	41.87	74.00	N/A	54.00	Horizontal	PASS
5729.280	46.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8408.880	47.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12212.680	47.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

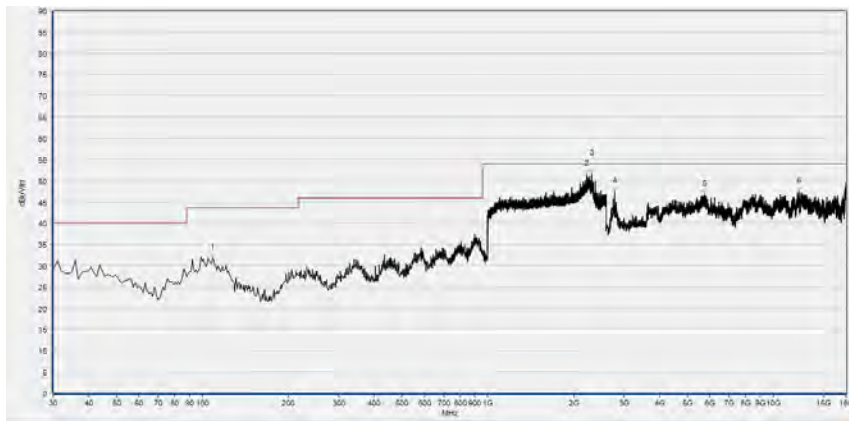
(Antenna Horizontal, 30MHz to 18GHz)



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
102.750	31.55	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1598.933	48.59	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2385.067	55.93	N/A	39.87	74.00	N/A	54.00	Vertical	PASS
5661.520	46.76	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9080.320	47.05	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12517.600	48.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

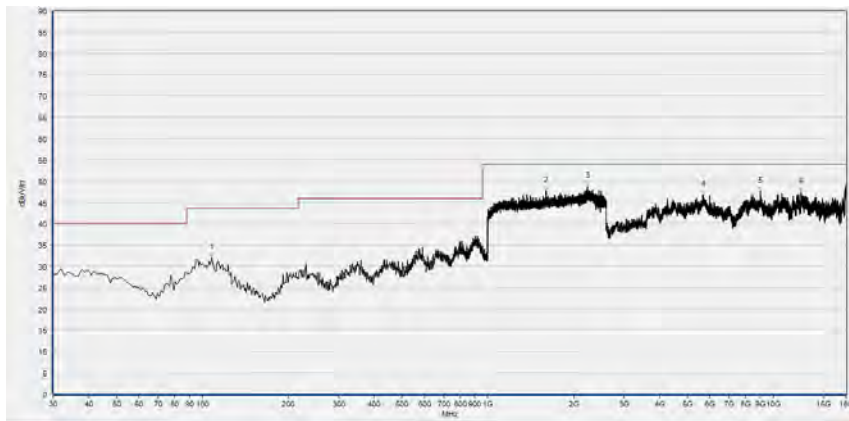
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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	31.79	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2225.067	51.53	N/A	38.55	74.00	N/A	54.00	Horizontal	PASS
2313.600	51.60	N/A	38.58	74.00	N/A	54.00	Horizontal	PASS
2781.720	47.43	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5760.080	46.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12280.440	47.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

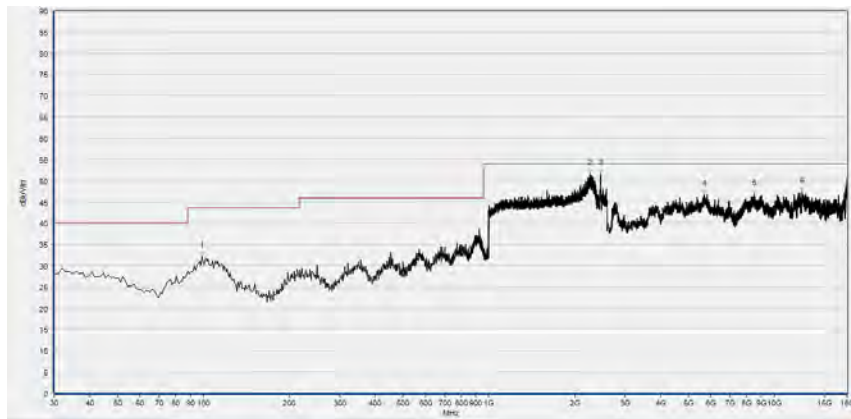


Fre. (MHz)	PK (dBµV/m)	QP (dBµV/m)	AV (dBµV/m)	Limit-PK (dBµV/m)	Limit-QP (dBµV/m)	Limit-AV (dBµV/m)	Antenna	Verdict
107.600	32.08	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1596.800	47.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2234.667	48.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5673.840	46.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9000.240	47.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12539.160	47.37	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

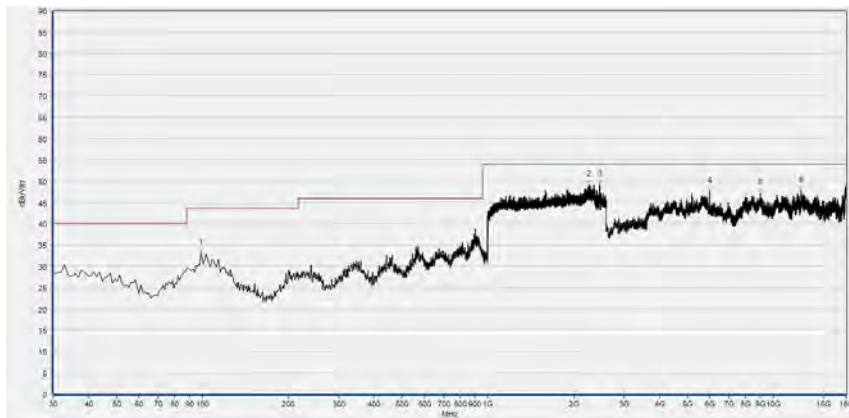


Plot for Channel 11



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
98.870	32.23	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2256.533	51.66	N/A	39.30	74.00	N/A	54.00	Horizontal	PASS
2464.000	51.61	N/A	N/A	74.00	N/A	54.00	Horizontal	N/A
5686.160	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8498.200	46.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12520.680	47.46	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)



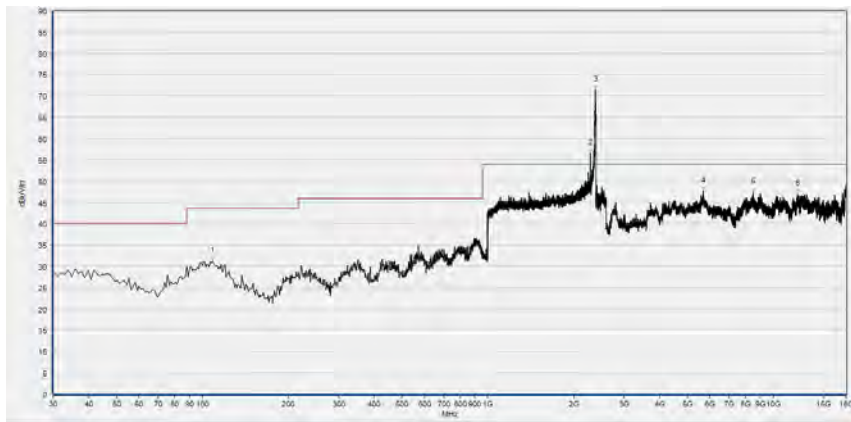
Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
98.870	33.11	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2264.000	49.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2465.600	49.32	N/A	N/A	74.00	N/A	54.00	Vertical	N/A
6000.320	47.56	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9031.040	47.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12526.840	47.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)



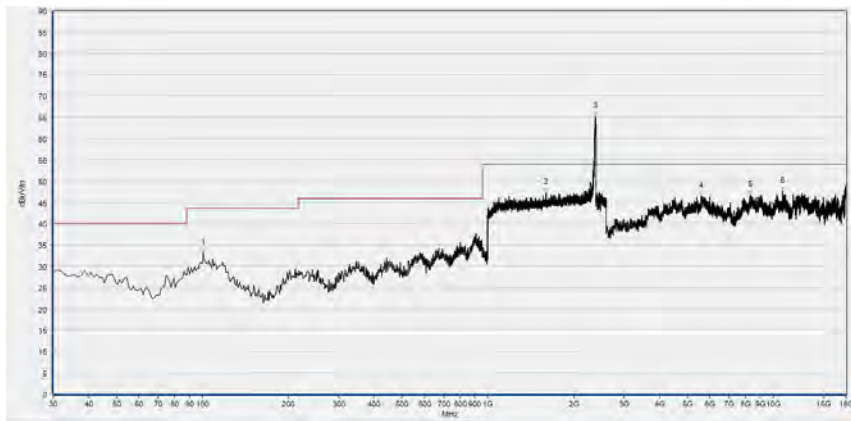
802.11ax (HEW40) Mode

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
108.570	31.21	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2289.067	56.53	N/A	44.21	74.00	N/A	54.00	Horizontal	PASS
2377.067	71.36	N/A	50.21	74.00	N/A	54.00	Horizontal	PASS
5670.760	47.63	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8519.760	47.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12144.920	46.98	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

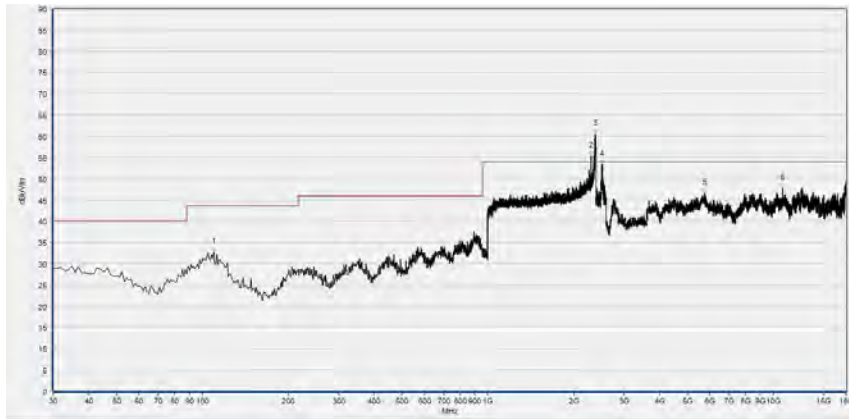
(Antenna Horizontal, 30MHz to 18GHz)



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
100.810	33.13	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1597.867	47.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2379.733	65.21	N/A	47.69	74.00	N/A	54.00	Vertical	PASS
5593.760	46.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8334.960	46.83	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
10798.960	47.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

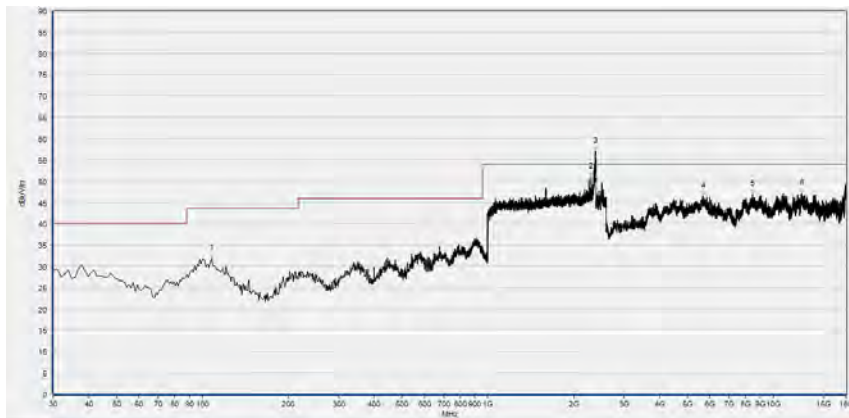
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 6



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	32.67	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2302.933	55.35	N/A	44.82	74.00	N/A	54.00	Horizontal	PASS
2385.067	60.57	N/A	42.70	74.00	N/A	54.00	Horizontal	PASS
2509.867	53.33	N/A	42.77	74.00	N/A	54.00	Horizontal	PASS
5741.600	46.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10805.120	47.76	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

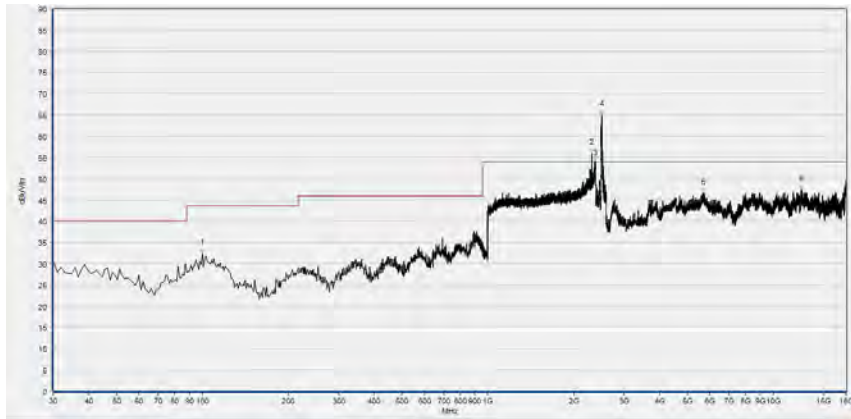
(Antenna Horizontal, 30MHz to 18GHz)



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
107.600	31.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2302.933	51.03	N/A	40.32	74.00	N/A	54.00	Vertical	PASS
2383.467	57.06	N/A	41.89	74.00	N/A	54.00	Vertical	PASS
5673.840	46.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8448.920	47.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12597.680	47.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

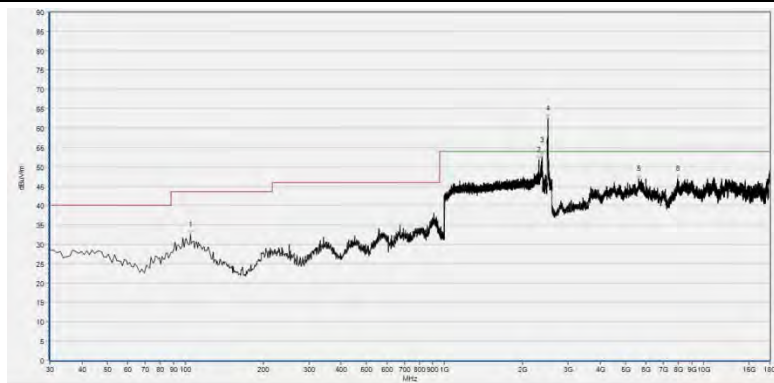
(Antenna Vertical, 30MHz to 18GHz)

Plot for Channel 9



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
99.840	32.28	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2317.333	55.99	N/A	44.88	74.00	N/A	54.00	Horizontal	PASS
2376.533	54.05	N/A	40.32	74.00	N/A	54.00	Horizontal	PASS
2500.800	64.97	N/A	45.33	74.00	N/A	54.00	Horizontal	PASS
5673.840	46.67	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12489.880	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
104.690	32.52	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2316.800	51.86	N/A	40.68	74.00	N/A	54.00	Vertical	PASS
2376.000	52.65	N/A	37.60	74.00	N/A	54.00	Vertical	PASS
2504.000	62.47	N/A	41.11	74.00	N/A	54.00	Vertical	PASS
5615.320	46.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
7931.480	46.88	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT