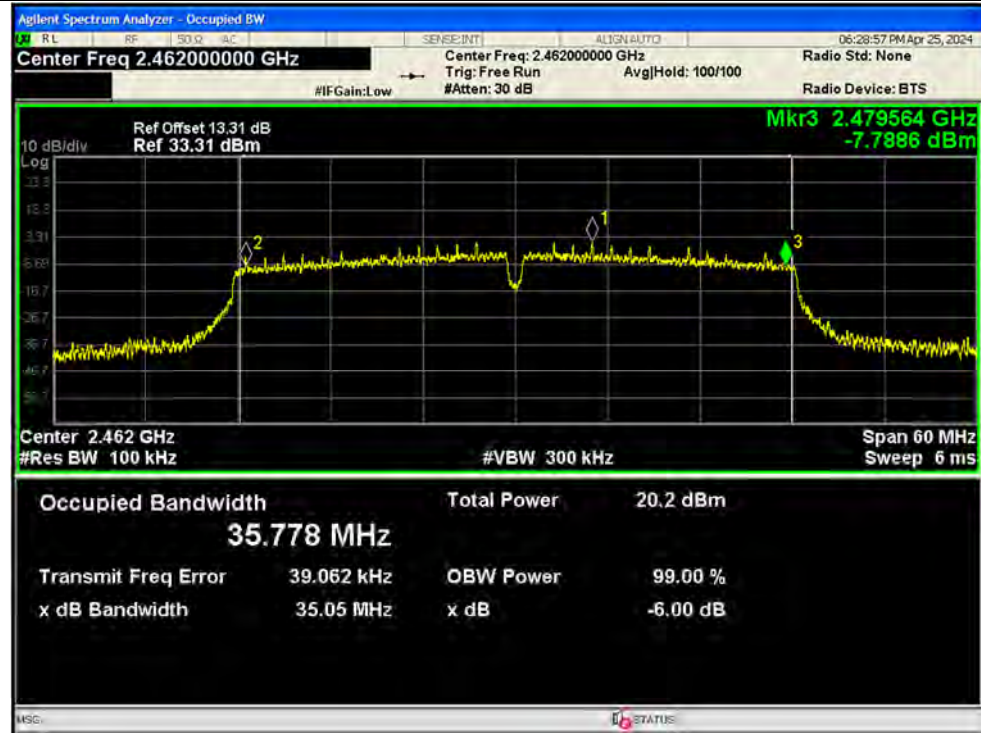
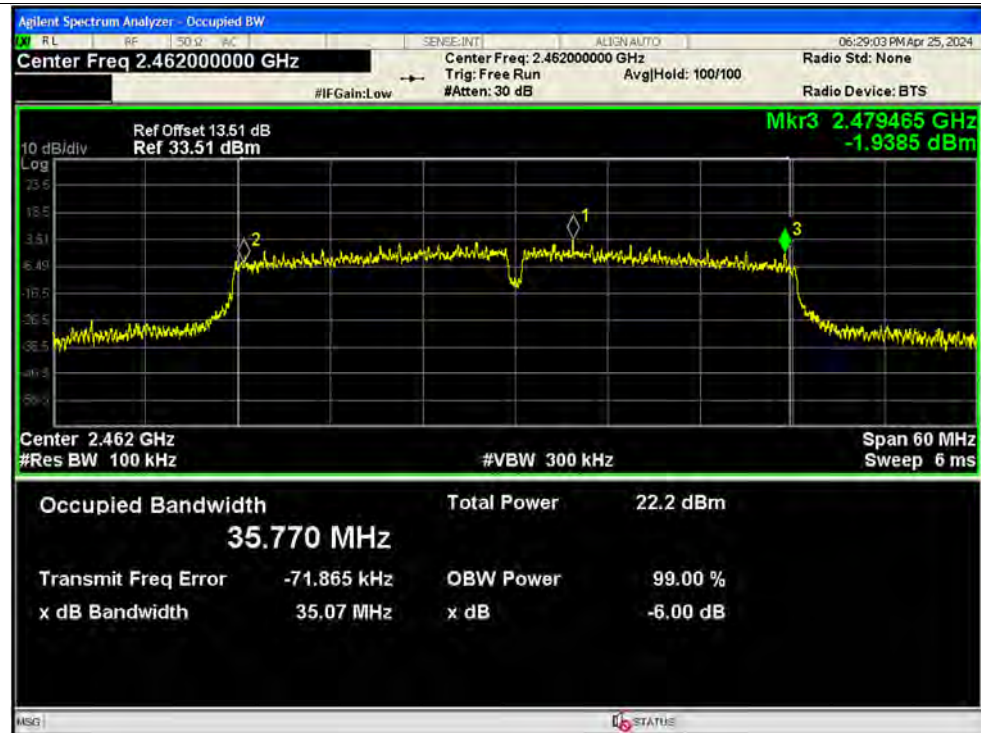


-6dB Bandwidth NVNT n40 2462MHz Ant1 MIMO



-6dB Bandwidth NVNT n40 2462MHz Ant2 MIMO



**A.5. Conducted Spurious Emissions**

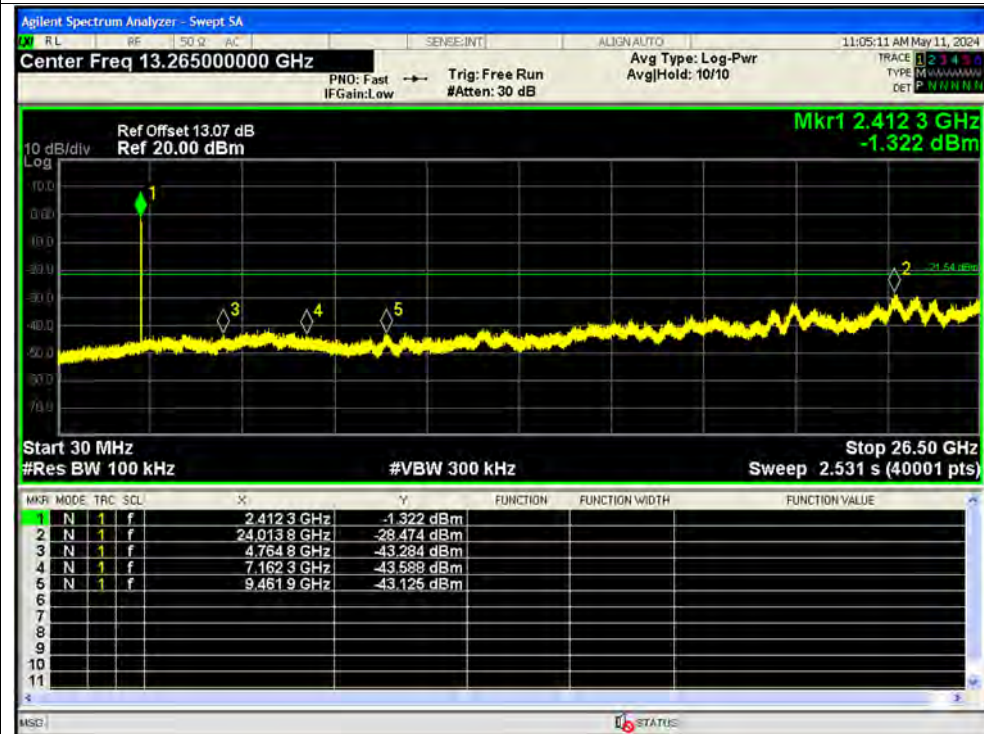
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b SISO	2412	Ant1	-26.93	-20	Pass
NVNT	b SISO	2442	Ant1	-28.38	-20	Pass
NVNT	b SISO	2472	Ant1	-26.85	-20	Pass
NVNT	b SISO	2412	Ant2	-27.25	-20	Pass
NVNT	b SISO	2442	Ant2	-29.58	-20	Pass
NVNT	b SISO	2472	Ant2	-37.94	-20	Pass
NVNT	g SISO	2412	Ant1	-25.41	-20	Pass
NVNT	g SISO	2442	Ant1	-24.39	-20	Pass
NVNT	g SISO	2472	Ant1	-24.88	-20	Pass
NVNT	g SISO	2412	Ant2	-27.16	-20	Pass
NVNT	g SISO	2442	Ant2	-25.91	-20	Pass
NVNT	g SISO	2472	Ant2	-26.77	-20	Pass
NVNT	n20 MIMO	2412	Ant1	-23.69	-20	Pass
NVNT	n20 MIMO	2412	Ant2	-26.12	-20	Pass
NVNT	n20 MIMO	2442	Ant1	-24.2	-20	Pass
NVNT	n20 MIMO	2442	Ant2	-25.39	-20	Pass
NVNT	n20 MIMO	2472	Ant1	-24.07	-20	Pass
NVNT	n20 MIMO	2472	Ant2	-25.82	-20	Pass
NVNT	n40 MIMO	2422	Ant1	-20.05	-20	Pass
NVNT	n40 MIMO	2422	Ant2	-22.02	-20	Pass
NVNT	n40 MIMO	2442	Ant1	-29.97	-20	Pass
NVNT	n40 MIMO	2442	Ant2	-32.39	-20	Pass
NVNT	n40 MIMO	2462	Ant1	-20.26	-20	Pass
NVNT	n40 MIMO	2462	Ant2	-21.8	-20	Pass

Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref SISO



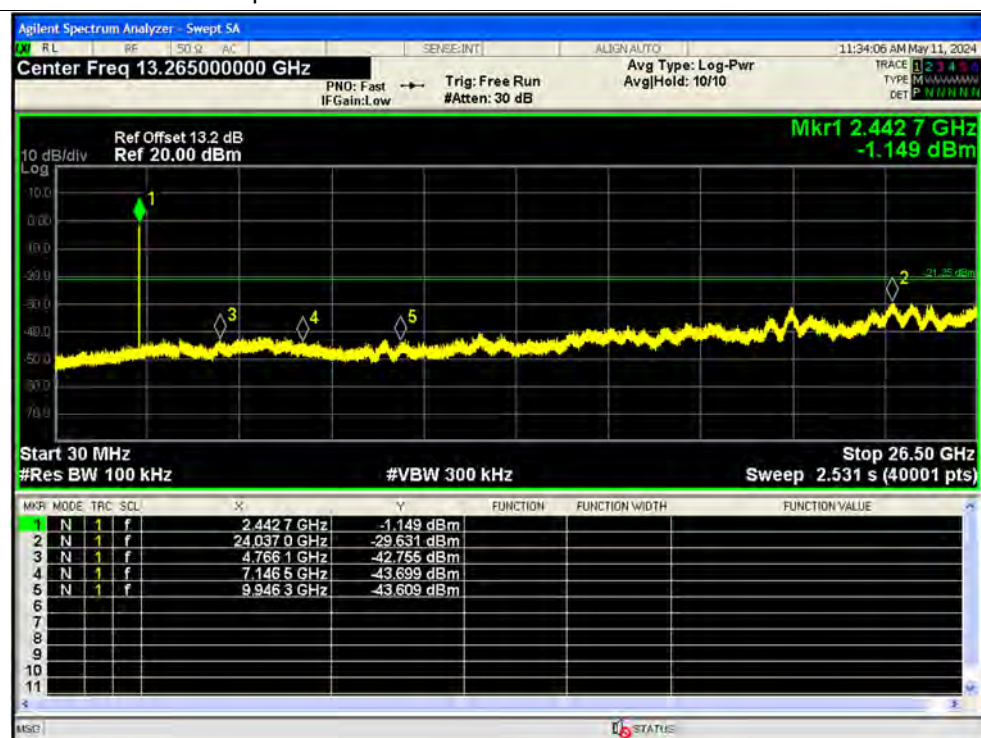
Tx. Spurious NVNT b 2412MHz Ant1 Emission SISO



Tx. Spurious NVNT b 2442MHz Ant1 Ref SISO



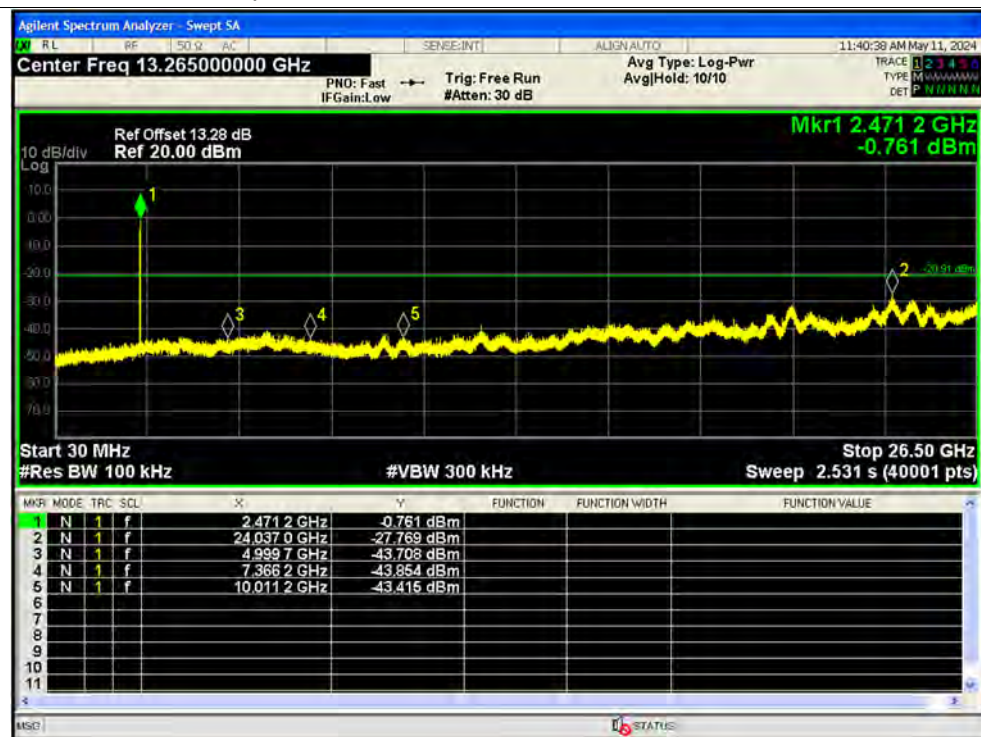
Tx. Spurious NVNT b 2442MHz Ant1 Emission SISO



Tx. Spurious NVNT b 2472MHz Ant1 Ref SISO



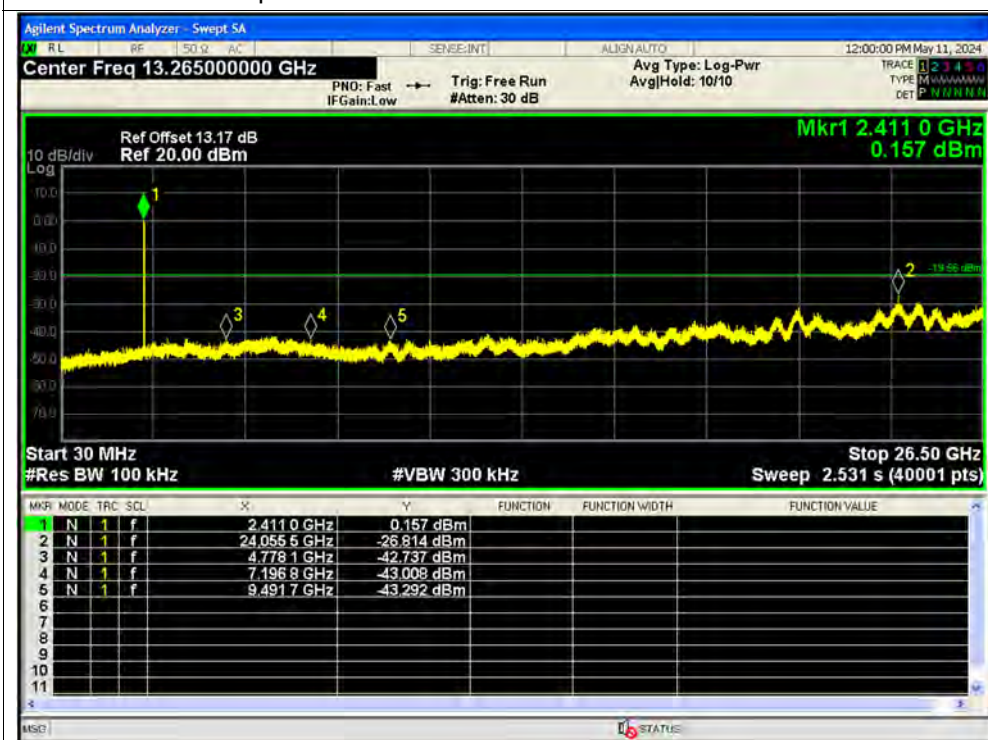
Tx. Spurious NVNT b 2472MHz Ant1 Emission SISO



Tx. Spurious NVNT b 2412MHz Ant2 Ref SISO



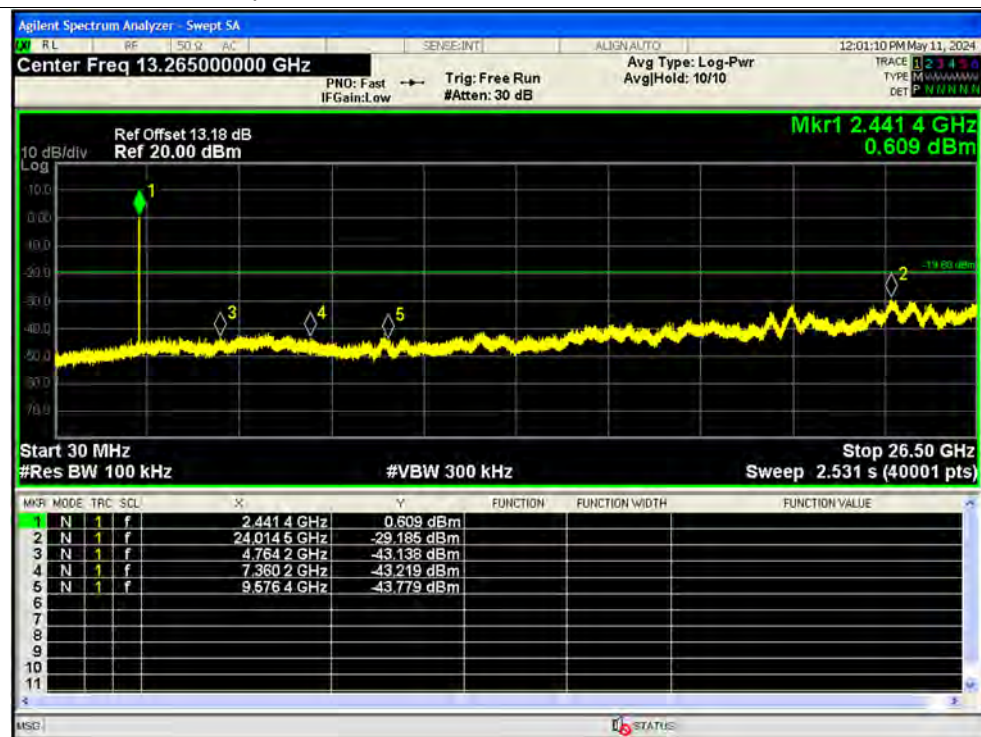
Tx. Spurious NVNT b 2412MHz Ant2 Emission SISO



Tx. Spurious NVNT b 2442MHz Ant2 Ref SISO



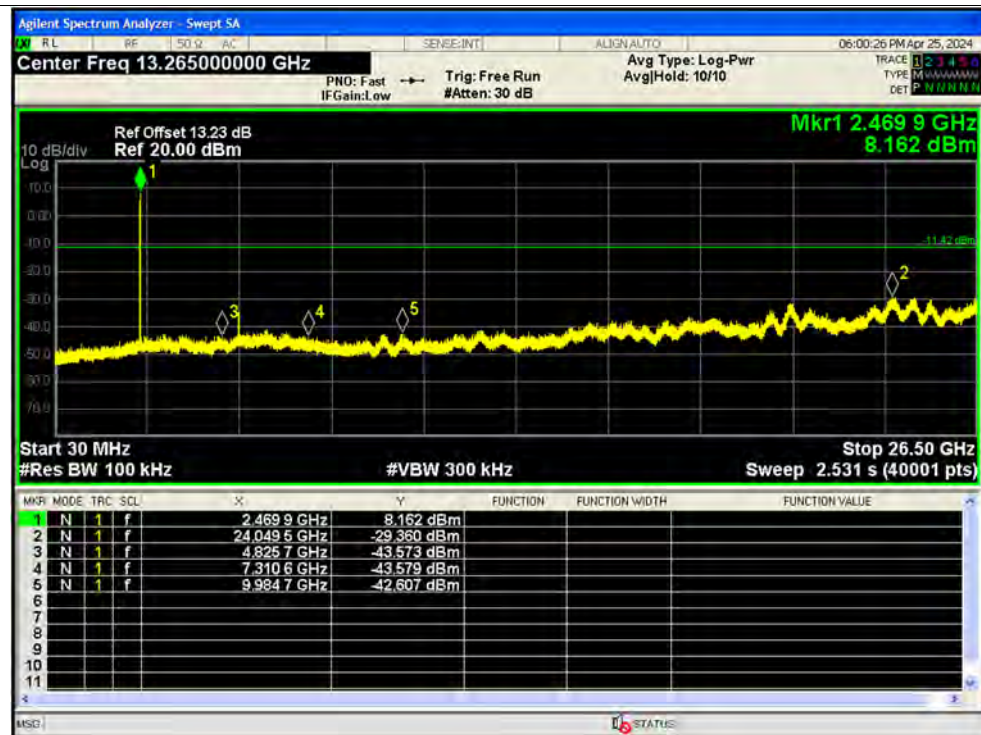
Tx. Spurious NVNT b 2442MHz Ant2 Emission SISO



Tx. Spurious NVNT b 2472MHz Ant2 Ref SISO



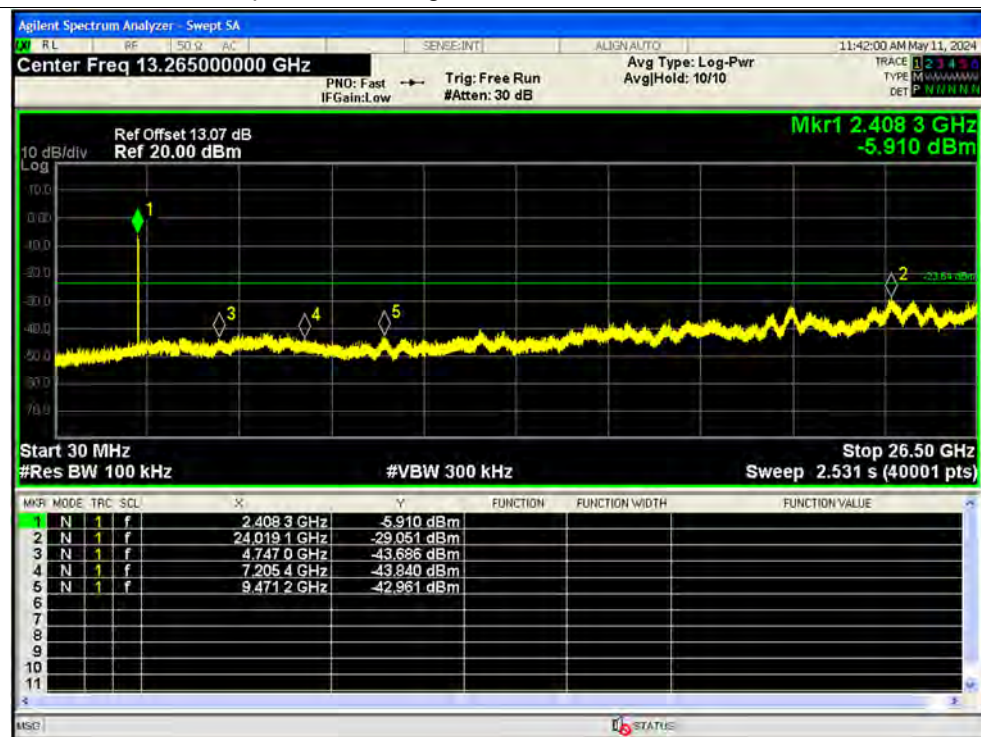
Tx. Spurious NVNT b 2472MHz Ant2 Emission SISO



Tx. Spurious NVNT g 2412MHz Ant1 Ref SISO



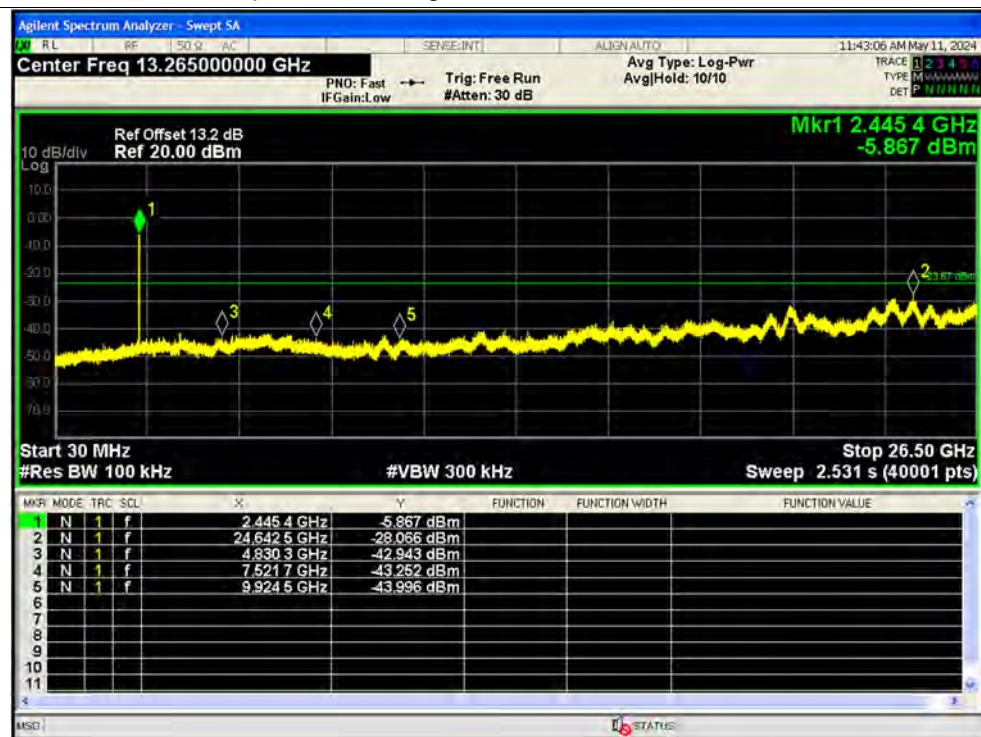
Tx. Spurious NVNT g 2412MHz Ant1 Emission SISO



Tx. Spurious NVNT g 2442MHz Ant1 Ref SISO



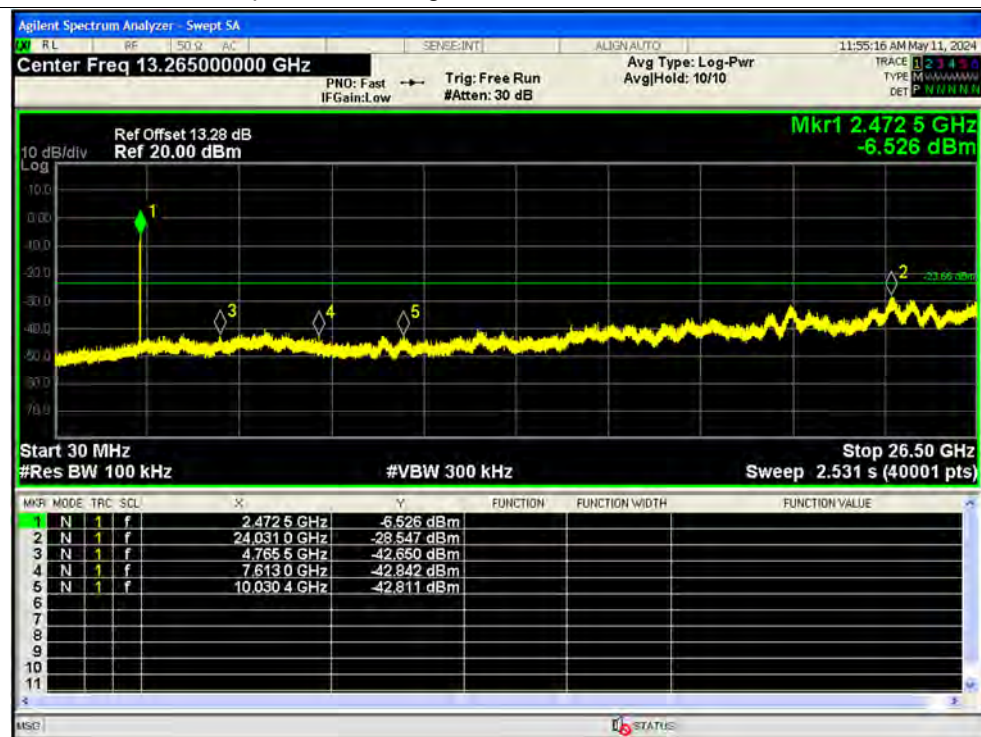
Tx. Spurious NVNT g 2442MHz Ant1 Emission SISO



Tx. Spurious NVNT g 2472MHz Ant1 Ref SISO



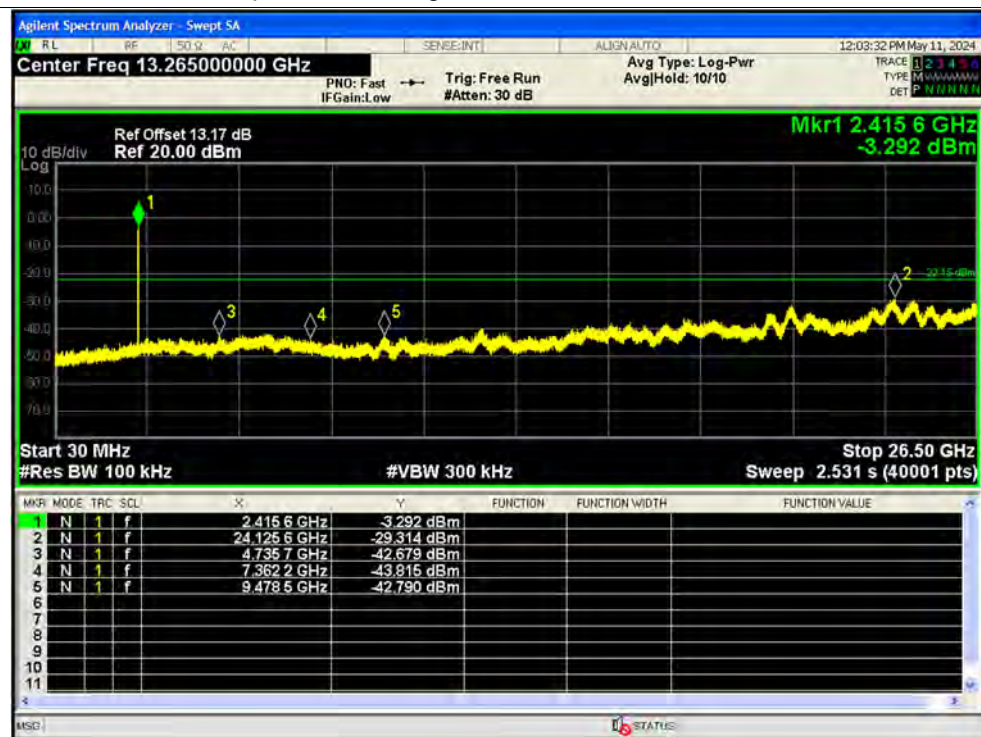
Tx. Spurious NVNT g 2472MHz Ant1 Emission SISO



Tx. Spurious NVNT g 2412MHz Ant2 Ref SISO



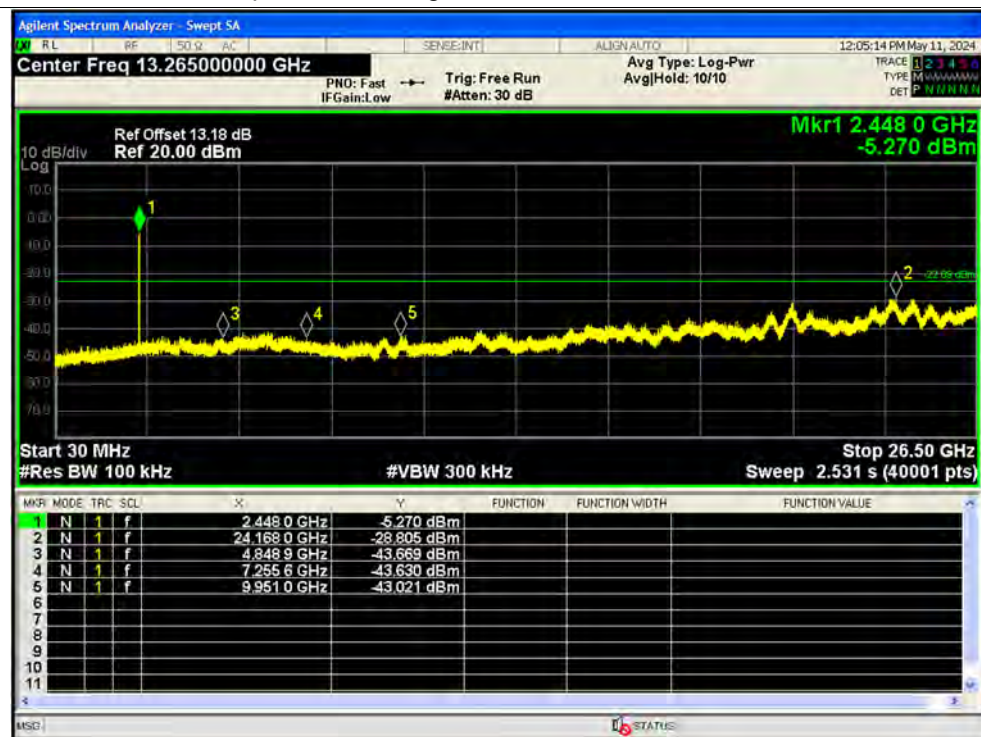
Tx. Spurious NVNT g 2412MHz Ant2 Emission SISO



Tx. Spurious NVNT g 2442MHz Ant2 Ref SISO



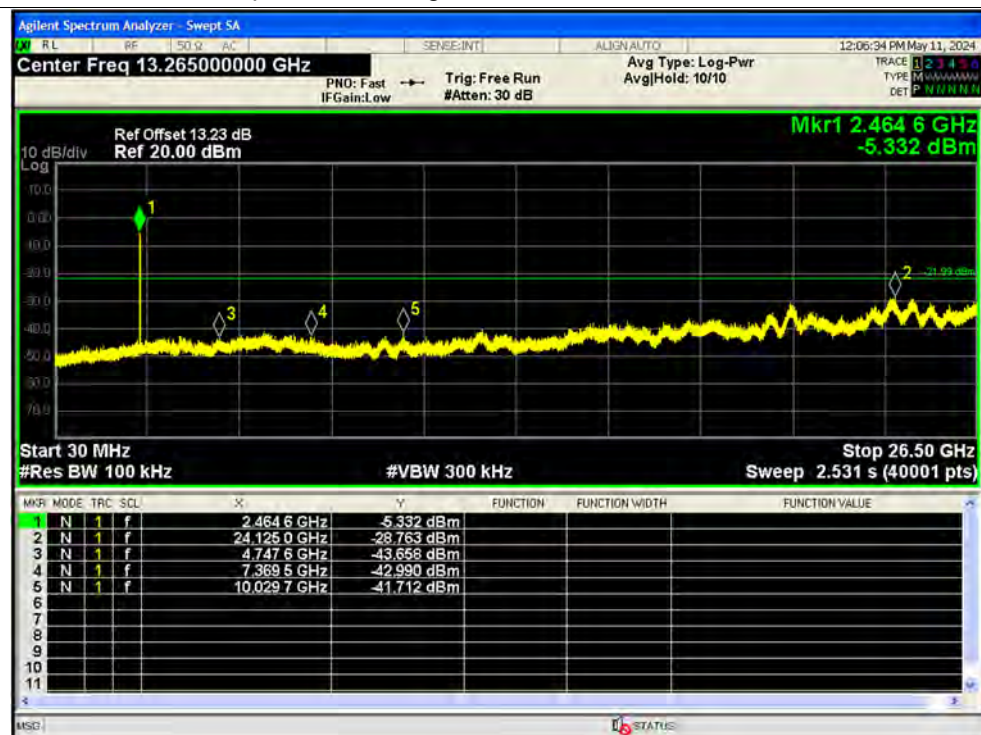
Tx. Spurious NVNT g 2442MHz Ant2 Emission SISO



Tx. Spurious NVNT g 2472MHz Ant2 Ref SISO



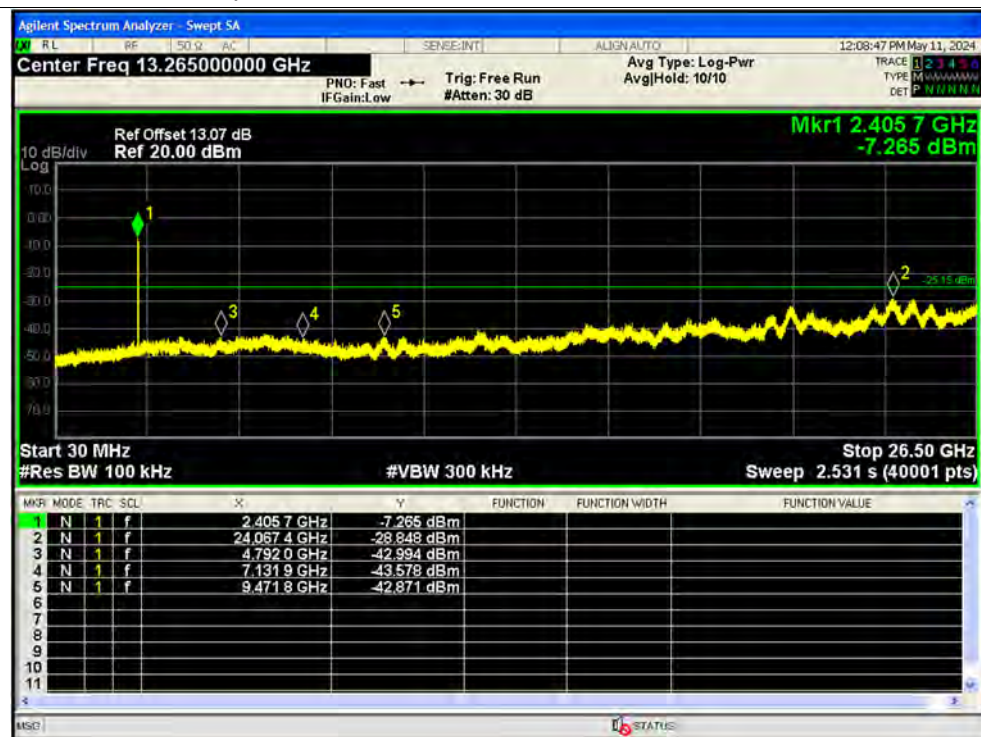
Tx. Spurious NVNT g 2472MHz Ant2 Emission SISO



Tx. Spurious NVNT n20 2412MHz Ant1 Ref MIMO



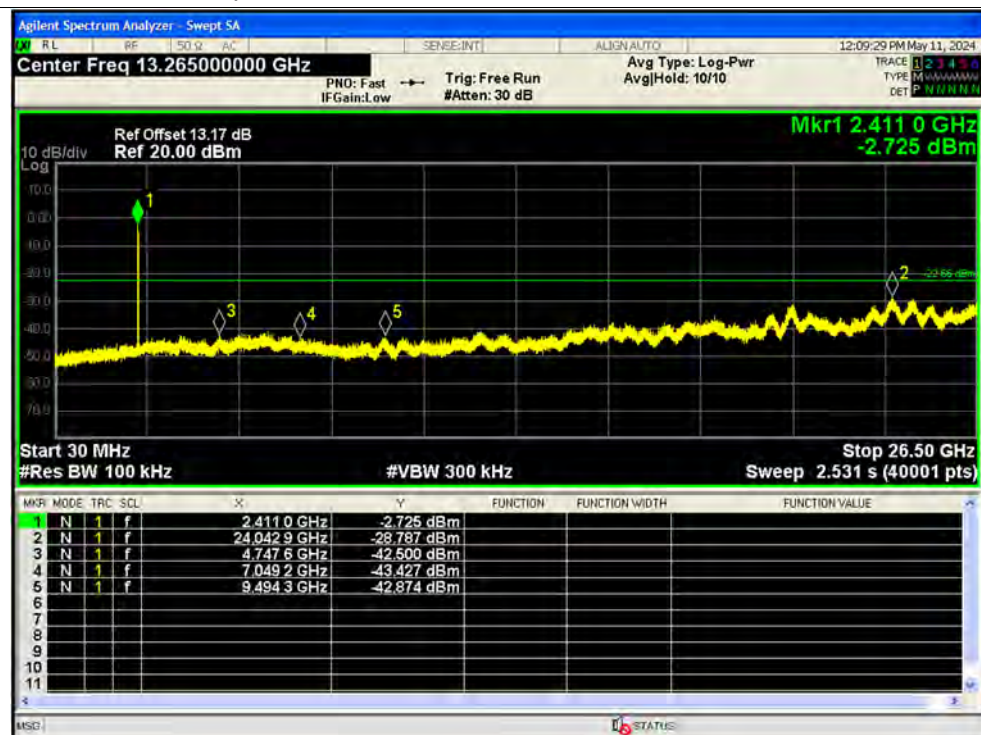
Tx. Spurious NVNT n20 2412MHz Ant1 Emission MIMO



Tx. Spurious NVNT n20 2412MHz Ant2 Ref MIMO



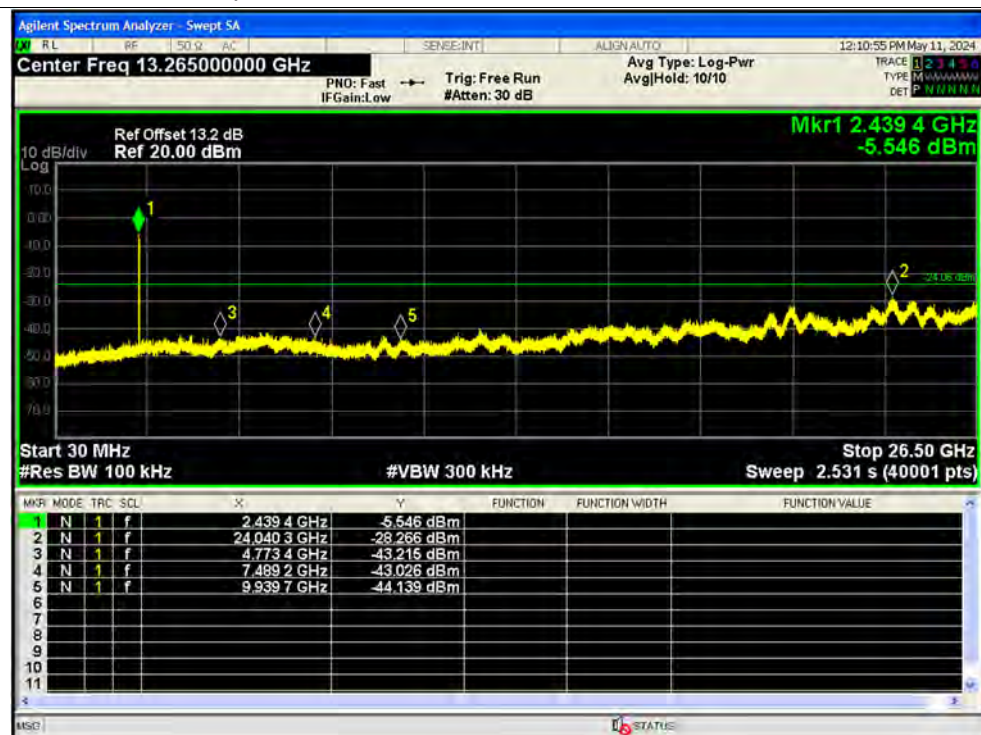
Tx. Spurious NVNT n20 2412MHz Ant2 Emission MIMO



Tx. Spurious NVNT n20 2442MHz Ant1 Ref MIMO



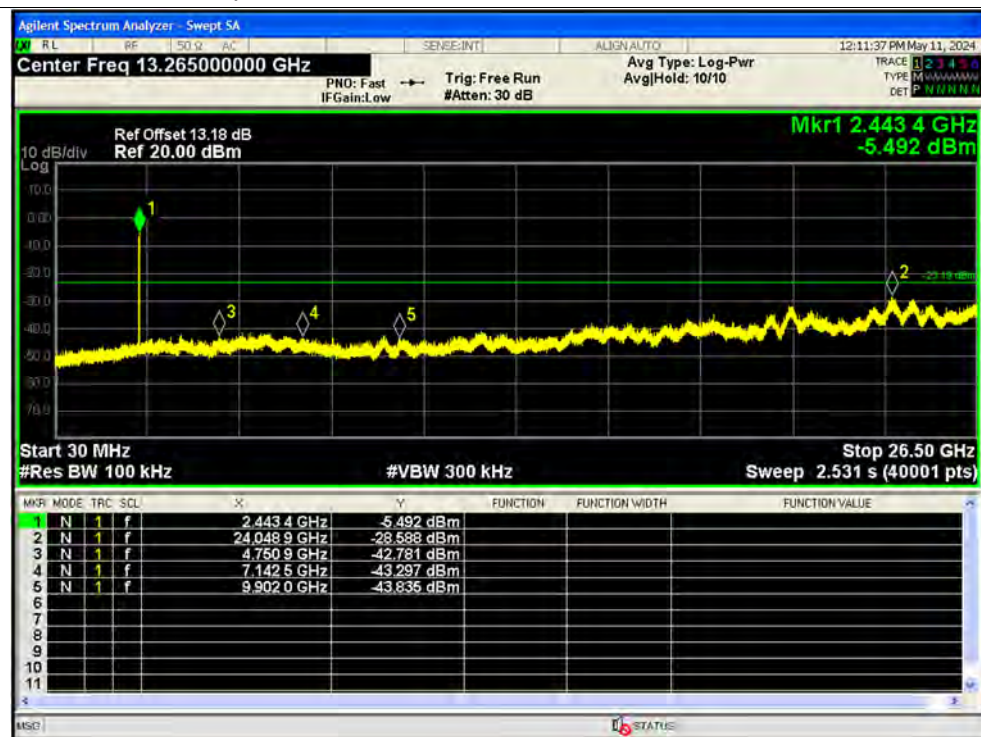
Tx. Spurious NVNT n20 2442MHz Ant1 Emission MIMO



Tx. Spurious NVNT n20 2442MHz Ant2 Ref MIMO



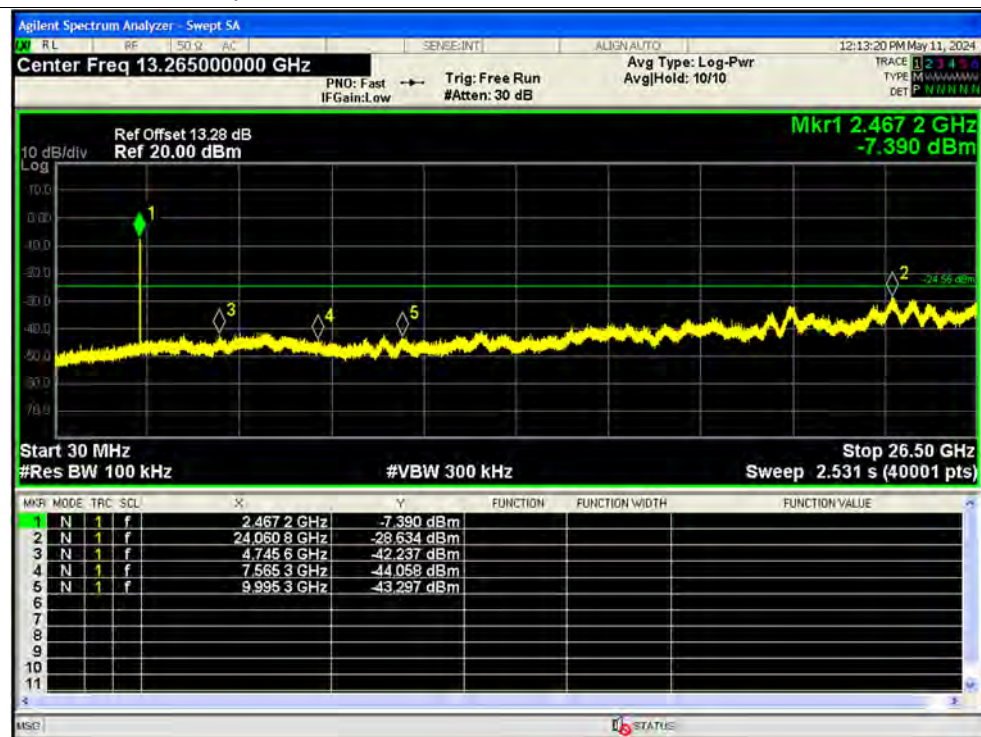
Tx. Spurious NVNT n20 2442MHz Ant2 Emission MIMO



Tx. Spurious NVNT n20 2472MHz Ant1 Ref MIMO



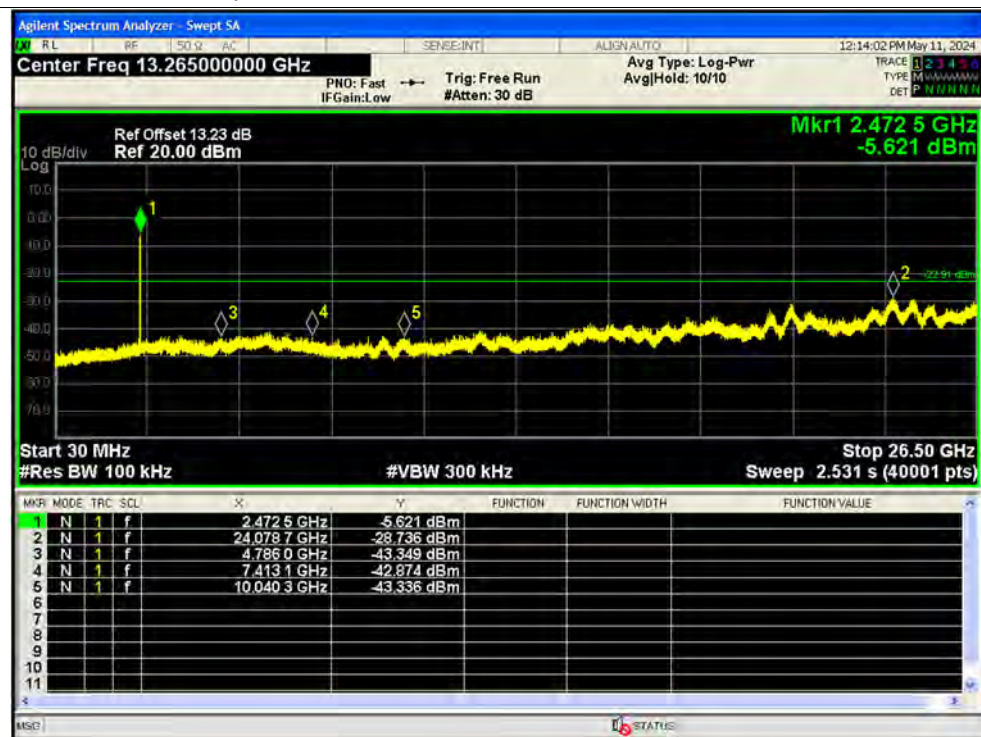
Tx. Spurious NVNT n20 2472MHz Ant1 Emission MIMO



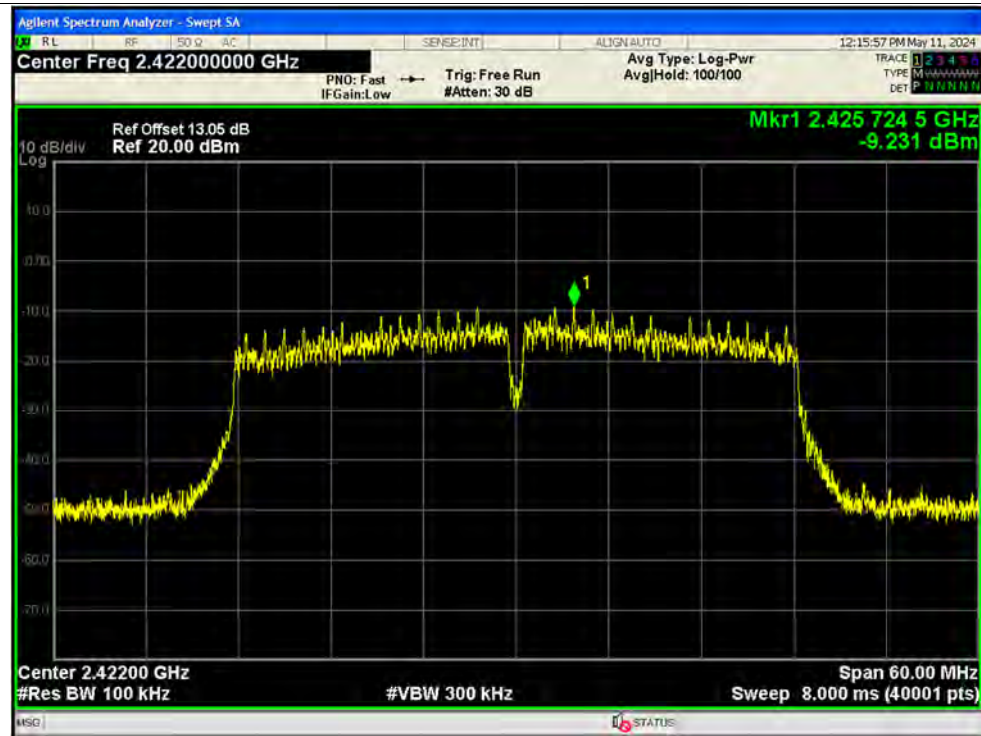
Tx. Spurious NVNT n20 2472MHz Ant2 Ref MIMO



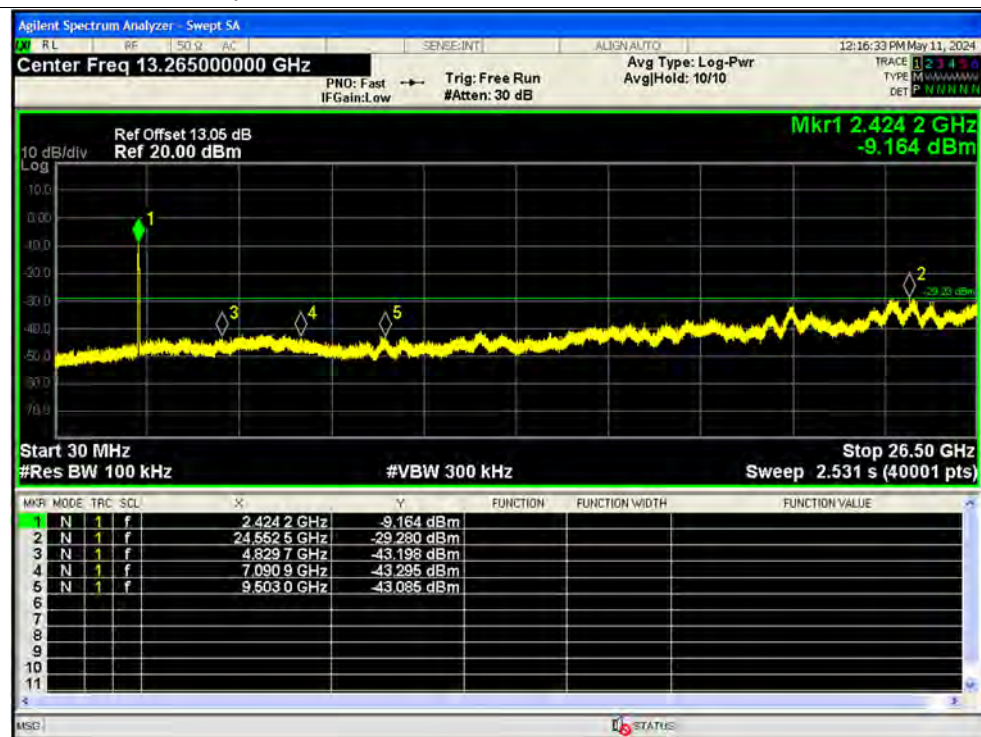
Tx. Spurious NVNT n20 2472MHz Ant2 Emission MIMO



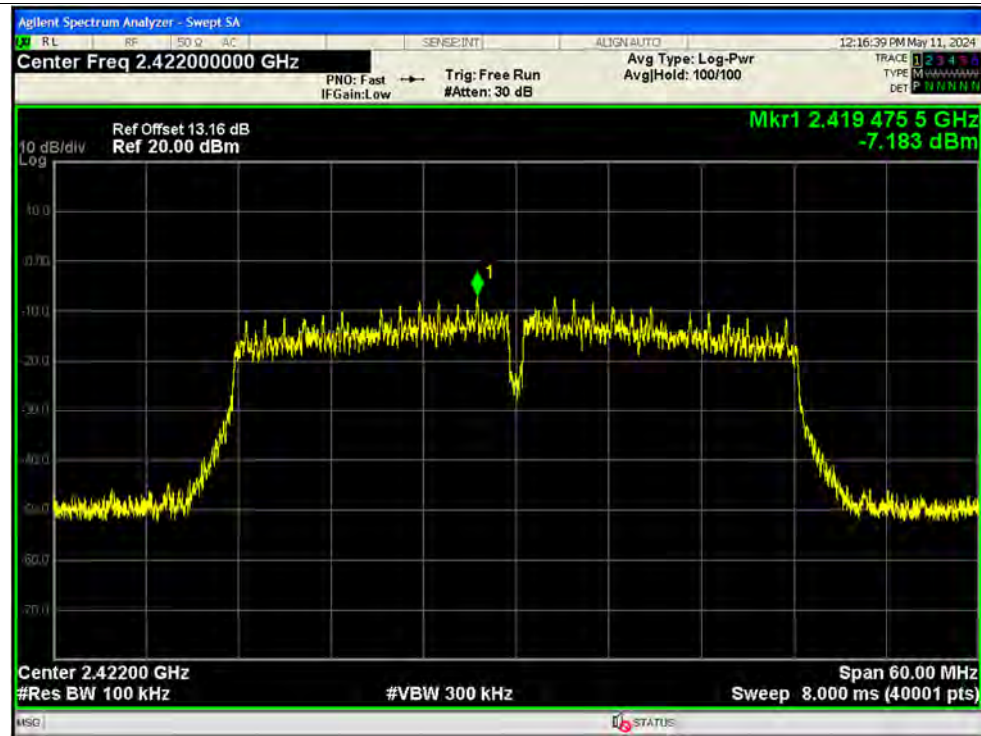
Tx. Spurious NVNT n40 2422MHz Ant1 Ref MIMO



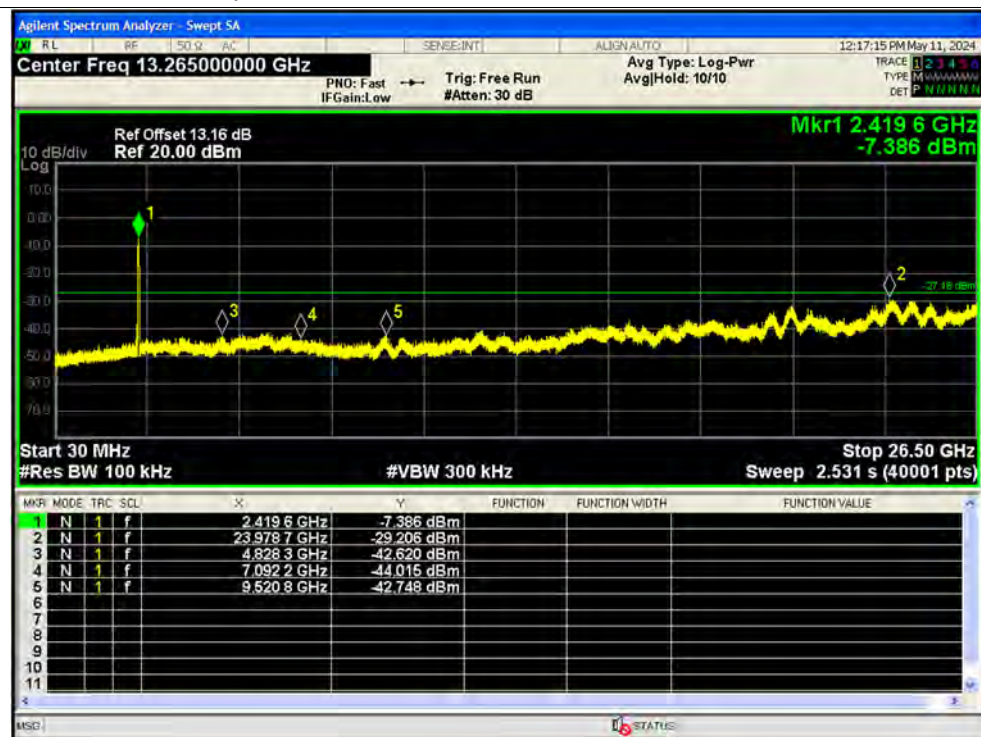
Tx. Spurious NVNT n40 2422MHz Ant1 Emission MIMO



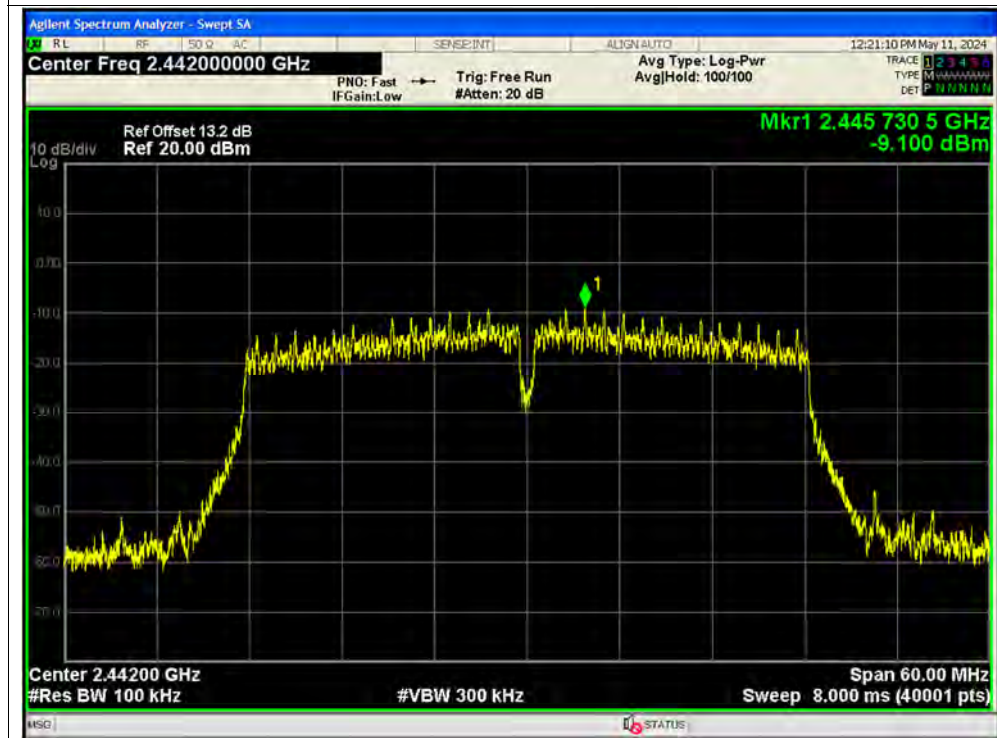
Tx. Spurious NVNT n40 2422MHz Ant2 Ref MIMO



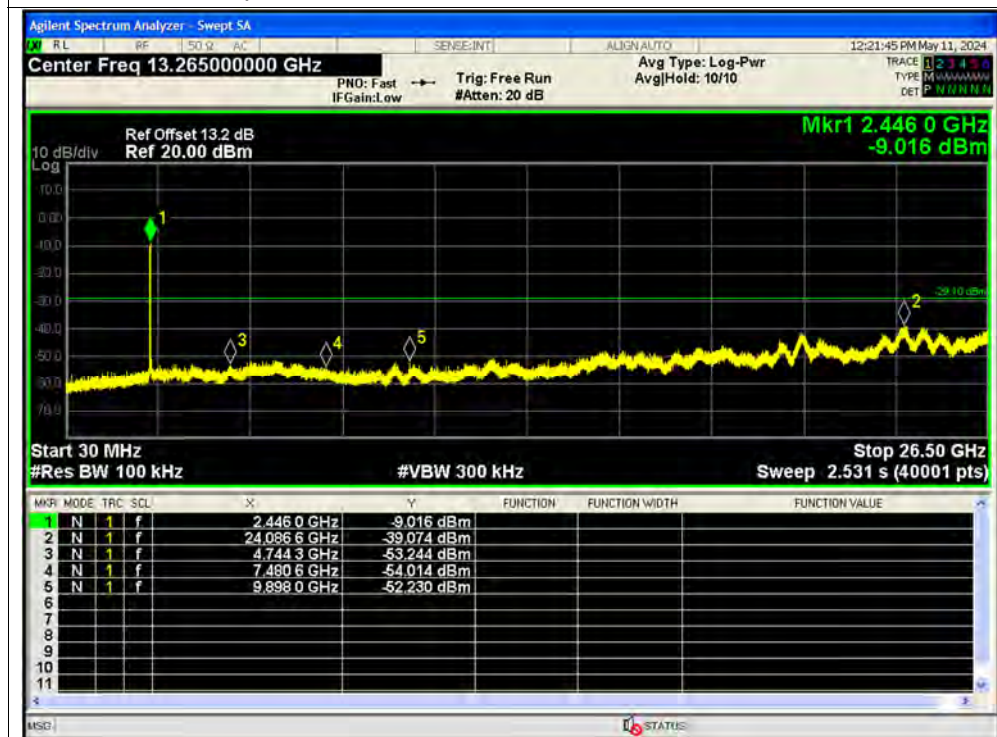
Tx. Spurious NVNT n40 2422MHz Ant2 Emission MIMO



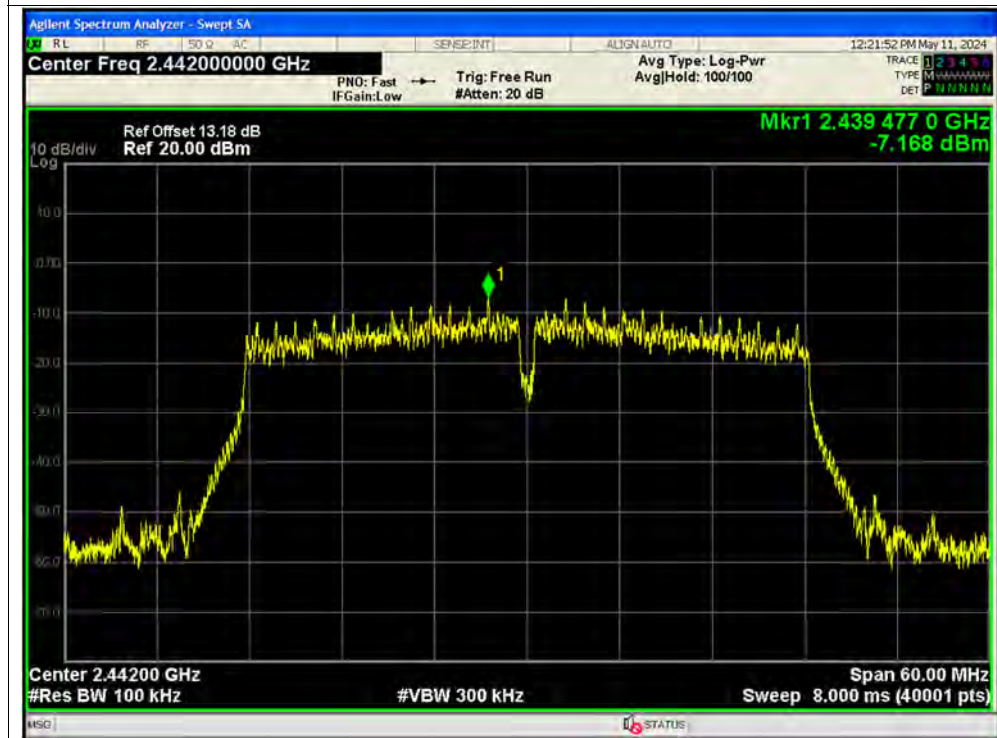
Tx. Spurious NVNT n40 2442MHz Ant1 Ref MIMO



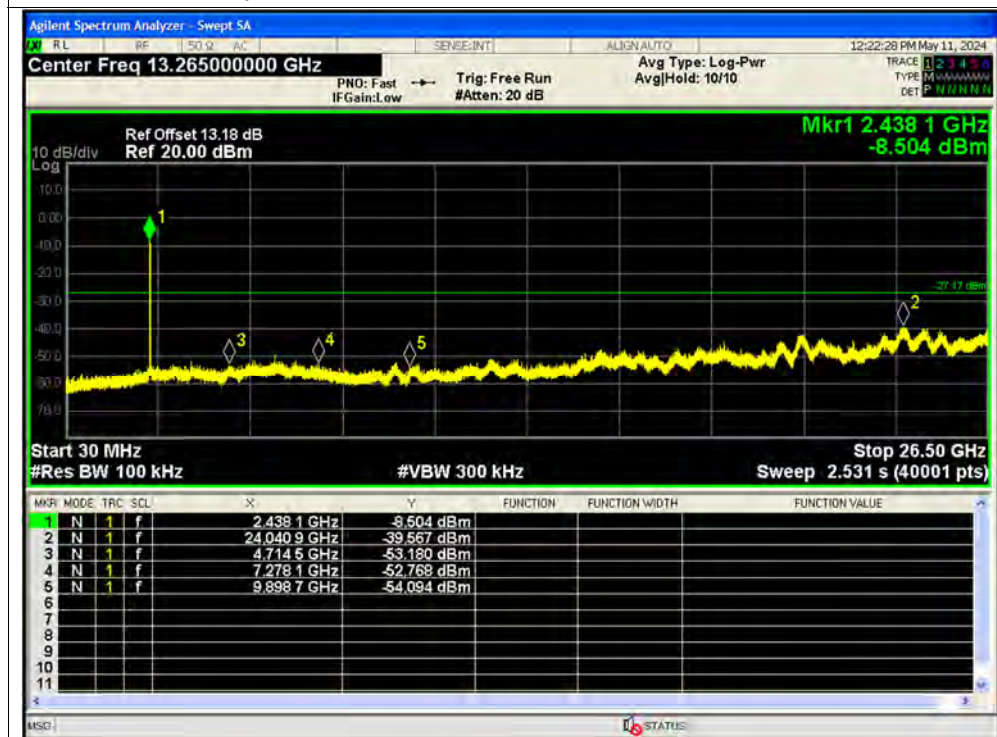
Tx. Spurious NVNT n40 2442MHz Ant1 Emission MIMO



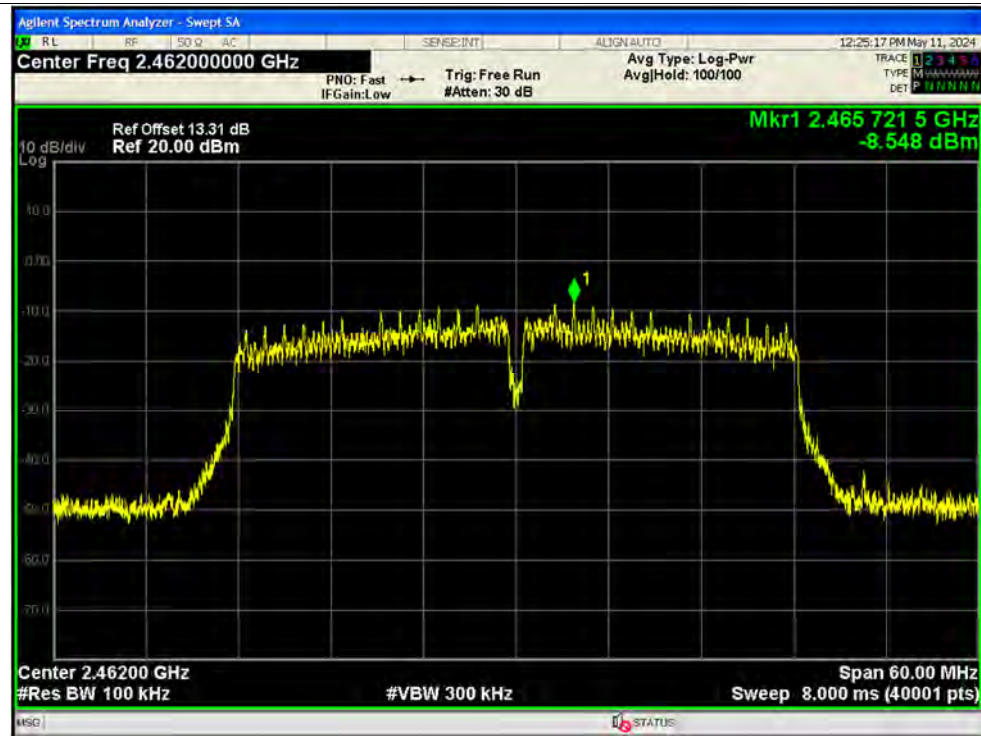
Tx. Spurious NVNT n40 2442MHz Ant2 Ref MIMO



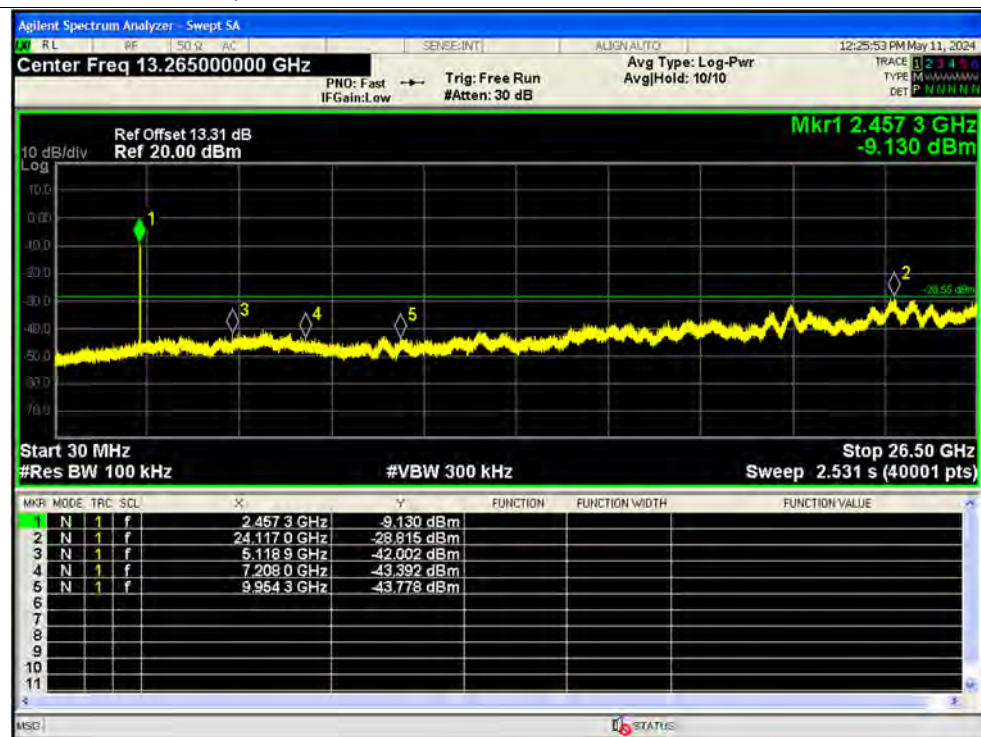
Tx. Spurious NVNT n40 2442MHz Ant2 Emission MIMO



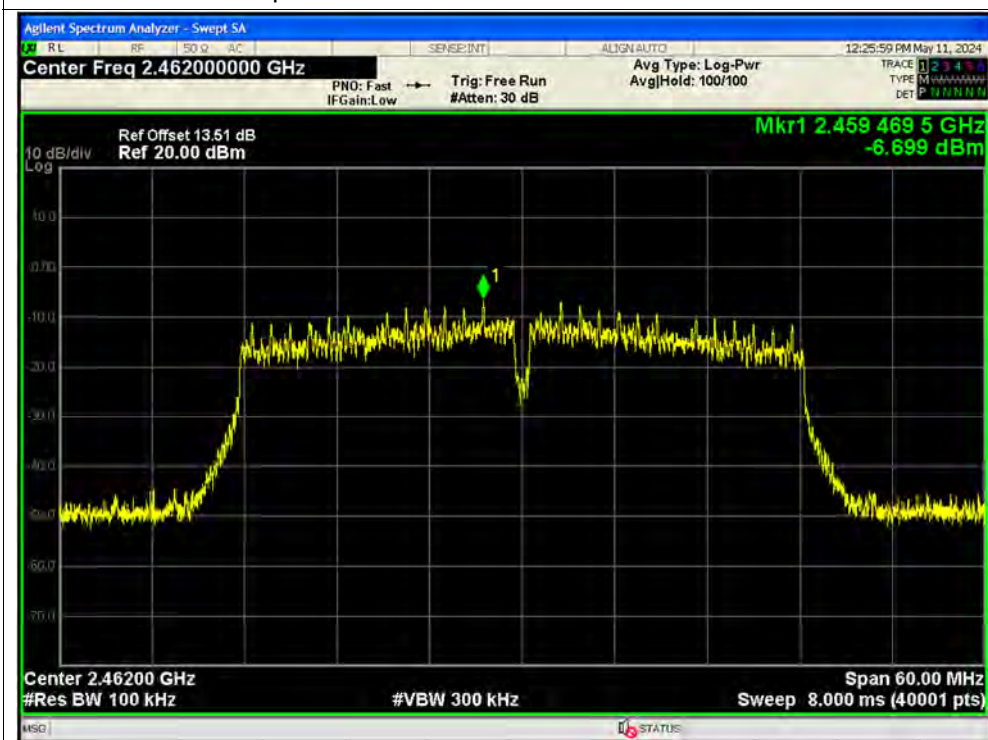
Tx. Spurious NVNT n40 2462MHz Ant1 Ref MIMO



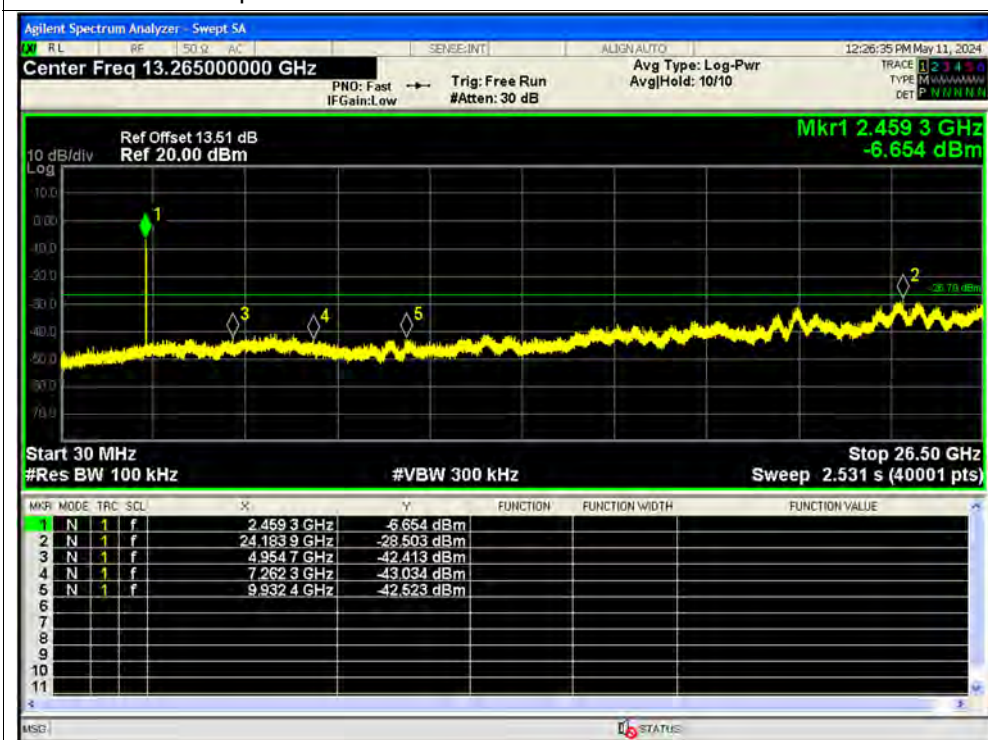
Tx. Spurious NVNT n40 2462MHz Ant1 Emission MIMO



Tx. Spurious NVNT n40 2462MHz Ant2 Ref MIMO



Tx. Spurious NVNT n40 2462MHz Ant2 Emission MIMO



**A.6. Band Edge**

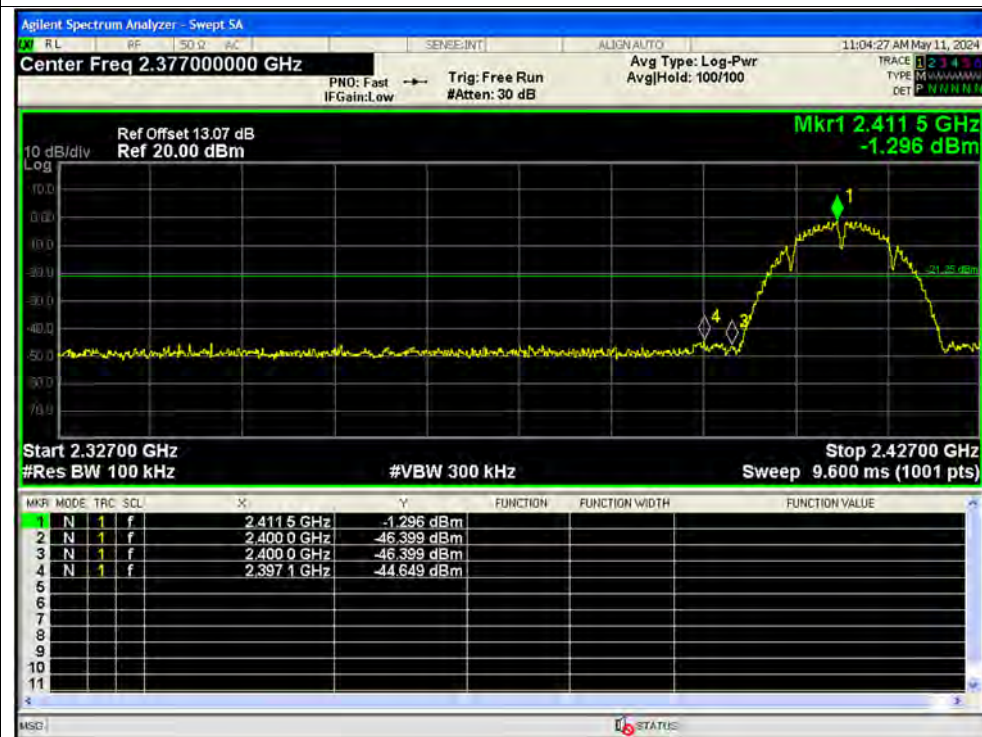
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b SISO	2412	Ant1	-43.39	-20	Pass
NVNT	b SISO	2472	Ant1	-43.5	-20	Pass
NVNT	b SISO	2412	Ant2	-45.53	-20	Pass
NVNT	b SISO	2472	Ant2	-37.14	-20	Pass
NVNT	g SISO	2412	Ant1	-39.79	-20	Pass
NVNT	g SISO	2472	Ant1	-40.02	-20	Pass
NVNT	g SISO	2412	Ant2	-39.56	-20	Pass
NVNT	g SISO	2472	Ant2	-41.07	-20	Pass
NVNT	n20 MIMO	2412	Ant1	-40.52	-20	Pass
NVNT	n20 MIMO	2412	Ant2	-39.7	-20	Pass
NVNT	n20 MIMO	2472	Ant1	-39.48	-20	Pass
NVNT	n20 MIMO	2472	Ant2	-40.91	-20	Pass
NVNT	n40 MIMO	2422	Ant1	-35.79	-20	Pass
NVNT	n40 MIMO	2422	Ant2	-30.05	-20	Pass
NVNT	n40 MIMO	2462	Ant1	-36.19	-20	Pass
NVNT	n40 MIMO	2462	Ant2	-34.54	-20	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref SISO



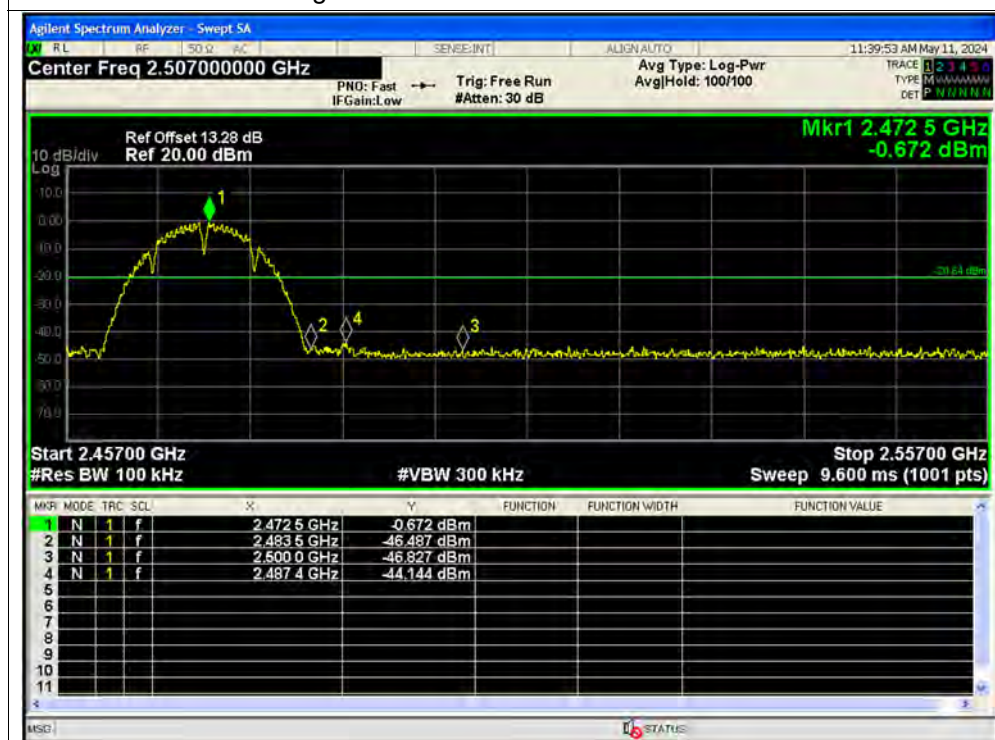
Band Edge NVNT b 2412MHz Ant1 Emission SISO



Band Edge NVNT b 2472MHz Ant1 Ref SISO



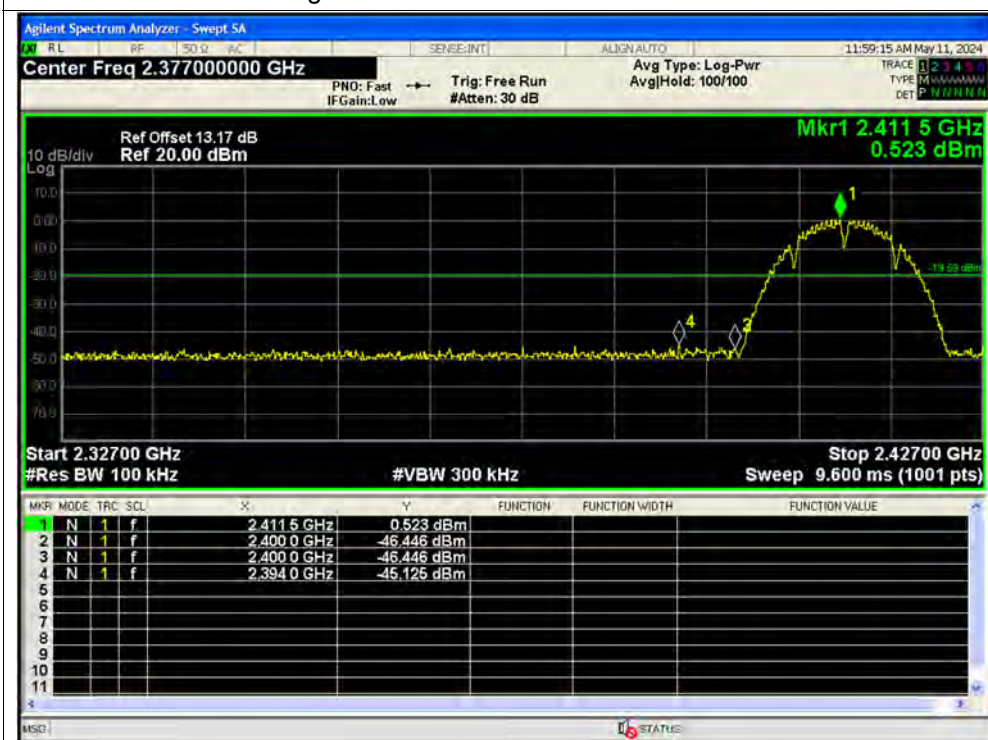
Band Edge NVNT b 2472MHz Ant1 Emission SISO



Band Edge NVNT b 2412MHz Ant2 Ref SISO



Band Edge NVNT b 2412MHz Ant2 Emission SISO



Band Edge NVNT b 2472MHz Ant2 Ref SISO



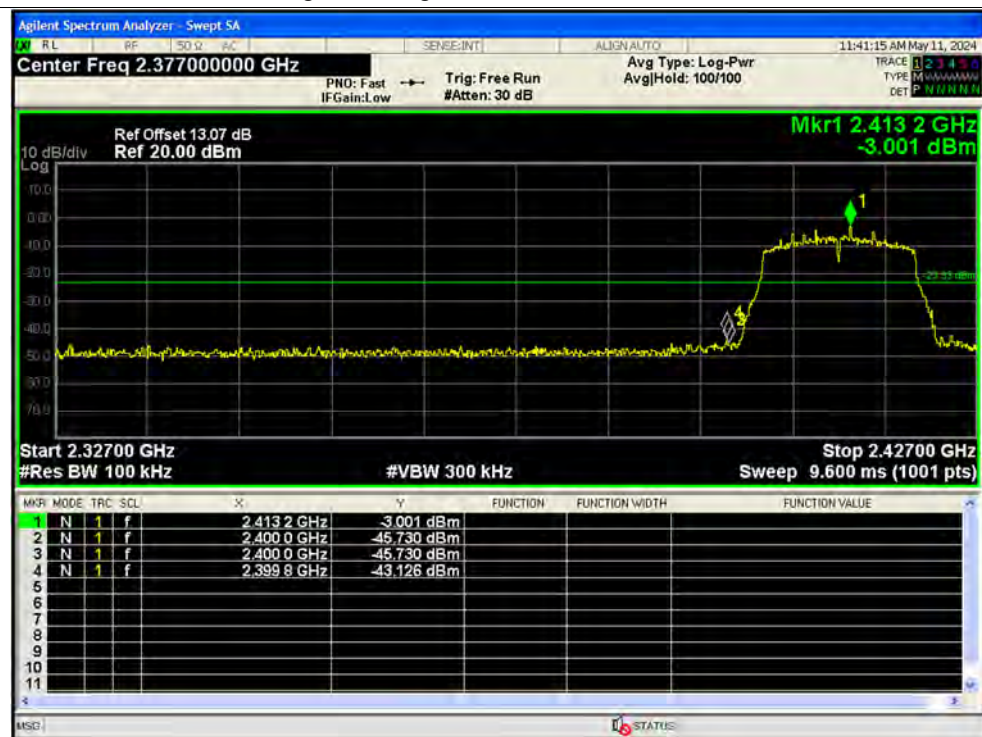
Band Edge NVNT b 2472MHz Ant2 Emission SISO



Band Edge NVNT g 2412MHz Ant1 Ref SISO



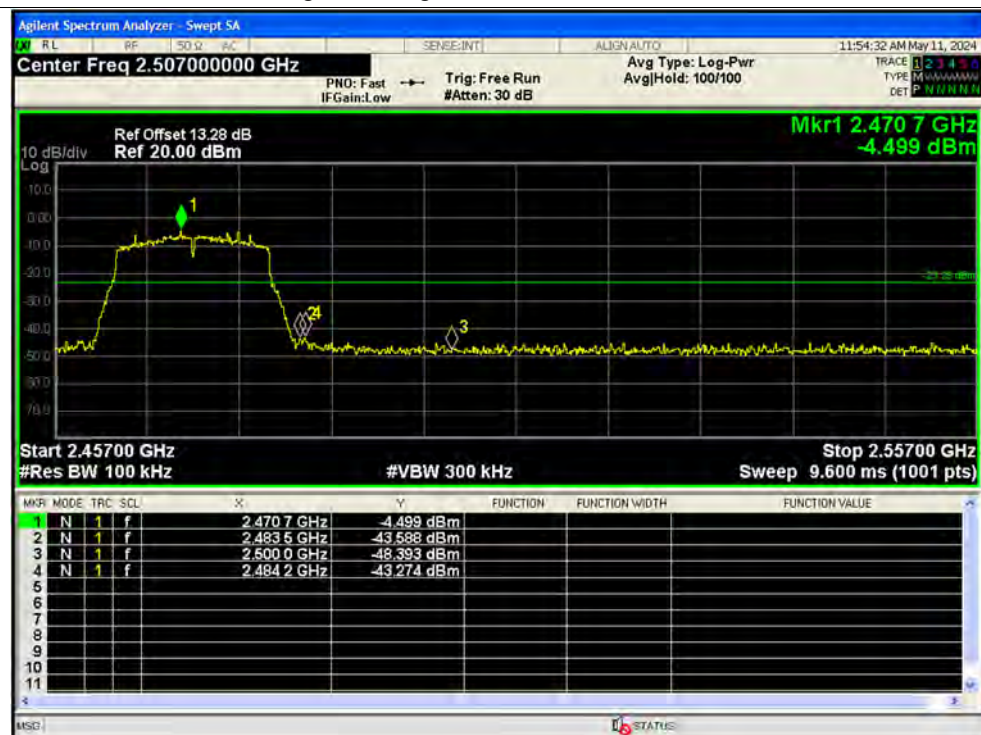
Band Edge NVNT g 2412MHz Ant1 Emission SISO



Band Edge NVNT g 2472MHz Ant1 Ref SISO



Band Edge NVNT g 2472MHz Ant1 Emission SISO



Band Edge NVNT g 2412MHz Ant2 Ref SISO



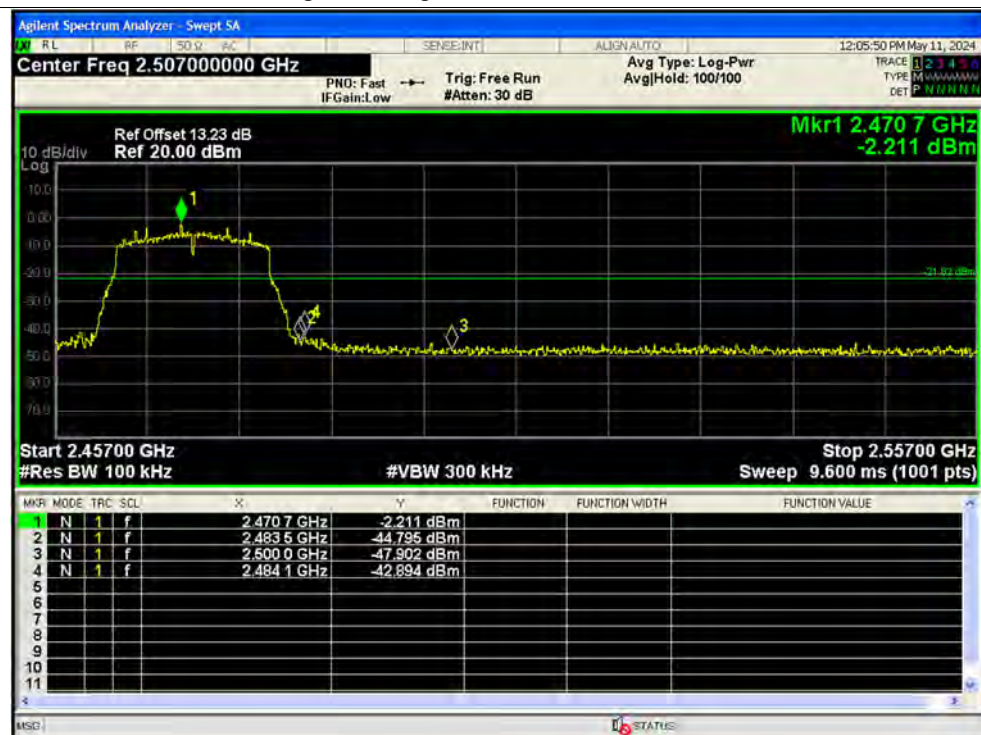
Band Edge NVNT g 2412MHz Ant2 Emission SISO



Band Edge NVNT g 2472MHz Ant2 Ref SISO



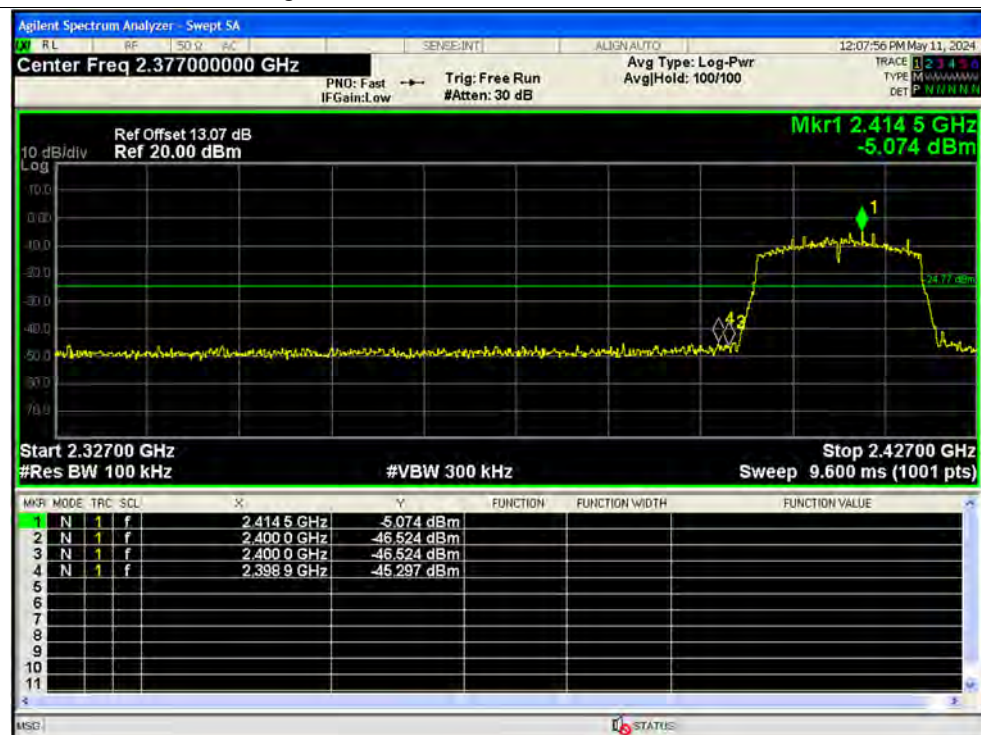
Band Edge NVNT g 2472MHz Ant2 Emission SISO



Band Edge NVNT n20 2412MHz Ant1 Ref MIMO



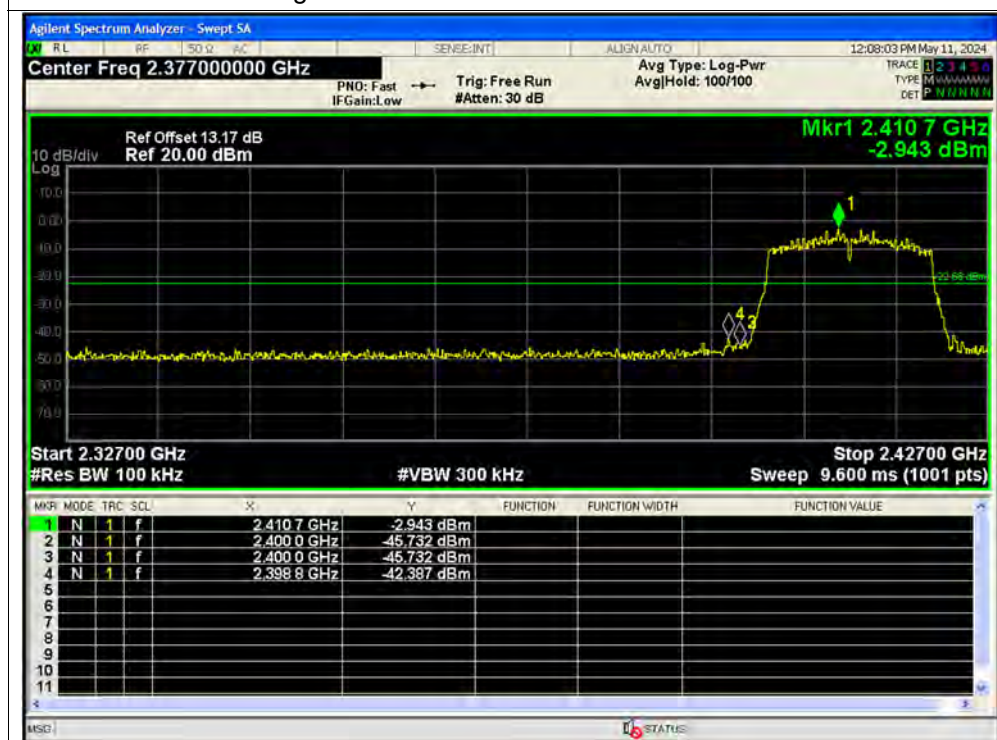
Band Edge NVNT n20 2412MHz Ant1 Emission MIMO



Band Edge NVNT n20 2412MHz Ant2 Ref MIMO



Band Edge NVNT n20 2412MHz Ant2 Emission MIMO



Band Edge NVNT n20 2472MHz Ant1 Ref MIMO



Band Edge NVNT n20 2472MHz Ant1 Emission MIMO



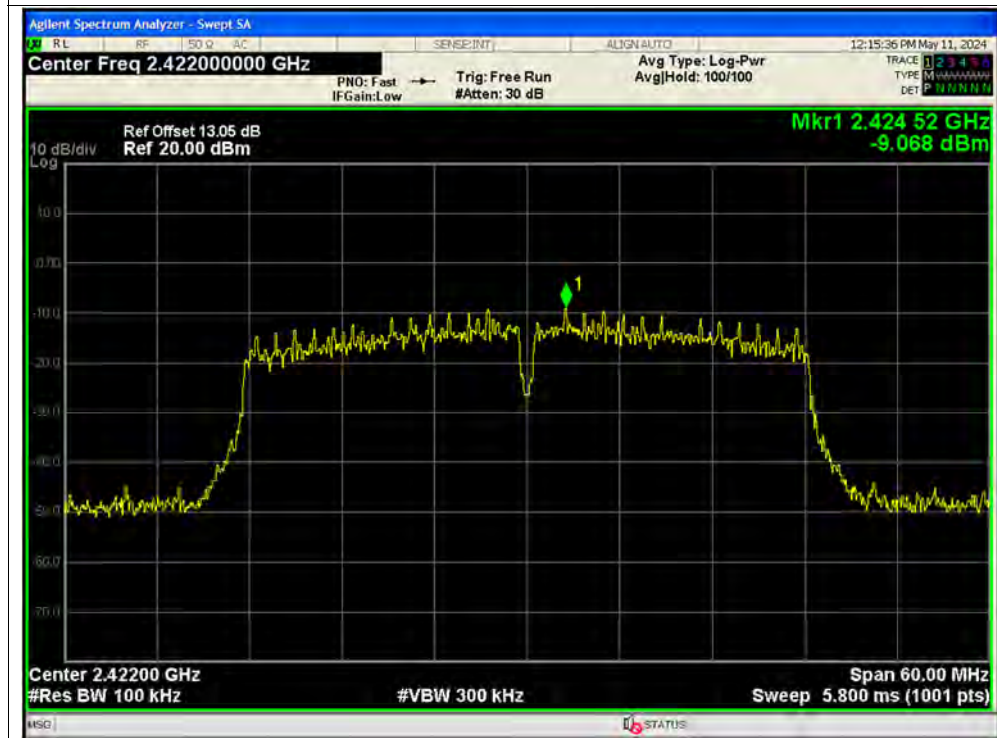
Band Edge NVNT n20 2472MHz Ant2 Ref MIMO



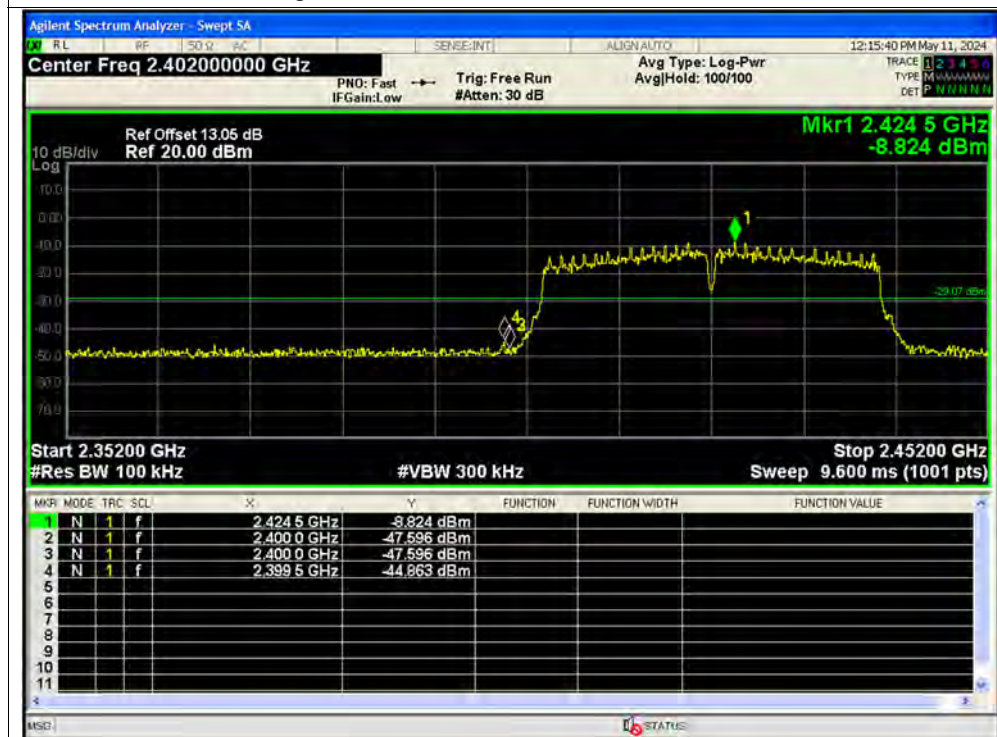
Band Edge NVNT n20 2472MHz Ant2 Emission MIMO



Band Edge NVNT n40 2422MHz Ant1 Ref MIMO



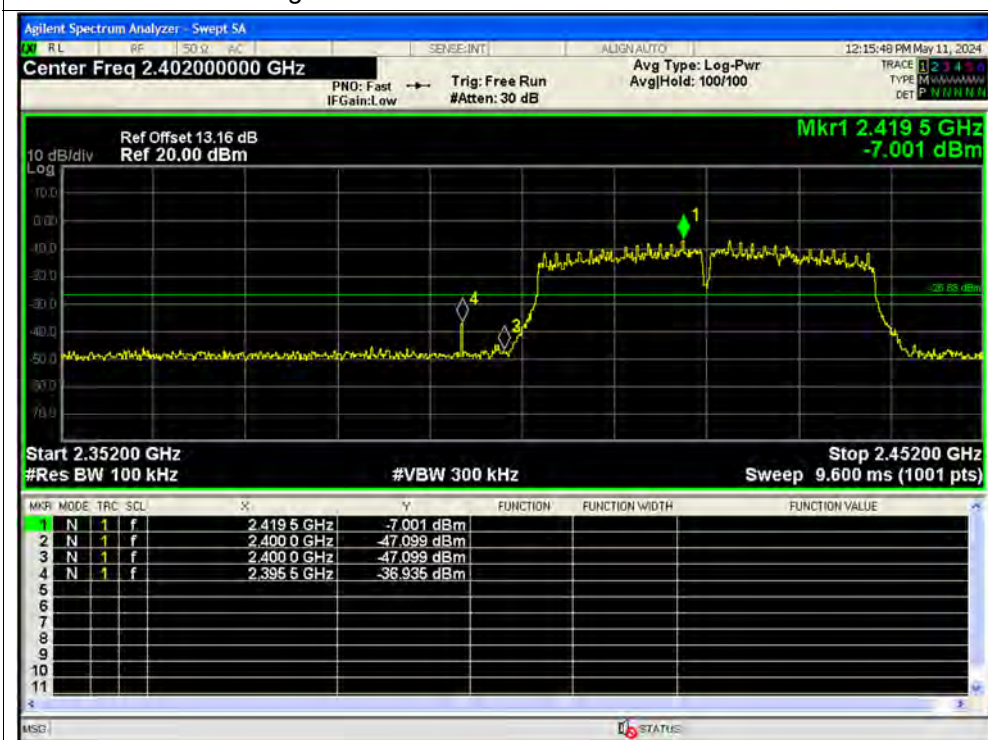
Band Edge NVNT n40 2422MHz Ant1 Emission MIMO



Band Edge NVNT n40 2422MHz Ant2 Ref MIMO



Band Edge NVNT n40 2422MHz Ant2 Emission MIMO



Band Edge NVNT n40 2462MHz Ant1 Ref MIMO



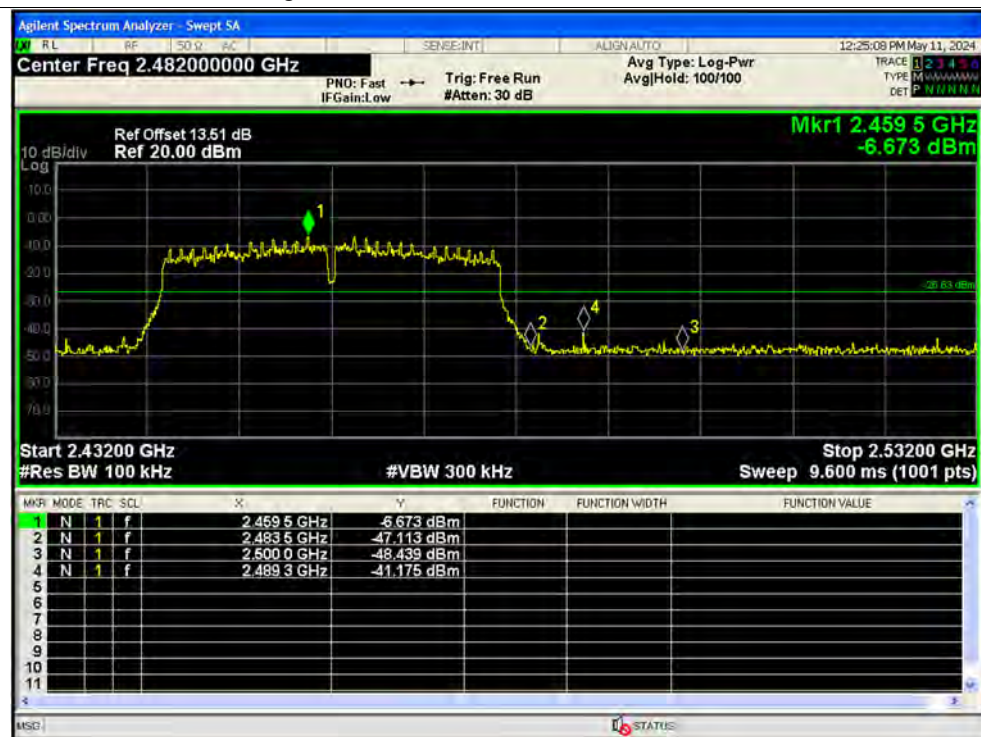
Band Edge NVNT n40 2462MHz Ant1 Emission MIMO



Band Edge NVNT n40 2462MHz Ant2 Ref MIMO



Band Edge NVNT n40 2462MHz Ant2 Emission MIMO



**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 SISO	2412	Ant1	-12.29	0	-12.29	8	Pass
NVNT	b SISO	2442	Ant1	-12.19	0	-12.19	8	Pass
NVNT	b SISO	2472	Ant1	-11.71	0	-11.71	8	Pass
NVNT	b SISO	2412	Ant2	-10.32	0	-10.32	8	Pass
NVNT	b SISO	2442	Ant2	-13.53	0	-13.53	8	Pass
NVNT	b SISO	2472	Ant2	-12.5	0	-12.5	8	Pass
NVNT	g SISO	2412	Ant1	-18.79	0	-18.79	8	Pass
NVNT	g SISO	2442	Ant1	-18.57	0	-18.57	8	Pass
NVNT	g SISO	2472	Ant1	-18.16	0	-18.16	8	Pass
NVNT	g SISO	2412	Ant2	-16.85	0	-16.85	8	Pass
NVNT	g SISO	2442	Ant2	-16.69	0	-16.69	8	Pass
NVNT	g SISO	2472	Ant2	-16.65	0	-16.65	8	Pass
NVNT	n20 MIMO	2412	Ant1	-18.63	0	-18.63	8	Pass
NVNT	n20 MIMO	2412	Ant2	-17.06	0	-17.06	8	Pass
NVNT	n20 MIMO	2412	Sum	-14.76	0	-14.76	8	Pass
NVNT	n20 MIMO	2442	Ant1	-18.26	0	-18.26	8	Pass
NVNT	n20 MIMO	2442	Ant2	-17.01	0	-17.01	8	Pass
NVNT	n20 MIMO	2442	Sum	-14.58	0	-14.58	8	Pass
NVNT	n20 MIMO	2472	Ant1	-18.83	0	-18.83	8	Pass
NVNT	n20 MIMO	2472	Ant2	-18.15	0	-18.15	8	Pass
NVNT	n20 MIMO	2472	Sum	-15.47	0	-15.47	8	Pass
NVNT	n40 MIMO	2422	Ant1	-23.41	0	-23.41	8	Pass
NVNT	n40 MIMO	2422	Ant2	-22.24	0	-22.24	8	Pass
NVNT	n40 MIMO	2422	Sum	-19.78	0	-19.78	8	Pass
NVNT	n40 MIMO	2442	Ant1	-23.63	0	-23.63	8	Pass
NVNT	n40 MIMO	2442	Ant2	-22.16	0	-22.16	8	Pass
NVNT	n40 MIMO	2442	Sum	-19.82	0	-19.82	8	Pass
NVNT	n40 MIMO	2462	Ant1	-23.29	0	-23.29	8	Pass
NVNT	n40 MIMO	2462	Ant2	-21.92	0	-21.92	8	Pass
NVNT	n40 MIMO	2462	Sum	-19.54	0	-19.54	8	Pass

Test Graphs

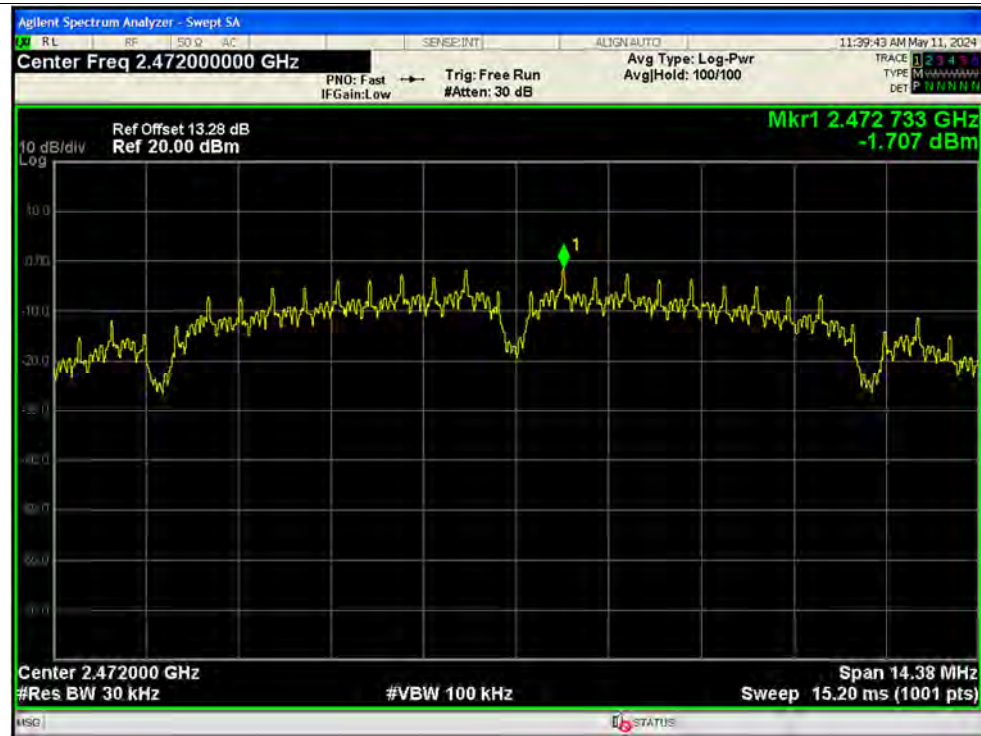
PSD NVNT b 2412MHz Ant1 SISO



PSD NVNT b 2442MHz Ant1 SISO



PSD NVNT b 2472MHz Ant1 SISO



PSD NVNT b 2412MHz Ant2 SISO





PSD NVNT b 2442MHz Ant2 SISO

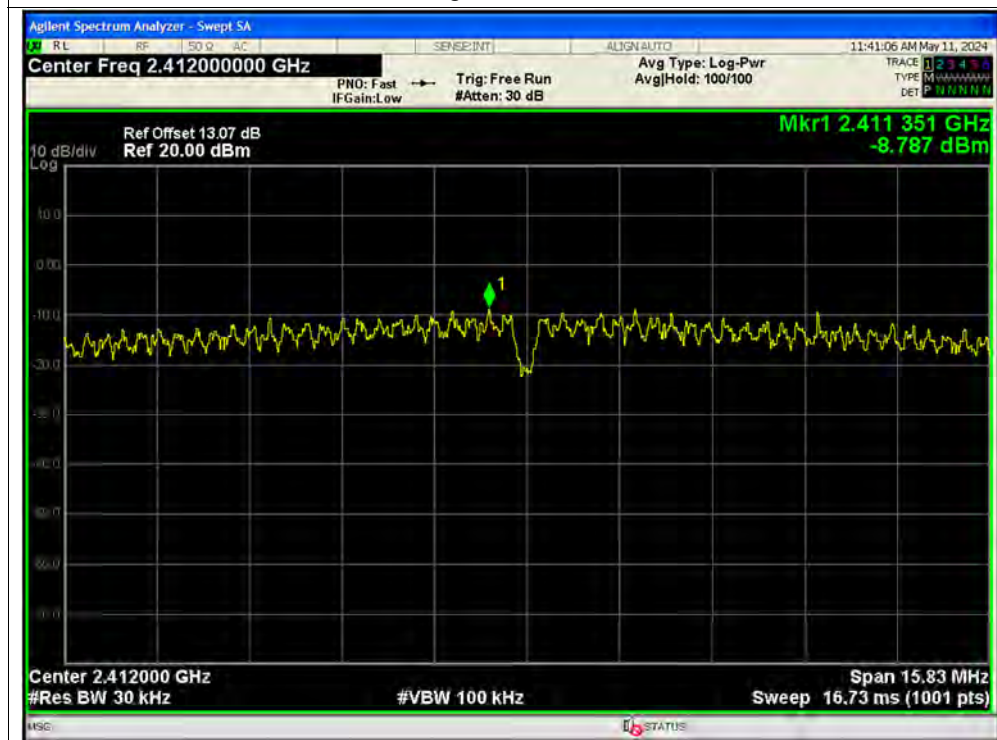


PSD NVNT b 2472MHz Ant2 SISO

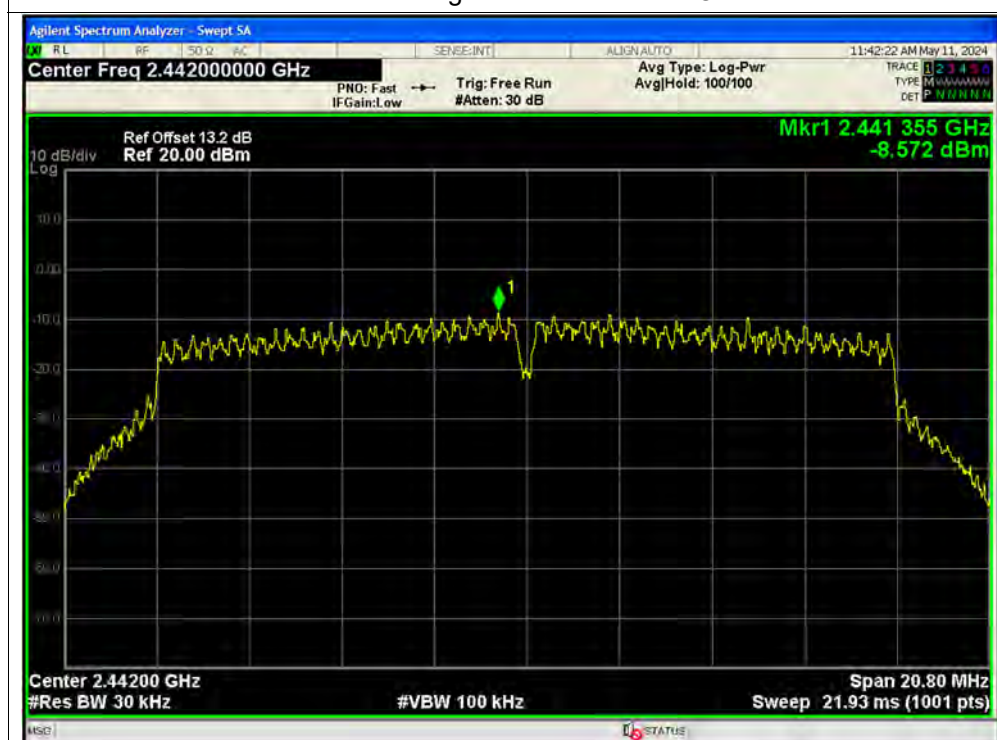




PSD NVNT g 2412MHz Ant1 SISO

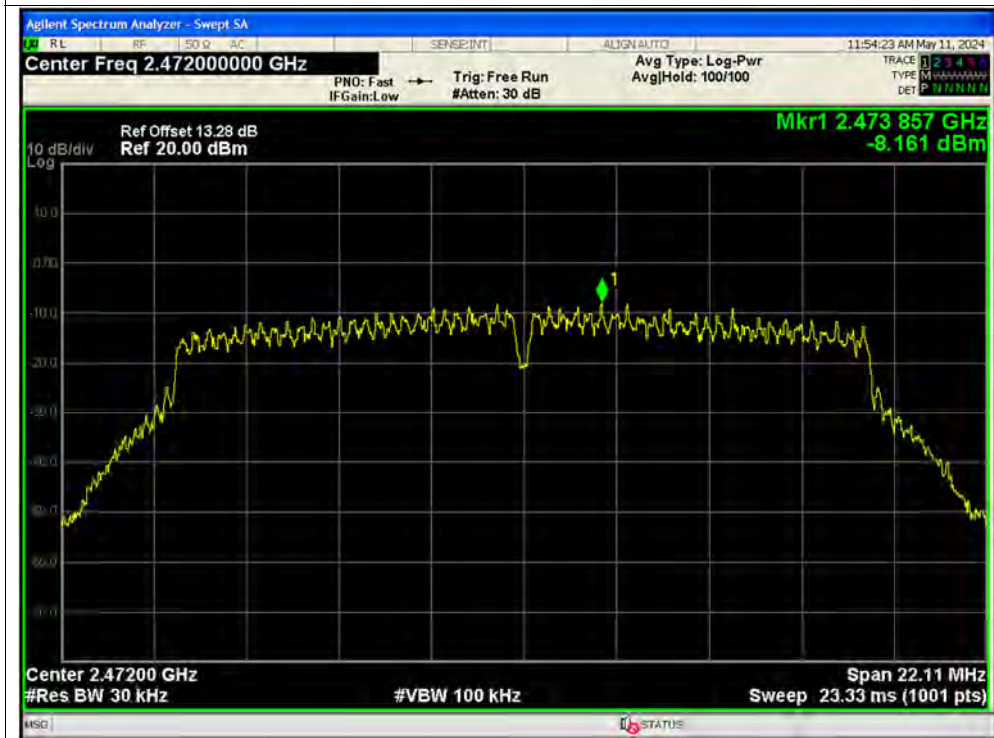


PSD NVNT g 2442MHz Ant1 SISO

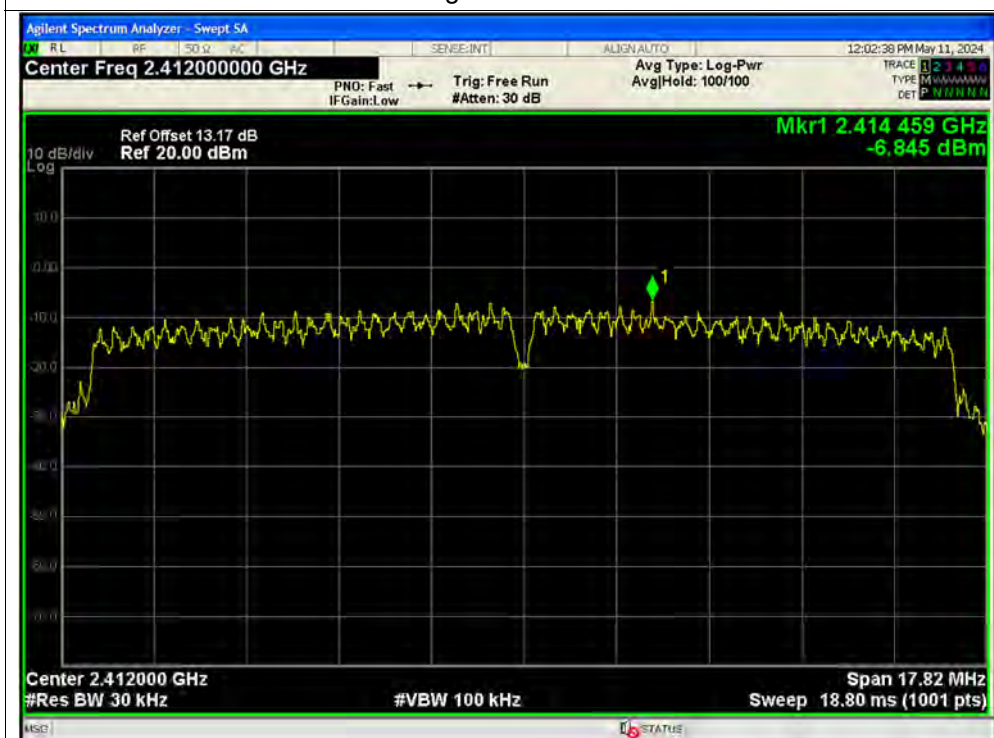




PSD NVNT g 2472MHz Ant1 SISO

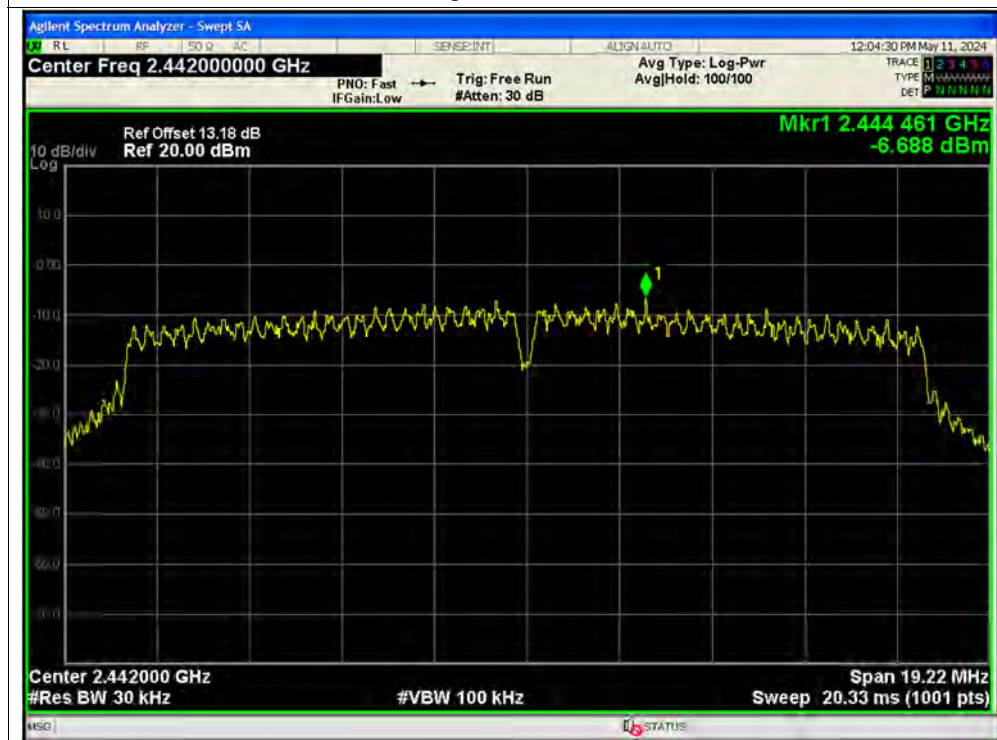


PSD NVNT g 2412MHz Ant2 SISO

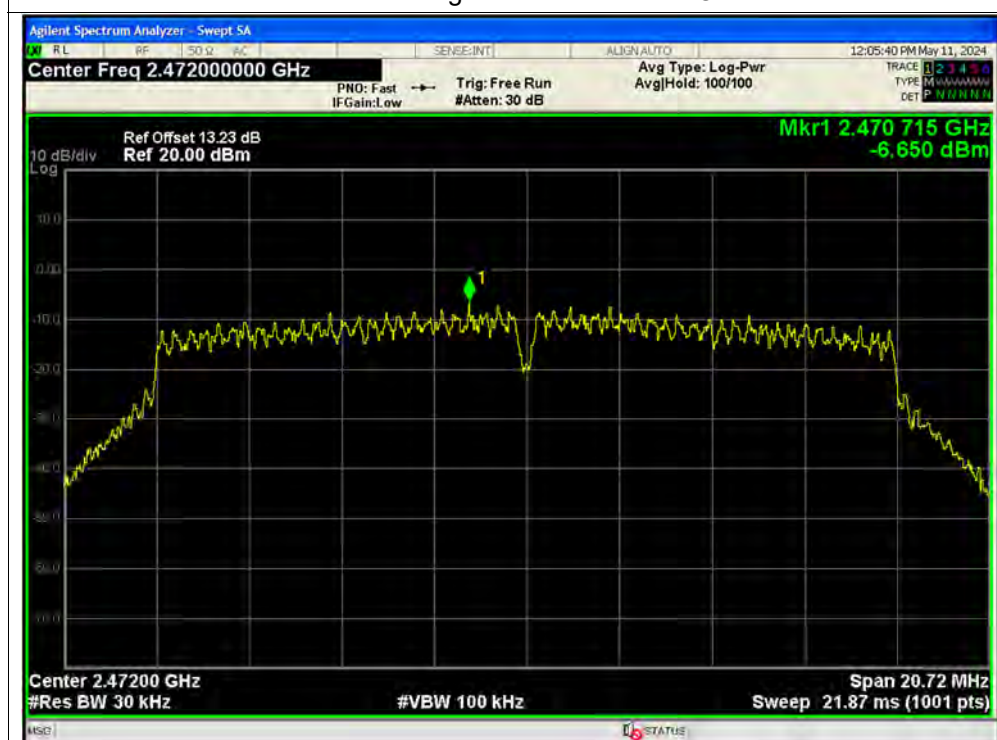




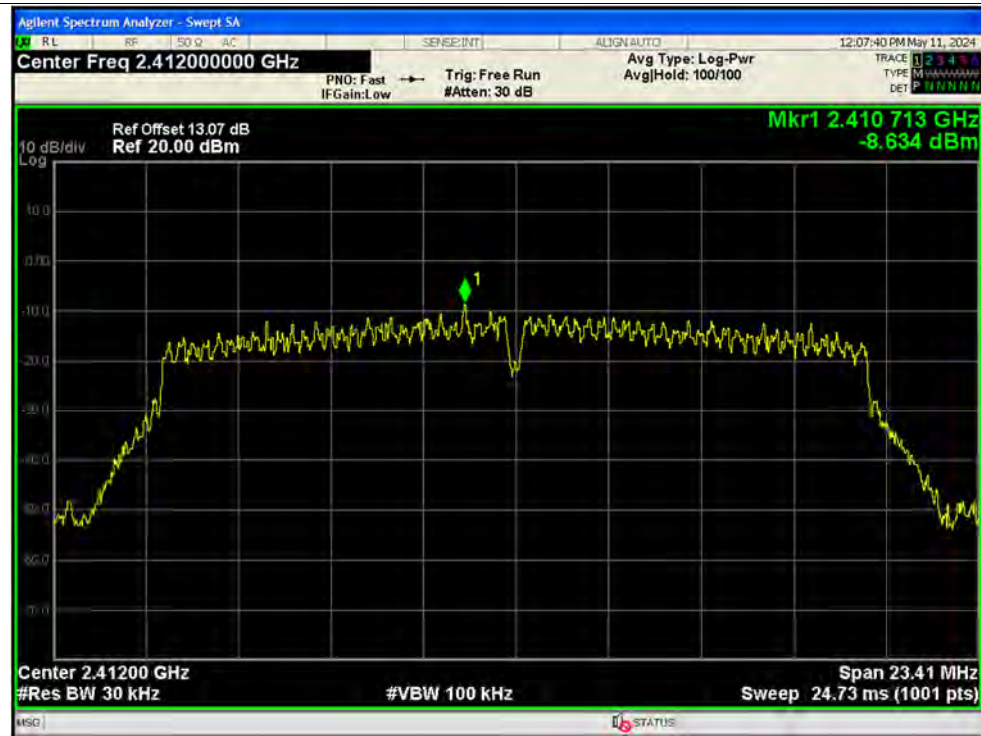
PSD NVNT g 2442MHz Ant2 SISO



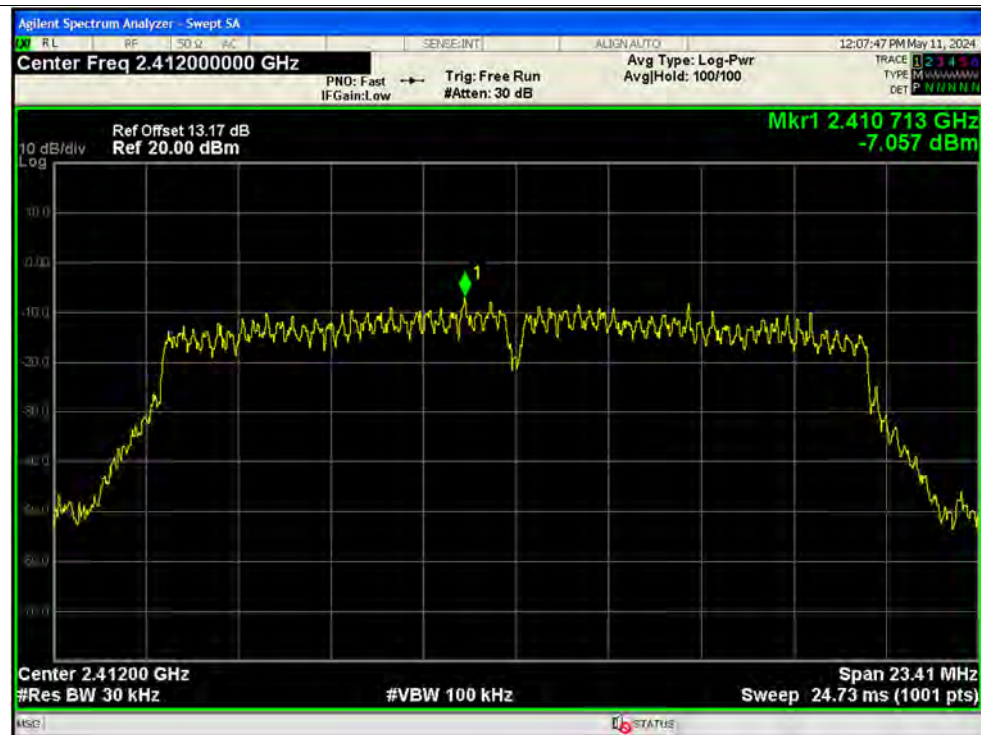
PSD NVNT g 2472MHz Ant2 SISO



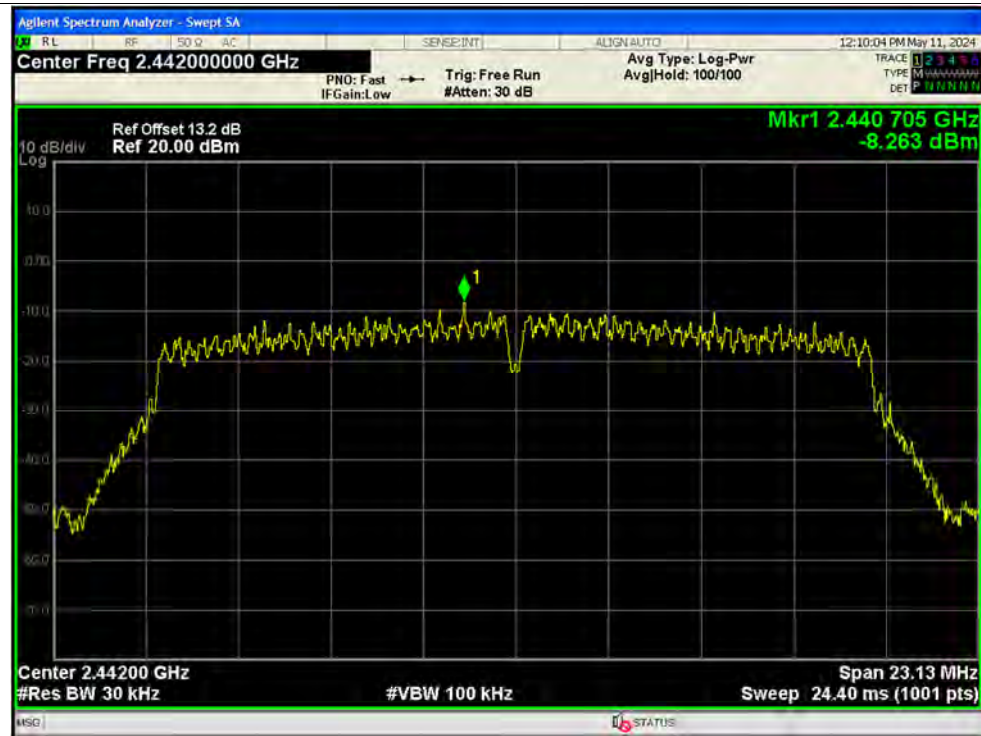
PSD NVNT n20 2412MHz Ant1 MIMO



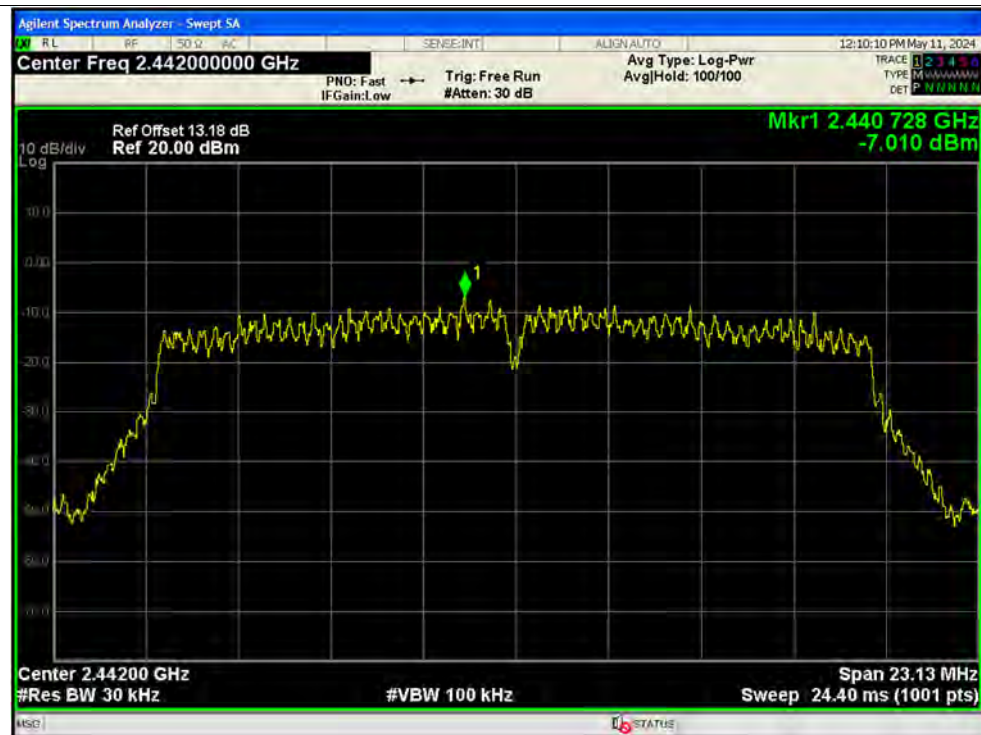
PSD NVNT n20 2412MHz Ant2 MIMO



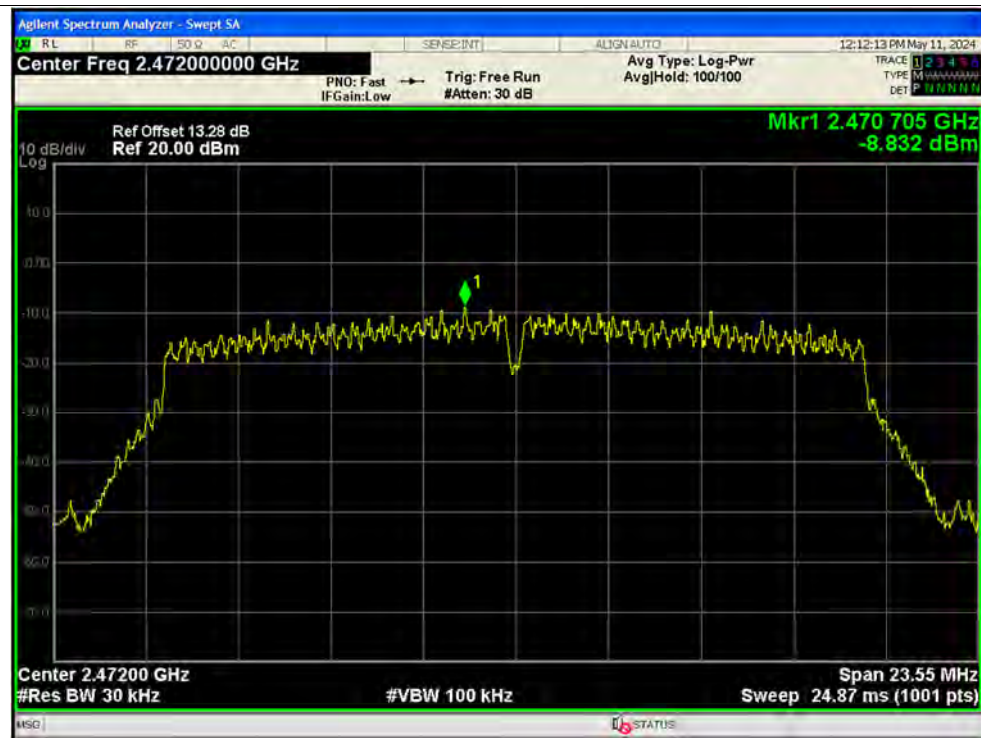
PSD NVNT n20 2442MHz Ant1 MIMO



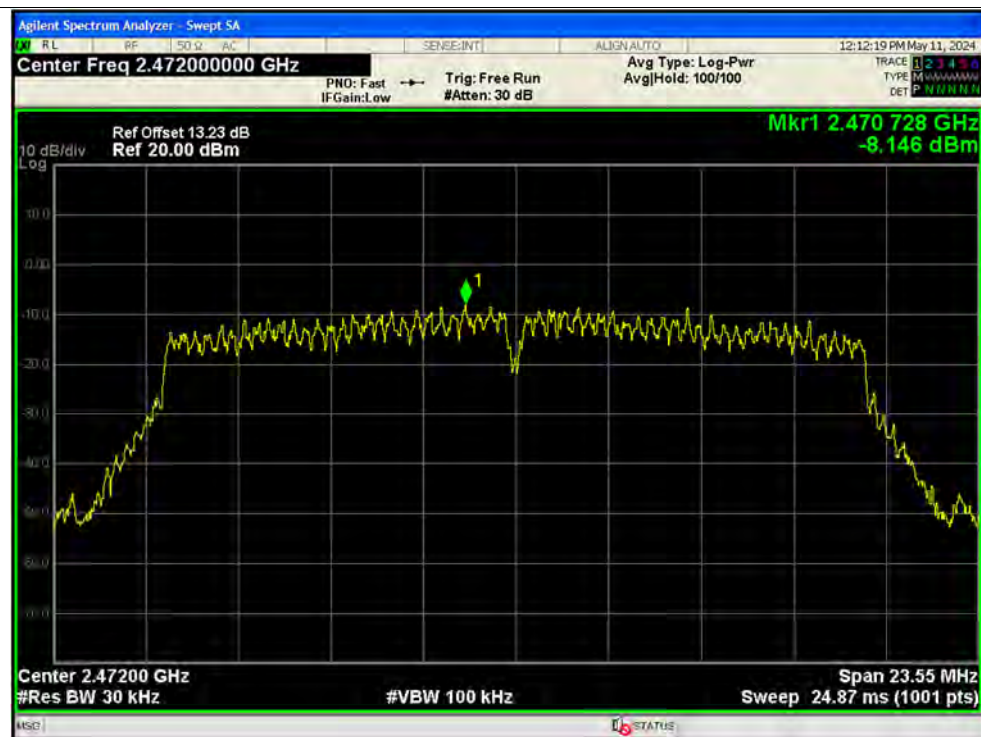
PSD NVNT n20 2442MHz Ant2 MIMO



PSD NVNT n20 2472MHz Ant1 MIMO



PSD NVNT n20 2472MHz Ant2 MIMO



PSD NVNT n40 2422MHz Ant1 MIMO



PSD NVNT n40 2422MHz Ant2 MIMO





PSD NVNT n40 2442MHz Ant1 MIMO

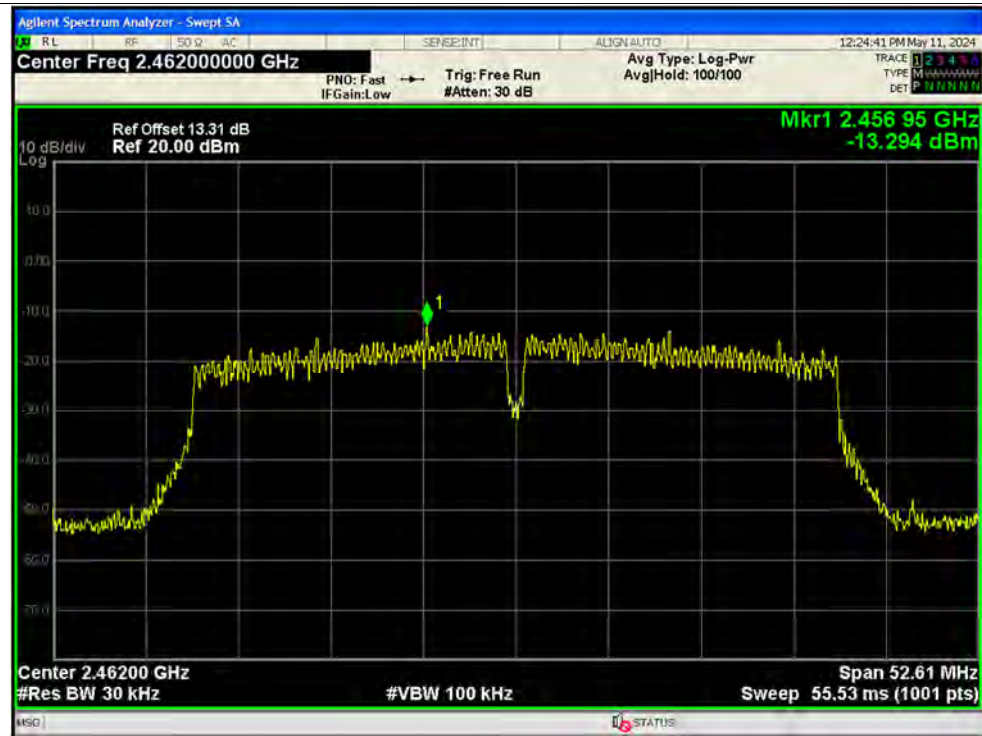


PSD NVNT n40 2442MHz Ant2 MIMO





PSD NVNT n40 2462MHz Ant1 MIMO



PSD NVNT n40 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+ RJ45 Cable + PC Adapter + PC + WIFI TX

Test voltage: AC 120V/60Hz

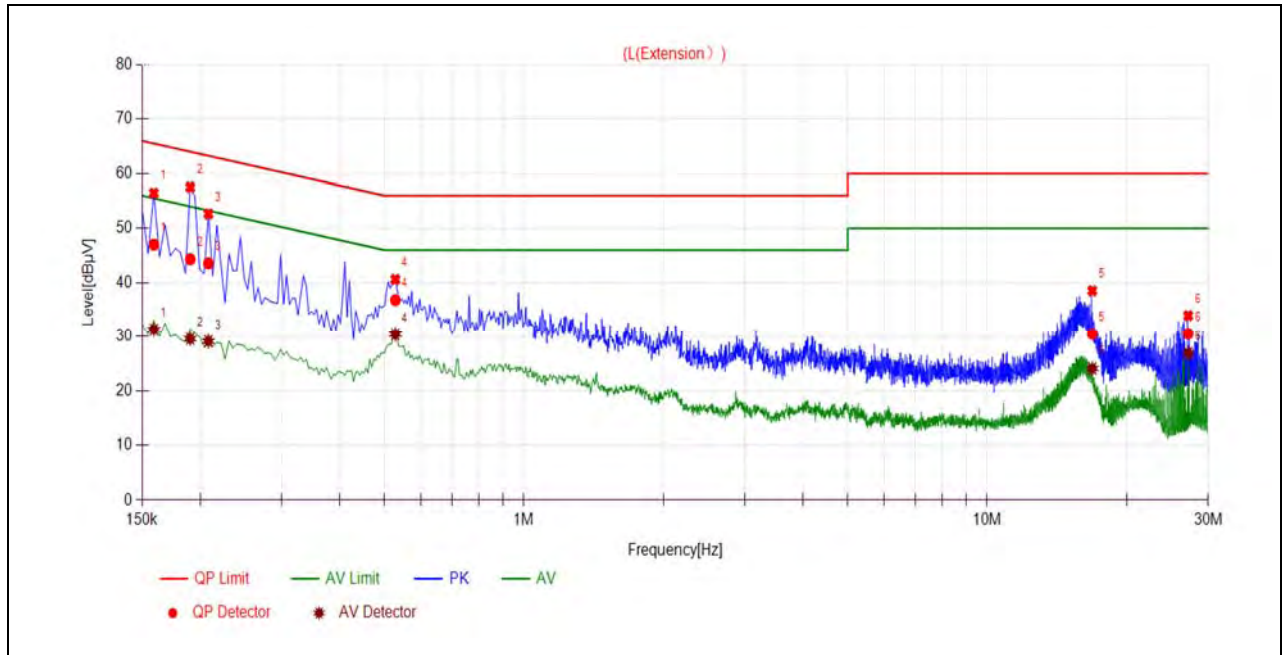
The measurement results are obtained as below:

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

U_R : Receiver Reading

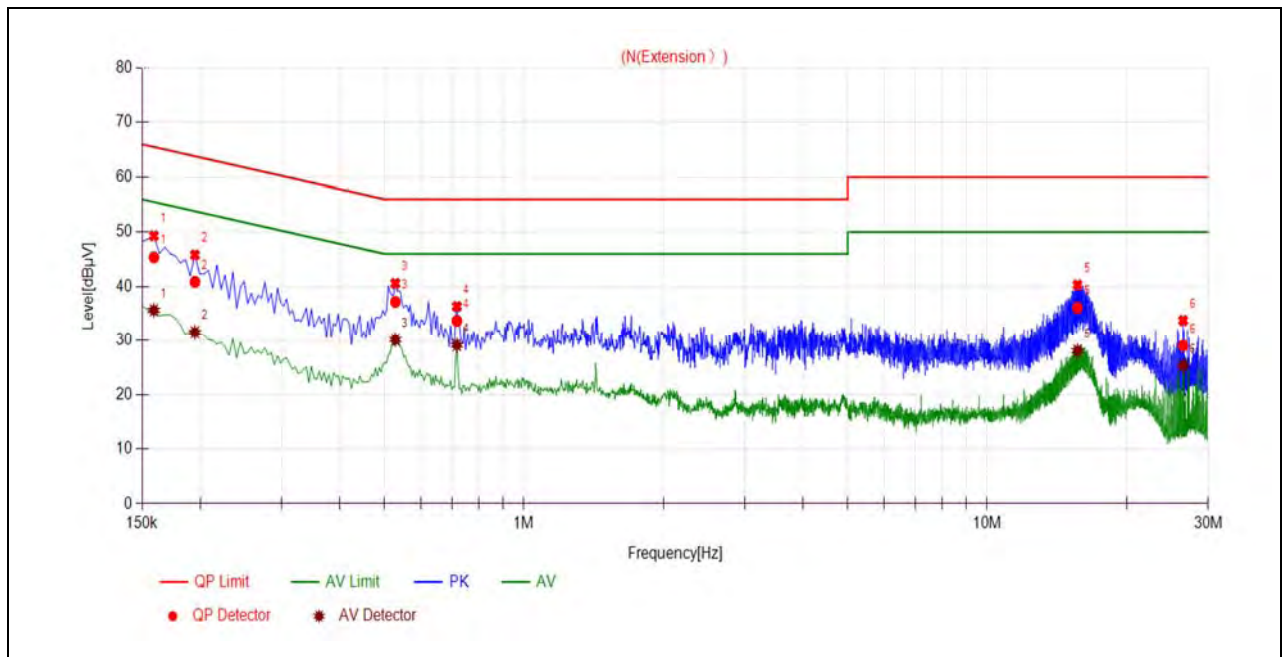
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1590	47.02	31.29	65.52	55.52	Line	PASS
2	0.1905	44.33	29.56	64.01	54.01		PASS
3	0.2085	43.58	29.09	63.27	53.27		PASS
4	0.5280	36.79	30.40	56.00	46.00		PASS
5	16.8621	30.46	24.05	60.00	50.00		PASS
6	27.1577	30.49	26.88	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	0.1590	45.38	35.64	65.52	55.52	Neutral	PASS
2	0.1950	40.86	31.54	63.82	53.82		PASS
3	0.5280	37.19	30.14	56.00	46.00		PASS
4	0.7169	33.69	29.12	56.00	46.00		PASS
5	15.6662	36.11	28.09	60.00	50.00		PASS
6	26.4894	29.02	25.33	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

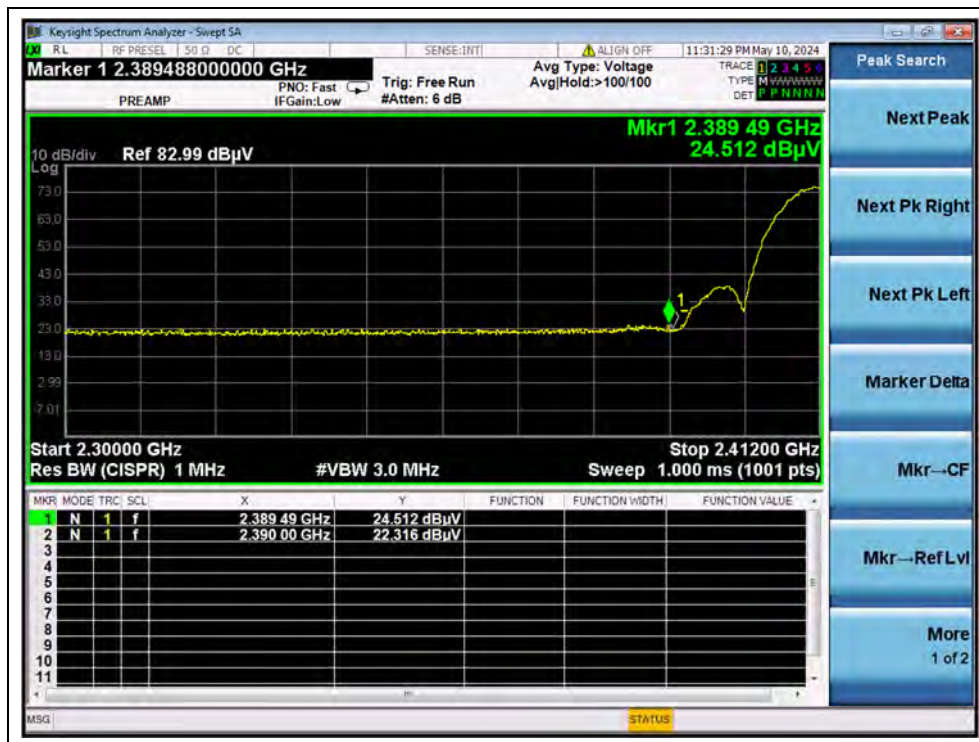
G_{preamp} : Preamplifier Gain

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 (Horizontal) was recorded in this test report.

802.11b Mode

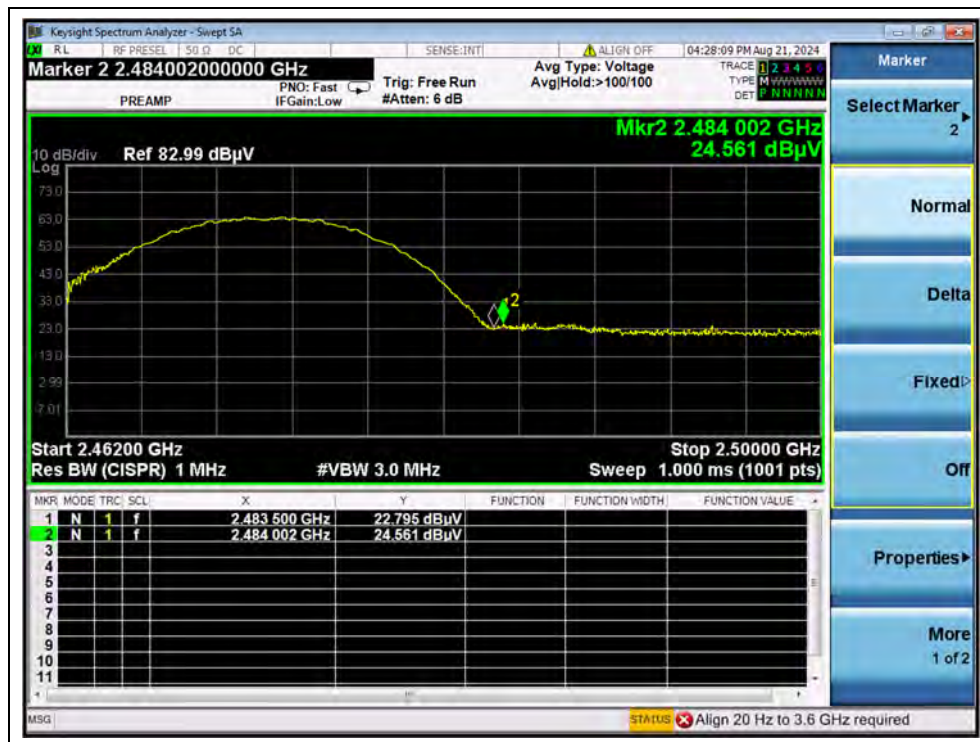
Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dB μ V)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dB μ V/m)	Limit (dB μ V/m)	Verdict
		PK/ AV						
0	2389.49	PK	24.51	6.74	27.20	58.45	74	PASS
0	2386.02	AV	14.36	6.74	27.20	48.30	54	PASS
13	2484.00	PK	24.56	6.74	27.20	58.50	74	PASS
13	2487.12	AV	15.17	6.74	27.20	49.11	54	PASS



(PEAK, Channel 1, 802.11b)



(AVERAGE, Channel 1, 802.11b)



(PEAK, Channel 13, 802.11b)

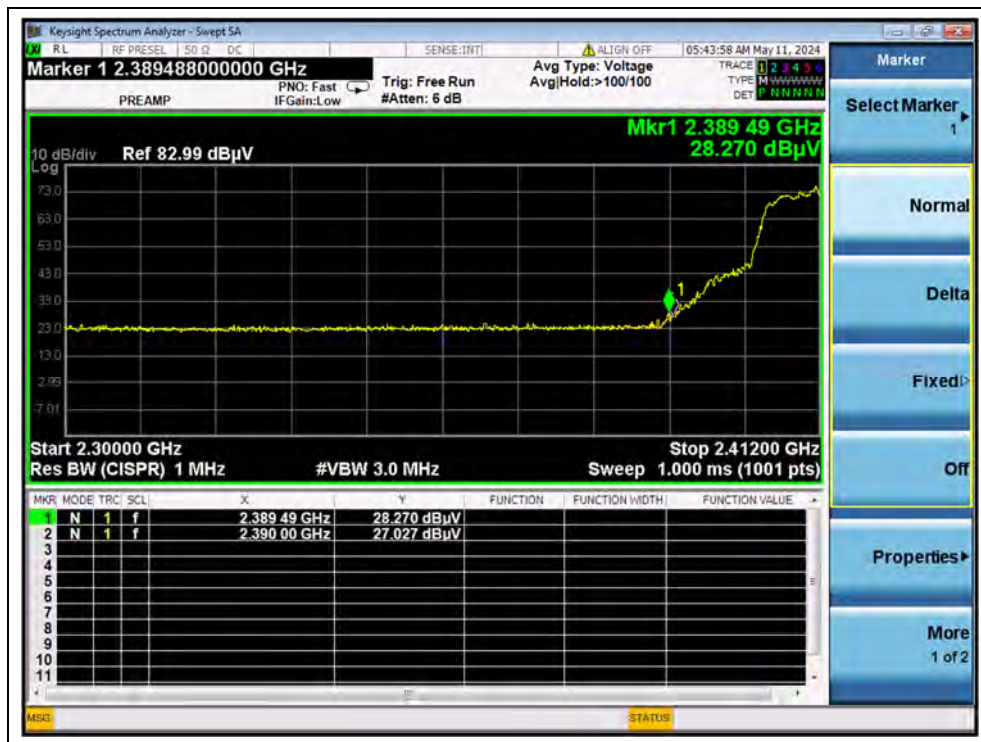


(AVERAGE, Channel 13, 802.11b)

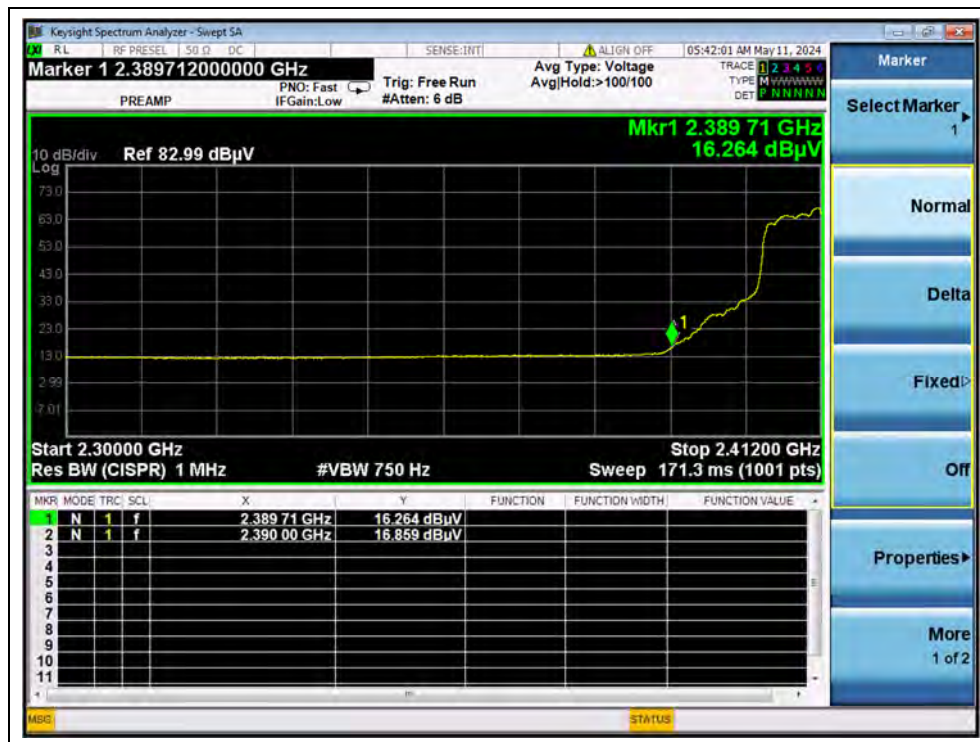


802.11g Mode

Channel	Frequency (MHz)	Detector	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						
0	2389.49	PK	28.27	6.74	27.20	62.21	74	PASS
0	2390.00	AV	16.86	6.74	27.20	50.80	54	PASS
13	2483.77	PK	28.28	6.74	27.20	62.22	74	PASS
13	2483.96	AV	15.05	6.74	27.20	48.99	54	PASS



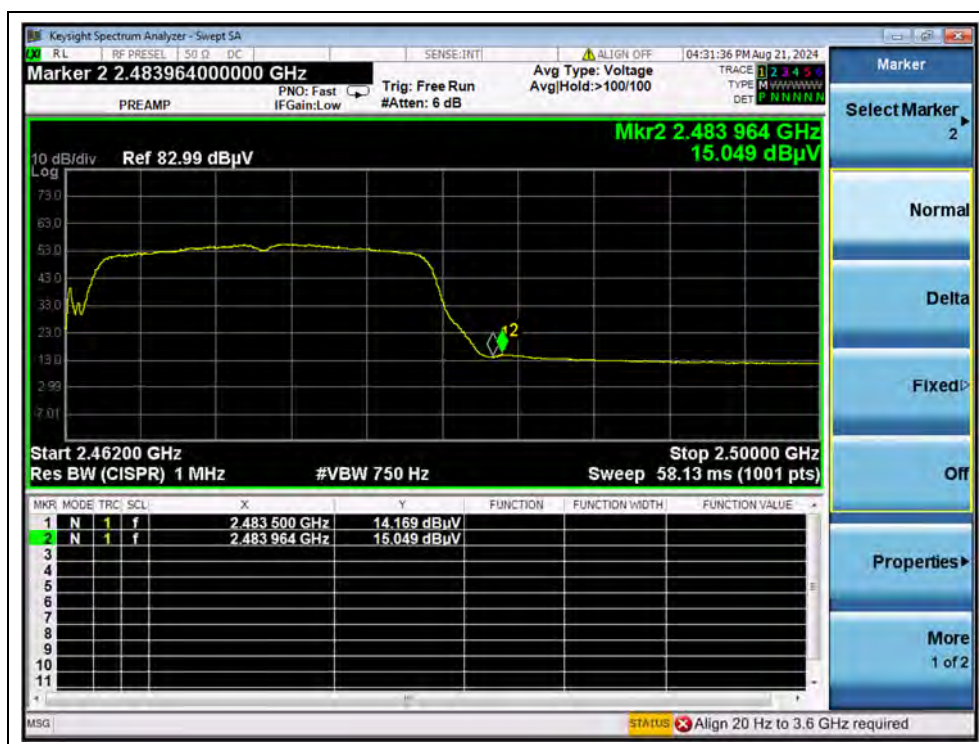
(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)



(PEAK, Channel 13, 802.11g)

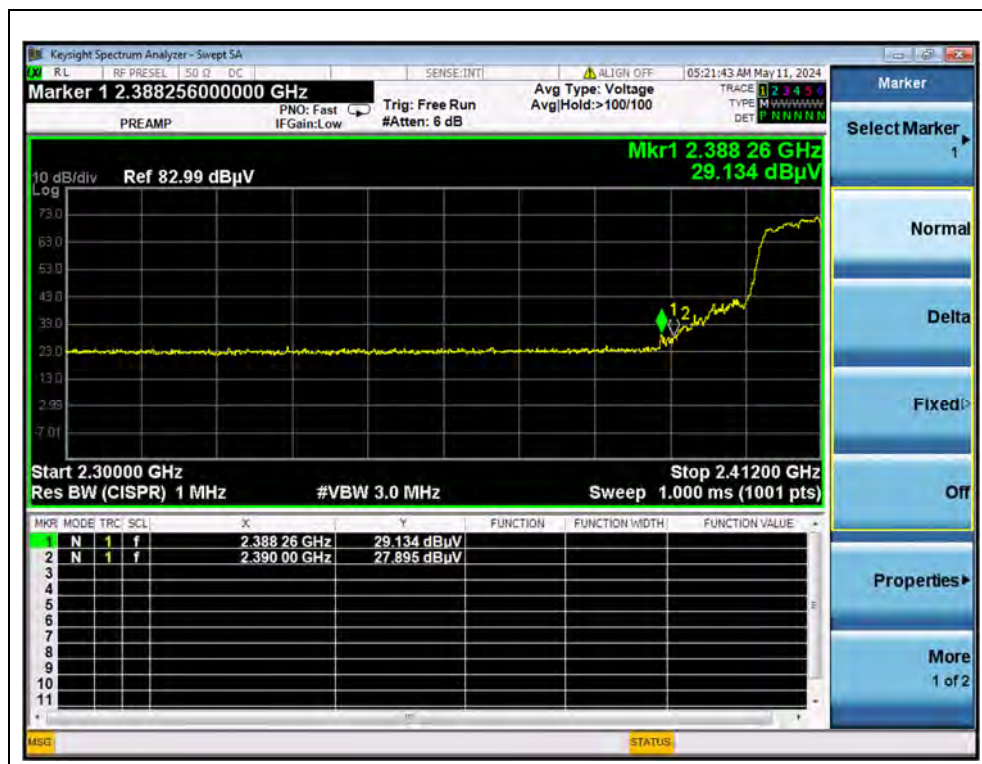


(AVERAGE, Channel 13, 802.11g)

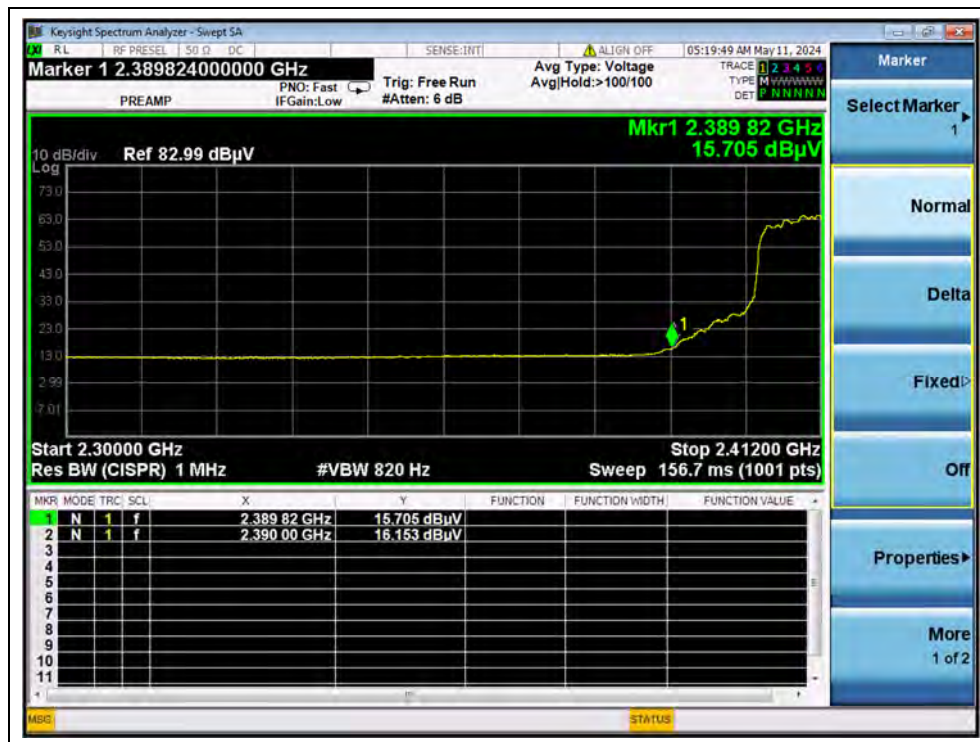


802.11n (HT20) Mode

Channel	Frequency (MHz)	Detector	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	2388.26	PK	29.13	6.74	27.20	63.07	74	PASS
1	2390.00	AV	16.15	6.74	27.20	50.09	54	PASS
13	2483.50	PK	26.97	6.74	27.20	60.91	74	PASS
13	2483.50	AV	15.97	6.74	27.20	49.91	54	PASS



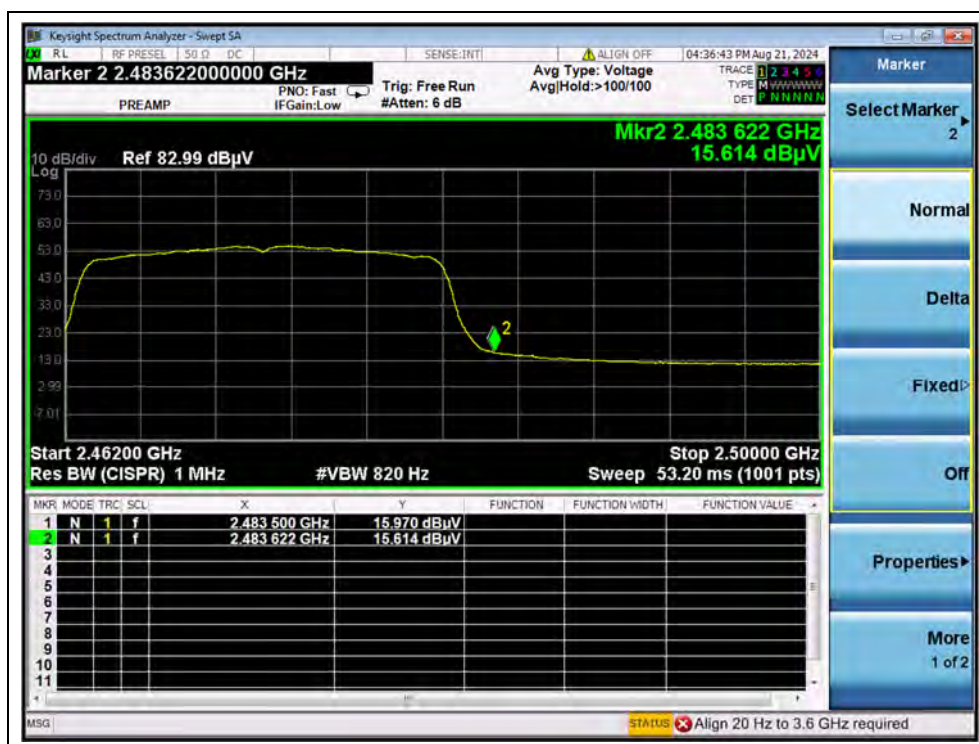
(PEAK, Channel 1, 802.11n (HT20))



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



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

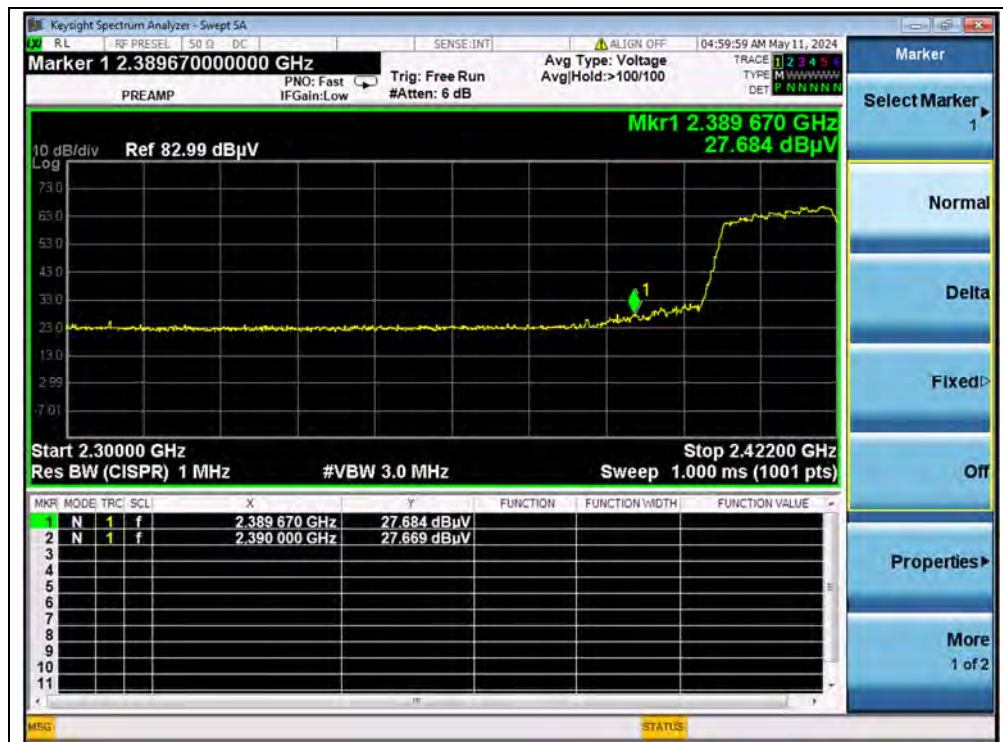


(AVERAGE, Channel 13, 802.11n (HT20))

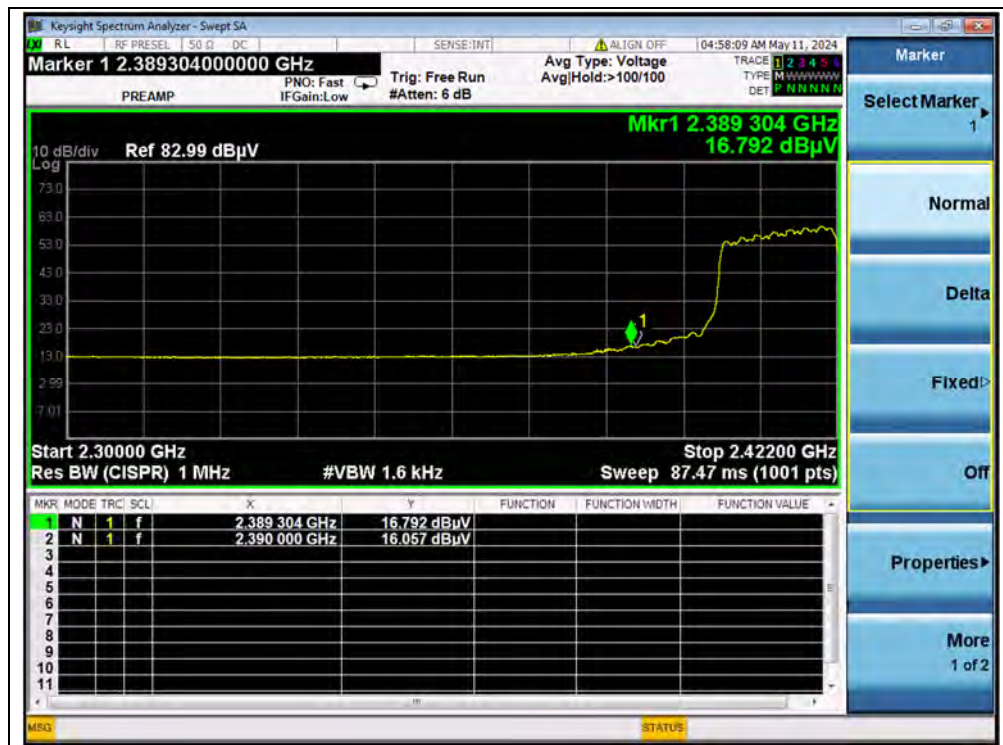


802.11n (HT40) Mode

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (dBμV)	A_T (dB)	A_{Factor} (dB@3m)	Max. Emission E (dBμV/m)	Limit (dBμV/m)	Verdict
		PK/ AV						
3	2489.67	PK	27.68	6.74	27.20	61.62	74	PASS
3	2389.30	AV	16.79	6.74	27.20	50.73	54	PASS
11	2483.50	PK	27.05	6.74	27.20	60.99	74	PASS
11	2483.50	AV	15.52	6.74	27.20	49.46	54	PASS



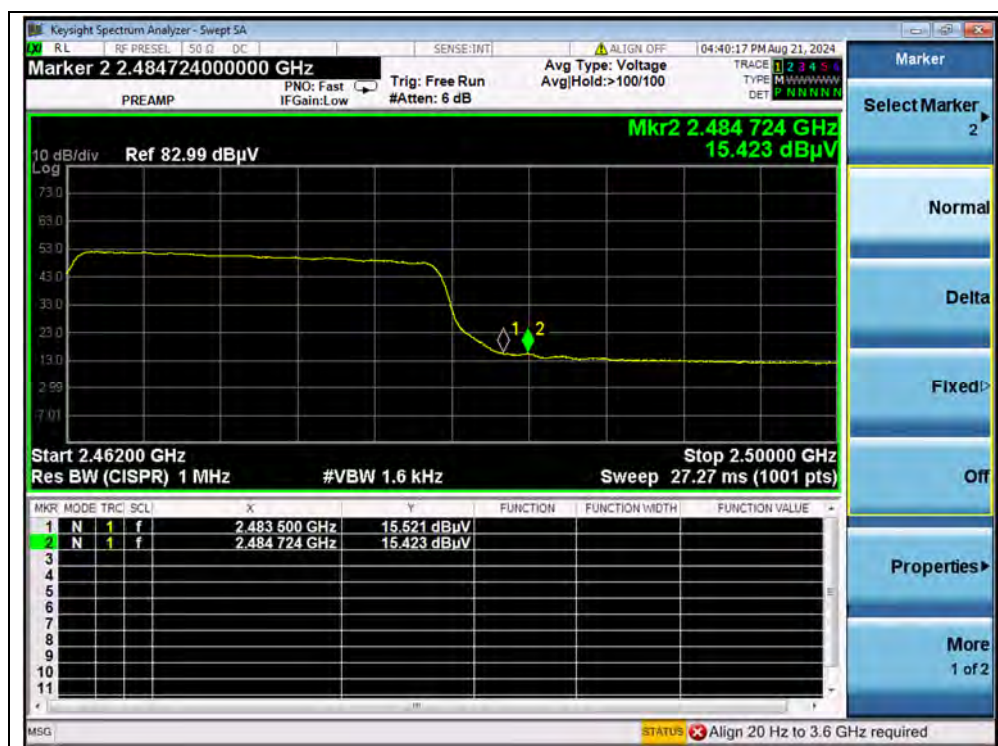
(PEAK, Channel 3, 802.11n (HT40))



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



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



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



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.

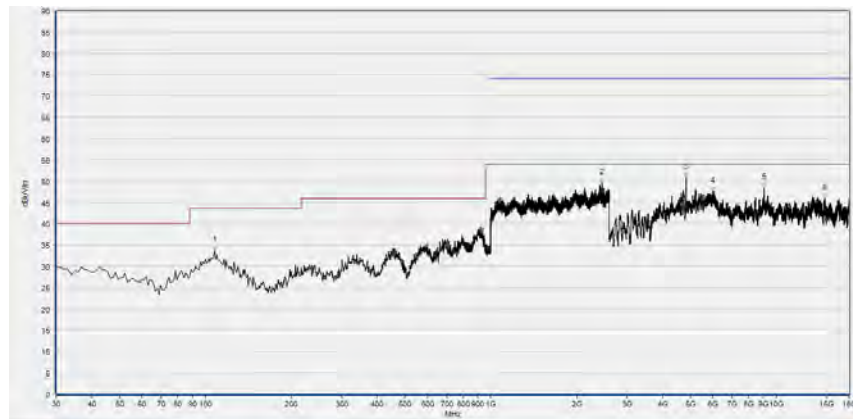
Field strength of fundamental:

Frequency (MHz)	Reading_Peak (dB μ V/m)	Antenna Factor (dB)	Path Loss (dB)	Final_Peak (dB μ V/m)	Antenna Polarity
2411.20	73.54	27.20	6.74	107.48	Horizontal

The field strength (the lowest) of fundamenta is more than 20dB higher than the unwanted emissions, in accordance with FCC part 15.215(b).

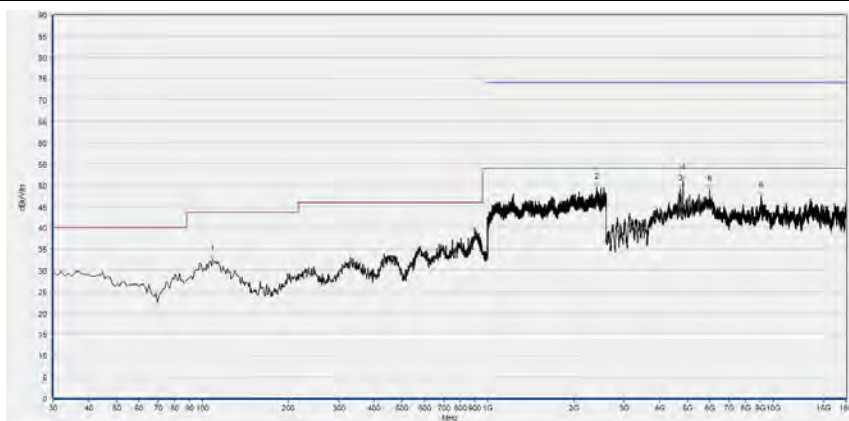
**802.11b Mode**

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
107.600	33.61	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2457.600	49.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4823.760	50.86	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5991.080	47.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9071.080	48.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14778.320	45.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

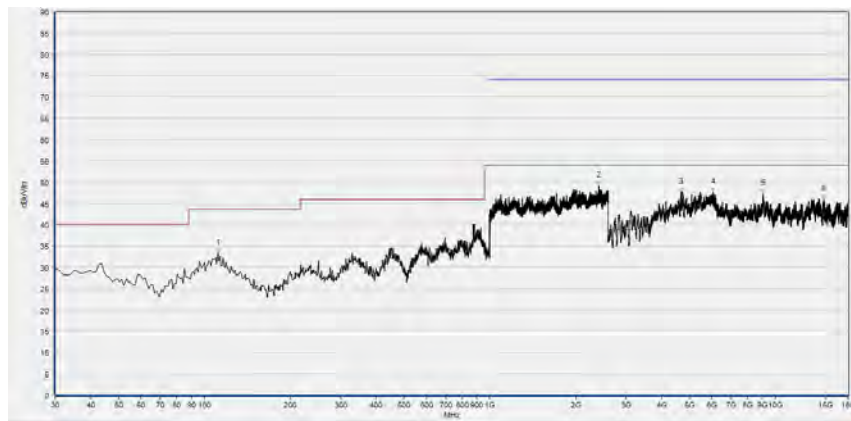


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	32.43	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2405.333	49.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4734.440	49.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4823.760	50.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	48.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9046.440	47.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

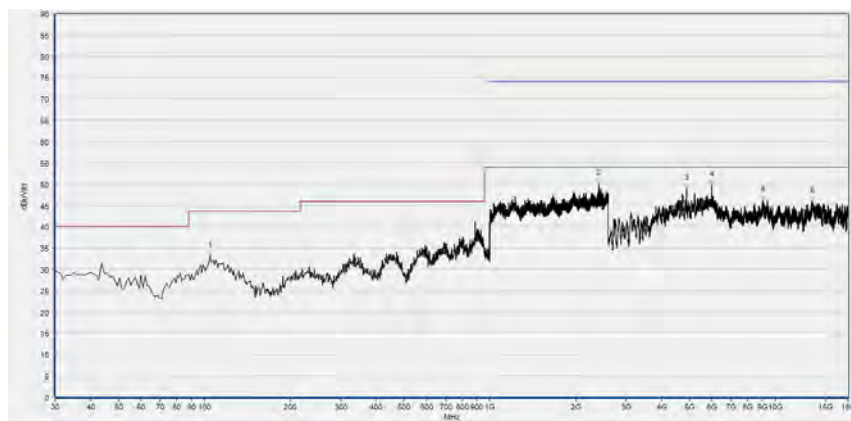


Plot for Channel 7



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
111.480	33.39	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2406.933	49.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4666.680	47.54	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6058.840	47.57	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9071.080	47.29	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14775.240	45.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

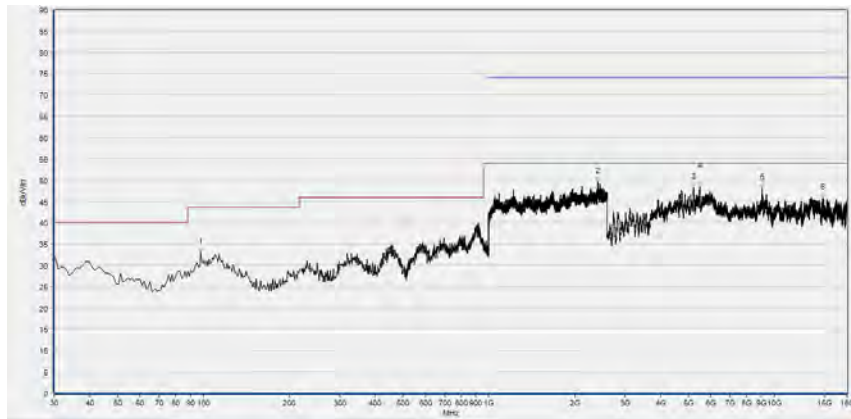


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
104.690	33.19	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2411.733	50.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4882.280	48.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	49.77	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	46.19	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13503.200	45.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

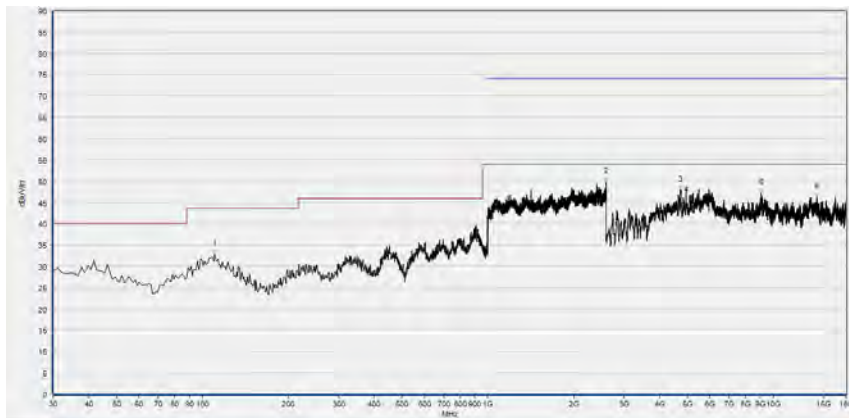


Plot for Channel 13



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
97.900	32.96	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.067	49.56	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5211.840	48.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5479.800	48.41	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9086.480	48.08	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14769.080	45.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

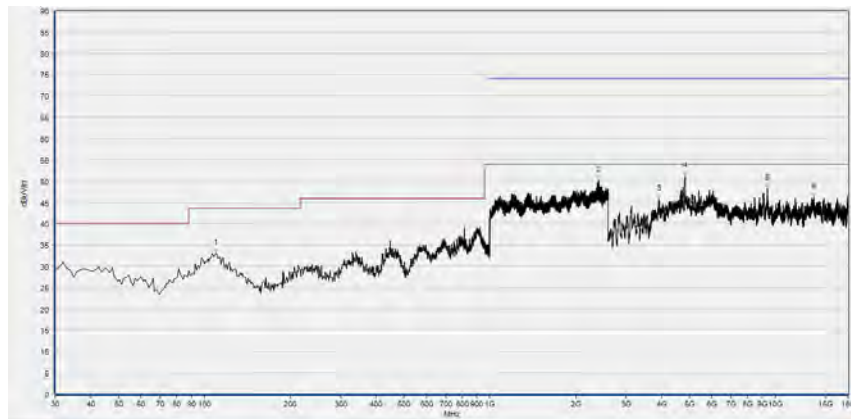


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	32.77	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2594.667	49.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4737.520	48.01	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4943.880	47.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9074.160	47.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14190.040	46.22	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
109.540	33.00	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2407.467	50.10	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3912.080	45.82	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4829.920	51.20	N/A	41.77	74.00	N/A	54.00	Horizontal	PASS
9400.640	48.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13647.960	46.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

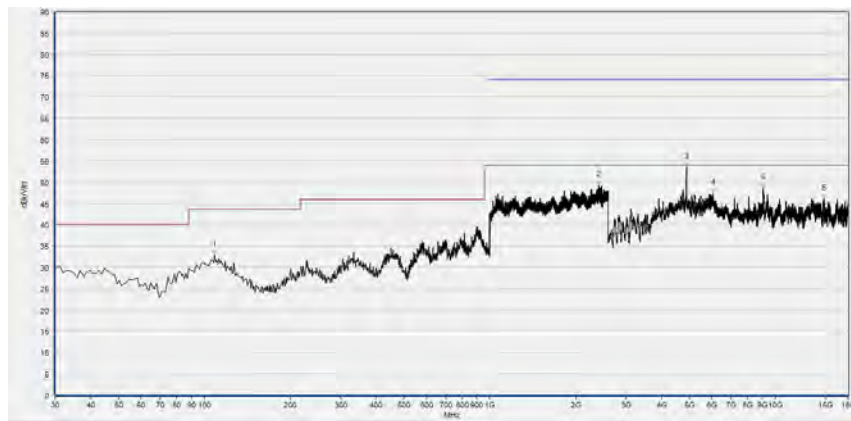
(Antenna Horizontal, 30MHz to 18GHz)



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
108.570	33.30	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2409.600	49.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4820.680	54.99	N/A	43.25	74.00	N/A	54.00	Vertical	PASS
6000.320	48.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9111.120	47.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13561.720	46.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

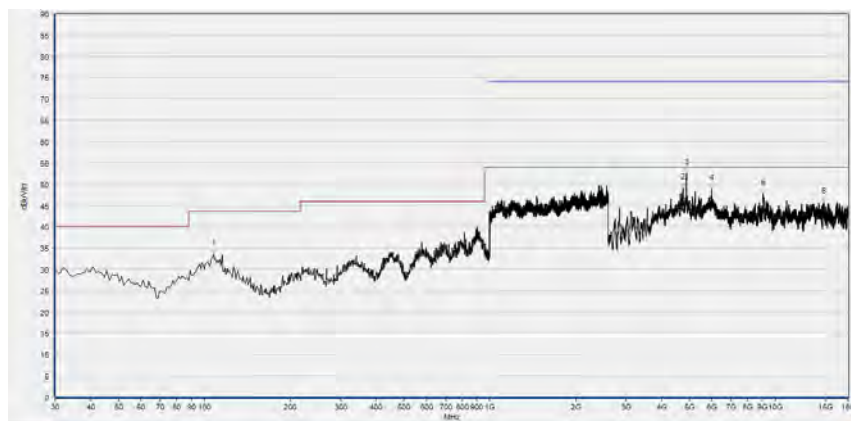
(Antenna Vertical, 30MHz to 18GHz)

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
108.570	32.91	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2413.333	49.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4882.280	53.50	N/A	41.79	74.00	N/A	54.00	Horizontal	PASS
6052.680	47.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9089.560	48.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14766.000	46.16	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

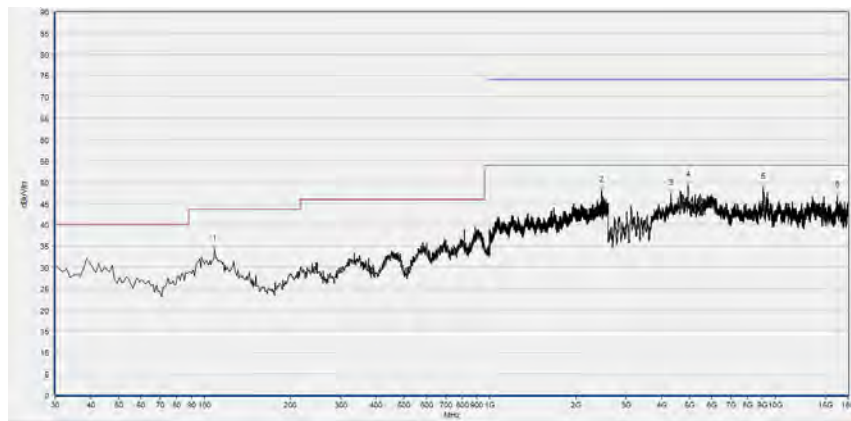


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.600	33.47	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
4746.760	49.13	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4885.360	52.71	N/A	44.05	74.00	N/A	54.00	Vertical	PASS
6000.320	48.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	47.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14775.240	45.69	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

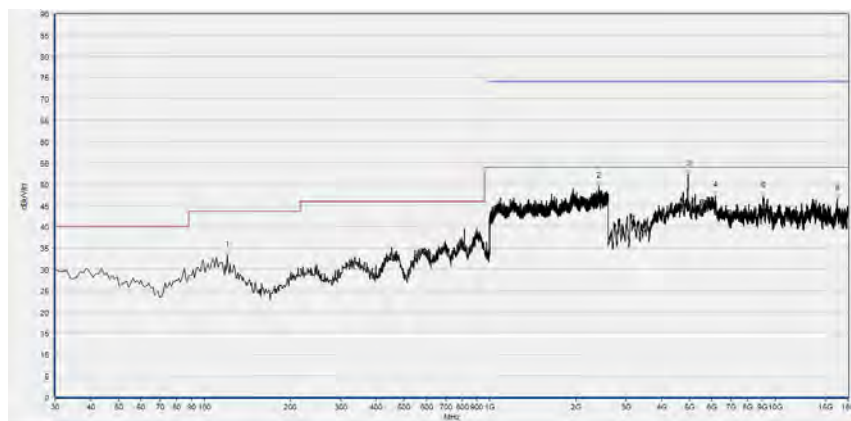


Plot for Channel 13



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	34.23	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2466.133	48.09	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4303.240	47.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4946.960	49.23	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9077.240	48.75	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
16487.720	46.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

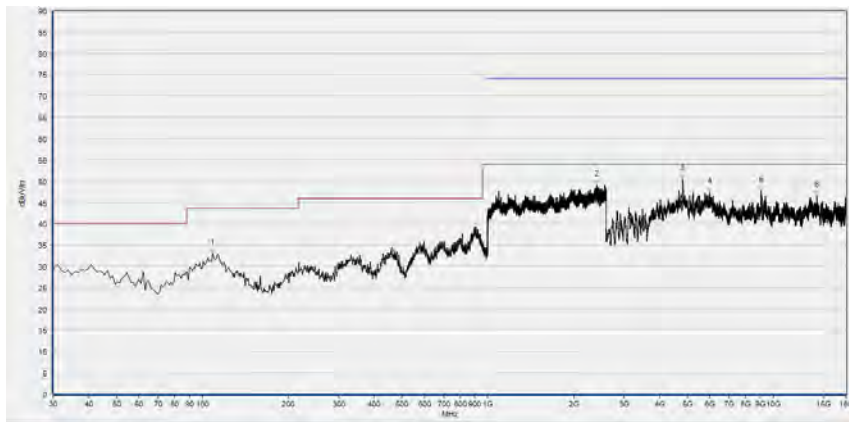


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
120.210	33.27	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2413.867	49.39	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4943.880	52.30	N/A	40.22	74.00	N/A	54.00	Vertical	PASS
6178.960	47.26	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	47.18	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
16466.160	46.67	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

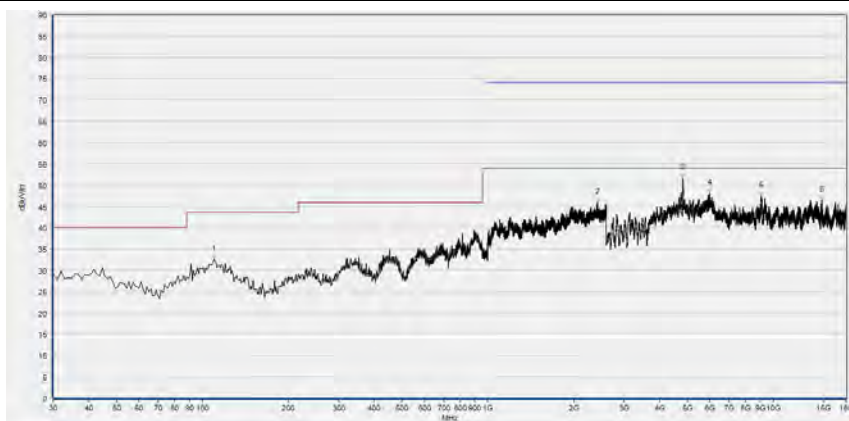
**802.11n (HT20) Mode**

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
108.570	33.00	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2414.400	49.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4820.680	50.44	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5972.600	47.49	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9077.240	47.72	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14186.960	46.55	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

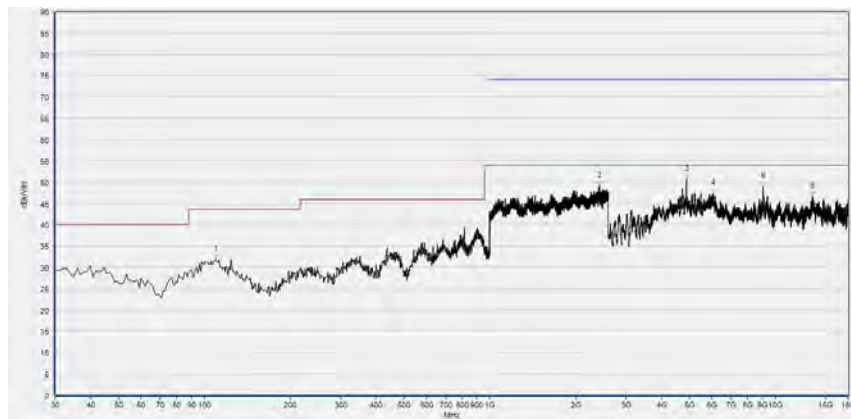


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
109.540	32.44	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2428.267	45.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4820.680	51.66	N/A	42.08	74.00	N/A	54.00	Vertical	PASS
5972.600	48.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9083.400	47.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14787.560	46.45	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

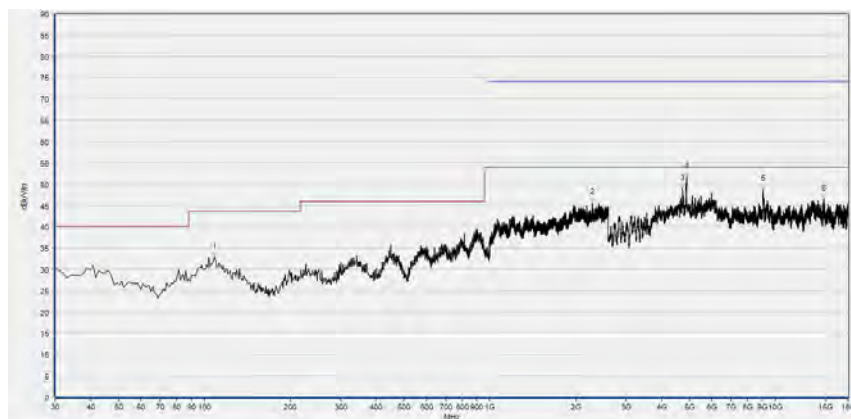


Plot for Channel 7



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	31.86	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2416.533	49.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4882.280	50.67	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6049.600	47.24	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9083.400	48.96	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13481.640	46.61	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

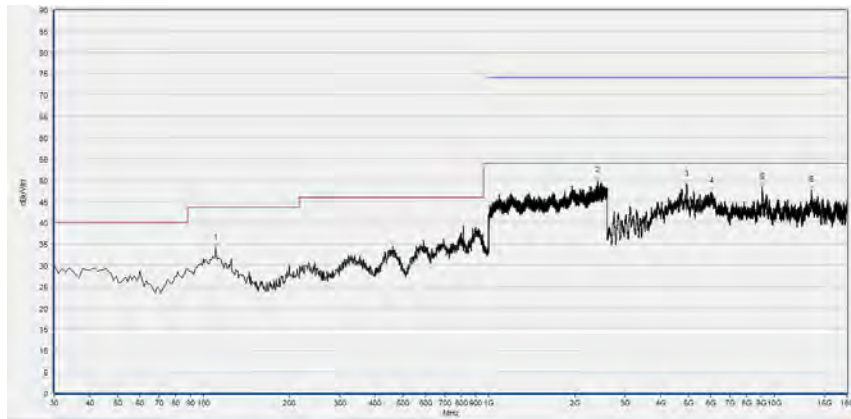
(Antenna Horizontal, 30MHz to 18GHz)



Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	32.90	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2281.067	45.66	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4740.600	48.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4888.440	51.55	N/A	41.47	74.00	N/A	54.00	Vertical	PASS
9083.400	48.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14787.560	46.42	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

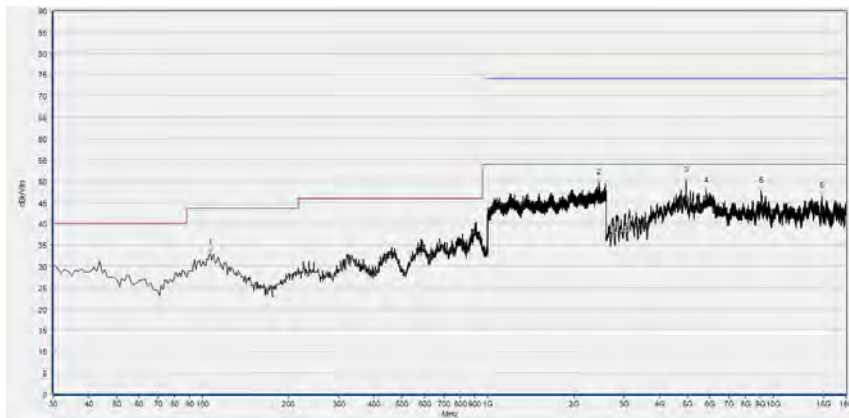
(Antenna Vertical, 30MHz to 18GHz)

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
110.510	34.06	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2413.333	49.70	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4934.640	48.92	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
6012.640	47.33	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9086.480	48.20	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13463.160	47.53	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

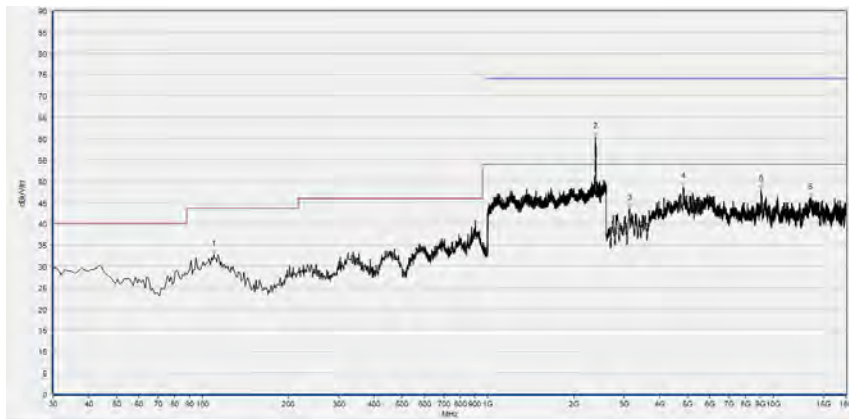


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
106.630	32.94	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2449.600	49.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4943.880	50.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5809.360	47.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	47.63	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14827.600	46.47	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

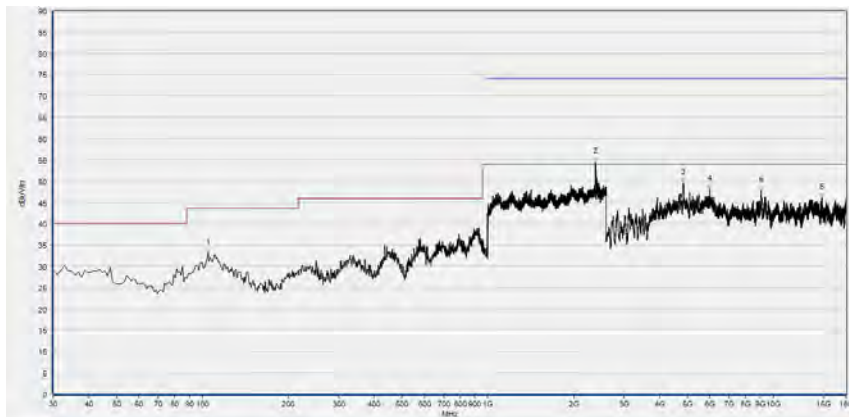
**802.11n (HT40) Mode**

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
109.540	32.66	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2387.200	60.25	N/A	42.47	74.00	N/A	54.00	Horizontal	PASS
3142.080	43.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4839.160	48.68	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9086.480	48.15	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13497.040	46.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

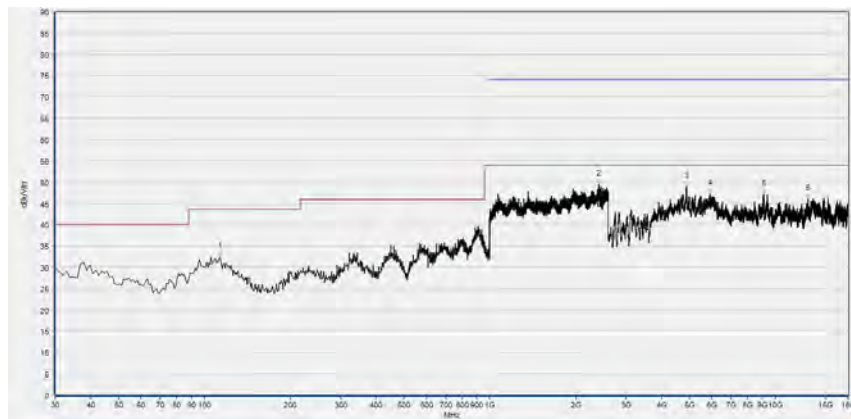


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
104.690	33.24	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2387.200	54.53	N/A	39.03	74.00	N/A	54.00	Vertical	PASS
4848.400	49.64	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	48.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	47.83	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14806.040	46.09	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

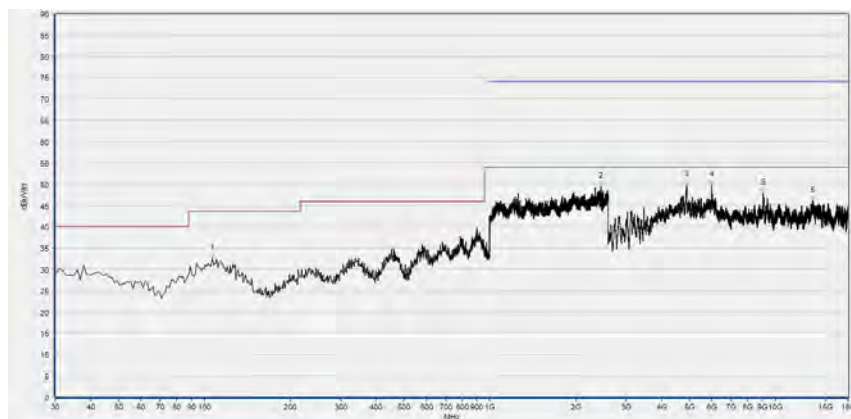


Plot for Channel 7



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	32.37	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2405.333	49.45	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4888.440	48.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5914.080	47.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9123.440	47.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13056.600	46.07	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

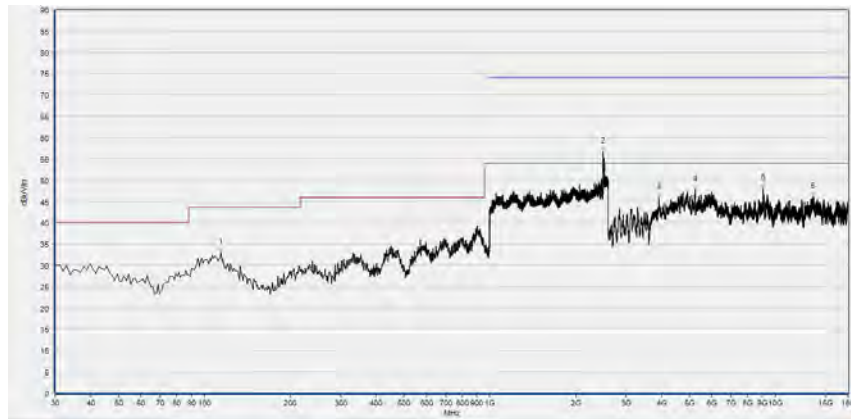
(Antenna Horizontal, 30MHz to 18GHz)



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	32.44	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2456.533	49.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4888.440	49.82	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	49.75	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9083.400	47.91	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13537.080	46.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

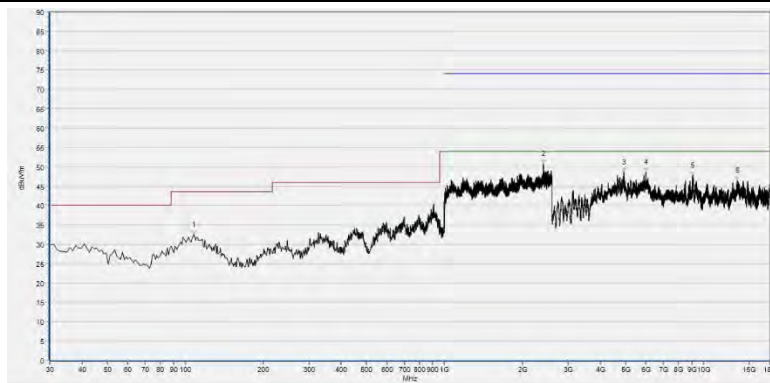
(Antenna Vertical, 30MHz to 18GHz)

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
114.390	33.07	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2499.733	56.62	N/A	41.89	74.00	N/A	54.00	Horizontal	PASS
3918.240	45.95	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5236.480	47.78	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
9077.240	48.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
13567.880	46.11	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	32.57	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2414.400	50.70	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
4919.240	48.60	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
6000.320	48.58	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
9077.240	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
13478.560	46.43	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT