

Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Vertical Mouse

Test Model: HM8833

Environmental Conditions

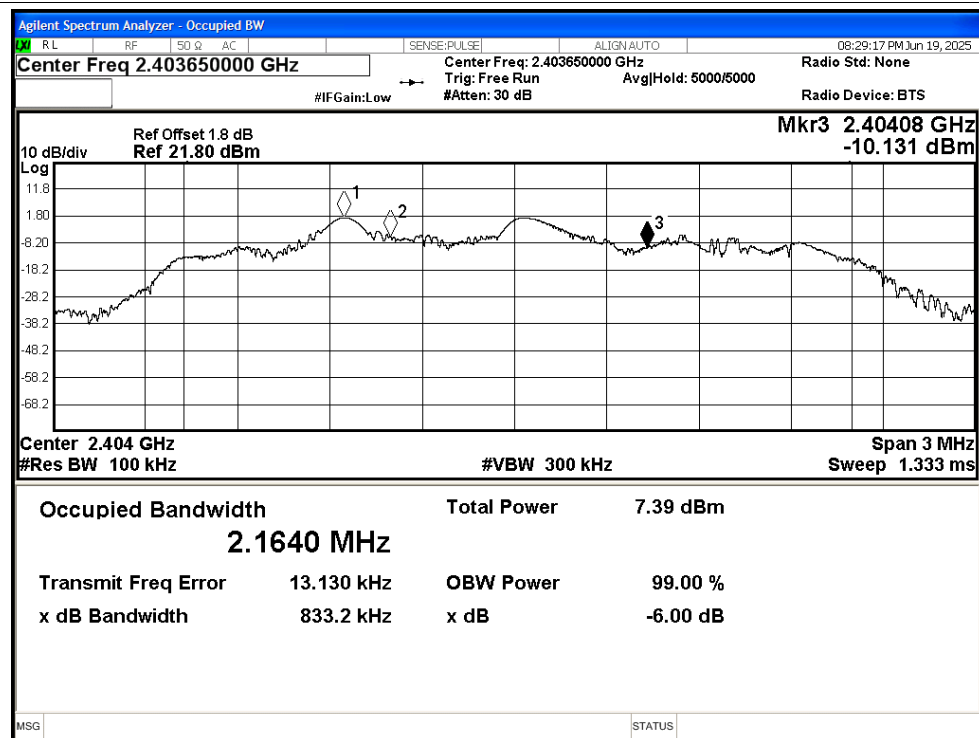
Temperature:	23.6°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Jone.Lee
Supervised by:	Yan Chen

A.1 -6dB Bandwidth

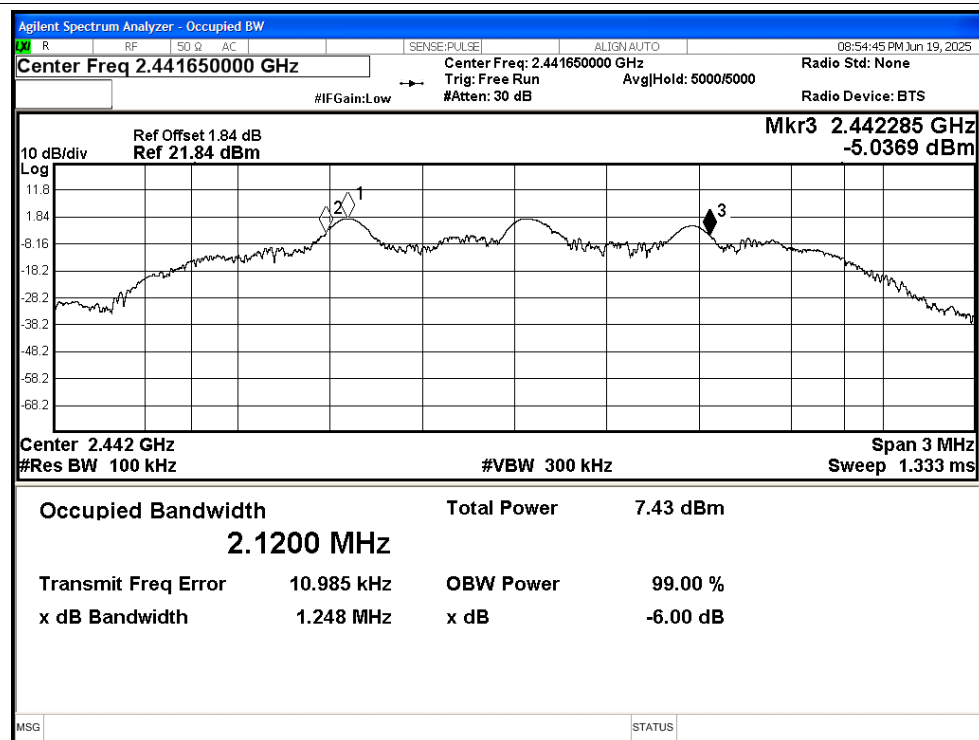
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2403.65	Ant1	0.833	>=0.5	Pass
NVNT	2.4G	2441.65	Ant1	1.248	>=0.5	Pass
NVNT	2.4G	2479.65	Ant1	1.25	>=0.5	Pass

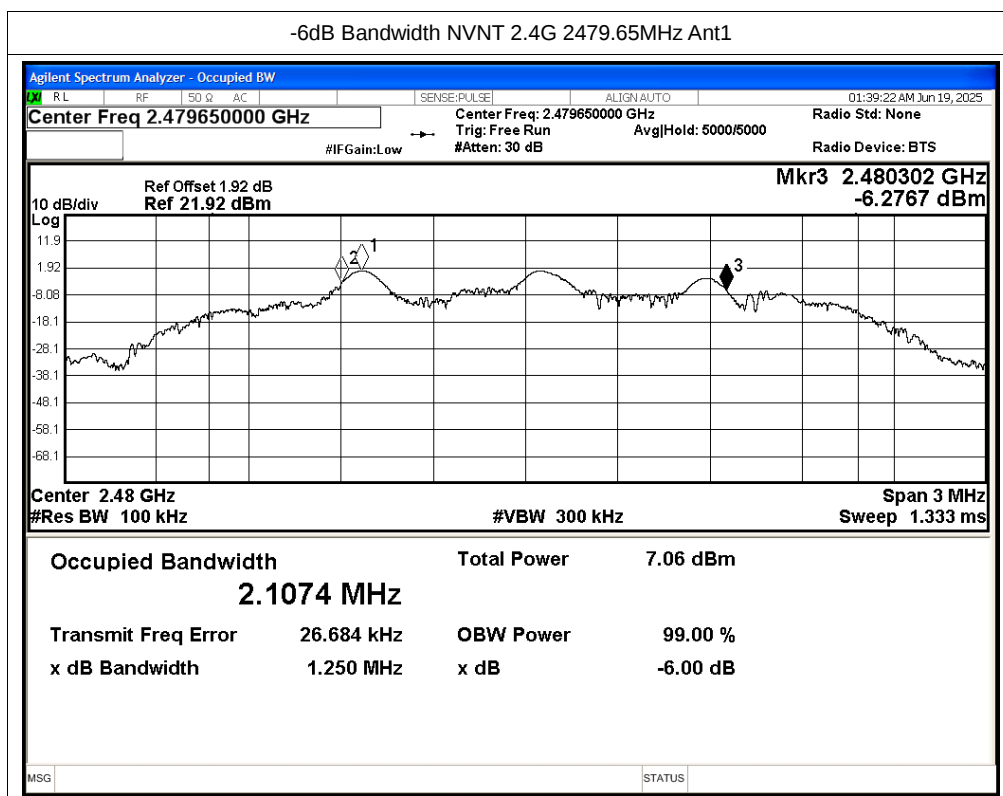
Test Graphs

-6dB Bandwidth NVNT 2.4G 2403.65MHz Ant1



-6dB Bandwidth NVNT 2.4G 2441.65MHz Ant1



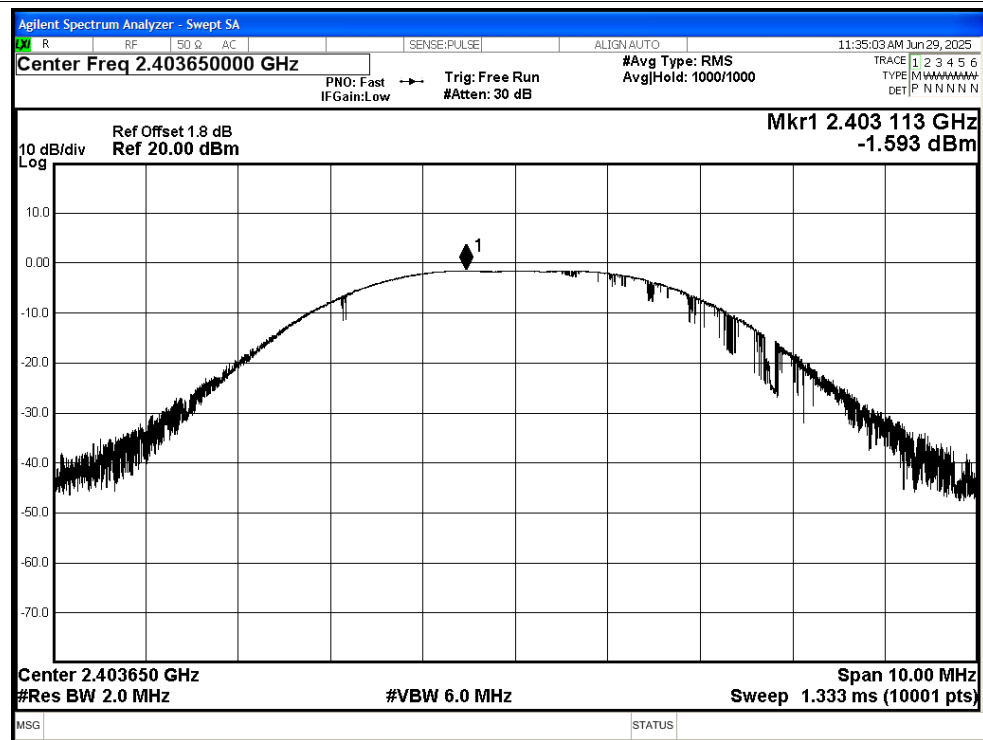


A.2 Maximum Peak Conducted Output Power

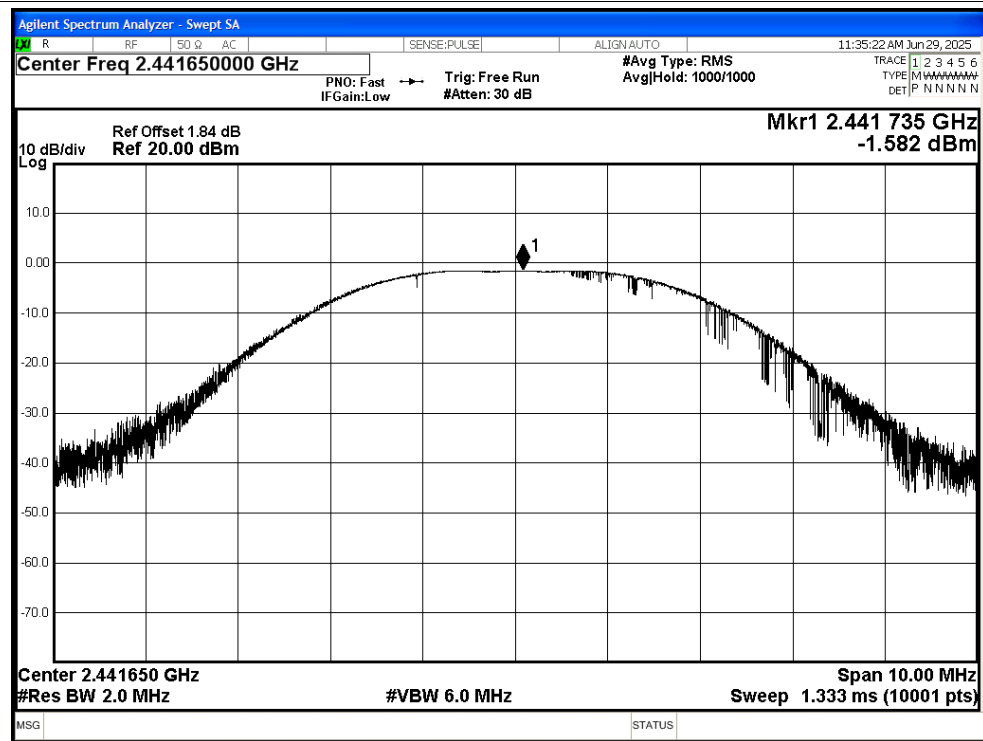
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2403.65	Ant1	-1.59	30	Pass
NVNT	2.4G	2441.65	Ant1	-1.58	30	Pass
NVNT	2.4G	2479.65	Ant1	-1.47	30	Pass

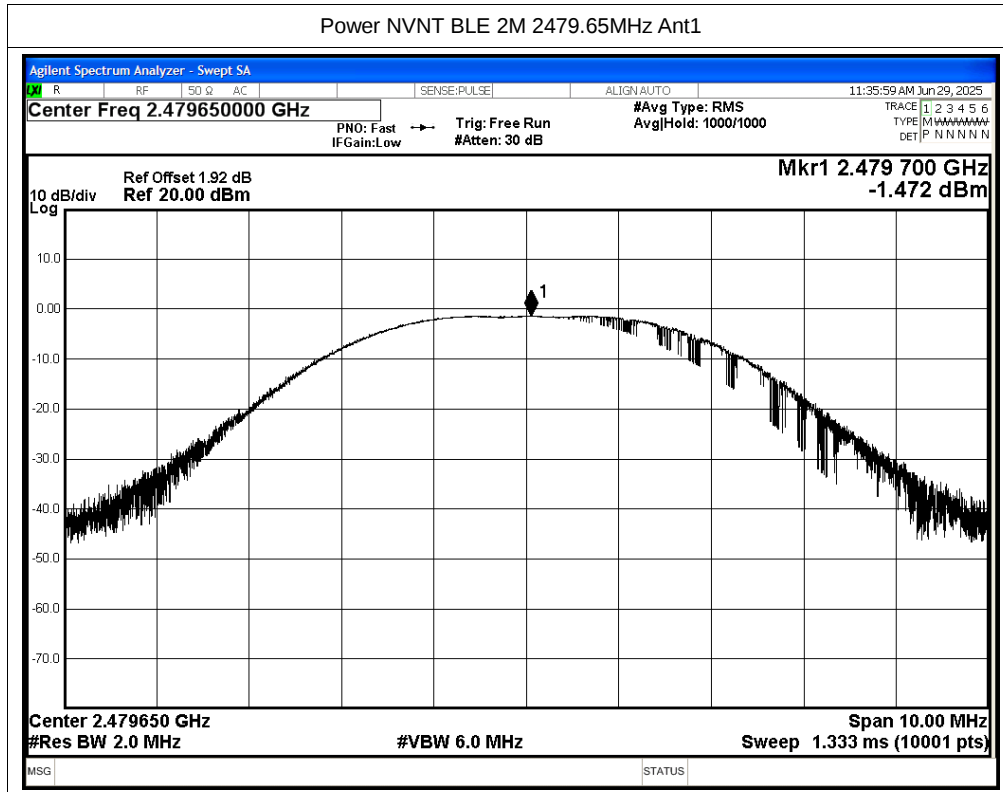
Test Graphs

Power NVNT BLE 2M 2403.65MHz Ant1



Power NVNT BLE 2M 2441.65MHz Ant1



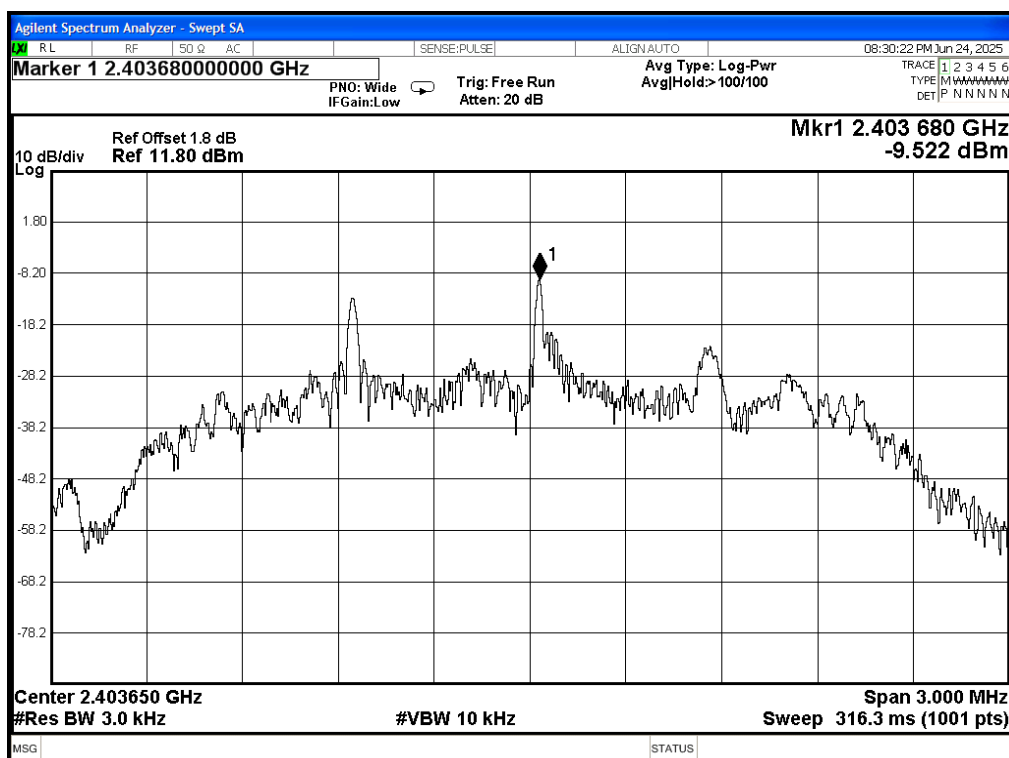


A.3 Maximum Power Spectral Density Level

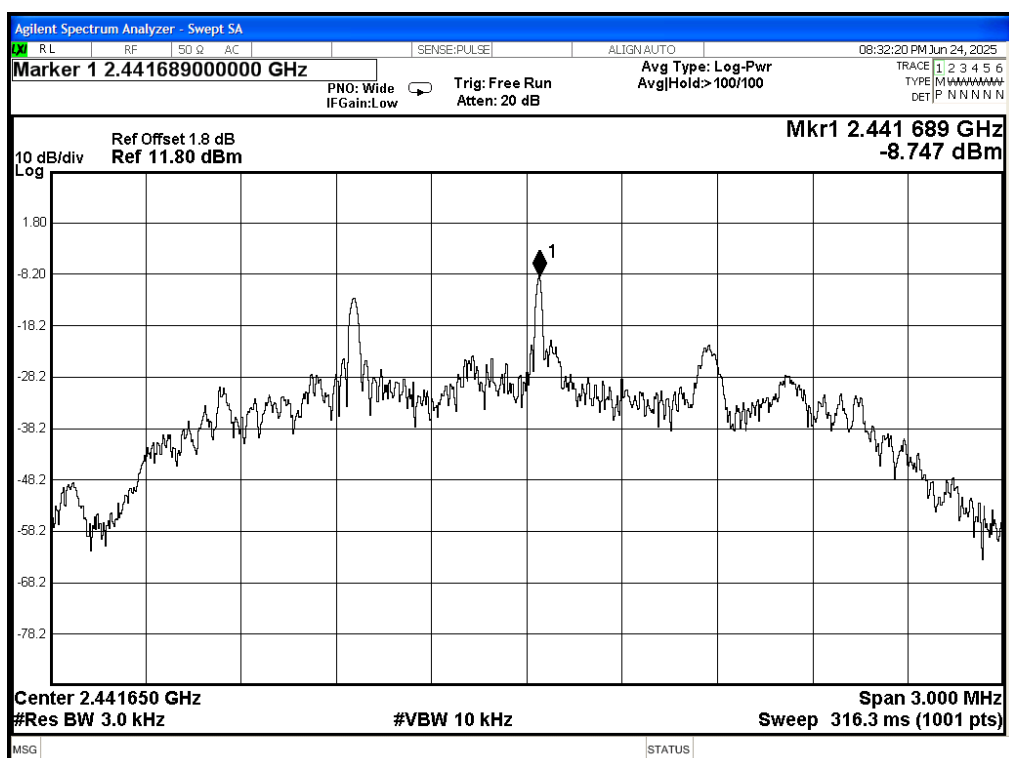
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2403.65	Ant1	-9.52	8	Pass
NVNT	2.4G	2441.65	Ant1	-8.75	8	Pass
NVNT	2.4G	2479.65	Ant1	-9.38	8	Pass

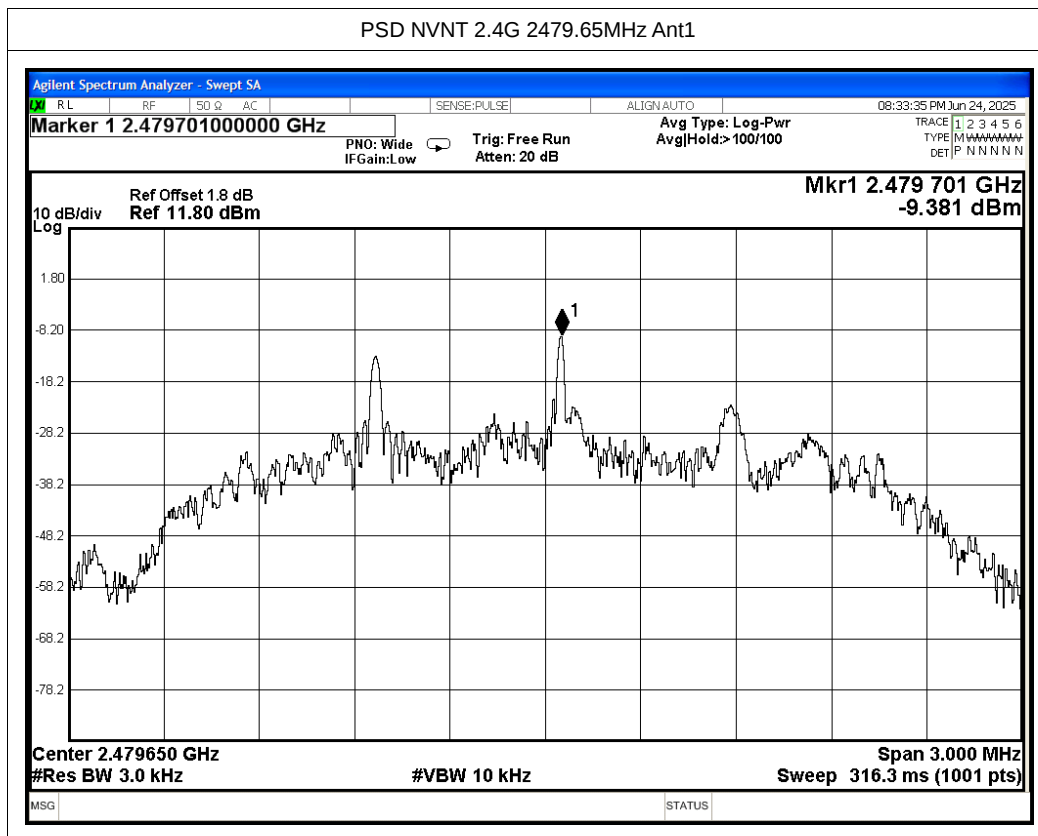
Test Graphs

PSD NVNT 2.4G 2403.65MHz Ant1



PSD NVNT 2.4G 2441.65MHz Ant1





A.4 Band Edge

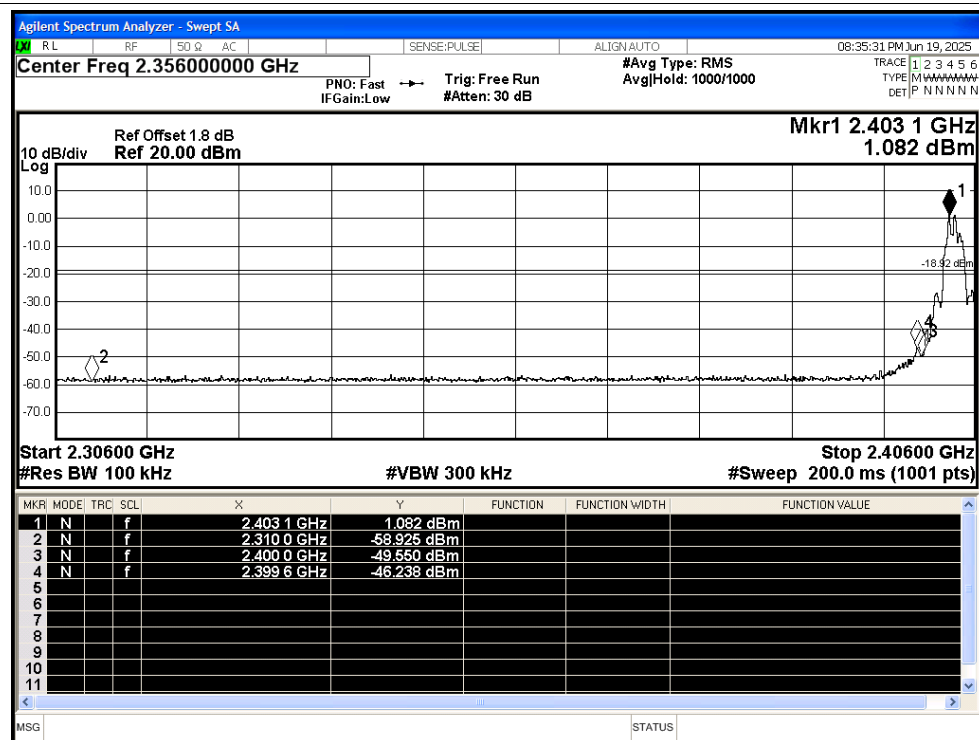
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2403.65	Ant1	-47.32	-20	Pass
NVNT	2.4G	2479.65	Ant1	-46.72	-20	Pass

Test Graphs

Band Edge NVNT 2.4G 2403.65MHz Ant1 Ref



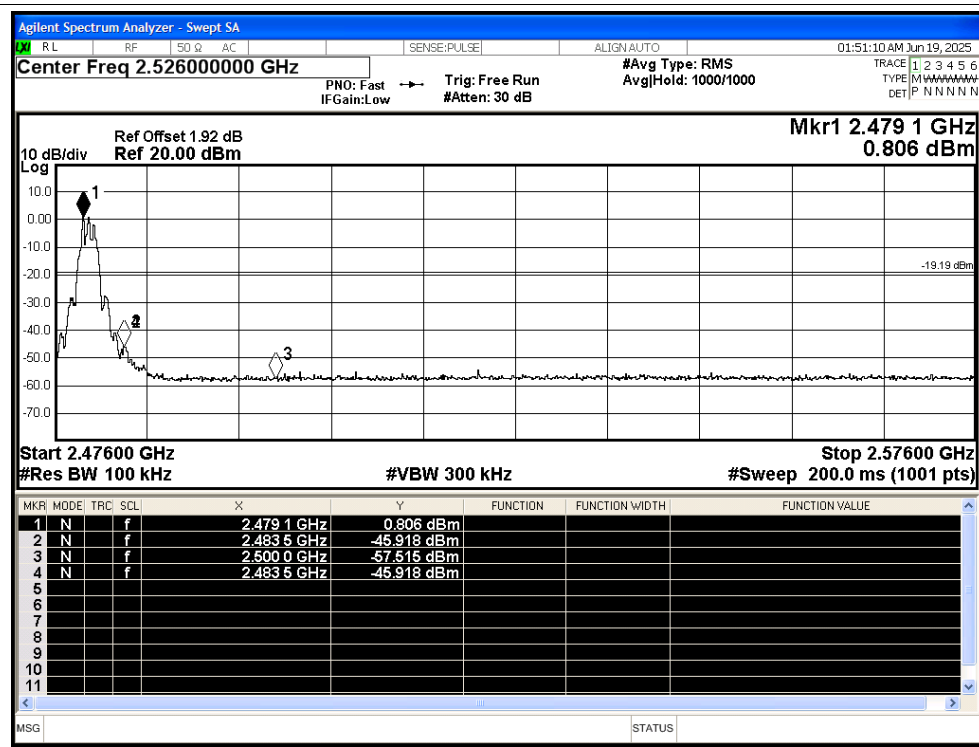
Band Edge NVNT 2.4G 2403.65MHz Ant1 Emission



Band Edge NVNT 2.4G 2479.65MHz Ant1 Ref



Band Edge NVNT 2.4G 2479.65MHz Ant1 Emission

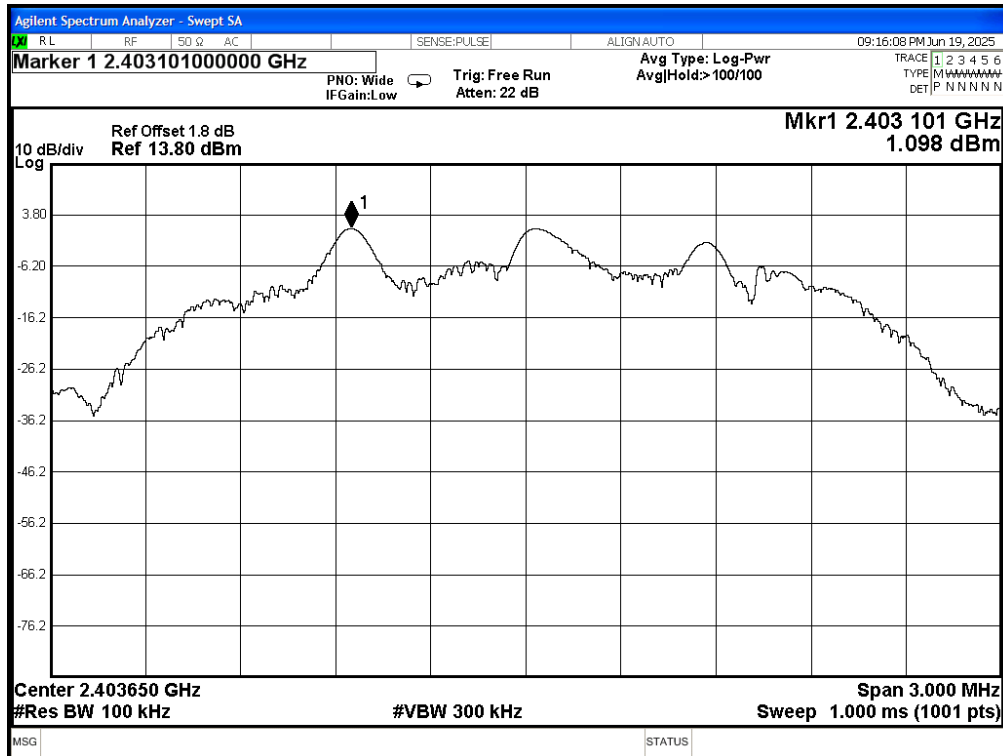


A.5 Conducted RF Spurious Emission

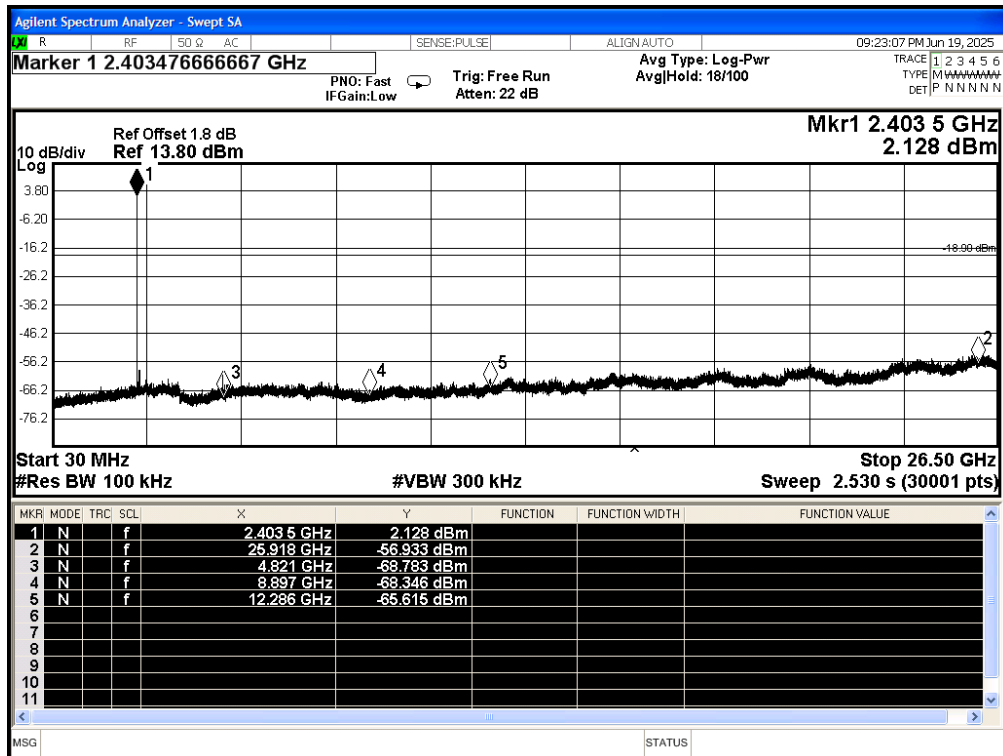
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2403.65	Ant1	1.098	-20	Pass
NVNT	2.4G	2441.65	Ant1	1.322	-20	Pass
NVNT	2.4G	2479.65	Ant1	0.712	-20	Pass

Test Graphs

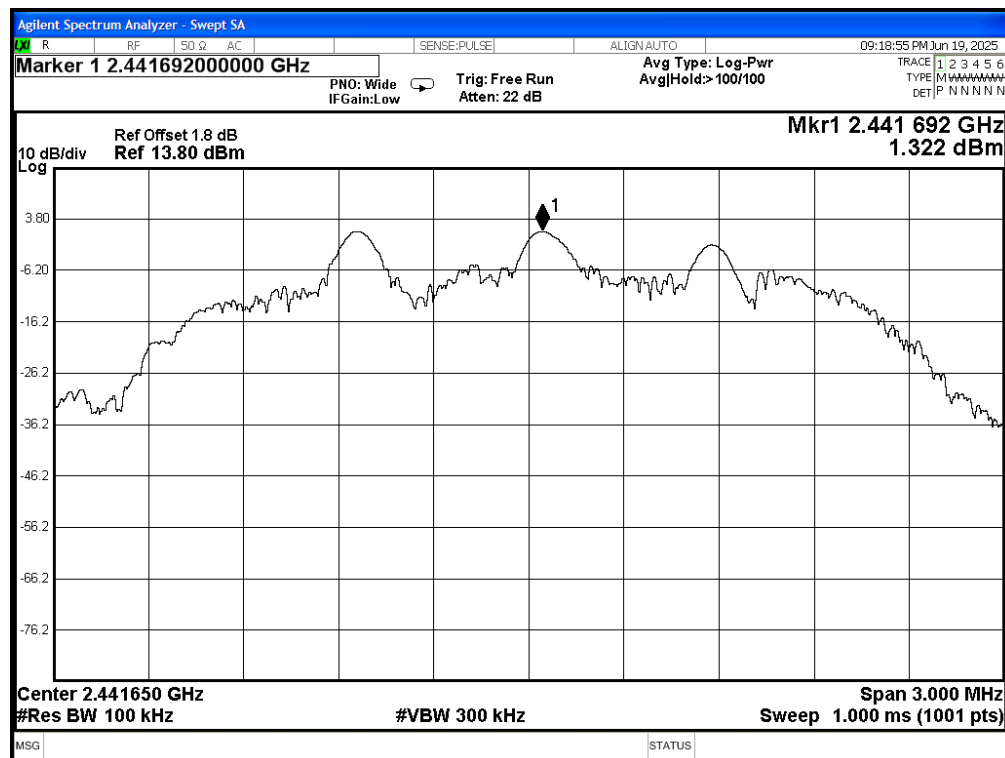
Tx. Spurious NVNT 2.4G 2403.65MHz Ant1 Ref



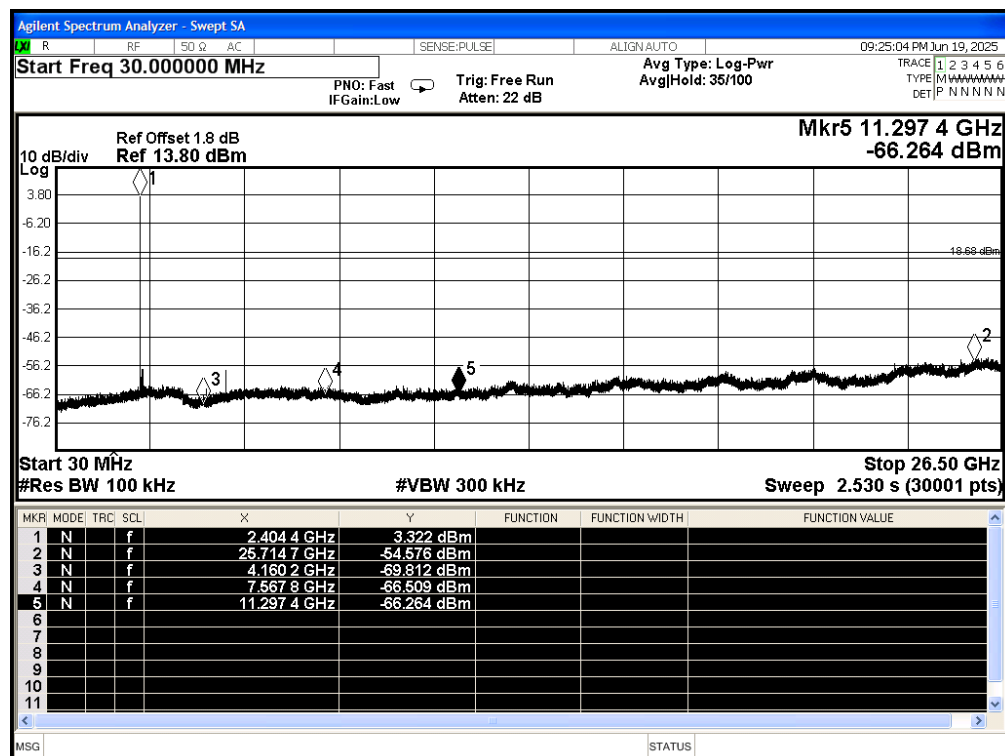
Tx. Spurious NVNT 2.4G 2403.65MHz Ant1 Emission



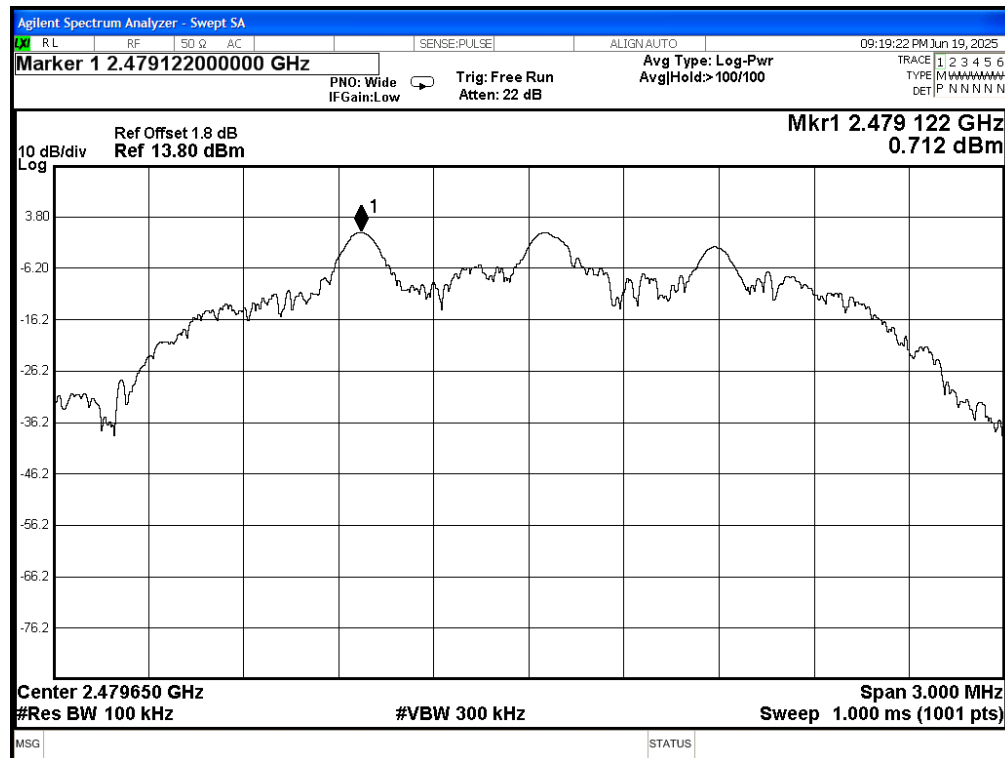
Tx. Spurious NVNT 2.4G 2441.65MHz Ant1 Ref



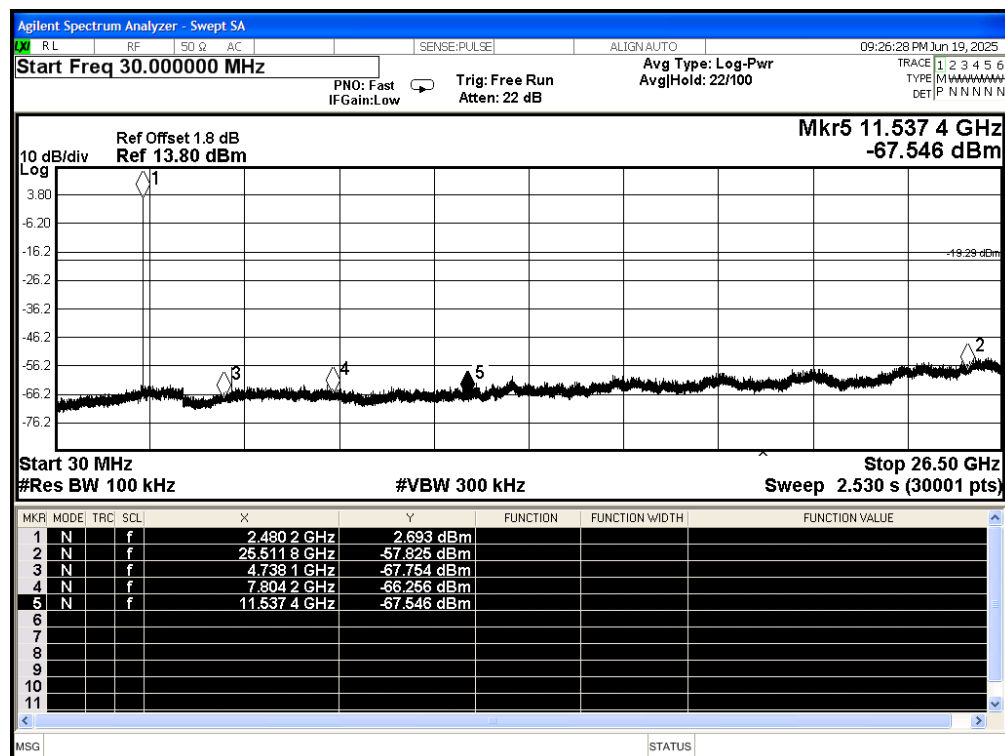
Tx. Spurious NVNT 2.4G 2441.65MHz Ant1 Emission



Tx. Spurious NVNT 2.4G 2479.65MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2479.65MHz Ant1 Emission

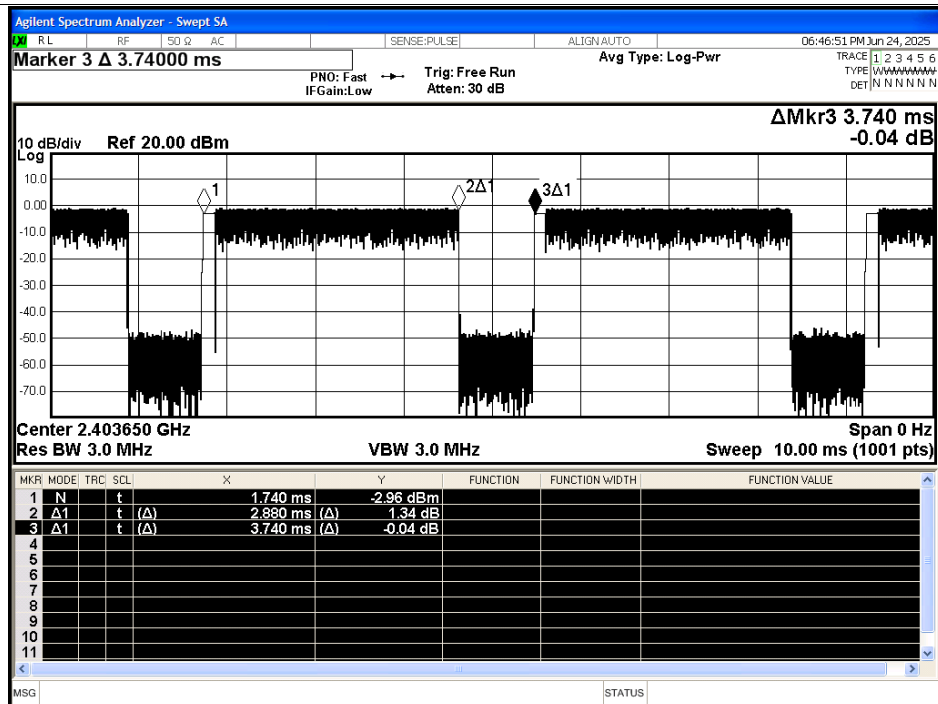


A.6 Duty Cycle

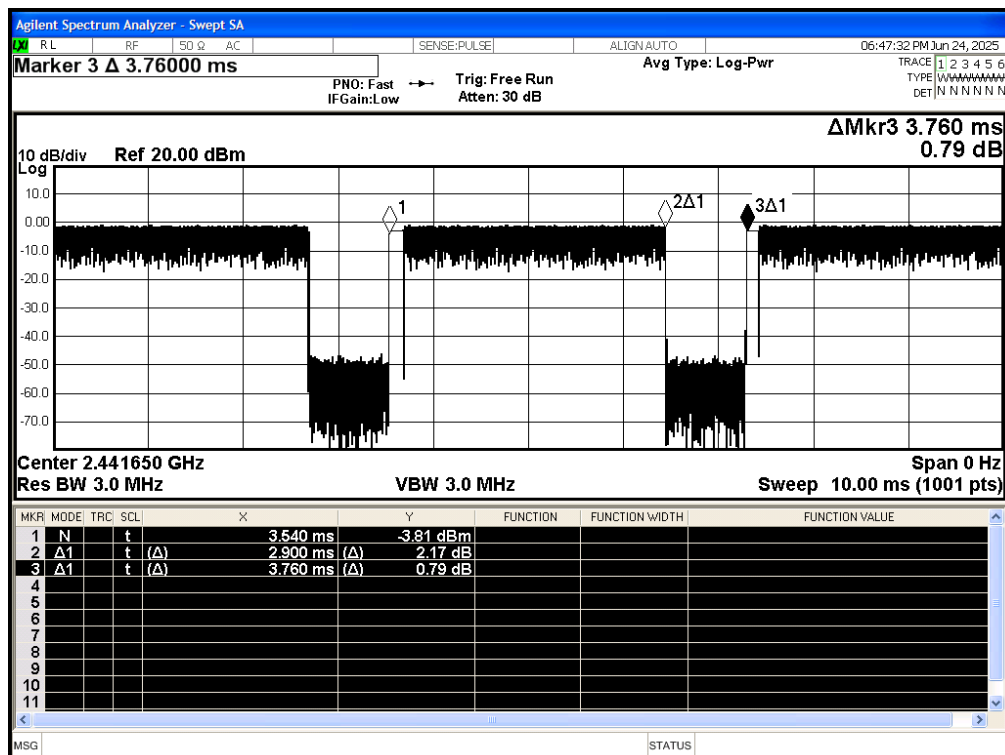
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2403.65	Ant1	77.01	1.13	0.35
NVNT	2.4G	2441.65	Ant1	77.13	1.13	0.34
NVNT	2.4G	2479.65	Ant1	77.13	1.13	0.34

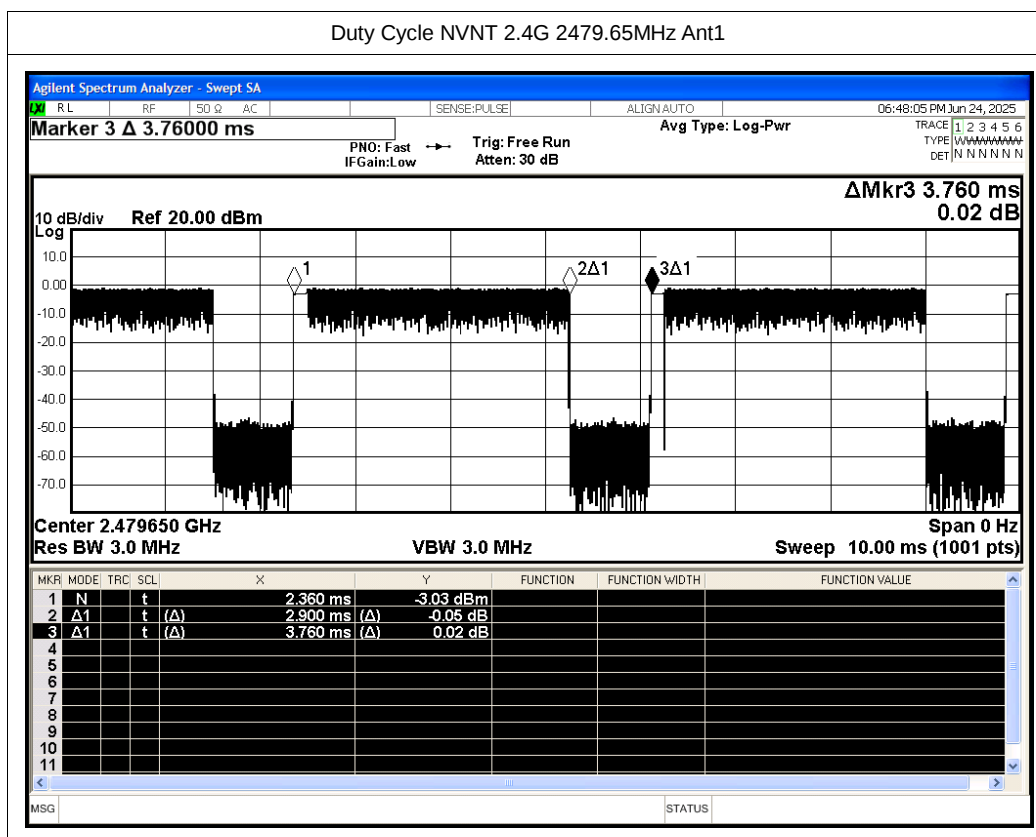
Test Graphs

Duty Cycle NVNT 2.4G 2403.65MHz Ant1



Duty Cycle NVNT 2.4G 2441.65MHz Ant1



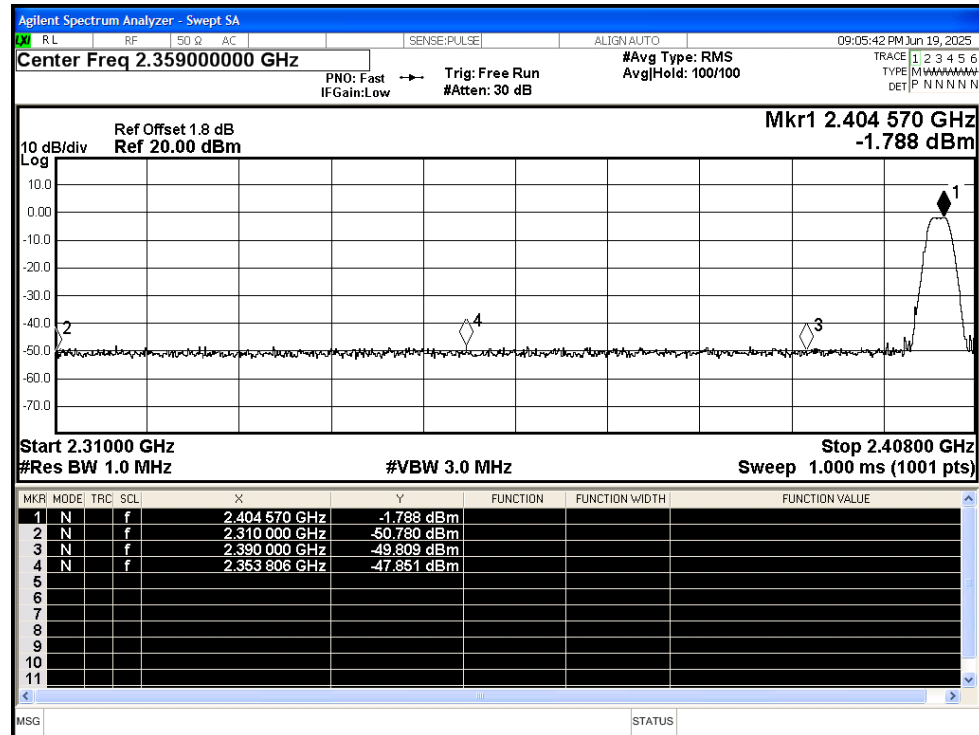


A.7 Restrict Band

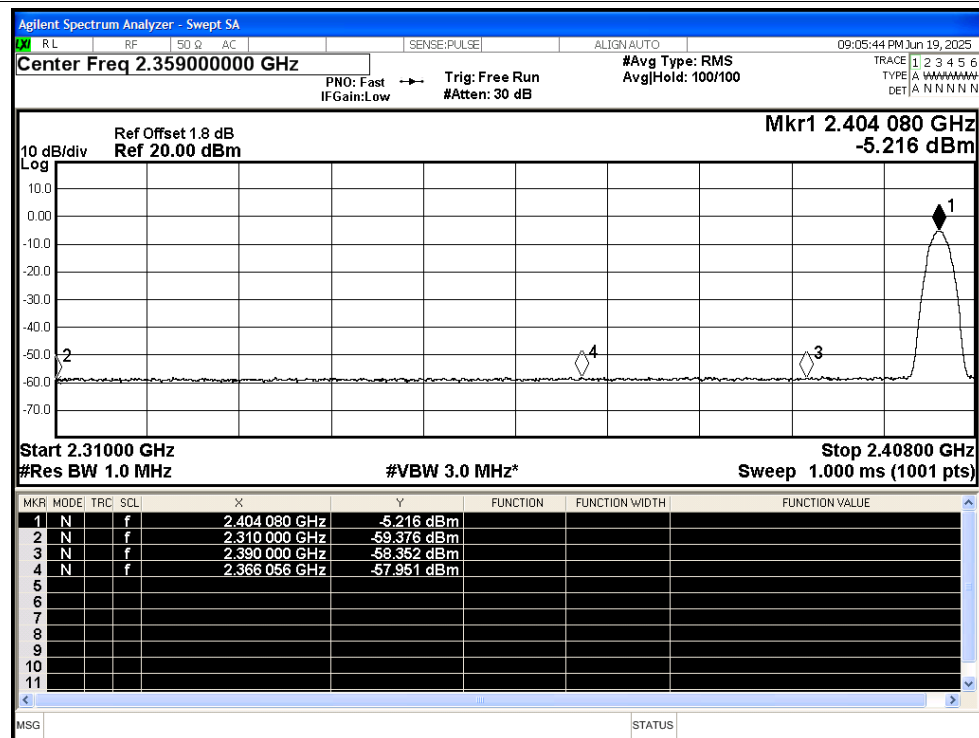
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	2.4G	2403.65	Ant1	2310	-50.78	3.85	-	48.30	Peak	74	Pass
NVNT	2.4G	2403.65	Ant1	2310	-59.38	3.85	1.13	40.83	Average	54	Pass
NVNT	2.4G	2403.65	Ant1	2353.806	-47.85	3.85	-	51.23	Peak	74	Pass
NVNT	2.4G	2403.65	Ant1	2366.056	-57.95	3.85	1.13	42.26	Average	54	Pass
NVNT	2.4G	2403.65	Ant1	2390	-49.81	3.85	-	49.27	Peak	74	Pass
NVNT	2.4G	2403.65	Ant1	2390	-58.35	3.85	1.13	41.86	Average	54	Pass
NVNT	2.4G	2479.65	Ant1	2483.5	-36.91	3.85	-	62.17	Peak	74	Pass
NVNT	2.4G	2479.65	Ant1	2483.5	-57.67	3.85	1.13	42.54	Average	54	Pass
NVNT	2.4G	2479.65	Ant1	2483.5881	-37.32	3.85	-	61.76	Peak	74	Pass
NVNT	2.4G	2479.65	Ant1	2483.56375	-57.6	3.85	1.13	42.61	Average	54	Pass
NVNT	2.4G	2479.65	Ant1	2500	-47.73	3.85	-	51.35	Peak	74	Pass
NVNT	2.4G	2479.65	Ant1	2500	-58.24	3.85	1.13	41.97	Average	54	Pass

Test Graphs

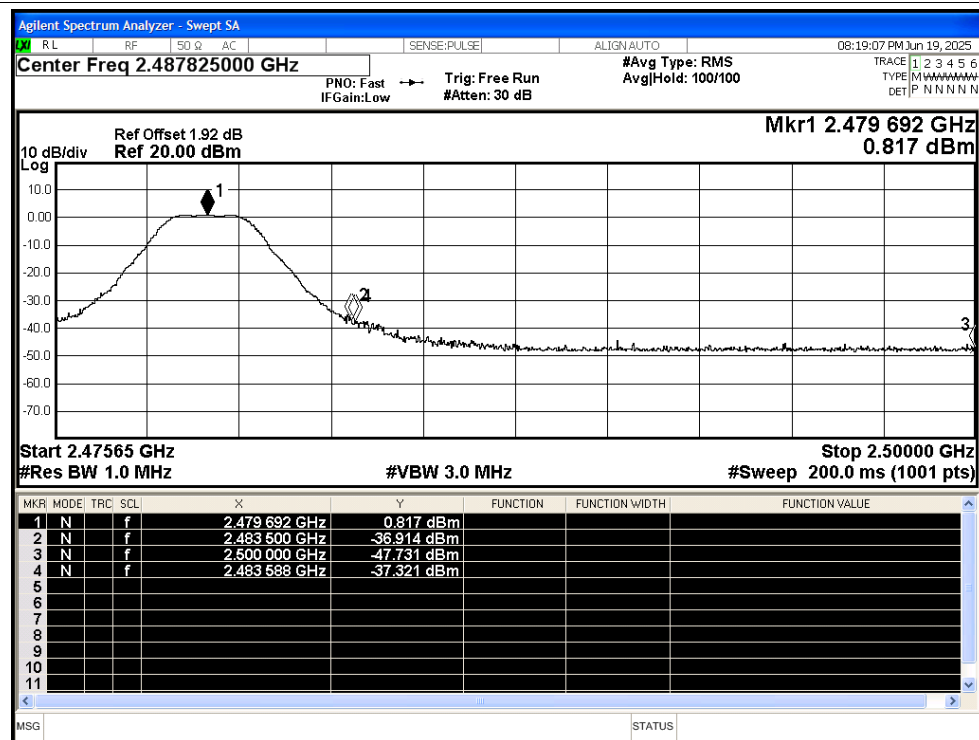
Restrict Band NVNT 2.4G 2403.65MHz Ant1 Peak



Restrict Band NVNT 2.4G 2403.65MHz Ant1 Average



Restrict Band NVNT 2.4G 2479.65MHz Ant1 Peak



Restrict Band NVNT 2.4G 2479.65MHz Ant1 Average

