



## Appendix A

### RF Test Data for BT (Conducted Measurement)

Product Name: VIM1S

Test Model: VIM1S

#### Environmental Conditions

Temperature:	23.8° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Wunder Wu
Supervised by:	Li Huan





## A.1 -20dB Bandwidth

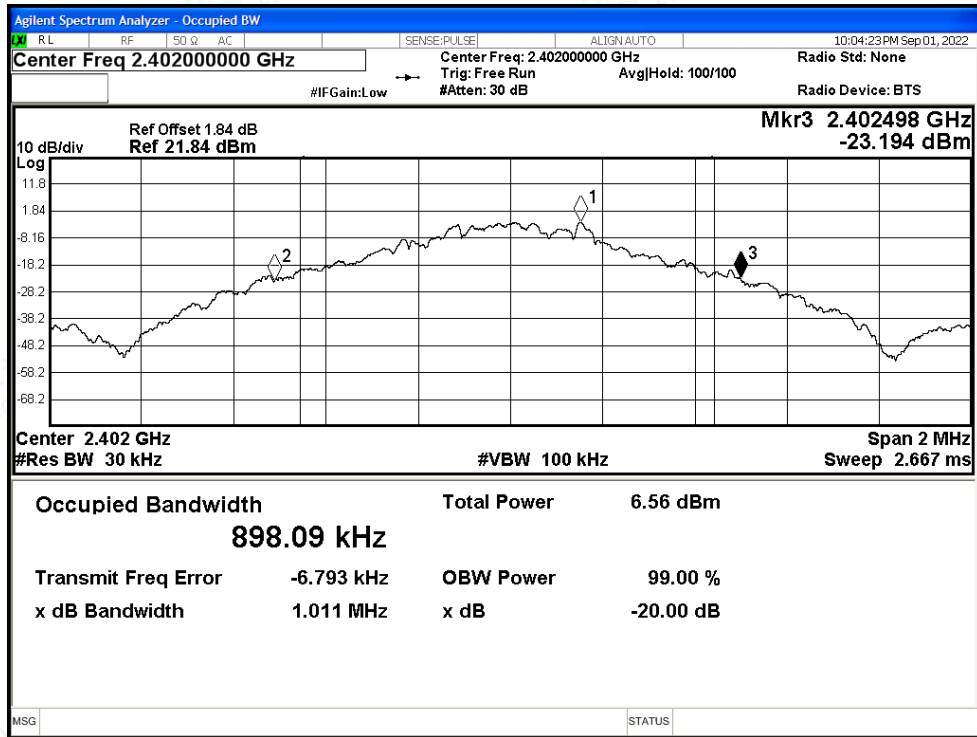
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	1.011	N/A	Pass
NVNT	1-DH5	2441	Ant1	1.01	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.978	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.304	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.277	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.283	N/A	Pass
NVNT	3-DH5	2402	Ant1	1.278	N/A	Pass
NVNT	3-DH5	2441	Ant1	1.297	N/A	Pass
NVNT	3-DH5	2480	Ant1	1.288	N/A	Pass



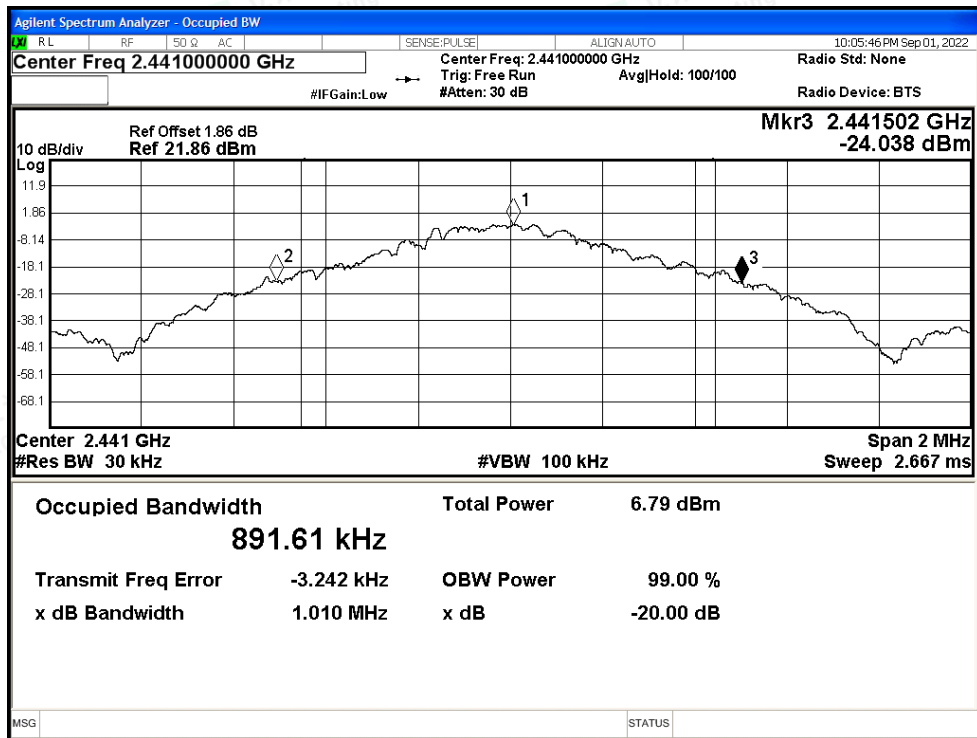


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

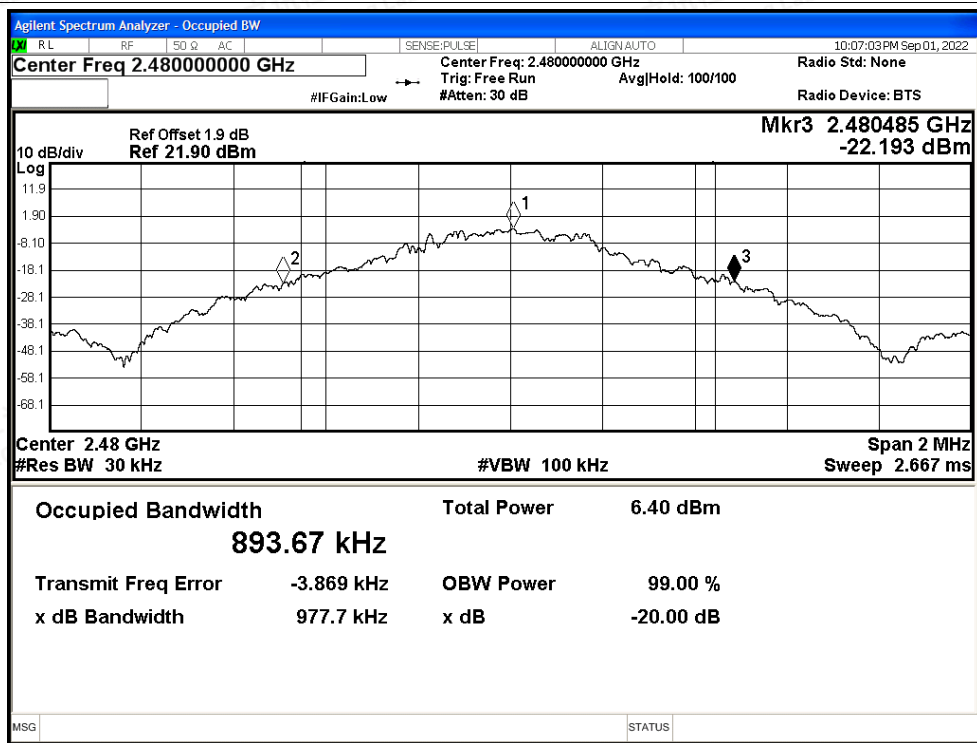


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1





-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

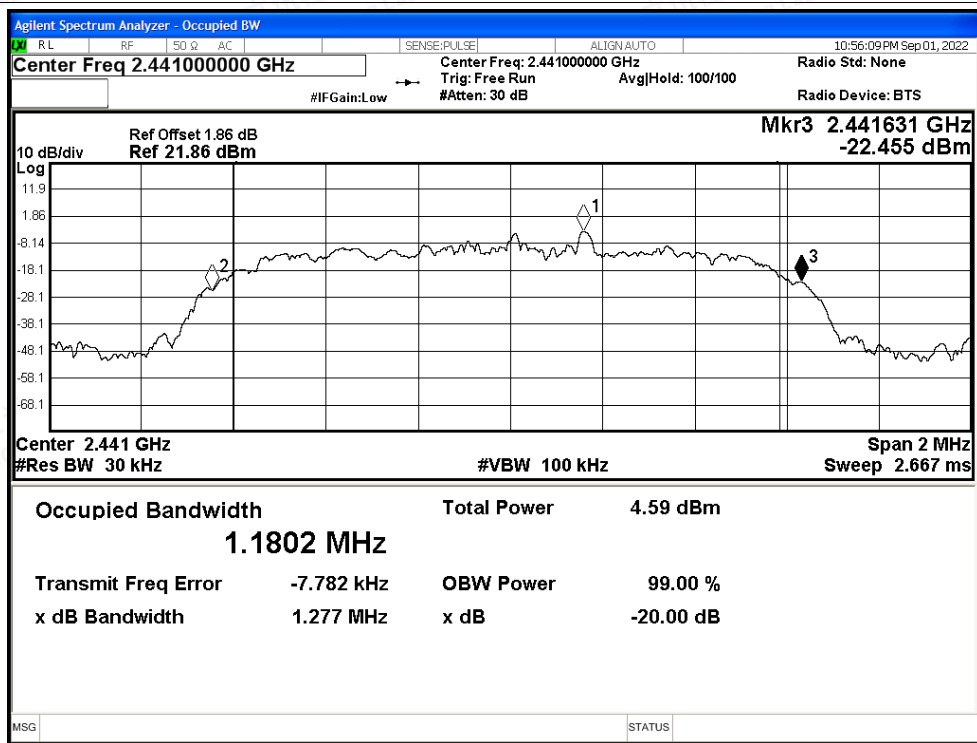


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

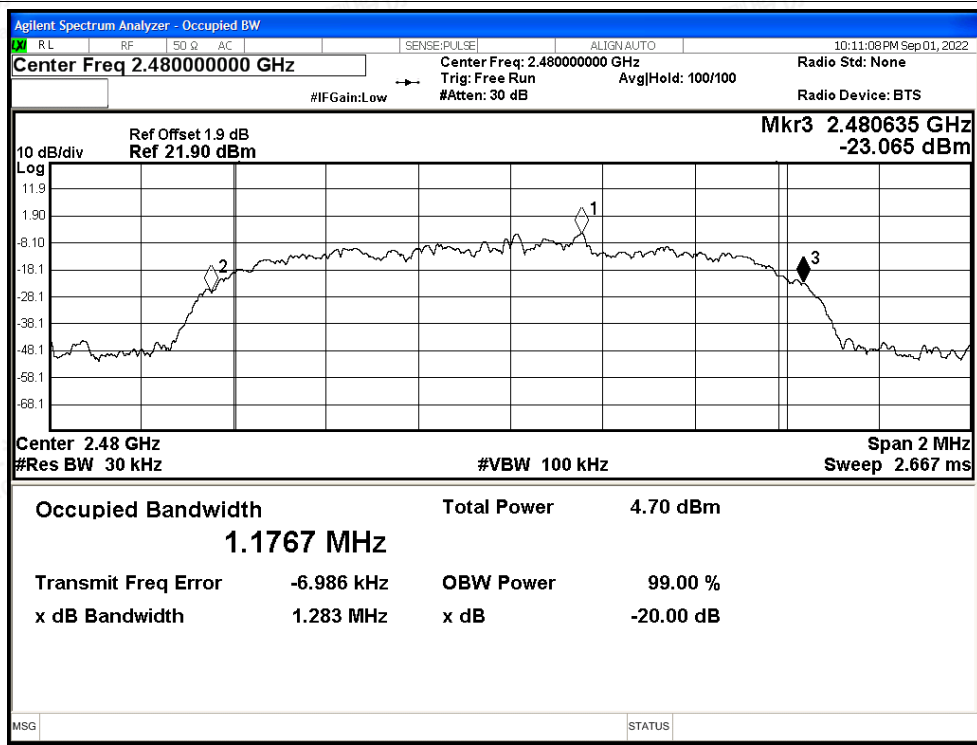




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1

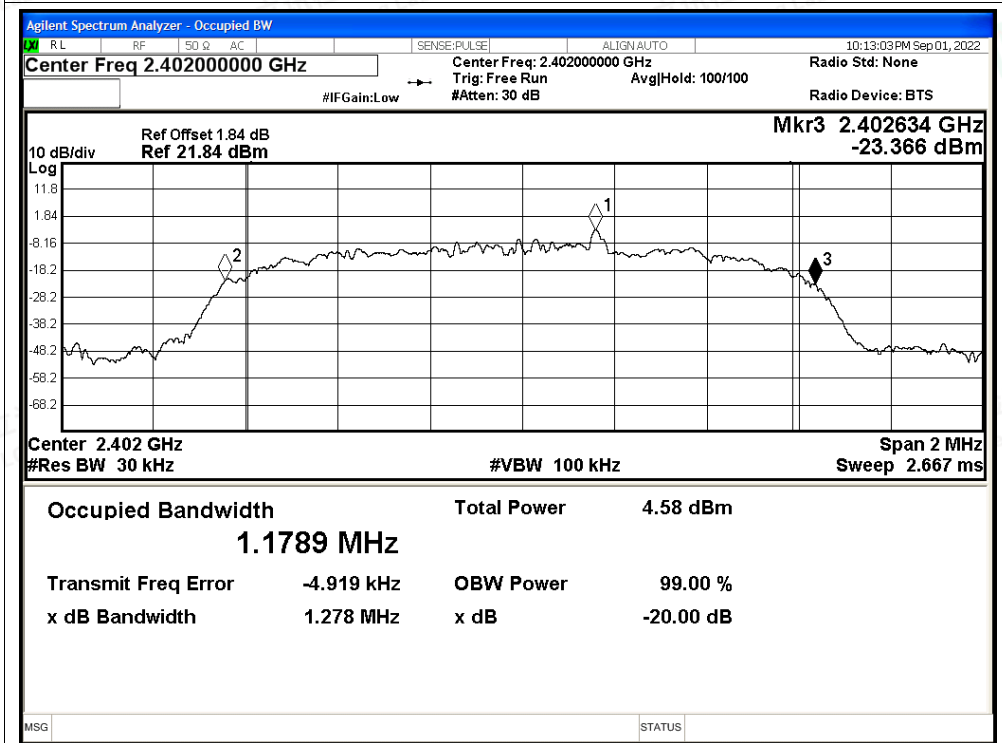


-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

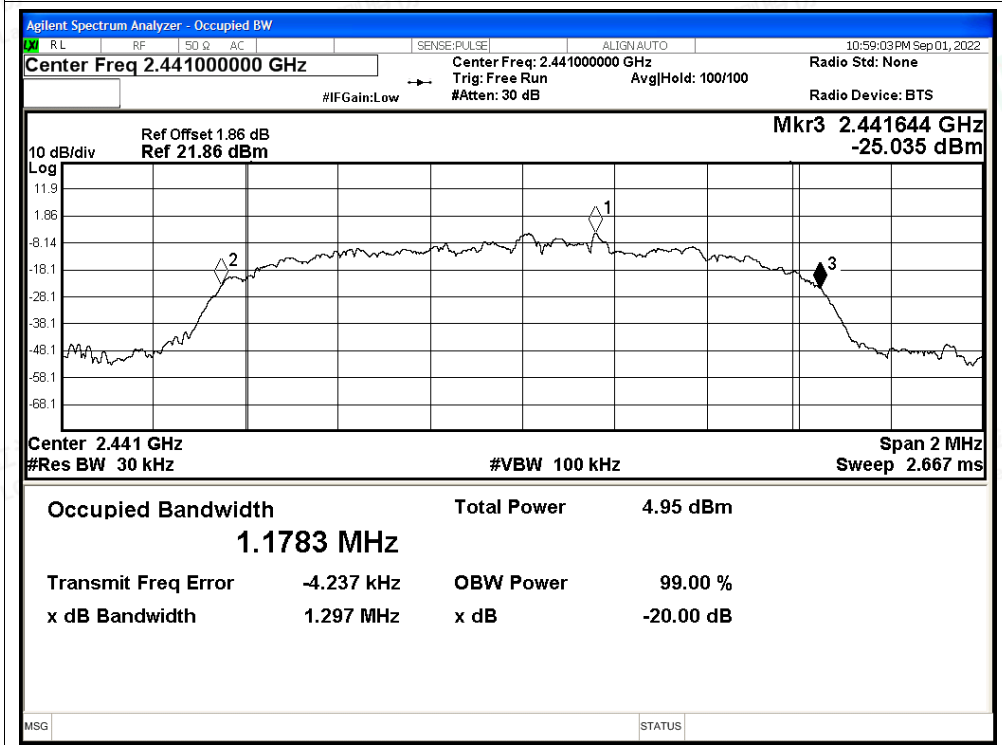


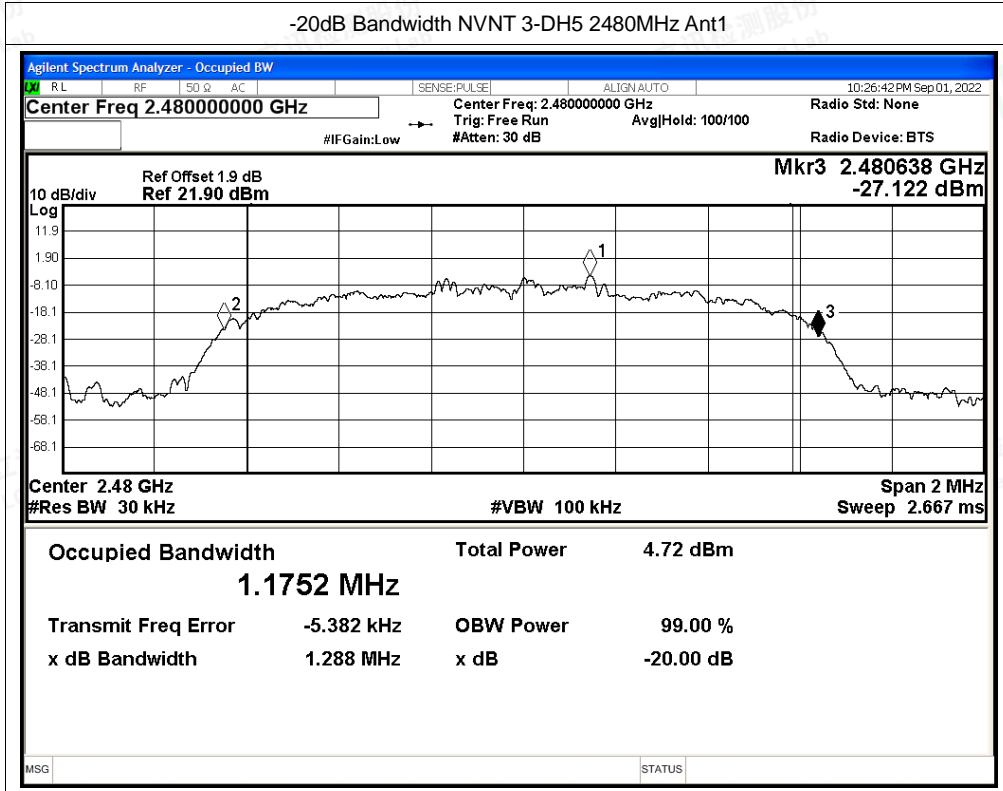


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1







## A.2 Maximum Peak Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	0.38	21	Pass
NVNT	1-DH5	2441	Ant1	0.5	21	Pass
NVNT	1-DH5	2480	Ant1	0.69	21	Pass
NVNT	2-DH5	2402	Ant1	0.52	21	Pass
NVNT	2-DH5	2441	Ant1	0.23	21	Pass
NVNT	2-DH5	2480	Ant1	0.07	21	Pass
NVNT	3-DH5	2402	Ant1	0.56	21	Pass
NVNT	3-DH5	2441	Ant1	0.33	21	Pass
NVNT	3-DH5	2480	Ant1	0.46	21	Pass

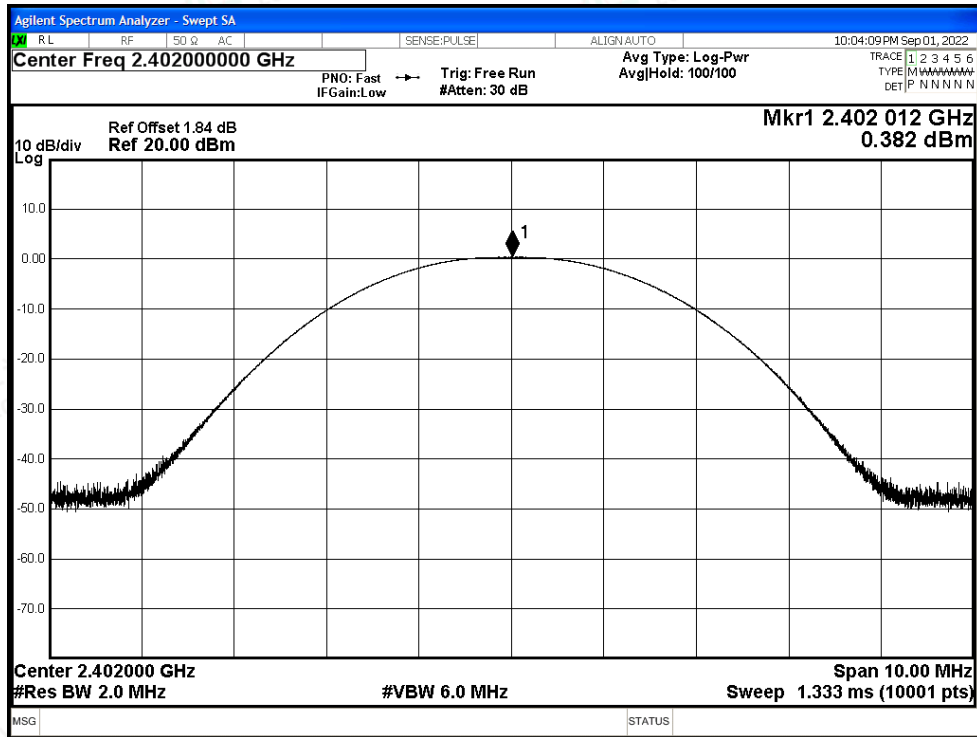




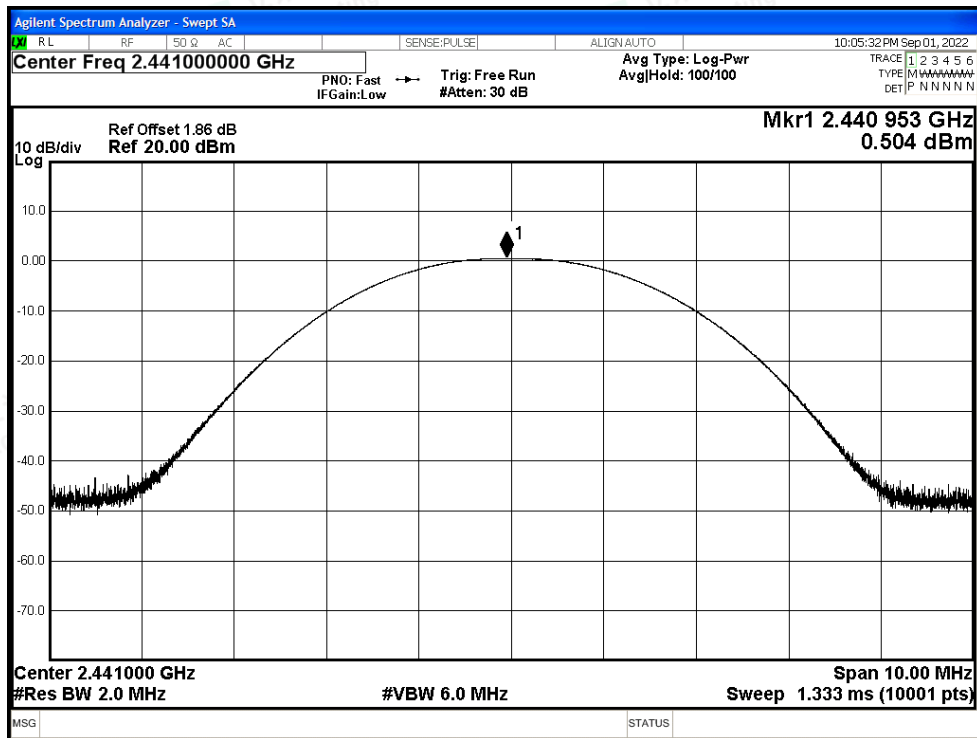


Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

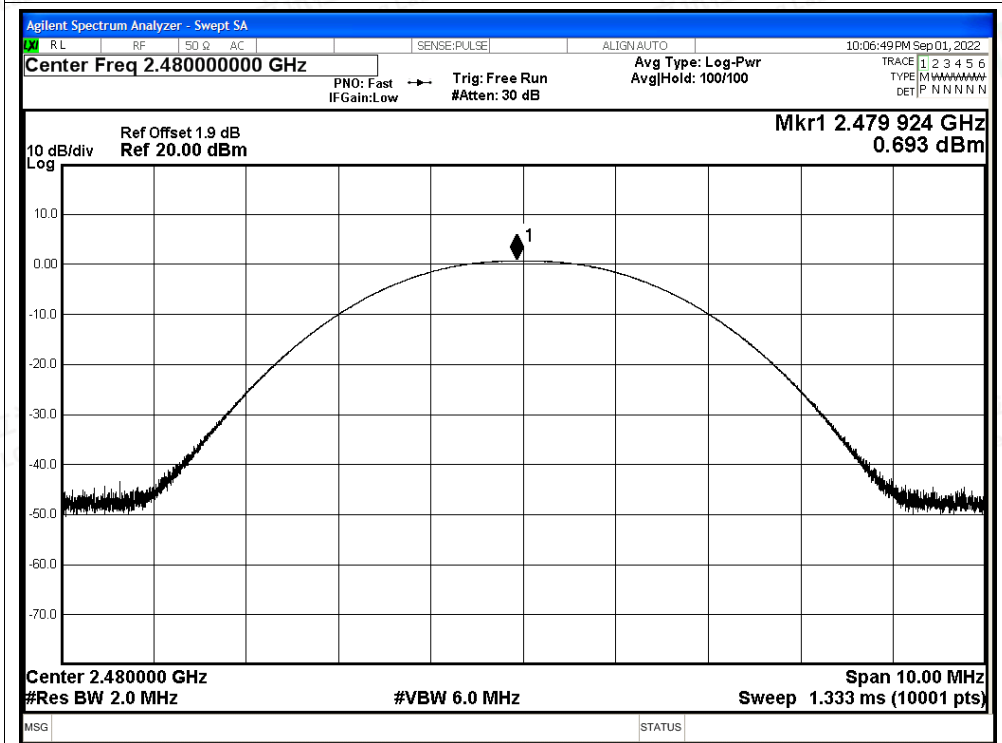


Power NVNT 1-DH5 2441MHz Ant1

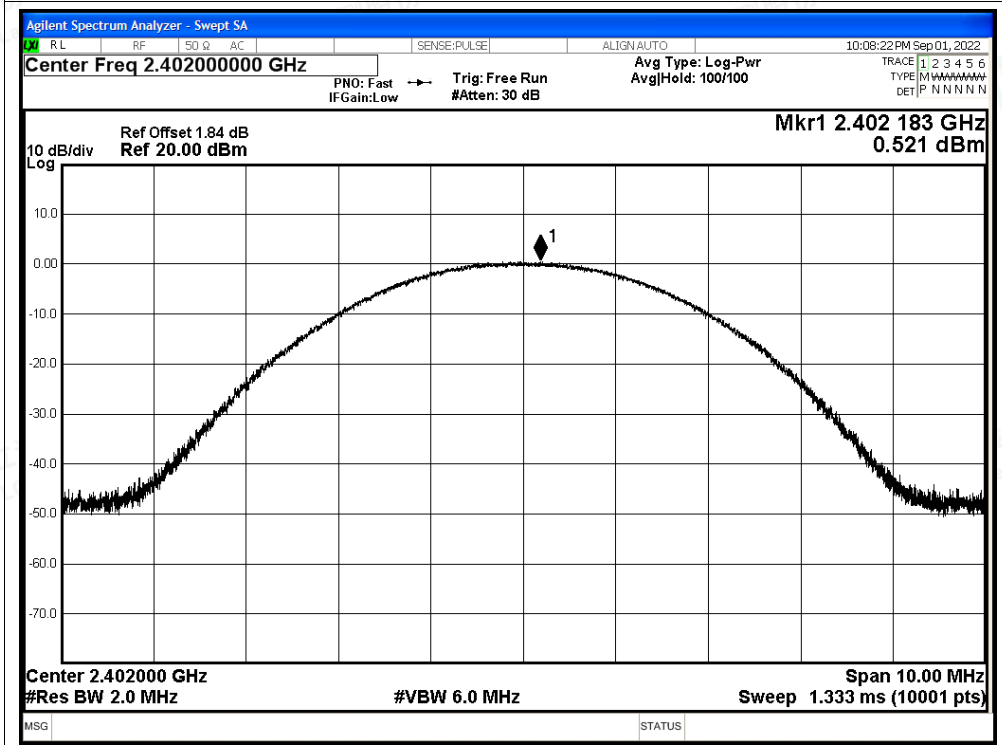


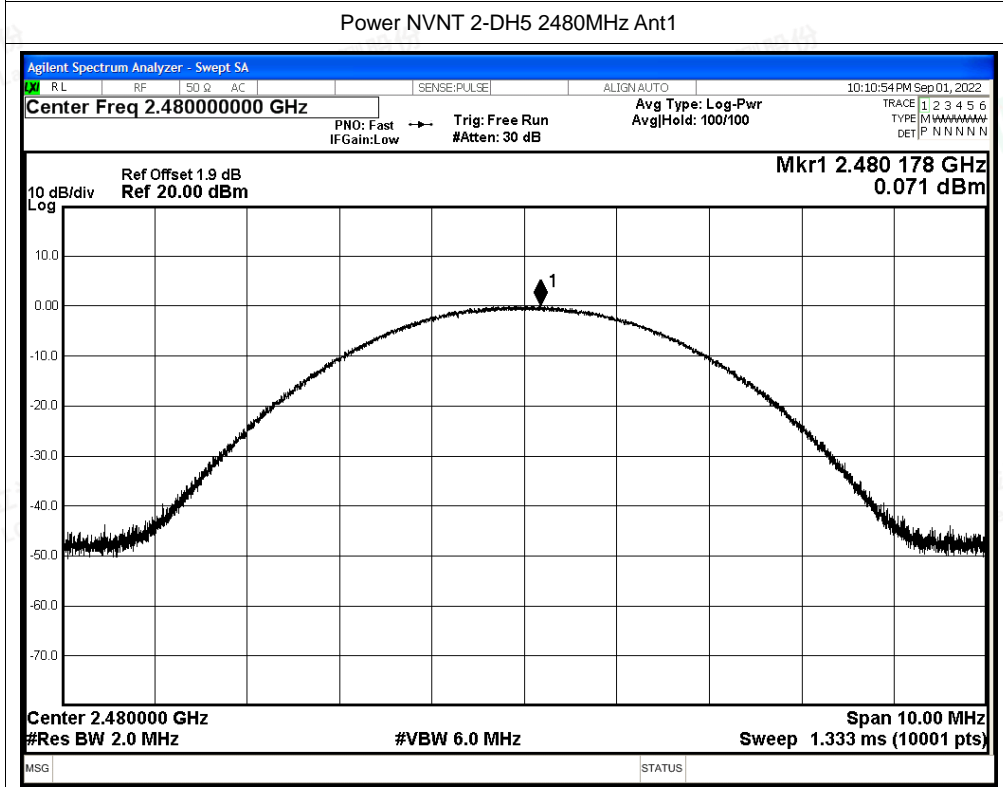
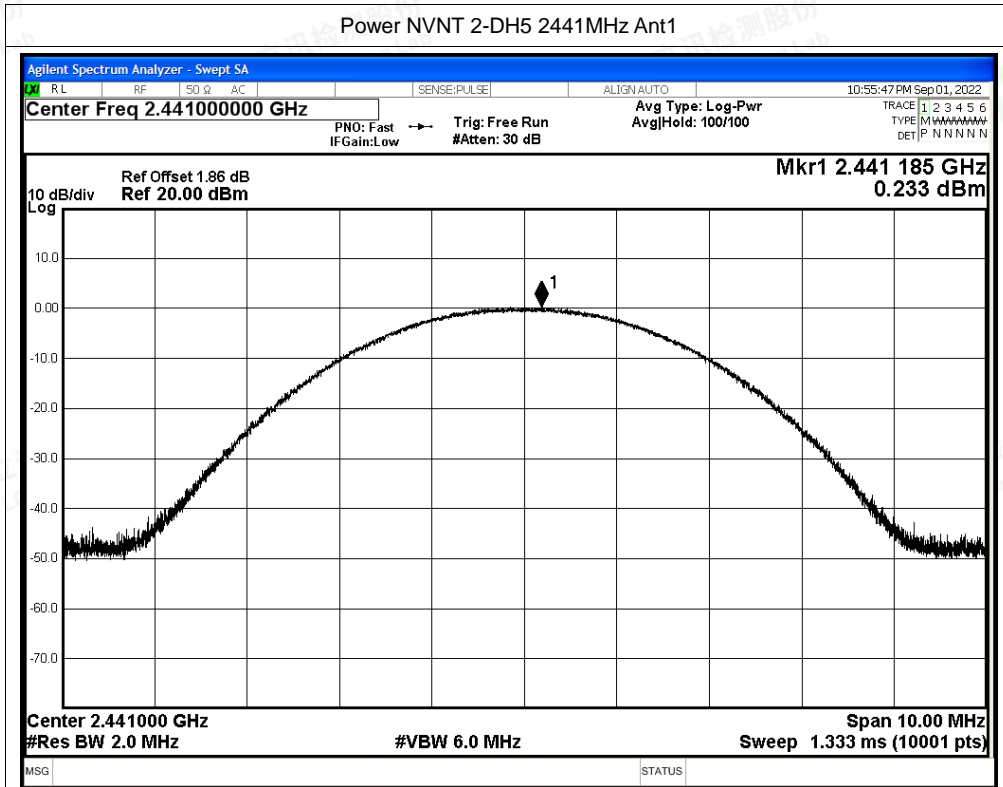


Power NVNT 1-DH5 2480MHz Ant1



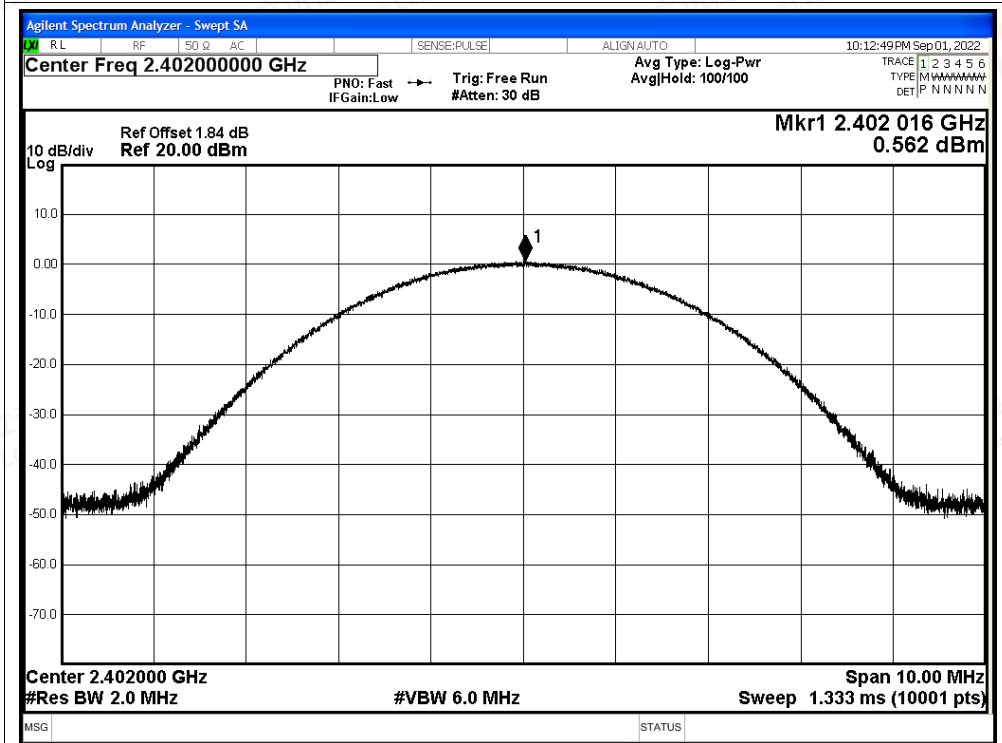
Power NVNT 2-DH5 2402MHz Ant1



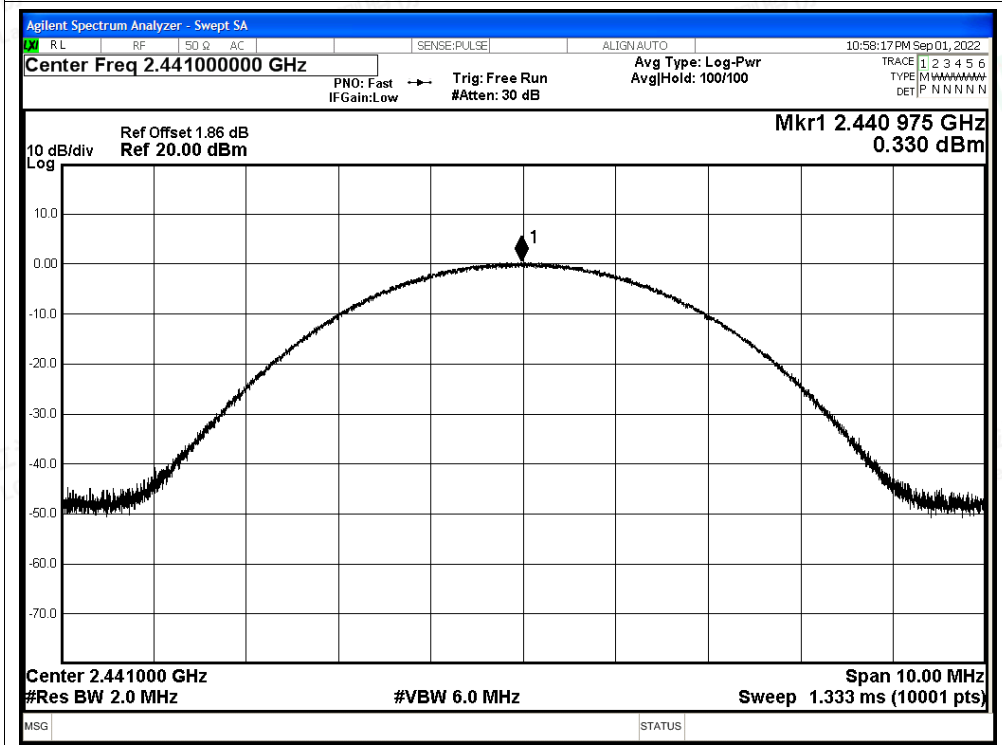


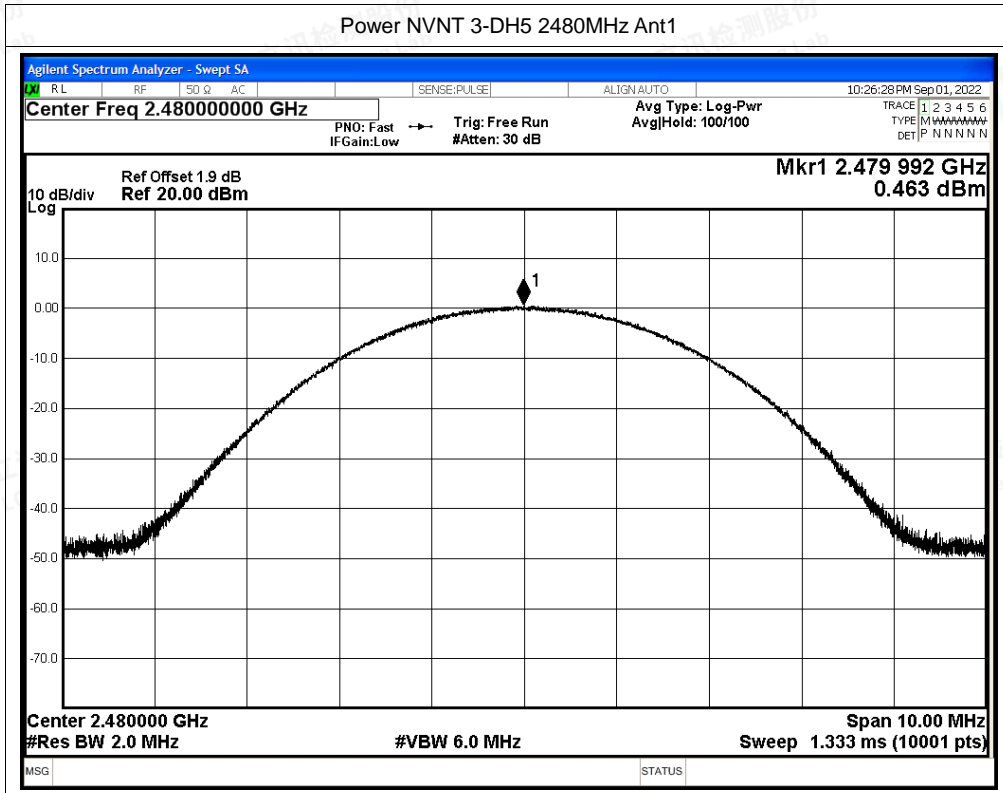


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-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	2402.01	2403.01	1	0.674	Pass
NVNT	2-DH5	Ant1	2402.018	2403.156	1.138	0.869	Pass
NVNT	3-DH5	Ant1	2402.162	2403.158	0.996	0.852	Pass

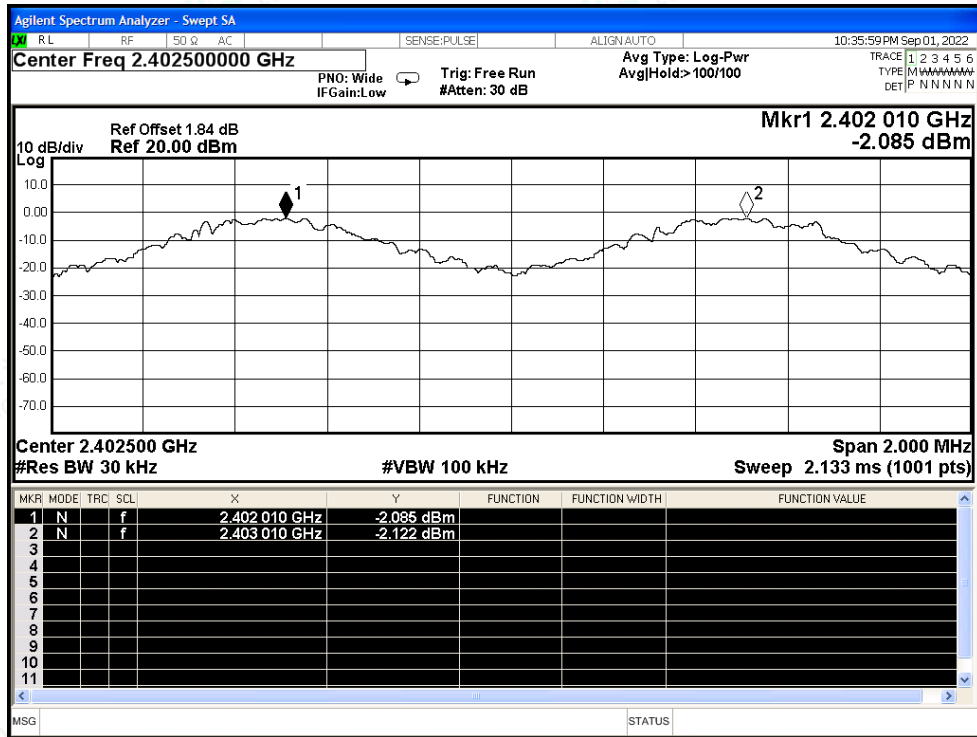


Shenzhen LCS Compliance Testing Laboratory Ltd.  
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
Scan code to check authenticity

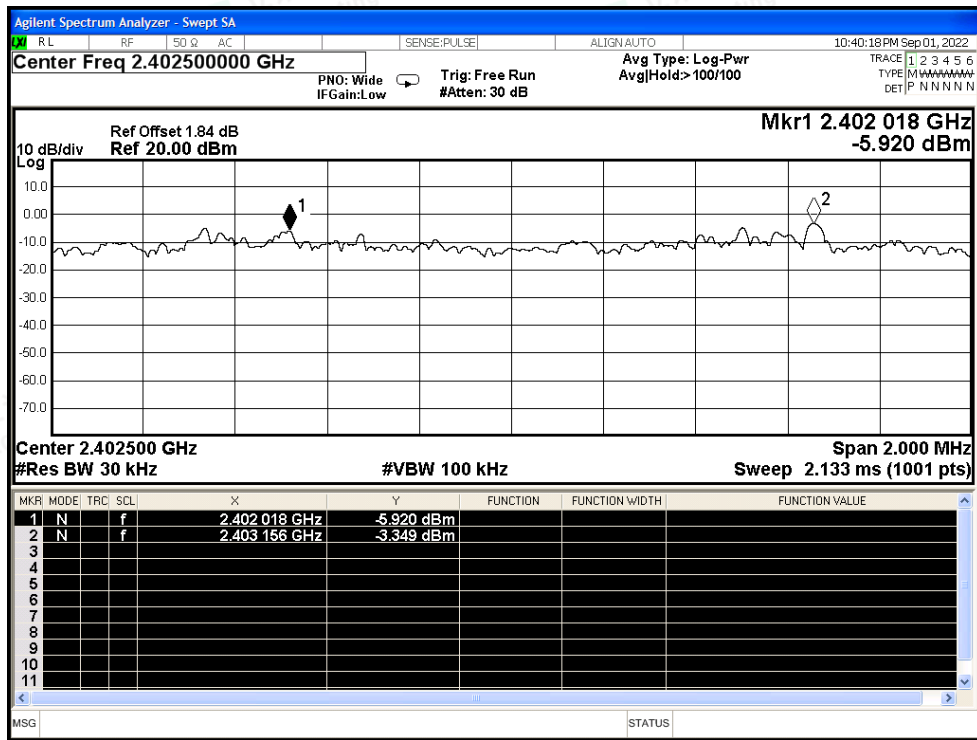


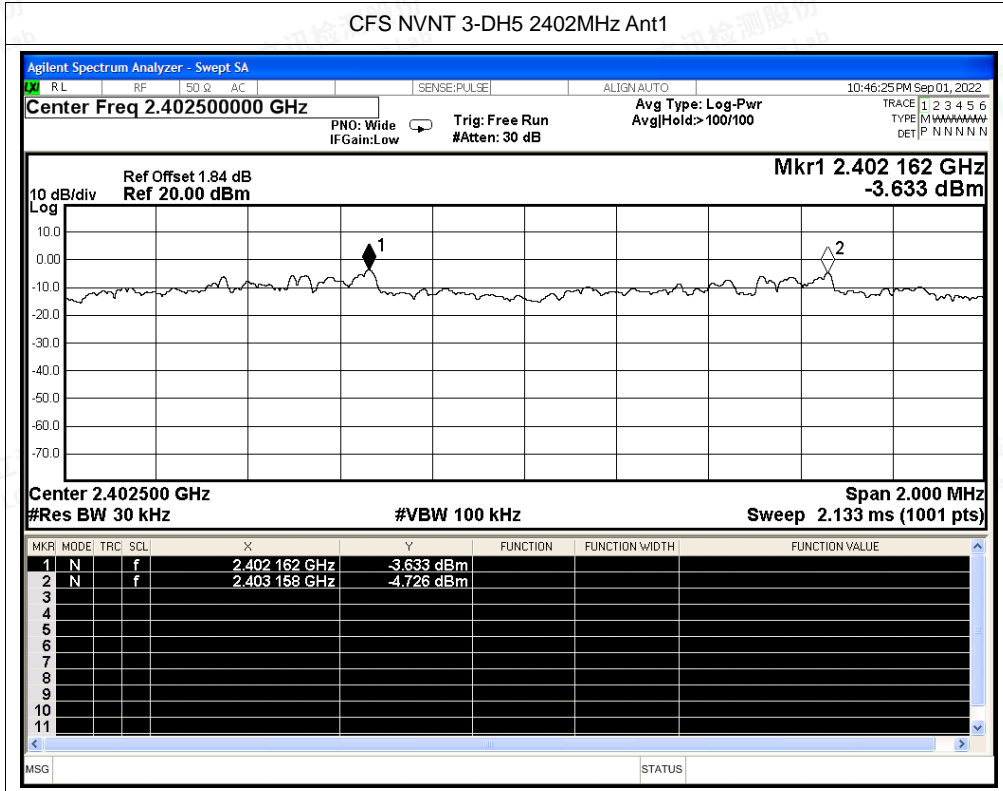
Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1









### A.4 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	2.881	316.91	110	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.885	291.385	101	31600	400	Pass
NVNT	3-DH5	2402	Ant1	2.887	300.248	104	31600	400	Pass

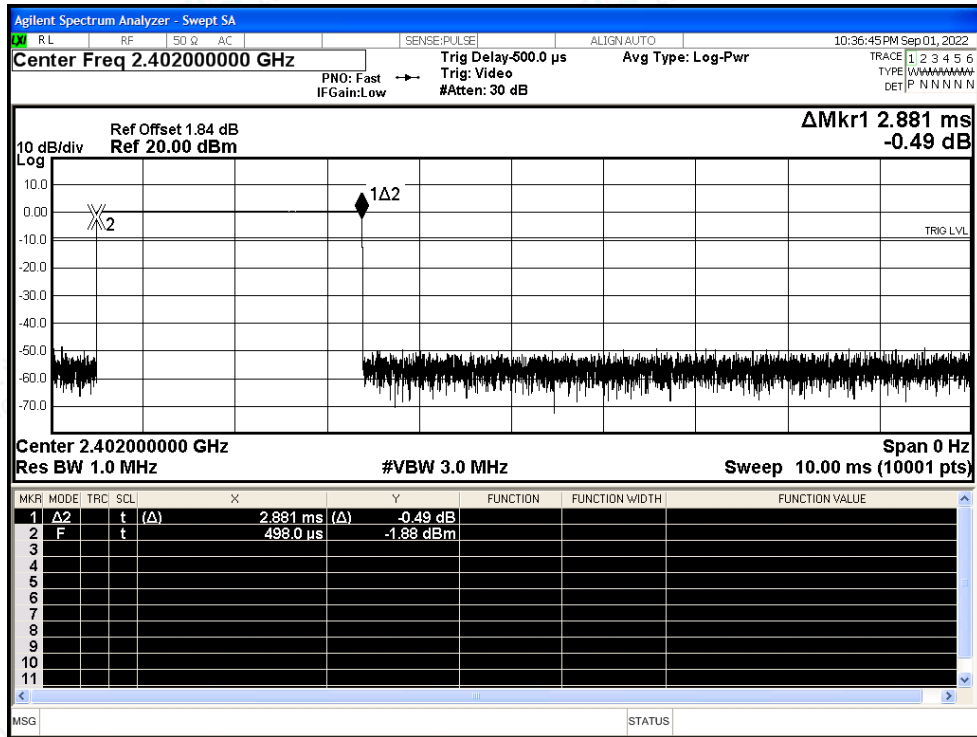


Shenzhen LCS Compliance Testing Laboratory Ltd.  
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
Scan code to check authenticity

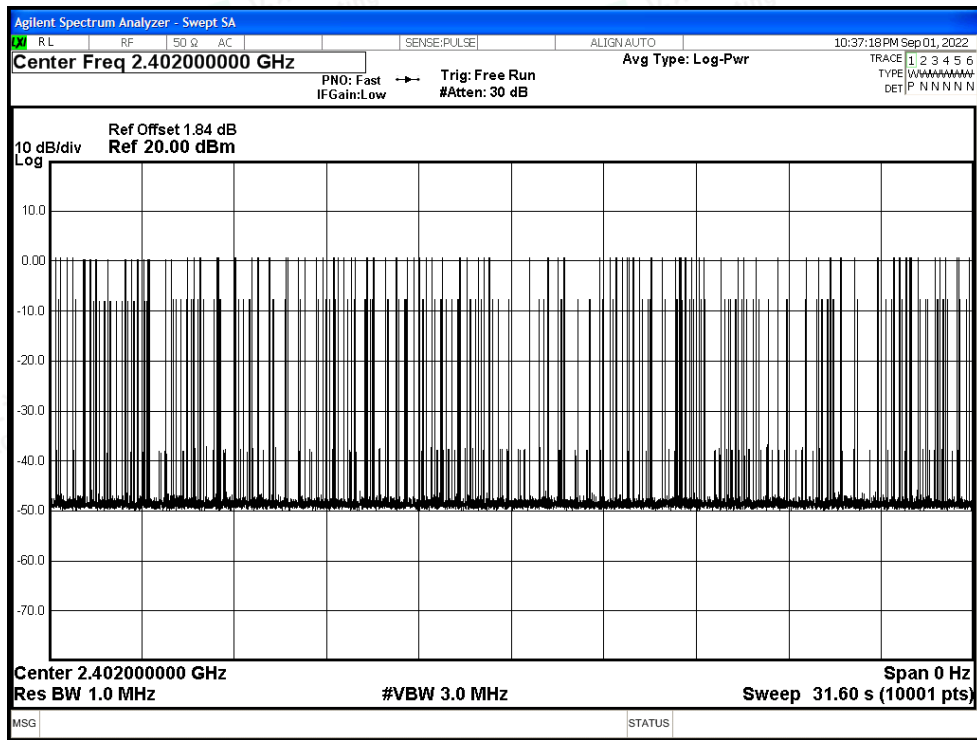


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

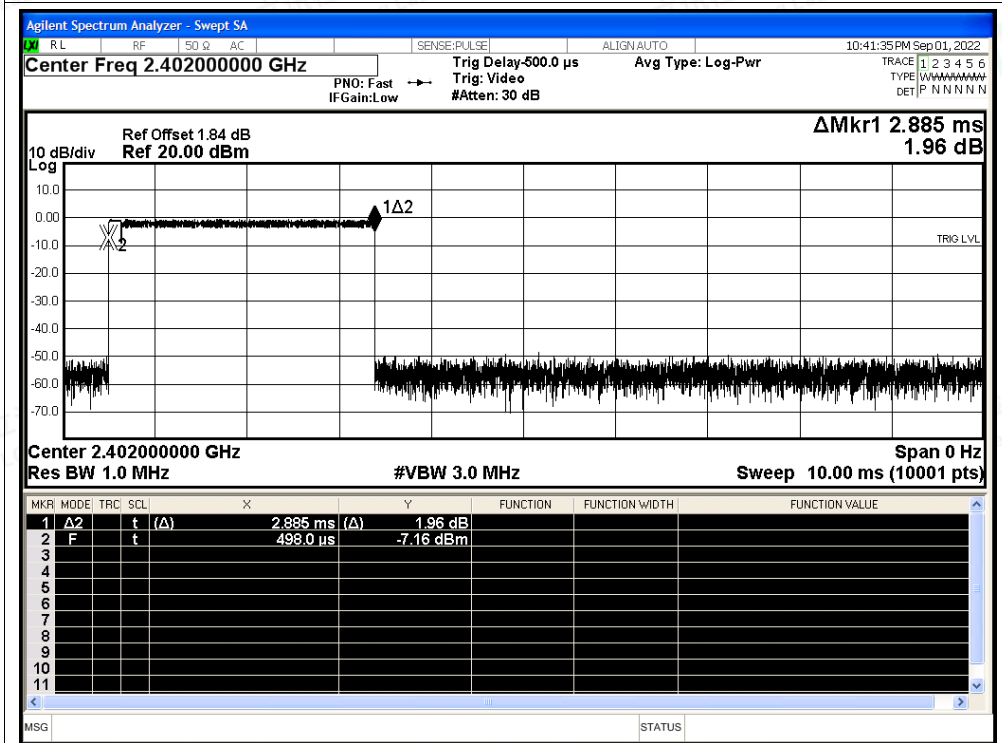


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

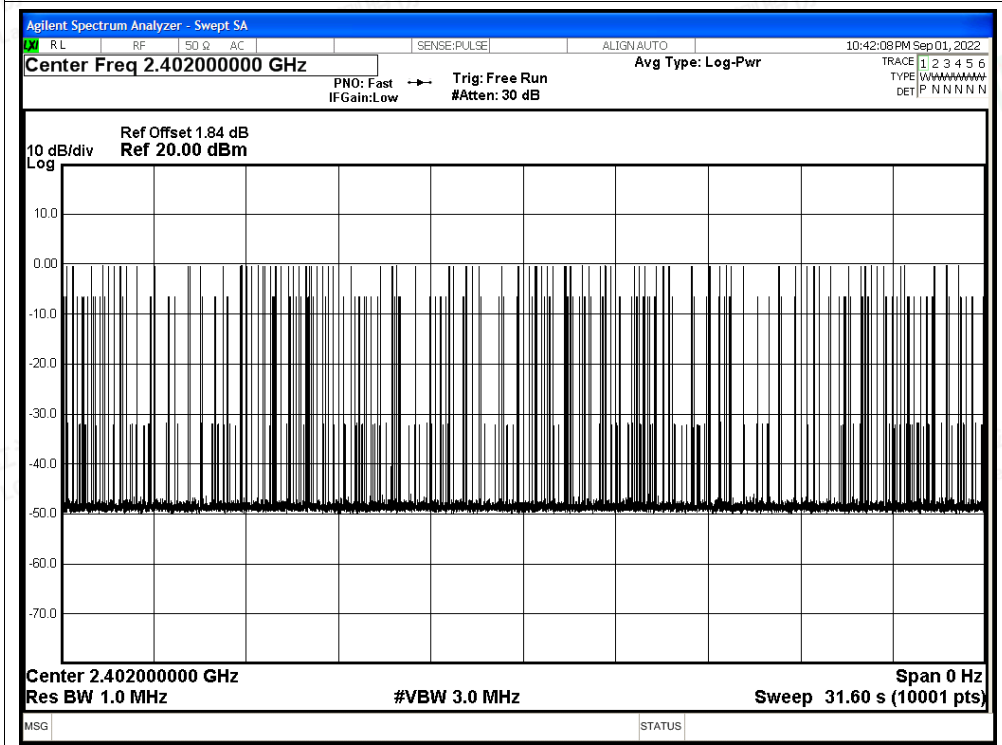




Dwell NVNT 2-DH5 2402MHz Ant1 One Burst

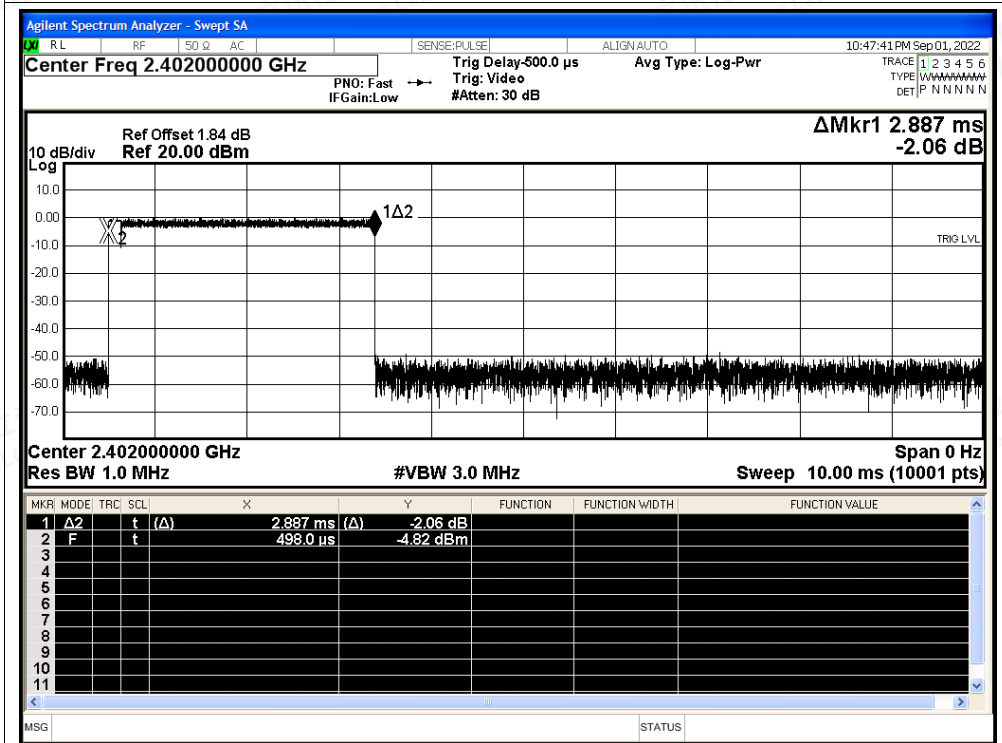


Dwell NVNT 2-DH5 2402MHz Ant1 Accumulated

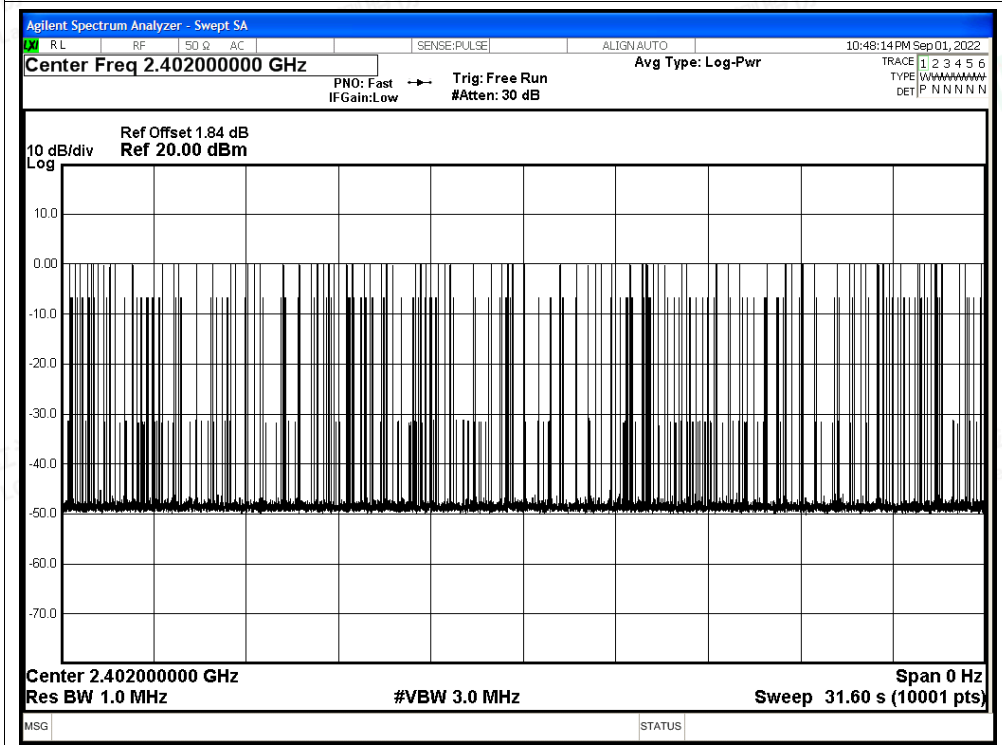




Dwell NVNT 3-DH5 2402MHz Ant1 One Burst



Dwell NVNT 3-DH5 2402MHz Ant1 Accumulated





## A.5 Number of Hopping Channel

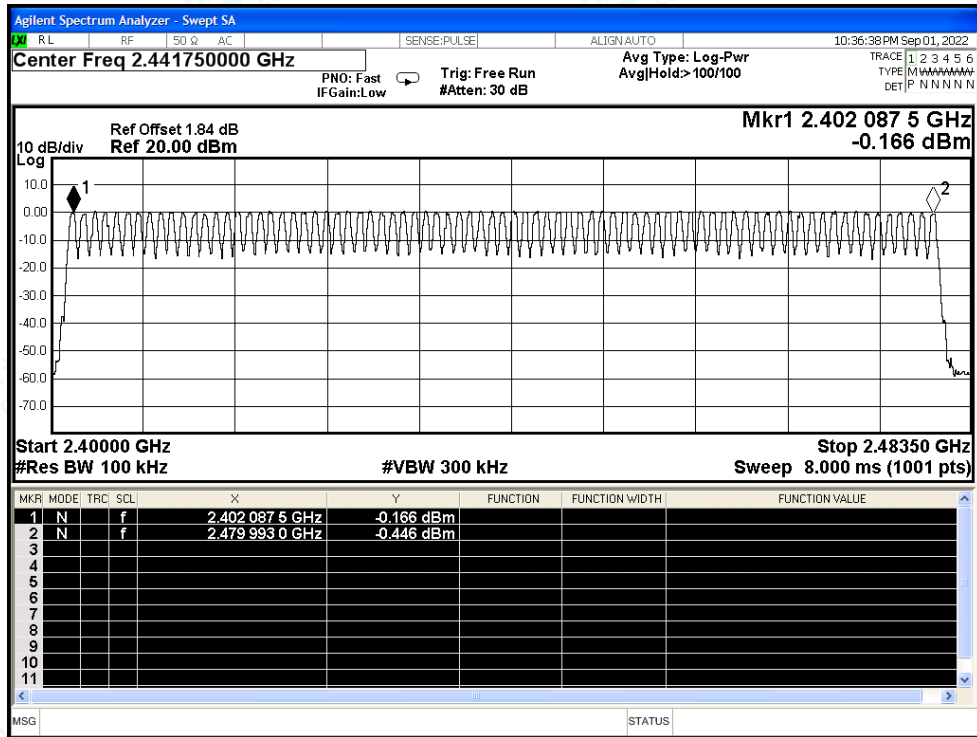
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass



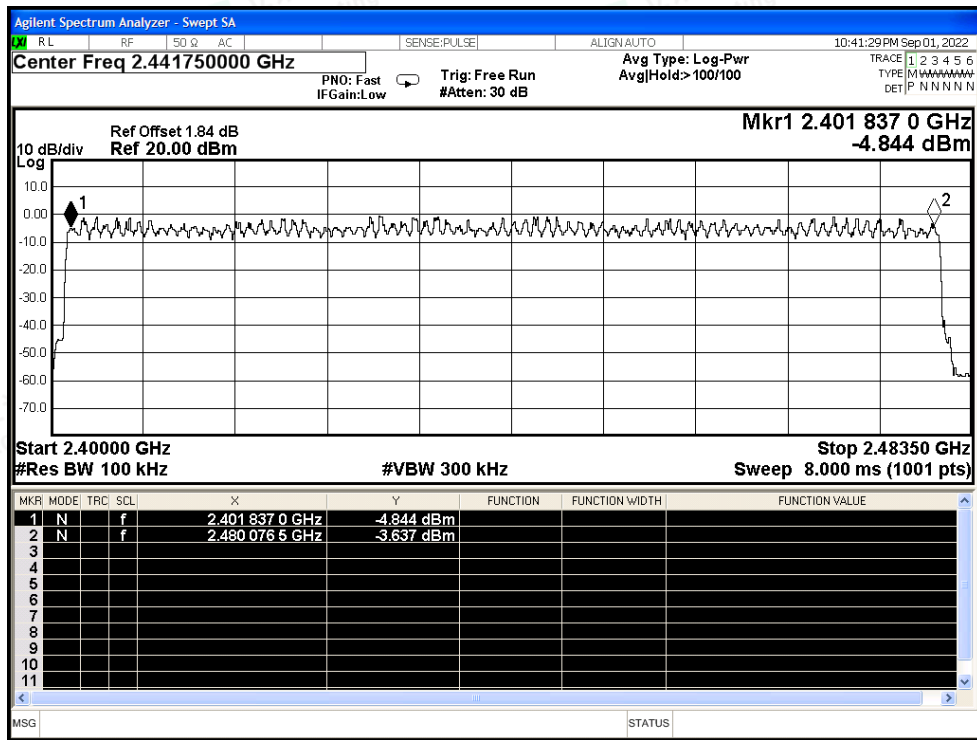


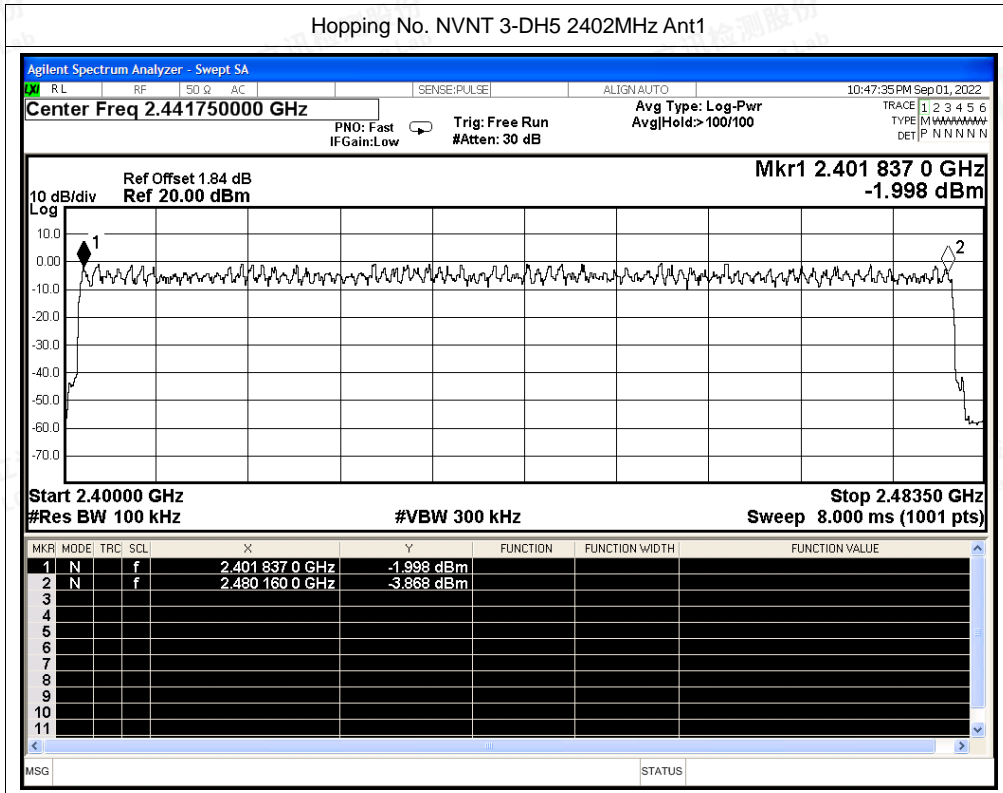
Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1







## A.6 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-55.51	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-57.46	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-55.1	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-55.11	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-53.68	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-55.76	-20	Pass

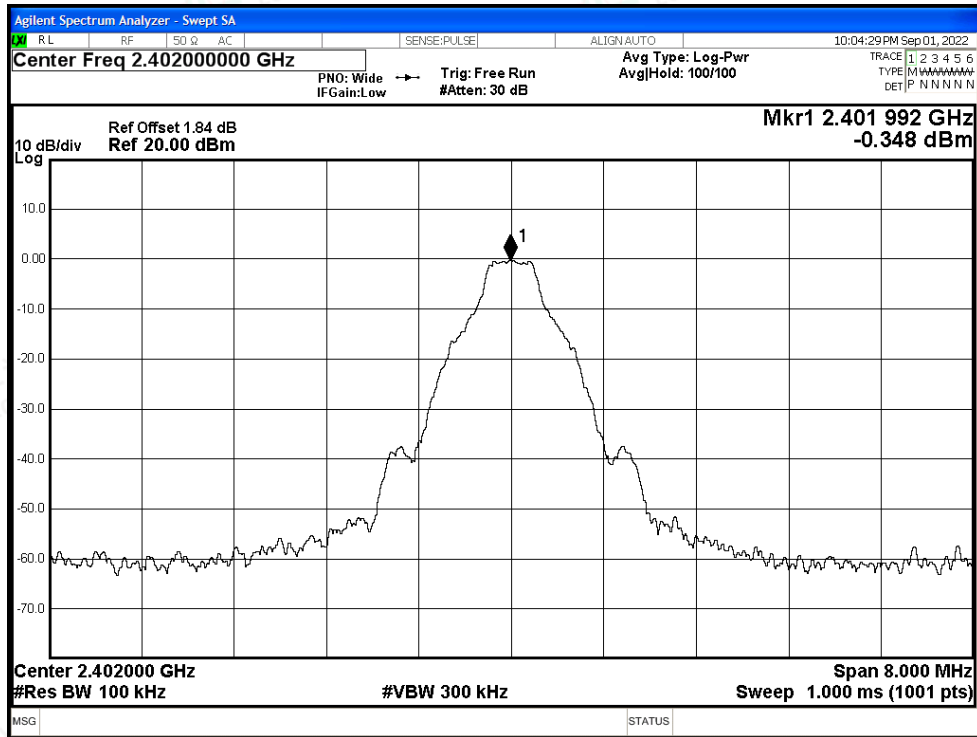




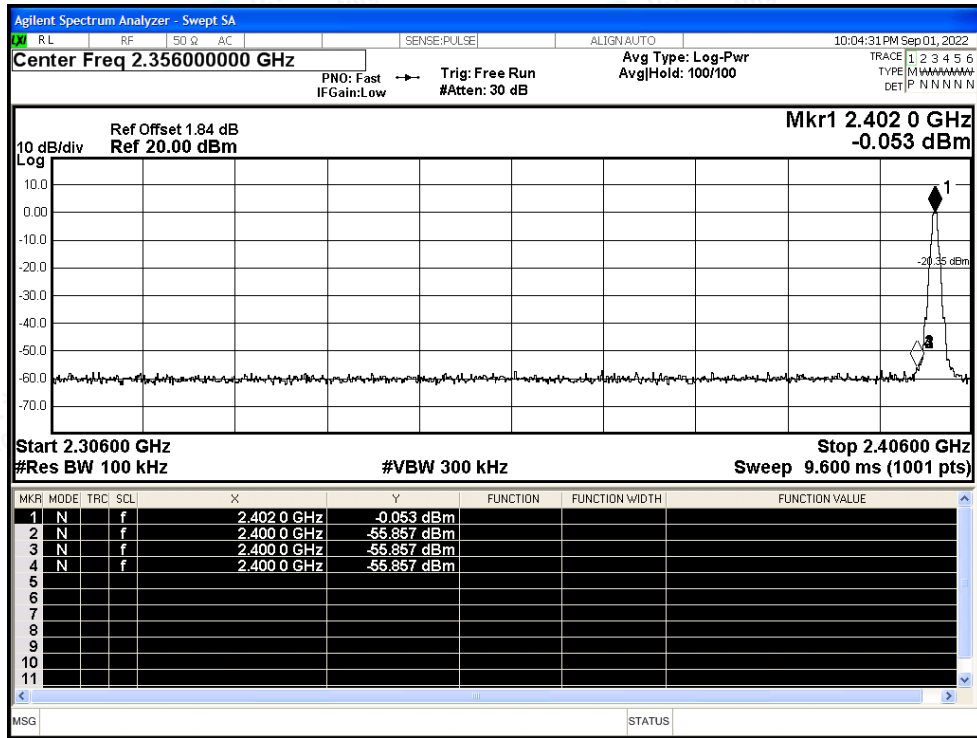


Test Graphs

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

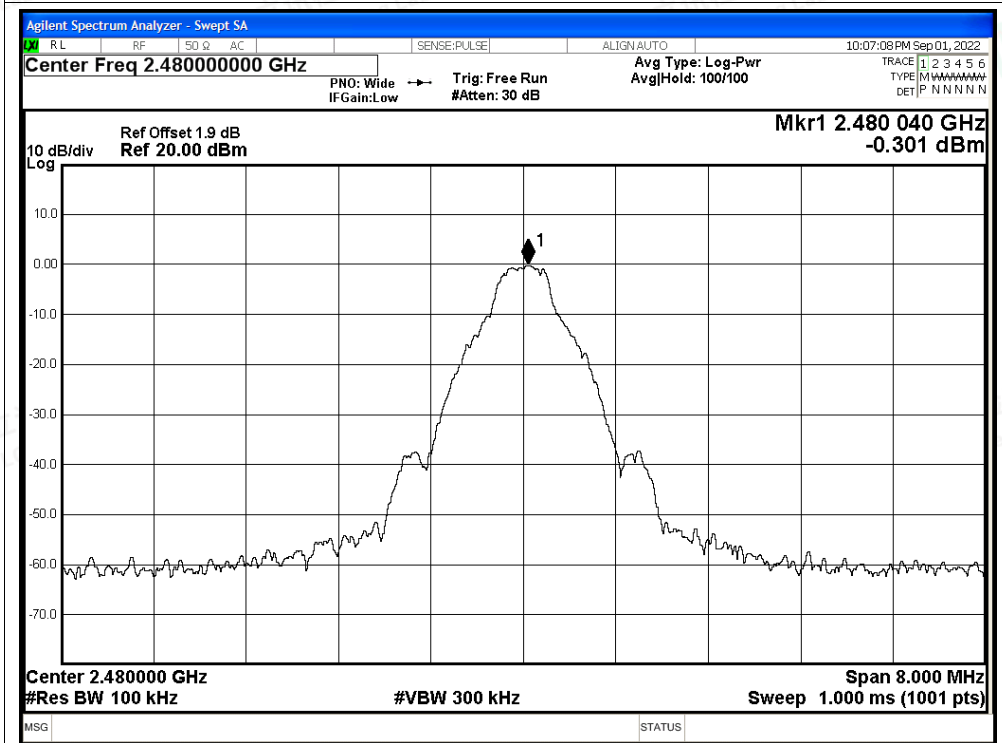


Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission

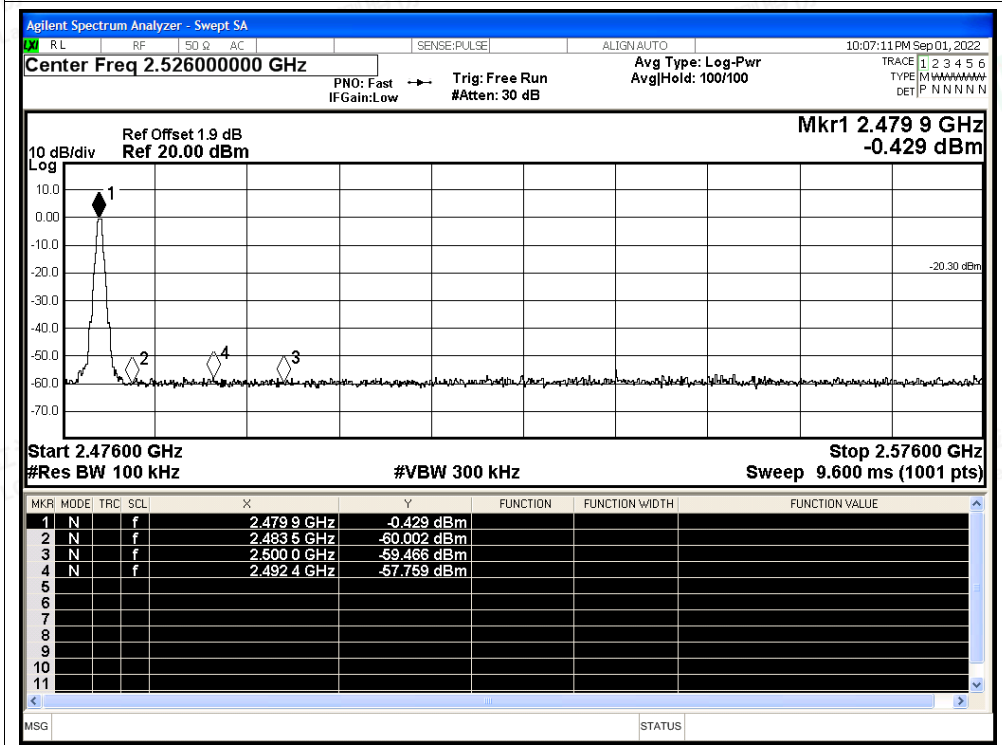




Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref

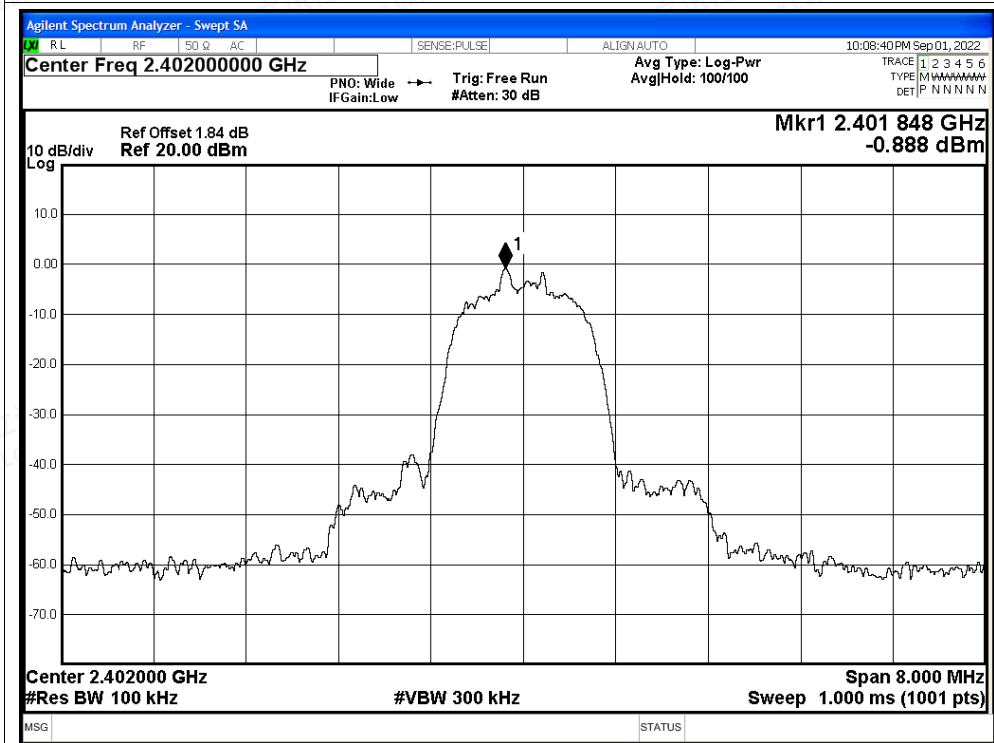


Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission

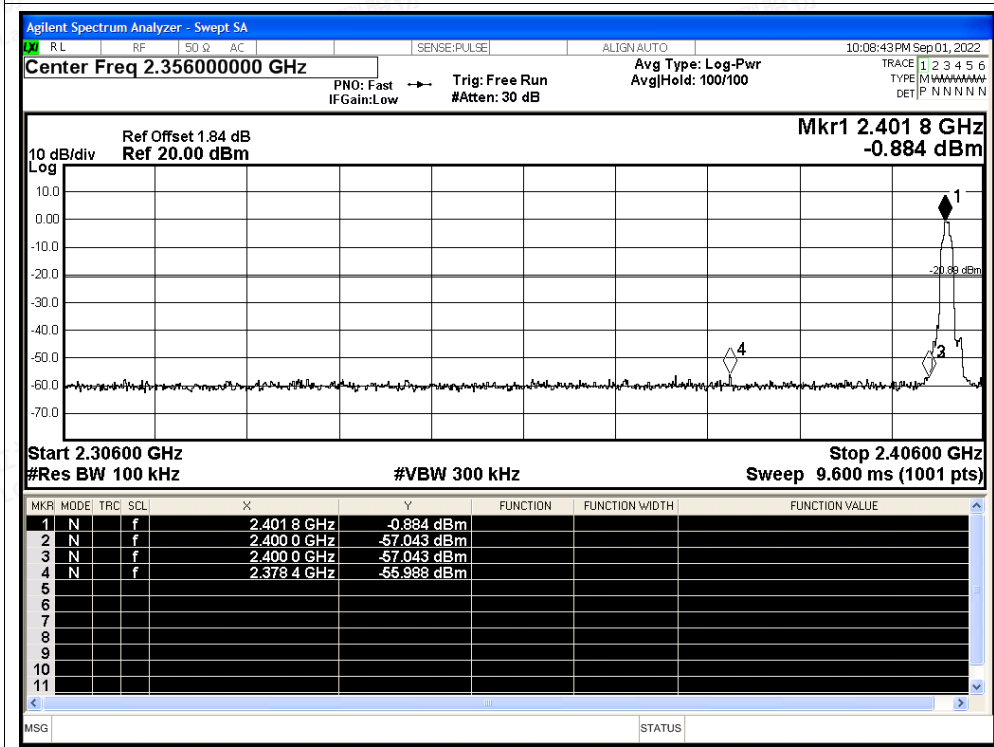




Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref

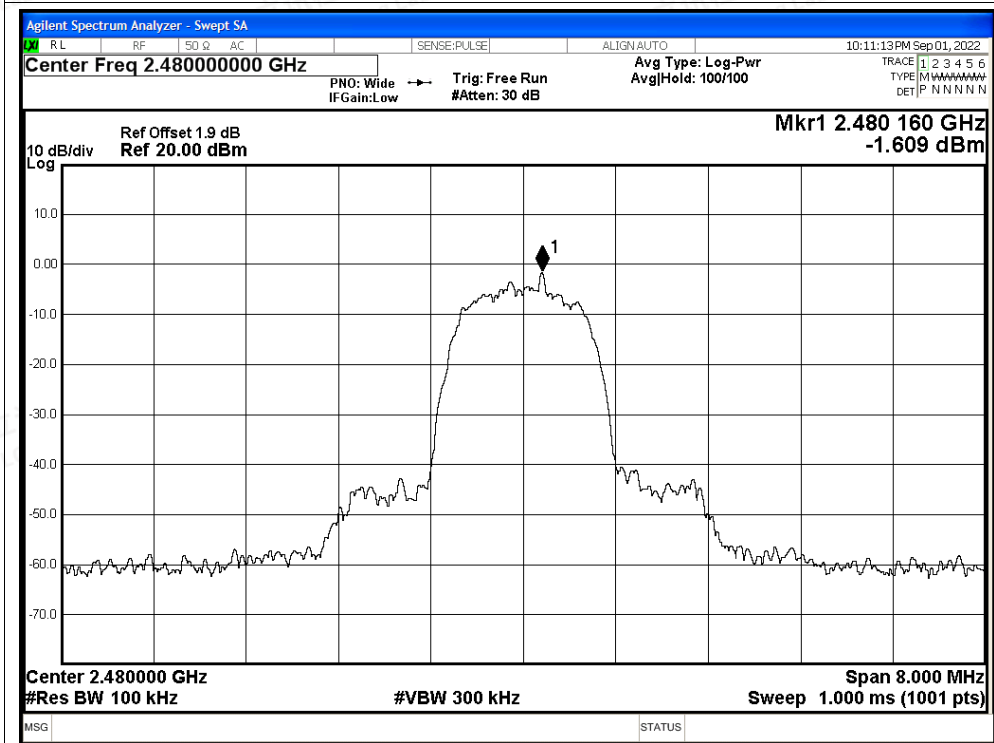


Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission

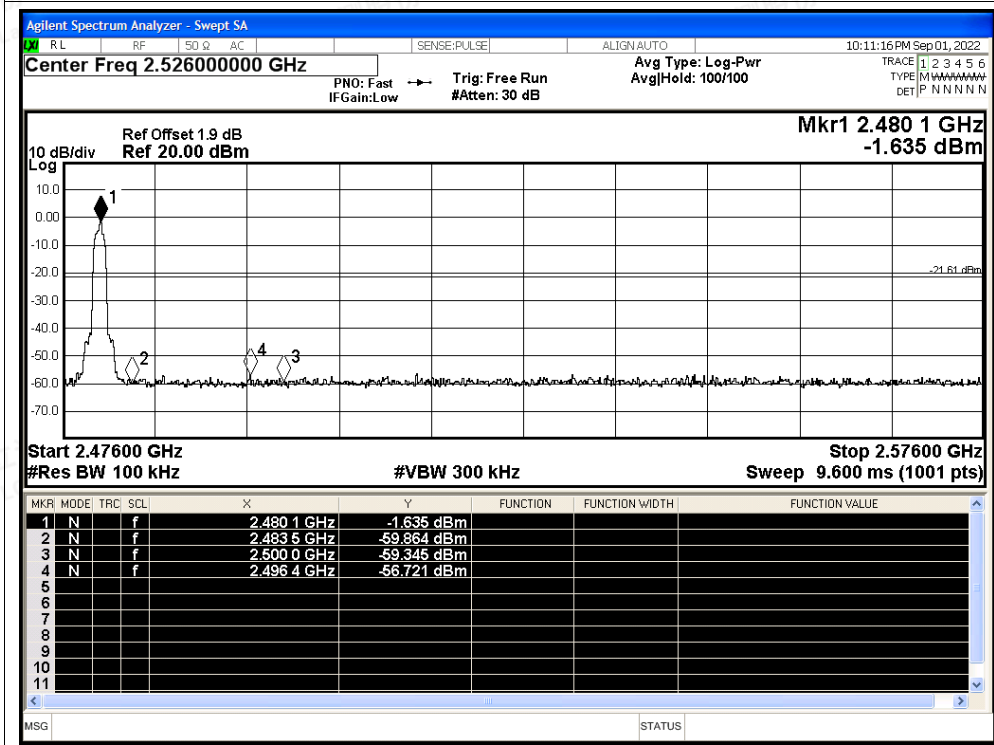




Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref

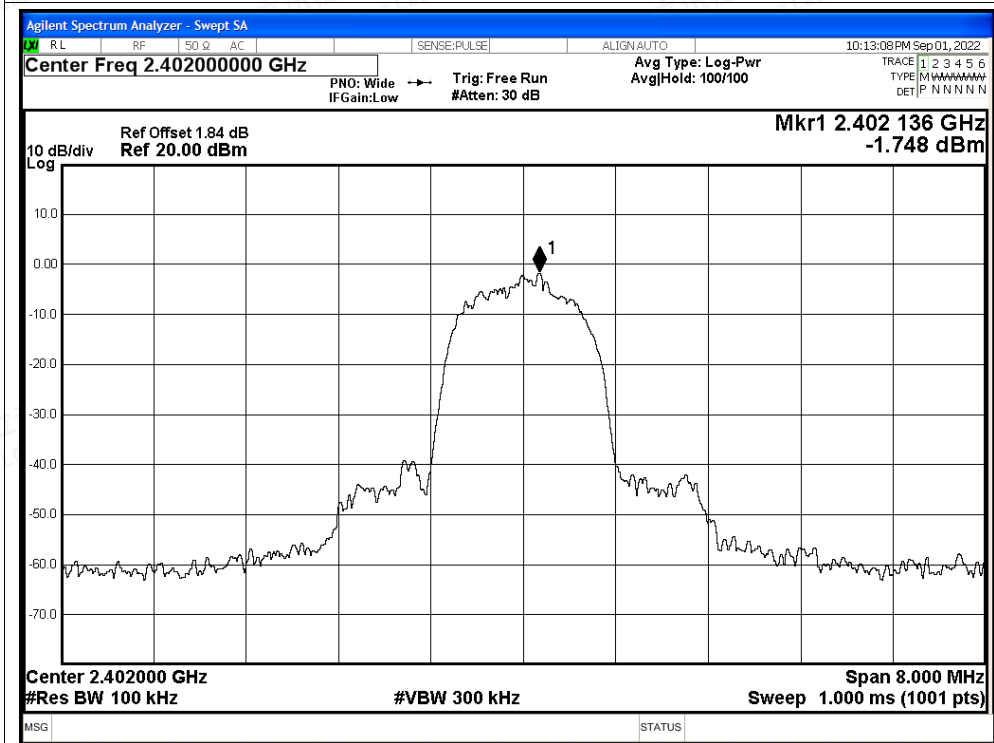


Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission

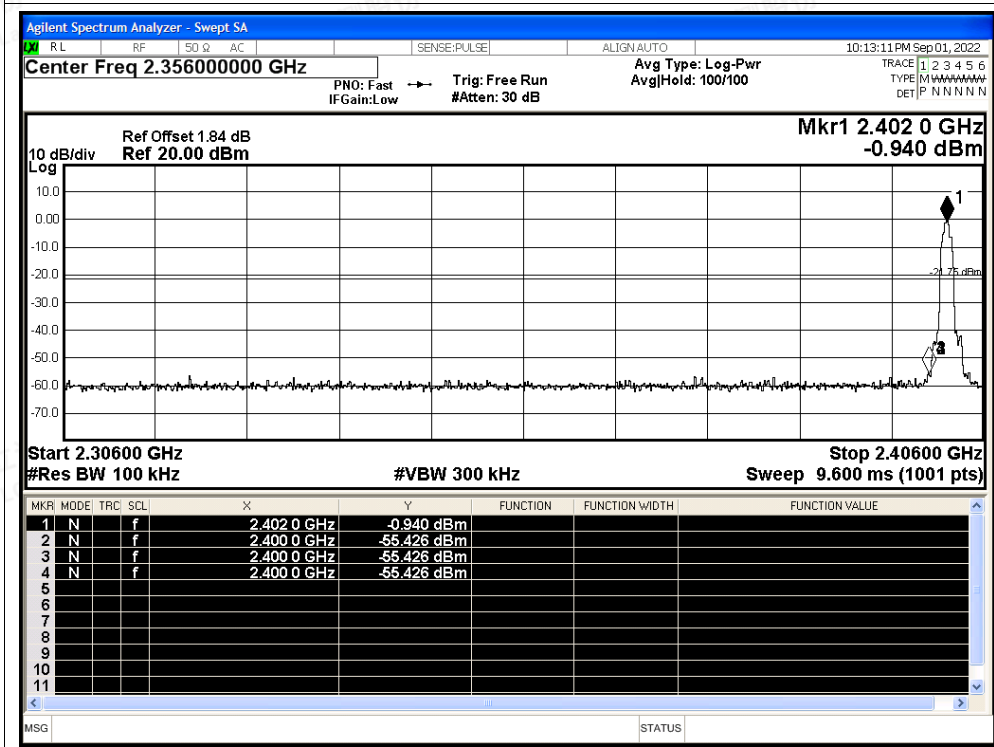




Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref

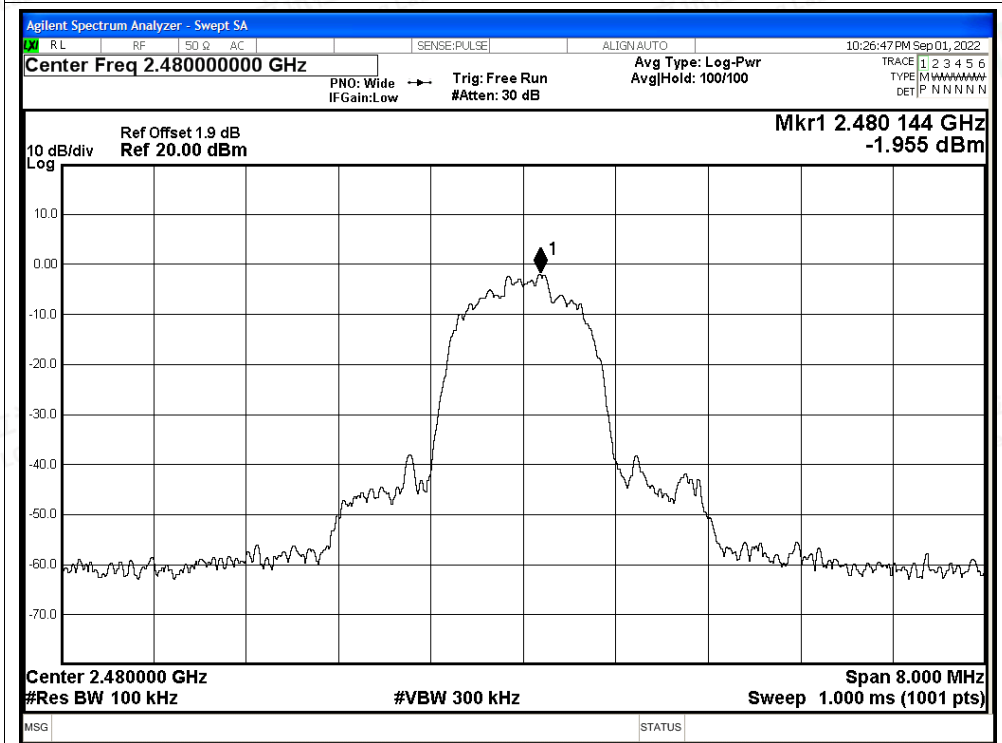


Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission

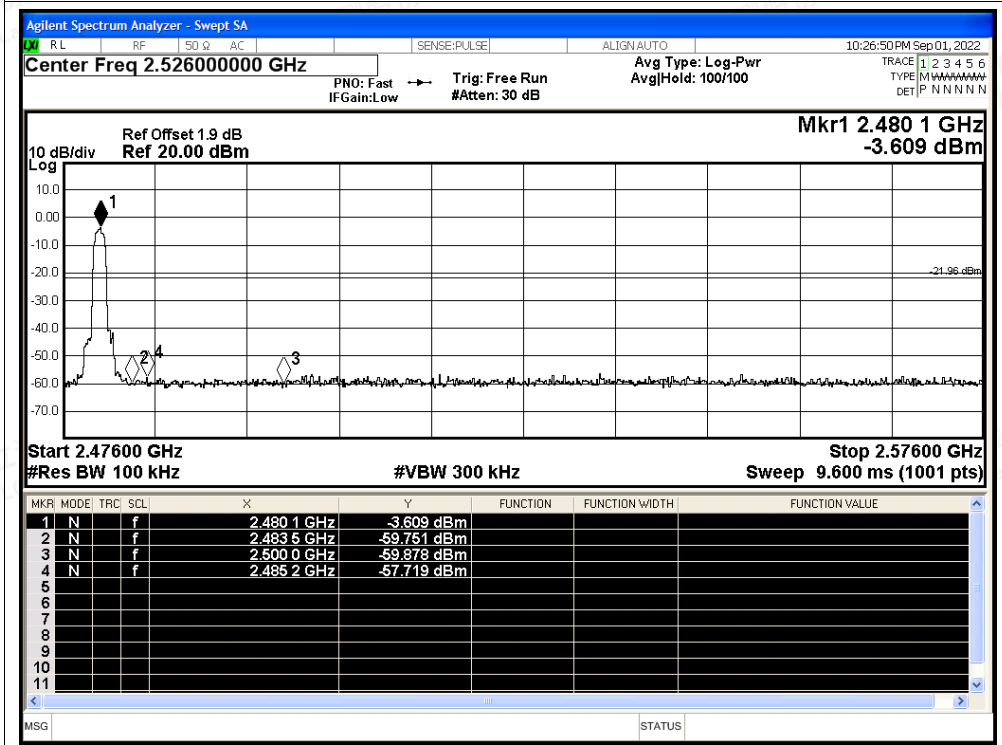




Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



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





### (Hopping)

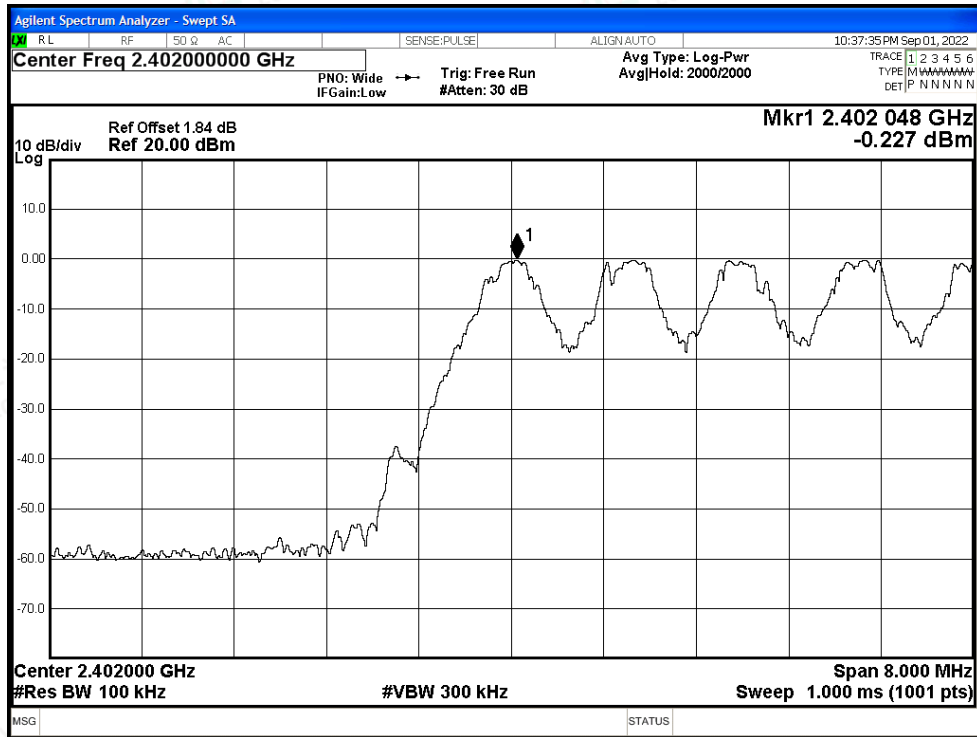
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-56.35	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-56.68	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-55.12	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-53.58	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-55.25	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-54.88	-20	Pass



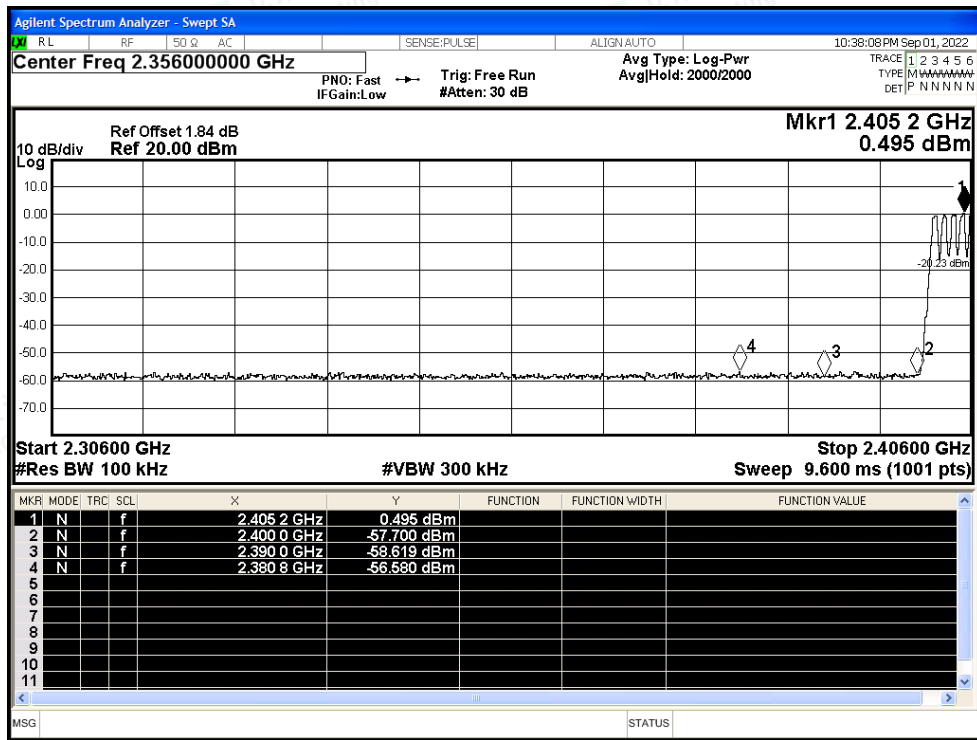


Test Graphs

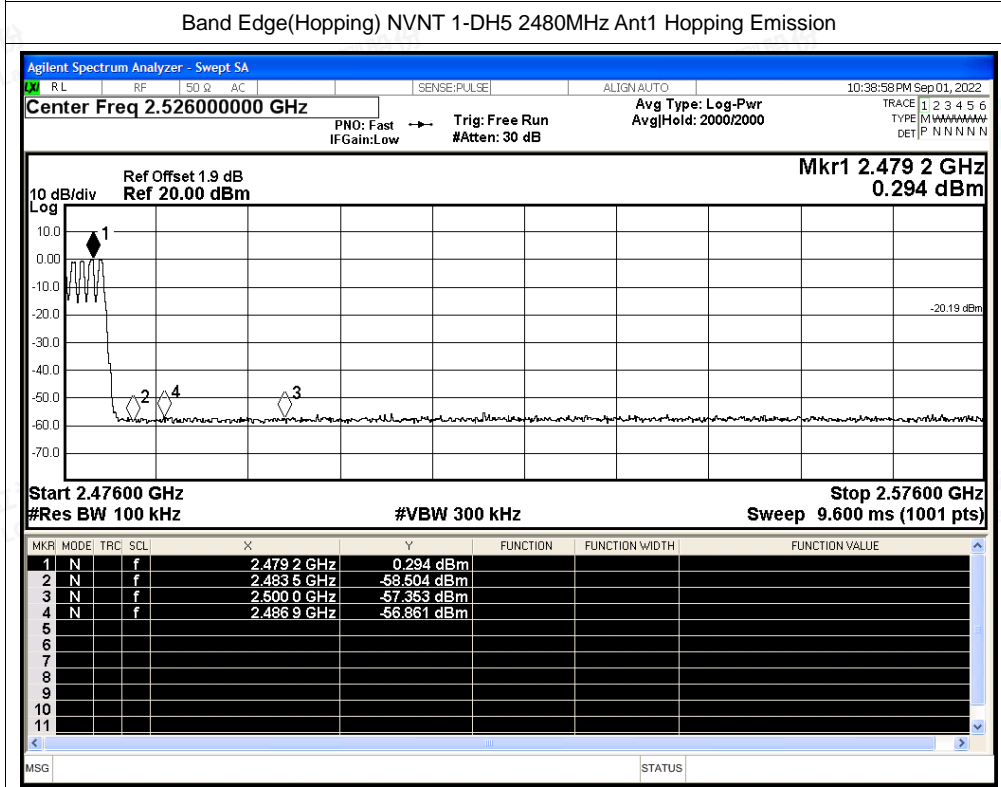
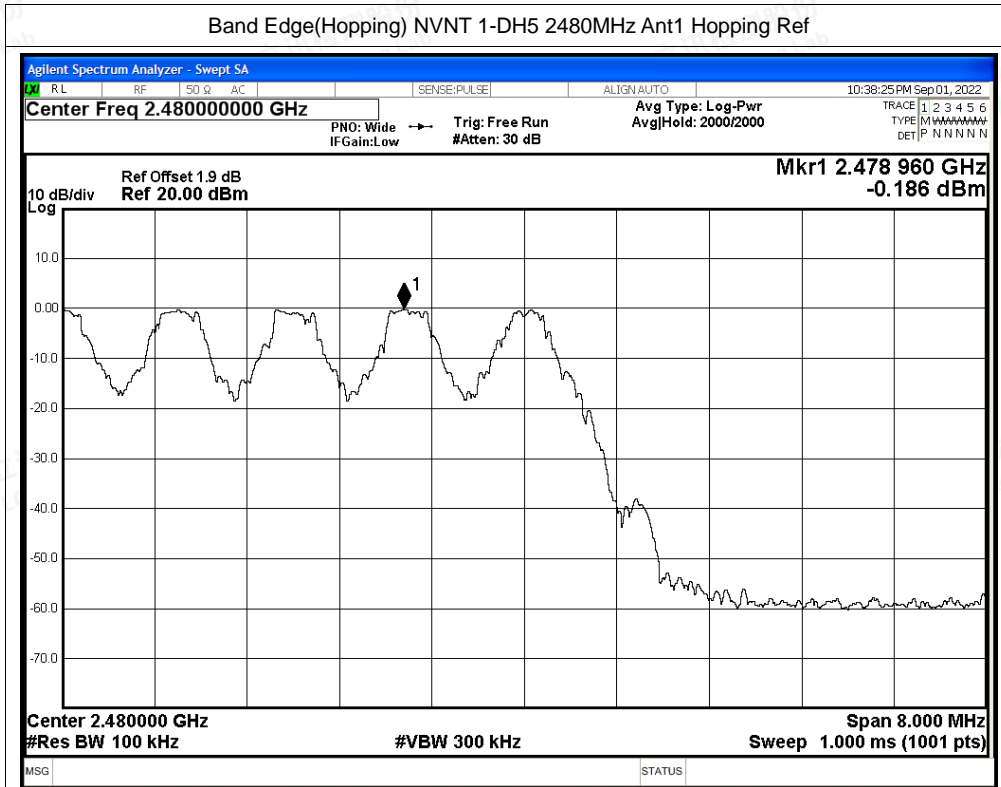
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

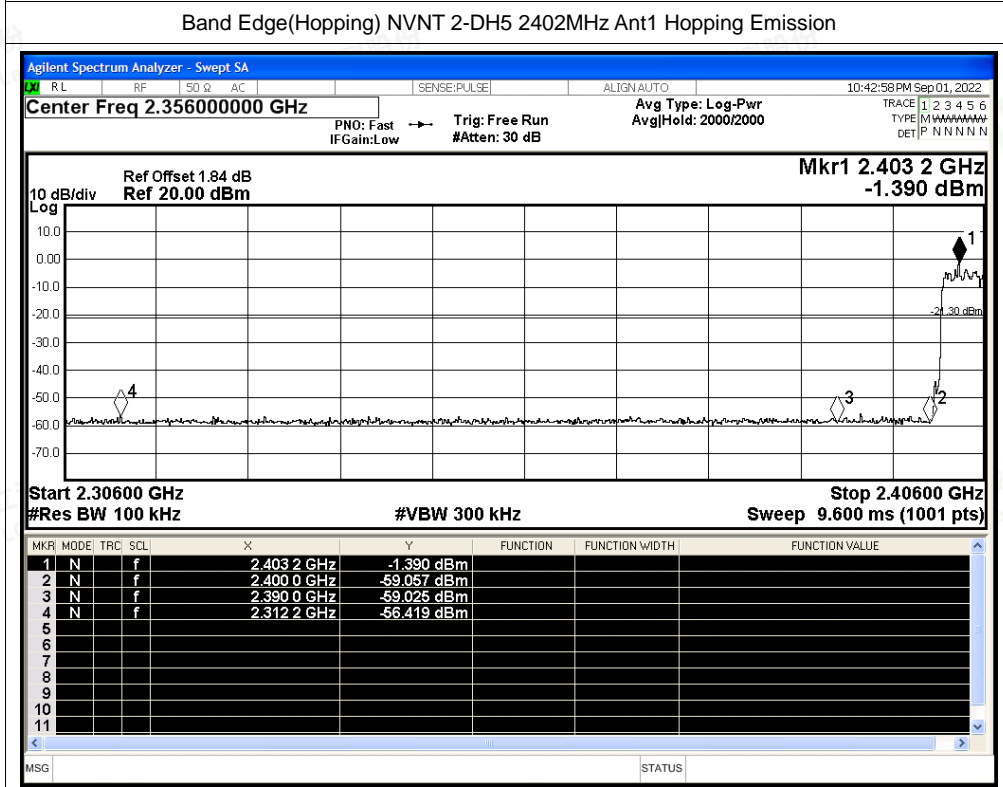
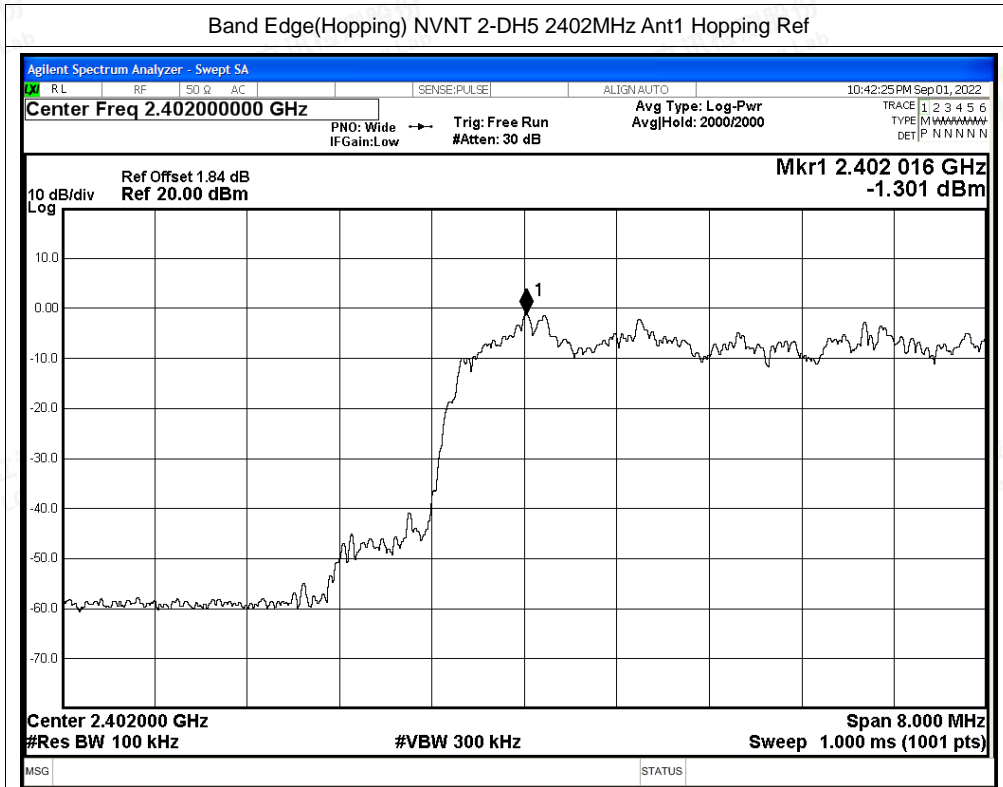


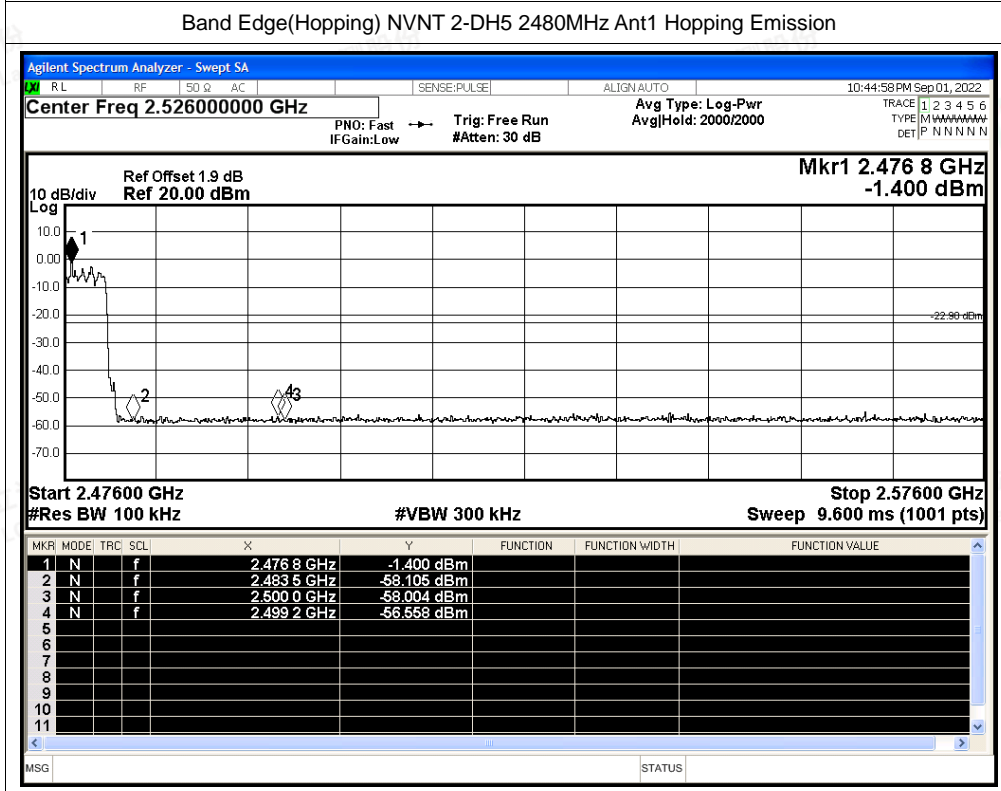
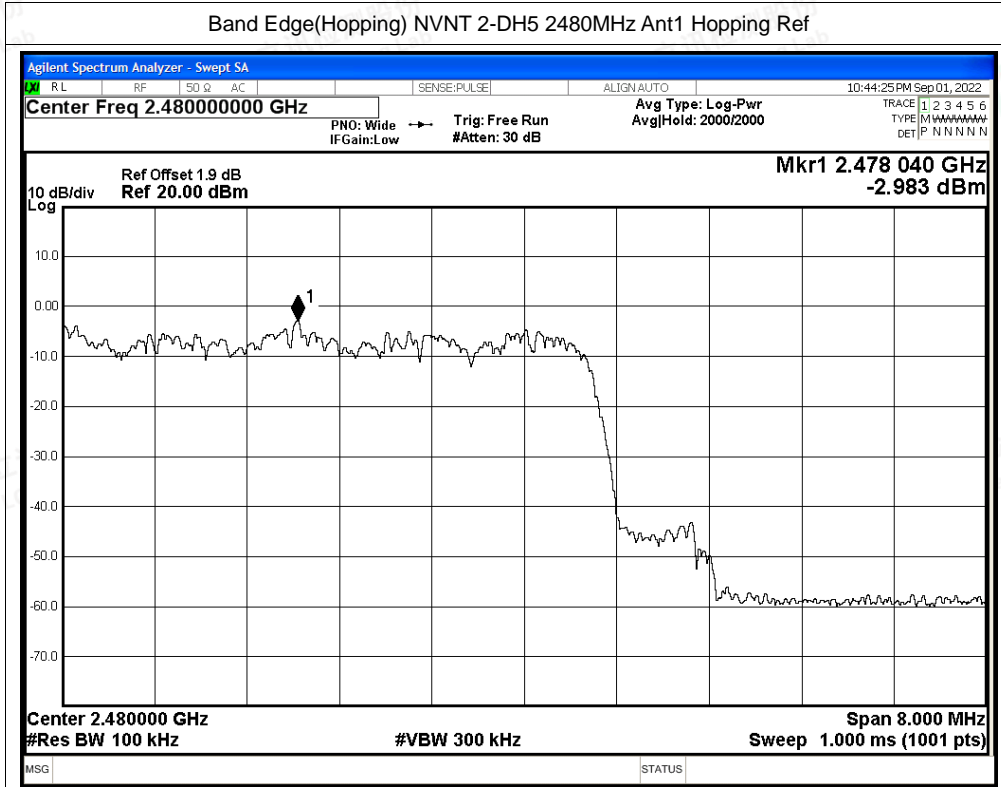
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission

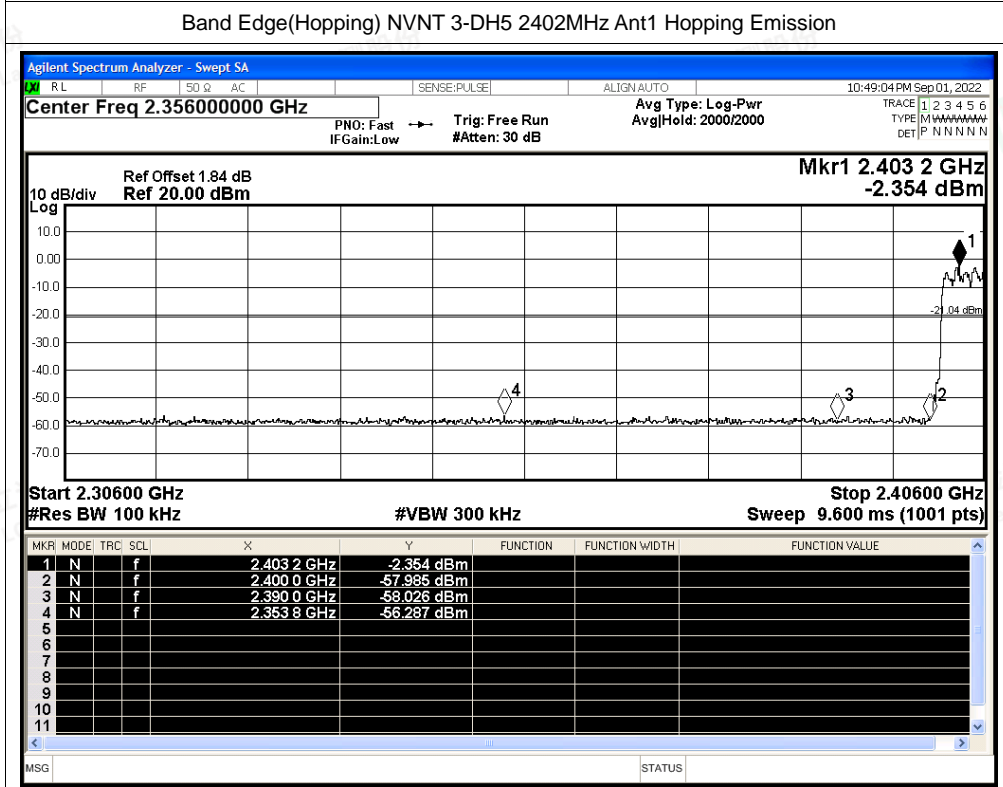
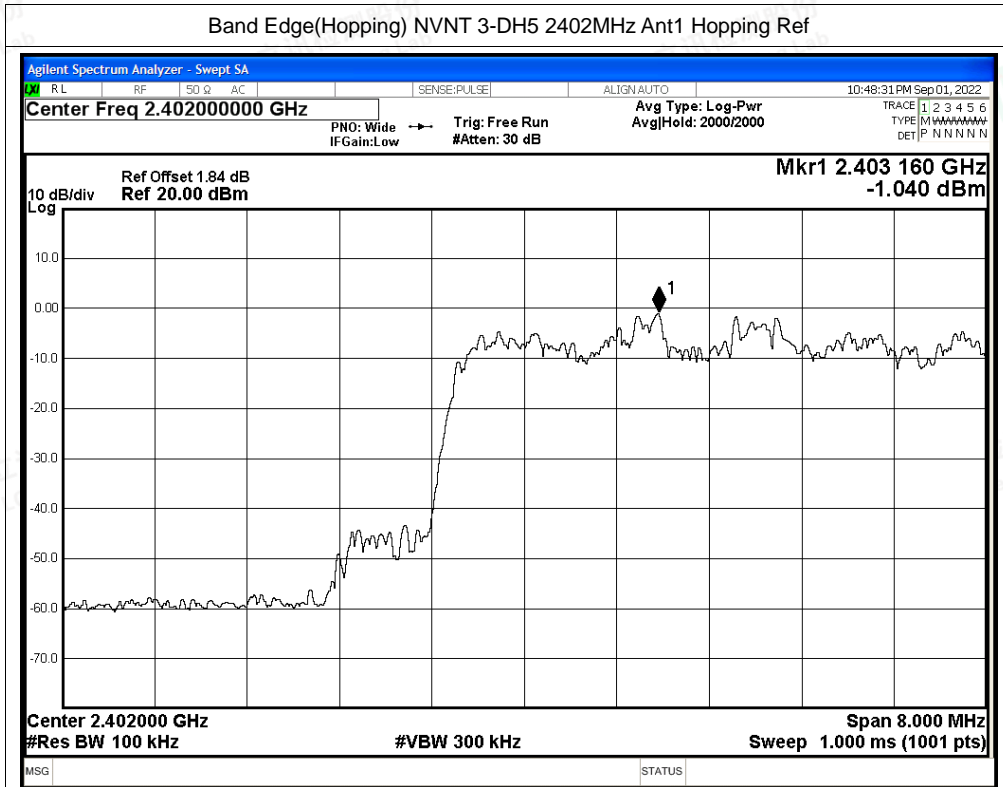


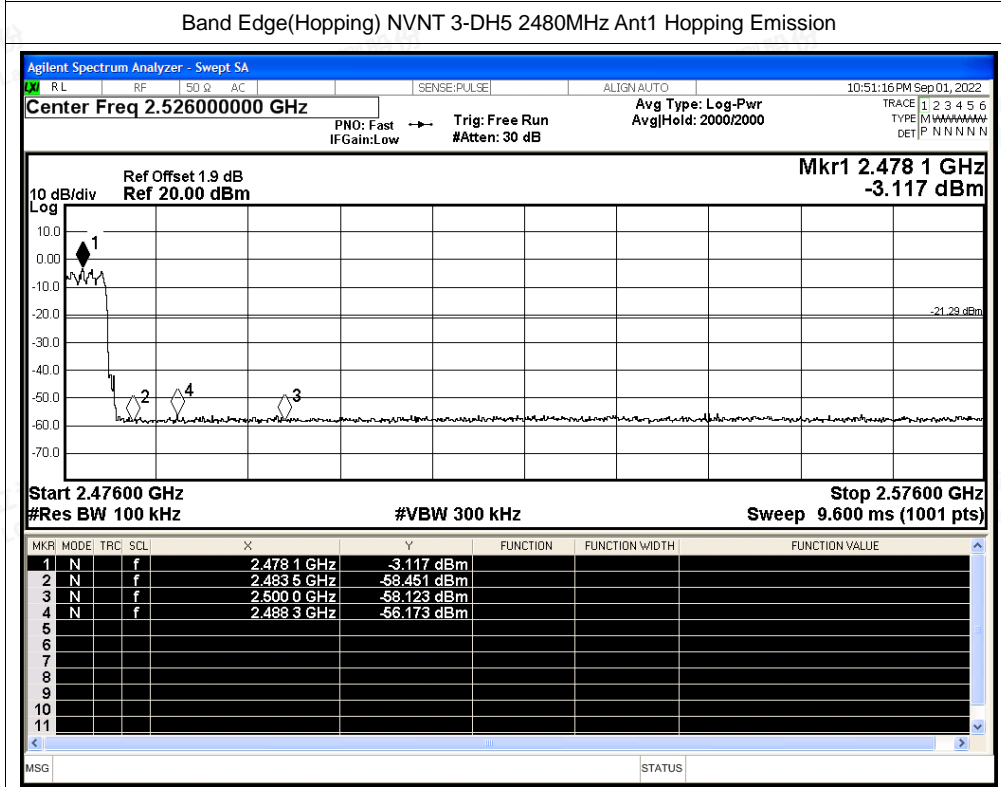
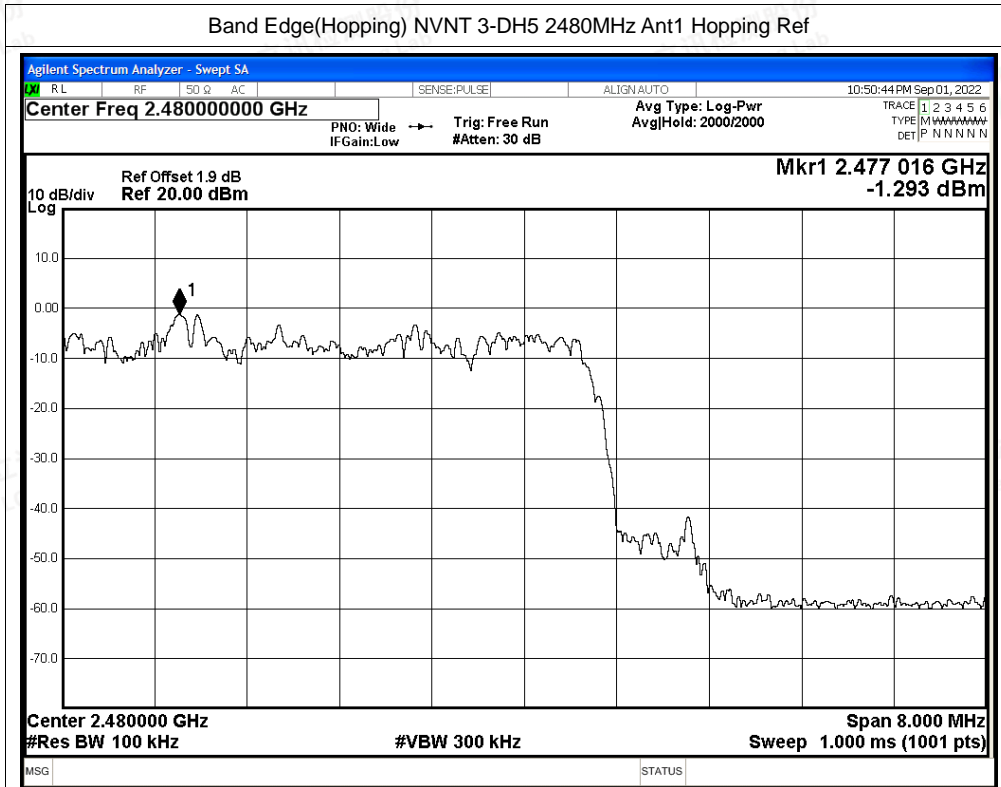














## A.7 Conducted RF Spurious Emission

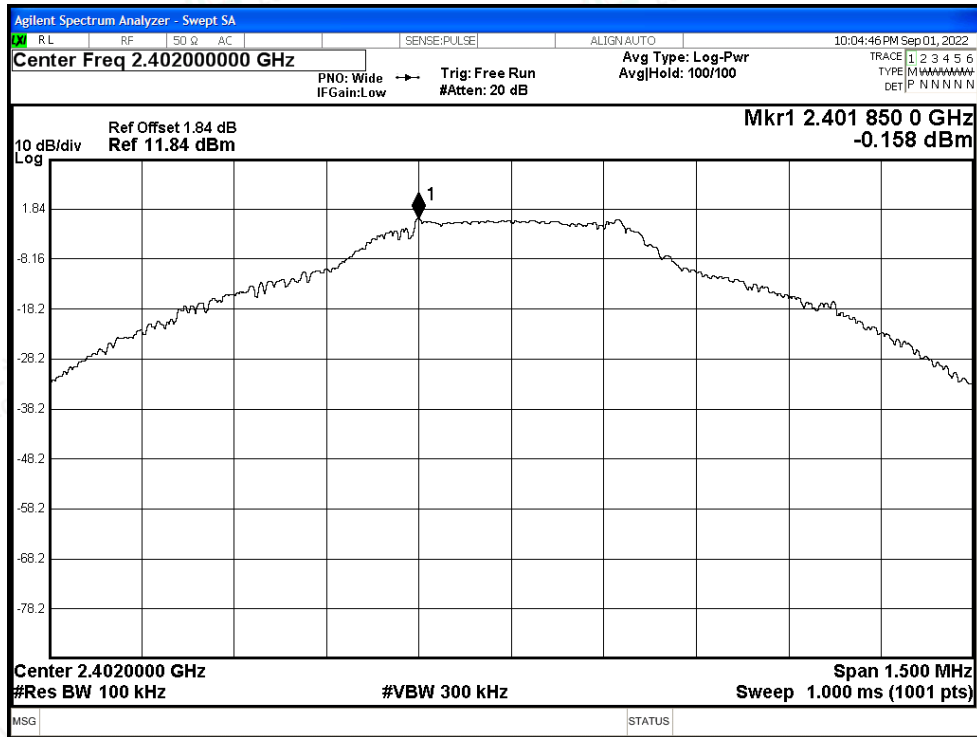
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-55.67	-20	Pass
NVNT	1-DH5	2441	Ant1	-56.15	-20	Pass
NVNT	1-DH5	2480	Ant1	-55.45	-20	Pass
NVNT	2-DH5	2402	Ant1	-54.31	-20	Pass
NVNT	2-DH5	2441	Ant1	-53.82	-20	Pass
NVNT	2-DH5	2480	Ant1	-54.86	-20	Pass
NVNT	3-DH5	2402	Ant1	-54.5	-20	Pass
NVNT	3-DH5	2441	Ant1	-55.09	-20	Pass
NVNT	3-DH5	2480	Ant1	-53.44	-20	Pass



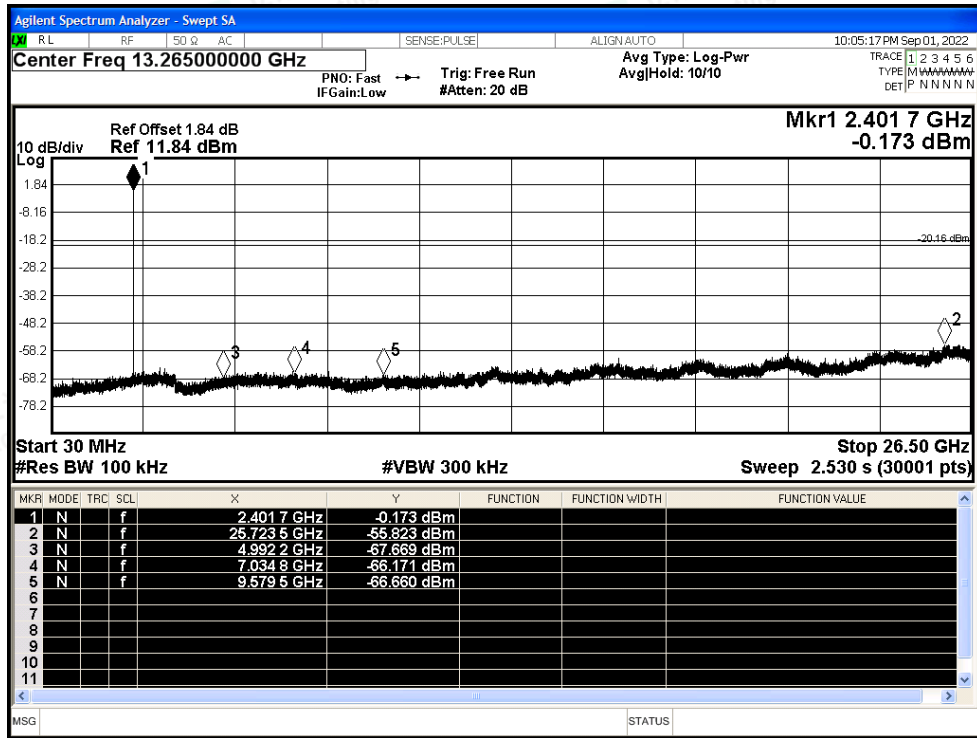


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref

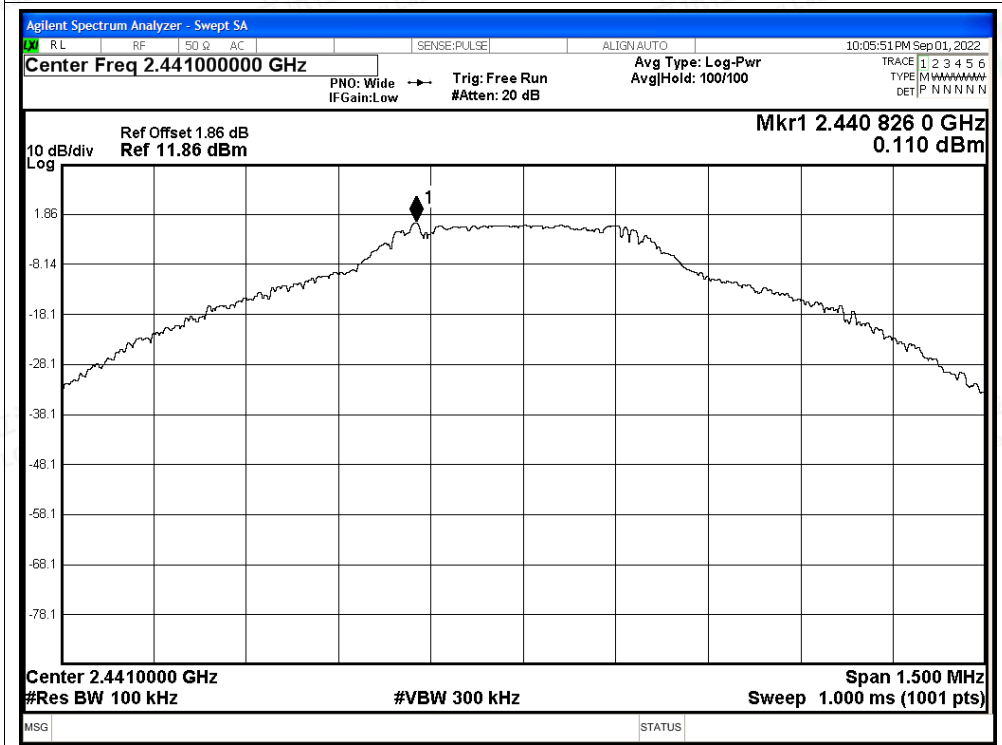


Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission

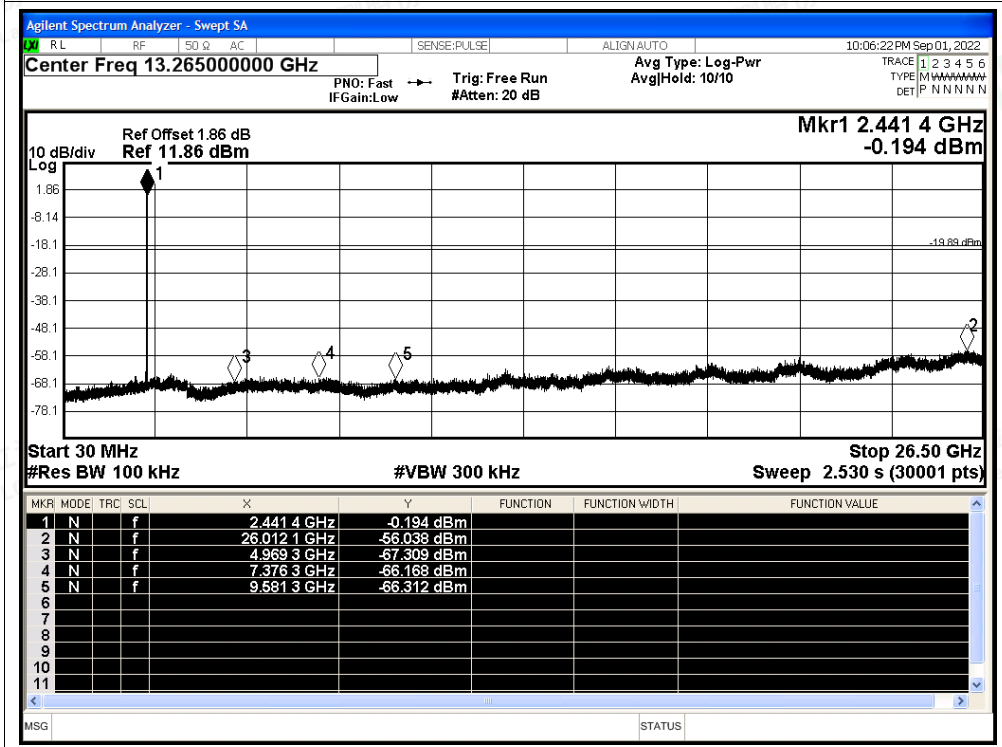




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



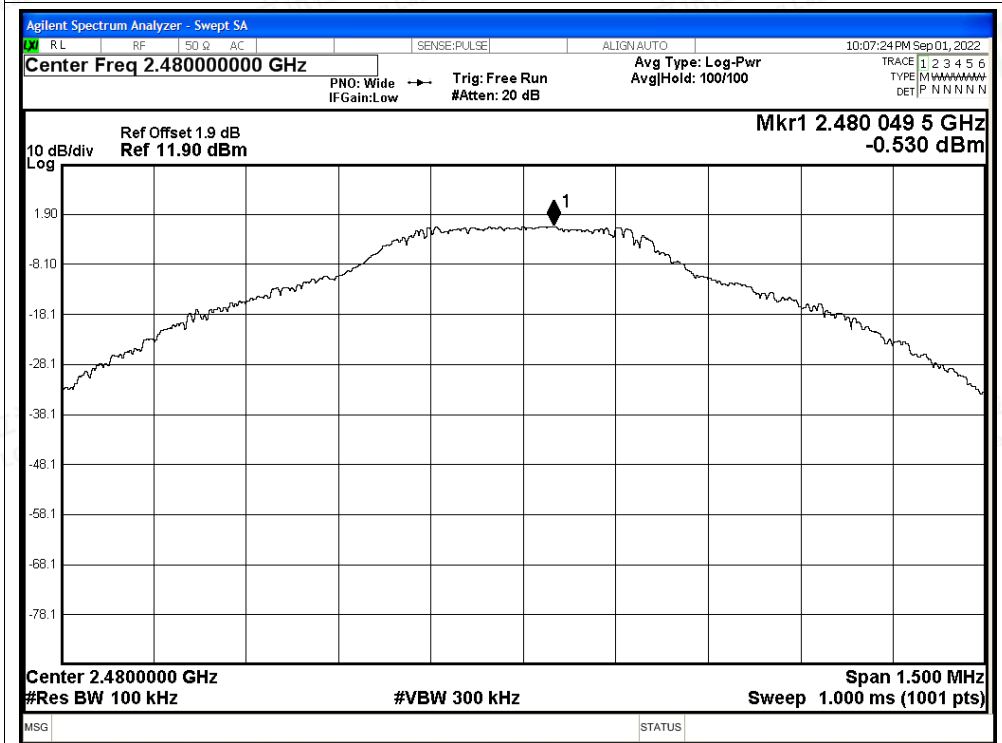
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



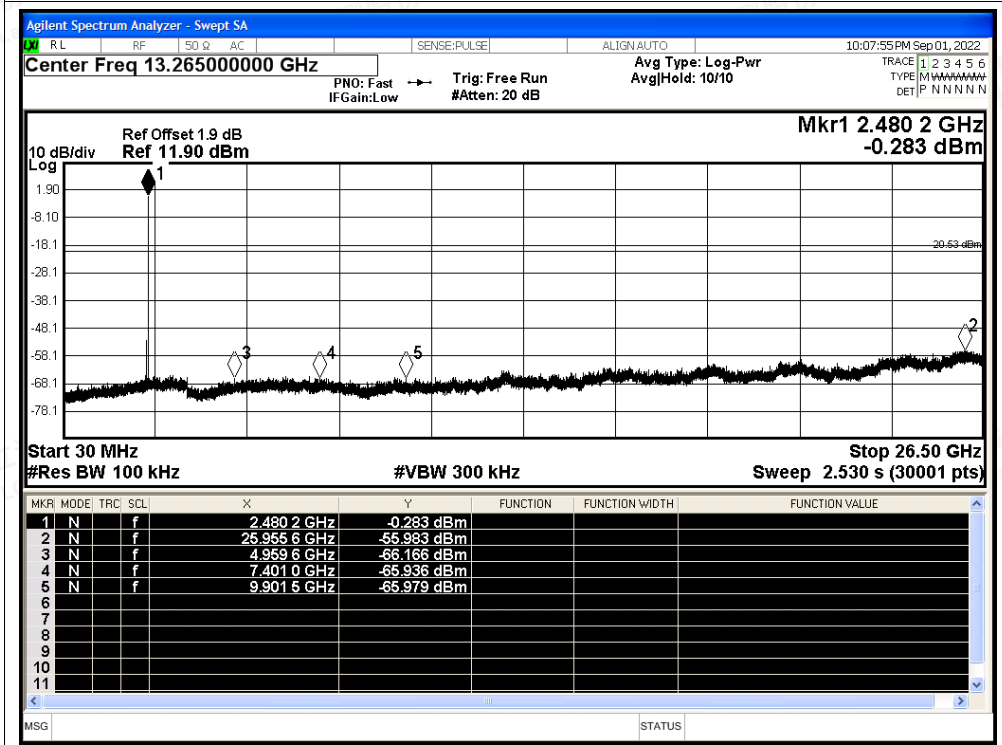




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

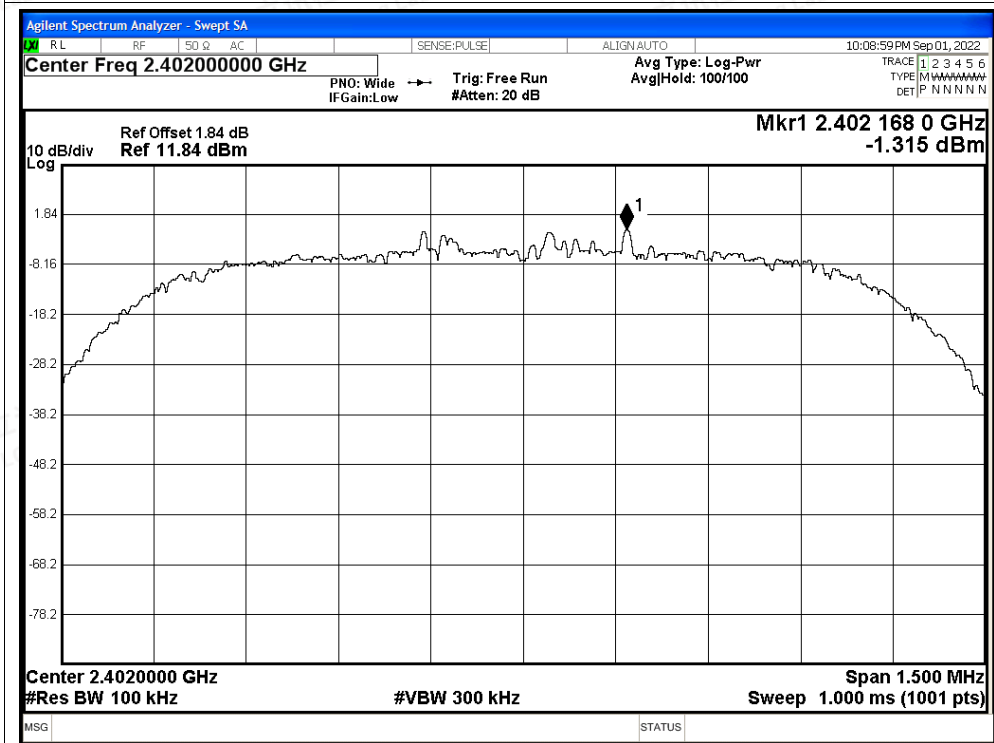


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

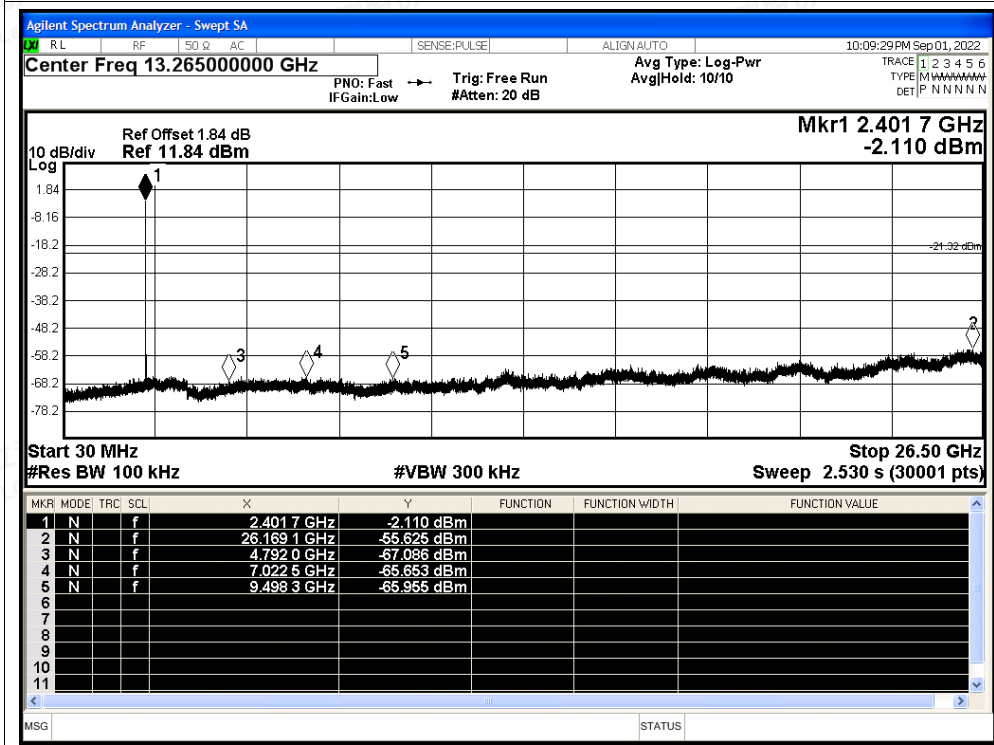




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

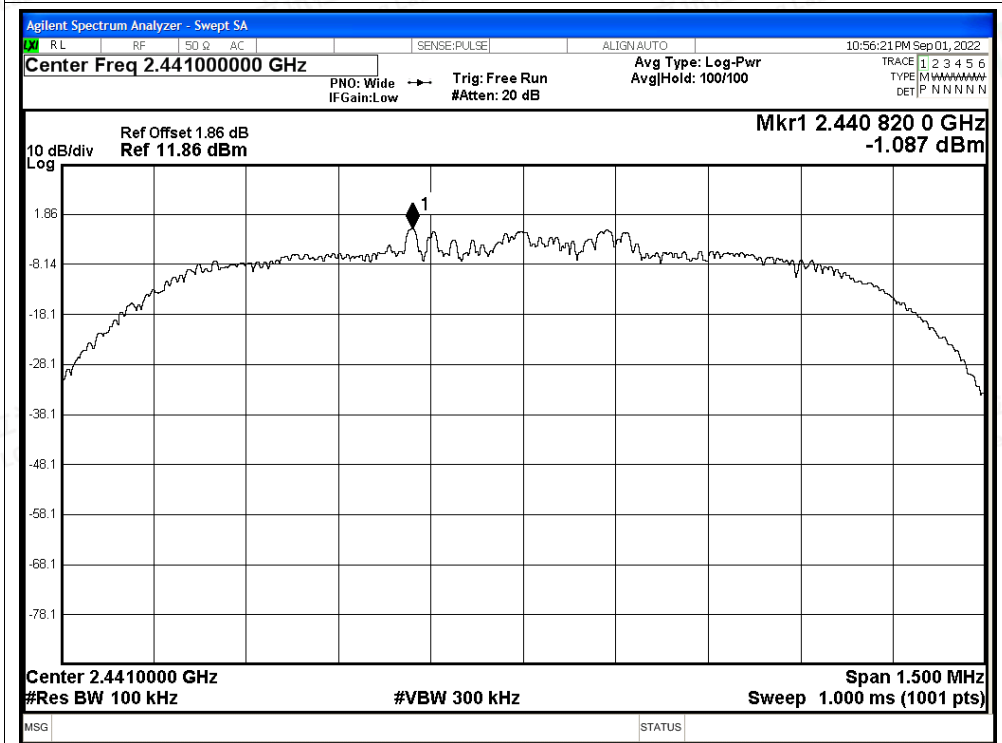


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

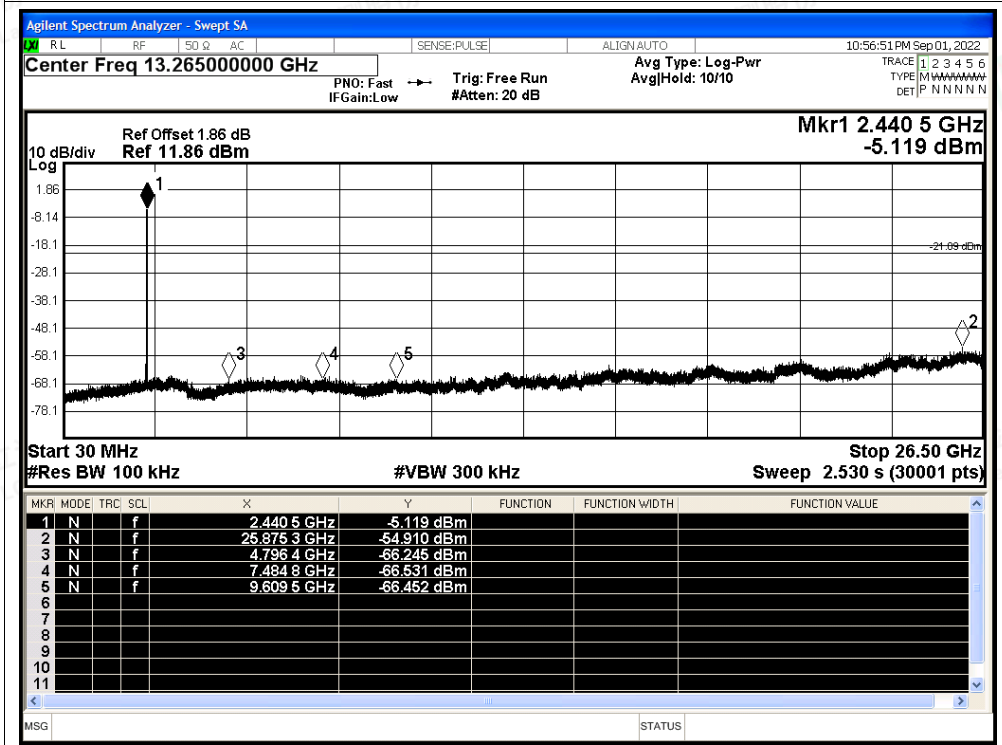




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

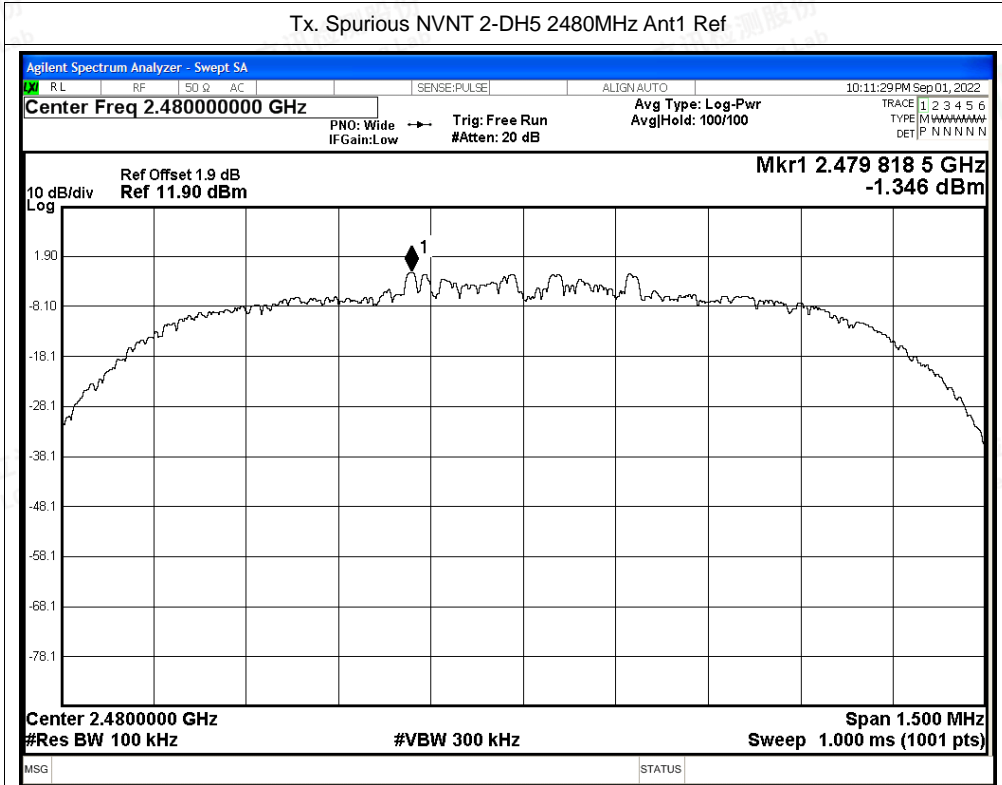


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

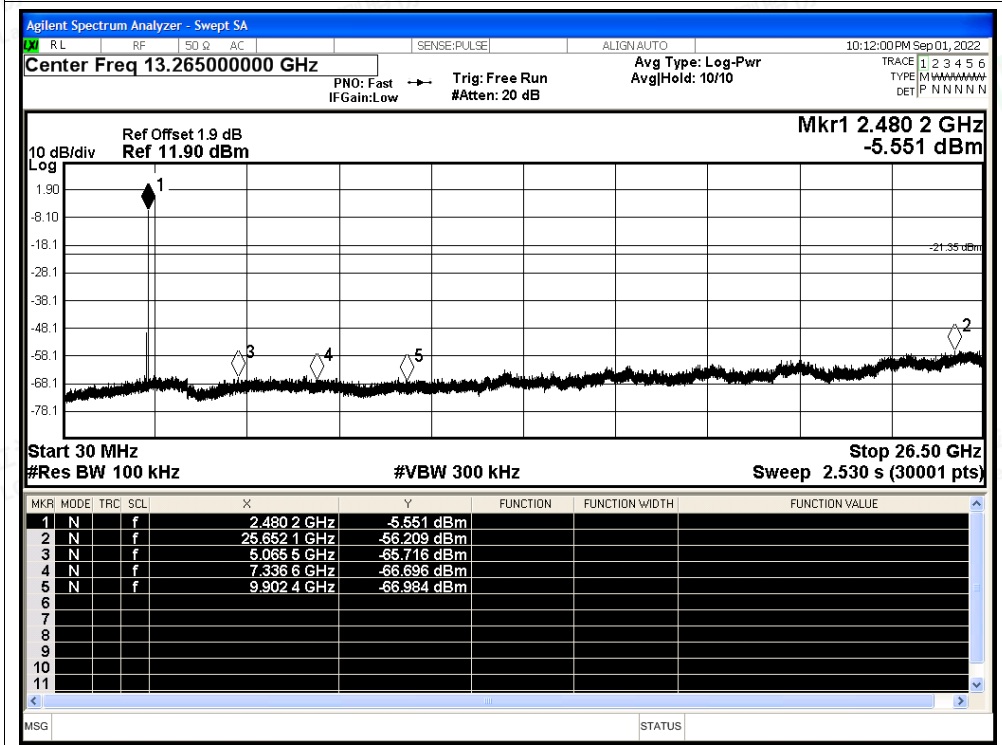




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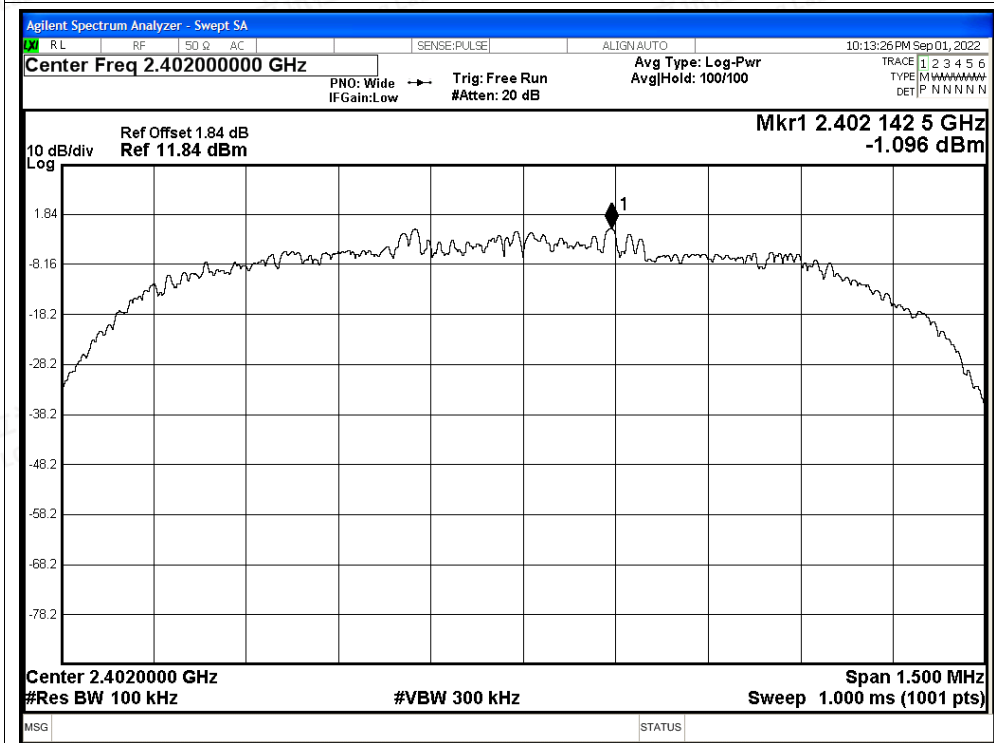


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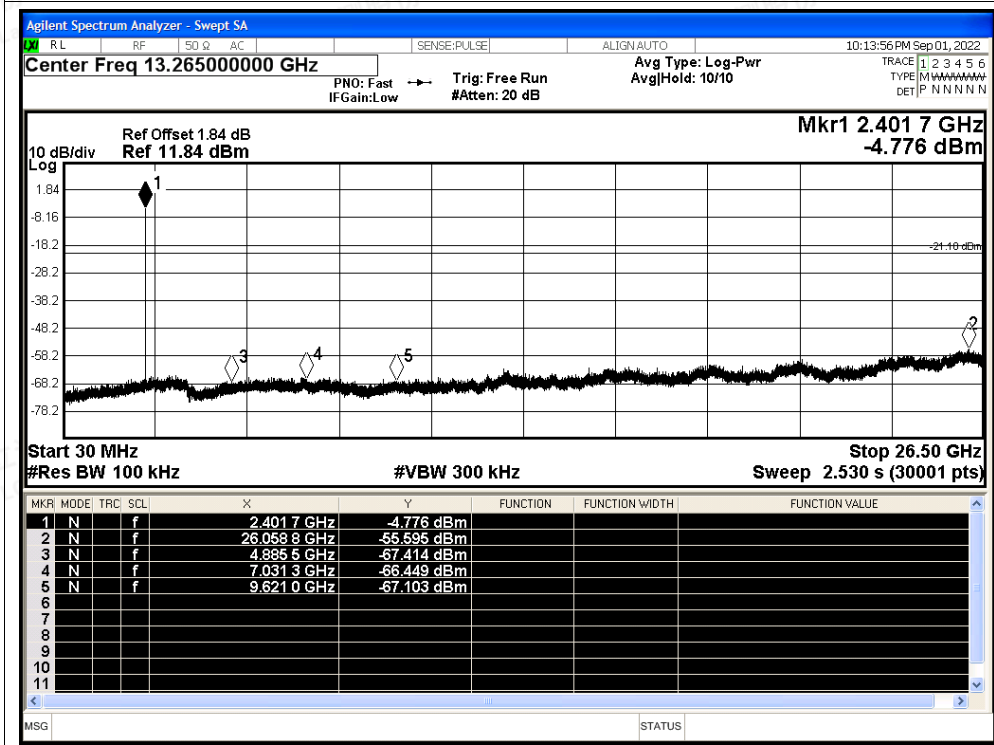




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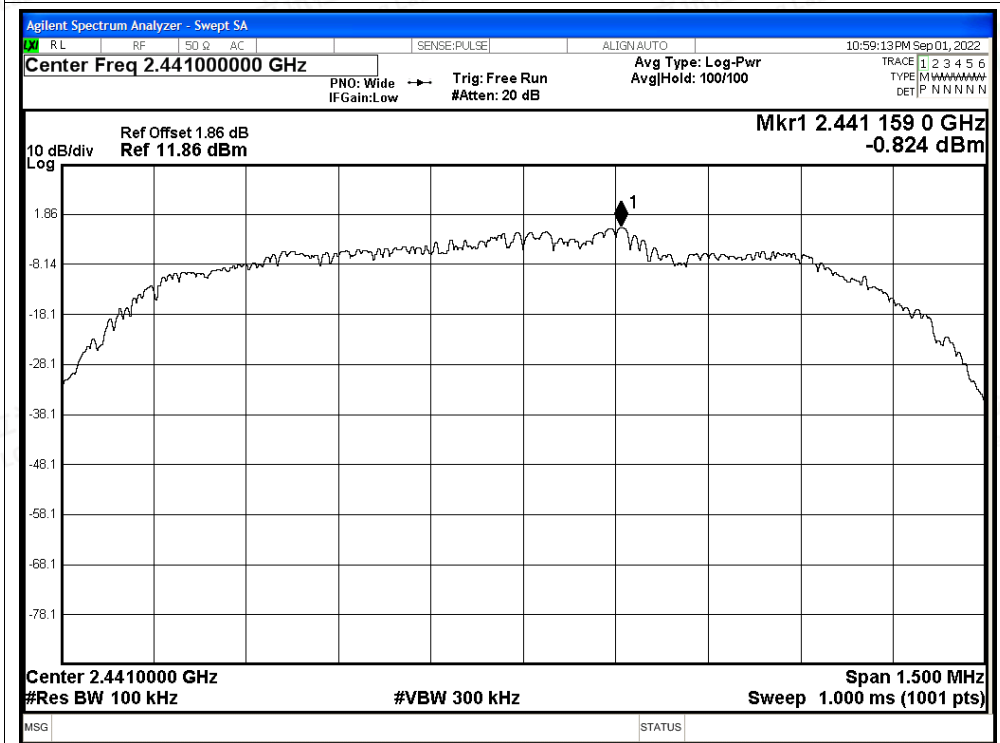


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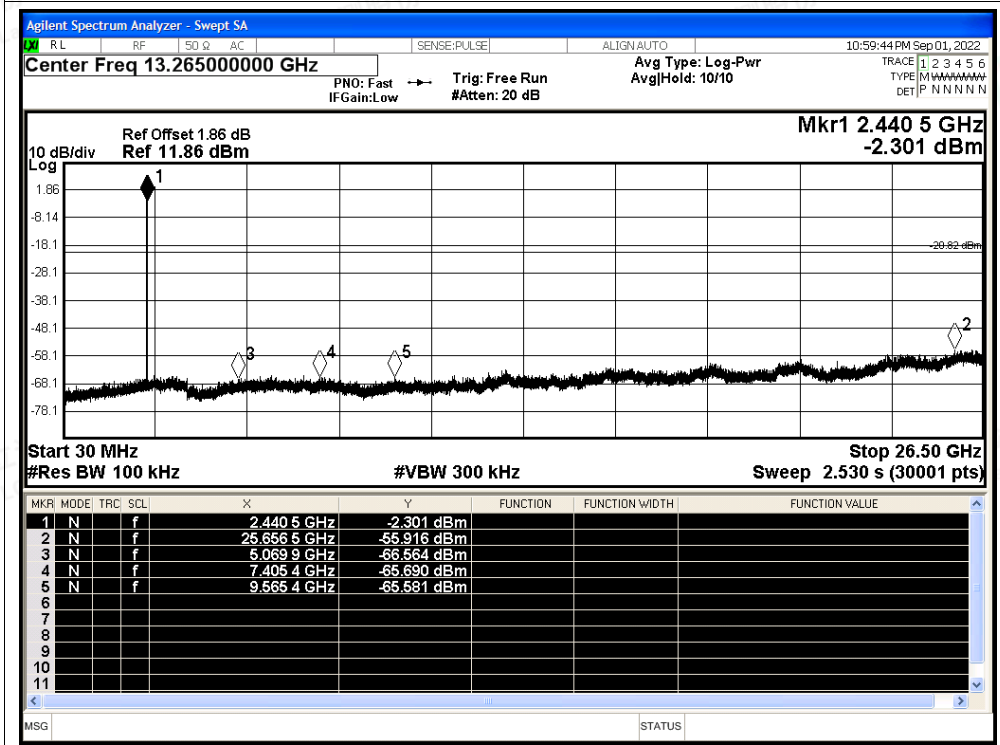




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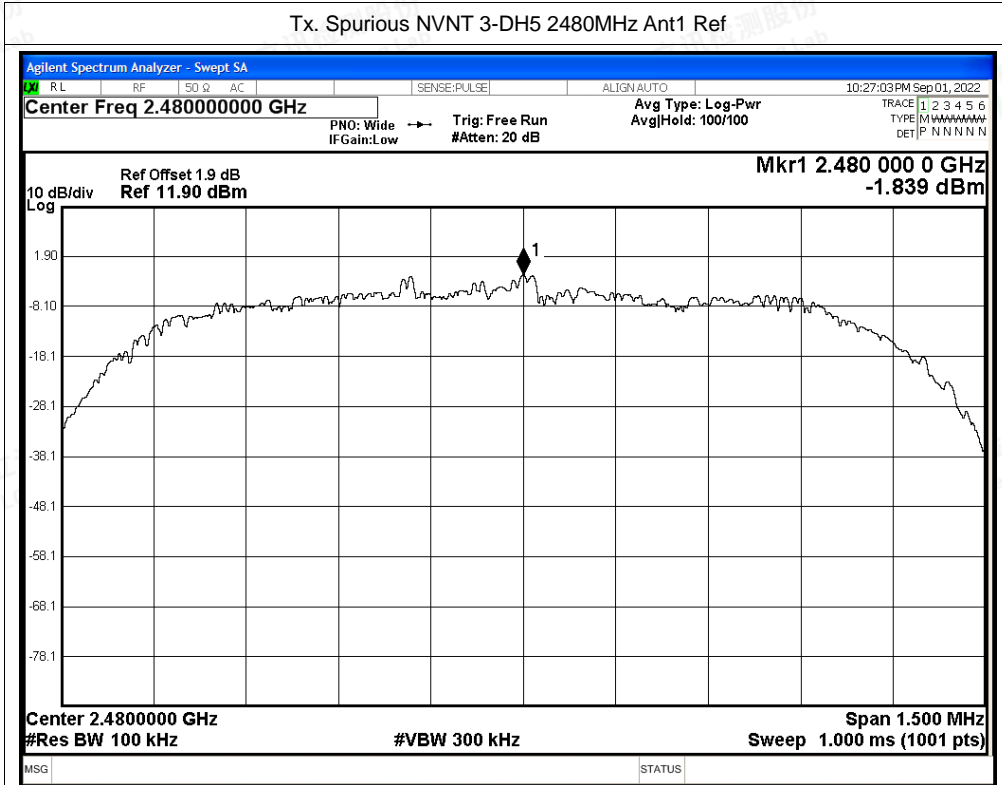


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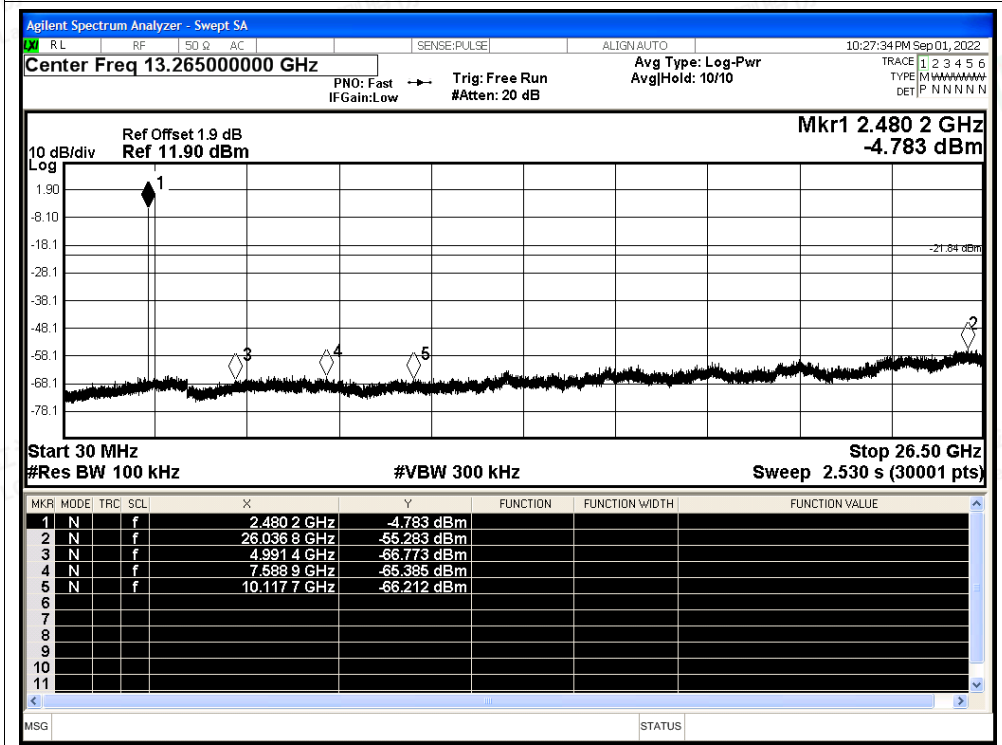




Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission





### A.8 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-50.81	2.47	46.89	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.64	2.47	37.06	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2350.704	-47.35	2.47	50.35	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2379.408	-60.15	2.47	37.55	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.63	2.47	48.07	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-60.16	2.47	37.54	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-49.37	2.47	48.33	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-59.76	2.47	37.94	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2489.824	-46.4	2.47	51.30	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.544	-59.6	2.47	38.10	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-49.39	2.47	48.31	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-59.95	2.47	37.75	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.56	2.47	46.14	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.5	2.47	37.20	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2324.4	-46.58	2.47	51.12	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2387.856	-60.03	2.47	37.67	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-48.77	2.47	48.93	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-60.26	2.47	37.44	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-50.13	2.47	47.57	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-59.75	2.47	37.95	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.664	-47.17	2.47	50.53	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.728	-59.62	2.47	38.08	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-50.88	2.47	46.82	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-59.86	2.47	37.84	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-50.12	2.47	47.58	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-60.57	2.47	37.13	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2329.2	-47.96	2.47	49.74	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2389.968	-60.05	2.47	37.65	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-50.83	2.47	46.87	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-60.05	2.47	37.65	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-50.13	2.47	47.57	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-59.81	2.47	37.89	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2496.88	-47.44	2.47	50.26	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2485	-59.71	2.47	37.99	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-49.28	2.47	48.42	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-59.89	2.47	37.81	Average	54	Pass



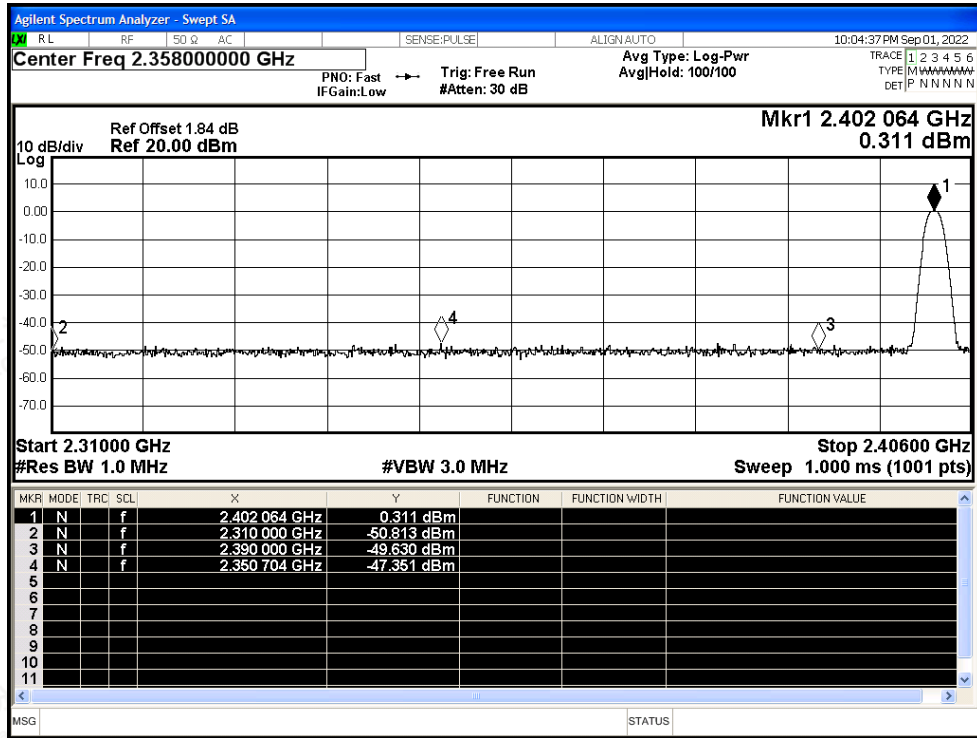
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



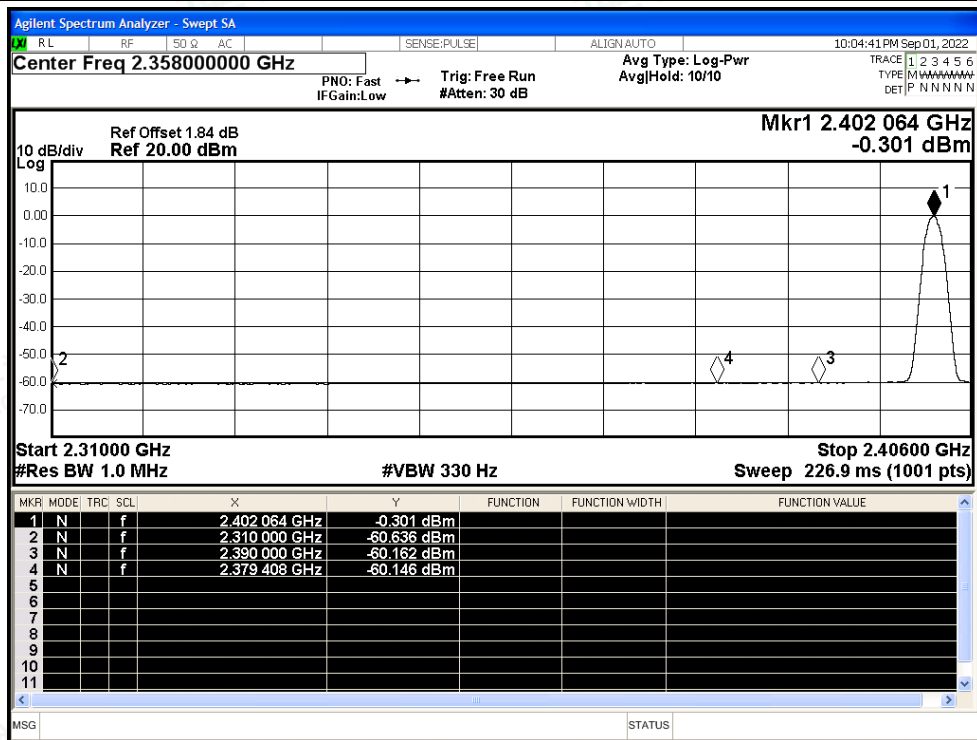


Test Graphs

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

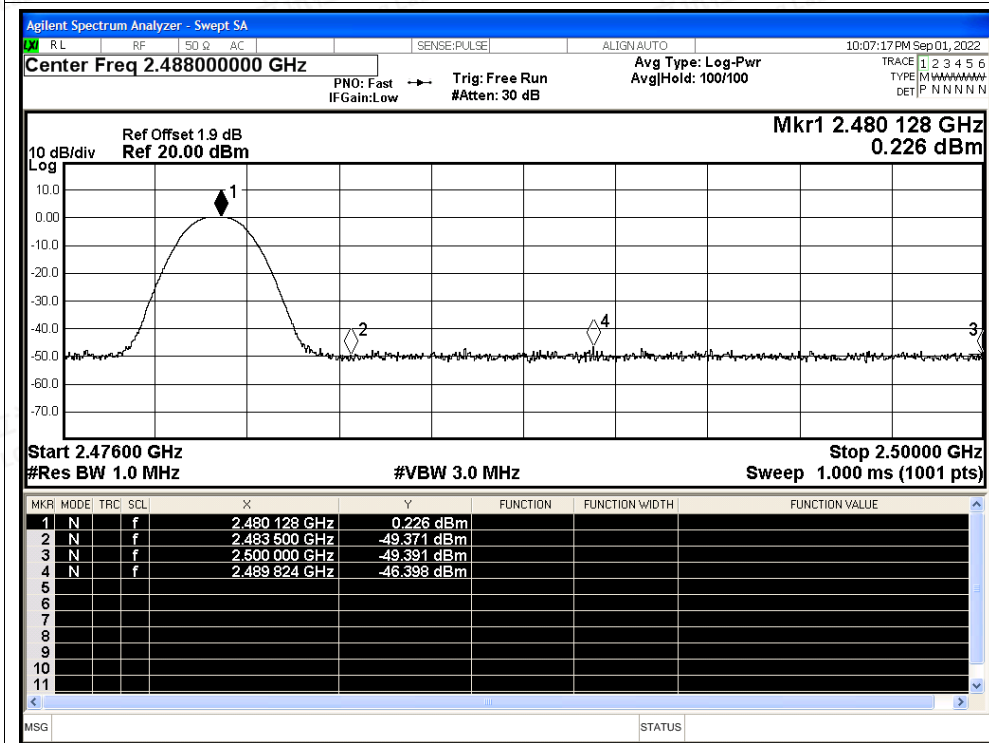


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

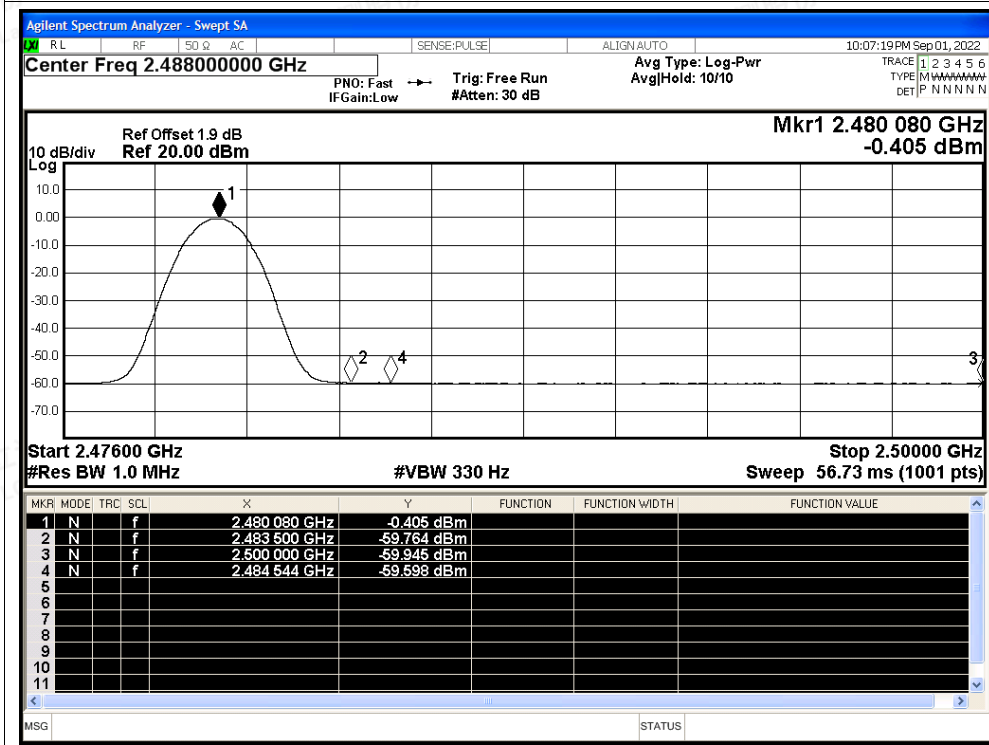




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak

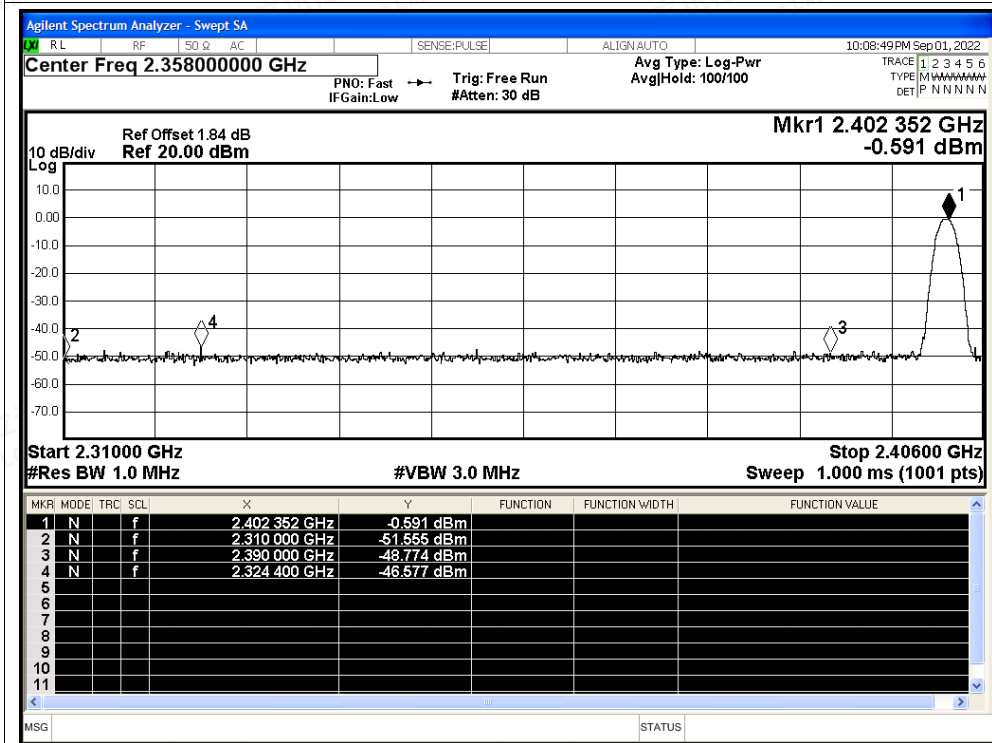


Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average

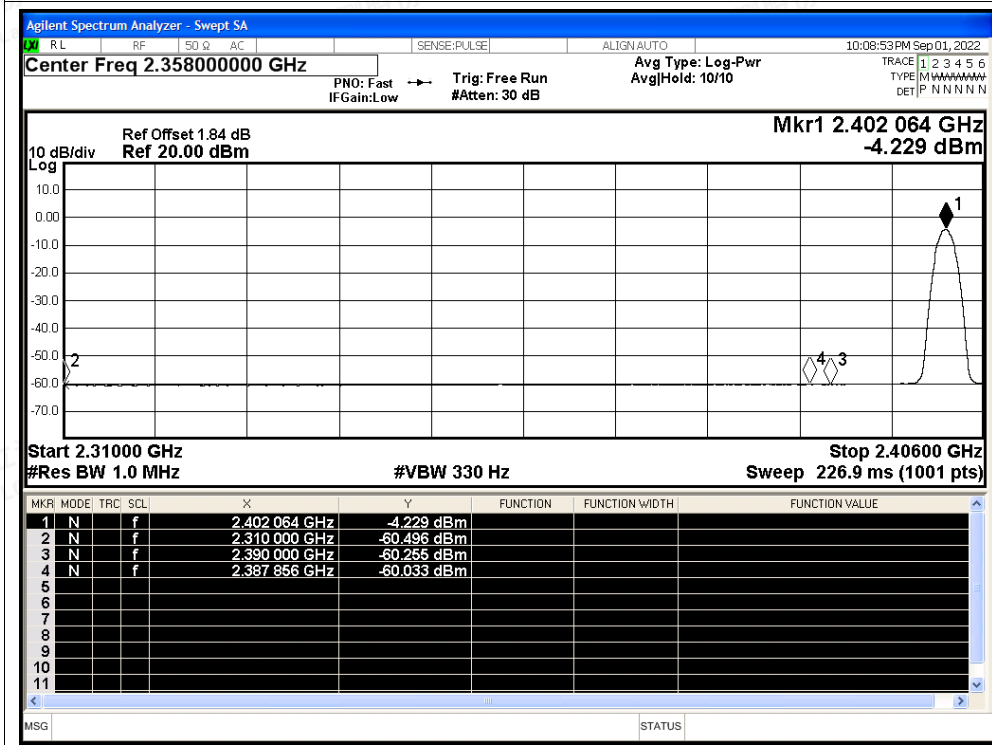




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

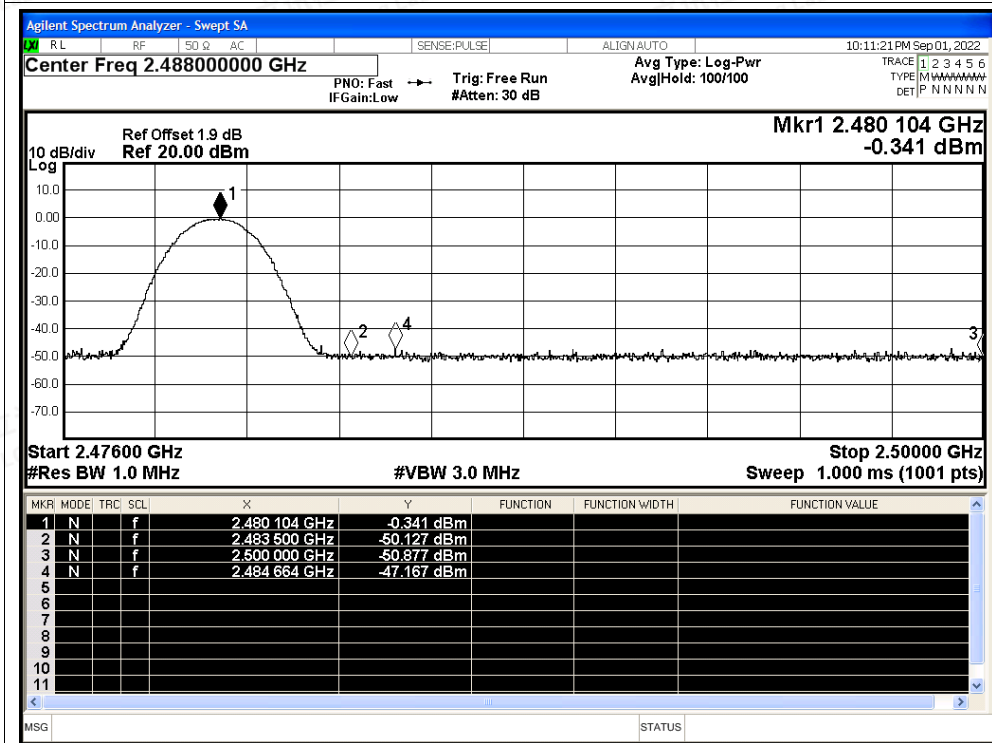


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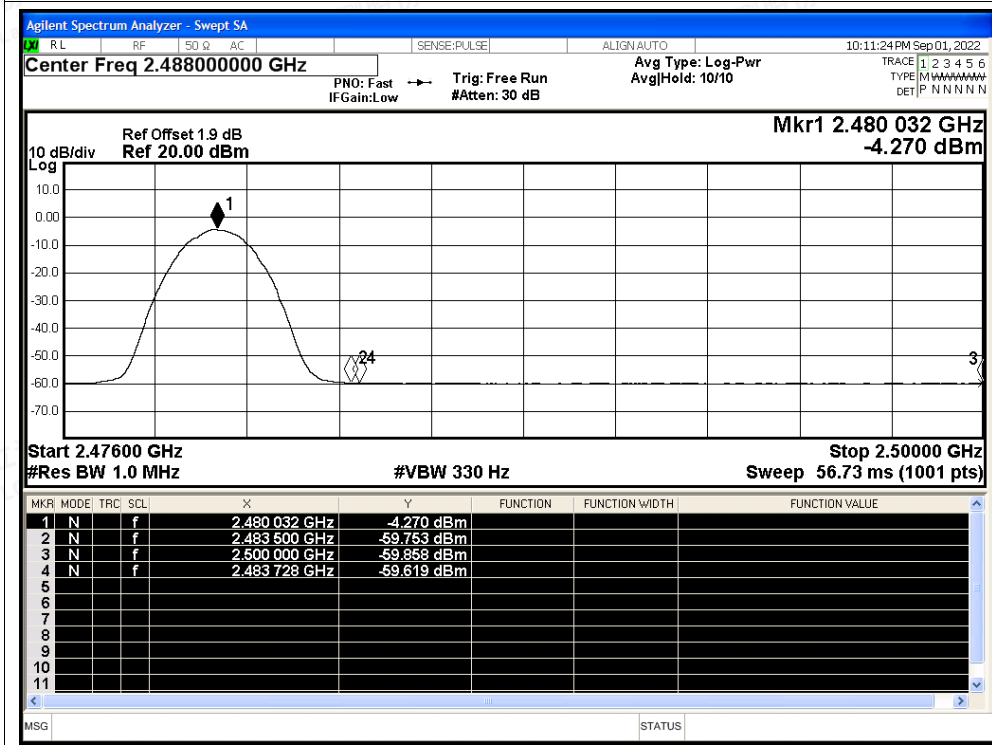




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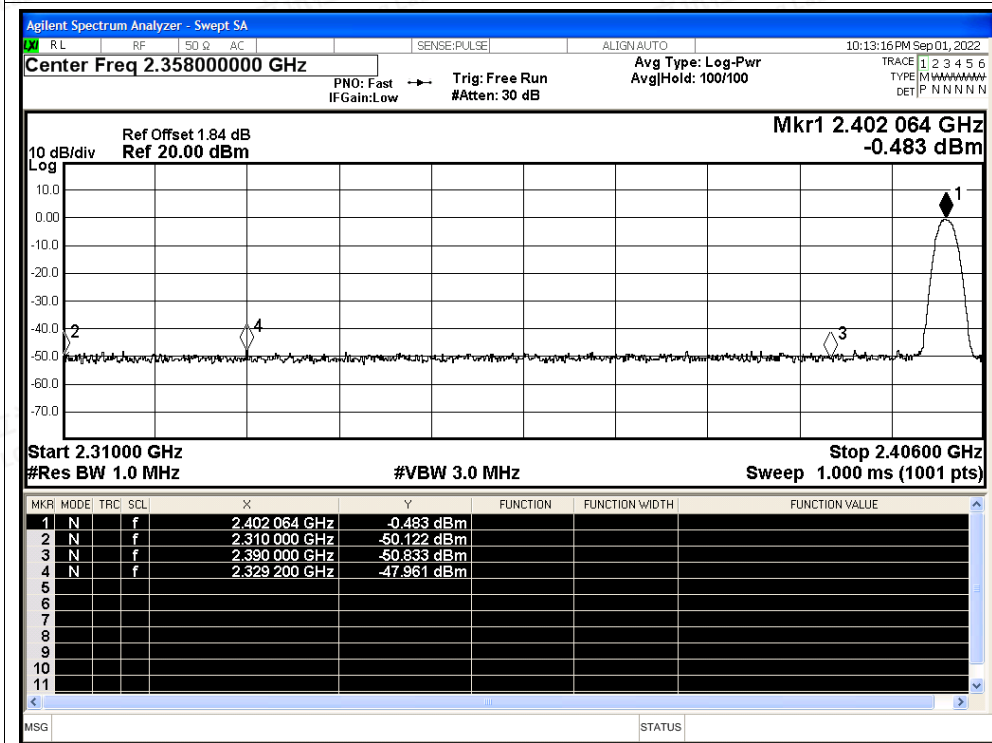


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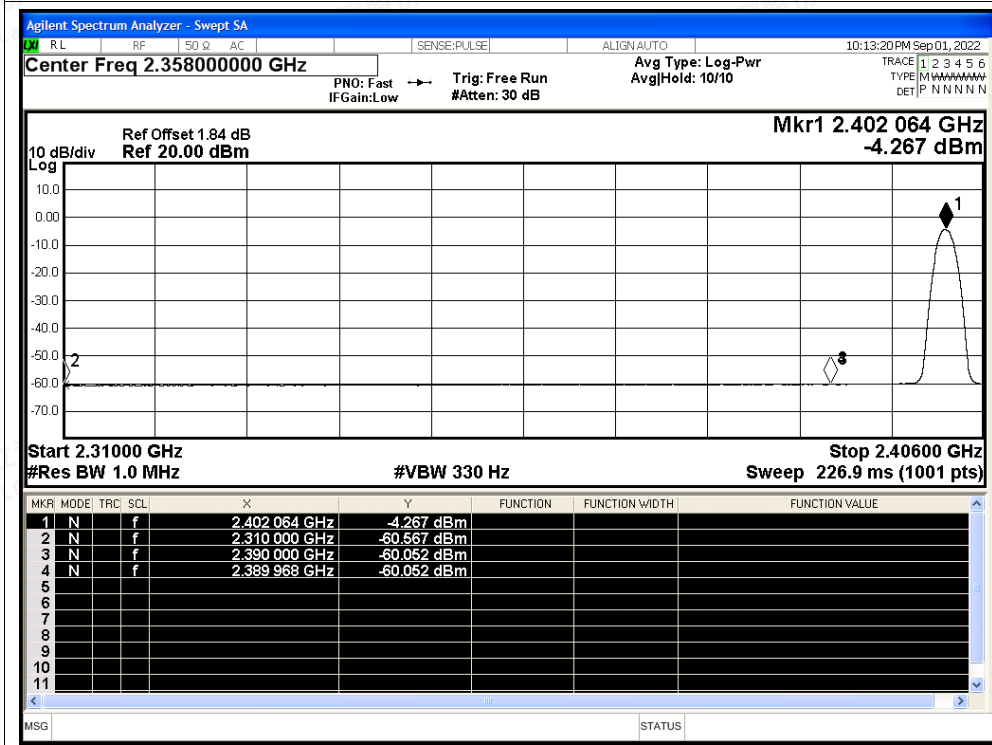




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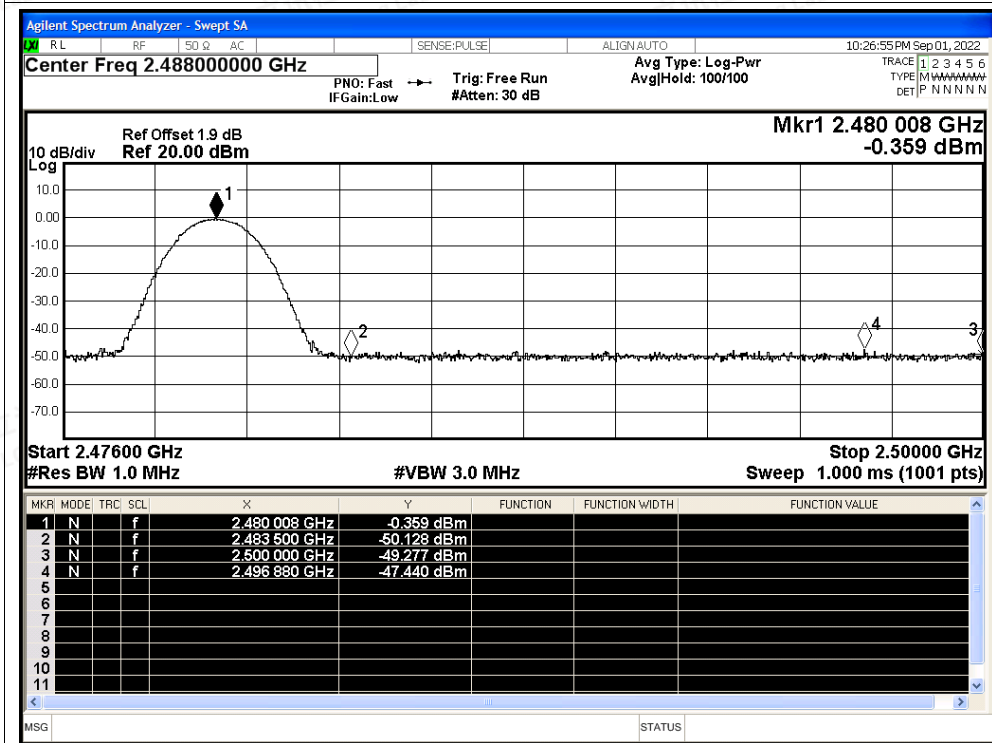


Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average





Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

