

FCC Appendix RF Test Data for BLE

FCC ID : 2ACN7RMC102

Company : Shenzhen Fitcare Electronics Co., Ltd

EUT : Performance Monitor

Model Number : RMC102

Report No. : CTA26081702801

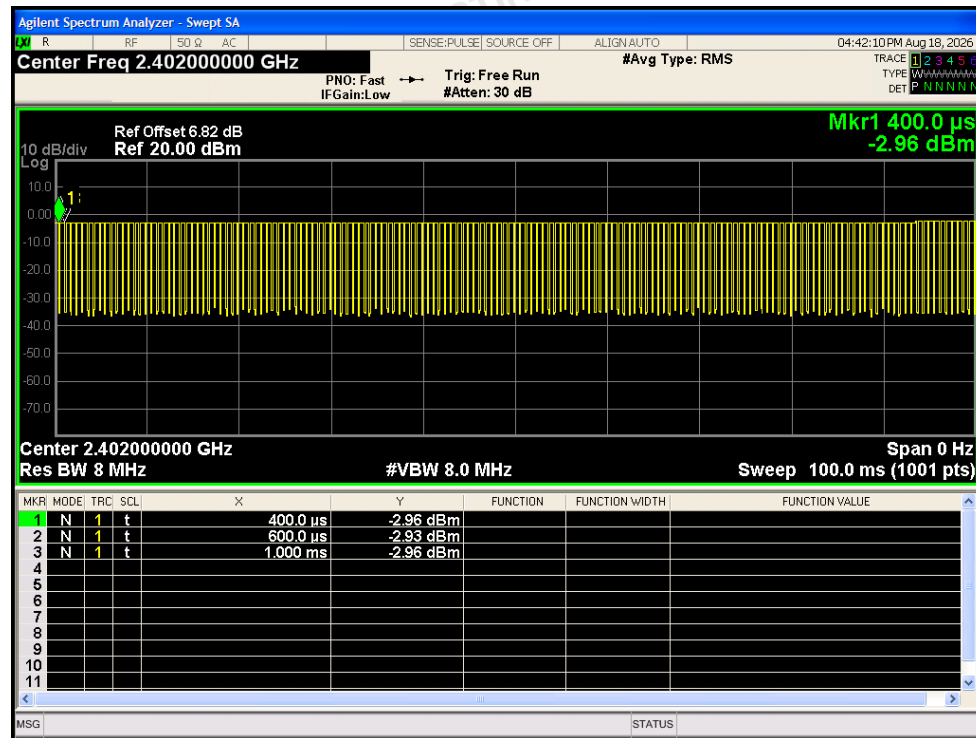
Reviewed By : Eric Wang

Duty Cycle

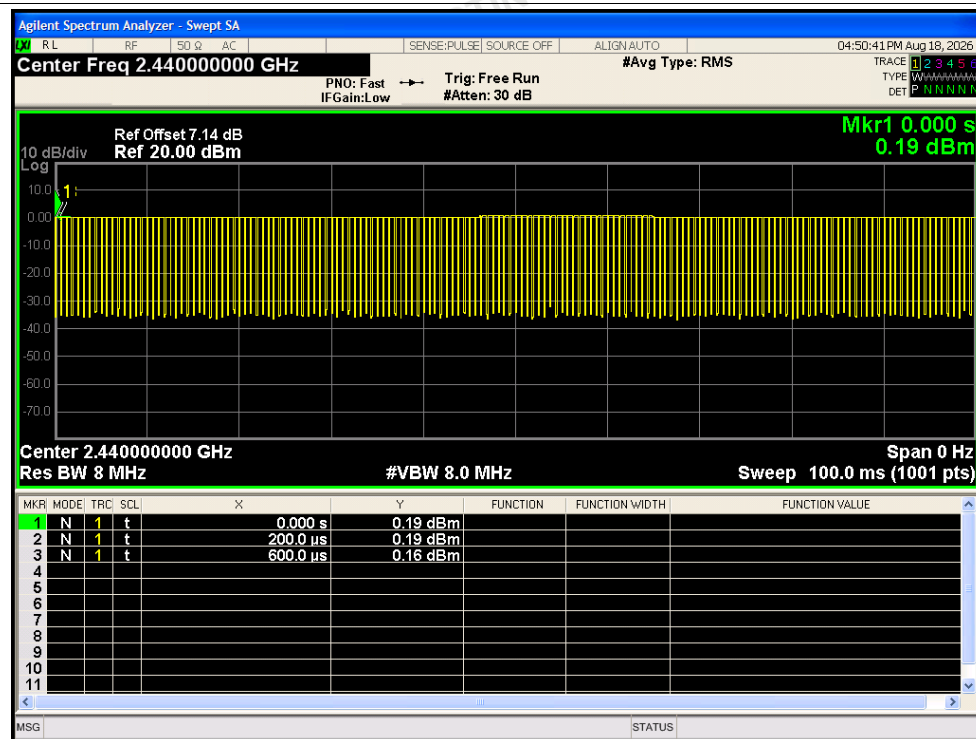
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	76.02	1.19	2.5
NVNT	BLE 1M	2440	80.02	0.97	2.5
NVNT	BLE 1M	2480	79.12	1.02	2.5

Test Graphs

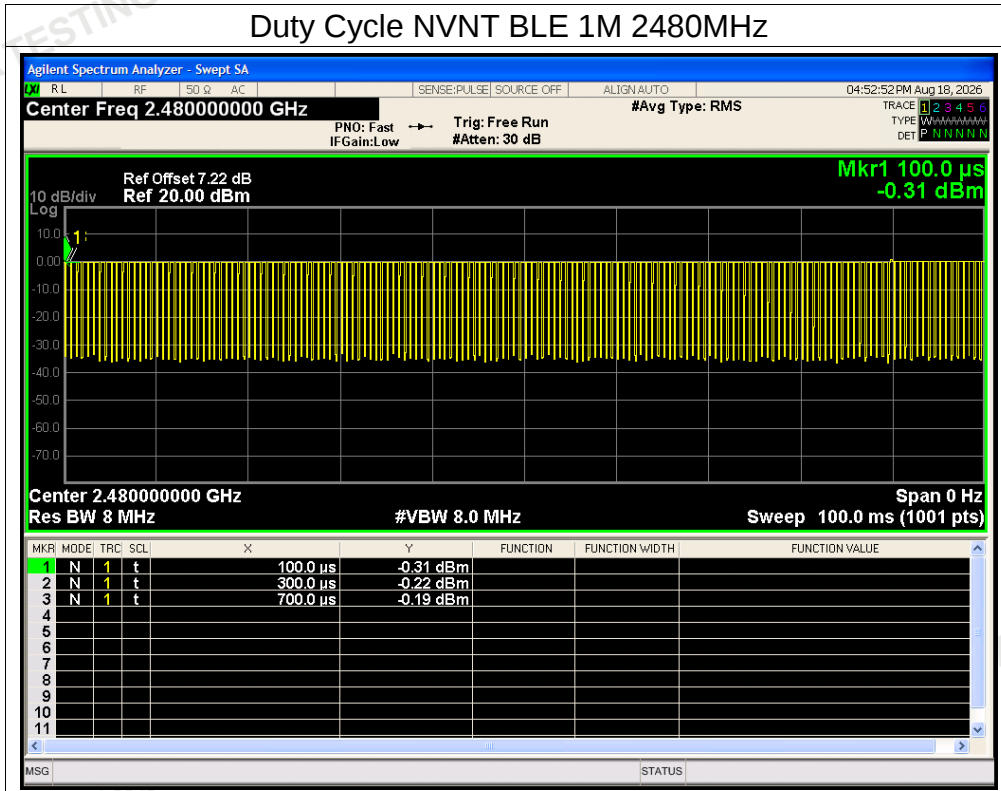
Duty Cycle NVNT BLE 1M 2402MHz



Duty Cycle NVNT BLE 1M 2440MHz



Duty Cycle NVNT BLE 1M 2480MHz



Maximum Conducted Output Power

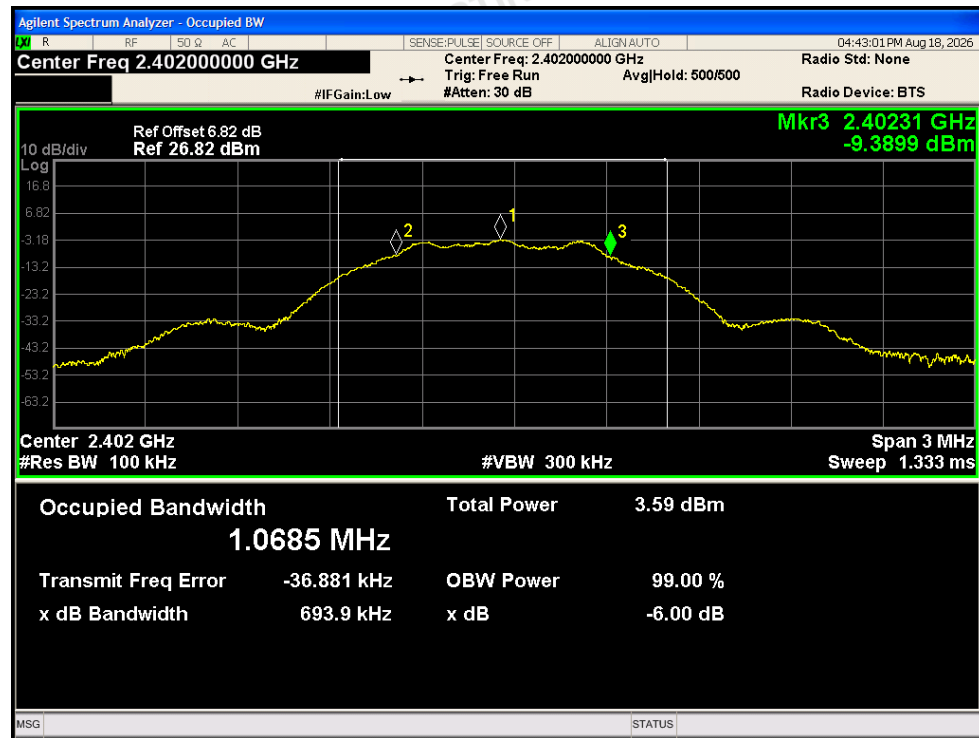
Condition	Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	-2.08	30	Pass
NVNT	BLE 1M	2440	0.65	30	Pass
NVNT	BLE 1M	2480	0.27	30	Pass

-6dB Bandwidth

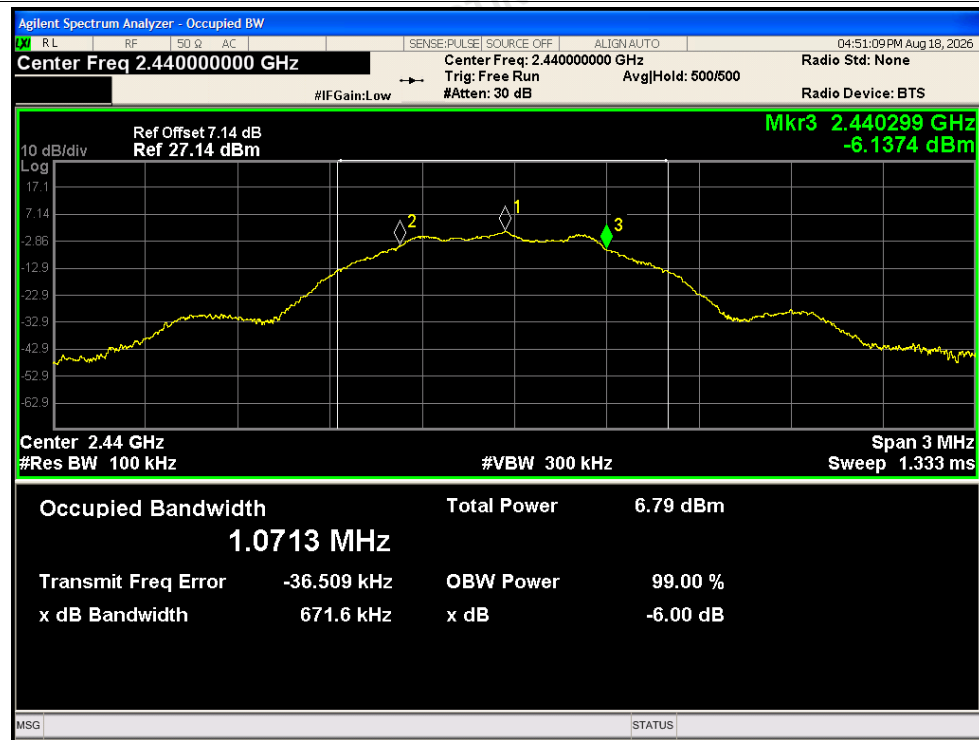
Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	0.694	0.5	Pass
NVNT	BLE 1M	2440	0.672	0.5	Pass
NVNT	BLE 1M	2480	0.670	0.5	Pass

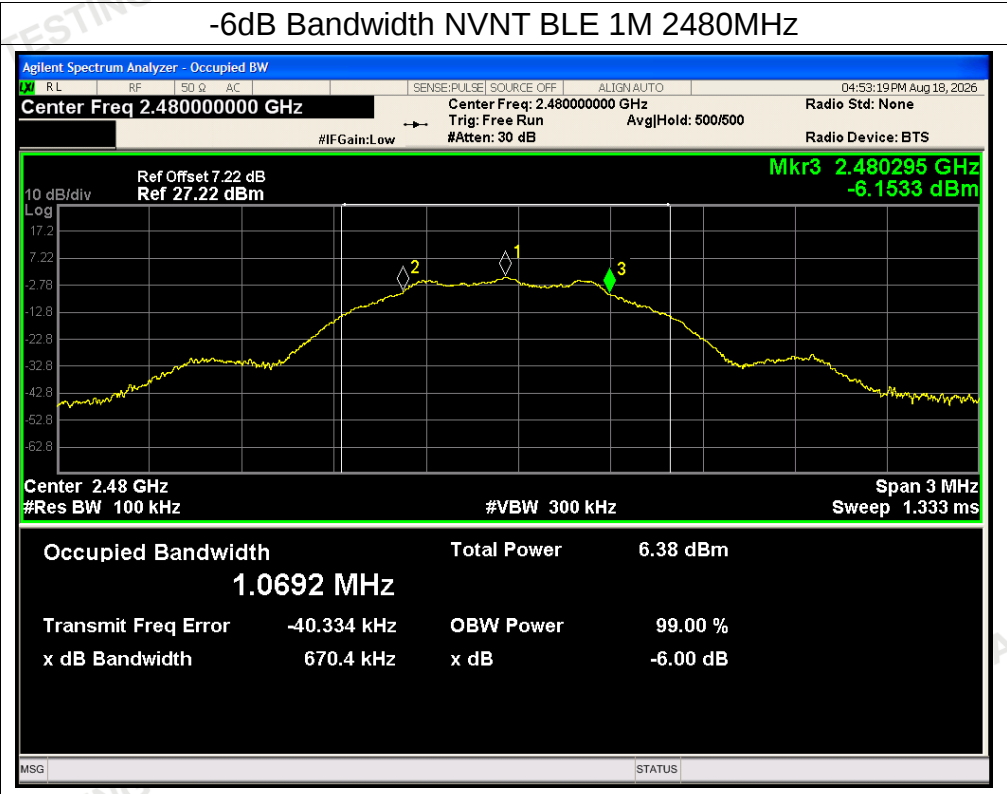
Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz



-6dB Bandwidth NVNT BLE 1M 2440MHz



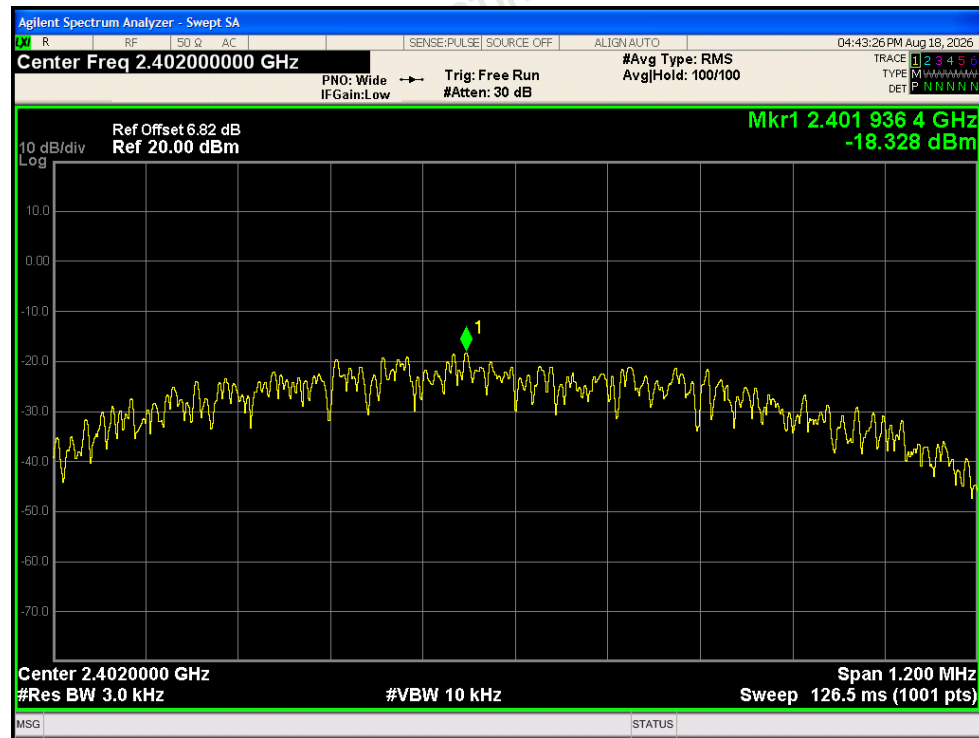


Maximum Power Spectral Density Level

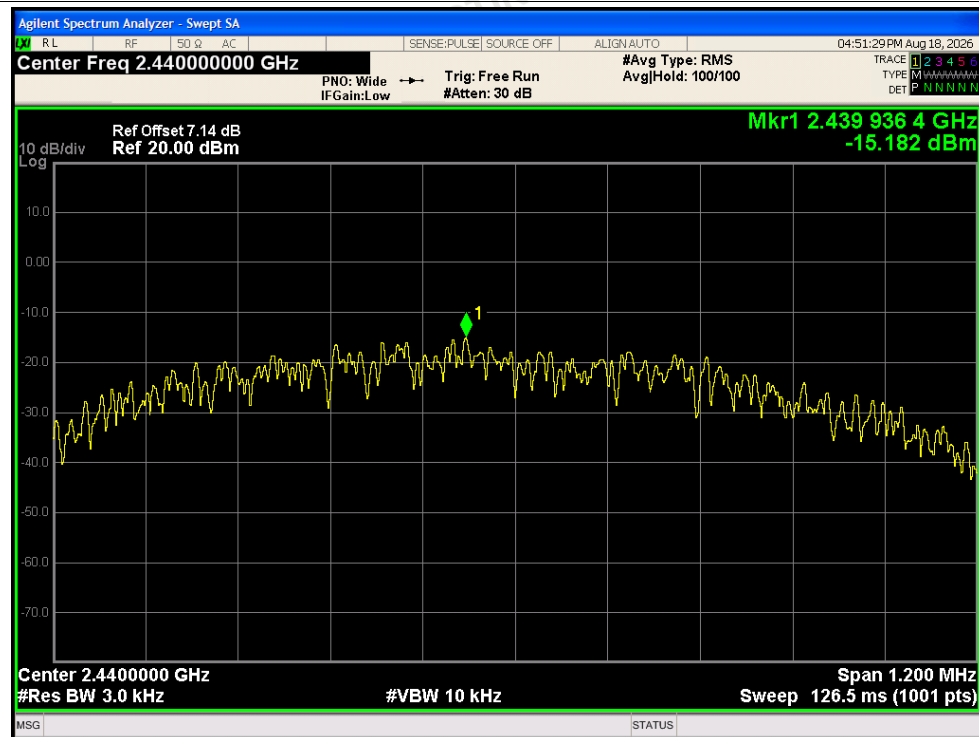
Condition	Mode	Frequency (MHz)	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	-18.33	8	Pass
NVNT	BLE 1M	2440	-15.18	8	Pass
NVNT	BLE 1M	2480	-15.65	8	Pass

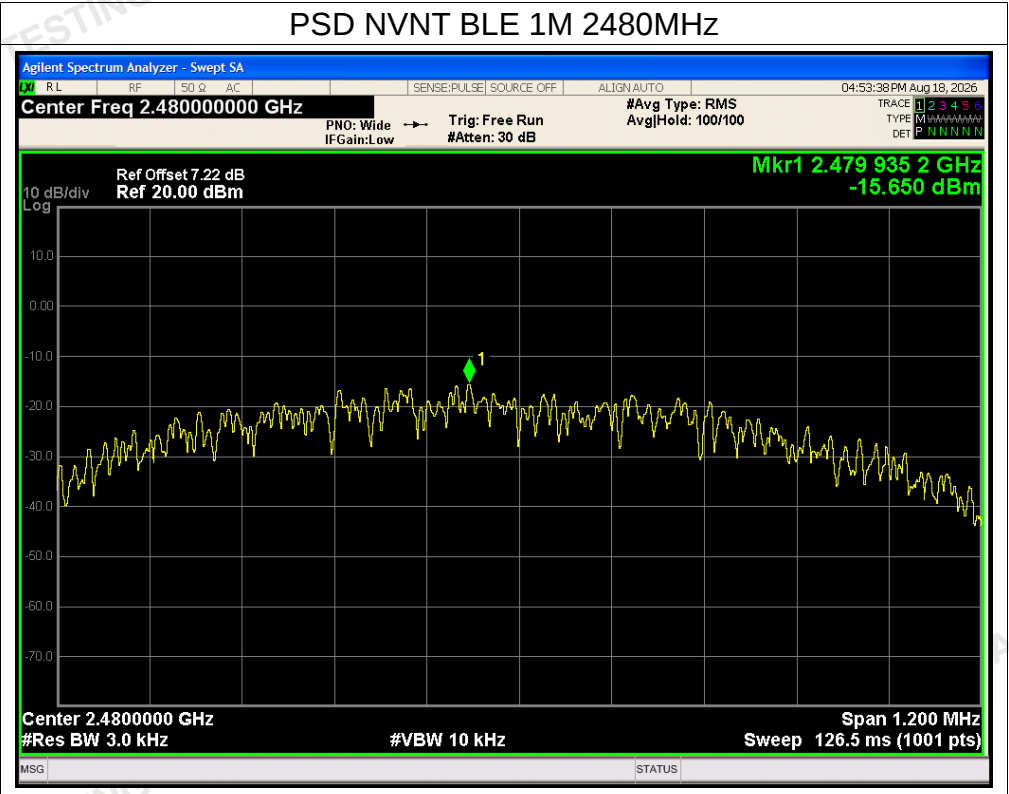
Test Graphs

PSD NVNT BLE 1M 2402MHz



PSD NVNT BLE 1M 2440MHz



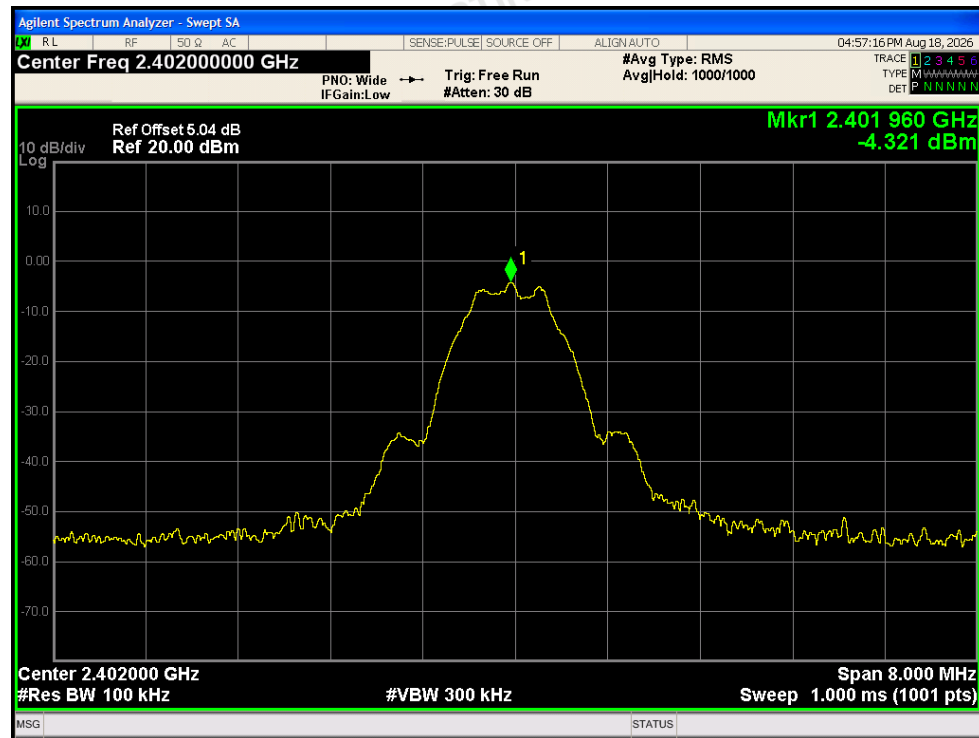


Band Edge

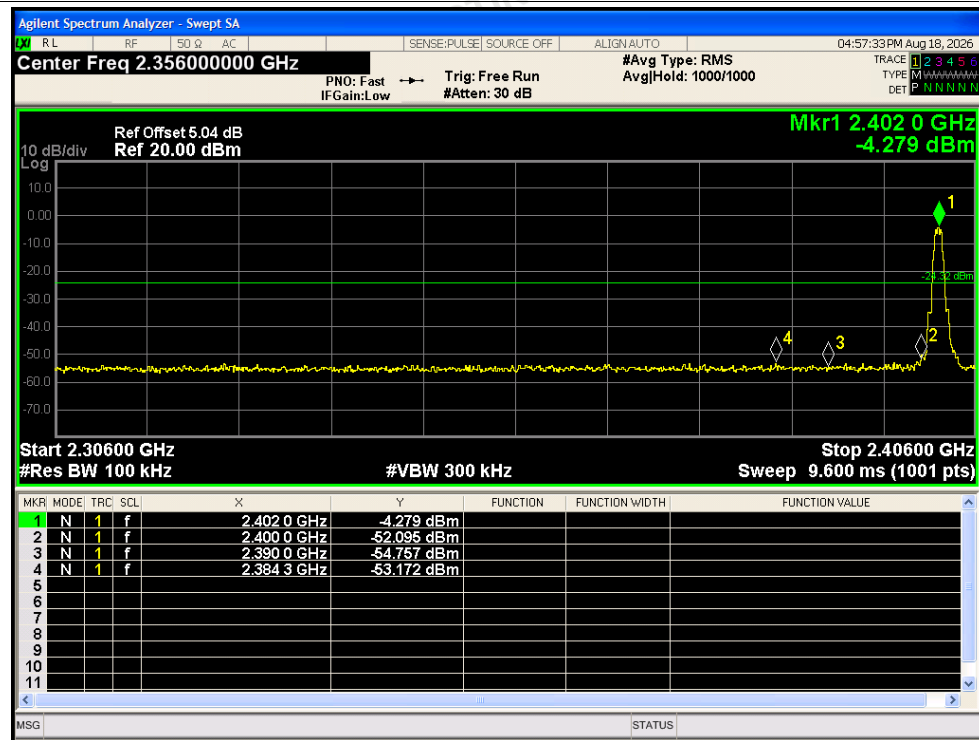
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-48.85	-20	Pass
NVNT	BLE 1M	2480	-50.48	-20	Pass

Test Graphs

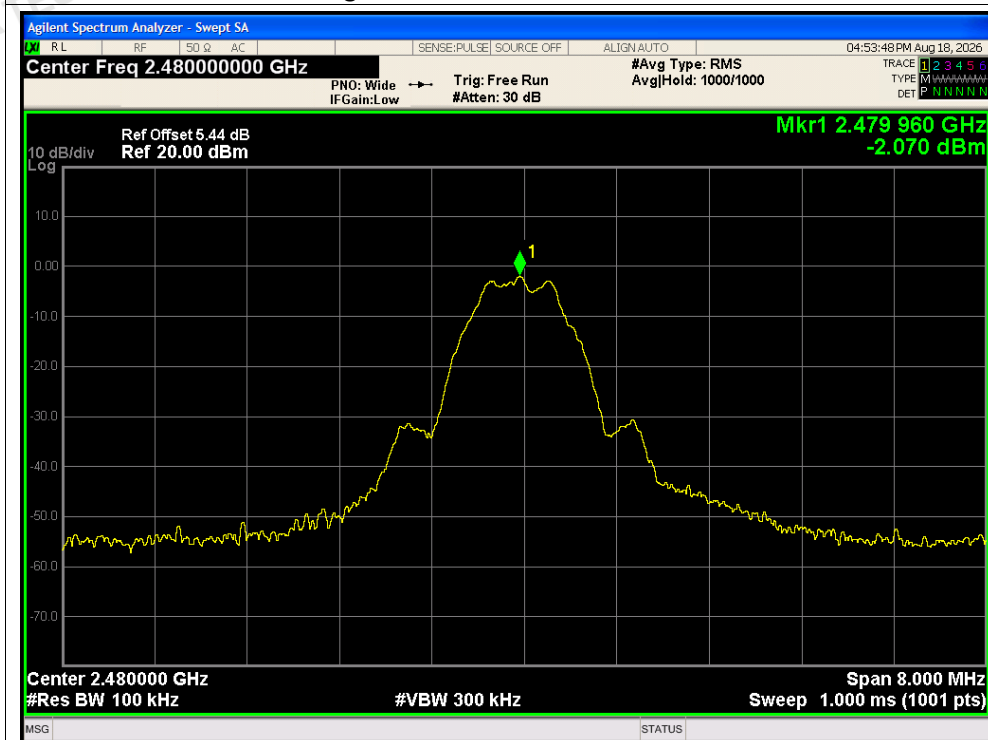
Band Edge NVNT BLE 1M 2402MHz Ref



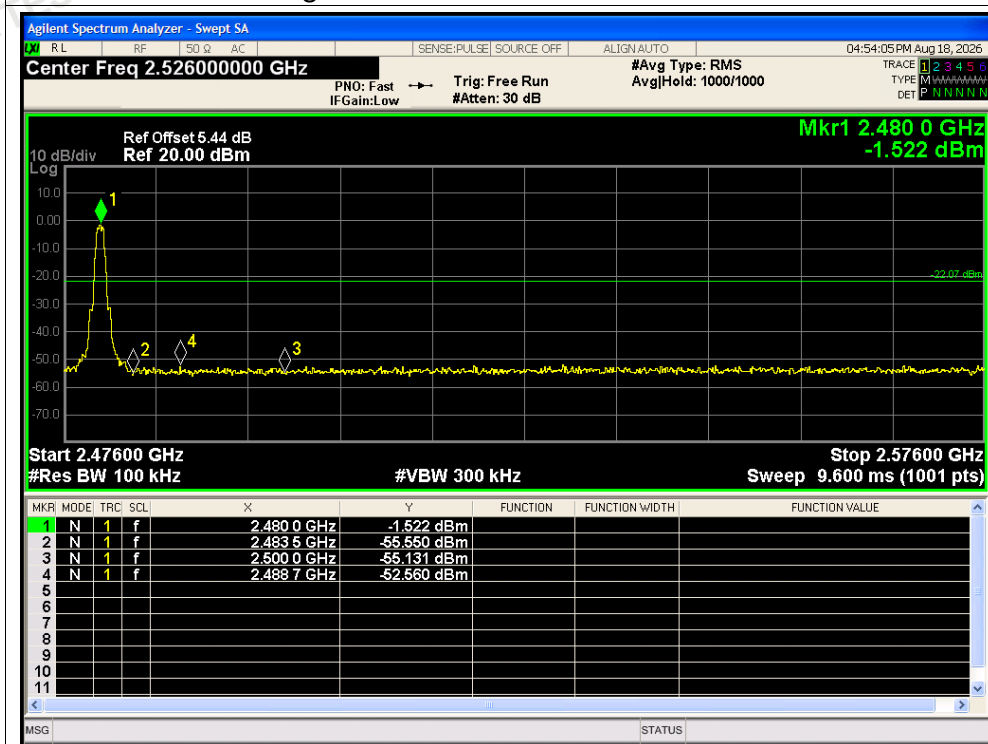
Band Edge NVNT BLE 1M 2402MHz Emission



Band Edge NVNT BLE 1M 2480MHz Ref



Band Edge NVNT BLE 1M 2480MHz Emission

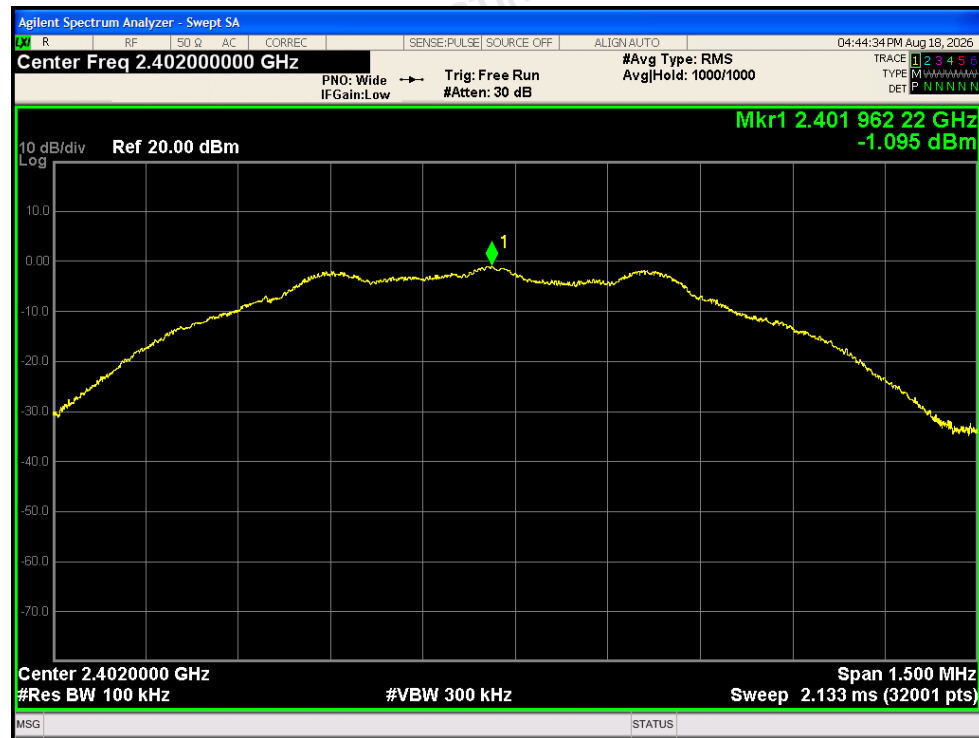


Conducted RF Spurious Emission

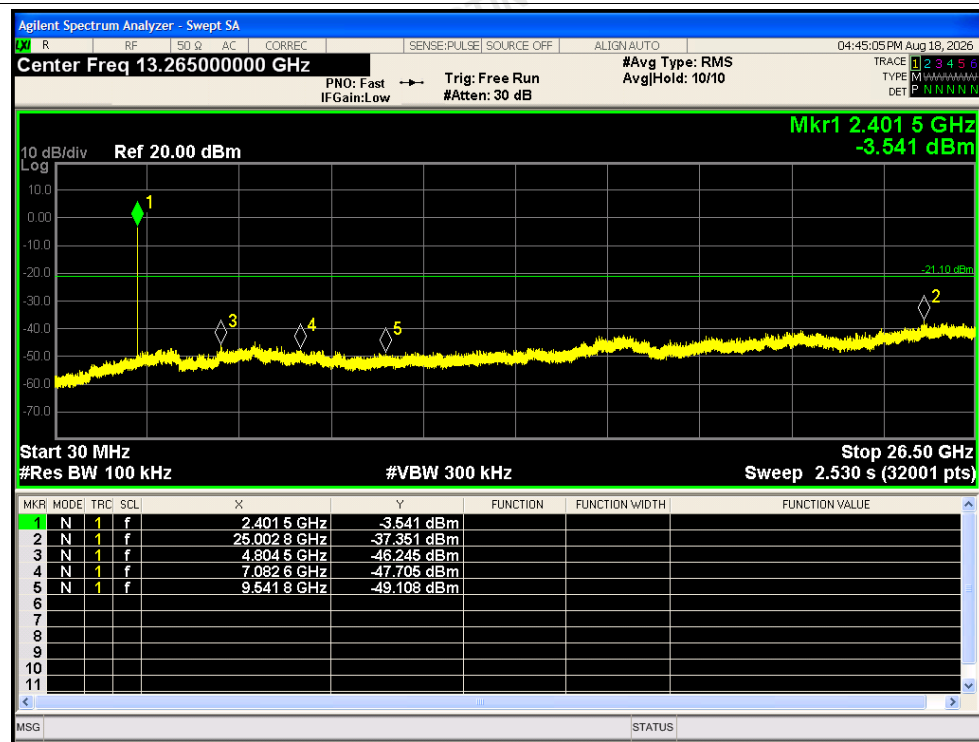
Condition	Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	-36.26	-20	Pass
NVNT	BLE 1M	2440	-39.90	-20	Pass
NVNT	BLE 1M	2480	-38.81	-20	Pass

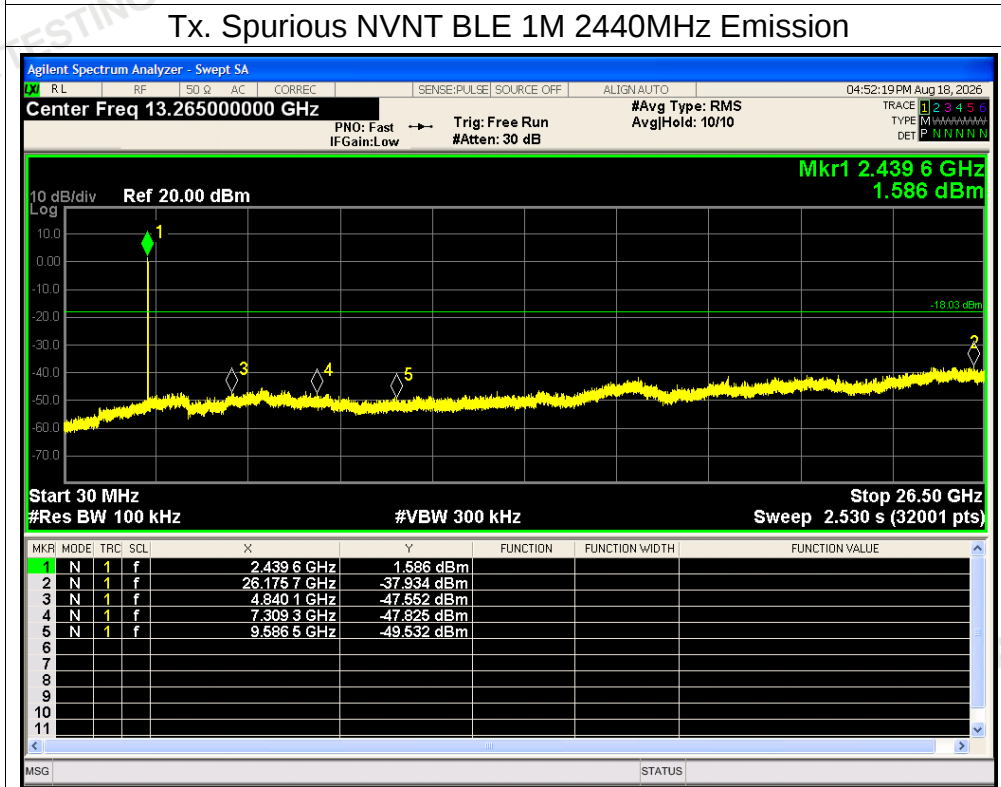
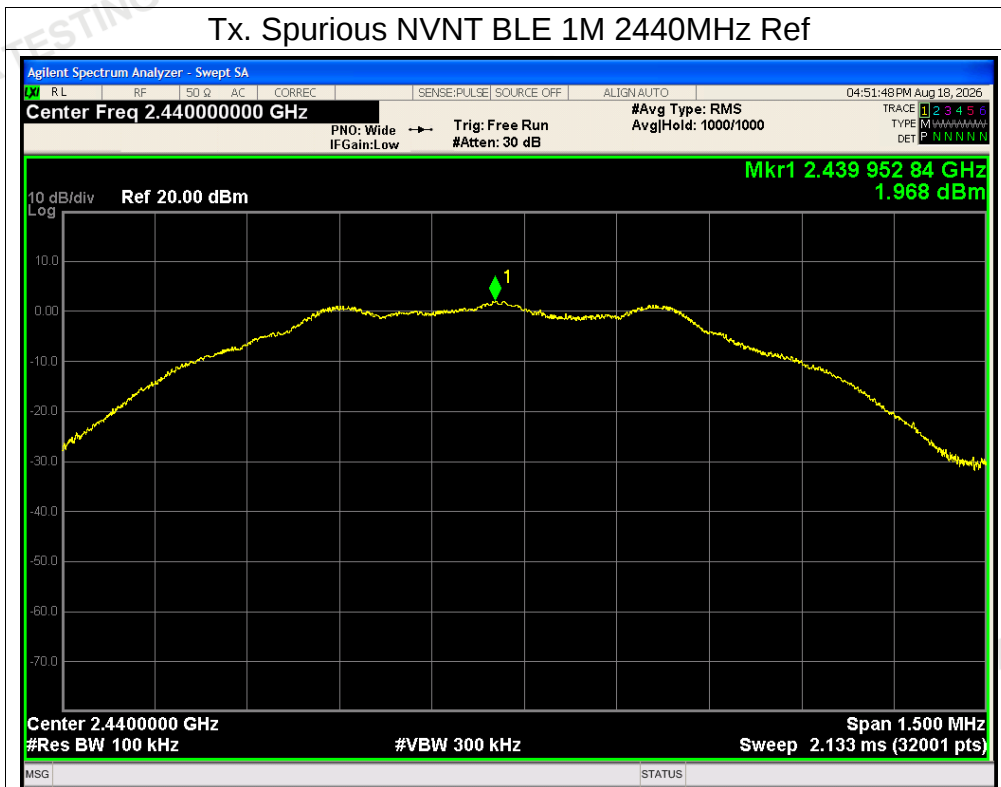
Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ref

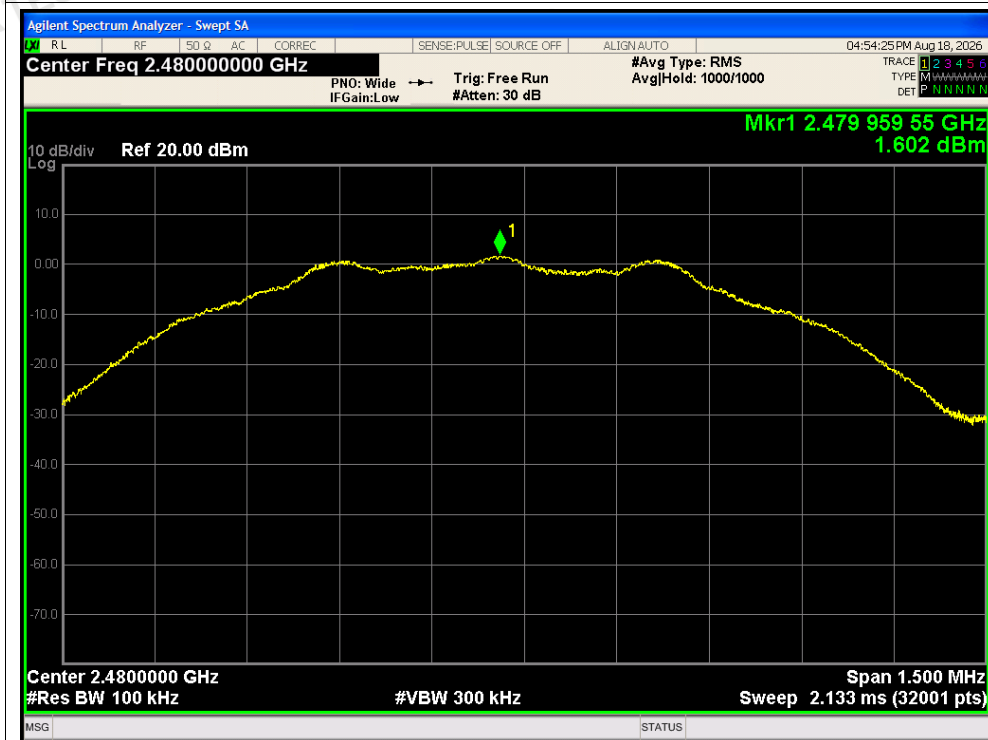


Tx. Spurious NVNT BLE 1M 2402MHz Emission

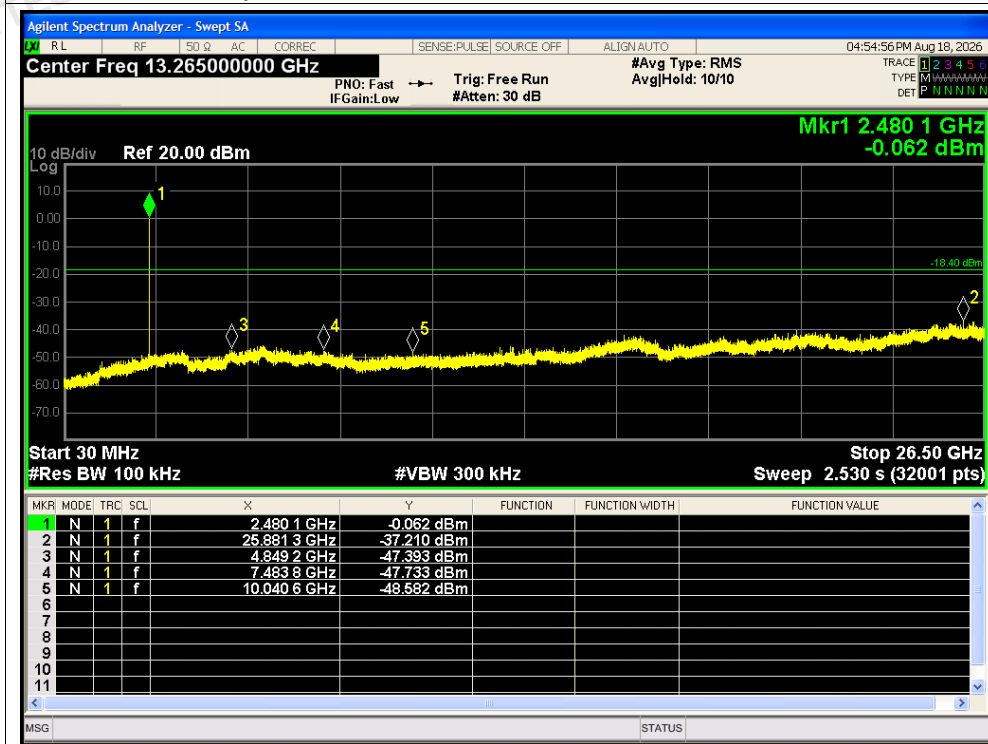




Tx. Spurious NVNT BLE 1M 2480MHz Ref



Tx. Spurious NVNT BLE 1M 2480MHz Emission



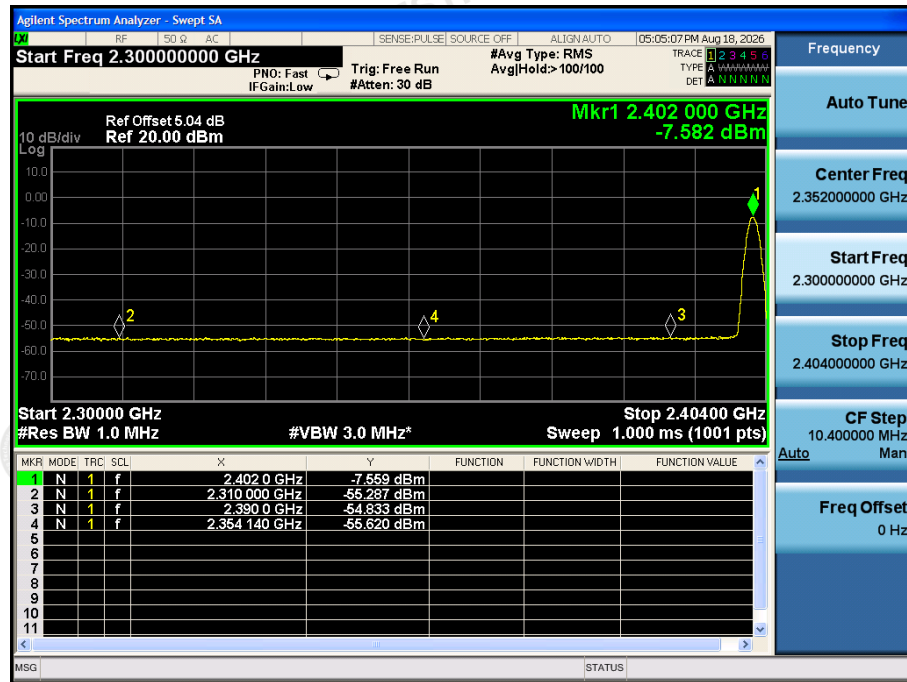
Emissions in Restricted Bands

Test Mode	Ch	Freq (MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE 1M	Low	2402	AV	2310.000	-55.29	2.00	1.19	43.10	≤54	PASS
			AV	2354.140	-55.62	2.00	1.19	42.77	≤54	PASS
			AV	2390.000	-54.83	2.00	1.19	43.56	≤54	PASS
			Peak	2310.000	-43.87	2.00	0.00	53.33	≤74	PASS
			Peak	2358.508	-42.72	2.00	0.00	54.48	≤74	PASS
			Peak	2390.000	-43.18	2.00	0.00	54.02	≤74	PASS
	High	2480	AV	2483.500	-53.99	2.00	1.02	44.23	≤54	PASS
			AV	2491.486	-54.37	2.00	1.02	43.85	≤54	PASS
			AV	2500.000	-54.82	2.00	1.02	43.40	≤54	PASS
			Peak	2483.500	-39.12	2.00	0.00	58.08	≤74	PASS
			Peak	2493.719	-42.43	2.00	0.00	54.77	≤74	PASS
			Peak	2500.000	-42.48	2.00	0.00	54.72	≤74	PASS

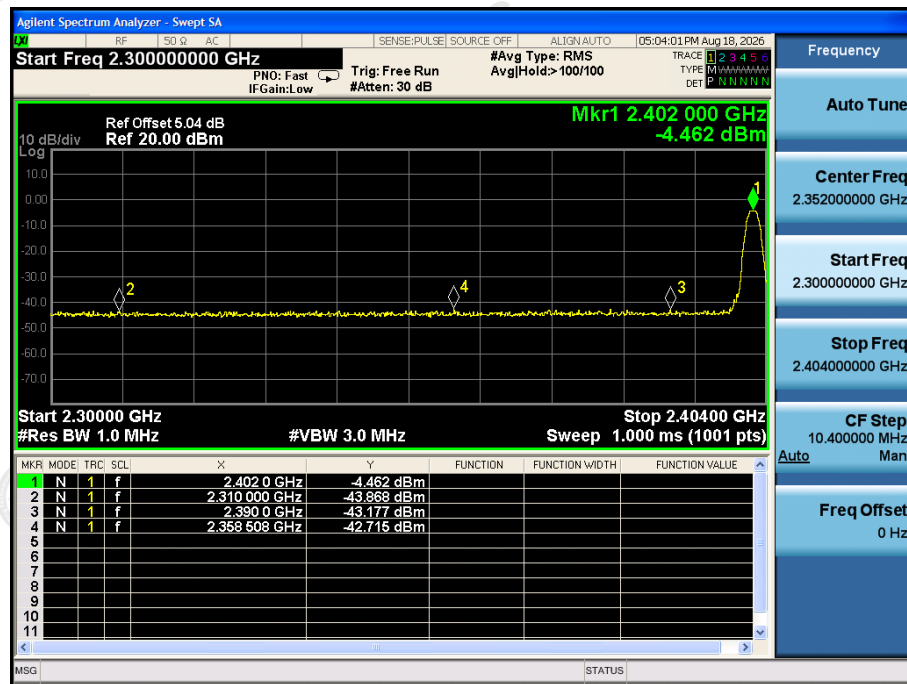
Note: 1. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

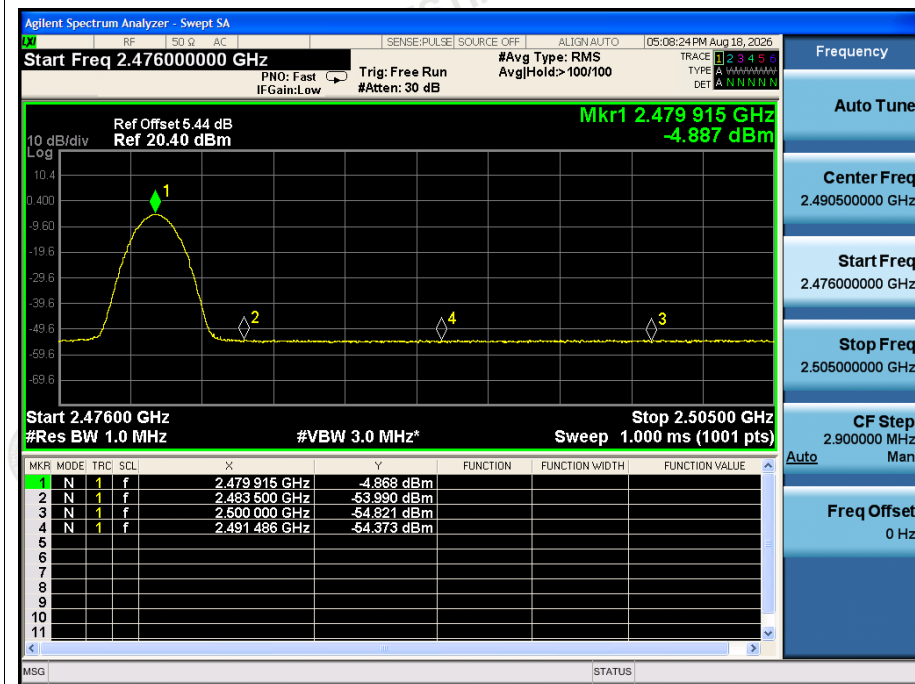
NVNT BLE 1M 2402MHz AV



NVNT BLE 1M 2402MHz PK



NVNT BLE 1M 2480MHz AV



NVNT BLE 1M 2480MHz PK

