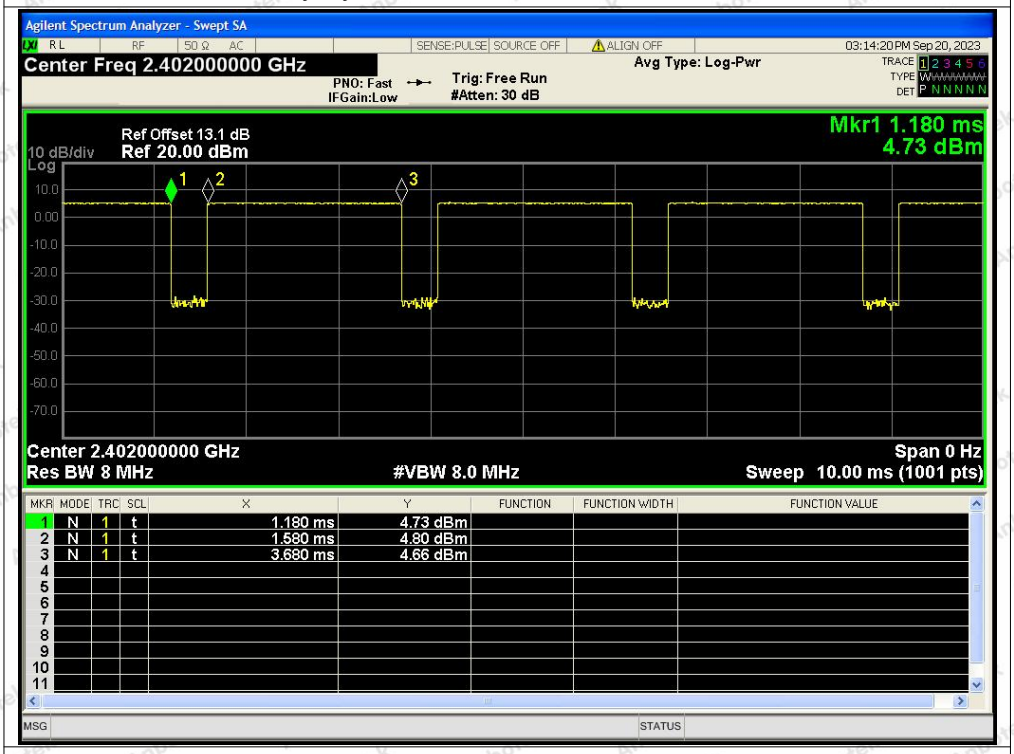
Appendix Test Data

Duty Cycle of Test Signal

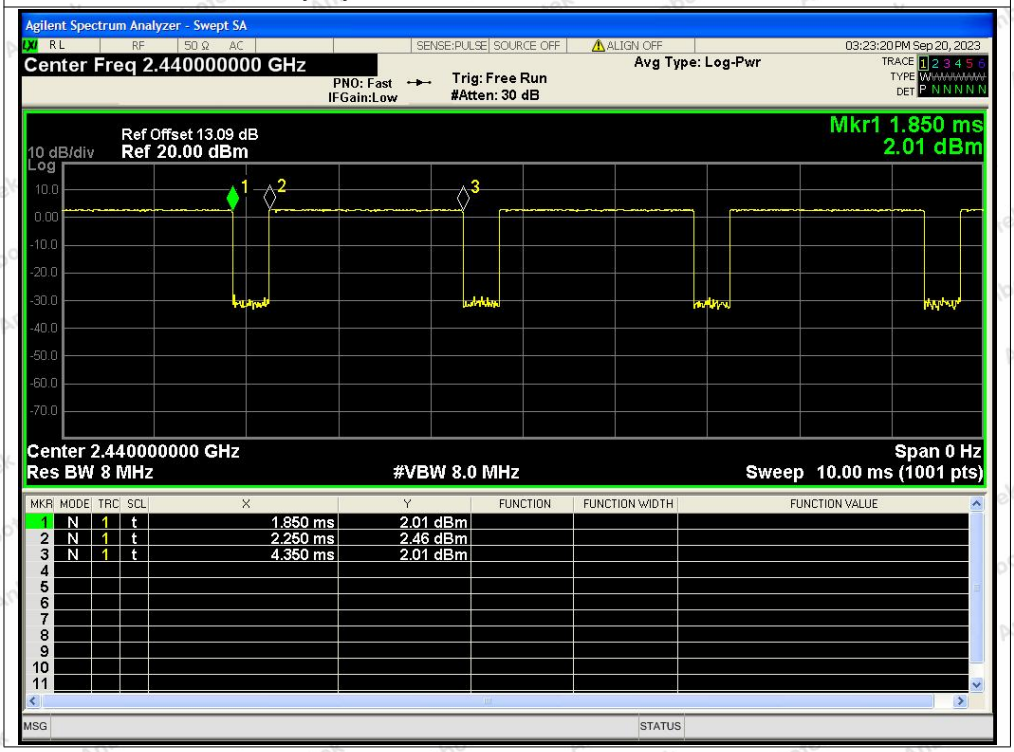
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	84	0.76	0.48
NVNT	BLE 1M	2440	Ant1	84	0.76	0.48
NVNT	BLE 1M	2480	Ant1	84	0.76	0.48

Test Graphs

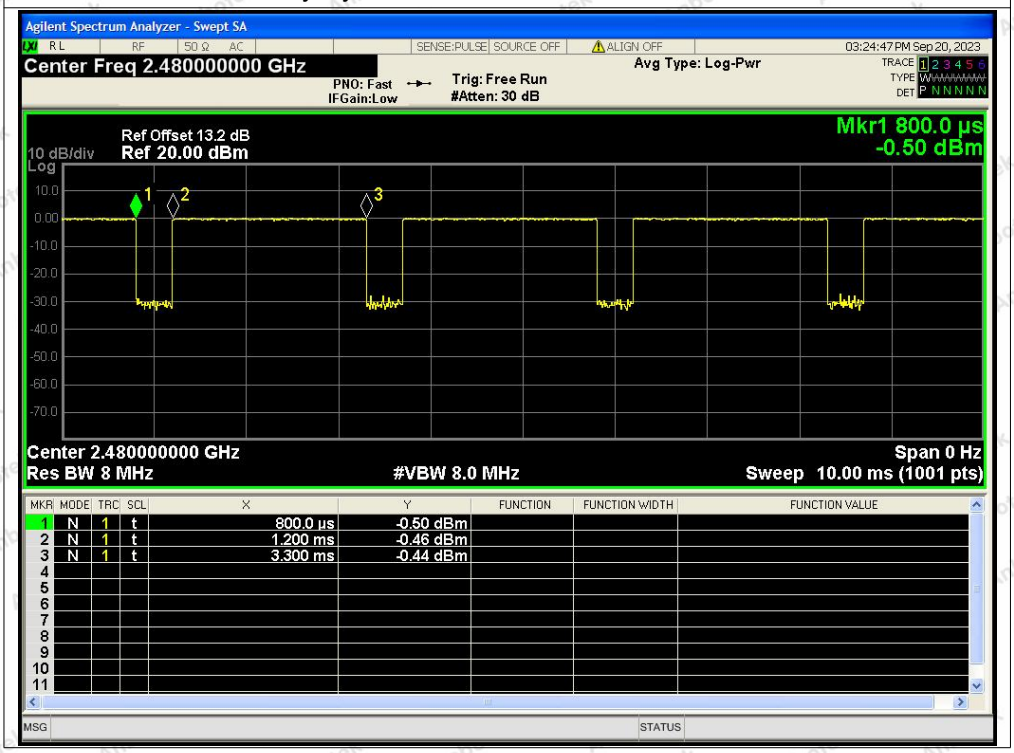
Duty Cycle NVNT BLE 1M 2402MHz Ant1



Duty Cycle NVNT BLE 1M 2440MHz Ant1



Duty Cycle NVNT BLE 1M 2480MHz Ant1

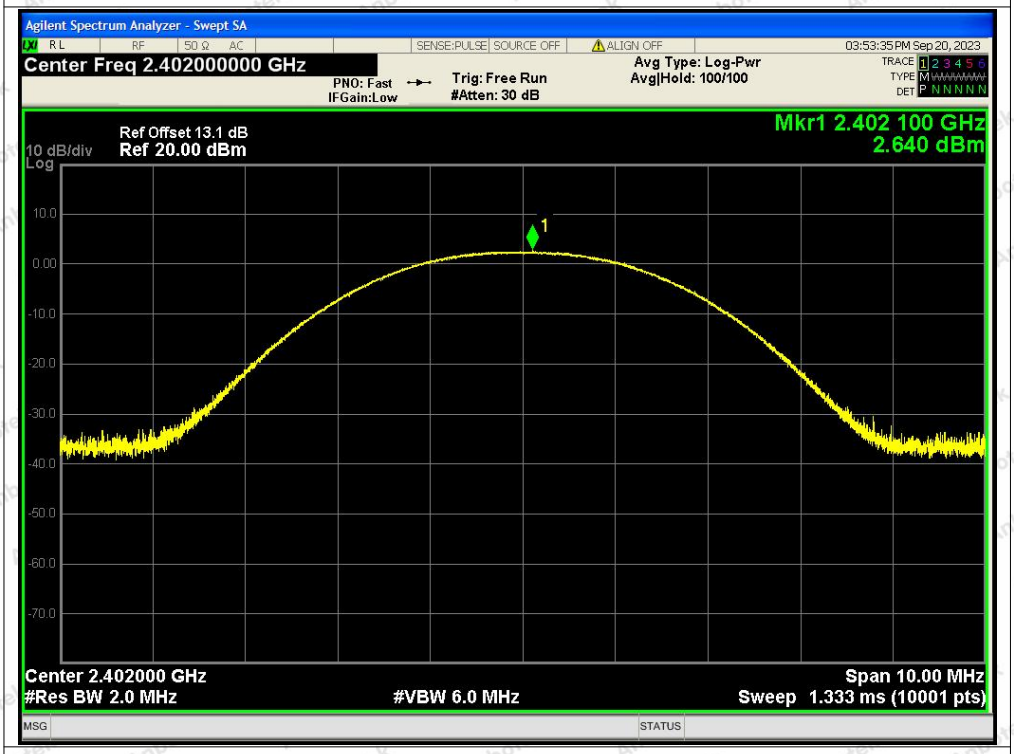


Maximum Peak Conducted Output Power

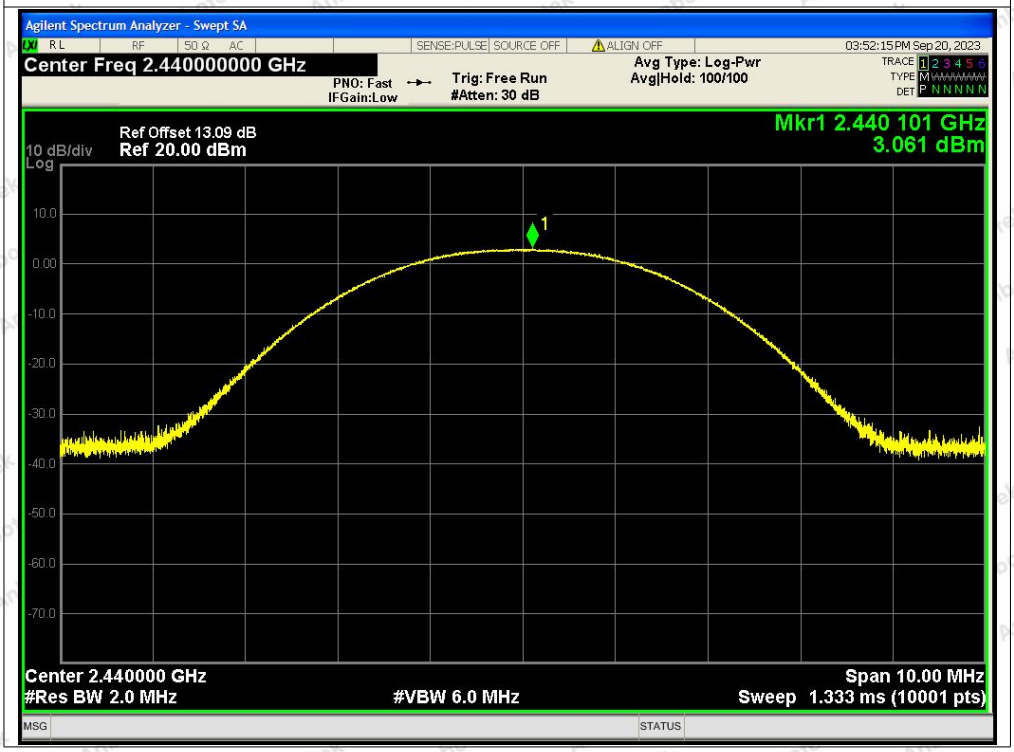
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	2.64	0	2.64	0.00184	30	Pass
NVNT	BLE 1M	2440	Ant1	3.06	0	3.06	0.00202	30	Pass
NVNT	BLE 1M	2480	Ant1	3.31	0	3.31	0.00214	30	Pass

Test Graphs

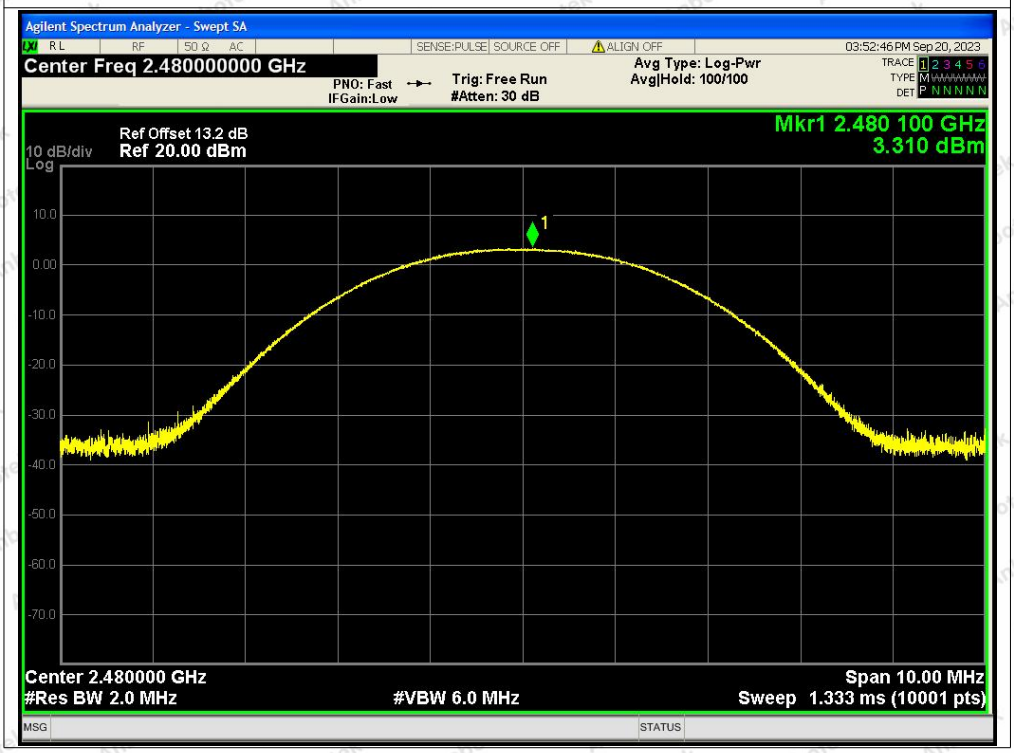
Peak Power NVNT BLE 1M 2402MHz Ant1



Peak Power NVNT BLE 1M 2440MHz Ant1



Peak Power NVNT BLE 1M 2480MHz Ant1

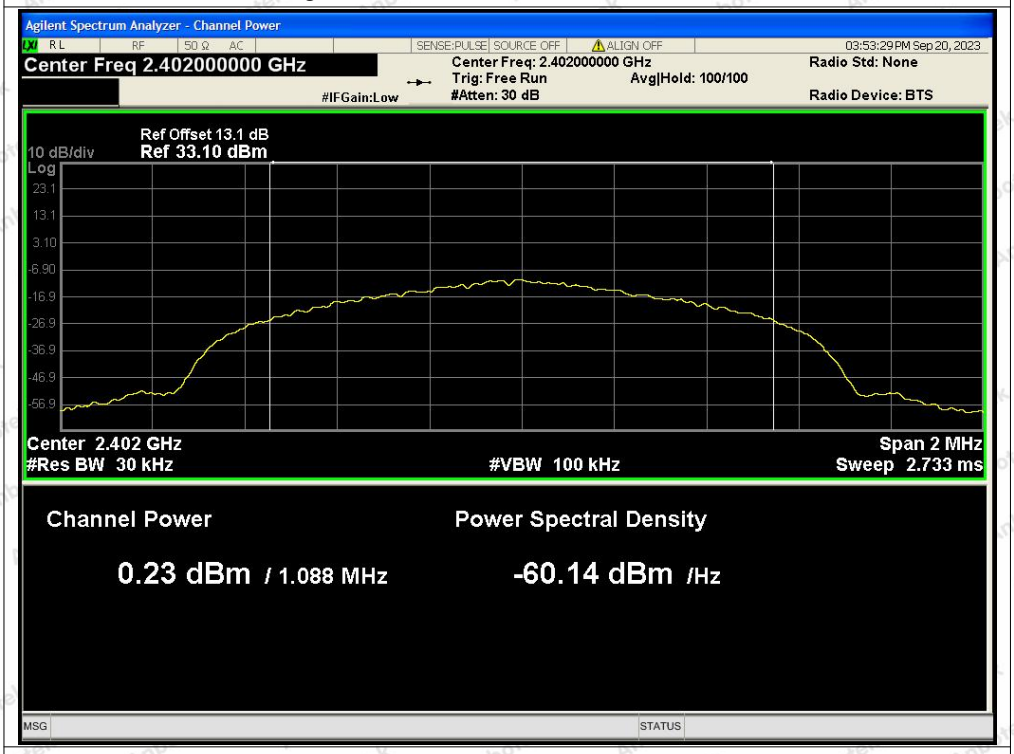


Maximum Average Conducted Output Power

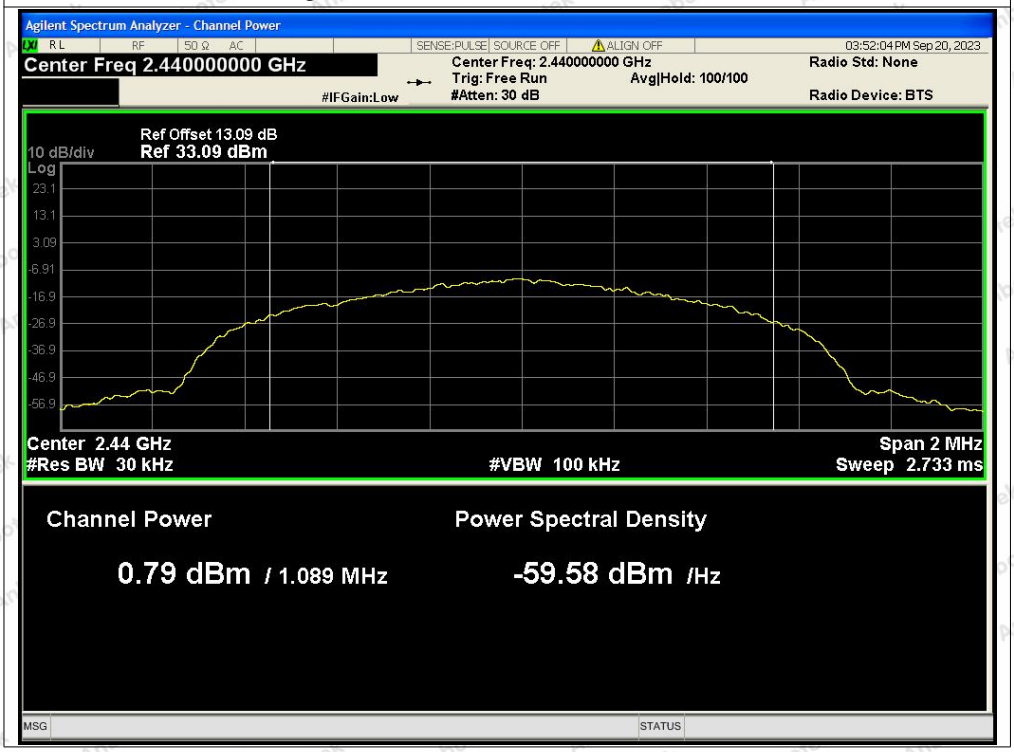
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Conducted Power (dBm)	Total Conducted Power (W)	Limit Conducted (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	0.23	0.76	0.99	0.00126	30	Pass
NVNT	BLE 1M	2440	Ant1	0.79	0.76	1.55	0.00143	30	Pass
NVNT	BLE 1M	2480	Ant1	0.95	0.76	1.71	0.00148	30	Pass

Test Graphs

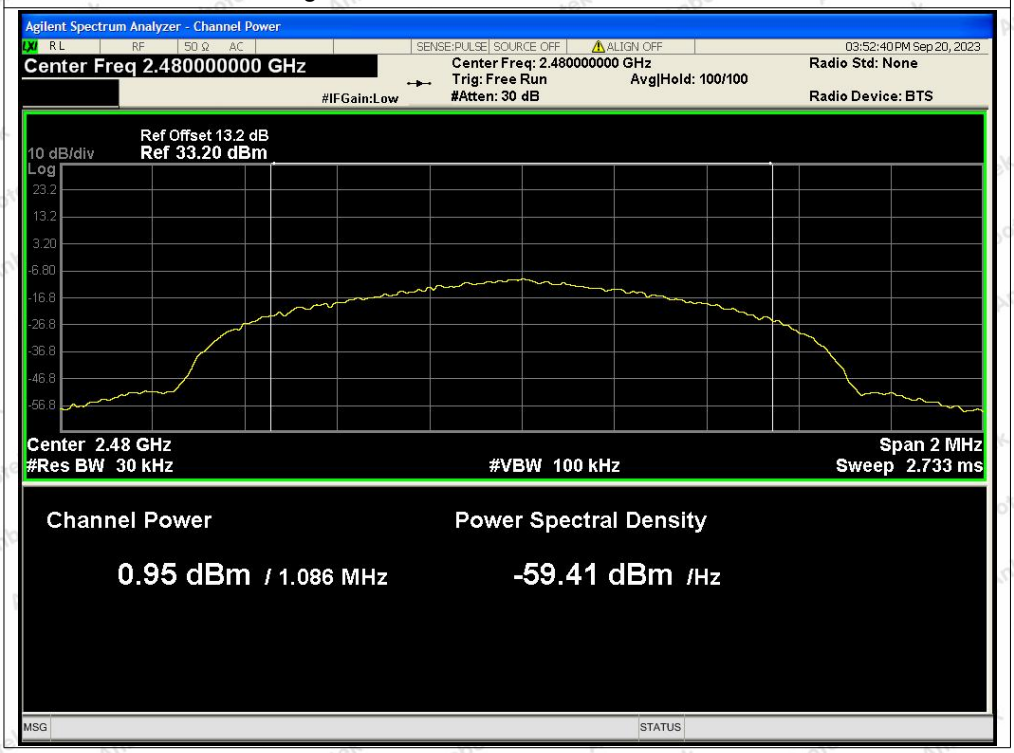
Average Power NVNT BLE 1M 2402MHz Ant1



Average Power NVNT BLE 1M 2440MHz Ant1



Average Power NVNT BLE 1M 2480MHz Ant1

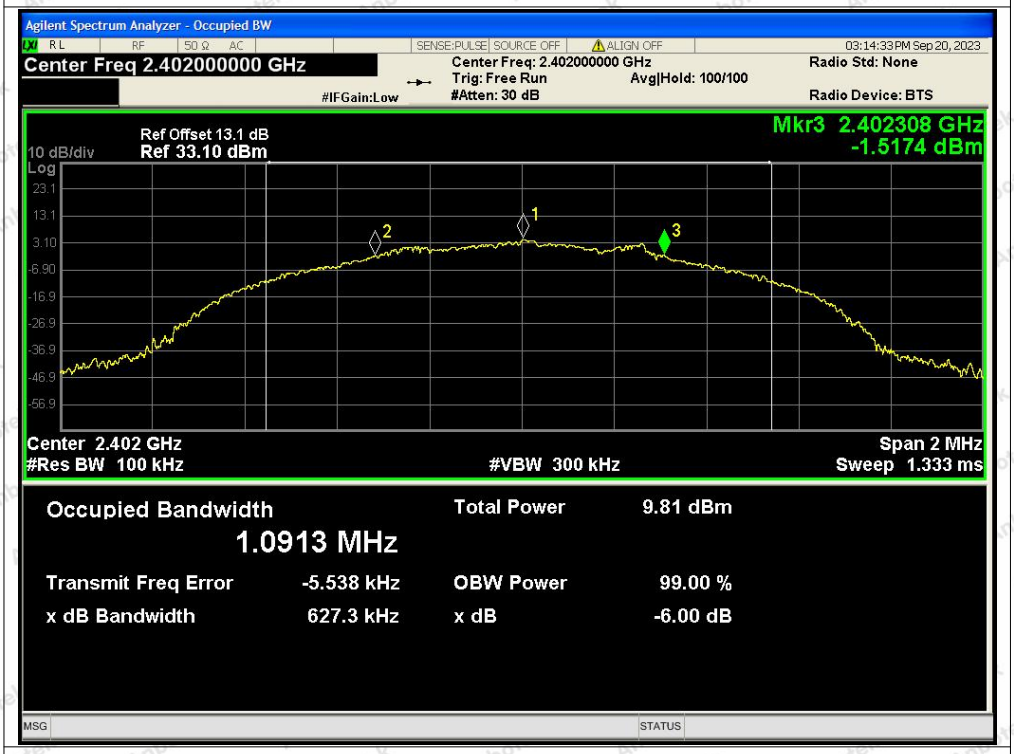


6 dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.627	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.615	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.61	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

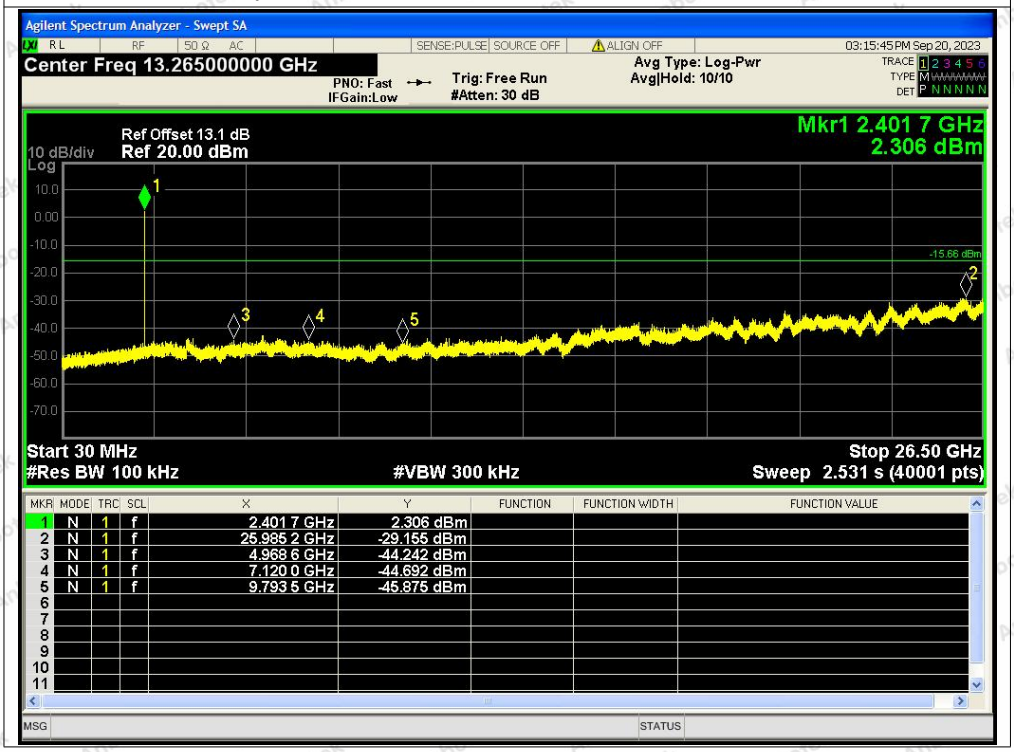
Conducted Spurious Emissions

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-33.49	-20	Pass
NVNT	BLE 1M	2440	Ant1	-32.84	-20	Pass
NVNT	BLE 1M	2480	Ant1	-32.67	-20	Pass

Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref

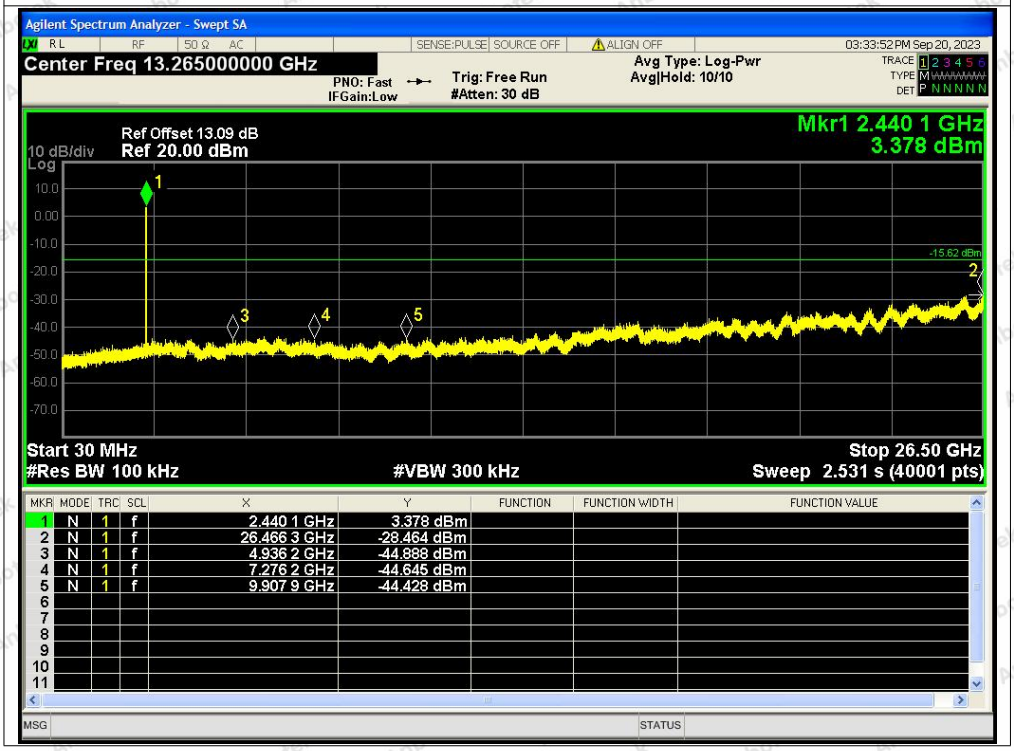
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401 7 GHz	2.306 dBm			
2	N	1	f	25.985 2 GHz	-29.155 dBm			
3	N	1	f	4.968 6 GHz	-44.242 dBm			
4	N	1	f	7.120 0 GHz	-44.692 dBm			
5	N	1	f	9.793 5 GHz	-45.875 dBm			
6								
7								
8								
9								
10								
11								

Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref

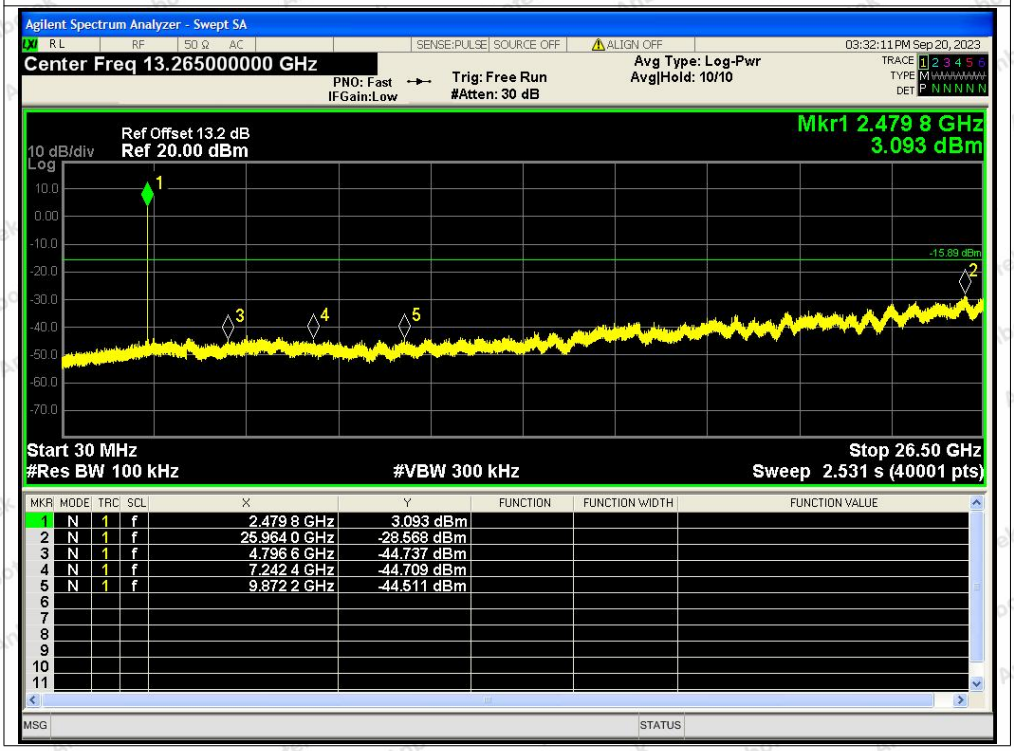
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.440 1 GHz	3.378 dBm			
2	N	1	f	26.466 3 GHz	-28.464 dBm			
3	N	1	f	4.936 2 GHz	-44.888 dBm			
4	N	1	f	7.276 2 GHz	-44.645 dBm			
5	N	1	f	9.907 9 GHz	-44.428 dBm			
6								
7								
8								
9								
10								
11								

Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Ref

Tx. Spurious NVNT BLE 1M 2480MHz Ant1 Emission



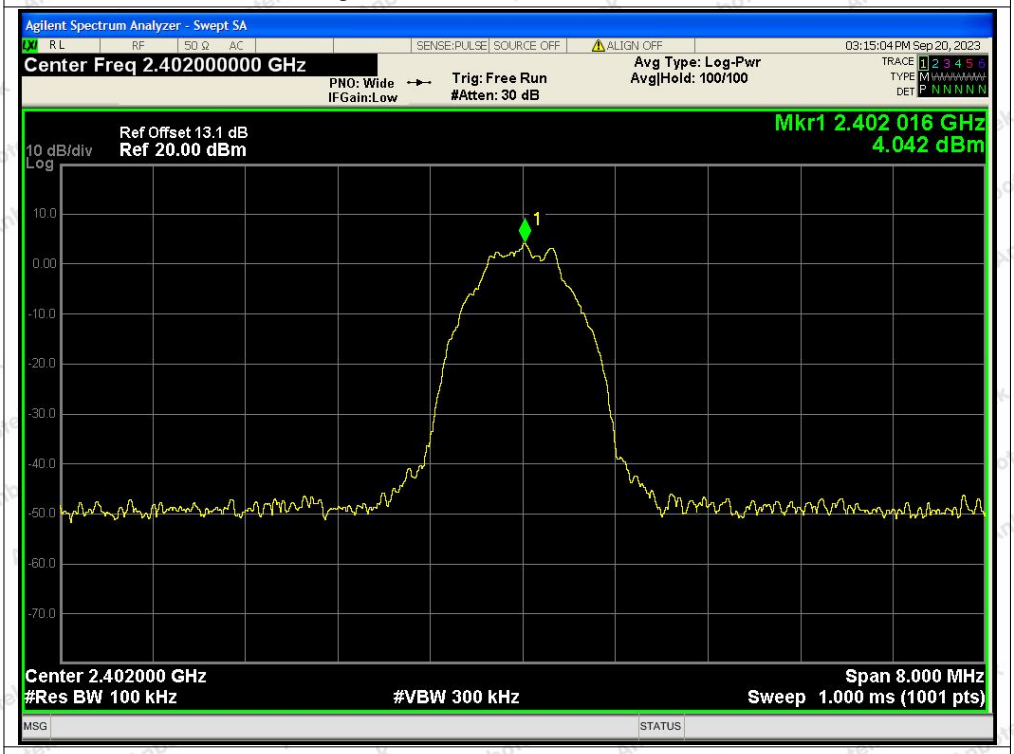
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.479 8 GHz	3.093 dBm			
2	N	1	f	25.964 0 GHz	-28.568 dBm			
3	N	1	f	4.796 6 GHz	-44.737 dBm			
4	N	1	f	7.242 4 GHz	-44.709 dBm			
5	N	1	f	9.872 2 GHz	-44.511 dBm			
6								
7								
8								
9								
10								
11								

Band Edge

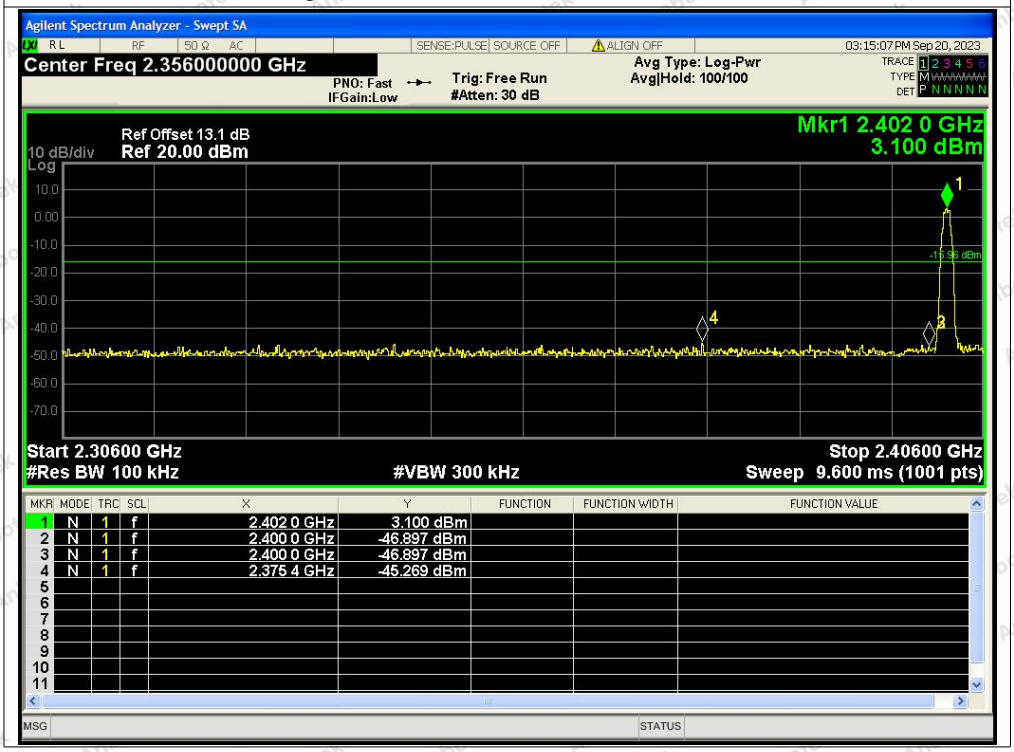
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-49.3	-20	Pass
NVNT	BLE 1M	2480	Ant1	-50.02	-20	Pass

Test Graphs

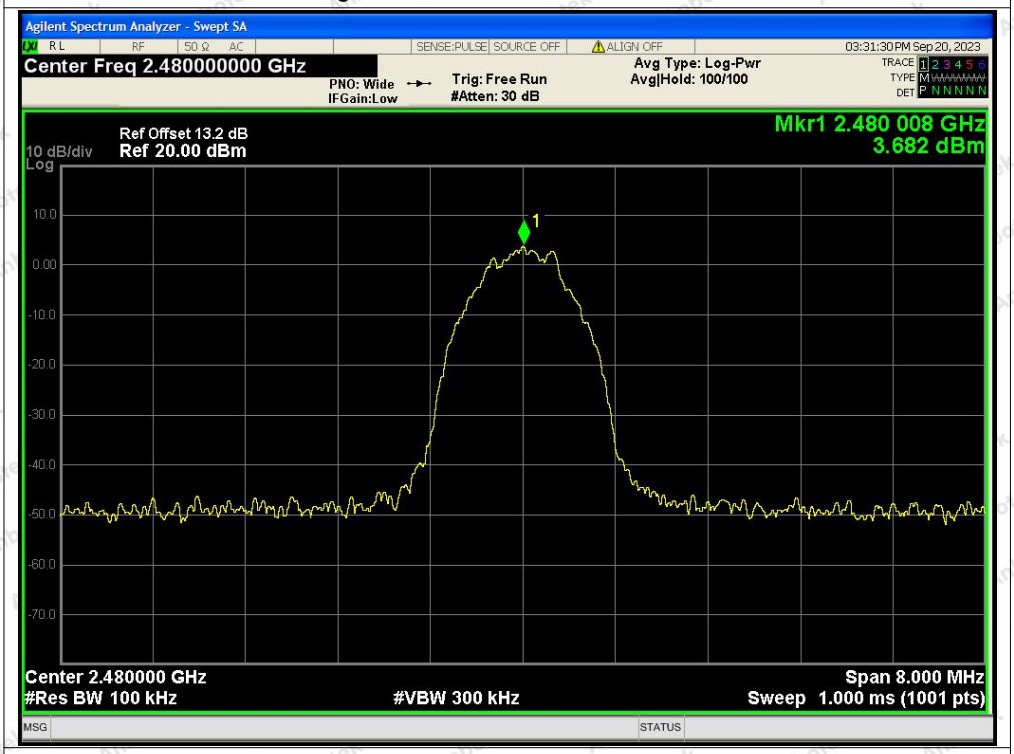
Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



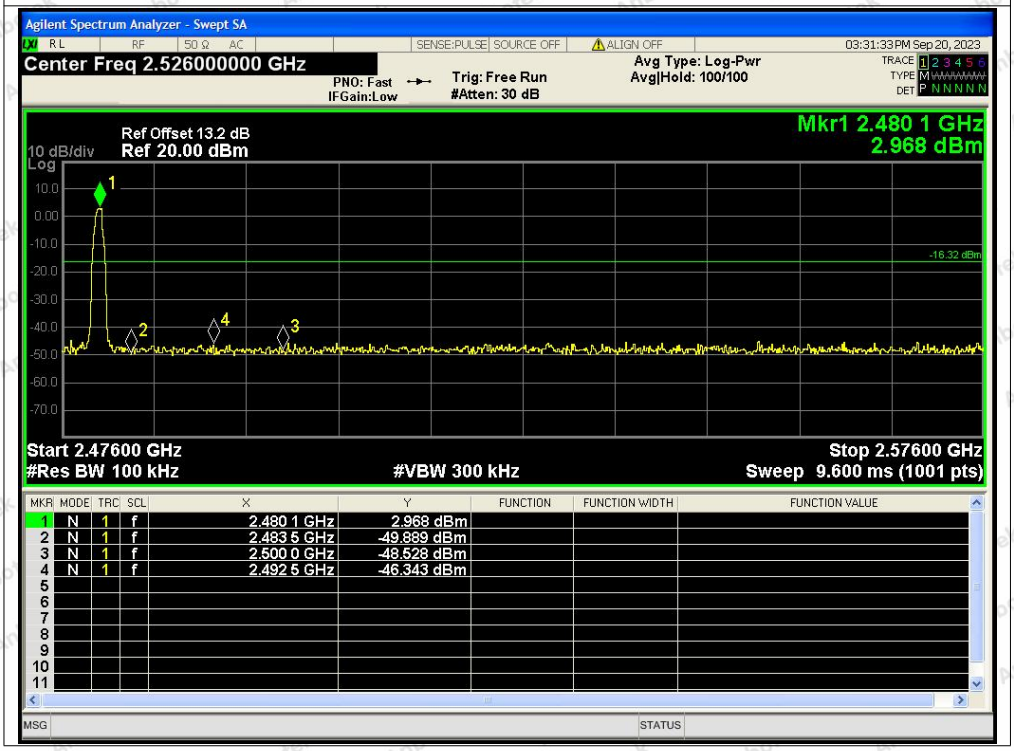
Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



Power Spectral Density

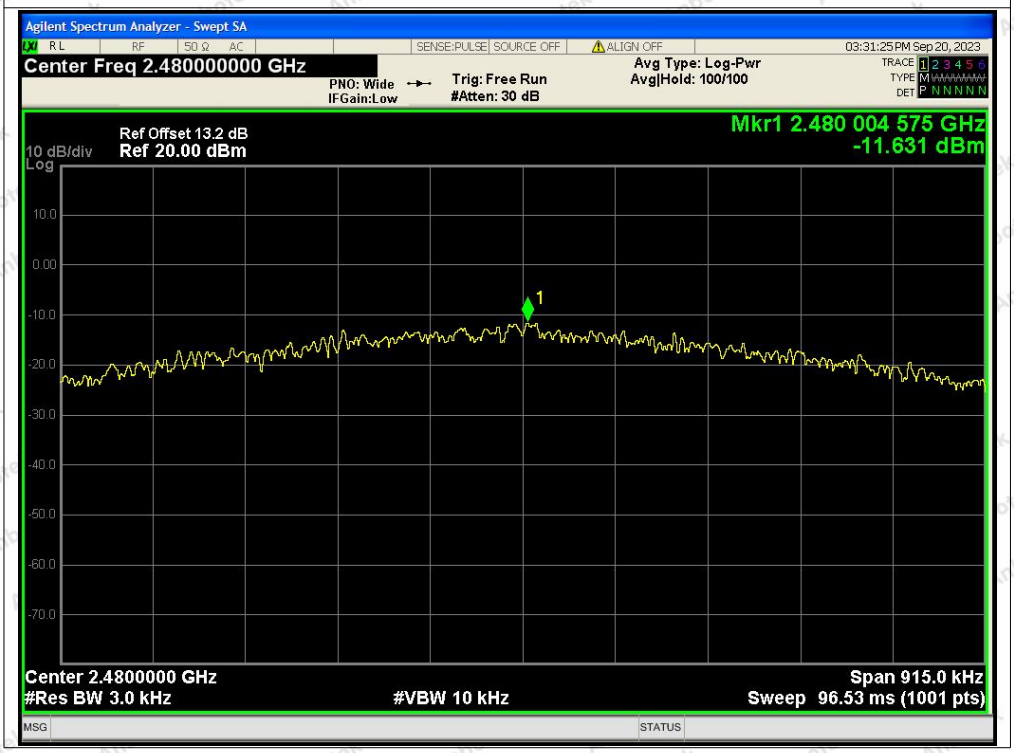
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-10.49	0	-10.49	8	Pass
NVNT	BLE 1M	2440	Ant1	-10.76	0	-10.76	8	Pass
NVNT	BLE 1M	2480	Ant1	-11.63	0	-11.63	8	Pass

Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1

PSD NVNT BLE 1M 2440MHz Ant1

PSD NVNT BLE 1M 2480MHz Ant1



END OF REPORT