



Appendix A

RF Test Data for BT LE (Conducted Measurement)

Product Name: GARDEN LED

Test Model: XG4646

Environmental Conditions

Temperature:	23.5℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Bill Zhu
Supervised by:	Li Huan



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A.1 6dB Bandwidth

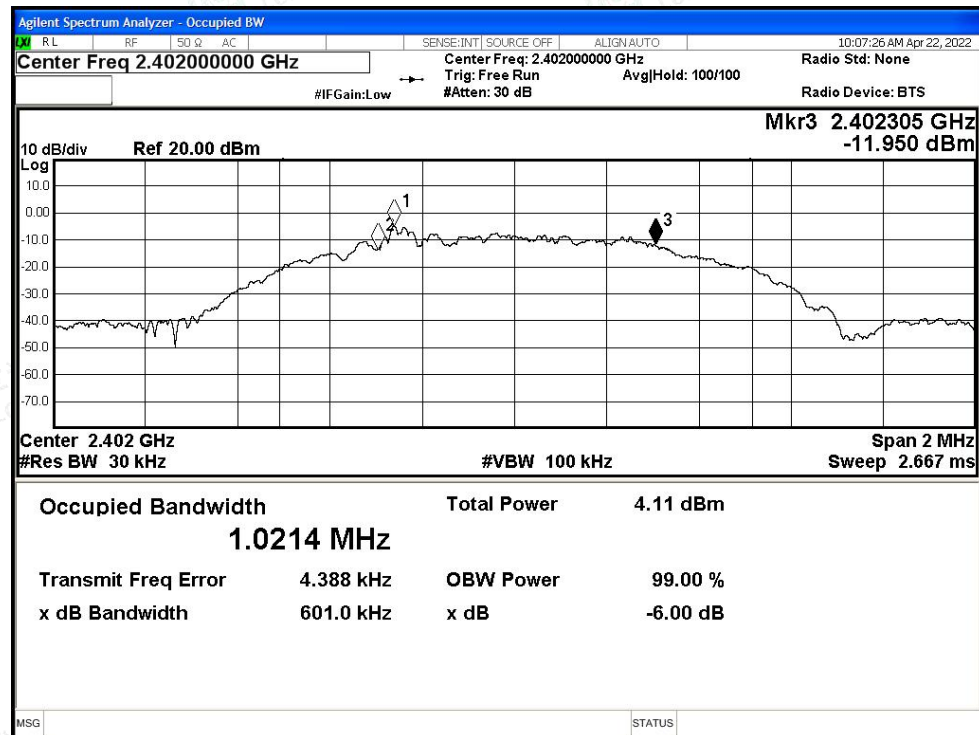
Condition	Mode	Frequency (MHz)	Antenna	6 dB Bandwidth (MHz)	Limit 6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant1	0.601	0.5	Pass
NVNT	BLE 1M	2440	Ant1	0.548	0.5	Pass
NVNT	BLE 1M	2480	Ant1	0.627	0.5	Pass
NVNT	BLE 2M	2402	Ant1	1.117	0.5	Pass
NVNT	BLE 2M	2440	Ant1	1.143	0.5	Pass
NVNT	BLE 2M	2480	Ant1	1.127	0.5	Pass





Test Graphs

6dB Bandwidth NVNT BLE 1M 2402MHz Ant1



6dB Bandwidth NVNT BLE 1M 2440MHz Ant1



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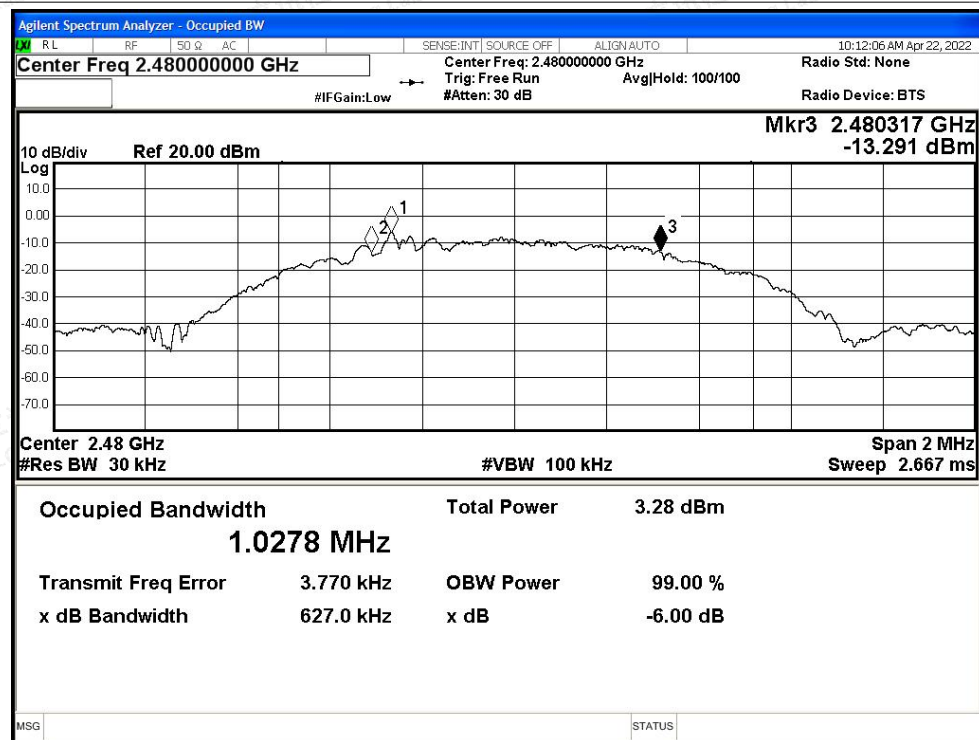
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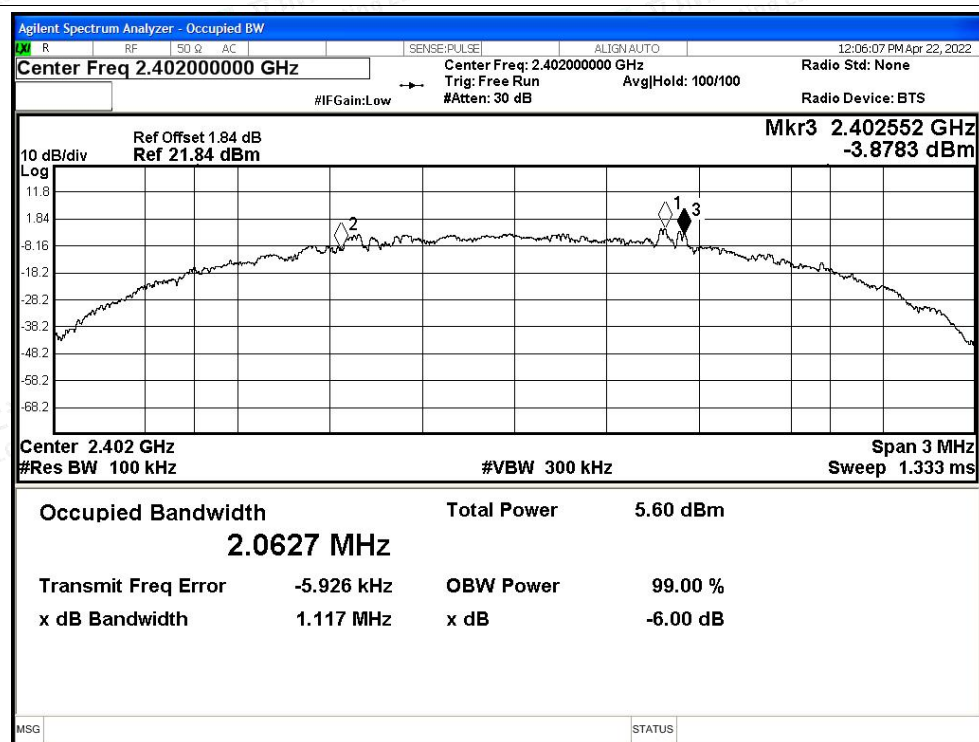


6dB Bandwidth NVNT BLE 1M 2480MHz Ant1



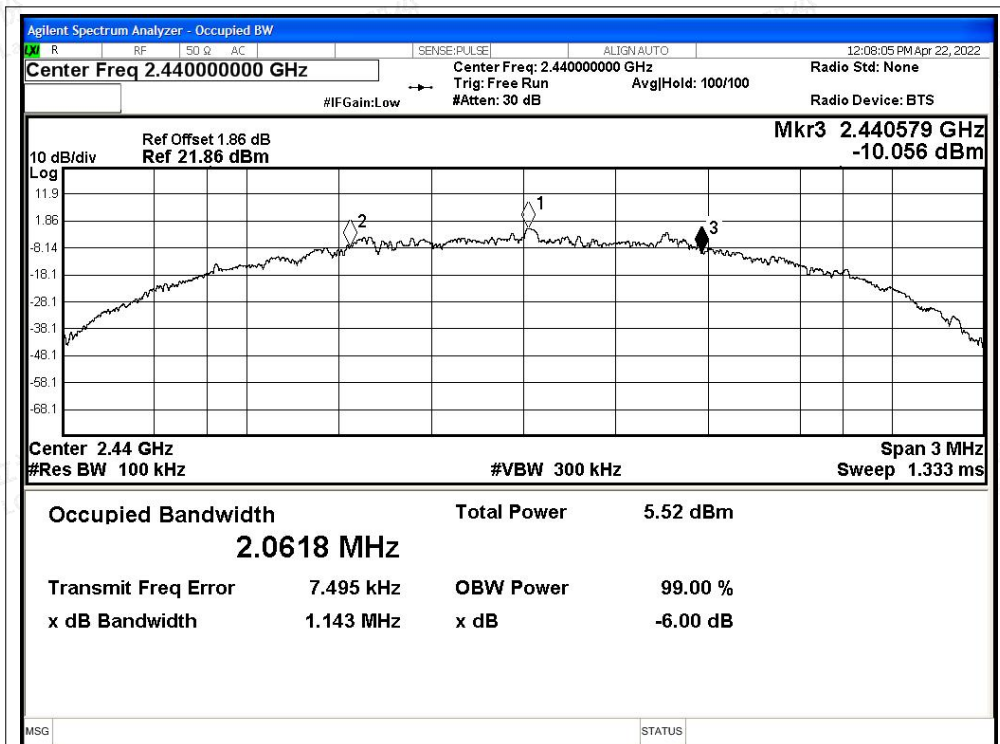
Test Graphs

6dB Bandwidth NVNT BLE 2M 2402MHz Ant1

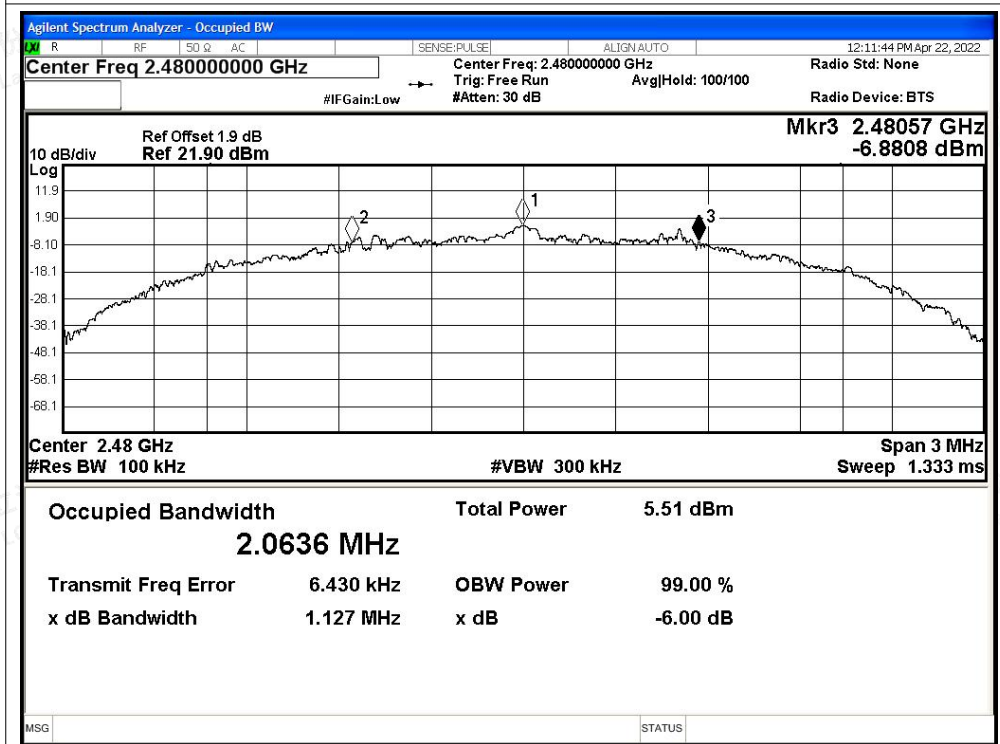


6dB Bandwidth NVNT BLE 2M 2440MHz Ant1





6dB Bandwidth NVNT BLE 2M 2480MHz Ant1



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A.2 Maximum Conducted Output Power

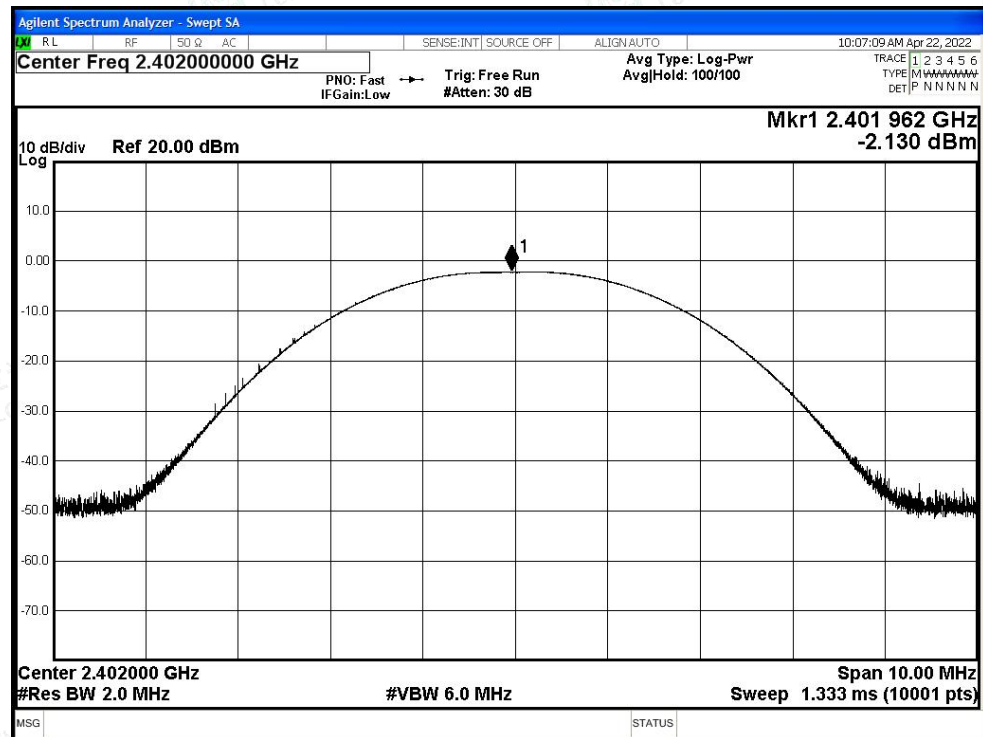
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant1	-2.13	30	Pass
NVNT	BLE 1M	2440	Ant1	-2.73	30	Pass
NVNT	BLE 1M	2480	Ant1	-2.88	30	Pass
NVNT	BLE 2M	2402	Ant1	-0.44	30	Pass
NVNT	BLE 2M	2440	Ant1	-0.59	30	Pass
NVNT	BLE 2M	2480	Ant1	-0.86	30	Pass



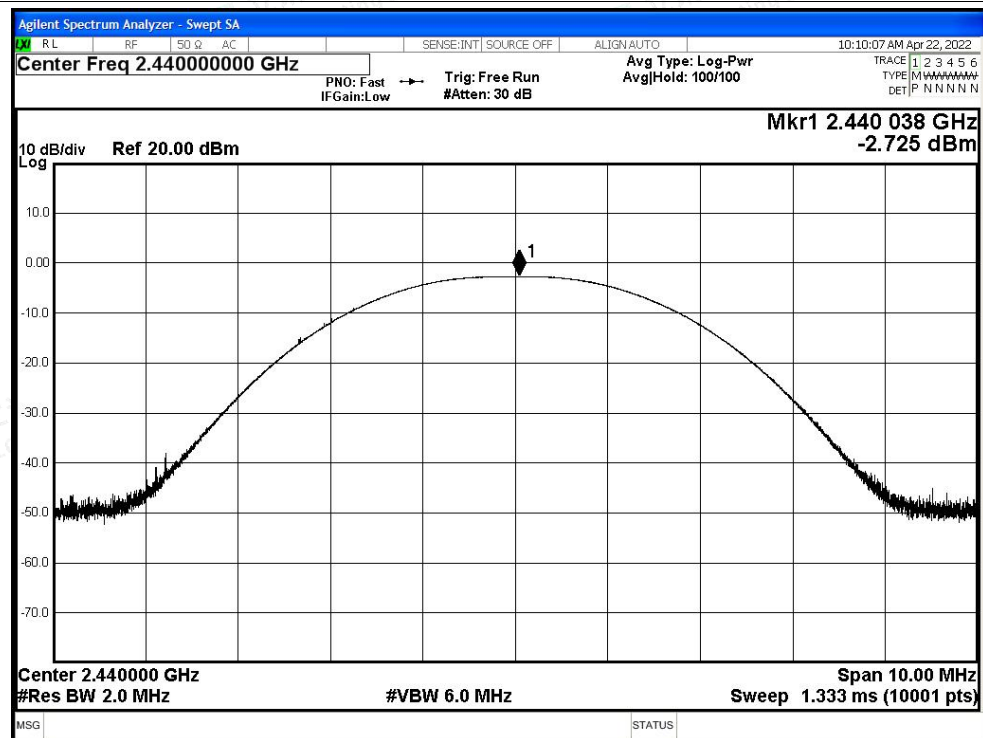


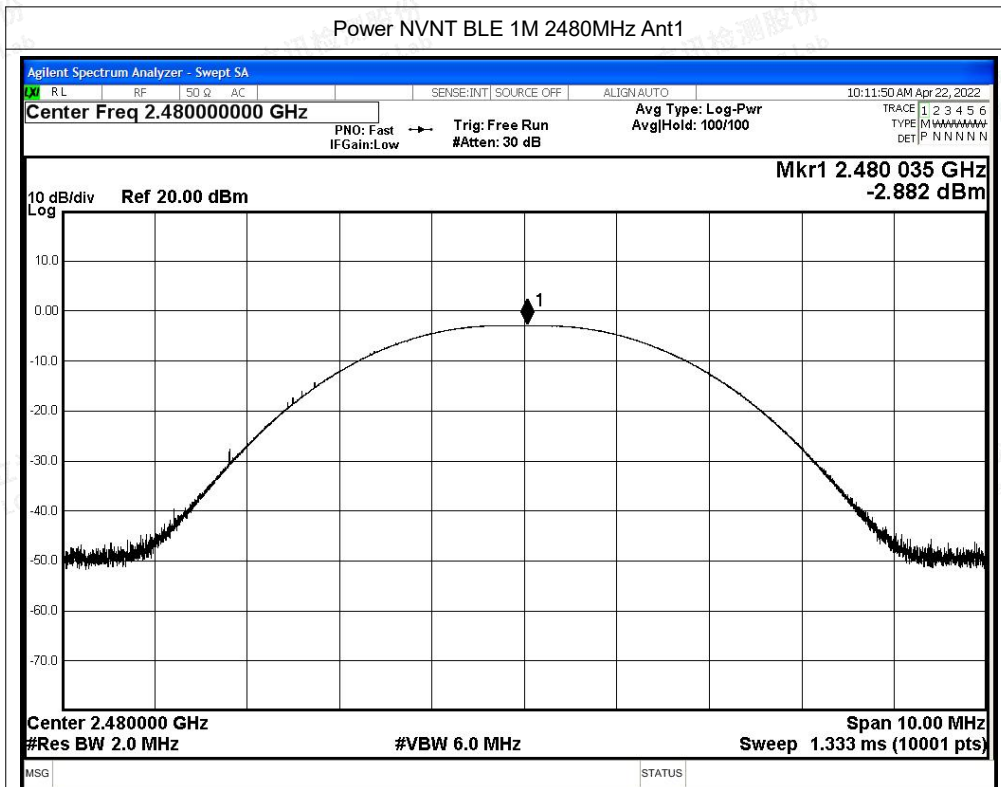
Test Graphs

Power NVNT BLE 1M 2402MHz Ant1

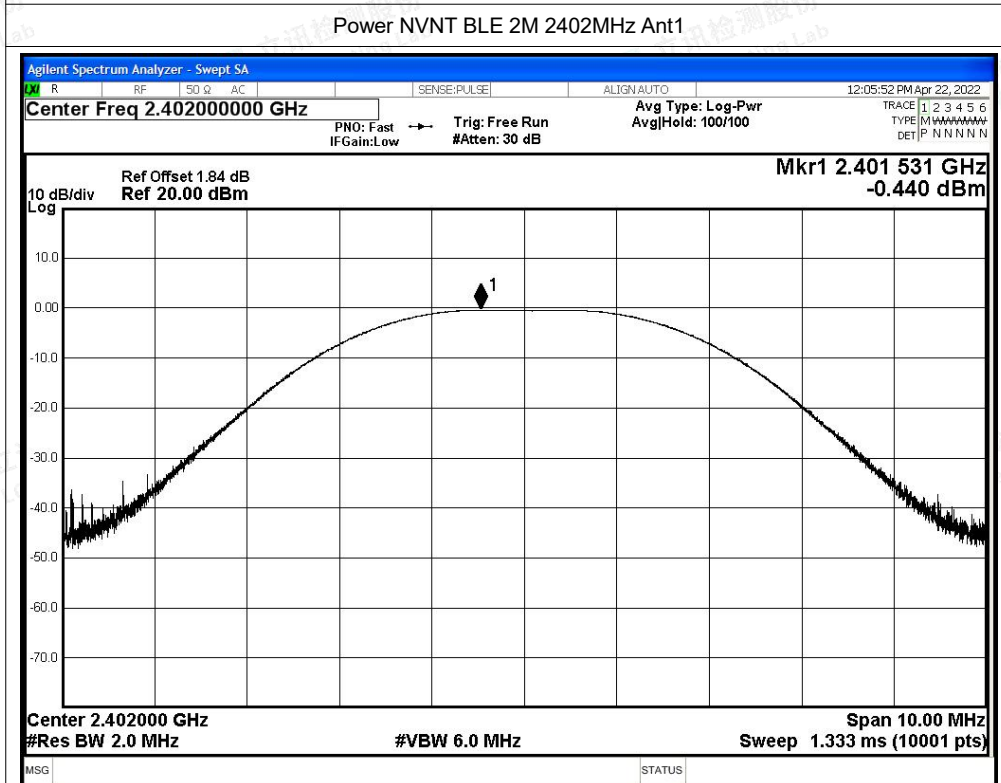


Power NVNT BLE 1M 2440MHz Ant1



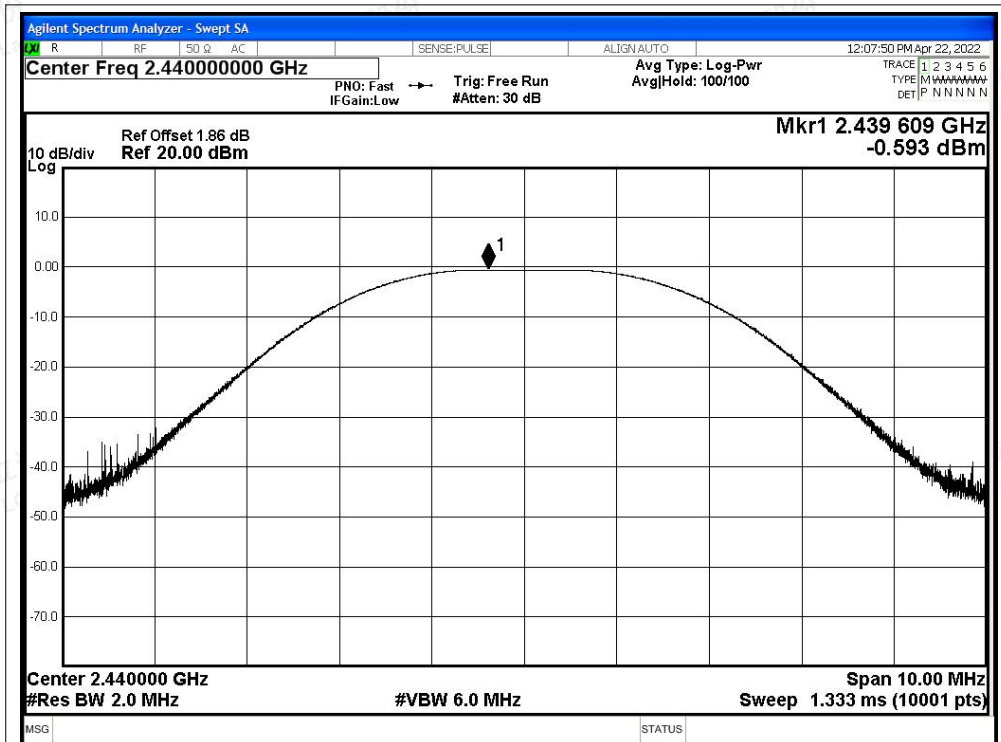


Test Graphs

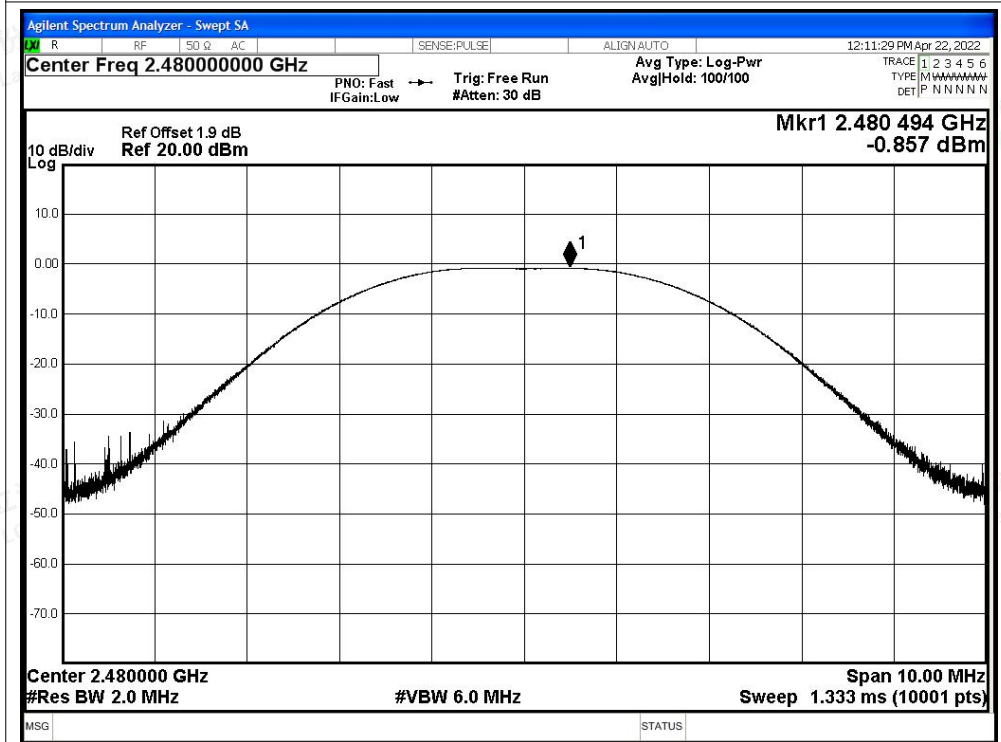


Power NVNT BLE 2M 2440MHz Ant1





Power NVNT BLE 2M 2480MHz Ant1





A.3 Maximum Power Spectral Density

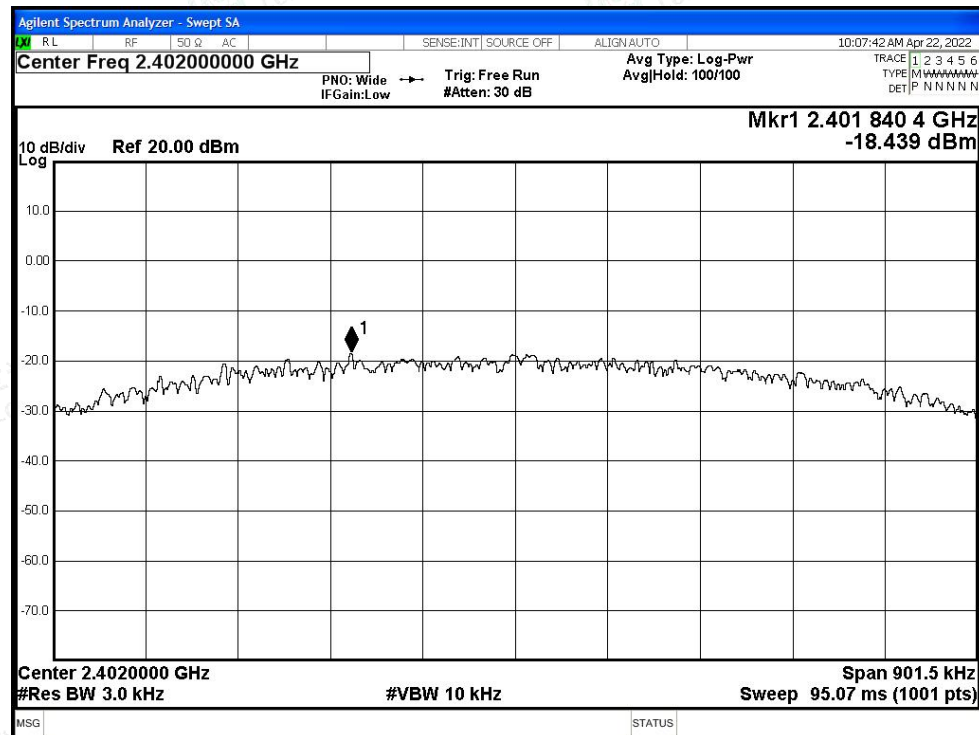
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant1	-18.44	0	-18.44	8	Pass
NVNT	BLE 1M	2440	Ant1	-18.96	0	-18.96	8	Pass
NVNT	BLE 1M	2480	Ant1	-19.01	0	-19.01	8	Pass
NVNT	BLE 2M	2402	Ant1	-18.71	0	-18.71	8	Pass
NVNT	BLE 2M	2440	Ant1	-19.27	0	-19.27	8	Pass
NVNT	BLE 2M	2480	Ant1	-19.02	0	-19.02	8	Pass



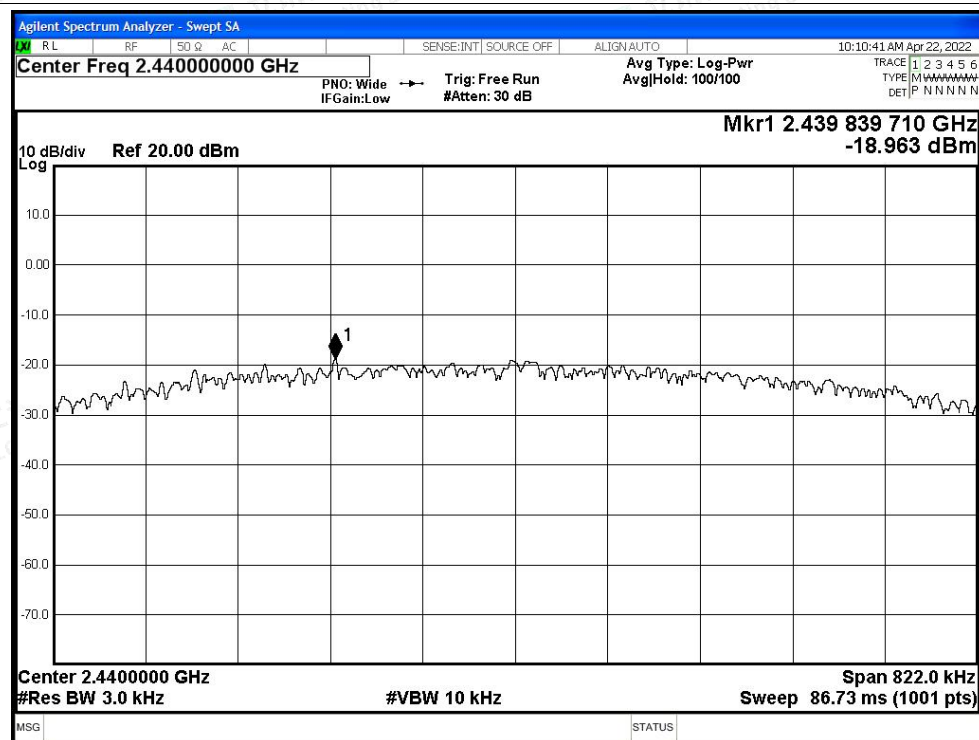


Test Graphs

PSD NVNT BLE 1M 2402MHz Ant1



PSD NVNT BLE 1M 2440MHz Ant1



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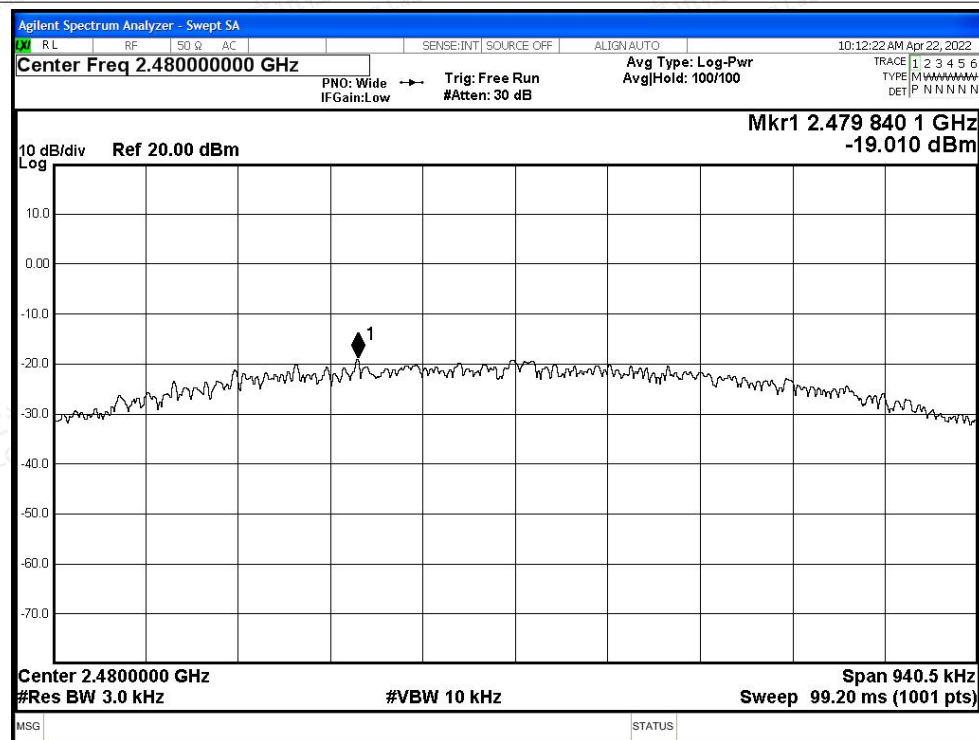
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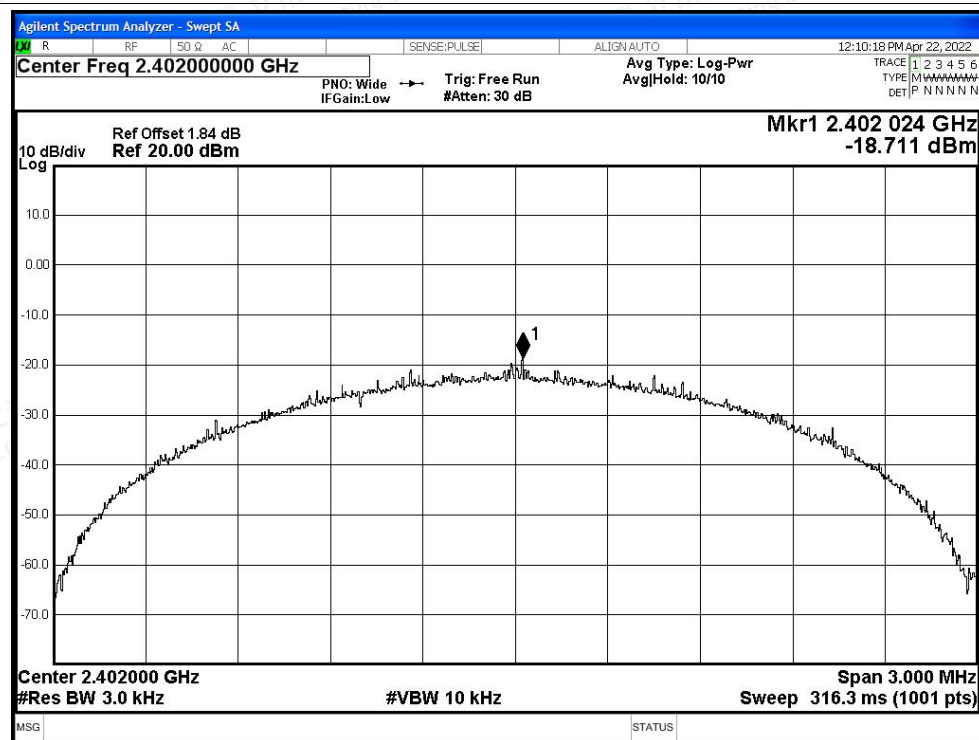


PSD NVNT BLE 1M 2480MHz Ant1



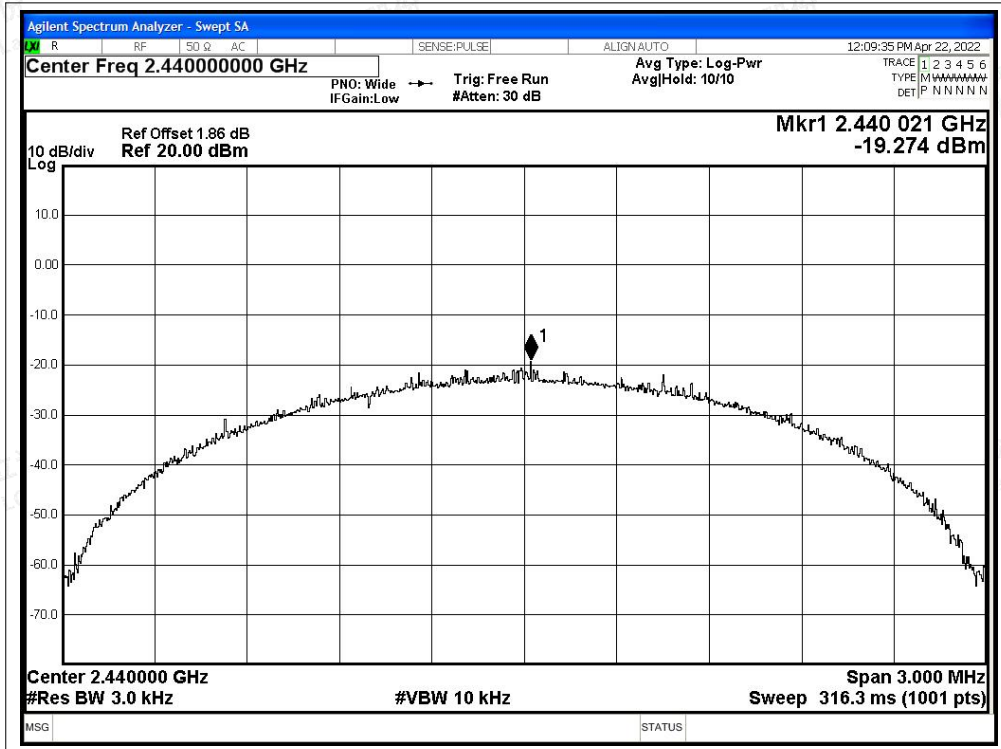
Test Graphs

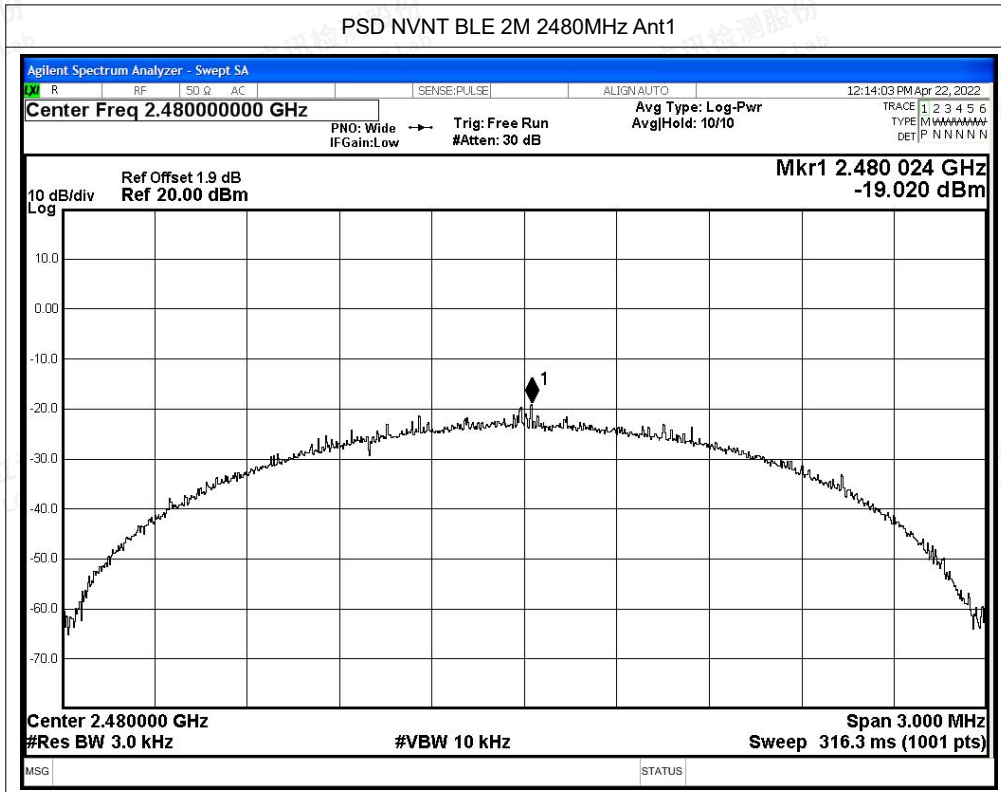
PSD NVNT BLE 2M 2402MHz Ant1



PSD NVNT BLE 2M 2440MHz Ant1









A.4 Band edge measurements

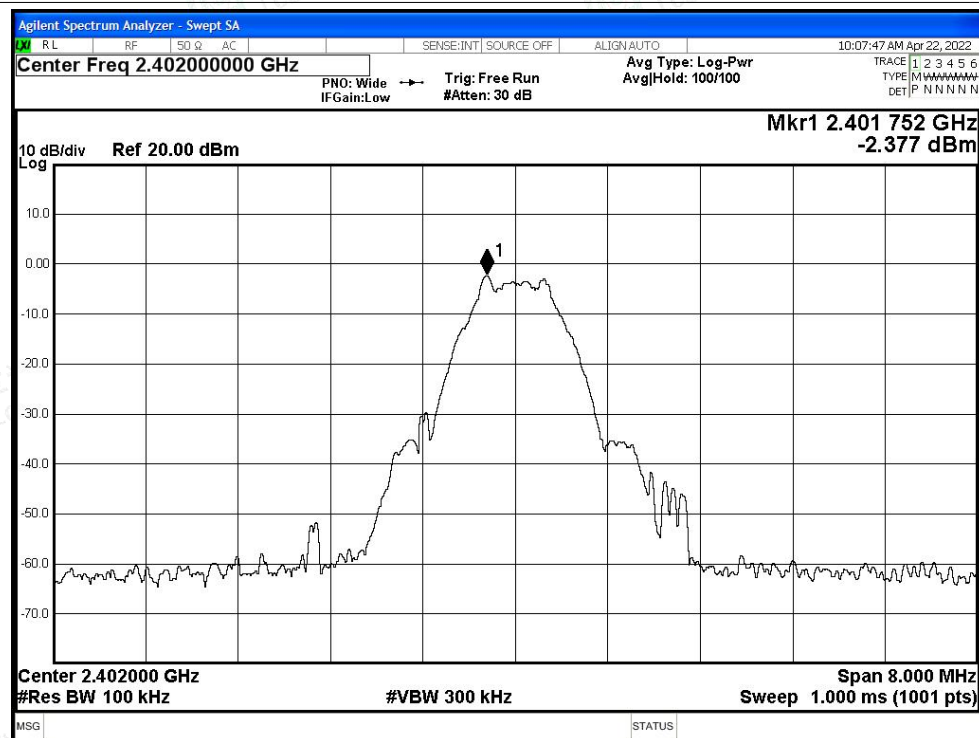
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-56.8	-20	Pass
NVNT	BLE 1M	2480	Ant1	-56.03	-20	Pass
NVNT	BLE 2M	2402	Ant1	-33.93	-20	Pass
NVNT	BLE 2M	2480	Ant1	-53.18	-20	Pass



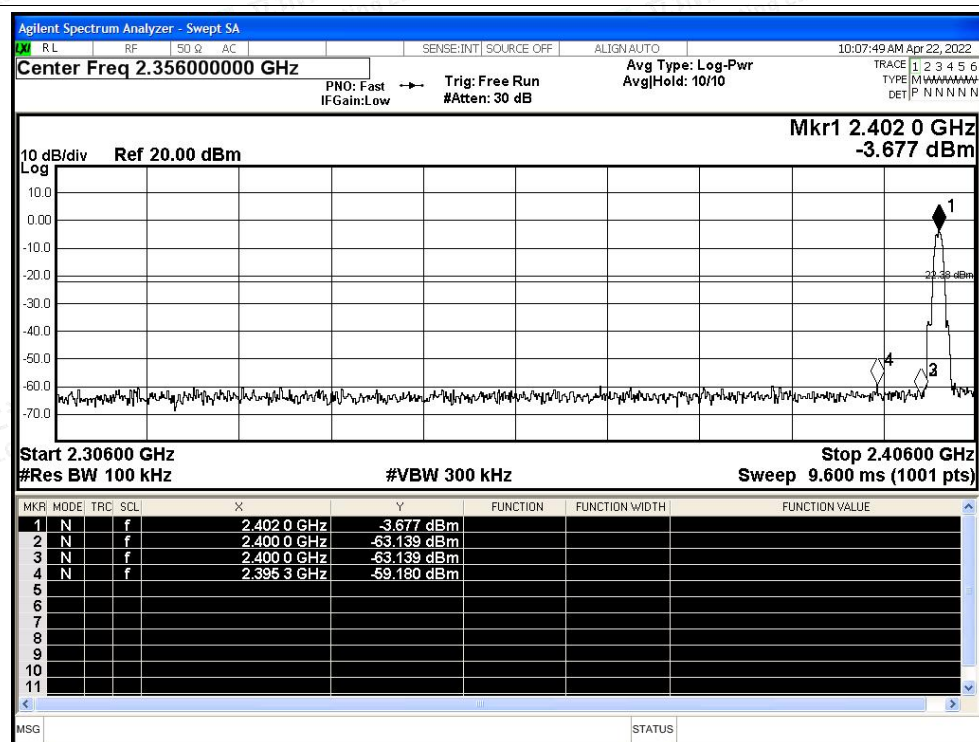


Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant1 Ref



Band Edge NVNT BLE 1M 2402MHz Ant1 Emission



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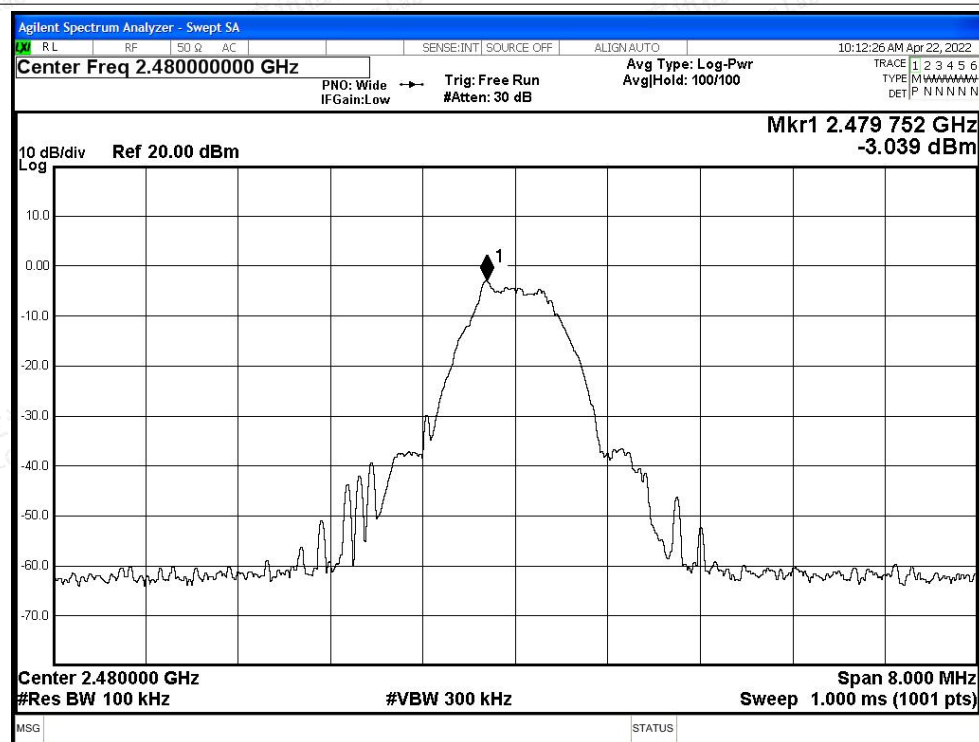
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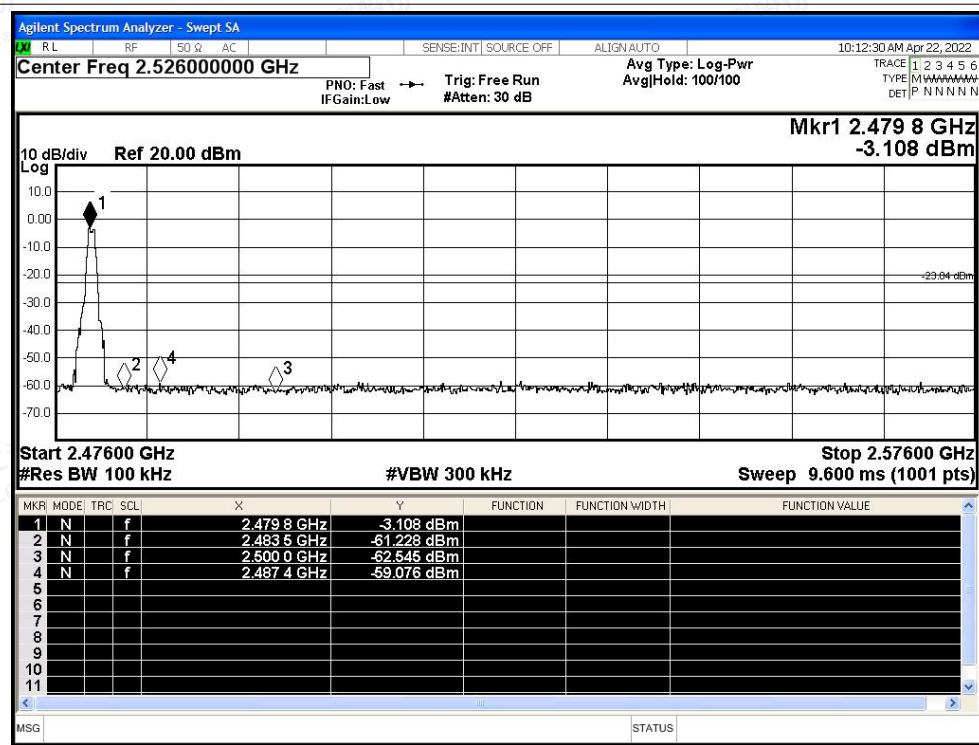
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Band Edge NVNT BLE 1M 2480MHz Ant1 Ref



Band Edge NVNT BLE 1M 2480MHz Ant1 Emission



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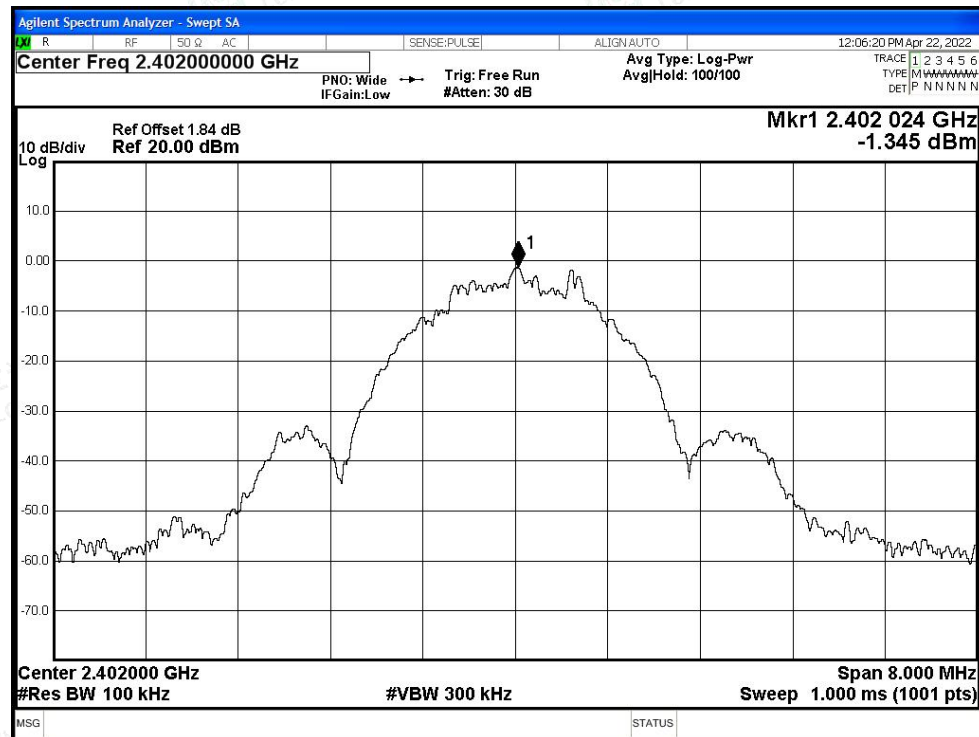
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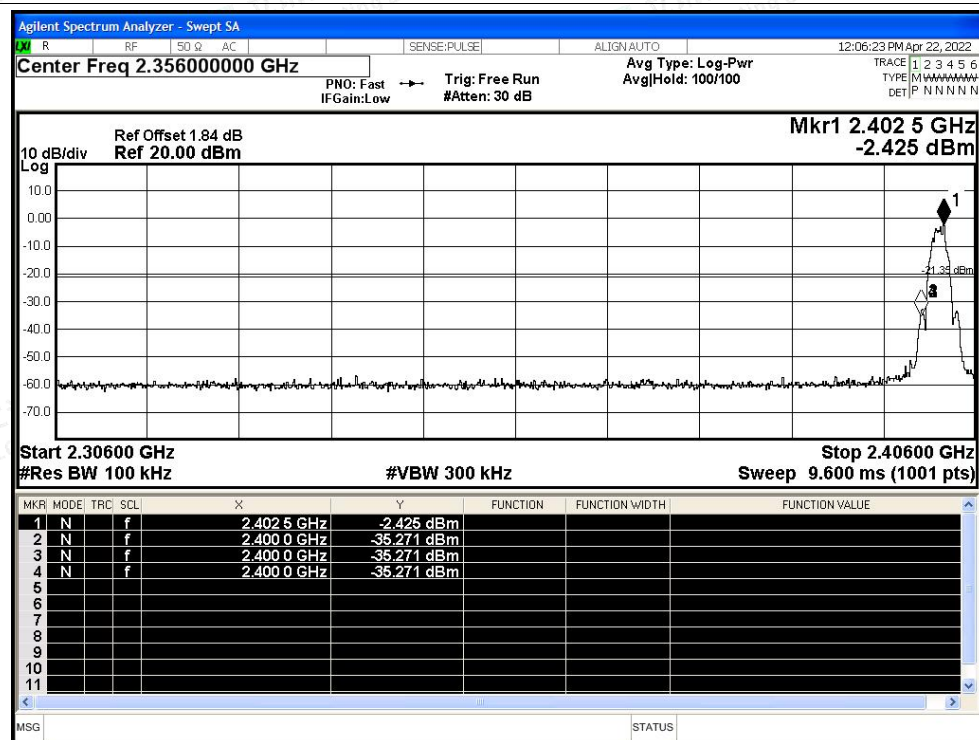


Test Graphs

Band Edge NVNT BLE 2M 2402MHz Ant1 Ref



Band Edge NVNT BLE 2M 2402MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

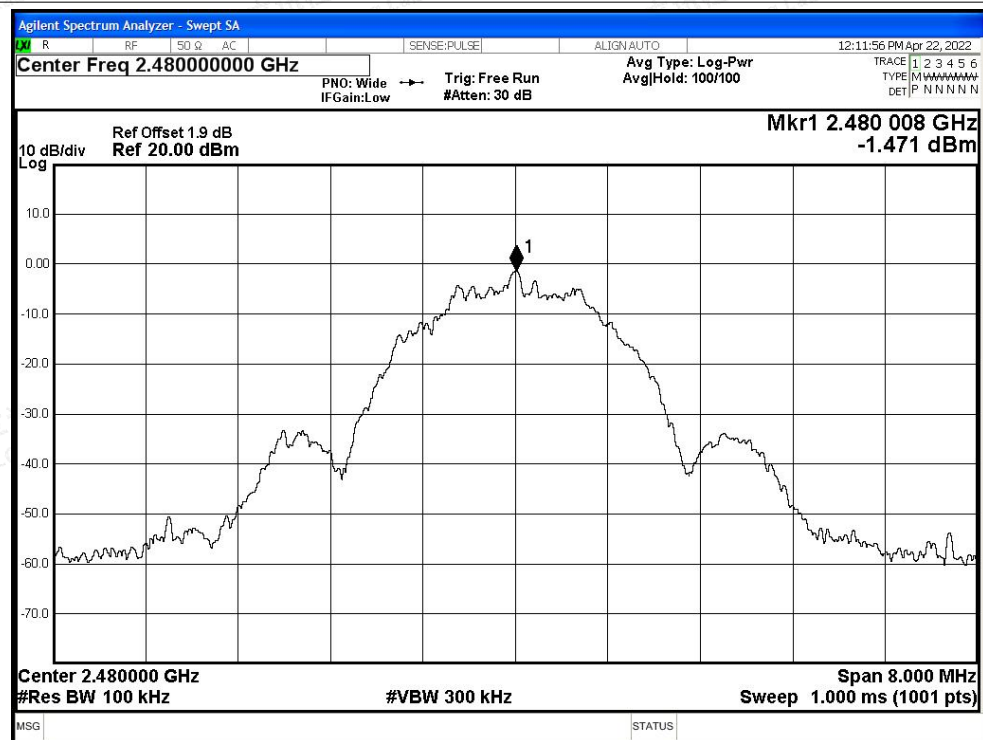
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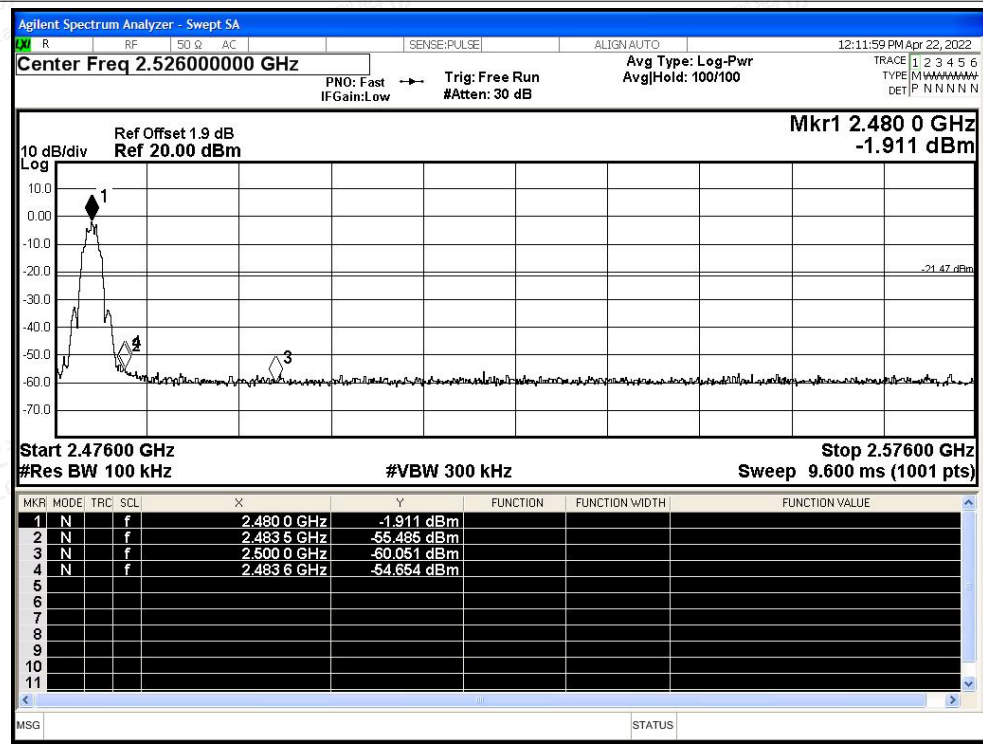
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Band Edge NVNT BLE 2M 2480MHz Ant1 Ref



Band Edge NVNT BLE 2M 2480MHz Ant1 Emission



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A.5 Conducted Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant1	-54.66	-20	Pass
NVNT	BLE 1M	2440	Ant1	-54.62	-20	Pass
NVNT	BLE 1M	2480	Ant1	-44.79	-20	Pass
NVNT	BLE 2M	2402	Ant1	-41.93	-20	Pass
NVNT	BLE 2M	2440	Ant1	-53.45	-20	Pass
NVNT	BLE 2M	2480	Ant1	-53.89	-20	Pass

