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FCC_BLE(Part15.247) Test Data

1.Duty Cycle

Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
BLE 1M	2402	65.92	1.81	2.43
BLE 1M	2440	65.92	1.81	2.43
BLE 1M	2480	65.92	1.81	2.43

Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1

Duty Cycle NVNT BLE 1M 2440MHz Ant1

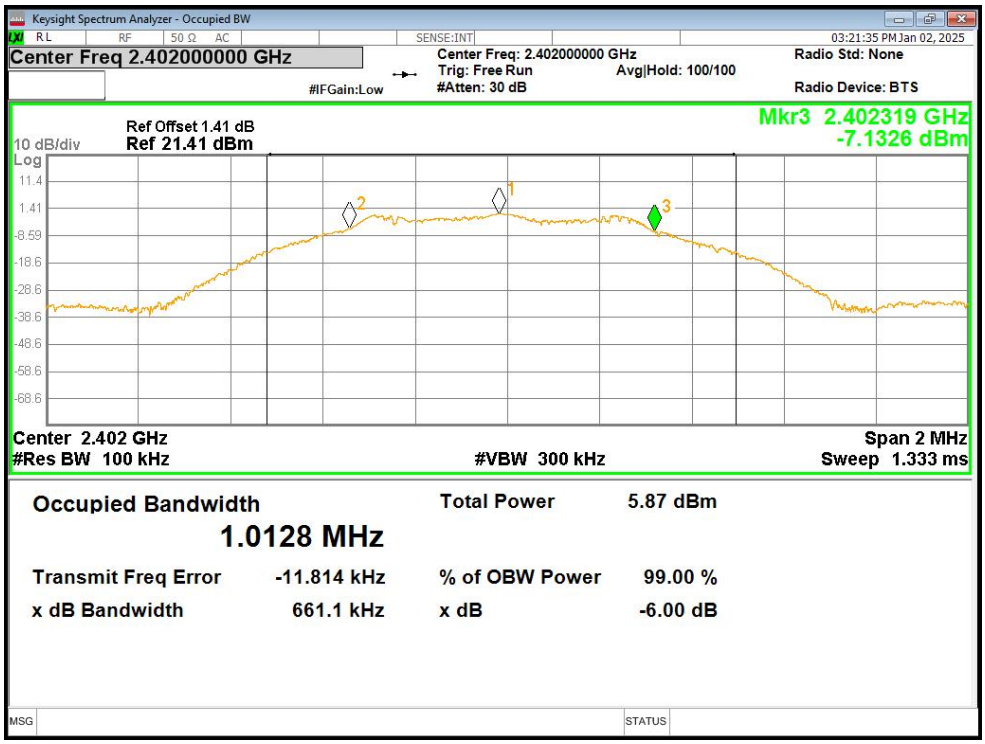
Duty Cycle NVNT BLE 1M 2480MHz Ant1

2.-6dB Bandwidth

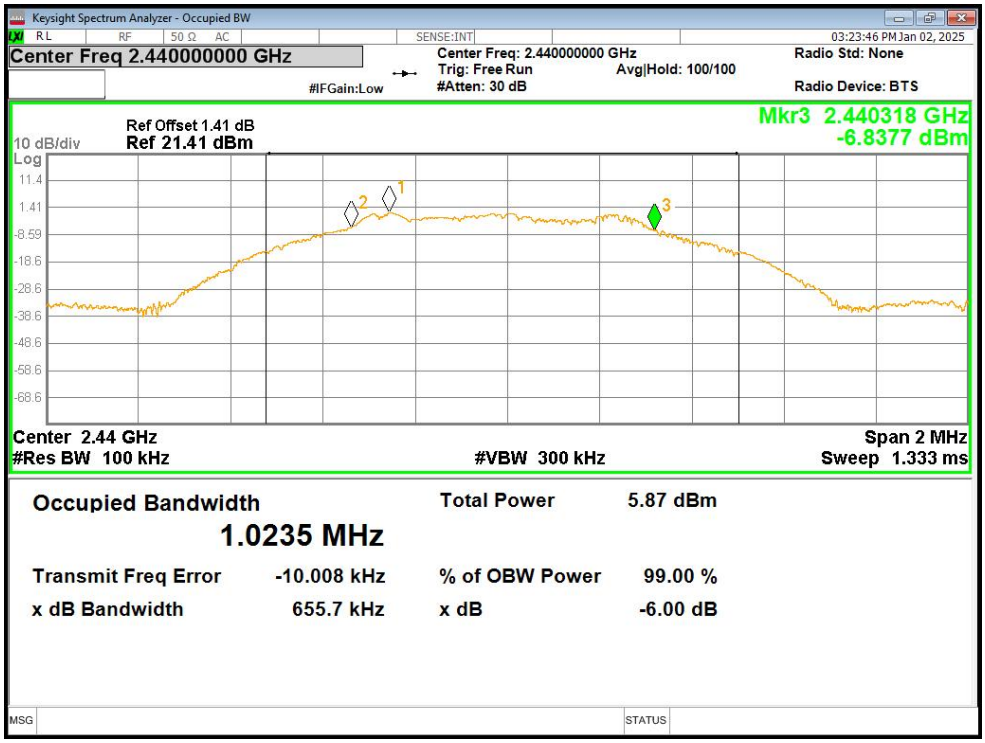
Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
BLE 1M	2402	0.661	0.5	Pass
BLE 1M	2440	0.656	0.5	Pass
BLE 1M	2480	0.66	0.5	Pass

Test Graphs

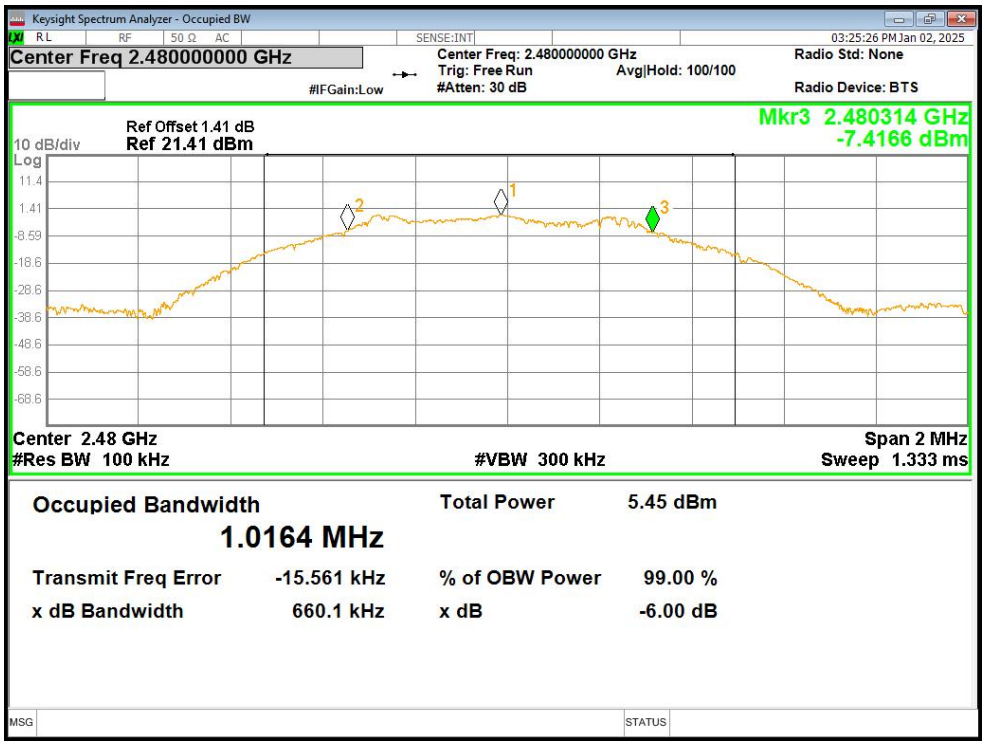
-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1

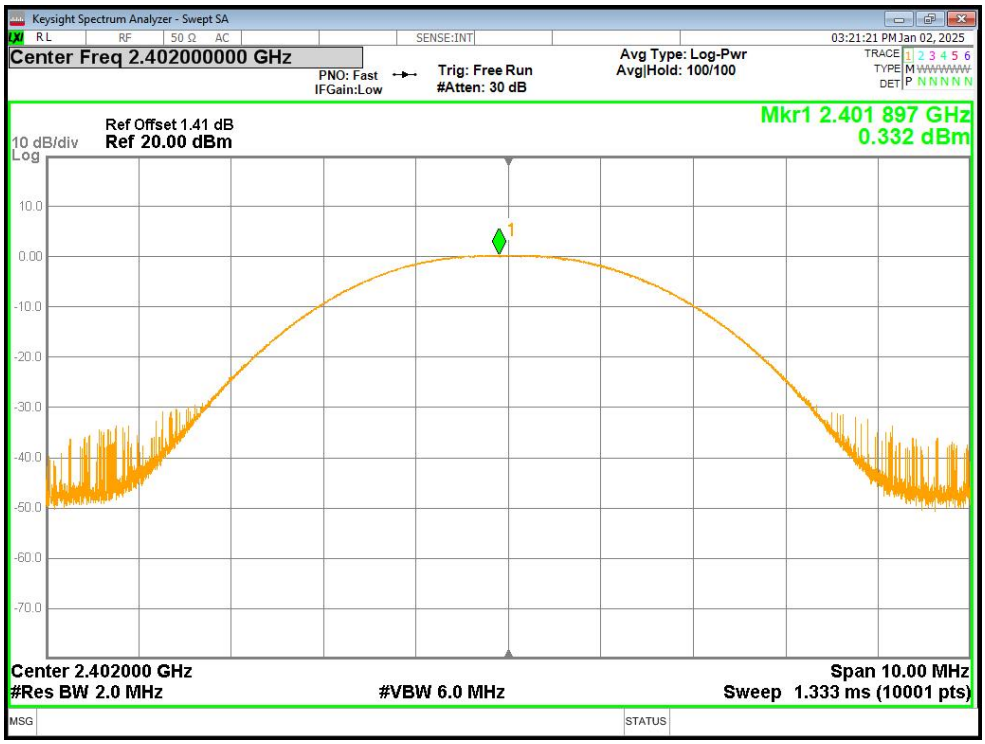


3.Maximum Peak Conducted Output Power

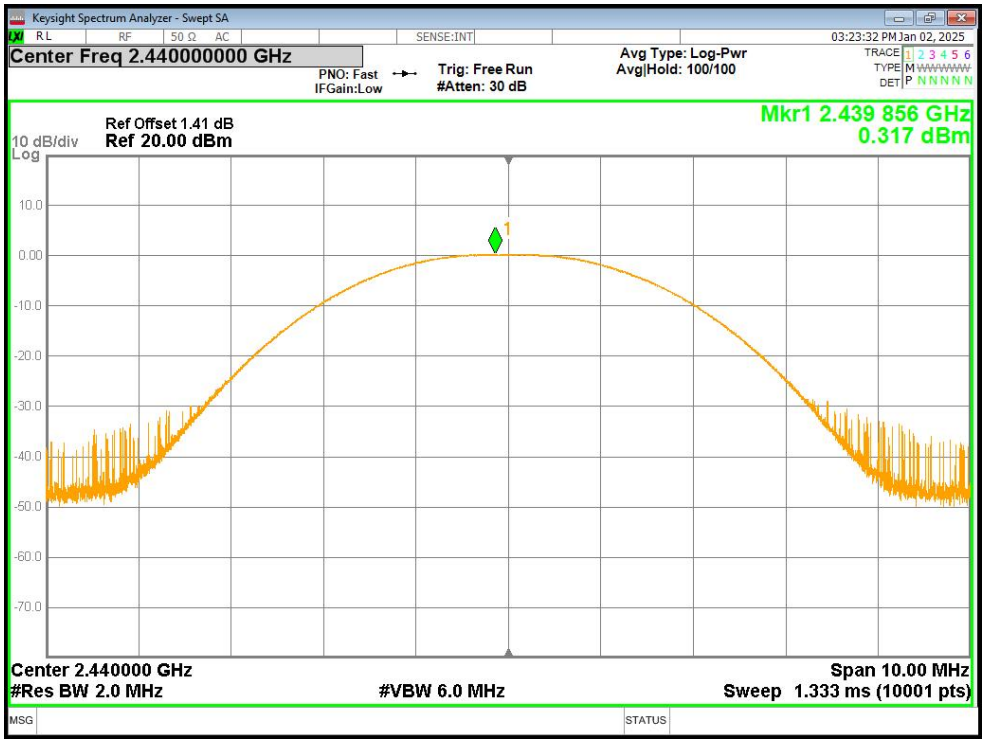
Mode	Frequency (MHz)	Total Power (dBm)	Limit (dBm)	Verdict
BLE 1M	2402	0.33	30	Pass
BLE 1M	2440	0.32	30	Pass
BLE 1M	2480	-0.11	30	Pass

Test Graphs

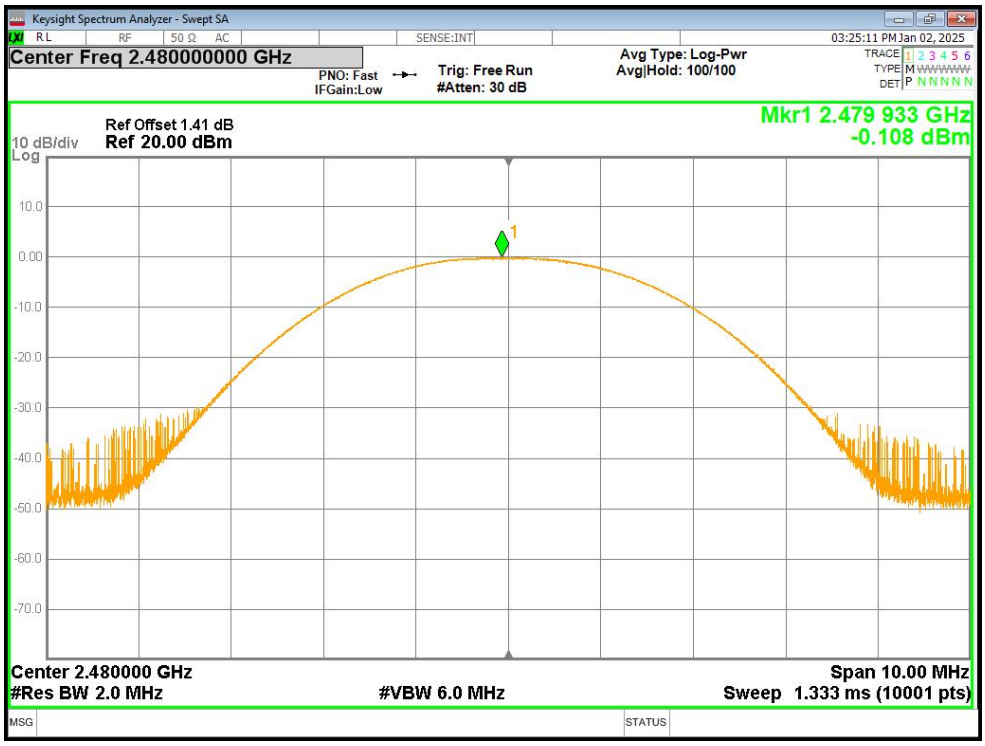
Peak Power NVNT BLE 1M 2402MHz Ant1



Peak Power NVNT BLE 1M 2440MHz Ant1



Peak Power NVNT BLE 1M 2480MHz Ant1

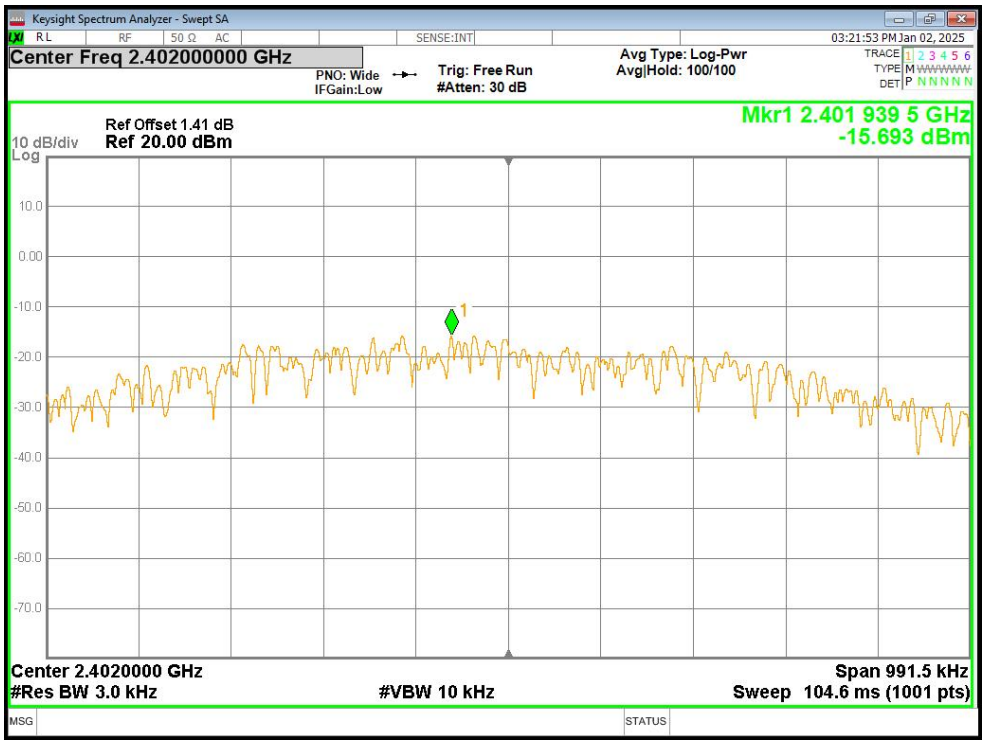


4.Maximum Power Spectral Density Level

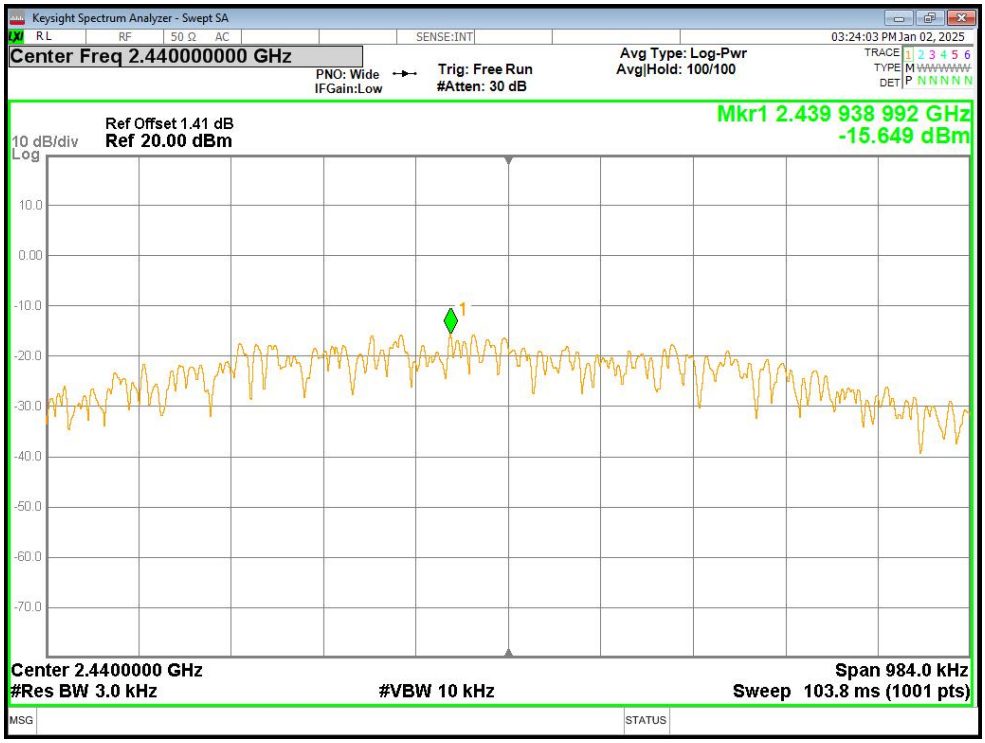
Mode	Frequency (MHz)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
BLE 1M	2402	-15.69	8	Pass
BLE 1M	2440	-15.65	8	Pass
BLE 1M	2480	-16.06	8	Pass

Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1



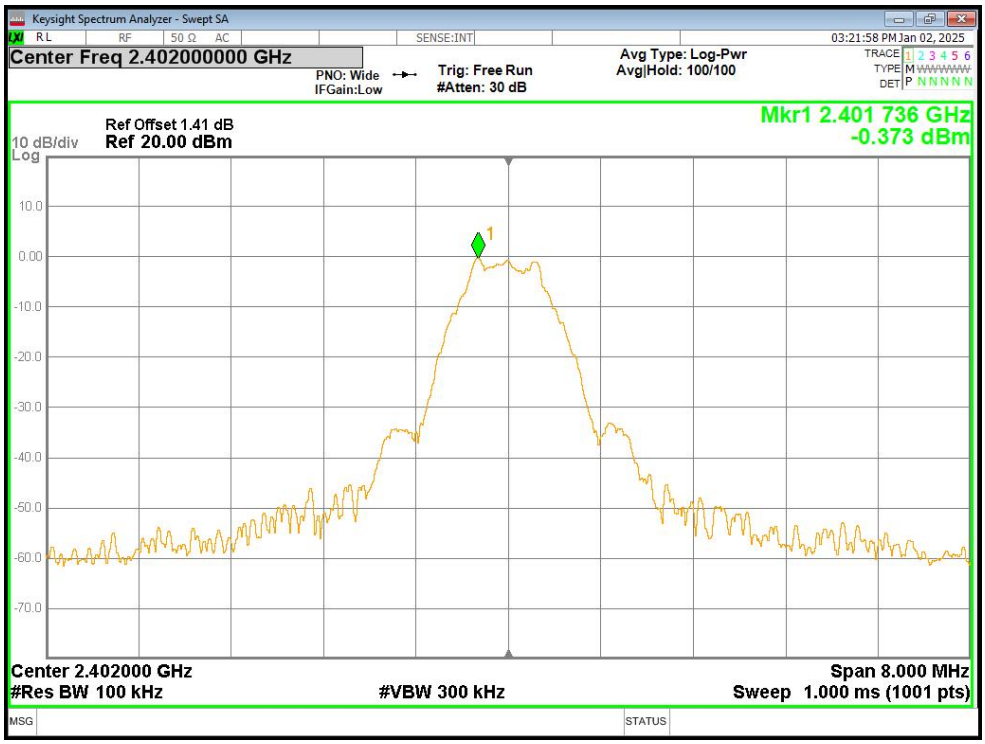
PSD NVNT BLE 1M 2480MHz Ant1

5.Band Edge

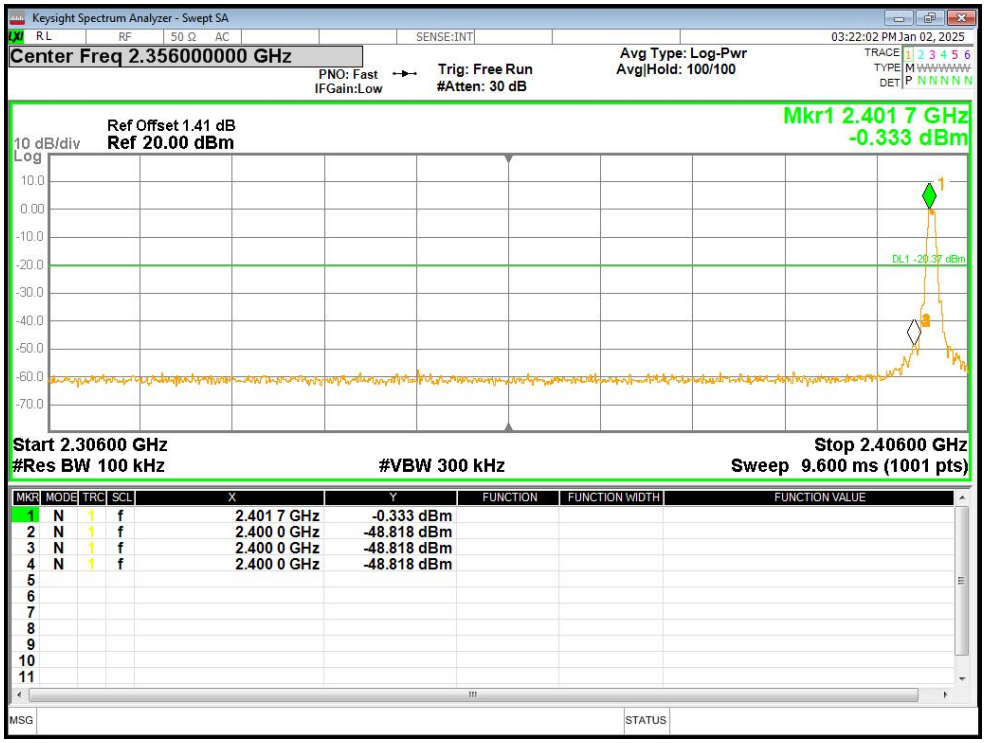
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-48.44	-20	Pass
BLE 1M	2480	-56.22	-20	Pass

Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref

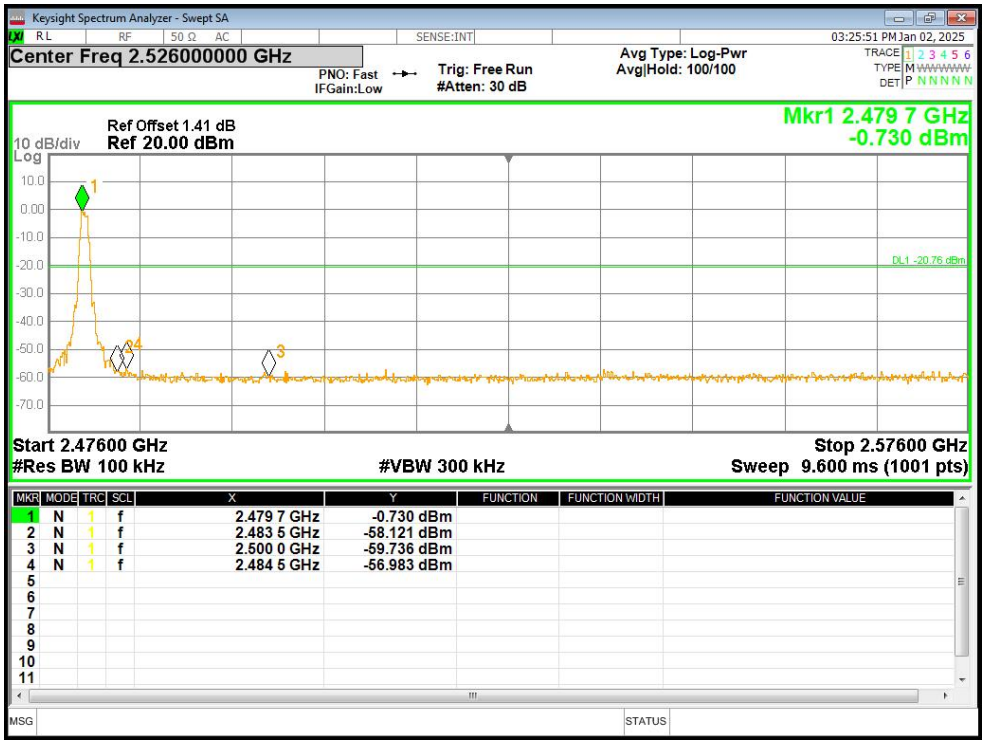


Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



Band Edge NVNT BLE 1M 2480MHz Ant1 Ref

Band Edge NVNT BLE 1M 2480MHz Ant1 Emission

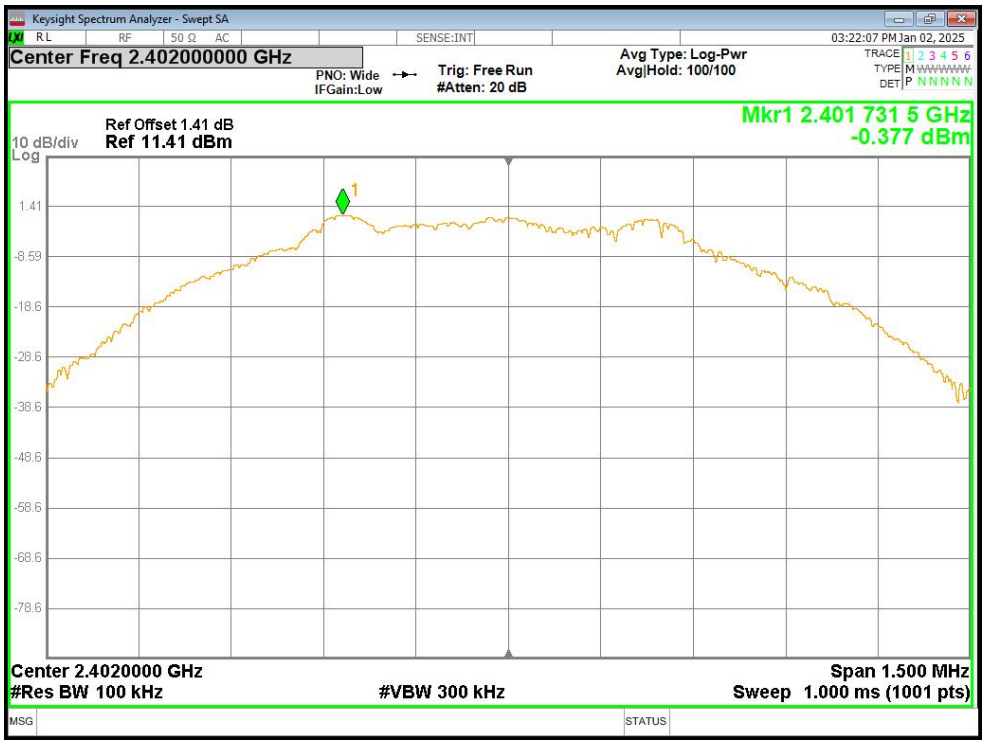


6.Conducted RF Spurious Emission

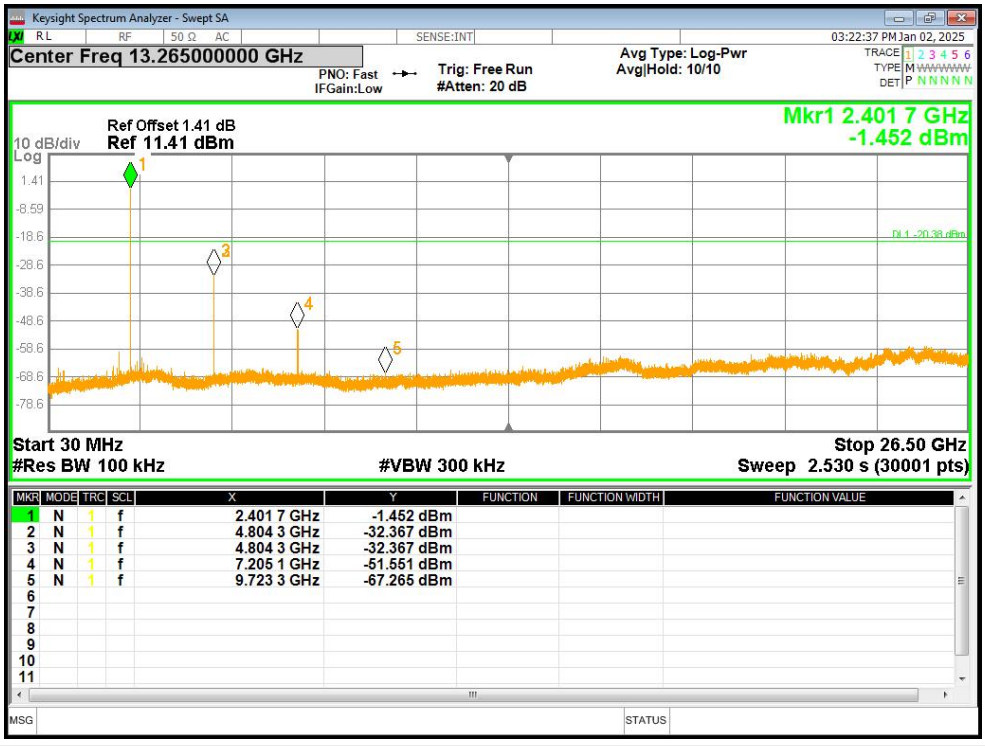
Mode	Frequency (MHz)	Max Value (dBc)	Limit (dBc)	Verdict
BLE 1M	2402	-31.98	-20	Pass
BLE 1M	2440	-33.09	-20	Pass
BLE 1M	2480	-33.46	-20	Pass

Test Graphs

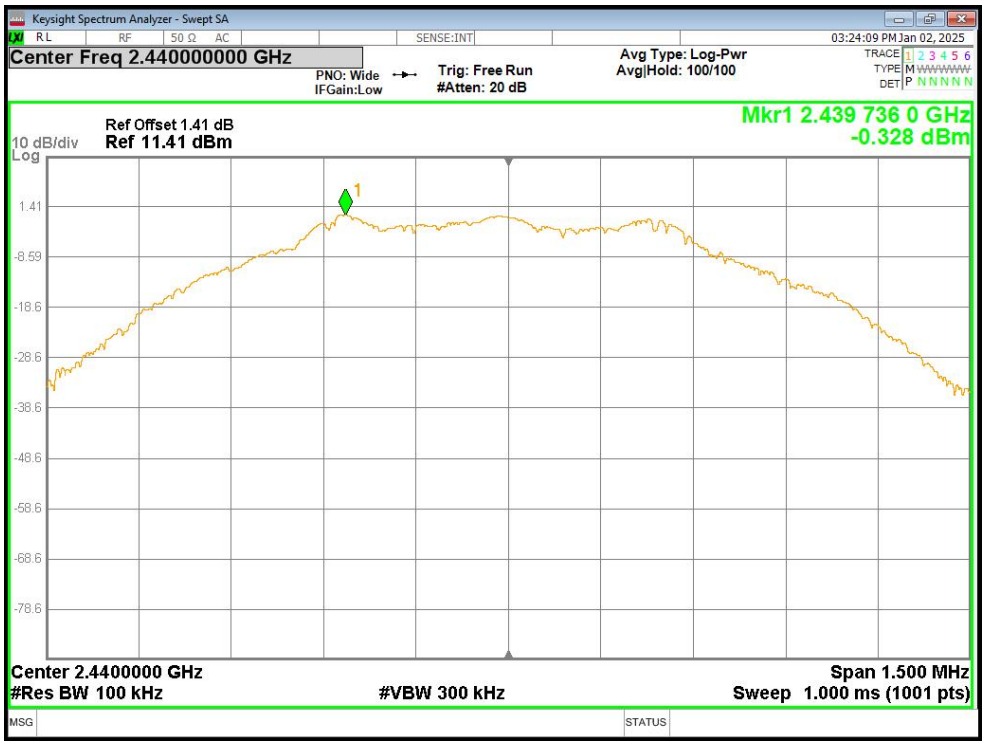
Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Ref



Tx. Spurious NVNT BLE 1M 2402MHz Ant1 Emission



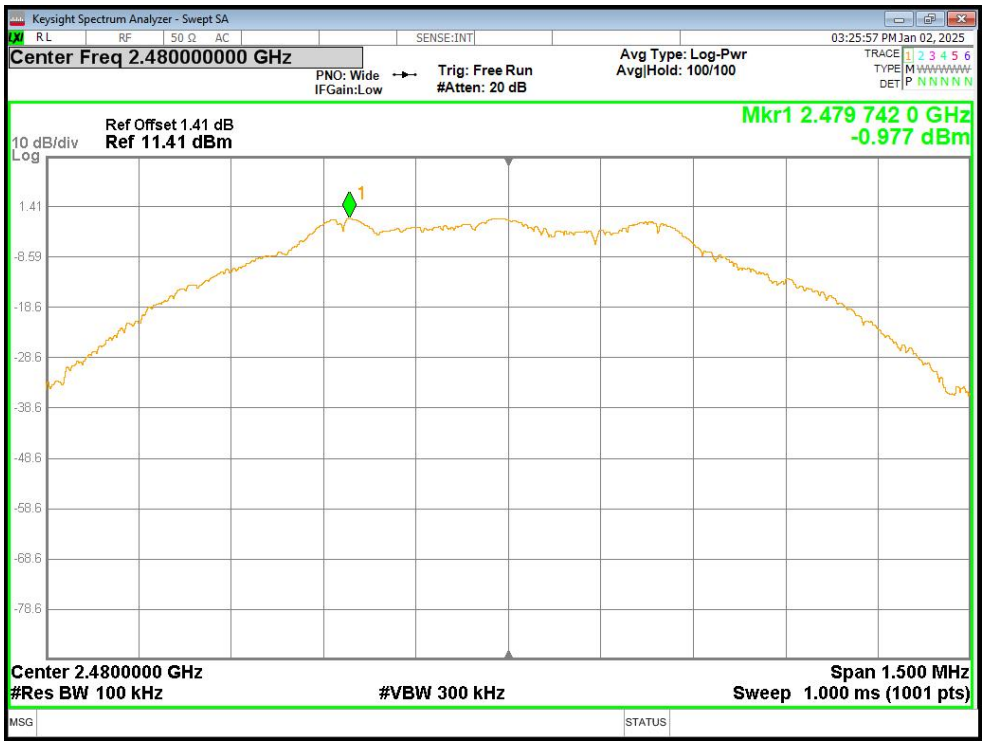
Tx. Spurious NVNT BLE 1M 2440MHz Ant1 Ref



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 5 GHz	-1.436 dBm			
2	N	1	f	4.879 3 GHz	-33.425 dBm			
3	N	1	f	4.879 3 GHz	-33.425 dBm			
4	N	1	f	7.319 0 GHz	-54.753 dBm			
5	N	1	f	9.956 3 GHz	-68.271 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	2.480 2 GHz	-2.747 dBm			
2	N	1	f	4.959 6 GHz	-34.448 dBm			
3	N	1	f	4.959 6 GHz	-34.448 dBm			
4	N	1	f	7.439 8 GHz	-55.803 dBm			
5	N	1	f	9.920 1 GHz	-67.723 dBm			
6								
7								
8								
9								
10								
11								