

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	LED Bluetooth Mirror
Test Model:	24"x36" Oval Bluetooth
Sample ID:	HC-C-202409-0068-01-02#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202409-0068-1 The report only show the worst case data.	

Contents

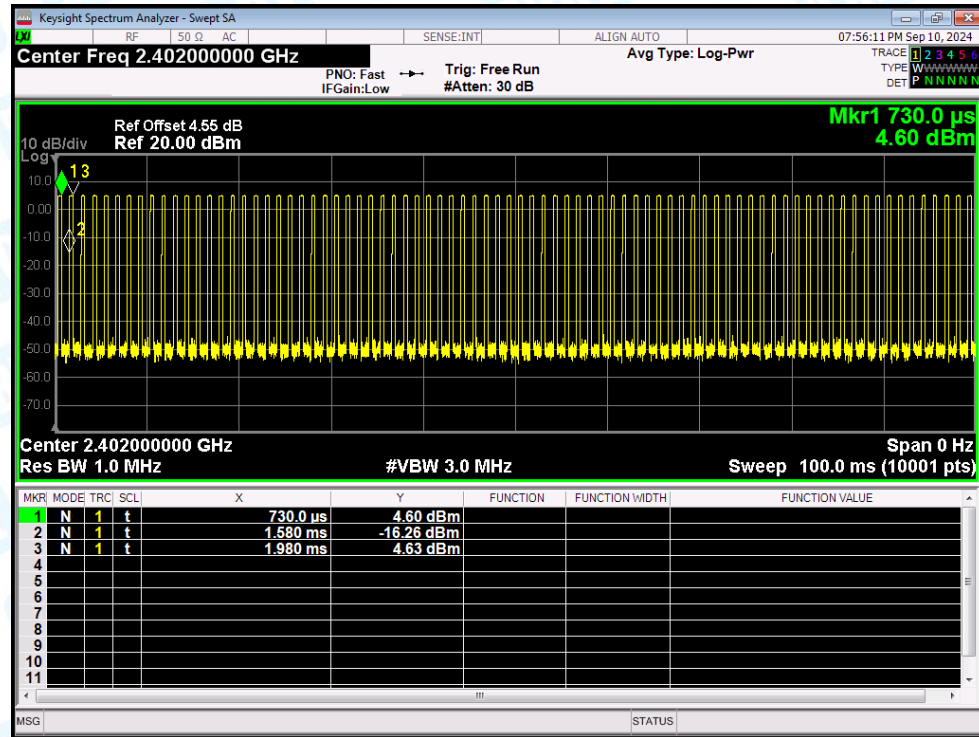
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1.Duty Cycle

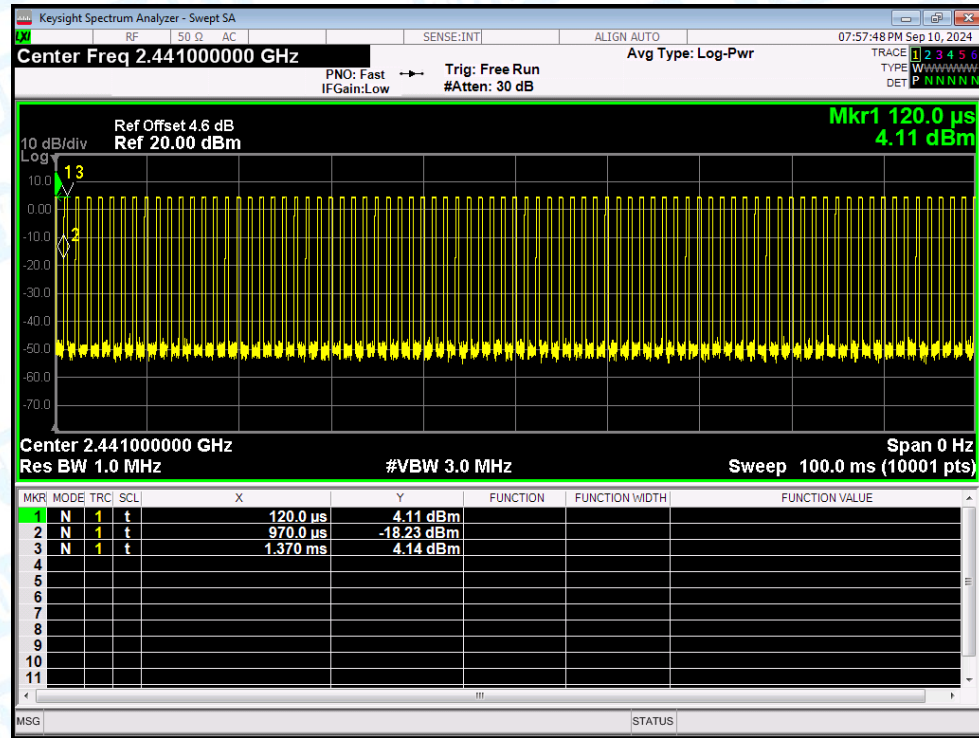
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	32	4.95	2.5
NVNT	1-DH1	2441	Ant1	32	4.95	2.5
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	32.8	4.84	2.44
NVNT	2-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	2-DH1	2480	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2402	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2441	Ant1	32.8	4.84	2.44
NVNT	3-DH1	2480	Ant1	32.8	4.84	2.44

Test Graphs

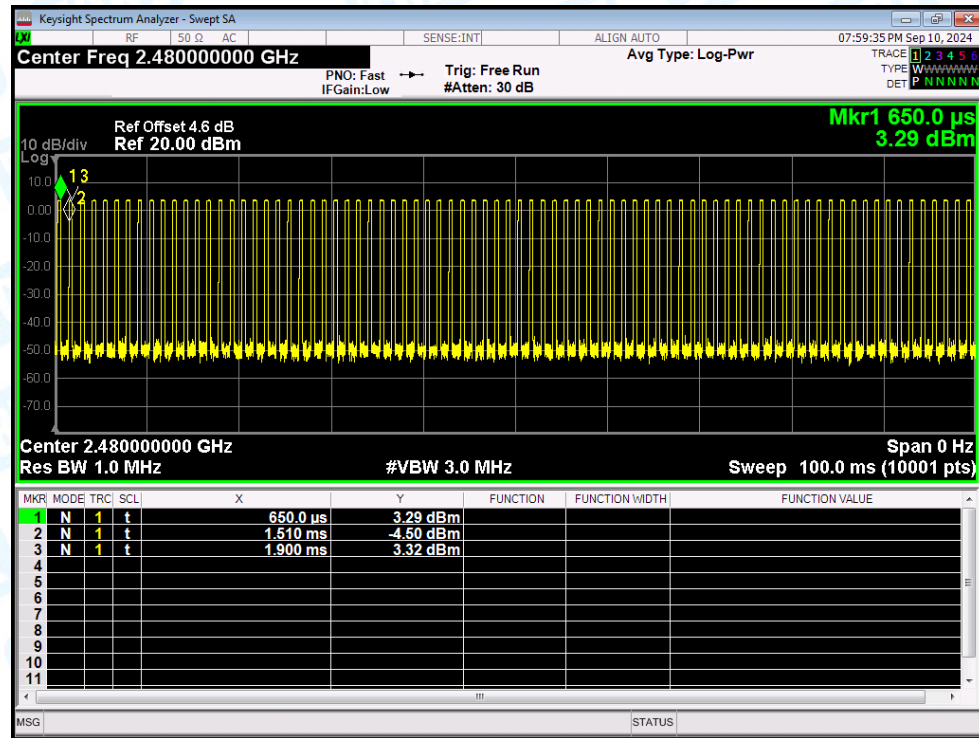
Duty Cycle NVNT 1-DH1 2402MHz Ant1



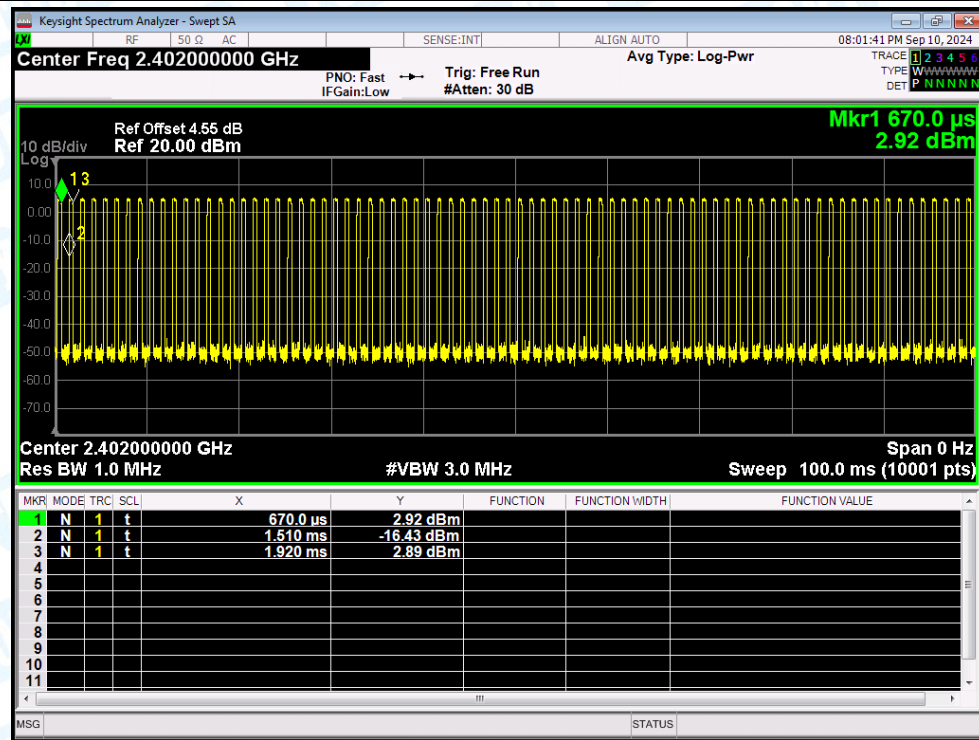
Duty Cycle NVNT 1-DH1 2441MHz Ant1



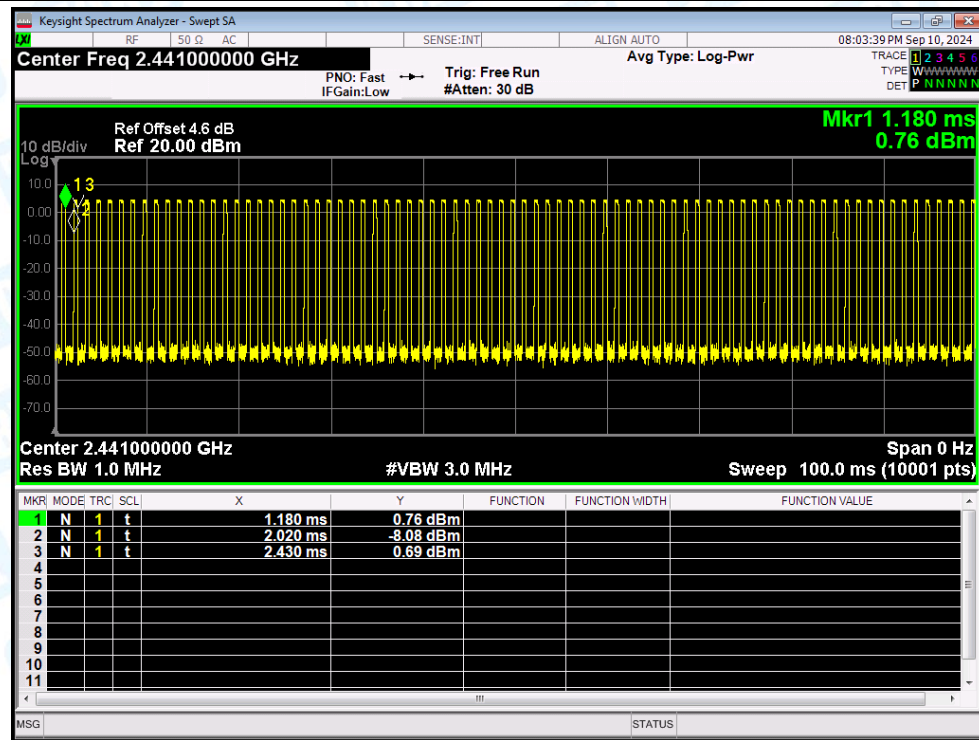
Duty Cycle NVNT 1-DH1 2480MHz Ant1



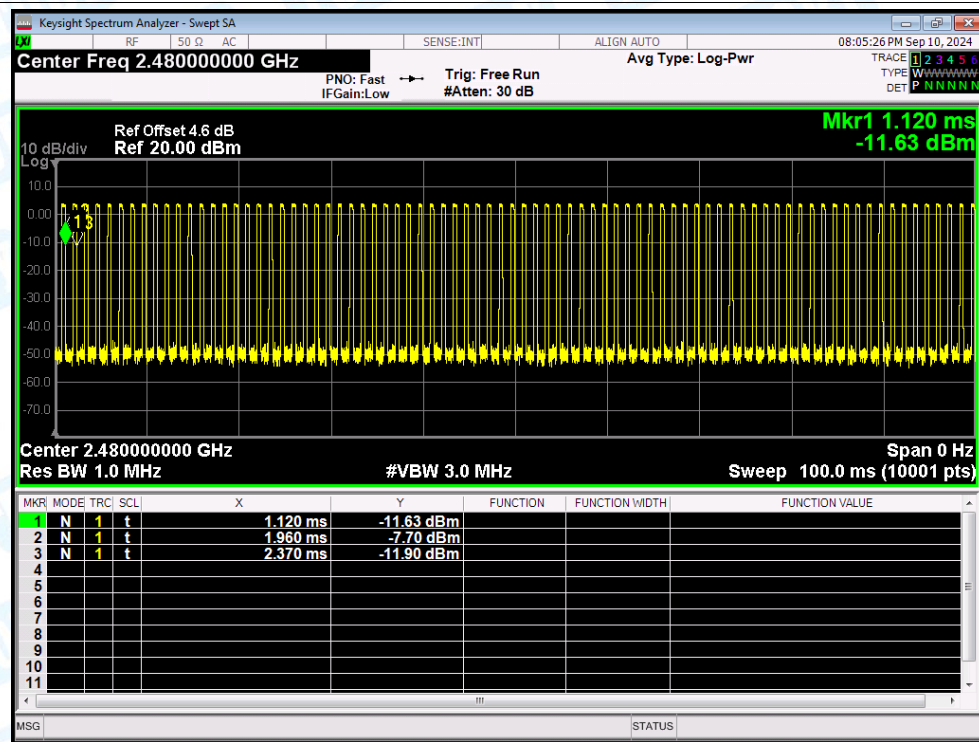
Duty Cycle NVNT 2-DH1 2402MHz Ant1



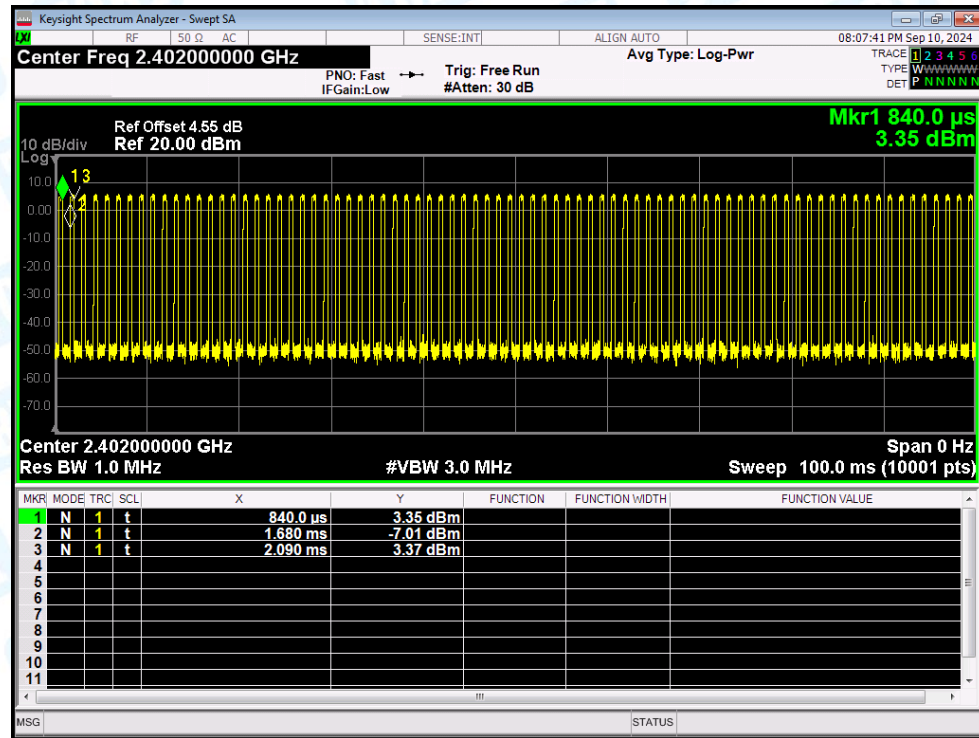
Duty Cycle NVNT 2-DH1 2441MHz Ant1



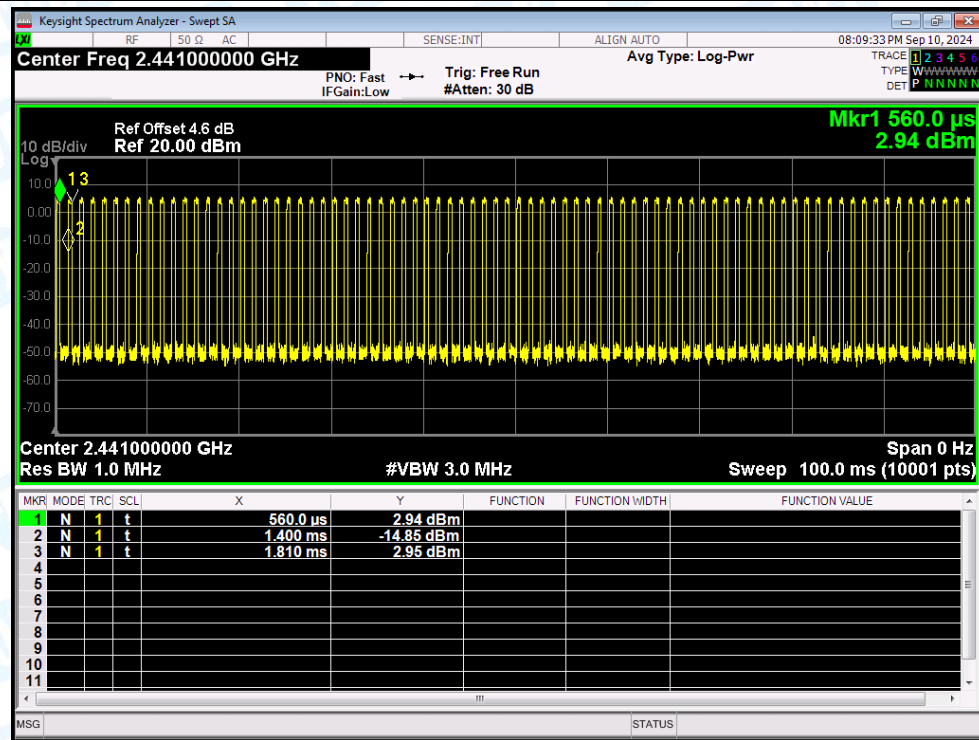
Duty Cycle NVNT 2-DH1 2480MHz Ant1

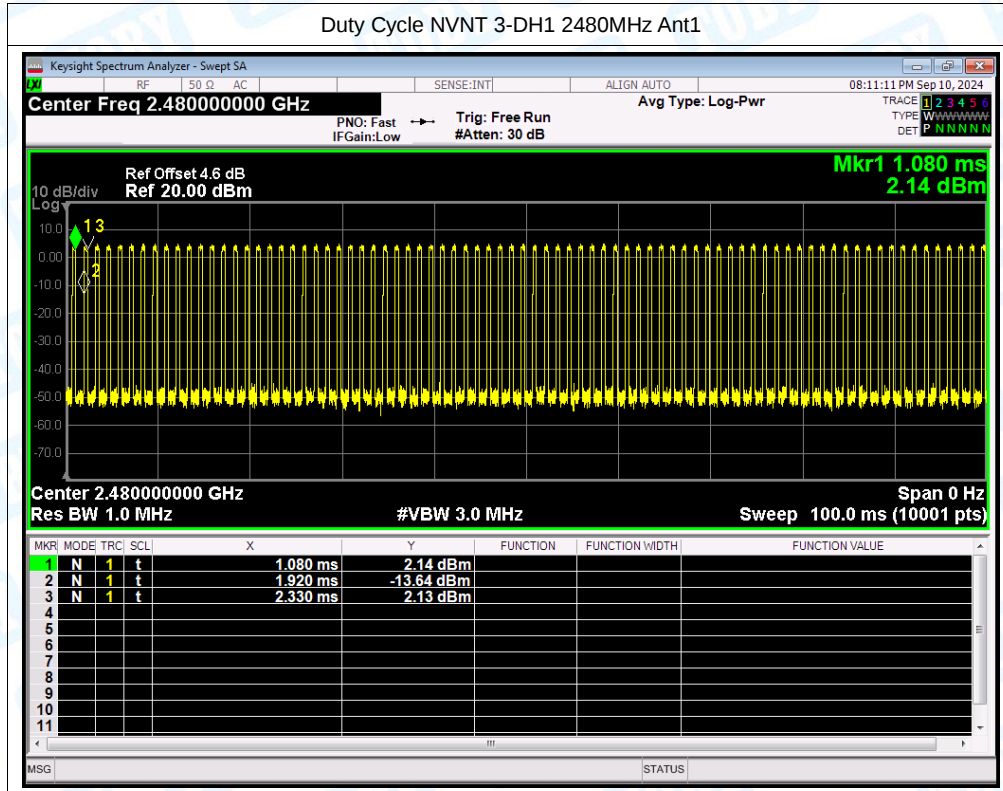


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



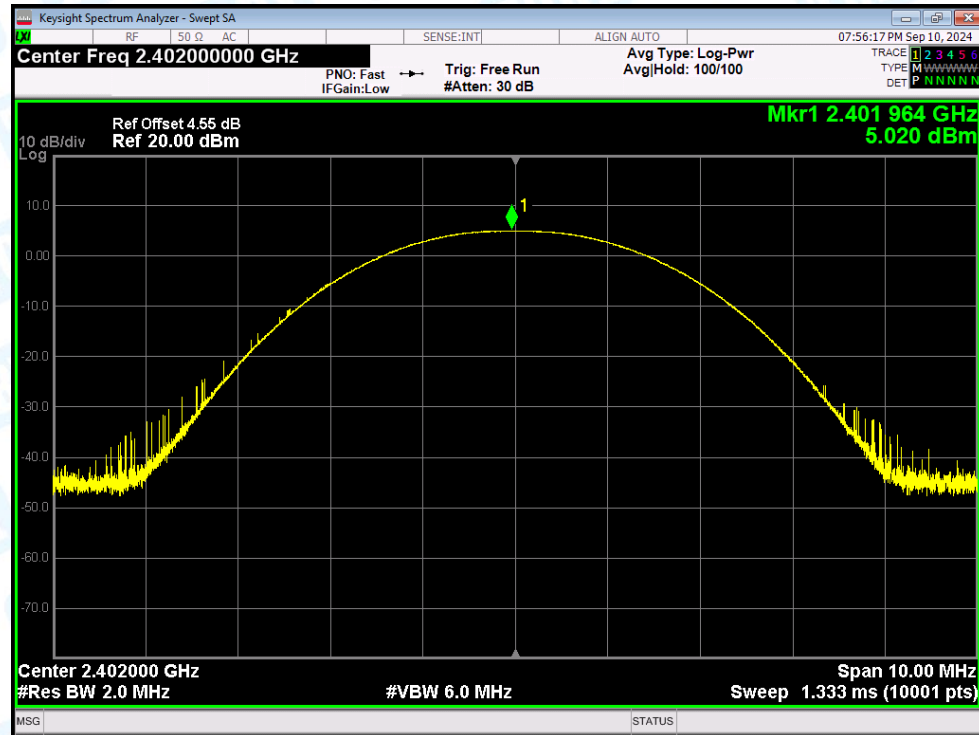


2.Maximum Conducted Output Power

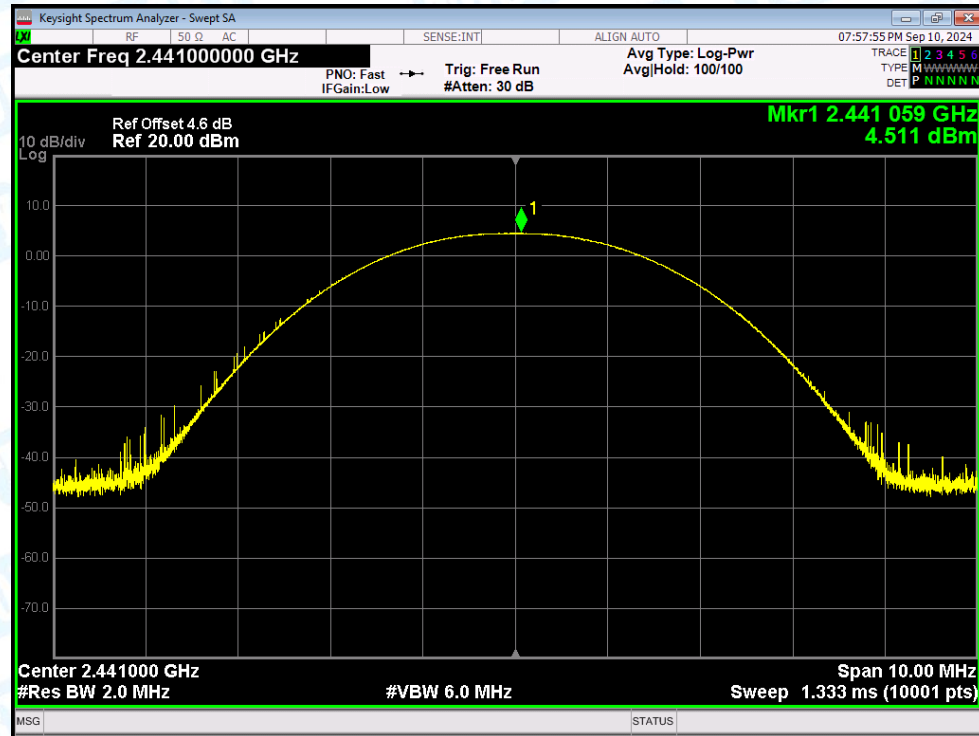
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	5.02	21	Pass
NVNT	1-DH1	2441	Ant1	4.511	21	Pass
NVNT	1-DH1	2480	Ant1	3.683	21	Pass
NVNT	2-DH1	2402	Ant1	5.539	21	Pass
NVNT	2-DH1	2441	Ant1	5.055	21	Pass
NVNT	2-DH1	2480	Ant1	4.254	21	Pass
NVNT	3-DH1	2402	Ant1	6.358	21	Pass
NVNT	3-DH1	2441	Ant1	5.924	21	Pass
NVNT	3-DH1	2480	Ant1	5.112	21	Pass

Test Graphs

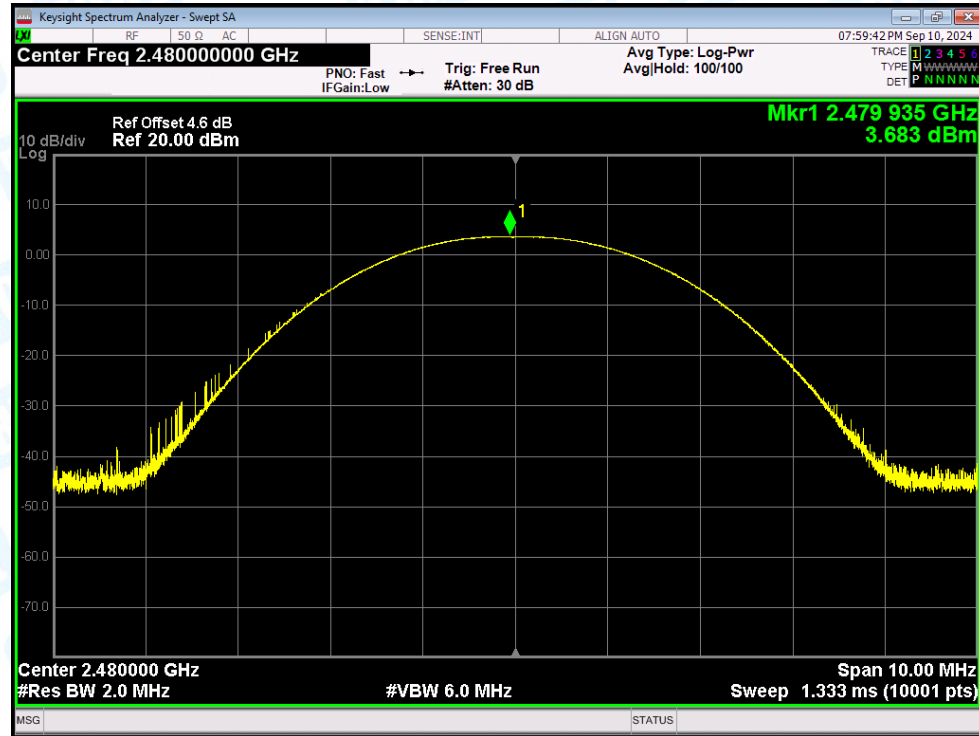
Power NVNT 1-DH1 2402MHz Ant1



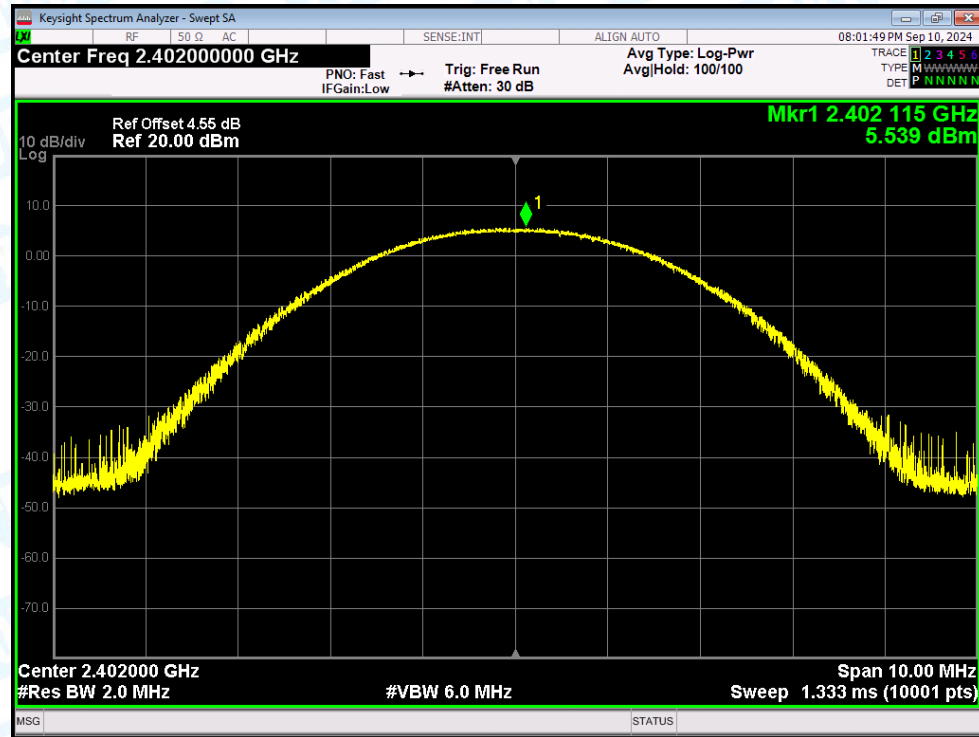
Power NVNT 1-DH1 2441MHz Ant1



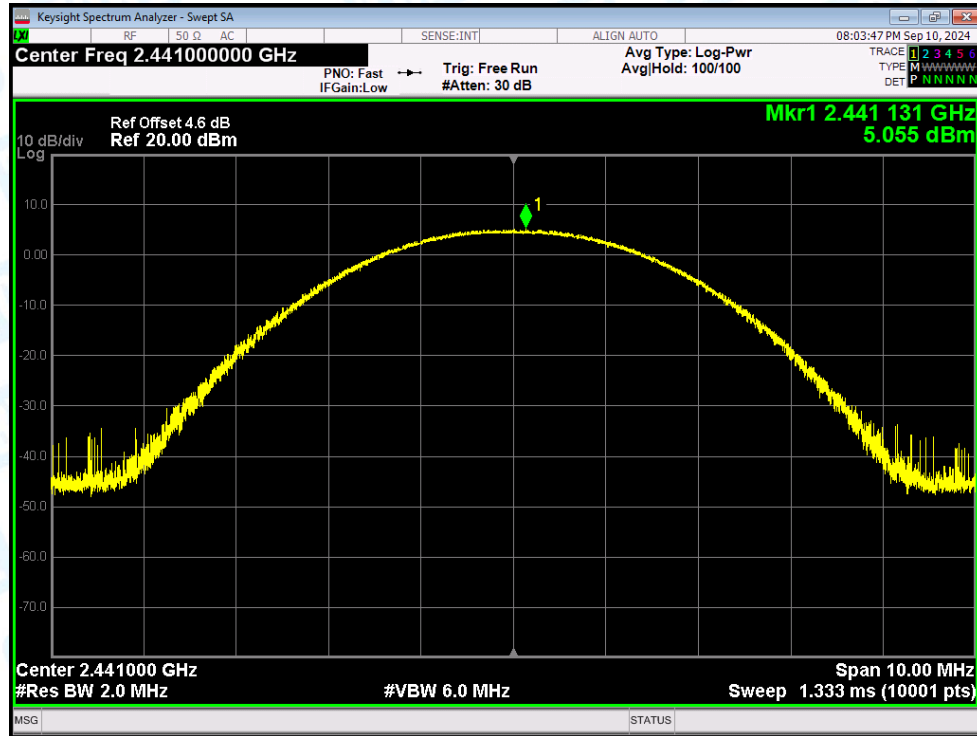
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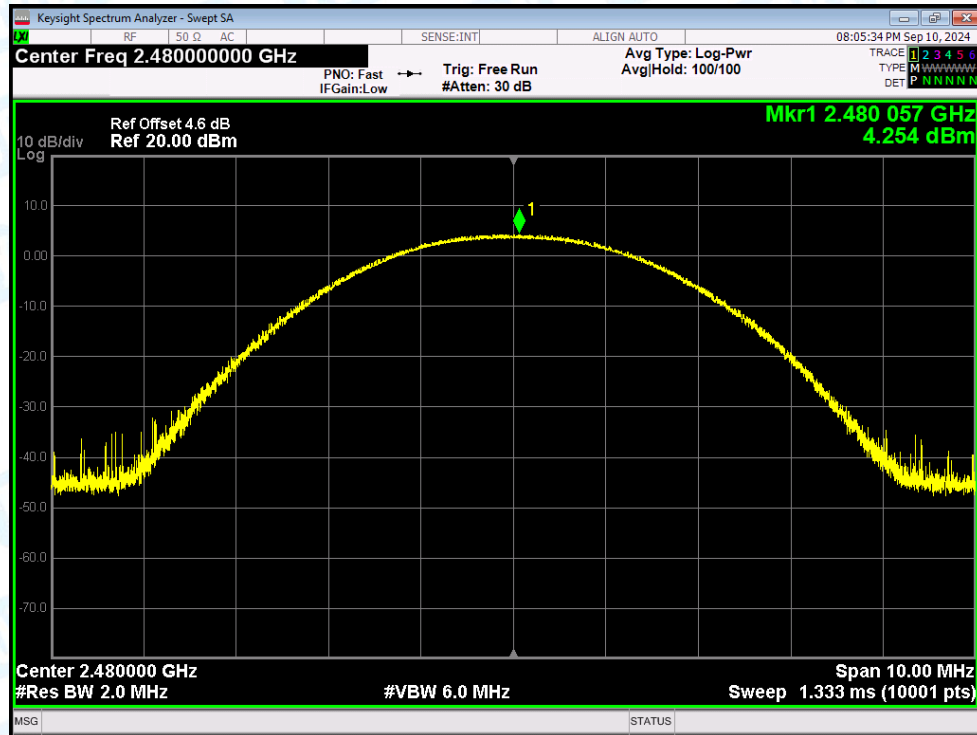
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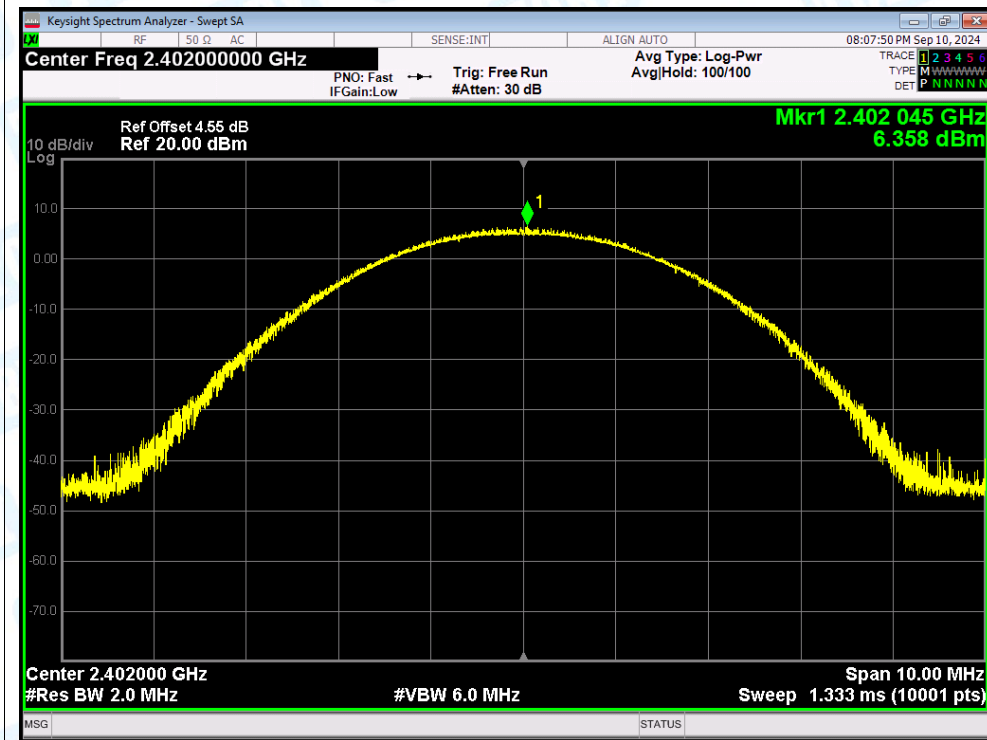
Power NVNT 2-DH1 2441MHz Ant1



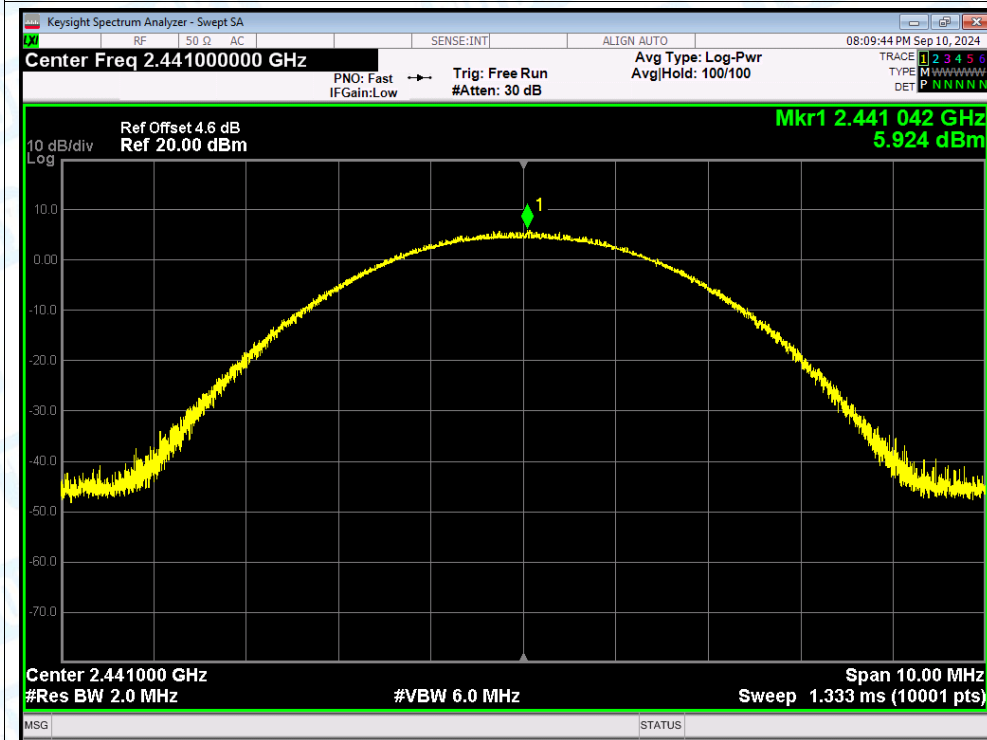
Power NVNT 2-DH1 2480MHz Ant1

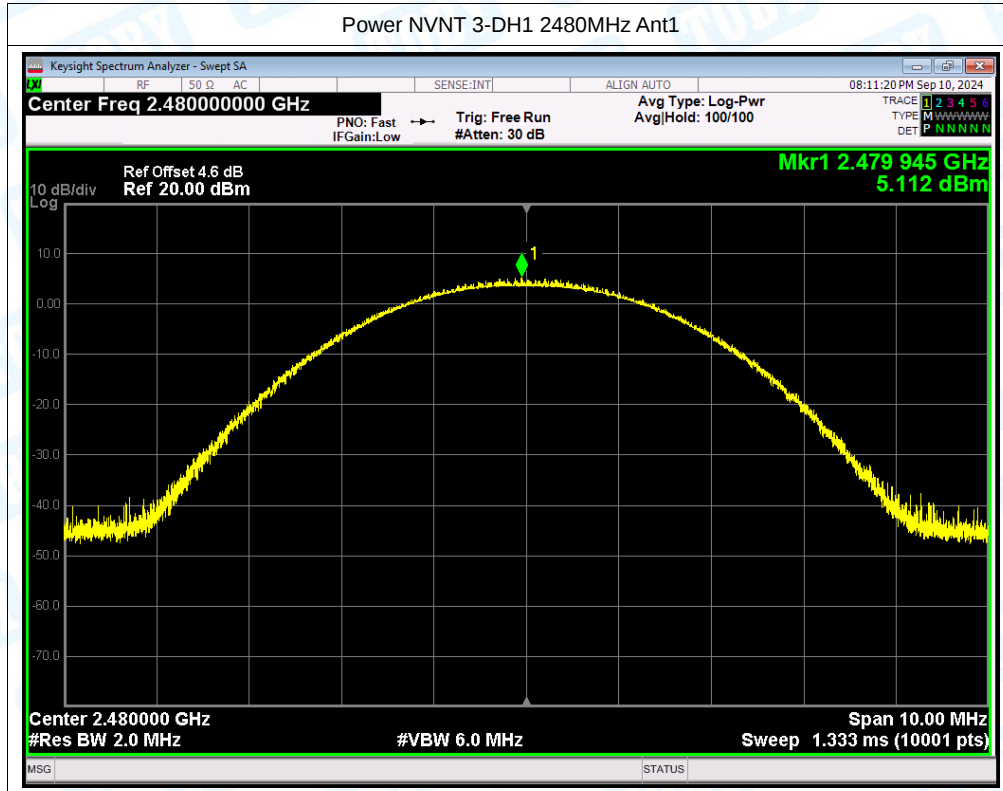


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



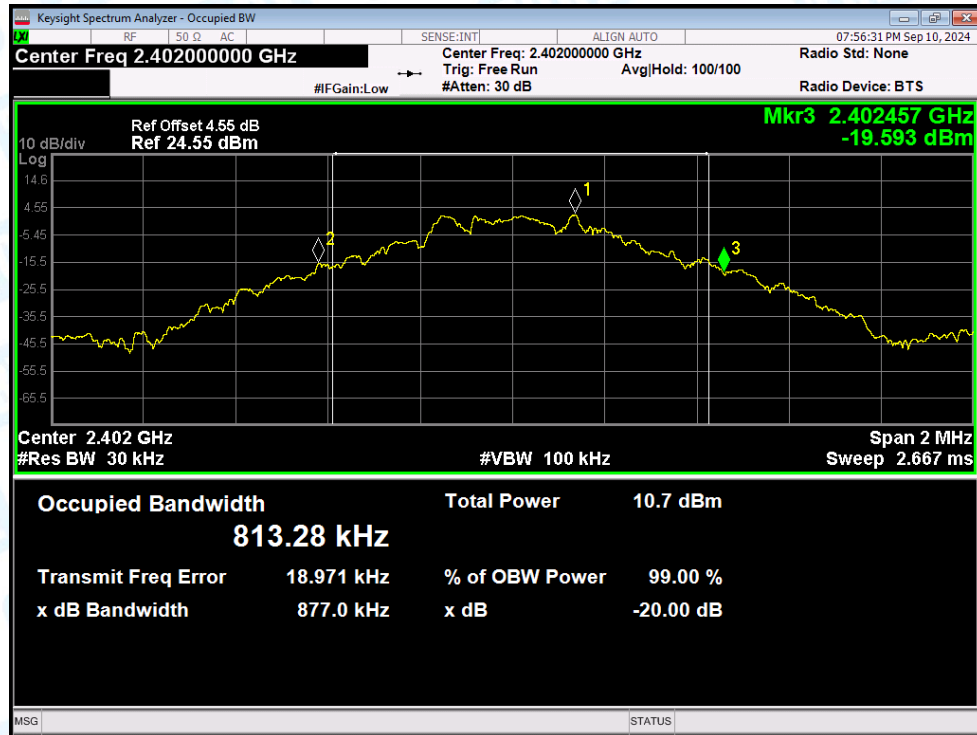


3.-20dB Bandwidth

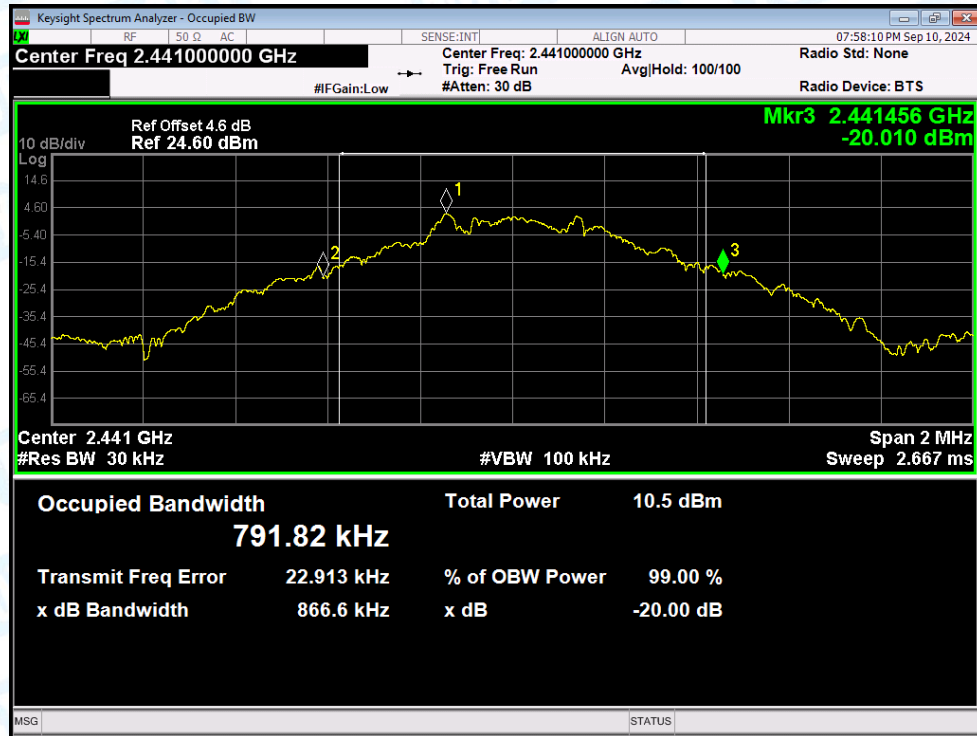
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.88	0	Pass
NVNT	1-DH1	2441	Ant1	0.87	0	Pass
NVNT	1-DH1	2480	Ant1	0.83	0	Pass
NVNT	2-DH1	2402	Ant1	1.22	0	Pass
NVNT	2-DH1	2441	Ant1	1.22	0	Pass
NVNT	2-DH1	2480	Ant1	1.23	0	Pass
NVNT	3-DH1	2402	Ant1	1.21	0	Pass
NVNT	3-DH1	2441	Ant1	1.21	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

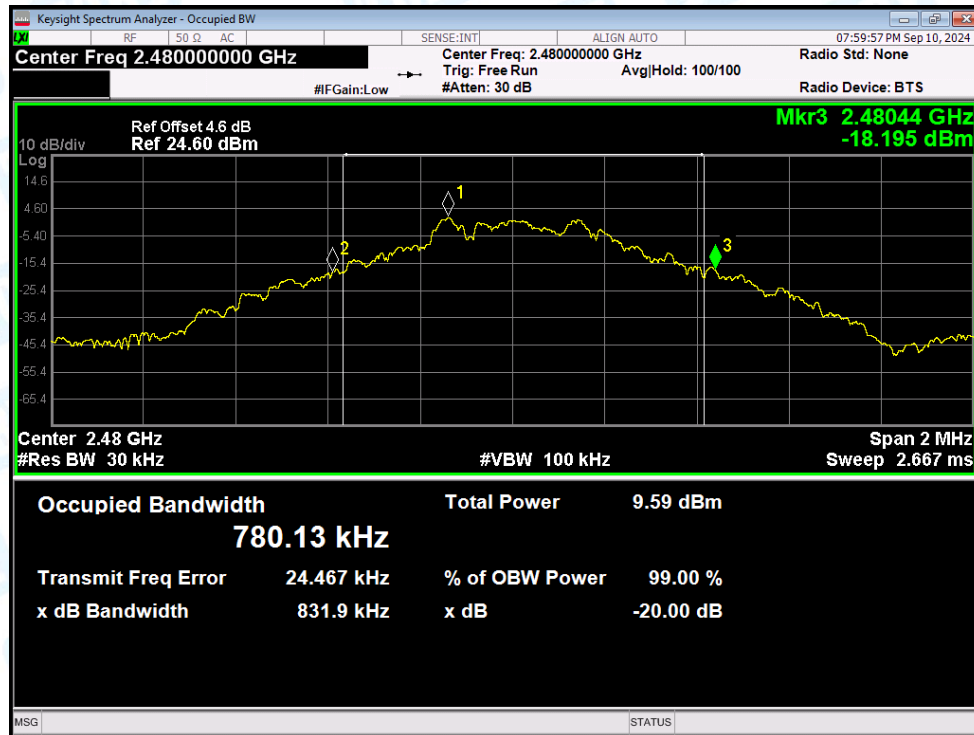
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



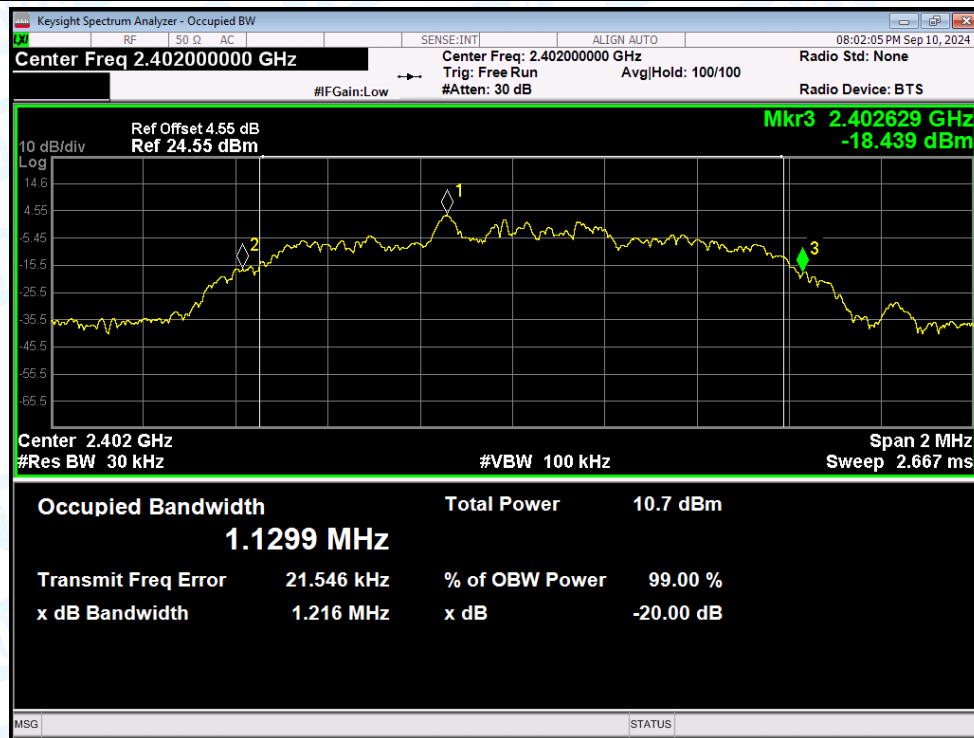
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



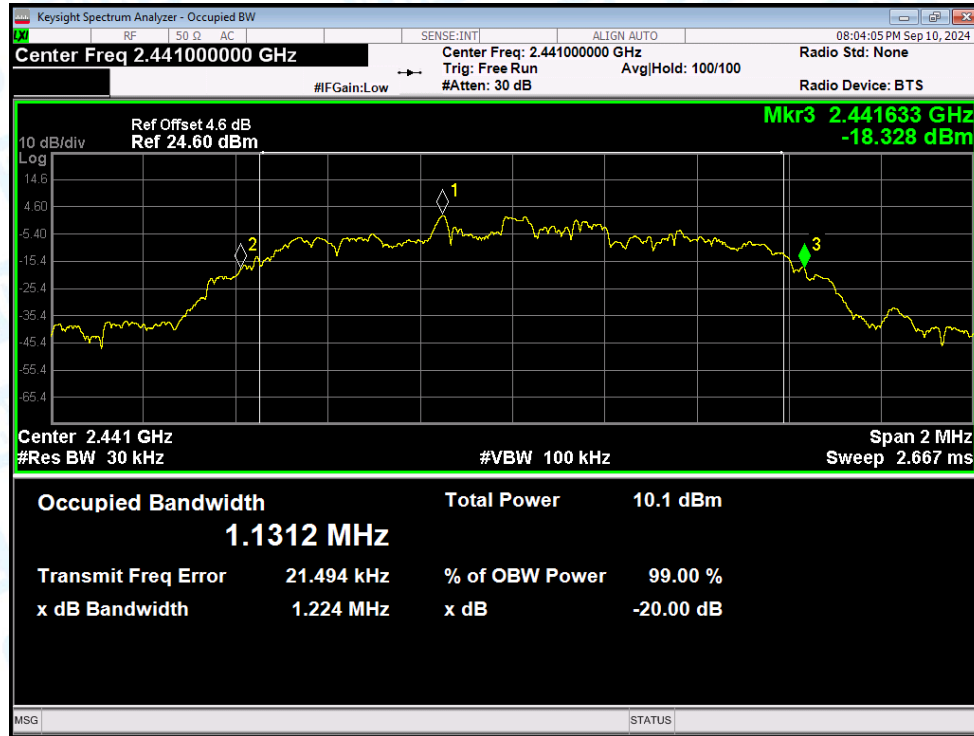
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



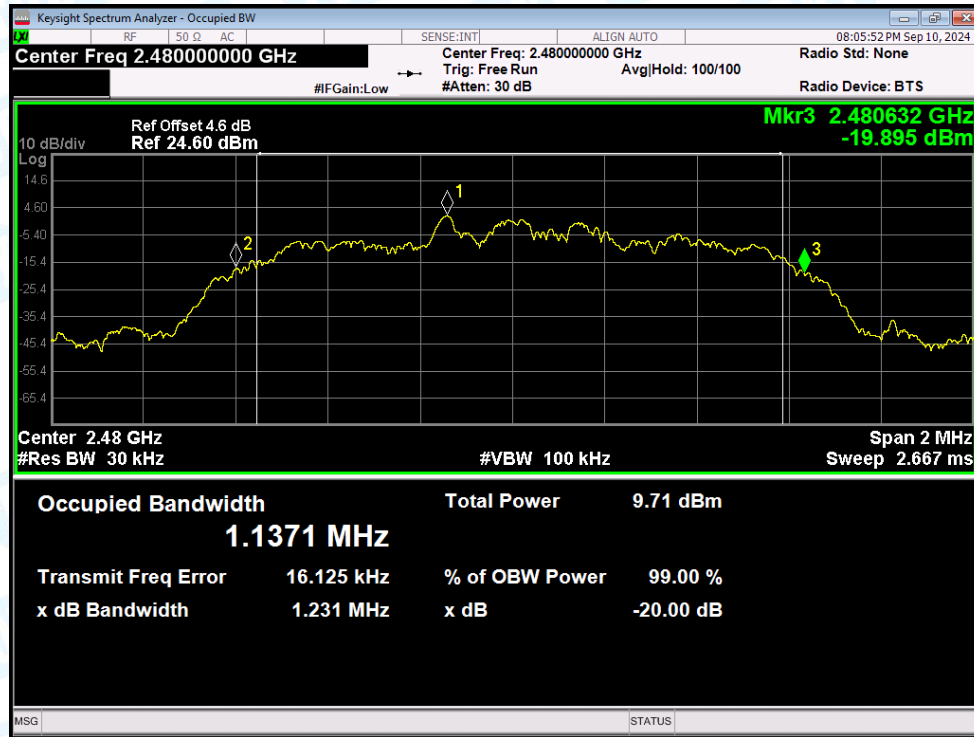
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



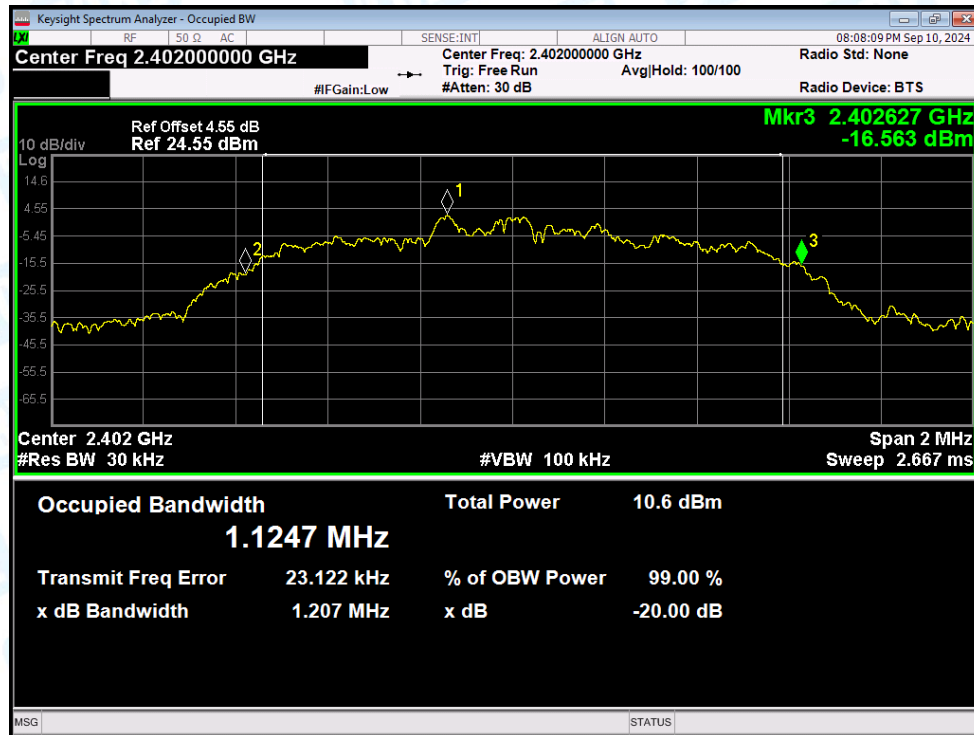
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



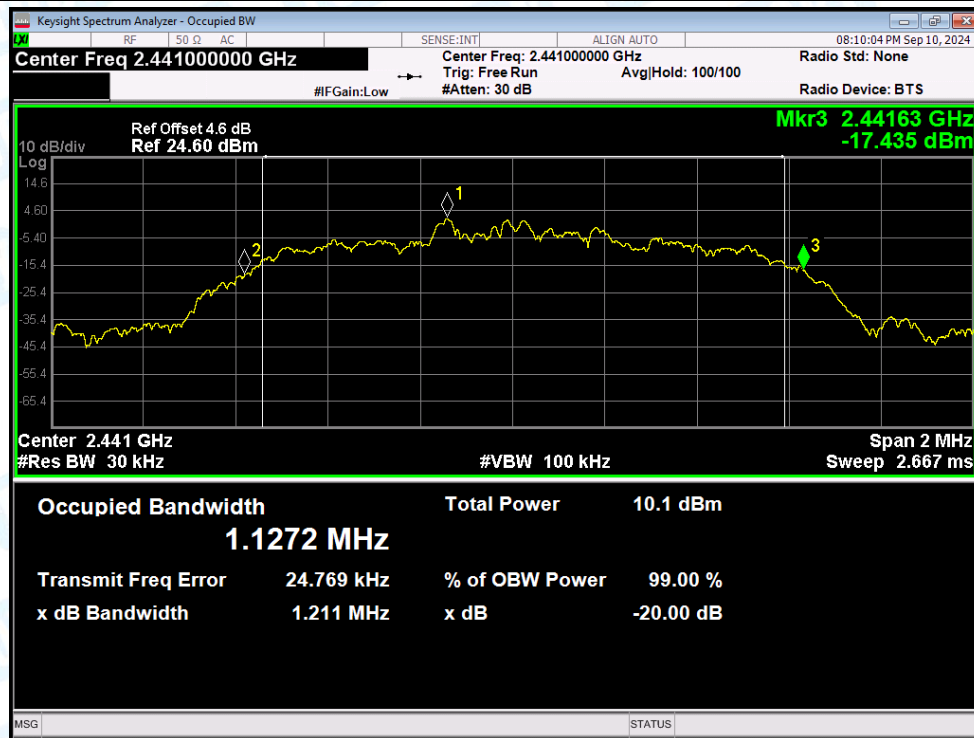
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

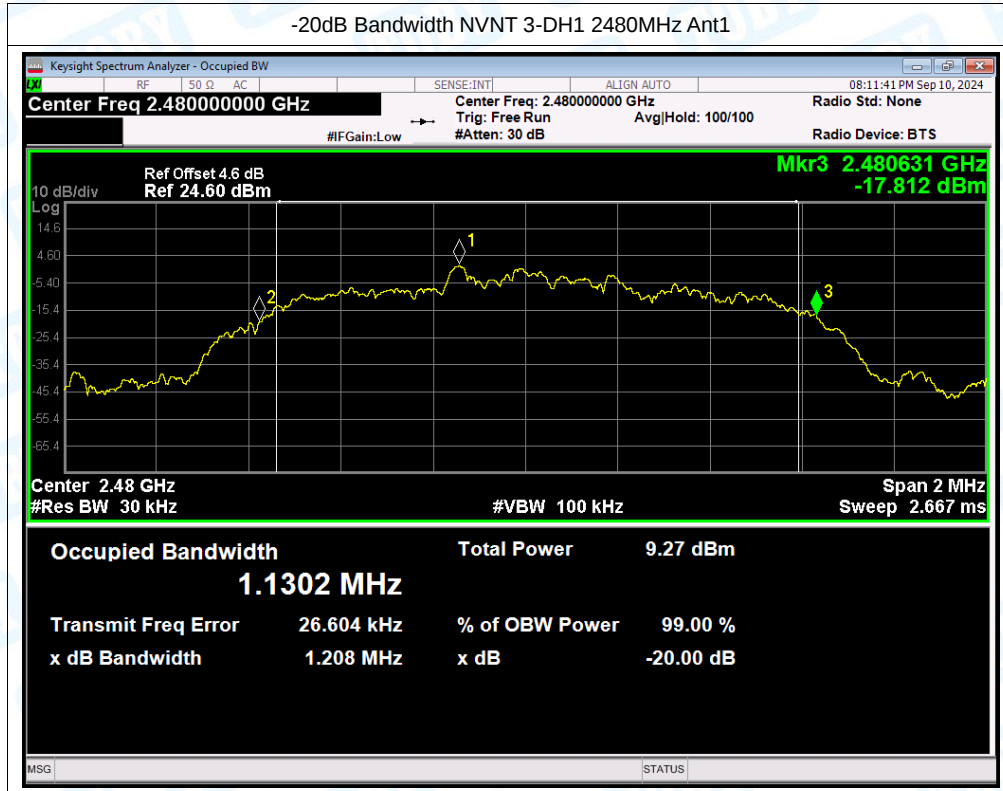


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



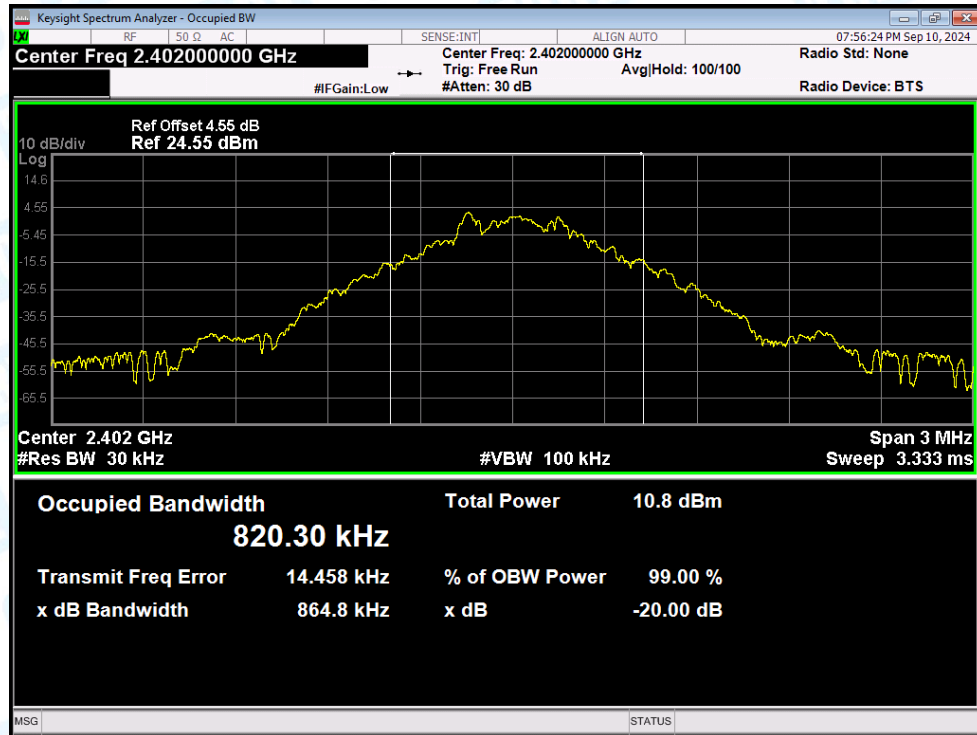


4.Occupied Channel Bandwidth

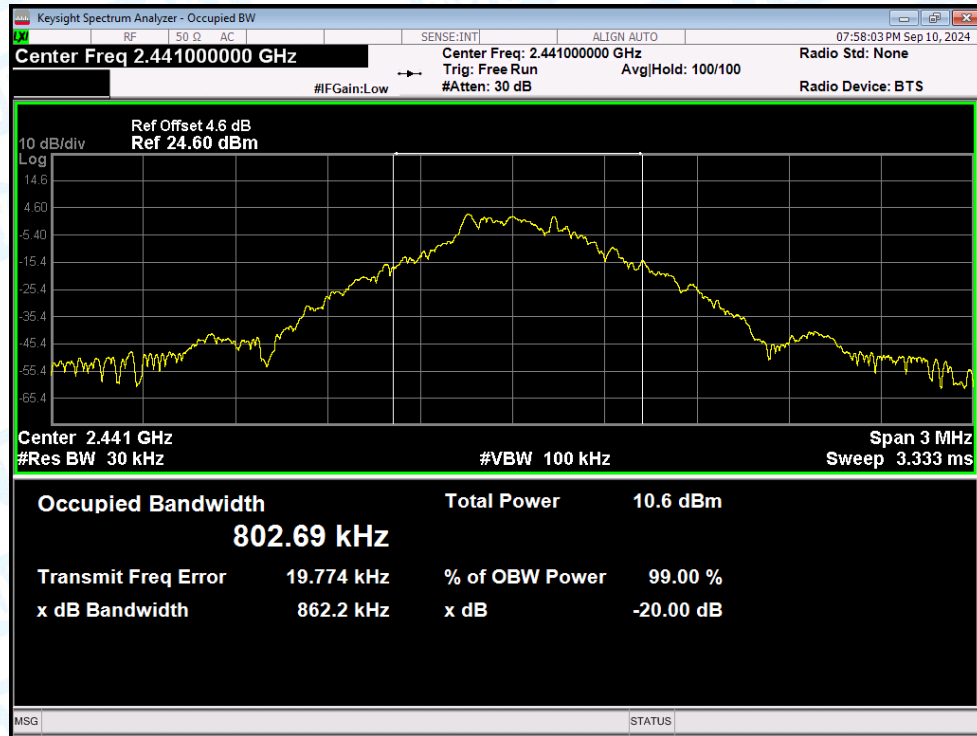
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.82
NVNT	1-DH1	2441	Ant1	0.803
NVNT	1-DH1	2480	Ant1	0.787
NVNT	2-DH1	2402	Ant1	1.144
NVNT	2-DH1	2441	Ant1	1.136
NVNT	2-DH1	2480	Ant1	1.148
NVNT	3-DH1	2402	Ant1	1.141
NVNT	3-DH1	2441	Ant1	1.134
NVNT	3-DH1	2480	Ant1	1.12

Test Graphs

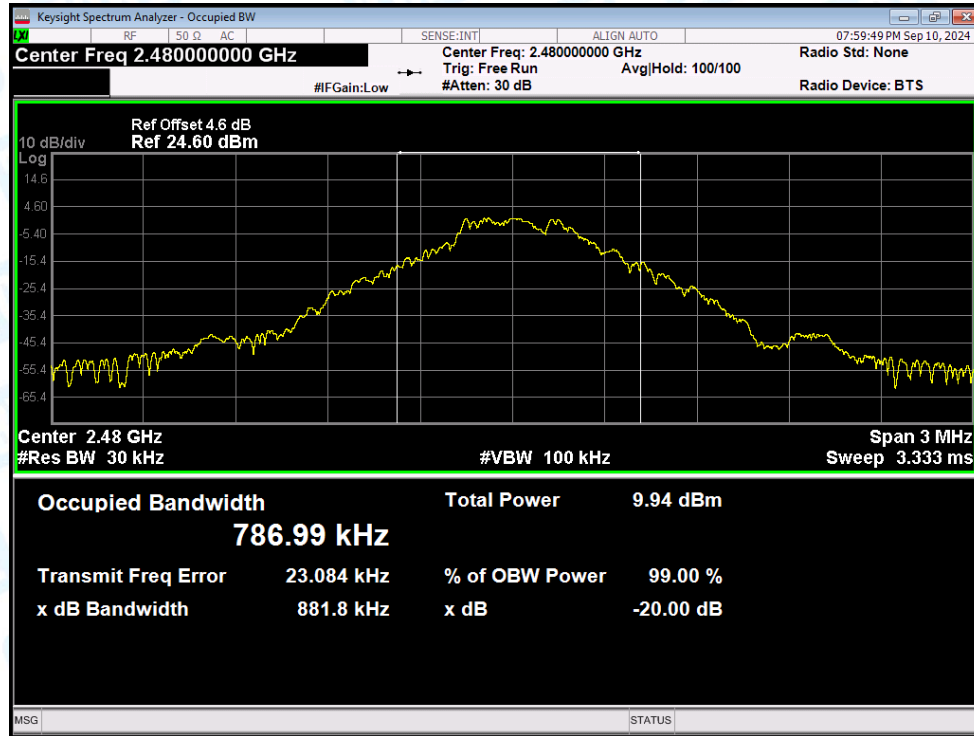
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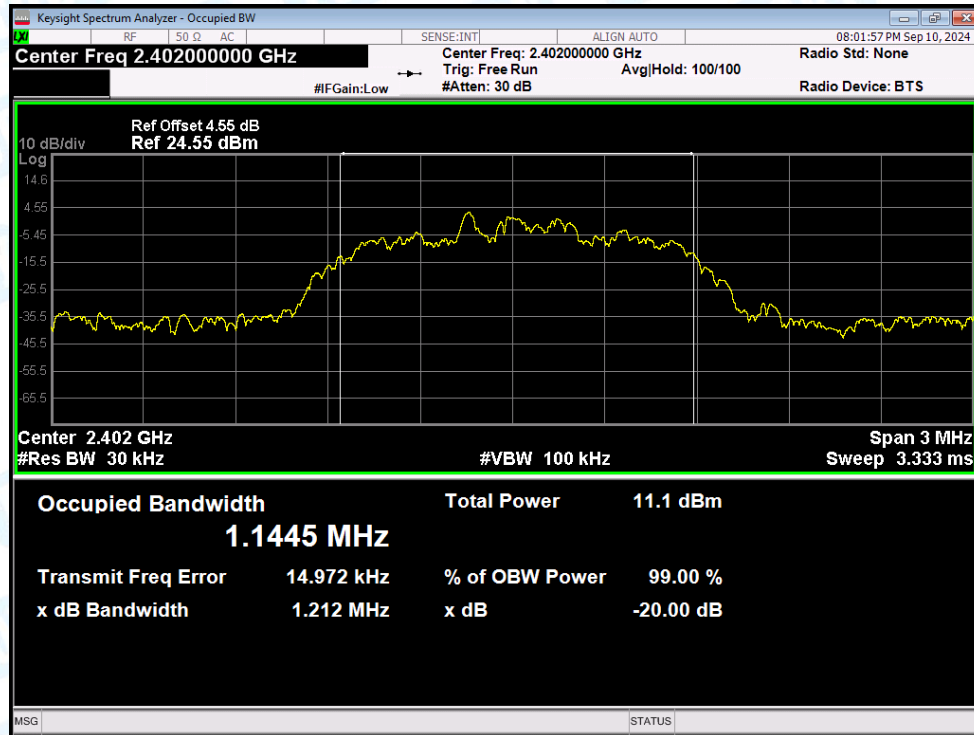
OBW NVNT 1-DH1 2441MHz Ant1



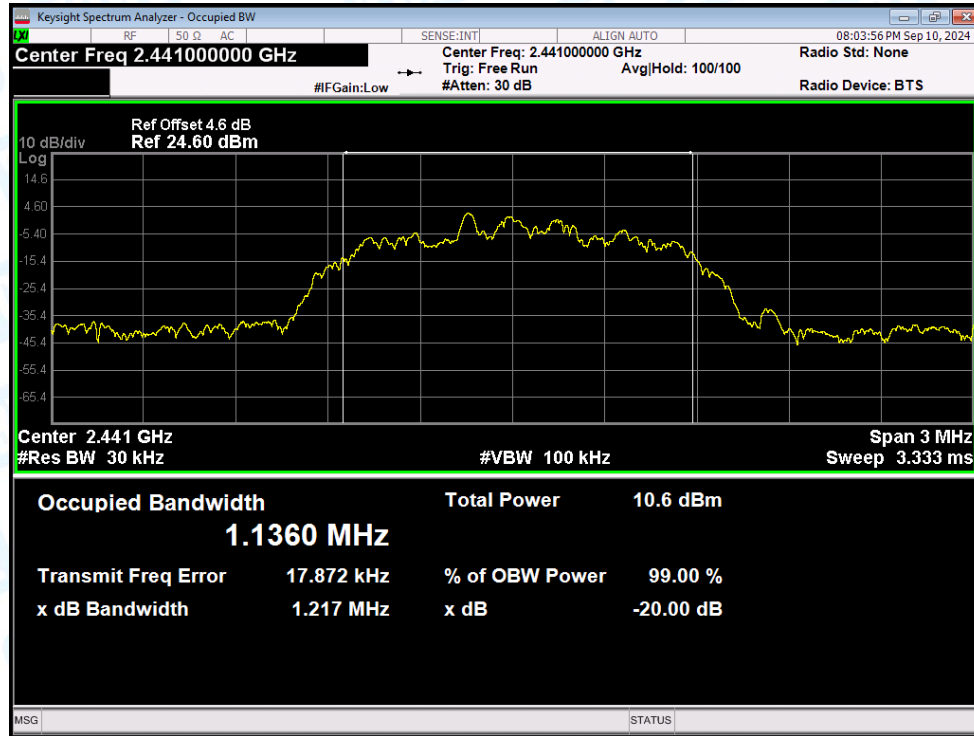
OBW NVNT 1-DH1 2480MHz Ant1



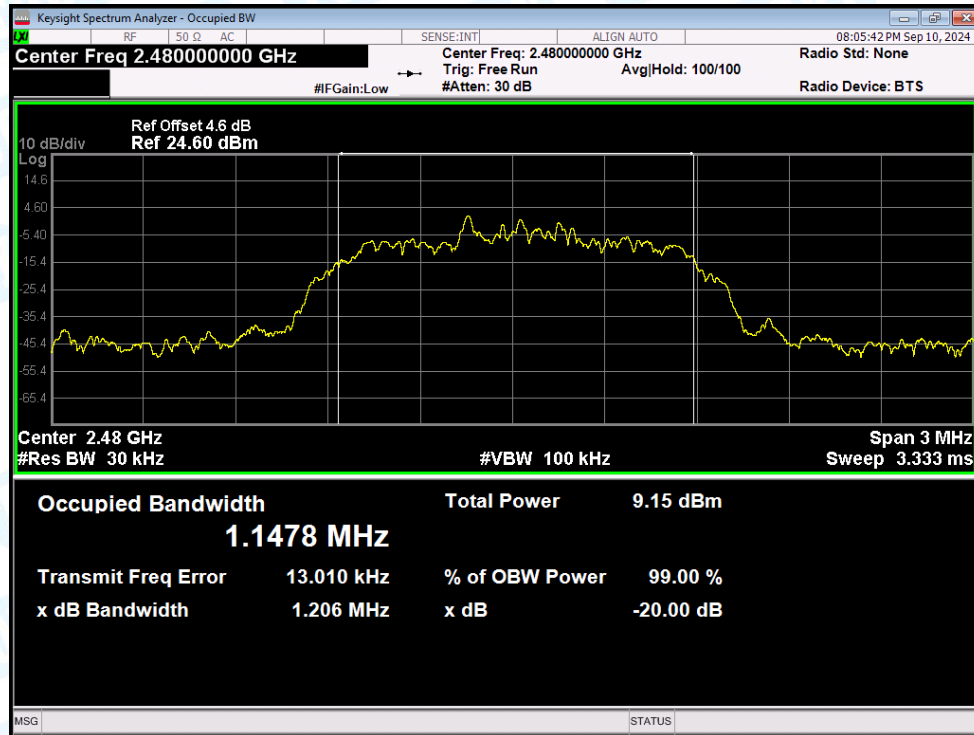
OBW NVNT 2-DH1 2402MHz Ant1



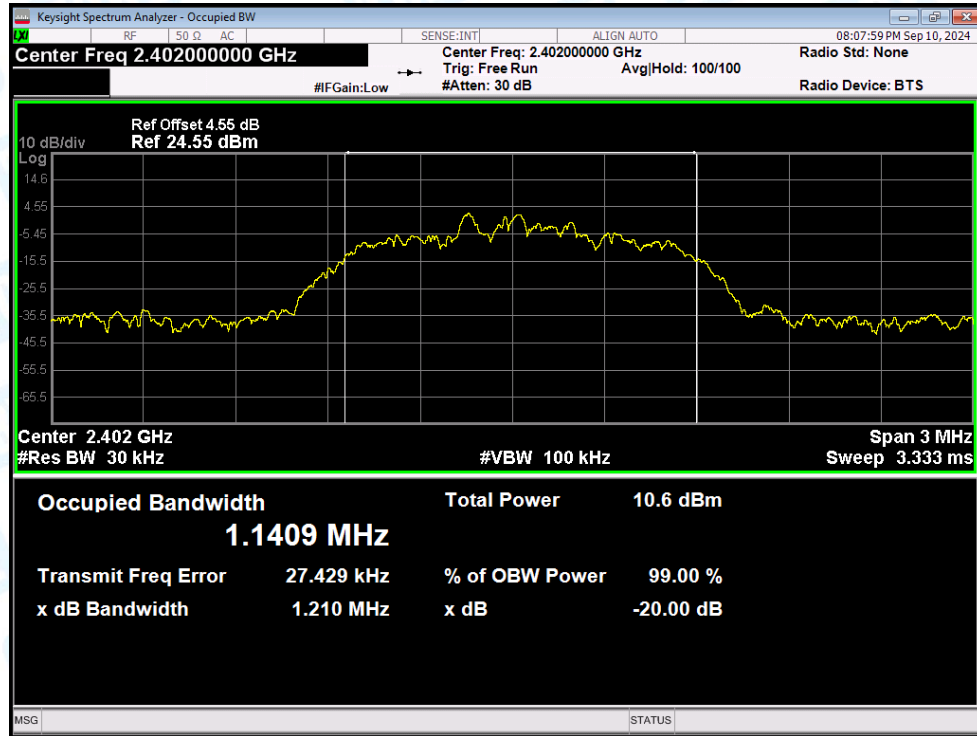
OBW NVNT 2-DH1 2441MHz Ant1



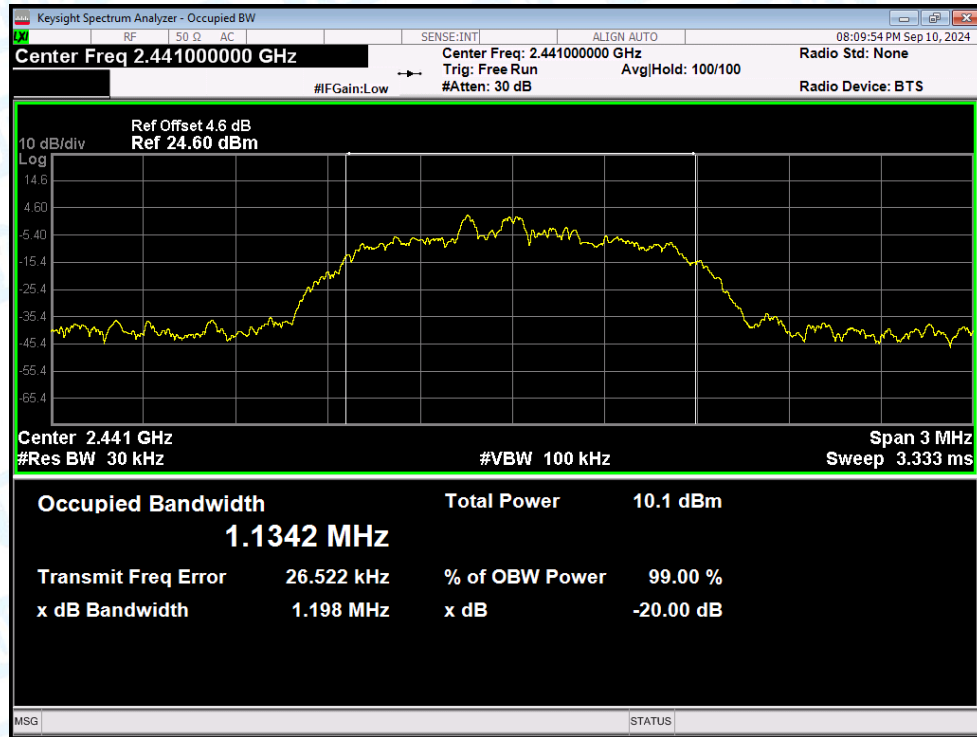
OBW NVNT 2-DH1 2480MHz Ant1

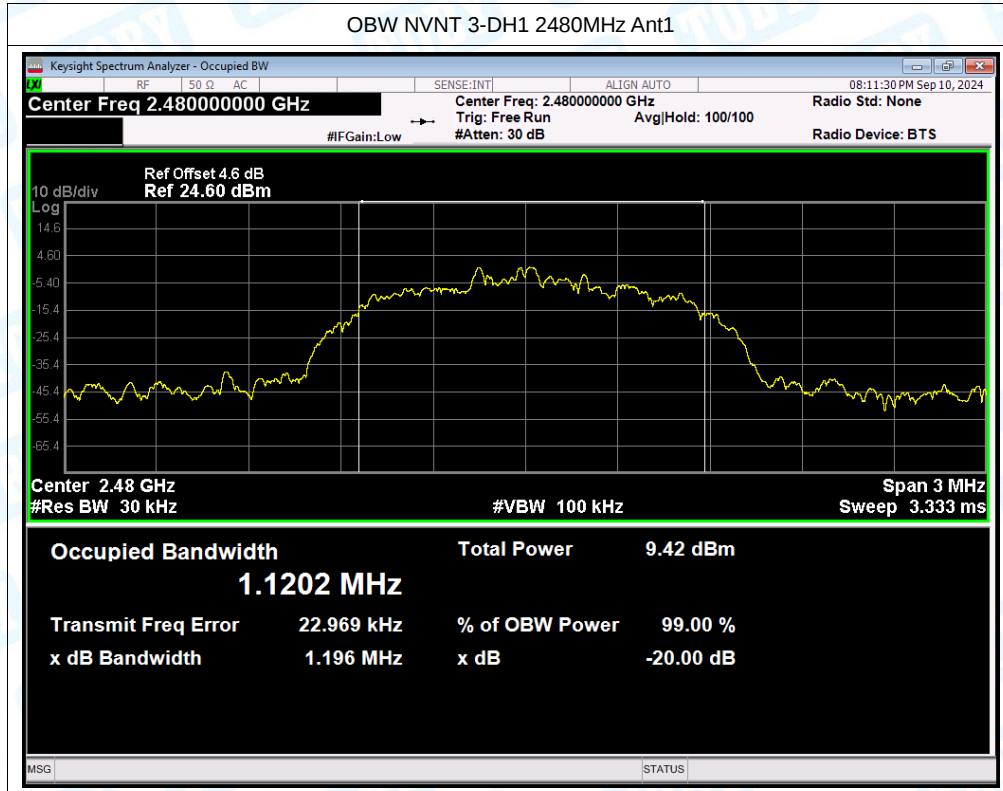


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





5.Band Edge

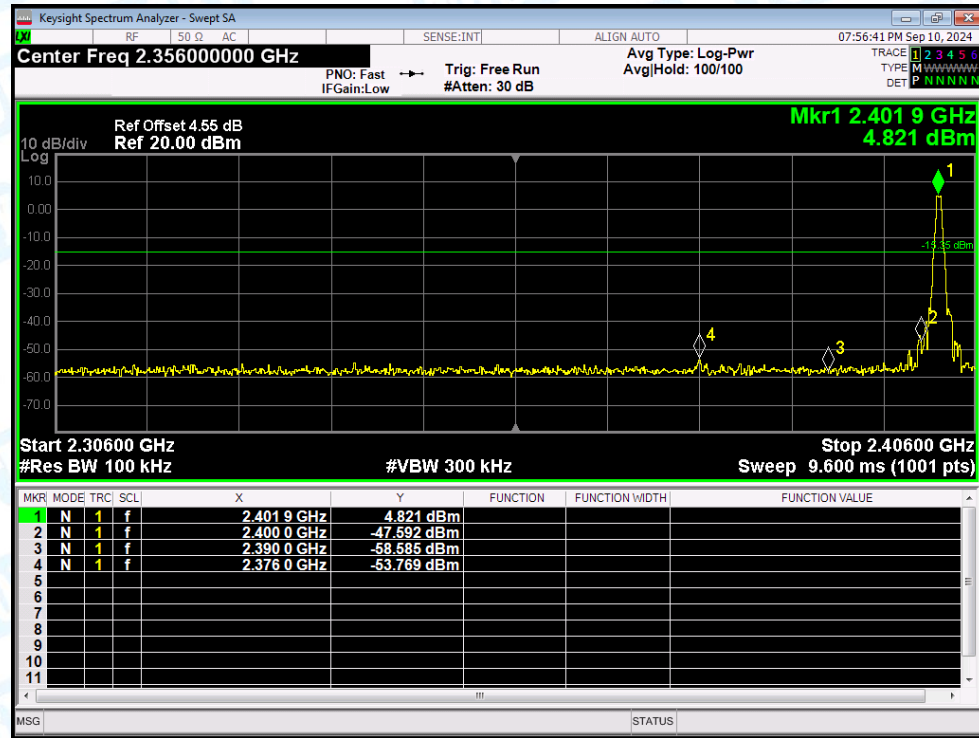
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-58.42	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-57.45	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-58.11	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-57.4	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-58.78	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-57.91	-20	Pass

Test Graphs

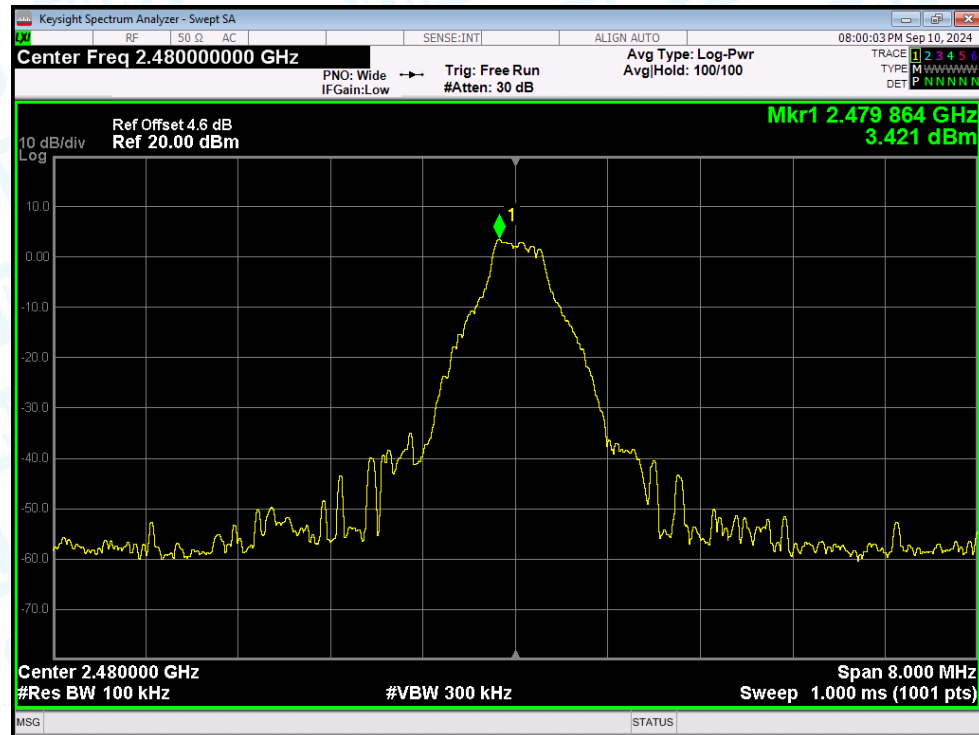
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



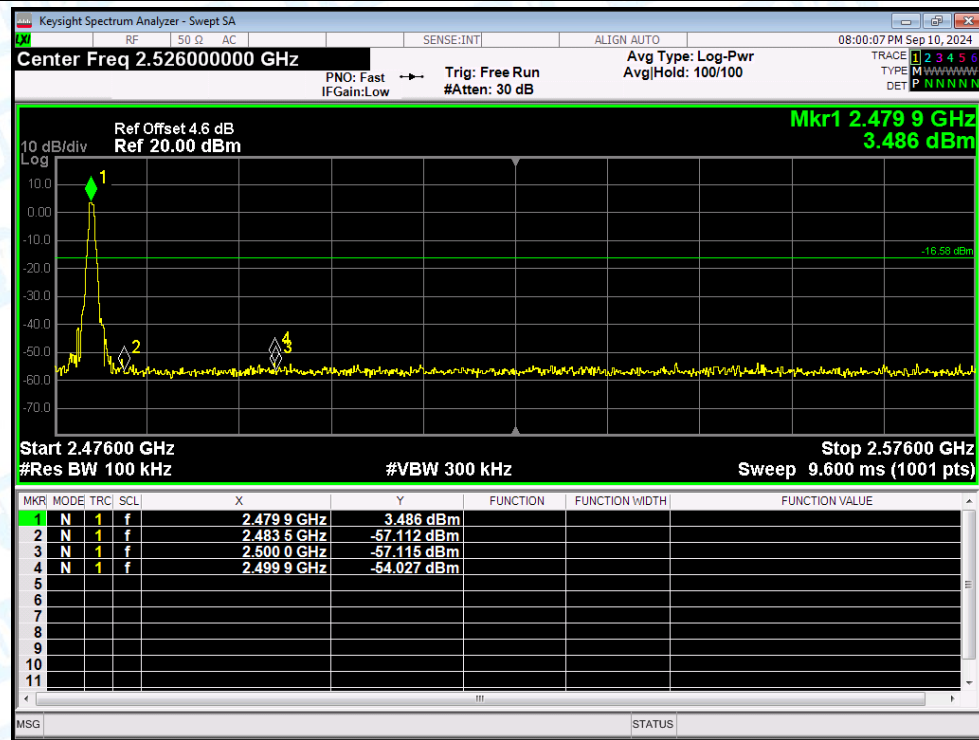
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



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



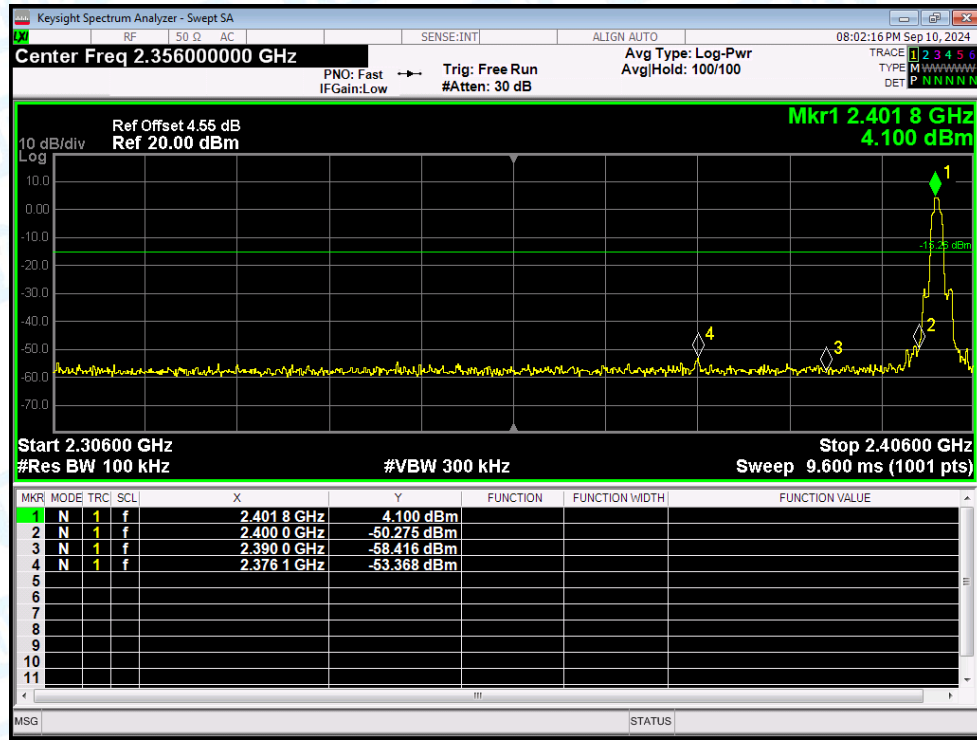
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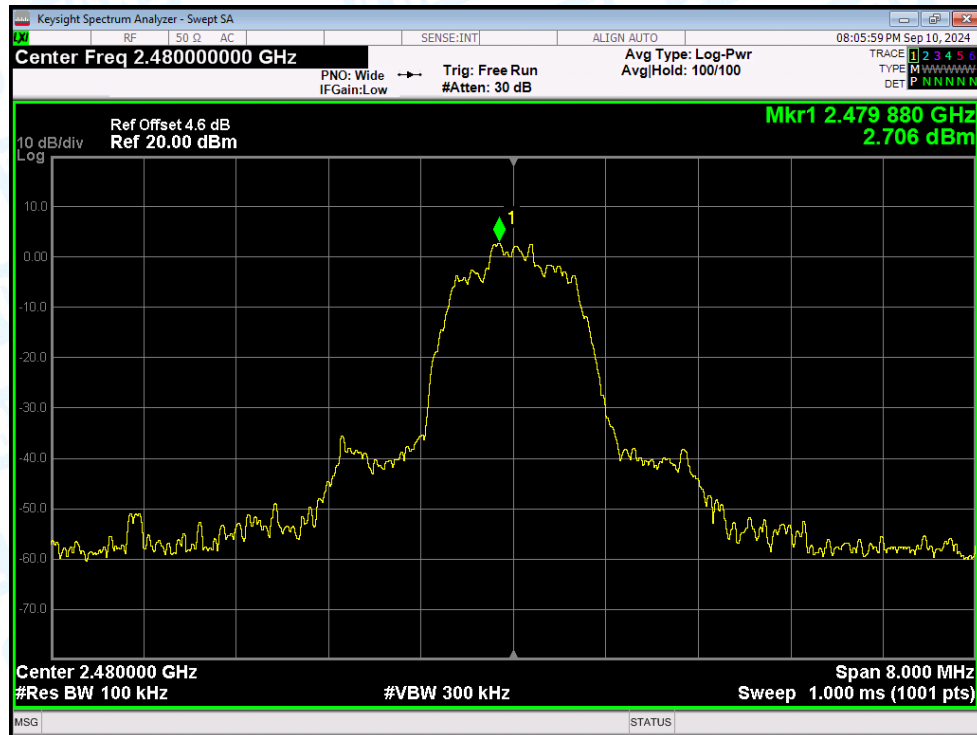
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



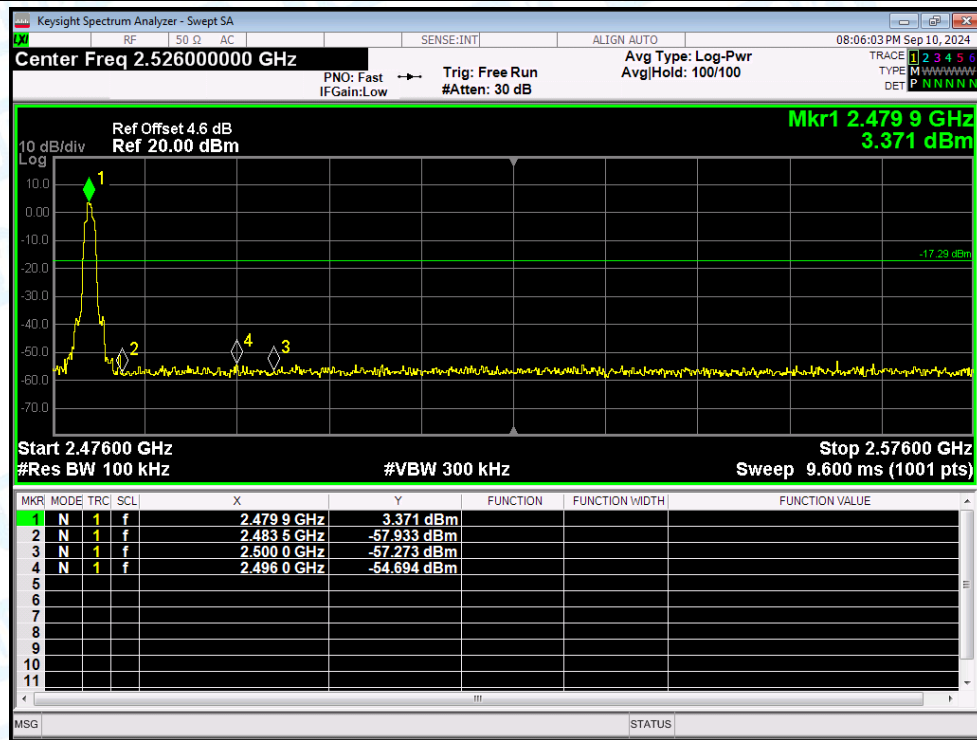
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Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



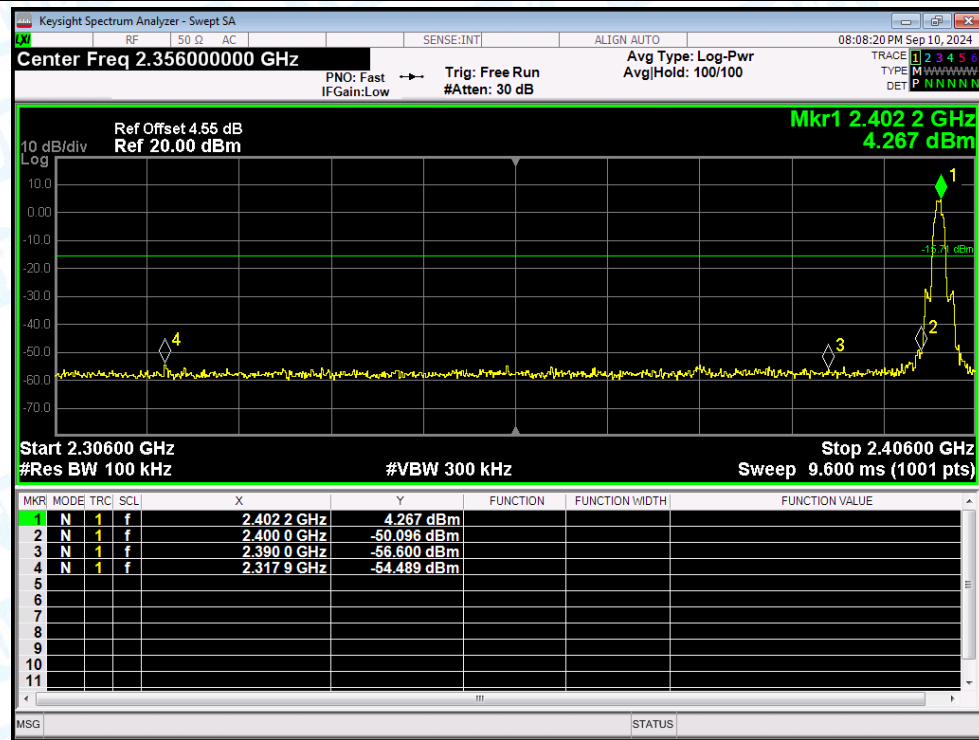
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



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



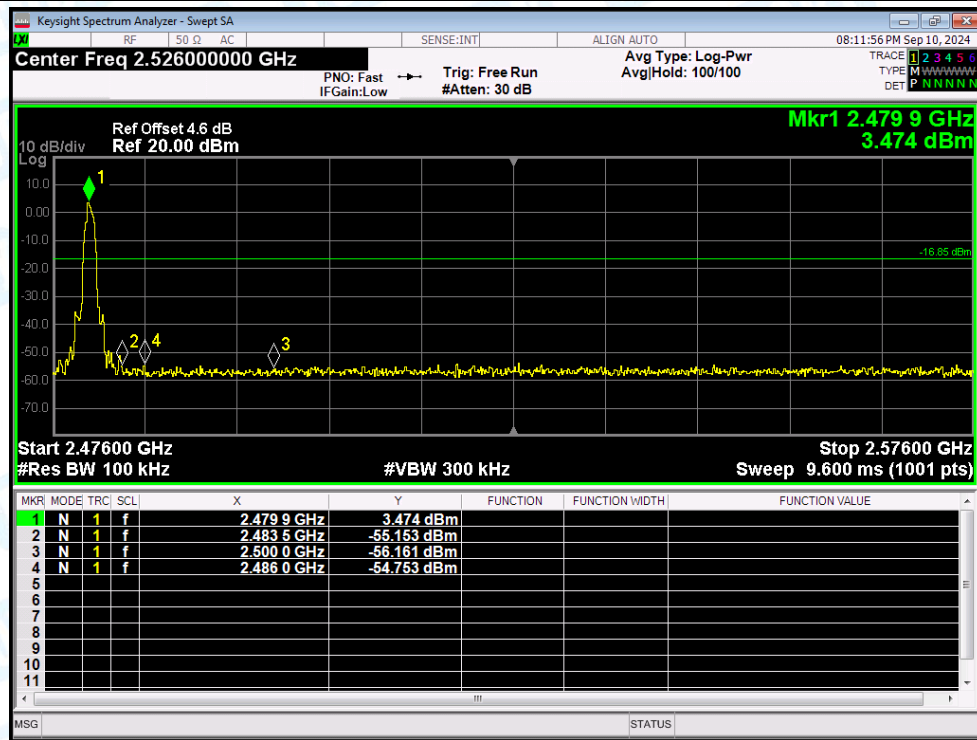
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

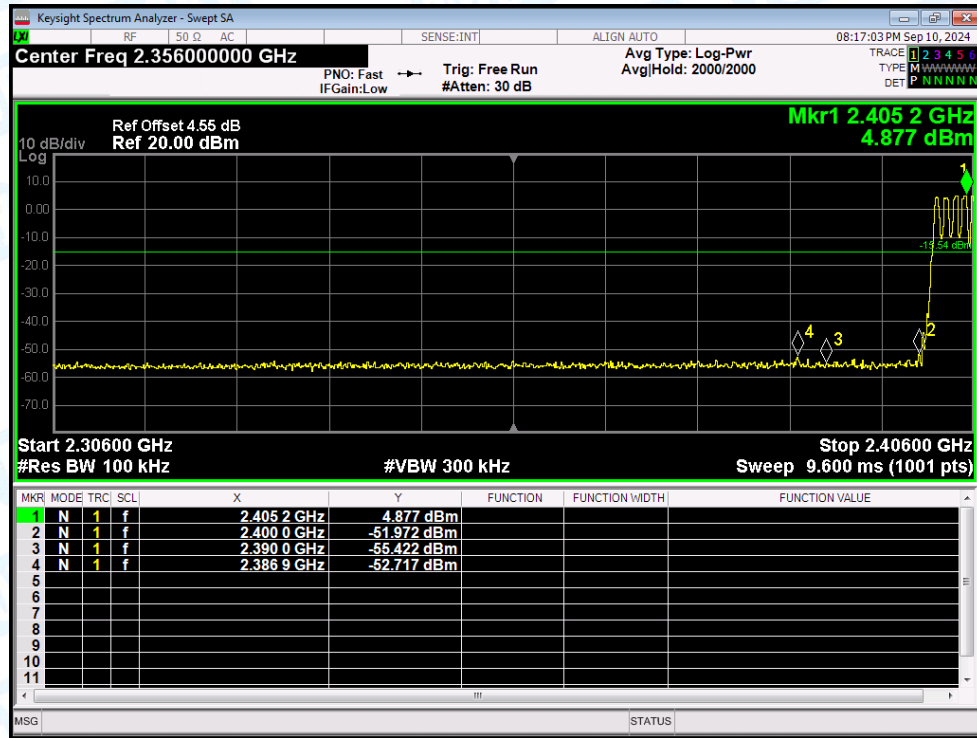
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-57.19	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-56.27	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.93	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-57.04	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-57.31	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-56.66	-20	Pass

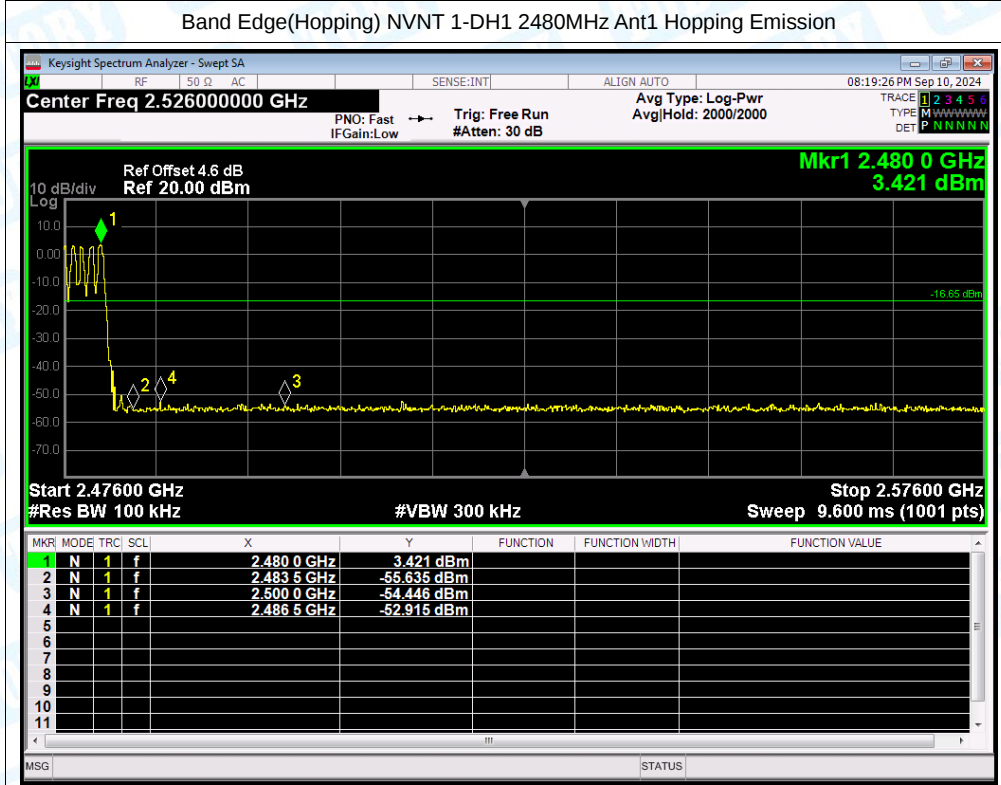
Test Graphs

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



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

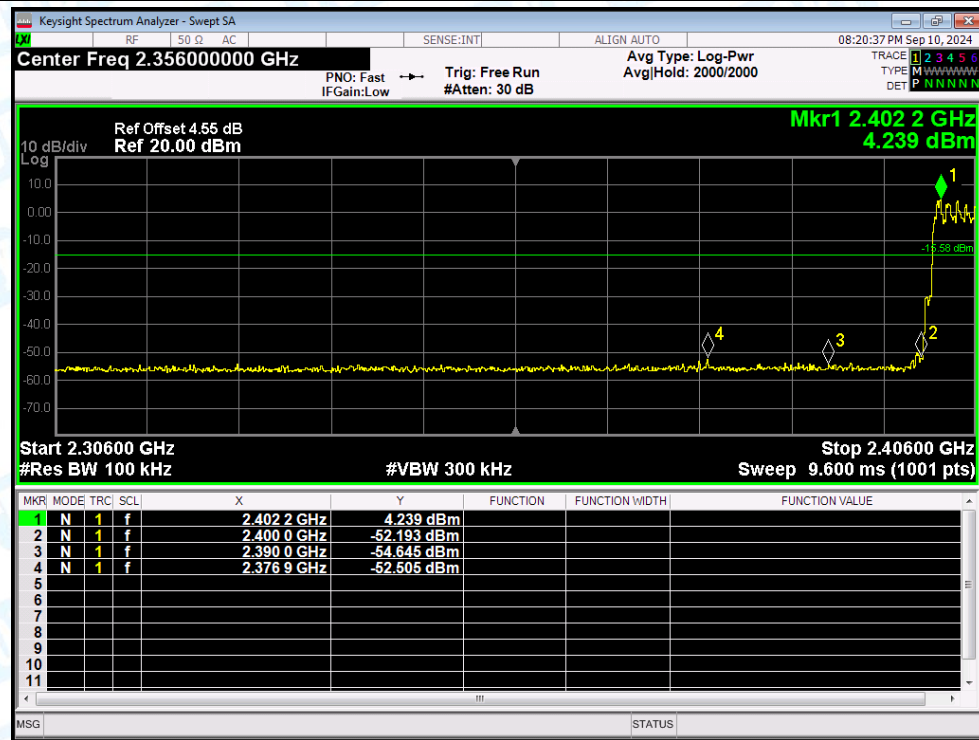


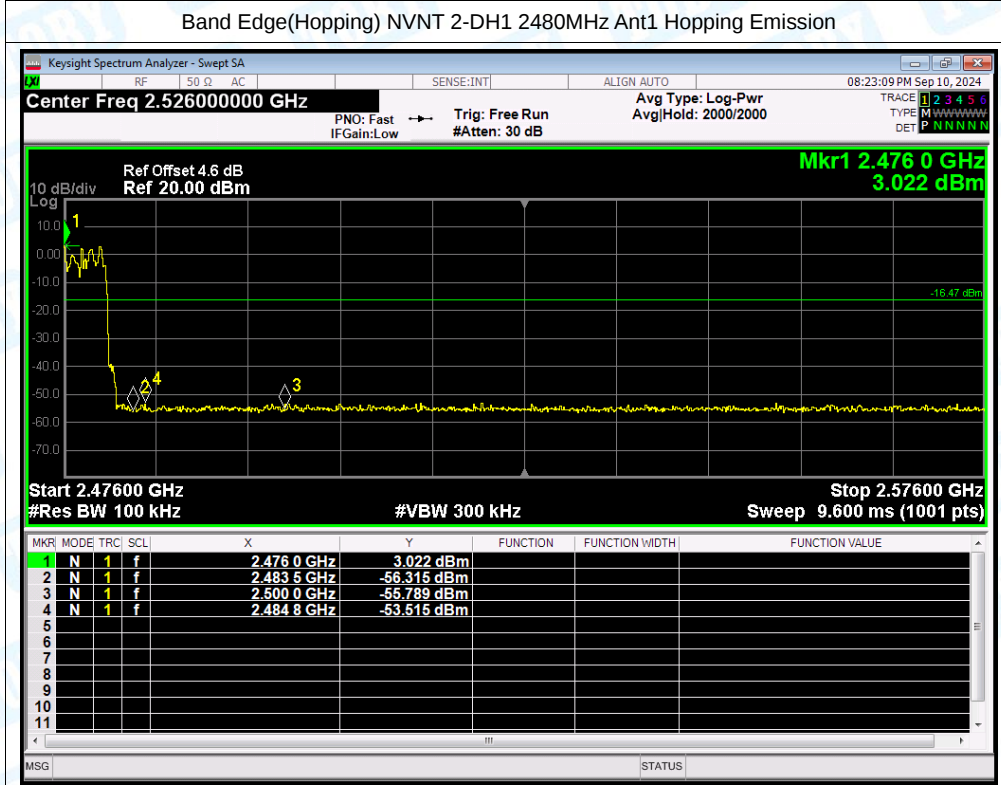


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



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

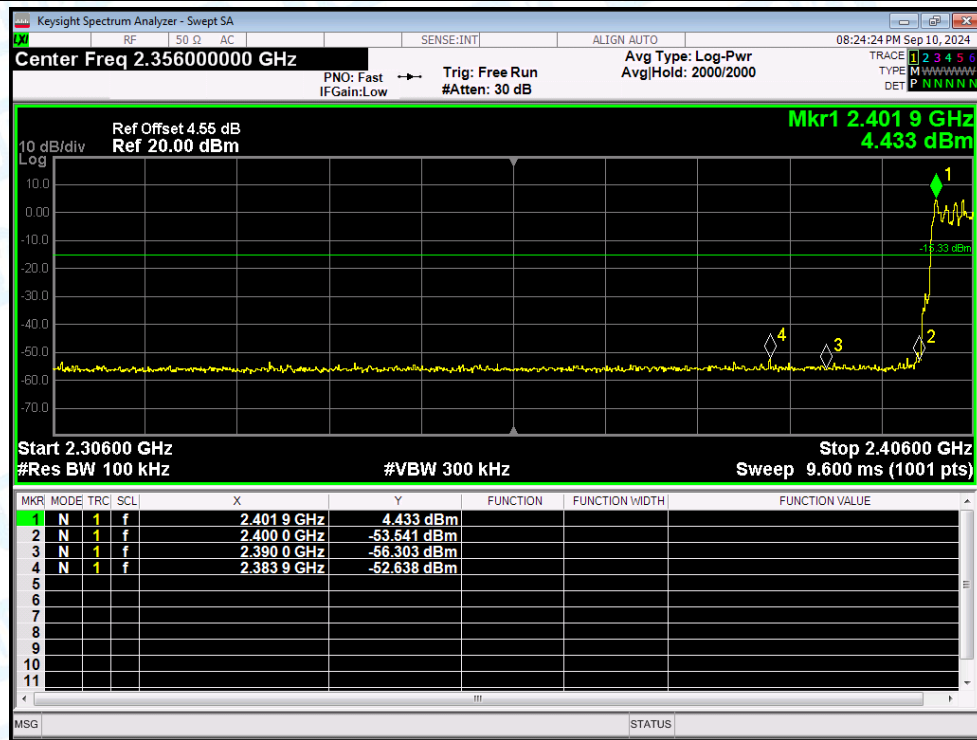


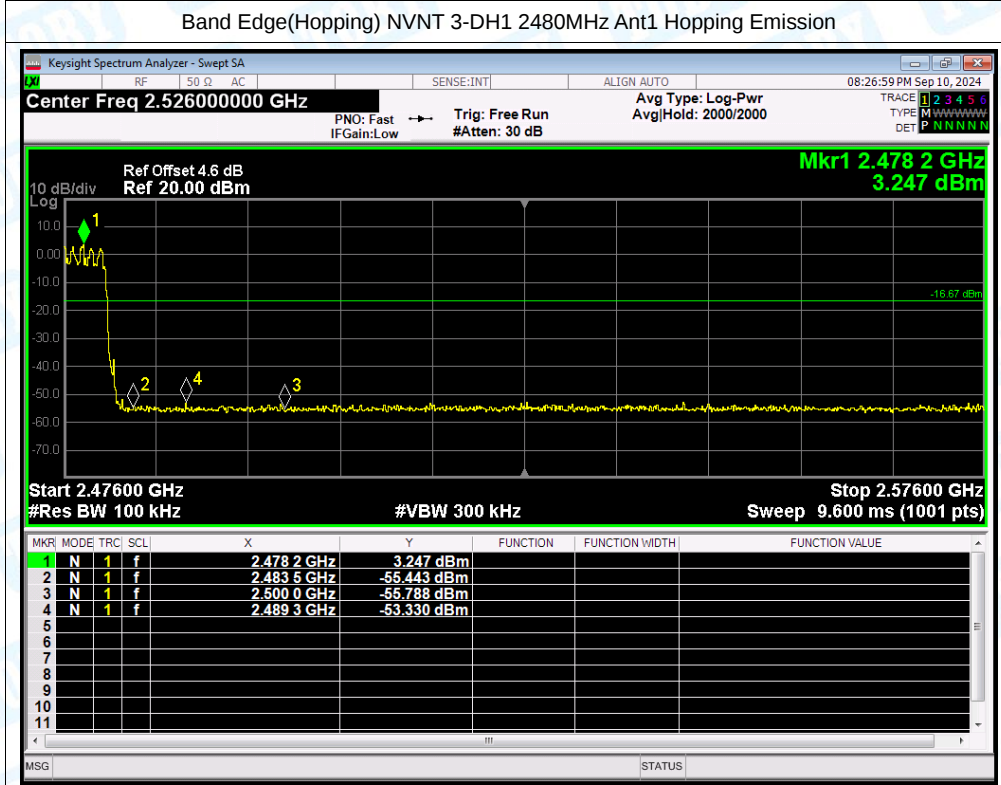


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



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



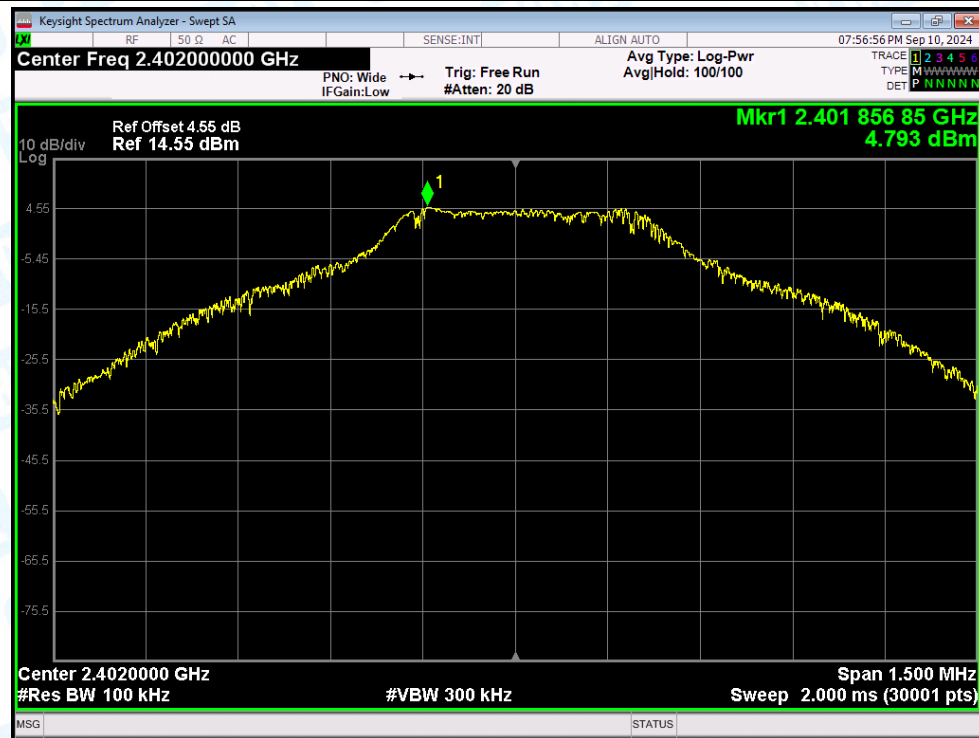


7. Conducted RF Spurious Emission

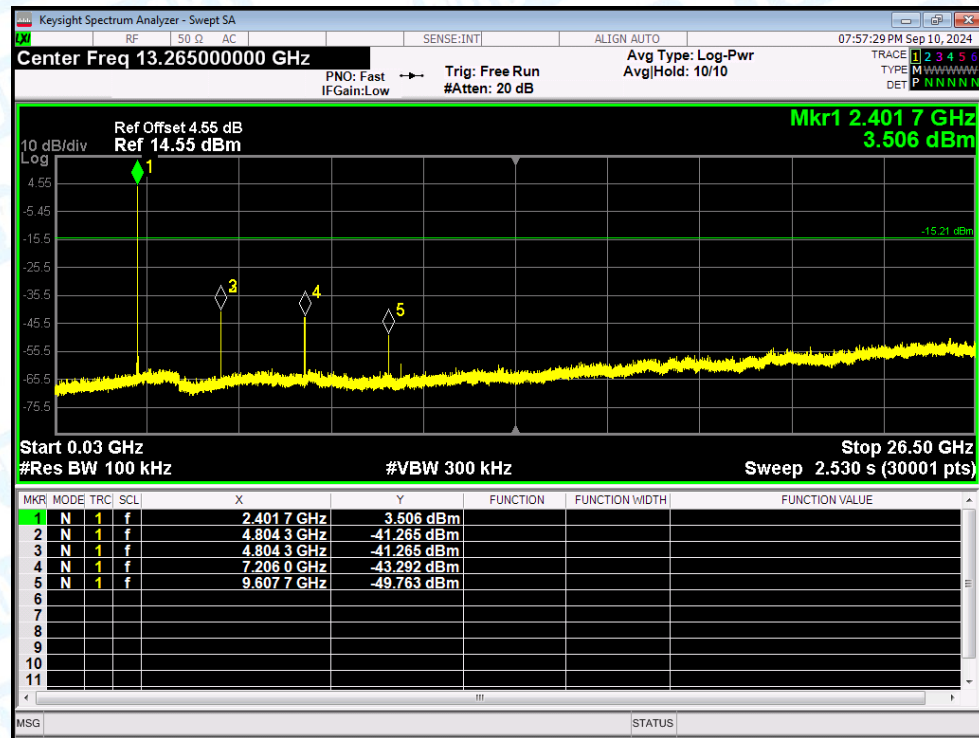
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-46.06	-20	Pass
NVNT	1-DH1	2441	Ant1	-43.71	-20	Pass
NVNT	1-DH1	2480	Ant1	-47.85	-20	Pass
NVNT	2-DH1	2402	Ant1	-45.47	-20	Pass
NVNT	2-DH1	2441	Ant1	-46.06	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.59	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.81	-20	Pass
NVNT	3-DH1	2441	Ant1	-47.61	-20	Pass
NVNT	3-DH1	2480	Ant1	-48.38	-20	Pass

Test Graphs

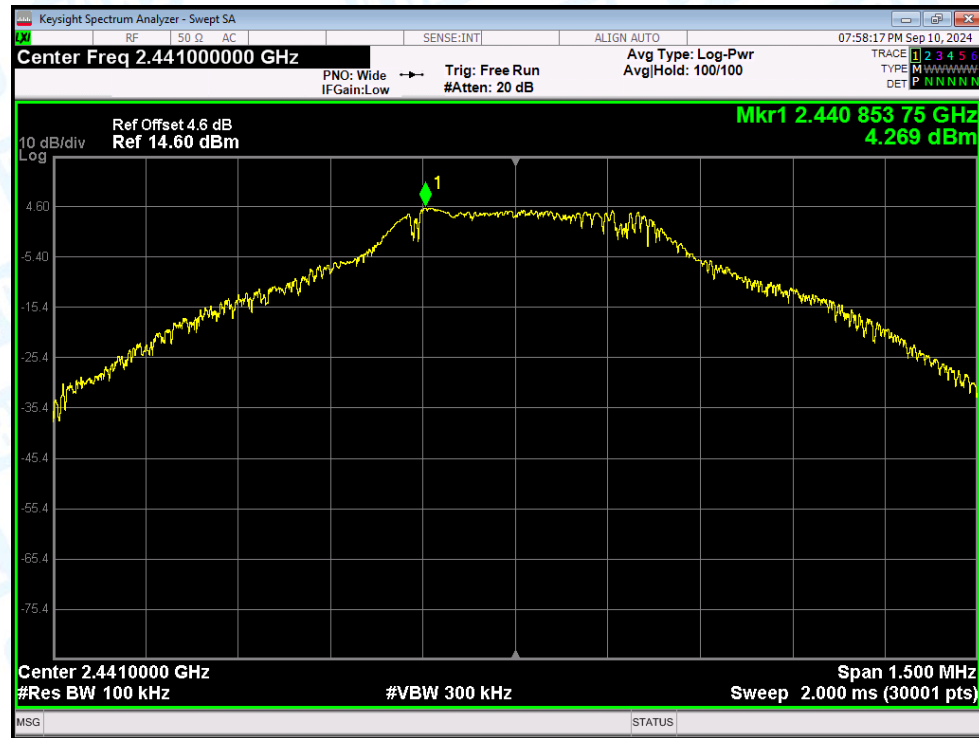
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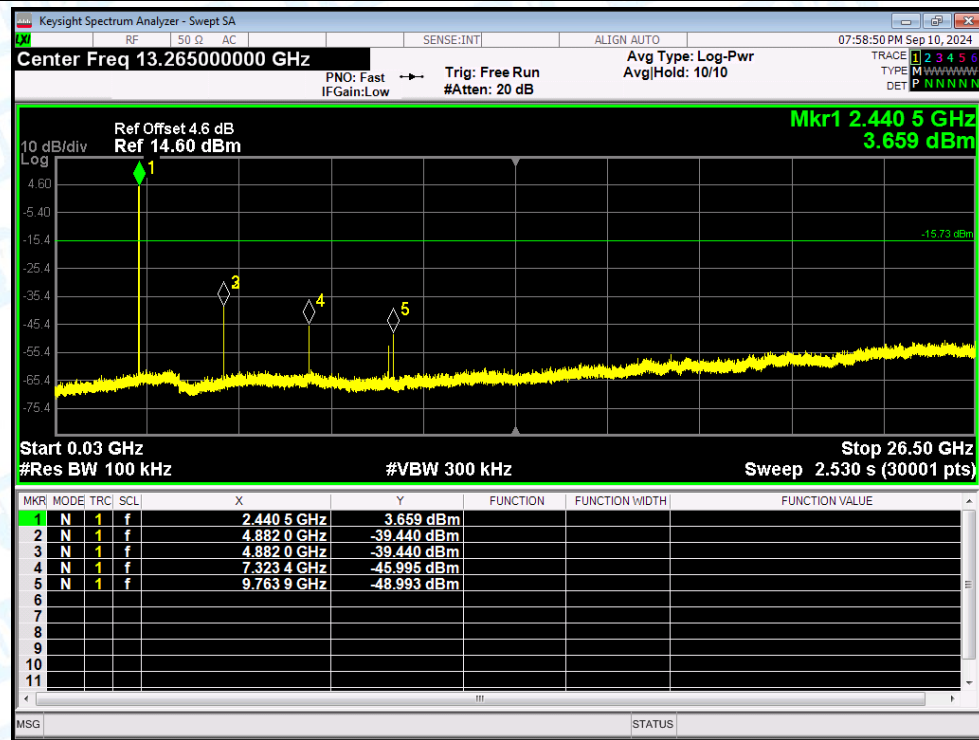
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



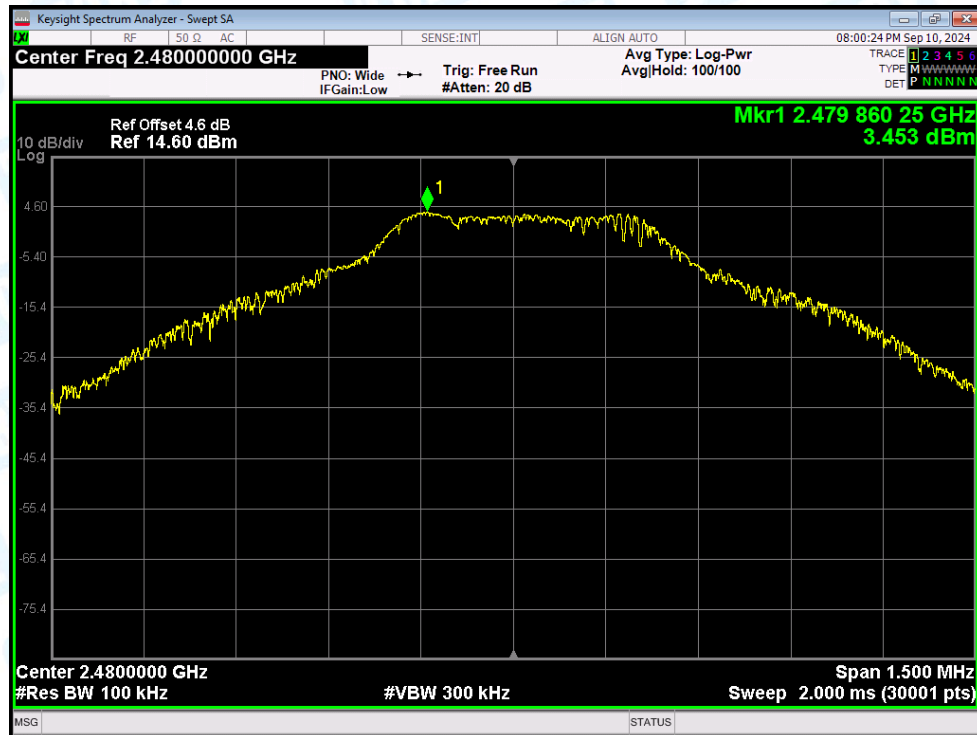
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



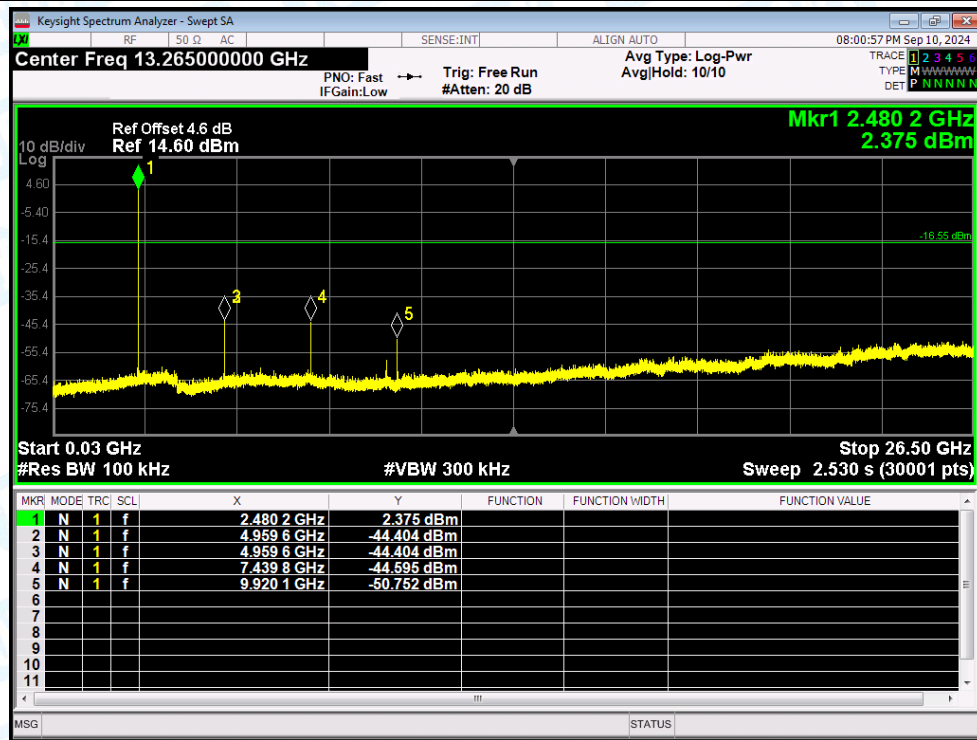
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



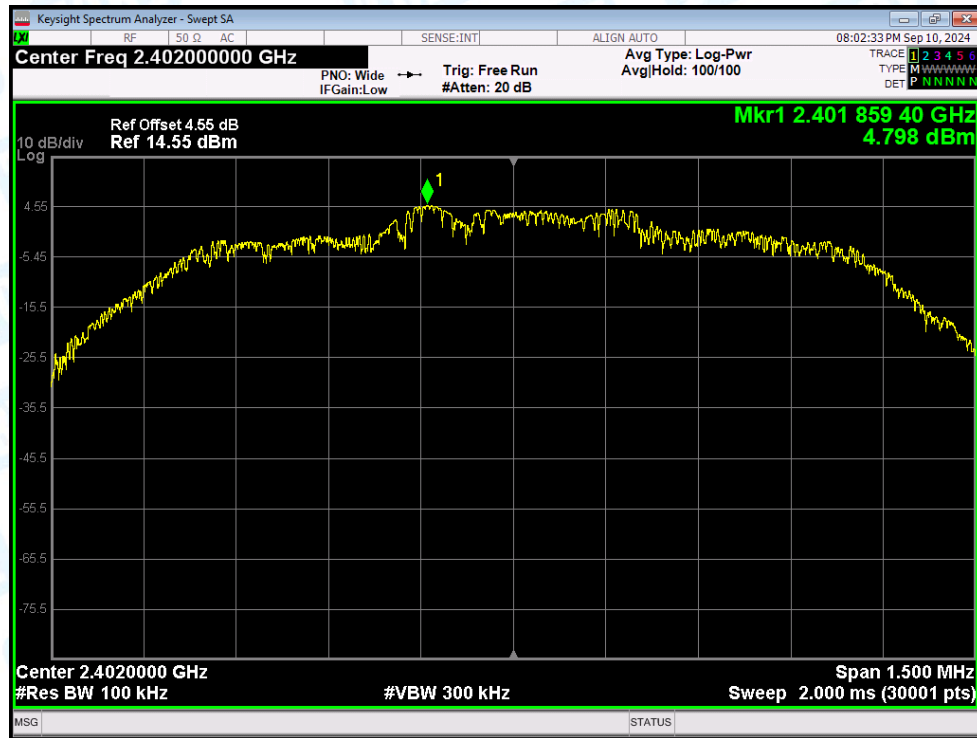
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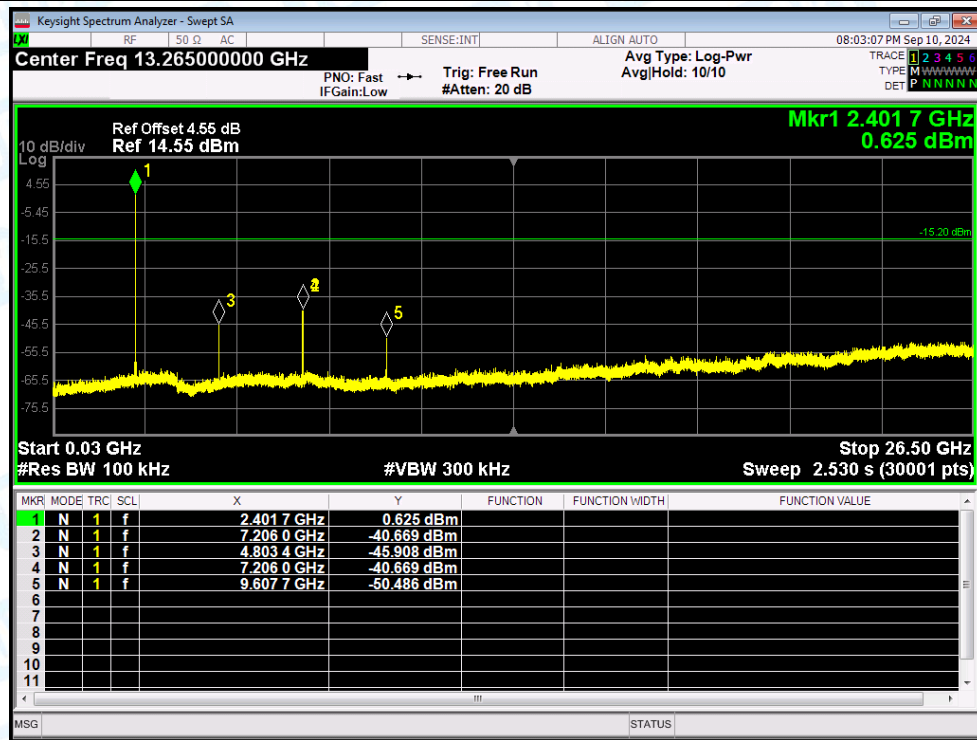
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



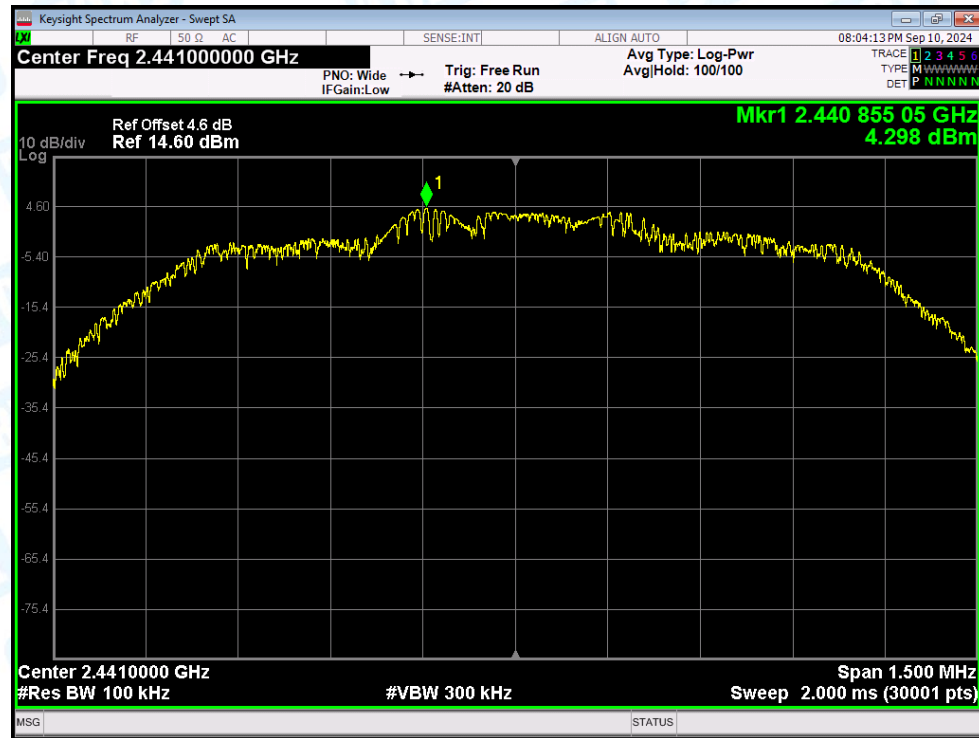
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



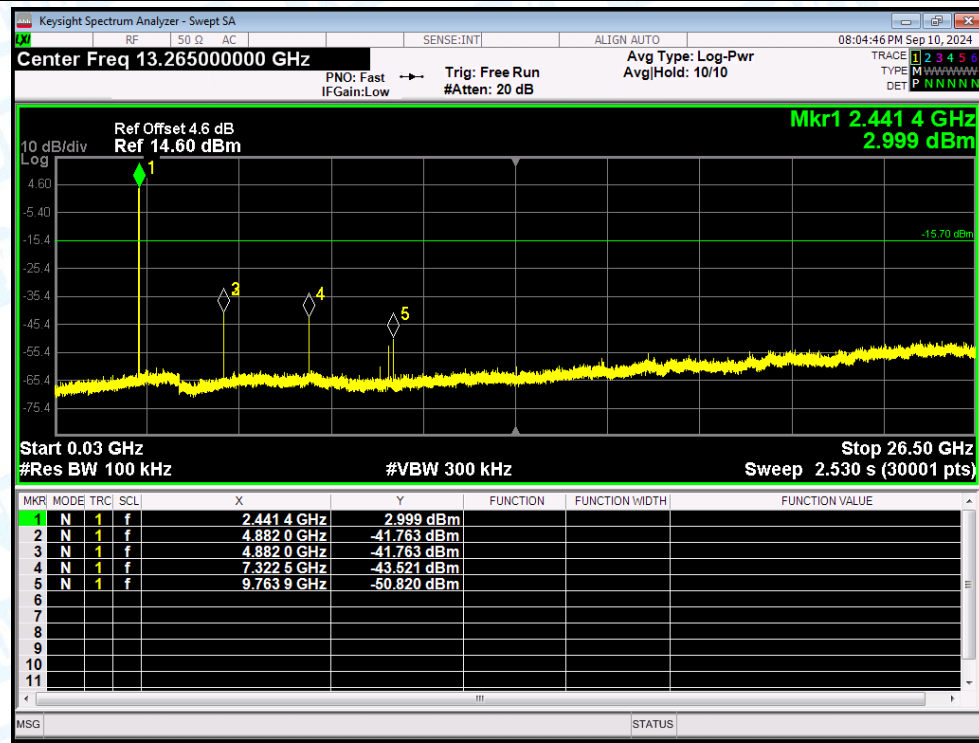
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



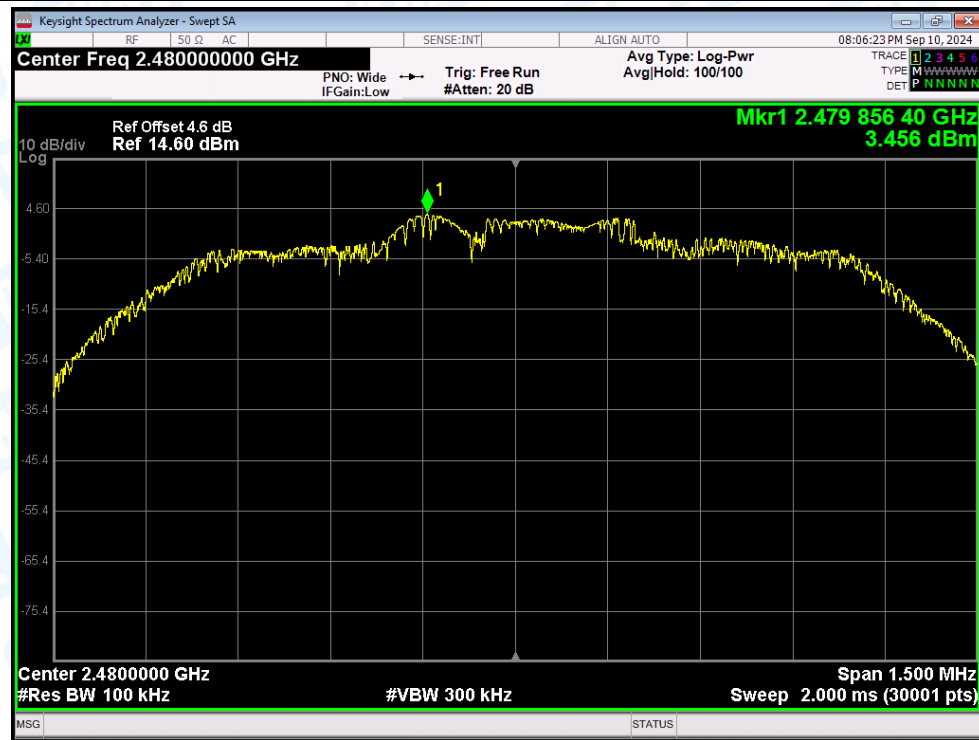
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



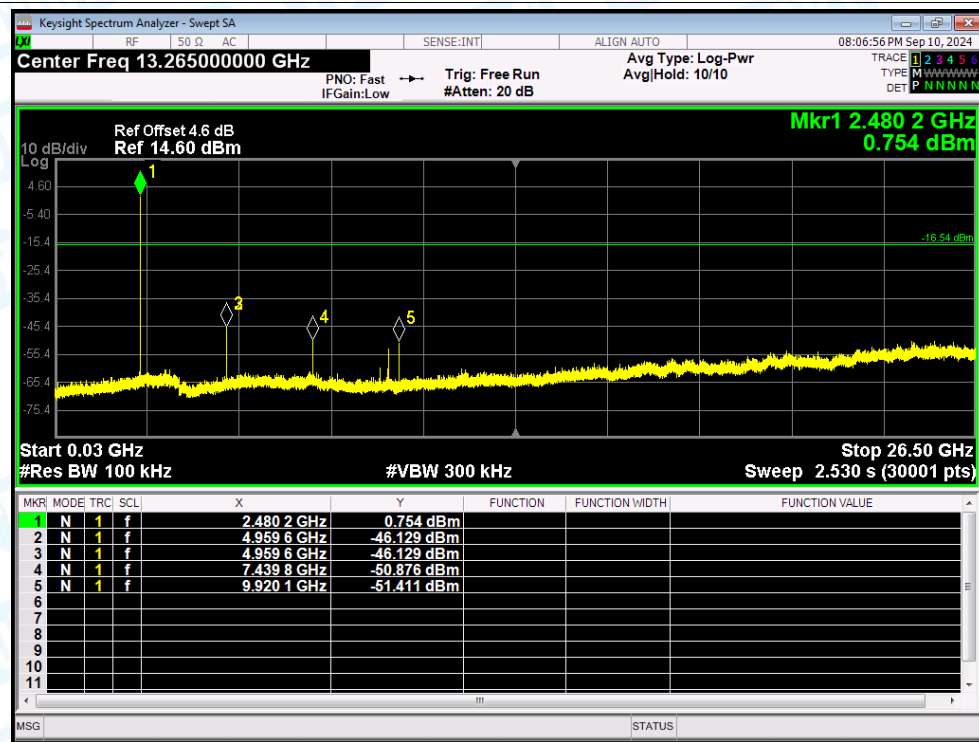
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



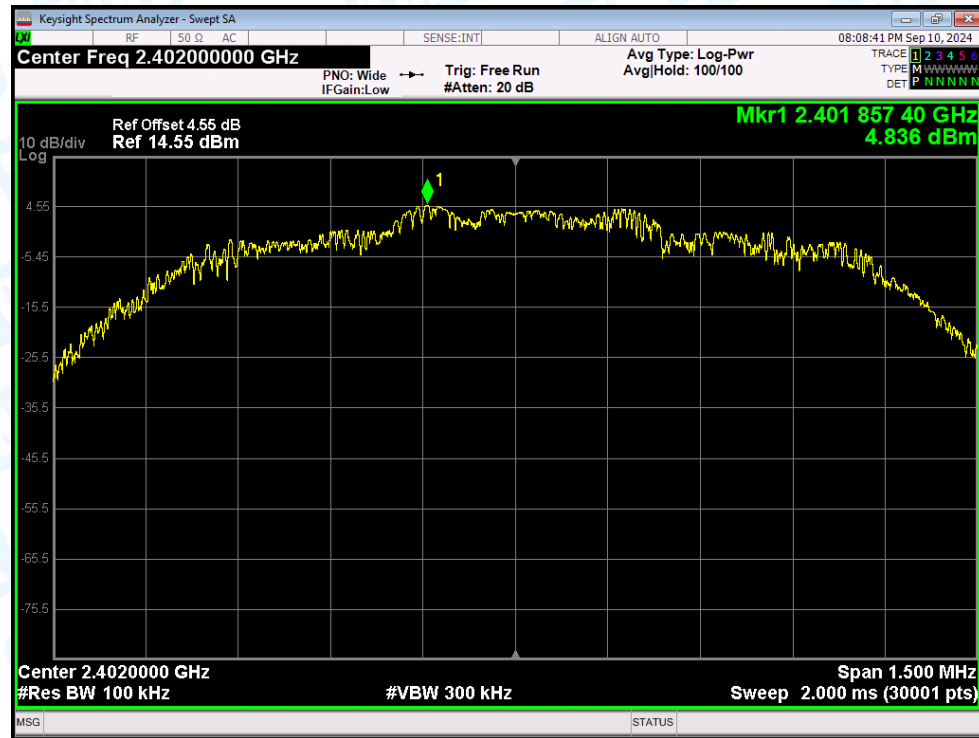
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



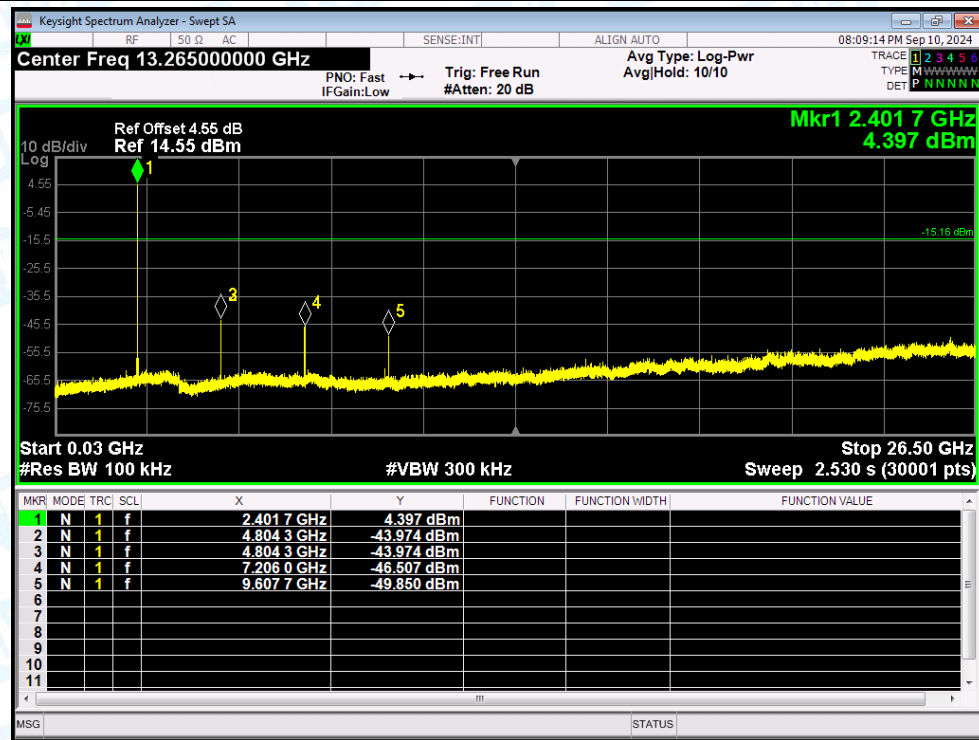
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



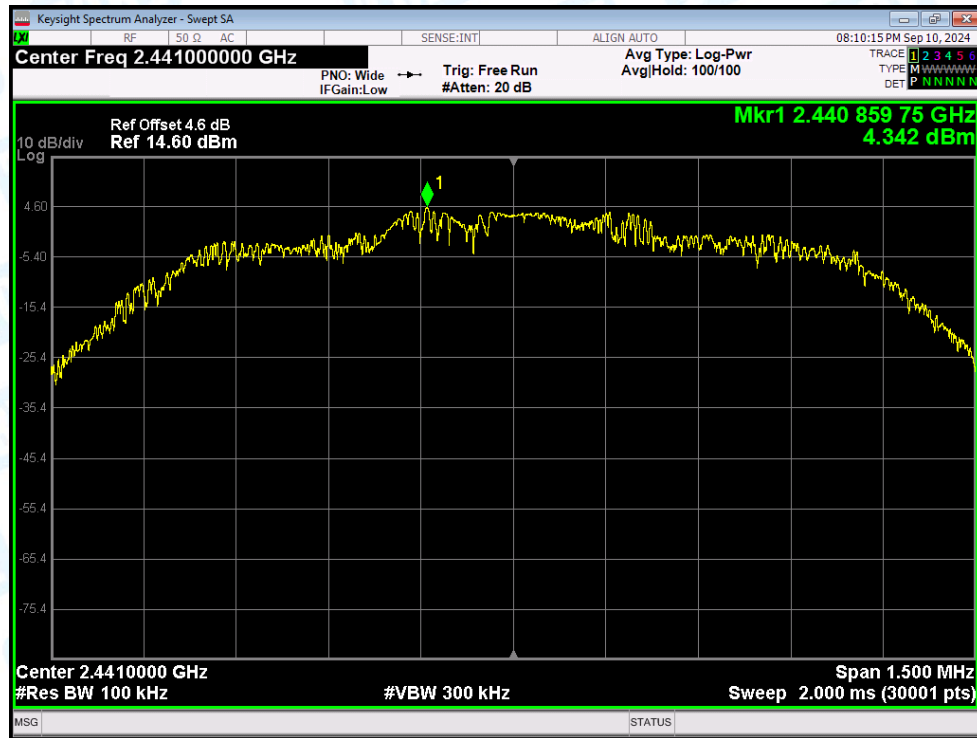
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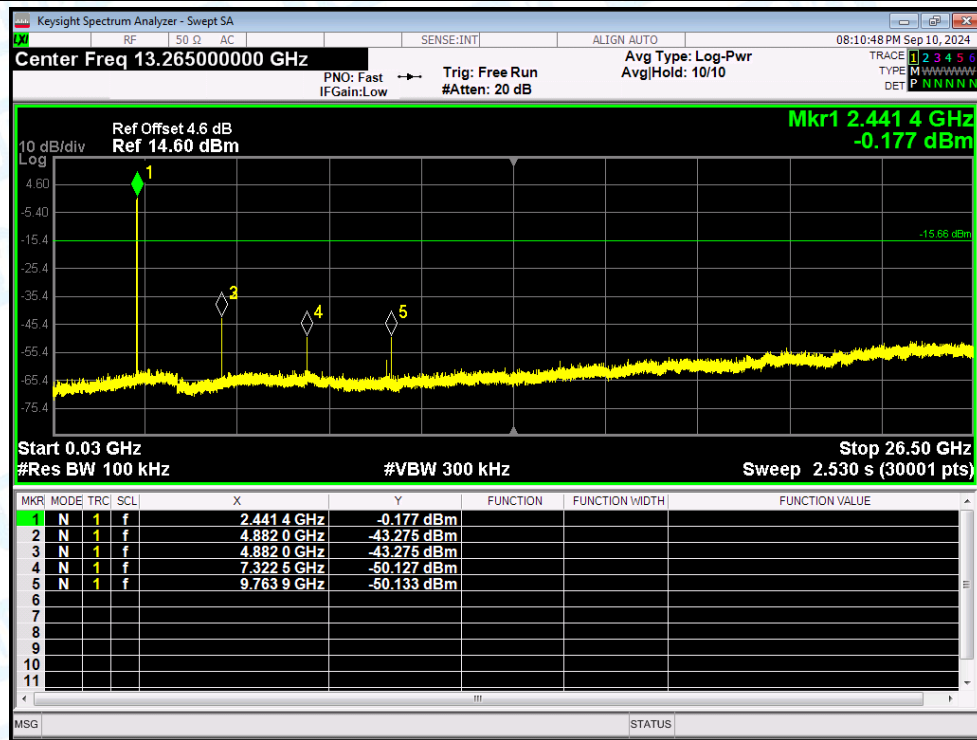
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



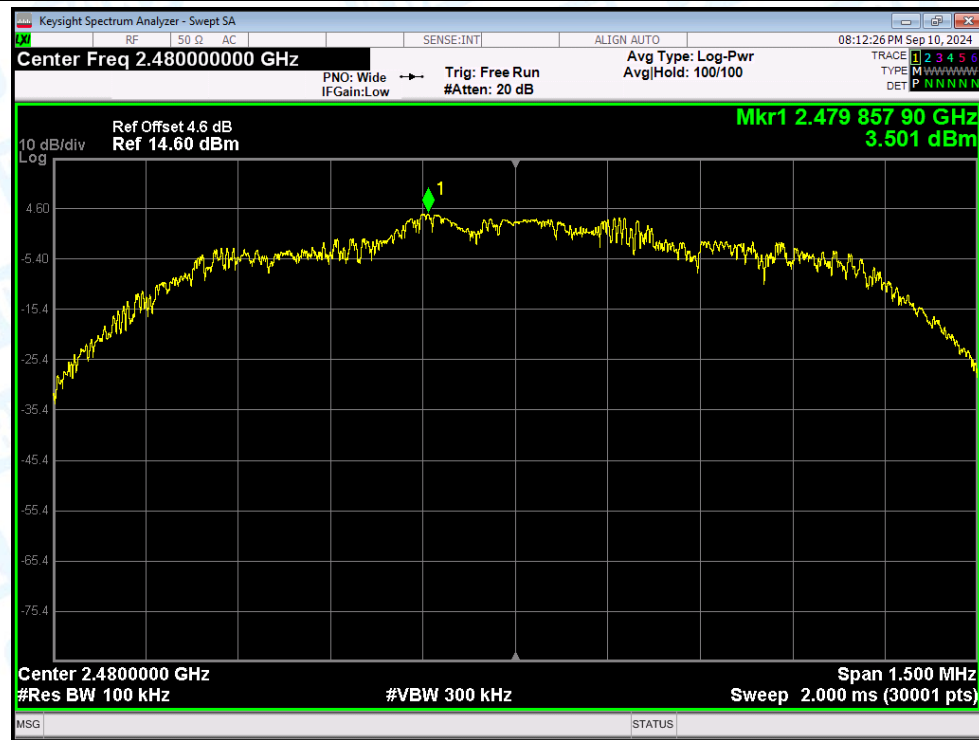
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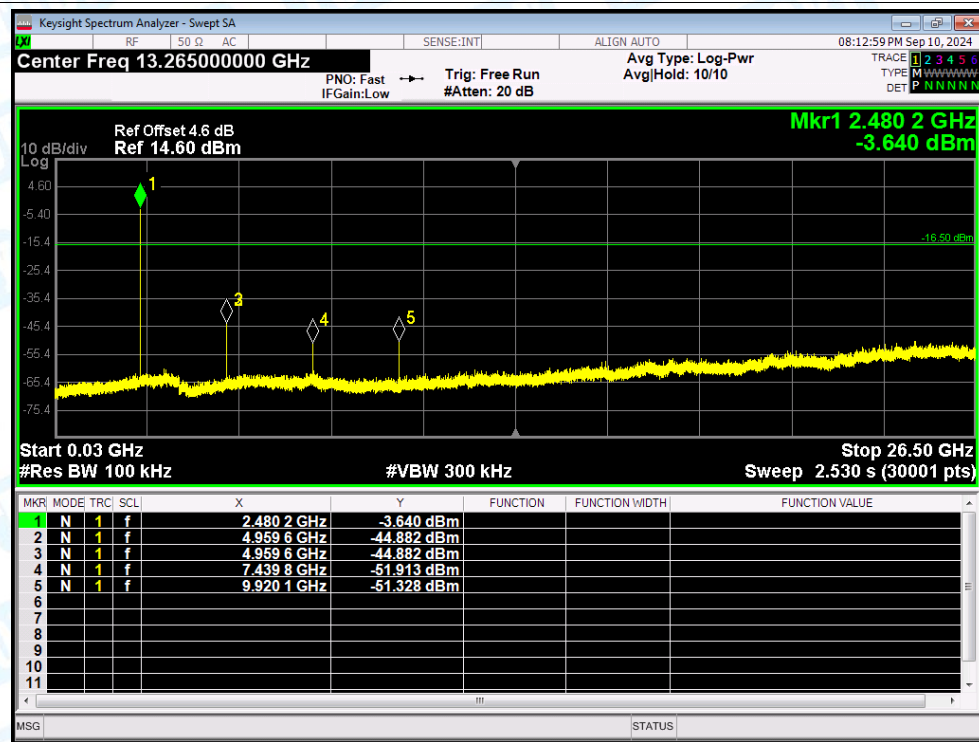
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

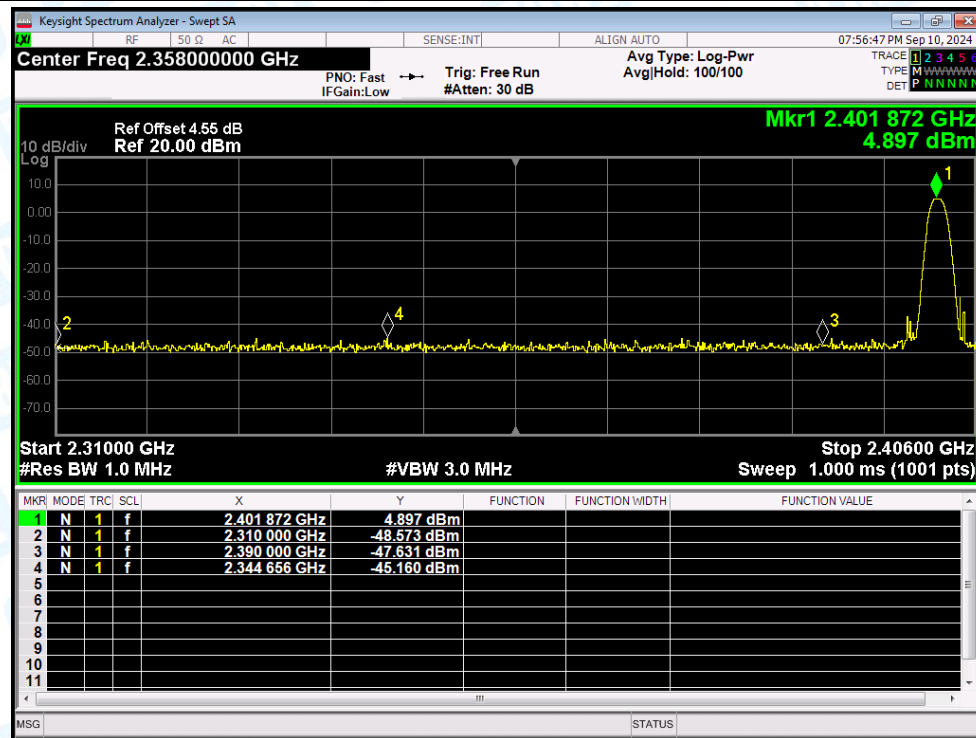


8.Restrict Band

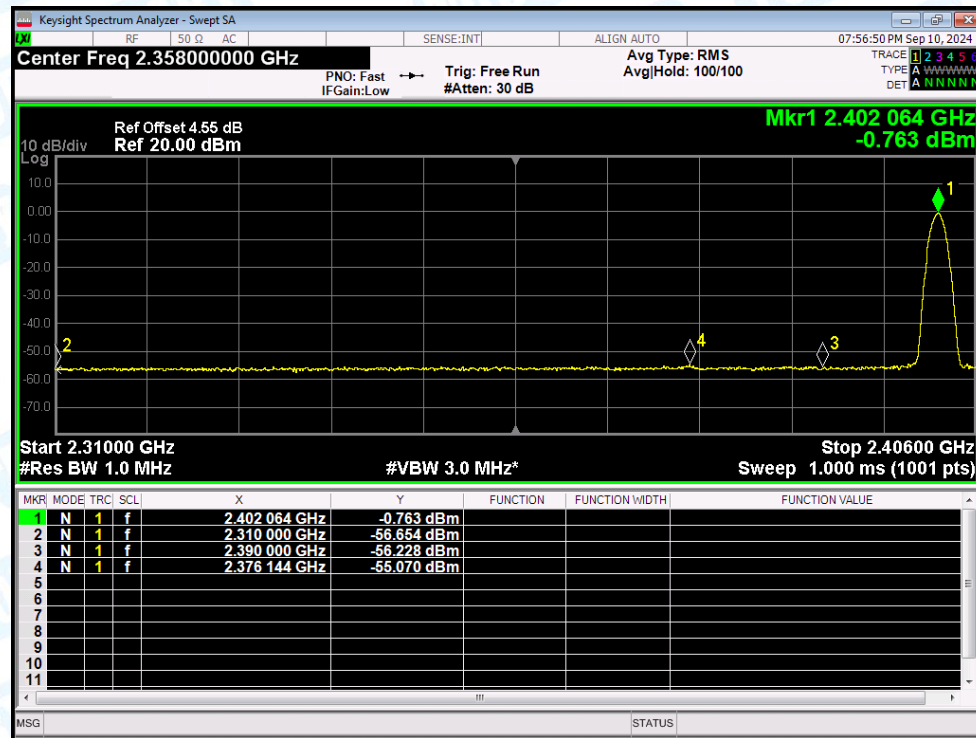
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.57	2	-	48.69	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.65	2	4.95	45.56	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2344.656	-45.16	2	-	52.1	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2376.144	-55.07	2	4.95	47.14	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.63	2	-	49.63	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-56.23	2	4.95	45.98	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.1	2	-	50.16	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.95	2	5.06	47.37	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.56	-41.89	2	-	55.37	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.632	-54.53	2	5.06	47.79	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-48.89	2	-	48.37	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.79	2	5.06	46.53	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.58	2	-	50.68	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.78	2	4.84	45.32	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2376.144	-44.31	2	-	52.95	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2358.192	-55.19	2	4.84	46.91	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.68	2	-	50.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.49	2	4.84	45.61	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-47.74	2	-	49.52	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.76	2	4.84	46.34	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.824	-40.46	2	-	56.8	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2495.488	-54.87	2	4.84	47.23	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-48.27	2	-	48.99	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.51	2	4.84	46.59	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.48	2	-	48.78	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.93	2	4.84	46.17	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2311.44	-44.88	2	-	52.38	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2376.048	-54.84	2	4.84	47.26	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.04	2	-	49.22	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-56.47	2	4.84	45.63	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.63	2	-	50.63	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.99	2	4.84	46.11	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2487.928	-44.3	2	-	52.96	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2493.136	-54.87	2	4.84	47.23	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	-55.02	2	4.84	47.08	Average	54	Pass

Test Graphs

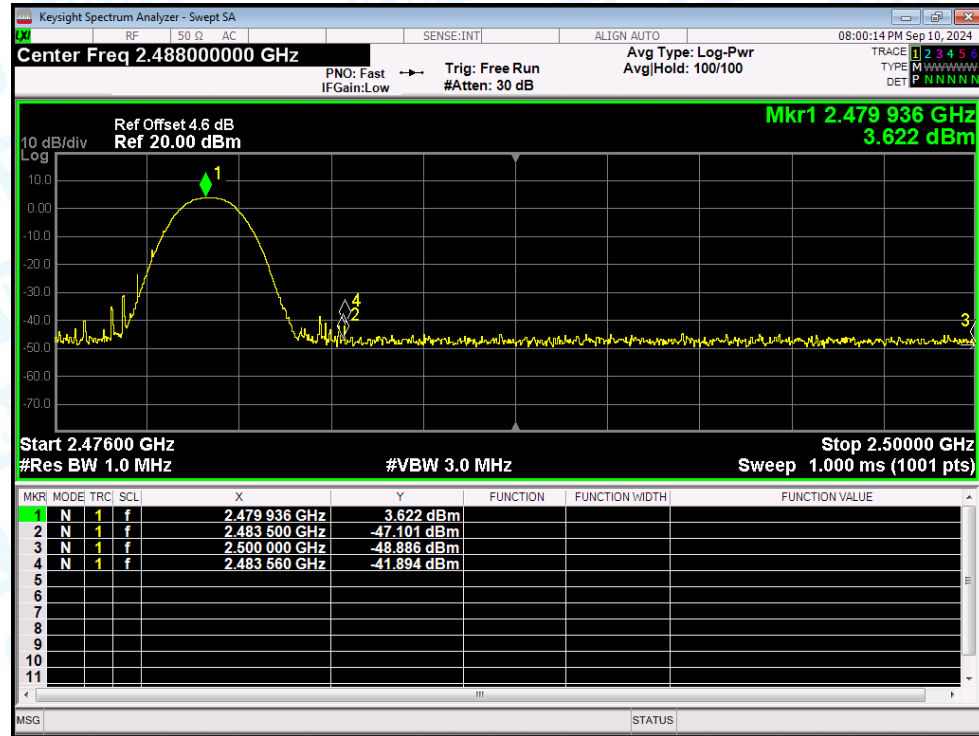
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



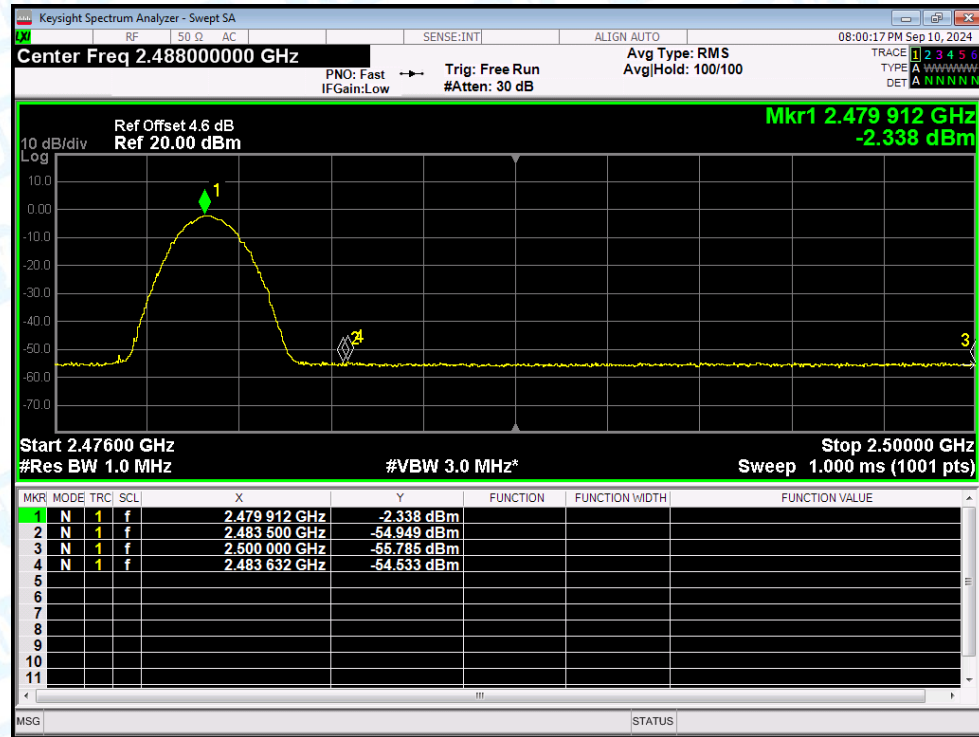
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



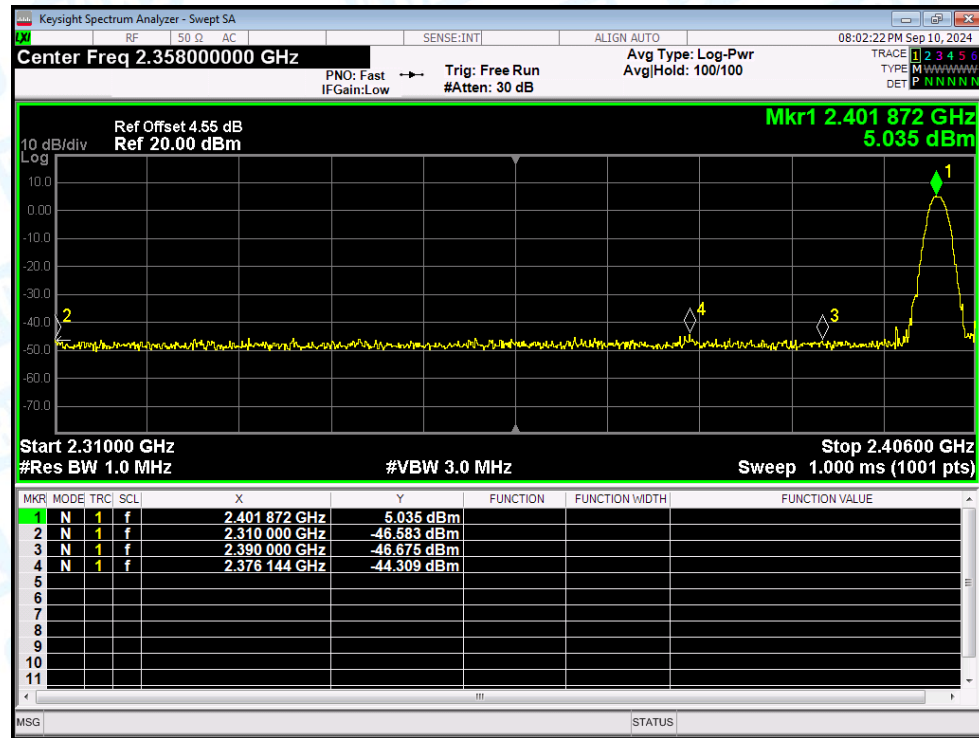
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



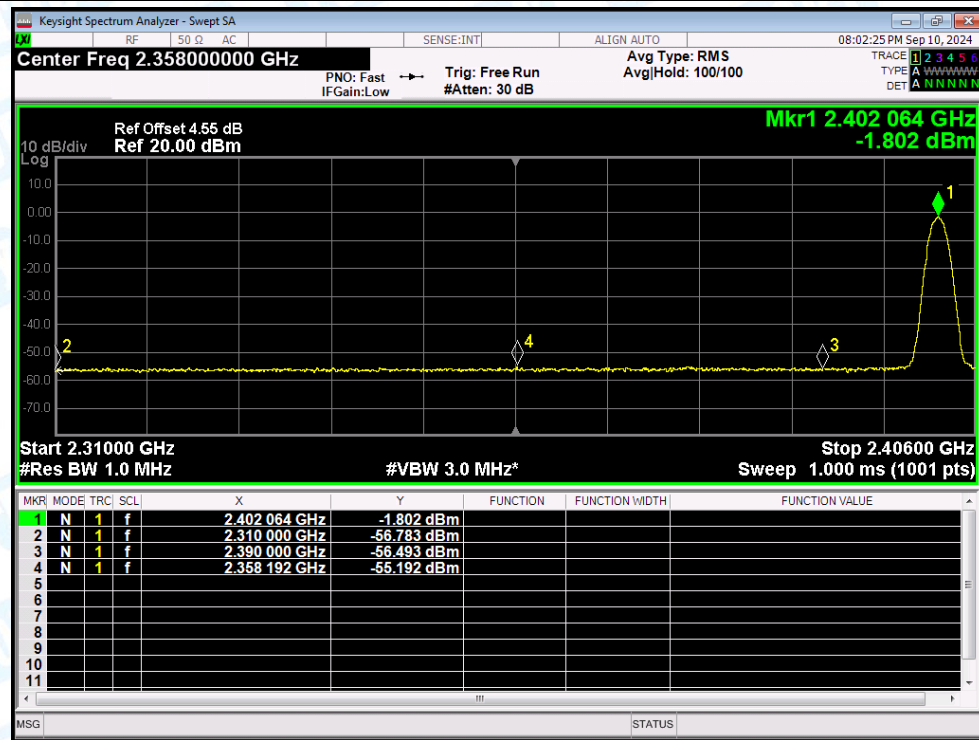
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



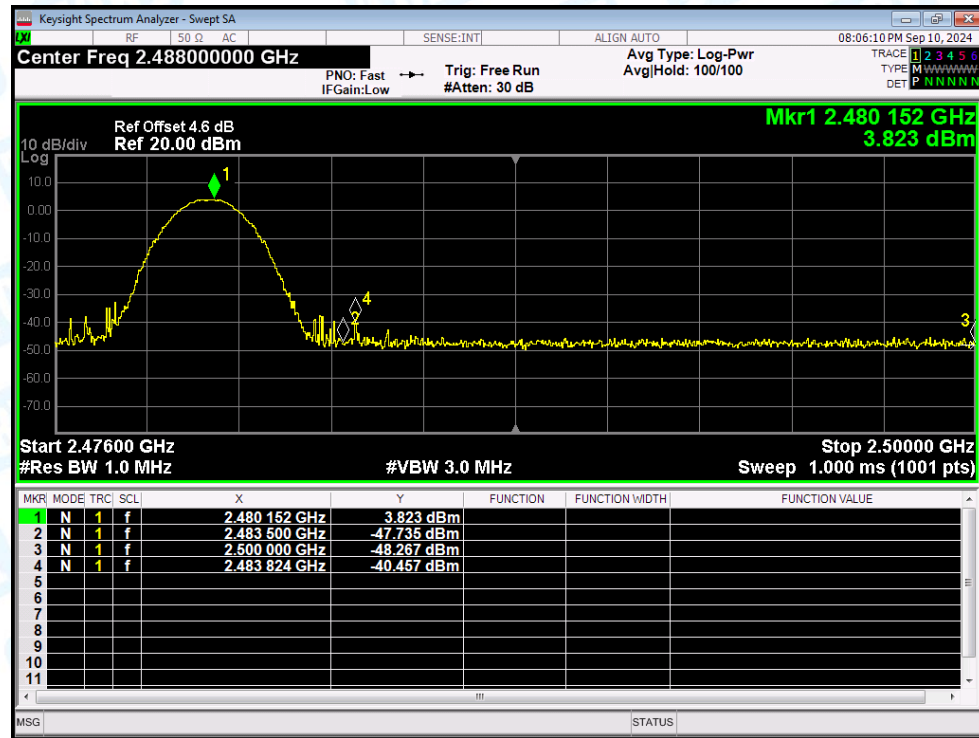
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



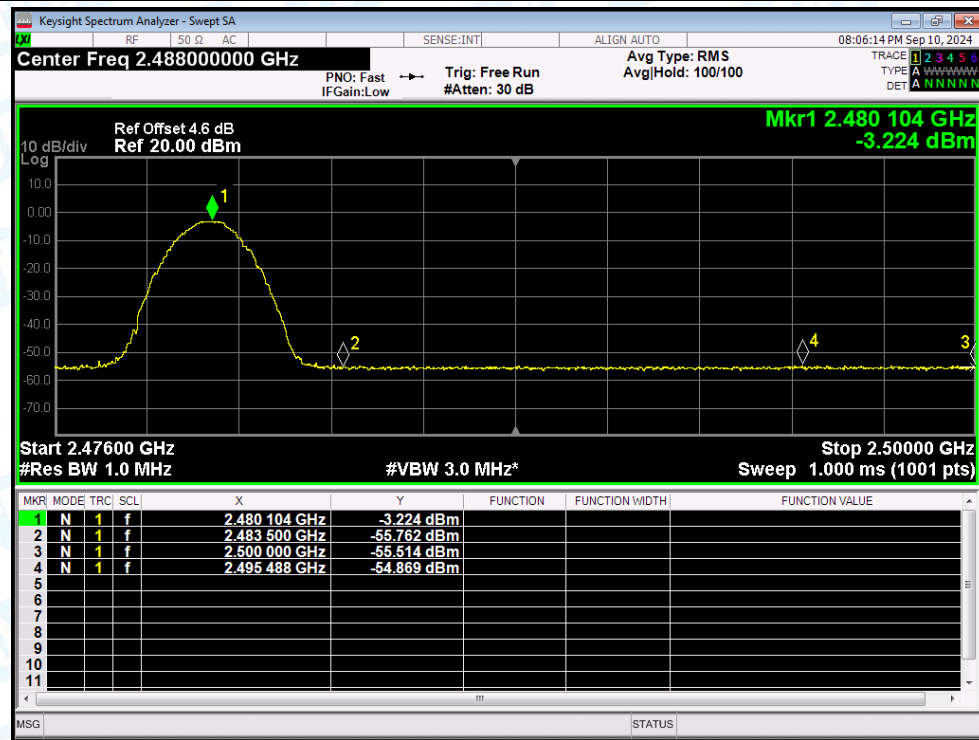
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



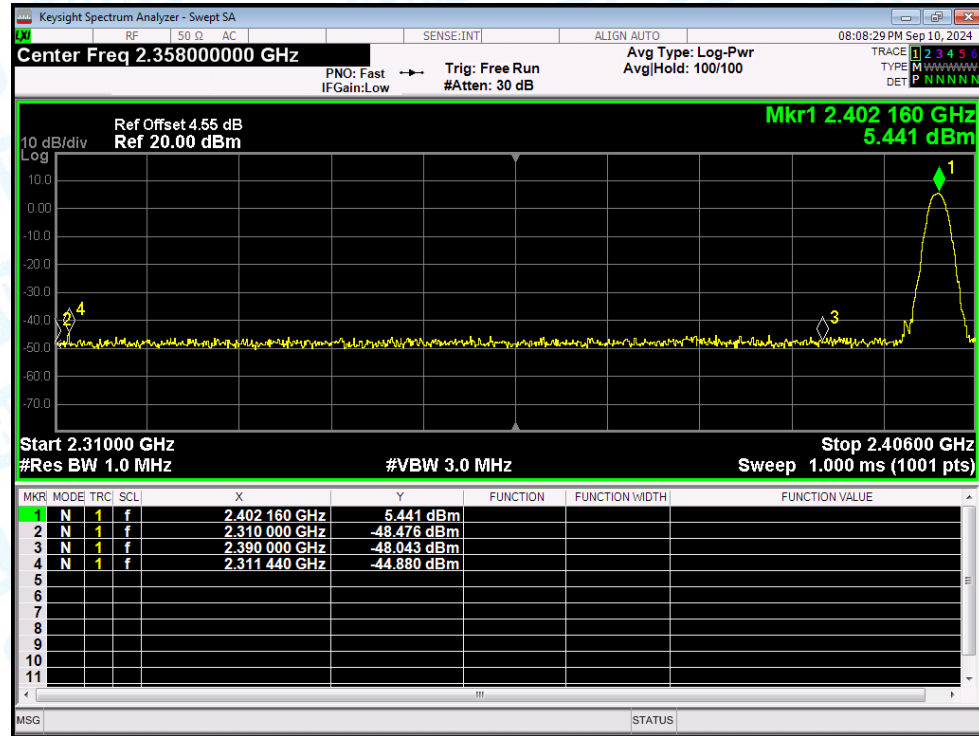
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



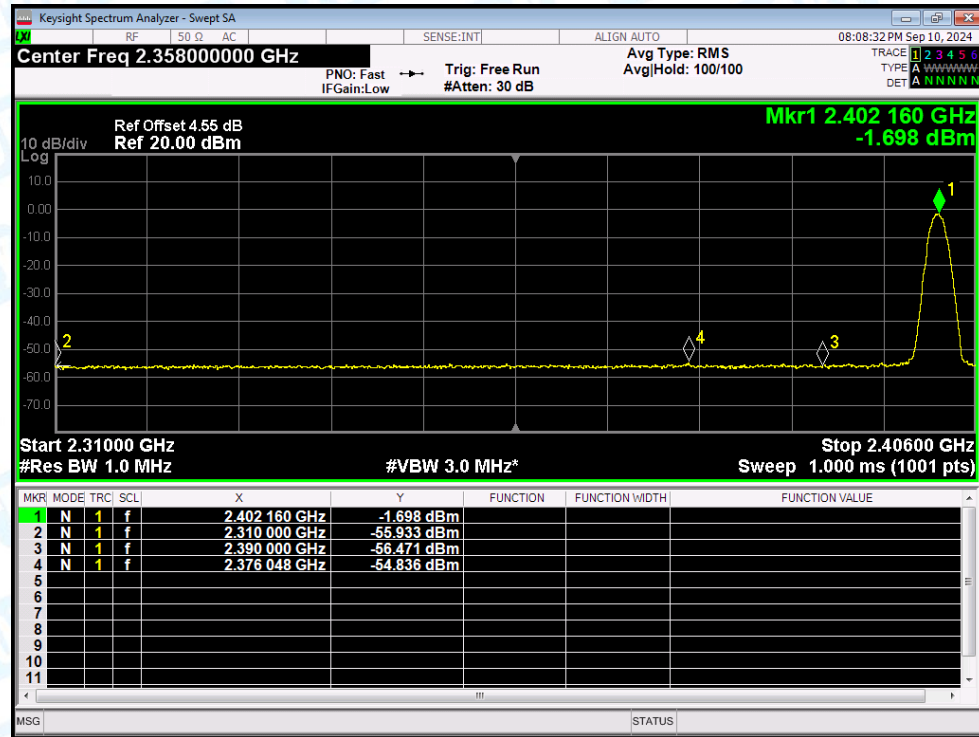
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



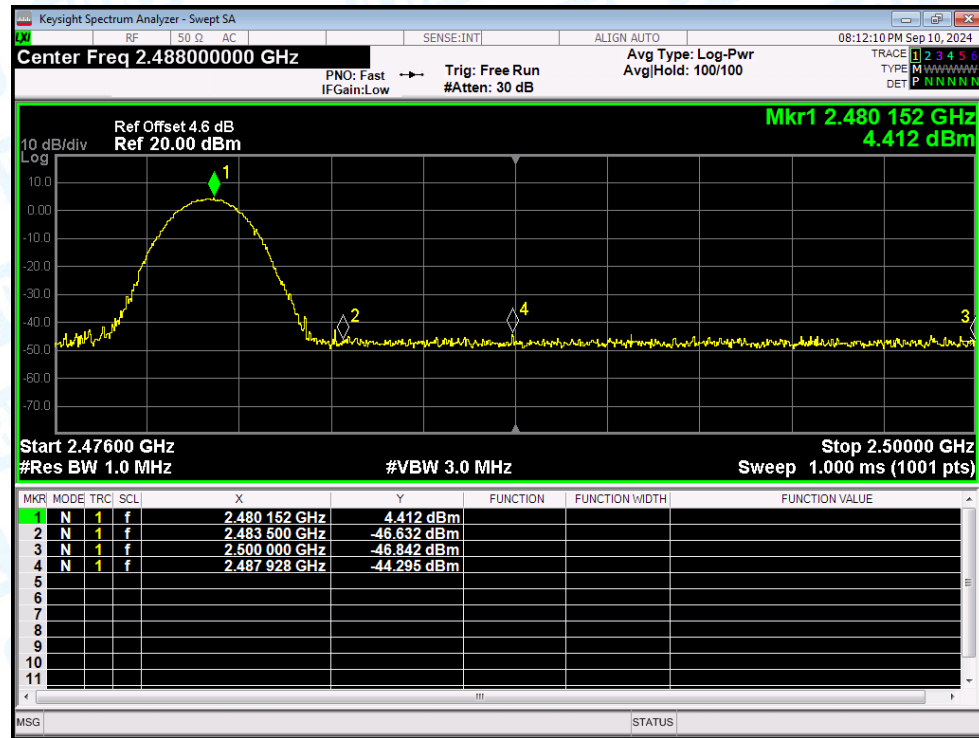
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



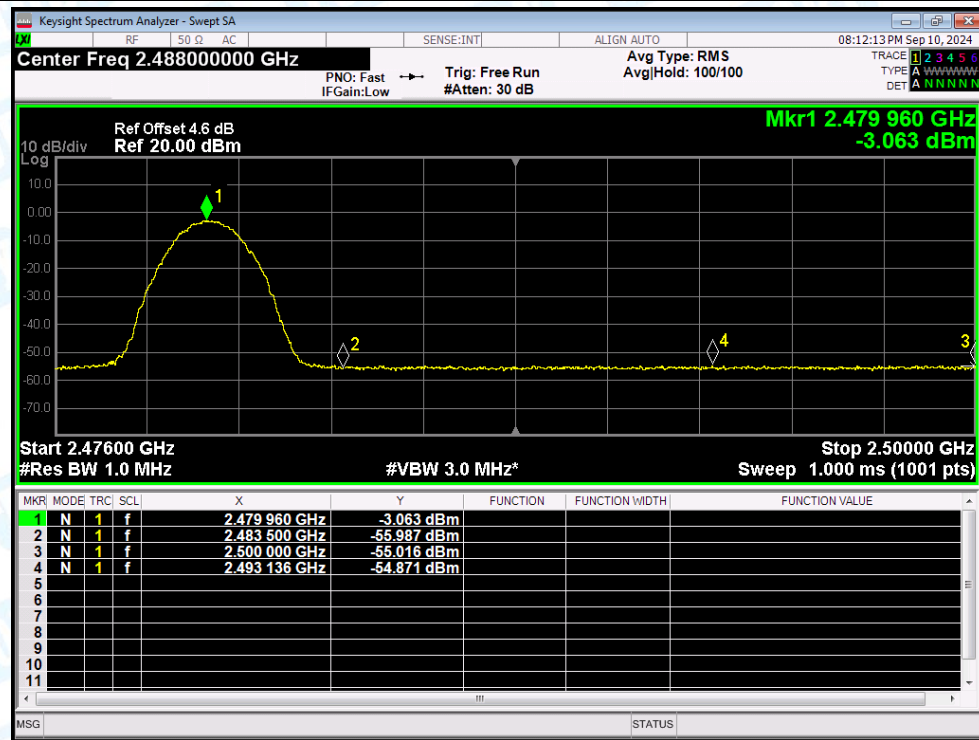
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

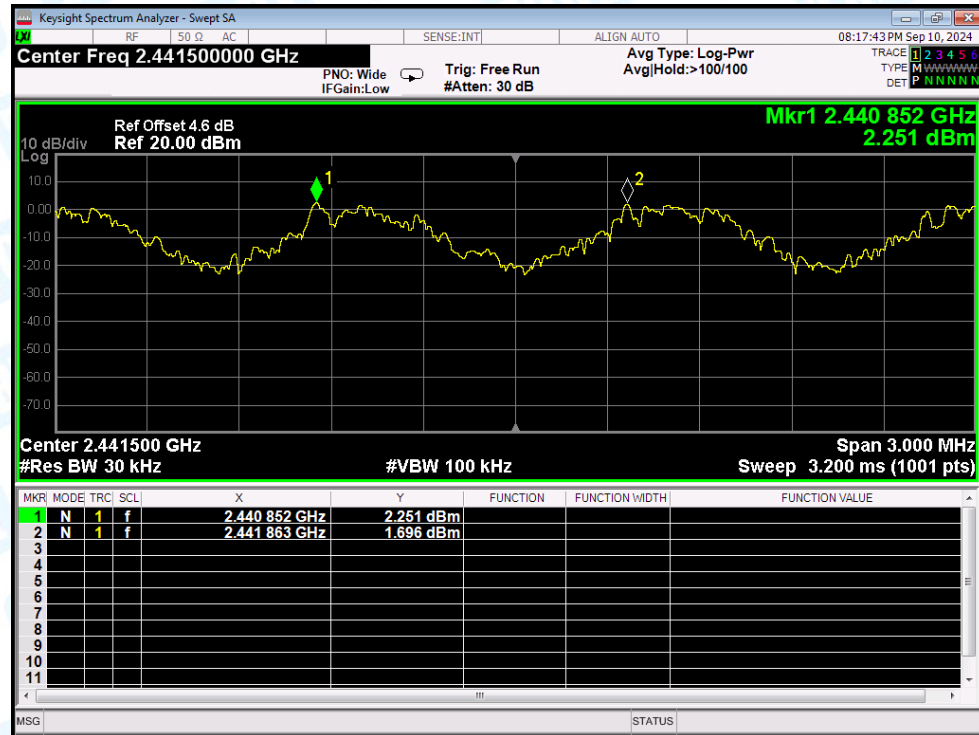


9.Carrier Frequencies Separation

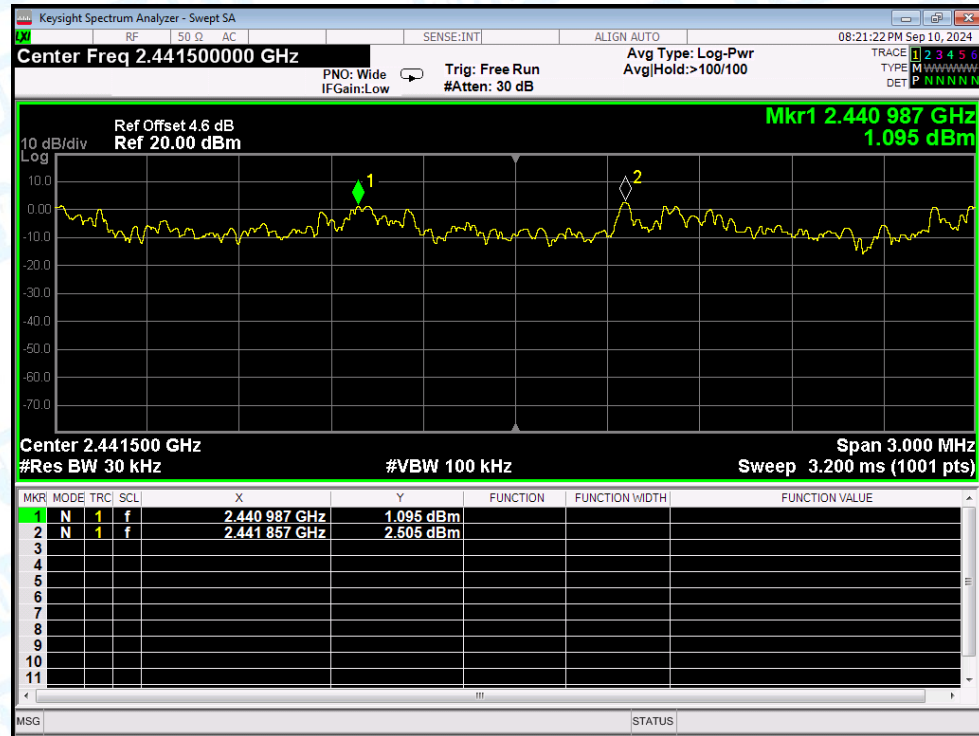
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.852	2441.863	1.011	0.58	Pass
NVNT	2-DH1	Ant1	2440.987	2441.857	0.87	0.813	Pass
NVNT	3-DH1	Ant1	2440.852	2441.857	1.005	0.807	Pass

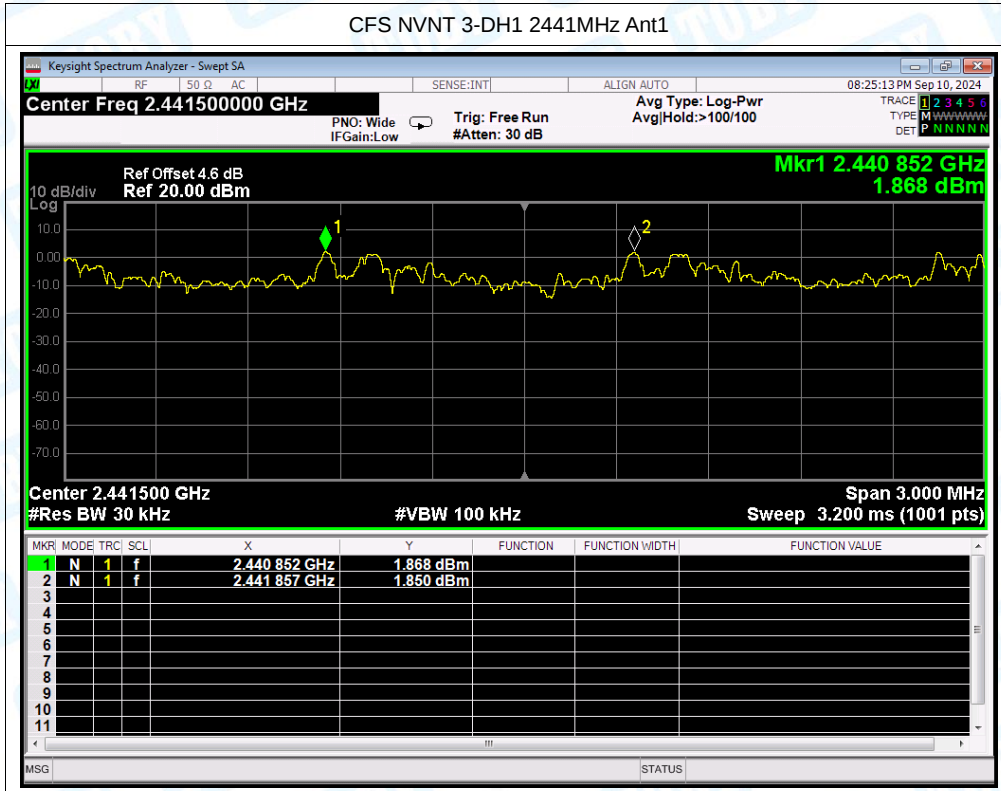
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



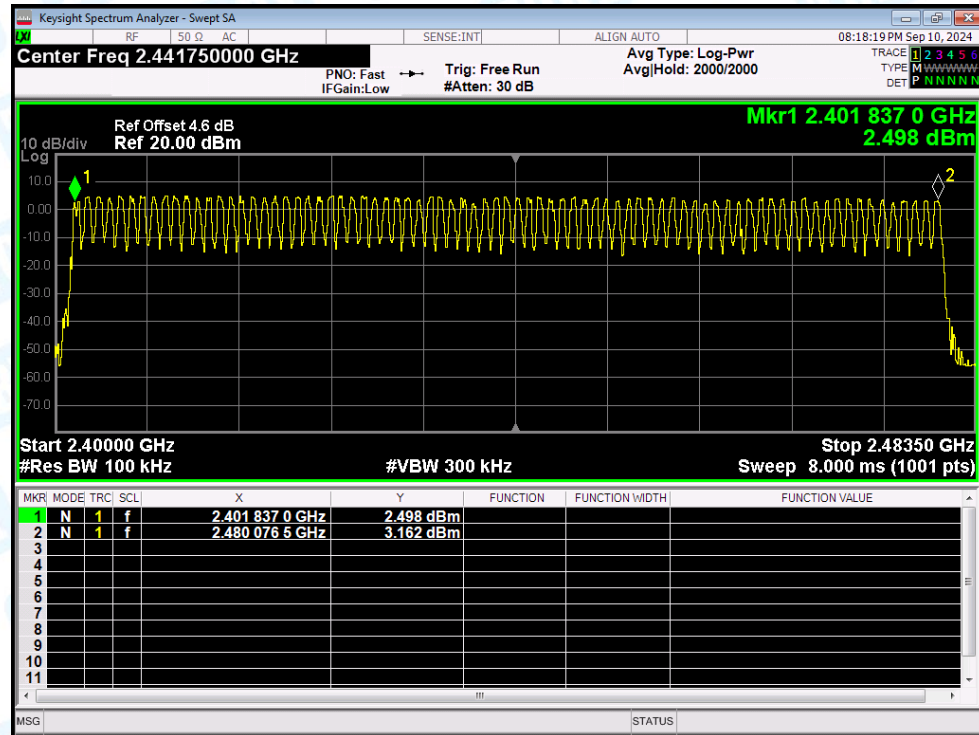


10.Number of Hopping Channel

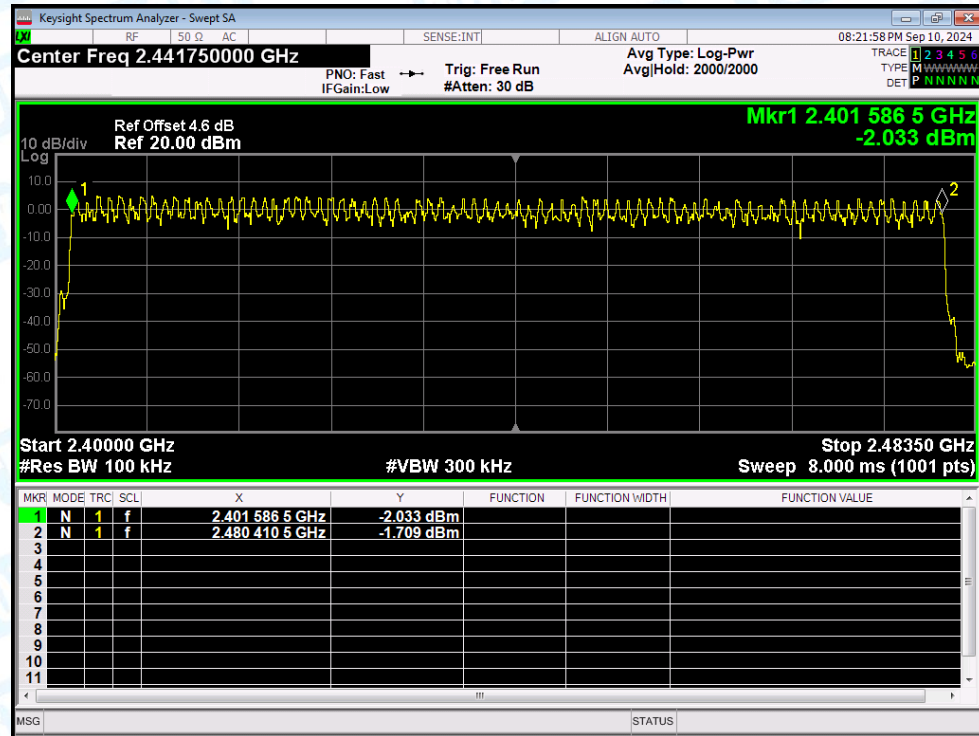
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

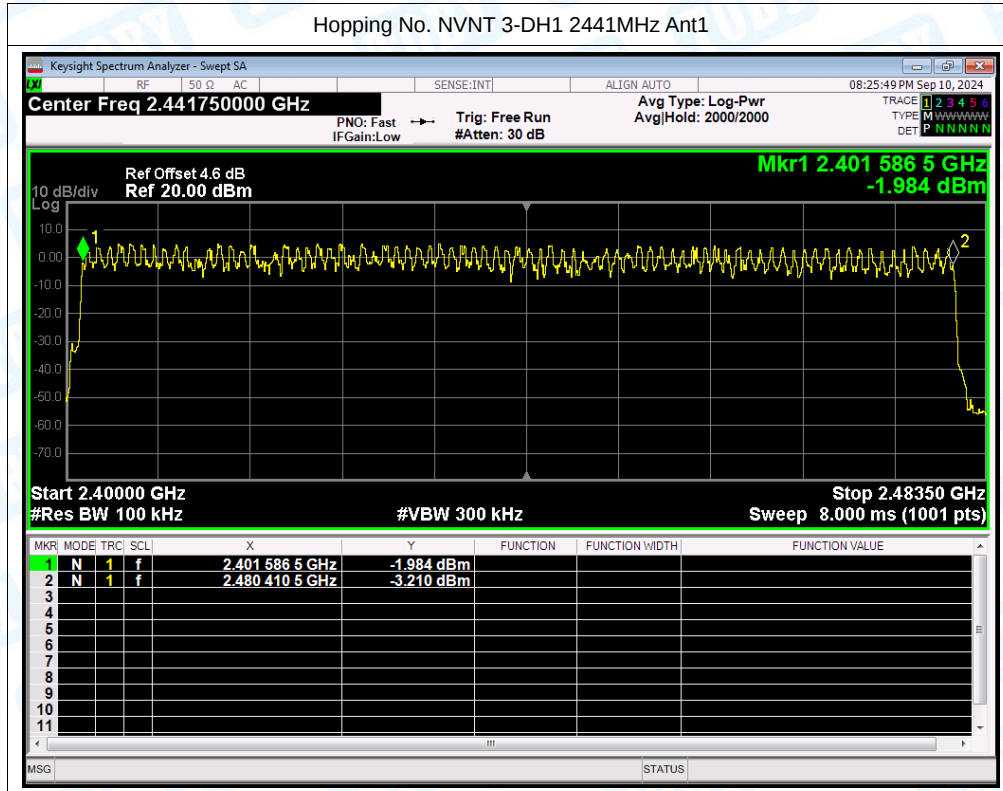
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



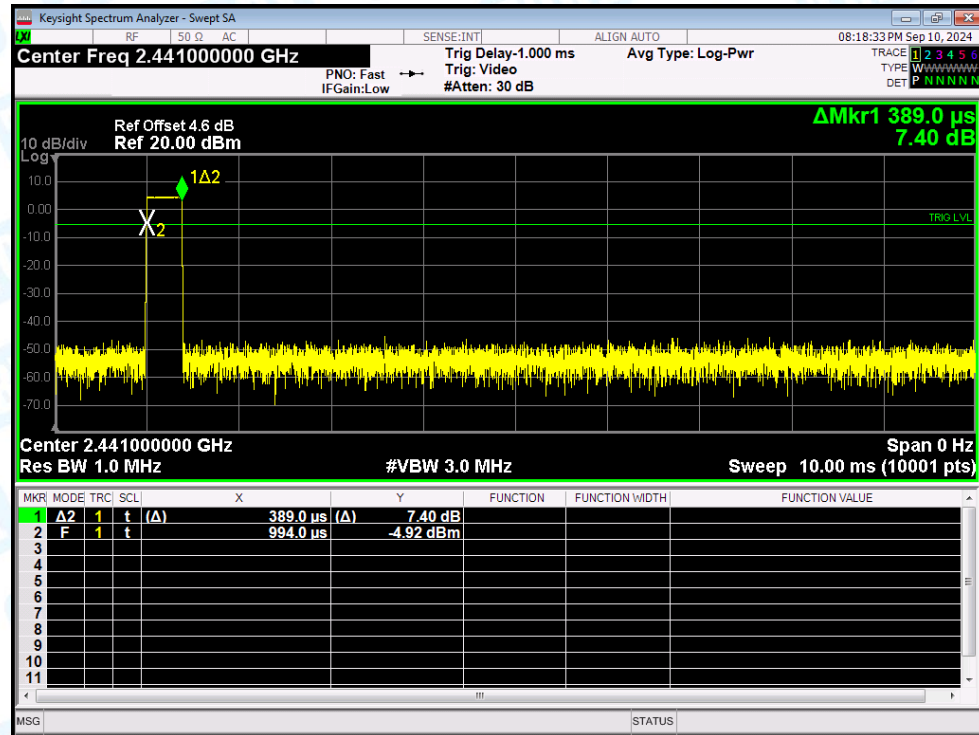


11.Dwell Time

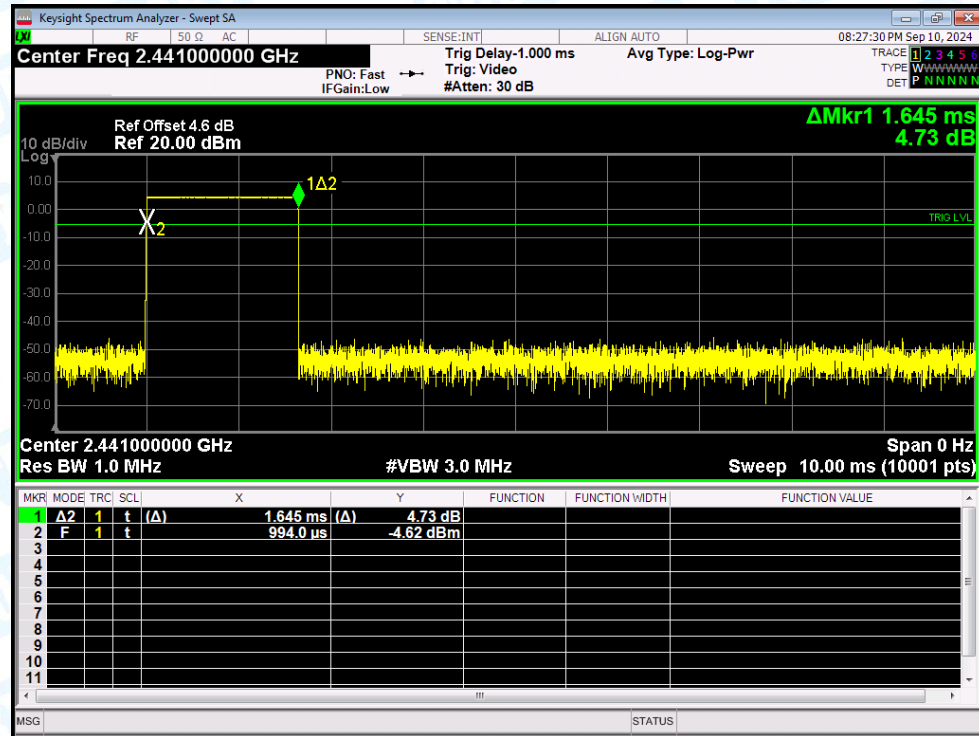
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.389	124.48	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.645	263.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.893	308.587	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.398	127.36	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.651	264.16	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.899	309.227	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.4	128	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.65	264	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.901	309.44	31600	400	Pass

Test Graphs

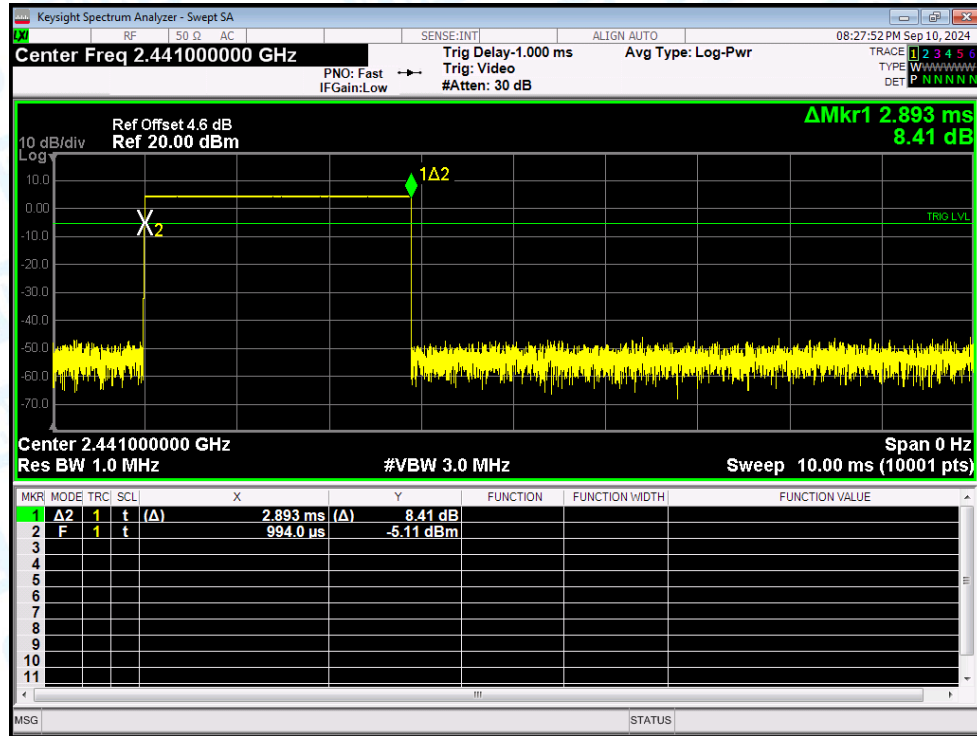
Dwell NVNT 1-DH1 2441MHz Ant1



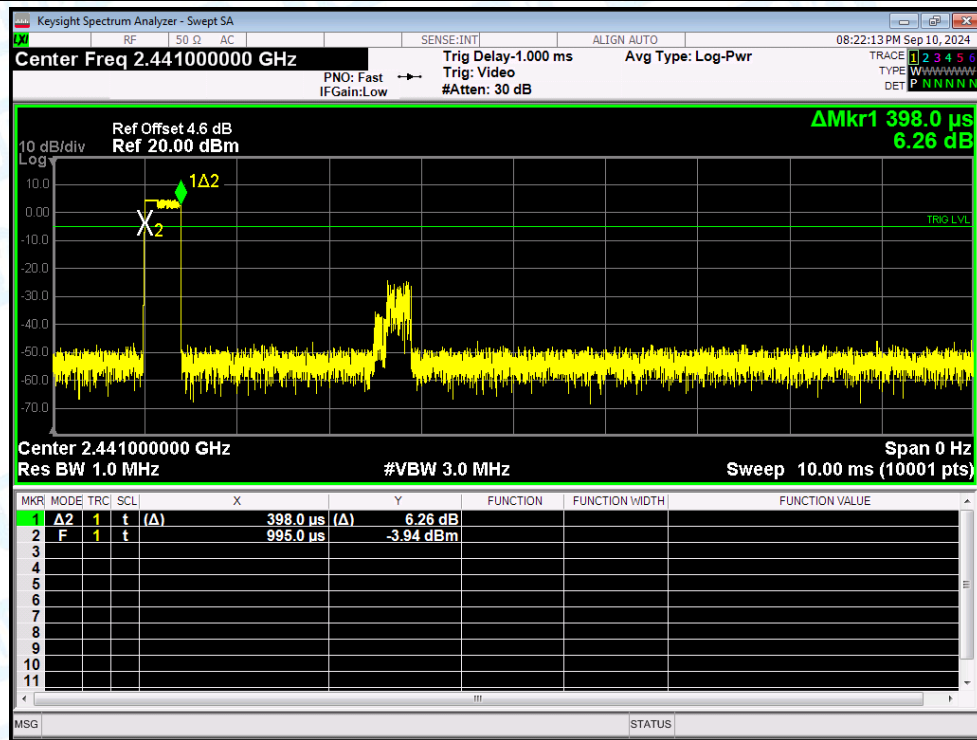
Dwell NVNT 1-DH3 2441MHz Ant1

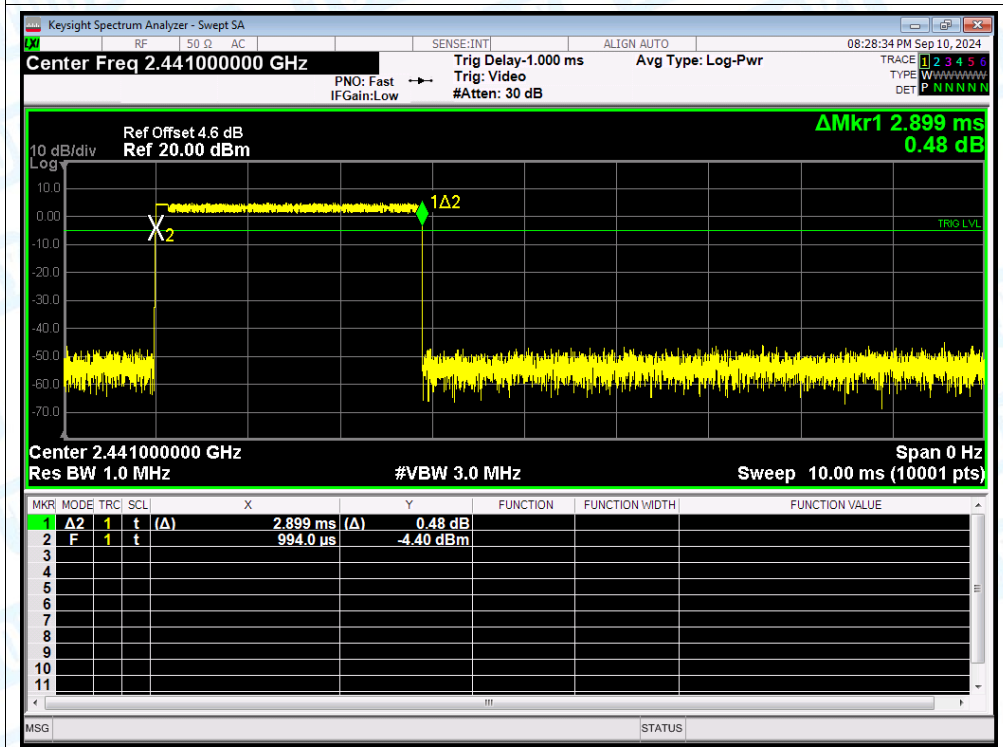


Dwell NVNT 1-DH5 2441MHz Ant1

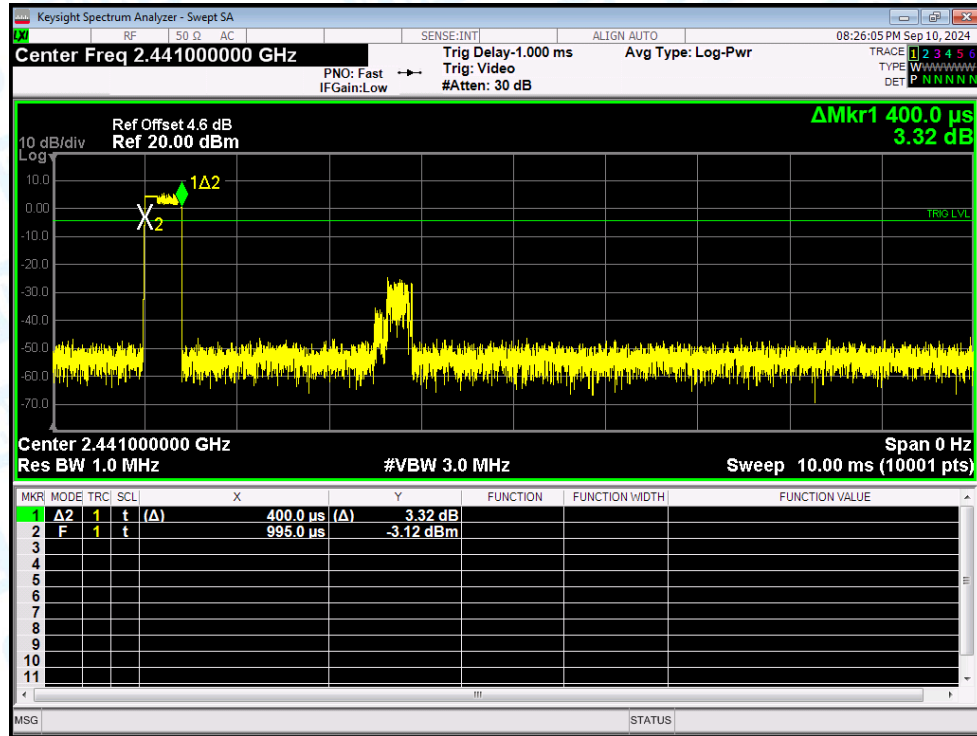


Dwell NVNT 2-DH1 2441MHz Ant1

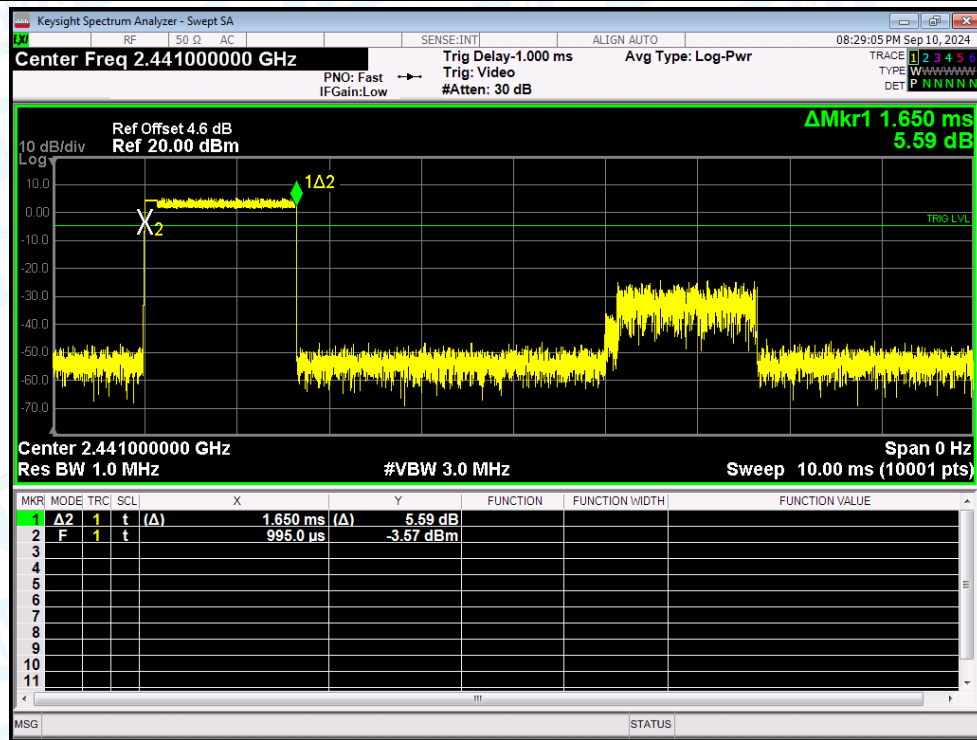


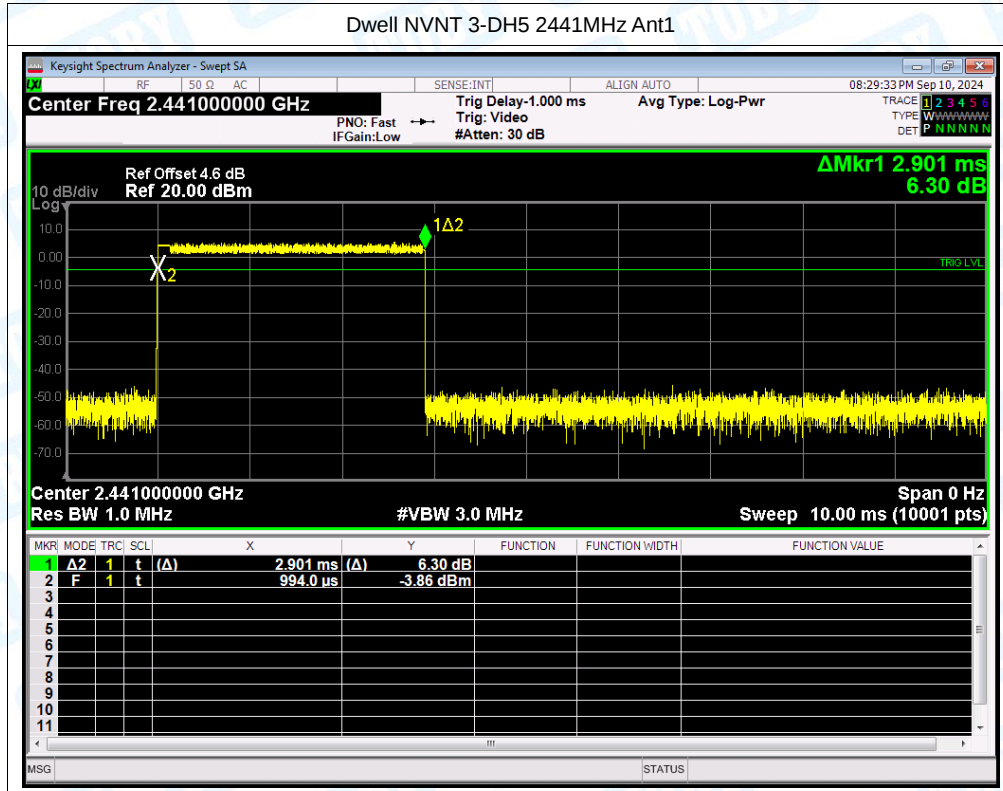


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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