

RF Test Data for Bluetooth LE (Conducted Measurements)

General Description of EUT	
Product Name:	7"core tablet
Test Model:	TBBLU36020962
Sample ID:	HC-C-202512-0001-01-01
Test Standard:	FCC Part 15.247 & RSS 247 Issue 4
Environmental Conditions	
Temperature:	23.5℃
Relative Humidity:	49%
Test Voltage:	DC 3.85V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202512-0001-8 The report only show the worst case data.	

Contents

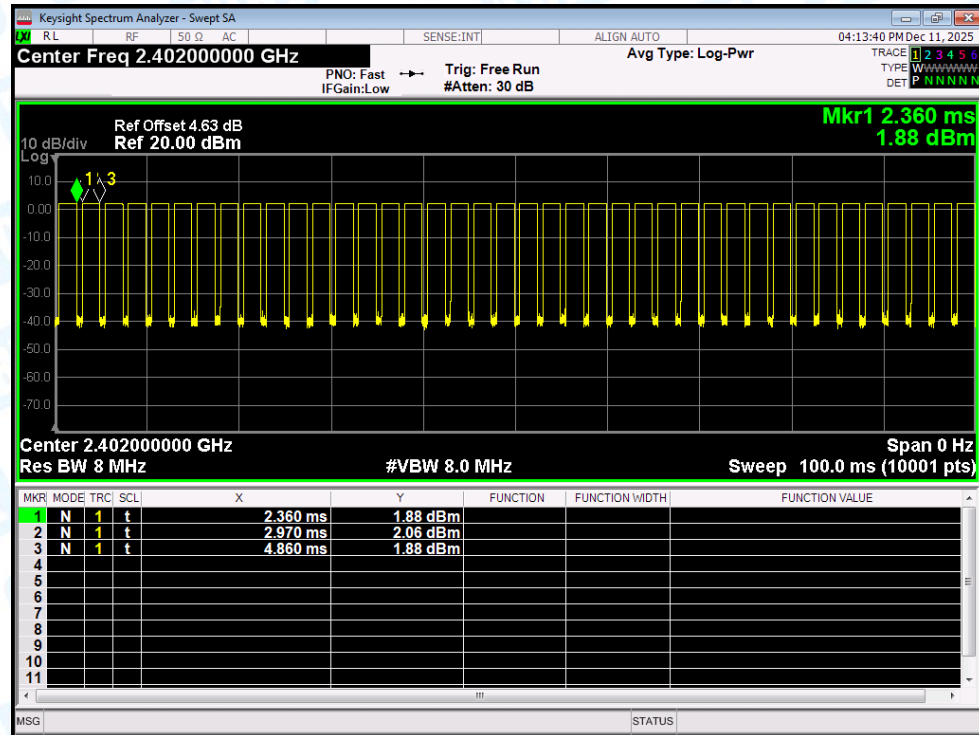
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1.Duty Cycle

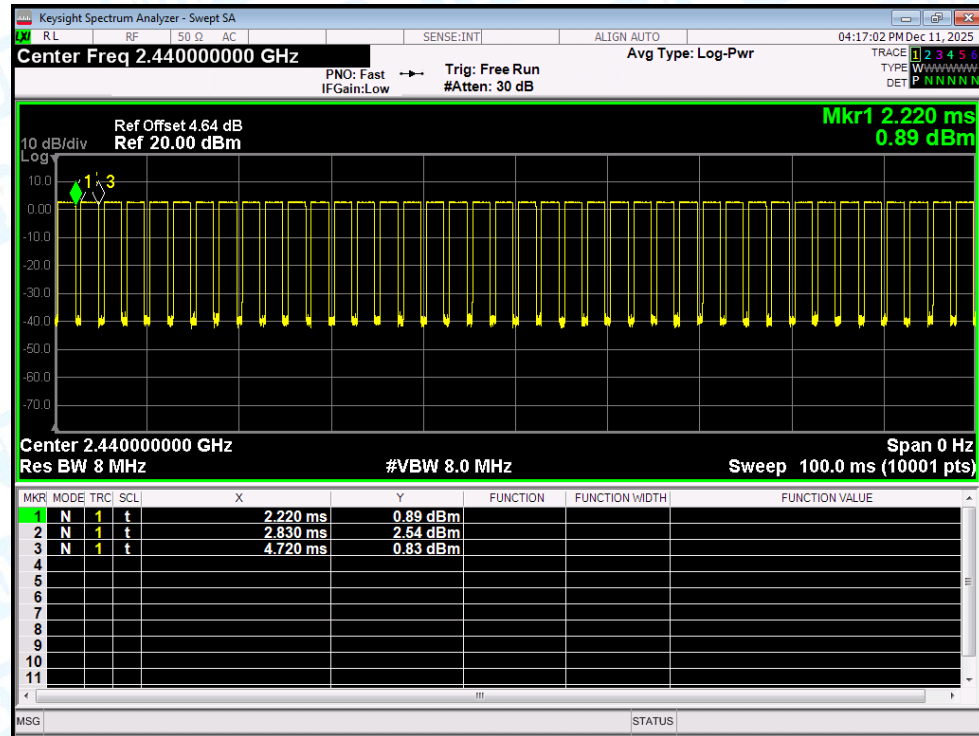
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1Mbps	2402	Ant1	75.6	1.21	0.53
NVNT	BLE 1Mbps	2440	Ant1	75.6	1.21	0.53
NVNT	BLE 1Mbps	2480	Ant1	75.6	1.21	0.53
NVNT	BLE 2Mbps	2404	Ant1	76	1.19	1.05
NVNT	BLE 2Mbps	2440	Ant1	76	1.19	1.05
NVNT	BLE 2Mbps	2478	Ant1	76	1.19	1.05

Test Graphs

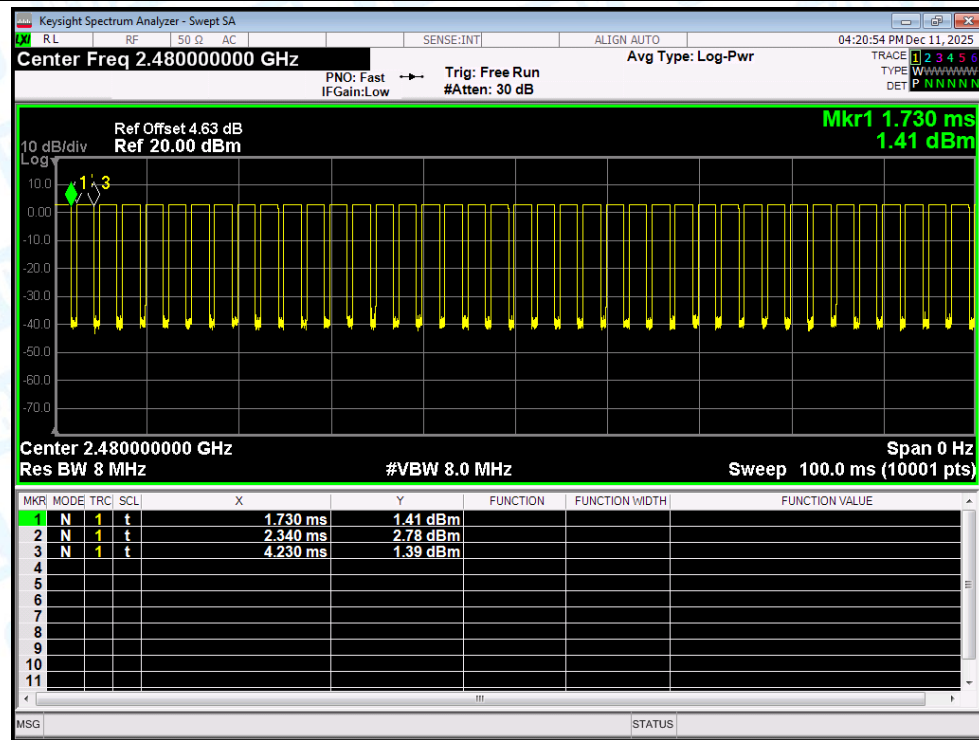
Duty Cycle NVNT BLE 1Mbps 2402MHz Ant1



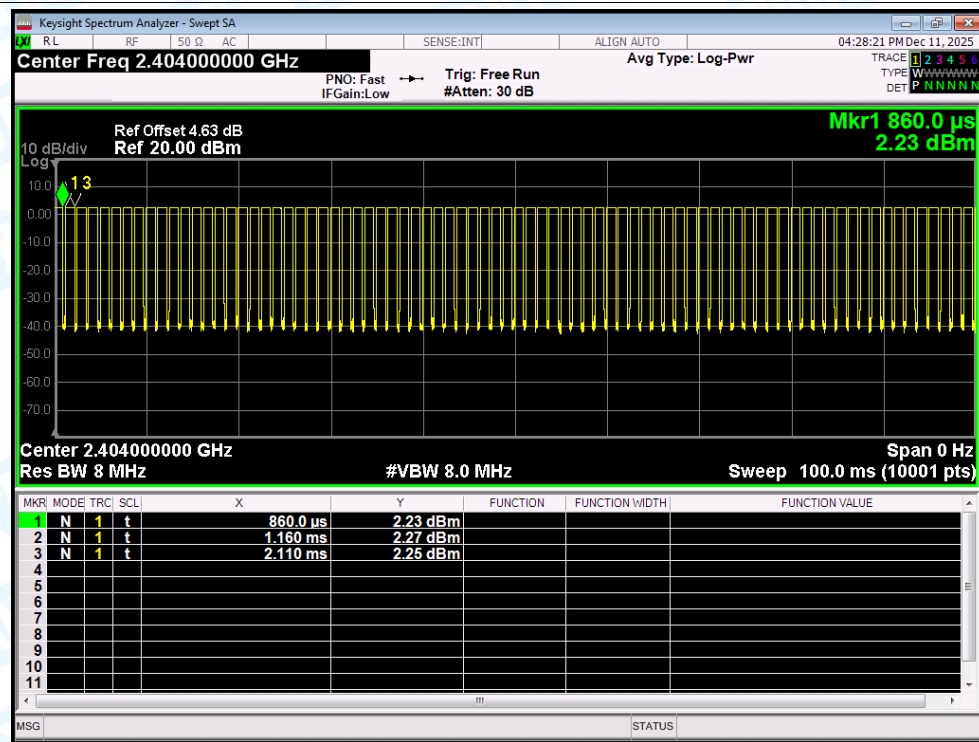
Duty Cycle NVNT BLE 1Mbps 2440MHz Ant1



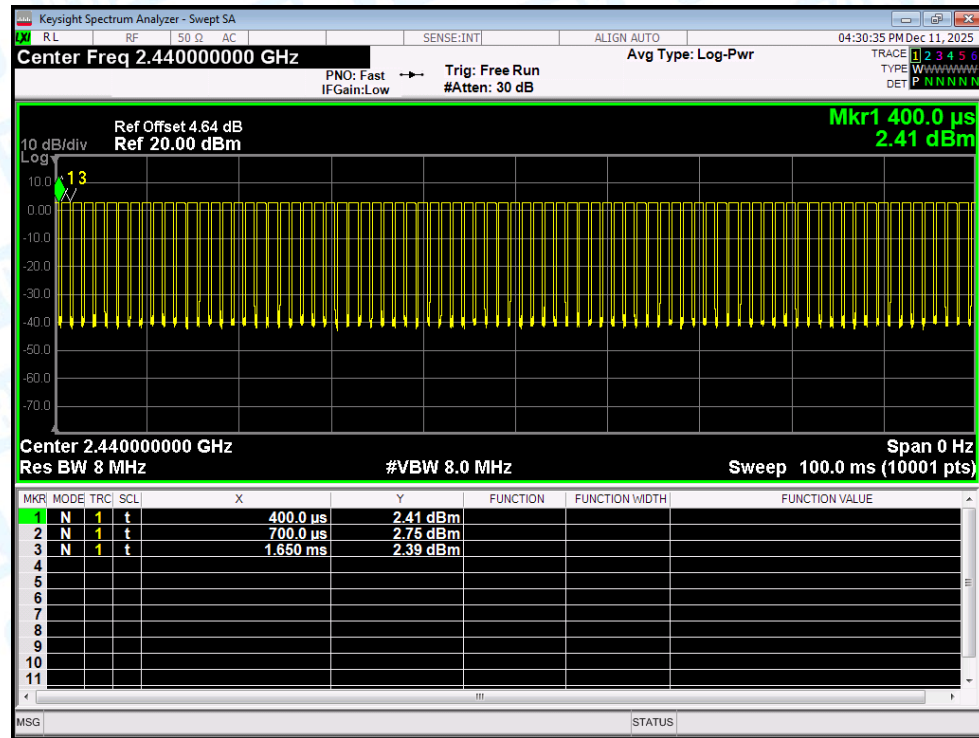
Duty Cycle NVNT BLE 1Mbps 2480MHz Ant1



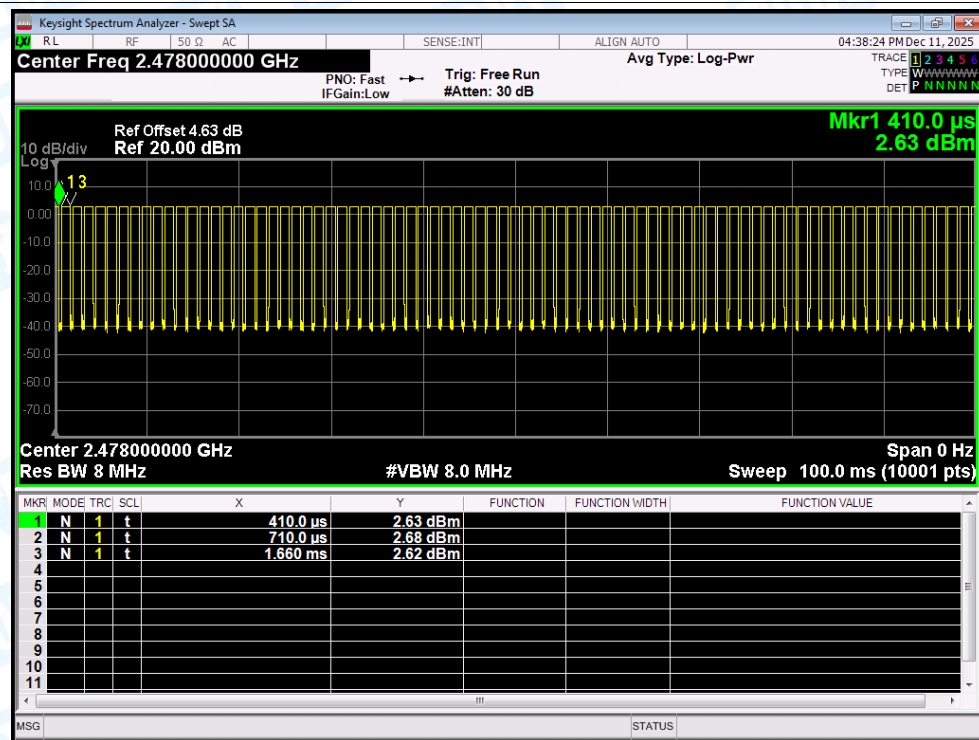
Duty Cycle NVNT BLE 2Mbps 2404MHz Ant1



Duty Cycle NVNT BLE 2Mbps 2440MHz Ant1



Duty Cycle NVNT BLE 2Mbps 2478MHz Ant1

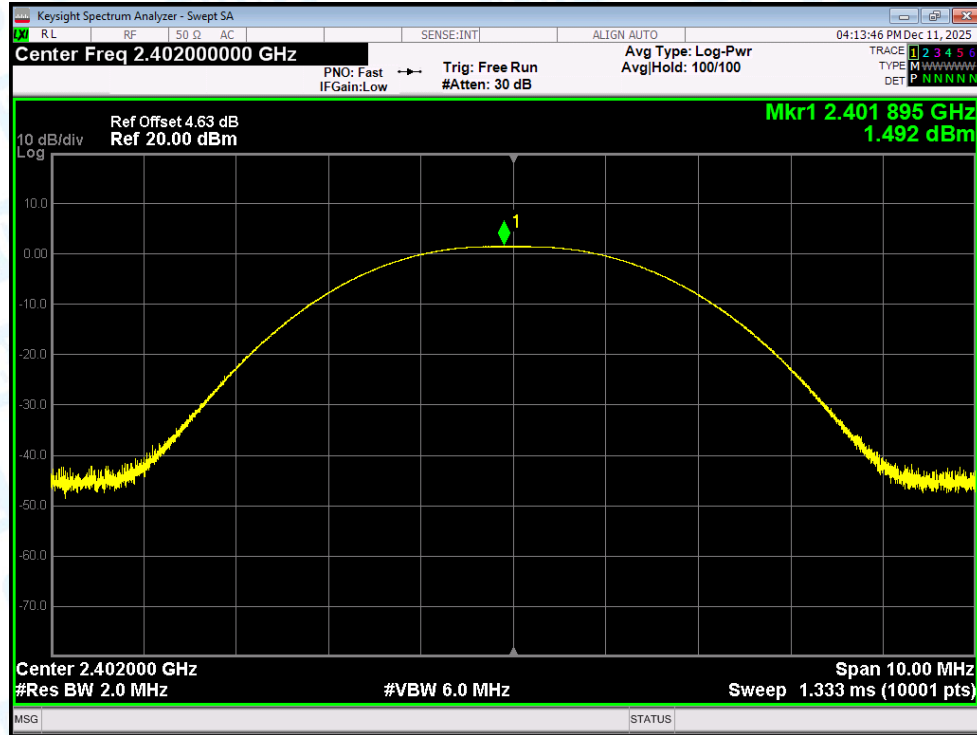


2.Maximum Conducted Output Power&EIRP

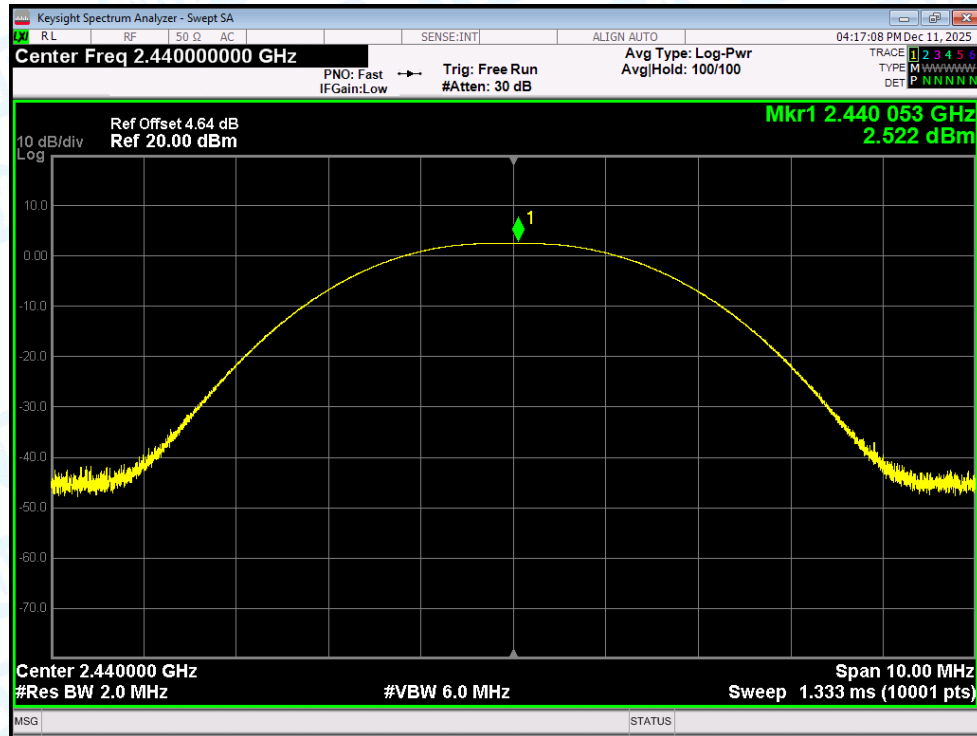
Mode	Frequency (MHz)	Conducted Power (dBm)	Limit (dBm)	Gain(dBi)	EIRP (dBm)	EIRP Limit (dBm)	Verdict
BLE 1Mbps	2402	1.492	30	4.7	6.192	36	Pass
BLE 1Mbps	2440	2.522	30	4.7	7.222	36	Pass
BLE 1Mbps	2480	2.721	30	4.7	7.421	36	Pass
BLE 2Mbps	2404	2.147	30	4.7	6.847	36	Pass
BLE 2Mbps	2440	2.615	30	4.7	7.315	36	Pass
BLE 2Mbps	2478	2.525	30	4.7	7.225	36	Pass

Test Graphs

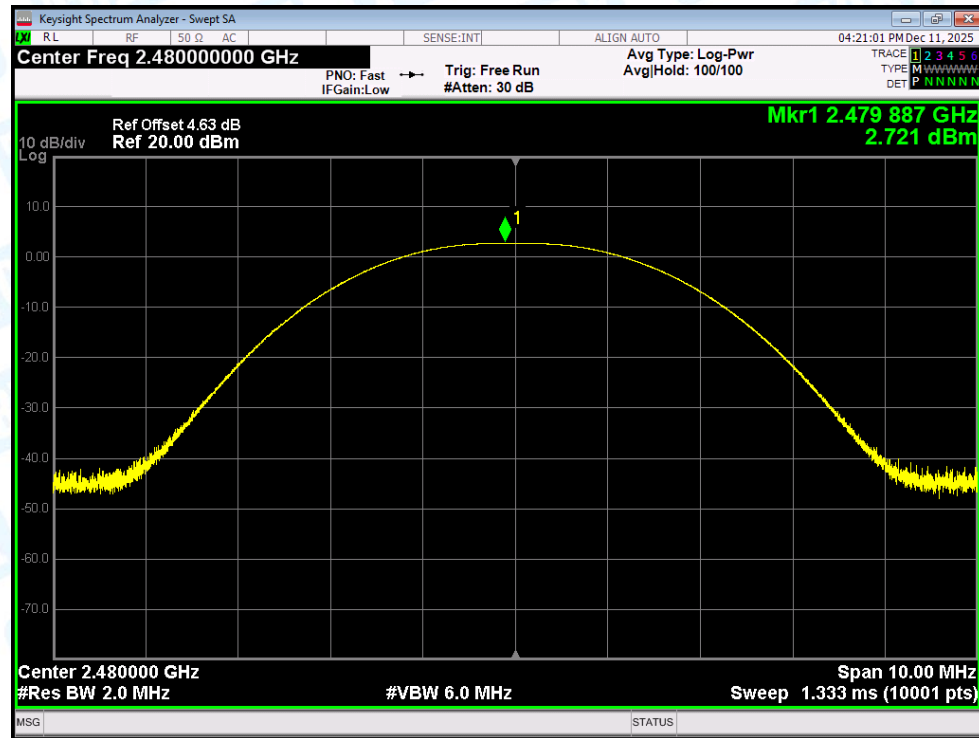
Power NVNT BLE 1Mbps 2402MHz Ant1



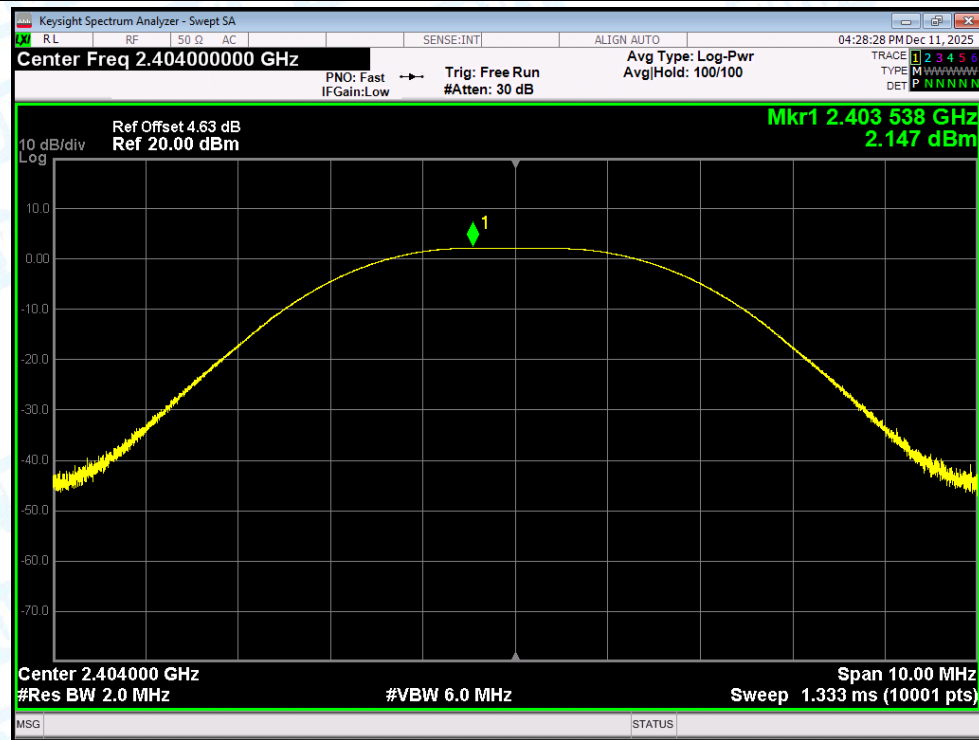
Power NVNT BLE 1Mbps 2440MHz Ant1



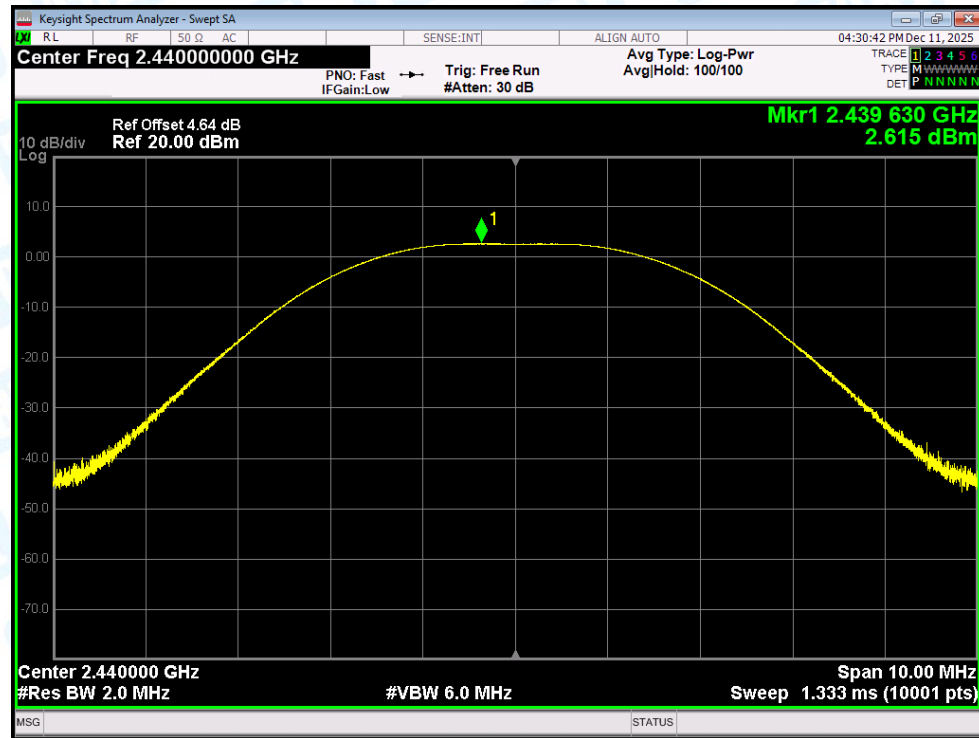
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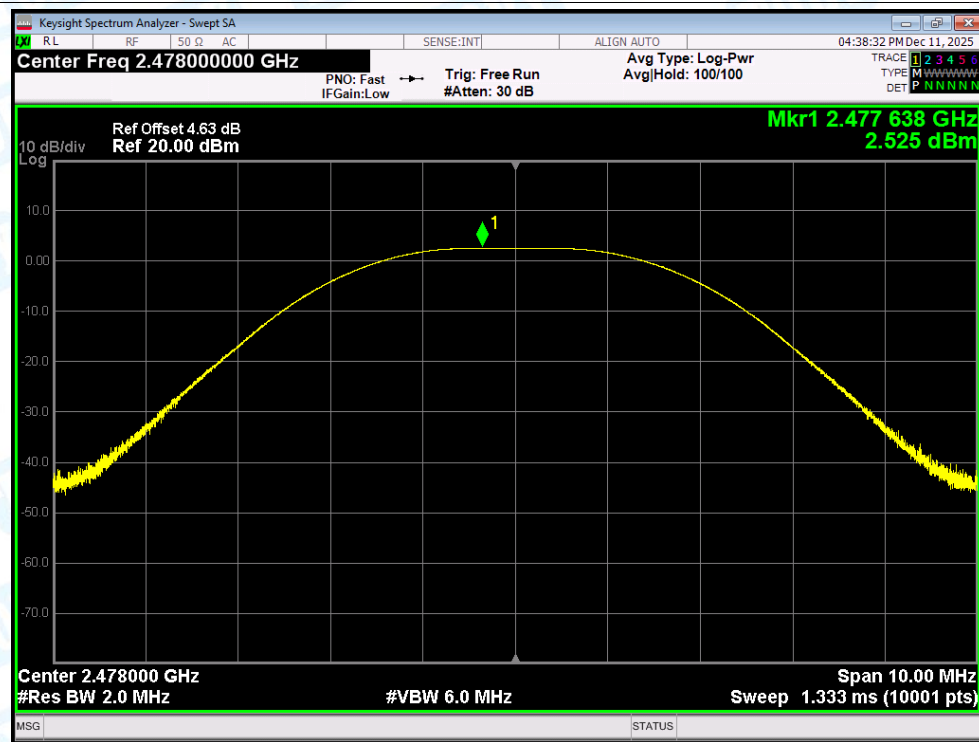
Power NVNT BLE 2Mbps 2404MHz Ant1



Power NVNT BLE 2Mbps 2440MHz Ant1



Power NVNT BLE 2Mbps 2478MHz Ant1

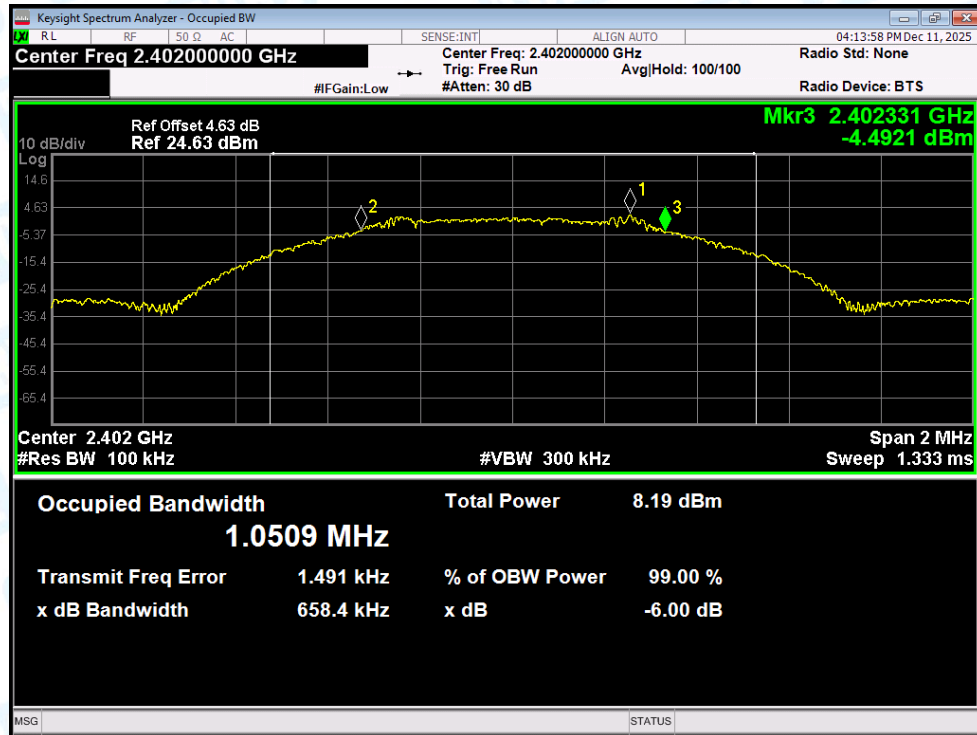


3.-6dB Bandwidth

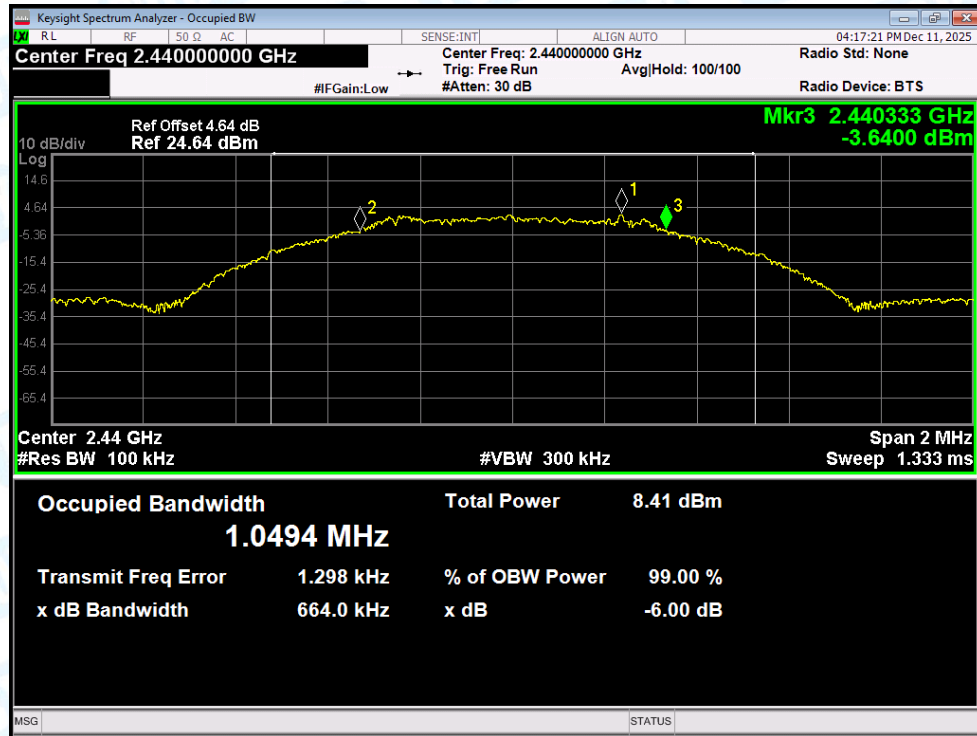
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	0.66	0.5	Pass
NVNT	BLE 1Mbps	2440	Ant1	0.66	0.5	Pass
NVNT	BLE 1Mbps	2480	Ant1	0.65	0.5	Pass
NVNT	BLE 2Mbps	2404	Ant1	1.16	0.5	Pass
NVNT	BLE 2Mbps	2440	Ant1	1.11	0.5	Pass
NVNT	BLE 2Mbps	2478	Ant1	1.26	0.5	Pass

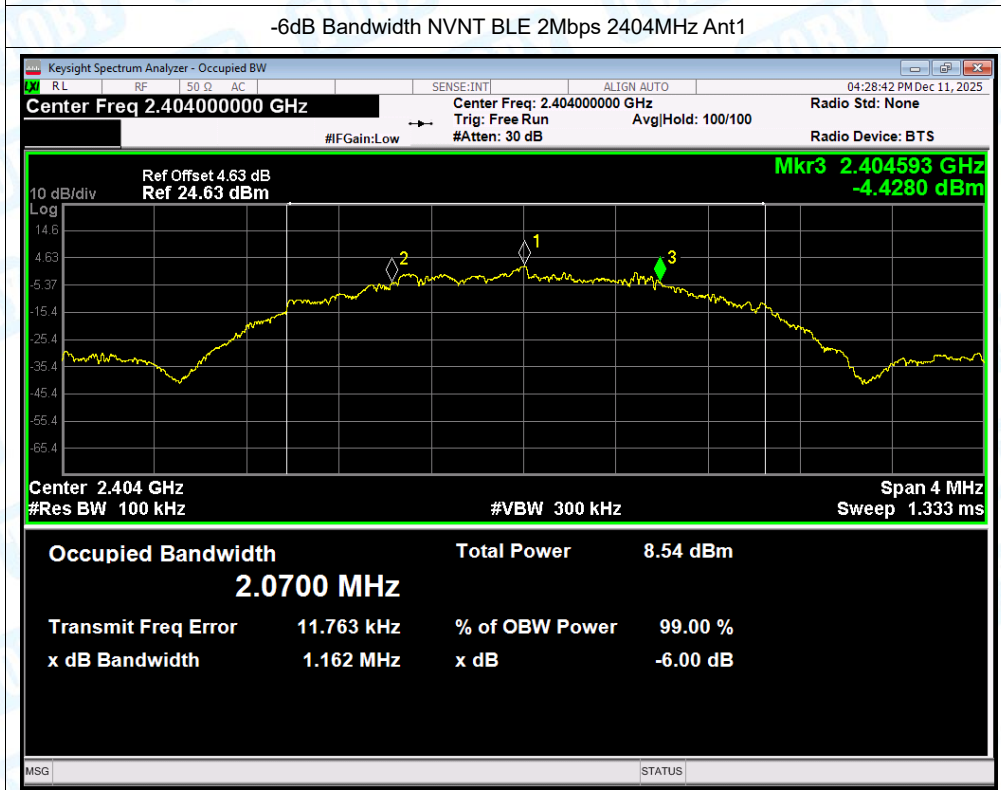
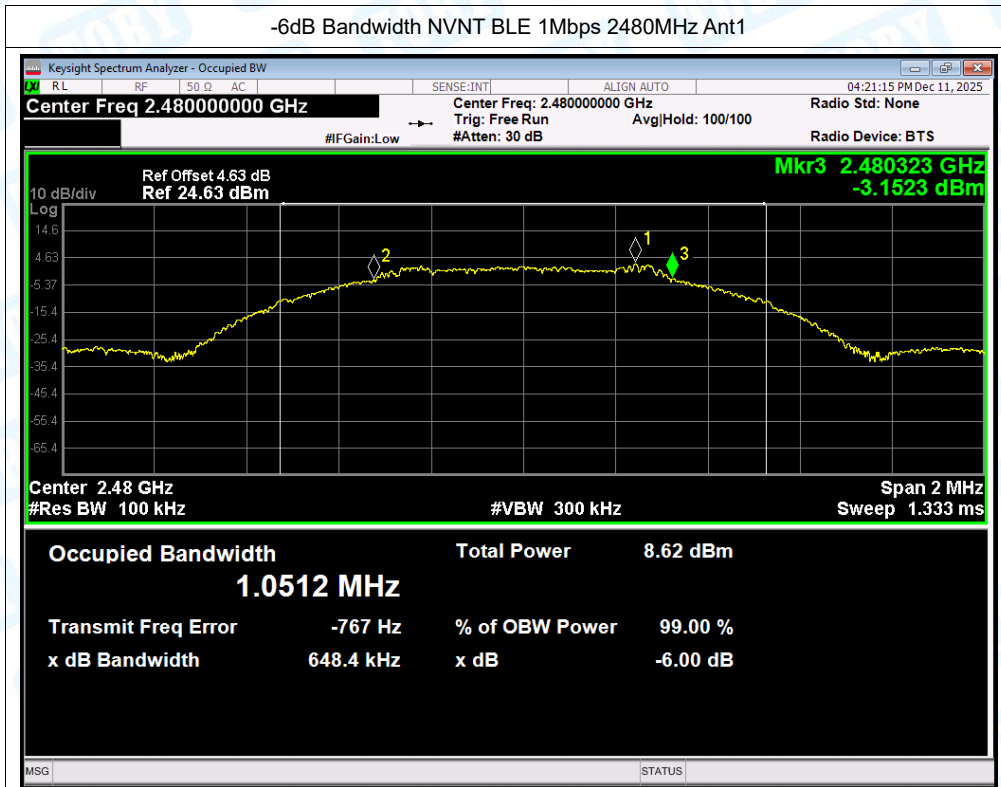
Test Graphs

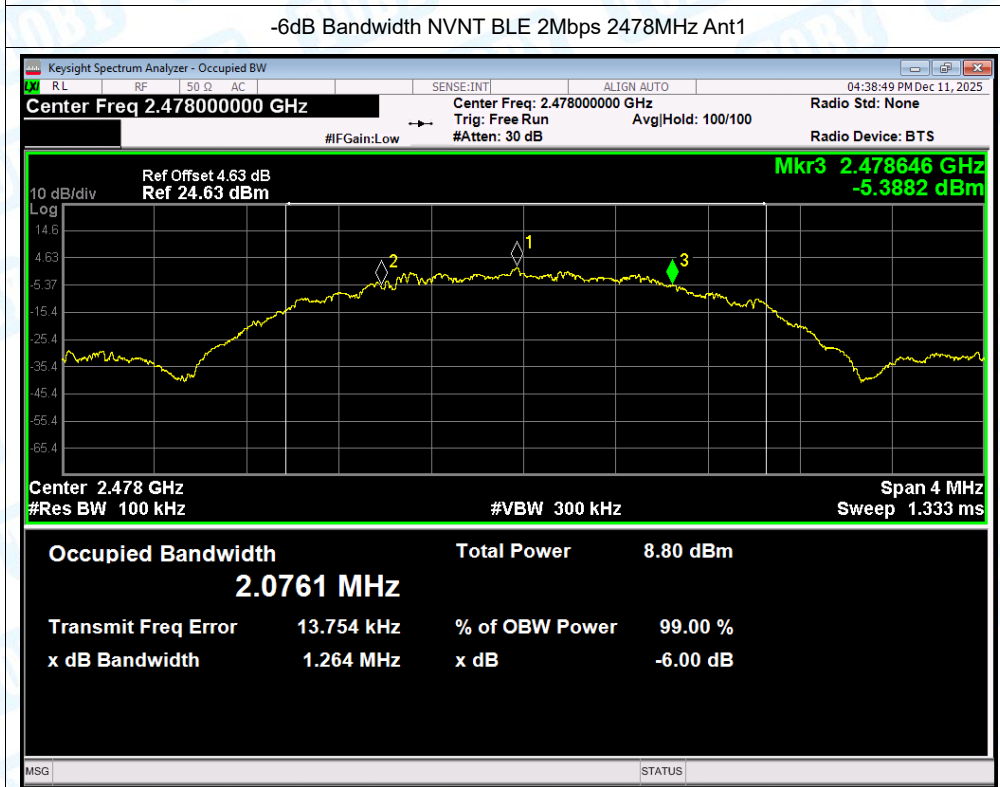
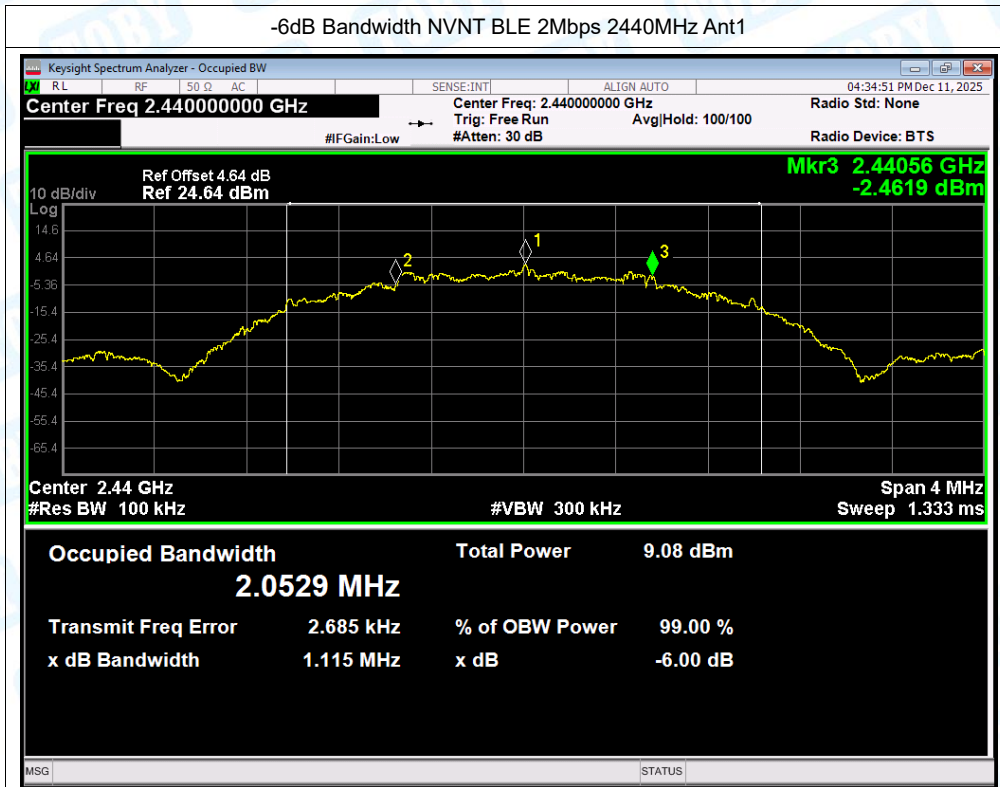
-6dB Bandwidth NVNT BLE 1Mbps 2402MHz Ant1



-6dB Bandwidth NVNT BLE 1Mbps 2440MHz Ant1





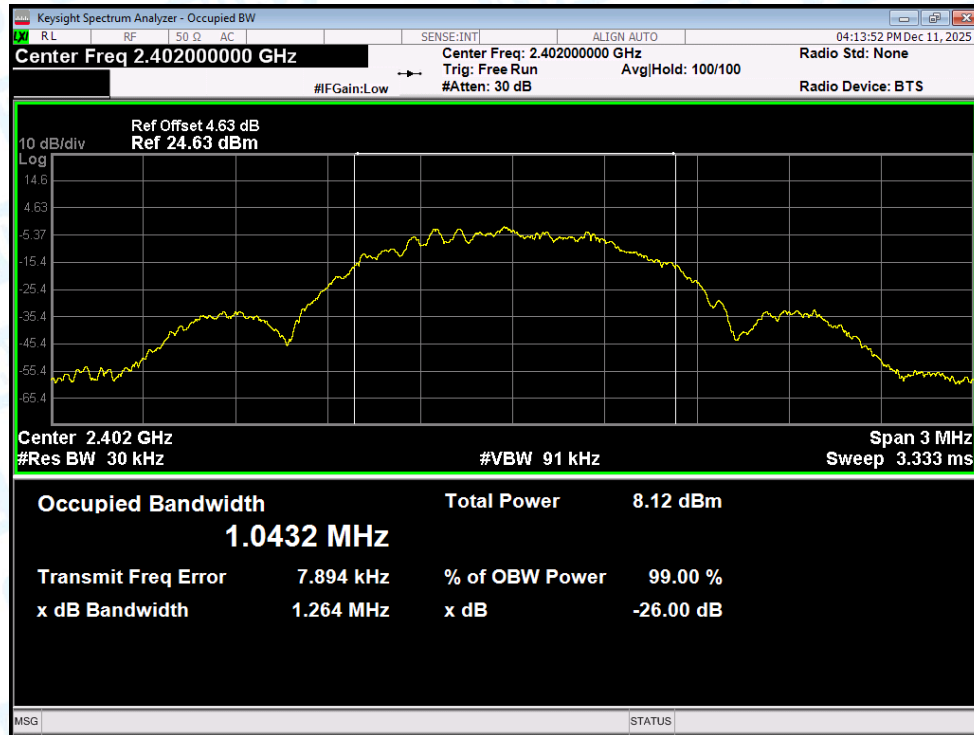


4.Occupied Channel Bandwidth

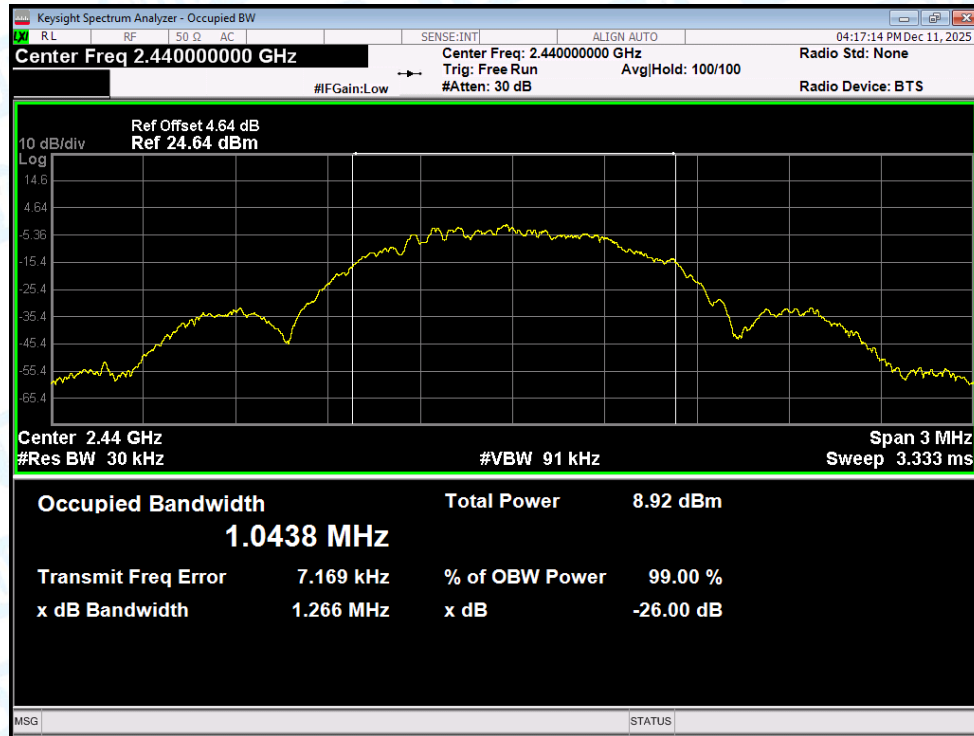
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	BLE 1Mbps	2402	Ant1	1.043
NVNT	BLE 1Mbps	2440	Ant1	1.044
NVNT	BLE 1Mbps	2480	Ant1	1.037
NVNT	BLE 2Mbps	2404	Ant1	2.08
NVNT	BLE 2Mbps	2440	Ant1	2.08
NVNT	BLE 2Mbps	2478	Ant1	2.079

Test Graphs

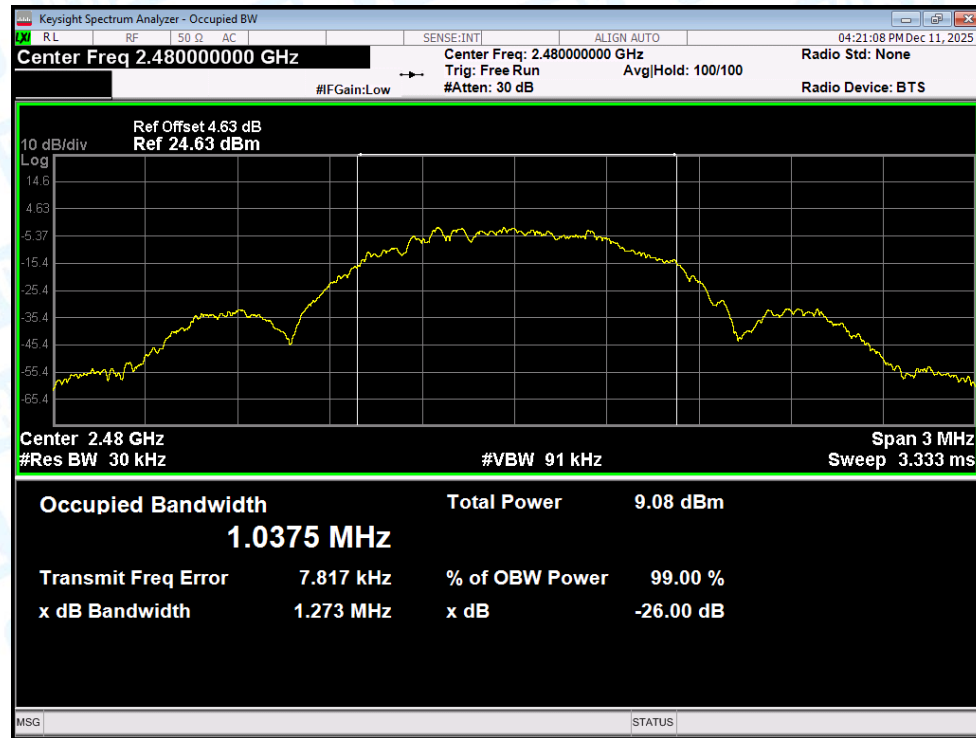
OBW NVNT BLE 1Mbps 2402MHz Ant1



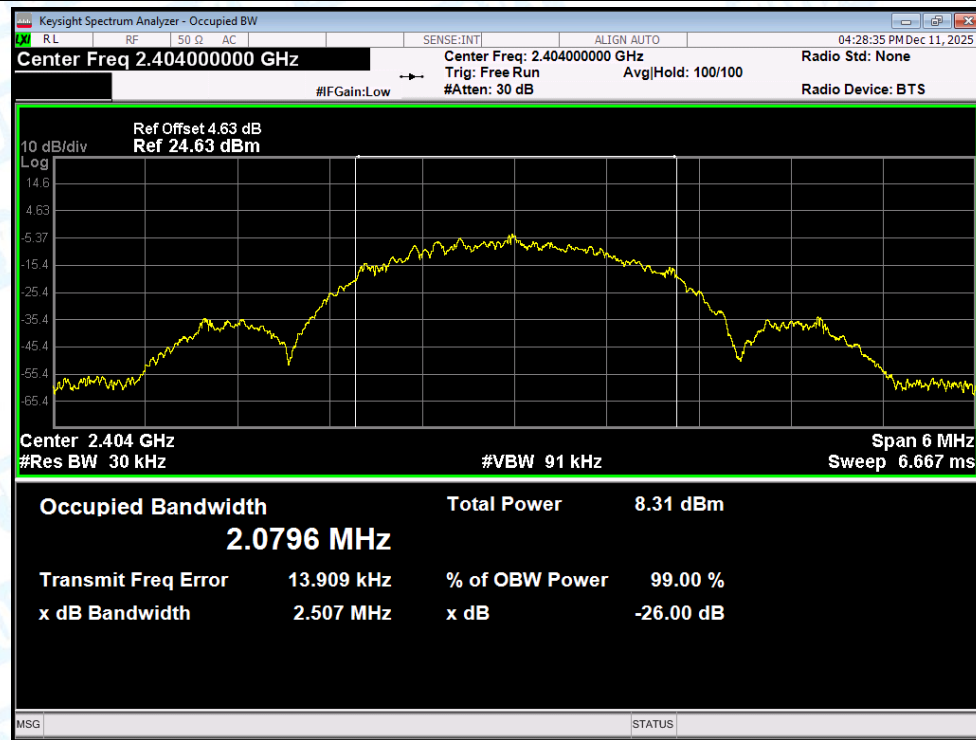
OBW NVNT BLE 1Mbps 2440MHz Ant1



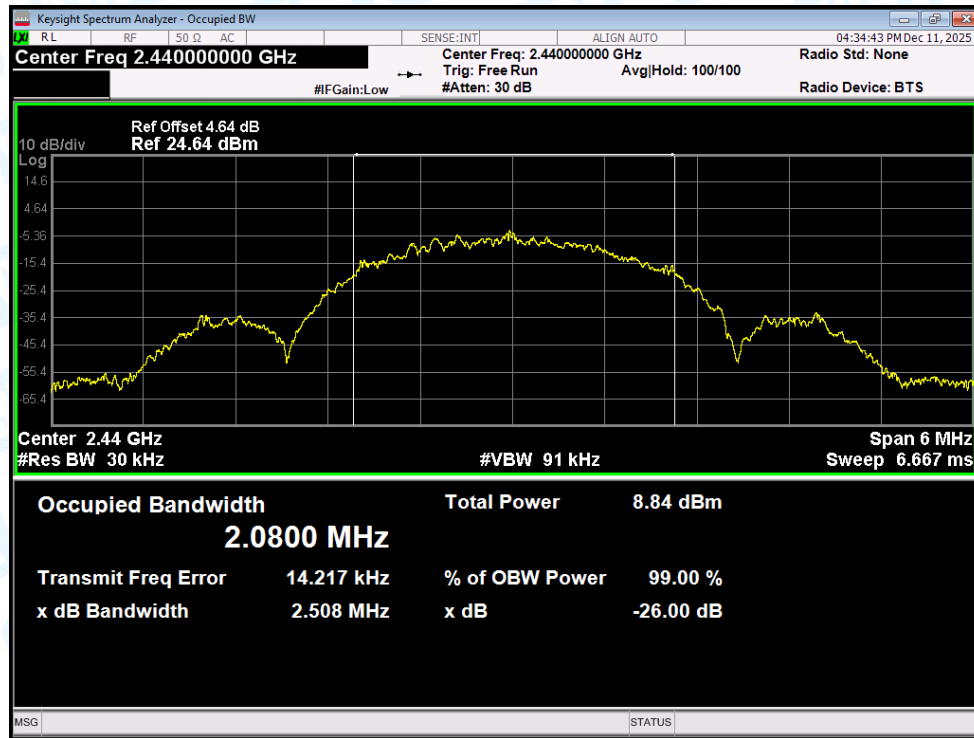
OBW NVNT BLE 1Mbps 2480MHz Ant1



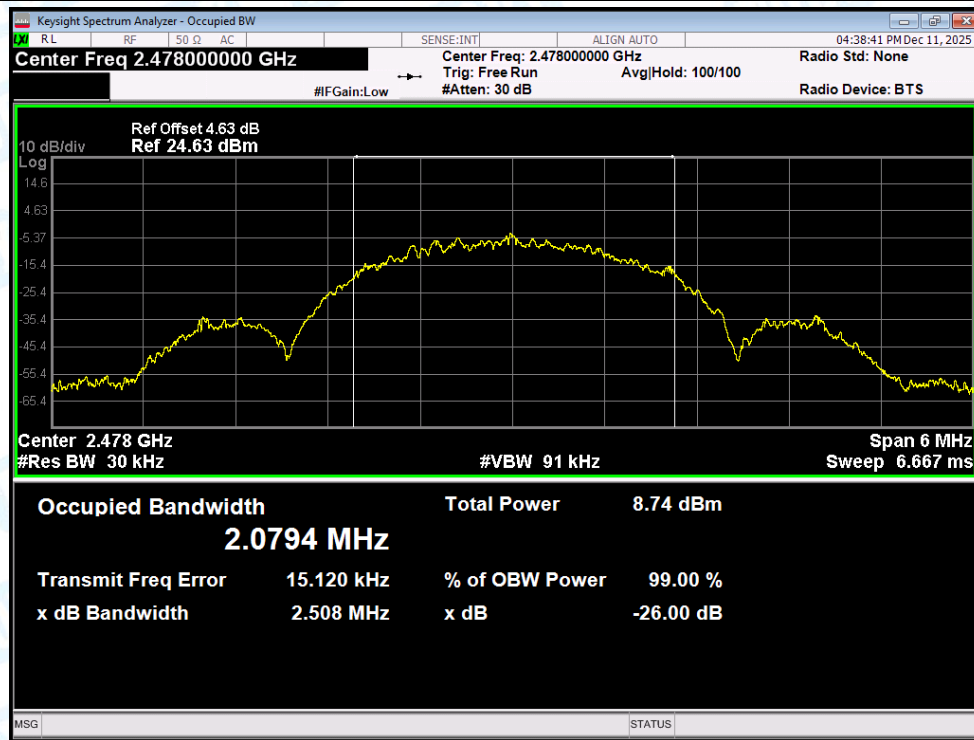
OBW NVNT BLE 2Mbps 2404MHz Ant1



OBW NVNT BLE 2Mbps 2440MHz Ant1



OBW NVNT BLE 2Mbps 2478MHz Ant1

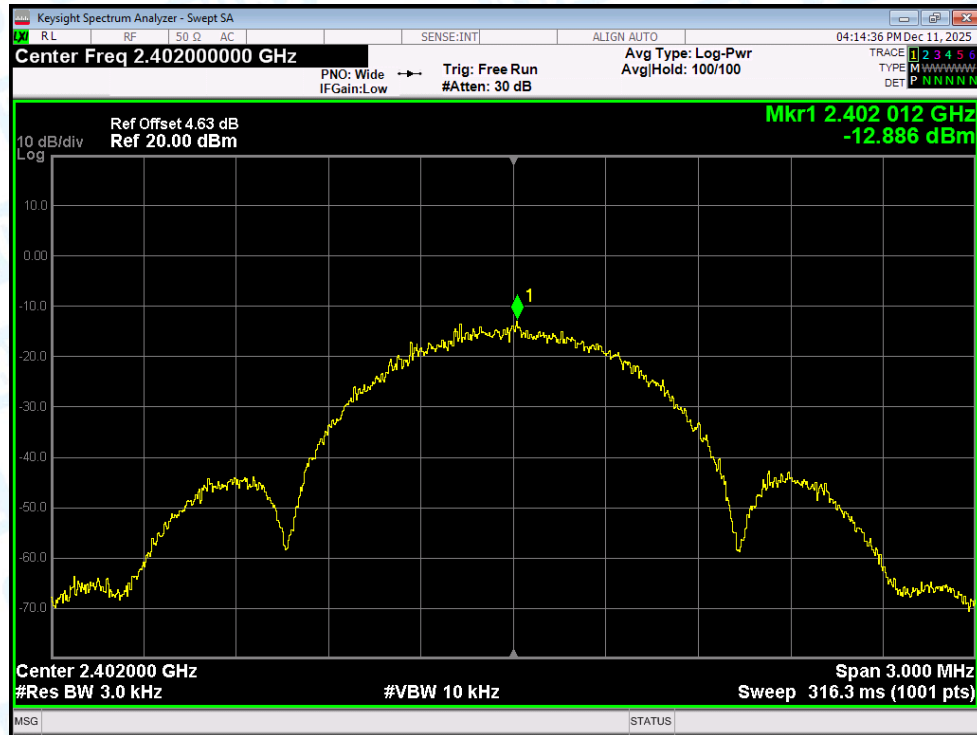


5.Maximum Power Spectral Density Level

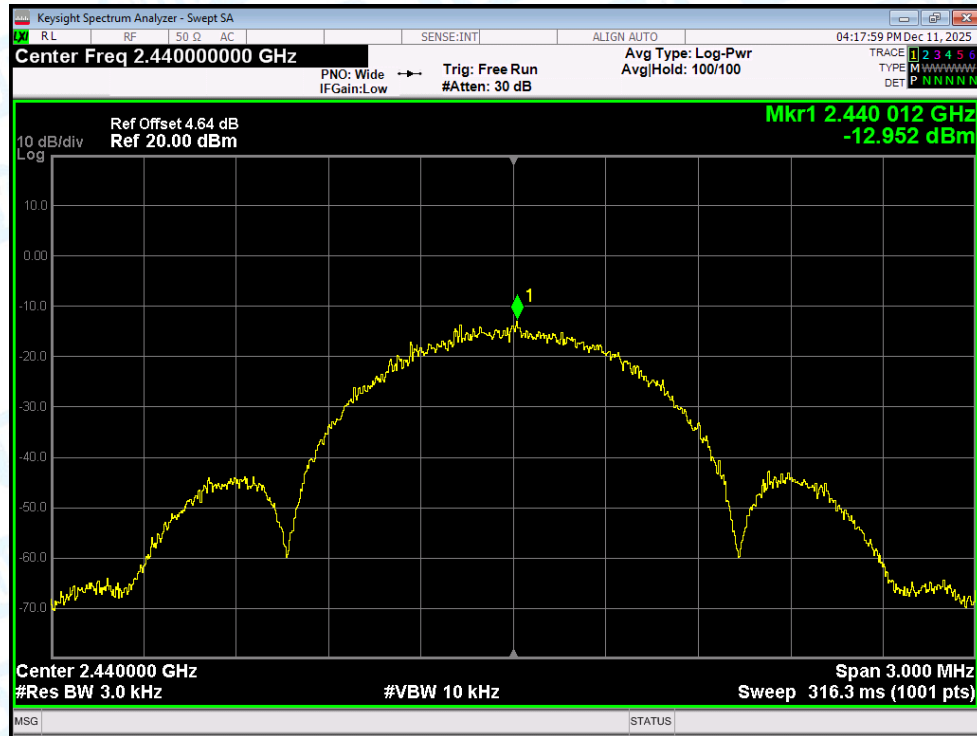
Condition	Mode	Frequency (MHz)	Antenna	Max PSD(dBm/3kHz)	Limit(dBm/3kHz)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-12.886	8	Pass
NVNT	BLE 1Mbps	2440	Ant1	-12.952	8	Pass
NVNT	BLE 1Mbps	2480	Ant1	-12.471	8	Pass
NVNT	BLE 2Mbps	2404	Ant1	-16.322	8	Pass
NVNT	BLE 2Mbps	2440	Ant1	-8.999	8	Pass
NVNT	BLE 2Mbps	2478	Ant1	-16.135	8	Pass

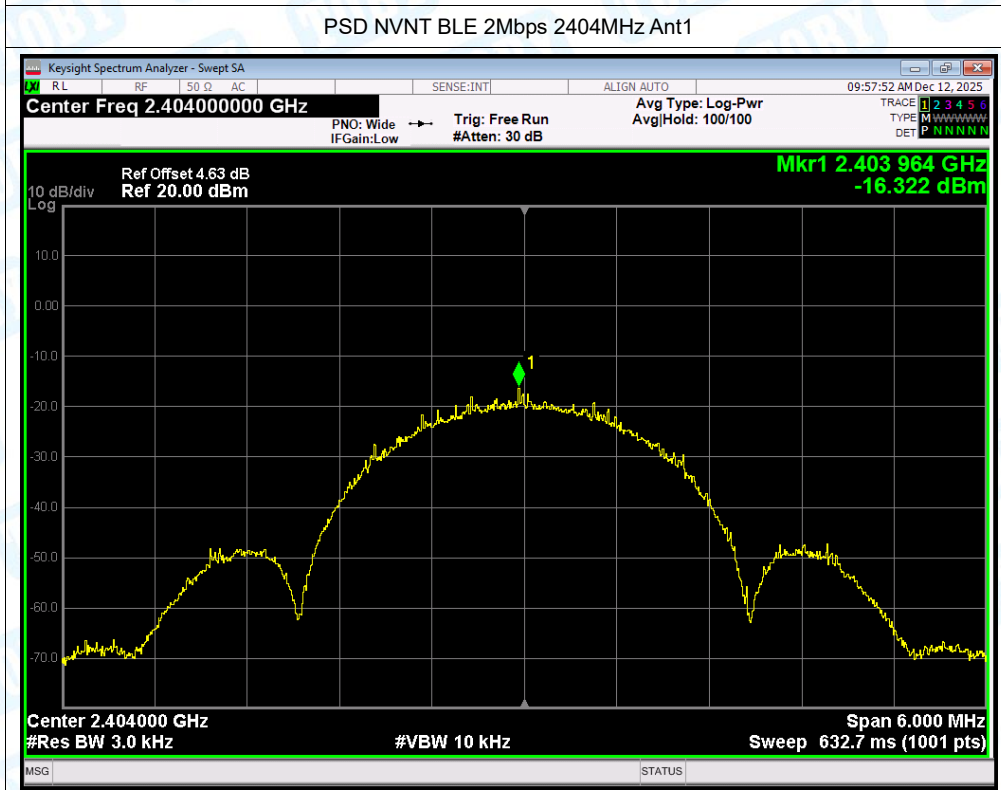
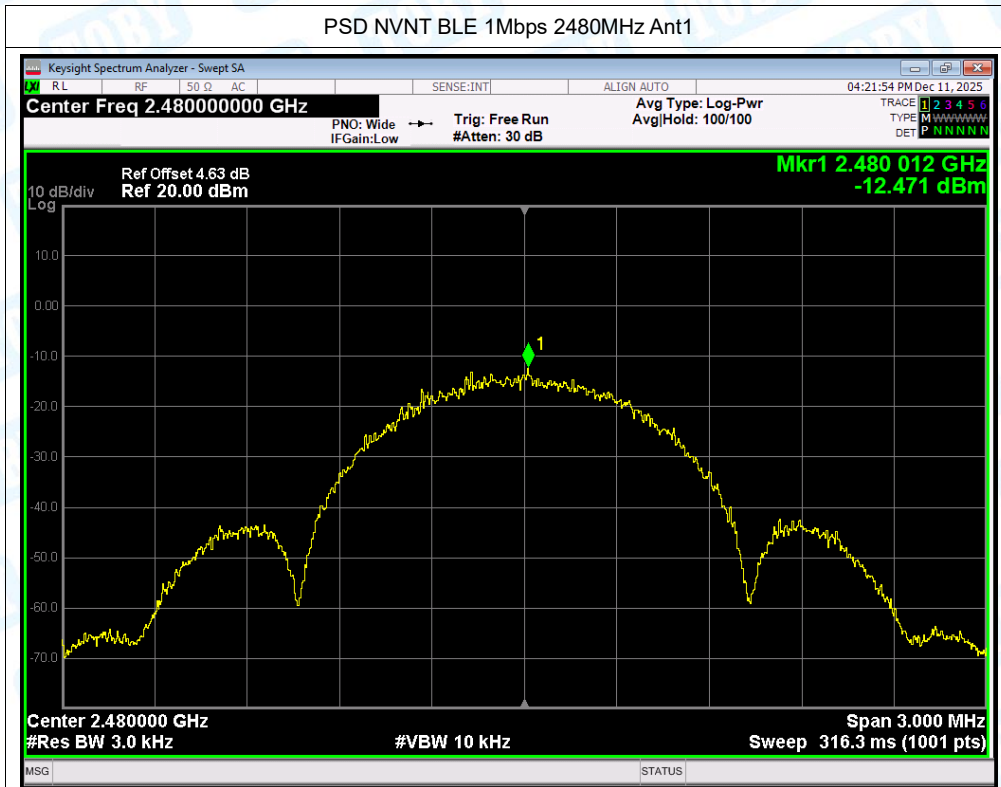
Test Graphs

PSD NVNT BLE 1Mbps 2402MHz Ant1

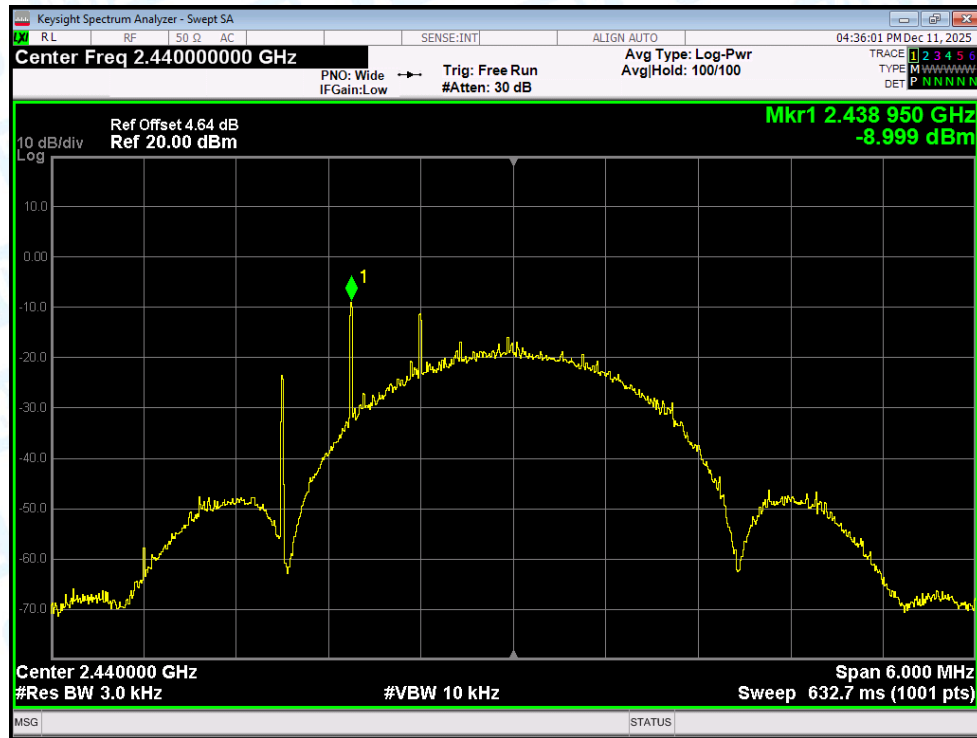


PSD NVNT BLE 1Mbps 2440MHz Ant1

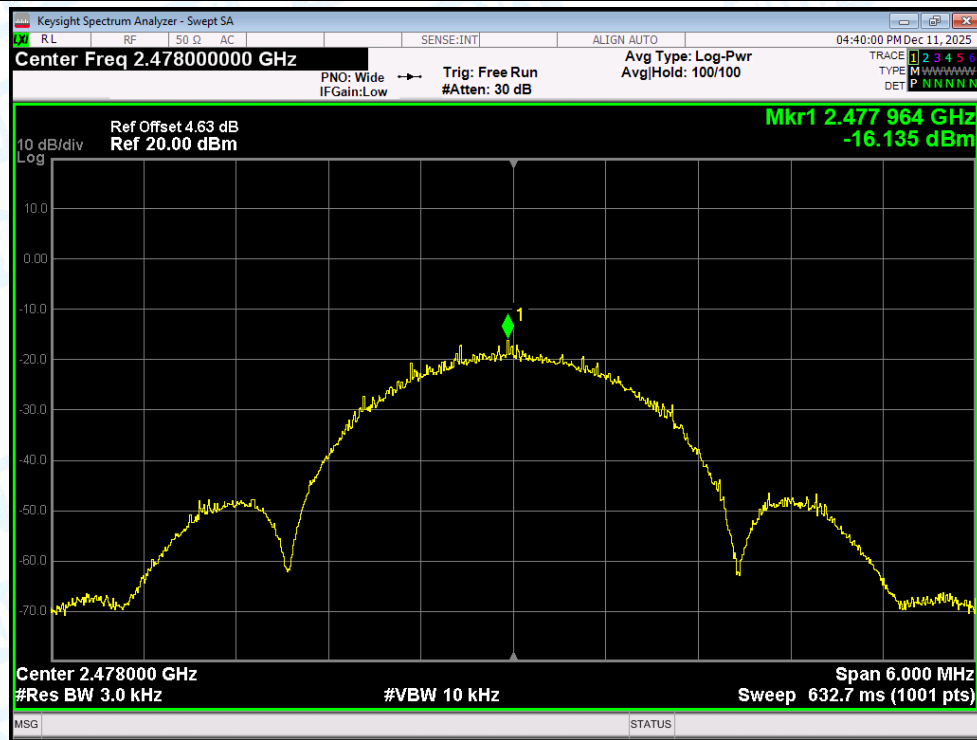




PSD NVNT BLE 2Mbps 2440MHz Ant1



PSD NVNT BLE 2Mbps 2478MHz Ant1

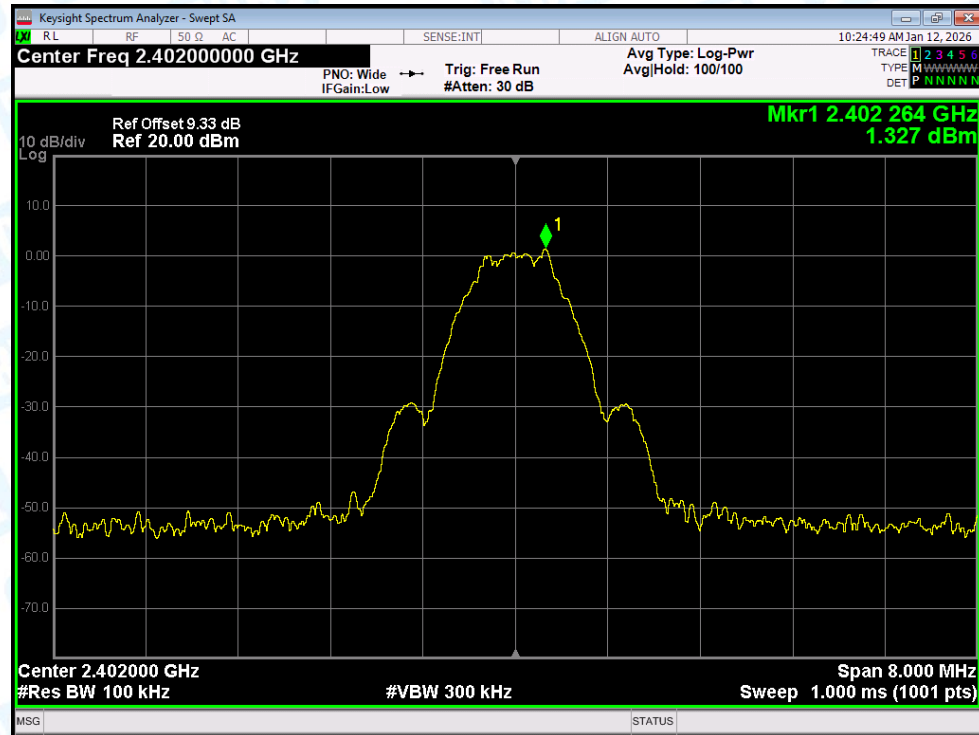


6.Band Edge

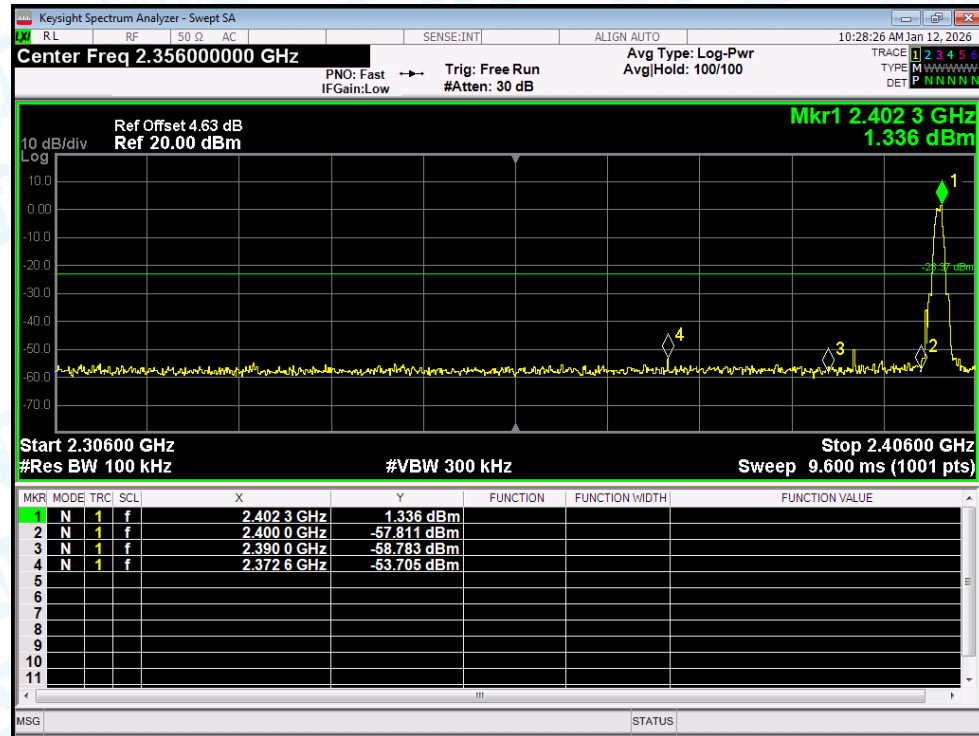
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-51.44	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-56.93	-20	Pass
NVNT	BLE 2Mbps	2404	Ant1	-56.3	-20	Pass
NVNT	BLE 2Mbps	2478	Ant1	-57.35	-20	Pass

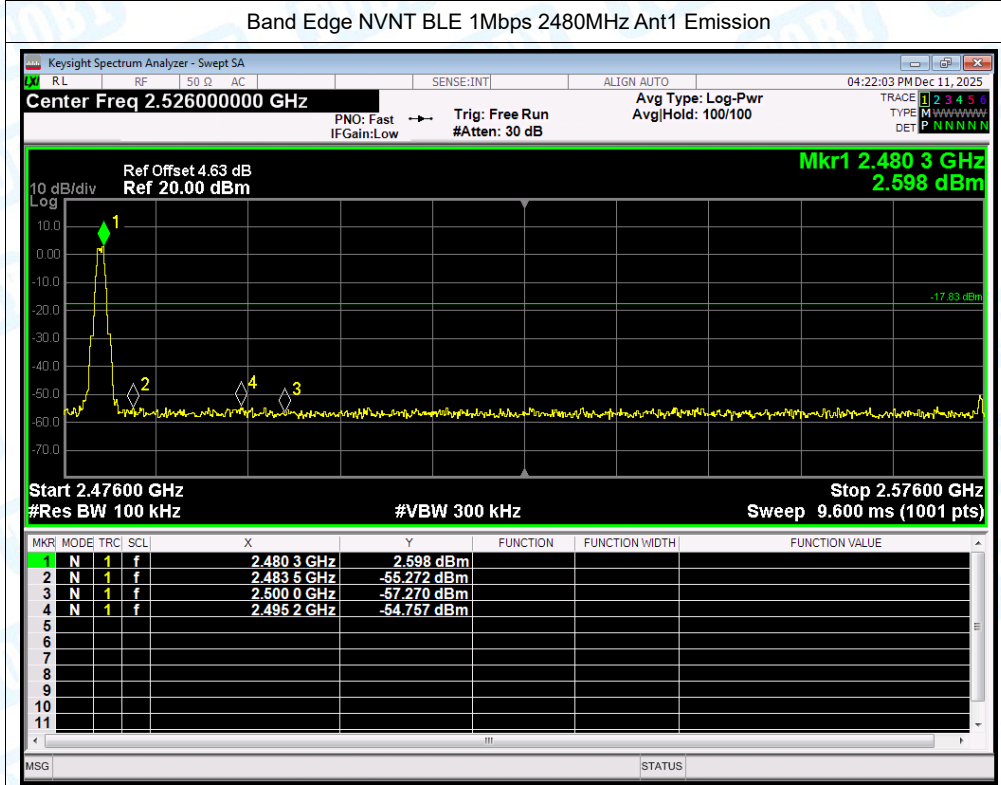
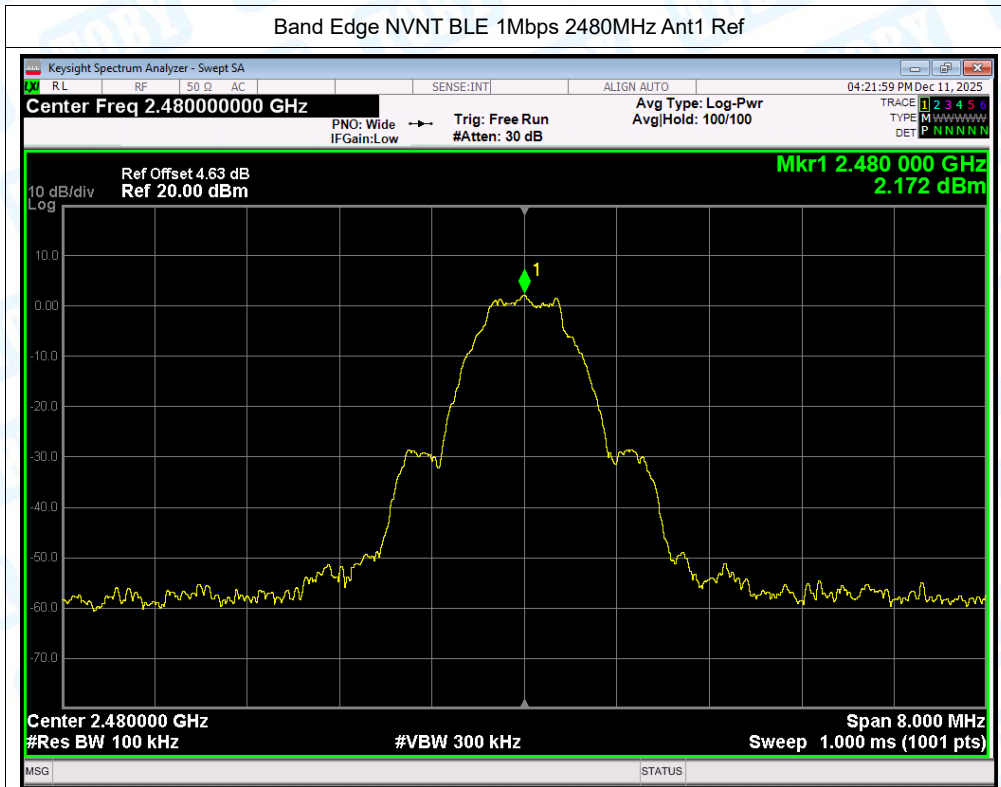
Test Graphs

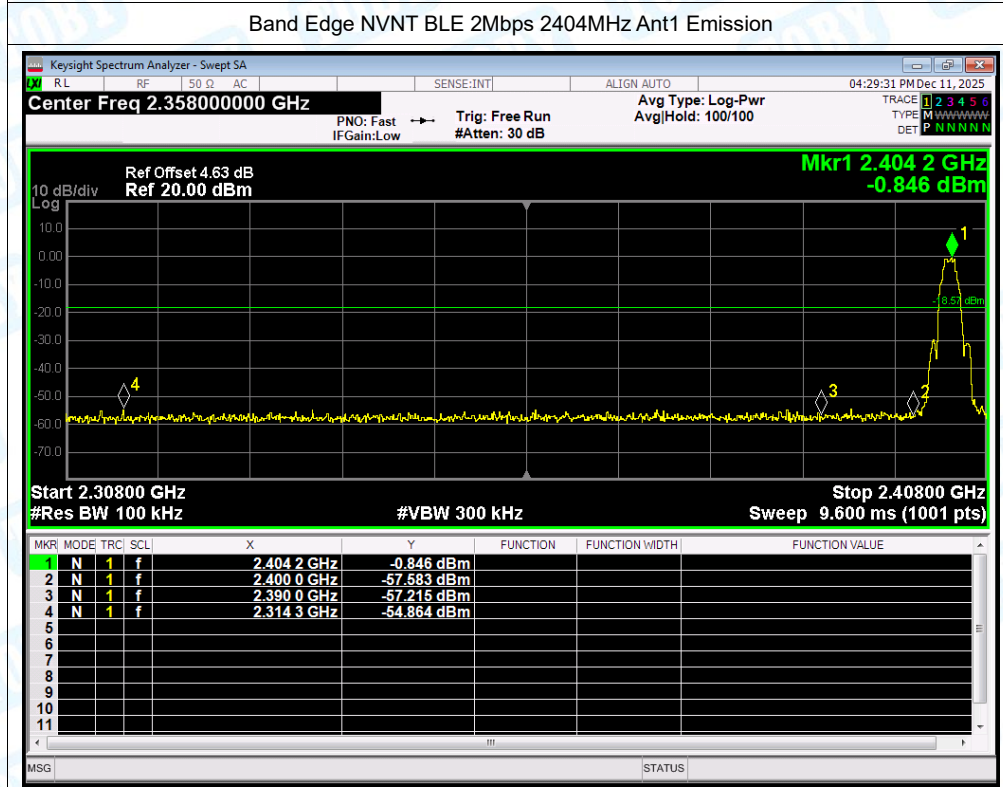
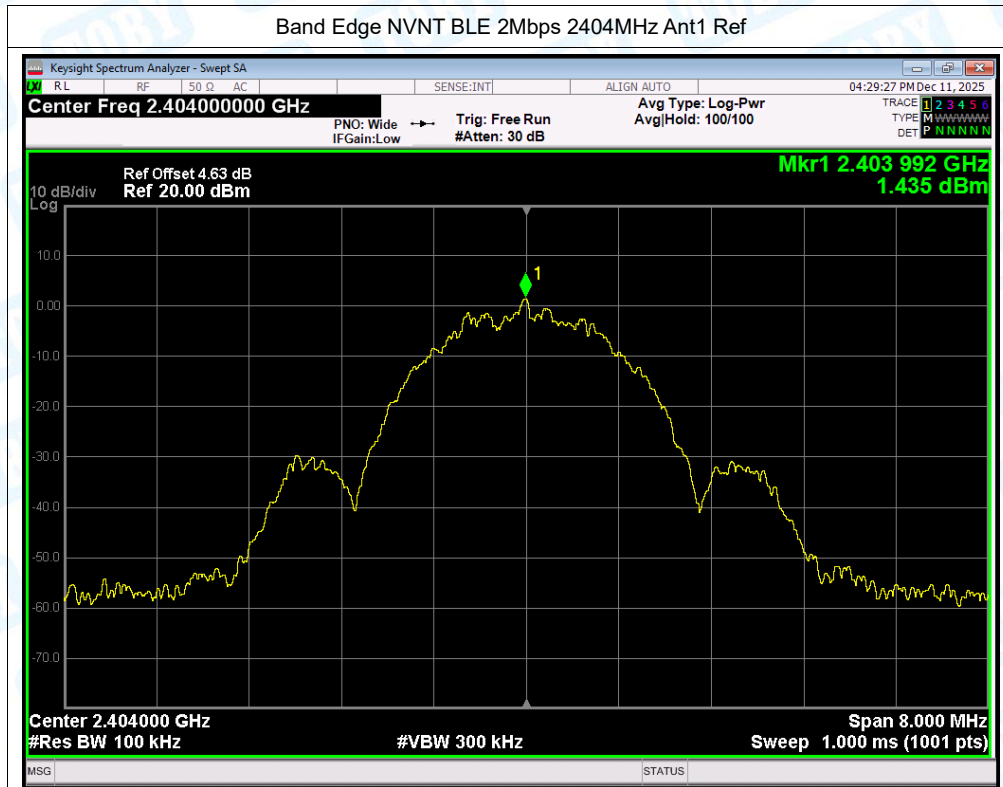
Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Ref

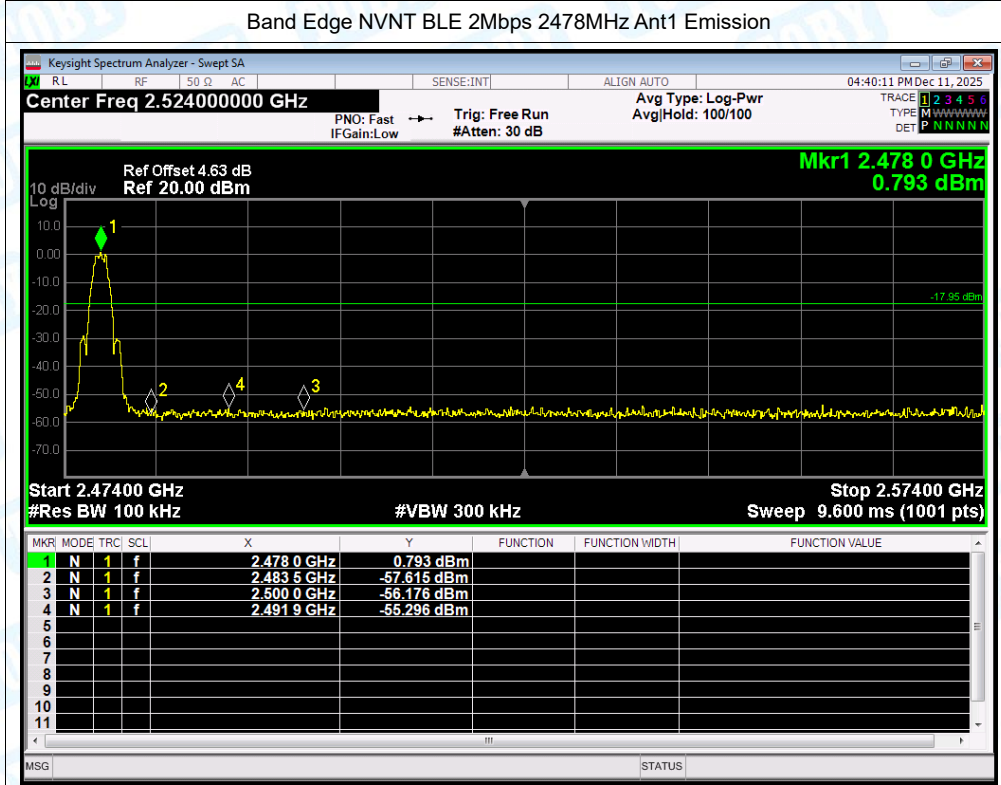
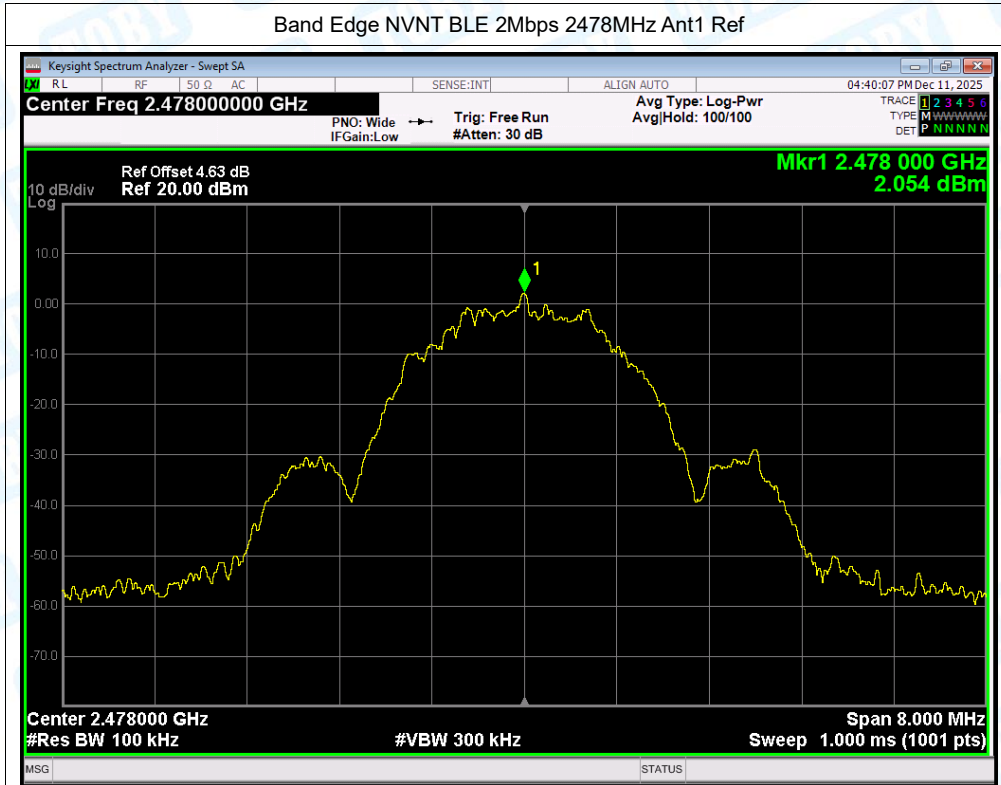


Band Edge NVNT BLE 1Mbps 2402MHz Ant1 Emission







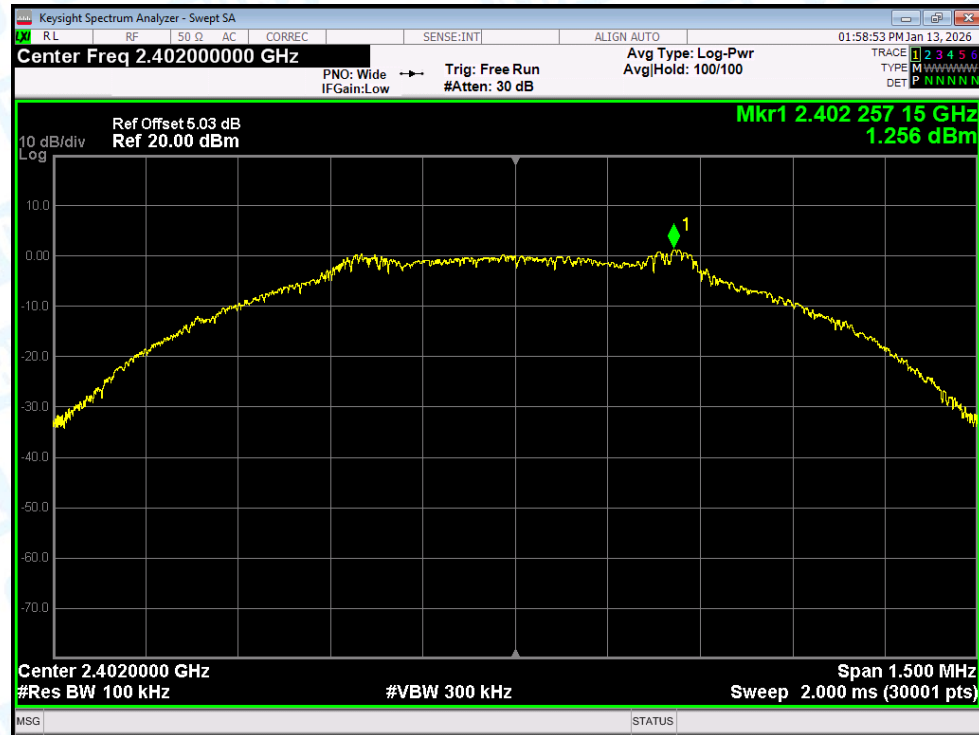


7. Conducted RF Spurious Emission

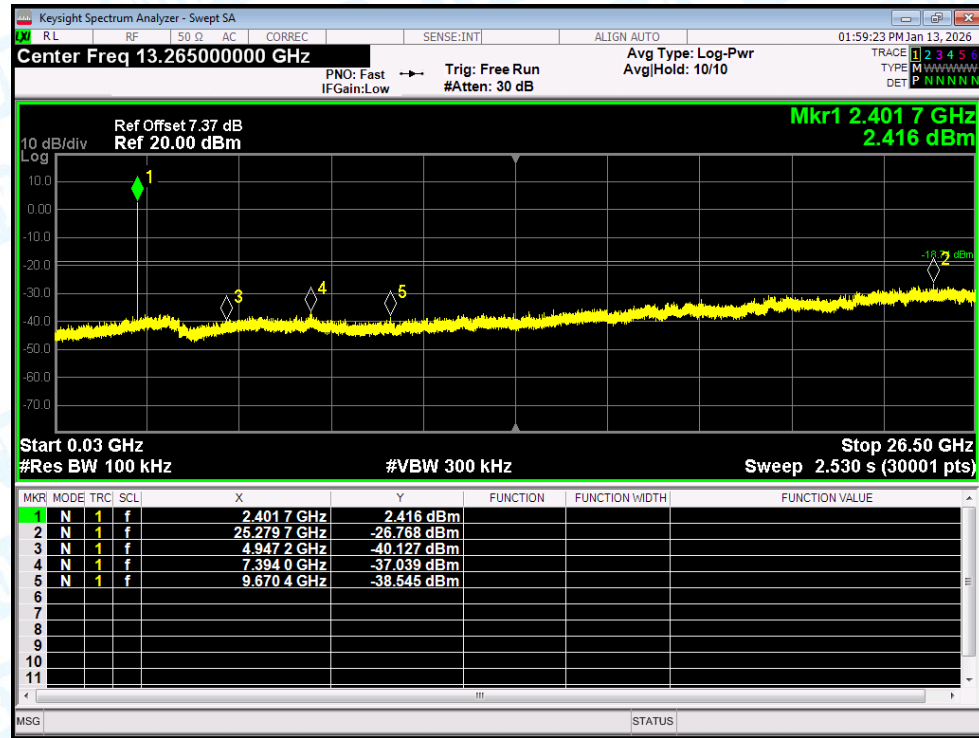
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1Mbps	2402	Ant1	-28.03	-20	Pass
NVNT	BLE 1Mbps	2440	Ant1	-40.76	-20	Pass
NVNT	BLE 1Mbps	2480	Ant1	-41.66	-20	Pass
NVNT	BLE 2Mbps	2404	Ant1	-38.12	-20	Pass
NVNT	BLE 2Mbps	2440	Ant1	-38.74	-20	Pass
NVNT	BLE 2Mbps	2478	Ant1	-40.6	-20	Pass

Test Graphs

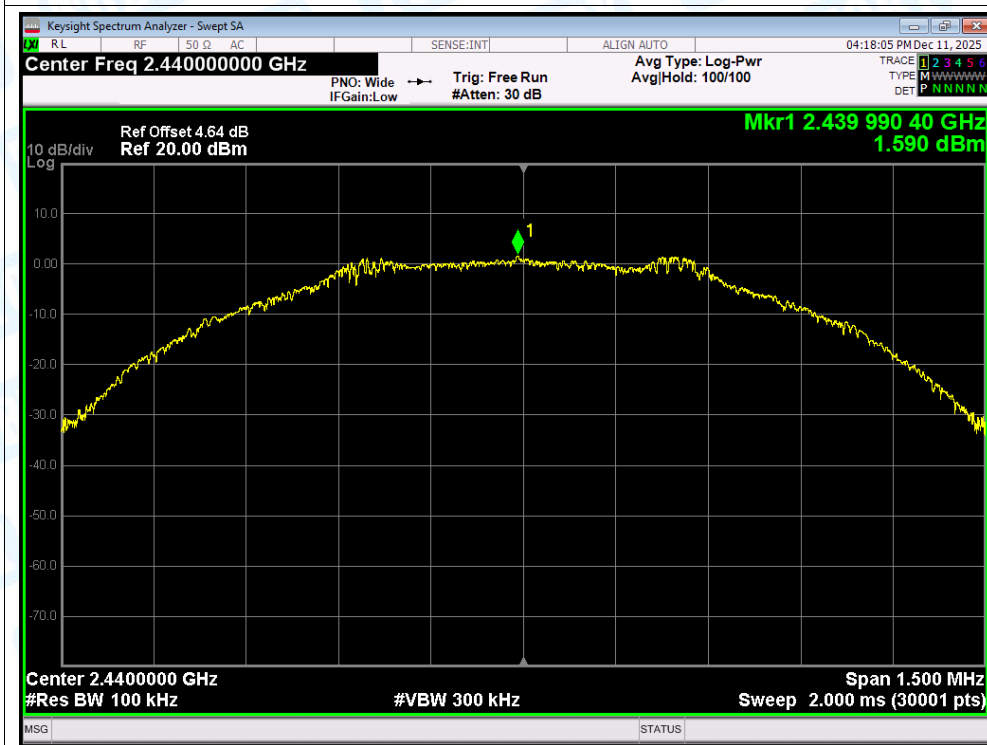
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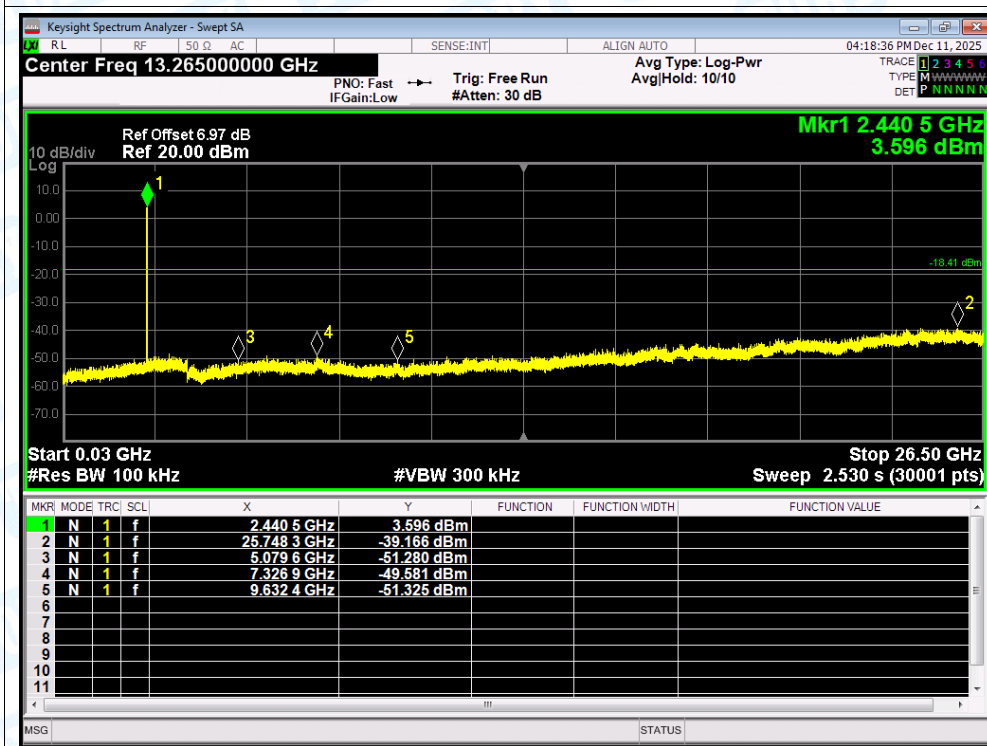
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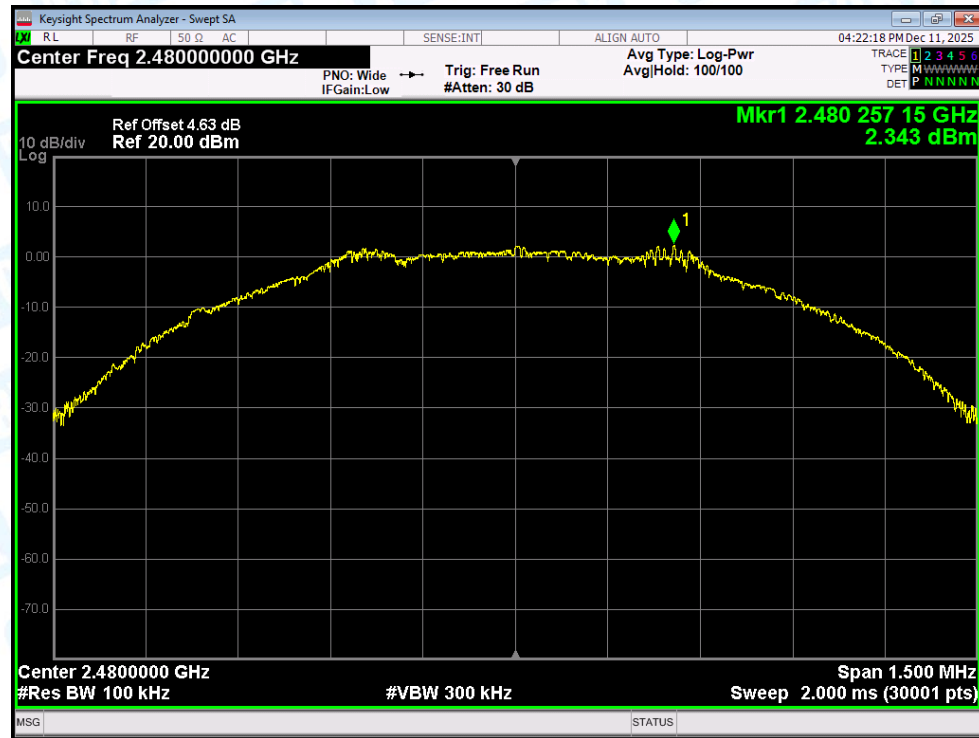
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Ref



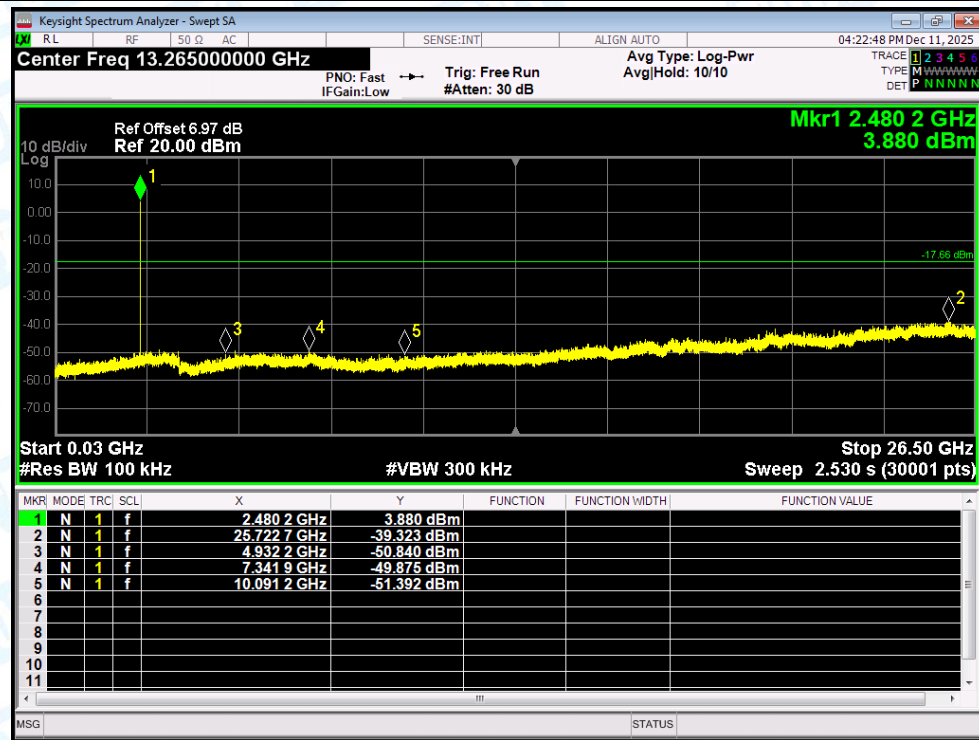
Tx. Spurious NVNT BLE 1Mbps 2440MHz Ant1 Emission



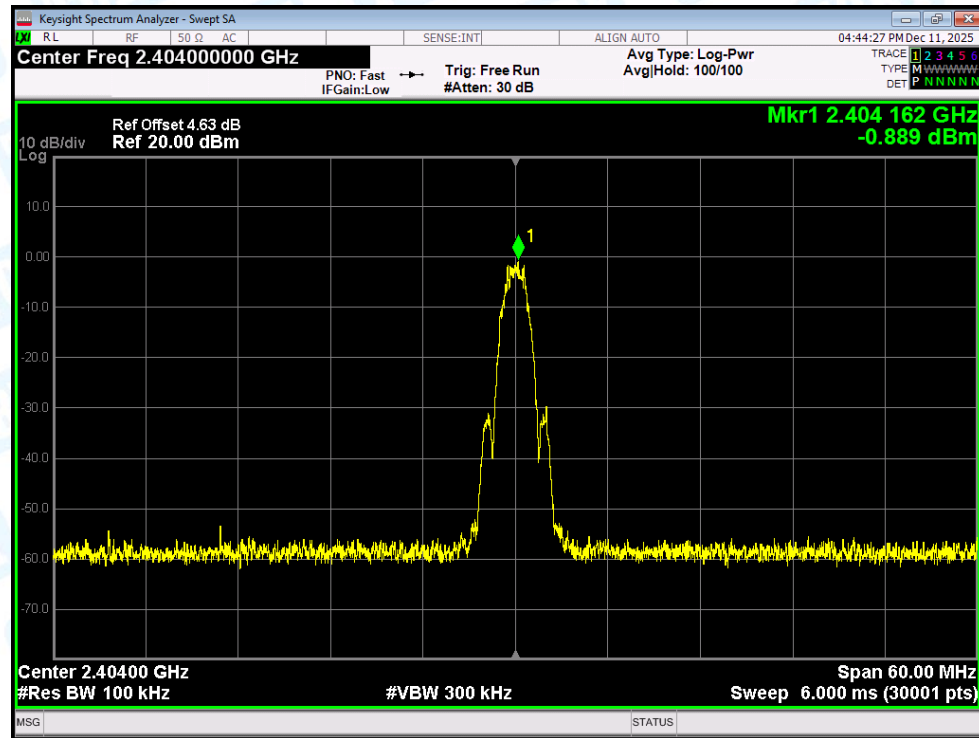
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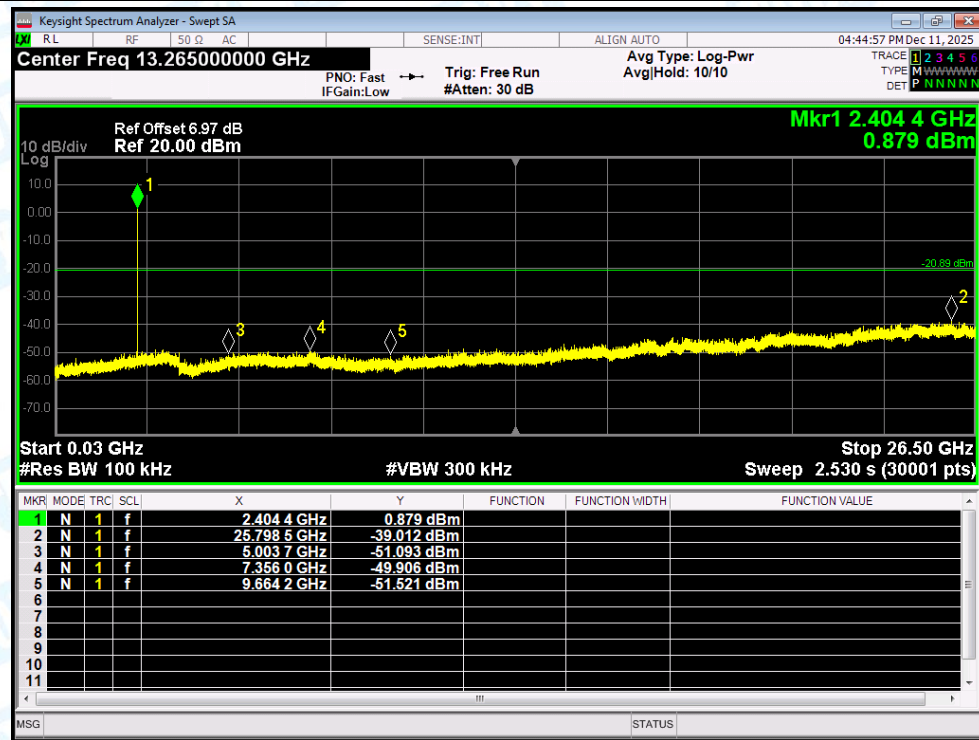
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Tx. Spurious NVNT BLE 2Mbps 2404MHz Ant1 Ref



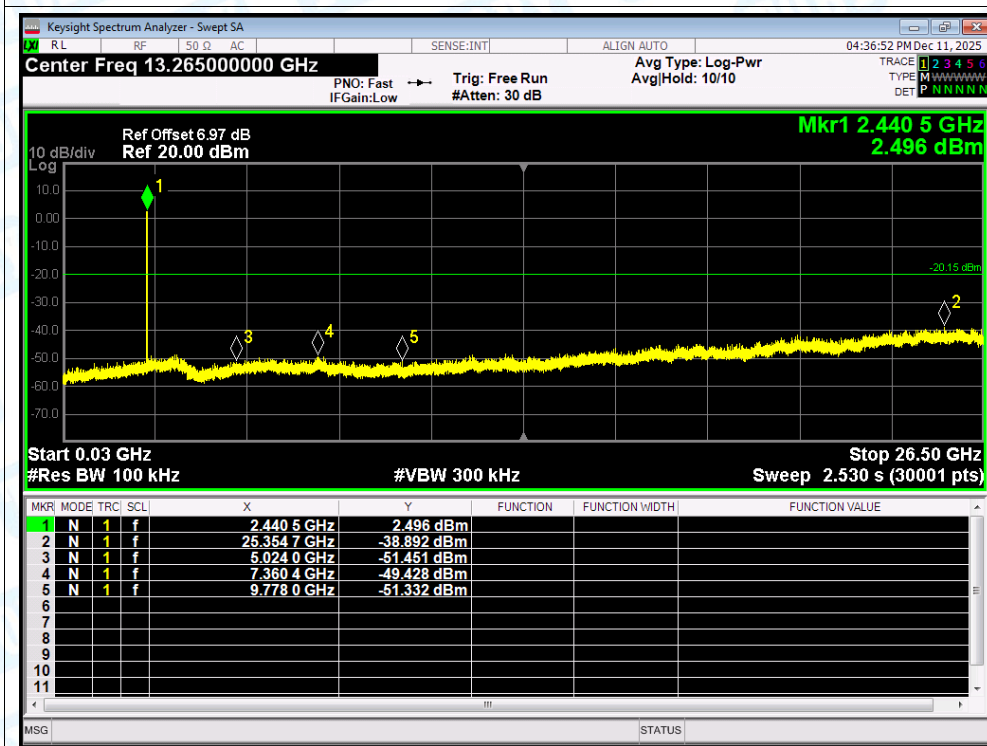
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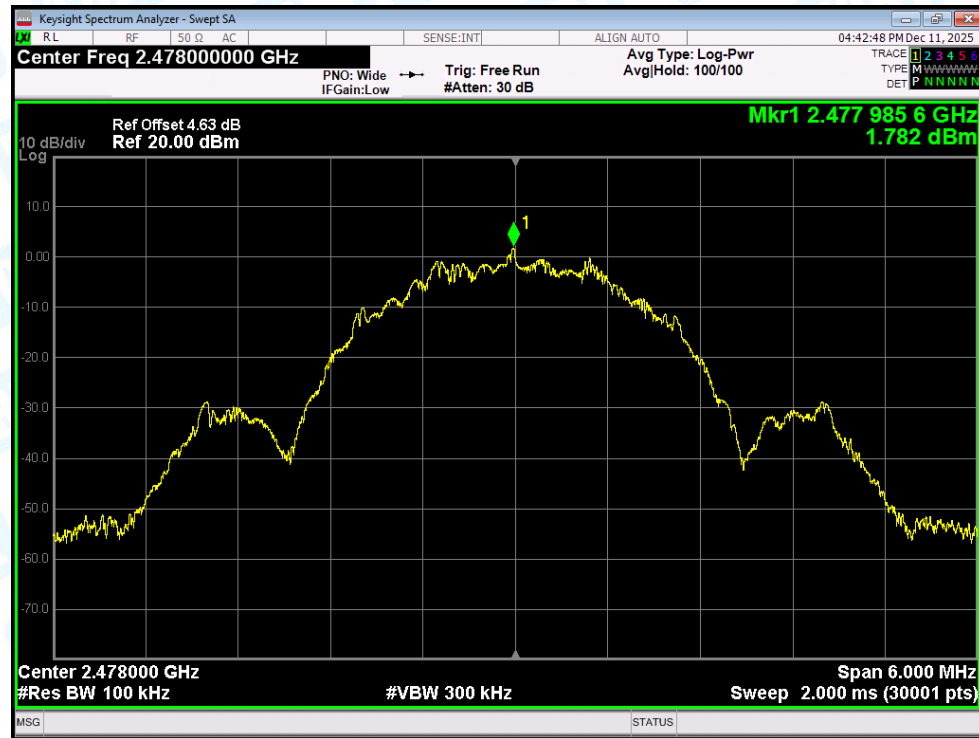
Tx. Spurious NVNT BLE 2Mbps 2440MHz Ant1 Ref



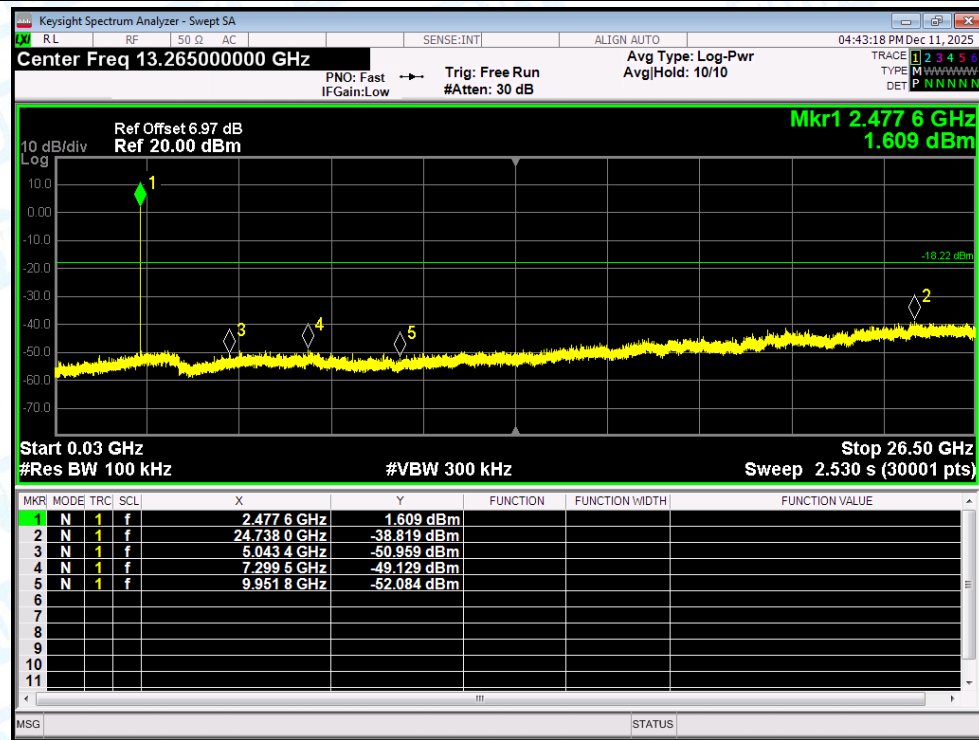
Tx. Spurious NVNT BLE 2Mbps 2440MHz Ant1 Emission



Tx. Spurious NVNT BLE 2Mbps 2478MHz Ant1 Ref



Tx. Spurious NVNT BLE 2Mbps 2478MHz Ant1 Emission



-----END OF THE REPORT-----