

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless over-ear Bluetooth headphones
Test Model:	Y04-ANC
Sample ID:	HC-C-202506-0084-02-02 #
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202506-0084-2 The report only show the worst case data.	

Contents

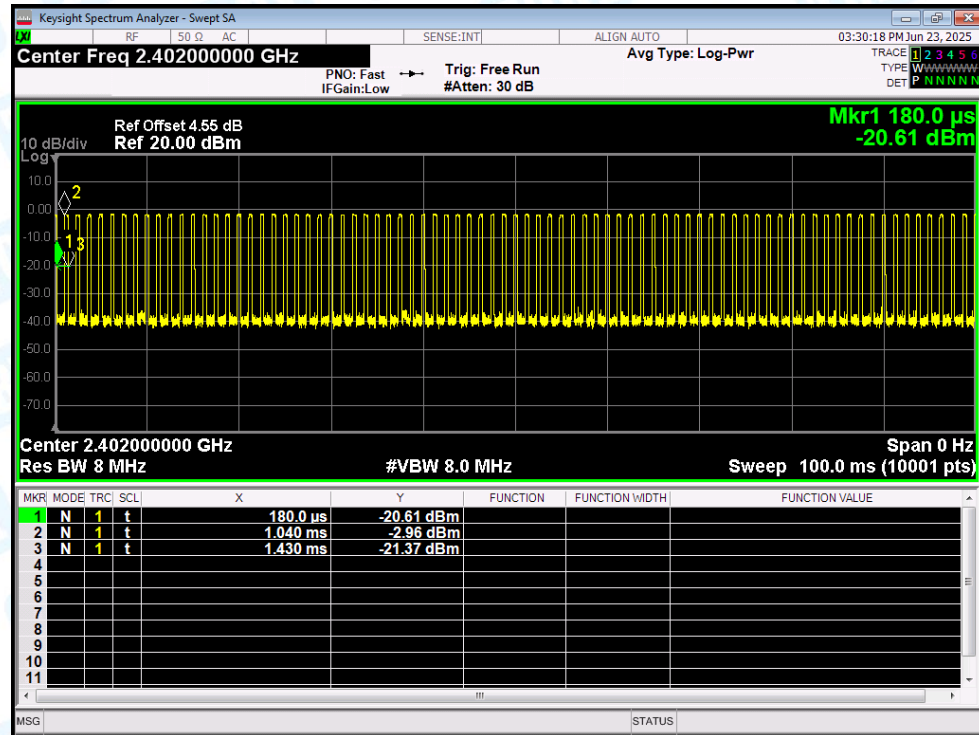
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1.Duty Cycle

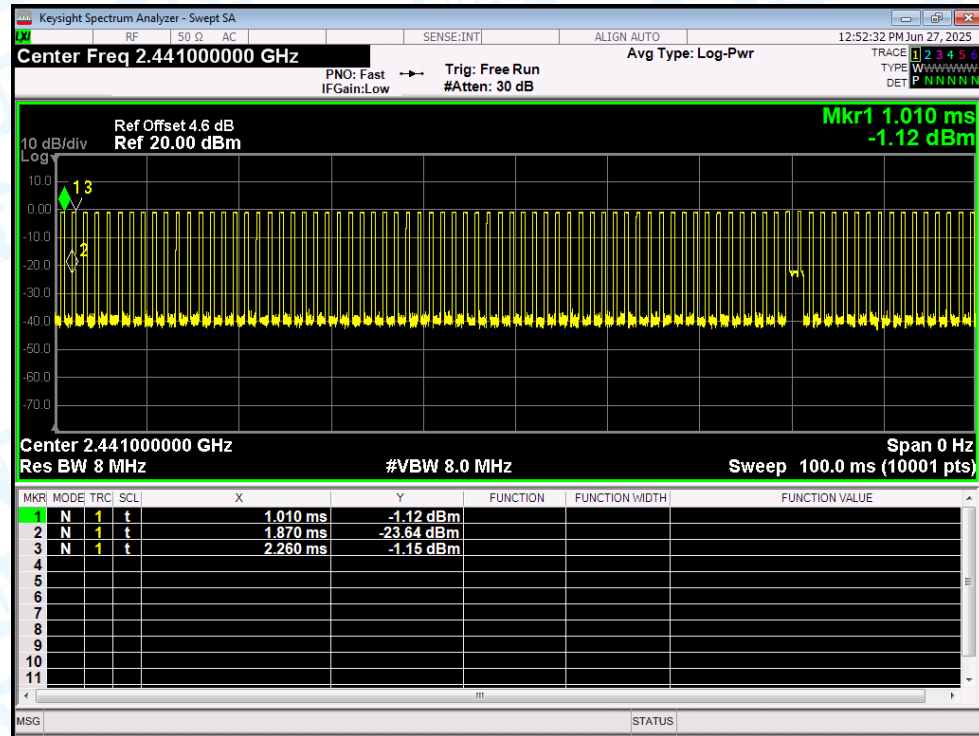
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	32	4.95	2.5
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63
NVNT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

Test Graphs

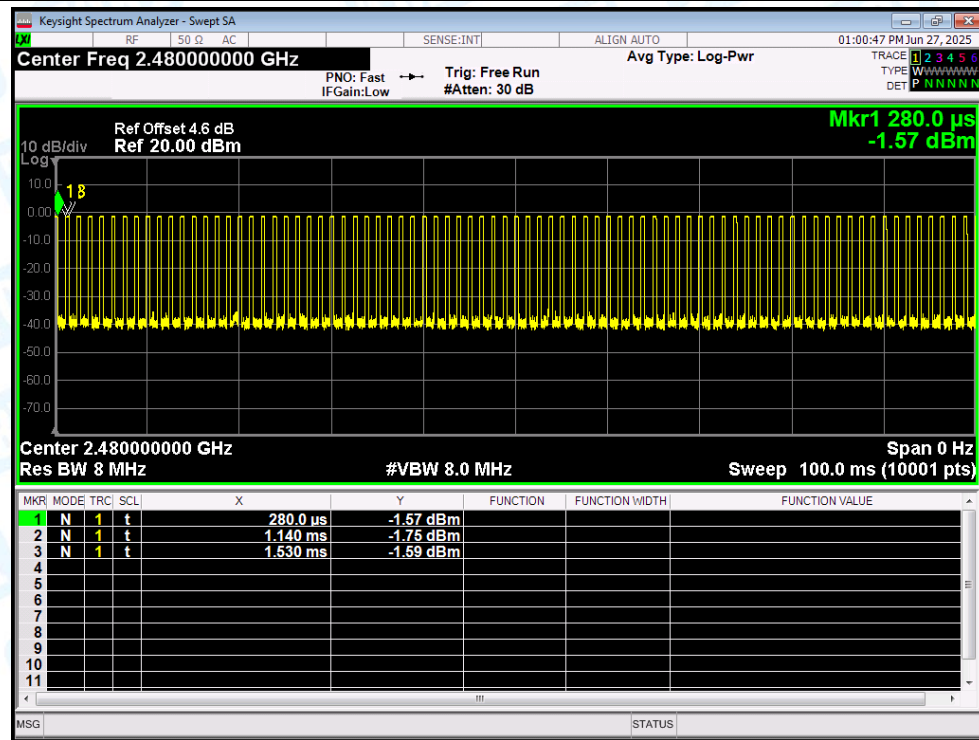
Duty Cycle NVNT 1-DH1 2402MHz Ant1



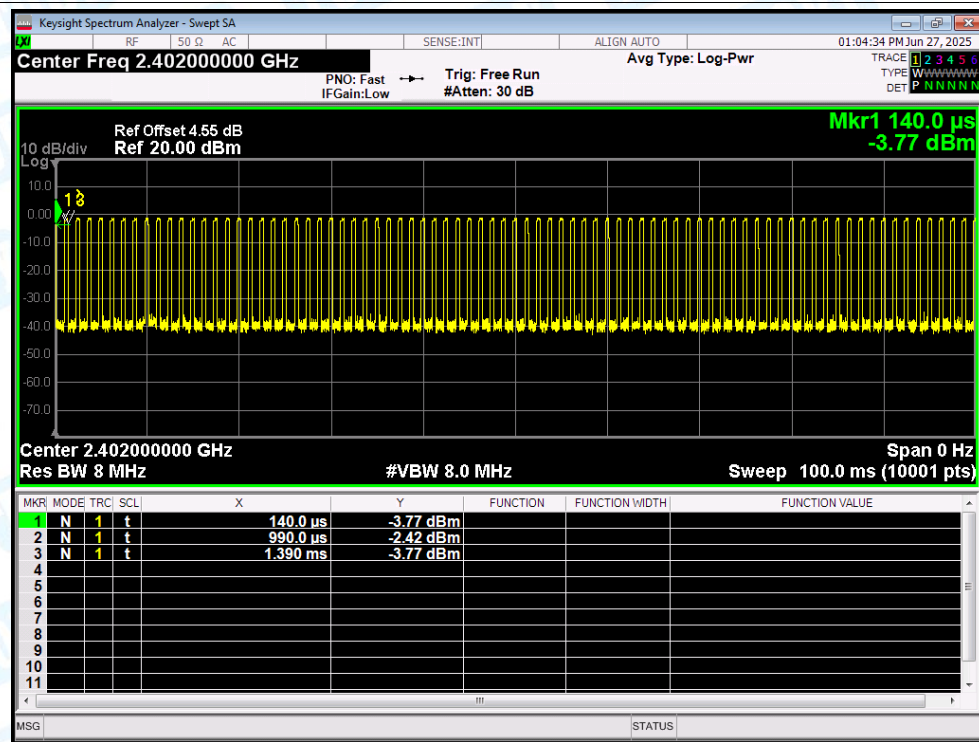
Duty Cycle NVNT 1-DH1 2441MHz Ant1



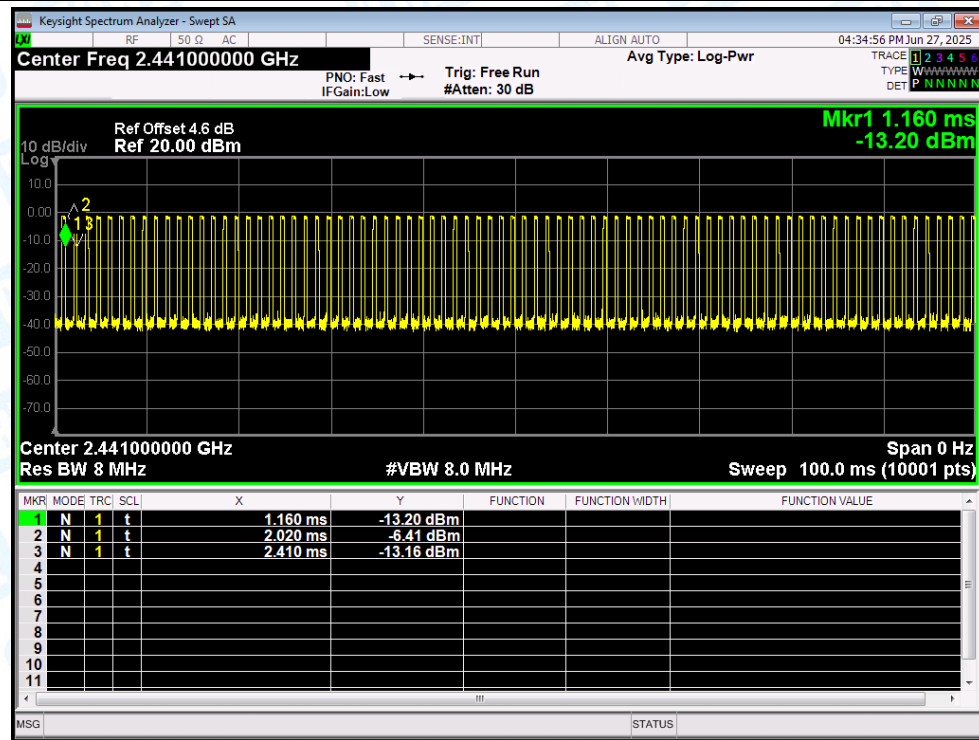
Duty Cycle NVNT 1-DH1 2480MHz Ant1



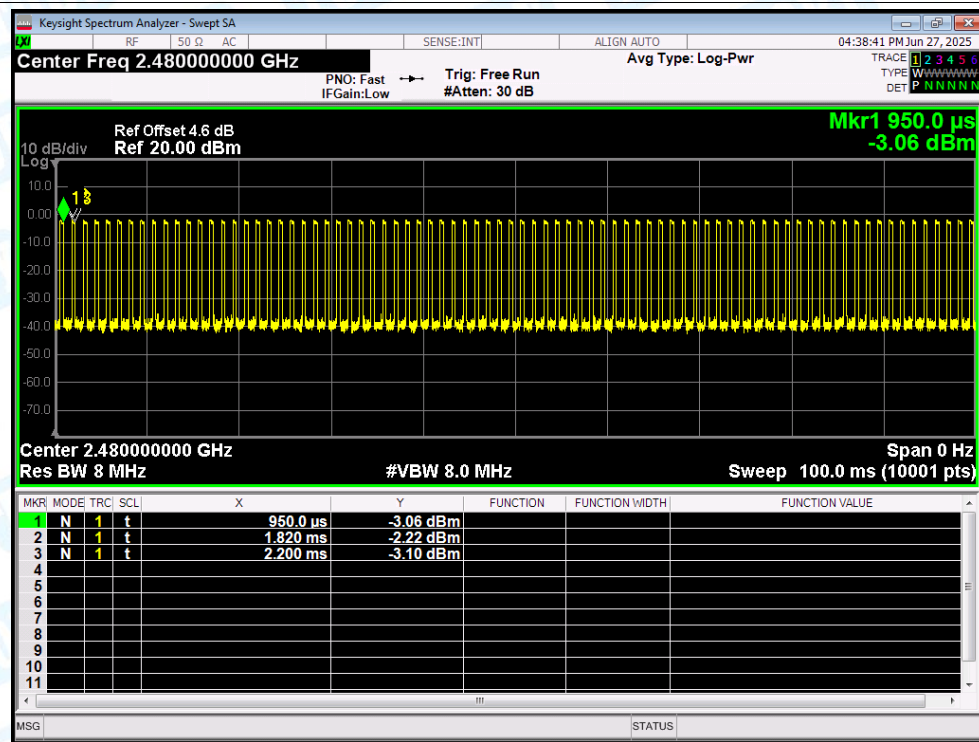
Duty Cycle NVNT 2-DH1 2402MHz Ant1



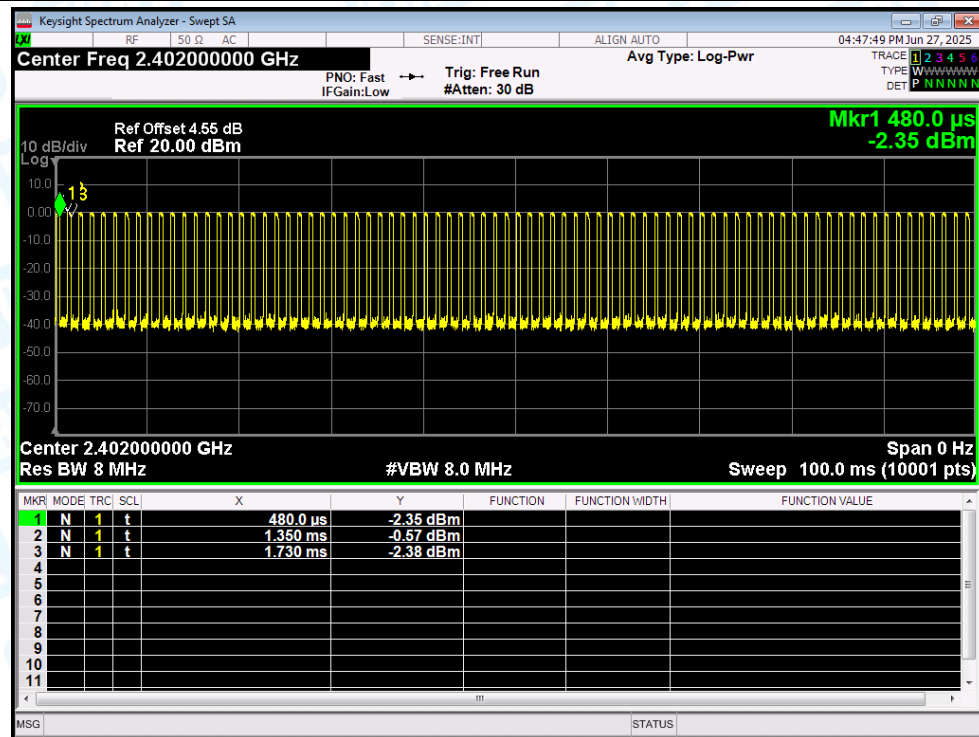
Duty Cycle NVNT 2-DH1 2441MHz Ant1



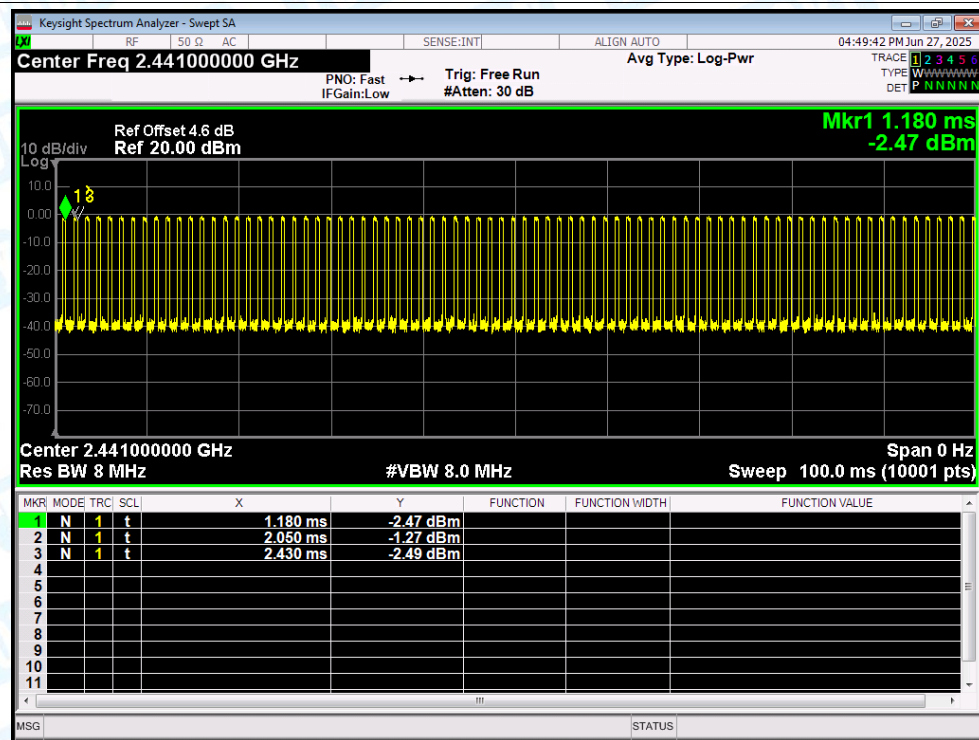
Duty Cycle NVNT 2-DH1 2480MHz Ant1

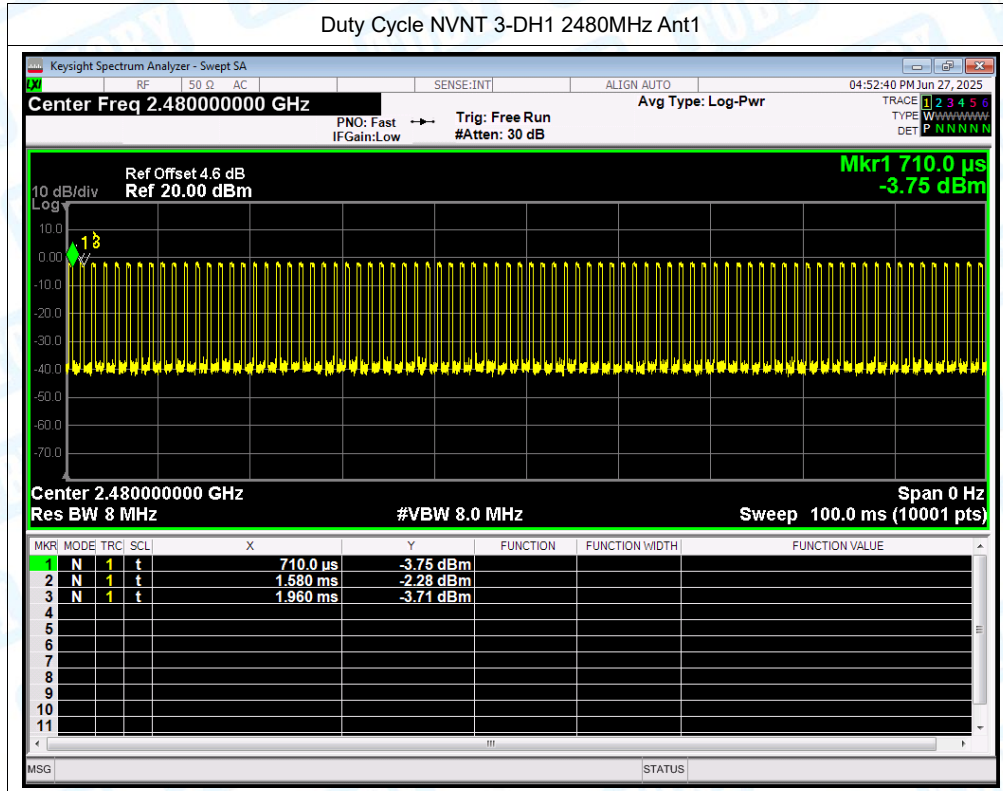


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



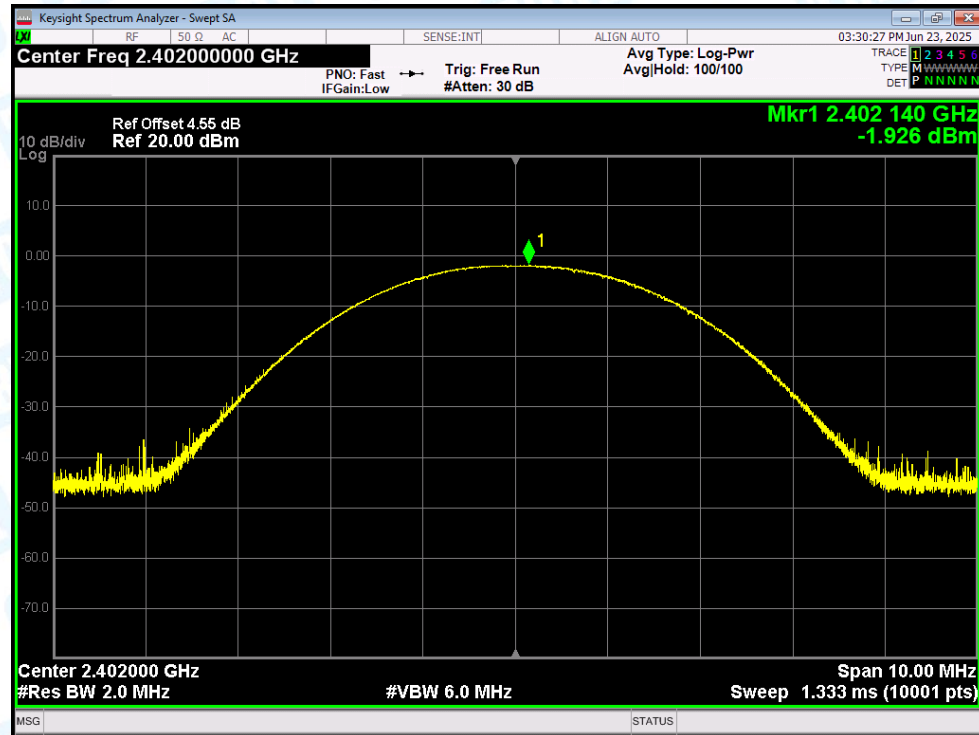


2.Maximum Conducted Output Power

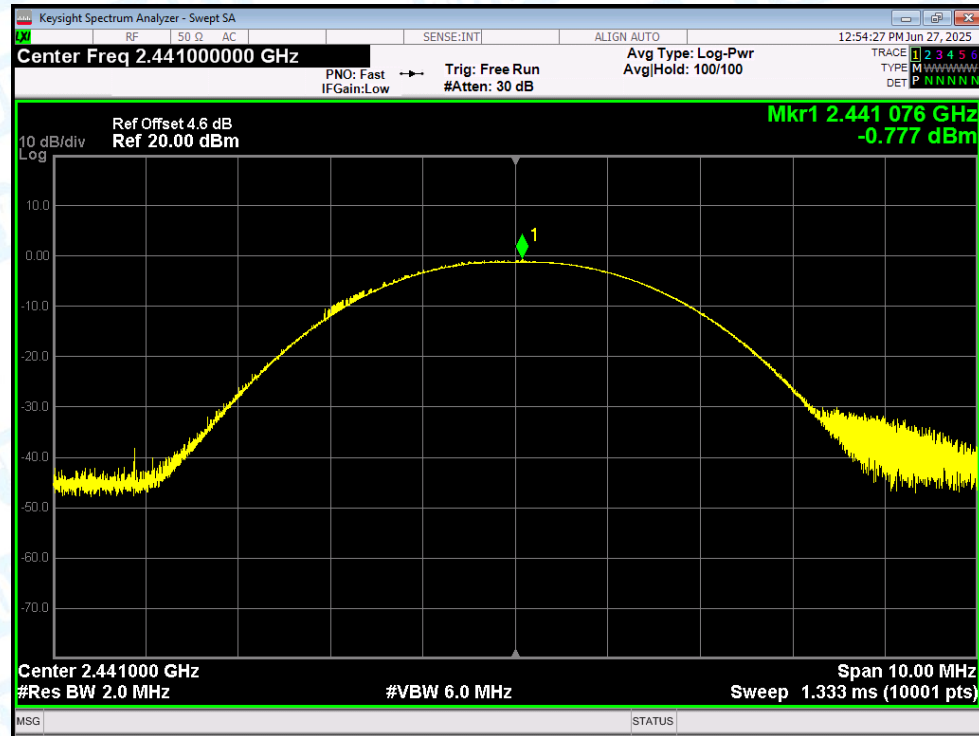
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-1.926	21	Pass
NVNT	1-DH1	2441	Ant1	-0.777	21	Pass
NVNT	1-DH1	2480	Ant1	-1.554	21	Pass
NVNT	2-DH1	2402	Ant1	-1.452	21	Pass
NVNT	2-DH1	2441	Ant1	-1.281	21	Pass
NVNT	2-DH1	2480	Ant1	-2.229	21	Pass
NVNT	3-DH1	2402	Ant1	-0.214	21	Pass
NVNT	3-DH1	2441	Ant1	-0.974	21	Pass
NVNT	3-DH1	2480	Ant1	-2.026	21	Pass

Test Graphs

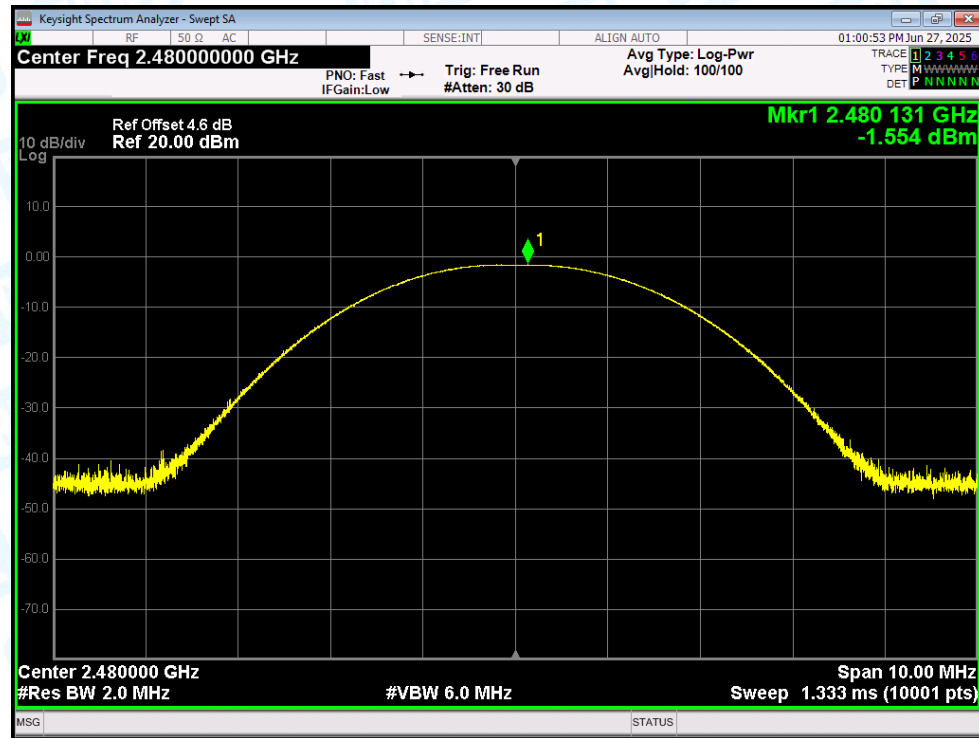
Power NVNT 1-DH1 2402MHz Ant1



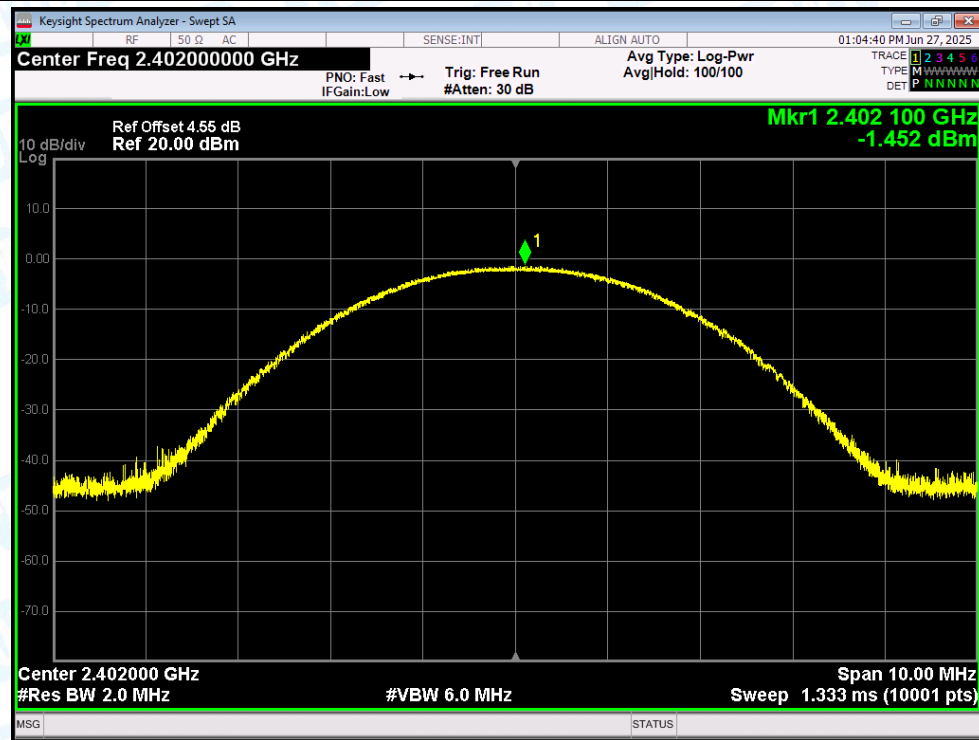
Power NVNT 1-DH1 2441MHz Ant1



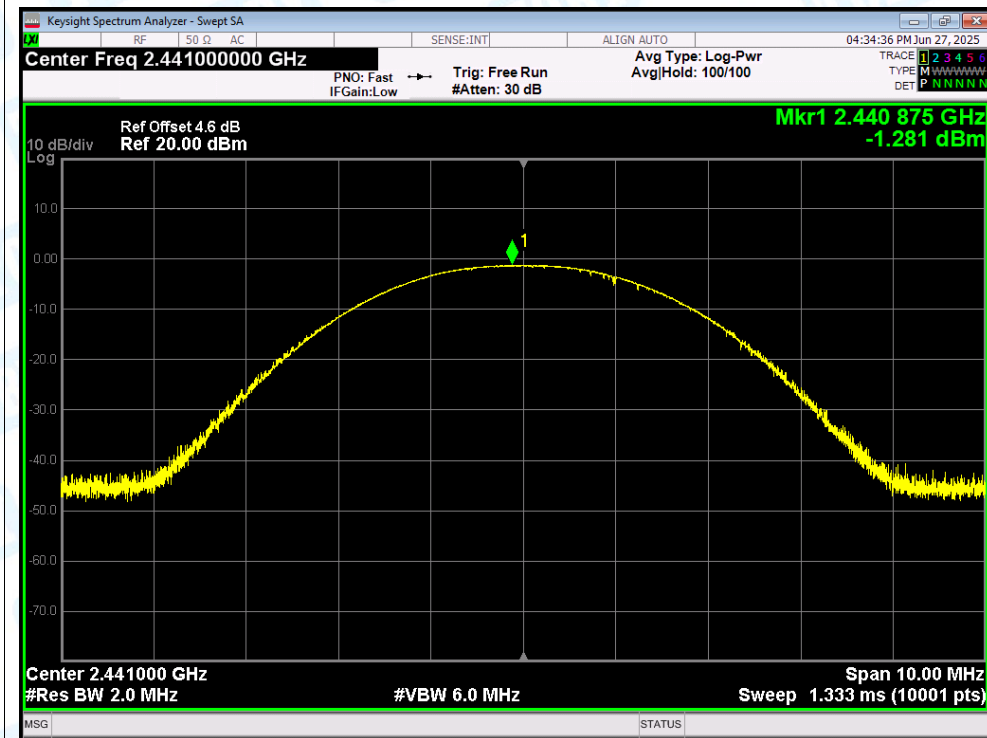
Power NVNT 1-DH1 2480MHz Ant1



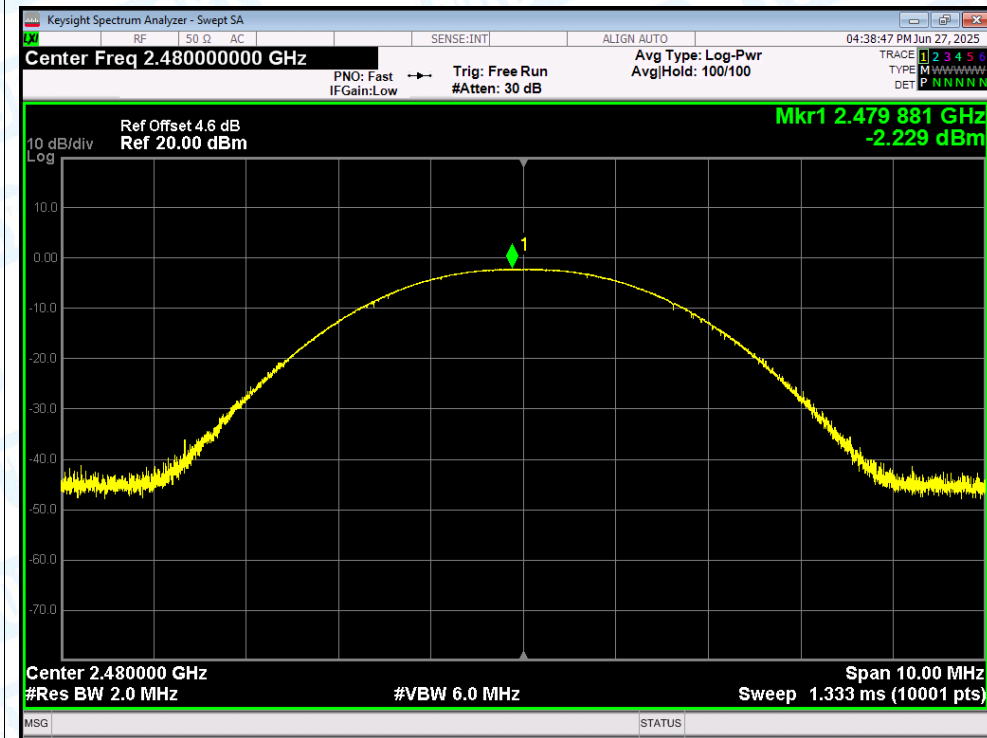
Power NVNT 2-DH1 2402MHz Ant1



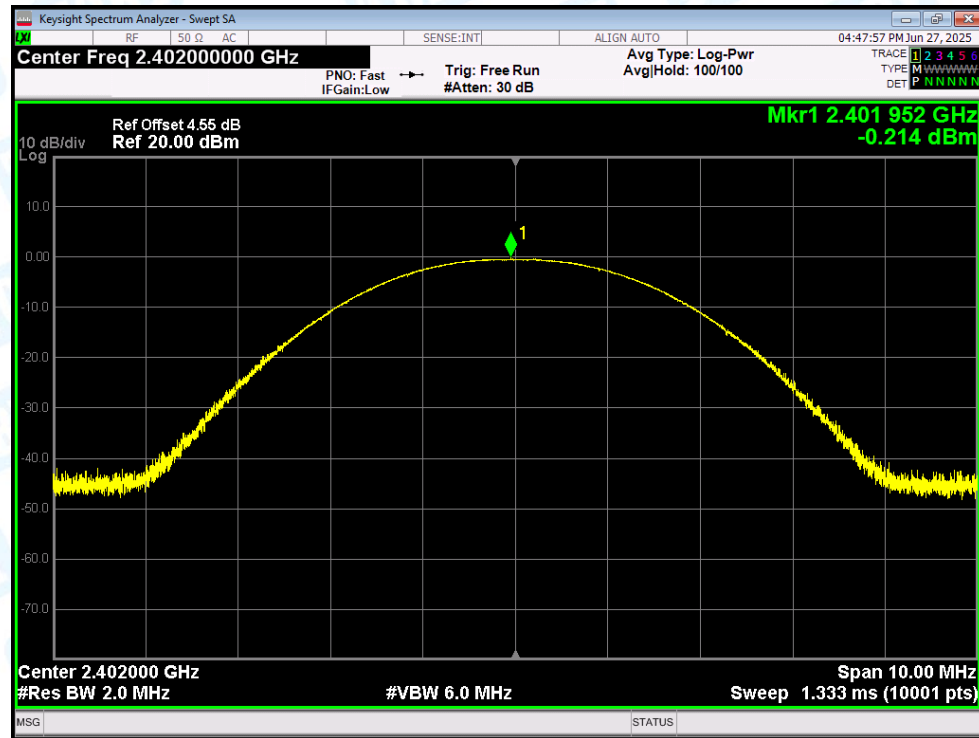
Power NVNT 2-DH1 2441MHz Ant1



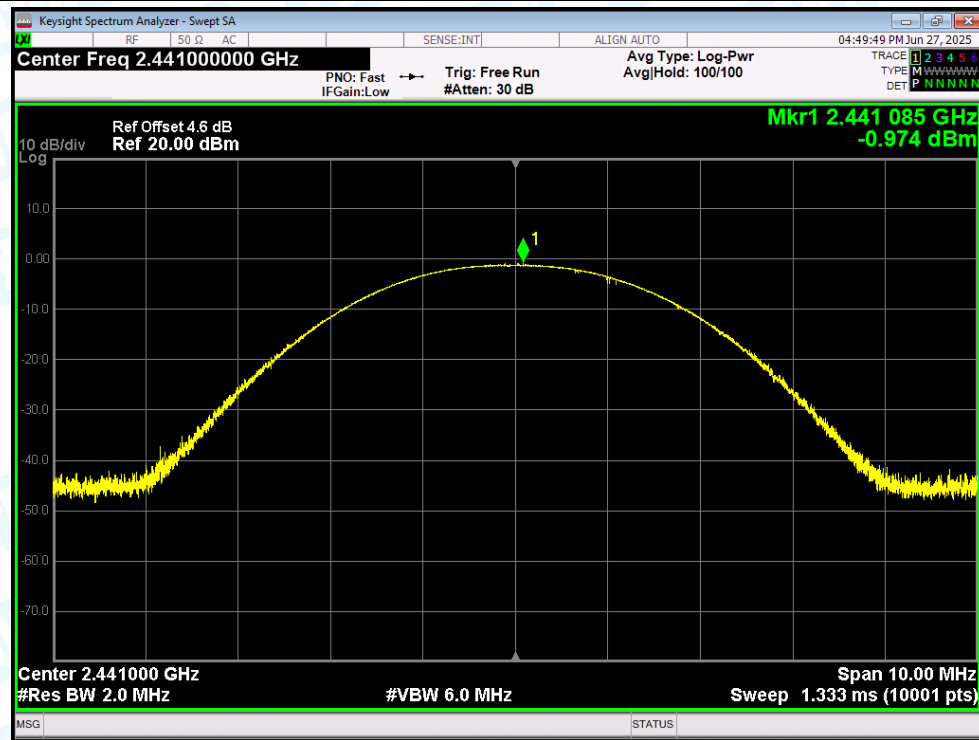
Power NVNT 2-DH1 2480MHz Ant1

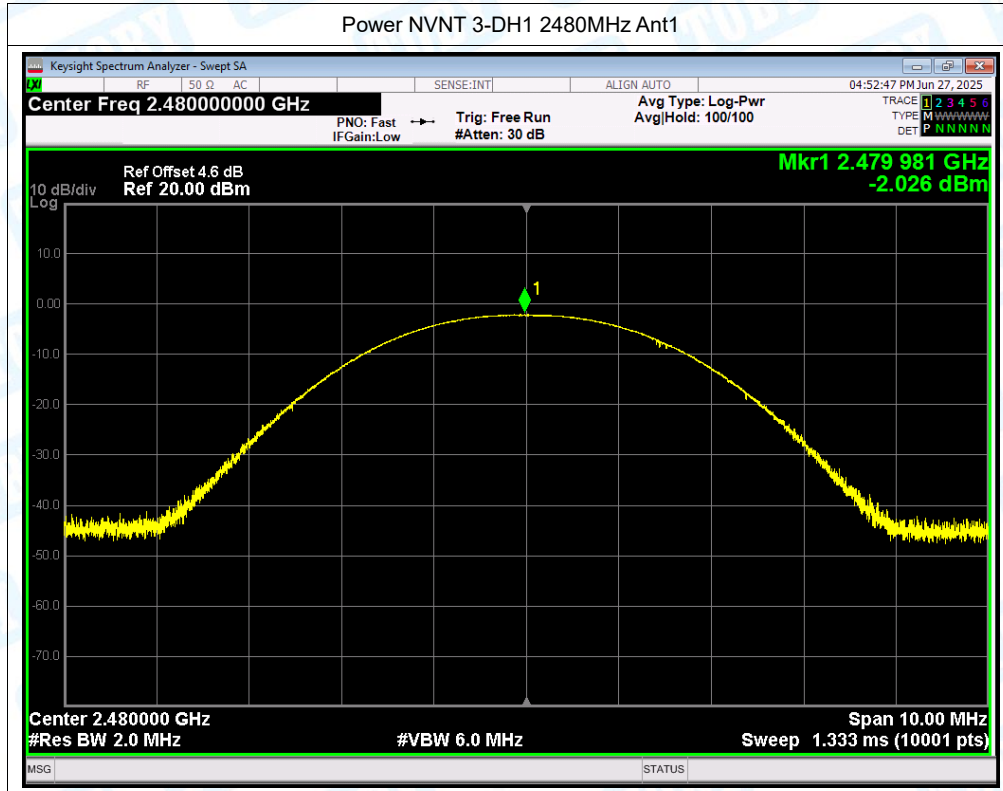


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1





3.-20dB Bandwidth

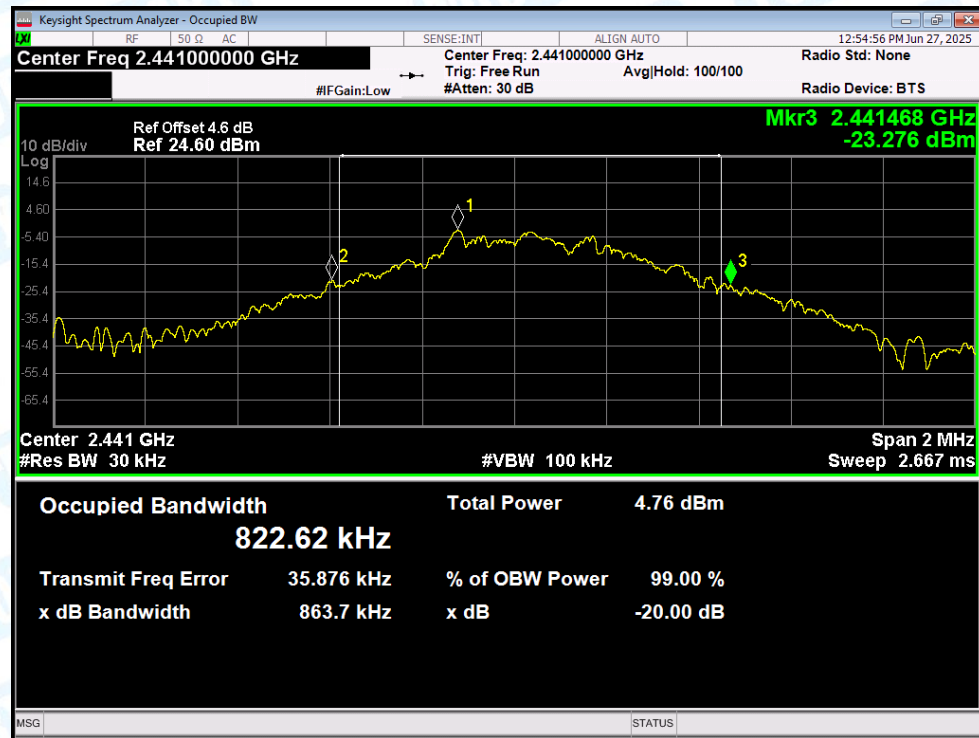
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	0	Pass
NVNT	1-DH1	2441	Ant1	0.86	0	Pass
NVNT	1-DH1	2480	Ant1	0.88	0	Pass
NVNT	2-DH1	2402	Ant1	1.25	0	Pass
NVNT	2-DH1	2441	Ant1	1.21	0	Pass
NVNT	2-DH1	2480	Ant1	1.16	0	Pass
NVNT	3-DH1	2402	Ant1	1.21	0	Pass
NVNT	3-DH1	2441	Ant1	1.21	0	Pass
NVNT	3-DH1	2480	Ant1	1.19	0	Pass

Test Graphs

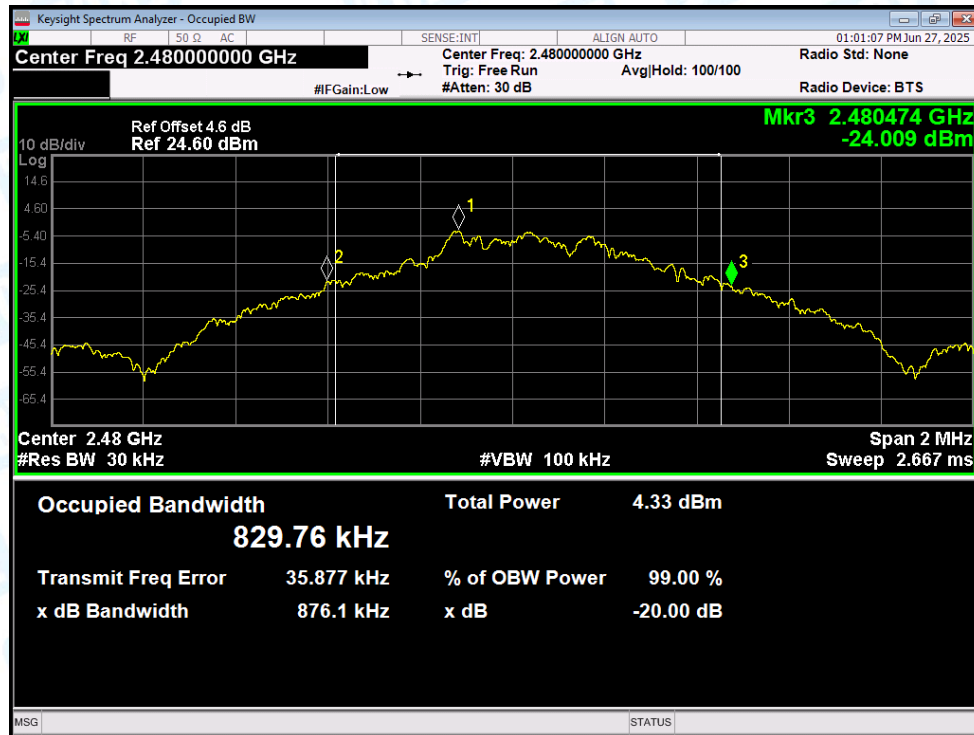
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



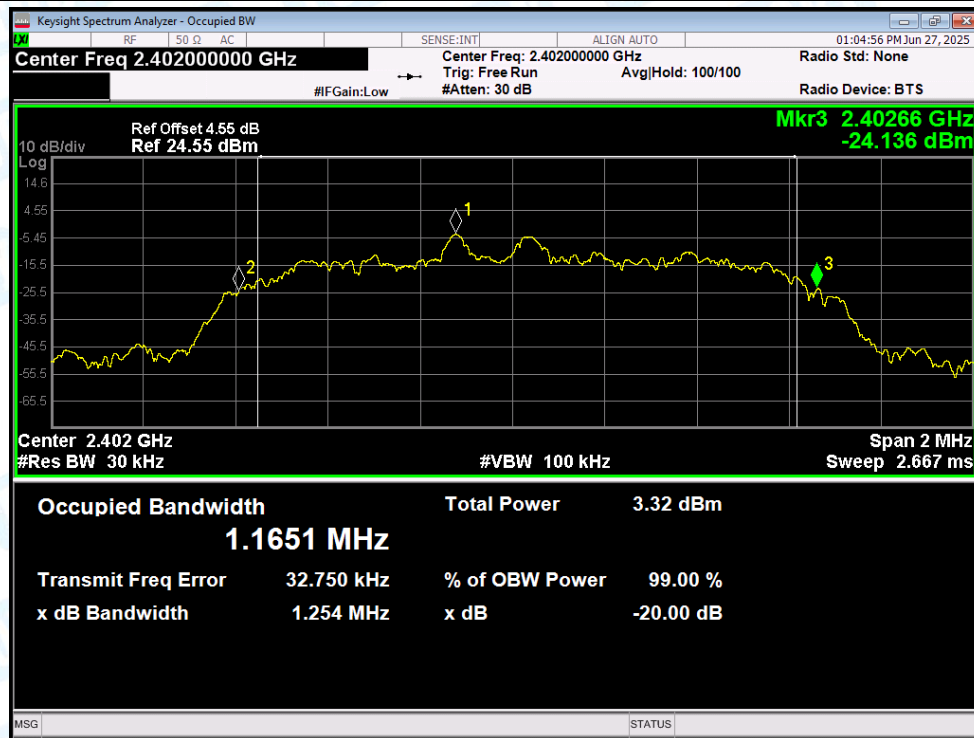
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



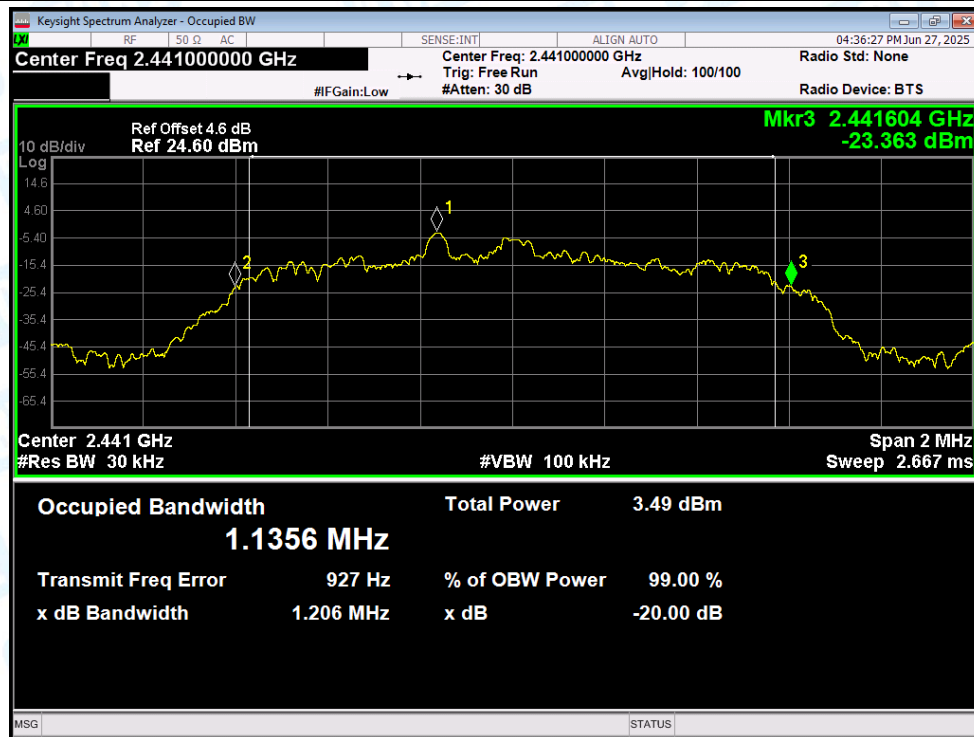
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



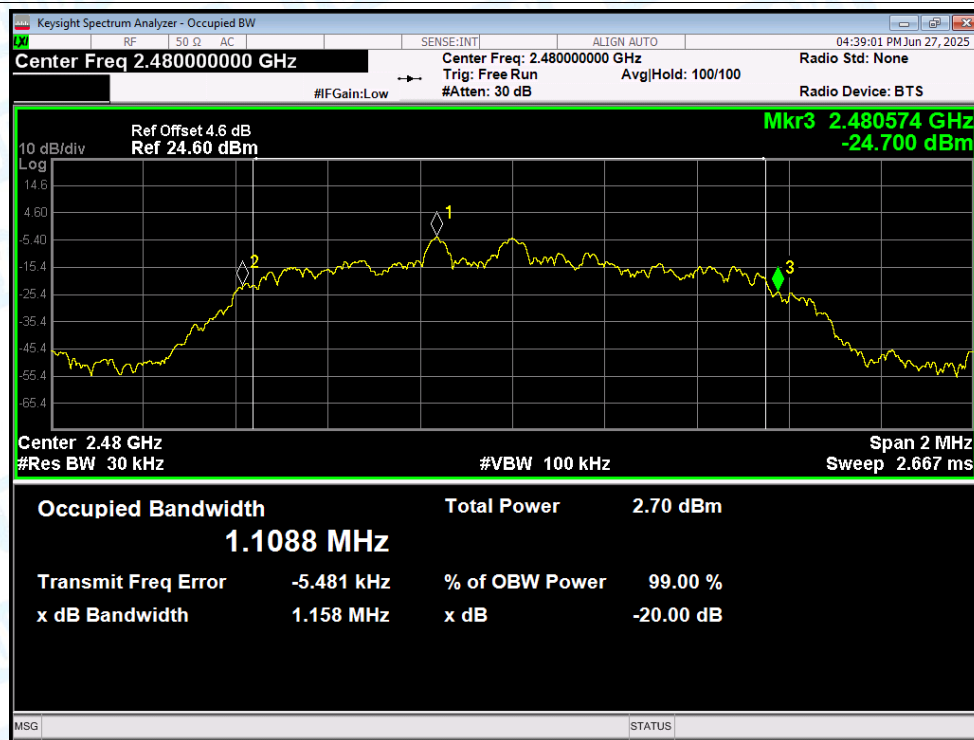
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



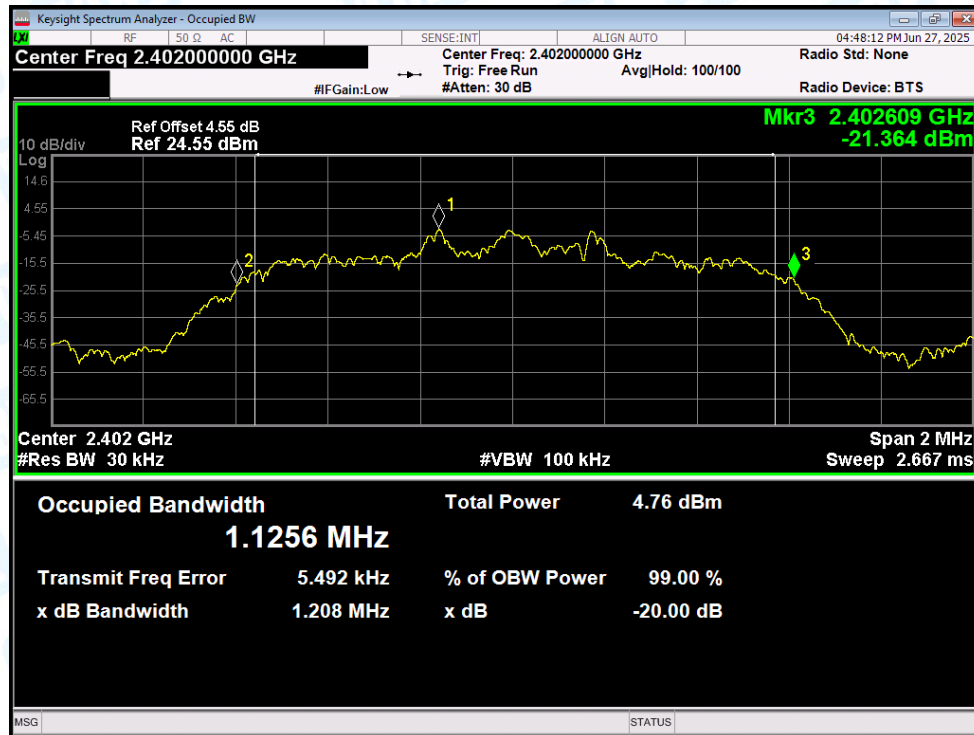
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



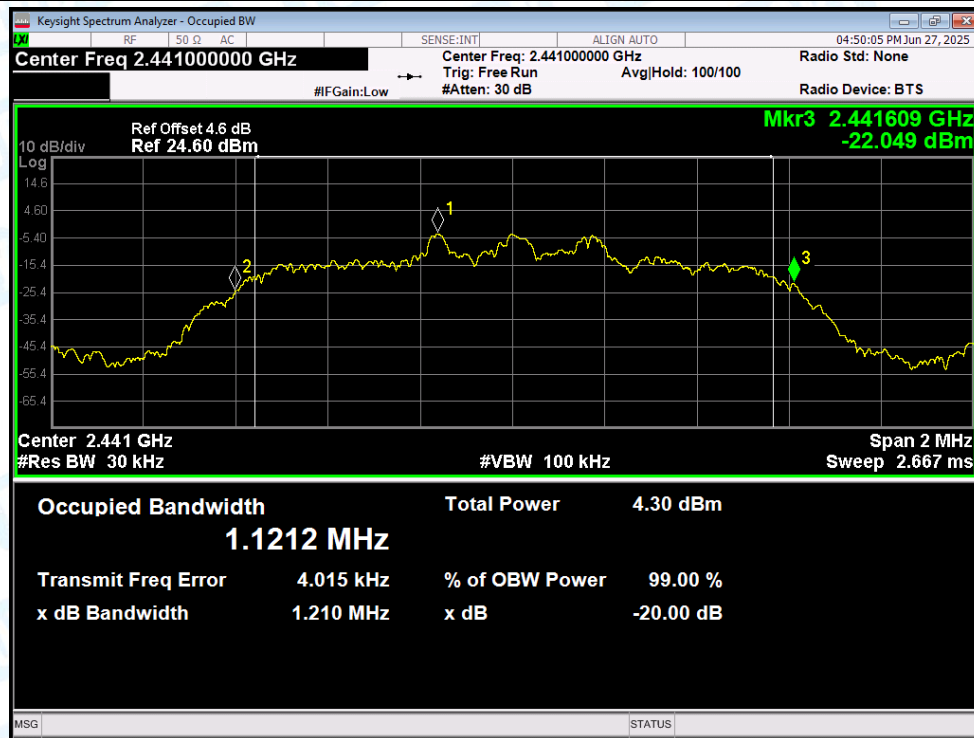
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

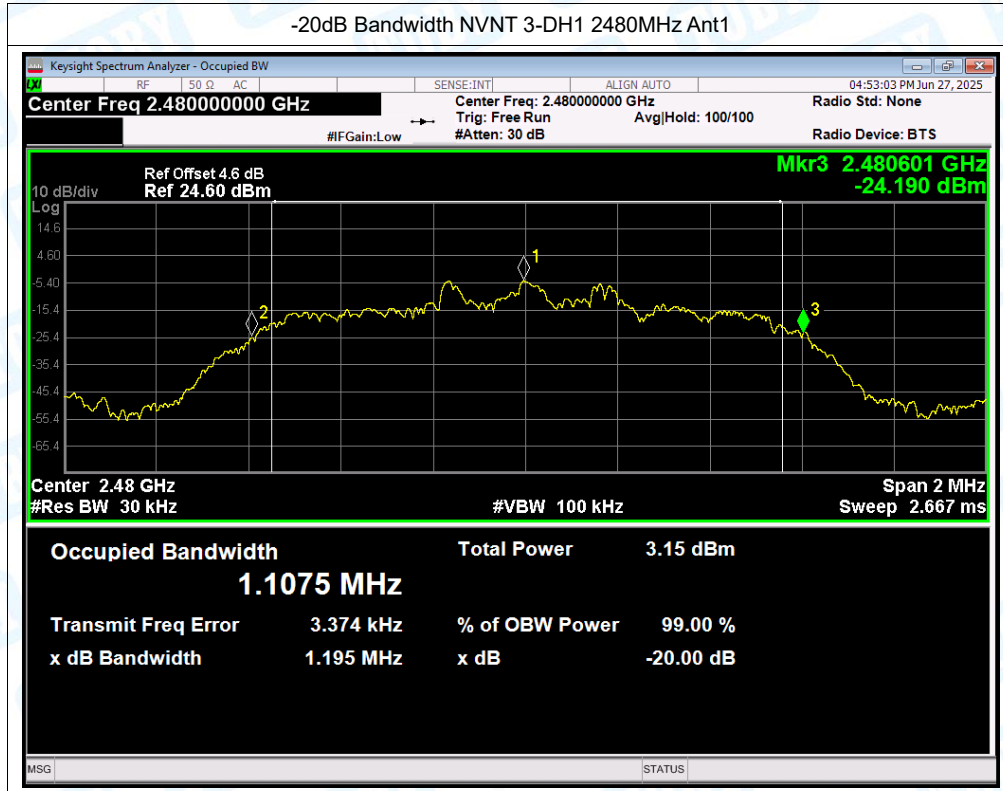


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



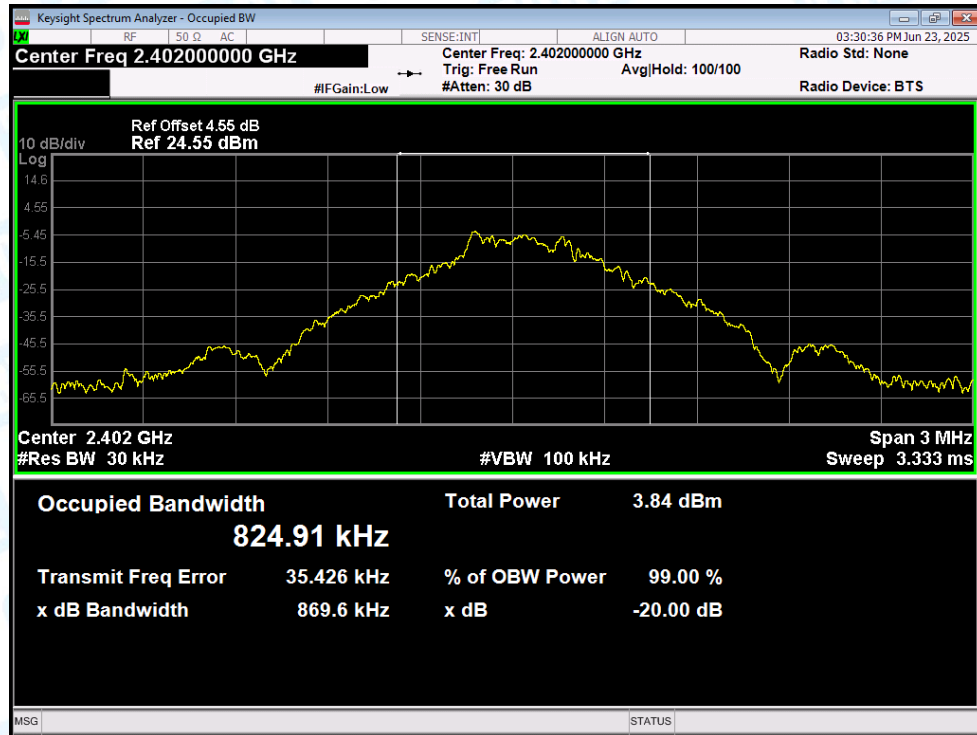


4.Occupied Channel Bandwidth

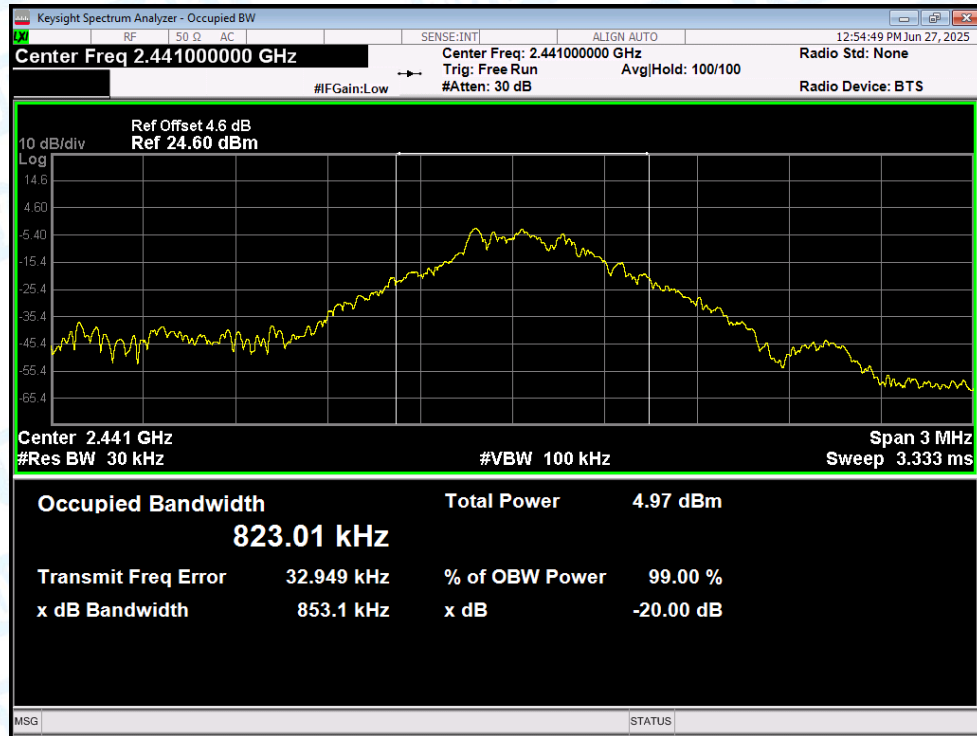
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.825
NVNT	1-DH1	2441	Ant1	0.823
NVNT	1-DH1	2480	Ant1	0.809
NVNT	2-DH1	2402	Ant1	1.159
NVNT	2-DH1	2441	Ant1	1.14
NVNT	2-DH1	2480	Ant1	1.112
NVNT	3-DH1	2402	Ant1	1.123
NVNT	3-DH1	2441	Ant1	1.122
NVNT	3-DH1	2480	Ant1	1.108

Test Graphs

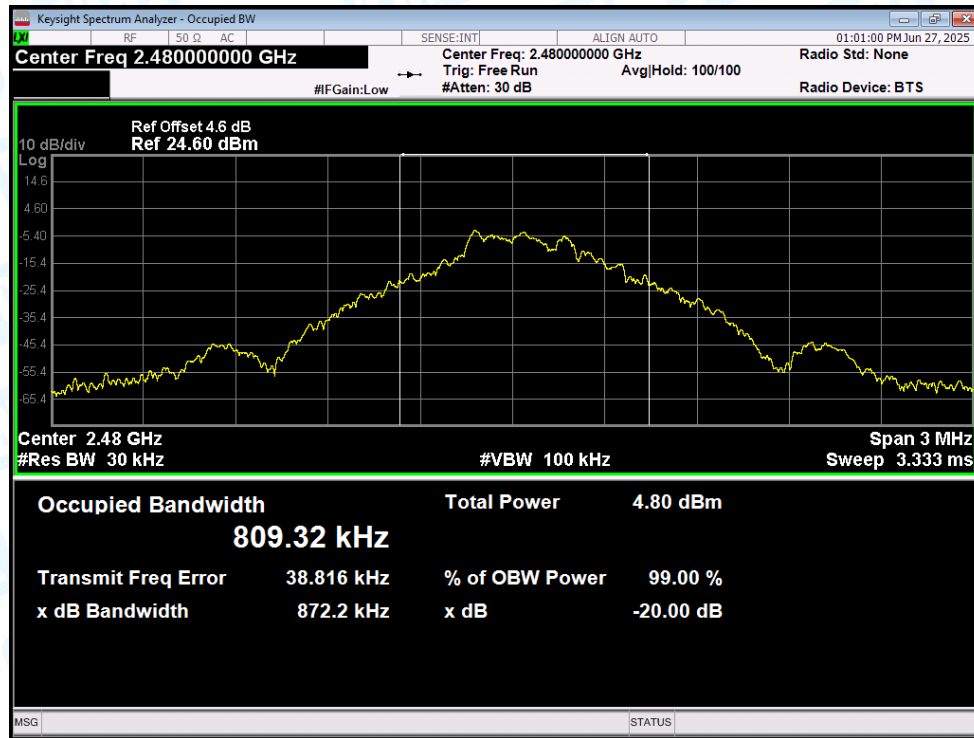
OBW NVNT 1-DH1 2402MHz Ant1



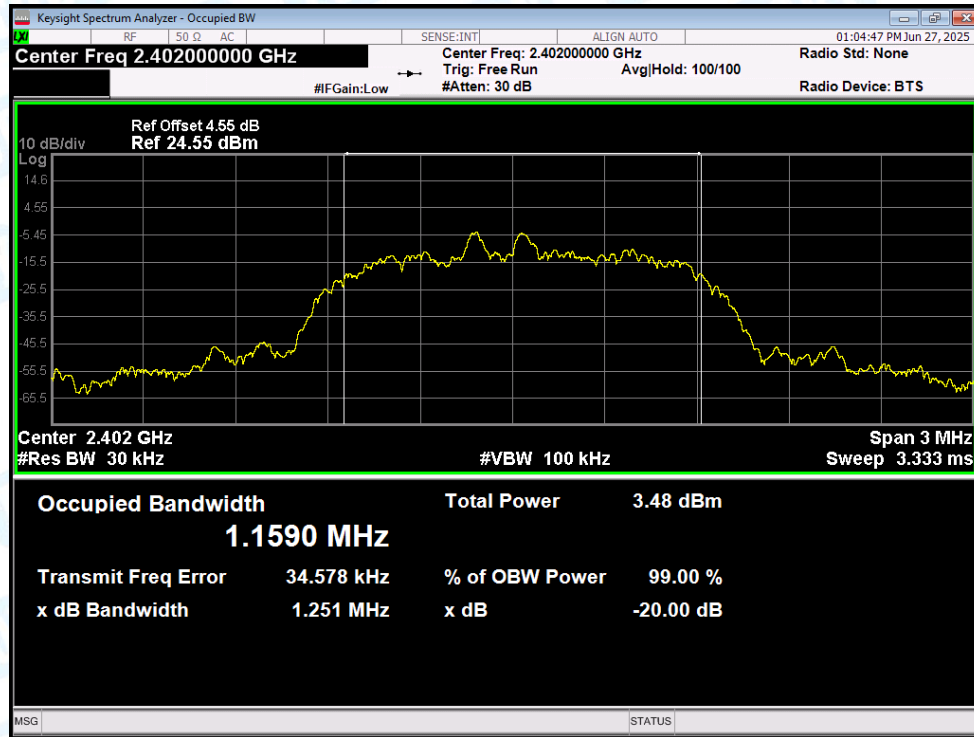
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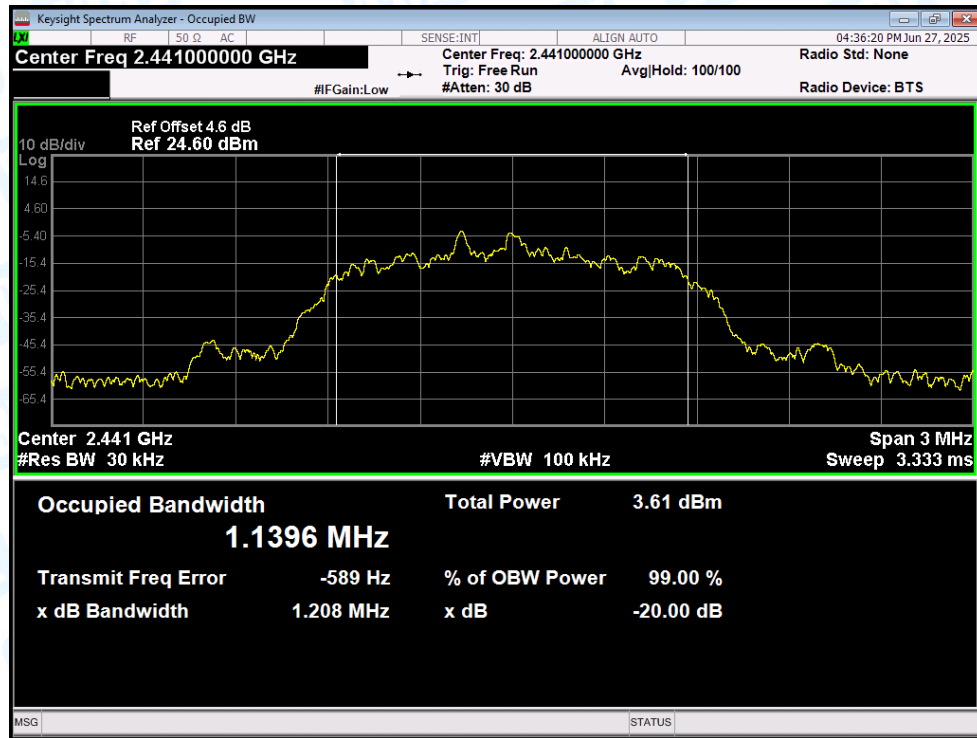
OBW NVNT 1-DH1 2480MHz Ant1



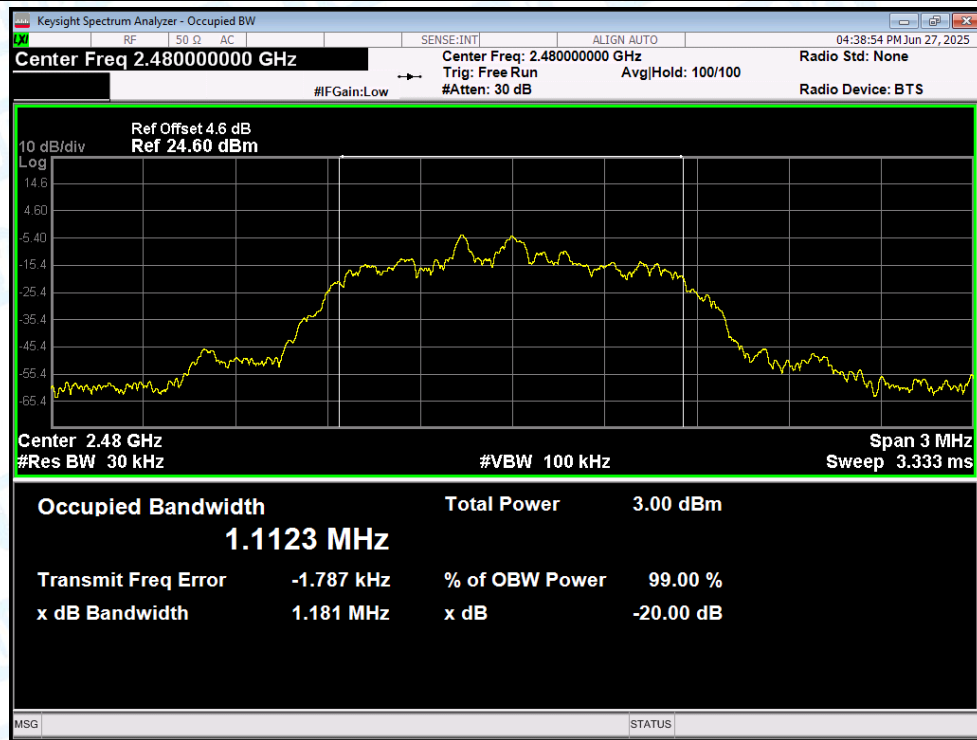
OBW NVNT 2-DH1 2402MHz Ant1



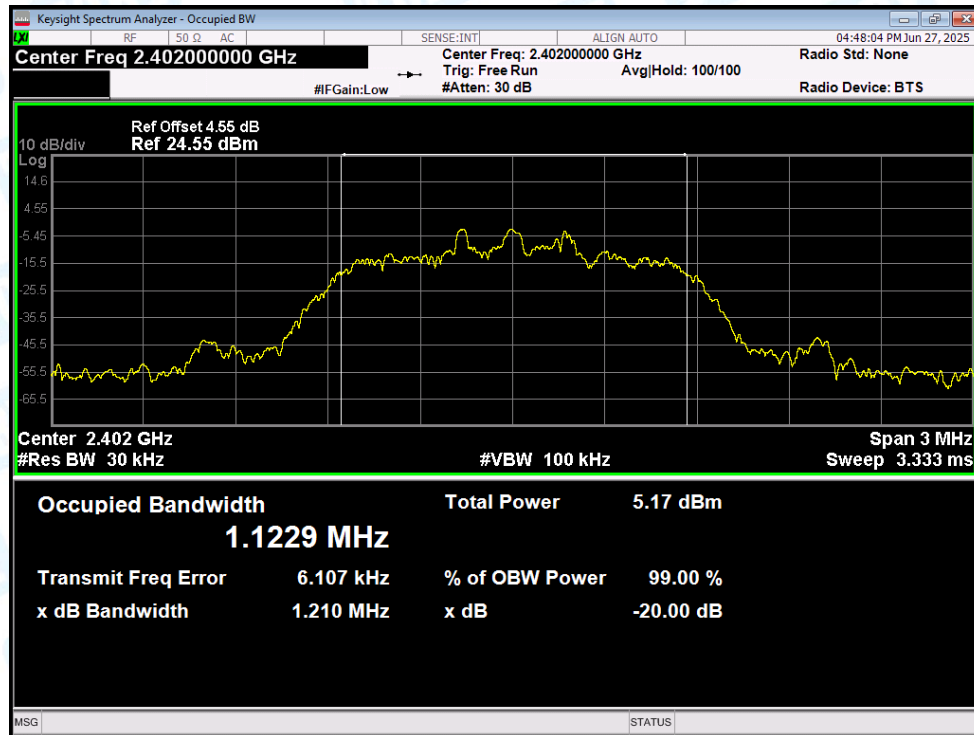
OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

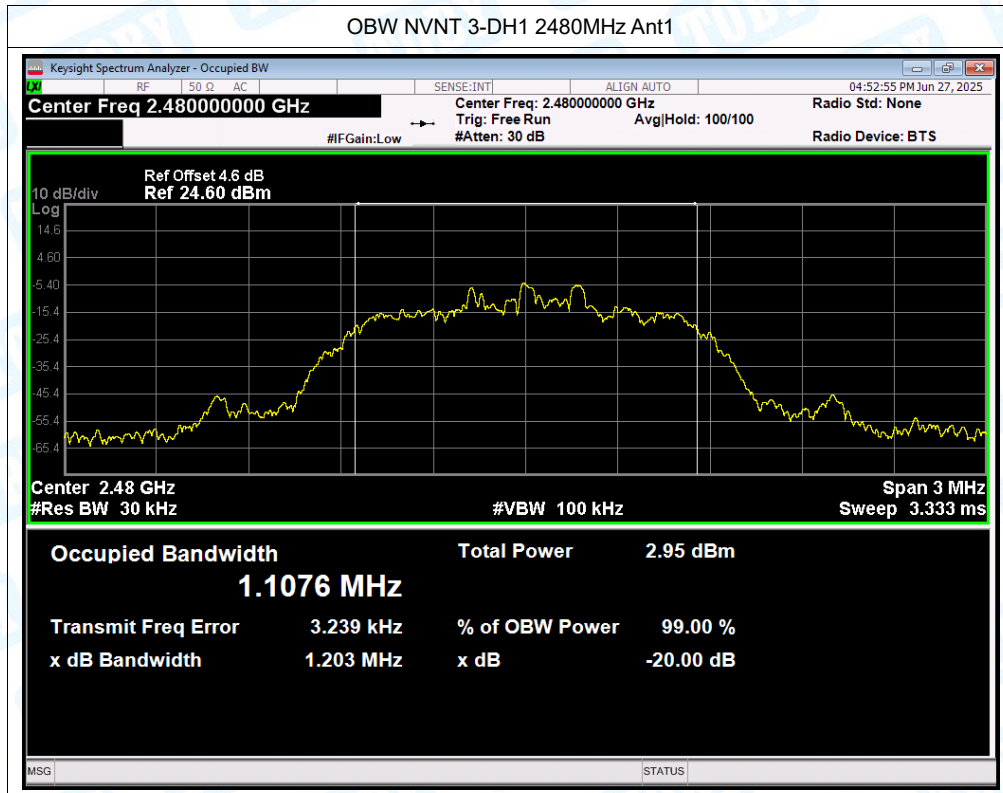


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



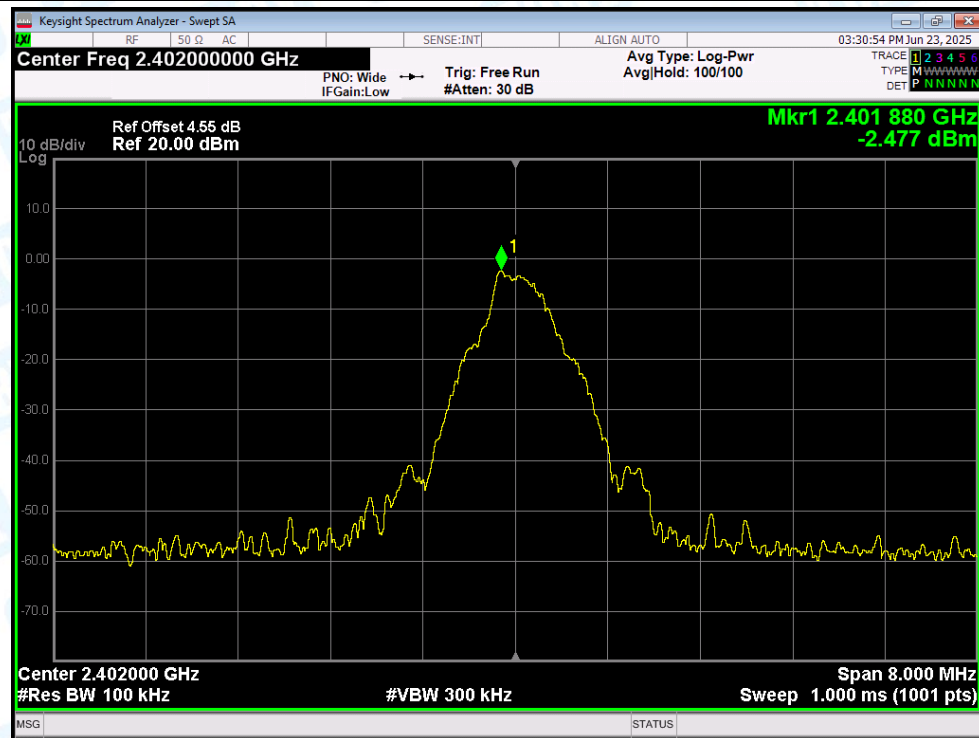


5.Band Edge

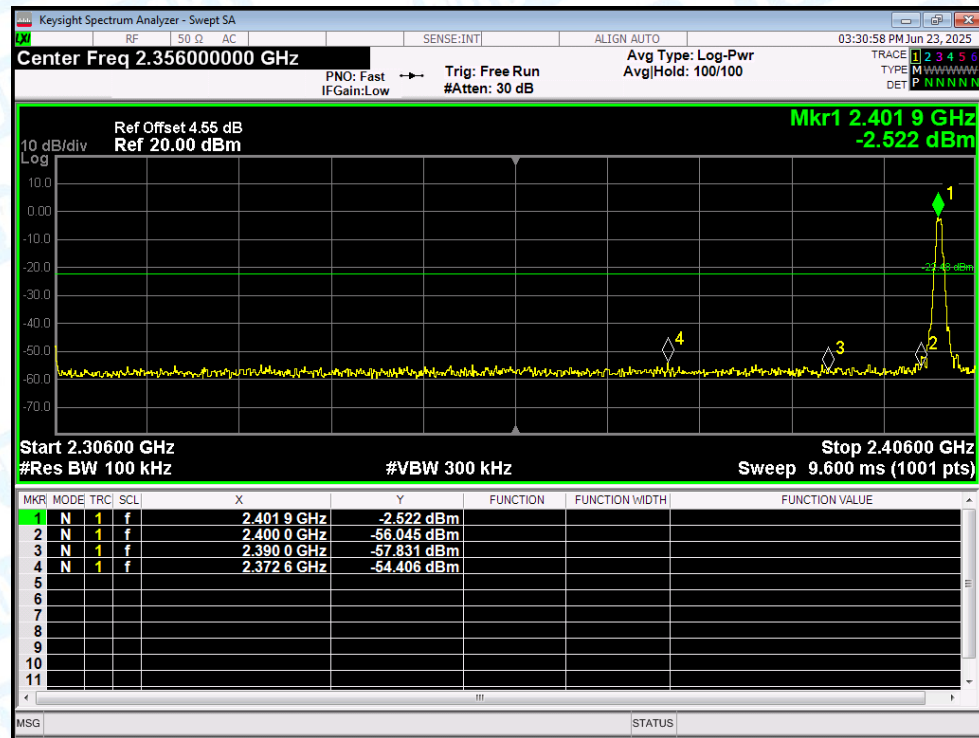
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-51.93	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-53.12	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-51.17	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-51.48	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-53.97	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-51.63	-20	Pass

Test Graphs

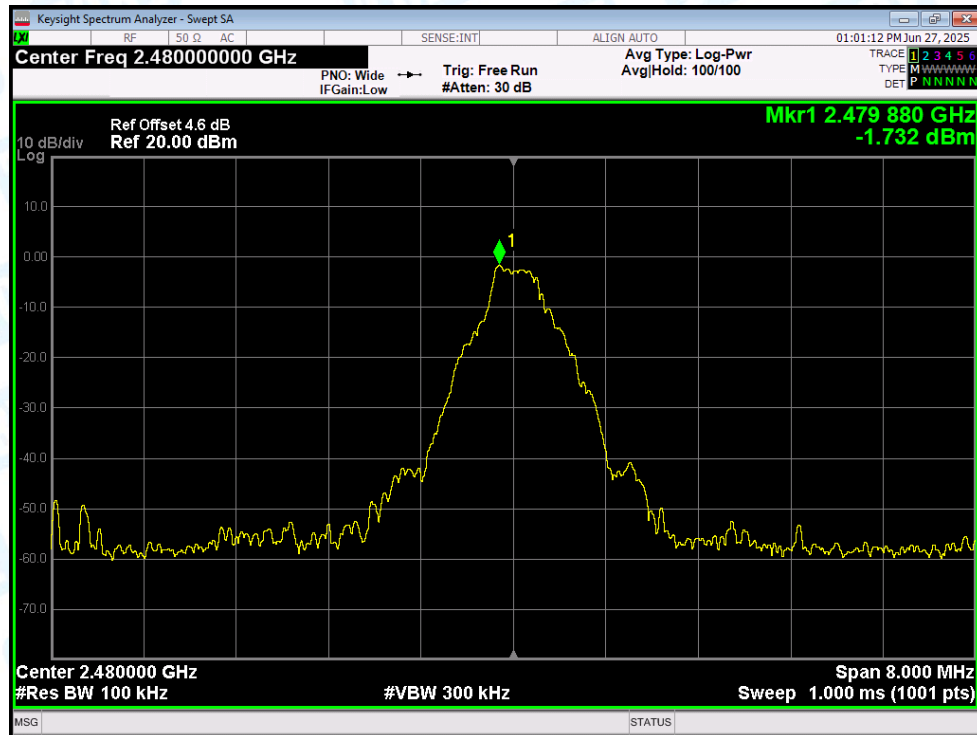
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



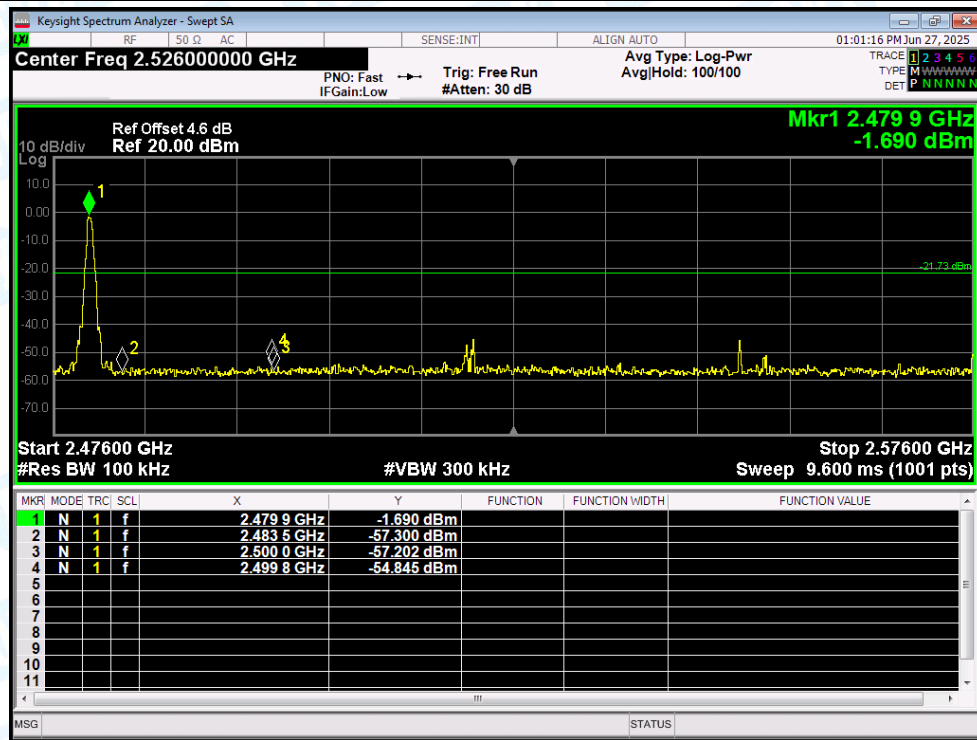
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

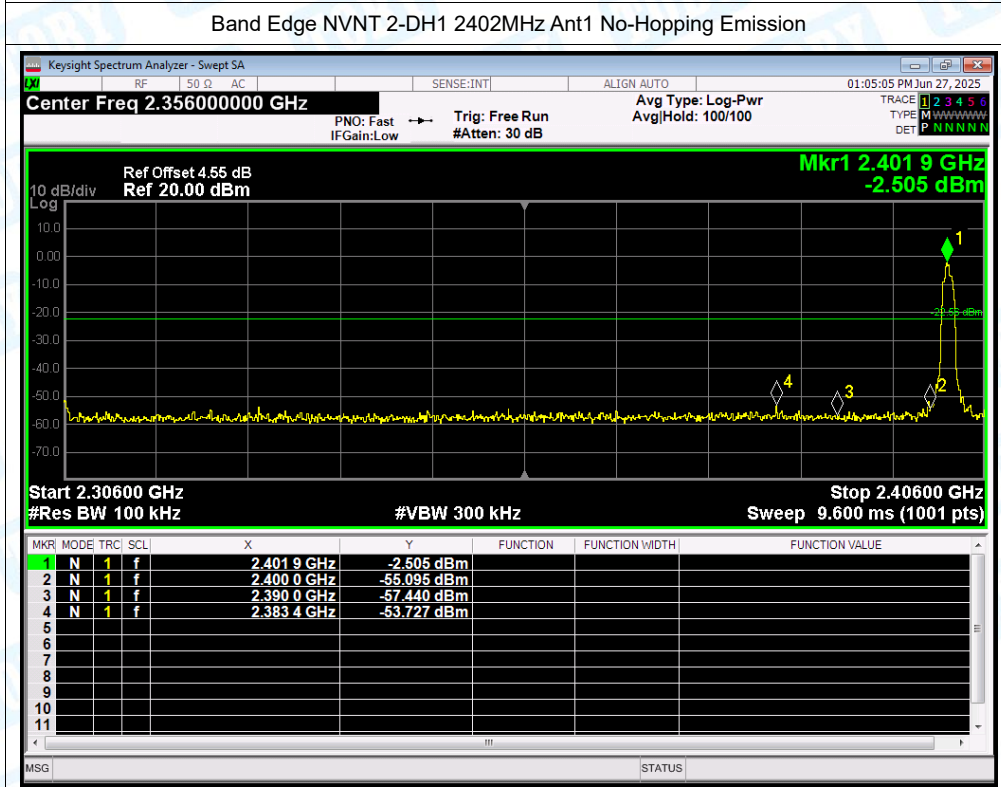
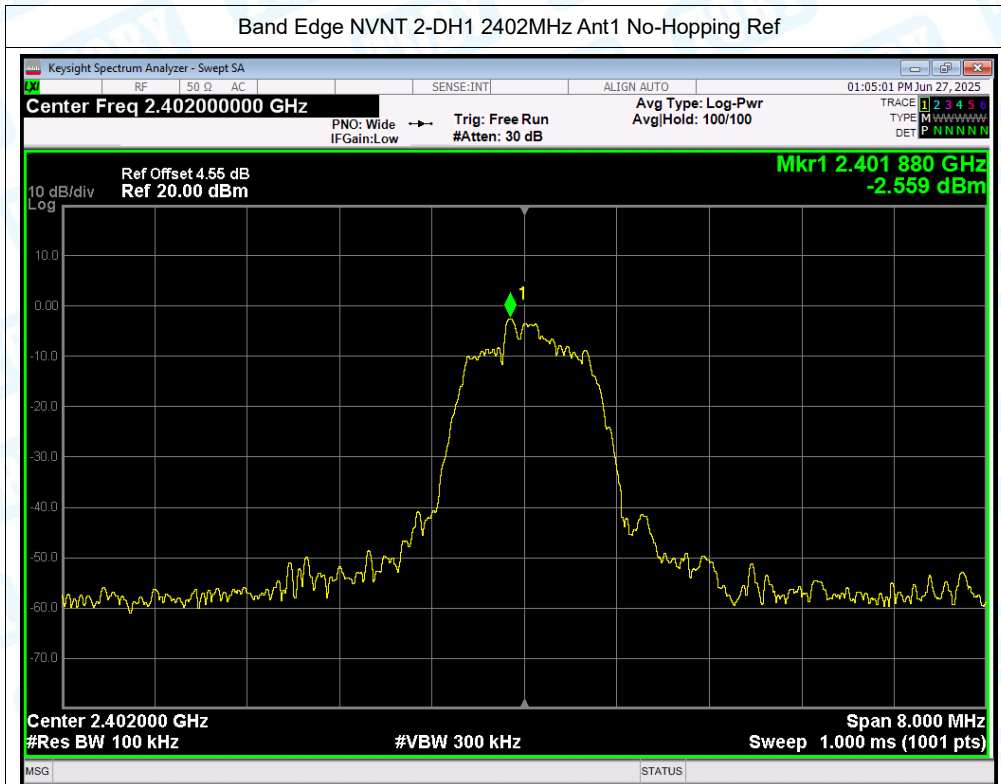


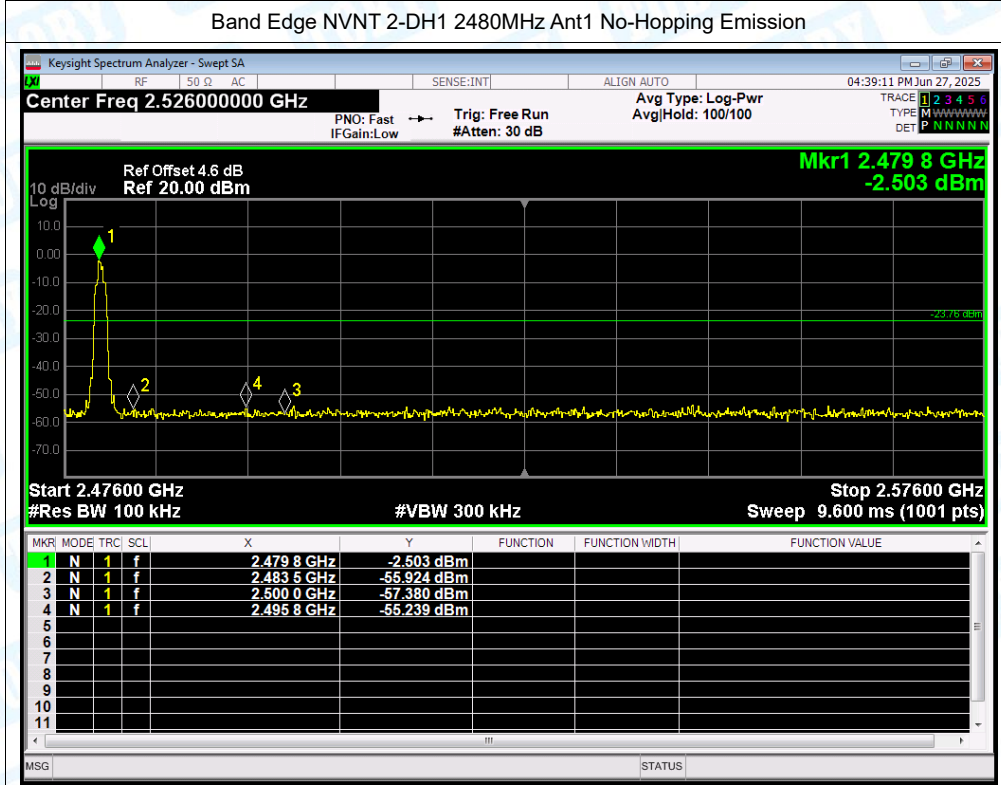
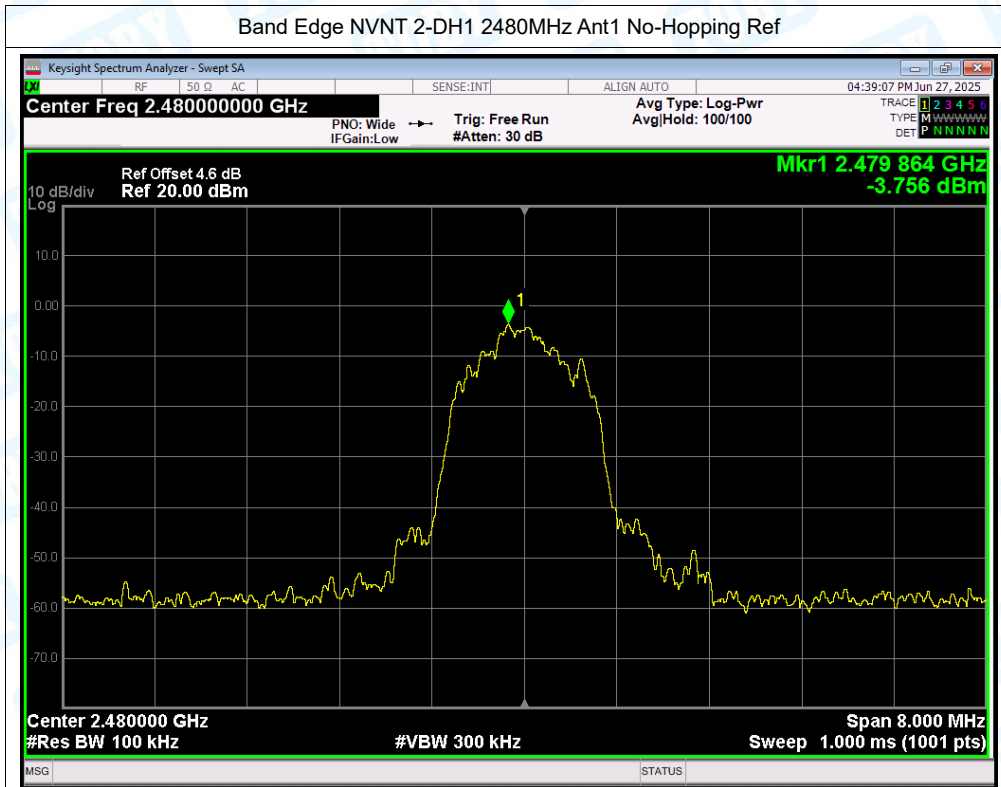
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



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



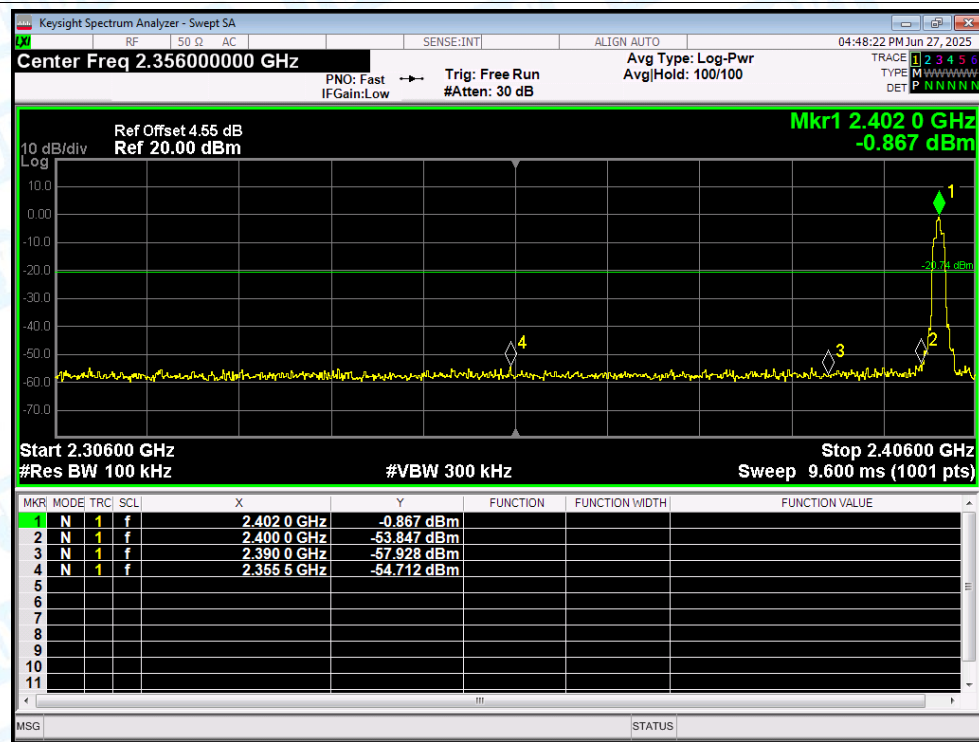




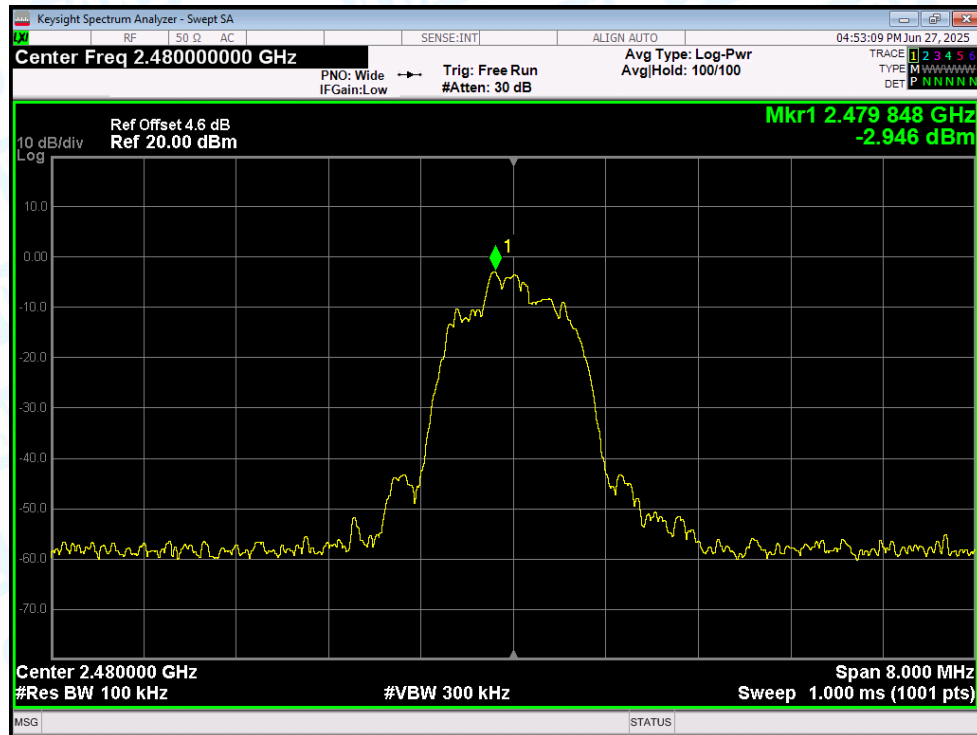
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



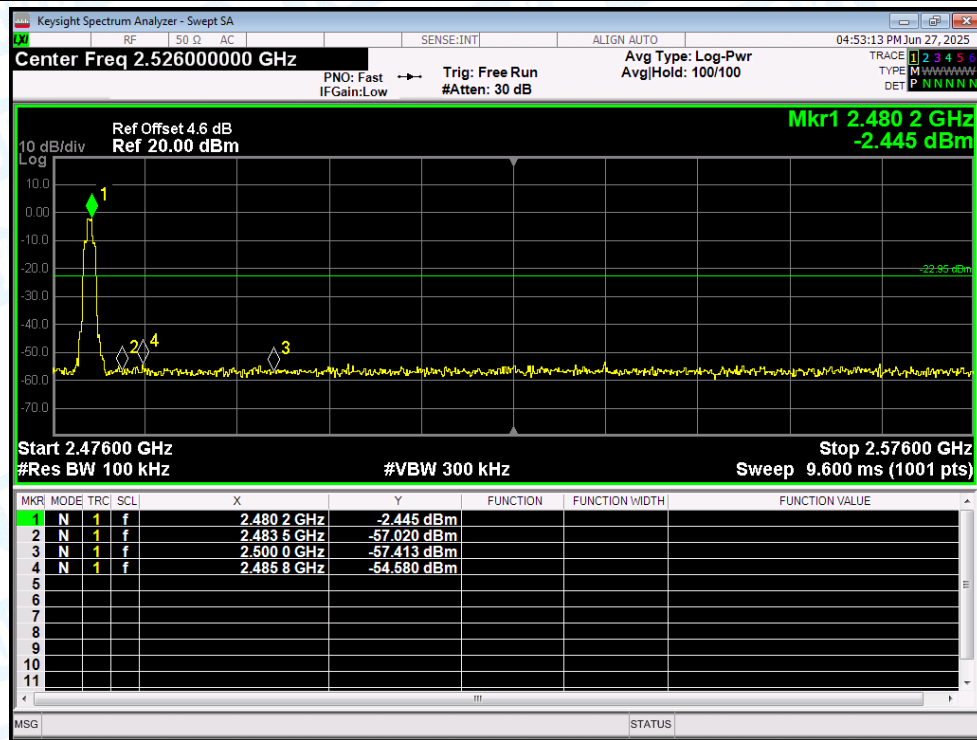
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

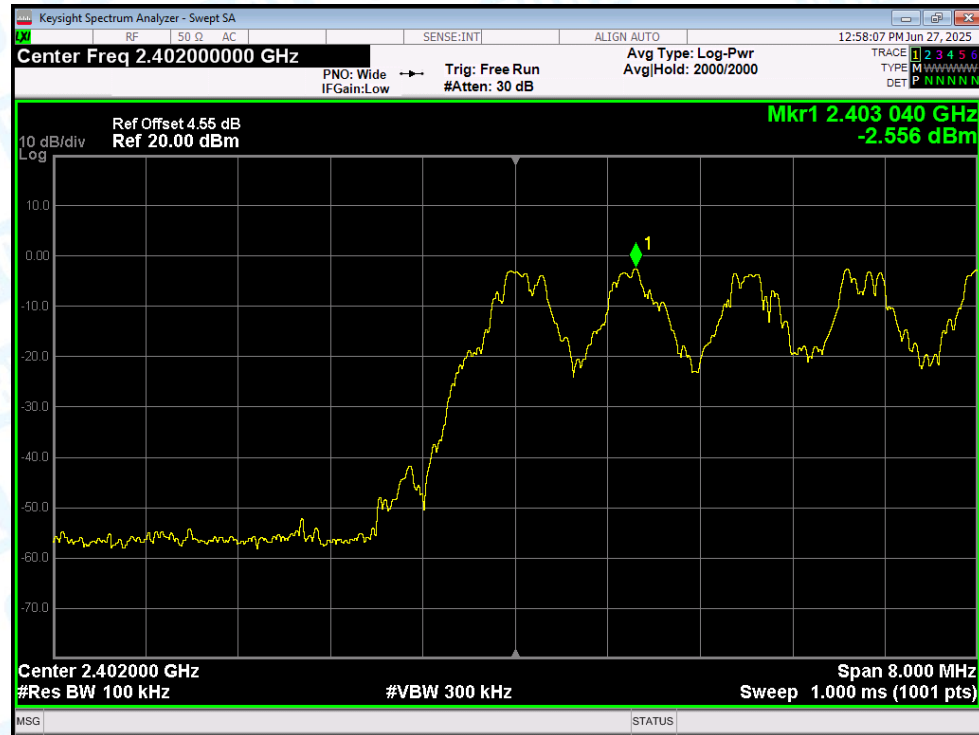


6. Band Edge(Hopping)

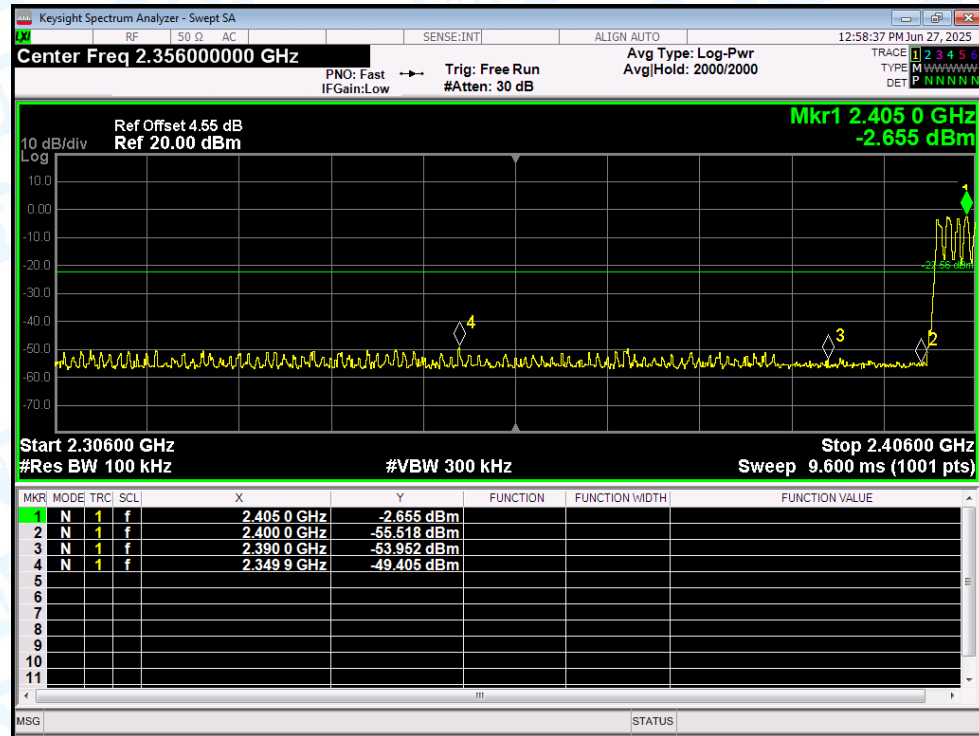
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-46.84	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-48.9	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.98	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-50.79	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-52.79	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-51.04	-20	Pass

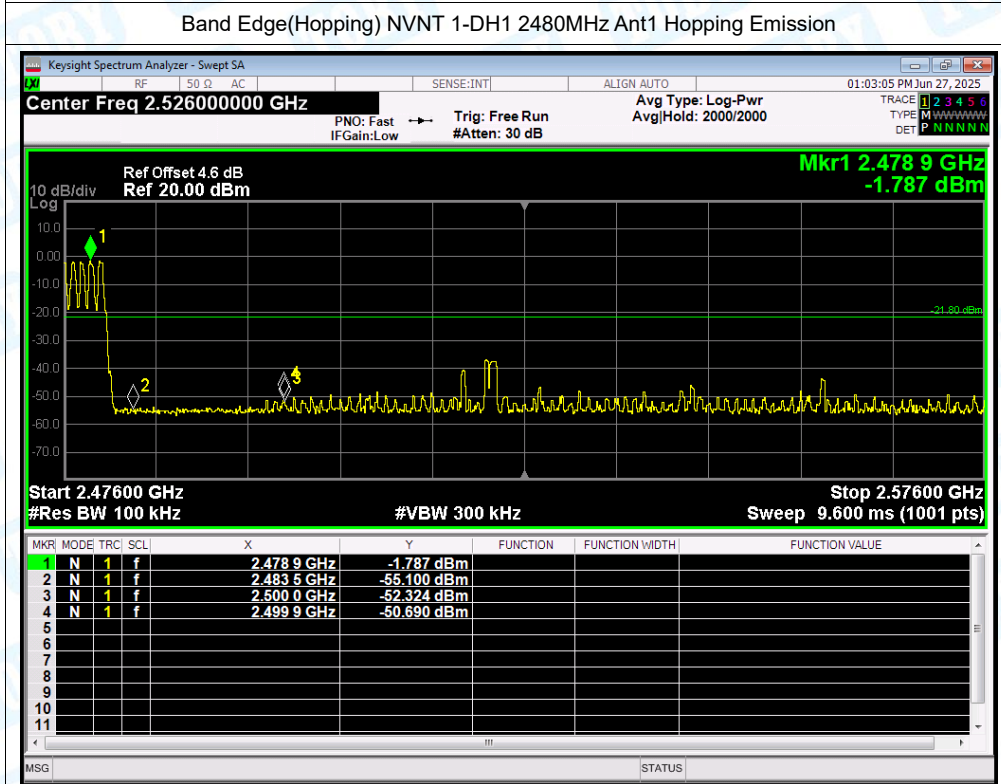
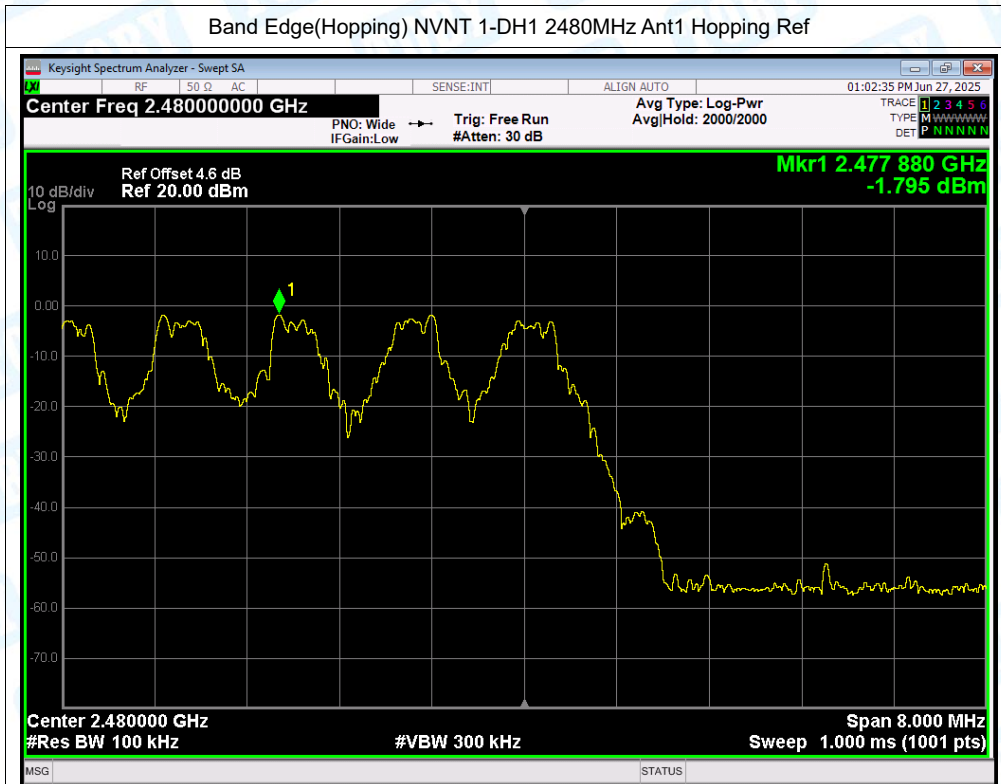
Test Graphs

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

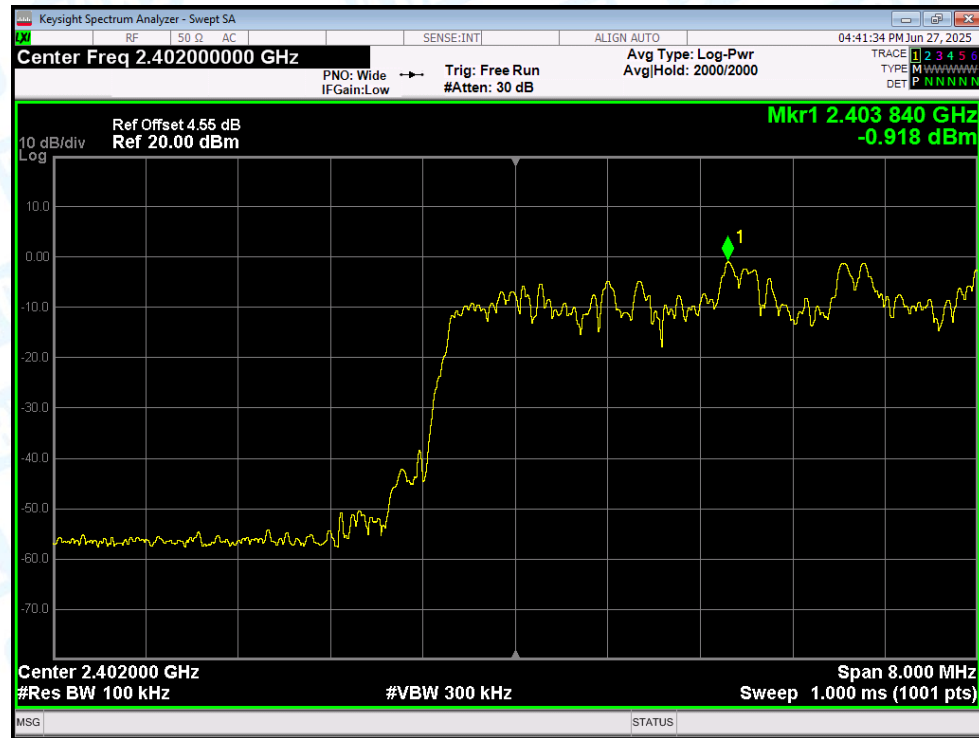


Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

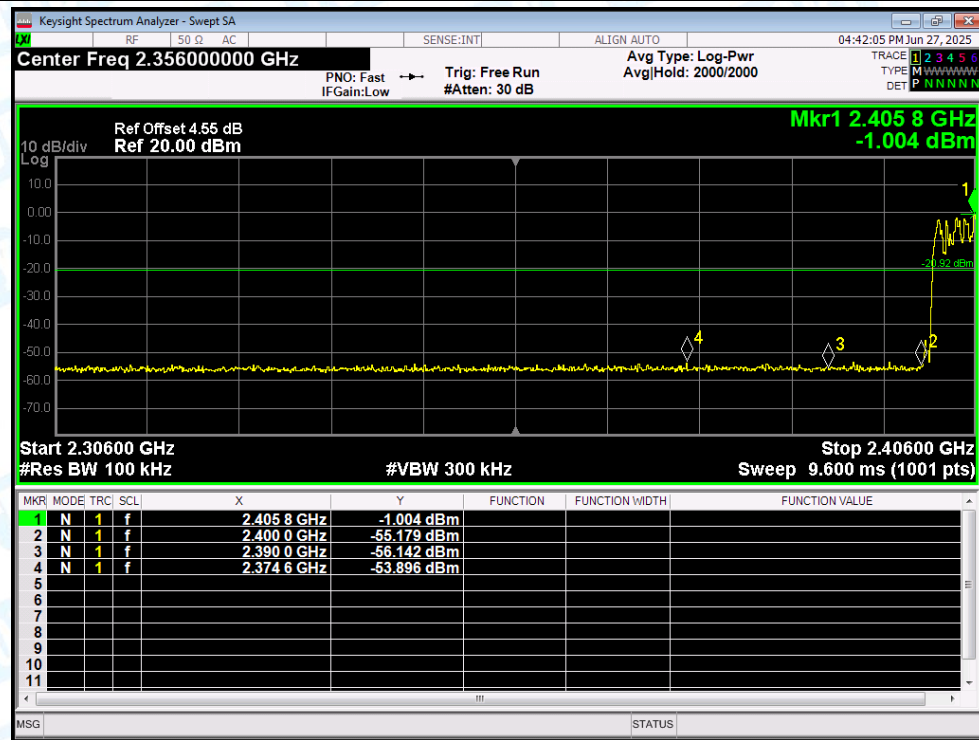


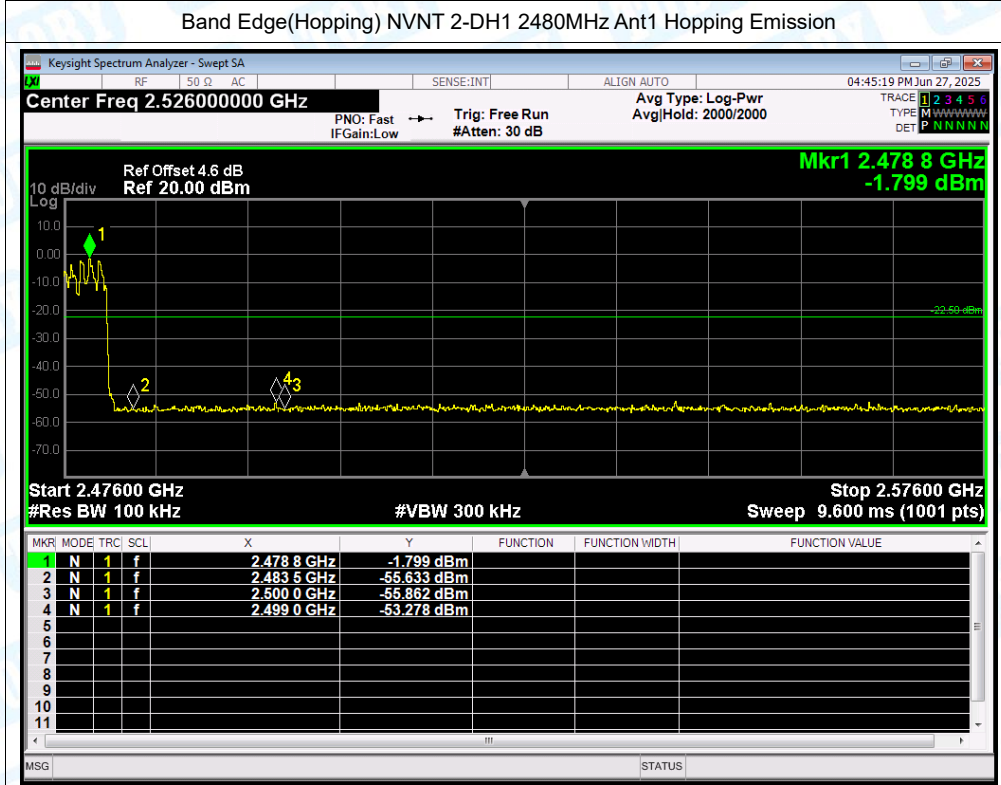
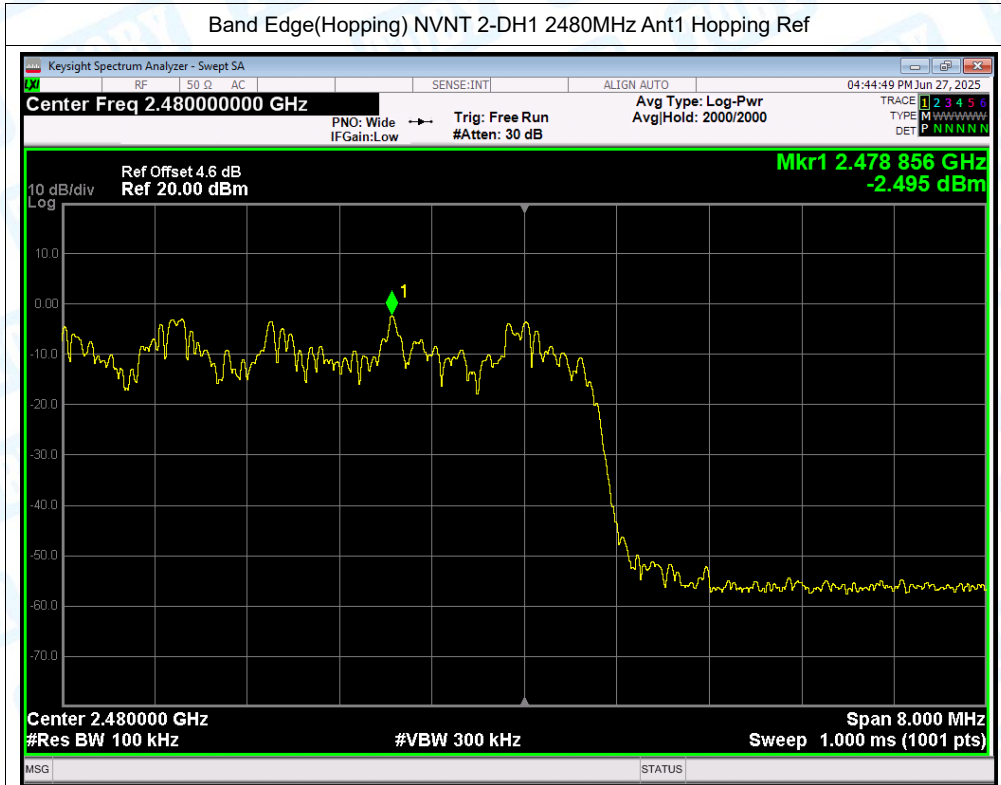


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



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

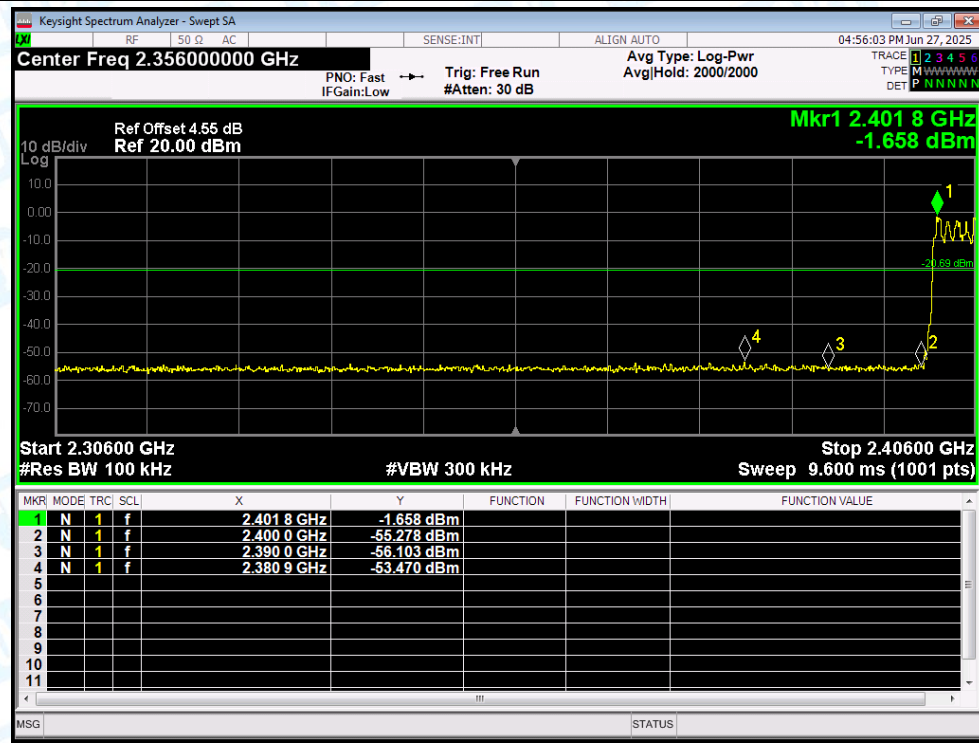


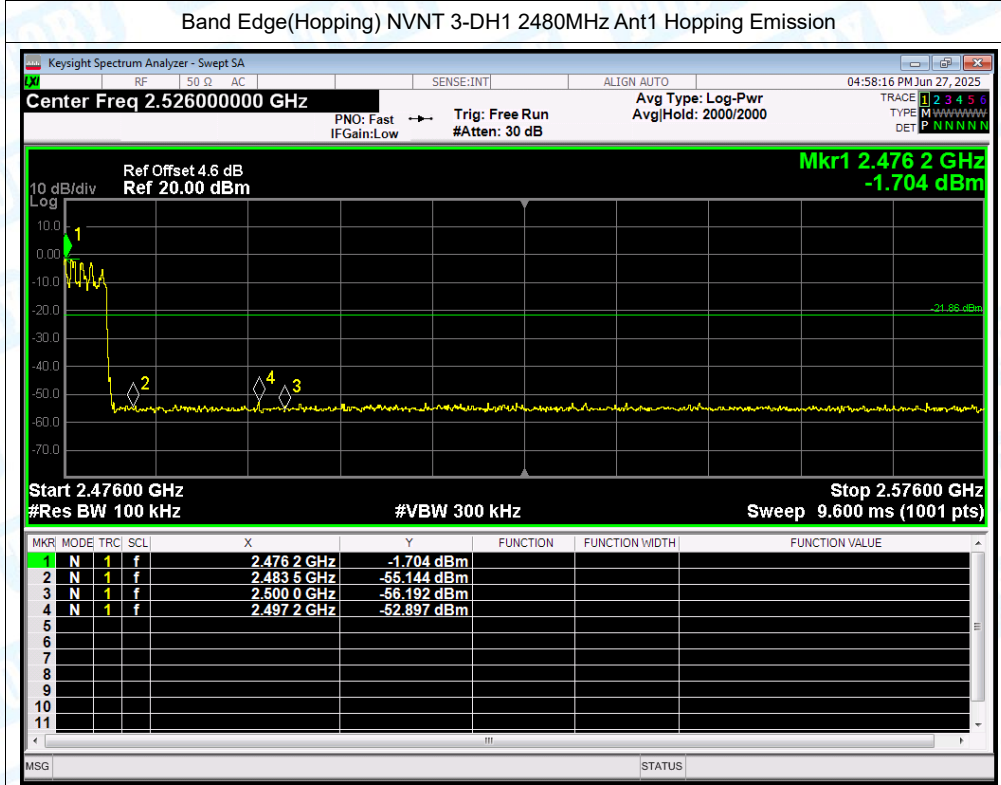


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



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



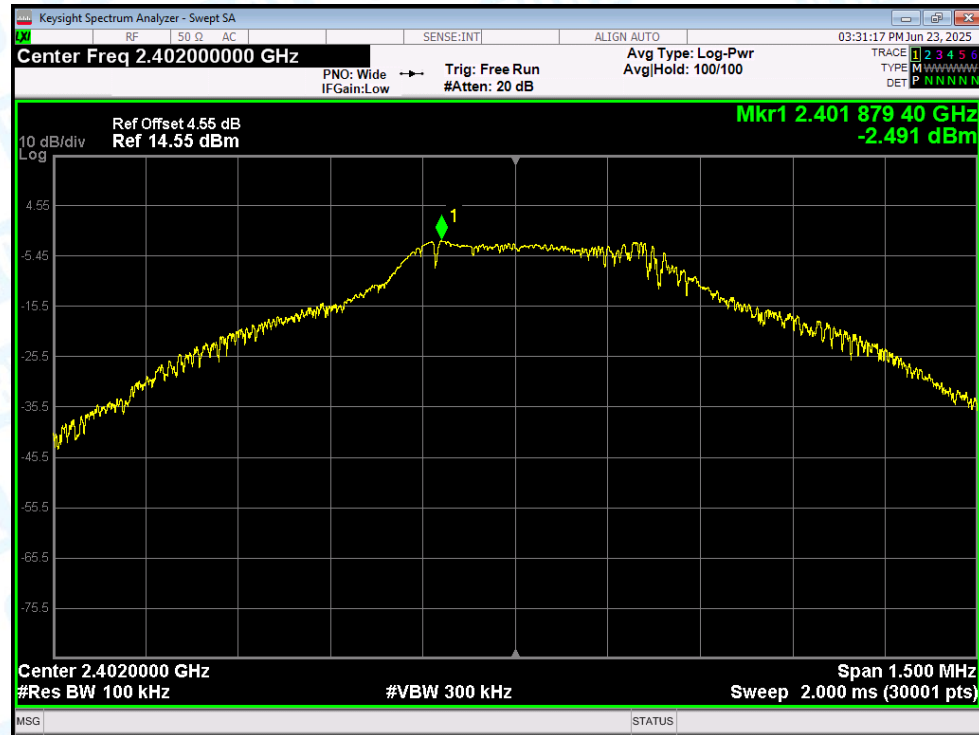


7. Conducted RF Spurious Emission

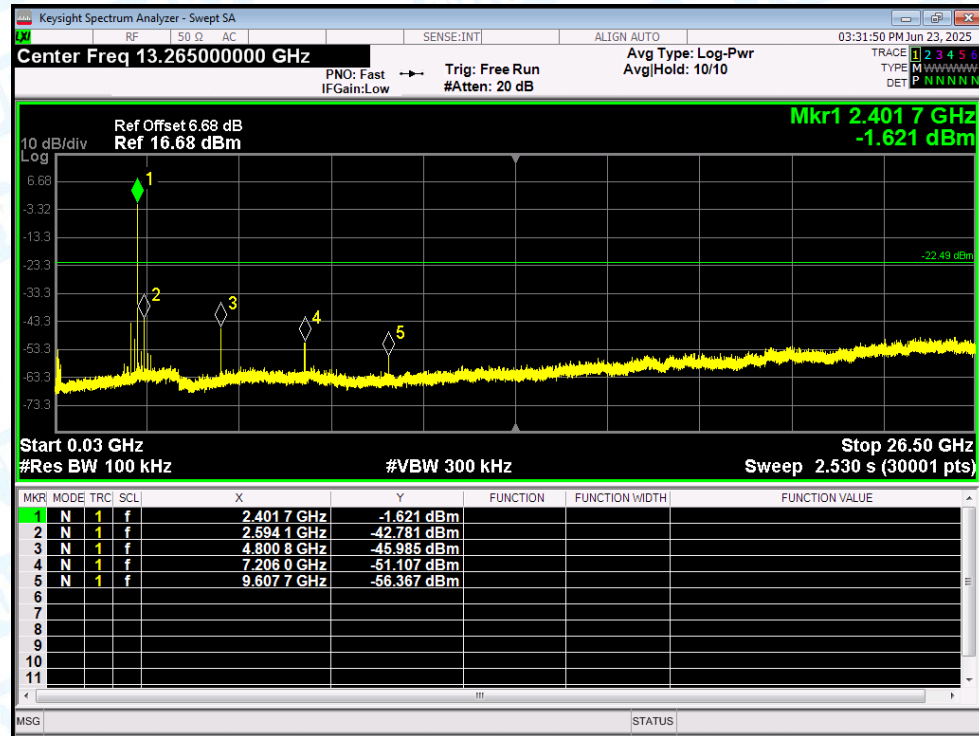
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-40.29	-20	Pass
NVNT	1-DH1	2441	Ant1	-38.41	-20	Pass
NVNT	1-DH1	2480	Ant1	-36.85	-20	Pass
NVNT	2-DH1	2402	Ant1	-37.27	-20	Pass
NVNT	2-DH1	2441	Ant1	-47.35	-20	Pass
NVNT	2-DH1	2480	Ant1	-46.15	-20	Pass
NVNT	3-DH1	2402	Ant1	-47.7	-20	Pass
NVNT	3-DH1	2441	Ant1	-47.59	-20	Pass
NVNT	3-DH1	2480	Ant1	-46.83	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



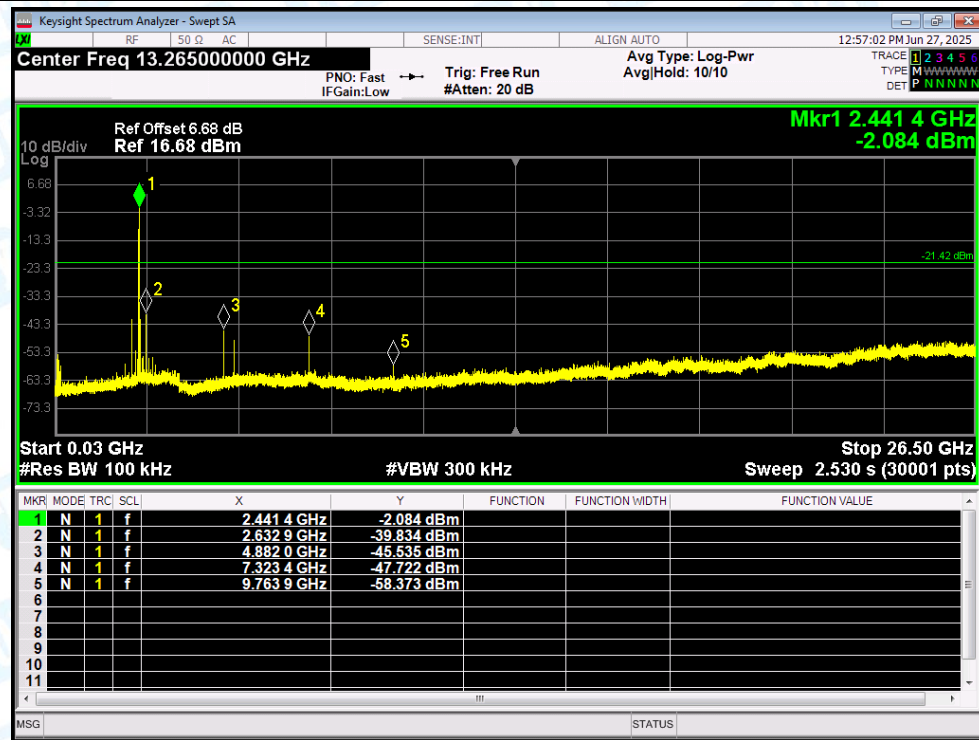
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



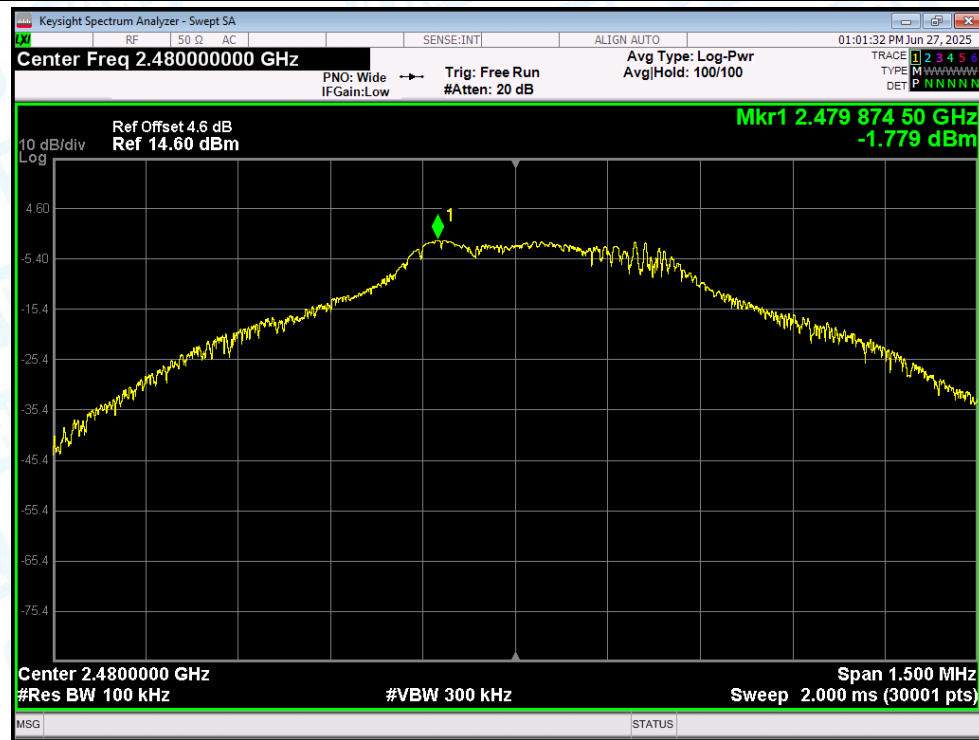
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



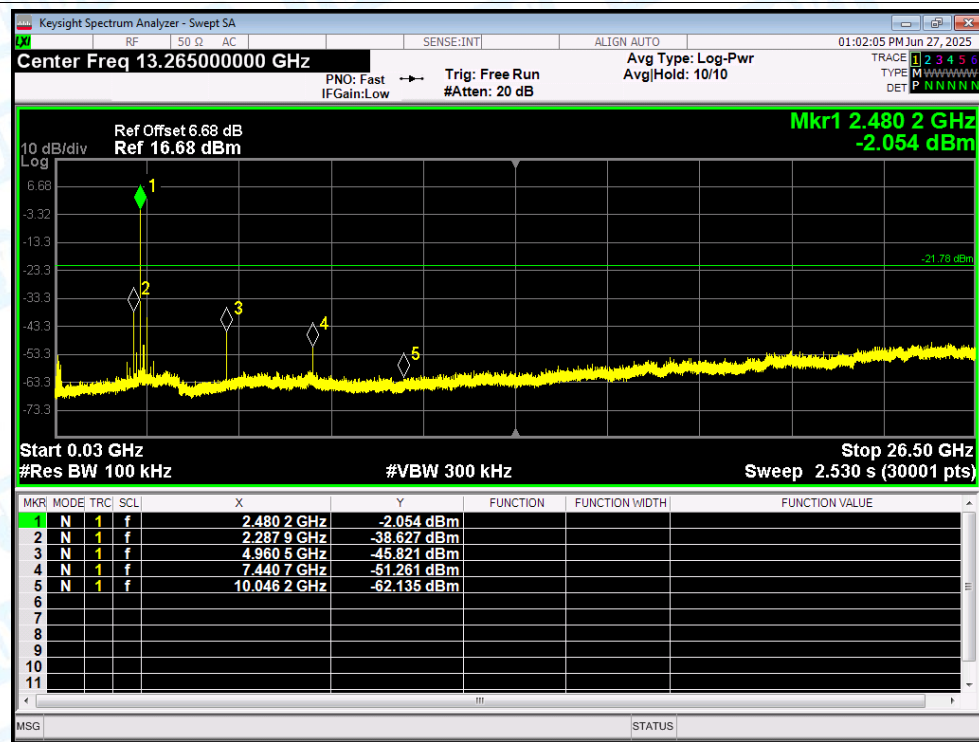
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



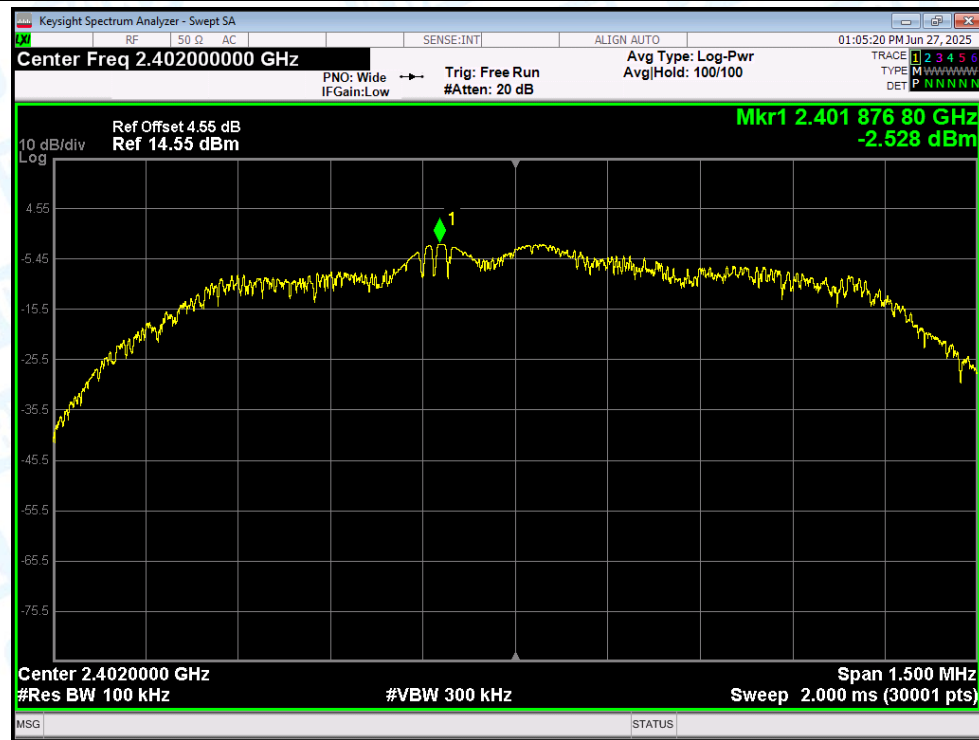
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



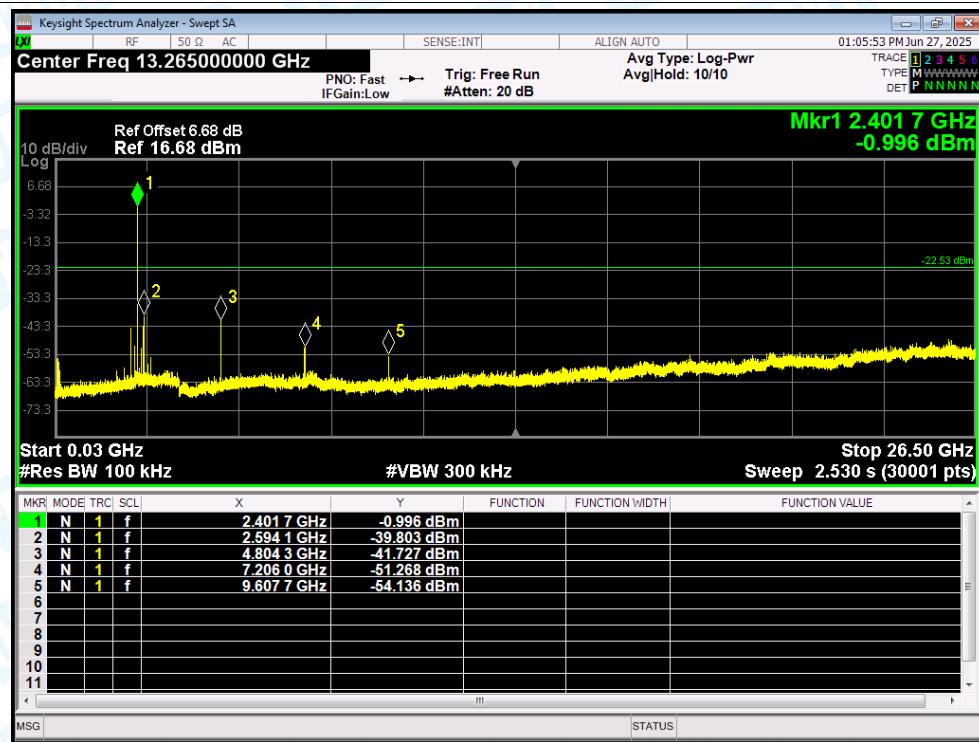
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



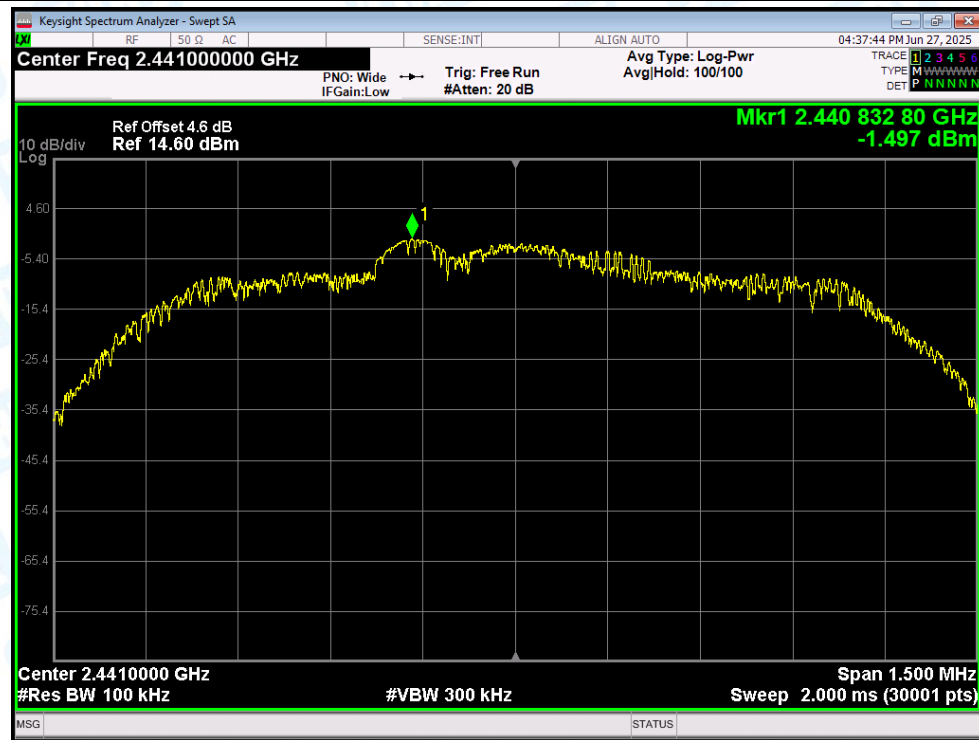
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



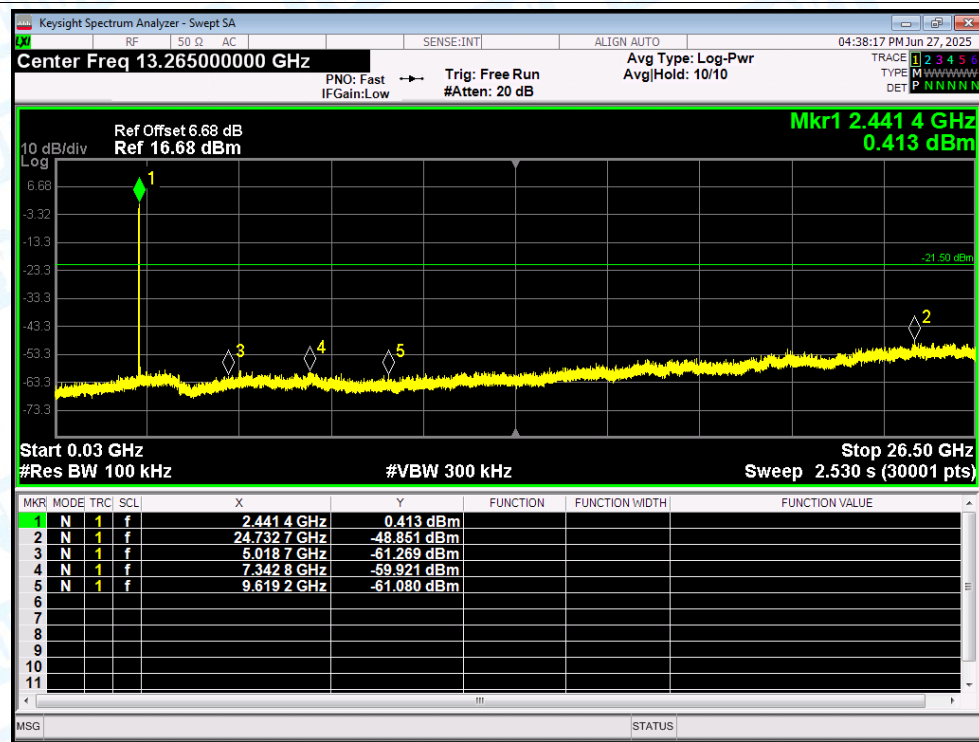
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



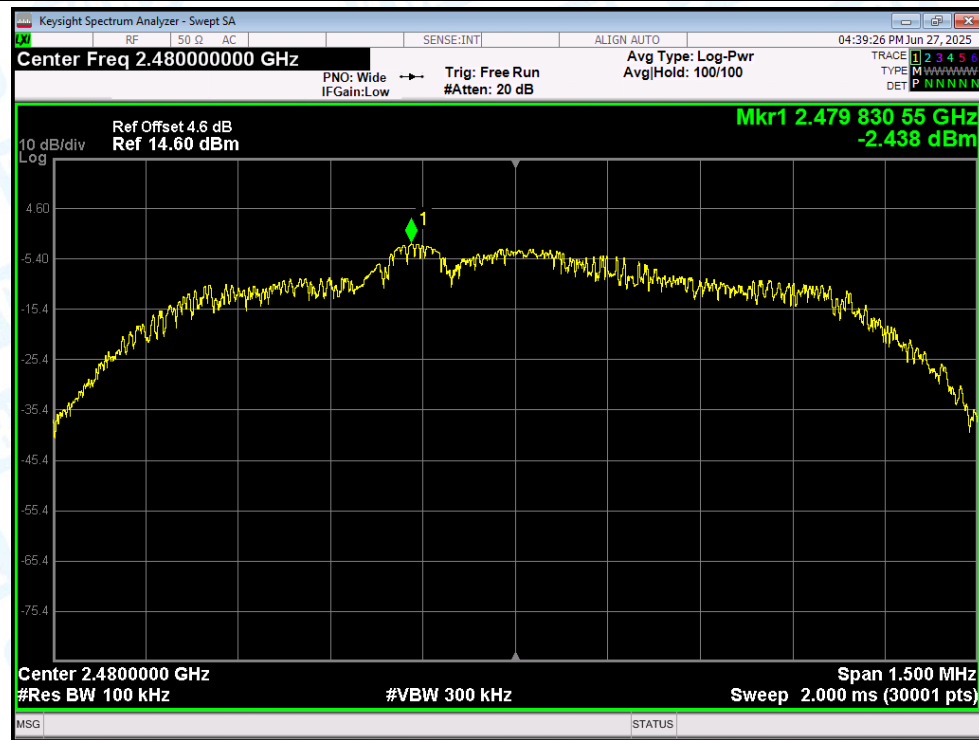
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



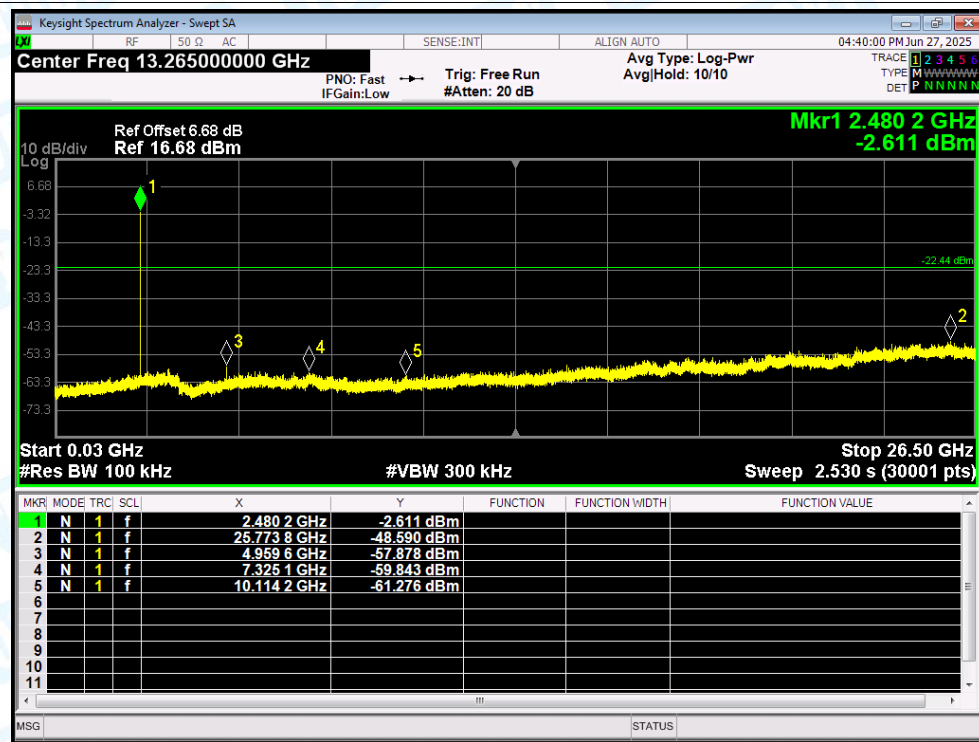
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



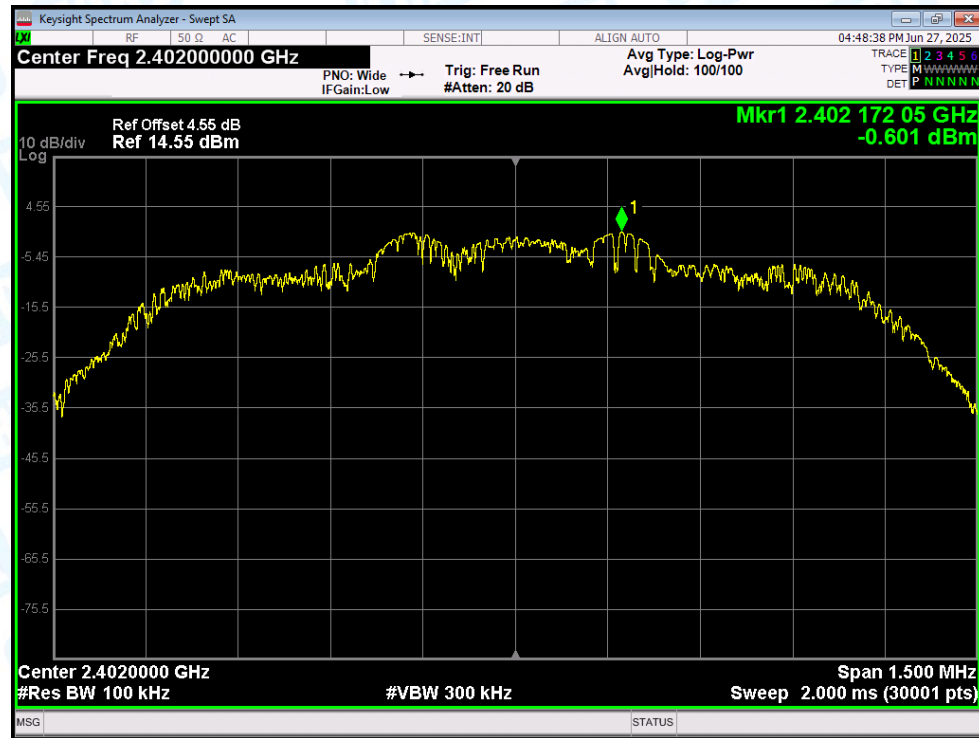
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



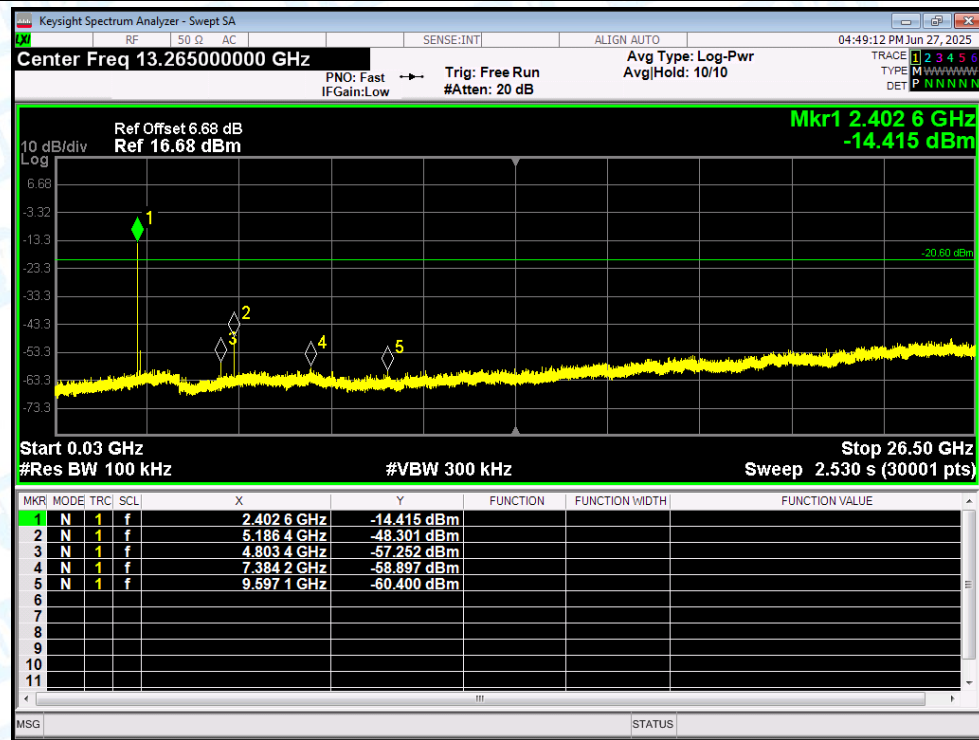
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



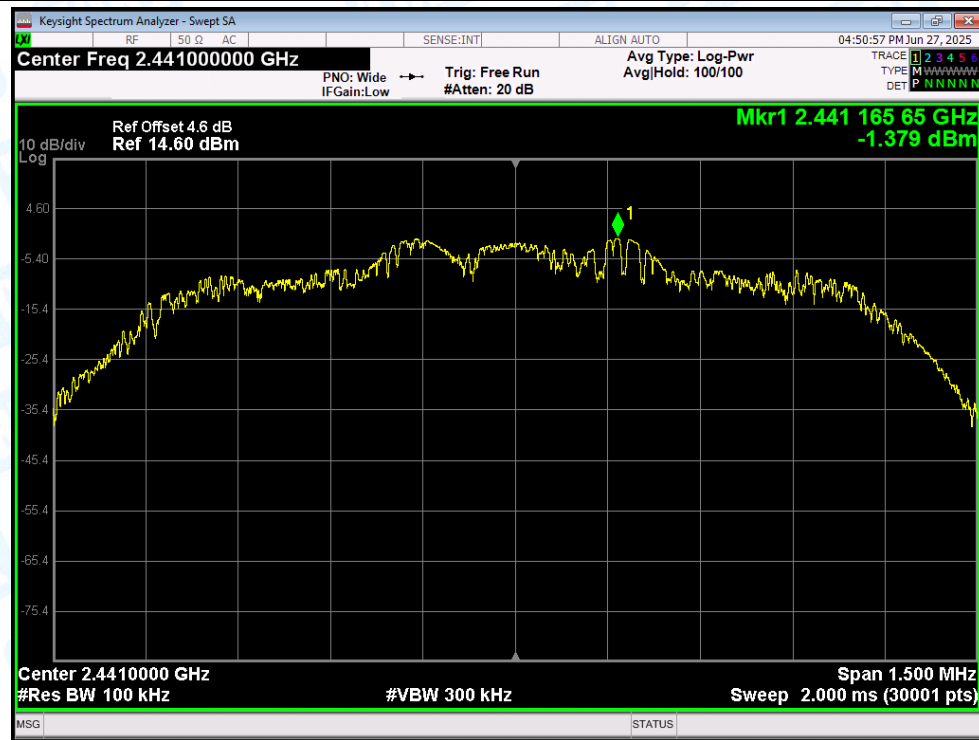
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



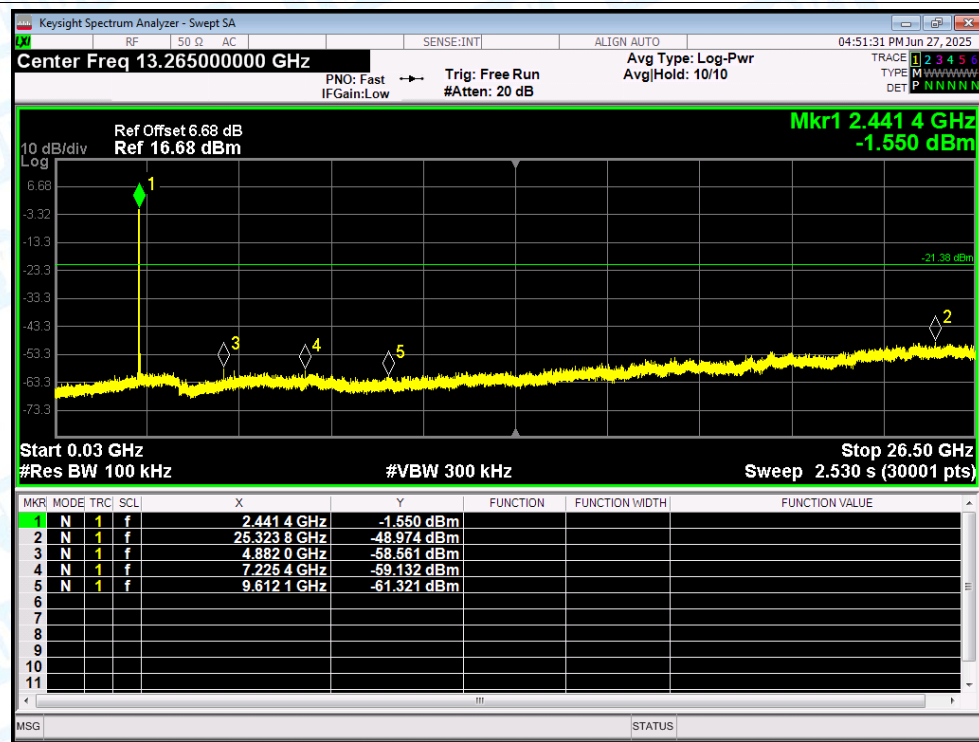
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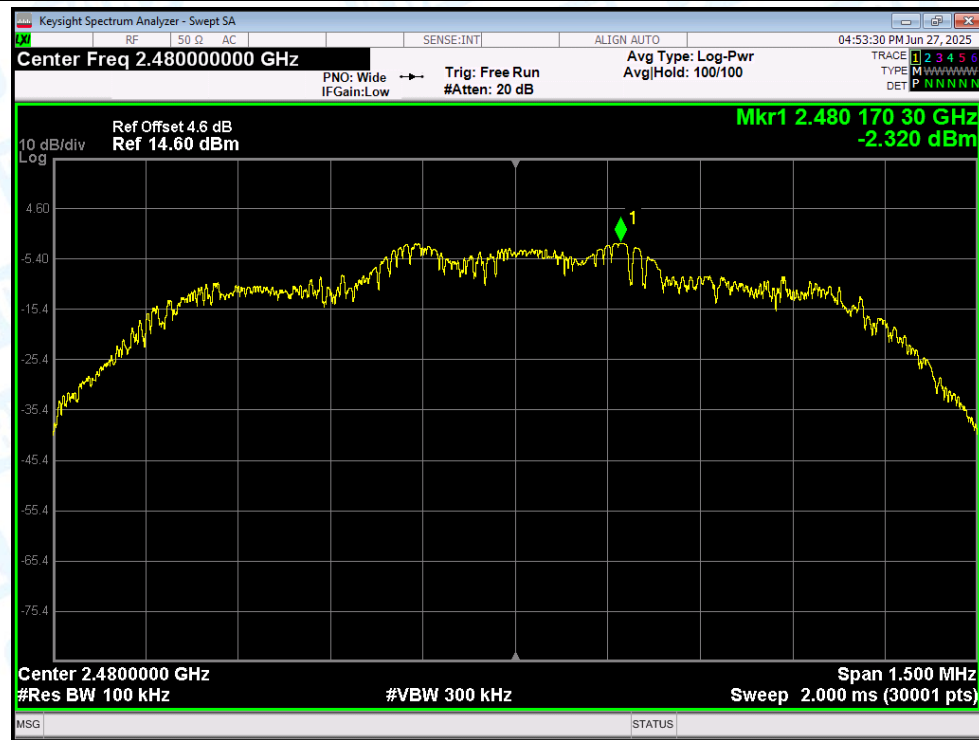
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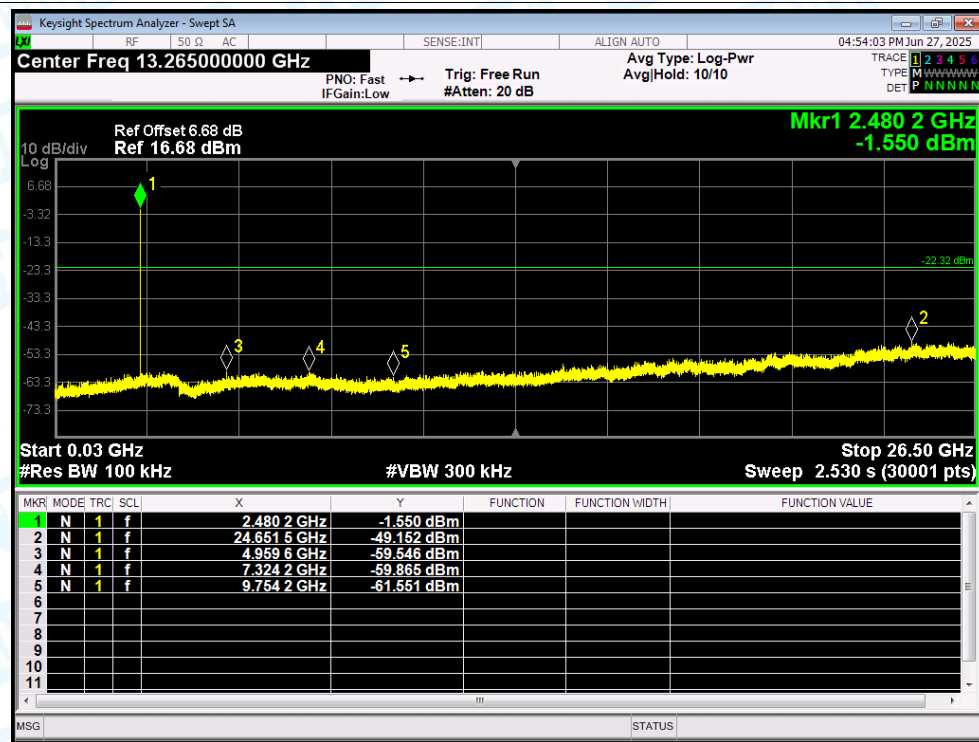
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

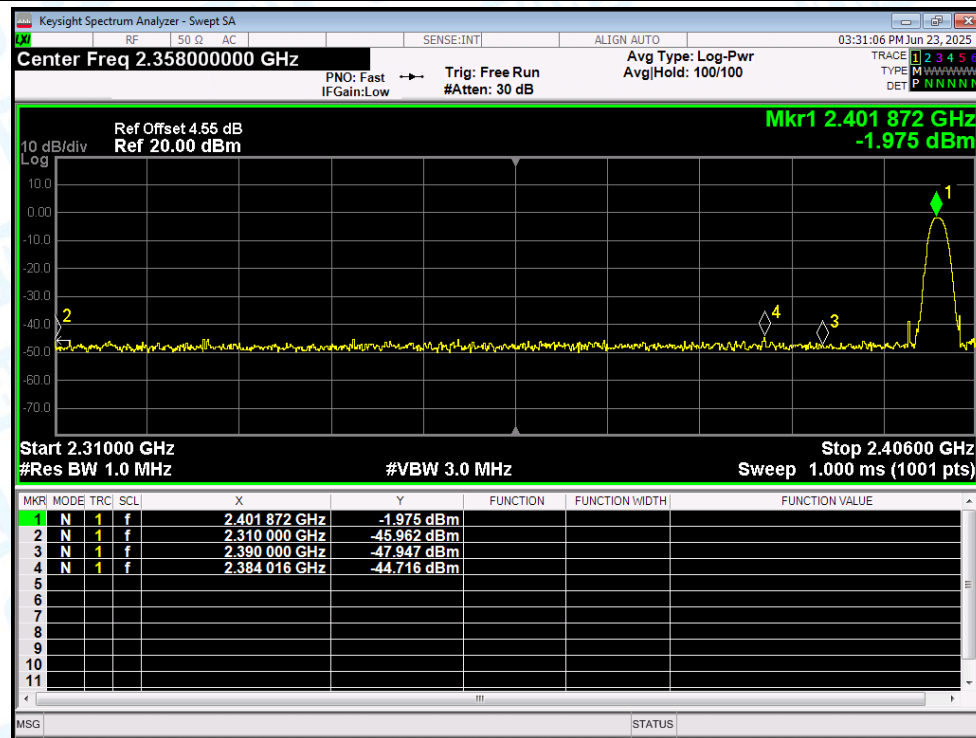


8.Restrict Band

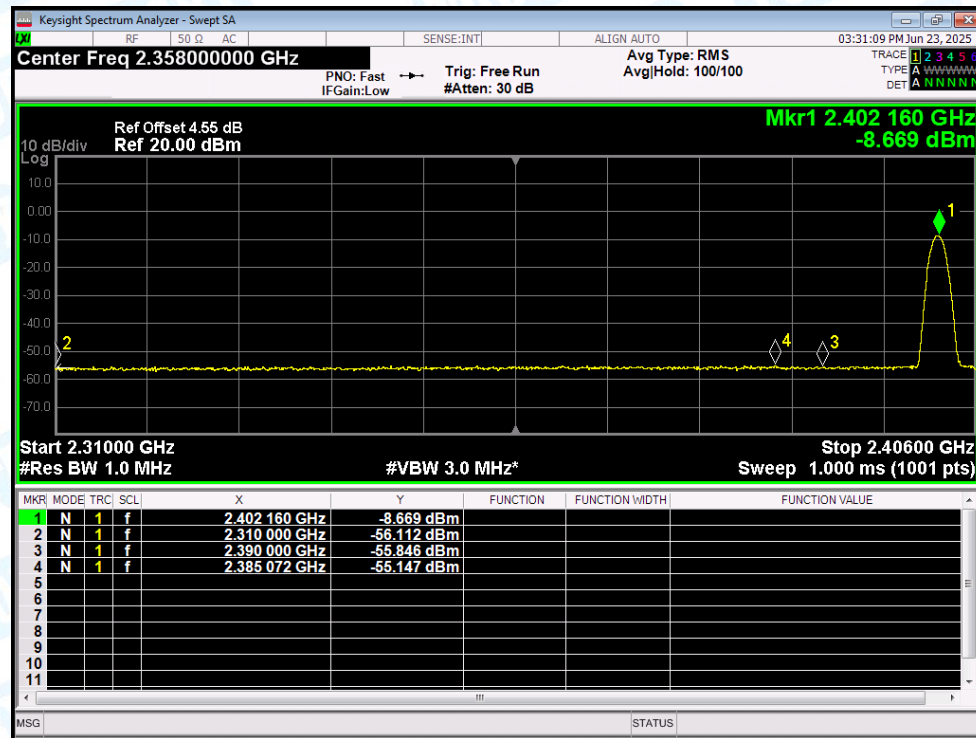
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.96	2	-	51.3	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.11	2	5.06	46.21	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2384.016	-44.72	2	-	52.54	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2385.072	-55.15	2	5.06	47.17	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.95	2	-	49.31	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.85	2	5.06	46.47	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.47	2	-	49.79	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.63	2	5.06	46.69	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.52	-44.37	2	-	52.89	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2491.984	-54.6	2	5.06	47.72	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.84	2	-	50.42	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.25	2	5.06	47.07	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.88	2	-	49.38	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.73	2	4.95	45.48	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2378.16	-44.94	2	-	52.32	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2374.608	-55.05	2	4.95	47.16	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.83	2	-	50.43	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.52	2	4.95	46.69	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.9	2	-	49.36	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.78	2	5.17	46.65	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2495.824	-44.03	2	-	53.23	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2499.664	-54.71	2	5.17	47.72	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-48.62	2	-	48.64	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.39	2	5.17	47.04	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-47.62	2	-	49.64	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.31	2	5.17	46.12	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2342.736	-44.5	2	-	52.76	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2353.776	-55.32	2	5.17	47.11	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.24	2	-	49.02	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-56.29	2	5.17	46.14	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-48.28	2	-	48.98	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.38	2	5.17	47.05	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2487.712	-44.48	2	-	52.78	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2484.736	-54.73	2	5.17	47.7	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.84	2	-	50.42	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.27	2	5.17	47.16	Average	54	Pass

Test Graphs

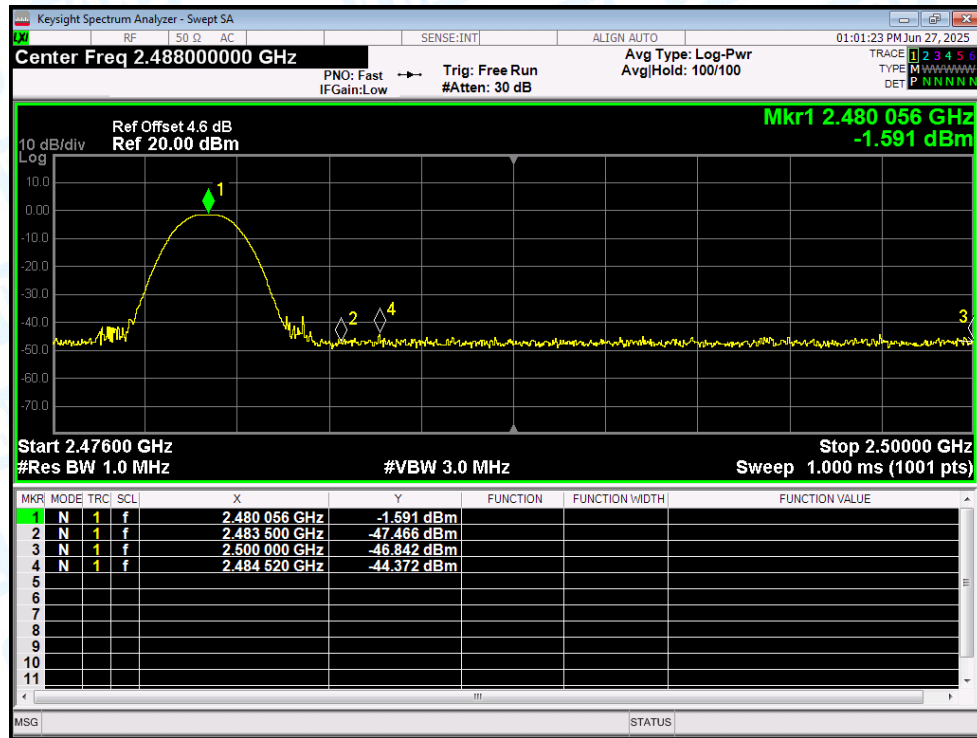
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



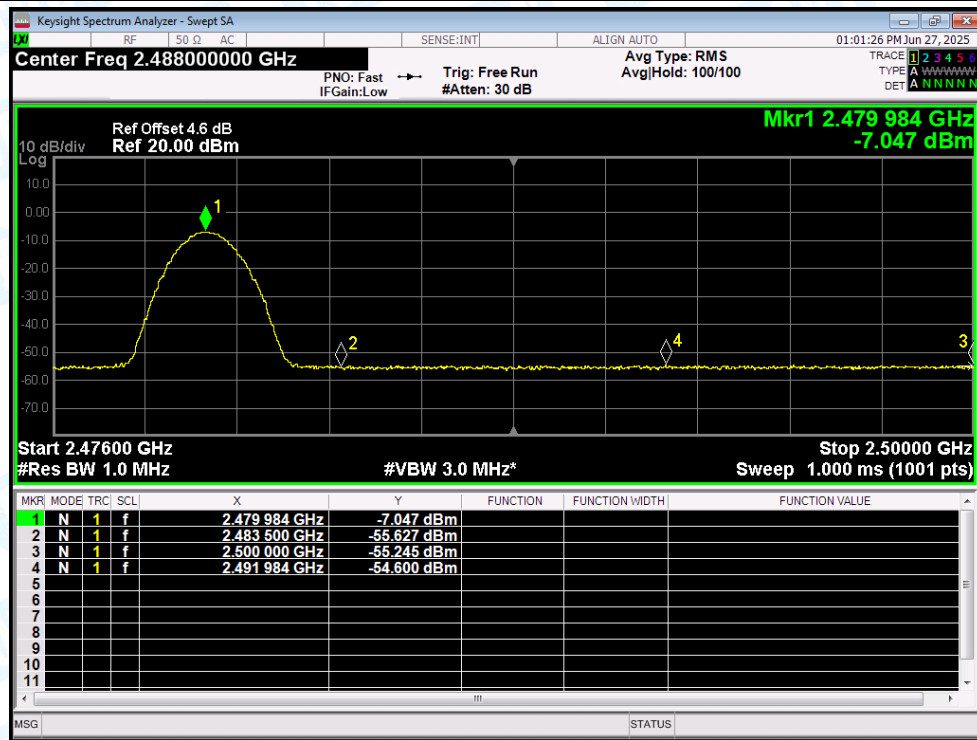
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



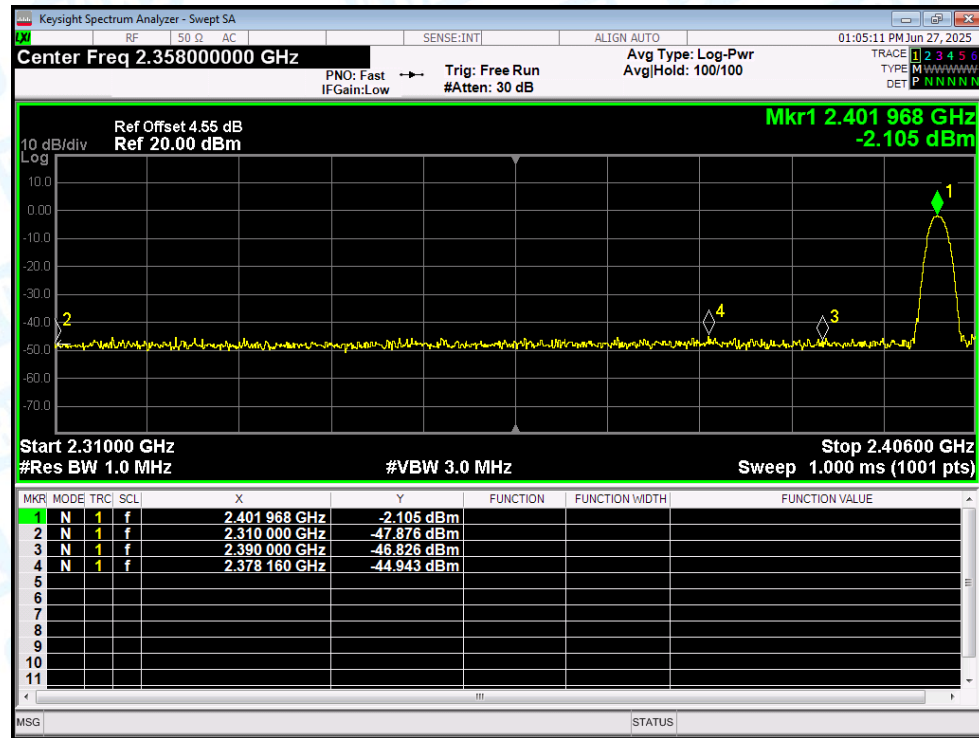
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



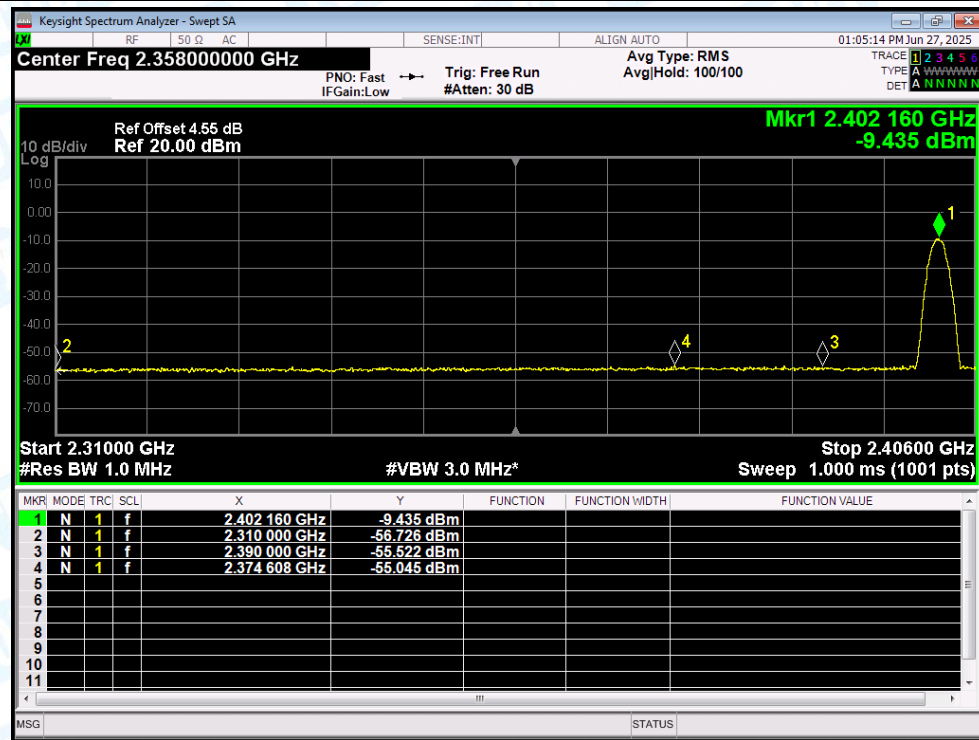
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



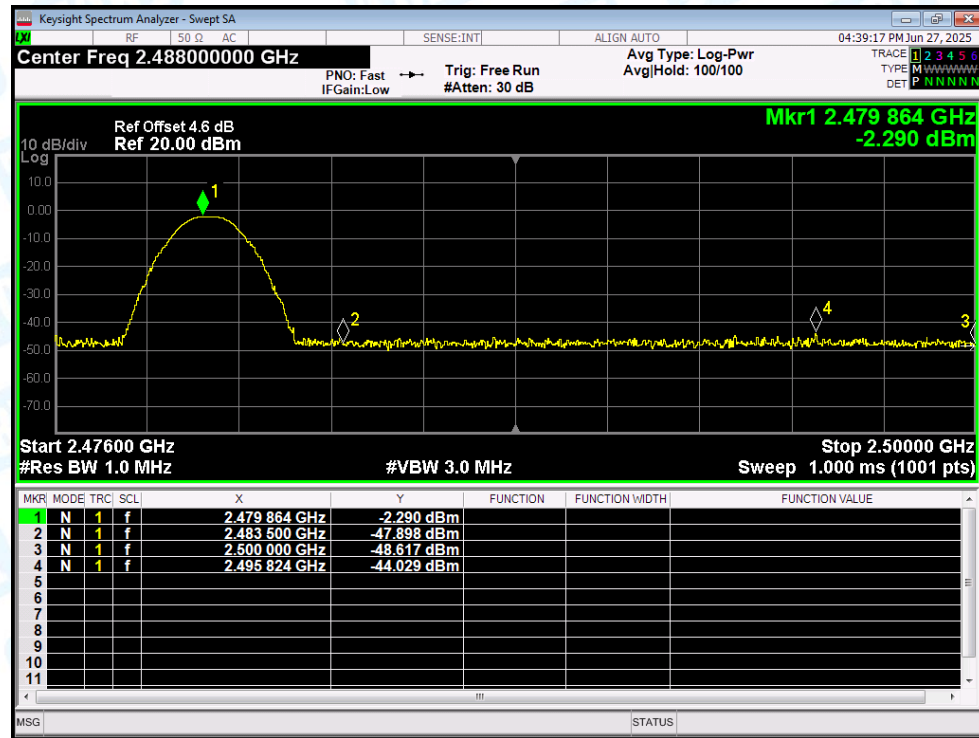
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



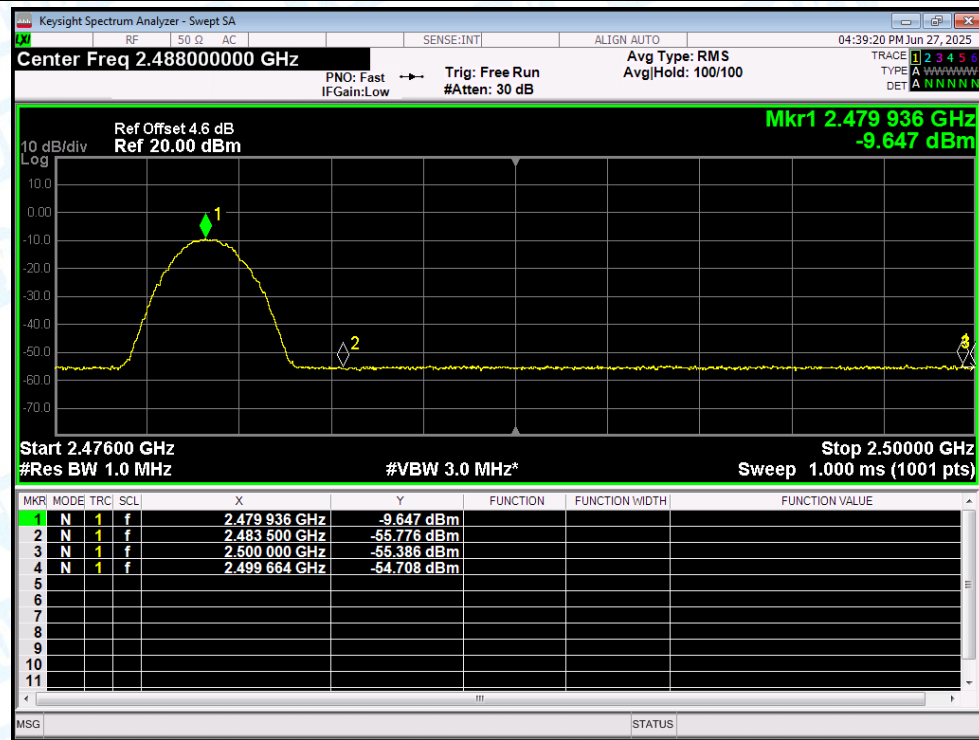
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



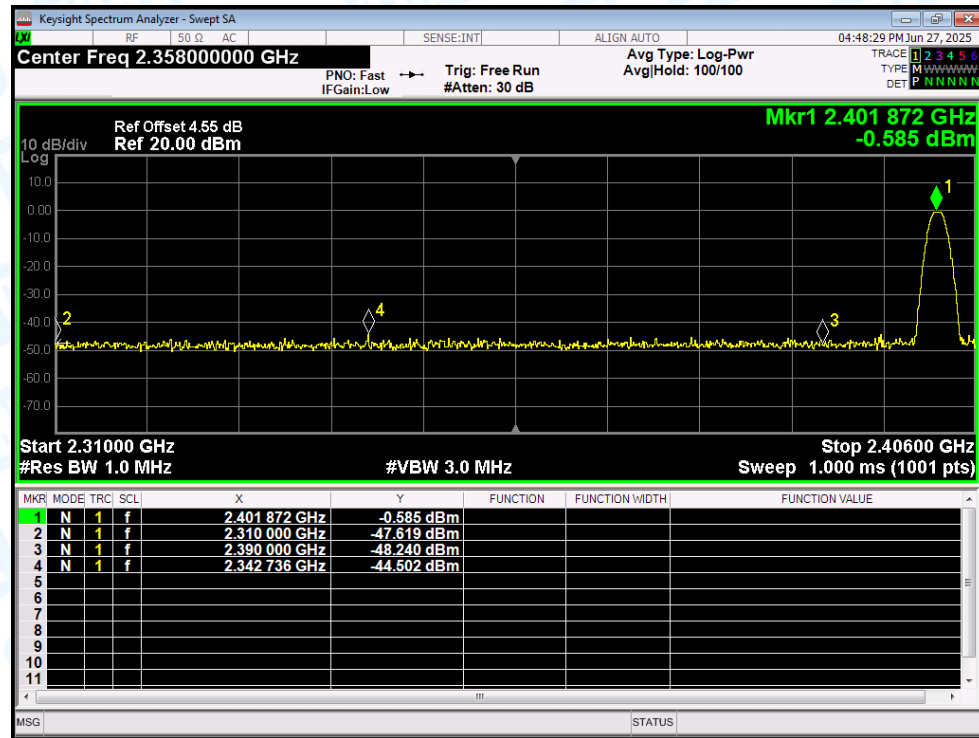
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



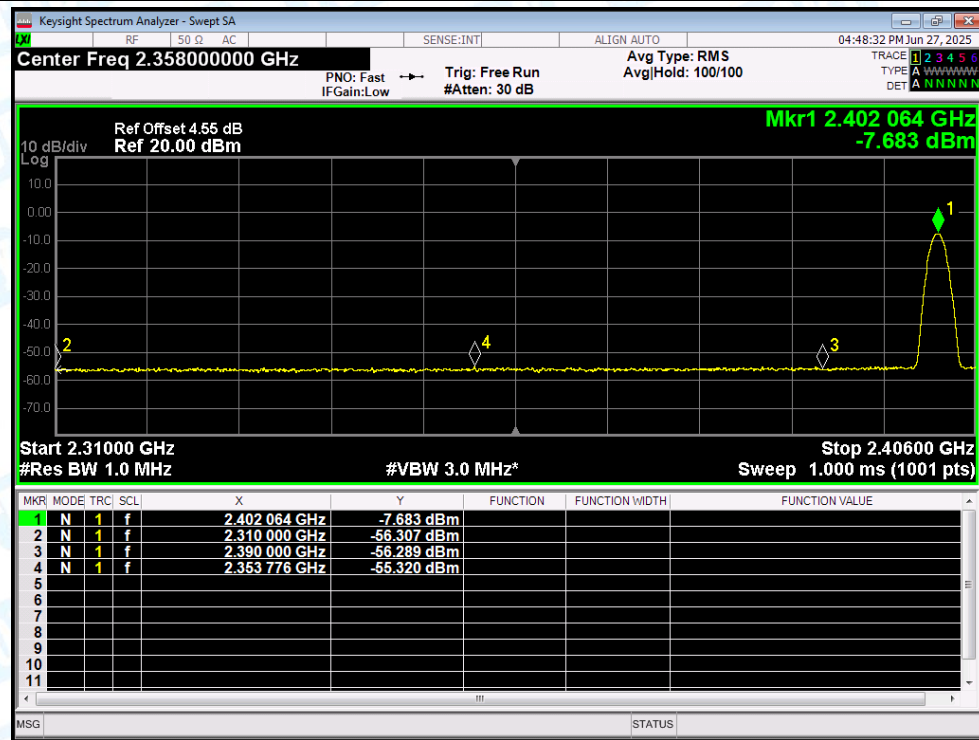
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



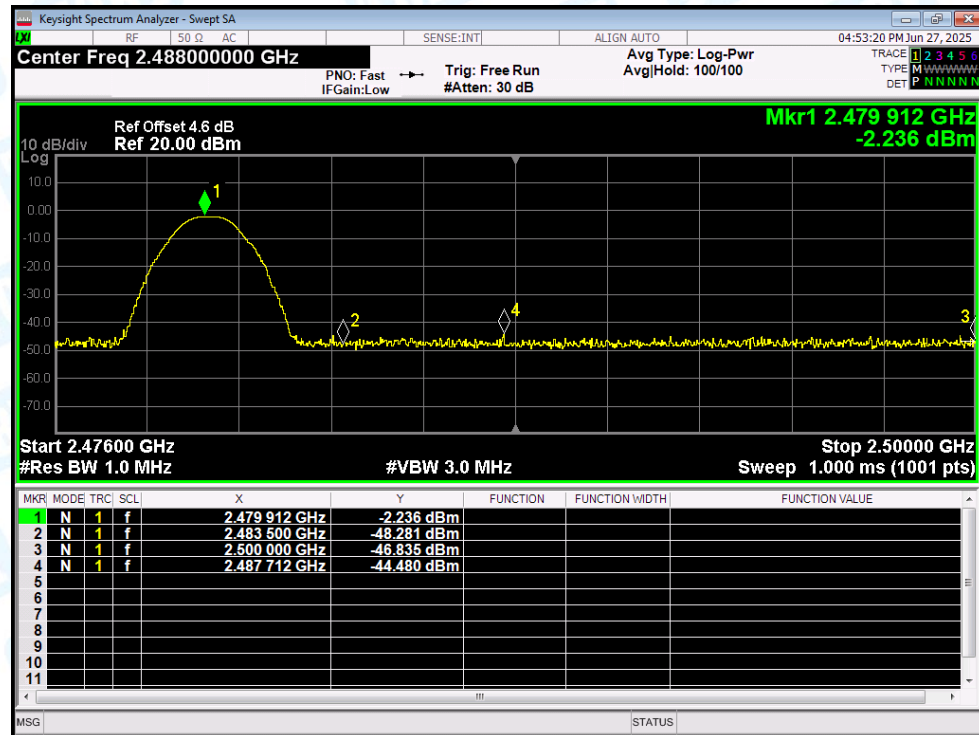
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



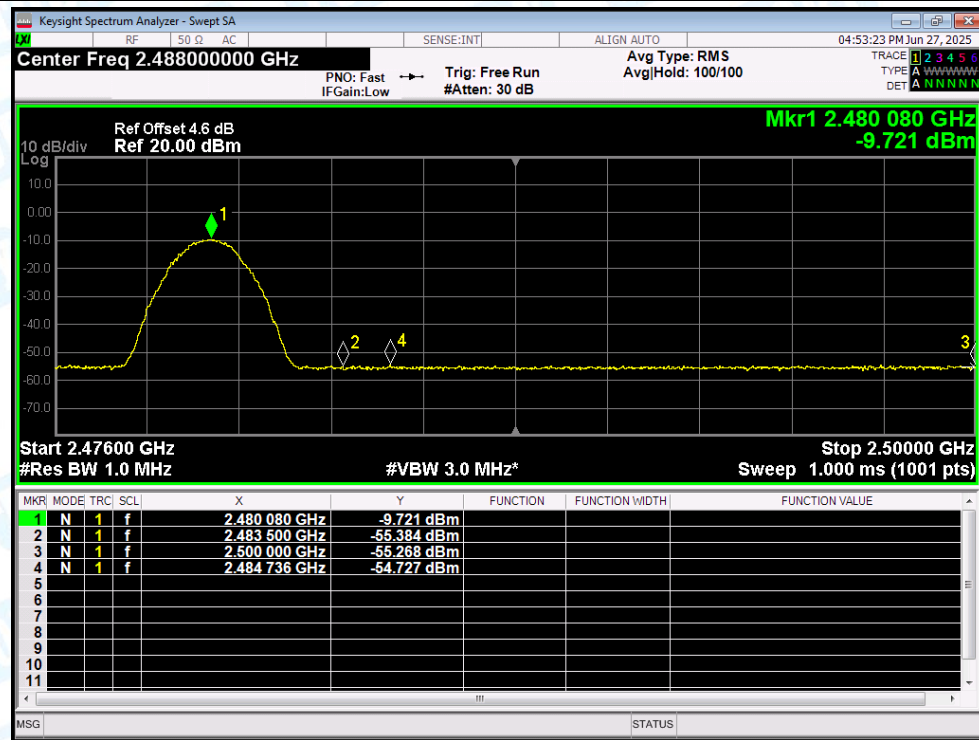
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

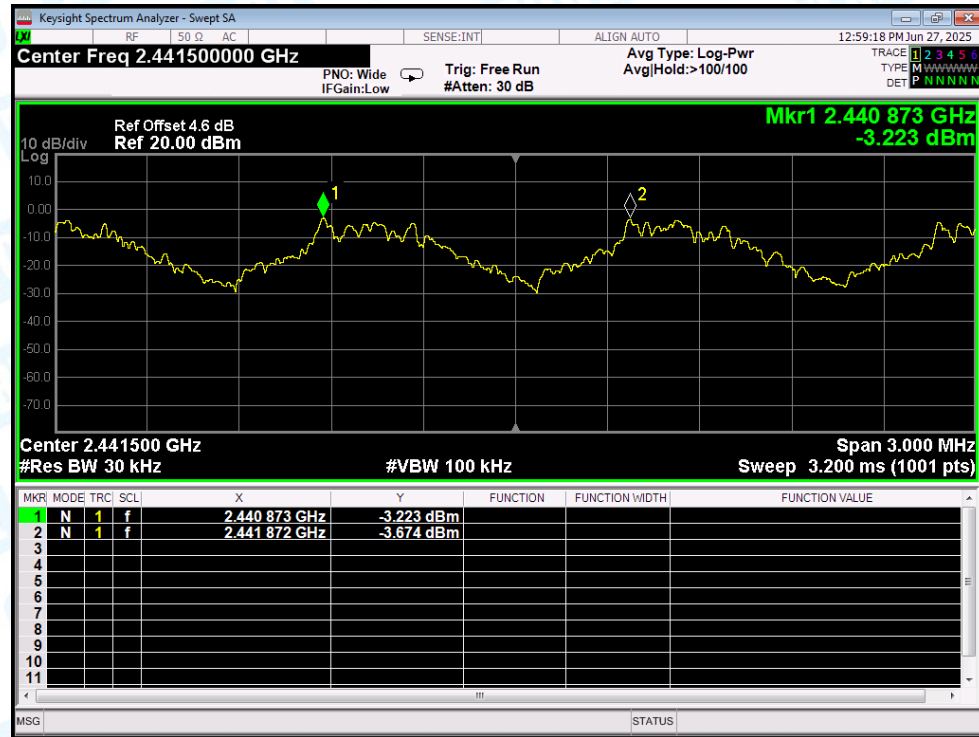


9.Carrier Frequencies Separation

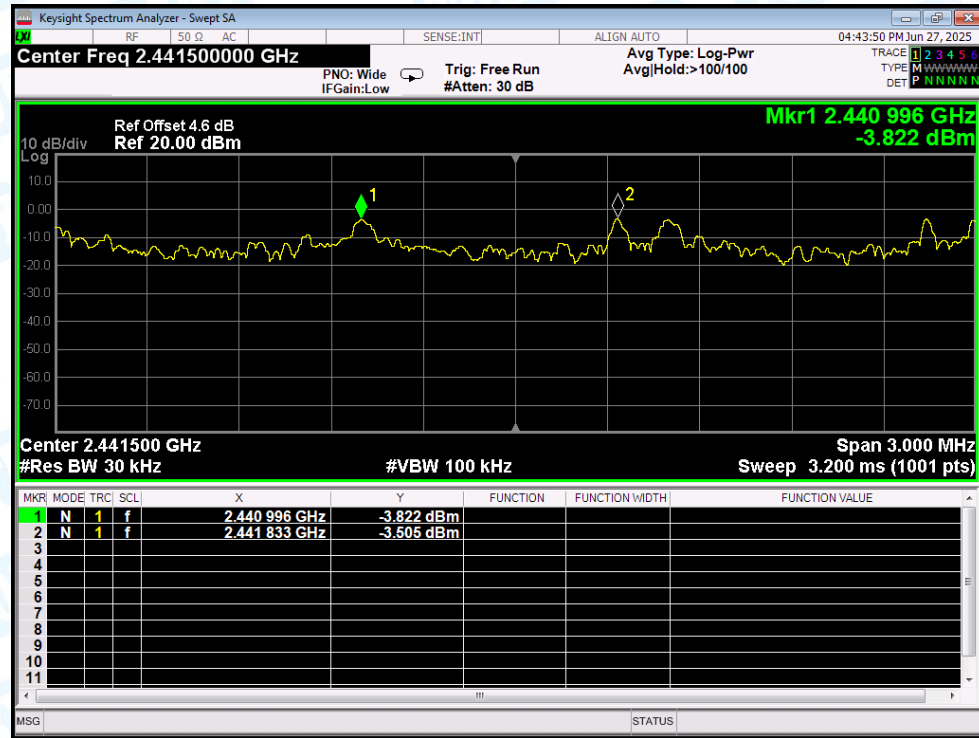
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.873	2441.872	0.999	0.573	Pass
NVNT	2-DH1	Ant1	2440.996	2441.833	0.837	0.807	Pass
NVNT	3-DH1	Ant1	2440.828	2442.001	1.173	0.807	Pass

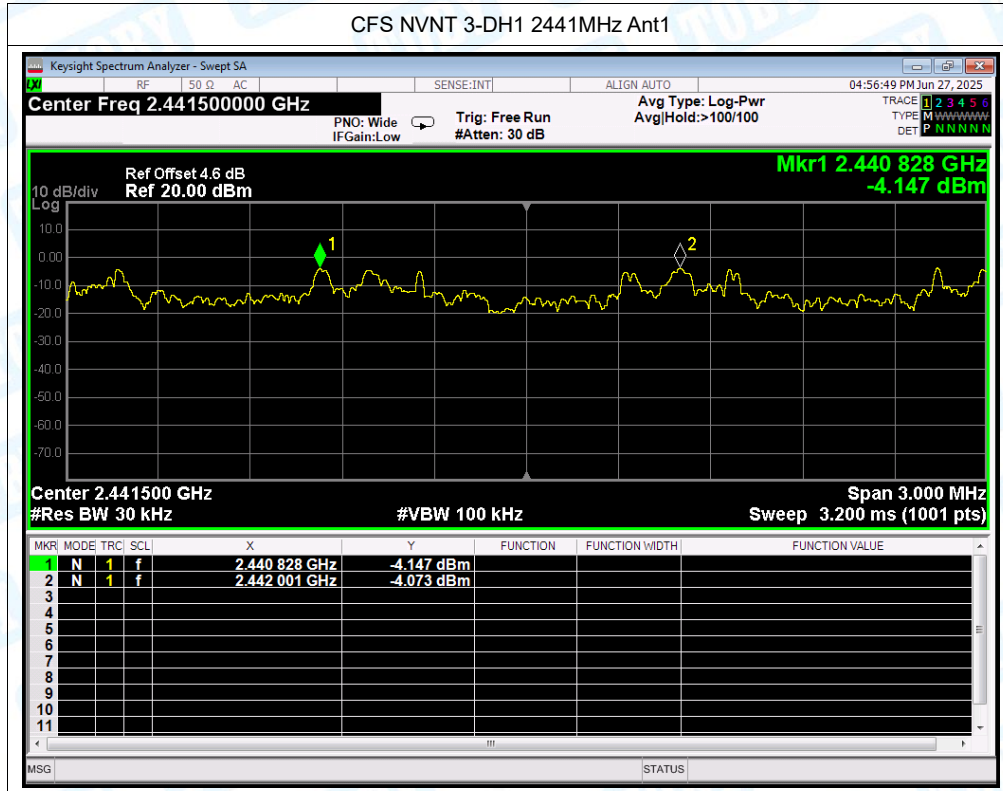
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



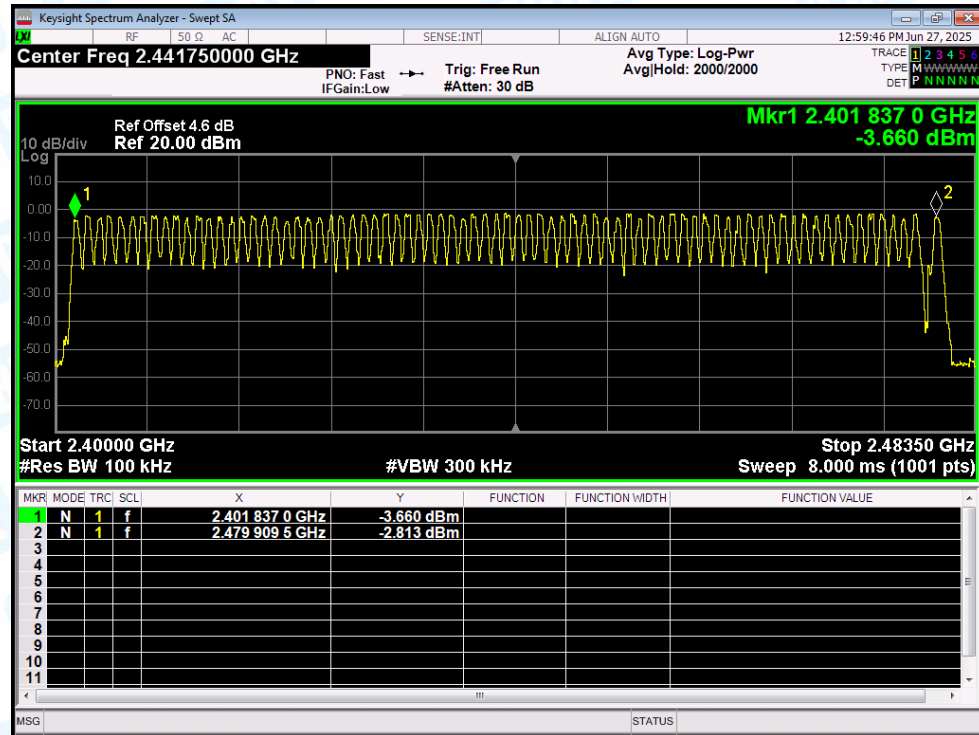


10.Number of Hopping Channel

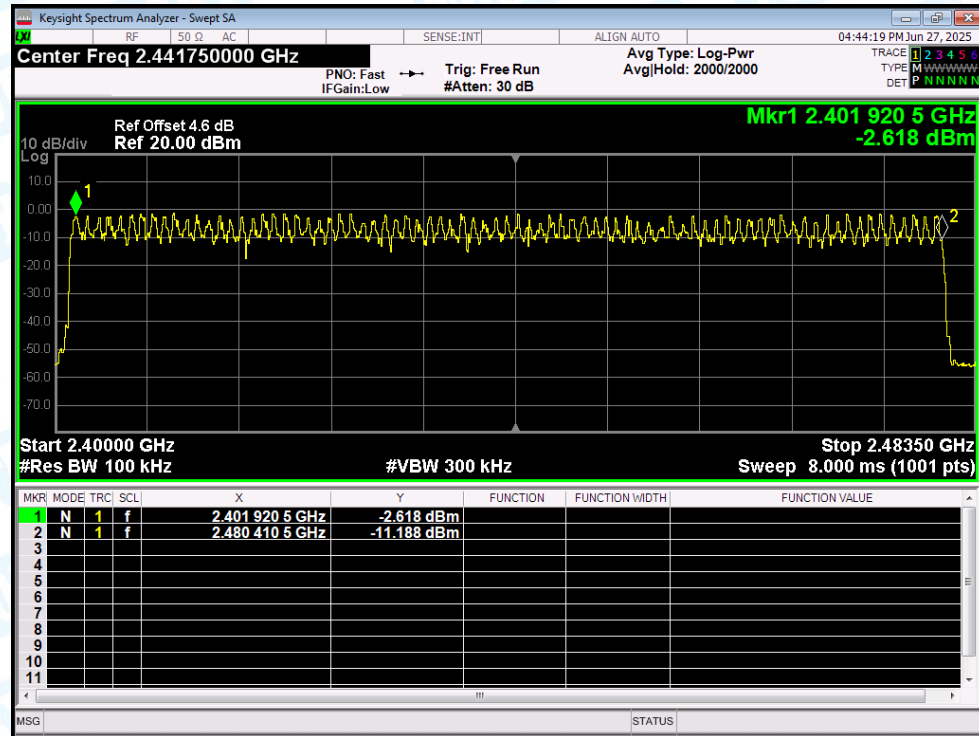
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

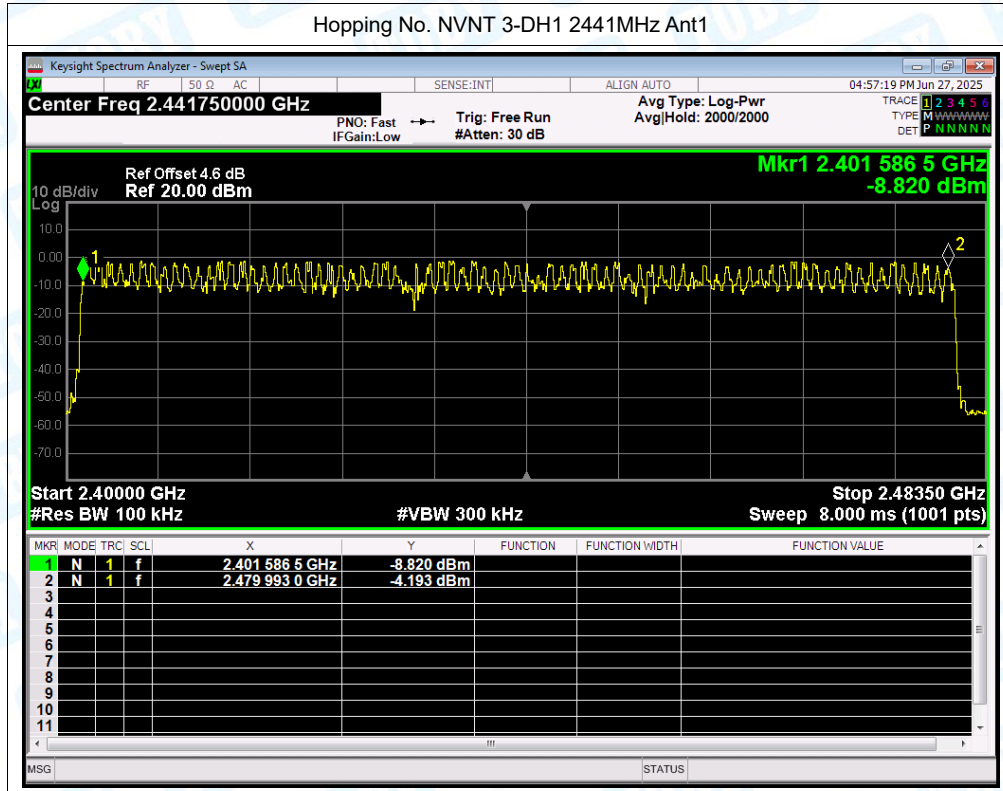
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



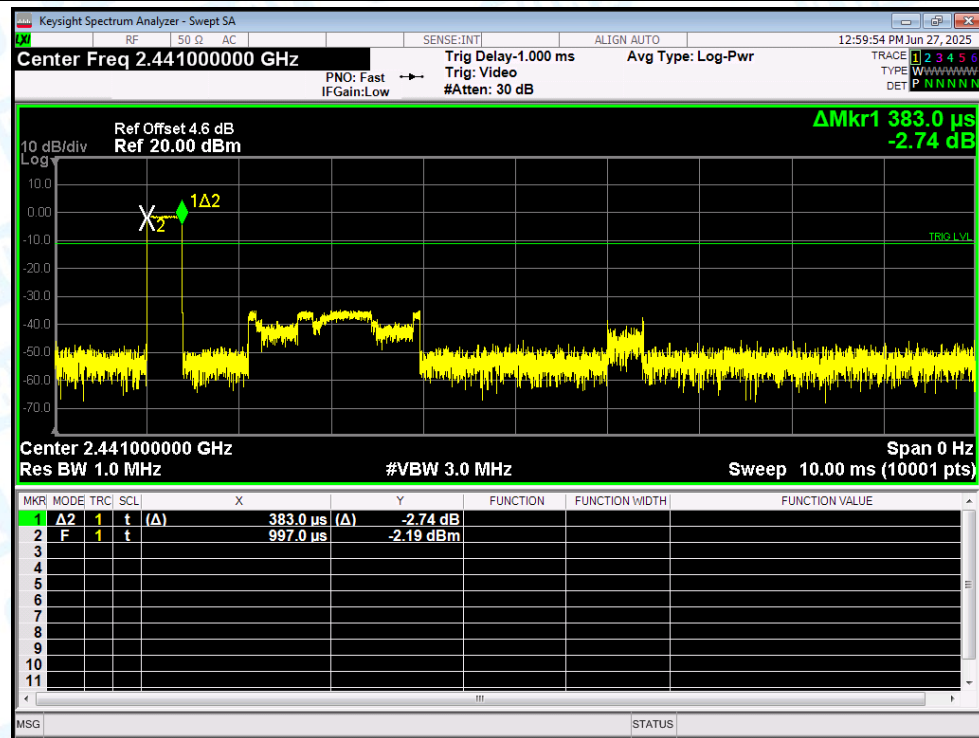


11.Dwell Time

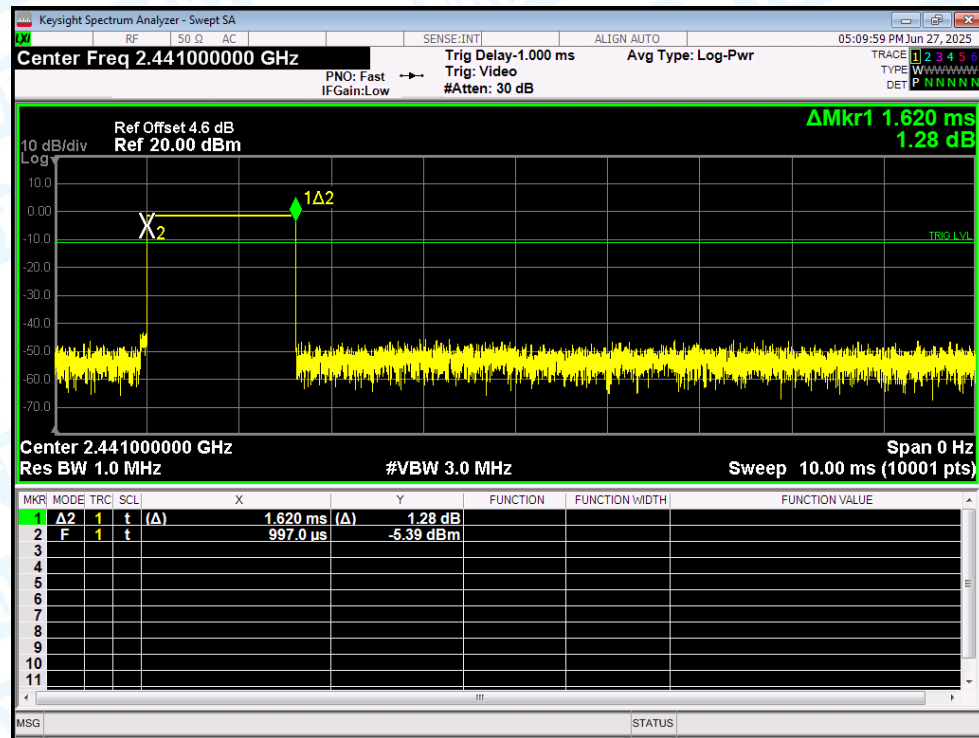
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.62	259.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.869	306.027	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.381	121.92	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.633	261.28	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	2.881	307.307	31600	400	Pass

Test Graphs

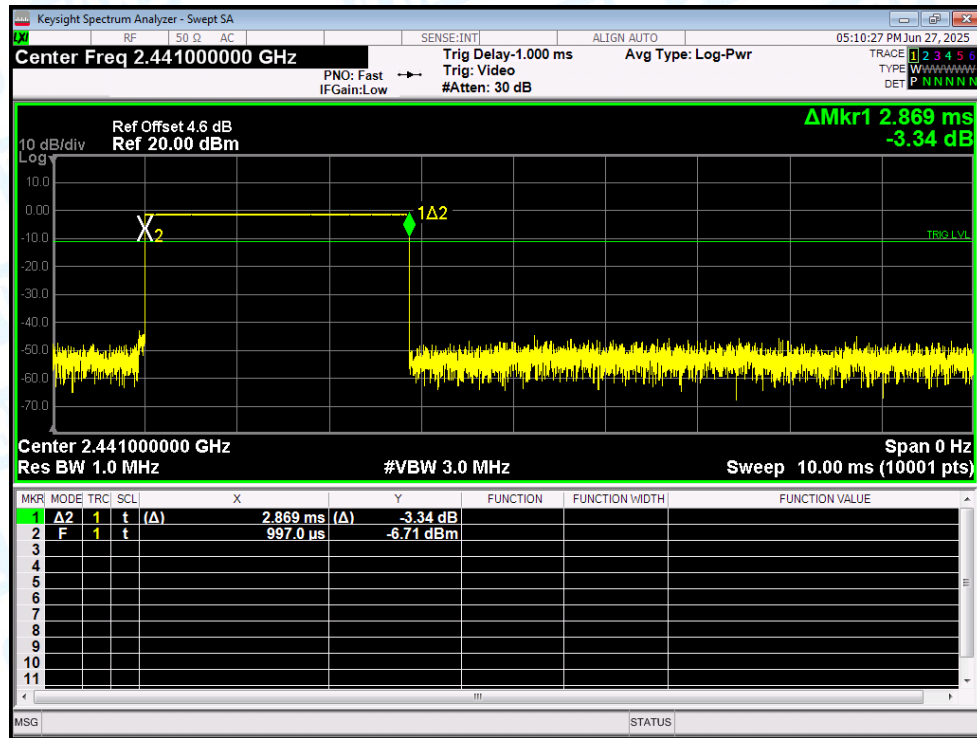
Dwell NVNT 1-DH1 2441MHz Ant1



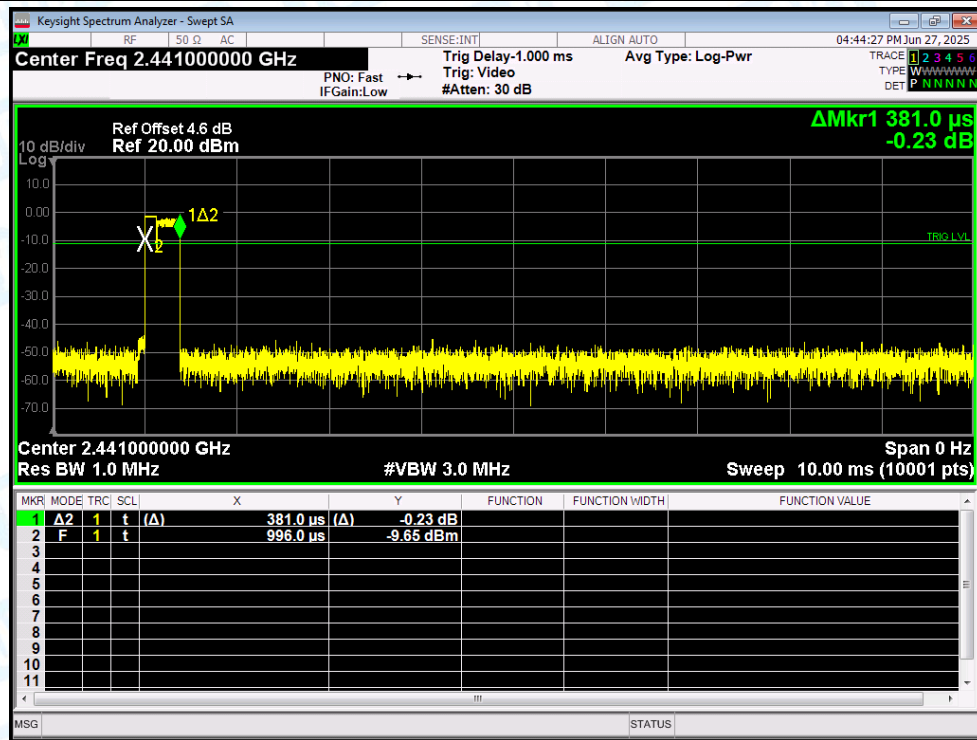
Dwell NVNT 1-DH3 2441MHz Ant1



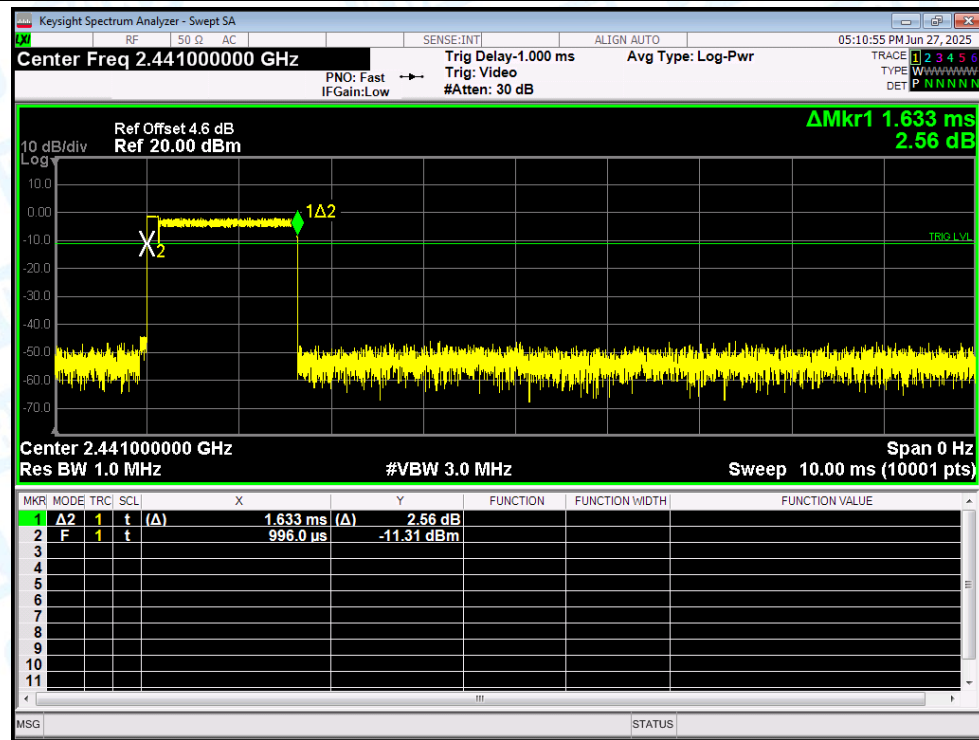
Dwell NVNT 1-DH5 2441MHz Ant1



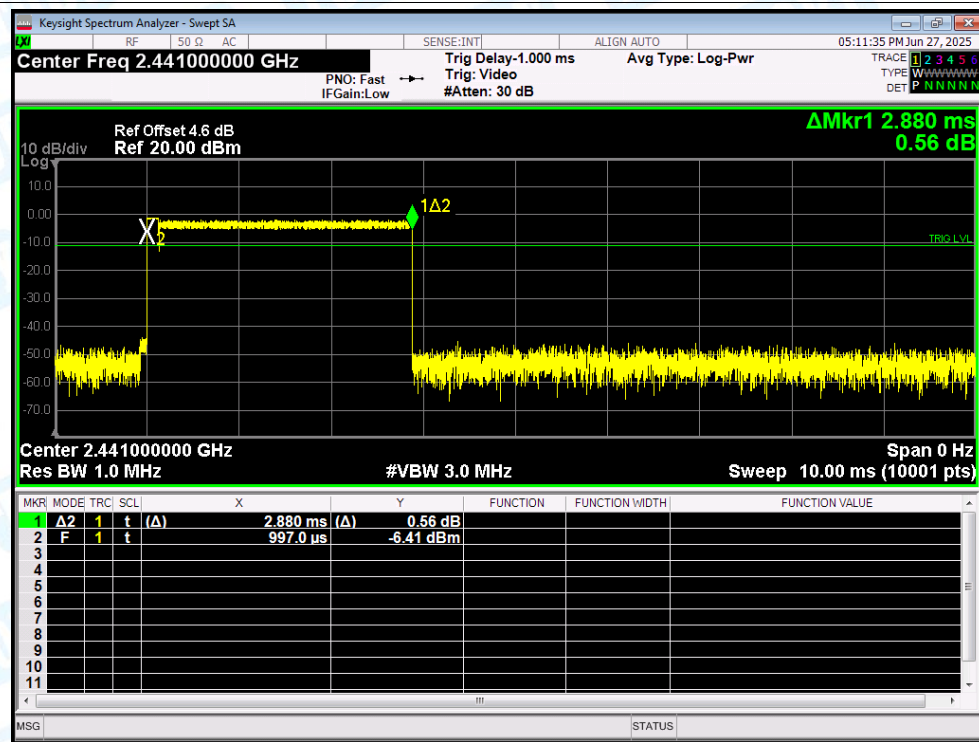
Dwell NVNT 2-DH1 2441MHz Ant1



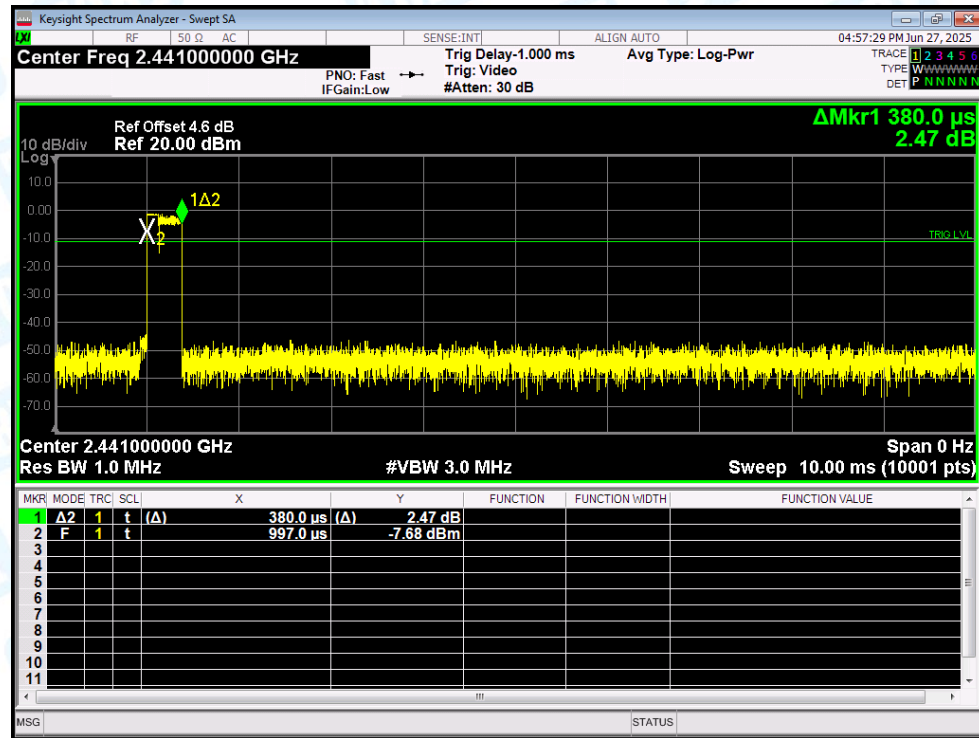
Dwell NVNT 2-DH3 2441MHz Ant1



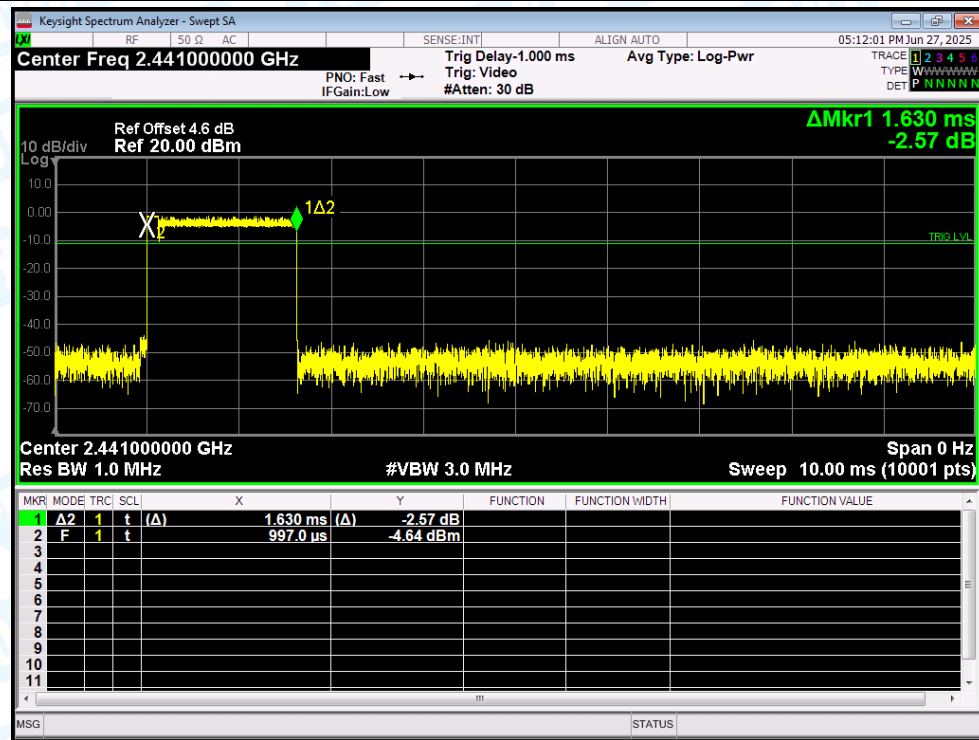
Dwell NVNT 2-DH5 2441MHz Ant1

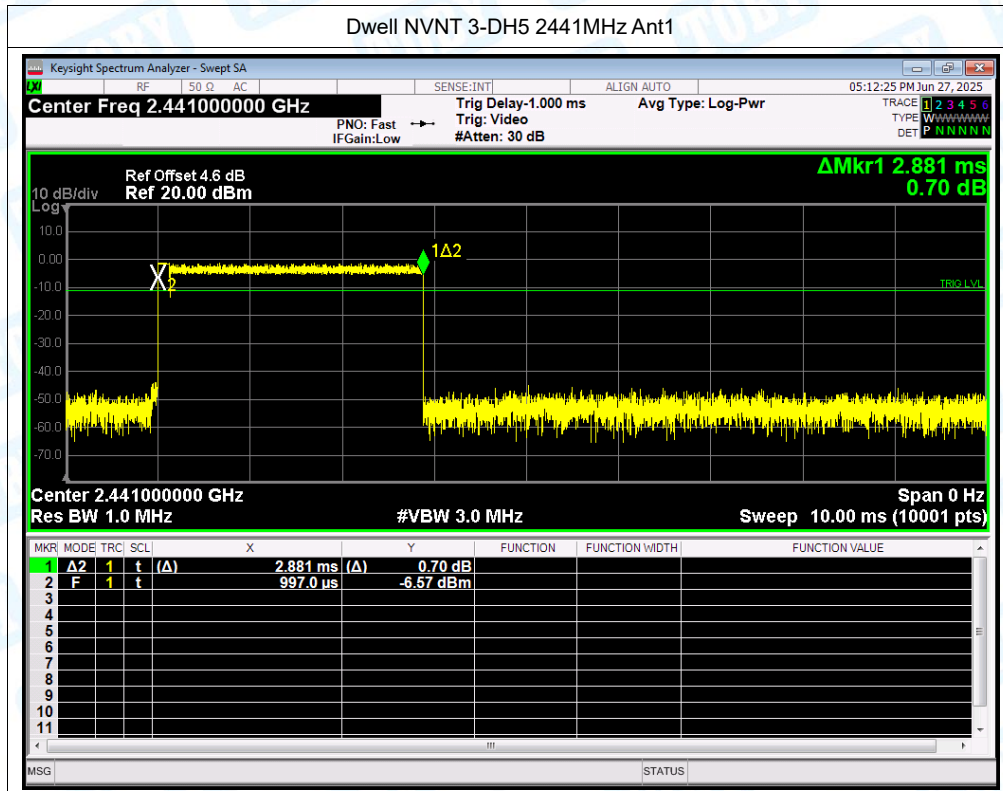


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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