



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: SEI700COAS

Test Model: SN8BKFF

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





B.1 -6dB Bandwidth

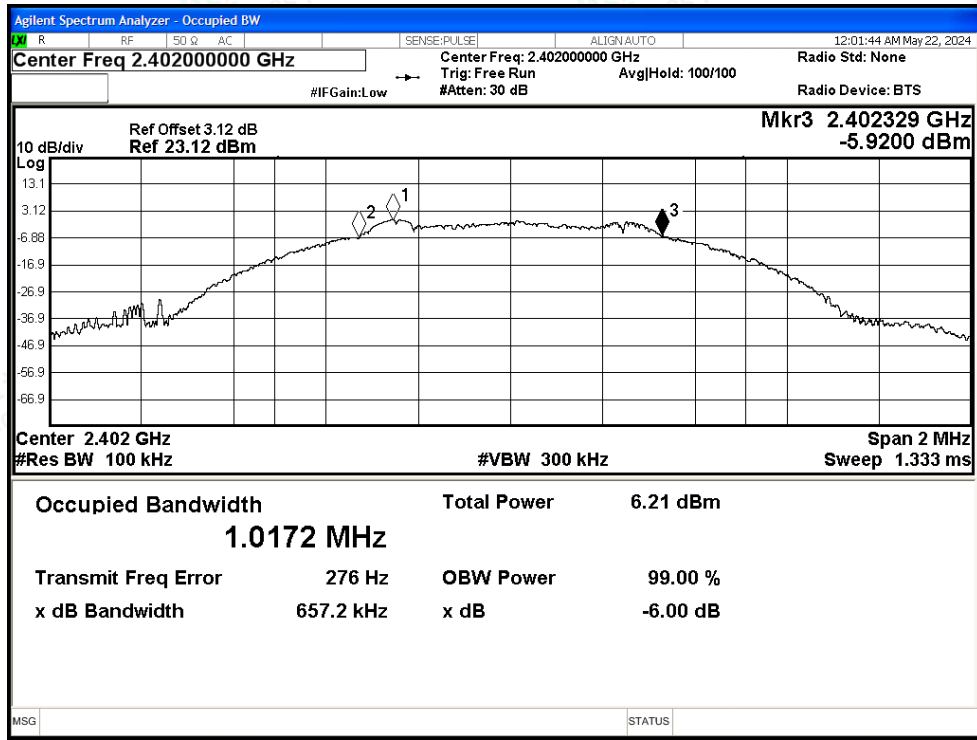
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	BLE 1M	2402	Ant2	0.657	≥ 0.5	Pass
NVNT	BLE 1M	2440	Ant2	0.651	≥ 0.5	Pass
NVNT	BLE 1M	2480	Ant2	0.643	≥ 0.5	Pass
NVNT	BLE 2M	2402	Ant2	1.144	≥ 0.5	Pass
NVNT	BLE 2M	2440	Ant2	1.139	≥ 0.5	Pass
NVNT	BLE 2M	2480	Ant2	1.173	≥ 0.5	Pass



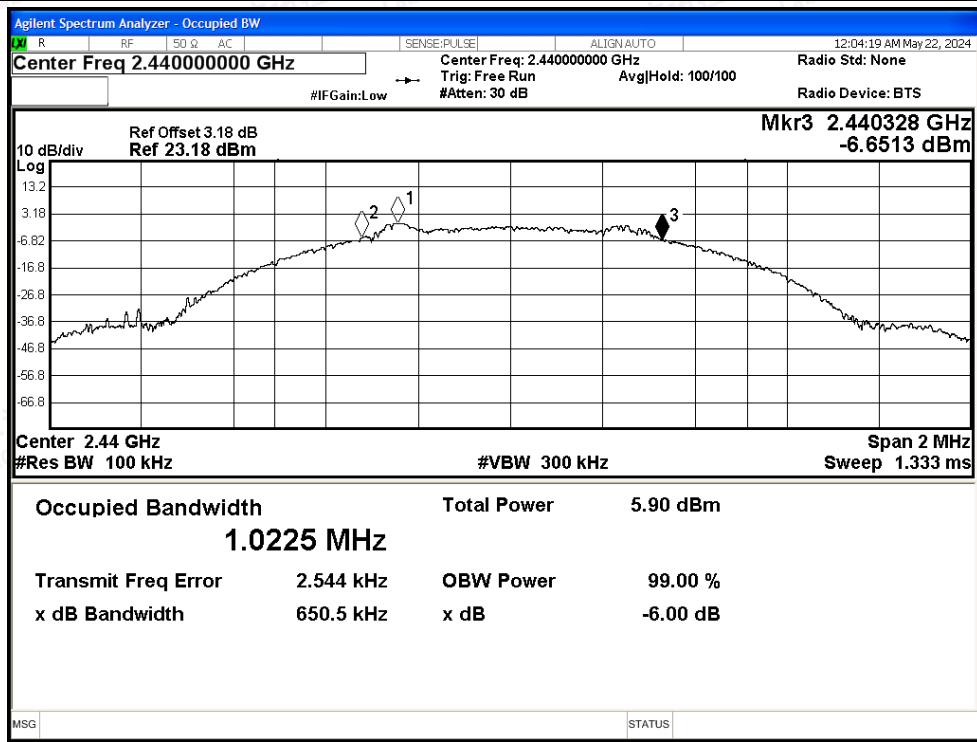


Test Graphs

-6dB Bandwidth NVNT BLE 1M 2402MHz Ant2



-6dB Bandwidth NVNT BLE 1M 2440MHz Ant2



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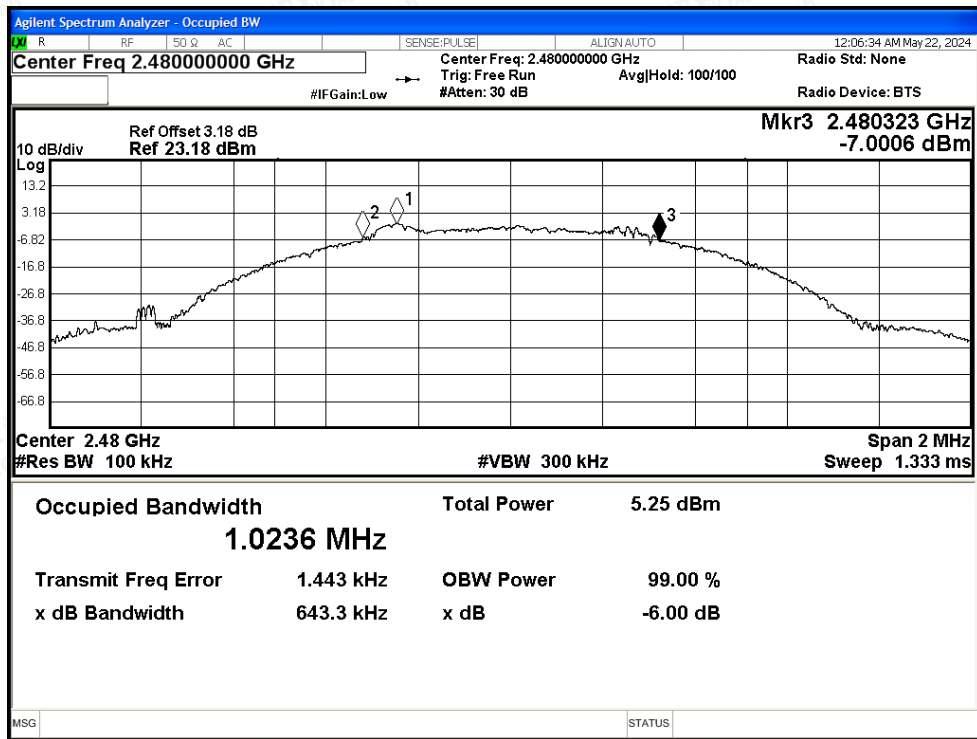
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

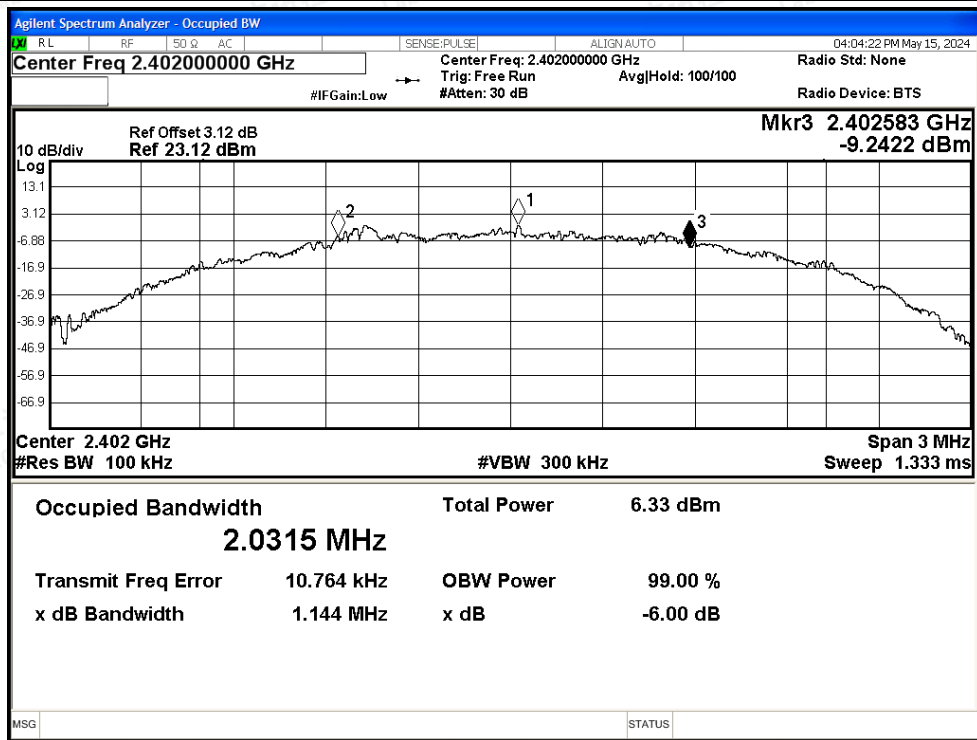


-6dB Bandwidth NVNT BLE 1M 2480MHz Ant2



Test Graphs

-6dB Bandwidth NVNT BLE 2M 2402MHz Ant2



-6dB Bandwidth NVNT BLE 2M 2440MHz Ant2

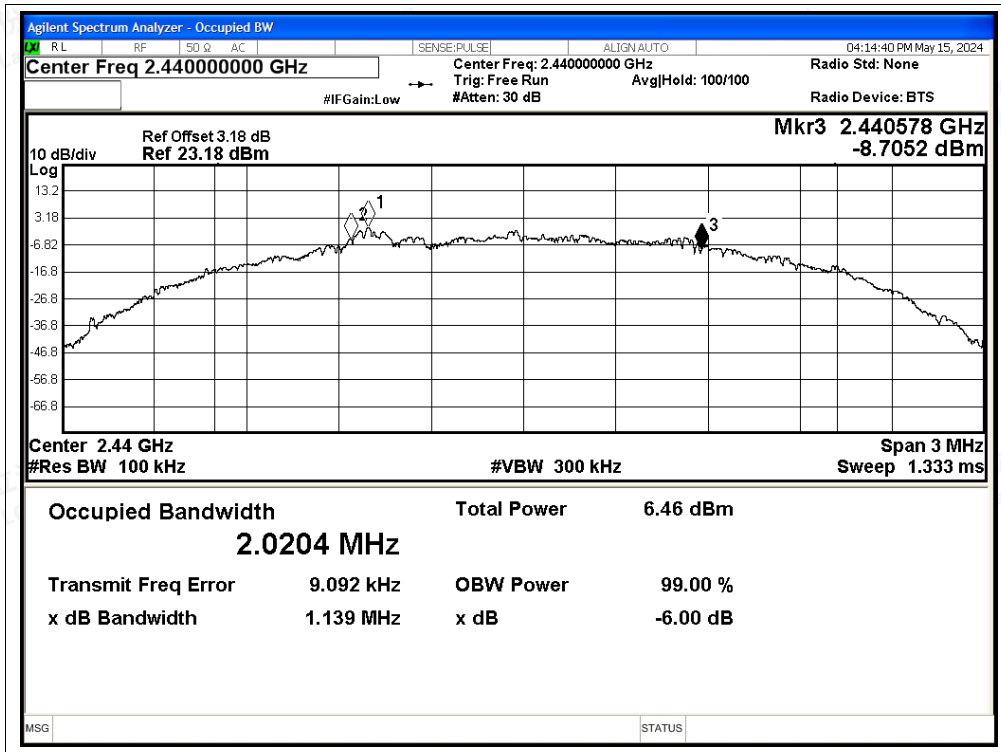


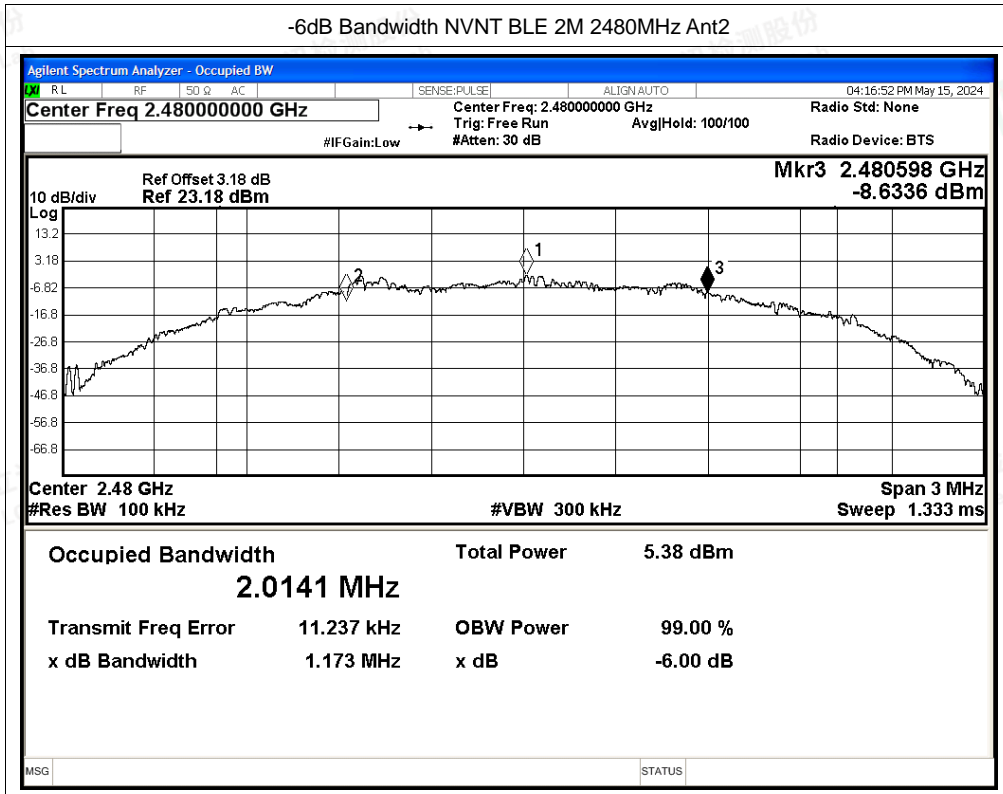
Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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Scan code to check authenticity







B.2 Maximum Peak Conducted Output Power

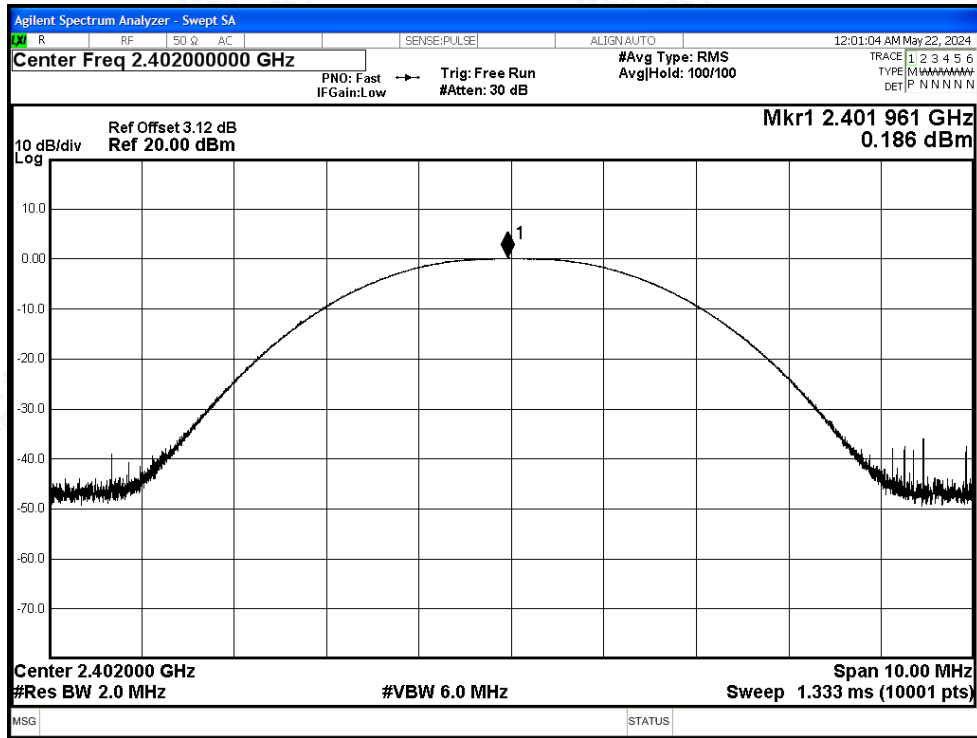
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	BLE 1M	2402	Ant2	0.19	30	Pass
NVNT	BLE 1M	2440	Ant2	0.34	30	Pass
NVNT	BLE 1M	2480	Ant2	-0.57	30	Pass
NVNT	BLE 2M	2402	Ant2	0.19	30	Pass
NVNT	BLE 2M	2440	Ant2	0.19	30	Pass
NVNT	BLE 2M	2480	Ant2	-0.95	30	Pass



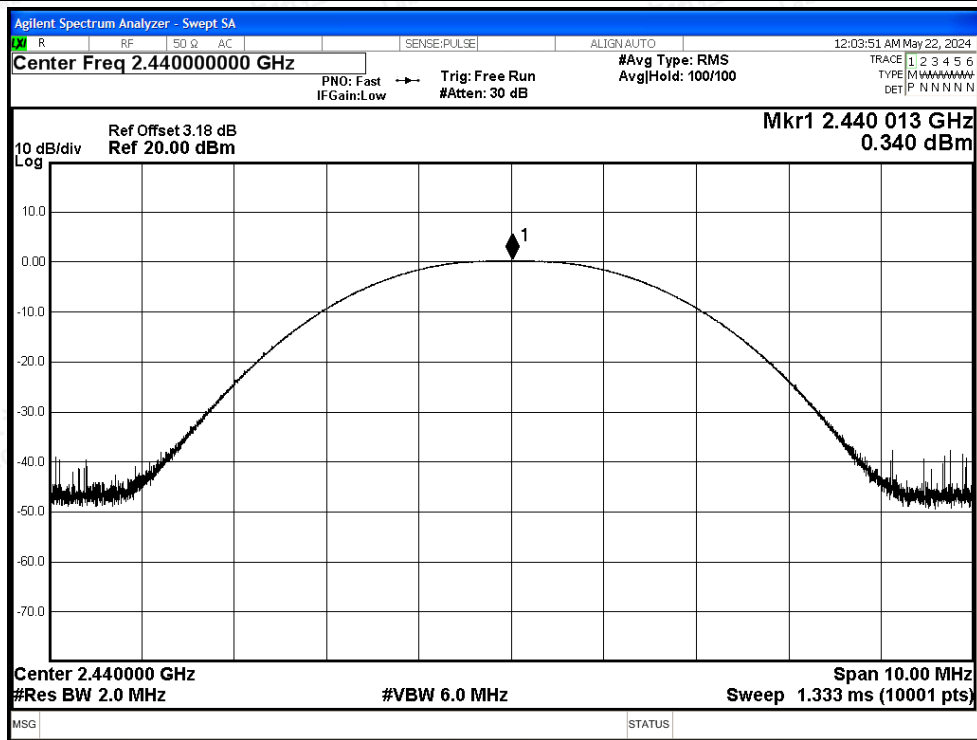


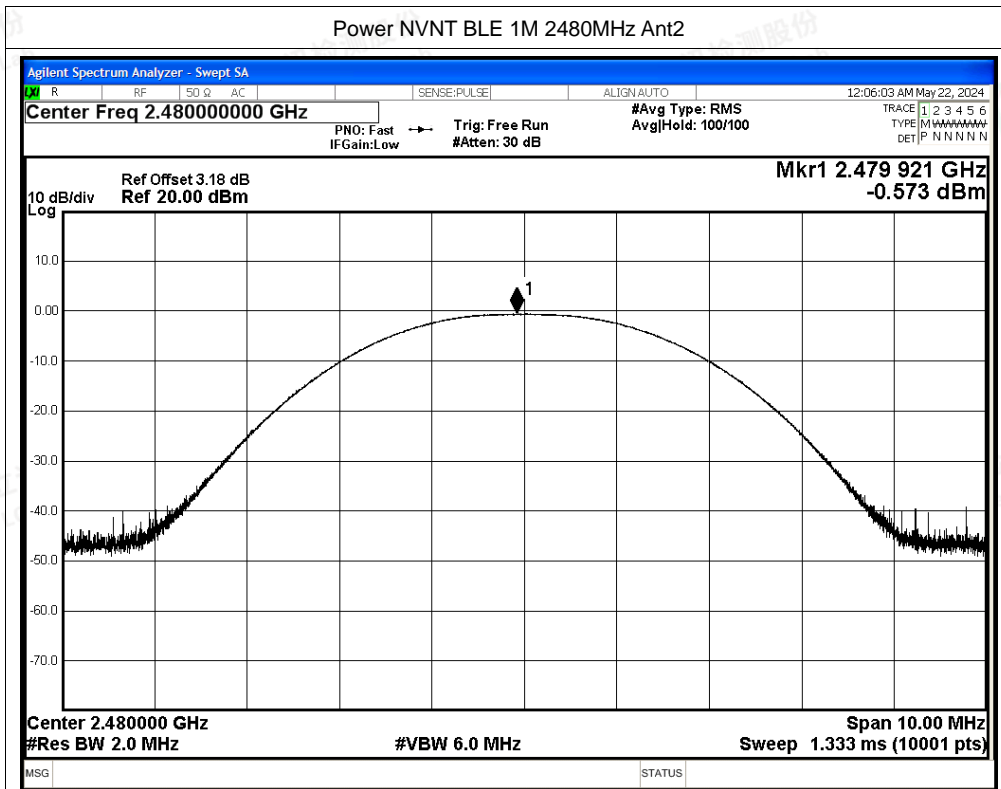
Test Graphs

Power NVNT BLE 1M 2402MHz Ant2

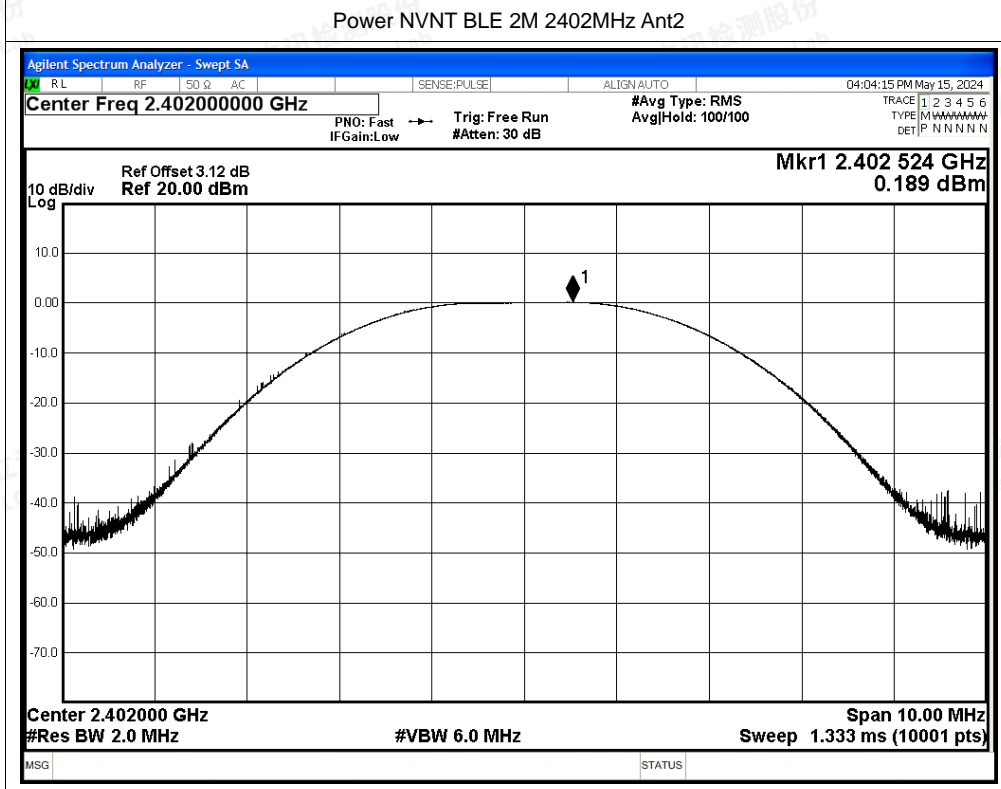


Power NVNT BLE 1M 2440MHz Ant2



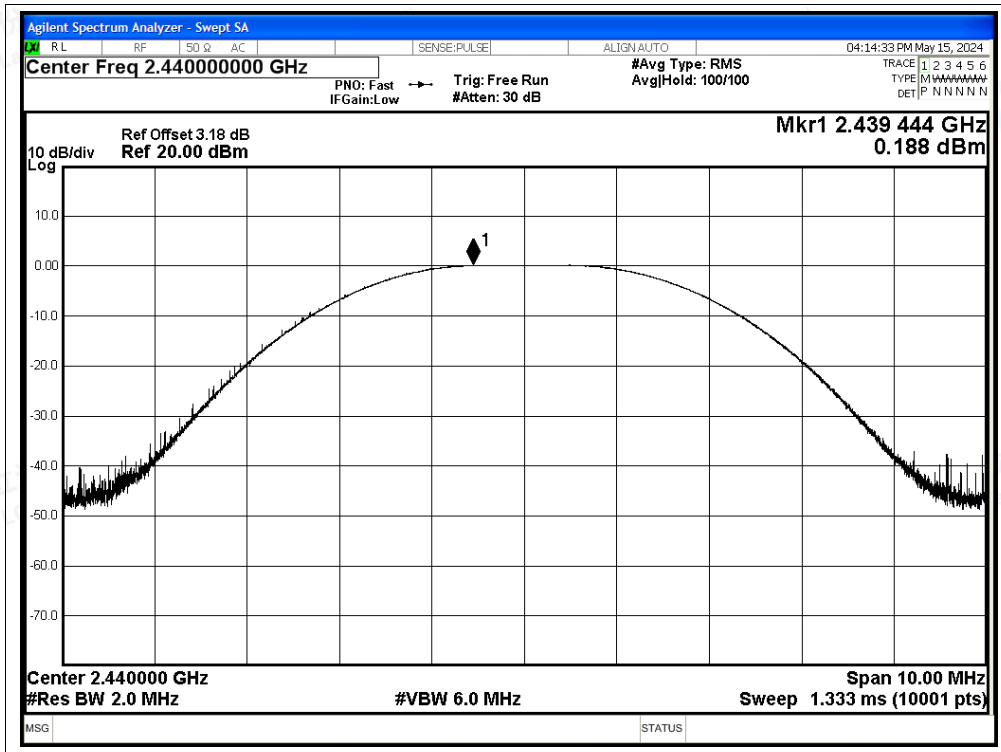


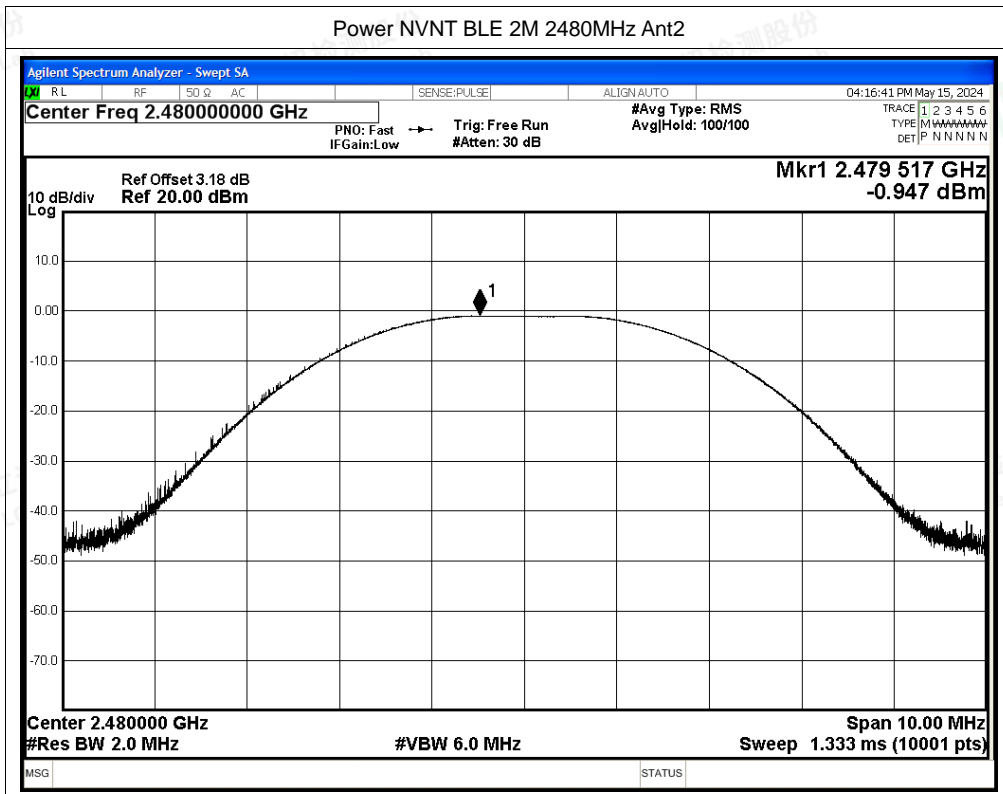
Test Graphs



Power NVNT BLE 2M 2440MHz Ant2









B.3 Maximum Power Spectral Density Level

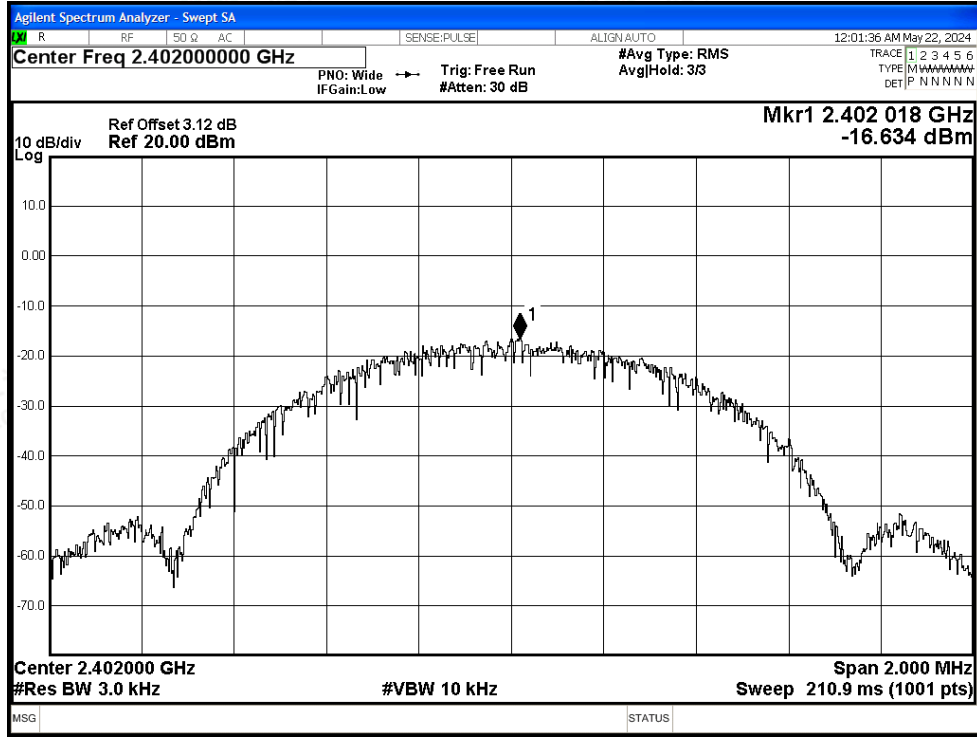
Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	BLE 1M	2402	Ant2	-16.63	8	Pass
NVNT	BLE 1M	2440	Ant2	-16.47	8	Pass
NVNT	BLE 1M	2480	Ant2	-17.24	8	Pass
NVNT	BLE 2M	2402	Ant2	-19.44	8	Pass
NVNT	BLE 2M	2440	Ant2	-19.46	8	Pass
NVNT	BLE 2M	2480	Ant2	-21.11	8	Pass



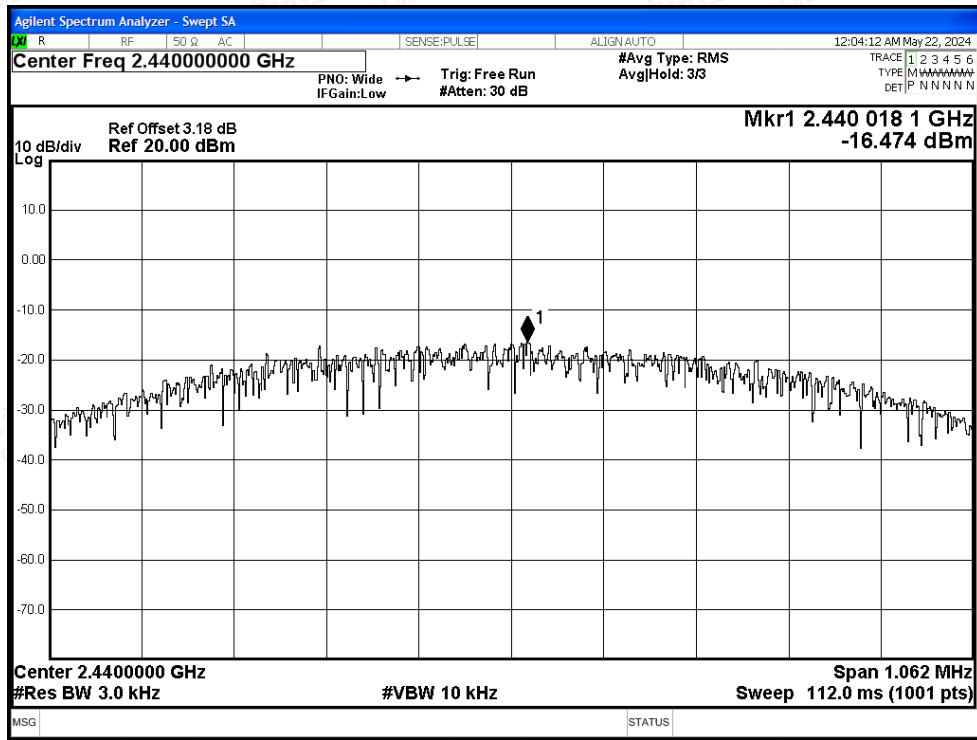


Test Graphs

PSD NVNT BLE 1M 2402MHz Ant2



PSD NVNT BLE 1M 2440MHz Ant2



Shenzhen LCS Compliance Testing Laboratory Ltd.

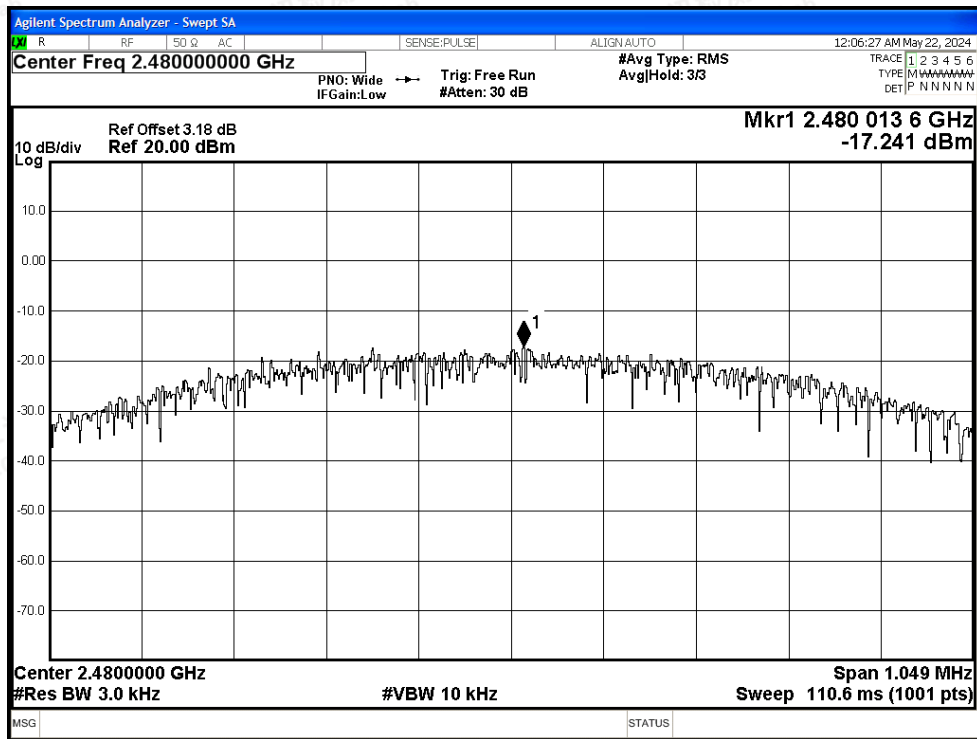
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

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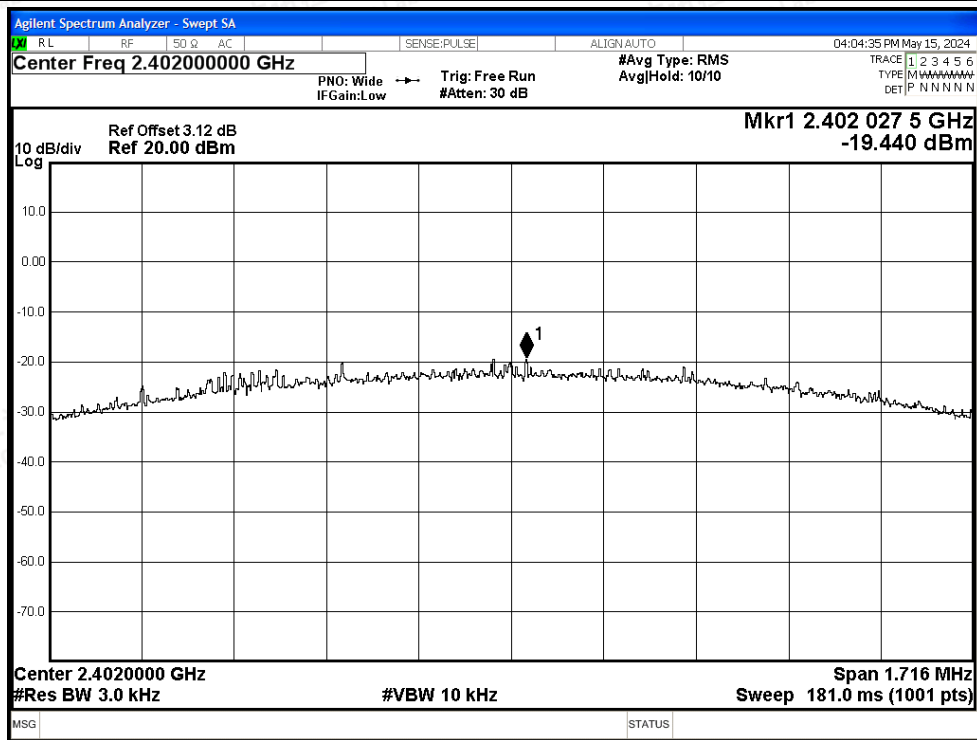


PSD NVNT BLE 1M 2480MHz Ant2



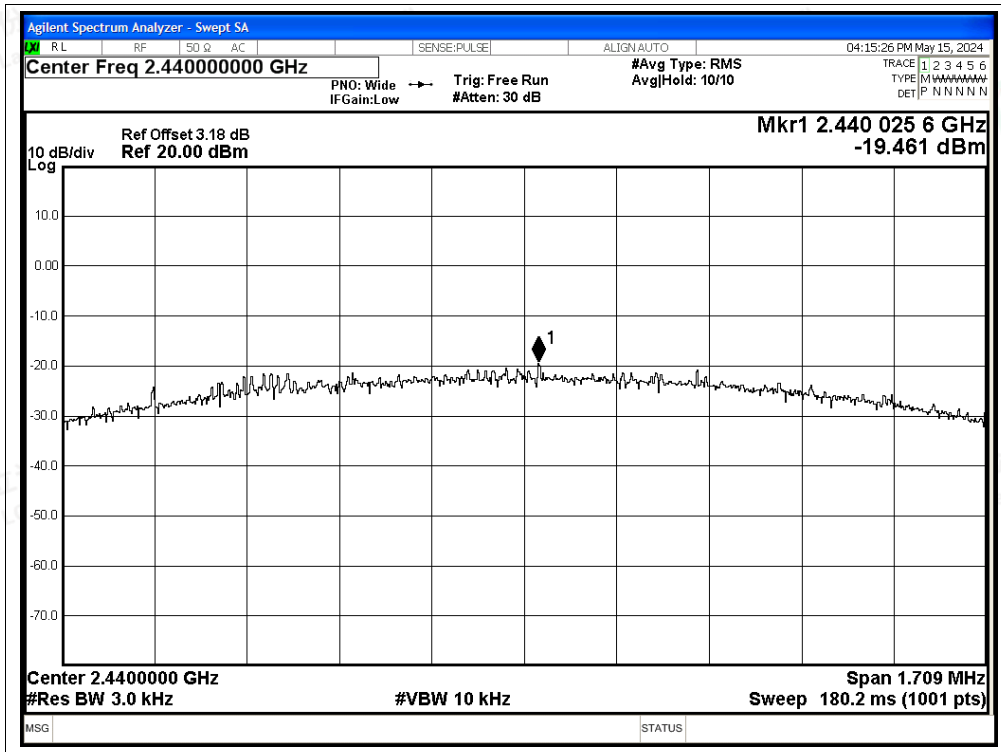
Test Graphs

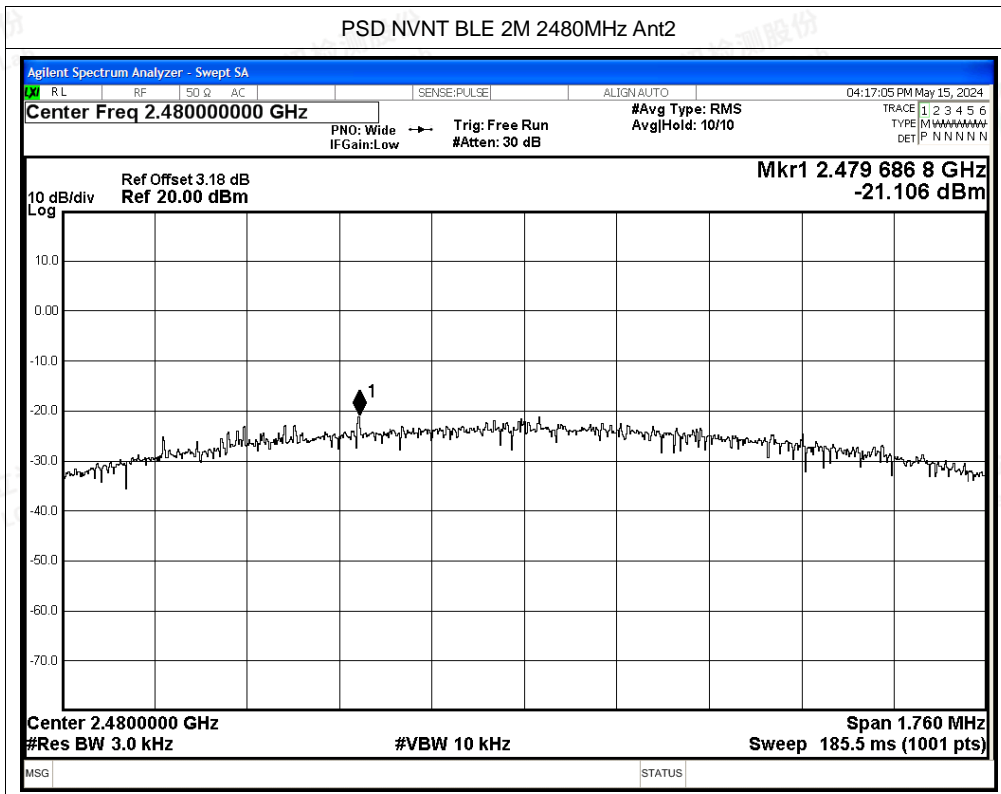
PSD NVNT BLE 2M 2402MHz Ant2



PSD NVNT BLE 2M 2440MHz Ant2









B.4 Band Edge

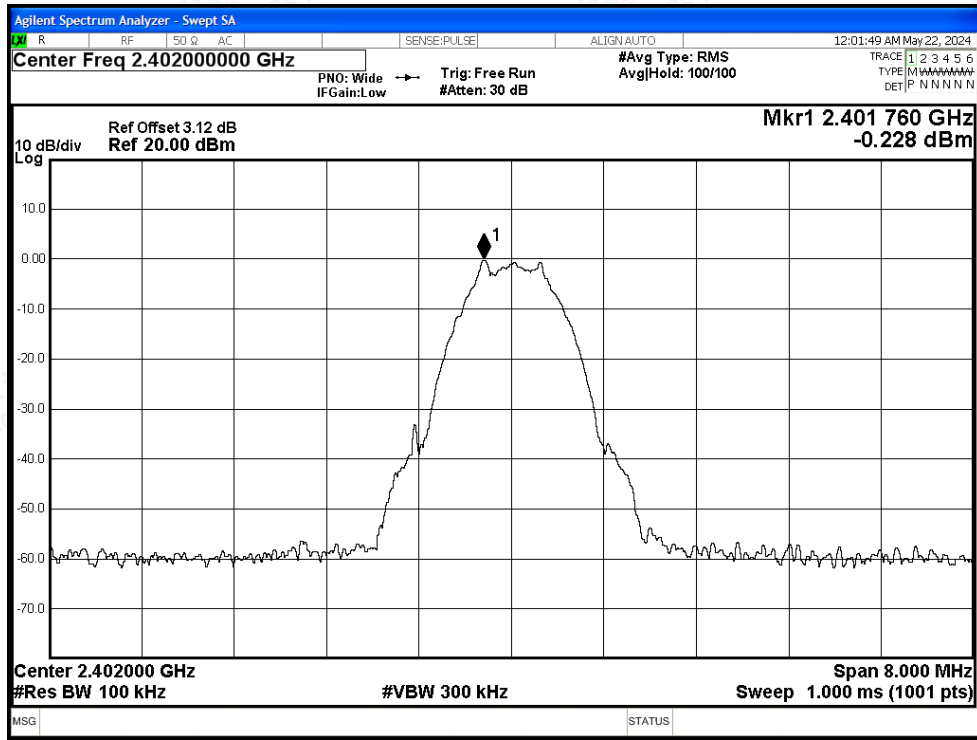
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant2	-56.33	-20	Pass
NVNT	BLE 1M	2480	Ant2	-53.89	-20	Pass
NVNT	BLE 2M	2402	Ant2	-45.53	-20	Pass
NVNT	BLE 2M	2480	Ant2	-54.41	-20	Pass



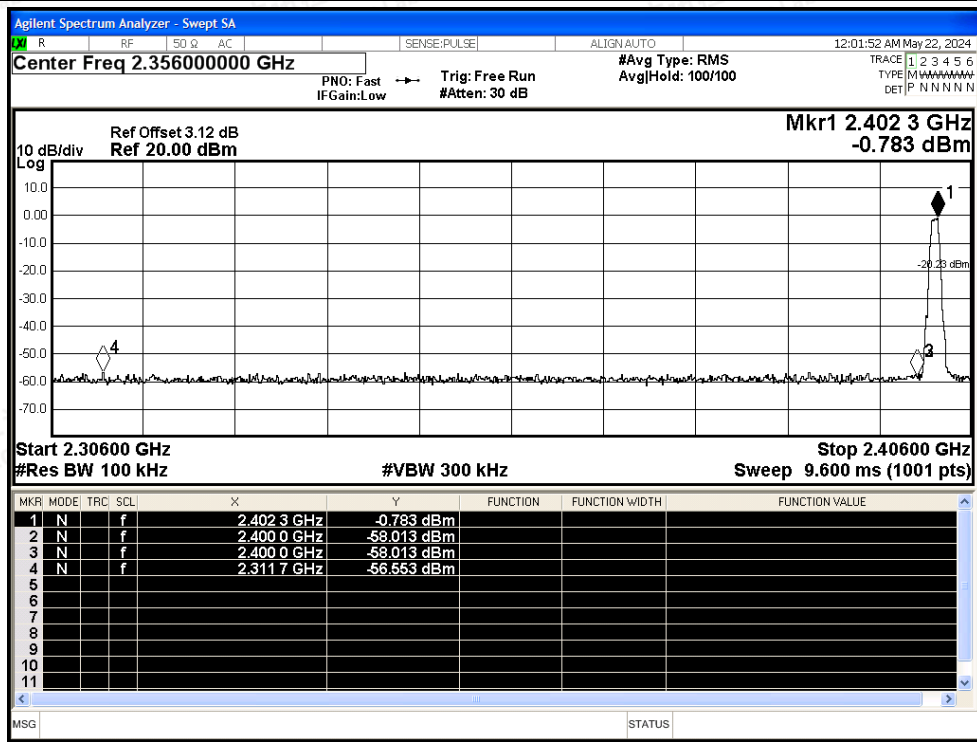


Test Graphs

Band Edge NVNT BLE 1M 2402MHz Ant2 Ref



Band Edge NVNT BLE 1M 2402MHz Ant2 Emission



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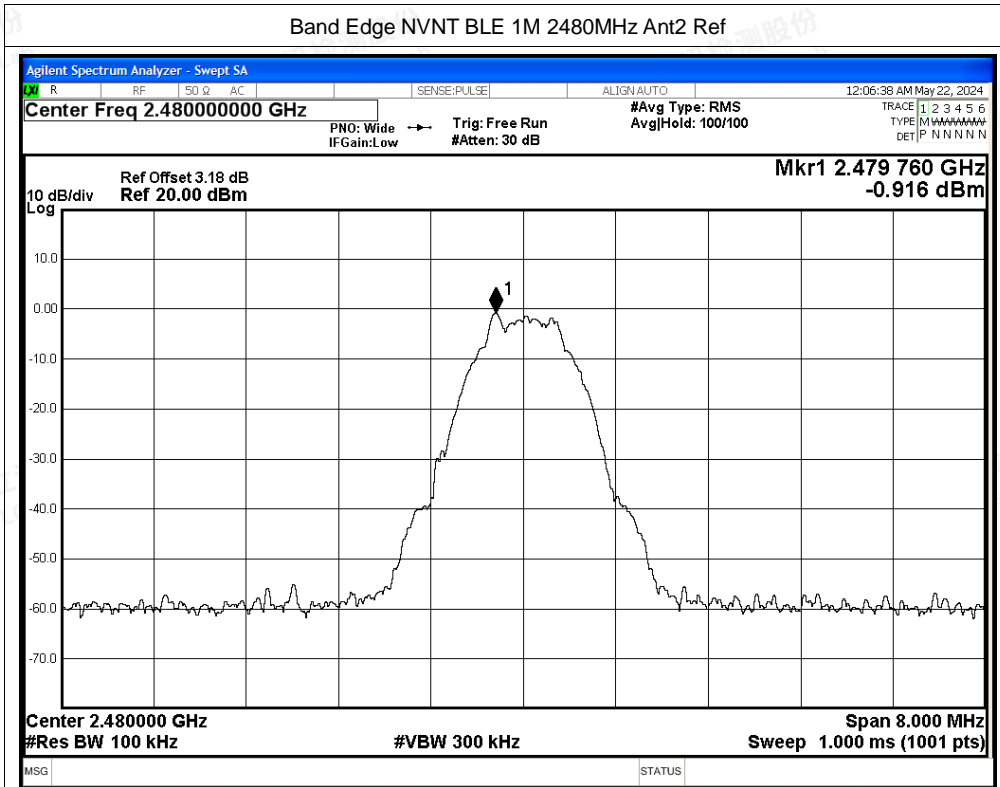
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

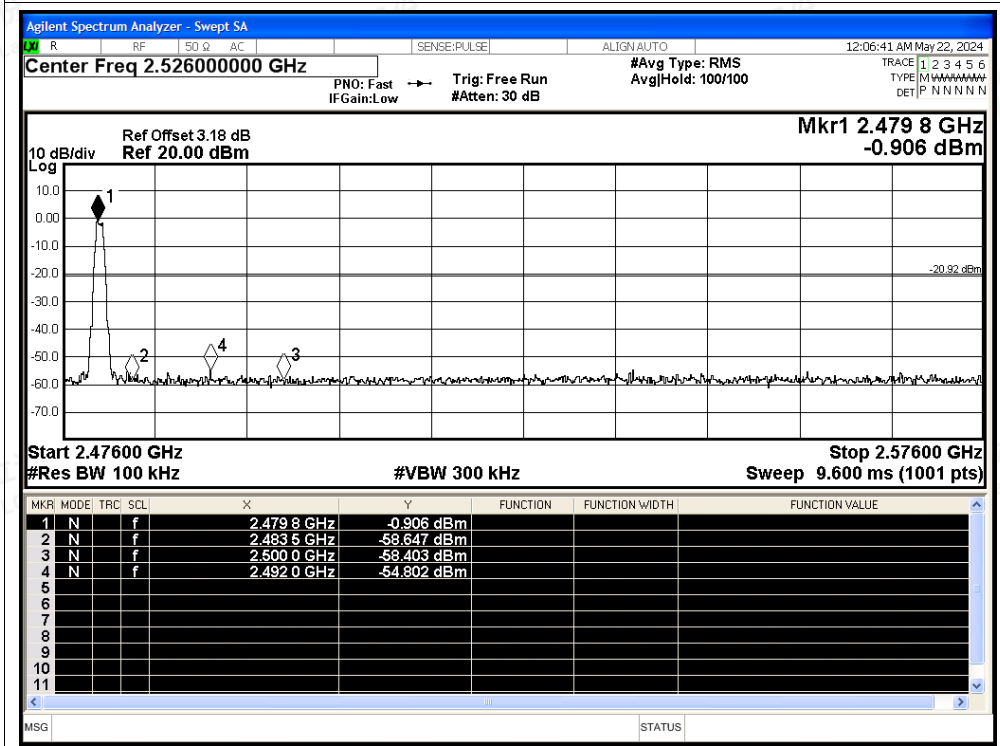
Scan code to check authenticity



Band Edge NVNT BLE 1M 2480MHz Ant2 Ref



Band Edge NVNT BLE 1M 2480MHz Ant2 Emission



Test Graphs

Band Edge NVNT BLE 2M 2402MHz Ant2 Ref

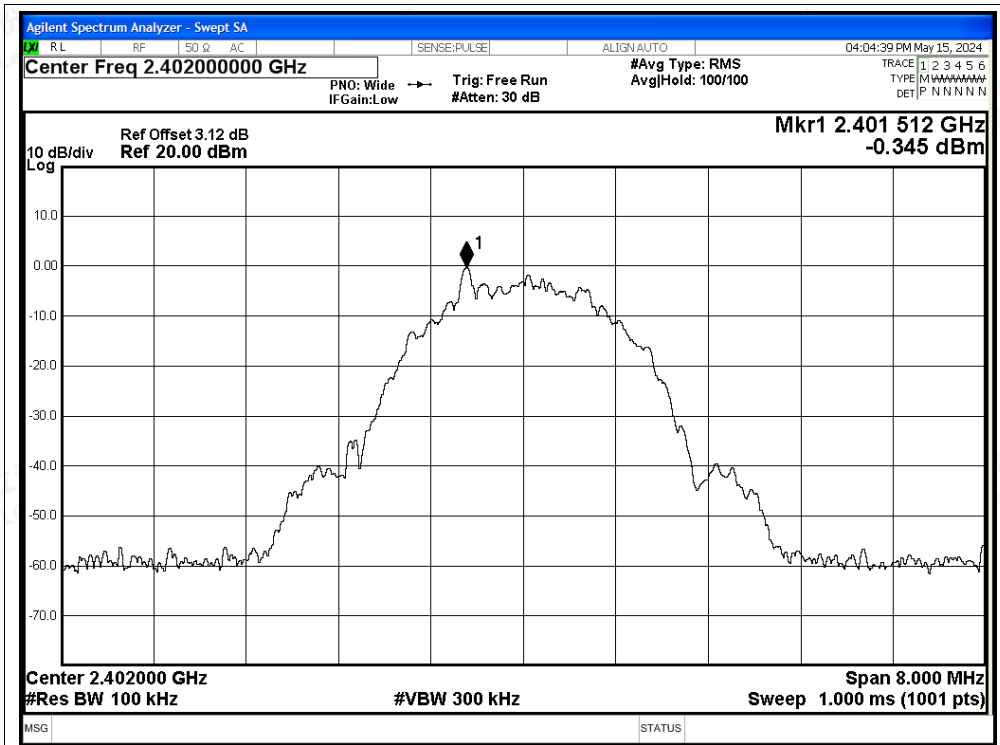


Shenzhen LCS Compliance Testing Laboratory Ltd.

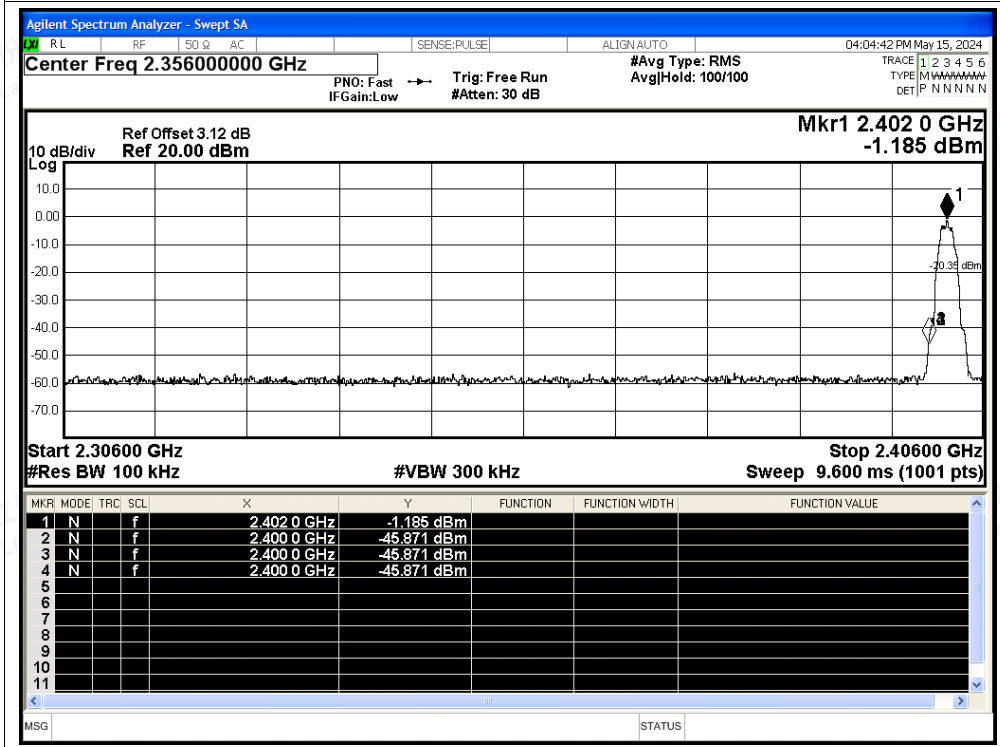
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

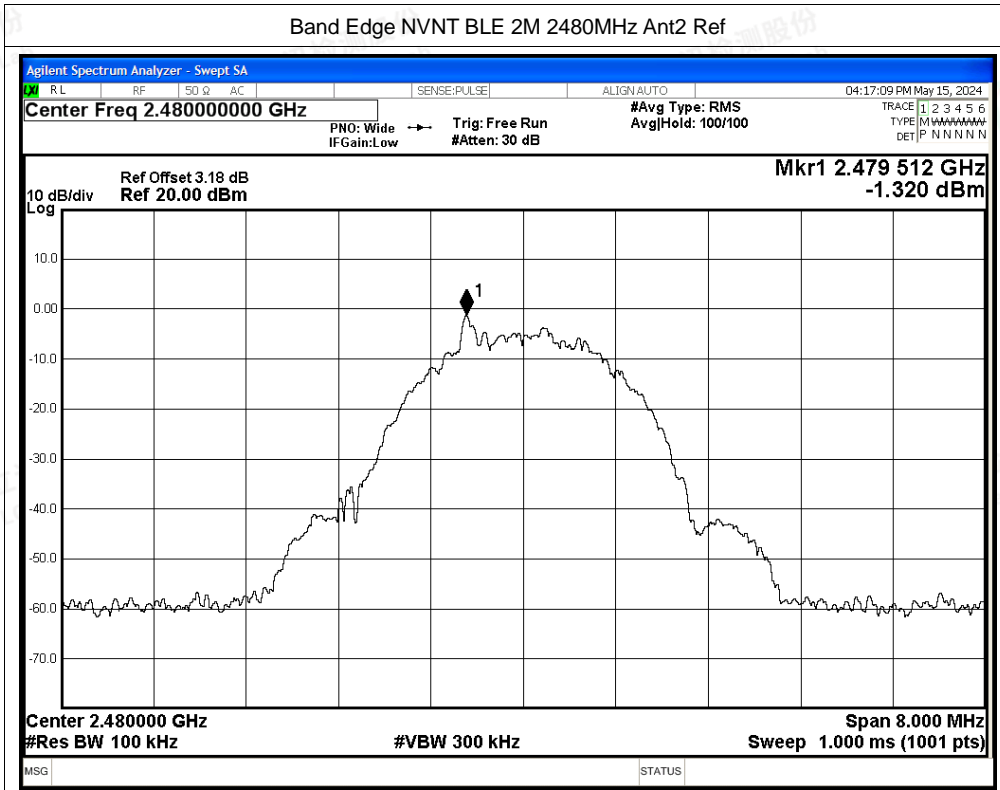


Band Edge NVNT BLE 2M 2402MHz Ant2 Emission

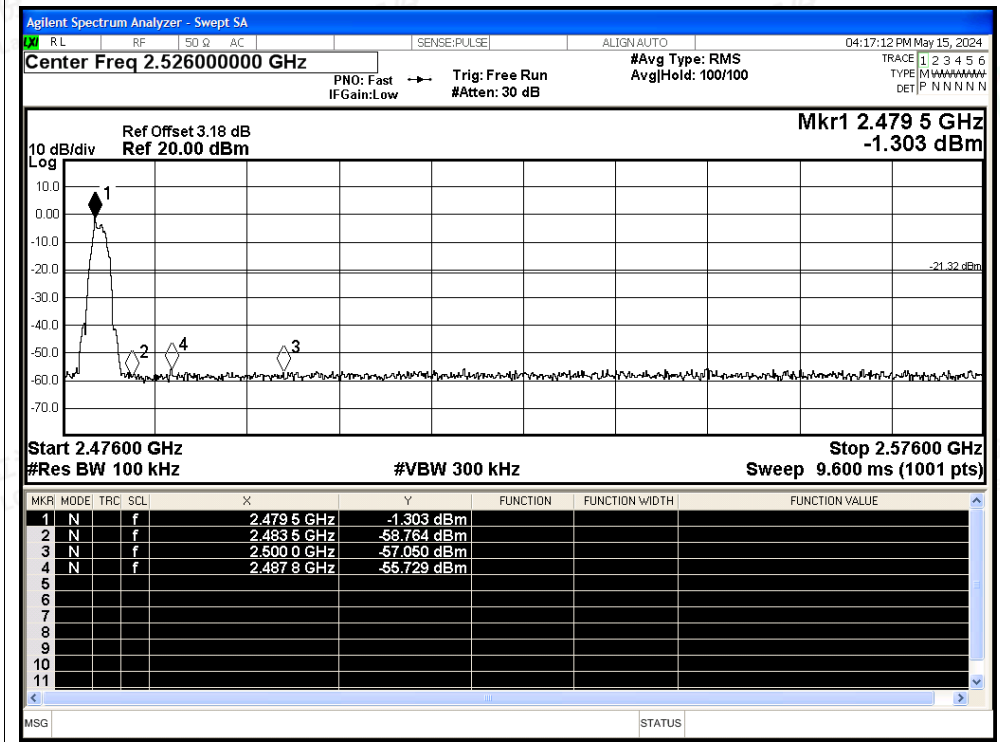




Band Edge NVNT BLE 2M 2480MHz Ant2 Ref



Band Edge NVNT BLE 2M 2480MHz Ant2 Emission





B.5 Conducted RF Spurious Emission

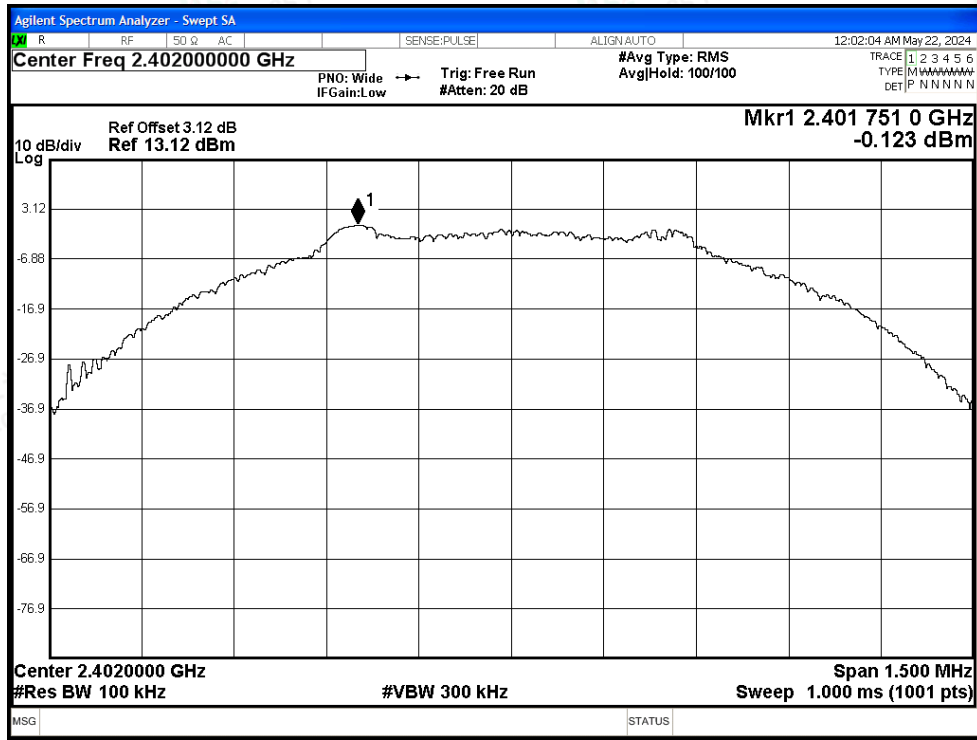
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	BLE 1M	2402	Ant2	-54.99	-20	Pass
NVNT	BLE 1M	2440	Ant2	-54.85	-20	Pass
NVNT	BLE 1M	2480	Ant2	-52.62	-20	Pass
NVNT	BLE 2M	2402	Ant2	-54.48	-20	Pass
NVNT	BLE 2M	2440	Ant2	-54.52	-20	Pass
NVNT	BLE 2M	2480	Ant2	-52.49	-20	Pass



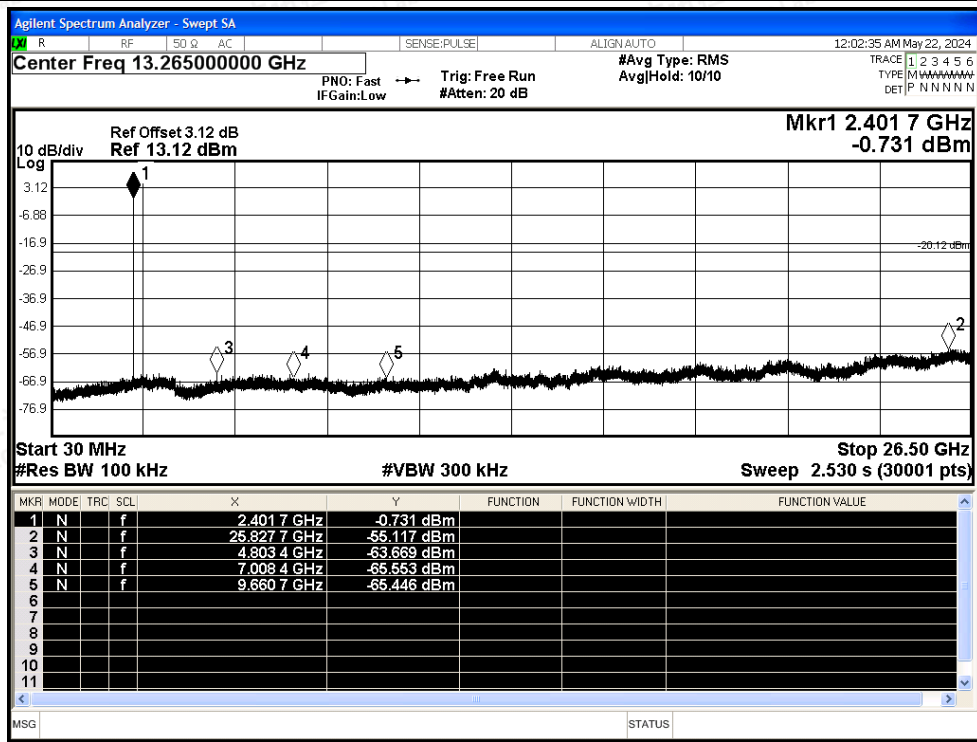


Test Graphs

Tx. Spurious NVNT BLE 1M 2402MHz Ant2 Ref

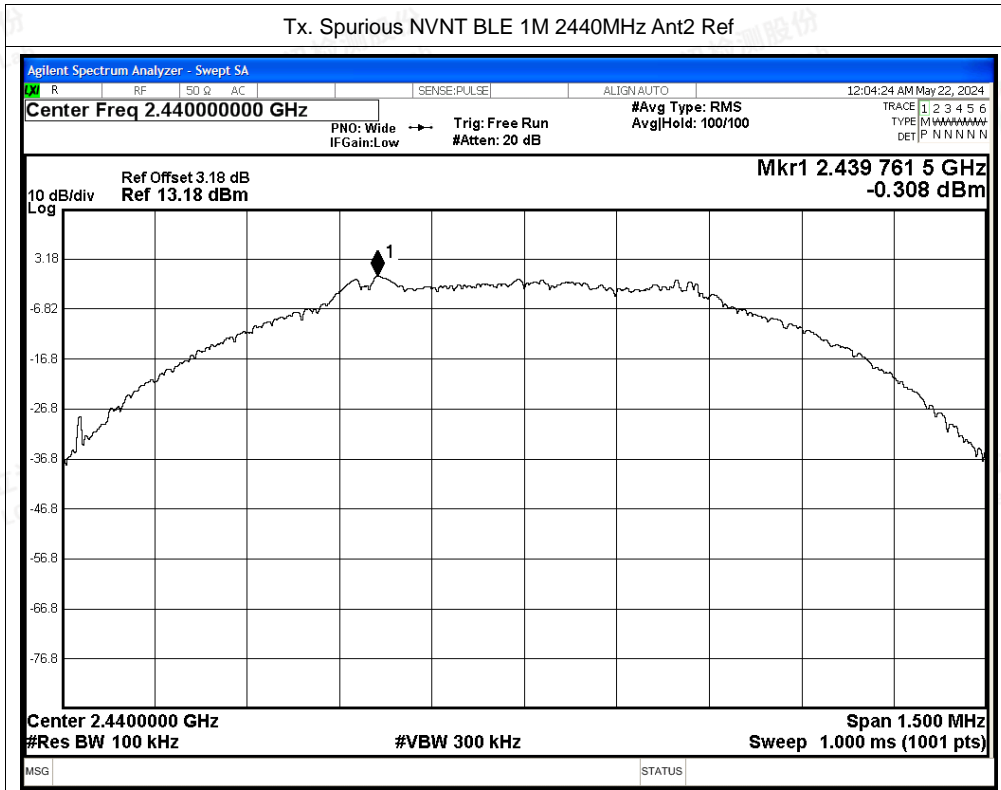


Tx. Spurious NVNT BLE 1M 2402MHz Ant2 Emission

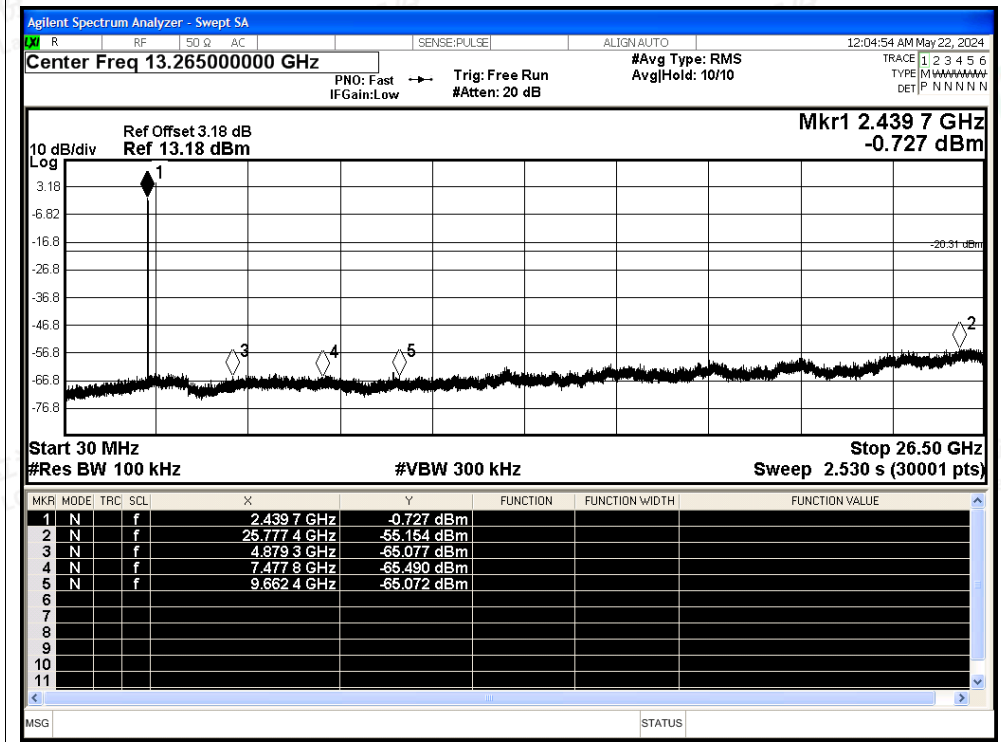




Tx. Spurious NVNT BLE 1M 2440MHz Ant2 Ref

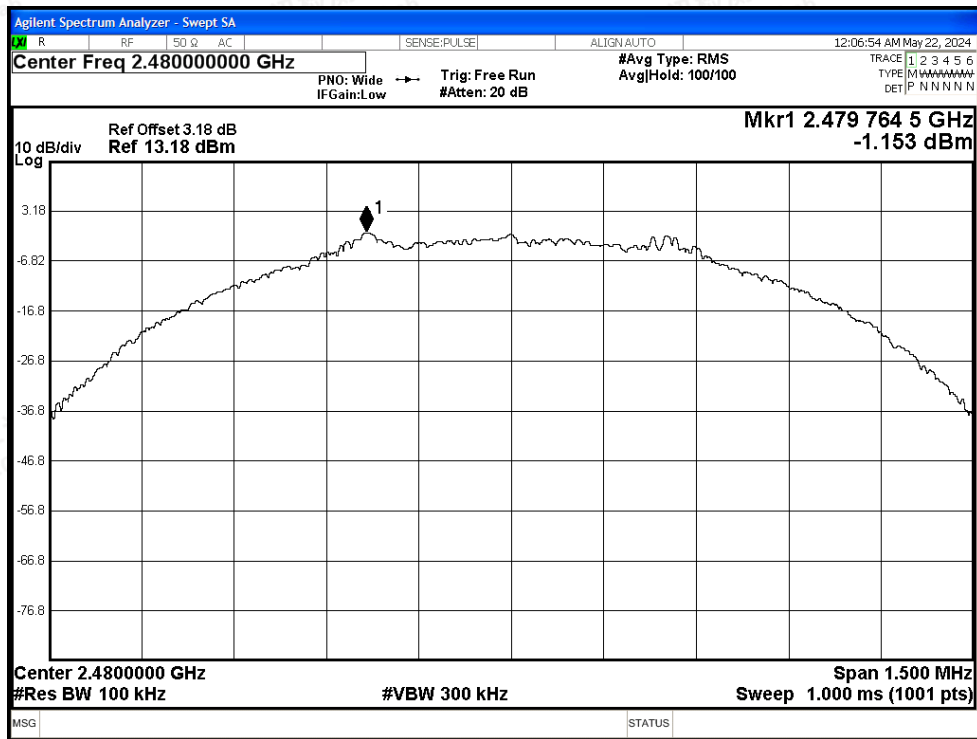


Tx. Spurious NVNT BLE 1M 2440MHz Ant2 Emission

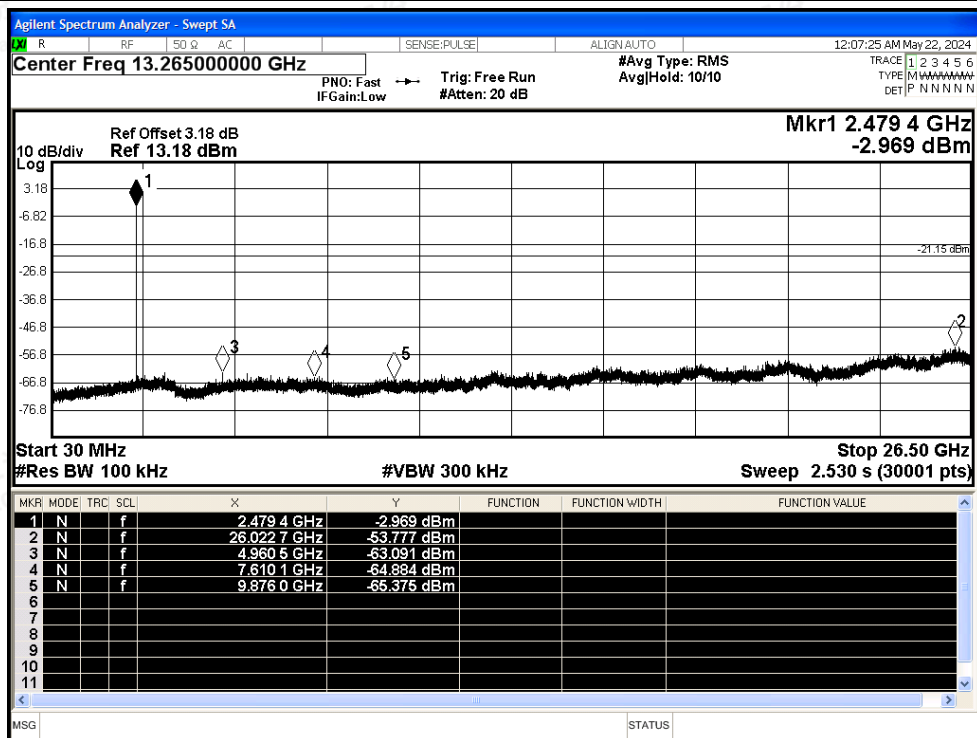




Tx. Spurious NVNT BLE 1M 2480MHz Ant2 Ref



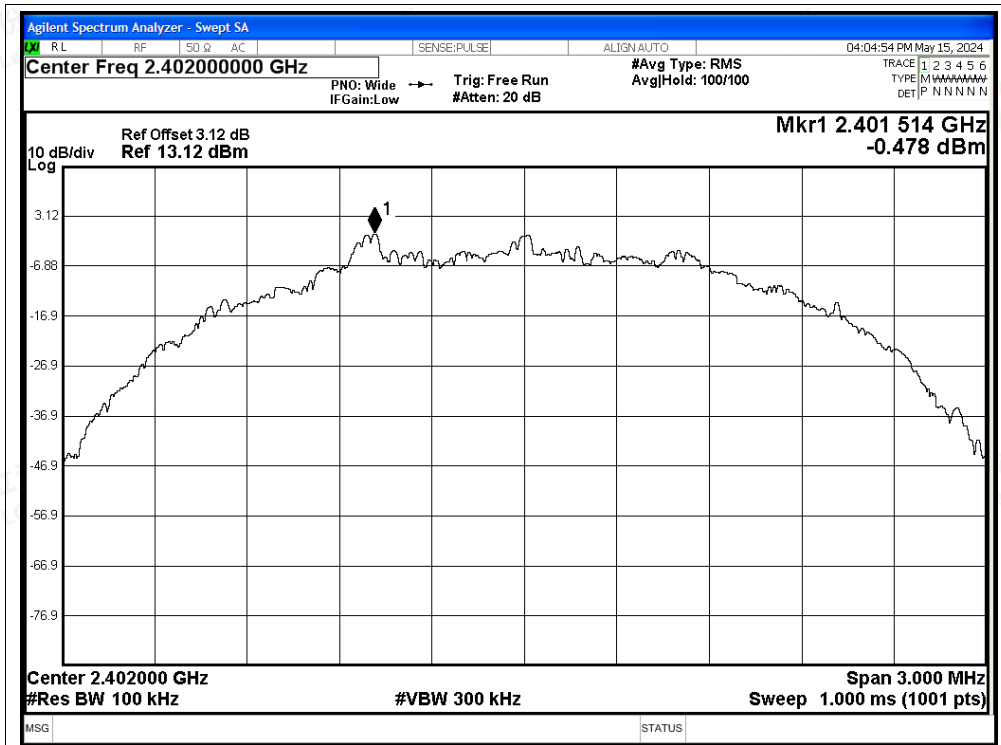
Tx. Spurious NVNT BLE 1M 2480MHz Ant2 Emission



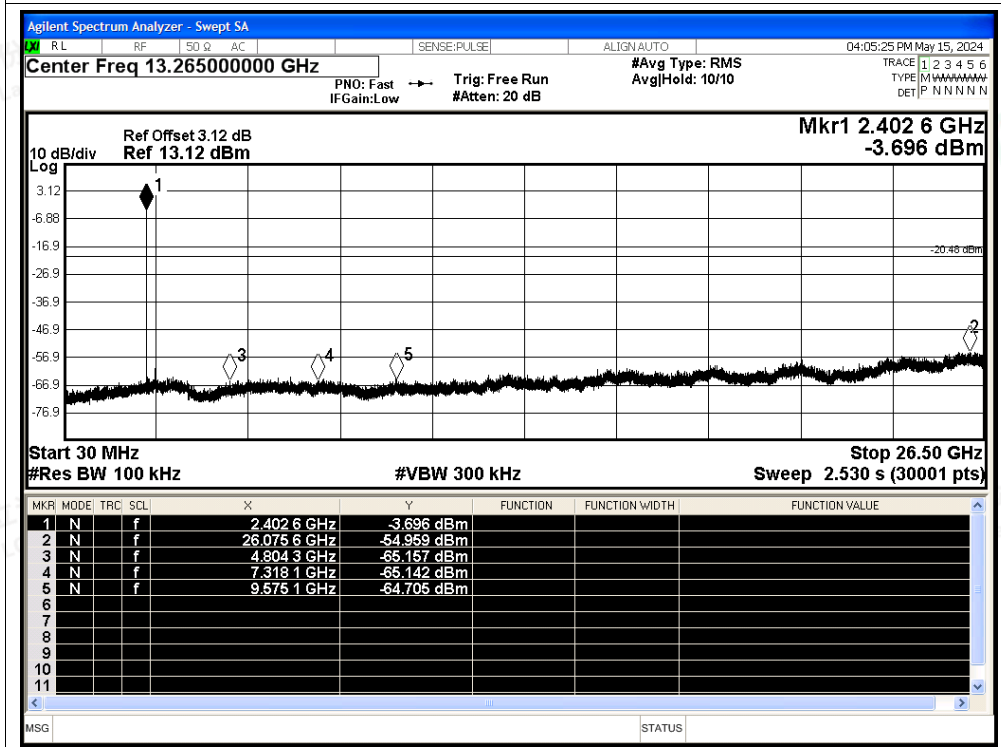
Test Graphs

Tx. Spurious NVNT BLE 2M 2402MHz Ant2 Ref



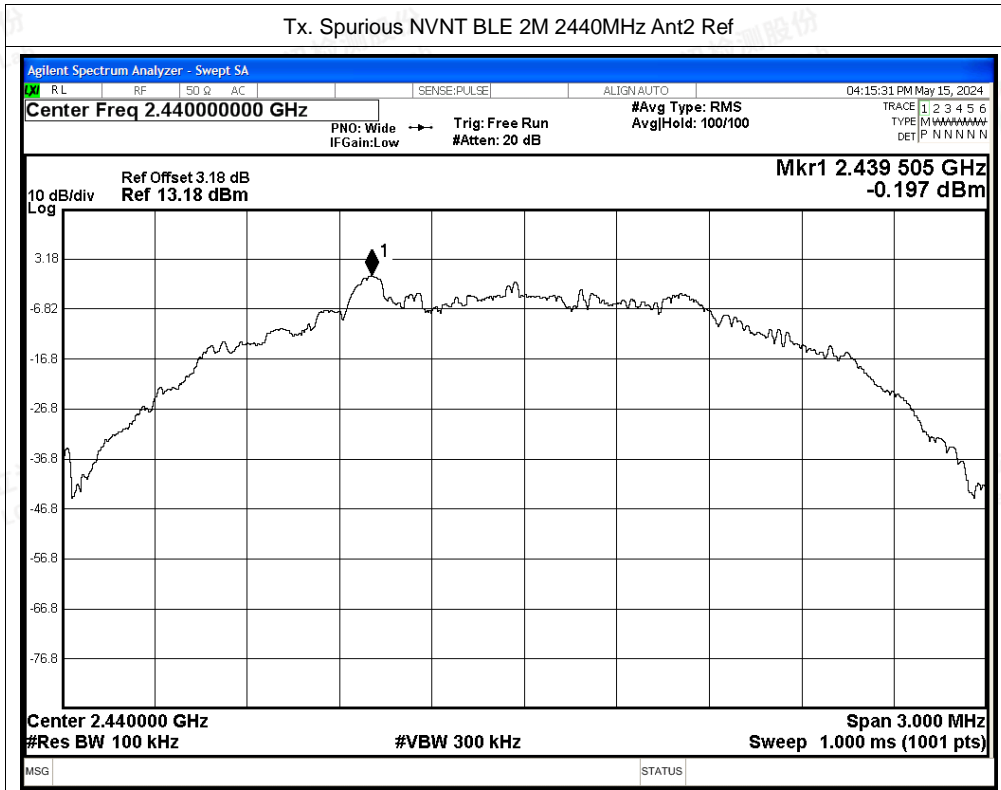


Tx. Spurious NVNT BLE 2M 2402MHz Ant2 Emission

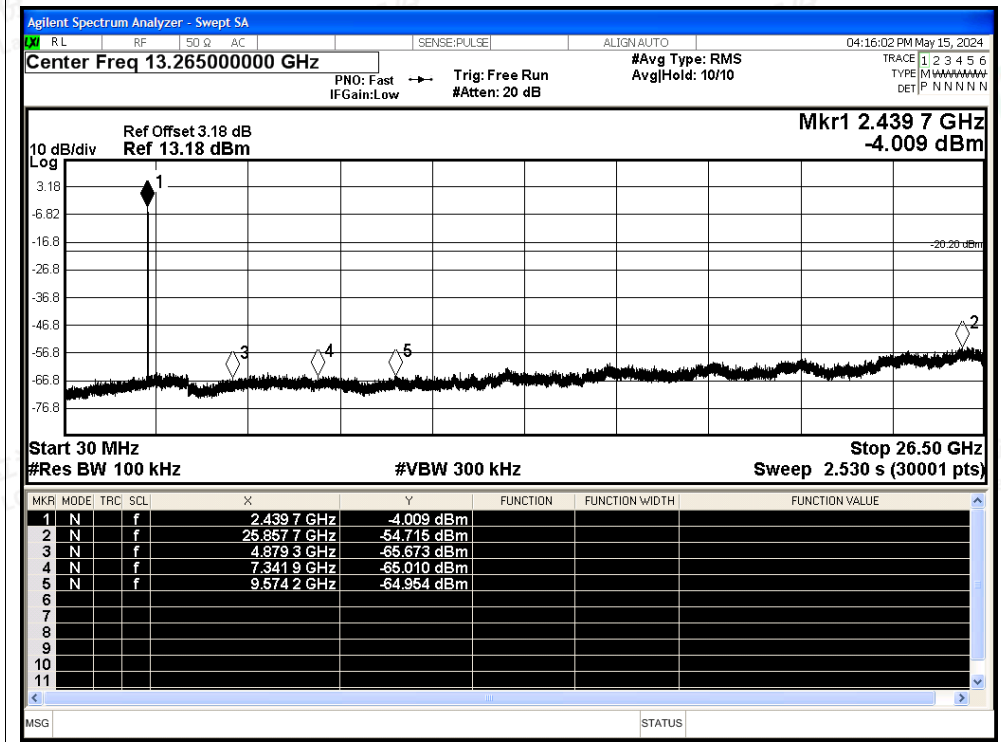




Tx. Spurious NVNT BLE 2M 2440MHz Ant2 Ref

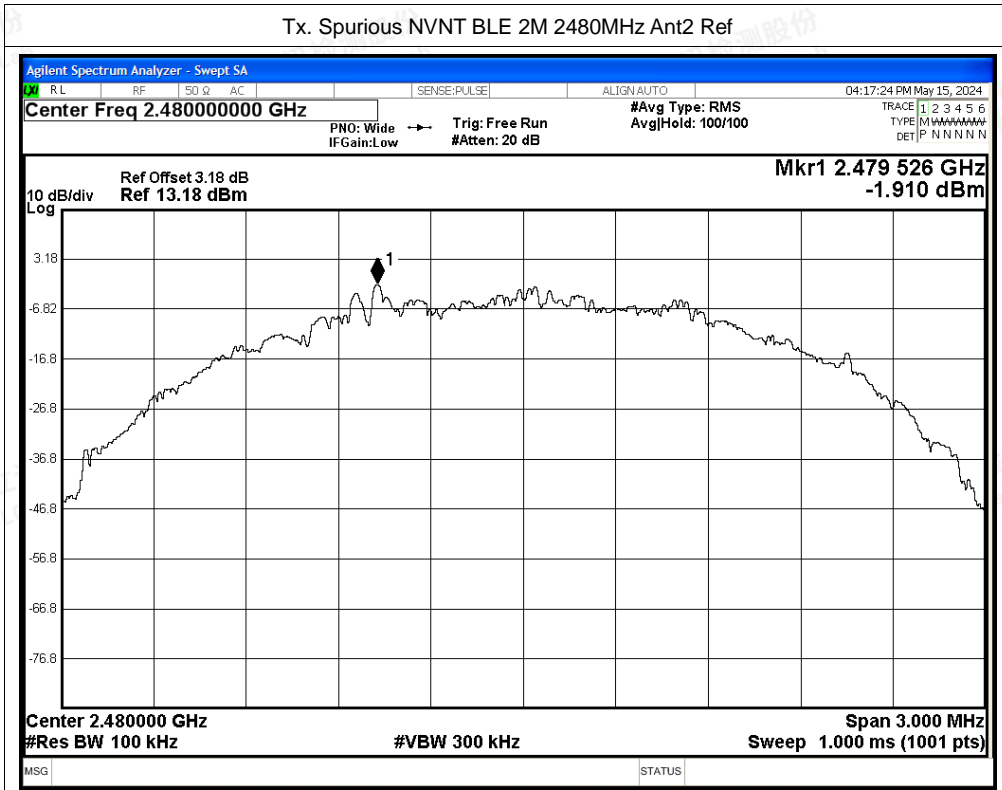


Tx. Spurious NVNT BLE 2M 2440MHz Ant2 Emission

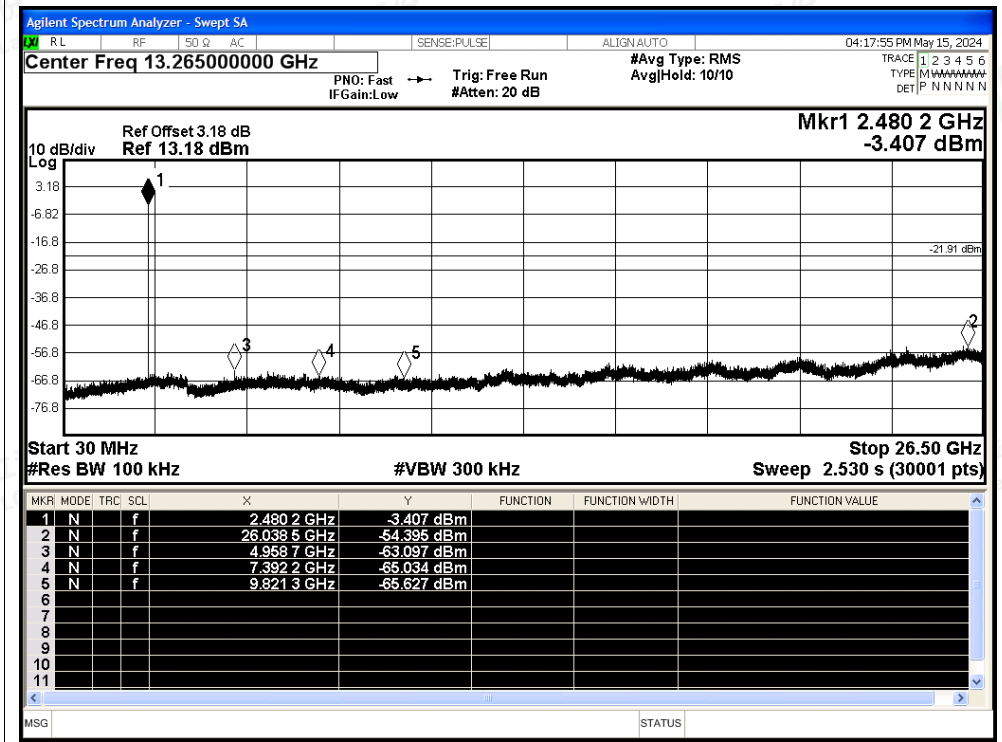




Tx. Spurious NVNT BLE 2M 2480MHz Ant2 Ref



Tx. Spurious NVNT BLE 2M 2480MHz Ant2 Emission





B.6 Duty Cycle

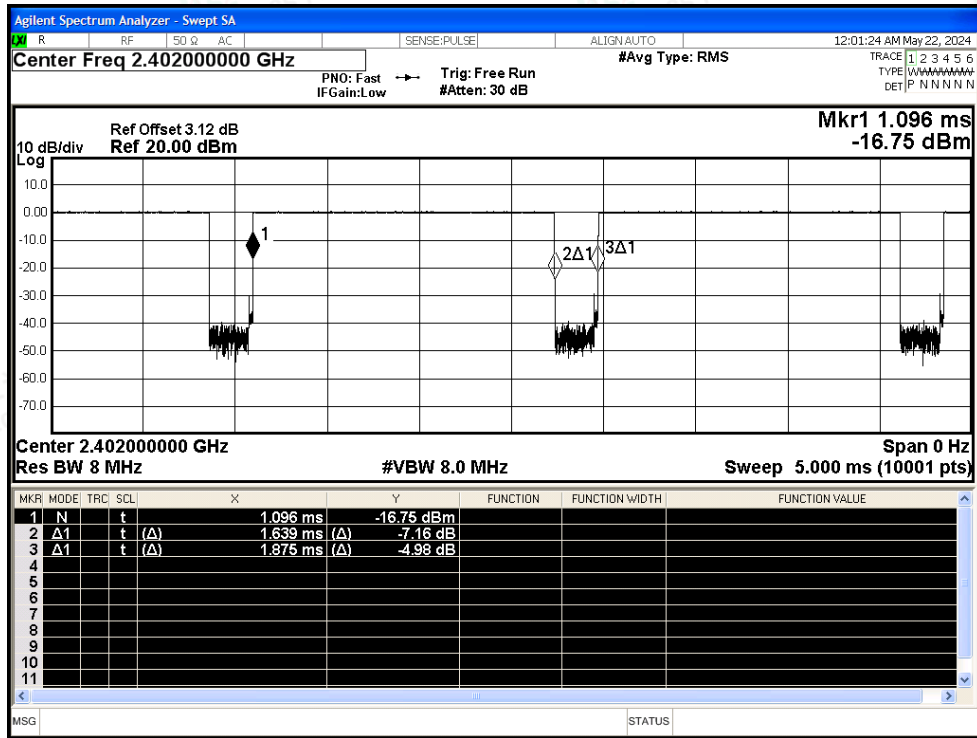
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	BLE 1M	2402	Ant2	87.41	0.58	0.61
NVNT	BLE 1M	2440	Ant2	87.39	0.59	0.61
NVNT	BLE 1M	2480	Ant2	87.39	0.59	0.61
NVNT	BLE 2M	2402	Ant2	65.92	1.81	1.21
NVNT	BLE 2M	2440	Ant2	65.92	1.81	1.21
NVNT	BLE 2M	2480	Ant2	65.92	1.81	1.21



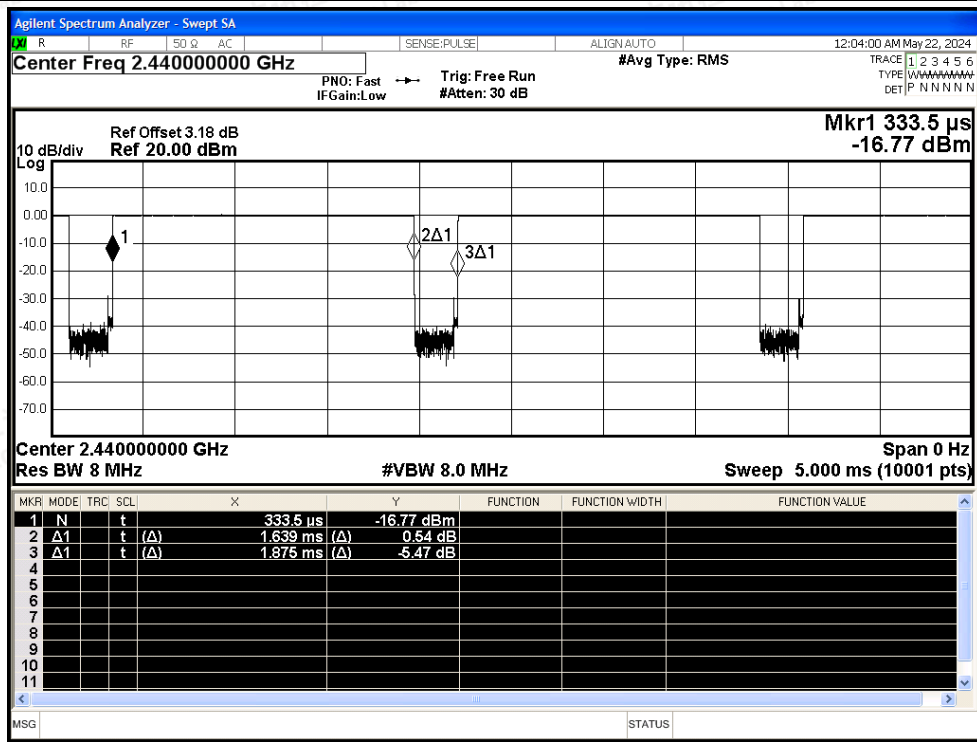


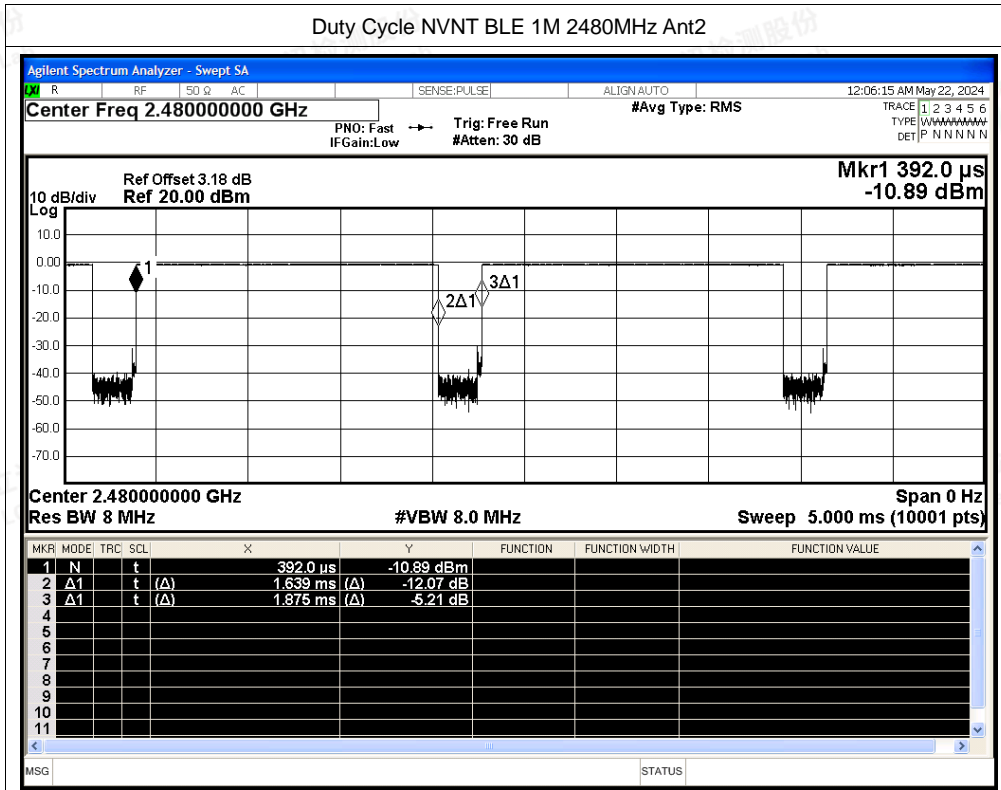
Test Graphs

Duty Cycle NVNT BLE 1M 2402MHz Ant2

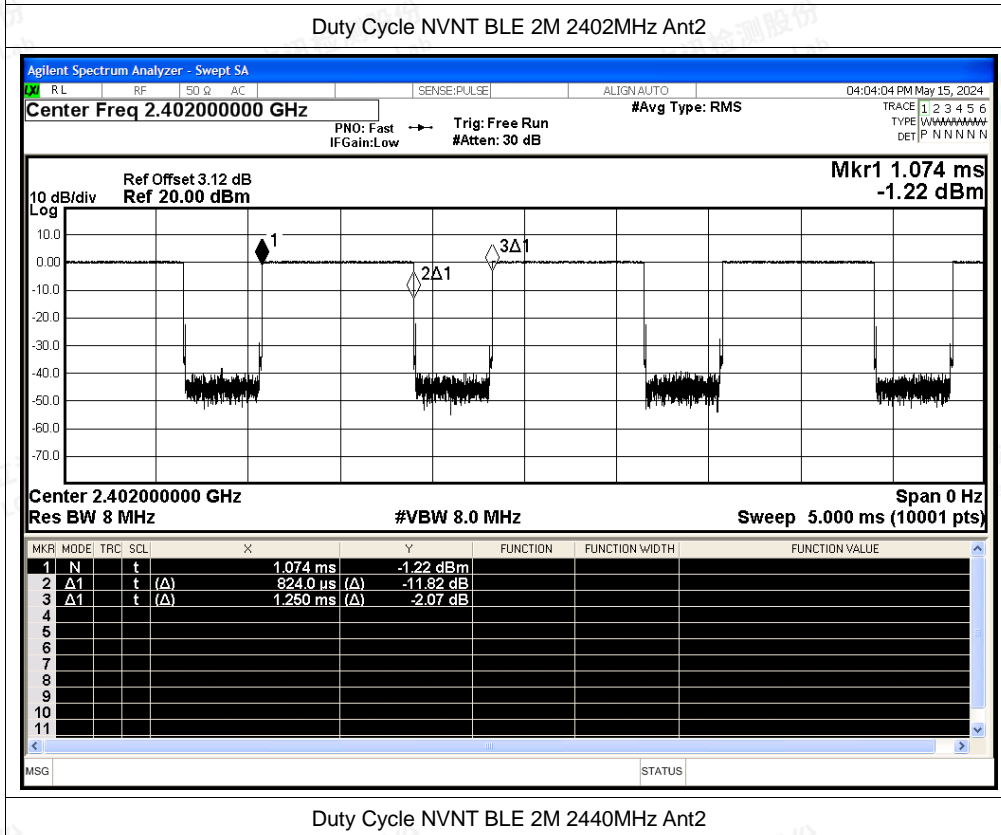


Duty Cycle NVNT BLE 1M 2440MHz Ant2



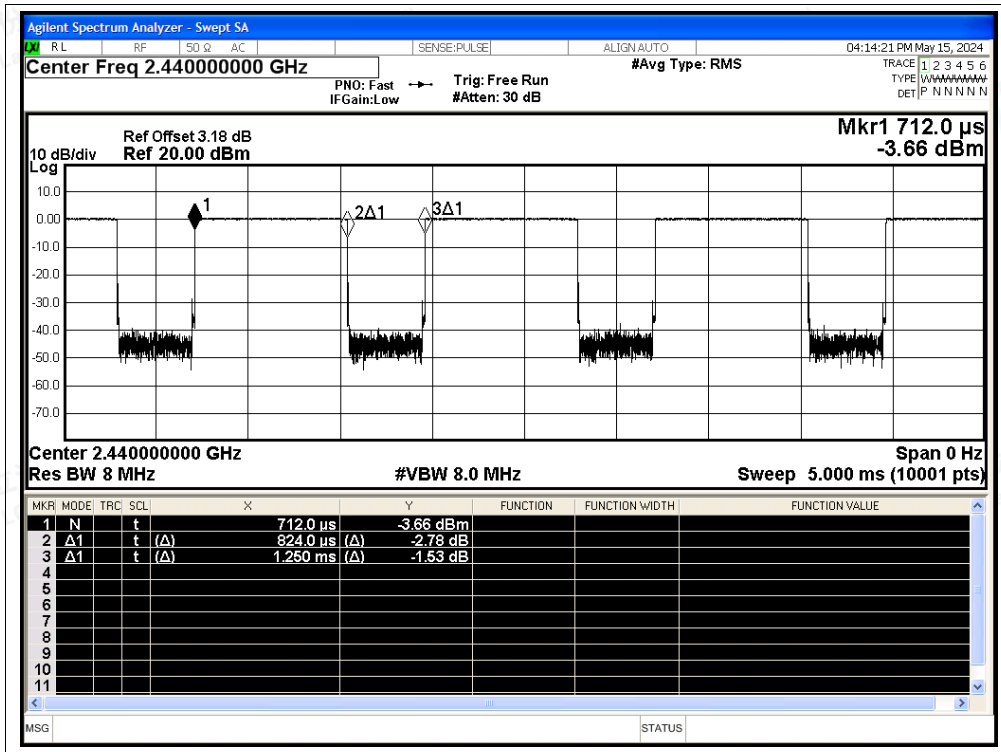


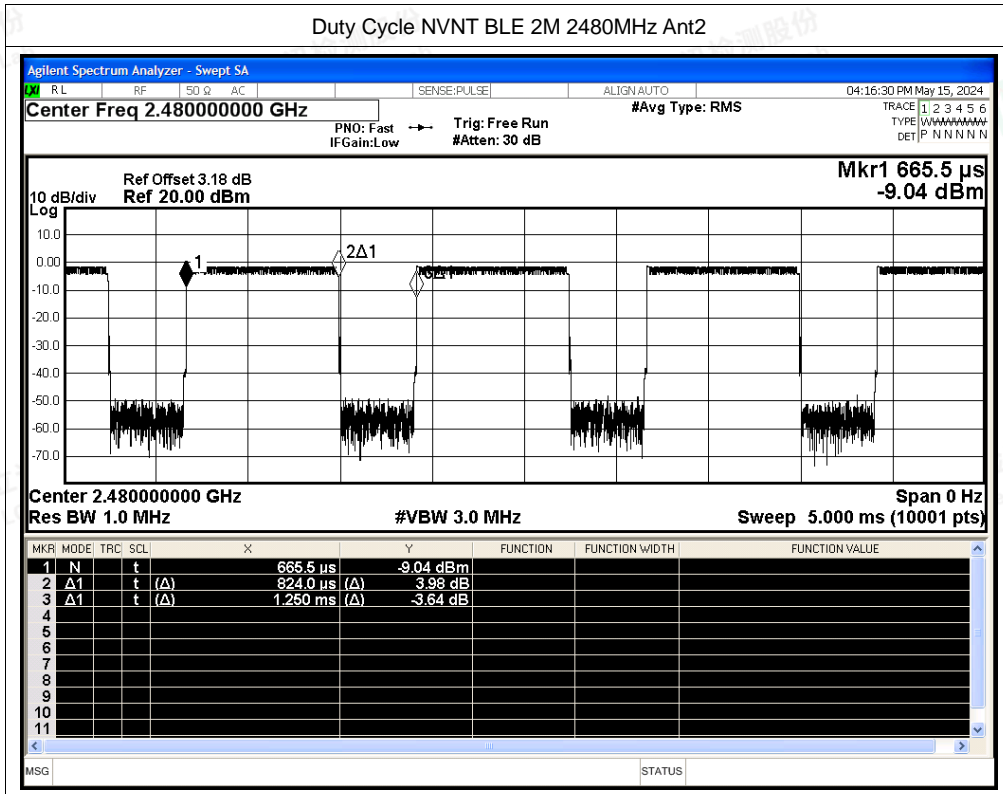
Test Graphs



Duty Cycle NVNT BLE 2M 2440MHz Ant2









B.7 Restrict Band

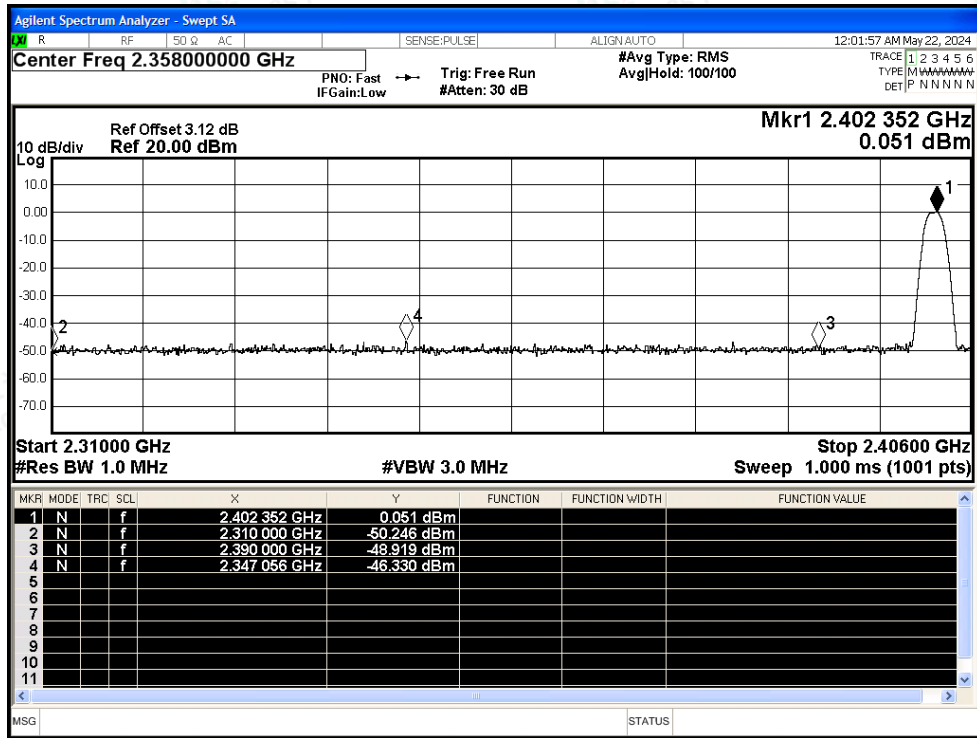
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	BLE 1M	2402	Ant2	2310	-50.25	2	-	47.01	Peak	74	Pass
NVNT	BLE 1M	2402	Ant2	2310	-57.65	2	0.58	40.19	Average	54	Pass
NVNT	BLE 1M	2402	Ant2	2347.056	-46.33	2	-	50.93	Peak	74	Pass
NVNT	BLE 1M	2402	Ant2	2376.624	-56.8	2	0.58	41.04	Average	54	Pass
NVNT	BLE 1M	2402	Ant2	2390	-48.92	2	-	48.34	Peak	74	Pass
NVNT	BLE 1M	2402	Ant2	2390	-57.71	2	0.58	40.13	Average	54	Pass
NVNT	BLE 1M	2480	Ant2	2483.5	-45.8	2	-	51.46	Peak	74	Pass
NVNT	BLE 1M	2480	Ant2	2483.5	-57.18	2	0.59	40.67	Average	54	Pass
NVNT	BLE 1M	2480	Ant2	2485.84	-44.23	2	-	53.03	Peak	74	Pass
NVNT	BLE 1M	2480	Ant2	2488.648	-56.26	2	0.59	41.59	Average	54	Pass
NVNT	BLE 1M	2480	Ant2	2500	-49.7	2	-	47.56	Peak	74	Pass
NVNT	BLE 1M	2480	Ant2	2500	-57.34	2	0.59	40.51	Average	54	Pass
NVNT	BLE 2M	2402	Ant2	2310	-50.36	2	-	46.9	Peak	74	Pass
NVNT	BLE 2M	2402	Ant2	2310	-57.49	2	1.81	41.58	Average	54	Pass
NVNT	BLE 2M	2402	Ant2	2350.704	-46.7	2	-	50.56	Peak	74	Pass
NVNT	BLE 2M	2402	Ant2	2340.528	-56.58	2	1.81	42.49	Average	54	Pass
NVNT	BLE 2M	2402	Ant2	2390	-50.13	2	-	47.13	Peak	74	Pass
NVNT	BLE 2M	2402	Ant2	2390	-57.61	2	1.81	41.46	Average	54	Pass
NVNT	BLE 2M	2480	Ant2	2483.5	-47.71	2	-	49.55	Peak	74	Pass
NVNT	BLE 2M	2480	Ant2	2483.5	-56.79	2	1.81	42.28	Average	54	Pass
NVNT	BLE 2M	2480	Ant2	2486.536	-45.53	2	-	51.73	Peak	74	Pass
NVNT	BLE 2M	2480	Ant2	2483.536	-56.25	2	1.81	42.82	Average	54	Pass
NVNT	BLE 2M	2480	Ant2	2500	-48.34	2	-	48.92	Peak	74	Pass
NVNT	BLE 2M	2480	Ant2	2500	-57.31	2	1.81	41.76	Average	54	Pass



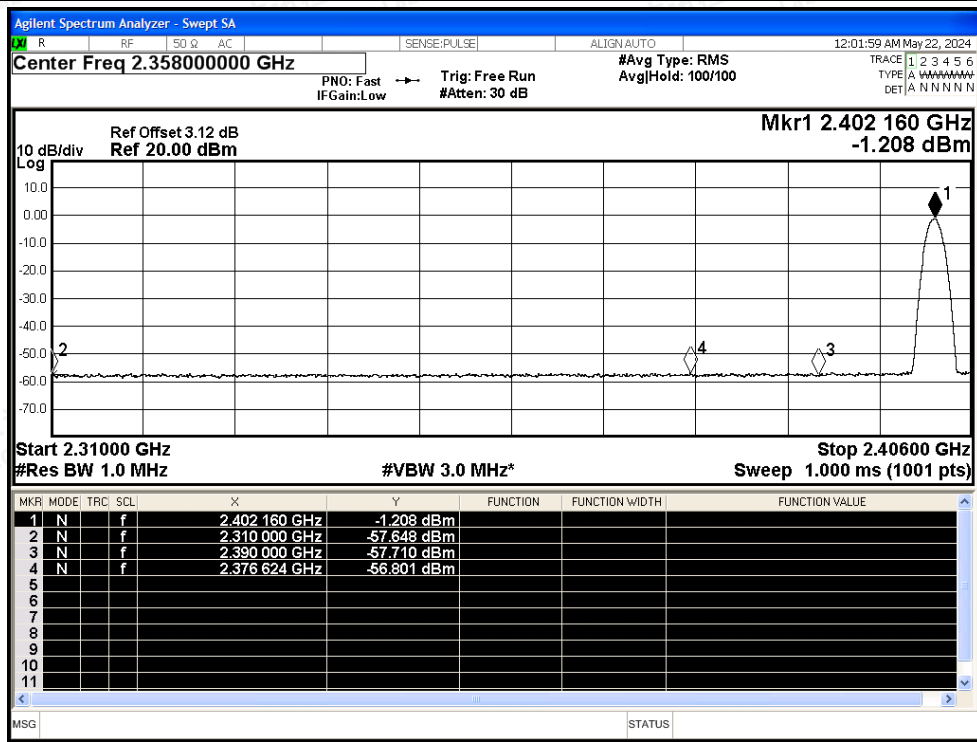


Test Graphs

Restrict Band NVNT BLE 1M 2402MHz Ant2 Peak



Restrict Band NVNT BLE 1M 2402MHz Ant2 Average

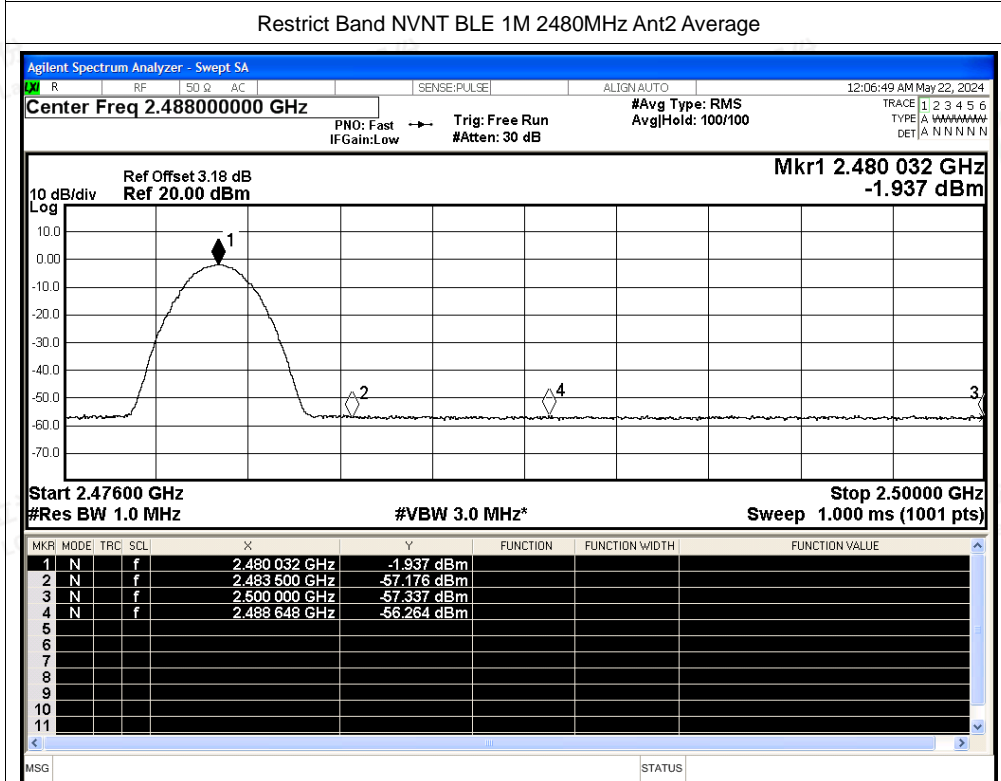
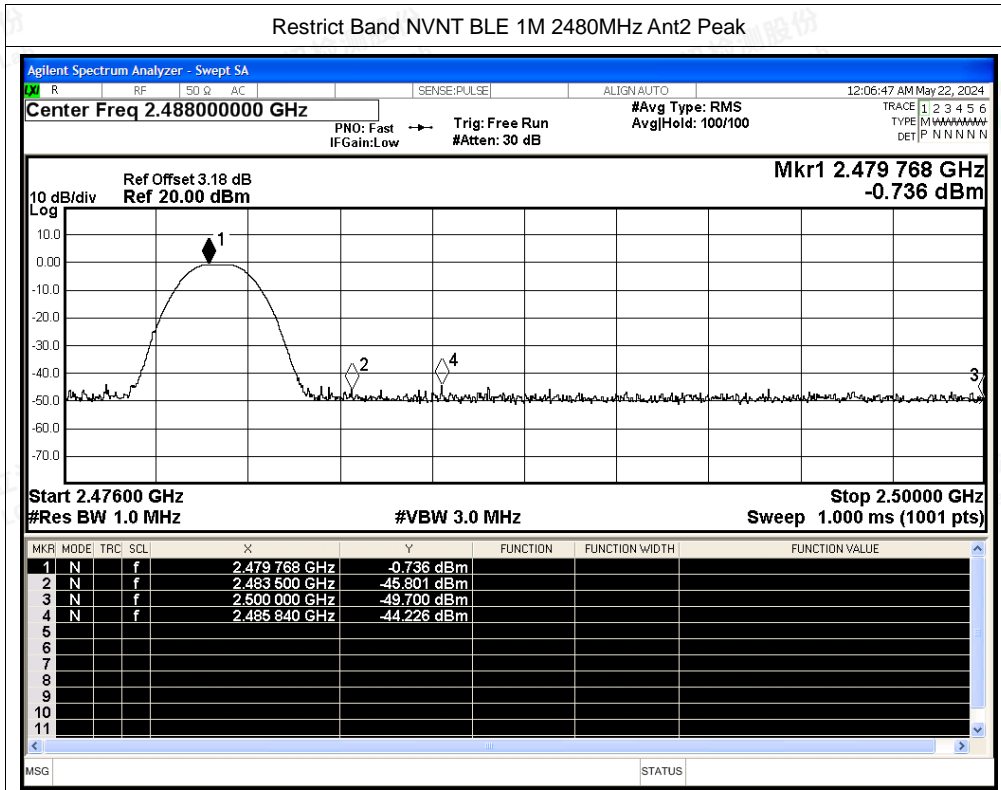


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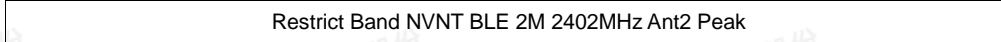
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

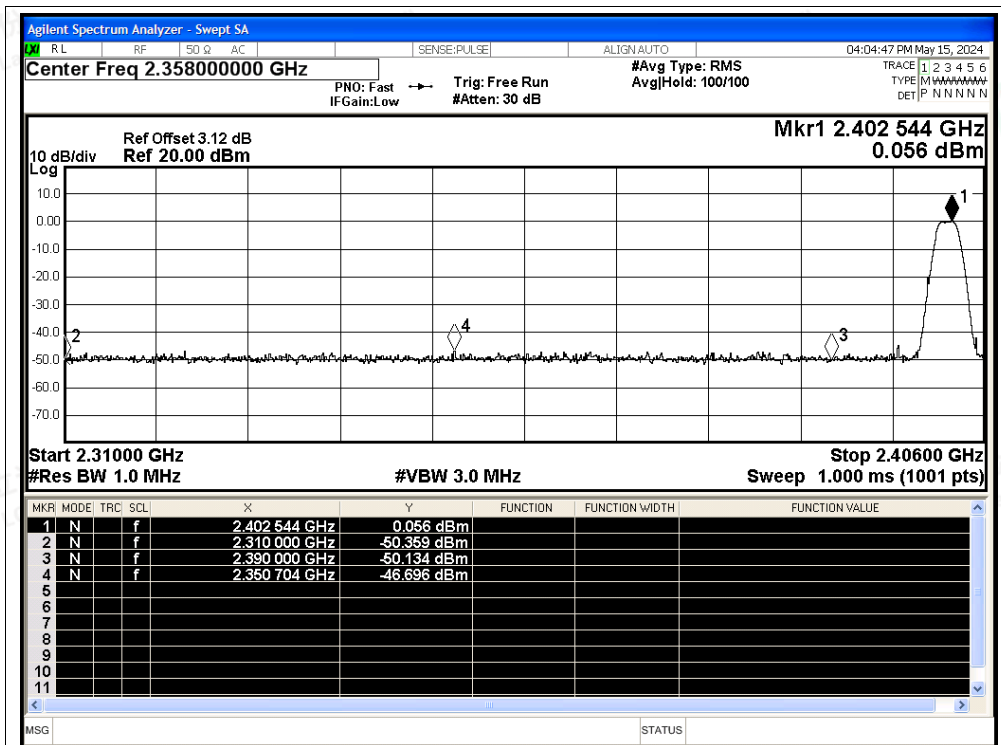
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

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Test Graphs





Restrict Band NVNT BLE 2M 2402MHz Ant2 Average

