

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Multi-function White Noise Machine
Test Model:	HFD-W29
Sample ID:	HC-C-202606-0456-01-01
Environmental Conditions	
Temperature:	23.2℃
Relative Humidity:	50%
Test Voltage:	DC 9V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202606-0456-4 The report only show the worst case data.	

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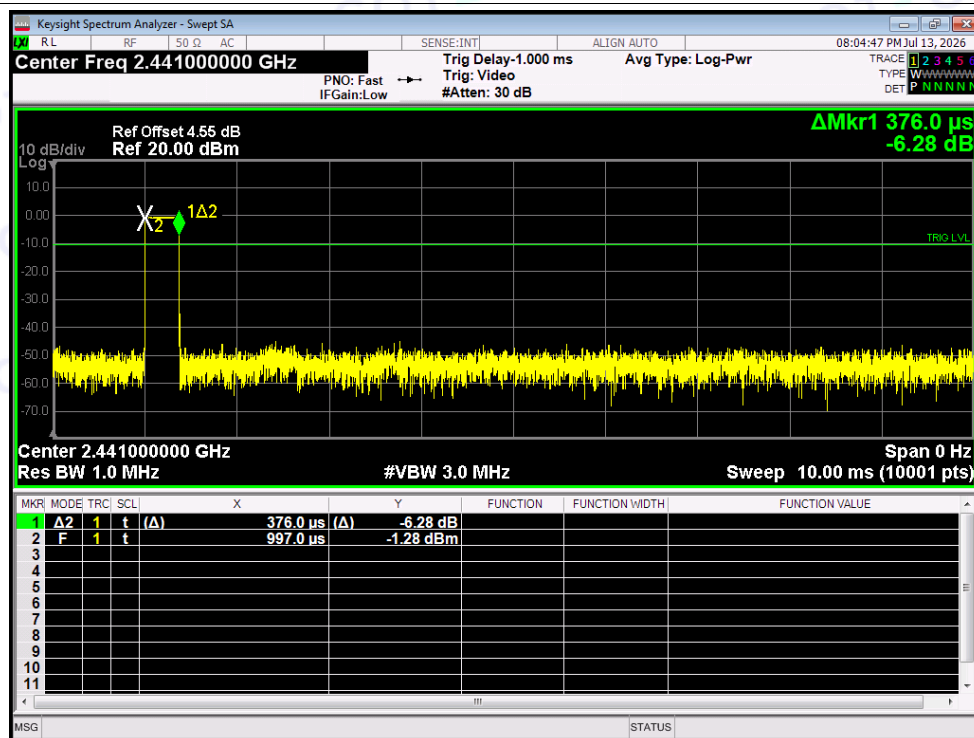
Dwell Time	3
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Dwell Time

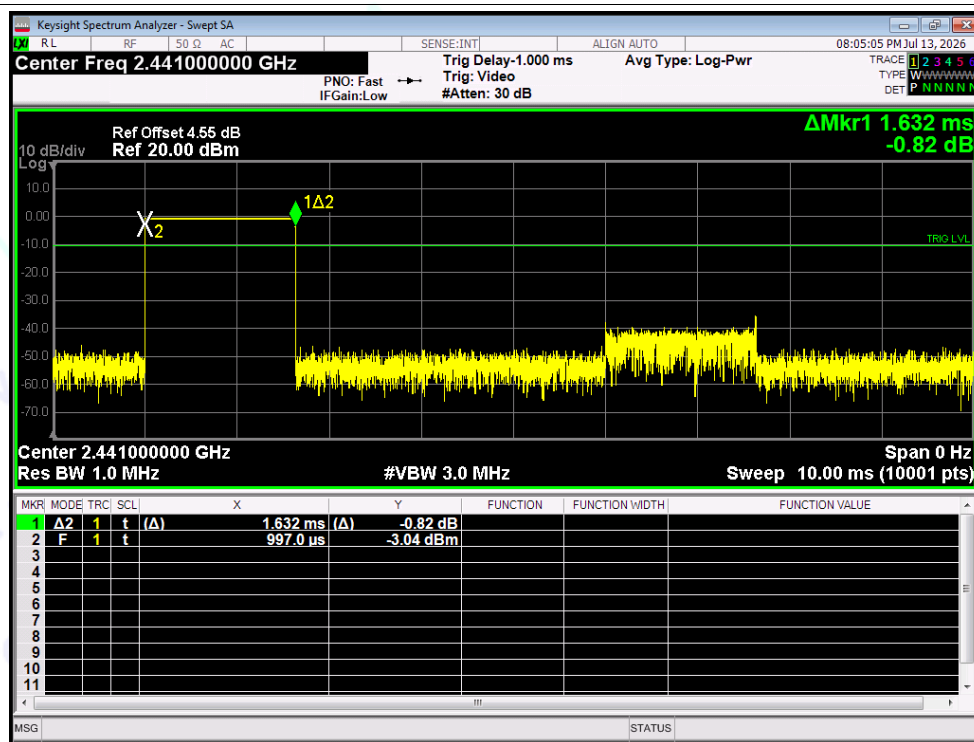
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.376	120.32	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.88	307.2	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.638	262.08	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.886	307.84	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.387	123.84	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.888	308.053	31600	400	Pass

Test Graphs

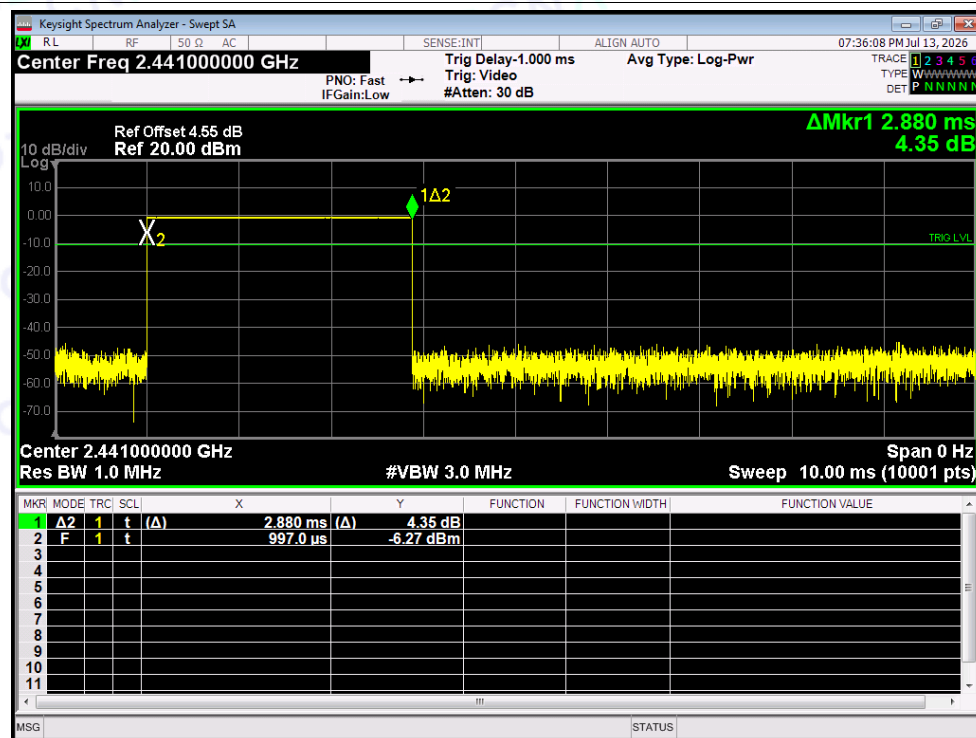
Dwell NVNT 1-DH1 2441MHz Ant1



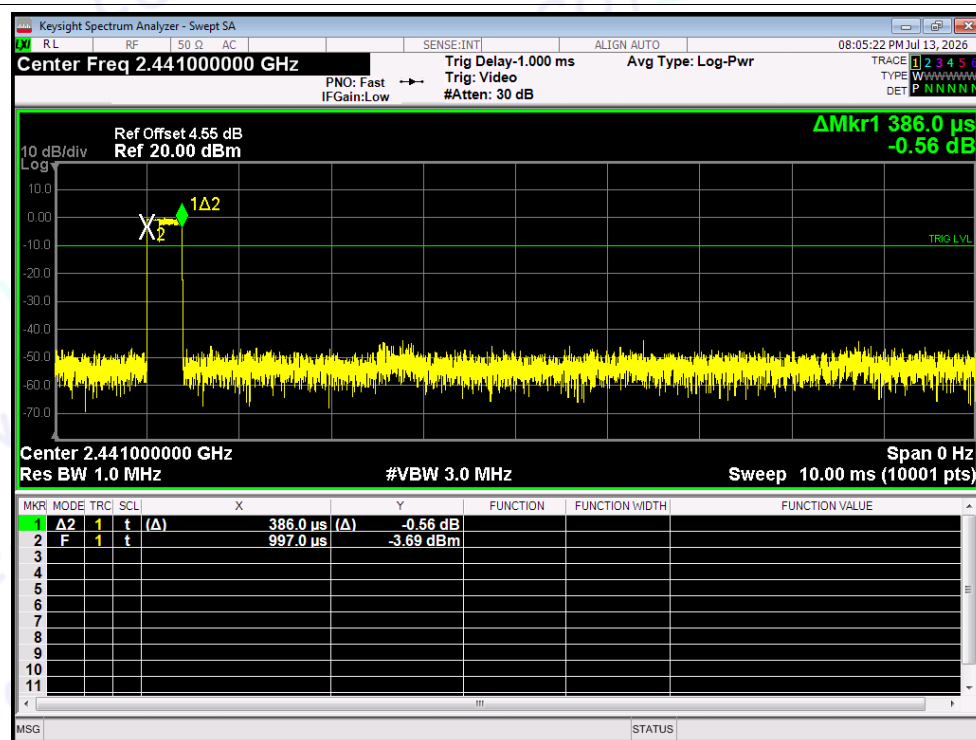
Dwell NVNT 1-DH3 2441MHz Ant1



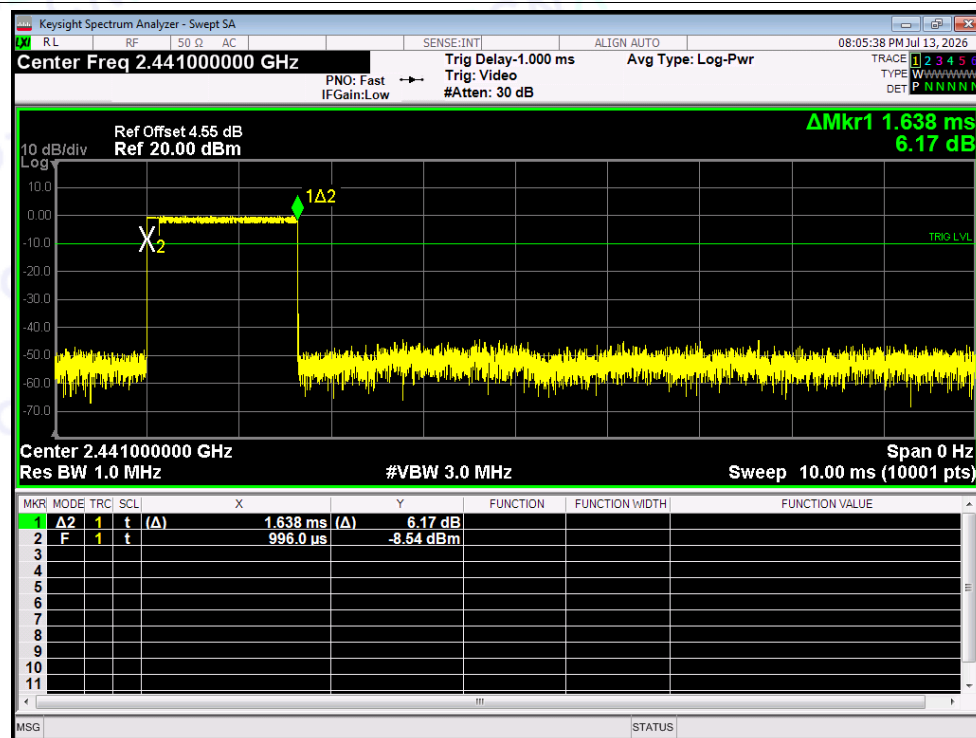
Dwell NVNT 1-DH5 2441MHz Ant1



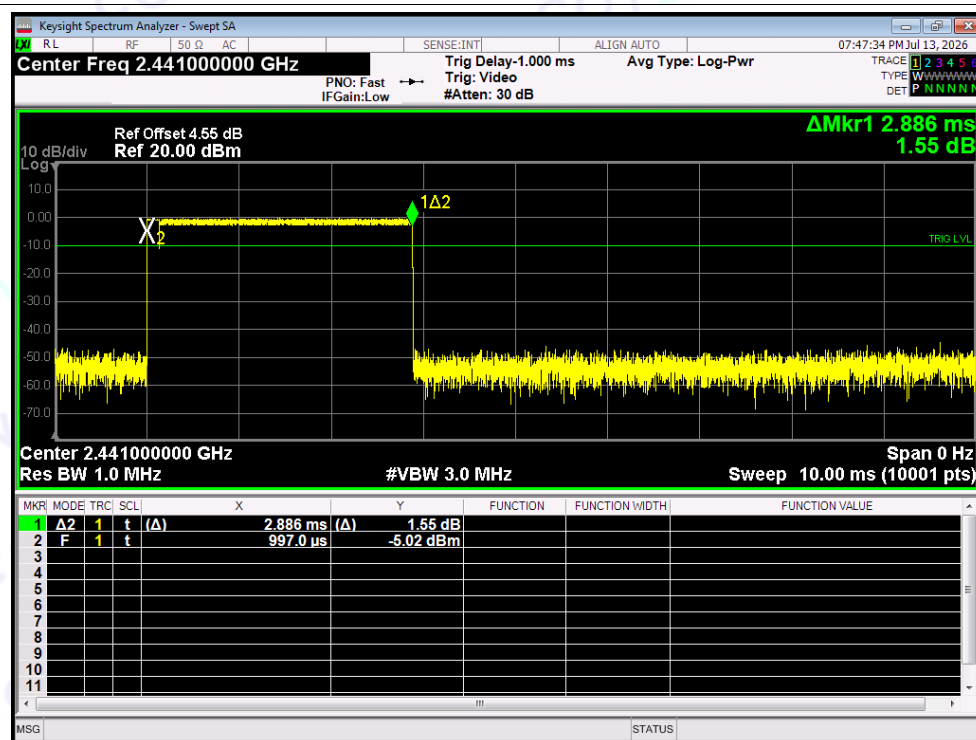
Dwell NVNT 2-DH1 2441MHz Ant1



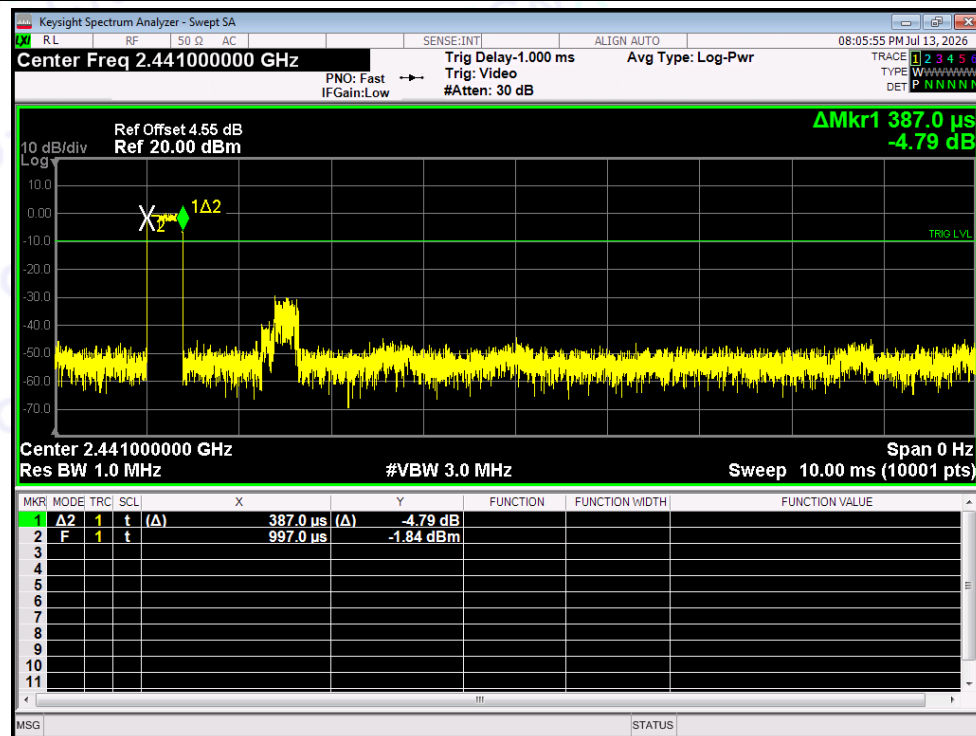
Dwell NVNT 2-DH3 2441MHz Ant1



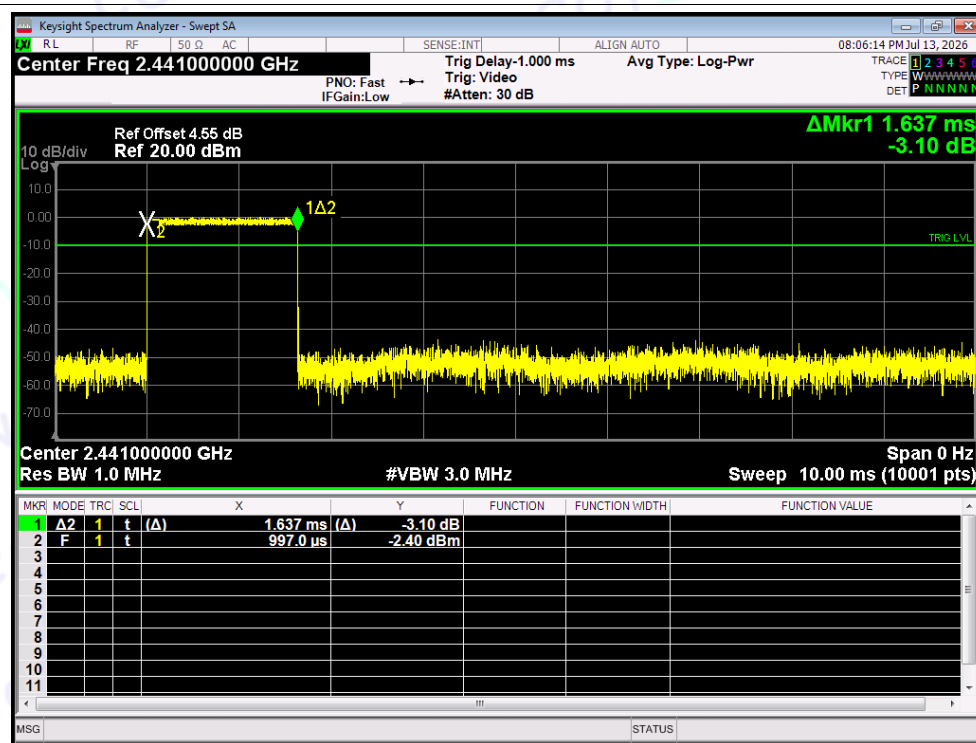
Dwell NVNT 2-DH5 2441MHz Ant1

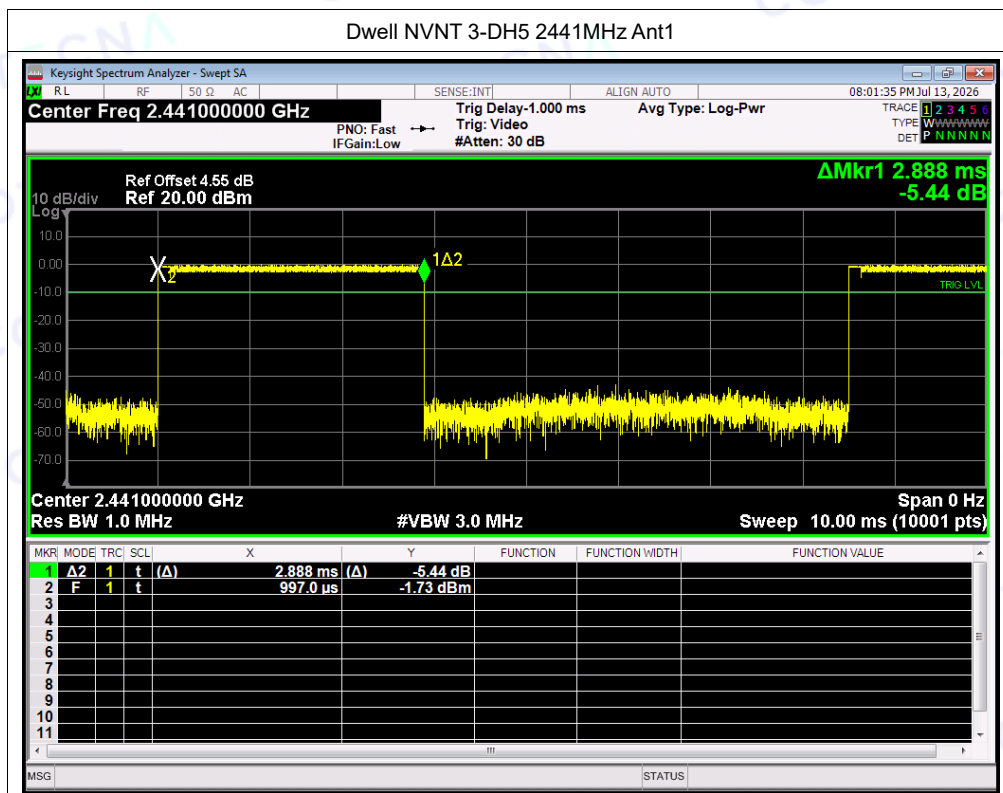


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



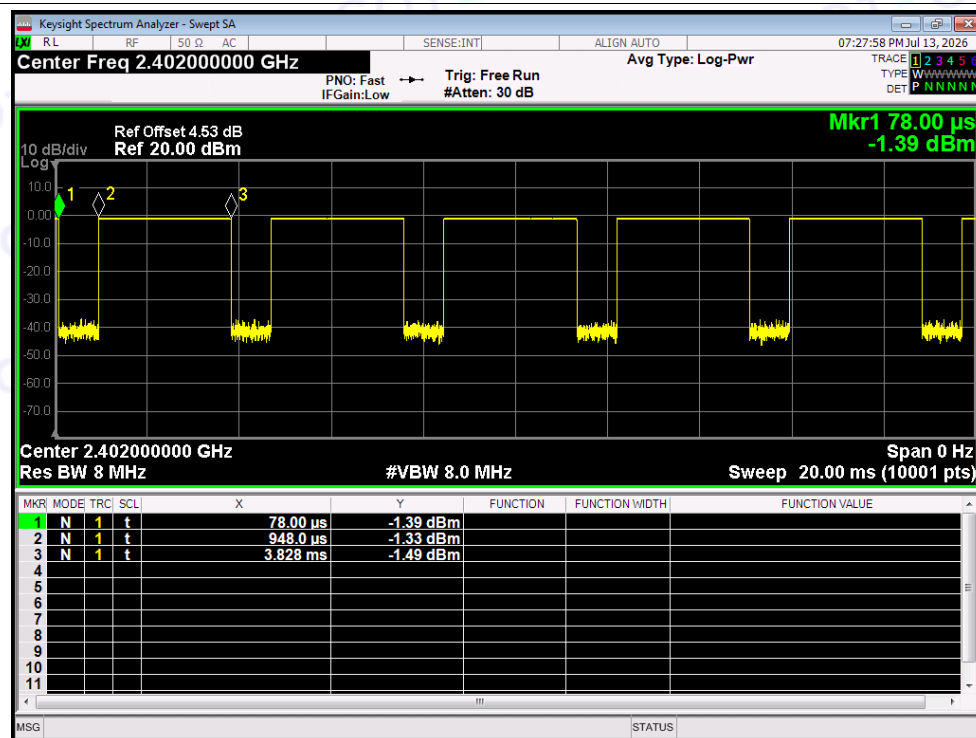


Duty Cycle

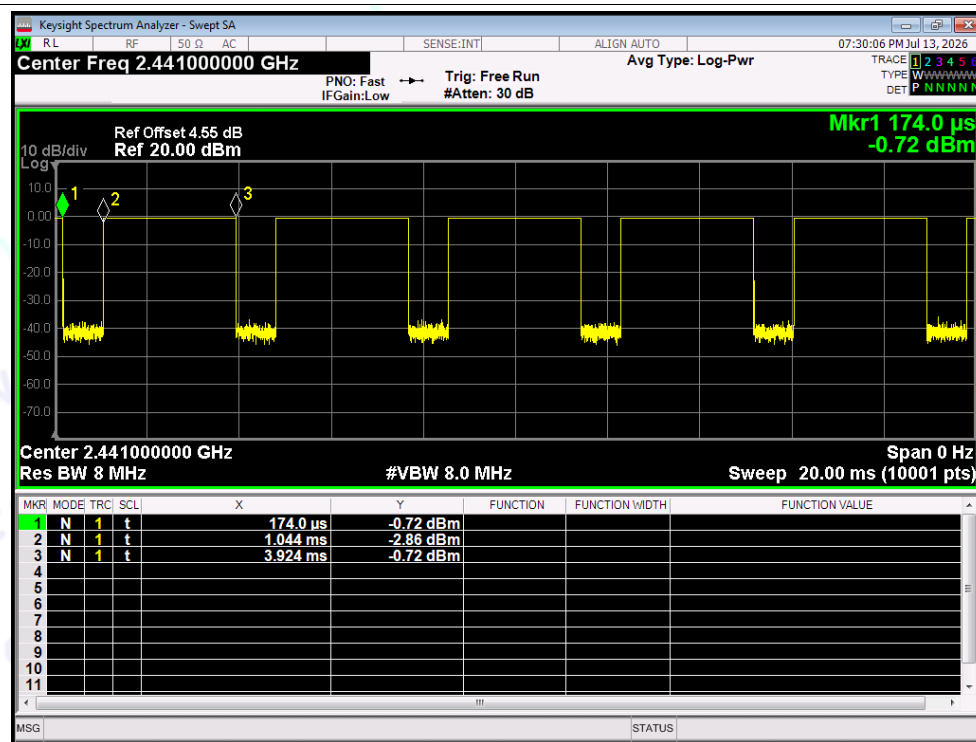
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.8	1.15	0.35
NVNT	1-DH5	2441	Ant1	76.8	1.15	0.35
NVNT	1-DH5	2480	Ant1	76.8	1.15	0.35
NVNT	2-DH5	2402	Ant1	77.01	1.13	0.35
NVNT	2-DH5	2441	Ant1	76.96	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.96	1.14	0.35
NVNT	3-DH5	2402	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2441	Ant1	77.01	1.13	0.35
NVNT	3-DH5	2480	Ant1	77.01	1.13	0.35

Test Graphs

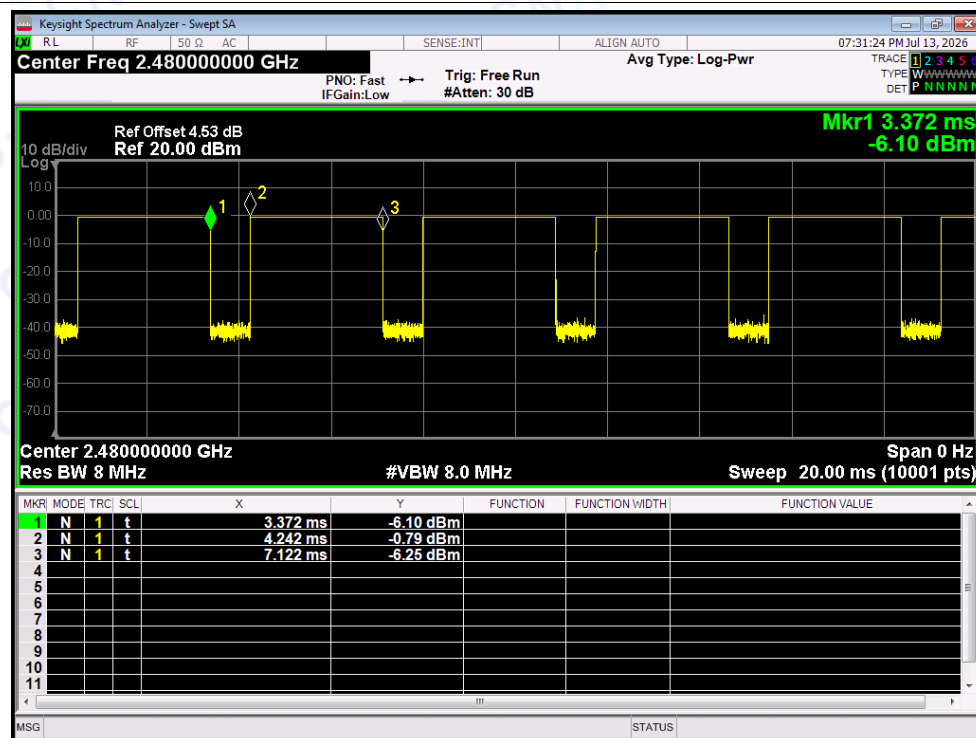
Duty Cycle NVNT 1-DH5 2402MHz Ant1



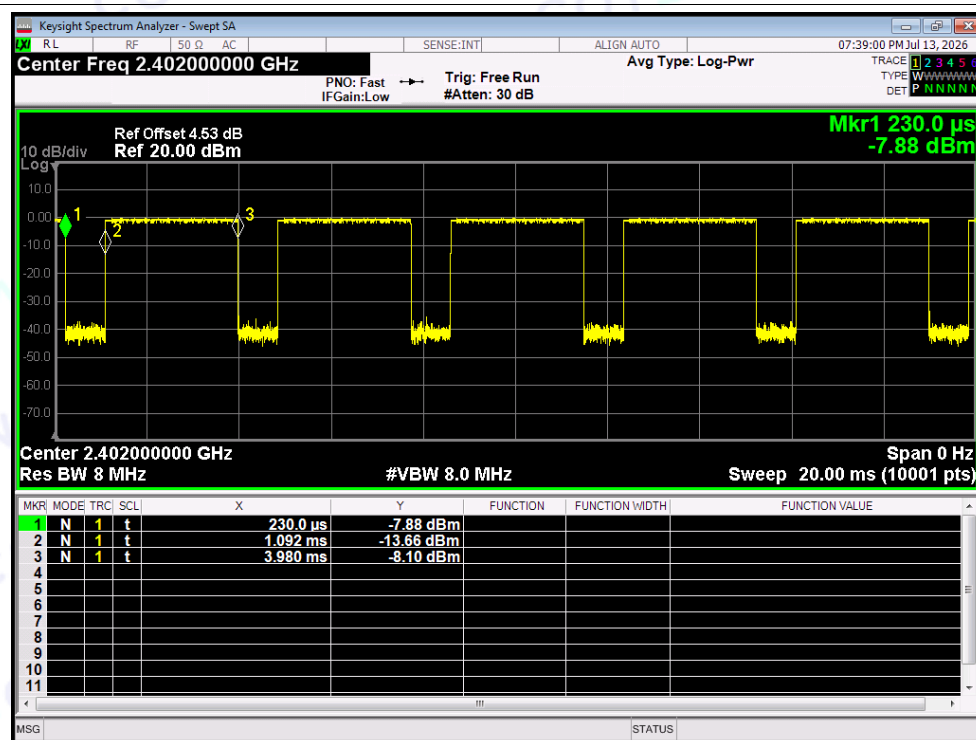
Duty Cycle NVNT 1-DH5 2441MHz Ant1



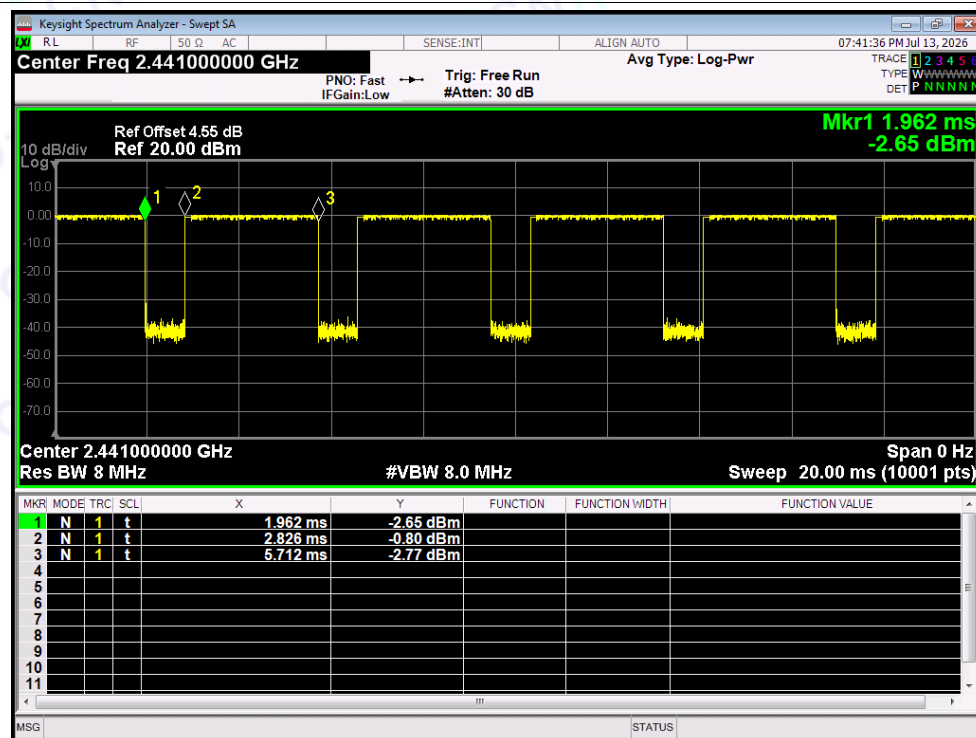
Duty Cycle NVNT 1-DH5 2480MHz Ant1



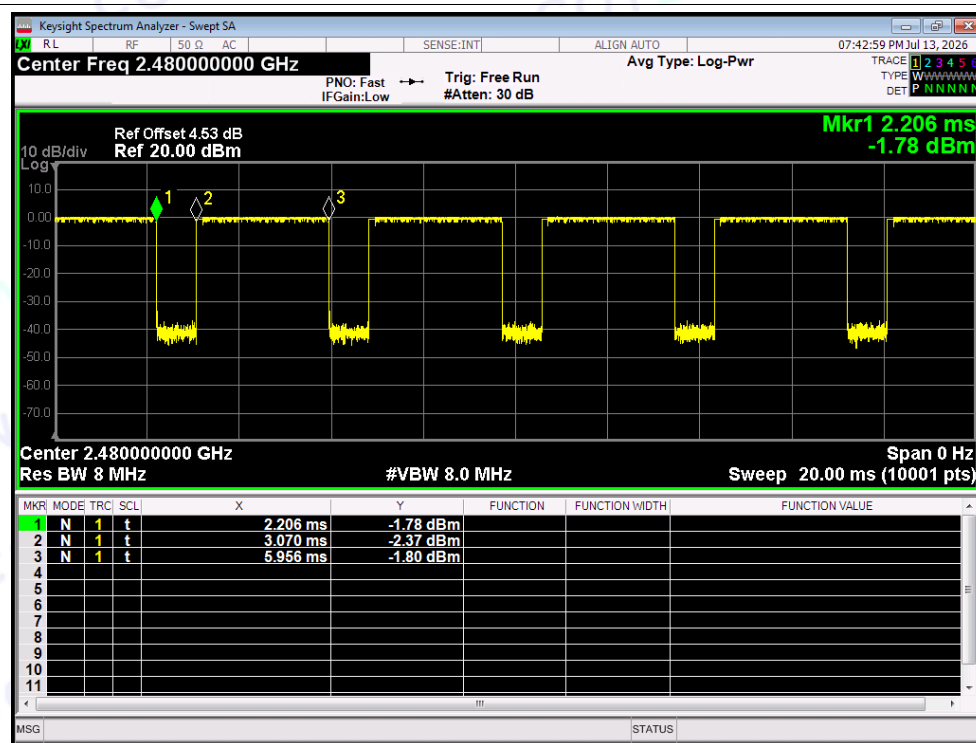
Duty Cycle NVNT 2-DH5 2402MHz Ant1



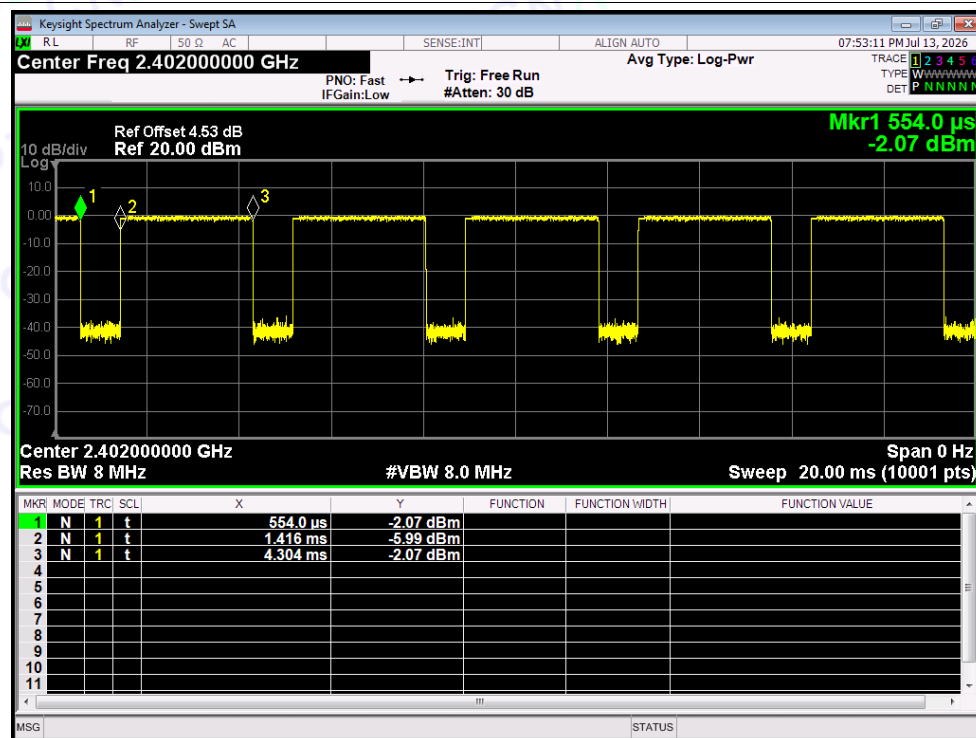
Duty Cycle NVNT 2-DH5 2441MHz Ant1



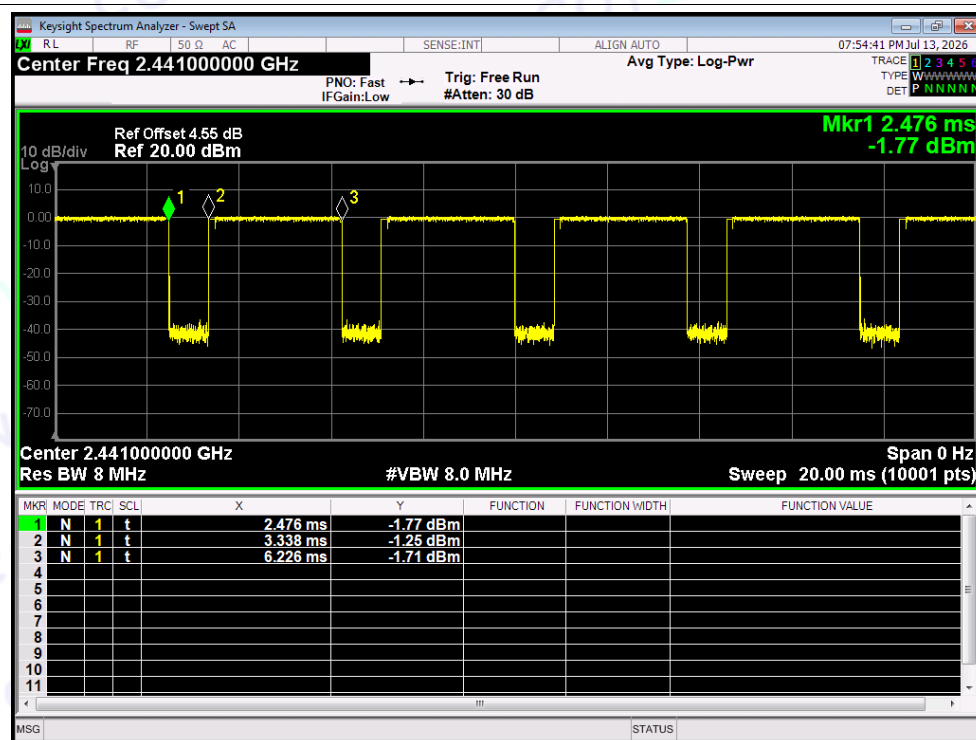
Duty Cycle NVNT 2-DH5 2480MHz Ant1

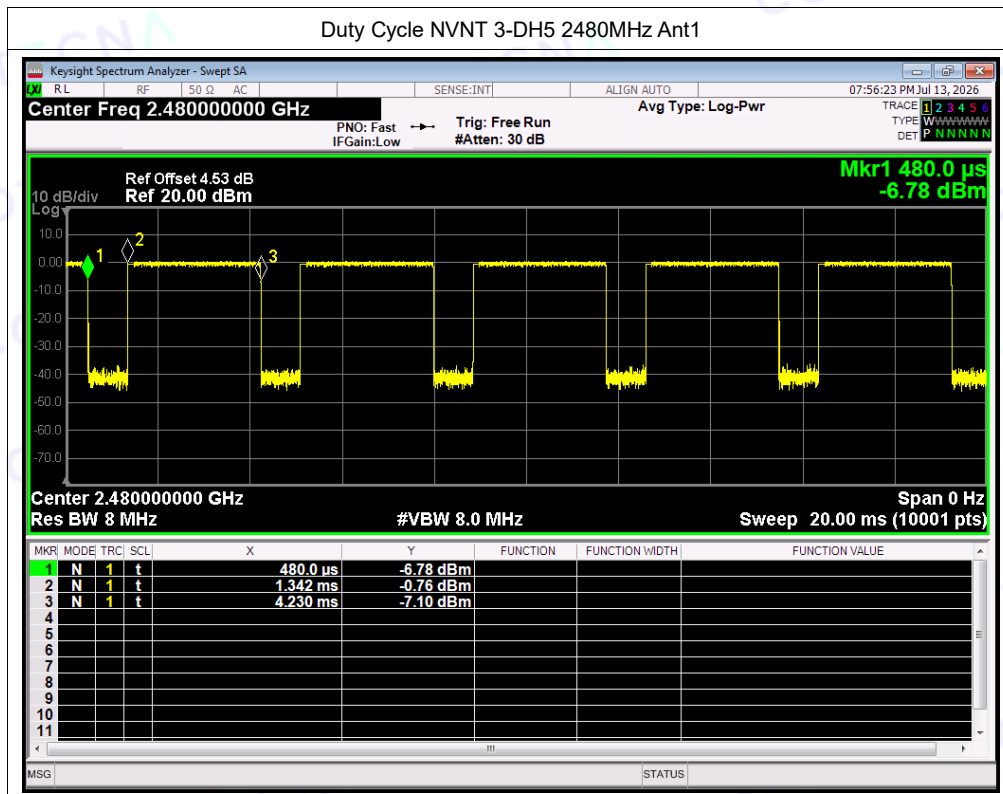


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



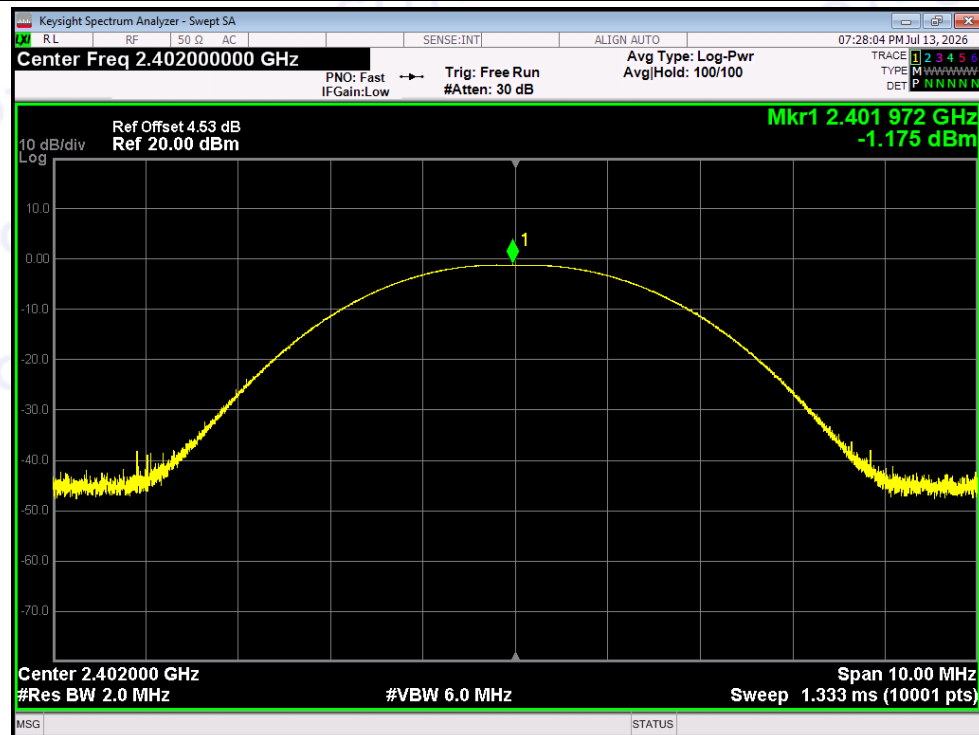


Maximum Conducted Output Power

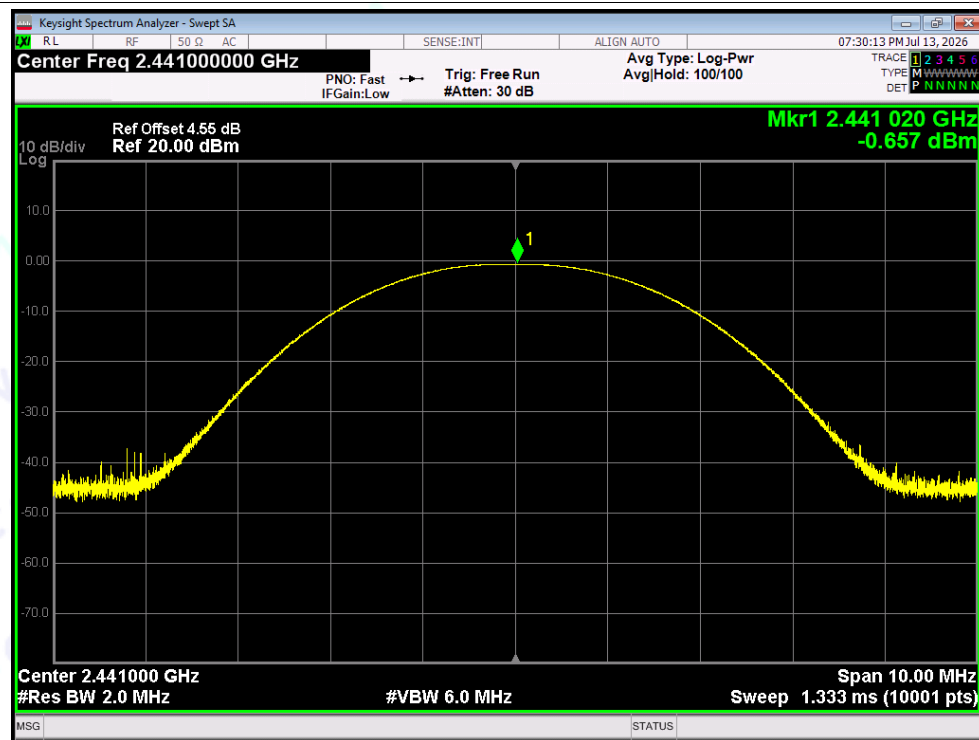
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-1.175	-1.175	21	Pass
NVNT	1-DH5	2441	Ant1	-0.657	-0.657	21	Pass
NVNT	1-DH5	2480	Ant1	-0.686	-0.686	21	Pass
NVNT	2-DH5	2402	Ant1	-0.61	-0.61	21	Pass
NVNT	2-DH5	2441	Ant1	-0.071	-0.071	21	Pass
NVNT	2-DH5	2480	Ant1	-0.026	-0.026	21	Pass
NVNT	3-DH5	2402	Ant1	-0.289	-0.289	21	Pass
NVNT	3-DH5	2441	Ant1	0.223	0.223	21	Pass
NVNT	3-DH5	2480	Ant1	0.236	0.236	21	Pass

Test Graphs

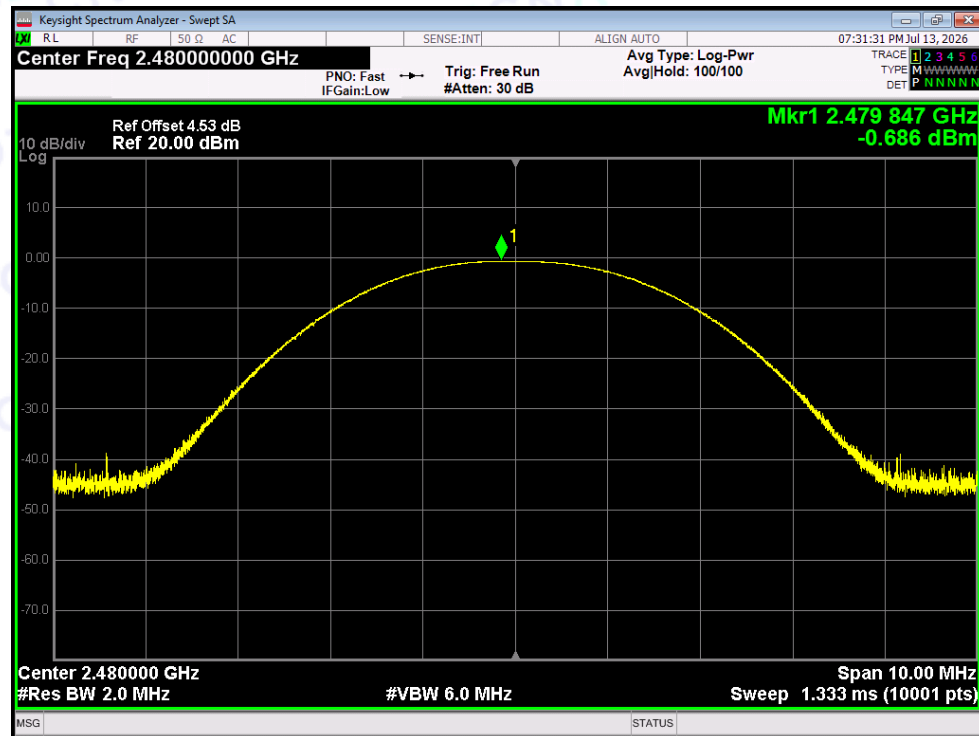
Power NVNT 1-DH5 2402MHz Ant1



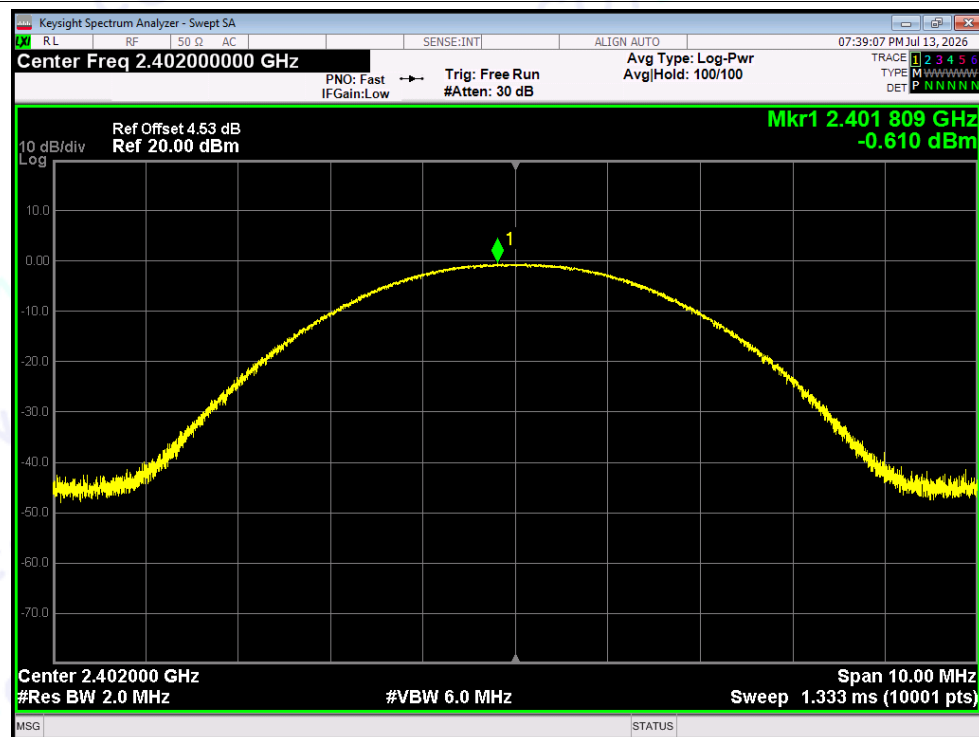
Power NVNT 1-DH5 2441MHz Ant1



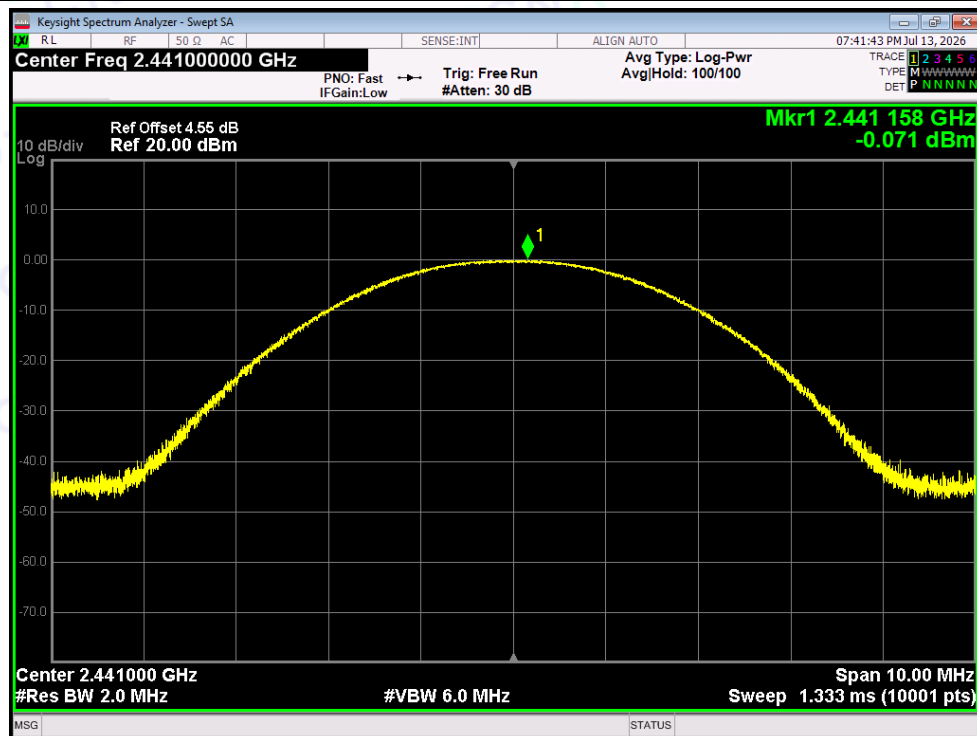
Power NVNT 1-DH5 2480MHz Ant1



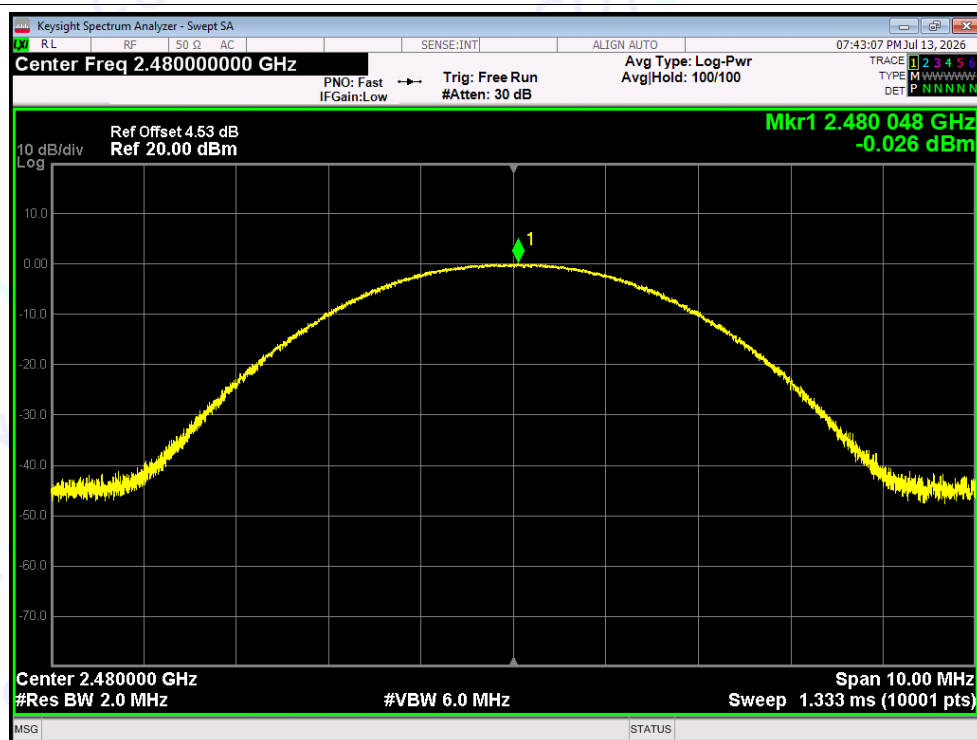
Power NVNT 2-DH5 2402MHz Ant1



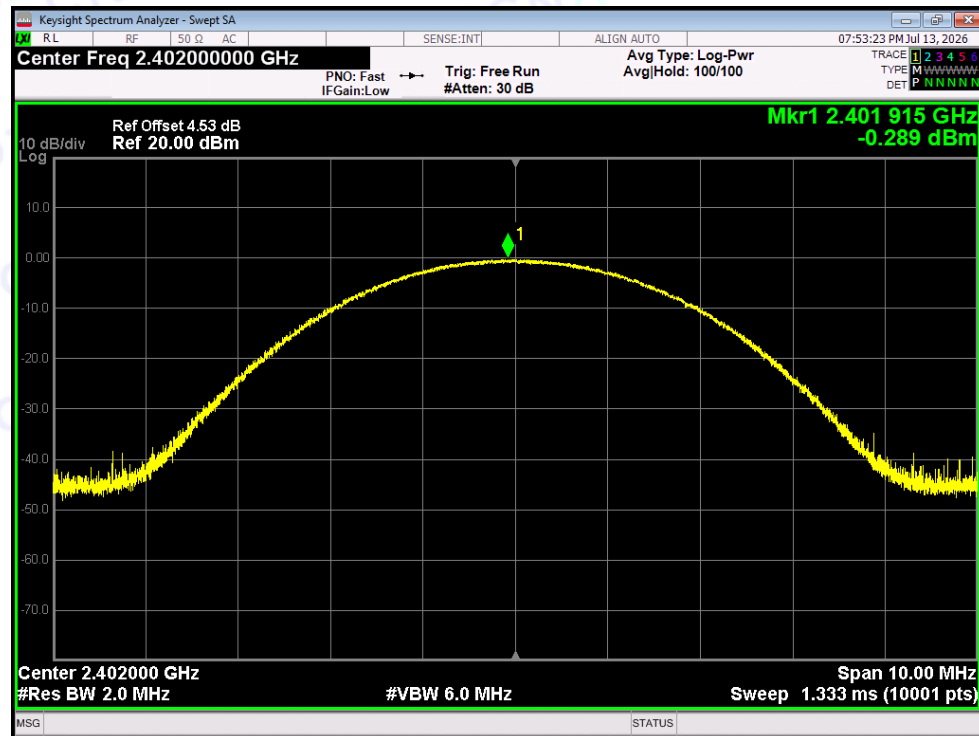
Power NVNT 2-DH5 2441MHz Ant1



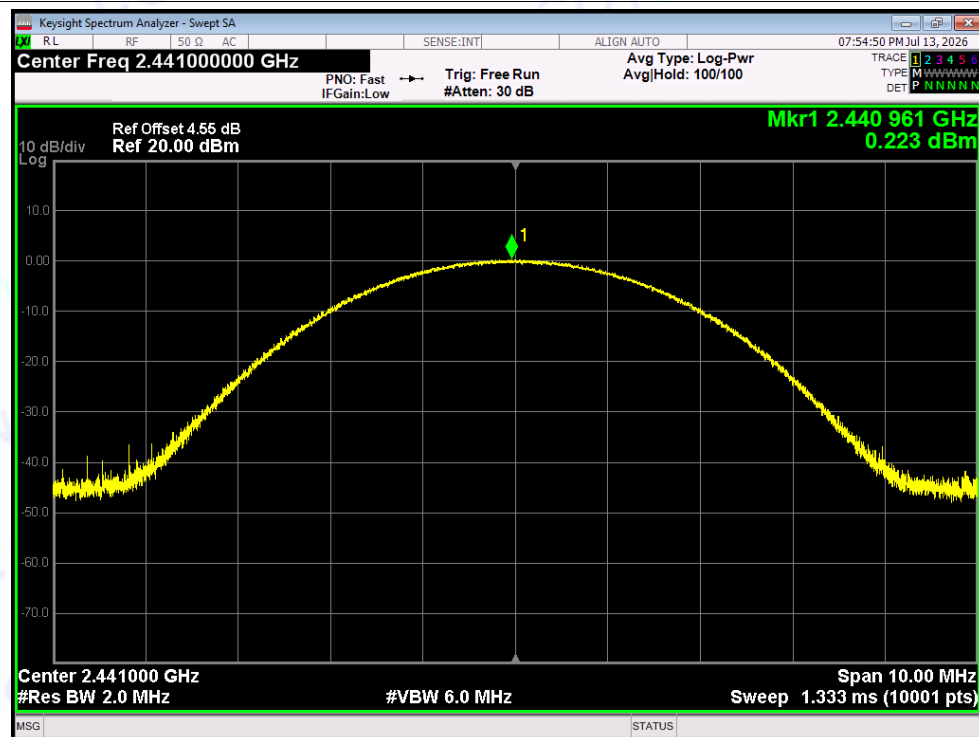
Power NVNT 2-DH5 2480MHz Ant1

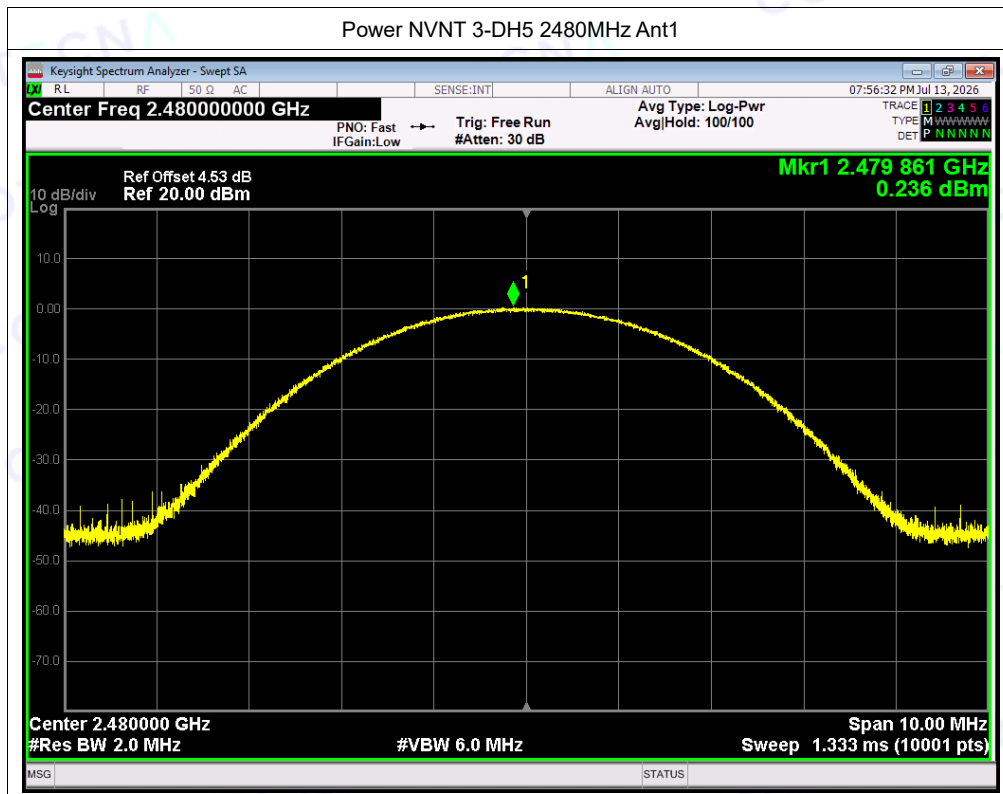


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1





-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.95	/	Pass
NVNT	1-DH5	2441	Ant1	0.99	/	Pass
NVNT	1-DH5	2480	Ant1	0.98	/	Pass
NVNT	2-DH5	2402	Ant1	1.33	/	Pass
NVNT	2-DH5	2441	Ant1	1.28	/	Pass
NVNT	2-DH5	2480	Ant1	1.29	/	Pass
NVNT	3-DH5	2402	Ant1	1.31	/	Pass
NVNT	3-DH5	2441	Ant1	1.3	/	Pass
NVNT	3-DH5	2480	Ant1	1.3	/	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



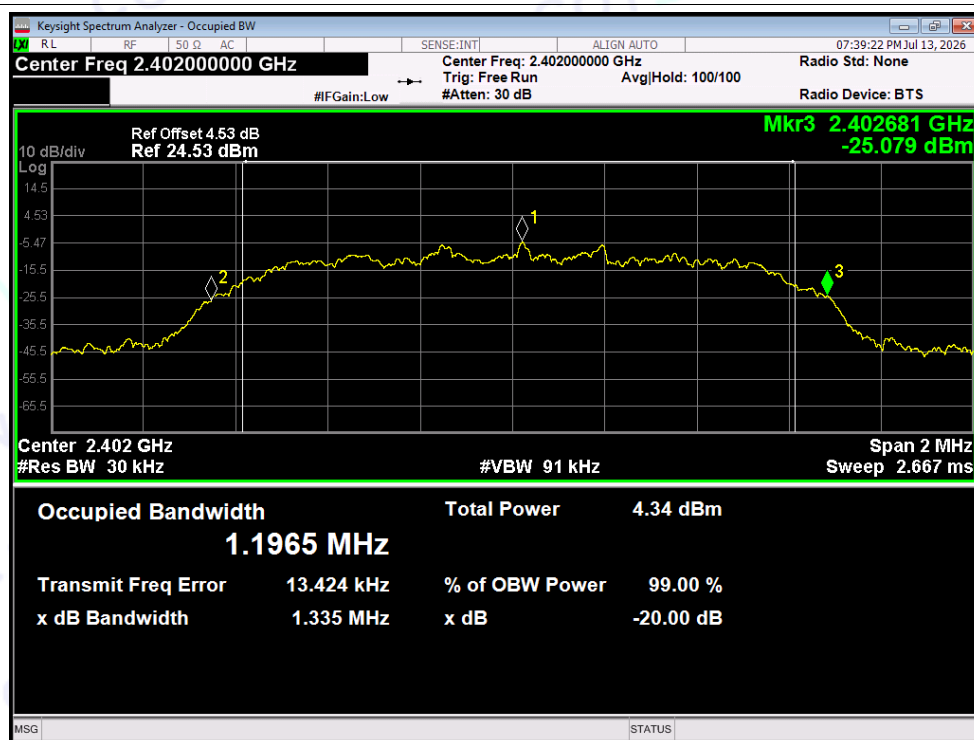
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



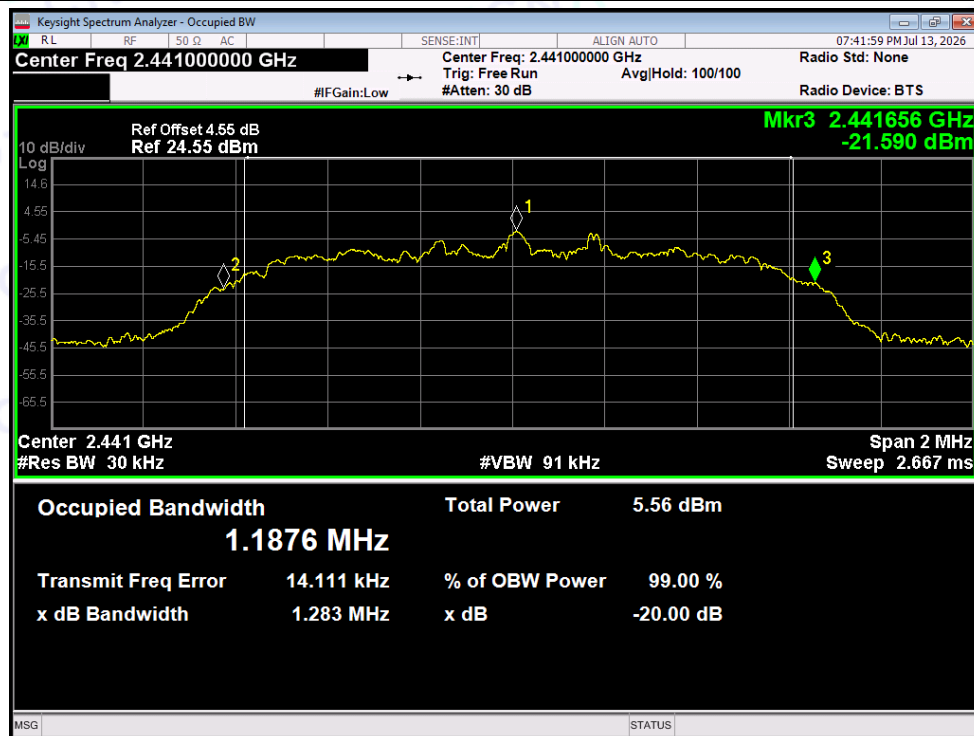
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



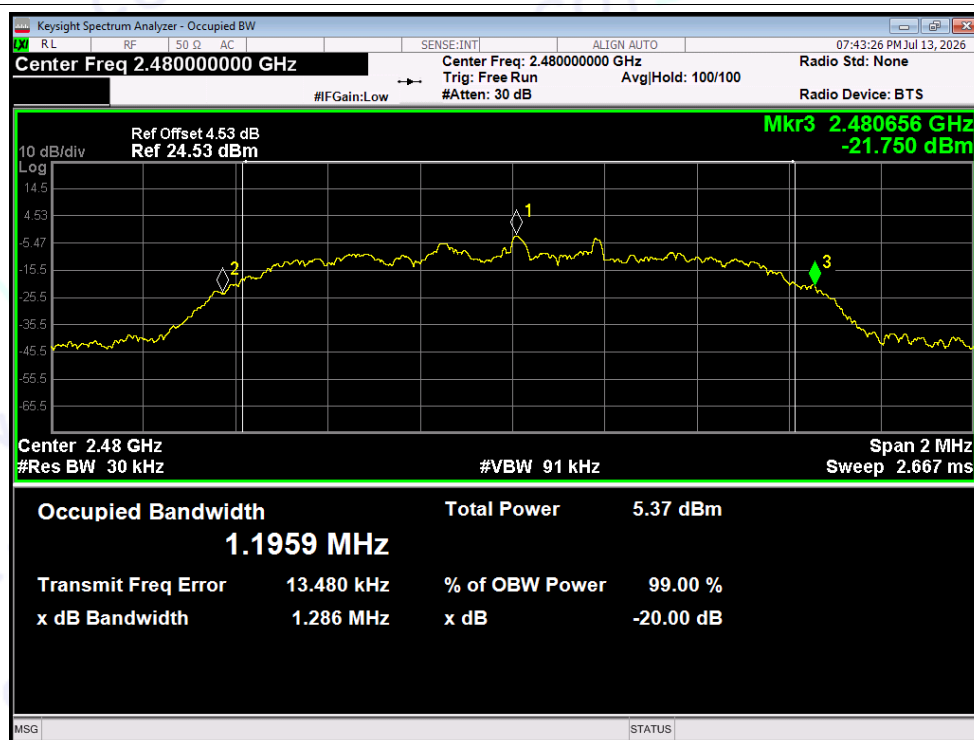
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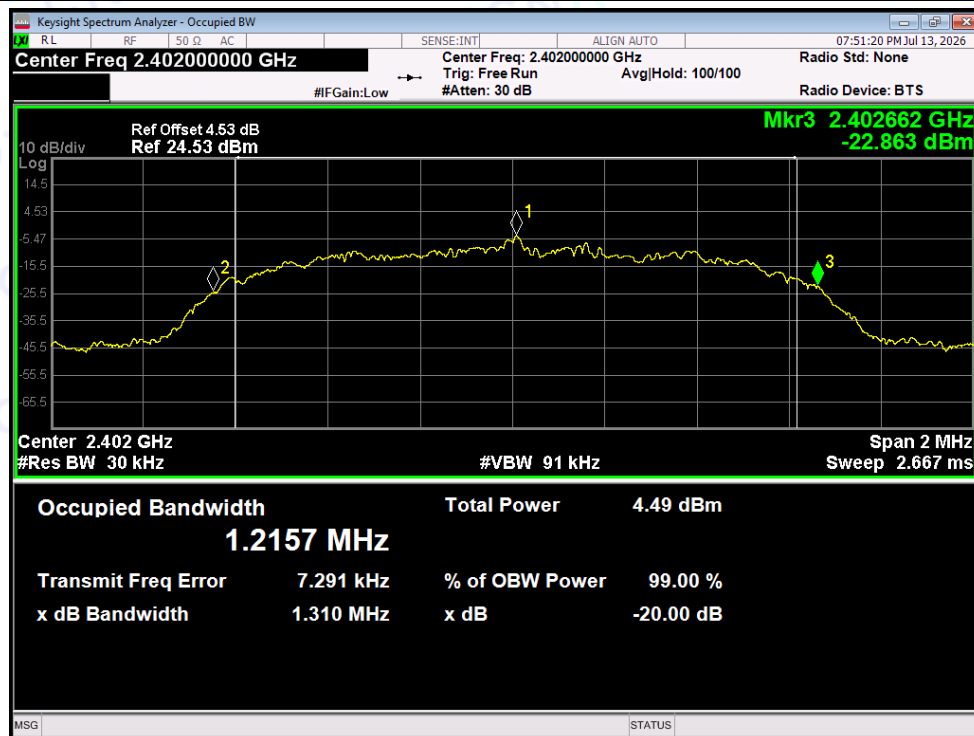
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



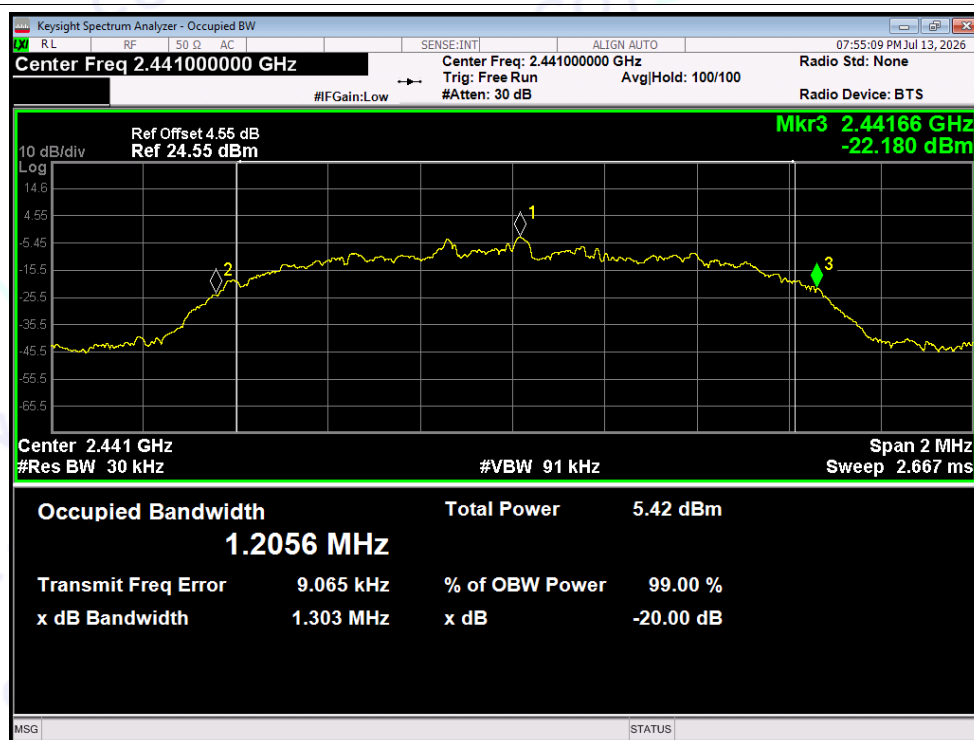
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

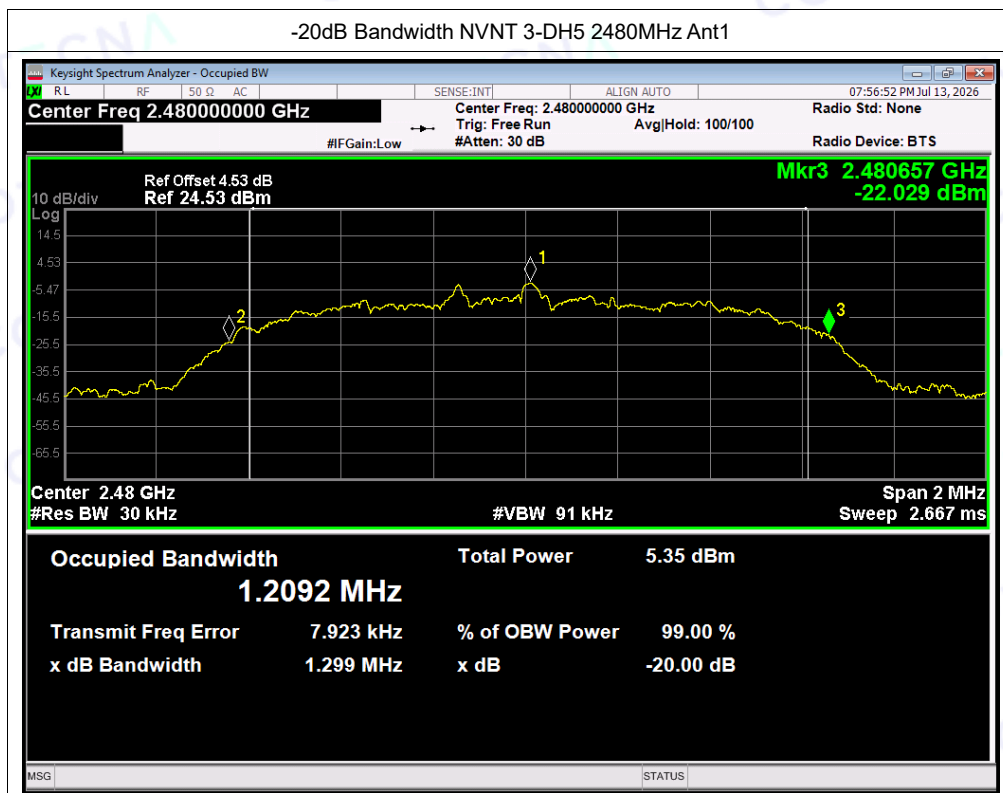


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



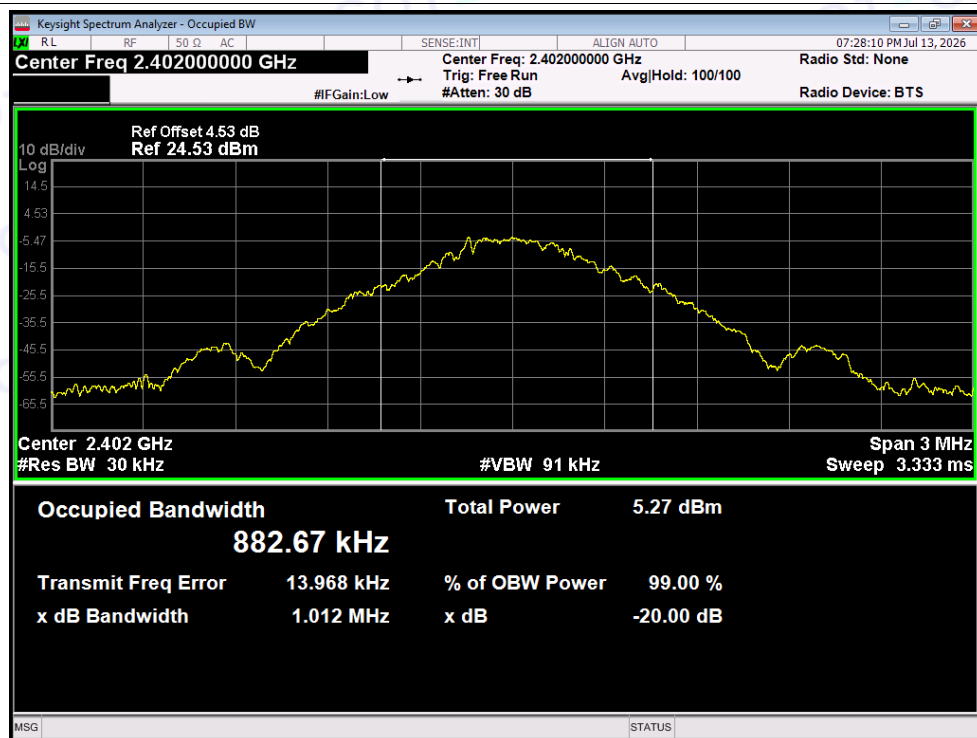


Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.883
NVNT	1-DH5	2441	Ant1	0.878
NVNT	1-DH5	2480	Ant1	0.896
NVNT	2-DH5	2402	Ant1	1.188
NVNT	2-DH5	2441	Ant1	1.191
NVNT	2-DH5	2480	Ant1	1.199
NVNT	3-DH5	2402	Ant1	1.207
NVNT	3-DH5	2441	Ant1	1.21
NVNT	3-DH5	2480	Ant1	1.208

Test Graphs

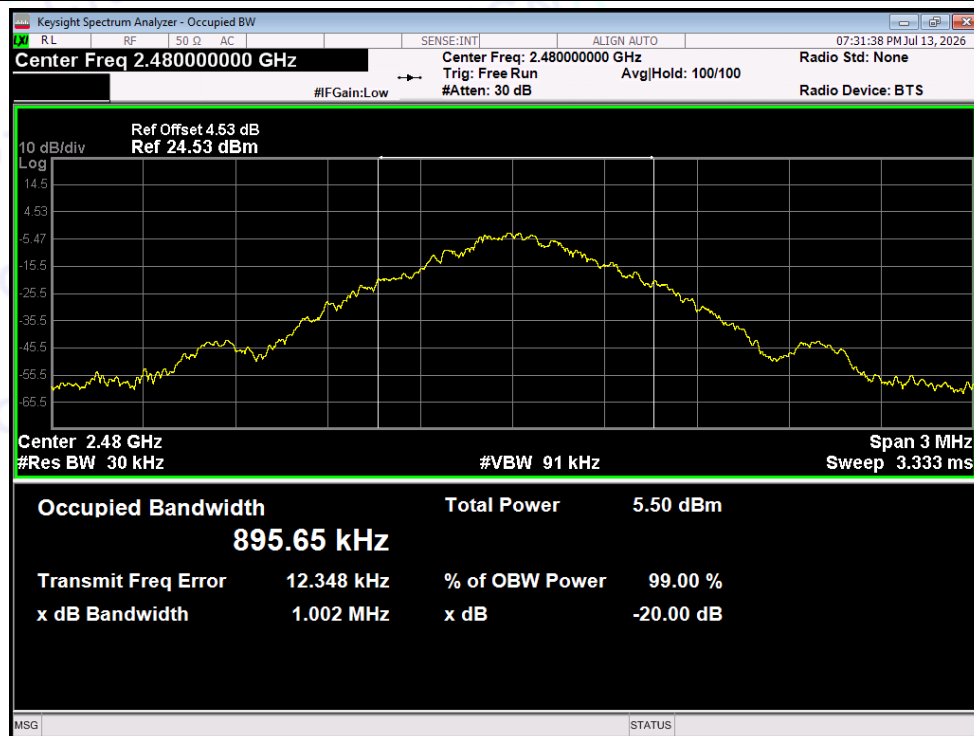
OBW NVNT 1-DH5 2402MHz Ant1



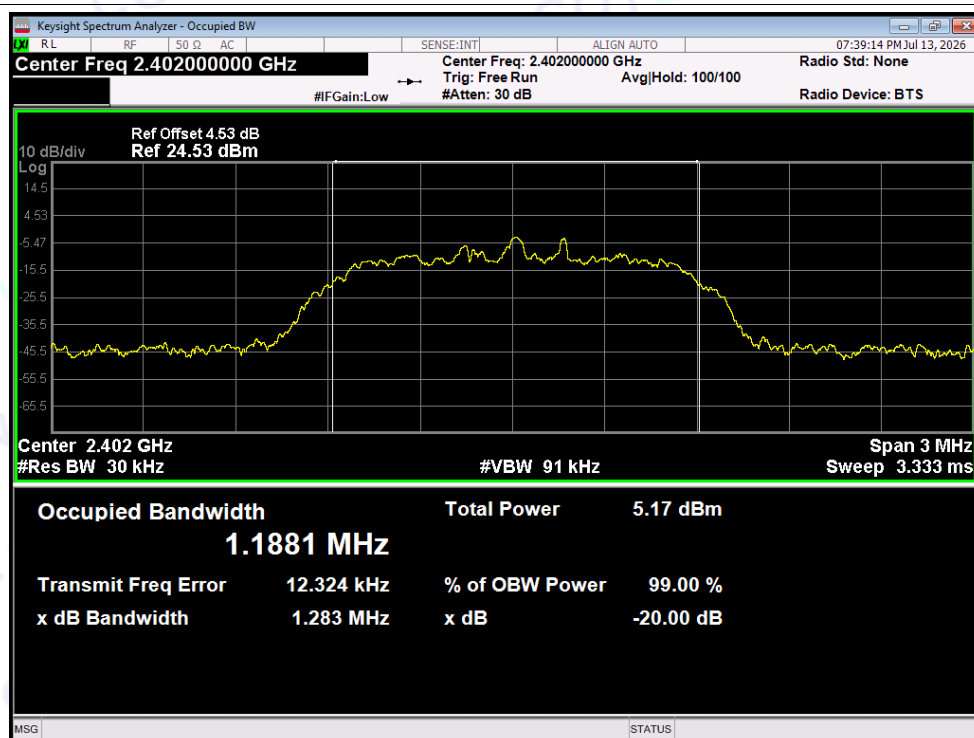
OBW NVNT 1-DH5 2441MHz Ant1



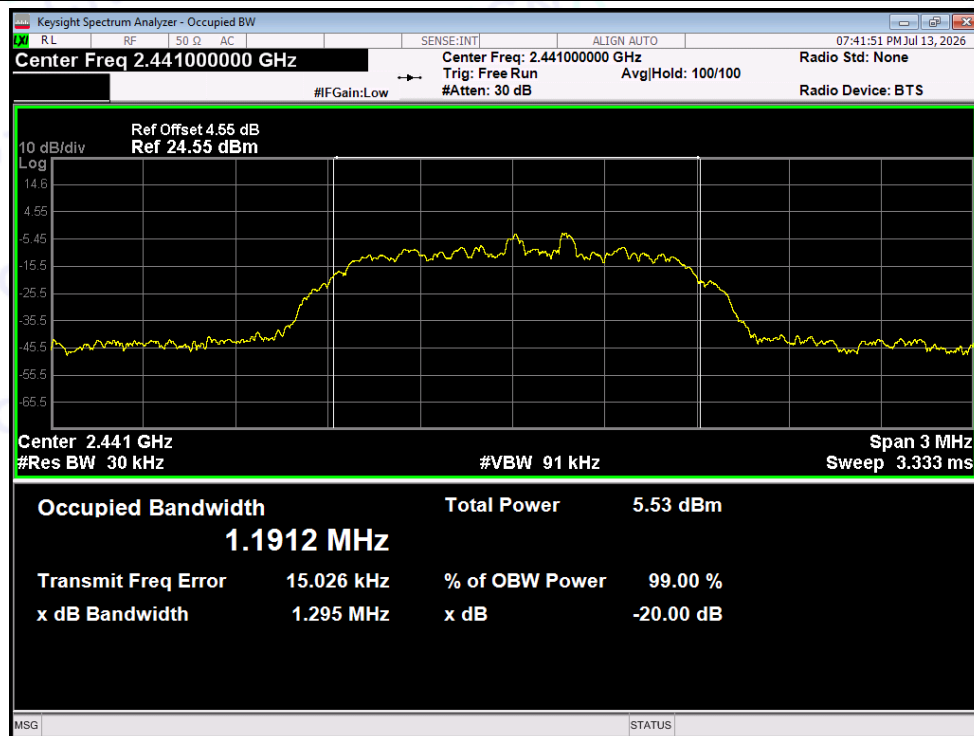
OBW NVNT 1-DH5 2480MHz Ant1



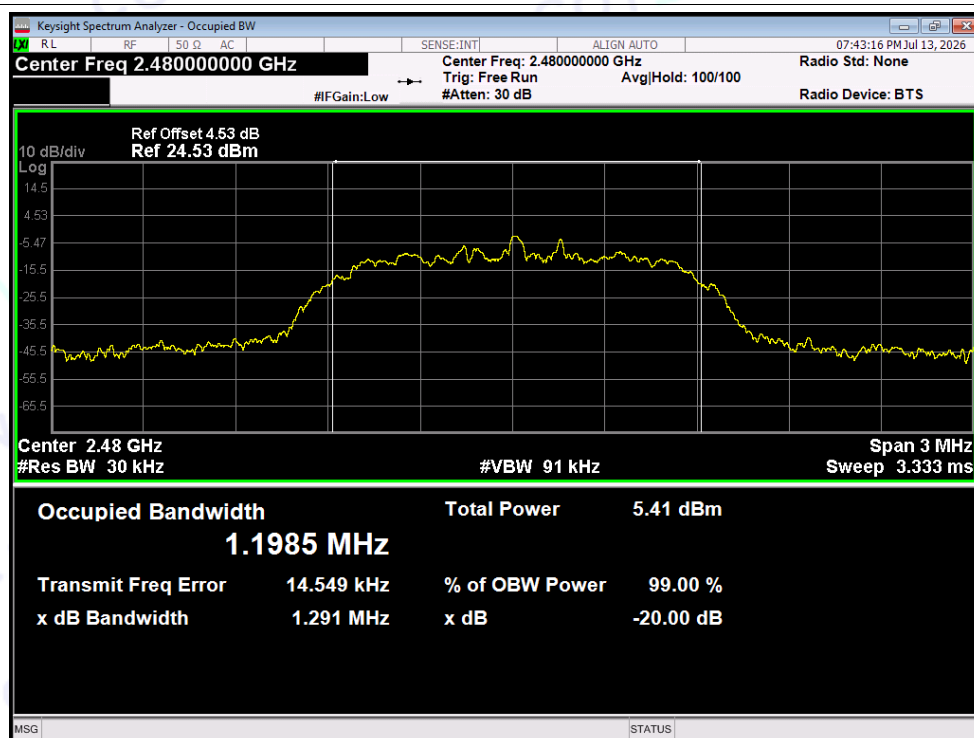
OBW NVNT 2-DH5 2402MHz Ant1



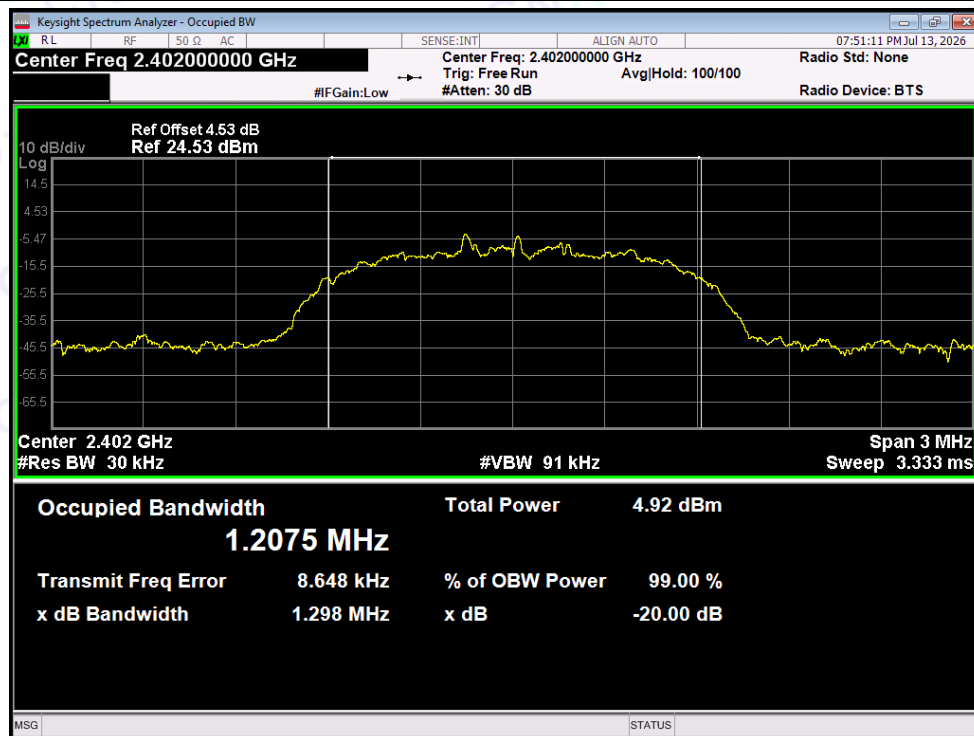
OBW NVNT 2-DH5 2441MHz Ant1



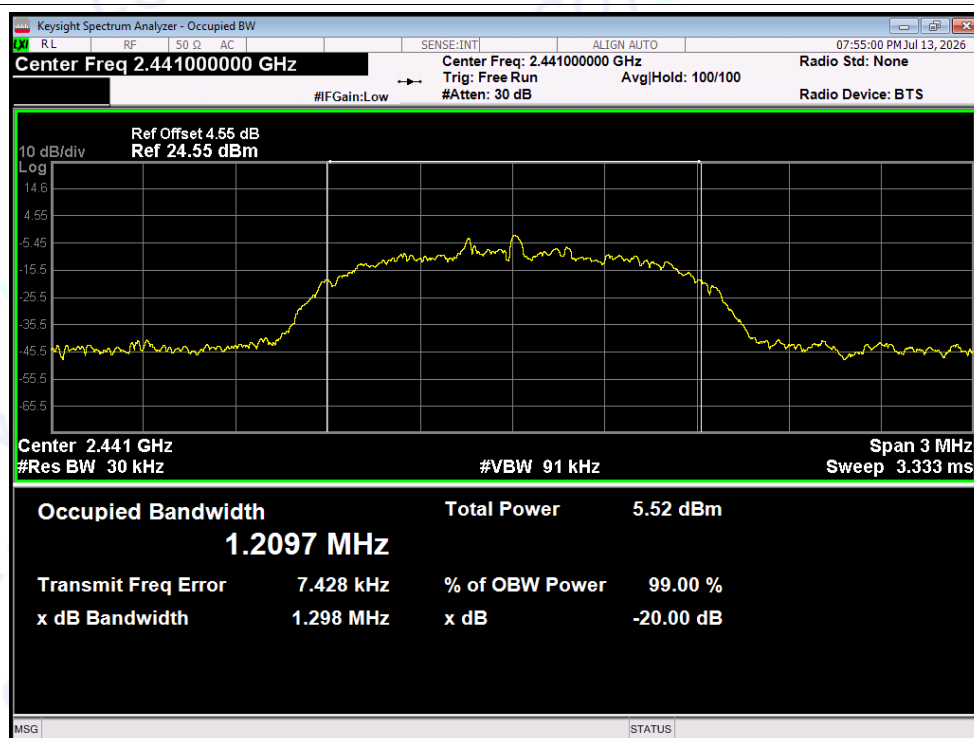
OBW NVNT 2-DH5 2480MHz Ant1

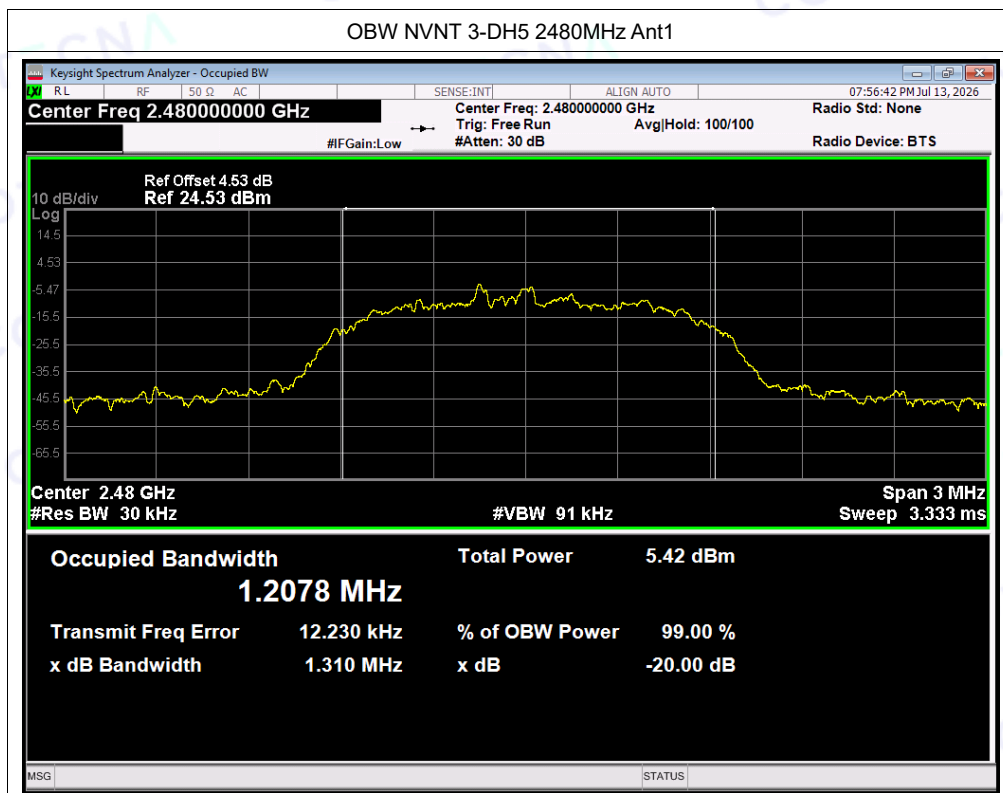


OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



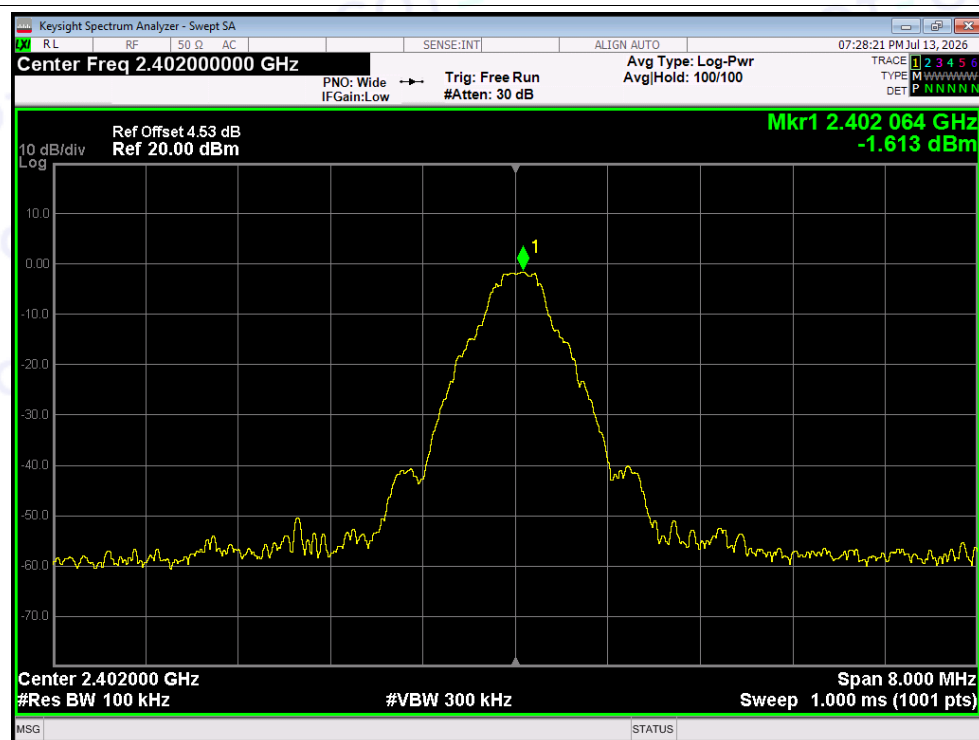


Band Edge

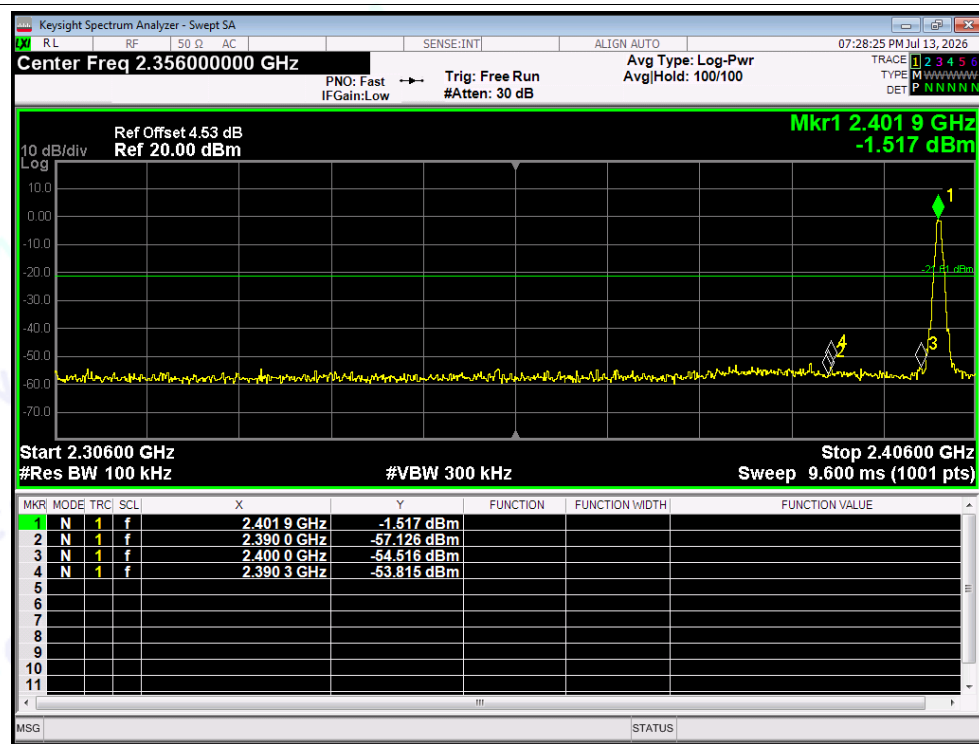
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-52.2	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-51.95	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-50.07	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-50.99	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-50.63	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-50.46	-20	Pass

Test Graphs

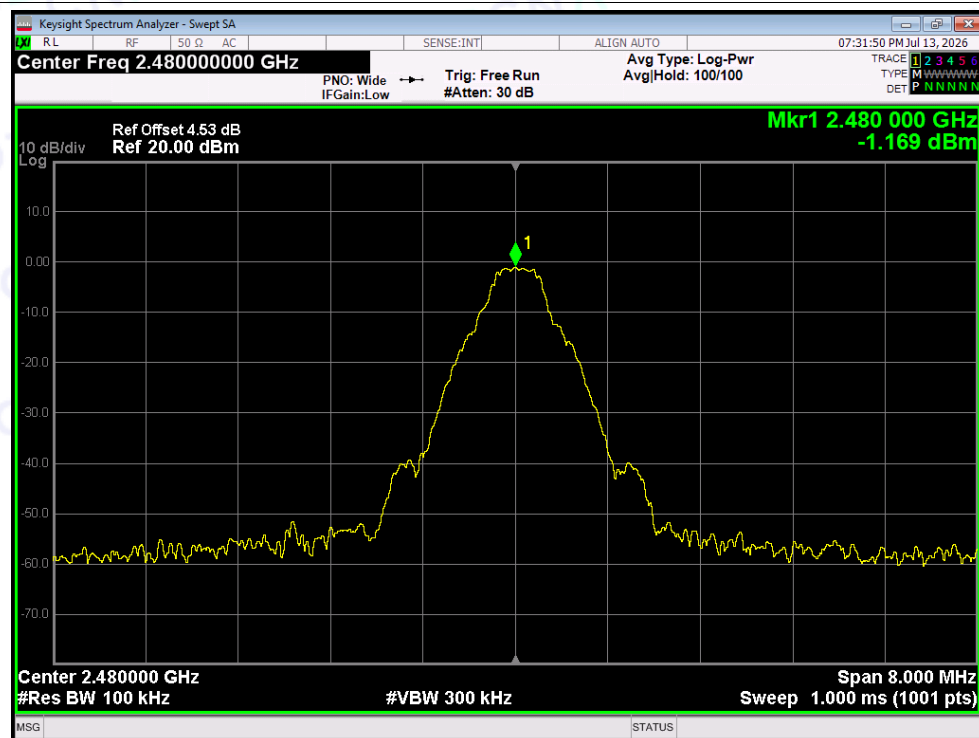
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



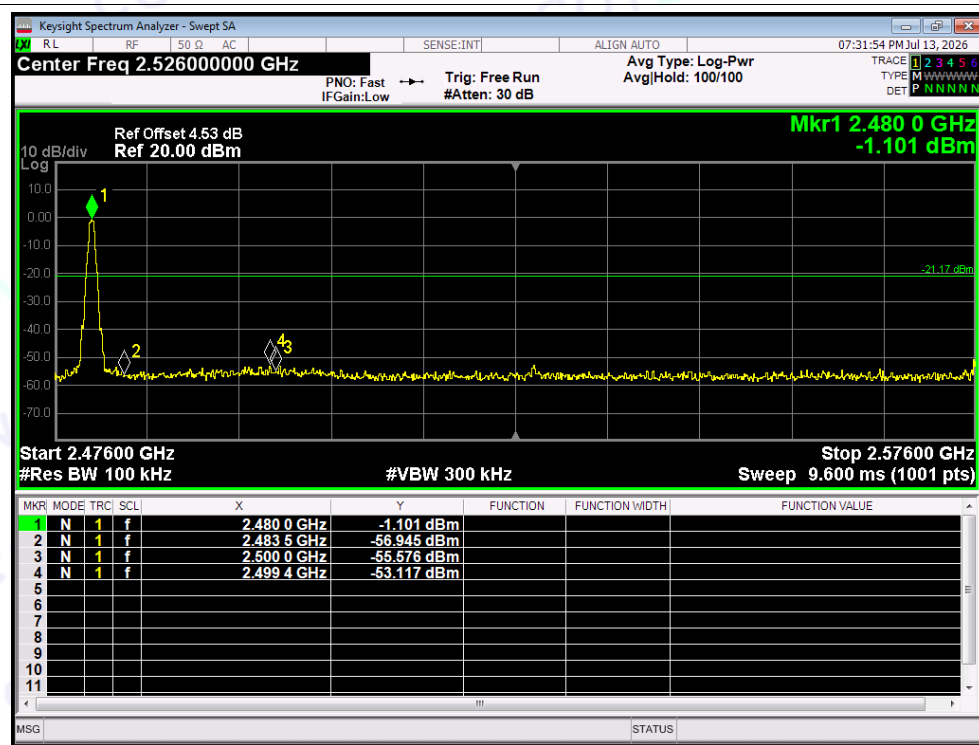
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



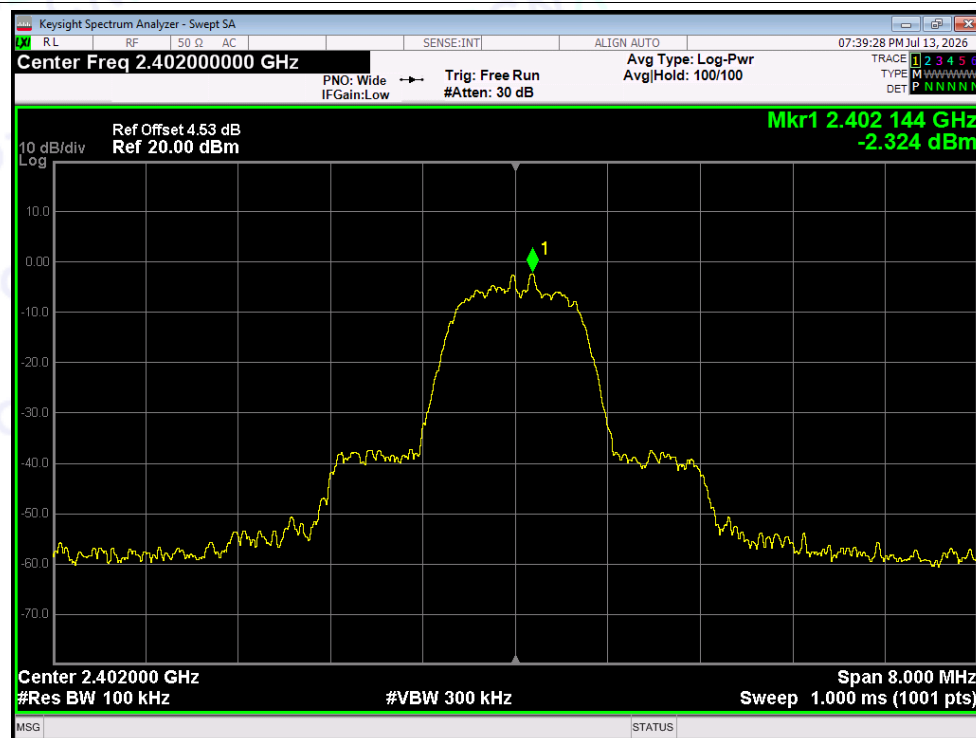
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



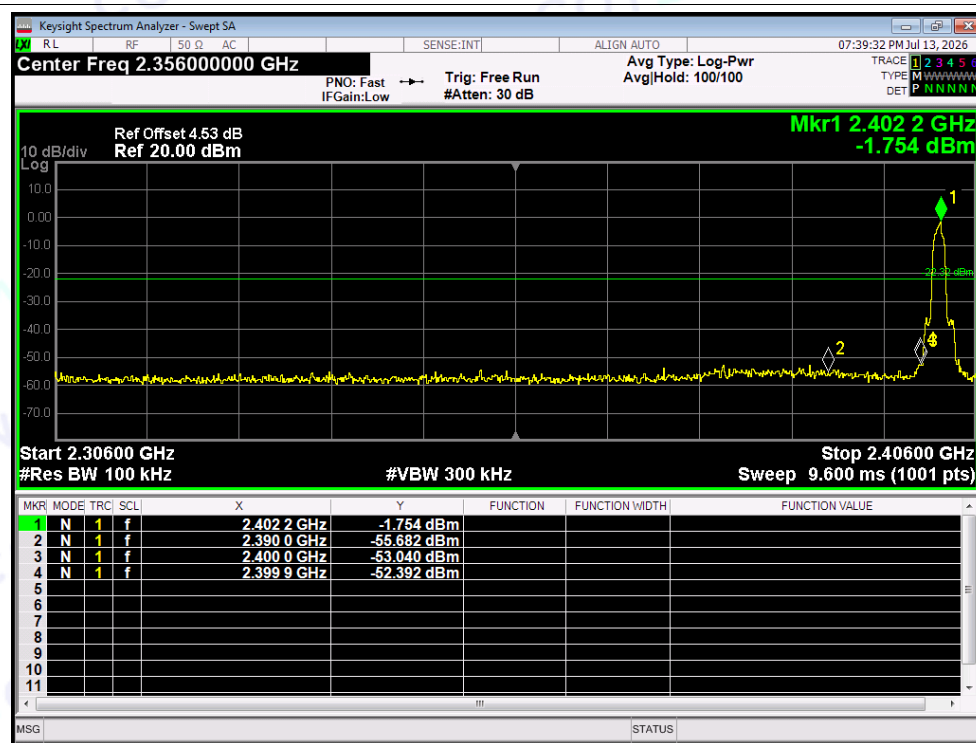
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



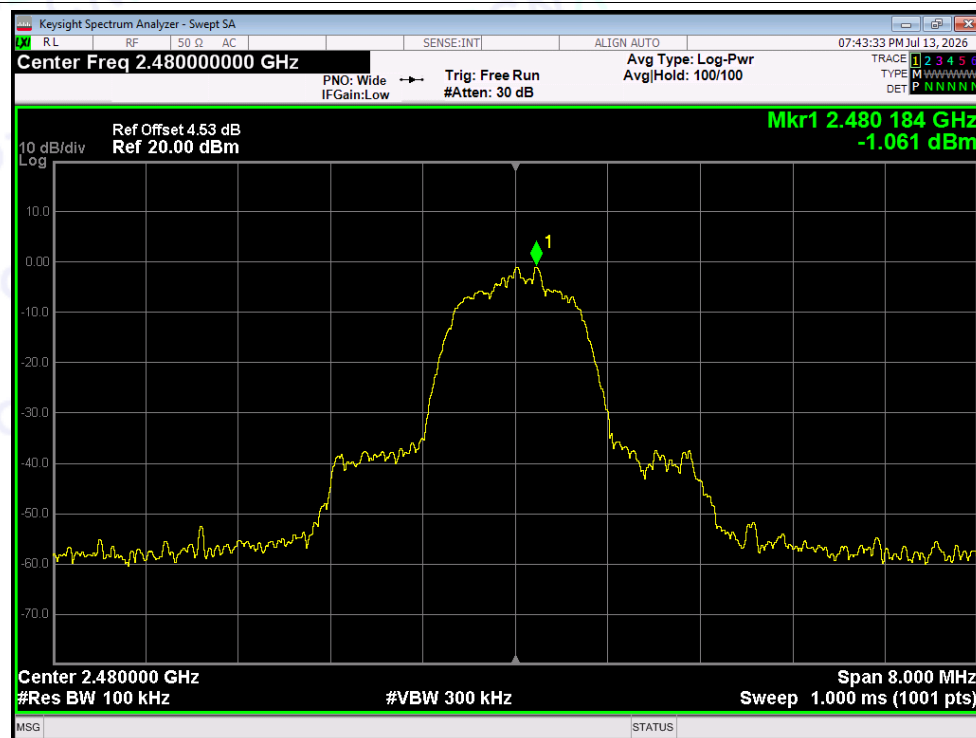
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



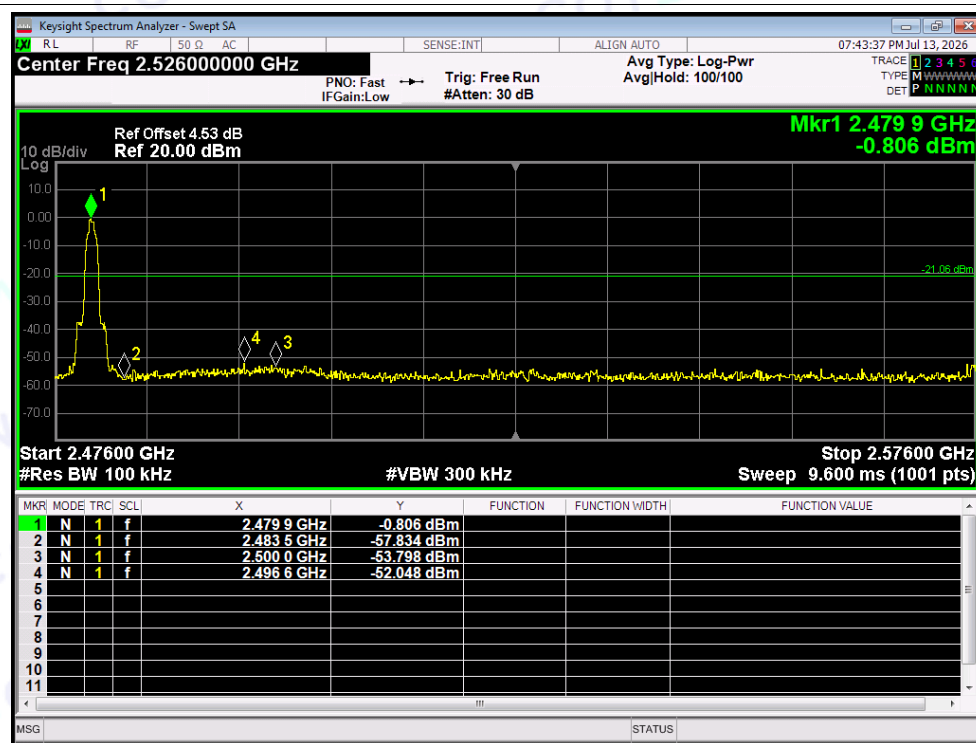
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



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



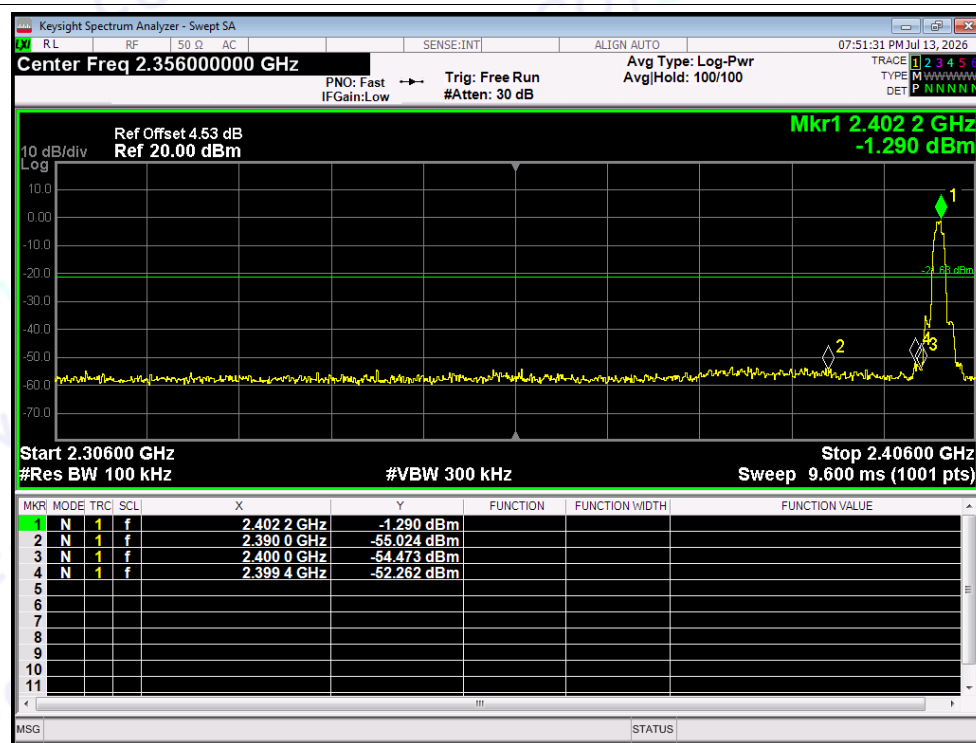
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



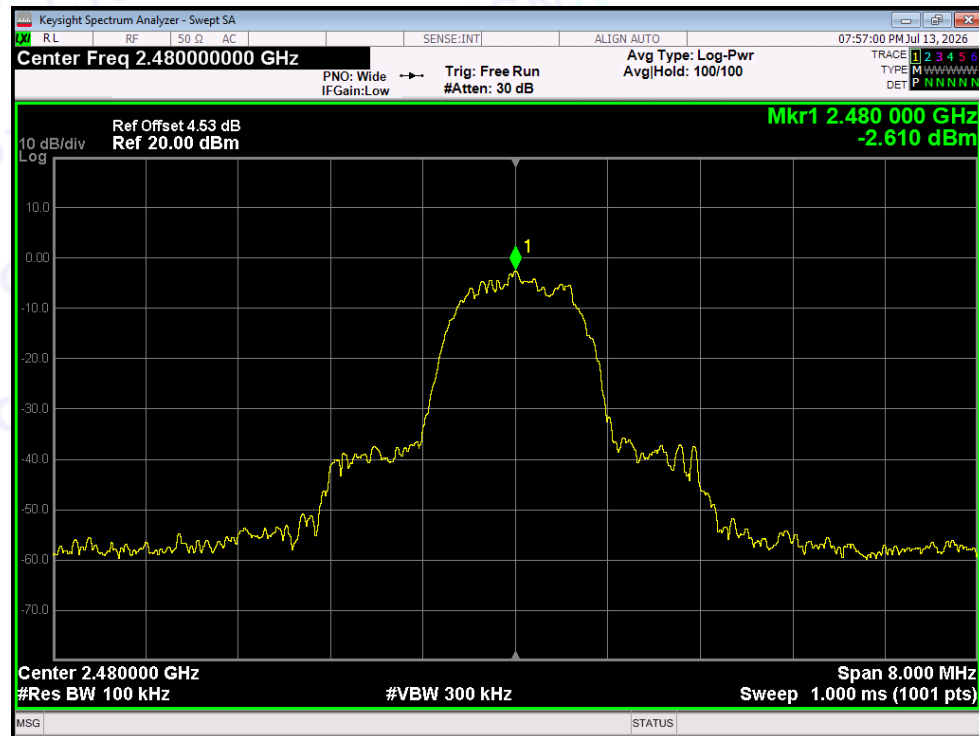
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



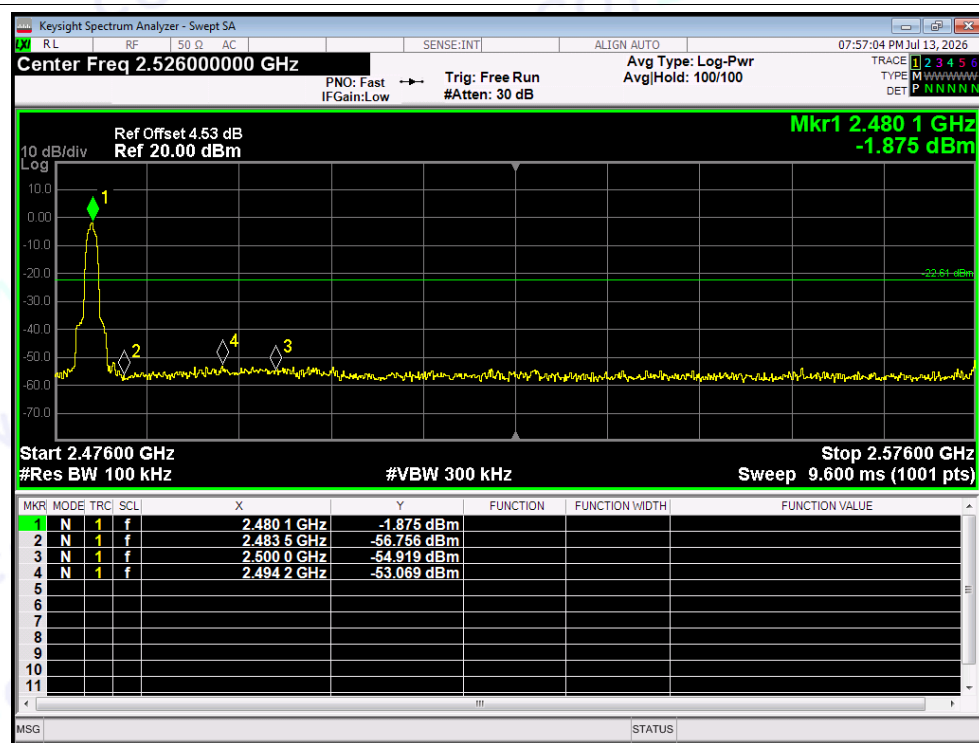
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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

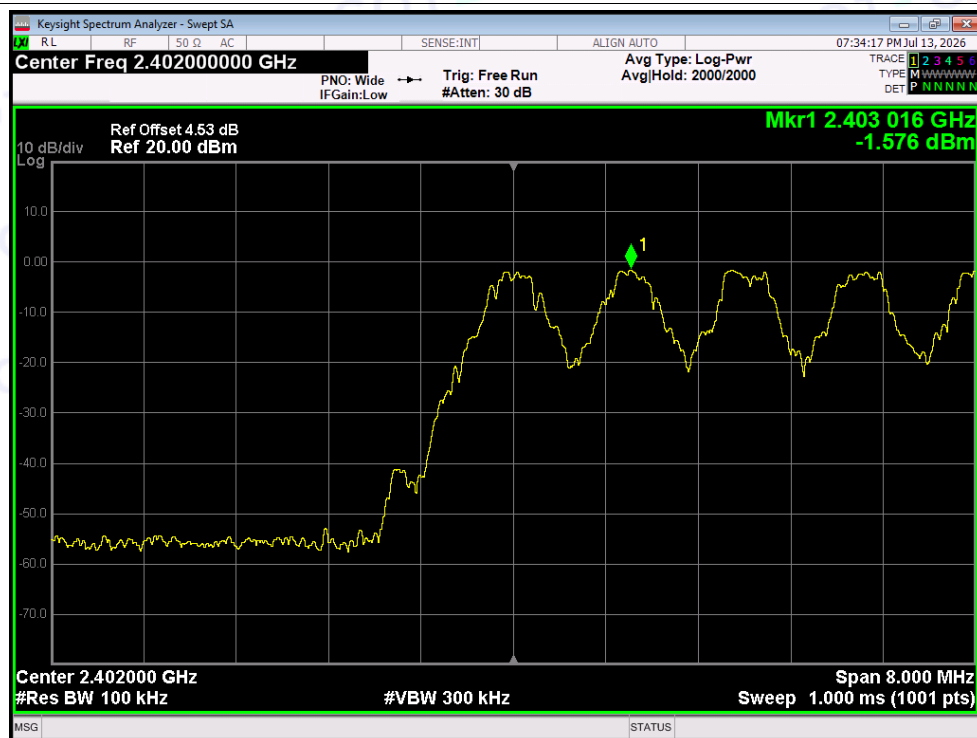


Band Edge(Hopping)

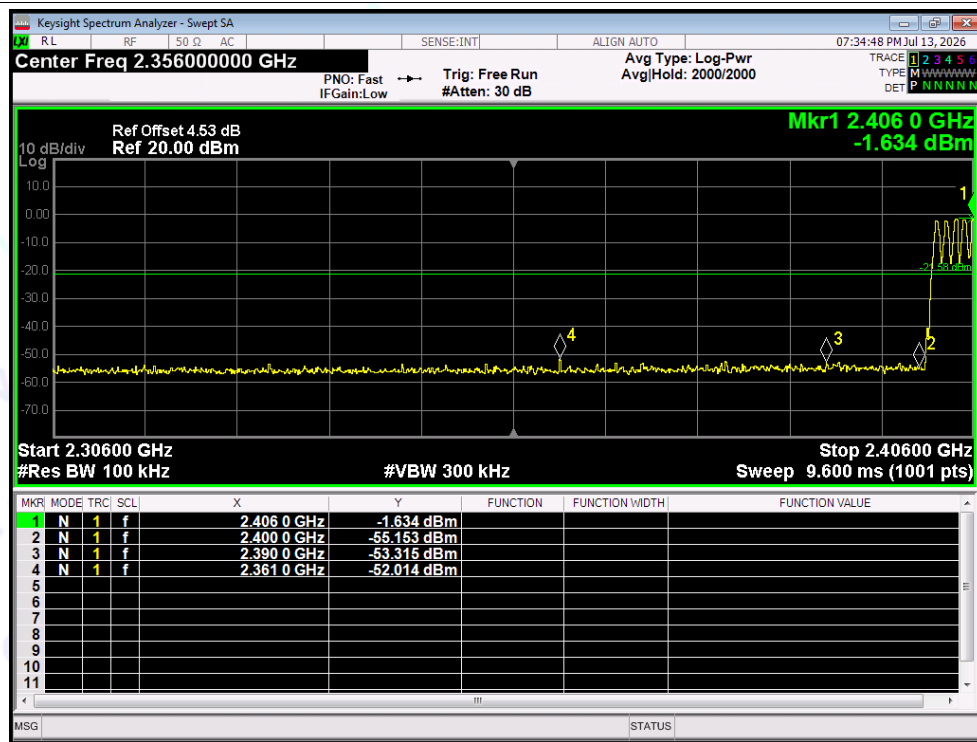
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-50.43	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-50.7	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-51.37	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-50.57	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-50.66	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-49.72	-20	Pass

Test Graphs

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



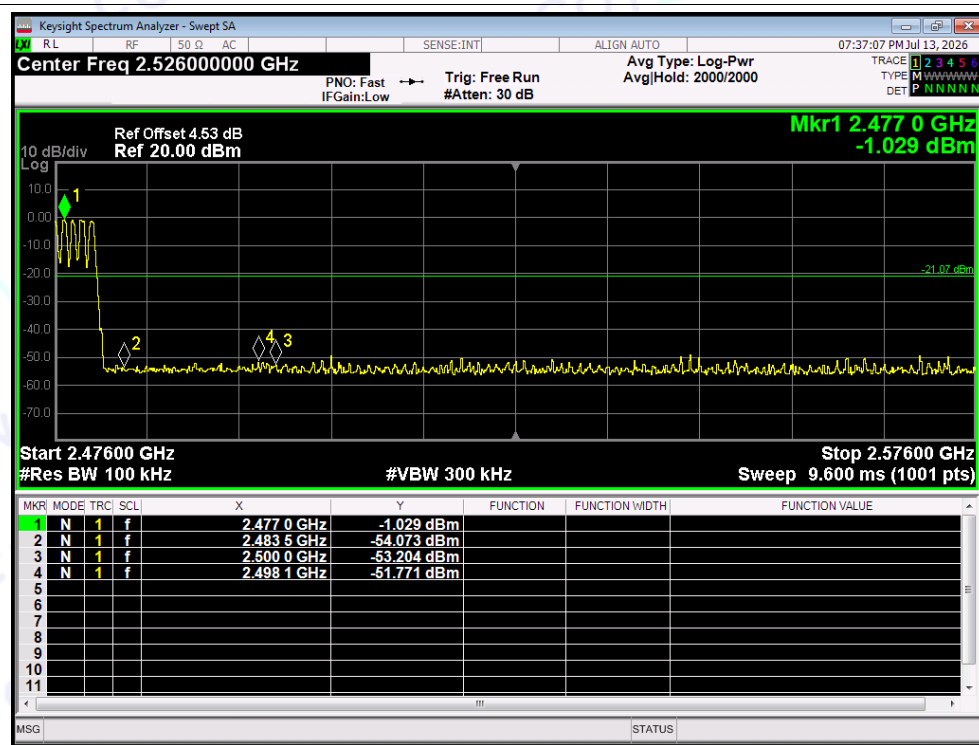
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



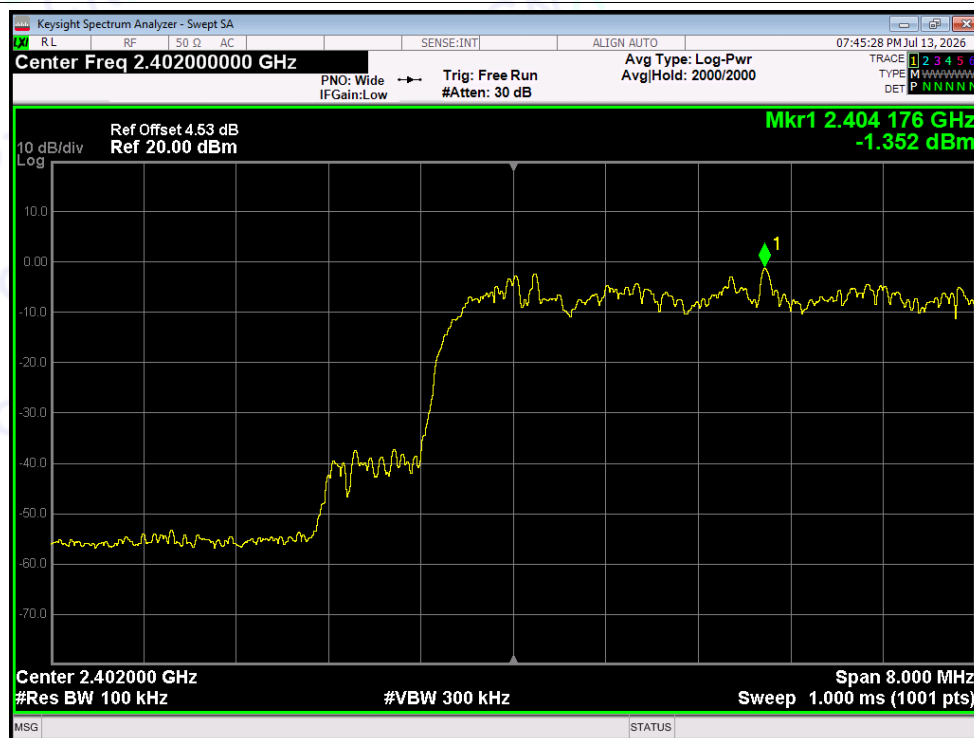
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



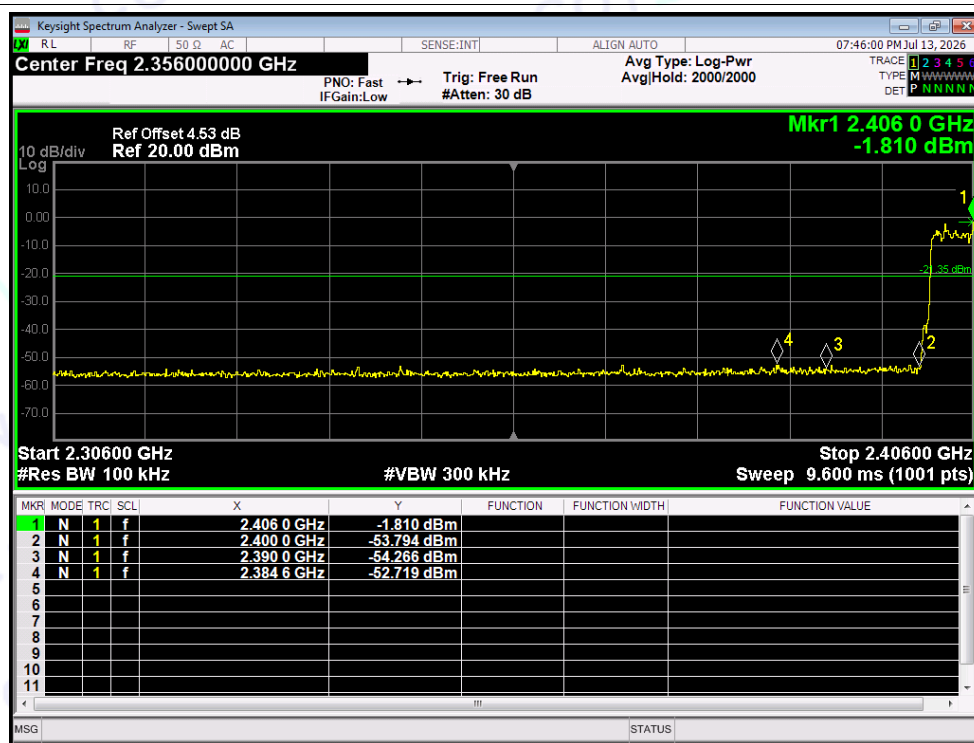
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



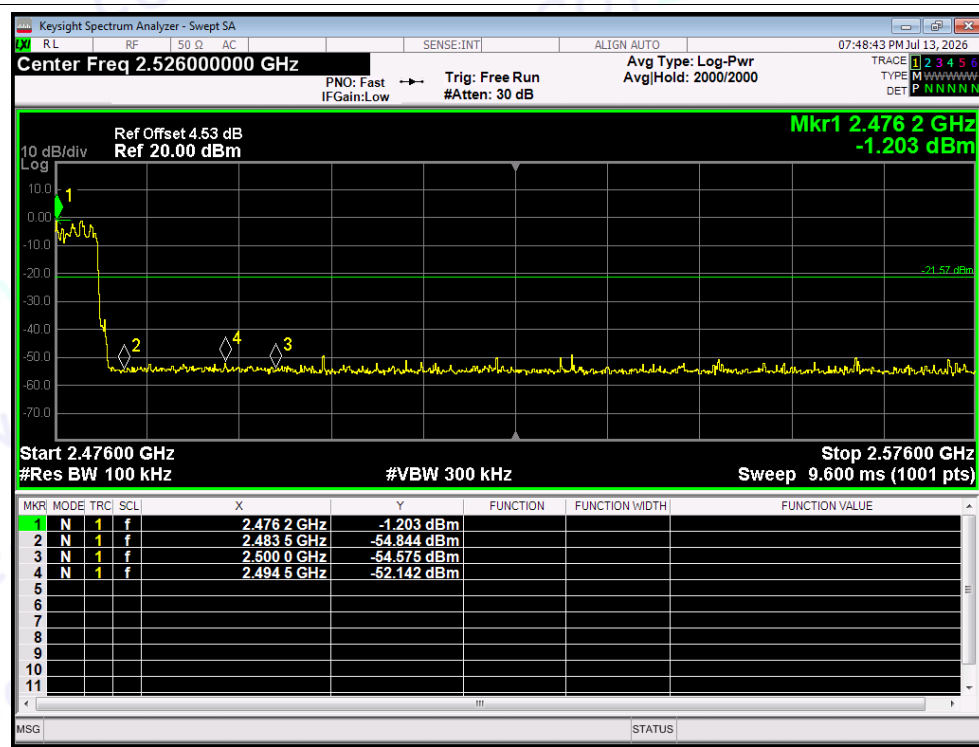
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



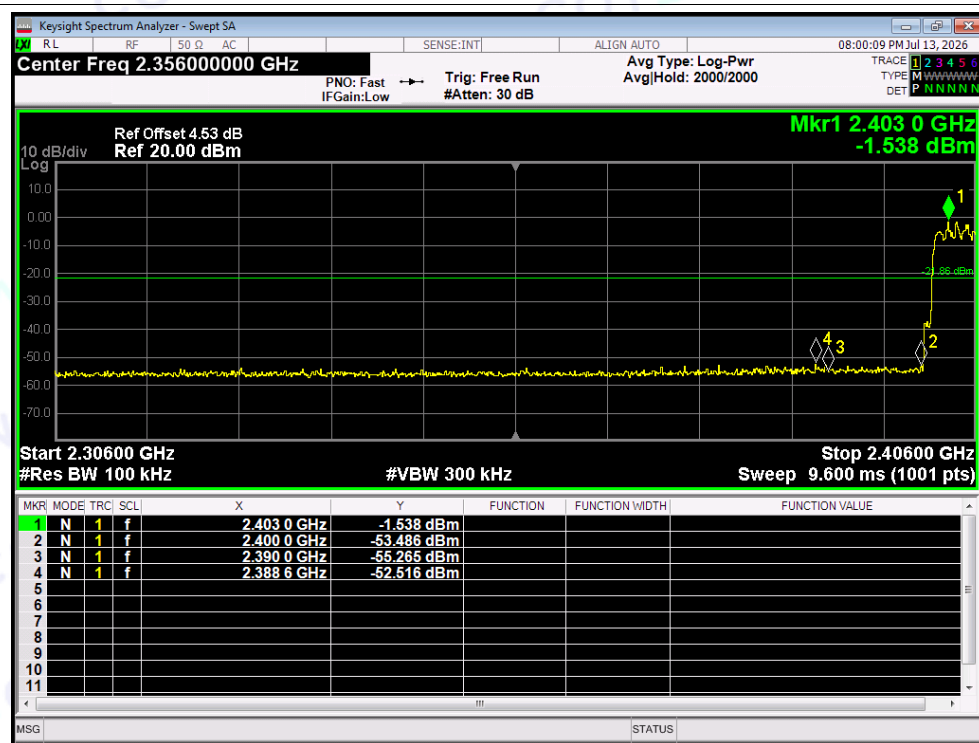
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



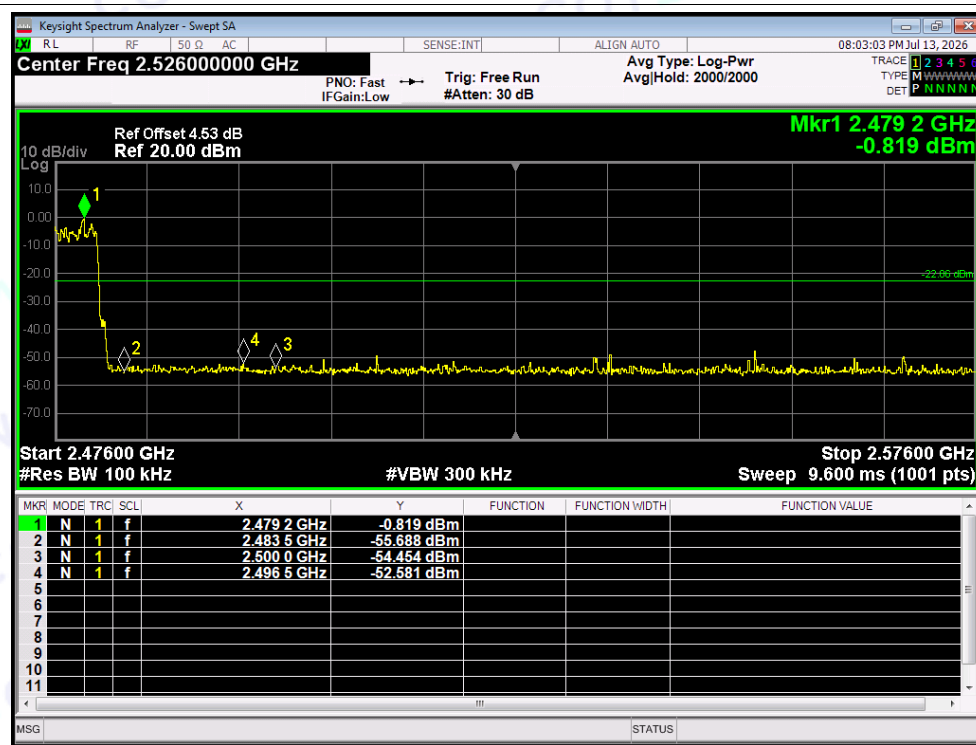
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

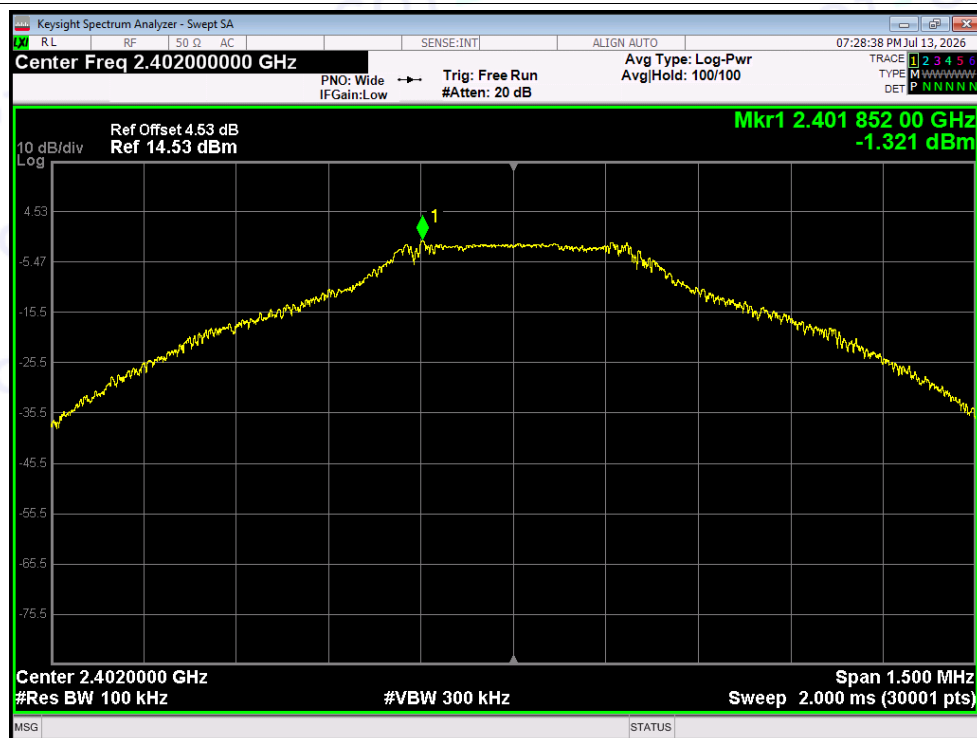


Conducted RF Spurious Emission

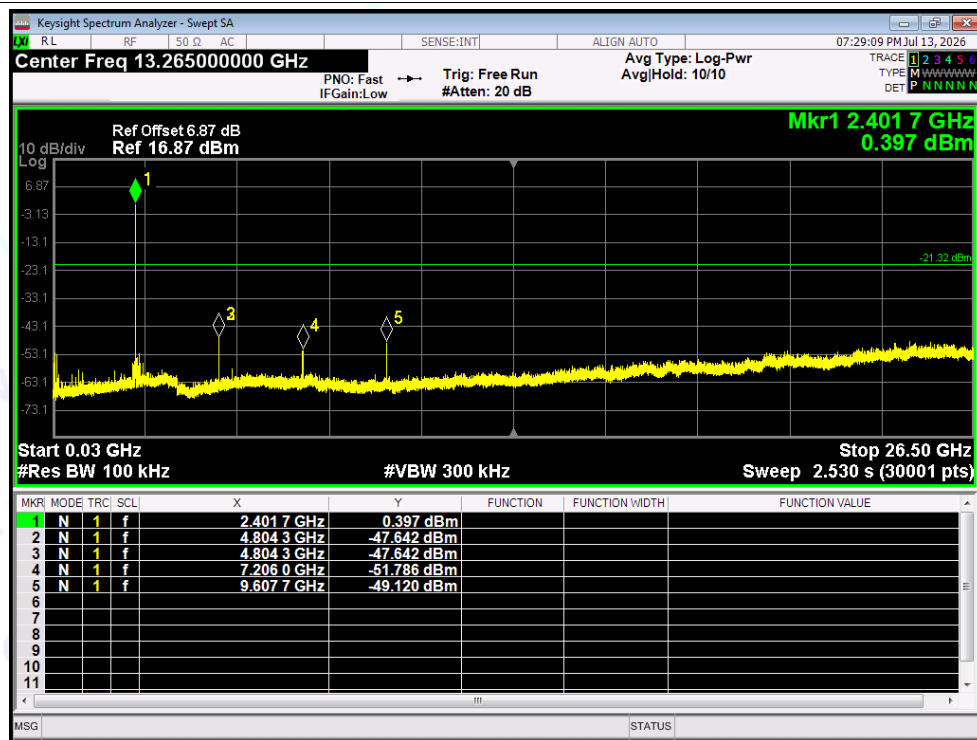
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-46.32	-20	Pass
NVNT	1-DH5	2441	Ant1	-39.44	-20	Pass
NVNT	1-DH5	2480	Ant1	-38.84	-20	Pass
NVNT	2-DH5	2402	Ant1	-41.42	-20	Pass
NVNT	2-DH5	2441	Ant1	-34.68	-20	Pass
NVNT	2-DH5	2480	Ant1	-44.99	-20	Pass
NVNT	3-DH5	2402	Ant1	-47.02	-20	Pass
NVNT	3-DH5	2441	Ant1	-43.8	-20	Pass
NVNT	3-DH5	2480	Ant1	-43.26	-20	Pass

Test Graphs

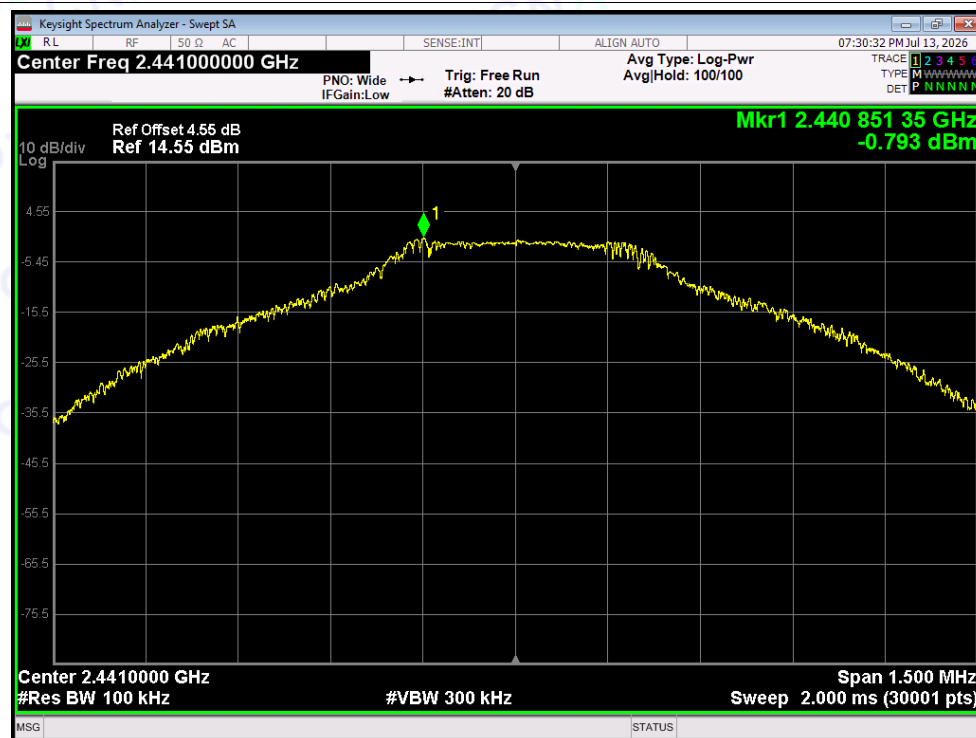
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



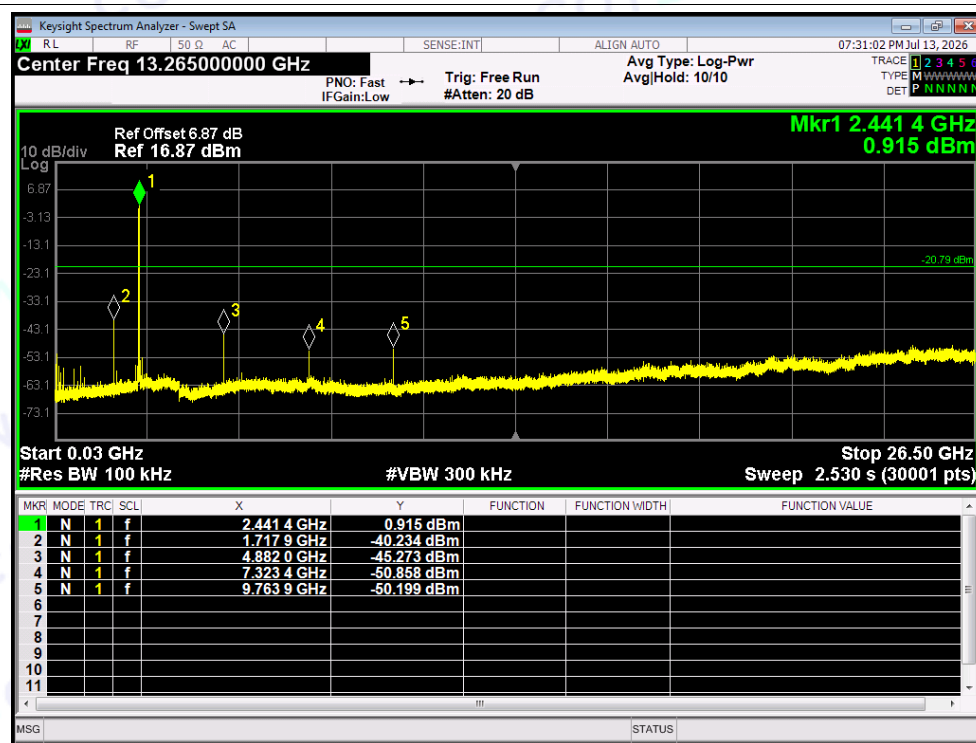
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



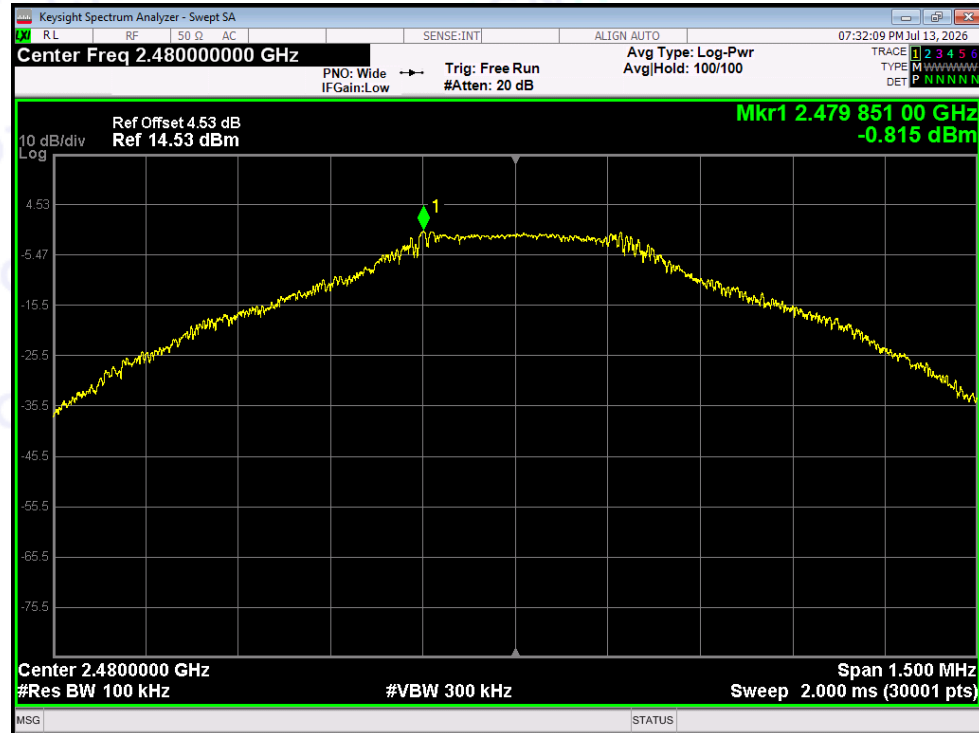
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



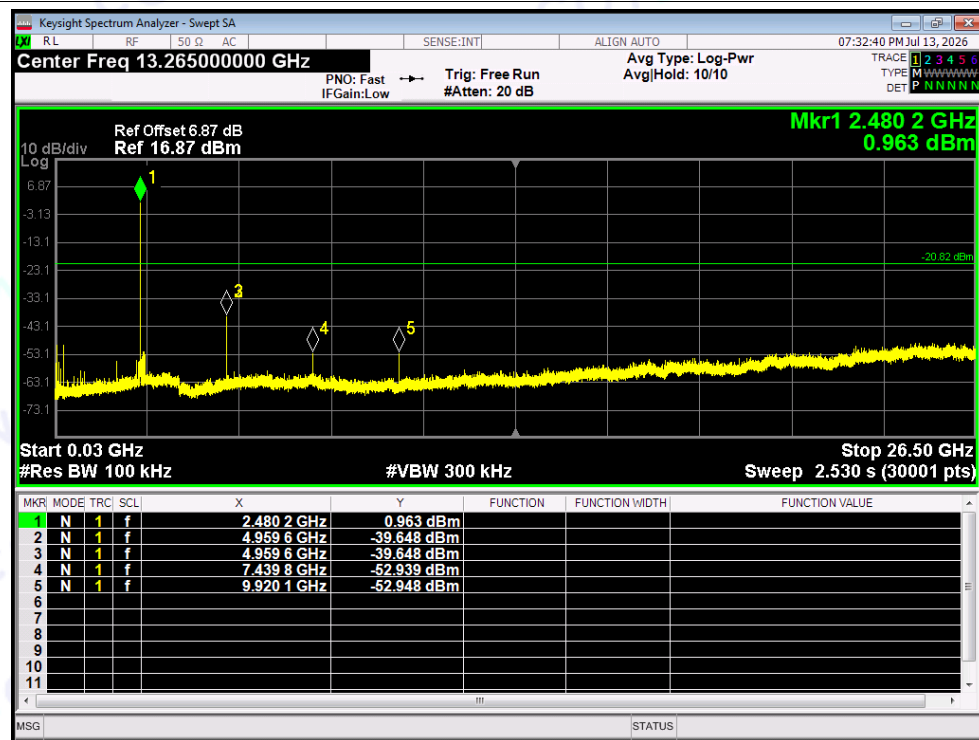
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



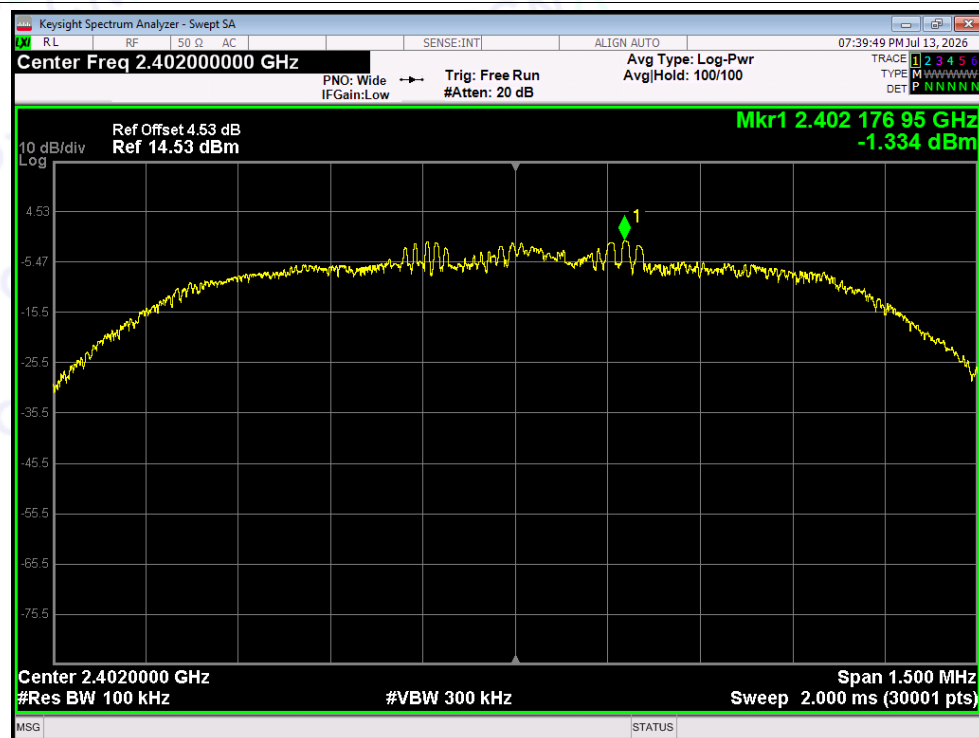
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



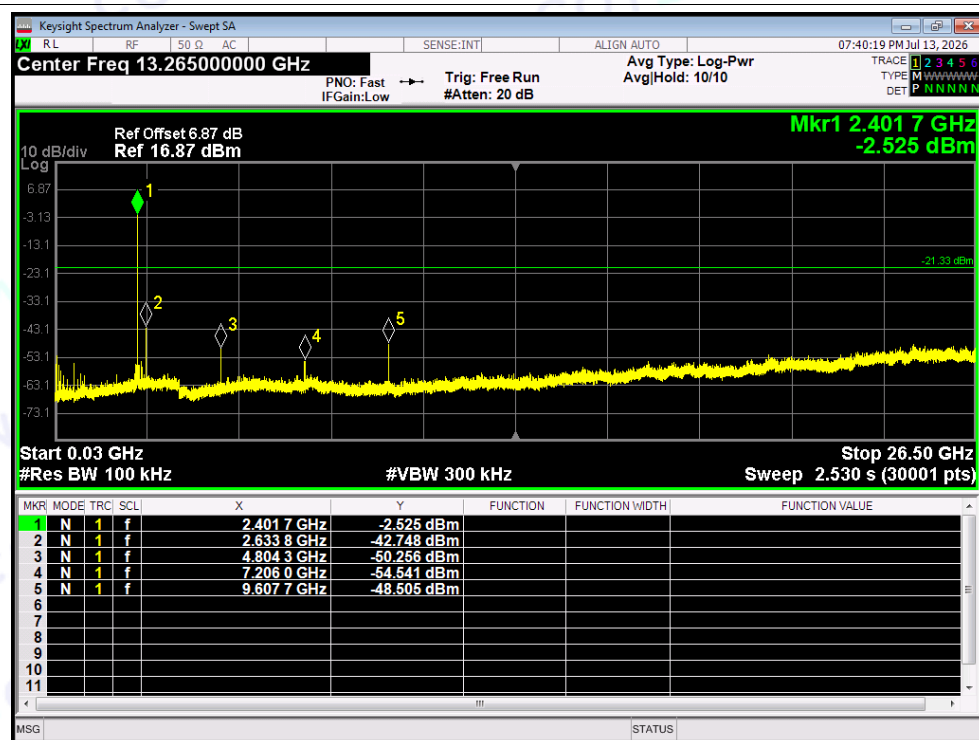
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



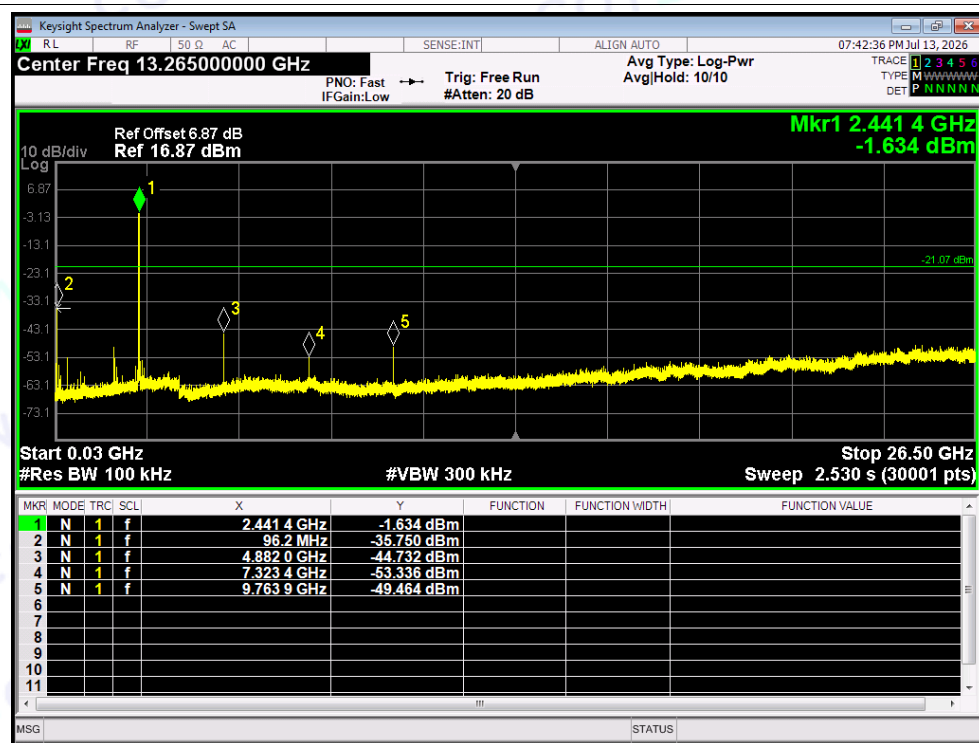
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



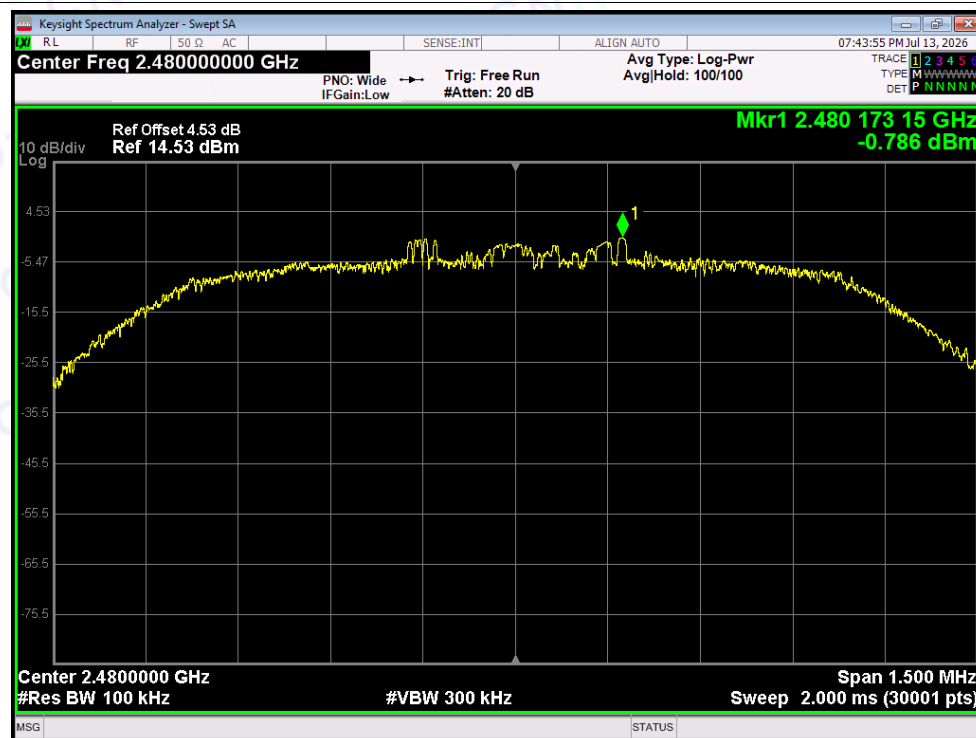
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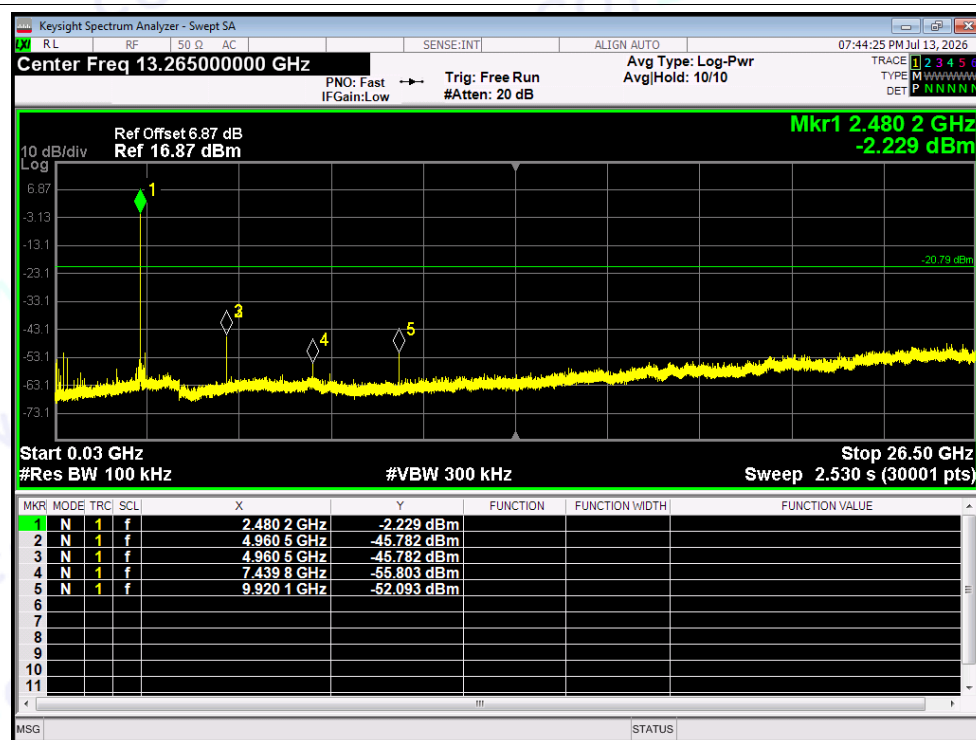
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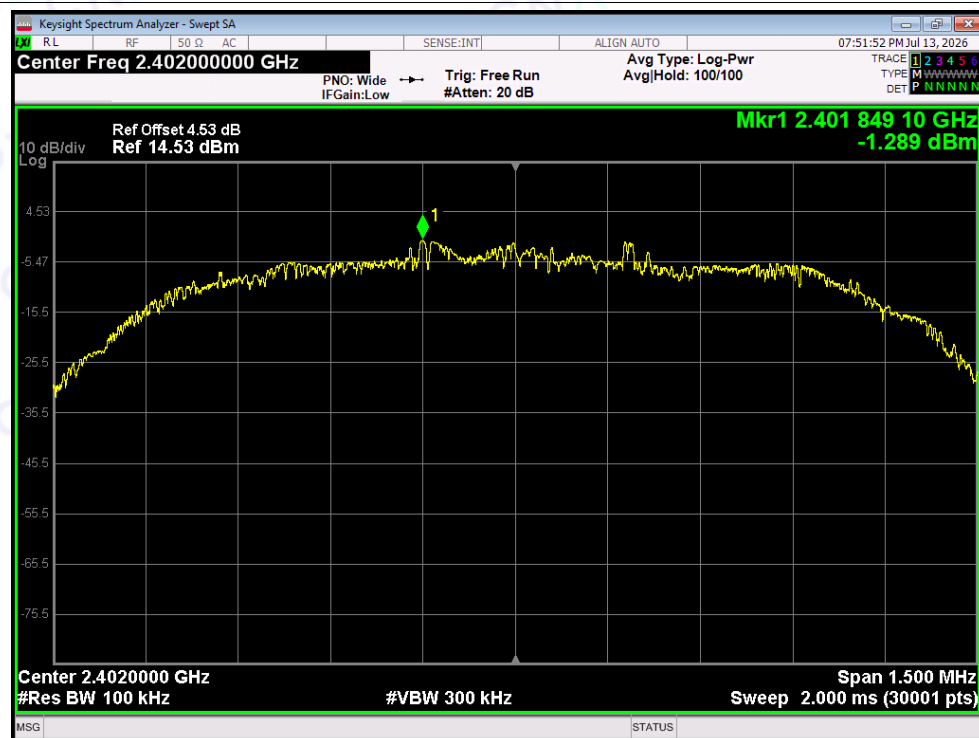
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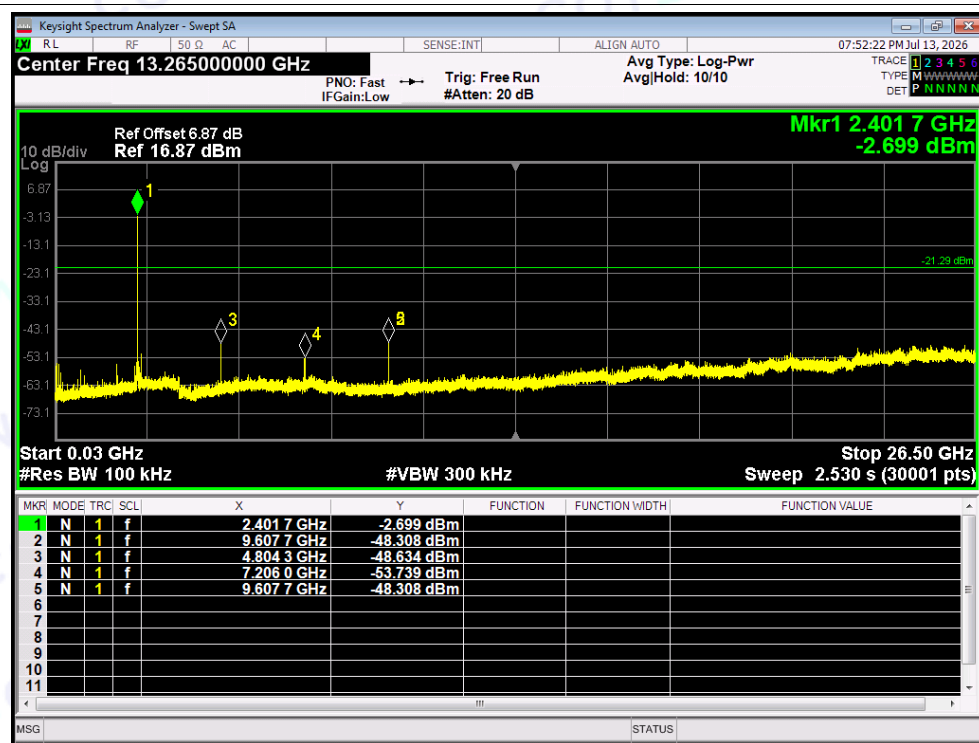
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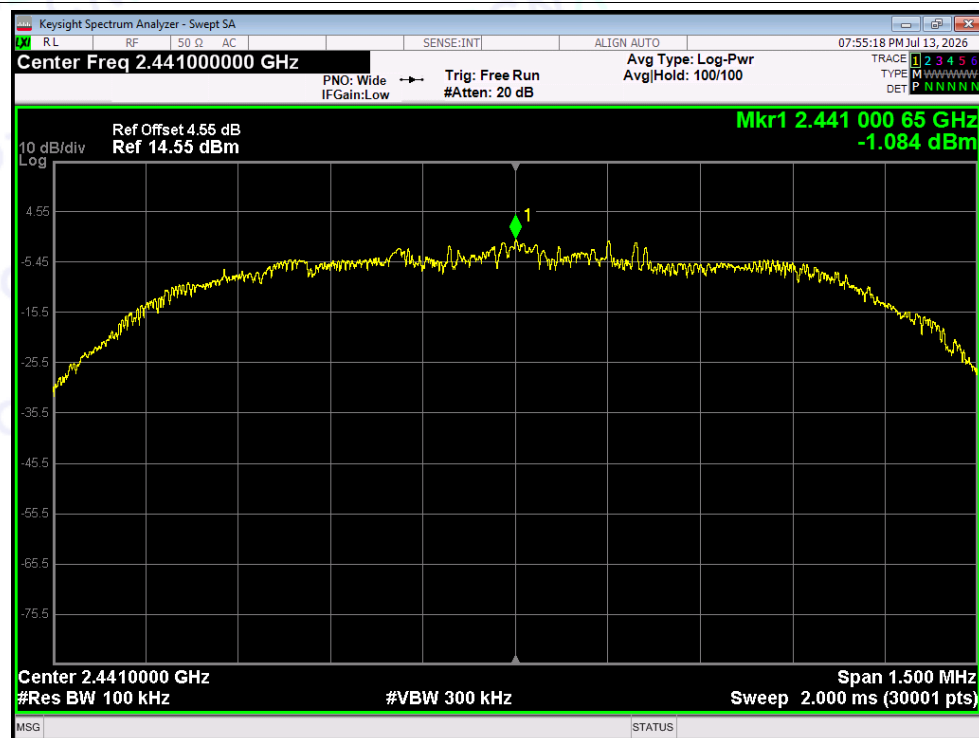
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



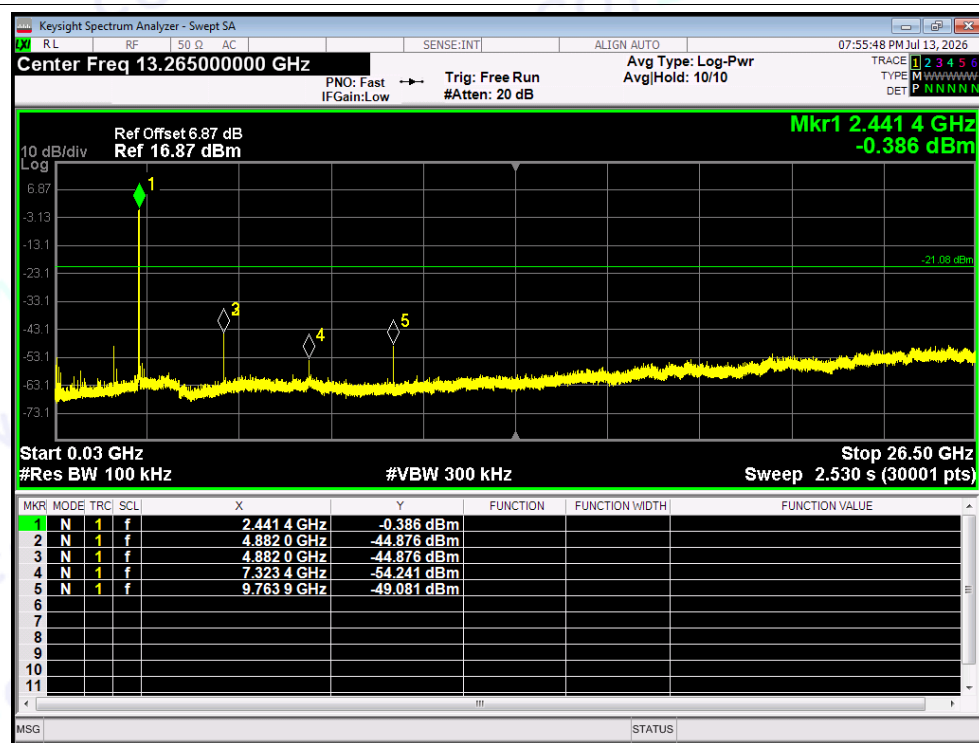
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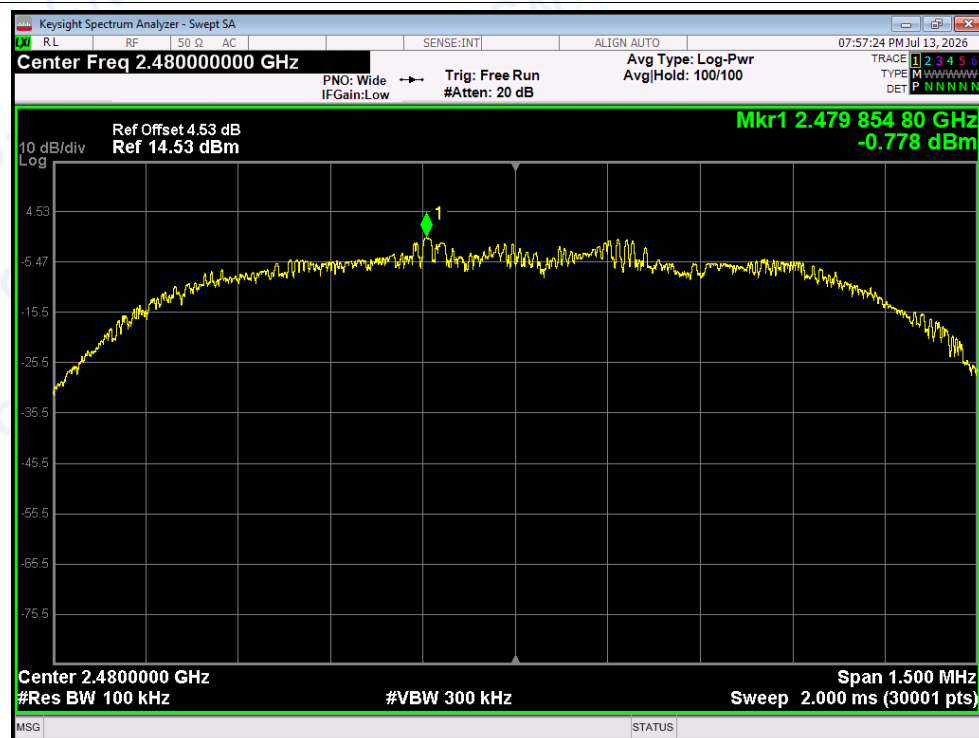
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



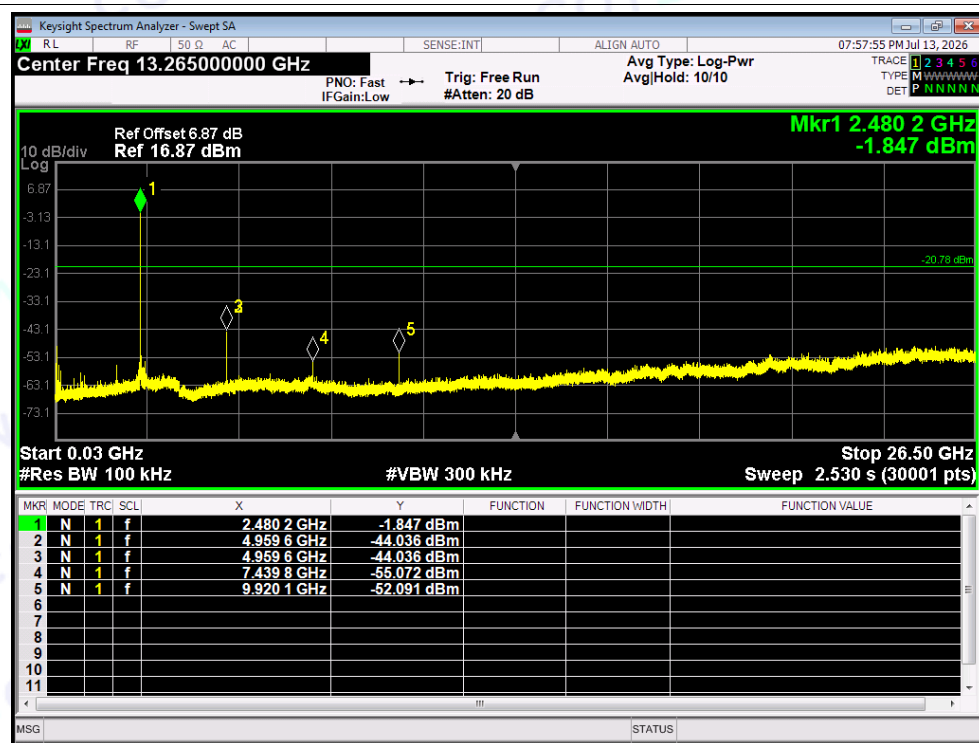
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

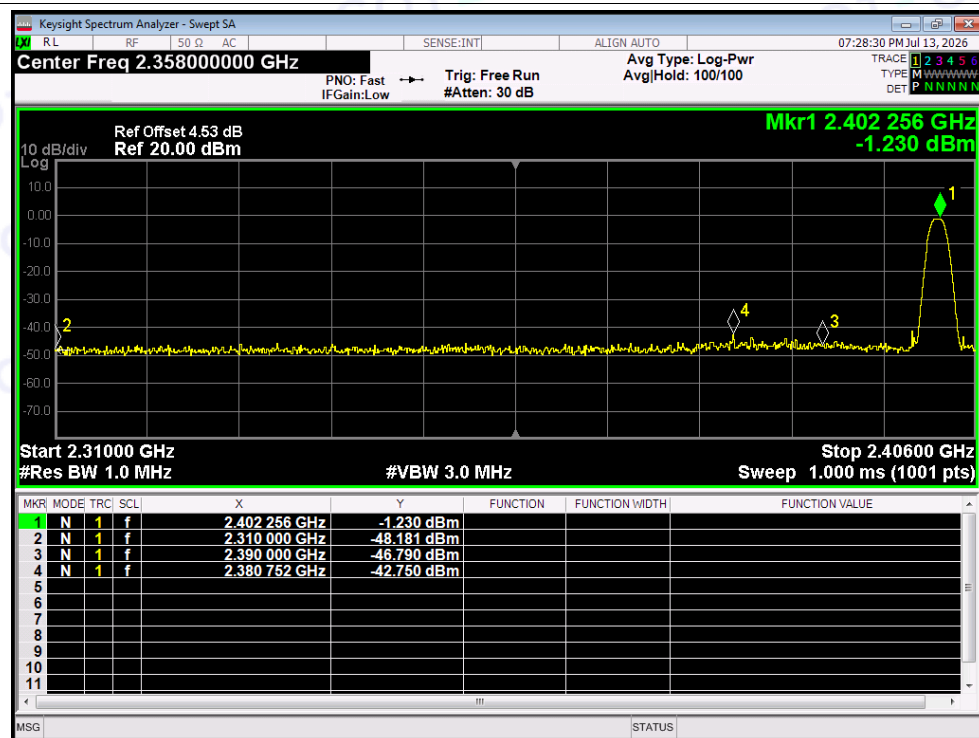


Restrict Band

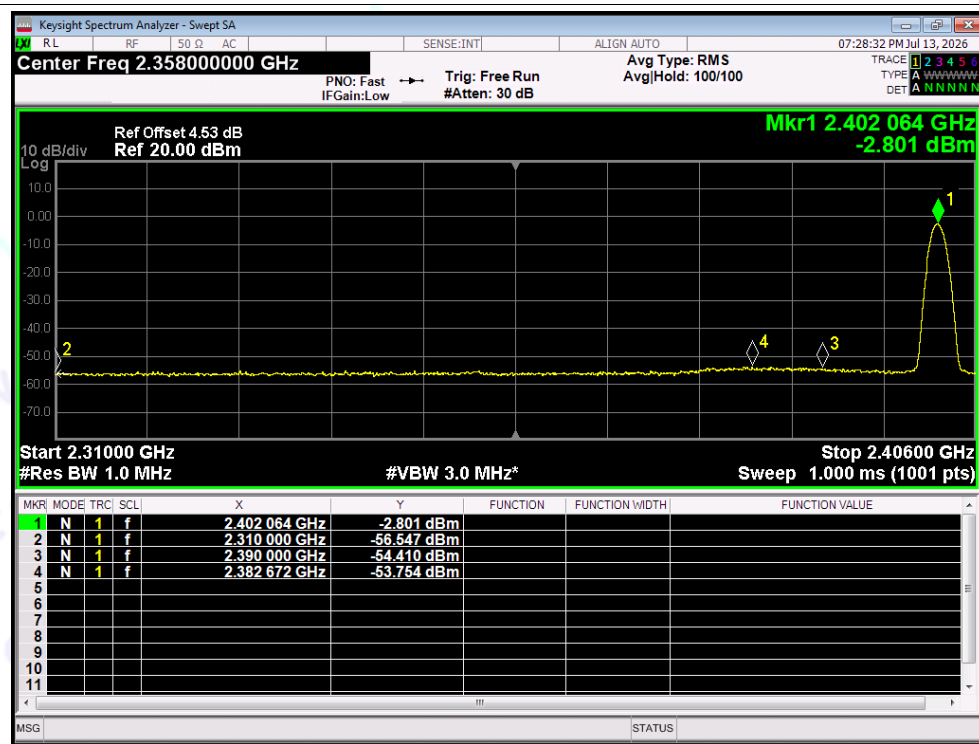
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-48.18	2	-	49.08	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-56.55	2	1.15	41.86	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2380.752	-42.75	2	-	54.51	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2382.672	-53.75	2	1.15	44.66	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-46.79	2	-	50.47	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-54.41	2	1.15	44	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-46.65	2	-	50.61	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-54.98	2	1.15	43.43	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2495.728	-43.37	2	-	53.89	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2499.28	-53.36	2	1.15	45.05	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-46.97	2	-	50.29	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-53.58	2	1.15	44.83	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-48.49	2	-	48.77	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-56.63	2	1.13	41.76	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2377.008	-43.4	2	-	53.86	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2384.592	-53.75	2	1.13	44.64	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-44.69	2	-	52.57	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-54.33	2	1.13	44.06	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-46.58	2	-	50.68	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-55.49	2	1.14	42.91	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2499.712	-42.52	2	-	54.74	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2499.496	-53.08	2	1.14	45.32	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-43.91	2	-	53.35	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-53.91	2	1.14	44.49	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-49.04	2	-	48.22	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-56.18	2	1.13	41.08	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2379.984	-43.63	2	-	53.63	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2383.92	-53.66	2	1.13	43.6	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-46.68	2	-	50.58	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-54.17	2	1.13	43.09	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-47.63	2	-	49.63	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-55.26	2	1.13	43.13	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.944	-42.74	2	-	54.52	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2498.536	-52.96	2	1.13	45.43	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-46.83	2	-	50.43	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-53.56	2	1.13	44.83	Average	54	Pass

Test Graphs

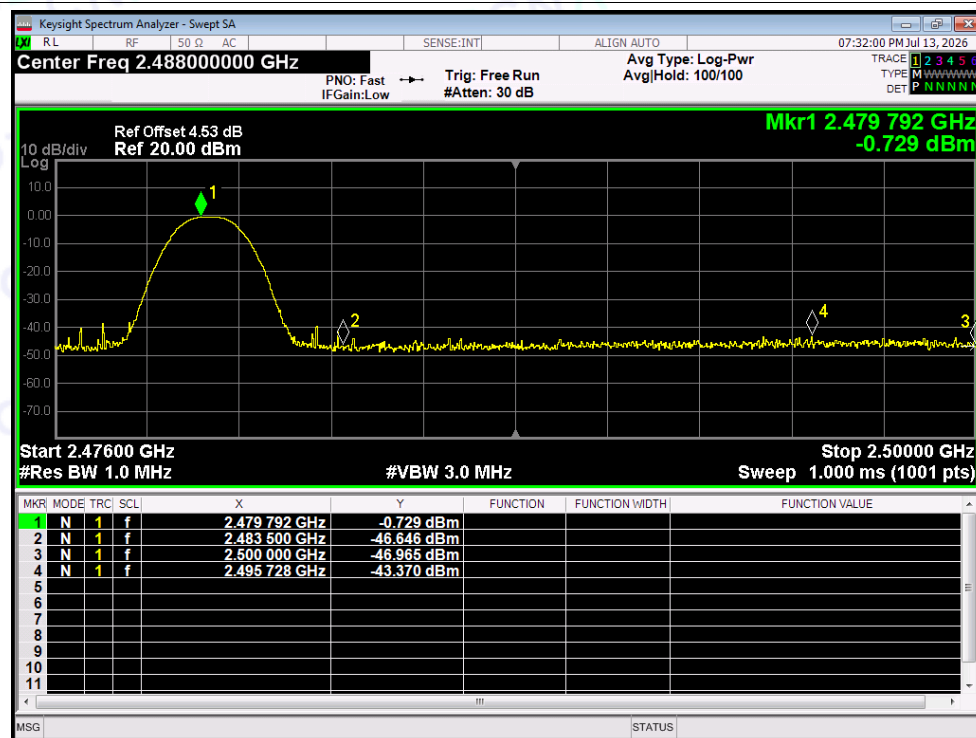
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



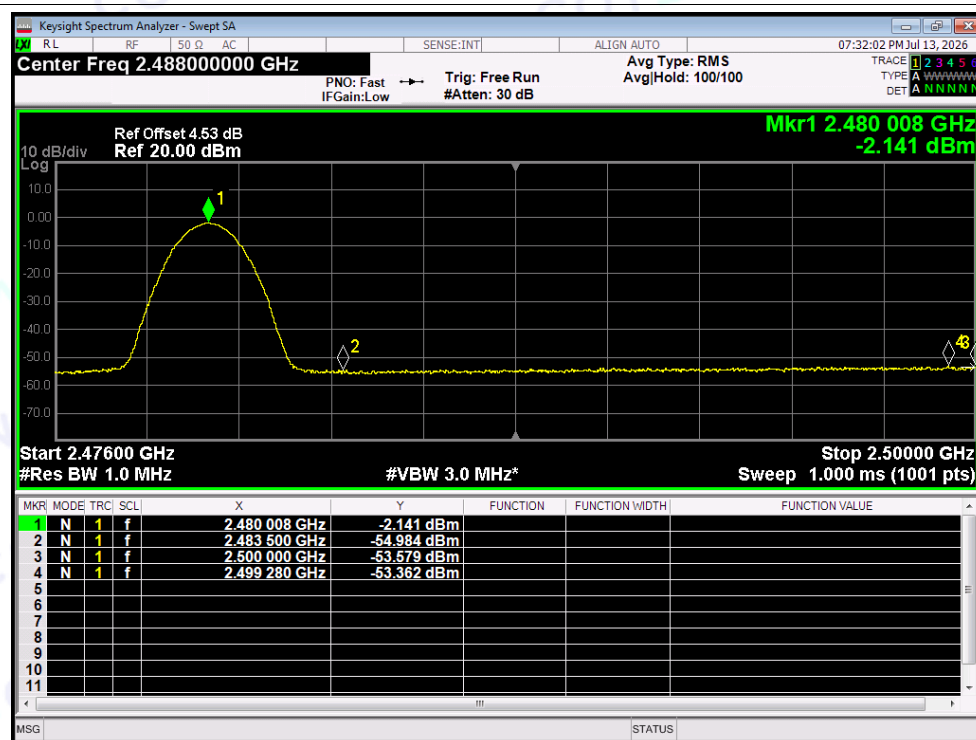
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



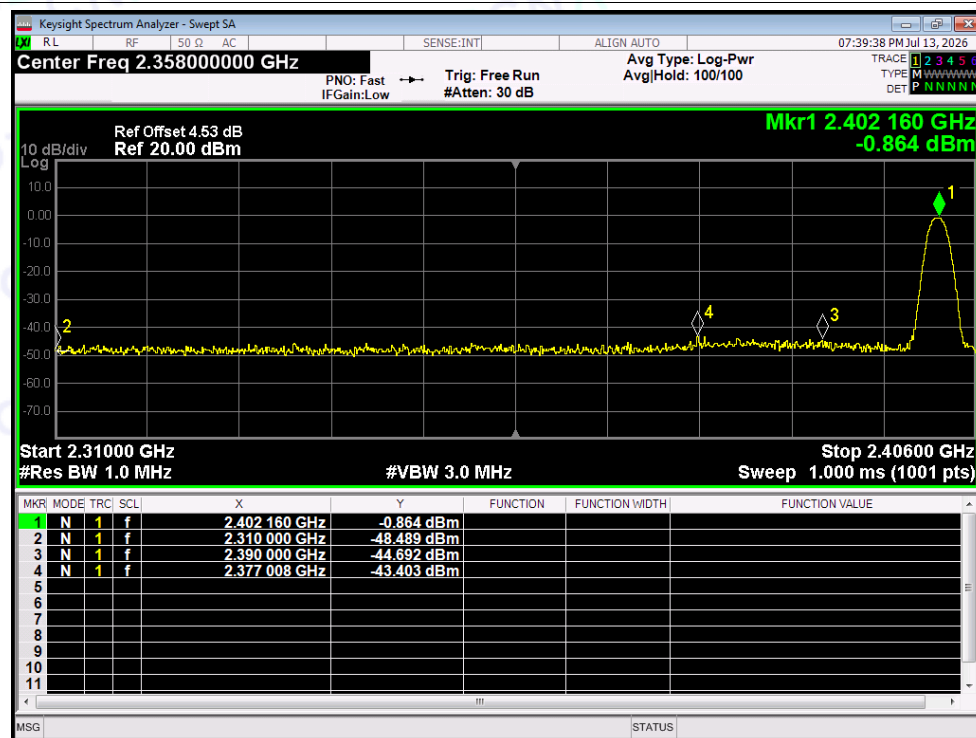
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



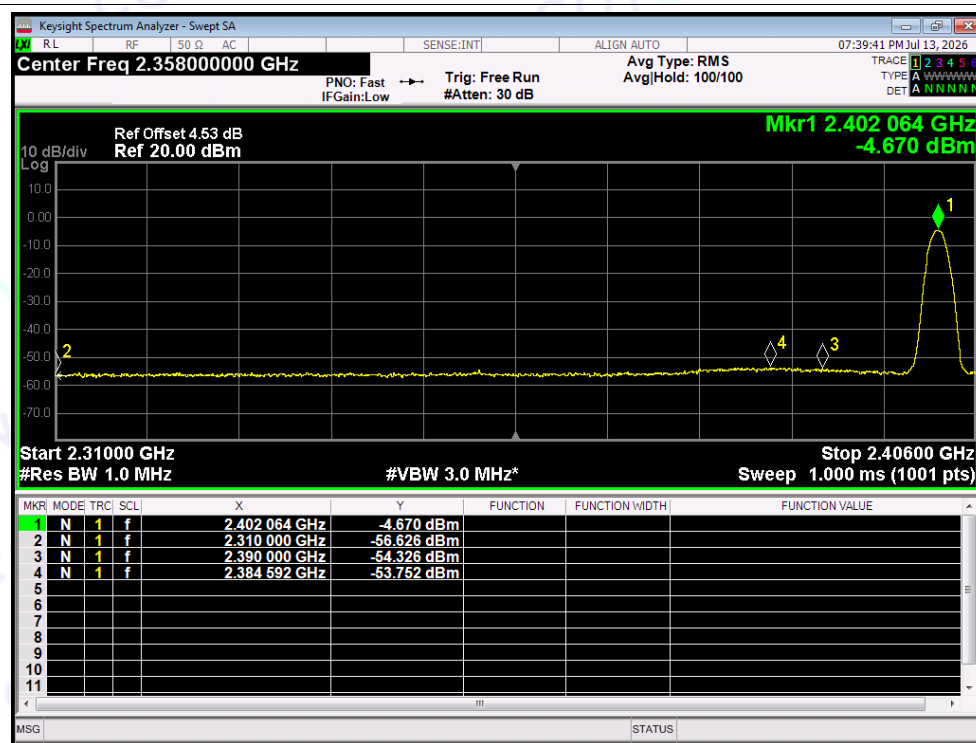
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



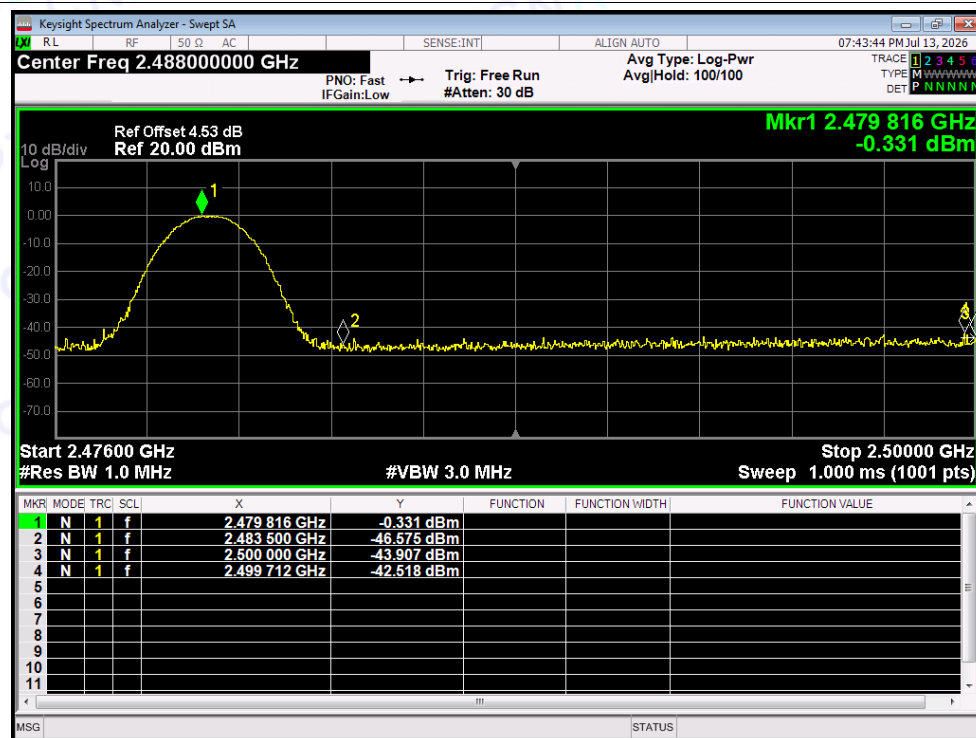
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



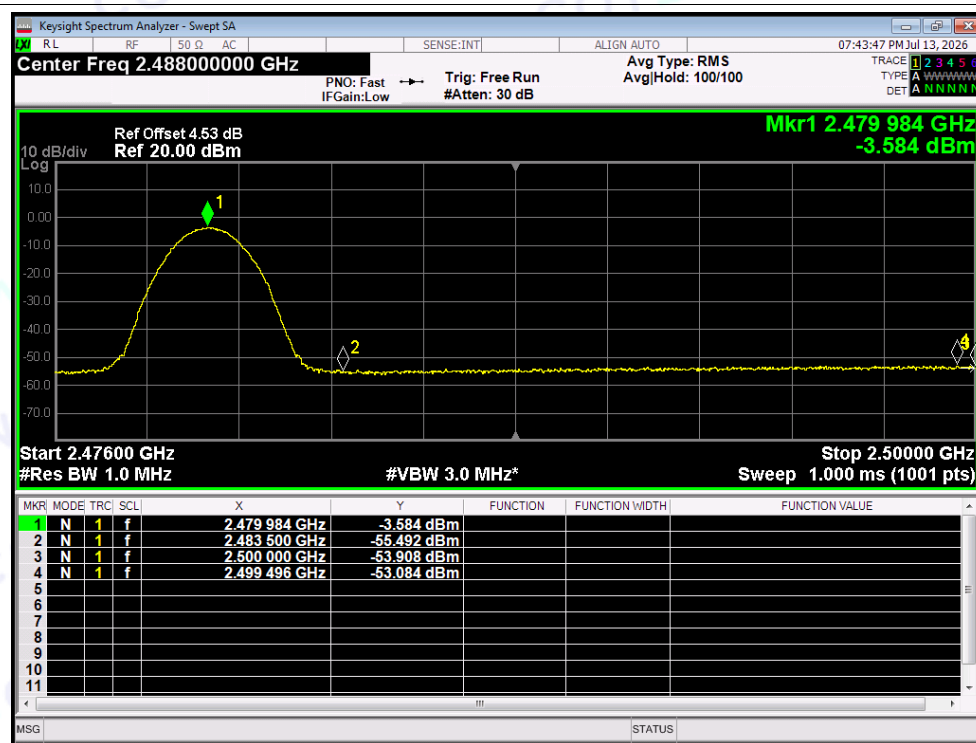
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



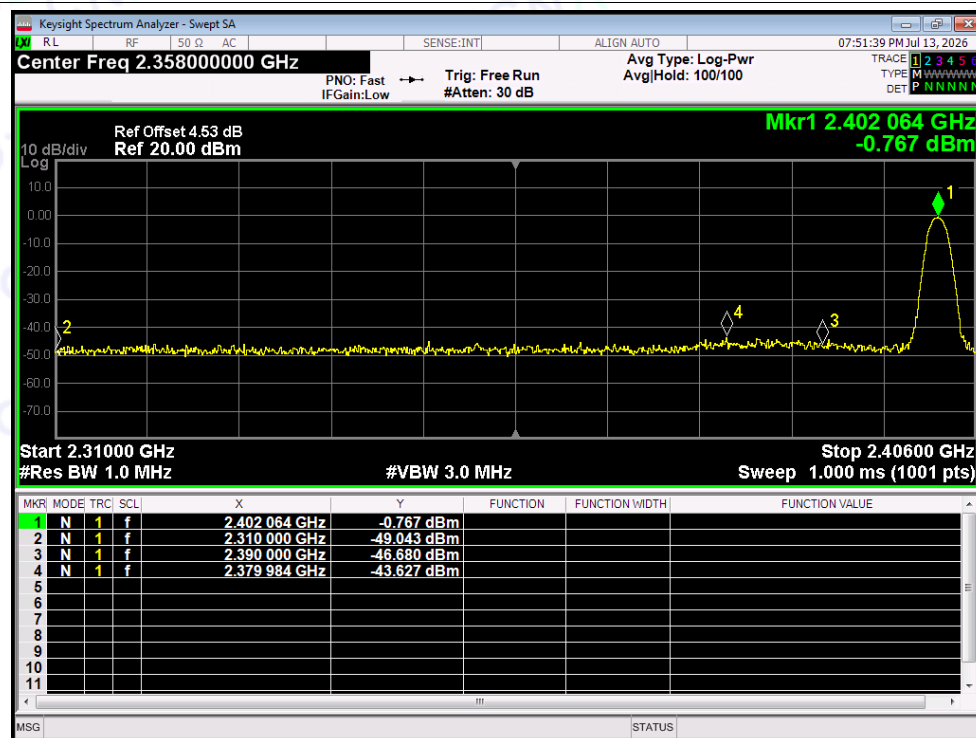
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



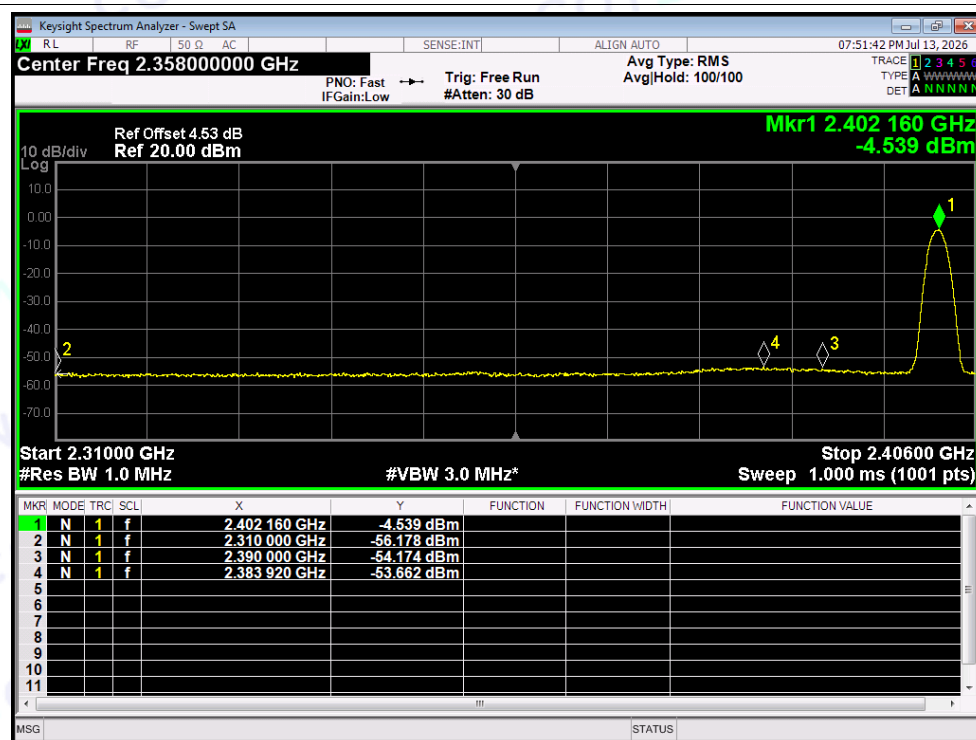
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



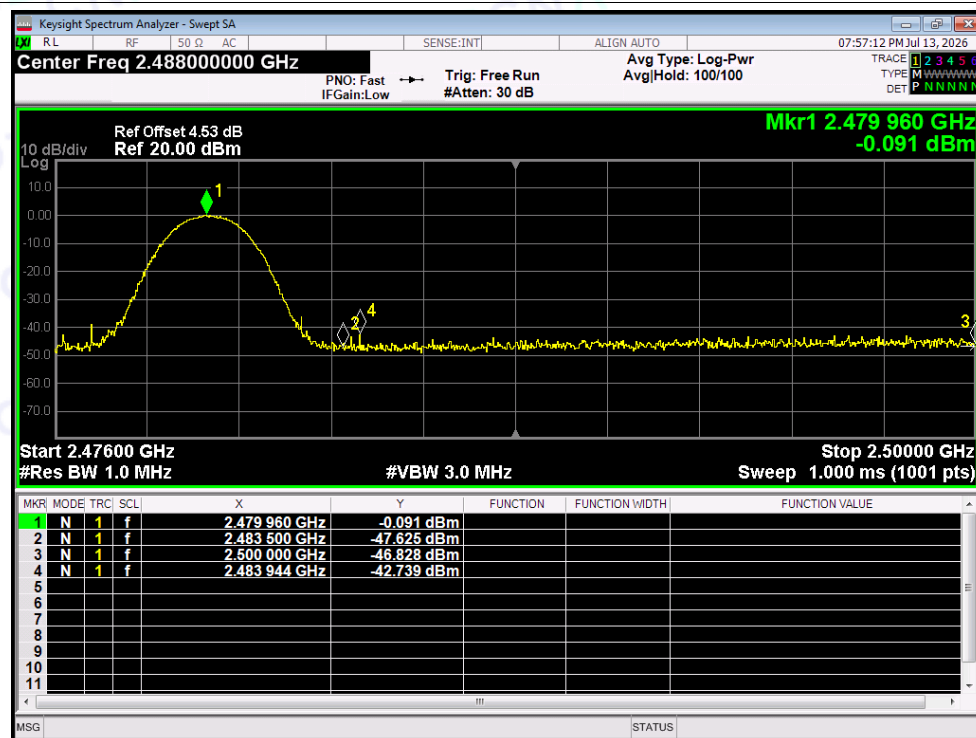
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



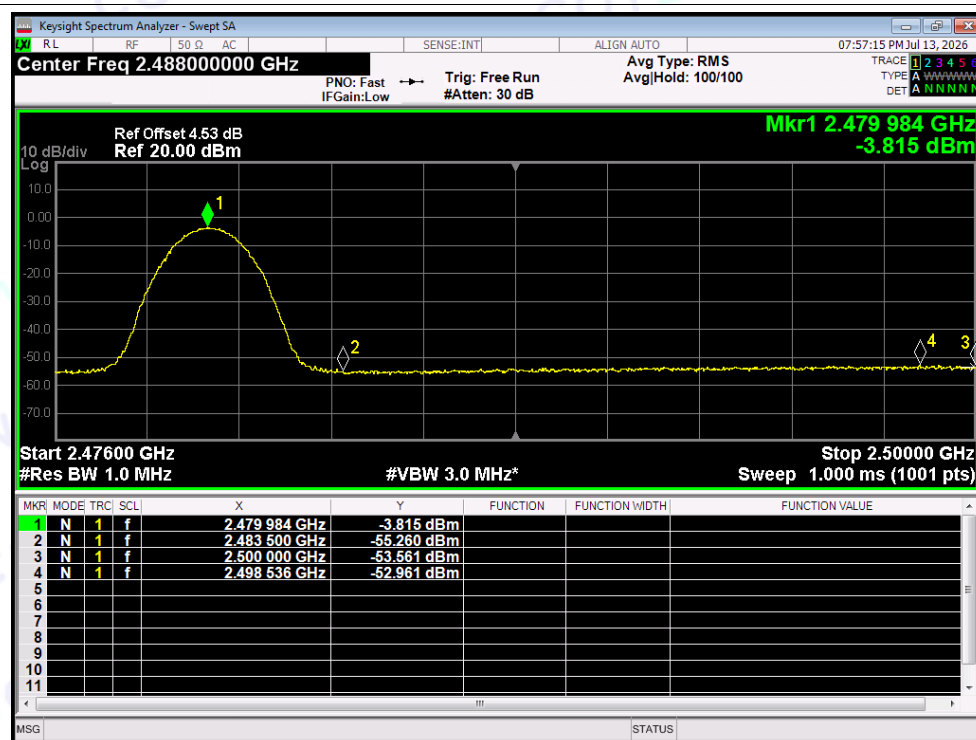
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average



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



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

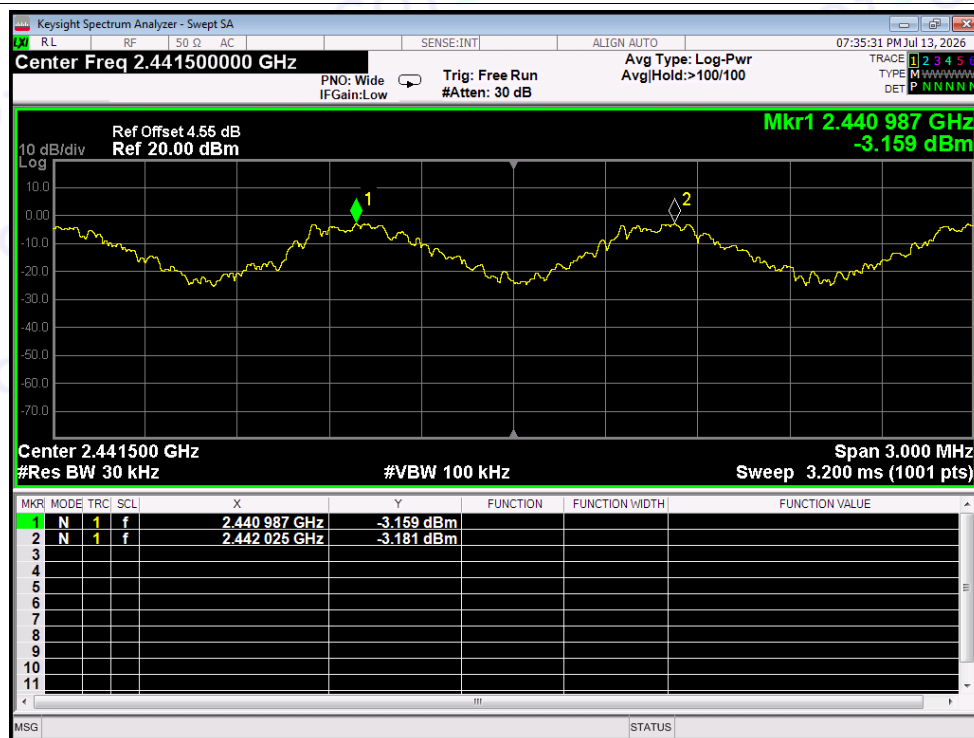


Carrier Frequencies Separation

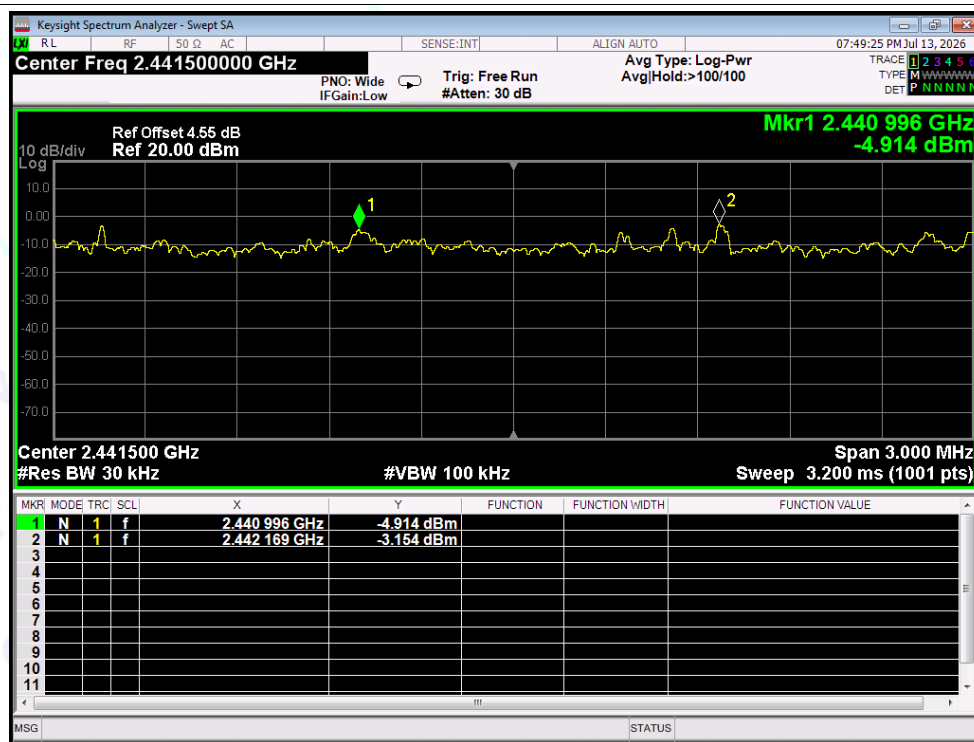
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2440.987	2442.025	1.038	0.66	Pass
NVNT	2-DH5	Ant1	2440.996	2442.169	1.173	0.853	Pass
NVNT	3-DH5	Ant1	2441.008	2442.016	1.008	0.867	Pass

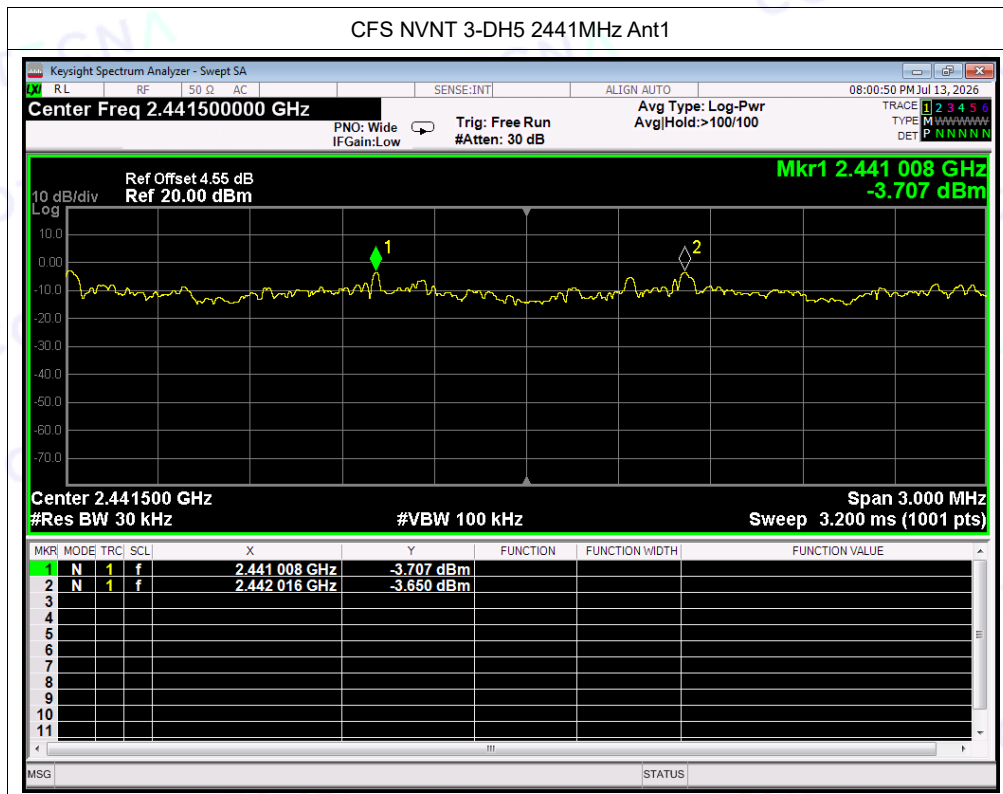
Test Graphs

CFS NVNT 1-DH5 2441MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1



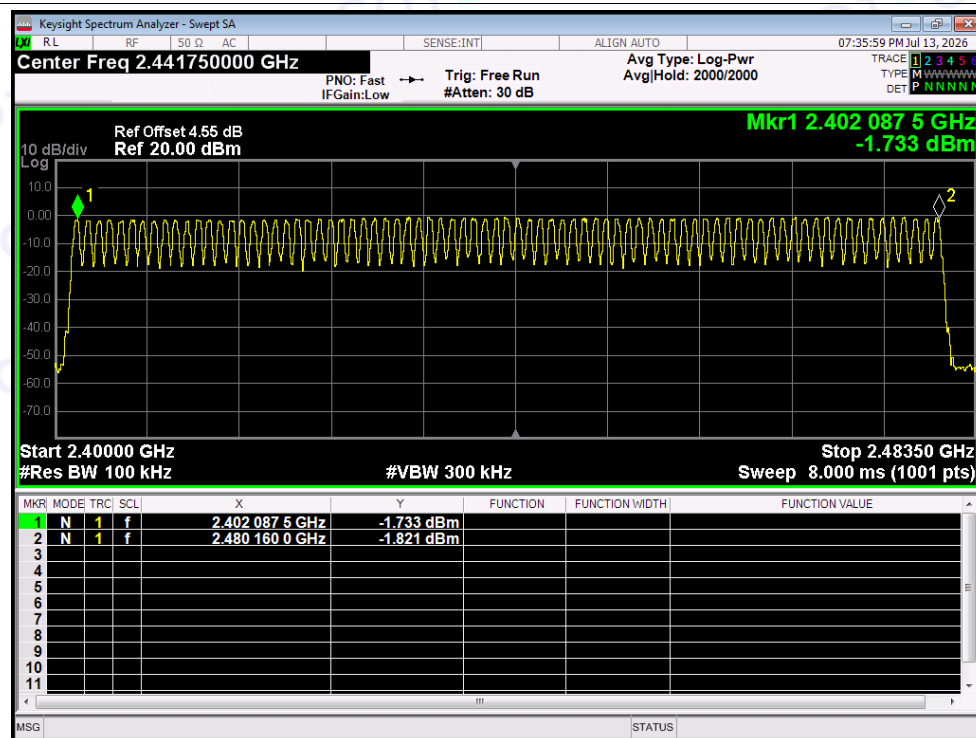


Number of Hopping Channel

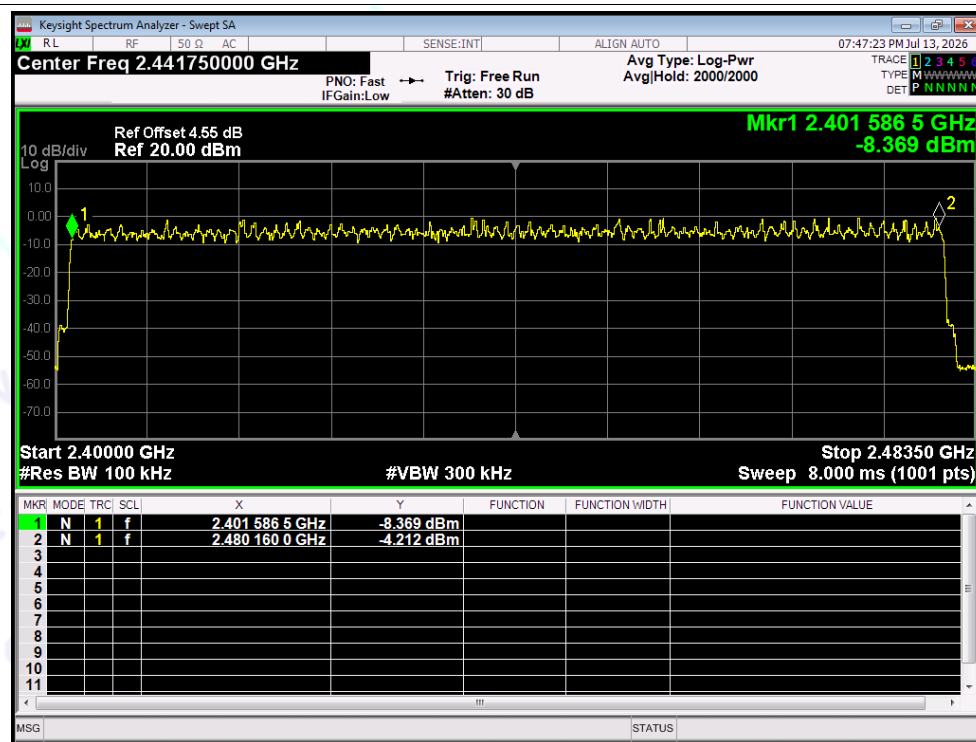
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

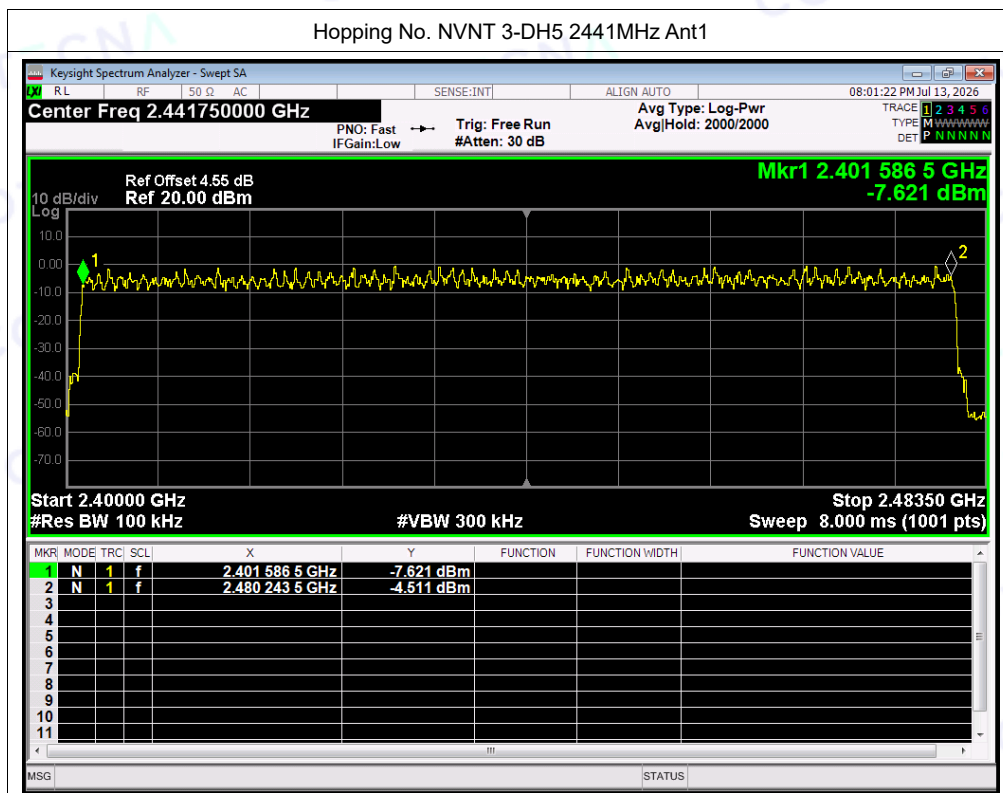
Test Graphs

Hopping No. NVNT 1-DH5 2441MHz Ant1



Hopping No. NVNT 2-DH5 2441MHz Ant1





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