

Appendix A

RF Test Data for 2.4G (Conducted Measurement)

Product Name: Wireless In-Ear System

Test Model: TA101

Environmental Conditions

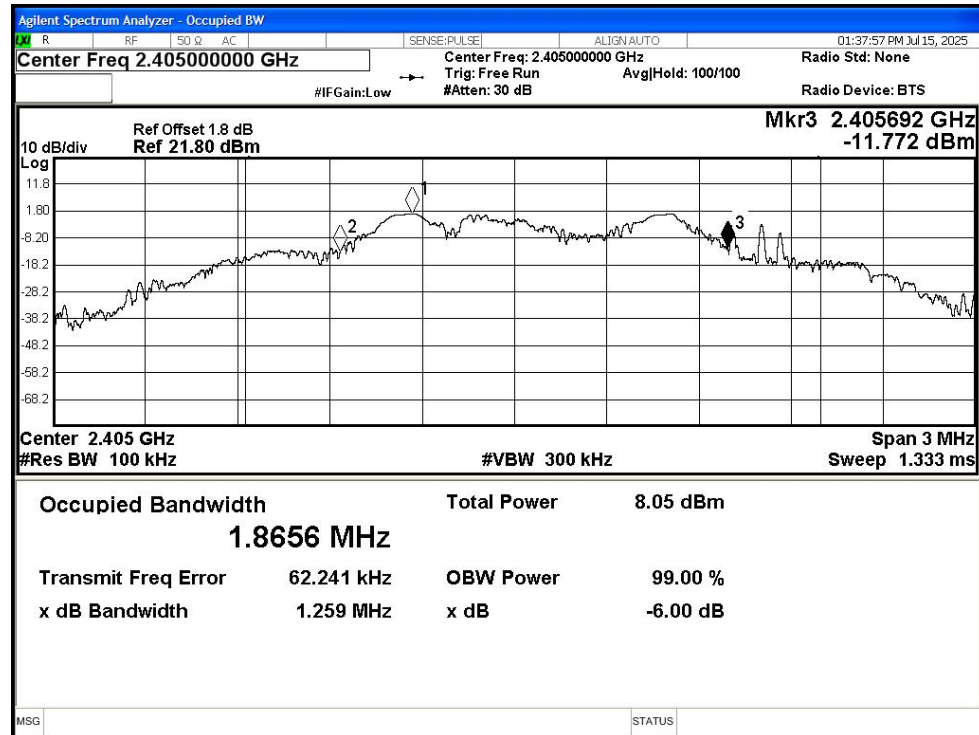
Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Yongwang Li
Supervised by:	Yan Chen

A.1 -6dB Bandwidth

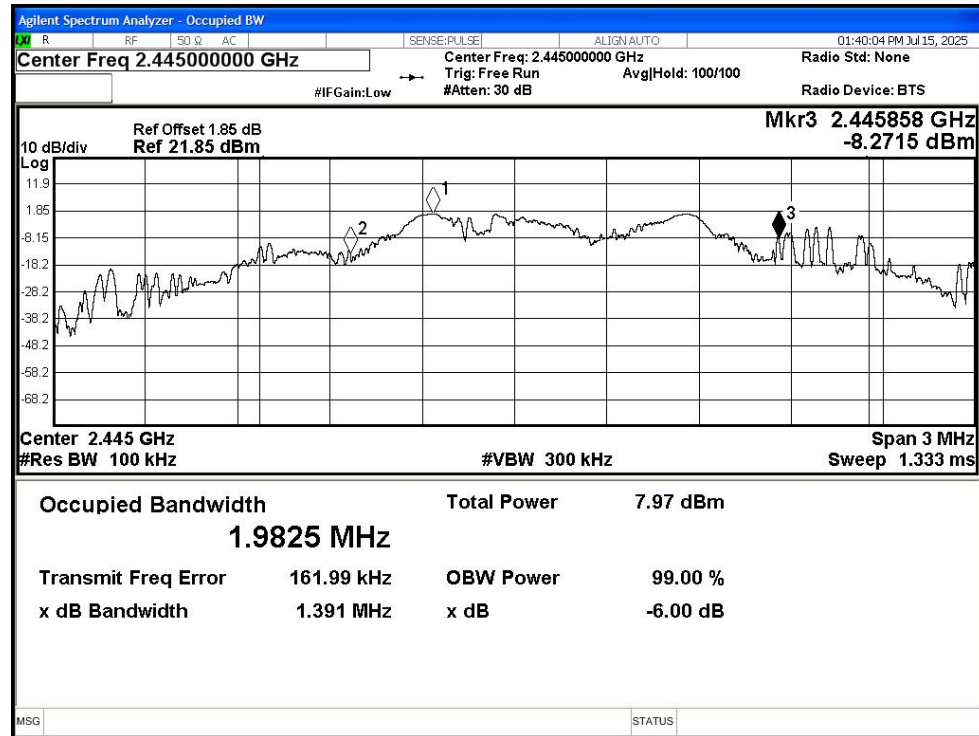
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	2.4G	2405	Ant1	1.259	≥ 0.5	Pass
NVNT	2.4G	2445	Ant1	1.391	≥ 0.5	Pass
NVNT	2.4G	2475	Ant1	1.515	≥ 0.5	Pass

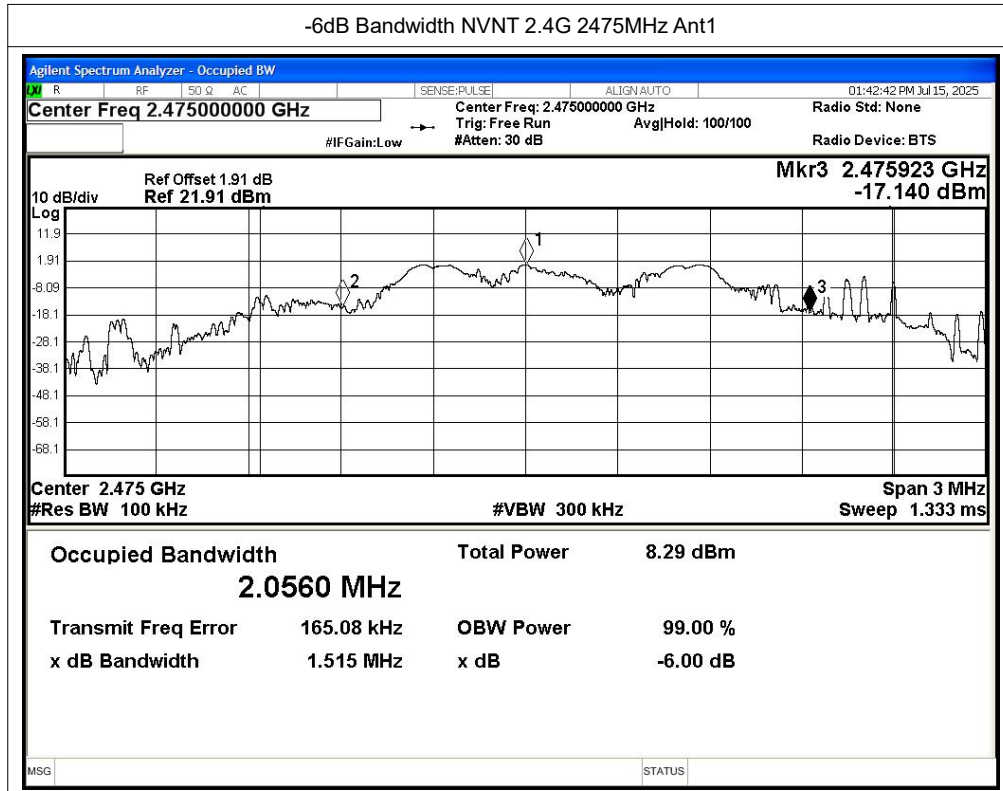
Test Graphs

-6dB Bandwidth NVNT 2.4G 2405MHz Ant1



-6dB Bandwidth NVNT 2.4G 2445MHz Ant1



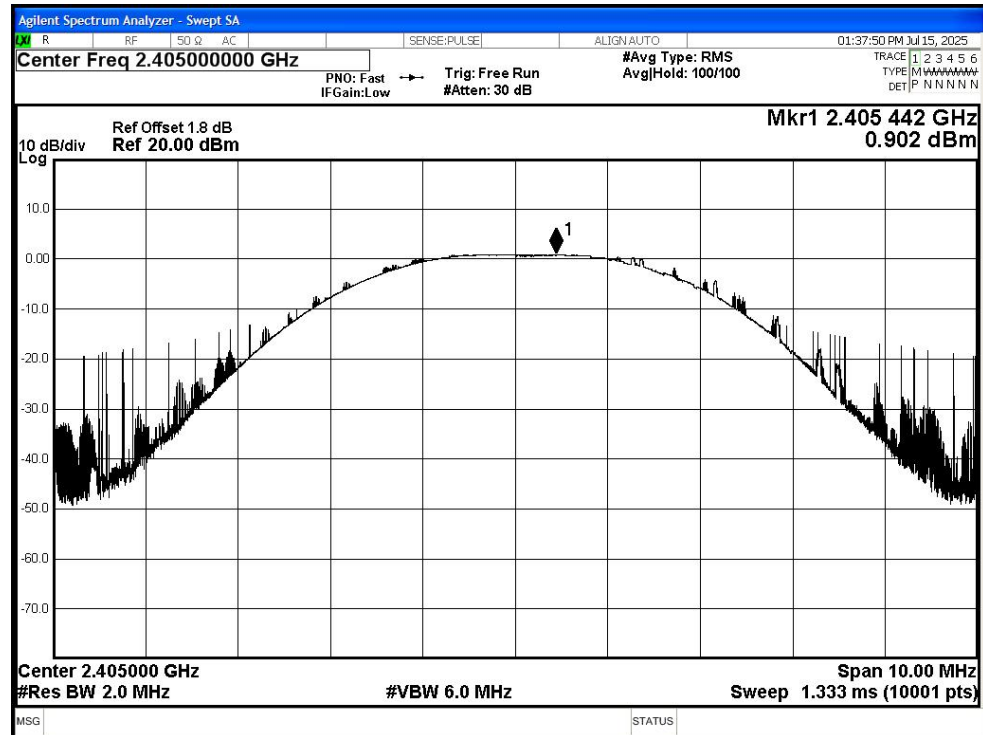


A.2 Maximum Peak Conducted Output Power

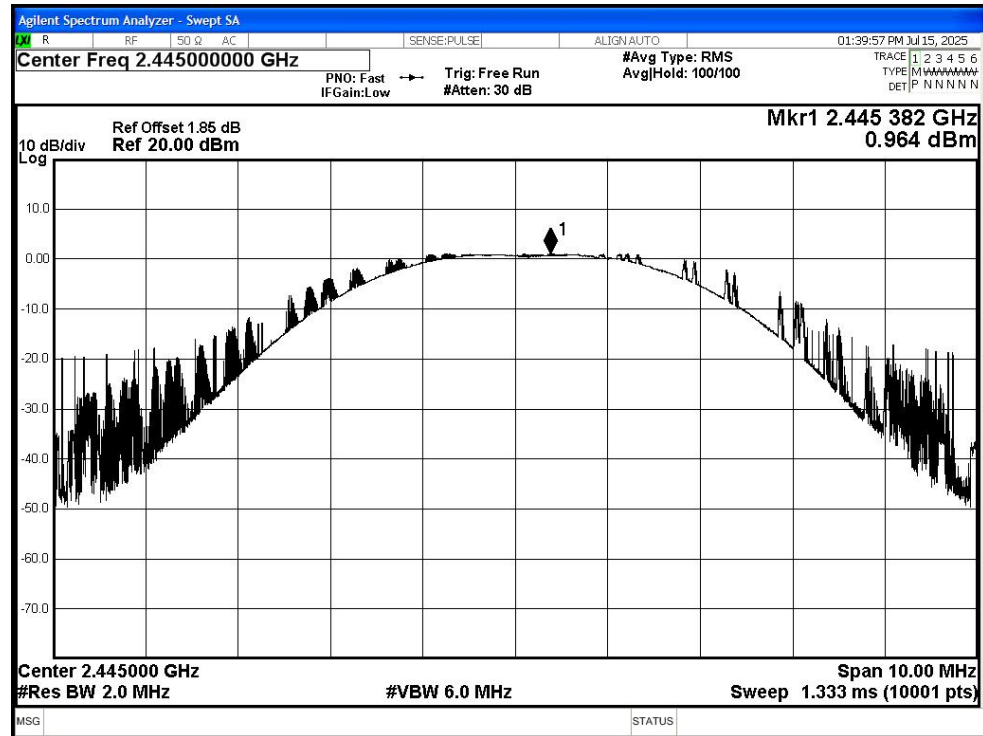
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	2.4G	2405	Ant1	0.9	30	Pass
NVNT	2.4G	2445	Ant1	0.96	30	Pass
NVNT	2.4G	2475	Ant1	0.78	30	Pass

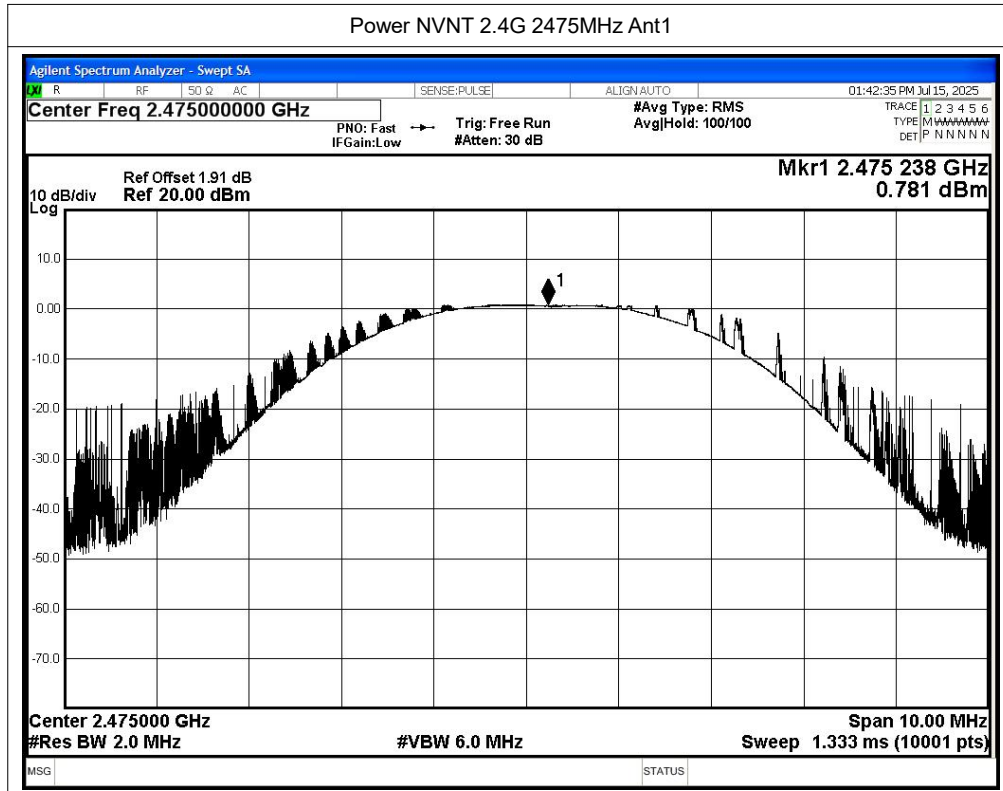
Test Graphs

Power NVNT 2.4G 2405MHz Ant1



Power NVNT 2.4G 2445MHz Ant1



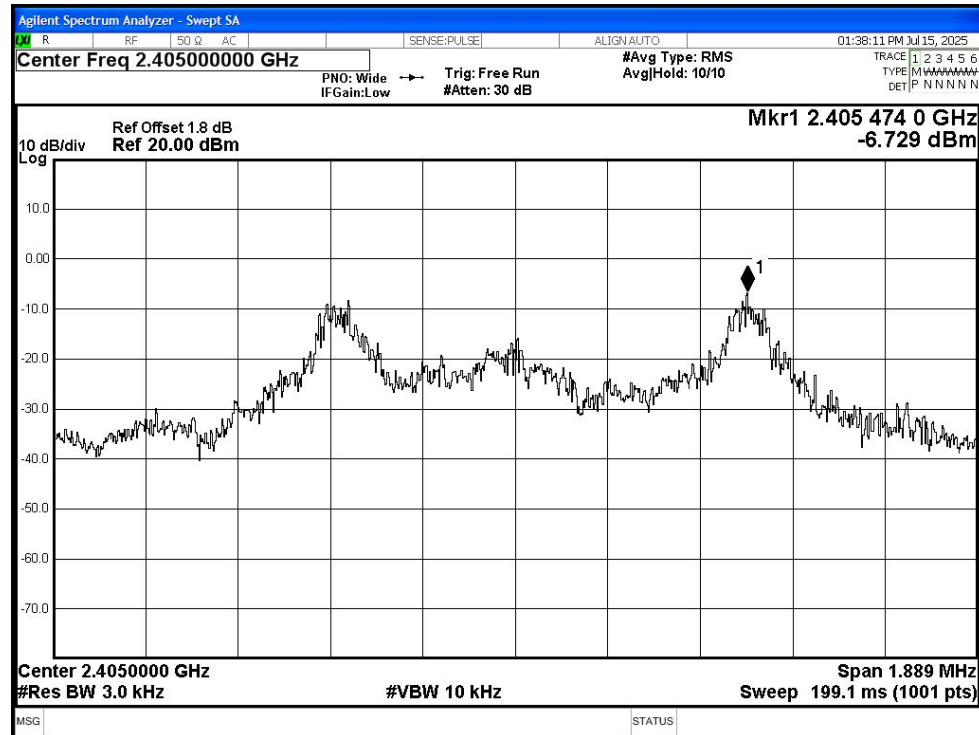


A.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	2.4G	2405	Ant1	-6.73	8	Pass
NVNT	2.4G	2445	Ant1	-8.85	8	Pass
NVNT	2.4G	2475	Ant1	-6.84	8	Pass

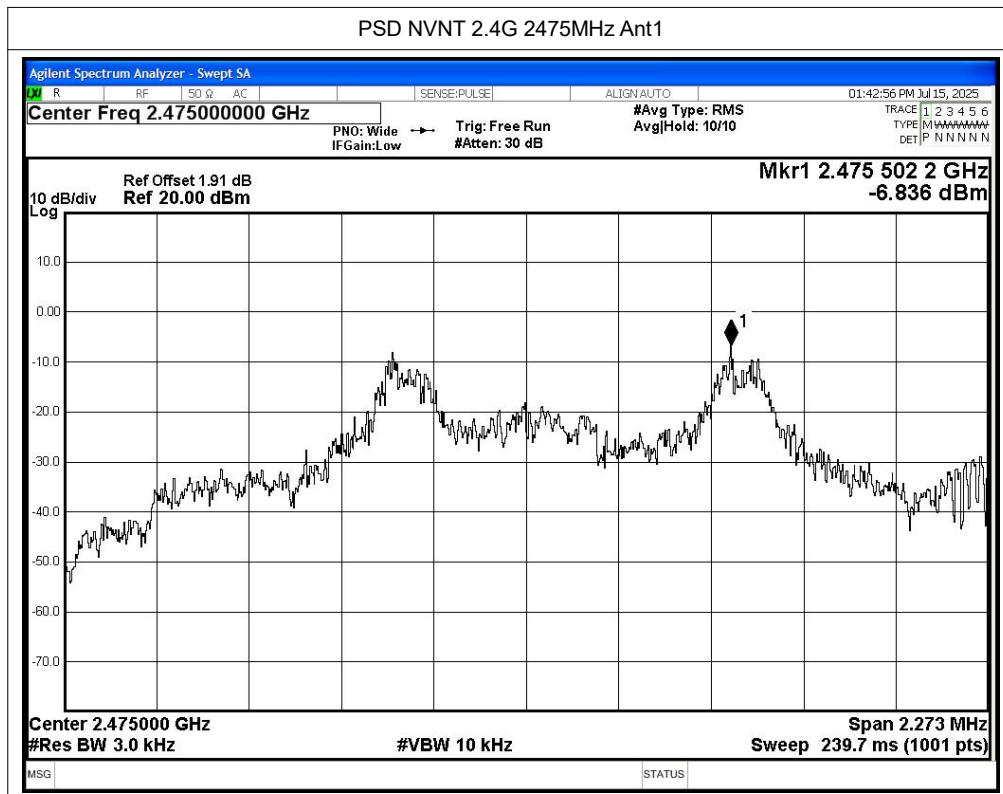
Test Graphs

PSD NVNT 2.4G 2405MHz Ant1



PSD NVNT 2.4G 2445MHz Ant1



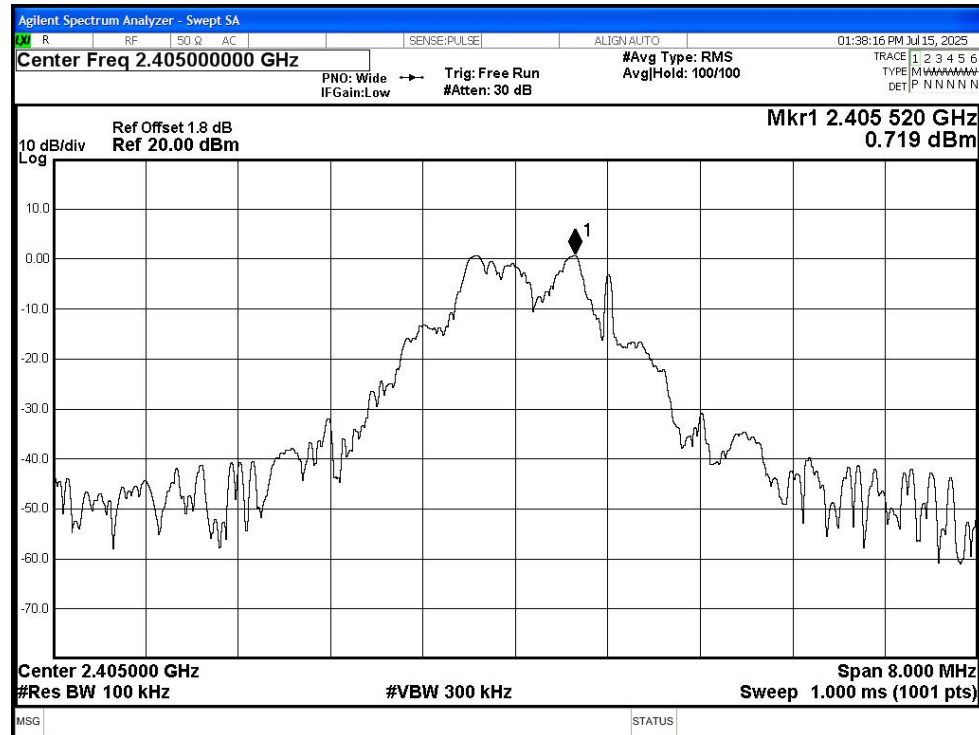


A.4 Band Edge

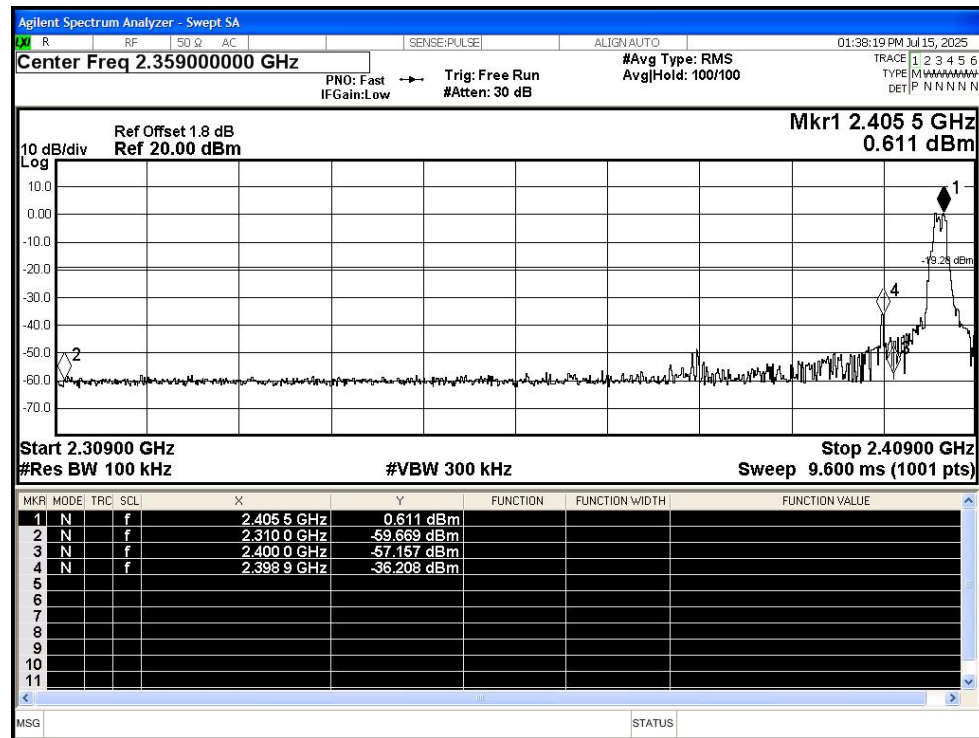
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2405	Ant1	-36.93	-20	Pass
NVNT	2.4G	2475	Ant1	-50.35	-20	Pass

Test Graphs

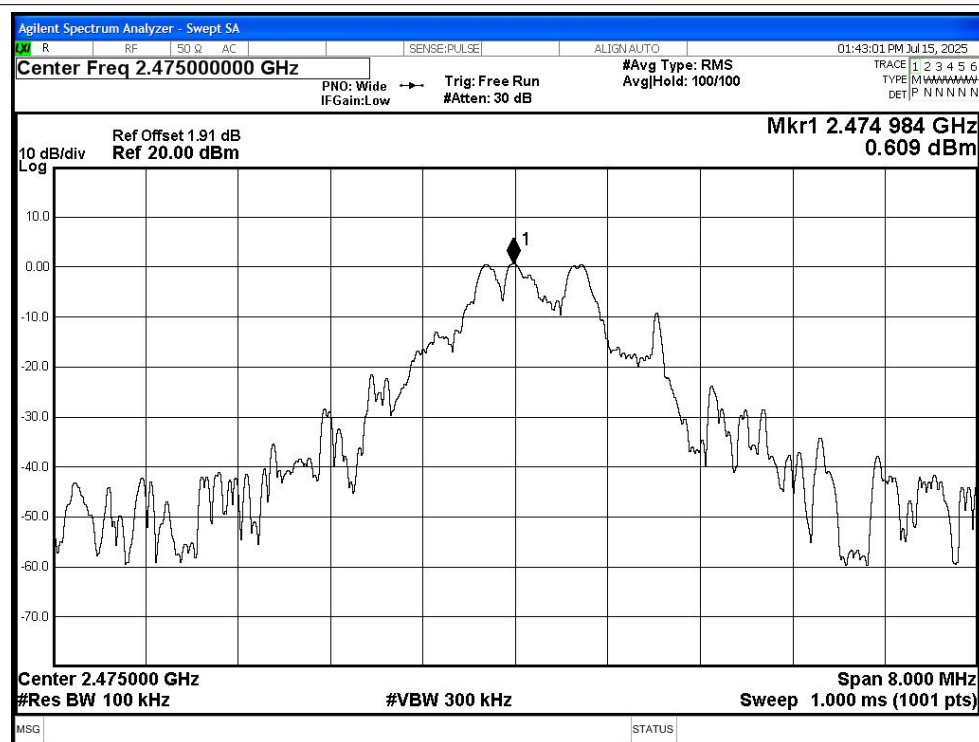
Band Edge NVNT 2.4G 2405MHz Ant1 Ref



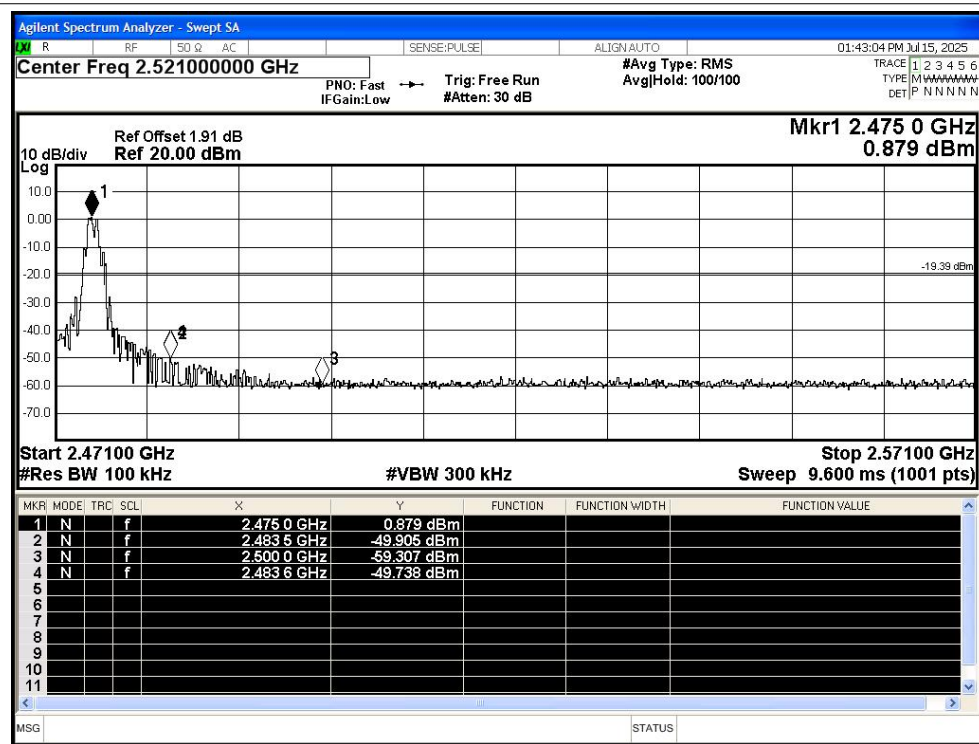
Band Edge NVNT 2.4G 2405MHz Ant1 Emission



Band Edge NVNT 2.4G 2475MHz Ant1 Ref



Band Edge NVNT 2.4G 2475MHz Ant1 Emission

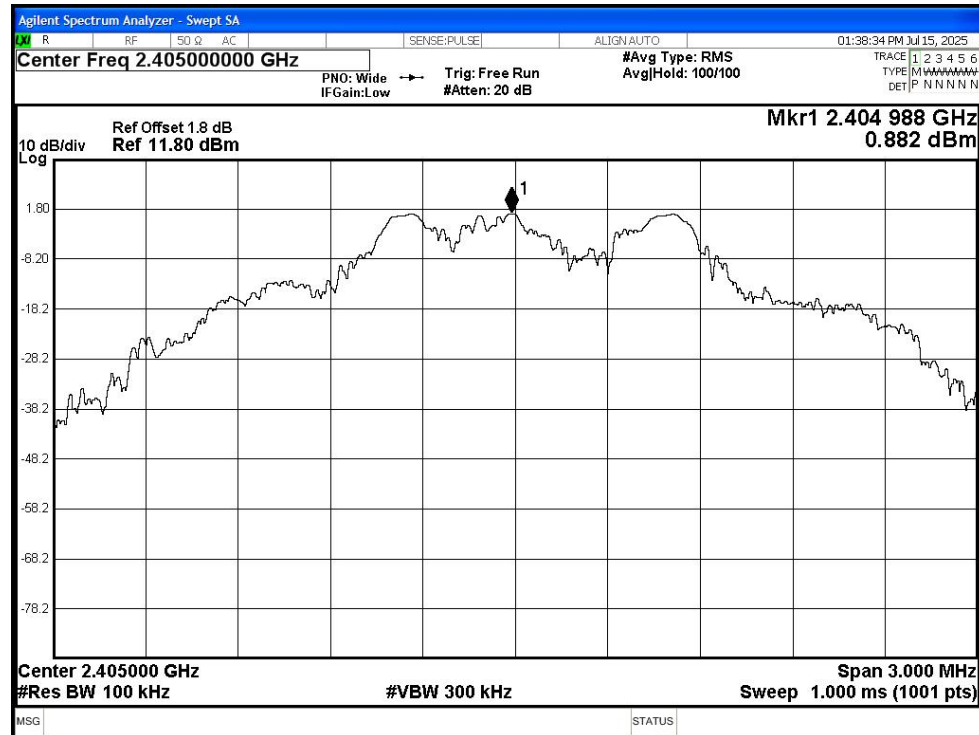


A.5 Conducted RF Spurious Emission

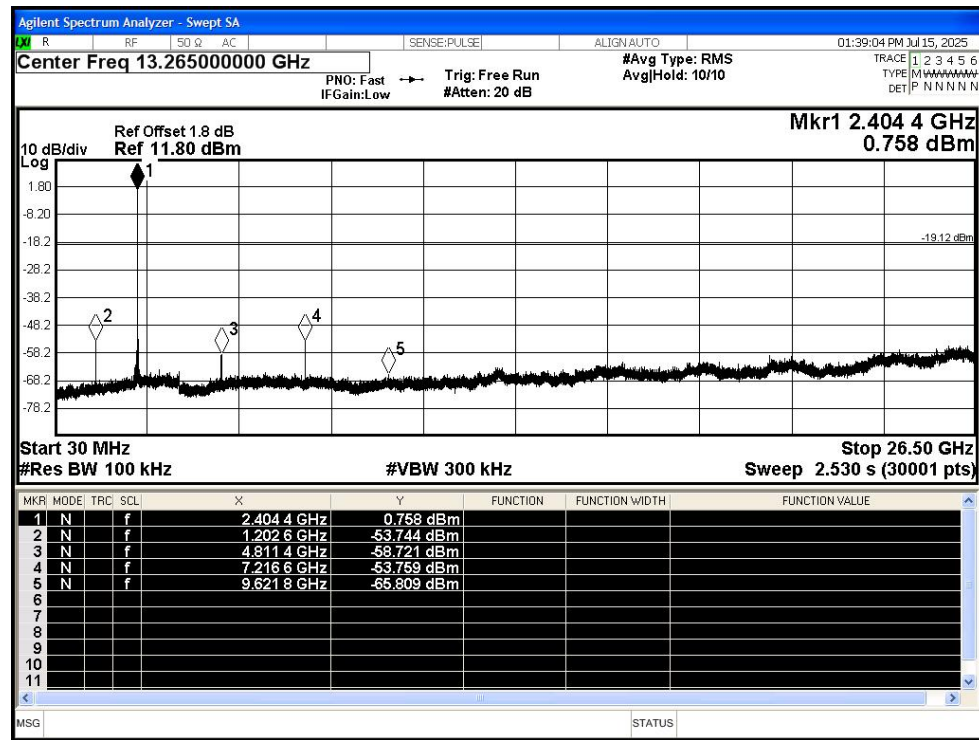
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	2.4G	2405	Ant1	-54.63	-20	Pass
NVNT	2.4G	2445	Ant1	-53.09	-20	Pass
NVNT	2.4G	2475	Ant1	-50.13	-20	Pass

Test Graphs

Tx. Spurious NVNT 2.4G 2405MHz Ant1 Ref



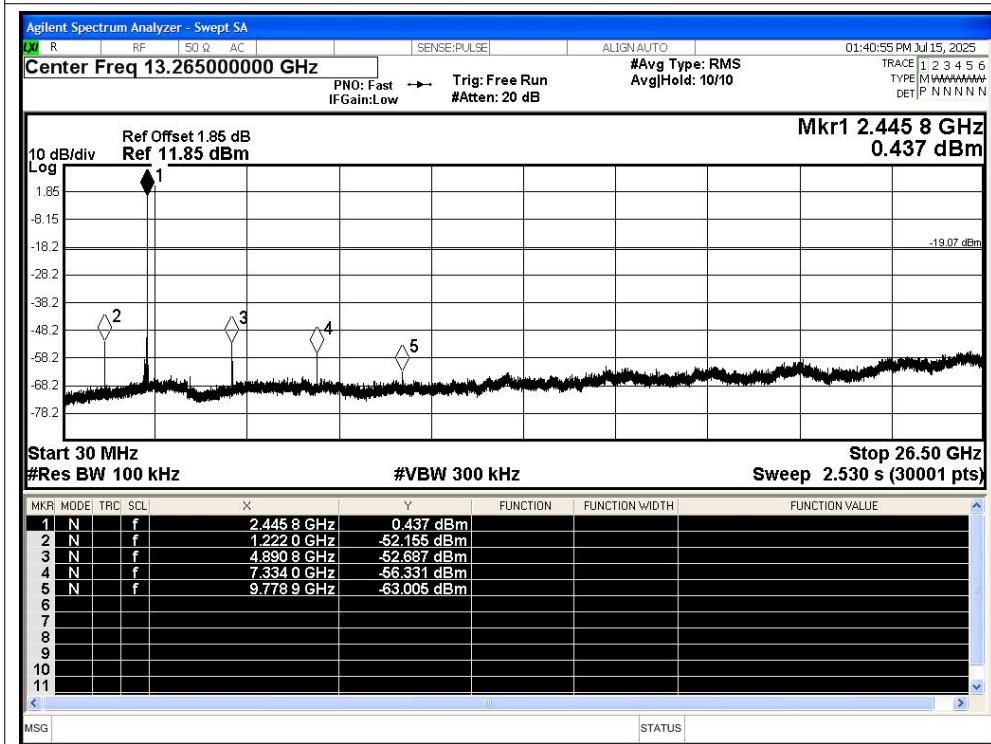
Tx. Spurious NVNT 2.4G 2405MHz Ant1 Emission



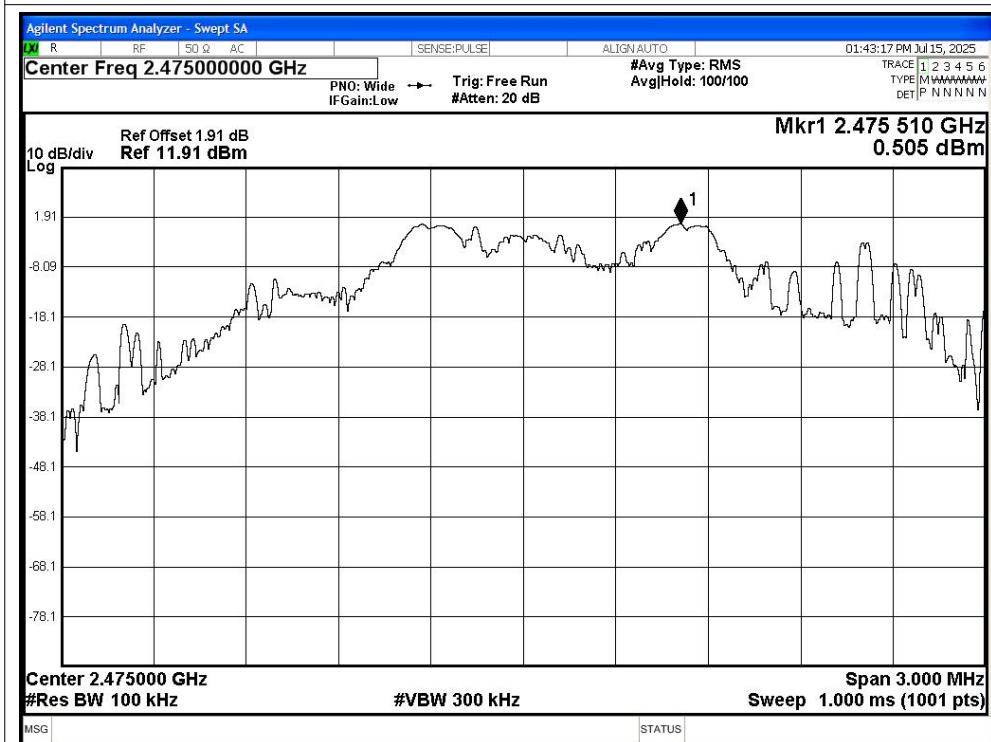
Tx. Spurious NVNT 2.4G 2445MHz Ant1 Ref



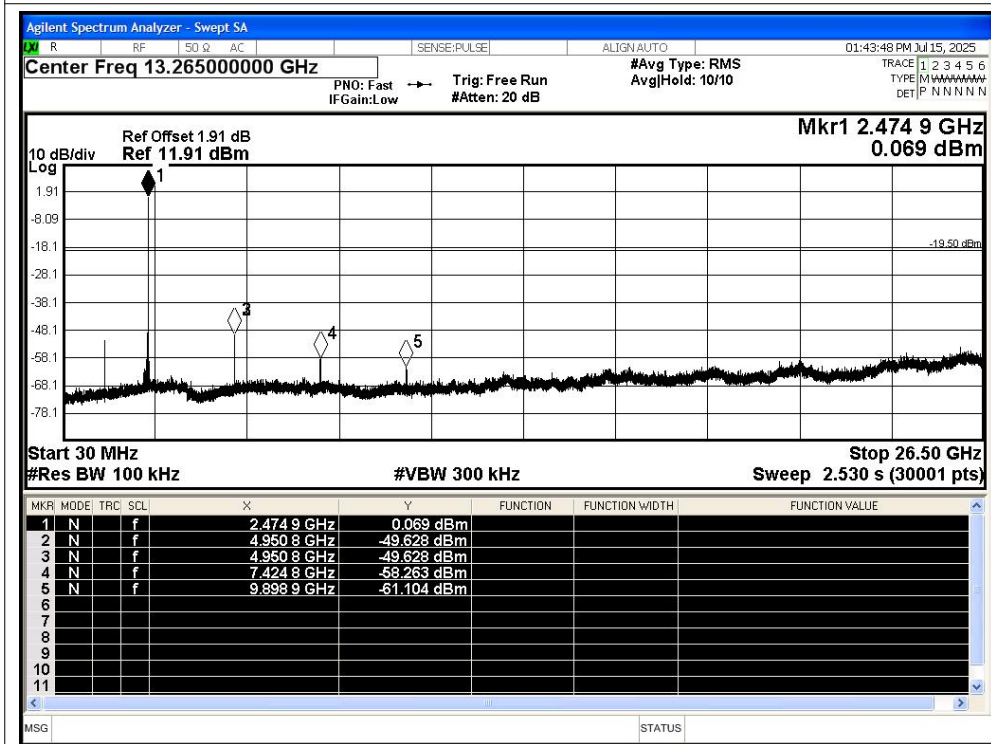
Tx. Spurious NVNT 2.4G 2445MHz Ant1 Emission



Tx. Spurious NVNT 2.4G 2475MHz Ant1 Ref



Tx. Spurious NVNT 2.4G 2475MHz Ant1 Emission

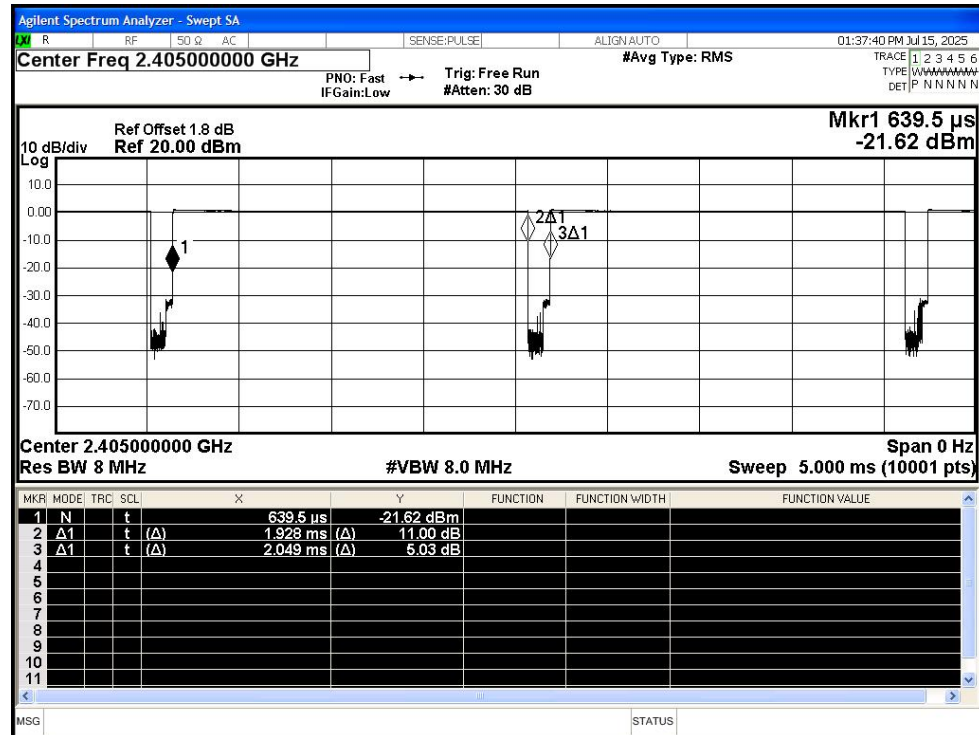


A.6 Duty Cycle

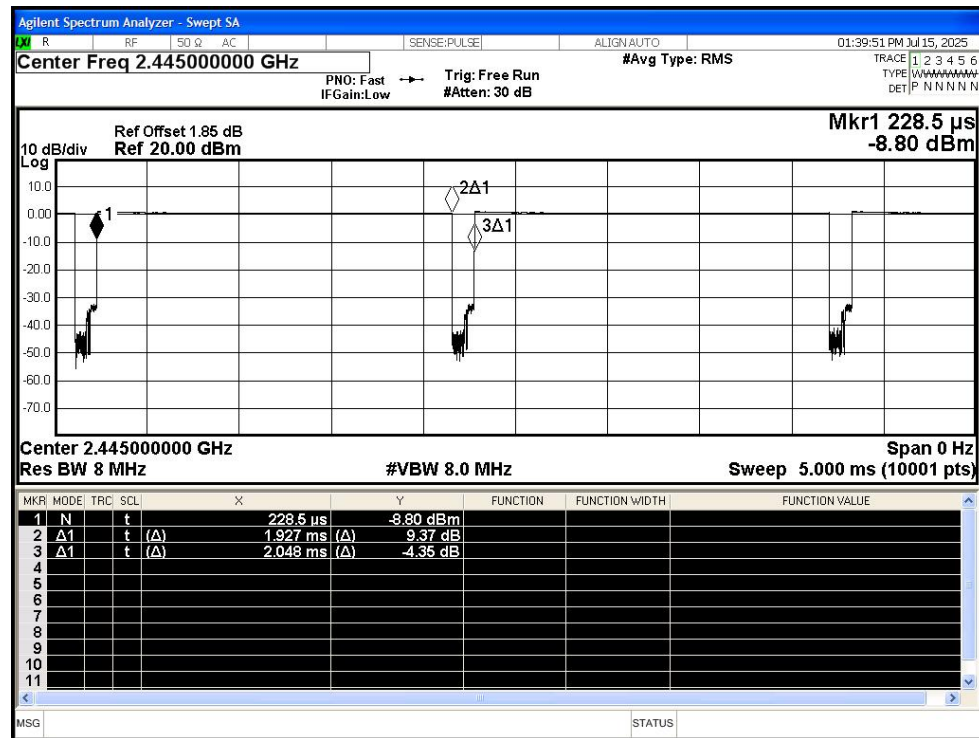
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	2.4G	2405	Ant1	94.12	0.26	0.52
NVNT	2.4G	2445	Ant1	94.09	0.26	0.52
NVNT	2.4G	2475	Ant1	94.09	0.26	0.52

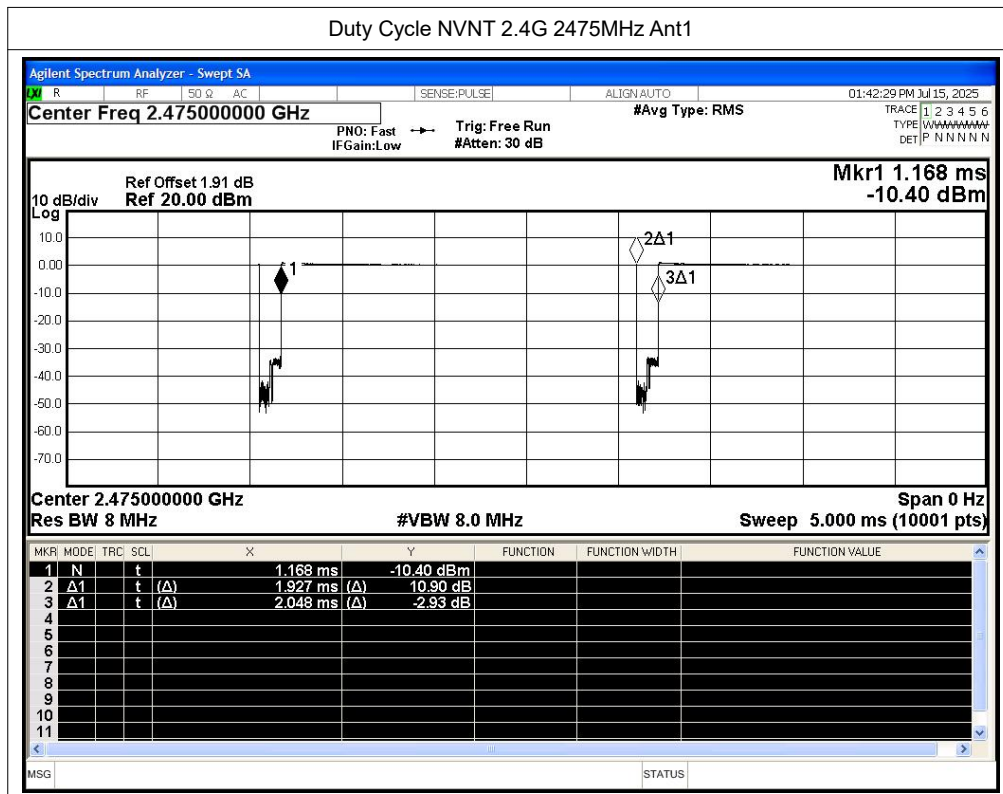
Test Graphs

Duty Cycle NVNT 2.4G 2405MHz Ant1



Duty Cycle NVNT 2.4G 2445MHz Ant1



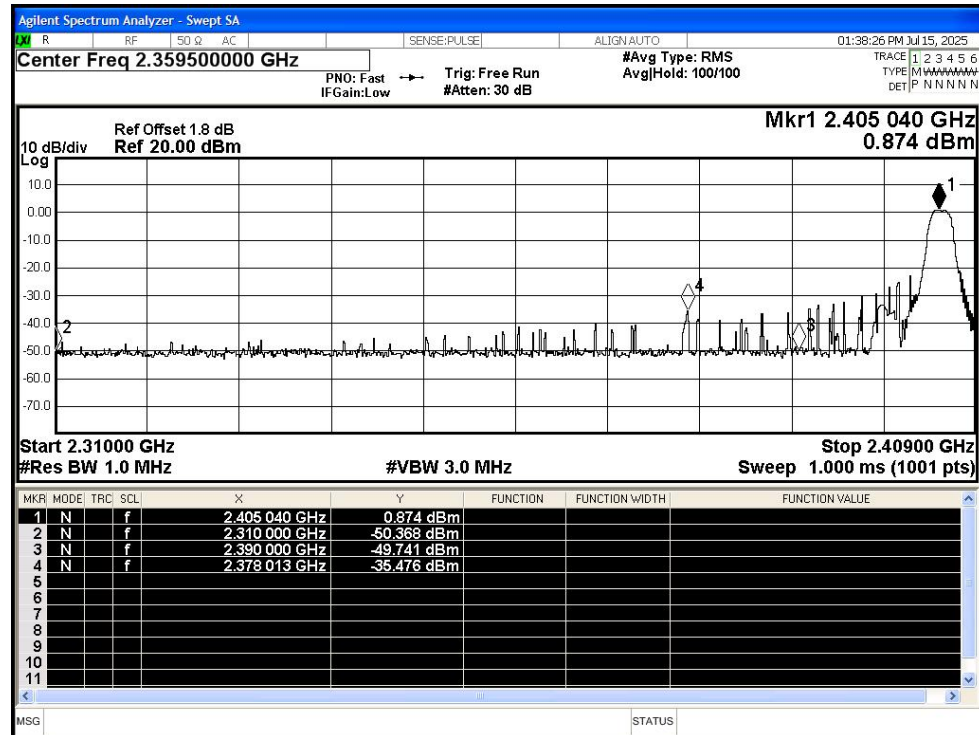


A.7 Restrict Band

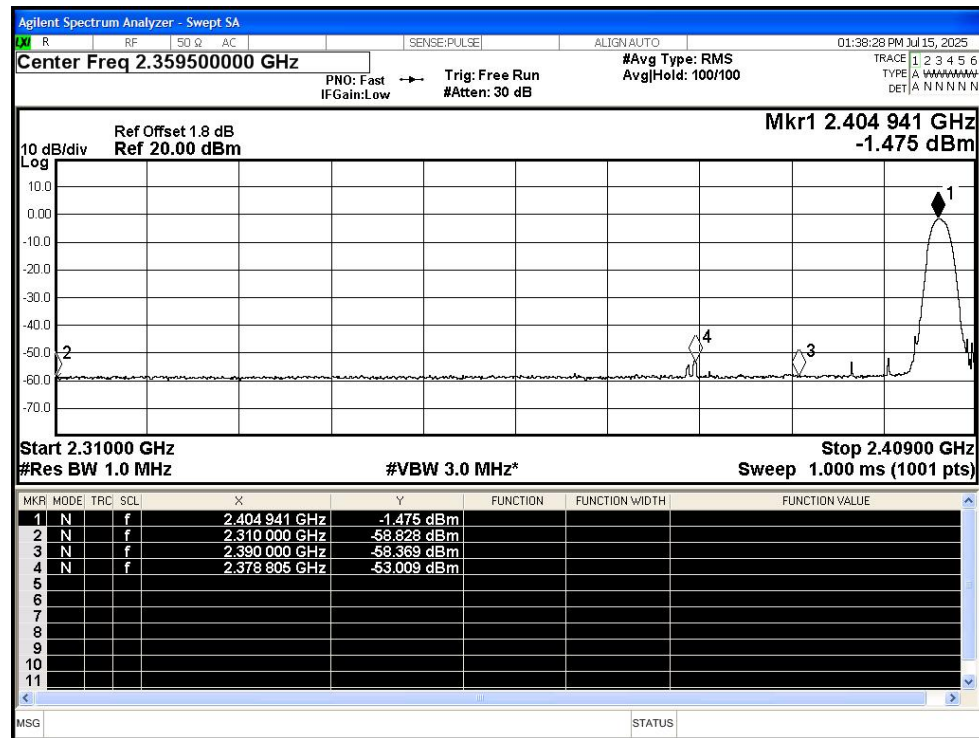
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	2.4G	2405	Ant1	2310	-50.37	2	-	46.89	Peak	74	Pass
NVNT	2.4G	2405	Ant1	2310	-58.83	2	0.26	38.69	Average	54	Pass
NVNT	2.4G	2405	Ant1	2378.013	-35.48	2	-	61.78	Peak	74	Pass
NVNT	2.4G	2405	Ant1	2378.805	-53.01	2	0.26	44.51	Average	54	Pass
NVNT	2.4G	2405	Ant1	2390	-49.74	2	-	47.52	Peak	74	Pass
NVNT	2.4G	2405	Ant1	2390	-58.37	2	0.26	39.15	Average	54	Pass
NVNT	2.4G	2475	Ant1	2483.5	-49.9	2	-	47.36	Peak	74	Pass
NVNT	2.4G	2475	Ant1	2483.5	-58.24	2	0.26	39.28	Average	54	Pass
NVNT	2.4G	2475	Ant1	2484.543	-33.36	2	-	63.9	Peak	74	Pass
NVNT	2.4G	2475	Ant1	2484.833	-52.67	2	0.26	44.85	Average	54	Pass
NVNT	2.4G	2475	Ant1	2500	-51.02	2	-	46.24	Peak	74	Pass
NVNT	2.4G	2475	Ant1	2500	-58.16	2	0.26	39.36	Average	54	Pass

Test Graphs

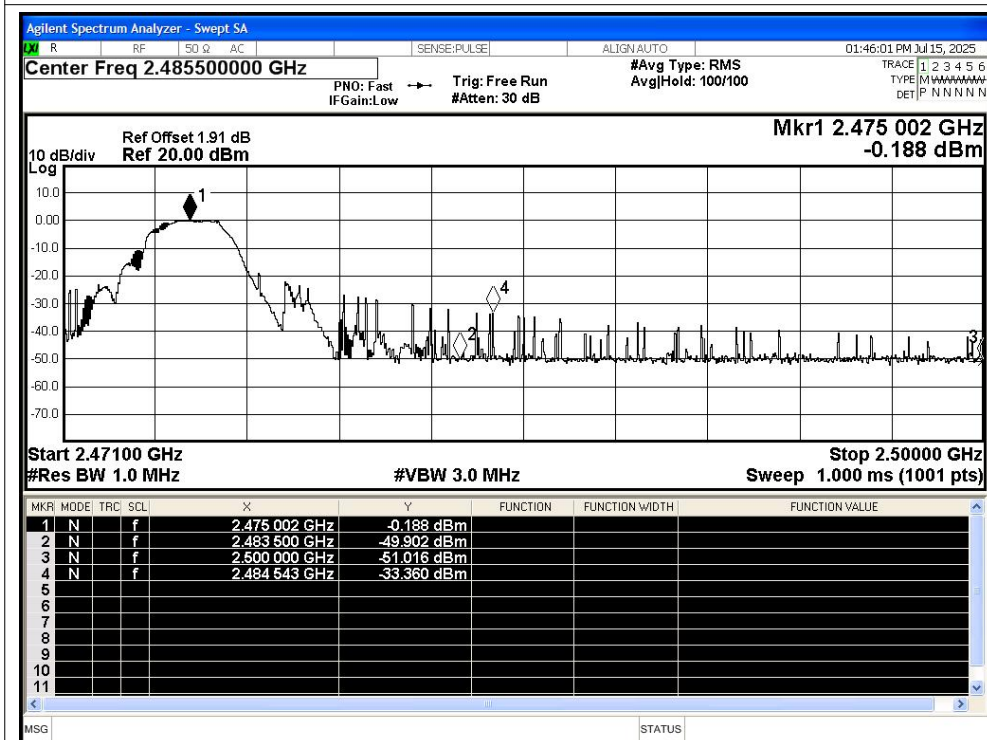
Restrict Band NVNT 2.4G 2405MHz Ant1 Peak



Restrict Band NVNT 2.4G 2405MHz Ant1 Average



Restrict Band NVNT 2.4G 2475MHz Ant1 Peak



Restrict Band NVNT 2.4G 2475MHz Ant1 Average

