

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	E.I.R.P (dBm)	E.I.R.P Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	4.31	0	4.31	30	8.52	<=36.02	Pass
NVNT	BLE 1M	2440	Ant1	4.76	0	4.76	30	8.97	<=36.02	Pass
NVNT	BLE 1M	2480	Ant1	4.92	0	4.92	30	9.13	<=36.02	Pass
NVNT	BLE 2M	2402	Ant1	4.31	0	4.31	30	8.52	<=36.02	Pass
NVNT	BLE 2M	2440	Ant1	4.77	0	4.77	30	8.98	<=36.02	Pass
NVNT	BLE 2M	2480	Ant1	4.94	0	4.94	30	9.15	<=36.02	Pass
Note1: Antenna Gain: 4.21dBi; Note2: E.I.R.P = Measured Power + Antenna Gain										

Test Graphs

Power NVNT BLE 1M 2402MHz Ant1



Power NVNT BLE 1M 2440MHz Ant1



Power NVNT BLE 1M 2480MHz Ant1



Power NVNT BLE 2M 2402MHz Ant1



Power NVNT BLE 2M 2440MHz Ant1



Power NVNT BLE 2M 2480MHz Ant1



7.2 6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.71	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.705	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.661	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.178	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.227	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.263	0.5	Pass

Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.04
NVNT	BLE 1M	2440	Ant1	1.041
NVNT	BLE 1M	2480	Ant1	1.044
NVNT	BLE 2M	2402	Ant1	2.075
NVNT	BLE 2M	2440	Ant1	2.105
NVNT	BLE 2M	2480	Ant1	2.092

Test Graphs

OBW NVNT BLE 1M 2402MHz Ant1



OBW NVNT BLE 1M 2440MHz Ant1



OBW NVNT BLE 1M 2480MHz Ant1



OBW NVNT BLE 2M 2402MHz Ant1



OBW NVNT BLE 2M 2440MHz Ant1



OBW NVNT BLE 2M 2480MHz Ant1



7.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-11.84	0	-11.84	8	Pass
NVNT	BLE 1M	2440	Ant1	-11.59	0	-11.59	8	Pass
NVNT	BLE 1M	2480	Ant1	-11.53	0	-11.53	8	Pass
NVNT	BLE 2M	2402	Ant1	-14.99	0	-14.99	8	Pass
NVNT	BLE 2M	2440	Ant1	-15.45	0	-15.45	8	Pass
NVNT	BLE 2M	2480	Ant1	-15.19	0	-15.19	8	Pass

Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1



PSD NVNT BLE 1M 2480MHz Ant1



PSD NVNT BLE 2M 2402MHz Ant1



PSD NVNT BLE 2M 2440MHz Ant1



PSD NVNT BLE 2M 2480MHz Ant1

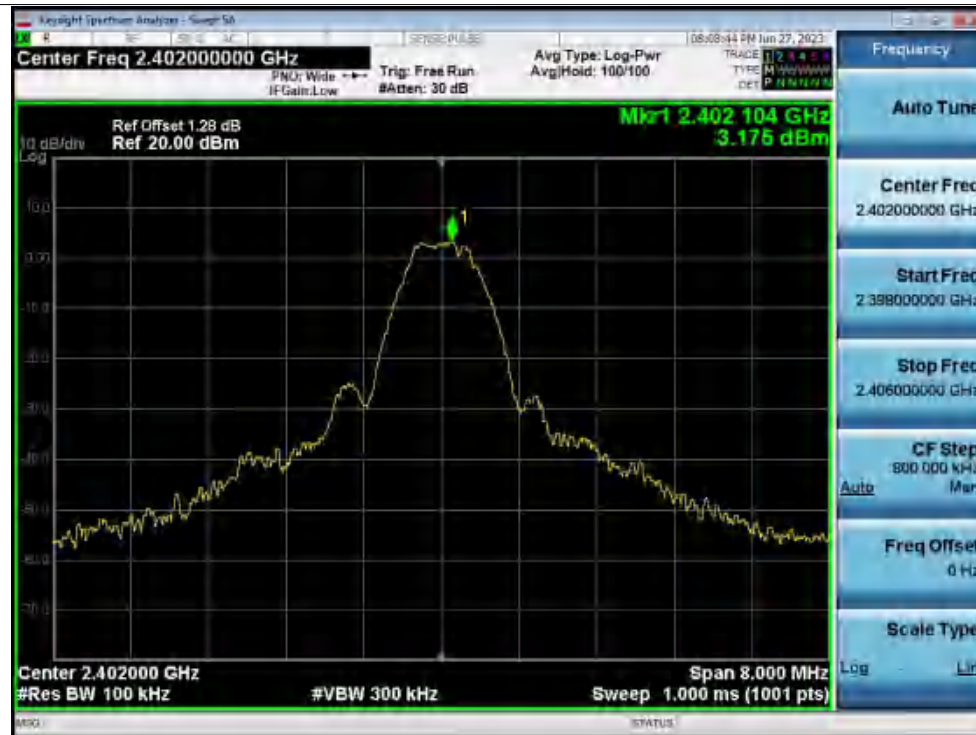


7.4 Band Edge

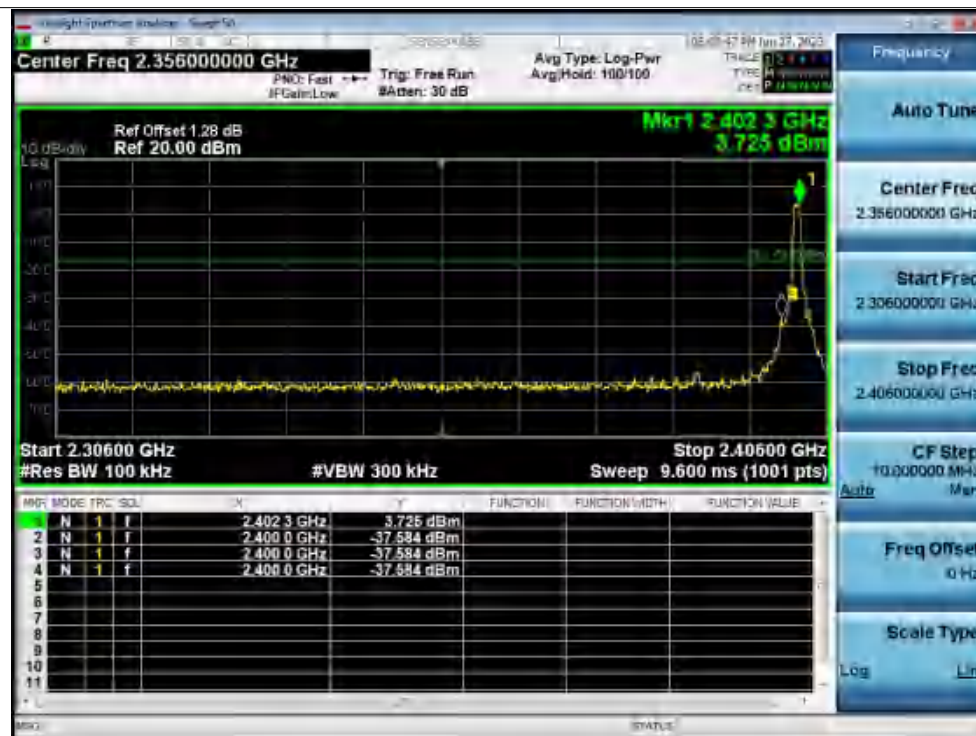
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-40.75	-20	Pass
NVNT	BLE 1M	2480	Ant1	-50.36	-20	Pass
NVNT	BLE 2M	2402	Ant1	-32.98	-20	Pass
NVNT	BLE 2M	2480	Ant1	-51.95	-20	Pass

Test Graphs

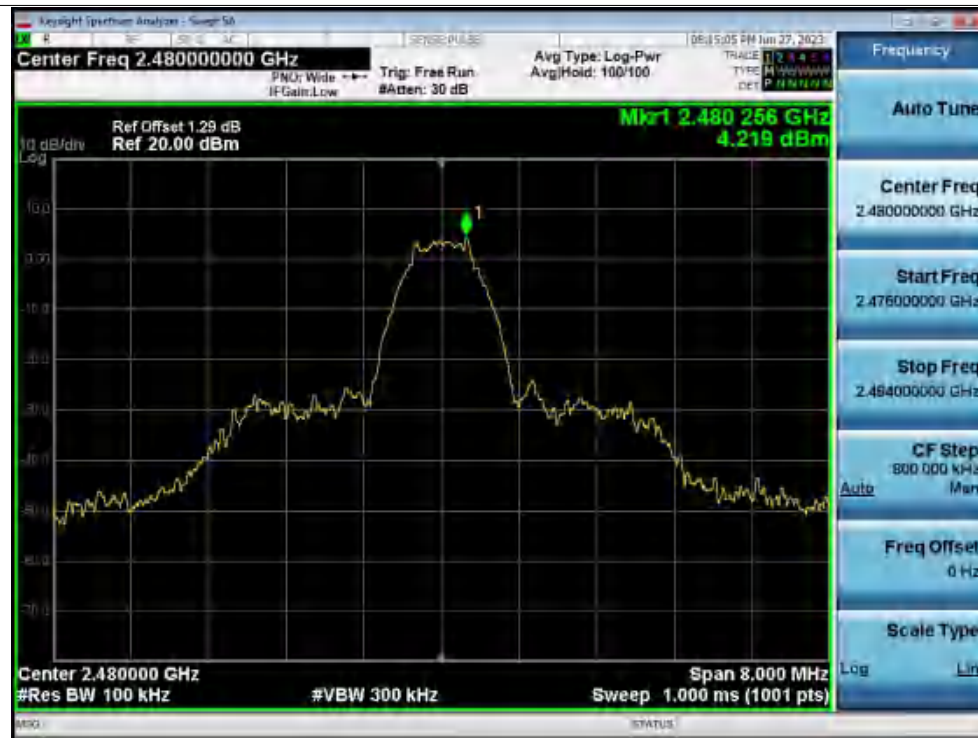
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



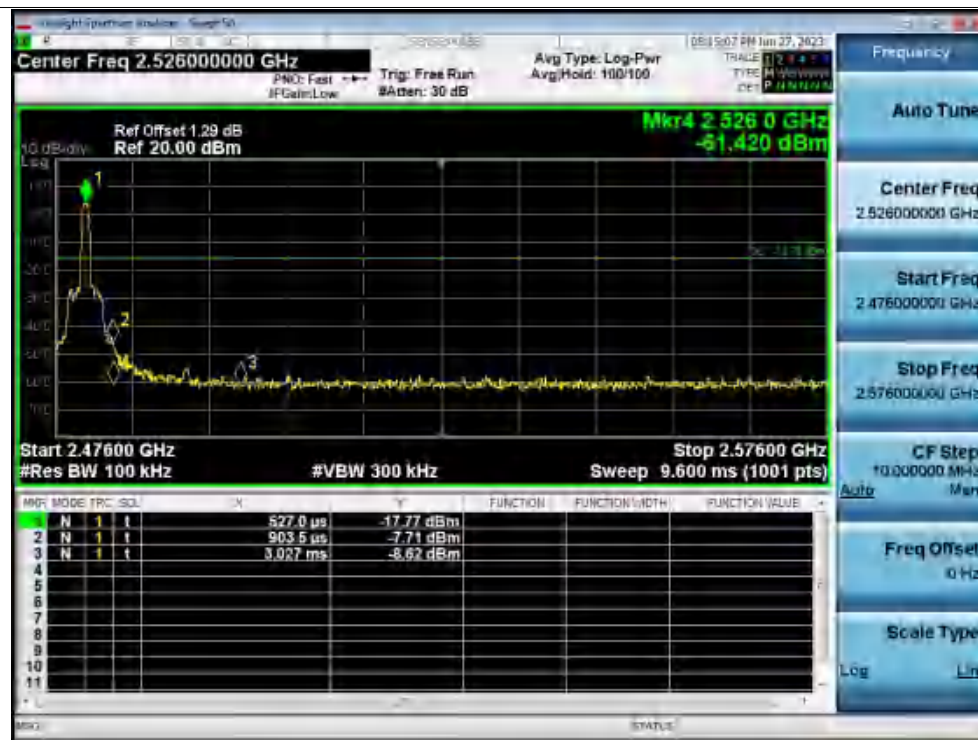
Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



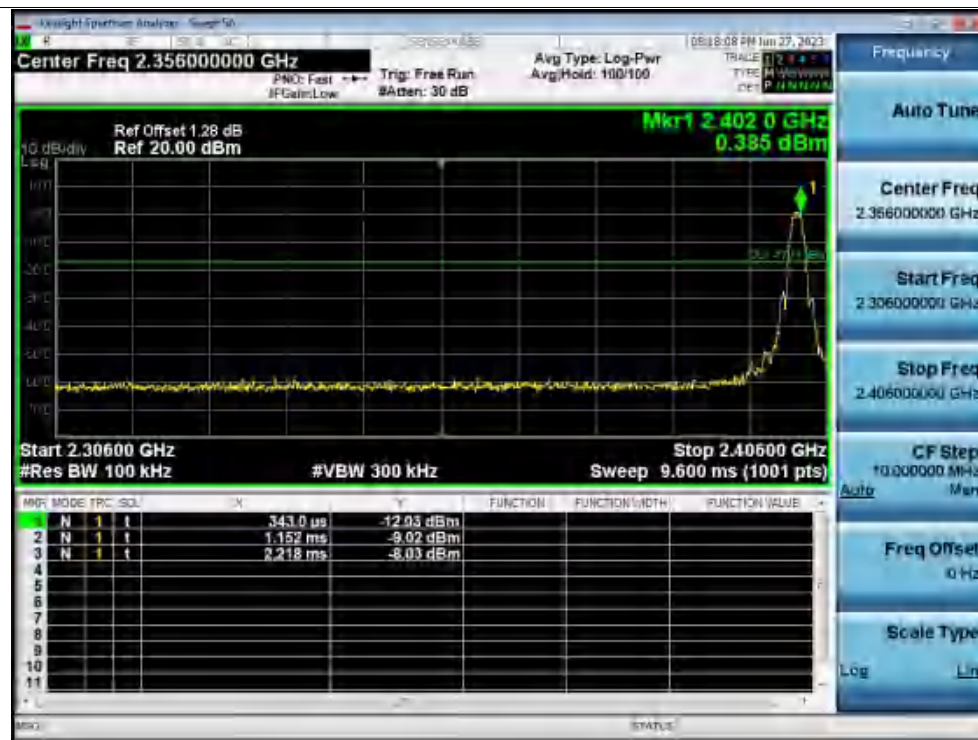
Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



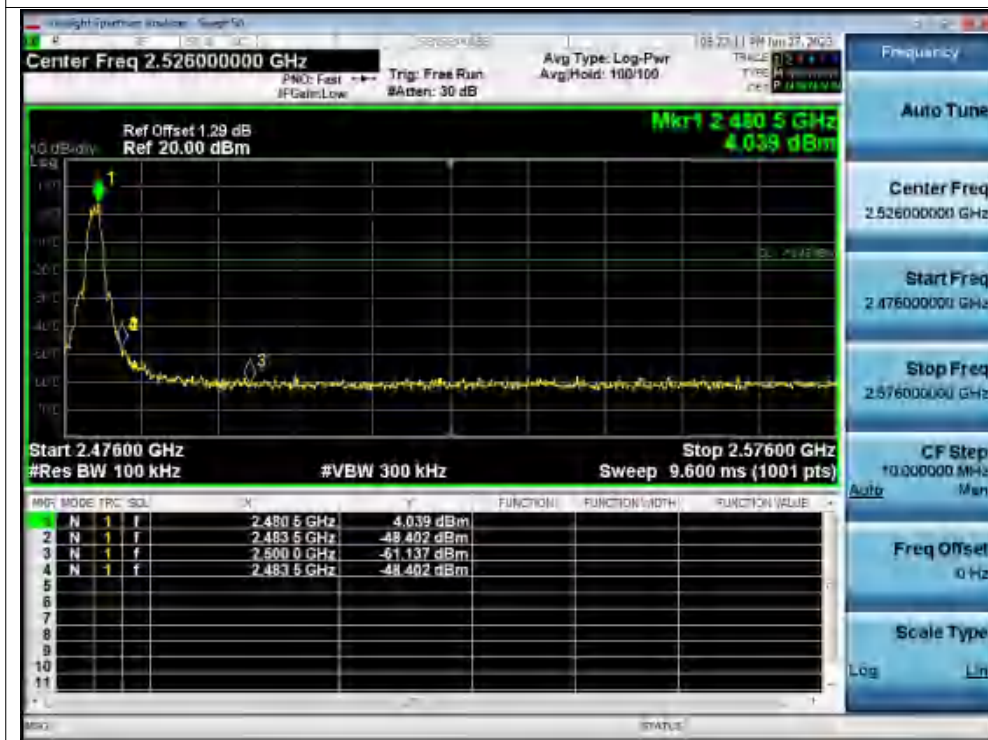
Band Edge NVNT BLE 2M 2402MHz Ant1 Emission



Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission



Conducted RF Spurious Emission

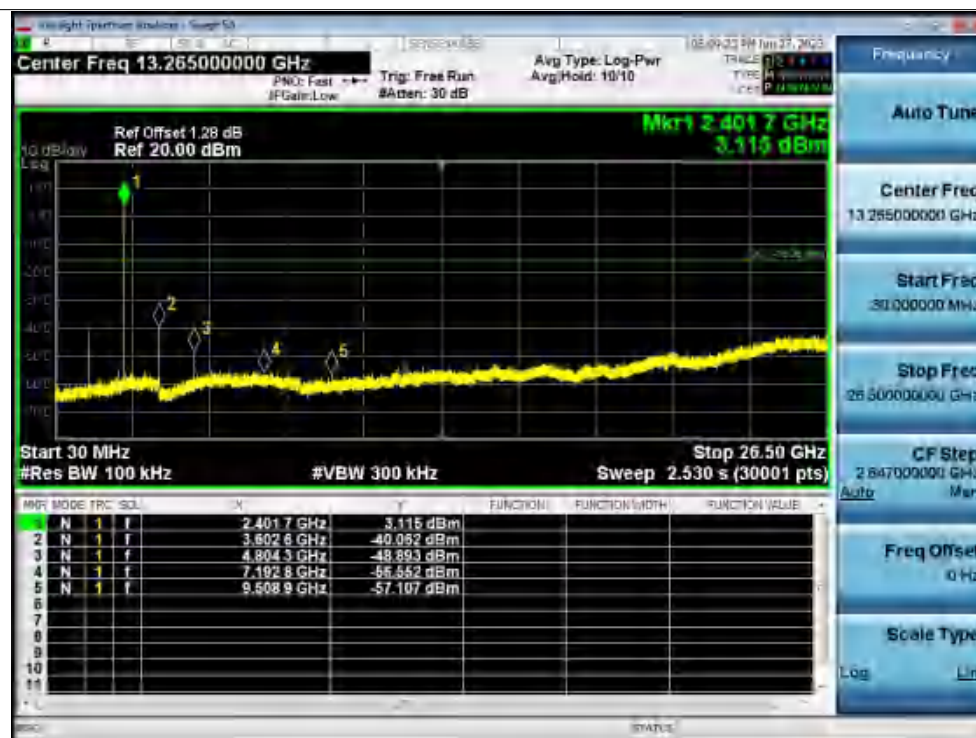
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-43.8	-20	Pass
NVNT	BLE 1M	2440	Ant1	-44.92	-20	Pass
NVNT	BLE 1M	2480	Ant1	-46.02	-20	Pass
NVNT	BLE 2M	2402	Ant1	-45.41	-20	Pass
NVNT	BLE 2M	2440	Ant1	-45.81	-20	Pass
NVNT	BLE 2M	2480	Ant1	-44.81	-20	Pass

Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



WAVE MODE	TRC	SQL	X	Y	FUNCTION	FUNCTION/NOTH	FUNCTION VALUE
2	N	1	f	2.4017 GHz	3.115 dBm		
3	N	1	f	3.8026 GHz	-40.062 dBm		
3	N	1	f	4.8043 GHz	-48.893 dBm		
4	N	1	f	7.1928 GHz	-55.552 dBm		
5	N	1	f	9.5089 GHz	-57.107 dBm		
6							
7							
8							
9							
10							
11							

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant1 Emission

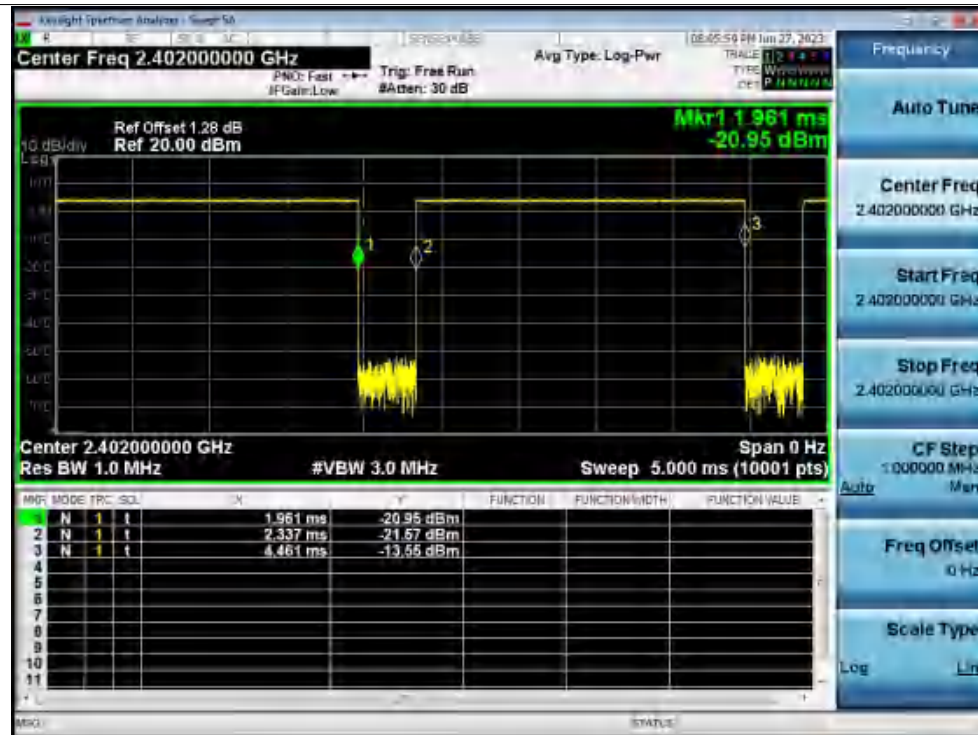


7.5 Duty Cycle

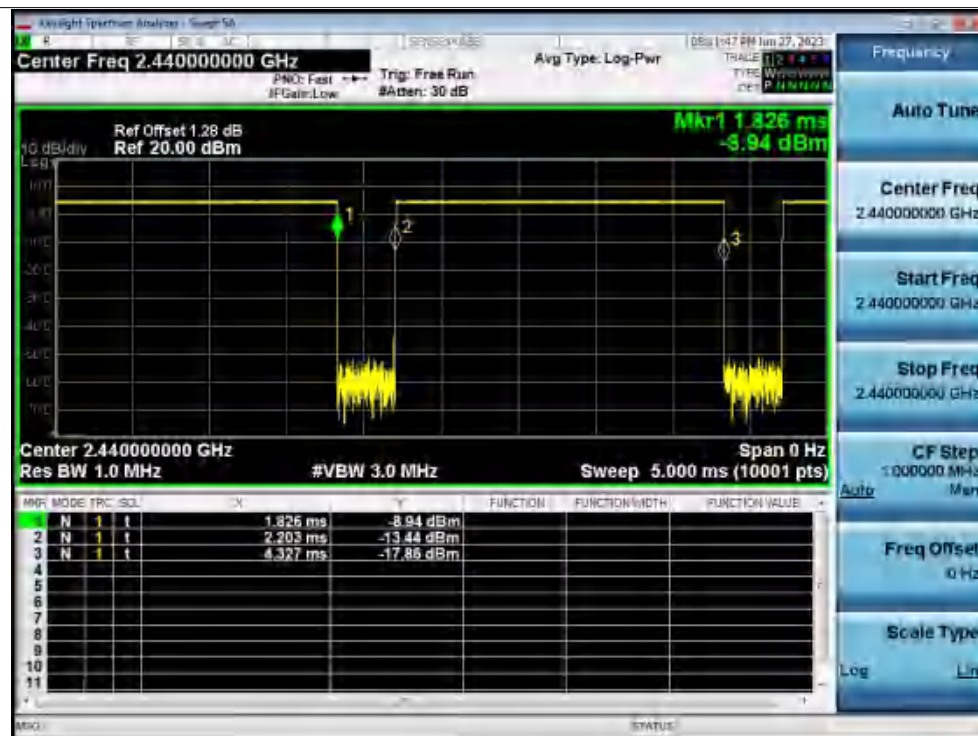
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	84.96	0.71	0.47
NVNT	BLE 1M	2440	Ant1	84.94	0.71	0.47
NVNT	BLE 1M	2480	Ant1	84.94	0.71	0.47
NVNT	BLE 2M	2402	Ant1	56.85	2.45	0.94
NVNT	BLE 2M	2440	Ant1	56.86	2.45	0.94
NVNT	BLE 2M	2480	Ant1	56.85	2.45	0.94

Test Graphs

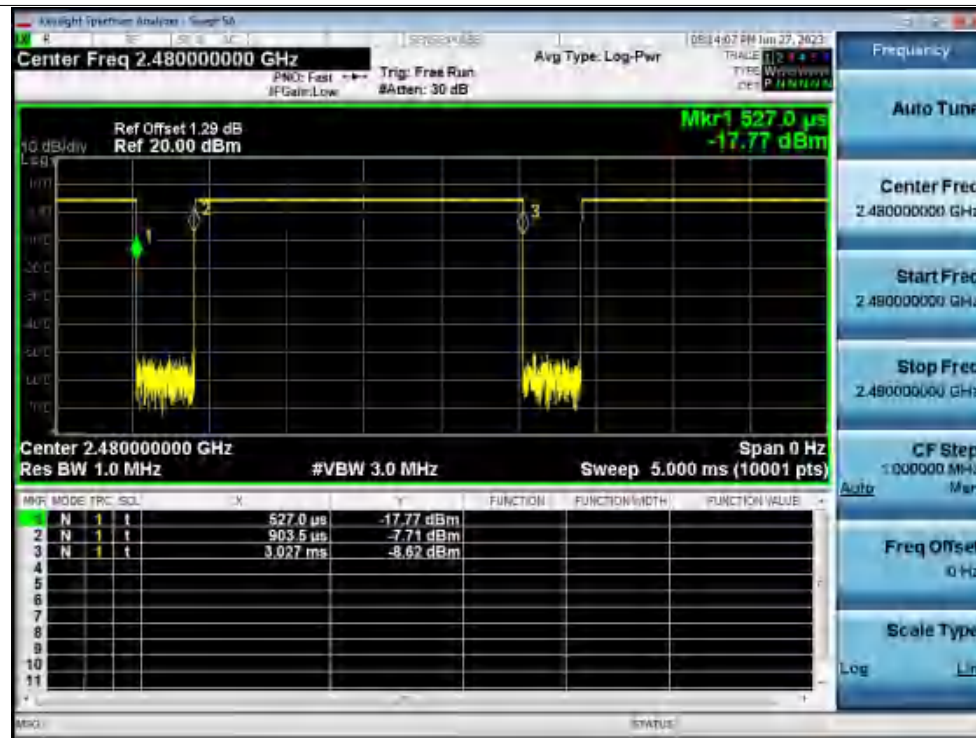
Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1



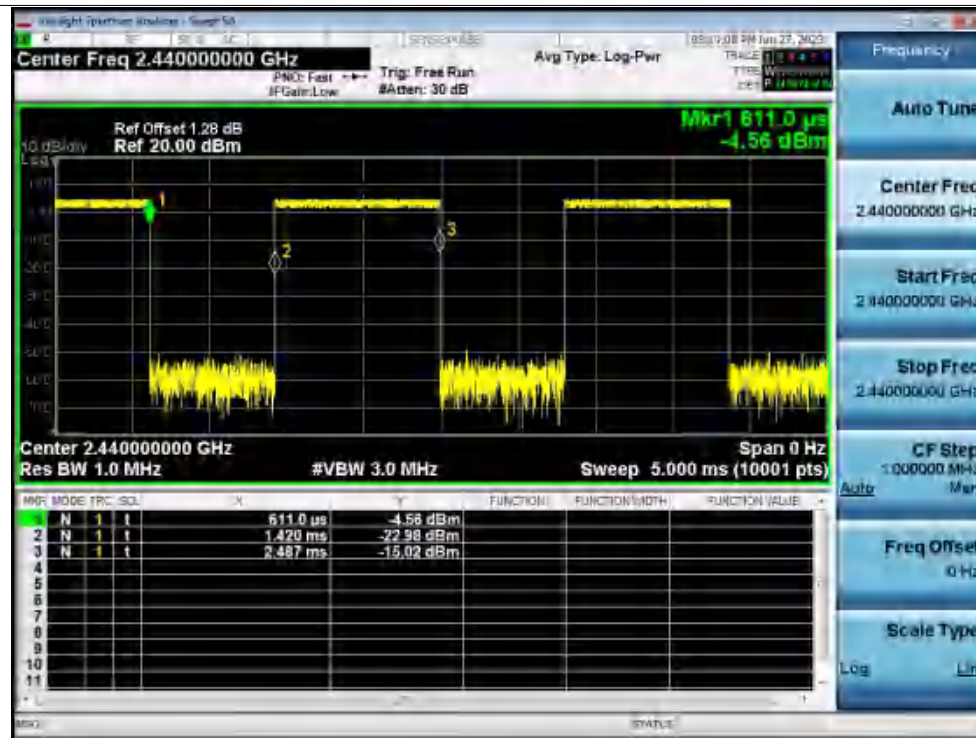
Duty Cycle NVNT BLE 1M 2480MHz Ant1



Duty Cycle NVNT BLE 2M 2402MHz Ant1



Duty Cycle NVNT BLE 2M 2440MHz Ant1



Duty Cycle NVNT BLE 2M 2480MHz Ant1

