

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
EUT Name:	SensAura500
Model:	SF-HA500
Sample ID:	HC-C-202605-0406-02-01
Test Standard:	FCC Part 15.247
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	46.2%
Test Voltage:	3.87V
Test Engineer:	Lily ZHANG
Note: For a more detailed features description, please refer to the report TBR-C-202605-0406-11 The report only show the worst case data.	

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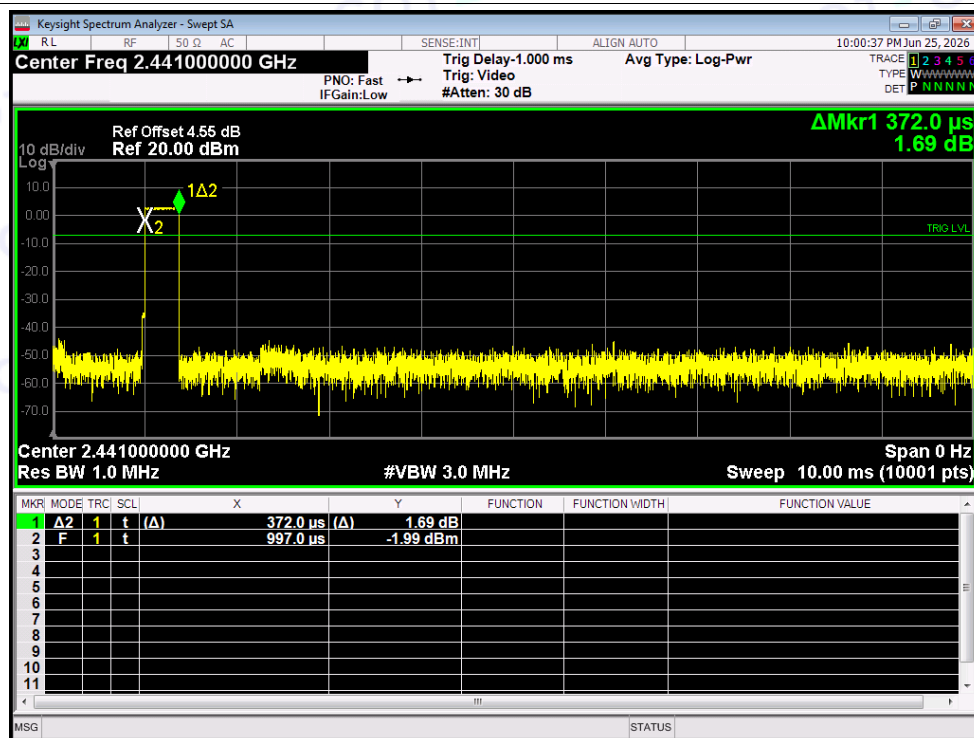
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Dwell Time

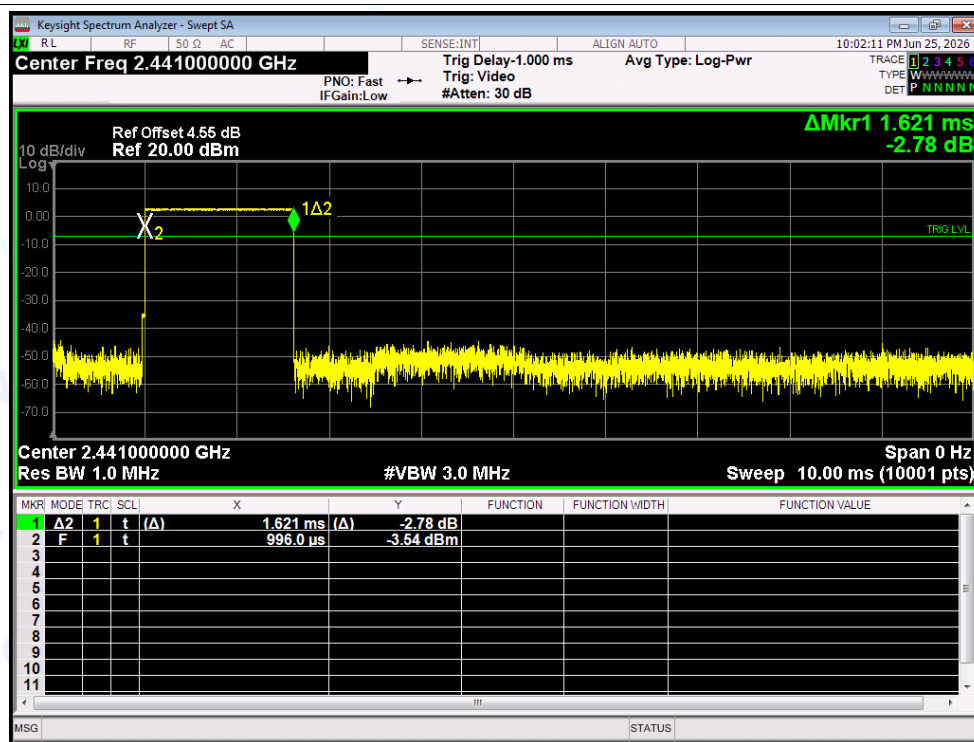
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.372	119.04	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.621	259.36	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.868	305.92	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.38	121.6	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.88	307.2	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.38	121.6	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.63	260.8	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.882	307.413	31600	400	Pass

Test Graphs

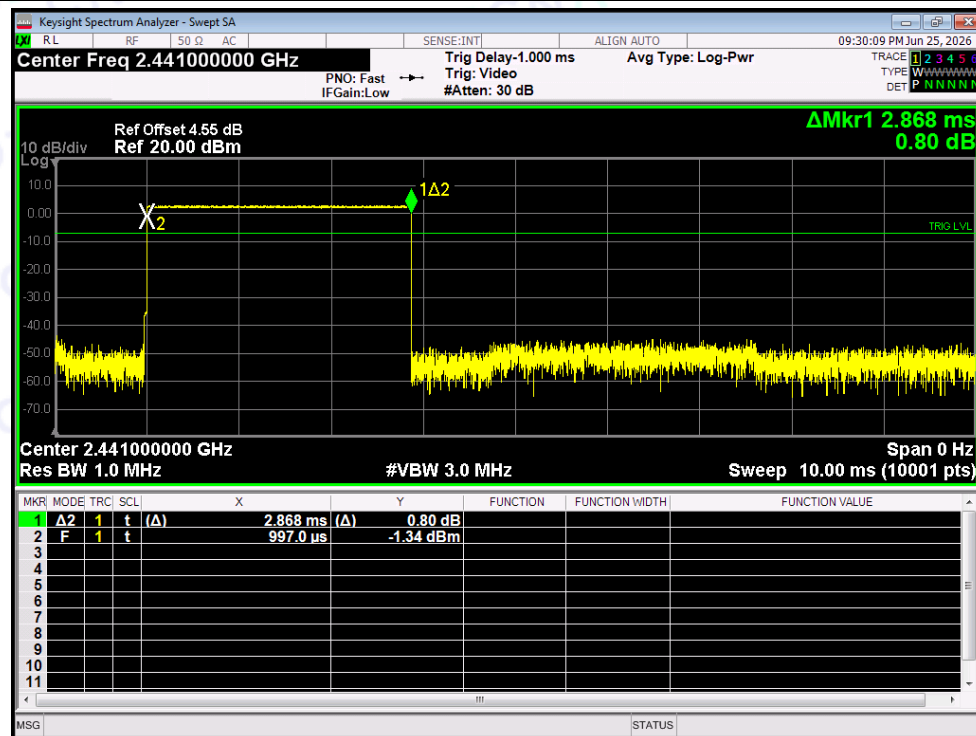
Dwell NVNT 1-DH1 2441MHz Ant1



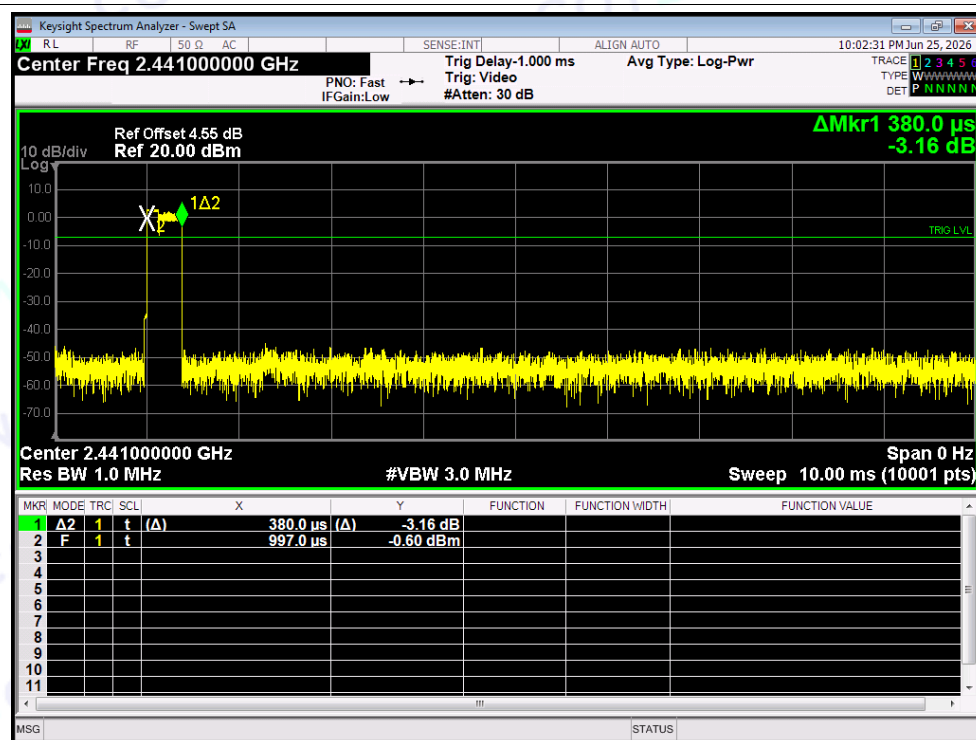
Dwell NVNT 1-DH3 2441MHz Ant1



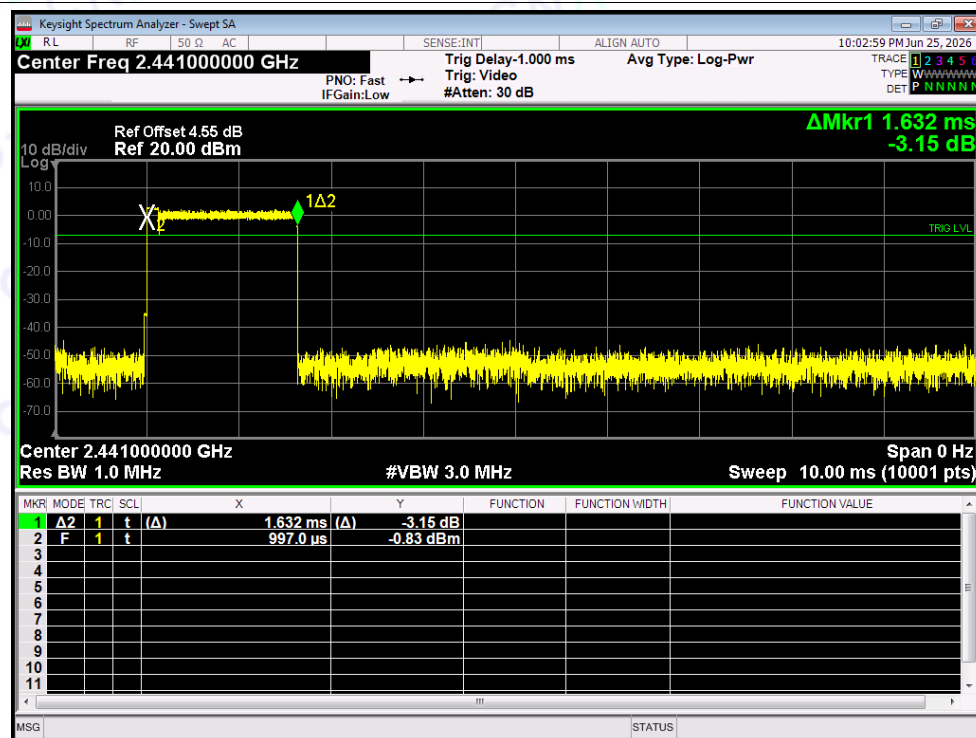
Dwell NVNT 1-DH5 2441MHz Ant1



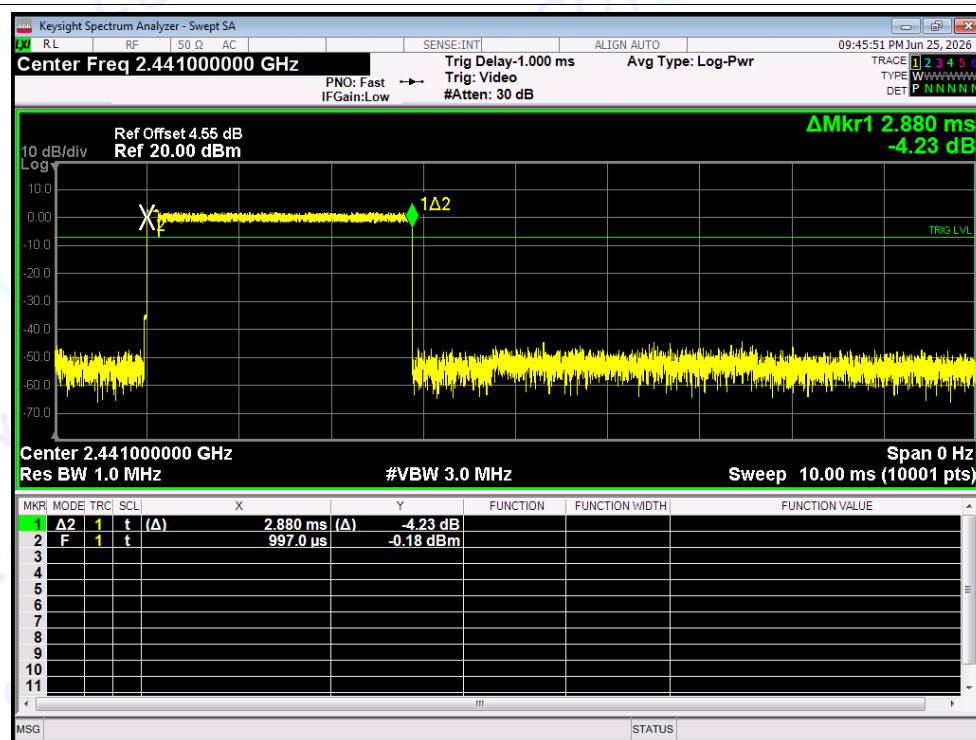
Dwell NVNT 2-DH1 2441MHz Ant1



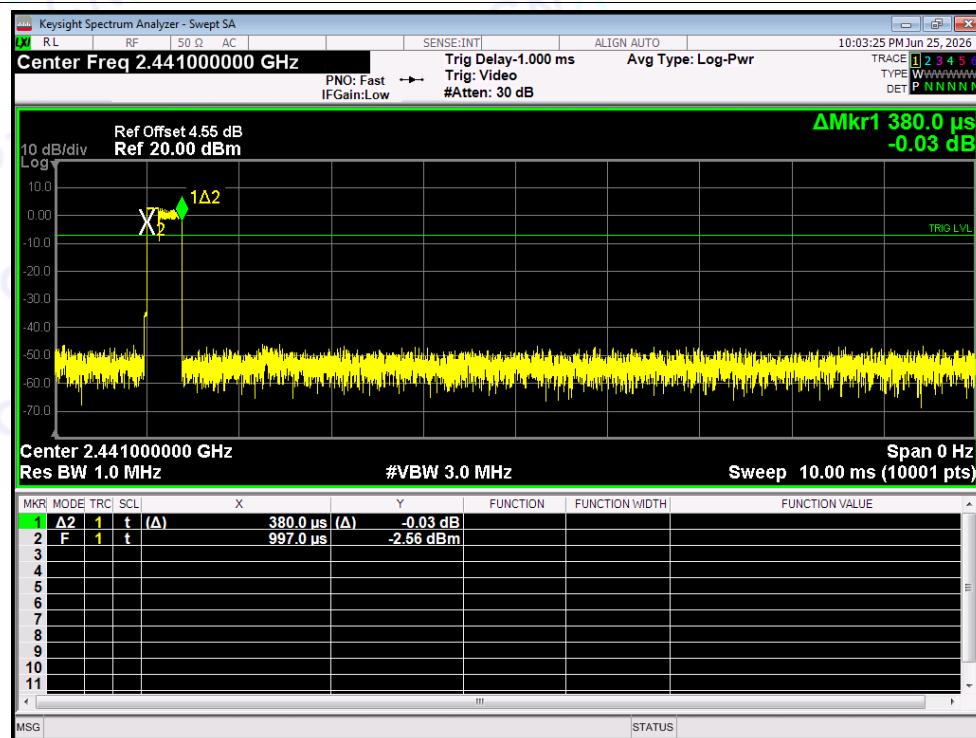
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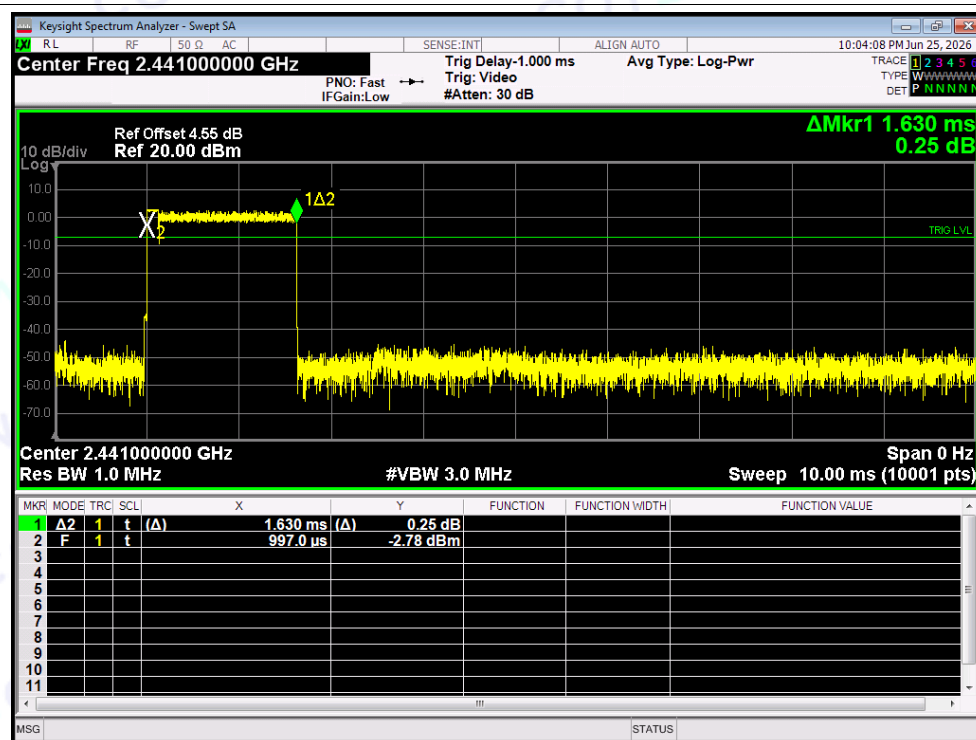
Dwell NVNT 2-DH5 2441MHz Ant1

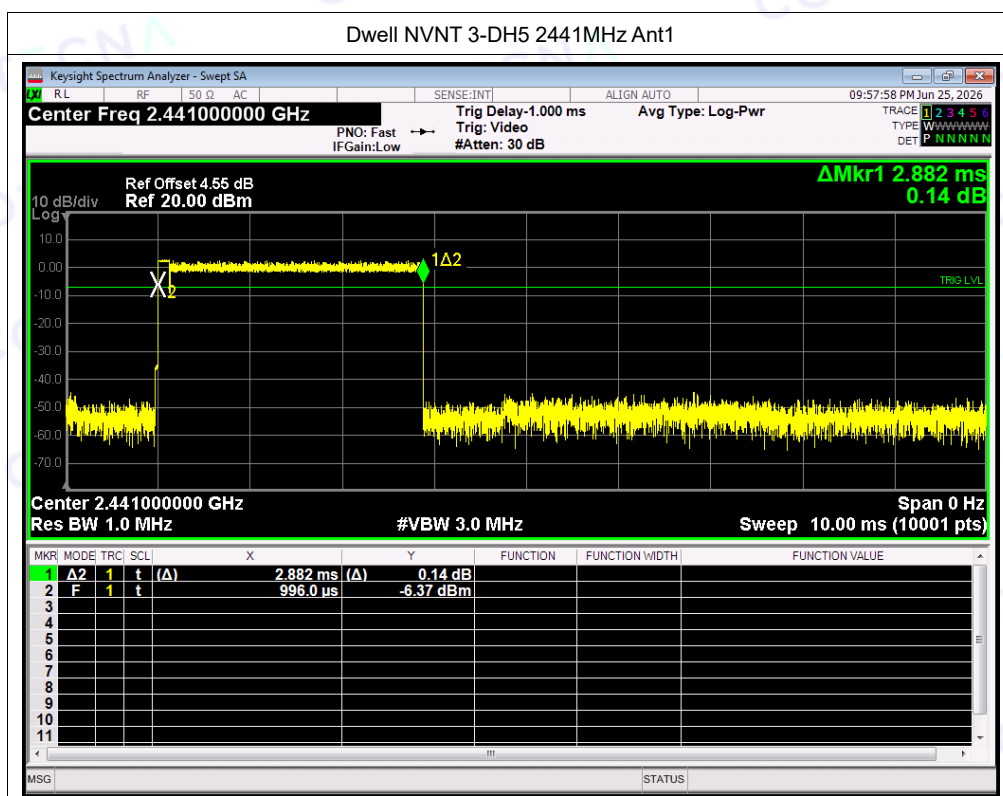


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



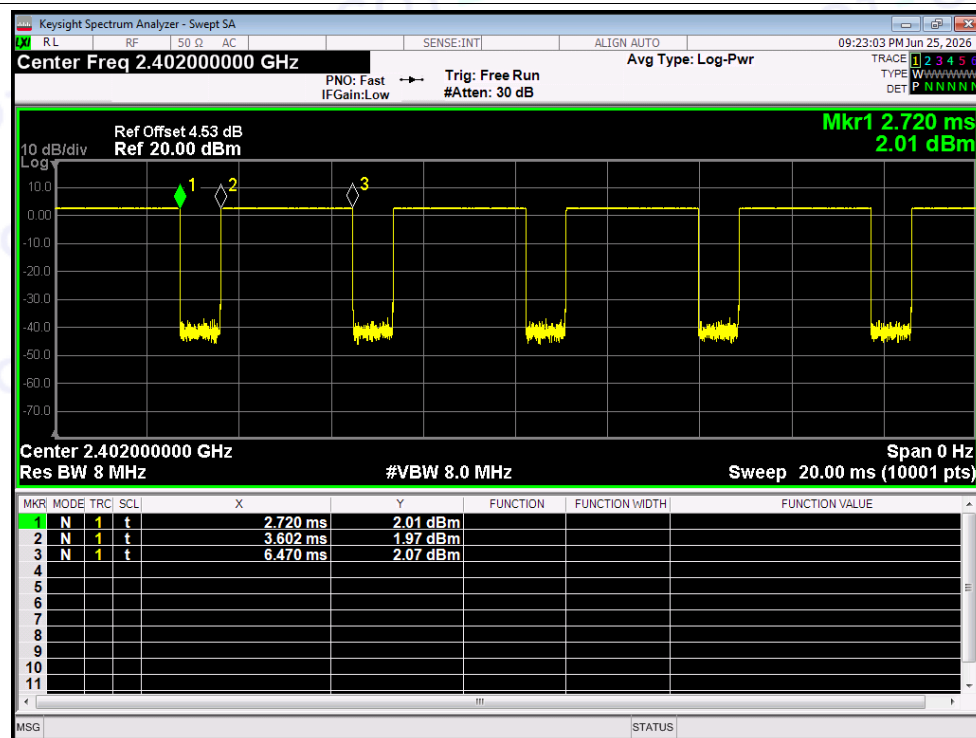


Duty Cycle

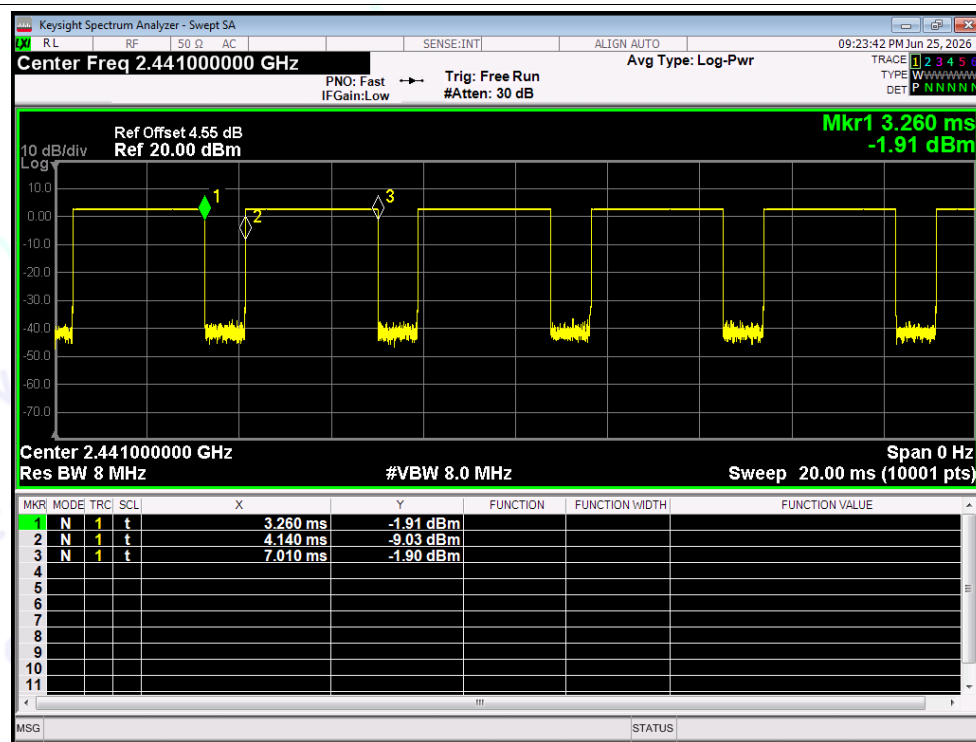
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	76.48	1.16	0.35
NVNT	1-DH5	2441	Ant1	76.53	1.16	0.35
NVNT	1-DH5	2480	Ant1	76.53	1.16	0.35
NVNT	2-DH5	2402	Ant1	76.85	1.14	0.35
NVNT	2-DH5	2441	Ant1	76.85	1.14	0.35
NVNT	2-DH5	2480	Ant1	76.85	1.14	0.35
NVNT	3-DH5	2402	Ant1	76.87	1.14	0.35
NVNT	3-DH5	2441	Ant1	76.85	1.14	0.35
NVNT	3-DH5	2480	Ant1	76.85	1.14	0.35

Test Graphs

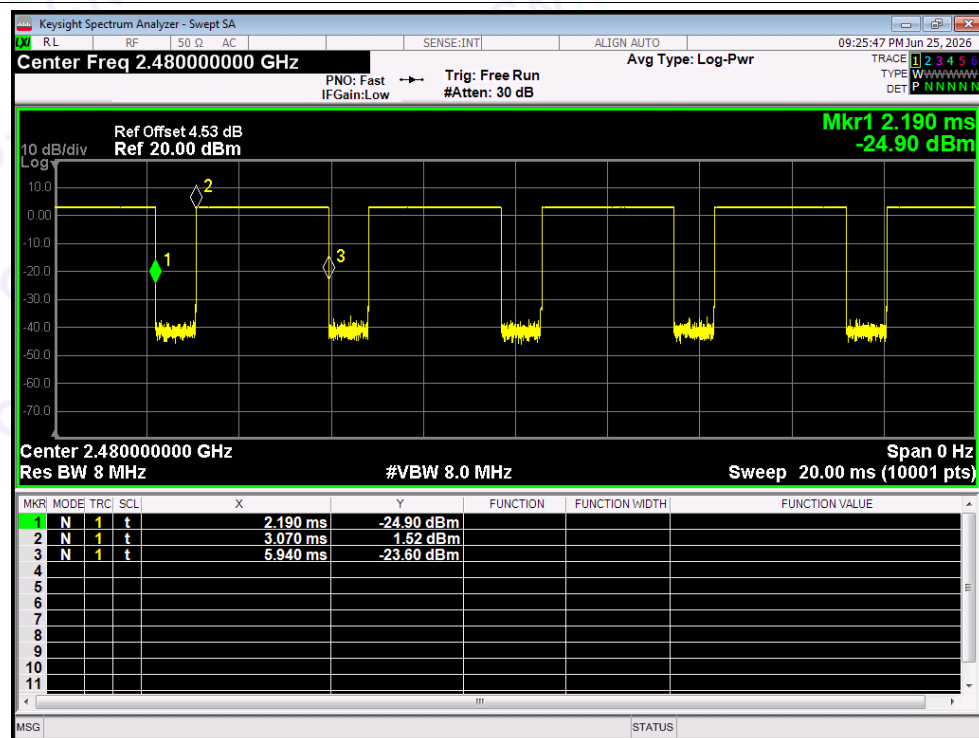
Duty Cycle NVNT 1-DH5 2402MHz Ant1



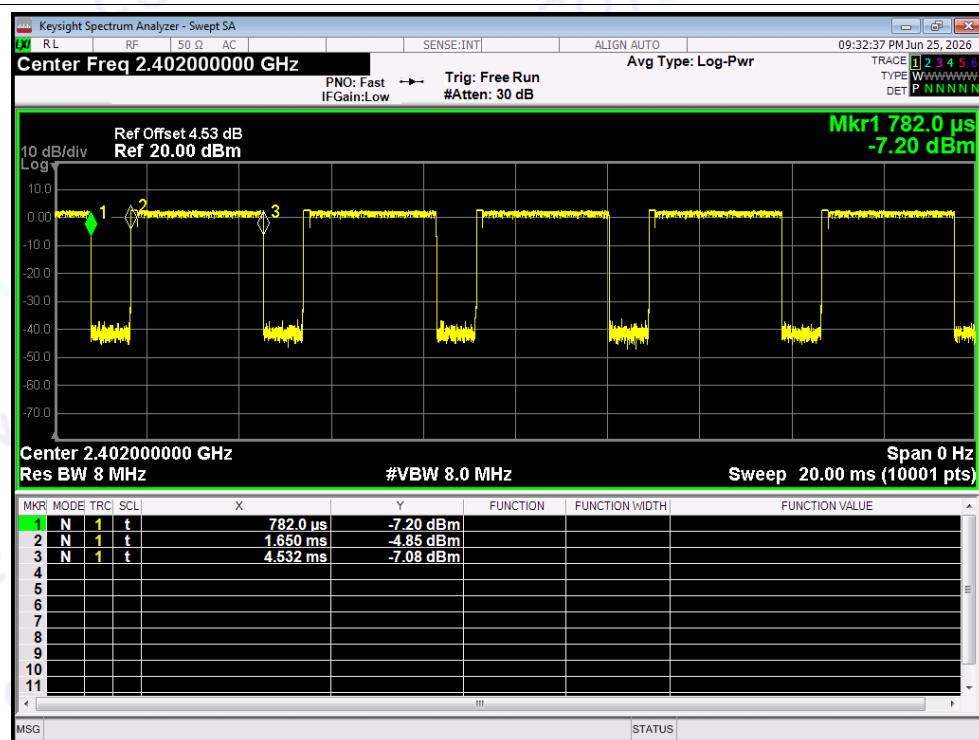
Duty Cycle NVNT 1-DH5 2441MHz Ant1



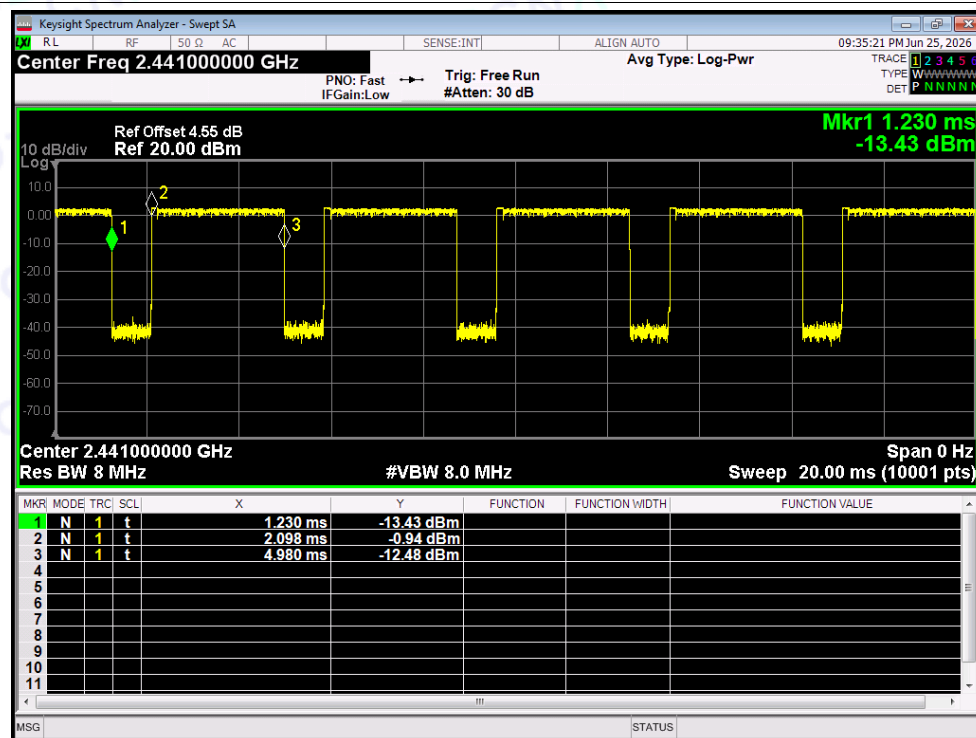
Duty Cycle NVNT 1-DH5 2480MHz Ant1



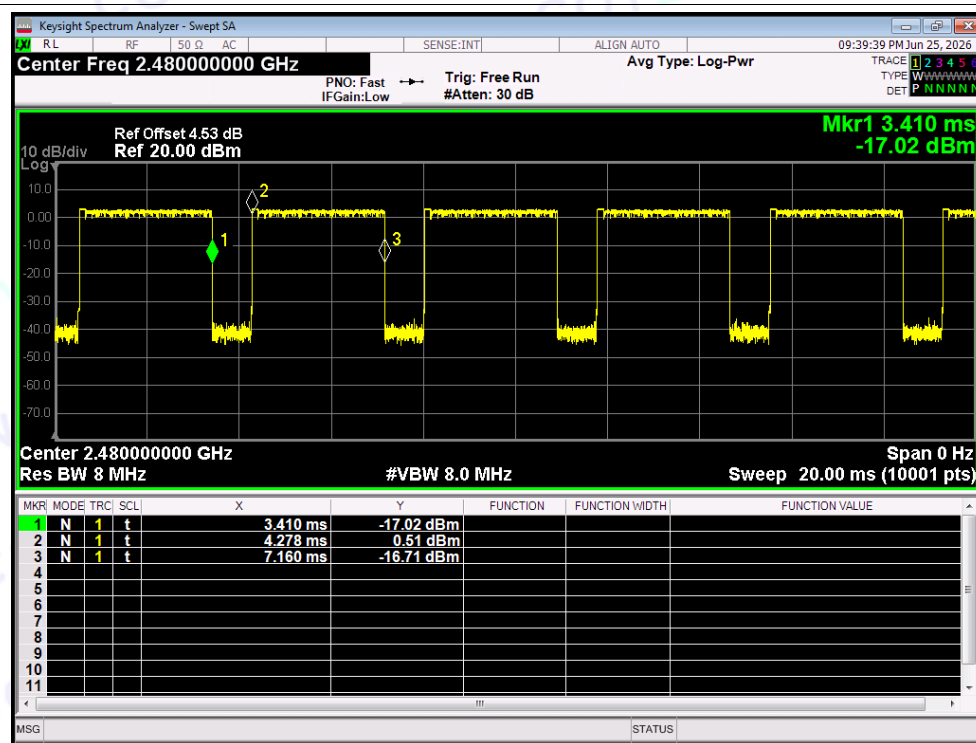
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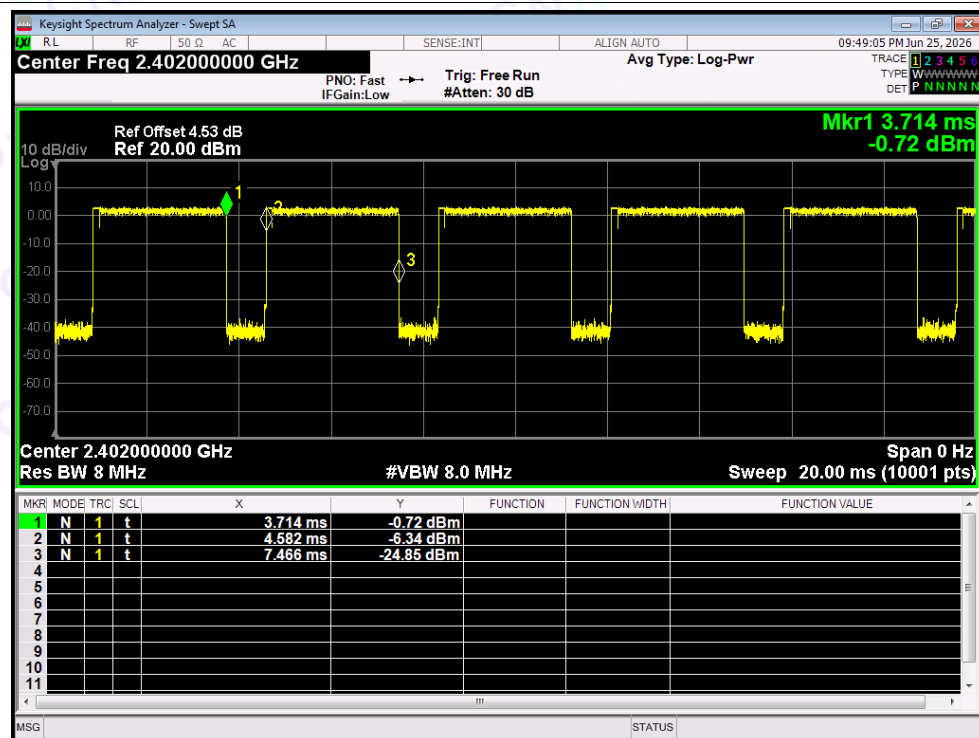
Duty Cycle NVNT 2-DH5 2441MHz Ant1



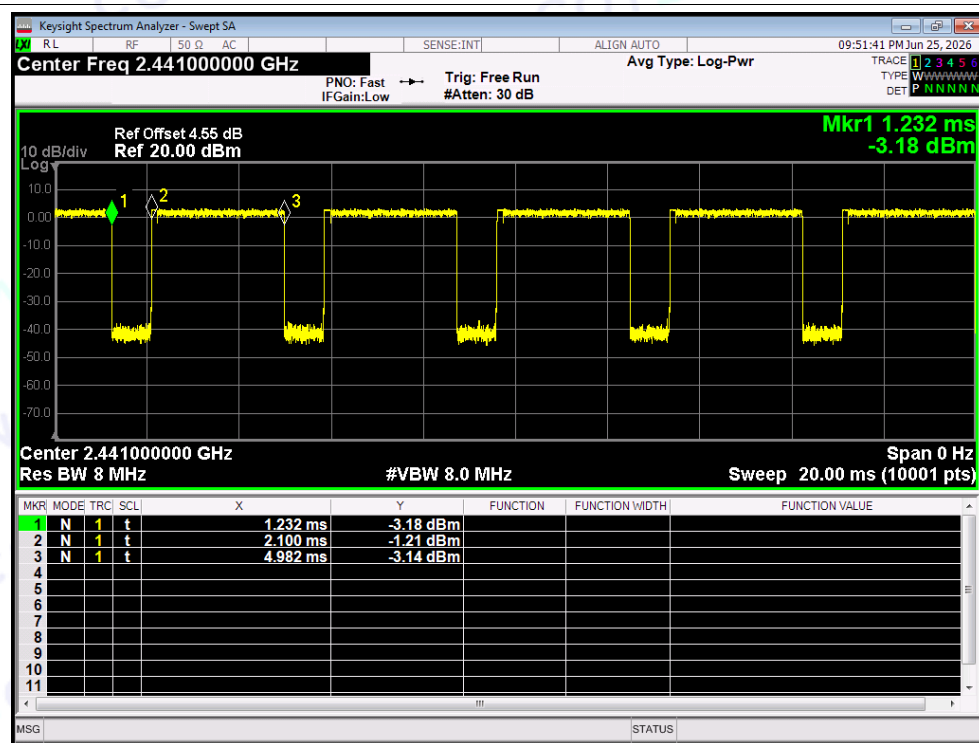
Duty Cycle NVNT 2-DH5 2480MHz Ant1

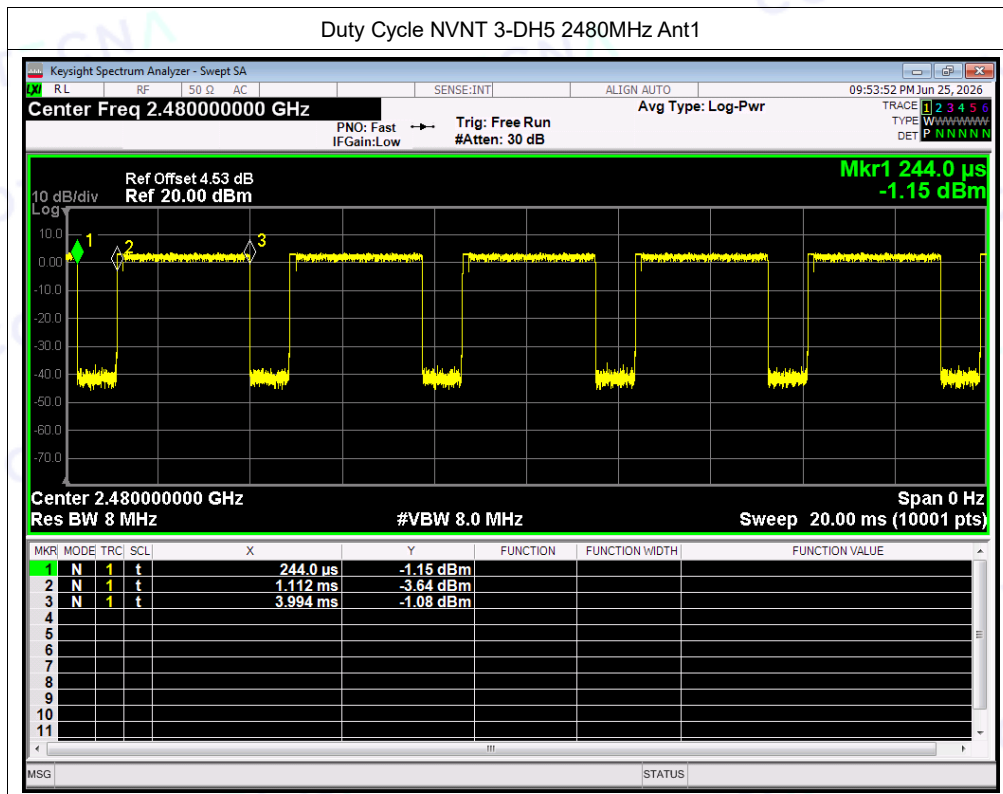


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



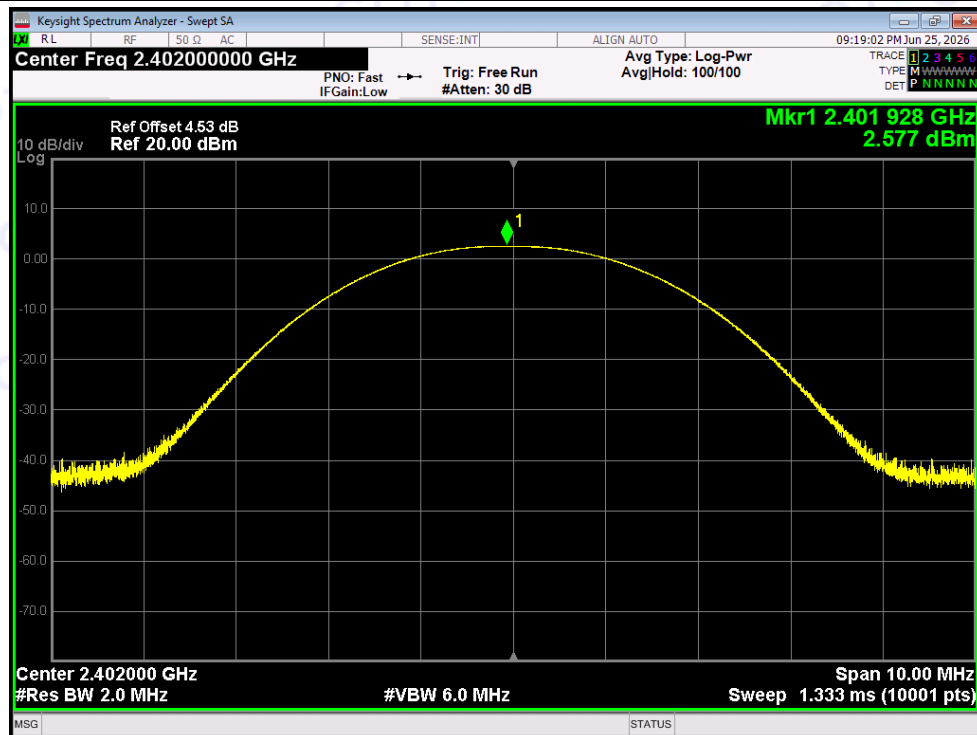


Maximum Conducted Output Power

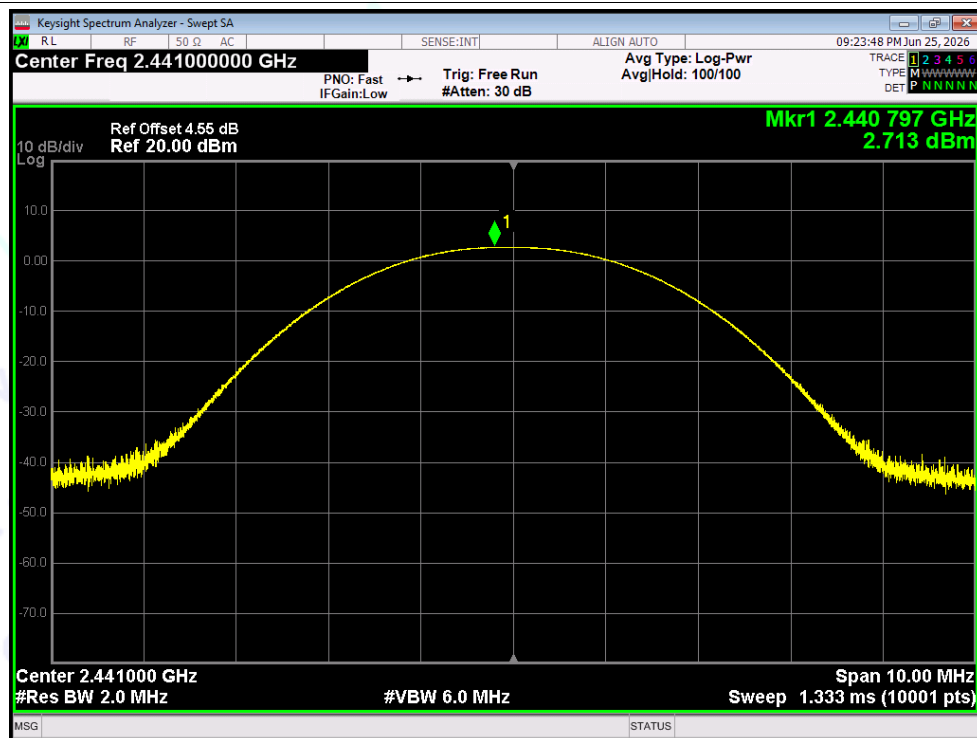
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	2.577	0	2.577	21	Pass
NVNT	1-DH5	2441	Ant1	2.713	0	2.713	21	Pass
NVNT	1-DH5	2480	Ant1	3.026	0	3.026	21	Pass
NVNT	2-DH5	2402	Ant1	2.679	0	2.679	21	Pass
NVNT	2-DH5	2441	Ant1	2.782	0	2.782	21	Pass
NVNT	2-DH5	2480	Ant1	3.06	0	3.06	21	Pass
NVNT	3-DH5	2402	Ant1	2.822	0	2.822	21	Pass
NVNT	3-DH5	2441	Ant1	2.919	0	2.919	21	Pass
NVNT	3-DH5	2480	Ant1	3.207	0	3.207	21	Pass

Test Graphs

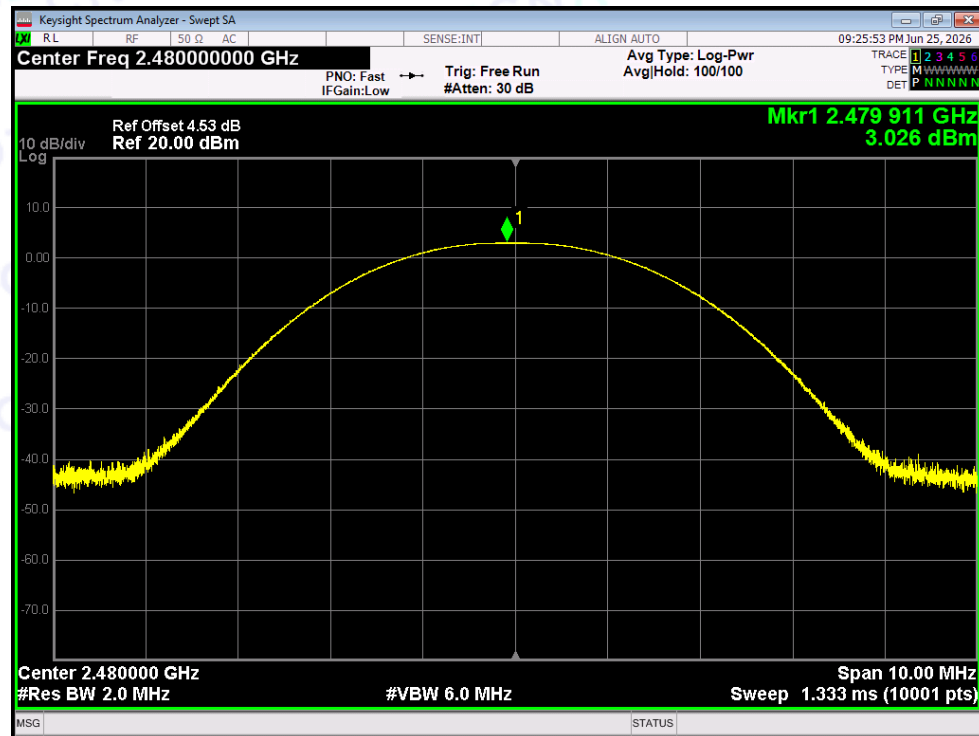
Power NVNT 1-DH5 2402MHz Ant1



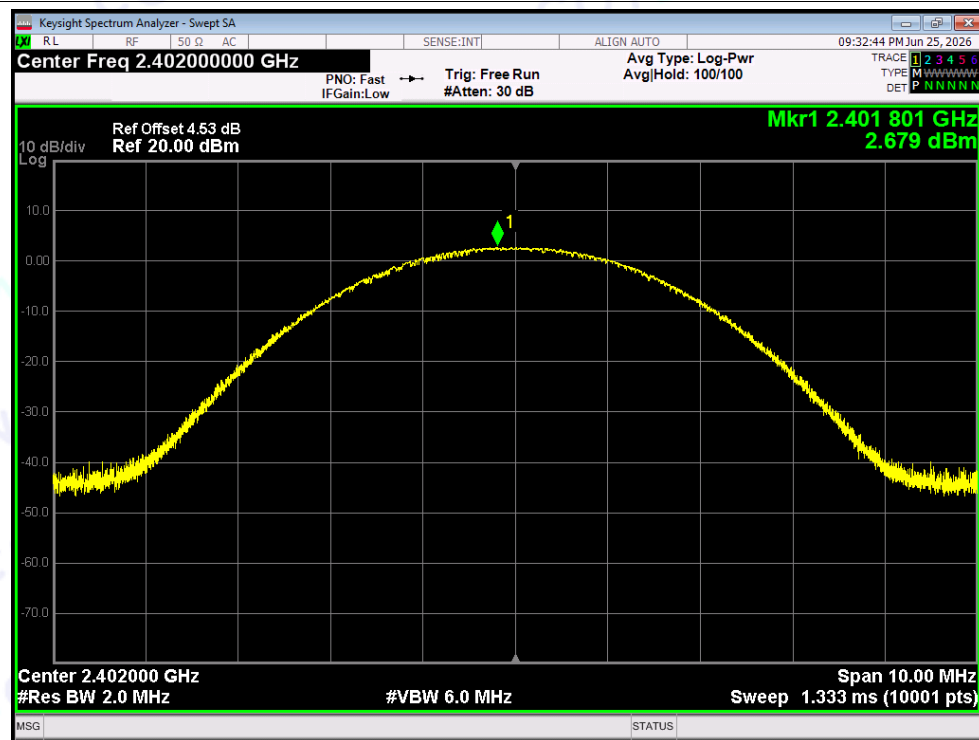
Power NVNT 1-DH5 2441MHz Ant1



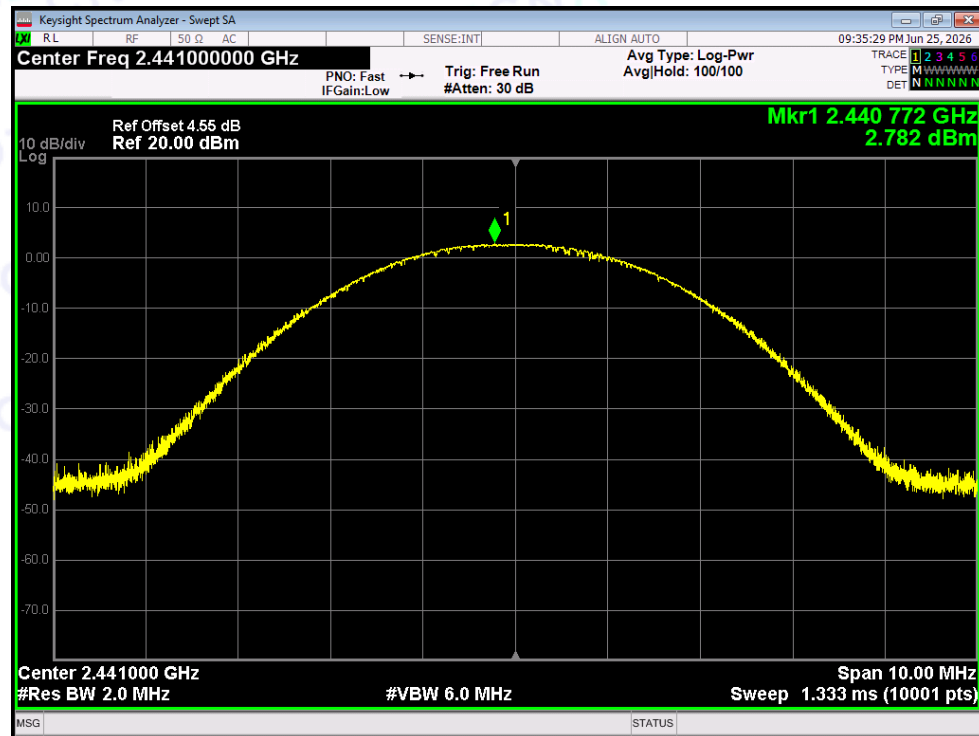
Power NVNT 1-DH5 2480MHz Ant1



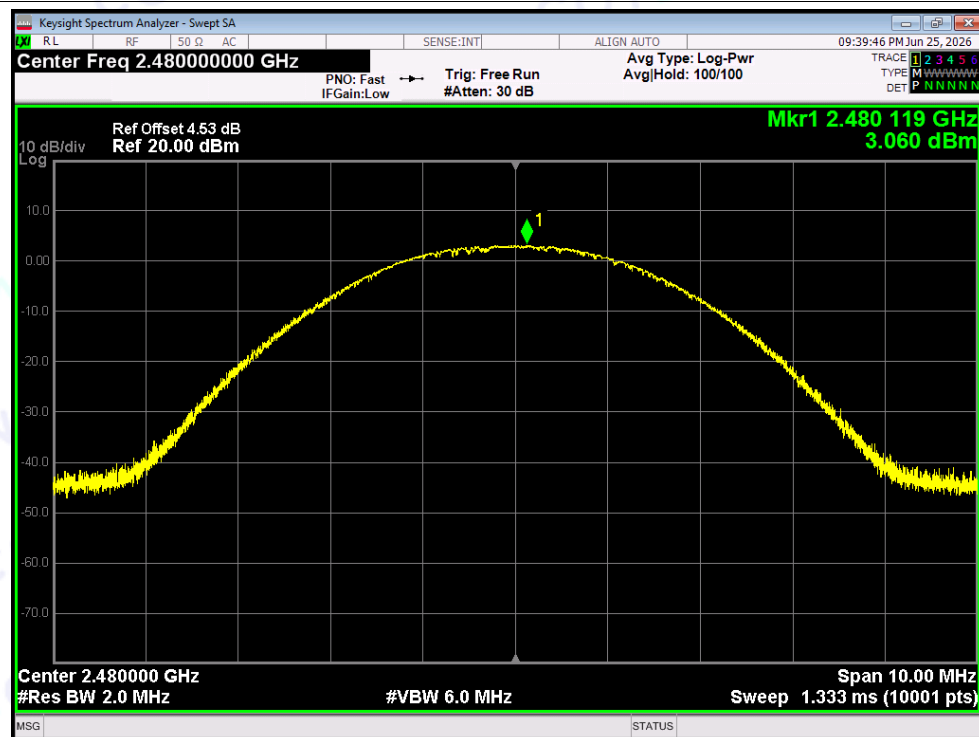
Power NVNT 2-DH5 2402MHz Ant1



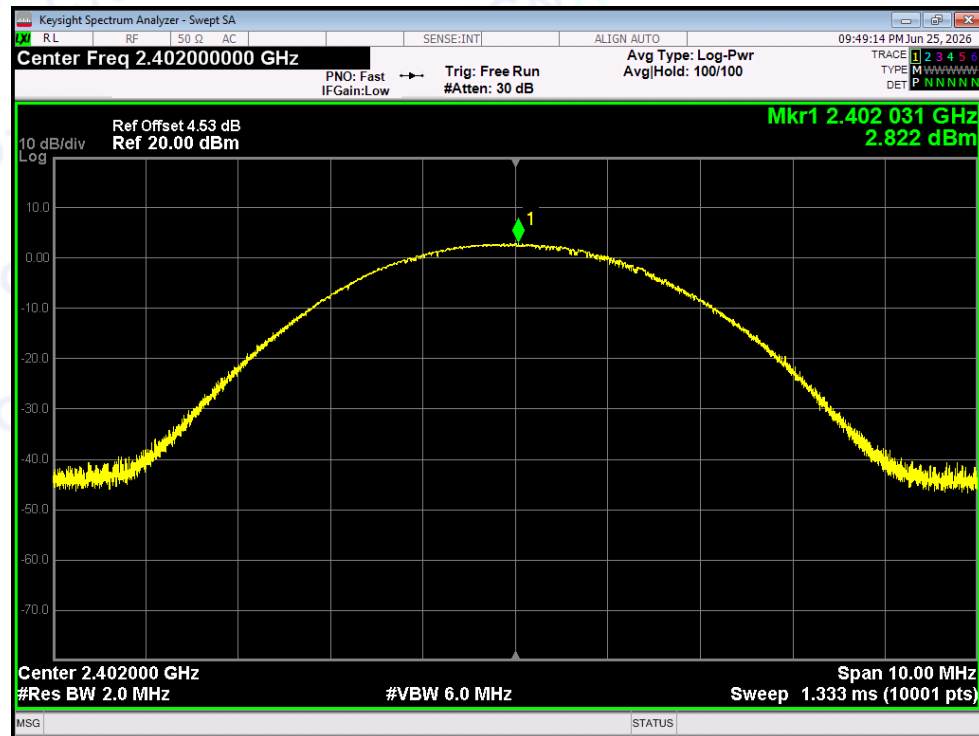
Power NVNT 2-DH5 2441MHz Ant1



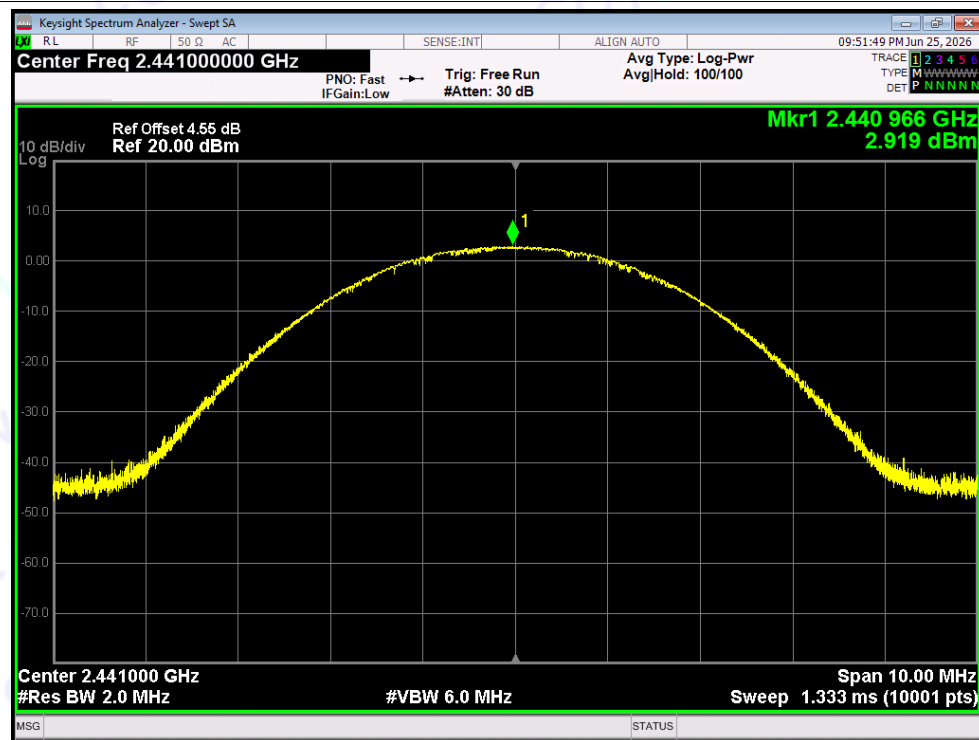
Power NVNT 2-DH5 2480MHz Ant1

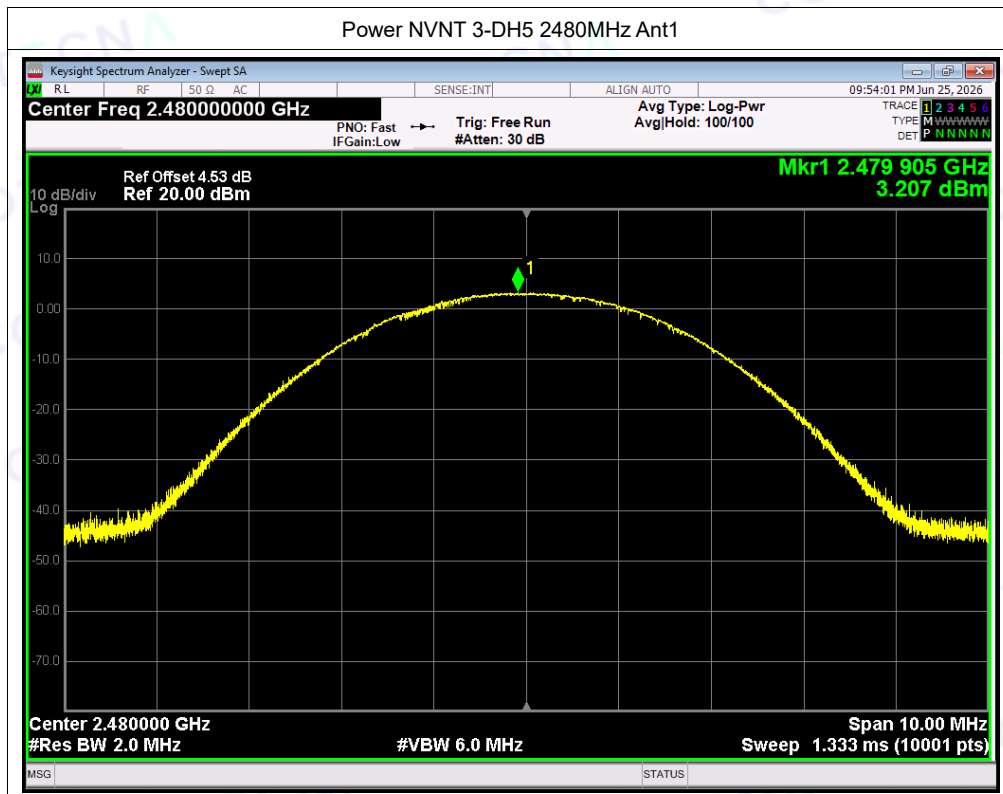


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



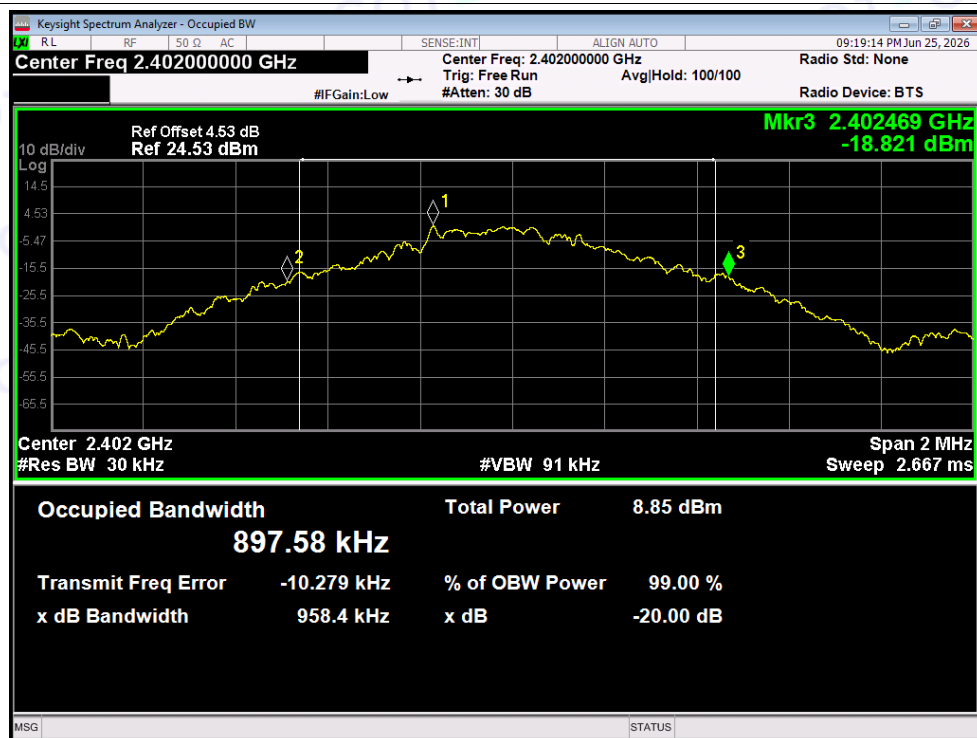


-20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.96	0	Pass
NVNT	1-DH5	2441	Ant1	0.94	0	Pass
NVNT	1-DH5	2480	Ant1	0.95	0	Pass
NVNT	2-DH5	2402	Ant1	1.28	0	Pass
NVNT	2-DH5	2441	Ant1	1.22	0	Pass
NVNT	2-DH5	2480	Ant1	1.28	0	Pass
NVNT	3-DH5	2402	Ant1	1.19	0	Pass
NVNT	3-DH5	2441	Ant1	1.19	0	Pass
NVNT	3-DH5	2480	Ant1	1.24	0	Pass

Test Graphs

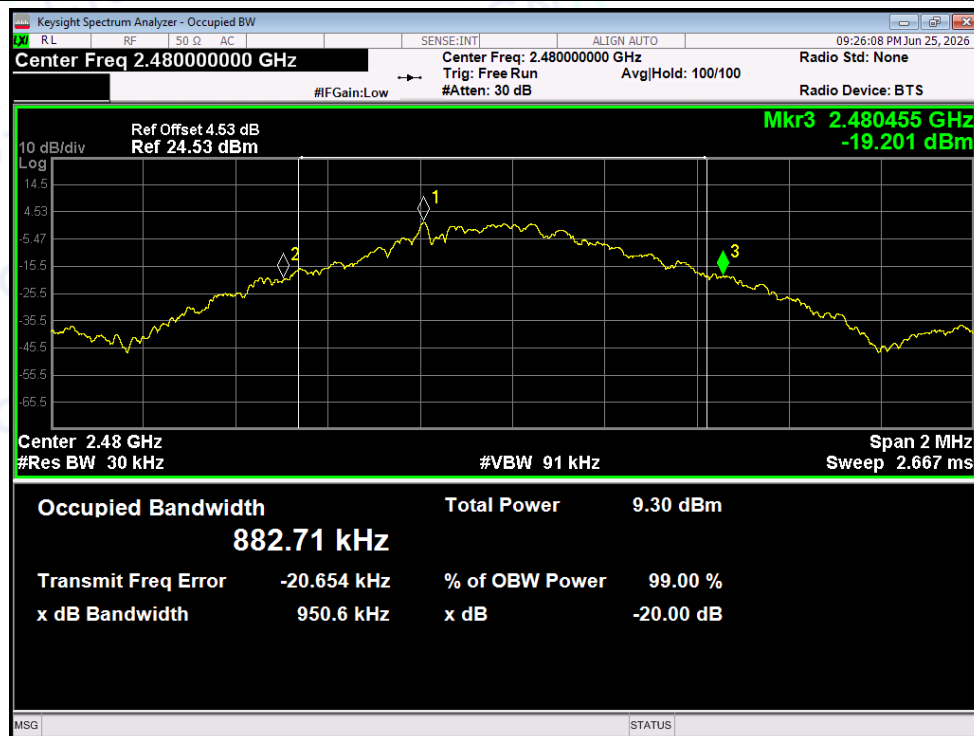
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



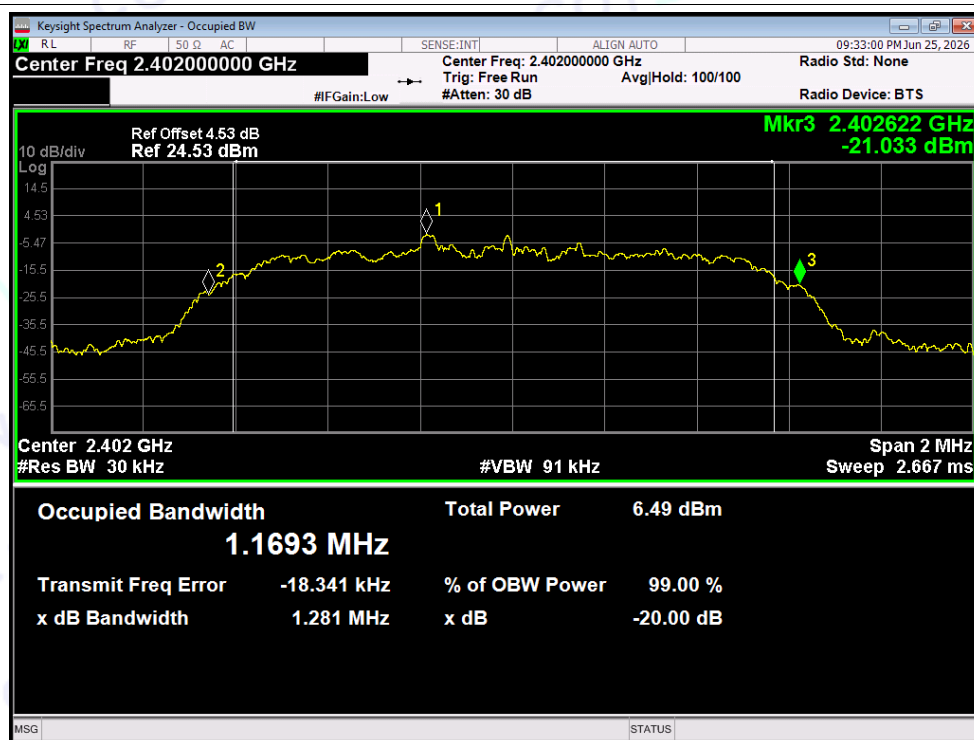
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



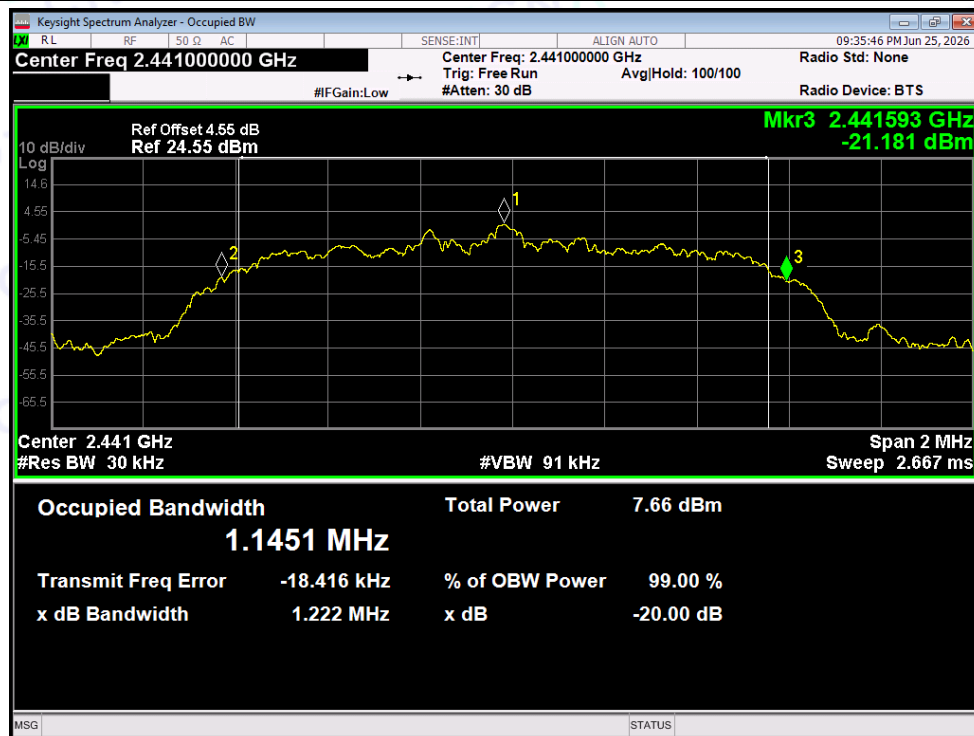
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



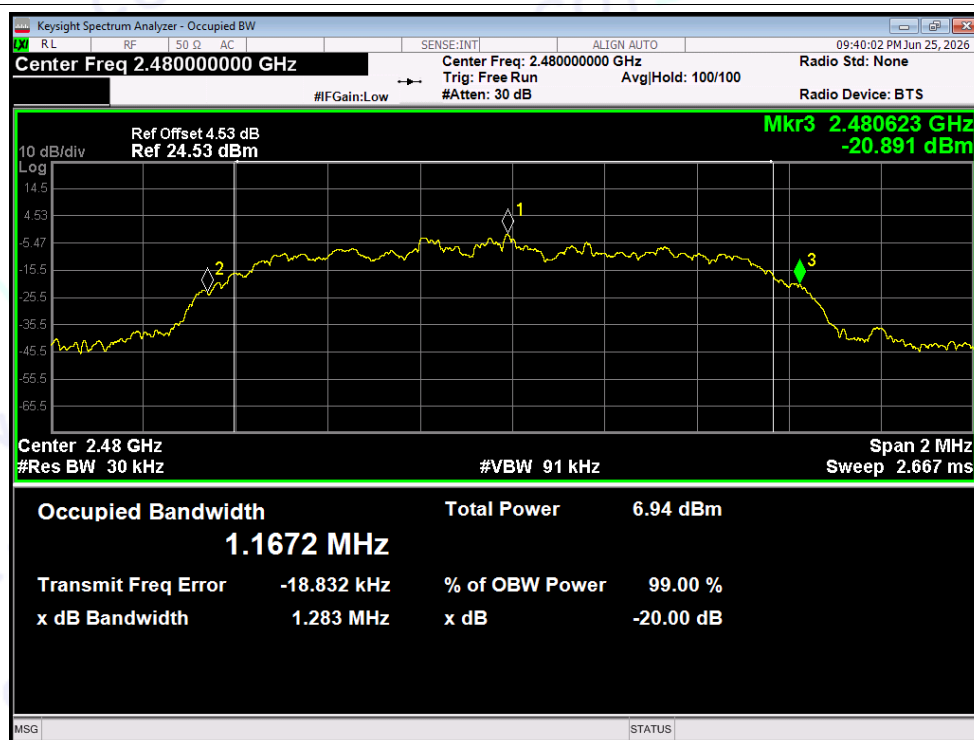
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



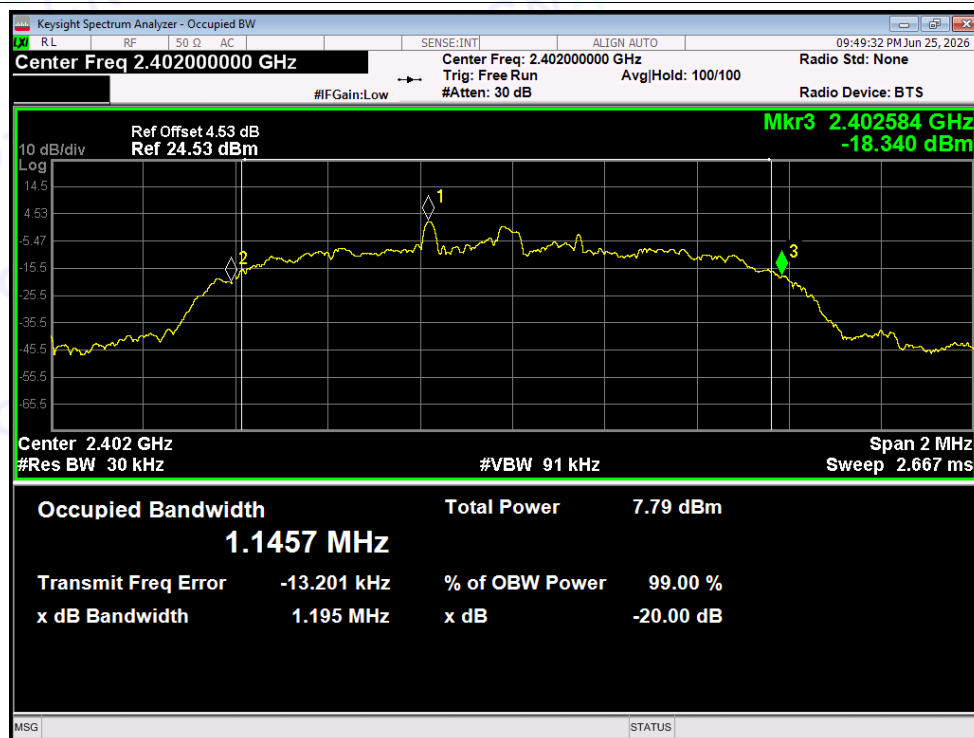
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



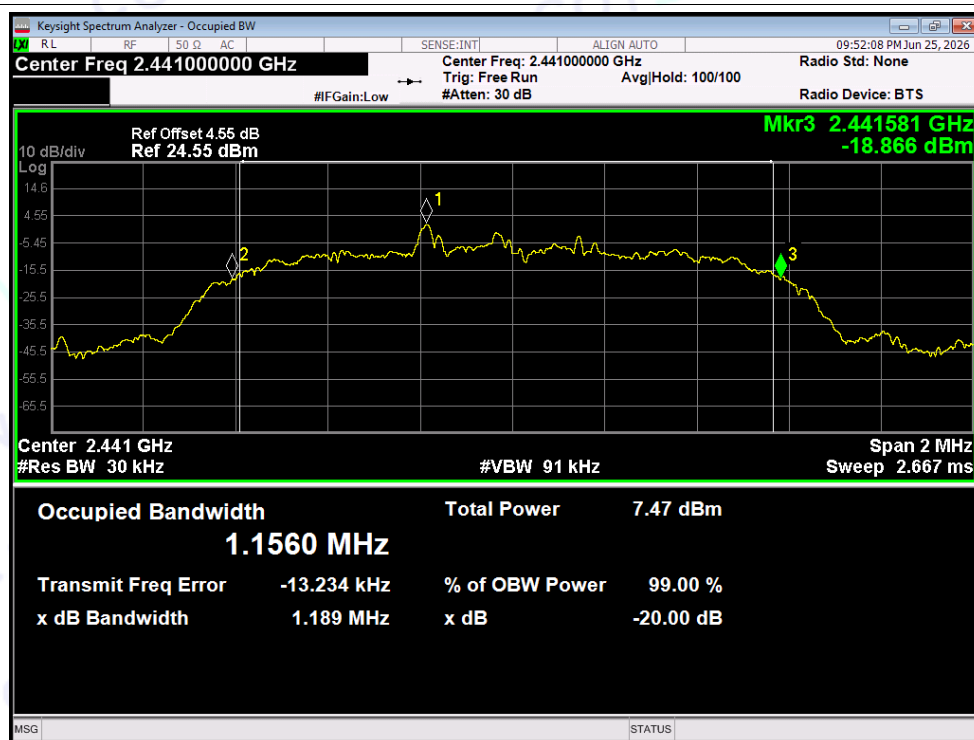
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

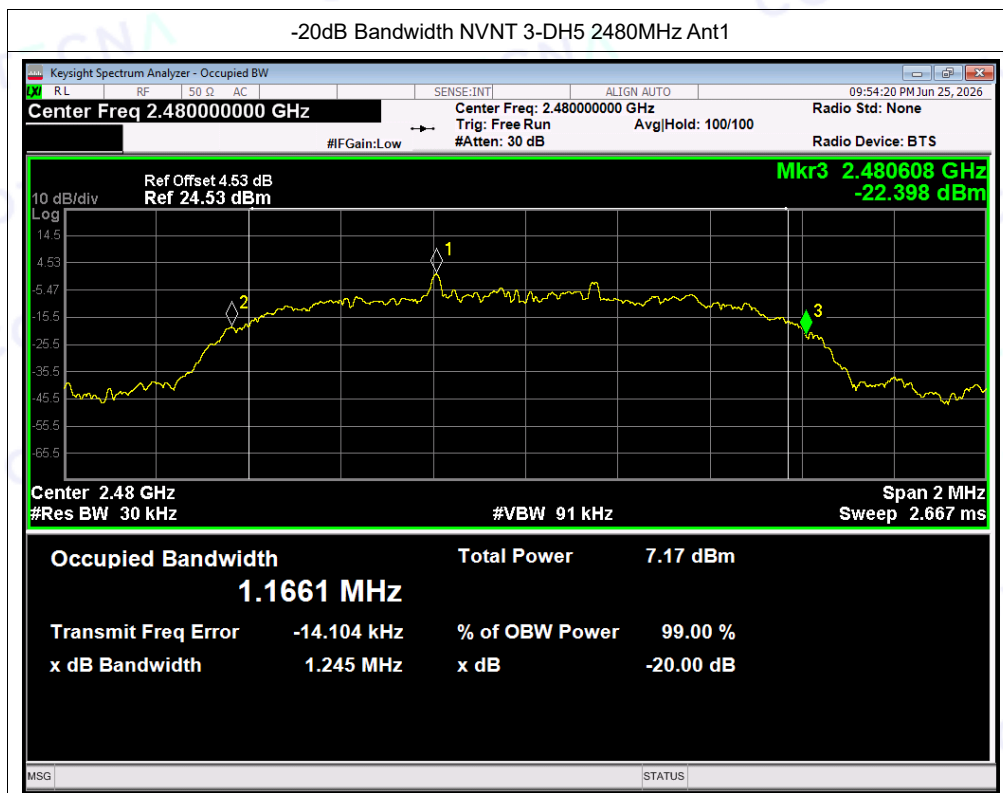


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



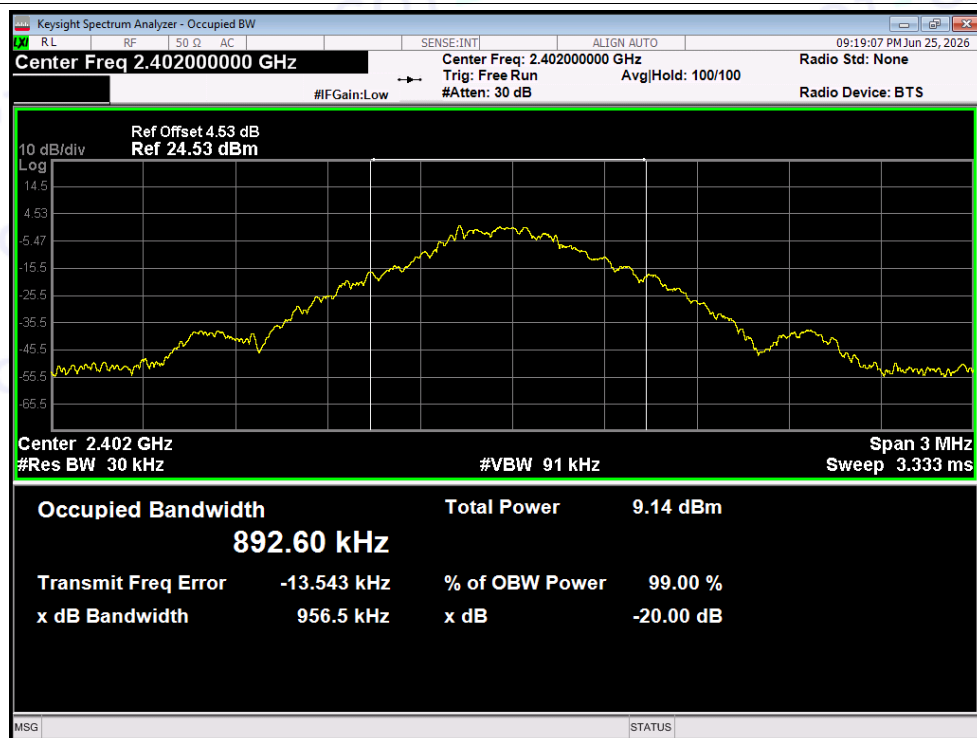


Occupied Channel Bandwidth

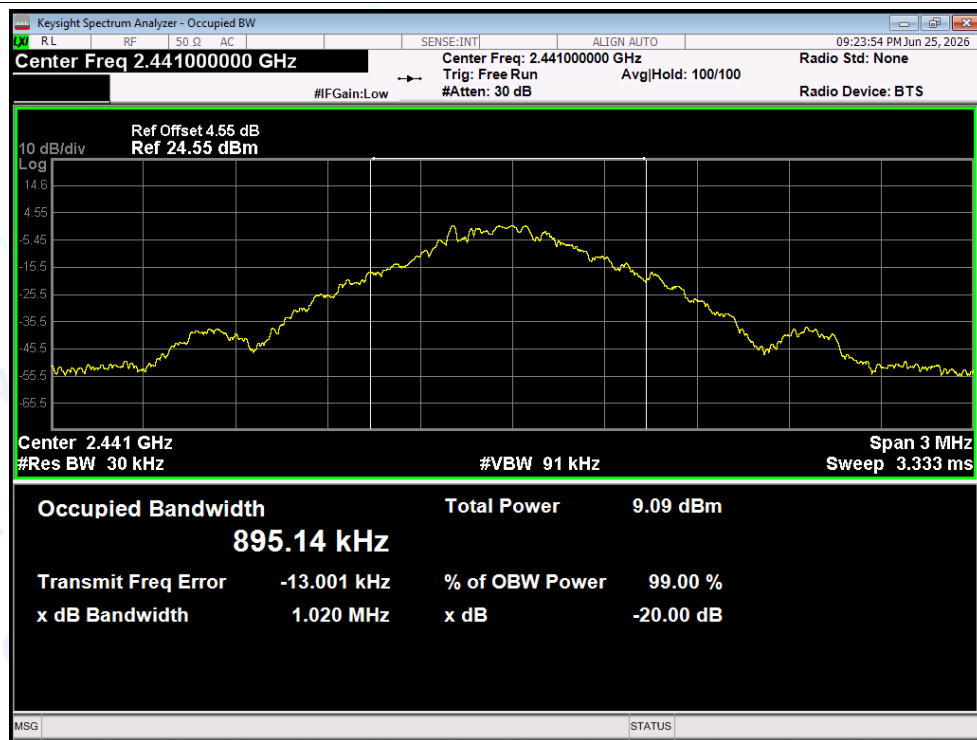
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.893
NVNT	1-DH5	2441	Ant1	0.895
NVNT	1-DH5	2480	Ant1	0.9
NVNT	2-DH5	2402	Ant1	1.172
NVNT	2-DH5	2441	Ant1	1.166
NVNT	2-DH5	2480	Ant1	1.173
NVNT	3-DH5	2402	Ant1	1.164
NVNT	3-DH5	2441	Ant1	1.182
NVNT	3-DH5	2480	Ant1	1.141

Test Graphs

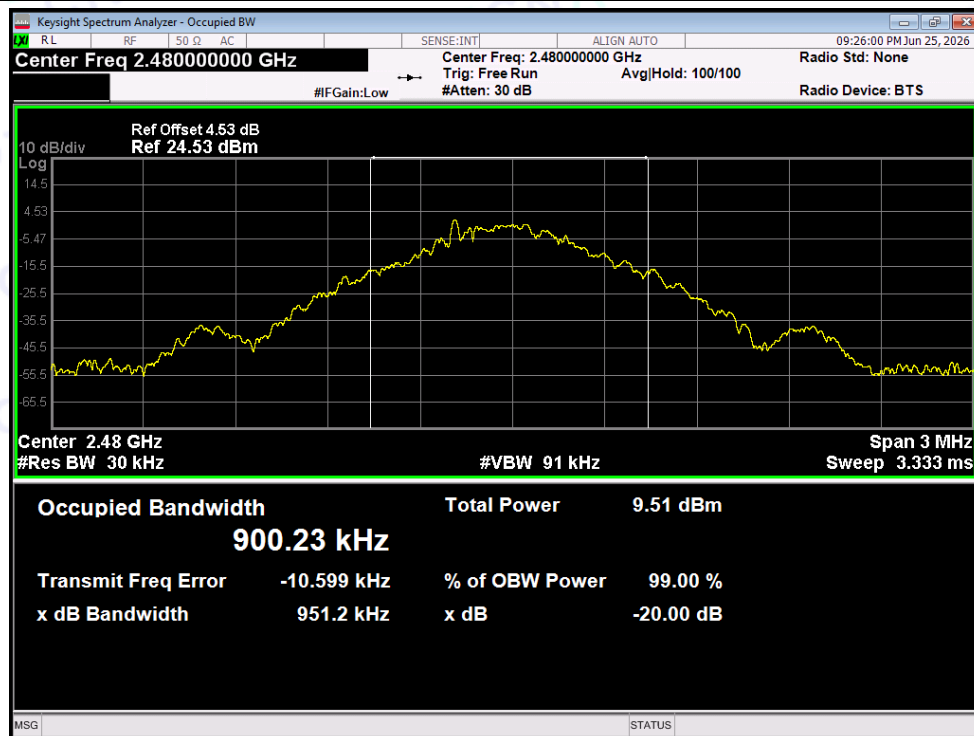
OBW NVNT 1-DH5 2402MHz Ant1



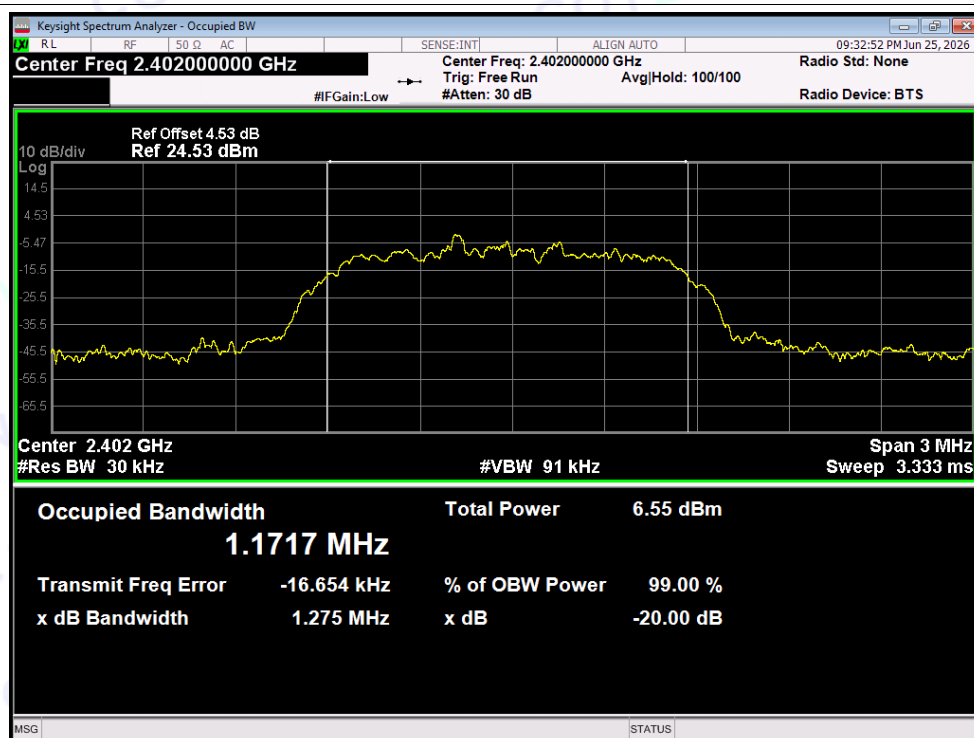
OBW NVNT 1-DH5 2441MHz Ant1



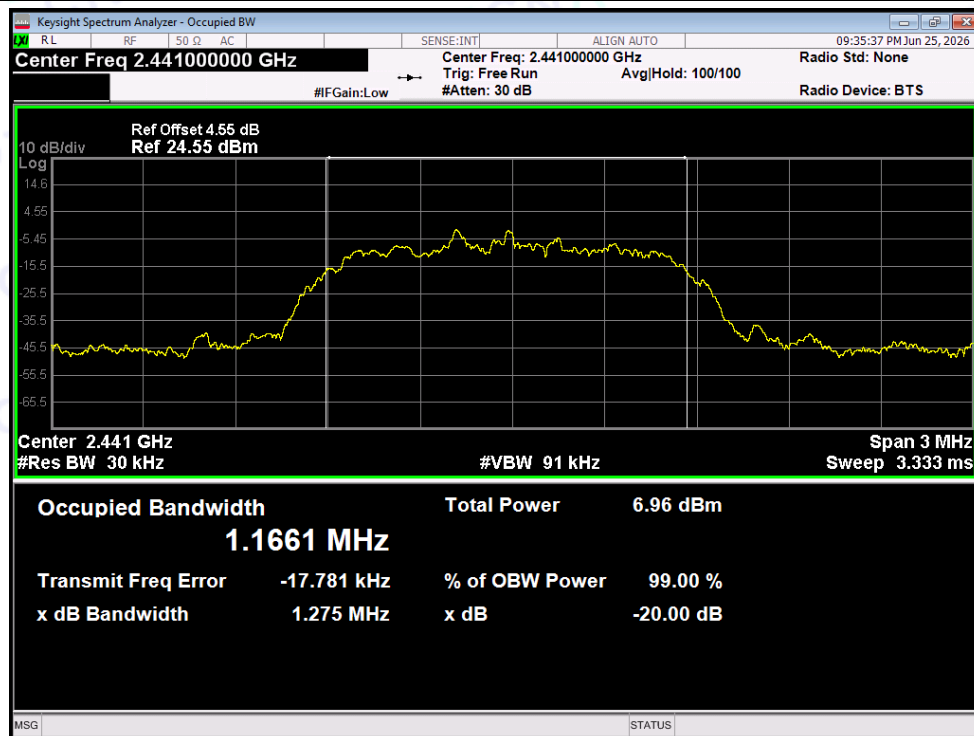
OBW NVNT 1-DH5 2480MHz Ant1



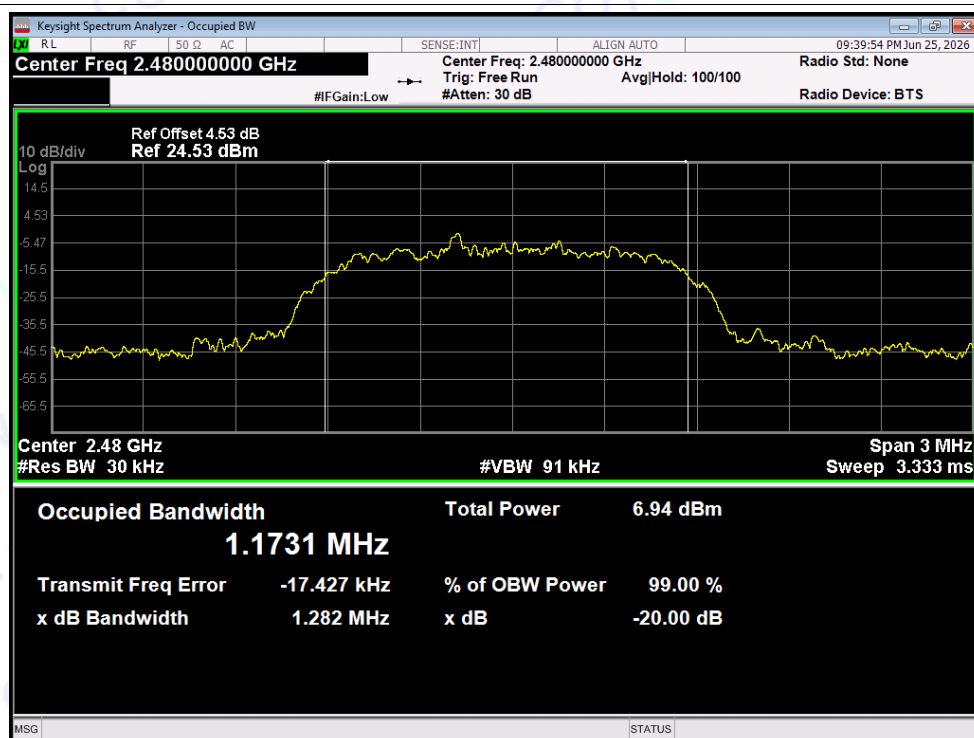
OBW NVNT 2-DH5 2402MHz Ant1



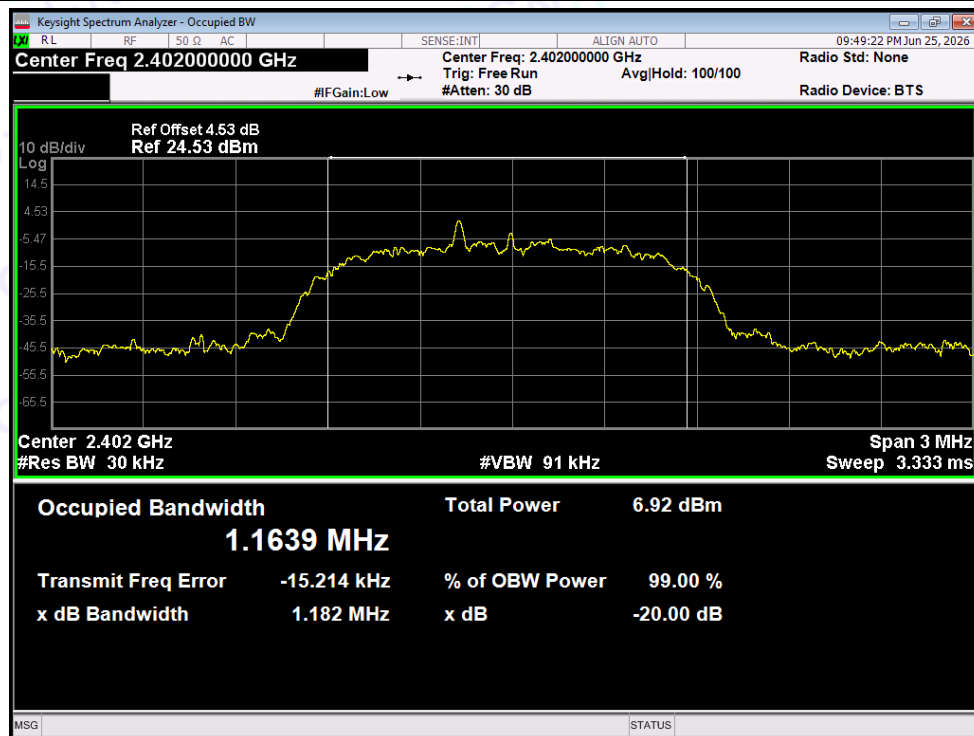
OBW NVNT 2-DH5 2441MHz Ant1



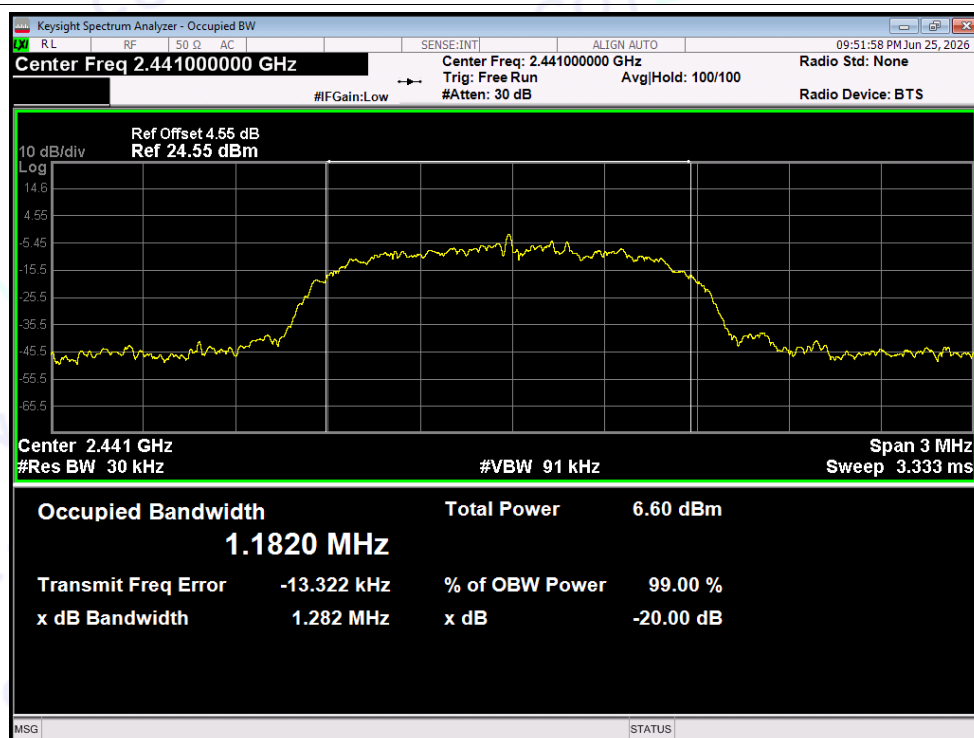
OBW NVNT 2-DH5 2480MHz Ant1

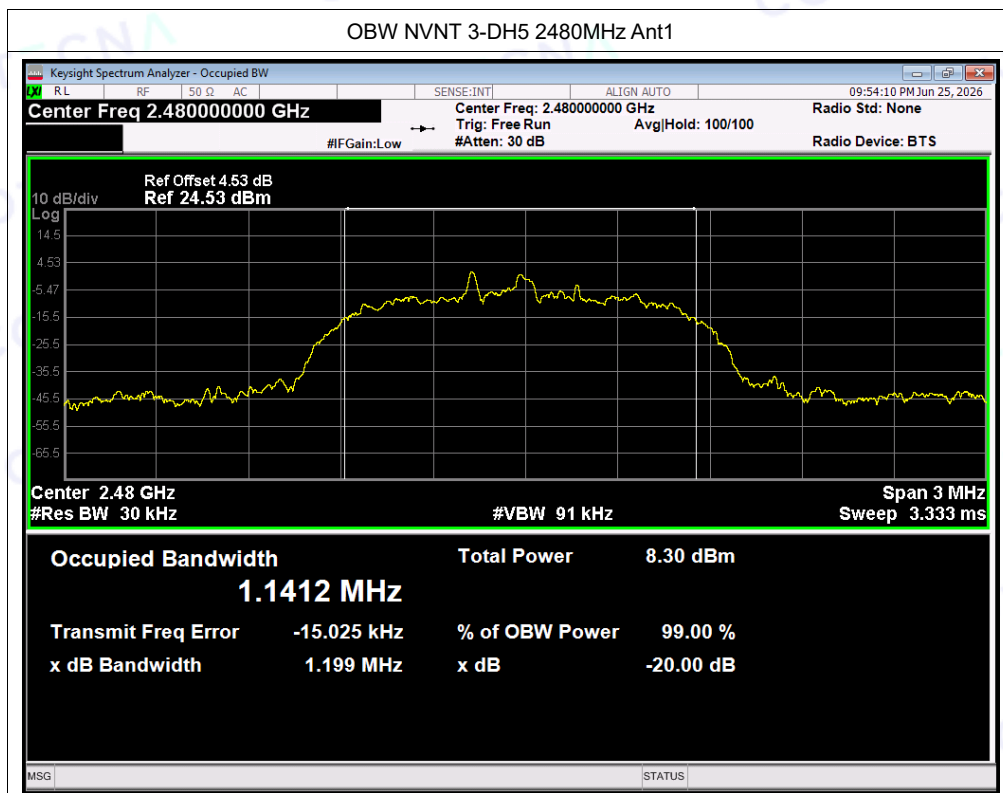


OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



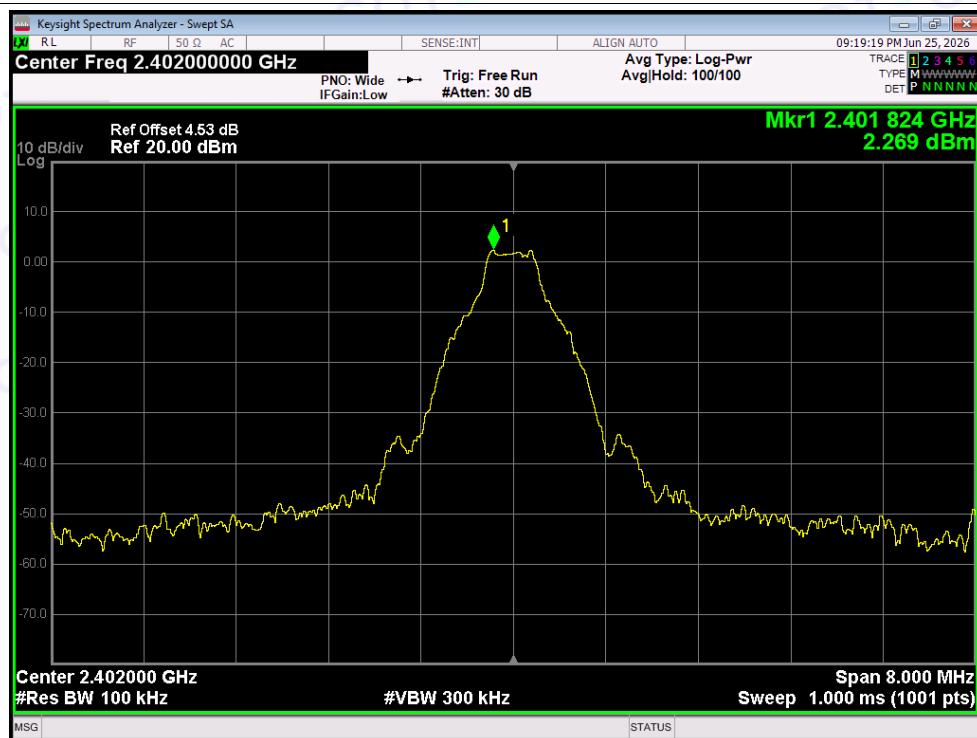


Band Edge

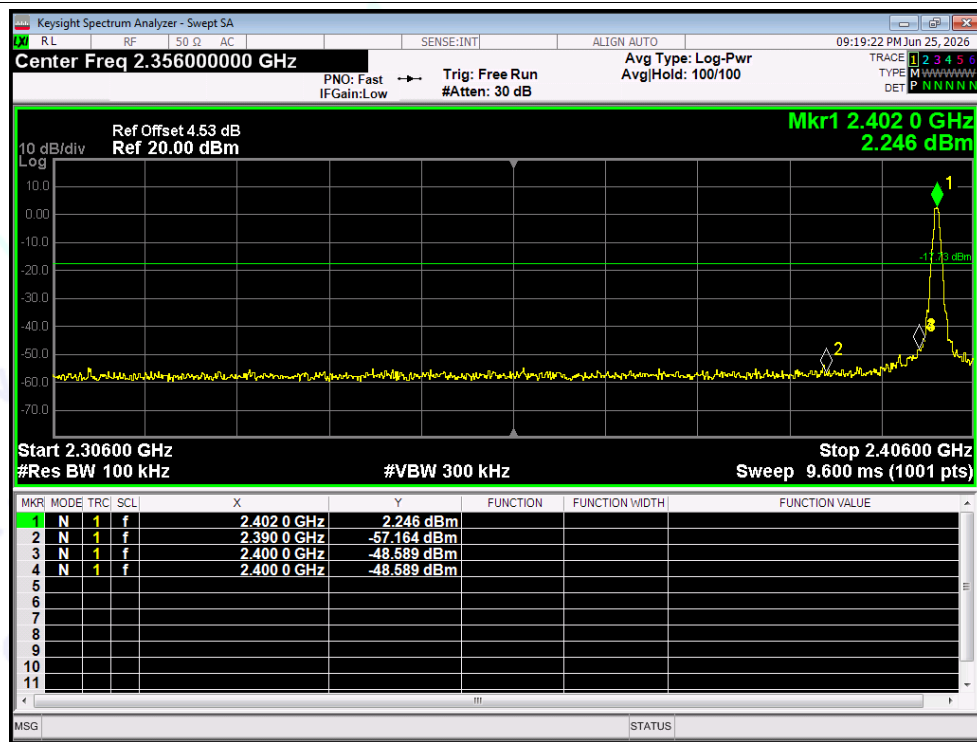
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-50.86	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-53.97	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-52.02	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-56.35	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-52.54	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-54.21	-20	Pass

Test Graphs

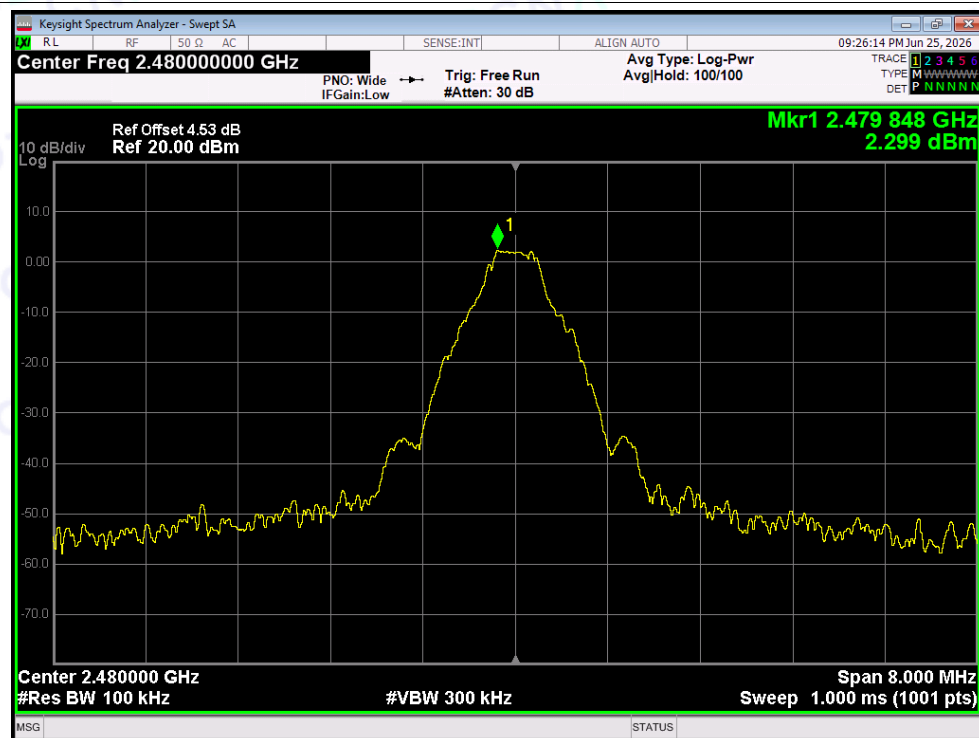
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



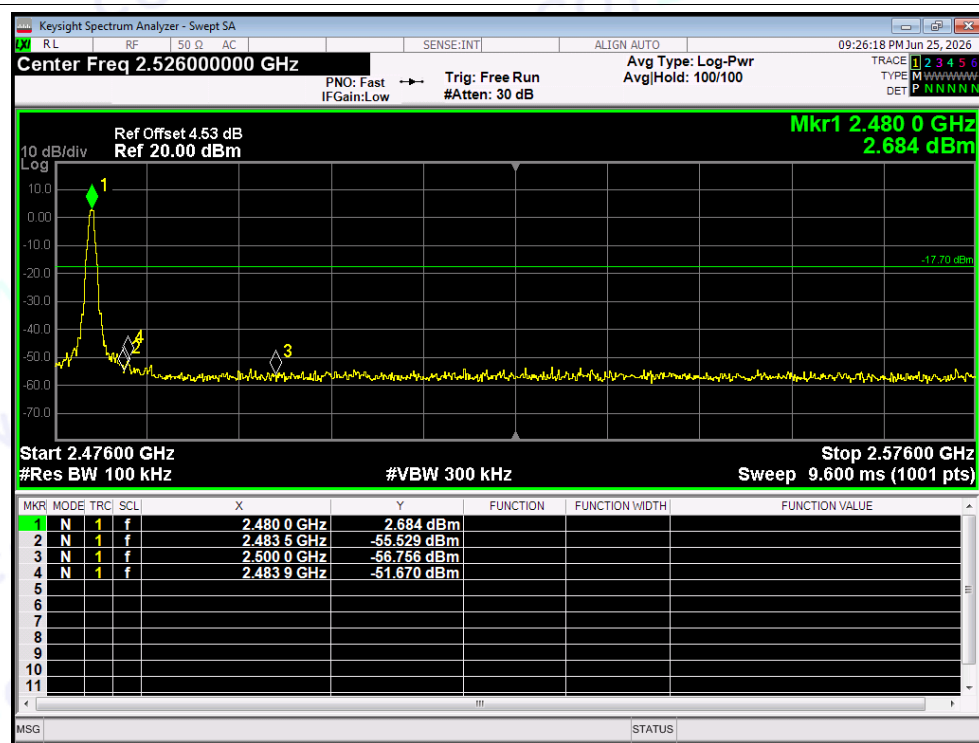
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



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



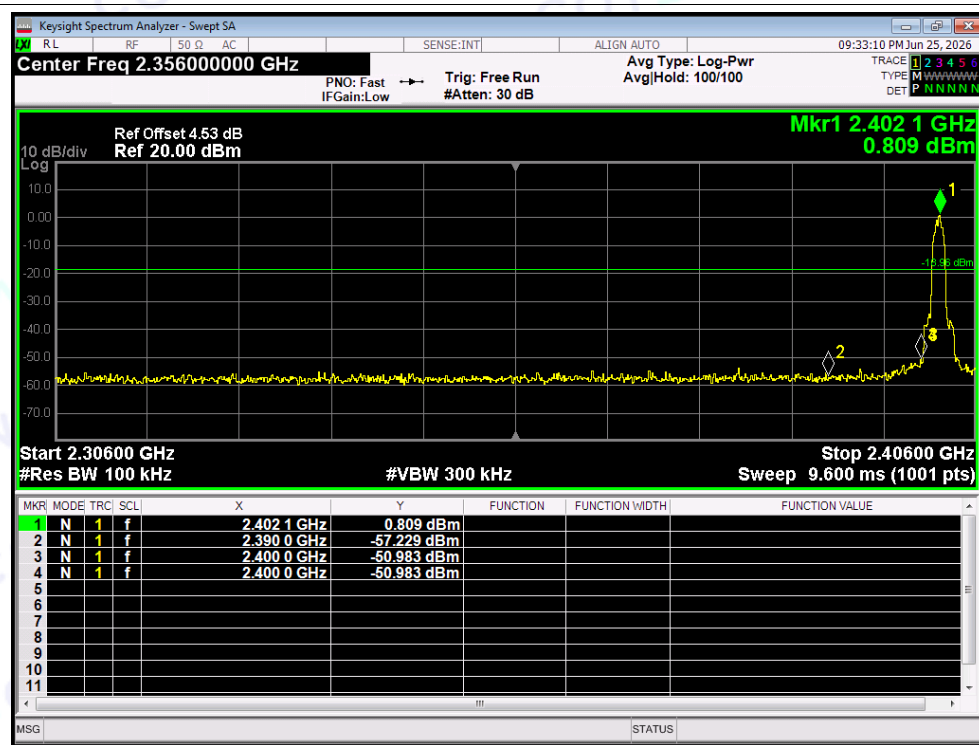
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



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



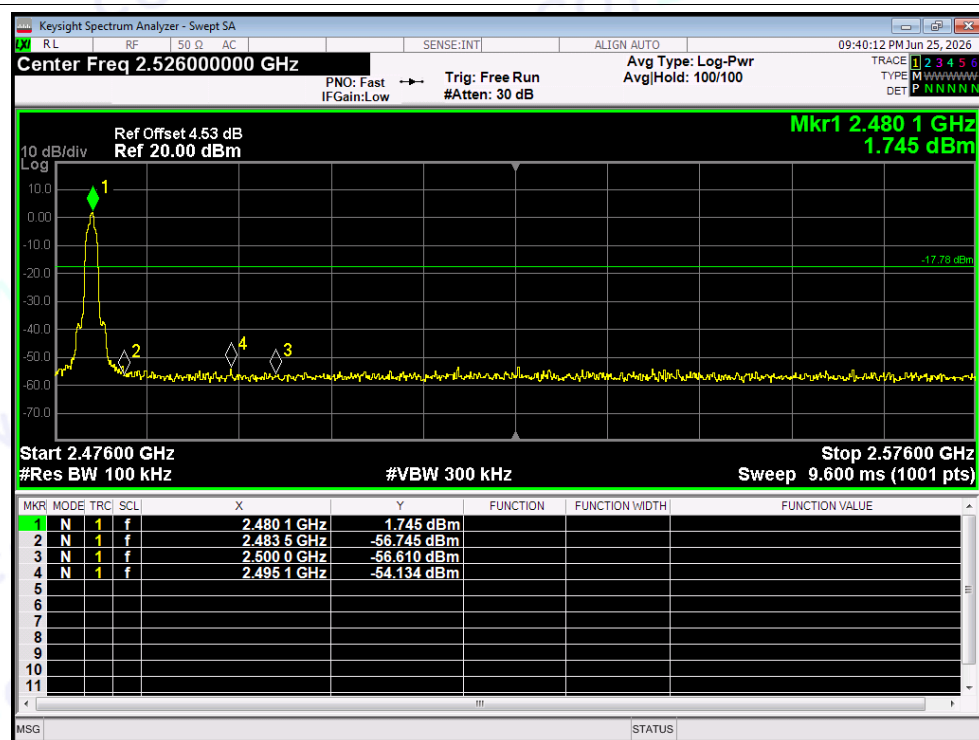
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



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



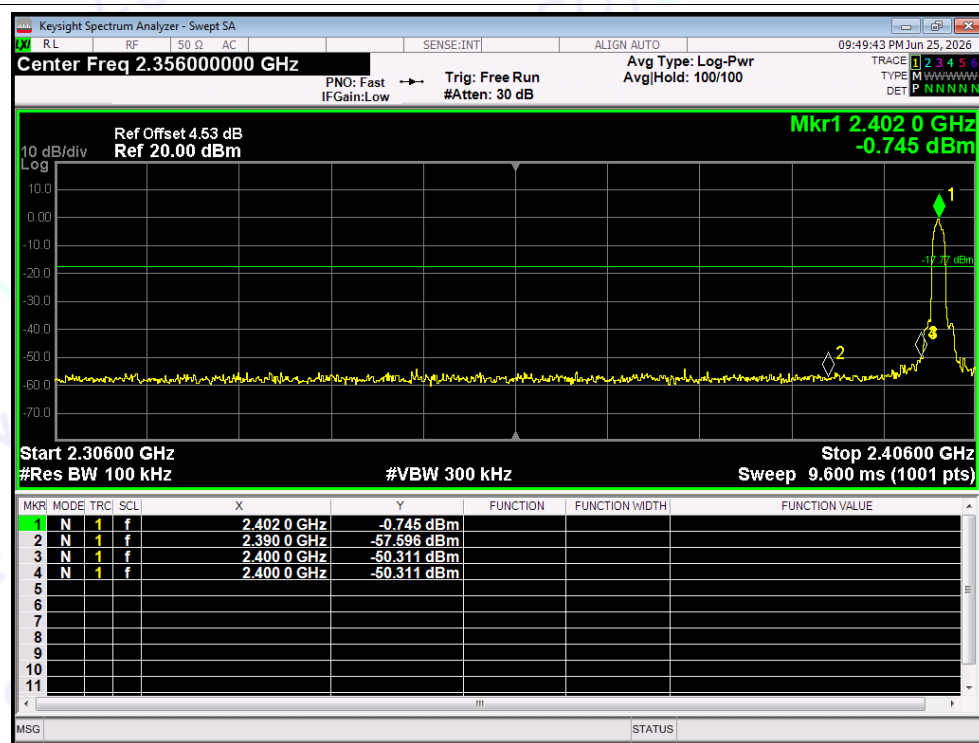
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



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



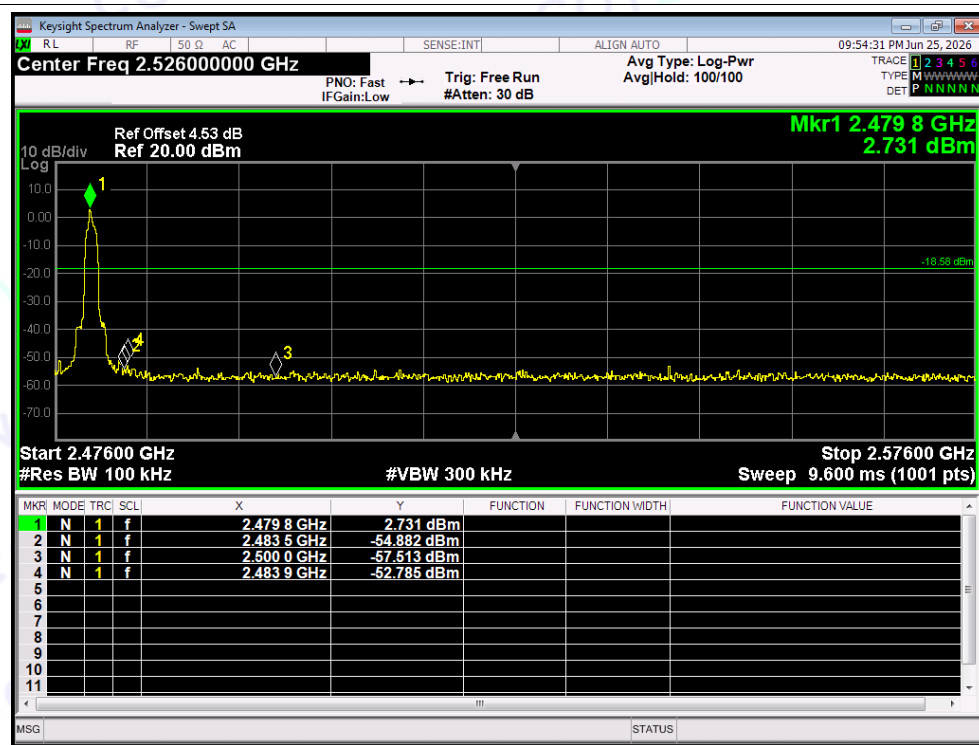
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



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



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



Band Edge(Hopping)

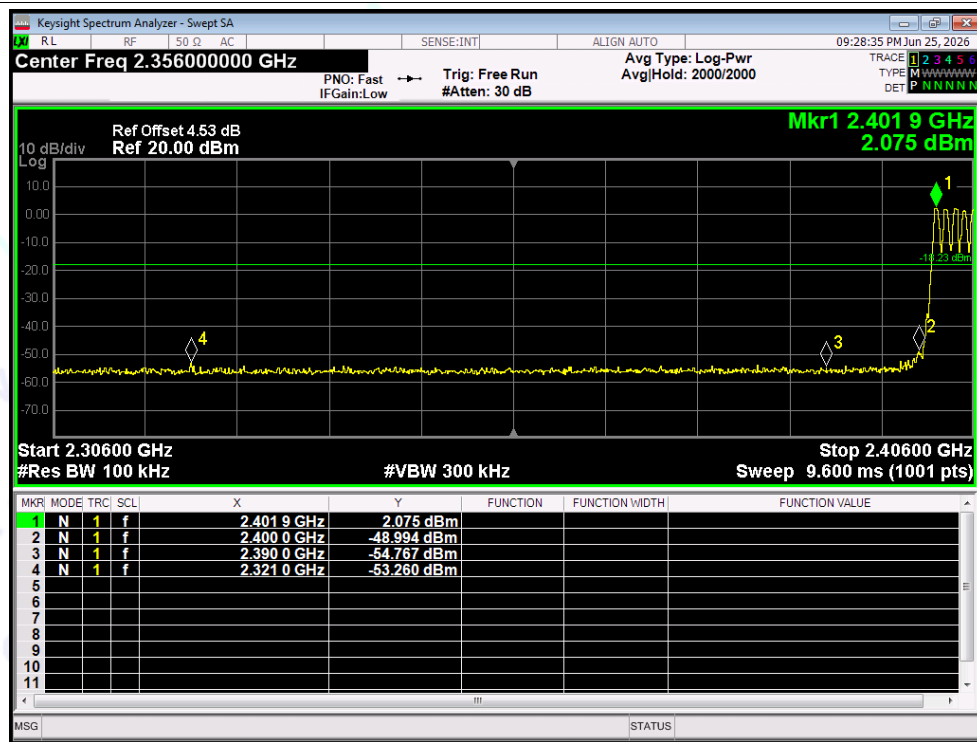
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-55.03	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-55.88	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-54.6	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-54.79	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-55.53	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-54.36	-20	Pass

Test Graphs

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



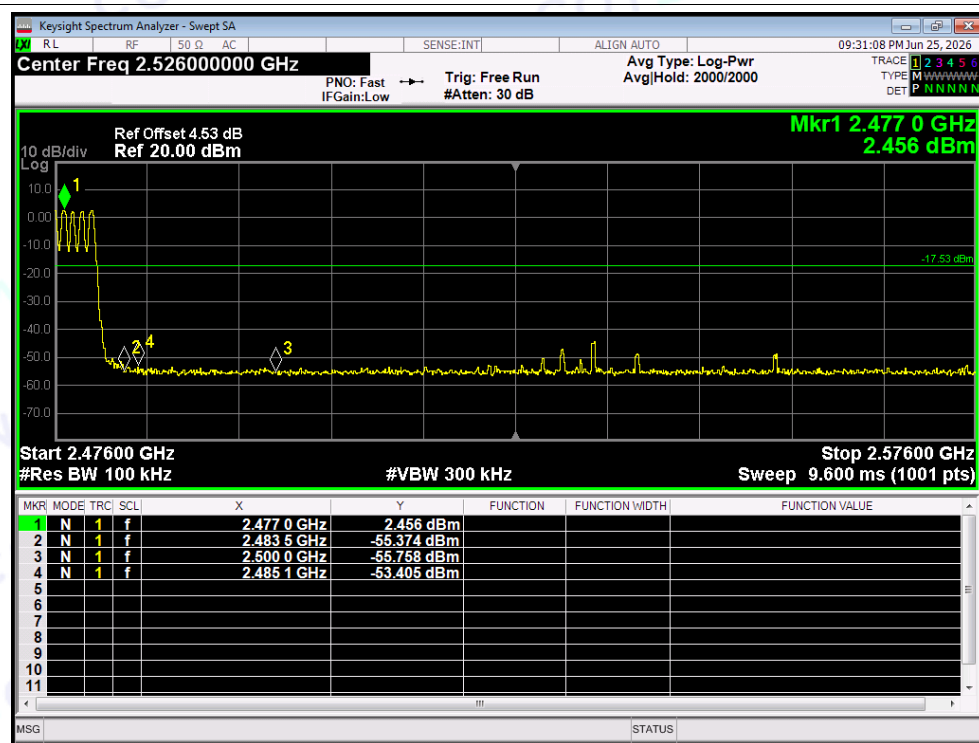
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



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



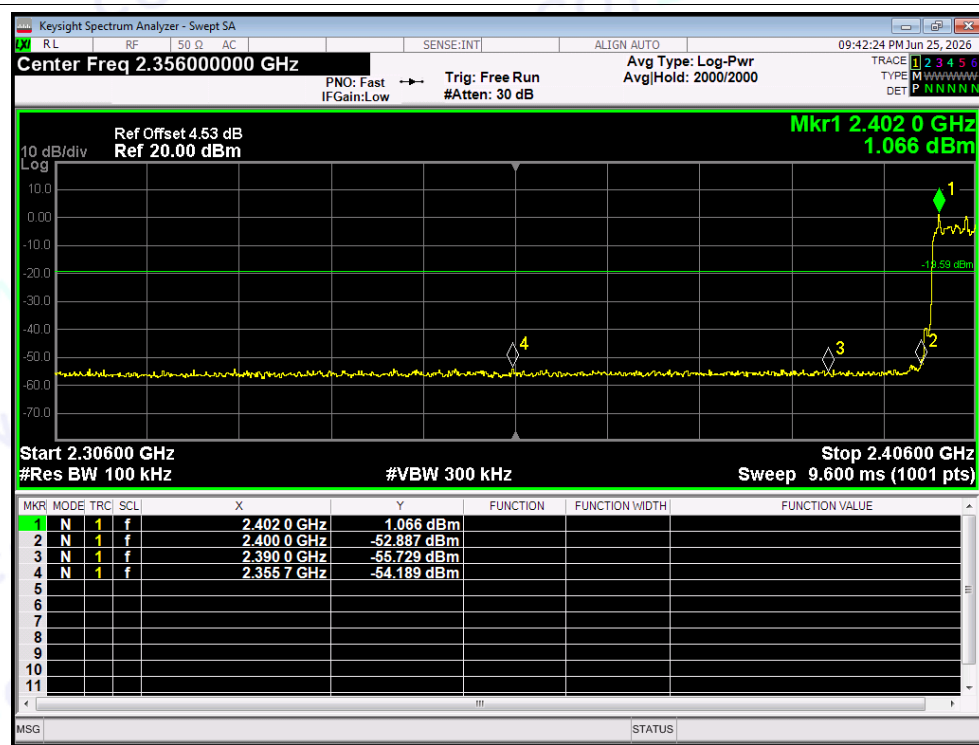
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



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



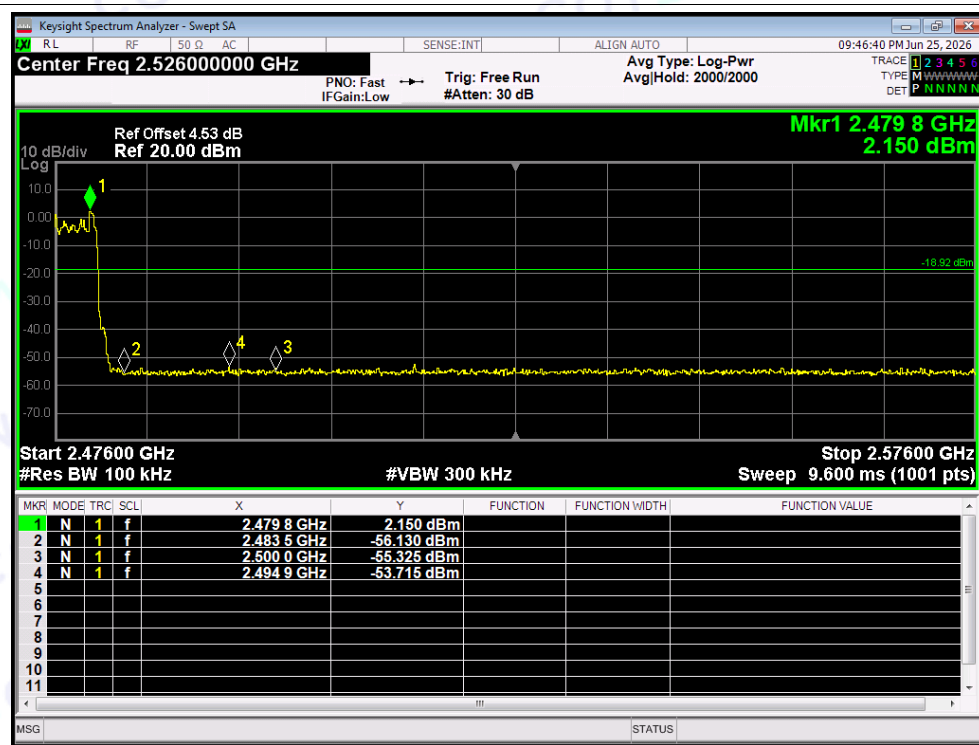
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



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



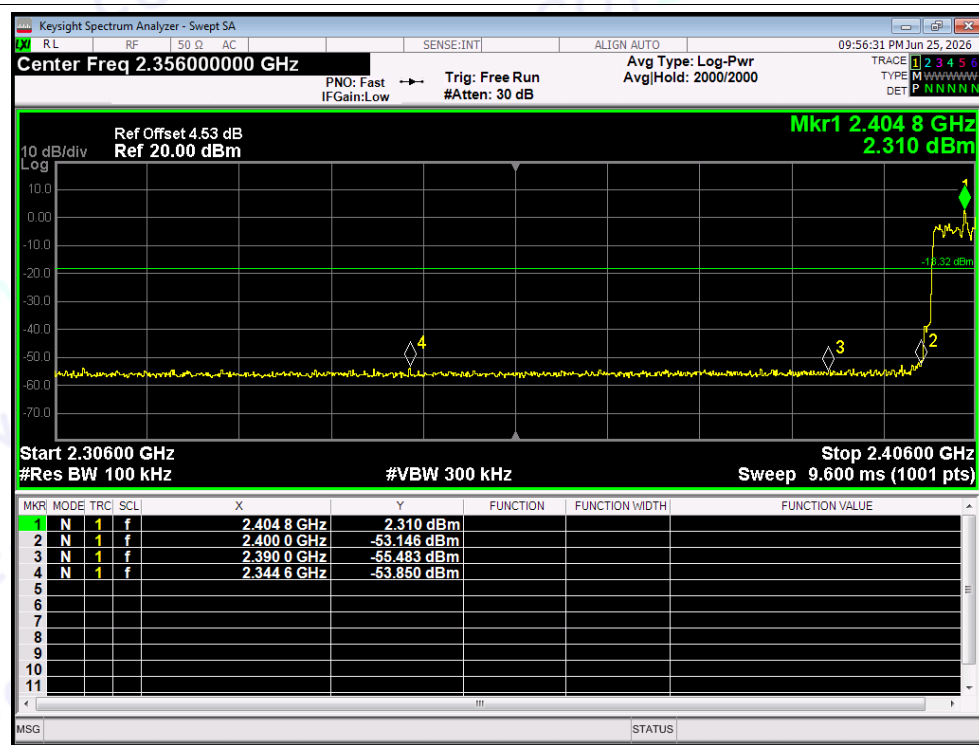
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



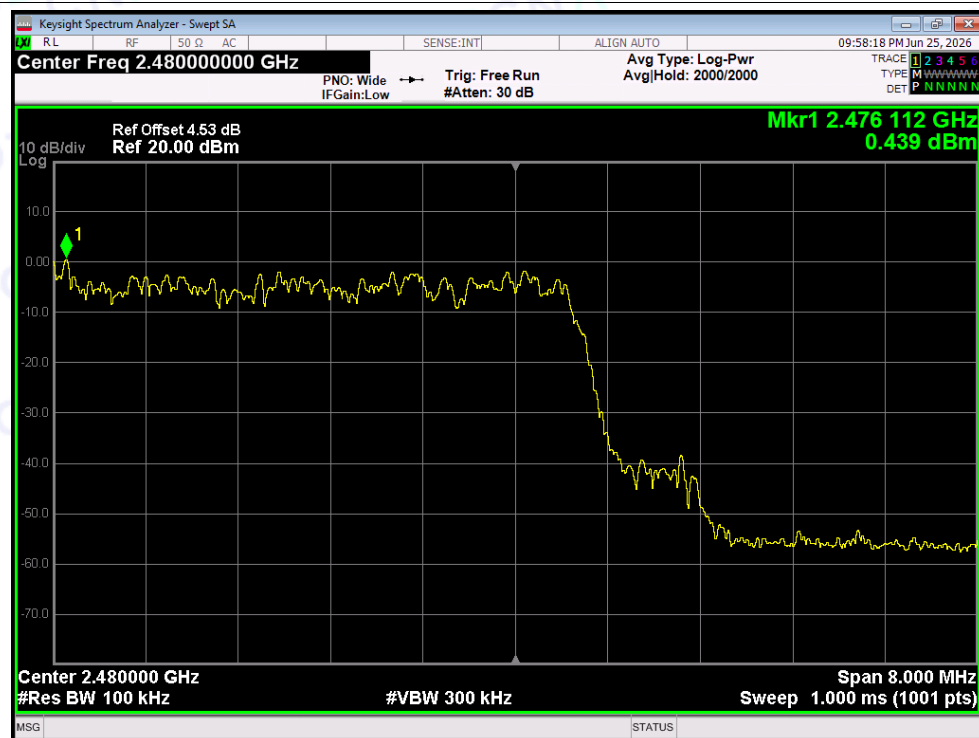
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



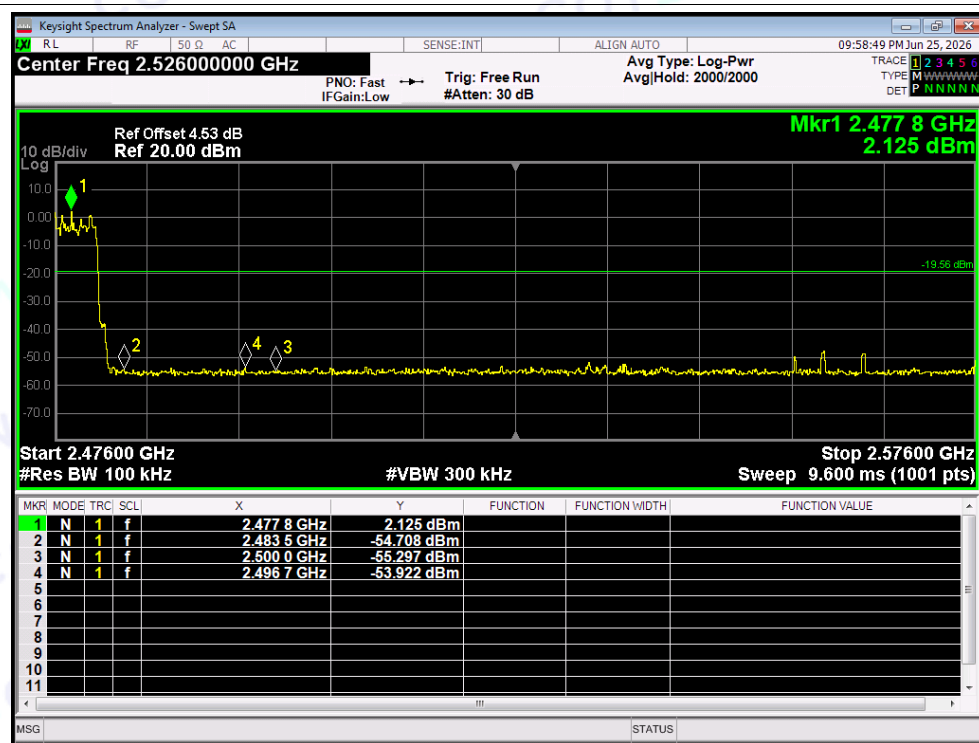
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



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



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



Conducted RF Spurious Emission

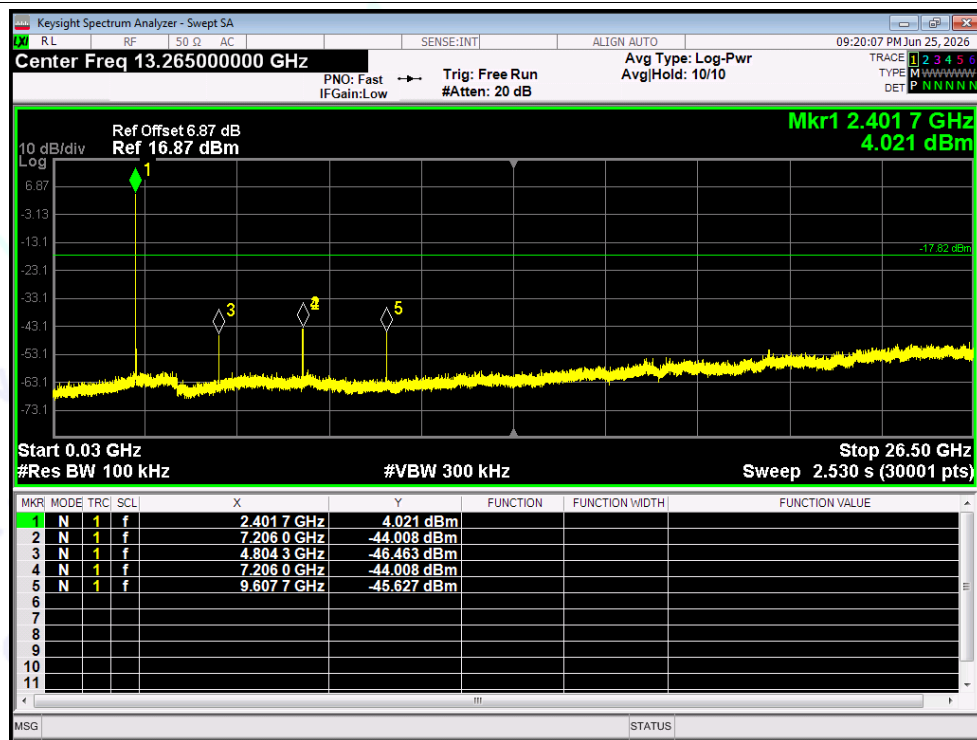
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-46.19	-20	Pass
NVNT	1-DH5	2441	Ant1	-46.05	-20	Pass
NVNT	1-DH5	2480	Ant1	-45.15	-20	Pass
NVNT	2-DH5	2402	Ant1	-49.36	-20	Pass
NVNT	2-DH5	2441	Ant1	-47.15	-20	Pass
NVNT	2-DH5	2480	Ant1	-45.61	-20	Pass
NVNT	3-DH5	2402	Ant1	-47.57	-20	Pass
NVNT	3-DH5	2441	Ant1	-46.84	-20	Pass
NVNT	3-DH5	2480	Ant1	-45.82	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



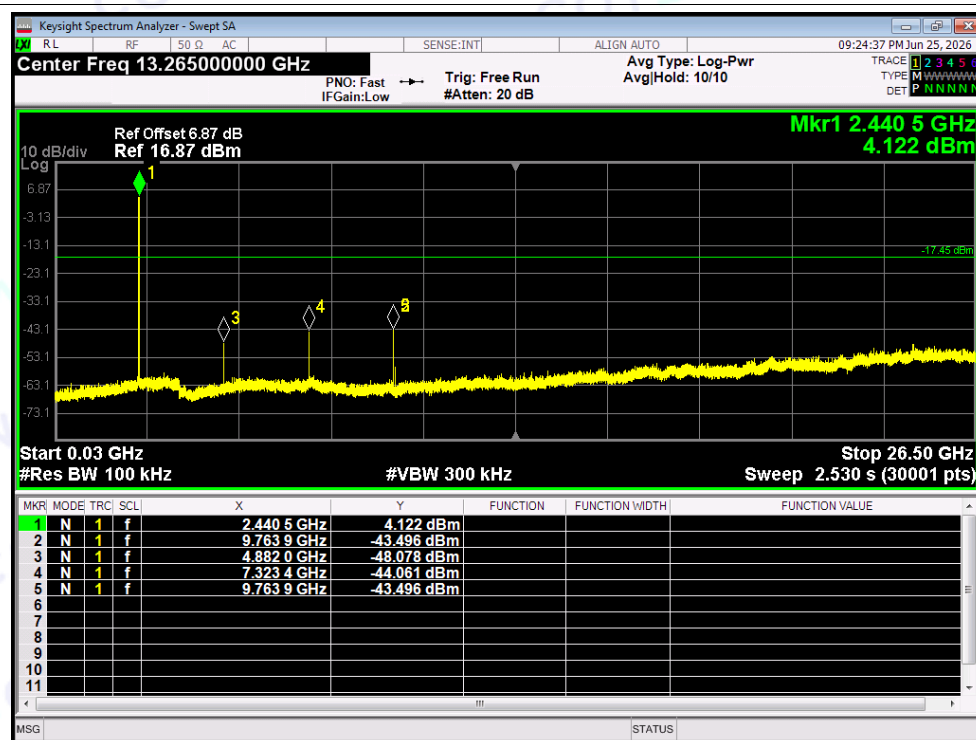
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



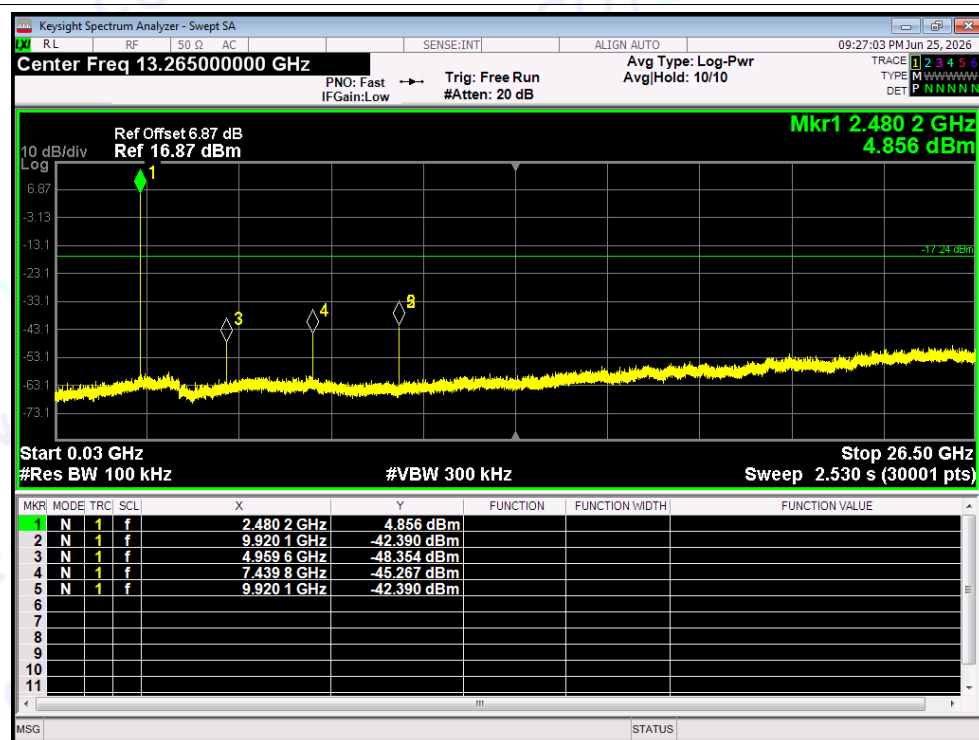
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



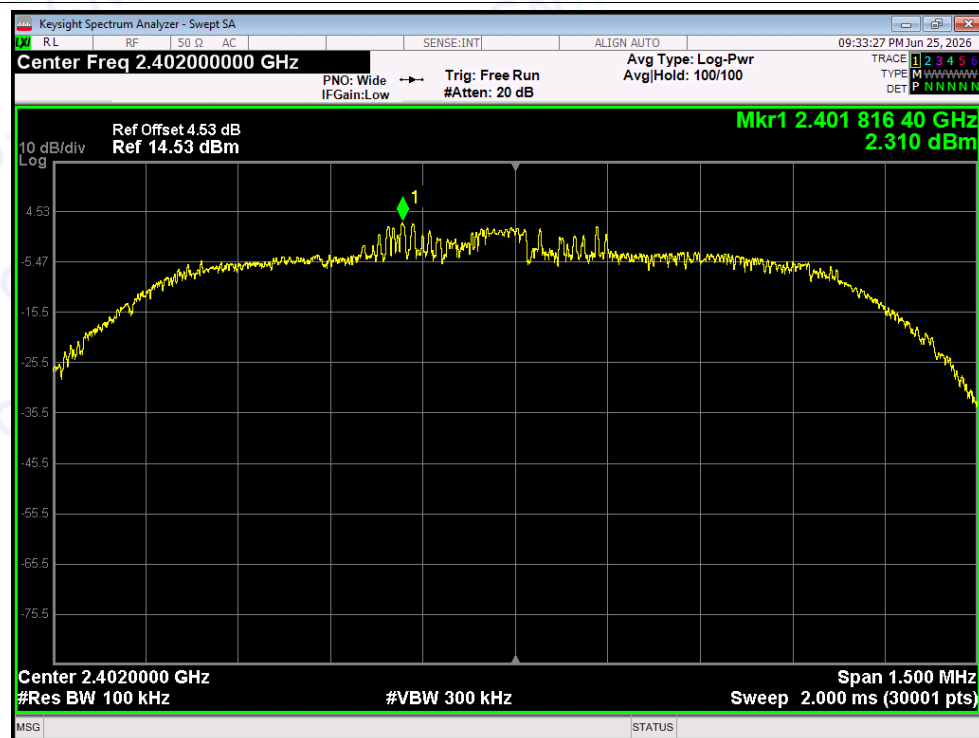
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



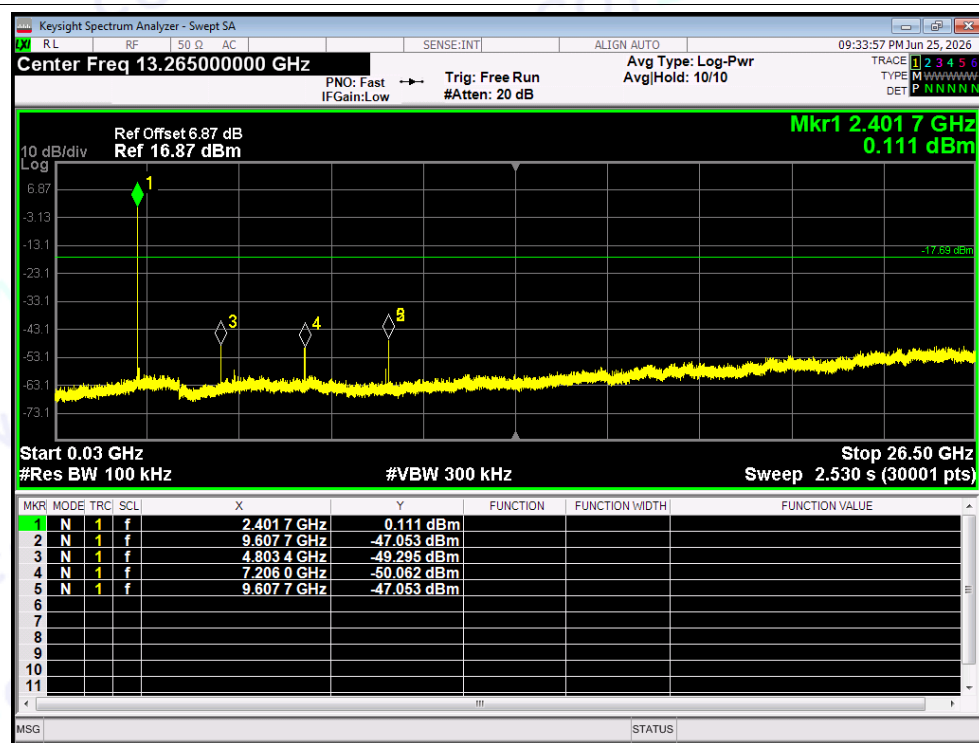
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



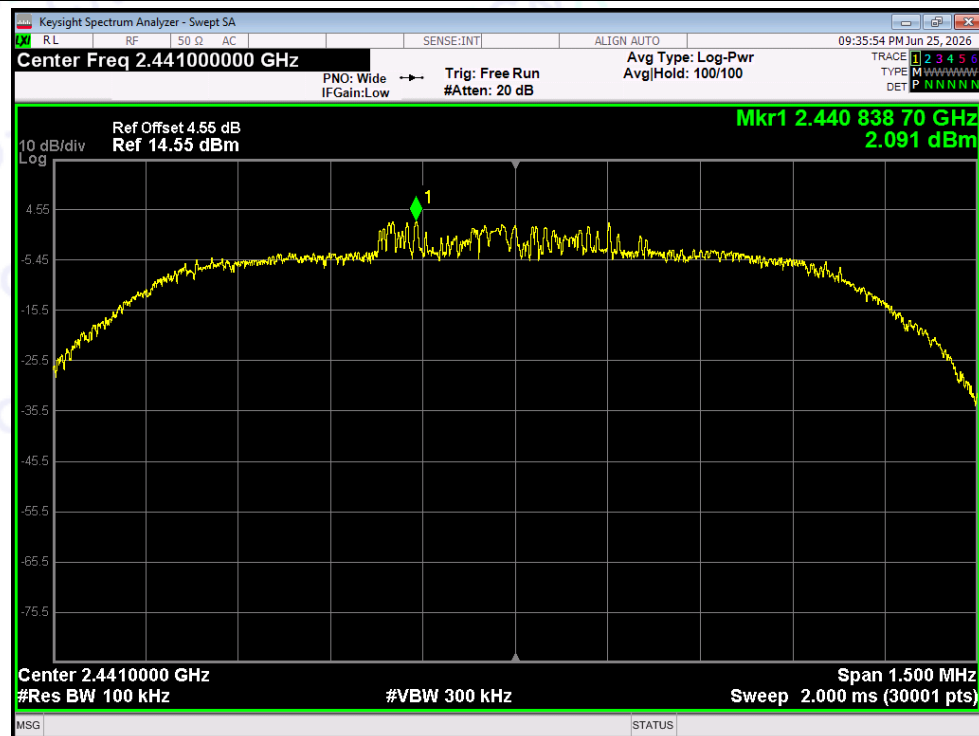
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



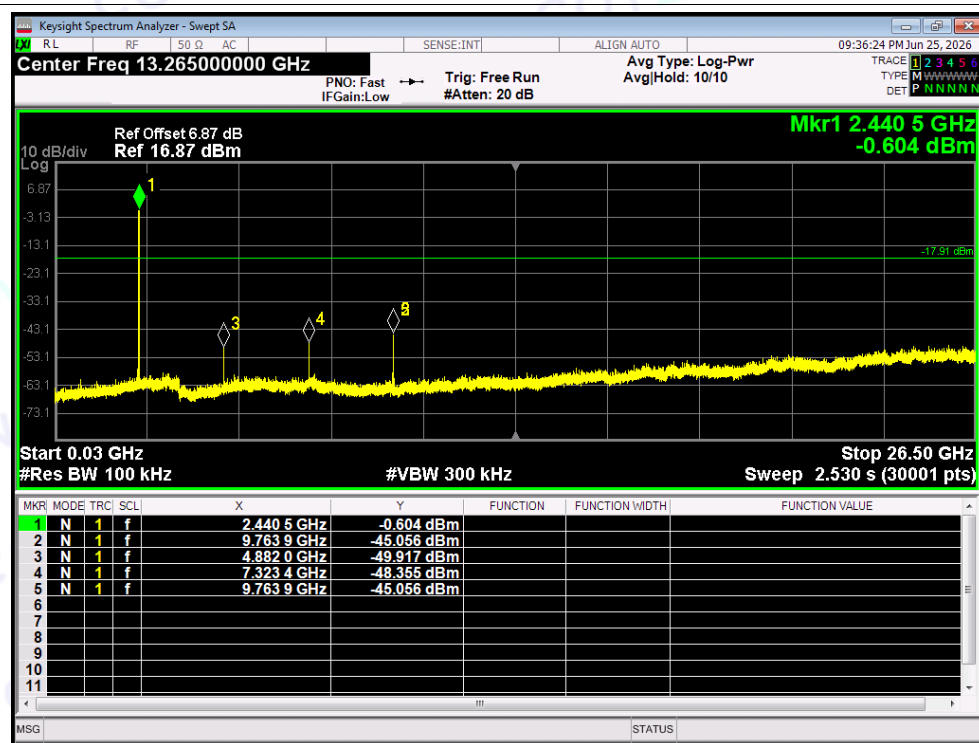
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



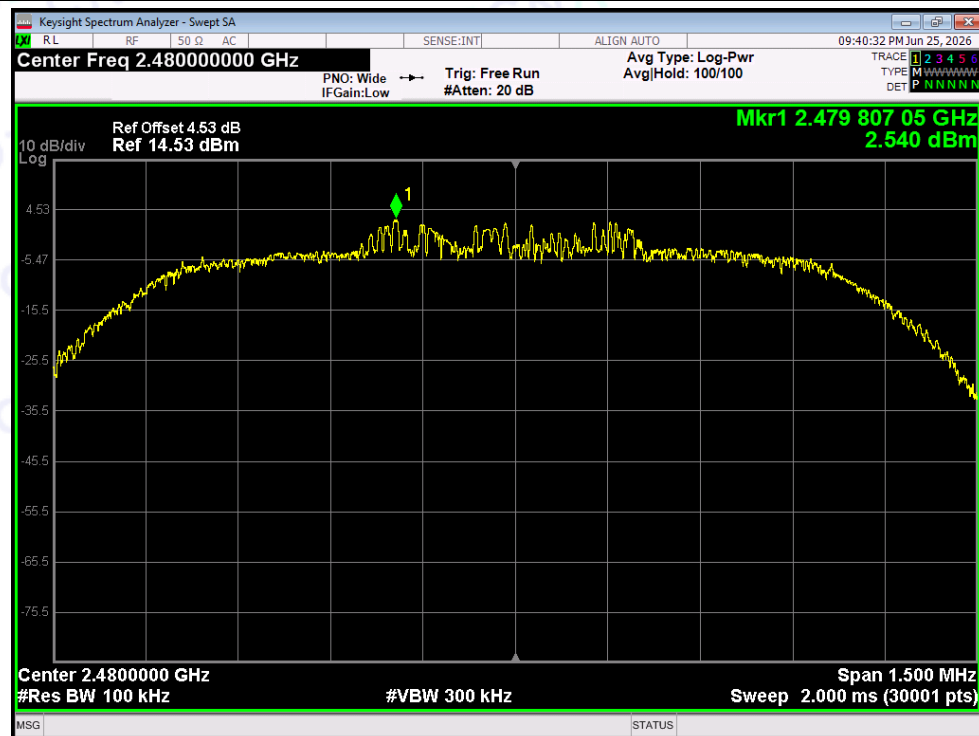
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



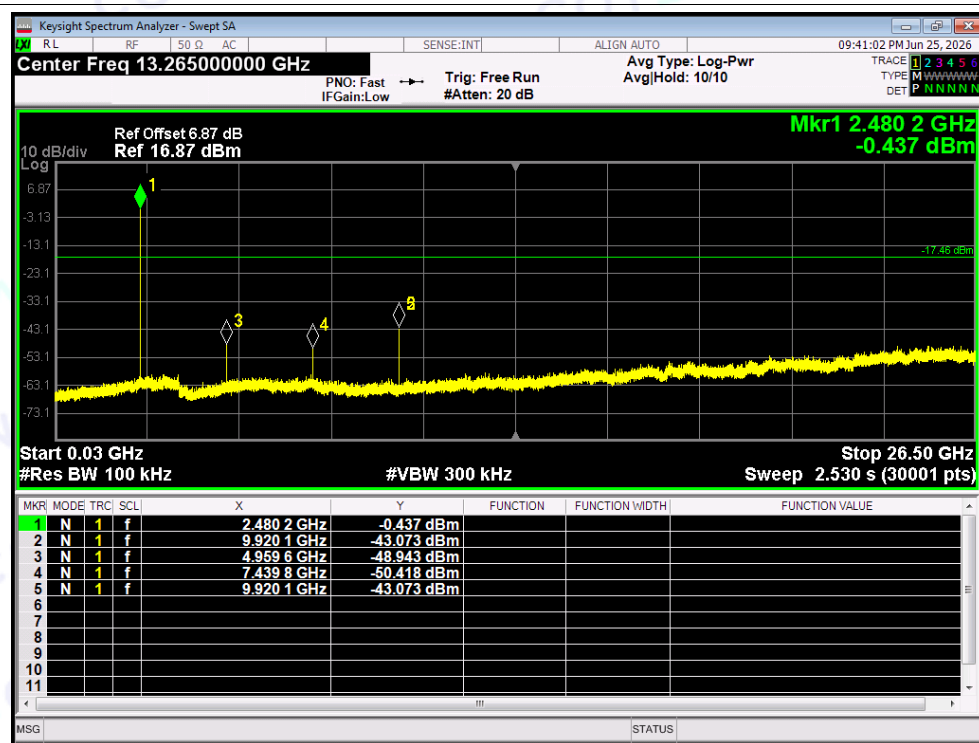
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



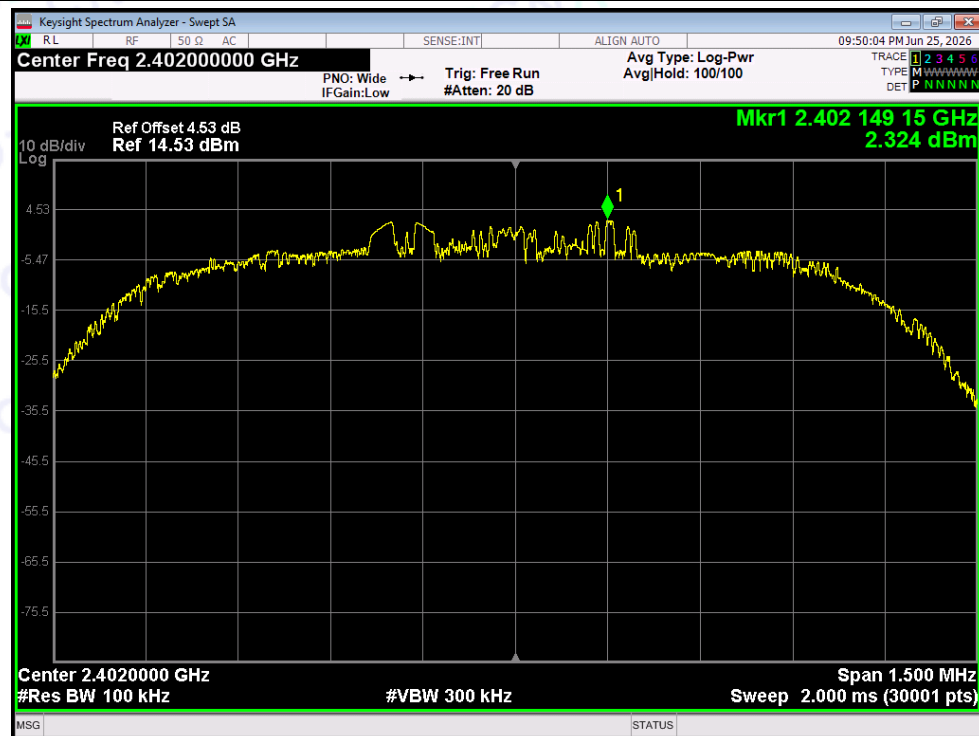
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



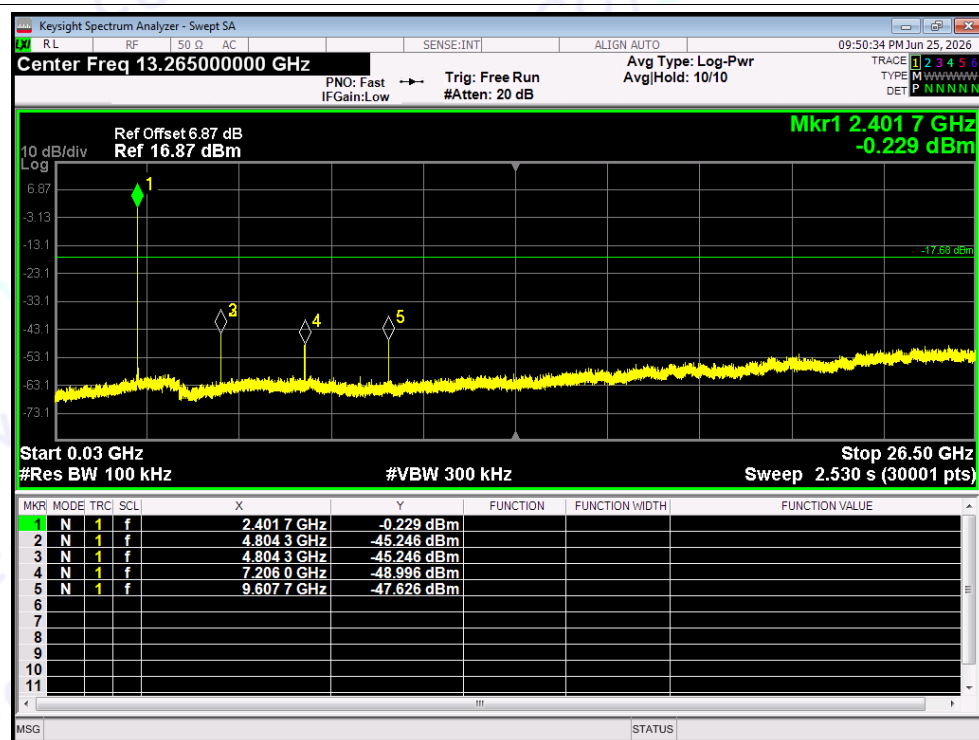
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



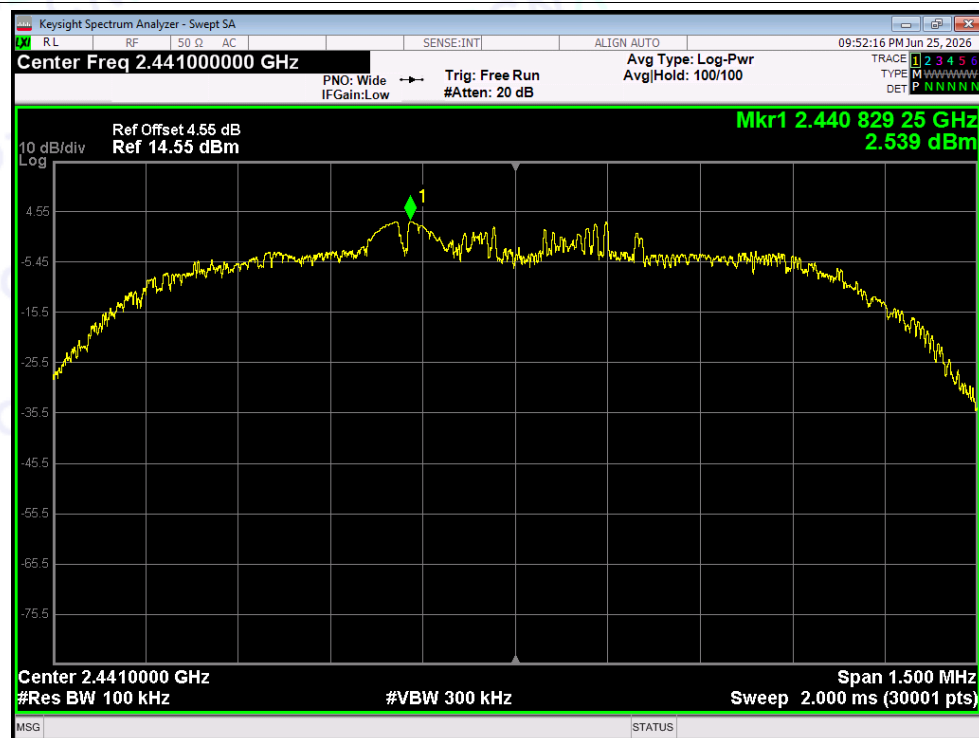
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



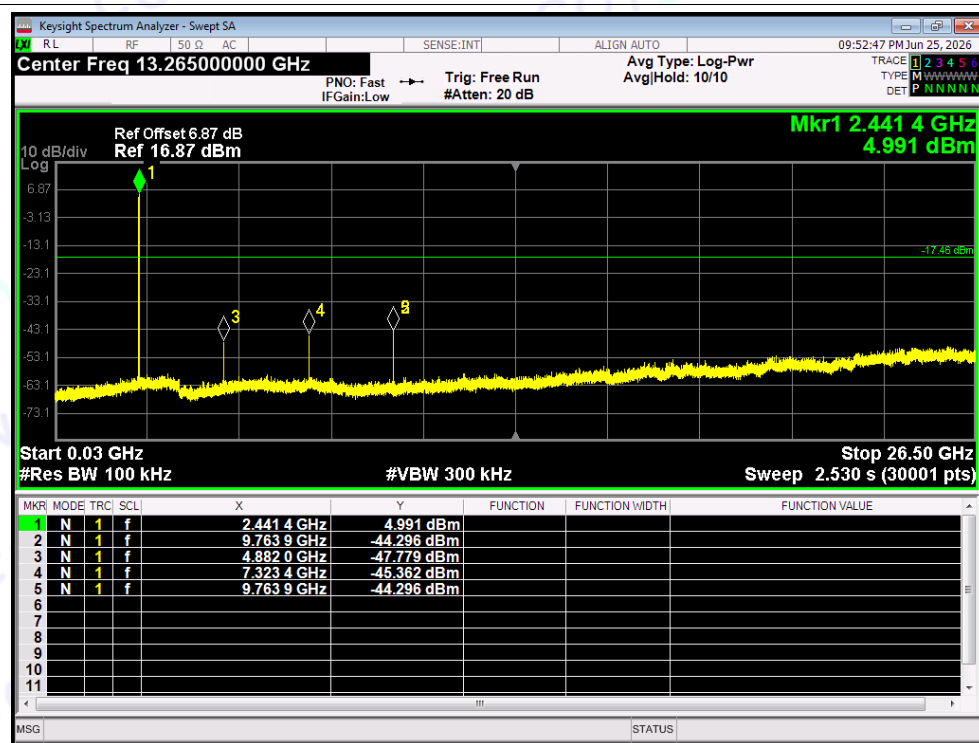
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



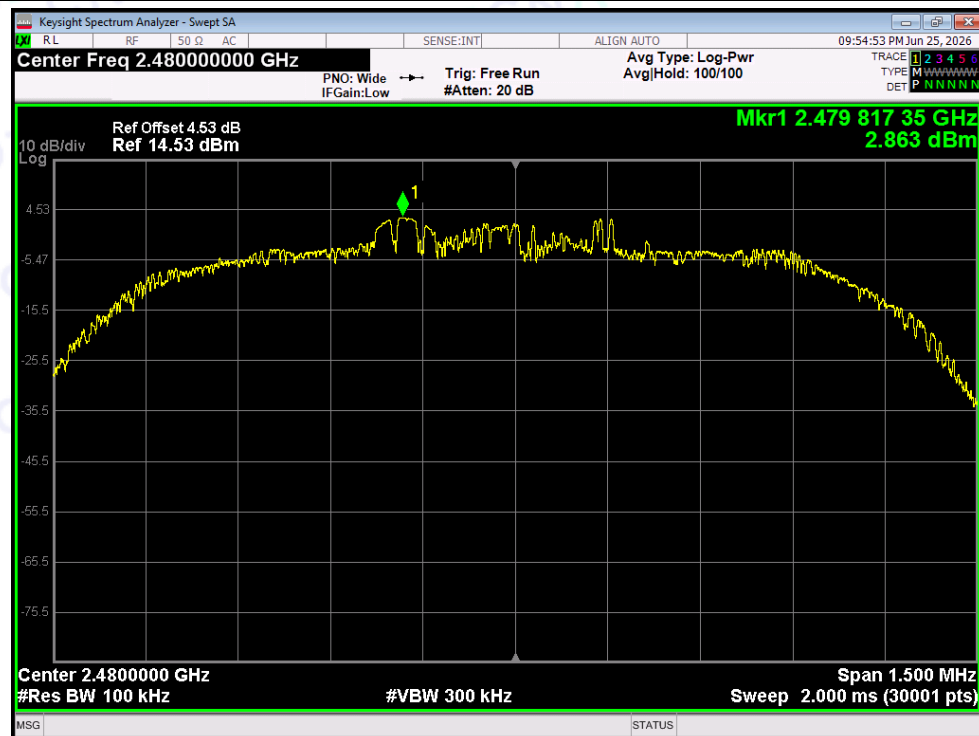
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



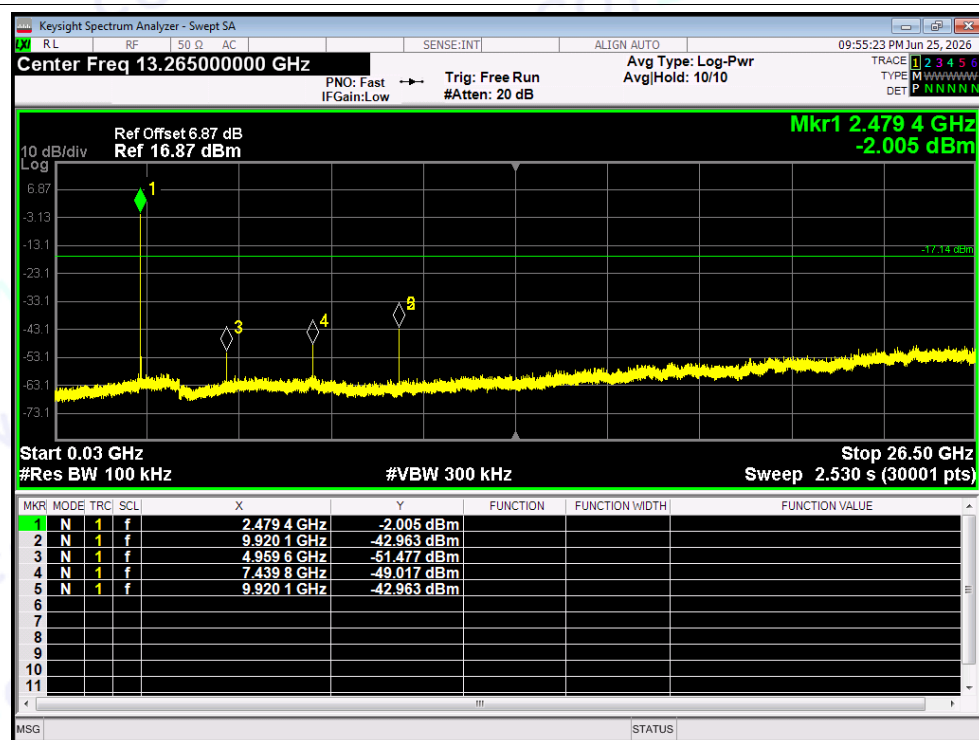
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

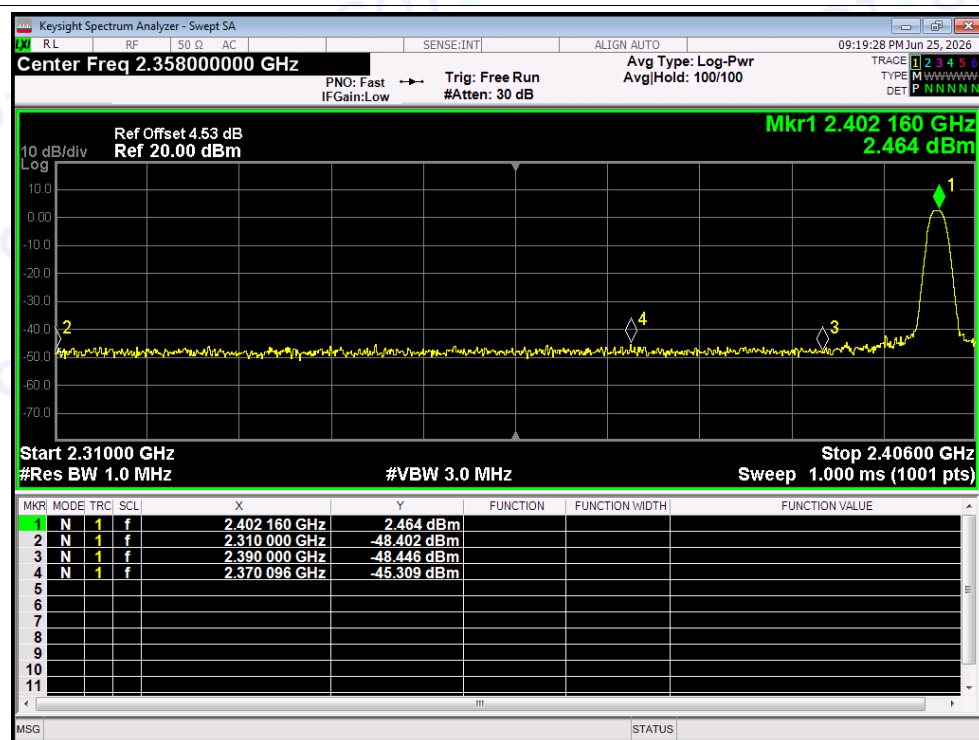


Restrict Band

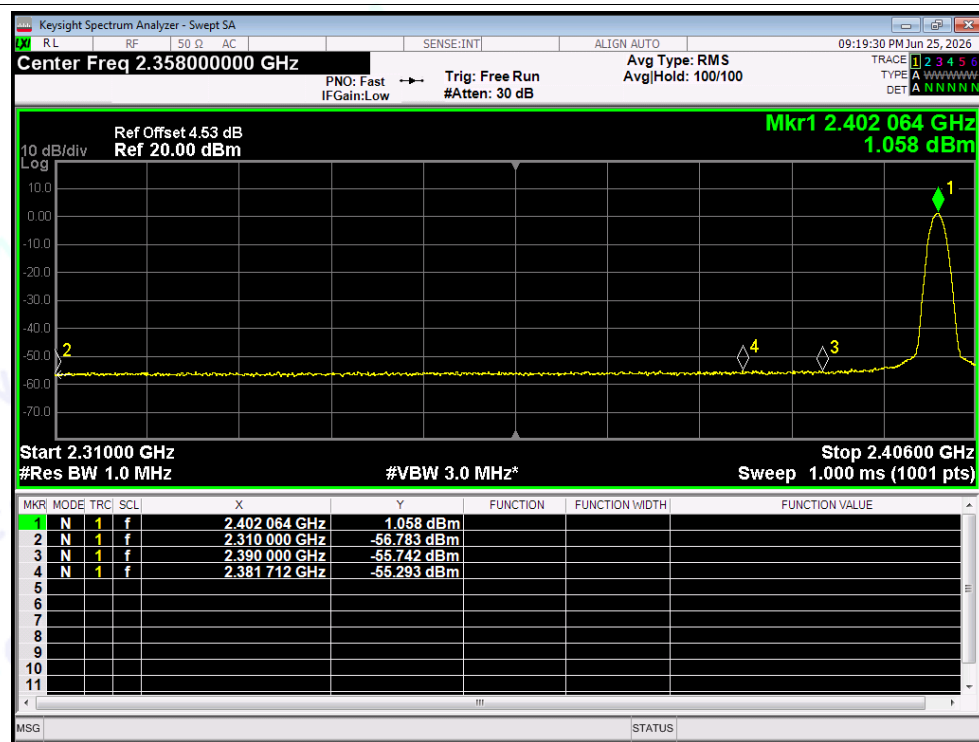
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-48.4	2.4	-	49.26	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-56.78	2.4	1.16	42.04	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2370.096	-45.31	2.4	-	52.35	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2381.712	-55.29	2.4	1.16	43.53	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-48.45	2.4	-	49.21	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-55.74	2.4	1.16	43.08	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-44.19	2.4	-	53.47	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-53.38	2.4	1.16	45.44	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.632	-43	2.4	-	54.66	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.872	-53.32	2.4	1.16	45.5	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-47.46	2.4	-	50.2	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-55.34	2.4	1.16	43.48	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-48.21	2.4	-	49.45	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-56.89	2.4	1.14	41.91	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2311.056	-45.17	2.4	-	52.49	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2383.152	-55.17	2.4	1.14	43.63	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-47.35	2.4	-	50.31	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-55.98	2.4	1.14	42.82	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-45.28	2.4	-	52.38	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-54.35	2.4	1.14	44.45	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.872	-43.44	2.4	-	54.22	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.8	-53.85	2.4	1.14	44.95	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-48.21	2.4	-	49.45	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-56.21	2.4	1.14	42.59	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-47.08	2.4	-	50.58	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-56.36	2.4	1.14	42.44	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2320.944	-45.84	2.4	-	51.82	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2382.96	-55.34	2.4	1.14	43.46	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-48.6	2.4	-	49.06	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-56.08	2.4	1.14	42.72	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-46.67	2.4	-	50.99	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-54.64	2.4	1.14	44.16	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2488.84	-44.08	2.4	-	53.58	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.536	-53.3	2.4	1.14	45.5	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-47.78	2.4	-	49.88	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-55.79	2.4	1.14	43.01	Average	54	Pass

Test Graphs

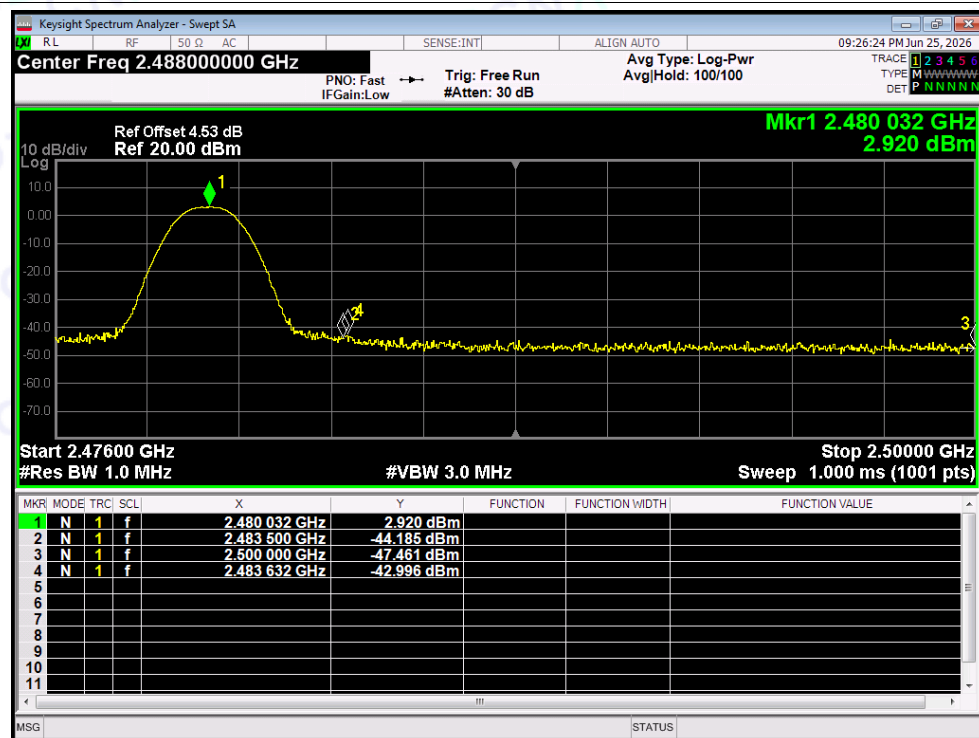
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



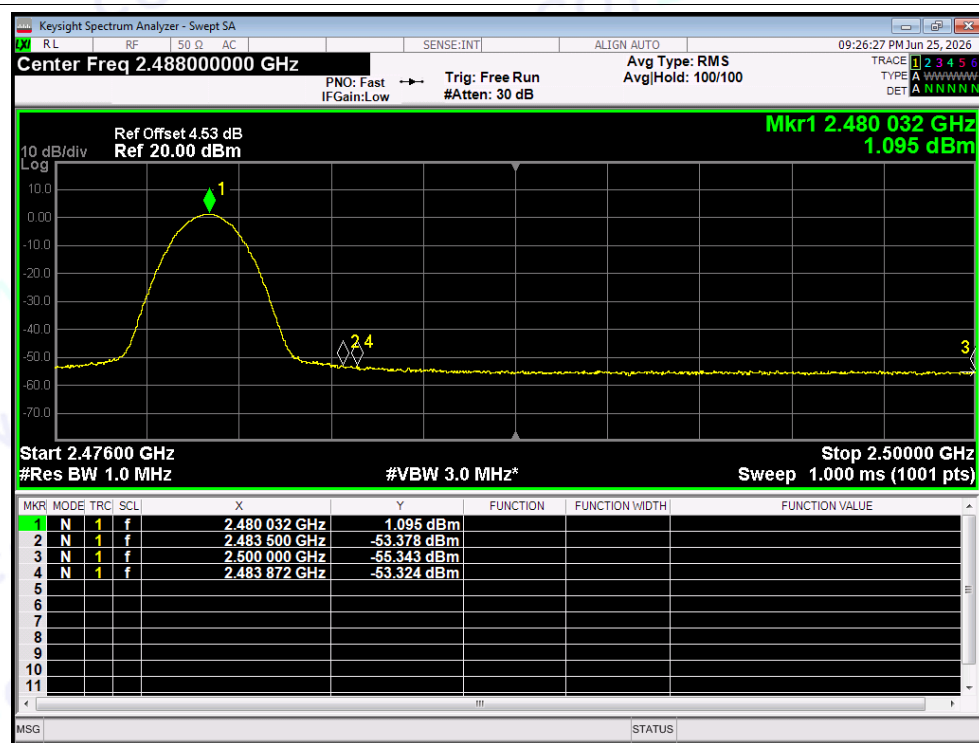
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



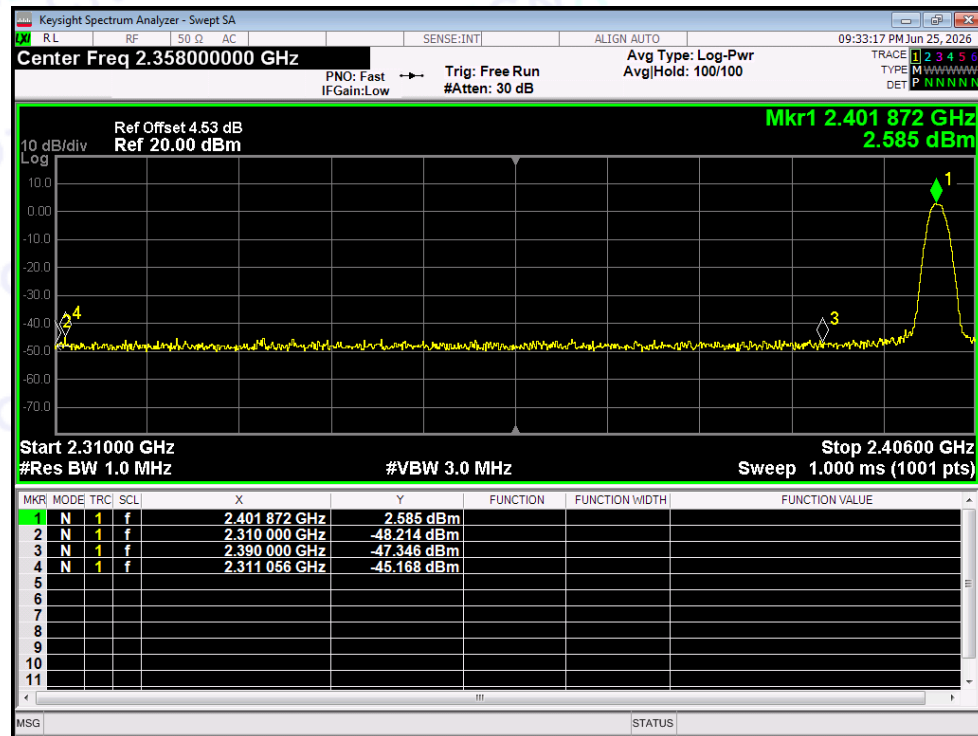
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



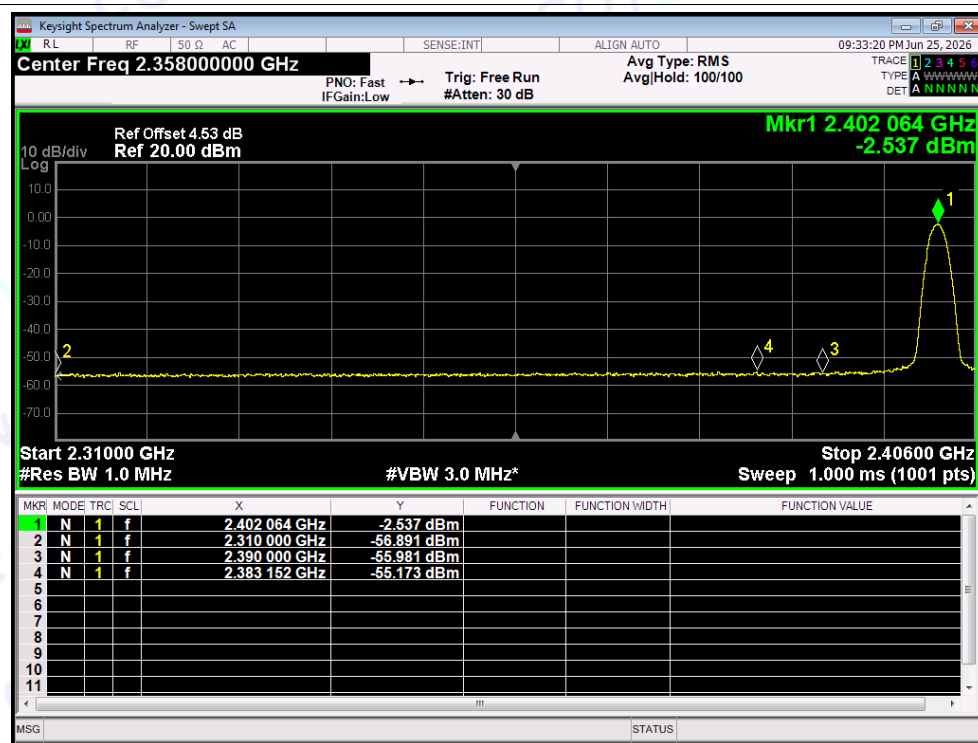
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



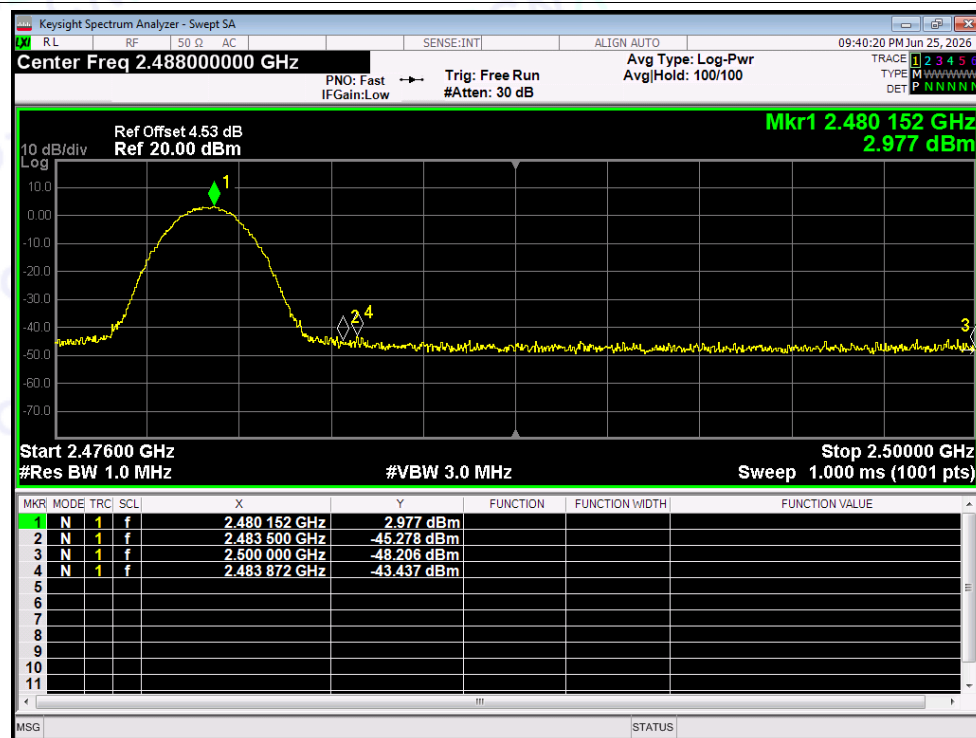
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



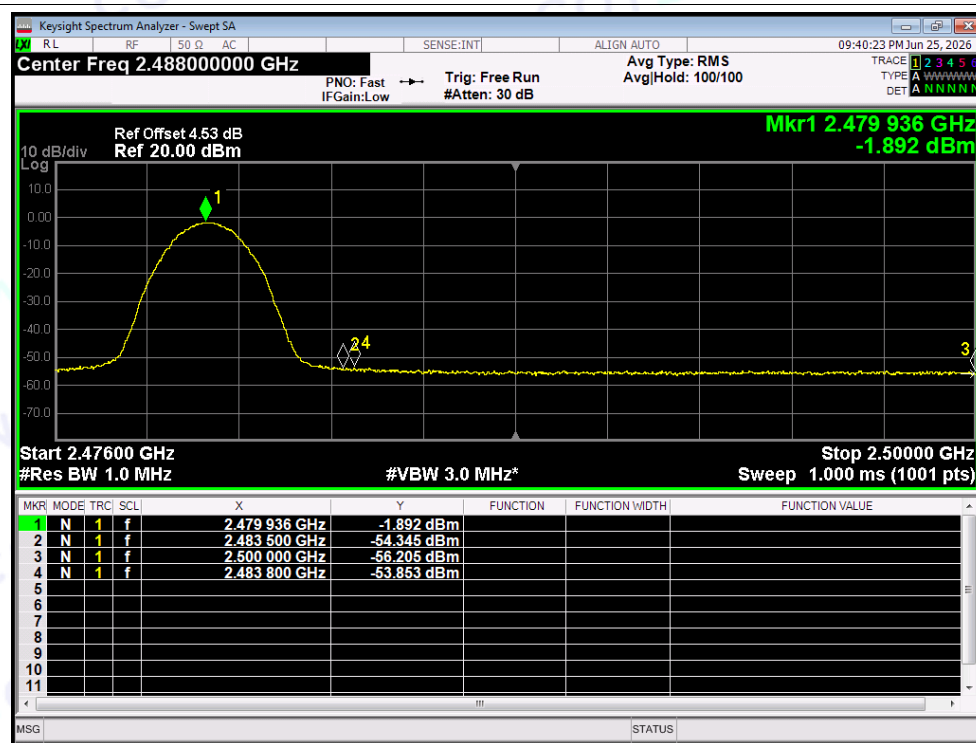
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



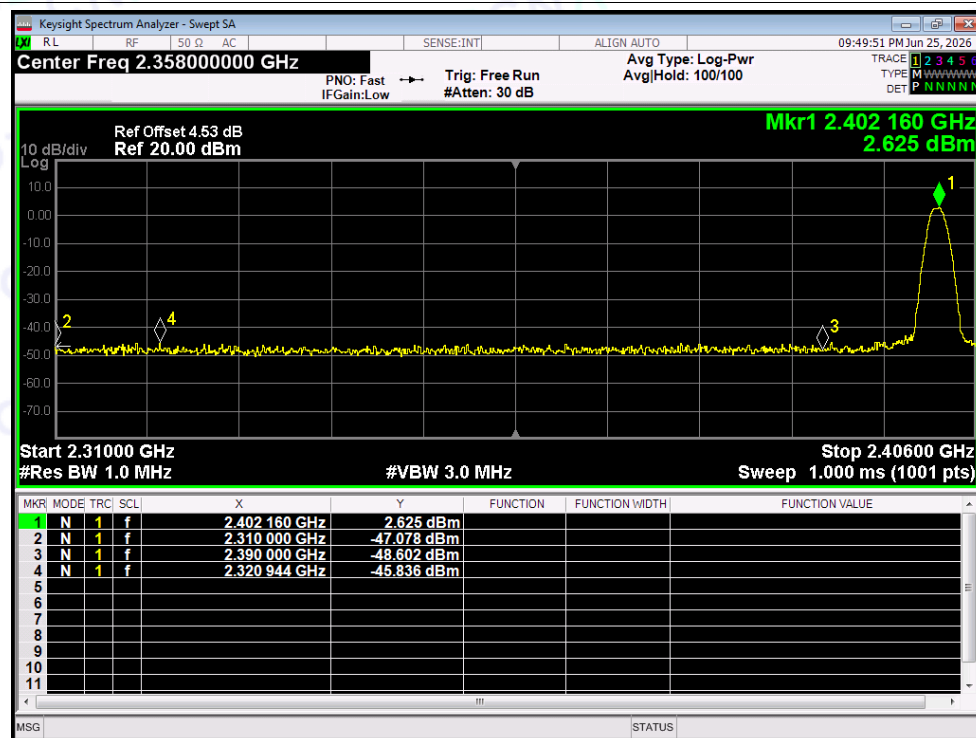
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



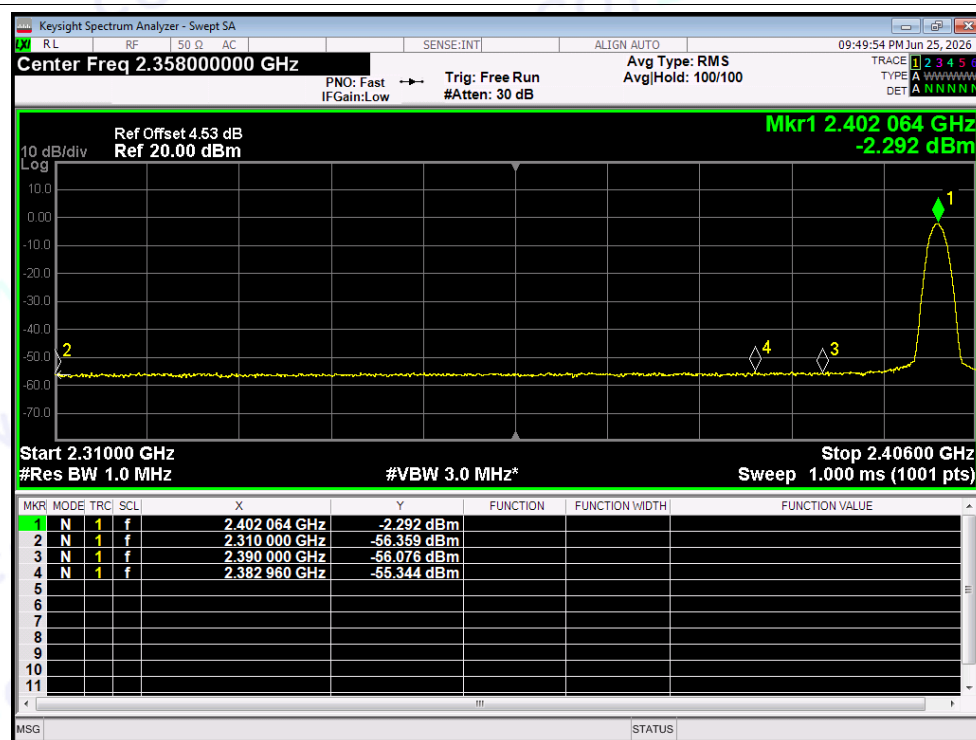
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



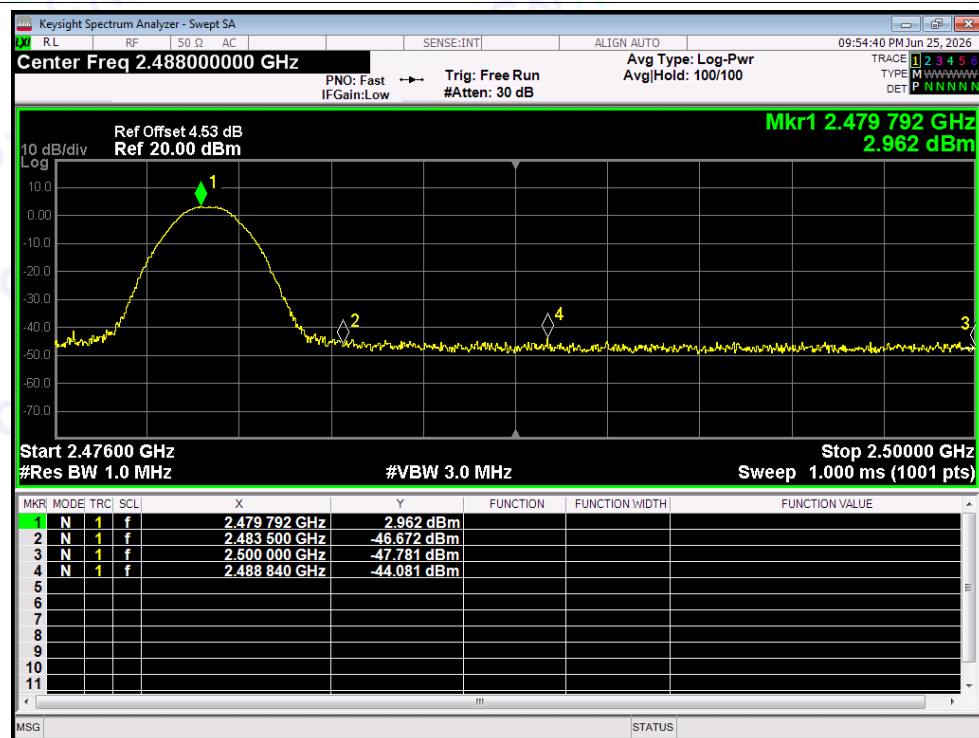
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



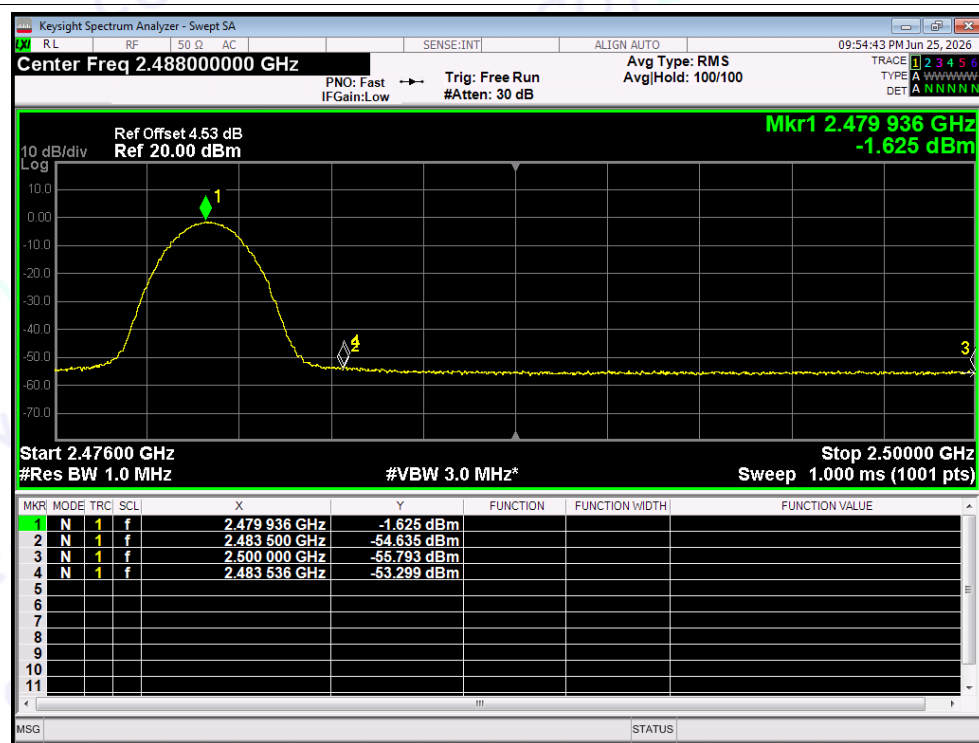
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average



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



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

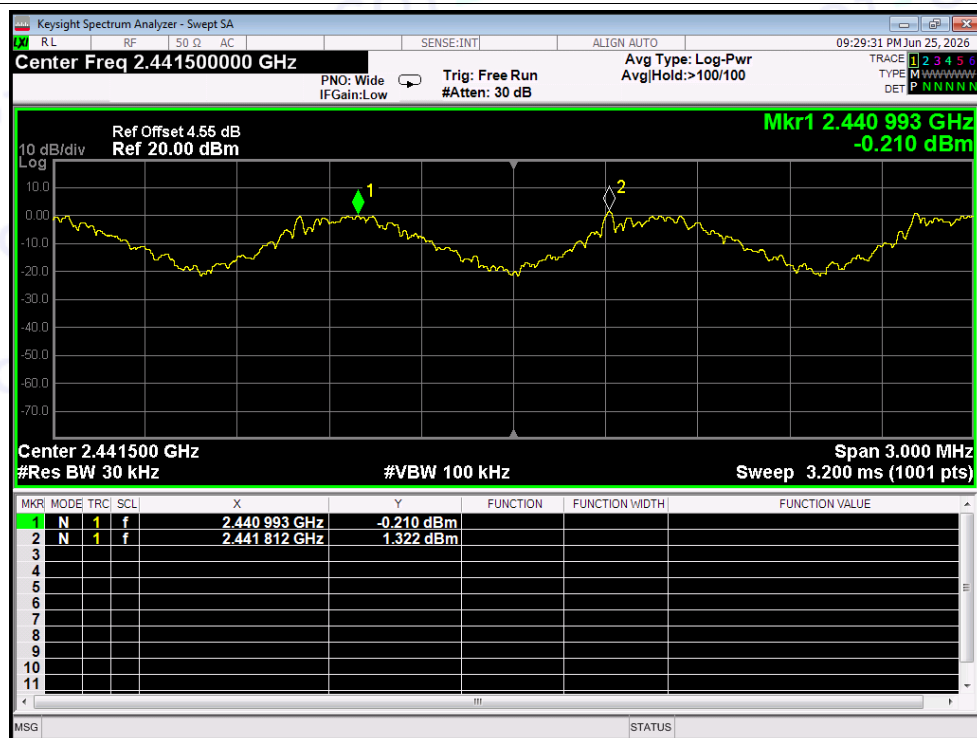


Carrier Frequencies Separation

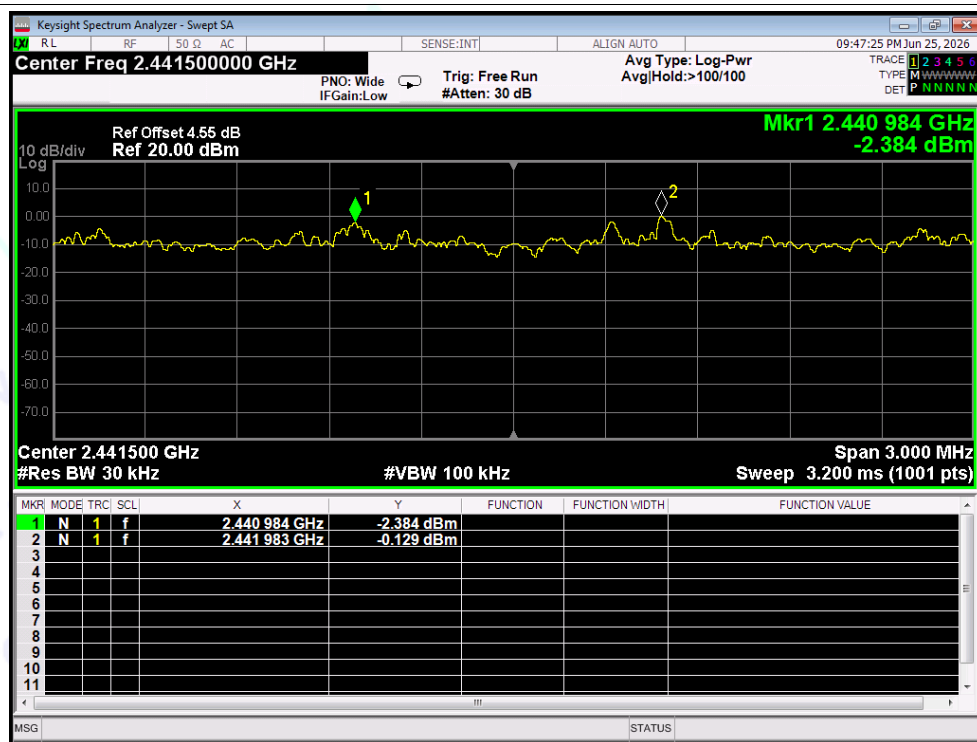
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2440.993	2441.812	0.819	0.627	Pass
NVNT	2-DH5	Ant1	2440.984	2441.983	0.999	0.813	Pass
NVNT	3-DH5	Ant1	2440.804	2441.818	1.014	0.793	Pass

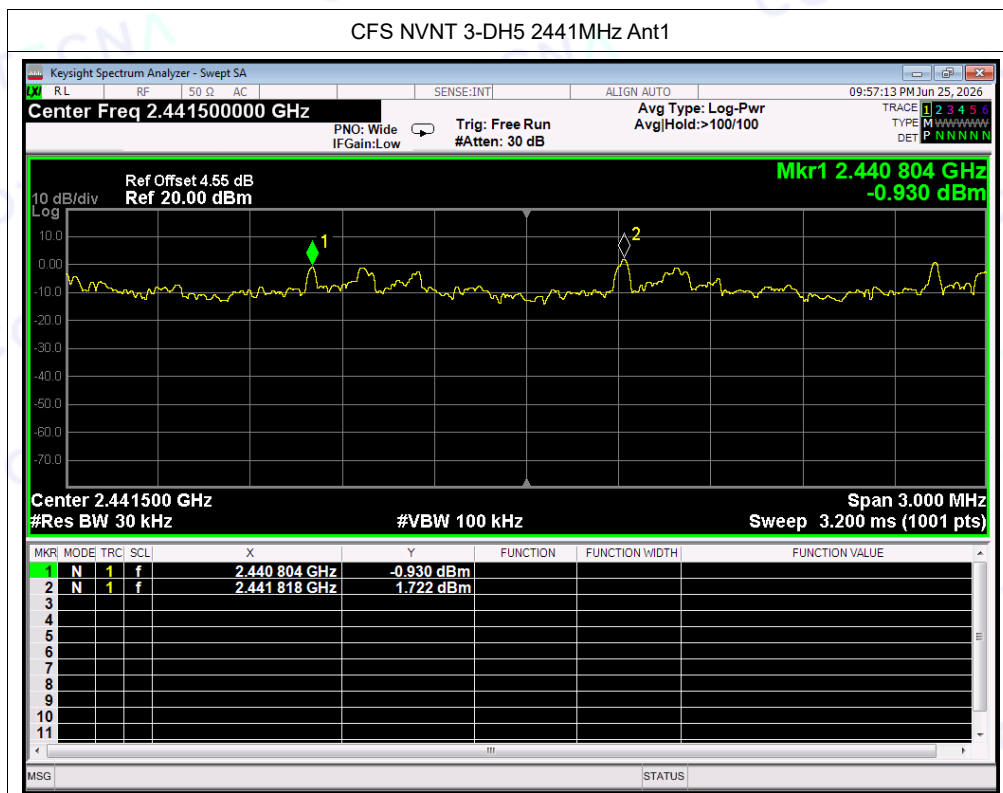
Test Graphs

CFS NVNT 1-DH5 2441MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1



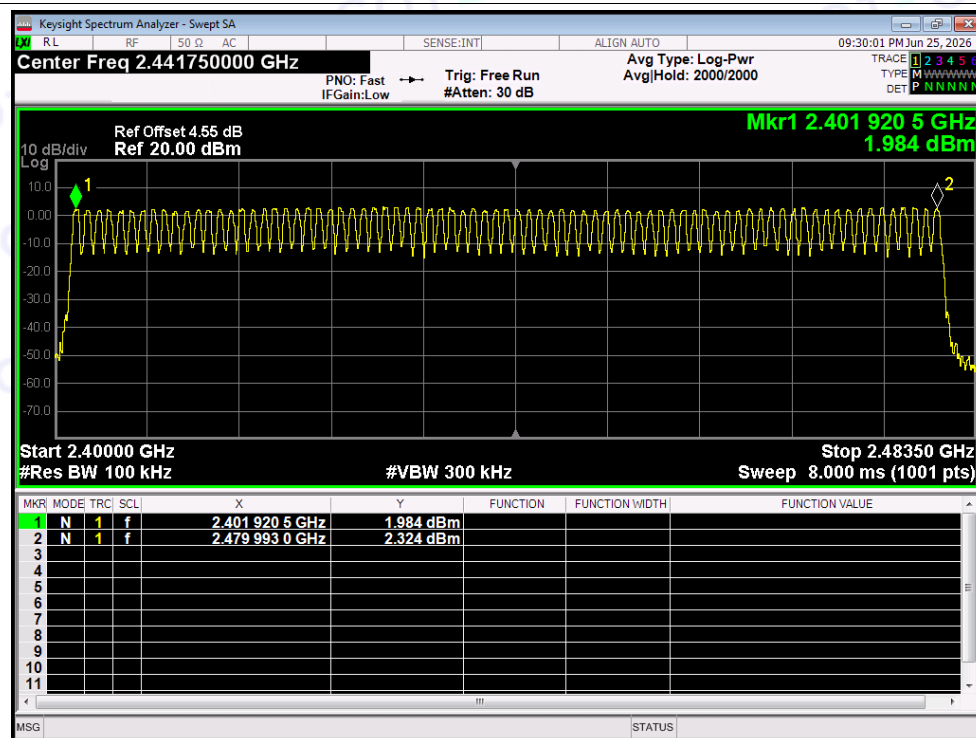


Number of Hopping Channel

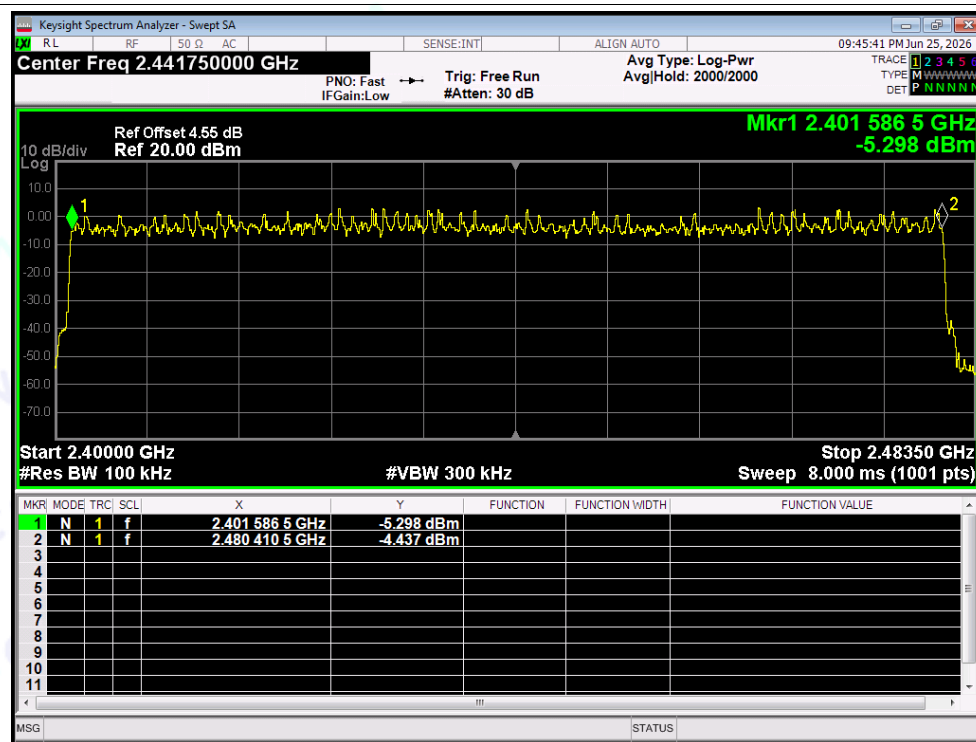
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

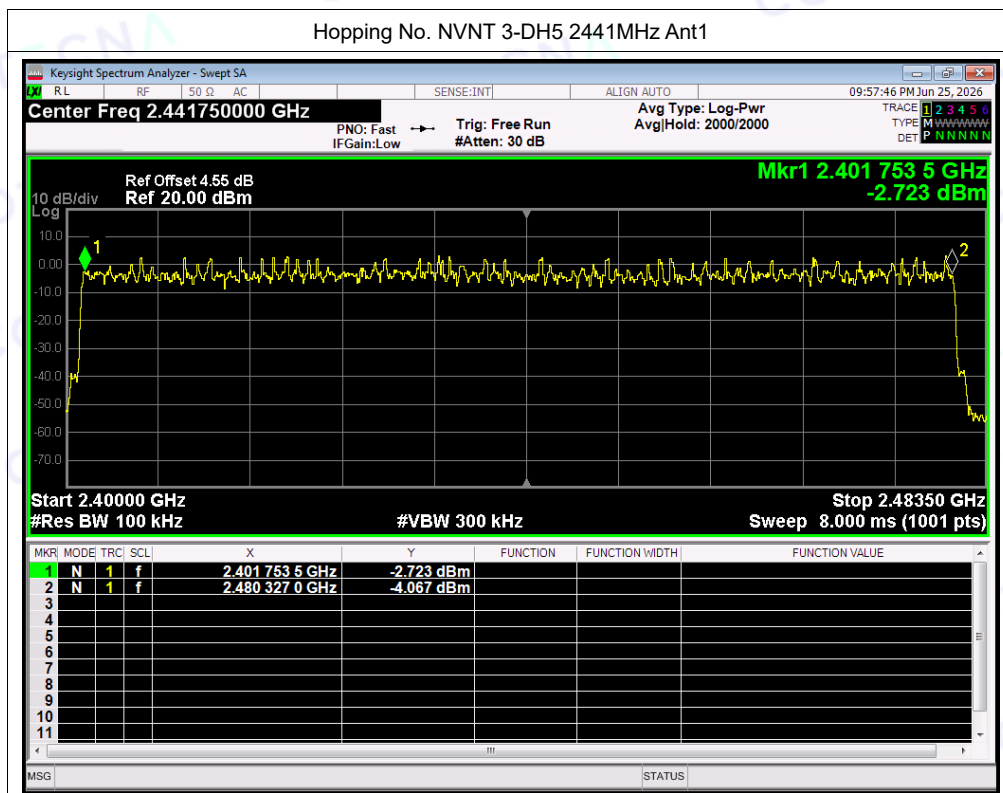
Test Graphs

Hopping No. NVNT 1-DH5 2441MHz Ant1



Hopping No. NVNT 2-DH5 2441MHz Ant1





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