Appendix: Bluetooth LE of Ear R

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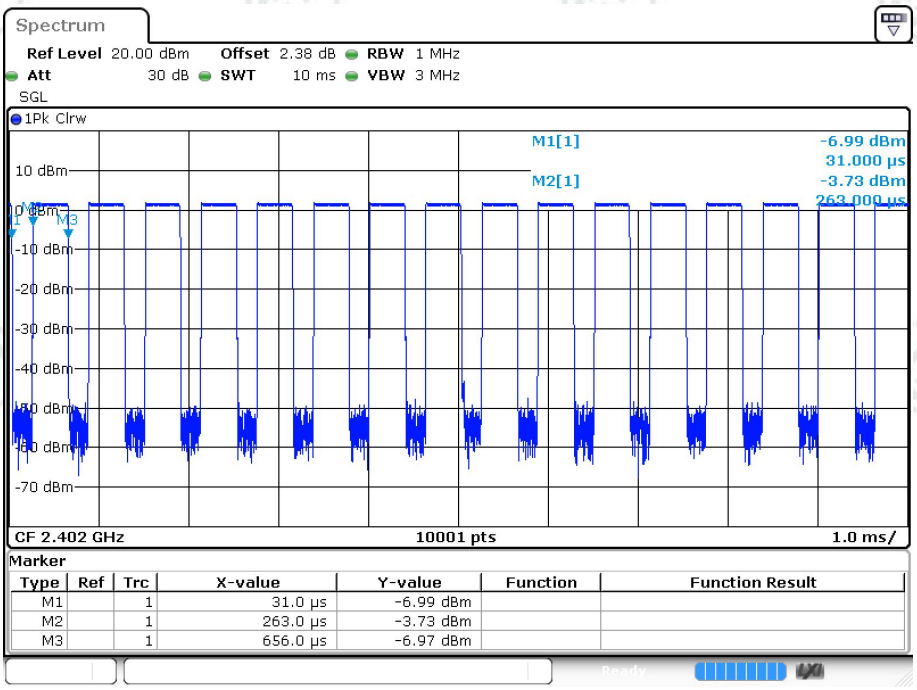
Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant1	62.88	2.01	2.54
NVNT	BLE 1M	2440	Ant1	62.88	2.01	2.54
NVNT	BLE 1M	2480	Ant1	62.88	2.01	2.54
NVNT	BLE 2M	2402	Ant1	33.92	4.7	4.72
NVNT	BLE 2M	2440	Ant1	34.08	4.68	4.69
NVNT	BLE 2M	2480	Ant1	34.08	4.68	4.69

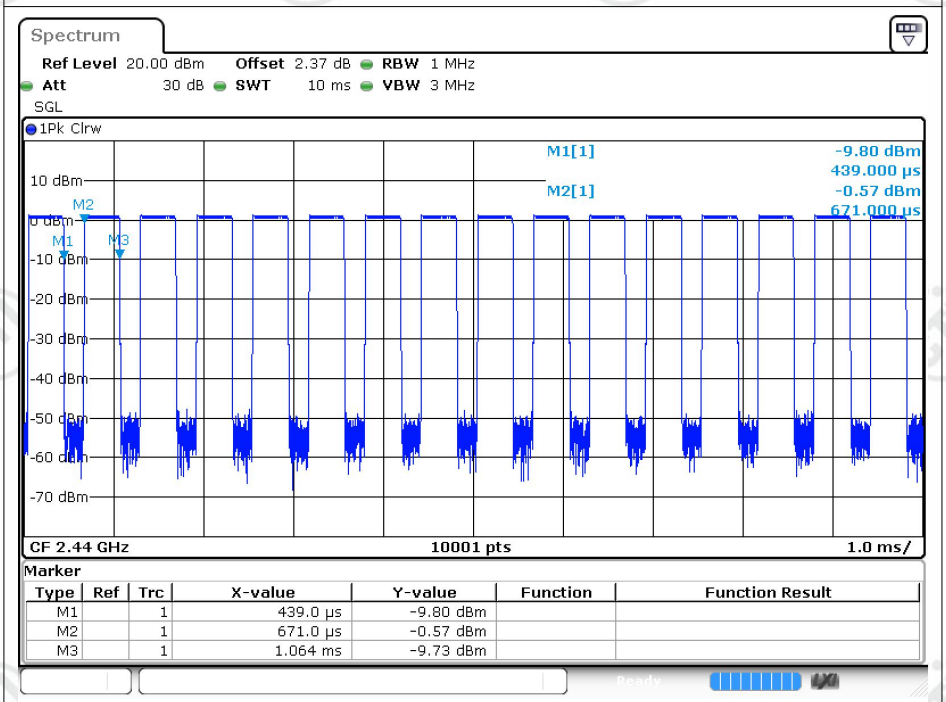
Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant1



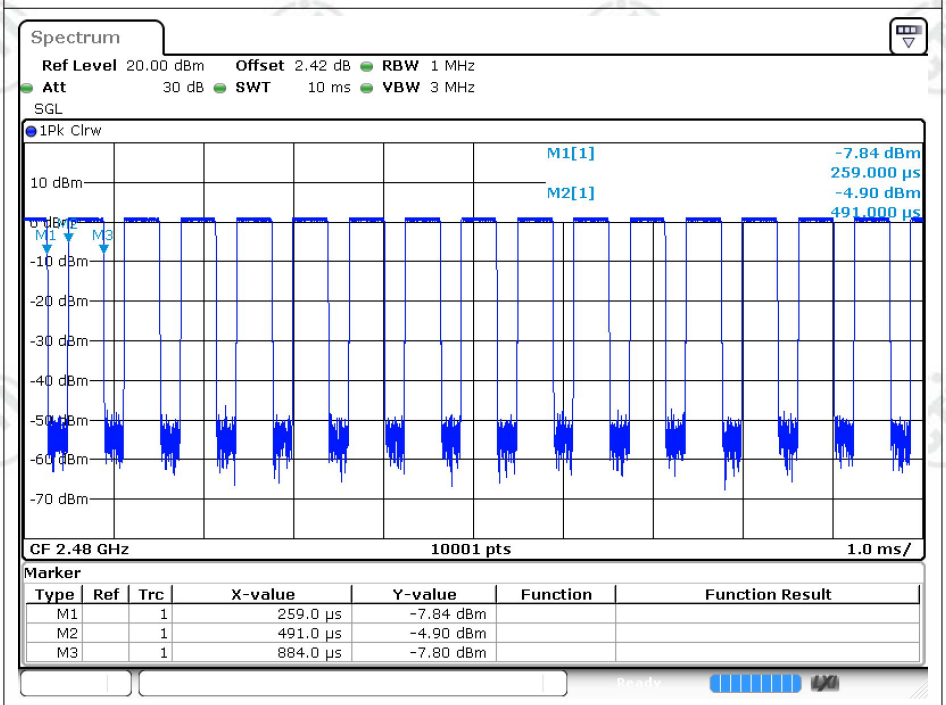
Date: 26.JUN.2025 09:21:48

Duty Cycle NVNT BLE 1M 2440MHz Ant1



Date: 26.JUN.2025 09:24:38

Duty Cycle NVNT BLE 1M 2480MHz Ant1

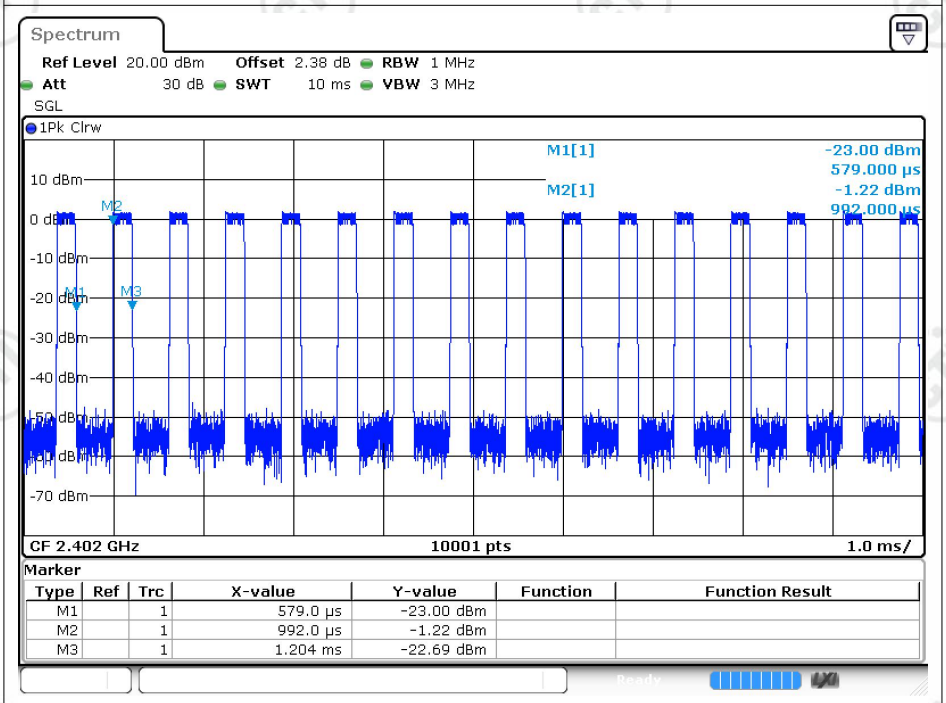


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	259.0 µs	-7.84 dBm		
M2		1	491.0 µs	-4.90 dBm		
M3		1	884.0 µs	-7.80 dBm		

Date: 26.JUN.2025 09:26:50

Duty Cycle NVNT BLE 2M 2402MHz Ant1

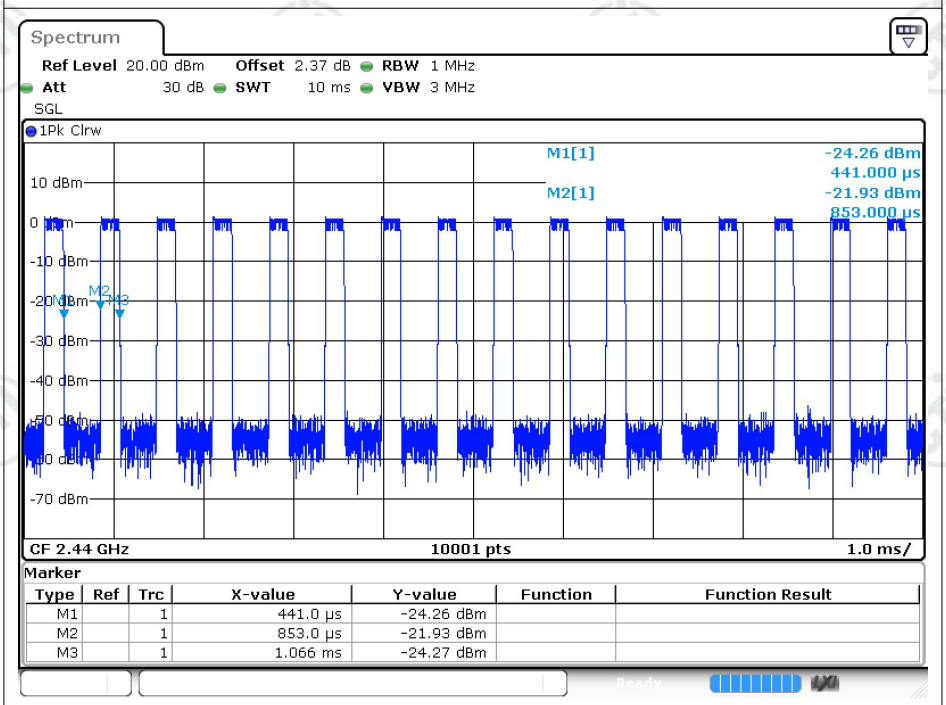


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	579.0 µs	-23.00 dBm		
M2		1	992.0 µs	-1.22 dBm		
M3		1	1.204 ms	-22.69 dBm		

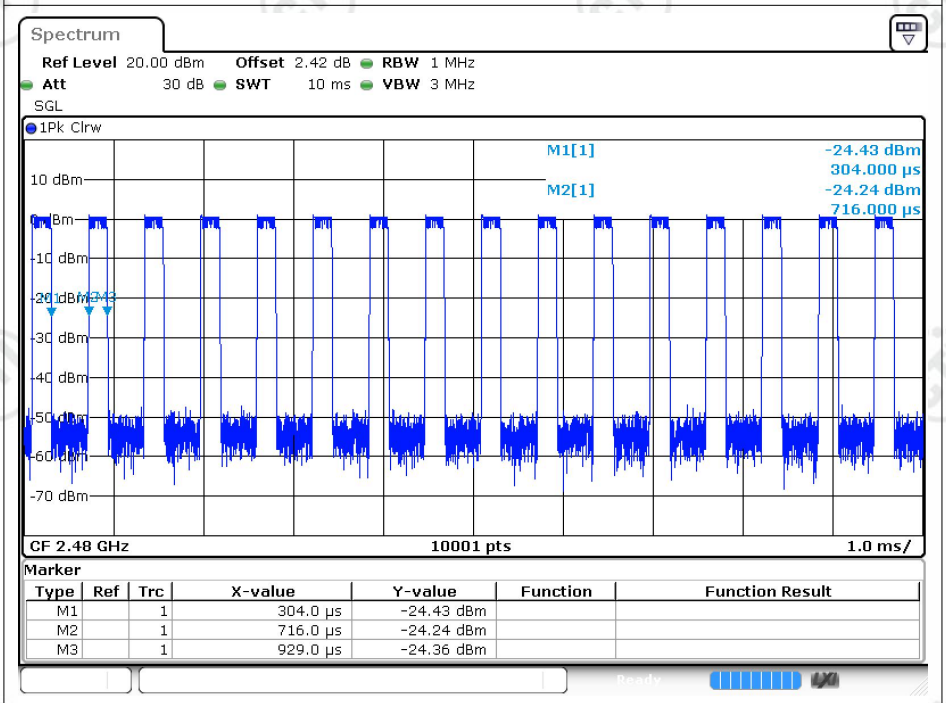
Date: 26.JUN.2025 09:28:43

Duty Cycle NVNT BLE 2M 2440MHz Ant1



Date: 26.JUN.2025 09:30:47

Duty Cycle NVNT BLE 2M 2480MHz Ant1



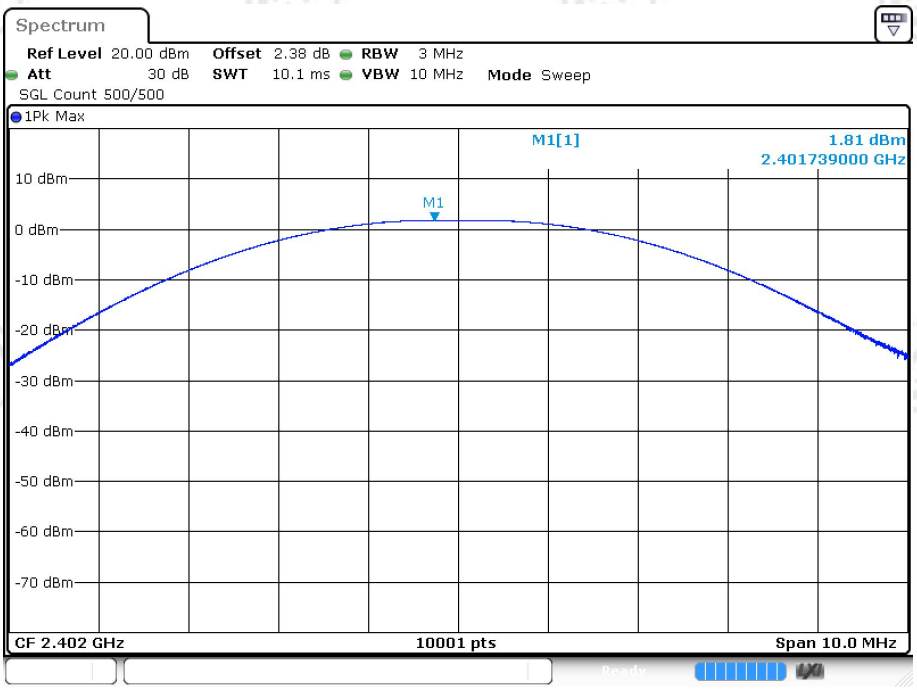
Date: 26.JUN.2025 09:32:41

Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	1.81	30	Pass
NVNT	BLE 1M	2440	Ant1	1.21	30	Pass
NVNT	BLE 1M	2480	Ant1	1.05	30	Pass
NVNT	BLE 2M	2402	Ant1	1.97	30	Pass
NVNT	BLE 2M	2440	Ant1	1.21	30	Pass
NVNT	BLE 2M	2480	Ant1	1.06	30	Pass

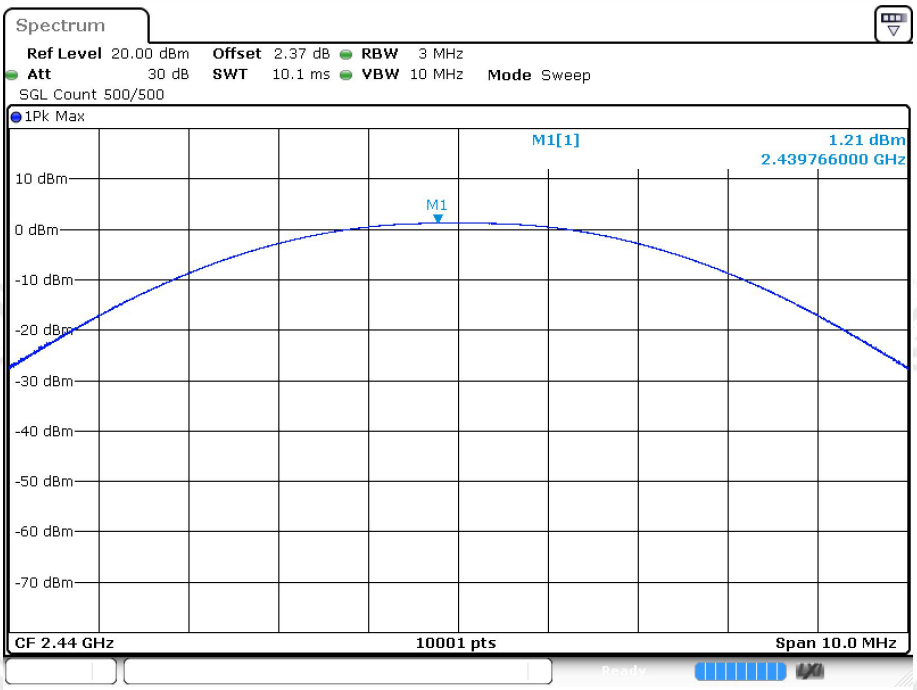
Test Graphs

Peak Power NVNT BLE 1M 2402MHz Ant1



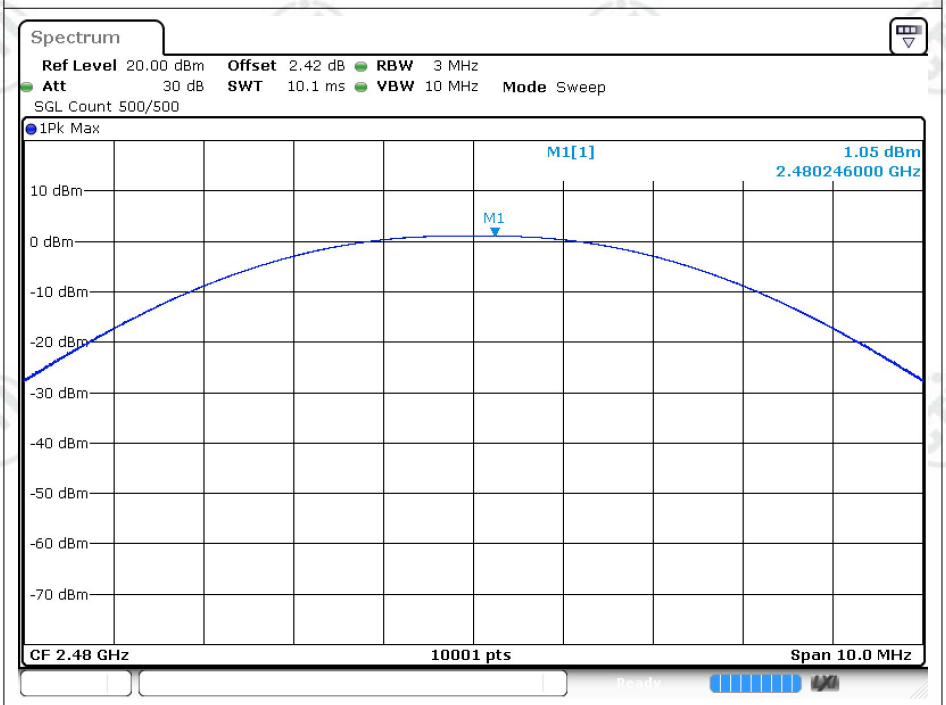
Date: 26.JUN.2025 09:21:58

Peak Power NVNT BLE 1M 2440MHz Ant1



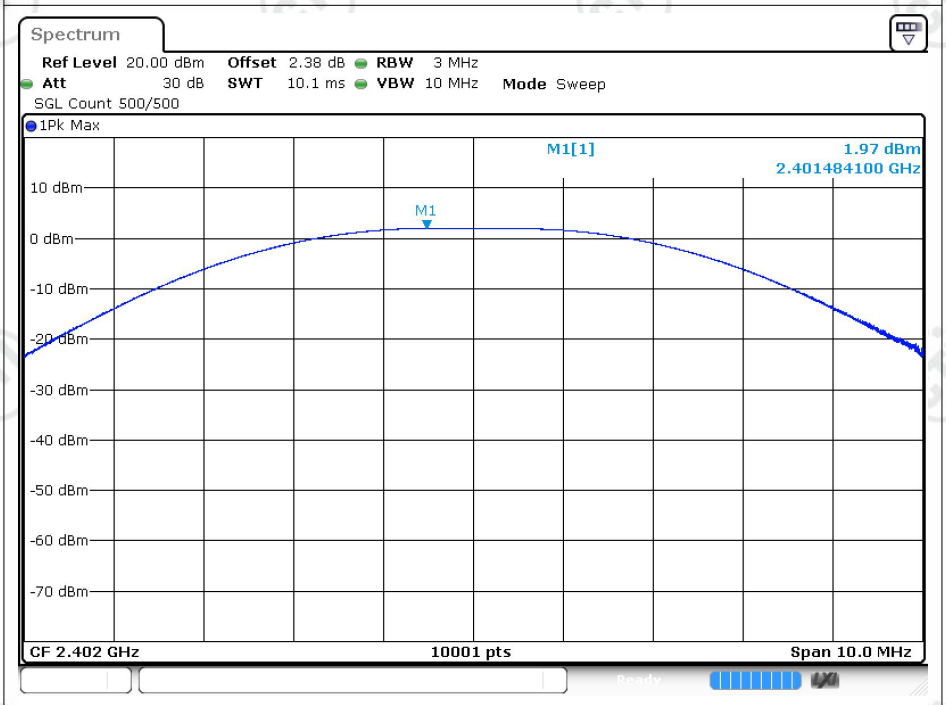
Date: 26.JUN.2025 09:24:48

Peak Power NVNT BLE 1M 2480MHz Ant1



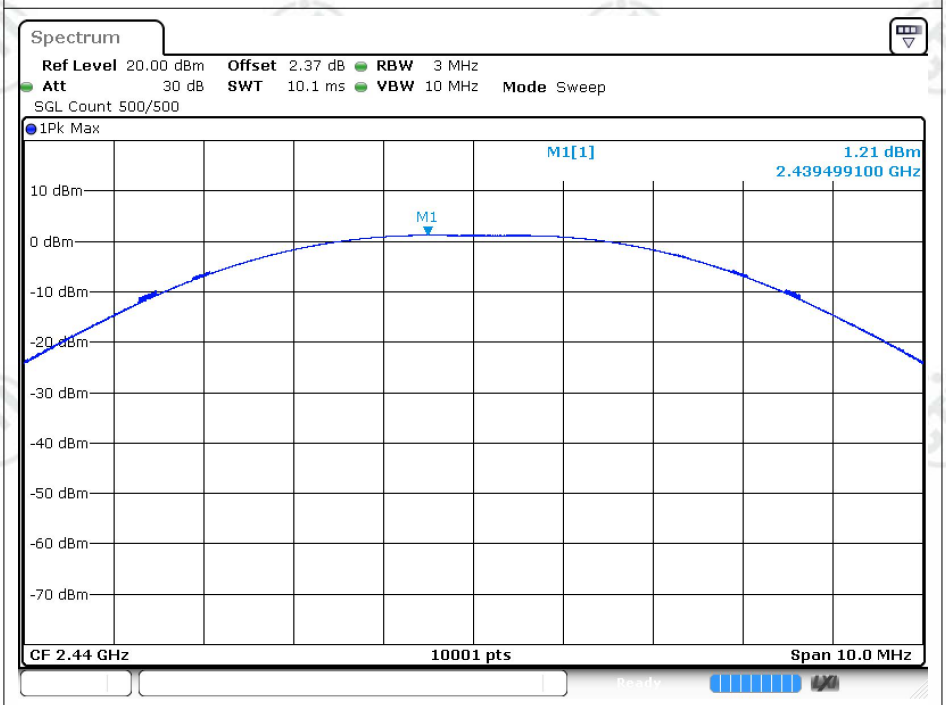
Date: 26.JUN.2025 09:27:00

Peak Power NVNT BLE 2M 2402MHz Ant1



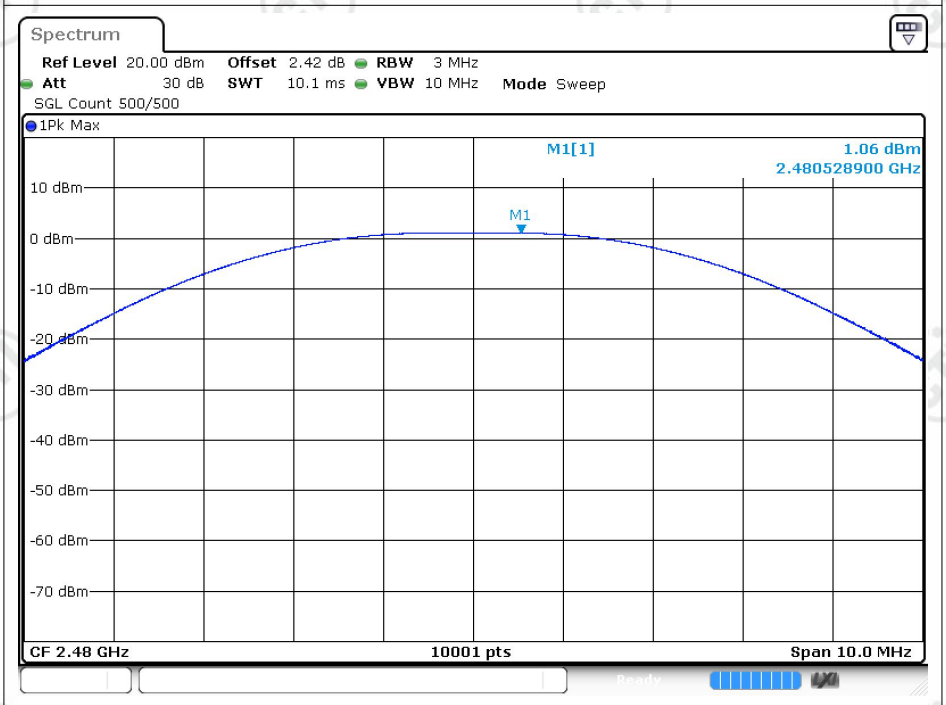
Date: 26.JUN.2025 09:28:52

Peak Power NVNT BLE 2M 2440MHz Ant1



Date: 26.JUN.2025 09:30:57

Peak Power NVNT BLE 2M 2480MHz Ant1



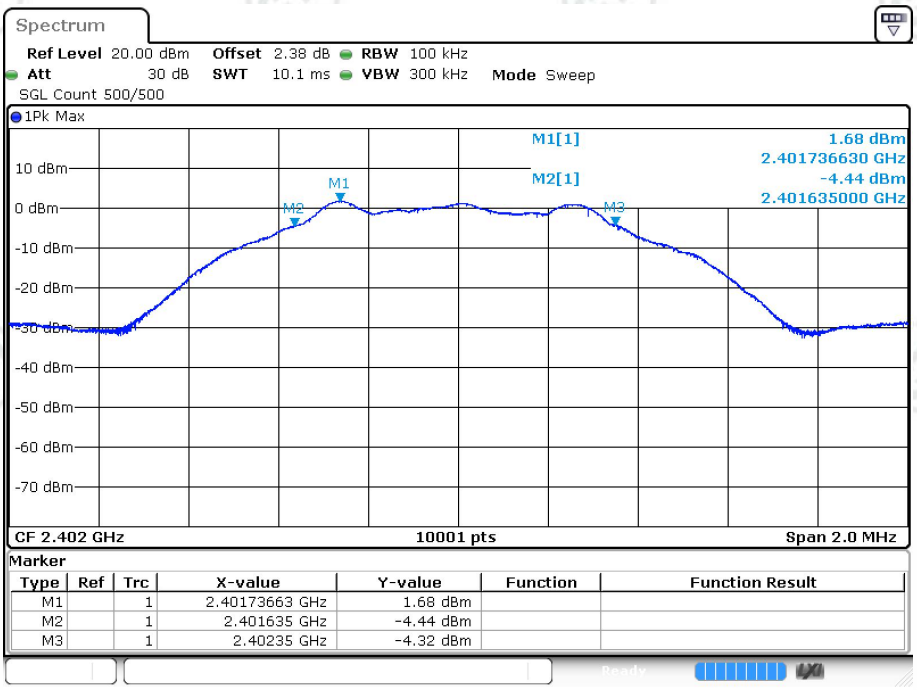
Date: 26.JUN.2025 09:32:51

-6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.716	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.72	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.72	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.258	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.256	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.249	0.5	Pass

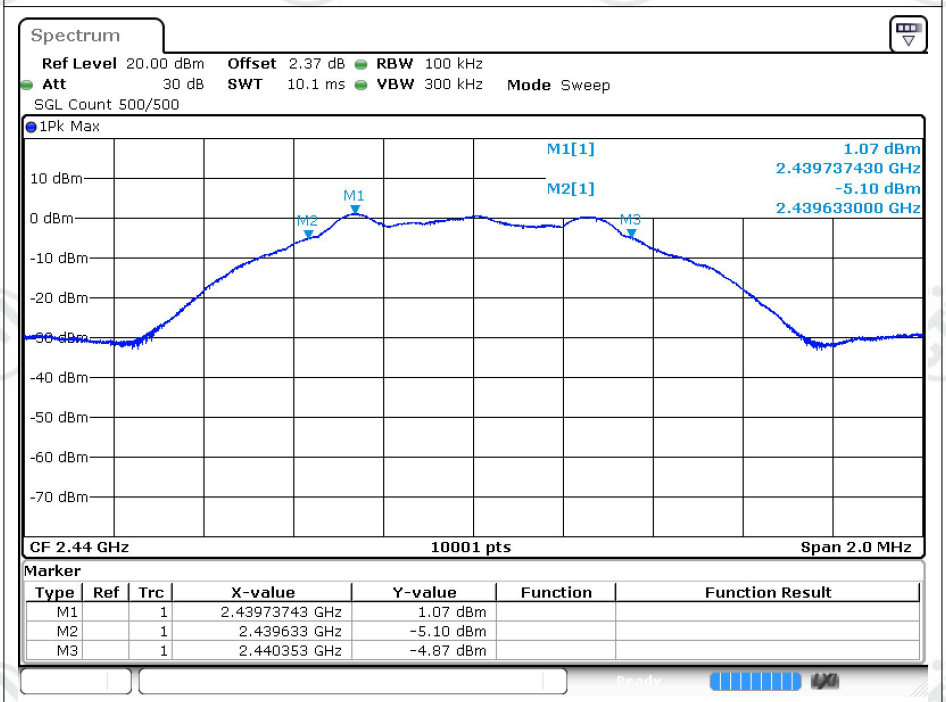
Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



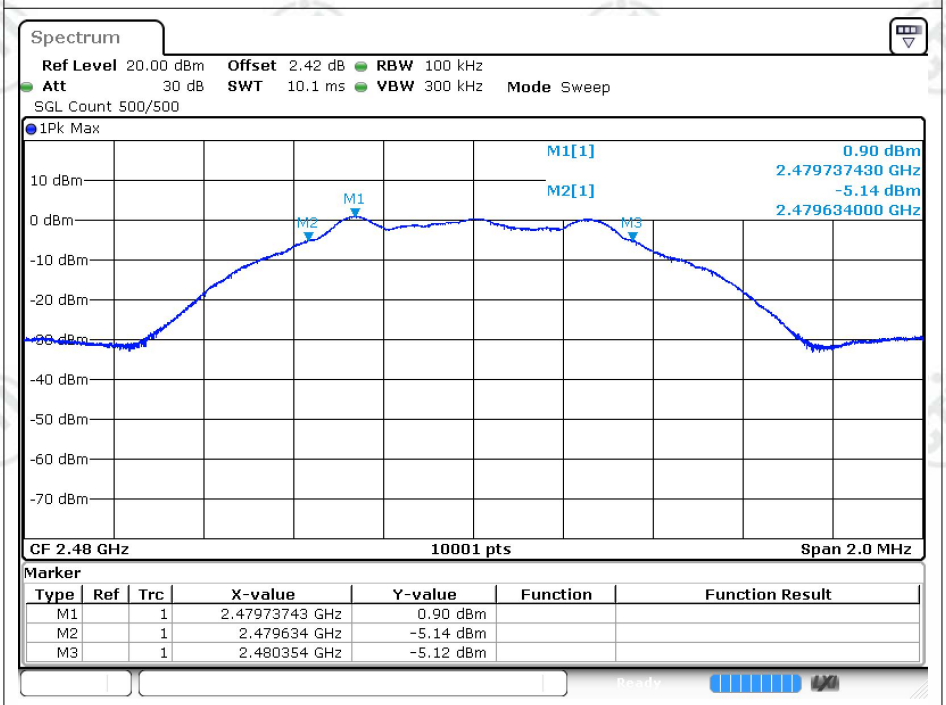
Date: 26.JUN.2025 09:22:20

-6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



Date: 26.JUN.2025 09:25:11

-6dB Bandwidth NVNT BLE 1M 2480MHz Ant1

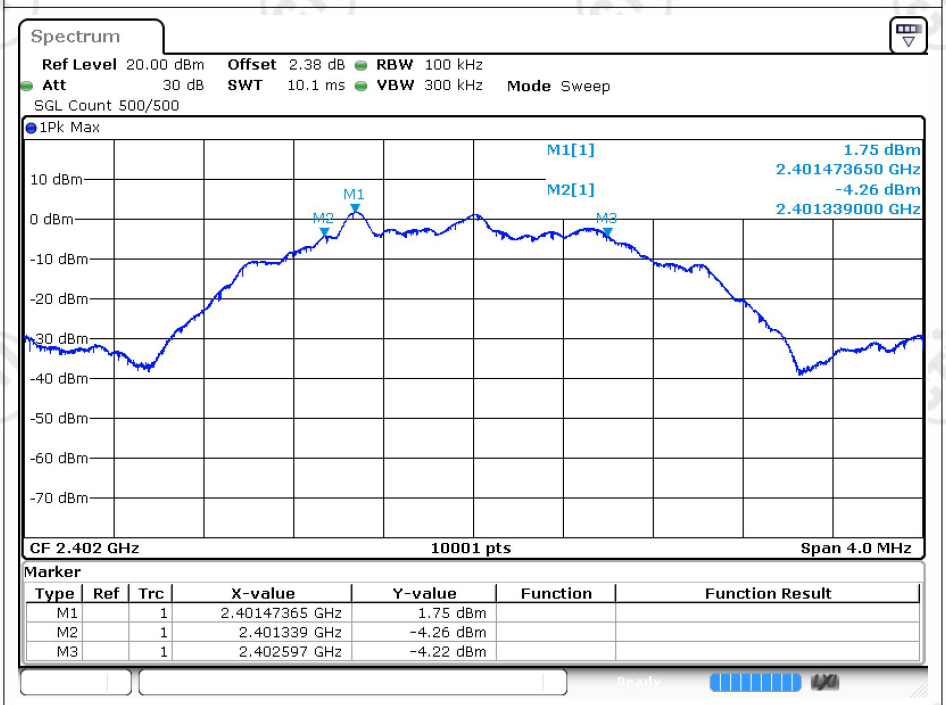


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47973743 GHz	0.90 dBm		
M2		1	2.479634 GHz	-5.14 dBm		
M3		1	2.480354 GHz	-5.12 dBm		

Date: 26.JUN.2025 09:27:22

-6dB Bandwidth NVNT BLE 2M 2402MHz Ant1

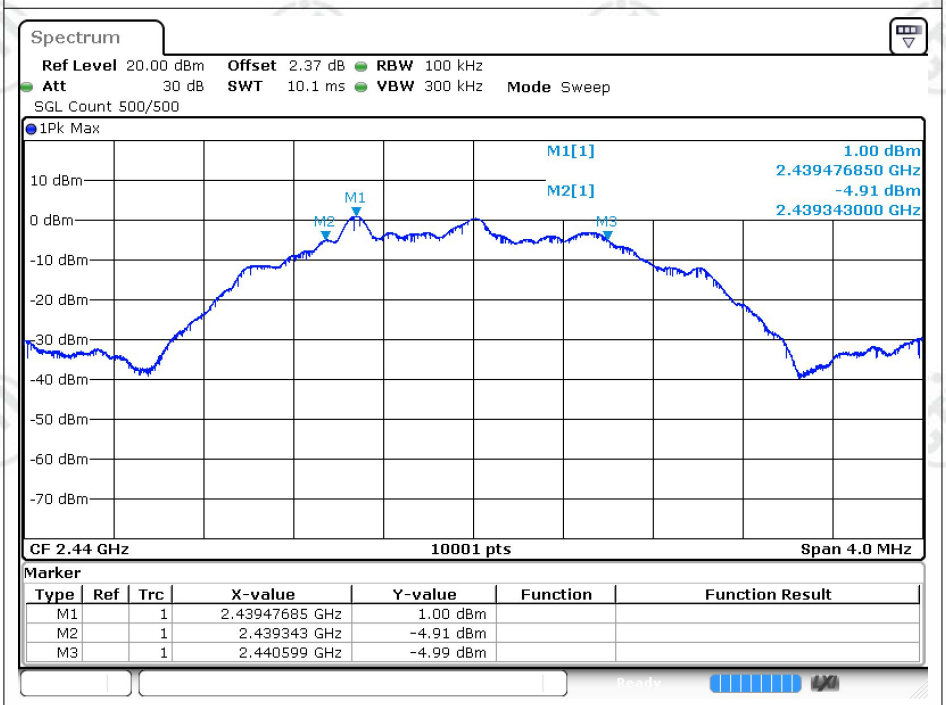


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.40147365 GHz	1.75 dBm		
M2		1	2.401339 GHz	-4.26 dBm		
M3		1	2.402597 GHz	-4.22 dBm		

Date: 26.JUN.2025 09:29:15

-6dB Bandwidth NVNT BLE 2M 2440MHz Ant1

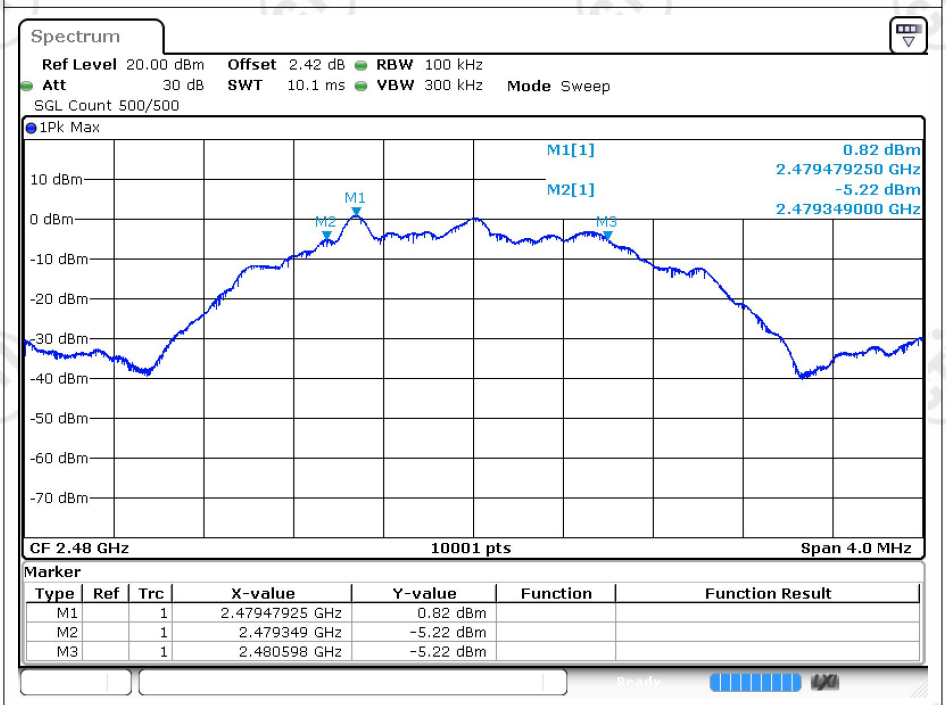


Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.43947685 GHz	1.00 dBm		
M2		1	2.439343 GHz	-4.91 dBm		
M3		1	2.440599 GHz	-4.99 dBm		

Date: 26.JUN.2025 09:31:19

-6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



Marker

Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1	2.47947925 GHz	0.82 dBm		
M2		1	2.479349 GHz	-5.22 dBm		
M3		1	2.480598 GHz	-5.22 dBm		

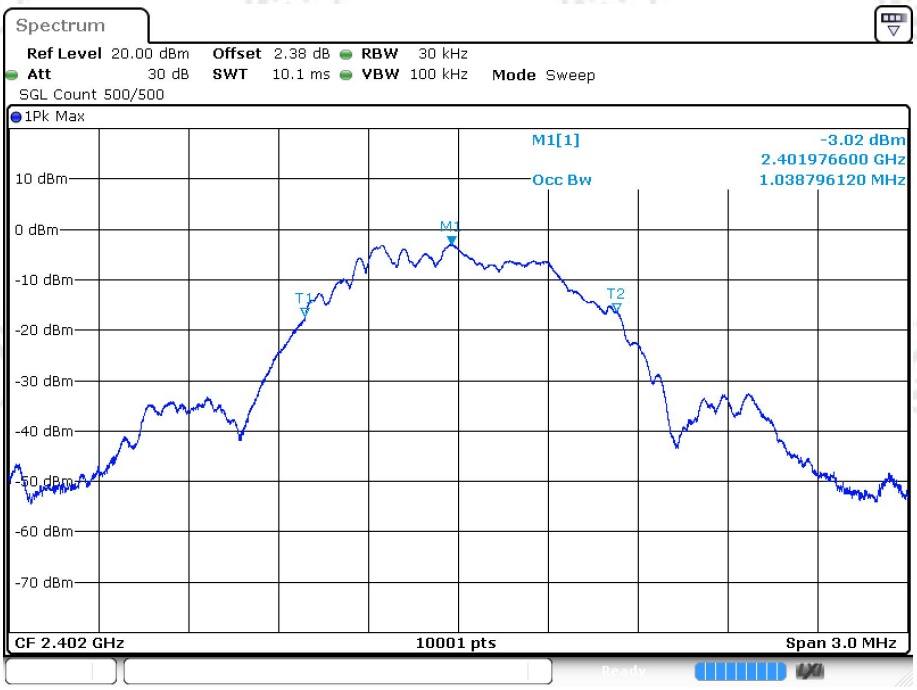
Date: 26.JUN.2025 09:33:13

Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1M	2402	Ant1	1.039
NVNT	BLE 1M	2440	Ant1	1.041
NVNT	BLE 1M	2480	Ant1	1.04
NVNT	BLE 2M	2402	Ant1	2.057
NVNT	BLE 2M	2440	Ant1	2.057
NVNT	BLE 2M	2480	Ant1	2.054

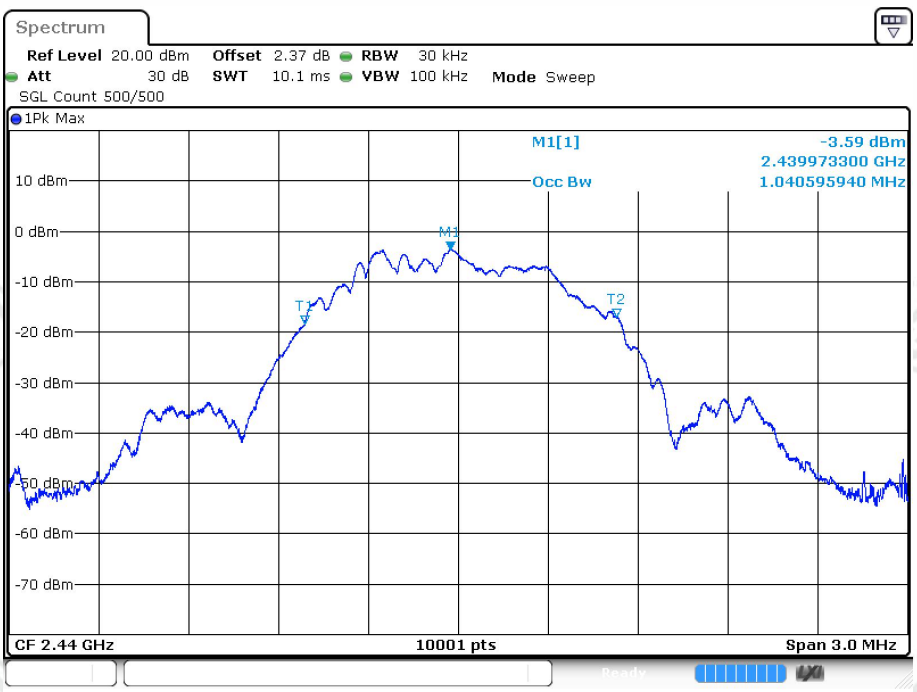
Test Graphs

OBW NVNT BLE 1M 2402MHz Ant1



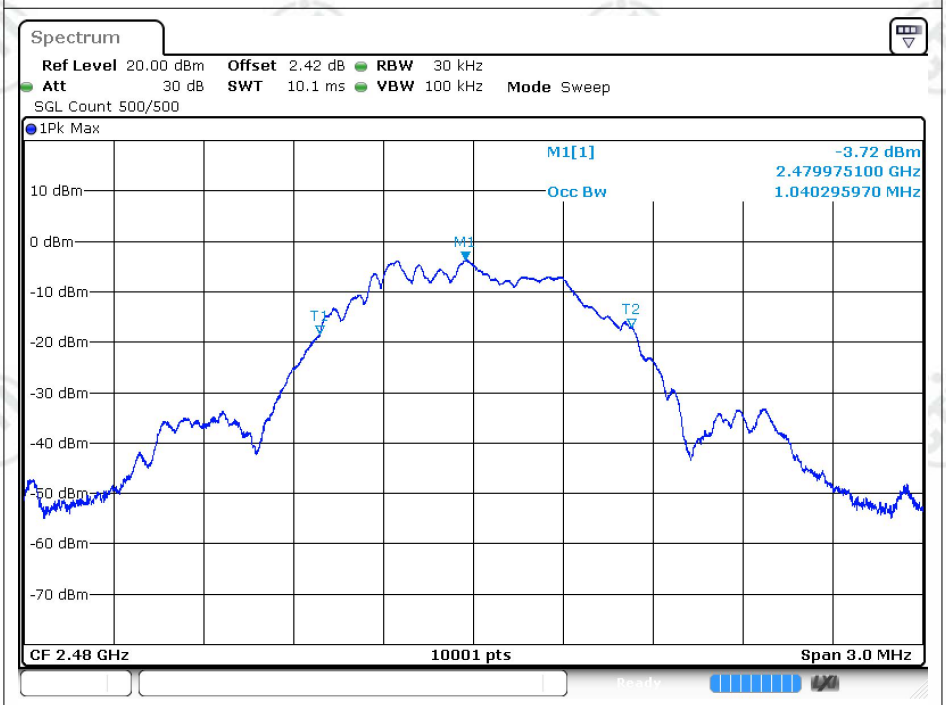
Date: 26.JUN.2025 09:22:09

OBW NVNT BLE 1M 2440MHz Ant1



Date: 26.JUN.2025 09:24:59

OBW NVNT BLE 1M 2480MHz Ant1

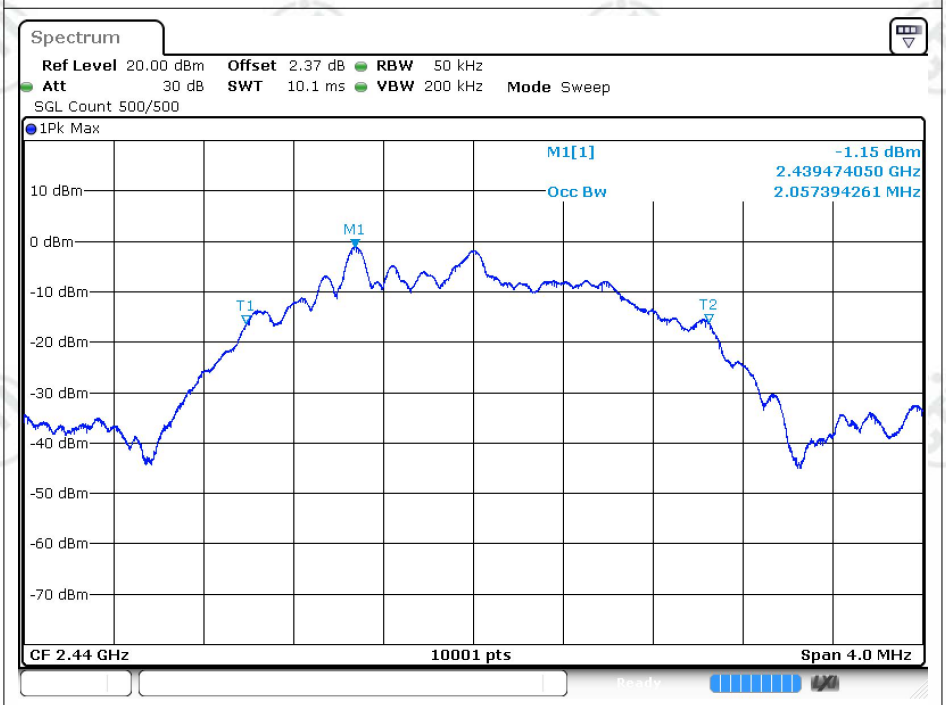


Date: 26.JUN.2025 09:27:11

OBW NVNT BLE 2M 2402MHz Ant1

Date: 26.JUN.2025 09:29:03

OBW NVNT BLE 2M 2440MHz Ant1



Date: 26.JUN.2025 09:31:08

OBW NVNT BLE 2M 2480MHz Ant1

Date: 26.JUN.2025 09:33:02

Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-13.75	8	Pass
NVNT	BLE 1M	2440	Ant1	-14.37	8	Pass
NVNT	BLE 1M	2480	Ant1	-14.51	8	Pass
NVNT	BLE 2M	2402	Ant1	-17.18	8	Pass
NVNT	BLE 2M	2440	Ant1	-17.91	8	Pass
NVNT	BLE 2M	2480	Ant1	-17.99	8	Pass