

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	SMART WATCH
Test Model:	G40PRO
Sample ID:	HC-C-202407-0182-01-01-2#
Environmental Conditions	
Temperature:	23.8°C
Relative Humidity:	48%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202407-0182-6 The report only show the worst case data.	

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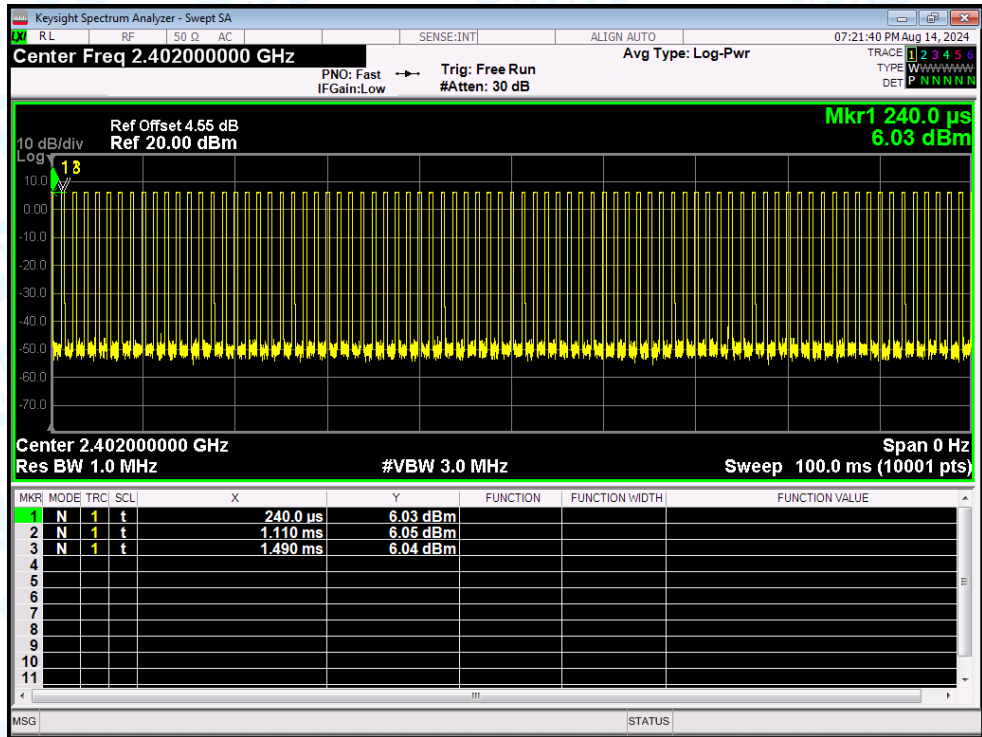
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1. Duty Cycle

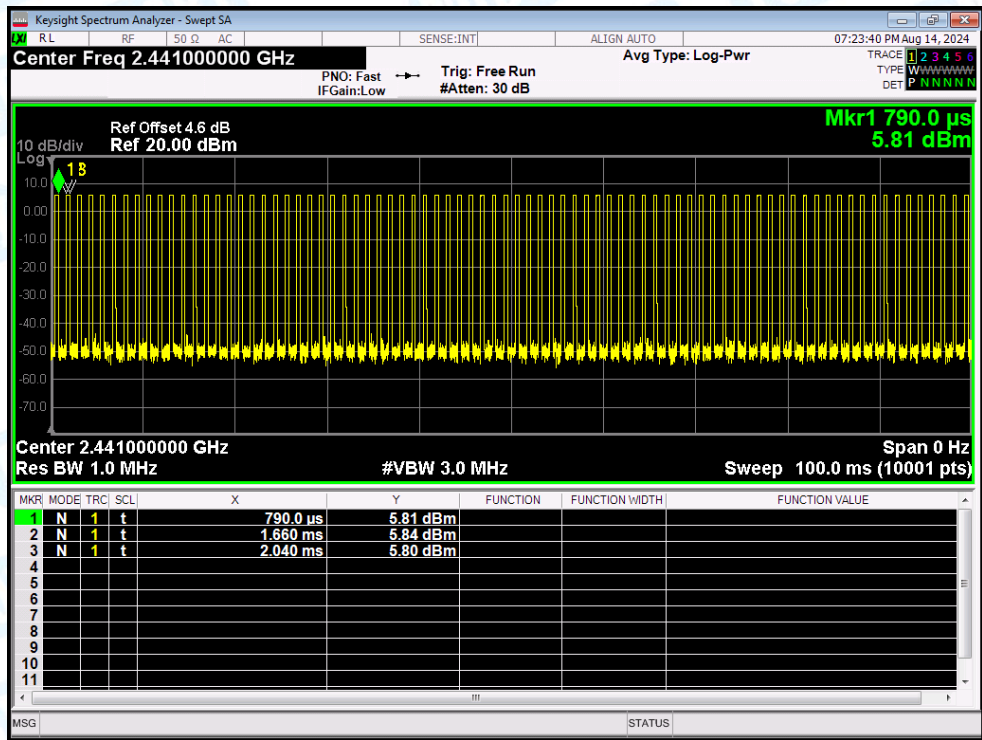
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	32	4.95	2.5
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

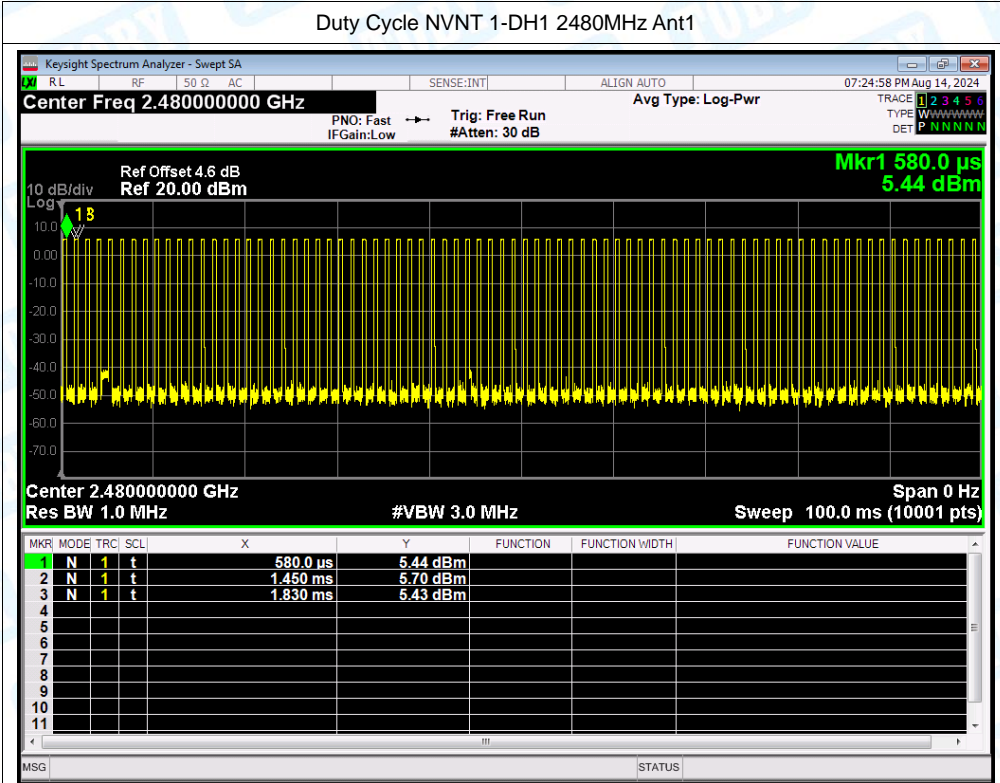
Duty Cycle NVNT 1-DH1 2402MHz Ant1



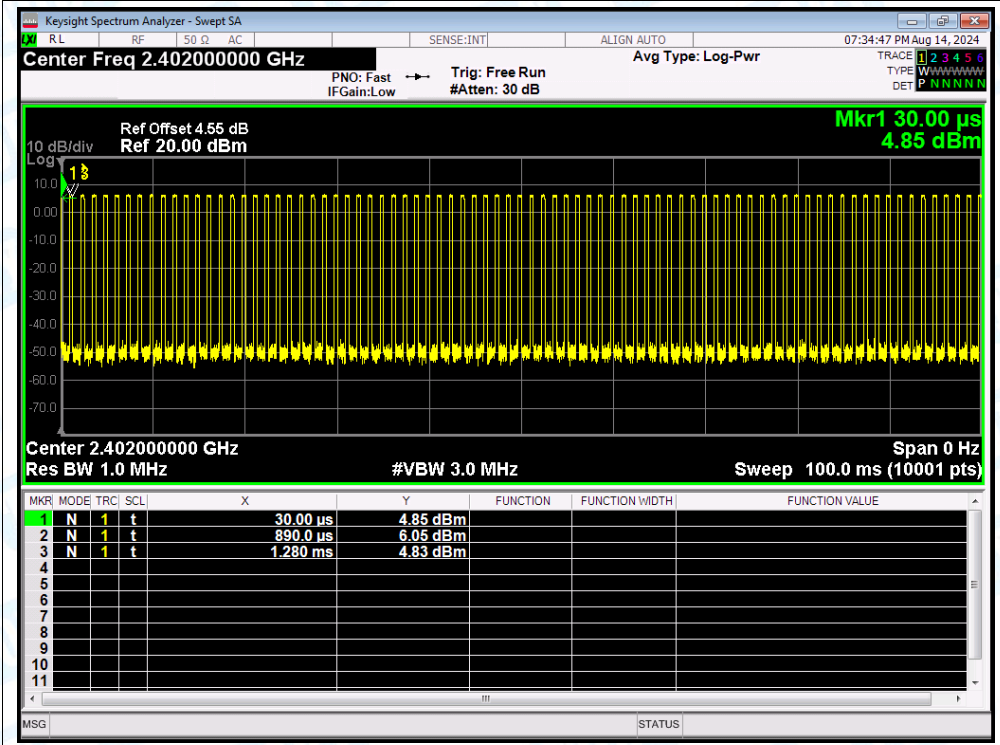
Duty Cycle NVNT 1-DH1 2441MHz Ant1



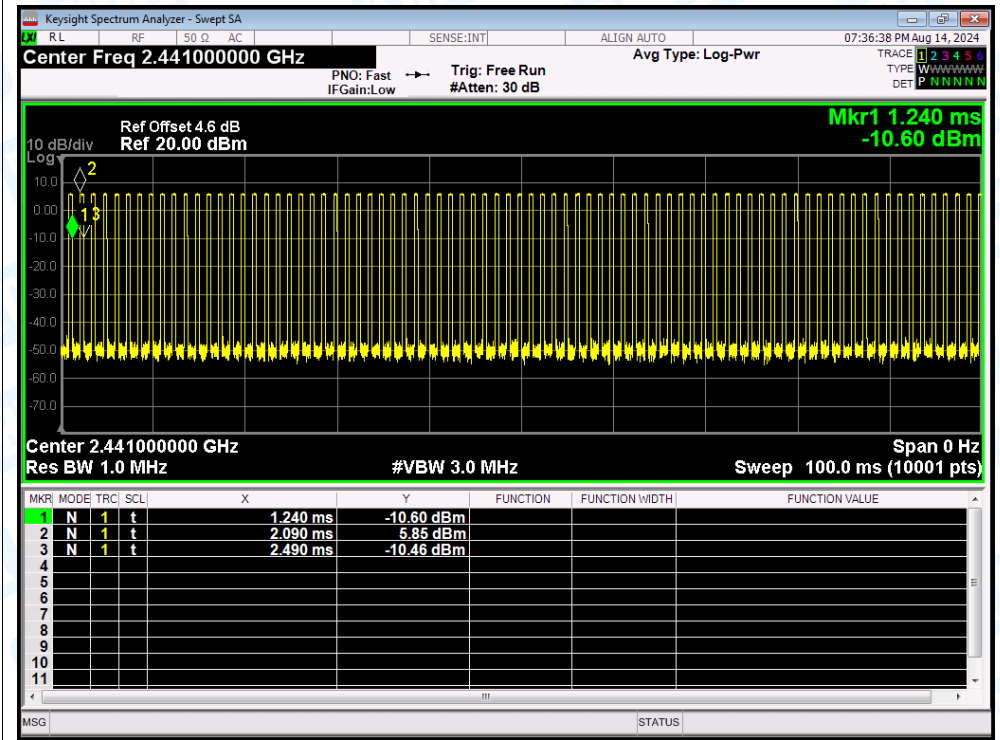
Duty Cycle NVNT 1-DH1 2480MHz Ant1



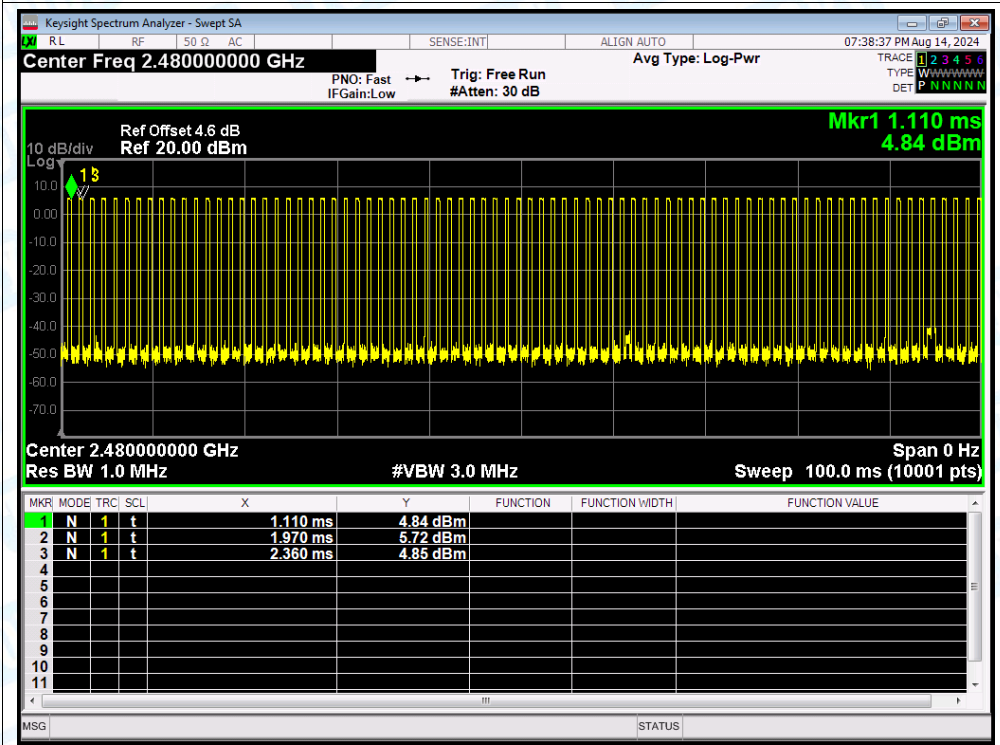
Duty Cycle NVNT 2-DH1 2402MHz Ant1



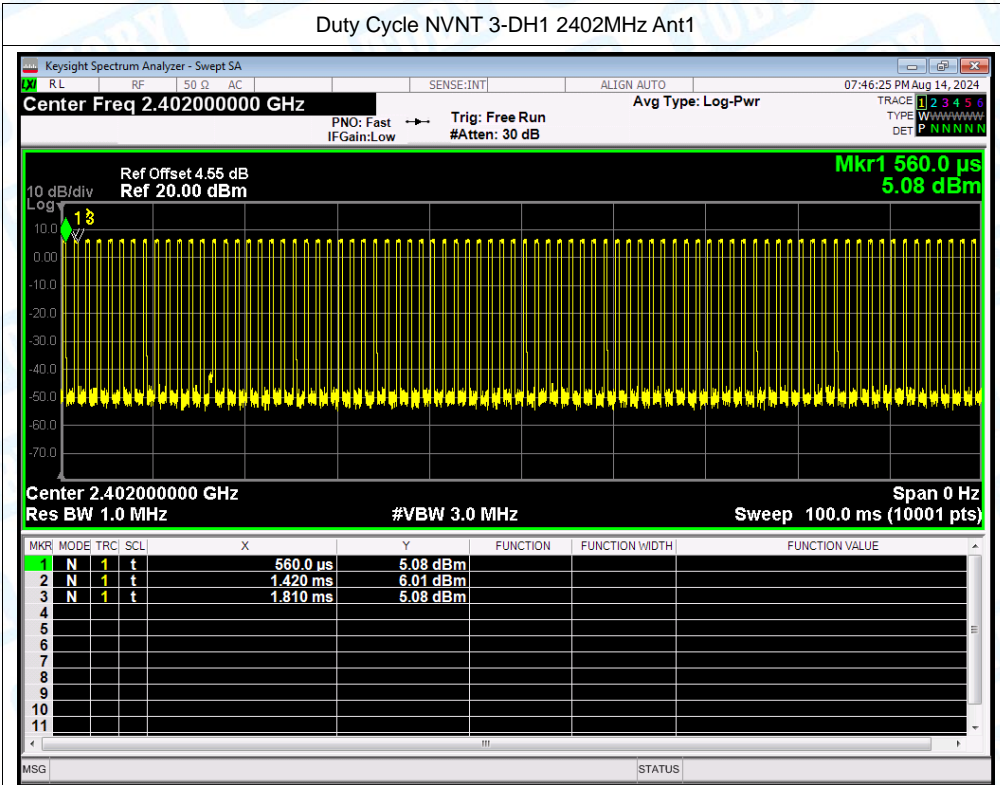
Duty Cycle NVNT 2-DH1 2441MHz Ant1



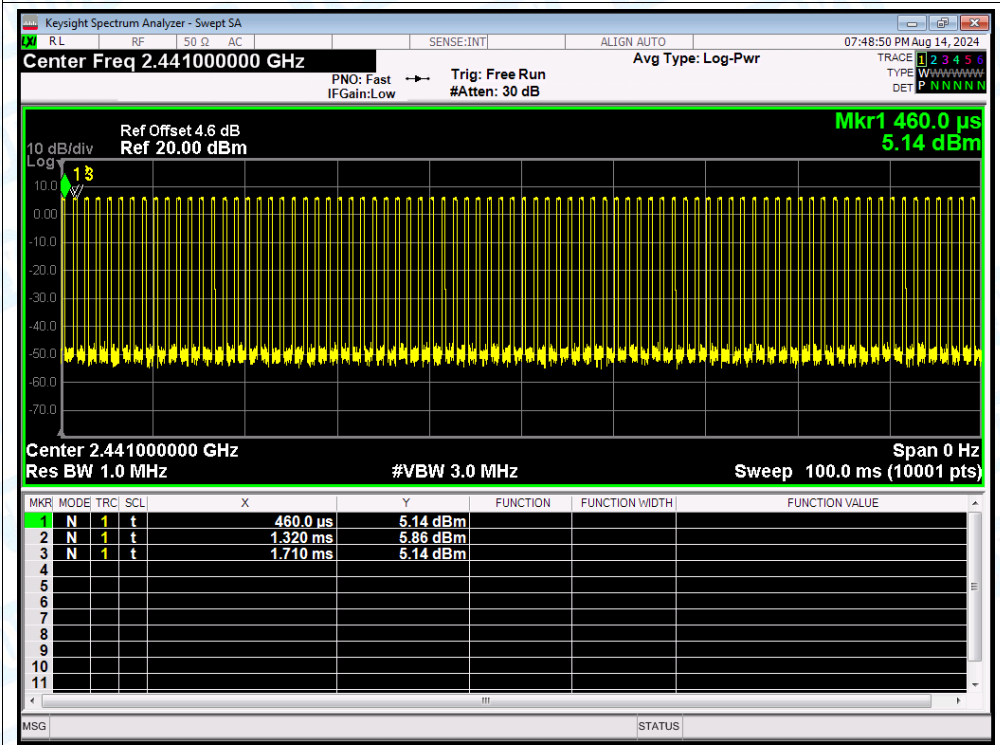
Duty Cycle NVNT 2-DH1 2480MHz Ant1

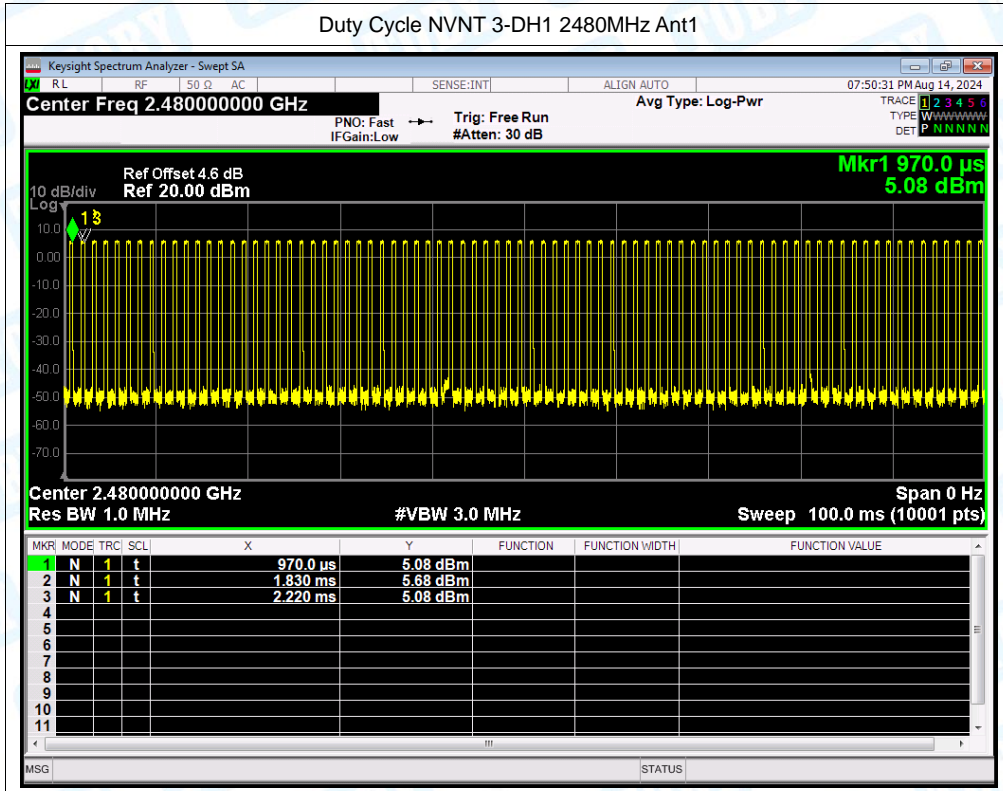


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



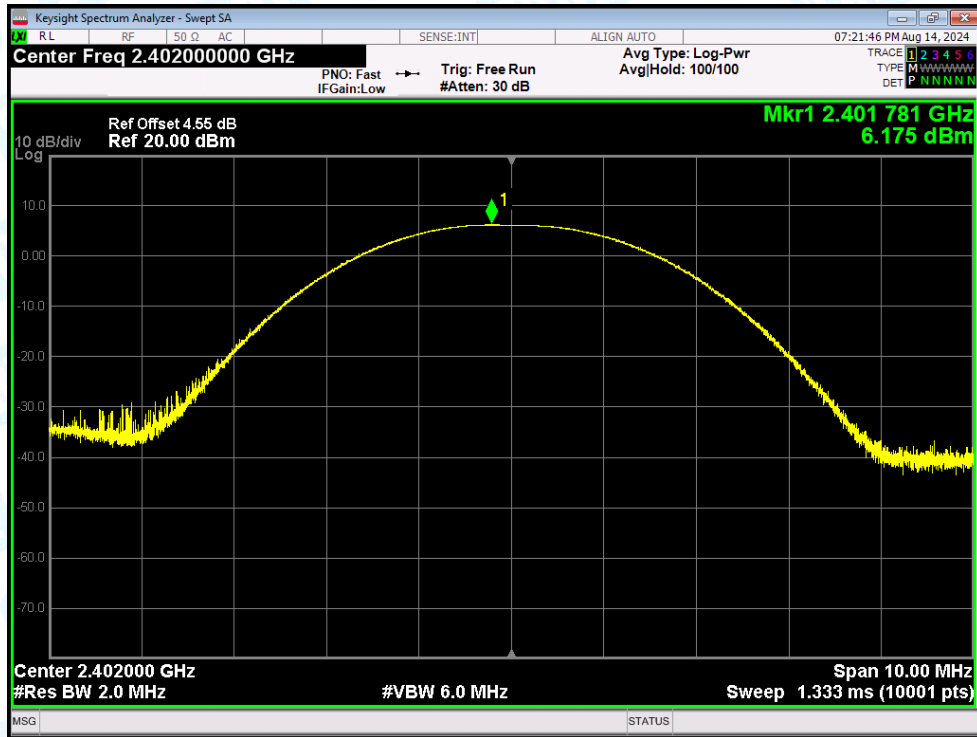


2. Maximum Conducted Output Power

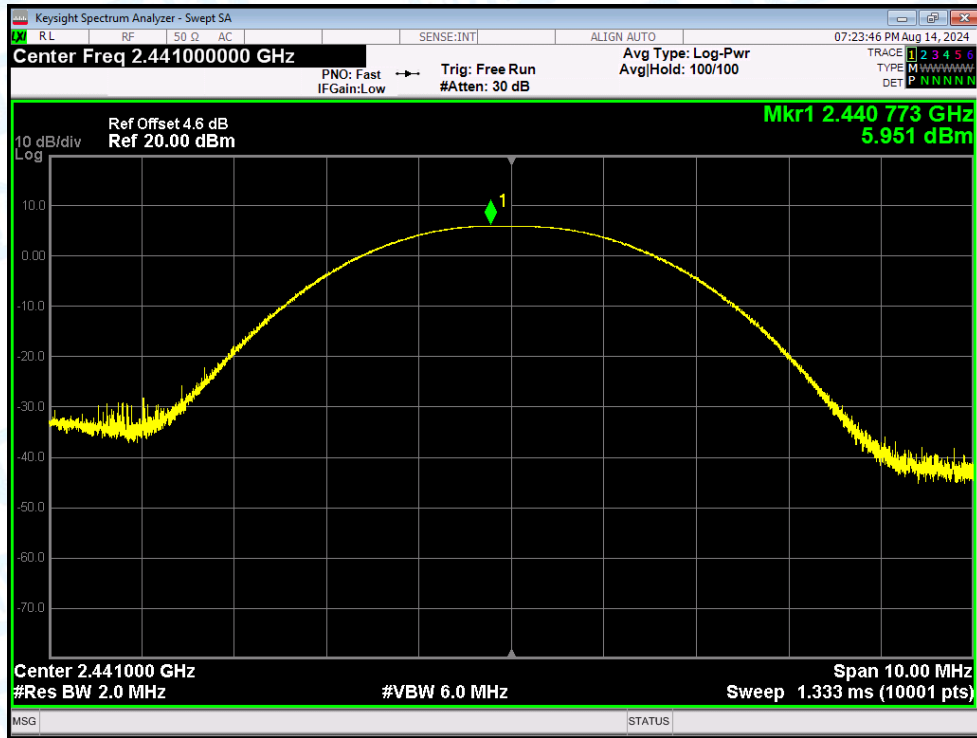
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	6.175	21	Pass
NVNT	1-DH1	2441	Ant1	5.951	21	Pass
NVNT	1-DH1	2480	Ant1	5.785	21	Pass
NVNT	2-DH1	2402	Ant1	6.634	21	Pass
NVNT	2-DH1	2441	Ant1	6.329	21	Pass
NVNT	2-DH1	2480	Ant1	6.078	21	Pass
NVNT	3-DH1	2402	Ant1	6.855	21	Pass
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NVNT	3-DH1	2480	Ant1	6.244	21	Pass

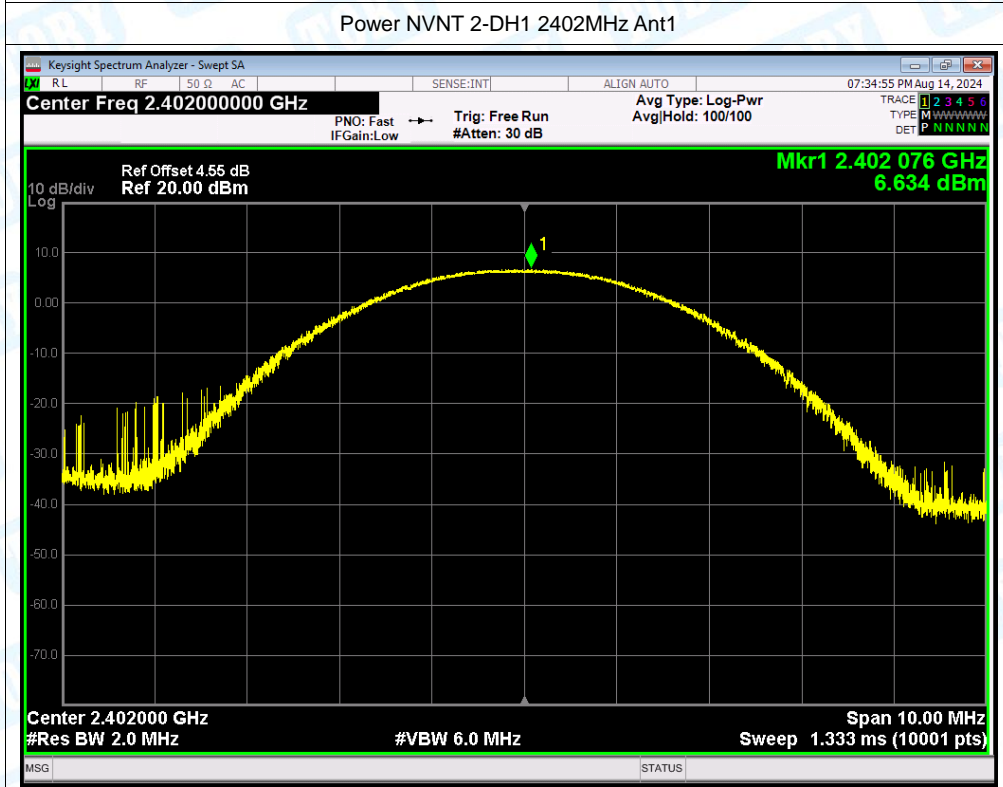
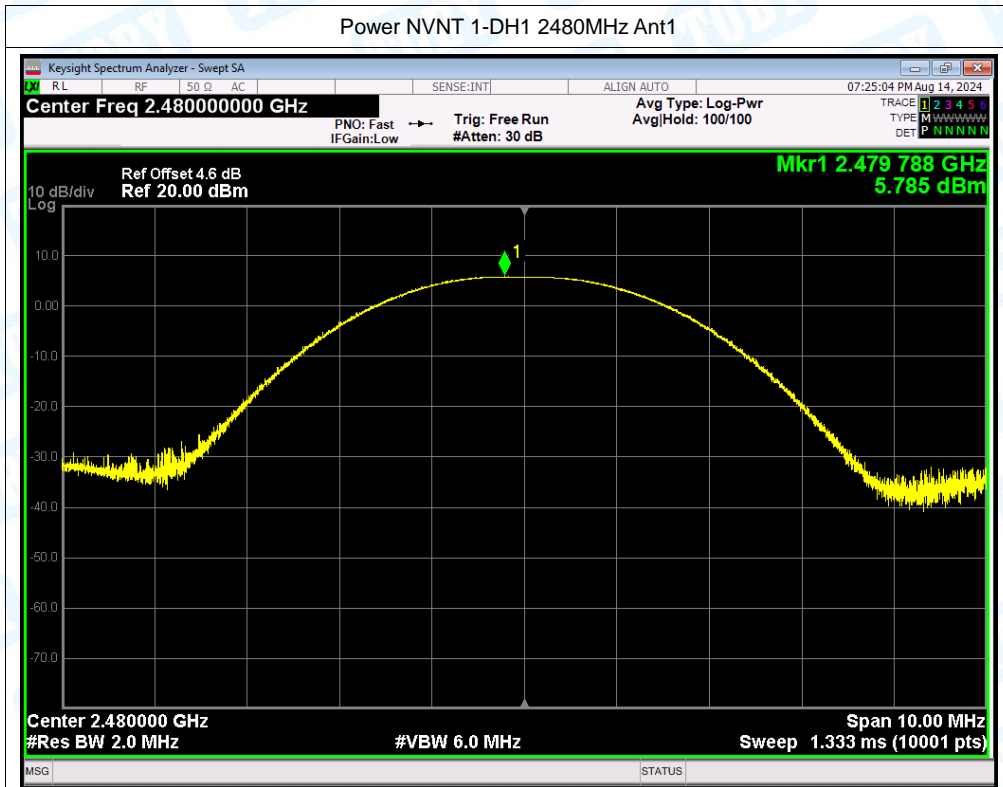
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1

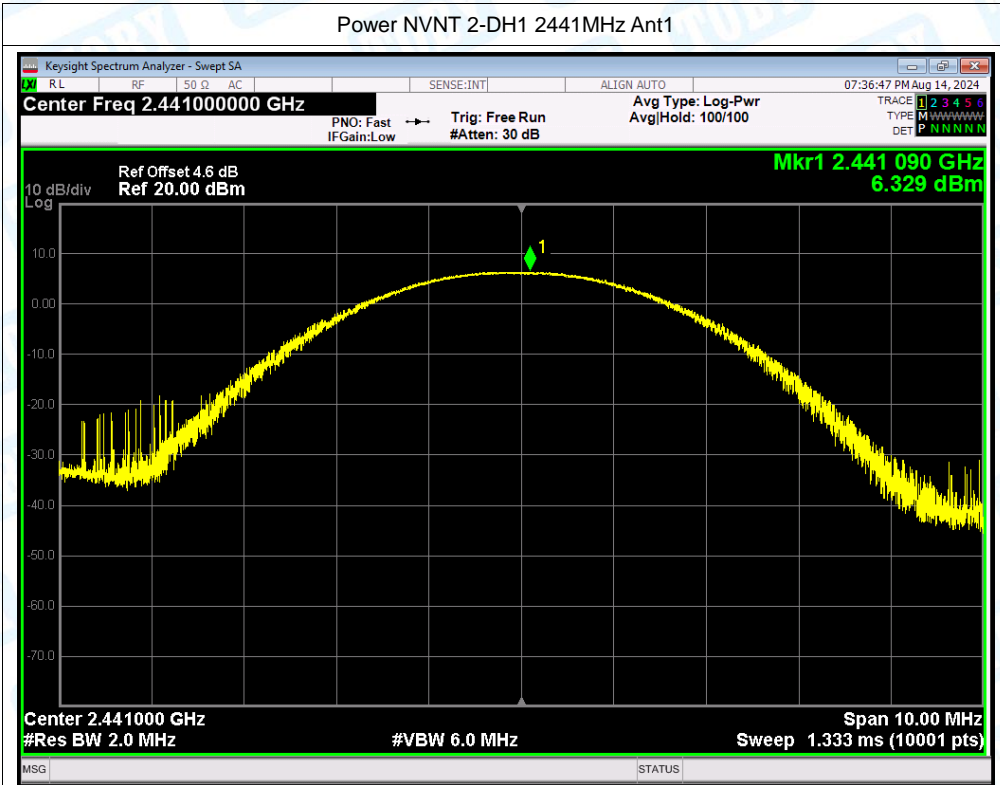


Power NVNT 1-DH1 2441MHz Ant1

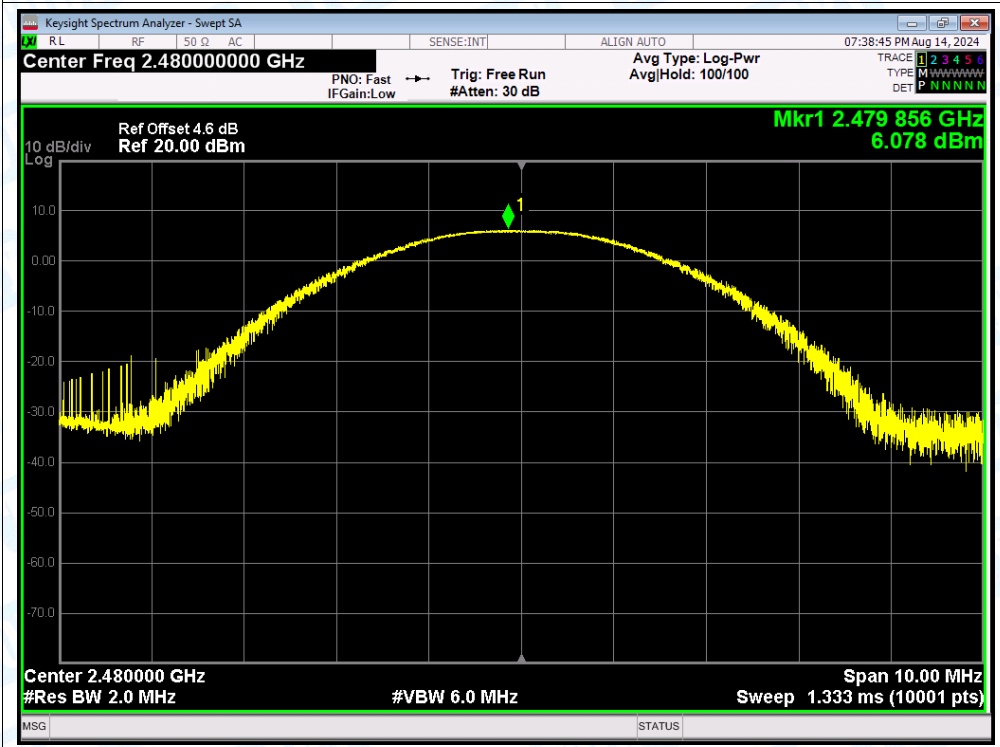


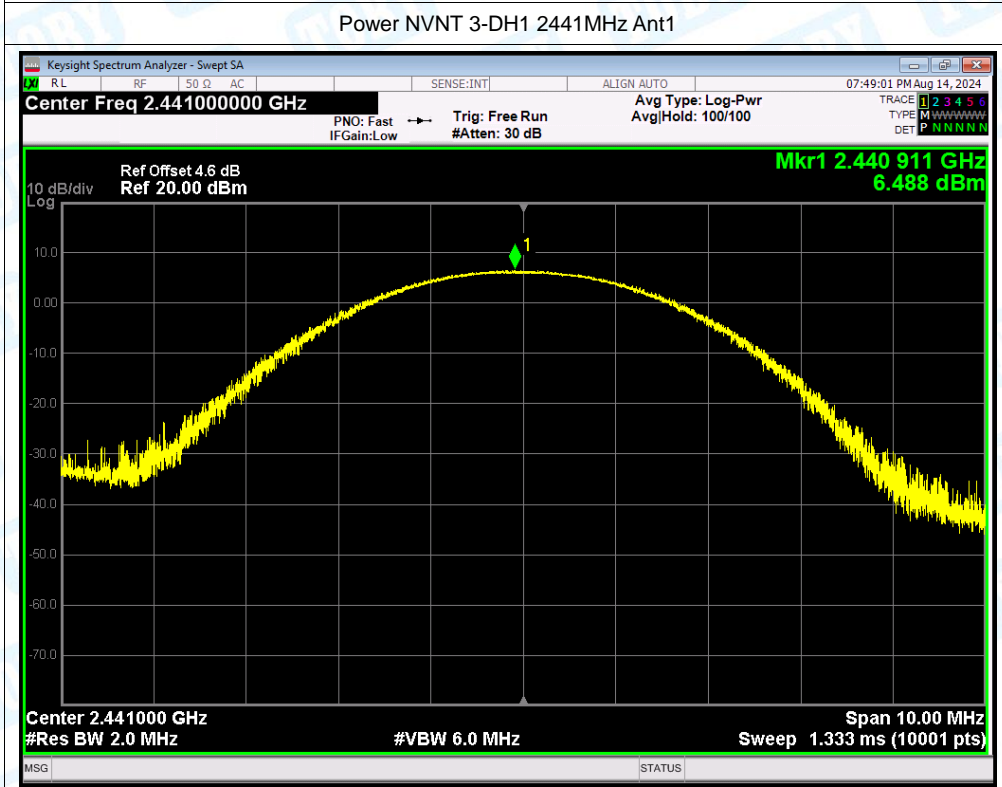
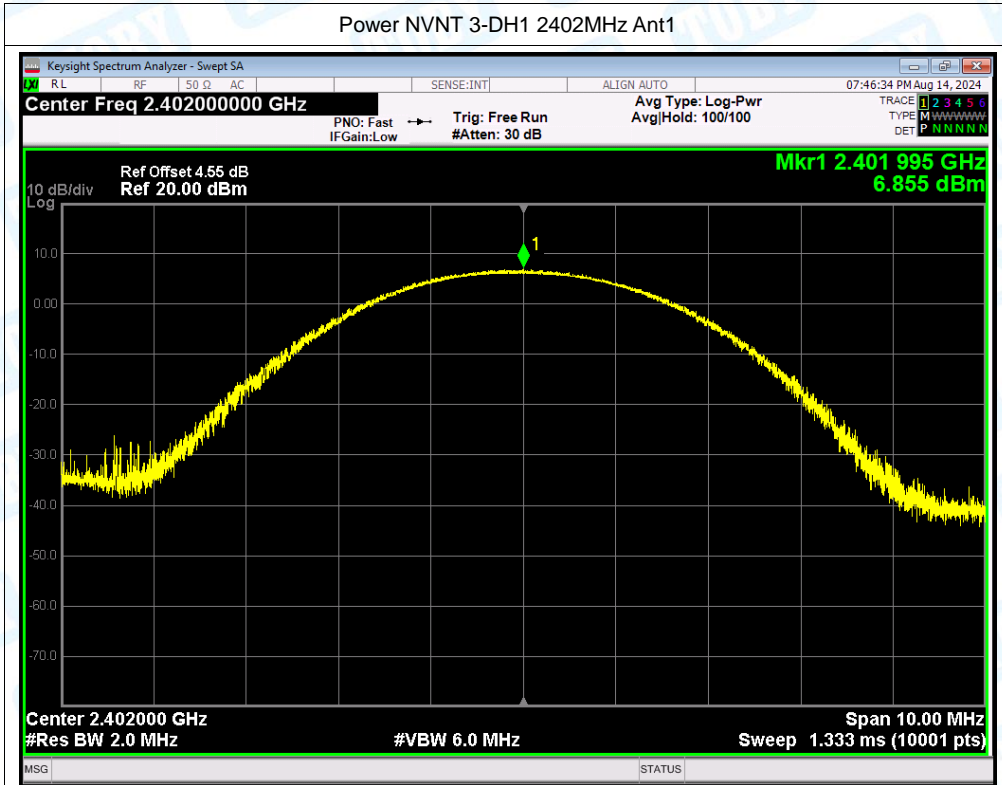


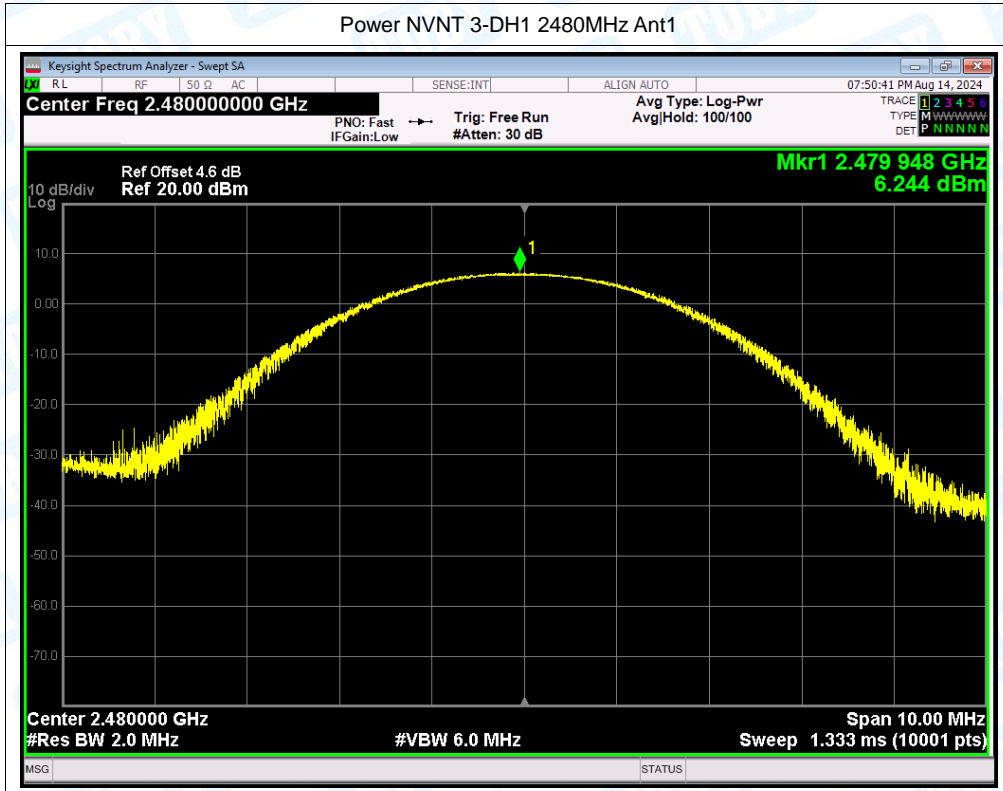
Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1





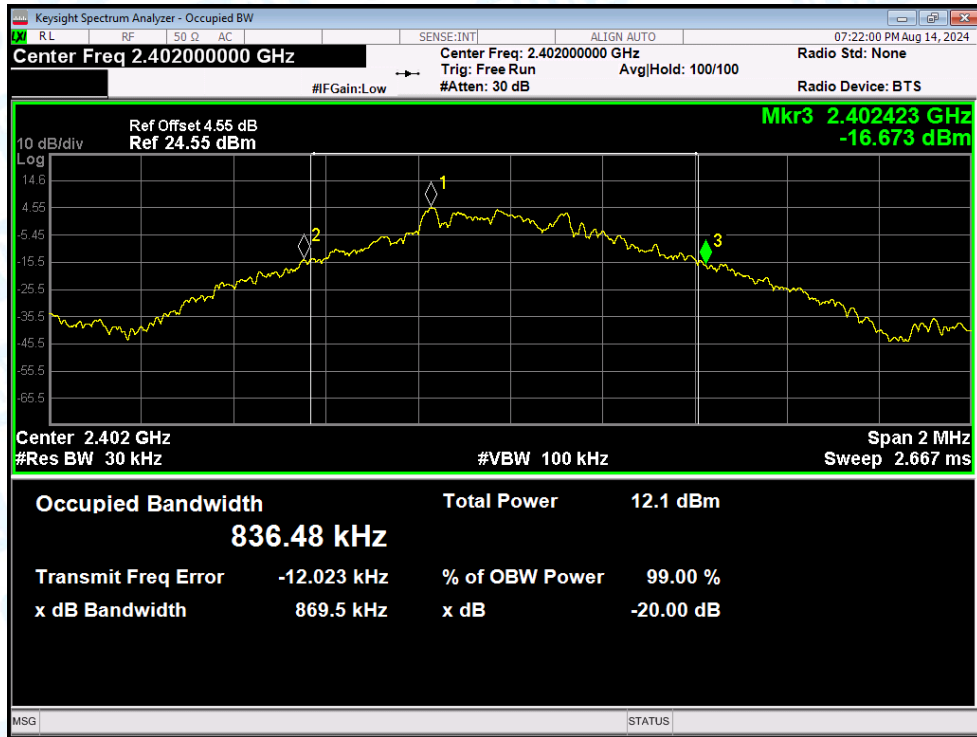


3. -20dB Bandwidth

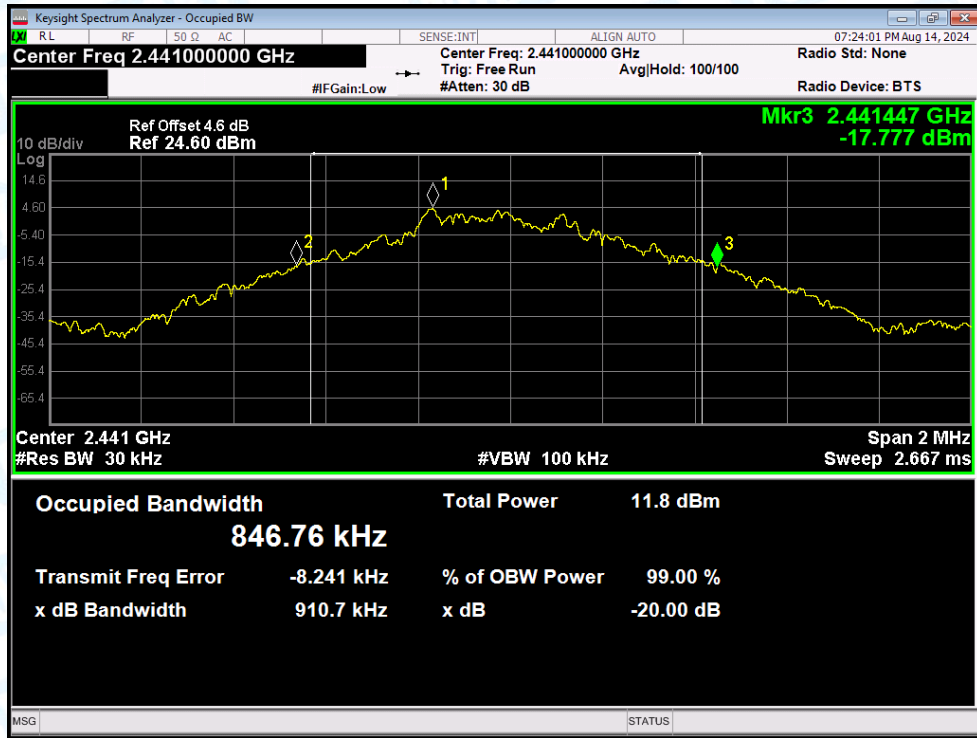
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.91	----	Pass
NVNT	1-DH1	2480	Ant1	0.88	----	Pass
NVNT	2-DH1	2402	Ant1	1.25	----	Pass
NVNT	2-DH1	2441	Ant1	1.28	----	Pass
NVNT	2-DH1	2480	Ant1	1.27	----	Pass
NVNT	3-DH1	2402	Ant1	1.25	----	Pass
NVNT	3-DH1	2441	Ant1	1.29	----	Pass
NVNT	3-DH1	2480	Ant1	1.22	----	Pass

Test Graphs

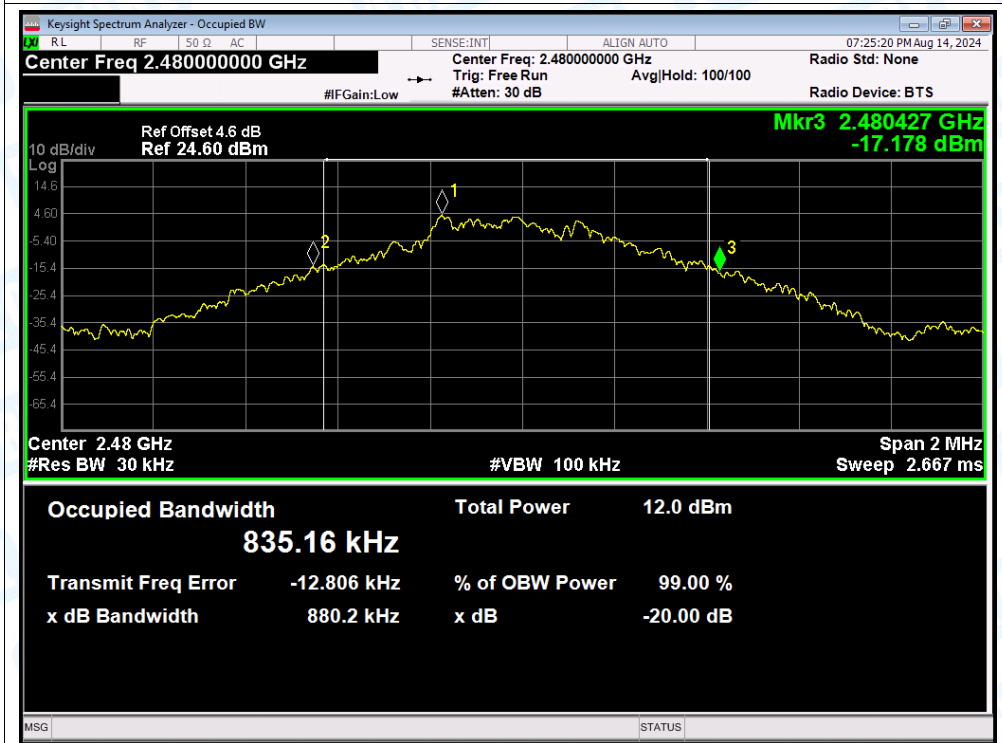
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



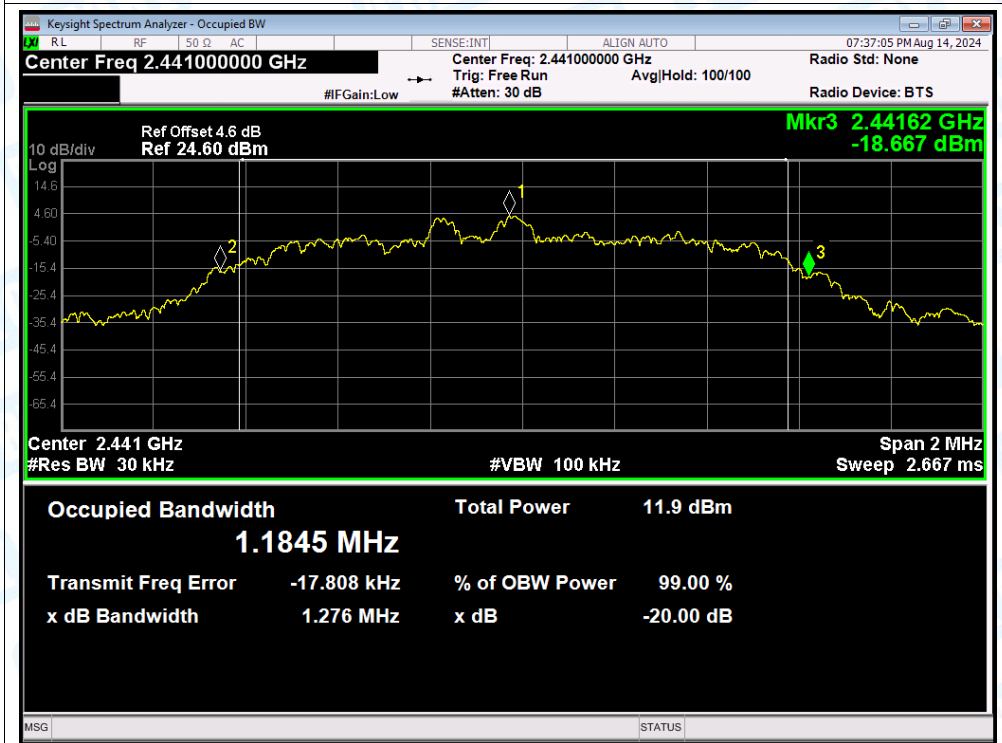
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



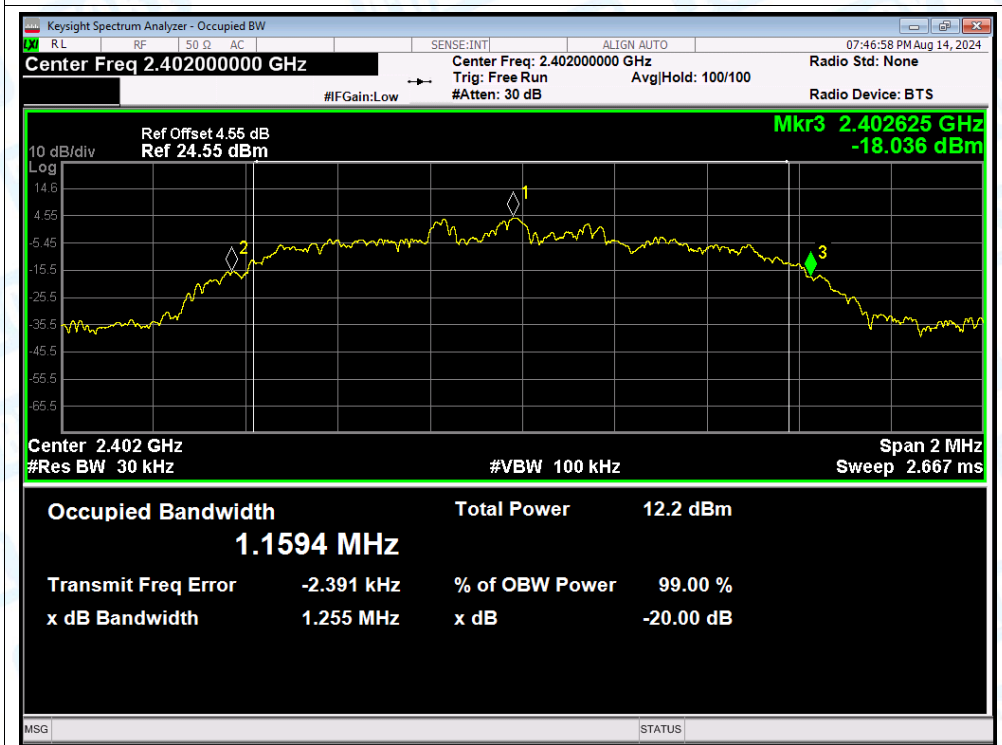
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



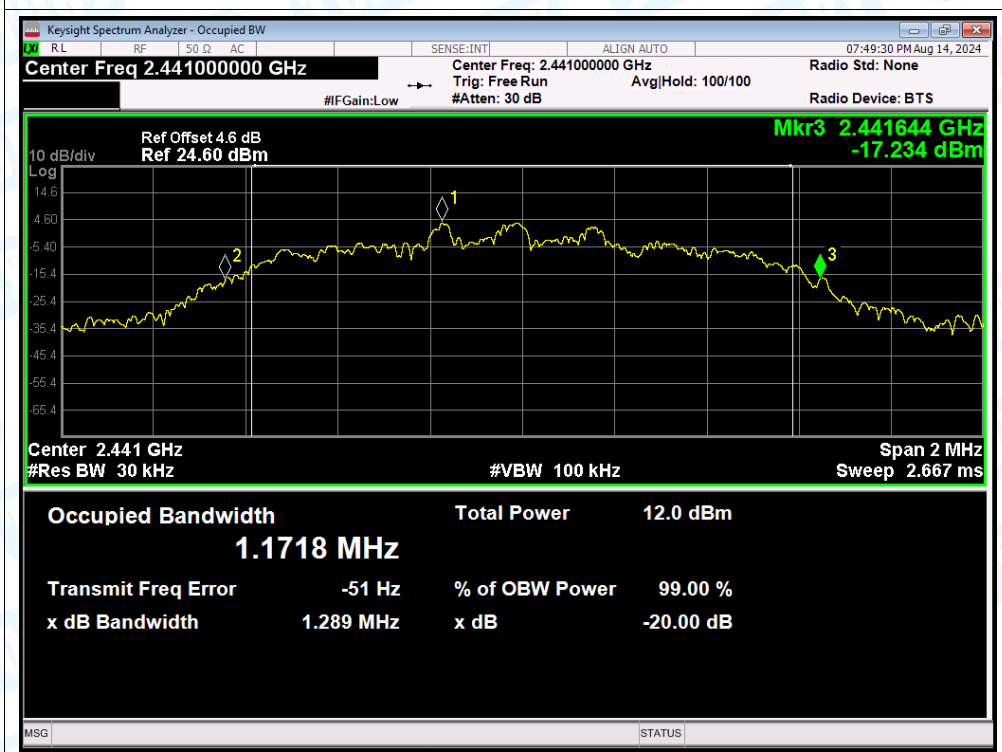
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

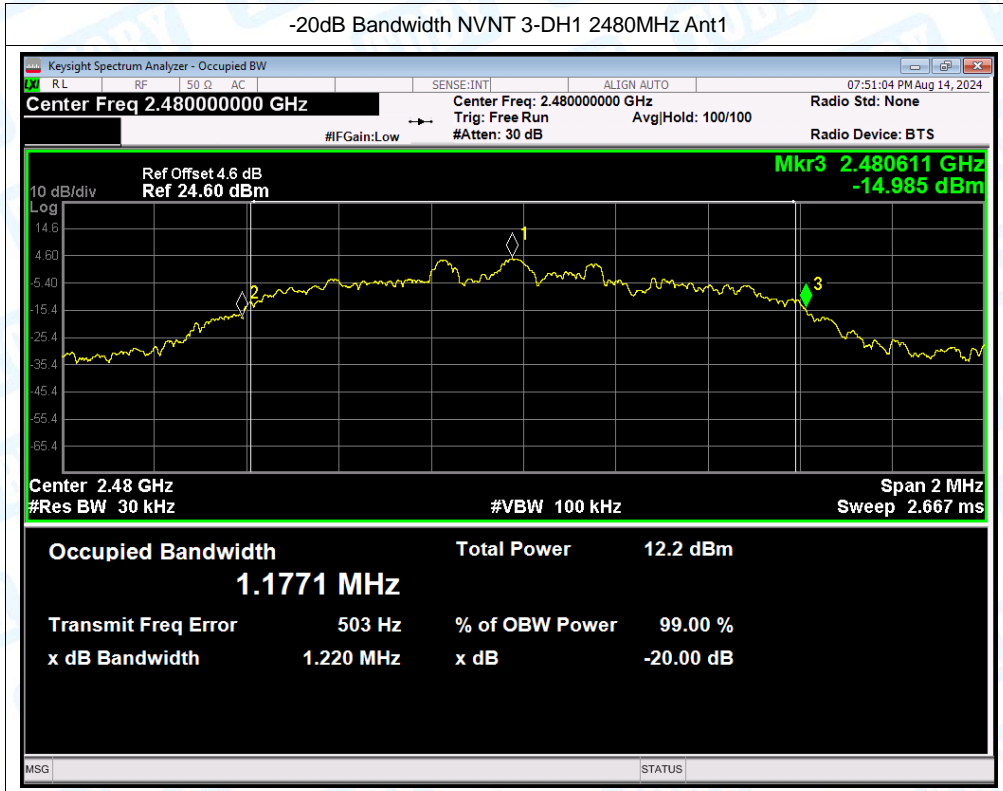


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



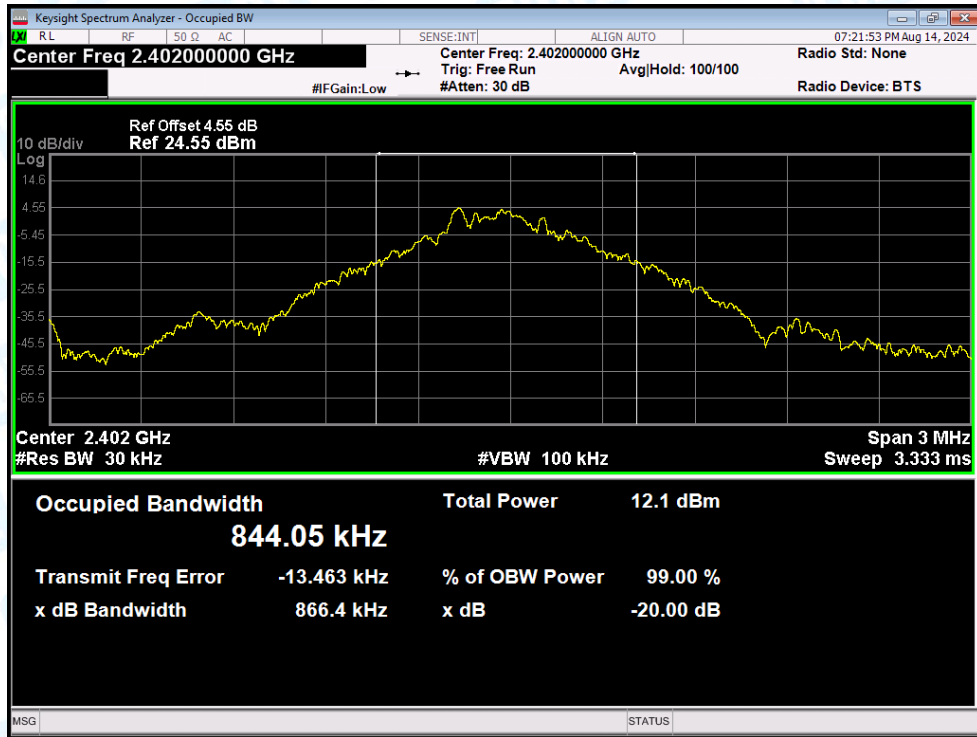


4. Occupied Channel Bandwidth

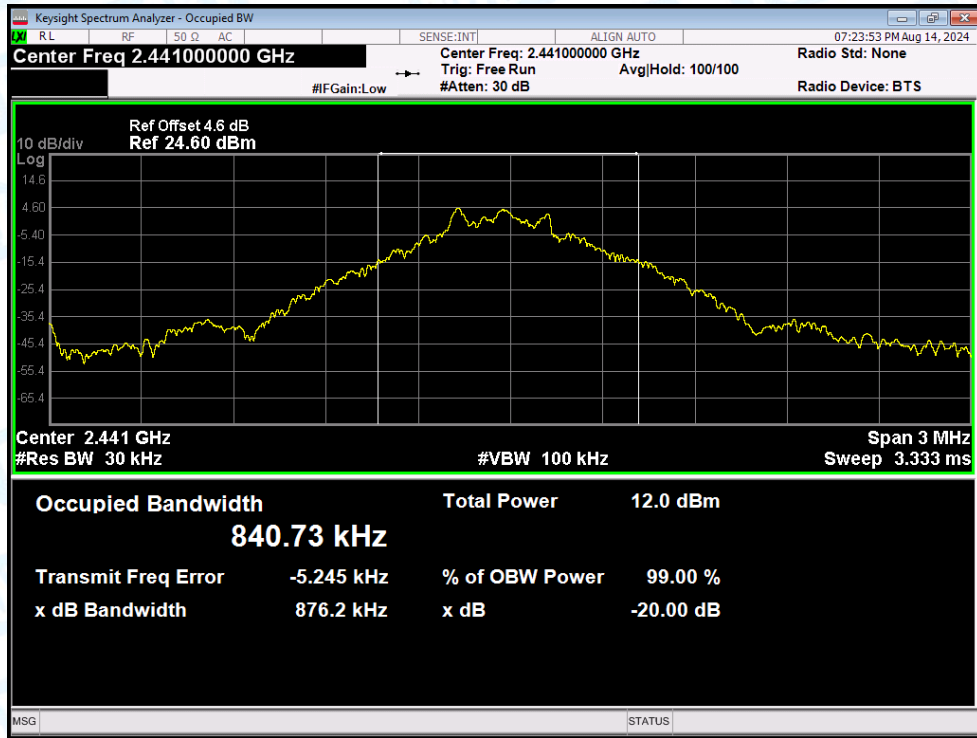
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.844
NVNT	1-DH1	2441	Ant1	0.841
NVNT	1-DH1	2480	Ant1	0.835
NVNT	2-DH1	2402	Ant1	1.177
NVNT	2-DH1	2441	Ant1	1.190
NVNT	2-DH1	2480	Ant1	1.227
NVNT	3-DH1	2402	Ant1	1.171
NVNT	3-DH1	2441	Ant1	1.175
NVNT	3-DH1	2480	Ant1	1.196

Test Graphs

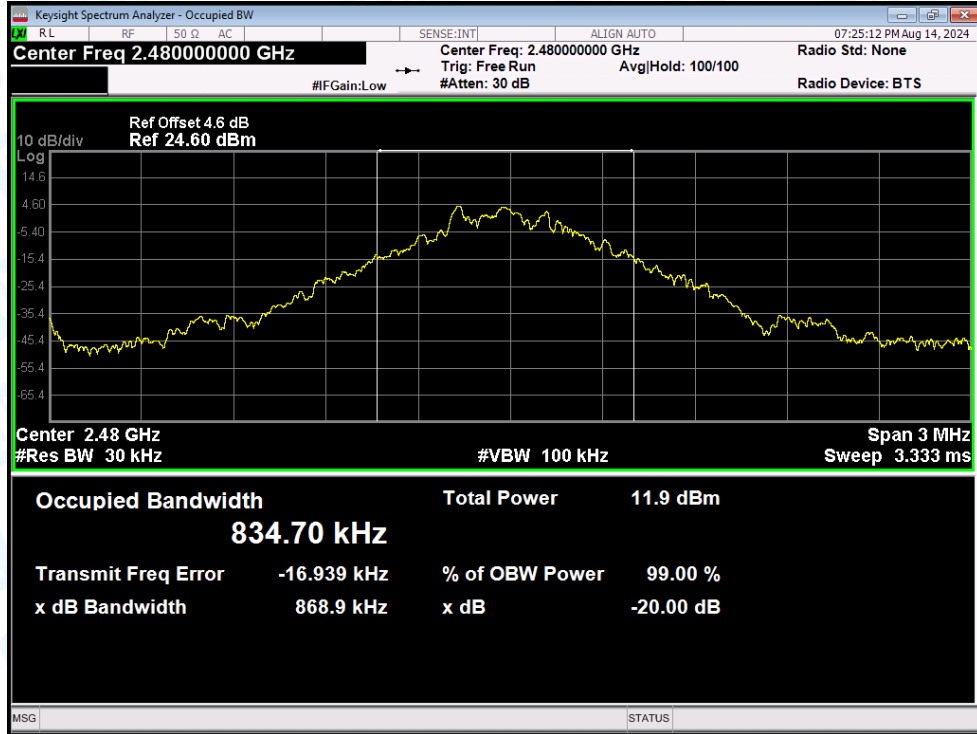
OBW NVNT 1-DH1 2402MHz Ant1



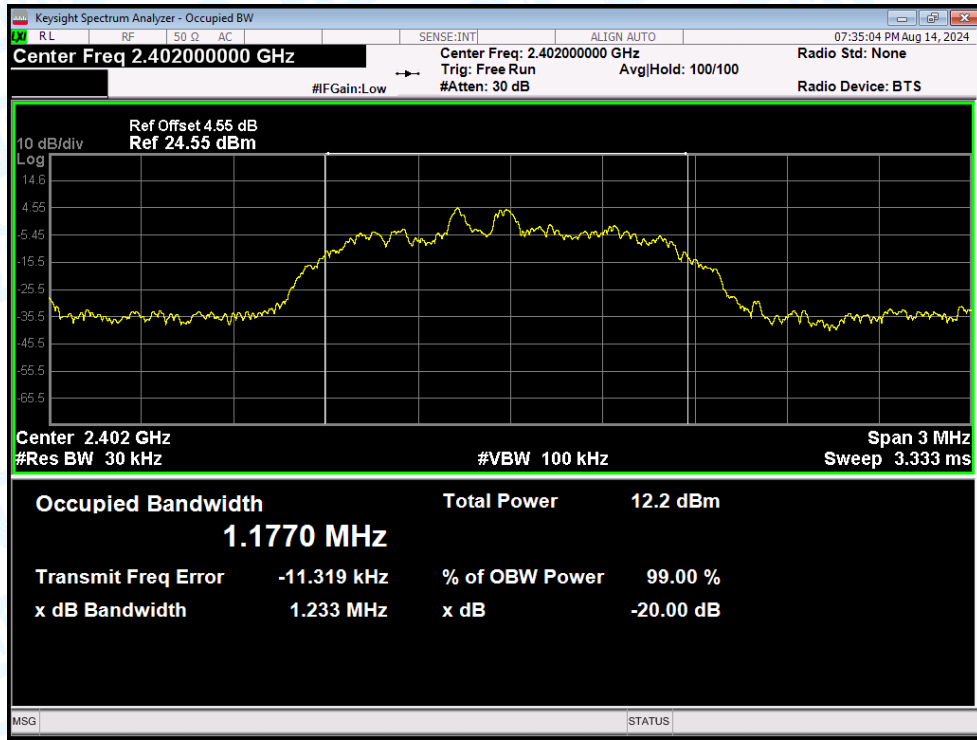
OBW NVNT 1-DH1 2441MHz Ant1

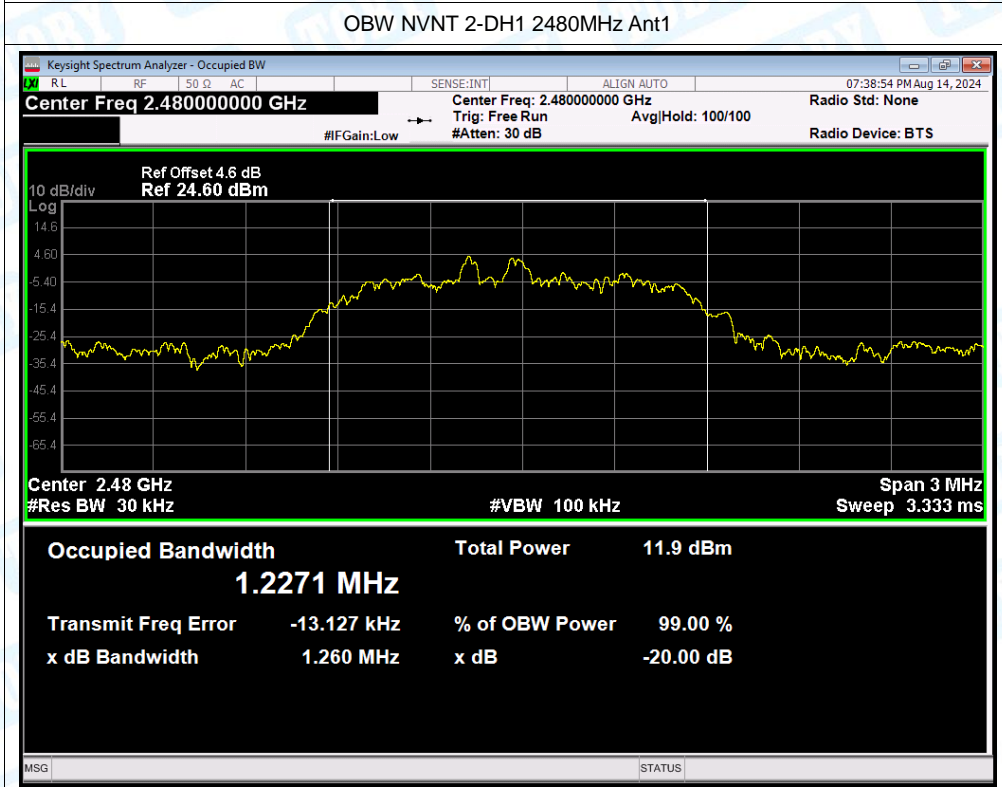
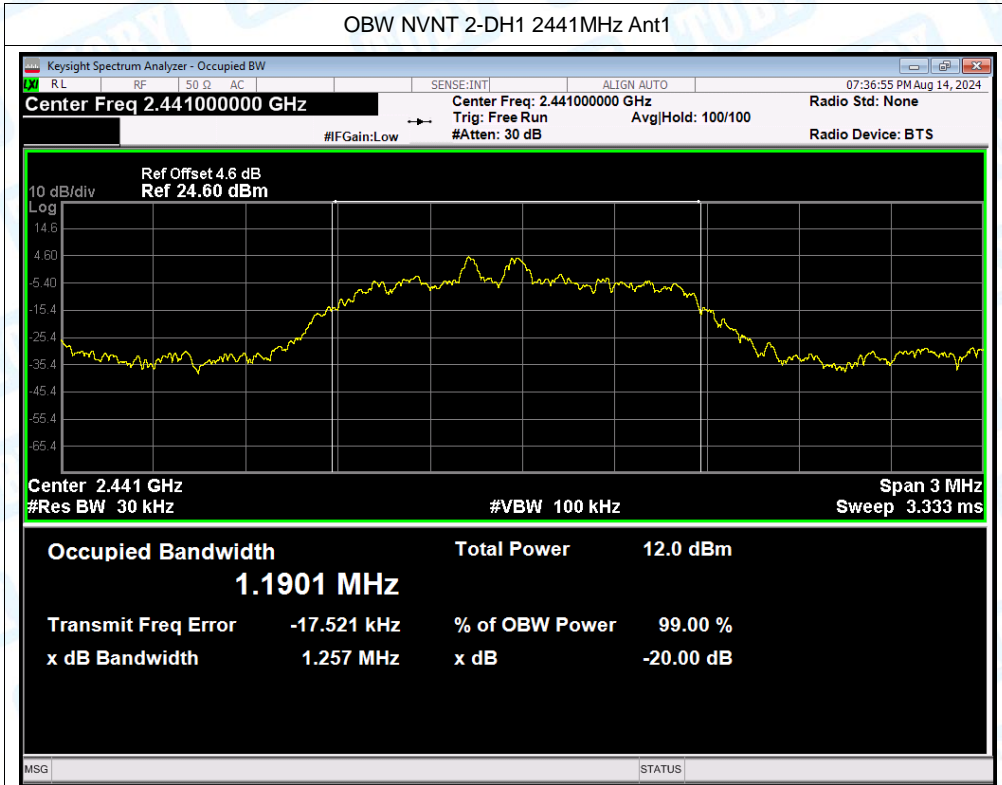


OBW NVNT 1-DH1 2480MHz Ant1

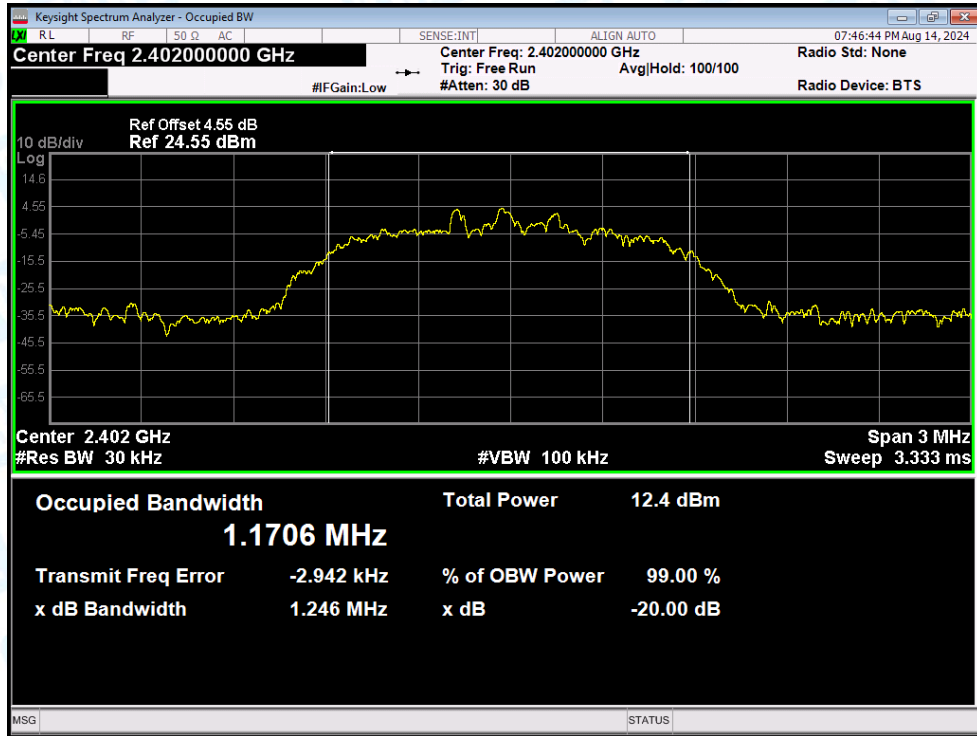


OBW NVNT 2-DH1 2402MHz Ant1

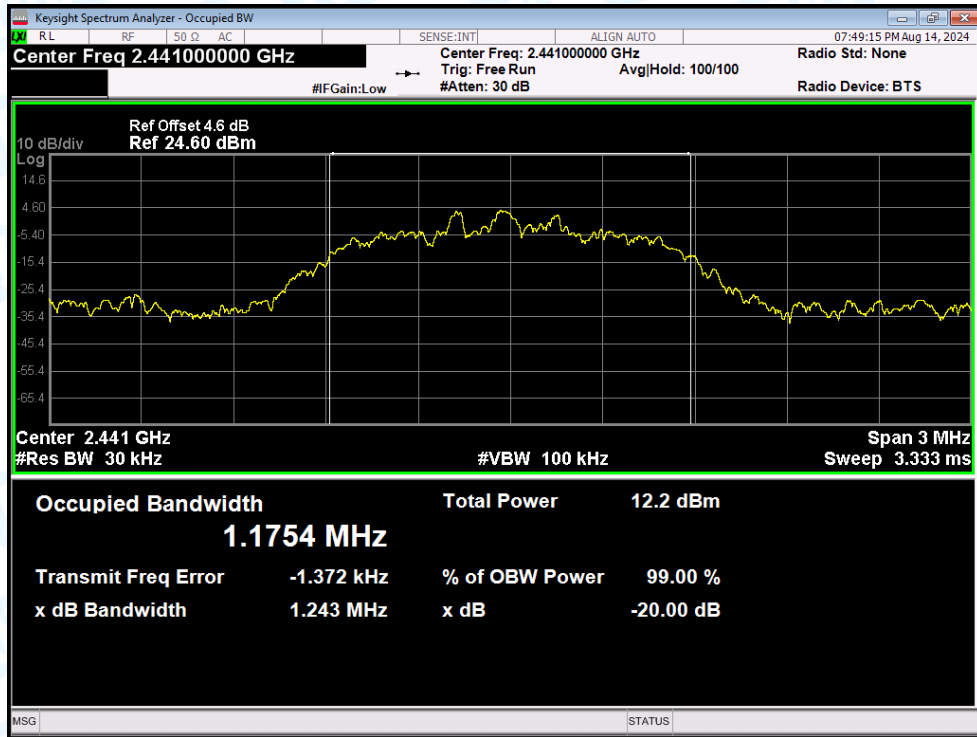


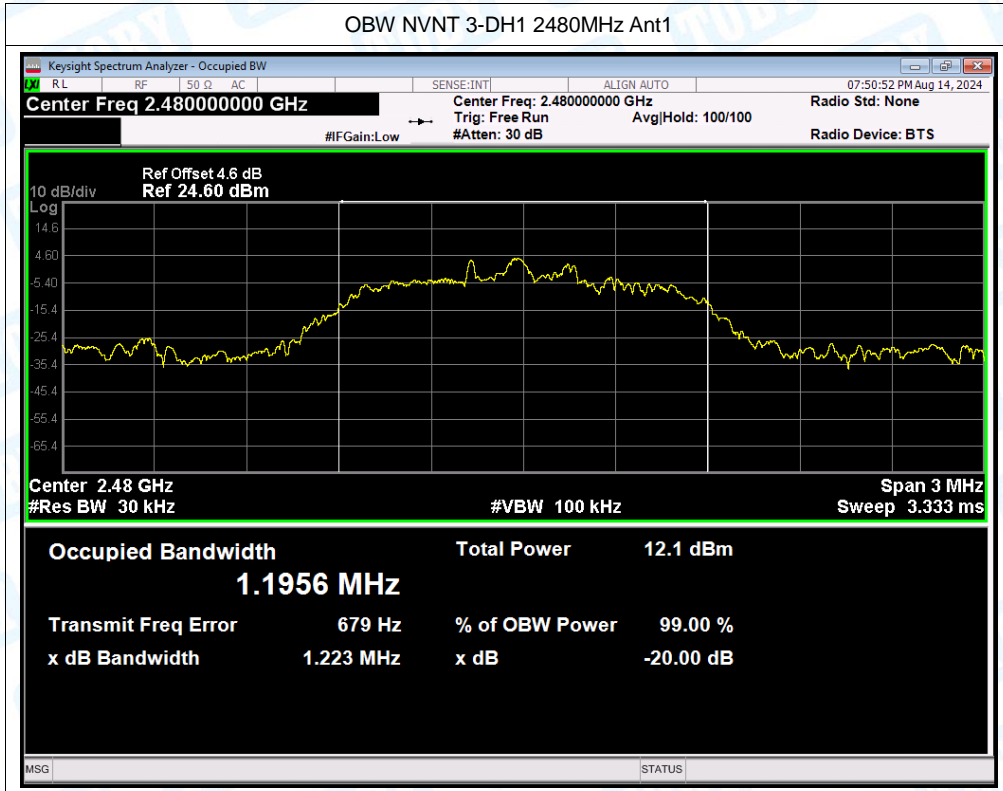


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





5. Band Edge

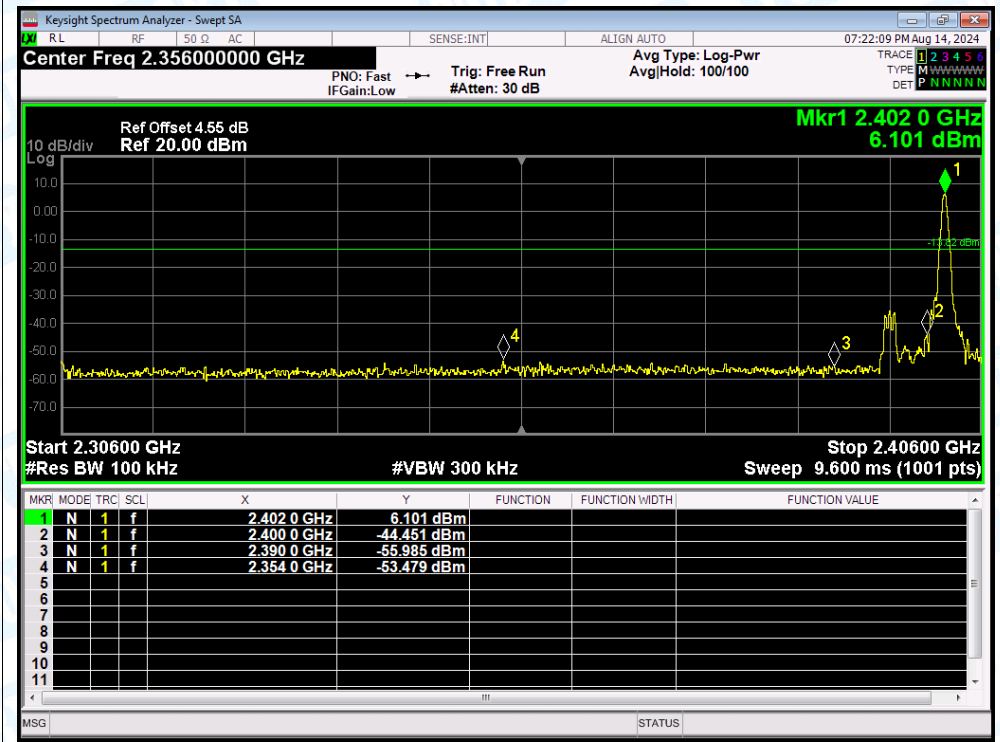
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-59.66	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-50.46	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-59.32	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-52.04	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-59.10	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-51.99	-20	Pass

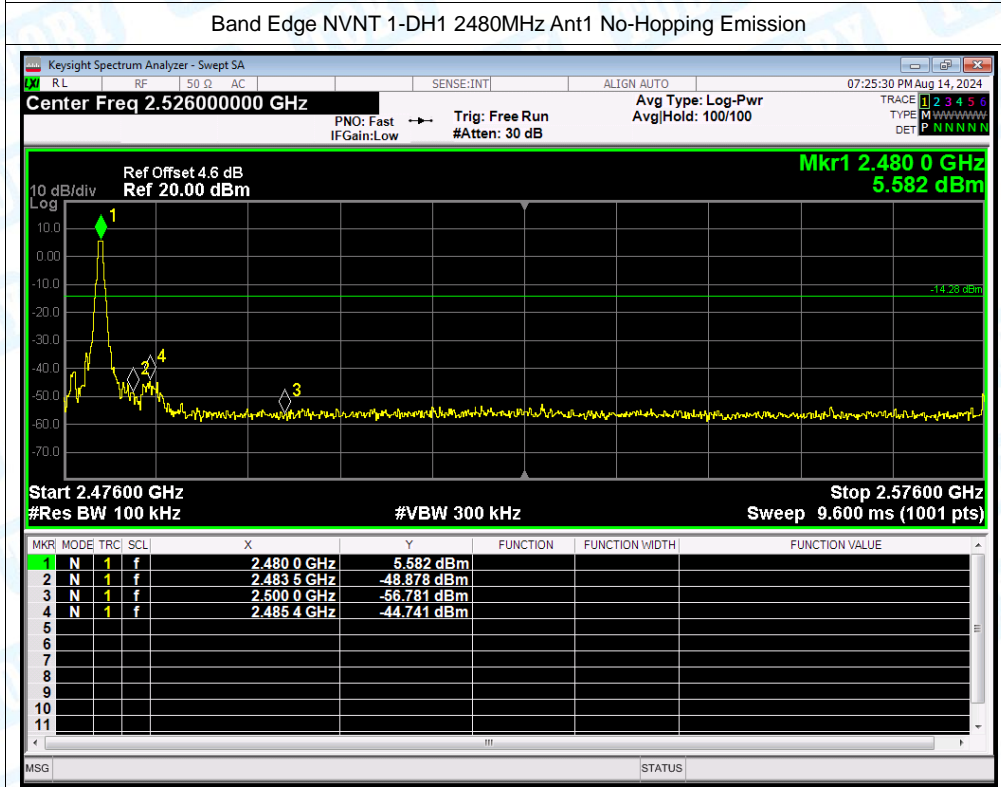
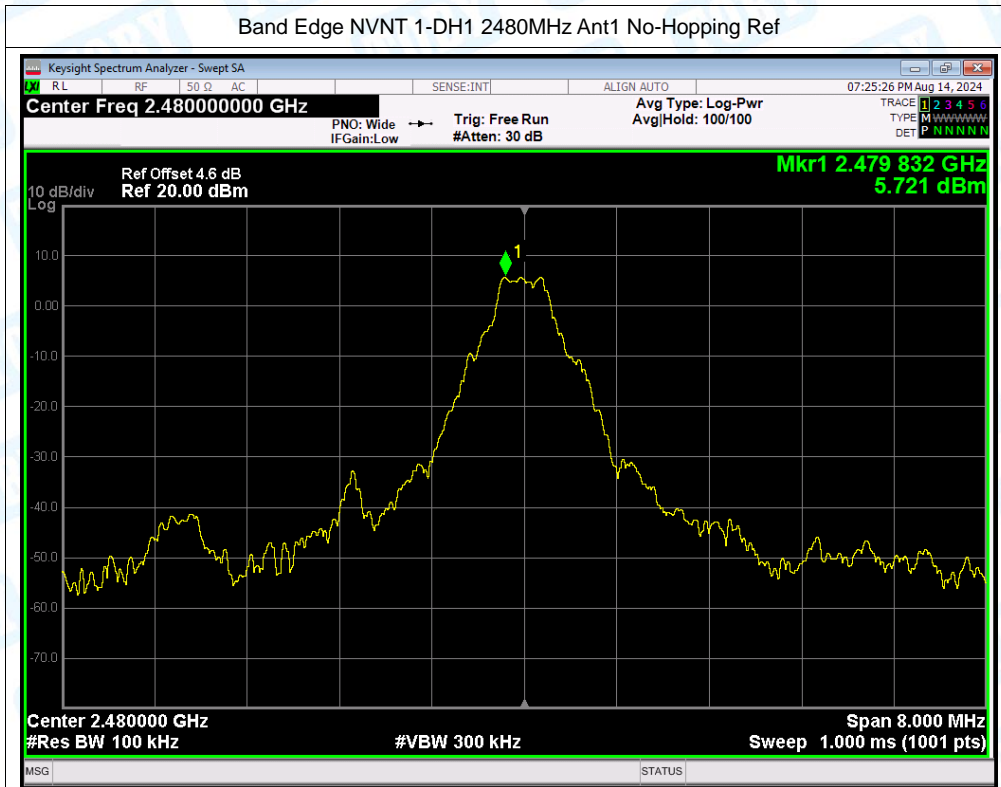
Test Graphs

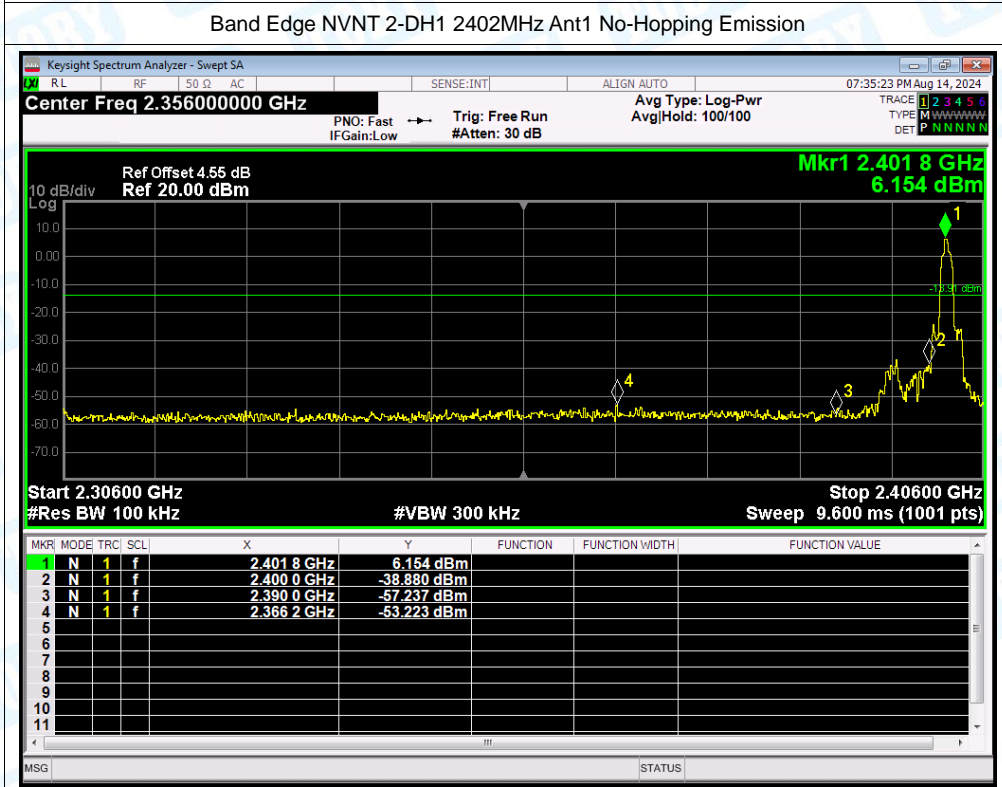
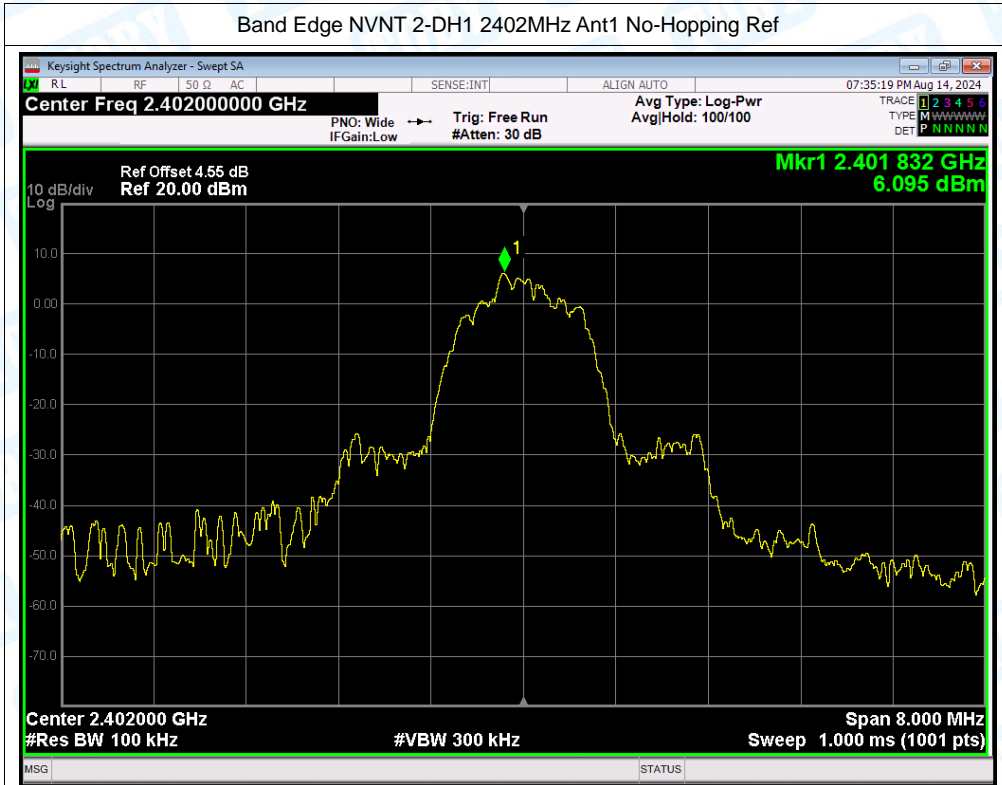
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

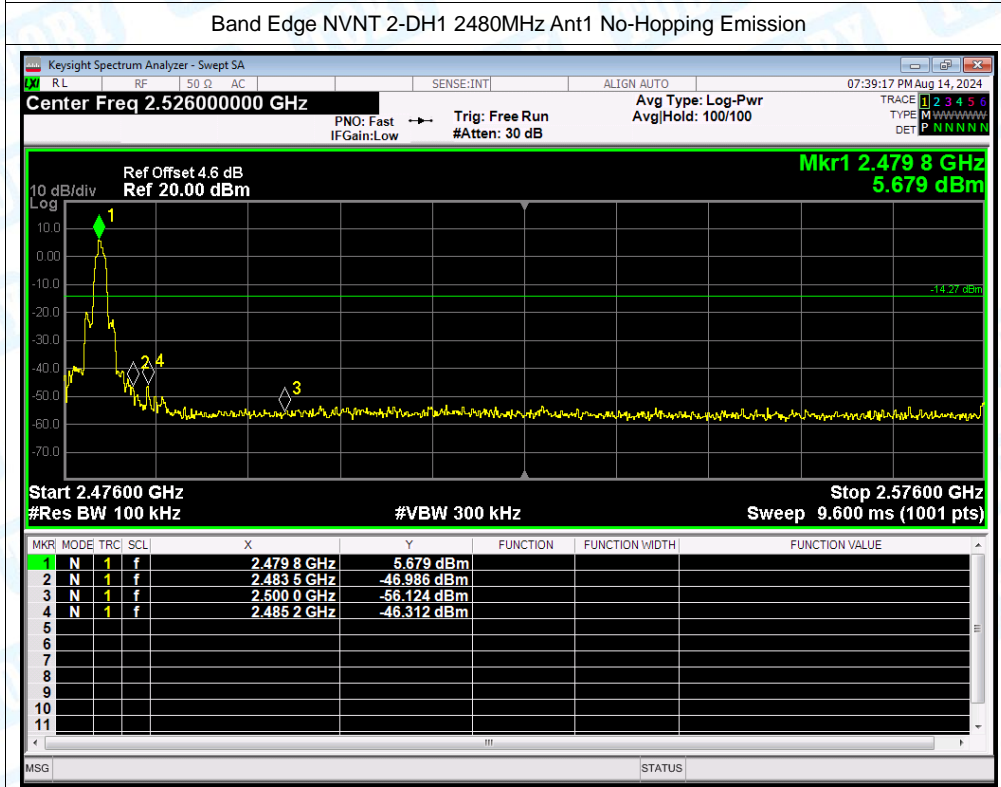
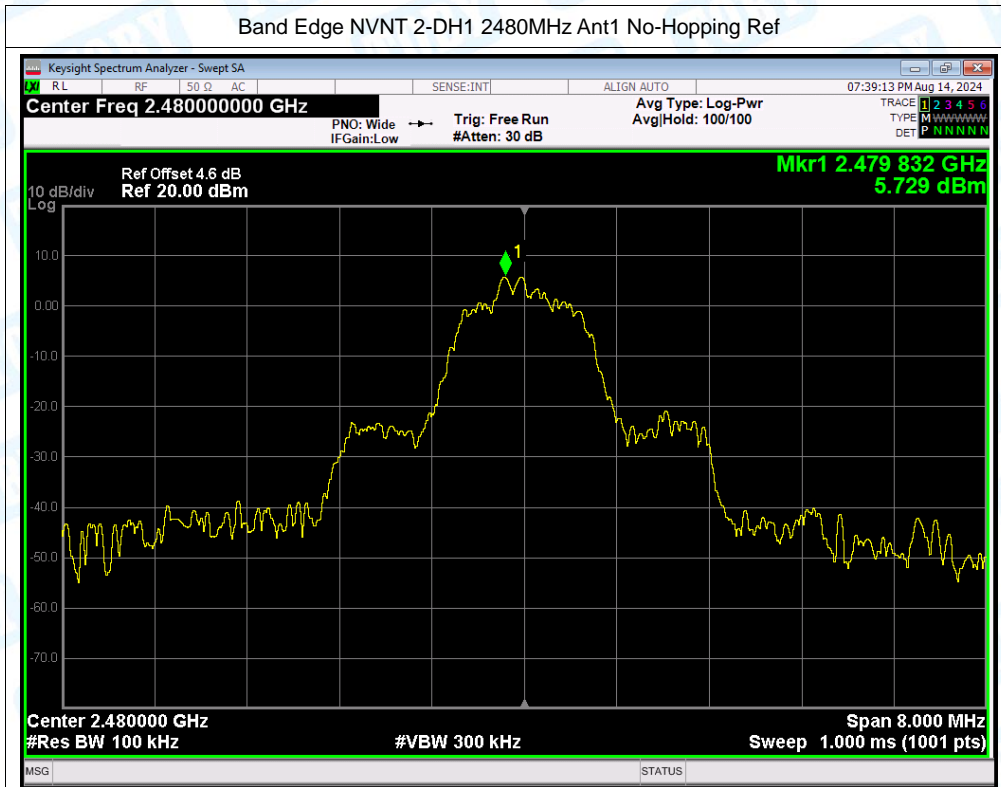


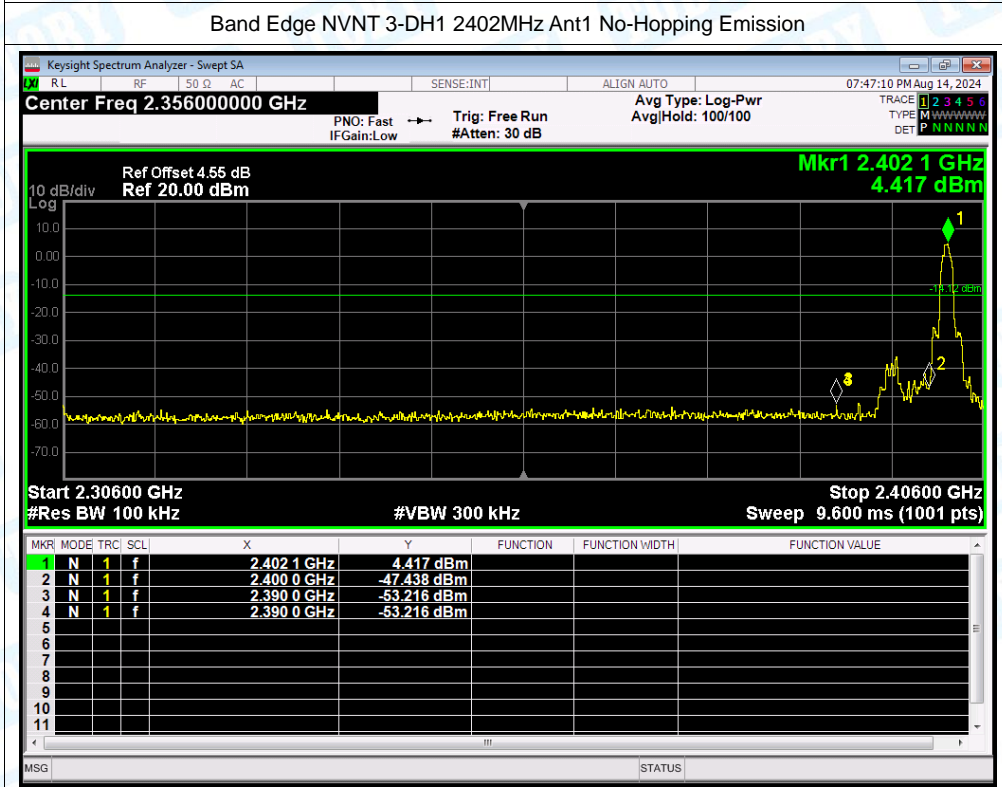
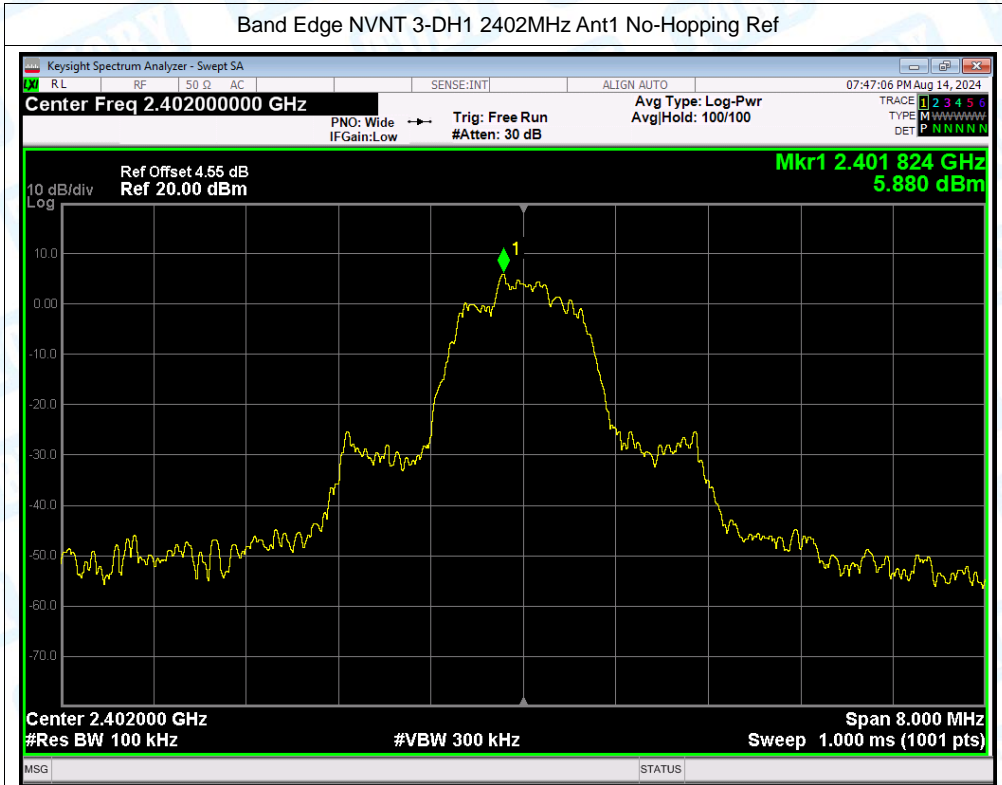
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

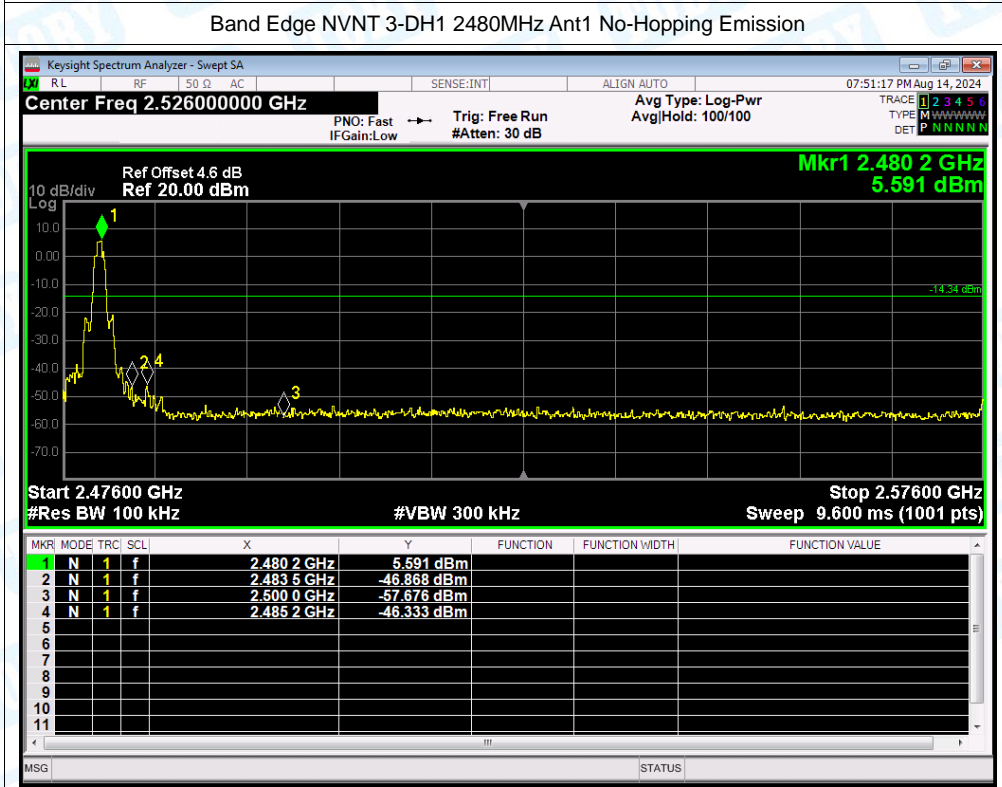
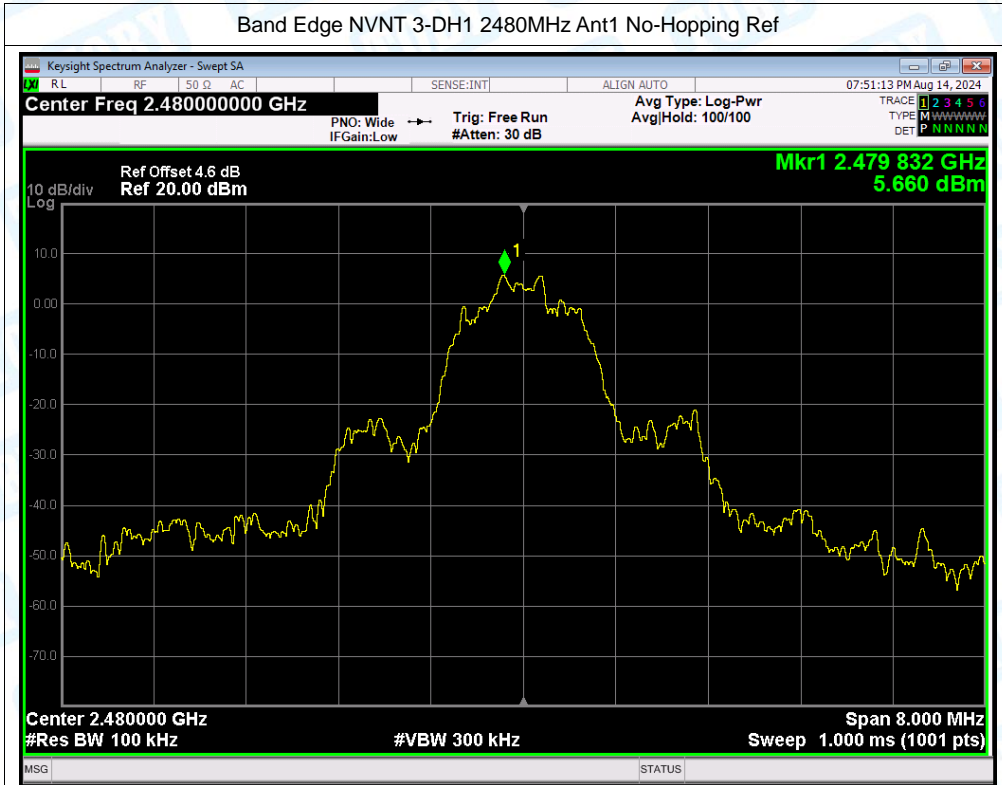










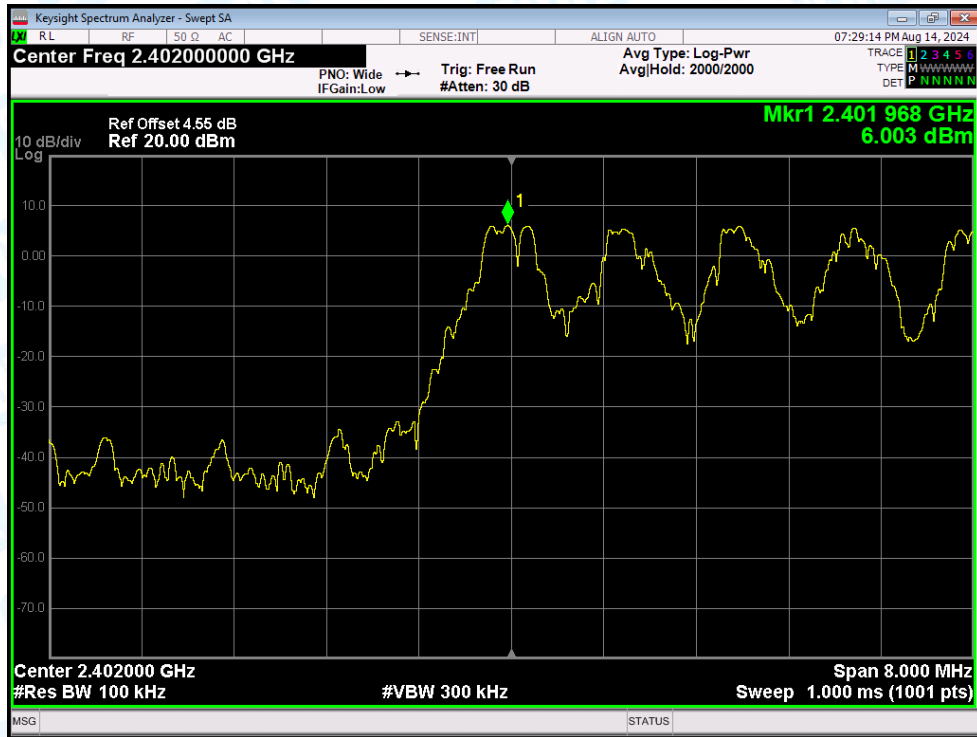


6. Band Edge(Hopping)

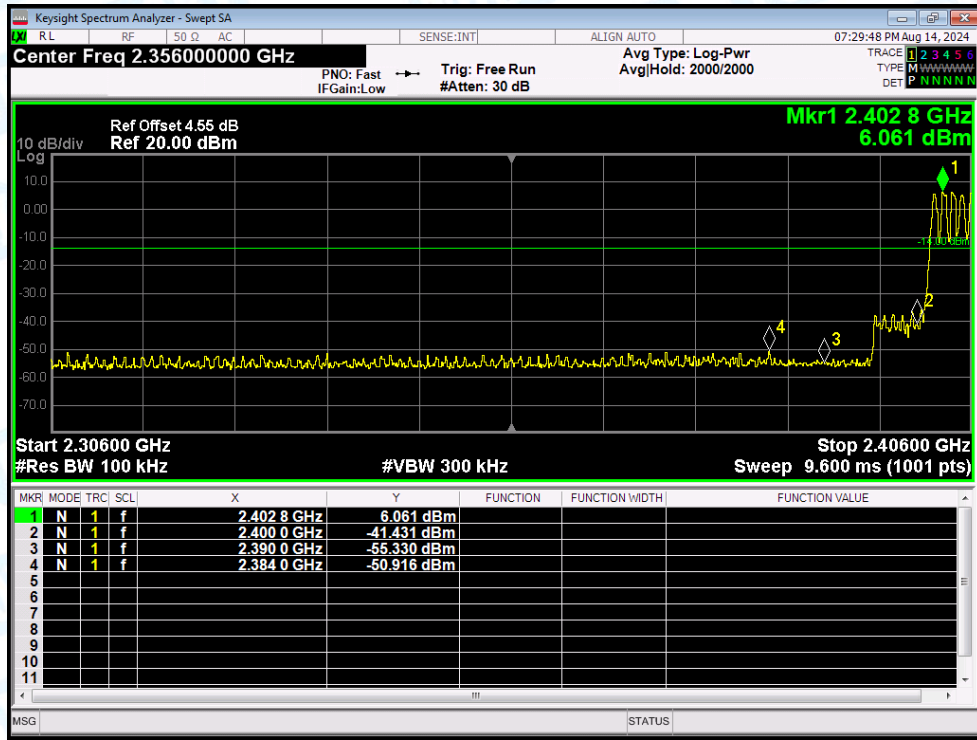
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-56.92	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-46.53	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.99	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-44.73	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-56.83	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-44.73	-20	Pass

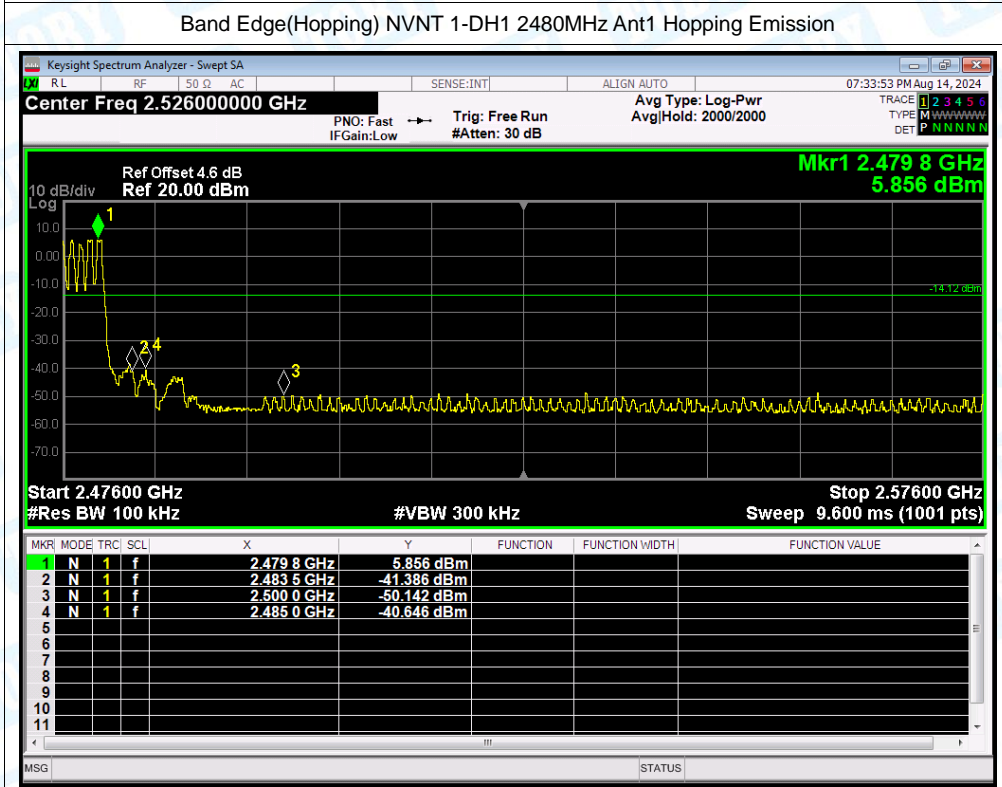
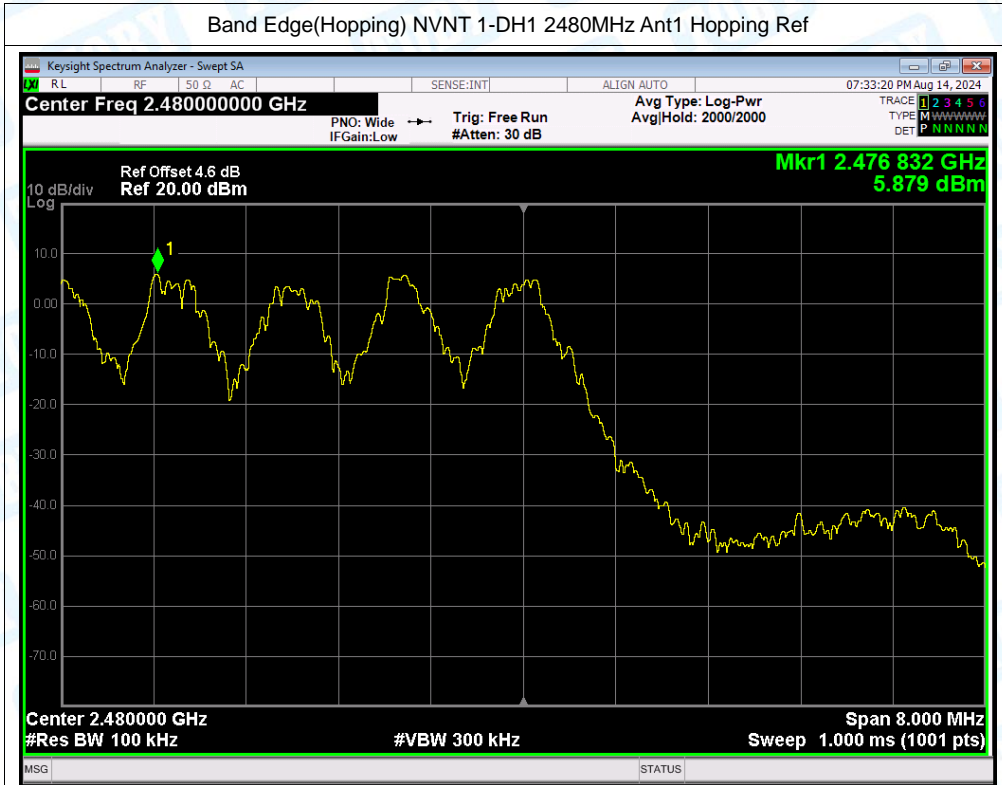
Test Graphs

Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref

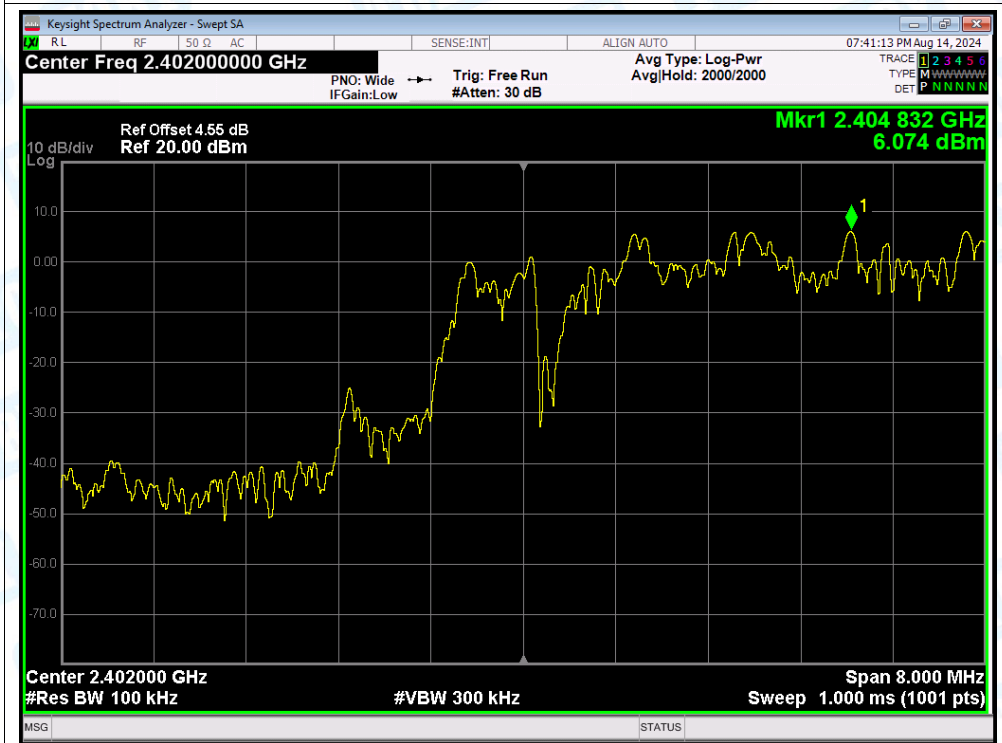


Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

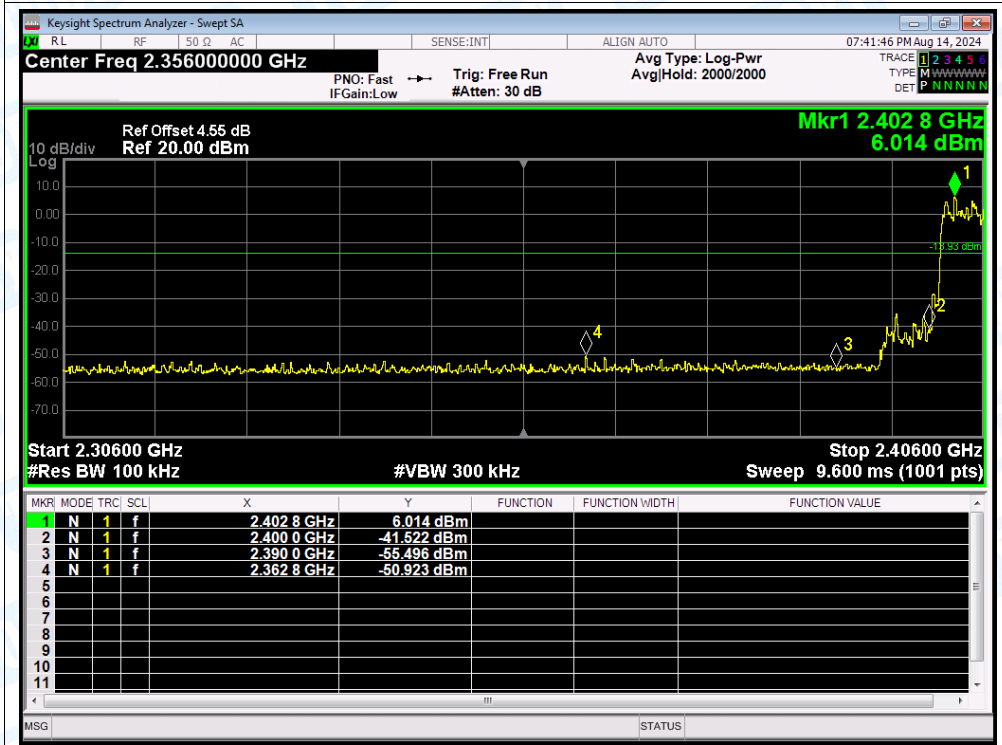


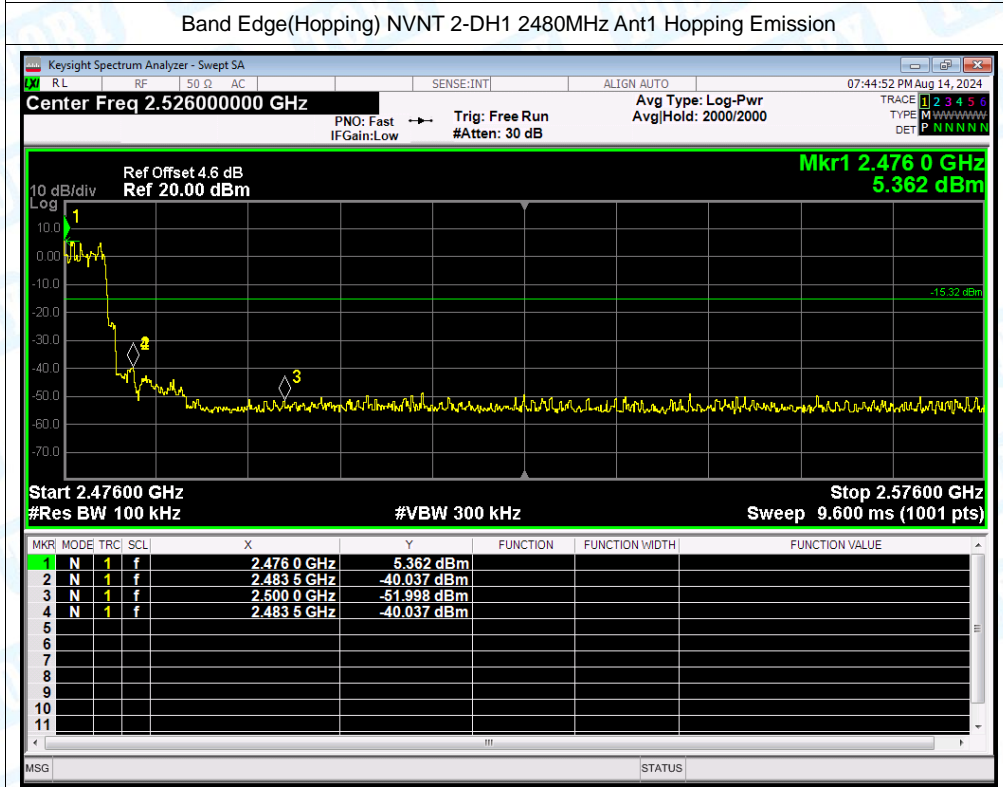


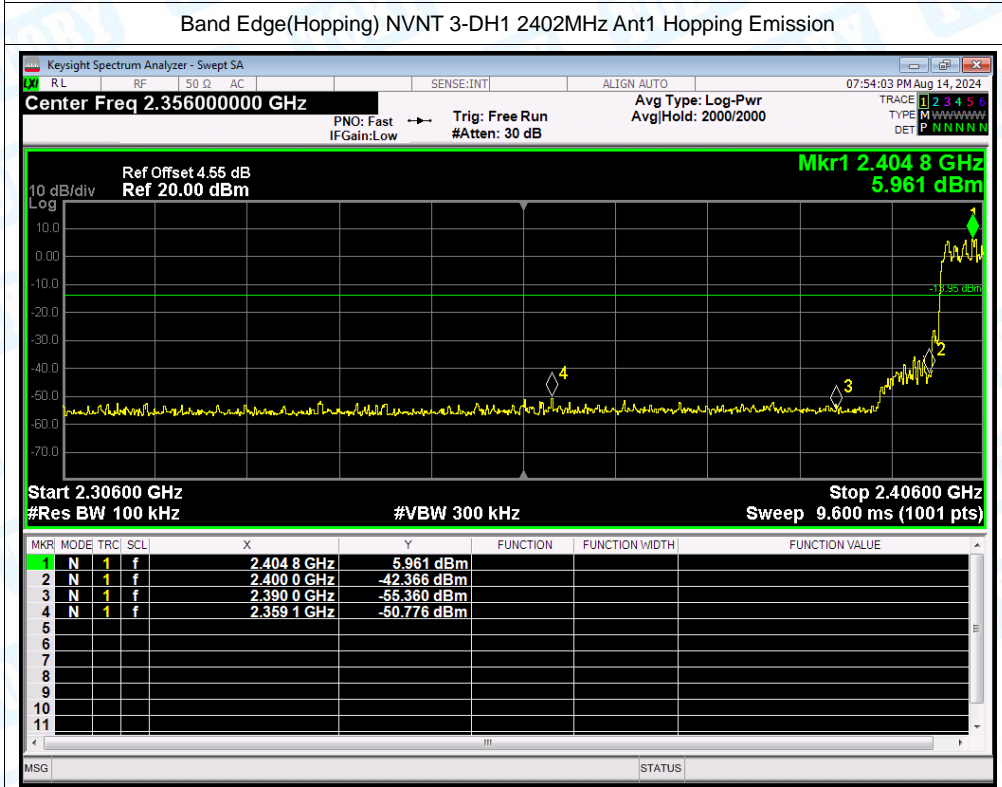
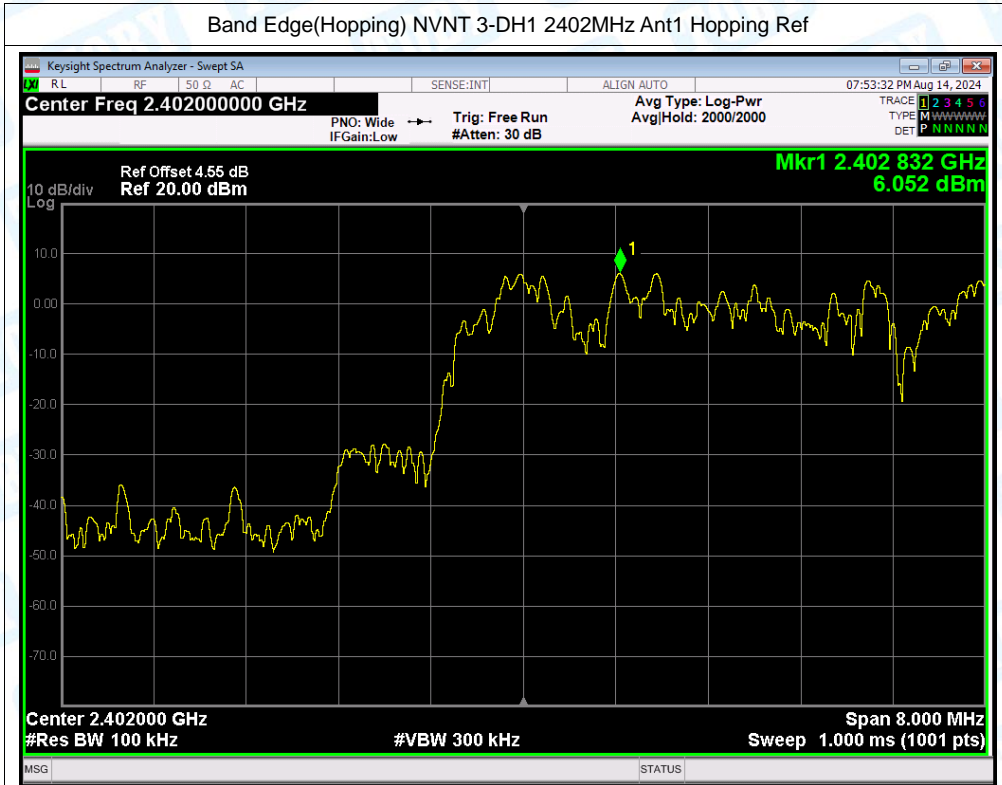
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref

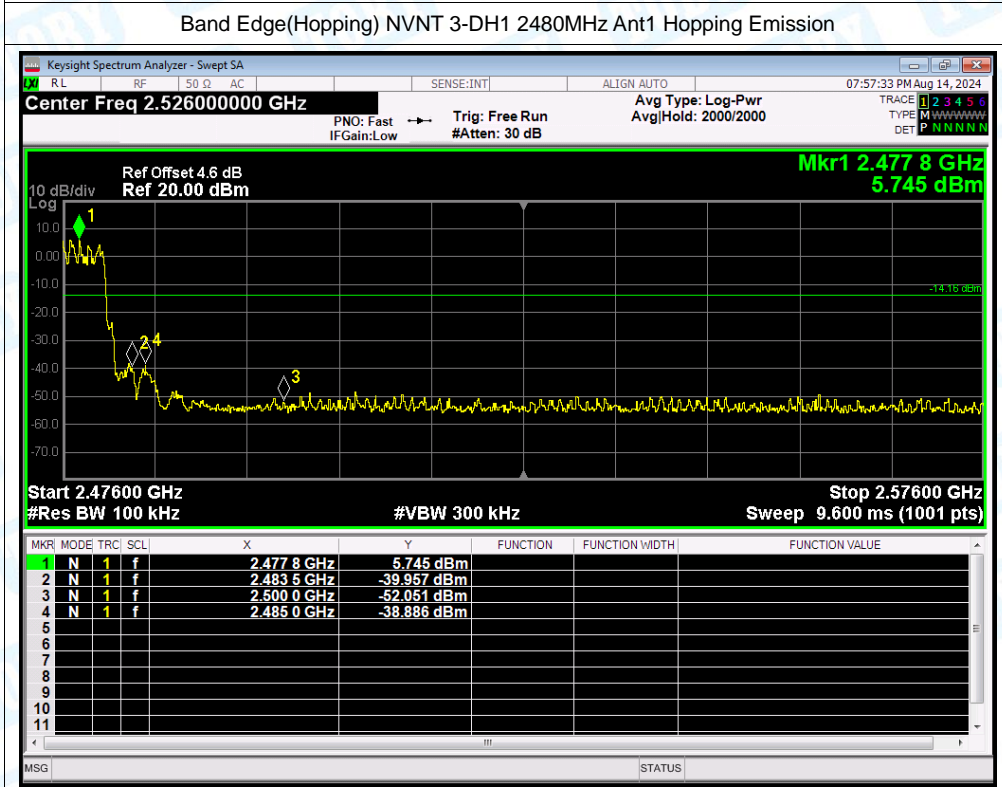


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission







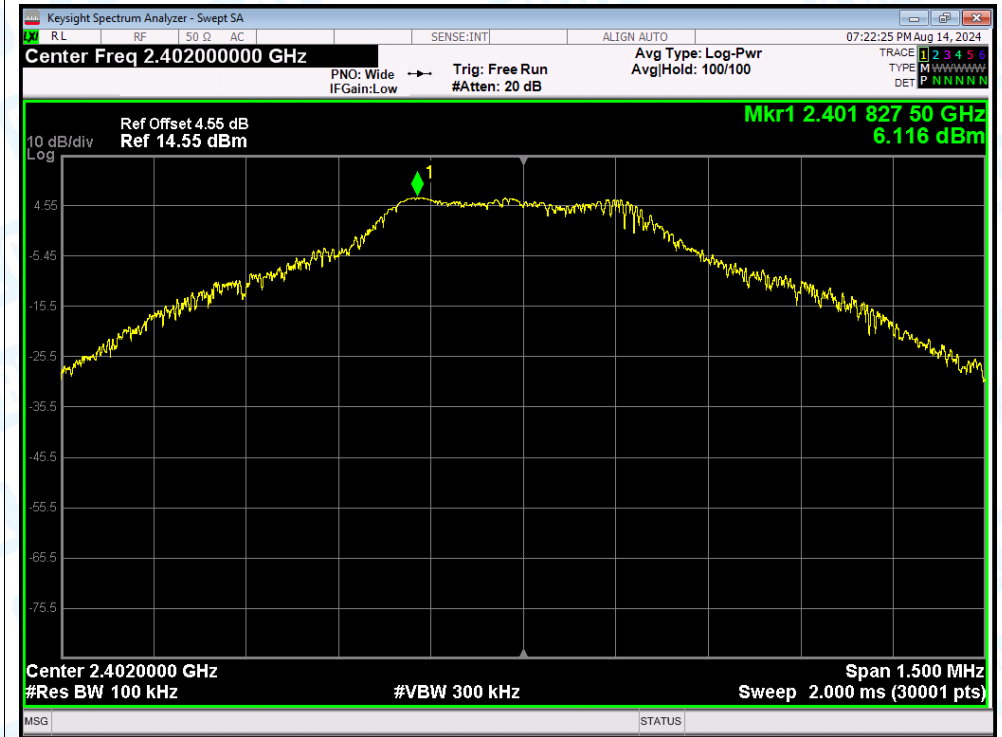


7. Conducted RF Spurious Emission

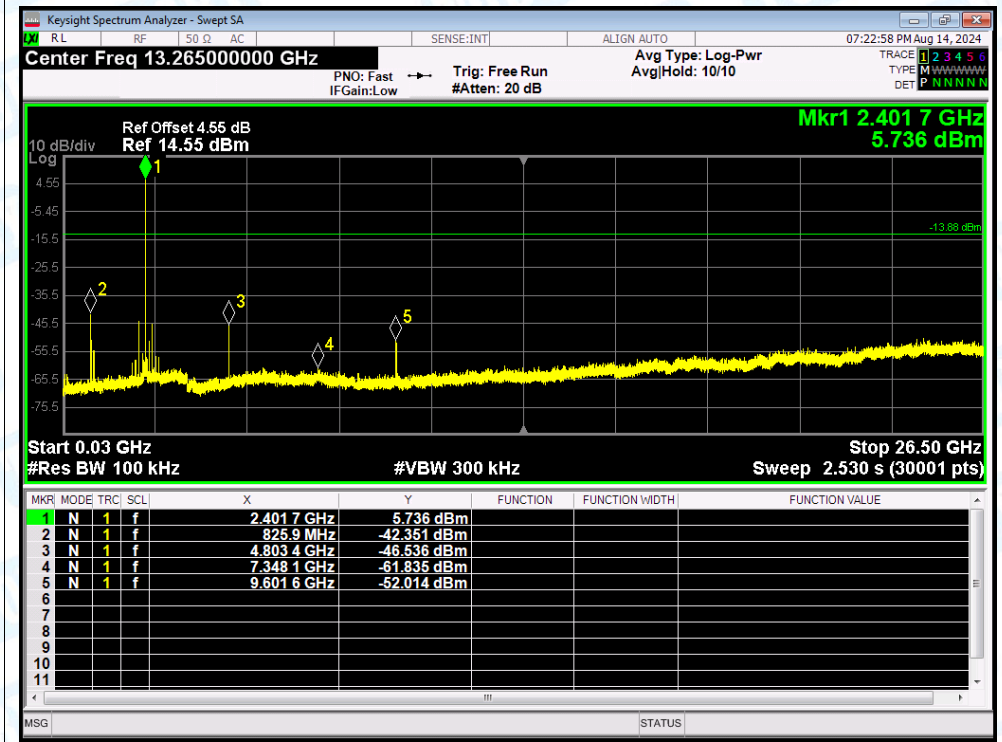
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-48.47	-20	Pass
NVNT	1-DH1	2441	Ant1	-50.93	-20	Pass
NVNT	1-DH1	2480	Ant1	-49.20	-20	Pass
NVNT	2-DH1	2402	Ant1	-50.36	-20	Pass
NVNT	2-DH1	2441	Ant1	-50.94	-20	Pass
NVNT	2-DH1	2480	Ant1	-45.78	-20	Pass
NVNT	3-DH1	2402	Ant1	-51.85	-20	Pass
NVNT	3-DH1	2441	Ant1	-51.16	-20	Pass
NVNT	3-DH1	2480	Ant1	-50.52	-20	Pass

Test Graphs

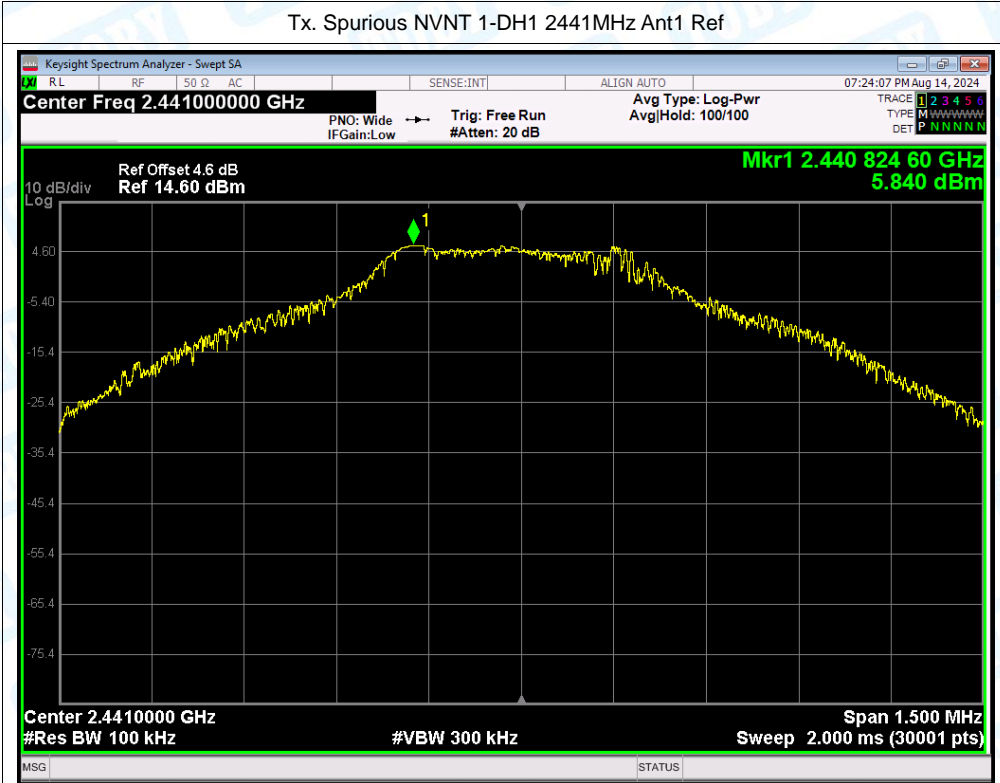
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



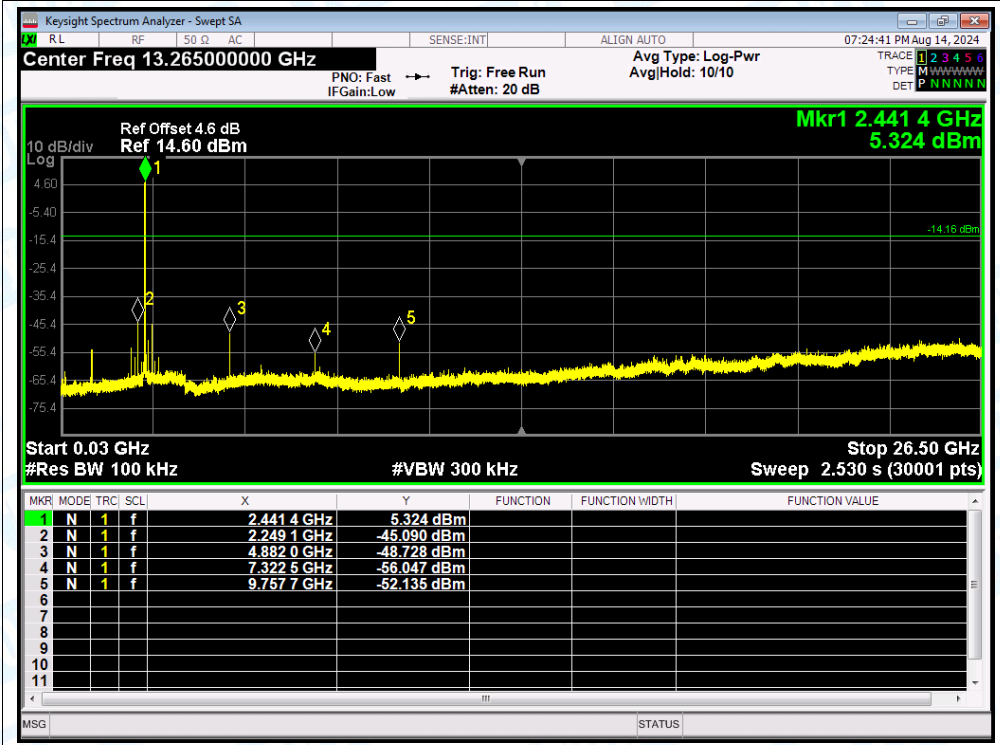
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



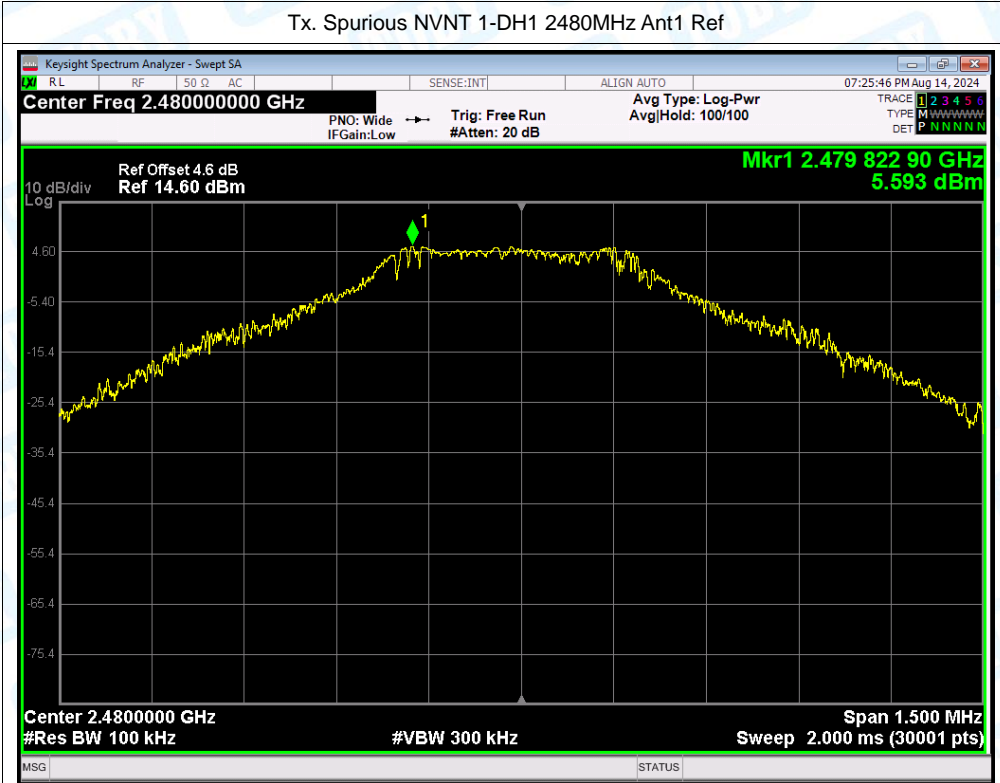
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



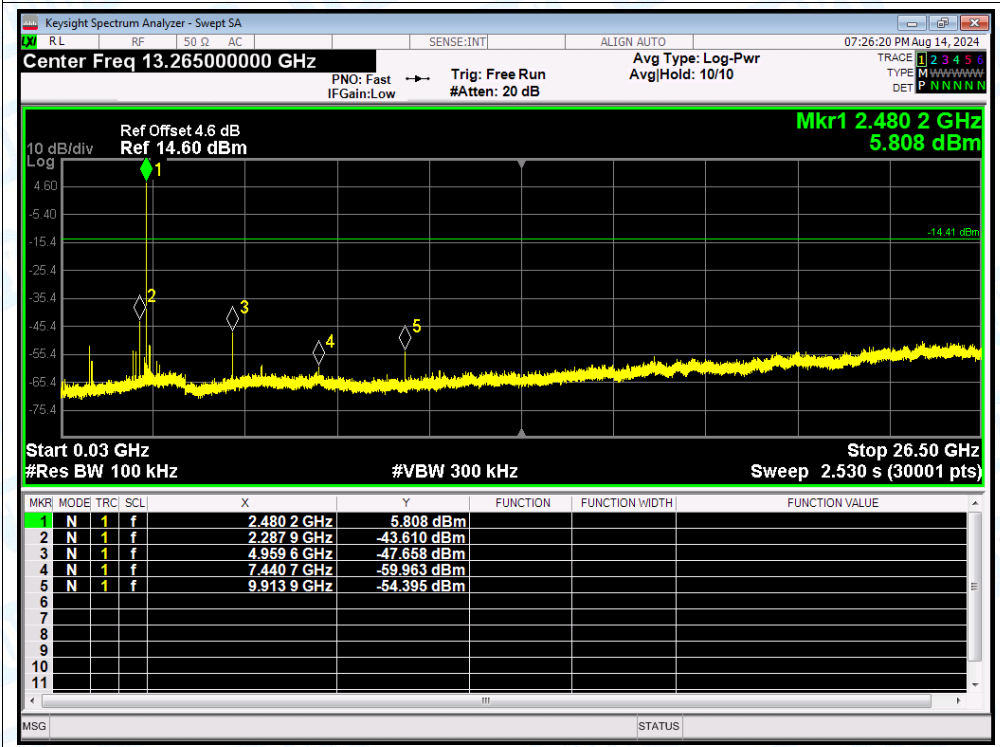
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



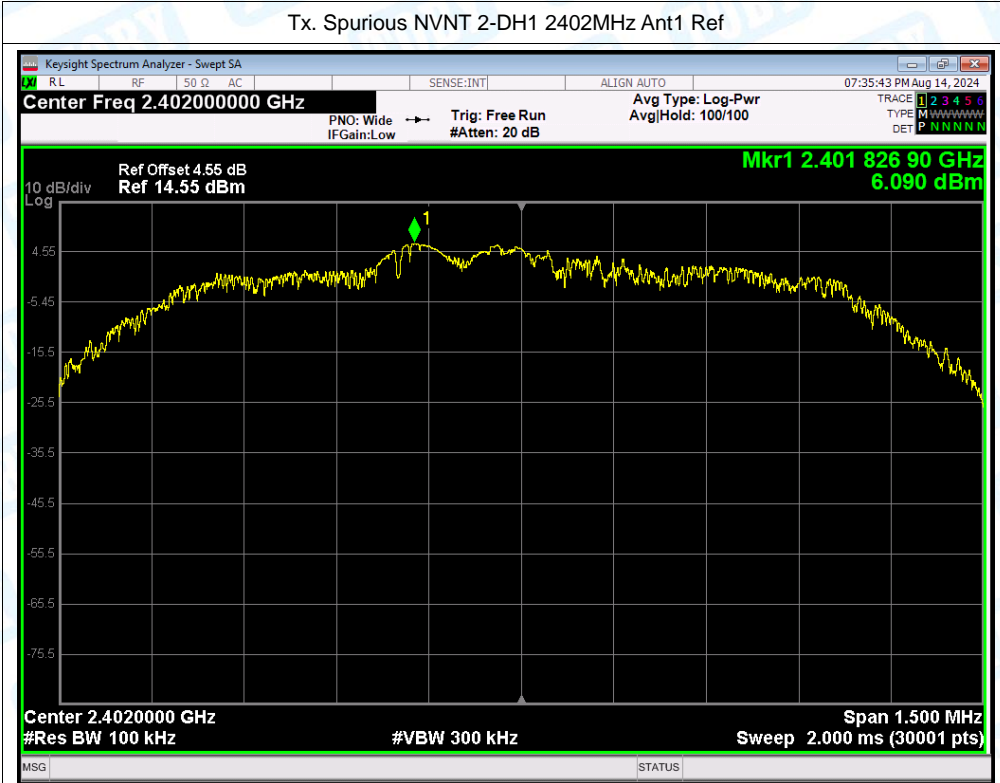
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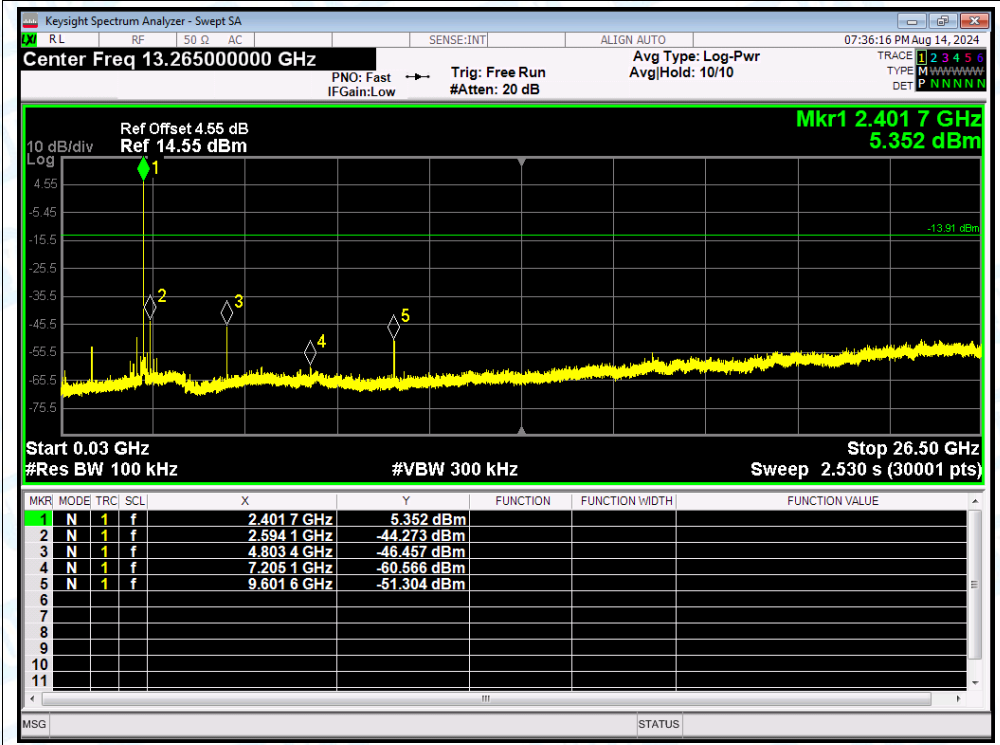
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



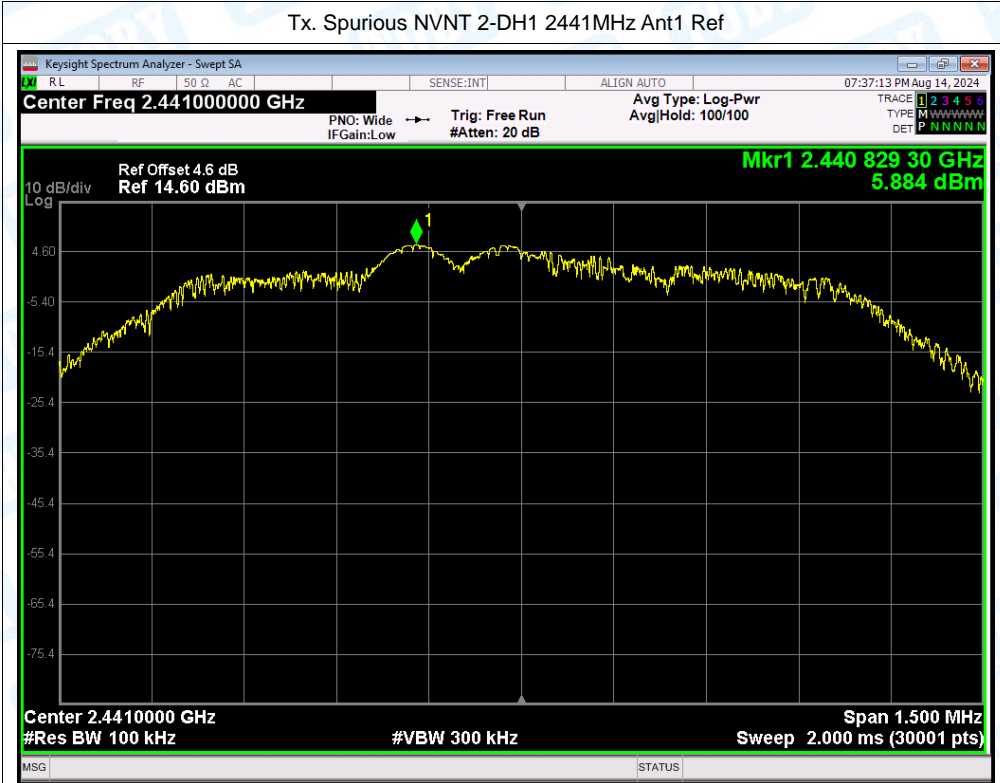
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



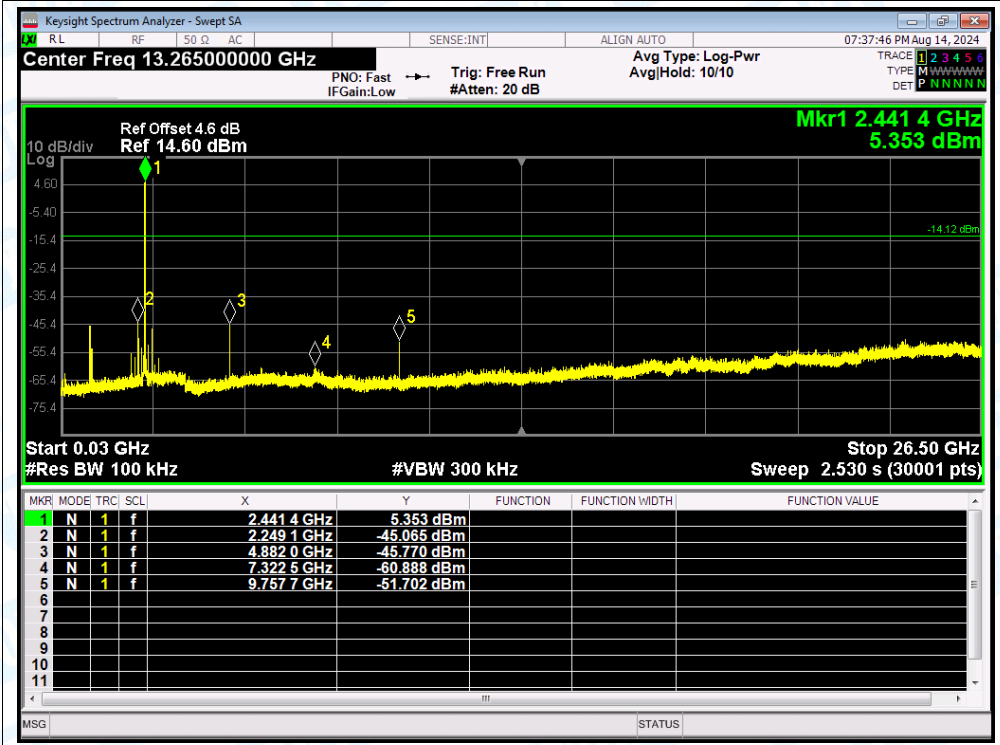
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



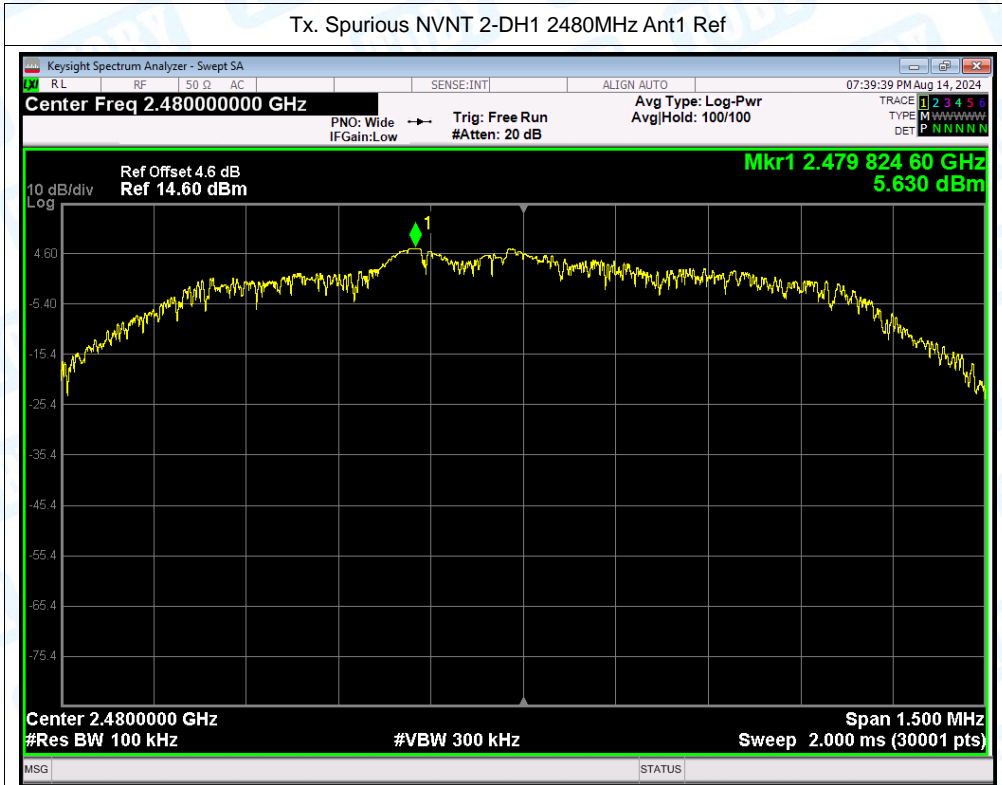
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



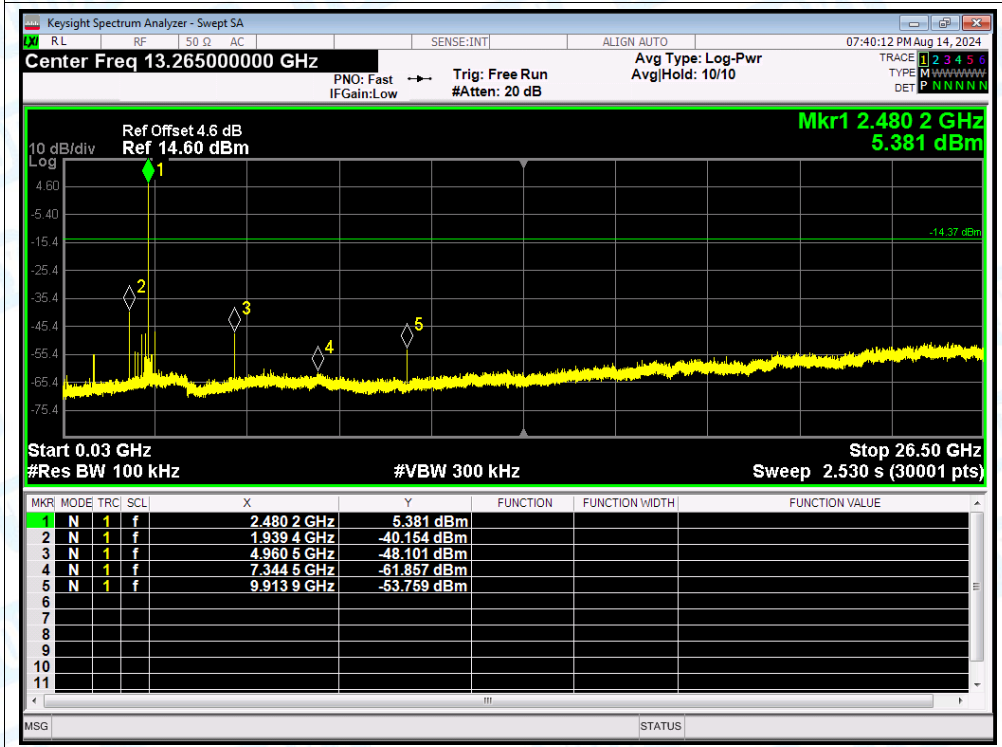
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



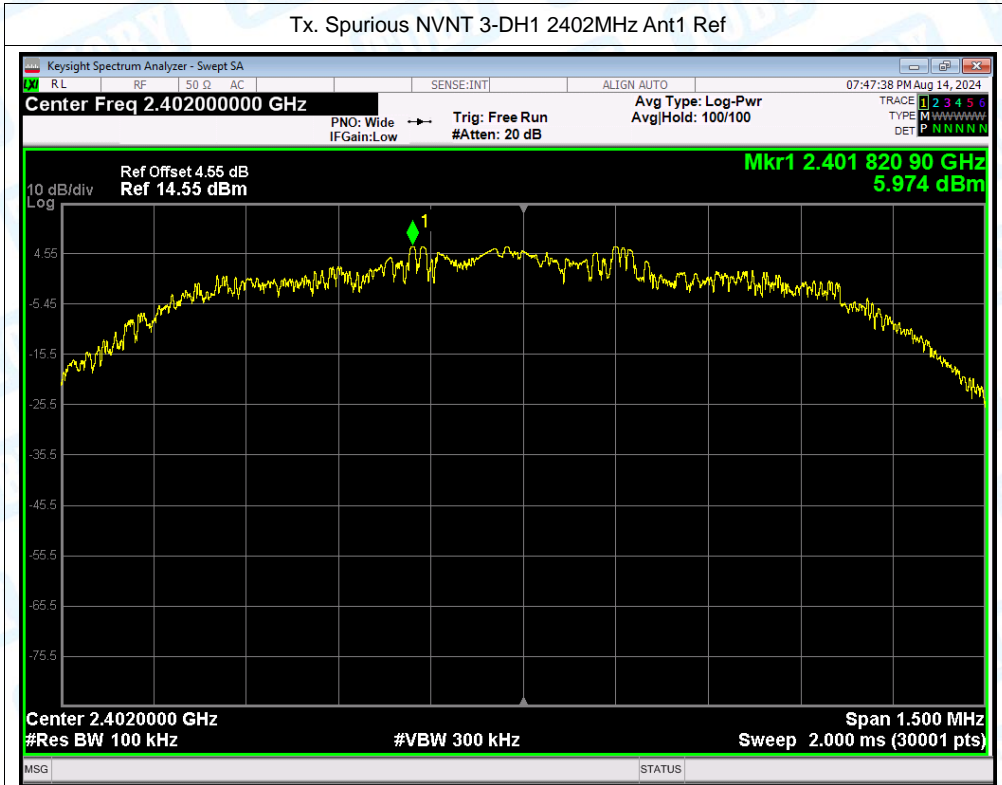
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



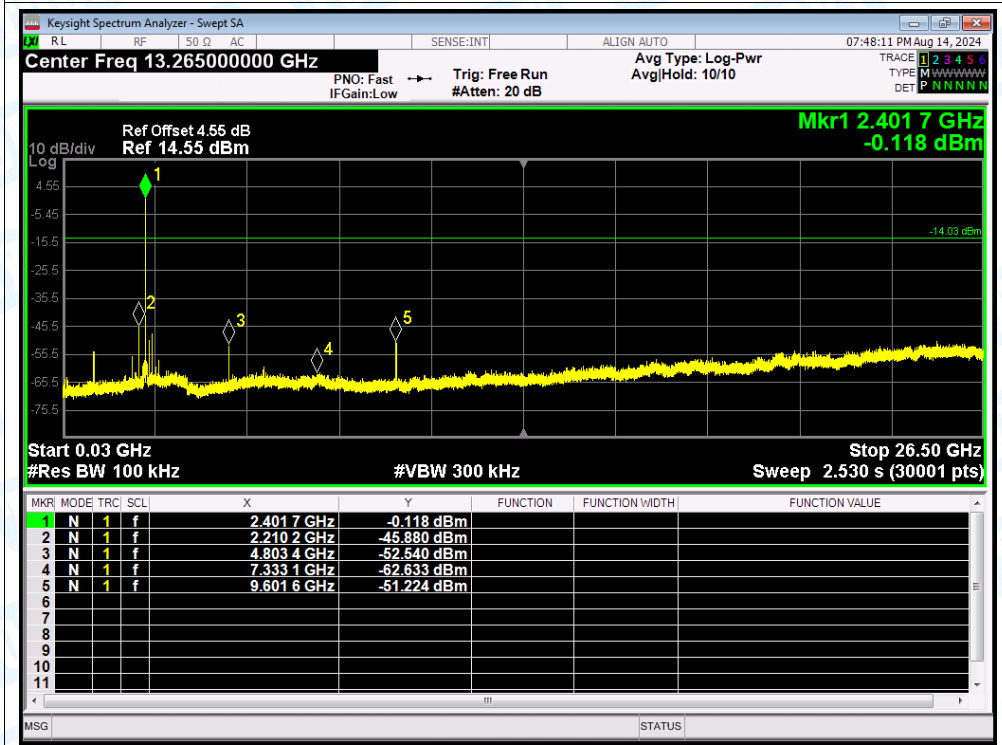
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



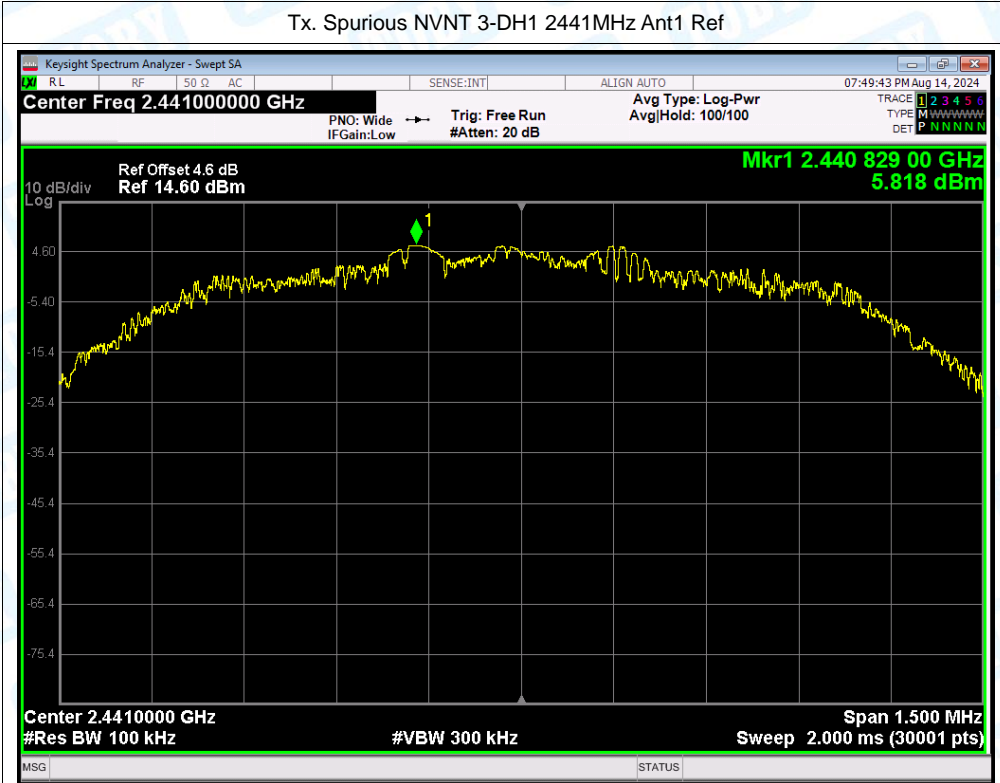
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



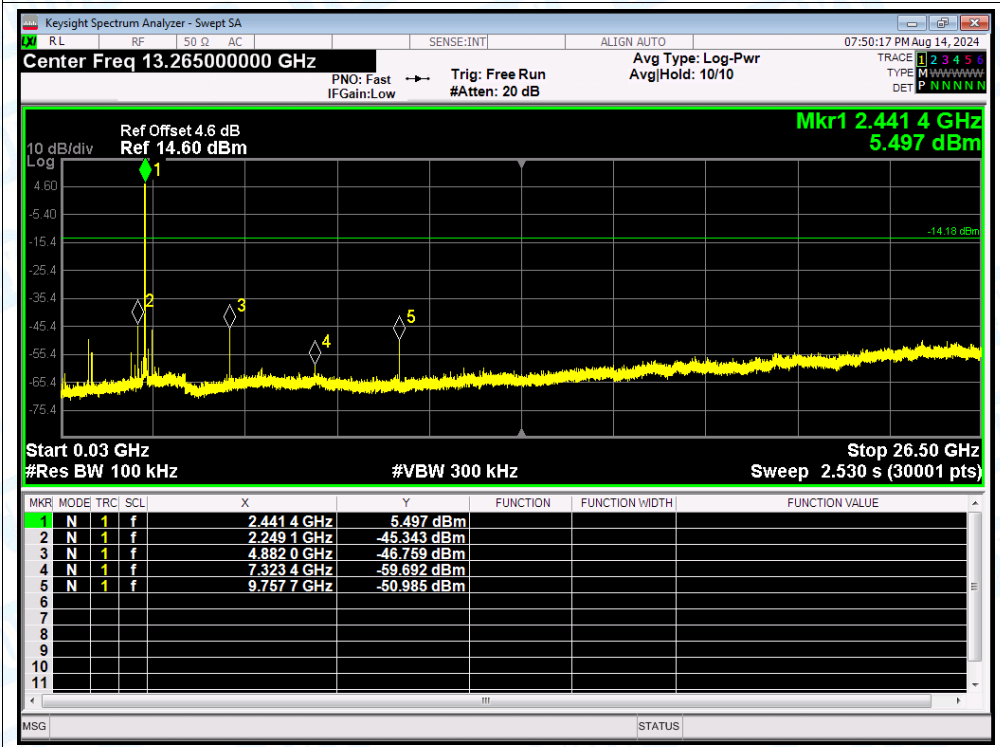
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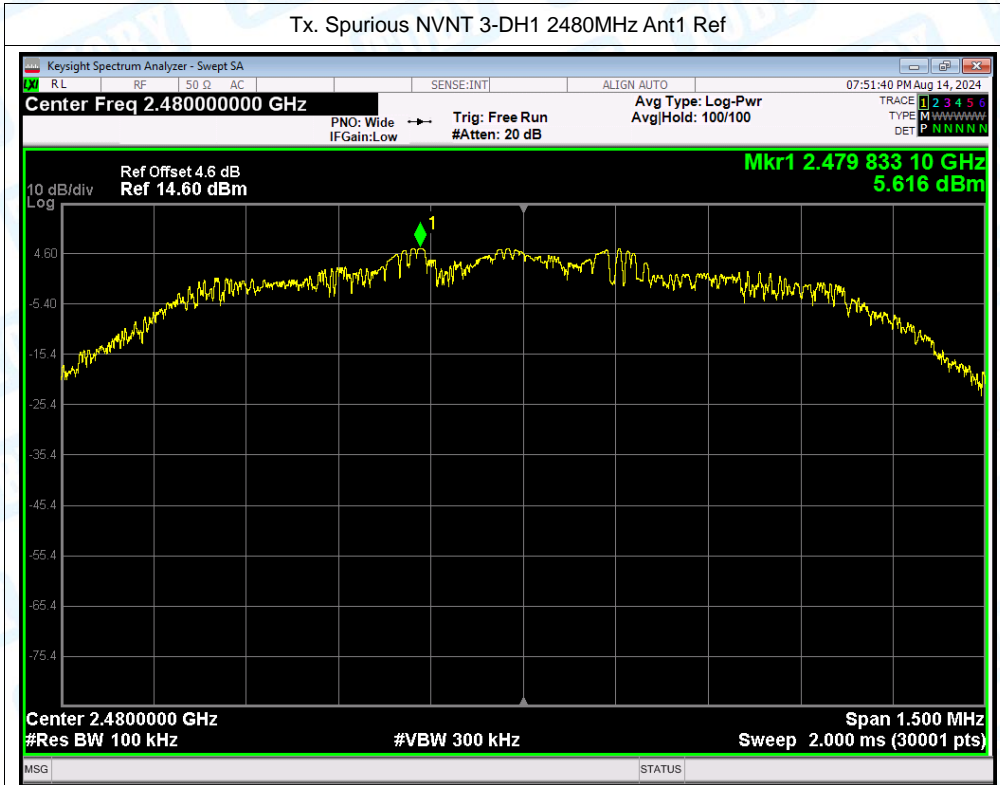
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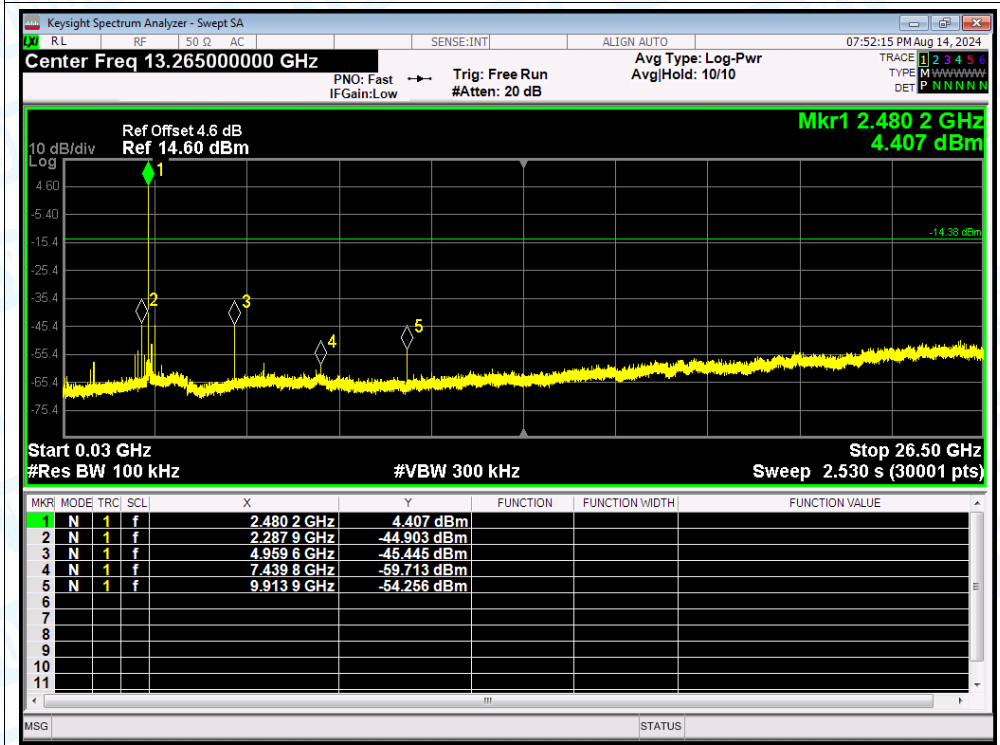
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

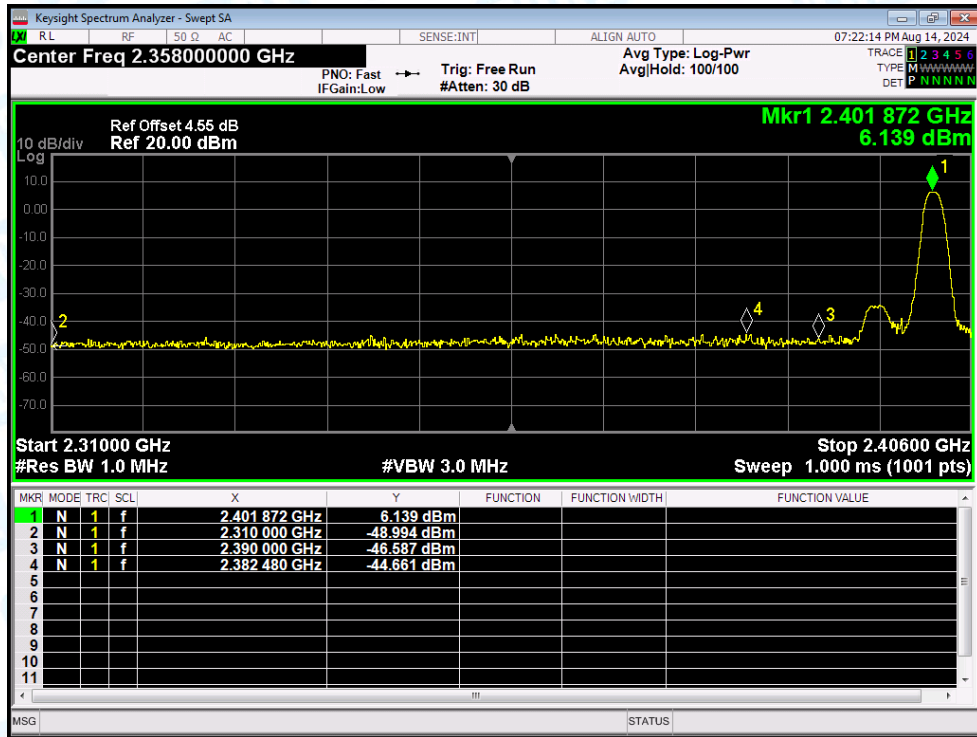


8. Restrict Band

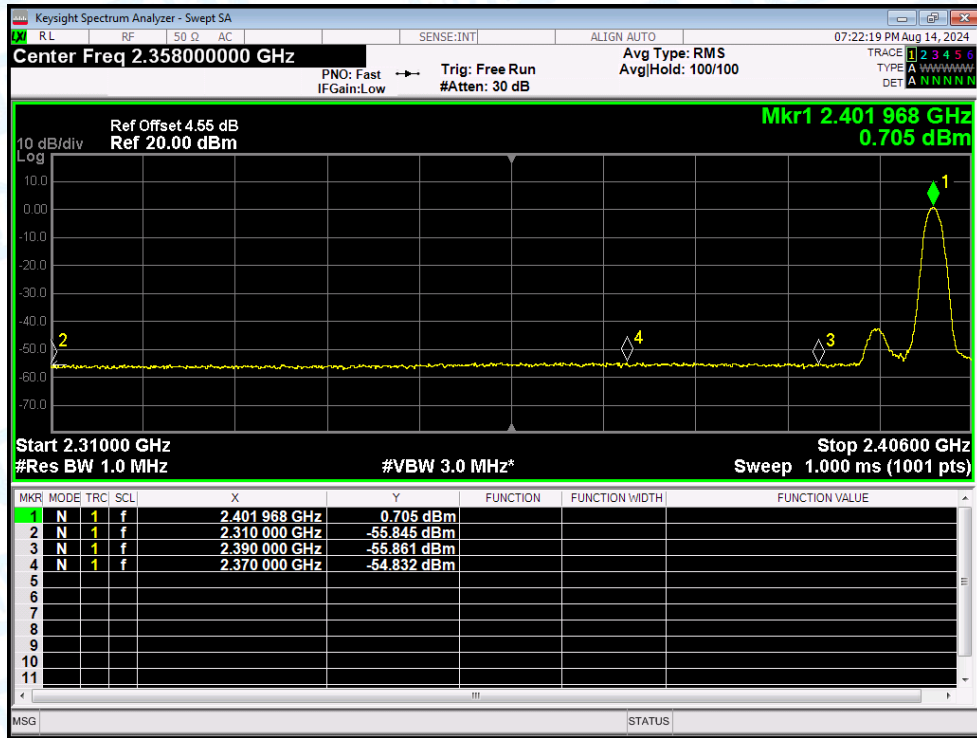
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.99	2	-	48.27	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.85	2	5.17	46.58	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2382.48	-44.66	2	-	52.6	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2370	-54.83	2	5.17	47.6	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.59	2	-	50.67	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.86	2	5.17	46.57	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-40.36	2	-	56.9	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-51.05	2	5.17	51.38	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.512	-40.36	2	-	56.9	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.608	-50.58	2	5.17	51.85	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-44.55	2	-	52.71	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.05	2	5.17	47.38	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.59	2	-	47.67	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.42	2	5.06	45.9	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2374.608	-44.17	2	-	53.09	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2377.872	-54.41	2	5.06	47.91	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-48.26	2	-	49	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.54	2	5.06	46.78	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-36.47	2	-	60.79	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-50.54	2	5.06	51.78	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.288	-33.96	2	-	63.3	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.608	-49.5	2	5.06	52.82	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.63	2	-	49.63	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.25	2	5.06	47.07	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.41	2	-	48.85	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.09	2	5.06	46.23	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2371.92	-43.32	2	-	53.94	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2379.504	-54.63	2	5.06	47.69	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.06	2	-	49.2	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.65	2	5.06	46.67	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-36.75	2	-	60.51	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-49.6	2	5.06	52.72	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.728	-35.28	2	-	61.98	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.512	-49.6	2	5.06	52.72	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.68	2	-	51.58	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-54.61	2	5.06	47.71	Average	54	Pass

Test Graphs

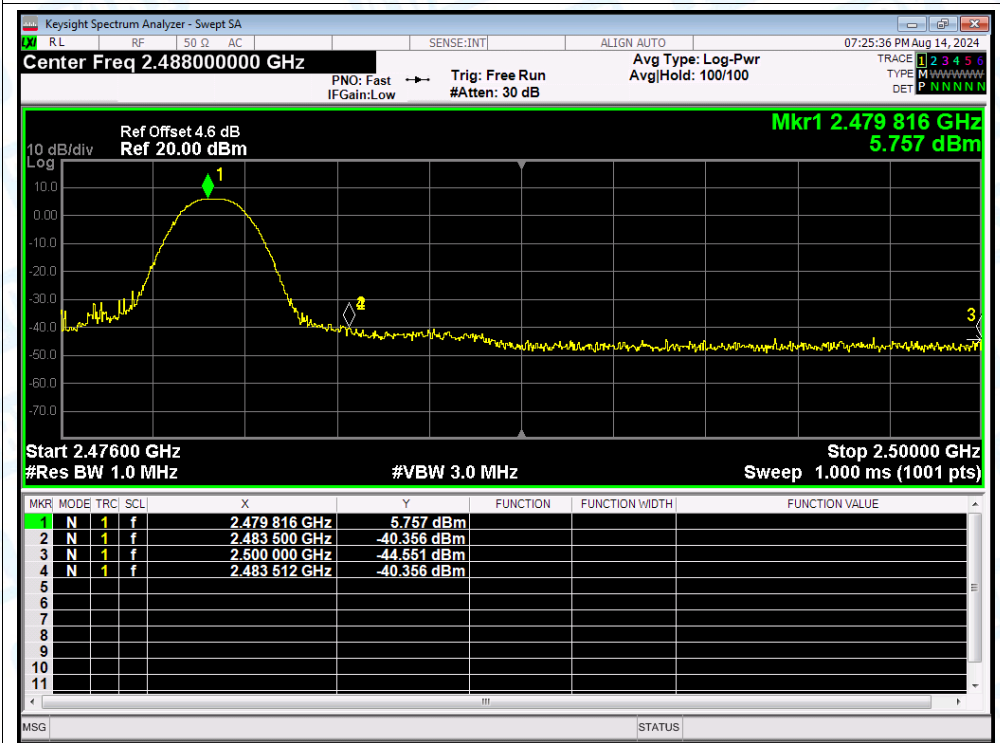
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



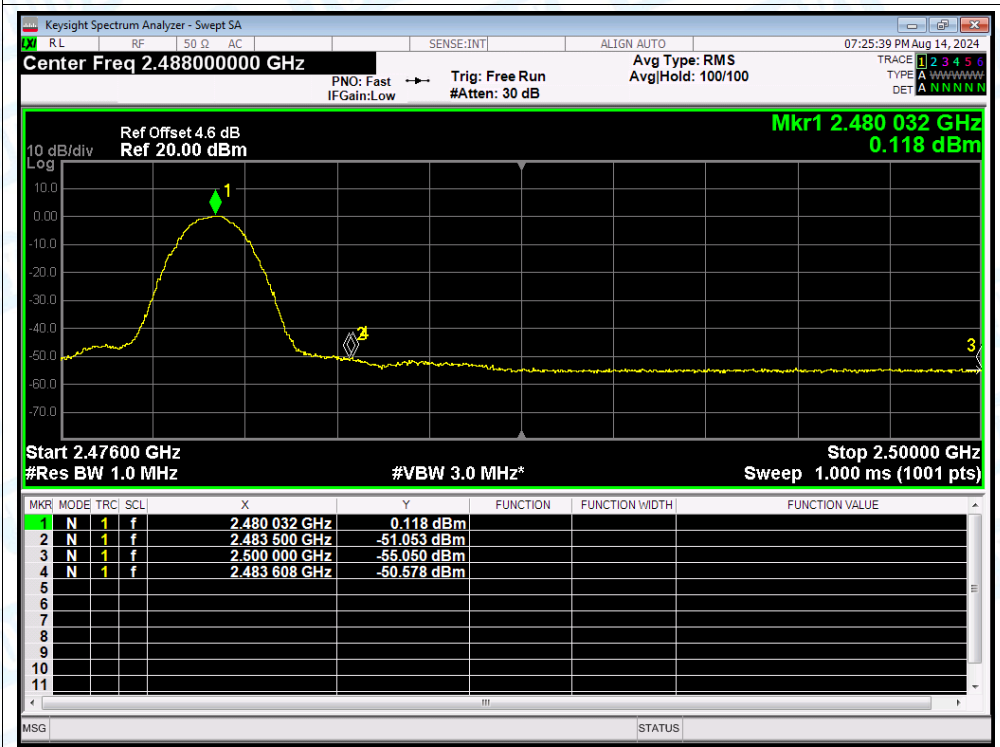
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



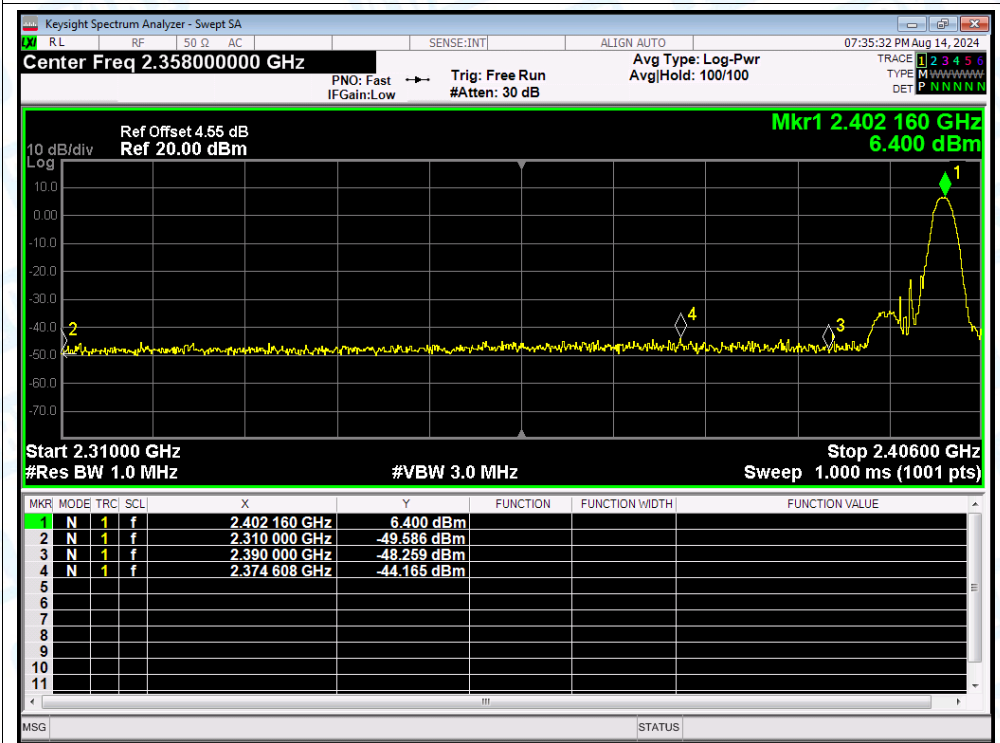
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



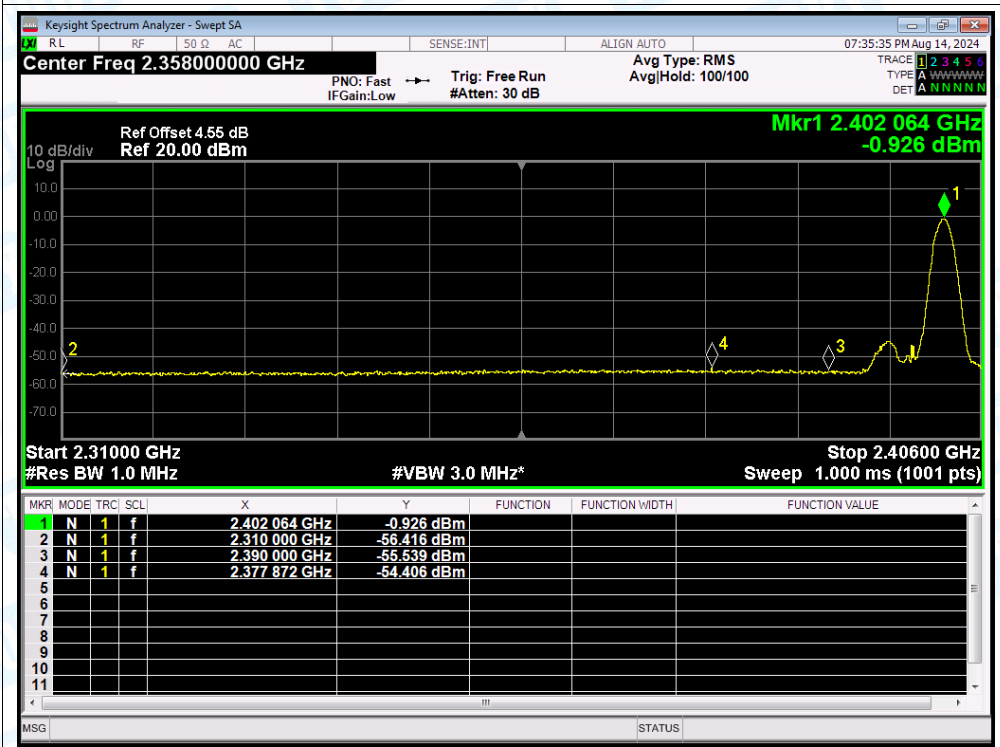
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



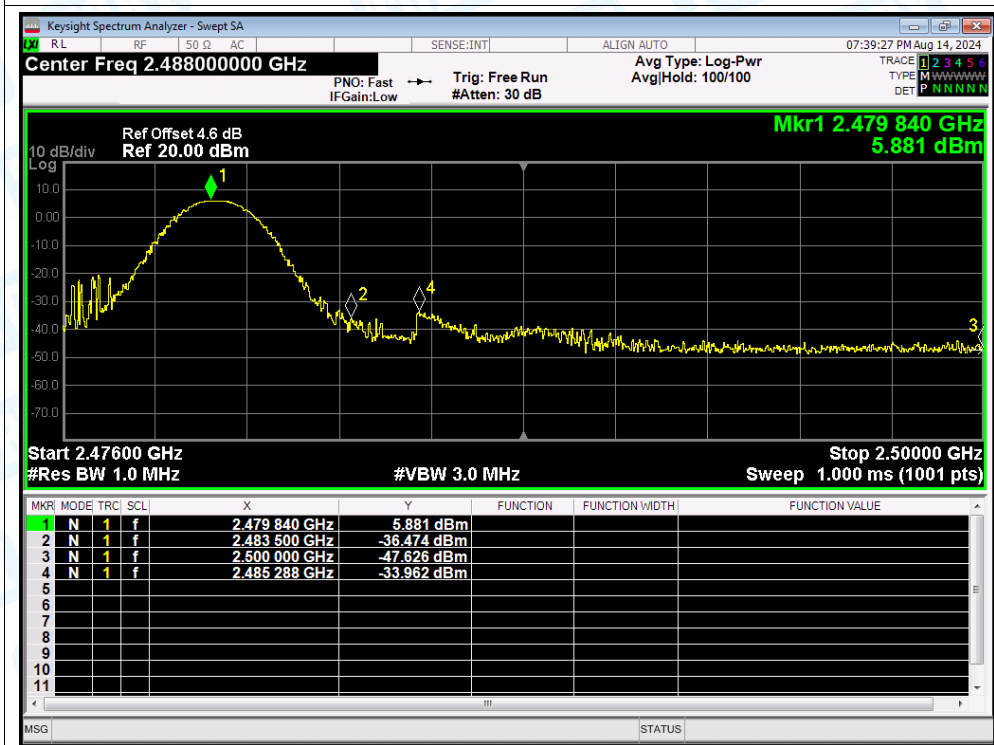
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



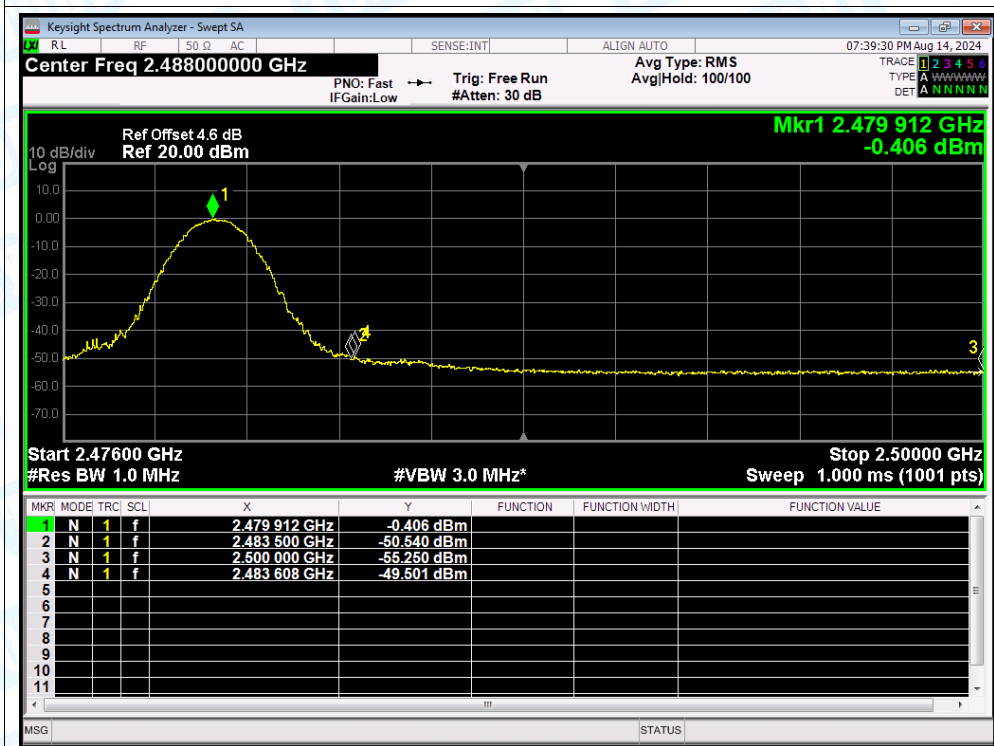
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average

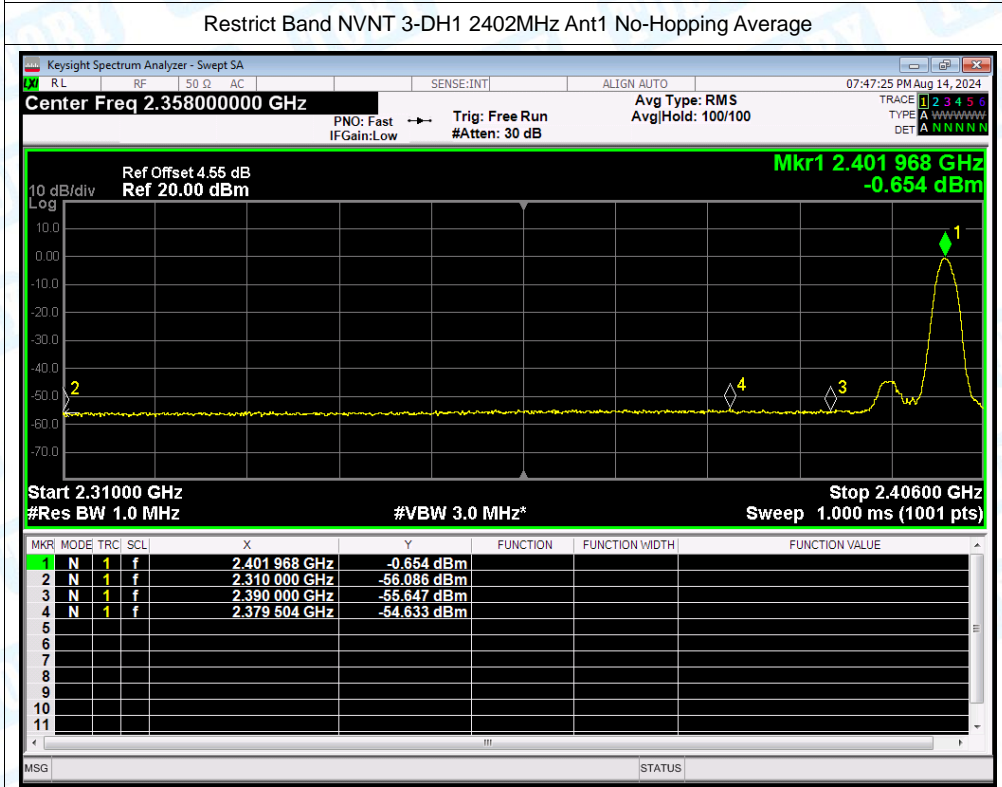
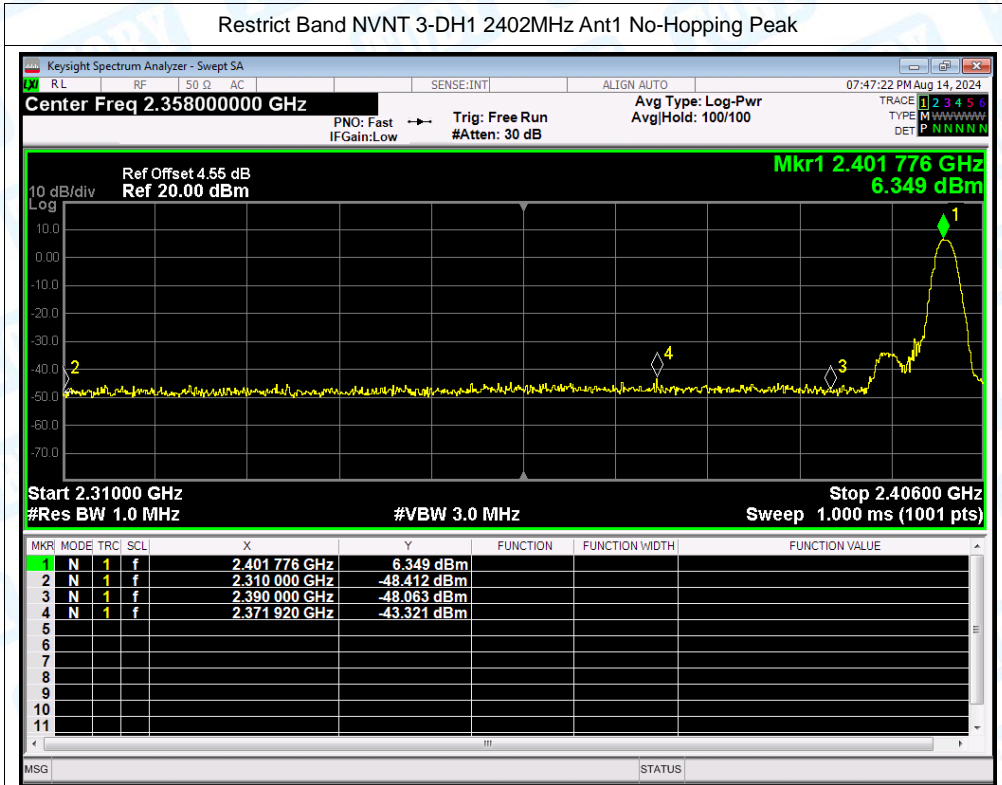


Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak

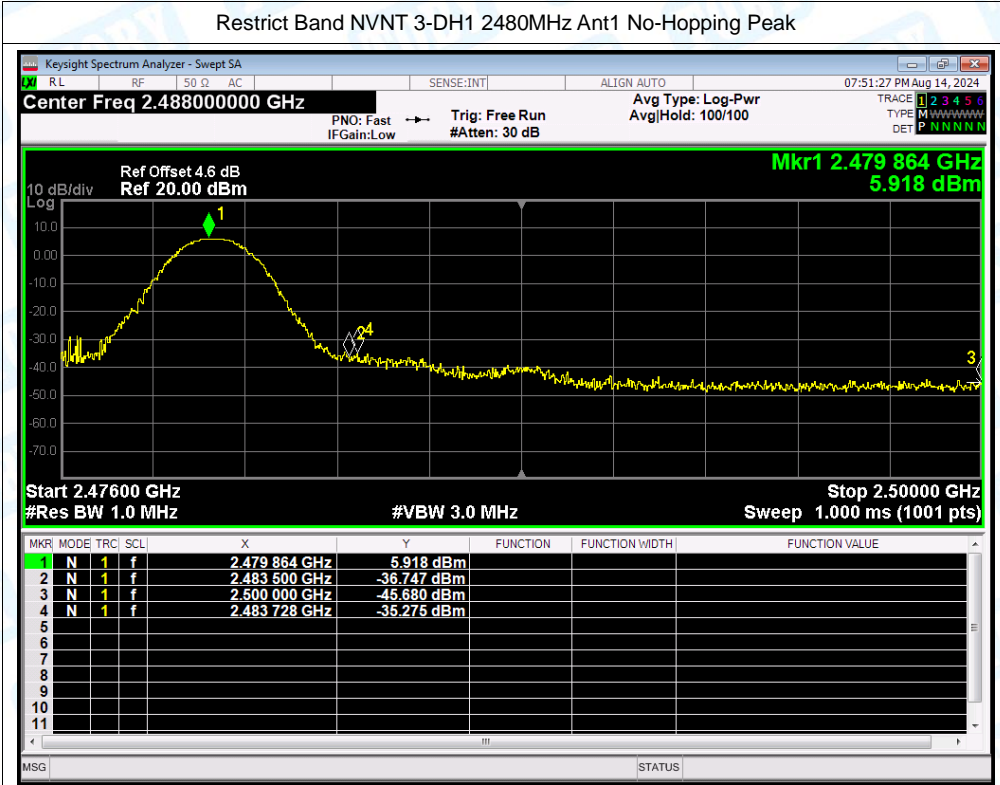


Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average

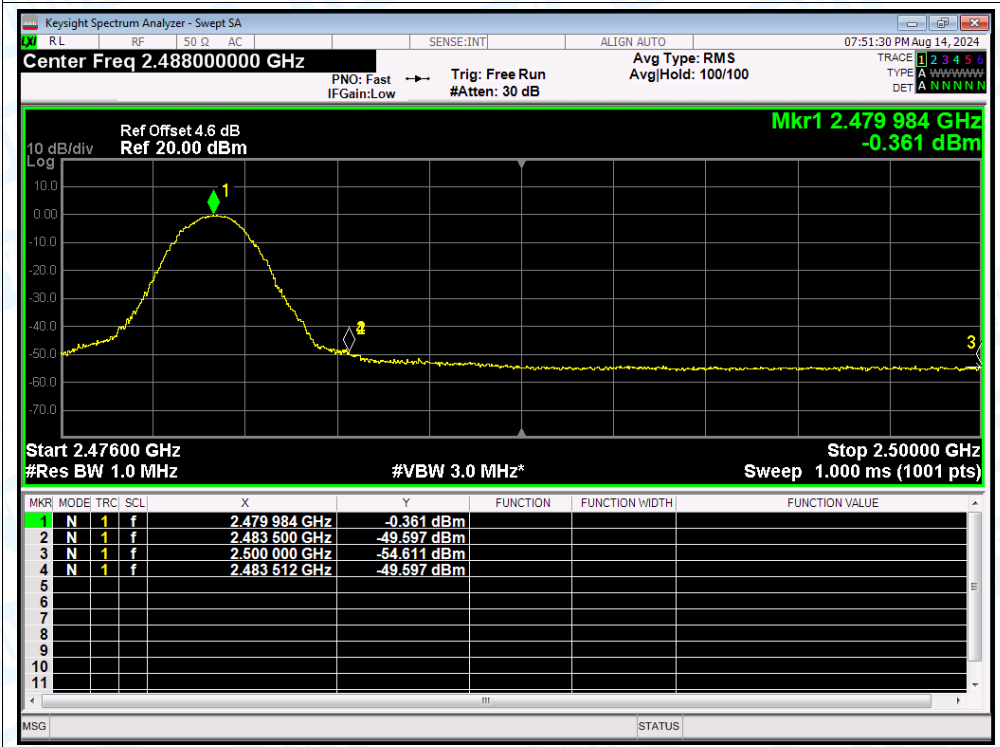




Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Average

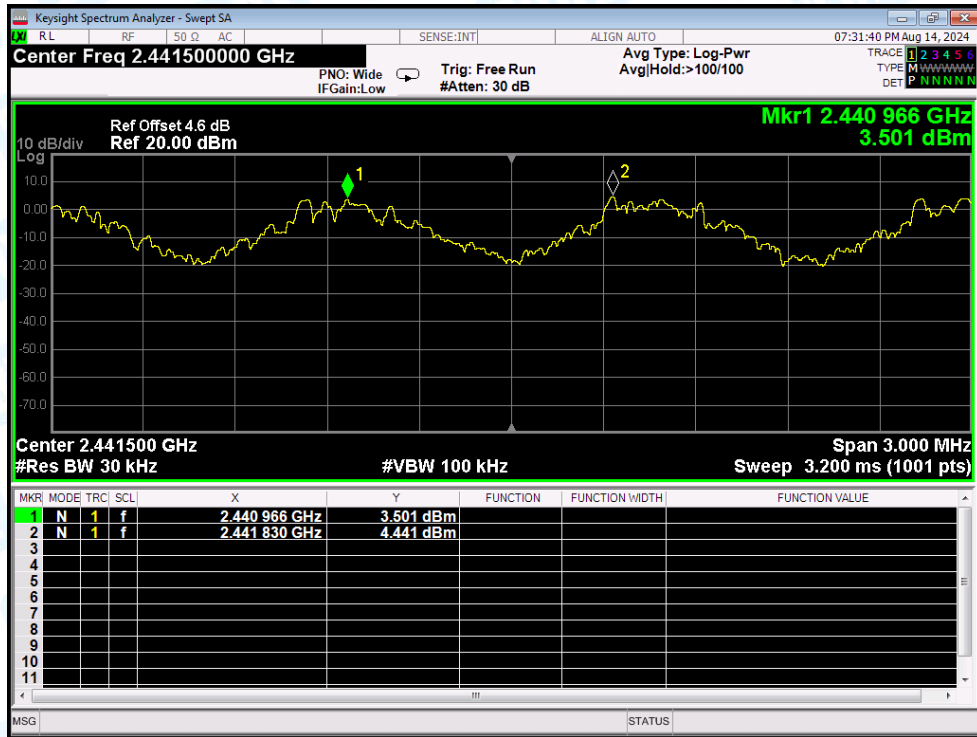


9. Carrier Frequencies Separation

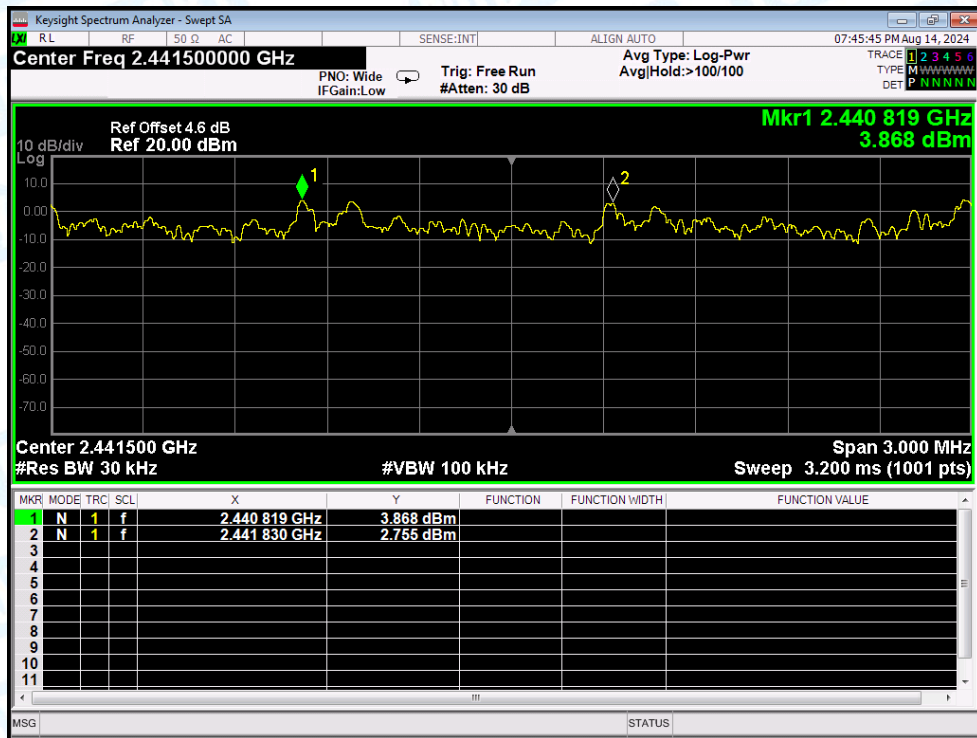
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.966	2441.83	0.864	0.607	Pass
NVNT	2-DH1	Ant1	2440.819	2441.83	1.011	0.853	Pass
NVNT	3-DH1	Ant1	2440.969	2441.989	1.02	0.860	Pass

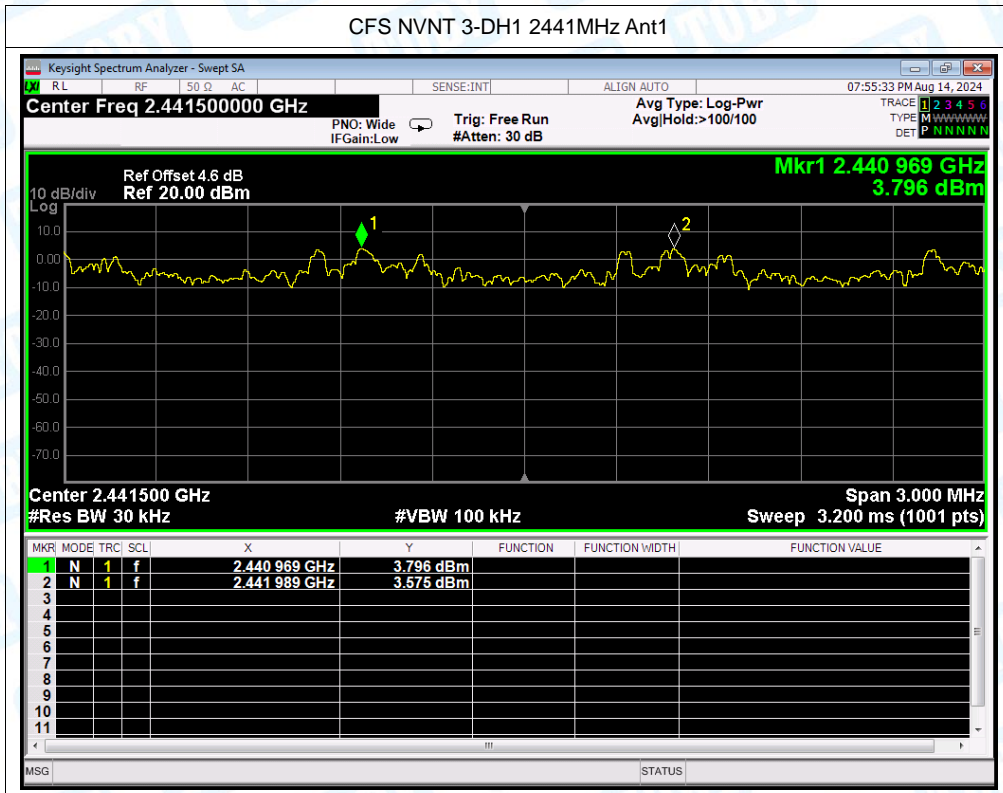
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



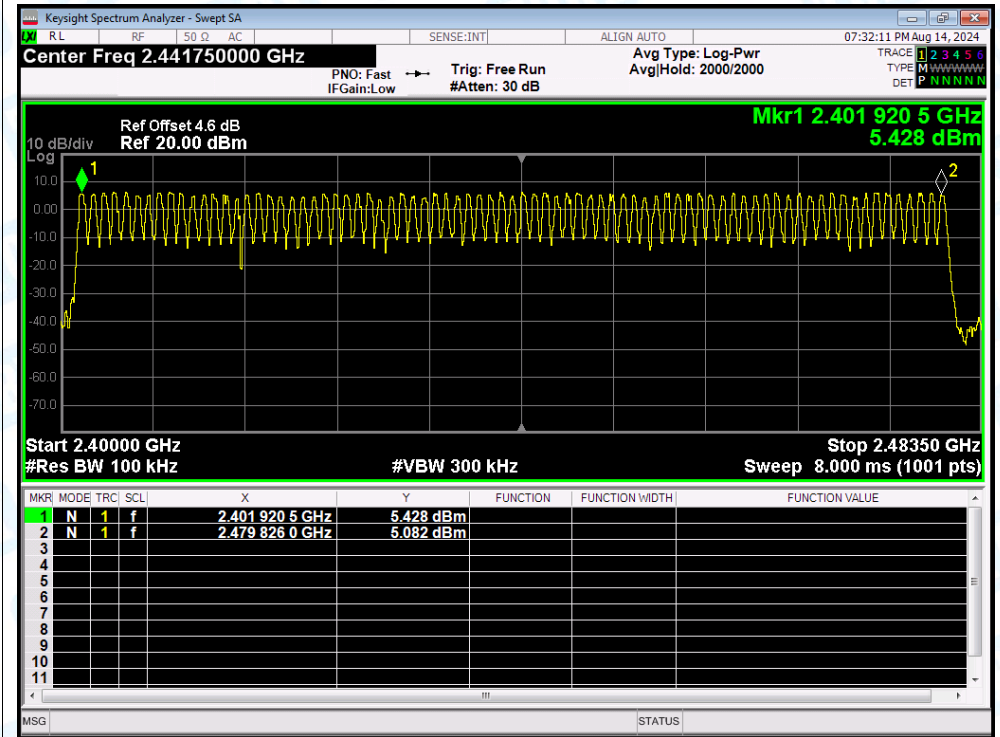


10. Number of Hopping Channel

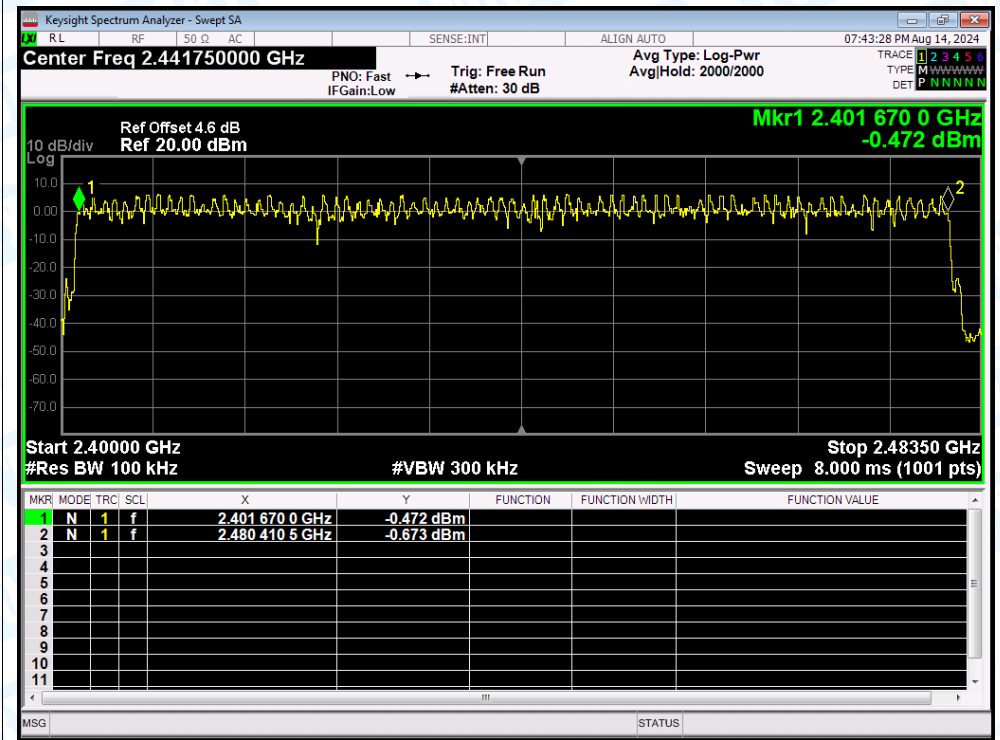
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

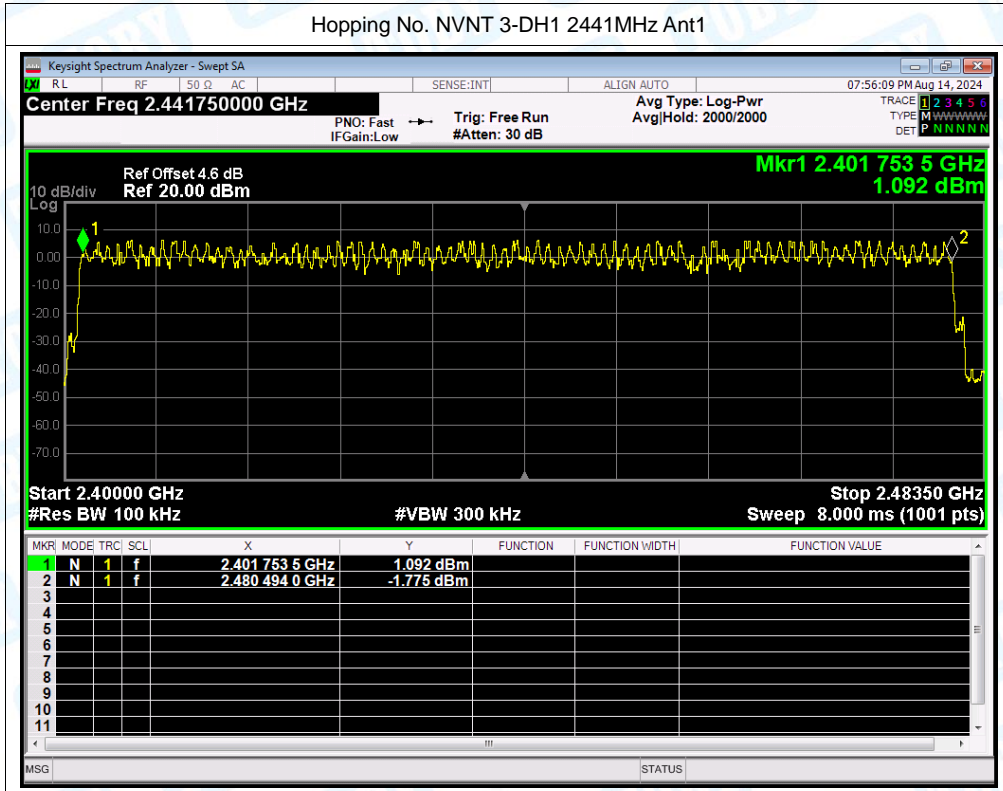
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



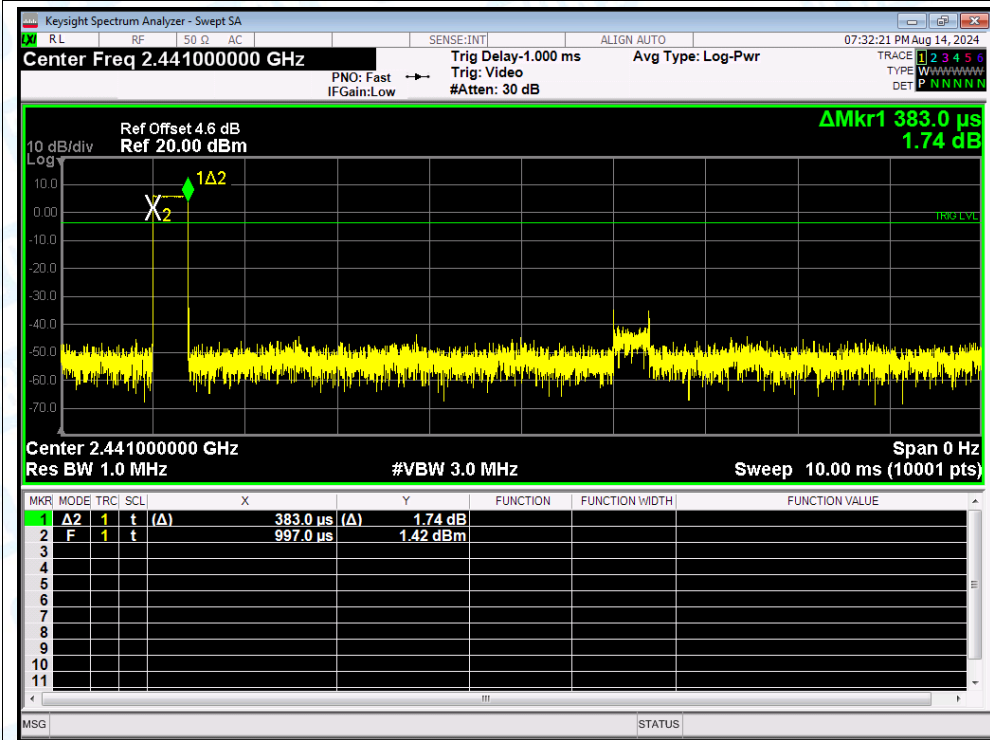


11. Dwell Time

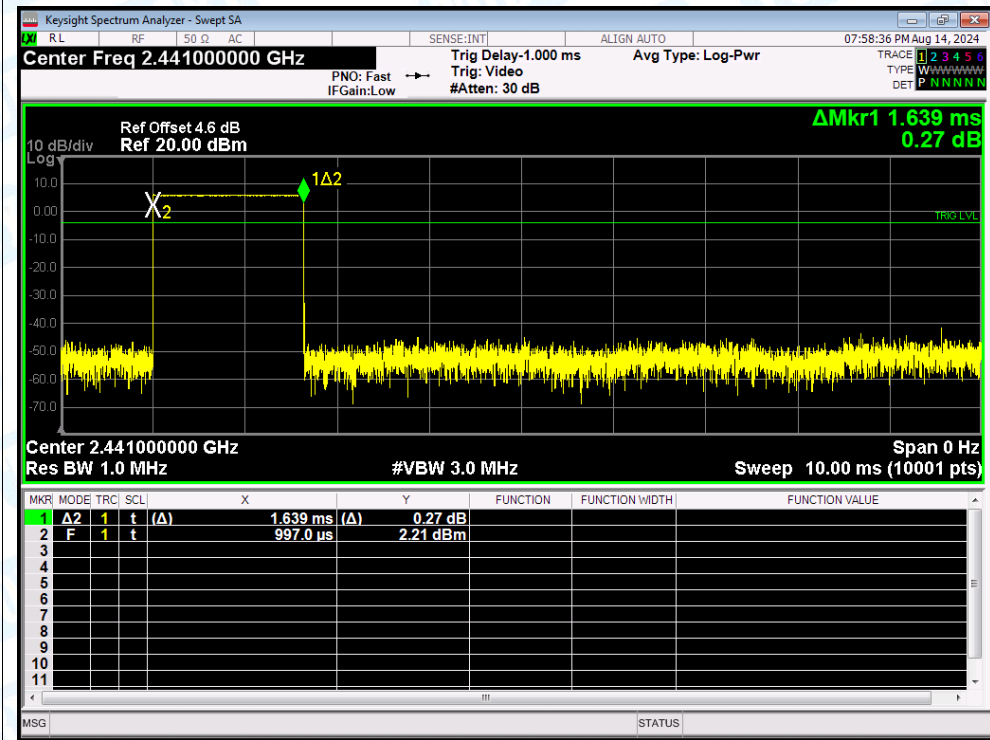
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.391	125.12	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.885	307.733	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.642	262.72	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.894	308.693	31600	400	Pass

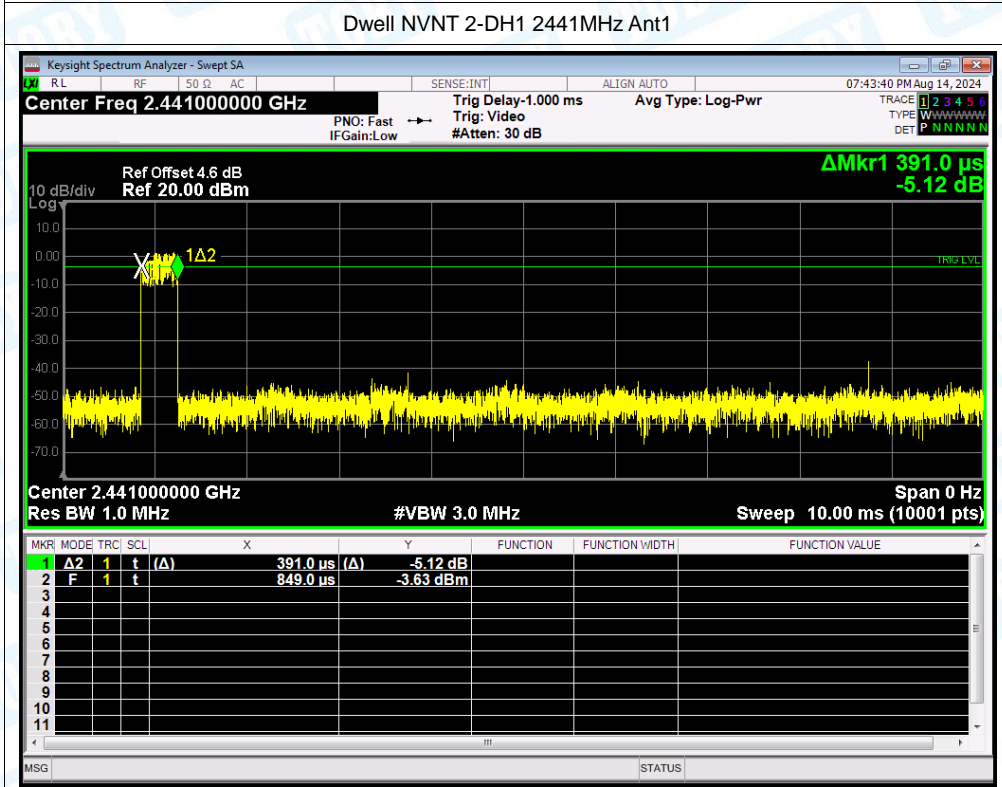
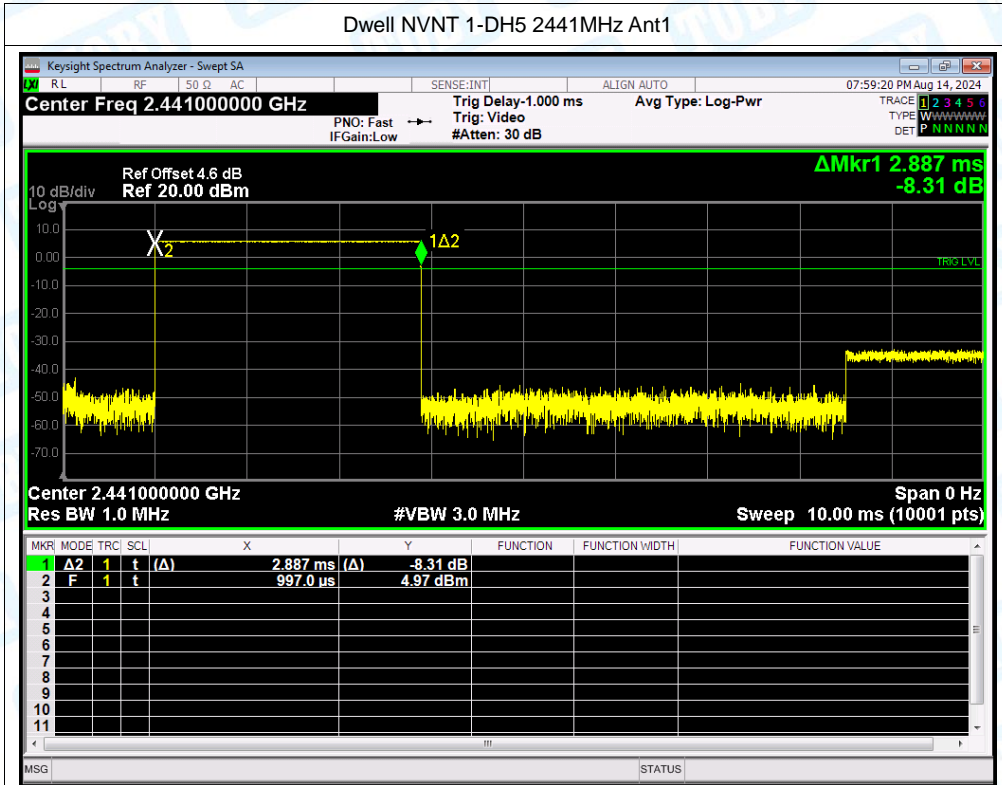
Test Graphs

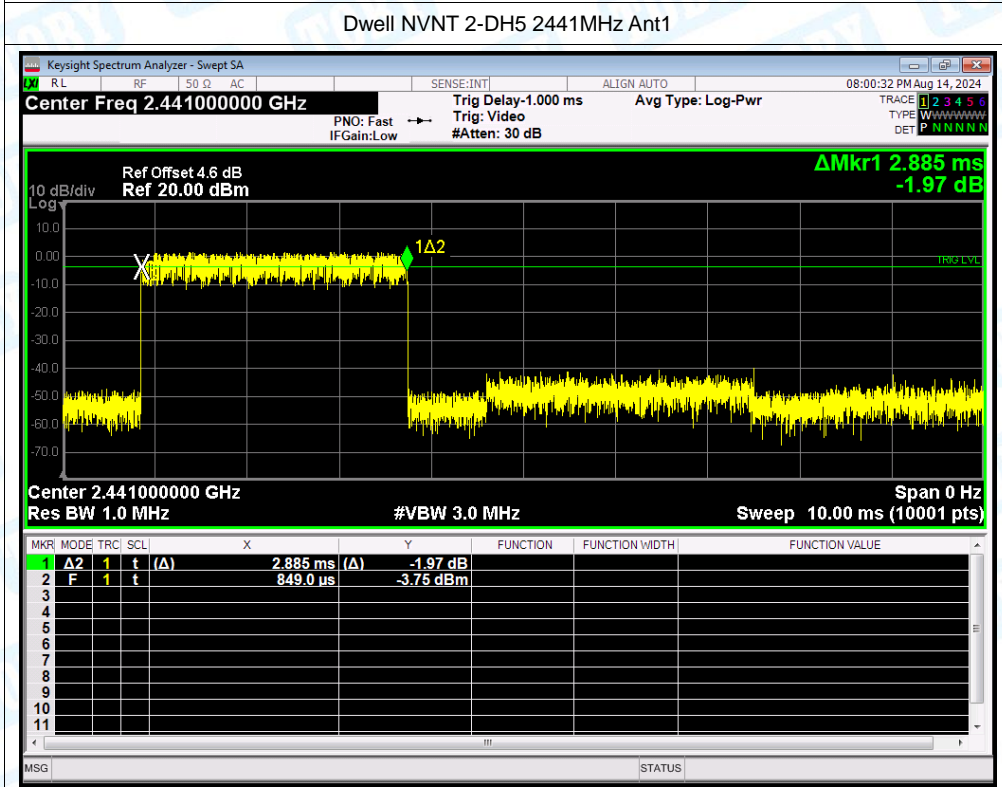
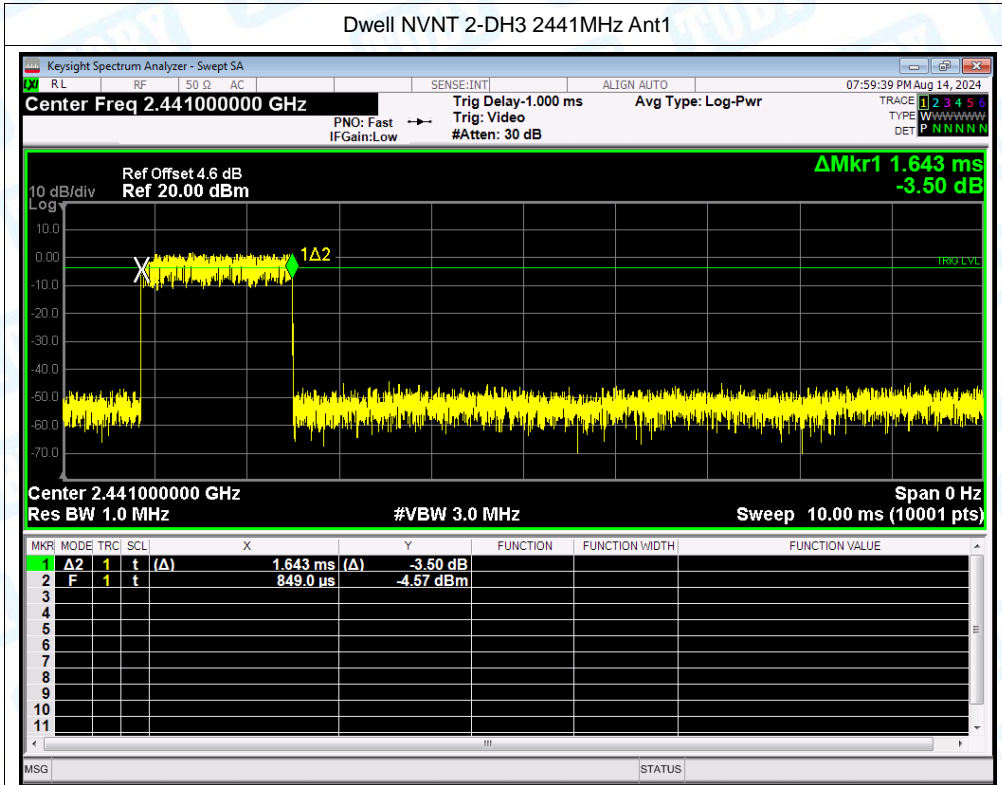
Dwell NVNT 1-DH1 2441MHz Ant1

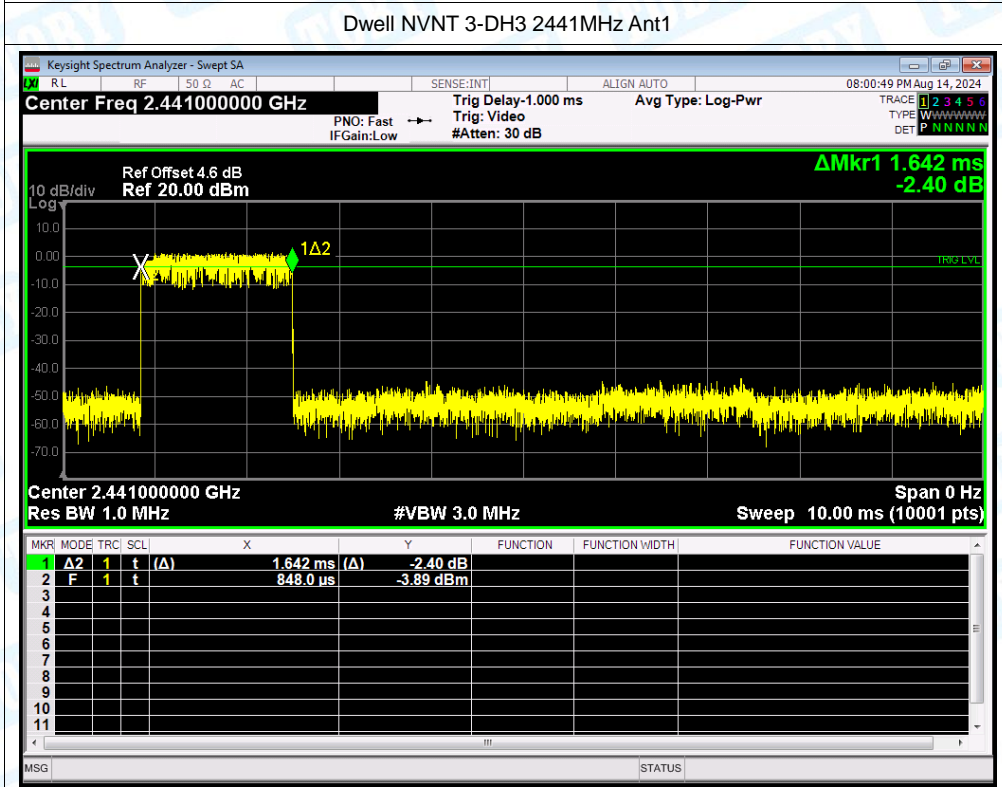
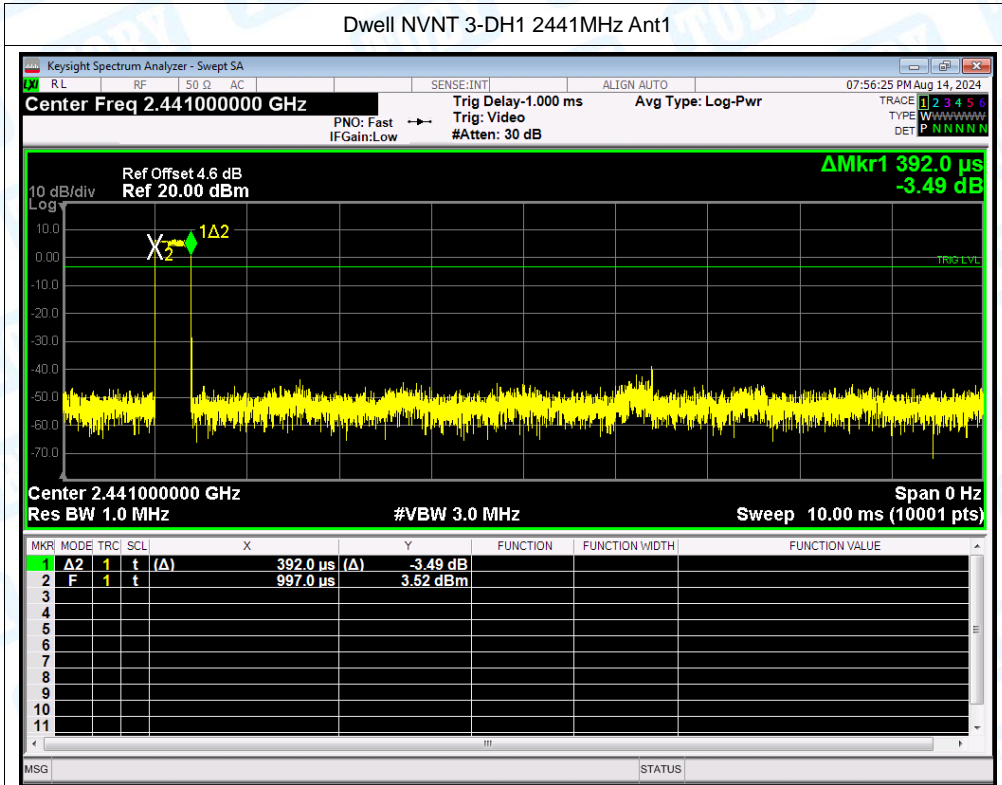


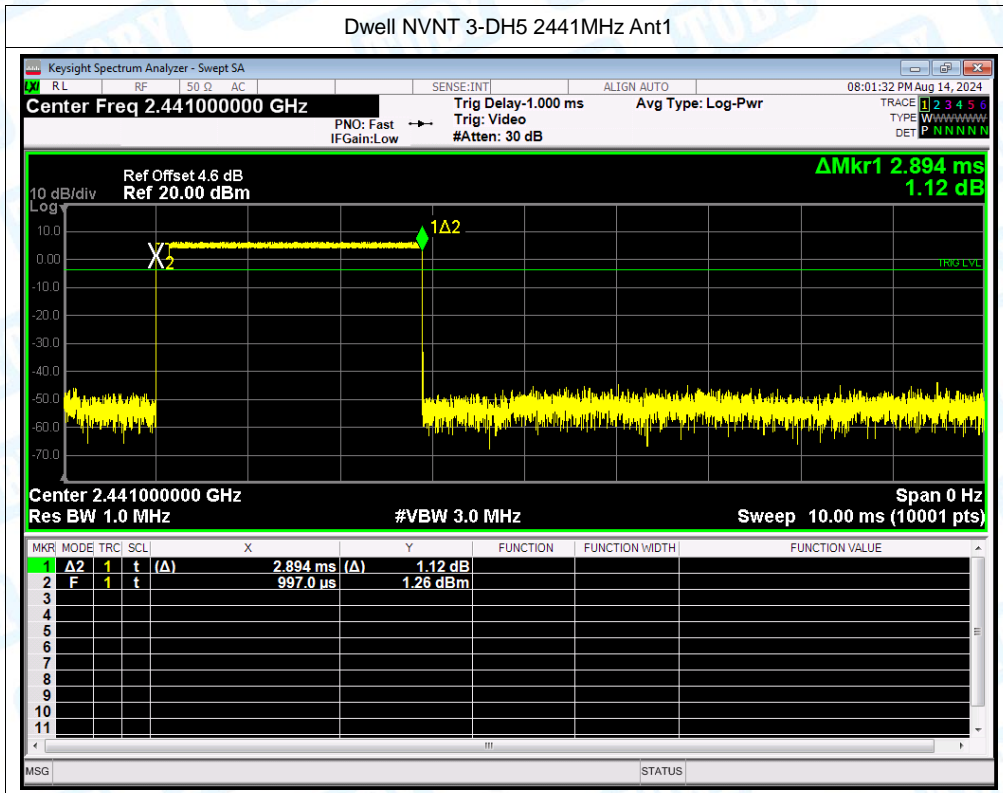
Dwell NVNT 1-DH3 2441MHz Ant1











-----END OF THE REPORT-----