

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Bone conduction earphone
Test Model:	S800Pro2
Sample ID:	HC-C-202507-0136-01-2#
Environmental Conditions	
Temperature:	23.9℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Gold Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202507-0136-8 The report only show the worst case data.	

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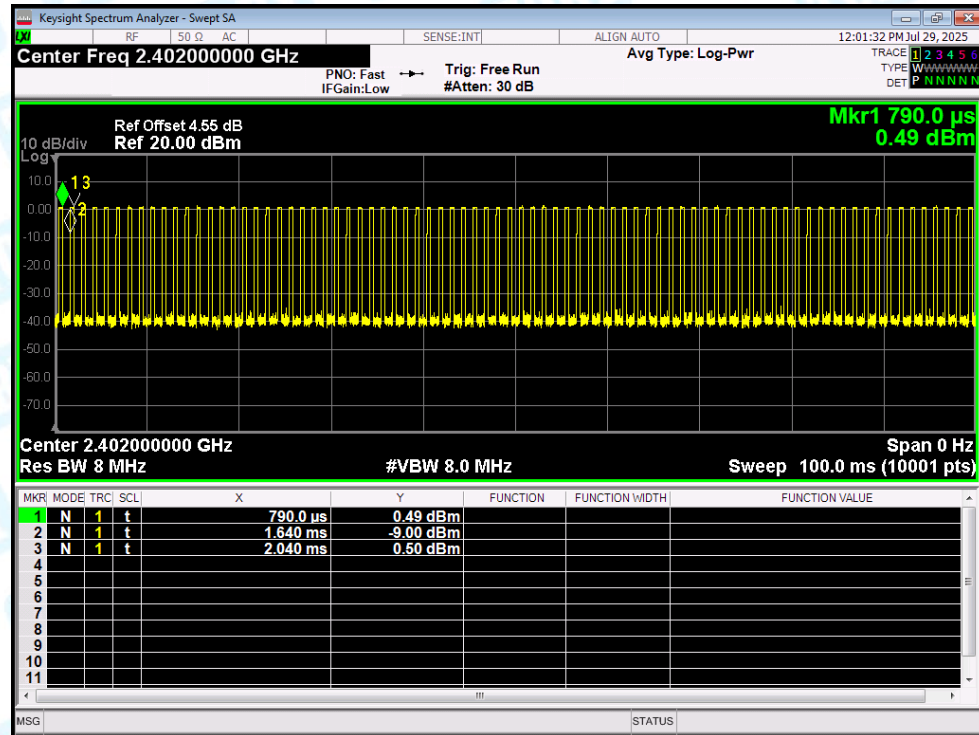
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1. Duty Cycle

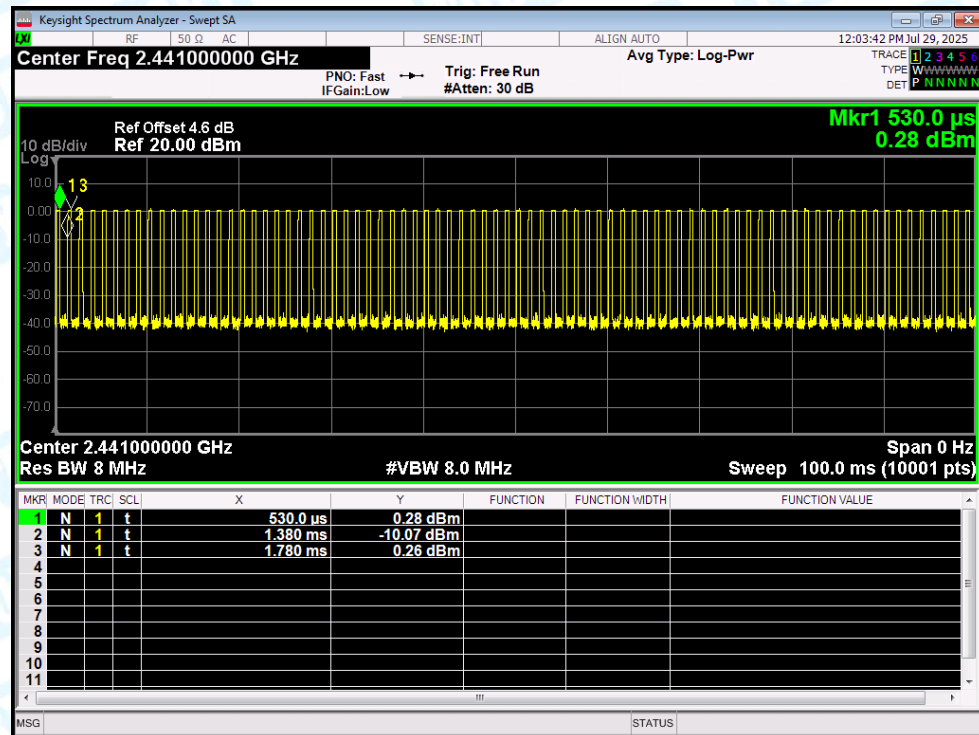
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	32	4.95	2.5
NVNT	1-DH1	2441	Ant1	32	4.95	2.5
NVNT	1-DH1	2480	Ant1	32	4.95	2.5
NVNT	2-DH1	2402	Ant1	33.6	4.74	2.38
NVNT	2-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	2-DH1	2480	Ant1	33.6	4.74	2.38
NVNT	3-DH1	2402	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2480	Ant1	32.8	4.84	2.44

Test Graphs

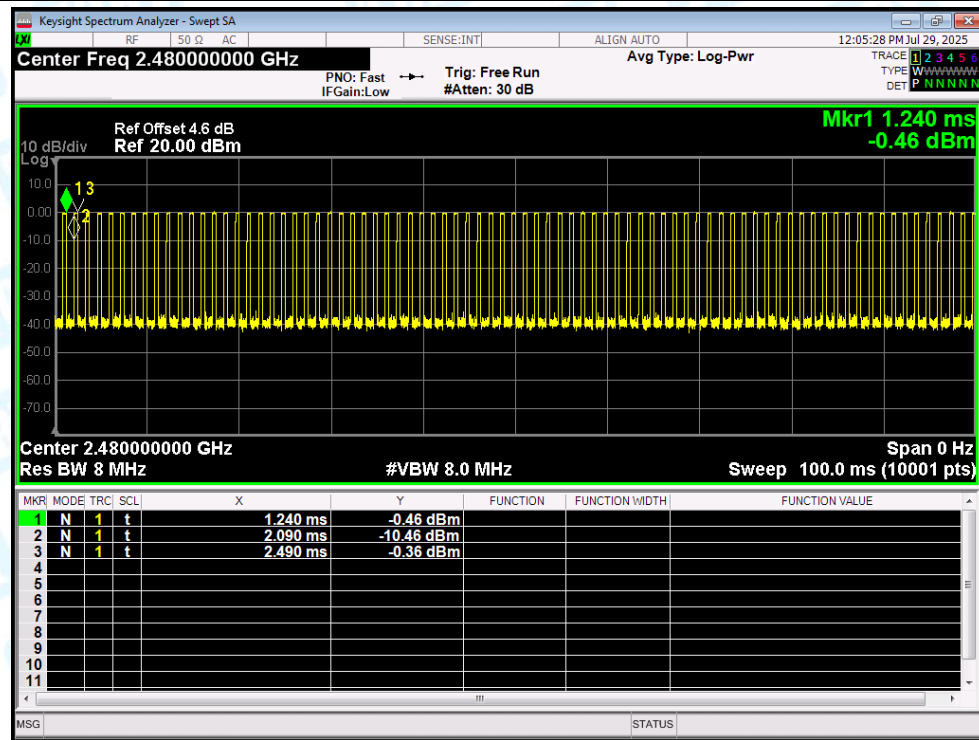
Duty Cycle NVNT 1-DH1 2402MHz Ant1



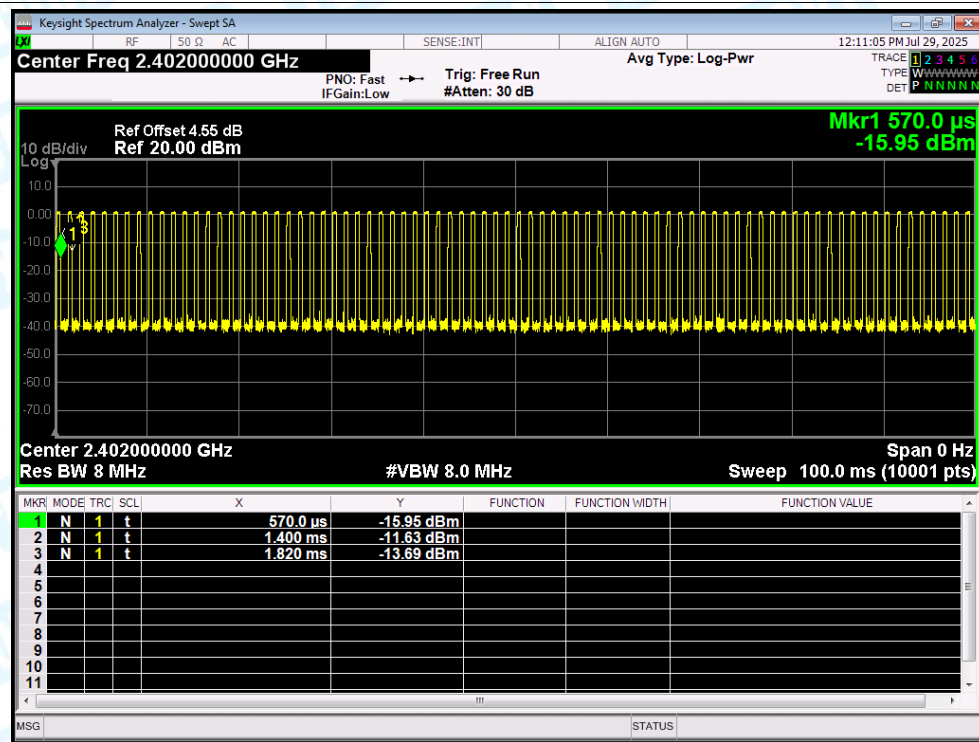
Duty Cycle NVNT 1-DH1 2441MHz Ant1



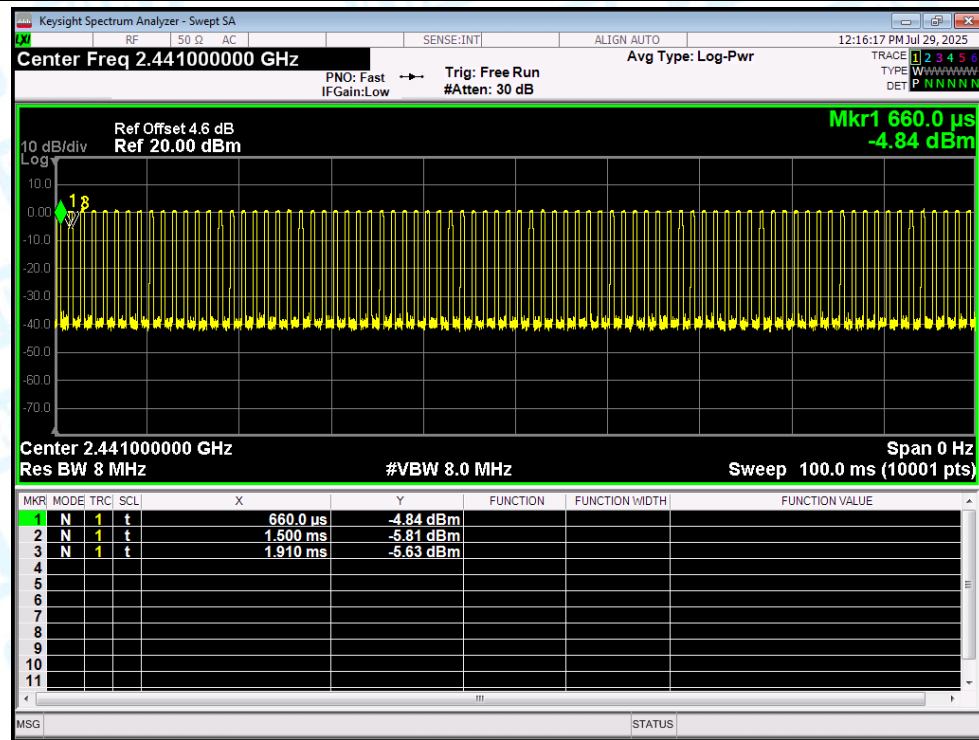
Duty Cycle NVNT 1-DH1 2480MHz Ant1



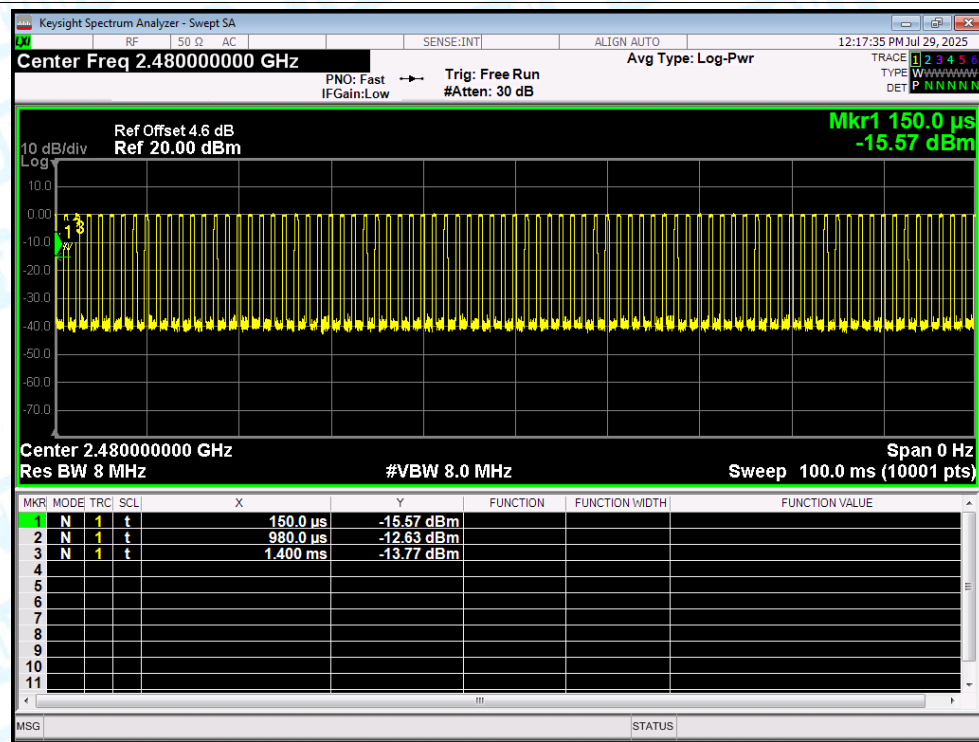
Duty Cycle NVNT 2-DH1 2402MHz Ant1



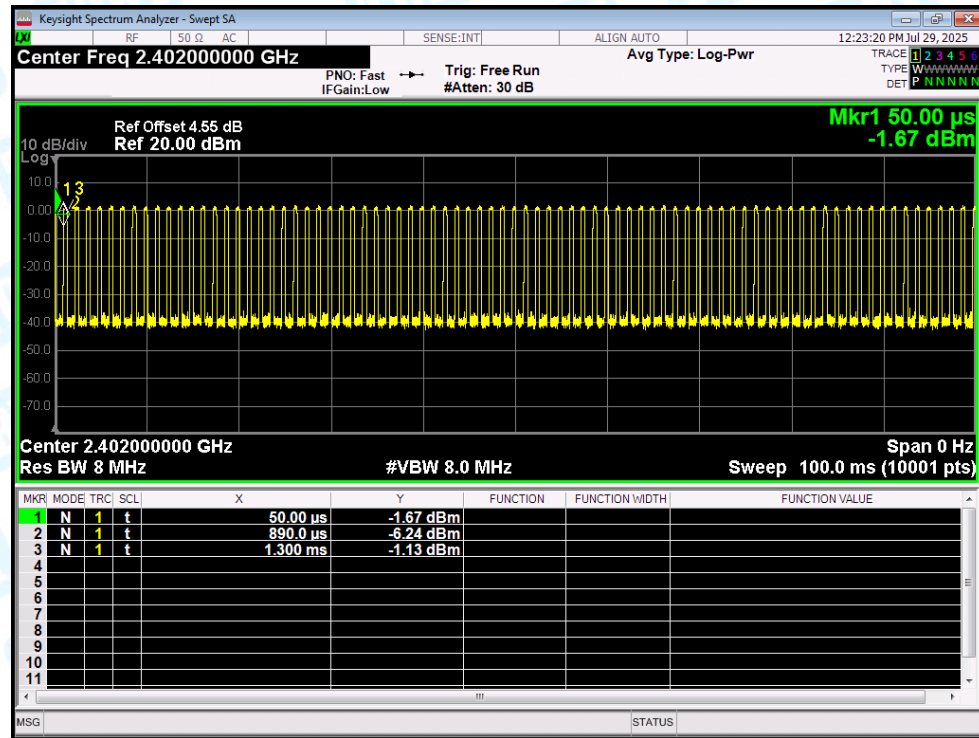
Duty Cycle NVNT 2-DH1 2441MHz Ant1



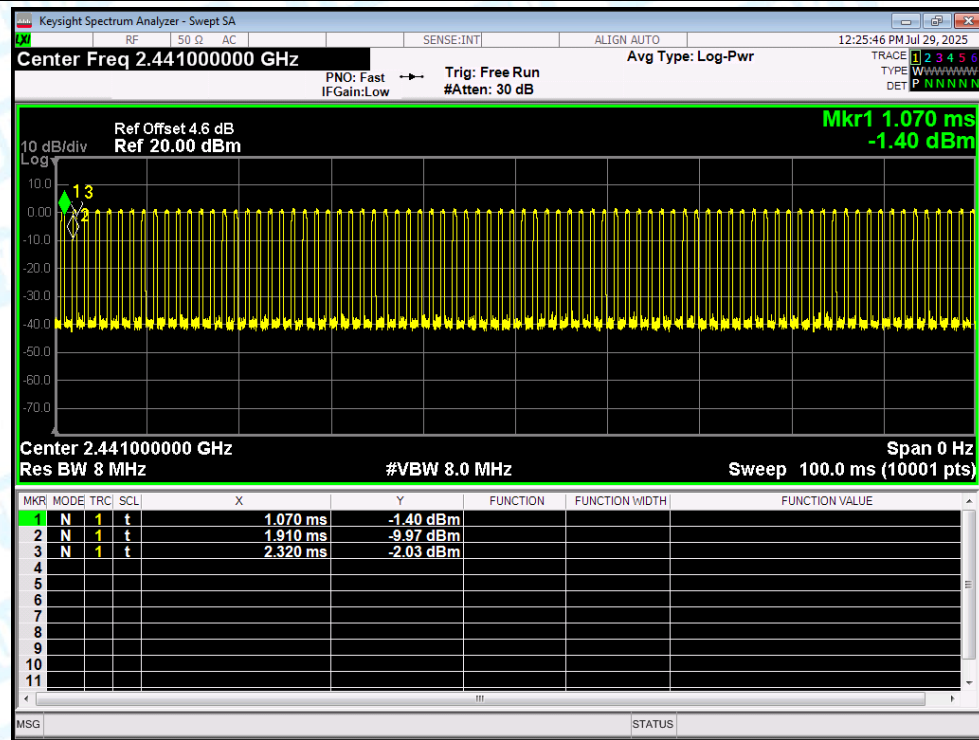
Duty Cycle NVNT 2-DH1 2480MHz Ant1

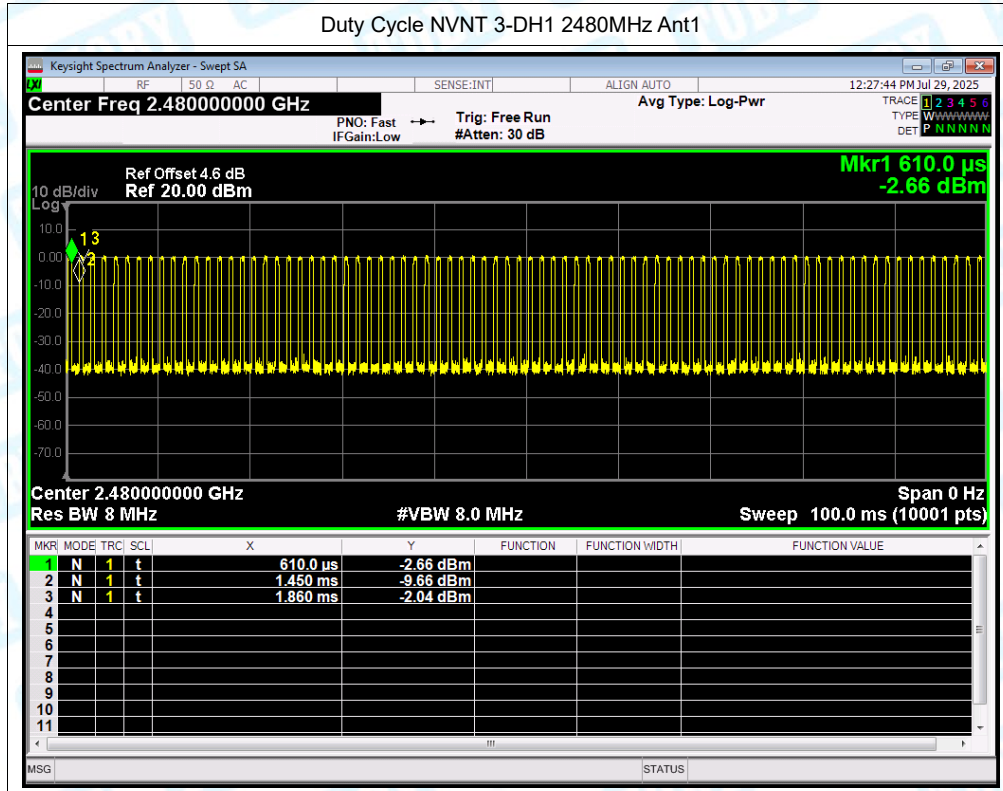


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



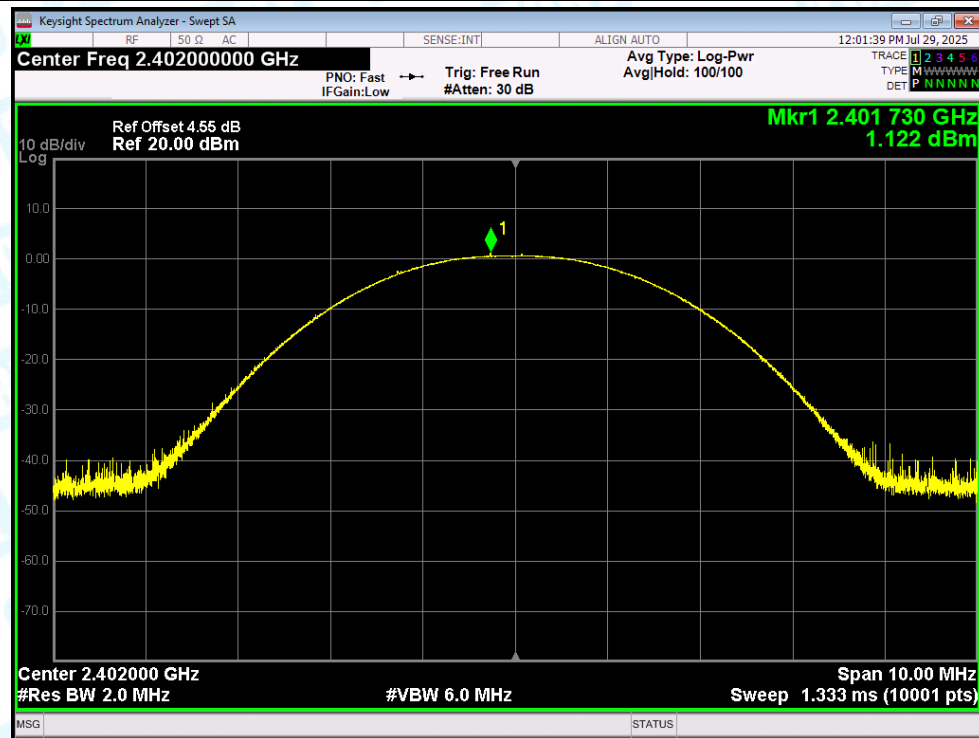


2. Maximum Conducted Output Power

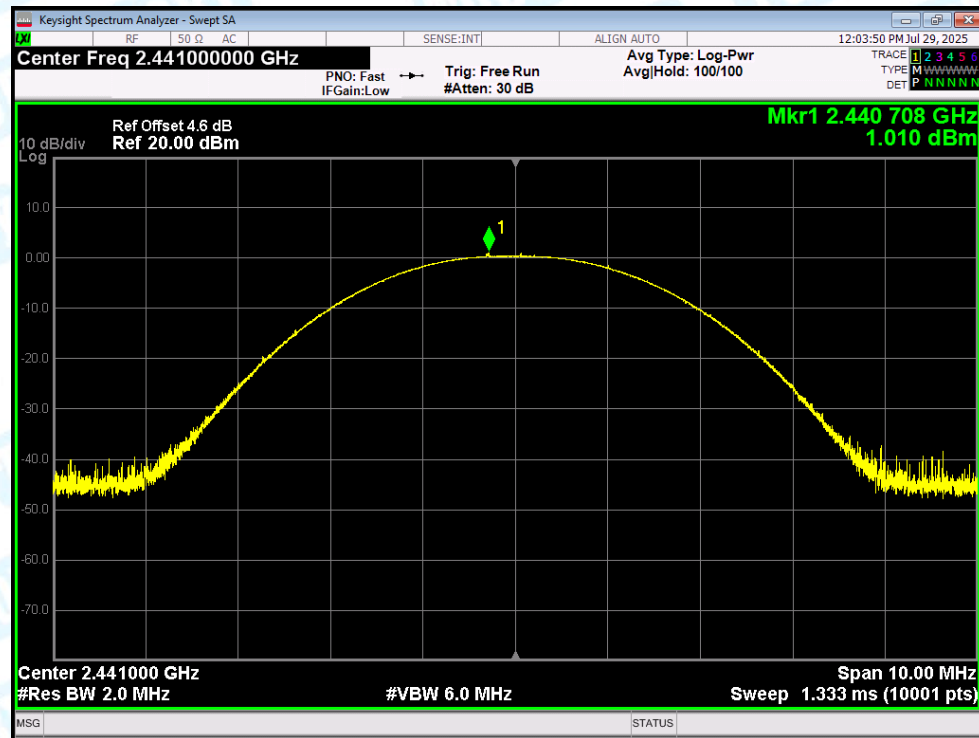
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.122	21	Pass
NVNT	1-DH1	2441	Ant1	1.01	21	Pass
NVNT	1-DH1	2480	Ant1	-0.303	21	Pass
NVNT	1-DH3	2441	Ant1	0.264	21	Pass
NVNT	1-DH5	2441	Ant1	0.337	21	Pass
NVNT	2-DH1	2402	Ant1	1.173	21	Pass
NVNT	2-DH1	2441	Ant1	0.816	21	Pass
NVNT	2-DH1	2480	Ant1	-0.011	21	Pass
NVNT	2-DH3	2441	Ant1	0.631	21	Pass
NVNT	2-DH5	2441	Ant1	0.563	21	Pass
NVNT	3-DH1	2402	Ant1	1.317	21	Pass
NVNT	3-DH1	2441	Ant1	1.069	21	Pass
NVNT	3-DH1	2480	Ant1	0.405	21	Pass
NVNT	3-DH3	2441	Ant1	1.154	21	Pass
NVNT	3-DH5	2441	Ant1	1.137	21	Pass

Test Graphs

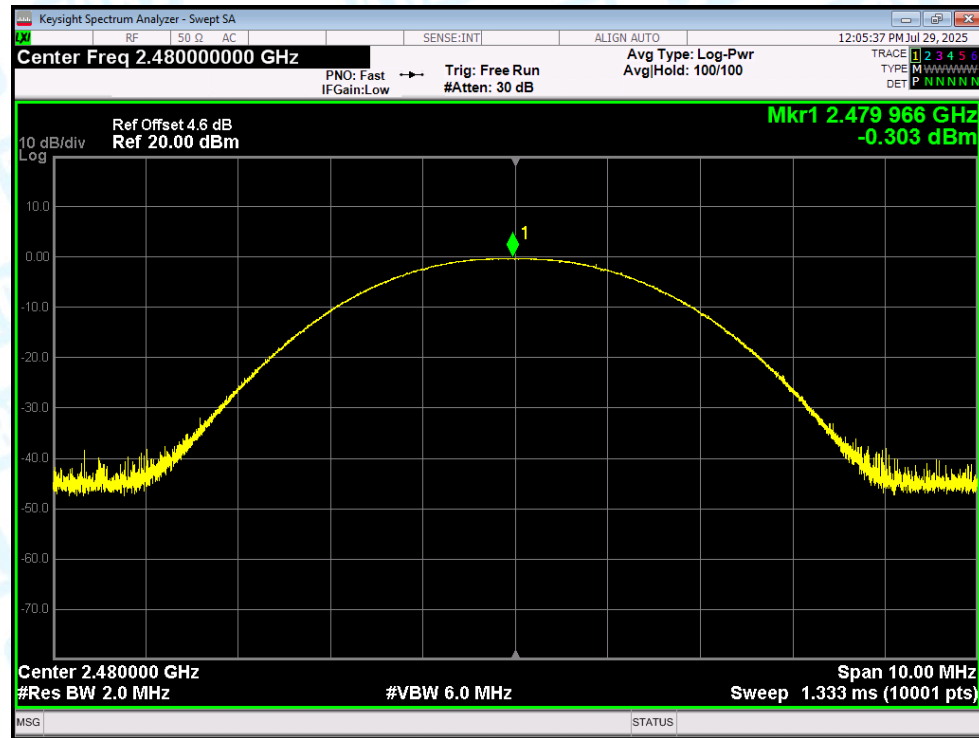
Power NVNT 1-DH1 2402MHz Ant1



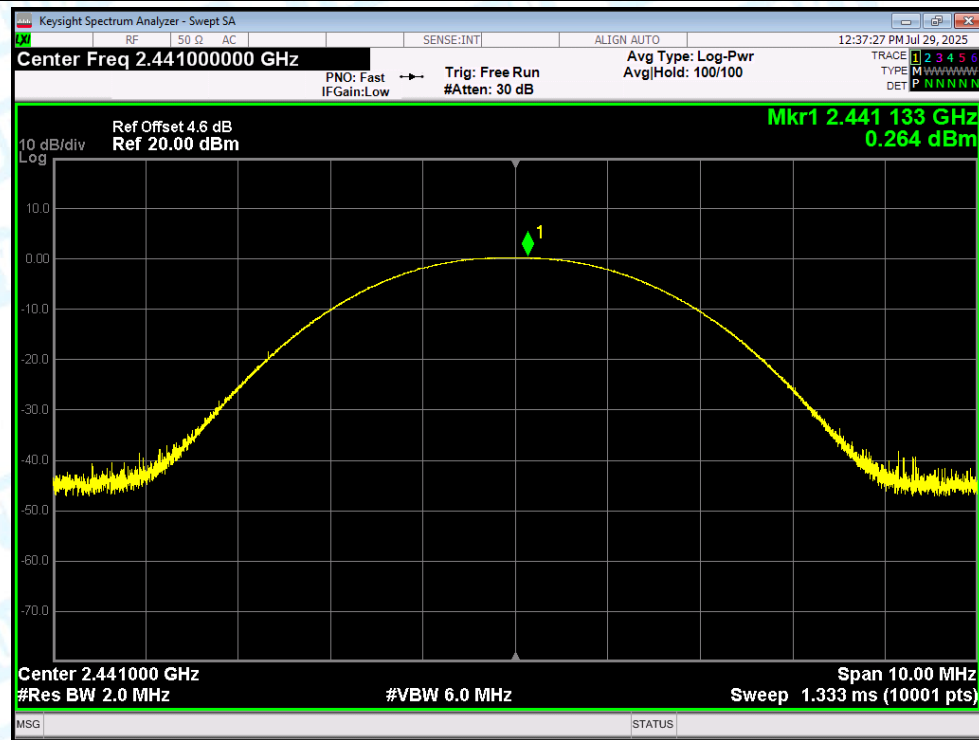
Power NVNT 1-DH1 2441MHz Ant1



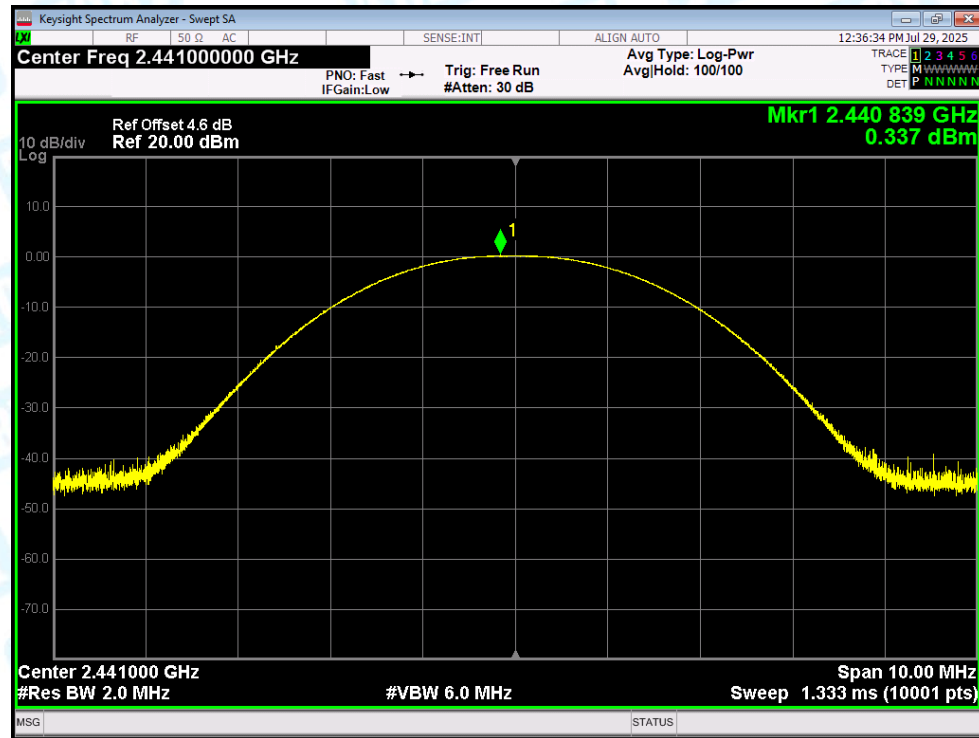
Power NVNT 1-DH1 2480MHz Ant1



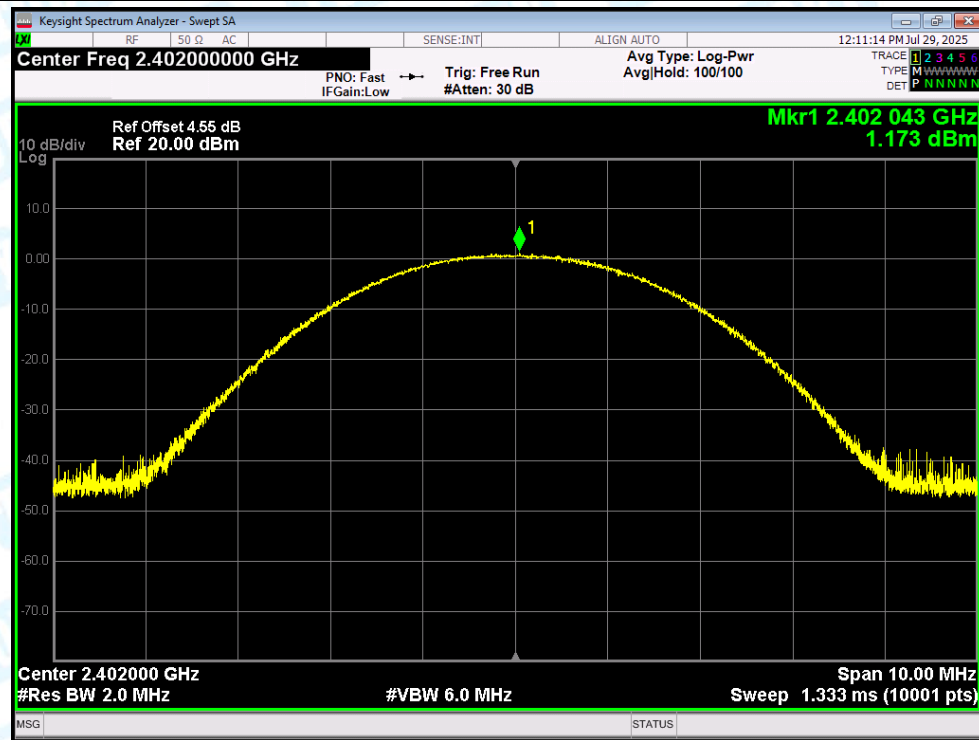
Power NVNT 1-DH3 2441MHz Ant1



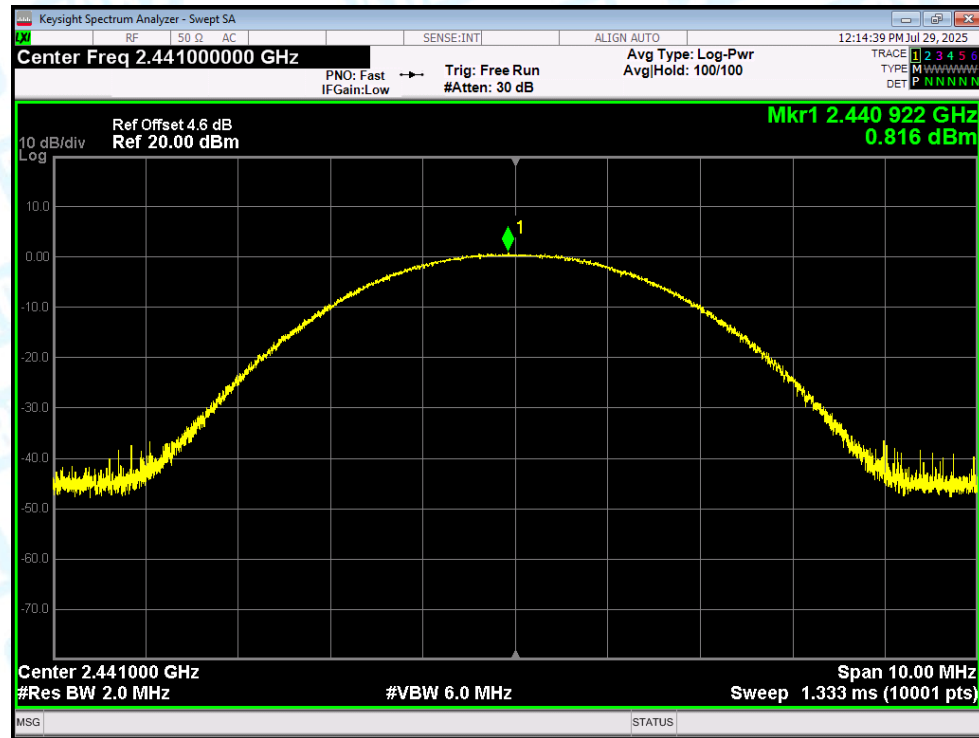
Power NVNT 1-DH5 2441MHz Ant1



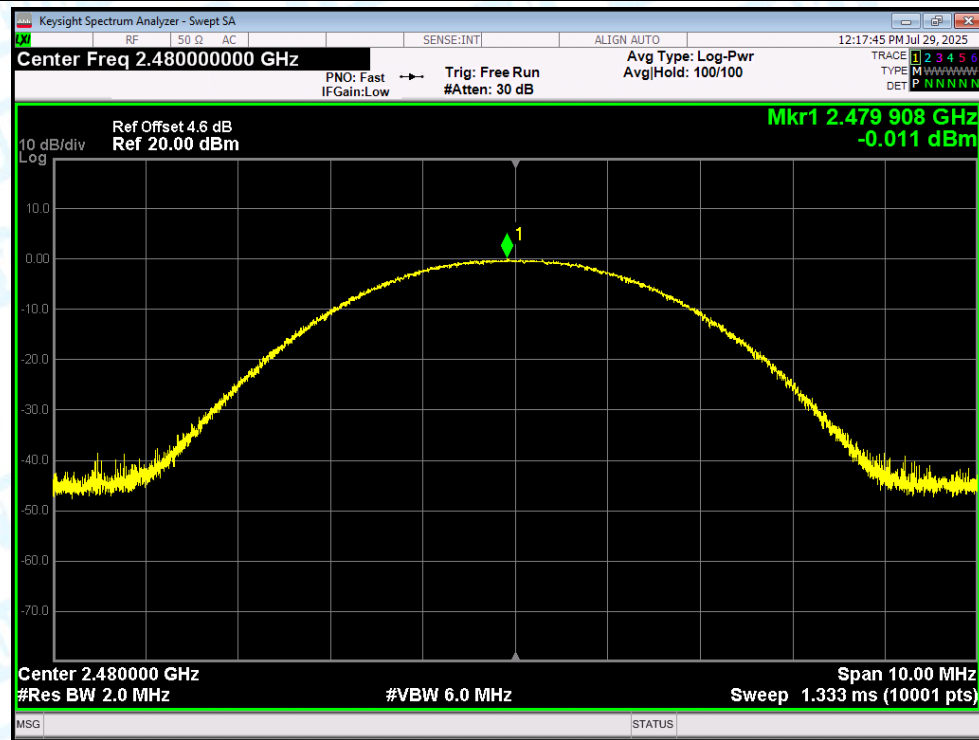
Power NVNT 2-DH1 2402MHz Ant1



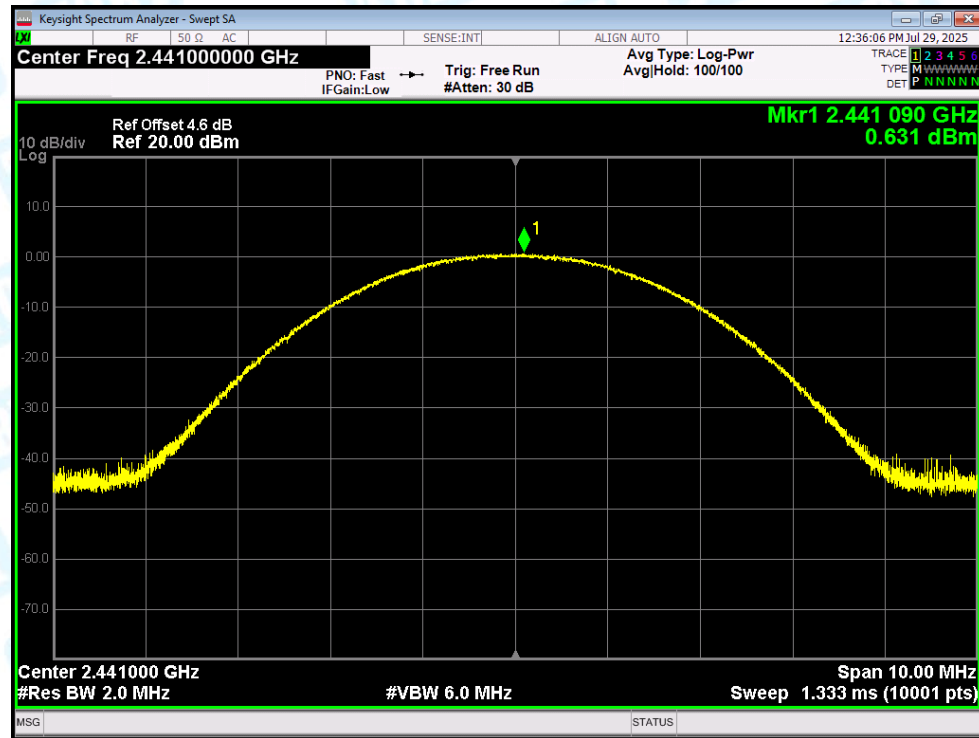
Power NVNT 2-DH1 2441MHz Ant1



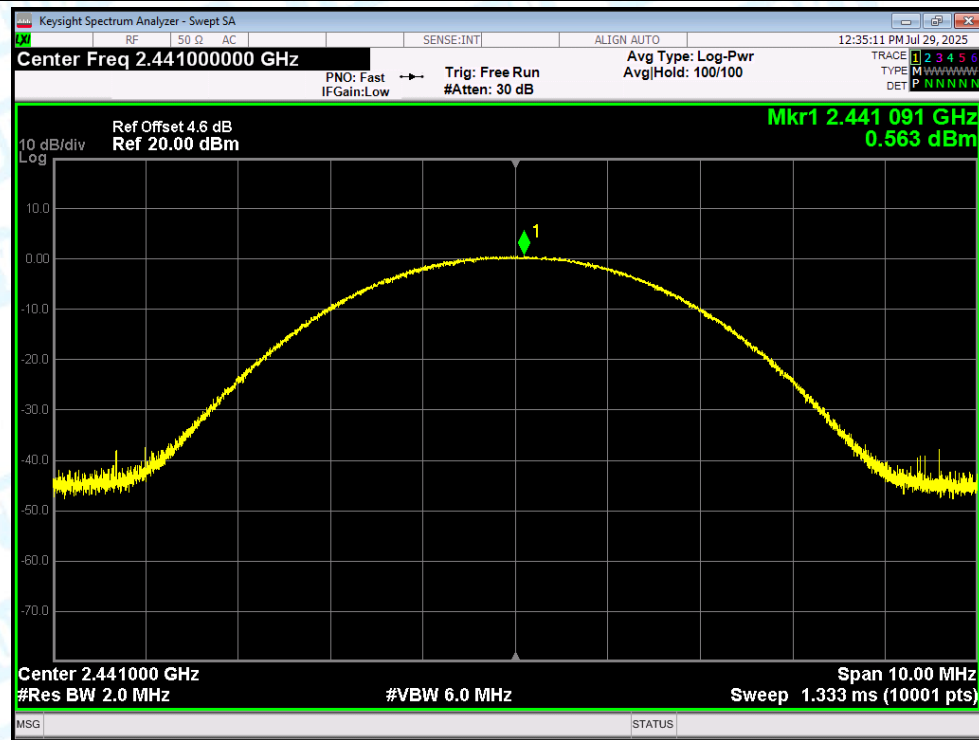
Power NVNT 2-DH1 2480MHz Ant1



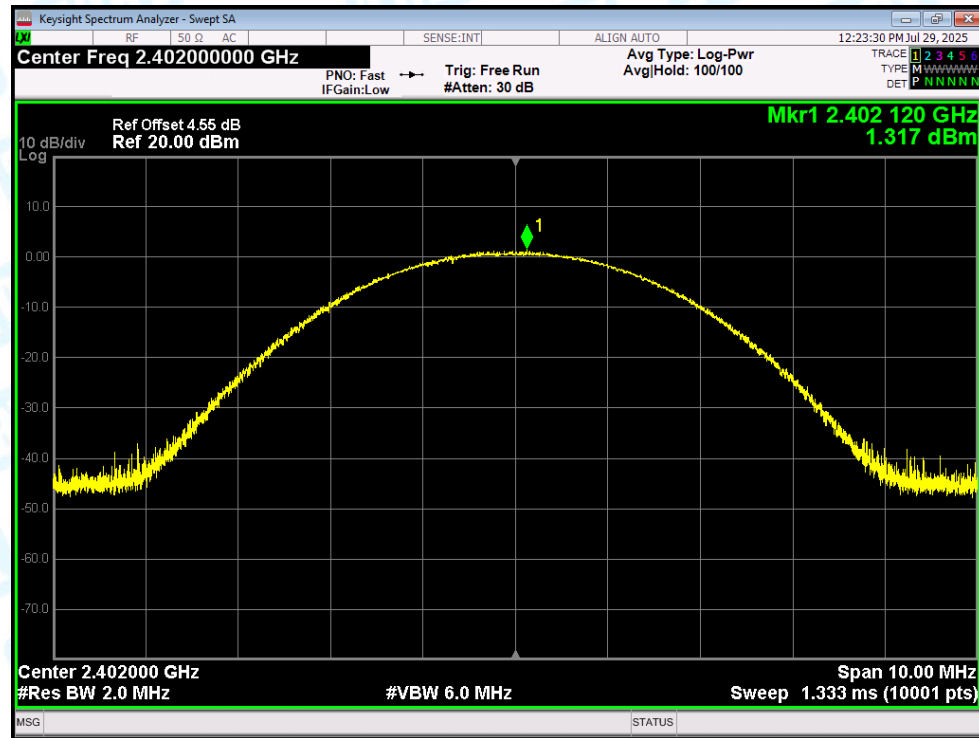
Power NVNT 2-DH3 2441MHz Ant1



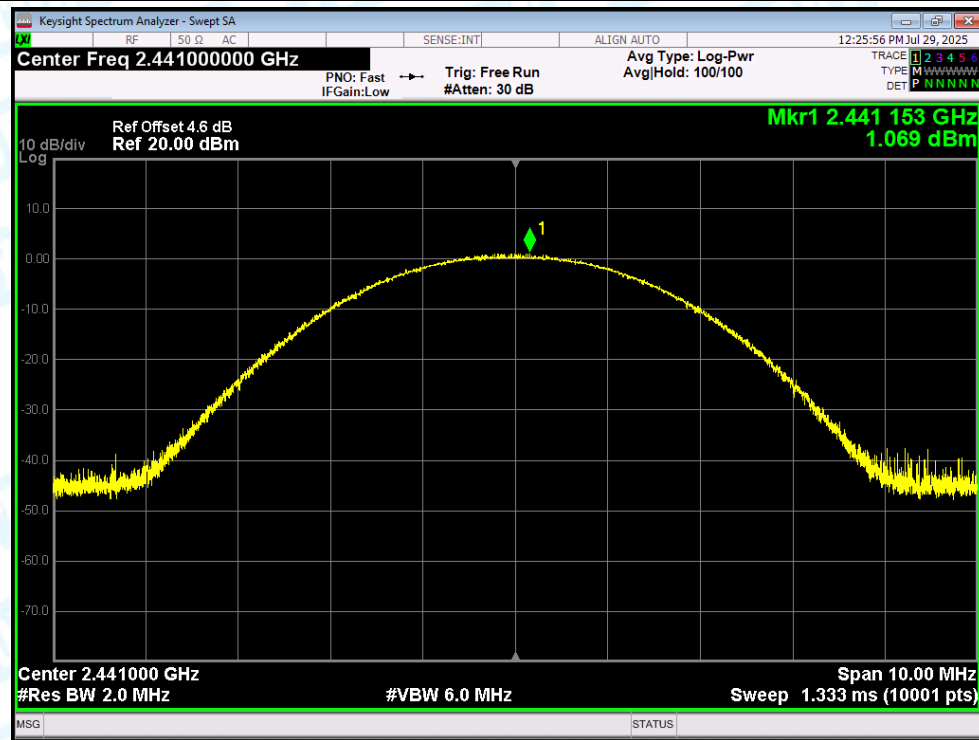
Power NVNT 2-DH5 2441MHz Ant1



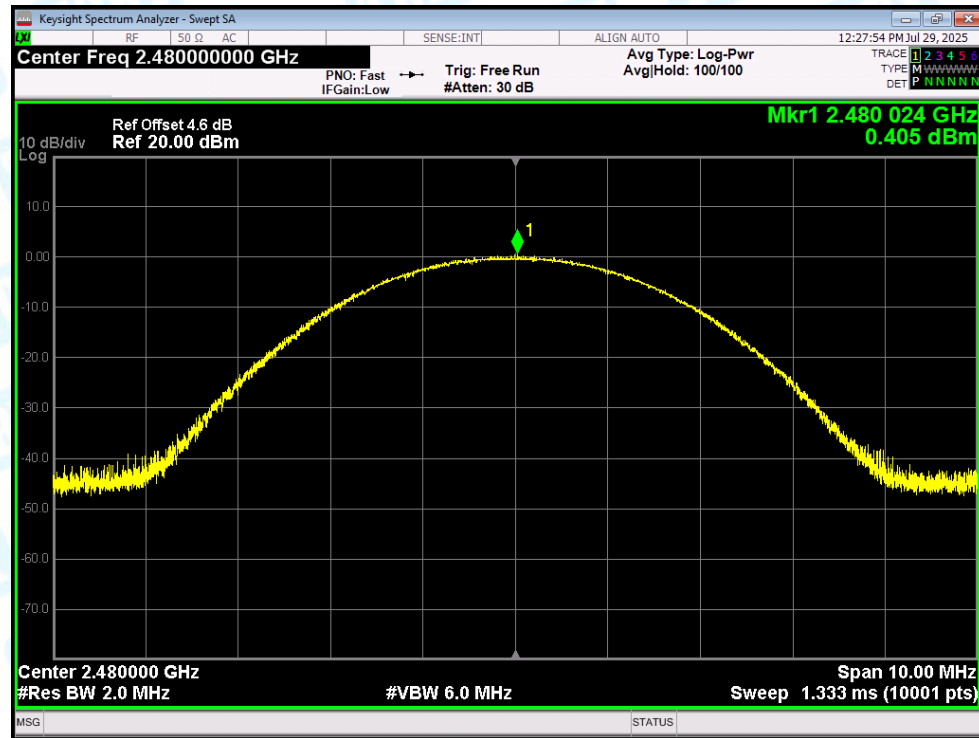
Power NVNT 3-DH1 2402MHz Ant1



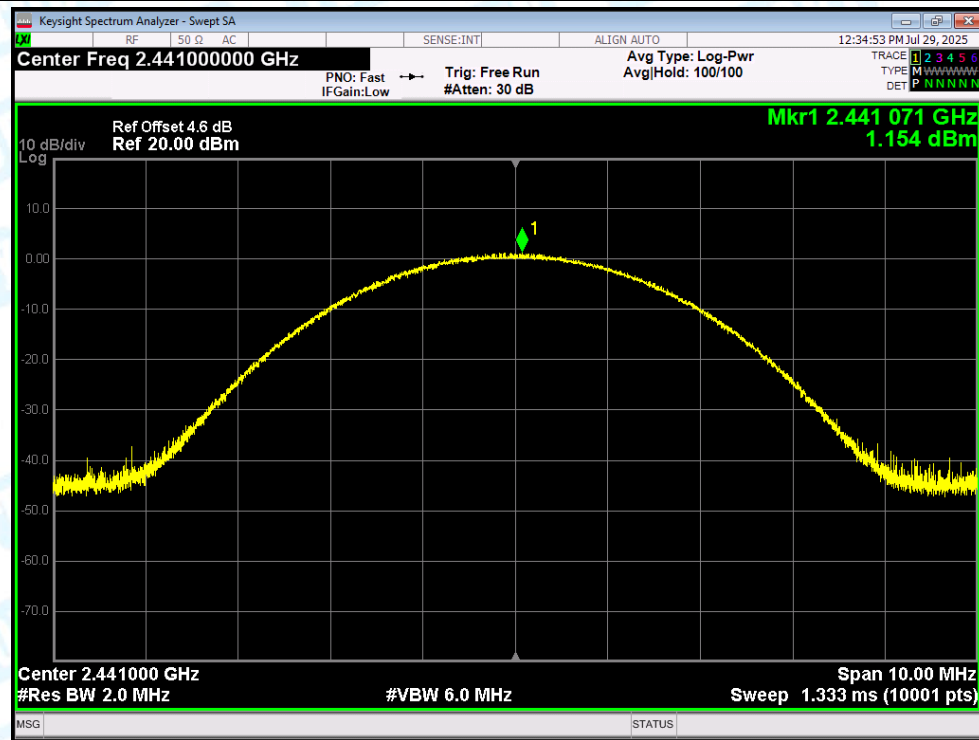
Power NVNT 3-DH1 2441MHz Ant1

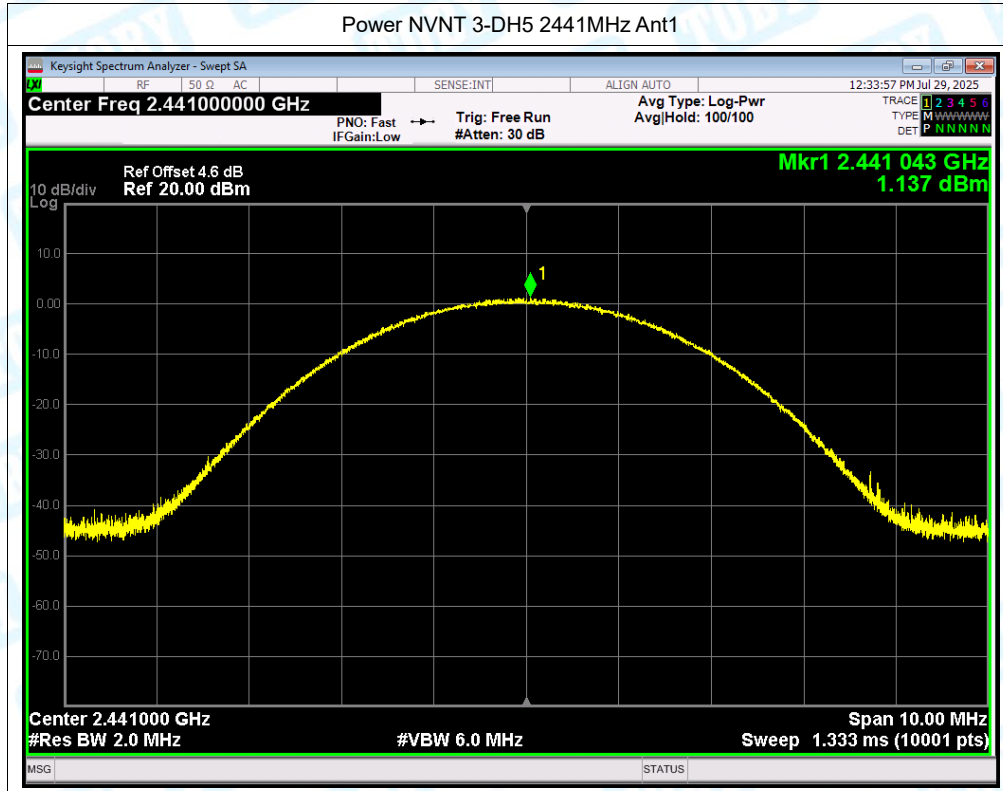


Power NVNT 3-DH1 2480MHz Ant1



Power NVNT 3-DH3 2441MHz Ant1





3. -20dB Bandwidth

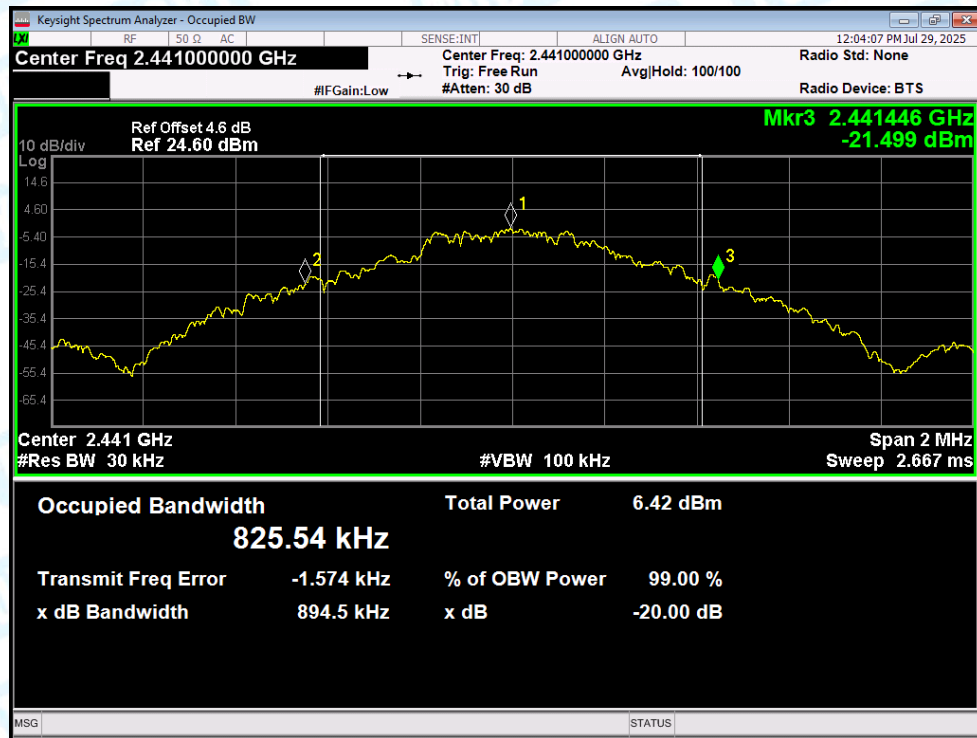
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.91	Pass
NVNT	1-DH1	2441	Ant1	0.89	Pass
NVNT	1-DH1	2480	Ant1	0.9	Pass
NVNT	2-DH1	2402	Ant1	1.22	Pass
NVNT	2-DH1	2441	Ant1	1.2	Pass
NVNT	2-DH1	2480	Ant1	1.22	Pass
NVNT	3-DH1	2402	Ant1	1.21	Pass
NVNT	3-DH1	2441	Ant1	1.21	Pass
NVNT	3-DH1	2480	Ant1	1.21	Pass

Test Graphs

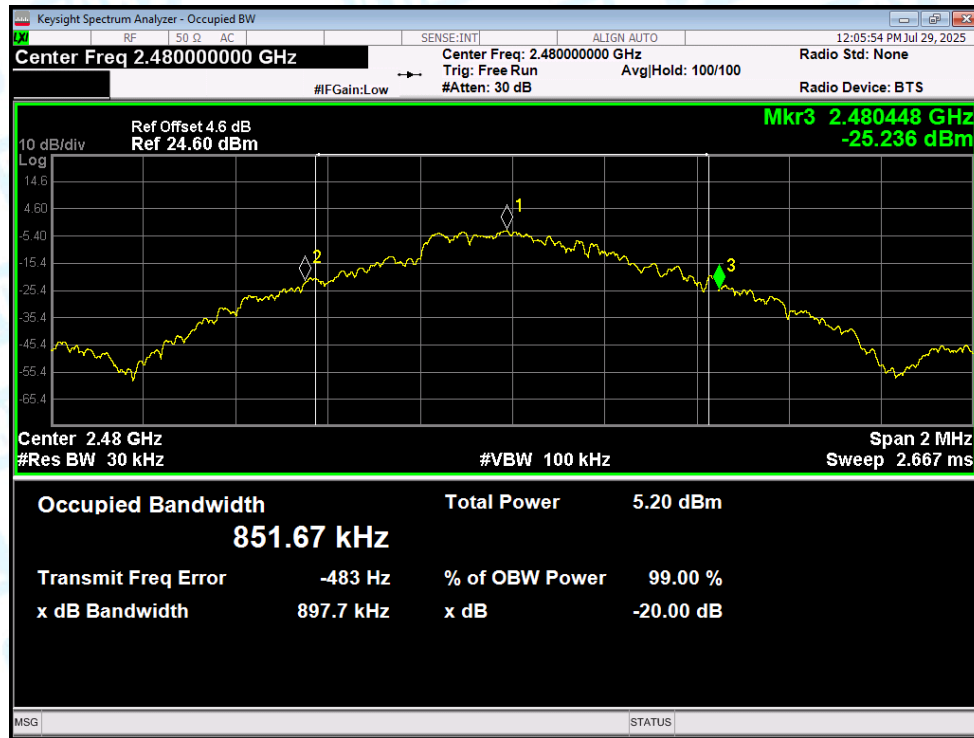
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



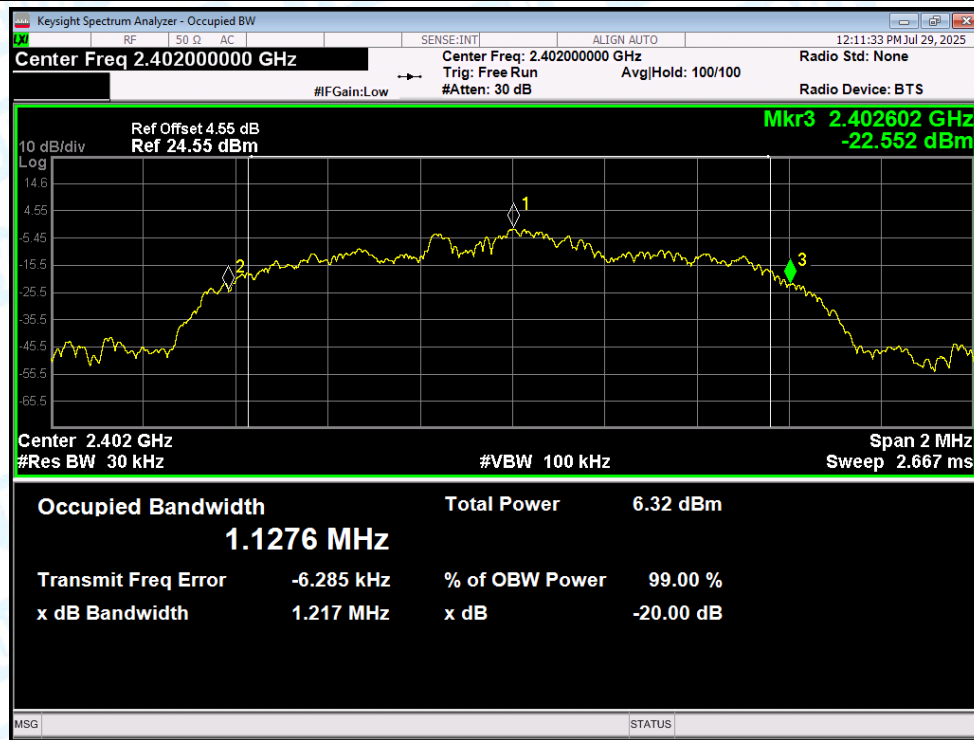
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



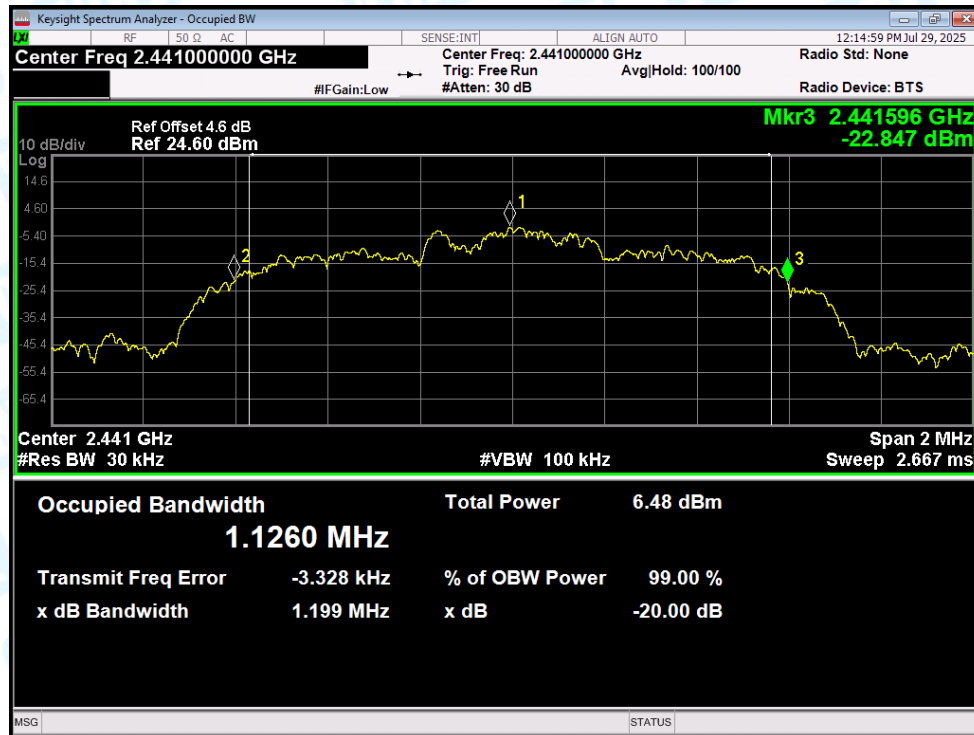
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



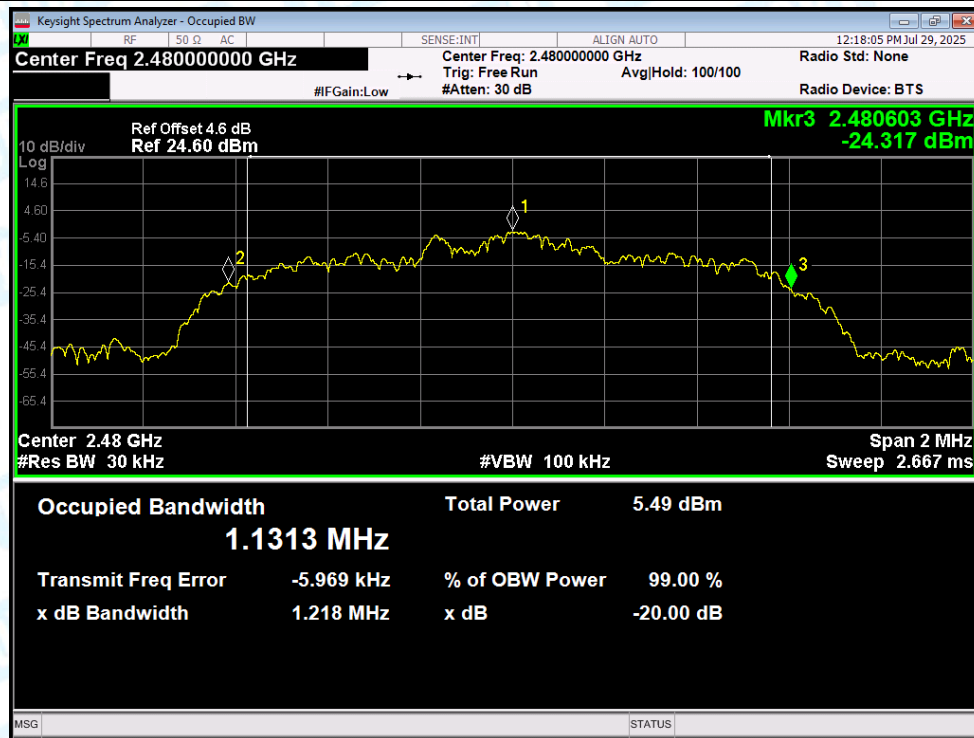
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



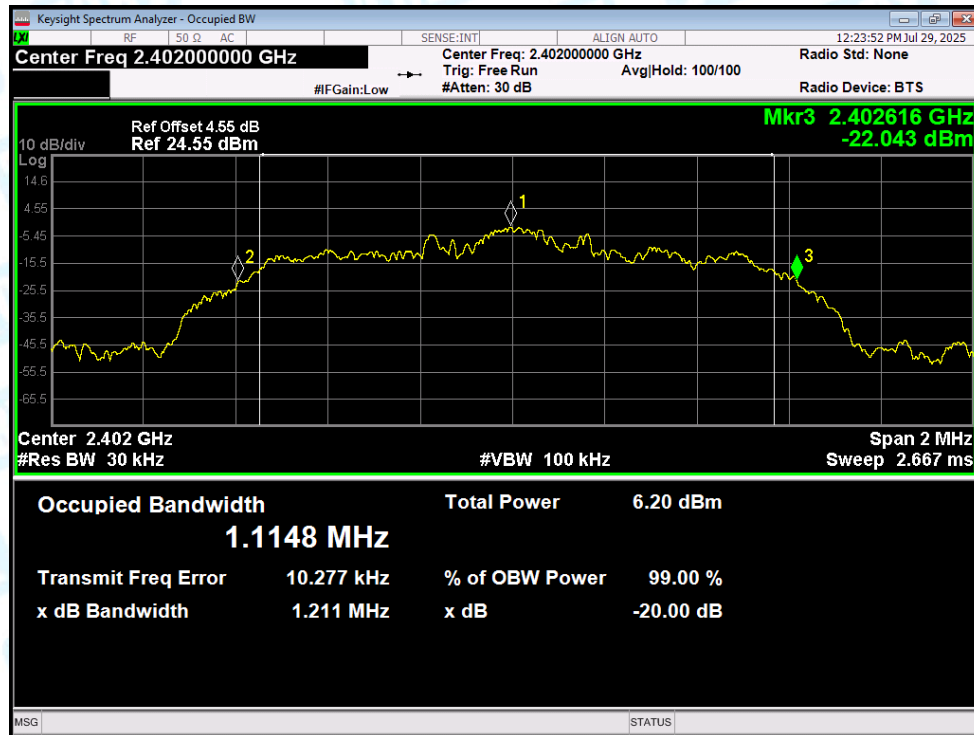
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



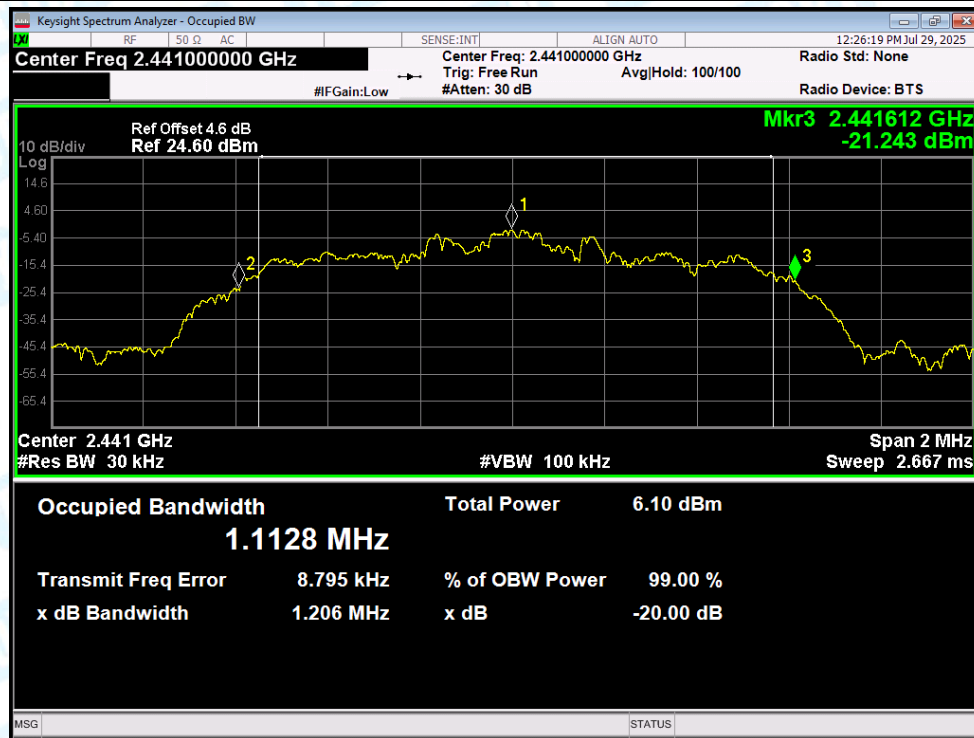
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

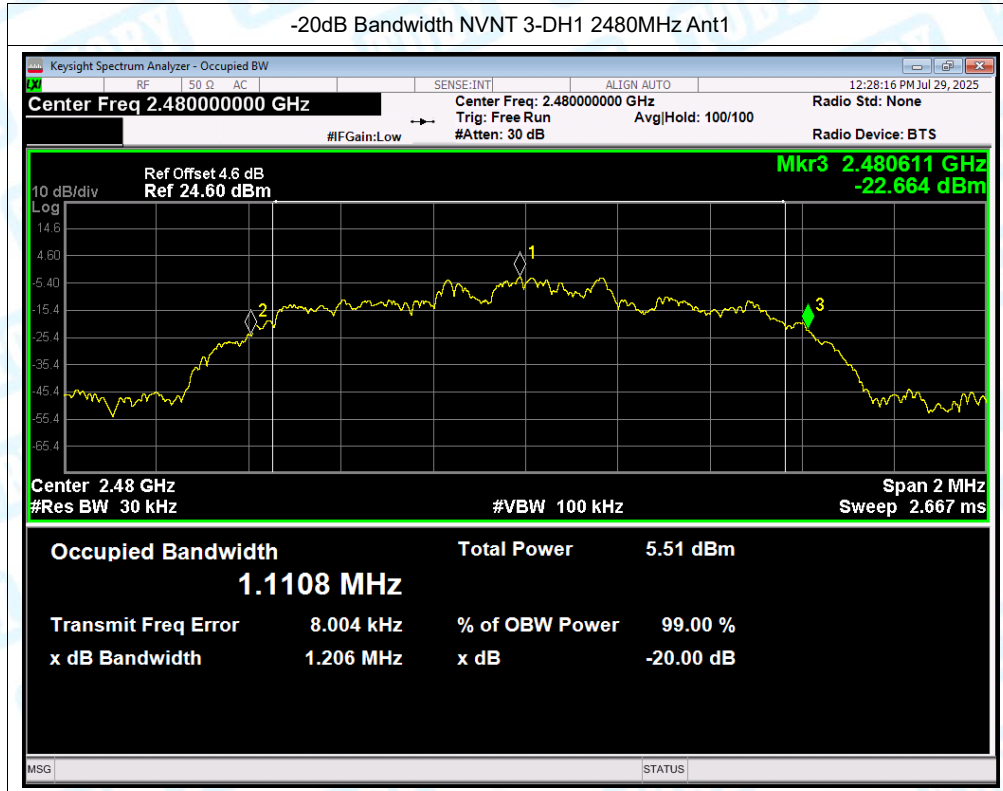


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



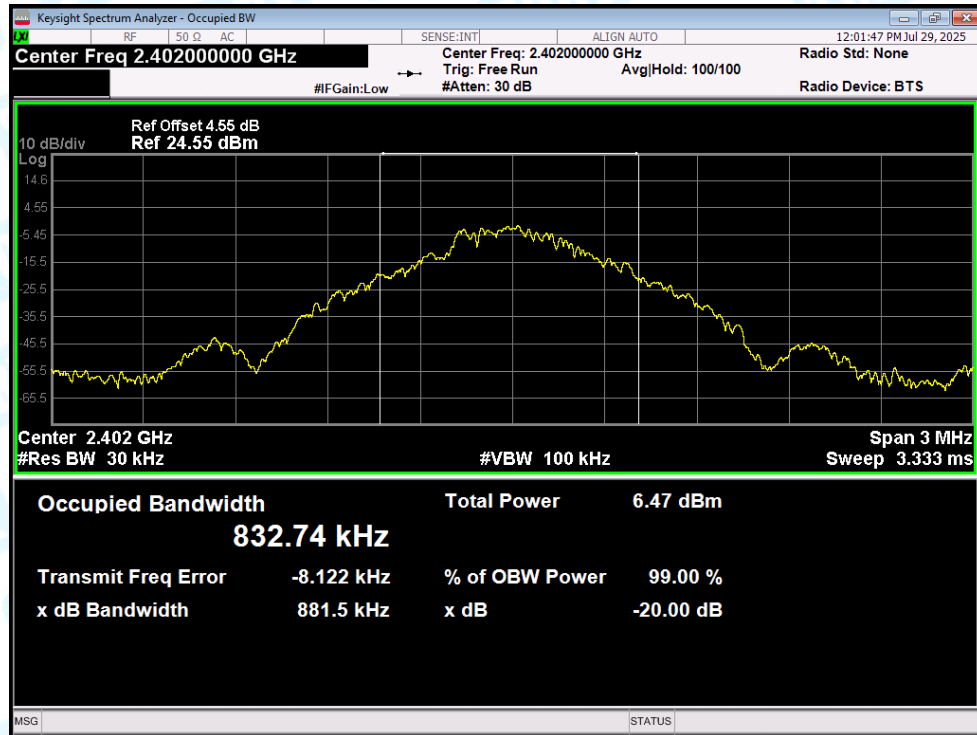


4. Occupied Channel Bandwidth

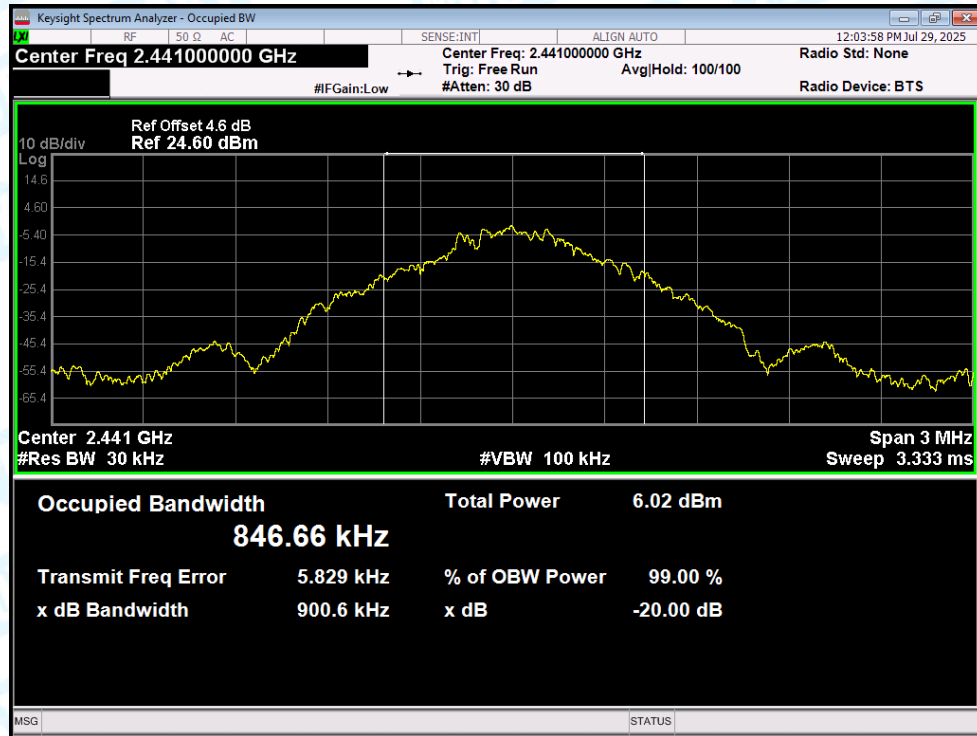
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.833
NVNT	1-DH1	2441	Ant1	0.847
NVNT	1-DH1	2480	Ant1	0.82
NVNT	2-DH1	2402	Ant1	1.142
NVNT	2-DH1	2441	Ant1	1.142
NVNT	2-DH1	2480	Ant1	1.135
NVNT	3-DH1	2402	Ant1	1.089
NVNT	3-DH1	2441	Ant1	1.122
NVNT	3-DH1	2480	Ant1	1.107

Test Graphs

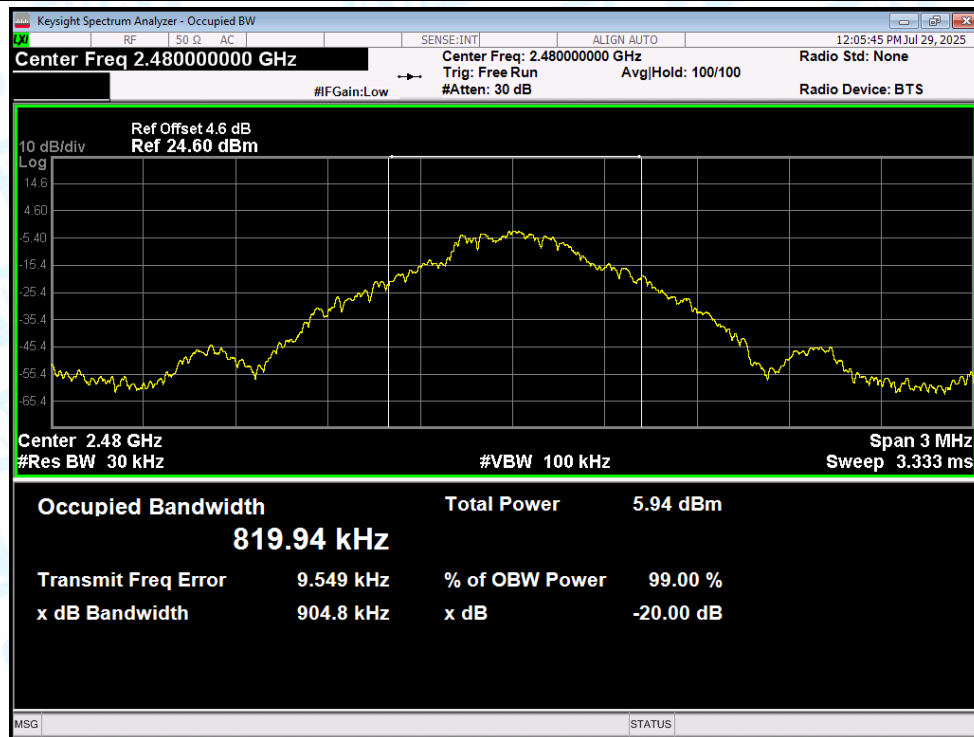
OBW NVNT 1-DH1 2402MHz Ant1



OBW NVNT 1-DH1 2441MHz Ant1



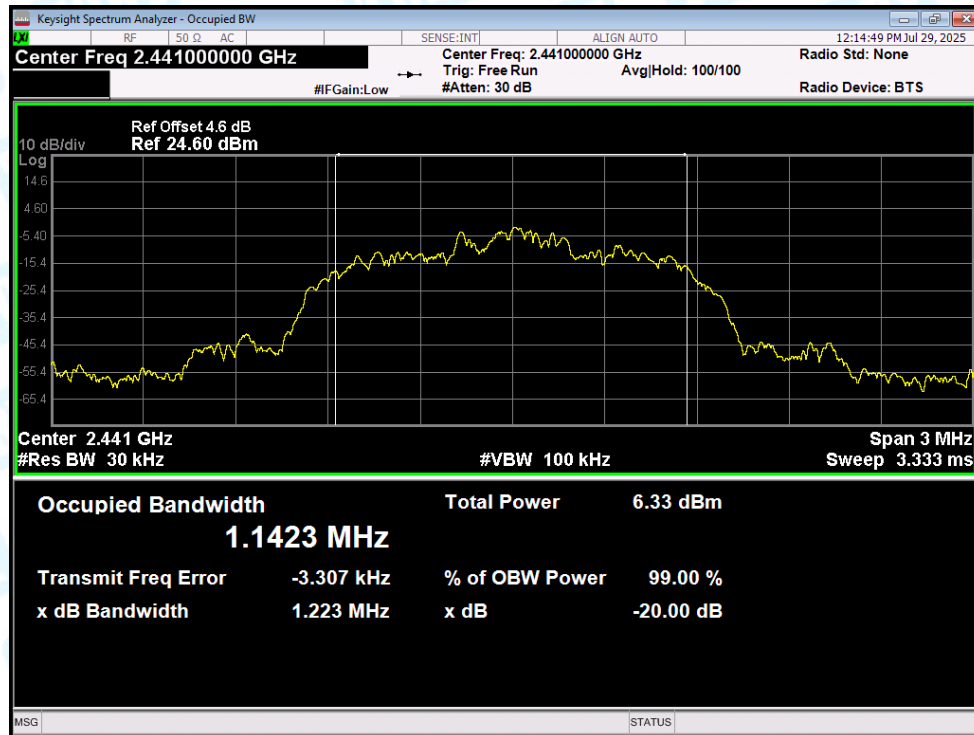
OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1



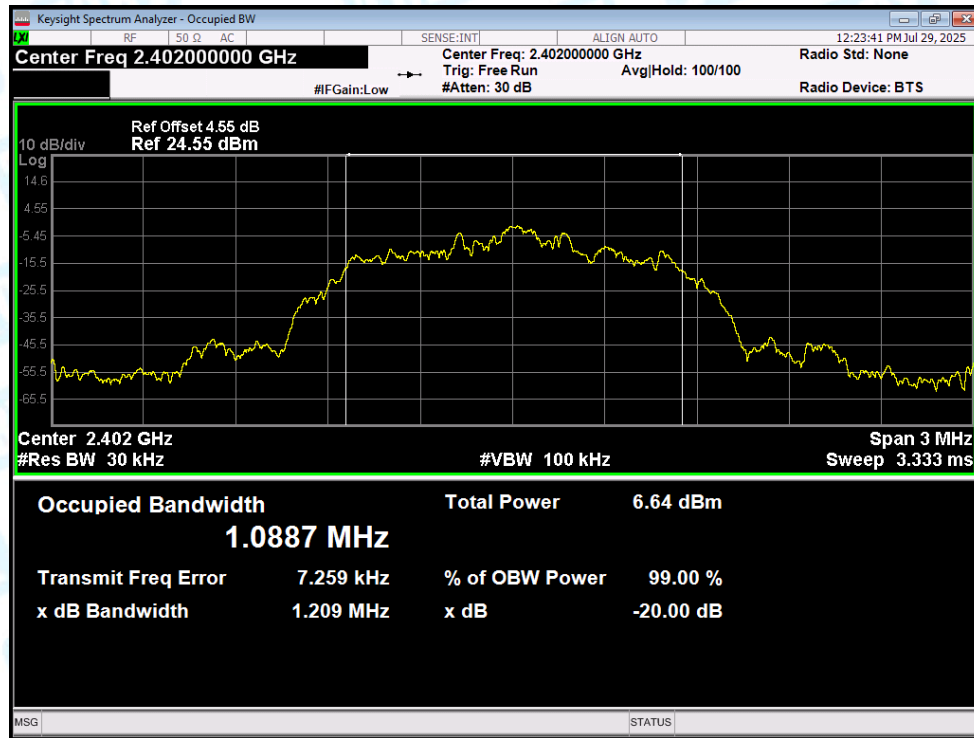
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

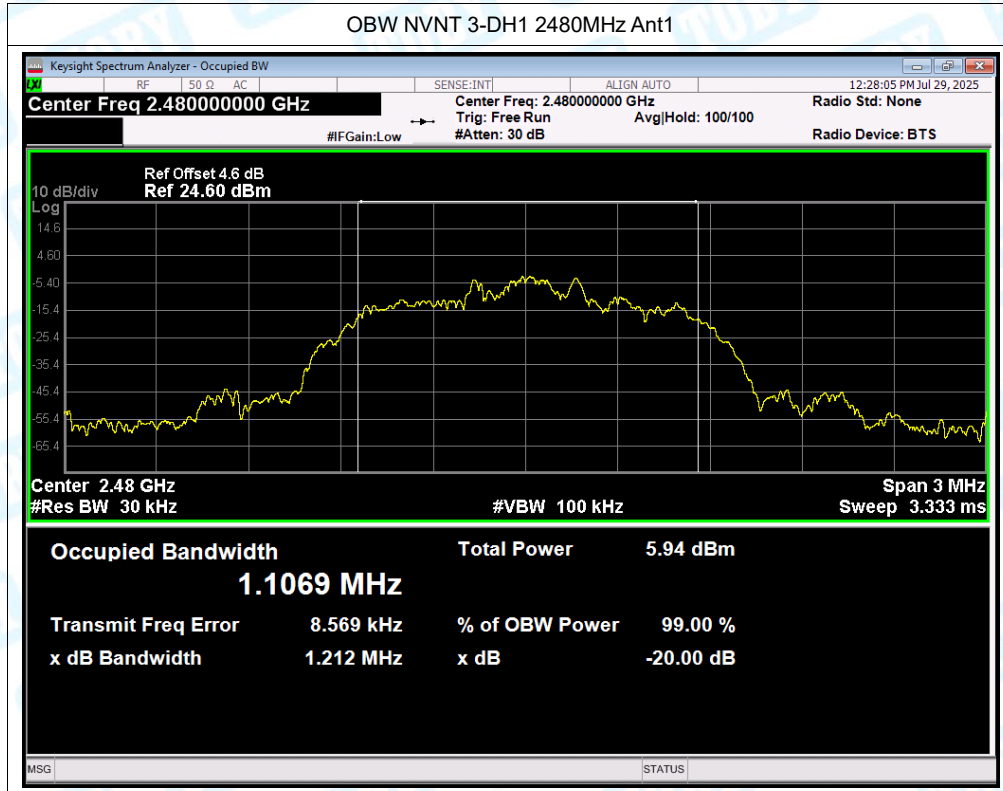


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



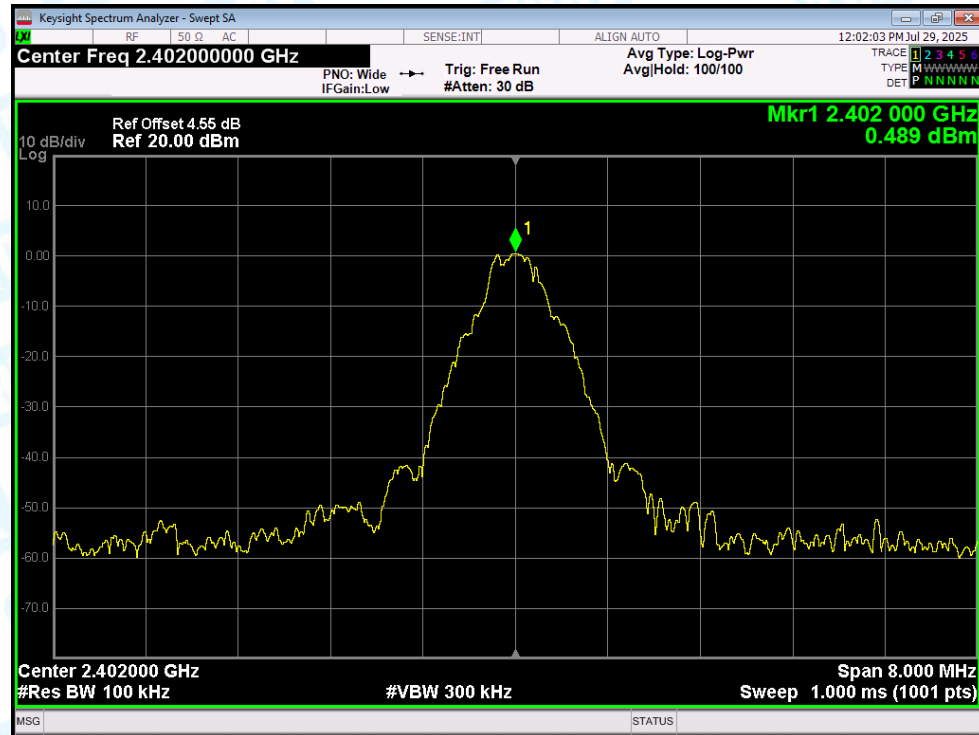


5. Band Edge

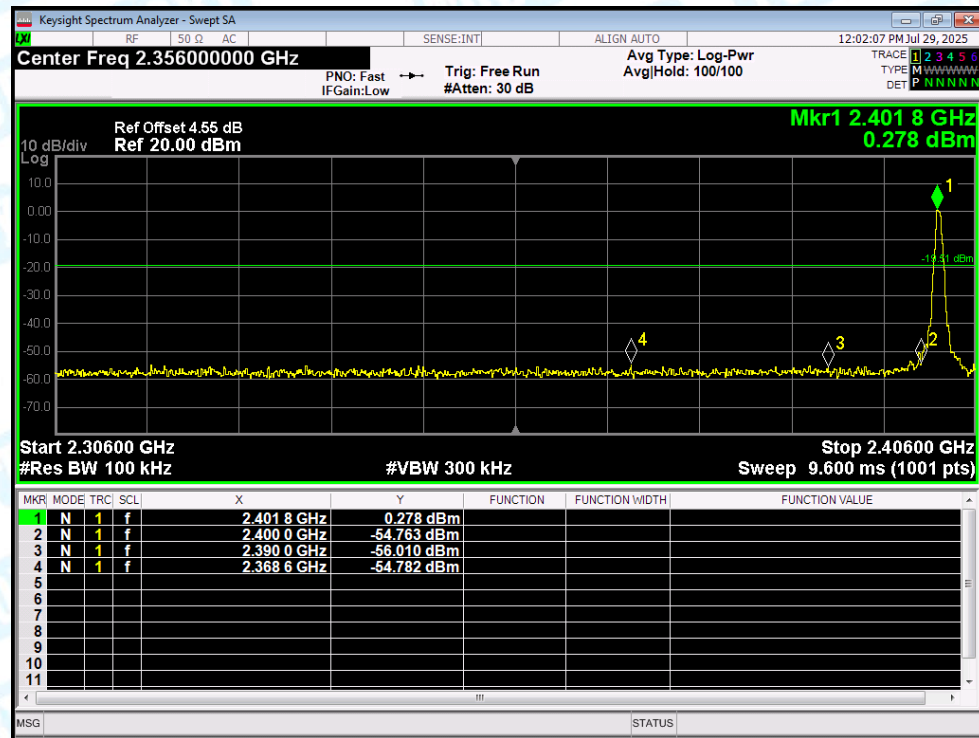
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-55.27	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-53.96	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-54.79	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-53.92	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-54.41	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-54.31	-20	Pass

Test Graphs

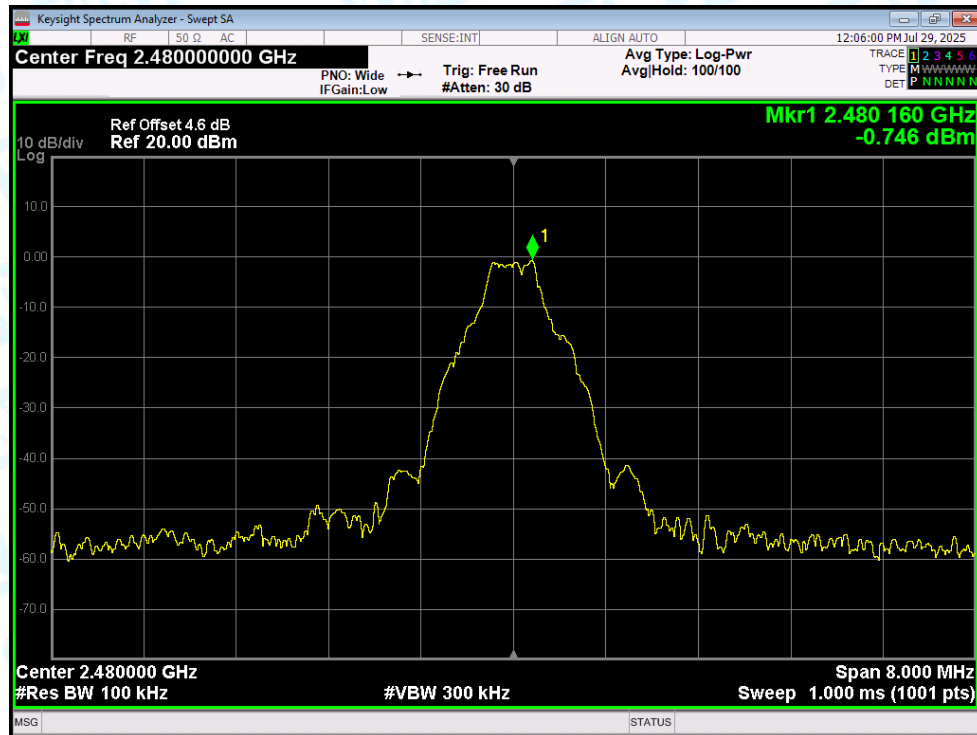
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



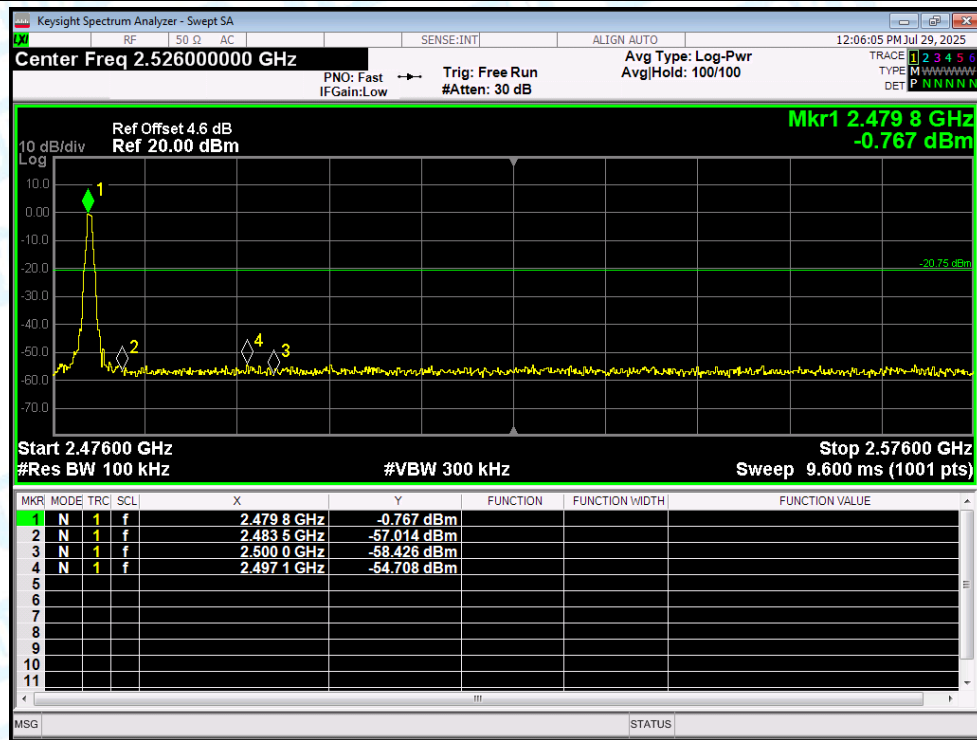
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



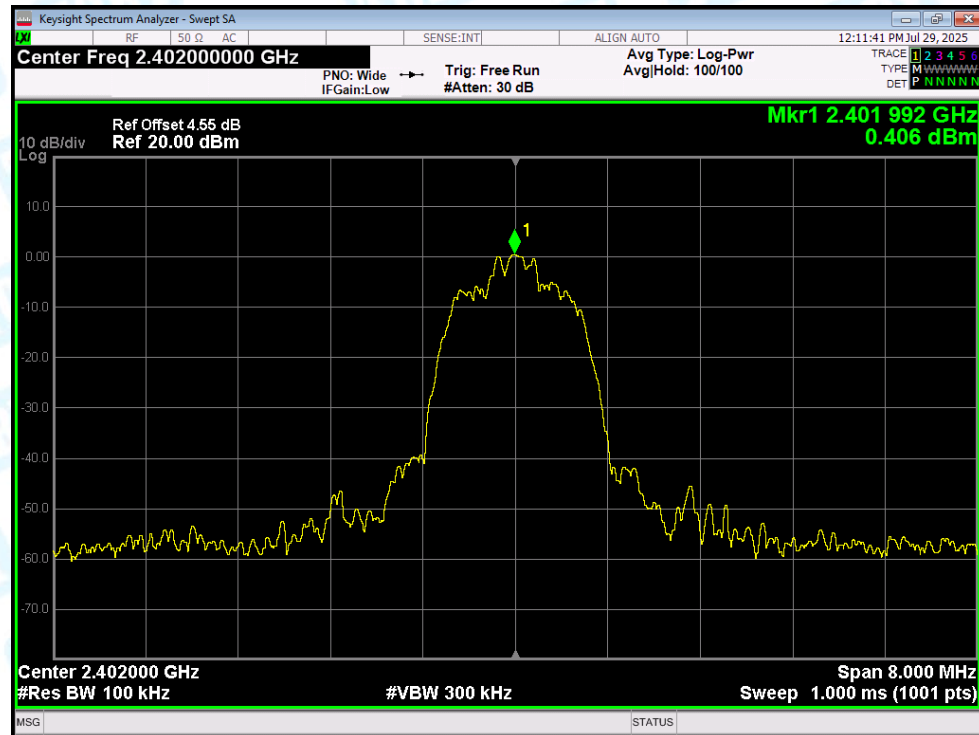
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



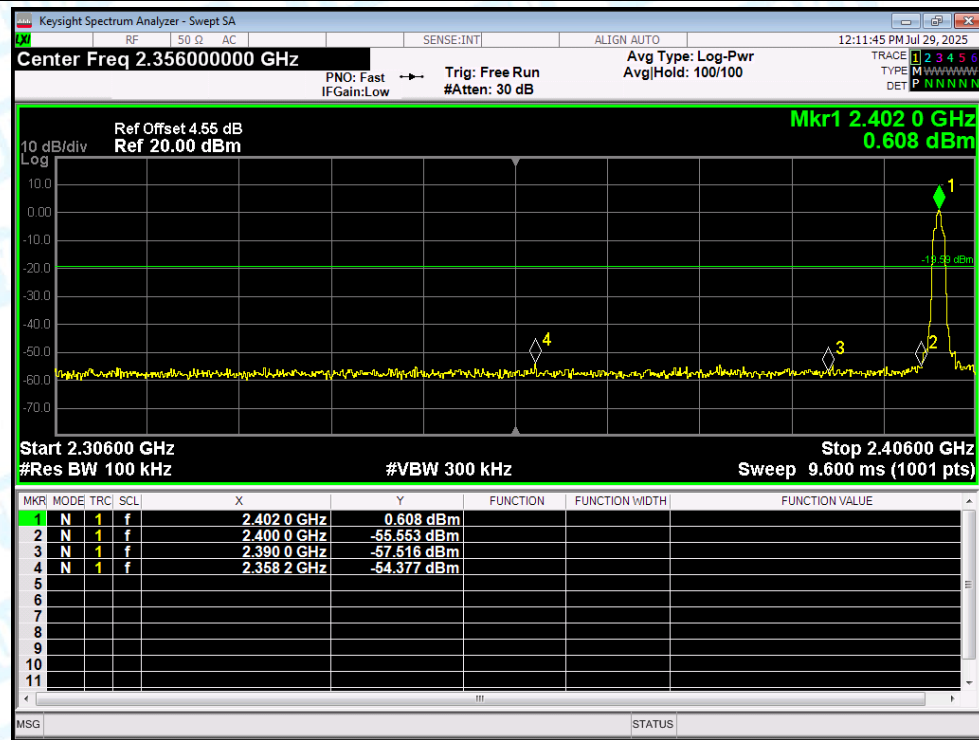
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



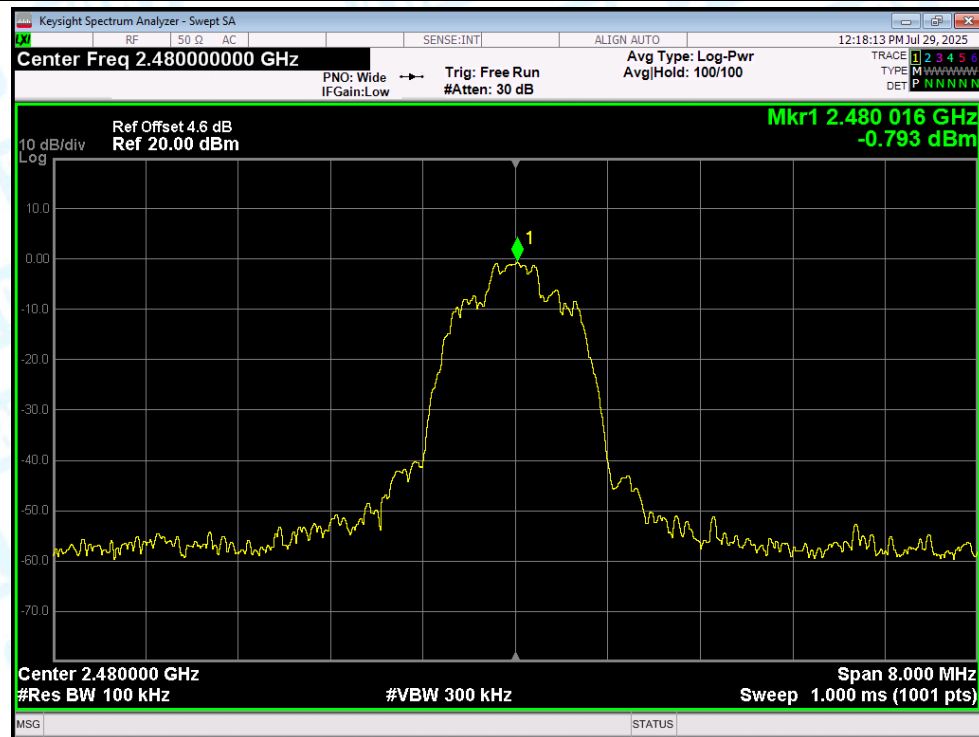
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



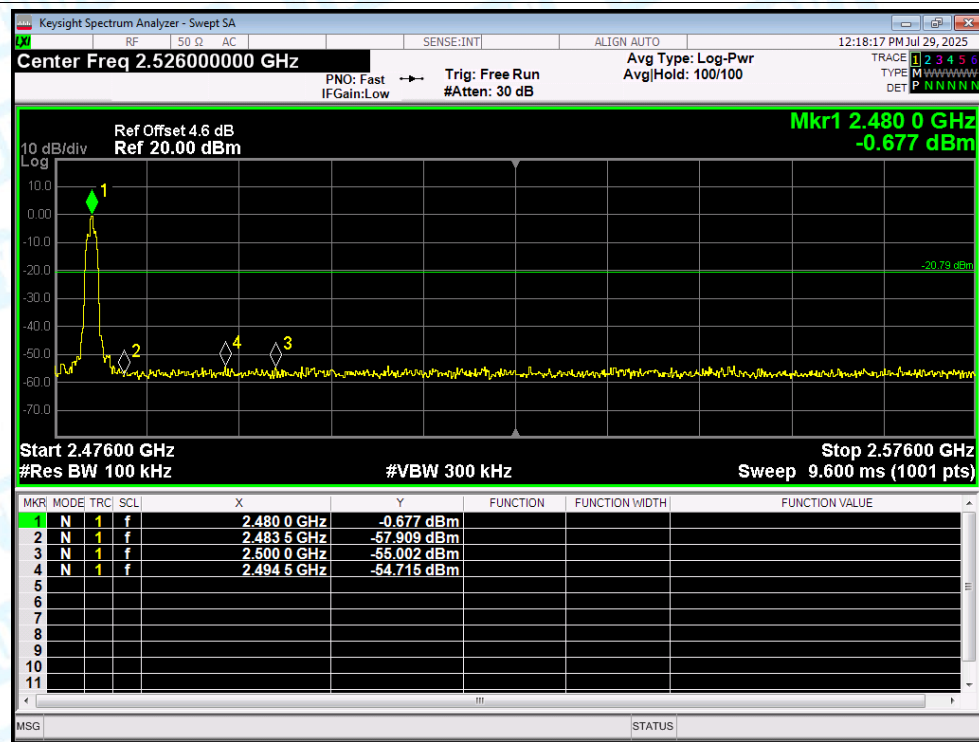
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



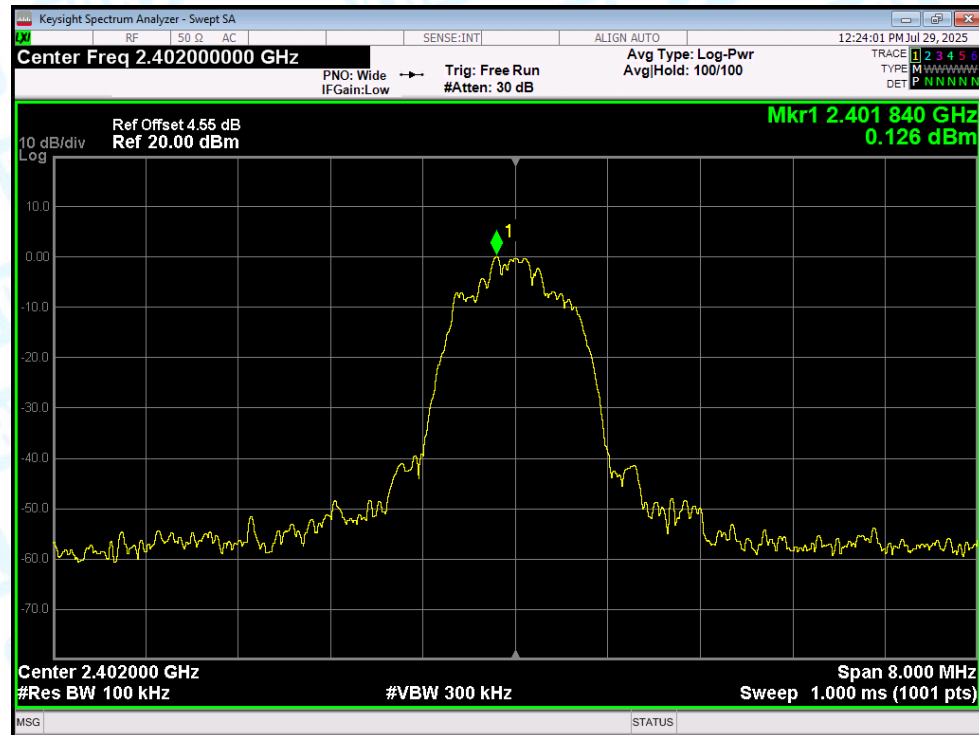
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



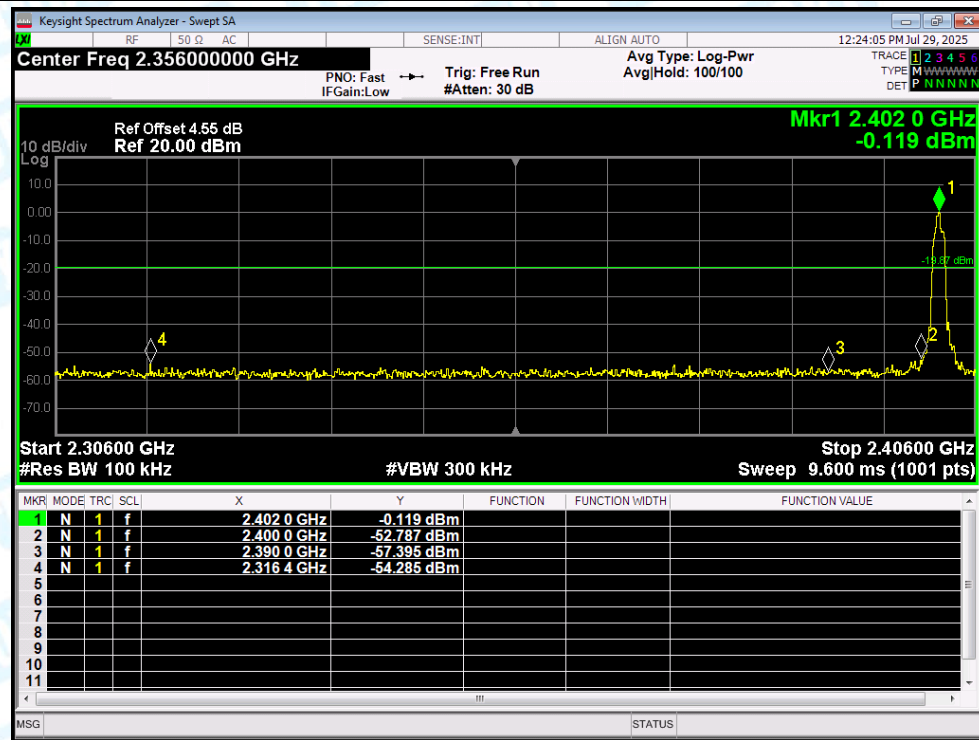
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



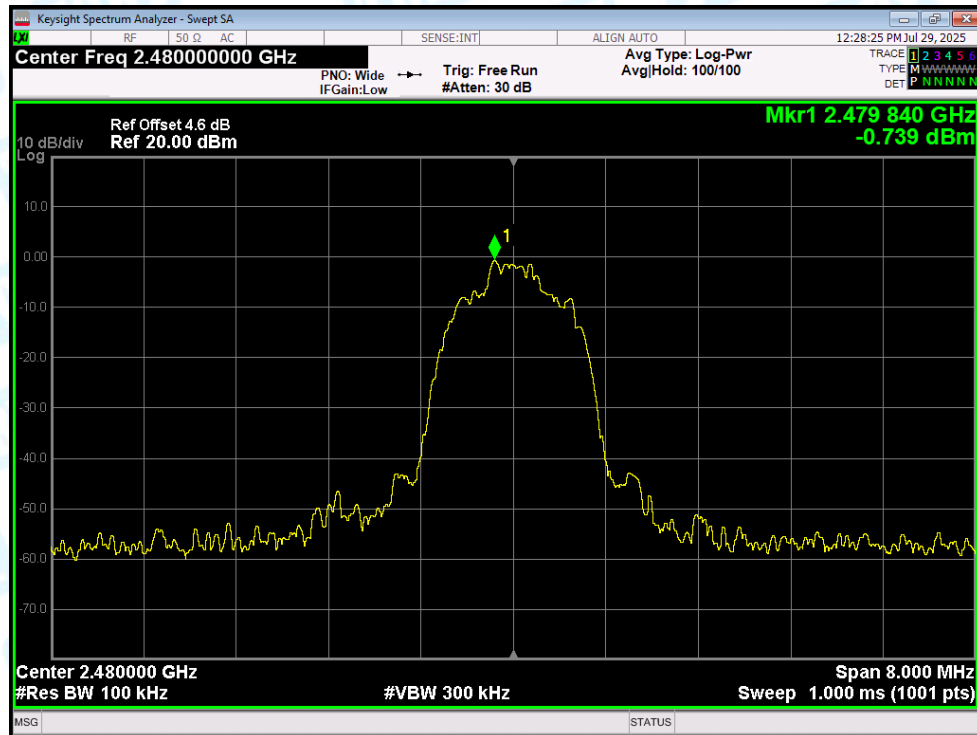
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



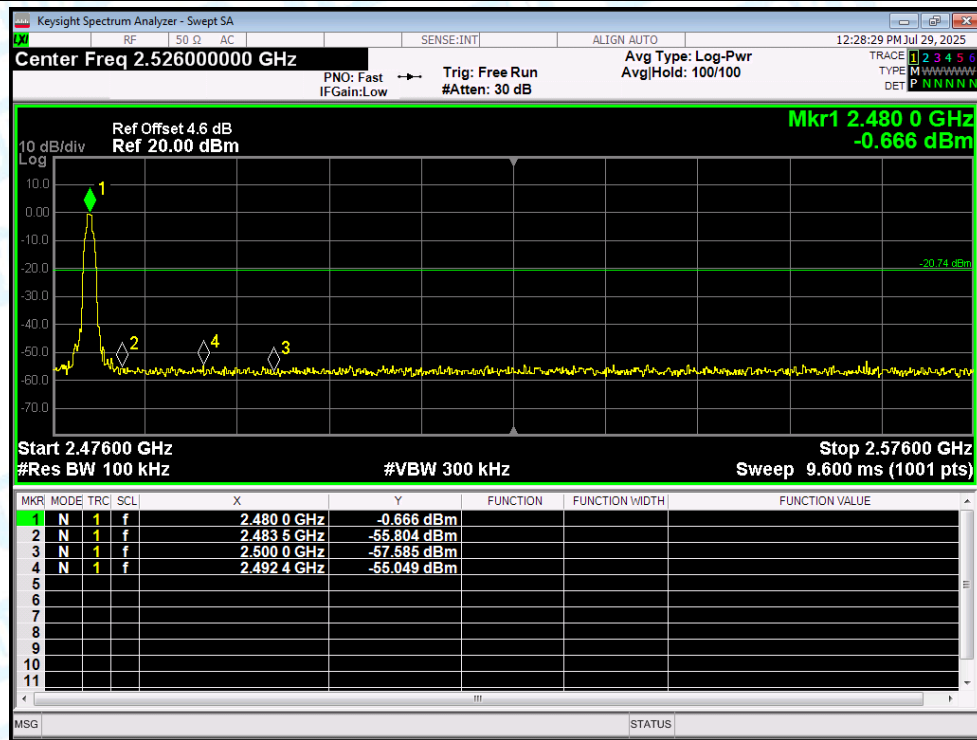
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Emission



6. Band Edge(Hopping)

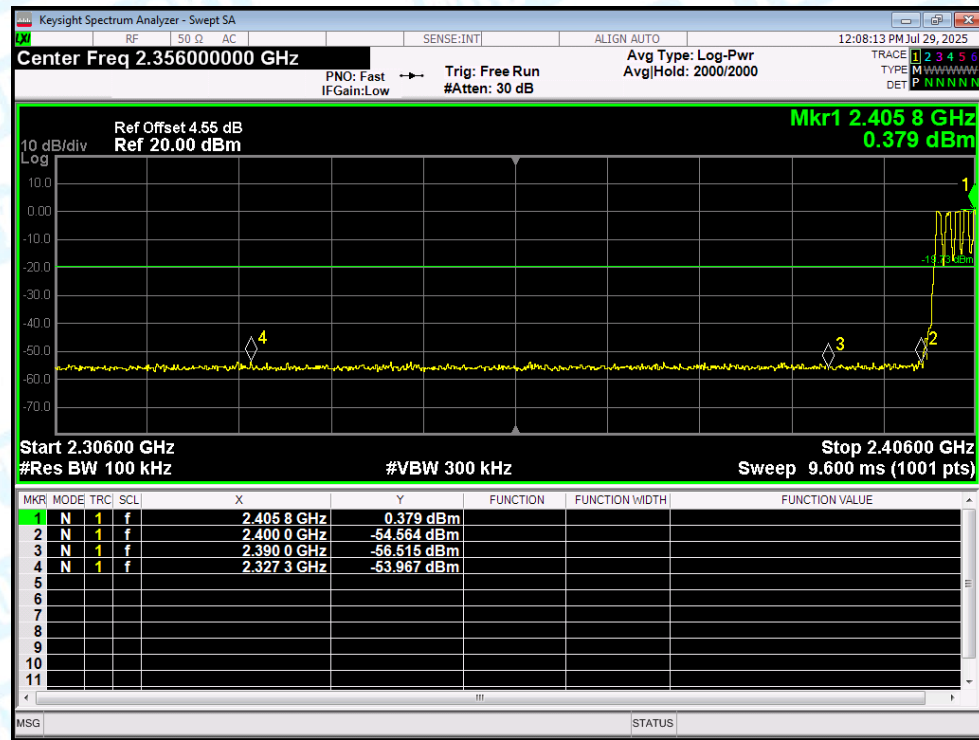
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-54.24	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-52.59	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-54.07	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-52.65	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-53.57	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-52.15	-20	Pass

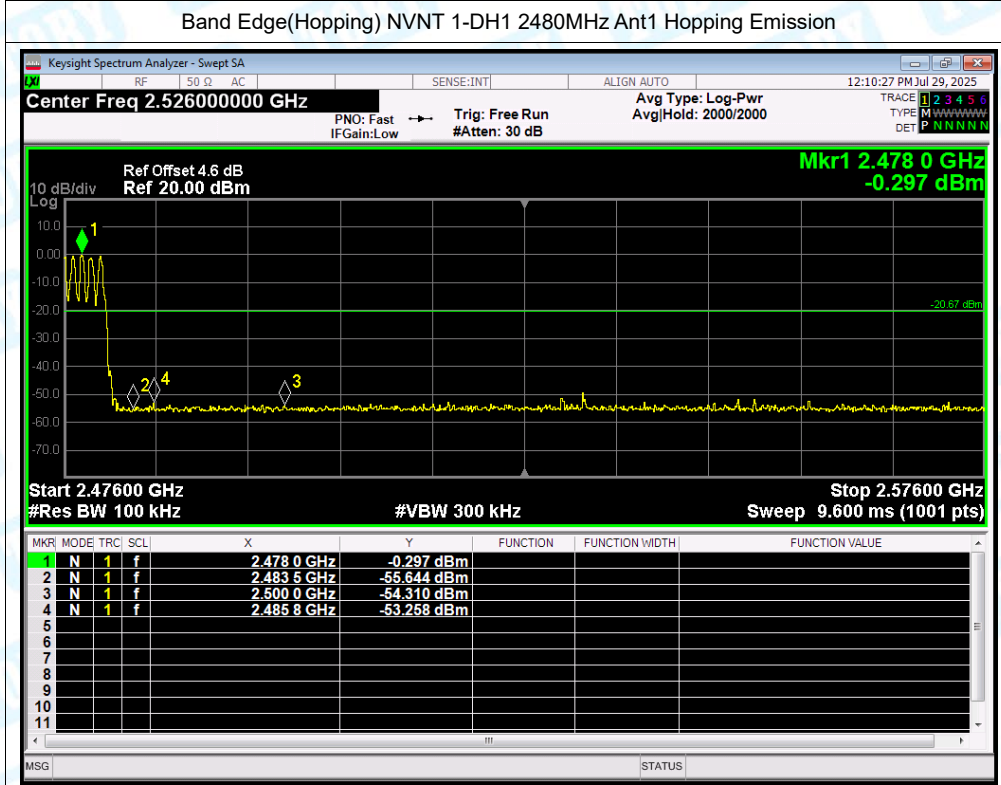
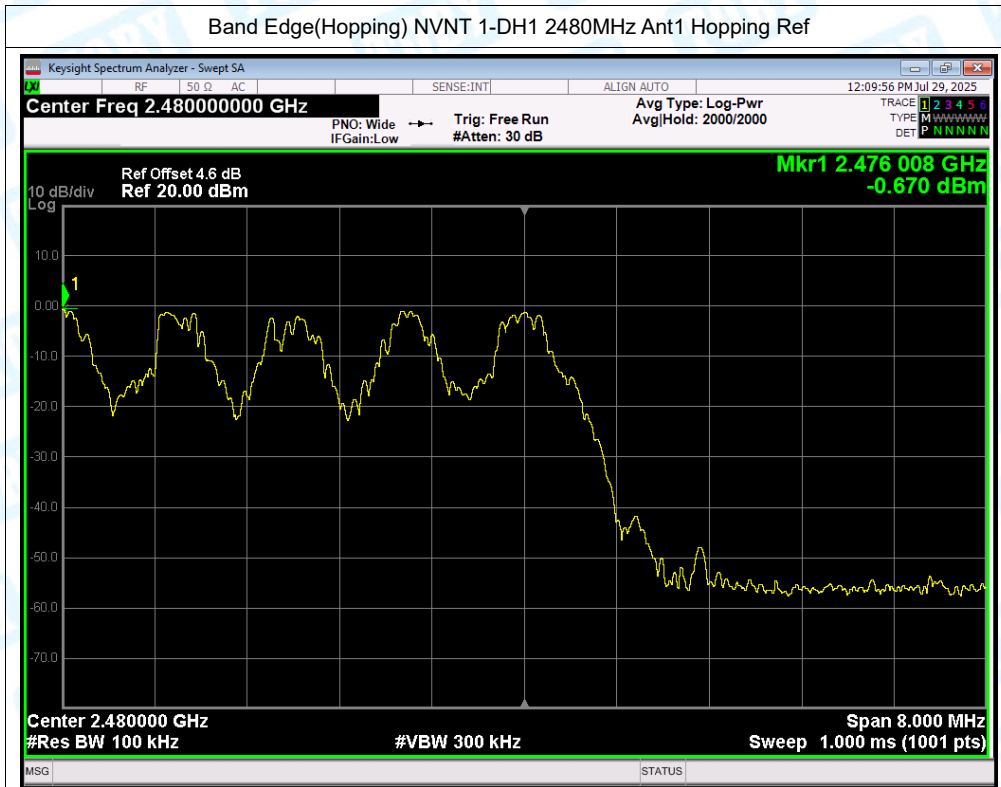
Test Graphs

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



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

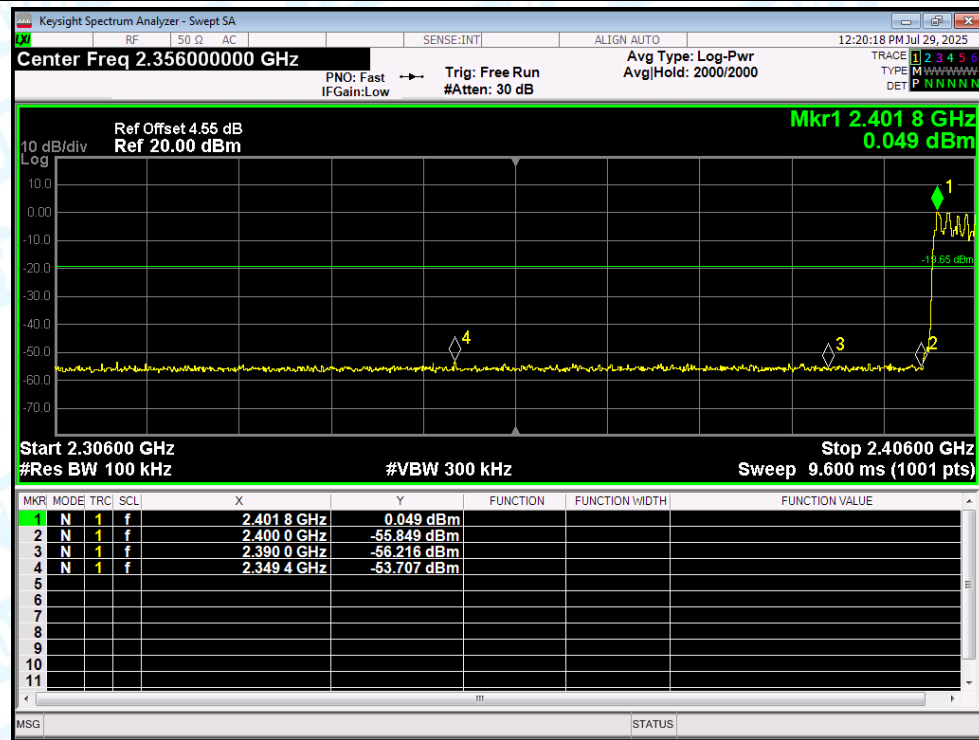


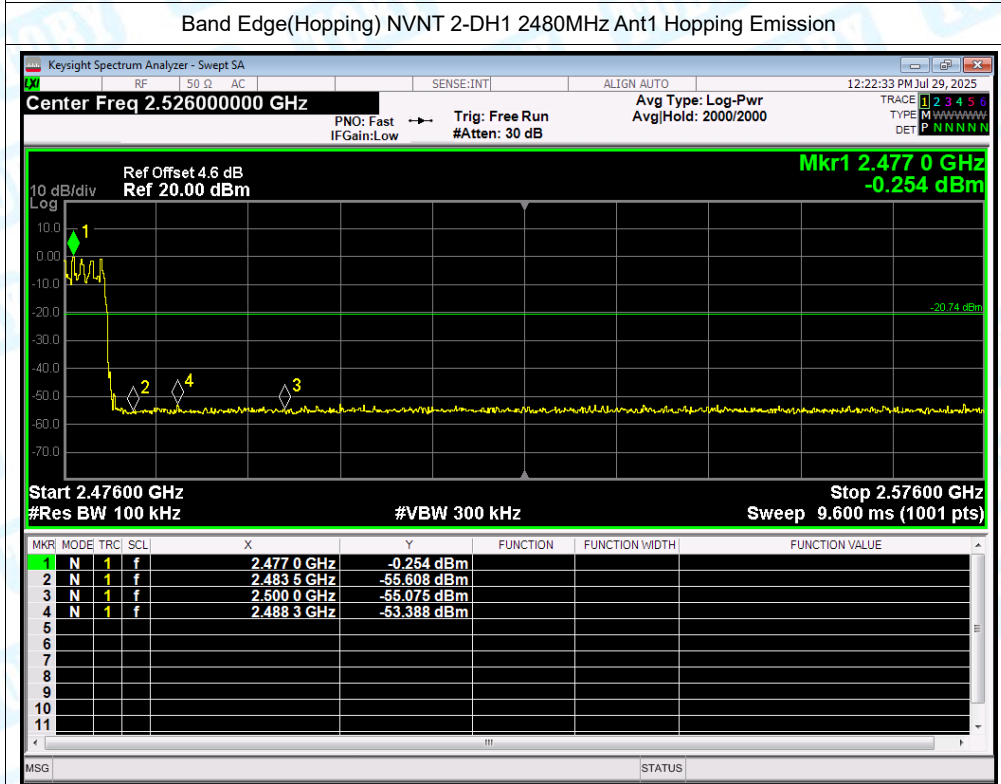
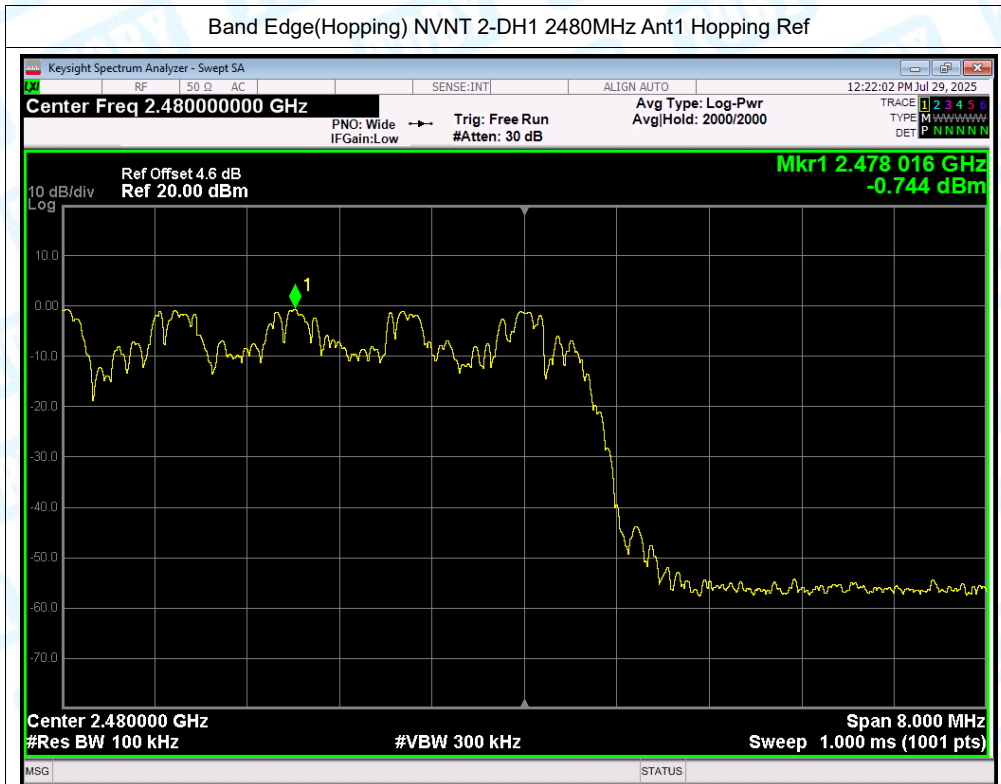


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



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

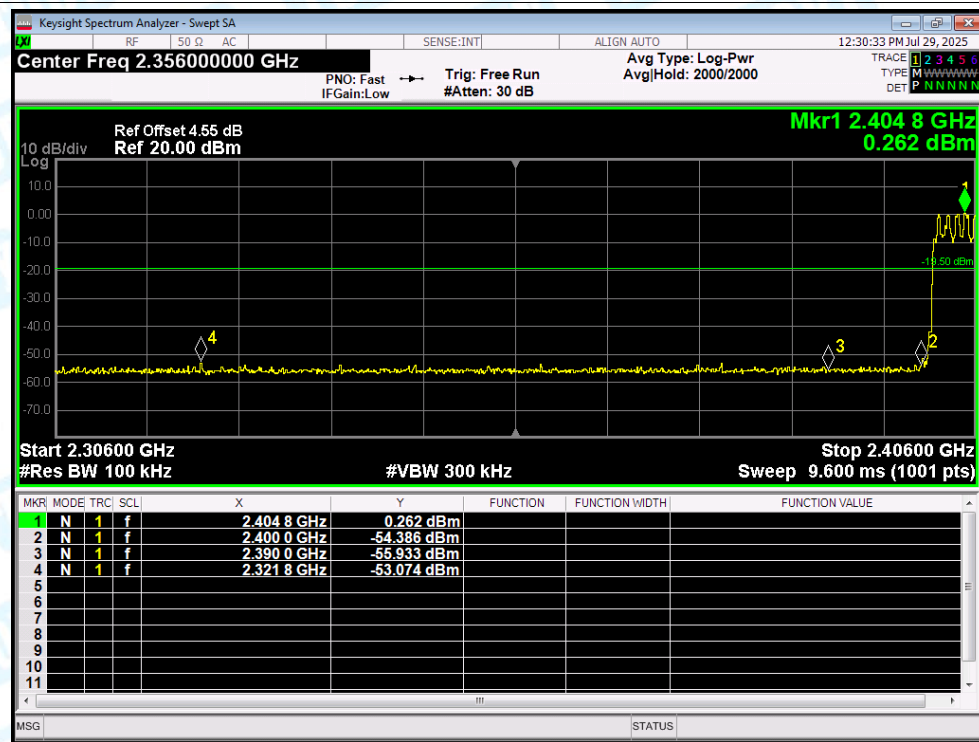


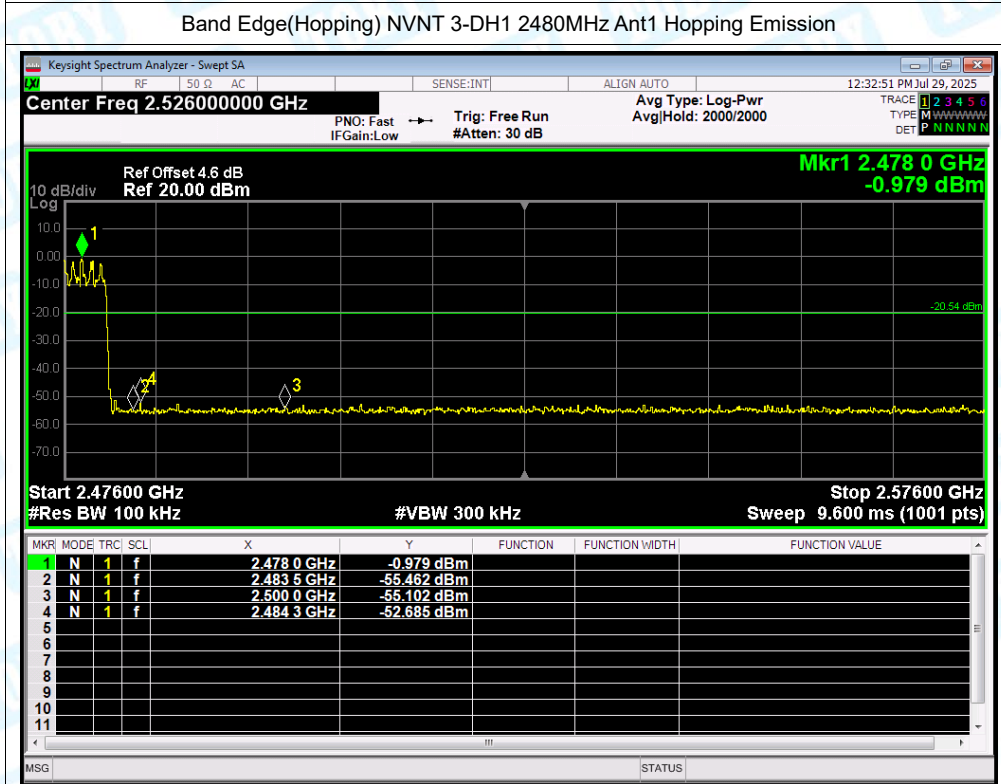
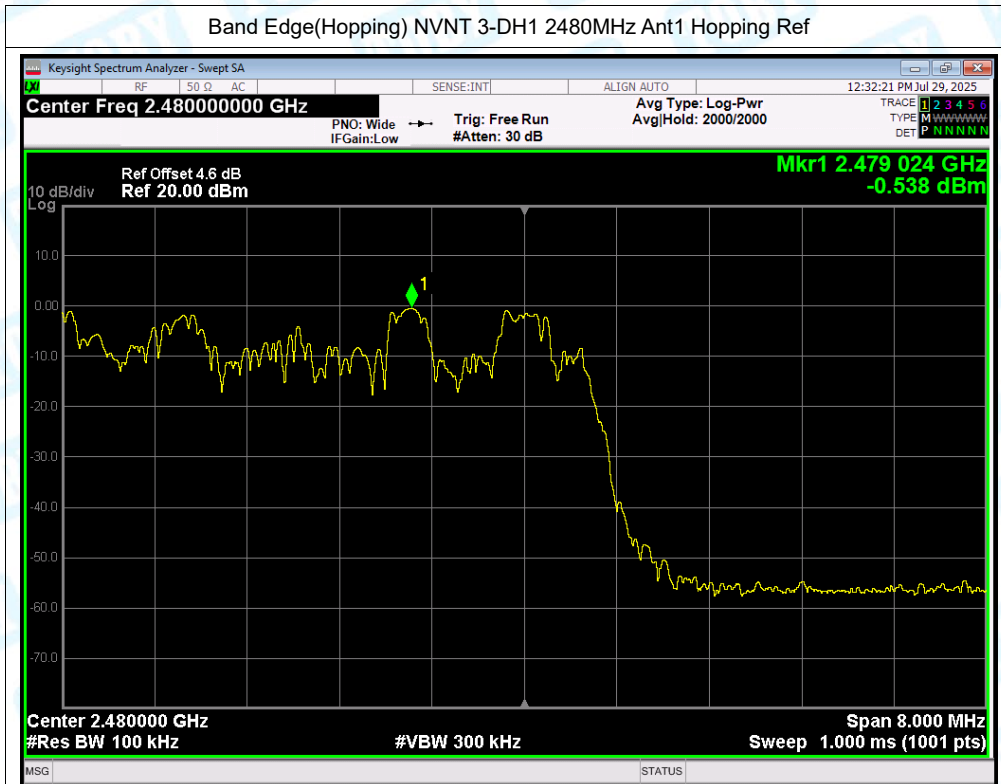


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission





7. Conducted RF Spurious Emission

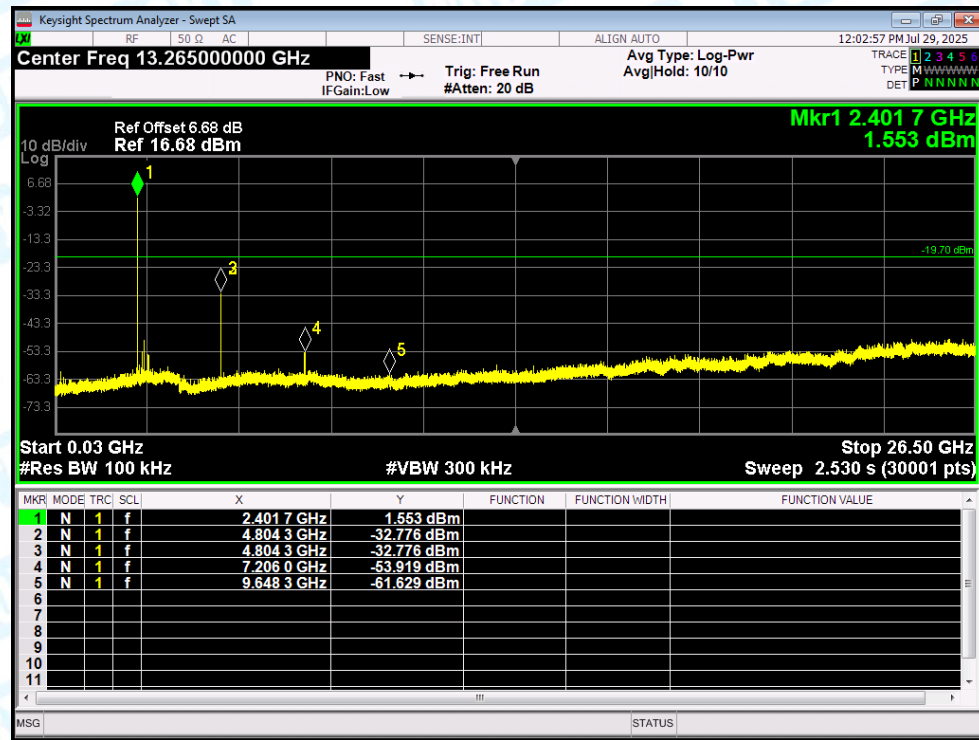
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-33.08	-20	Pass
NVNT	1-DH1	2441	Ant1	-35.3	-20	Pass
NVNT	1-DH1	2480	Ant1	-38.65	-20	Pass
NVNT	2-DH1	2402	Ant1	-38.16	-20	Pass
NVNT	2-DH1	2441	Ant1	-35.98	-20	Pass
NVNT	2-DH1	2480	Ant1	-37.02	-20	Pass
NVNT	3-DH1	2402	Ant1	-38.28	-20	Pass
NVNT	3-DH1	2441	Ant1	-34.55	-20	Pass
NVNT	3-DH1	2480	Ant1	-37.95	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



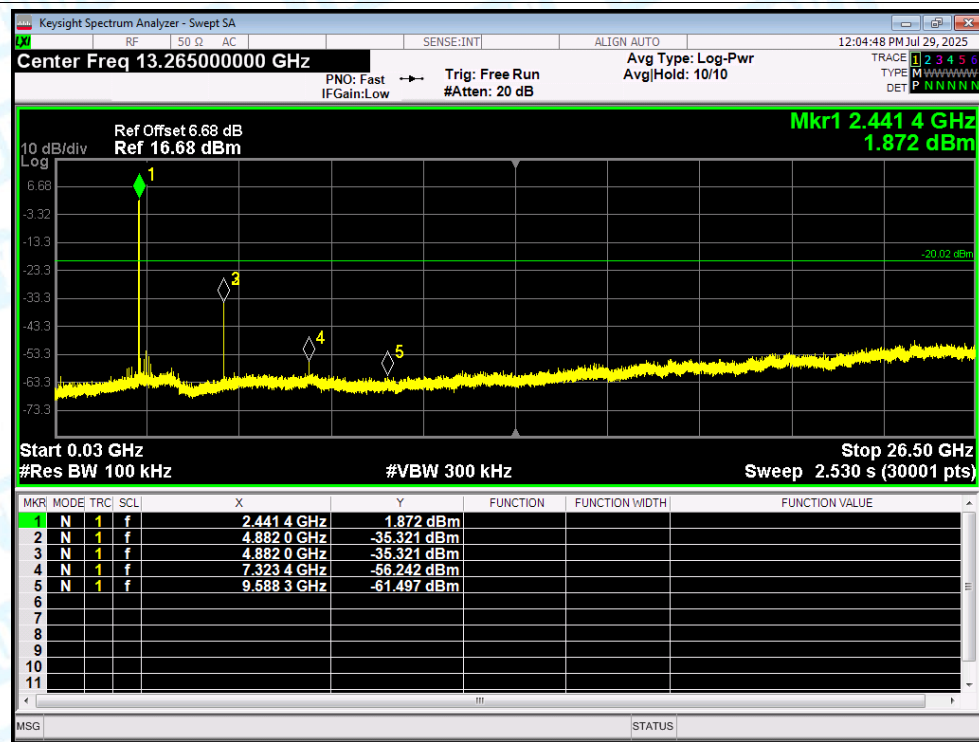
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



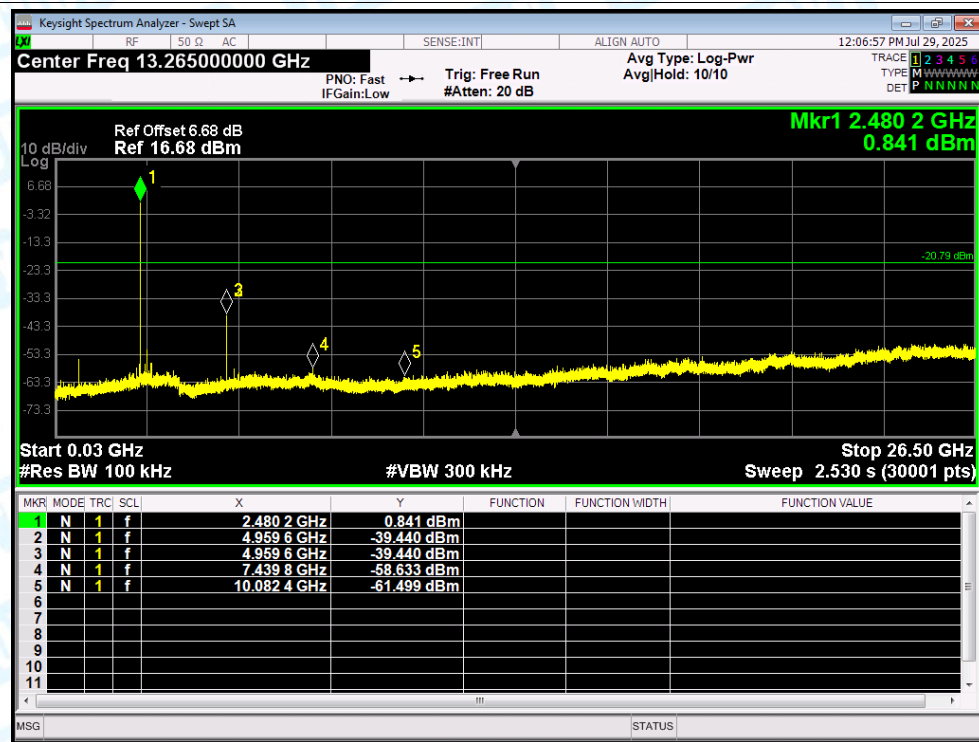
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



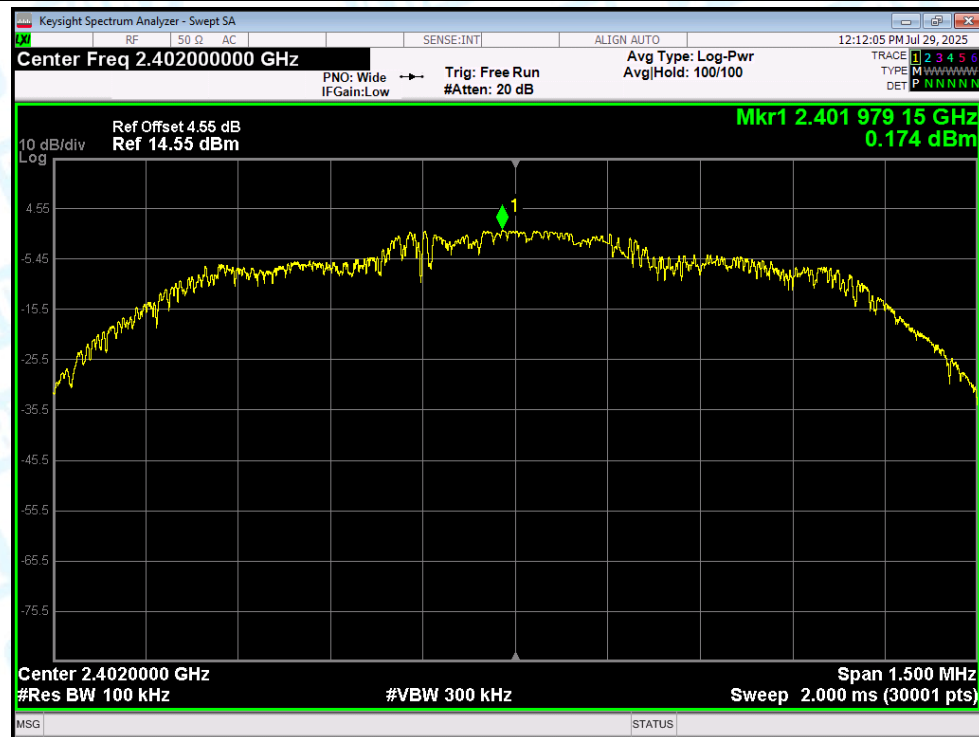
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



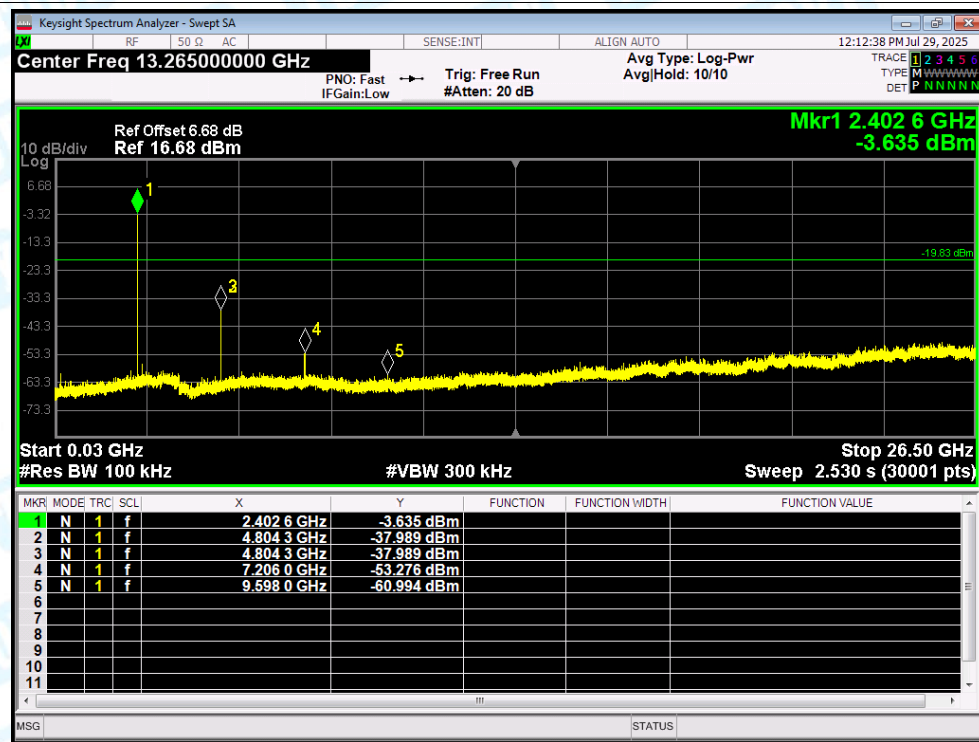
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



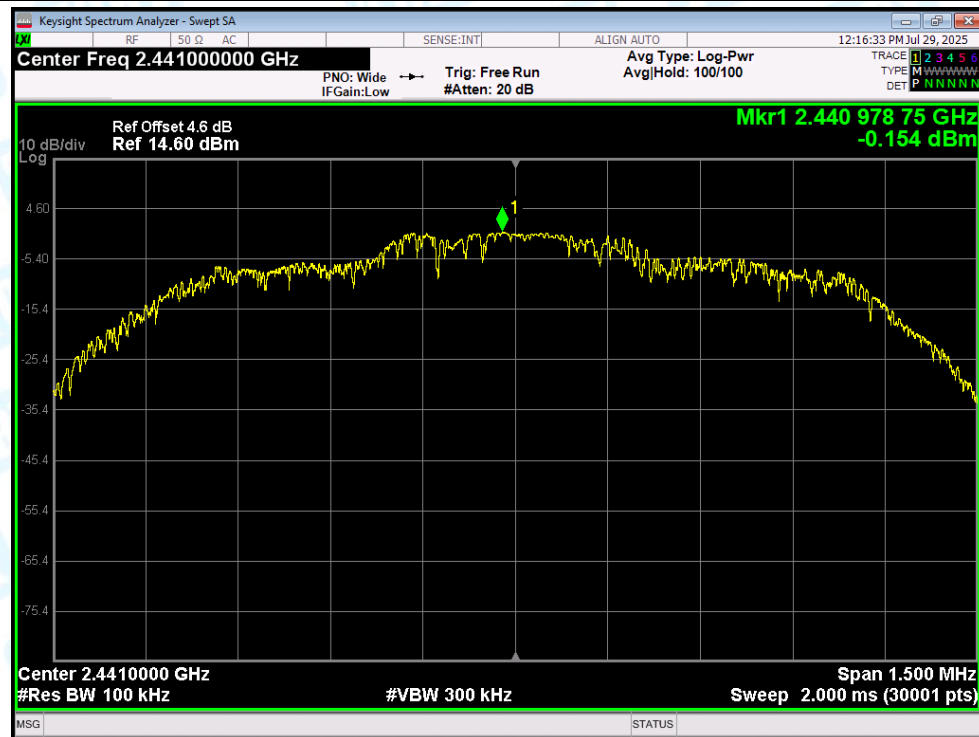
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



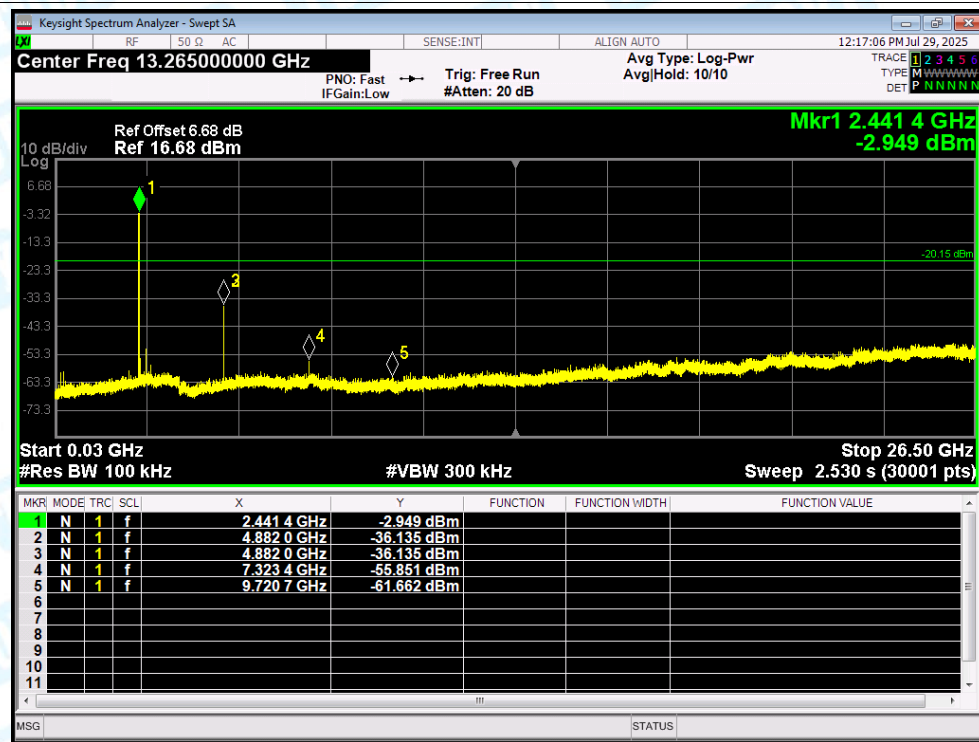
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



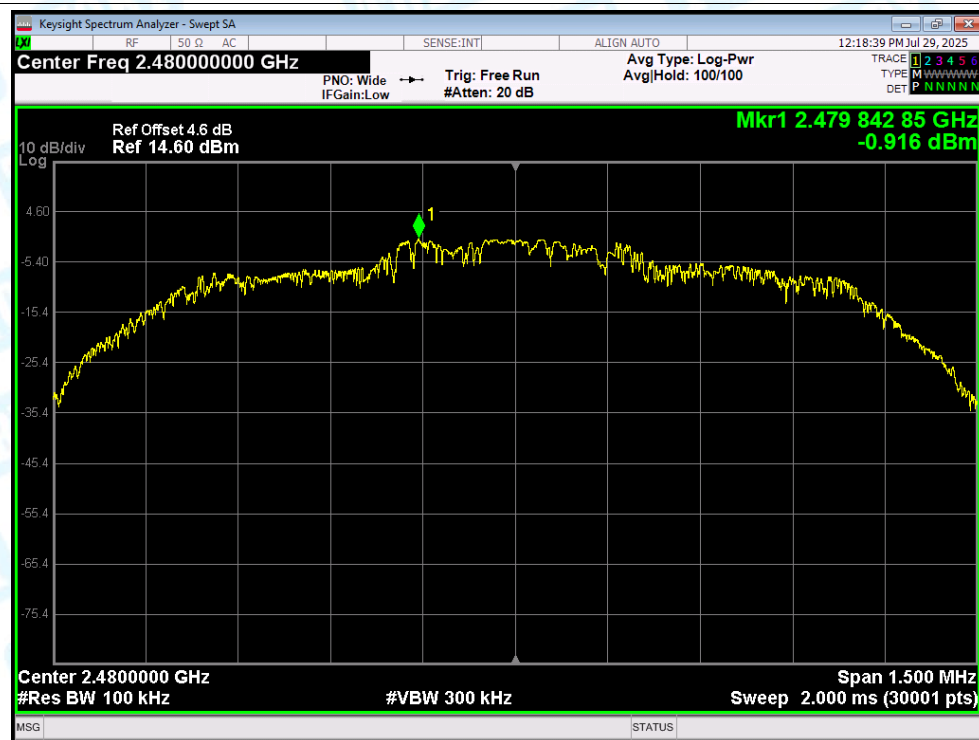
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



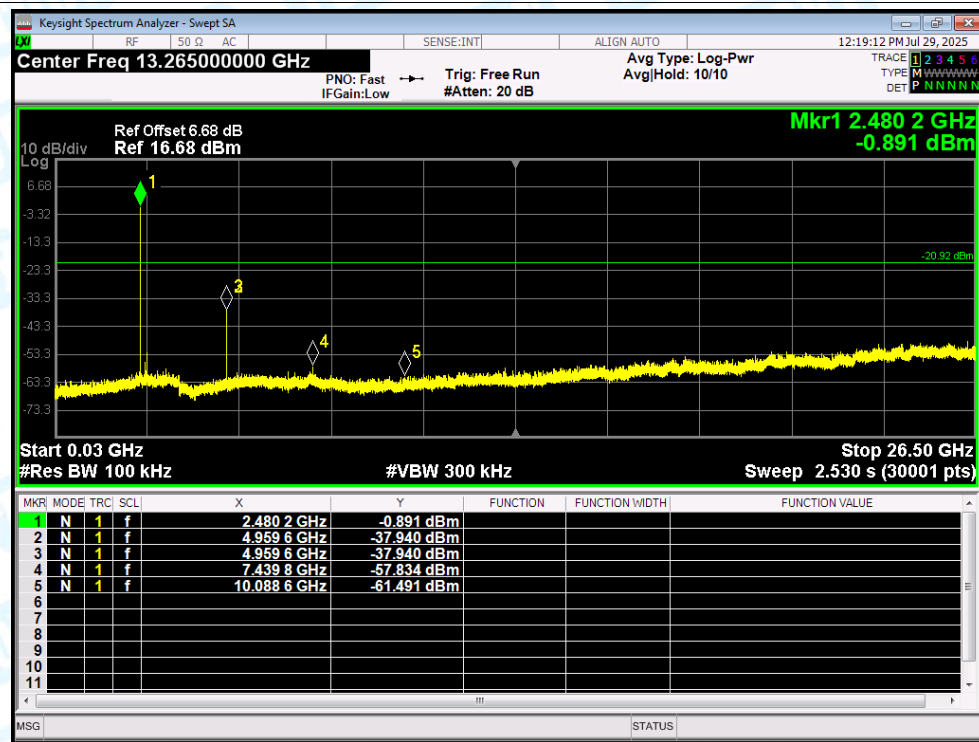
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



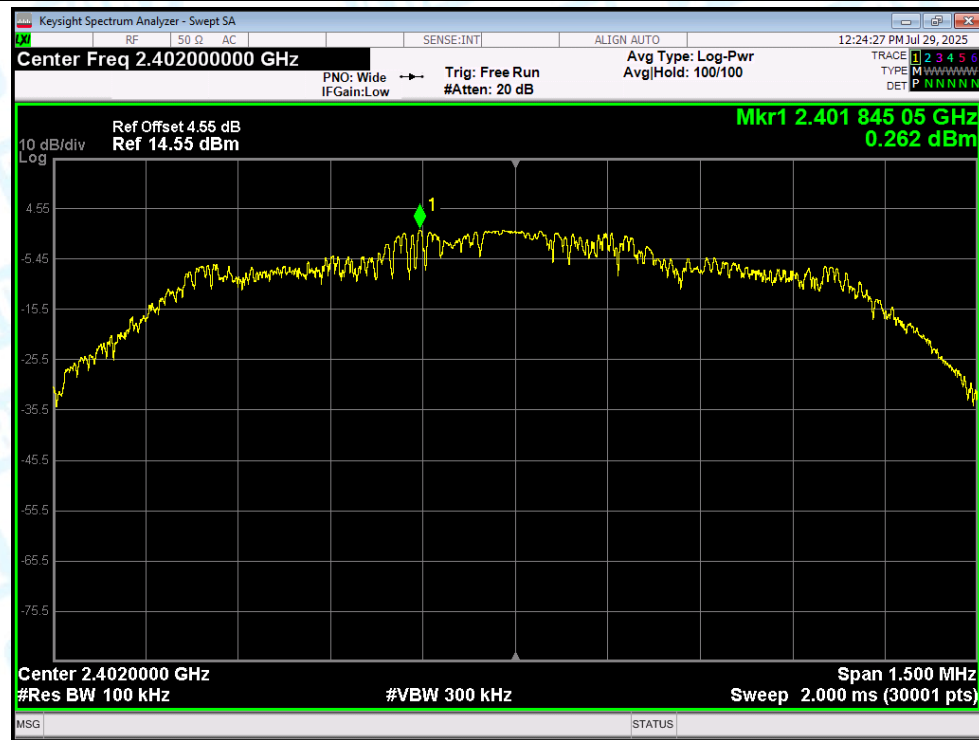
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



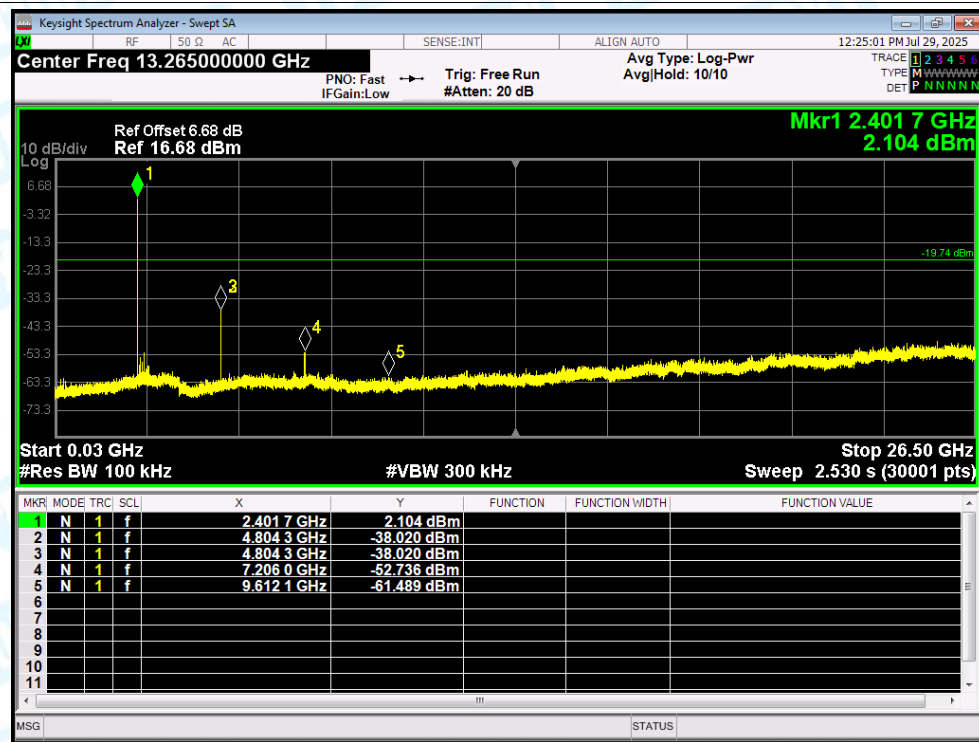
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



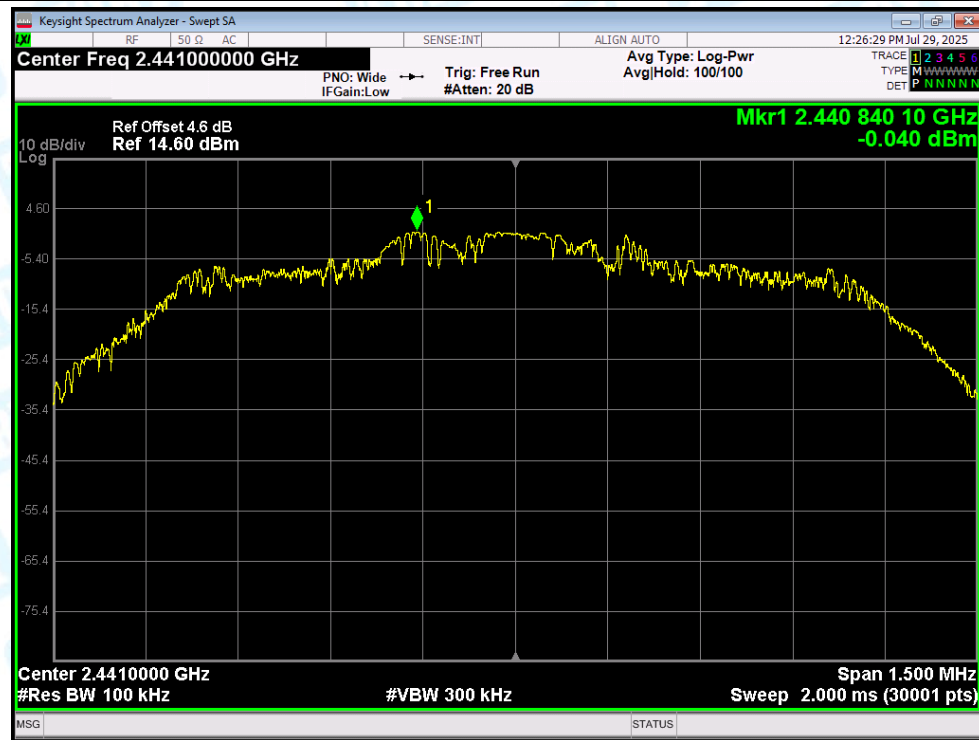
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



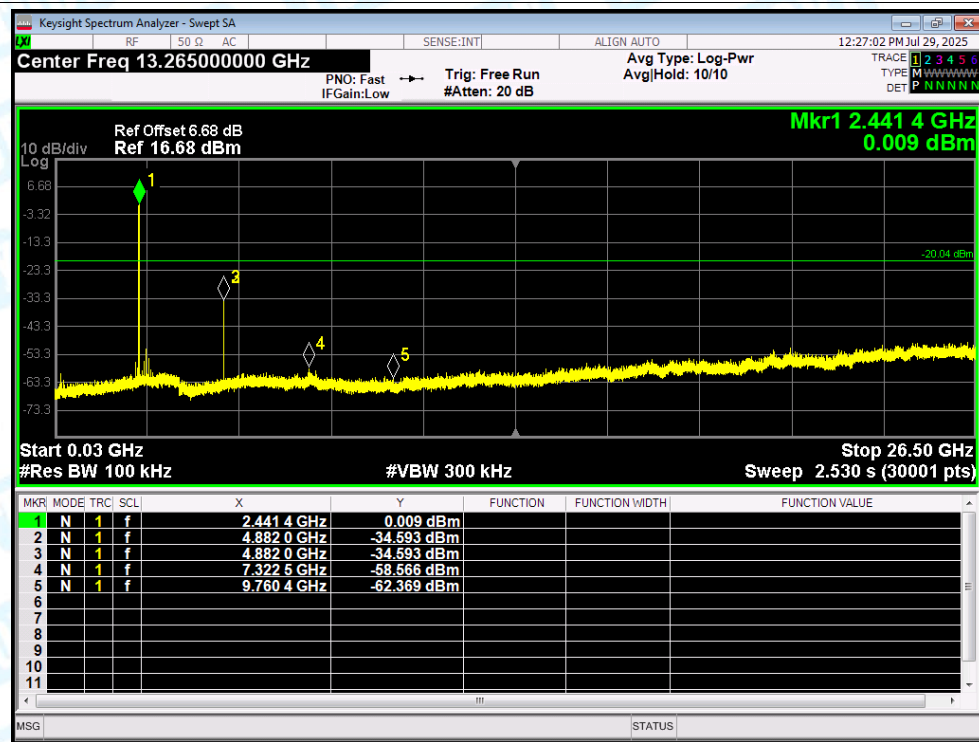
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



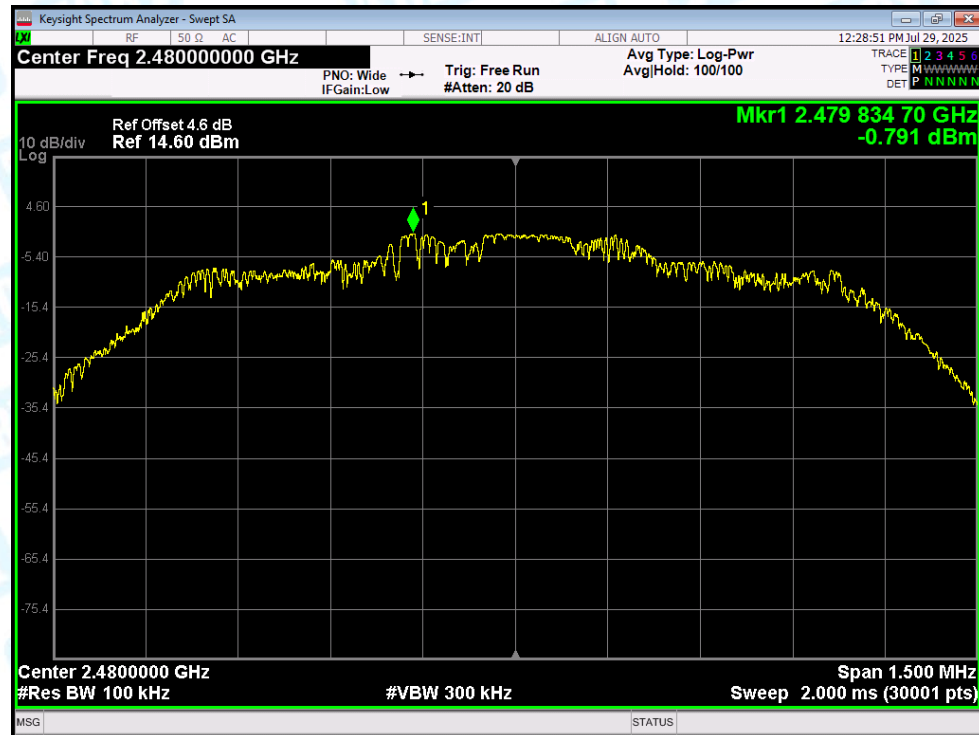
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



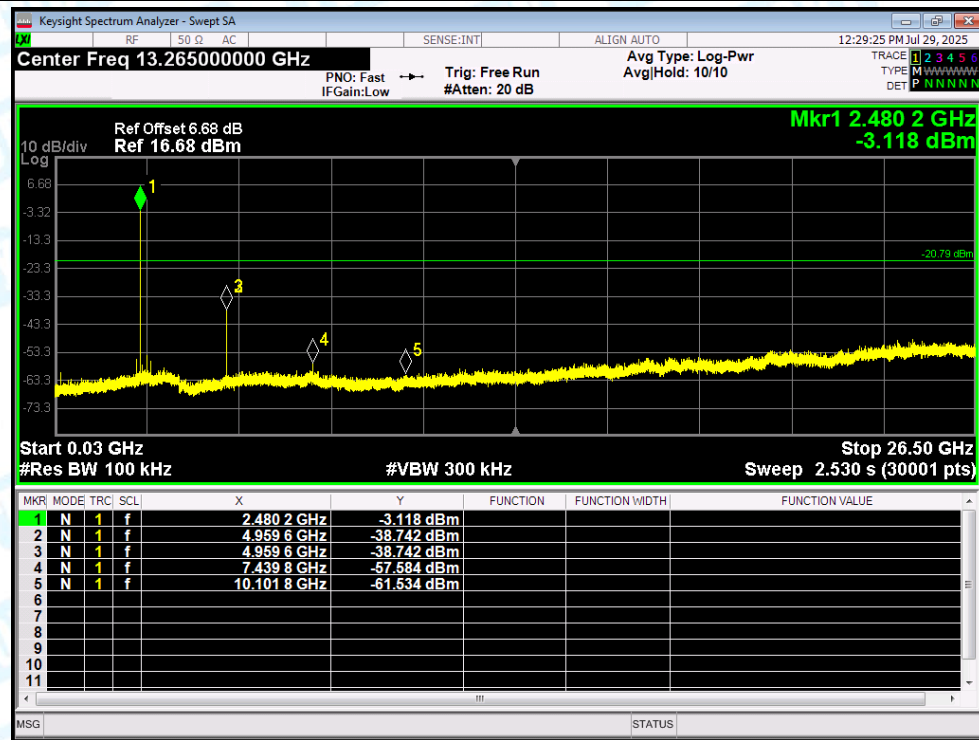
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

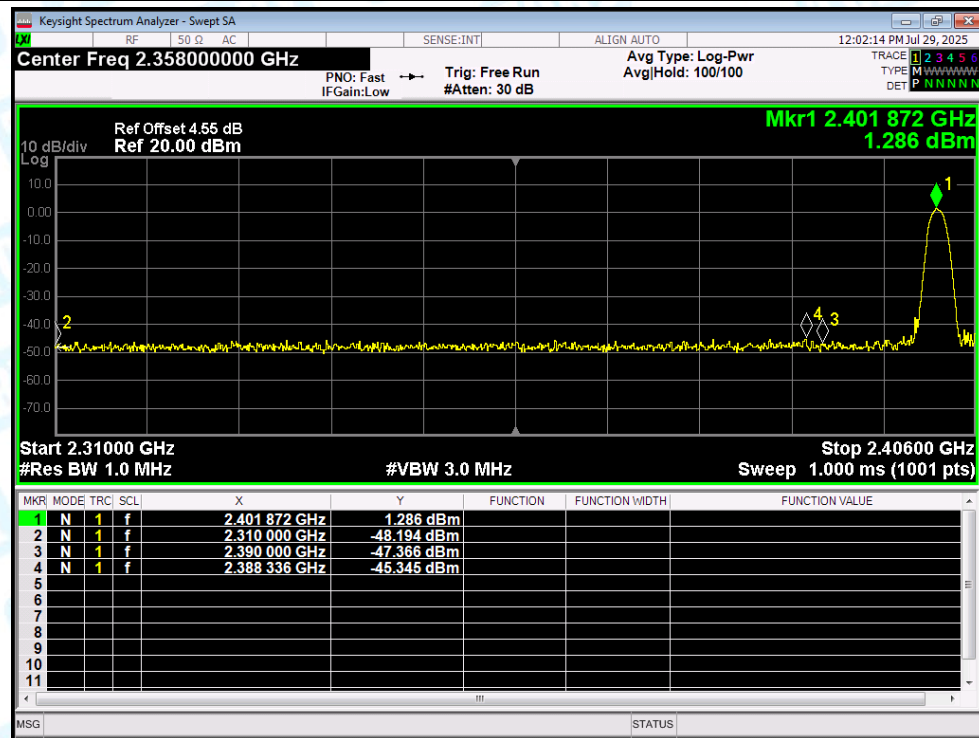


8. Restrict Band

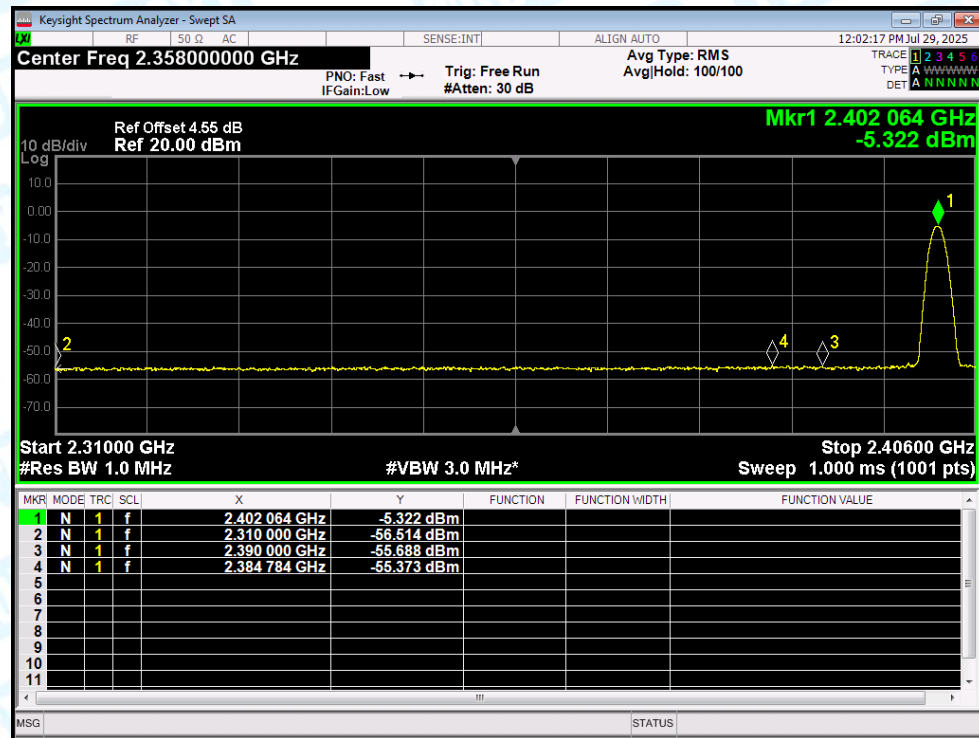
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.19	2	-	49.07	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.51	2	4.95	45.7	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2388.336	-45.34	2	-	51.92	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2384.784	-55.37	2	4.95	46.84	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.37	2	-	49.89	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.69	2	4.95	46.52	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-45.73	2	-	51.53	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.76	2	4.95	47.45	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2497.336	-43.96	2	-	53.3	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2494.84	-54.5	2	4.95	47.71	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-48.02	2	-	49.24	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.55	2	4.95	46.66	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.28	2	-	48.98	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.36	2	4.74	45.64	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2318.352	-44.98	2	-	52.28	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2386.896	-55.32	2	4.74	46.68	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.35	2	-	49.91	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.96	2	4.74	46.04	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.18	2	-	50.08	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.81	2	4.74	46.19	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2486.104	-44.64	2	-	52.62	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2492.608	-54.64	2	4.74	47.36	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-45.9	2	-	51.36	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.63	2	4.74	46.37	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.86	2	-	49.4	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.31	2	4.84	45.79	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2320.56	-44.65	2	-	52.61	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2387.376	-55.39	2	4.84	46.71	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-47.29	2	-	49.97	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.83	2	4.84	46.27	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-47.41	2	-	49.85	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.19	2	4.84	46.91	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2492.536	-43.99	2	-	53.27	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.704	-54.61	2	4.84	47.49	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.37	2	-	50.89	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.16	2	4.84	46.94	Average	54	Pass

Test Graphs

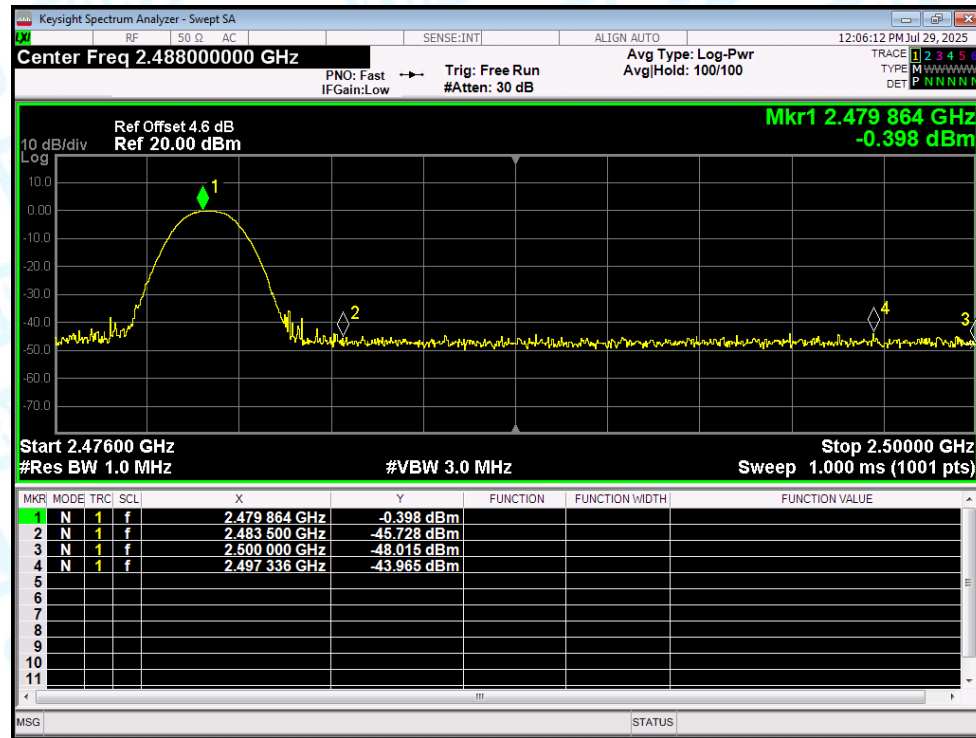
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



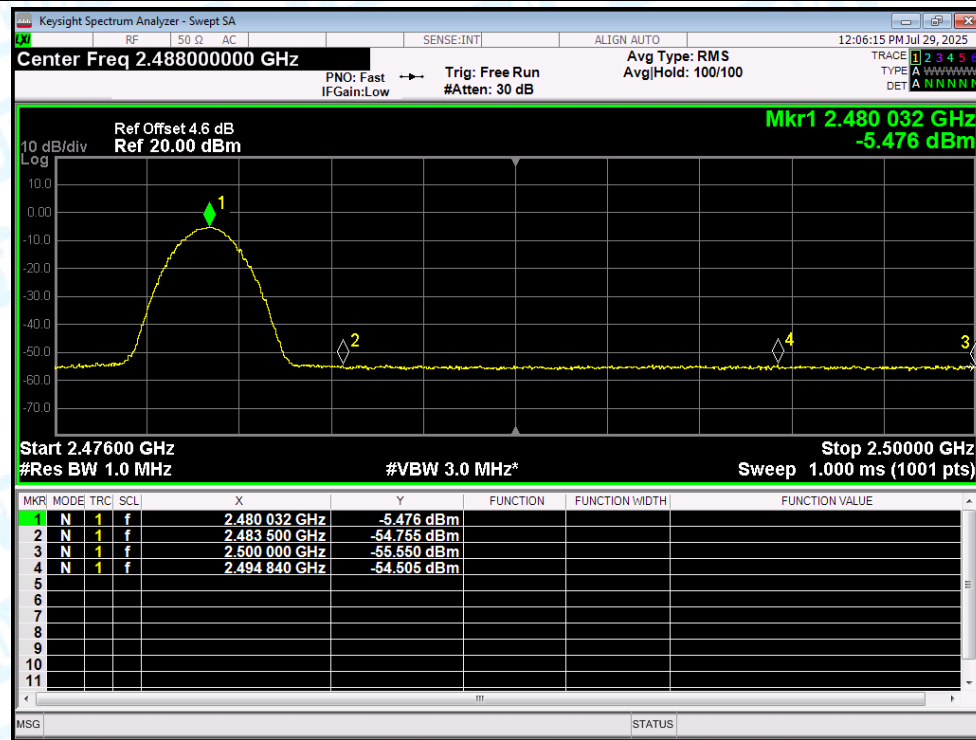
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



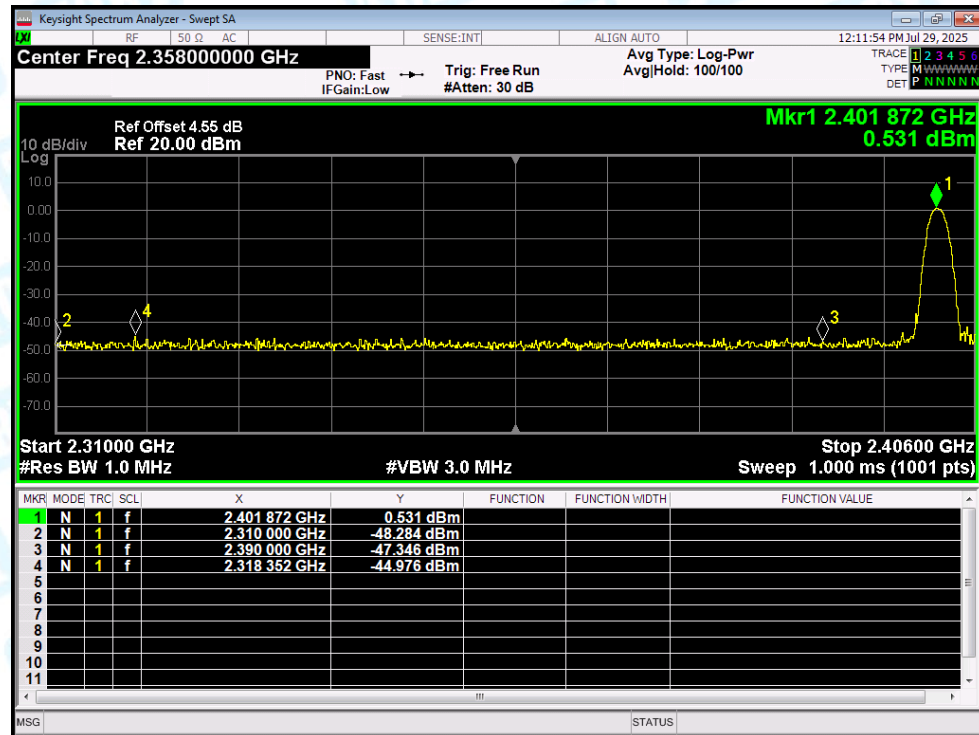
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



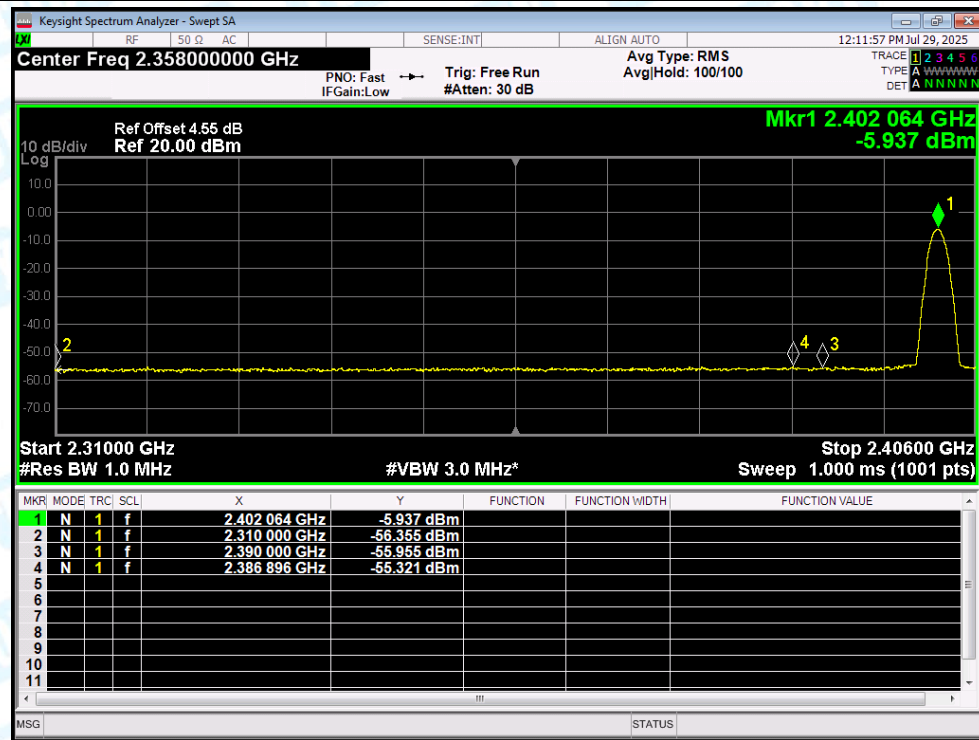
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



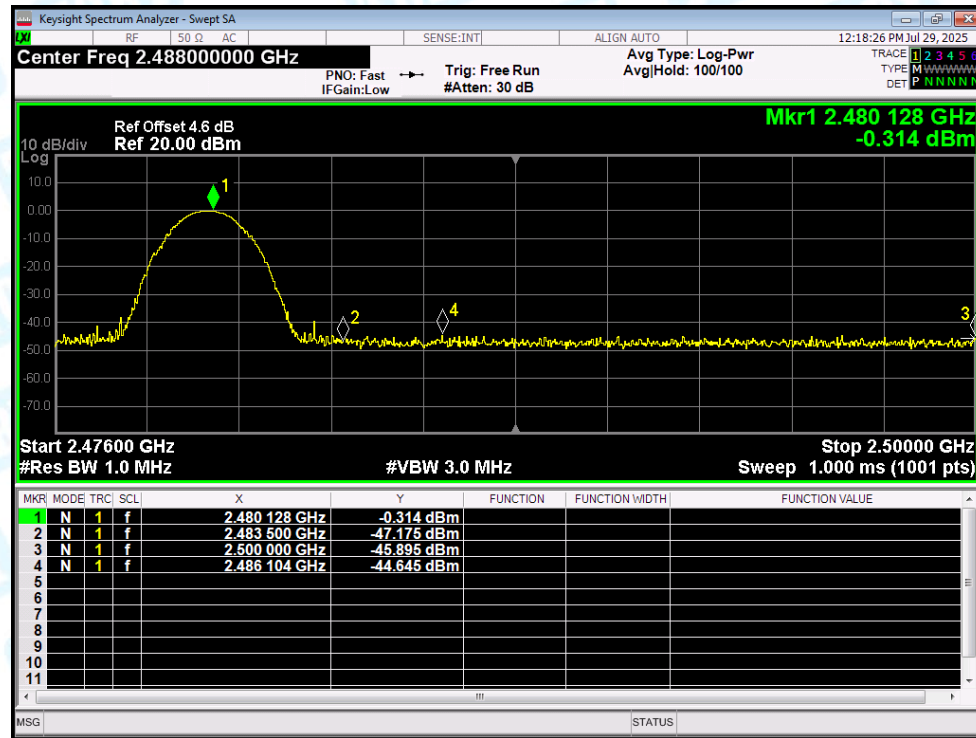
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



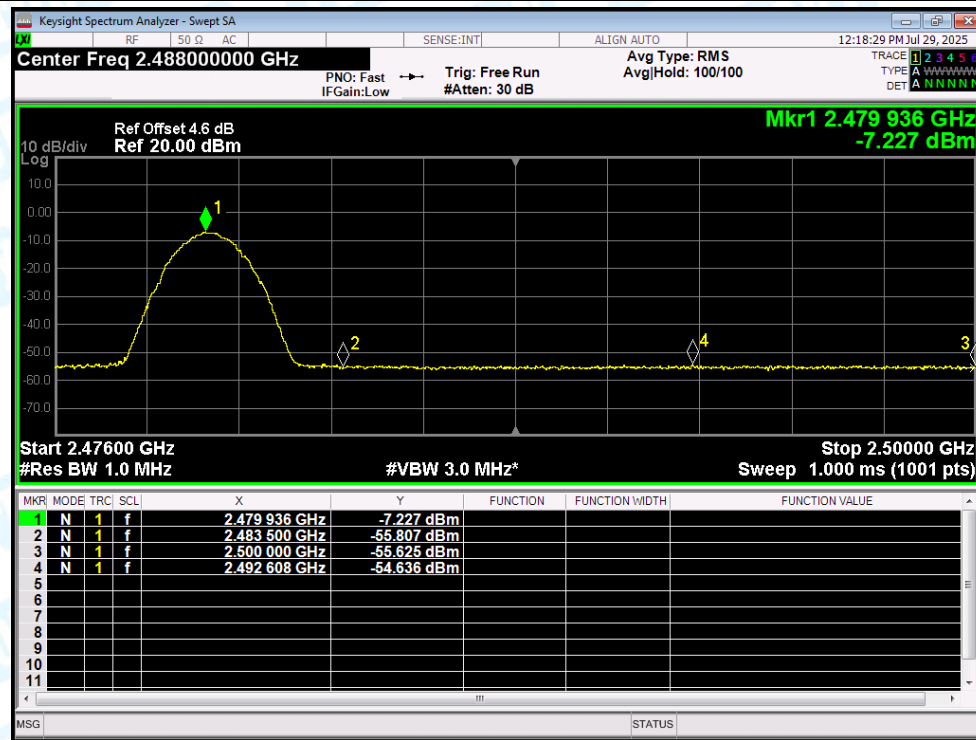
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



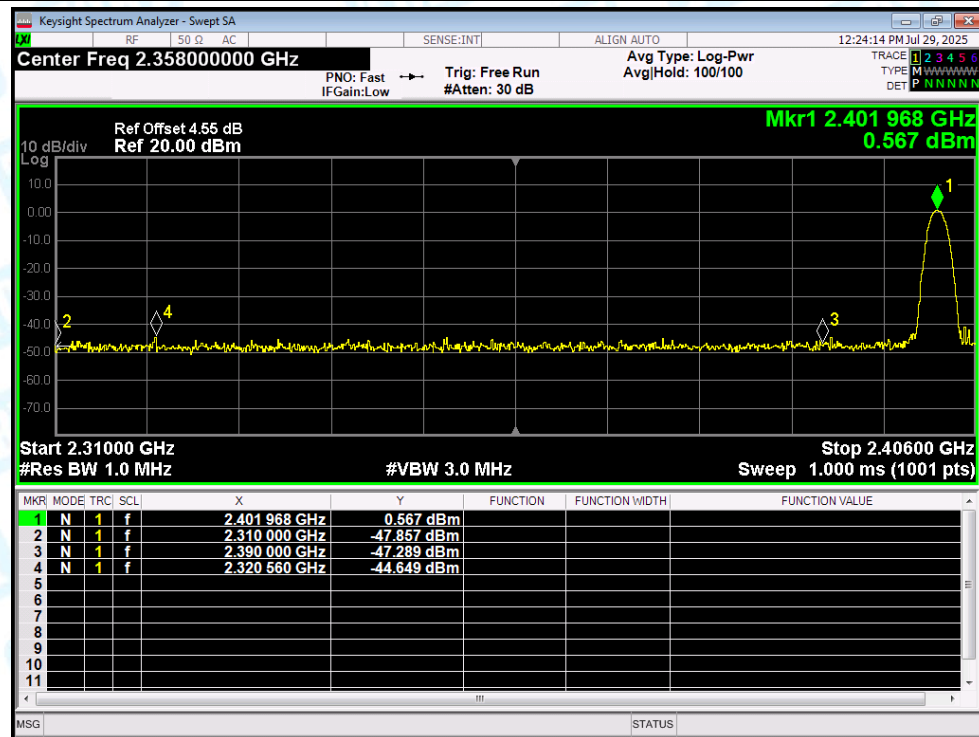
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



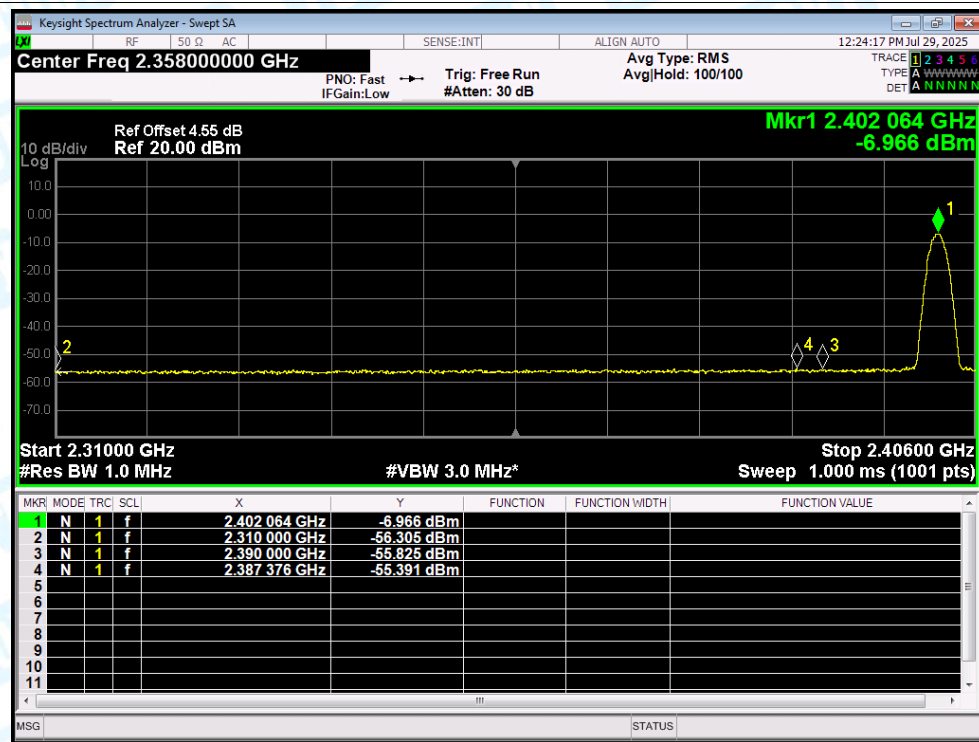
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



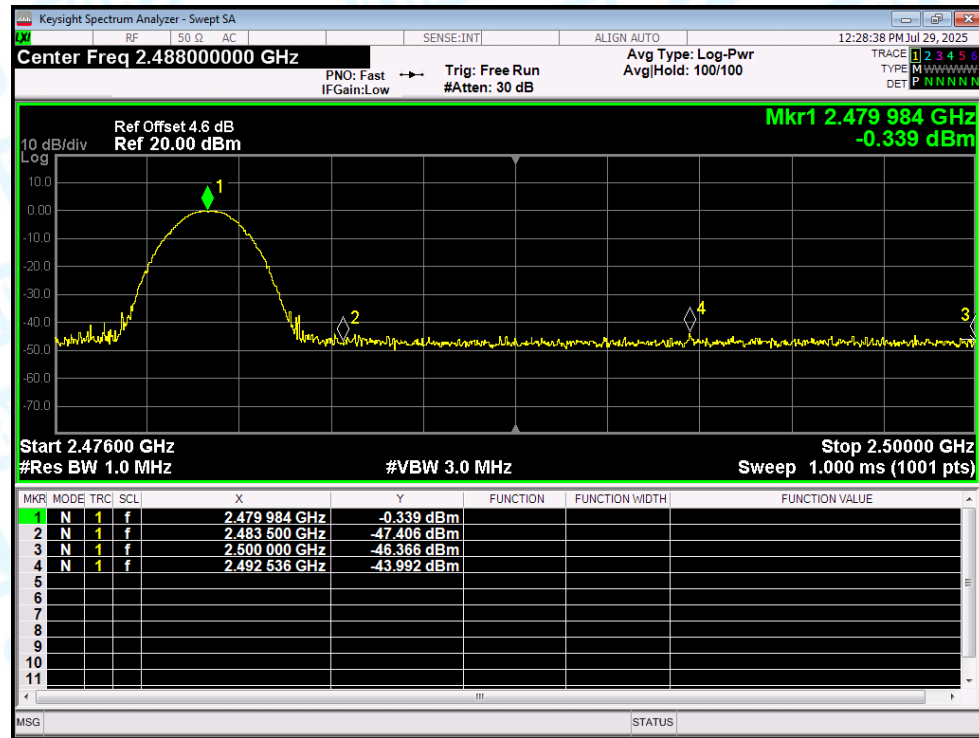
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



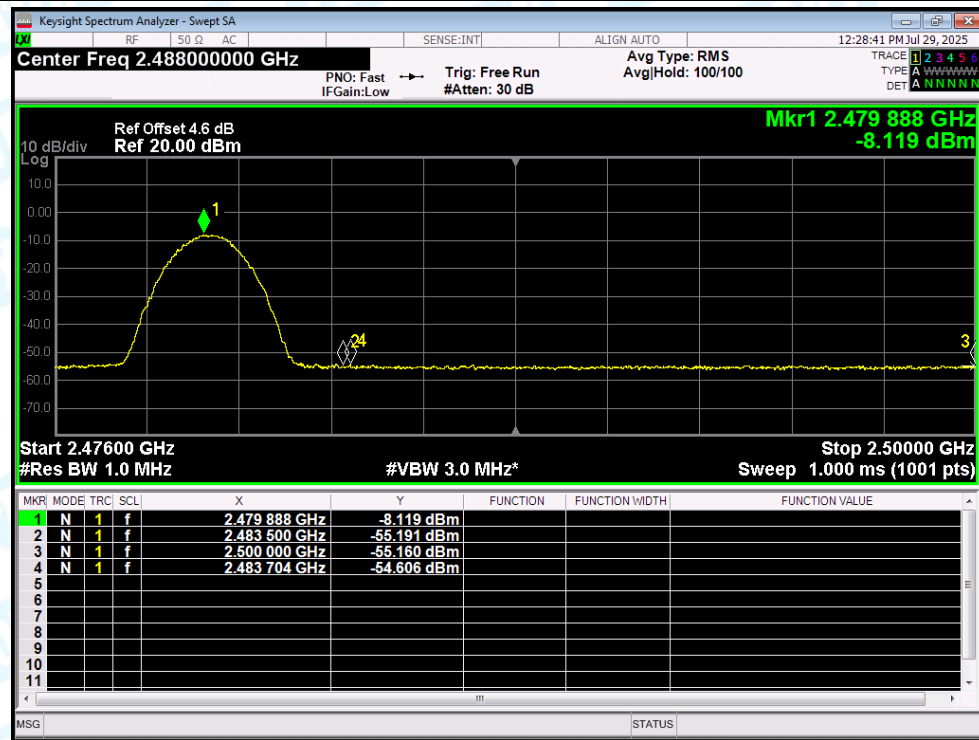
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

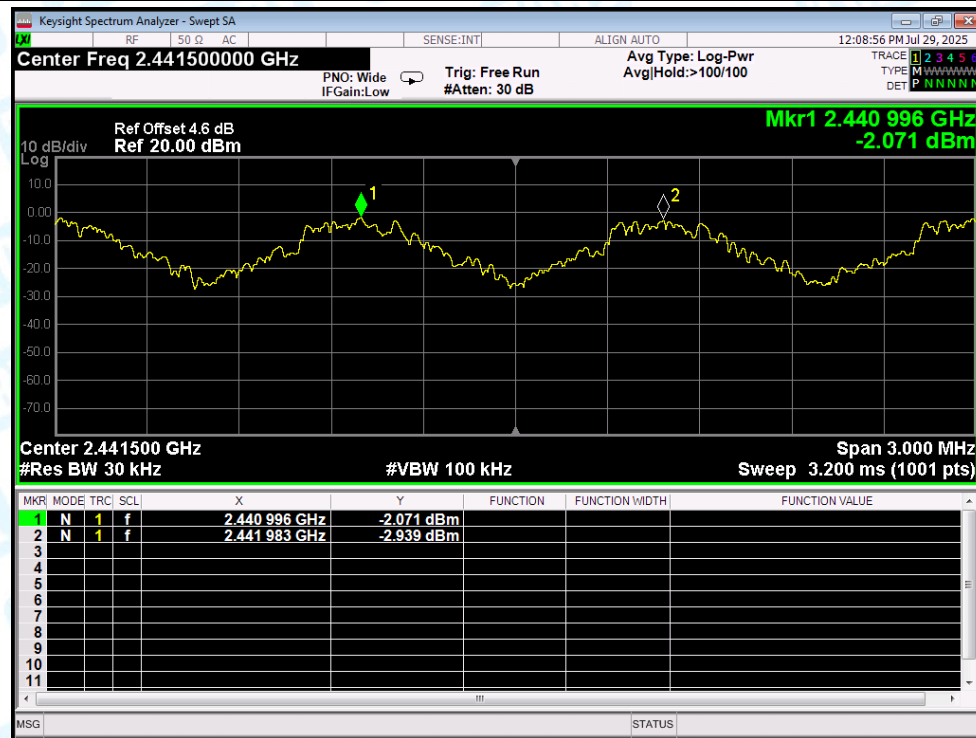


9. Carrier Frequencies Separation

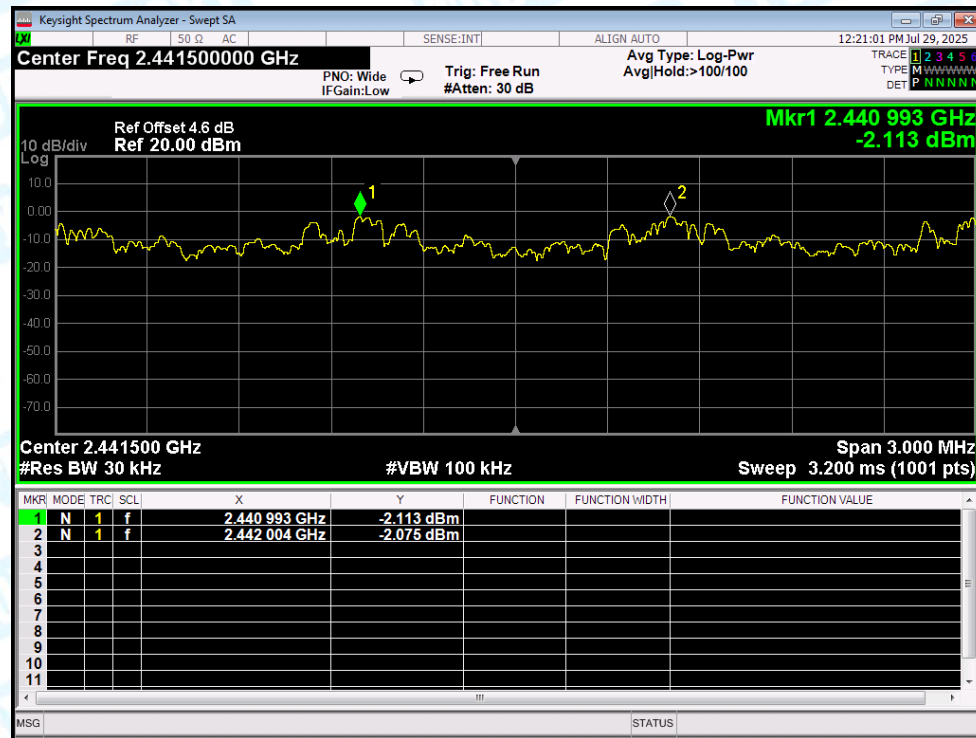
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.996	2441.983	0.987	0.593	Pass
NVNT	2-DH1	Ant1	2440.993	2442.004	1.011	0.8	Pass
NVNT	3-DH1	Ant1	2441.023	2441.989	0.966	0.807	Pass

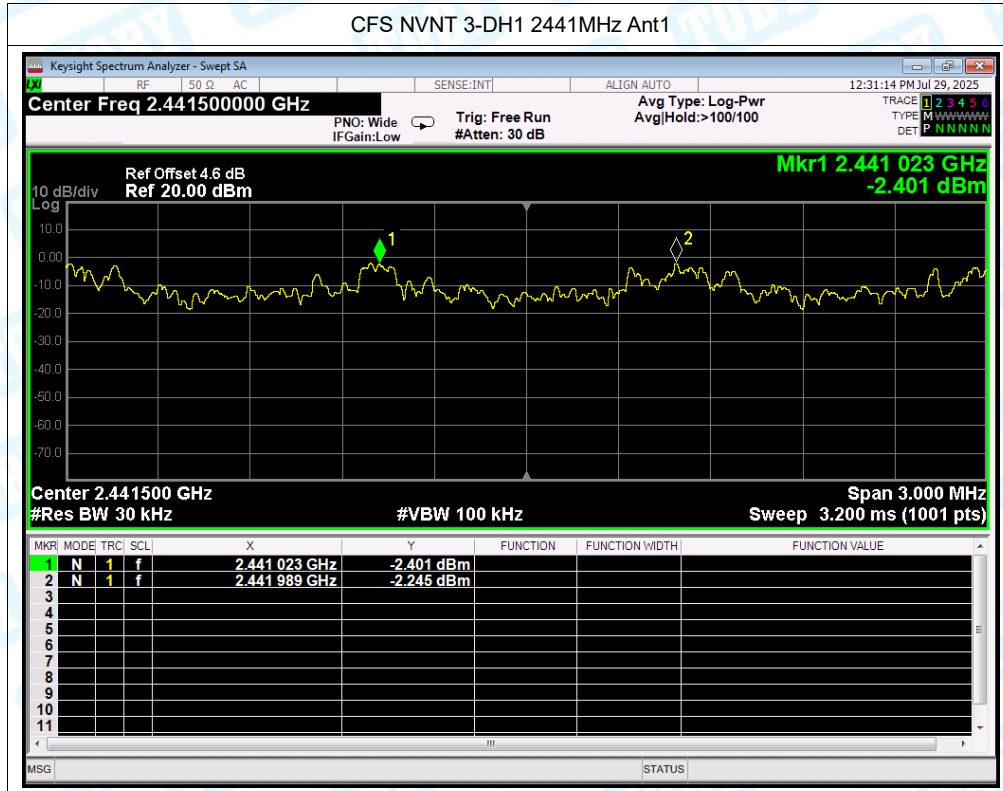
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



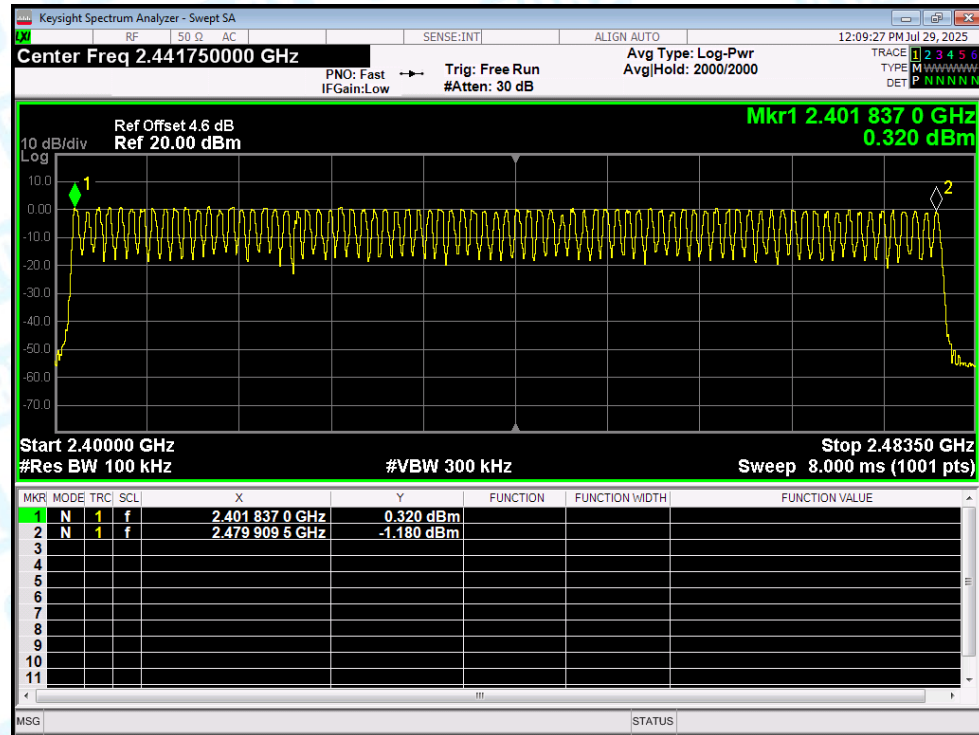


10. Number of Hopping Channel

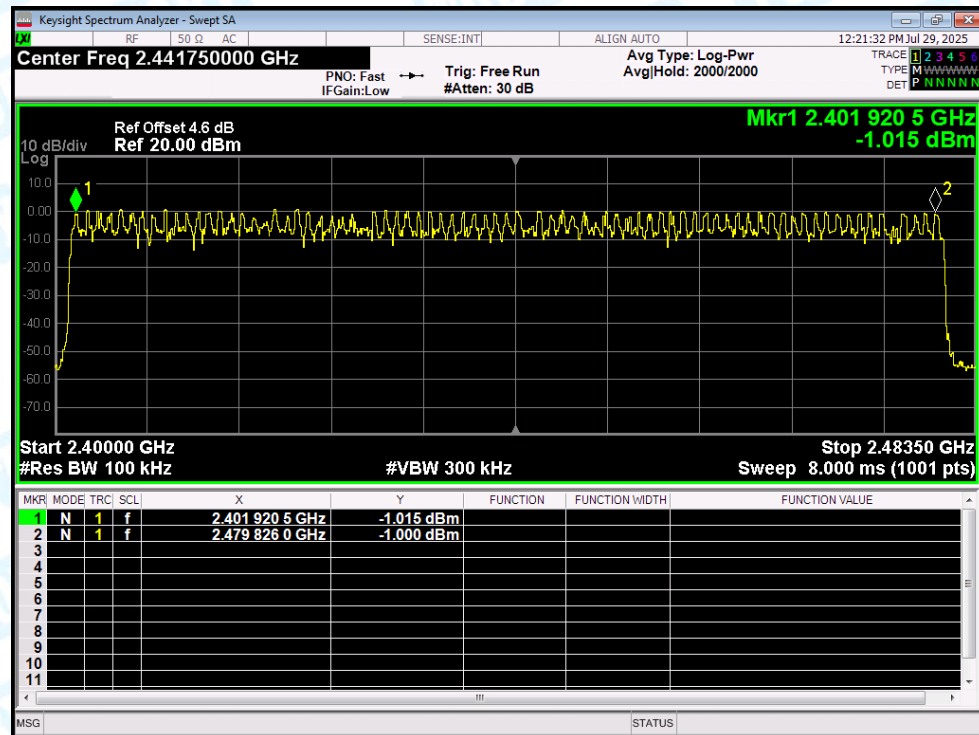
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

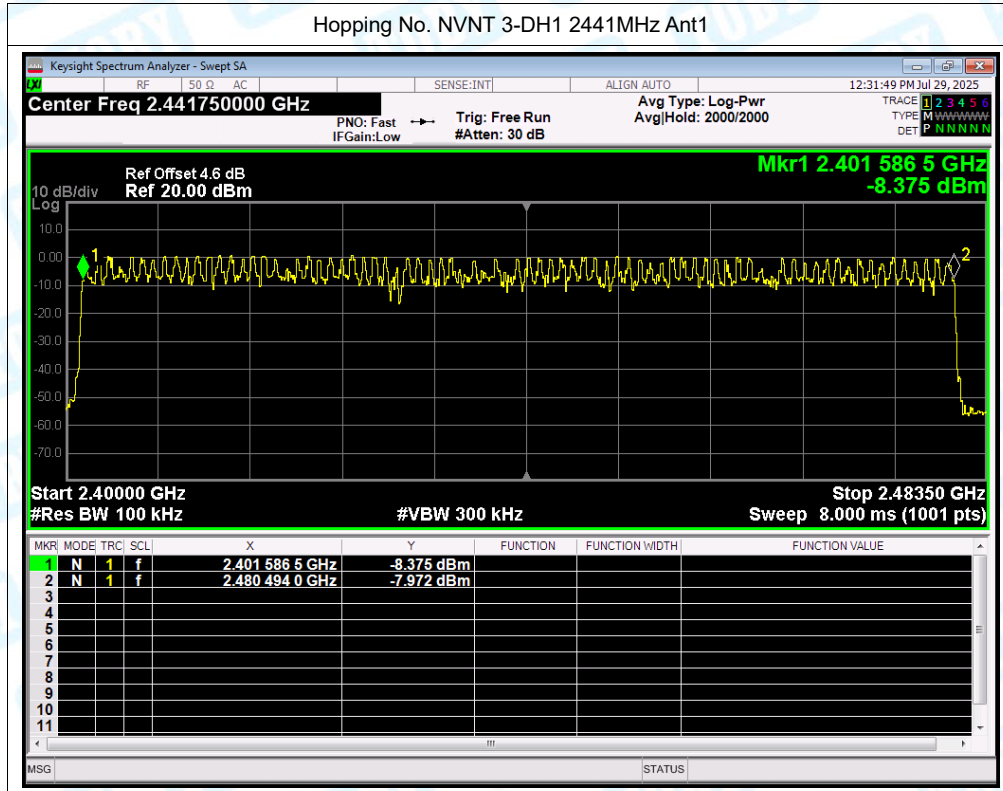
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



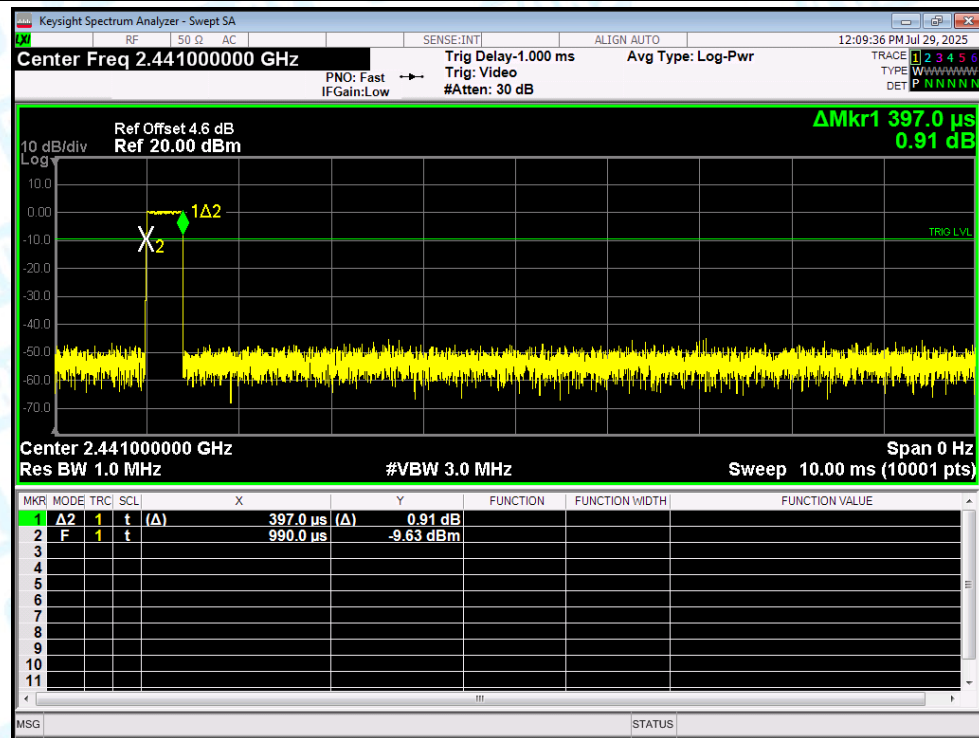


11. Dwell Time

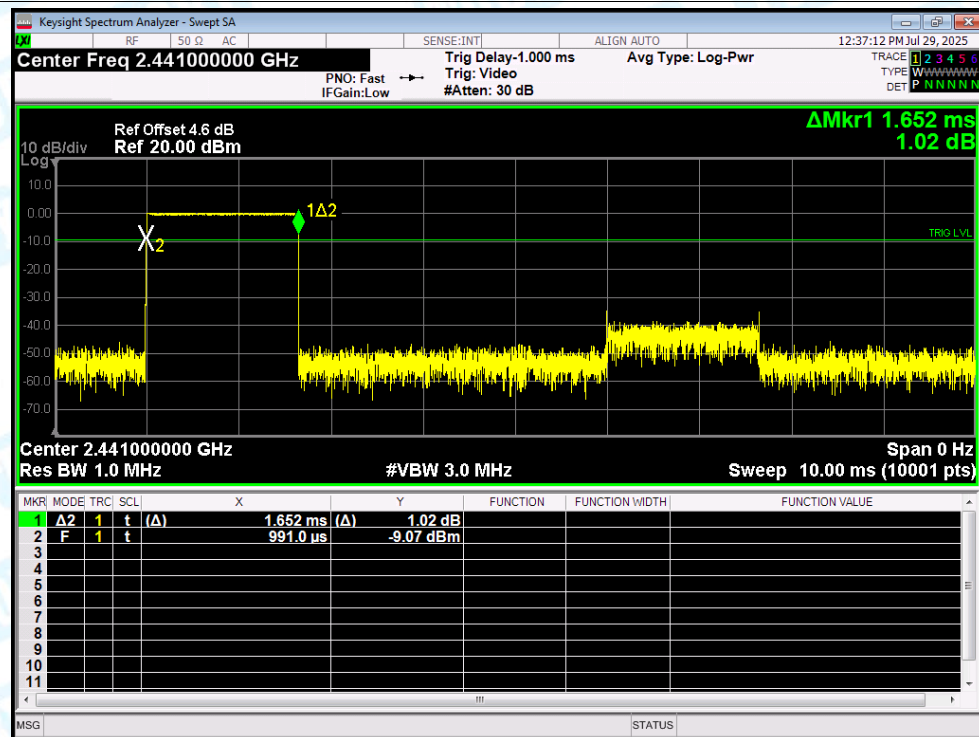
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.397	127.04	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.652	264.32	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.901	309.44	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.406	129.92	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.658	265.28	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.906	309.973	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.406	129.92	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.655	264.8	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.907	310.08	31600	400	Pass

Test Graphs

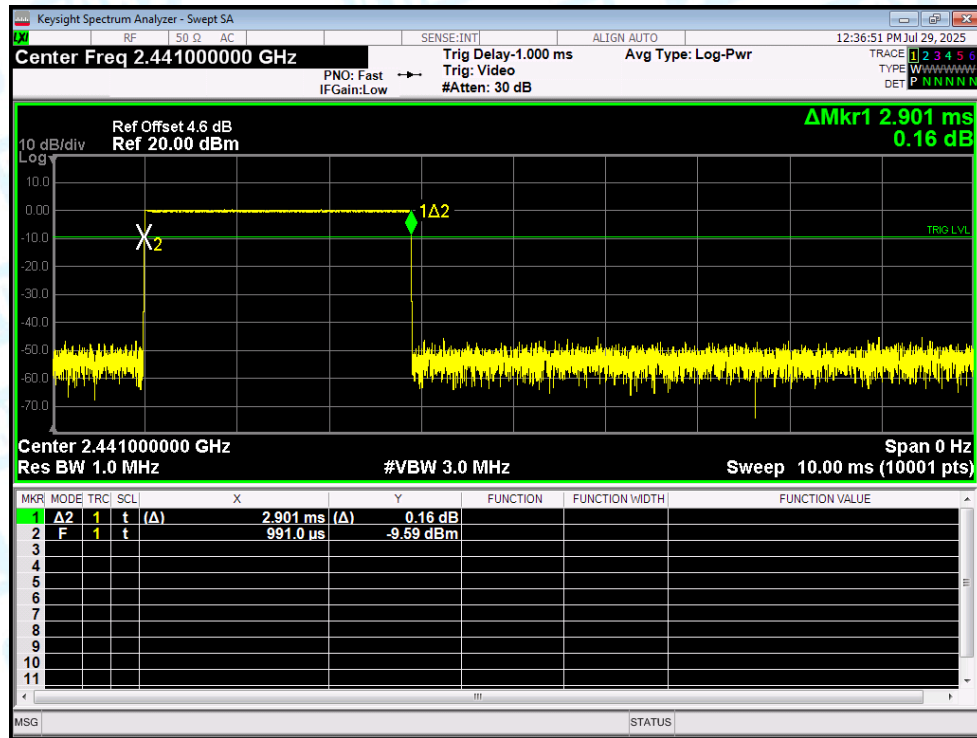
Dwell NVNT 1-DH1 2441MHz Ant1



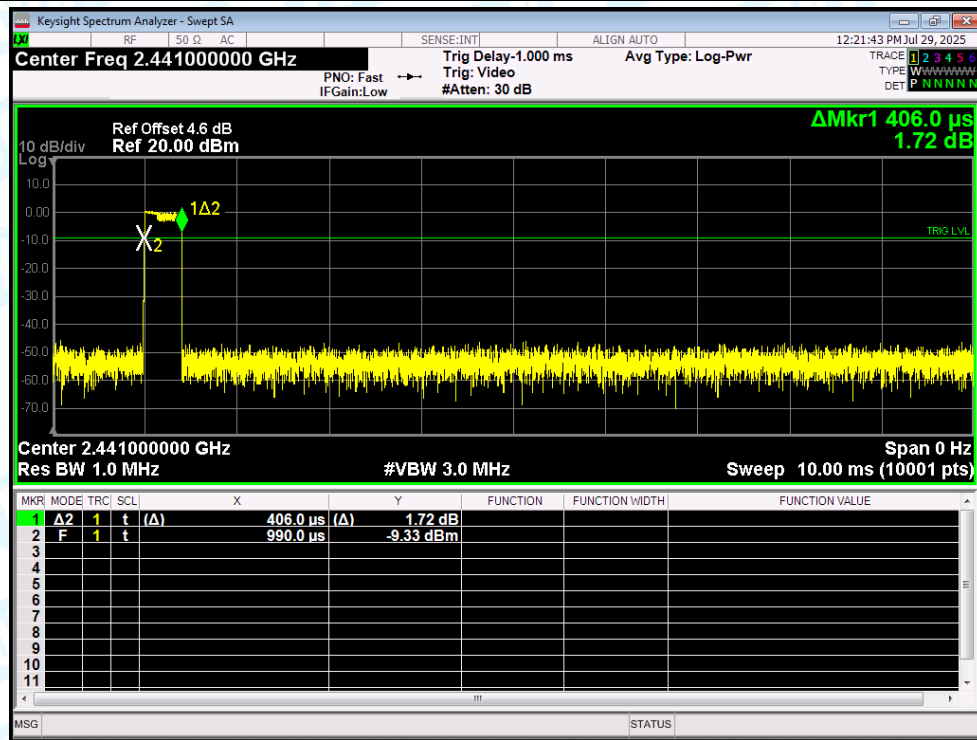
Dwell NVNT 1-DH3 2441MHz Ant1



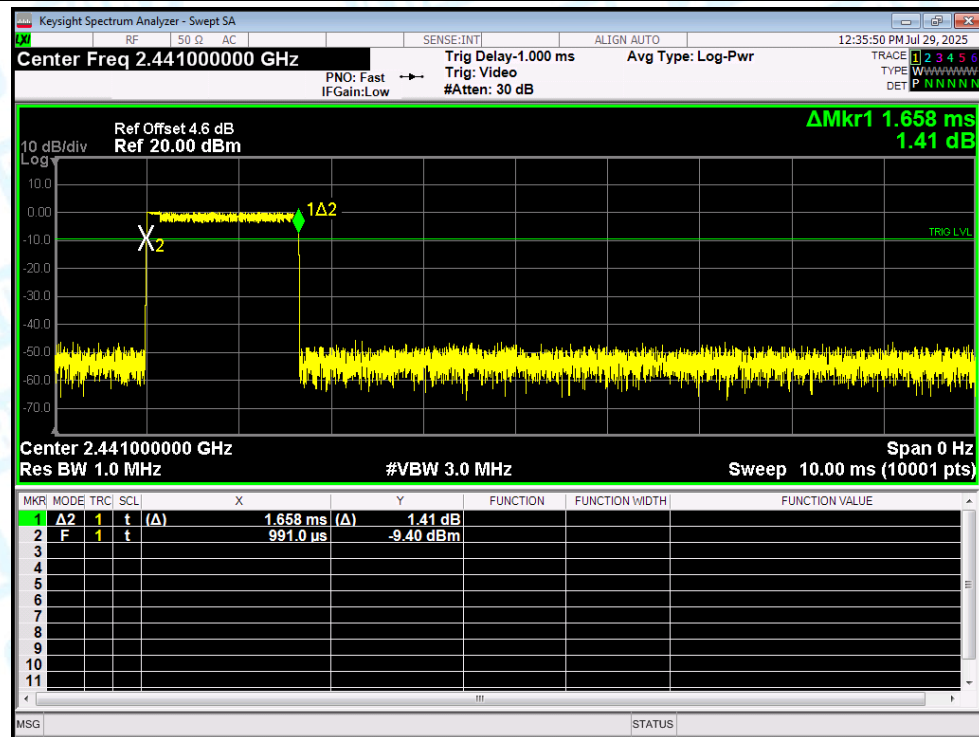
Dwell NVNT 1-DH5 2441MHz Ant1



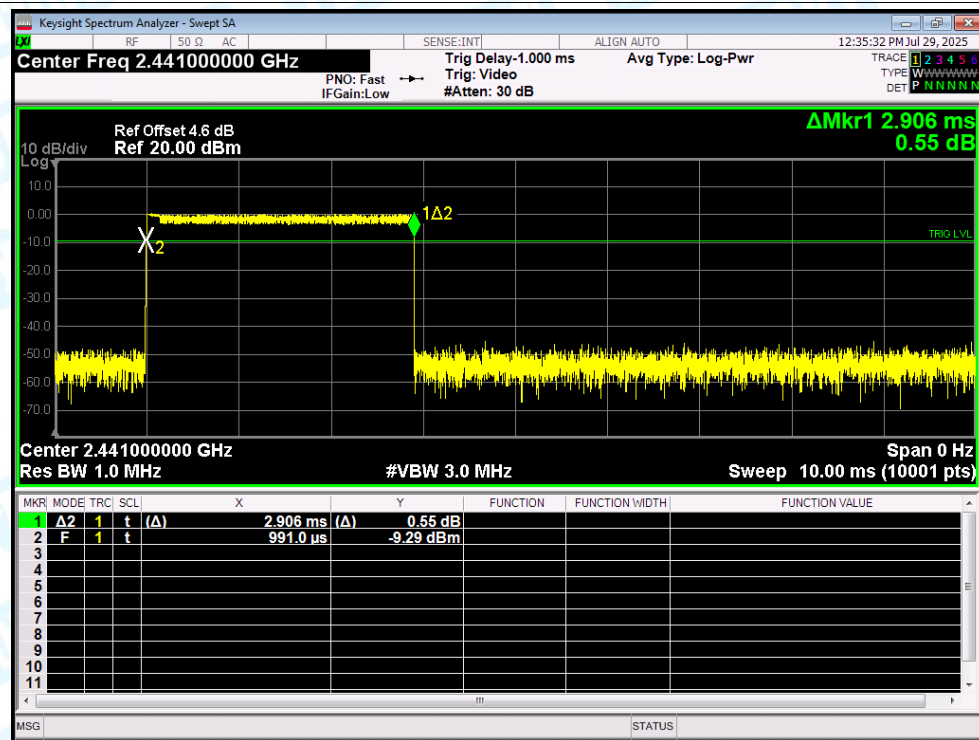
Dwell NVNT 2-DH1 2441MHz Ant1



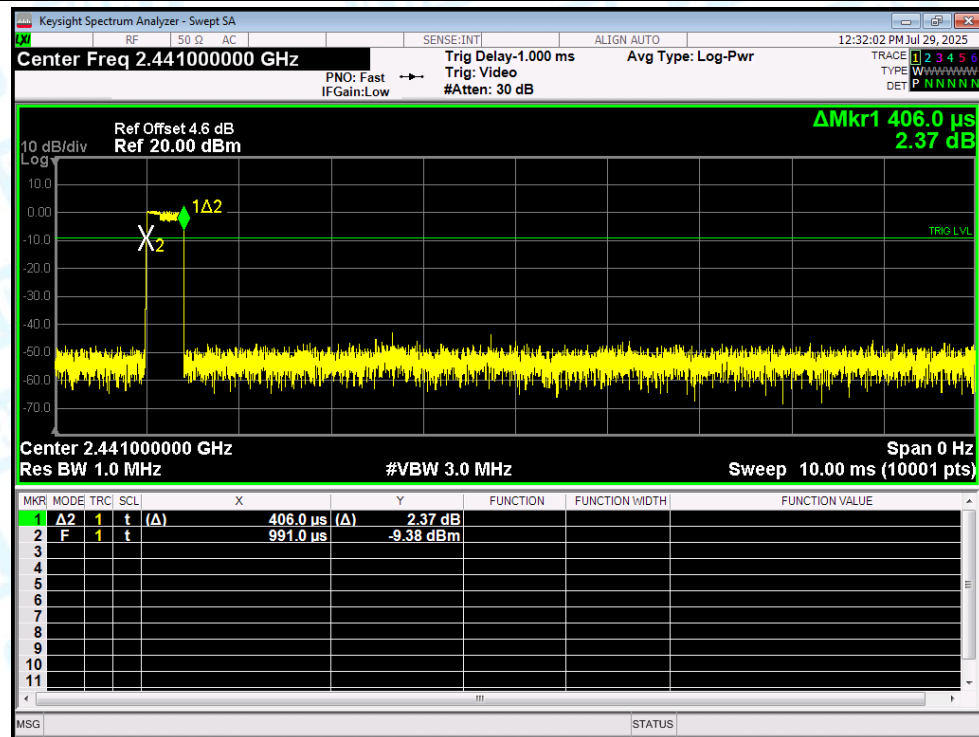
Dwell NVNT 2-DH3 2441MHz Ant1



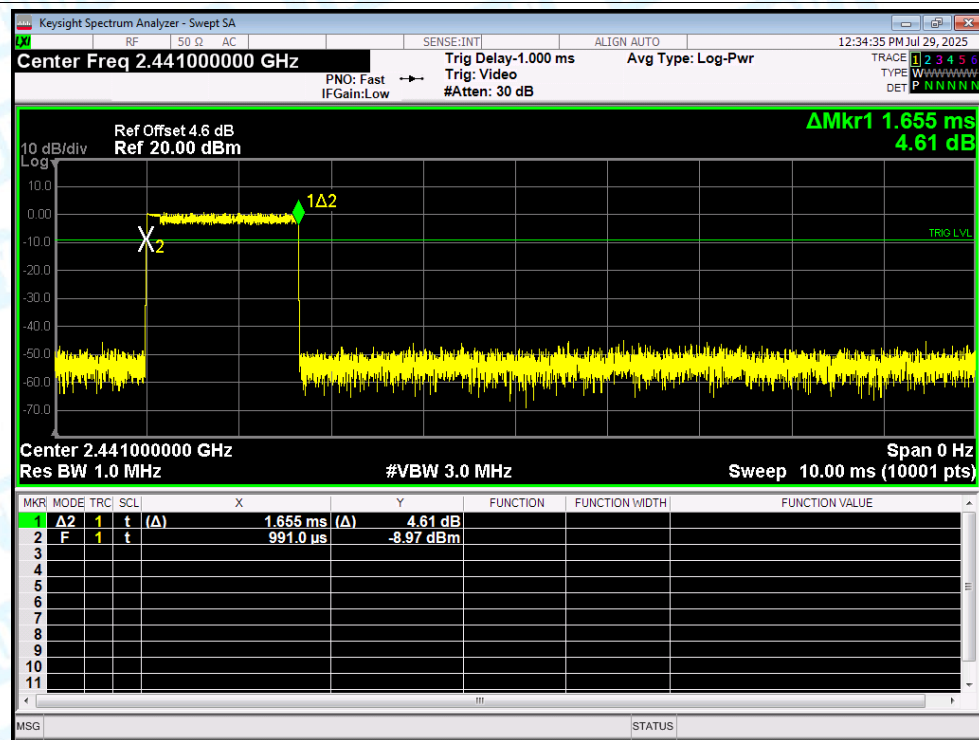
Dwell NVNT 2-DH5 2441MHz Ant1

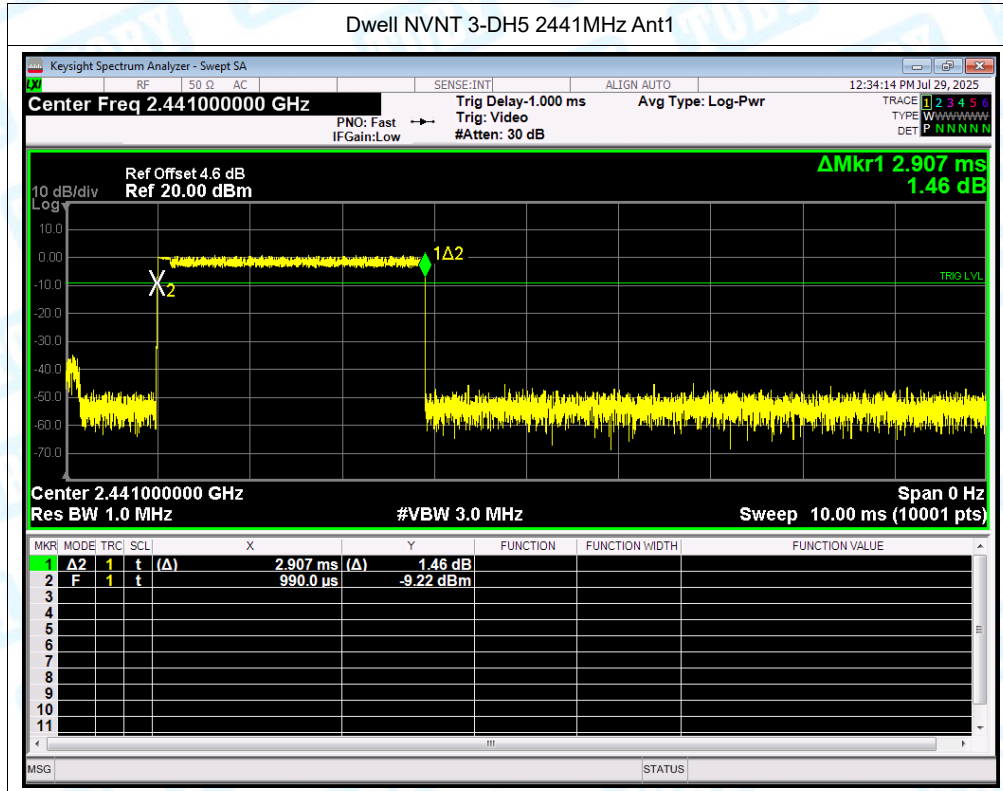


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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