

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless Microphone
Test Model:	K11
Sample ID:	HC-C-202405-0242-01-01
Environmental Conditions	
Temperature:	22.6℃
Relative Humidity:	52.6%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202405-0242-10 The report only show the worst case data.	

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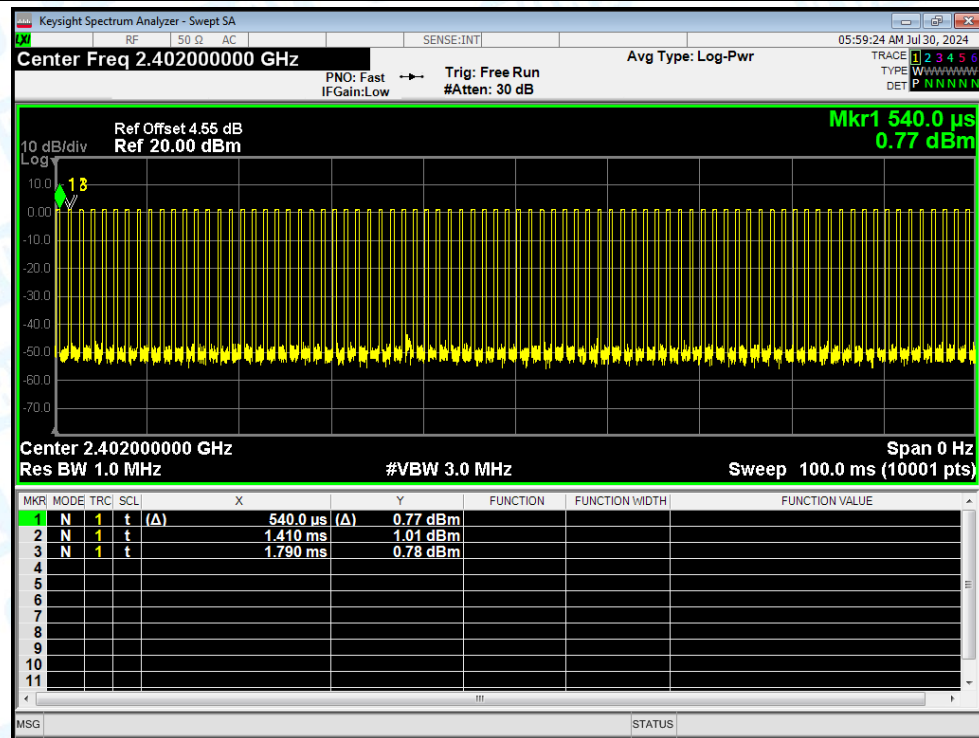
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1. Duty Cycle

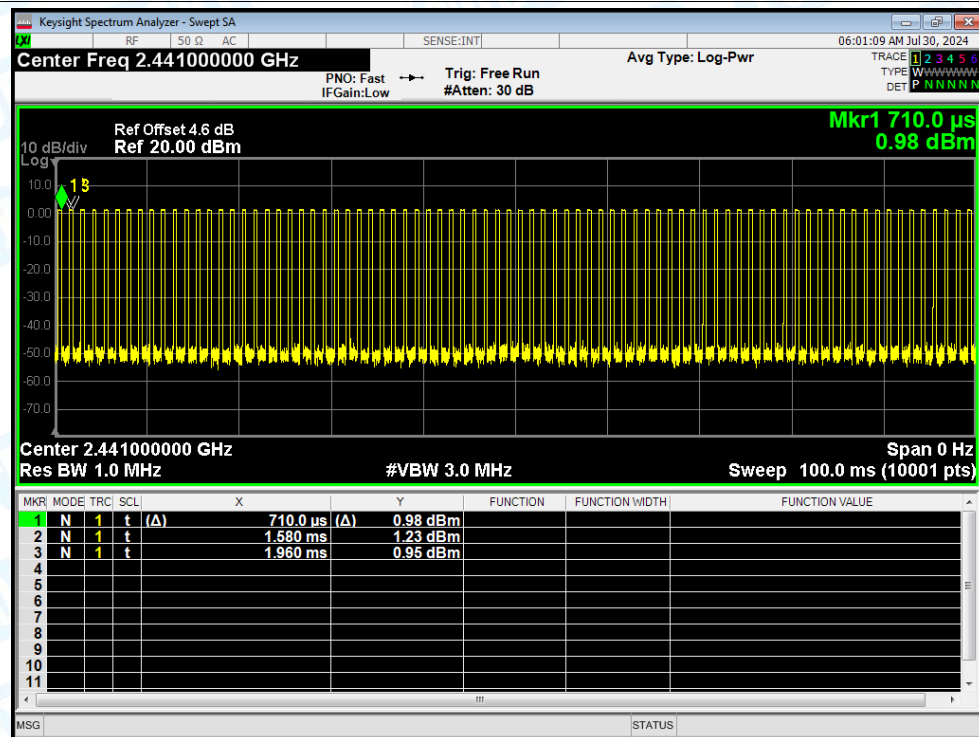
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	32	4.95	2.5
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT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

Test Graphs

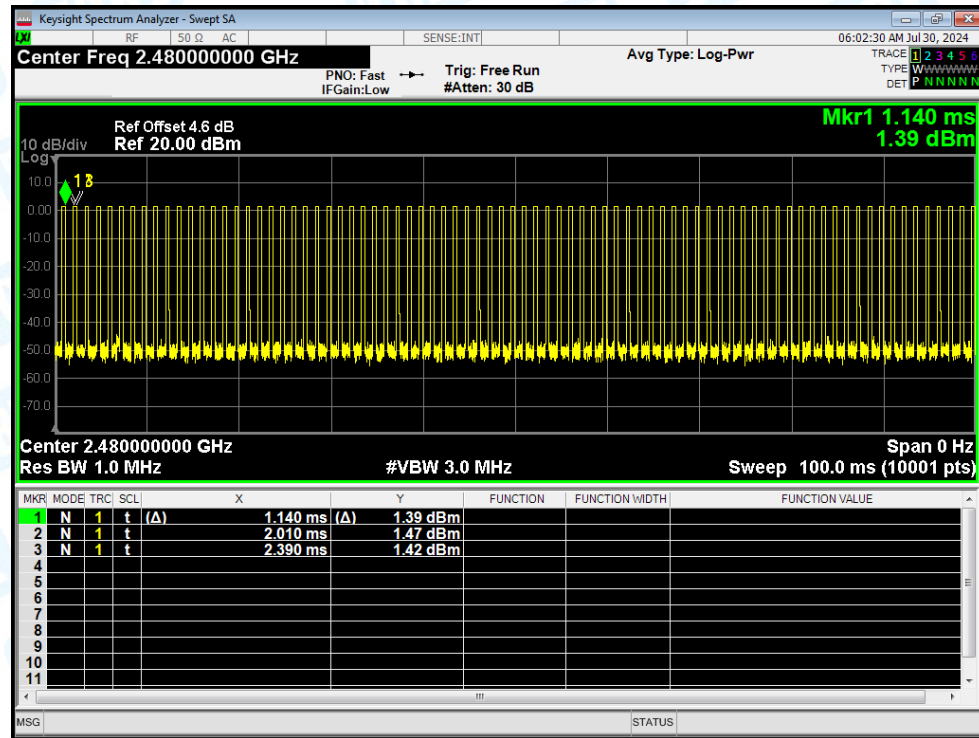
Duty Cycle NVNT 1-DH1 2402MHz Ant1



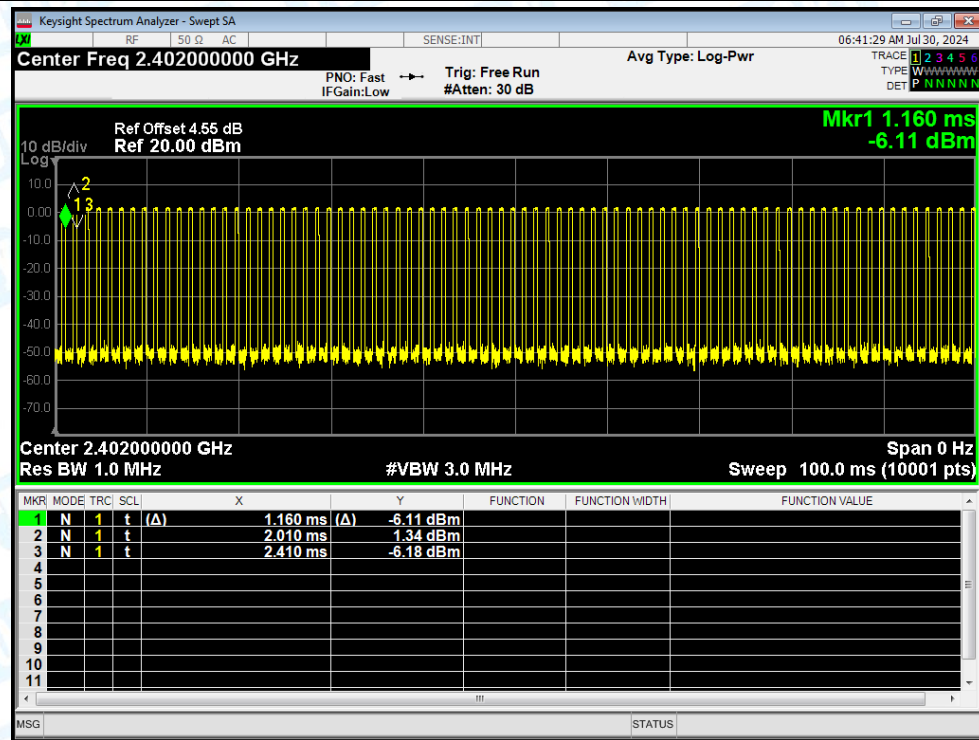
Duty Cycle NVNT 1-DH1 2441MHz Ant1



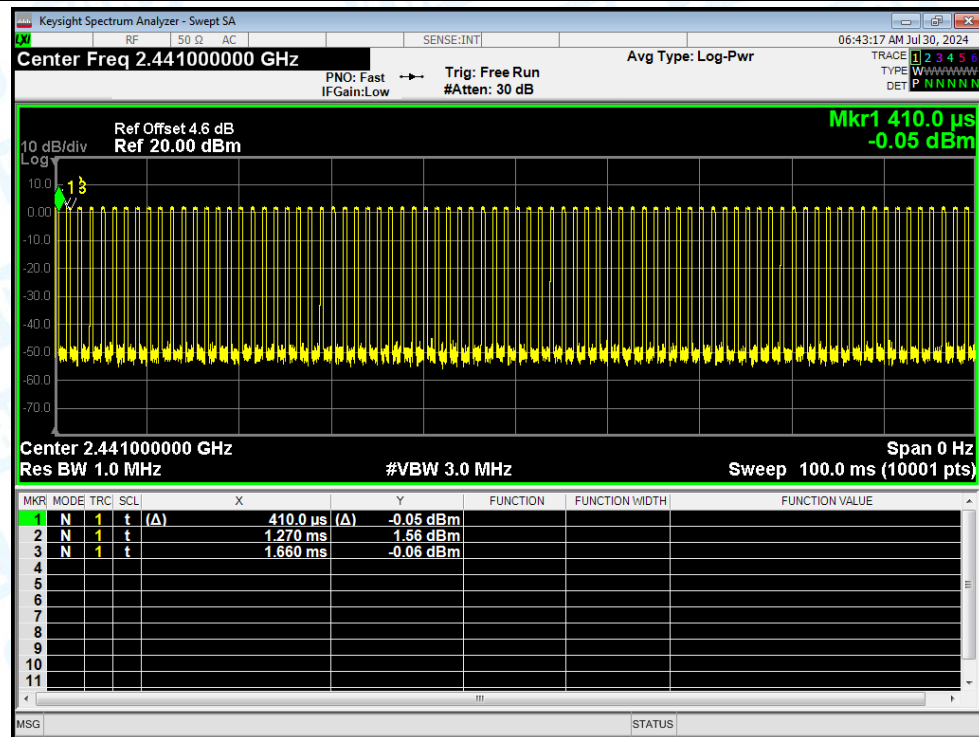
Duty Cycle NVNT 1-DH1 2480MHz Ant1



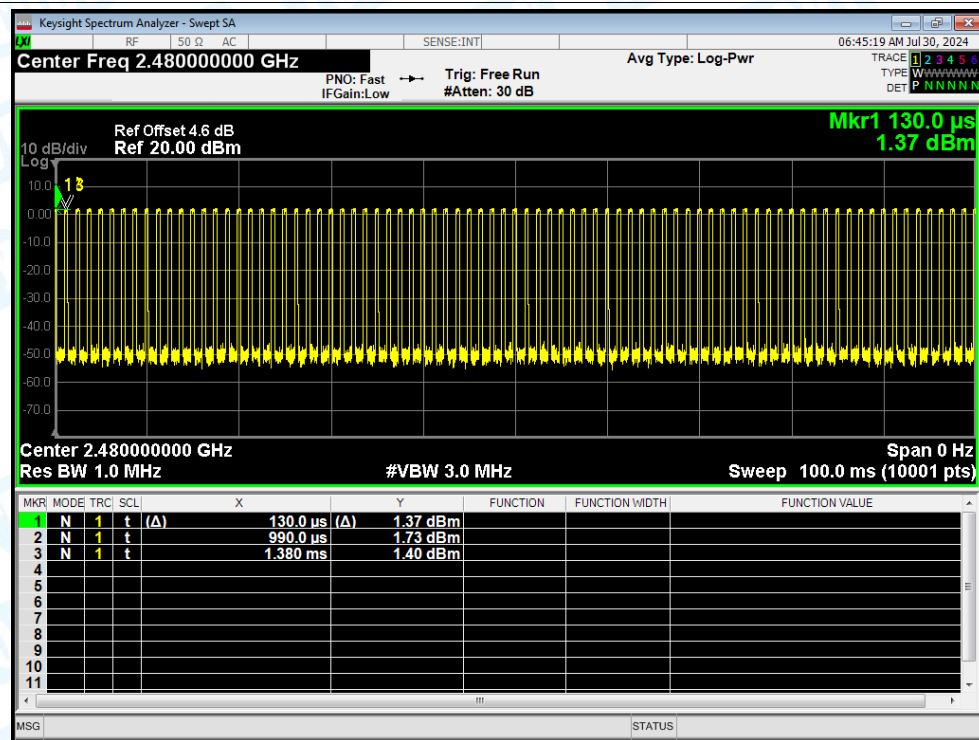
Duty Cycle NVNT 2-DH1 2402MHz Ant1



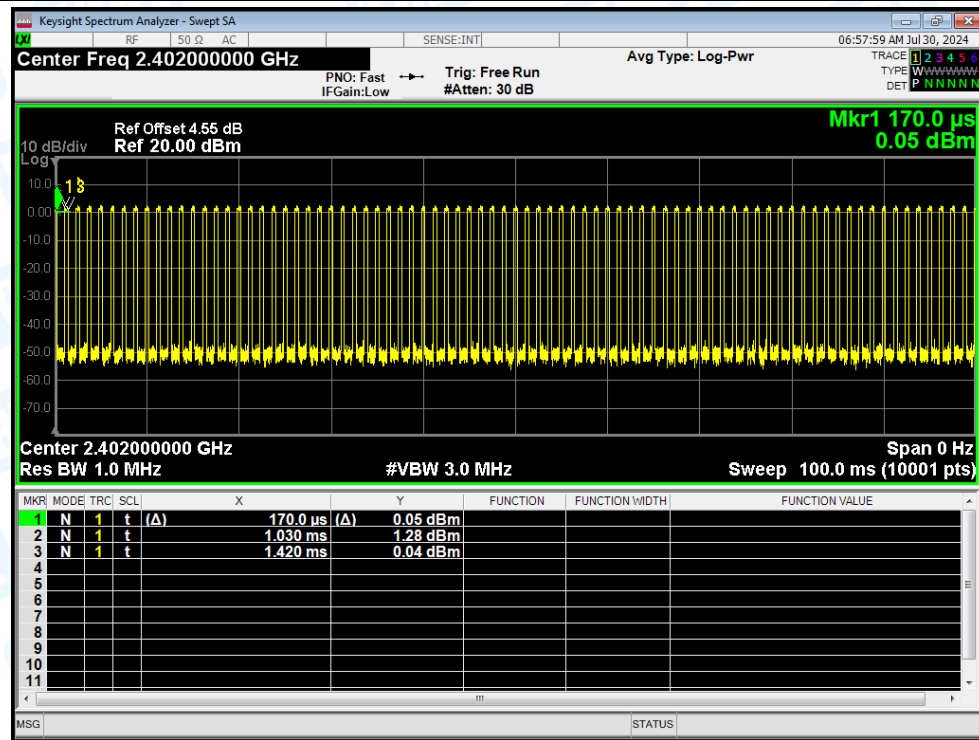
Duty Cycle NVNT 2-DH1 2441MHz Ant1



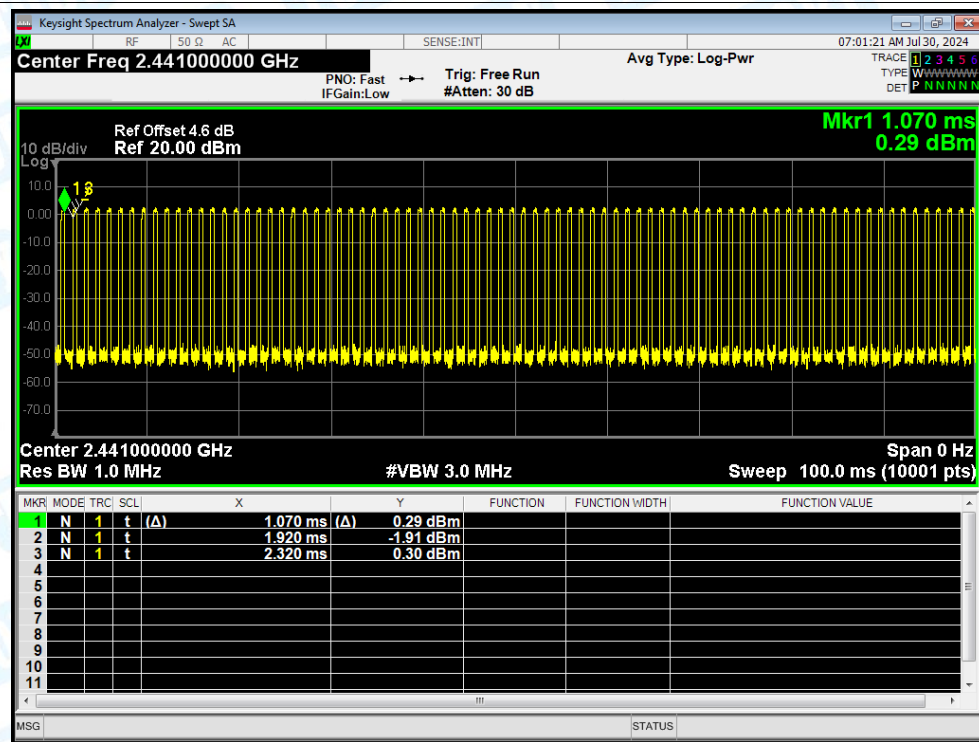
Duty Cycle NVNT 2-DH1 2480MHz Ant1

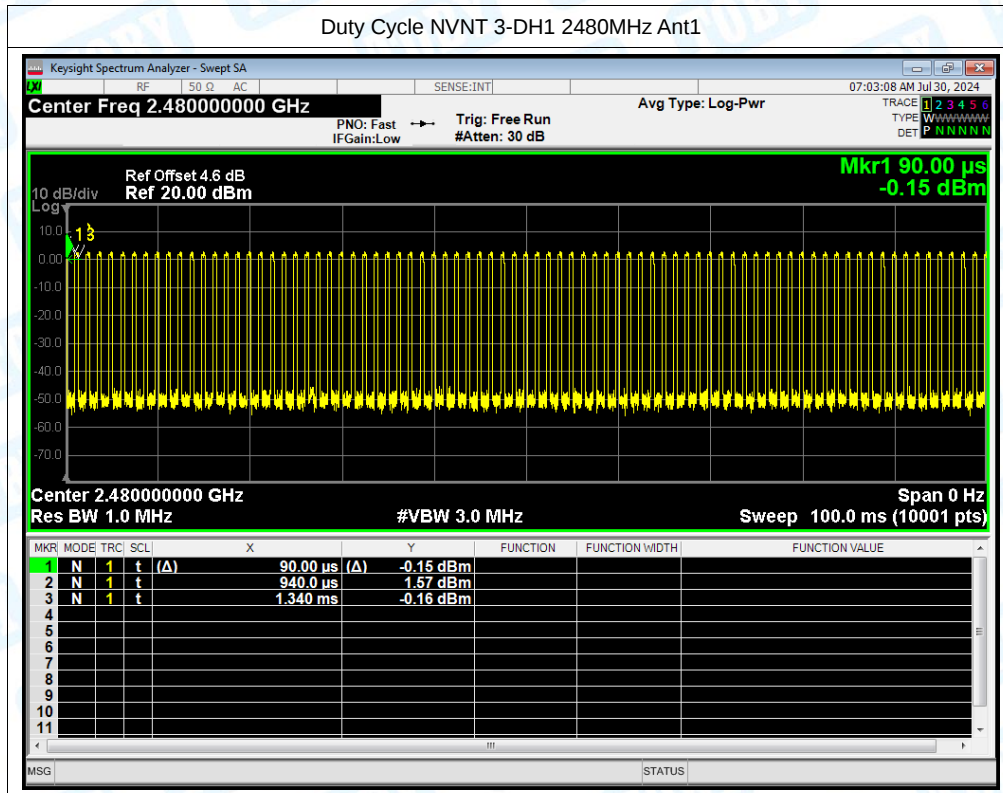


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



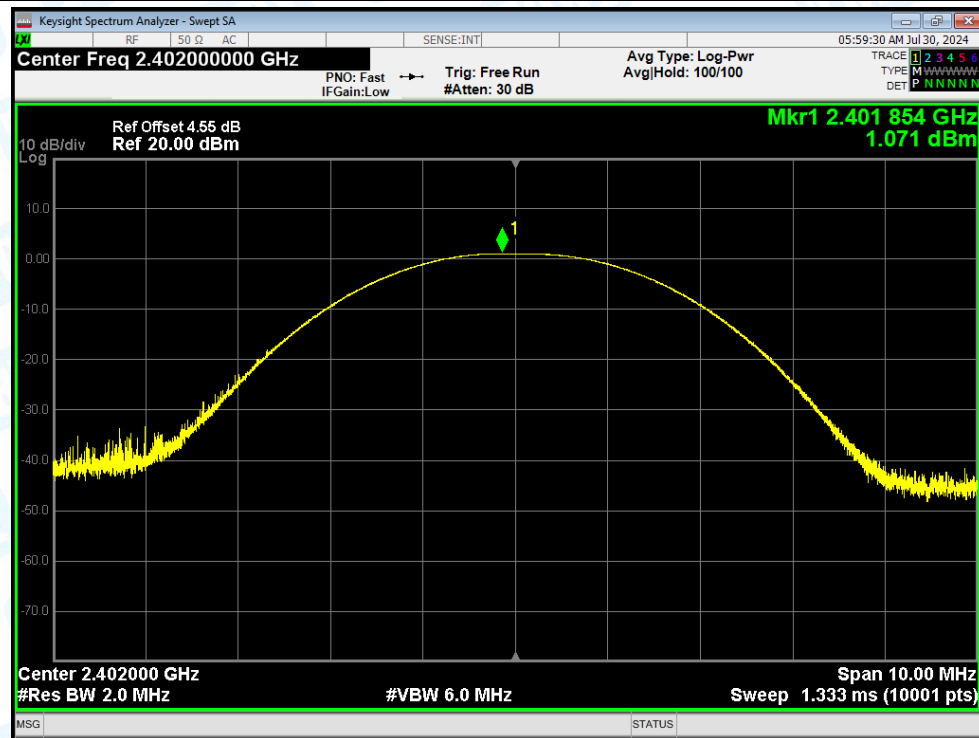


2. Maximum Conducted Output Power

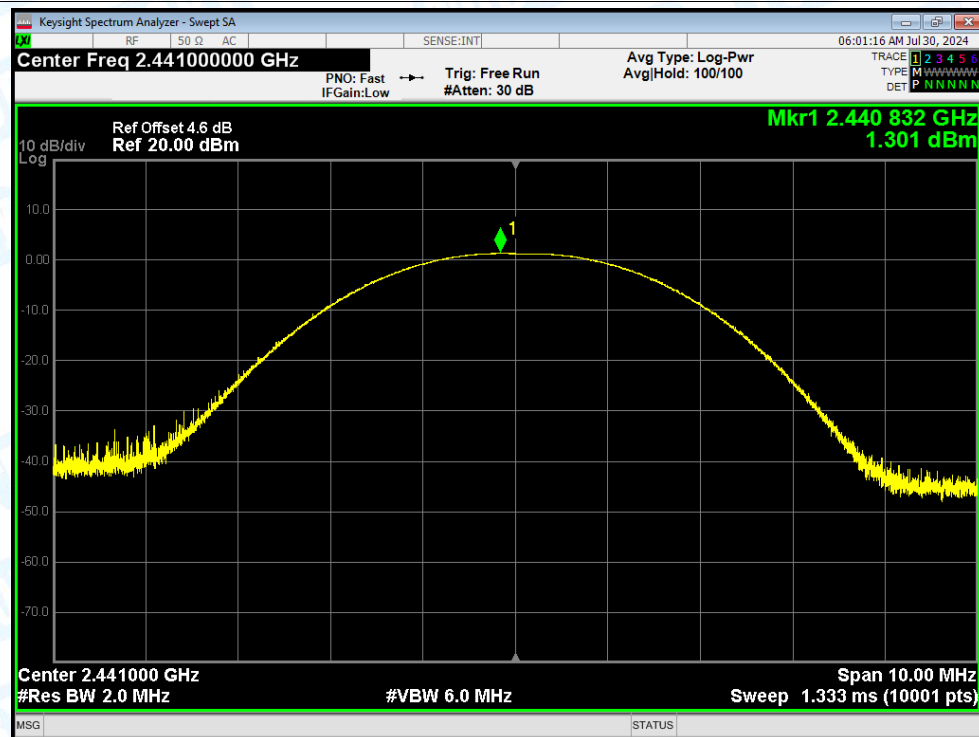
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.071	21	Pass
NVNT	1-DH1	2441	Ant1	1.301	21	Pass
NVNT	1-DH1	2480	Ant1	1.57	21	Pass
NVNT	1-DH3	2441	Ant1	1.639	21	Pass
NVNT	1-DH5	2441	Ant1	1.601	21	Pass
NVNT	2-DH1	2402	Ant1	2.279	21	Pass
NVNT	2-DH1	2441	Ant1	2.448	21	Pass
NVNT	2-DH1	2480	Ant1	2.572	21	Pass
NVNT	2-DH3	2441	Ant1	2.483	21	Pass
NVNT	2-DH5	2441	Ant1	2.448	21	Pass
NVNT	3-DH1	2402	Ant1	2.769	21	Pass
NVNT	3-DH1	2441	Ant1	2.997	21	Pass
NVNT	3-DH1	2480	Ant1	2.935	21	Pass
NVNT	3-DH3	2441	Ant1	2.875	21	Pass
NVNT	3-DH5	2441	Ant1	2.866	21	Pass

Test Graphs

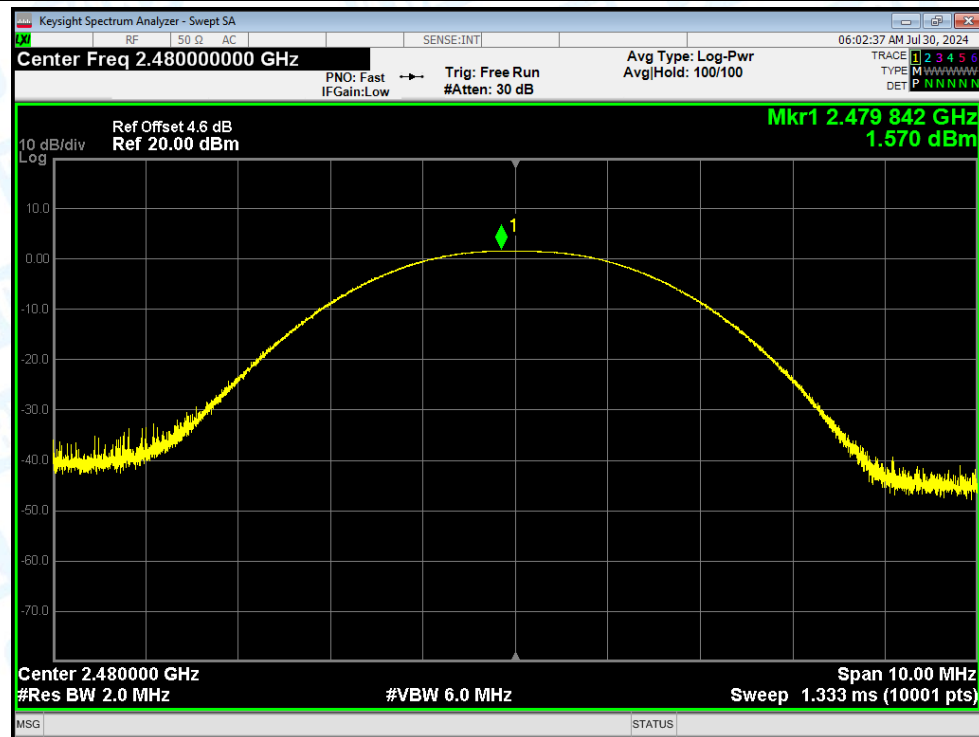
Power NVNT 1-DH1 2402MHz Ant1



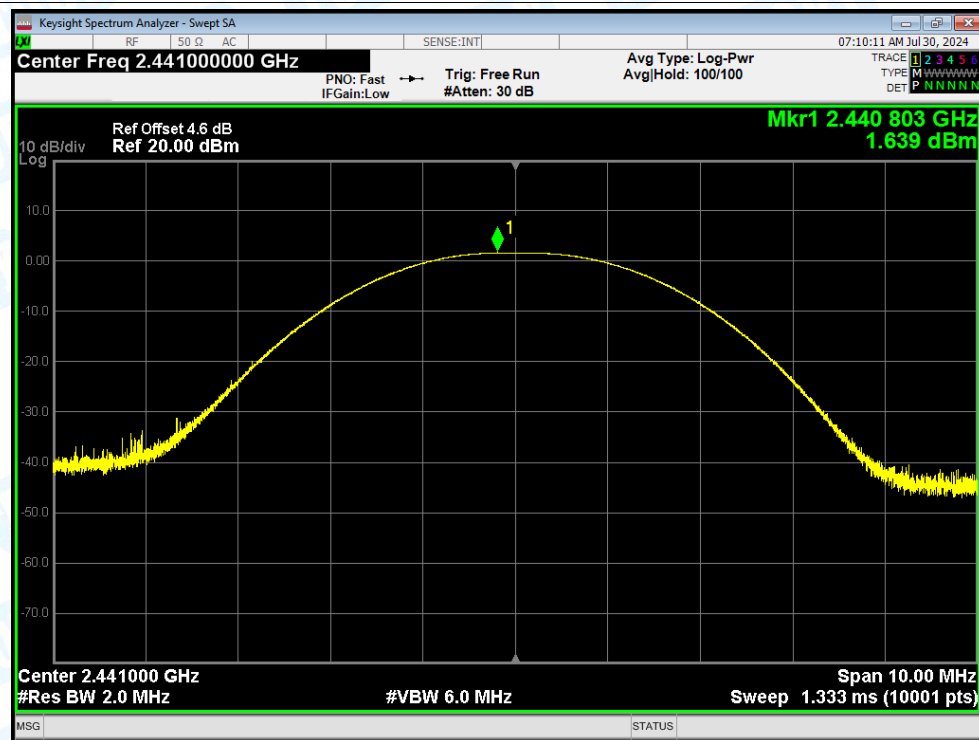
Power NVNT 1-DH1 2441MHz Ant1



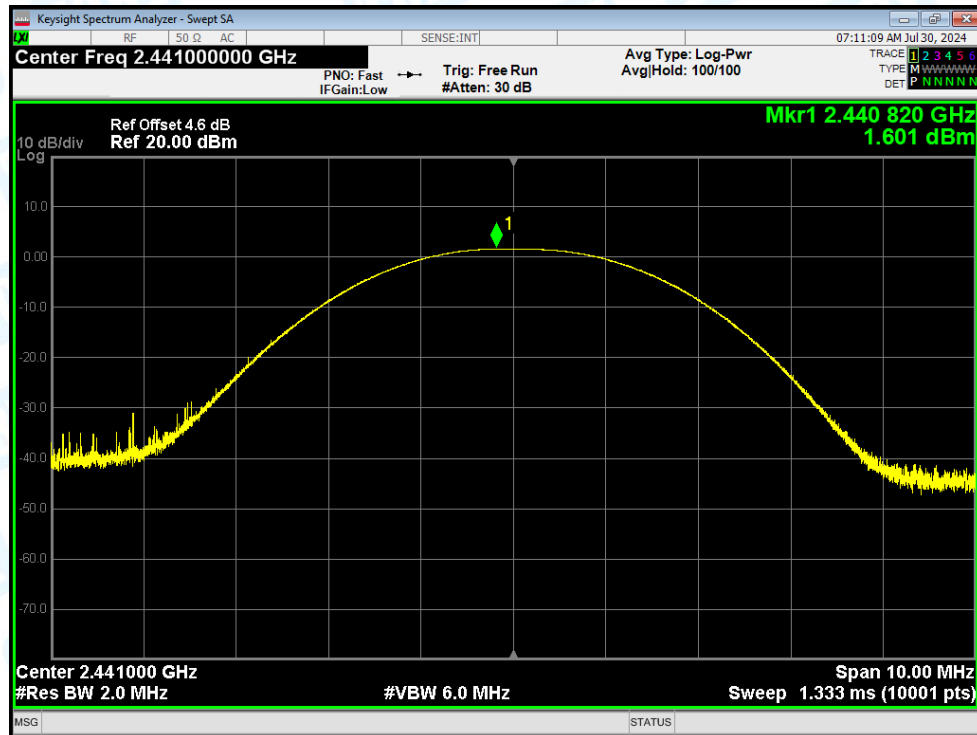
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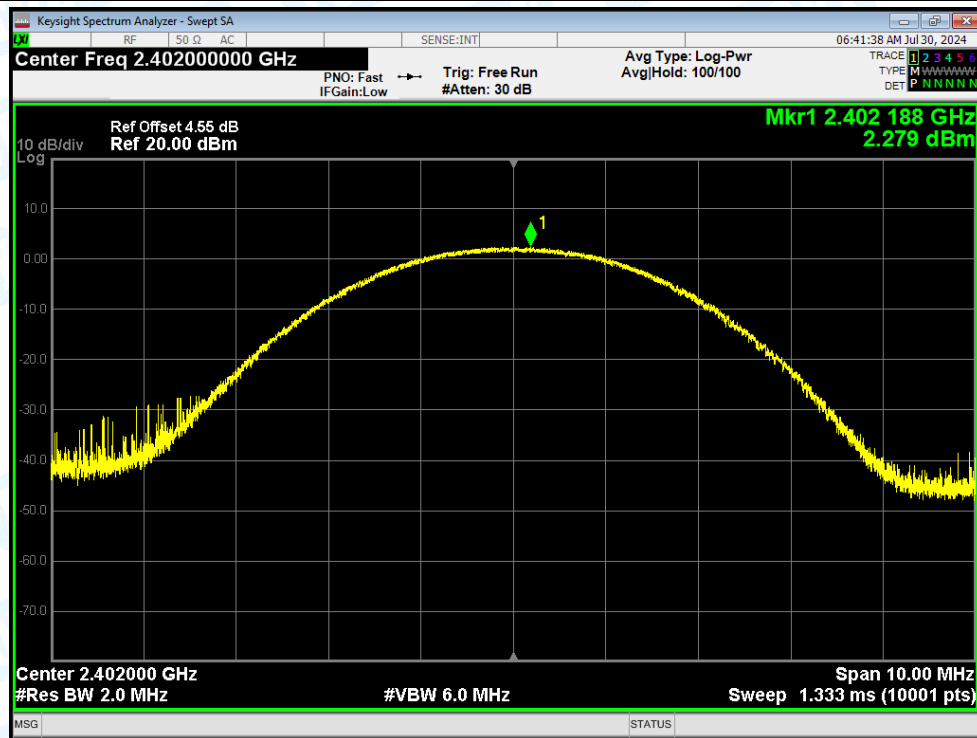
Power NVNT 1-DH3 2441MHz Ant1



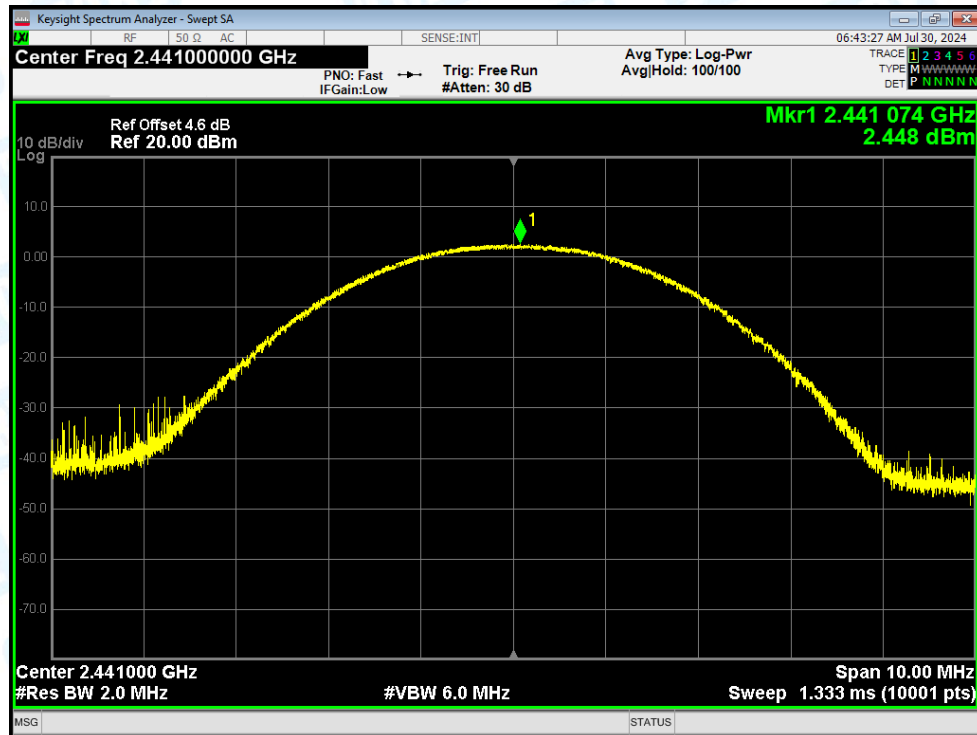
Power NVNT 1-DH5 2441MHz Ant1



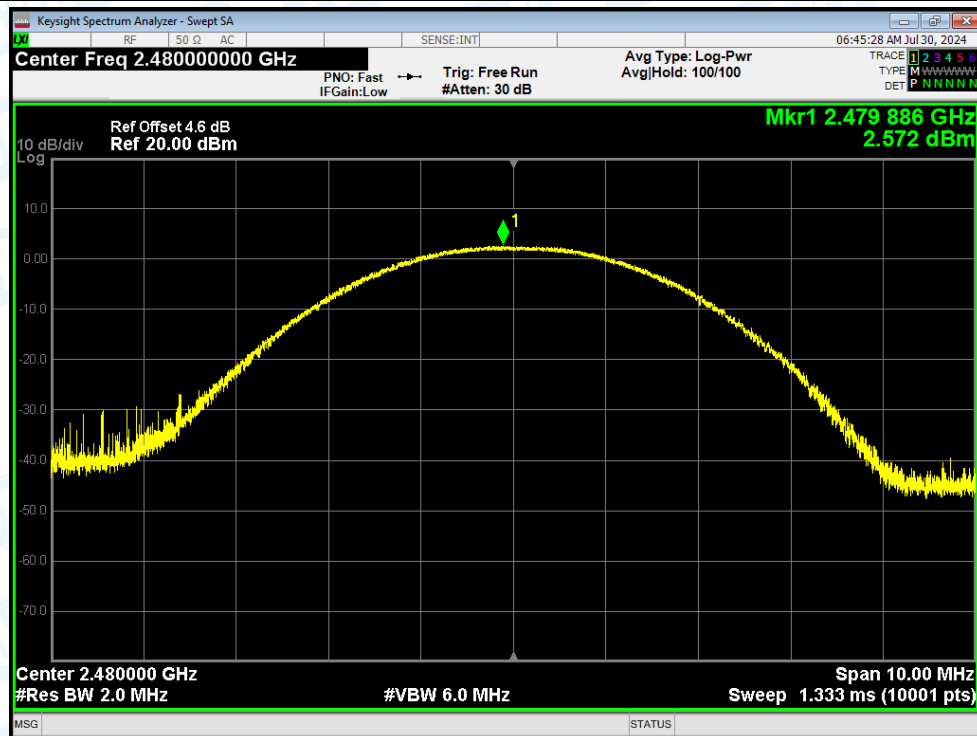
Power NVNT 2-DH1 2402MHz Ant1



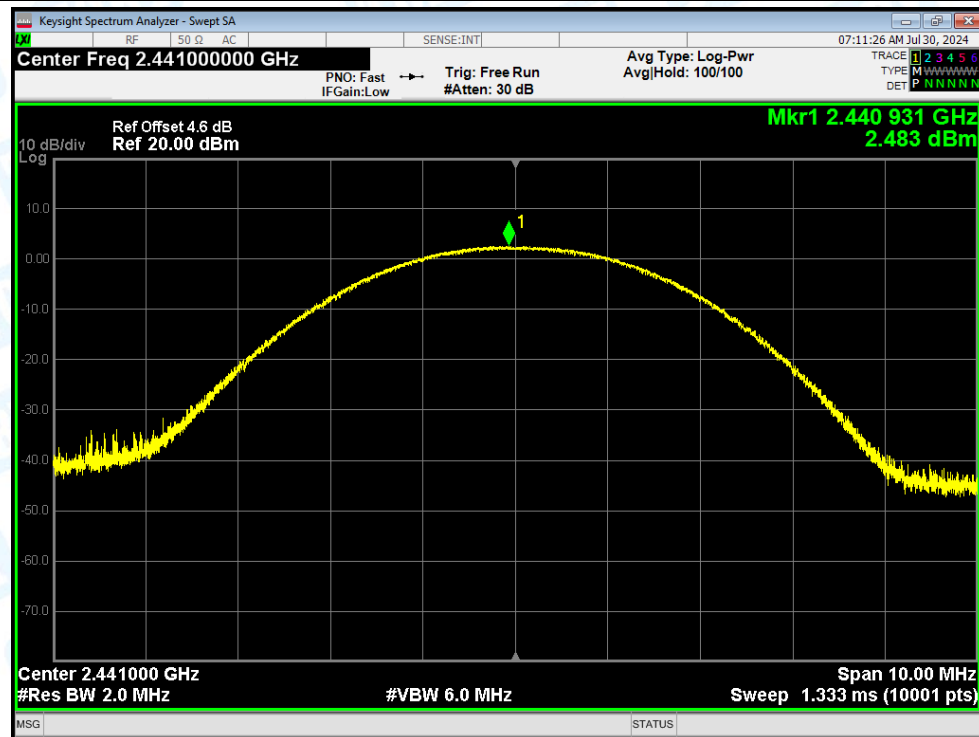
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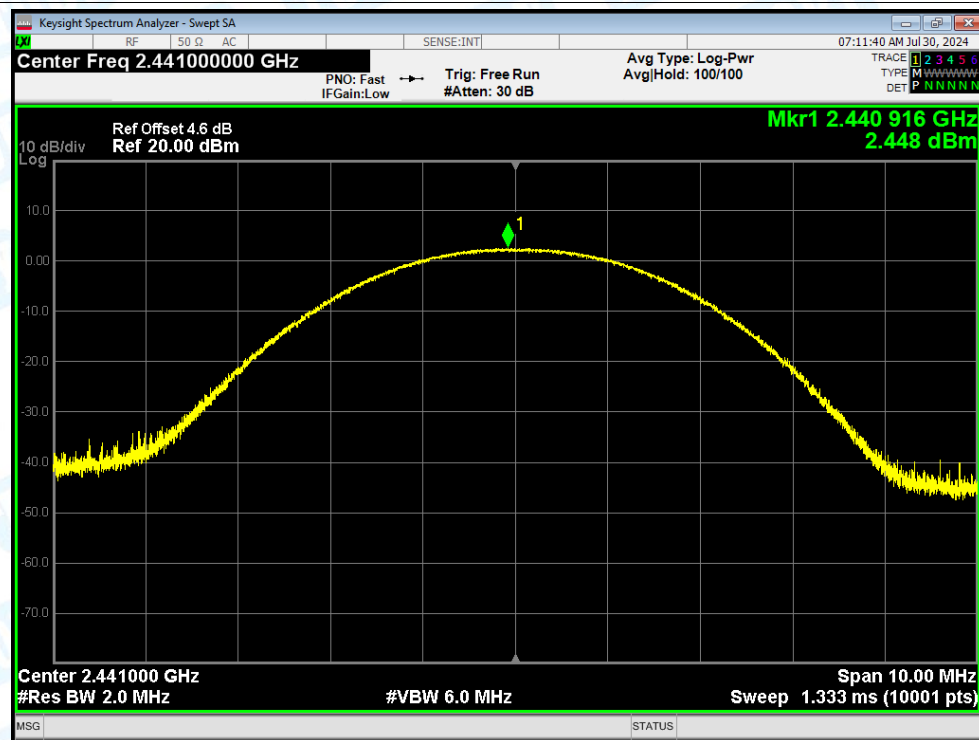
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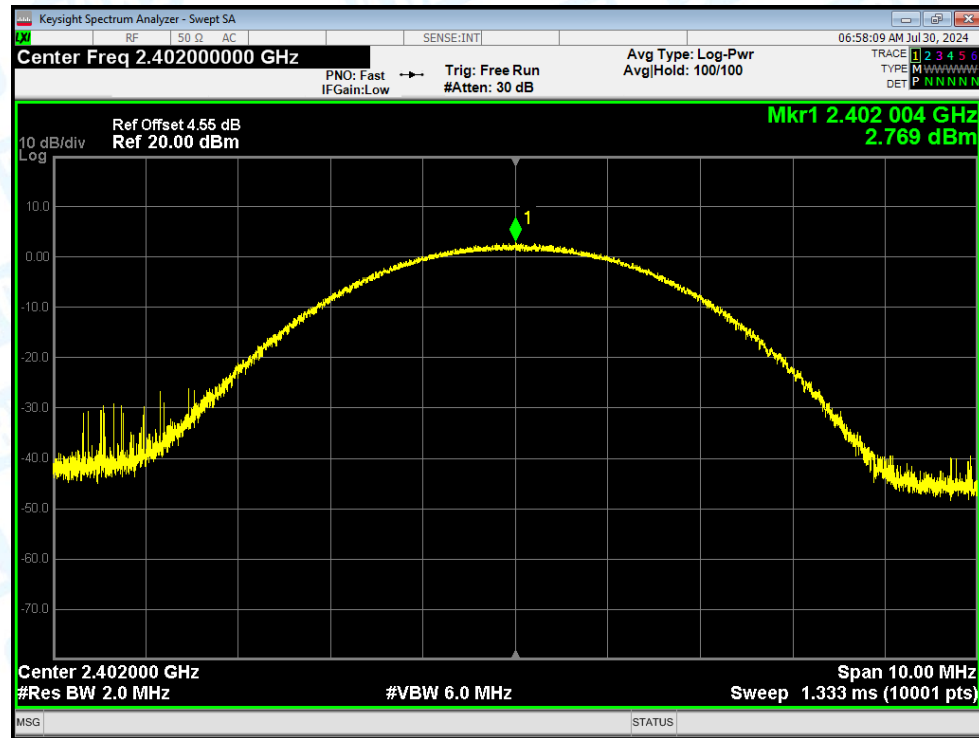
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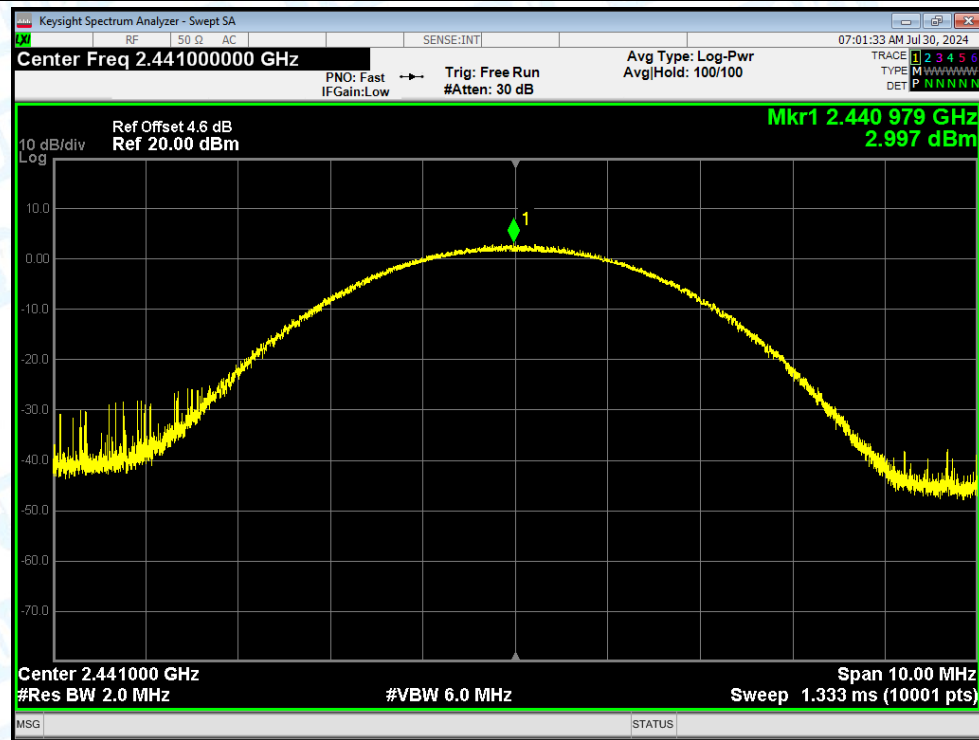
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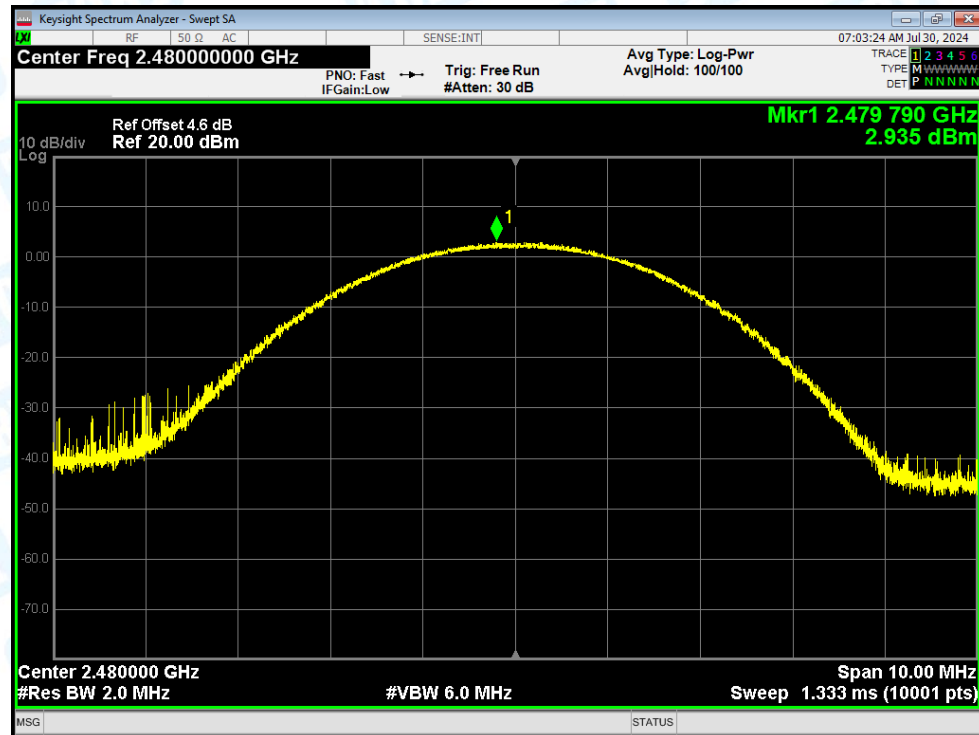
Power NVNT 3-DH1 2402MHz Ant1



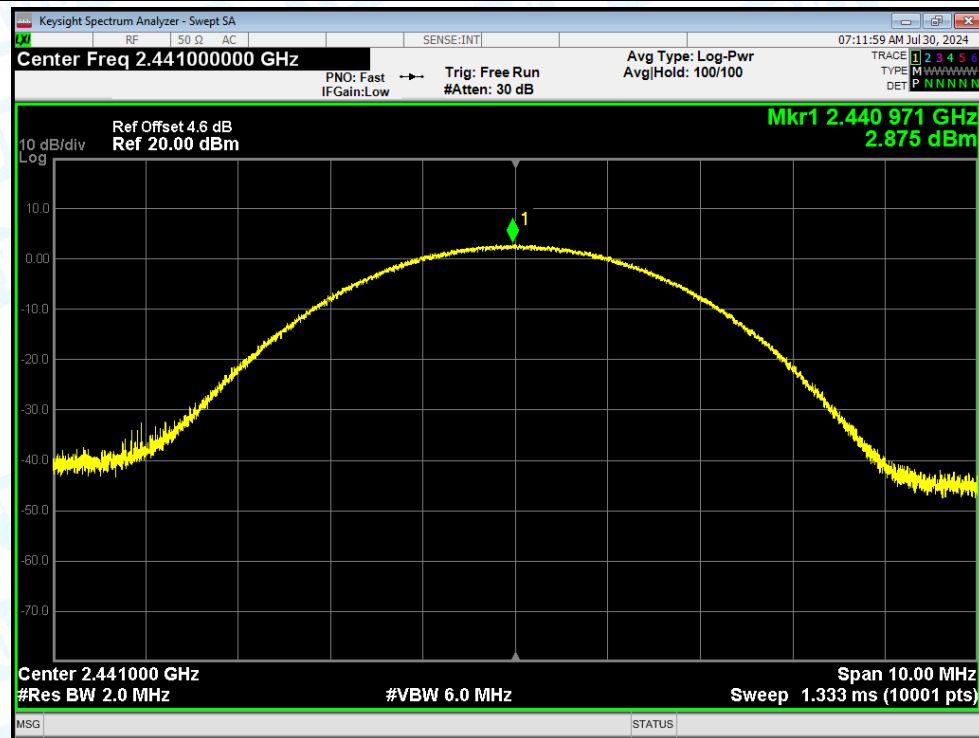
Power NVNT 3-DH1 2441MHz Ant1

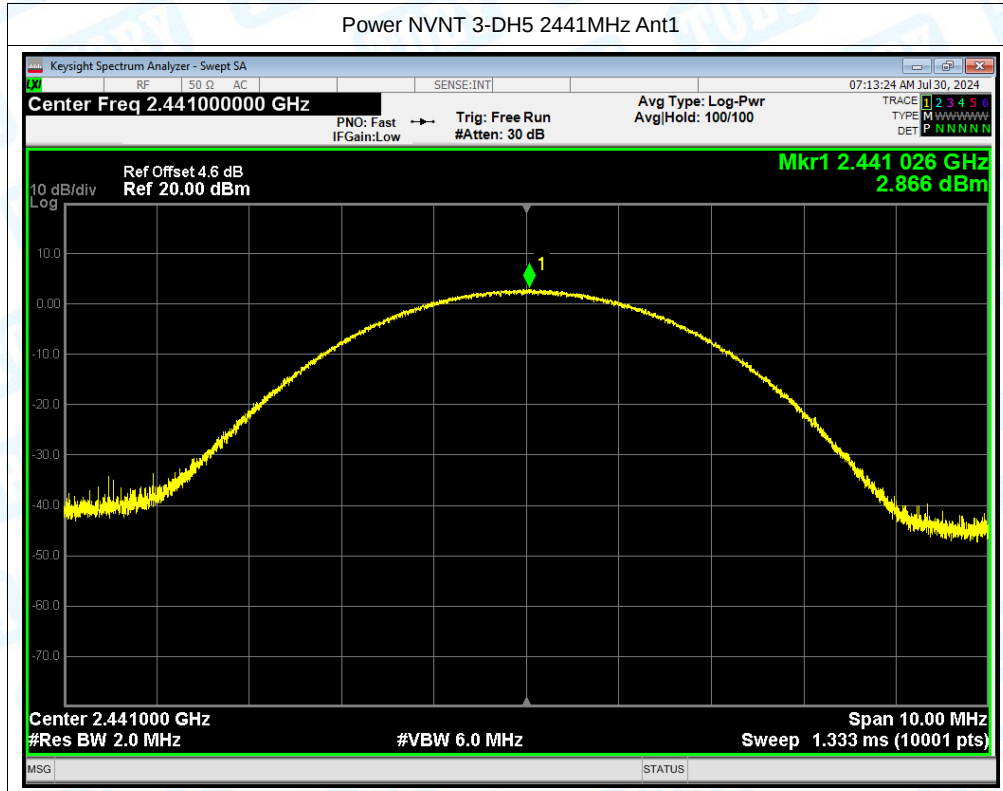


Power NVNT 3-DH1 2480MHz Ant1



Power NVNT 3-DH3 2441MHz Ant1



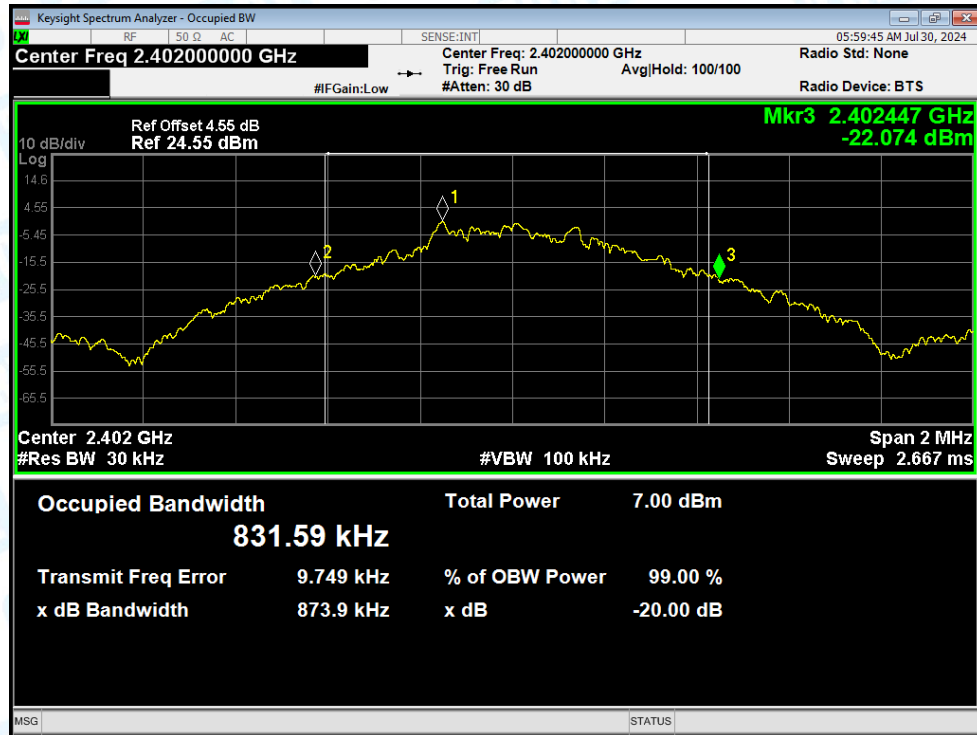


3. -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	0	Pass
NVNT	1-DH1	2441	Ant1	0.83	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	1.22	0	Pass
NVNT	2-DH1	2480	Ant1	1.25	0	Pass
NVNT	3-DH1	2402	Ant1	1.22	0	Pass
NVNT	3-DH1	2441	Ant1	1.19	0	Pass
NVNT	3-DH1	2480	Ant1	1.23	0	Pass

Test Graphs

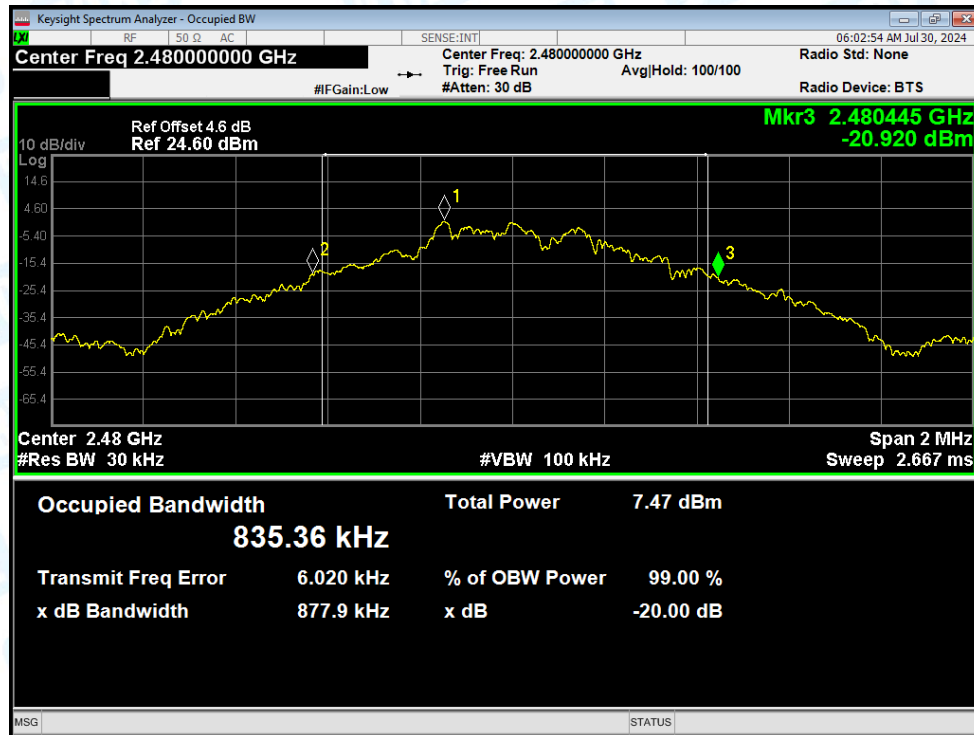
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



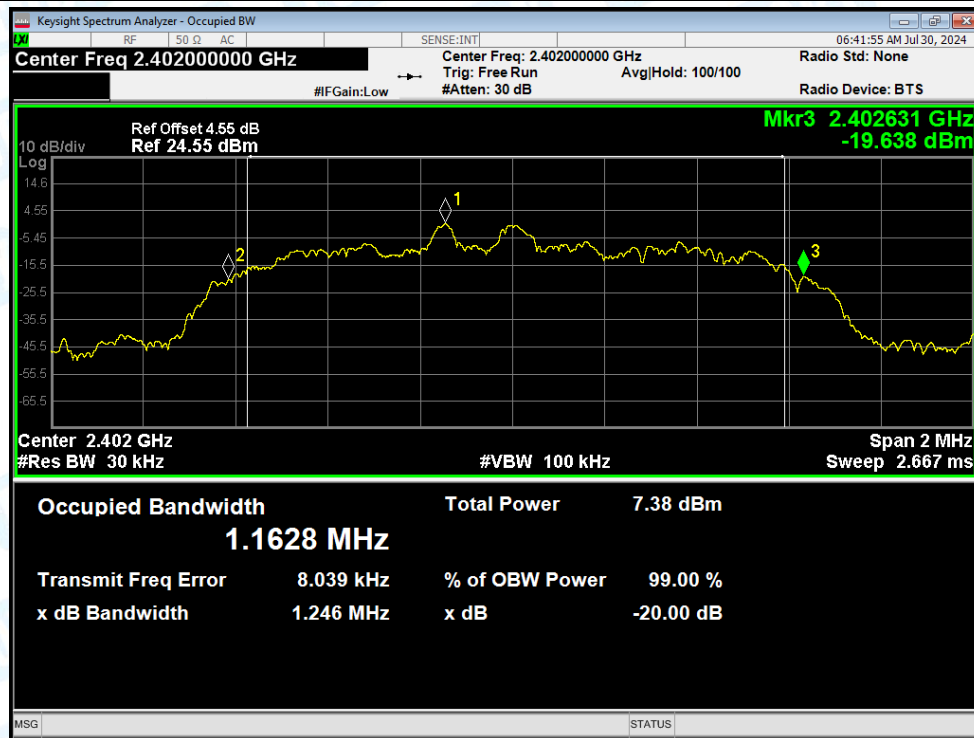
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



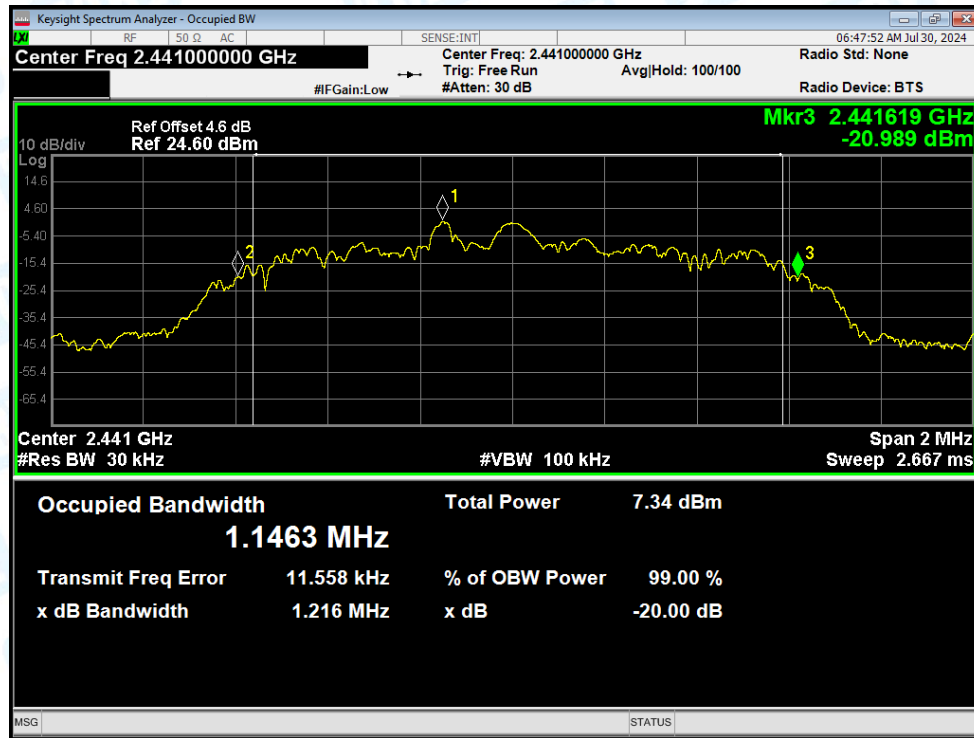
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



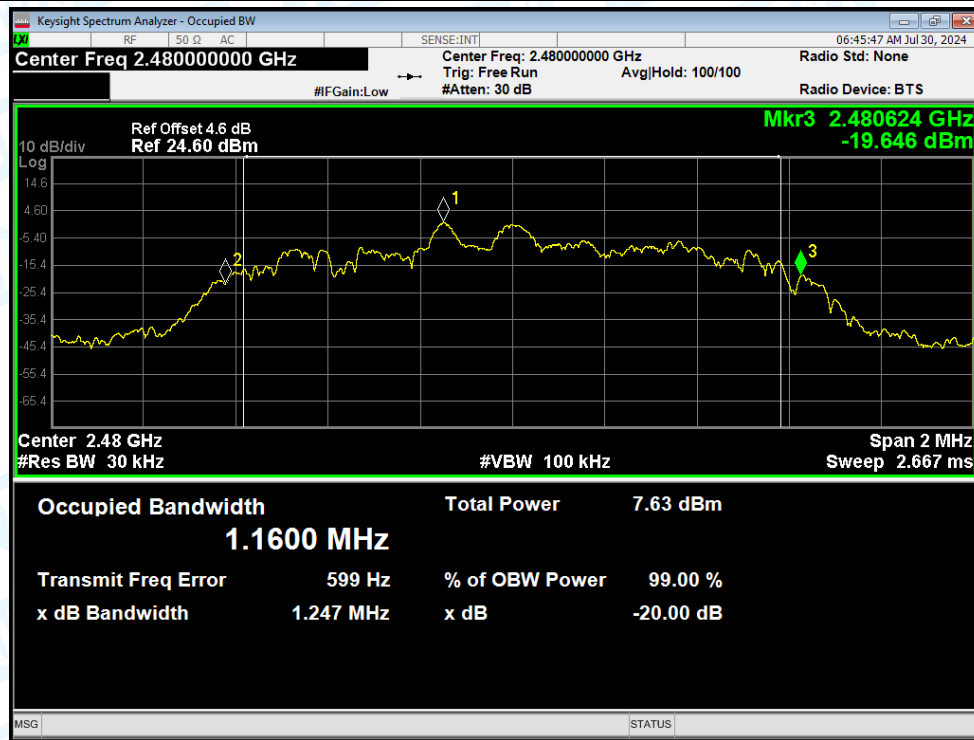
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



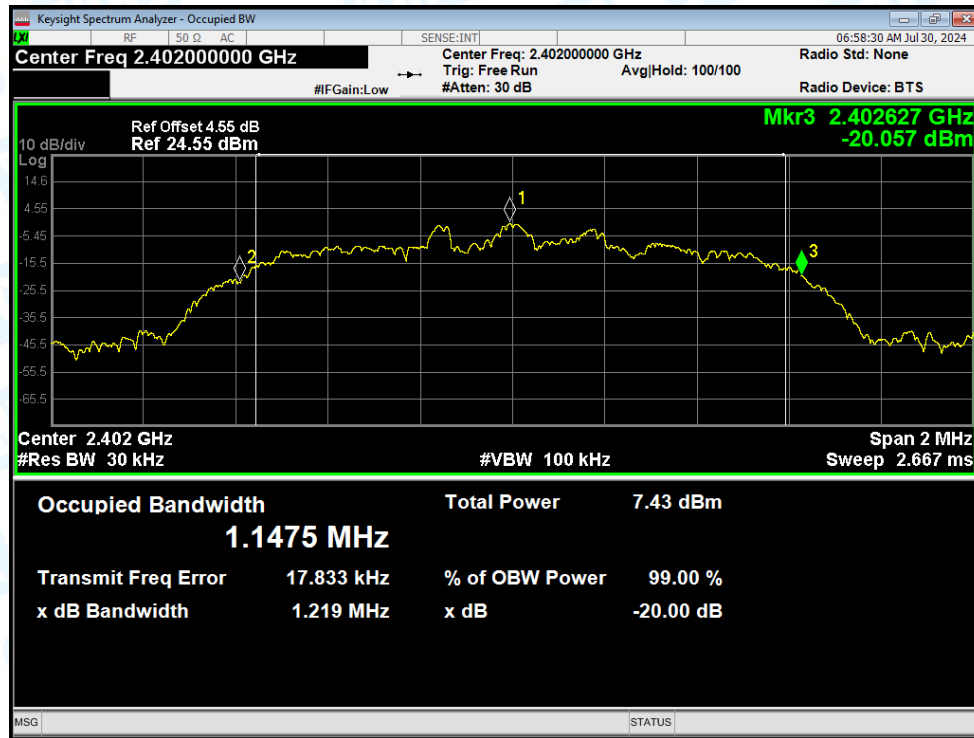
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



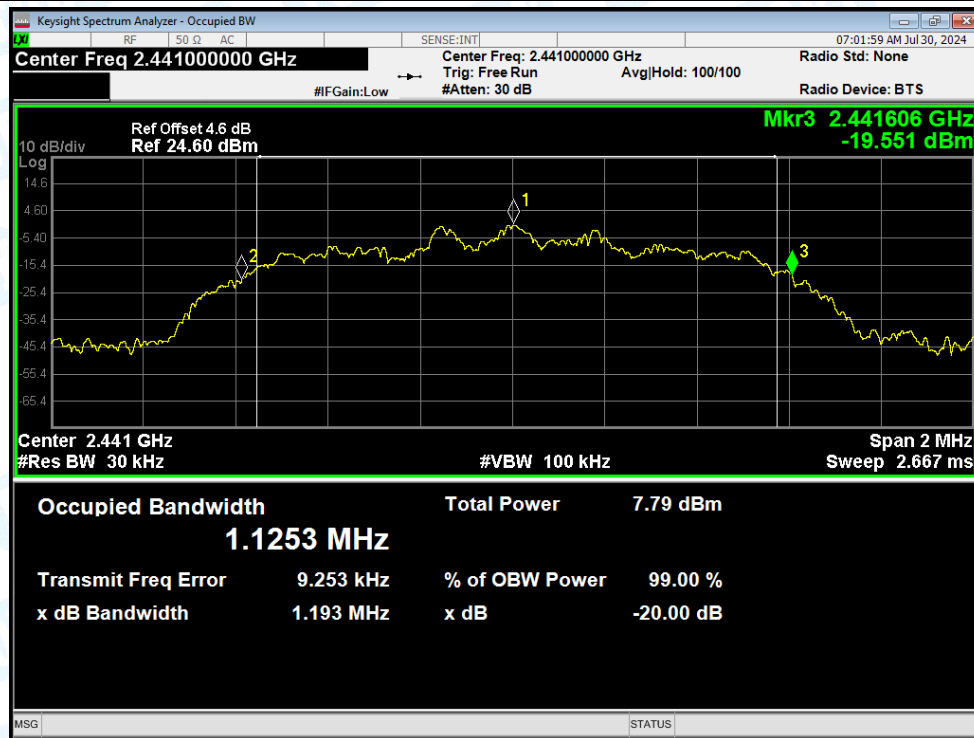
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

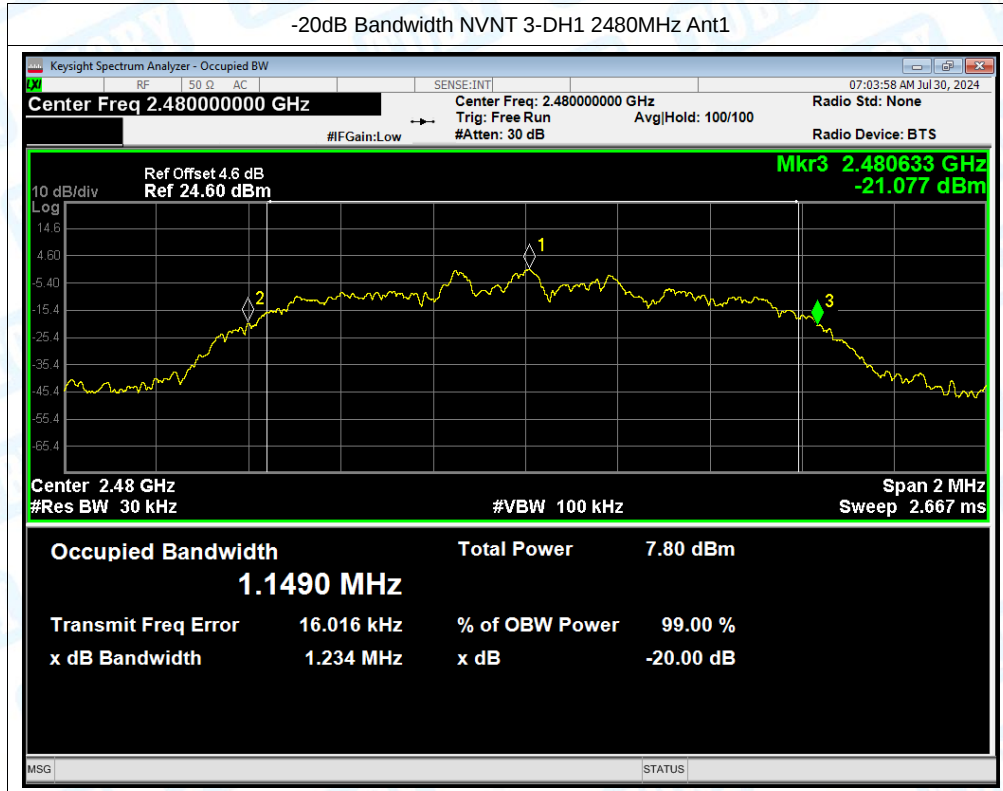


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



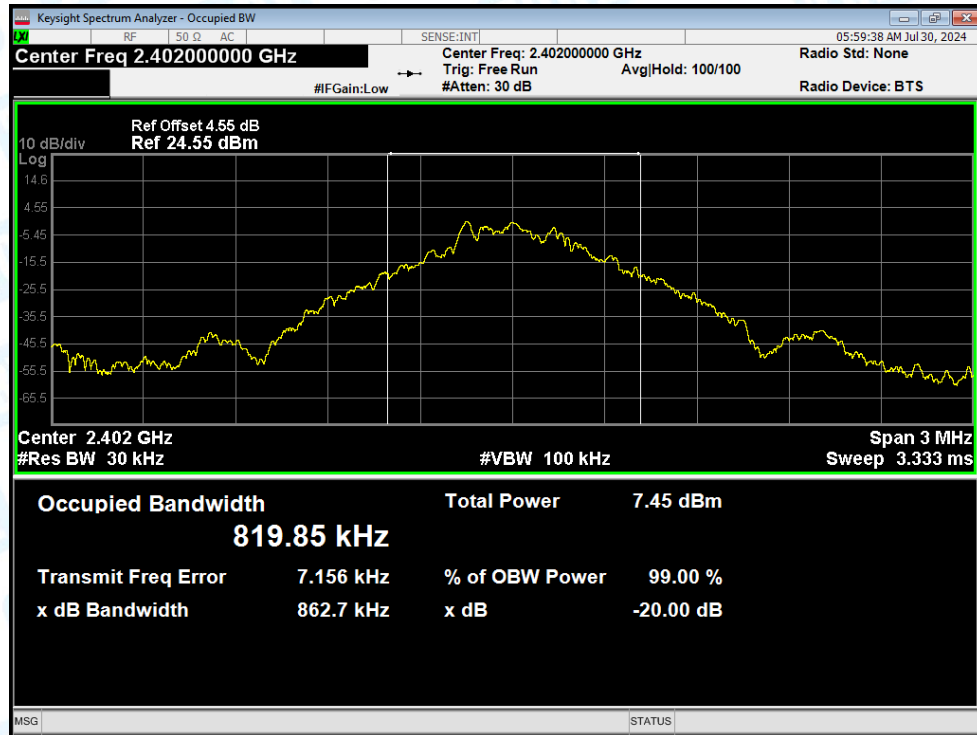


4. Occupied Channel Bandwidth

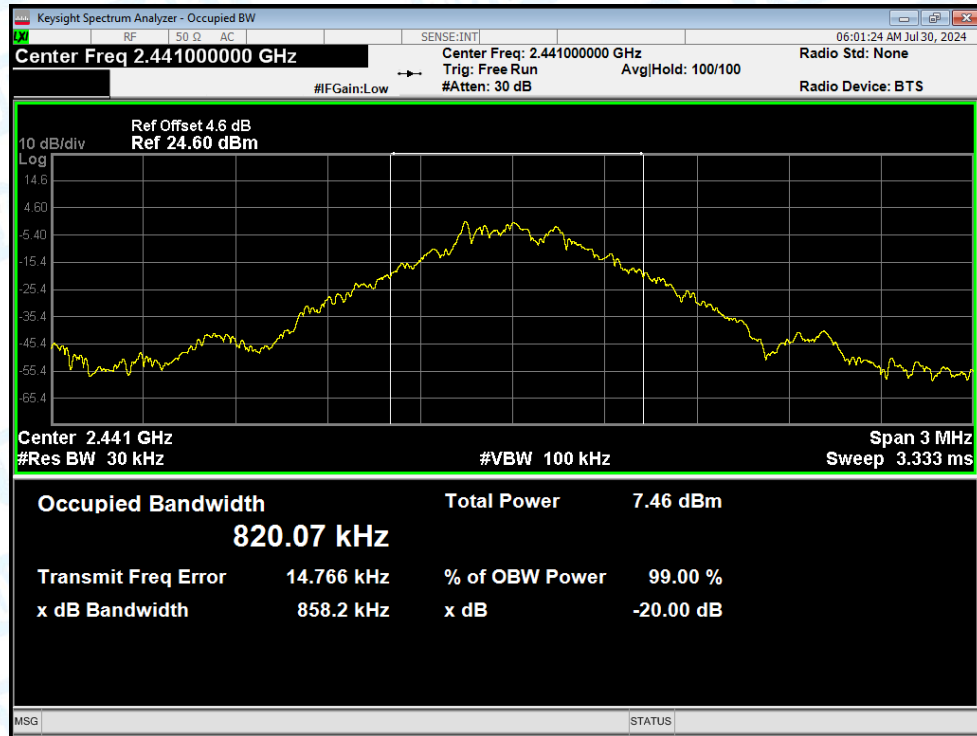
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.82
NVNT	1-DH1	2441	Ant1	0.82
NVNT	1-DH1	2480	Ant1	0.83
NVNT	2-DH1	2402	Ant1	1.127
NVNT	2-DH1	2441	Ant1	1.161
NVNT	2-DH1	2480	Ant1	1.172
NVNT	3-DH1	2402	Ant1	1.146
NVNT	3-DH1	2441	Ant1	1.131
NVNT	3-DH1	2480	Ant1	1.154

Test Graphs

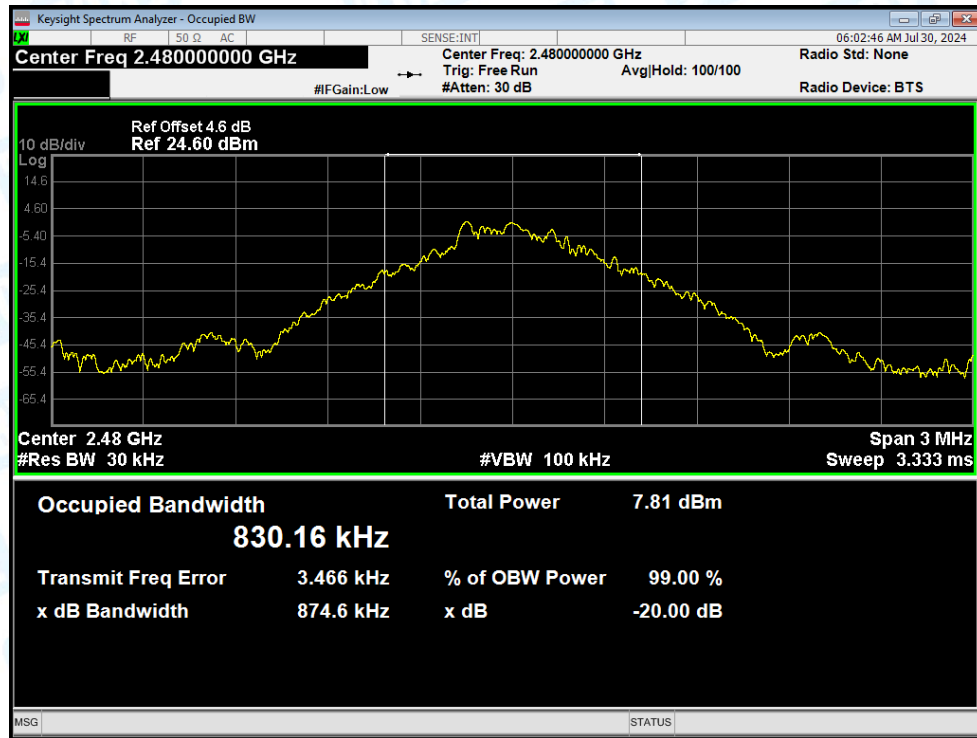
OBW NVNT 1-DH1 2402MHz Ant1



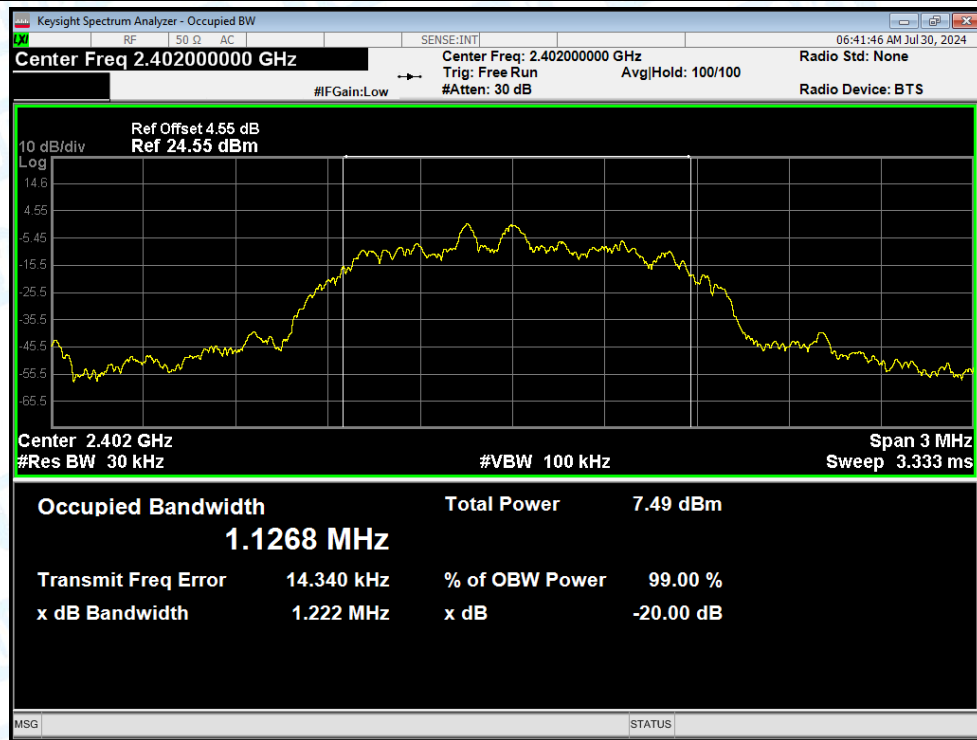
OBW NVNT 1-DH1 2441MHz Ant1



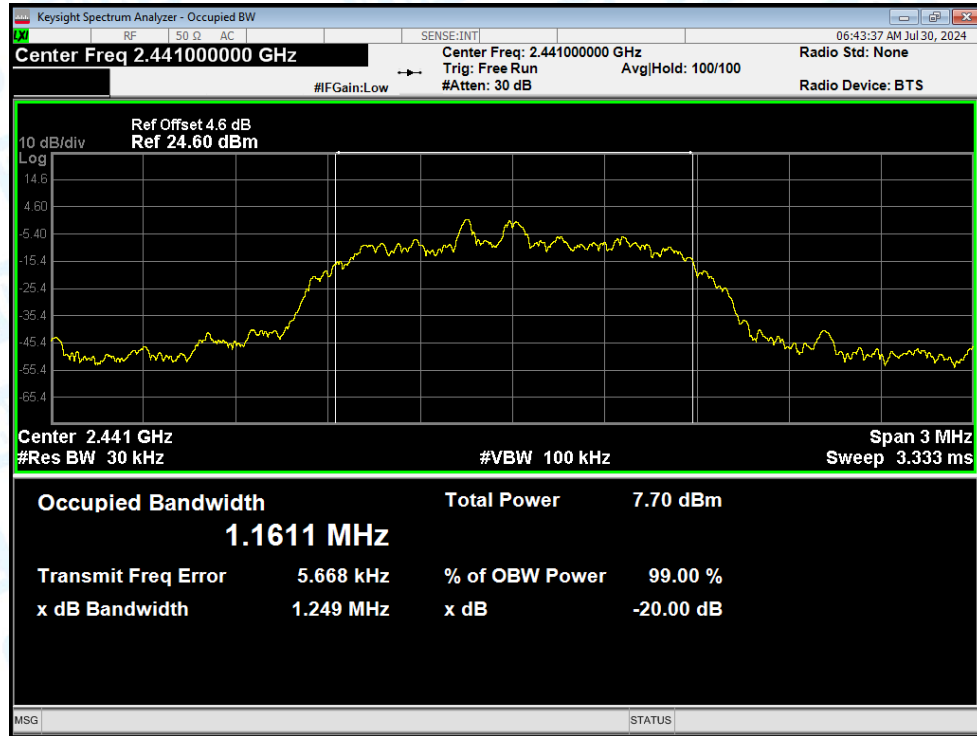
OBW NVNT 1-DH1 2480MHz Ant1



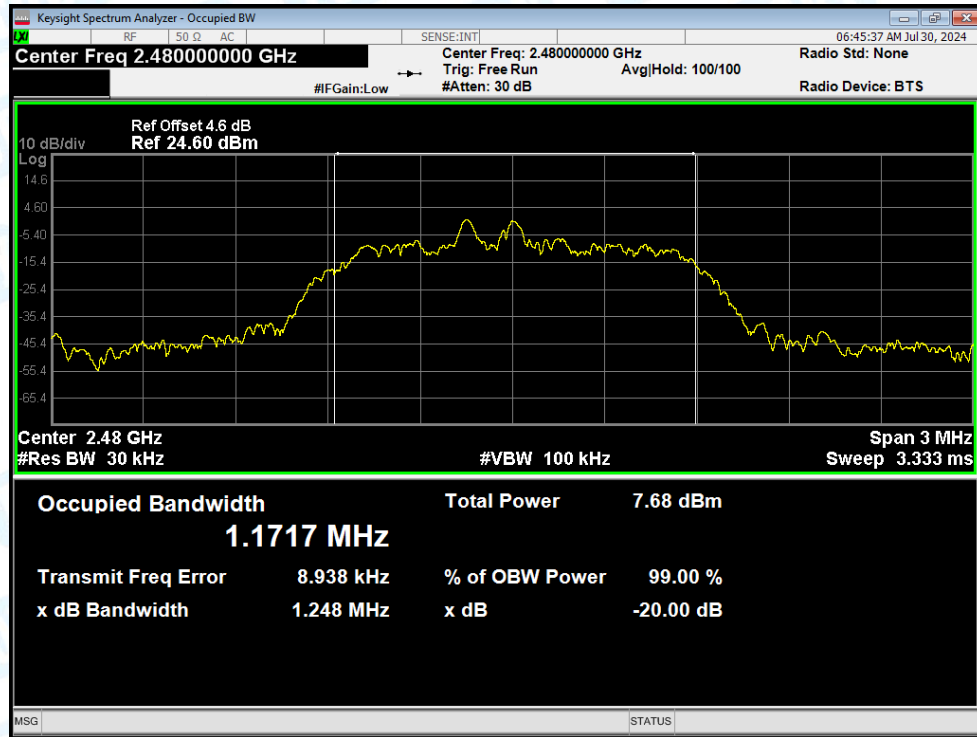
OBW NVNT 2-DH1 2402MHz Ant1



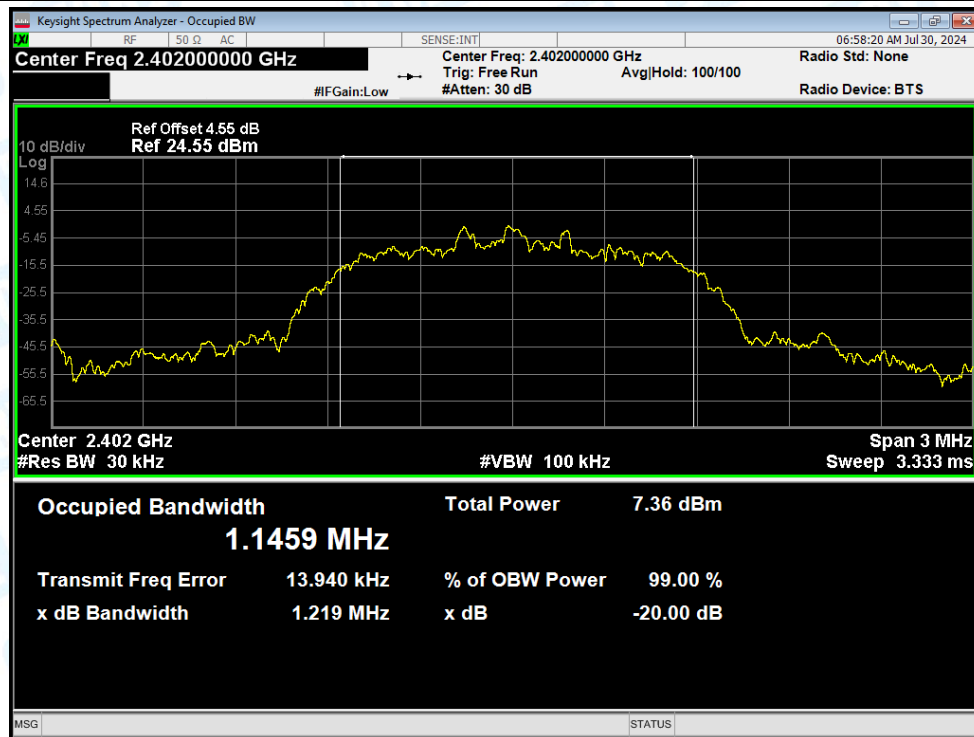
OBW NVNT 2-DH1 2441MHz Ant1



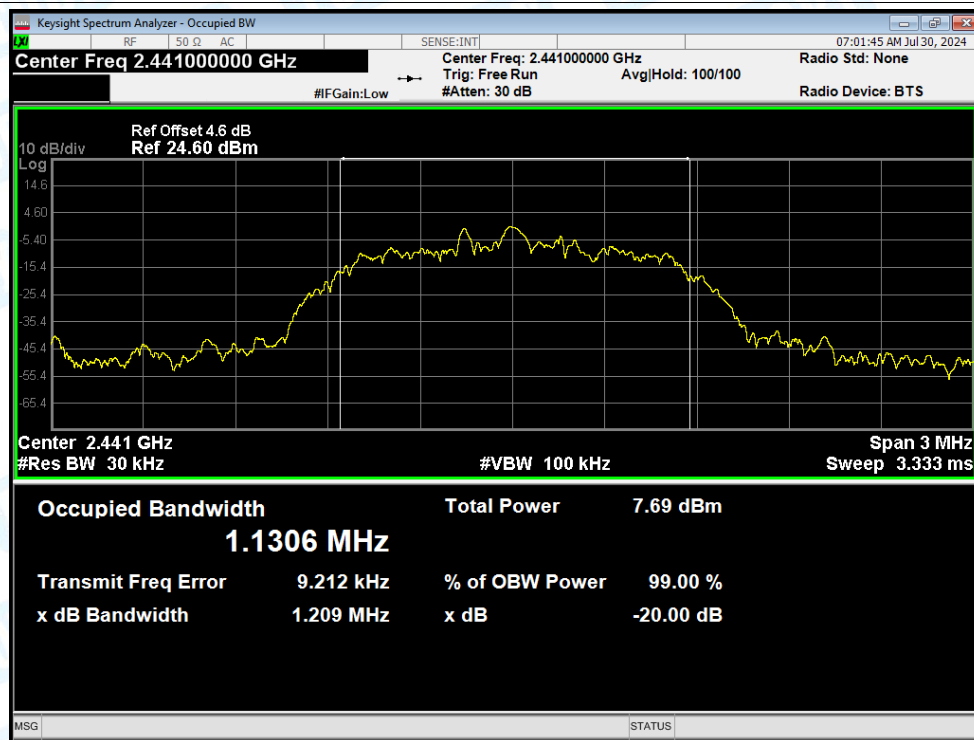
OBW NVNT 2-DH1 2480MHz Ant1

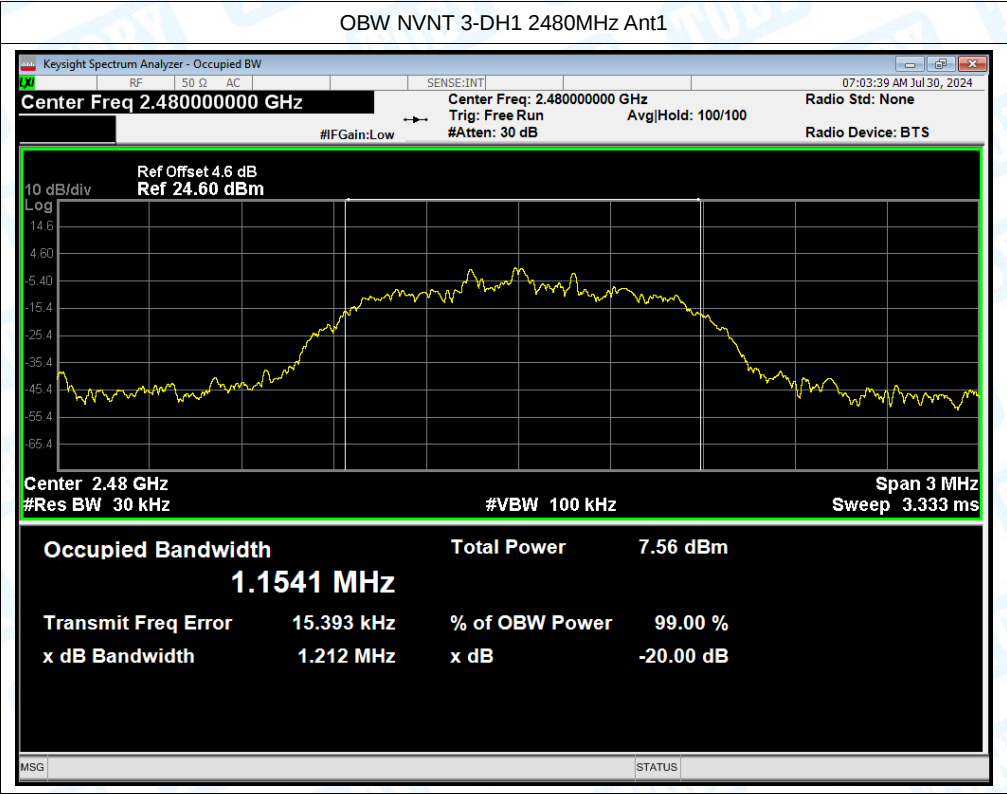


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



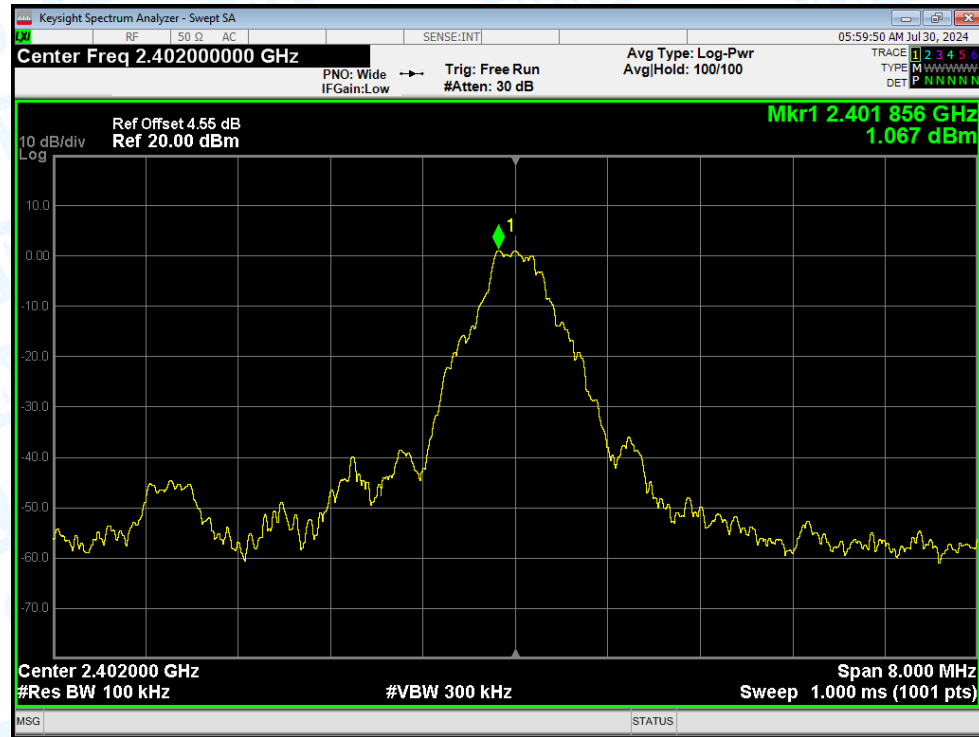


5. Band Edge

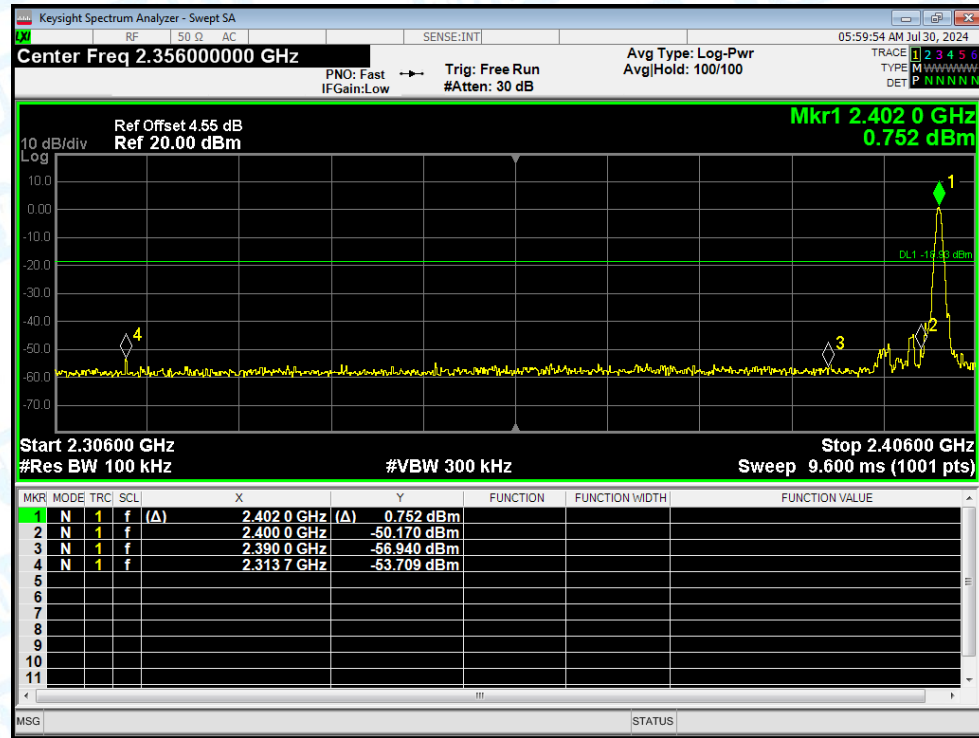
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-54.78	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-56.46	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.75	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.99	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-56.28	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.08	-20	Pass

Test Graphs

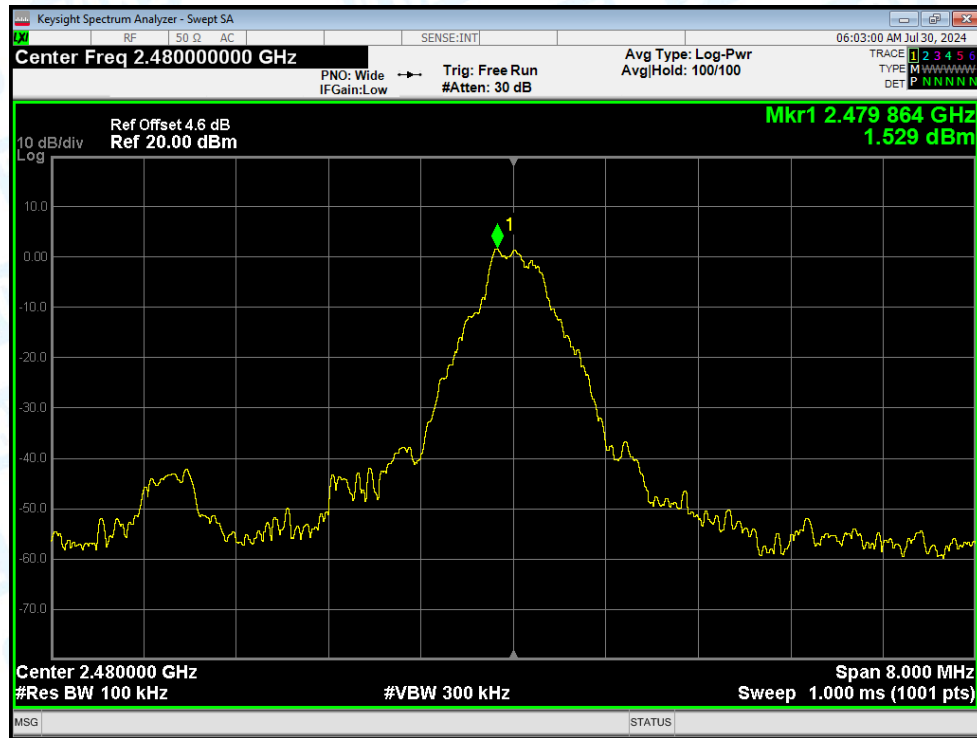
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



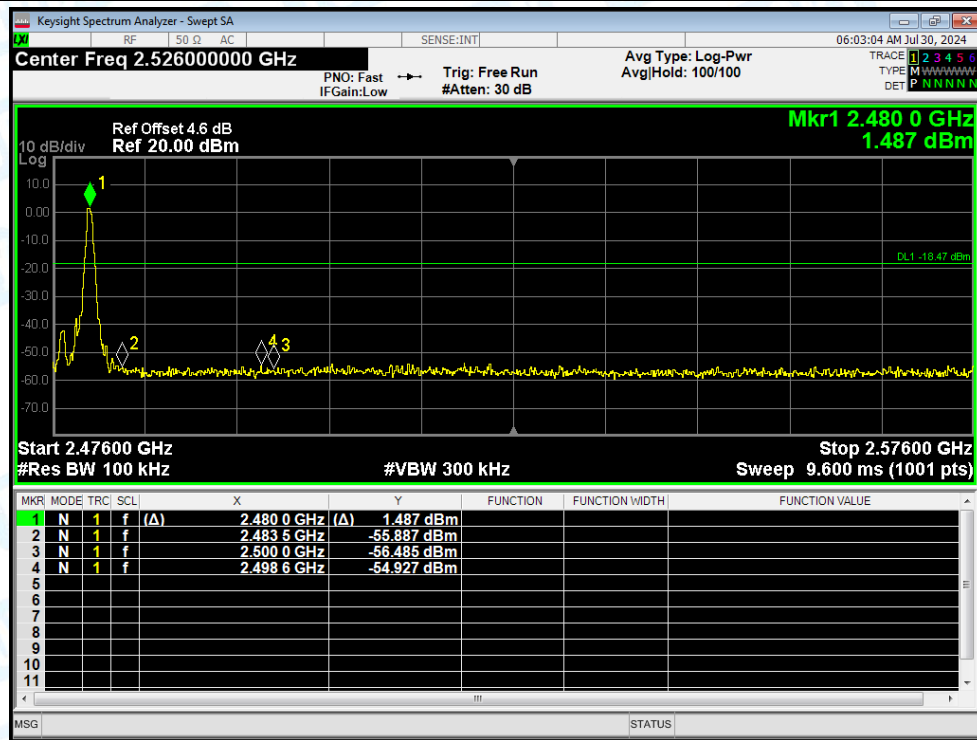
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



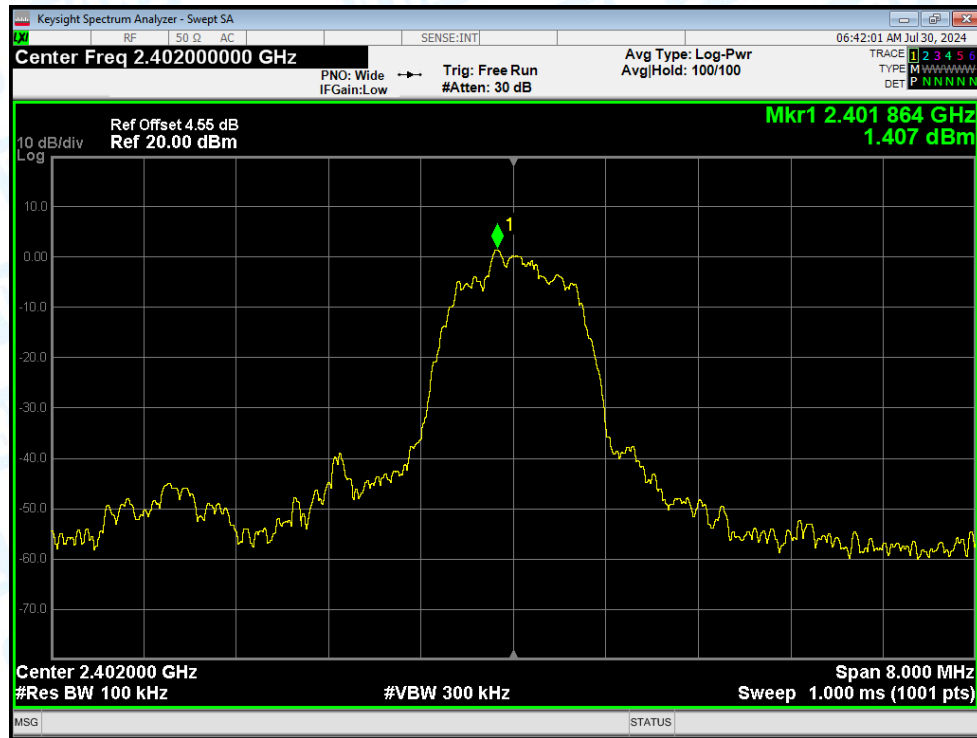
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



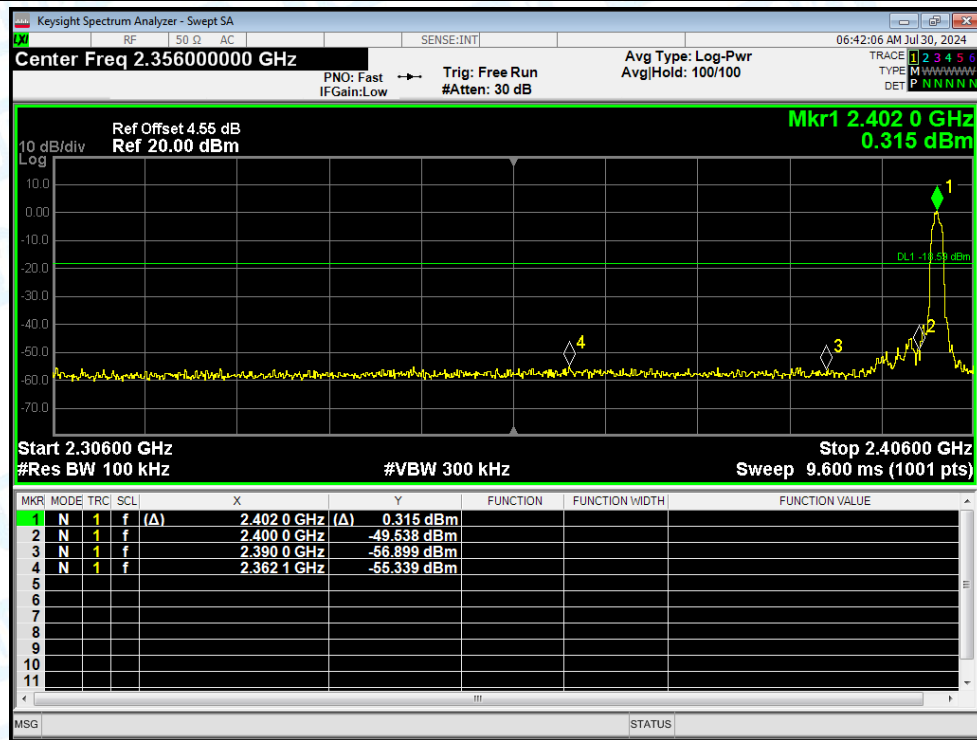
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



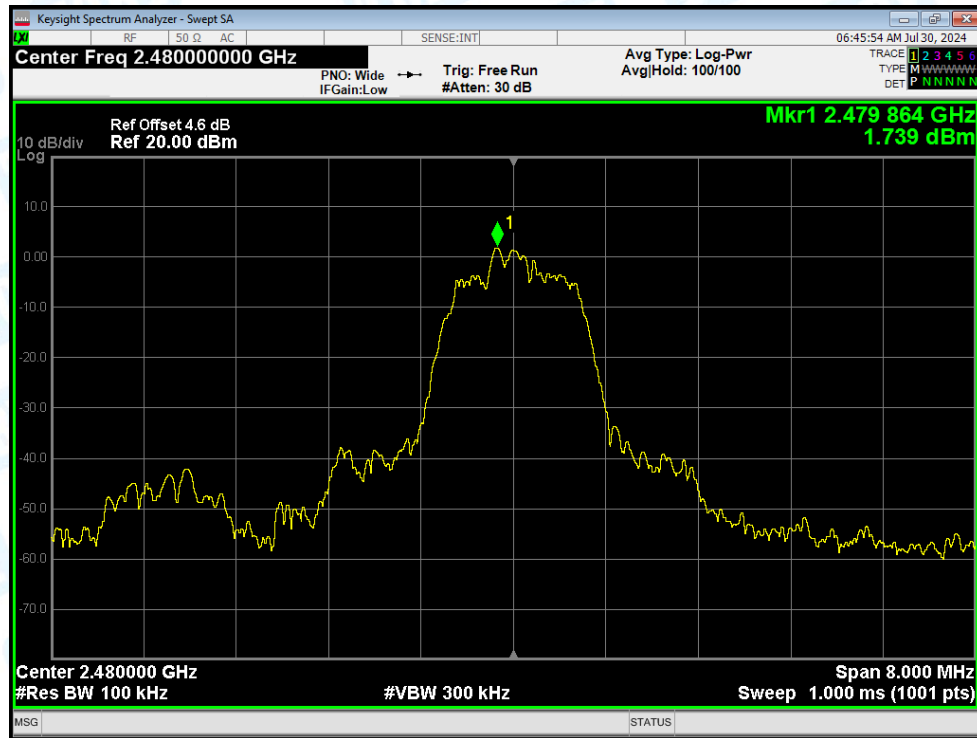
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



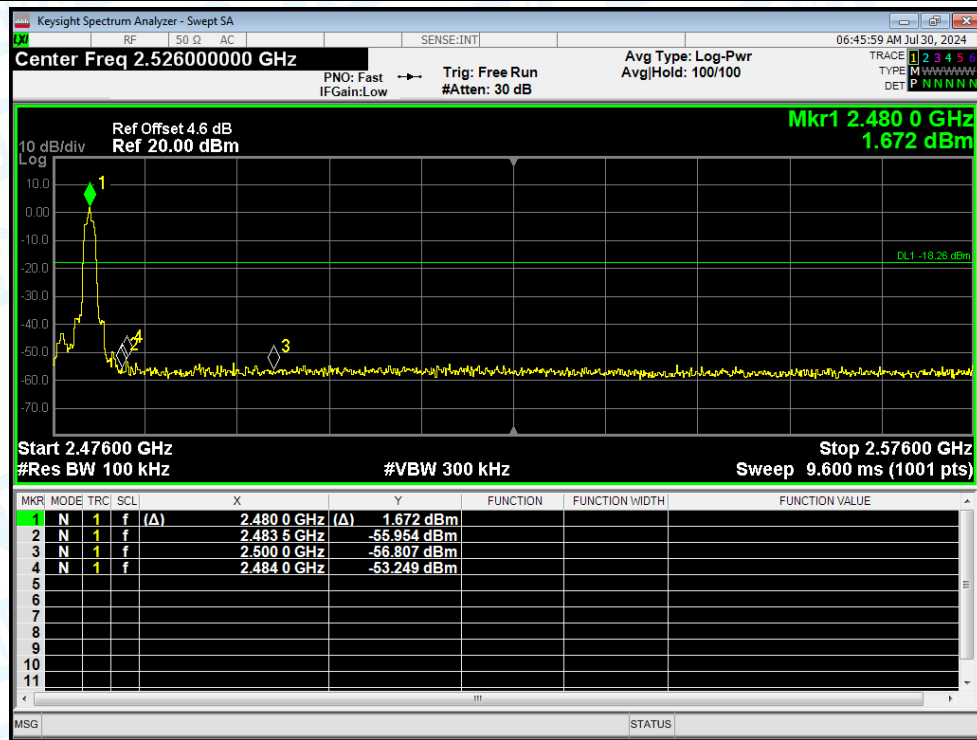
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



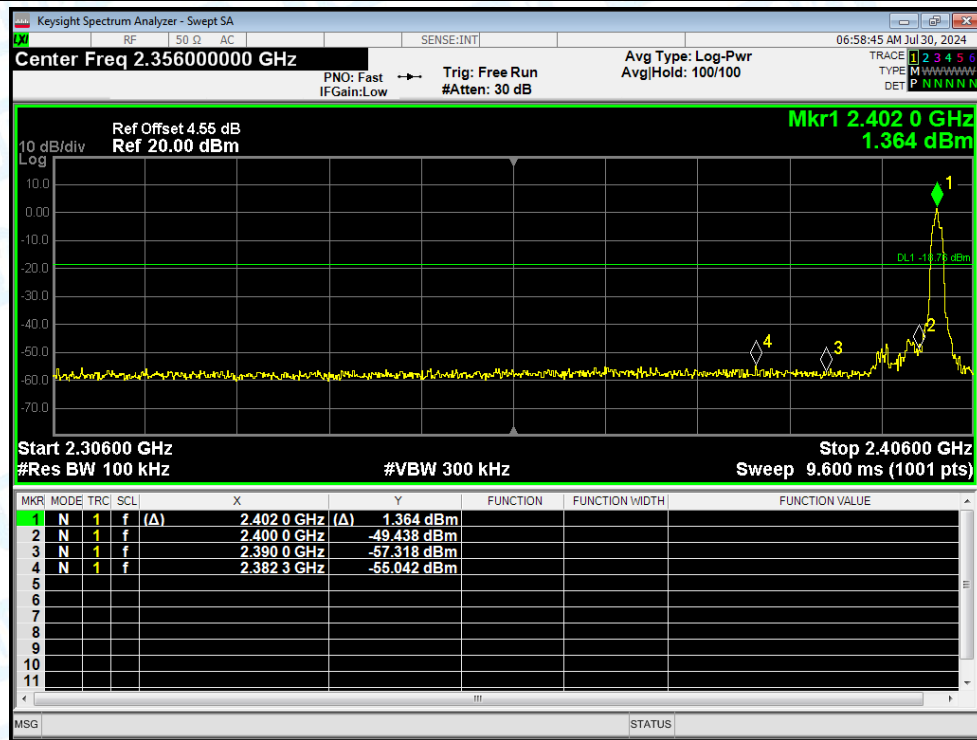
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



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



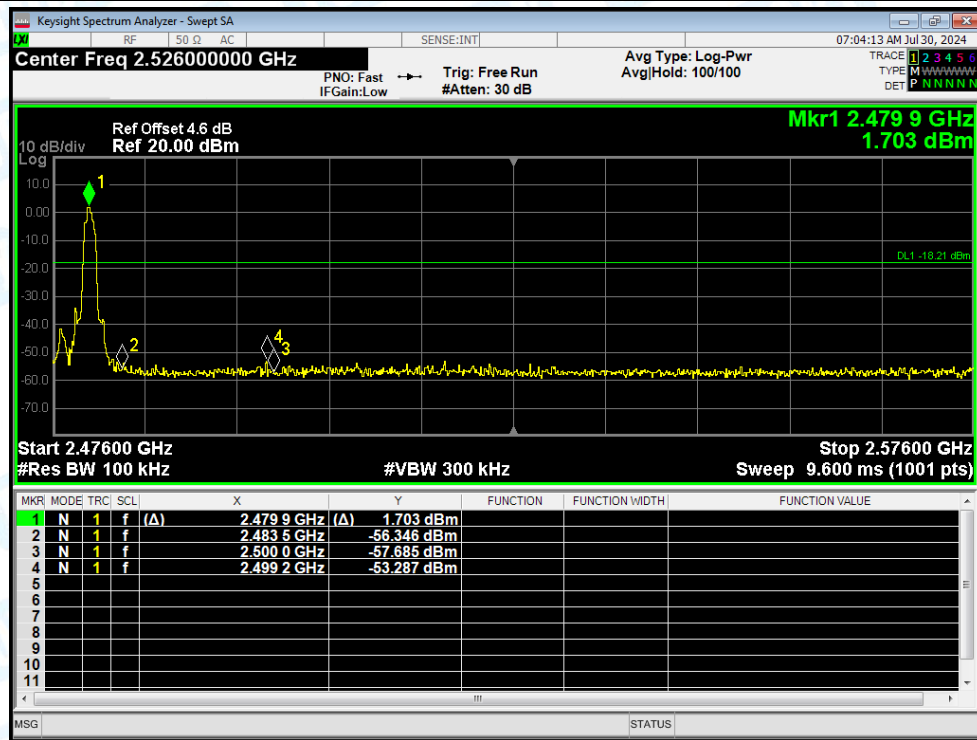
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

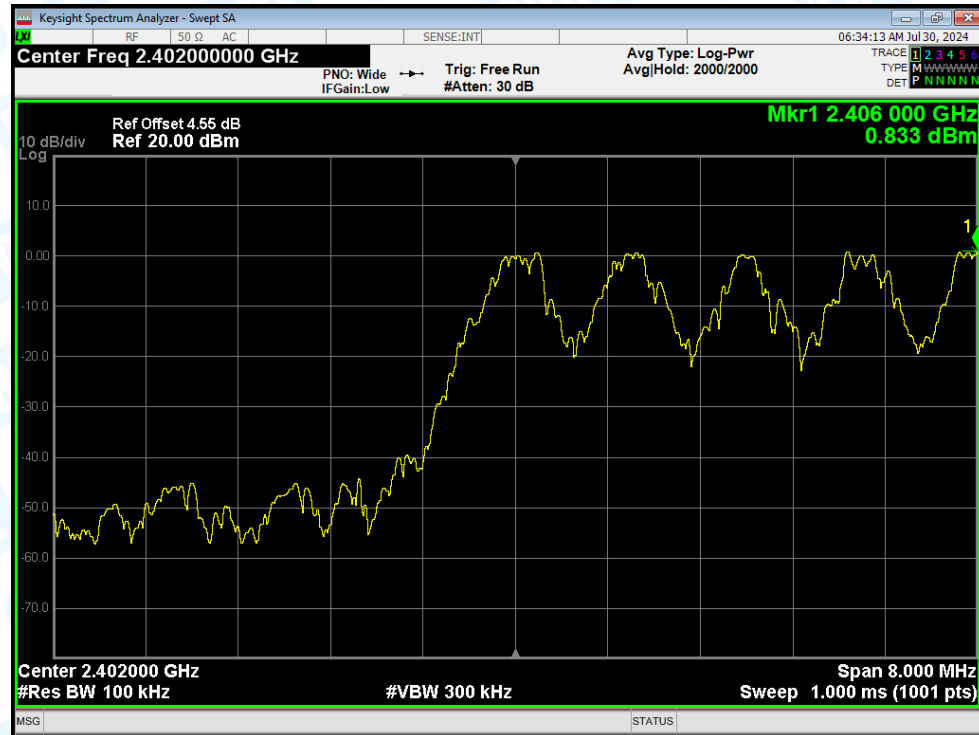


6. Band Edge(Hopping)

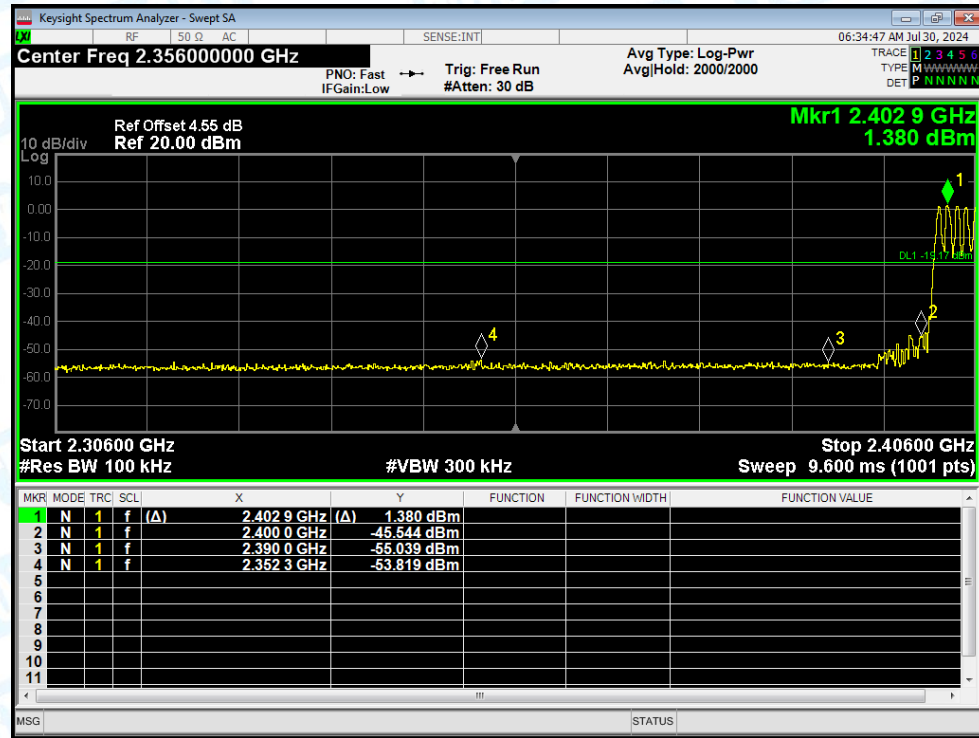
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-54.65	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-54.44	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-53.41	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-55.14	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-54.58	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-54.5	-20	Pass

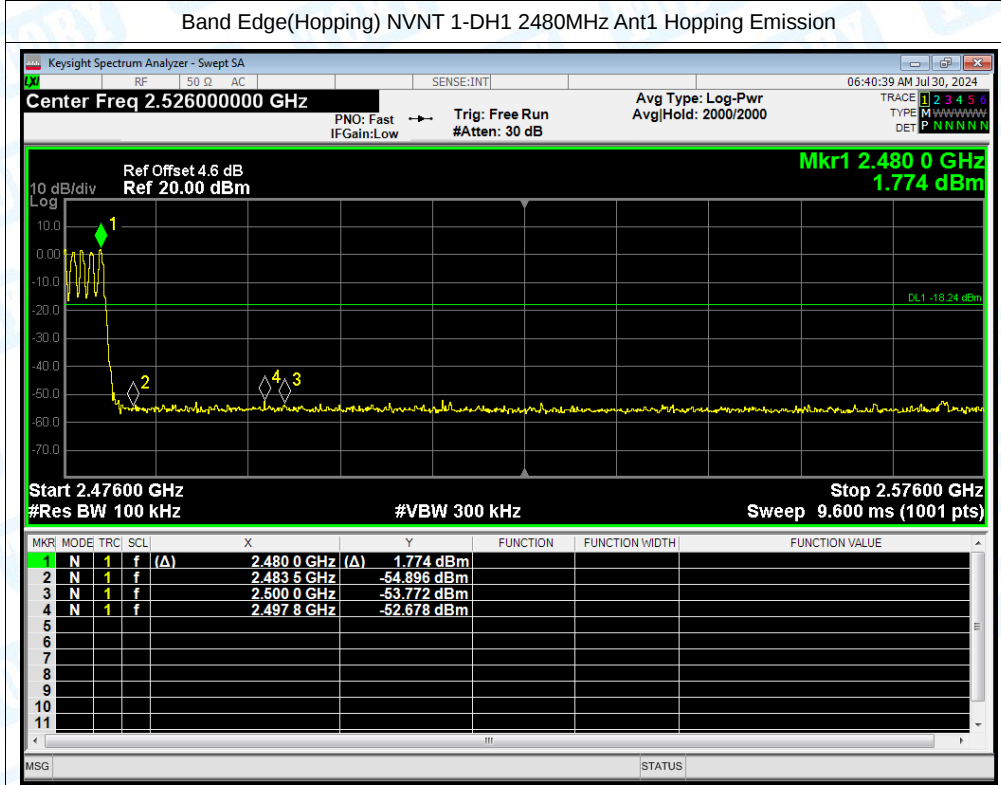
Test Graphs

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

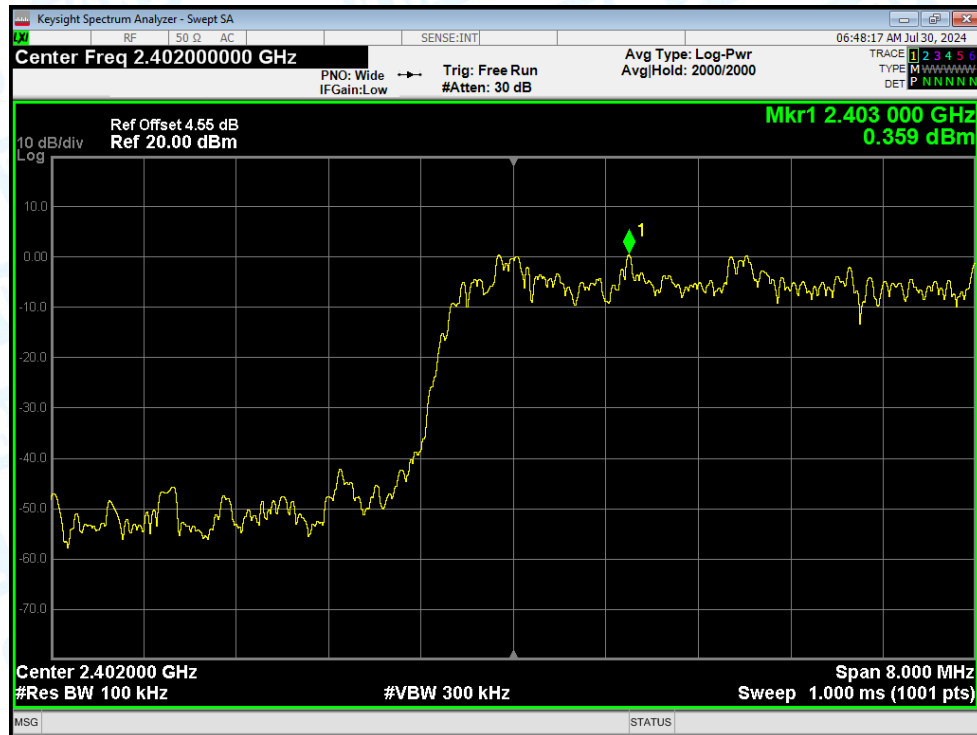


Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

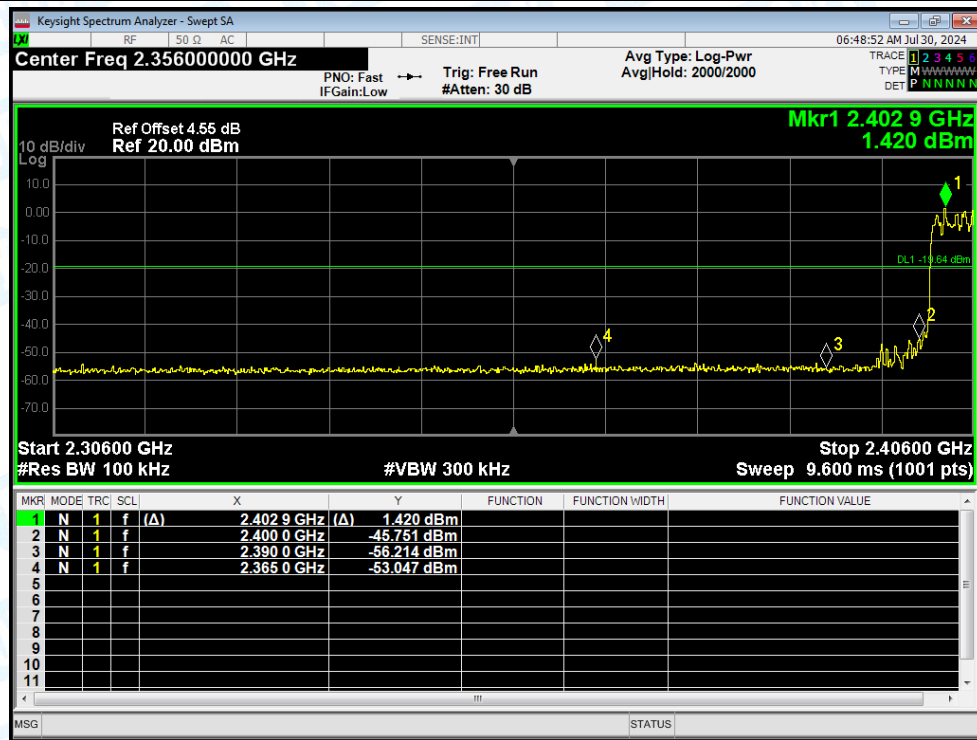


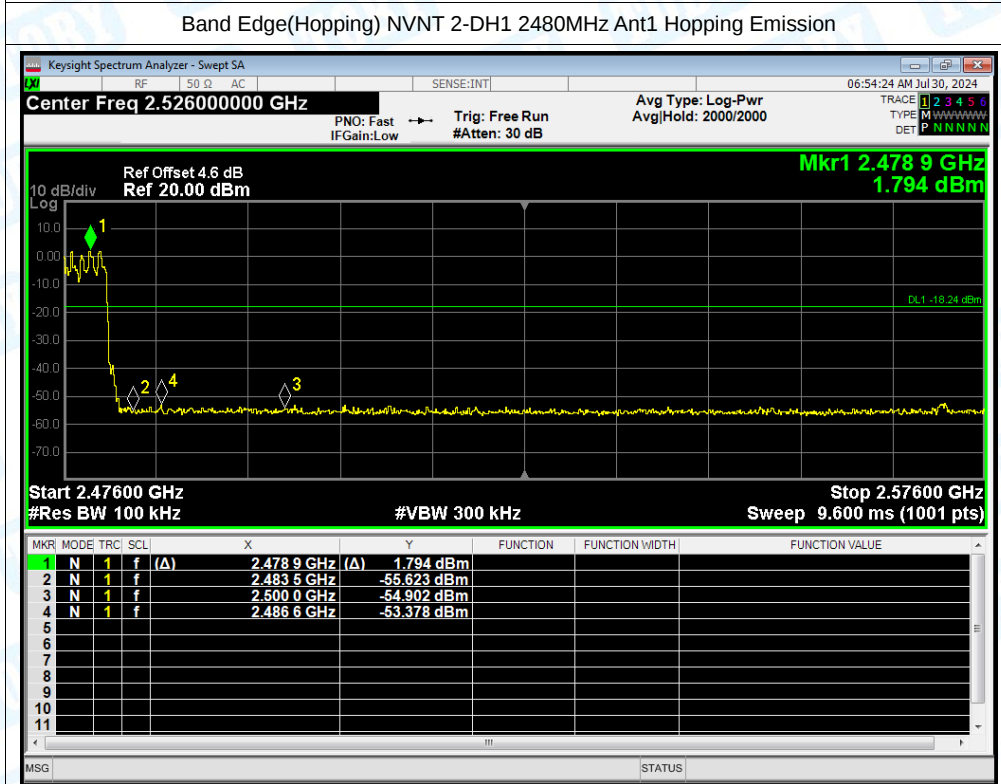
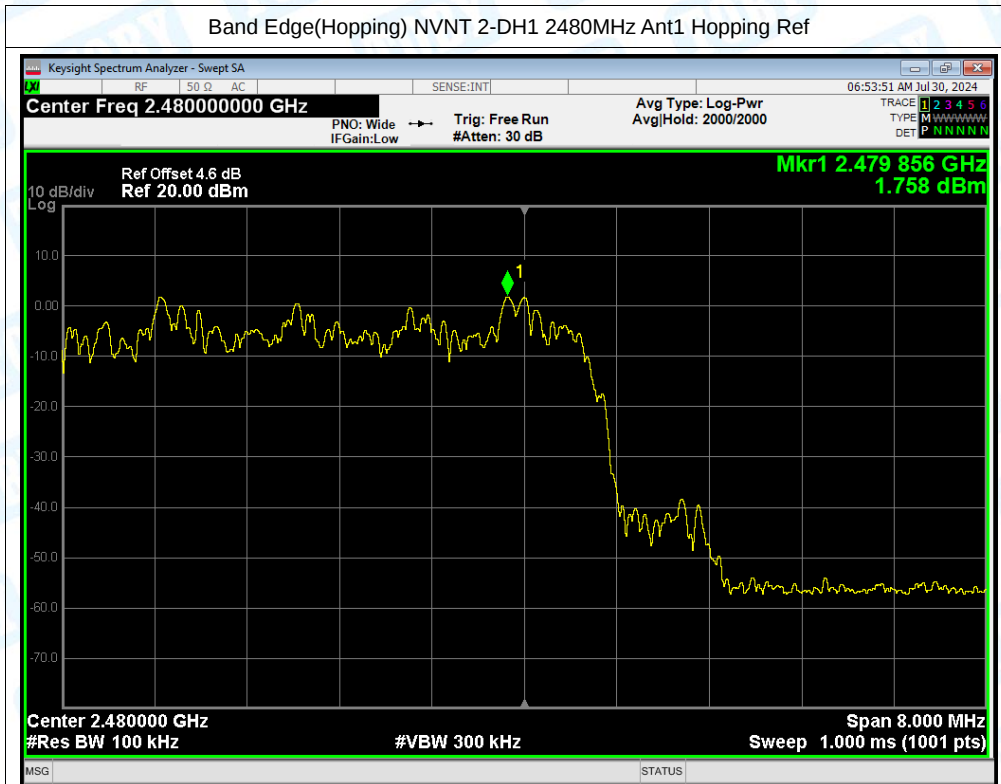


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



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

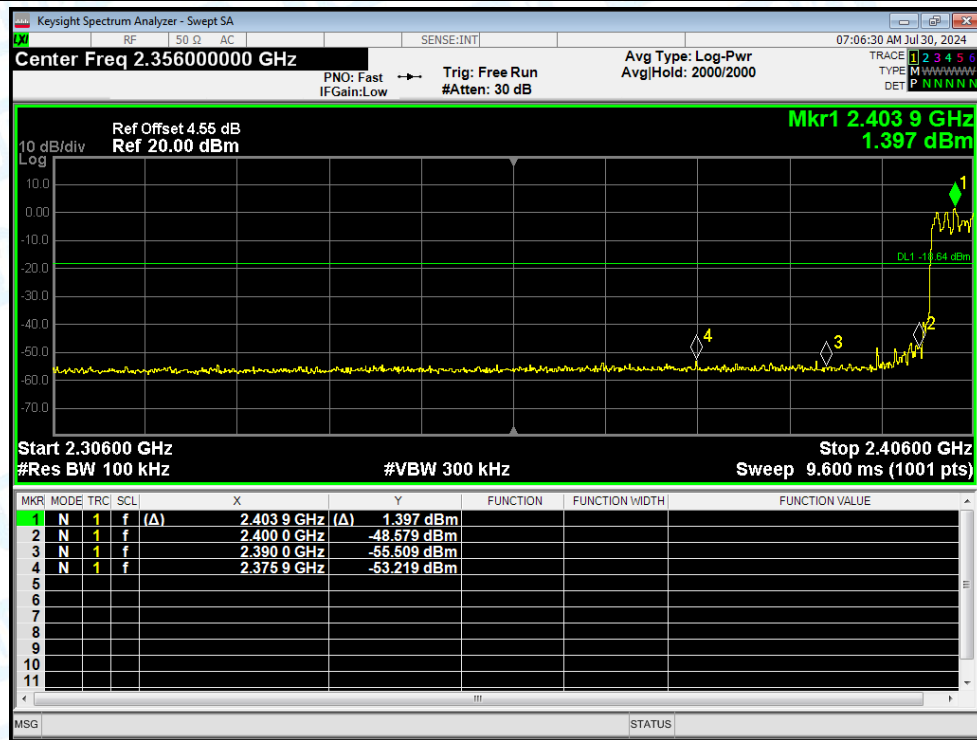


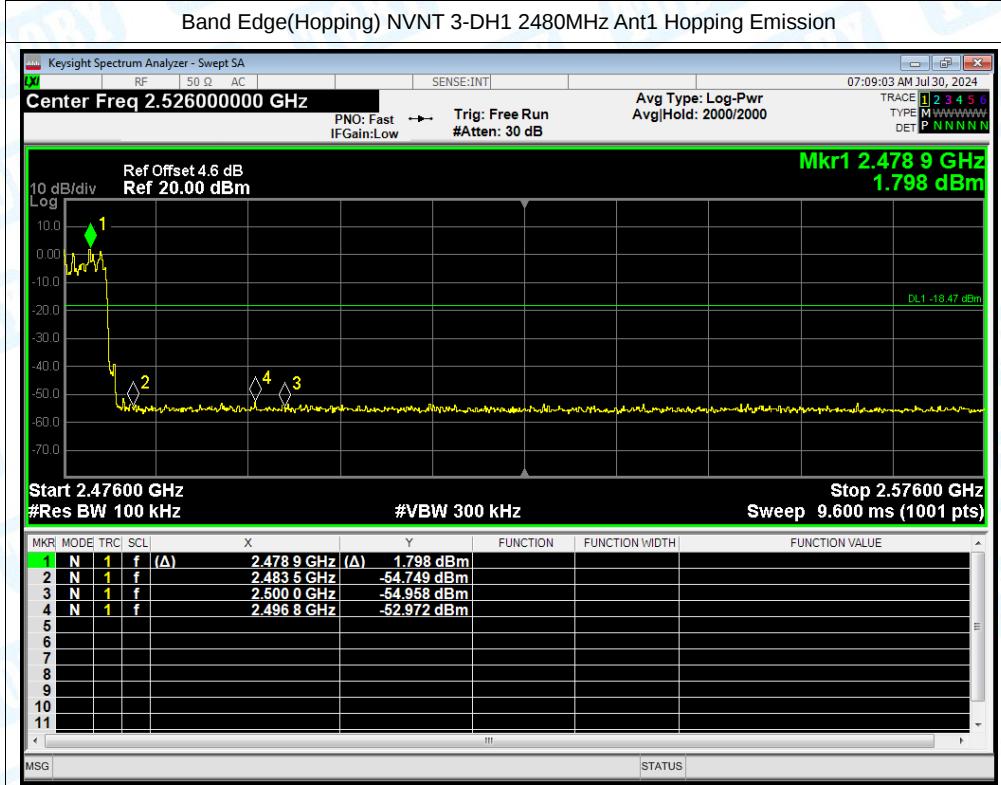
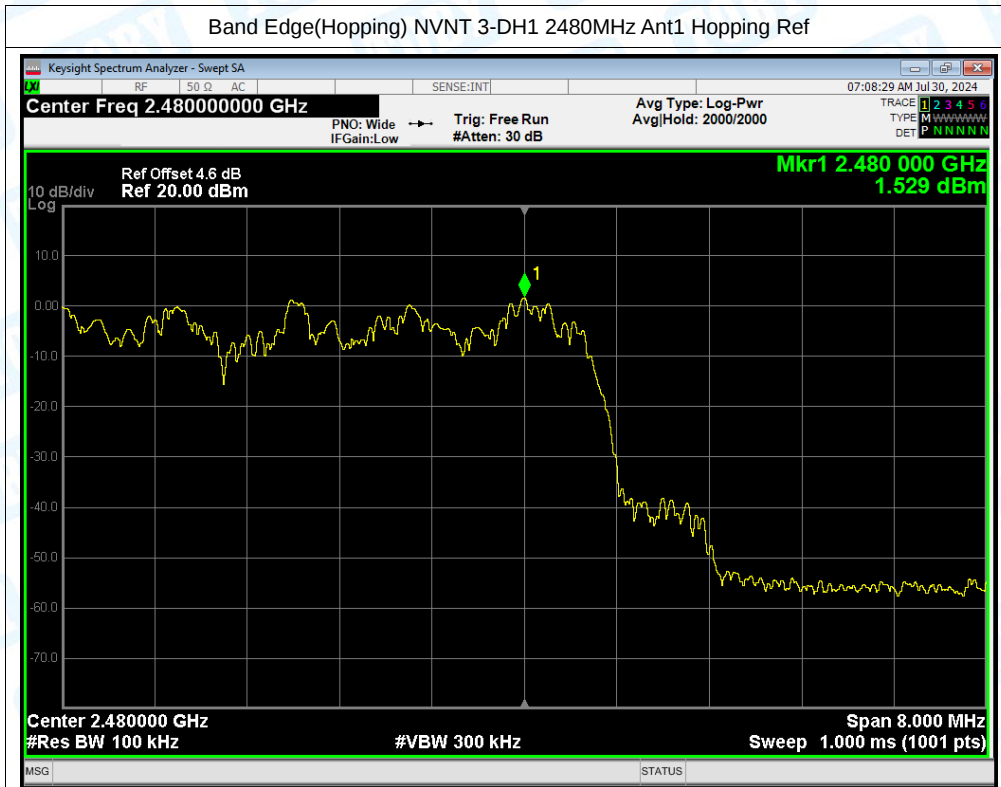


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



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



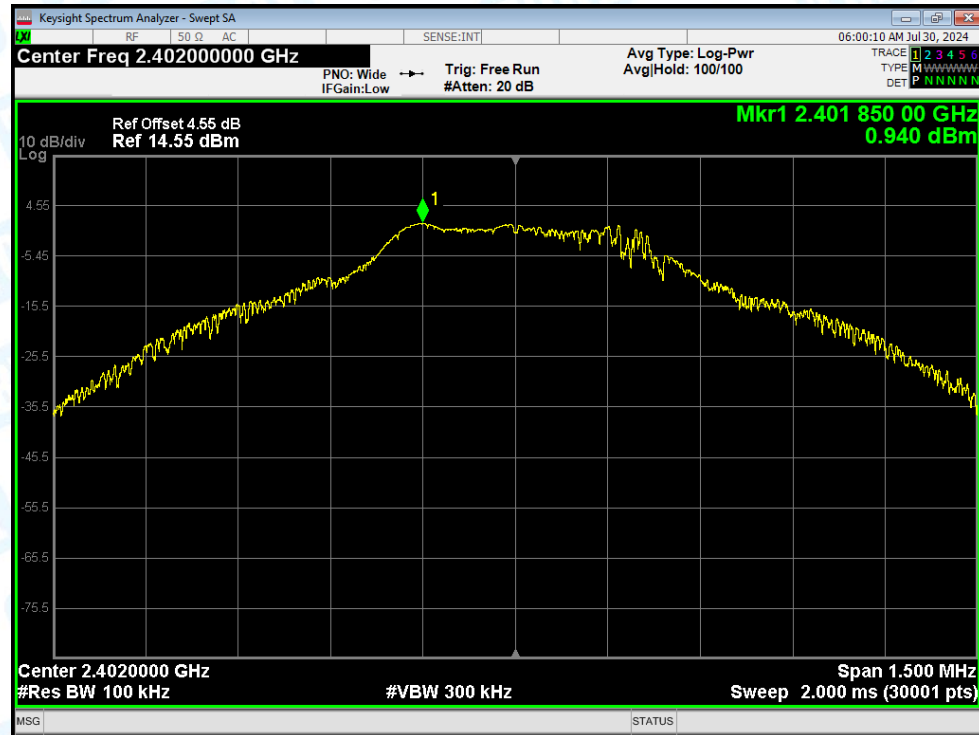


7. Conducted RF Spurious Emission

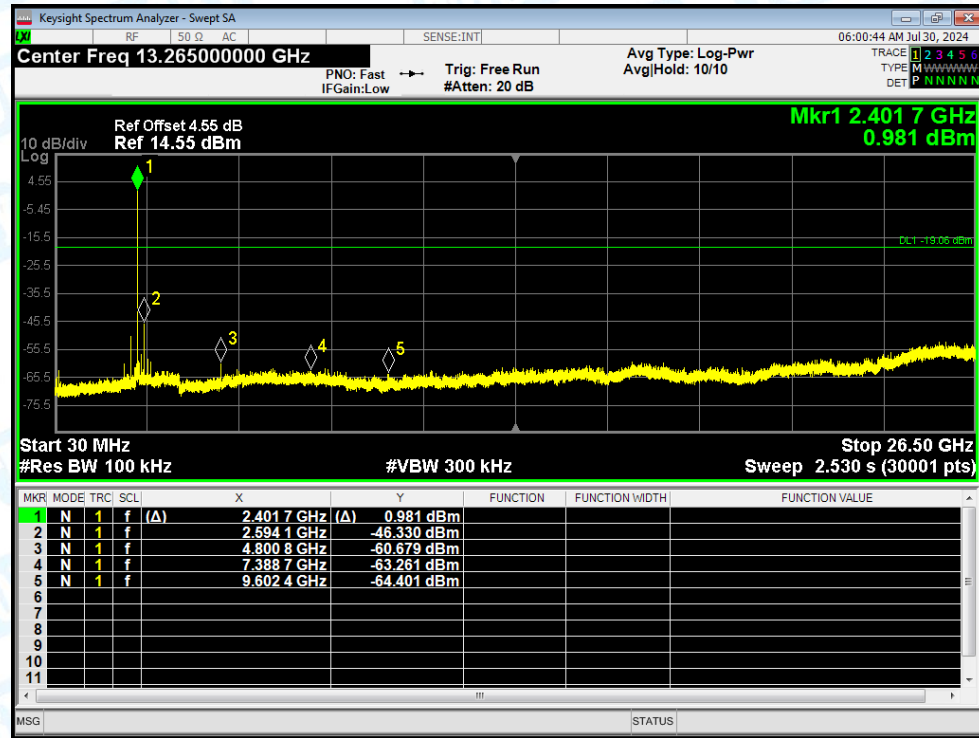
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-47.27	-20	Pass
NVNT	1-DH1	2441	Ant1	-48.64	-20	Pass
NVNT	1-DH1	2480	Ant1	-49.46	-20	Pass
NVNT	2-DH1	2402	Ant1	-46.5	-20	Pass
NVNT	2-DH1	2441	Ant1	-49.27	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.12	-20	Pass
NVNT	3-DH1	2402	Ant1	-46.33	-20	Pass
NVNT	3-DH1	2441	Ant1	-49.38	-20	Pass
NVNT	3-DH1	2480	Ant1	-50.04	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



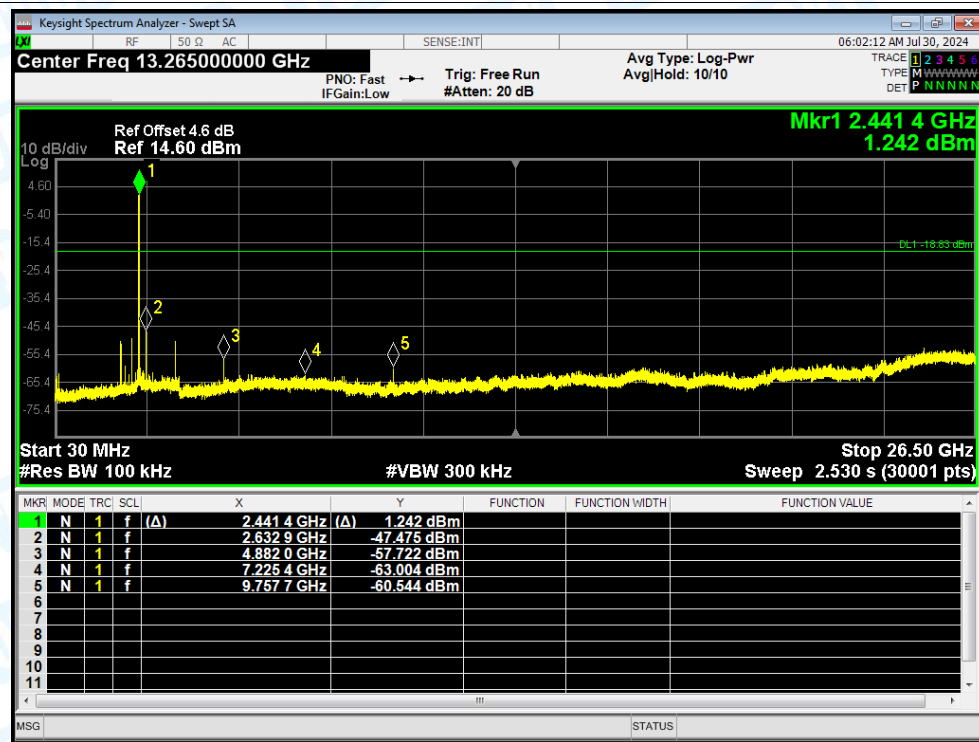
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



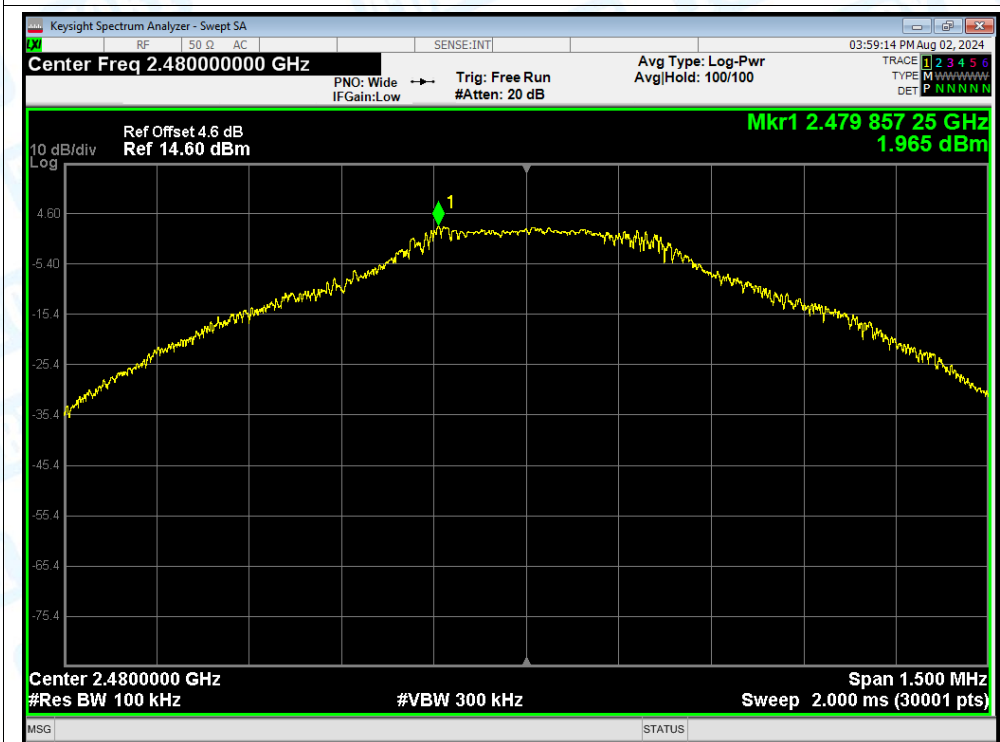
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



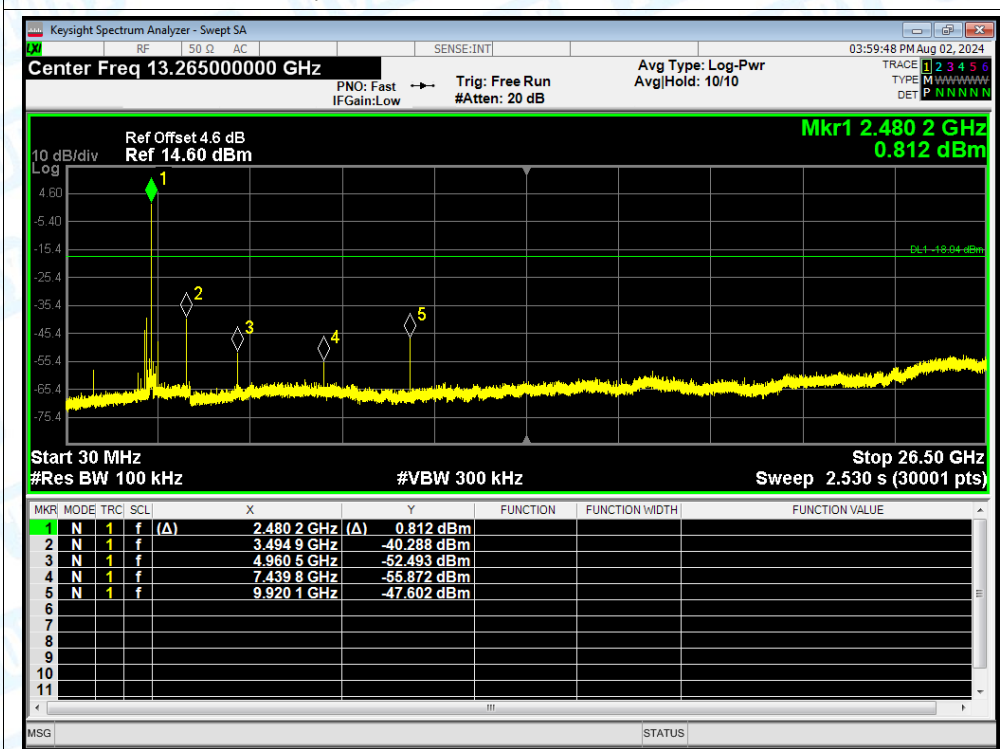
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



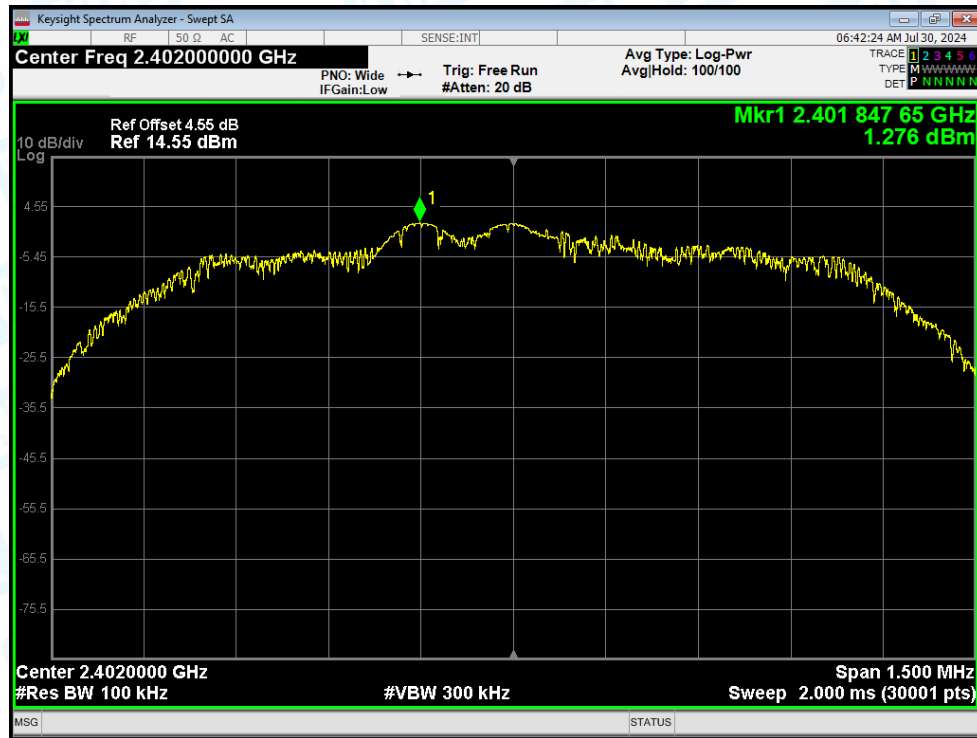
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



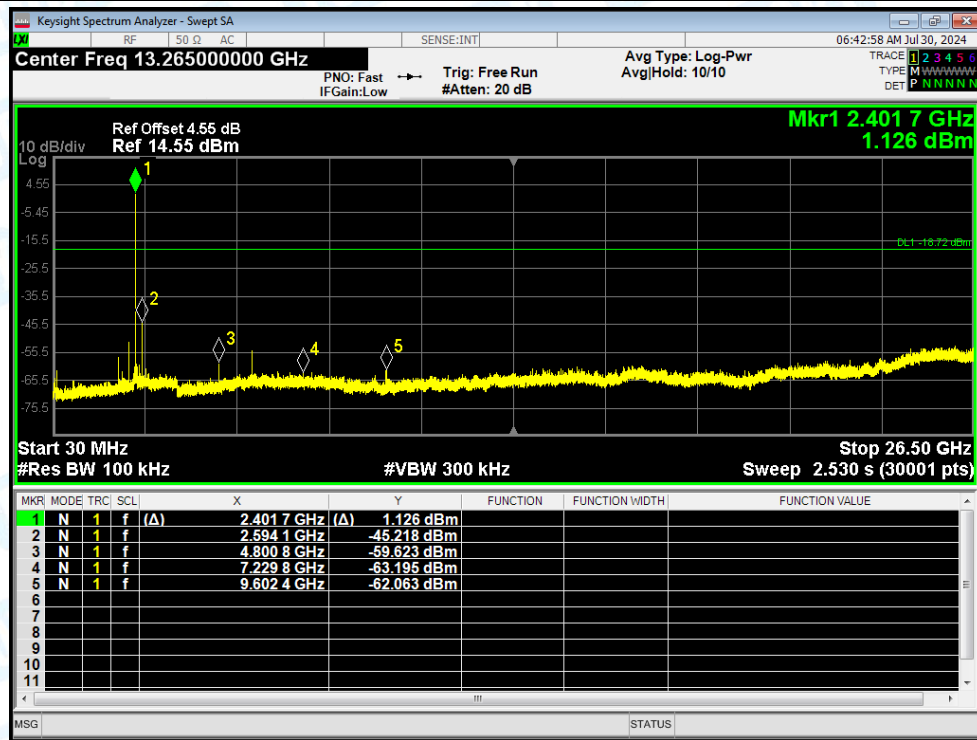
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



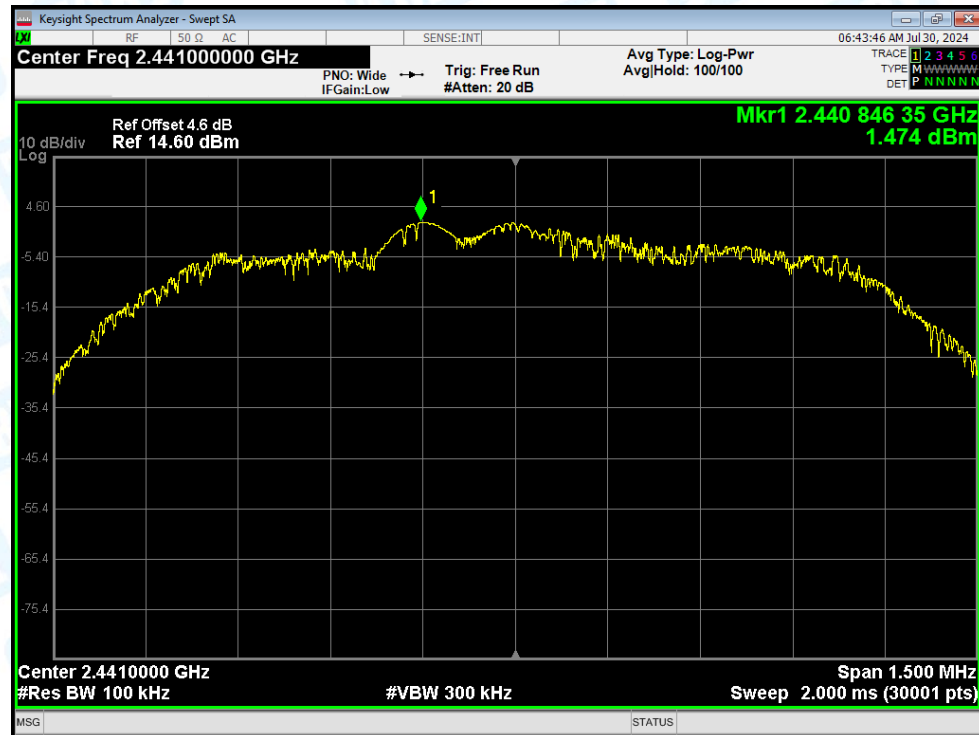
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



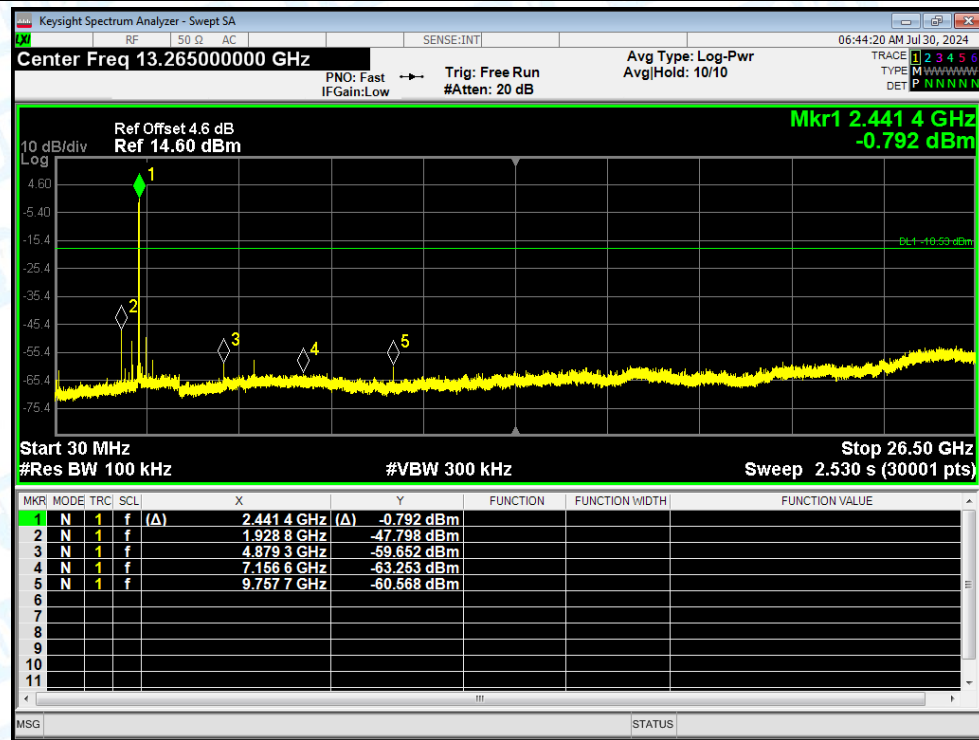
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



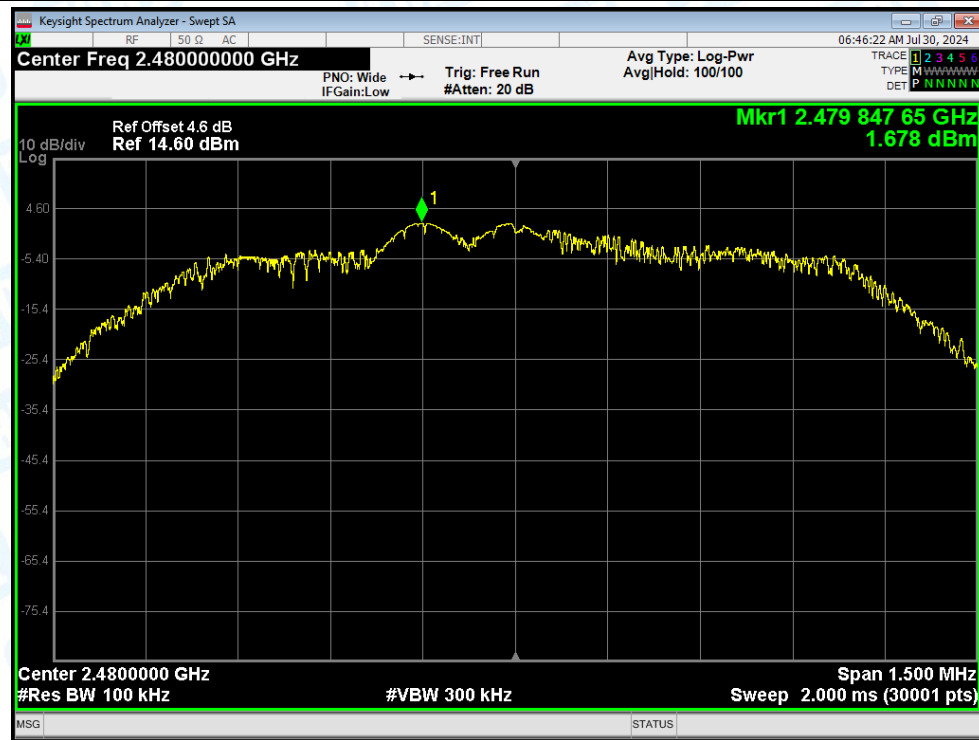
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



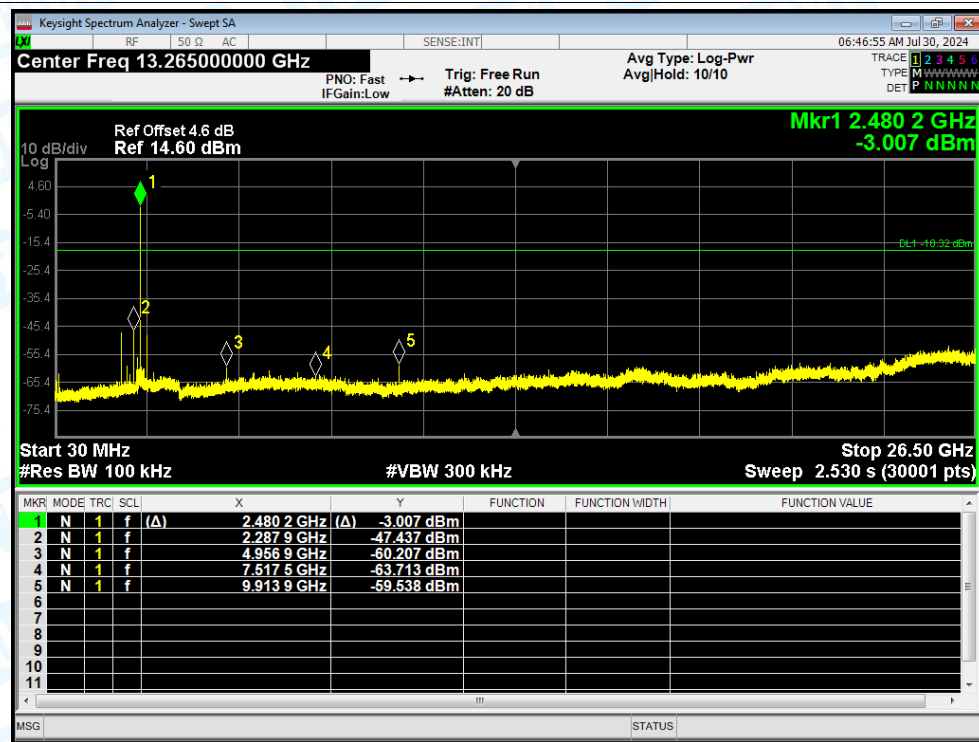
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



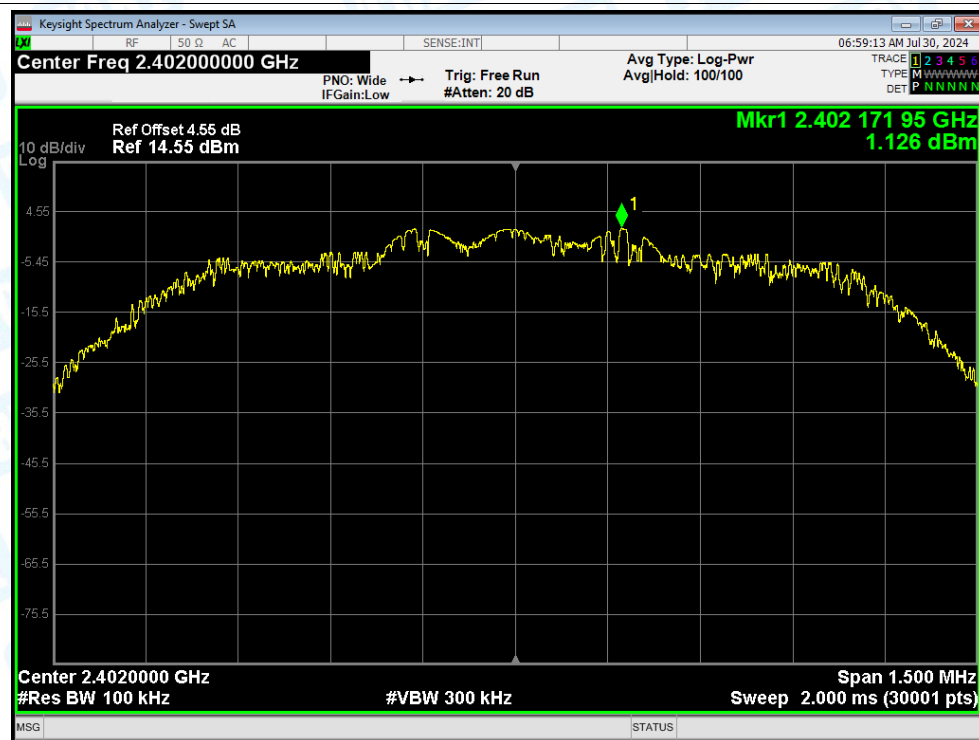
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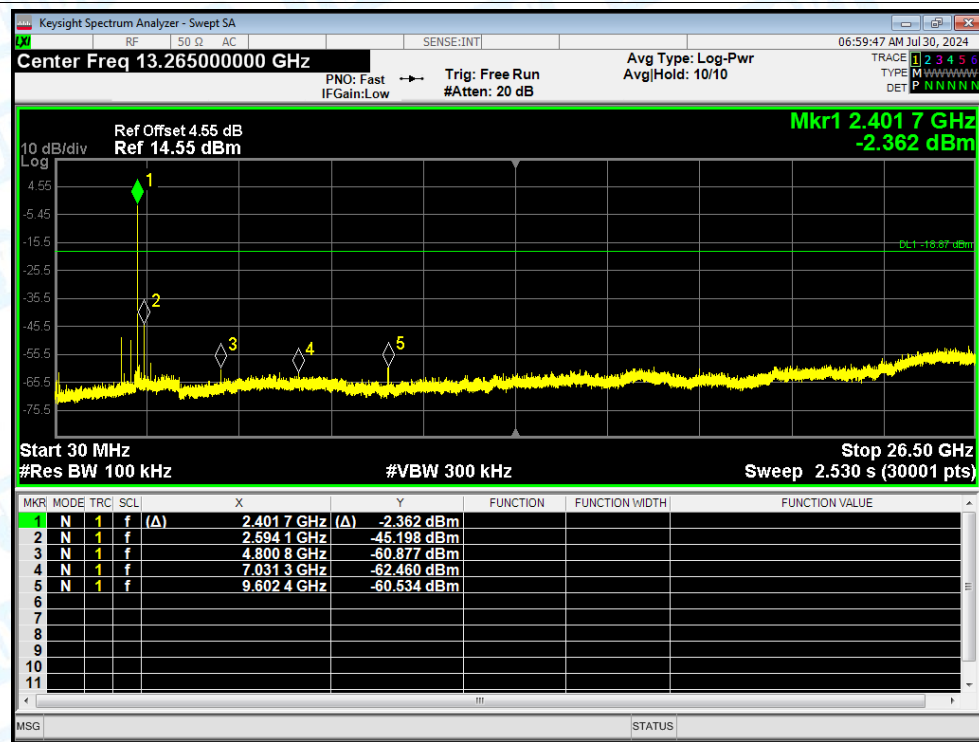
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



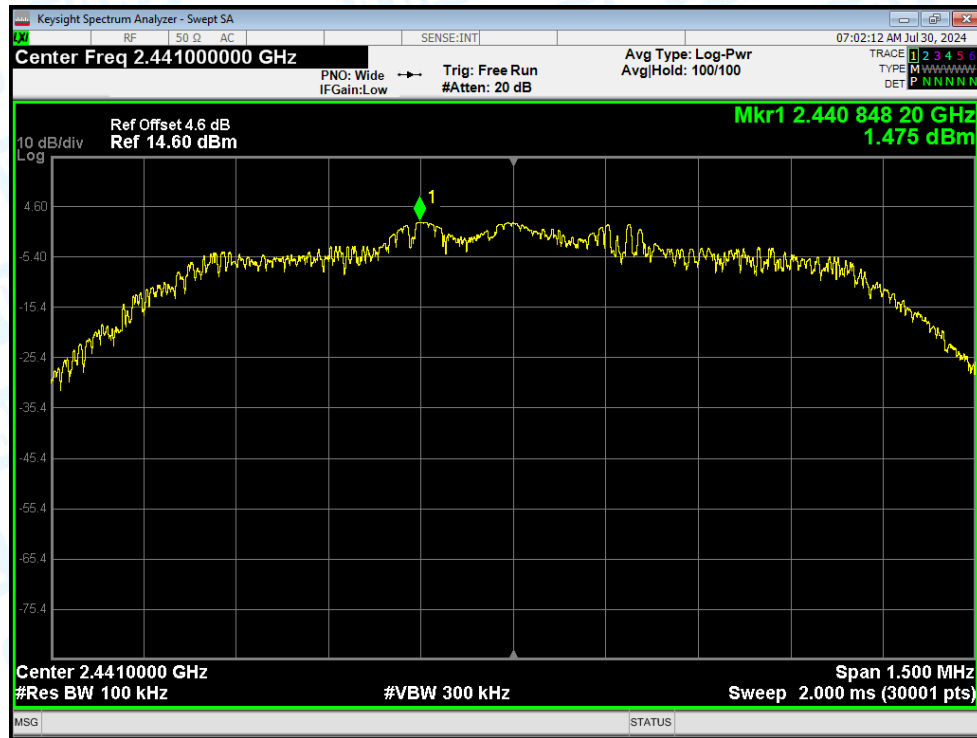
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



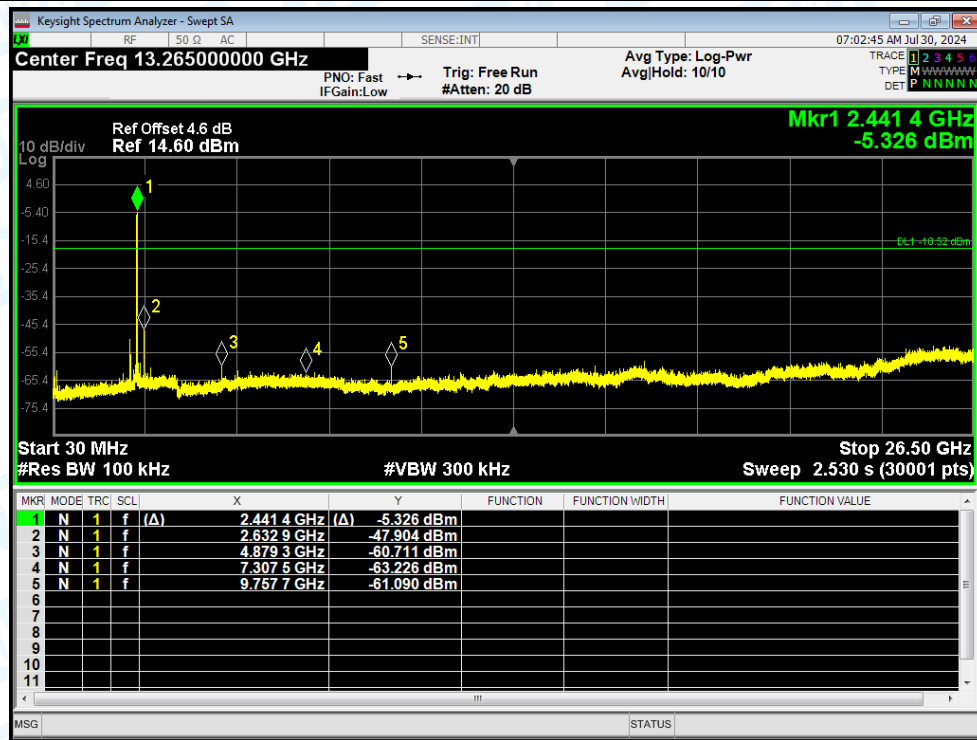
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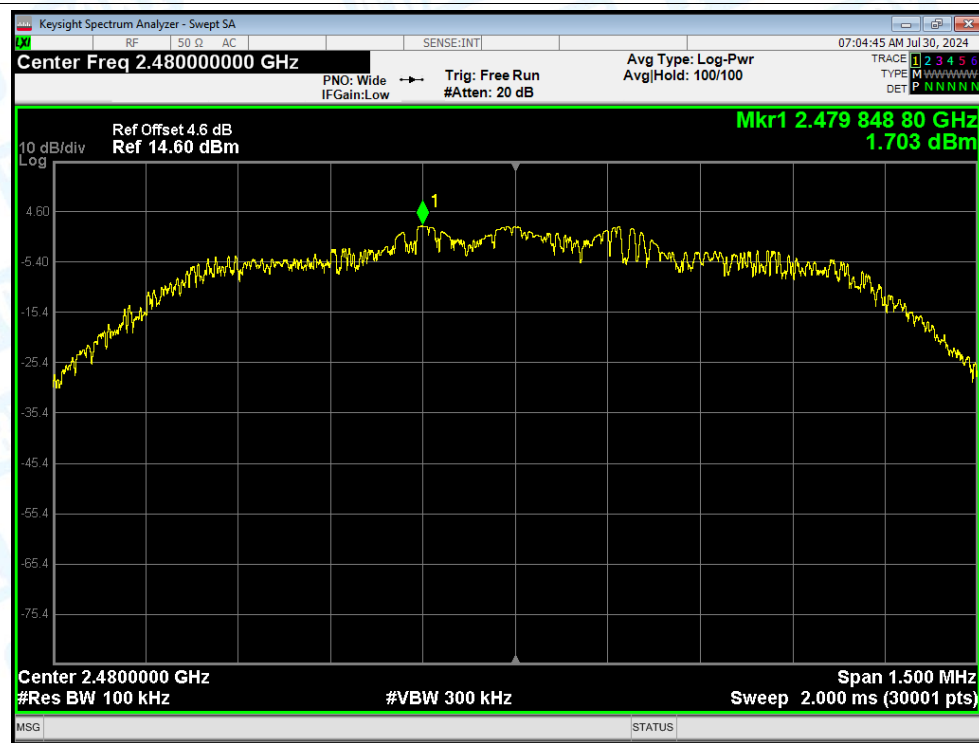
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



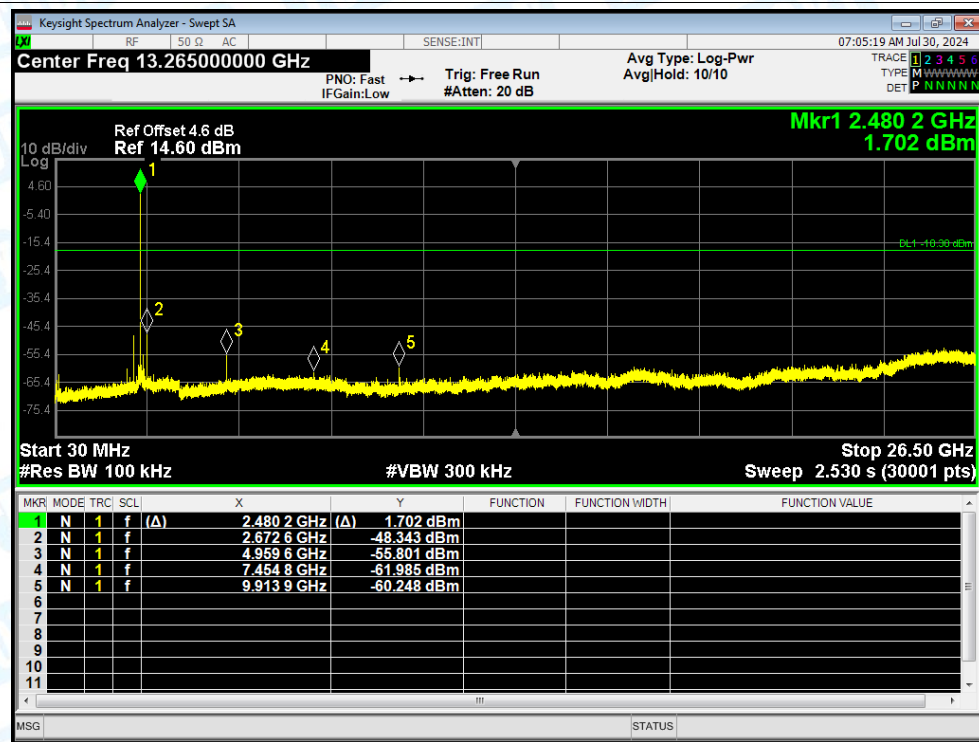
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

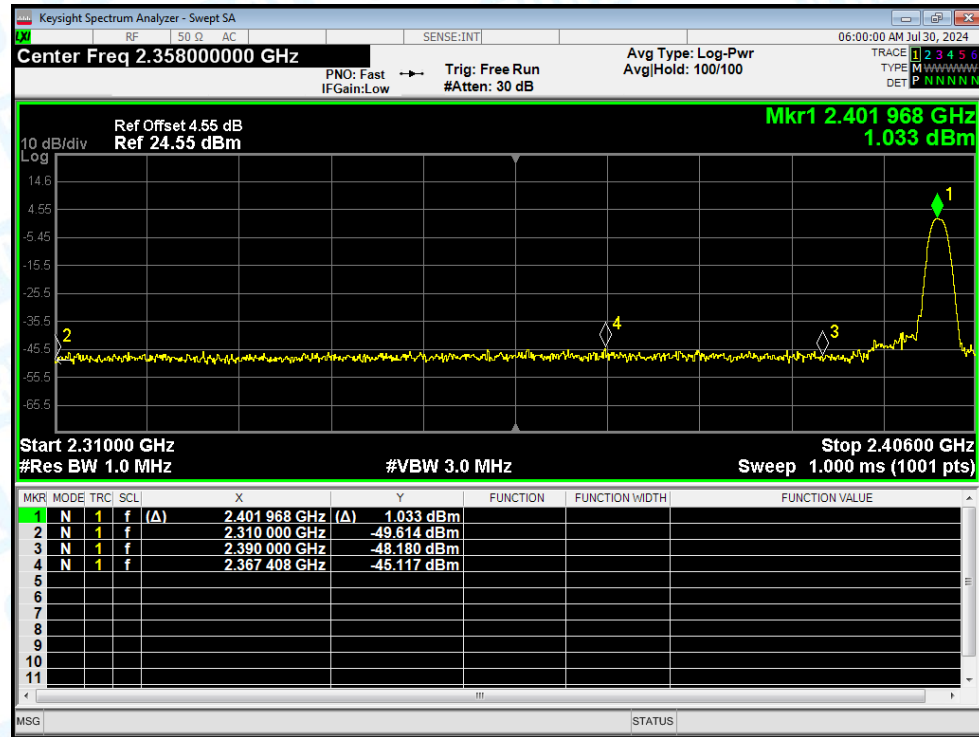


8. Restrict Band

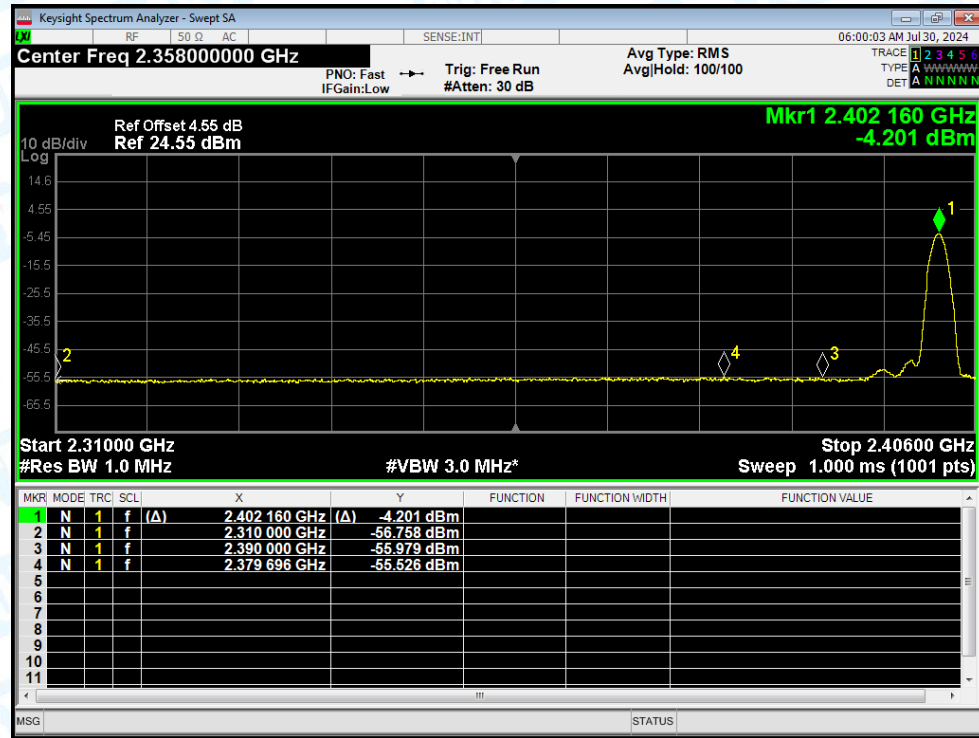
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-49.61	2	-	47.65	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.76	2	5.17	45.67	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2367.408	-45.12	2	-	52.14	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2379.696	-55.53	2	5.17	46.9	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.18	2	-	49.08	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.98	2	5.17	46.45	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-44.64	2	-	52.62	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.27	2	5.17	47.16	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.728	-44.17	2	-	53.09	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.584	-54.75	2	5.17	47.68	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.82	2	-	50.44	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.35	2	5.17	47.08	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.77	2	-	48.49	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.48	2	4.95	45.73	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2373.744	-44.94	2	-	52.32	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2377.296	-55.32	2	4.95	46.89	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-48	2	-	49.26	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.88	2	4.95	46.33	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.44	2	-	50.82	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.45	2	5.06	46.87	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.336	-42.84	2	-	54.42	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.536	-54.7	2	5.06	47.62	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.45	2	-	49.81	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.77	2	5.06	46.55	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-49.18	2	-	48.08	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.54	2	5.06	45.78	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2363.76	-44.93	2	-	52.33	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2378.64	-55.53	2	5.06	46.79	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-49.9	2	-	47.36	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-56.69	2	5.06	45.63	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-45.77	2	-	51.49	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.68	2	4.95	46.53	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2485.12	-41.23	2	-	56.03	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.92	-54.63	2	4.95	47.58	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-47.56	2	-	49.7	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.28	2	4.95	46.93	Average	54	Pass

Test Graphs

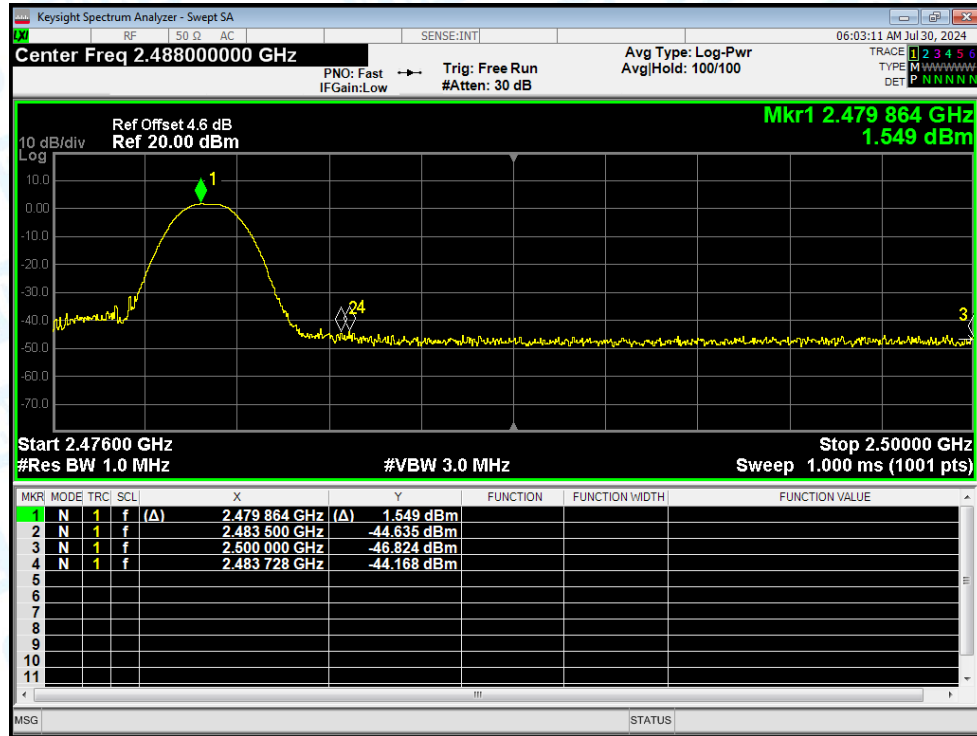
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



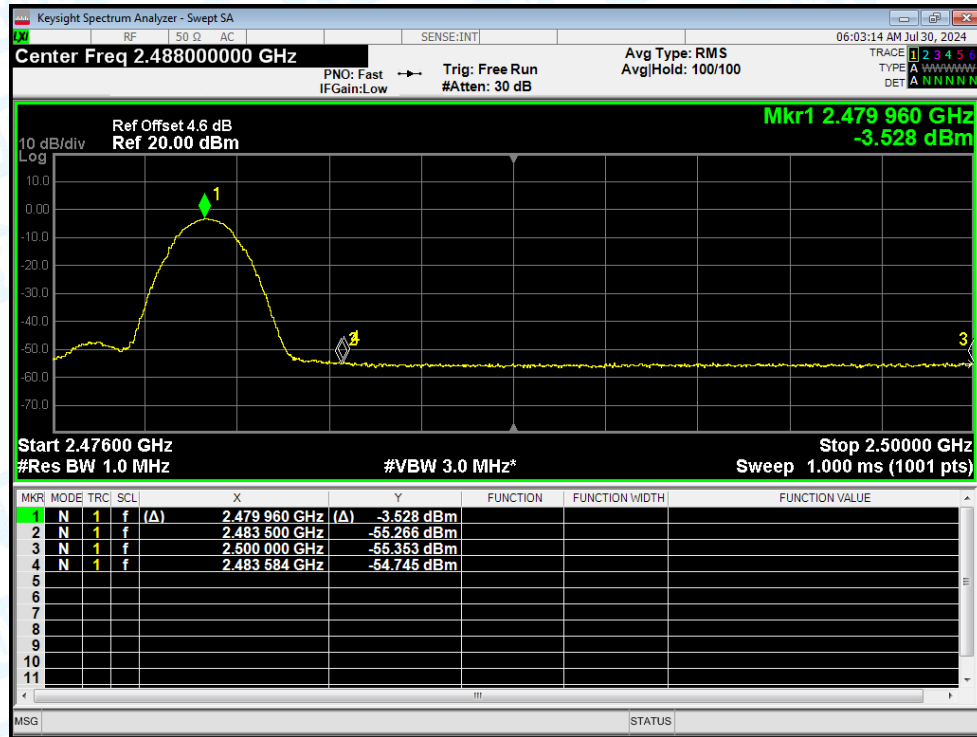
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



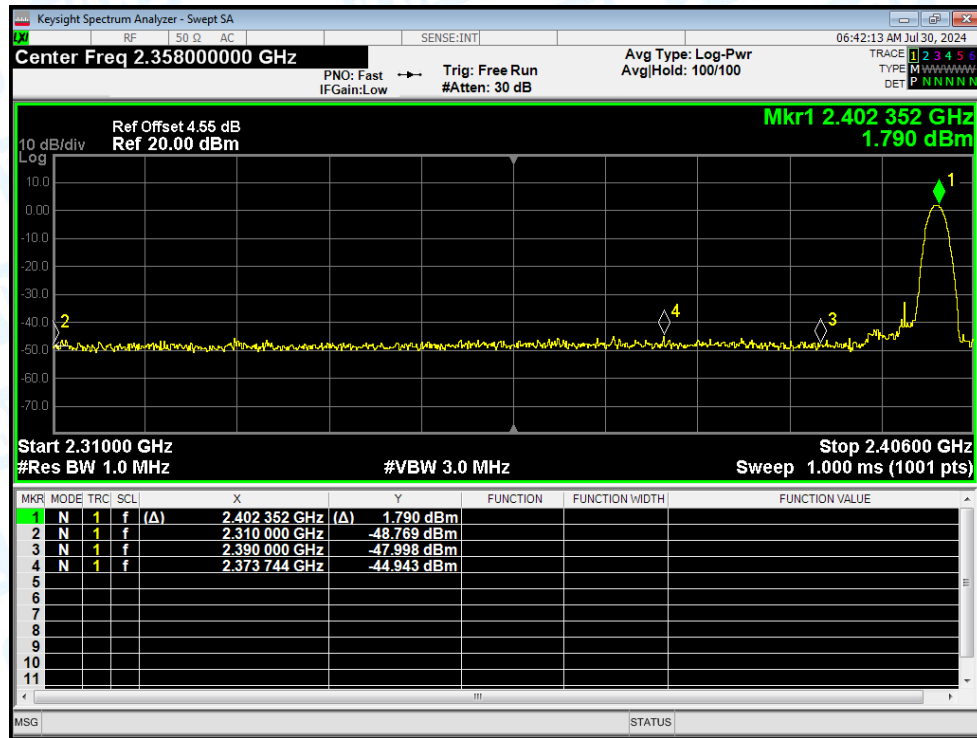
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



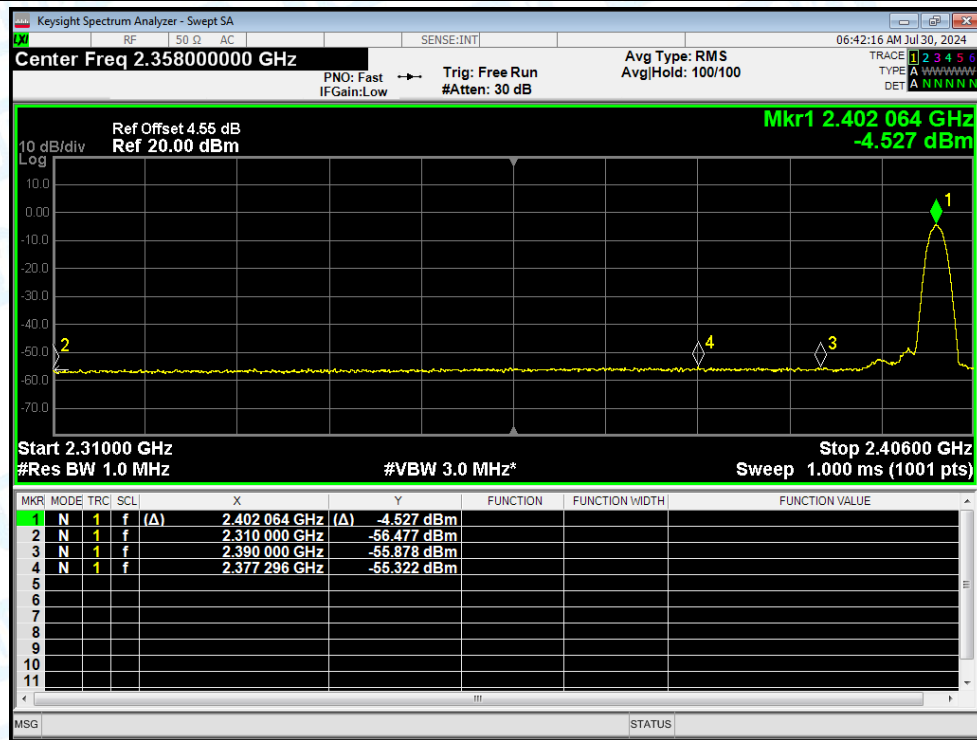
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



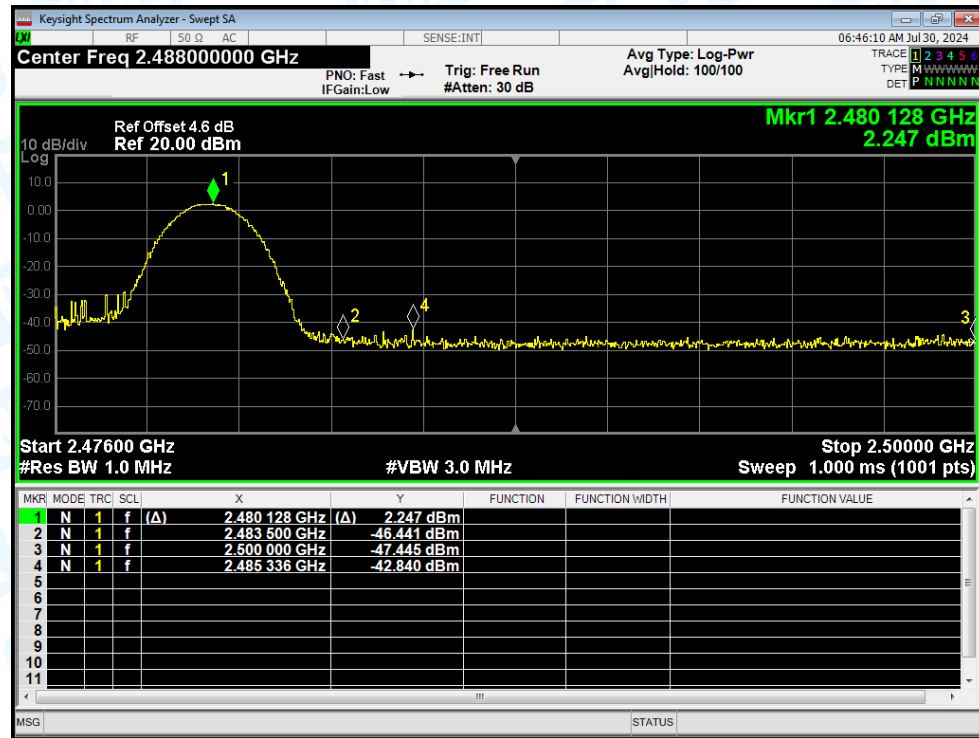
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



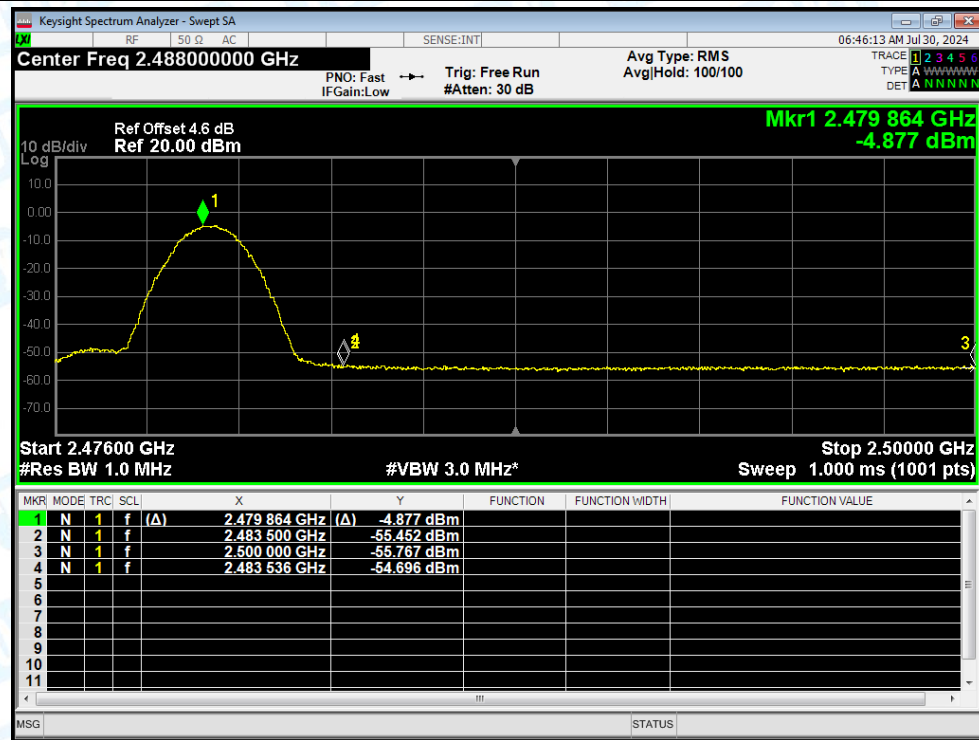
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



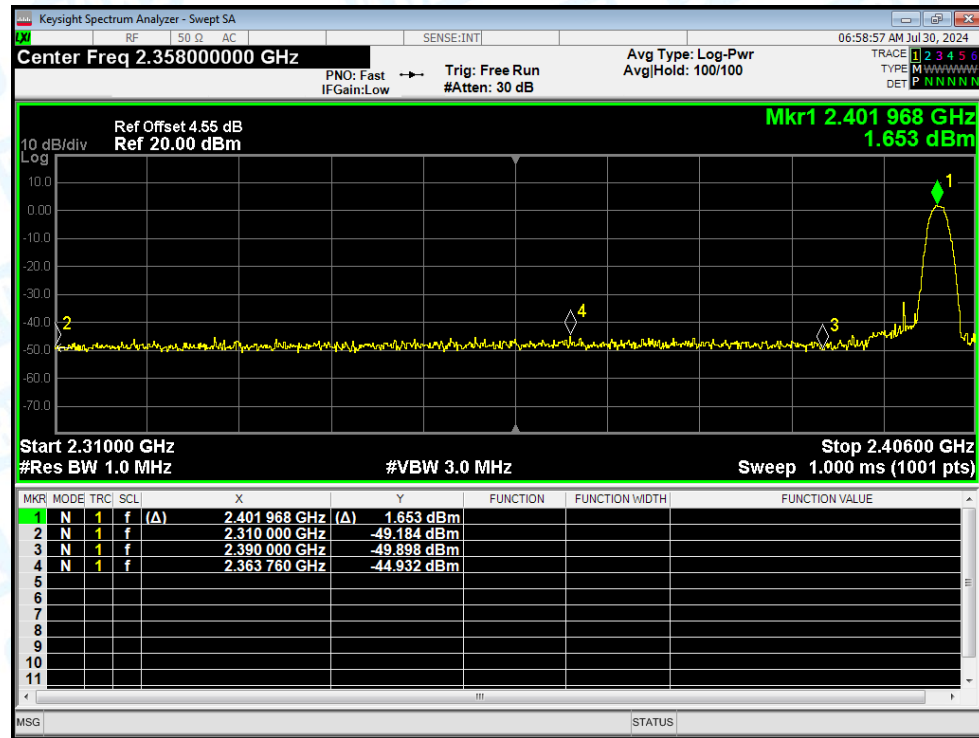
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



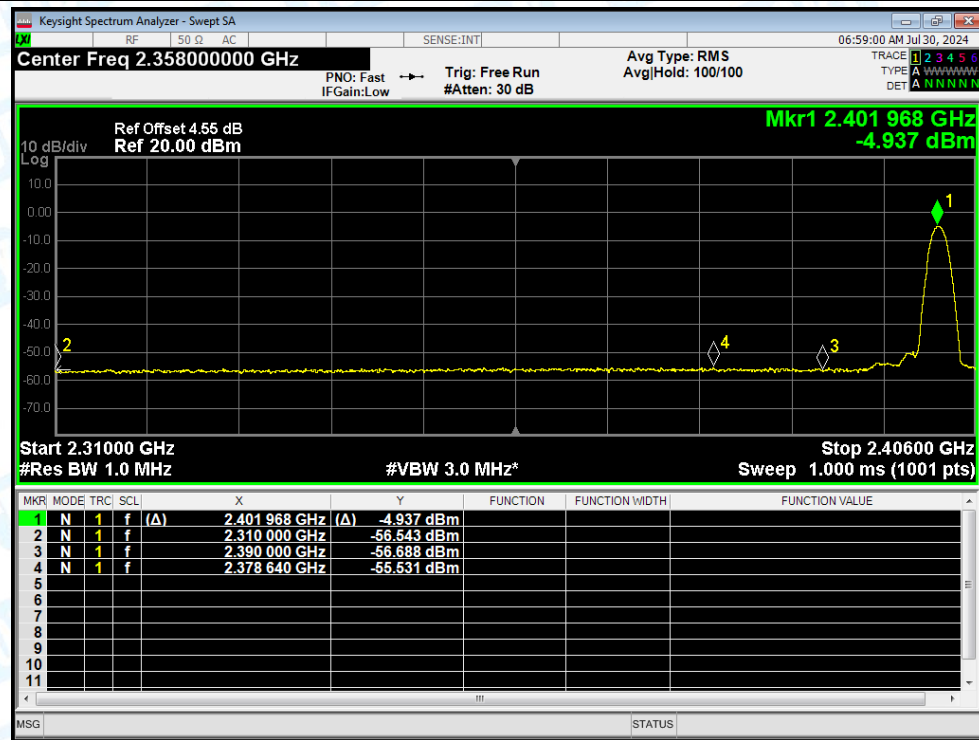
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



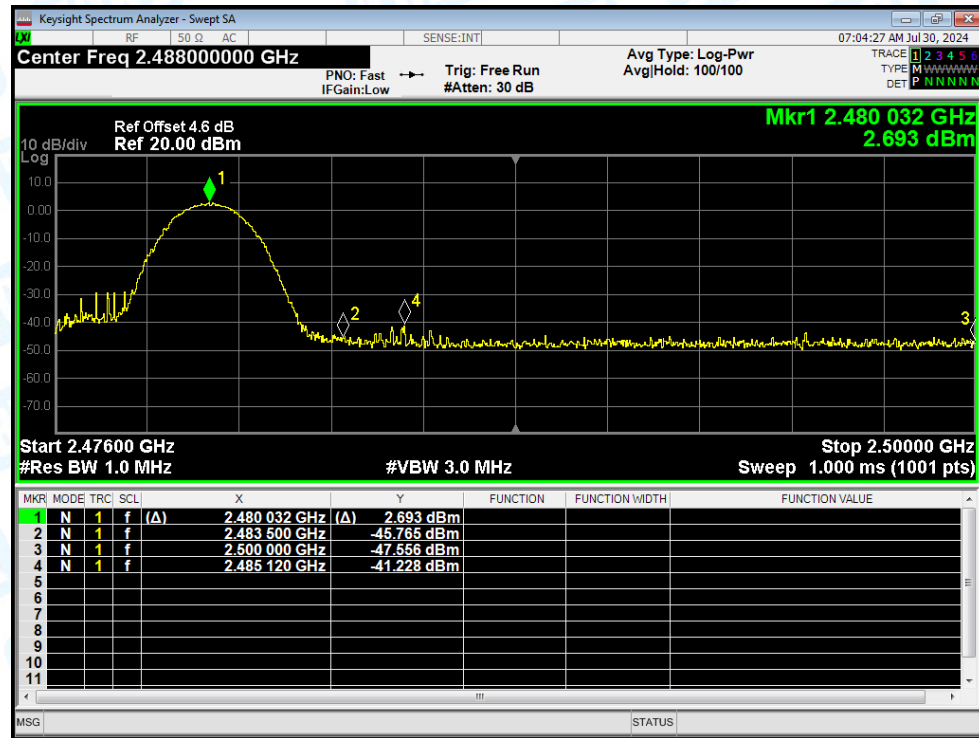
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



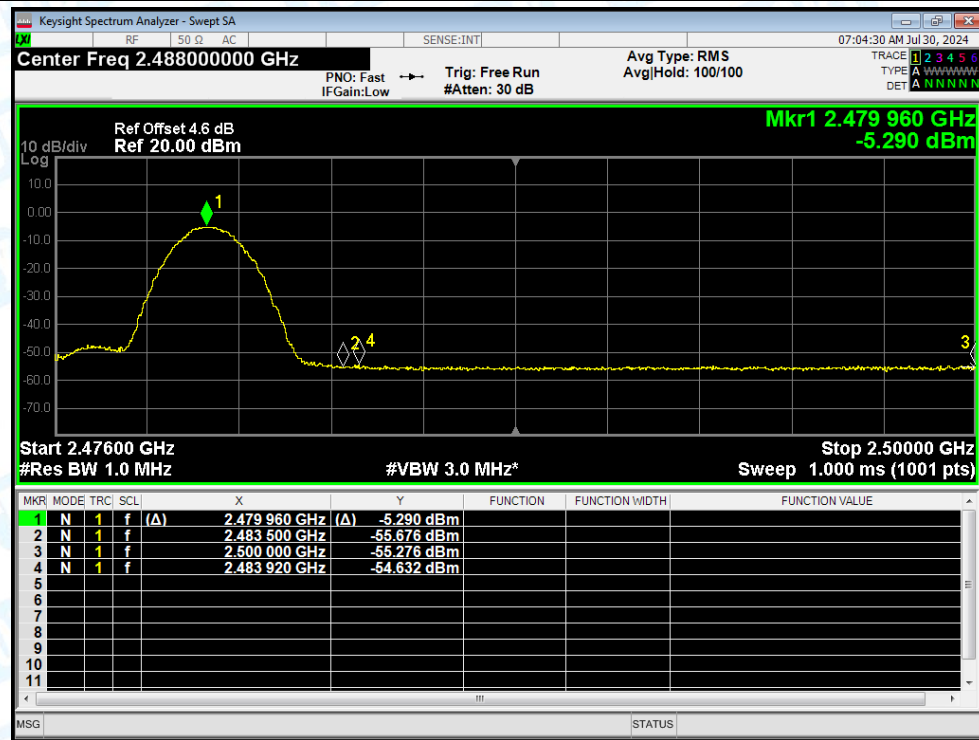
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

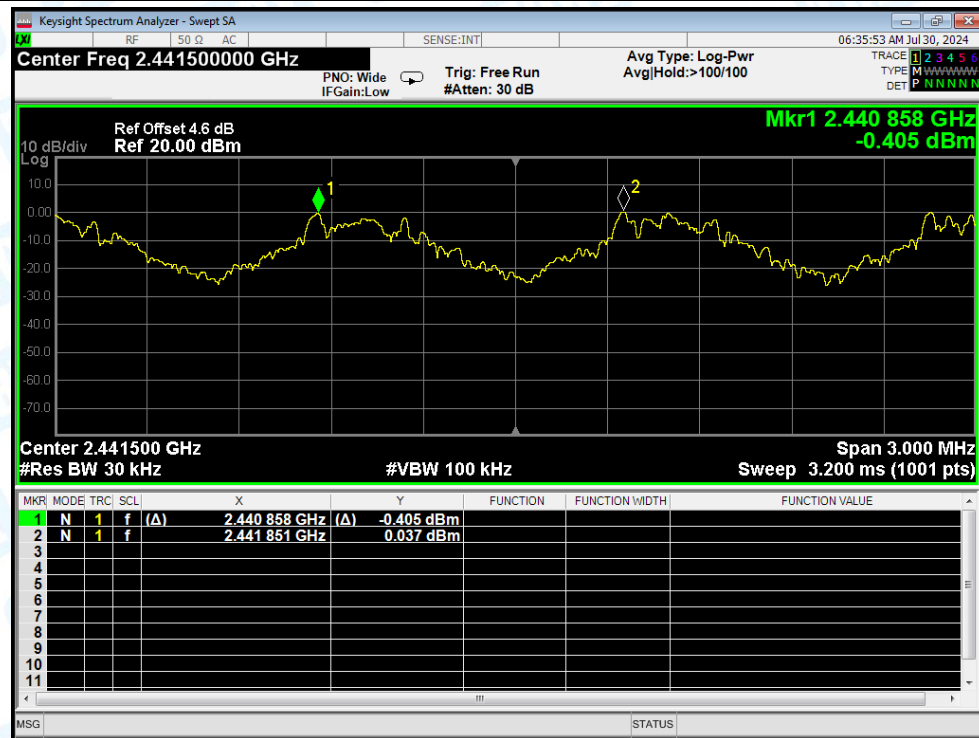


9. Carrier Frequencies Separation

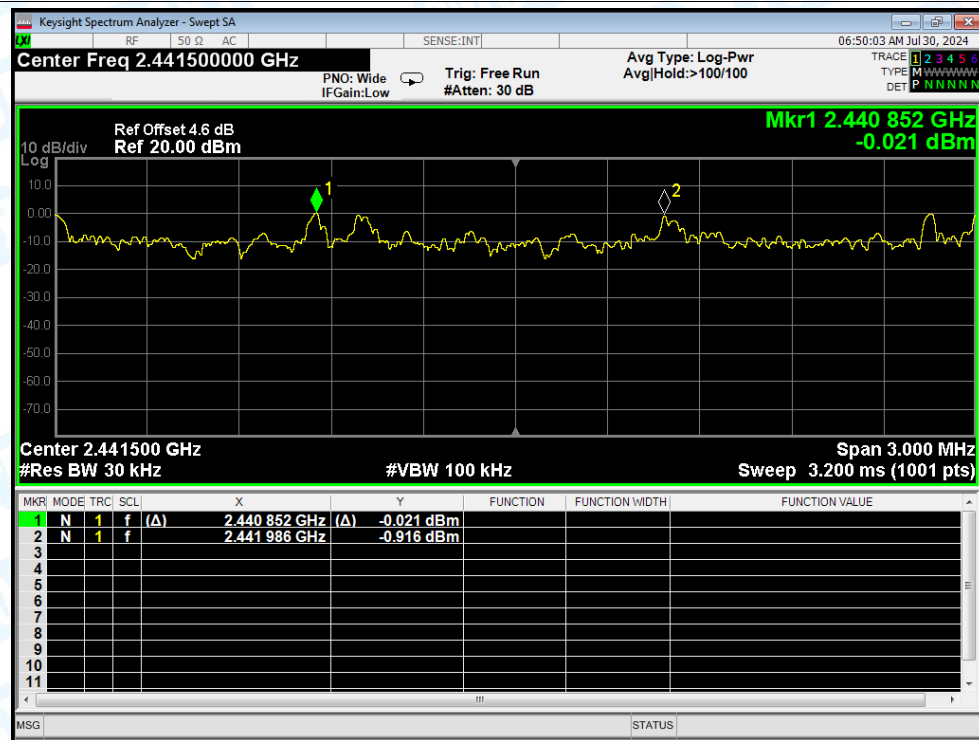
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.858	2441.851	0.993	0.553	Pass
NVNT	2-DH1	Ant1	2440.852	2441.986	1.134	0.813	Pass
NVNT	3-DH1	Ant1	2440.846	2441.845	0.999	0.793	Pass

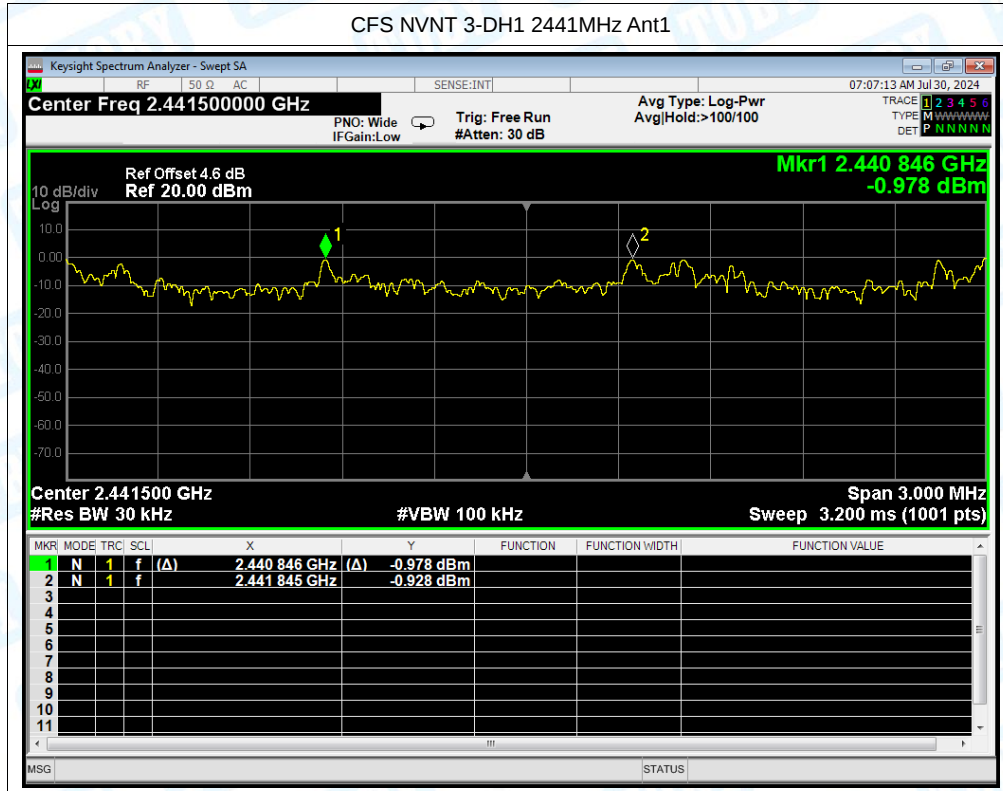
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



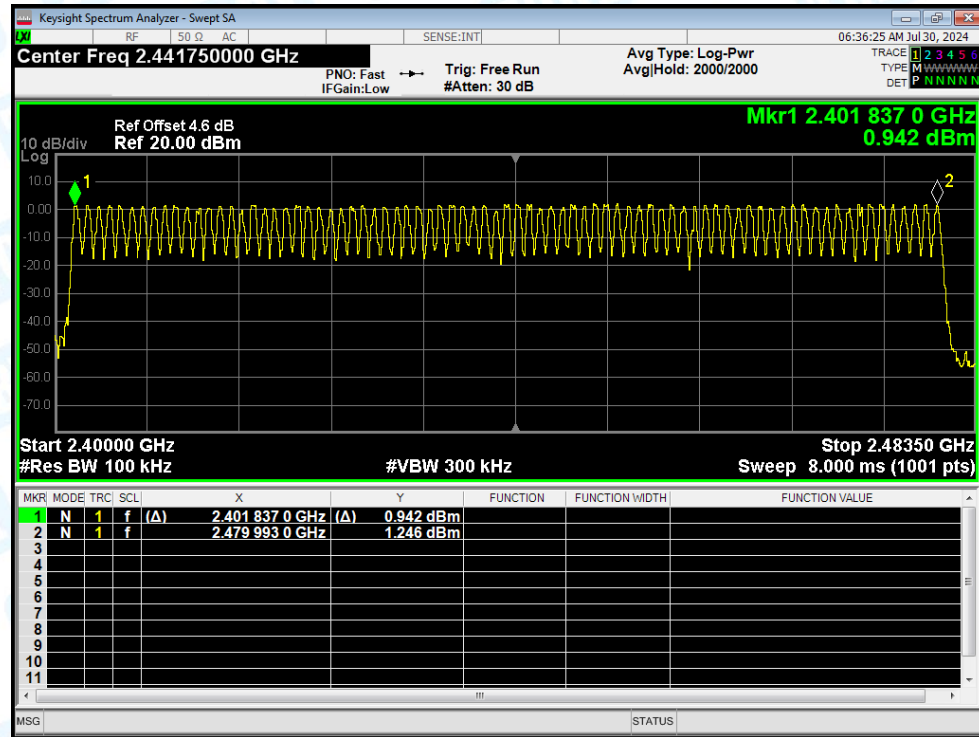


10. Number of Hopping Channel

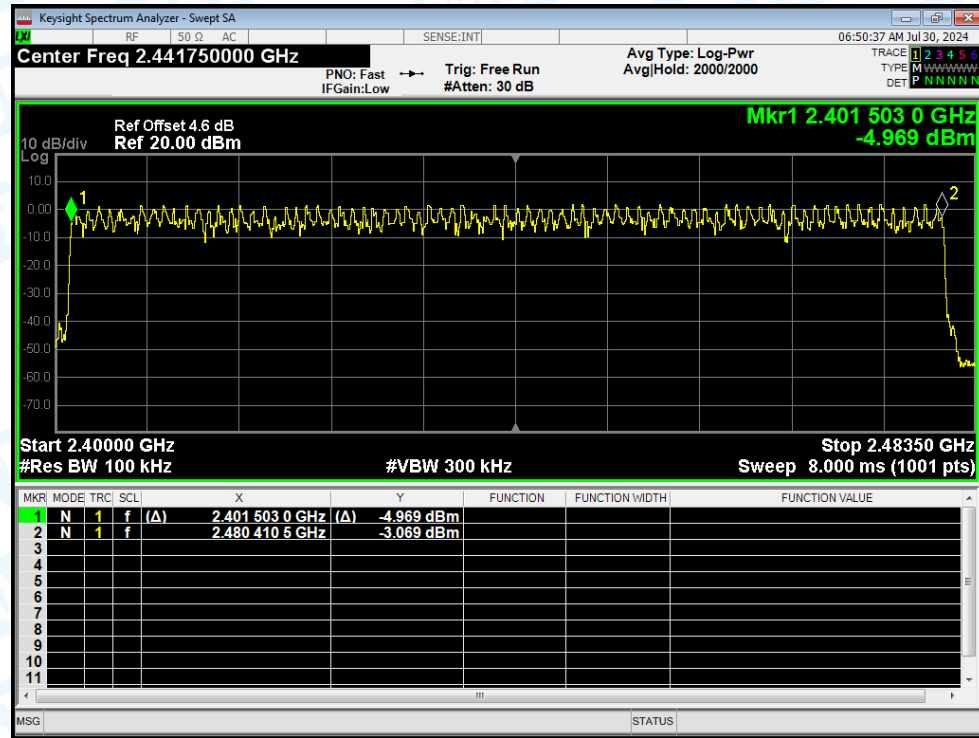
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

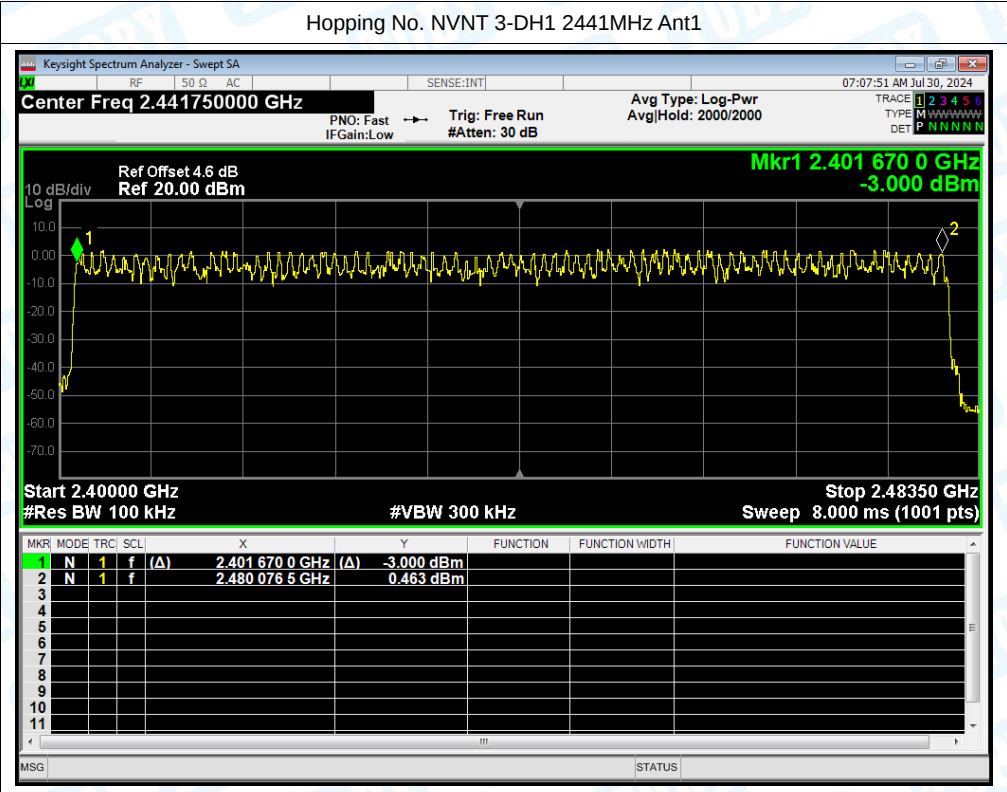
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



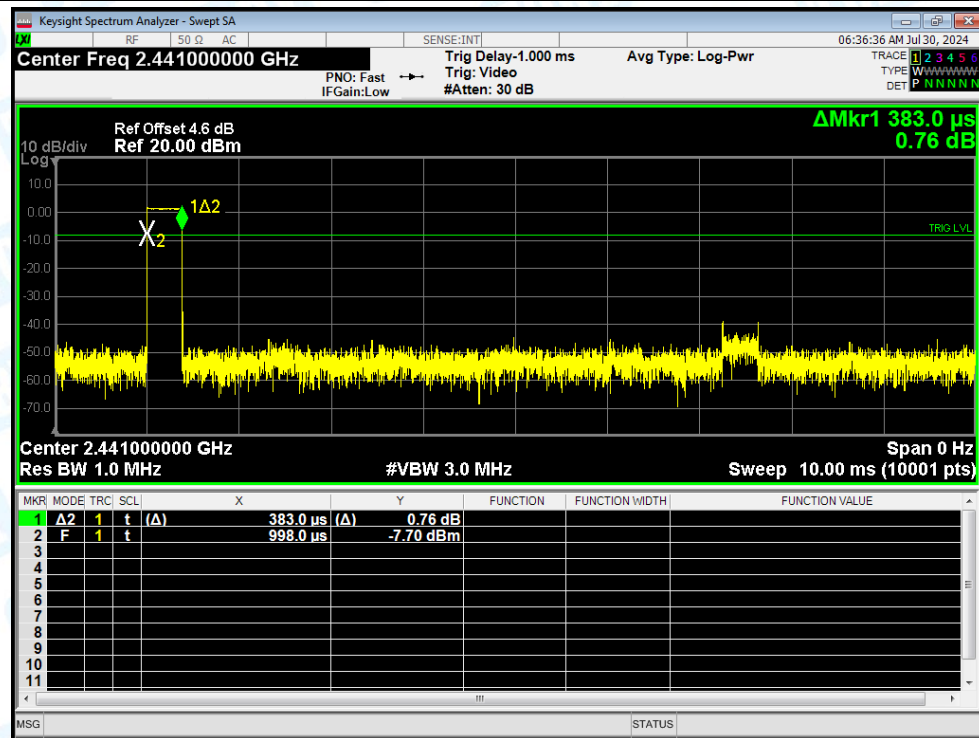


11. Dwell Time

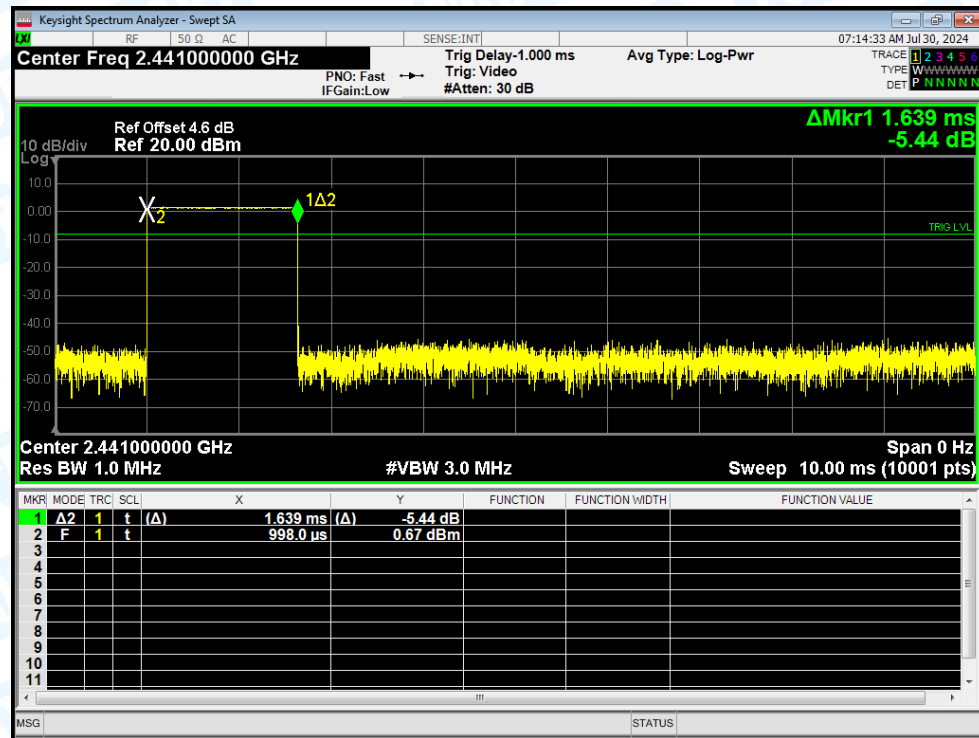
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.892	308.48	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

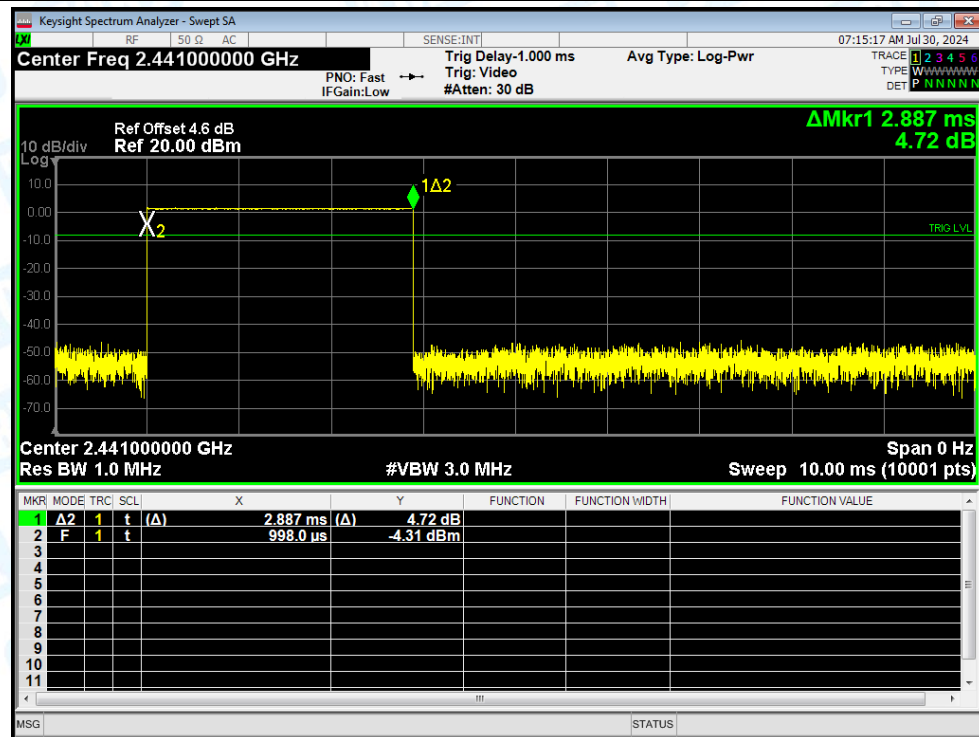
Dwell NVNT 1-DH1 2441MHz Ant1



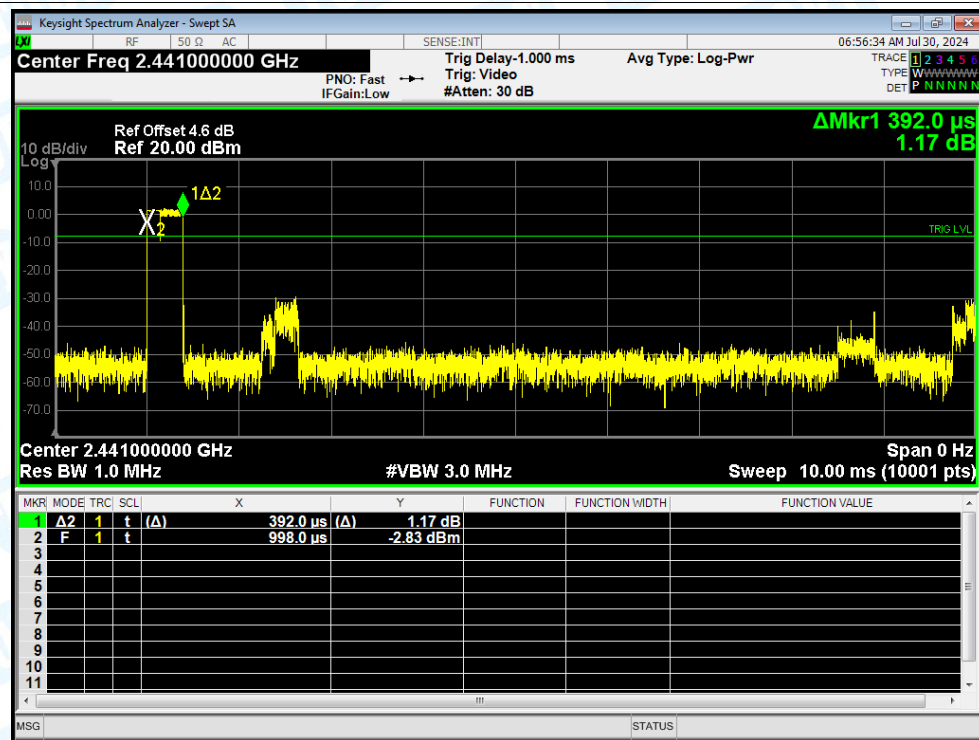
Dwell NVNT 1-DH3 2441MHz Ant1



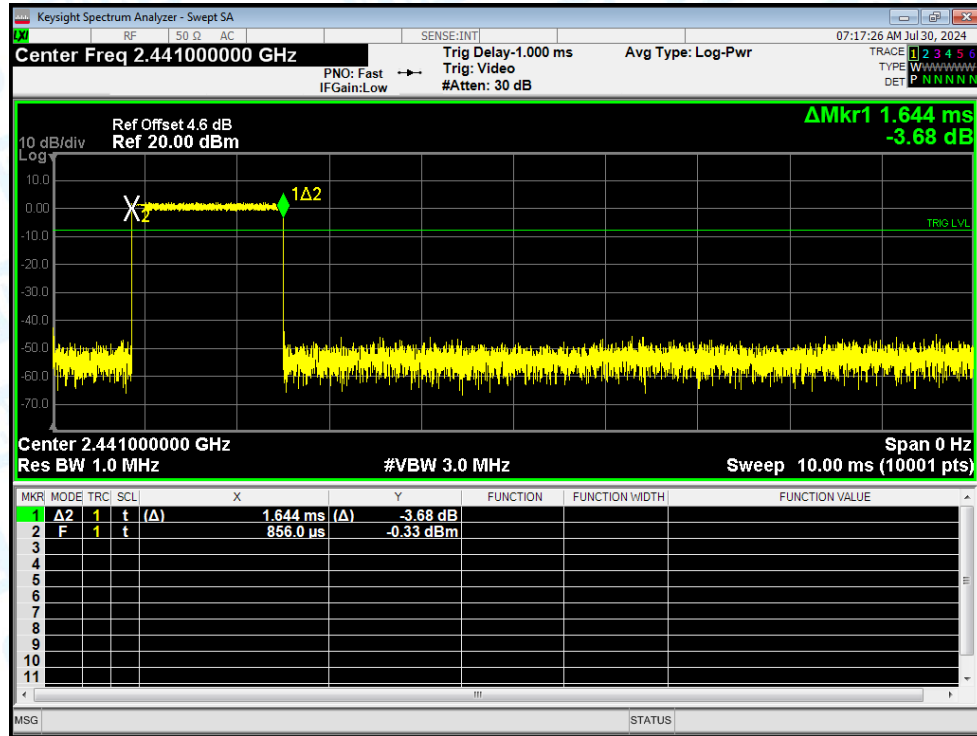
Dwell NVNT 1-DH5 2441MHz Ant1



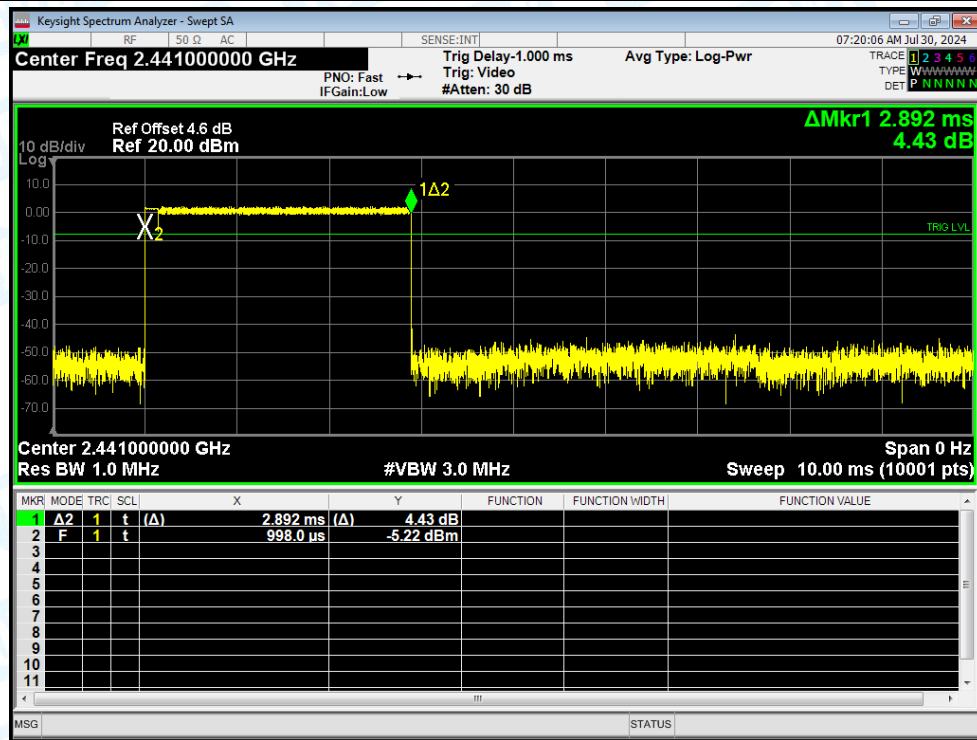
Dwell NVNT 2-DH1 2441MHz Ant1



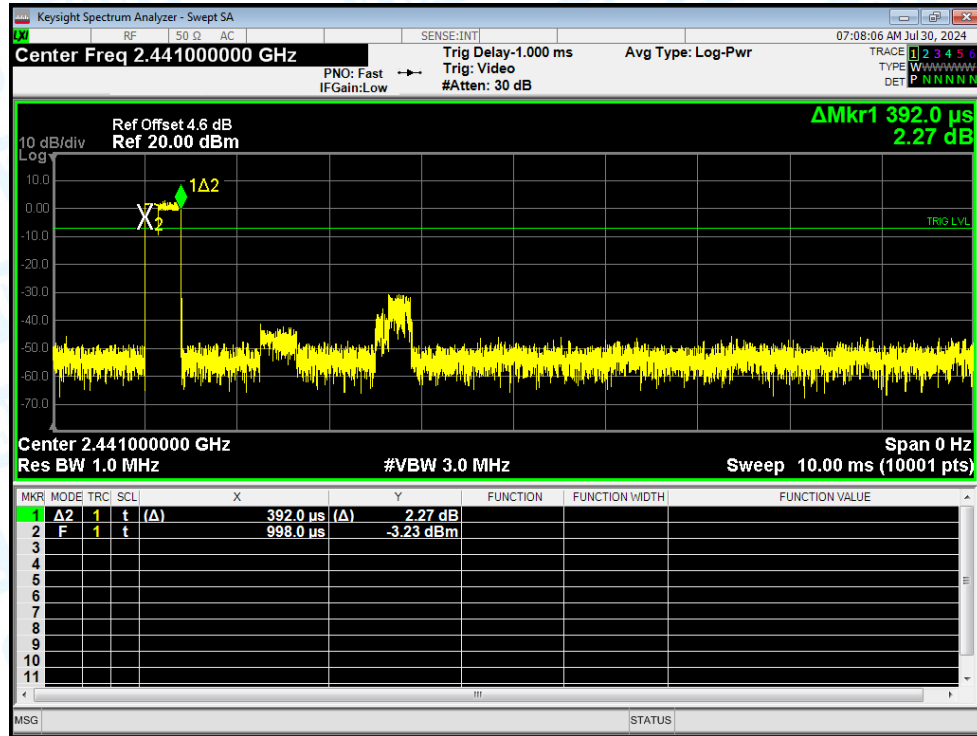
Dwell NVNT 2-DH3 2441MHz Ant1



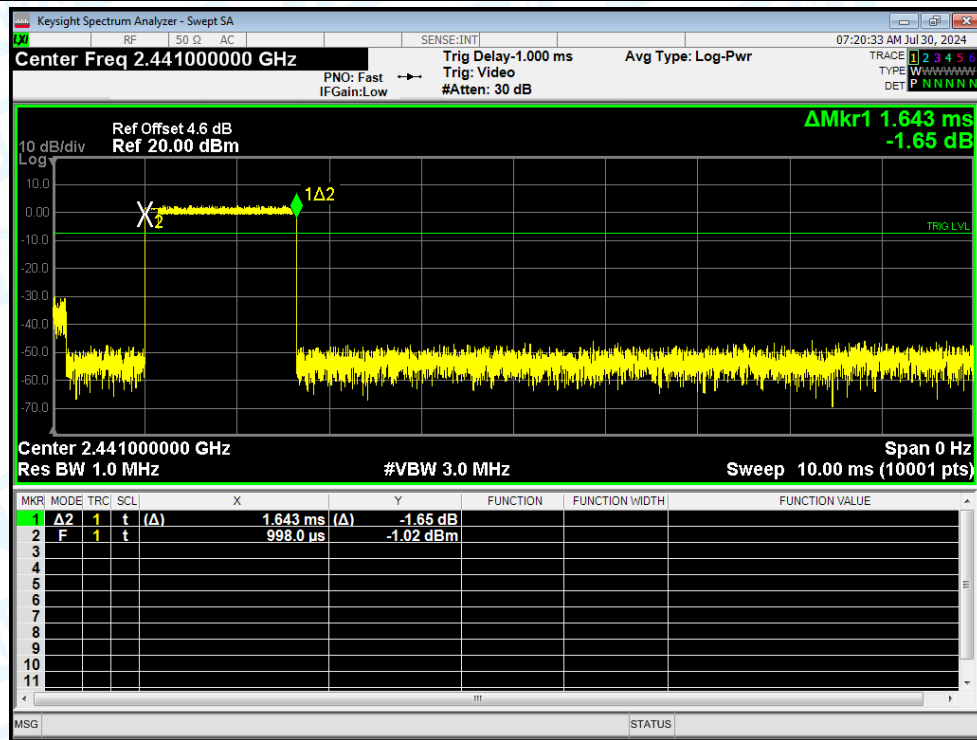
Dwell NVNT 2-DH5 2441MHz Ant1

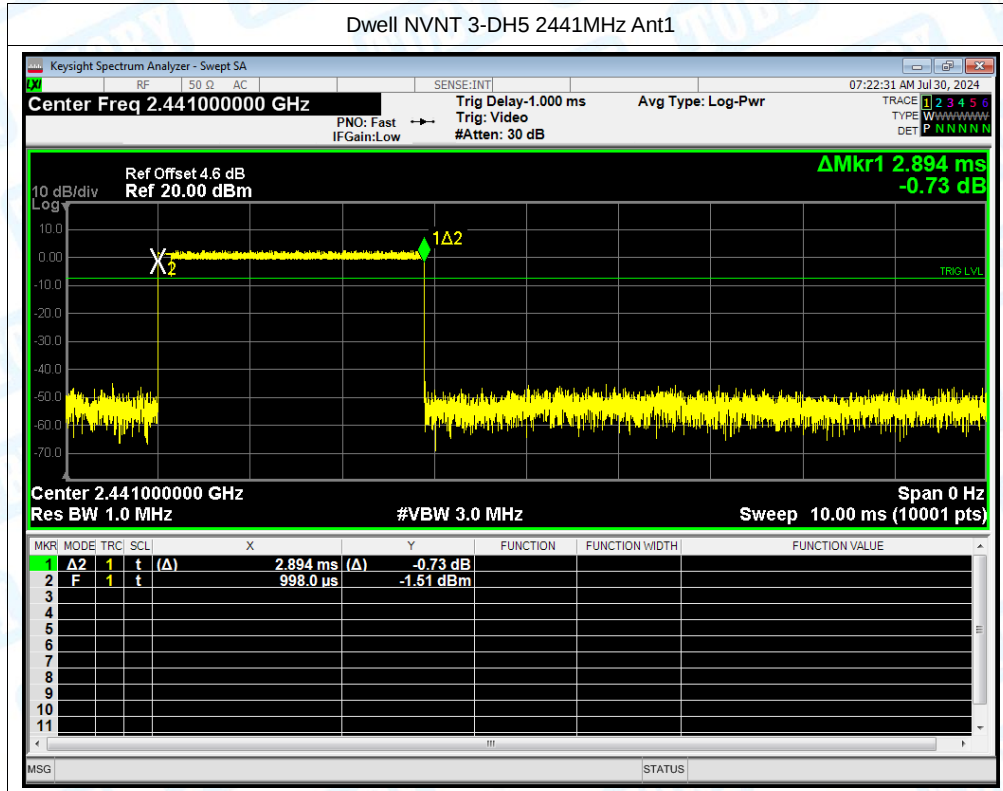


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





----END OF REPORT----