



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: gps dog fence

Test Model: GF02

Environmental Conditions

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





A.1 -20dB Bandwidth

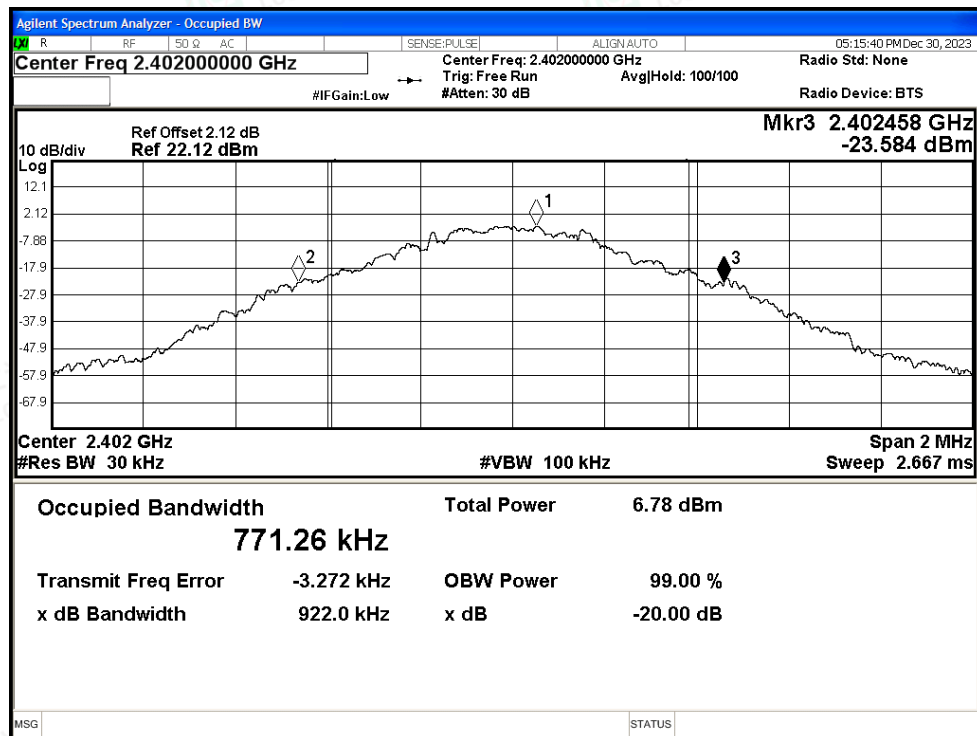
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.922	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.835	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.854	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.275	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.262	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.274	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.293	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.273	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.291	N/A	Pass



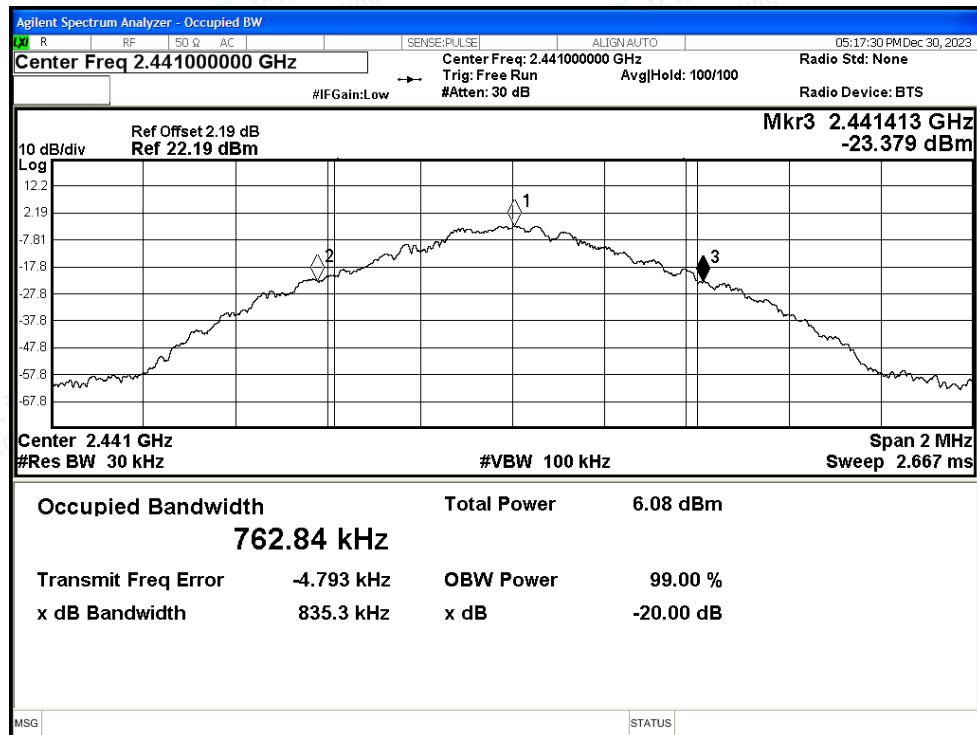


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

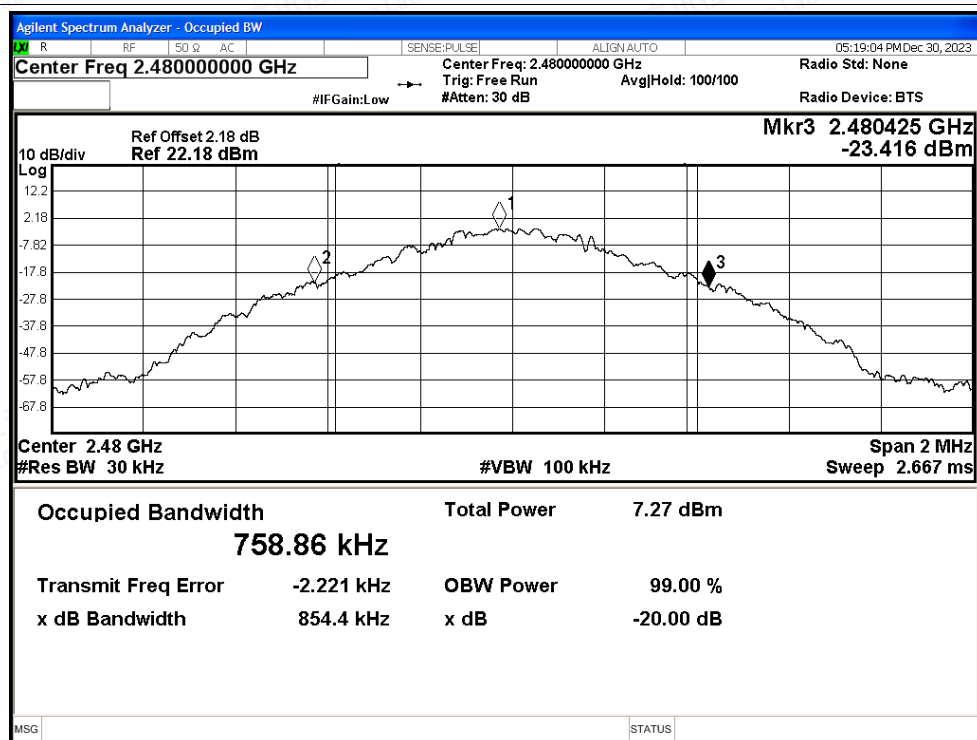


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

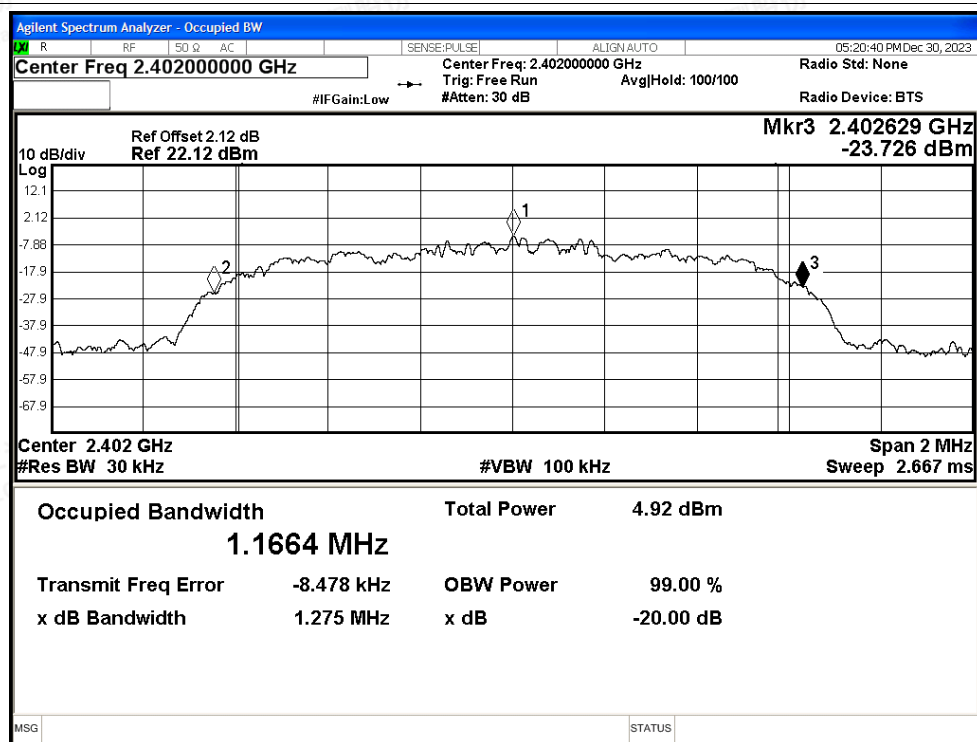




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

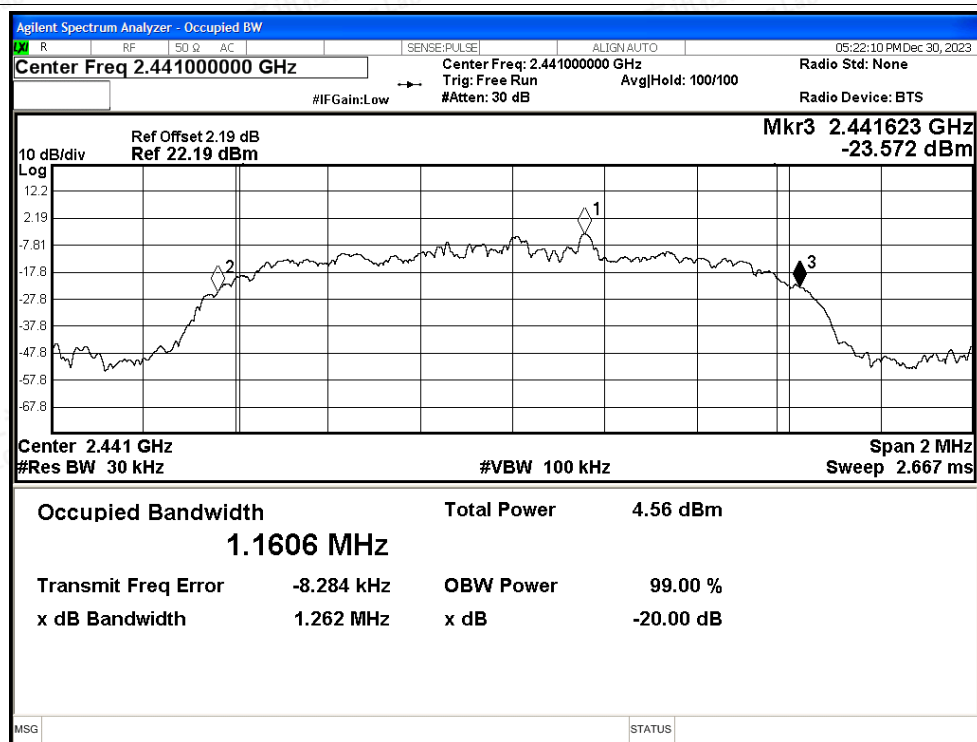


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

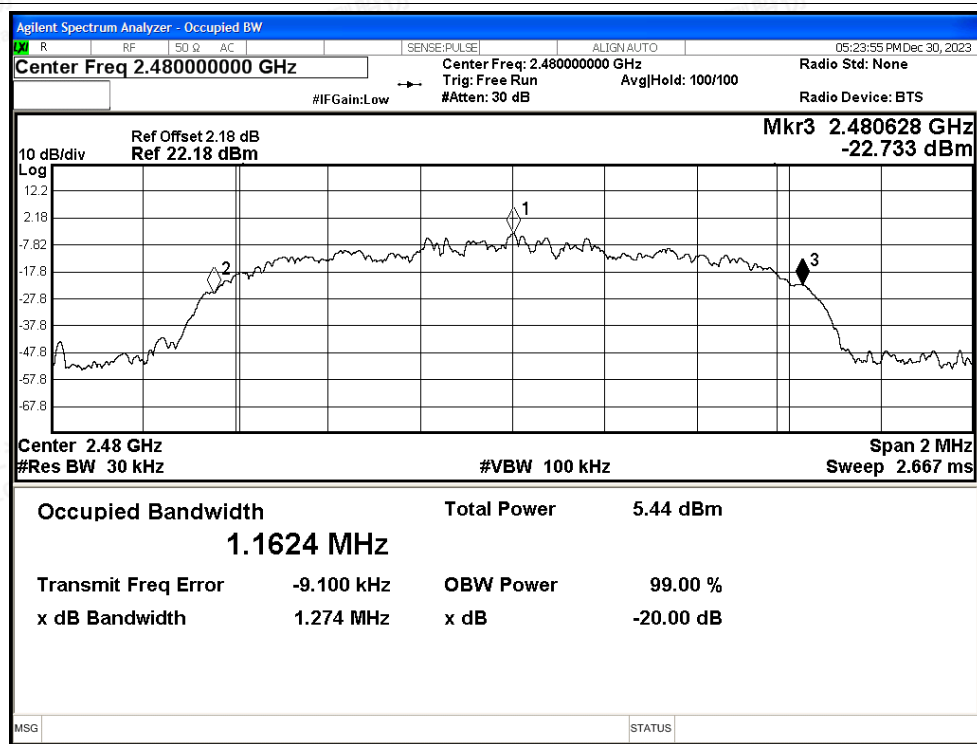




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

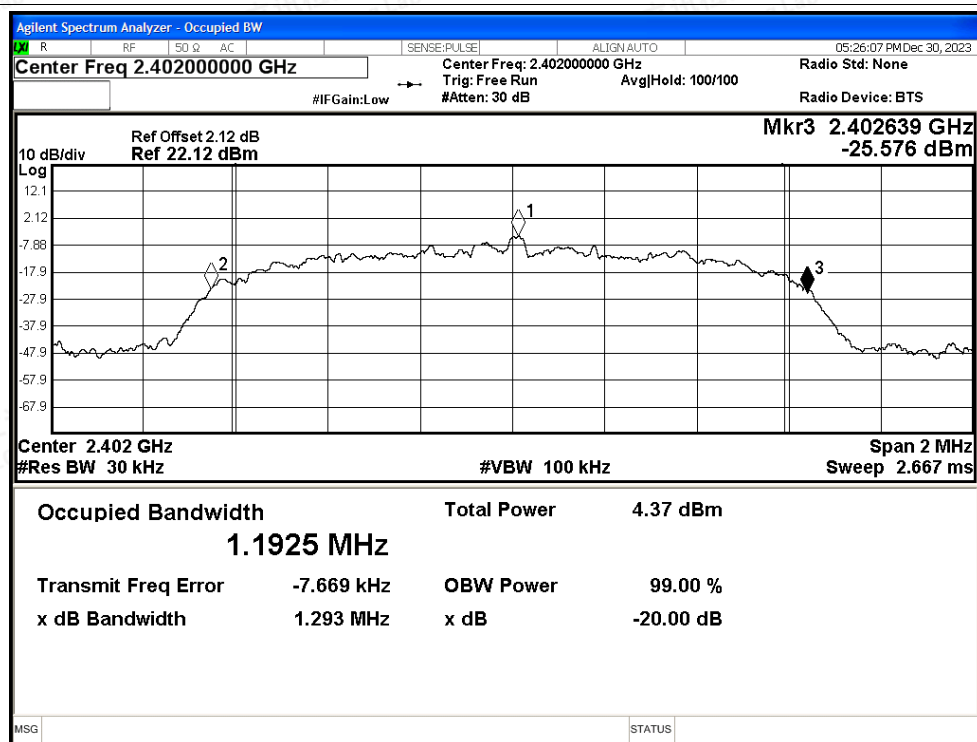


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

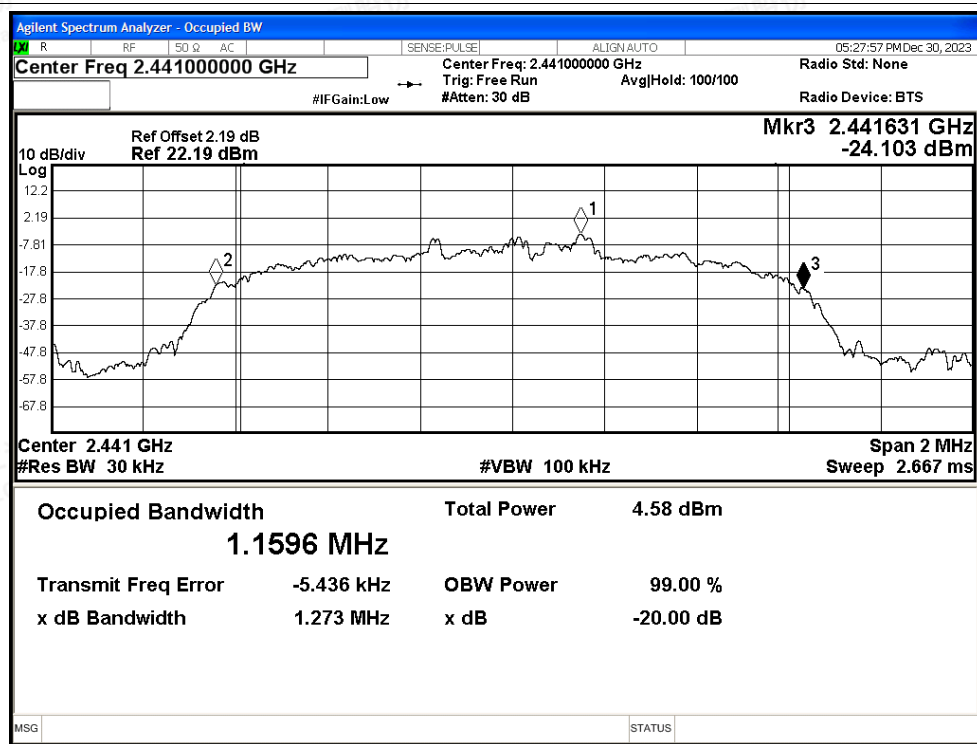


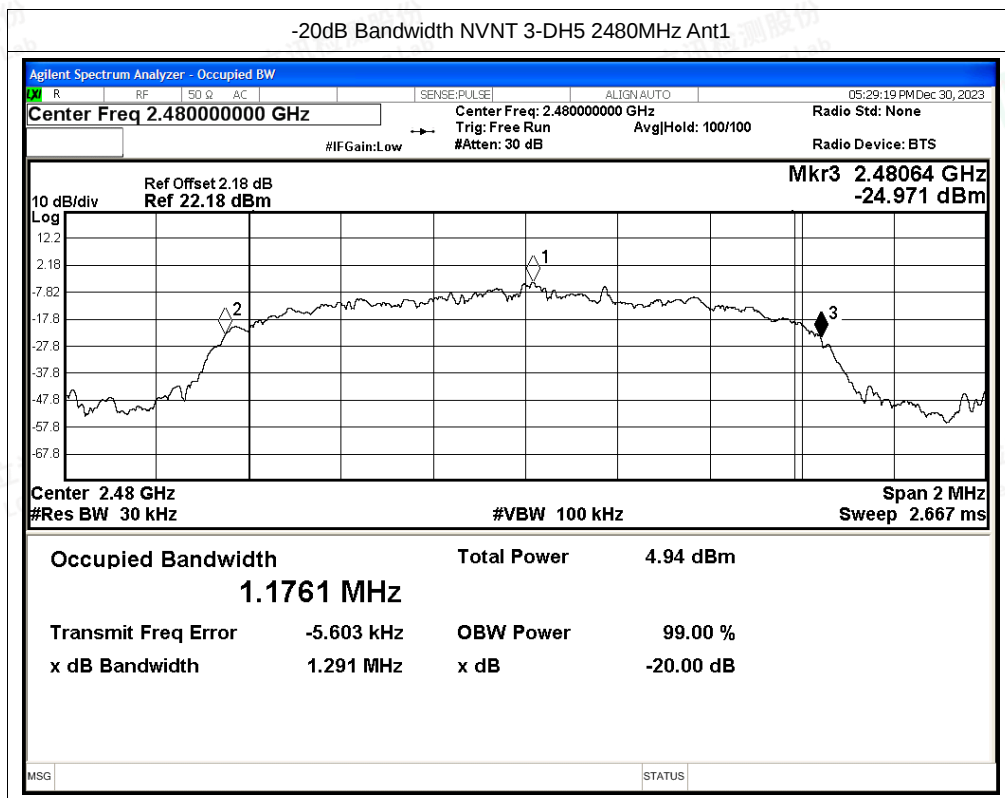


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







A.2 Maximum Peak Conducted Output Power

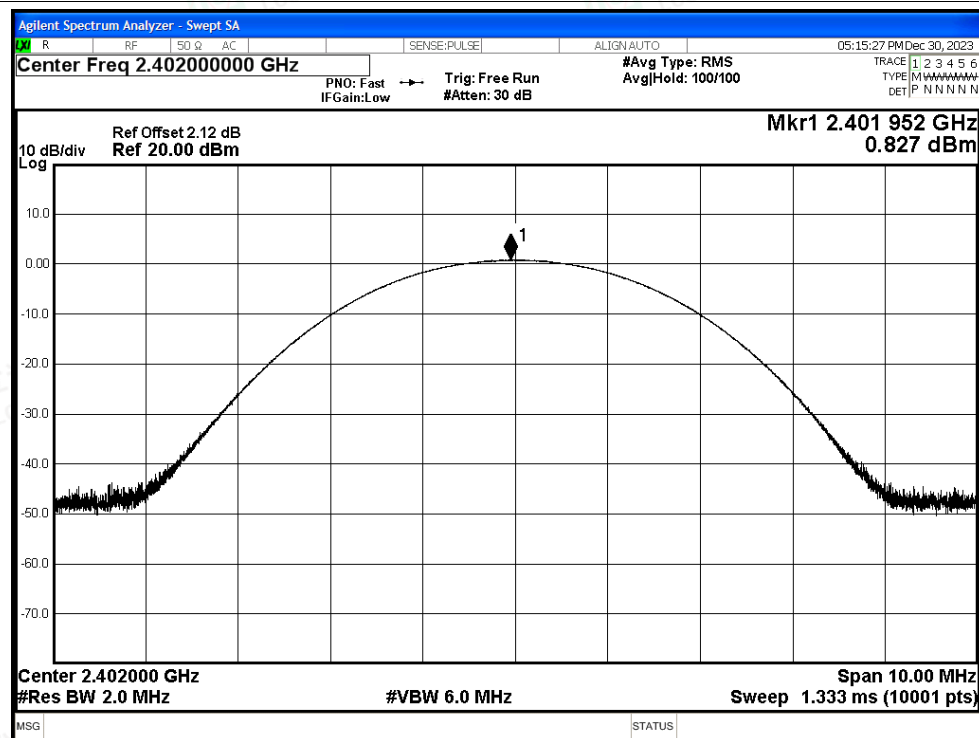
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.83	21	Pass
NVNT	1-DH5	2441	Ant1	0.3	21	Pass
NVNT	1-DH5	2480	Ant1	1.31	21	Pass
NVNT	2-DH5	2402	Ant1	0.03	21	Pass
NVNT	2-DH5	2441	Ant1	-0.49	21	Pass
NVNT	2-DH5	2480	Ant1	0.6	21	Pass
NVNT	3-DH5	2402	Ant1	0.03	21	Pass
NVNT	3-DH5	2441	Ant1	-0.59	21	Pass
NVNT	3-DH5	2480	Ant1	0.4	21	Pass



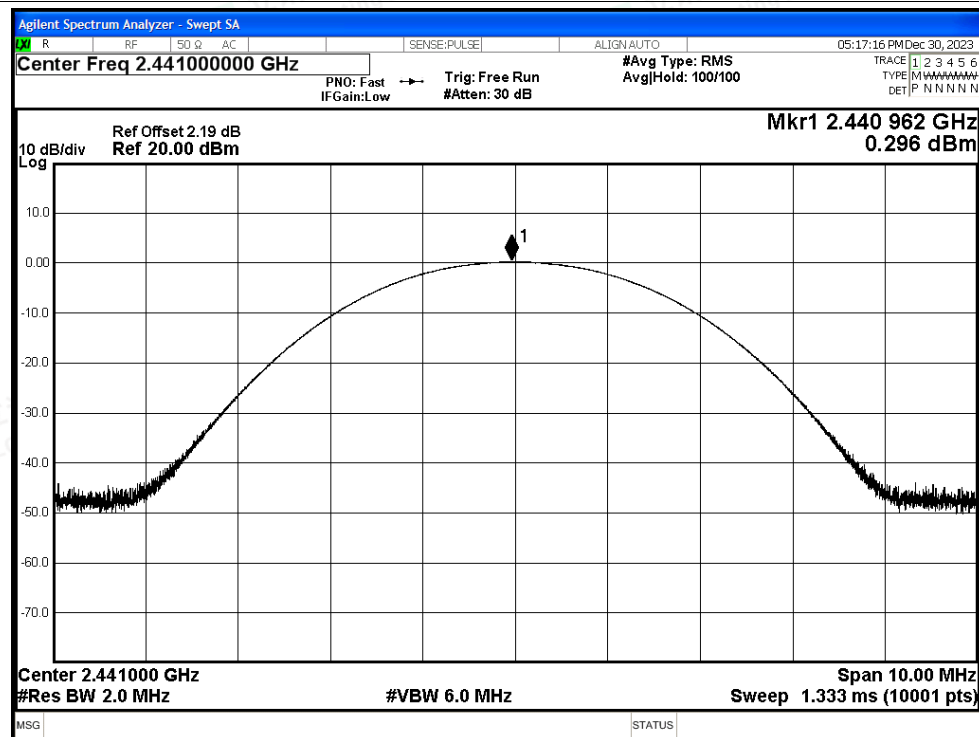


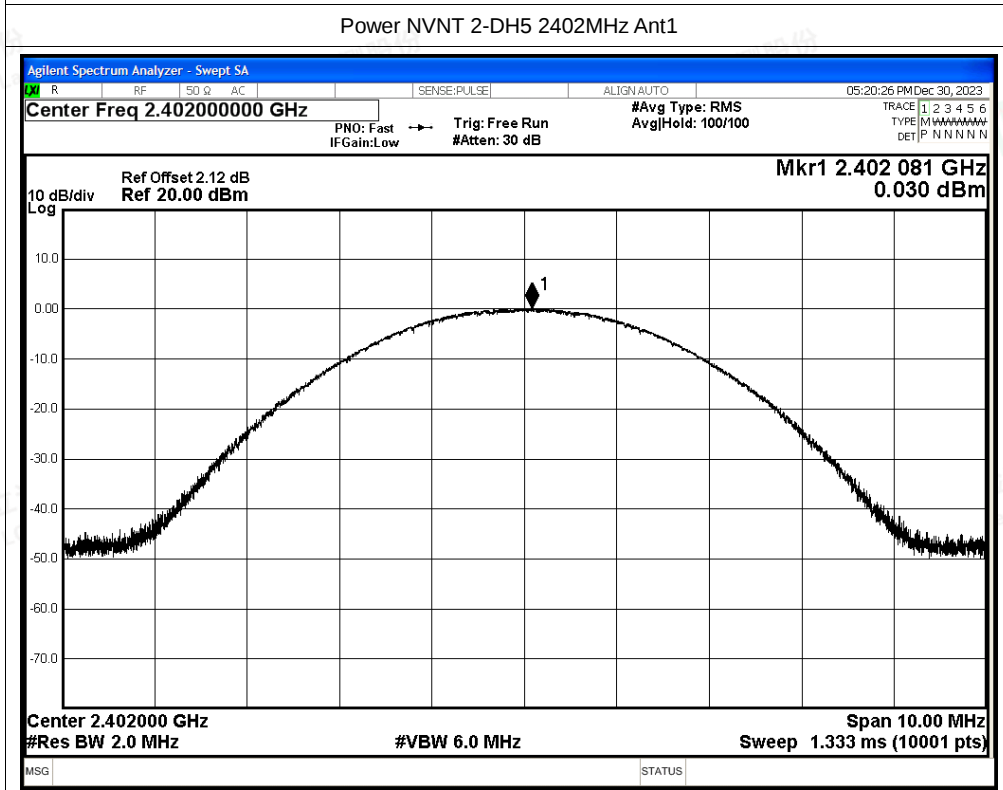
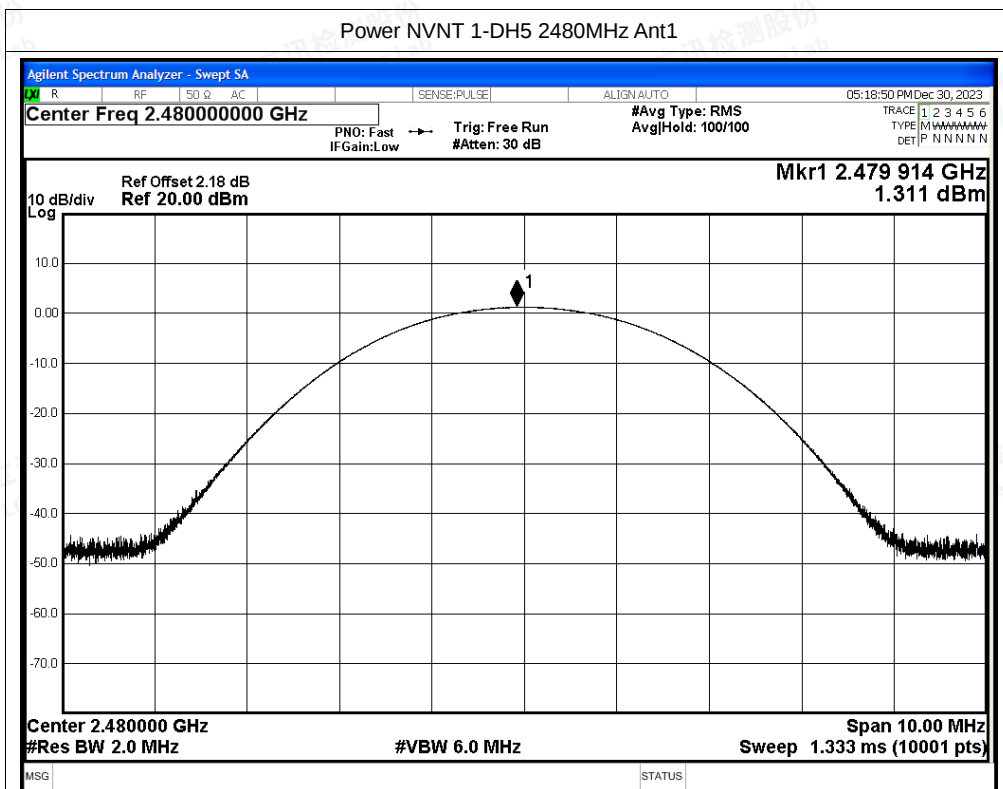
Test Graphs

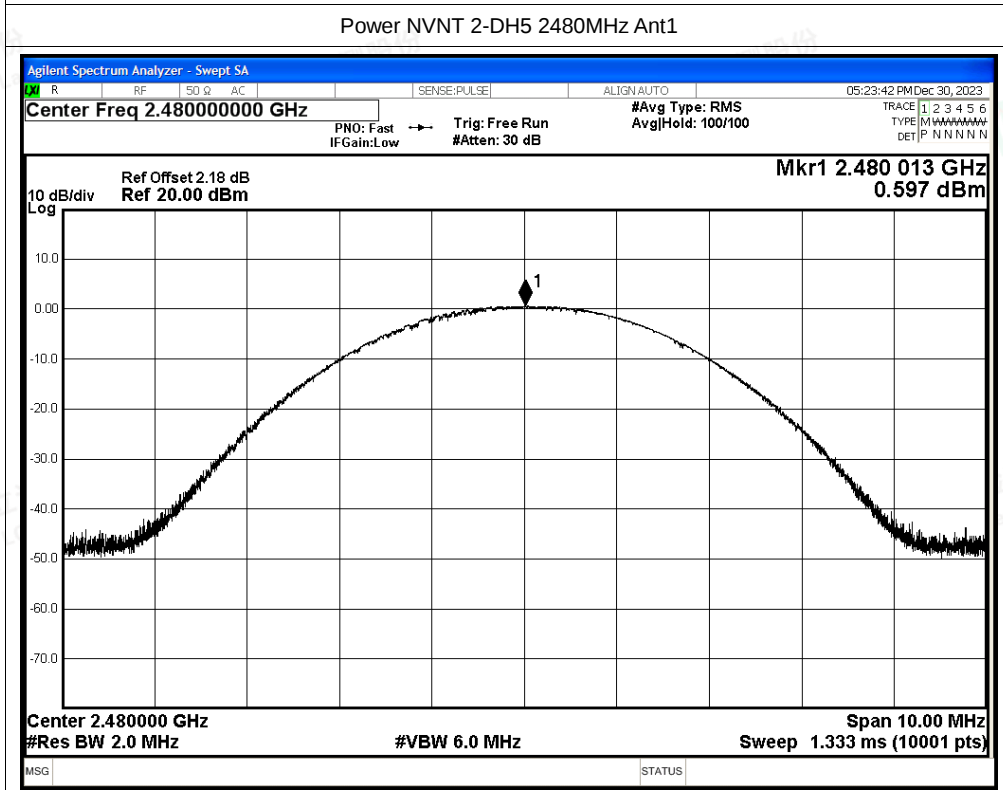
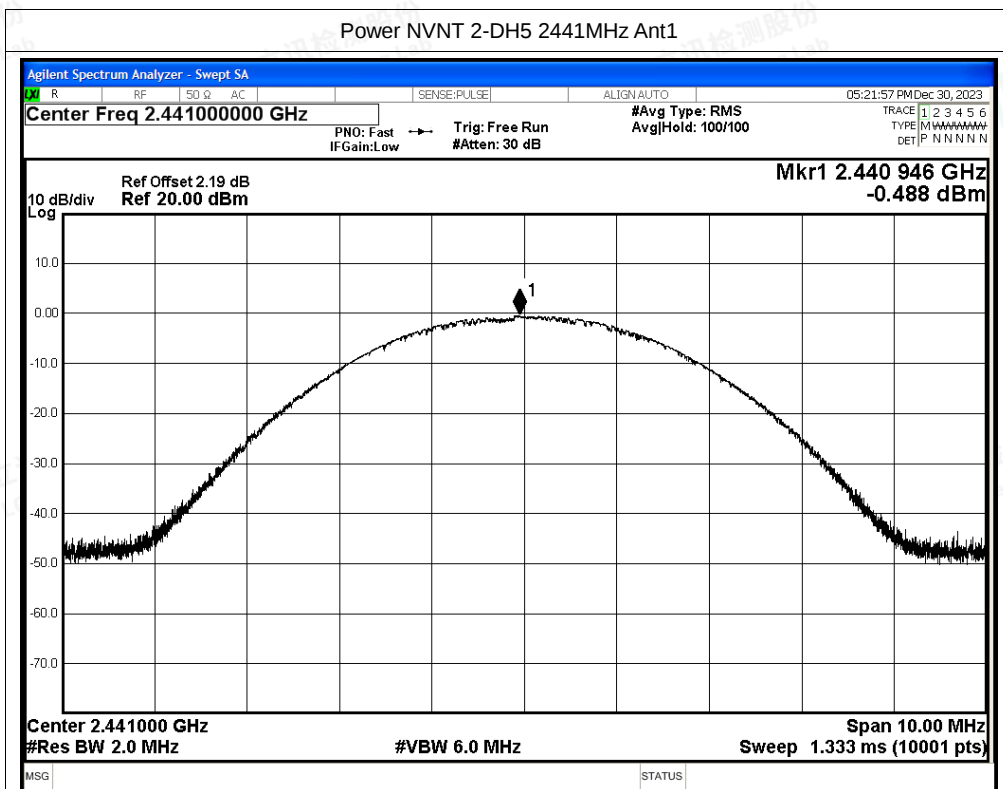
Power NVNT 1-DH5 2402MHz Ant1

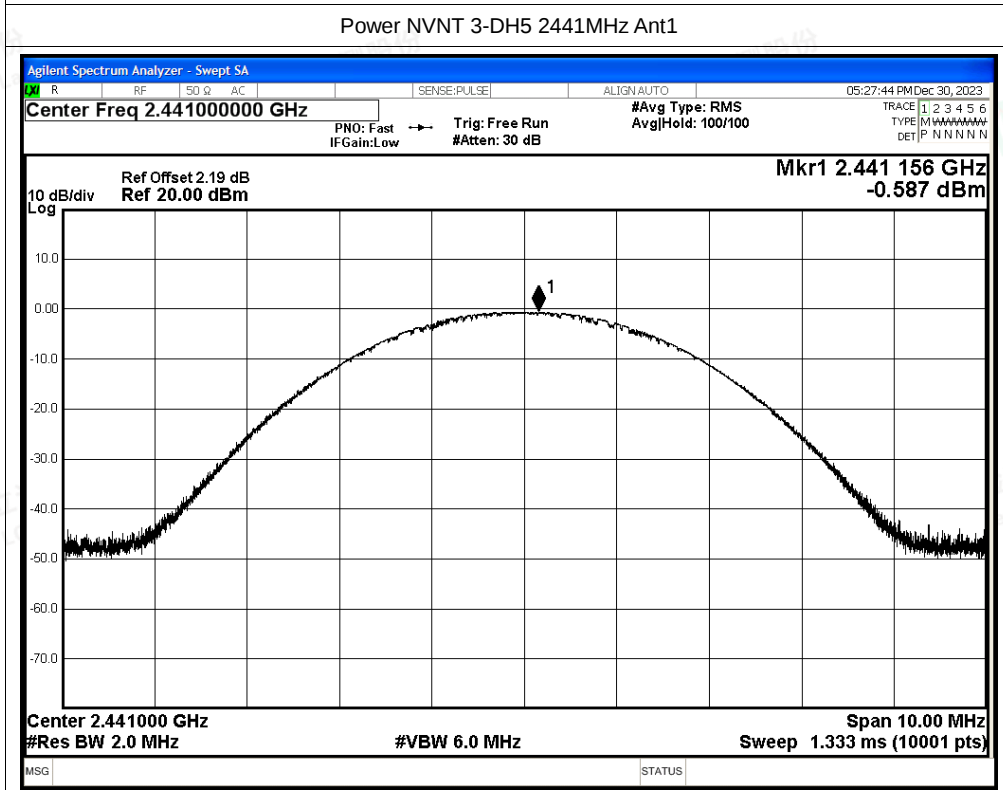
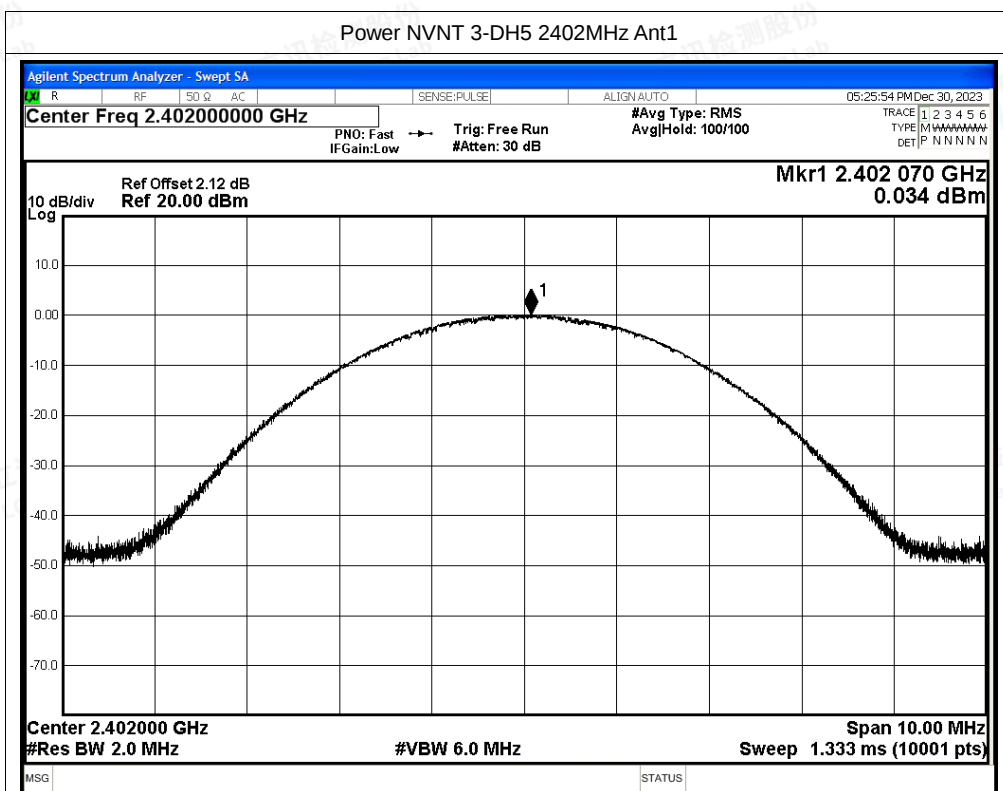


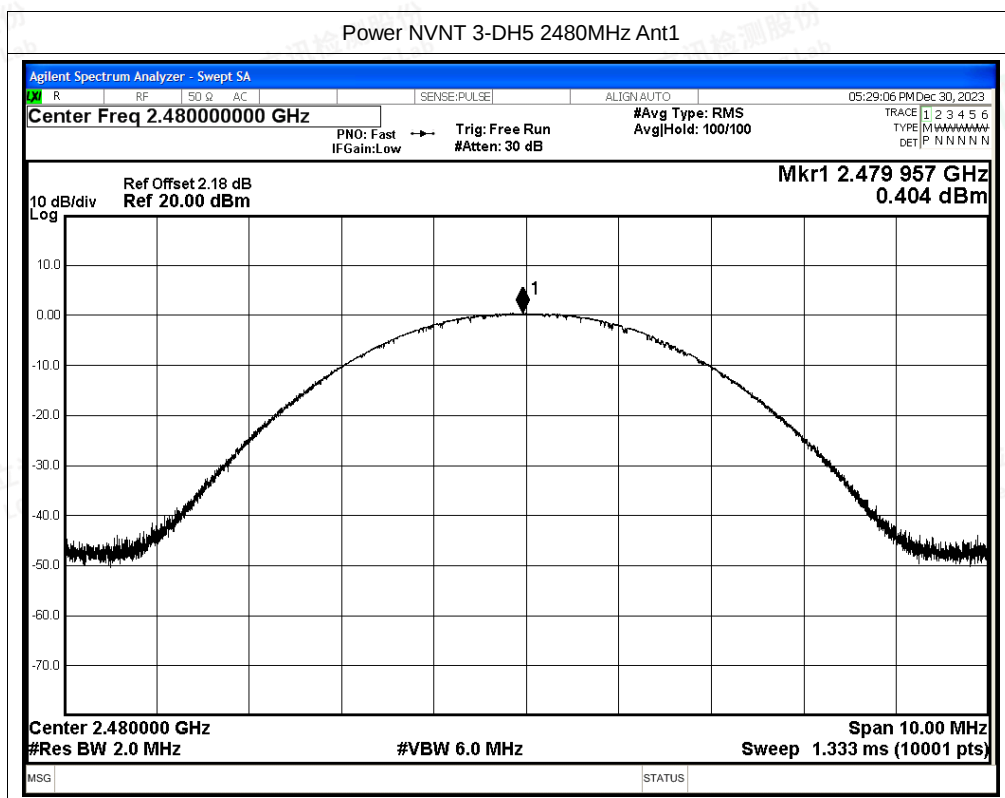
Power NVNT 1-DH5 2441MHz Ant1













A.3 Carrier Frequencies Separation

Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.964	2402.986	1.022	0.615	Pass
NVNT	2-DH5	Ant1	2401.998	2402.942	0.944	0.85	Pass
NVNT	3-DH5	Ant1	2402.118	2403.01	0.892	0.862	Pass

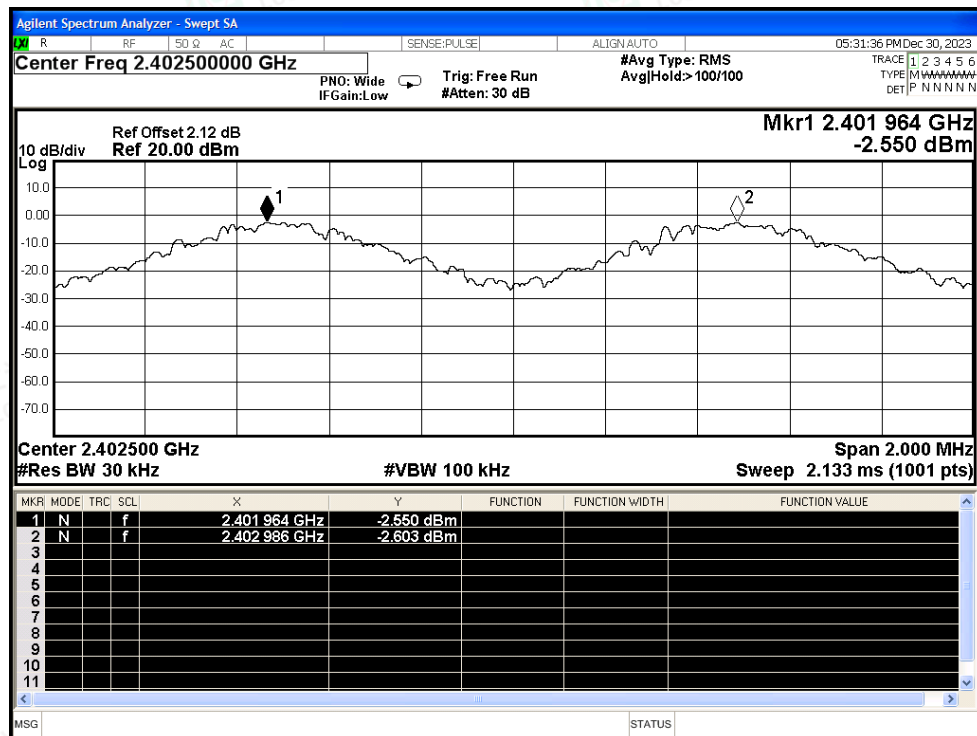


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
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Scan code to check authenticity

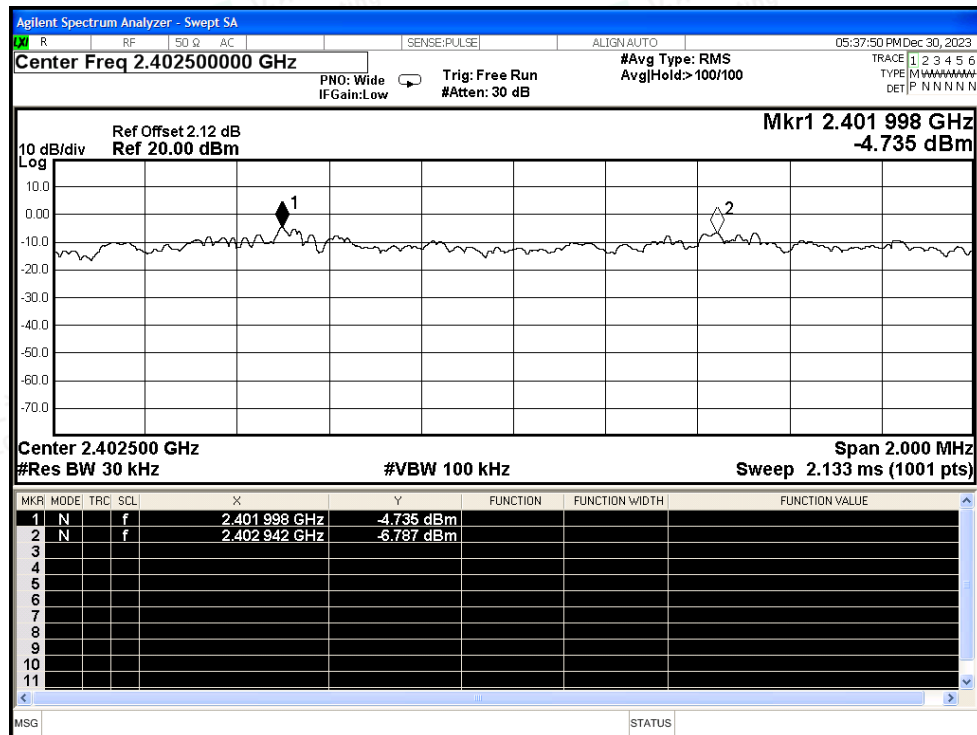


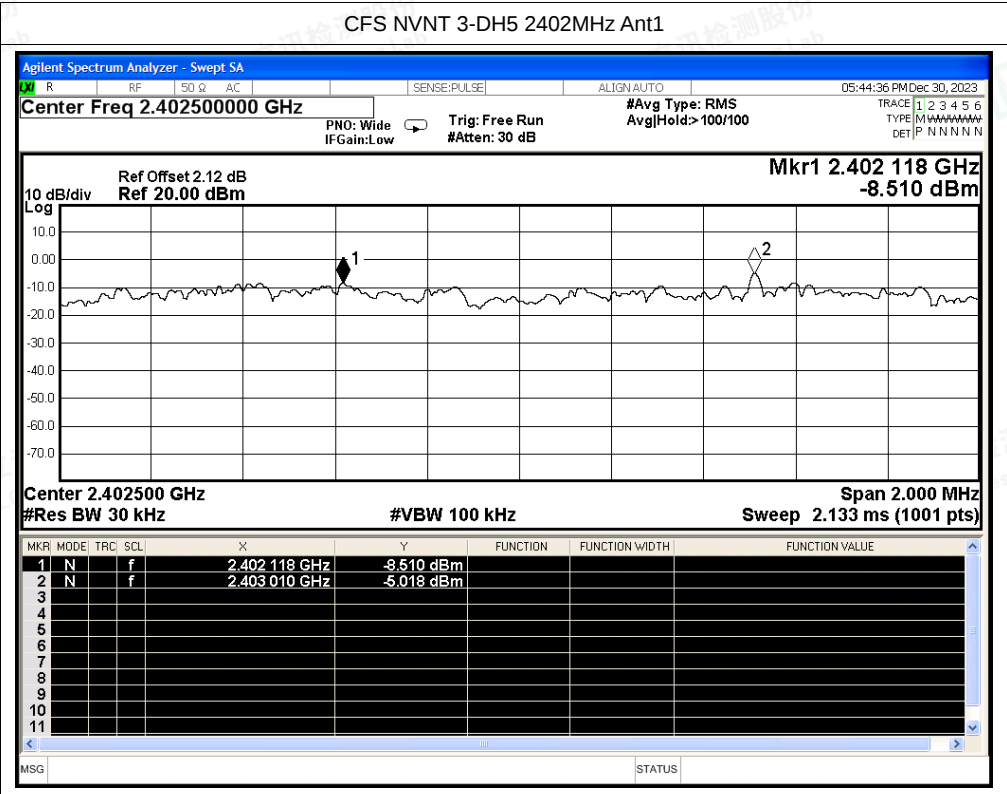
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





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Scan code to check authenticity



A.4 Number of Hopping Channel

Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

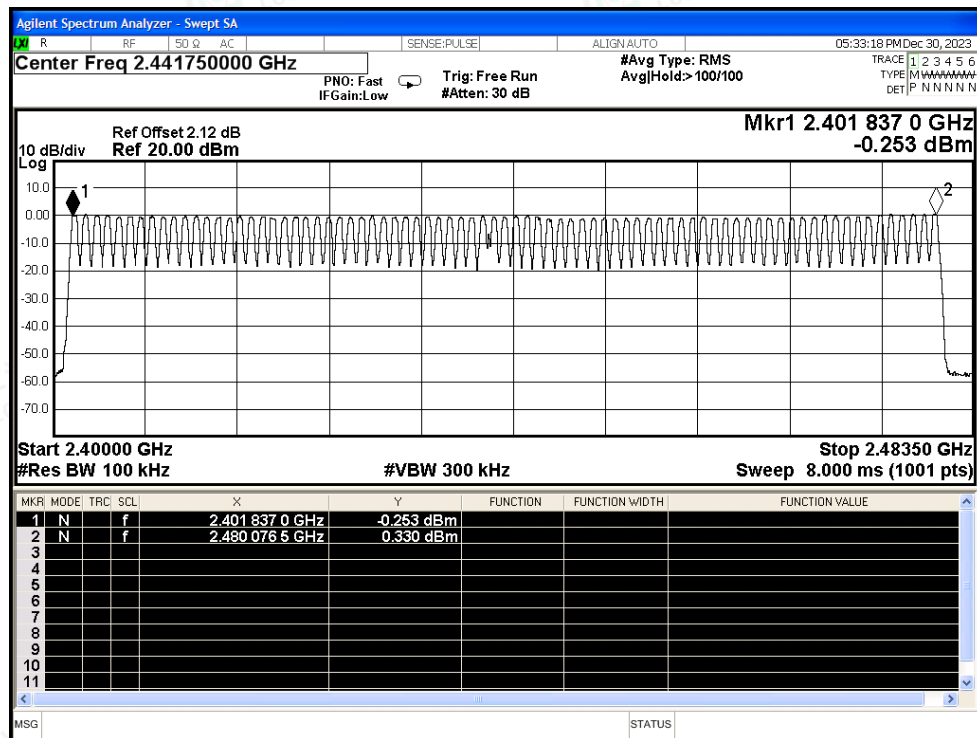


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Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

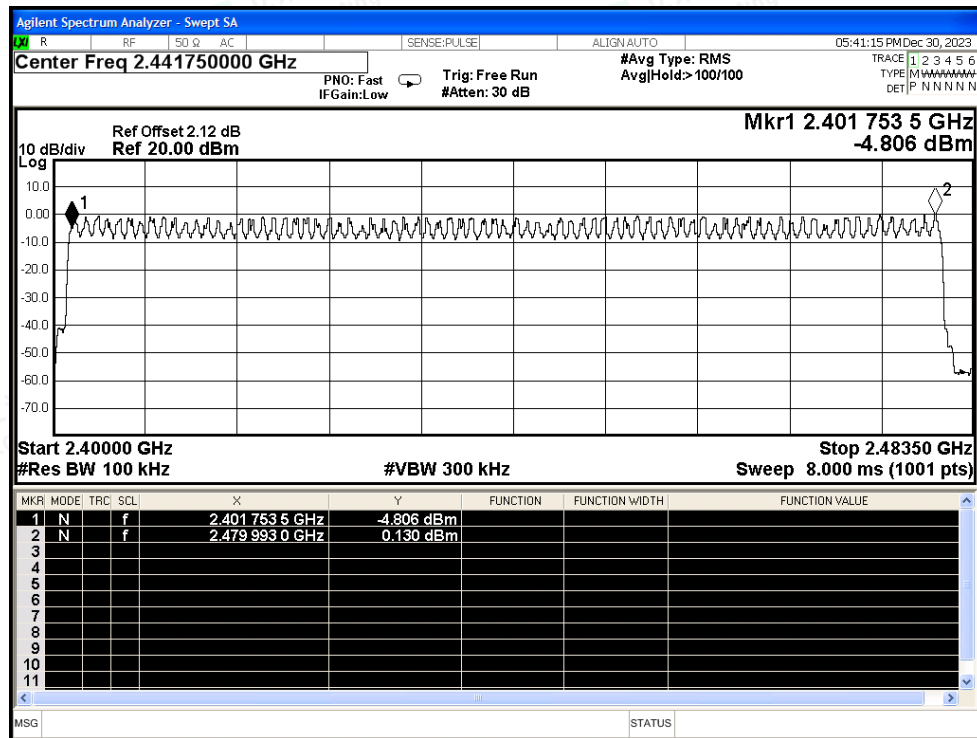


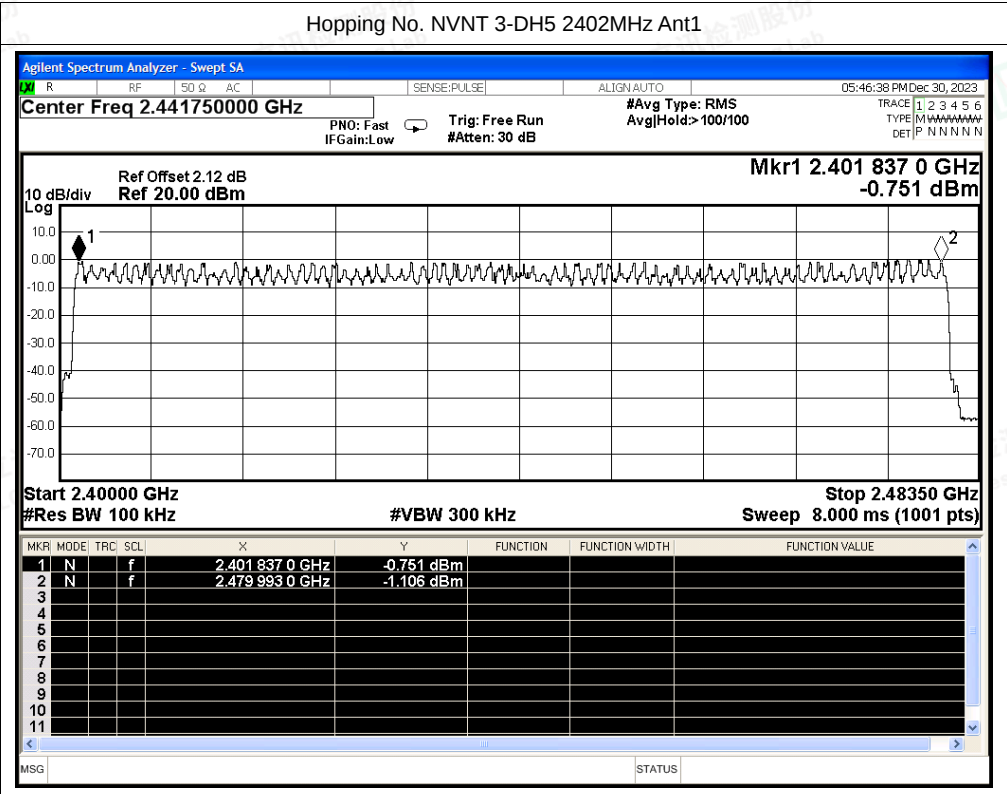
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1







A.5 Dwell Time

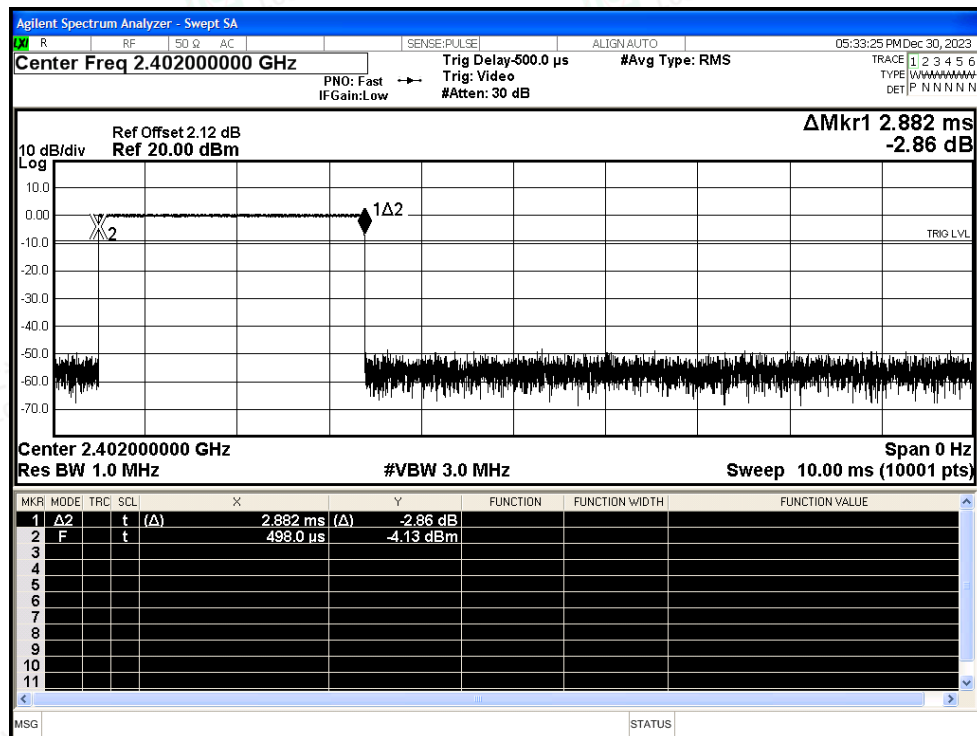
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.882	311.256	108	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	276.96	96	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	311.796	108	31600	400	Pass



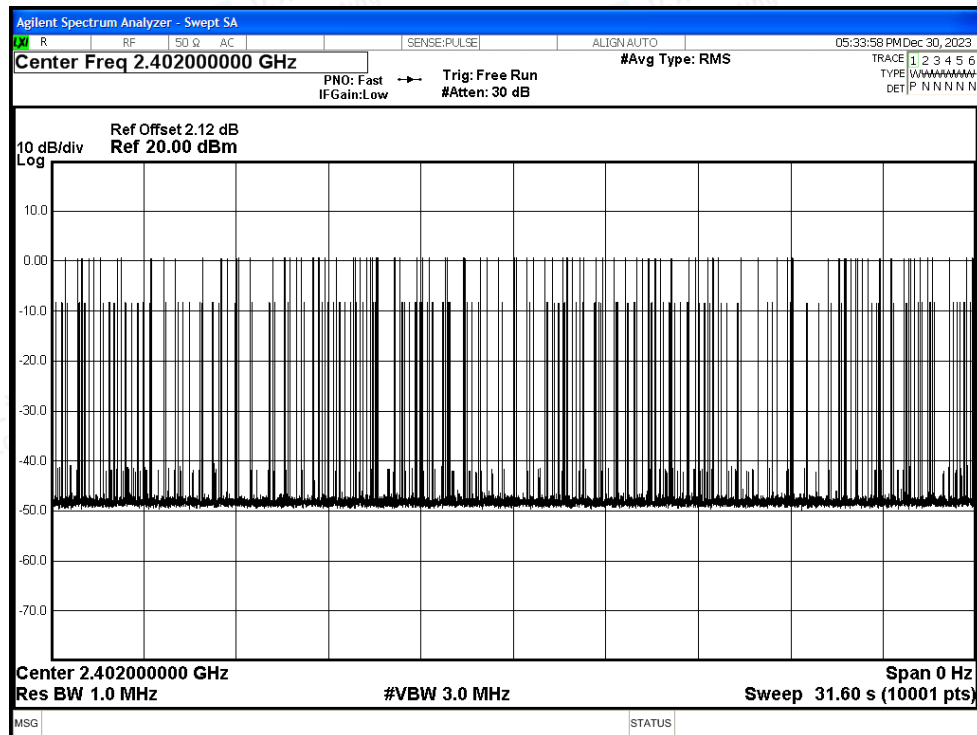


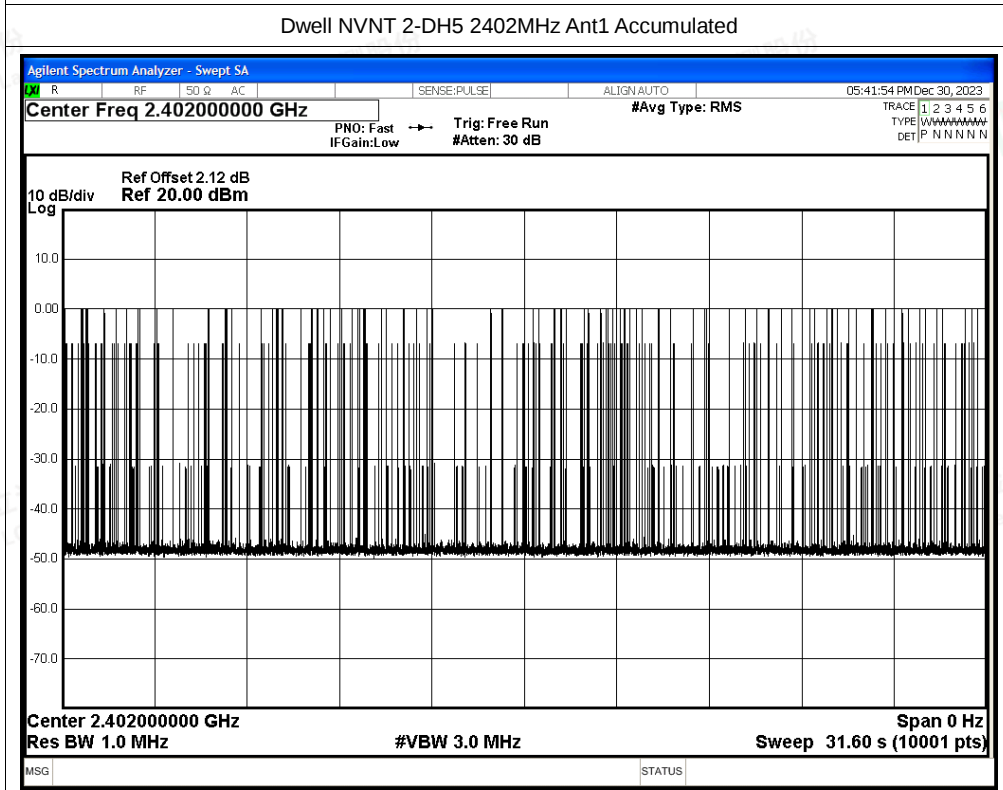
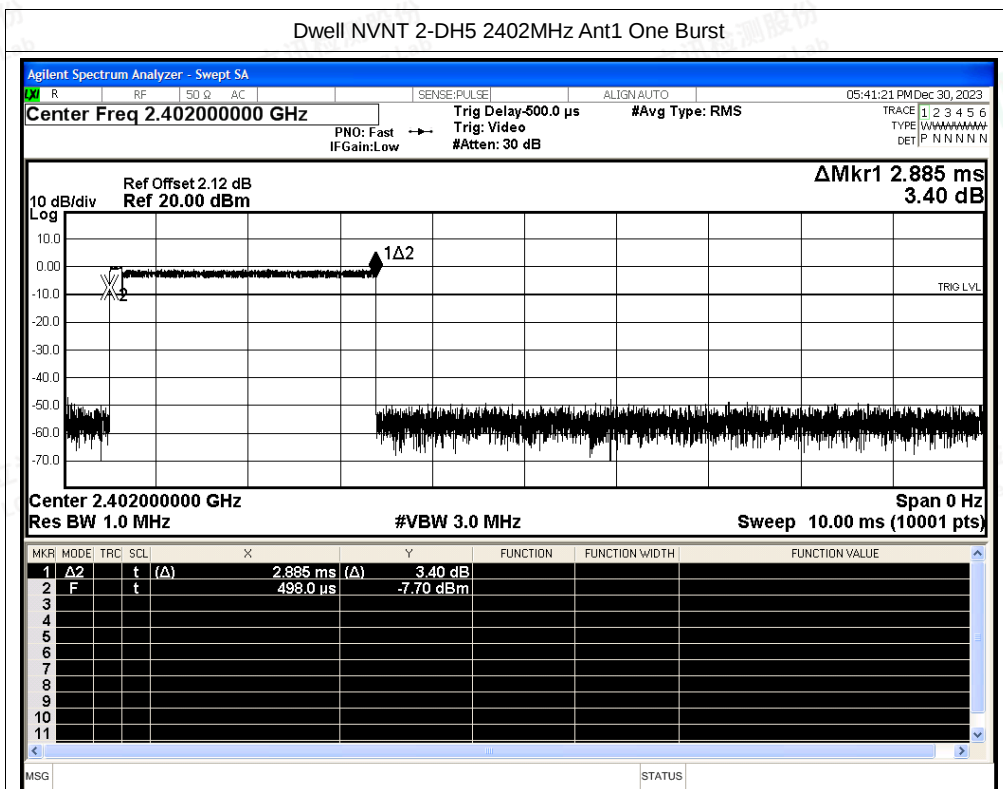
Test Graphs

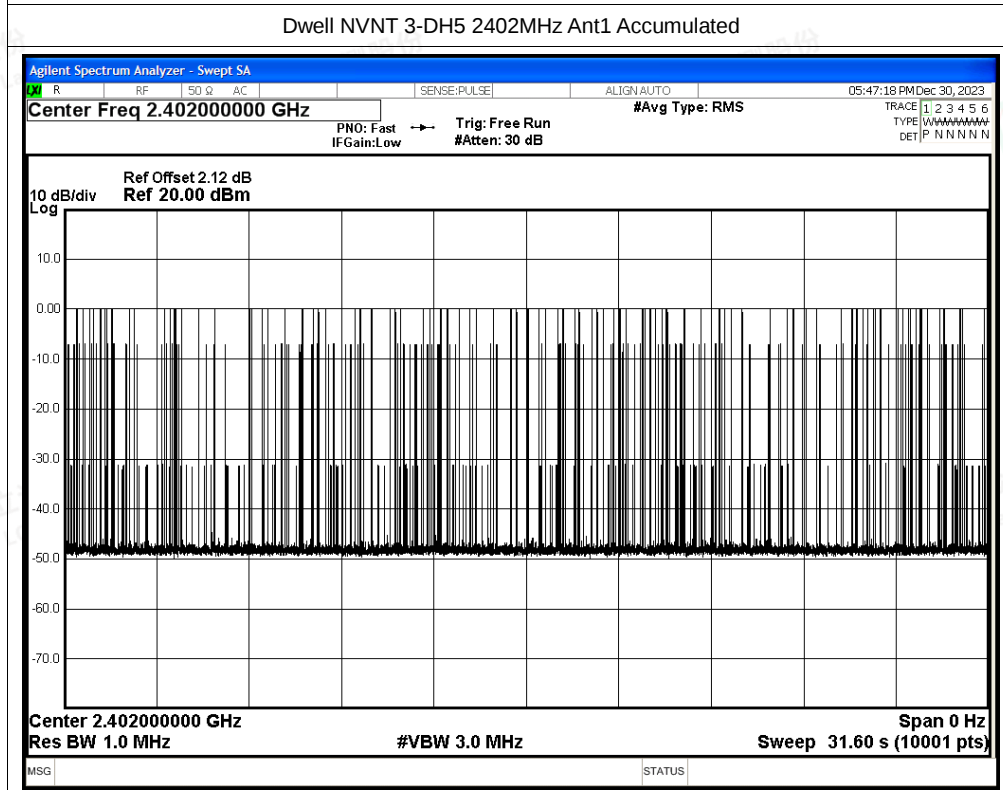
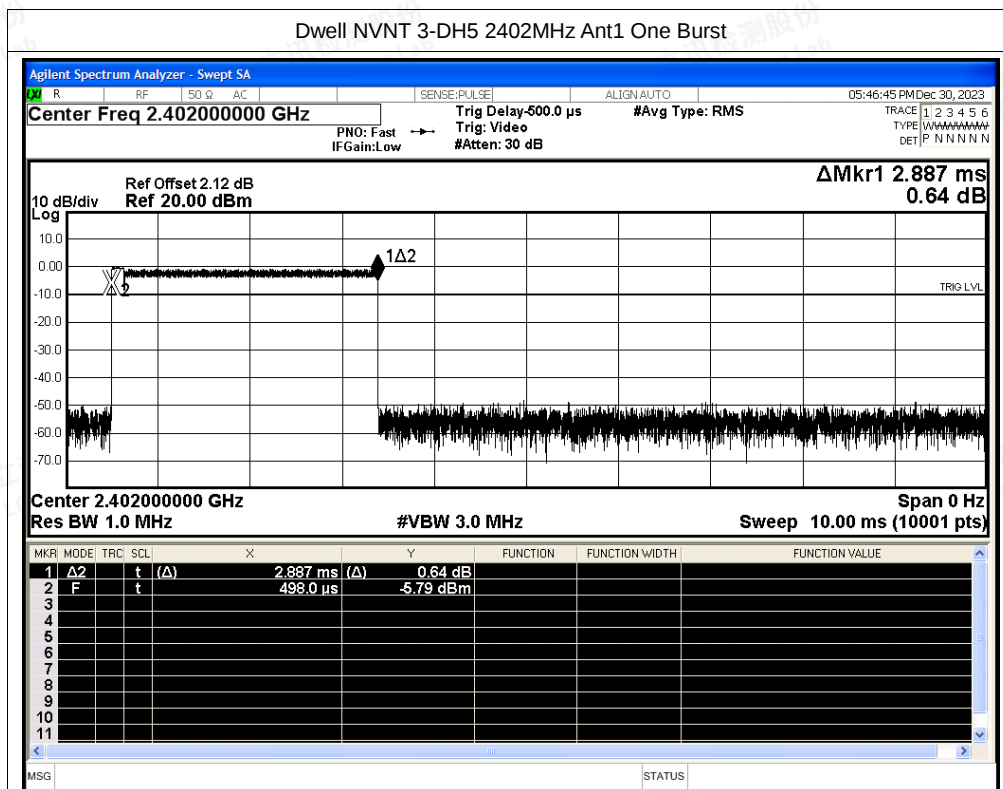
Dwell NVNT 1-DH5 2402MHz Ant1 One Burst



Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated









A.6 Band Edge

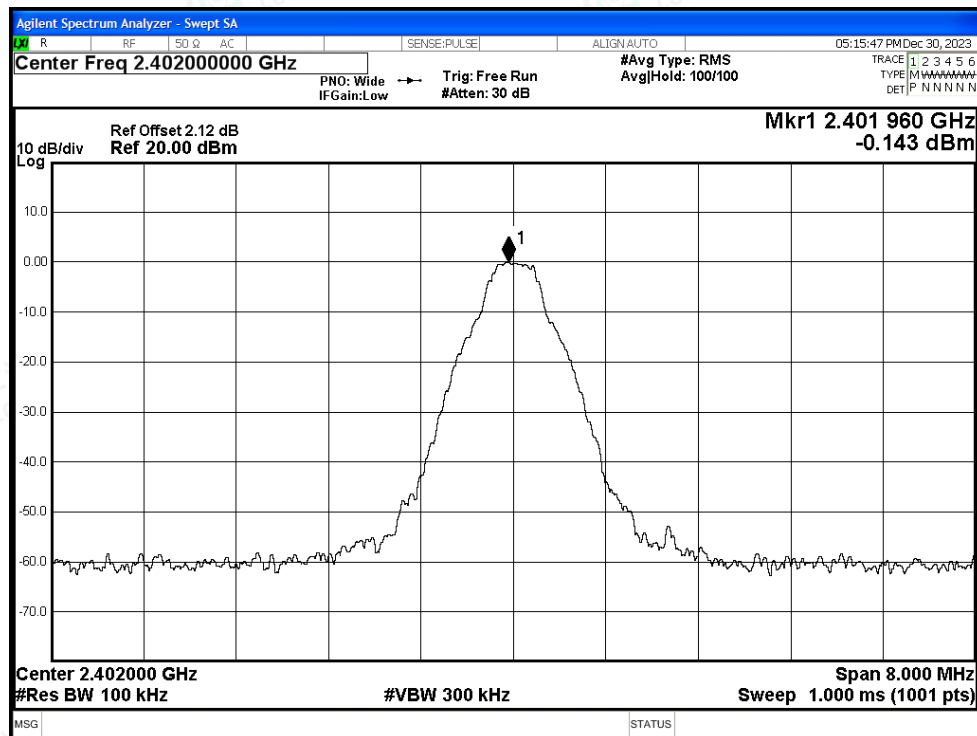
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-56.01	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.1	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-54.79	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.3	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-55.15	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-52.72	-20	Pass



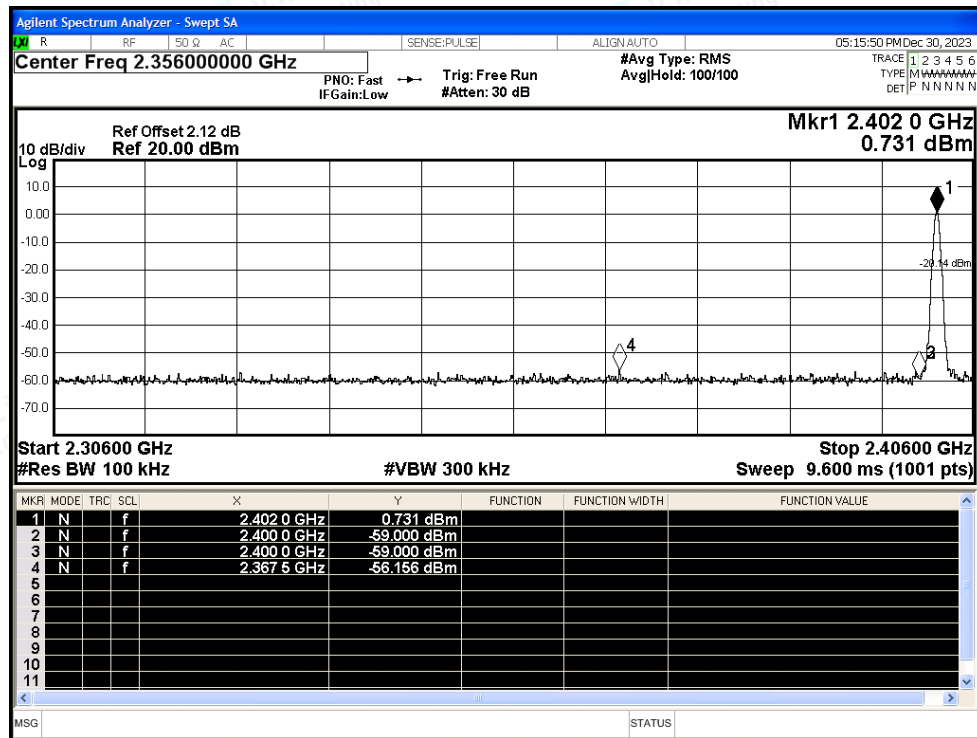


Test Graphs

Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



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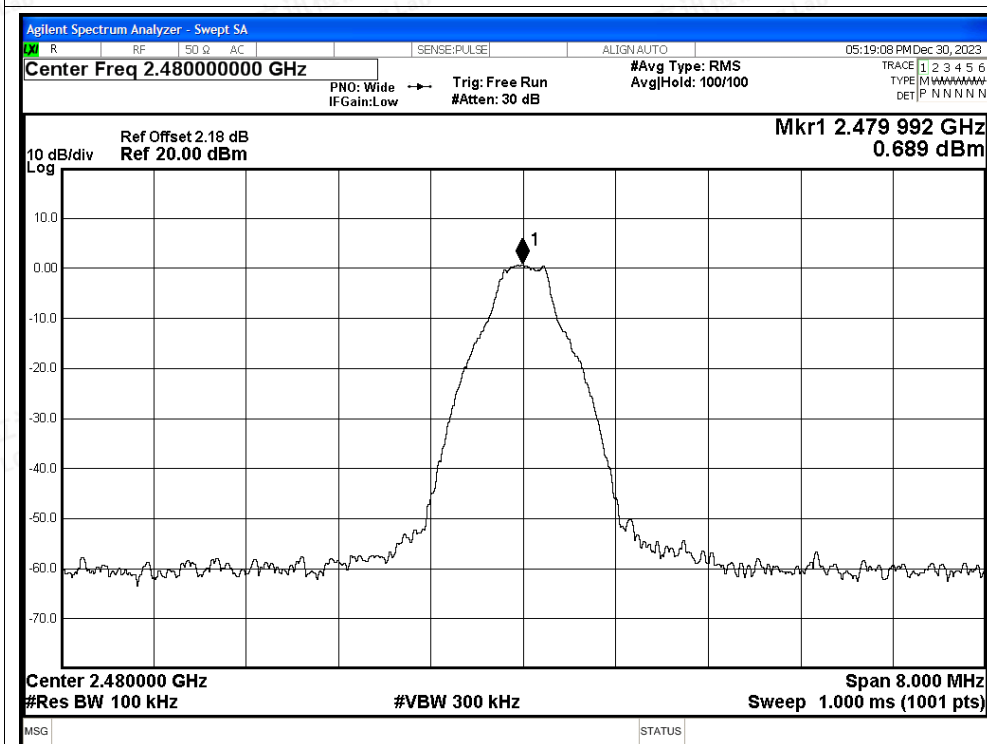
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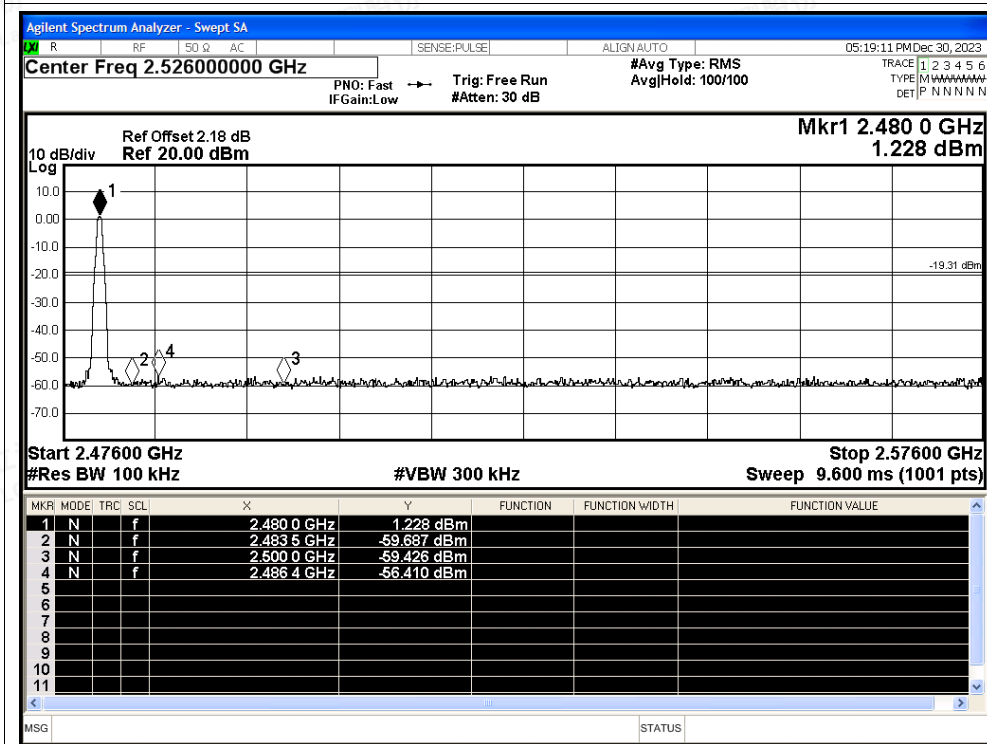
Scan code to check authenticity

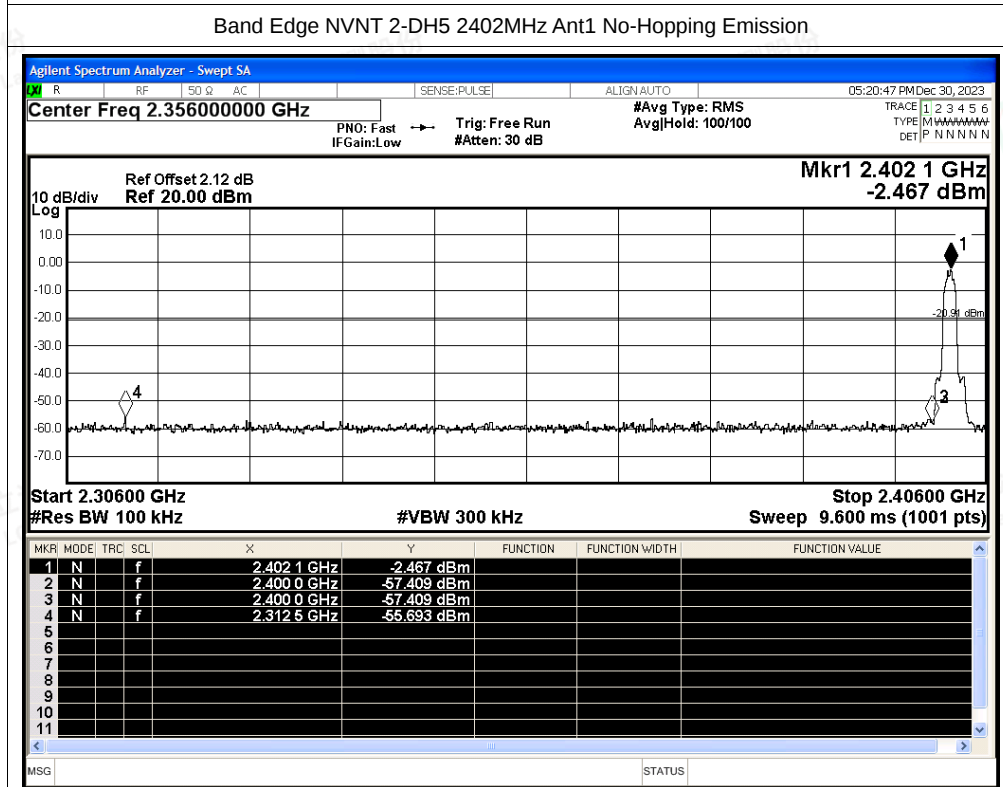
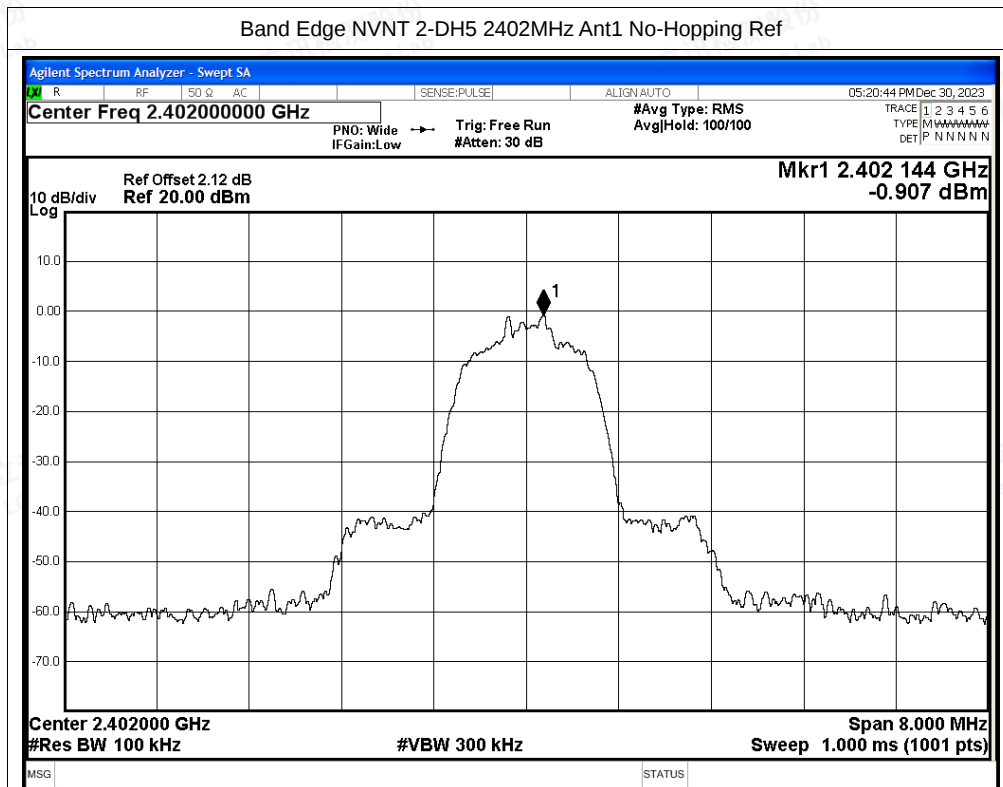


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



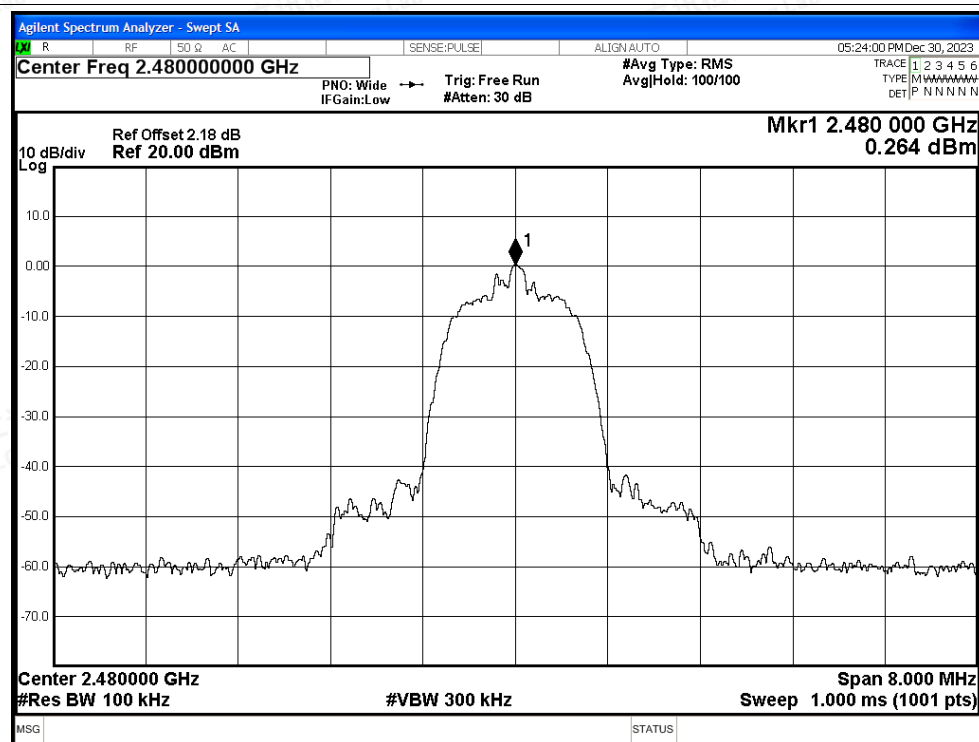
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



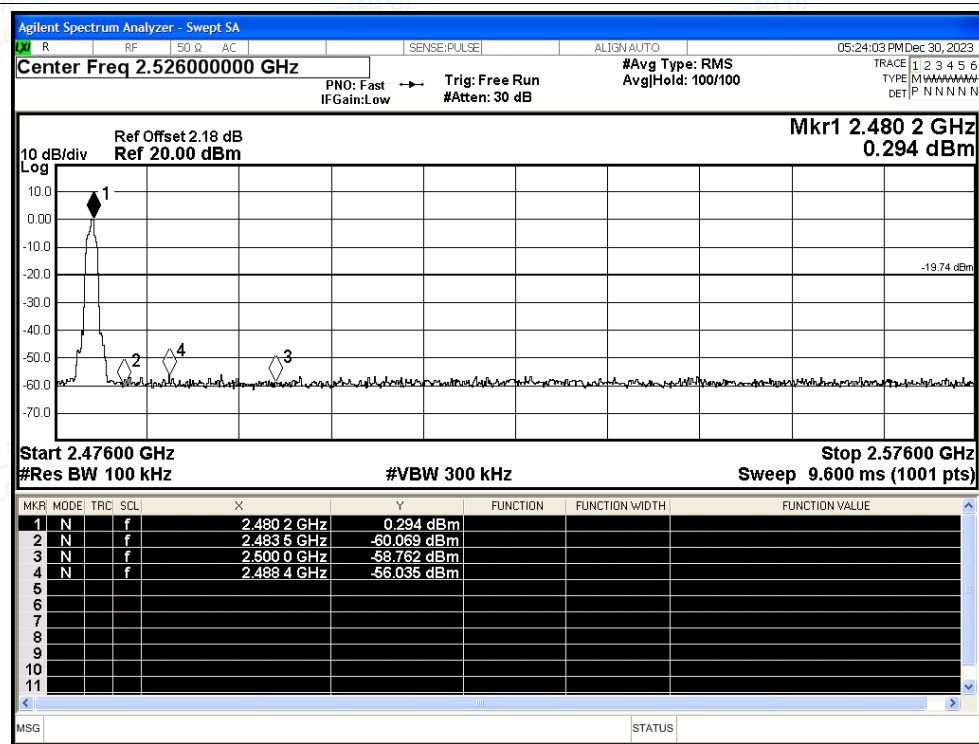


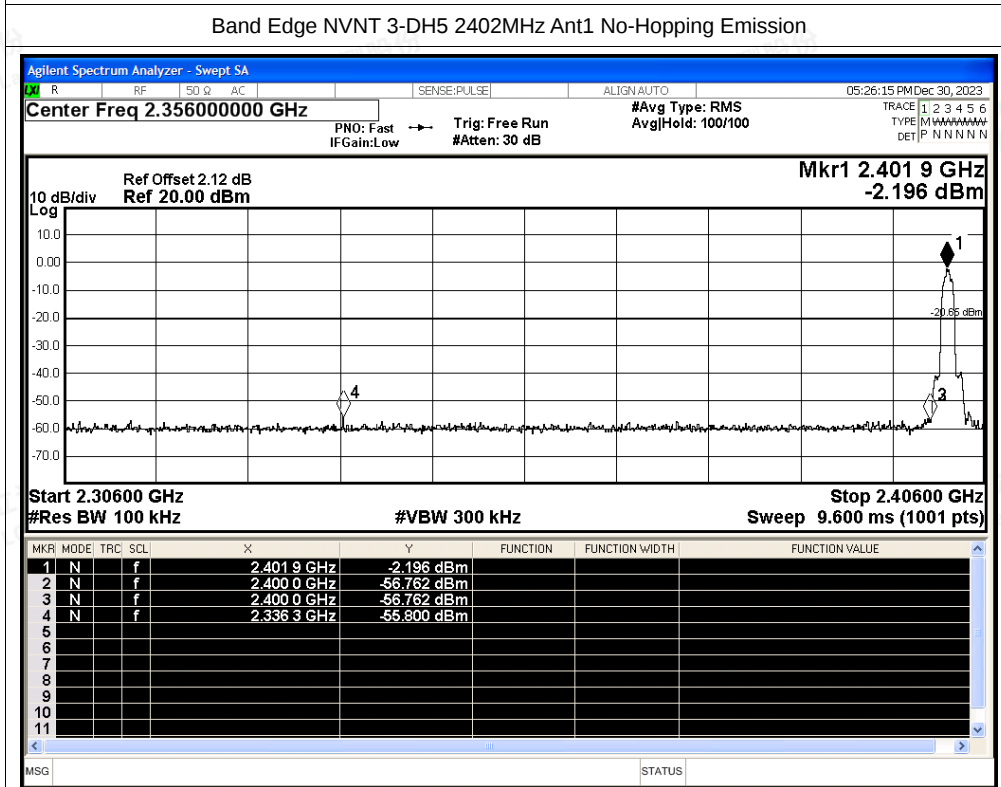
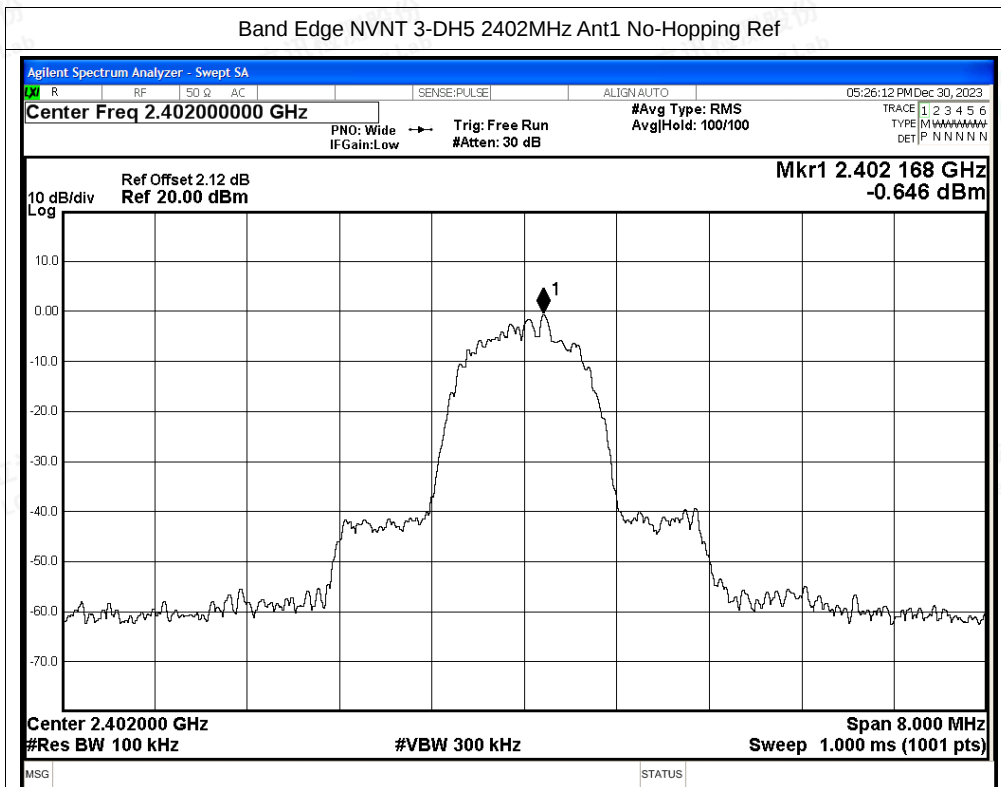


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



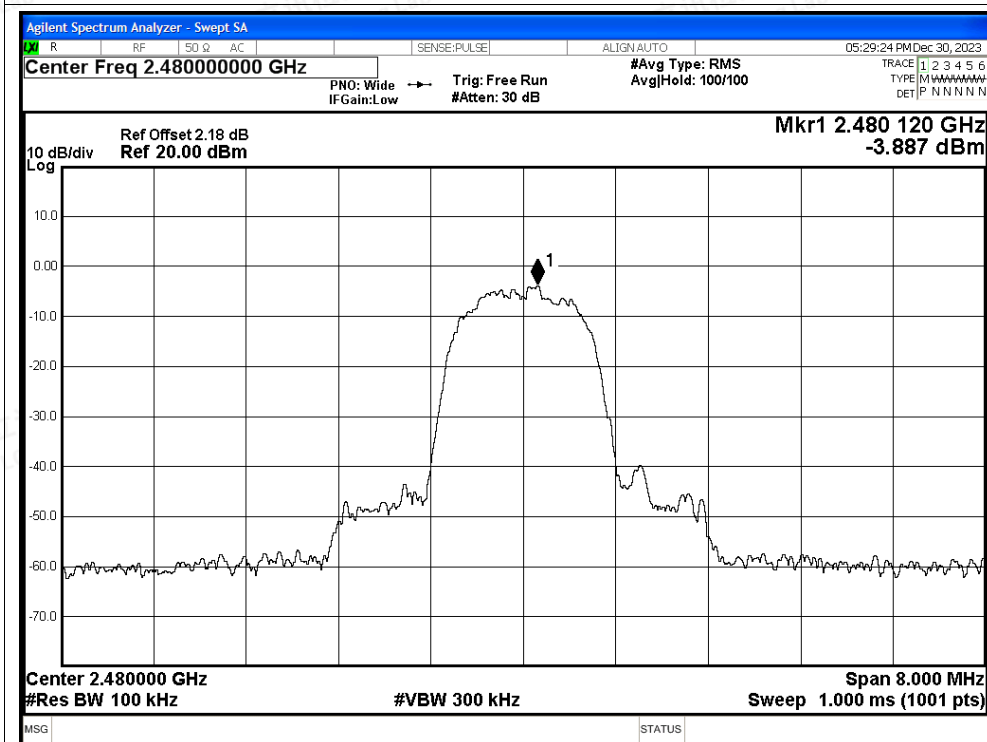
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



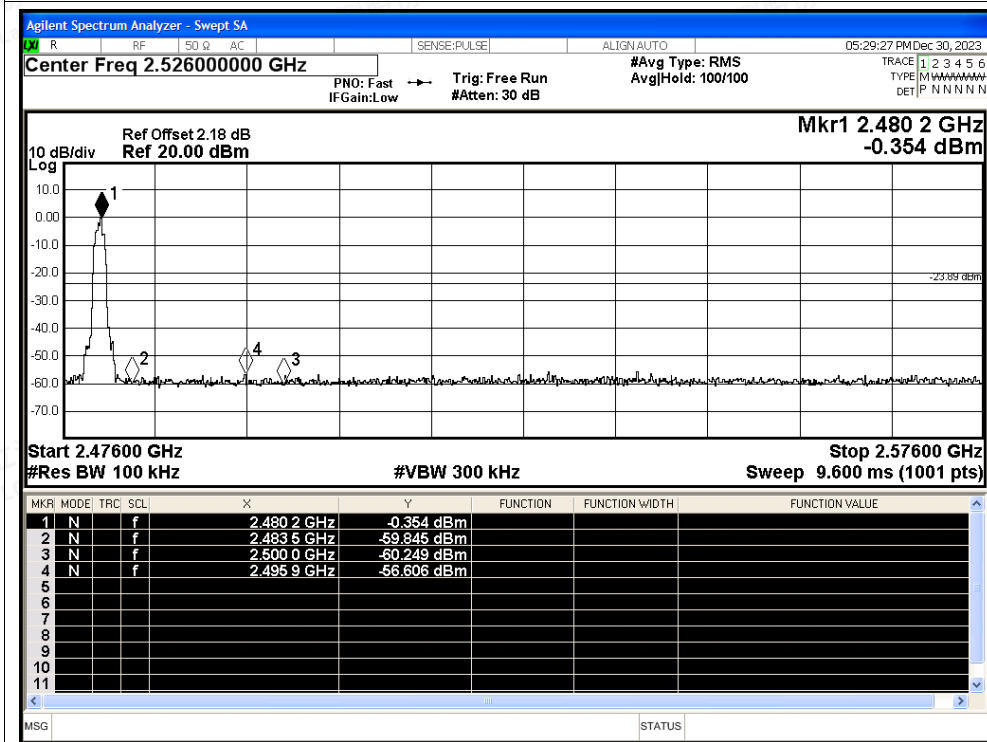




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission





Band Edge(Hopping)

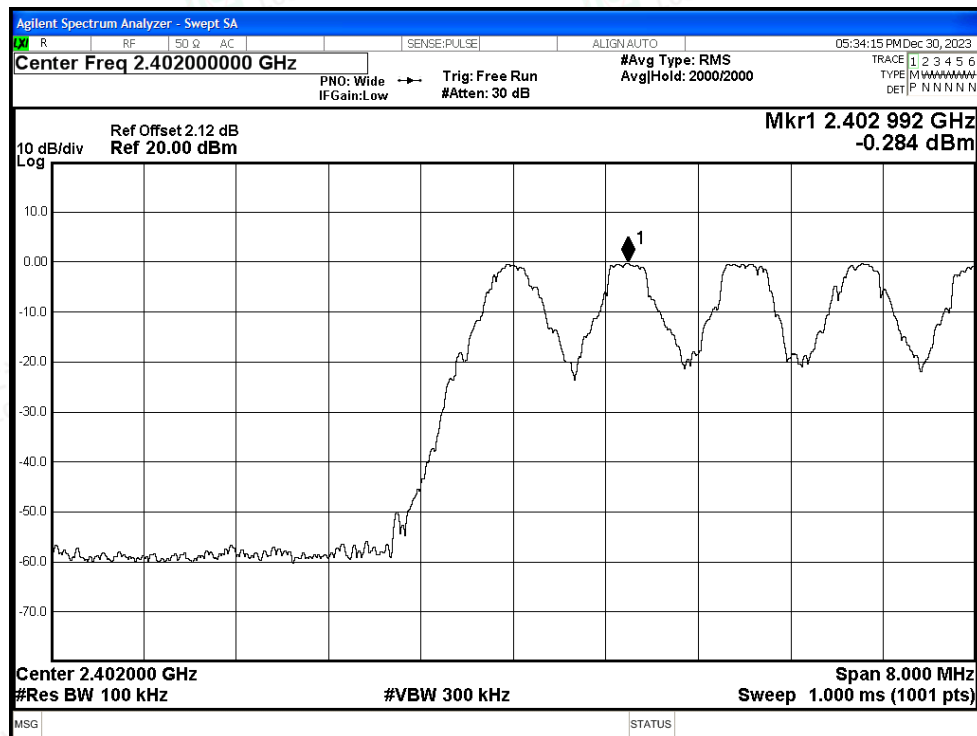
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.83	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.02	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-52.32	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-55.2	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-54.48	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-54.06	-20	Pass



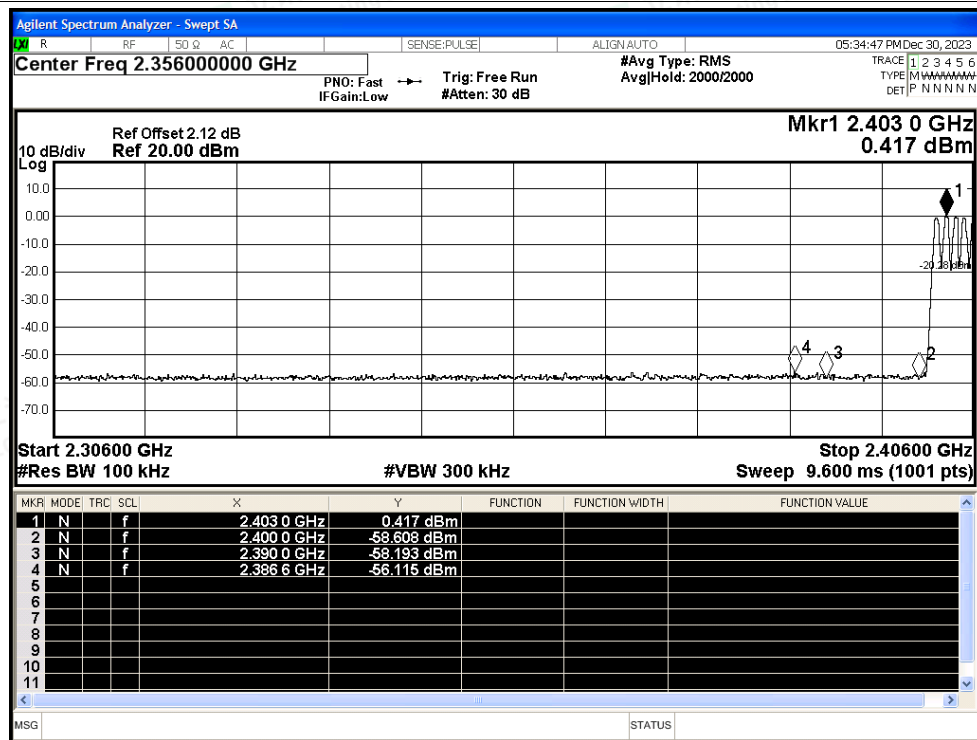


Test Graphs

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

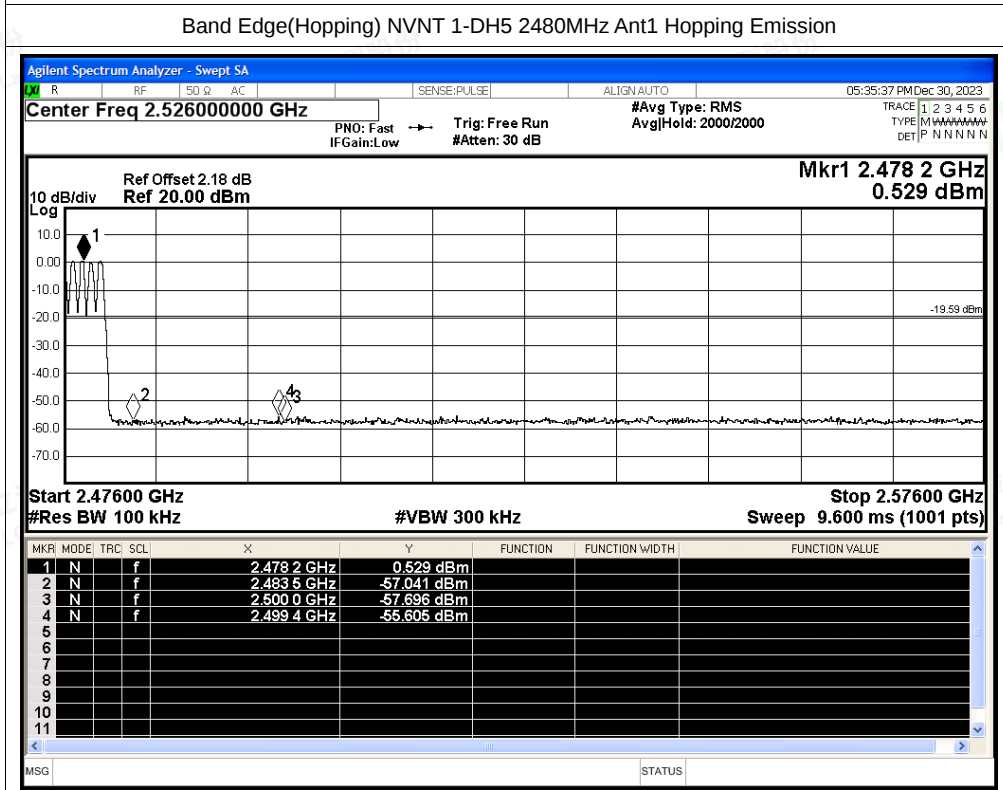
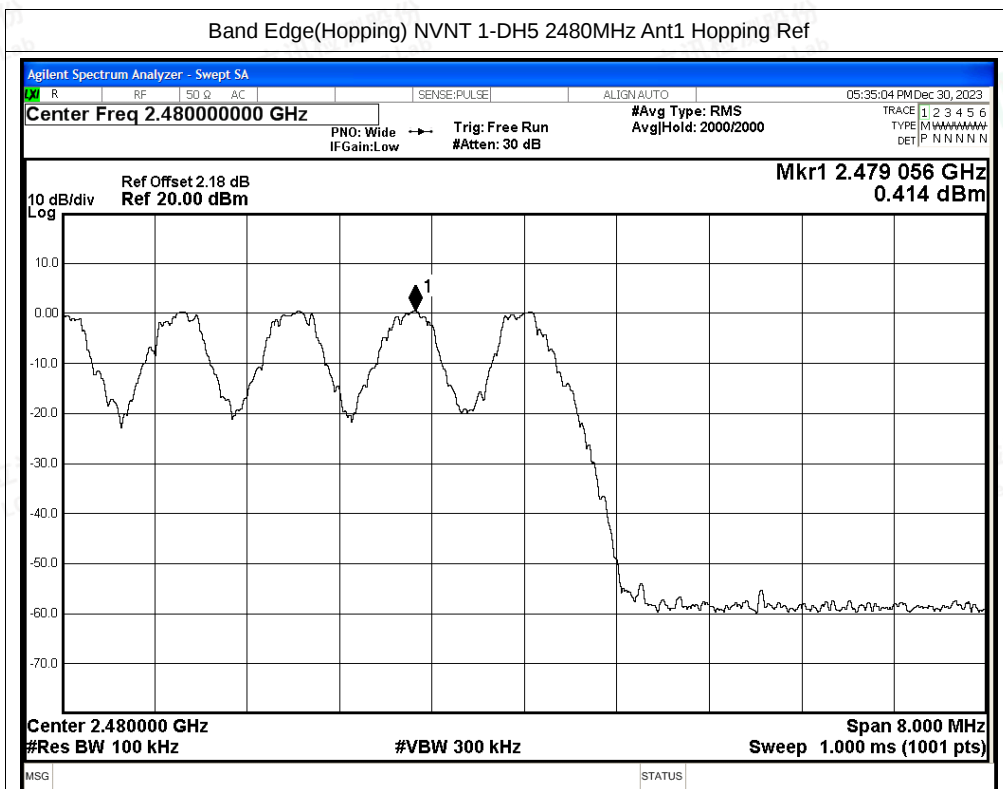


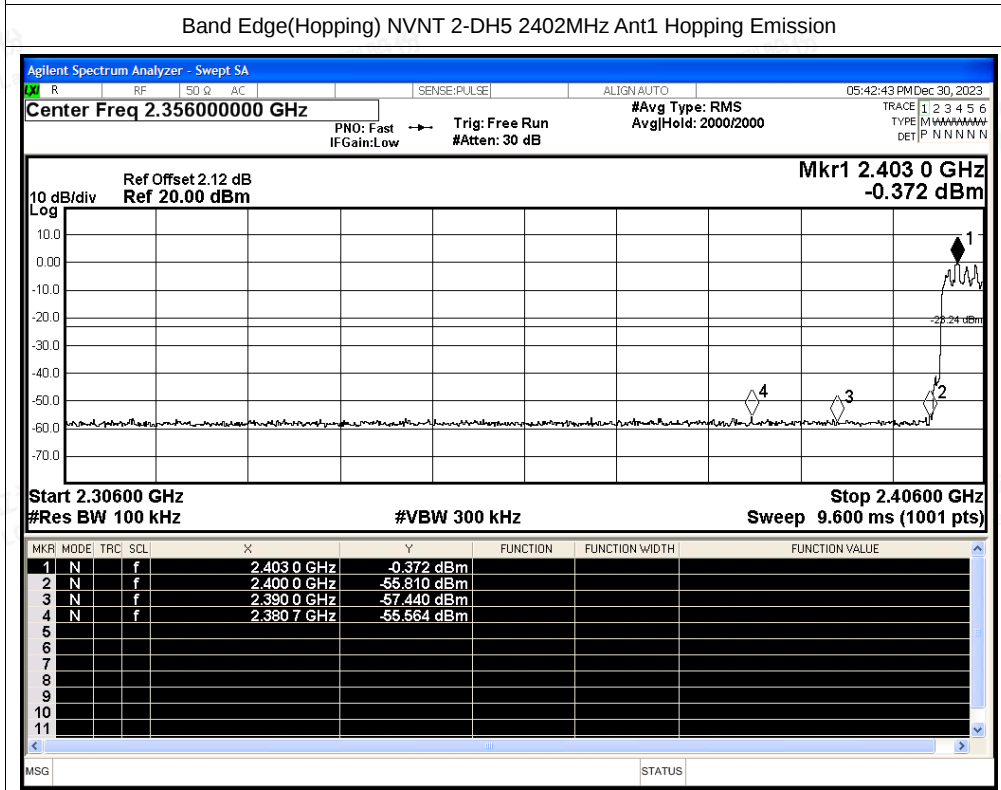
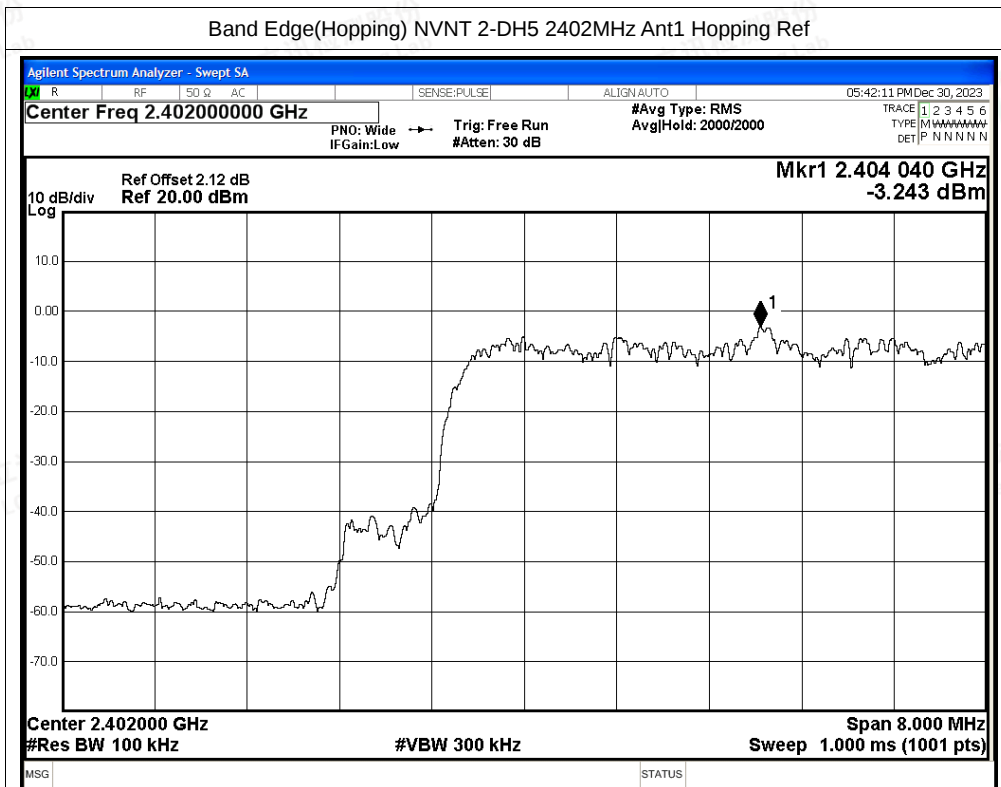
Shenzhen LCS Compliance Testing Laboratory Ltd.

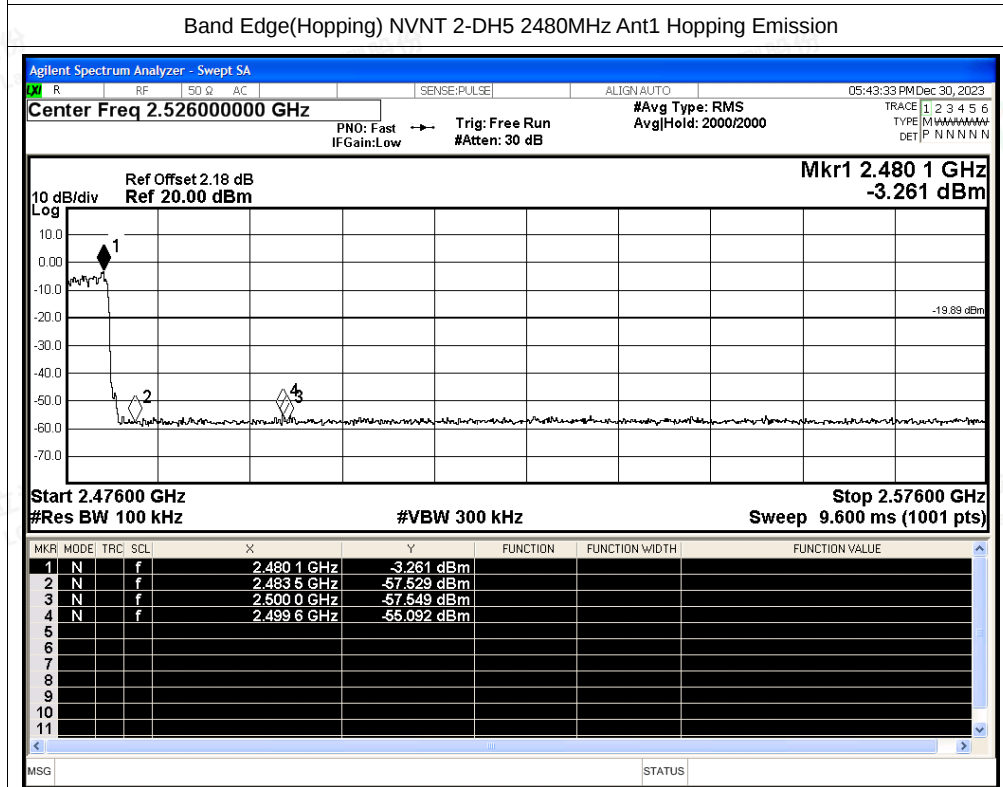
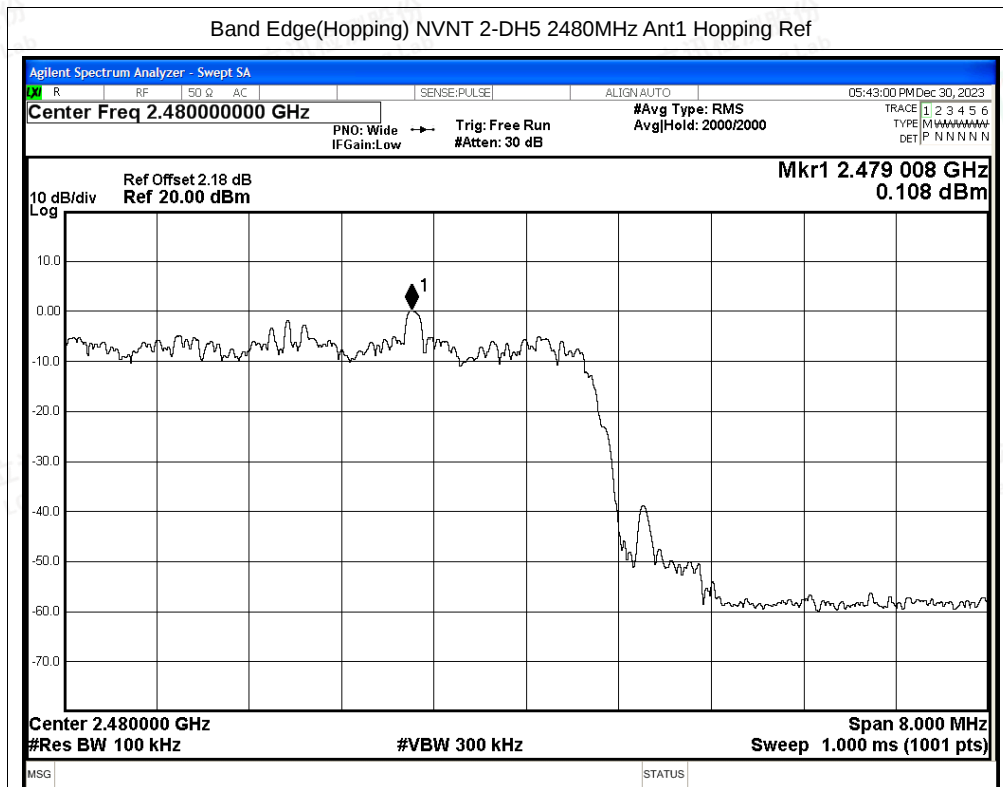
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

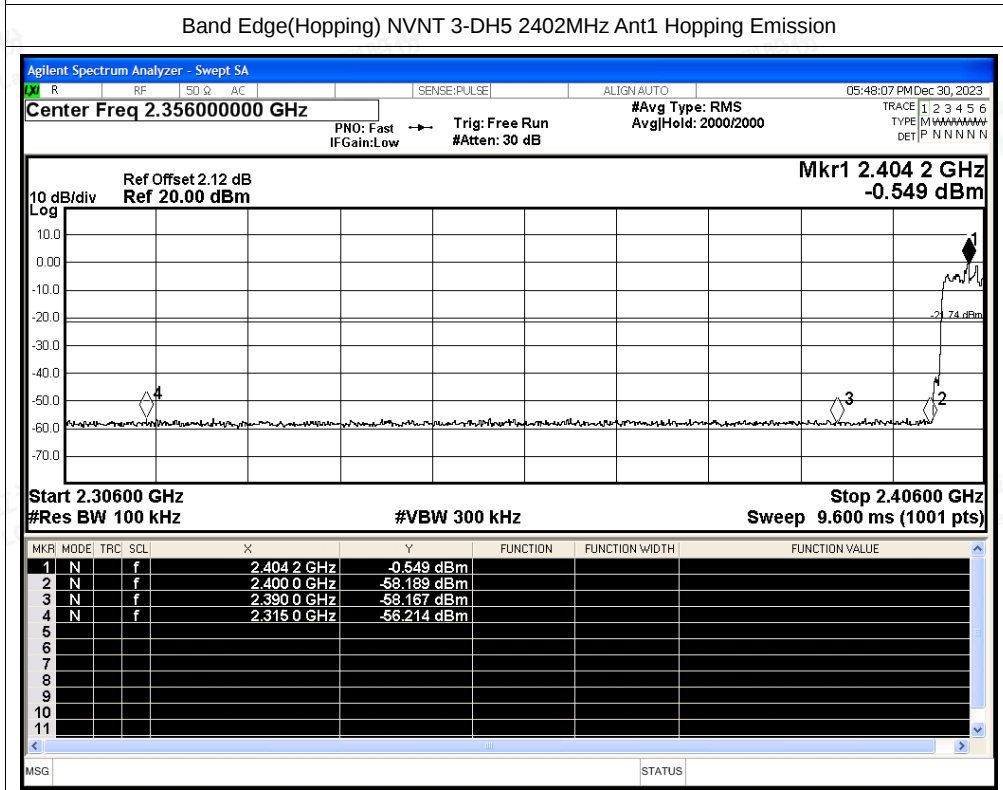
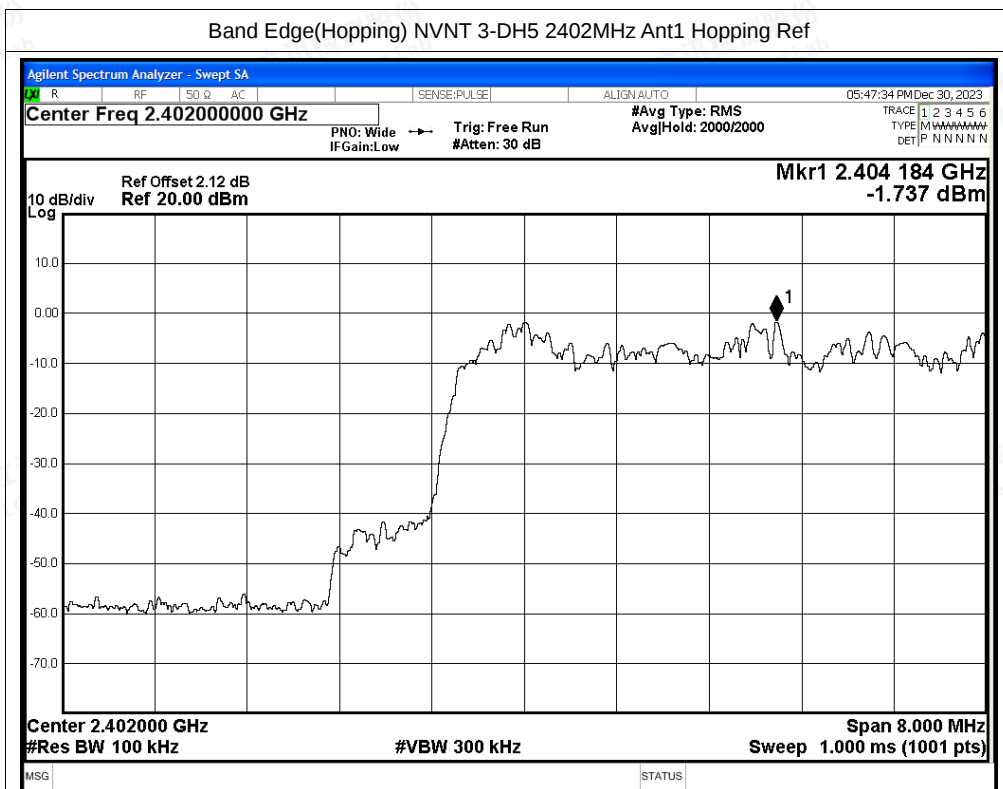
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

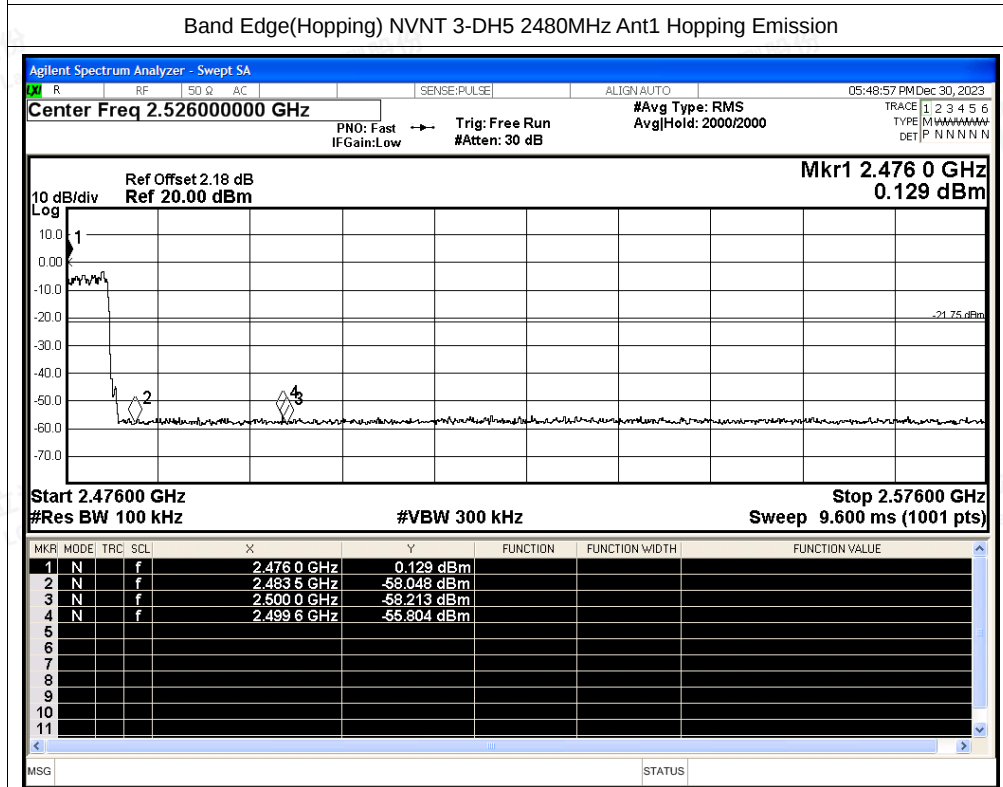
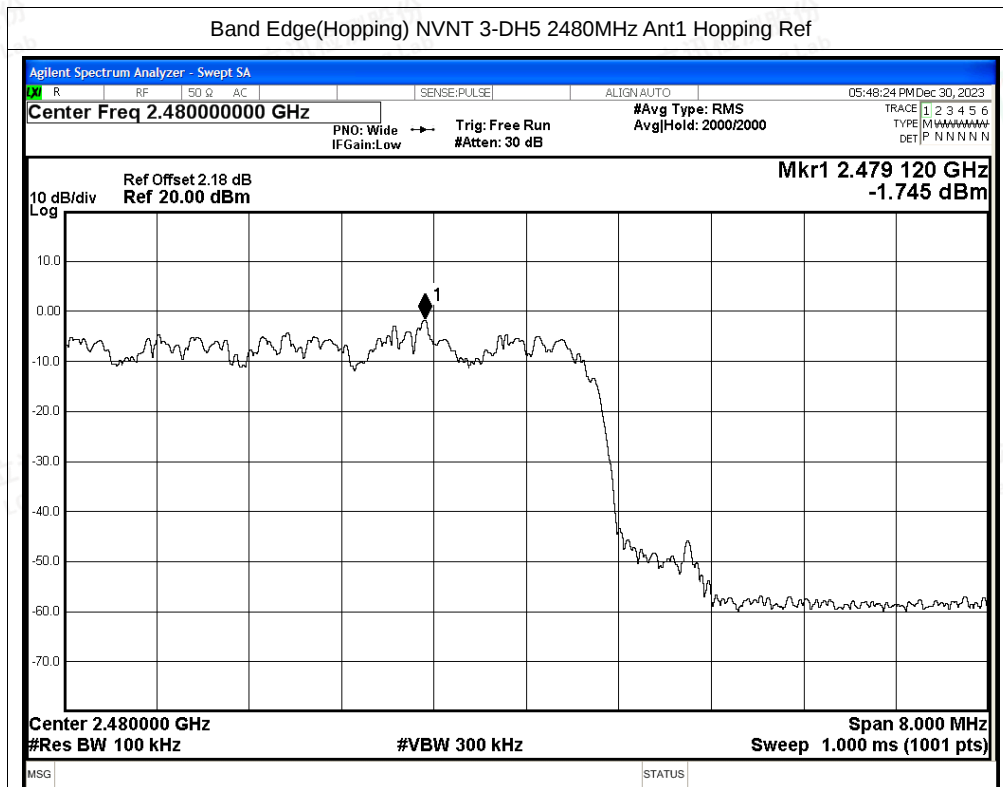
Scan code to check authenticity













A.7 Conducted RF Spurious Emission

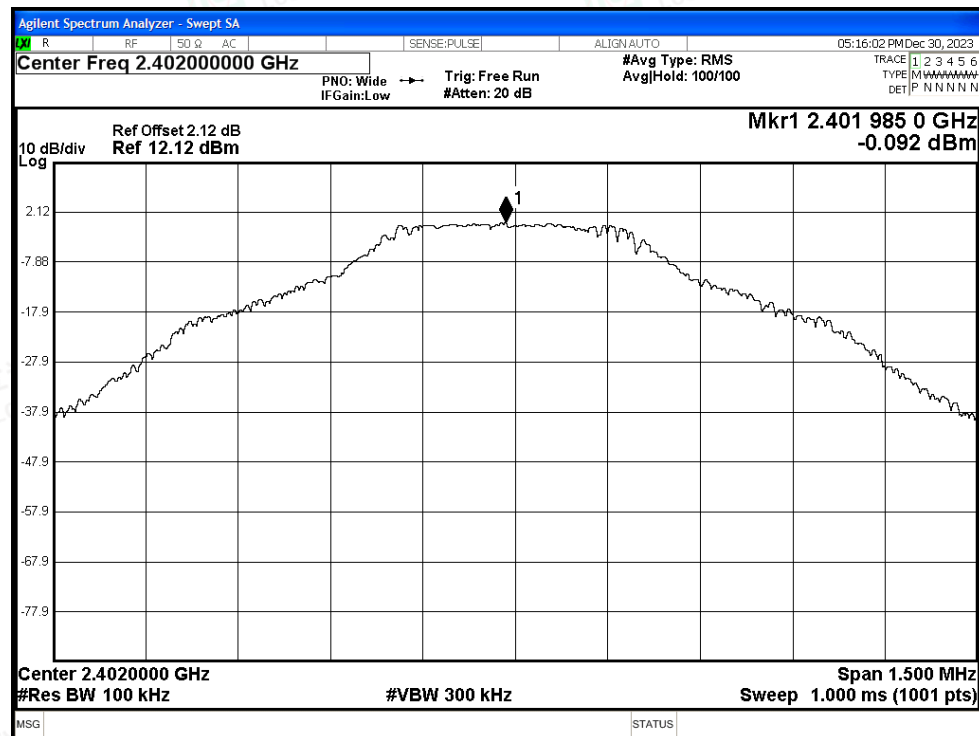
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.48	-20	Pass
NVNT	1-DH5	2441	Ant1	-55	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.75	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.94	-20	Pass
NVNT	2-DH5	2441	Ant1	-54.09	-20	Pass
NVNT	2-DH5	2480	Ant1	-55.07	-20	Pass
NVNT	3-DH5	2402	Ant1	-53.47	-20	Pass
NVNT	3-DH5	2441	Ant1	-54.12	-20	Pass
NVNT	3-DH5	2480	Ant1	-55.12	-20	Pass



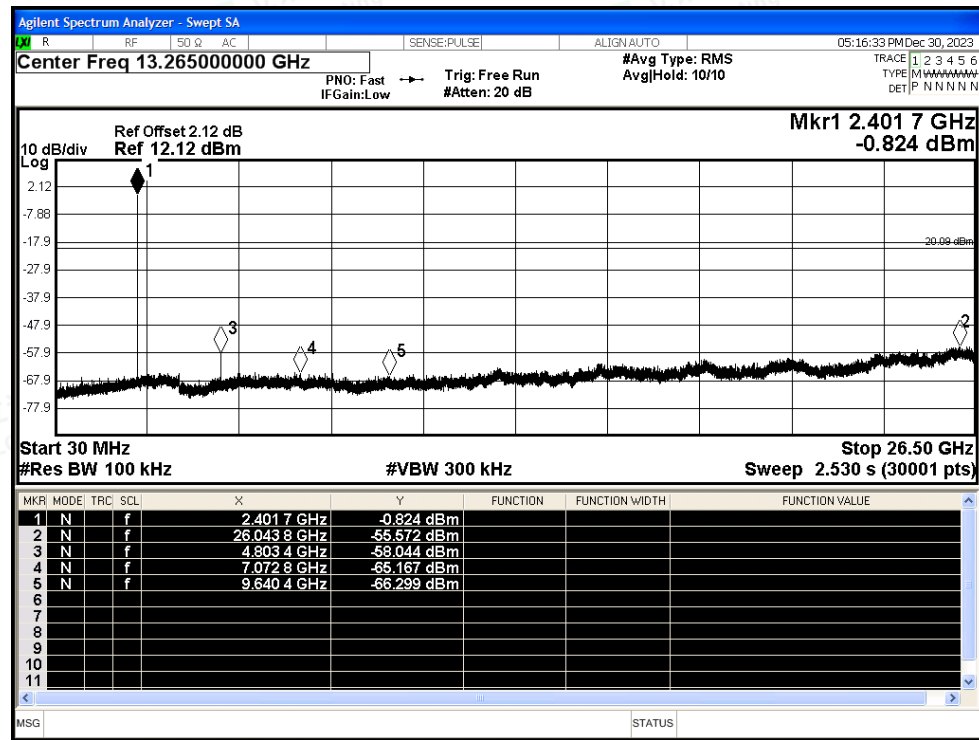


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

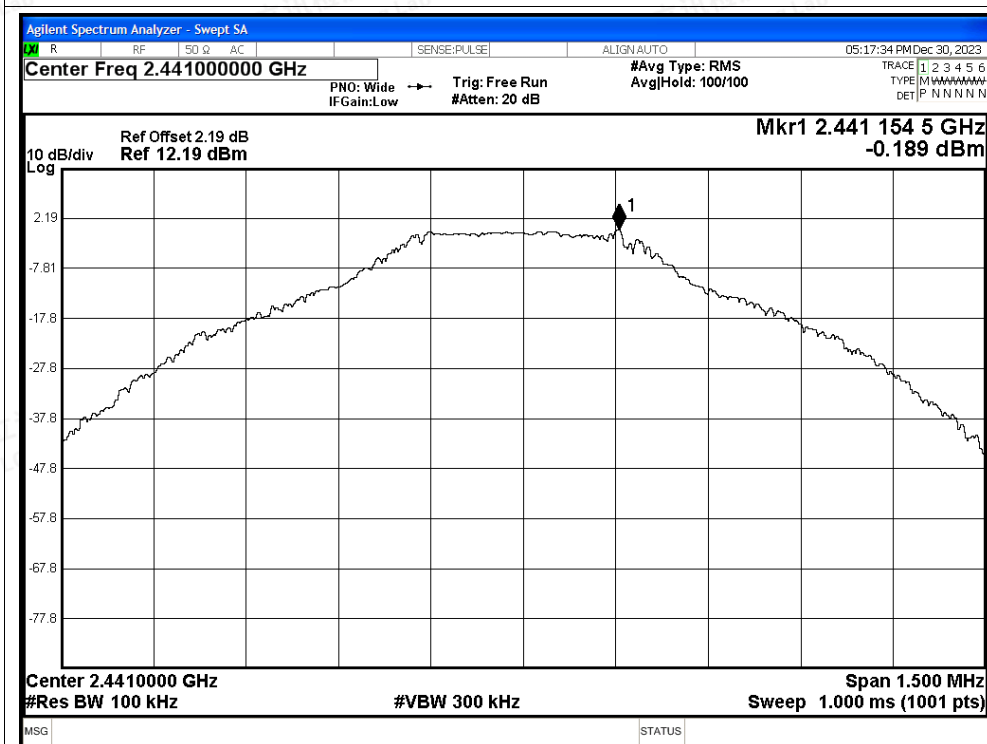


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

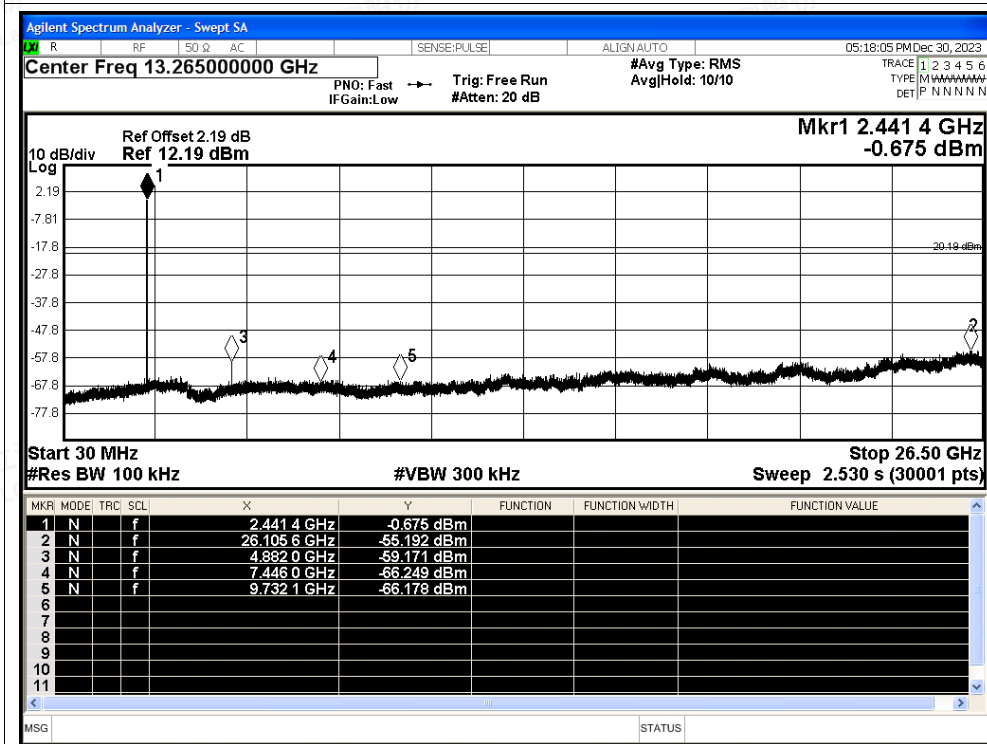




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

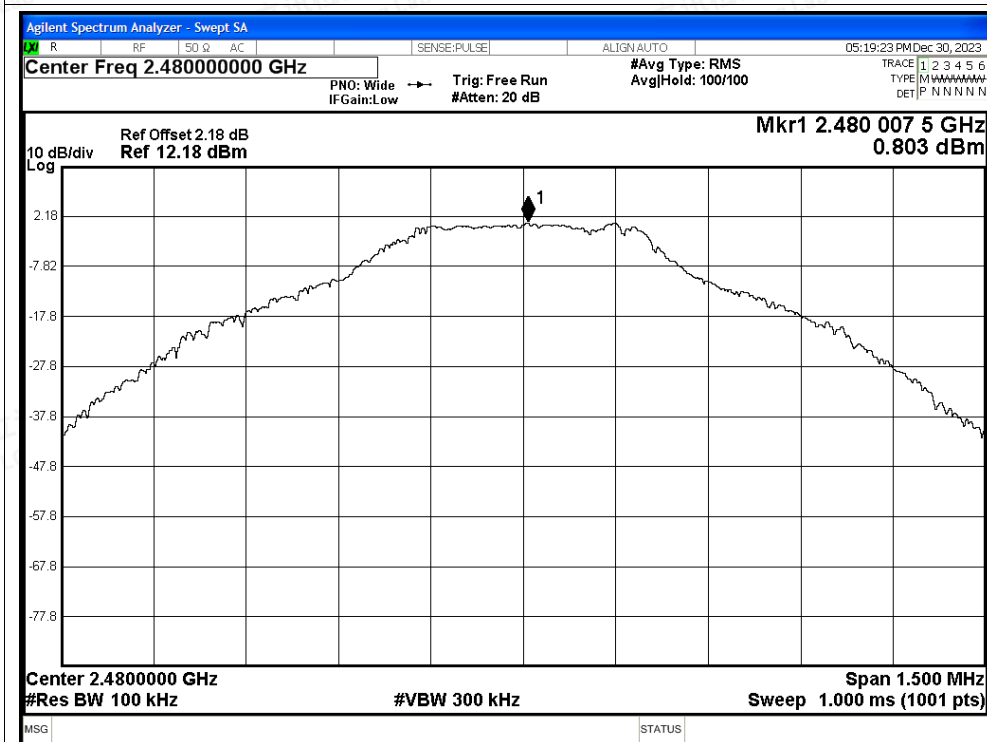


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

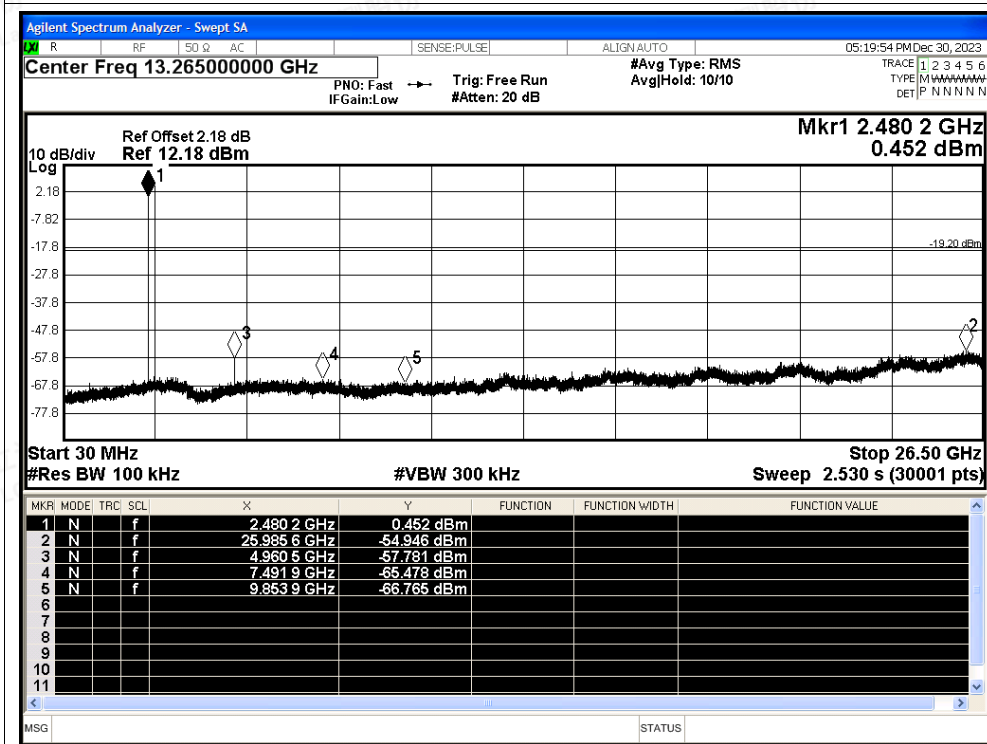




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

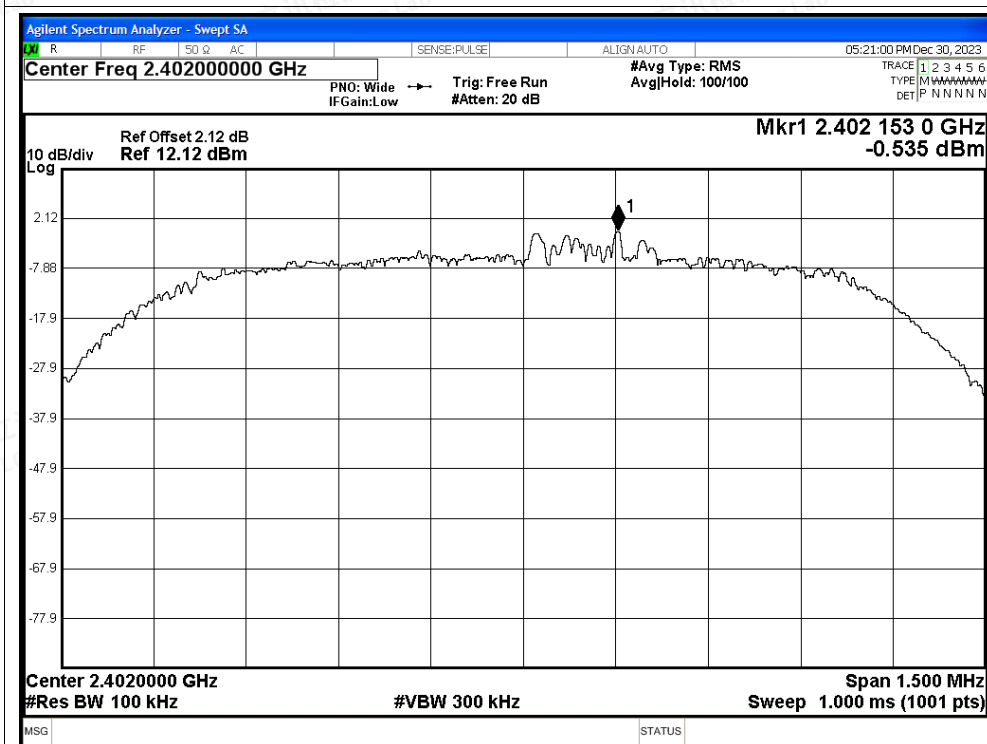


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

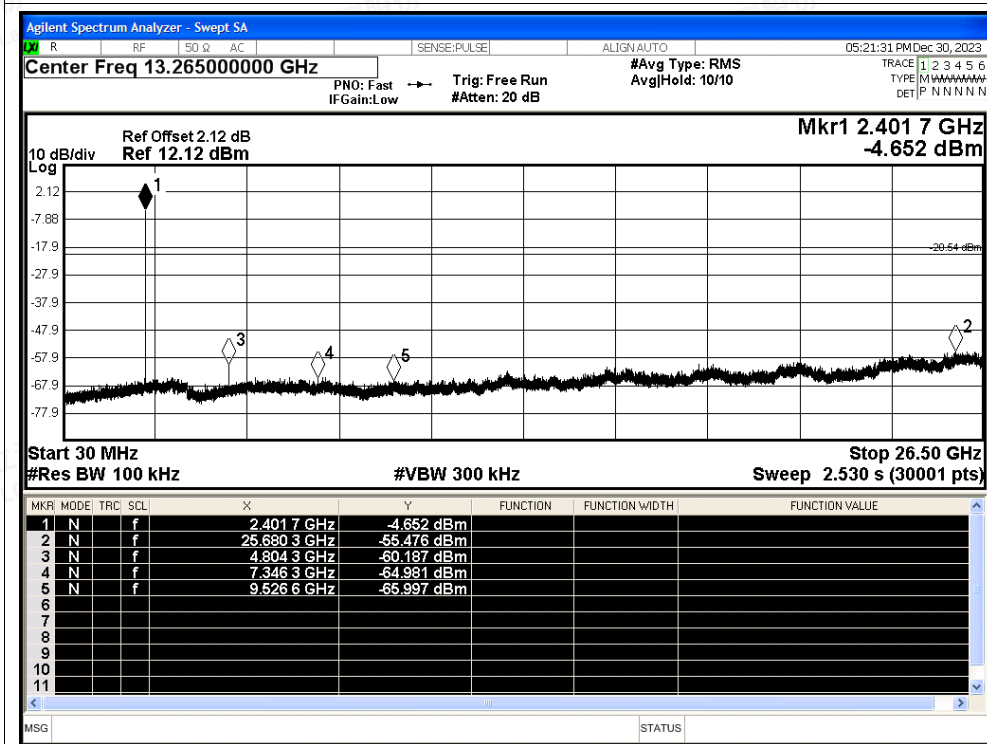




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

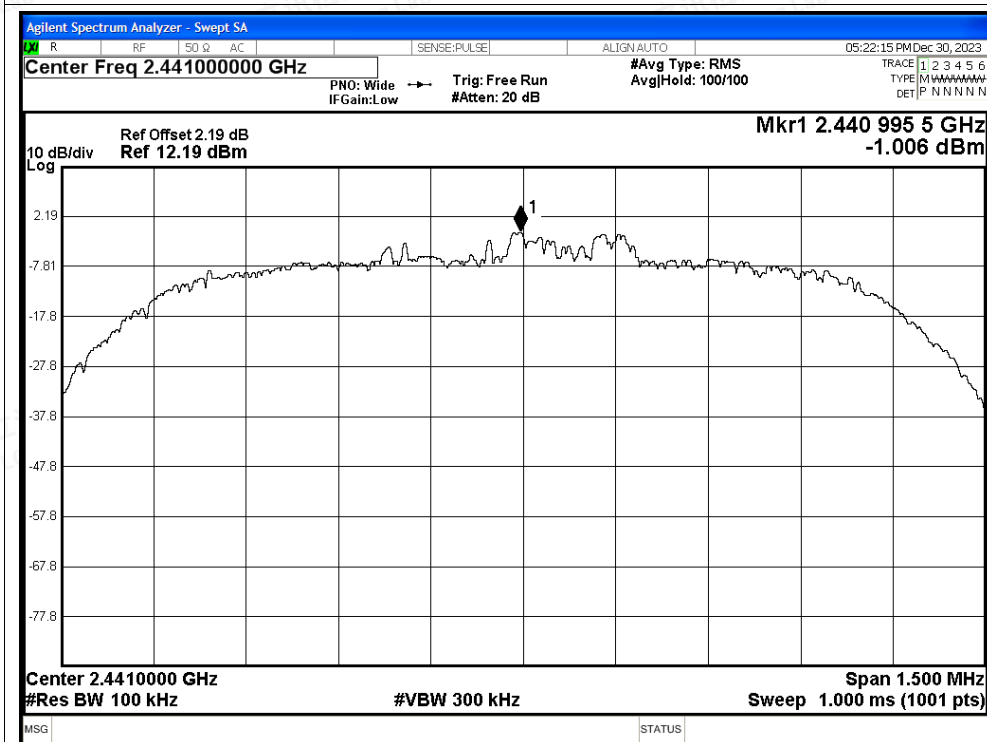


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

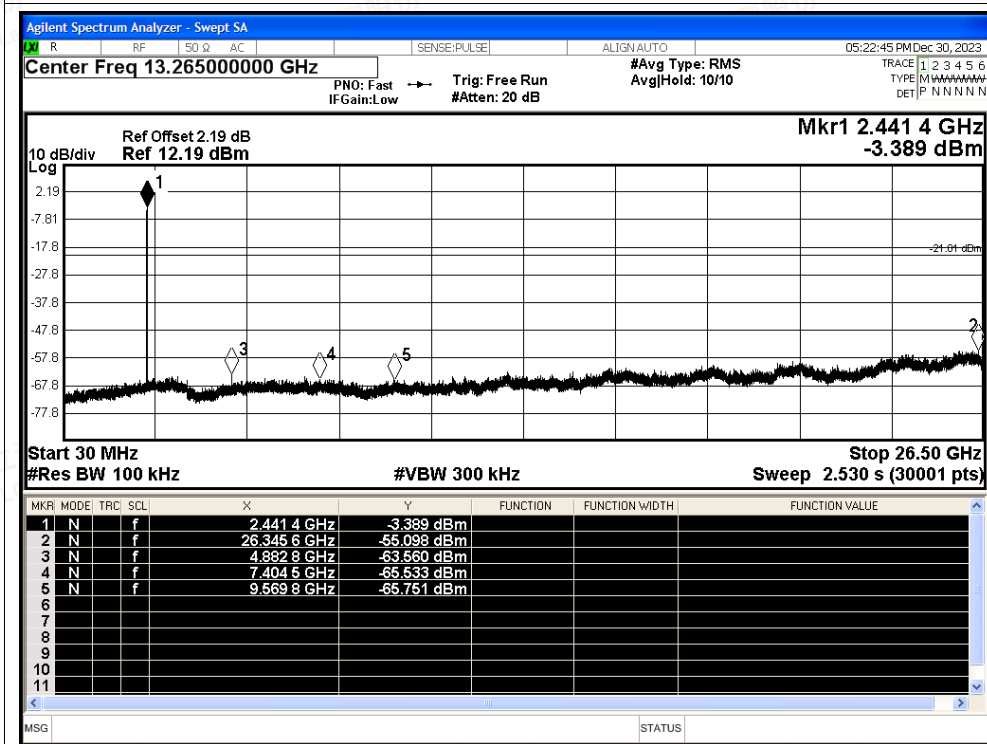




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

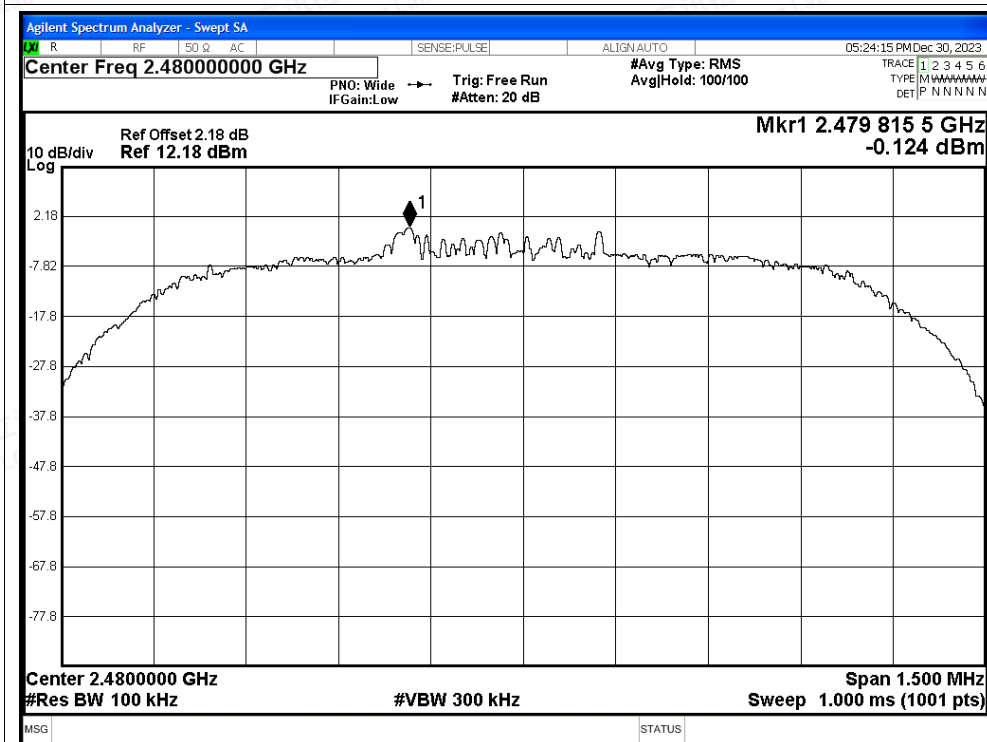


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

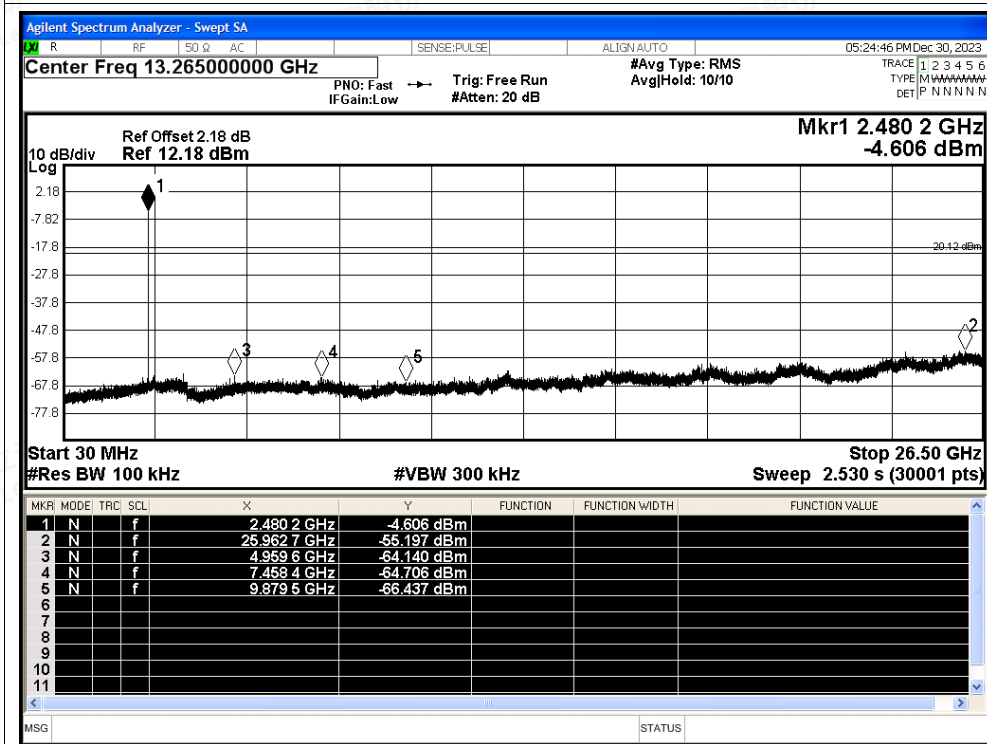




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref

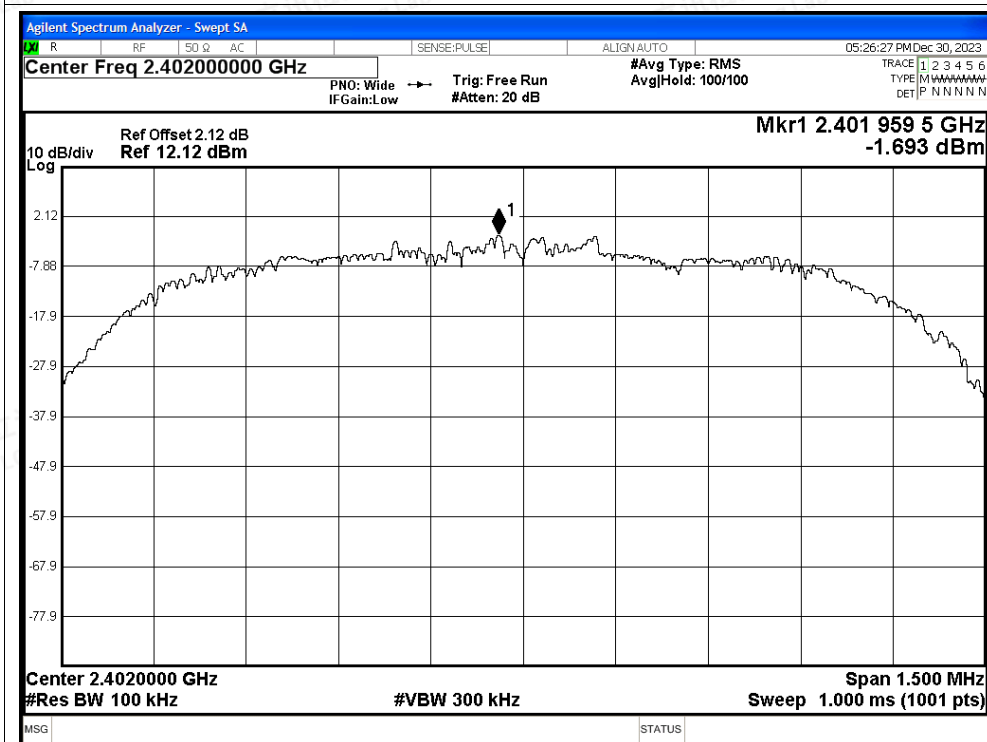


Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission

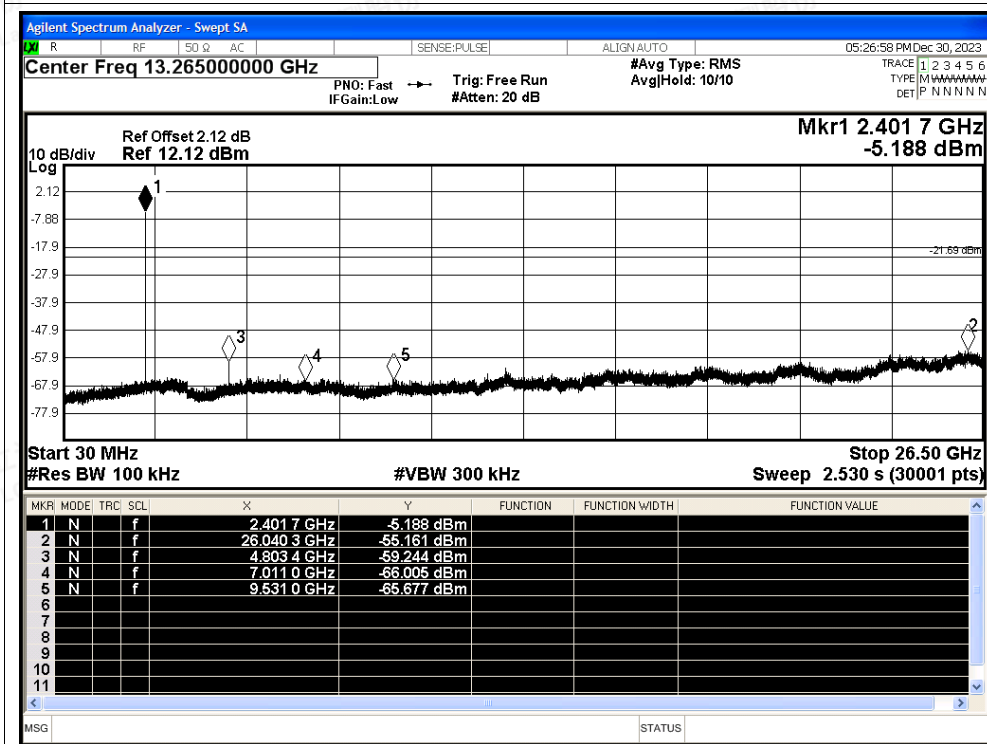




Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref

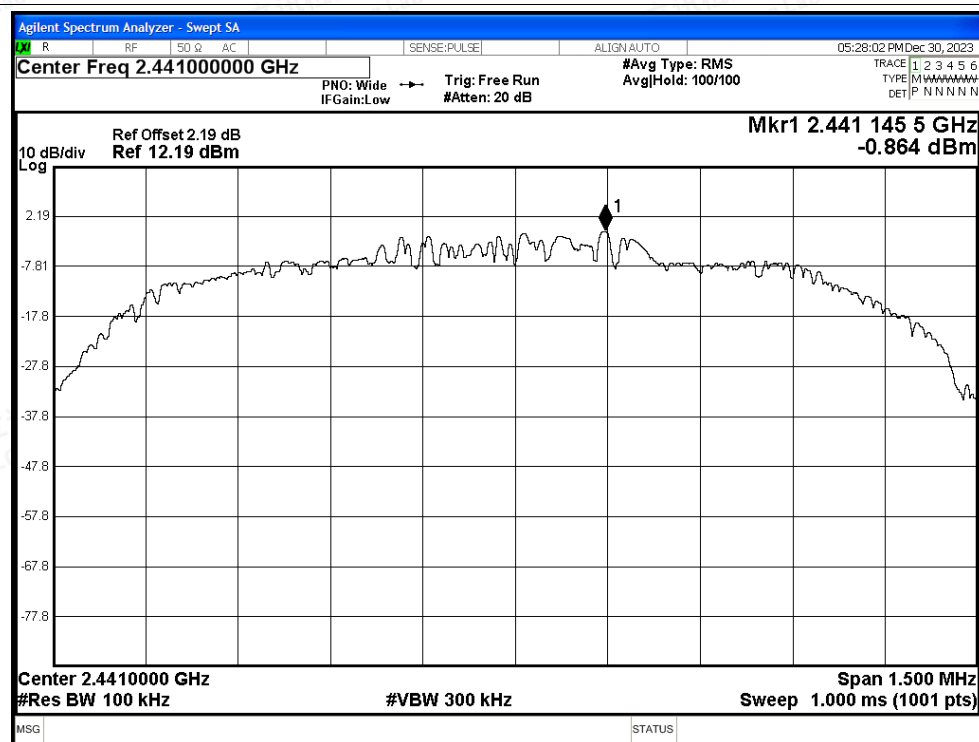


Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission

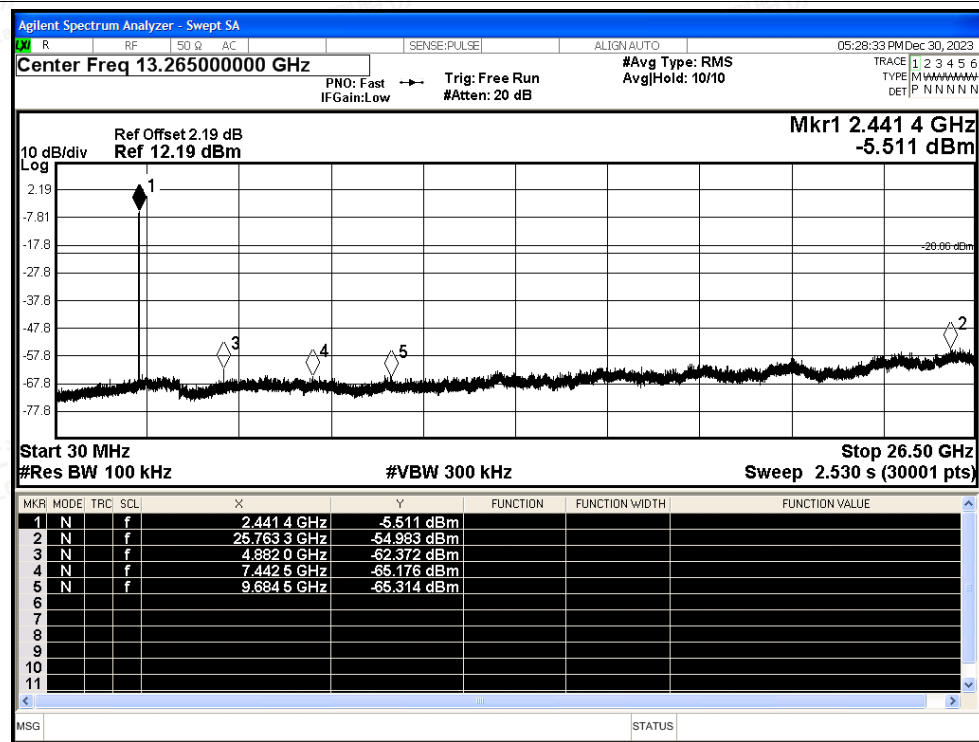




Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref

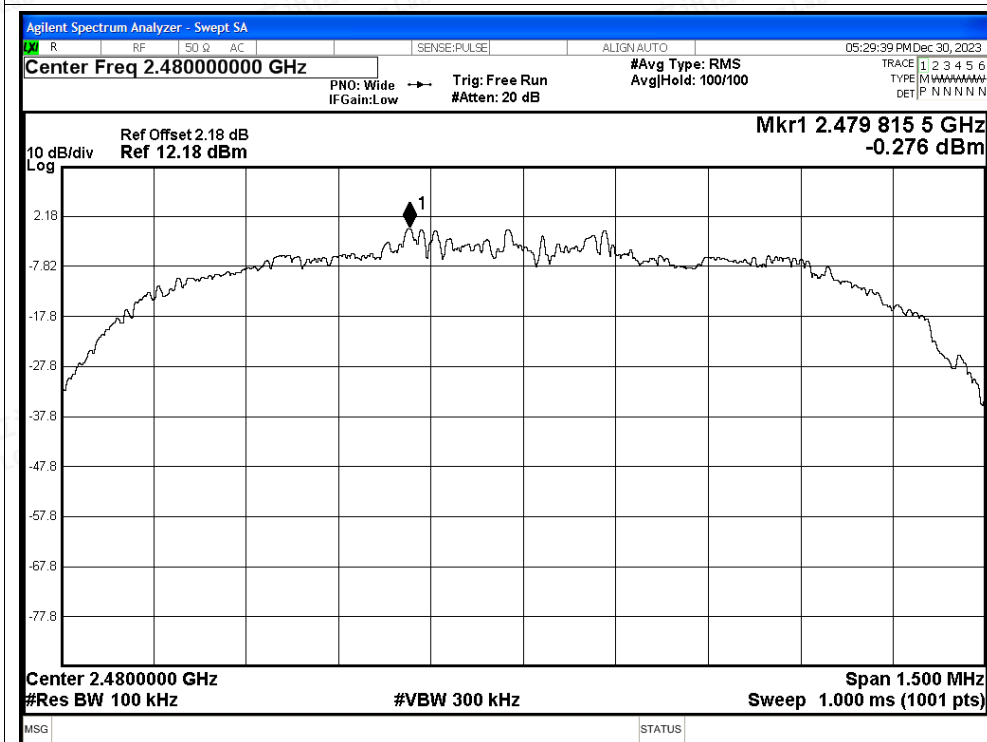


Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission

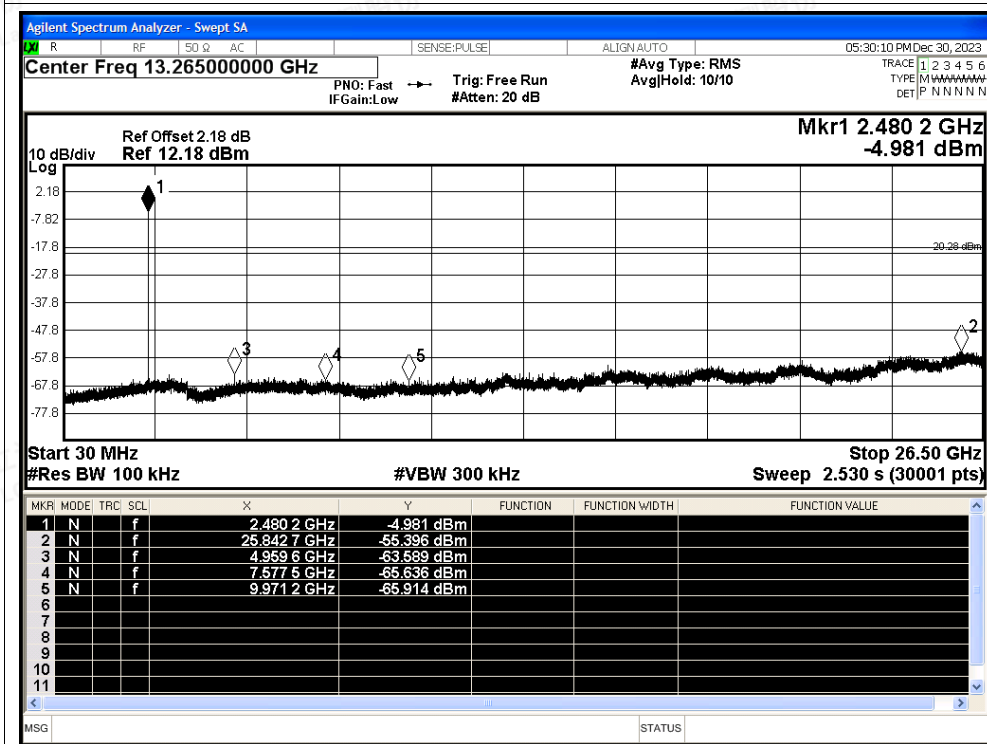




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





A.8 Duty Cycle

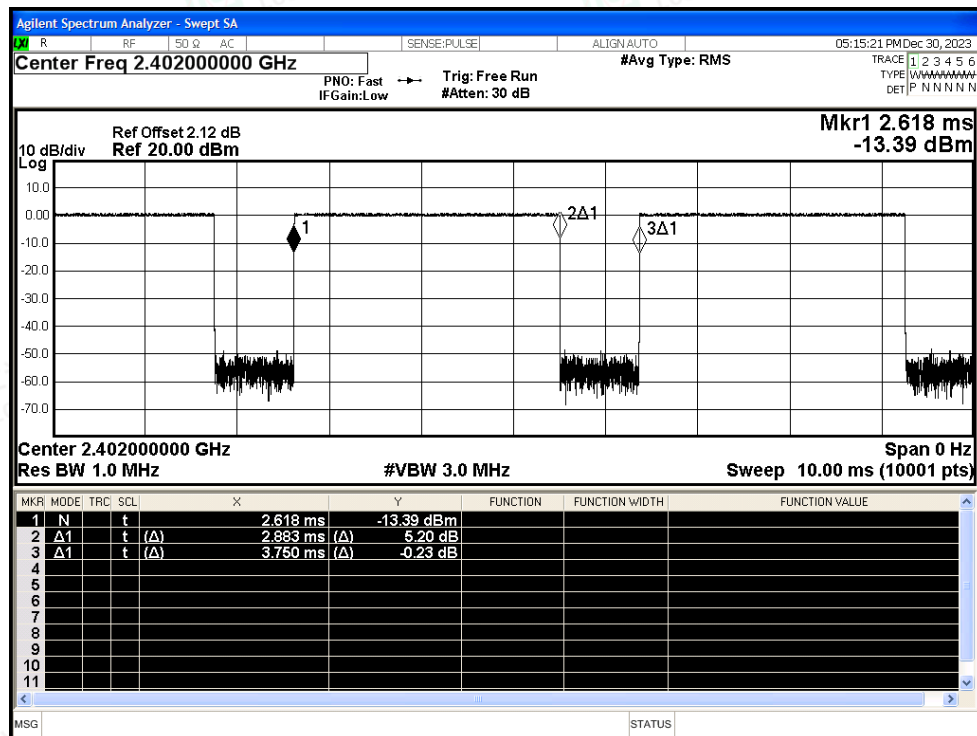
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2441	Ant1	76.88	1.14	0.35
NVNT	1-DH5	2480	Ant1	76.88	1.14	0.35
NVNT	2-DH5	2402	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.99	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.01	1.13	0.35



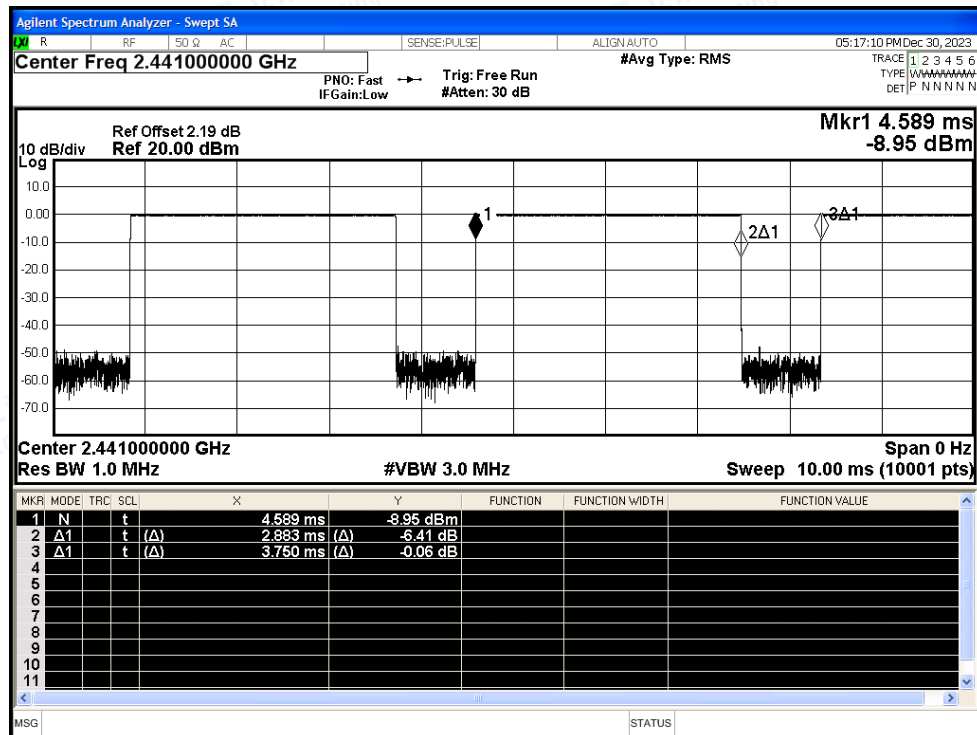


Test Graphs

Duty Cycle NVNT 1-DH5 2402MHz Ant1

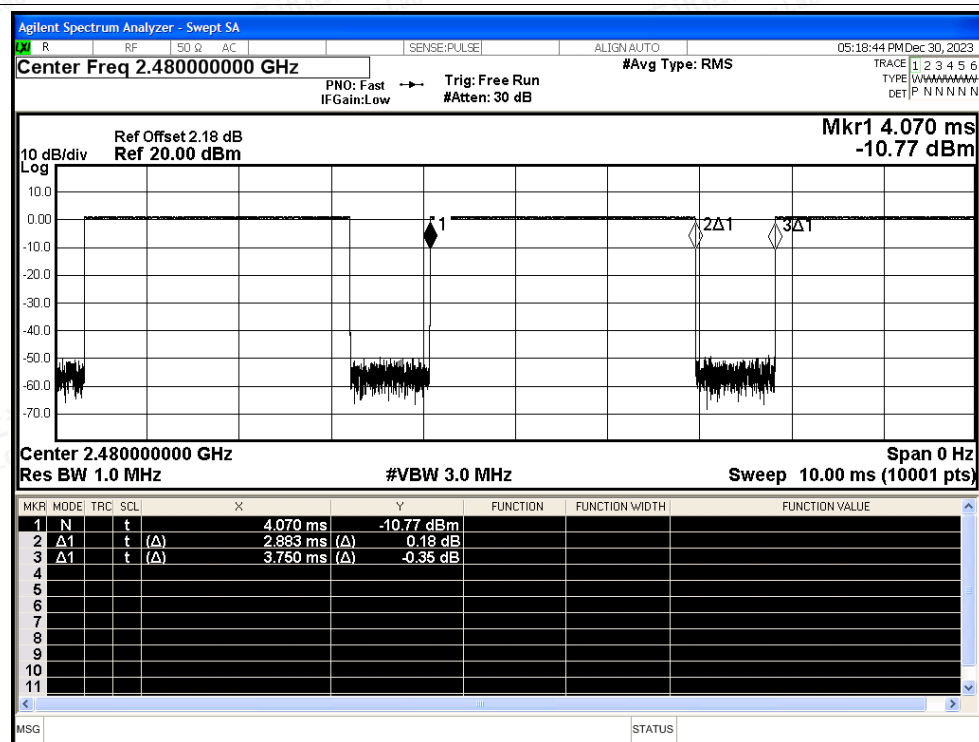


Duty Cycle NVNT 1-DH5 2441MHz Ant1

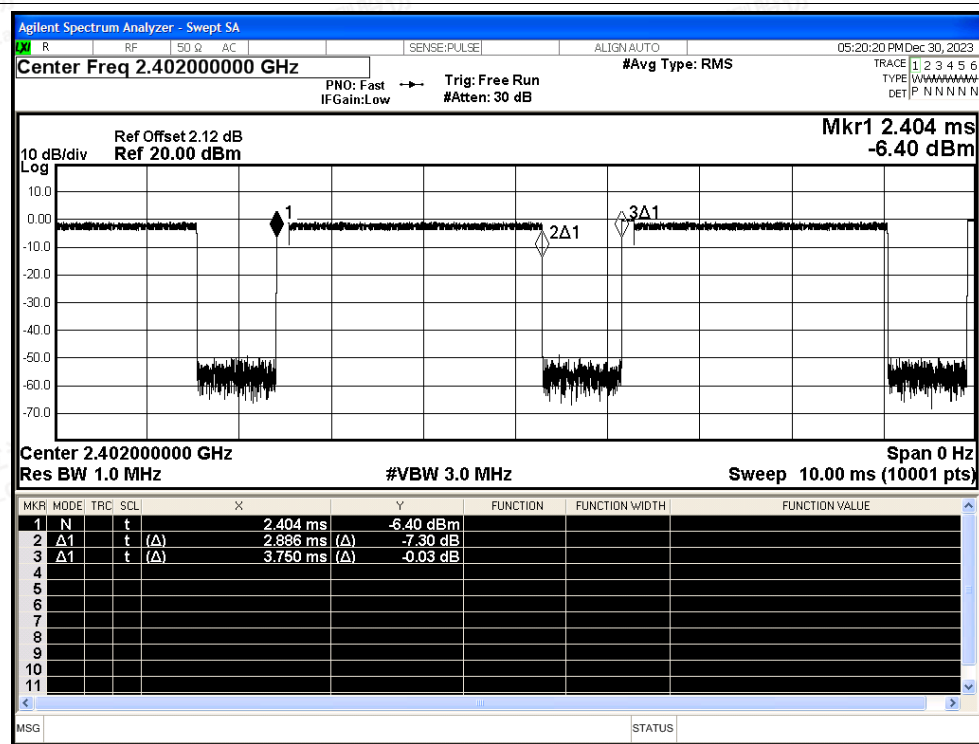




Duty Cycle NVNT 1-DH5 2480MHz Ant1

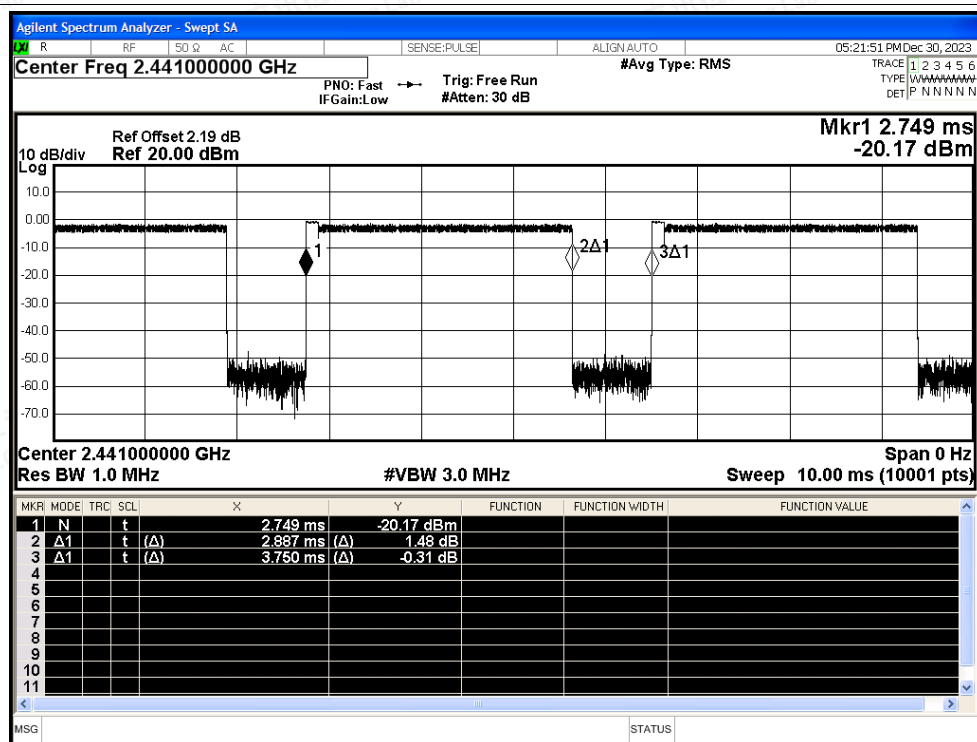


Duty Cycle NVNT 2-DH5 2402MHz Ant1

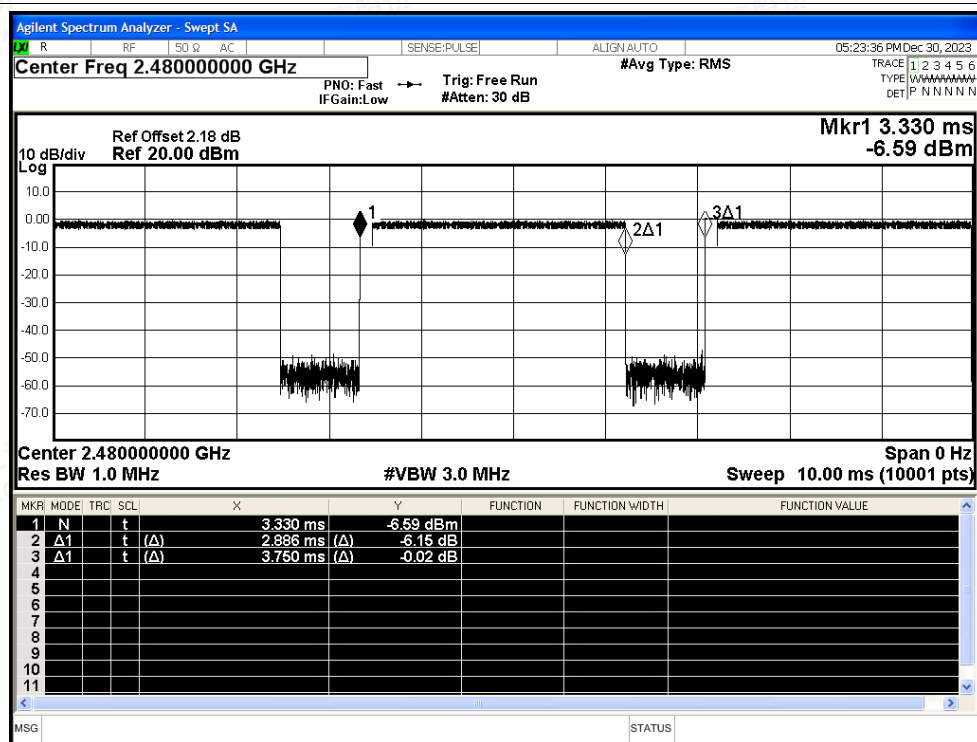




Duty Cycle NVNT 2-DH5 2441MHz Ant1

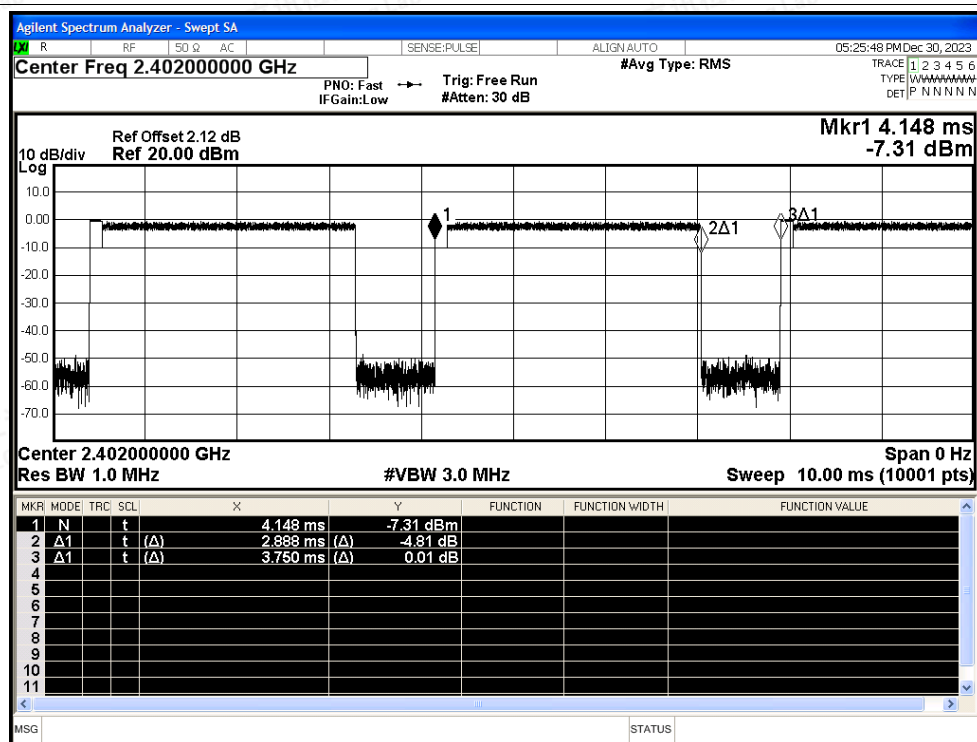


Duty Cycle NVNT 2-DH5 2480MHz Ant1

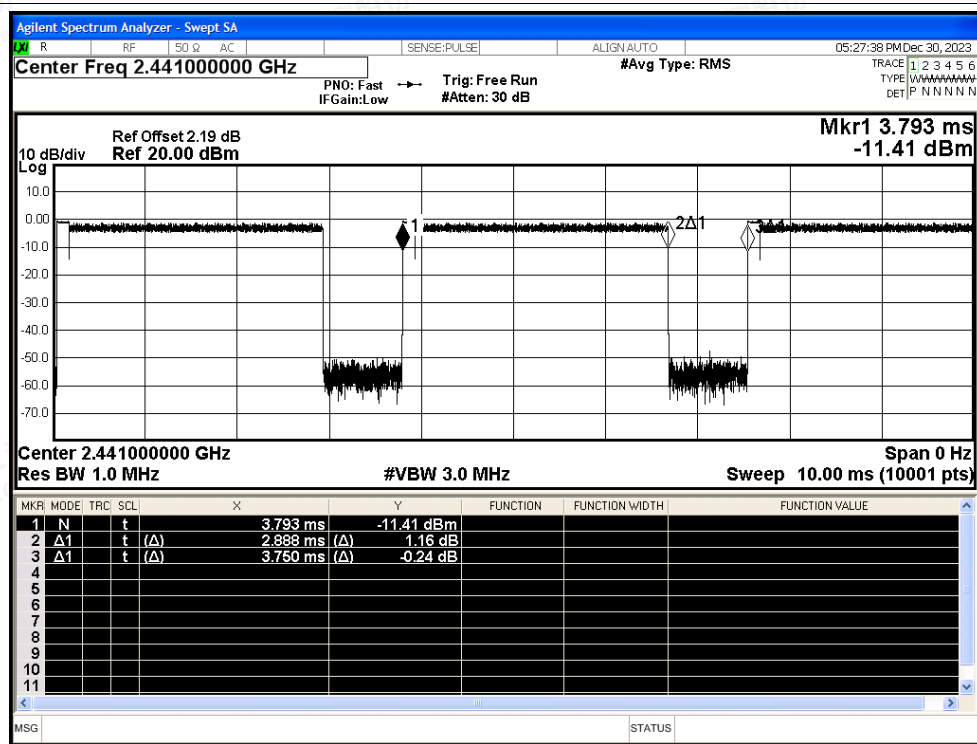


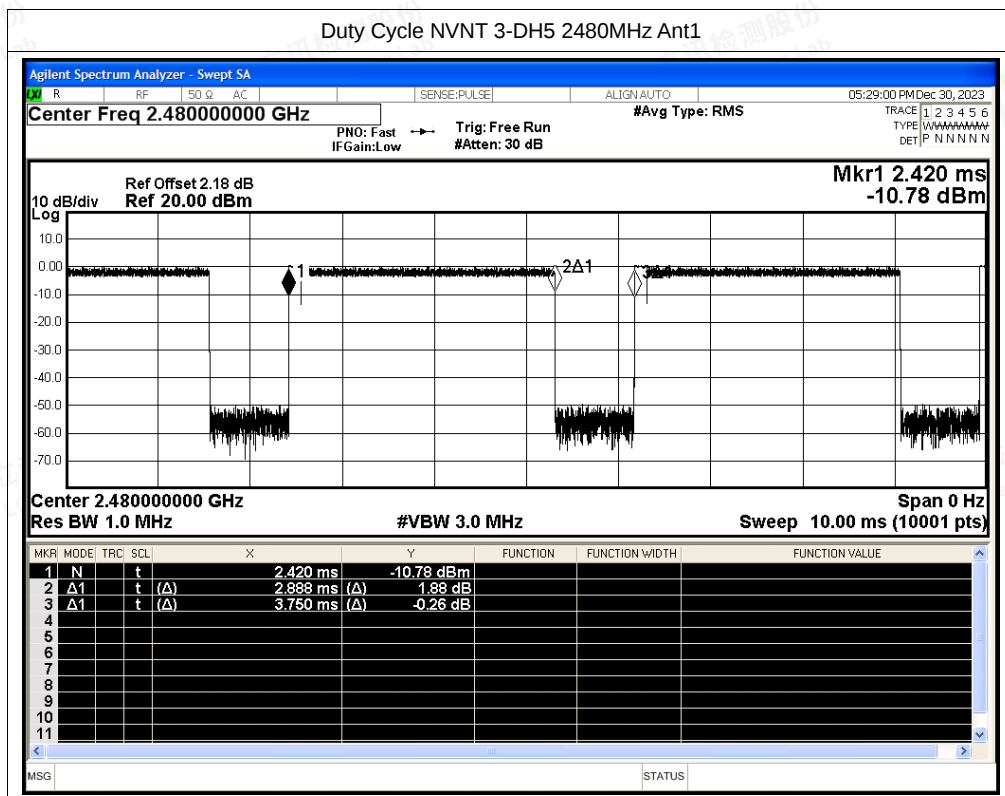


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1







A.9 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	2310	-50.89	2.66	47.00	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	2310	-58.85	2.66	39.04	Average	54	Pass
NVNT	1-DH5	2402	Ant1	2372.688	-47.64	2.66	50.25	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	2384.88	-57.49	2.66	40.40	Average	54	Pass
NVNT	1-DH5	2402	Ant1	2390	-49.87	2.66	48.02	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	2390	-57.75	2.66	40.14	Average	54	Pass
NVNT	1-DH5	2480	Ant1	2483.5	-50.75	2.66	47.14	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	2483.5	-57.51	2.66	40.38	Average	54	Pass
NVNT	1-DH5	2480	Ant1	2498.992	-46.37	2.66	51.52	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	2498.32	-56.65	2.66	41.24	Average	54	Pass
NVNT	1-DH5	2480	Ant1	2500	-49.59	2.66	48.30	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	2500	-58.73	2.66	39.16	Average	54	Pass
NVNT	2-DH5	2402	Ant1	2310	-49.84	2.66	48.05	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	2310	-58.66	2.66	39.23	Average	54	Pass
NVNT	2-DH5	2402	Ant1	2364.336	-46.69	2.66	51.20	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	2377.104	-57.31	2.66	40.58	Average	54	Pass
NVNT	2-DH5	2402	Ant1	2390	-50.56	2.66	47.33	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	2390	-58.32	2.66	39.57	Average	54	Pass
NVNT	2-DH5	2480	Ant1	2483.5	-50.26	2.66	47.63	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	2483.5	-57.56	2.66	40.33	Average	54	Pass
NVNT	2-DH5	2480	Ant1	2499.088	-47.15	2.66	50.74	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	2483.92	-57.03	2.66	40.86	Average	54	Pass
NVNT	2-DH5	2480	Ant1	2500	-50.66	2.66	47.23	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	2500	-57.93	2.66	39.96	Average	54	Pass
NVNT	3-DH5	2402	Ant1	2310	-50.1	2.66	47.79	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	2310	-58.89	2.66	39.00	Average	54	Pass
NVNT	3-DH5	2402	Ant1	2371.248	-47.33	2.66	50.56	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	2314.512	-57.43	2.66	40.46	Average	54	Pass
NVNT	3-DH5	2402	Ant1	2390	-49.29	2.66	48.60	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	2390	-58.57	2.66	39.32	Average	54	Pass
NVNT	3-DH5	2480	Ant1	2483.5	-48.3	2.66	49.59	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	2483.5	-57.48	2.66	40.41	Average	54	Pass
NVNT	3-DH5	2480	Ant1	2486.128	-47.02	2.66	50.87	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	2483.608	-57.06	2.66	40.83	Average	54	Pass
NVNT	3-DH5	2480	Ant1	2500	-49.41	2.66	48.48	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	2500	-58.31	2.66	39.58	Average	54	Pass



Shenzhen LCS Compliance Testing Laboratory Ltd.

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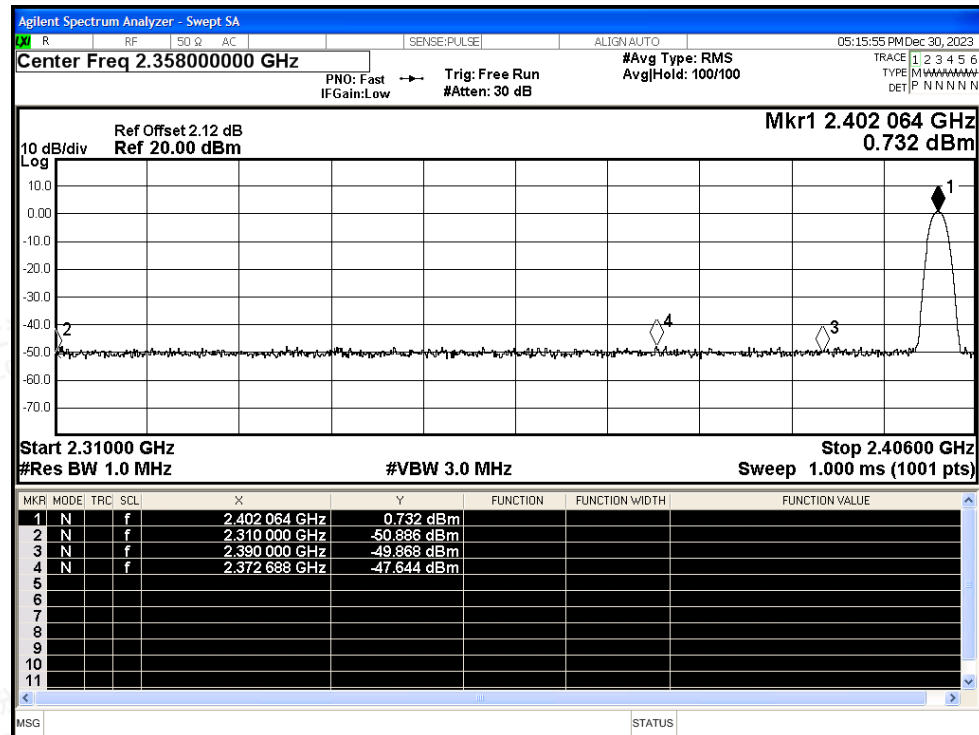
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity



Test Graphs

Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

