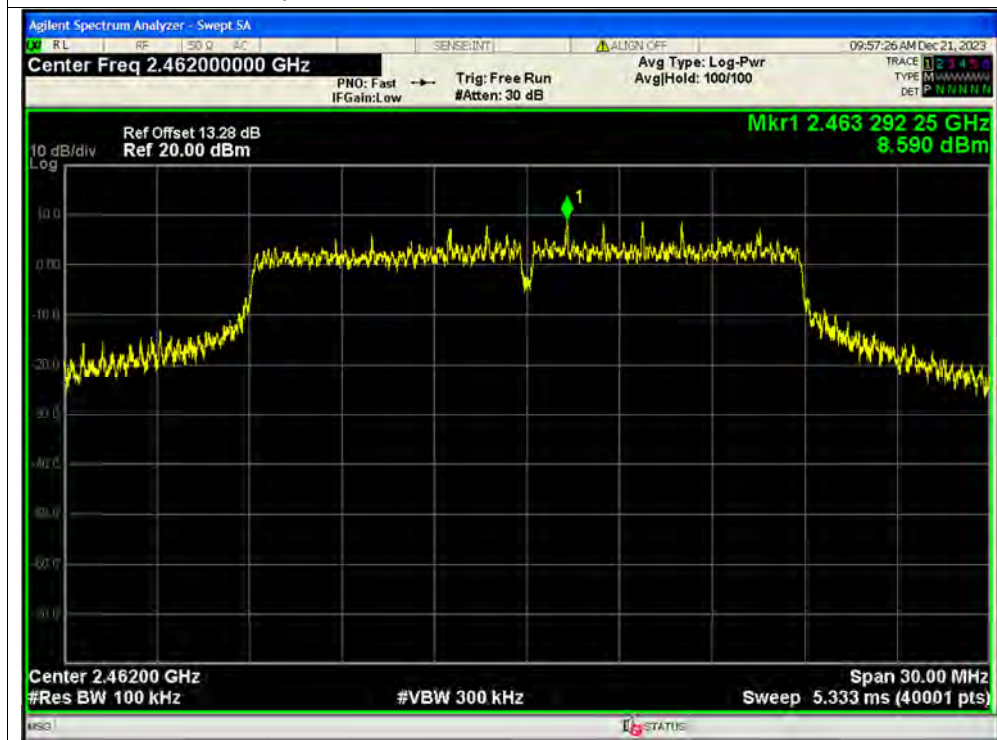
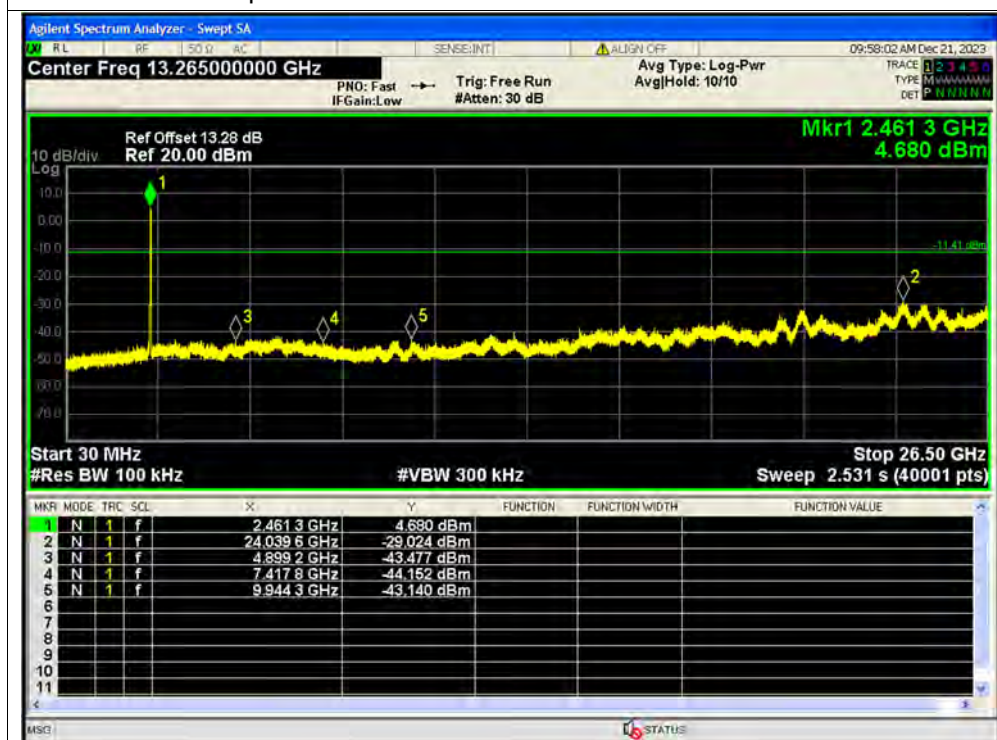




Tx. Spurious NVNT n20 2462MHz Ant8 Ref SISO



Tx. Spurious NVNT n20 2462MHz Ant8 Emission SISO

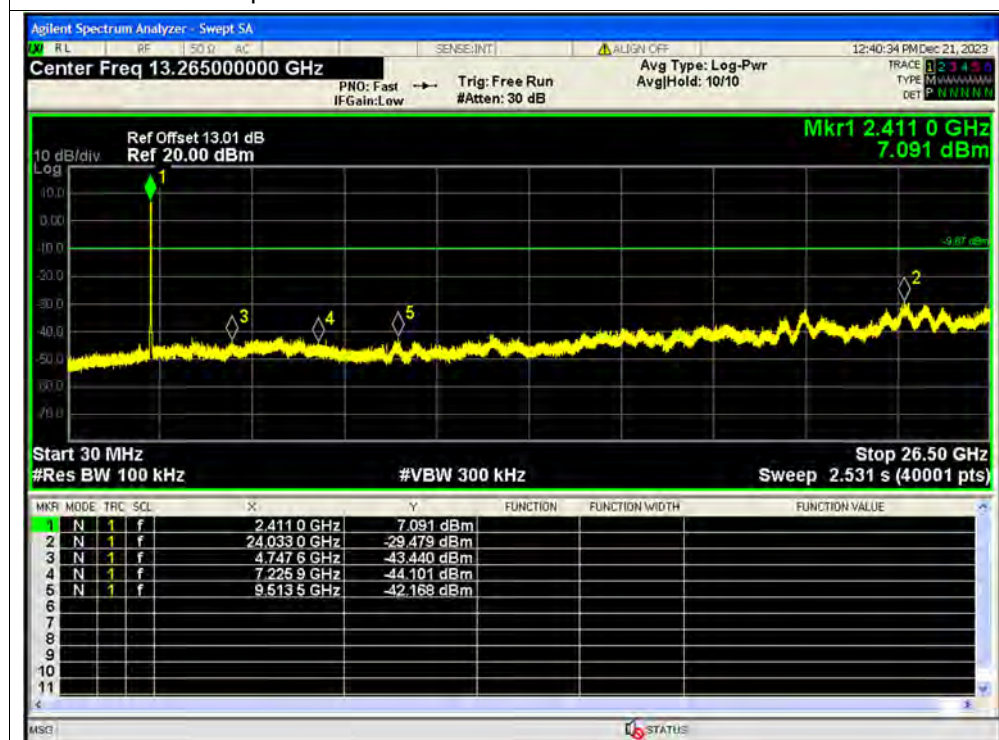




Tx. Spurious NVNT n20 2412MHz Ant9 Ref SISO



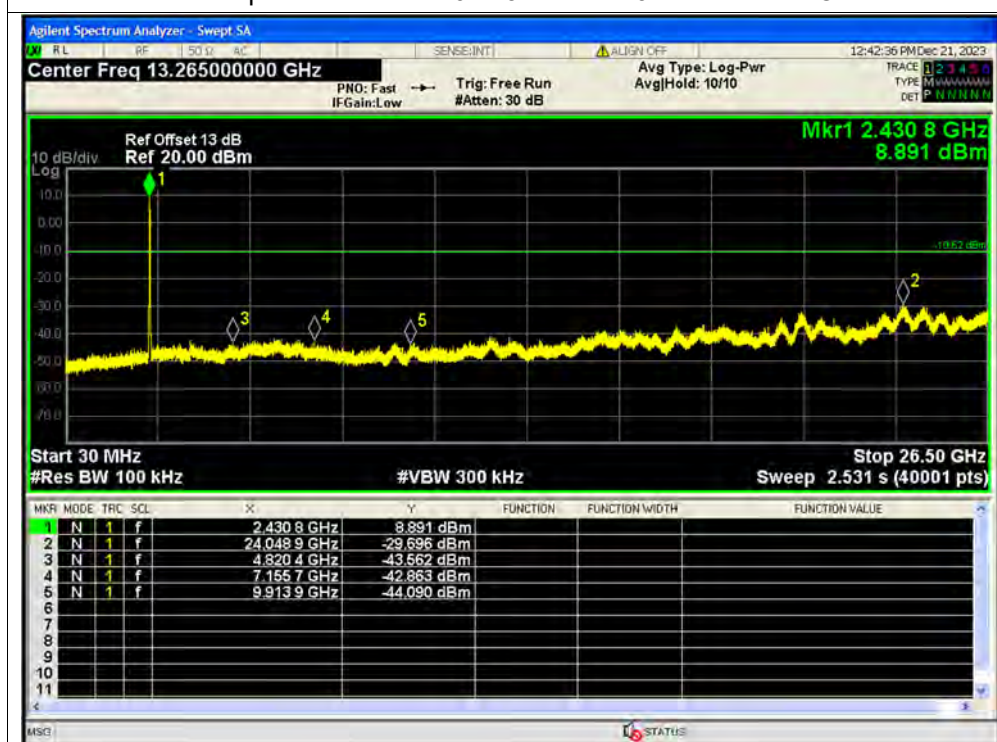
Tx. Spurious NVNT n20 2412MHz Ant9 Emission SISO



Tx. Spurious NVNT n20 2437MHz Ant9 Ref SISO



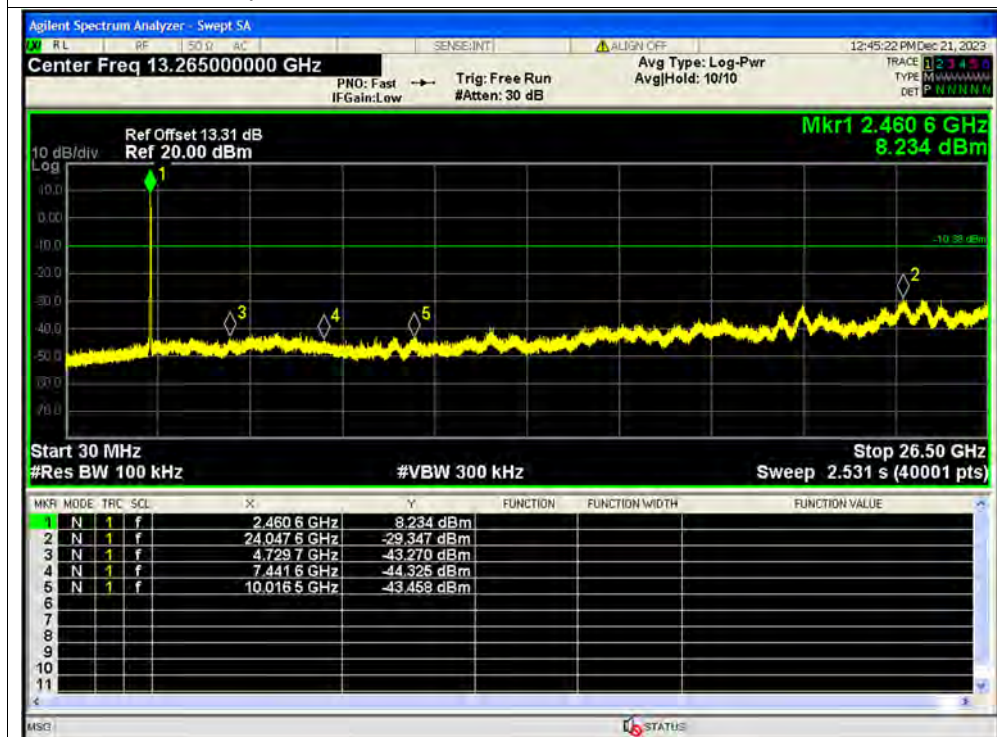
Tx. Spurious NVNT n20 2437MHz Ant9 Emission SISO



Tx. Spurious NVNT n20 2462MHz Ant9 Ref SISO



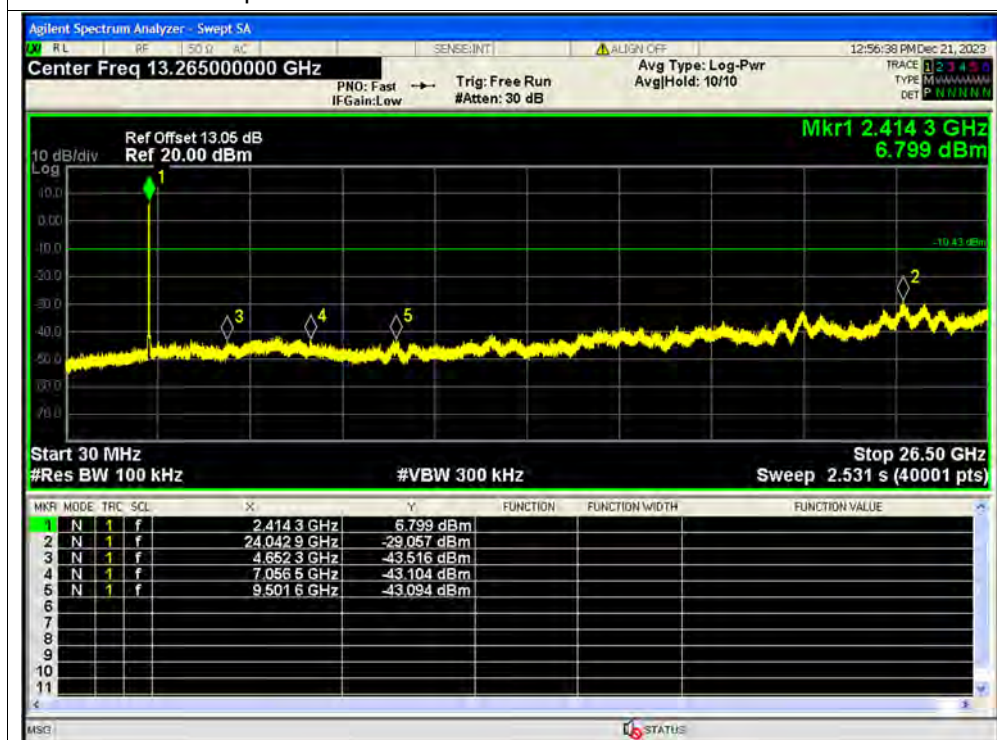
Tx. Spurious NVNT n20 2462MHz Ant9 Emission SISO



Tx. Spurious NVNT n20 2412MHz Ant8 Ref MIMO



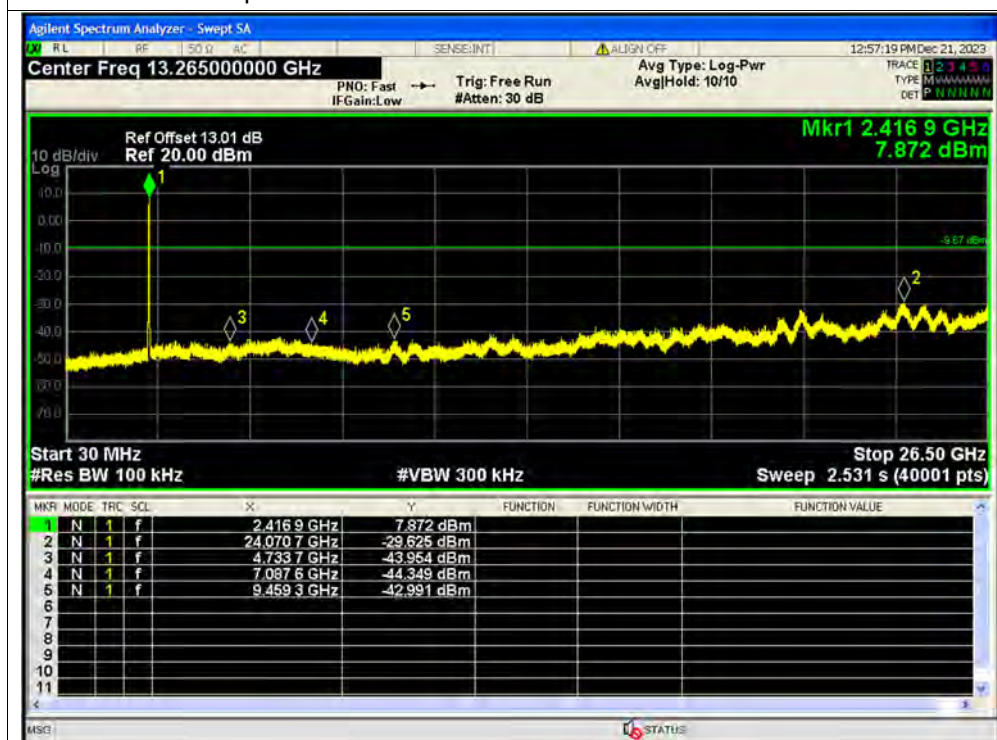
Tx. Spurious NVNT n20 2412MHz Ant8 Emission MIMO



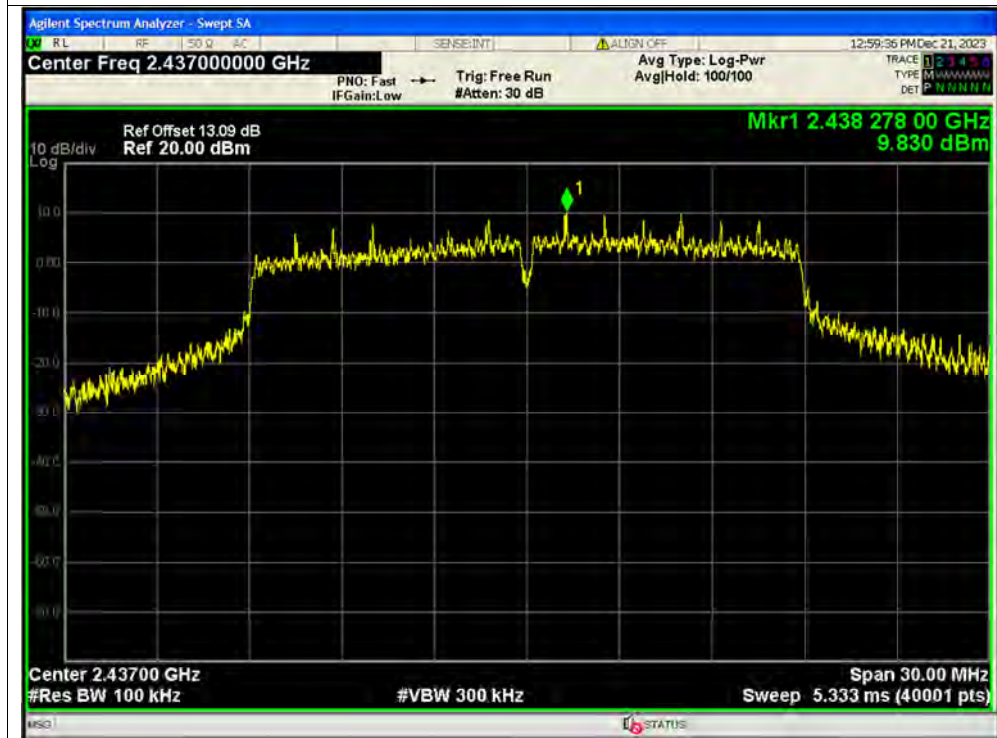
Tx. Spurious NVNT n20 2412MHz Ant9 Ref MIMO



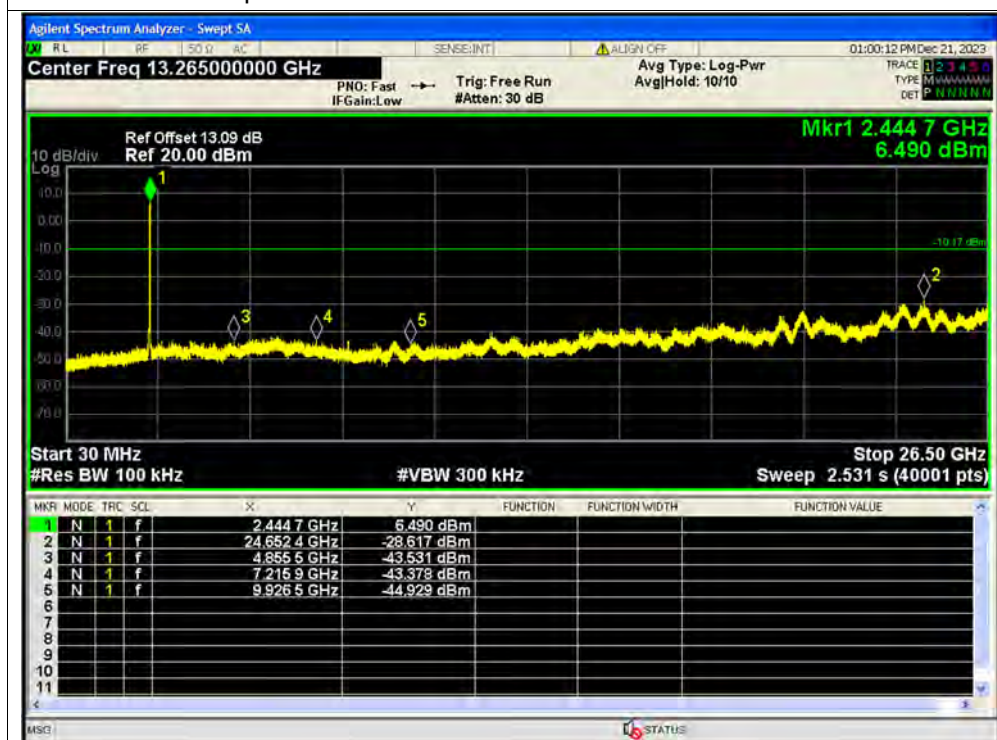
Tx. Spurious NVNT n20 2412MHz Ant9 Emission MIMO



Tx. Spurious NVNT n20 2437MHz Ant8 Ref MIMO



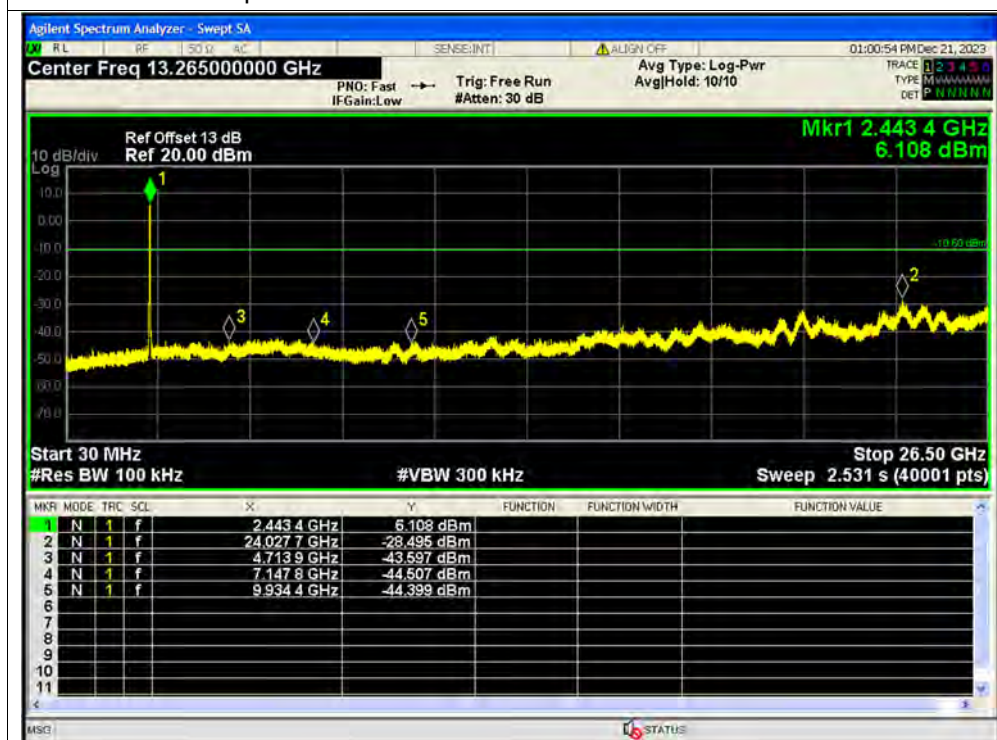
Tx. Spurious NVNT n20 2437MHz Ant8 Emission MIMO



Tx. Spurious NVNT n20 2437MHz Ant9 Ref MIMO



Tx. Spurious NVNT n20 2437MHz Ant9 Emission MIMO

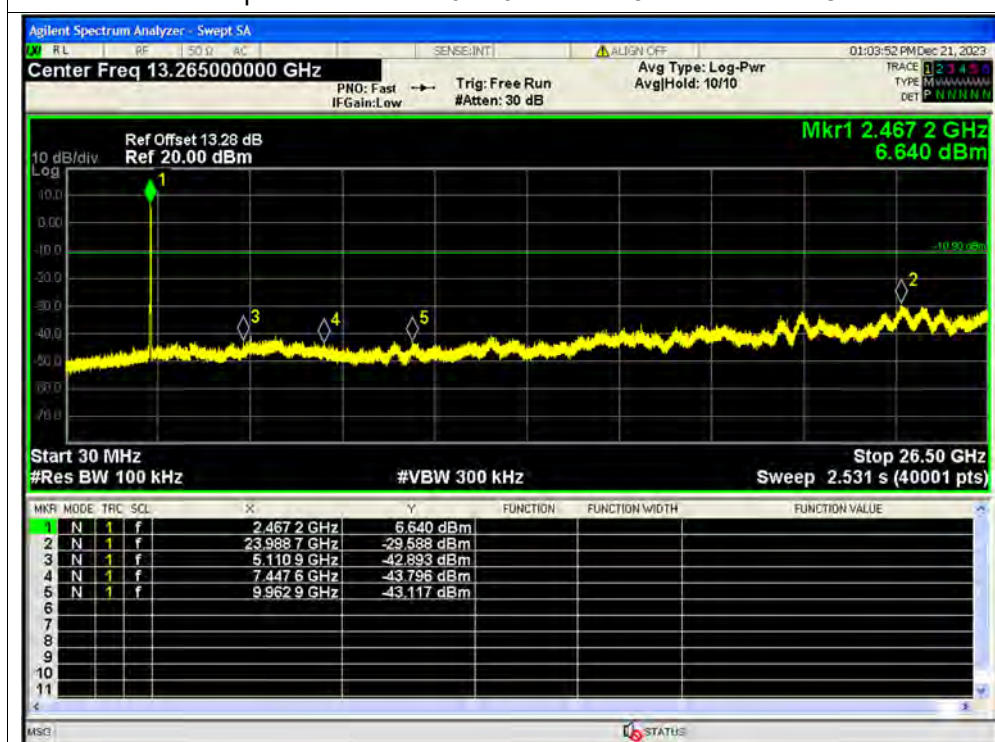




Tx. Spurious NVNT n20 2462MHz Ant8 Ref MIMO



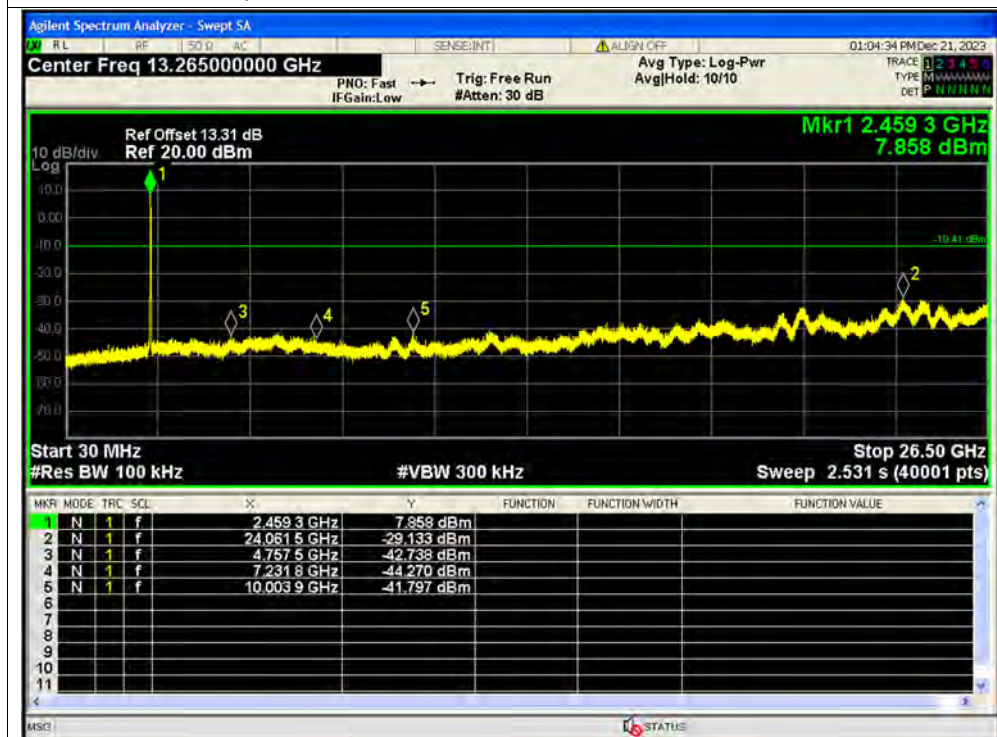
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Tx. Spurious NVNT n20 2462MHz Ant9 Ref MIMO



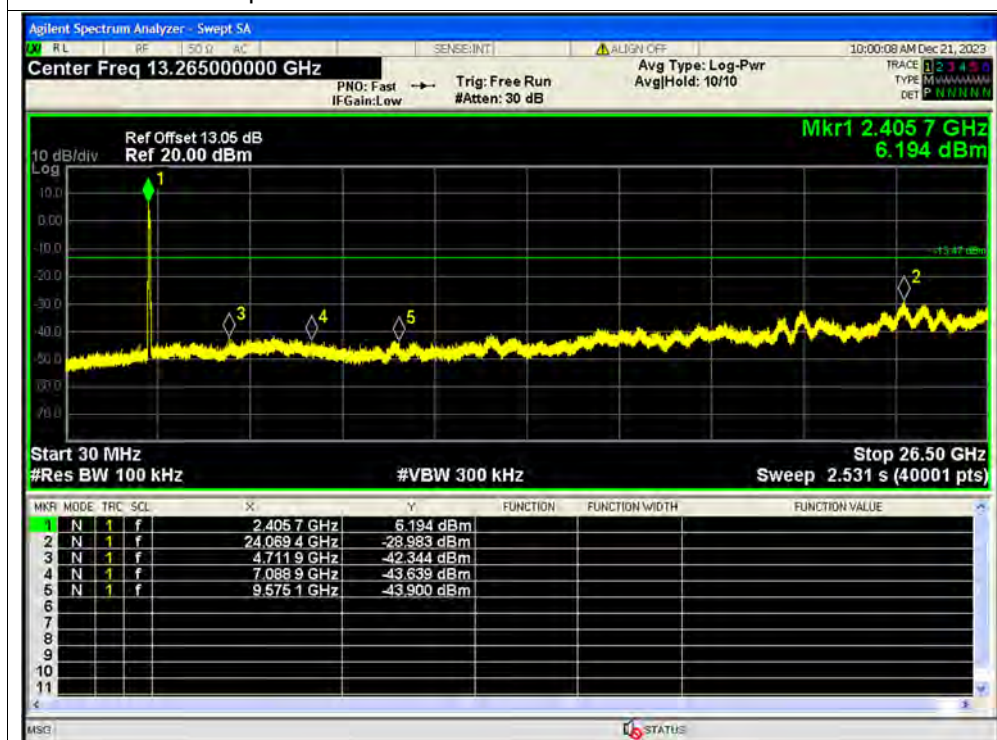
Tx. Spurious NVNT n20 2462MHz Ant9 Emission MIMO



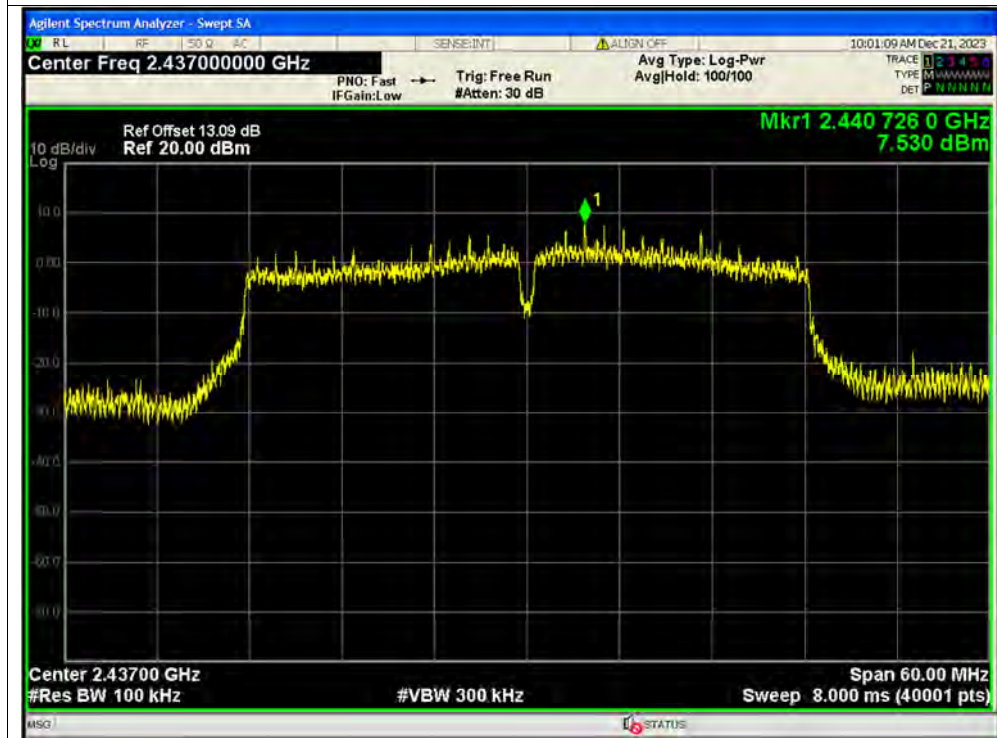
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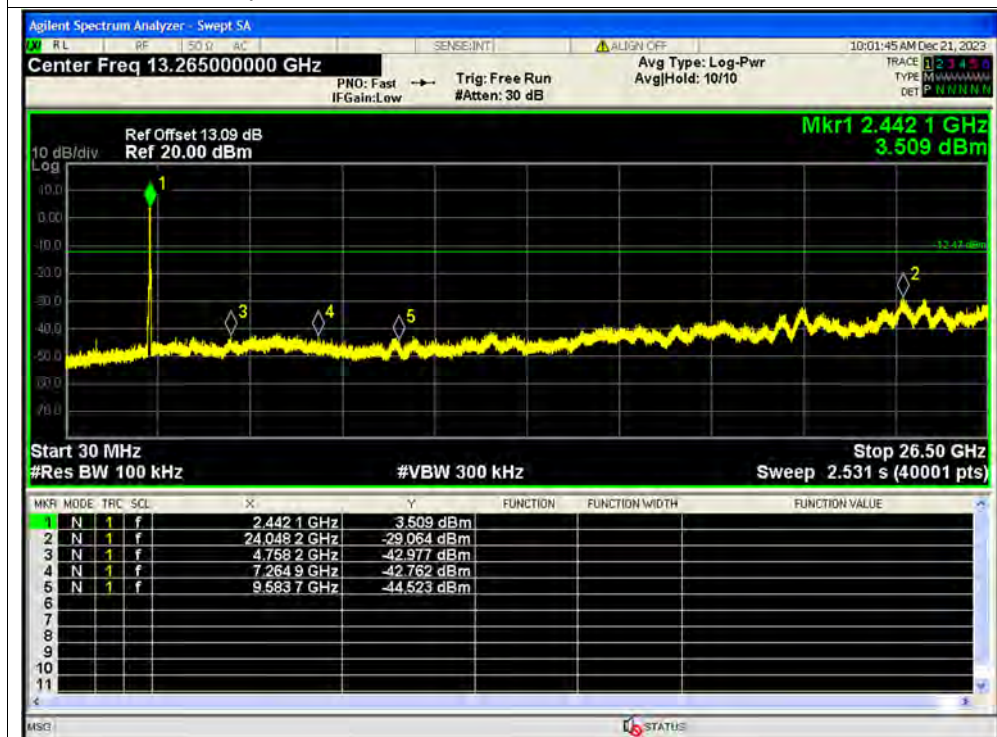
Tx. Spurious NVNT n40 2422MHz Ant8 Emission SISO



Tx. Spurious NVNT n40 2437MHz Ant8 Ref SISO



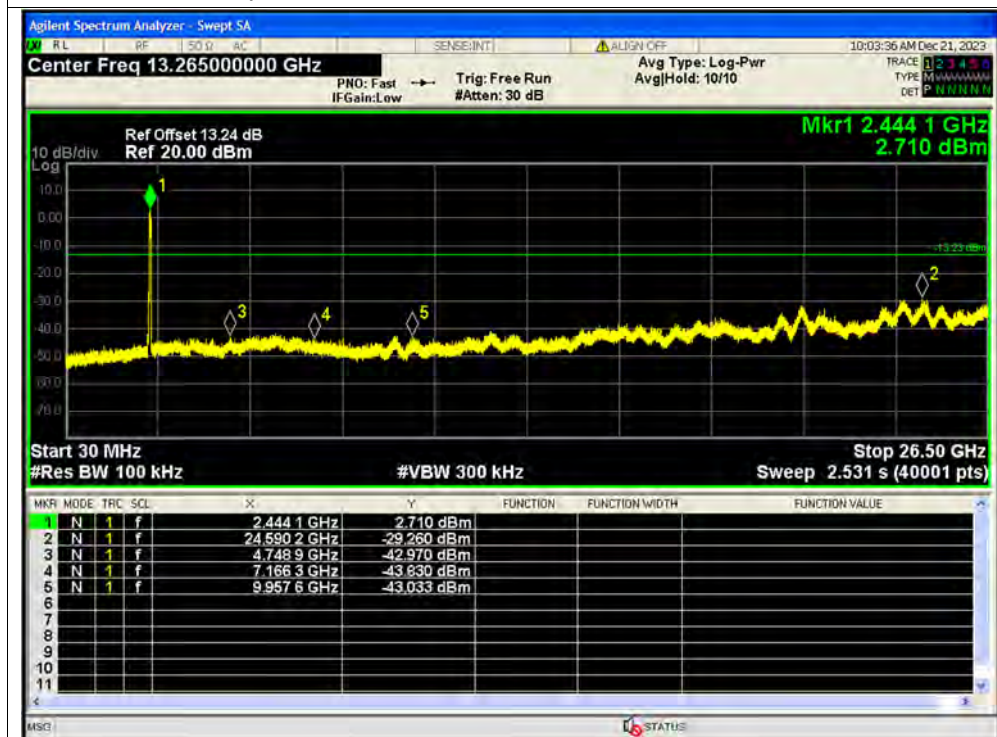
Tx. Spurious NVNT n40 2437MHz Ant8 Emission SISO



Tx. Spurious NVNT n40 2452MHz Ant8 Ref SISO



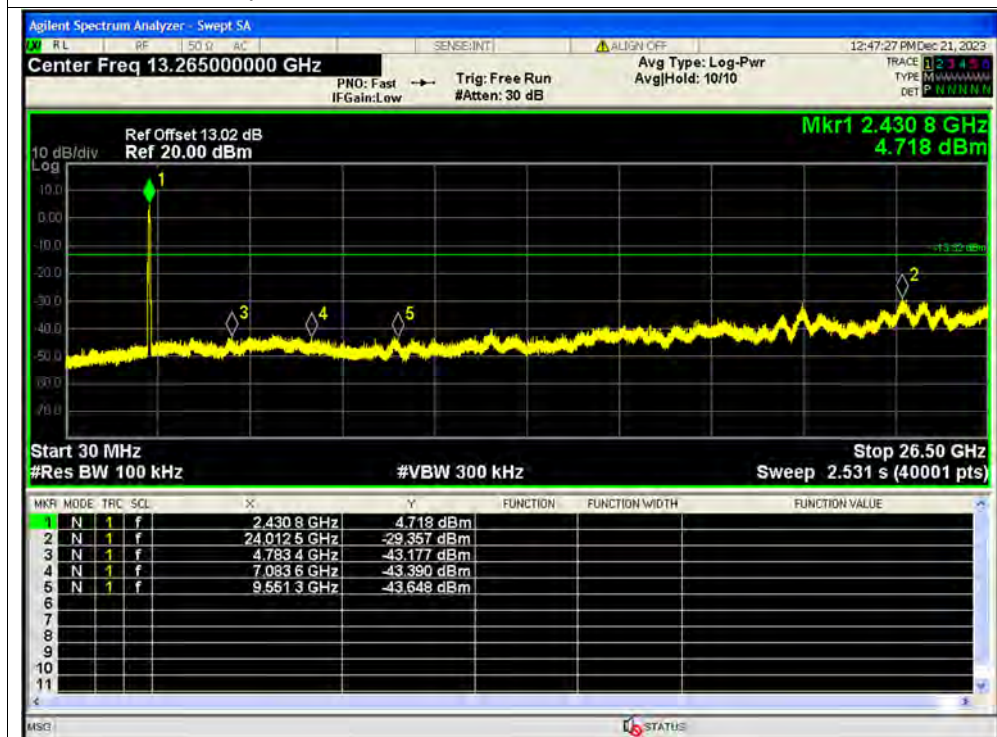
Tx. Spurious NVNT n40 2452MHz Ant8 Emission SISO



Tx. Spurious NVNT n40 2422MHz Ant9 Ref SISO



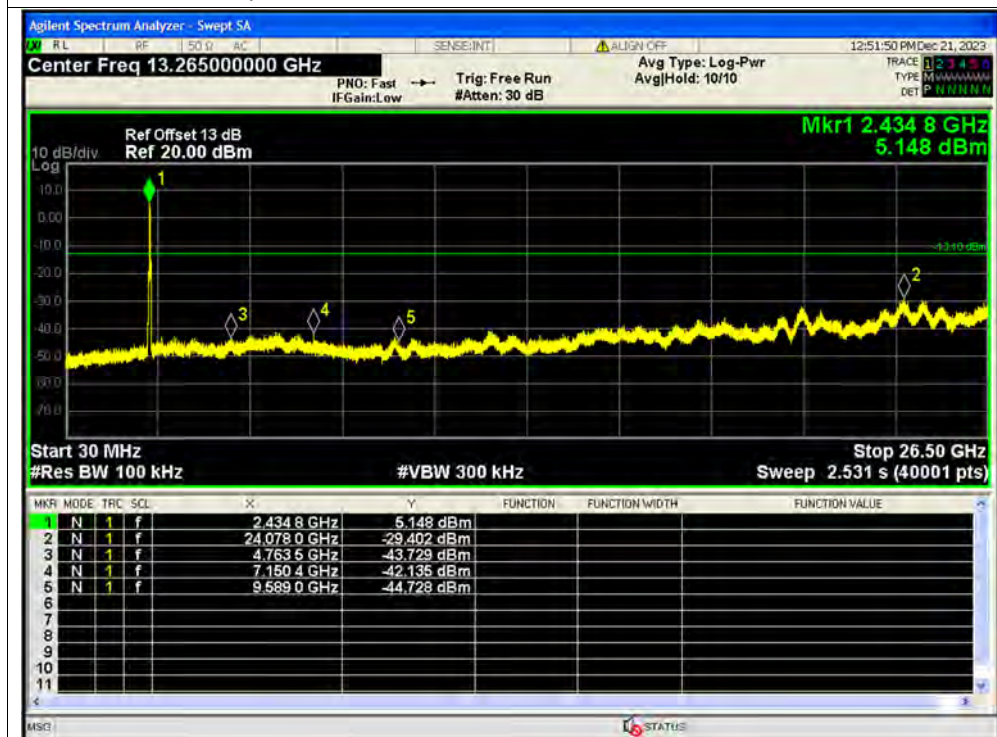
Tx. Spurious NVNT n40 2422MHz Ant9 Emission SISO



Tx. Spurious NVNT n40 2437MHz Ant9 Ref SISO



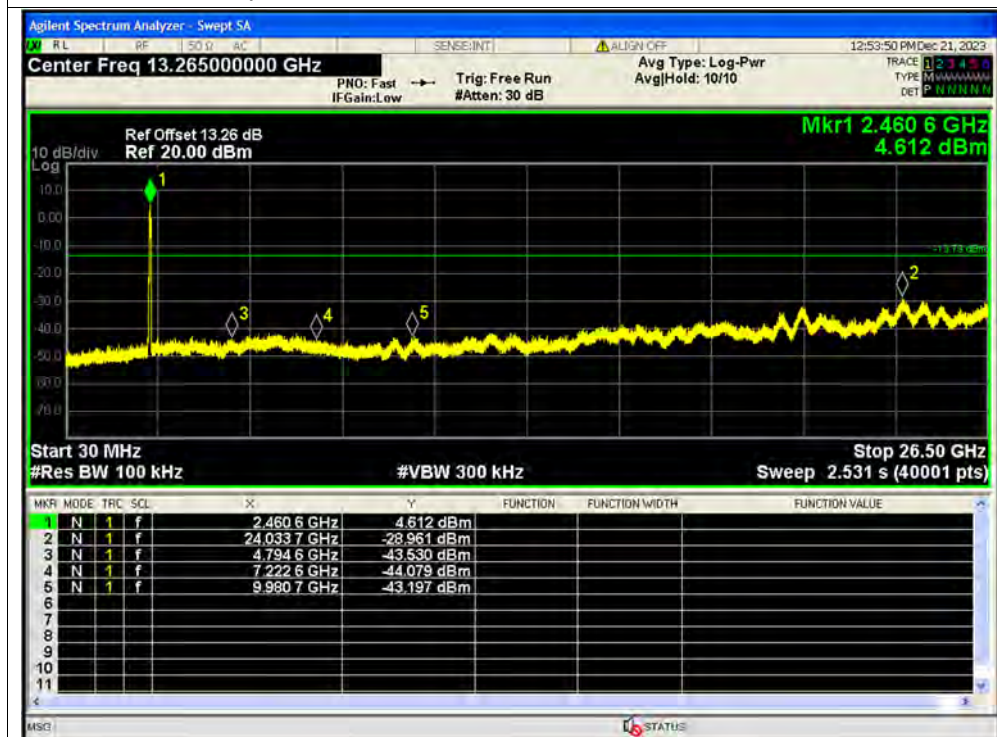
Tx. Spurious NVNT n40 2437MHz Ant9 Emission SISO



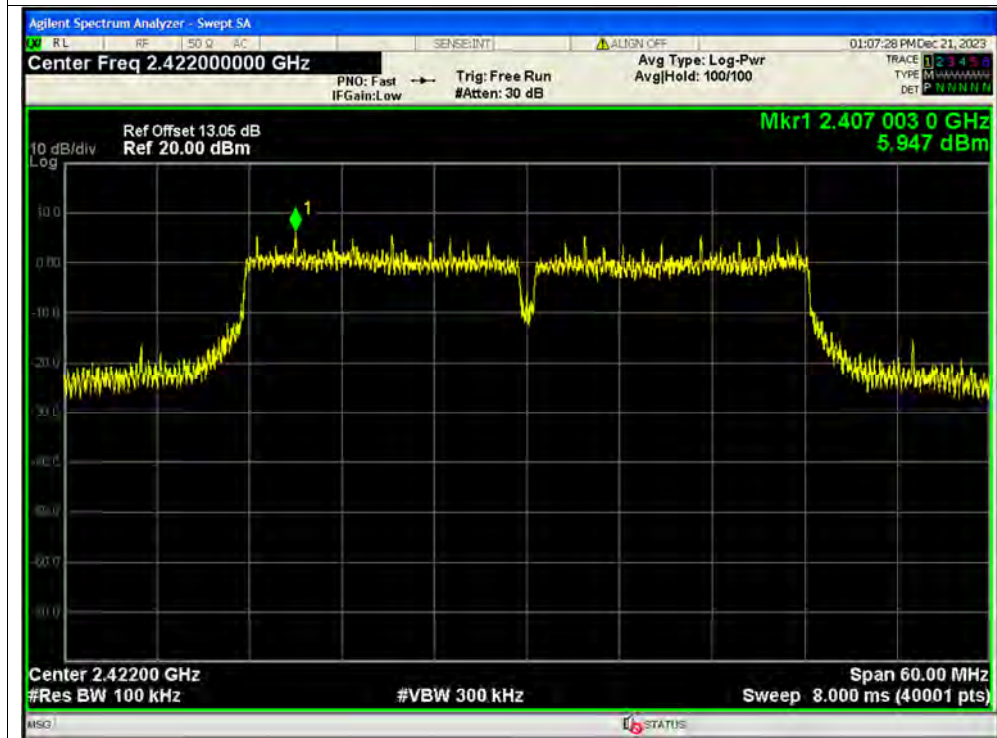
Tx. Spurious NVNT n40 2452MHz Ant9 Ref SISO



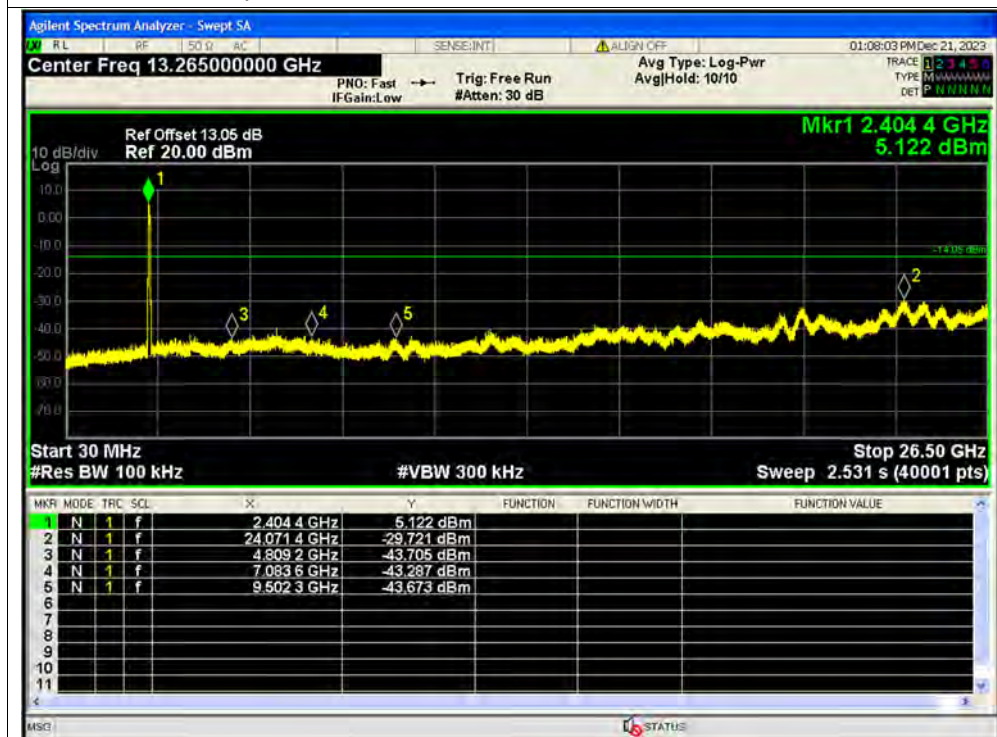
Tx. Spurious NVNT n40 2452MHz Ant9 Emission SISO



Tx. Spurious NVNT n40 2422MHz Ant8 Ref MIMO



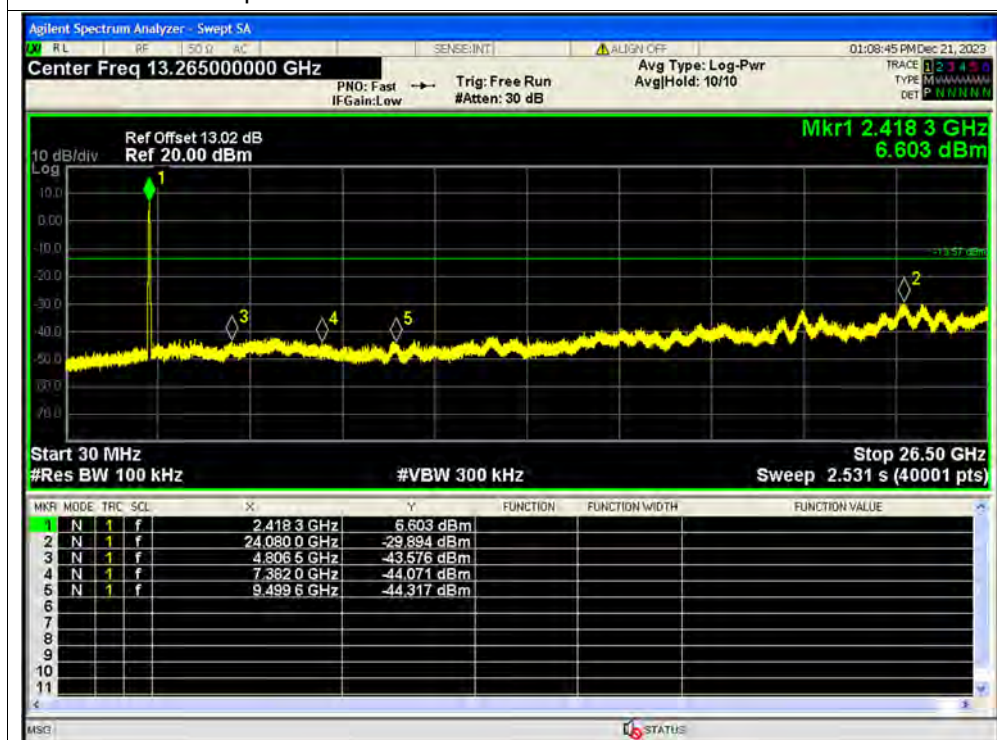
Tx. Spurious NVNT n40 2422MHz Ant8 Emission MIMO



Tx. Spurious NVNT n40 2422MHz Ant9 Ref MIMO



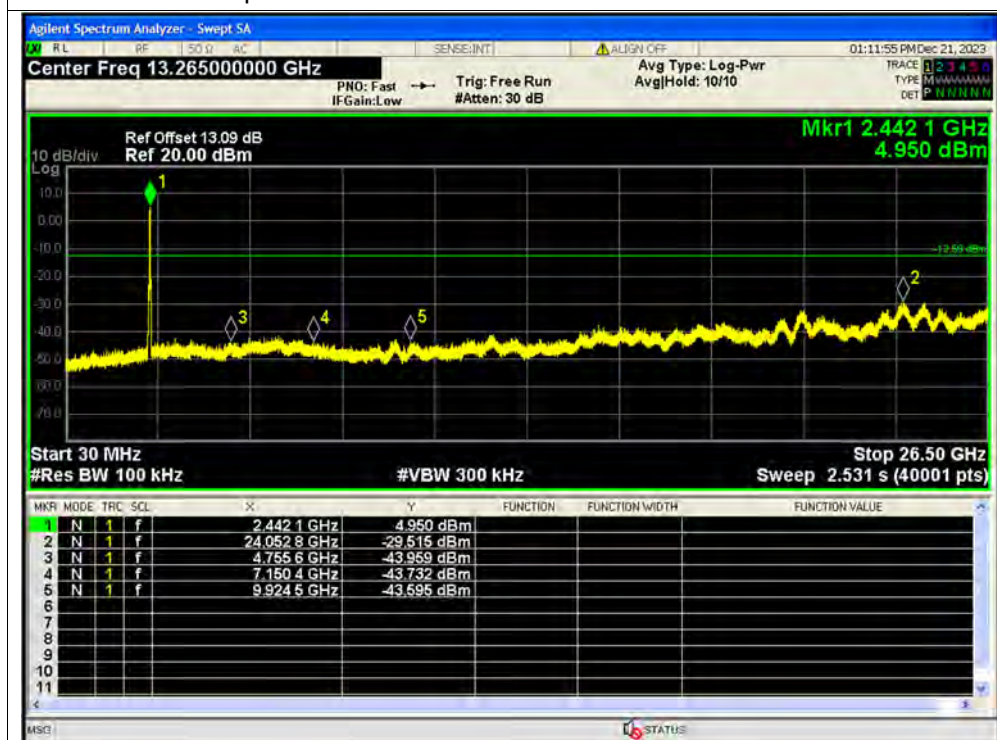
Tx. Spurious NVNT n40 2422MHz Ant9 Emission MIMO



Tx. Spurious NVNT n40 2437MHz Ant8 Ref MIMO



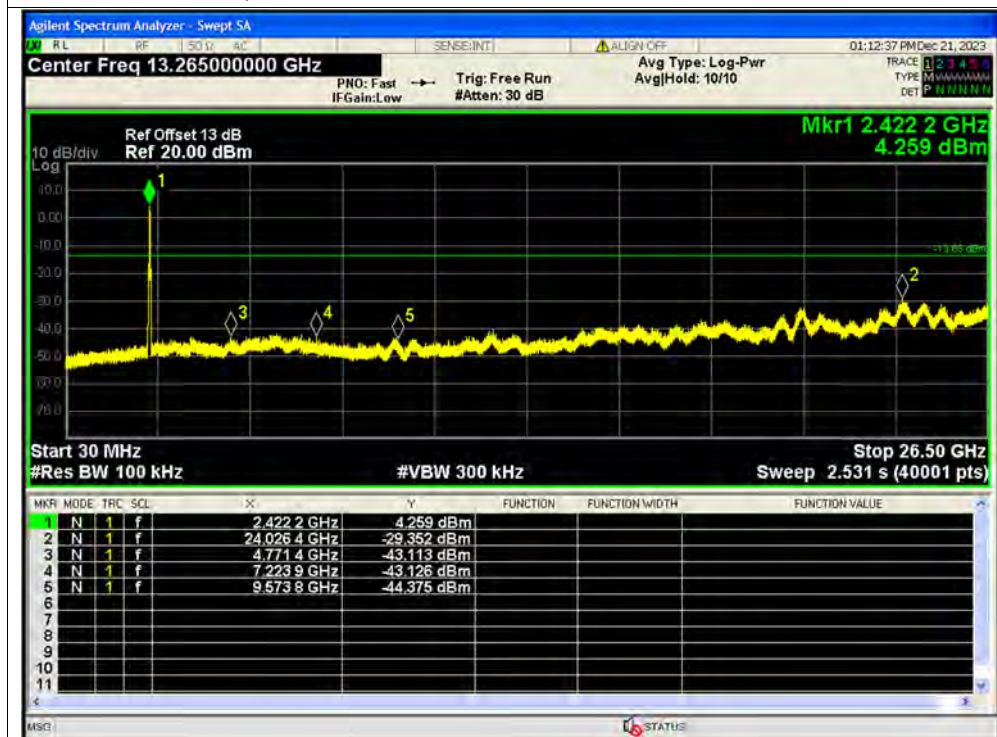
Tx. Spurious NVNT n40 2437MHz Ant8 Emission MIMO



Tx. Spurious NVNT n40 2437MHz Ant9 Ref MIMO



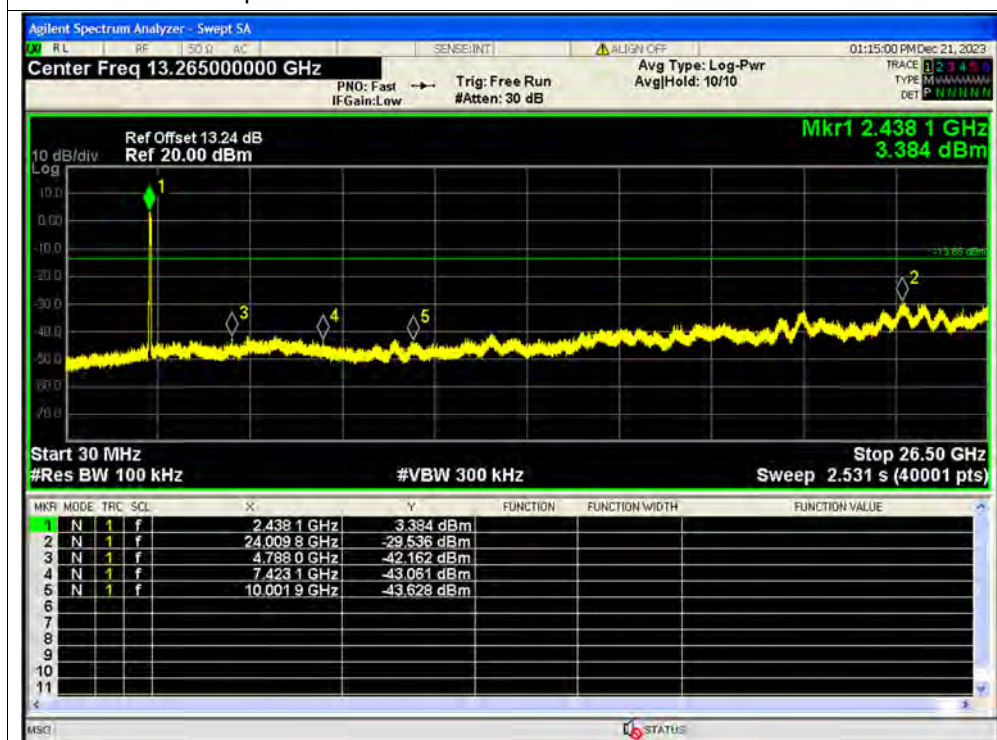
Tx. Spurious NVNT n40 2437MHz Ant9 Emission MIMO



Tx. Spurious NVNT n40 2452MHz Ant8 Ref MIMO



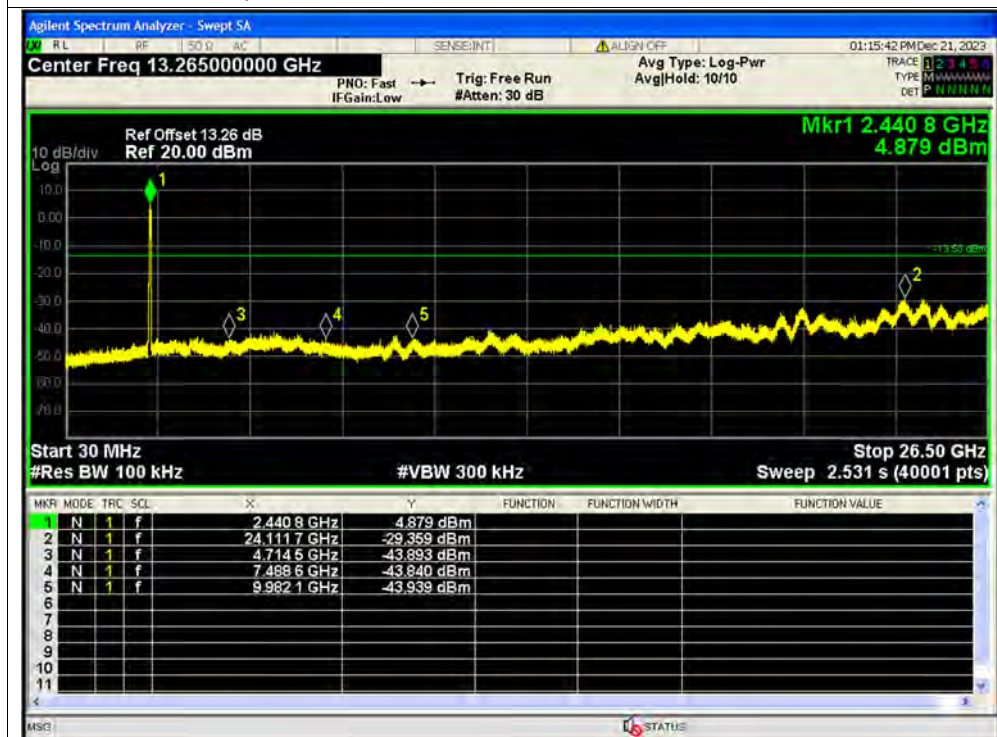
Tx. Spurious NVNT n40 2452MHz Ant8 Emission MIMO



Tx. Spurious NVNT n40 2452MHz Ant9 Ref MIMO



Tx. Spurious NVNT n40 2452MHz Ant9 Emission MIMO



**A.6. Band Edge**

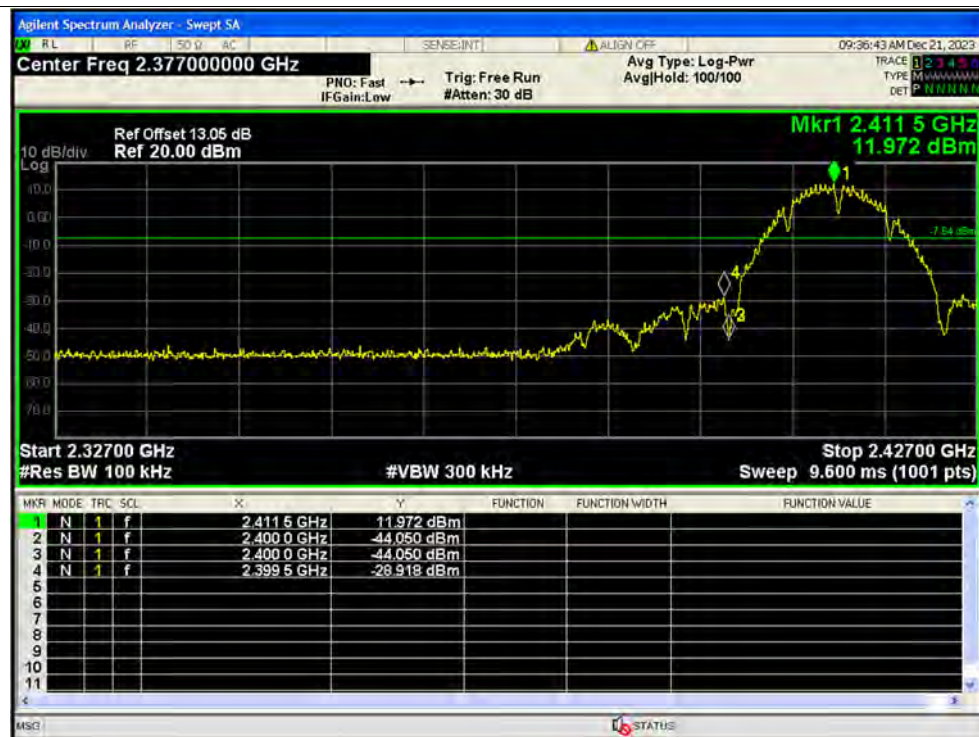
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b SISO	2412	Ant8	-41.28	-20	Pass
NVNT	b SISO	2462	Ant8	-56.32	-20	Pass
NVNT	b SISO	2412	Ant9	-34.45	-20	Pass
NVNT	b SISO	2462	Ant9	-55.14	-20	Pass
NVNT	g SISO	2412	Ant8	-26.79	-20	Pass
NVNT	g SISO	2462	Ant8	-39.78	-20	Pass
NVNT	g SISO	2412	Ant9	-22.85	-20	Pass
NVNT	g SISO	2462	Ant9	-37.21	-20	Pass
NVNT	n20 SISO	2412	Ant8	-25.55	-20	Pass
NVNT	n20 SISO	2462	Ant8	-39.03	-20	Pass
NVNT	n20 SISO	2412	Ant9	-23.9	-20	Pass
NVNT	n20 SISO	2462	Ant9	-36.89	-20	Pass
NVNT	n20 MIMO	2412	Ant8	-26.28	-20	Pass
NVNT	n20 MIMO	2412	Ant9	-23.97	-20	Pass
NVNT	n20 MIMO	2462	Ant8	-39.23	-20	Pass
NVNT	n20 MIMO	2462	Ant9	-37.63	-20	Pass
NVNT	n40 SISO	2422	Ant8	-22.68	-20	Pass
NVNT	n40 SISO	2452	Ant8	-31.57	-20	Pass
NVNT	n40 SISO	2422	Ant9	-21.05	-20	Pass
NVNT	n40 SISO	2452	Ant9	-29.81	-20	Pass
NVNT	n40 MIMO	2422	Ant8	-21.91	-20	Pass
NVNT	n40 MIMO	2422	Ant9	-22.49	-20	Pass
NVNT	n40 MIMO	2452	Ant8	-32.08	-20	Pass
NVNT	n40 MIMO	2452	Ant9	-26.59	-20	Pass

Test Graphs

Band Edge NVNT b 2412MHz Ant8 Ref SISO



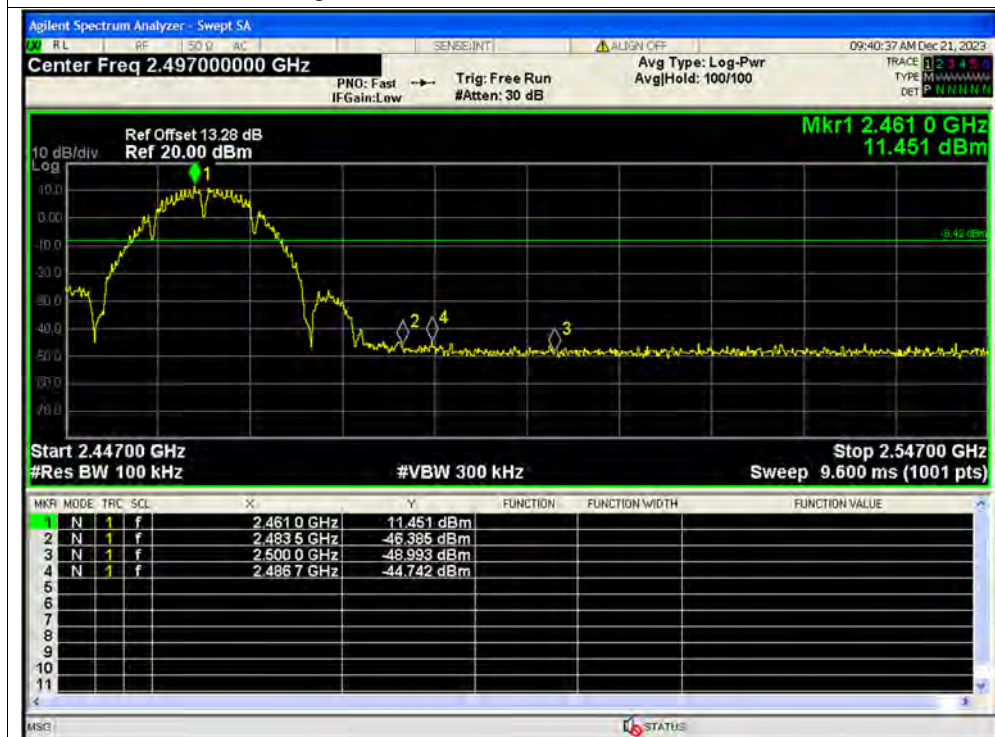
Band Edge NVNT b 2412MHz Ant8 Emission SISO



Band Edge NVNT b 2462MHz Ant8 Ref SISO



Band Edge NVNT b 2462MHz Ant8 Emission SISO

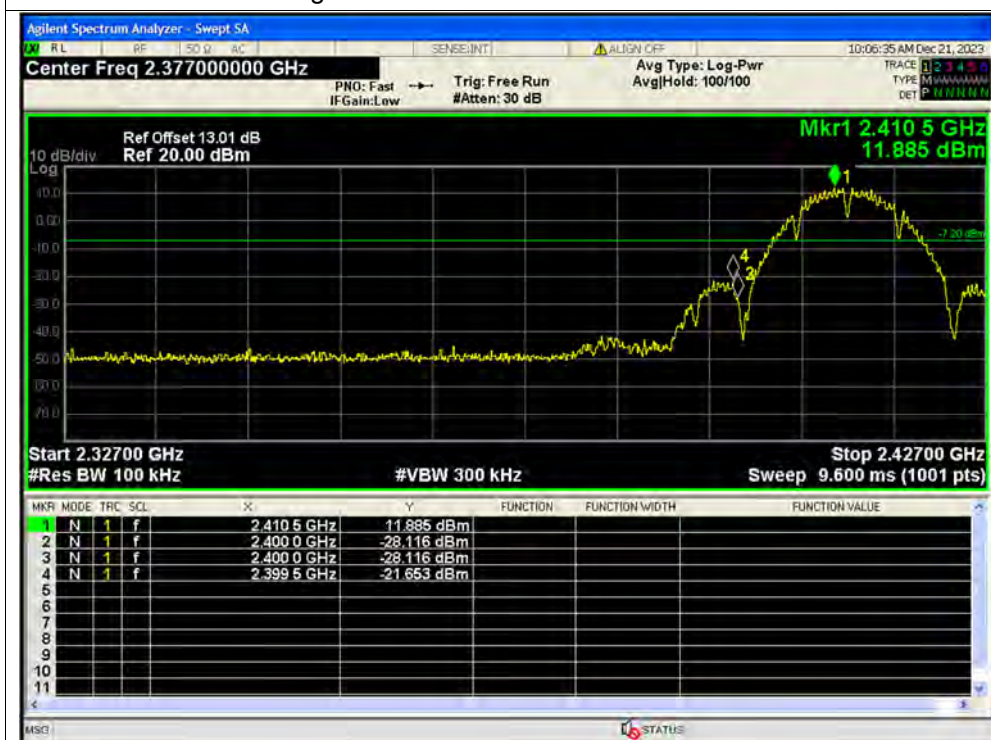




Band Edge NVNT b 2412MHz Ant9 Ref SISO



Band Edge NVNT b 2412MHz Ant9 Emission SISO



Band Edge NVNT b 2462MHz Ant9 Ref SISO



Band Edge NVNT b 2462MHz Ant9 Emission SISO

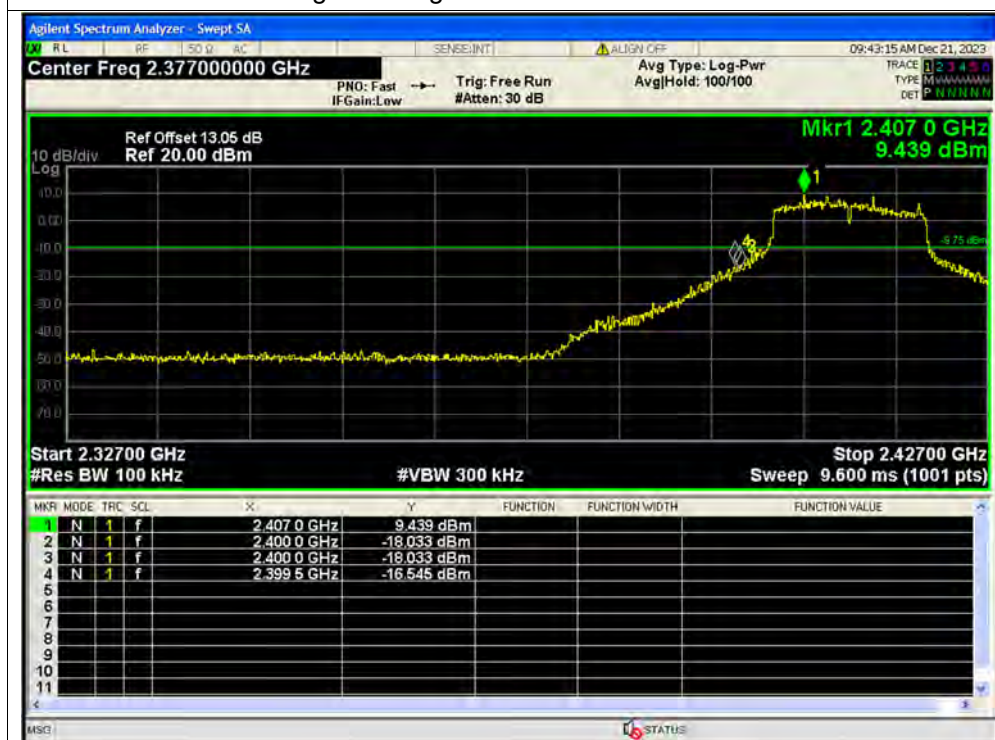




Band Edge NVNT g 2412MHz Ant8 Ref SISO

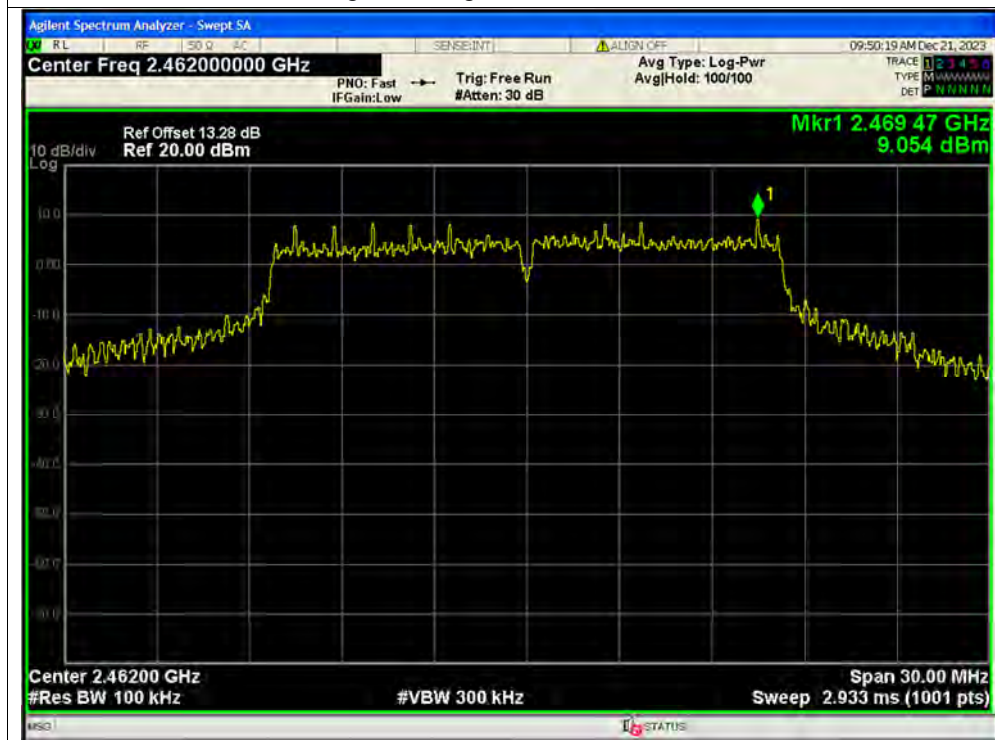


Band Edge NVNT g 2412MHz Ant8 Emission SISO





Band Edge NVNT g 2462MHz Ant8 Ref SISO



Band Edge NVNT g 2462MHz Ant8 Emission SISO

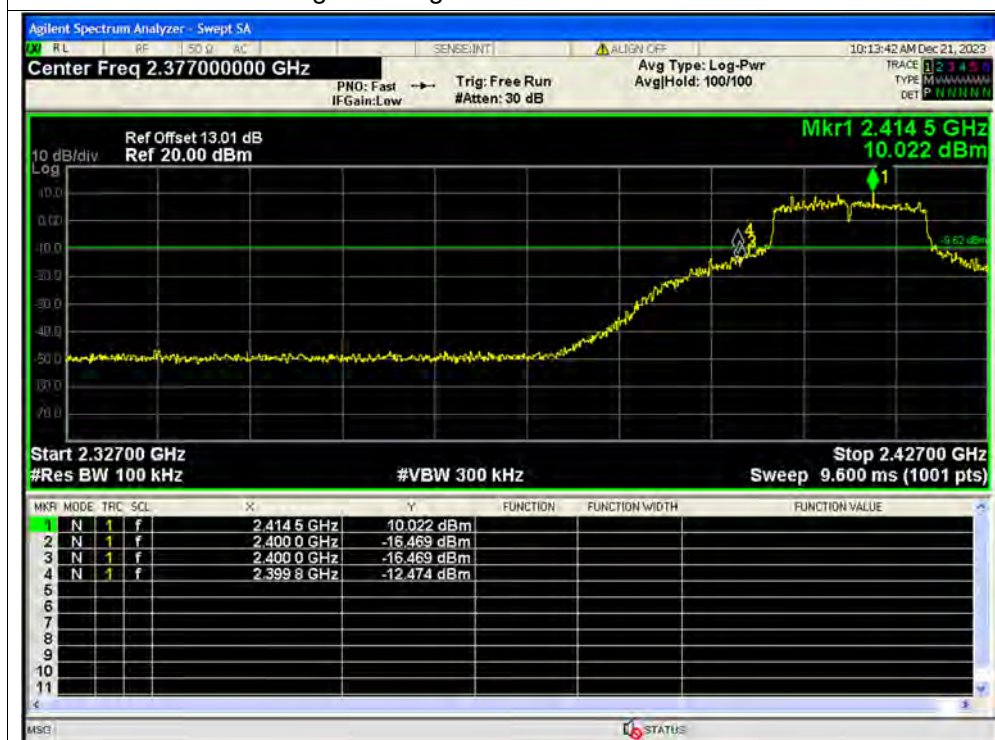




Band Edge NVNT g 2412MHz Ant9 Ref SISO



Band Edge NVNT g 2412MHz Ant9 Emission SISO



Band Edge NVNT g 2462MHz Ant9 Ref SISO



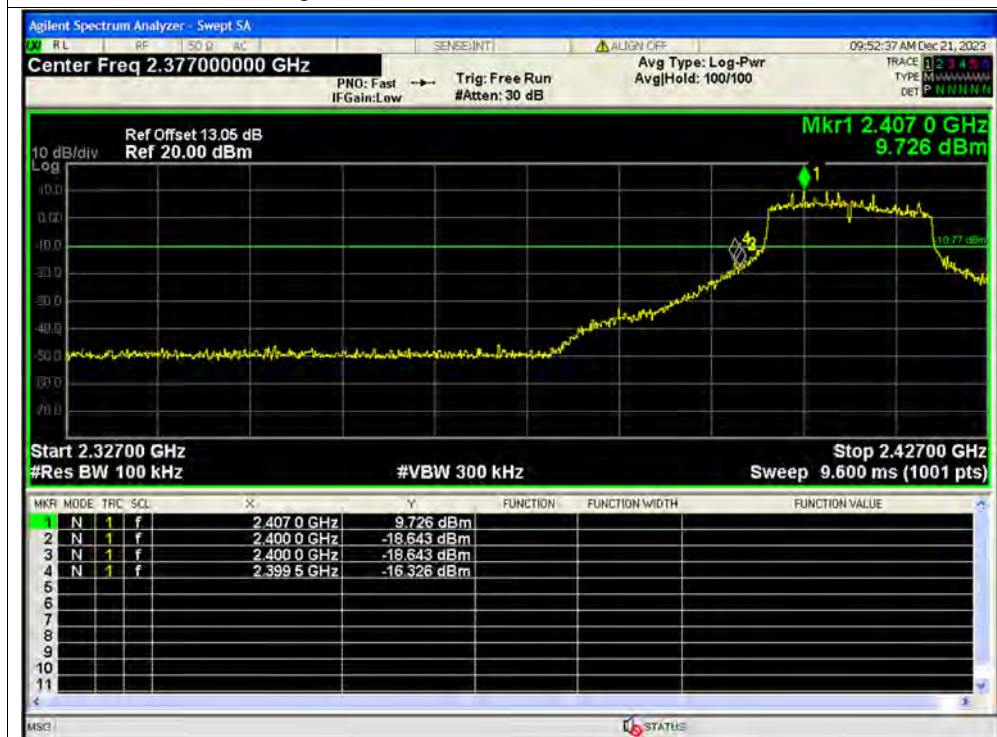
Band Edge NVNT g 2462MHz Ant9 Emission SISO



Band Edge NVNT n20 2412MHz Ant8 Ref SISO



Band Edge NVNT n20 2412MHz Ant8 Emission SISO



Band Edge NVNT n20 2462MHz Ant8 Ref SISO



Band Edge NVNT n20 2462MHz Ant8 Emission SISO

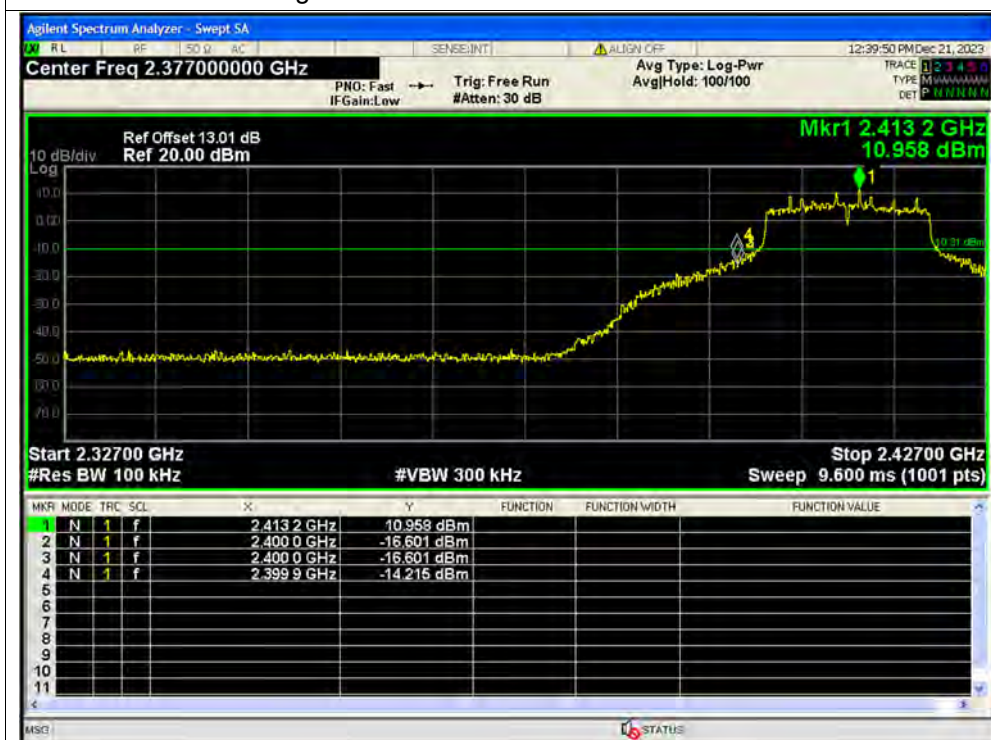




Band Edge NVNT n20 2412MHz Ant9 Ref SISO



Band Edge NVNT n20 2412MHz Ant9 Emission SISO



Band Edge NVNT n20 2462MHz Ant9 Ref SISO

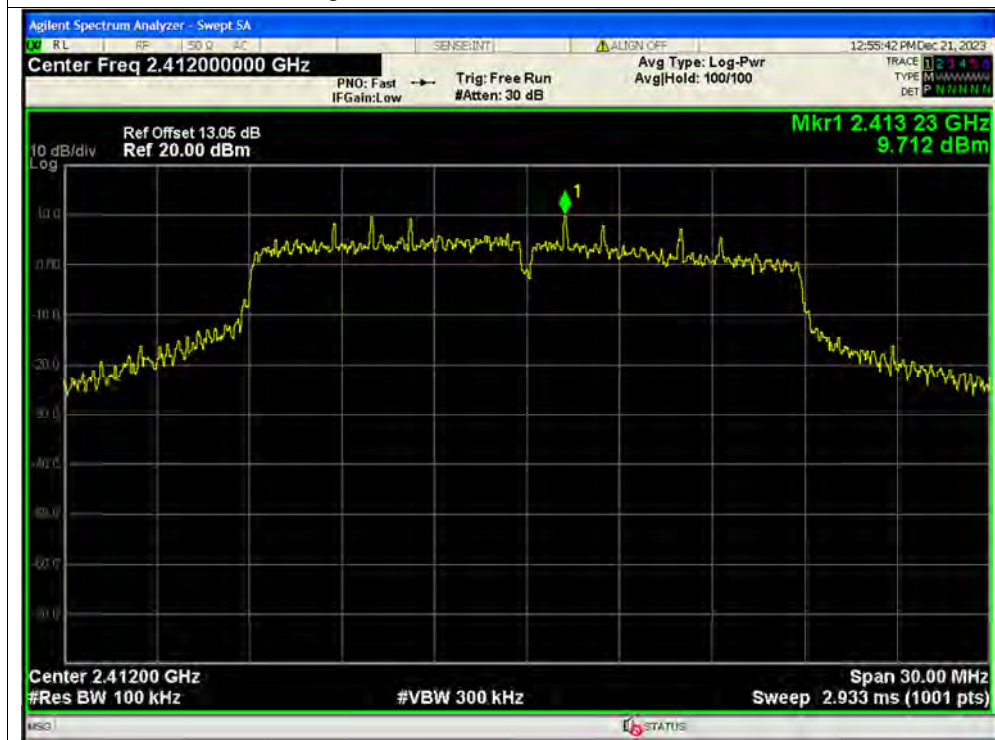


Band Edge NVNT n20 2462MHz Ant9 Emission SISO

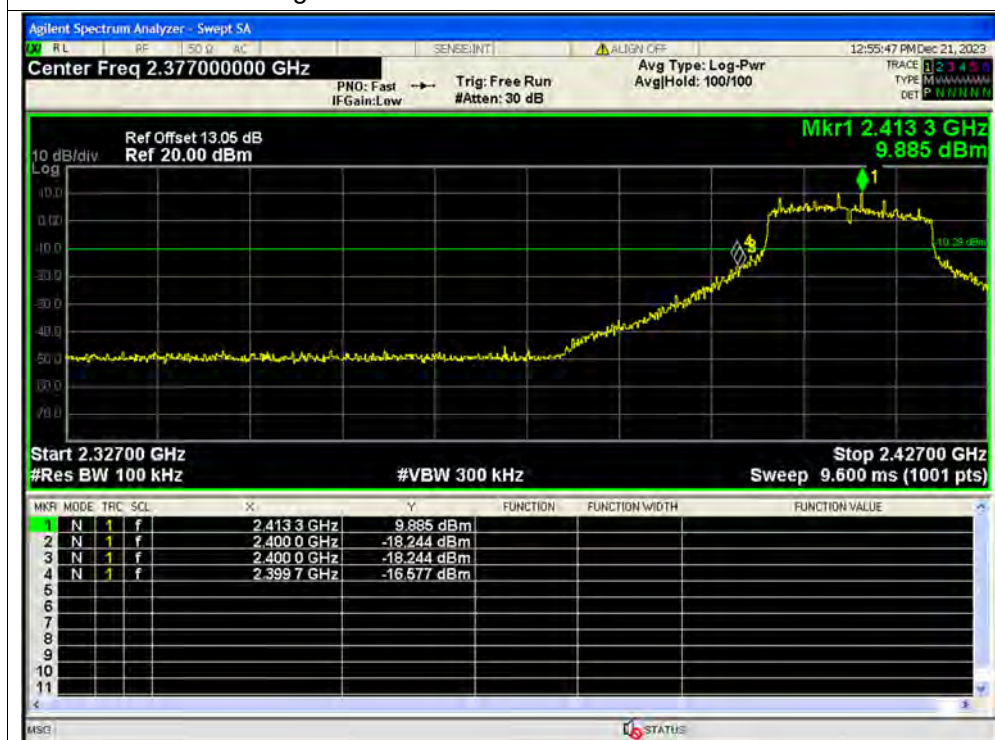




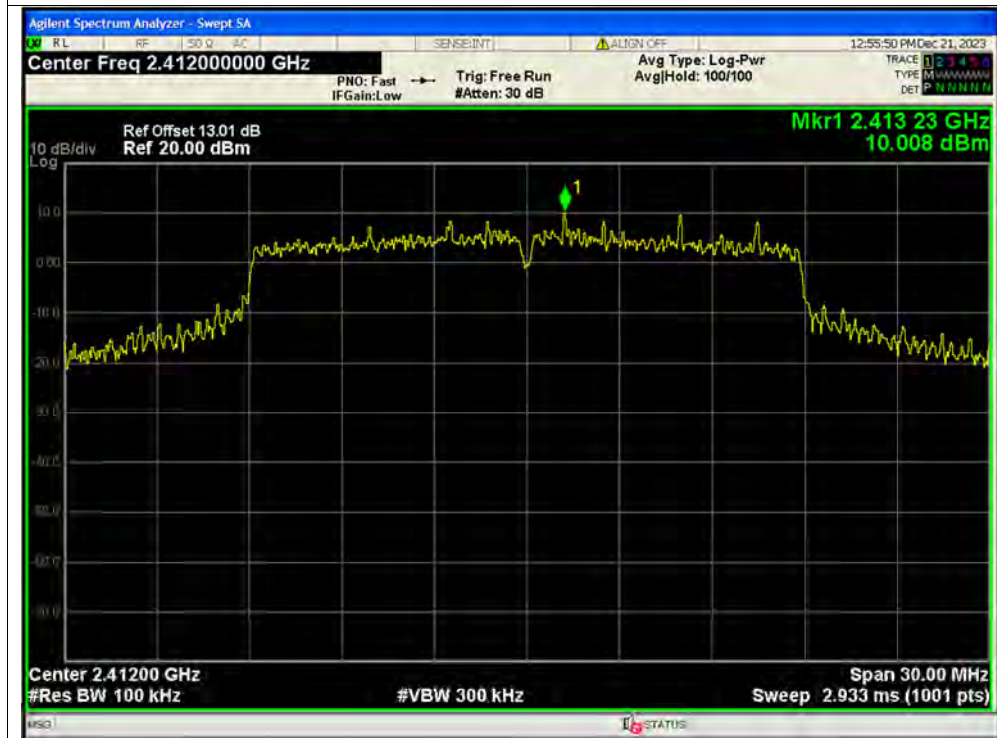
Band Edge NVNT n20 2412MHz Ant8 Ref MIMO



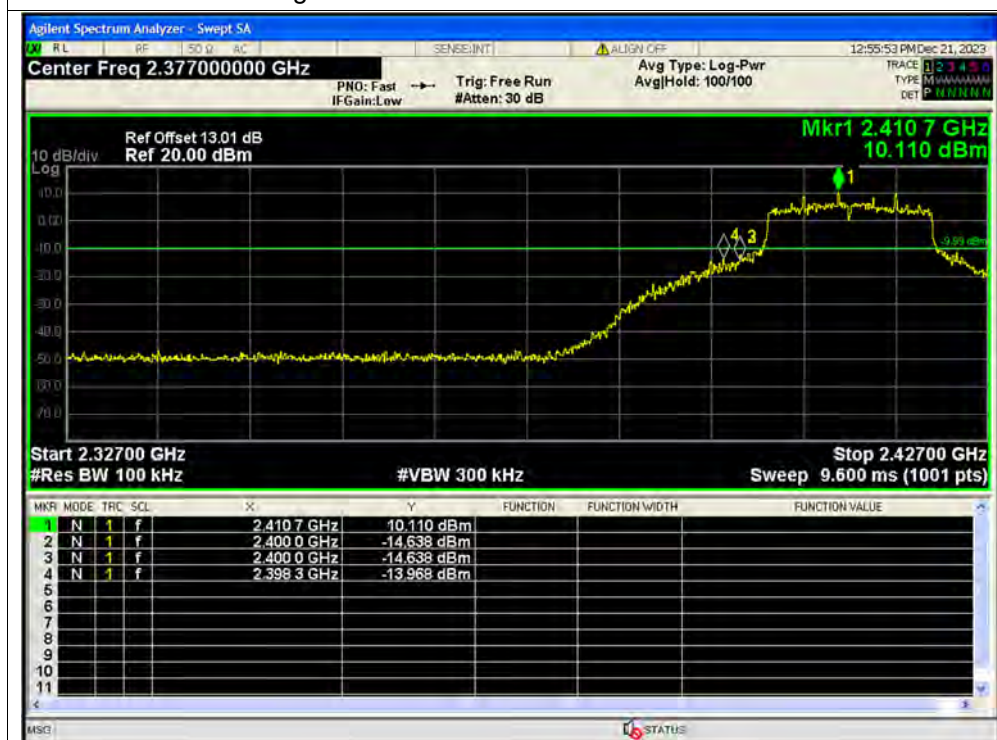
Band Edge NVNT n20 2412MHz Ant8 Emission MIMO



Band Edge NVNT n20 2412MHz Ant9 Ref MIMO



Band Edge NVNT n20 2412MHz Ant9 Emission MIMO





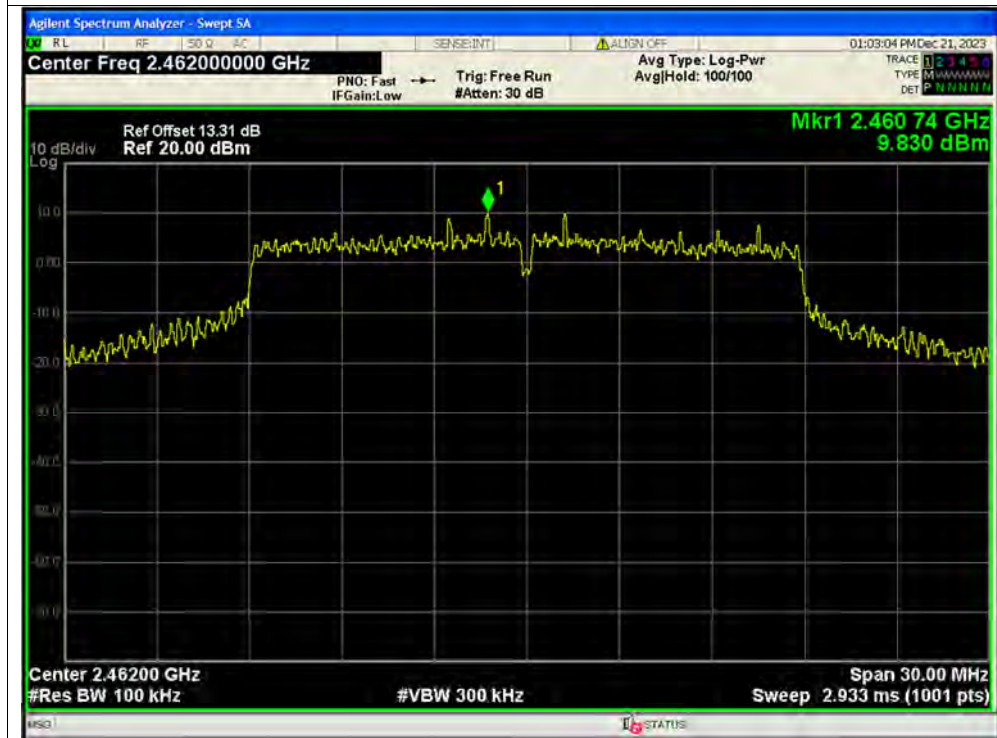
Band Edge NVNT n20 2462MHz Ant8 Ref MIMO



Band Edge NVNT n20 2462MHz Ant8 Emission MIMO



Band Edge NVNT n20 2462MHz Ant9 Ref MIMO



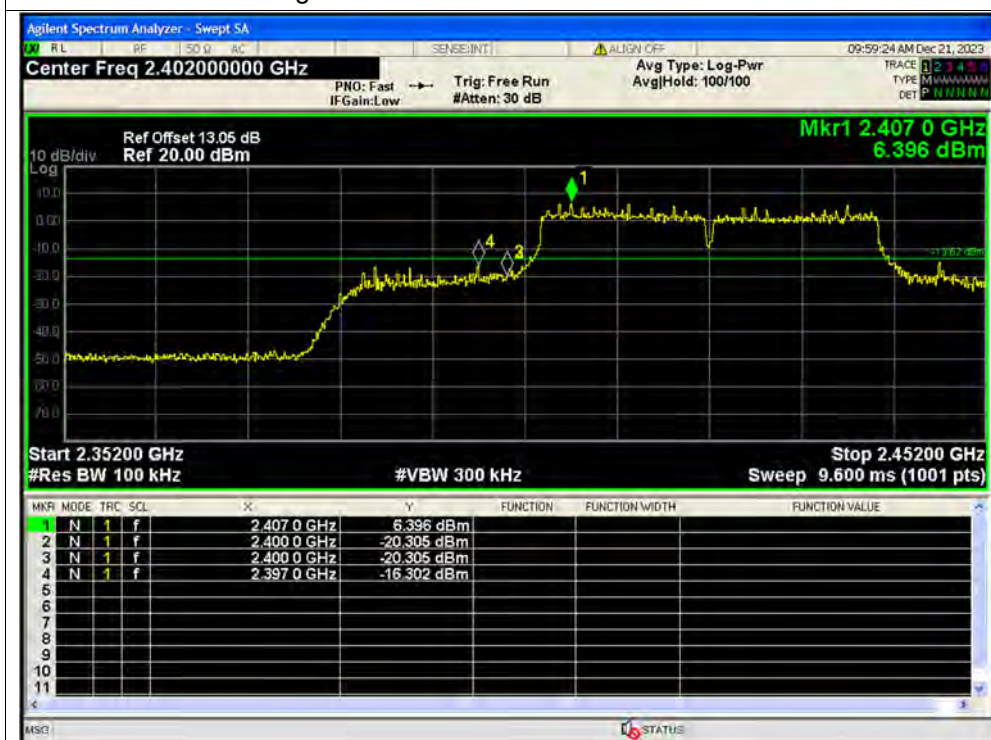
Band Edge NVNT n20 2462MHz Ant9 Emission MIMO



Band Edge NVNT n40 2422MHz Ant8 Ref SISO



Band Edge NVNT n40 2422MHz Ant8 Emission SISO



Band Edge NVNT n40 2452MHz Ant8 Ref SISO



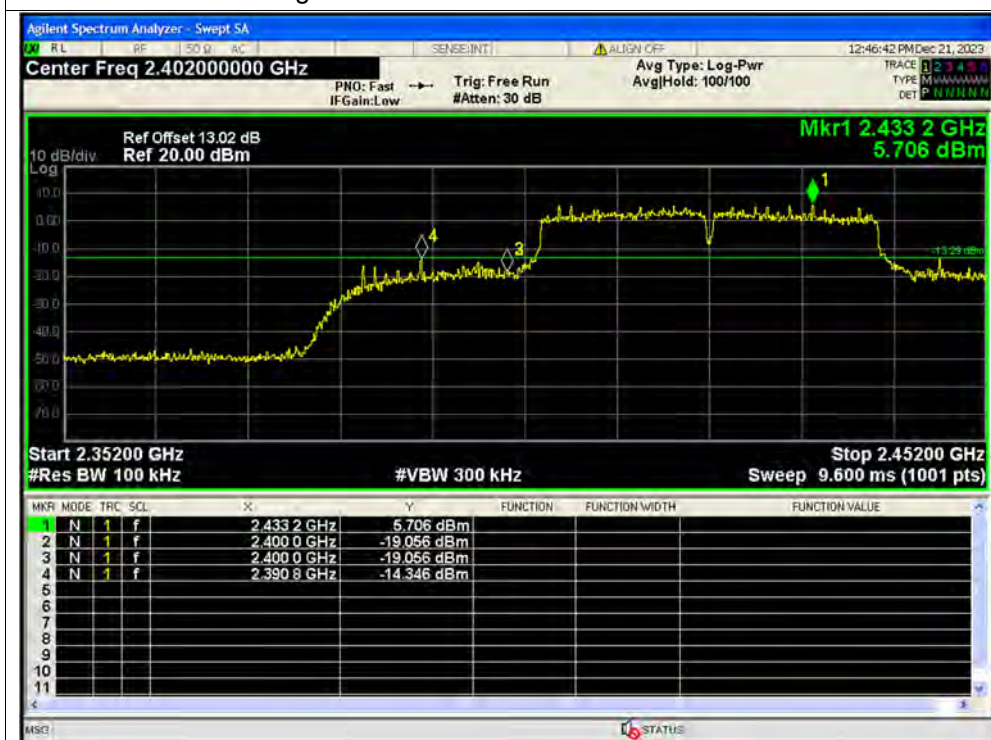
Band Edge NVNT n40 2452MHz Ant8 Emission SISO



Band Edge NVNT n40 2422MHz Ant9 Ref SISO



Band Edge NVNT n40 2422MHz Ant9 Emission SISO



Band Edge NVNT n40 2452MHz Ant9 Ref SISO



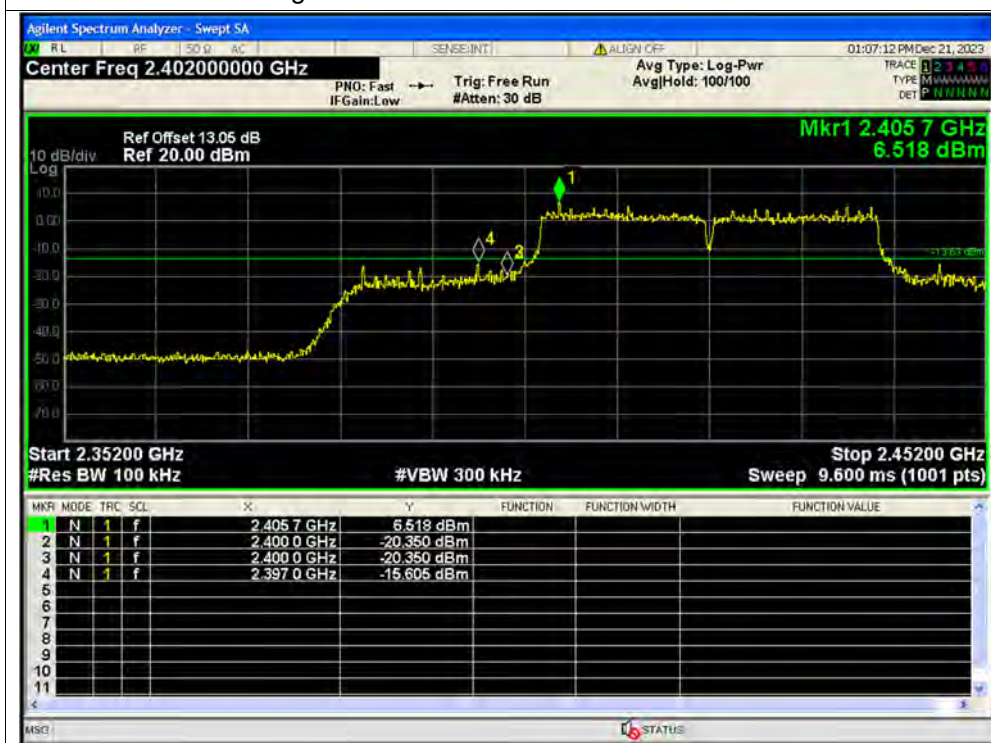
Band Edge NVNT n40 2452MHz Ant9 Emission SISO



Band Edge NVNT n40 2422MHz Ant8 Ref MIMO



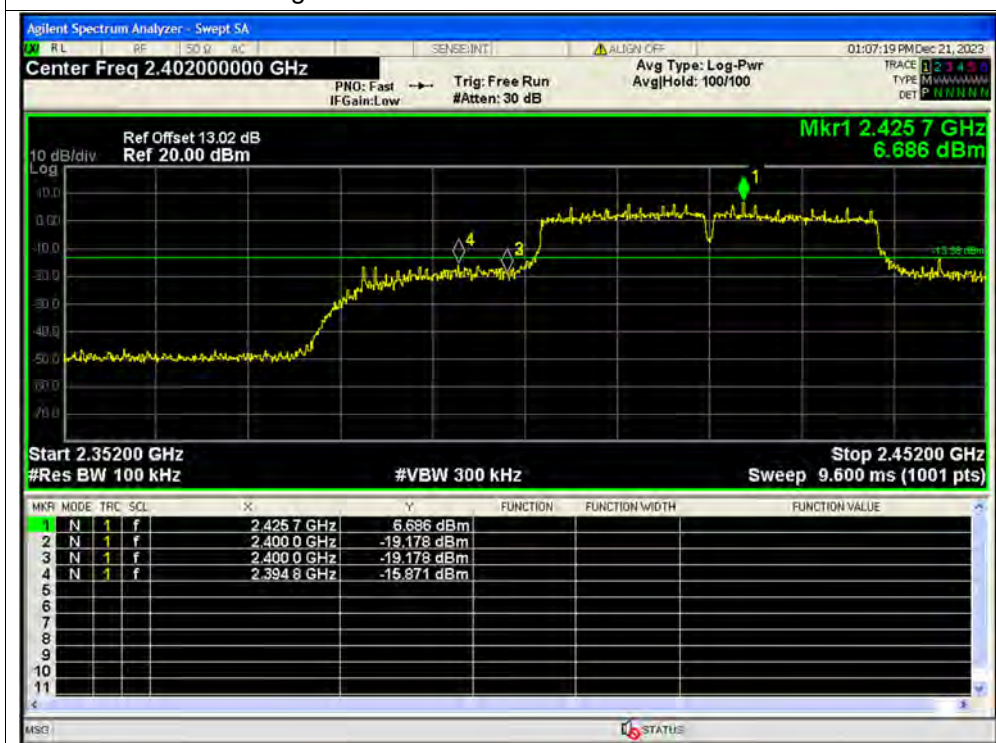
Band Edge NVNT n40 2422MHz Ant8 Emission MIMO



Band Edge NVNT n40 2422MHz Ant9 Ref MIMO



Band Edge NVNT n40 2422MHz Ant9 Emission MIMO



Band Edge NVNT n40 2452MHz Ant8 Ref MIMO



Band Edge NVNT n40 2452MHz Ant8 Emission MIMO



Band Edge NVNT n40 2452MHz Ant9 Ref MIMO



Band Edge NVNT n40 2452MHz Ant9 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	Ant8	-1.78	0	-1.78	8	Pass
NVNT	b SISO	2412	Ant8	-1.52	0	-1.52	8	Pass
NVNT	b SISO	2437	Ant8	-2.25	0	-2.25	8	Pass
NVNT	b SISO	2437	Ant9	-1.68	0	-1.68	8	Pass
NVNT	b SISO	2462	Ant9	-2.46	0	-2.46	8	Pass
NVNT	b SISO	2462	Ant9	-2.19	0	-2.19	8	Pass
NVNT	g SISO	2412	Ant8	-5.71	0	-5.71	8	Pass
NVNT	g SISO	2412	Ant8	-4.47	0	-4.47	8	Pass
NVNT	g SISO	2437	Ant8	-5.06	0	-5.06	8	Pass
NVNT	g SISO	2437	Ant9	-4.65	0	-4.65	8	Pass
NVNT	g SISO	2462	Ant9	-5.38	0	-5.38	8	Pass
NVNT	g SISO	2462	Ant9	-4.36	0	-4.36	8	Pass
NVNT	n20 SISO	2412	Ant8	-5.11	0	-5.11	8	Pass
NVNT	n20 SISO	2412	Ant8	-4.82	0	-4.82	8	Pass
NVNT	n20 MIMO	2412	Ant8	-6.06	0	-6.06	8	Pass
NVNT	n20 MIMO	2412	Ant9	-4.37	0	-4.37	8	Pass
NVNT	n20 MIMO	2412	Ant9	-5.16	0	-5.16	8	Pass



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NVNT	n20 SISO	2437	Ant9	-4.82	0	-4.82	8	Pass
NVNT	n20 SISO	2437	Ant8	-4.95	0	-4.95	8	Pass
NVNT	n20 MIMO	2437	Ant9	-4.72	0	-4.72	8	Pass
NVNT	n20 MIMO	2437	Sum	-1.82	0	-1.82	8	Pass
NVNT	n20 MIMO	2437	Ant8	-5.66	0	-5.66	8	Pass
NVNT	n20 SISO	2462	Ant9	-6.11	0	-6.11	8	Pass
NVNT	n20 SISO	2462	Sum	-2.87	0	-2.87	8	Pass
NVNT	n20 MIMO	2462	Ant8	-6.06	0	-6.06	8	Pass
NVNT	n20 MIMO	2462	Ant9	-5.04	0	-5.04	8	Pass
NVNT	n20 MIMO	2462	Sum	-2.51	0	-2.51	8	Pass
NVNT	n40 SISO	2422	Ant8	-8.47	0	-8.47	8	Pass
NVNT	n40 SISO	2422	Ant8	-7.46	0	-7.46	8	Pass
NVNT	n40 MIMO	2422	Ant8	-8.41	0	-8.41	8	Pass
NVNT	n40 MIMO	2422	Ant9	-8.21	0	-8.21	8	Pass
NVNT	n40 MIMO	2422	Ant9	-7.8	0	-7.8	8	Pass
NVNT	n40 SISO	2437	Ant9	-8.17	0	-8.17	8	Pass
NVNT	n40 SISO	2437	Ant8	-8.82	0	-8.82	8	Pass
NVNT	n40 MIMO	2437	Ant9	-8.2	0	-8.2	8	Pass
NVNT	n40 MIMO	2437	Sum	-5.49	0	-5.49	8	Pass
NVNT	n40	2437	Ant8	-7.57	0	-7.57	8	Pass



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	MIMO							
NVNT	n40 SISO	2452	Ant9	-8.15	0	-8.15	8	Pass
NVNT	n40 SISO	2452	Sum	-4.84	0	-4.84	8	Pass
NVNT	n40 MIMO	2452	Ant8	-9.05	0	-9.05	8	Pass
NVNT	n40 MIMO	2452	Ant9	-8.19	0	-8.19	8	Pass
NVNT	n40 MIMO	2452	Sum	-5.59	0	-5.59	8	Pass

Test Graphs

PSD NVNT b 2412MHz Ant8 SISO



PSD NVNT b 2437MHz Ant8 SISO



PSD NVNT b 2462MHz Ant8 SISO



PSD NVNT b 2412MHz Ant9 SISO





PSD NVNT b 2437MHz Ant9 SISO

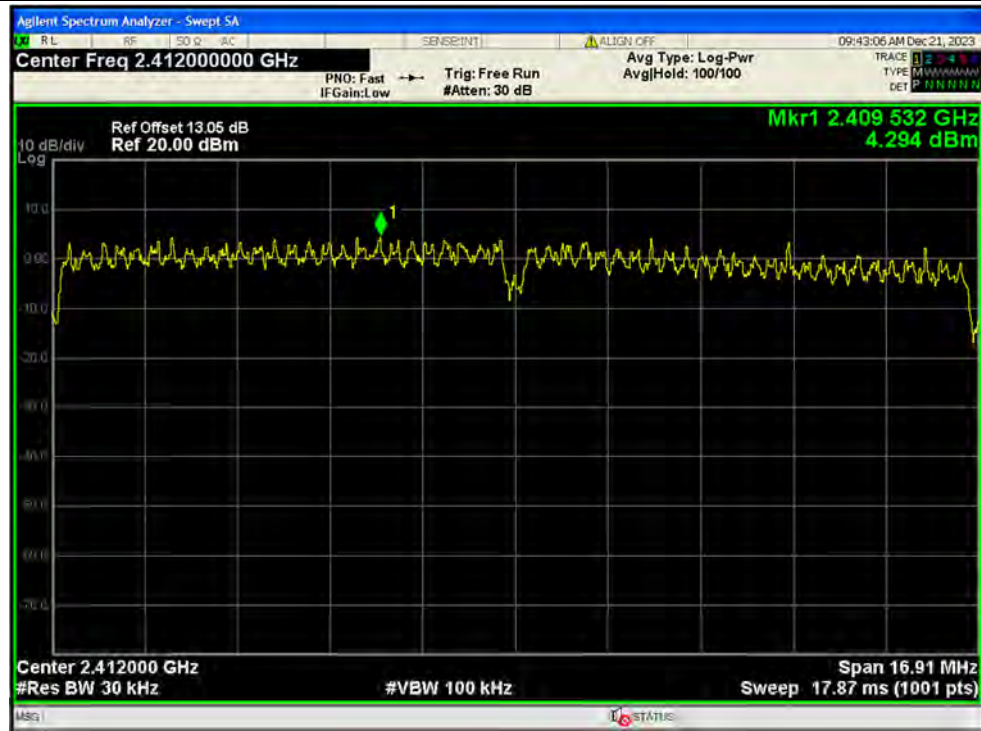


PSD NVNT b 2462MHz Ant9 SISO

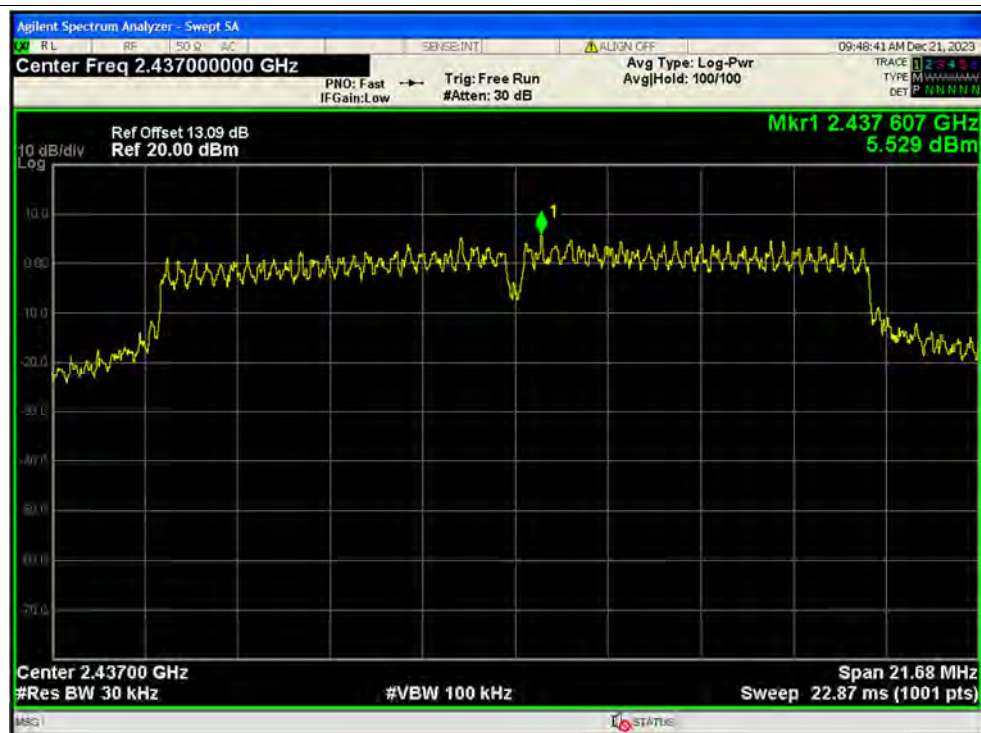




PSD NVNT g 2412MHz Ant8 SISO

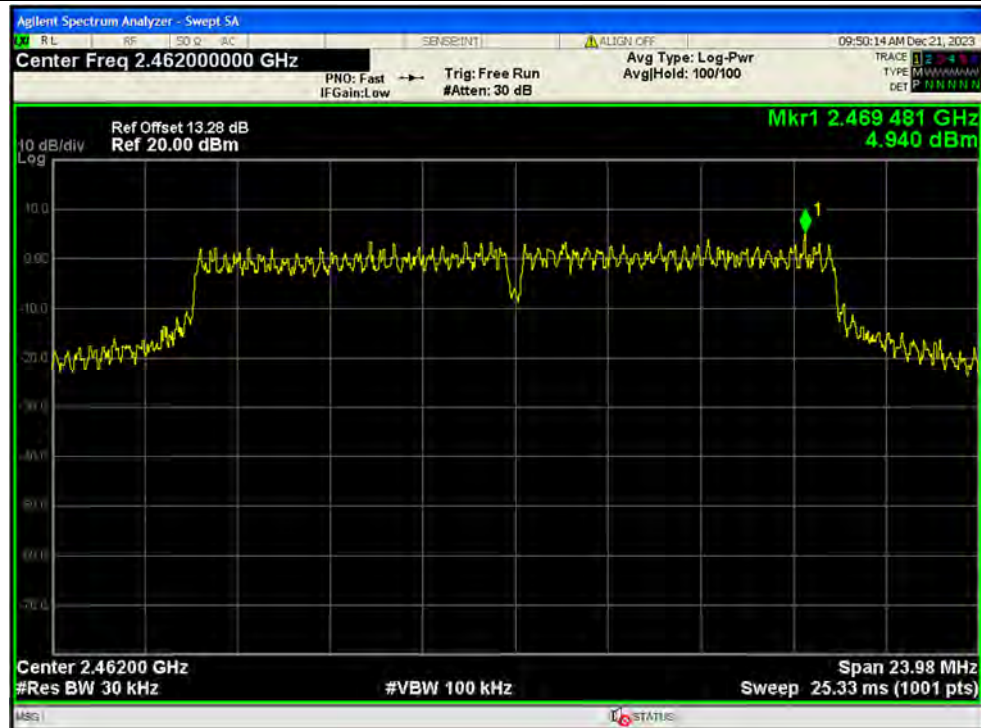


PSD NVNT g 2437MHz Ant8 SISO

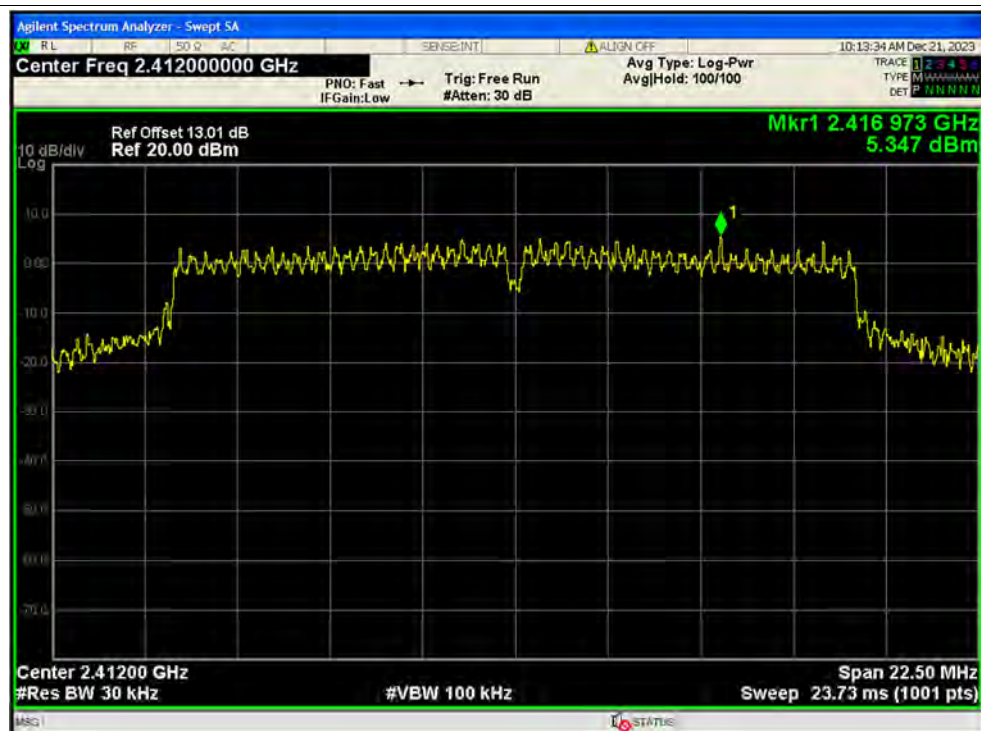




PSD NVNT g 2462MHz Ant8 SISO

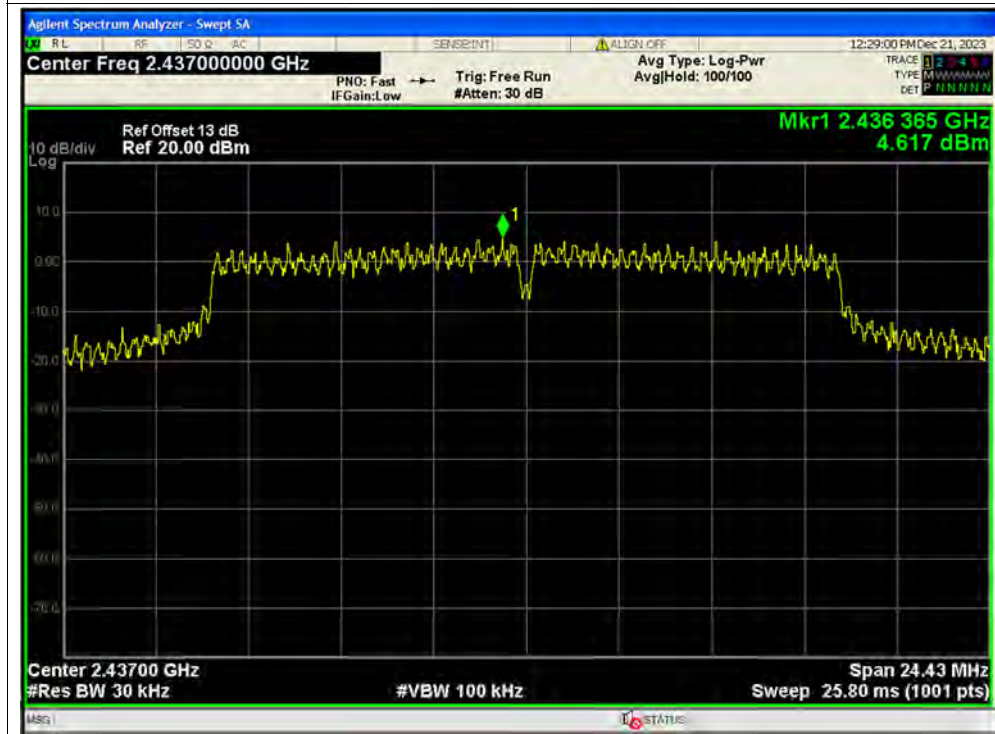


PSD NVNT g 2412MHz Ant9 SISO

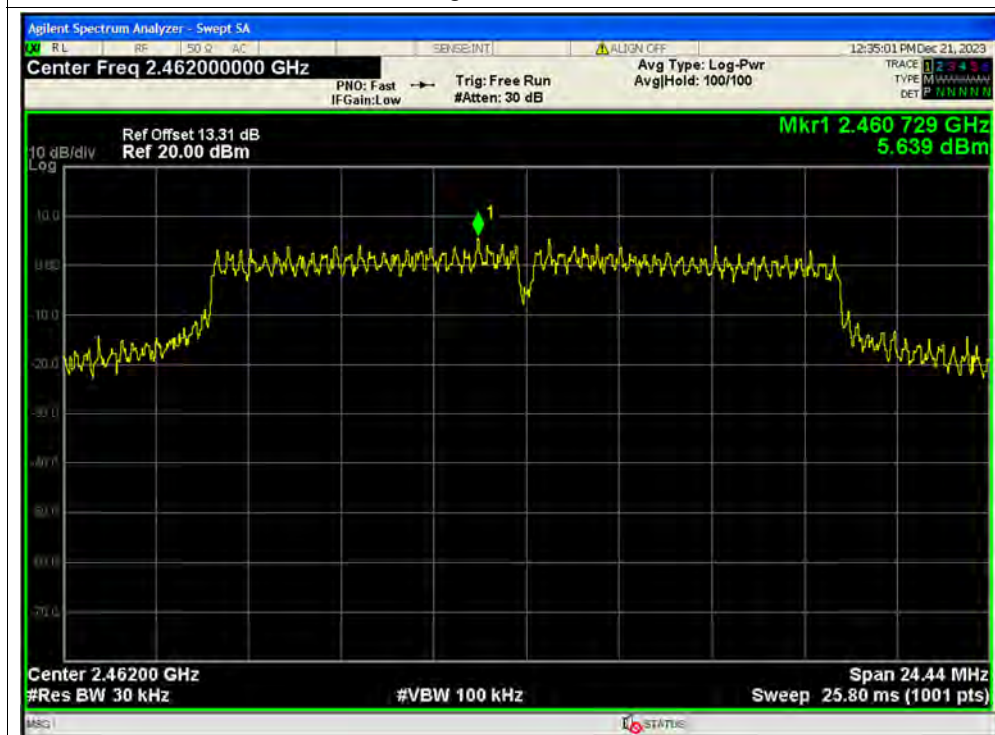




PSD NVNT g 2437MHz Ant9 SISO

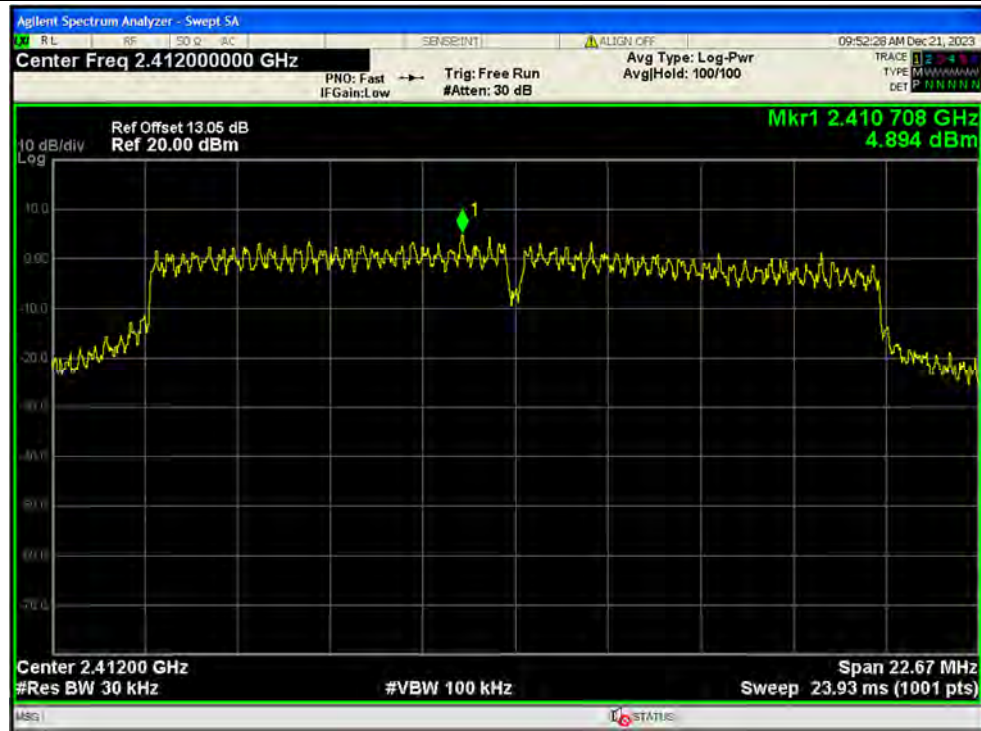


PSD NVNT g 2462MHz Ant9 SISO

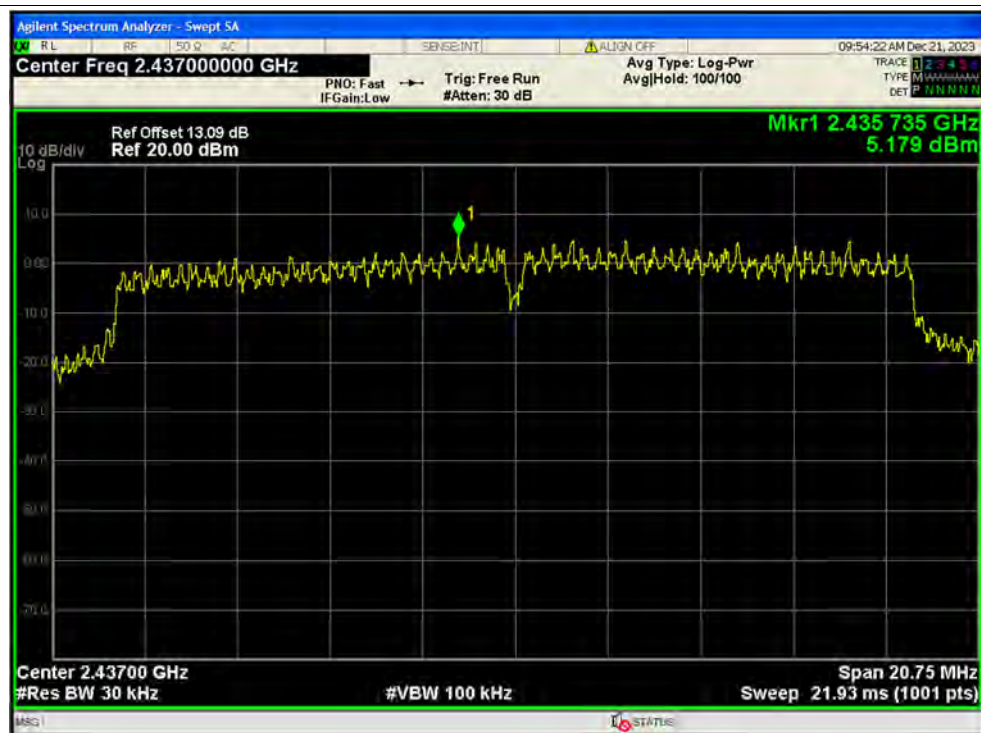




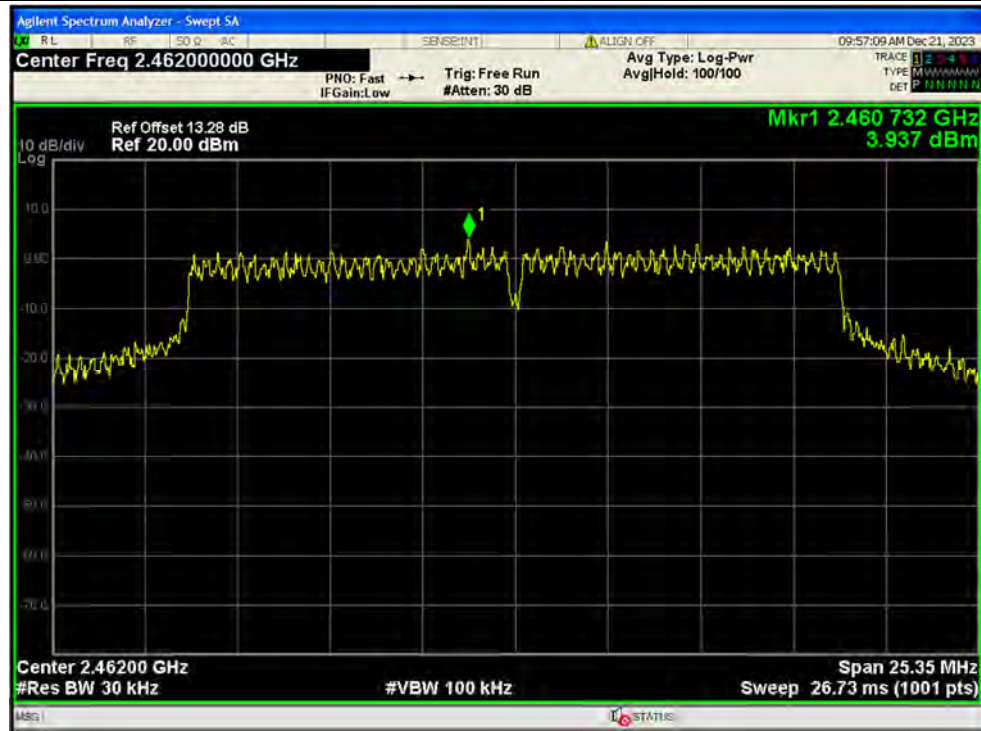
PSD NVNT n20 2412MHz Ant8 SISO



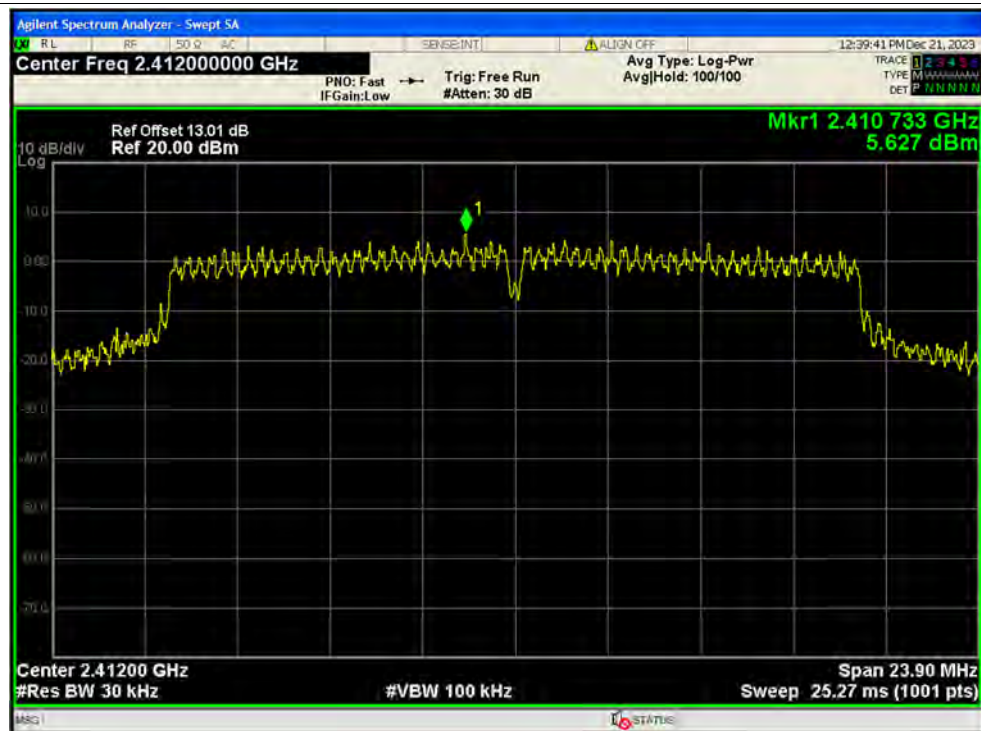
PSD NVNT n20 2437MHz Ant8 SISO



PSD NVNT n20 2462MHz Ant8 SISO

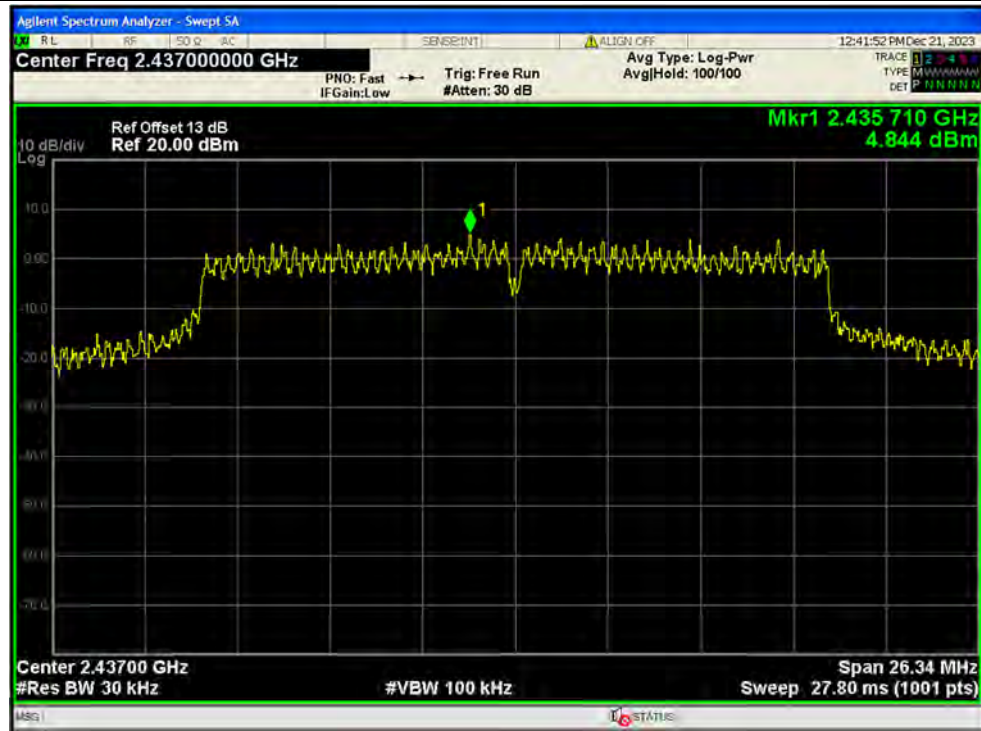


PSD NVNT n20 2412MHz Ant9 SISO

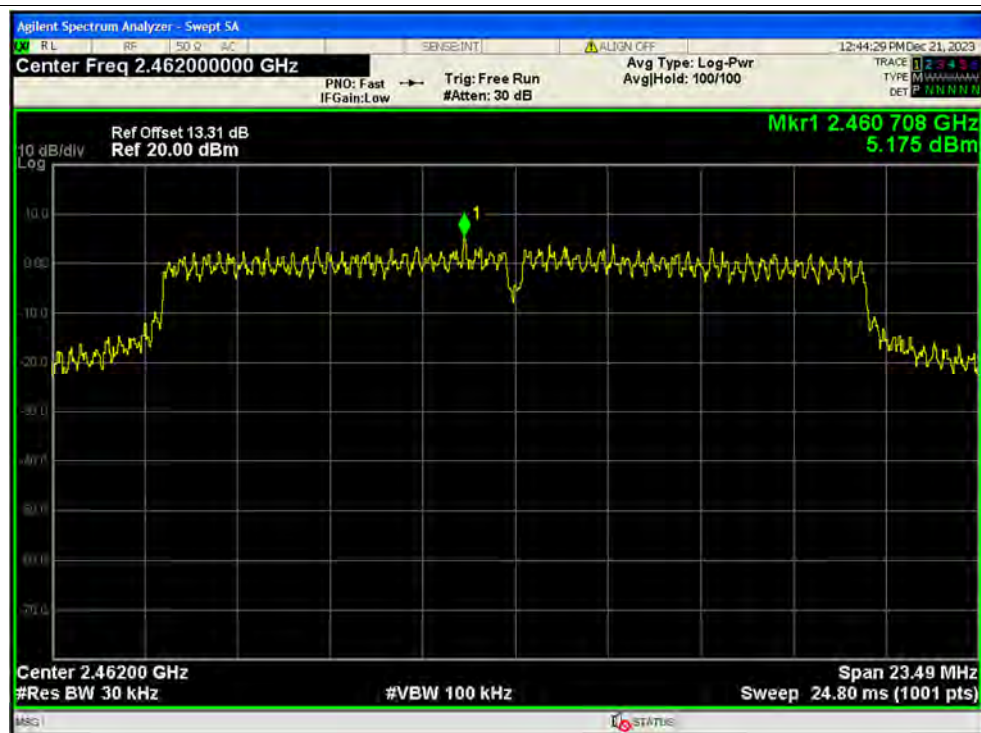




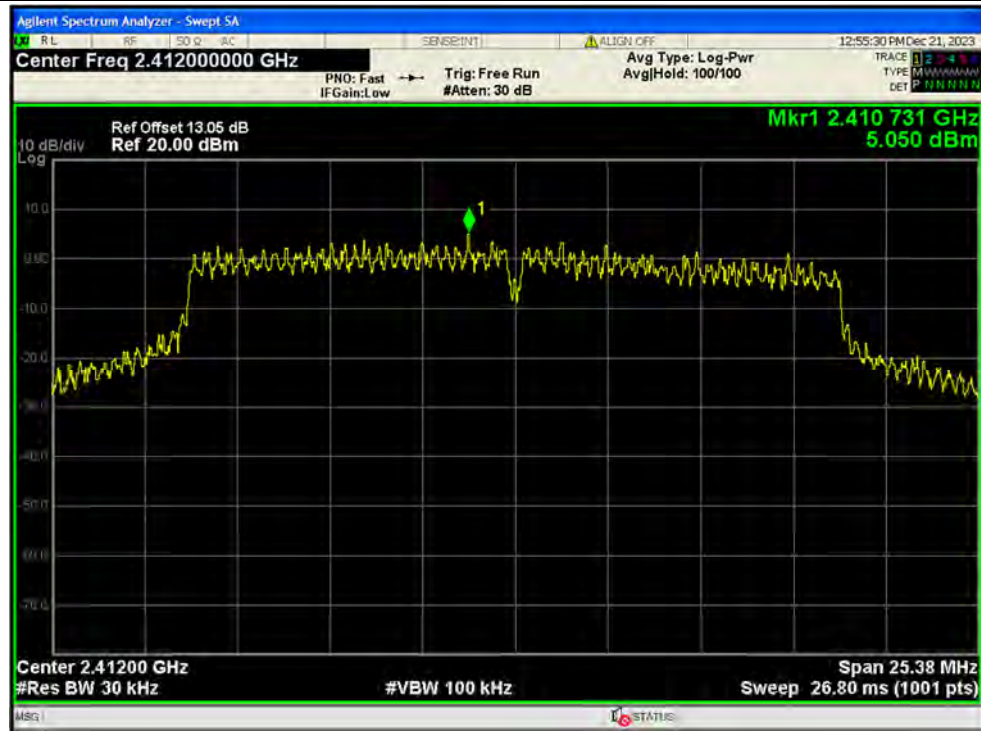
PSD NVNT n20 2437MHz Ant9 SISO



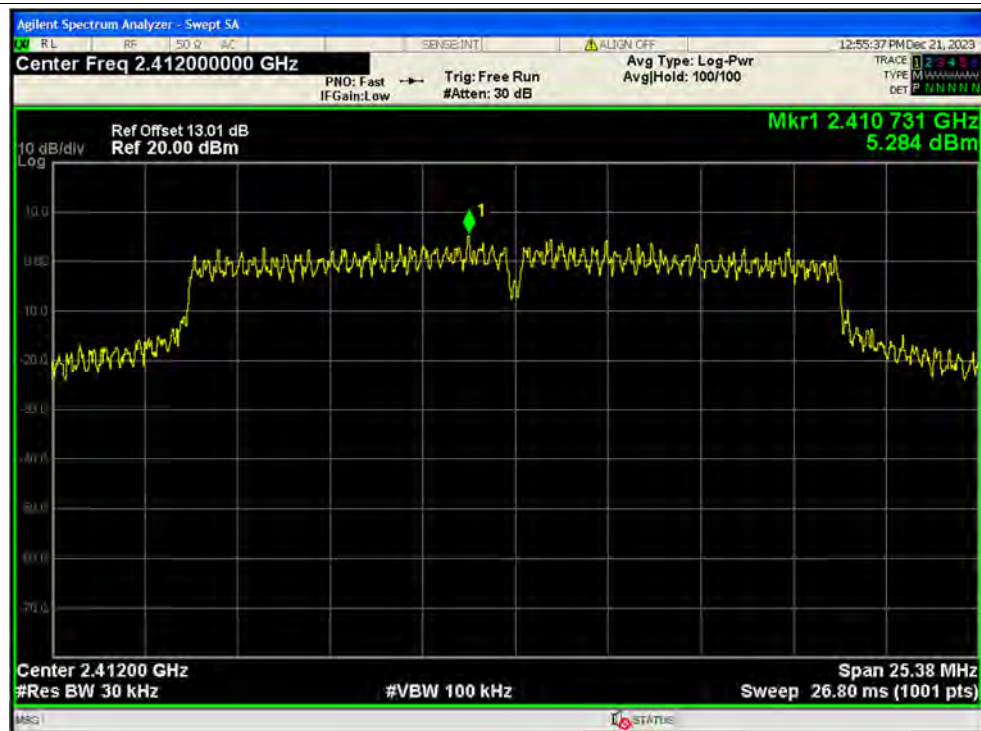
PSD NVNT n20 2462MHz Ant9 SISO



PSD NVNT n20 2412MHz Ant8 MIMO



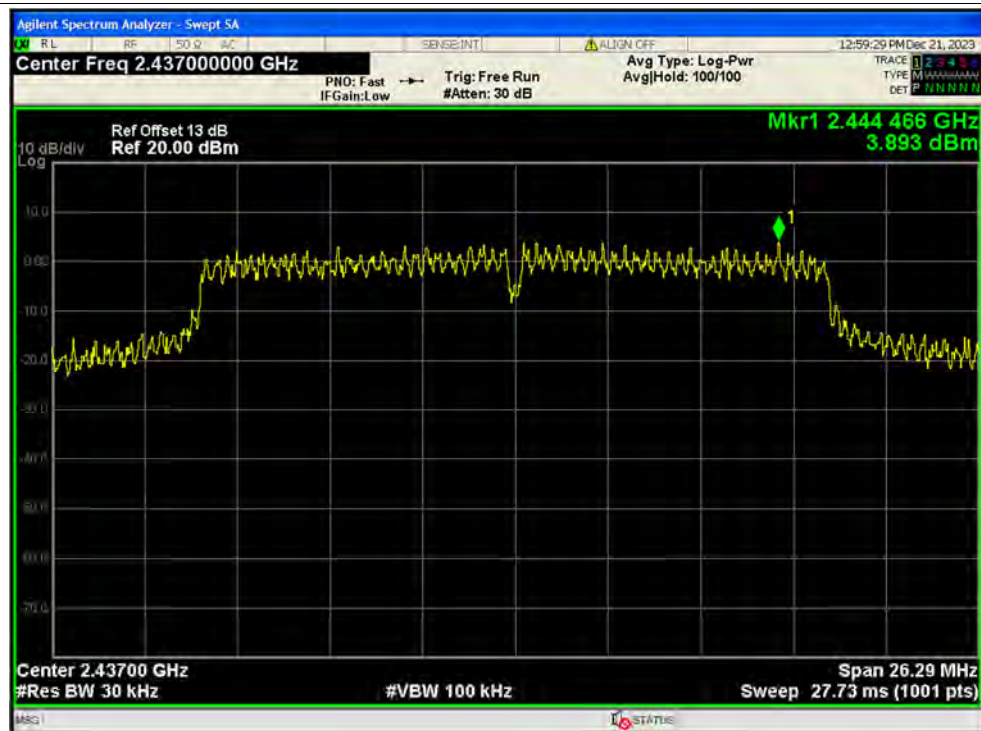
PSD NVNT n20 2412MHz Ant9 MIMO



PSD NVNT n20 2437MHz Ant8 MIMO



PSD NVNT n20 2437MHz Ant9 MIMO

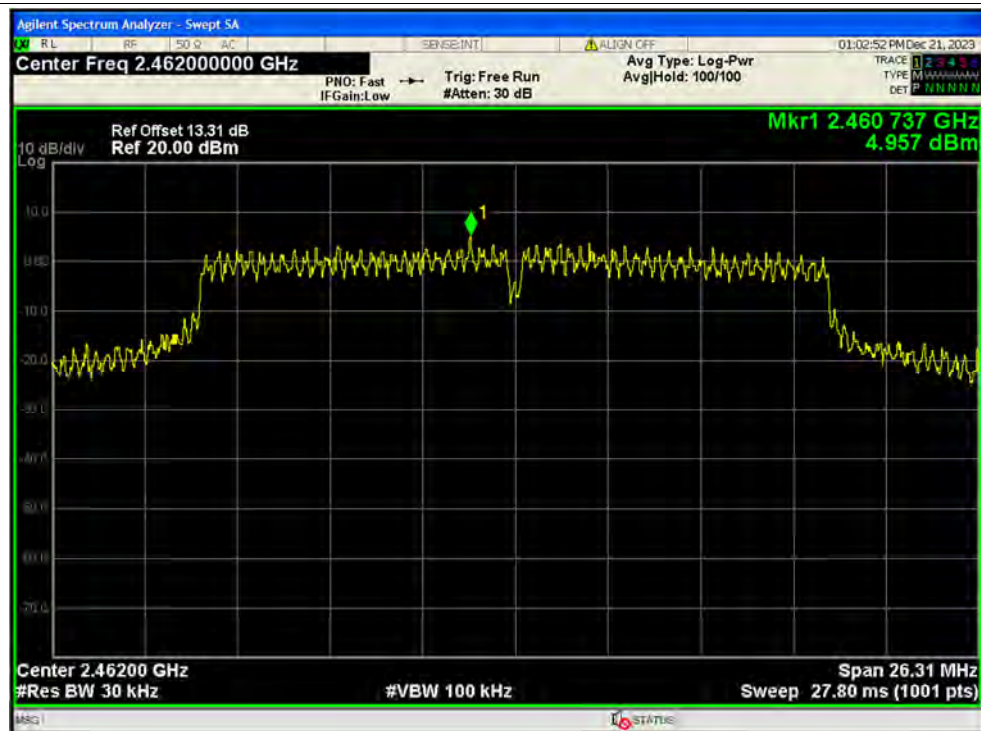


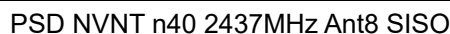


PSD NVNT n20 2462MHz Ant8 MIMO



PSD NVNT n20 2462MHz Ant9 MIMO





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[Http://www.morlab.cn](http://www.morlab.cn)

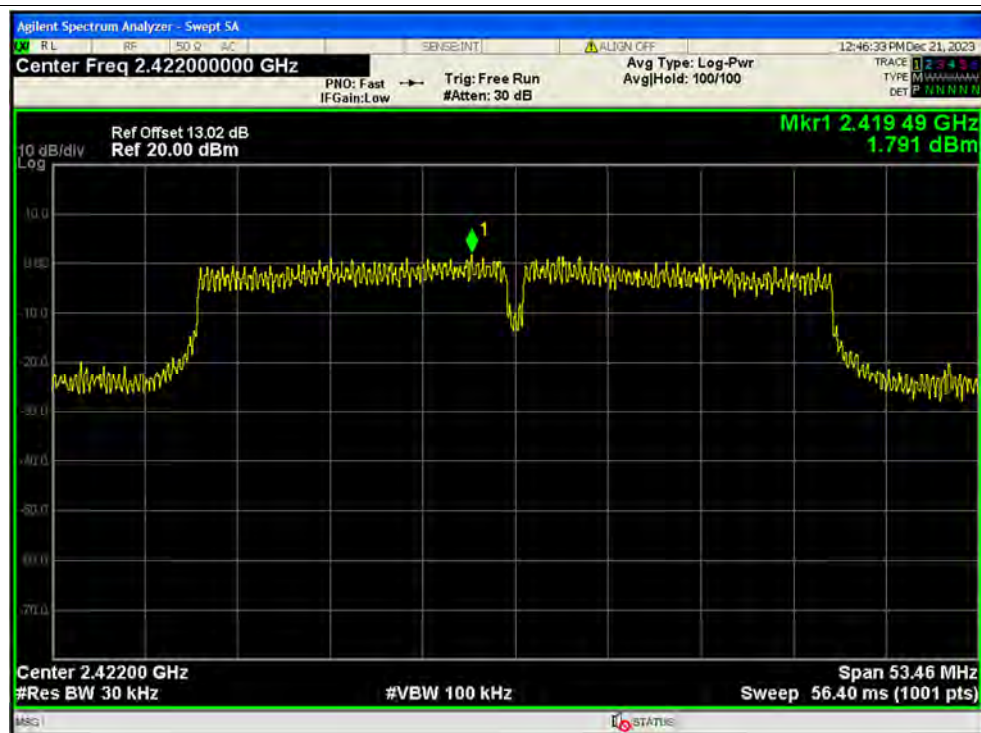
E-mail: service@morlab.cn



PSD NVNT n40 2452MHz Ant8 SISO

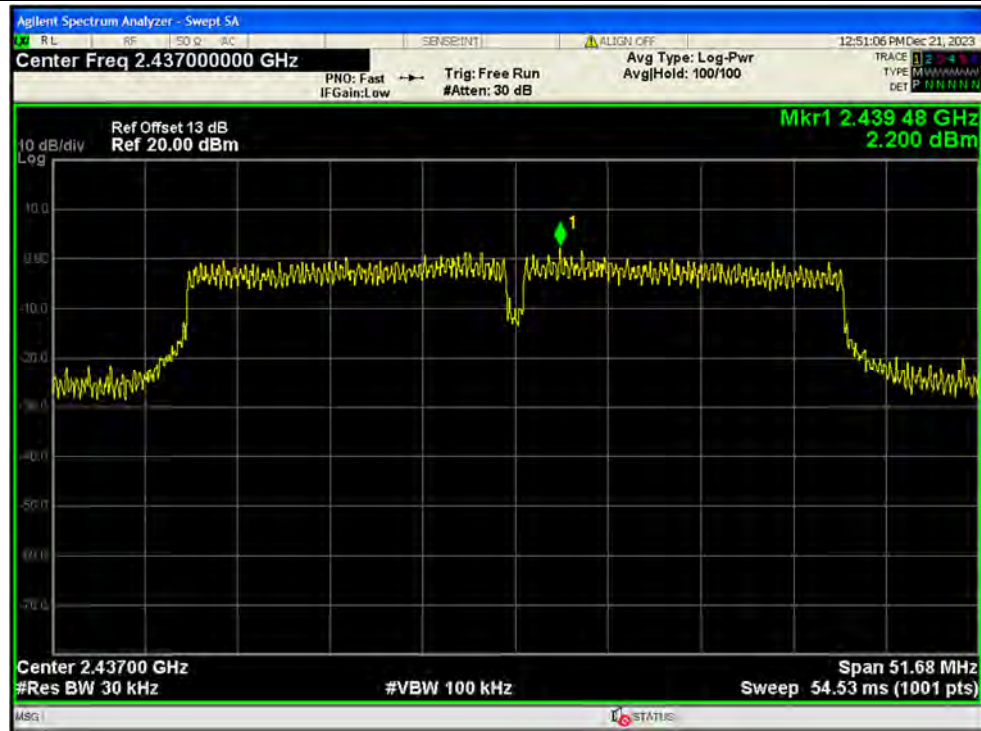


PSD NVNT n40 2422MHz Ant9 SISO





PSD NVNT n40 2437MHz Ant9 SISO

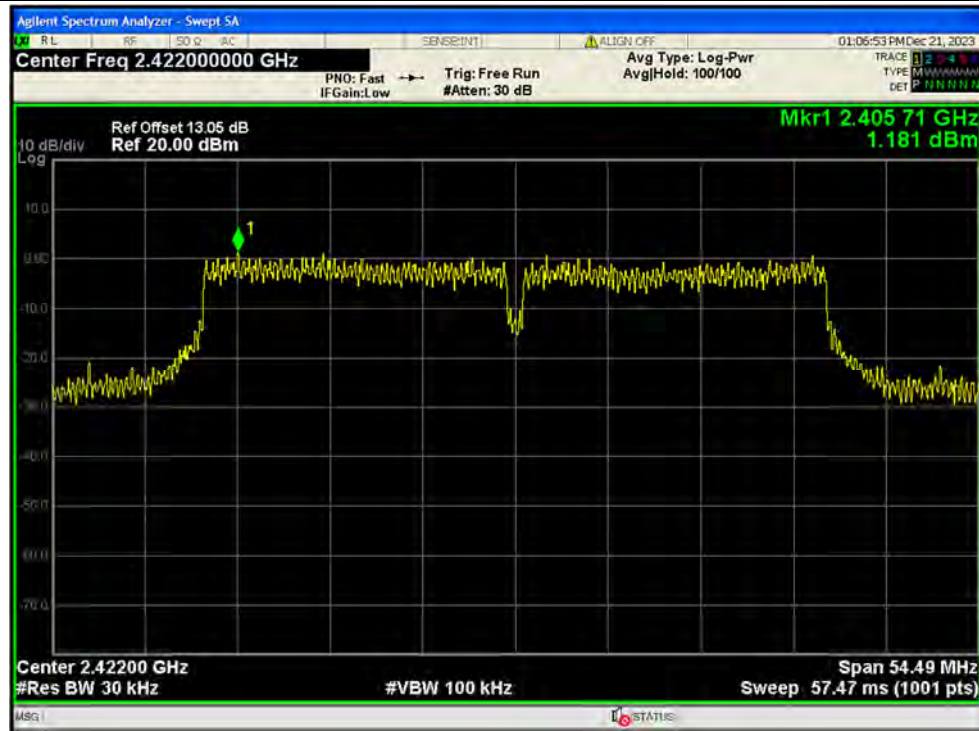


PSD NVNT n40 2452MHz Ant9 SISO

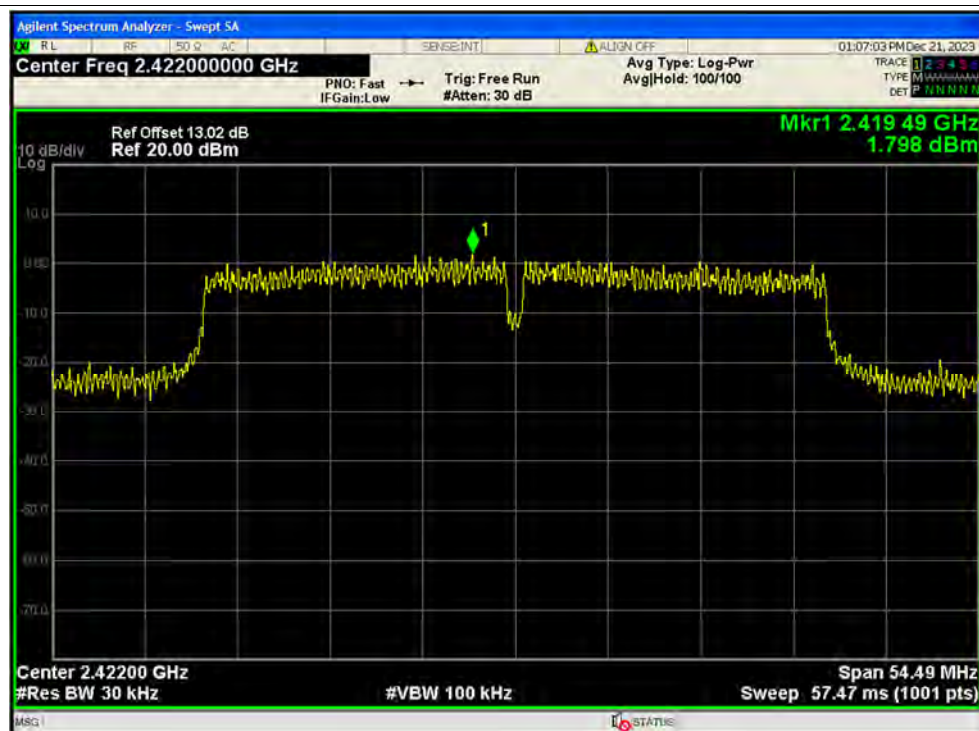




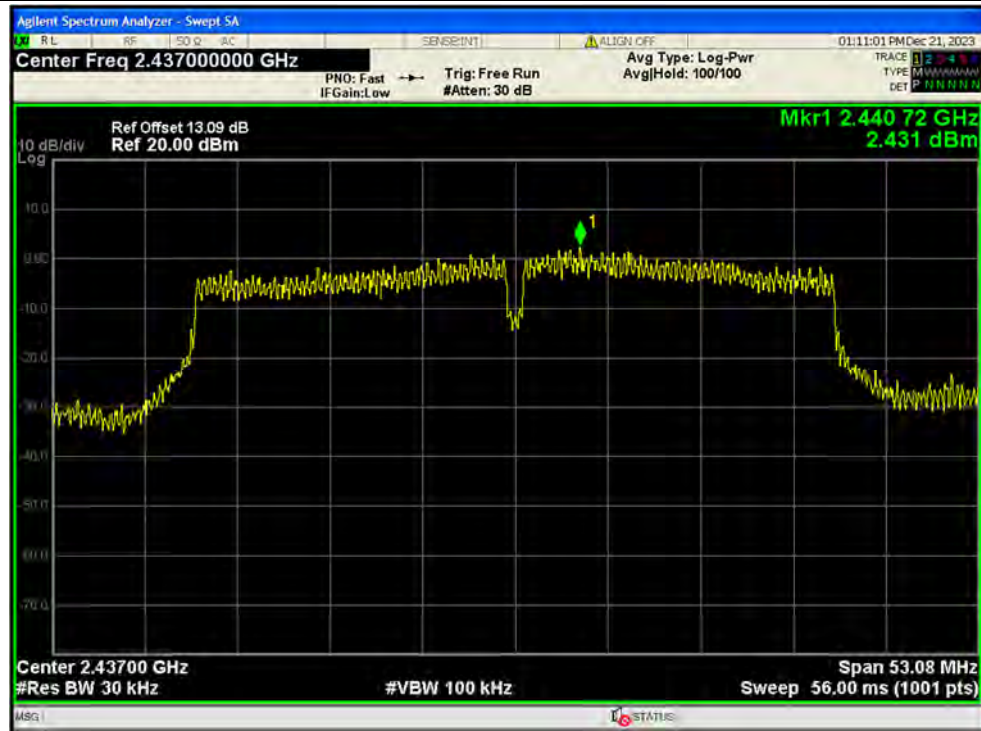
PSD NVNT n40 2422MHz Ant8 MIMO



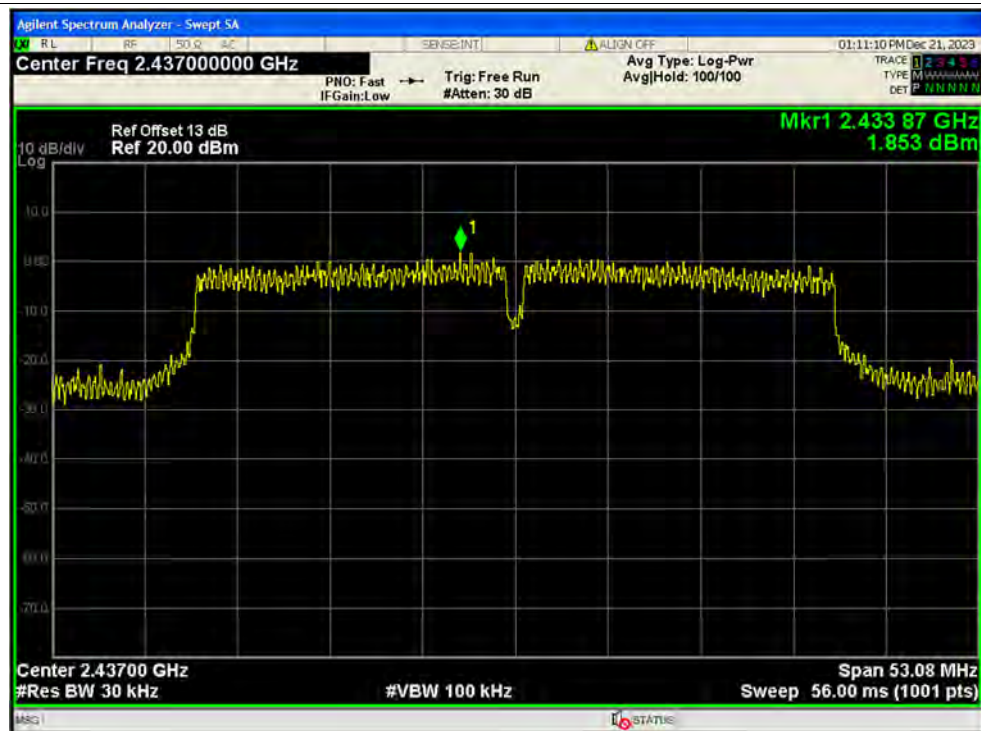
PSD NVNT n40 2422MHz Ant9 MIMO



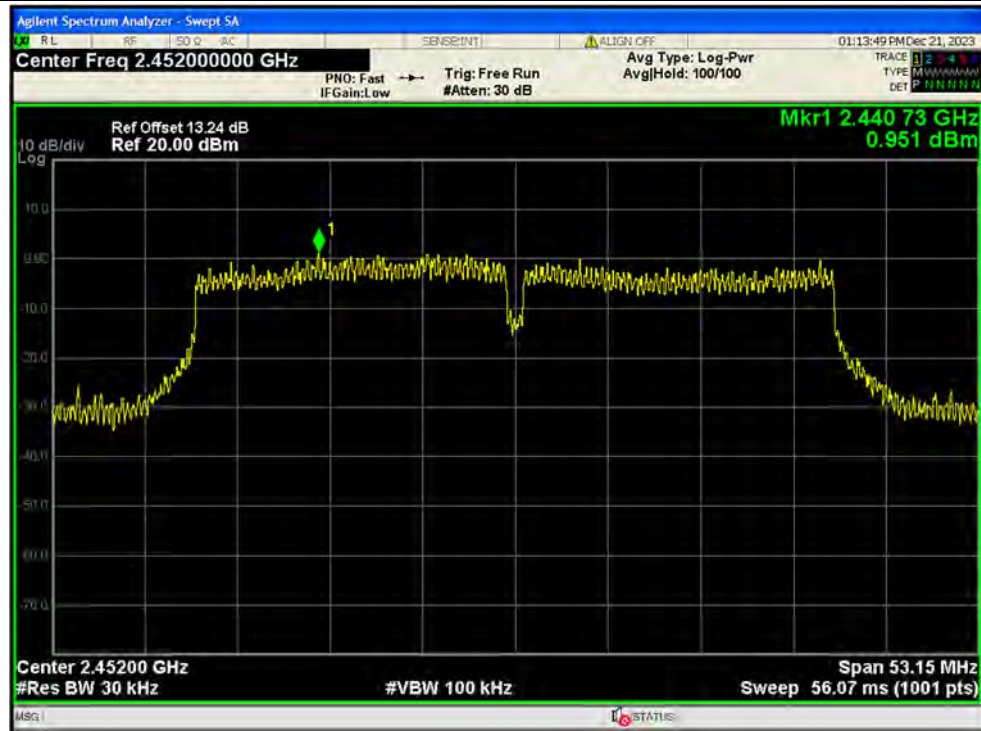
PSD NVNT n40 2437MHz Ant8 MIMO



PSD NVNT n40 2437MHz Ant9 MIMO



PSD NVNT n40 2452MHz Ant8 MIMO



PSD NVNT n40 2452MHz Ant9 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

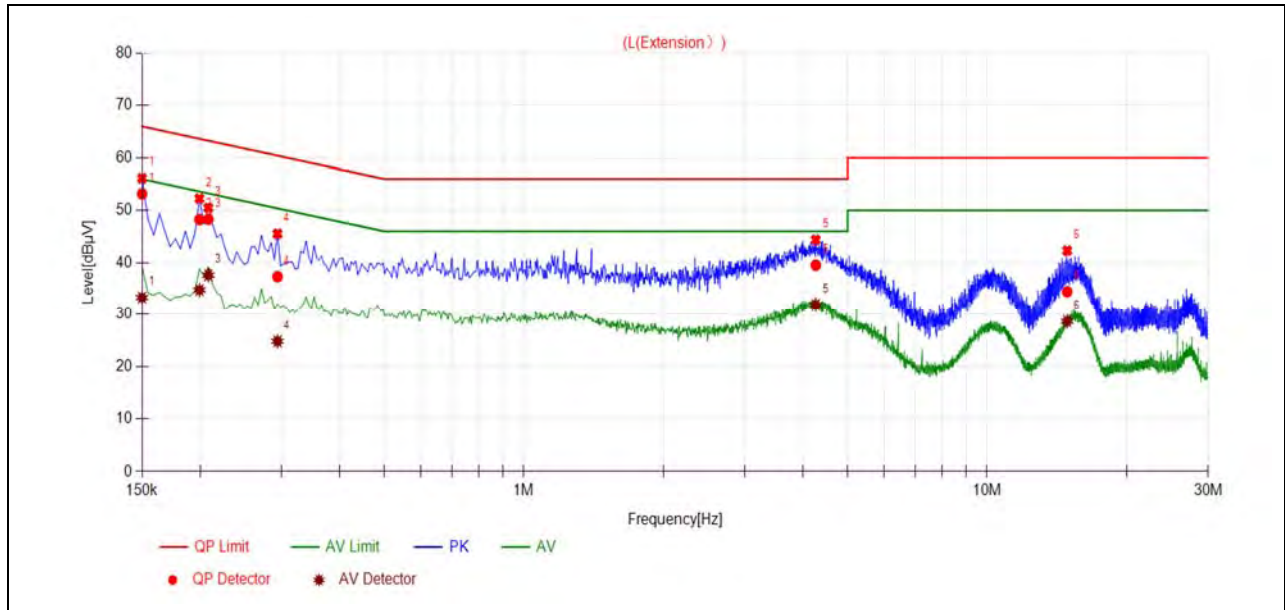
The measurement results are obtained as below:

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

U_R : Receiver Reading

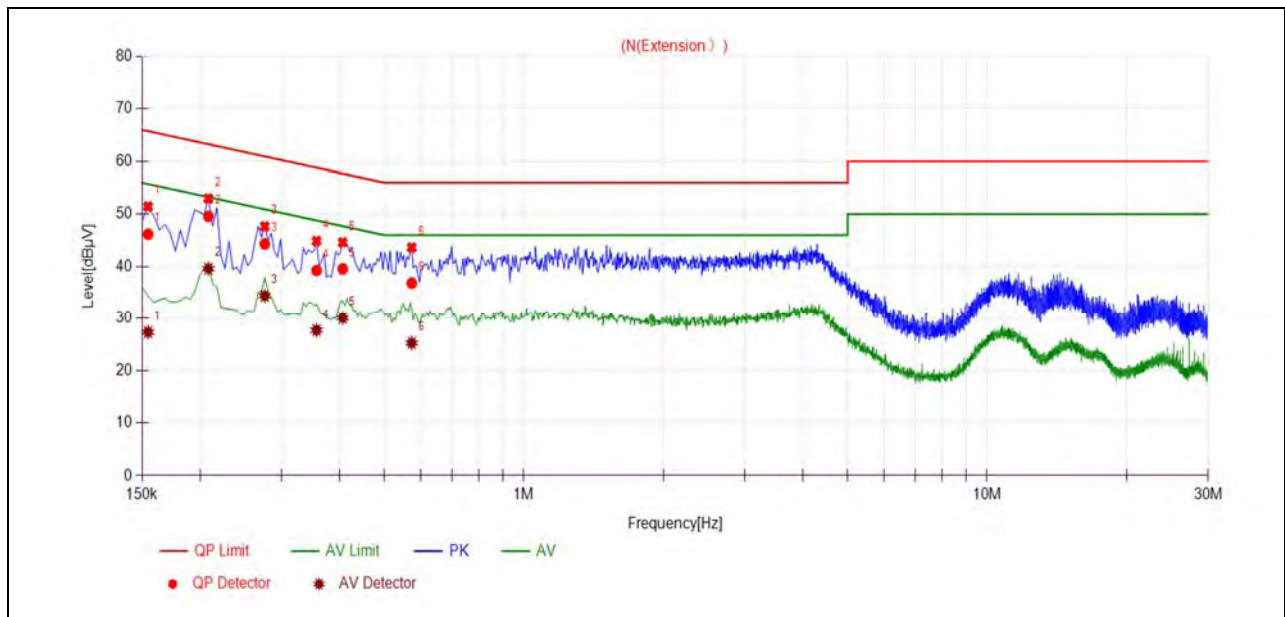
A_{Factor} : Voltage division factor of LISN

B. Test Plot:



(L Phase)

No.	Fre. (MHz)	Emission Level (dBμV)		Limit (dBμV)		Power-line	Verdict
		Quai-peak	Average	Quai-peak	Average		
1	0.1500	53.18	33.29	66.00	56.00	Line	PASS
2	0.1995	48.27	34.75	63.63	53.63		PASS
3	0.2085	48.34	37.60	63.26	53.26		PASS
4	0.2940	37.31	24.77	60.41	50.41		PASS
5	4.2677	39.52	31.84	56.00	46.00		PASS
6	14.8872	34.42	28.63	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	46.18	27.32	65.75	55.75	Neutral	PASS
2	0.2085	49.59	39.61	63.27	53.27		PASS
3	0.2760	44.33	34.39	60.93	50.93		PASS
4	0.3570	39.26	27.68	58.80	48.80		PASS
5	0.4065	39.56	30.05	57.72	47.72		PASS
6	0.5730	36.84	25.24	56.00	46.00		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

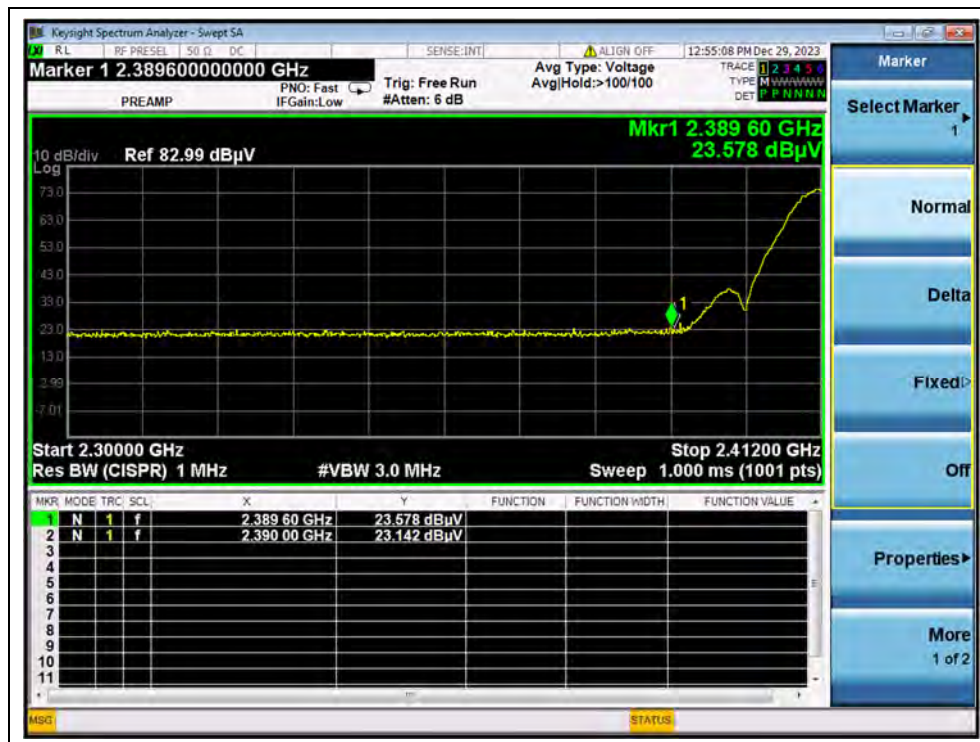
G_{preamp} : Preamplifier Gain

A_{Factor} : Antenna Factor at 3m

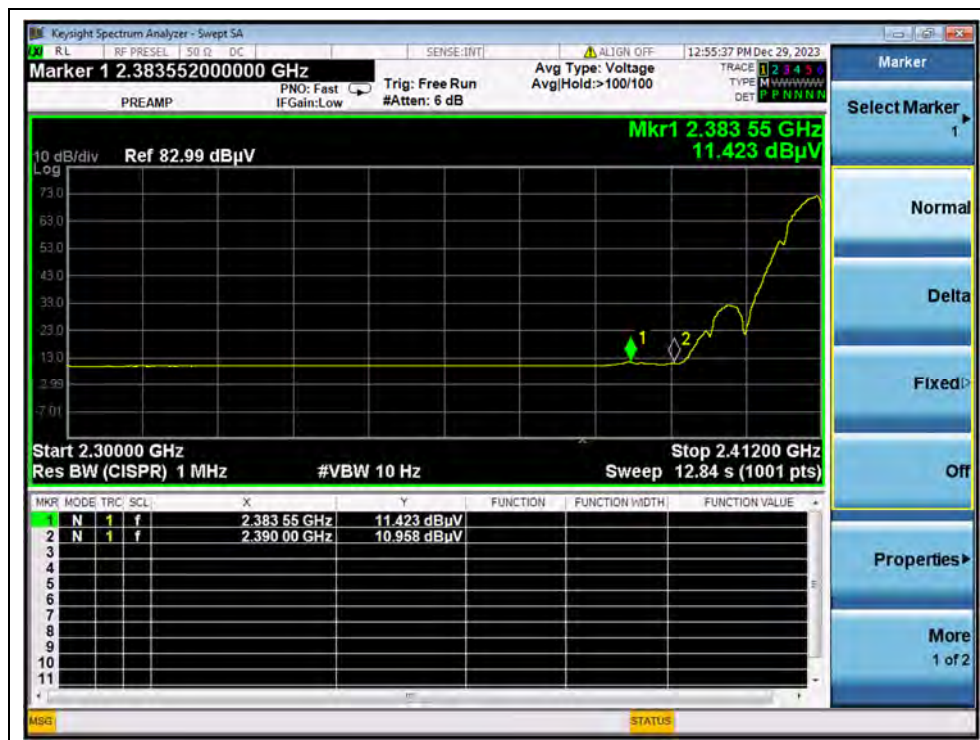
Note: Restricted Frequency Bands were performed when antenna was at vertical and horizontal polarity, and only the worse test condition (Horizontal) was recorded in this test report.

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						
1	2389.60	PK	23.58	6.74	27.20	57.52	74	PASS
1	2383.55	AV	11.42	6.74	27.20	45.36	54	PASS
11	2486.64	PK	22.97	6.74	27.20	56.91	74	PASS
11	2483.96	AV	10.43	6.74	27.20	44.37	54	PASS



(PEAK, Channel 1, 802.11b)



(AVERAGE, Channel 1, 802.11b)



(PEAK, Channel 11, 802.11b)

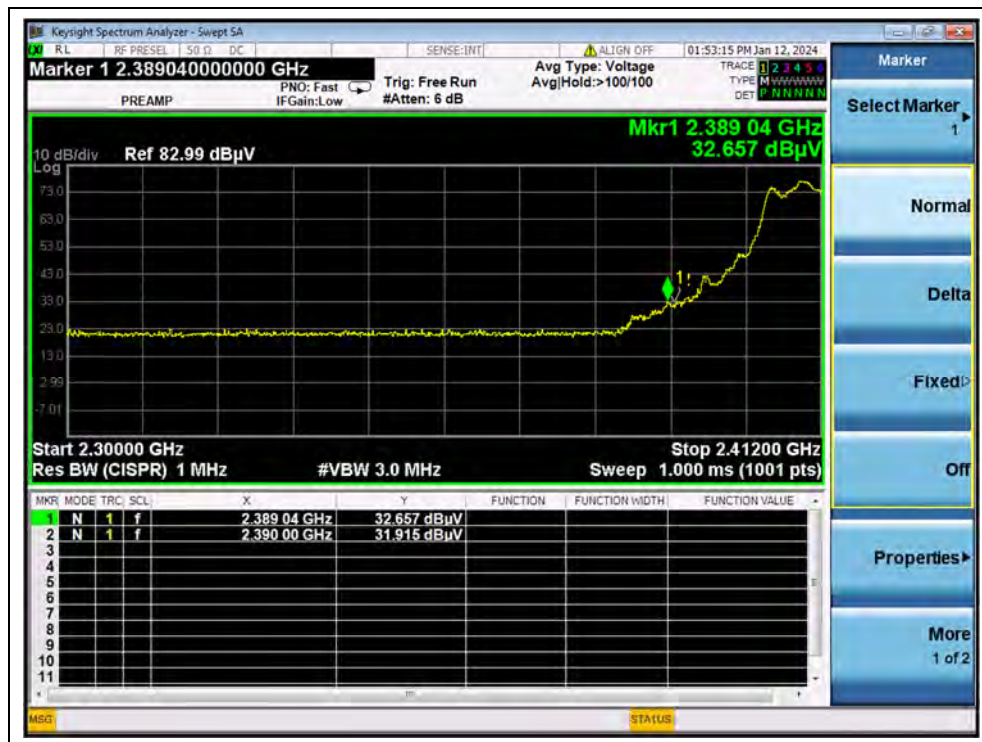


(AVERAGE, Channel 11, 802.11b)

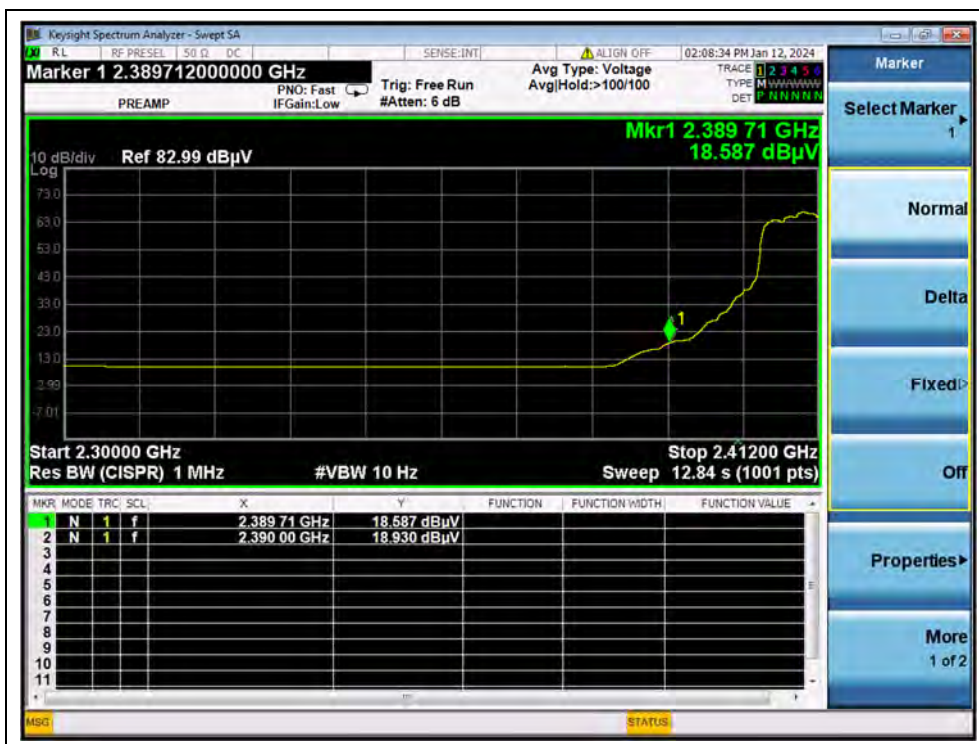


802.11g Mode

Channel	Frequency (MHz)	Detector	Receiver Reading U_R (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	2389.04	PK	32.66	6.74	27.20	66.60	74	PASS
1	2390.00	AV	18.93	6.74	27.20	52.87	54	PASS
11	2484.42	PK	31.67	6.74	27.20	65.61	74	PASS
11	2483.50	AV	19.23	6.74	27.20	53.17	54	PASS



(PEAK, Channel 1, 802.11g)



(AVERAGE, Channel 1, 802.11g)



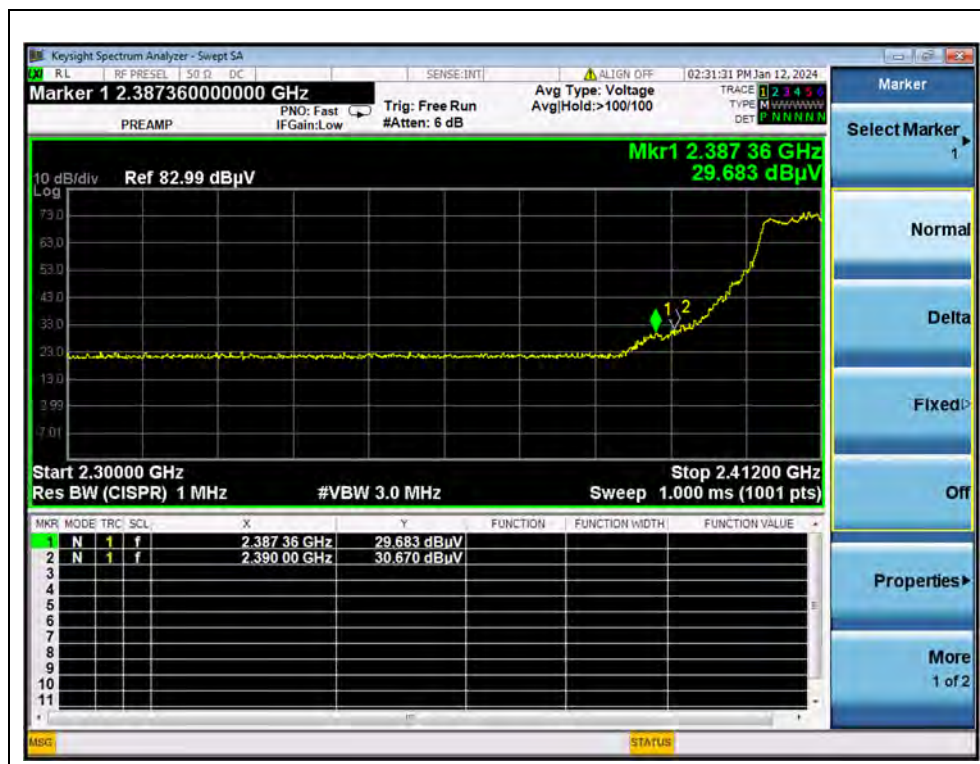
(PEAK, Channel 11, 802.11g)



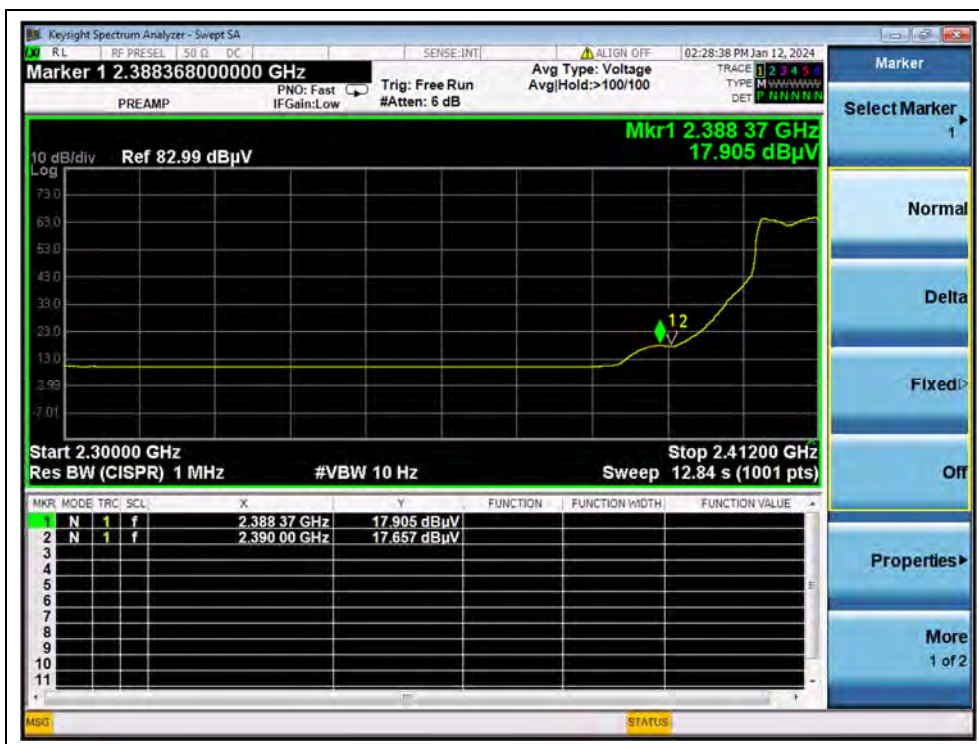
(AVERAGE, Channel 11, 802.11g)

**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	2390.00	PK	30.67	6.74	27.20	64.61	74	PASS
1	2388.37	AV	17.91	6.74	27.20	51.85	54	PASS
11	2484.12	PK	29.91	6.74	27.20	63.85	74	PASS
11	2483.50	AV	18.39	6.74	27.20	52.33	54	PASS



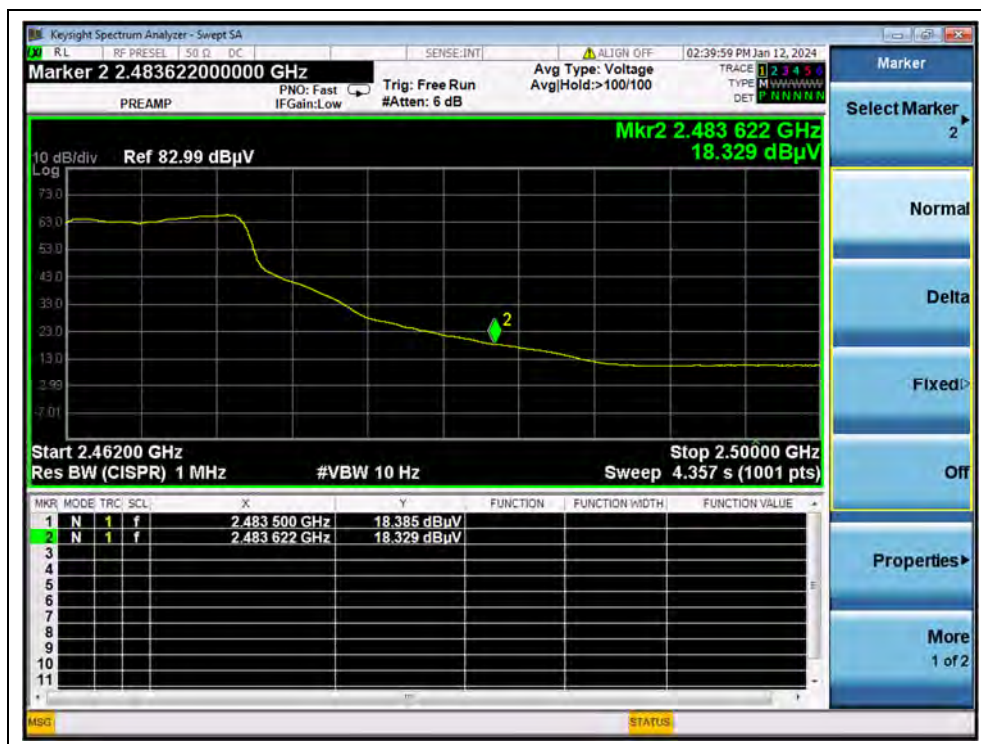
(PEAK, Channel 1, 802.11n (HT20))



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



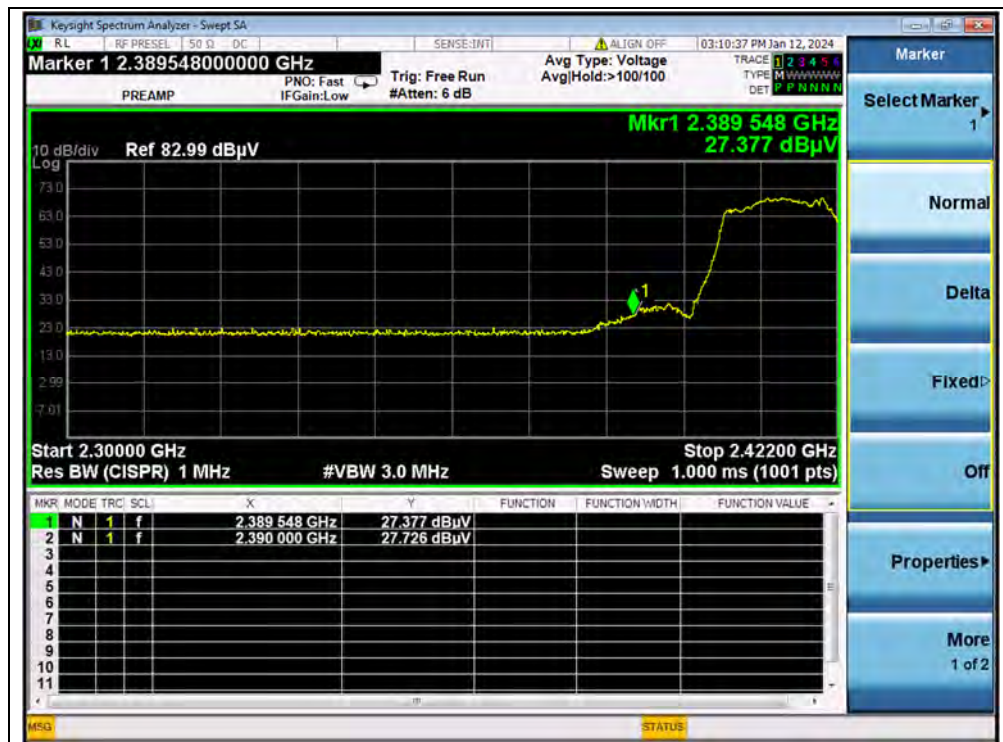
(PEAK, Channel 11, 802.11n (HT20))



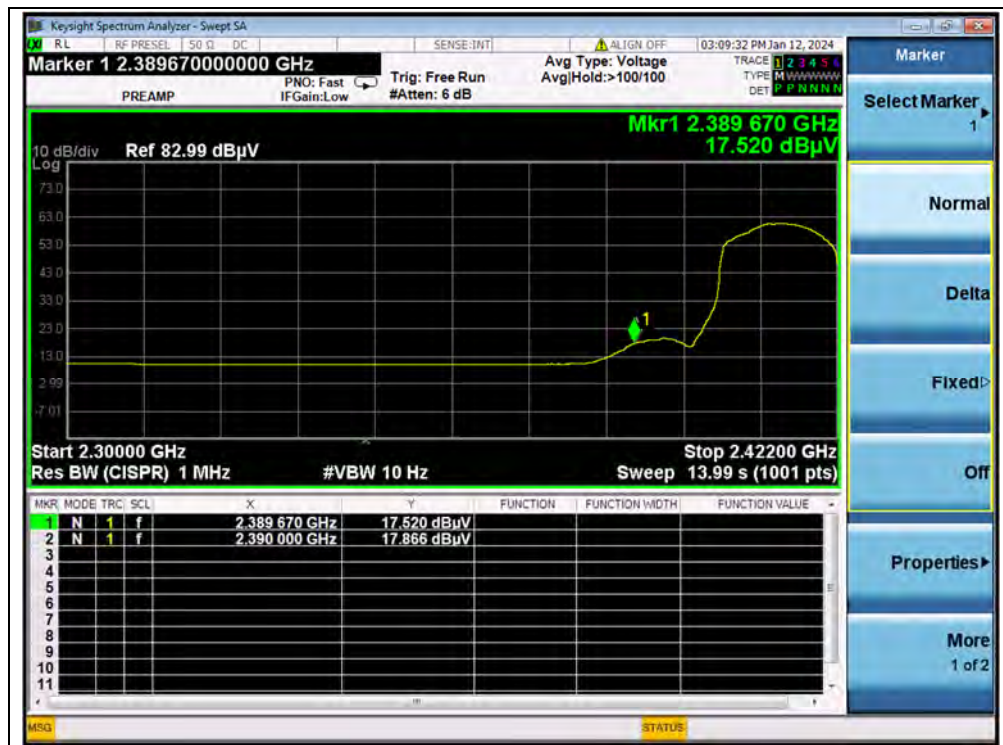
(AVERAGE, Channel 11, 802.11n (HT20))

**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	2390.00	PK	27.73	6.74	27.20	61.67	74	PASS
3	2390.00	AV	17.87	6.74	27.20	51.81	54	PASS
9	2485.22	PK	28.15	6.74	27.20	62.09	74	PASS
9	2483.50	AV	17.22	6.74	27.20	51.16	54	PASS



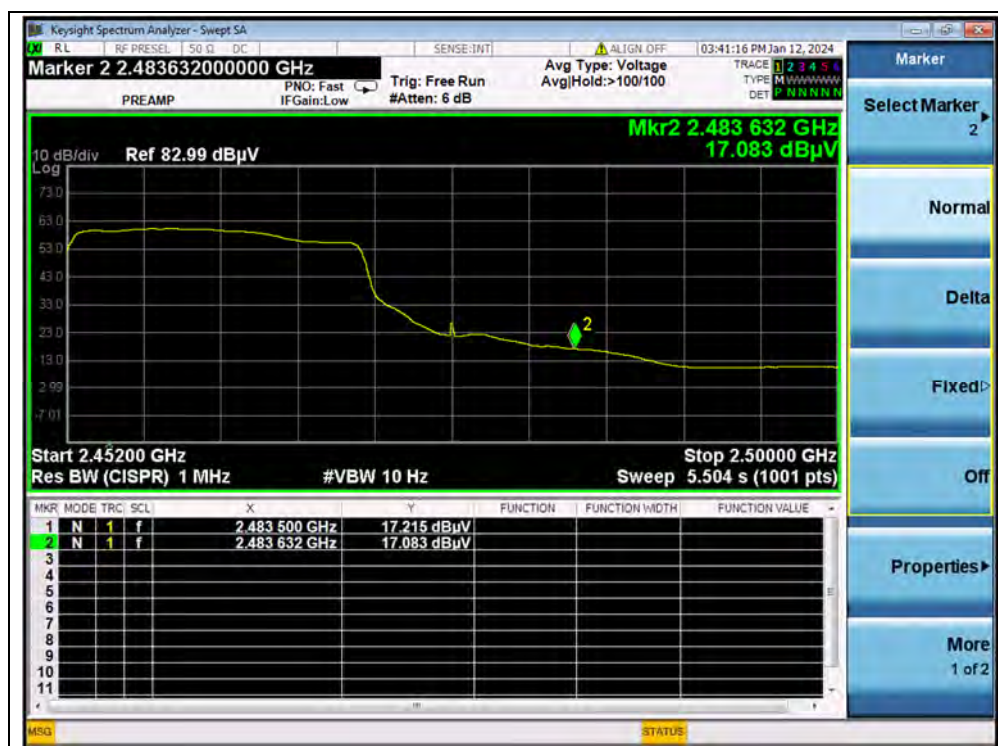
(PEAK, Channel 3, 802.11n (HT40))



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



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



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



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.

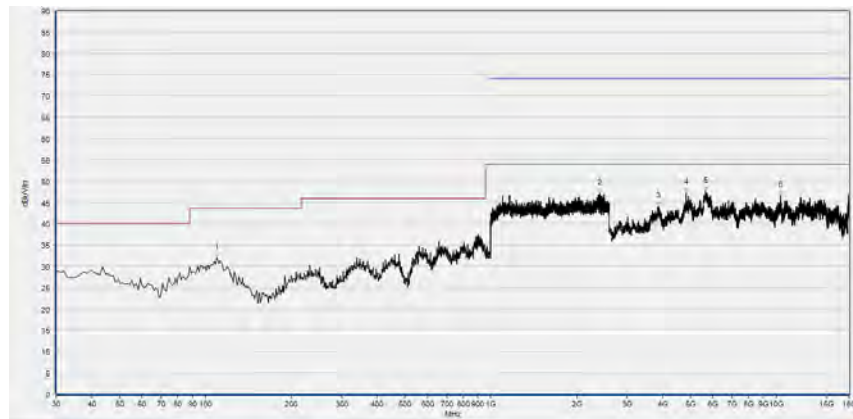
Note1: All radiated emission tests were performed in X, Y, Z axis direction. And only the worst axis test condition was recorded in this test report.

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.

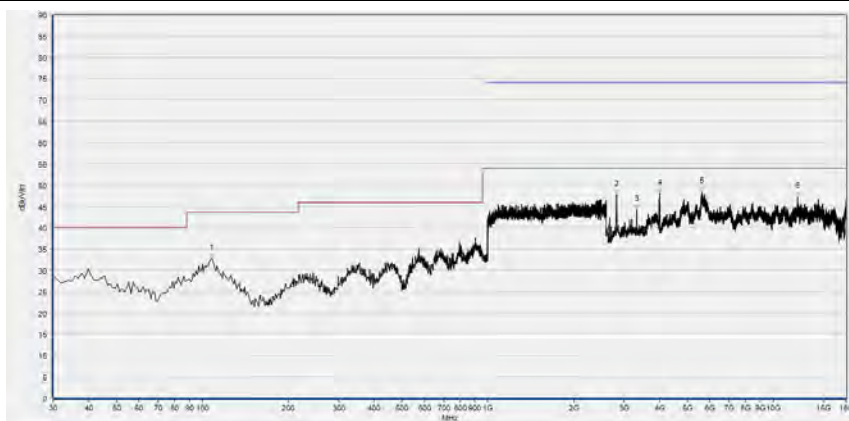
**802.11b Mode**

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
109.540	32.08	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2409.067	47.02	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3856.640	44.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4823.760	47.28	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5639.960	47.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10367.760	46.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

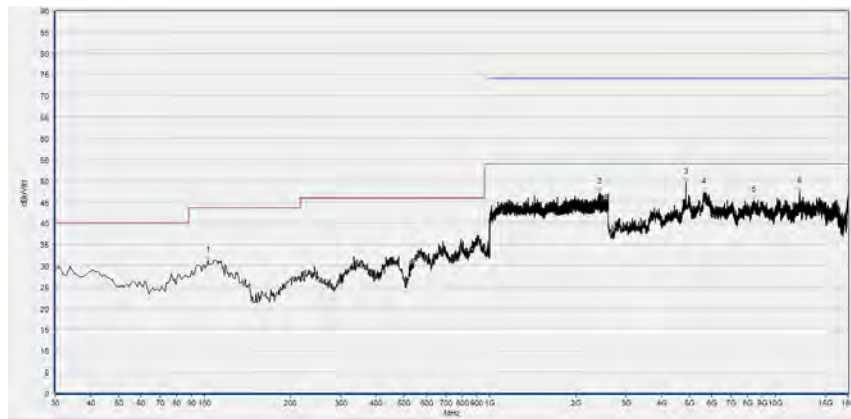


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.600	32.61	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2824.840	47.71	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3317.640	44.27	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3995.240	48.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5612.240	48.49	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12194.200	47.24	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

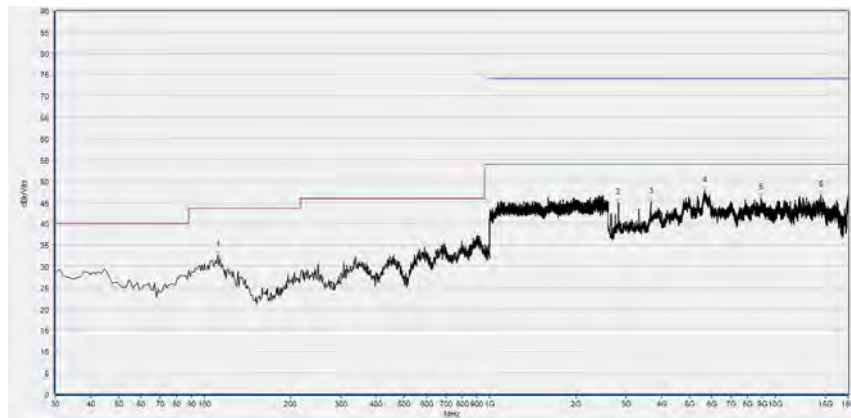


Plot for Channel 6



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
102.750	31.13	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2418.667	47.18	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4873.040	49.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5612.240	47.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
8411.960	45.40	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12181.880	47.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

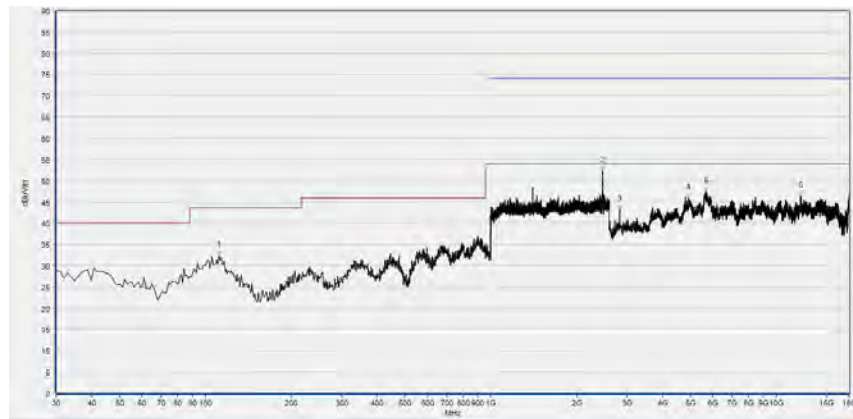


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	32.48	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2821.760	44.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3659.520	45.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5652.280	47.79	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8929.400	46.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14461.080	46.83	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

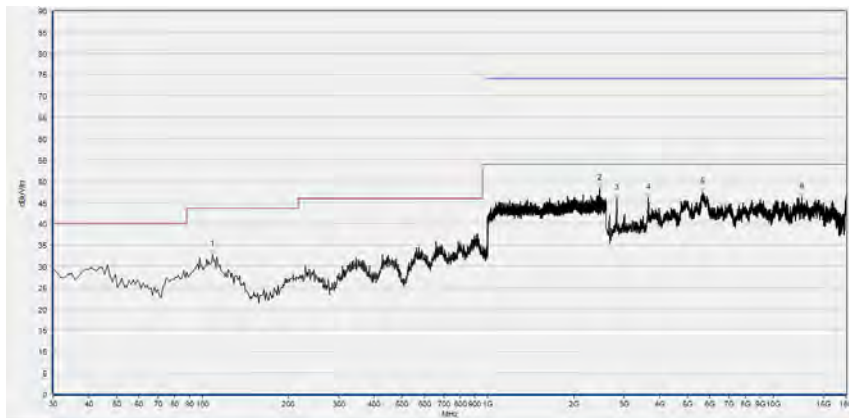


Plot for Channel 11



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	32.38	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2464.000	52.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2824.840	43.17	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4922.320	45.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5686.160	47.39	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12191.120	46.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

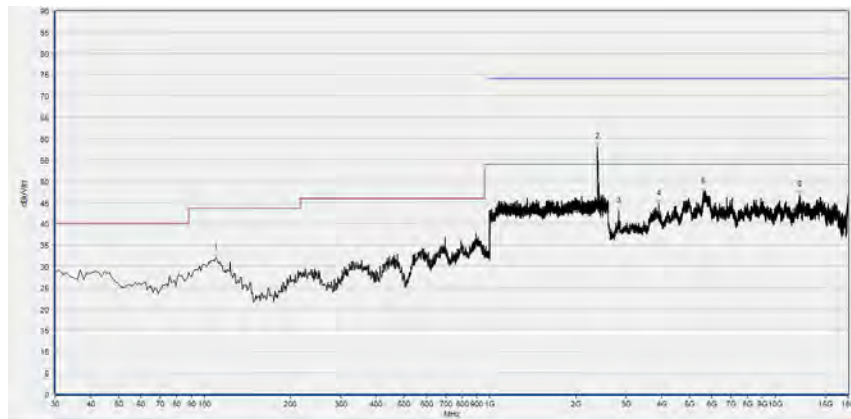


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	32.62	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2463.467	48.23	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2831.000	45.86	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3650.280	46.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5639.960	47.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12585.360	46.25	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

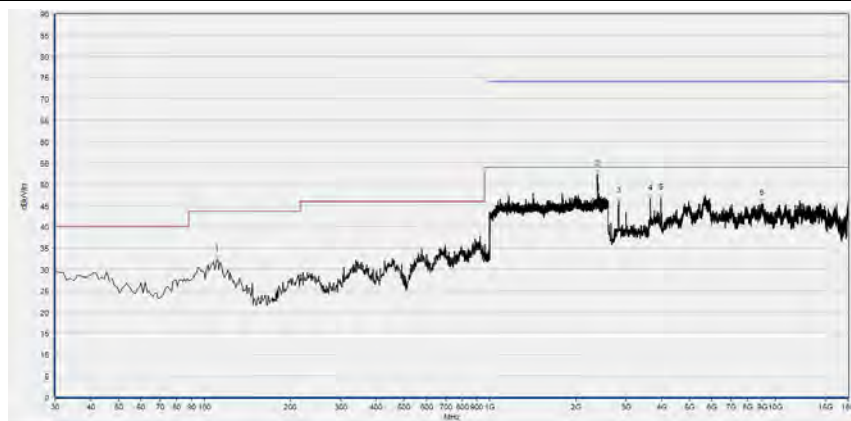
**802.11g Mode**

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	32.02	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2384.533	58.03	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2824.840	42.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3899.760	44.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5603.000	47.50	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12188.040	46.71	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

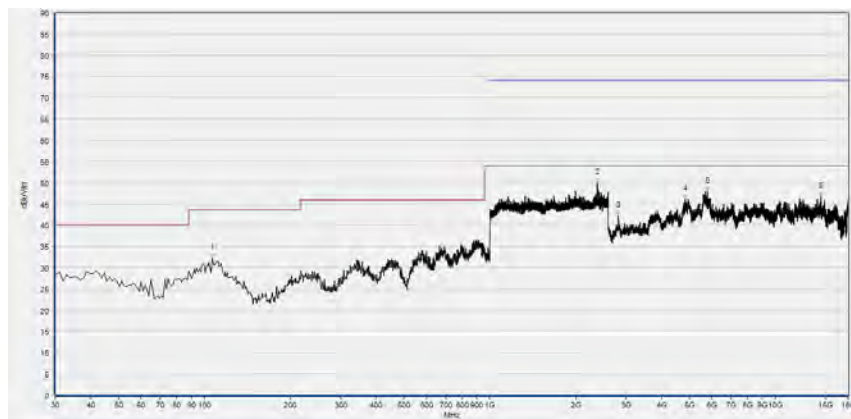


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	32.13	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2384.000	52.25	N/A	40.31	74.00	N/A	54.00	Vertical	PASS
2831.000	45.97	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3656.440	46.54	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3982.920	46.80	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8954.040	45.48	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
106.630	32.24	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2384.533	49.88	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2821.760	42.16	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4842.240	46.06	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5775.480	47.91	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14442.600	46.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

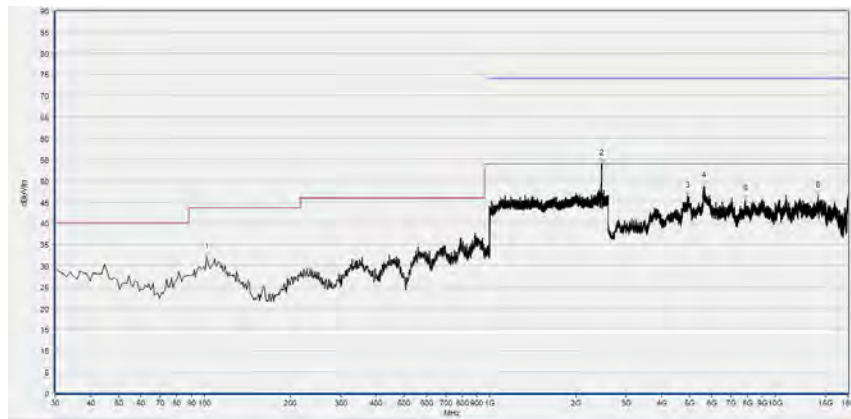


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
108.570	33.81	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2385.067	49.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2824.840	48.66	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5630.720	47.87	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8448.920	46.11	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
14427.200	46.85	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

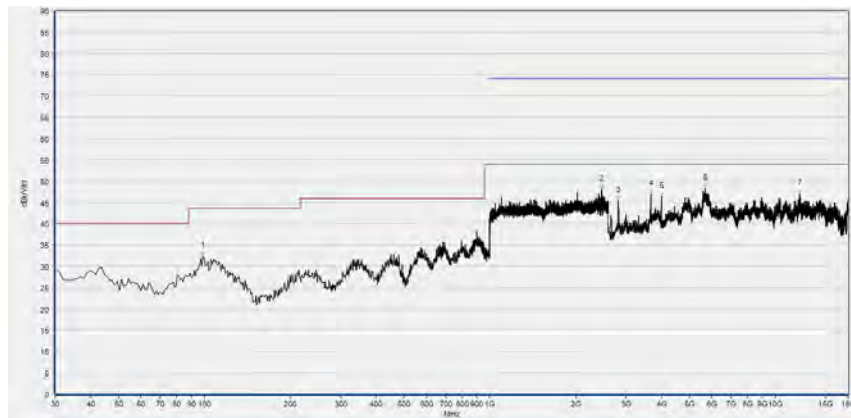


Plot for Channel 11



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
101.780	32.04	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2462.400	53.96	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4928.480	46.35	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5627.640	48.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7860.640	45.59	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
14097.640	46.37	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

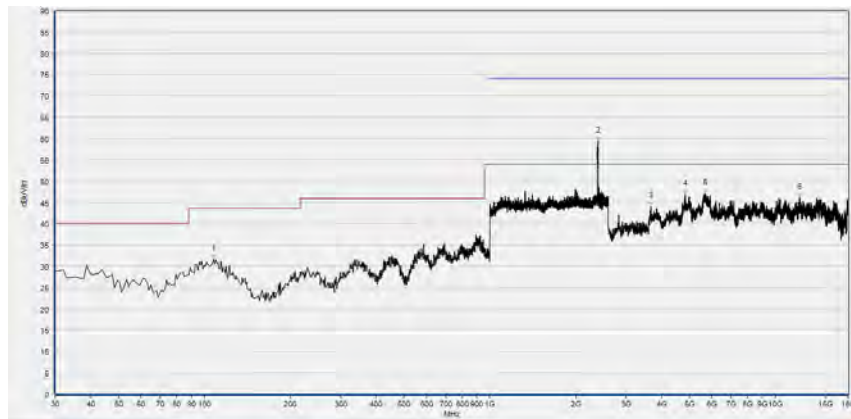


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
98.870	32.29	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2462.400	48.14	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2821.760	45.34	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3659.520	47.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3992.160	46.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5683.080	48.27	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
107.600	31.61	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2388.800	59.32	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
3671.840	44.04	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4823.760	46.89	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5692.320	47.05	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12135.680	46.14	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

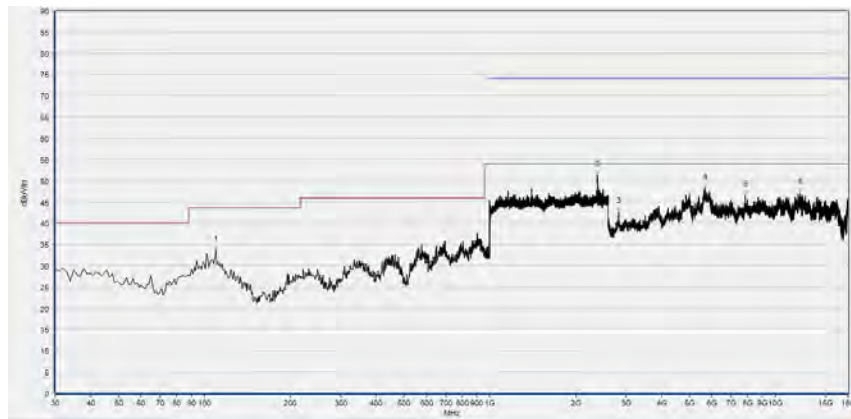


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
107.600	32.13	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2390.933	52.97	N/A	39.46	74.00	N/A	54.00	Vertical	PASS
3323.800	43.38	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3665.680	45.17	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3982.920	46.94	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8941.720	46.02	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

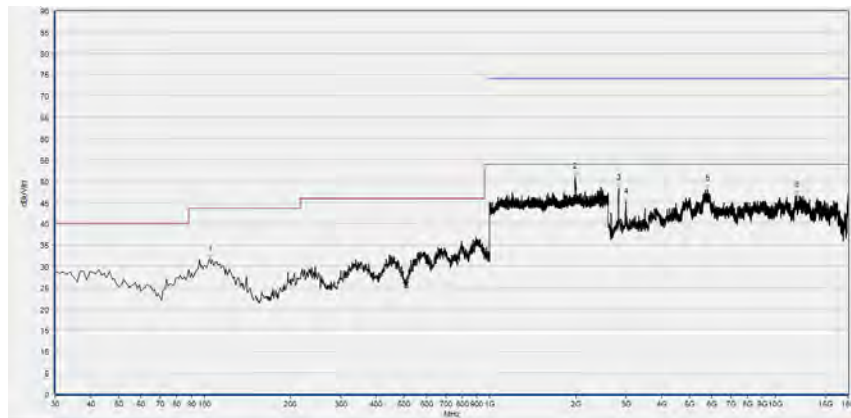


Plot for Channel 6



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	33.77	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2385.067	51.28	N/A	40.32	74.00	N/A	54.00	Horizontal	PASS
2827.920	42.69	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5686.160	48.27	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
7851.400	46.62	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12212.680	47.12	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

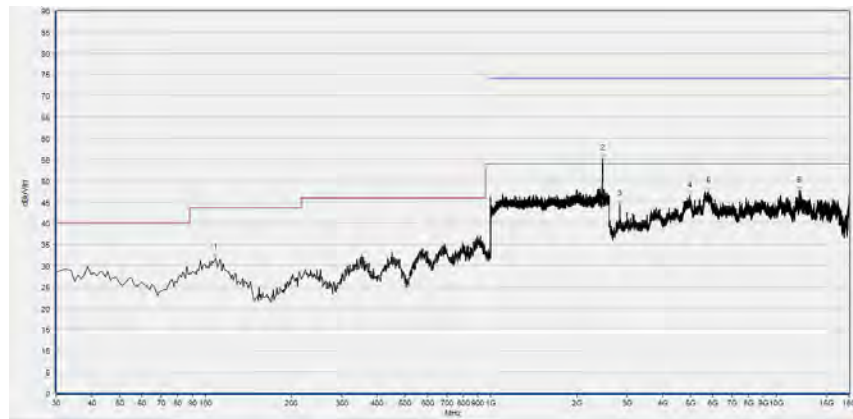
(Antenna Horizontal, 30MHz to 18GHz)



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	31.49	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1994.667	50.93	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2824.840	48.26	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2997.320	45.03	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5775.480	48.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
11855.400	46.52	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

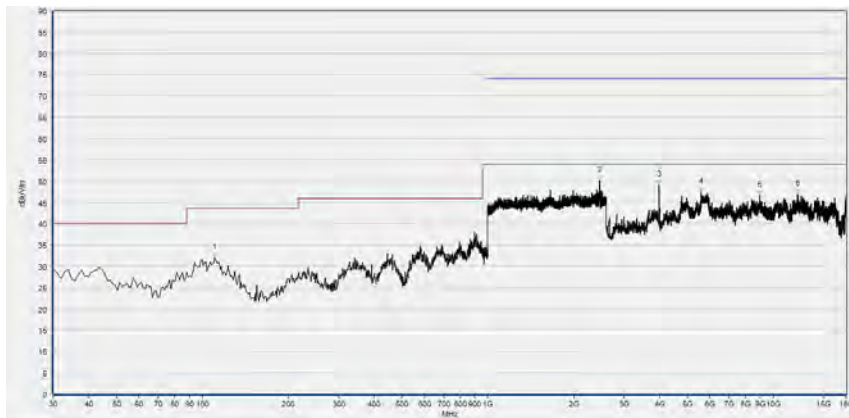
(Antenna Vertical, 30MHz to 18GHz)

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
108.570	31.86	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2462.933	55.21	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
2827.920	44.34	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4983.920	46.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5775.480	47.48	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12052.520	47.60	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

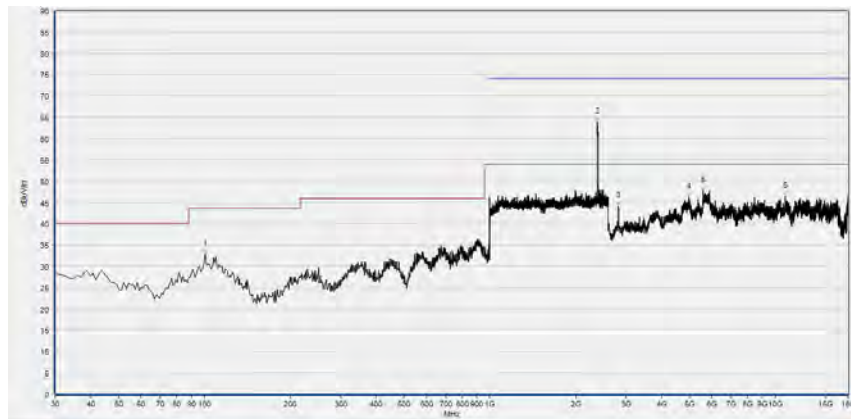


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	32.07	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2462.933	50.12	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3986.000	49.04	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5599.920	47.36	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
8954.040	46.53	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12132.600	46.92	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
100.810	32.79	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2386.667	63.82	N/A	51.29	74.00	N/A	54.00	Horizontal	PASS
2821.760	44.10	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4971.600	46.25	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5599.920	47.80	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10866.720	46.38	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

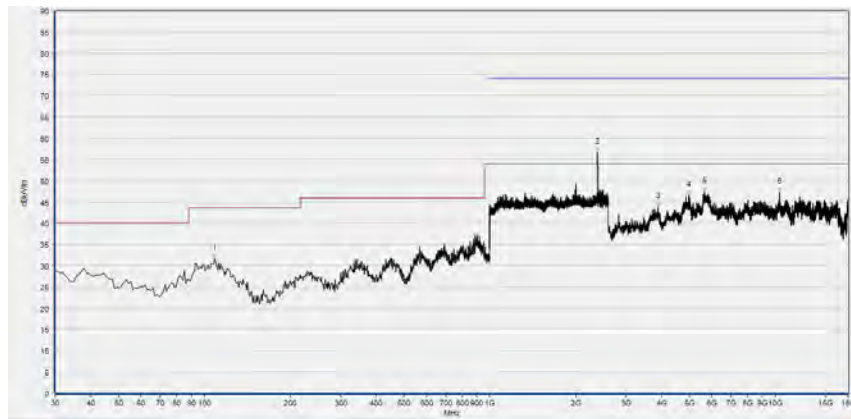


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
110.510	31.14	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
1998.933	50.44	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2384.533	56.89	N/A	43.85	74.00	N/A	54.00	Vertical	PASS
2991.160	44.72	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3656.440	45.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5889.440	47.78	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

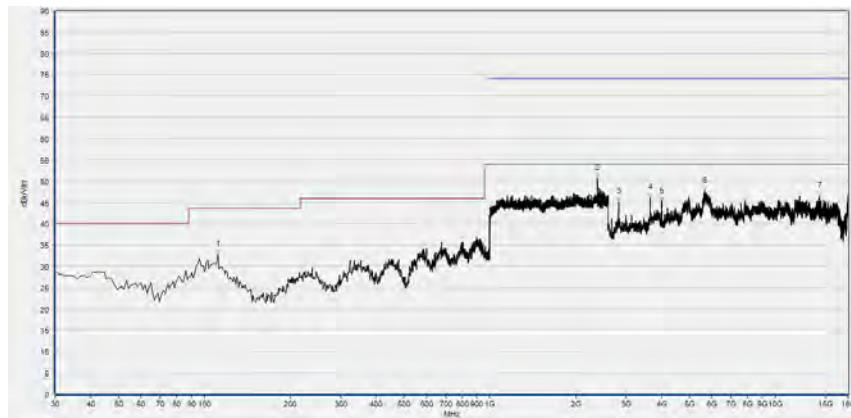


Plot for Channel 6



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	31.76	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2385.067	56.60	N/A	43.28	74.00	N/A	54.00	Horizontal	PASS
3875.120	43.94	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
4983.920	46.58	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5667.680	47.42	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
10340.040	47.26	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS

(Antenna Horizontal, 30MHz to 18GHz)

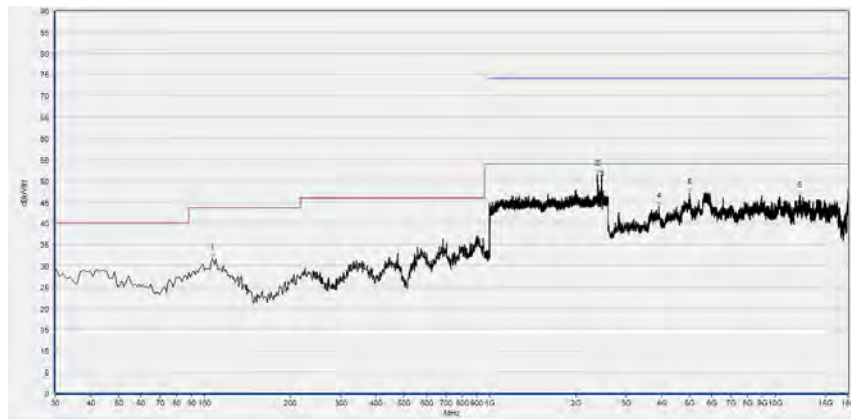


Fre. (MHz)	PK (dBμV/m)	QP (dBμV/m)	AV (dBμV/m)	Limit-PK (dBμV/m)	Limit-QP (dBμV/m)	Limit-AV (dBμV/m)	Antenna	Verdict
111.480	32.60	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2385.067	50.57	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2827.920	45.10	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3653.360	46.06	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3992.160	45.00	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5667.680	47.65	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

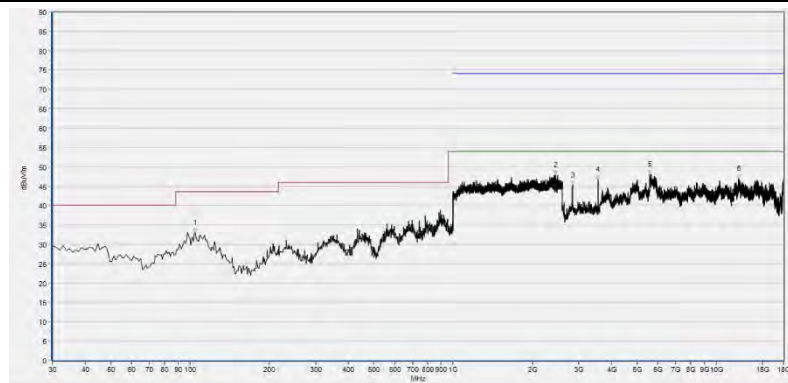


Plot for Channel 9



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
106.630	31.76	N/A	N/A	N/A	43.50	N/A	Horizontal	PASS
2381.867	51.44	N/A	41.46	74.00	N/A	54.00	Horizontal	PASS
2461.867	51.26	N/A	41.33	74.00	N/A	54.00	Horizontal	PASS
3918.240	43.90	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
5002.400	47.13	N/A	N/A	74.00	N/A	54.00	Horizontal	PASS
12197.280	46.43	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
104.690	32.94	N/A	N/A	N/A	43.50	N/A	Vertical	PASS
2454.933	47.98	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
2843.320	45.32	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
3551.720	46.73	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
5596.840	48.07	N/A	N/A	74.00	N/A	54.00	Vertical	PASS
12151.080	46.96	N/A	N/A	74.00	N/A	54.00	Vertical	PASS

(Antenna Vertical, 30MHz to 18GHz)

END OF REPORT