

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Smart glasses
Test Model:	S336
Sample ID:	HC-C-202506-0032-01-2#
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-202506-0032-9 The report only show the worst case data.	

Contents

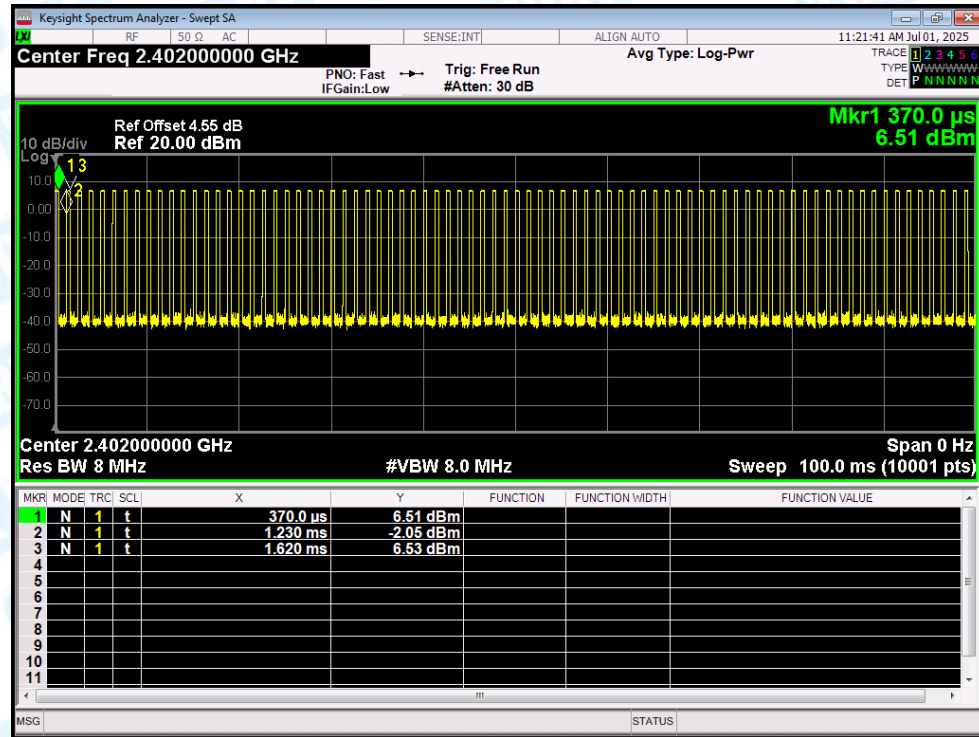
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1. Duty Cycle

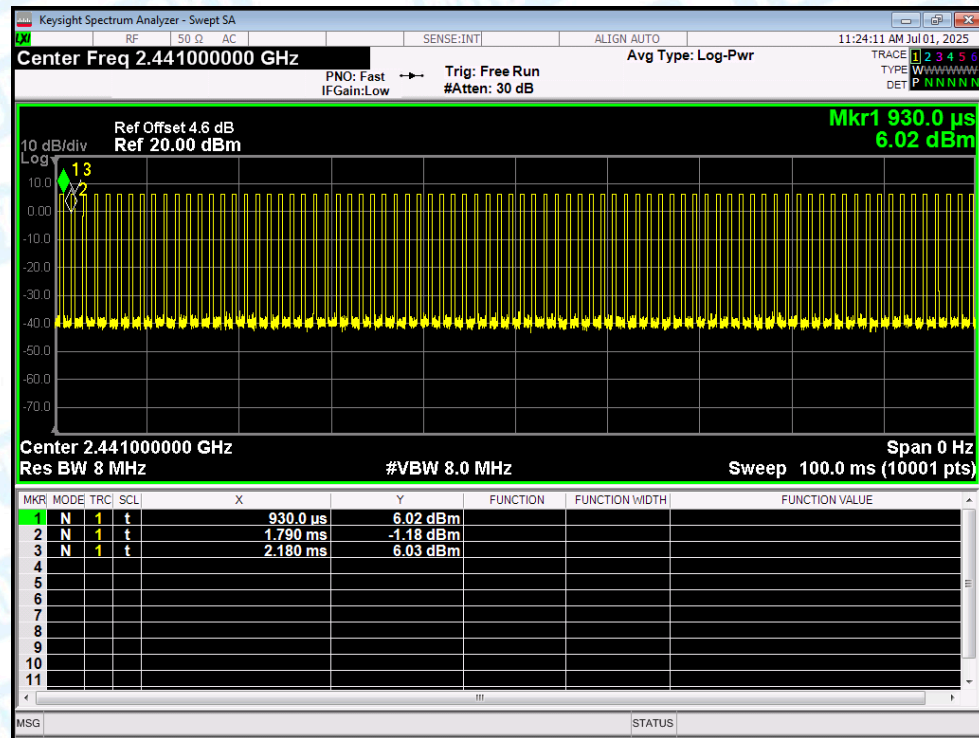
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	32	4.95	2.5
NVNT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

Test Graphs

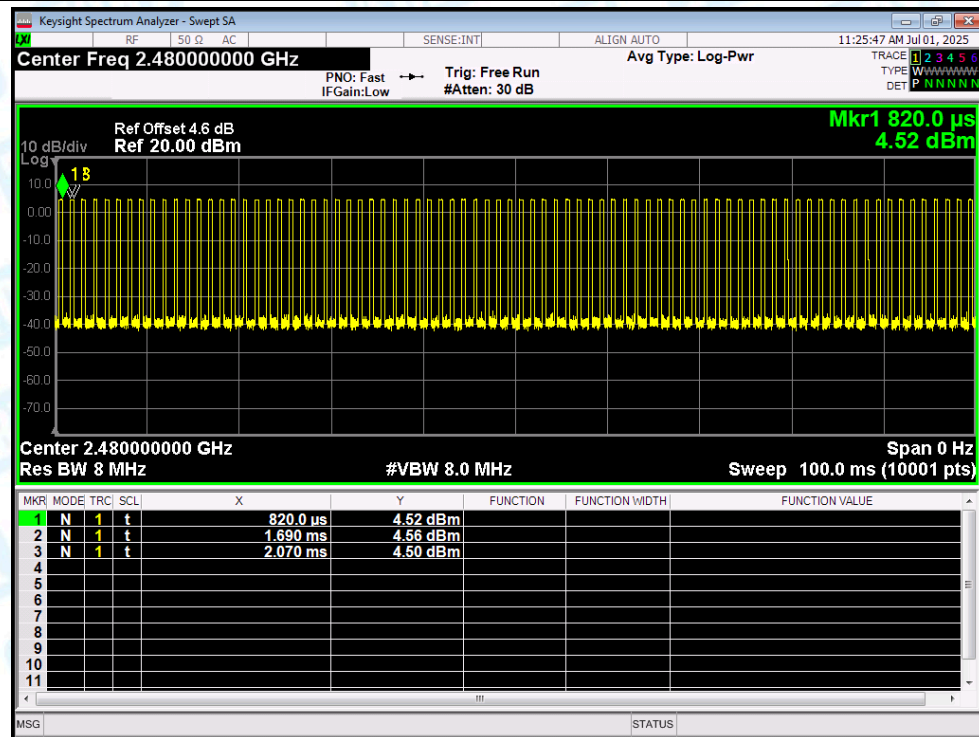
Duty Cycle NVNT 1-DH1 2402MHz Ant1



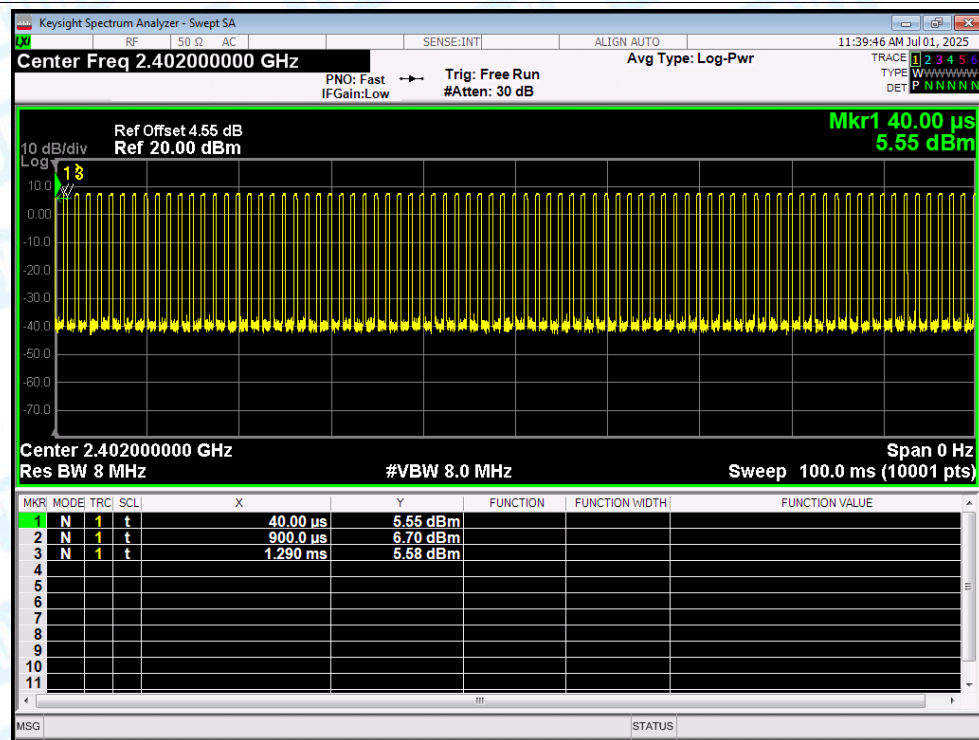
Duty Cycle NVNT 1-DH1 2441MHz Ant1



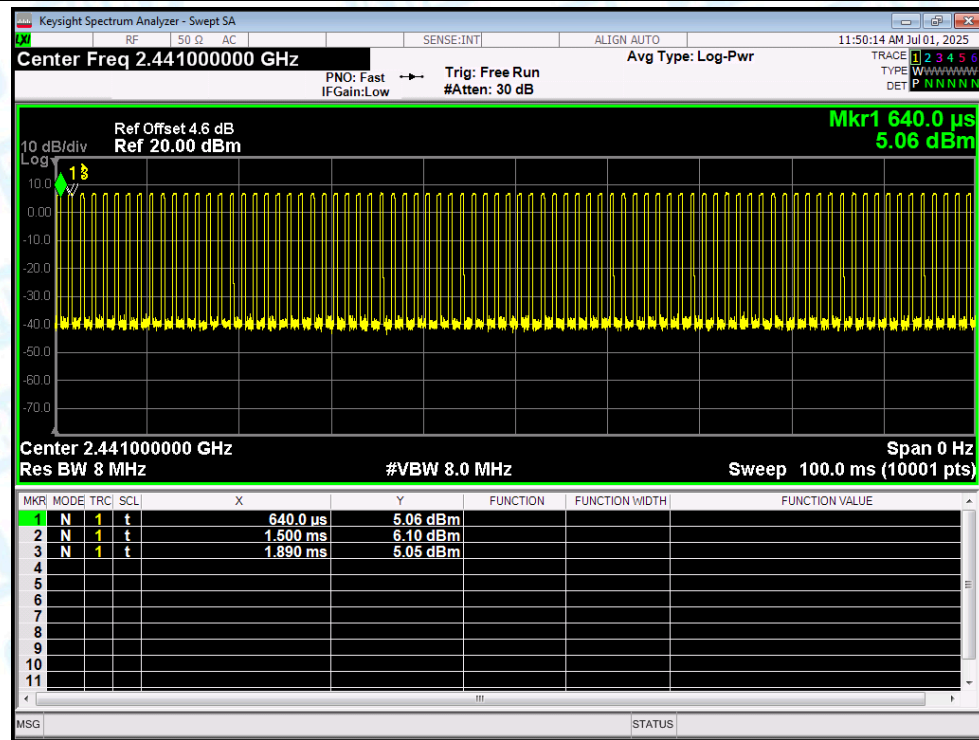
Duty Cycle NVNT 1-DH1 2480MHz Ant1



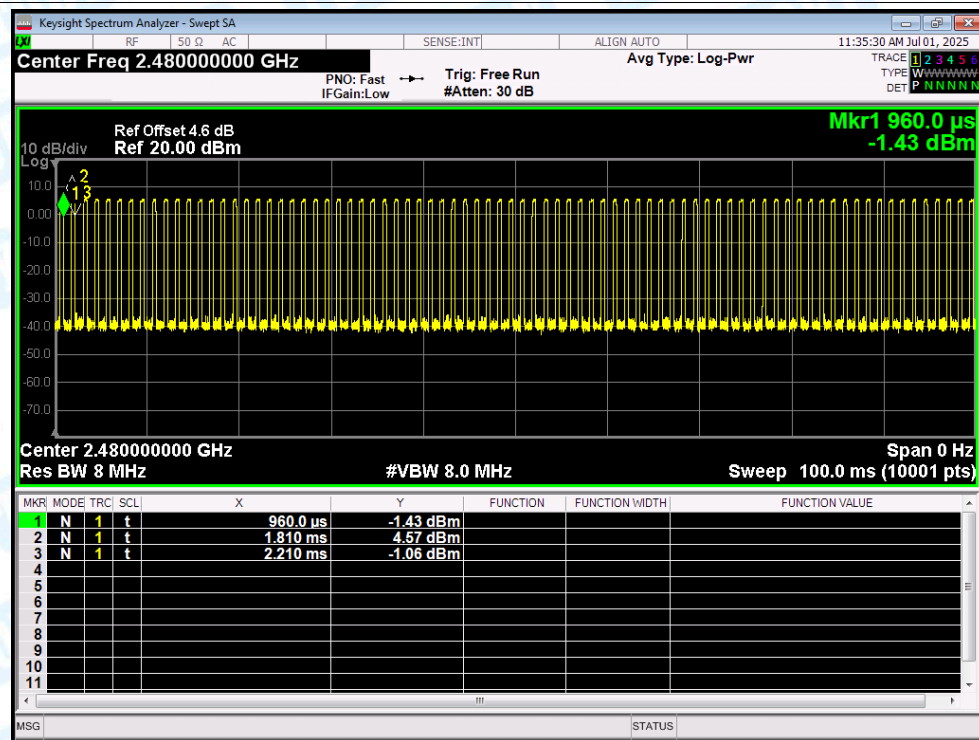
Duty Cycle NVNT 2-DH1 2402MHz Ant1



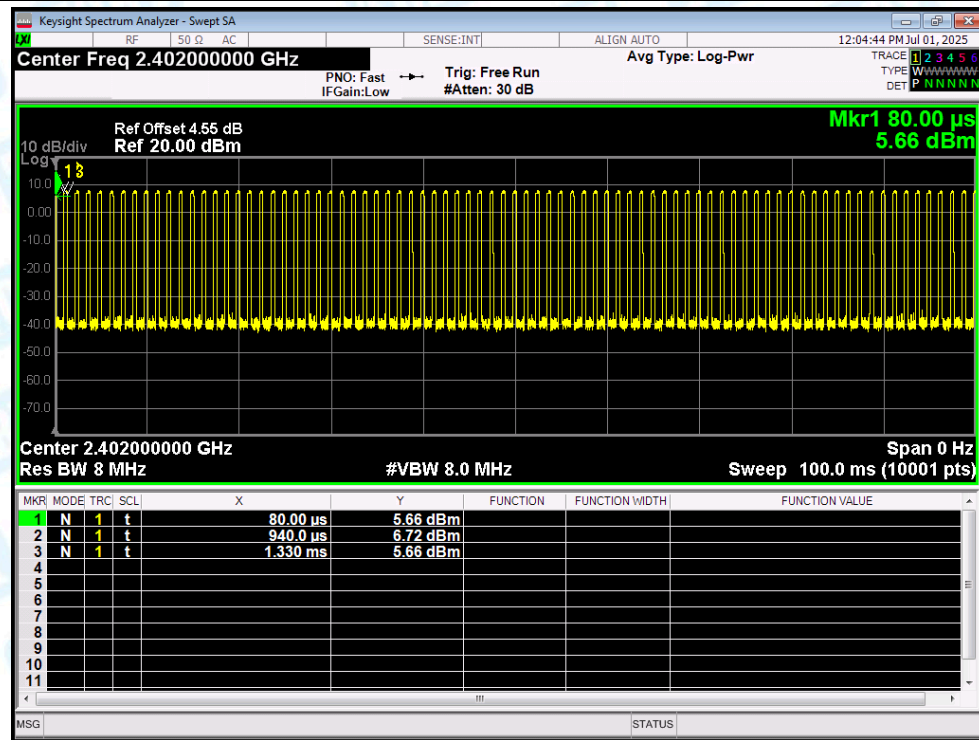
Duty Cycle NVNT 2-DH1 2441MHz Ant1



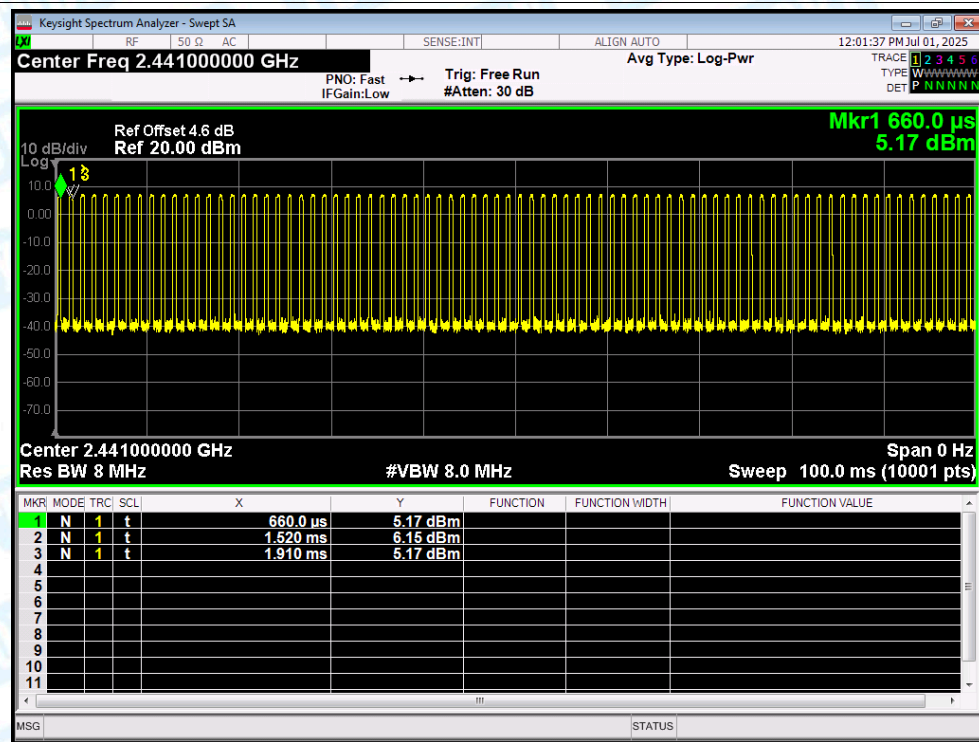
Duty Cycle NVNT 2-DH1 2480MHz Ant1

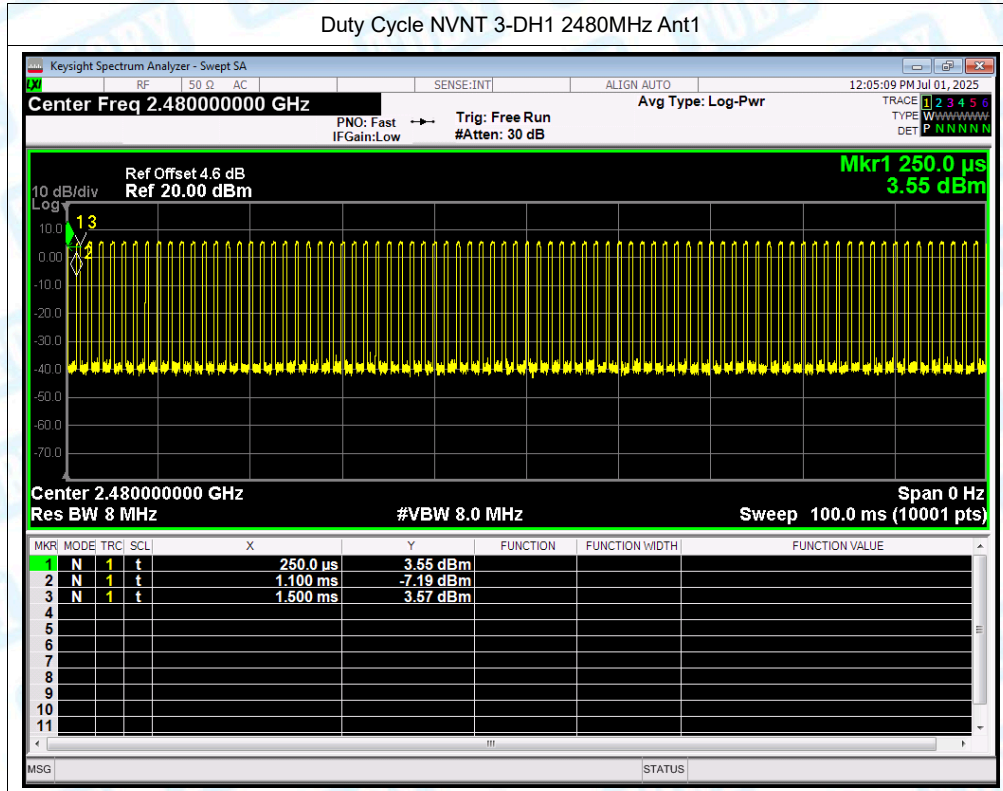


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



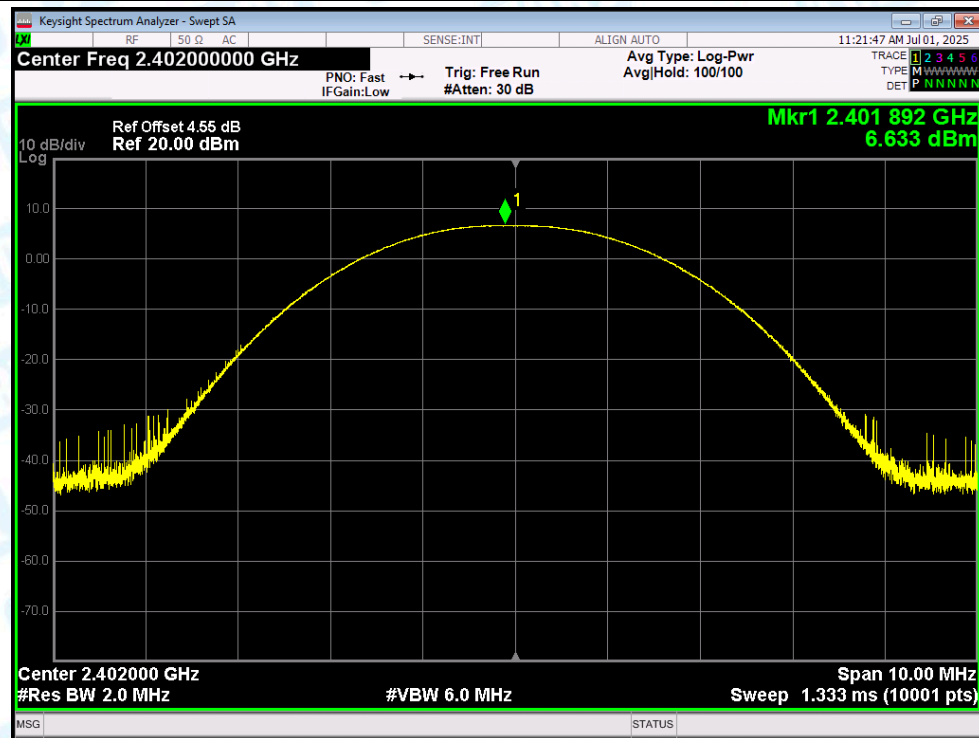


2. Maximum Conducted Output Power

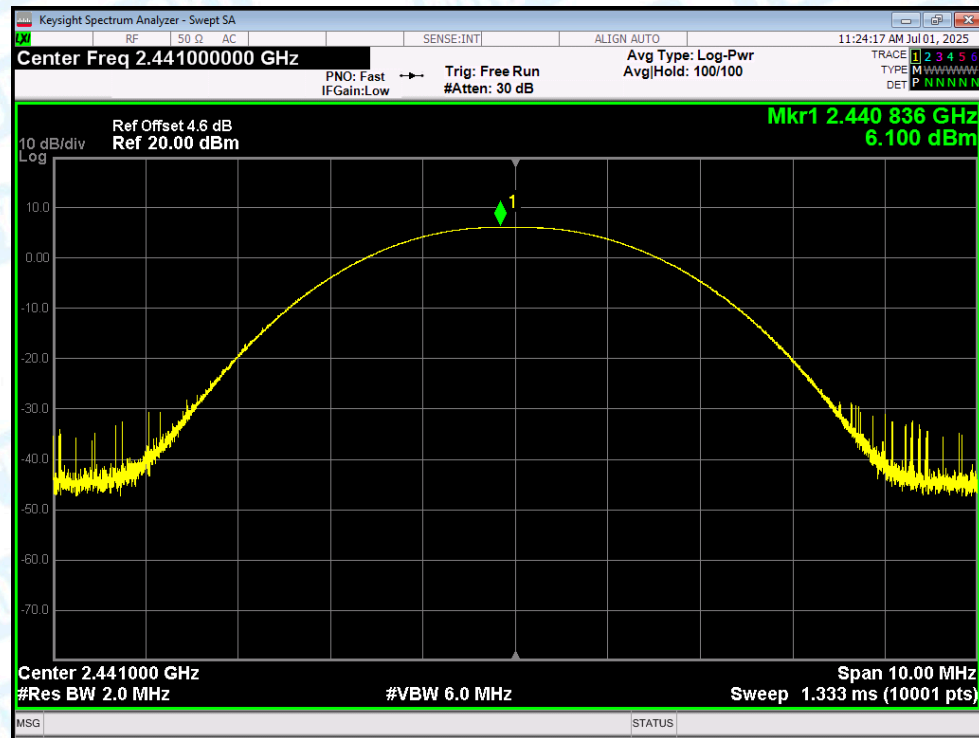
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	6.633	21	Pass
NVNT	1-DH1	2441	Ant1	6.1	21	Pass
NVNT	1-DH1	2480	Ant1	4.577	21	Pass
NVNT	1-DH3	2441	Ant1	5.955	21	Pass
NVNT	1-DH5	2441	Ant1	5.941	21	Pass
NVNT	2-DH1	2402	Ant1	7.287	21	Pass
NVNT	2-DH1	2441	Ant1	6.703	21	Pass
NVNT	2-DH1	2480	Ant1	5.248	21	Pass
NVNT	2-DH3	2441	Ant1	6.605	21	Pass
NVNT	2-DH5	2441	Ant1	6.634	21	Pass
NVNT	3-DH1	2402	Ant1	7.793	21	Pass
NVNT	3-DH1	2441	Ant1	7.141	21	Pass
NVNT	3-DH1	2480	Ant1	5.743	21	Pass
NVNT	3-DH3	2441	Ant1	6.881	21	Pass
NVNT	3-DH5	2441	Ant1	6.869	21	Pass

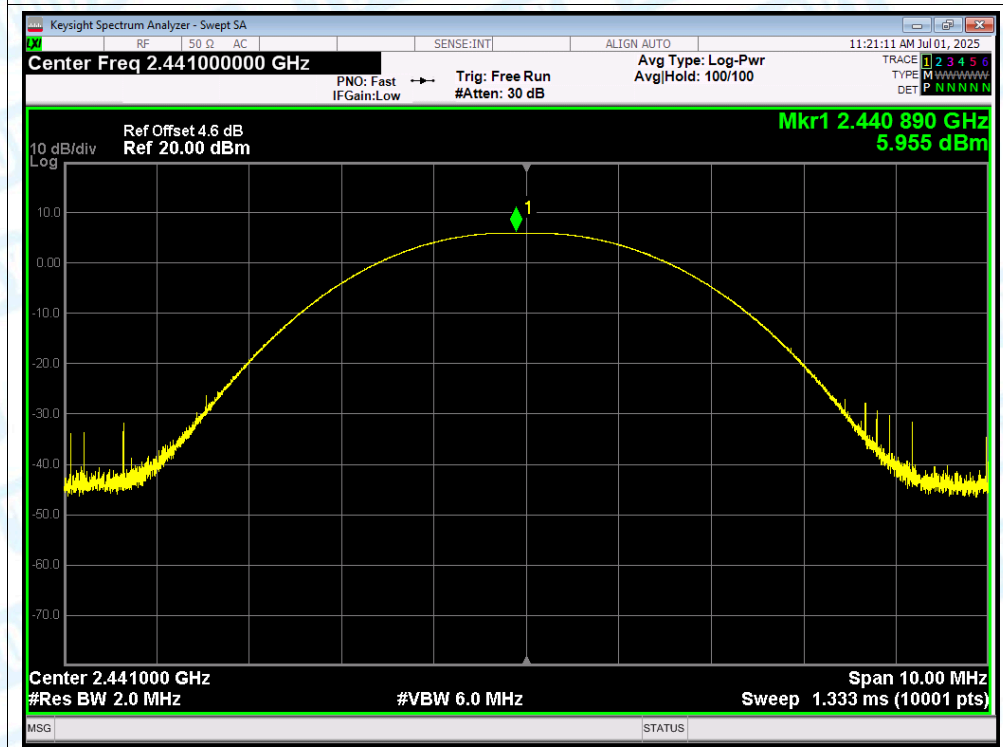
Test Graphs

Power NVNT 1-DH1 2402MHz Ant1

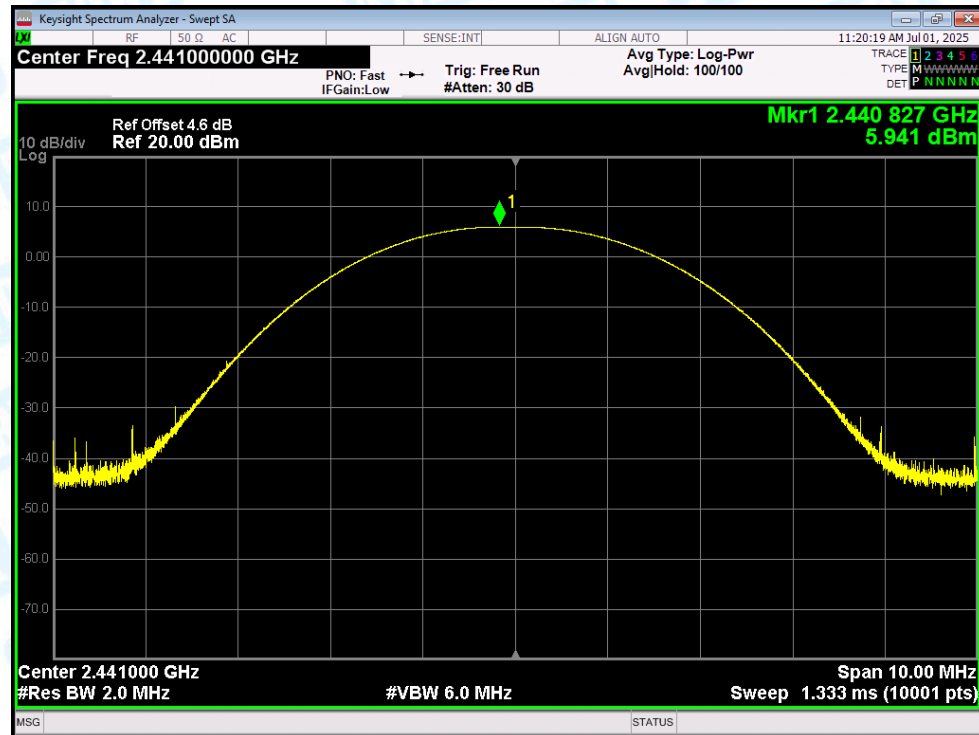


Power NVNT 1-DH1 2441MHz Ant1

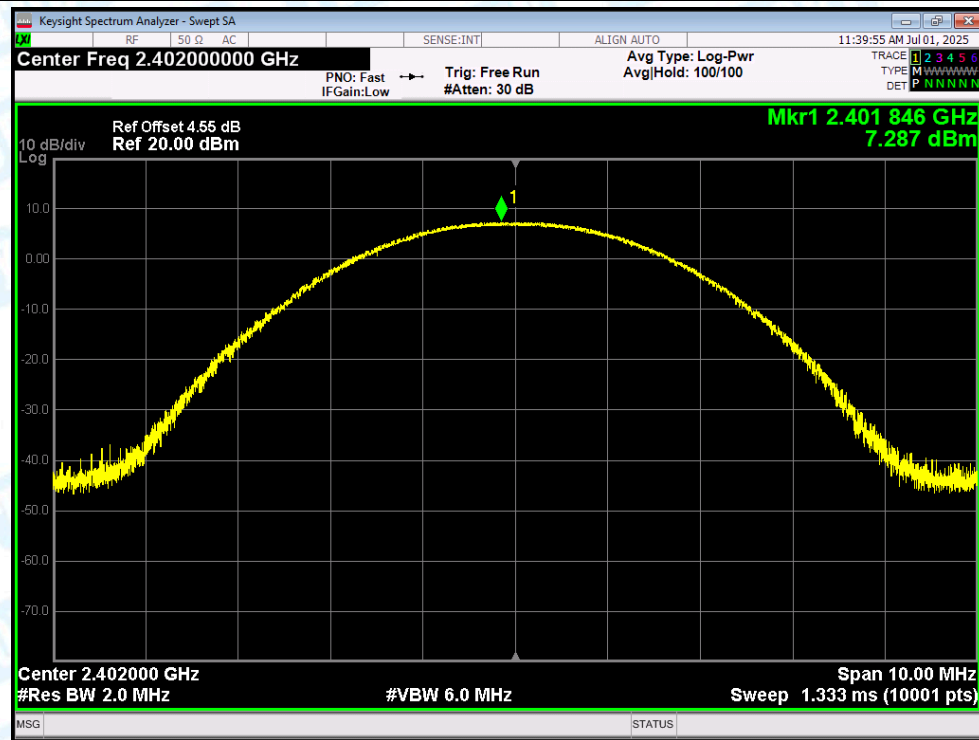




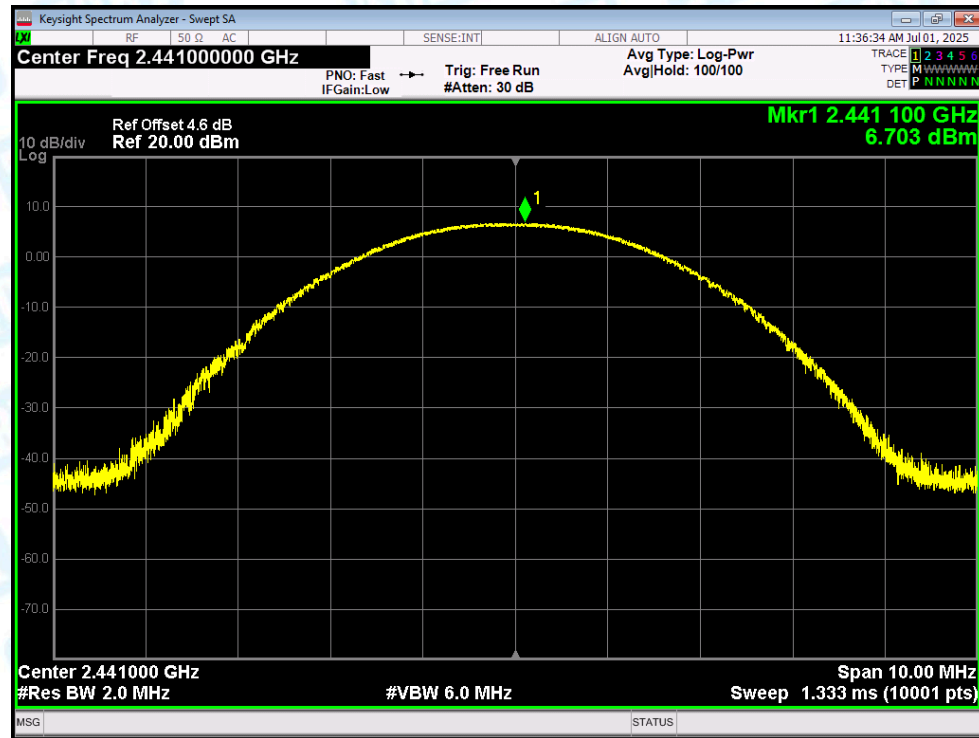
Power NVNT 1-DH5 2441MHz Ant1



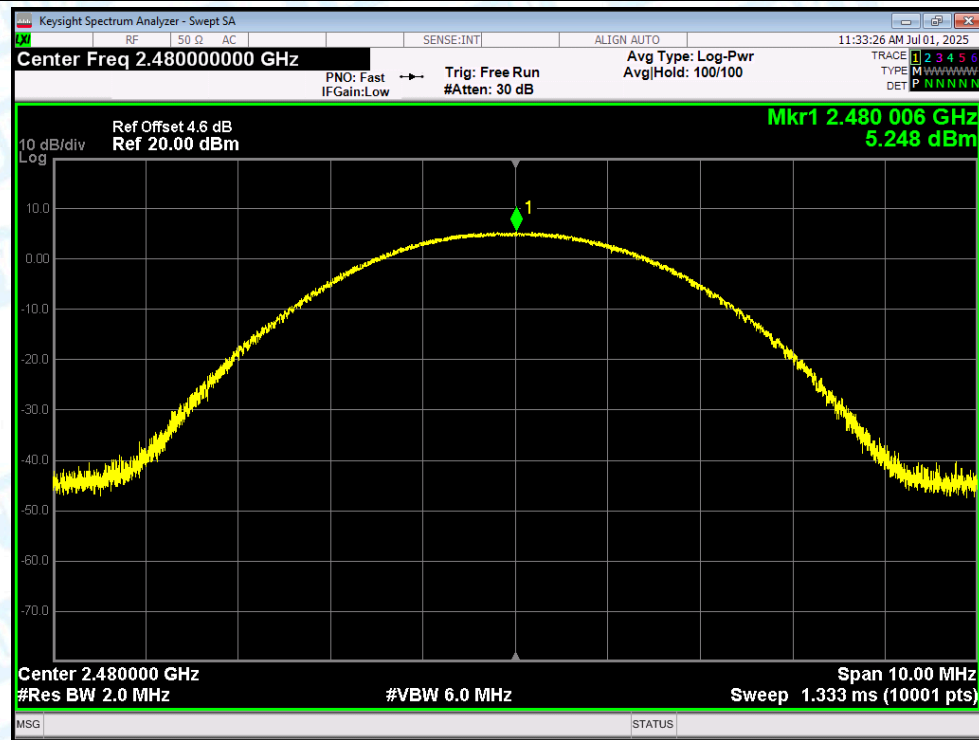
Power NVNT 2-DH1 2402MHz Ant1



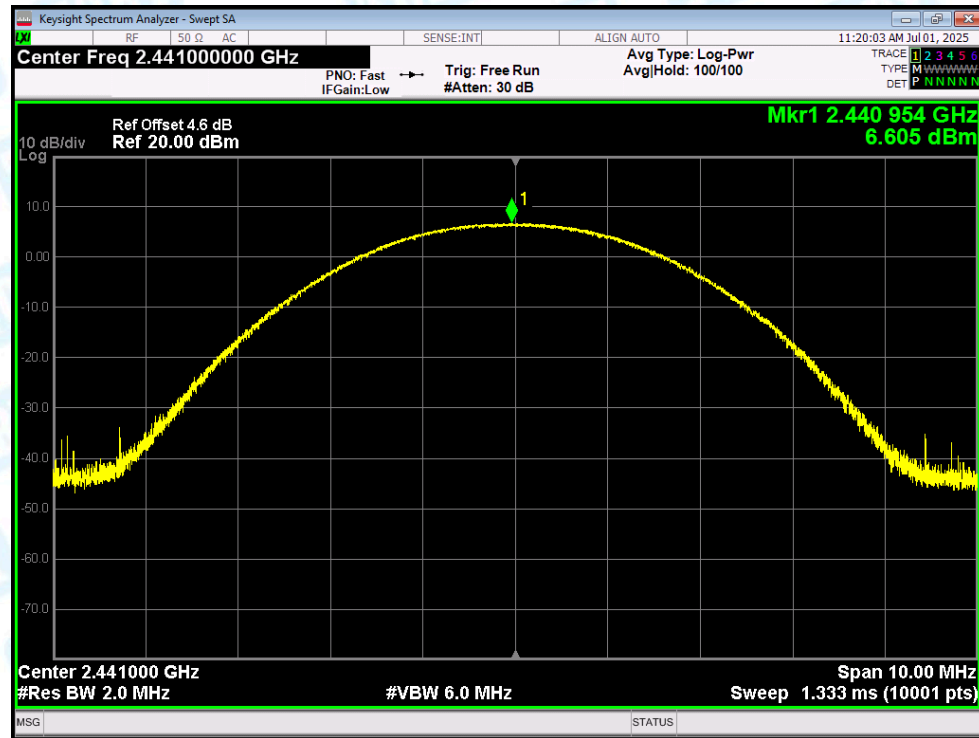
Power NVNT 2-DH1 2441MHz Ant1



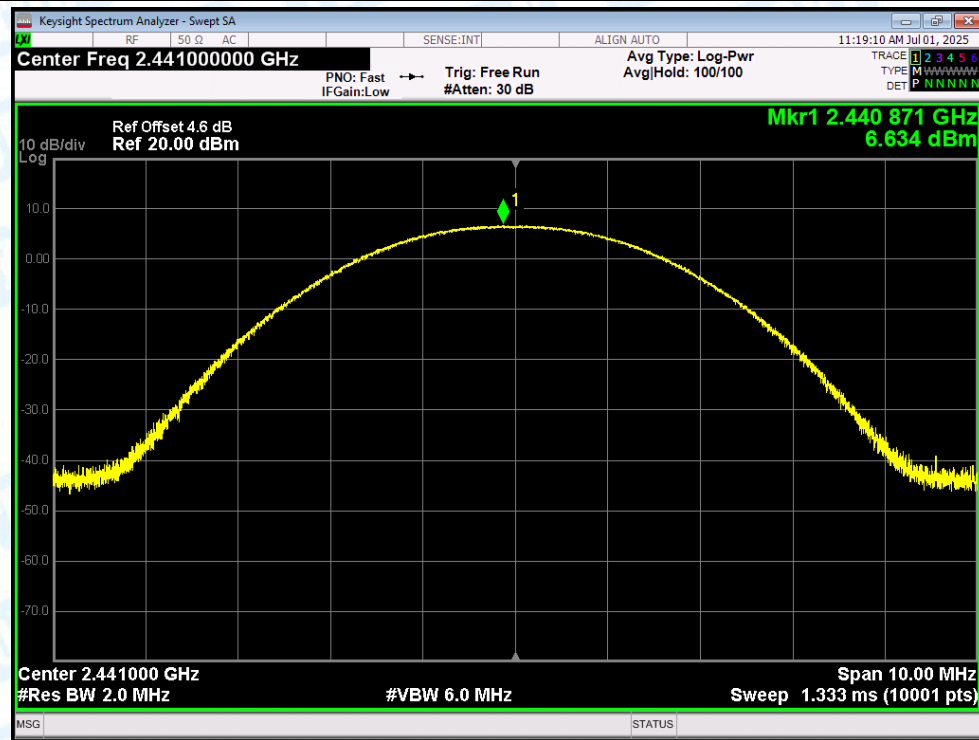
Power NVNT 2-DH1 2480MHz Ant1



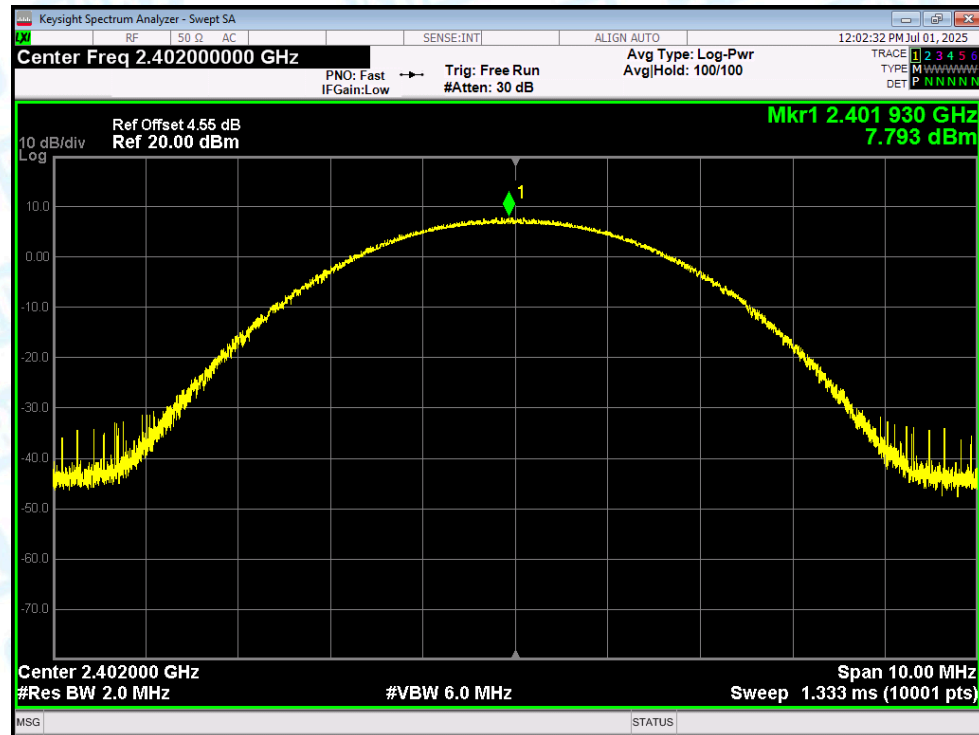
Power NVNT 2-DH3 2441MHz Ant1



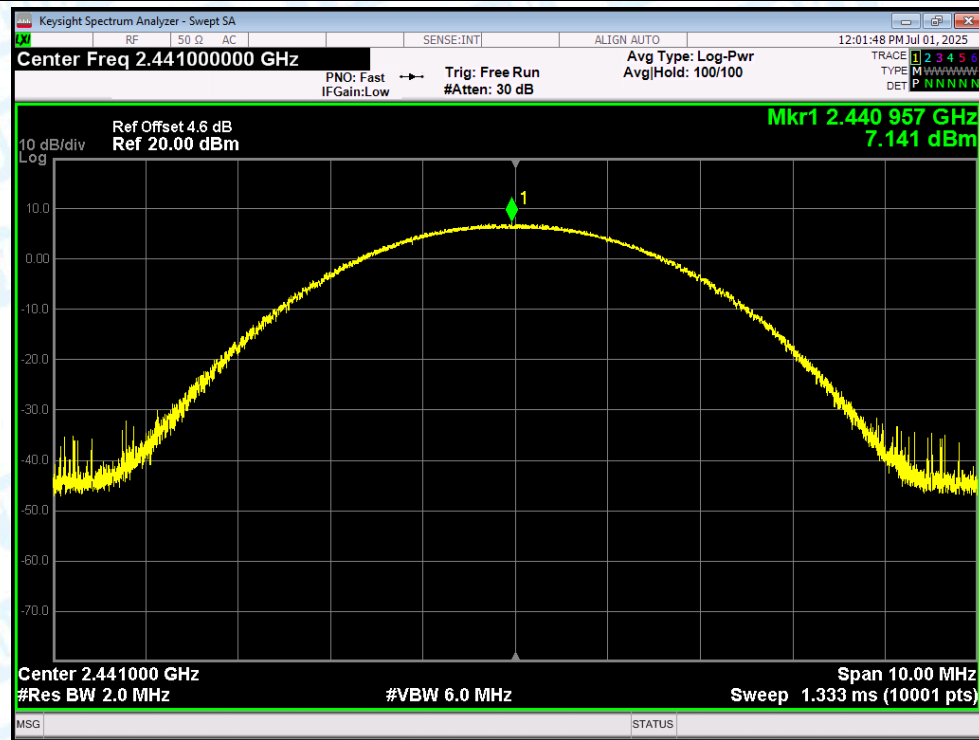
Power NVNT 2-DH5 2441MHz Ant1



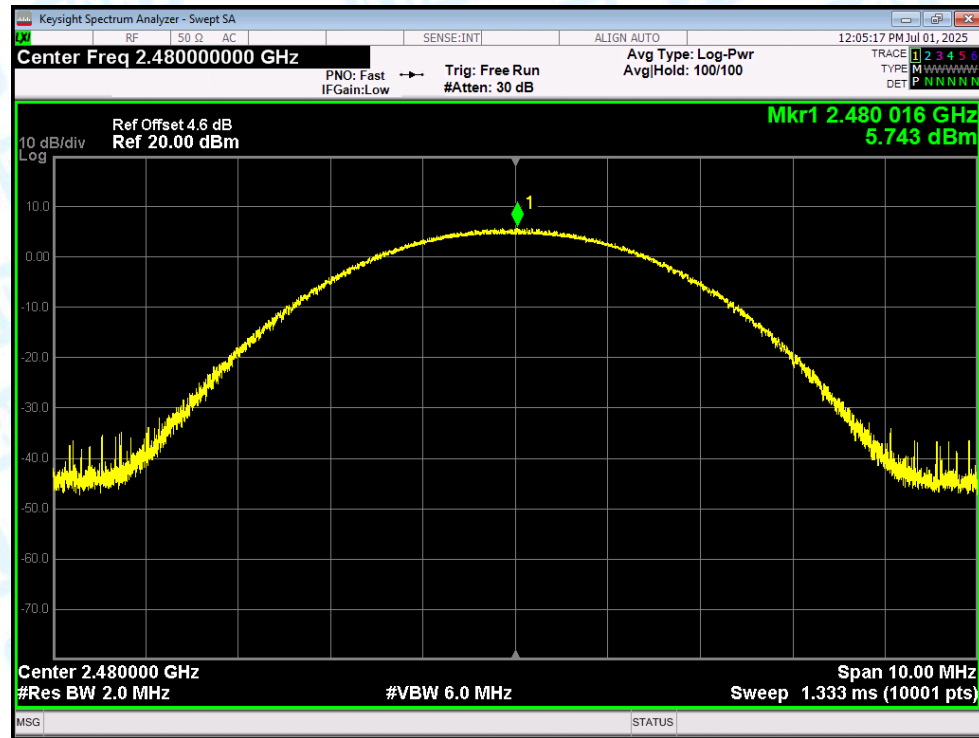
Power NVNT 3-DH1 2402MHz Ant1



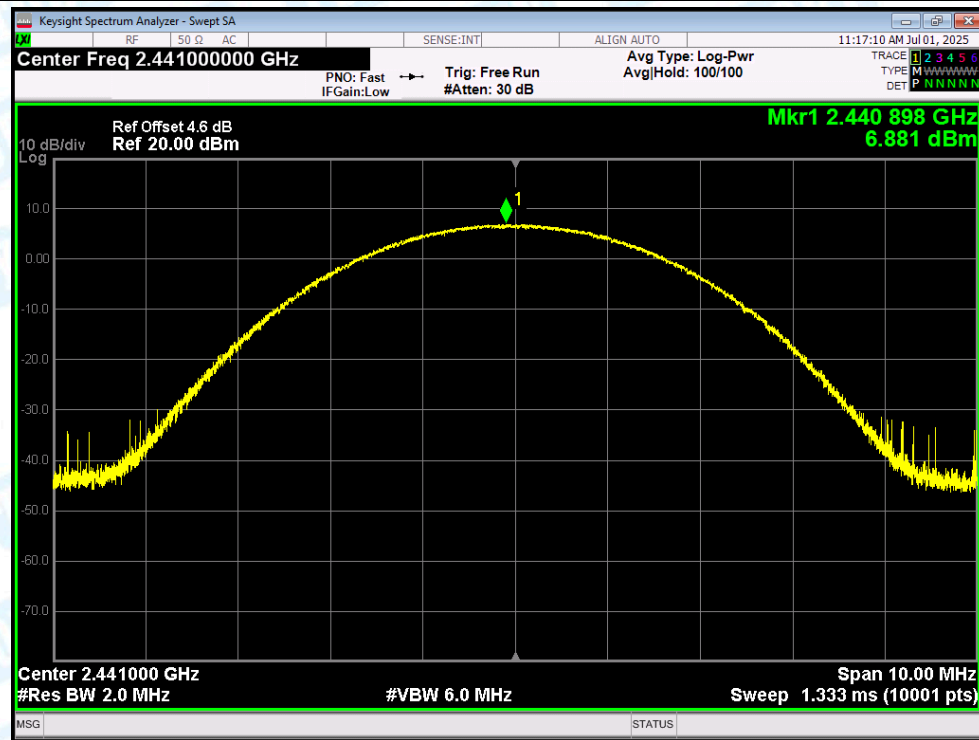
Power NVNT 3-DH1 2441MHz Ant1

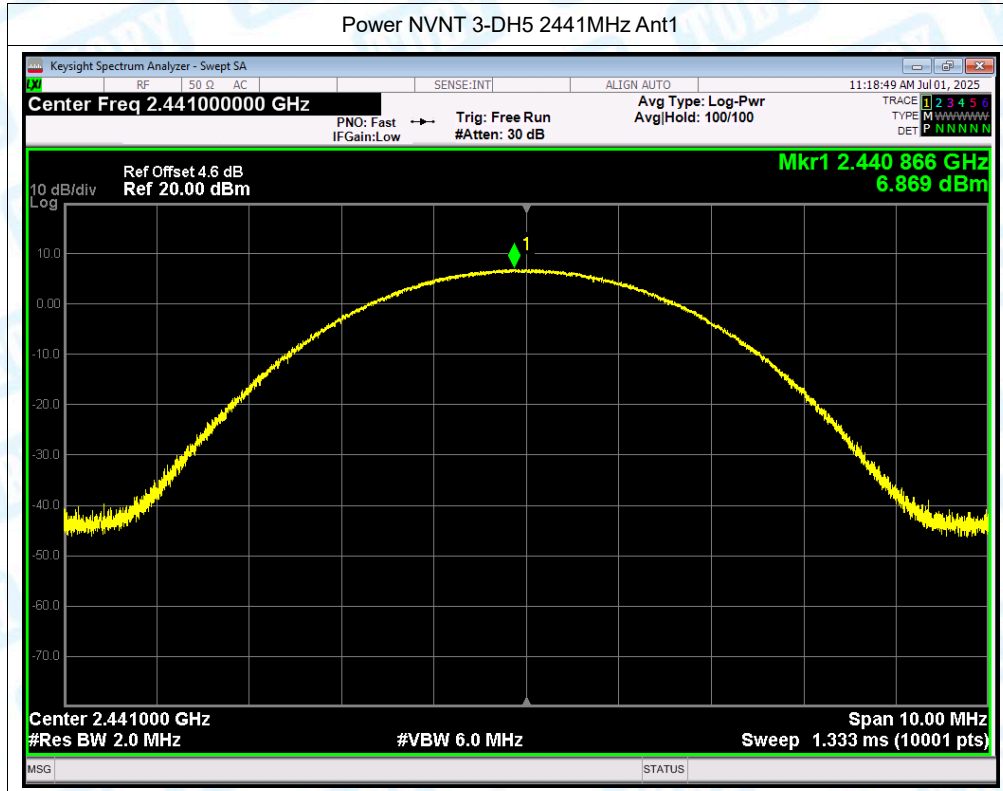


Power NVNT 3-DH1 2480MHz Ant1



Power NVNT 3-DH3 2441MHz Ant1



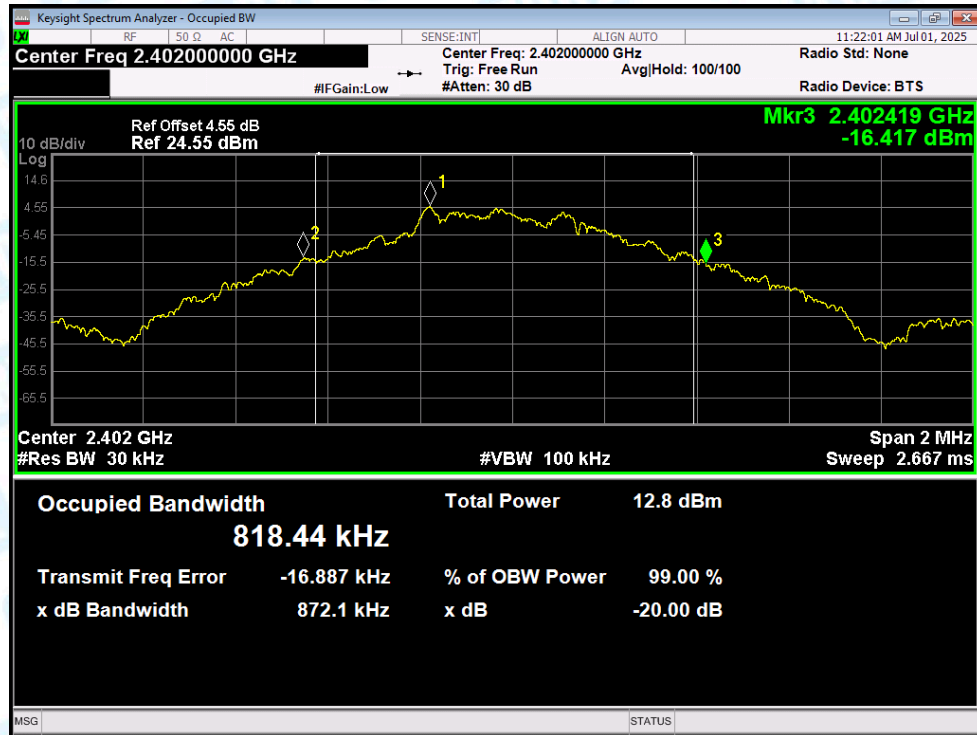


3. -20dB Bandwidth

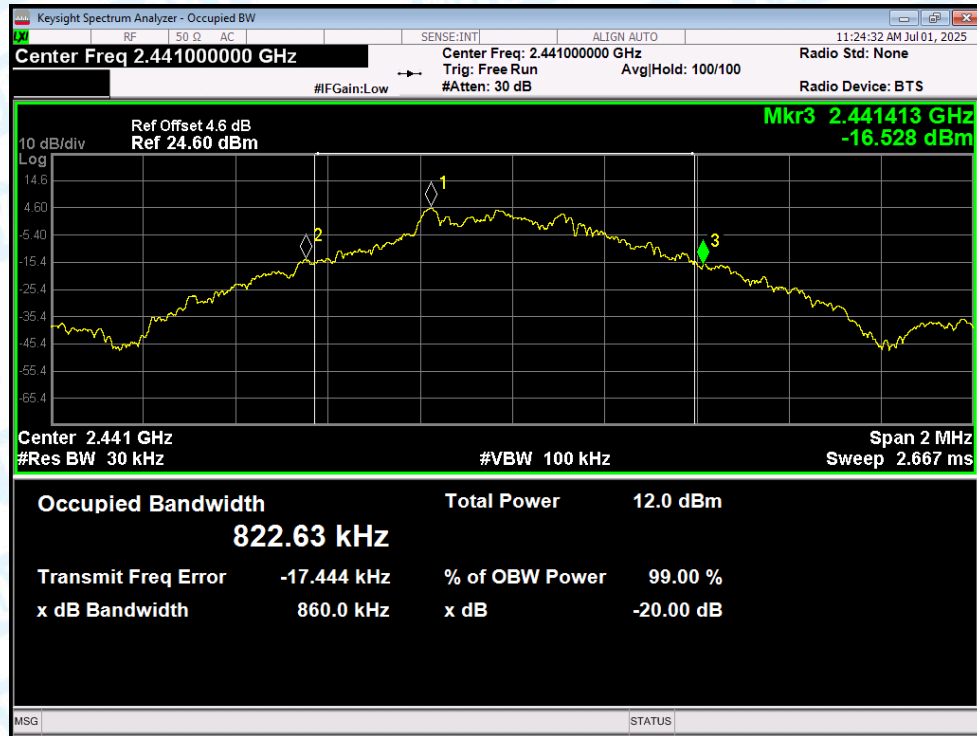
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	/	Pass
NVNT	1-DH1	2441	Ant1	0.86	/	Pass
NVNT	1-DH1	2480	Ant1	0.87	/	Pass
NVNT	2-DH1	2402	Ant1	1.25	/	Pass
NVNT	2-DH1	2441	Ant1	1.25	/	Pass
NVNT	2-DH1	2480	Ant1	1.21	/	Pass
NVNT	3-DH1	2402	Ant1	1.21	/	Pass
NVNT	3-DH1	2441	Ant1	1.22	/	Pass
NVNT	3-DH1	2480	Ant1	1.22	/	Pass

Test Graphs

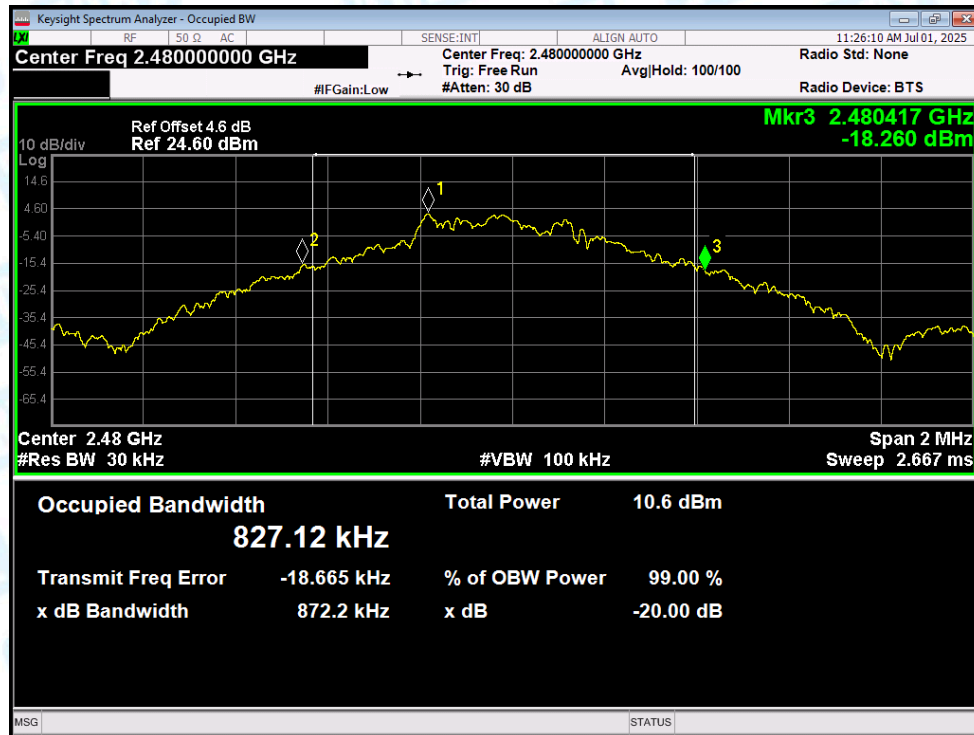
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



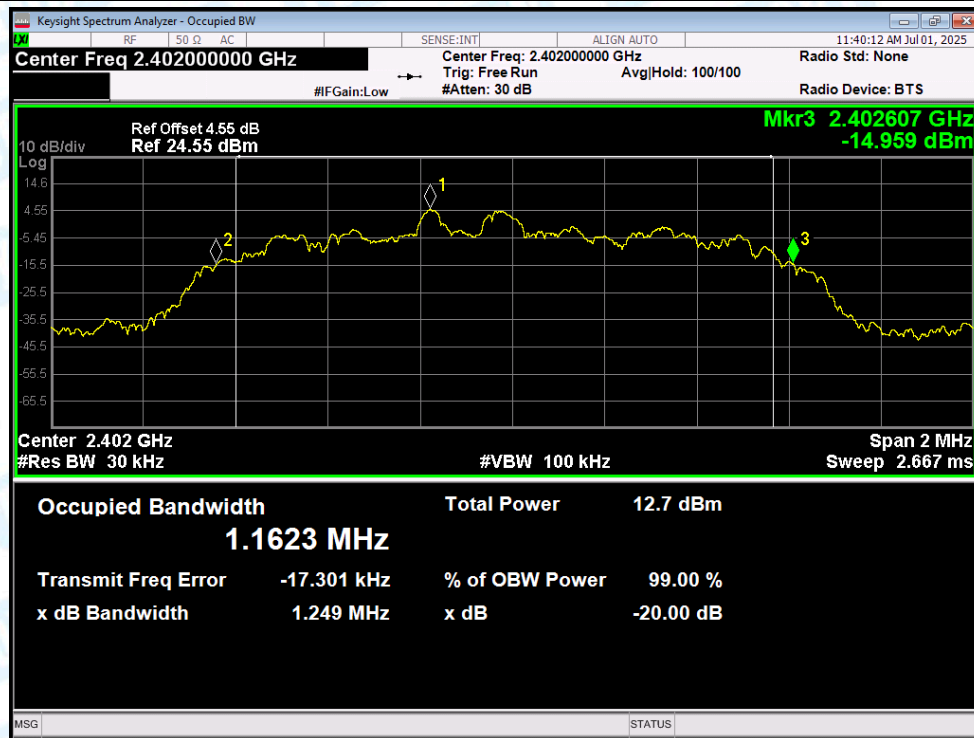
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



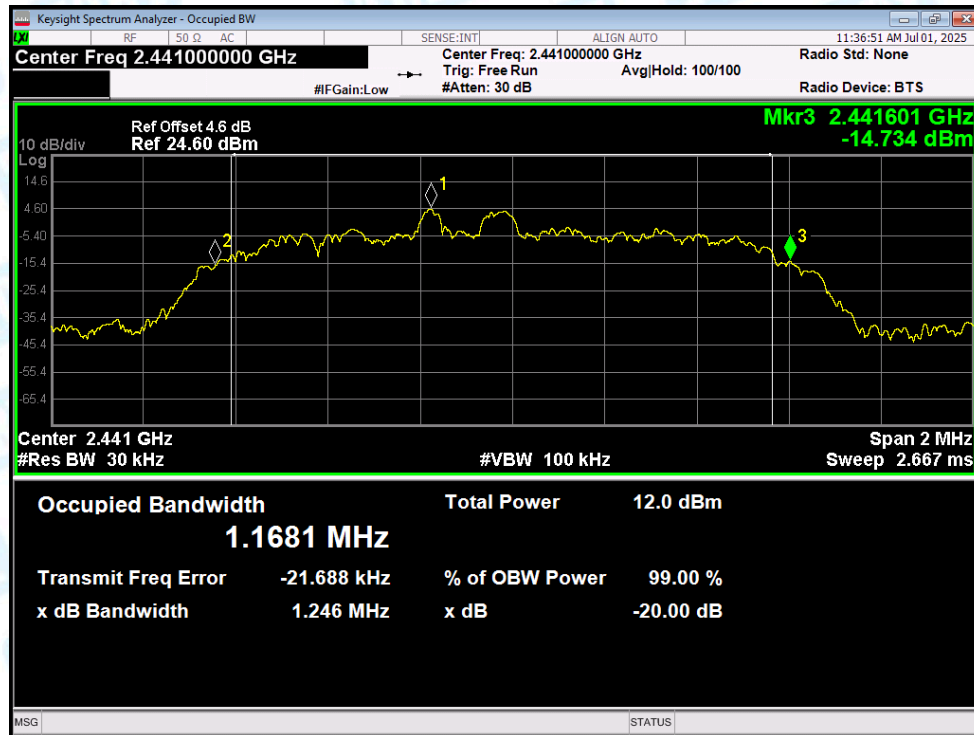
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



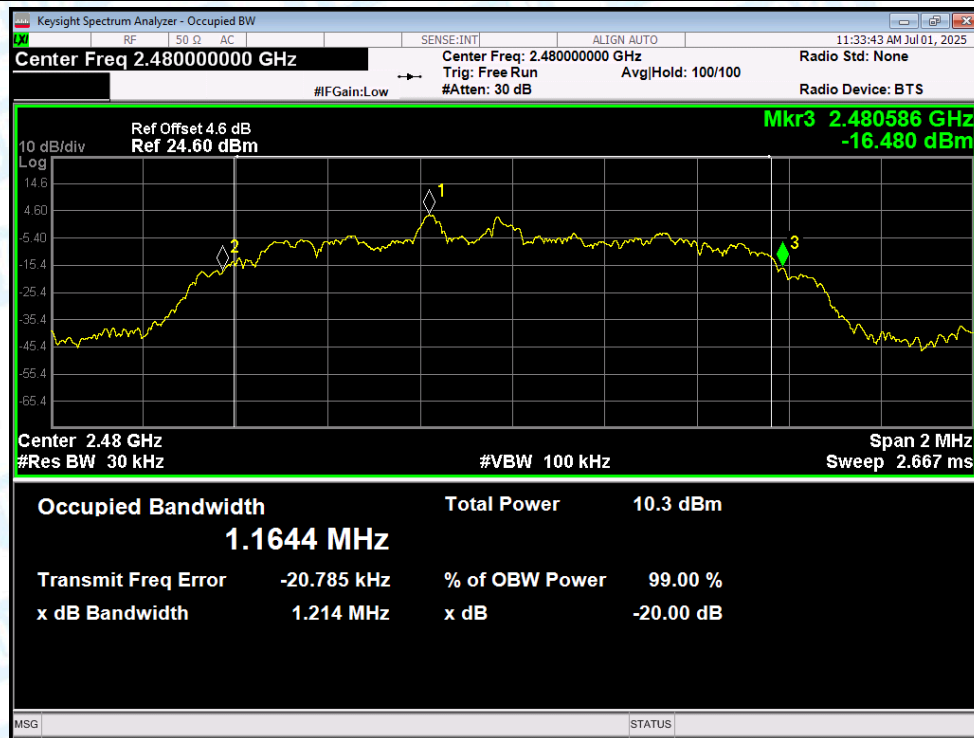
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



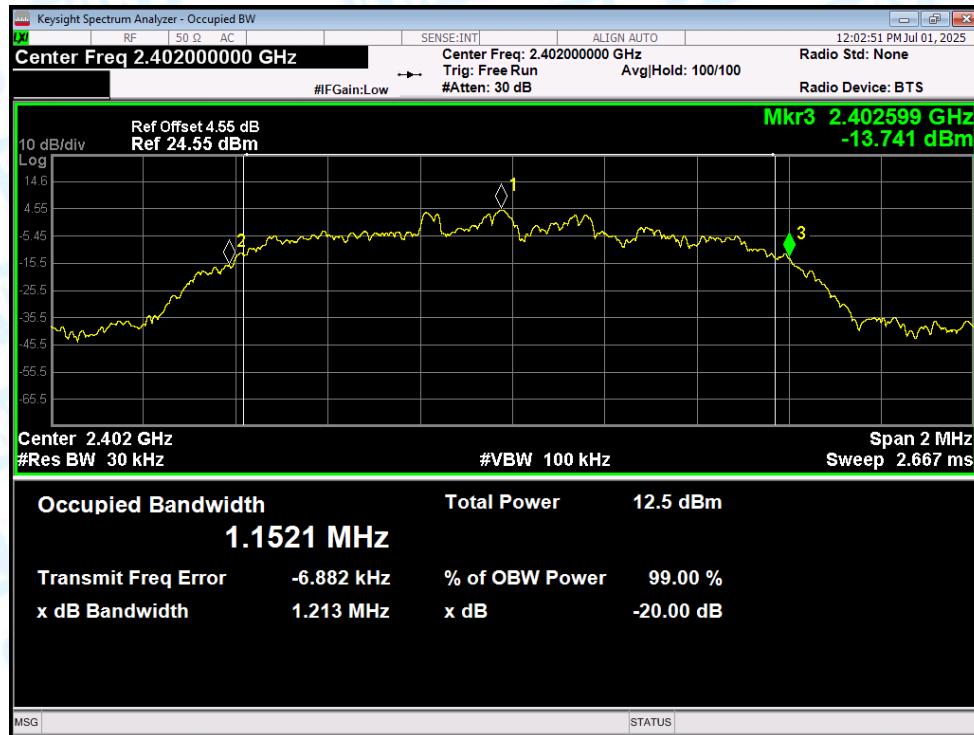
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



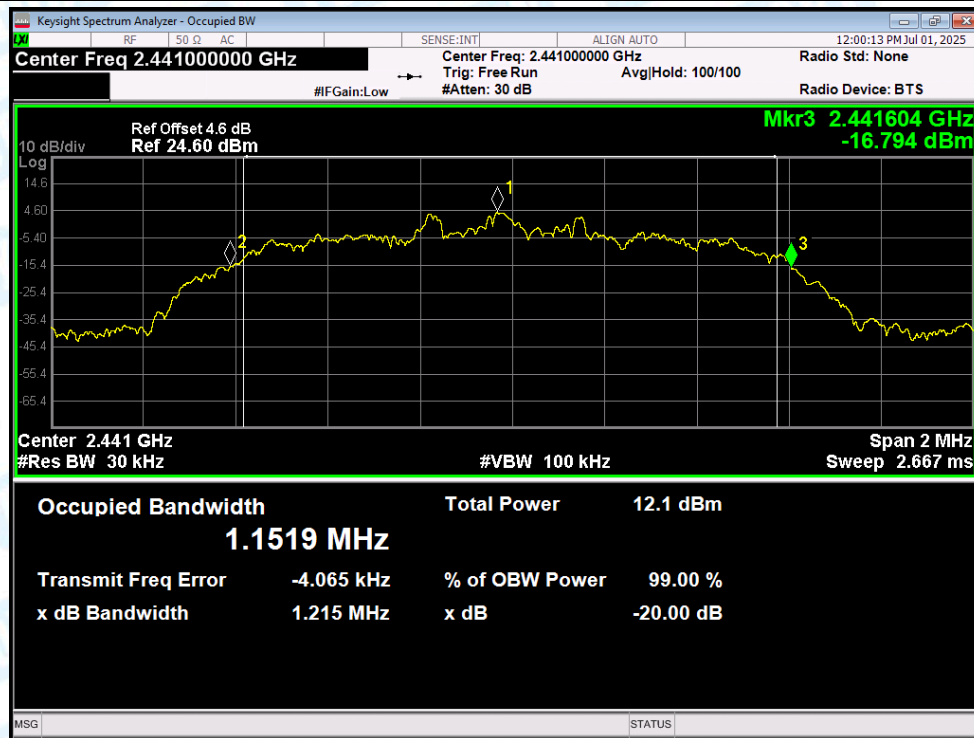
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

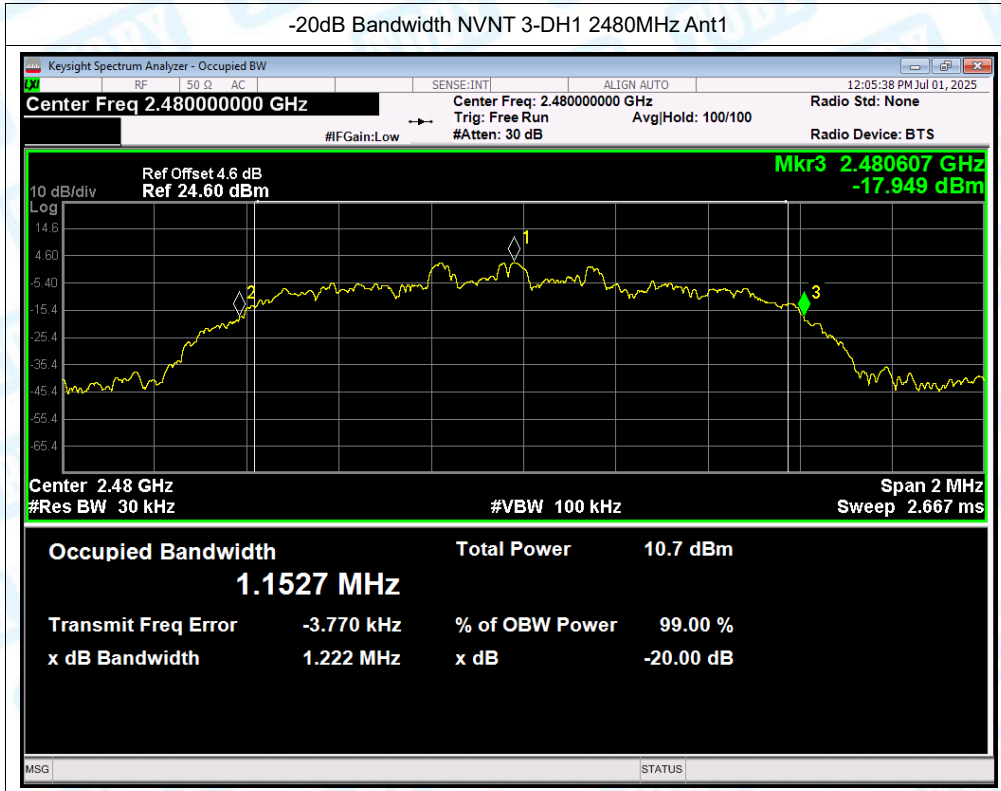


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



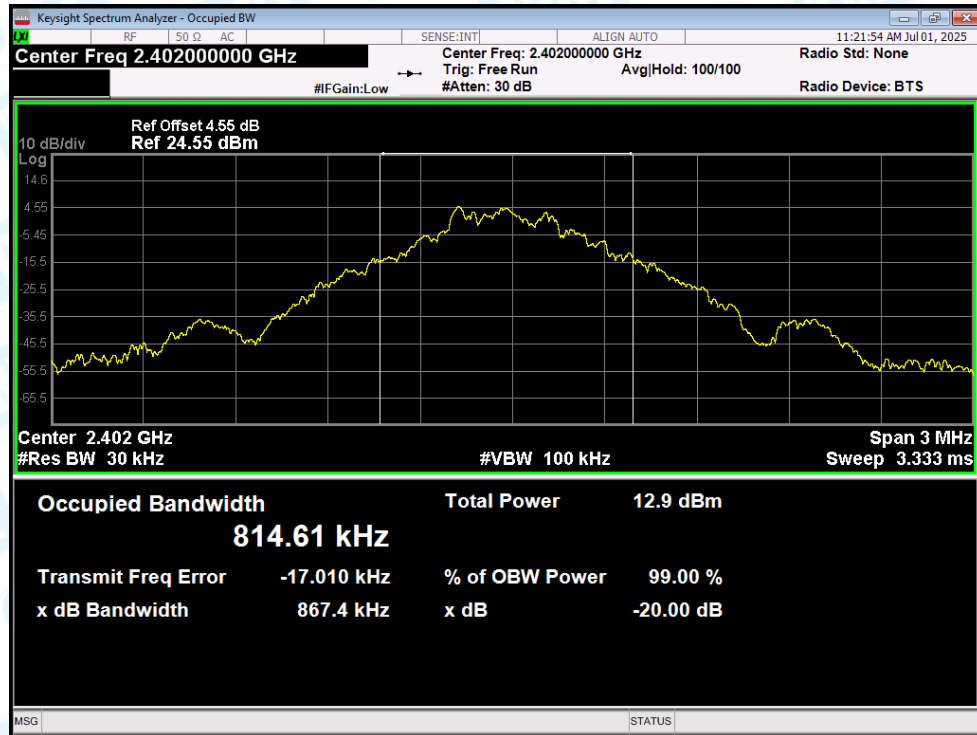


4. Occupied Channel Bandwidth

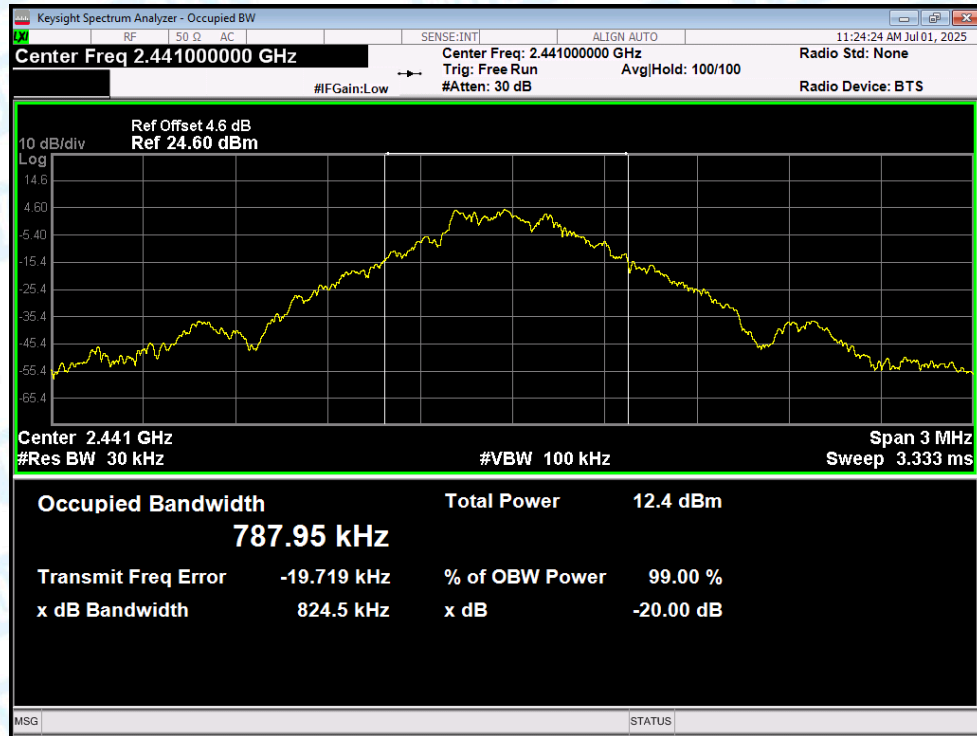
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.815
NVNT	1-DH1	2441	Ant1	0.788
NVNT	1-DH1	2480	Ant1	0.814
NVNT	2-DH1	2402	Ant1	1.147
NVNT	2-DH1	2441	Ant1	1.173
NVNT	2-DH1	2480	Ant1	1.16
NVNT	3-DH1	2402	Ant1	1.153
NVNT	3-DH1	2441	Ant1	1.153
NVNT	3-DH1	2480	Ant1	1.148

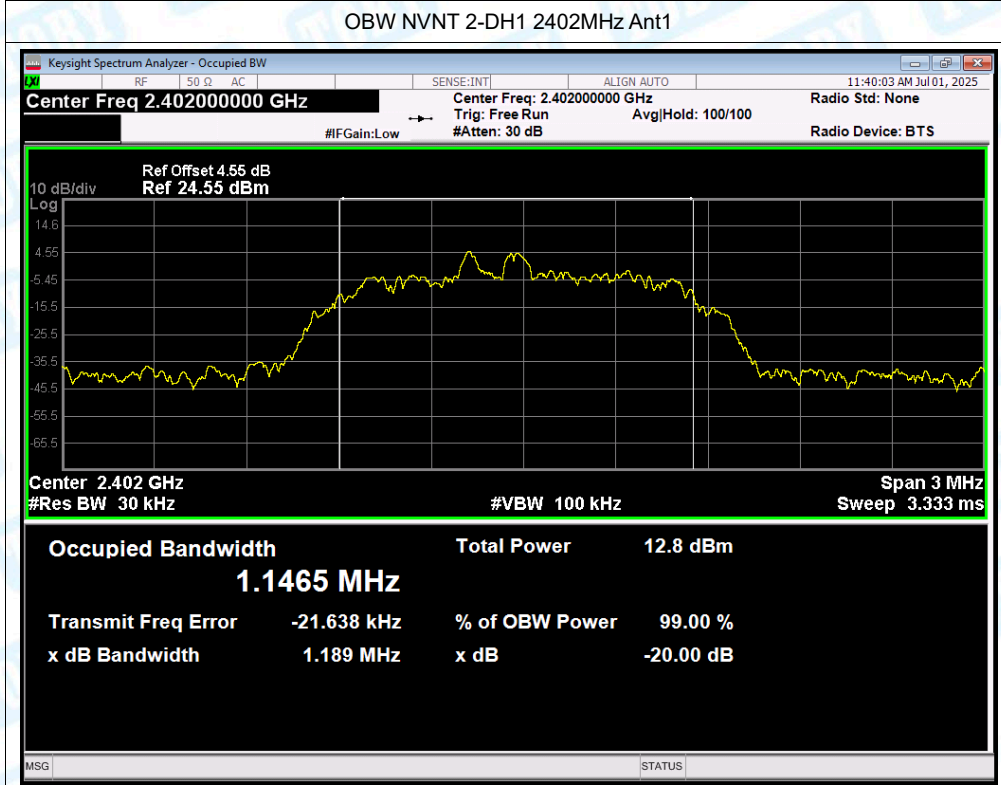
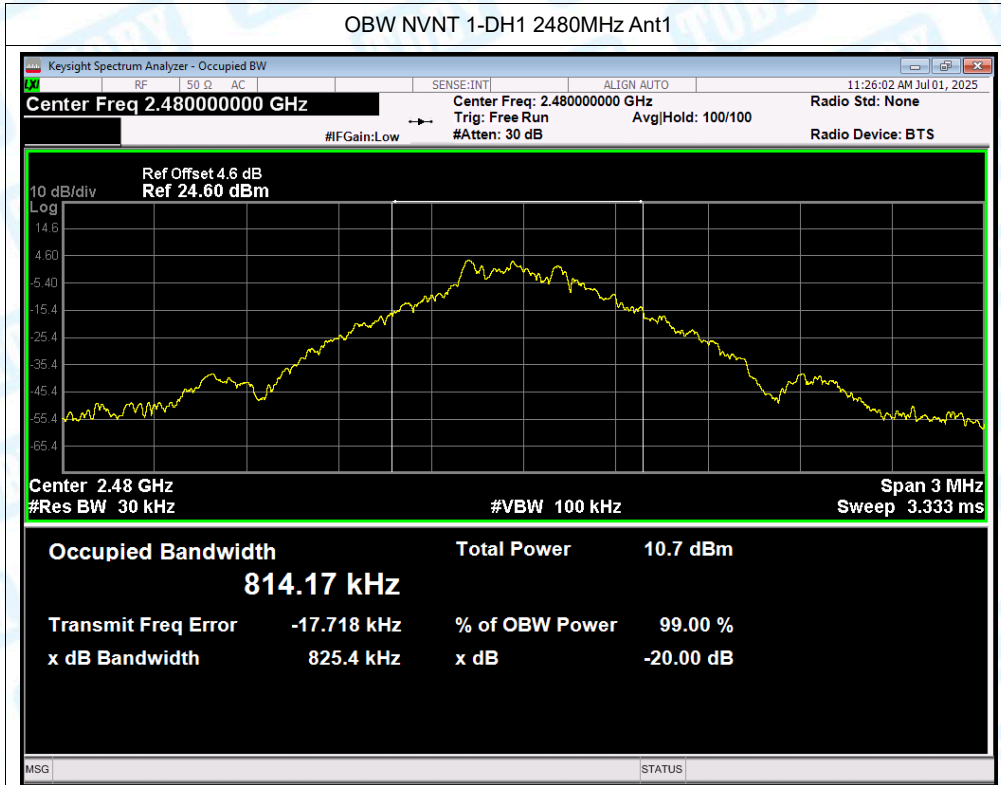
Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1

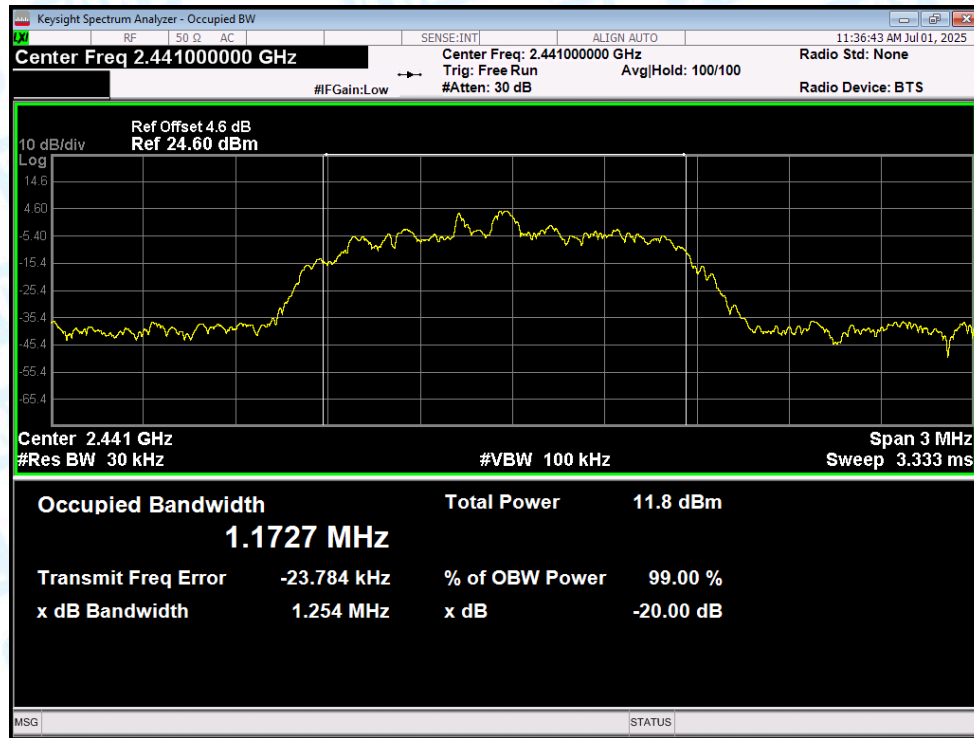


OBW NVNT 1-DH1 2441MHz Ant1

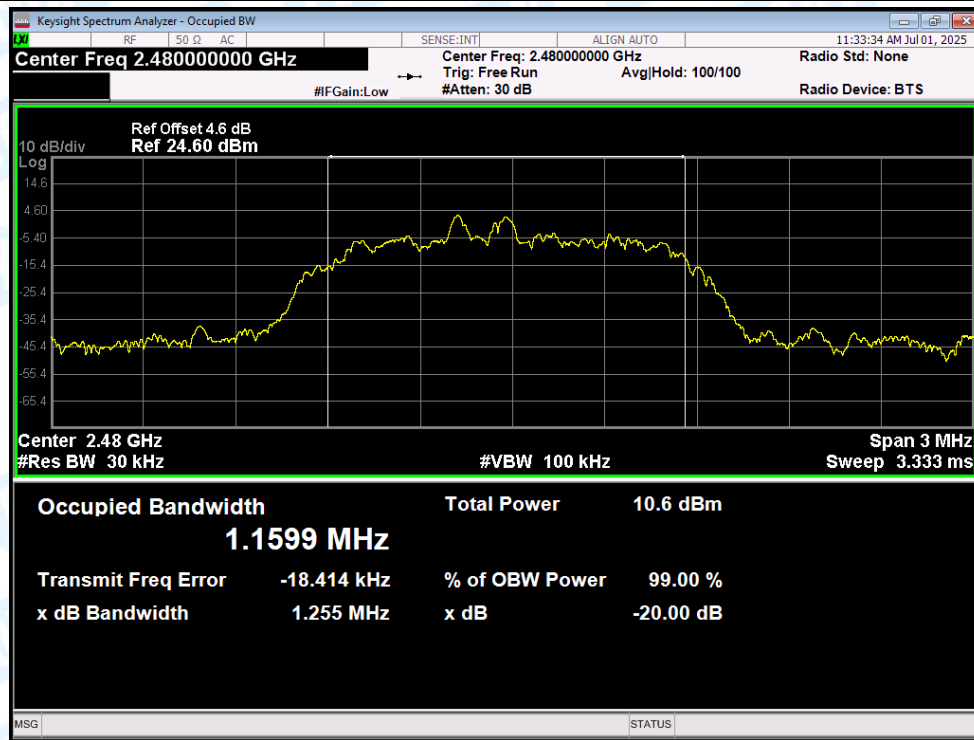




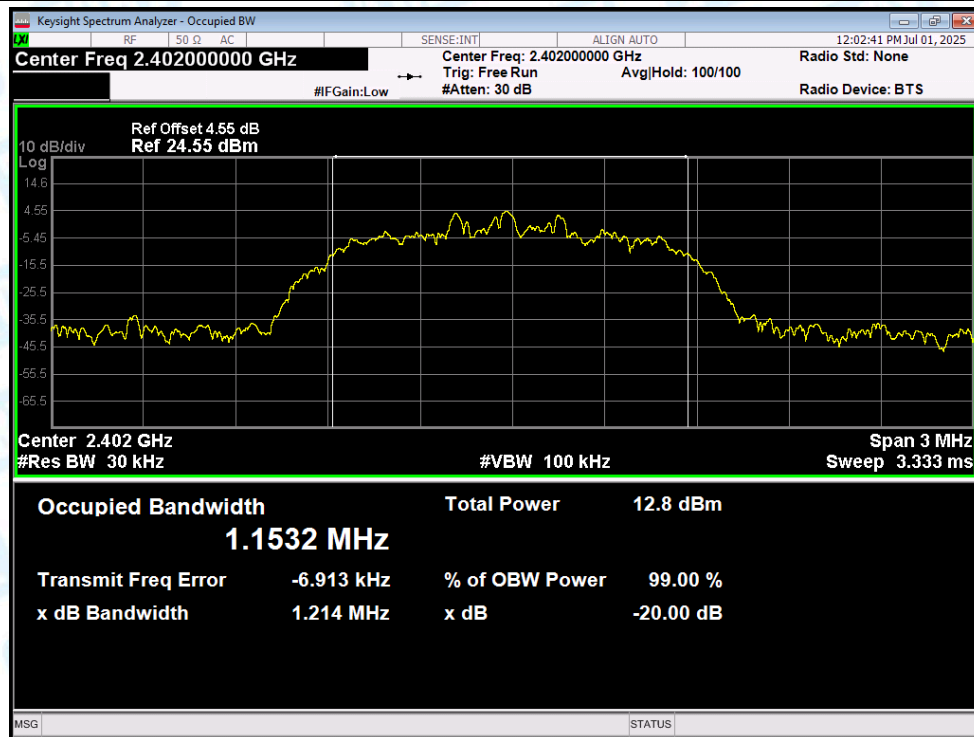
OBW NVNT 2-DH1 2441MHz Ant1



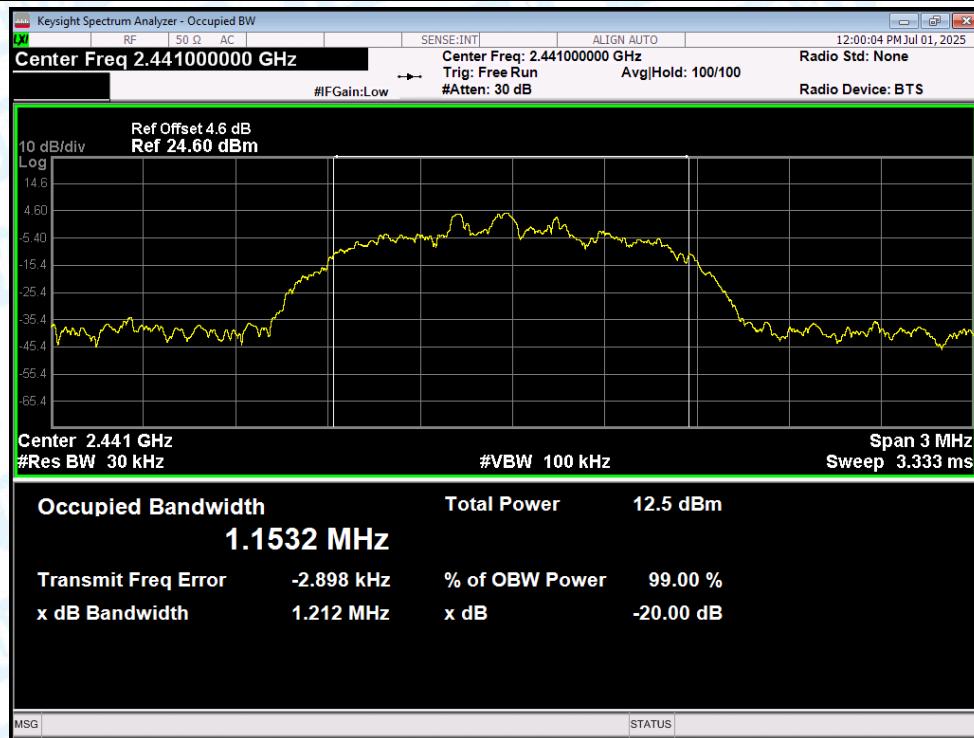
OBW NVNT 2-DH1 2480MHz Ant1

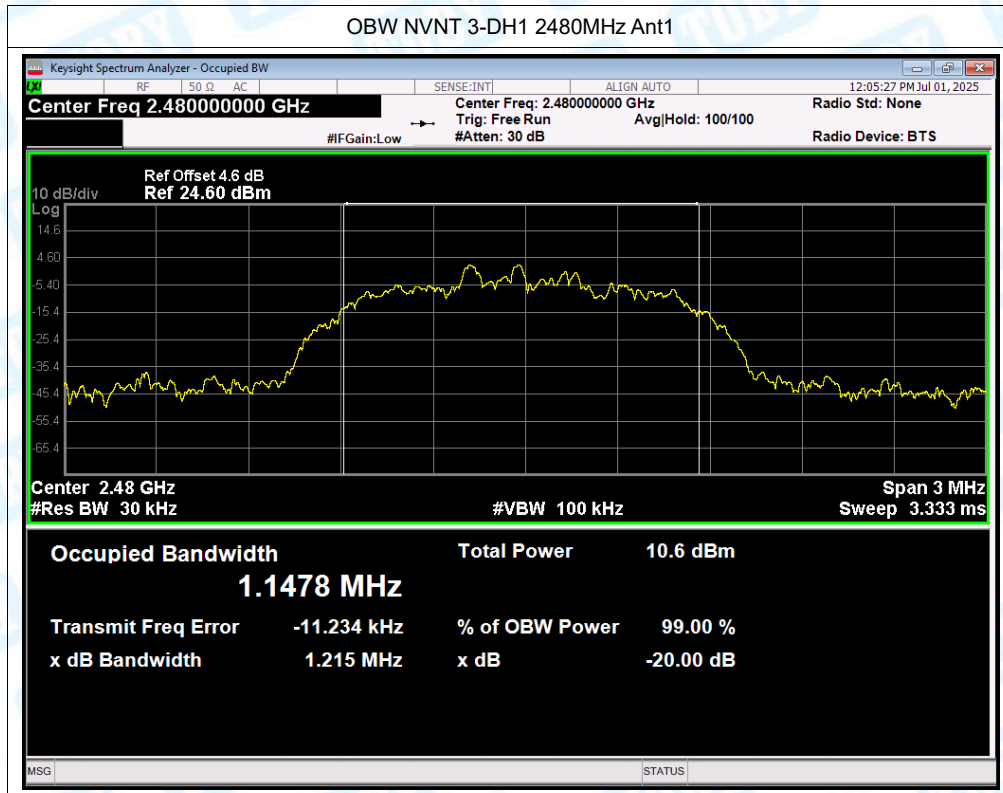


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



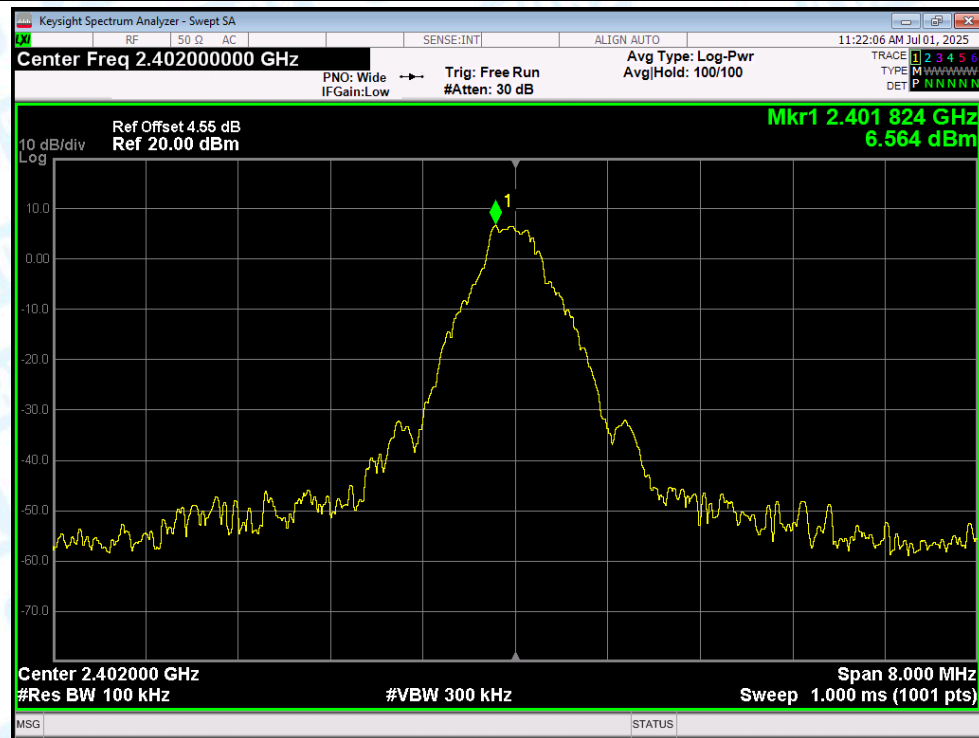


5. Band Edge

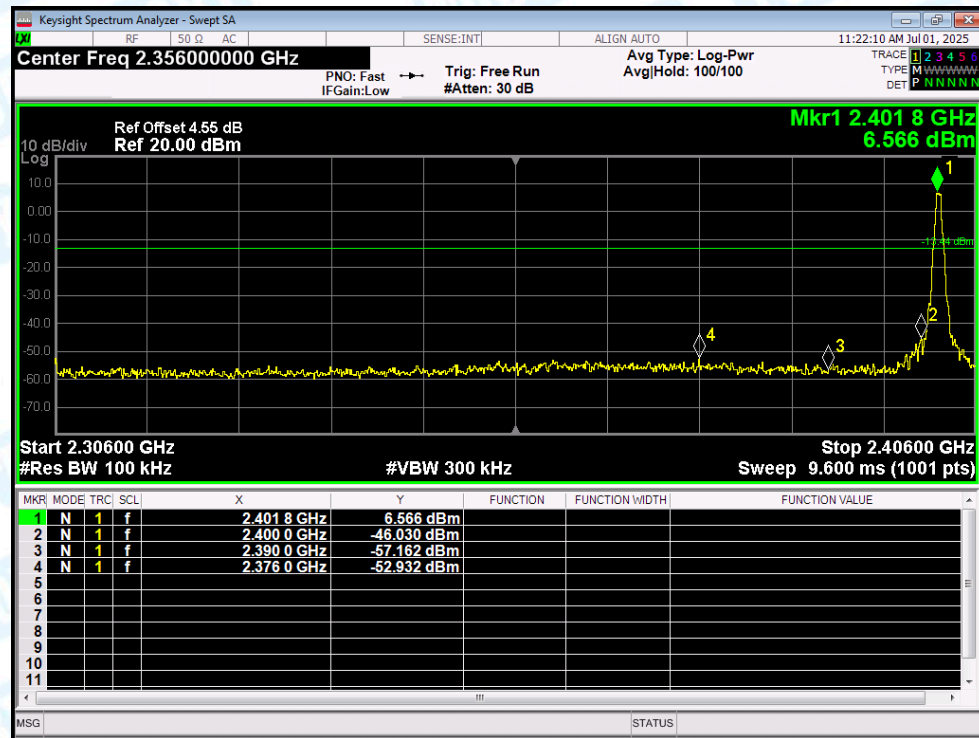
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-59.49	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-58.06	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-58.43	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-58.23	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-58.53	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-57.83	-20	Pass

Test Graphs

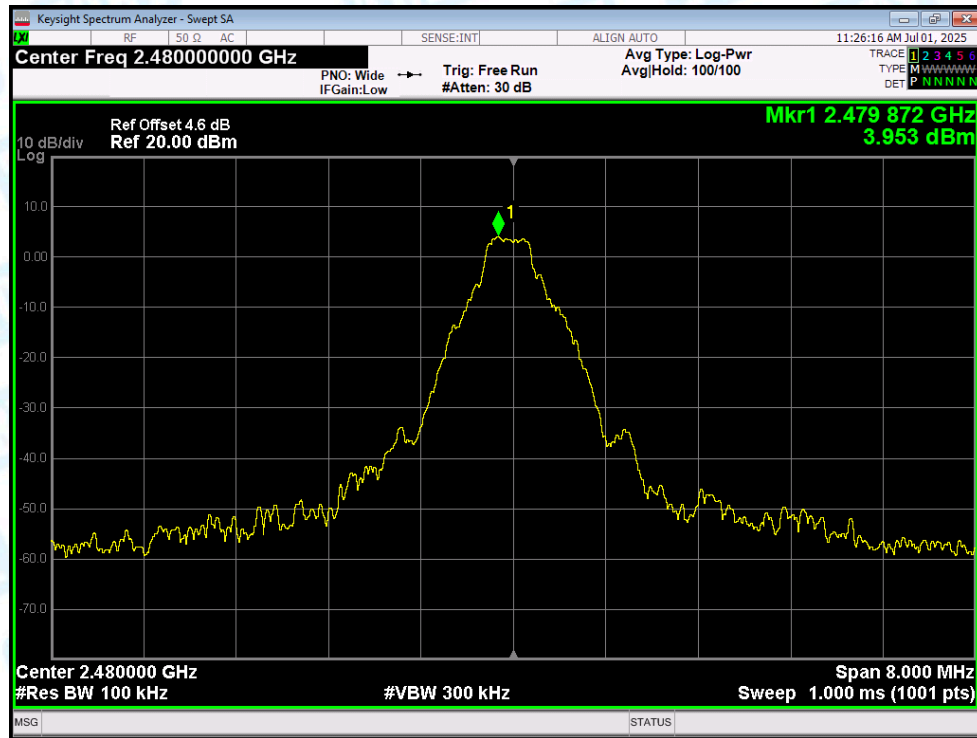
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



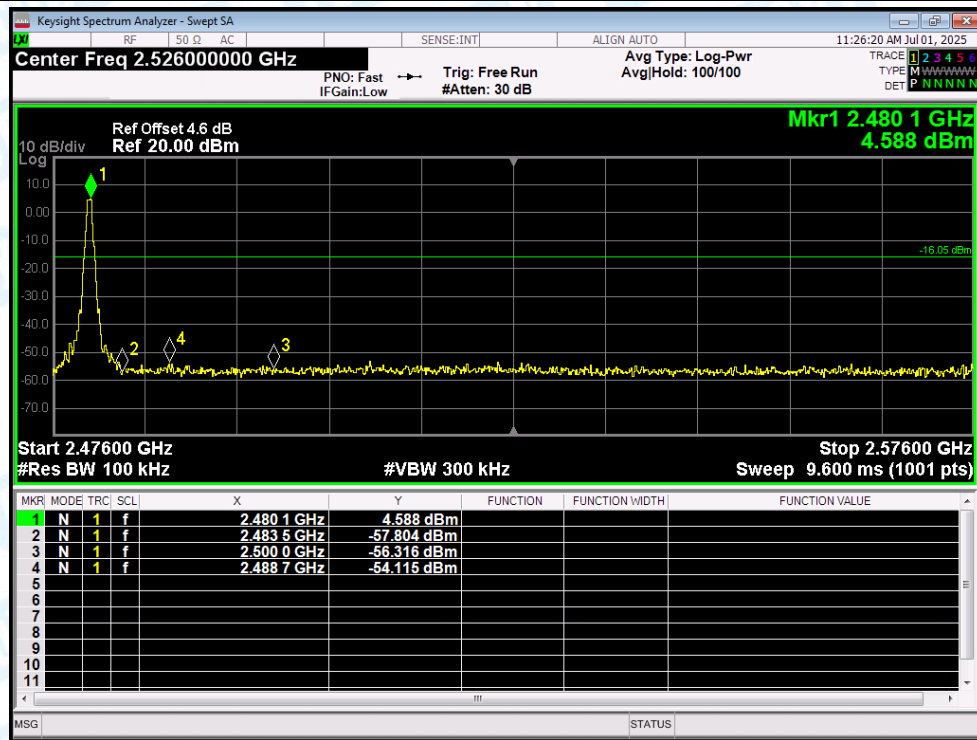
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

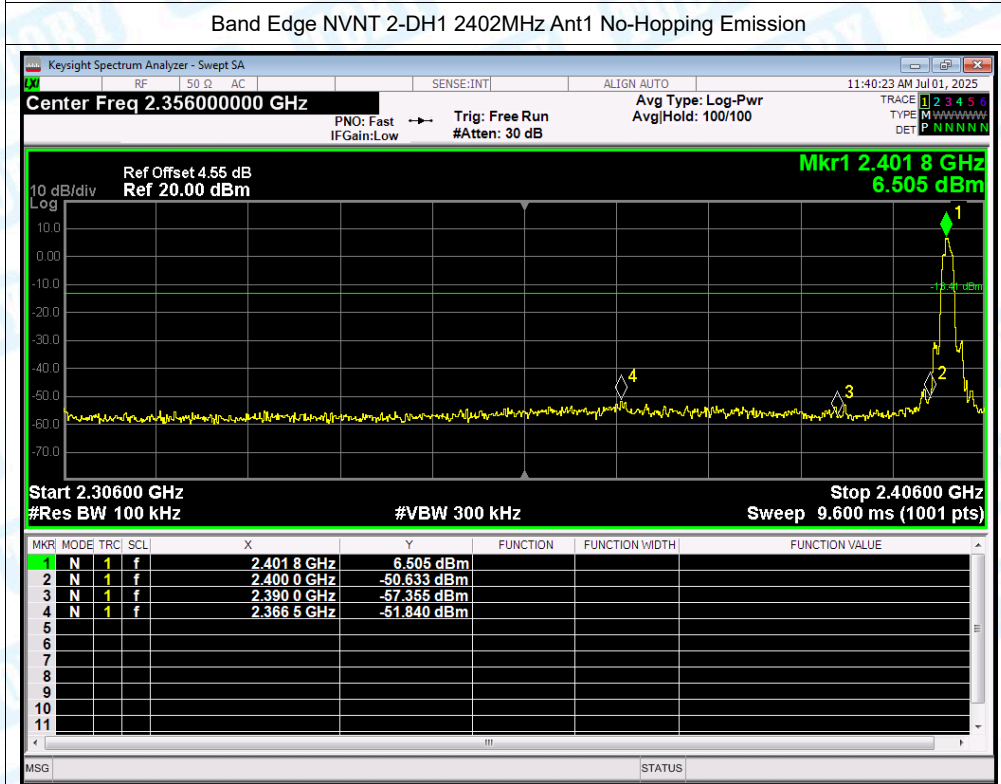
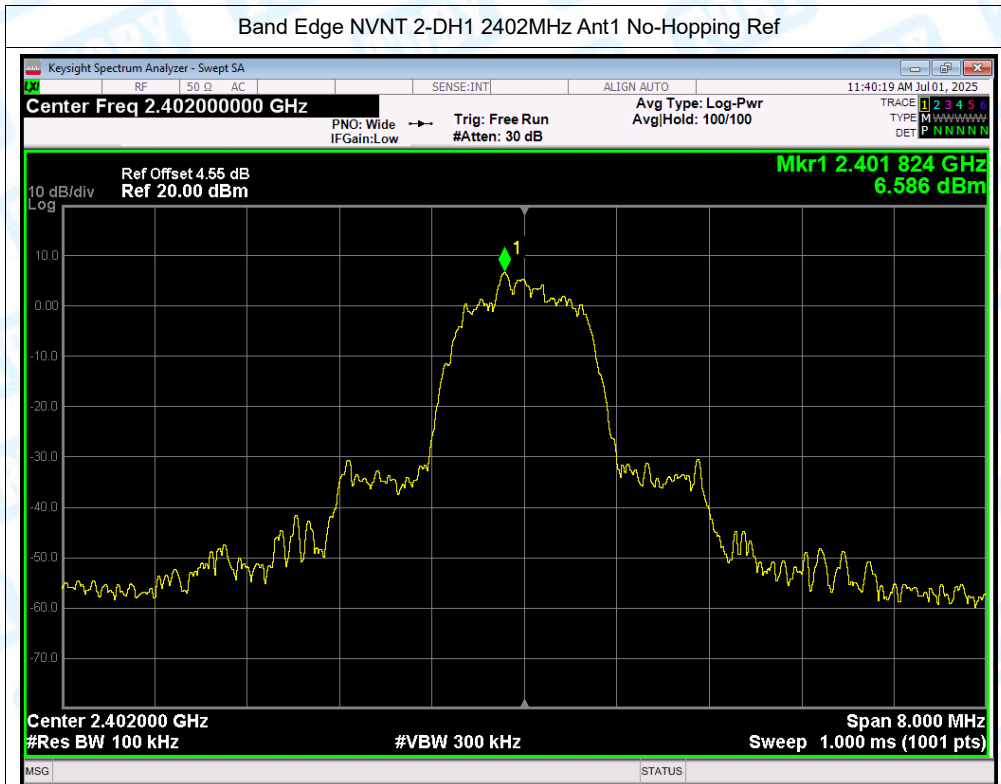


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

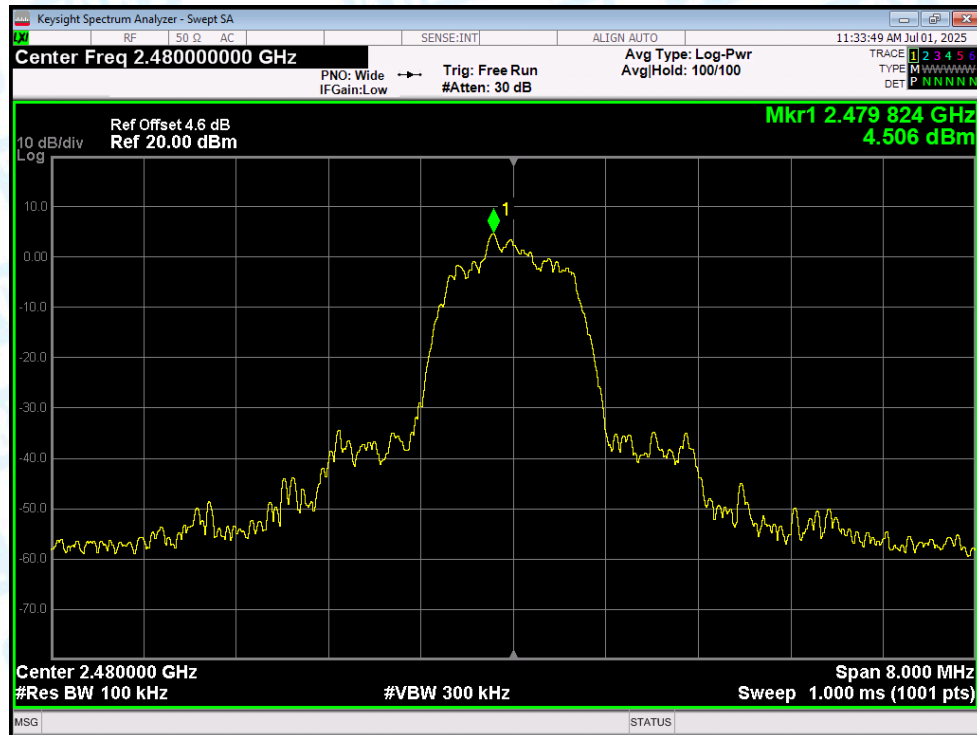


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

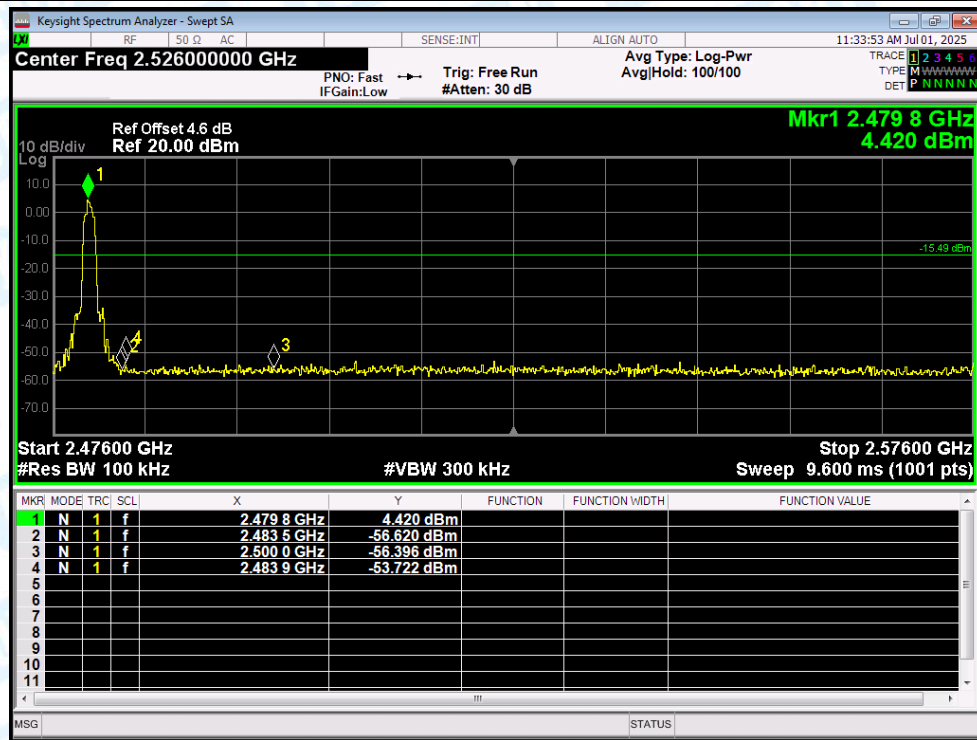




Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



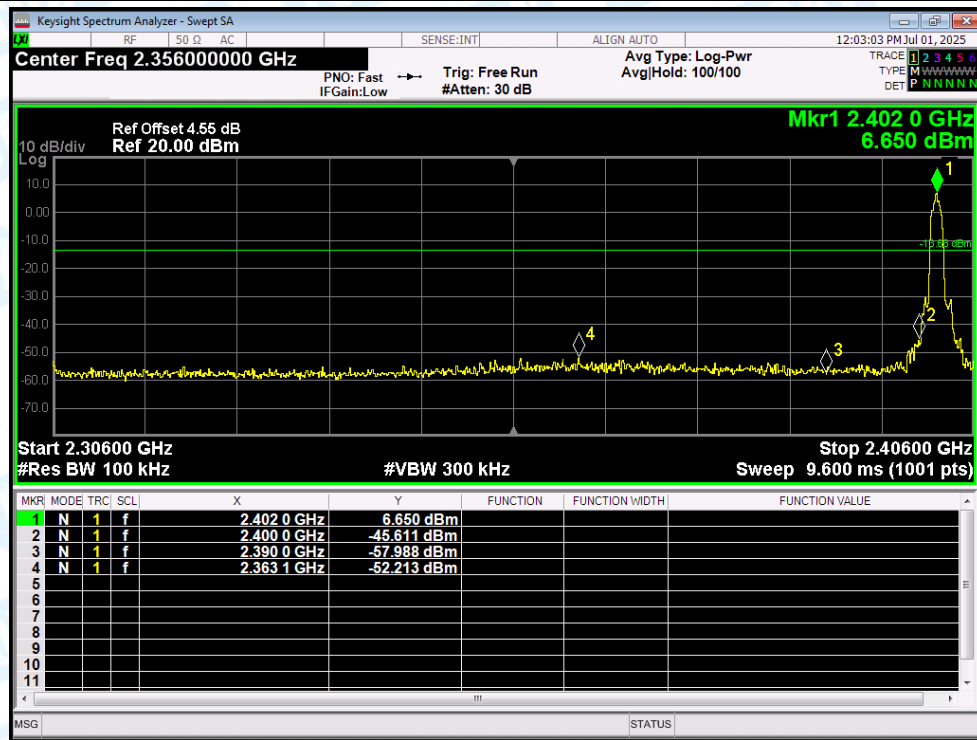
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



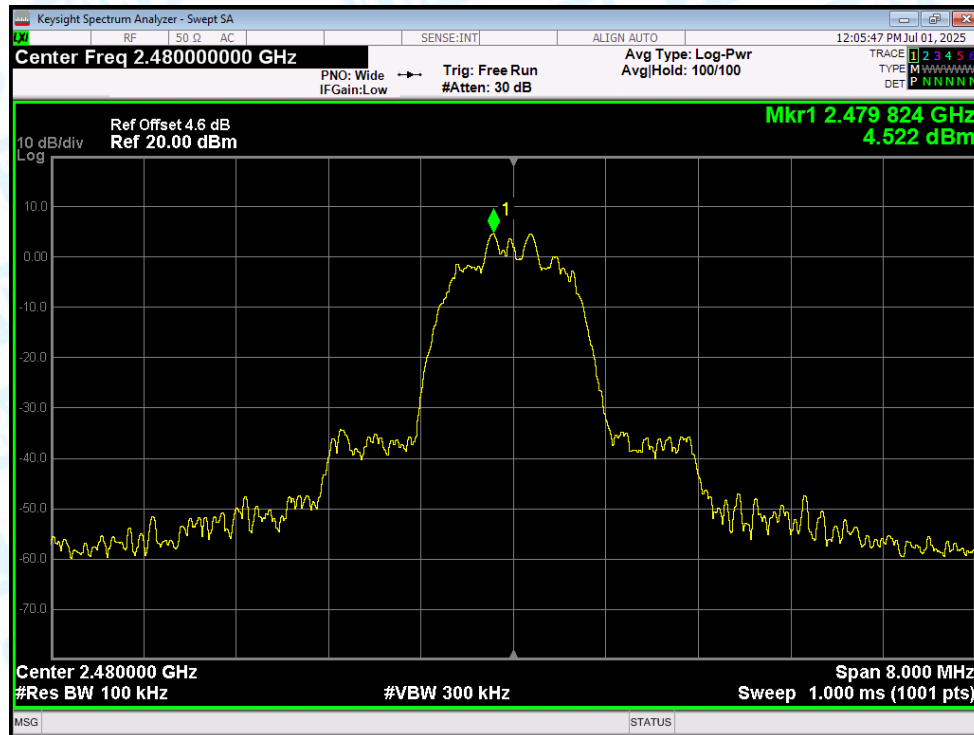
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



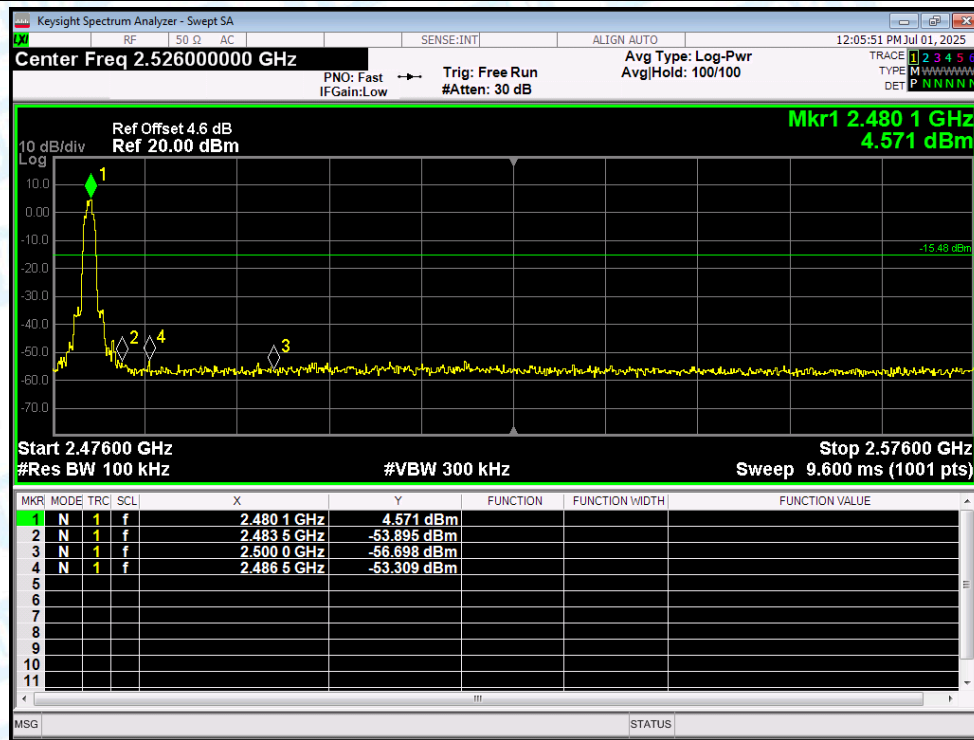
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

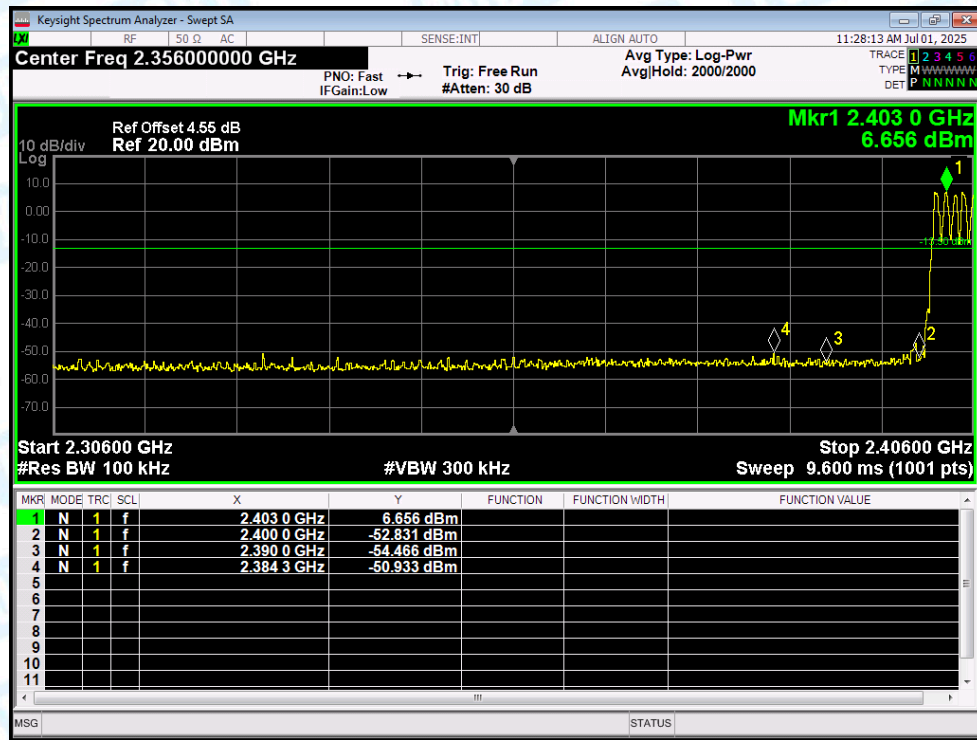
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-57.43	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.98	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-57.61	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-56.98	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-57.99	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-57.53	-20	Pass

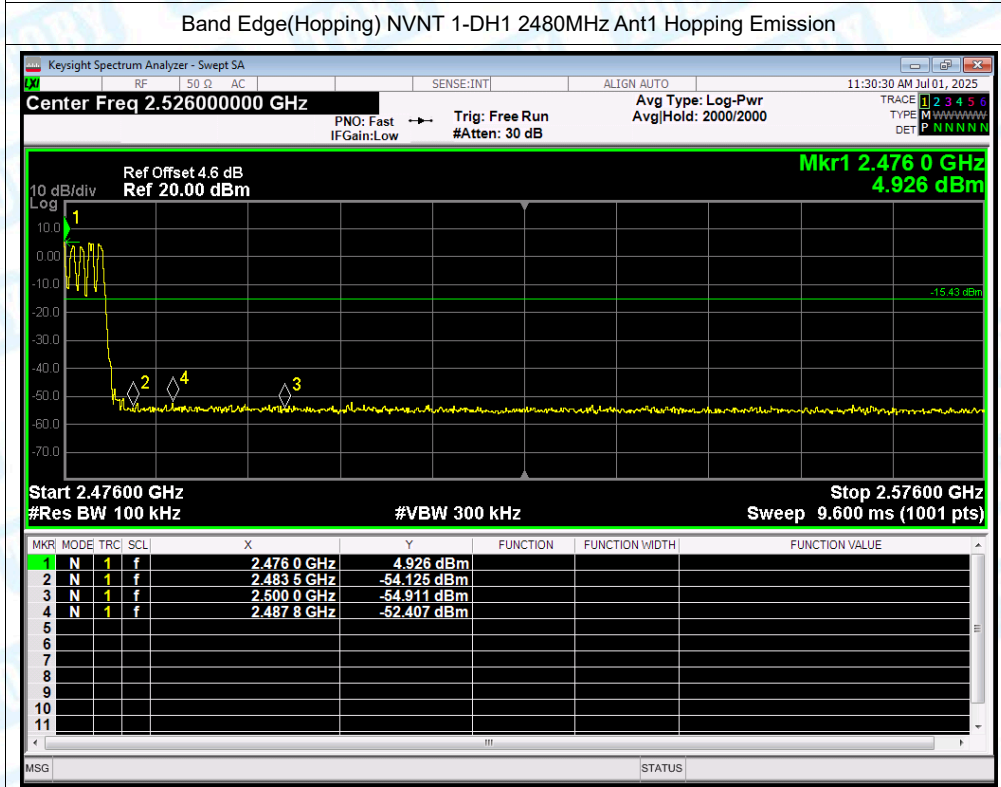
Test Graphs

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



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

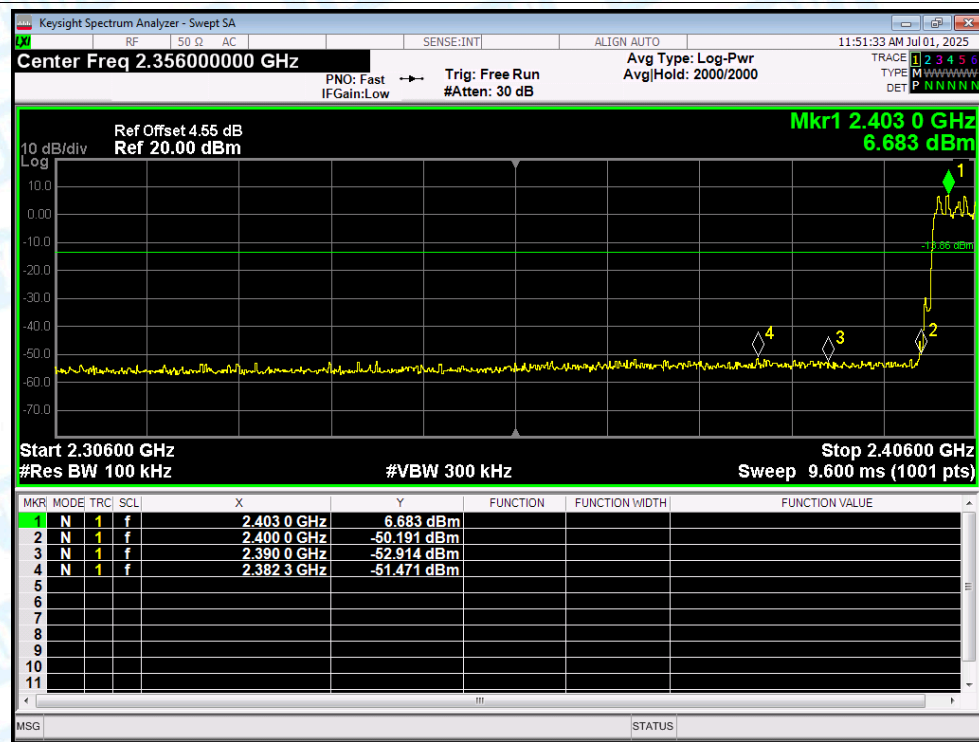


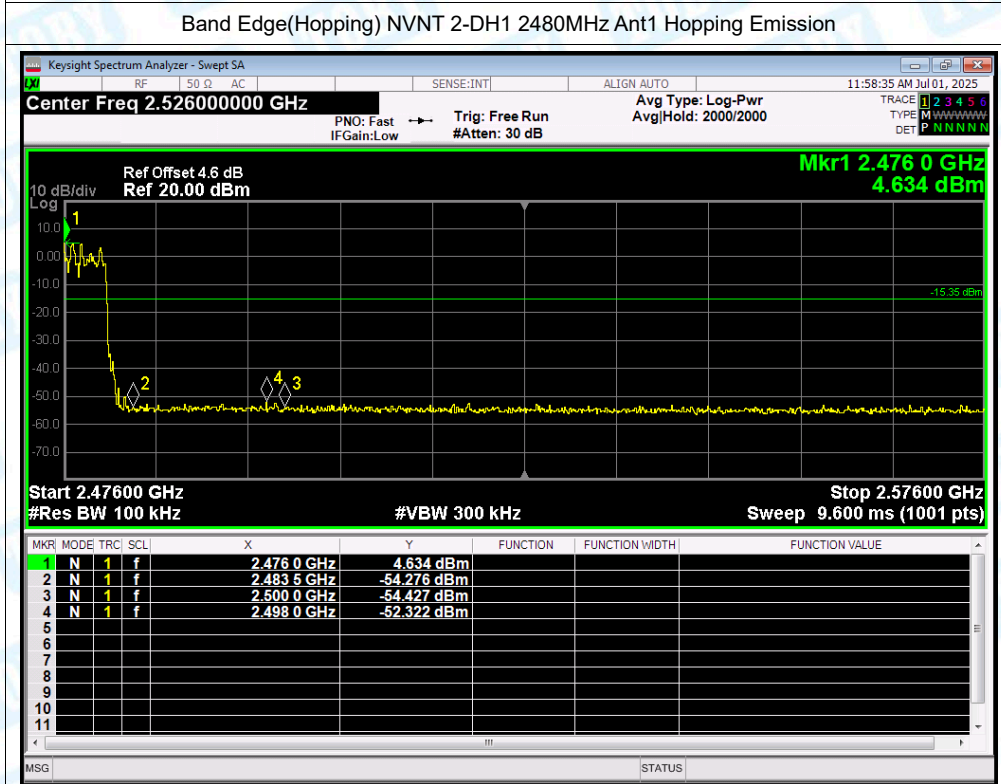
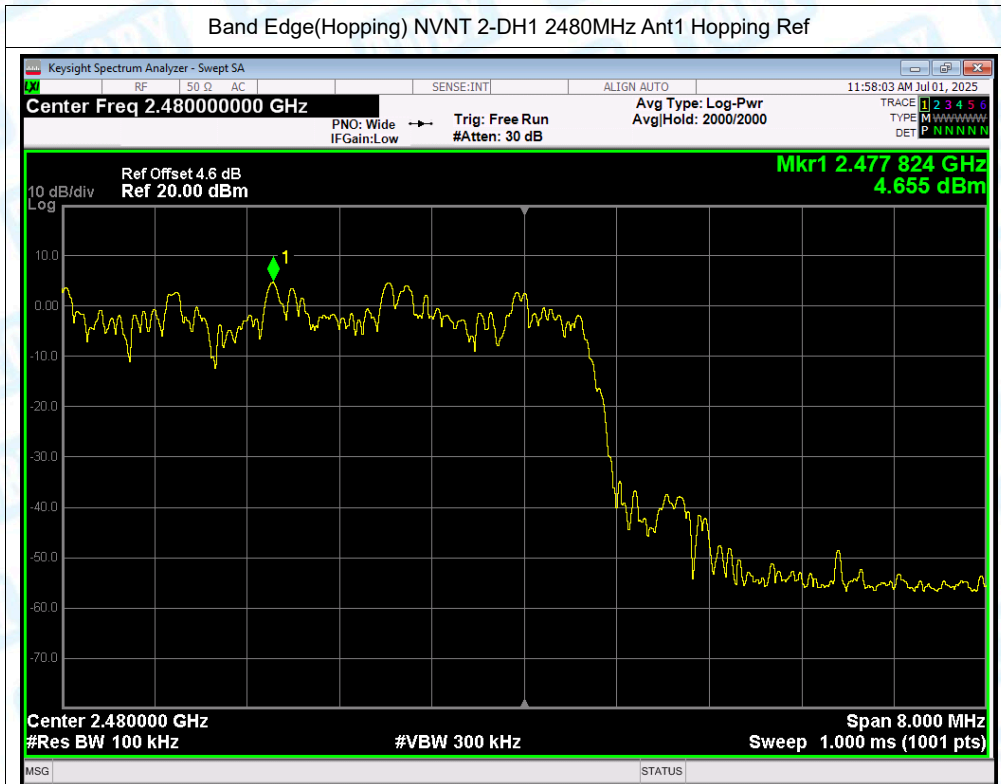


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref

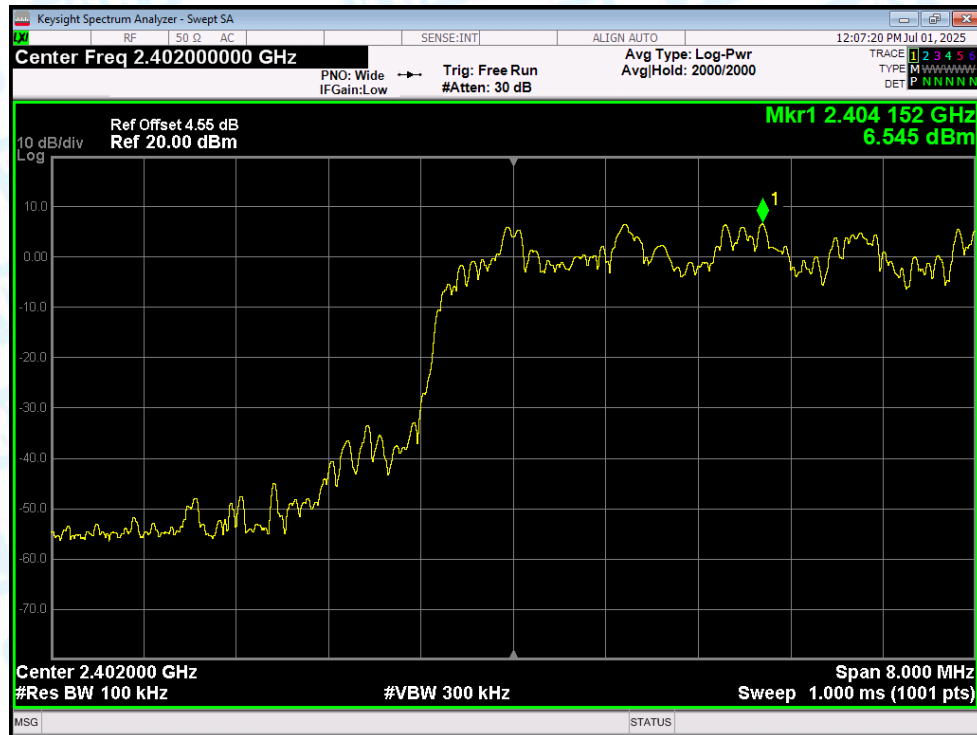


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission

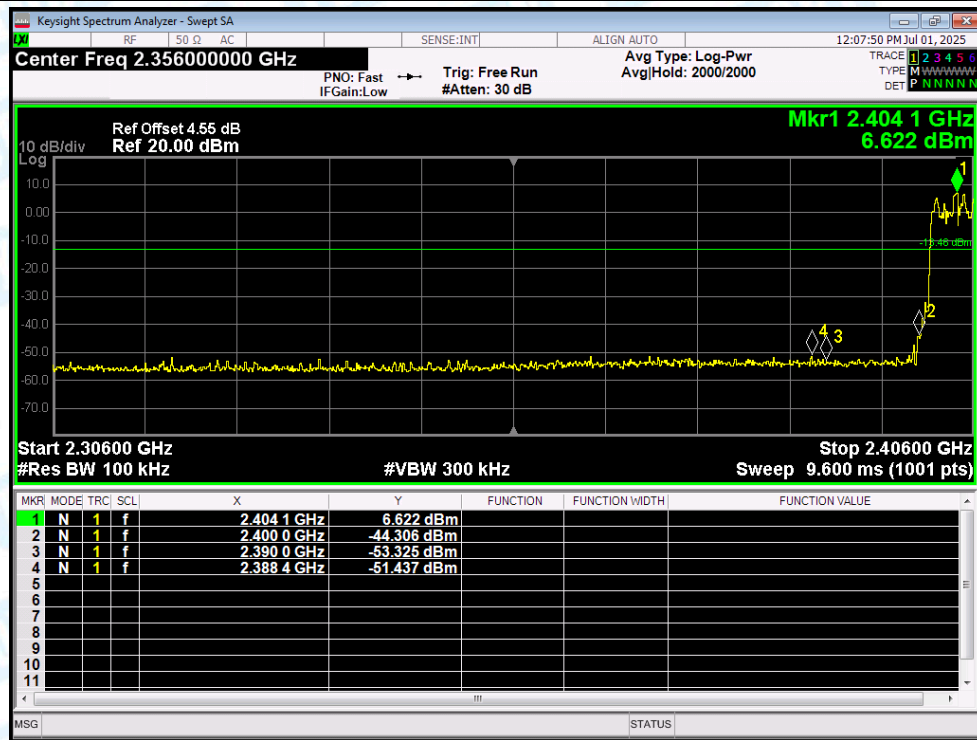


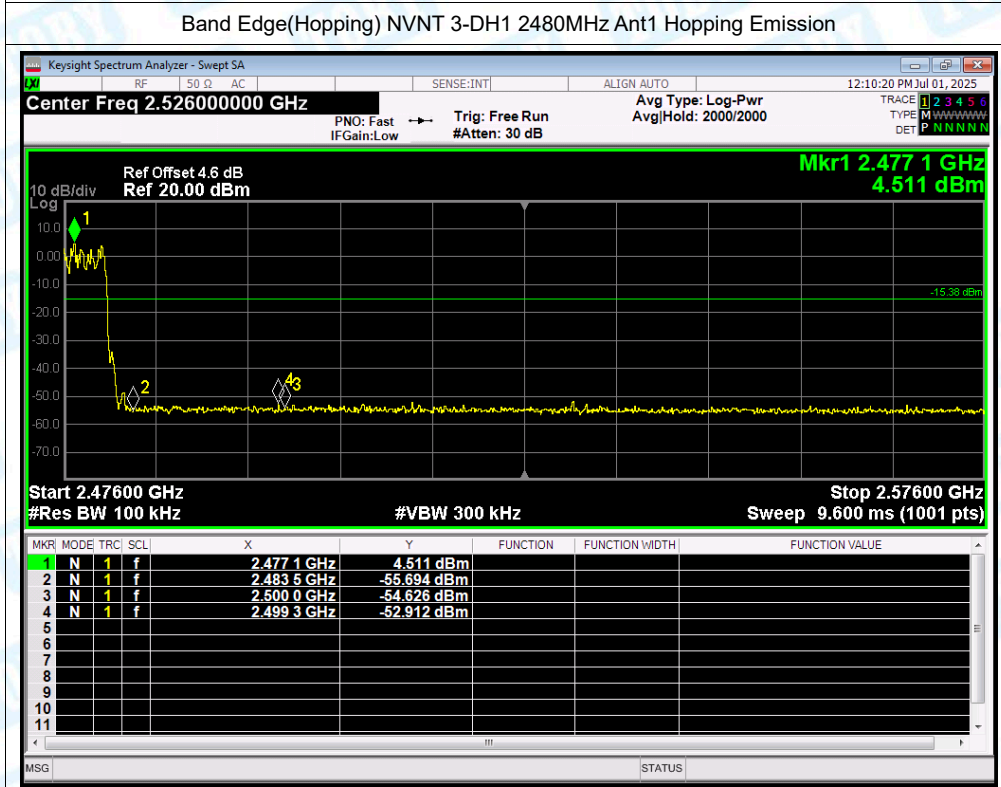
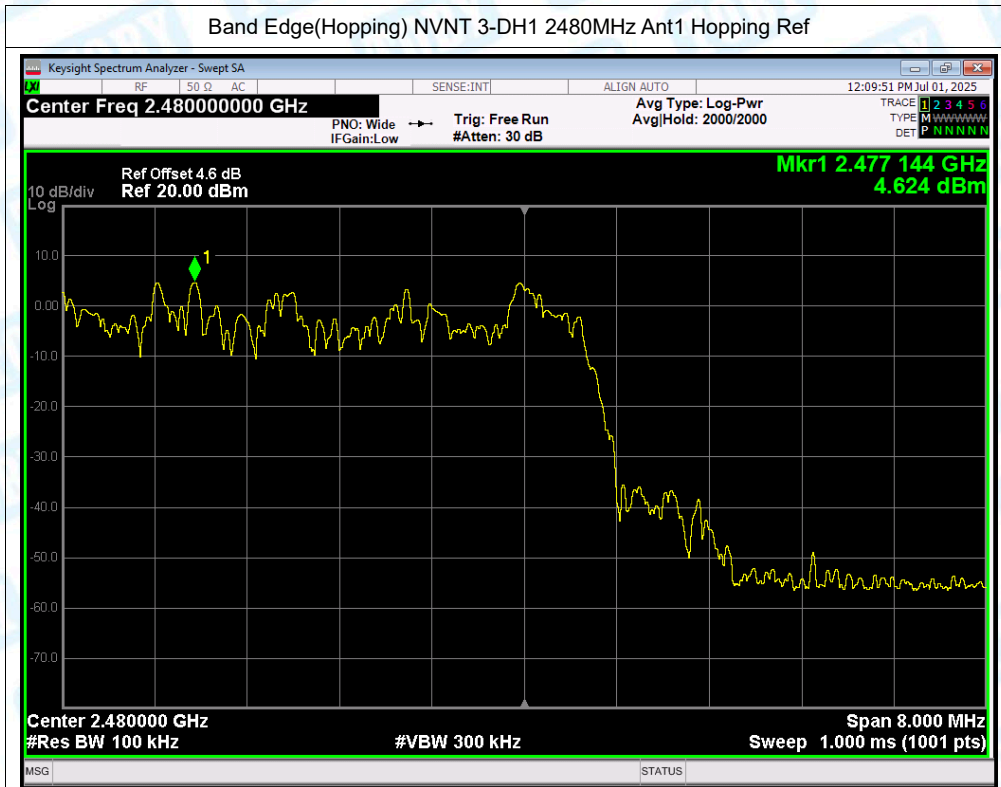


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



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



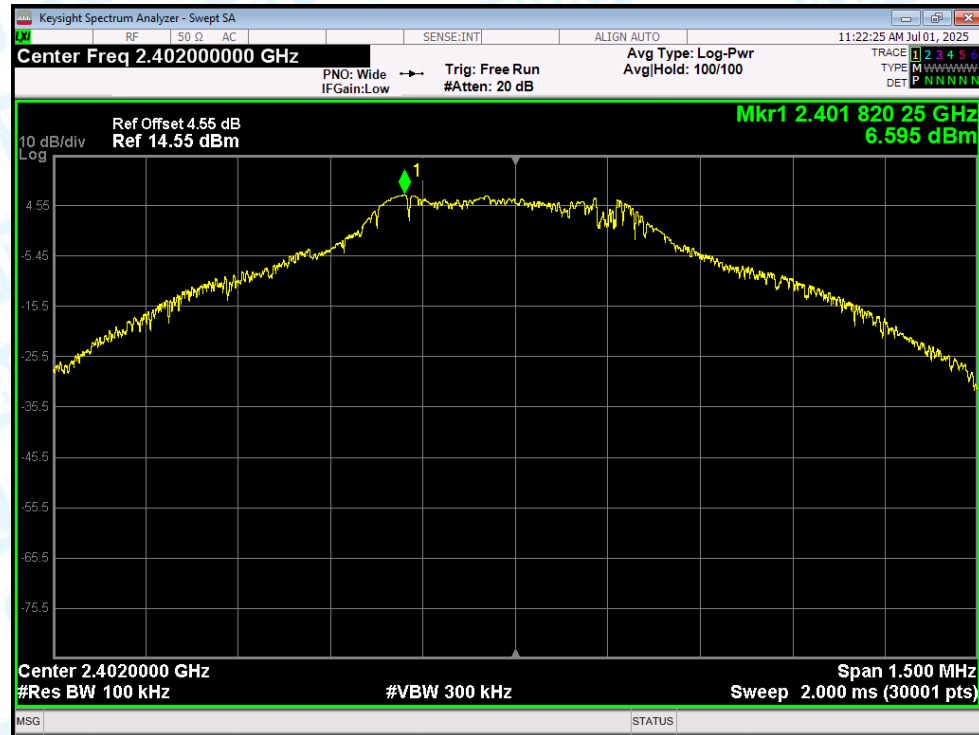


7. Conducted RF Spurious Emission

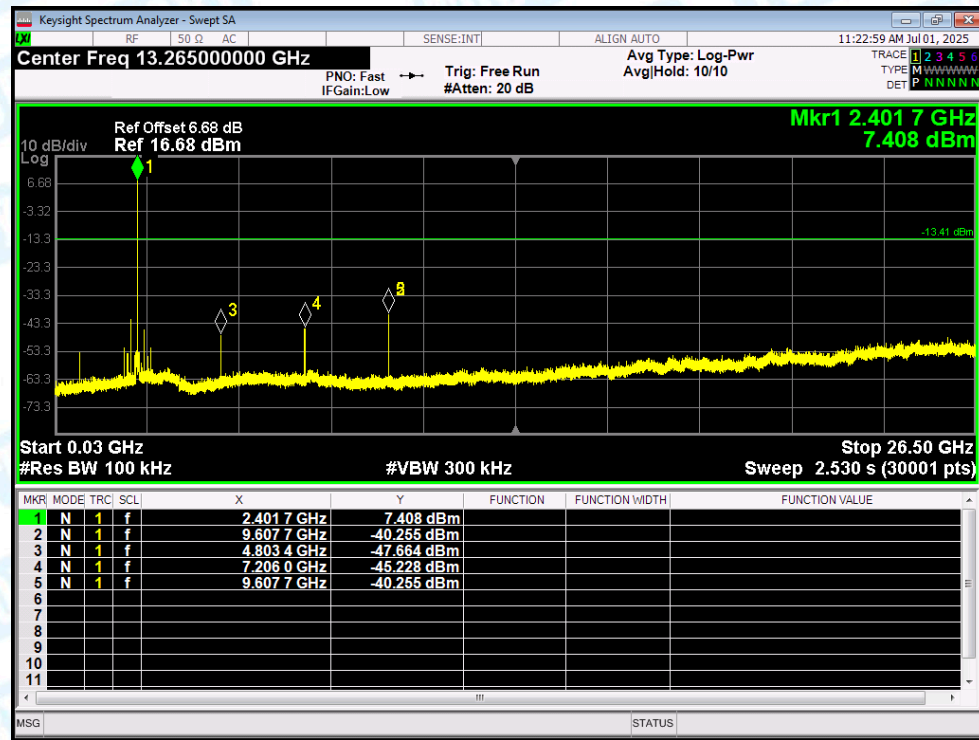
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-46.85	-20	Pass
NVNT	1-DH1	2441	Ant1	-46.21	-20	Pass
NVNT	1-DH1	2480	Ant1	-43.49	-20	Pass
NVNT	2-DH1	2402	Ant1	-46.99	-20	Pass
NVNT	2-DH1	2441	Ant1	-46.17	-20	Pass
NVNT	2-DH1	2480	Ant1	-43.43	-20	Pass
NVNT	3-DH1	2402	Ant1	-47.1	-20	Pass
NVNT	3-DH1	2441	Ant1	-46.03	-20	Pass
NVNT	3-DH1	2480	Ant1	-43.56	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



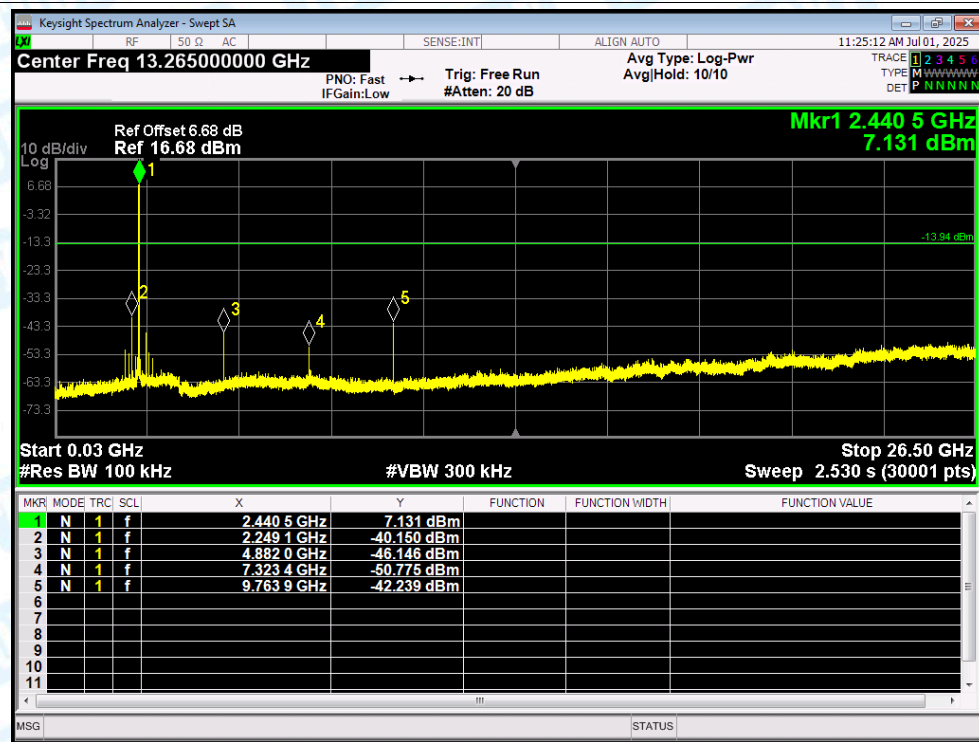
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



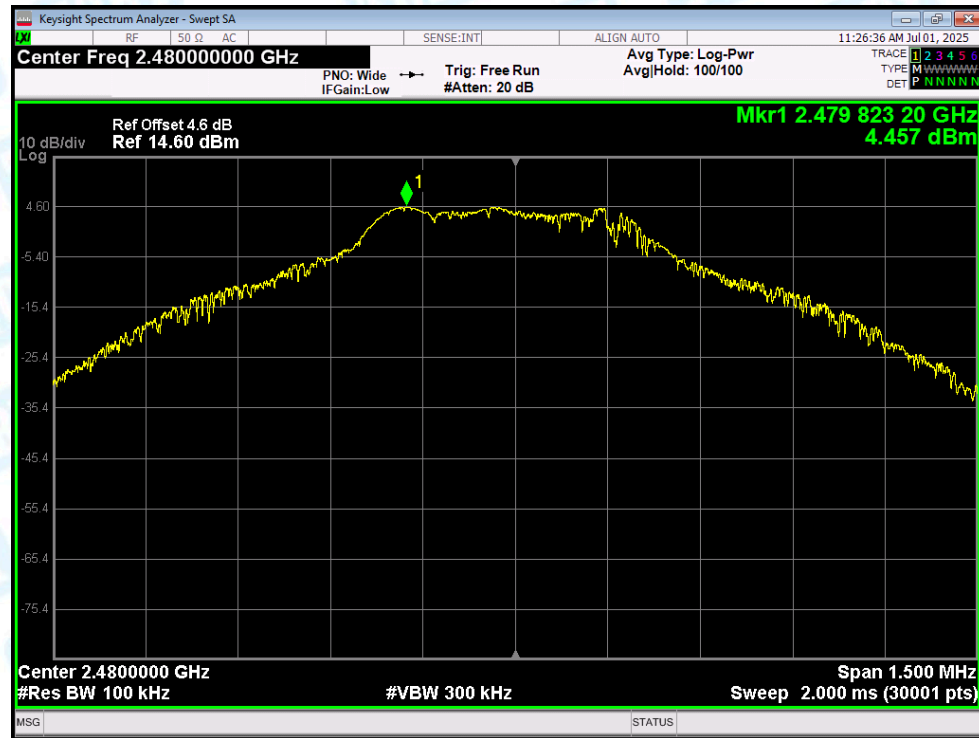
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



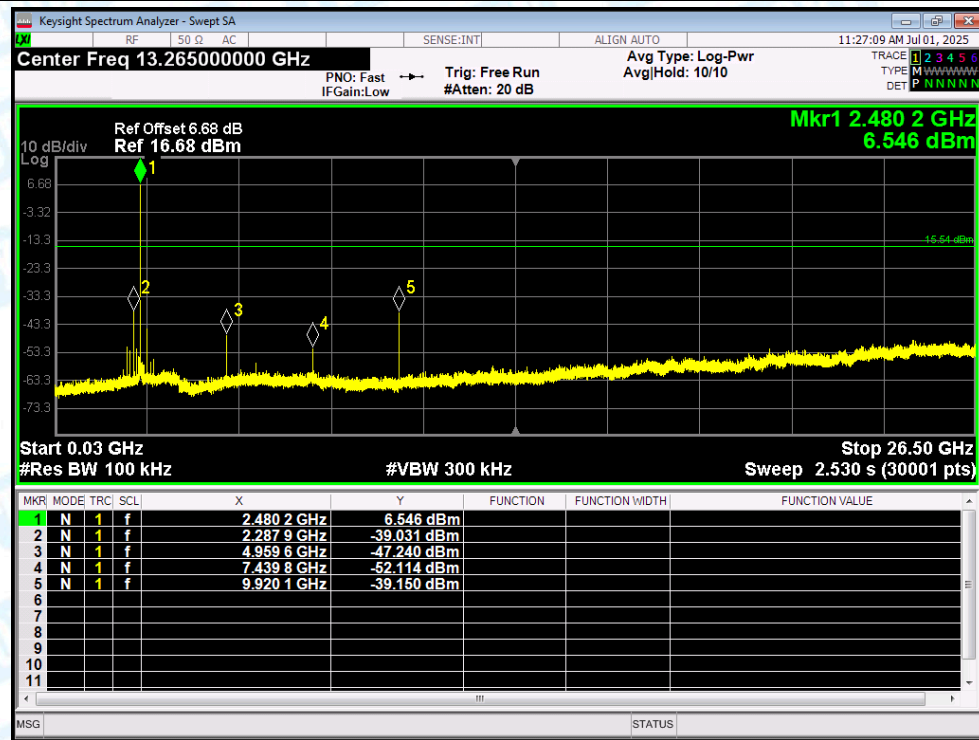
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



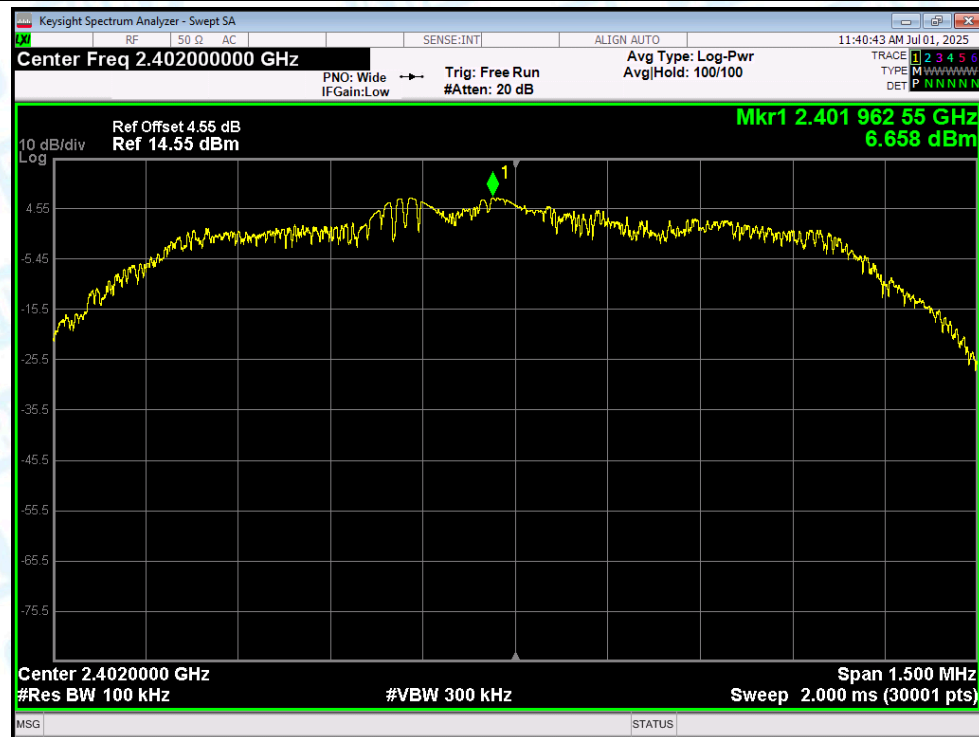
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



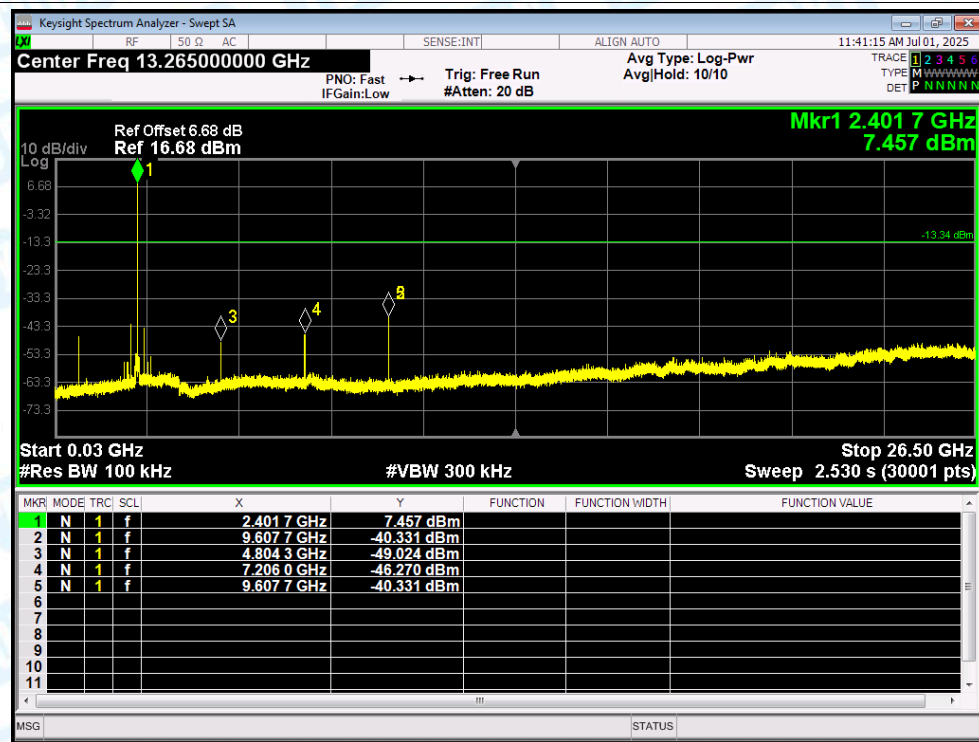
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



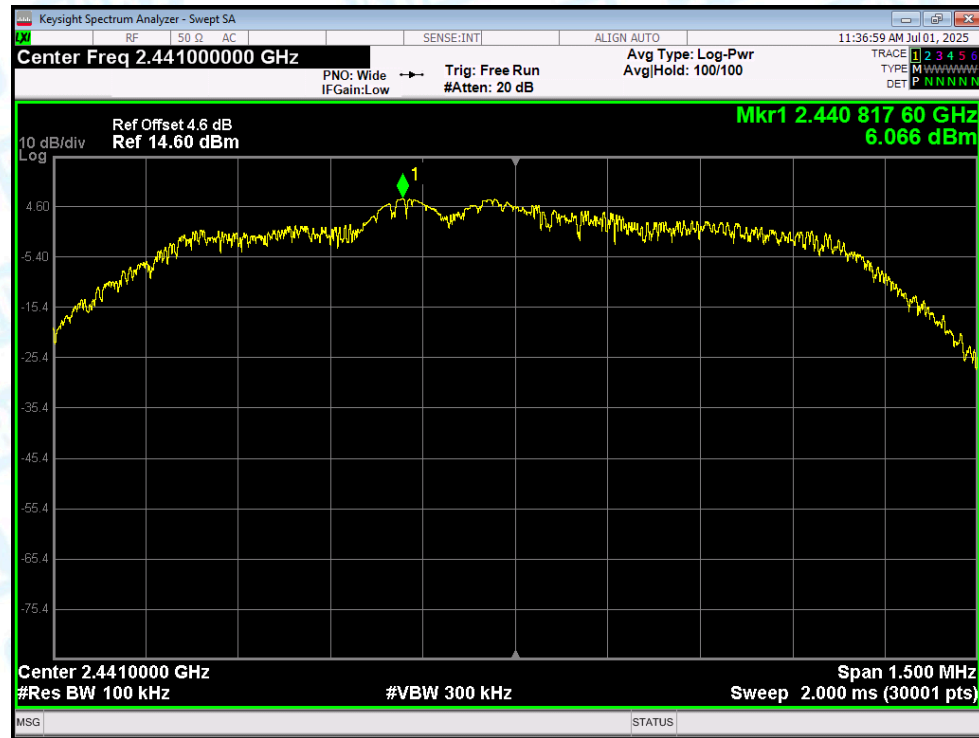
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



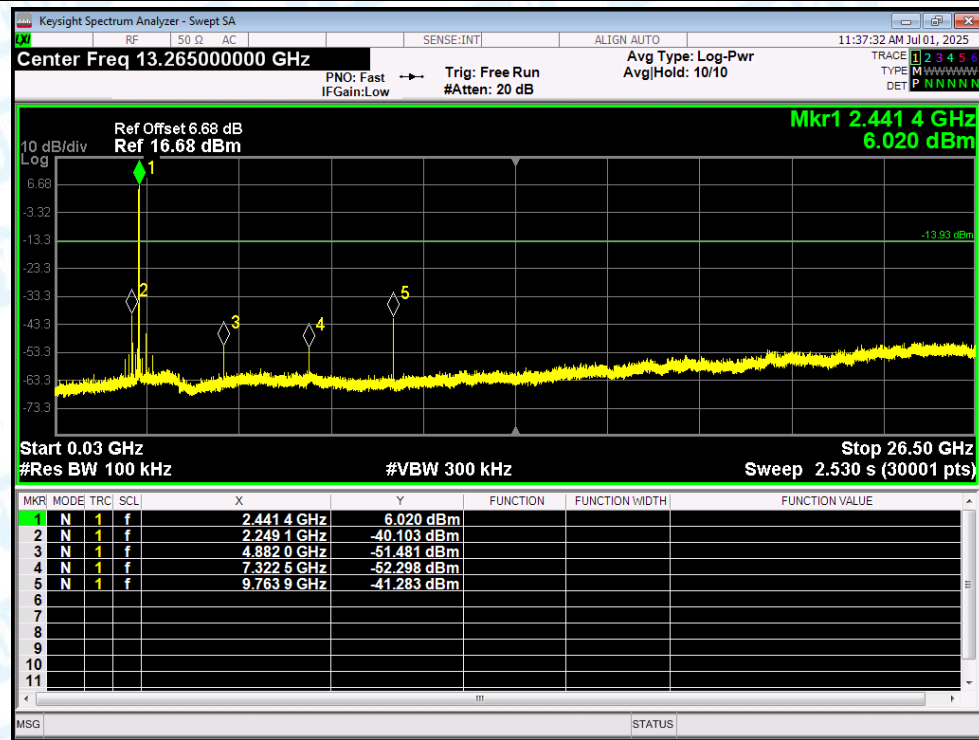
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



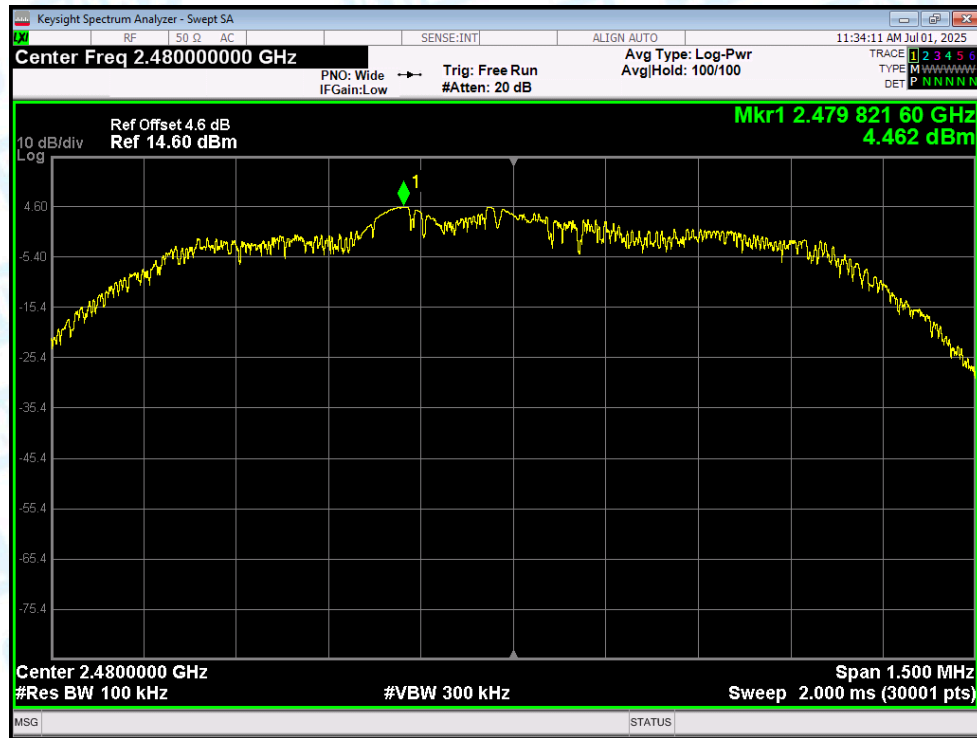
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



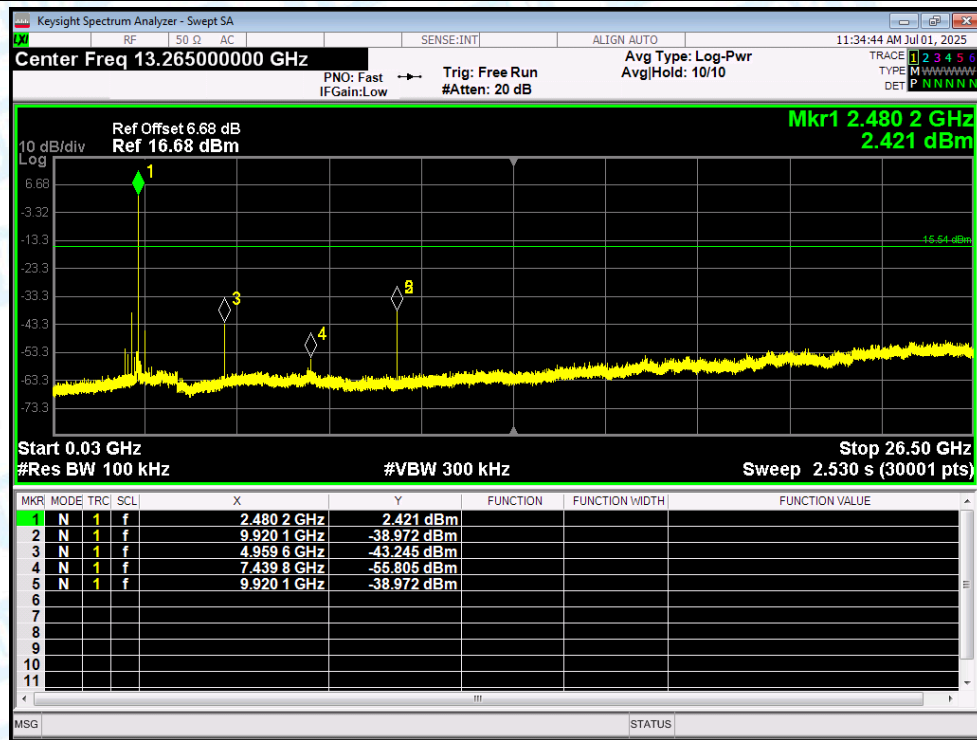
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



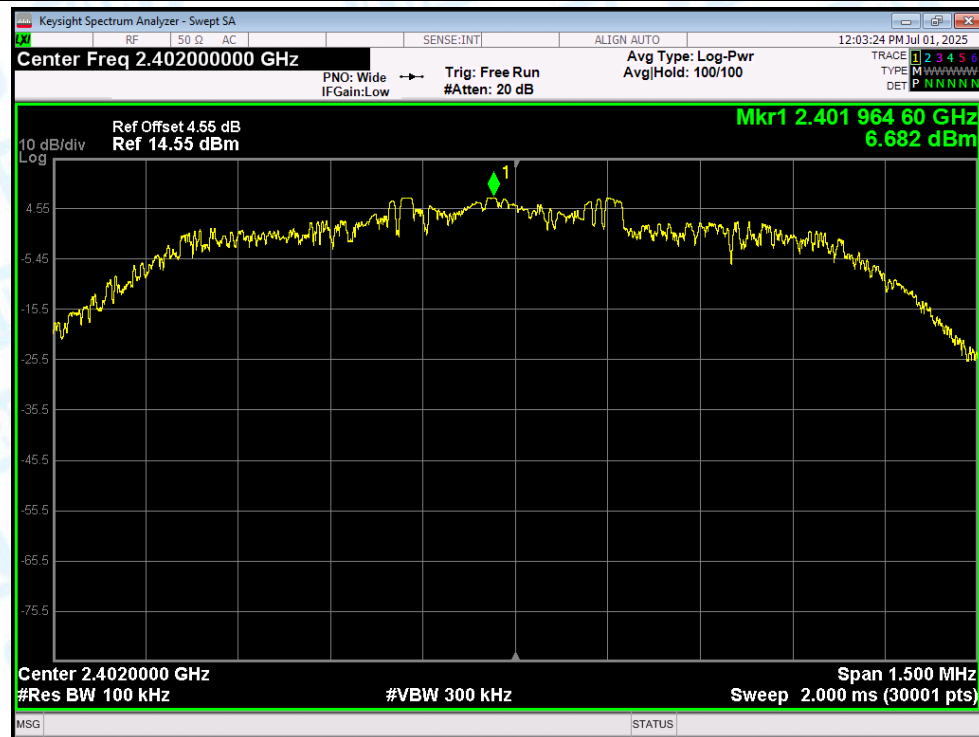
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



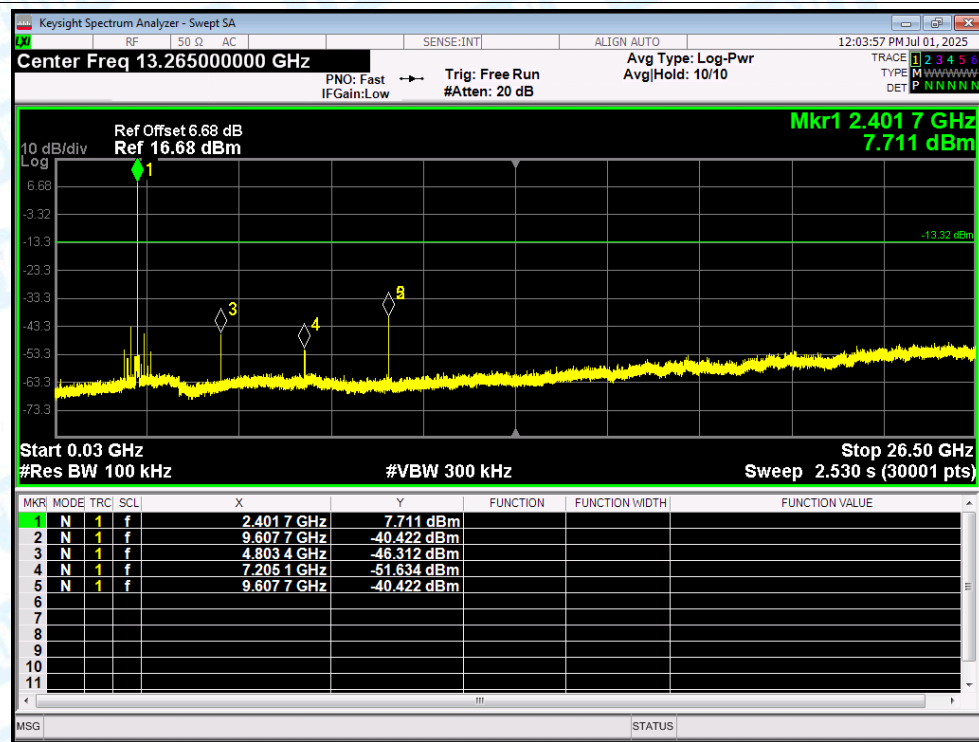
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



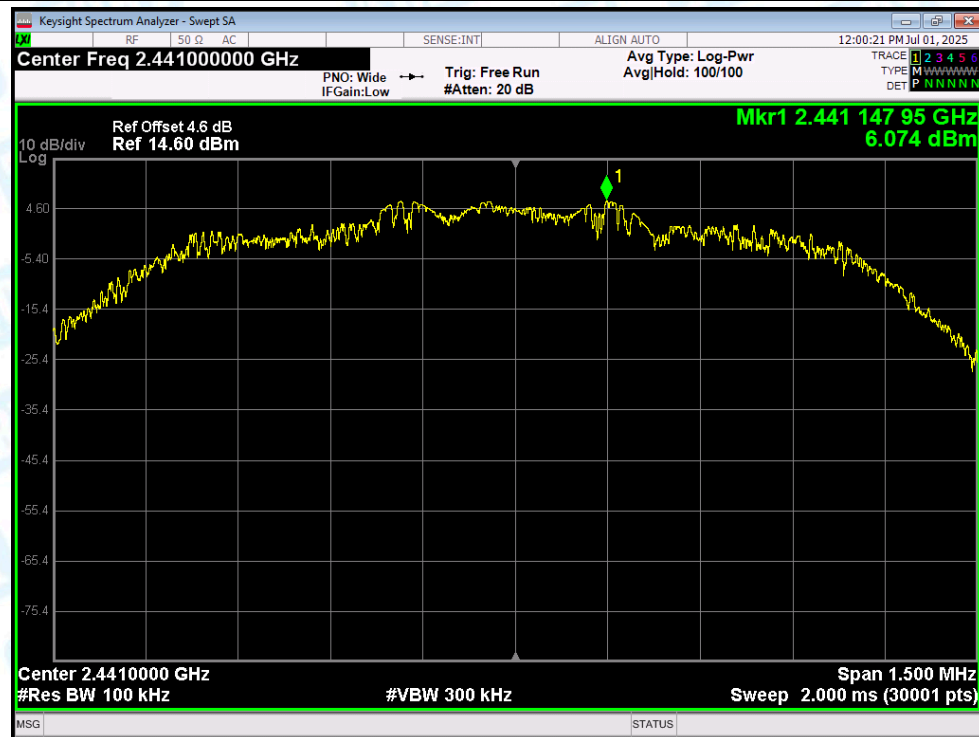
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



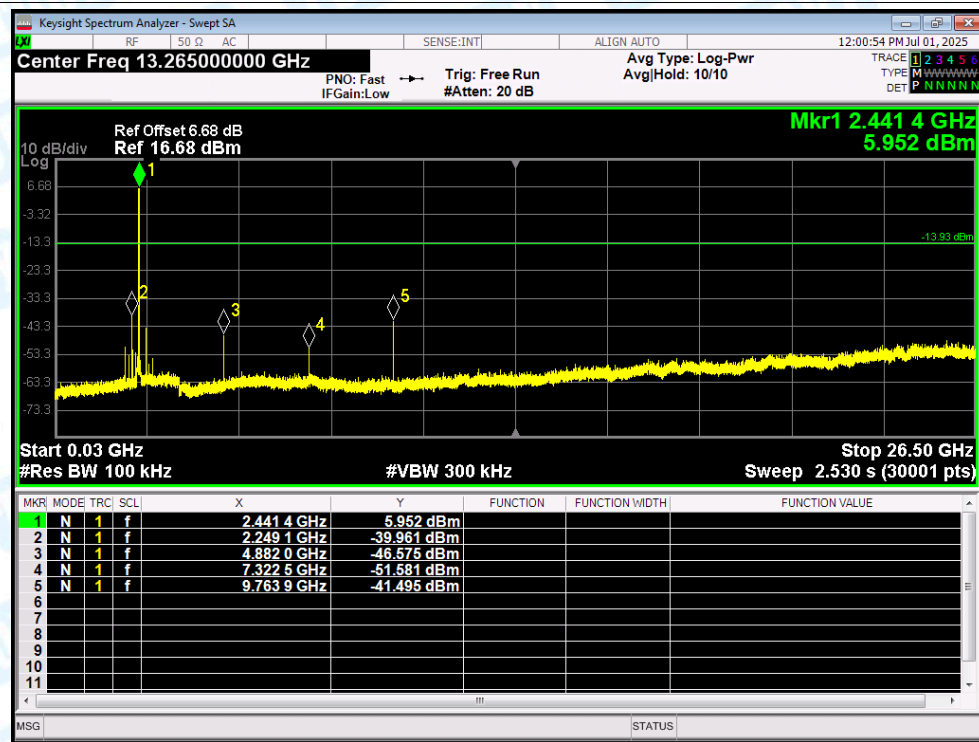
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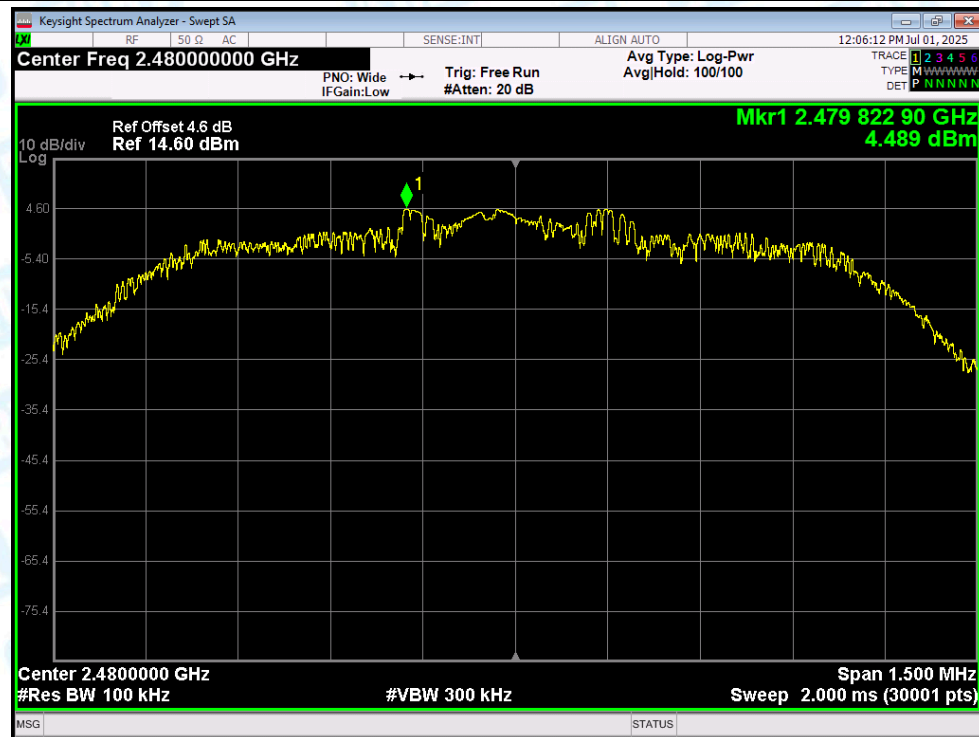
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



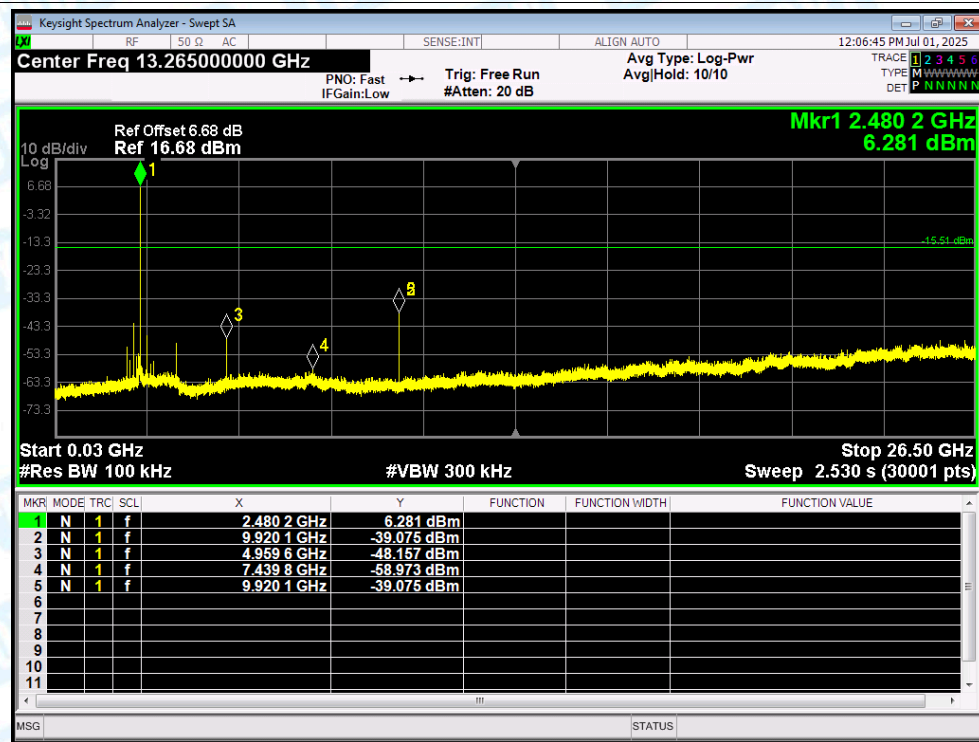
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

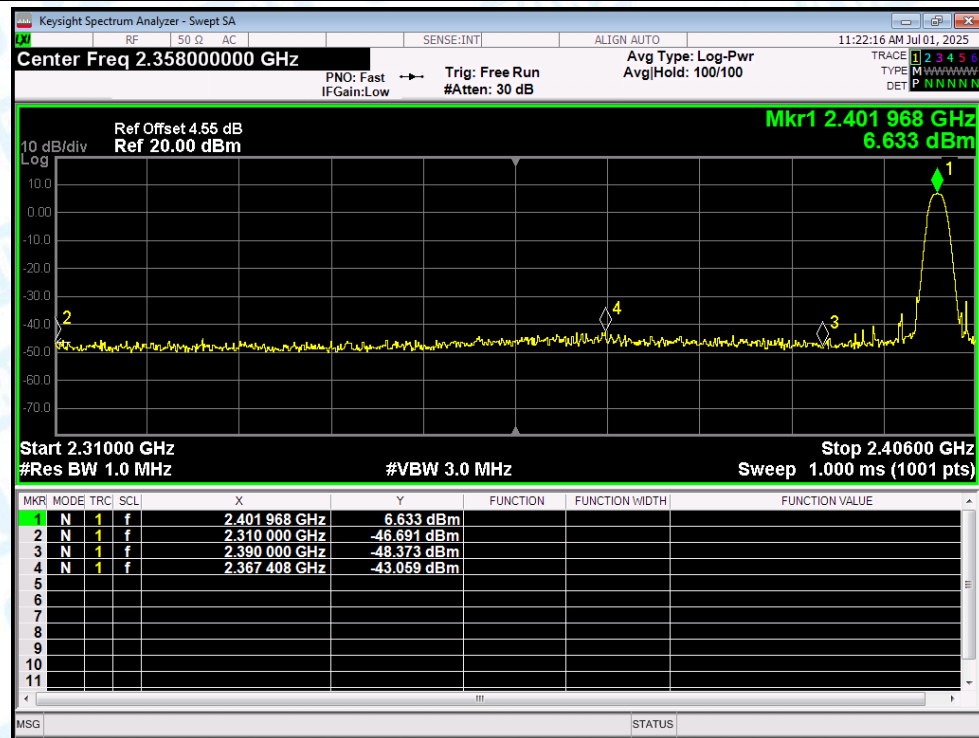


8. Restrict Band

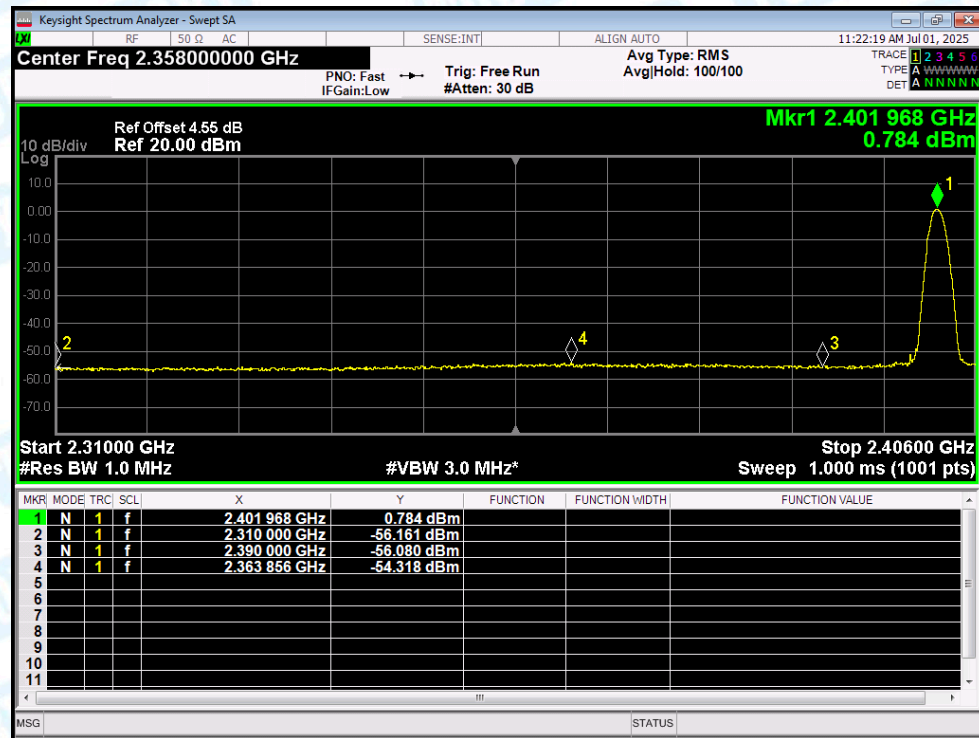
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-46.69	2	-	50.57	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.16	2	5.06	46.16	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2367.408	-43.06	2	-	54.2	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2363.856	-54.32	2	5.06	48	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.37	2	-	48.89	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-56.08	2	5.06	46.24	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.53	2	-	50.73	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.79	2	5.17	47.64	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.704	-40.33	2	-	56.93	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.68	-54.11	2	5.17	48.32	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.67	2	-	49.59	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.63	2	5.17	47.8	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.23	2	-	48.03	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.26	2	5.06	46.06	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2362.512	-42.11	2	-	55.15	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2373.648	-53.99	2	5.06	48.33	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.36	2	-	49.9	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.58	2	5.06	46.74	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-45.6	2	-	51.66	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.05	2	4.95	47.16	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.8	-42.78	2	-	54.48	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.992	-54.2	2	4.95	48.01	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.3	2	-	49.96	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.64	2	4.95	47.57	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.5	2	-	48.76	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.48	2	4.95	45.73	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2362.896	-43.32	2	-	53.94	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2362.416	-54.24	2	4.95	47.97	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-47.57	2	-	49.69	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.67	2	4.95	46.54	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-44.1	2	-	53.16	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-54.51	2	4.95	47.7	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.656	-39.34	2	-	57.92	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2498.992	-54.27	2	4.95	47.94	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-47.79	2	-	49.47	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.34	2	4.95	46.87	Average	54	Pass

Test Graphs

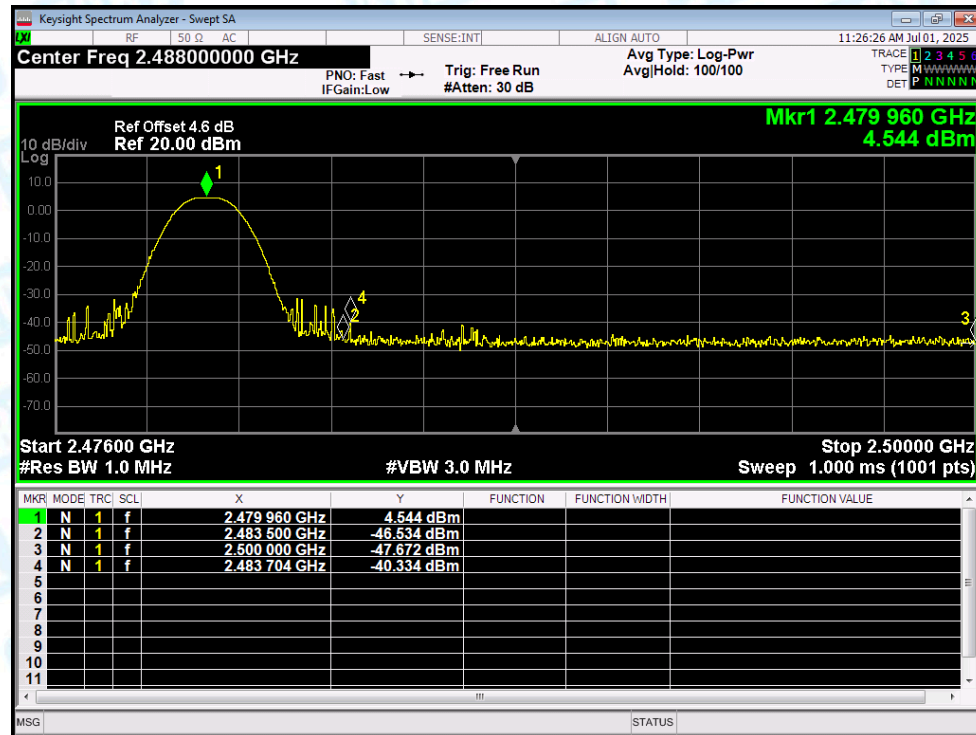
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



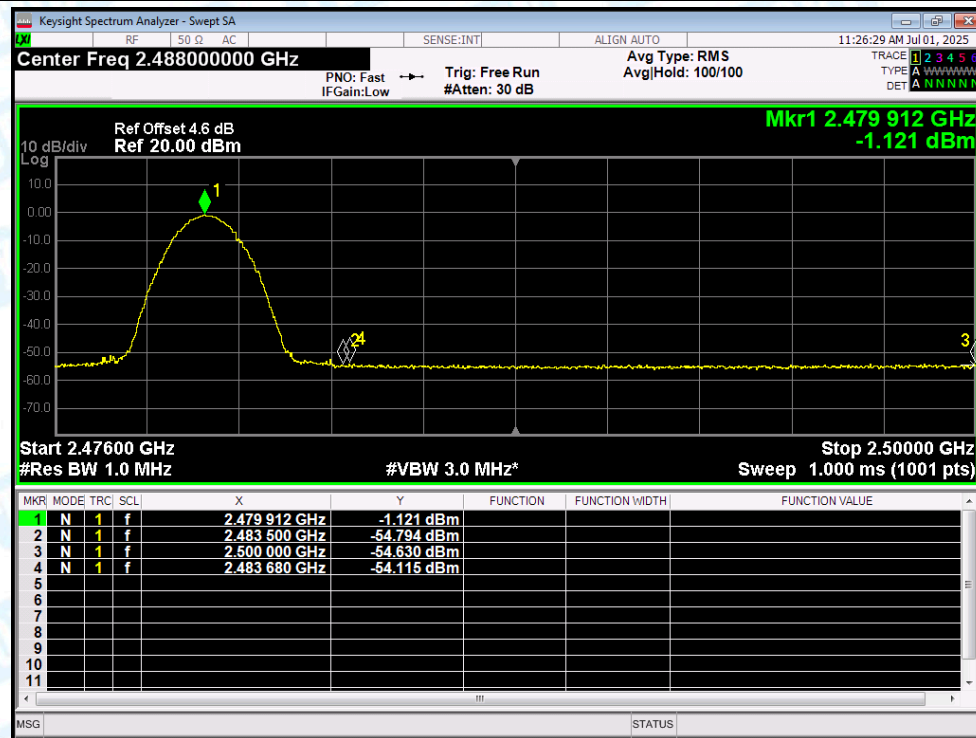
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



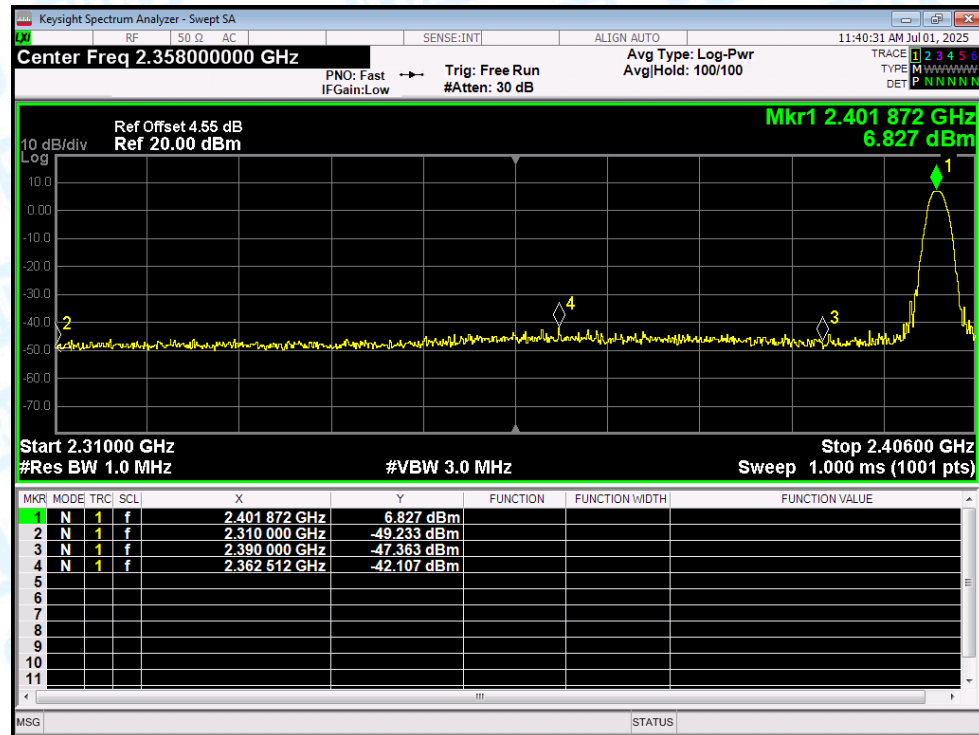
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



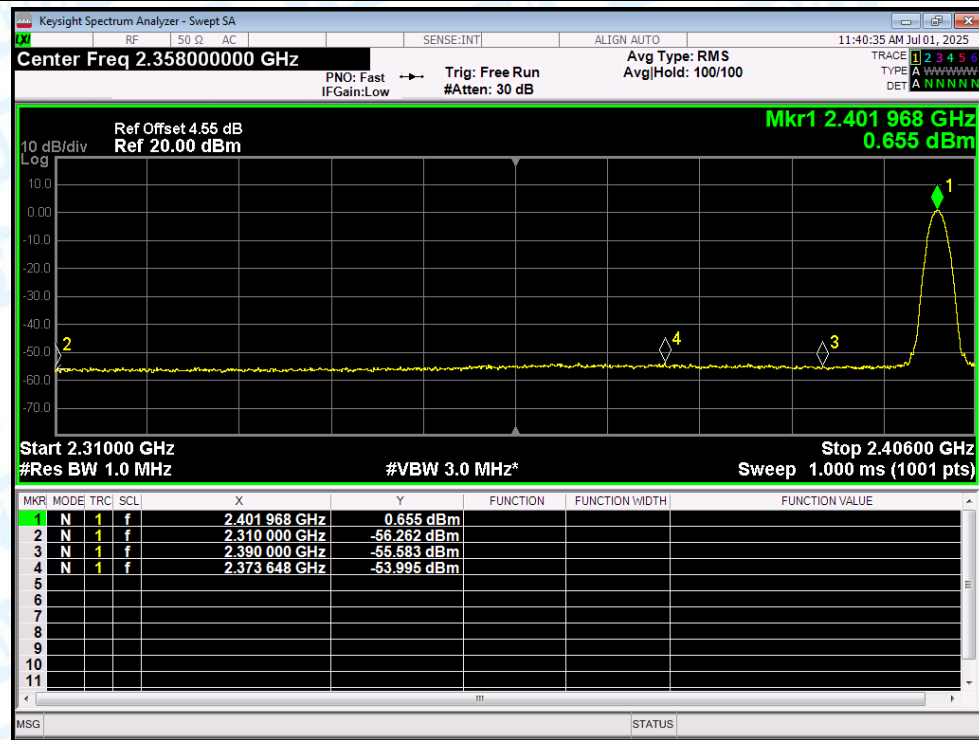
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



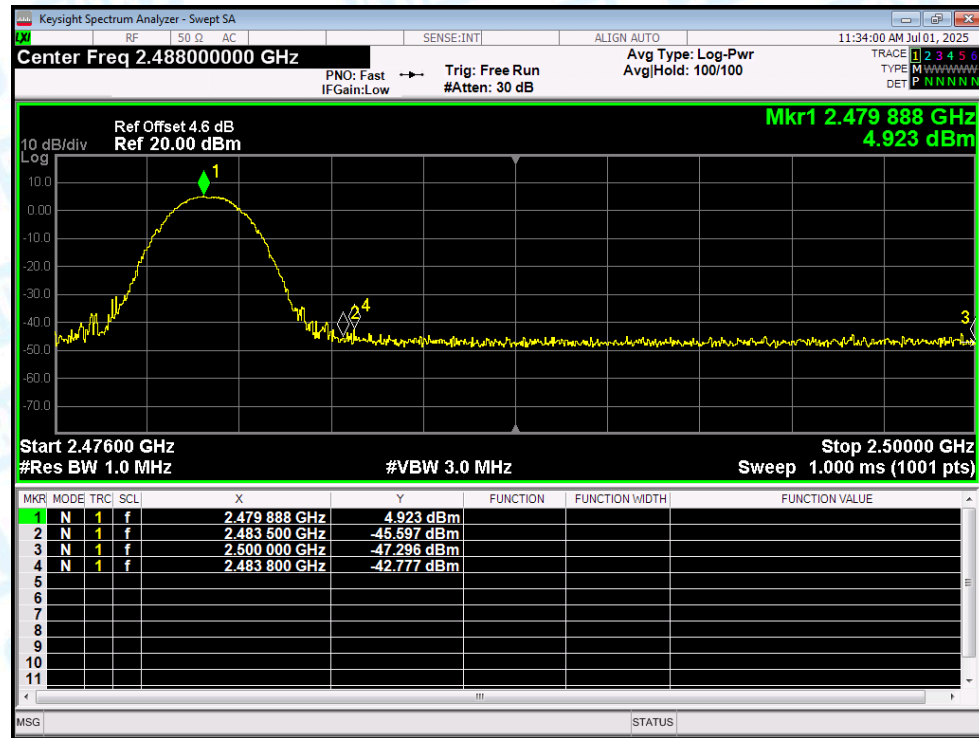
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



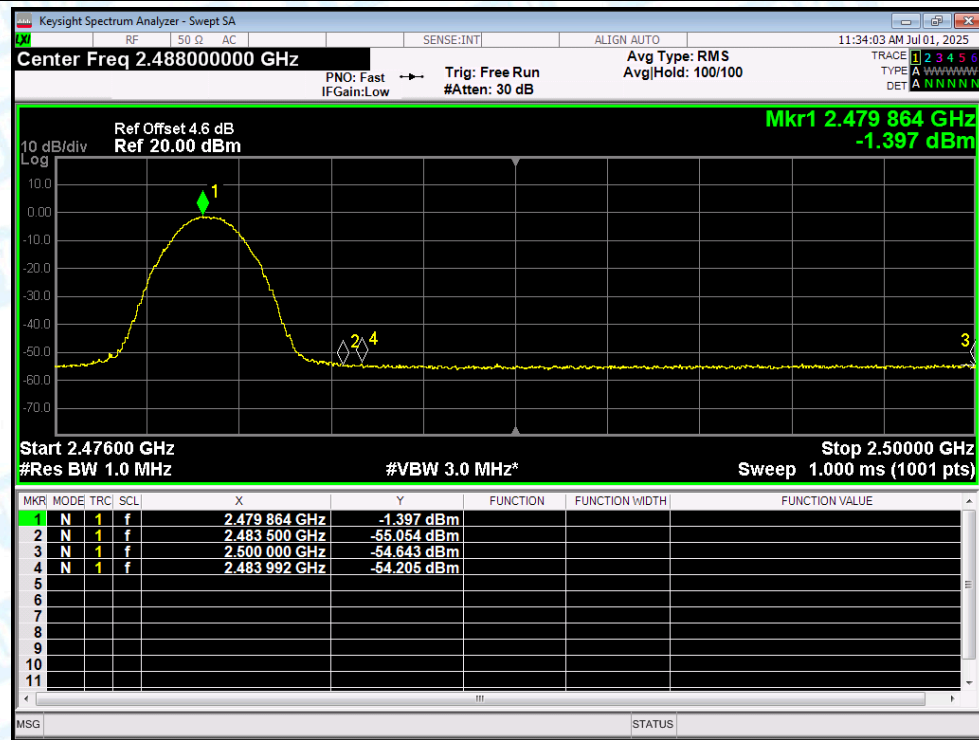
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



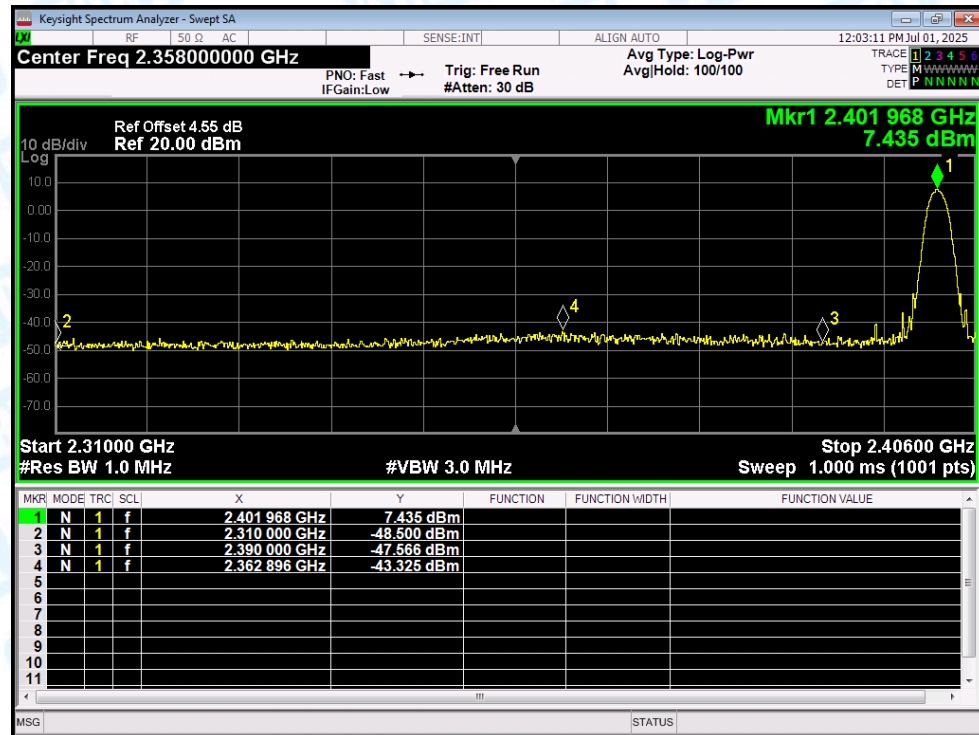
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



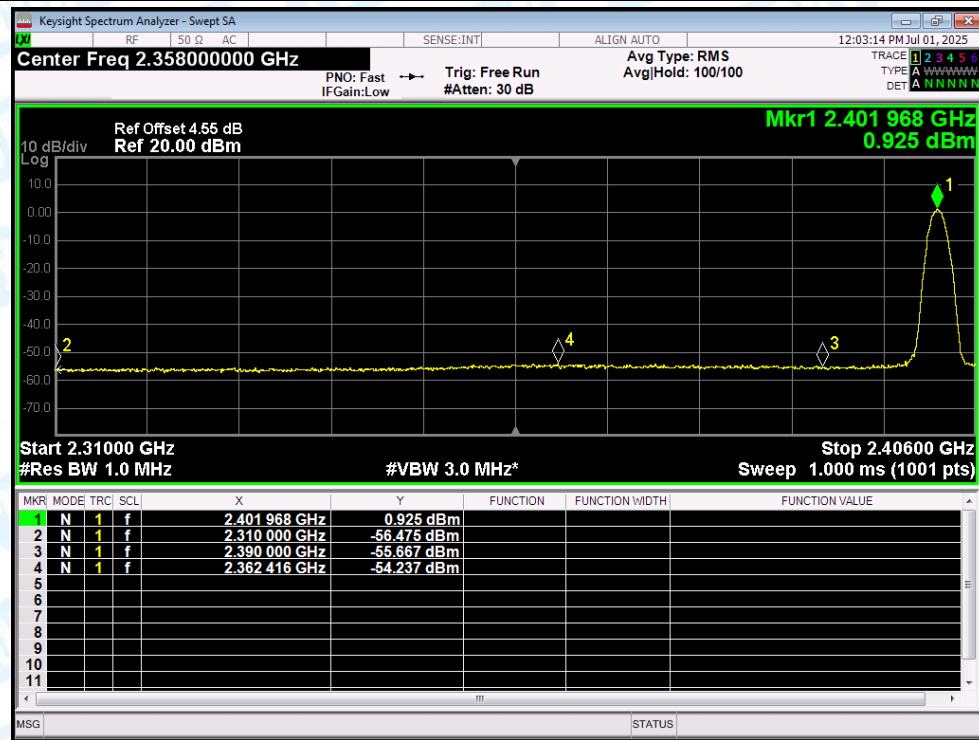
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



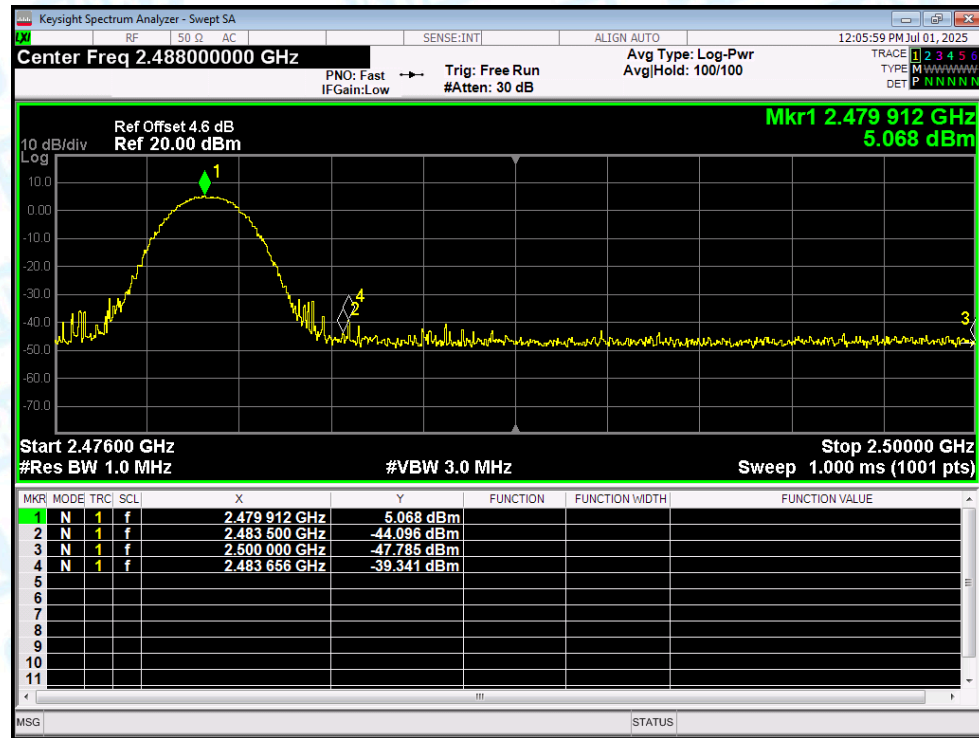
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



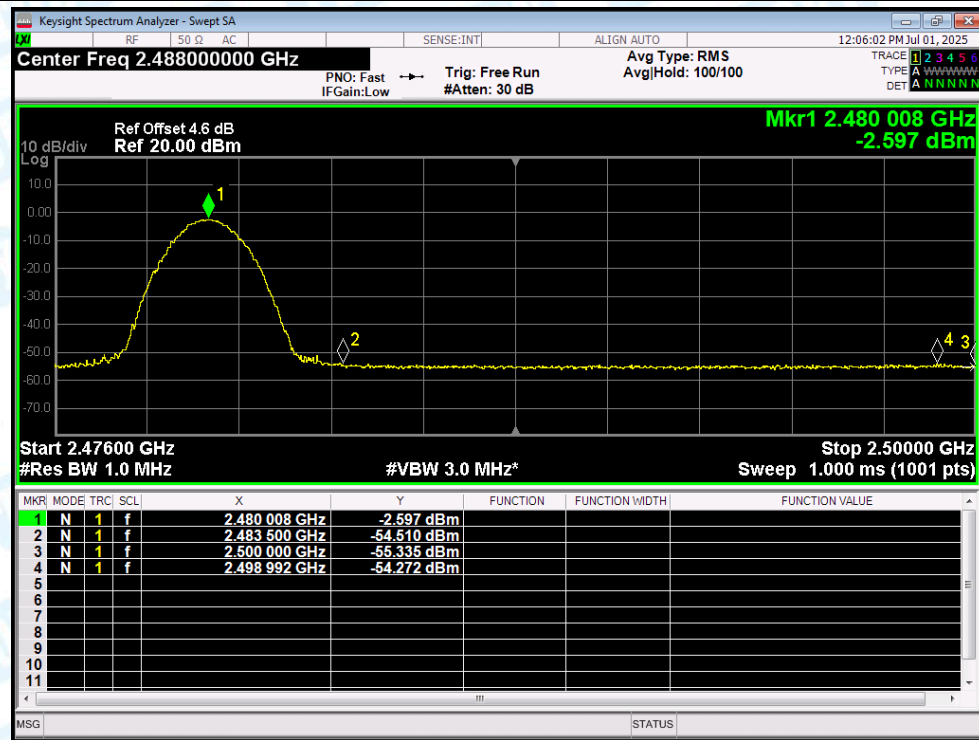
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



9. Carrier Frequencies Separation

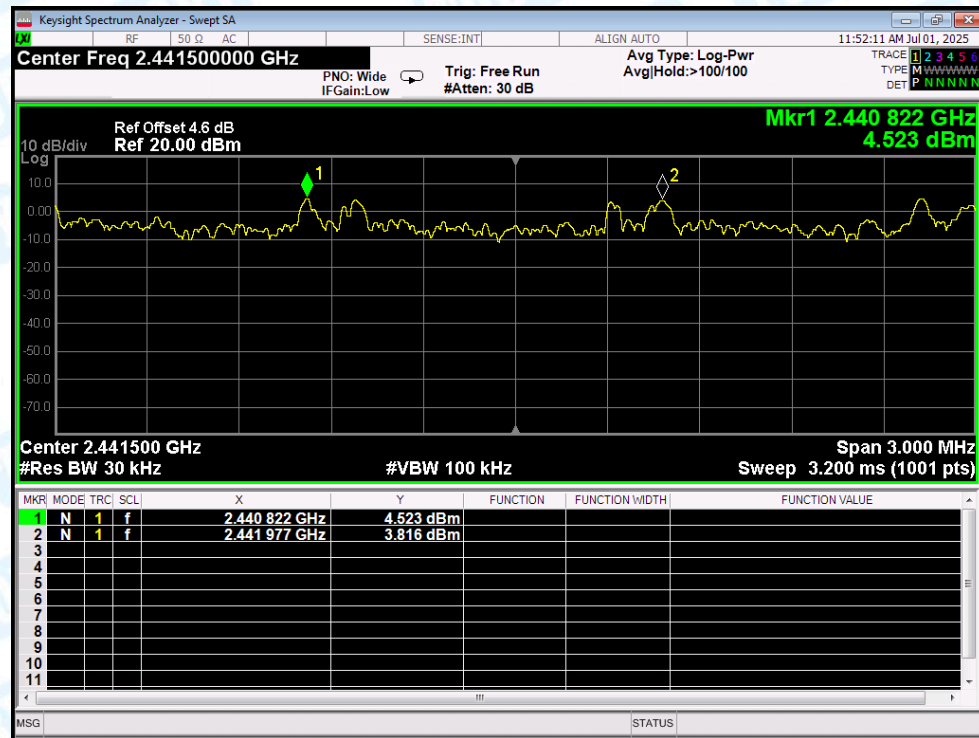
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.825	2441.821	0.996	0.573	Pass
NVNT	2-DH1	Ant1	2440.822	2441.977	1.155	0.833	Pass
NVNT	3-DH1	Ant1	2440.966	2441.959	0.993	0.813	Pass

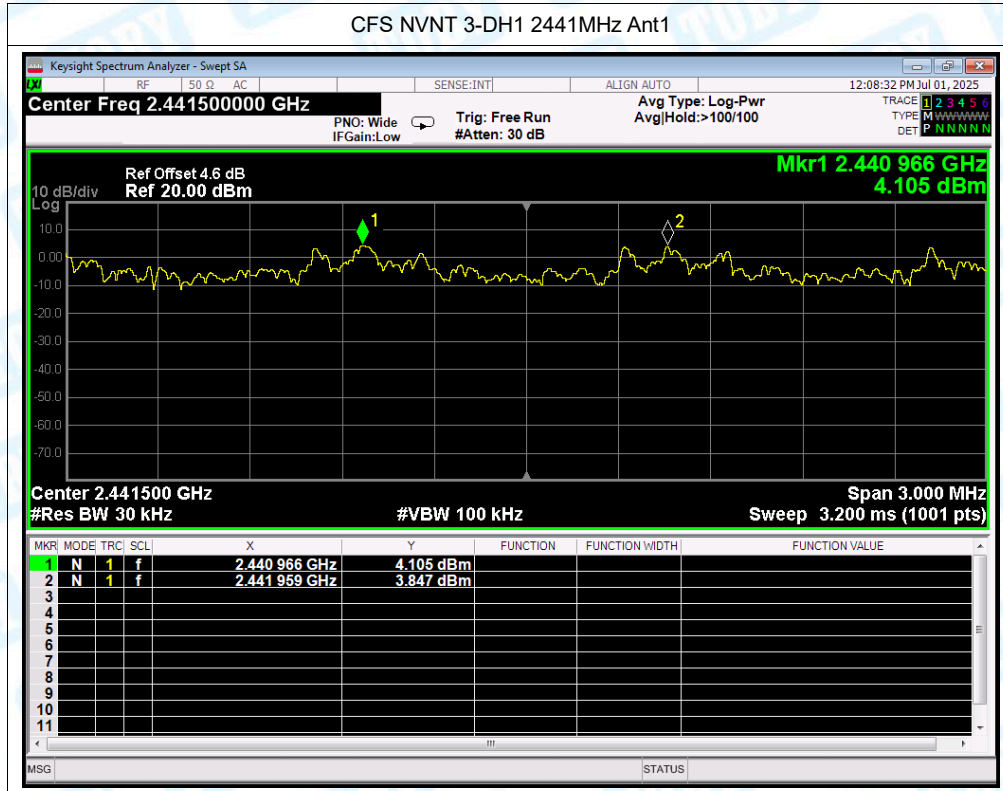
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



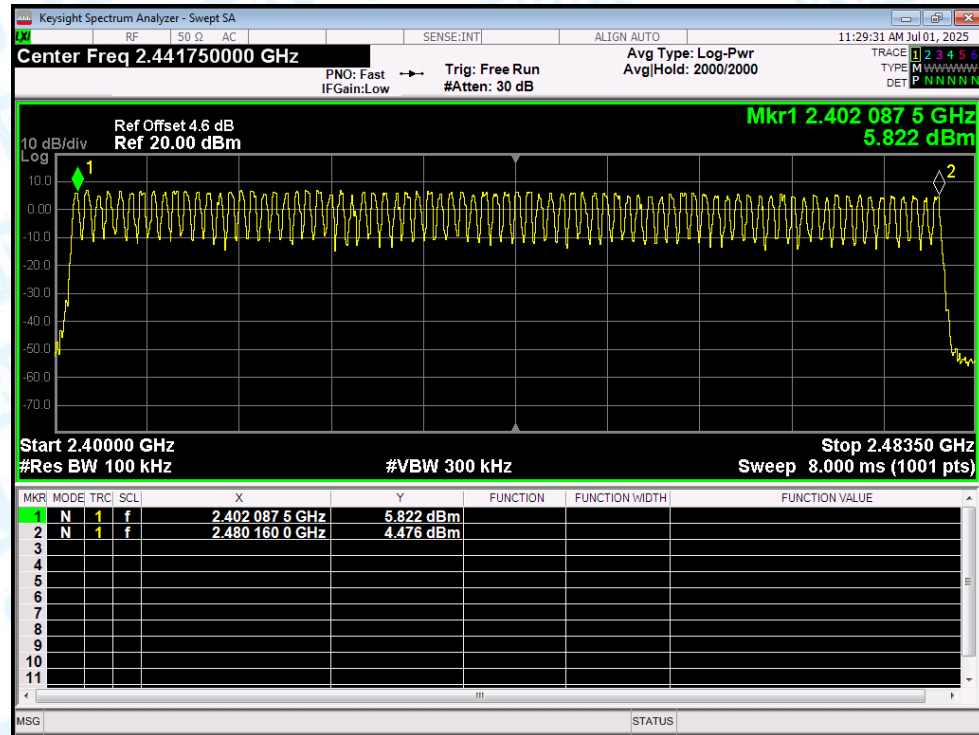


10. Number of Hopping Channel

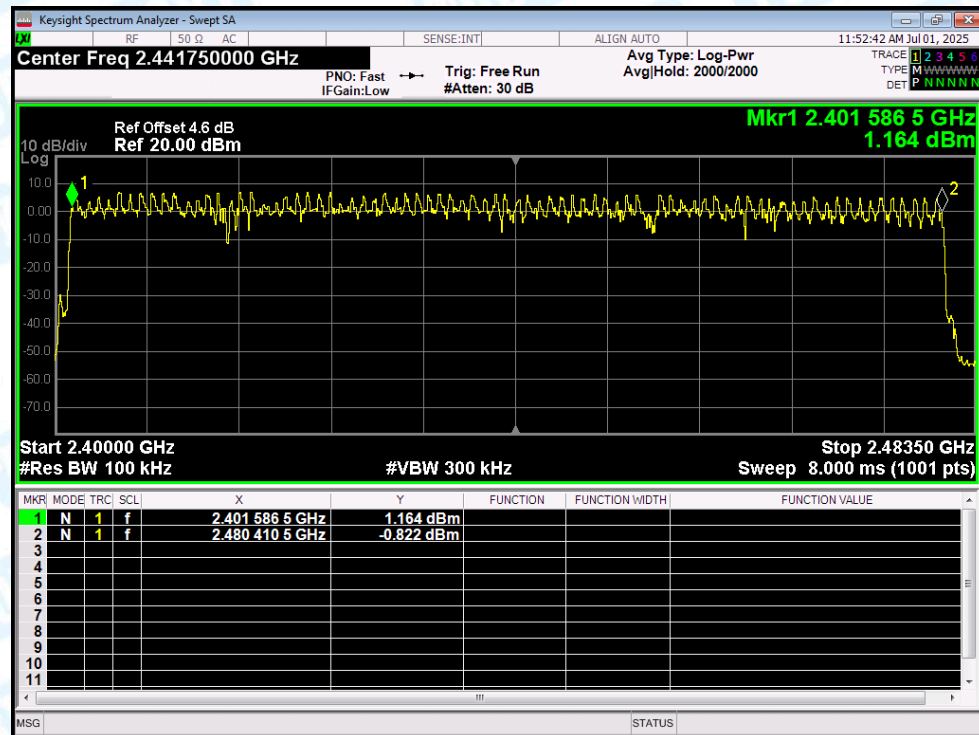
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

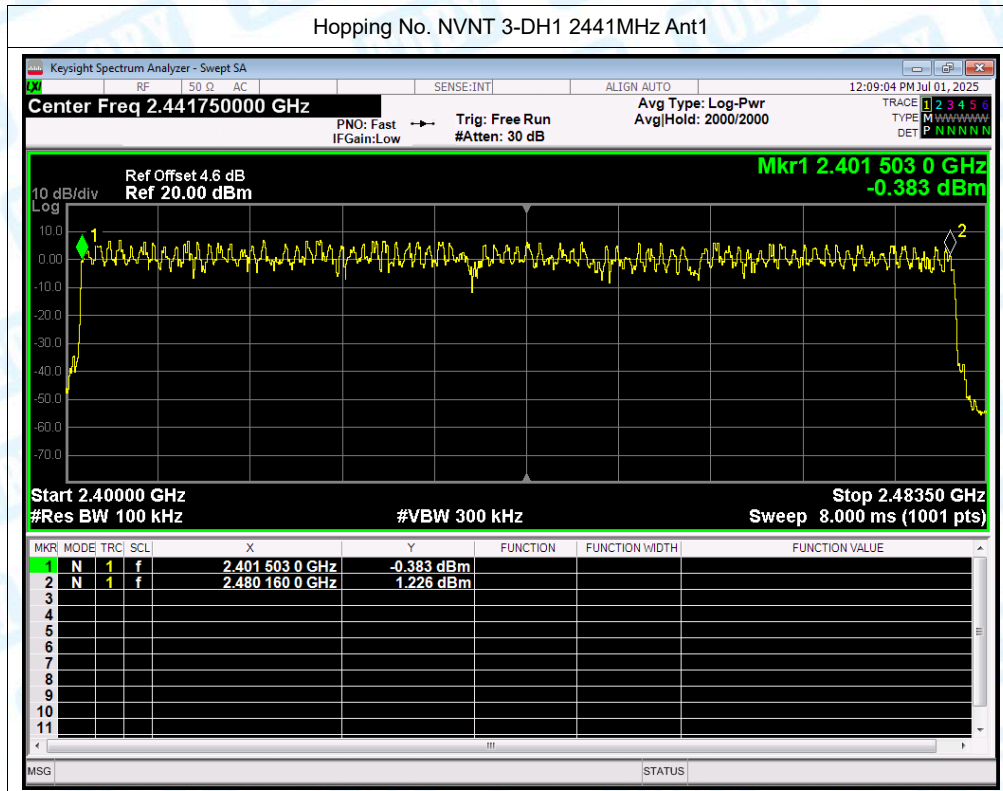
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



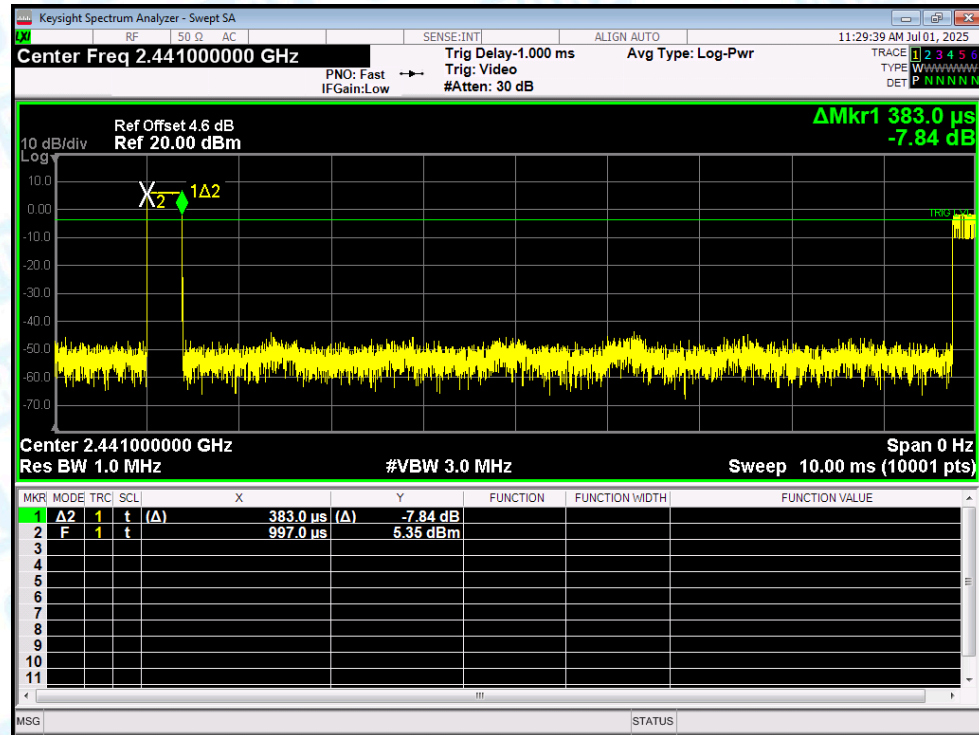


11. Dwell Time

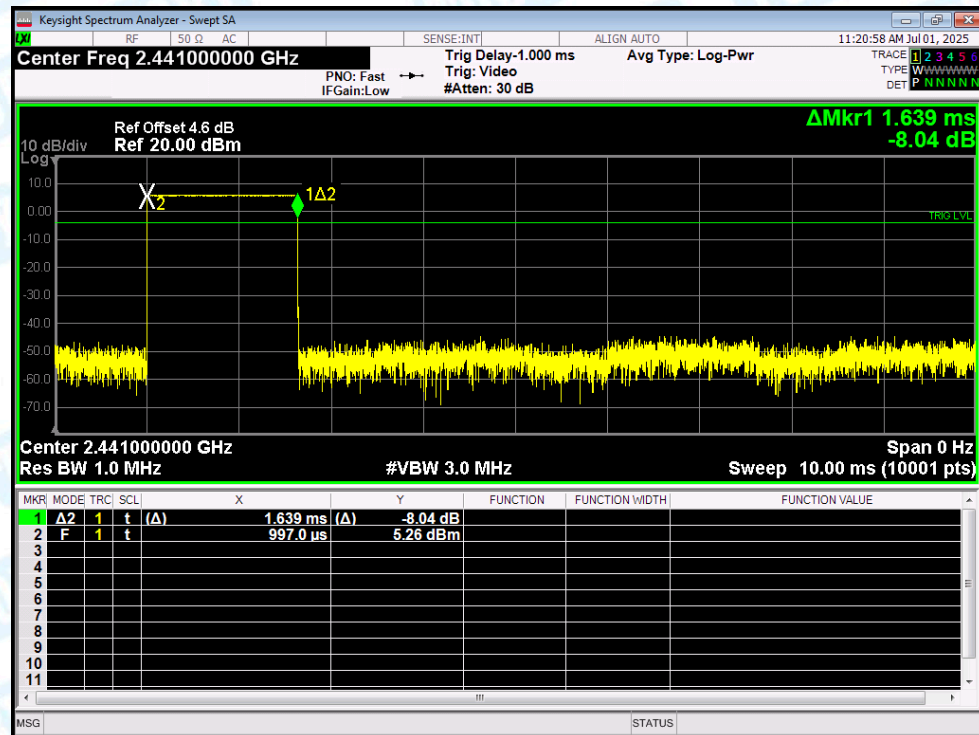
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	308.373	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.894	308.693	31600	400	Pass

Test Graphs

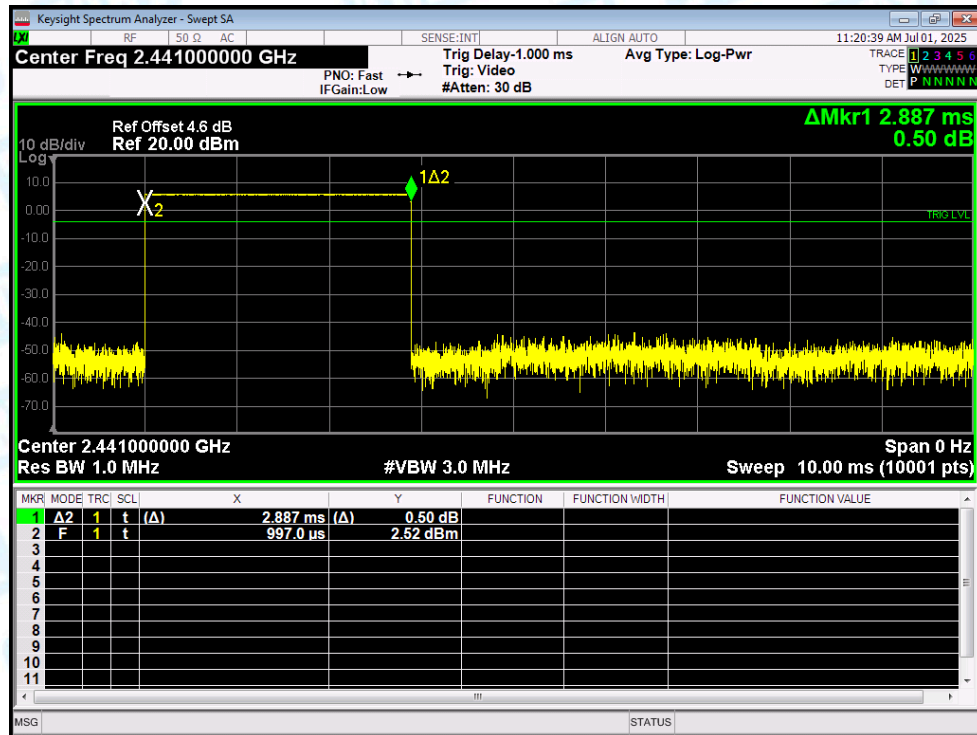
Dwell NVNT 1-DH1 2441MHz Ant1



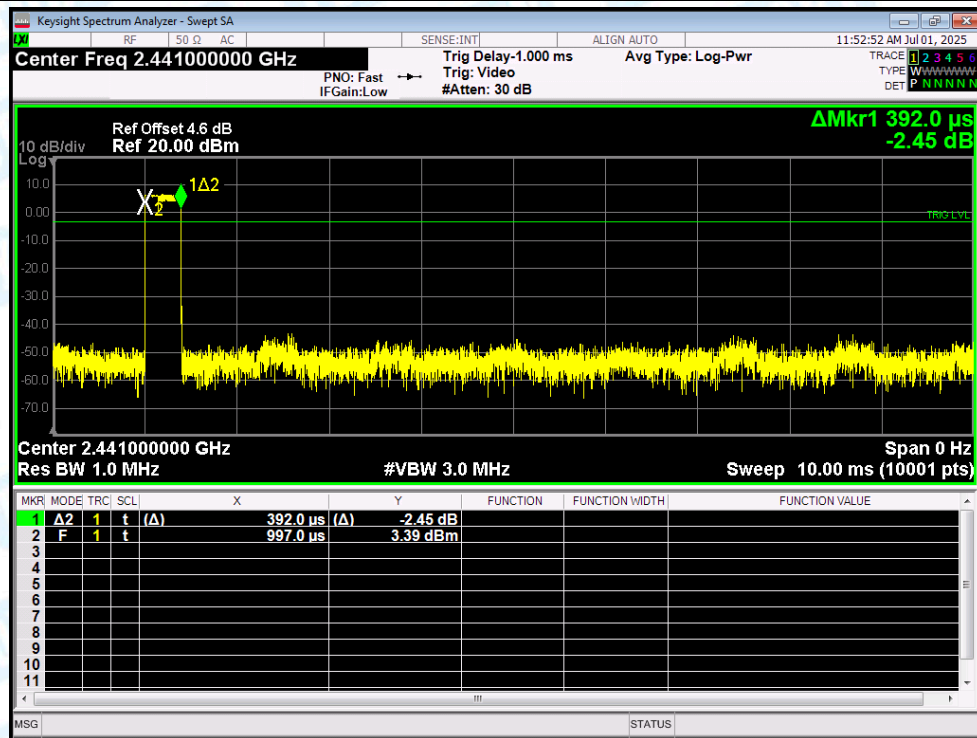
Dwell NVNT 1-DH3 2441MHz Ant1



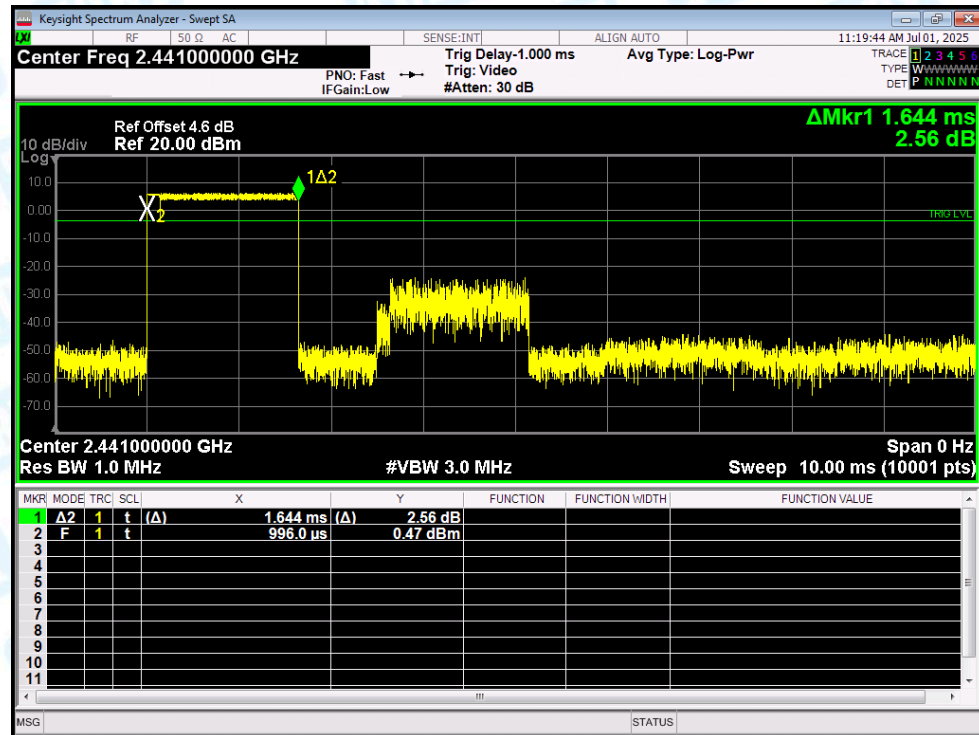
Dwell NVNT 1-DH5 2441MHz Ant1



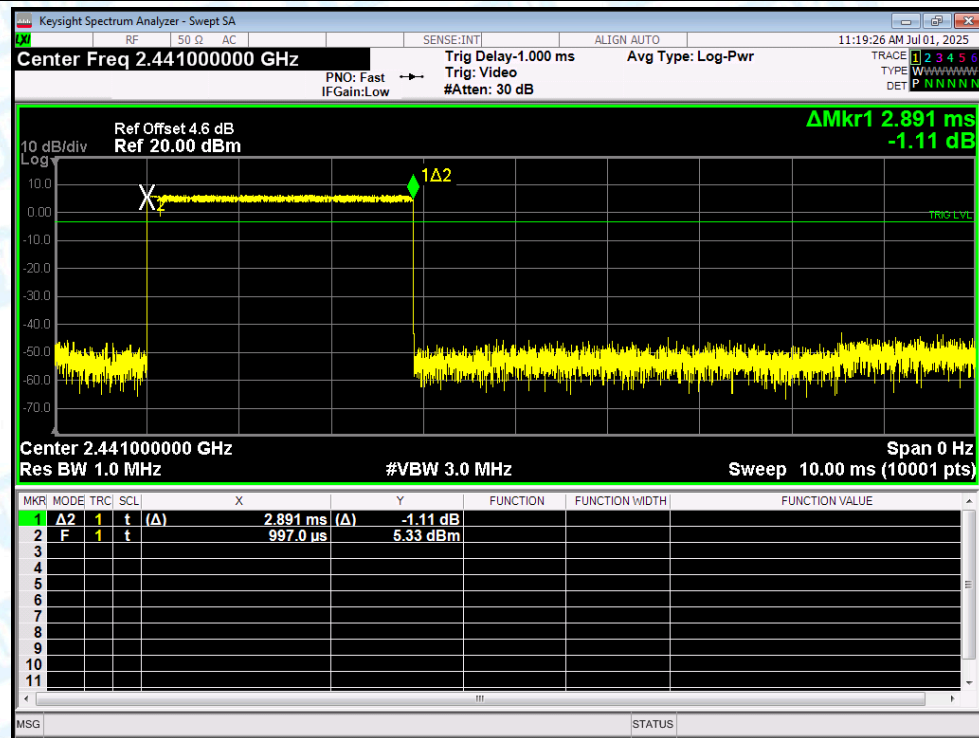
Dwell NVNT 2-DH1 2441MHz Ant1



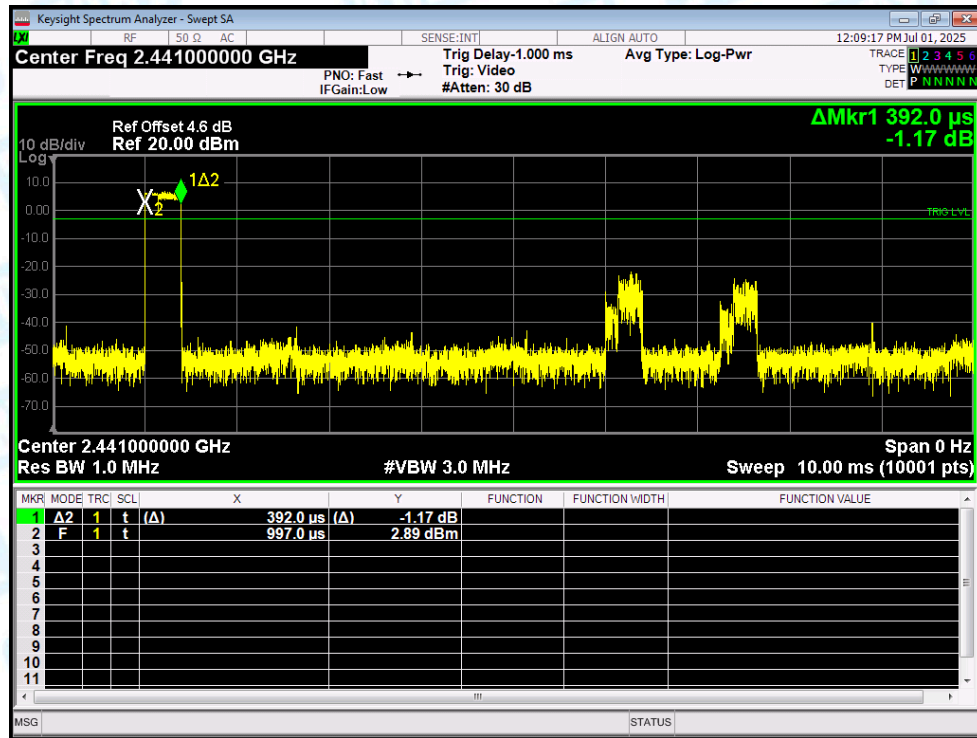
Dwell NVNT 2-DH3 2441MHz Ant1



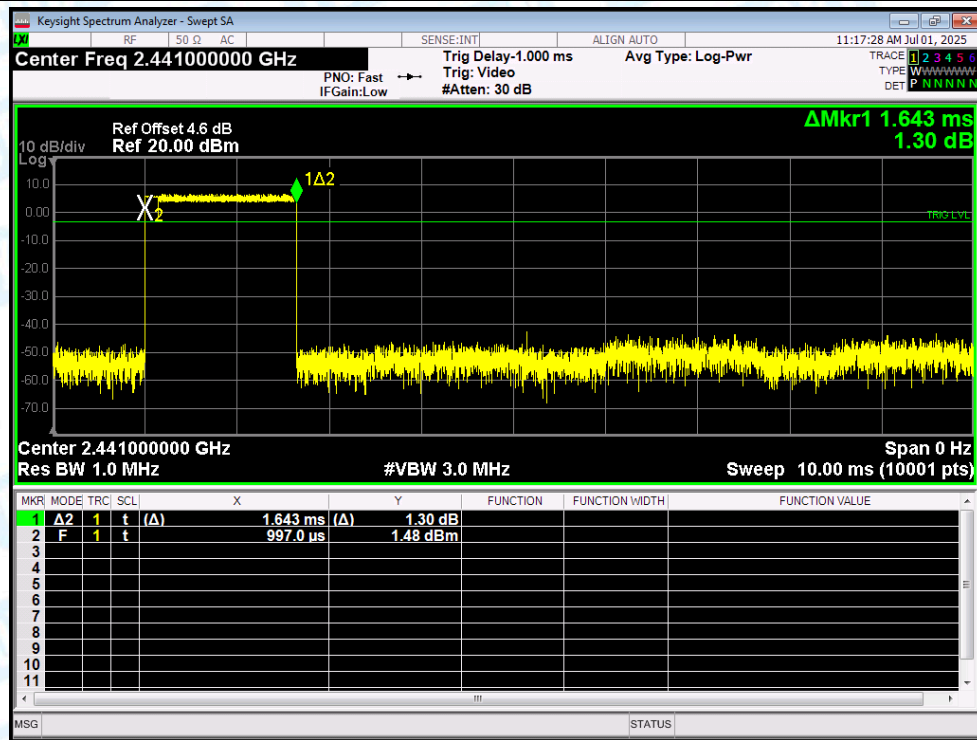
Dwell NVNT 2-DH5 2441MHz Ant1

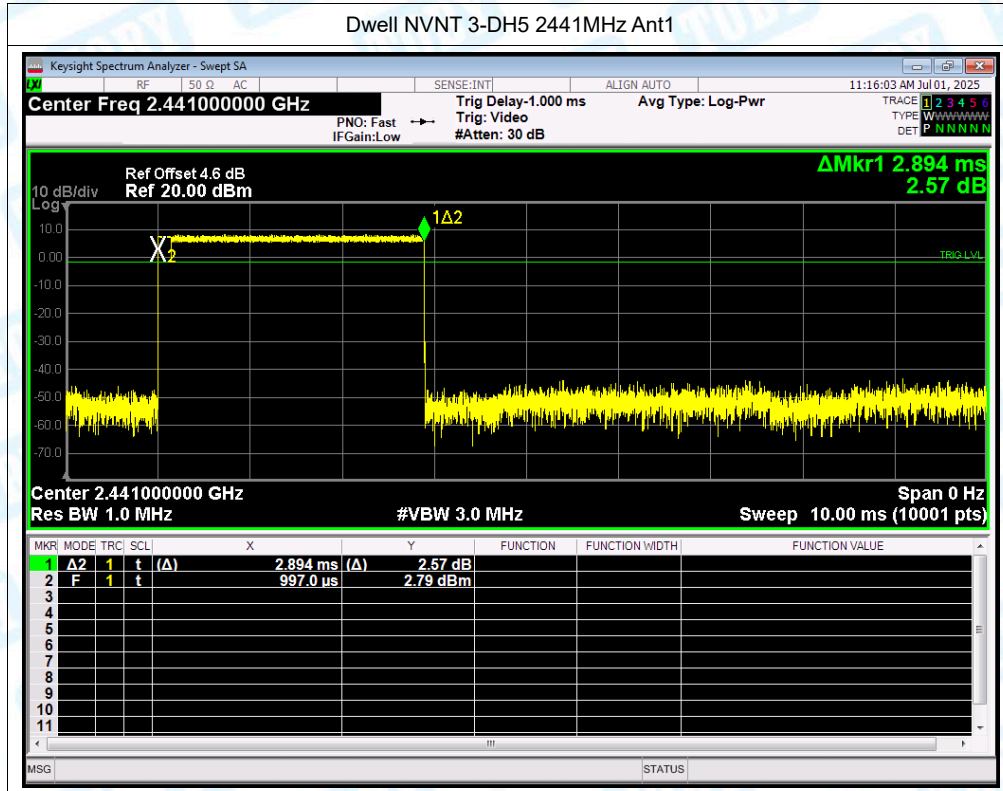


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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