



## Appendix A

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

Product Name: MULTI SPEAKER ACTIVE SUBWOOFER SYSTEM WITH AMAZING FULL PANEL LIGHTING SYSTEM

Test Model: PartySystem EP-180

#### Environmental Conditions

Temperature:	23.3 ° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	<i>Lh Li</i> Lh Li
Supervised by:	<i>Li Huan</i> Li Huan





## A.1 -20dB Bandwidth

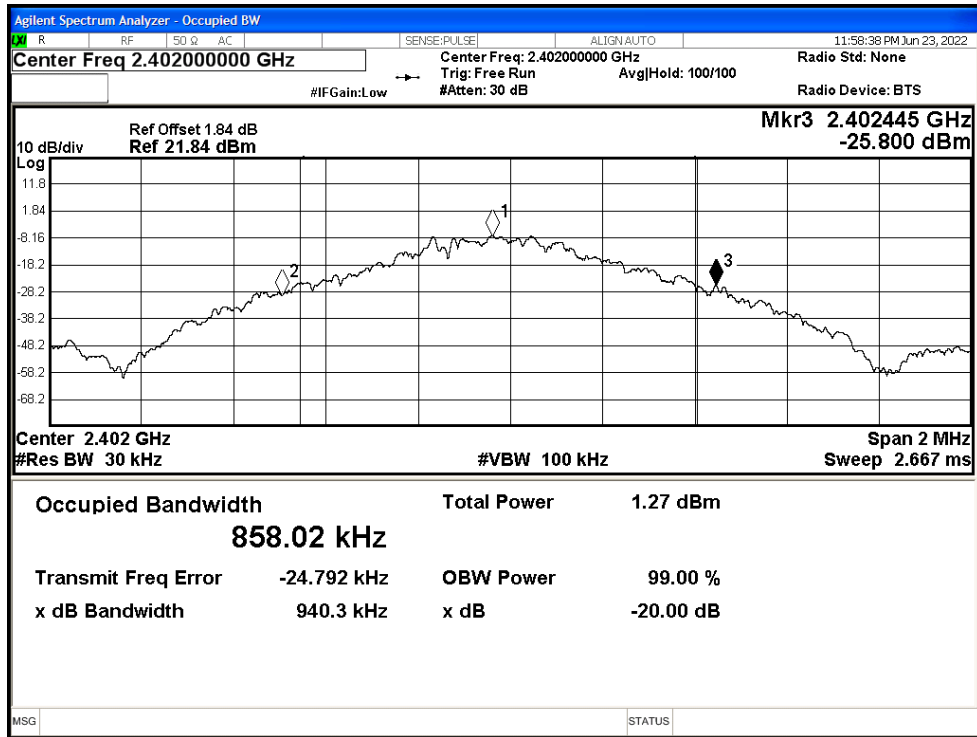
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.940	N/A	Pass
NVNT	1-DH5	2441	Ant1	0.938	N/A	Pass
NVNT	1-DH5	2480	Ant1	0.921	N/A	Pass
NVNT	2-DH5	2402	Ant1	1.316	N/A	Pass
NVNT	2-DH5	2441	Ant1	1.277	N/A	Pass
NVNT	2-DH5	2480	Ant1	1.319	N/A	Pass



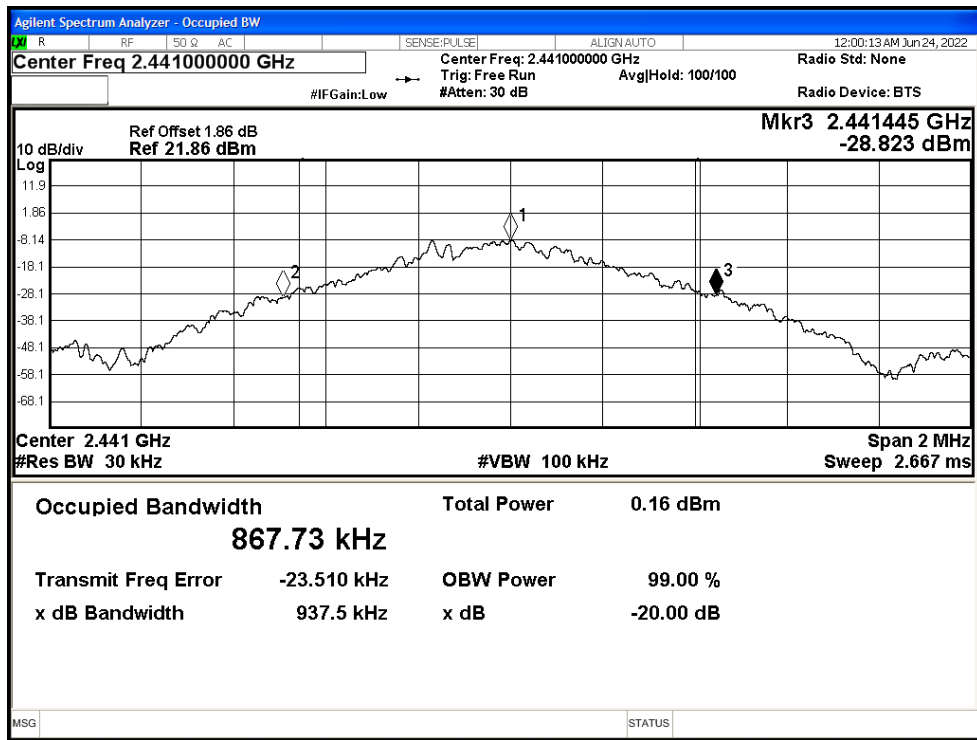


Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1

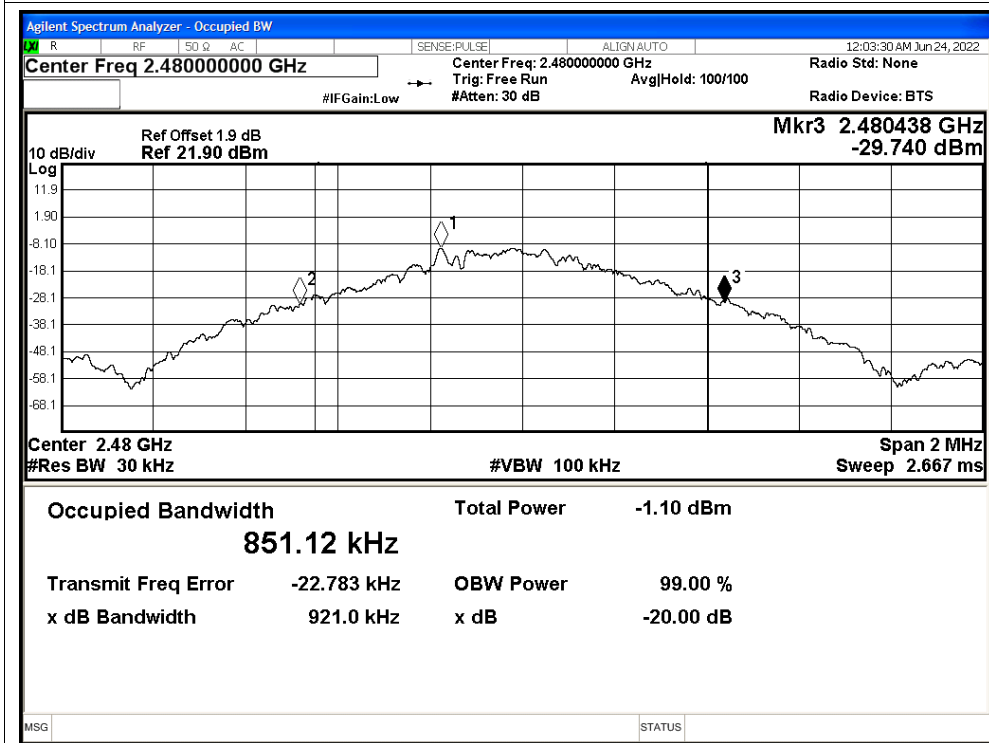


-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1

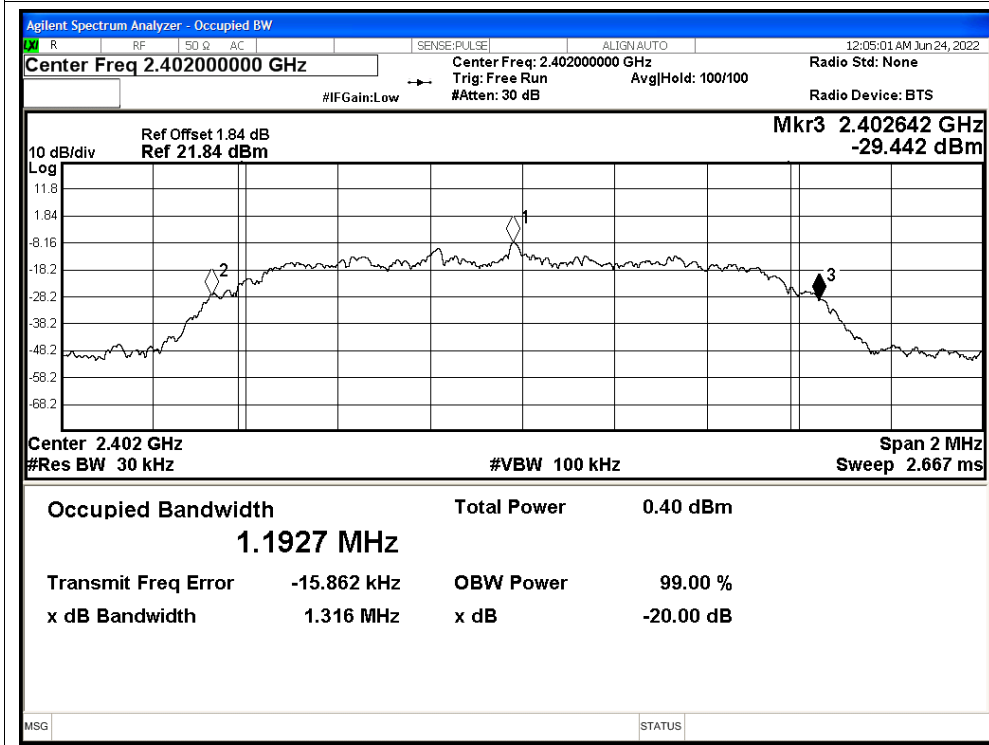




-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1

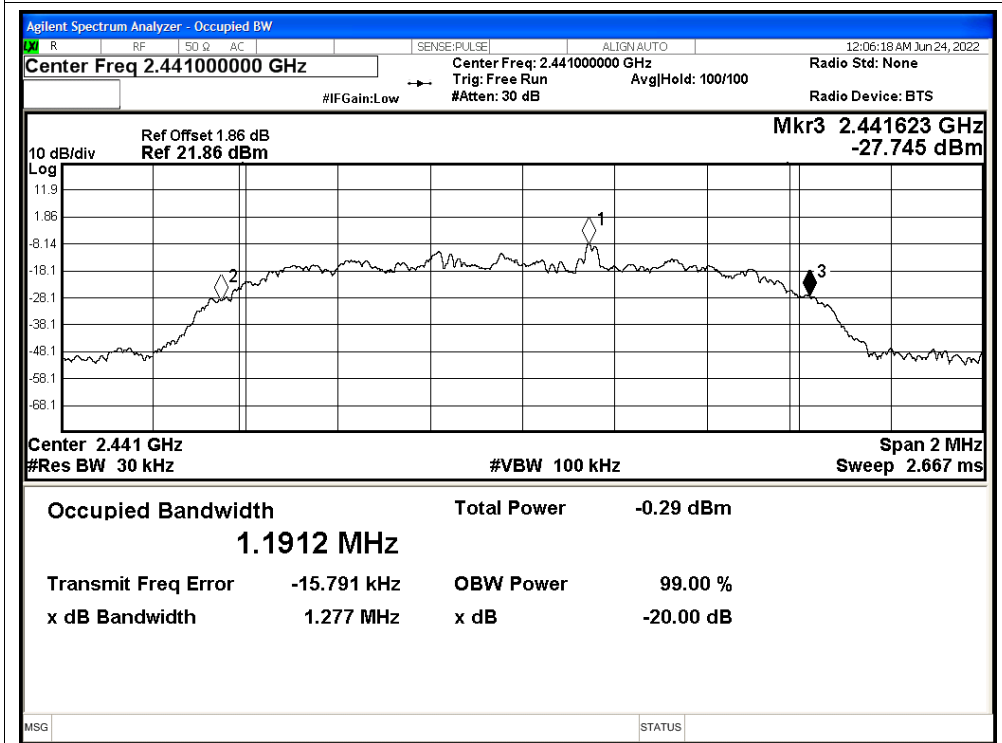


-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1

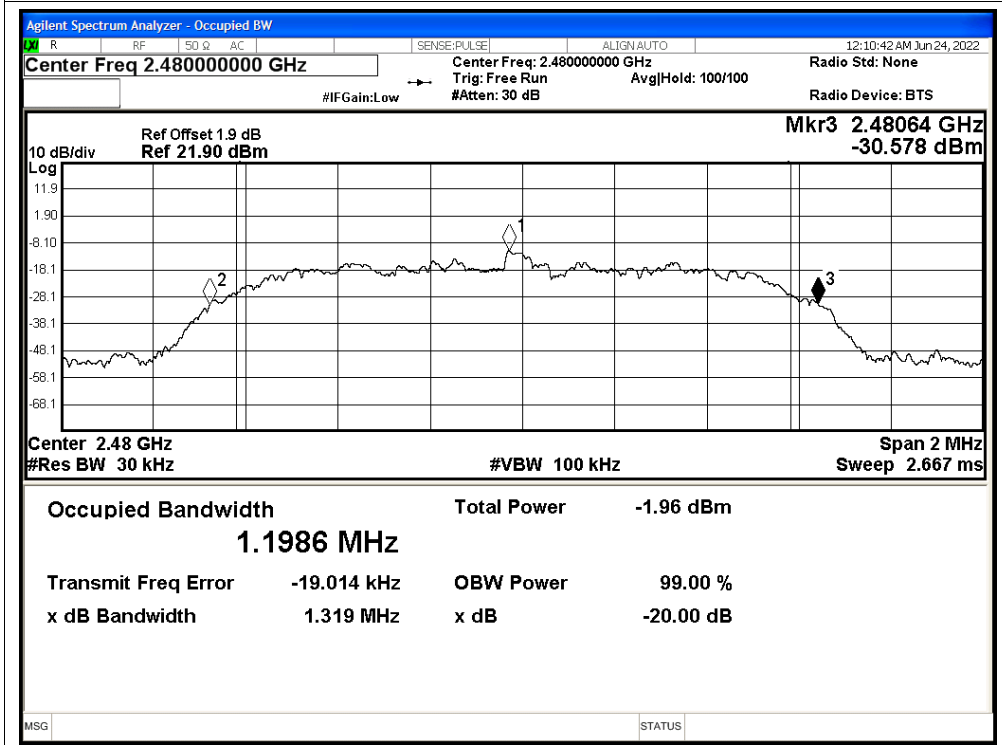




-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1





## A.2 Maximum Conducted Output Power

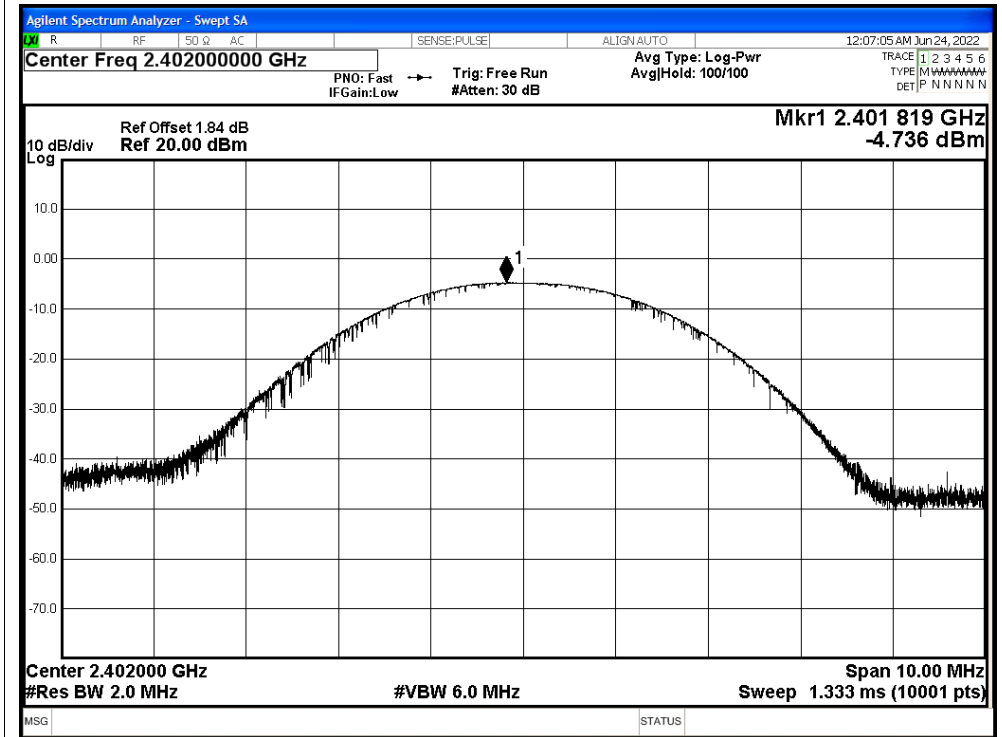
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-4.74	0	-4.74	21	Pass
NVNT	1-DH5	2441	Ant1	-5.56	0	-5.56	21	Pass
NVNT	1-DH5	2480	Ant1	-7.15	0	-7.15	21	Pass
NVNT	2-DH5	2402	Ant1	-3.97	0	-3.97	21	Pass
NVNT	2-DH5	2441	Ant1	-4.87	0	-4.87	21	Pass
NVNT	2-DH5	2480	Ant1	-6.36	0	-6.36	21	Pass



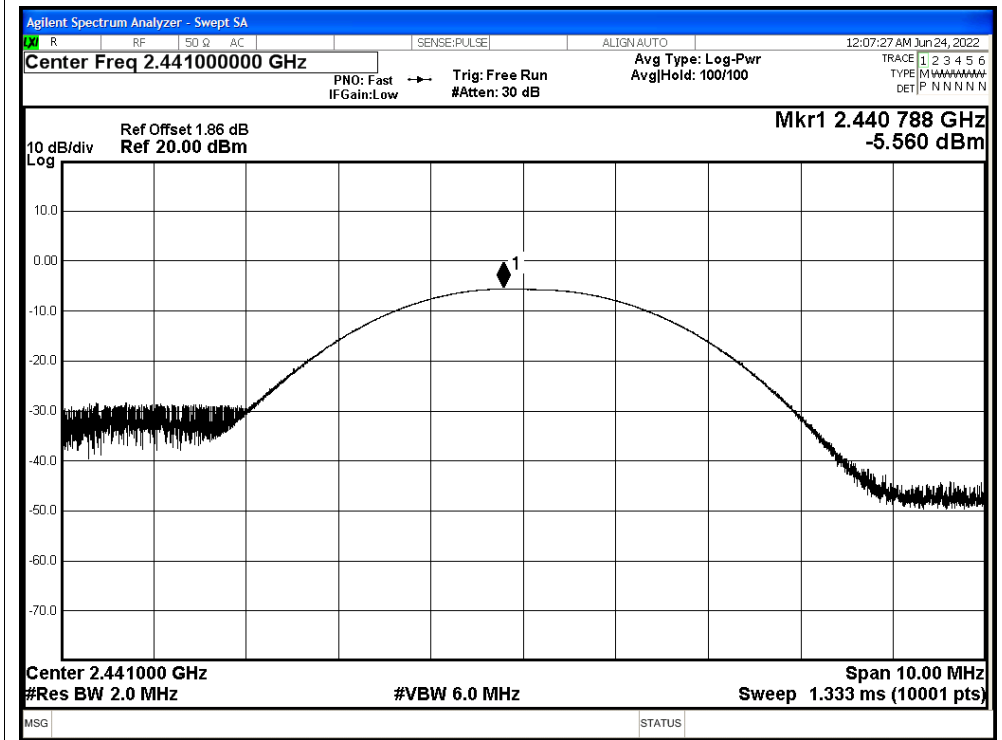


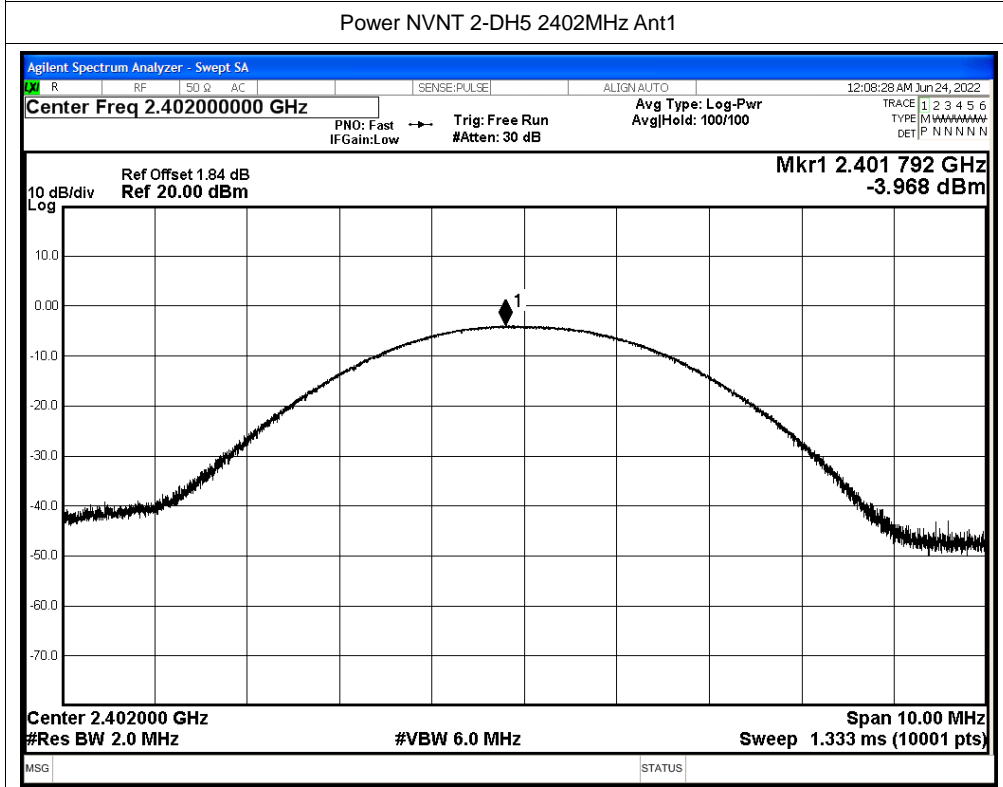
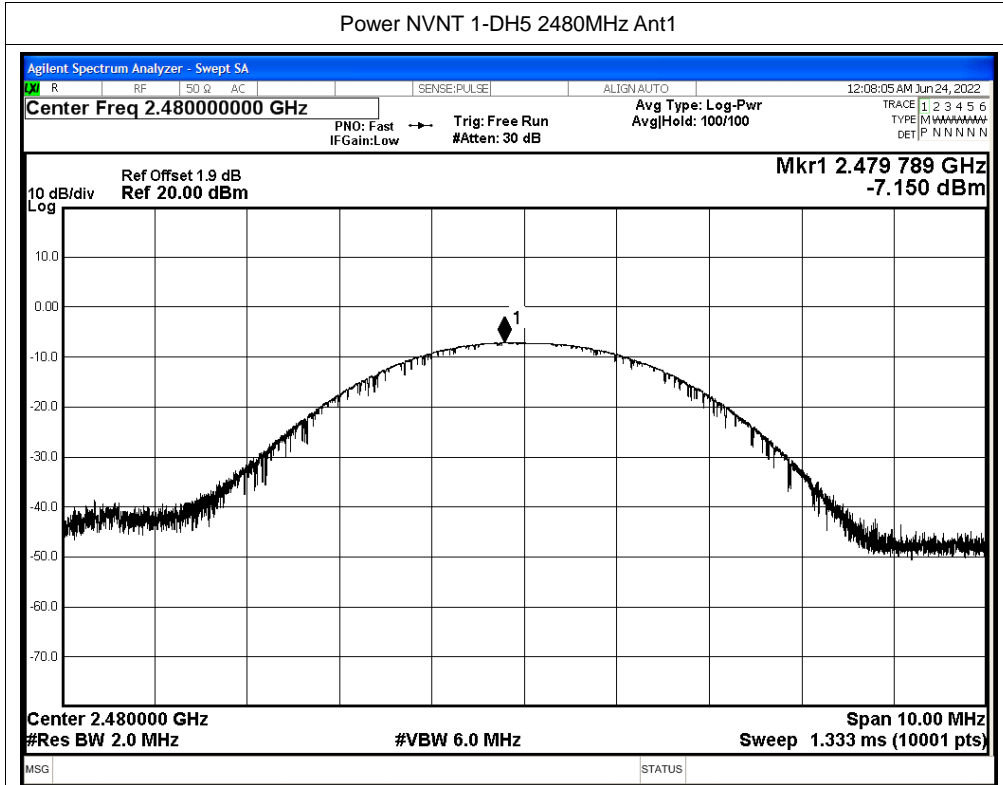
Test Graphs

Power NVNT 1-DH5 2402MHz Ant1

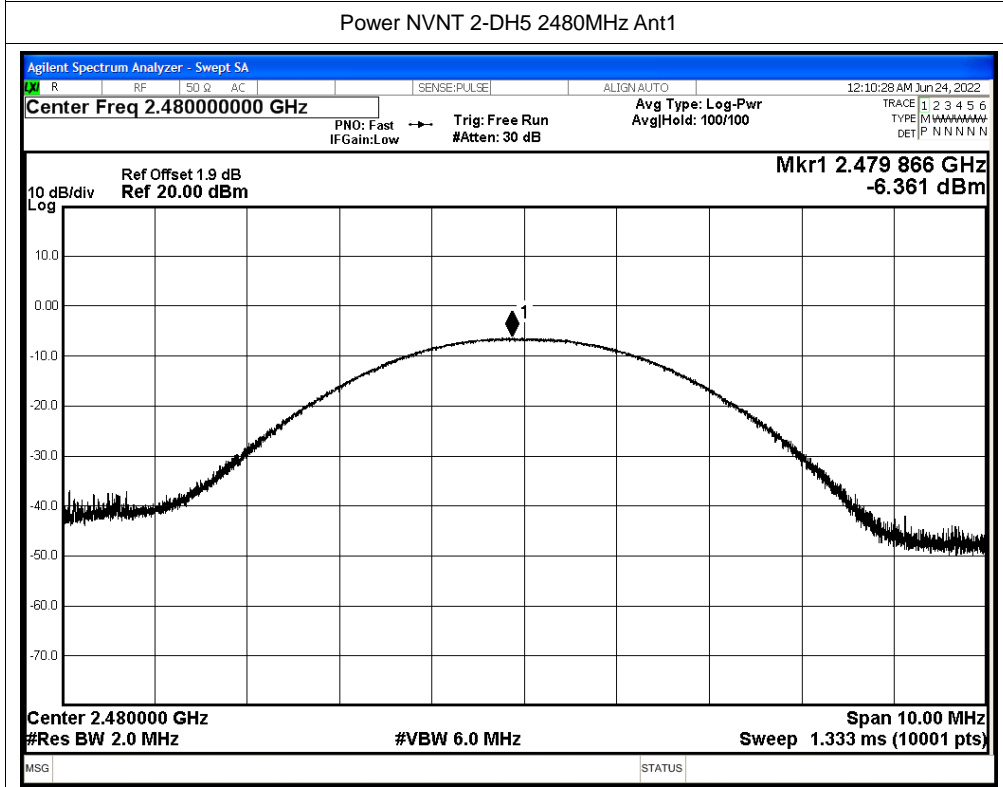
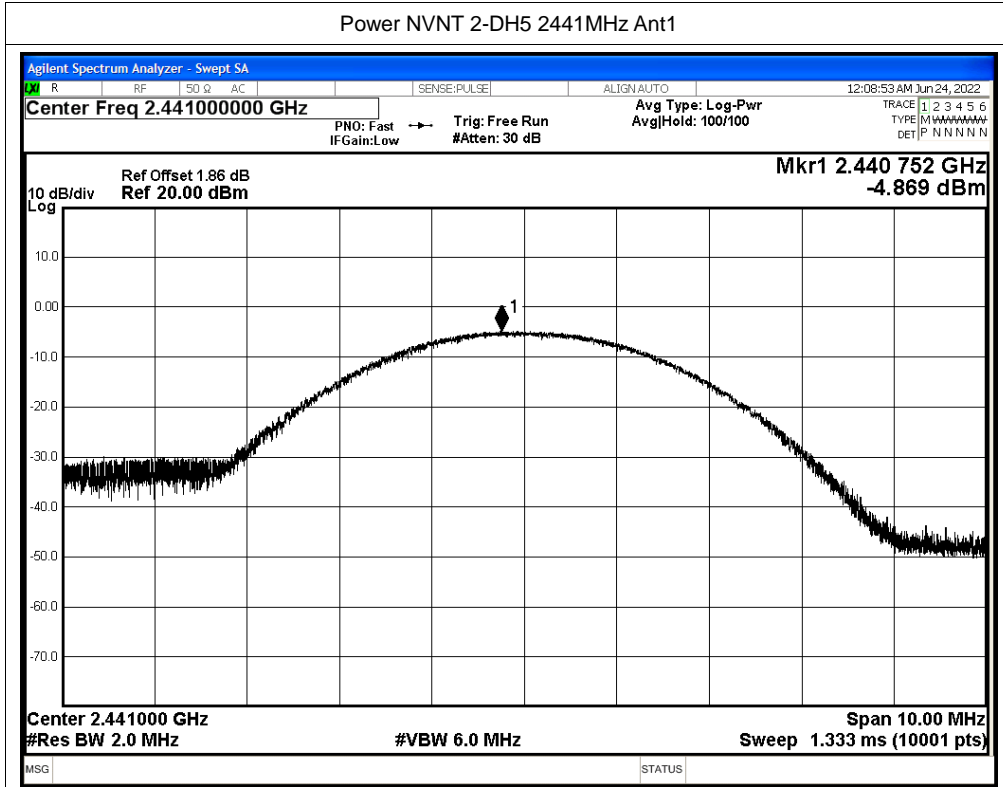


Power NVNT 1-DH5 2441MHz Ant1











### A.3 Carrier Frequencies Separation

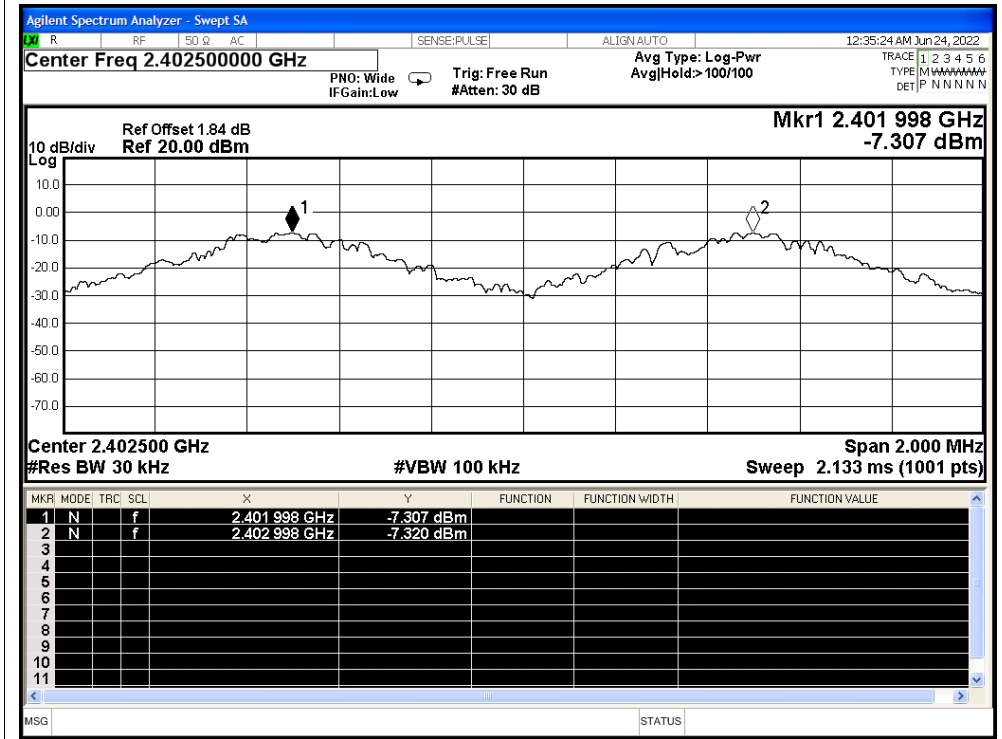
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2401.998	2402.998	1	0.025	Pass
NVNT	2-DH5	Ant1	2401.964	2402.808	0.844	0.025	Pass



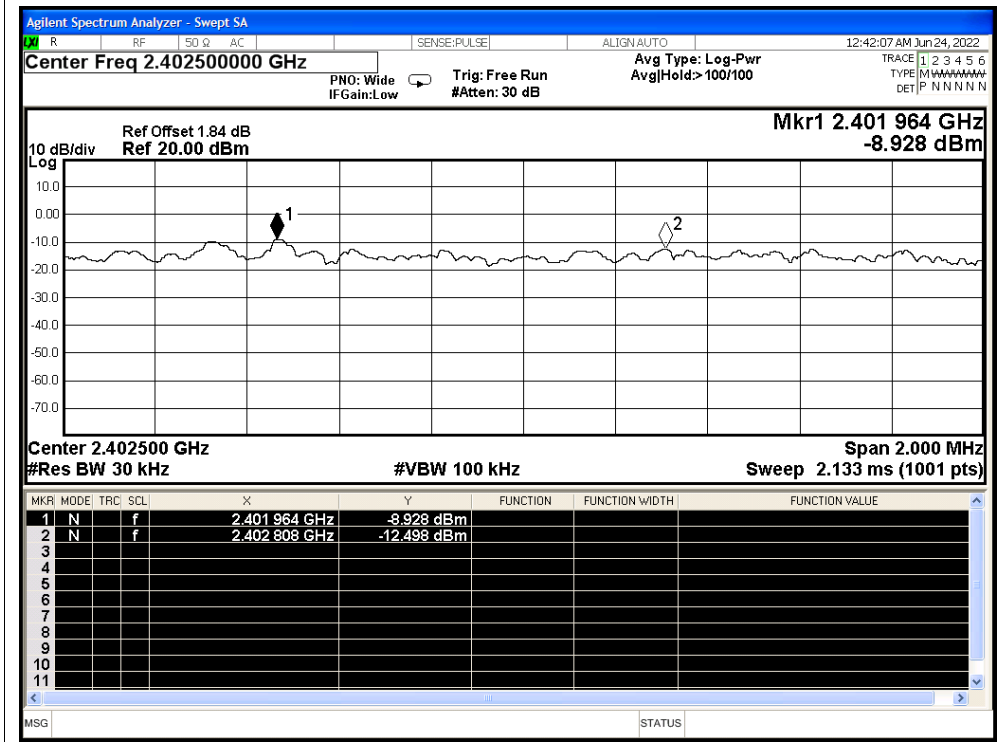


Test Graphs

CFS NVNT 1-DH5 2402MHz Ant1



CFS NVNT 2-DH5 2402MHz Ant1





## A.4 Dwell Time

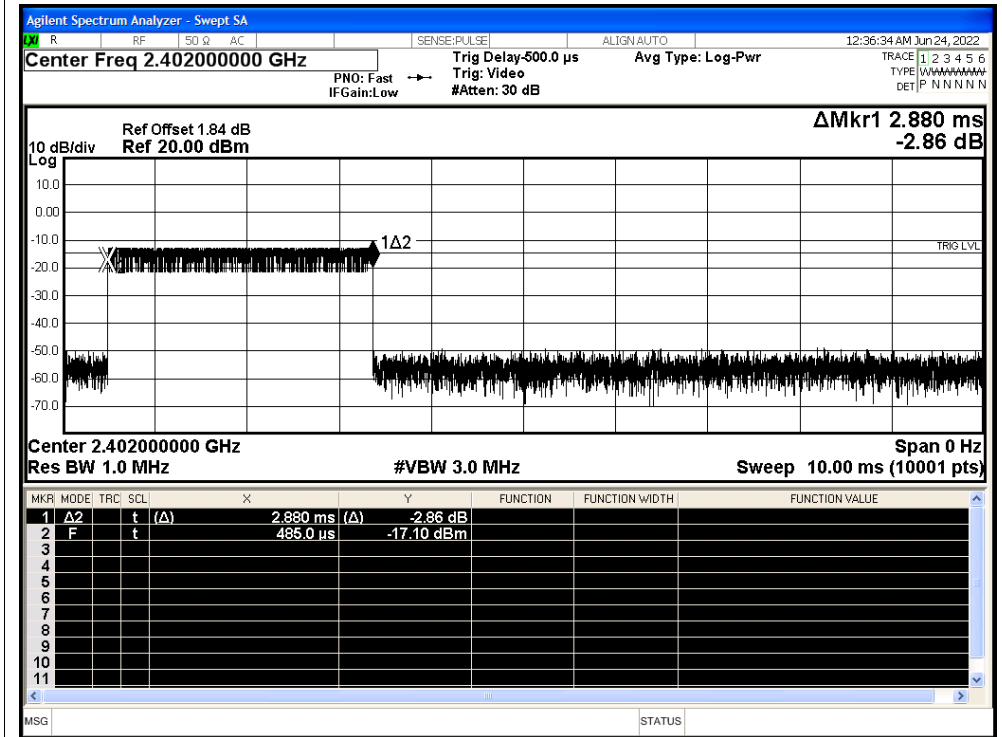
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Burst Count	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH5	2402	Ant1	2.88	155.52	54	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.88	184.32	64	31600	400	Pass
NVNT	1-DH5	2480	Ant1	2.88	178.56	62	31600	400	Pass
NVNT	2-DH5	2402	Ant1	2.879	164.103	57	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.885	201.95	70	31600	400	Pass
NVNT	2-DH5	2480	Ant1	2.885	210.605	73	31600	400	Pass



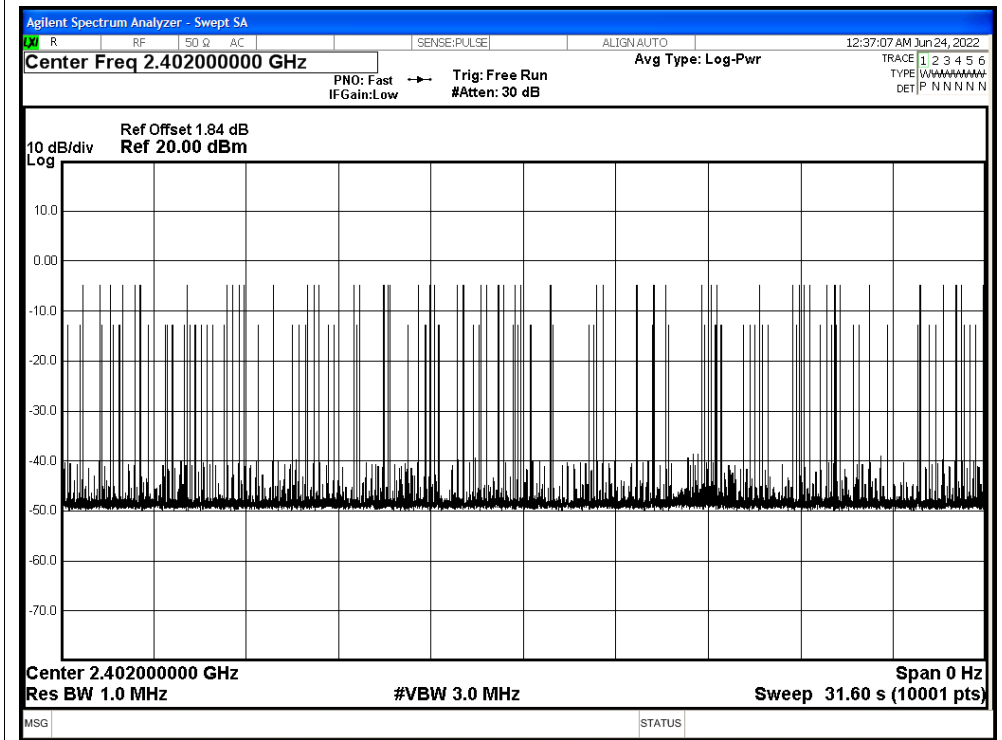


Test Graphs

Dwell NVNT 1-DH5 2402MHz Ant1 One Burst

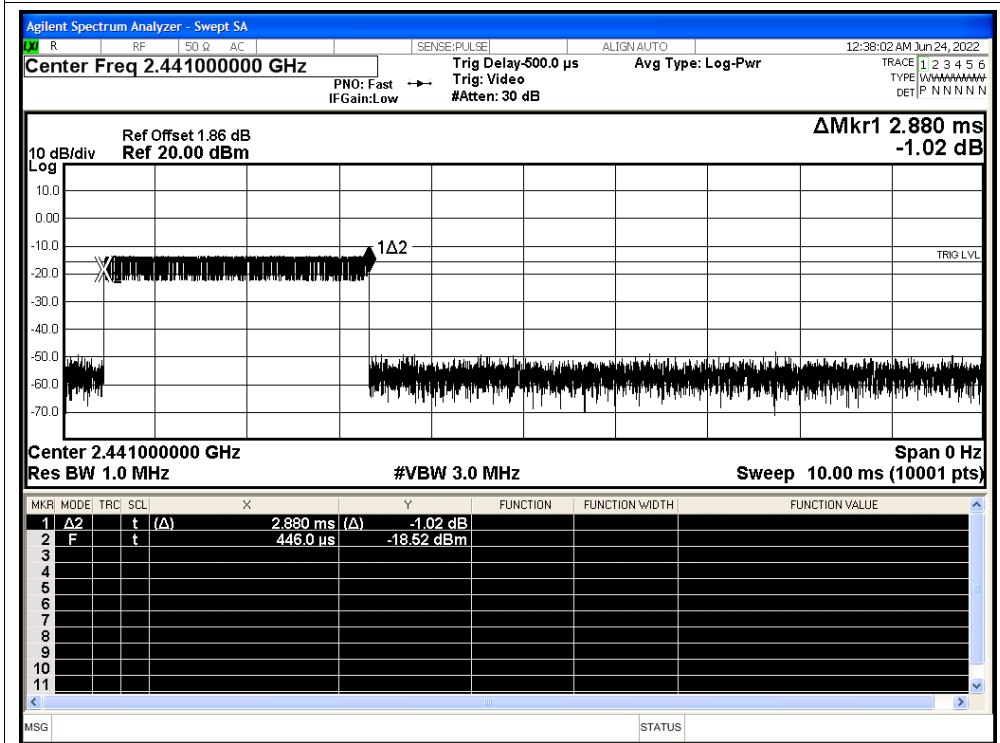


Dwell NVNT 1-DH5 2402MHz Ant1 Accumulated

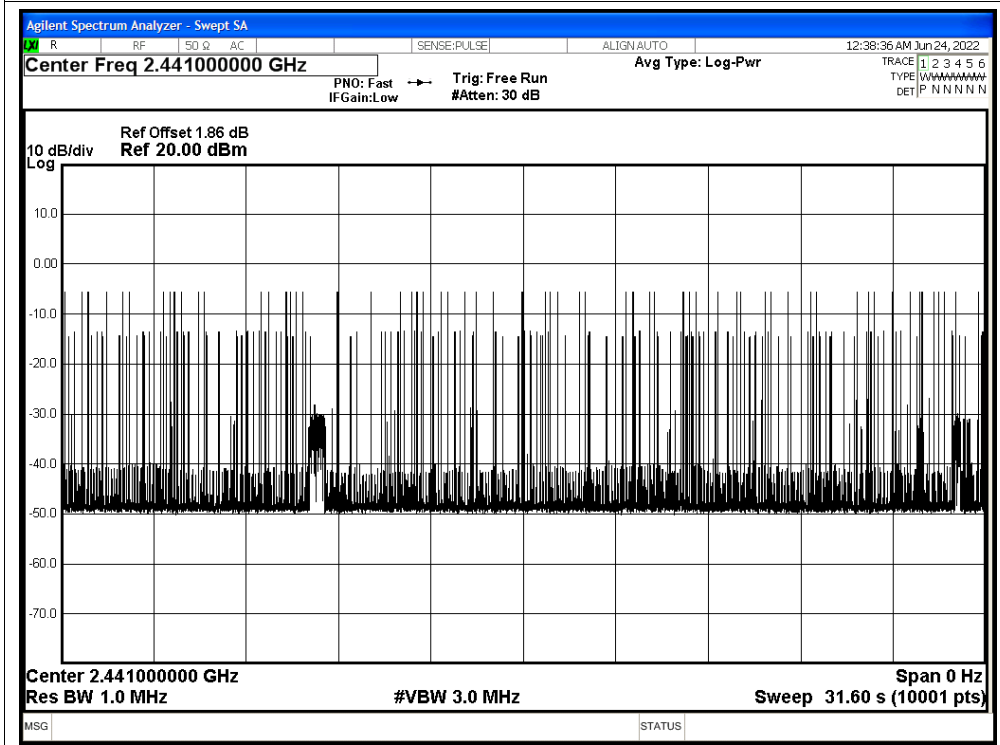


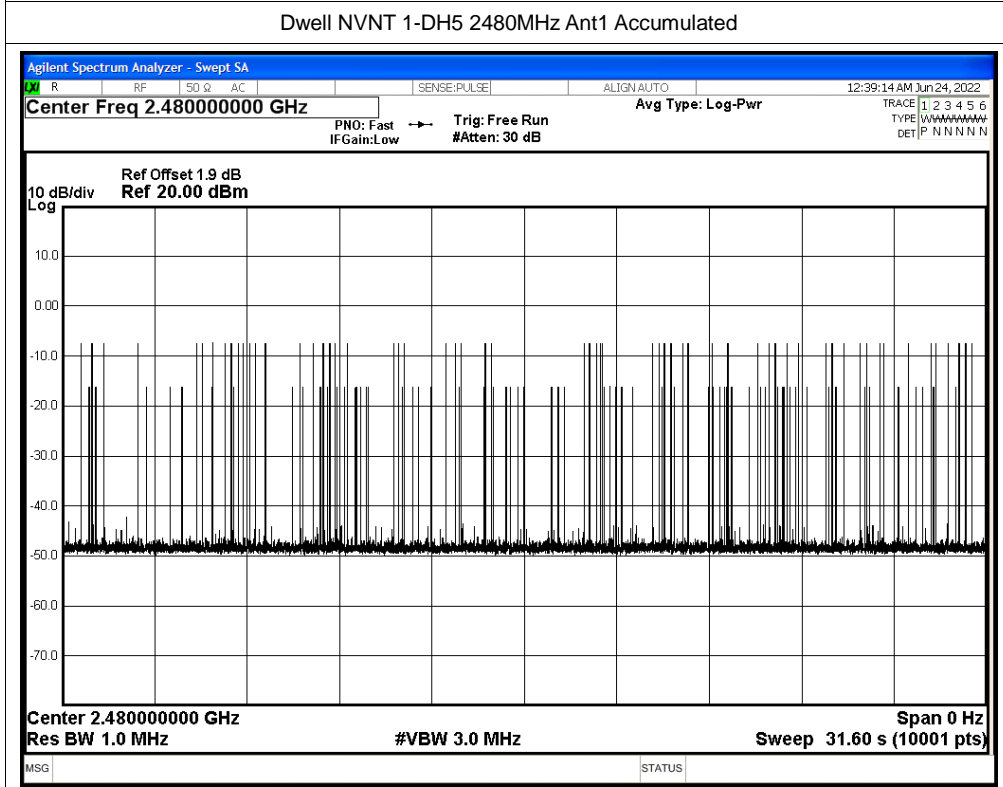
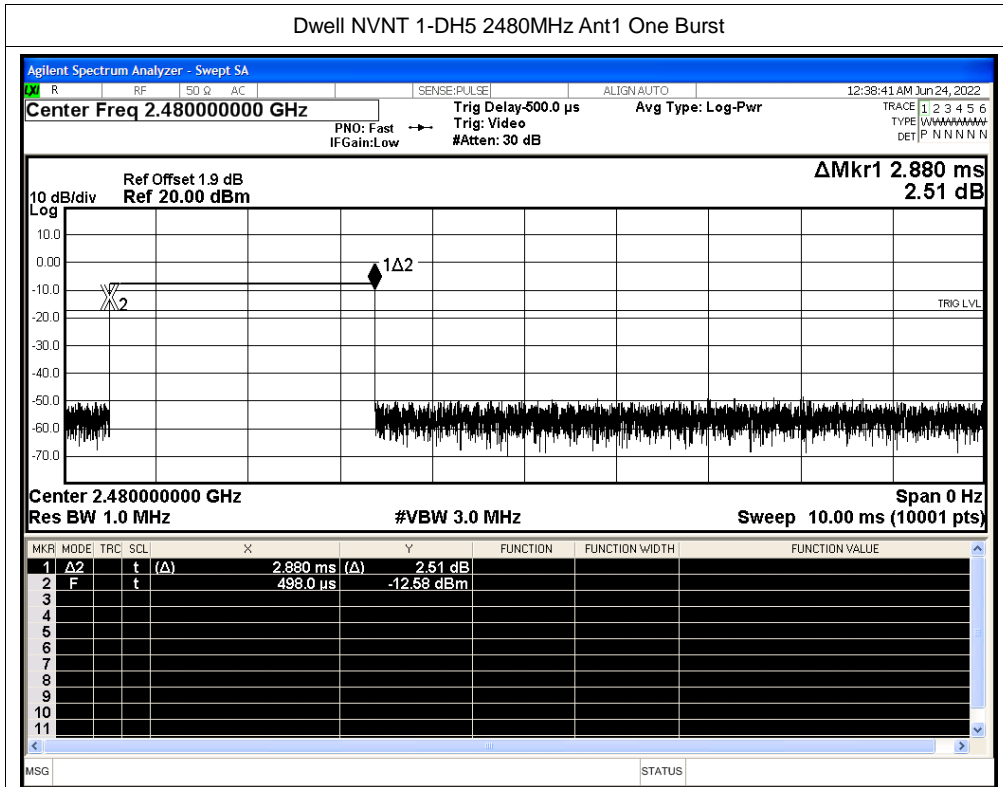


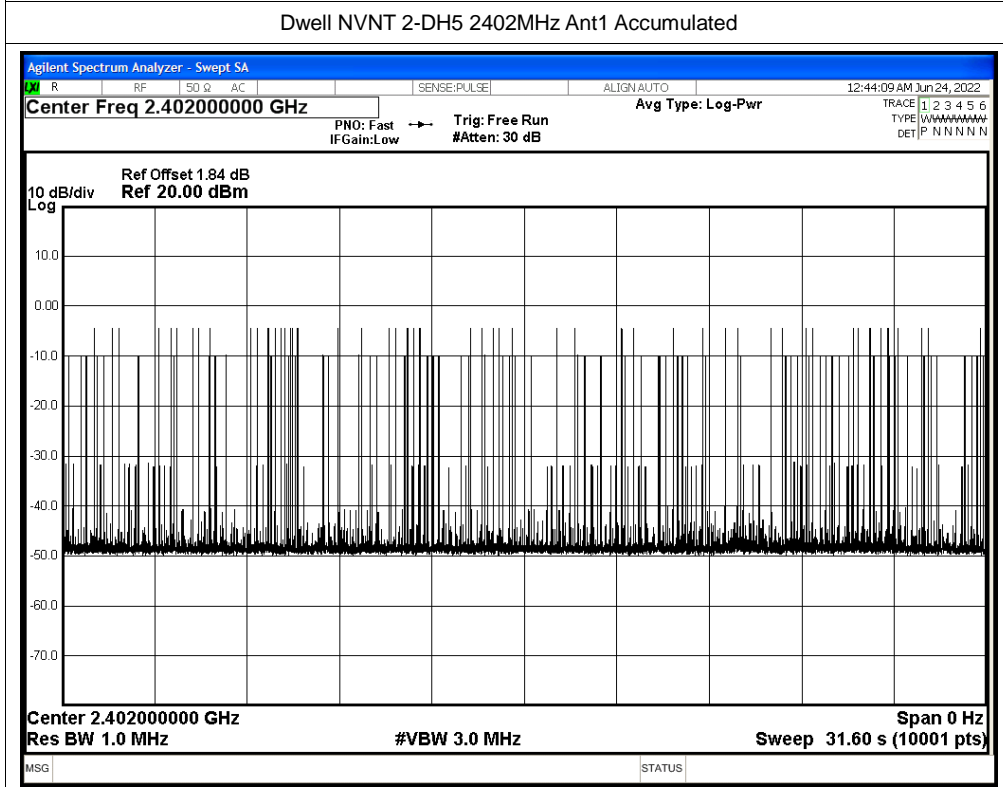
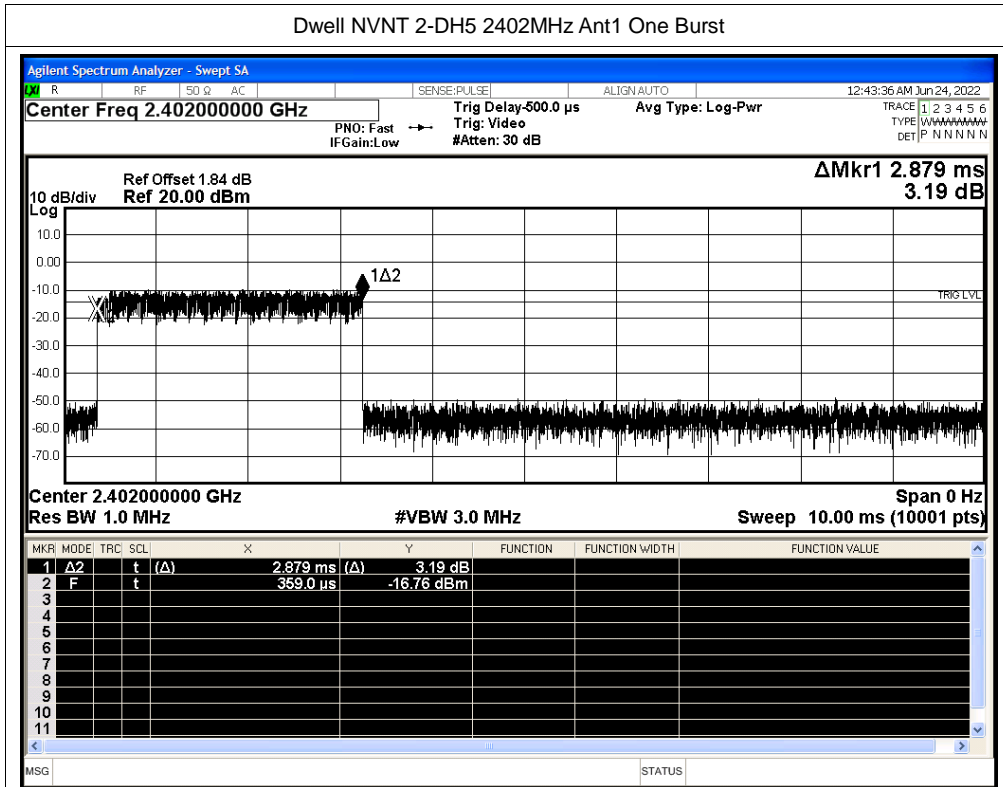
Dwell NVNT 1-DH5 2441MHz Ant1 One Burst



Dwell NVNT 1-DH5 2441MHz Ant1 Accumulated



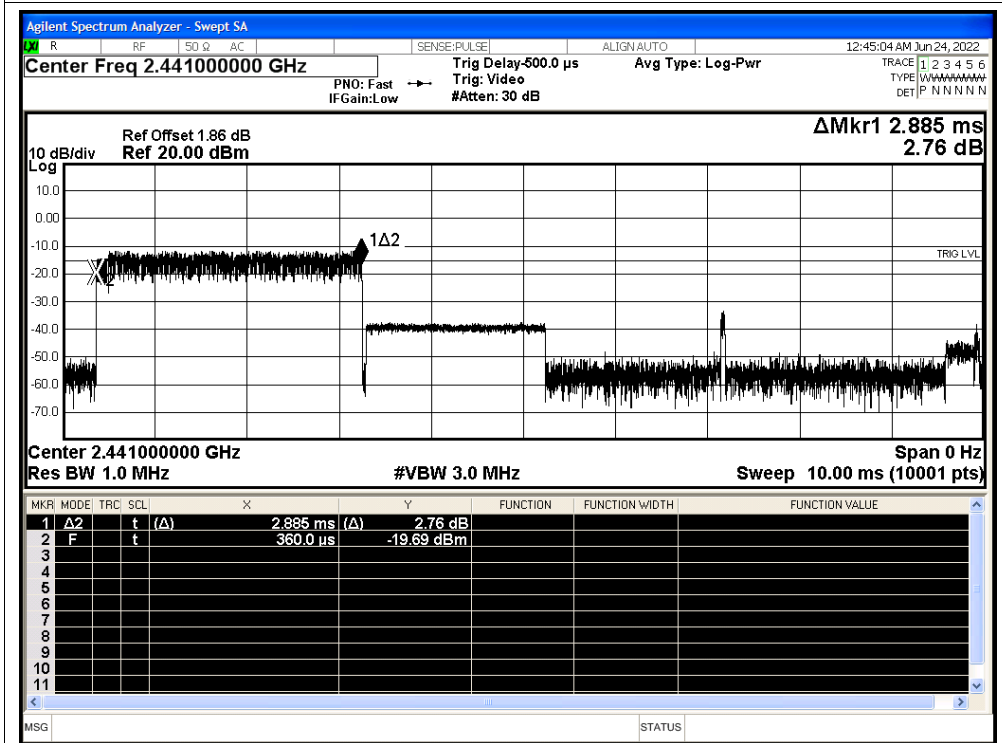




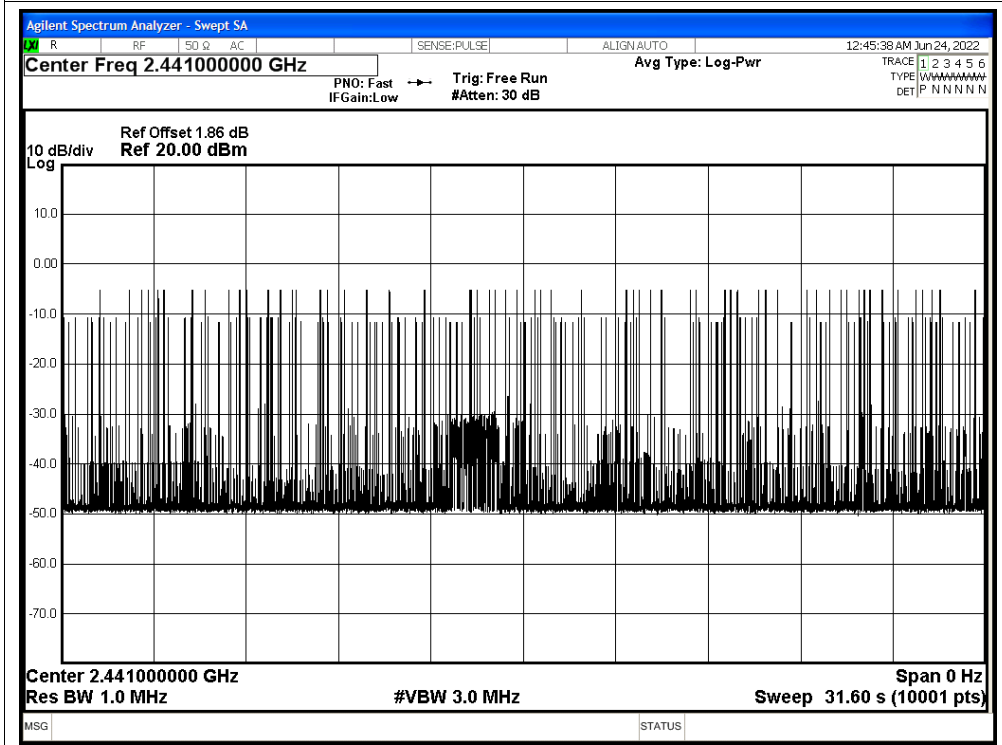


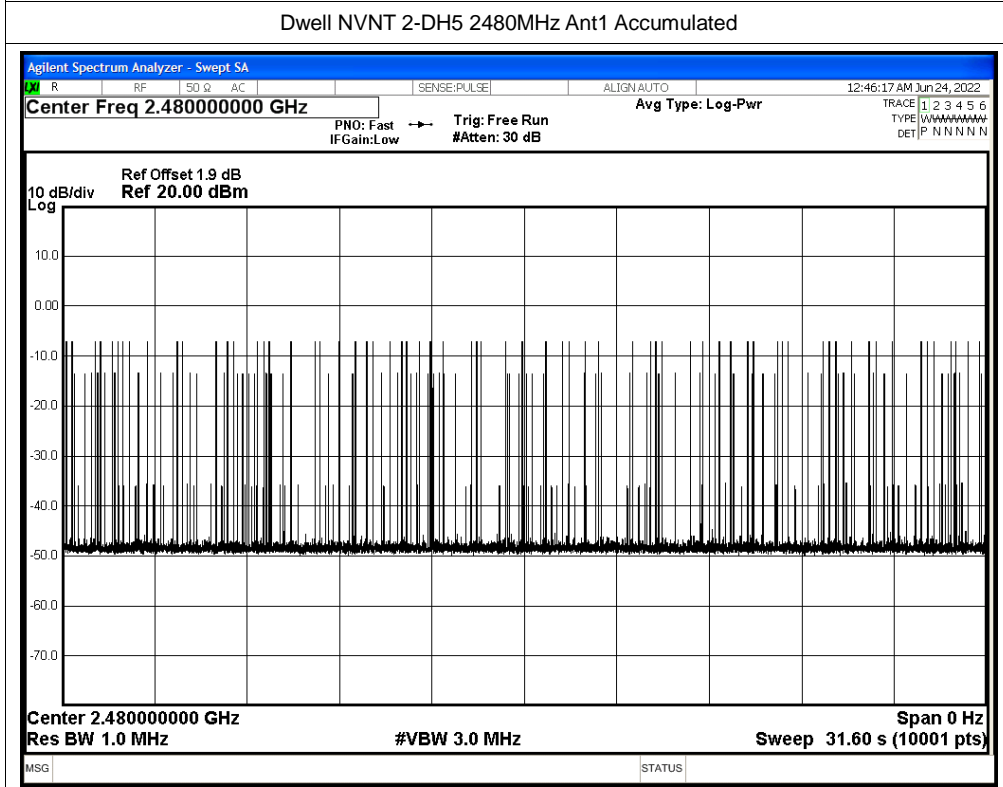
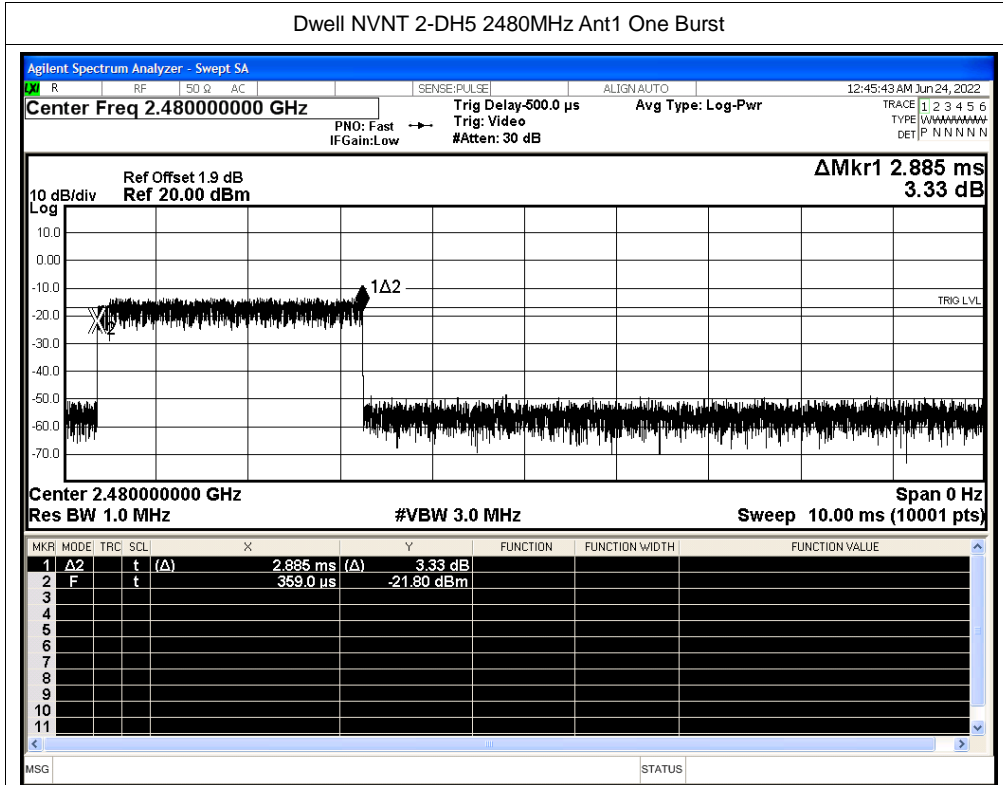


Dwell NVNT 2-DH5 2441MHz Ant1 One Burst



Dwell NVNT 2-DH5 2441MHz Ant1 Accumulated







## A.5 Number of Hopping Channel

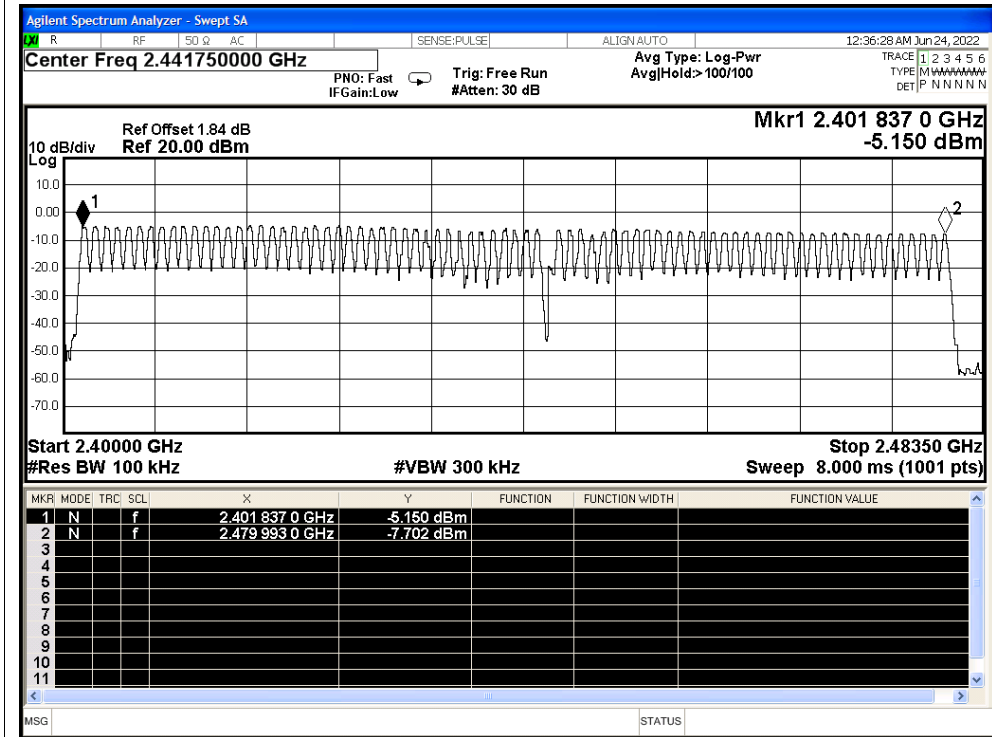
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass



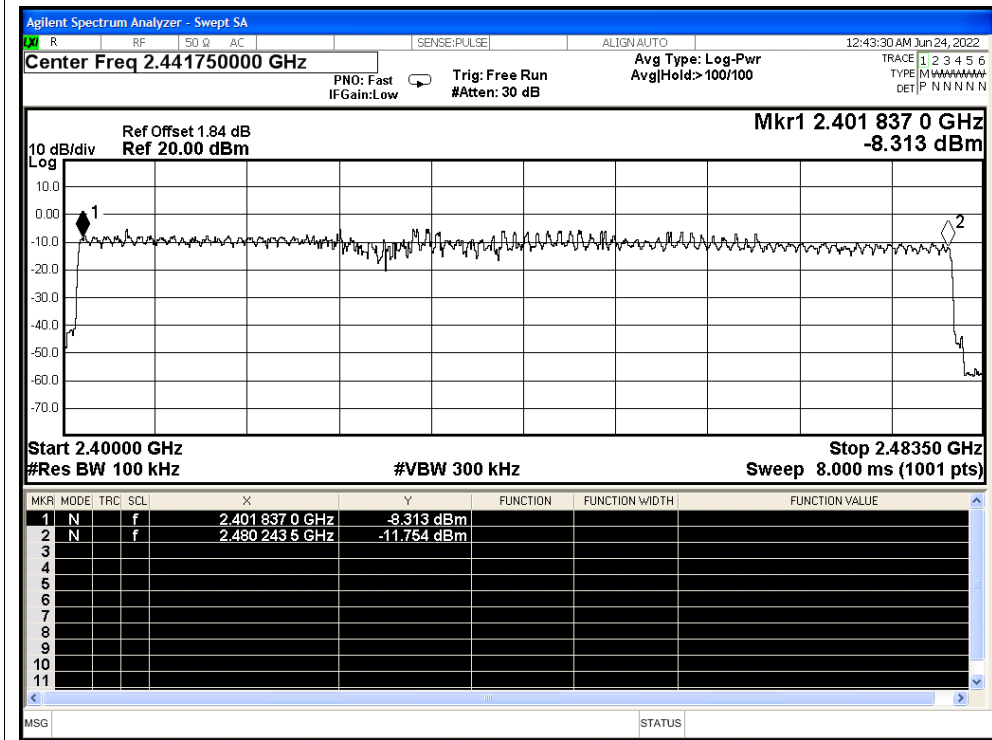


Test Graphs

Hopping No. NVNT 1-DH5 2402MHz Ant1



Hopping No. NVNT 2-DH5 2402MHz Ant1





## A.6 Band Edge

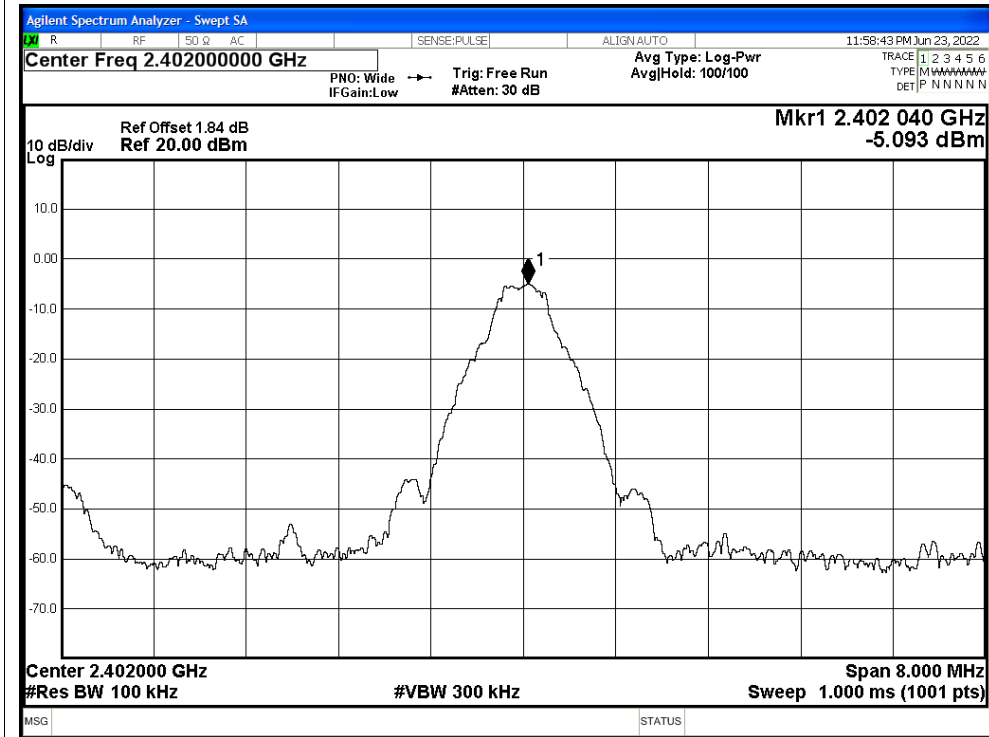
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-39.59	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-48.44	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-39.78	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-48.76	-20	Pass



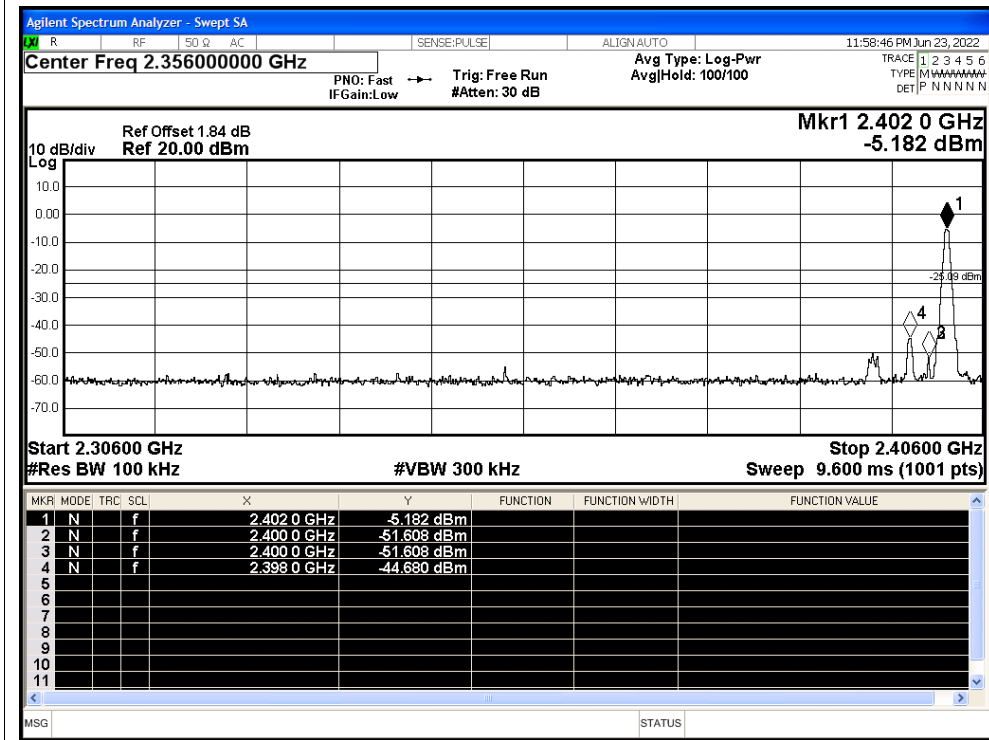


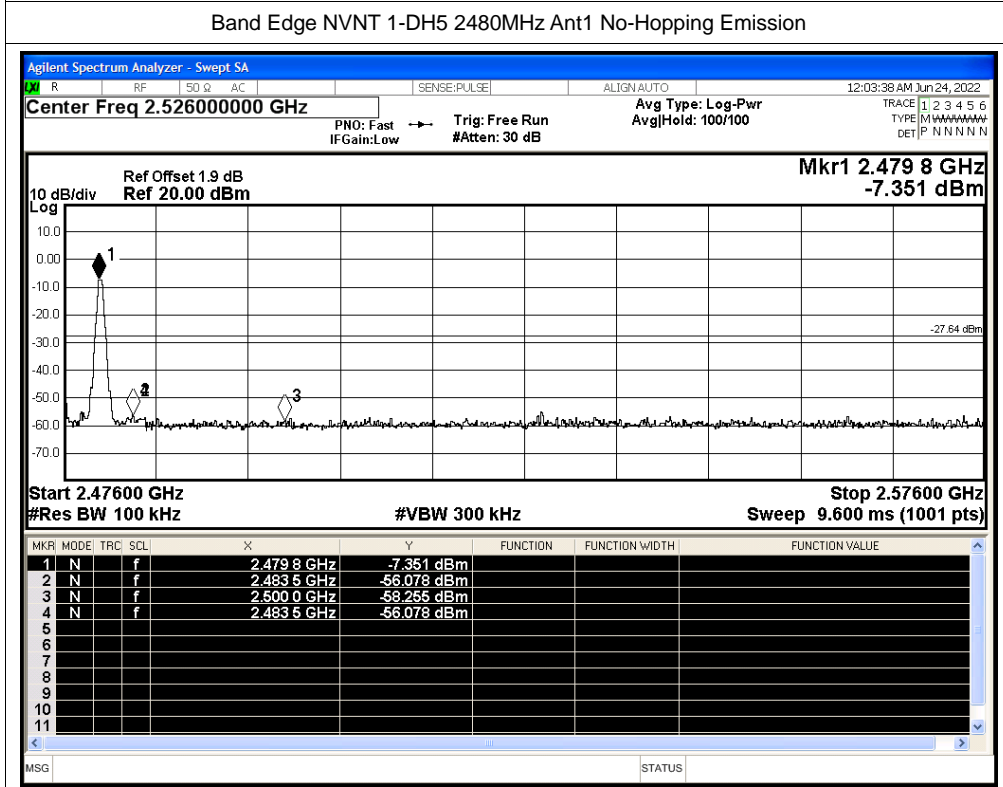
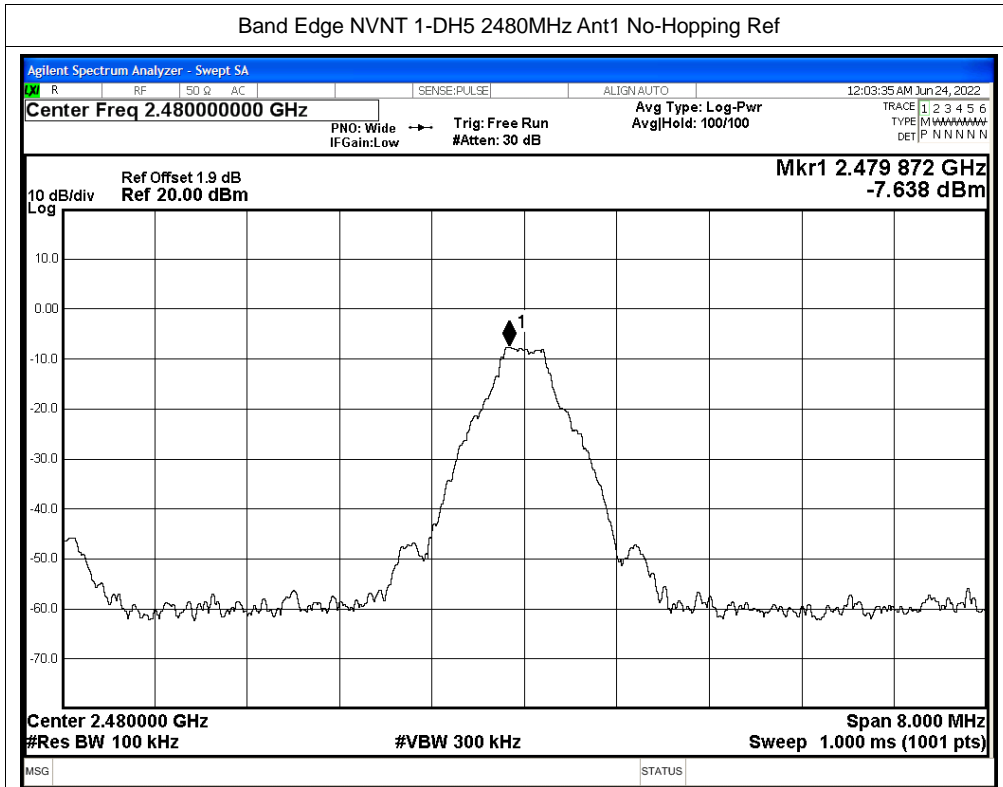
Test Graphs

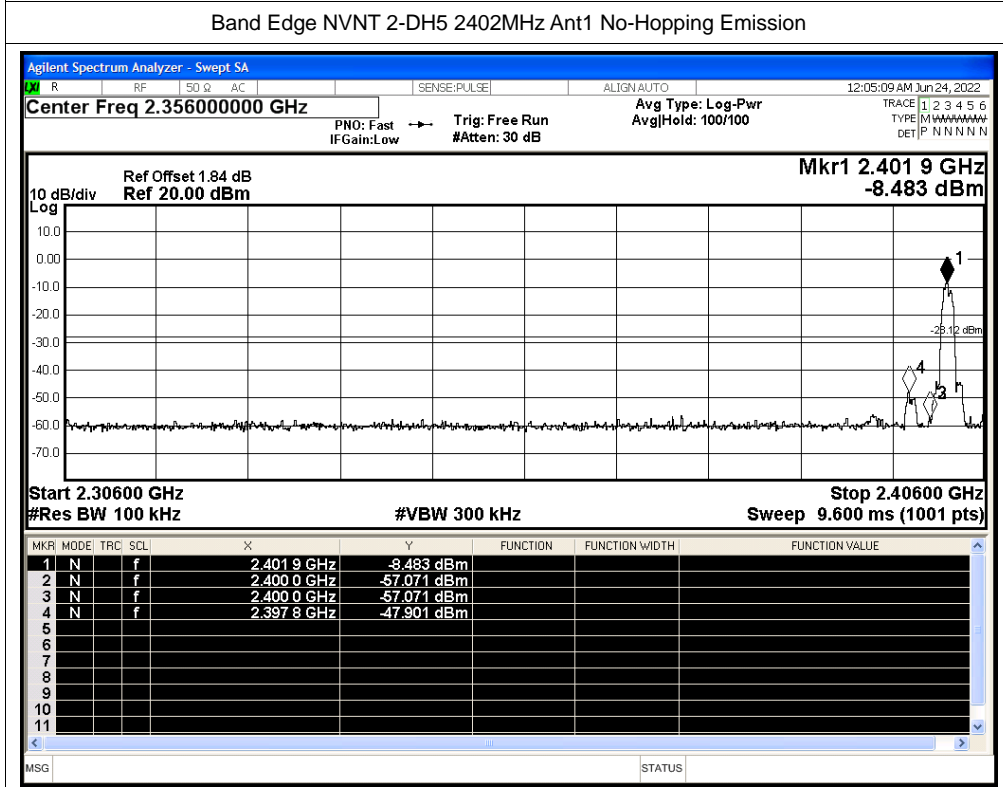
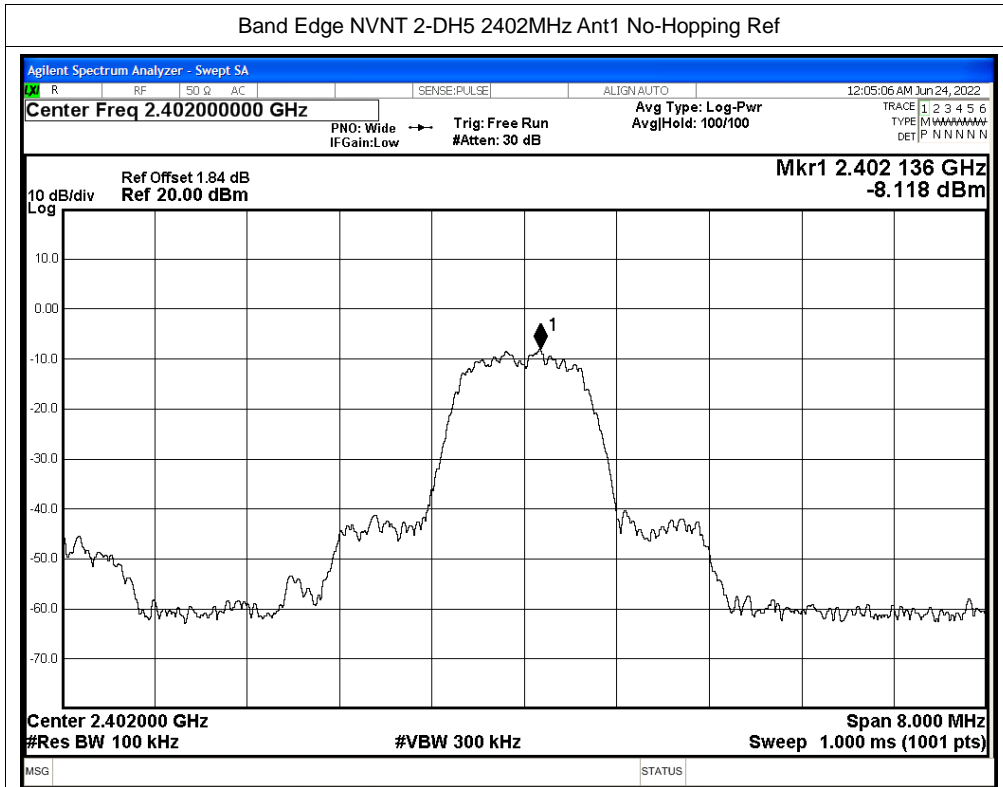
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



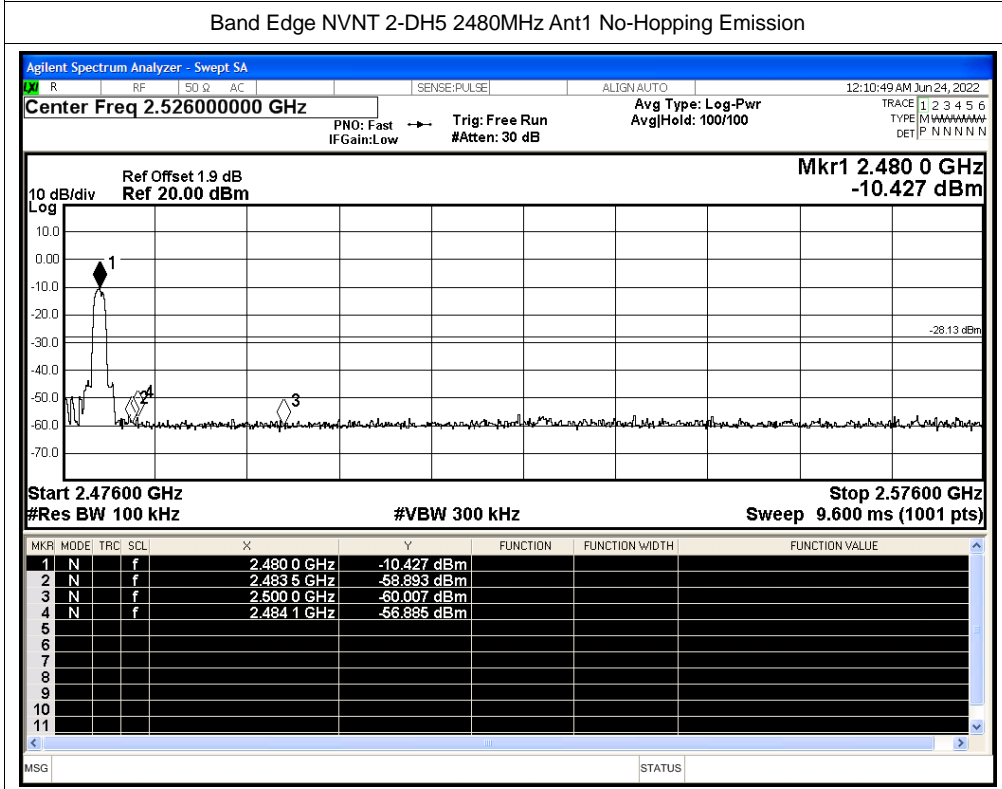
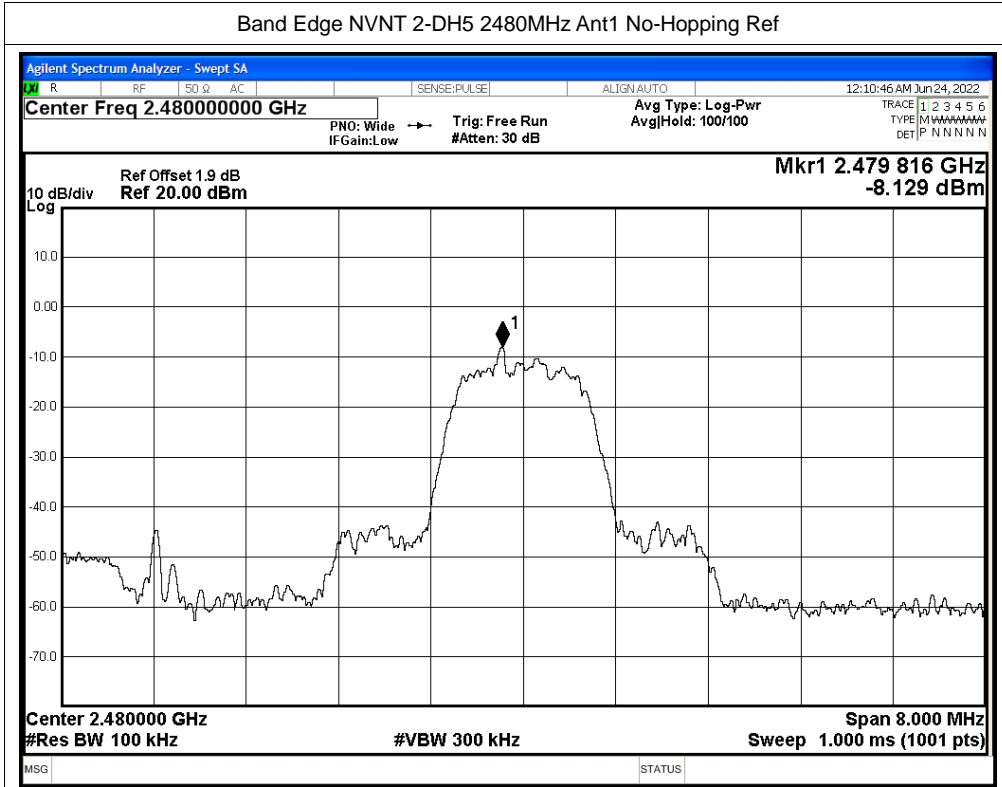
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission













## (Hopping)

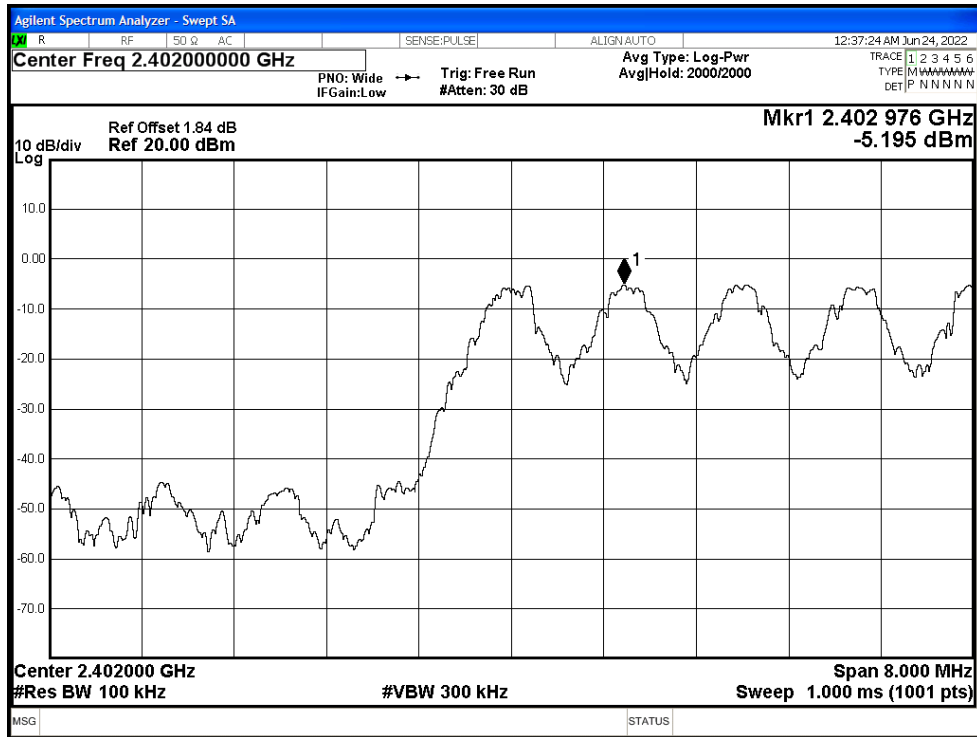
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-51.59	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-47.35	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-50.61	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-46.64	-20	Pass



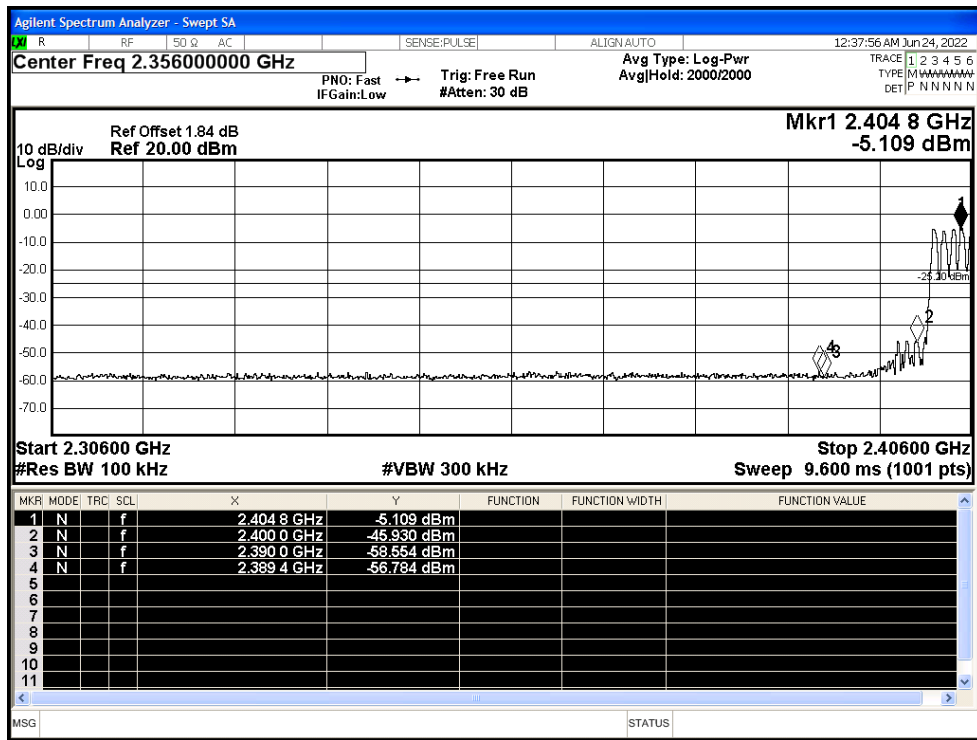


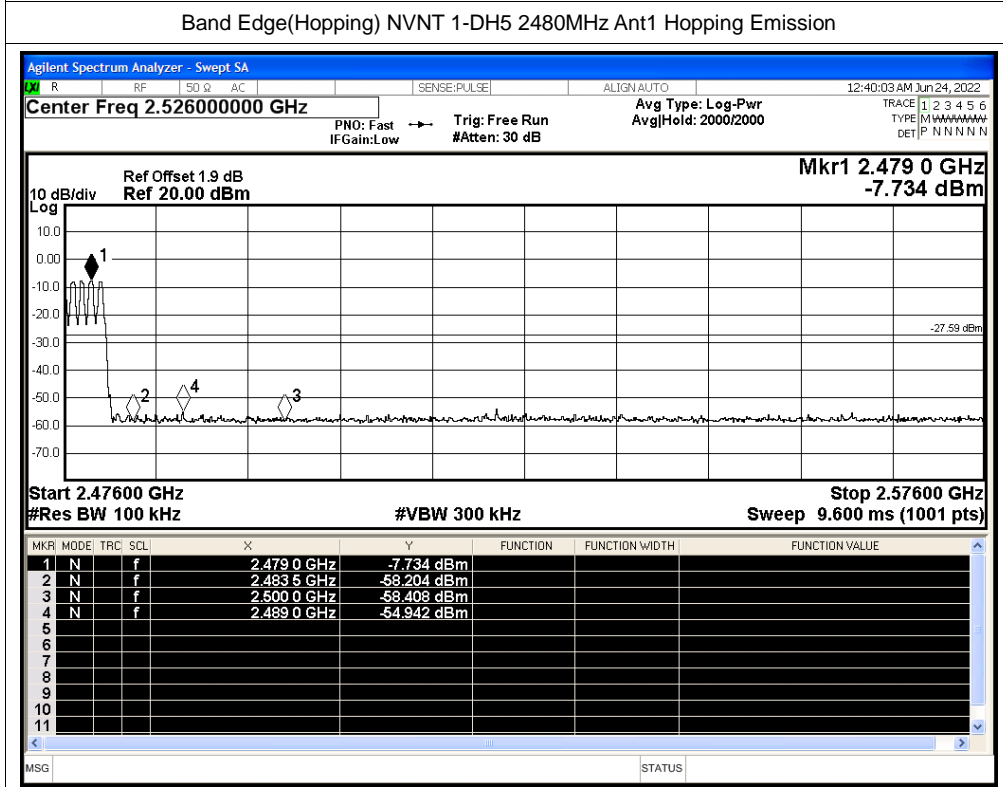
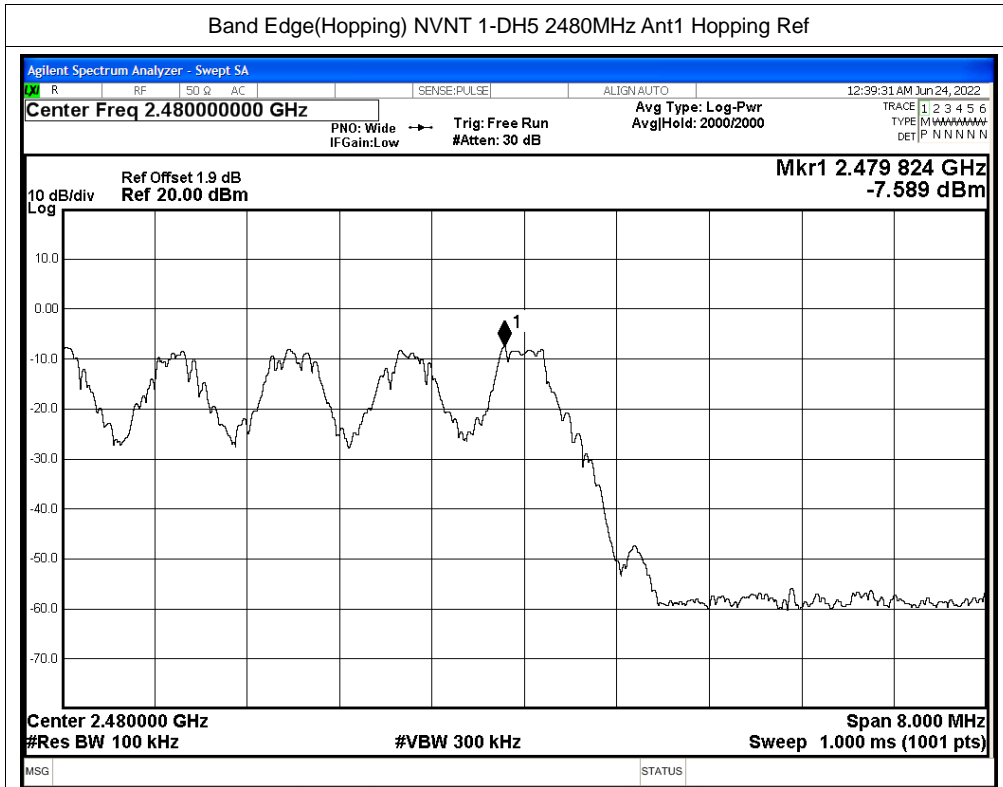
Test Graphs

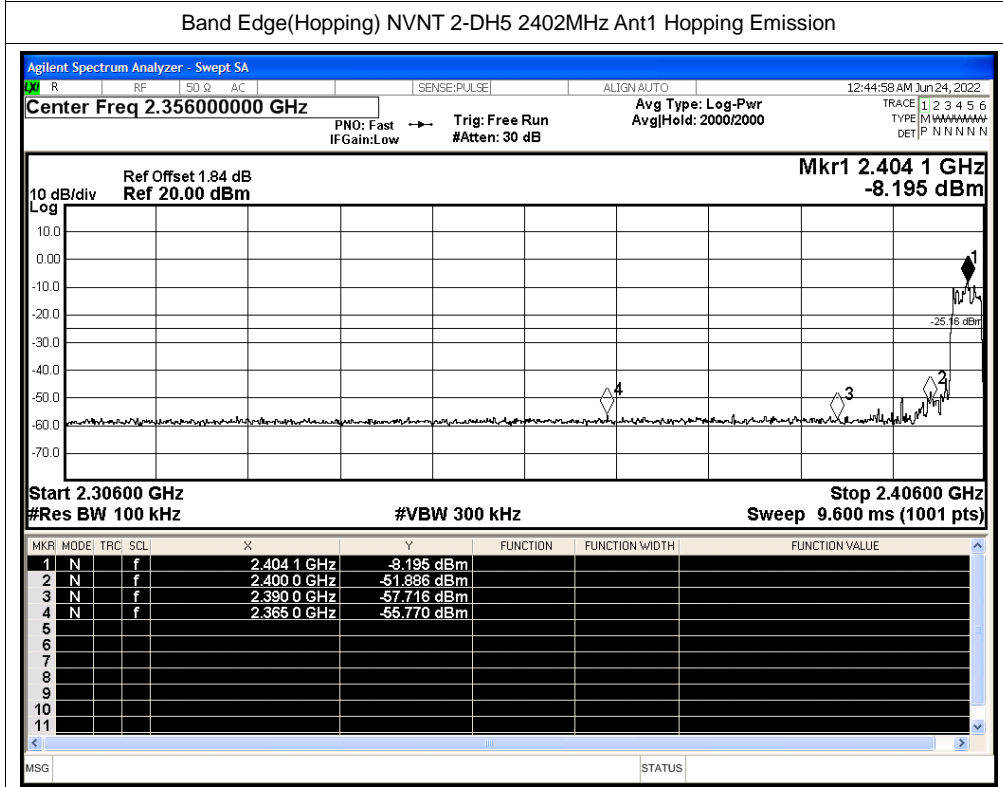
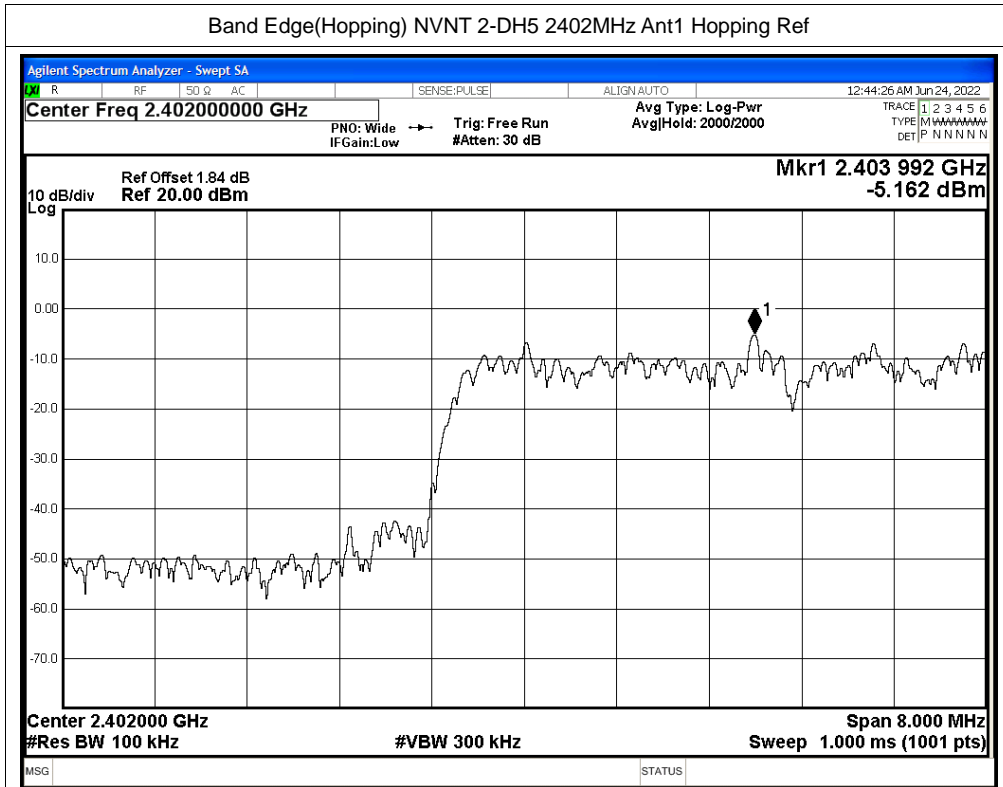
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref

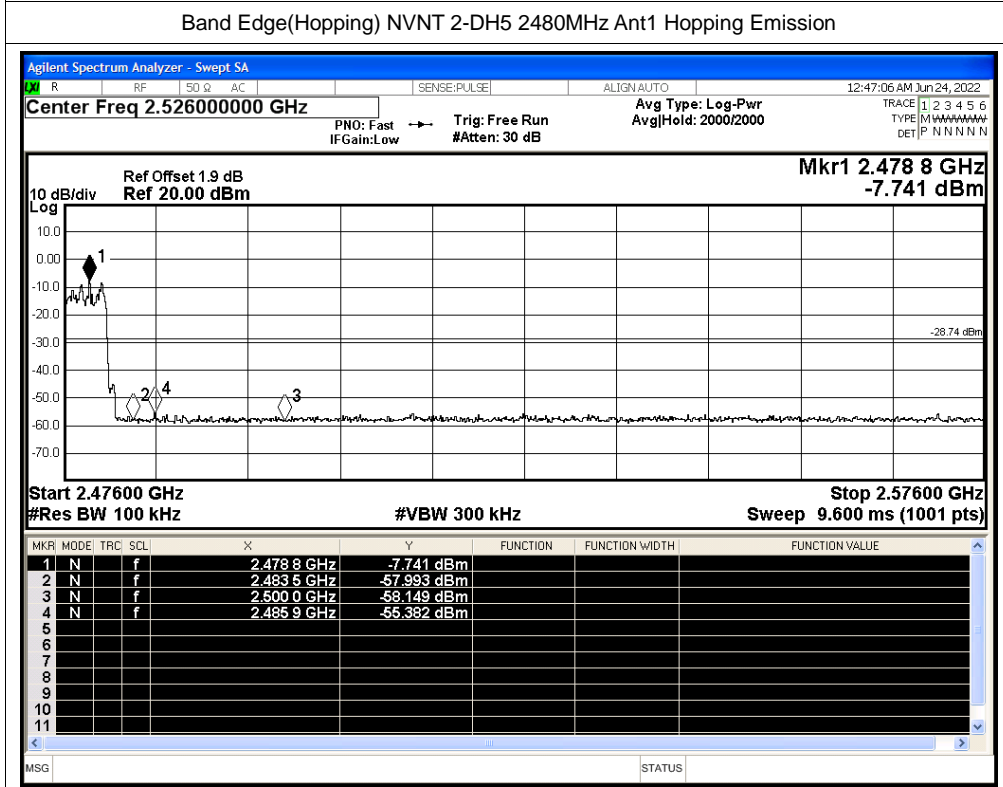
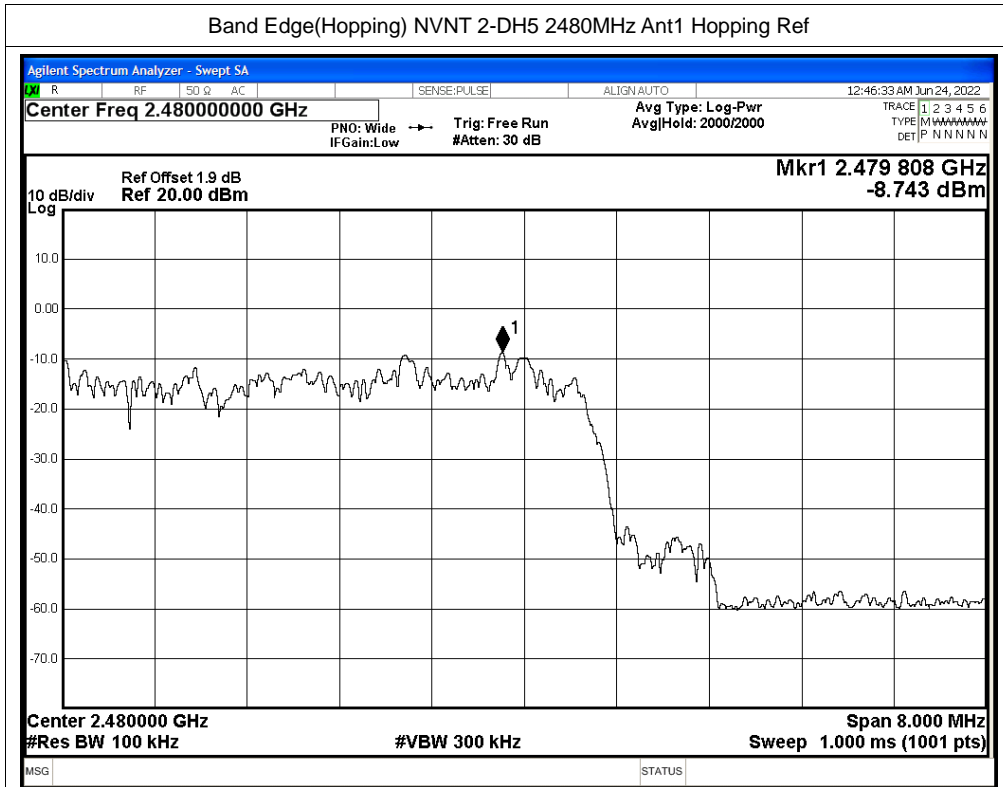


Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission











## A.7 Conducted RF Spurious Emission

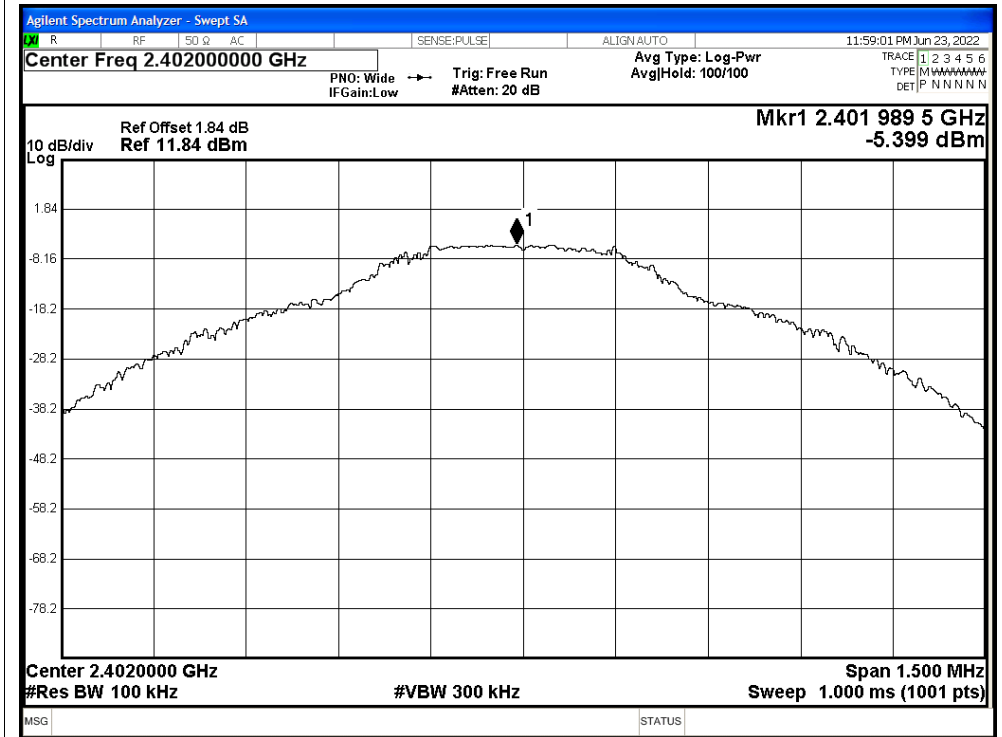
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-41.33	-20	Pass
NVNT	1-DH5	2441	Ant1	-26.23	-20	Pass
NVNT	1-DH5	2480	Ant1	-31.09	-20	Pass
NVNT	2-DH5	2402	Ant1	-34.25	-20	Pass
NVNT	2-DH5	2441	Ant1	-32.26	-20	Pass
NVNT	2-DH5	2480	Ant1	-29.88	-20	Pass



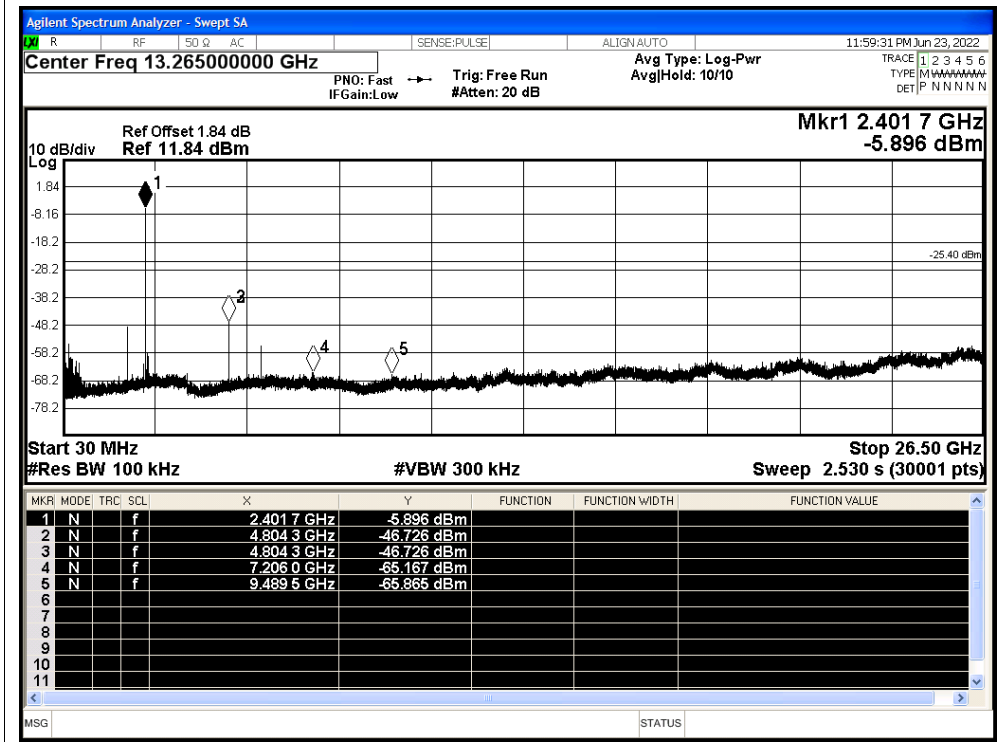


Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



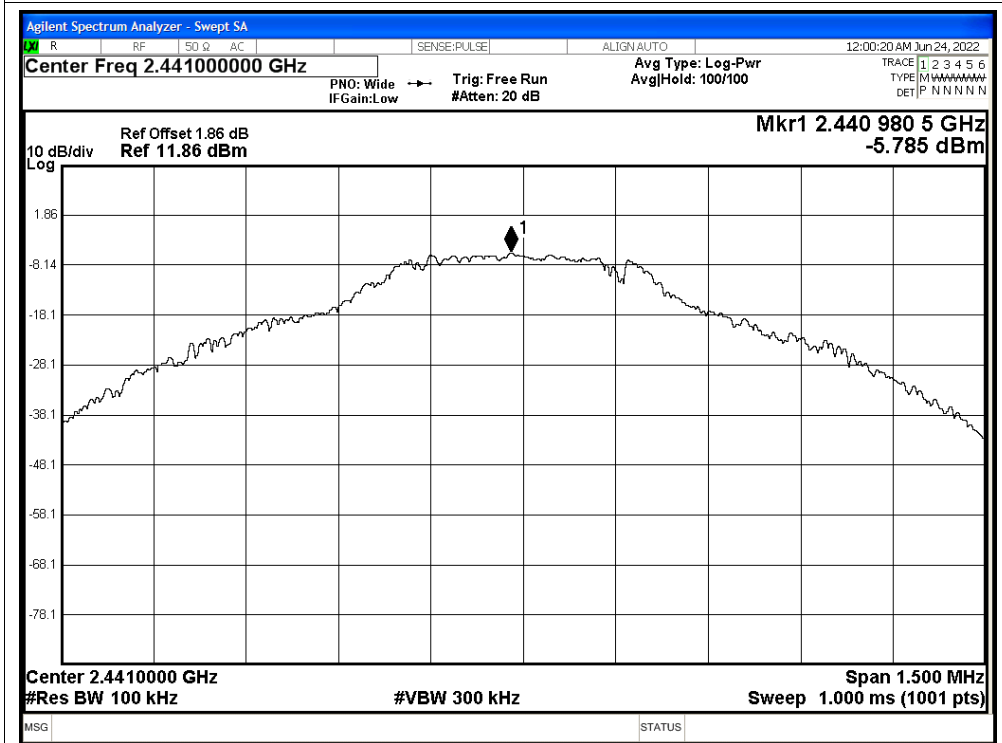
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



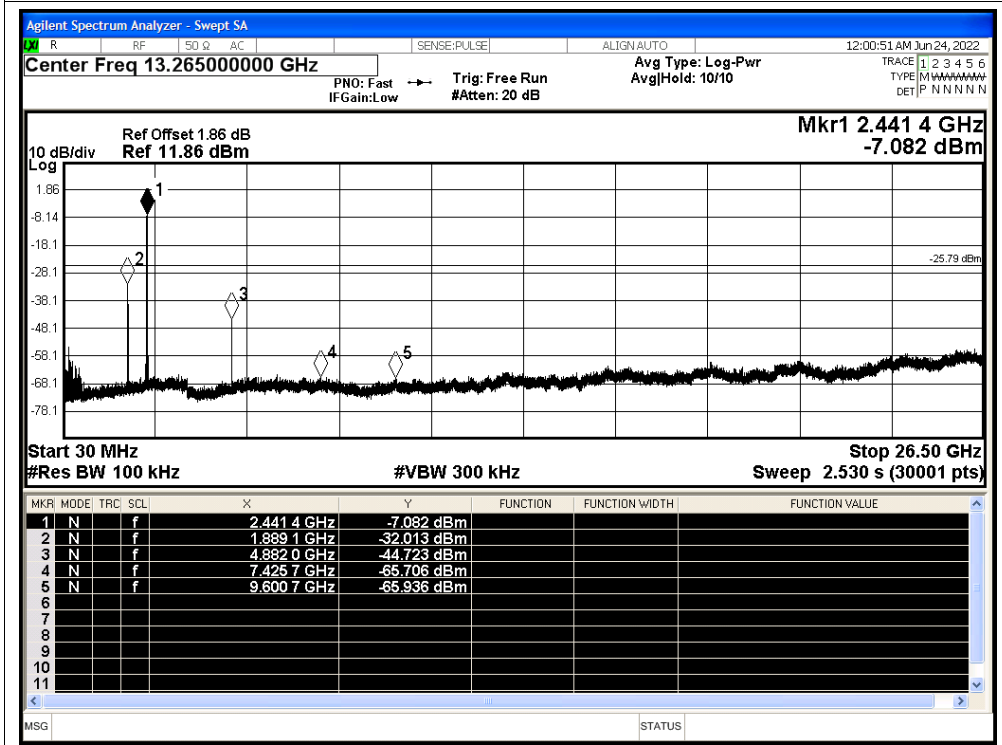




Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref

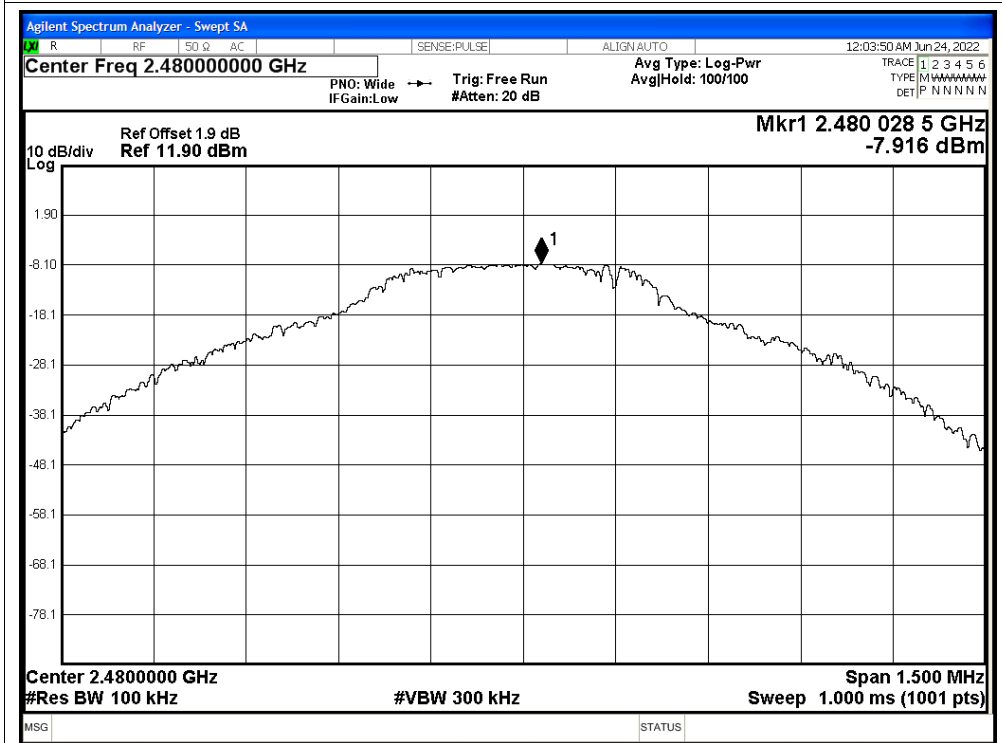


Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission

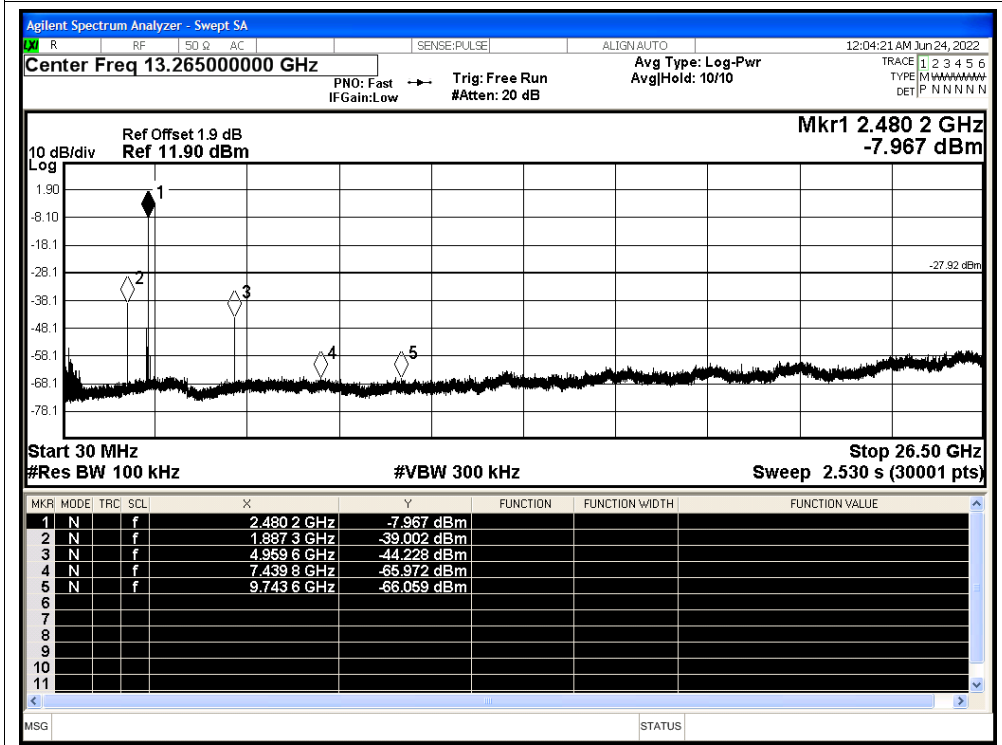




Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref

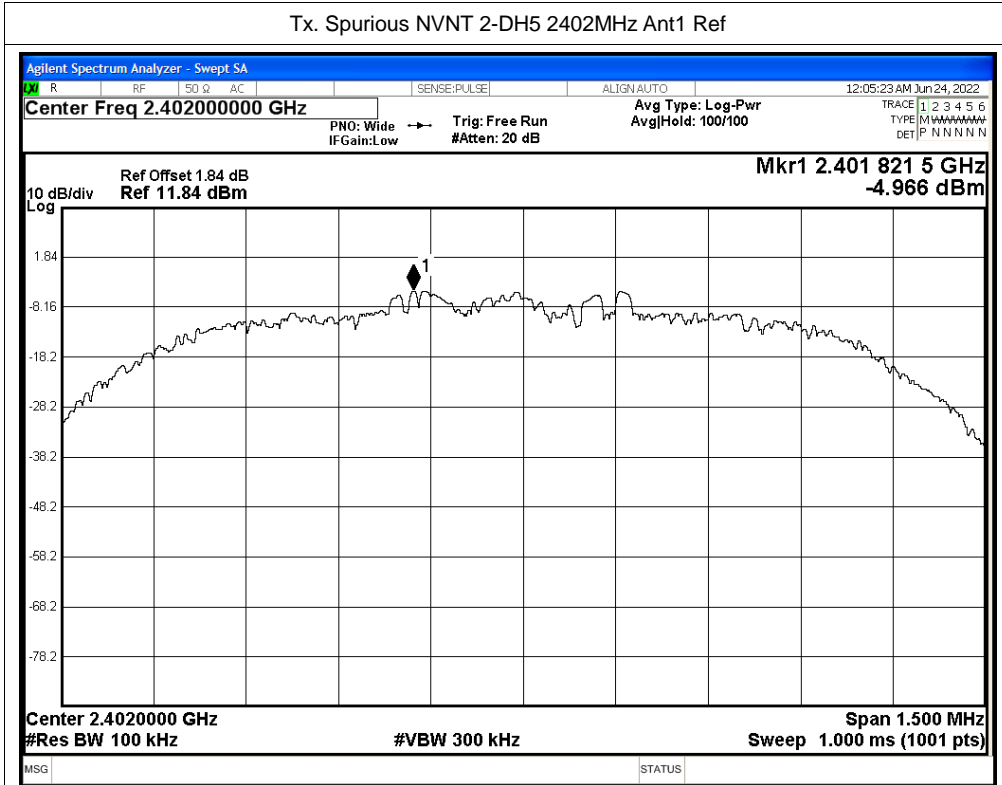


Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission

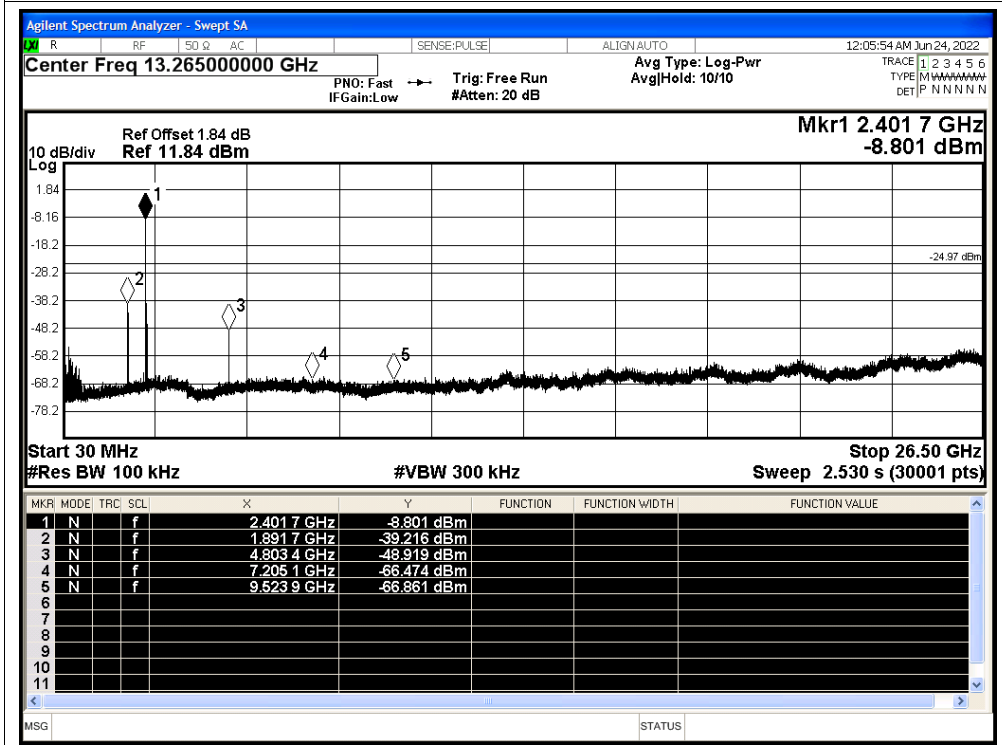




Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref

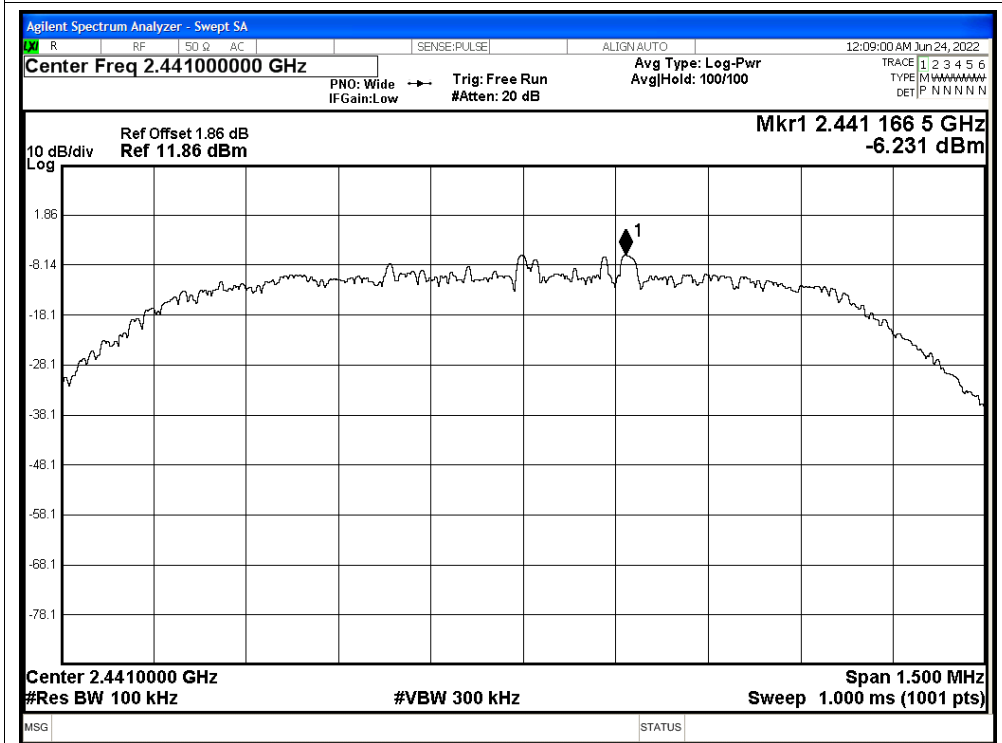


Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission

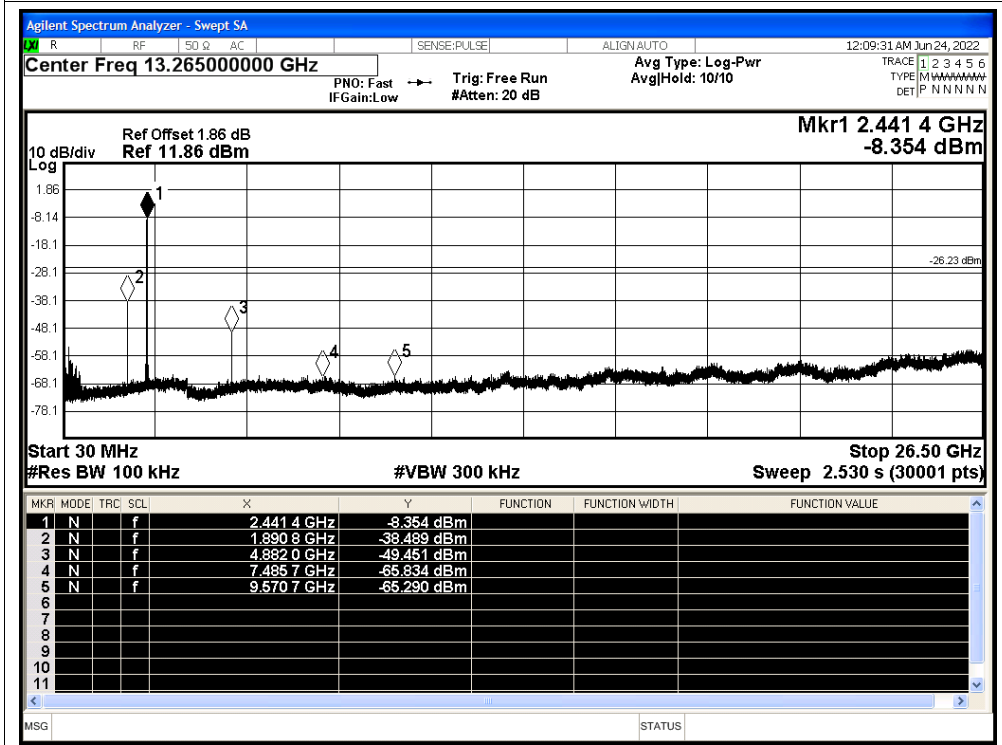




Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref

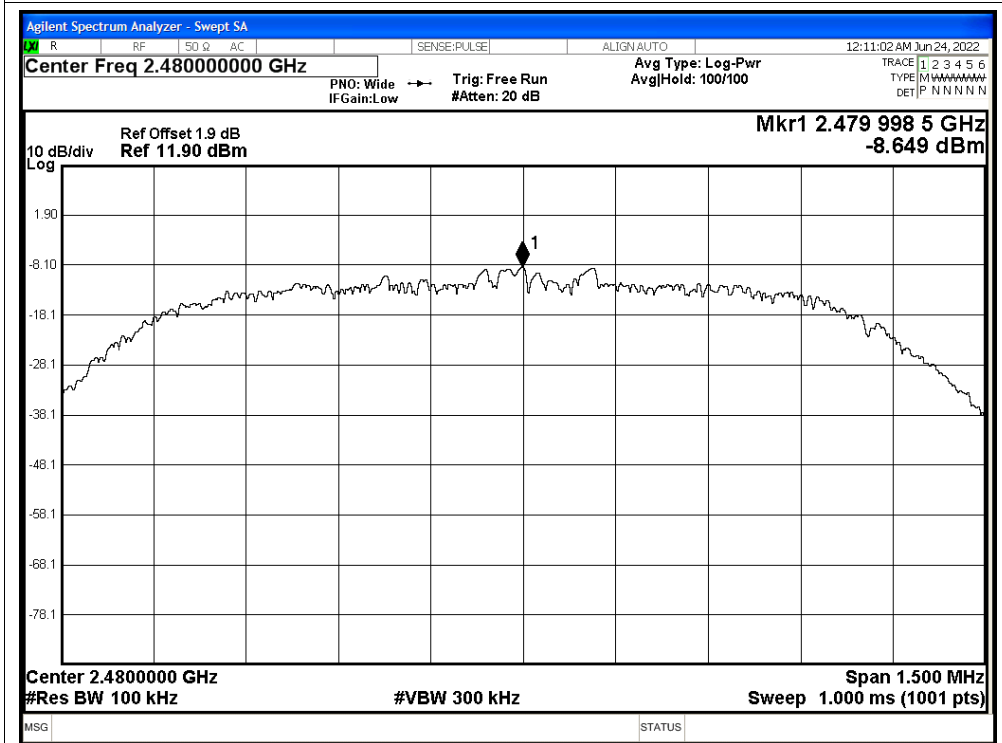


Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission

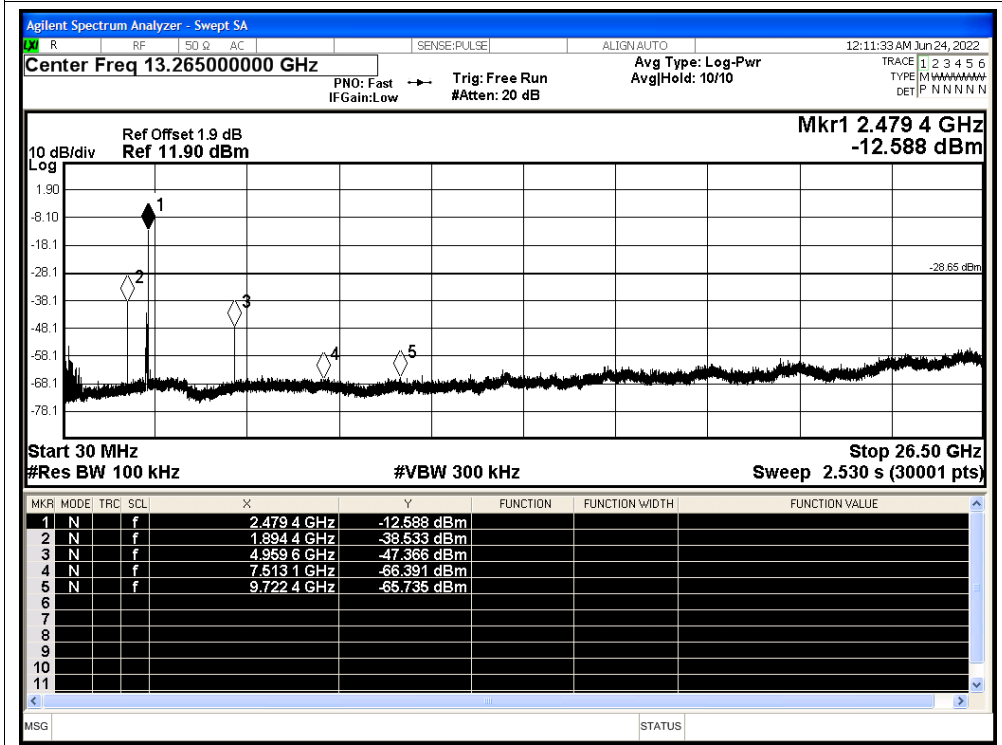




Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission





### A.8 Restrict Band

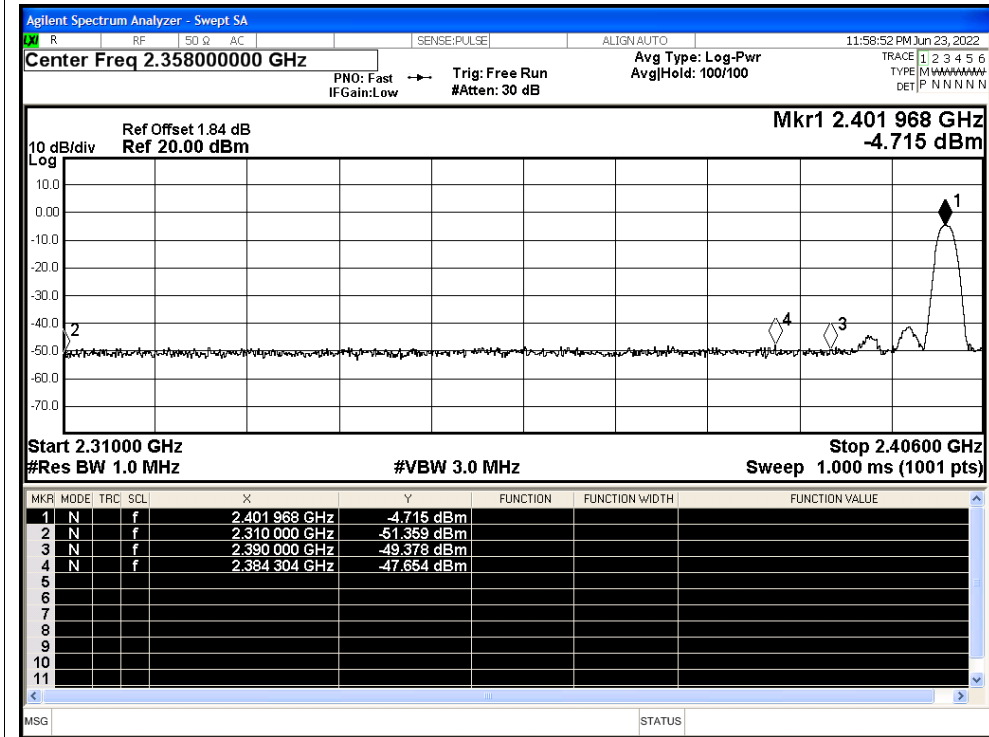
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-51.36	2	45.9	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-60.53	2	36.73	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2384.304	-47.65	2	49.61	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2354.16	-59.29	2	37.97	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.49	2	47.77	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-60.43	2	36.83	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-50.29	2	46.97	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-58.19	2	39.07	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2484.76	-46.57	2	50.69	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.872	-57.95	2	39.31	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-50.54	2	46.72	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-59.97	2	37.29	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-51.28	2	45.98	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-60.58	2	36.68	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2354.064	-47.31	2	49.95	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2354.352	-59.87	2	37.39	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-50.93	2	46.33	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-60.29	2	36.97	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-48.85	2	48.41	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-59.14	2	38.12	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.68	-47.46	2	49.8	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.824	-58.83	2	38.43	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-49.69	2	47.57	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-59.93	2	37.33	Average	54	Pass



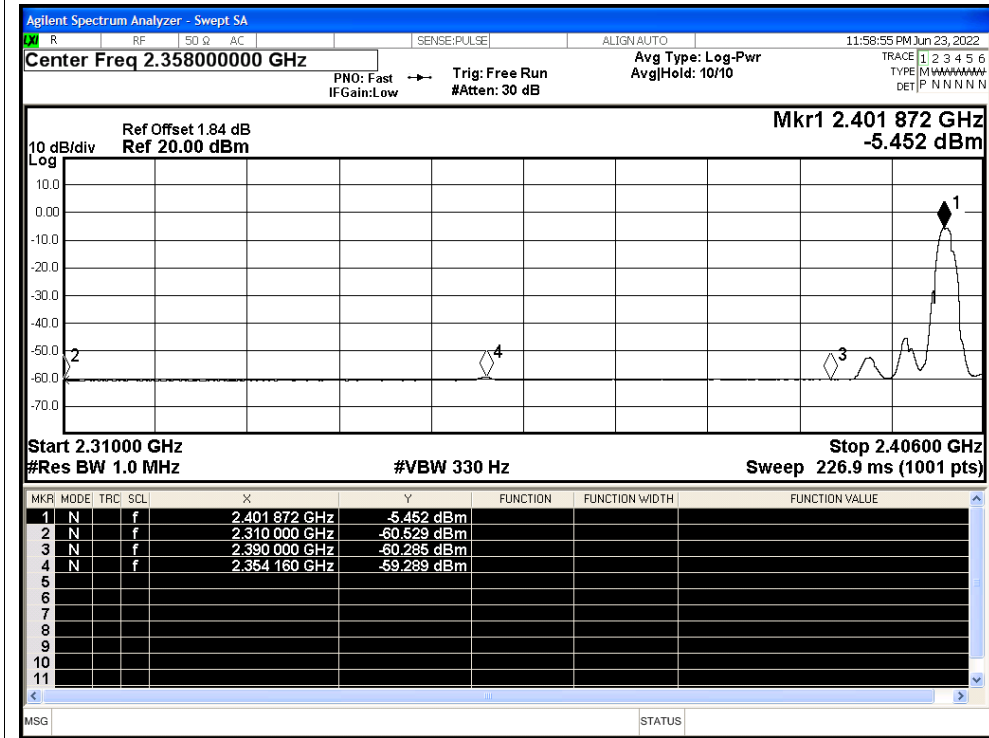


Test Graphs

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

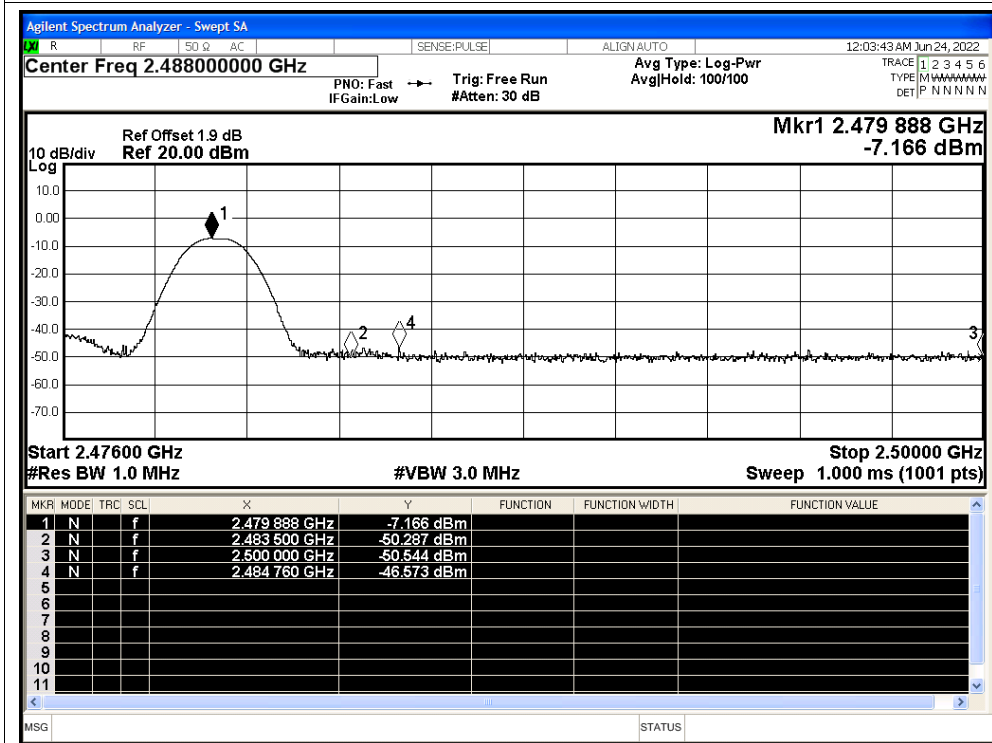


Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average

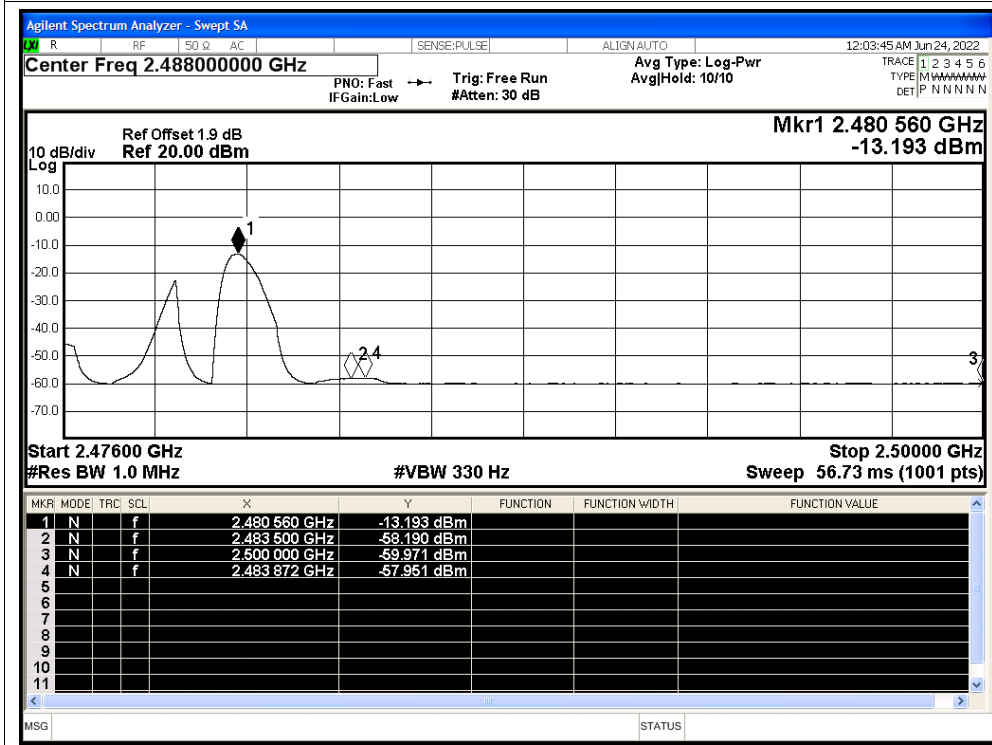




Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



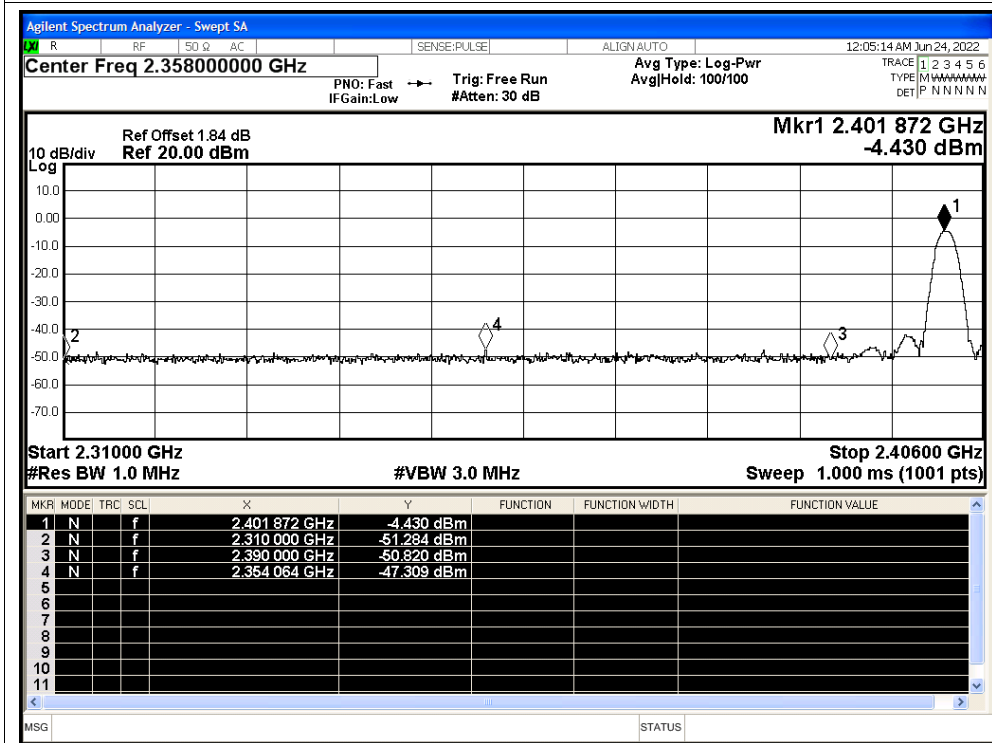
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



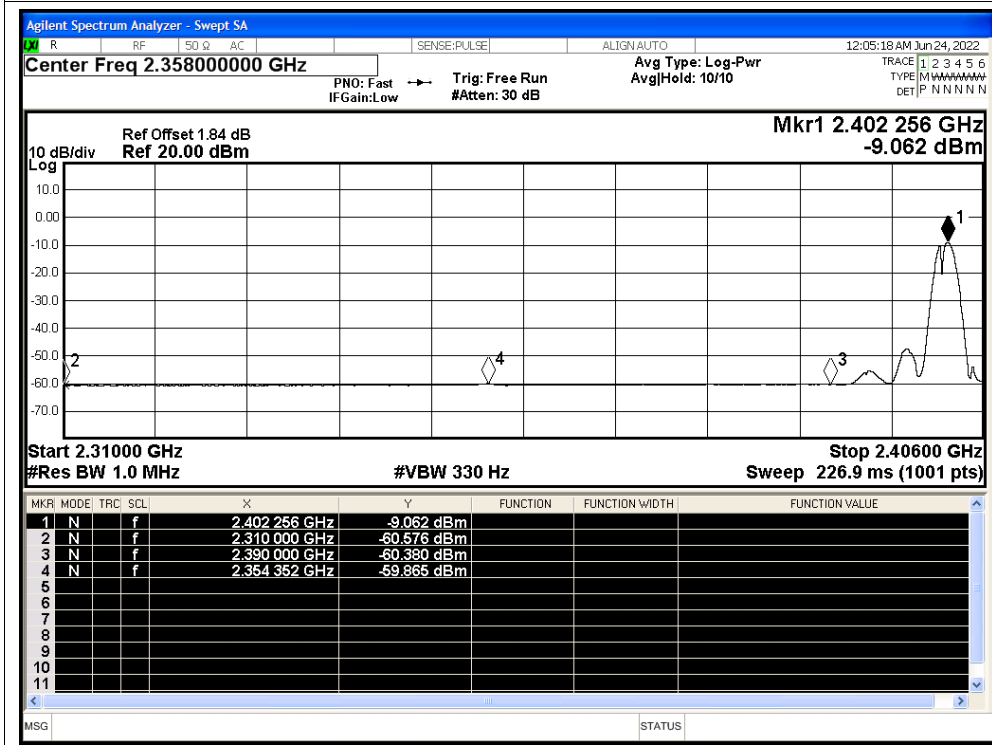




Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak

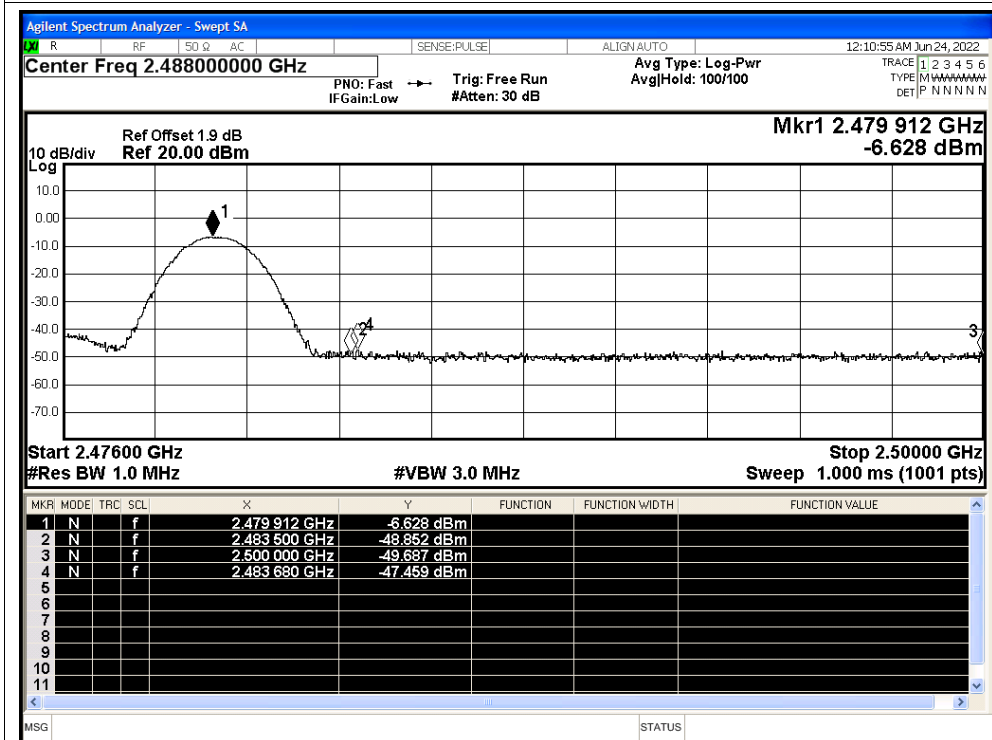


Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average





Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average

