

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	SMART WATCH
Test Model:	G40PLUS
Sample ID:	HC-C-202506-0052-02-3#
Environmental Conditions	
Temperature:	23.9℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202506-0052-31 The report only show the worst case data.	

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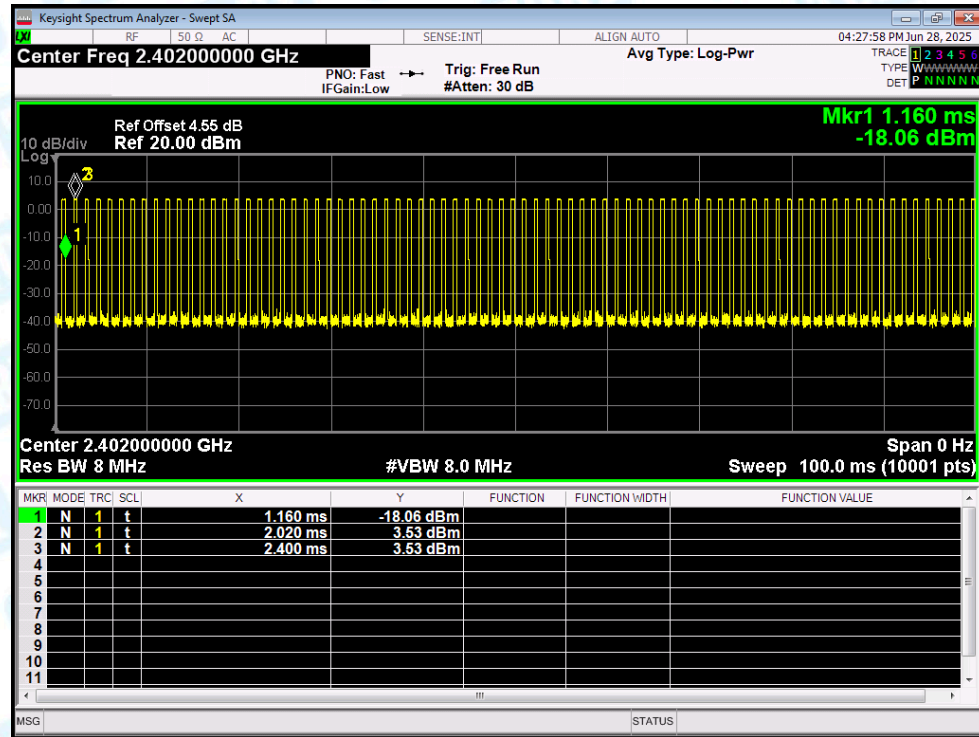
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1. Duty Cycle

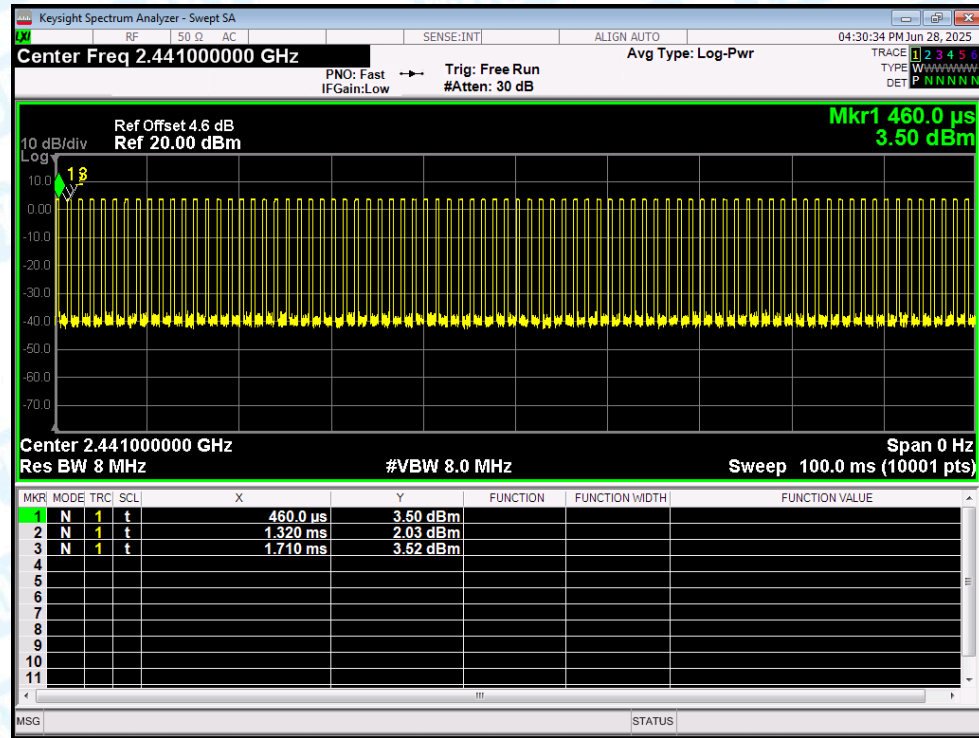
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.65	5.14	2.63
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	32	4.95	2.5
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	32	4.95	2.5
NVNT	3-DH1	2441	Ant1	31.45	5.02	2.56
NVNT	3-DH1	2480	Ant1	32	4.95	2.5

Test Graphs

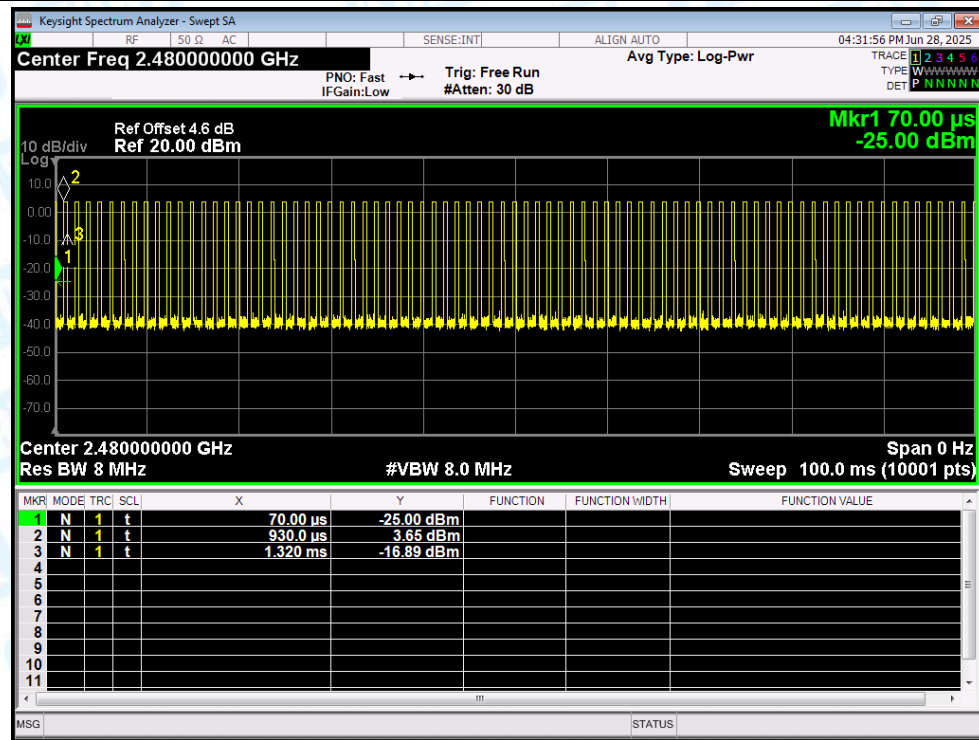
Duty Cycle NVNT 1-DH1 2402MHz Ant1



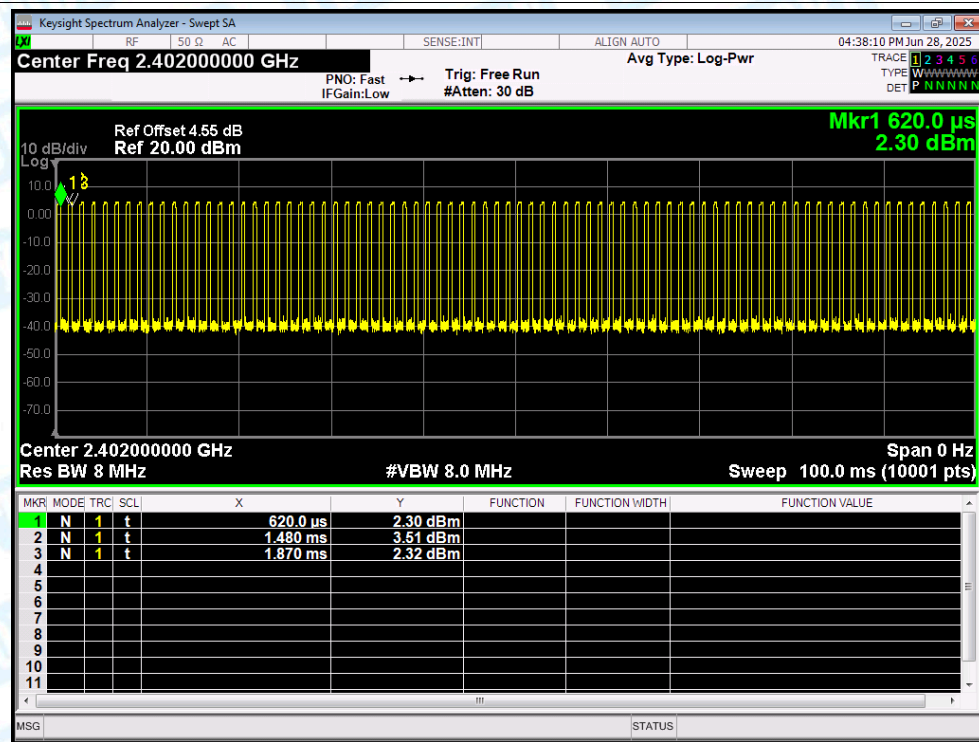
Duty Cycle NVNT 1-DH1 2441MHz Ant1



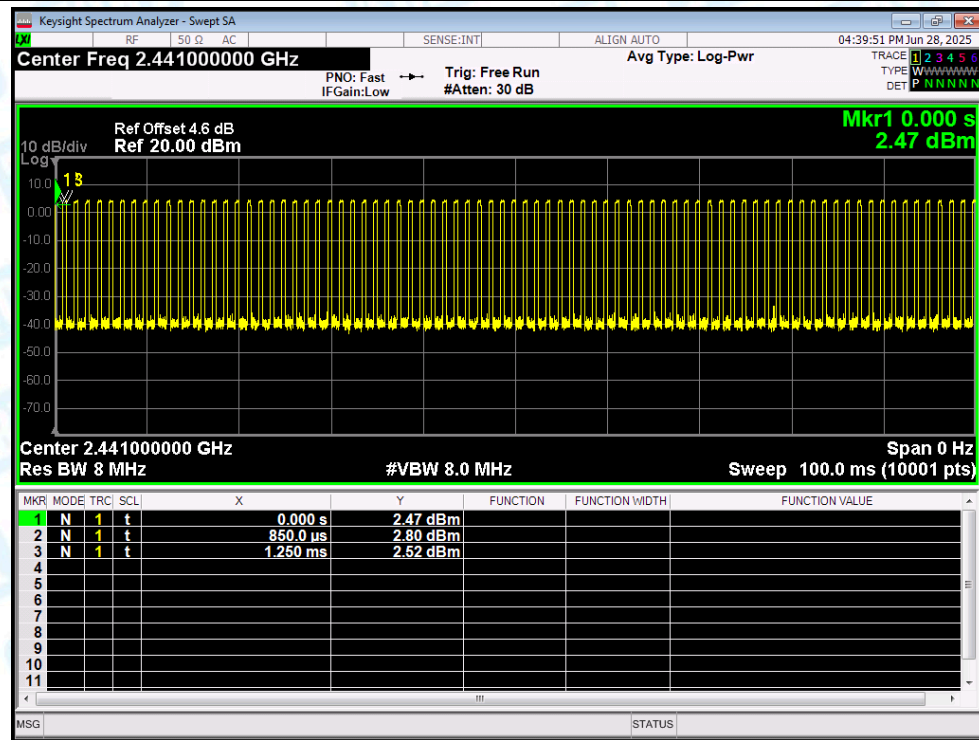
Duty Cycle NVNT 1-DH1 2480MHz Ant1



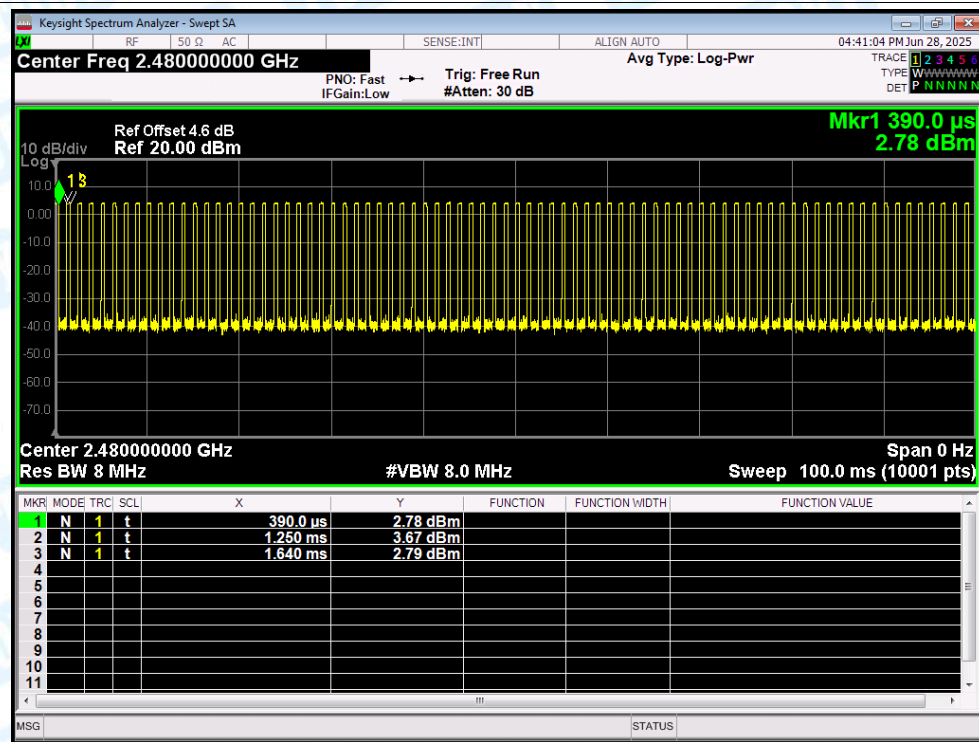
Duty Cycle NVNT 2-DH1 2402MHz Ant1



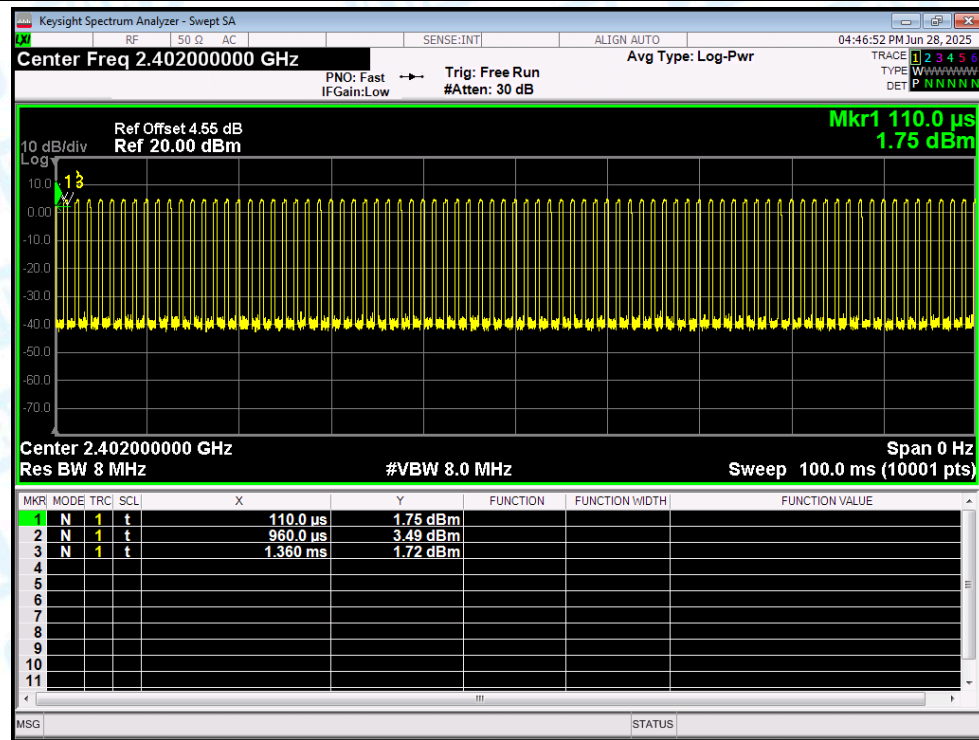
Duty Cycle NVNT 2-DH1 2441MHz Ant1



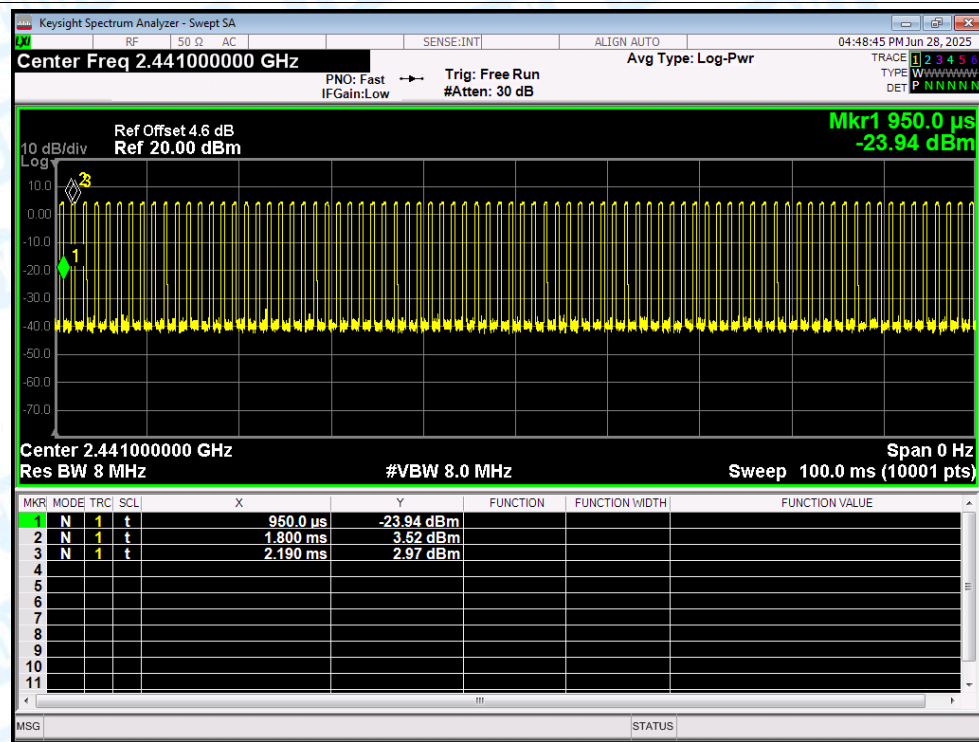
Duty Cycle NVNT 2-DH1 2480MHz Ant1

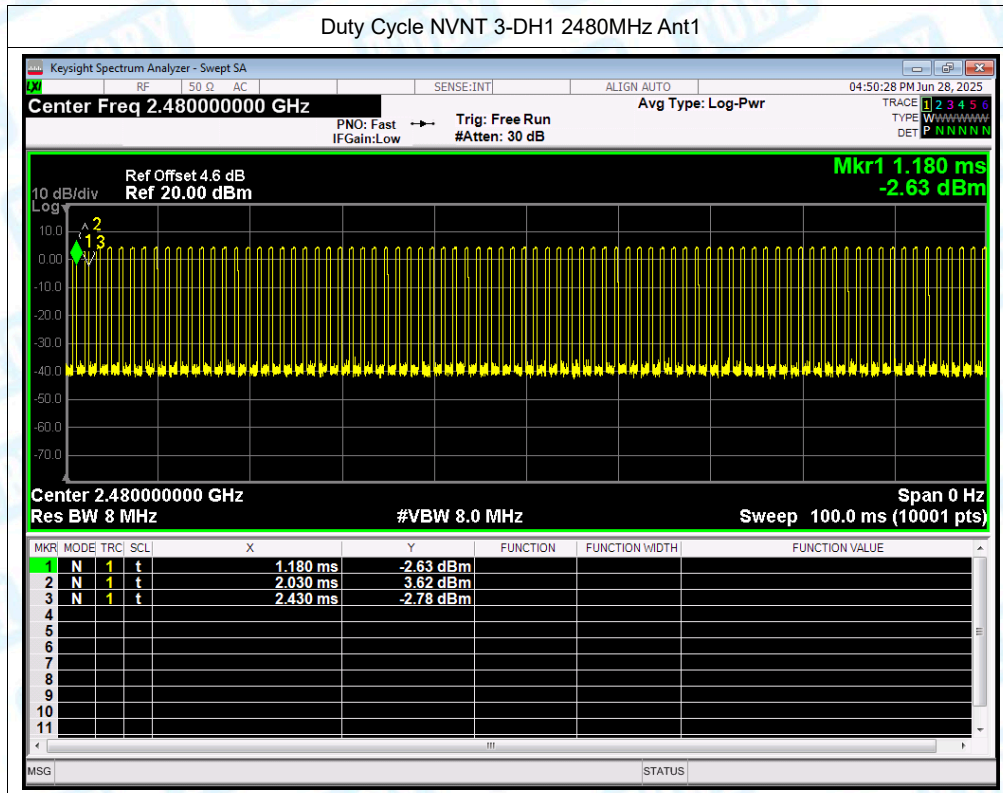


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



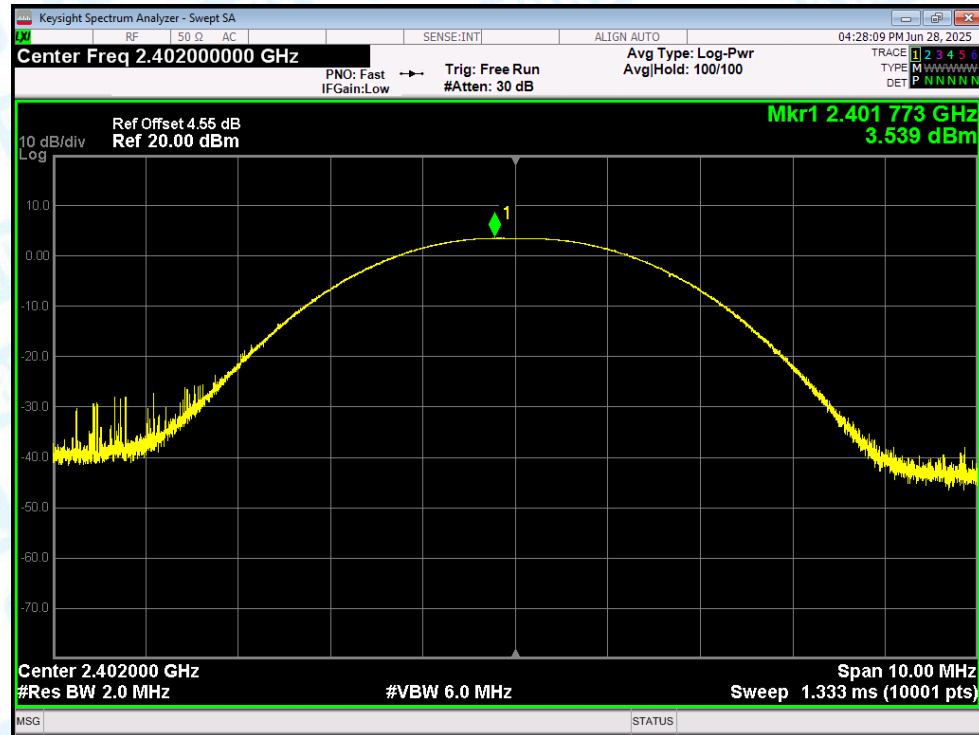


2. Maximum Conducted Output Power

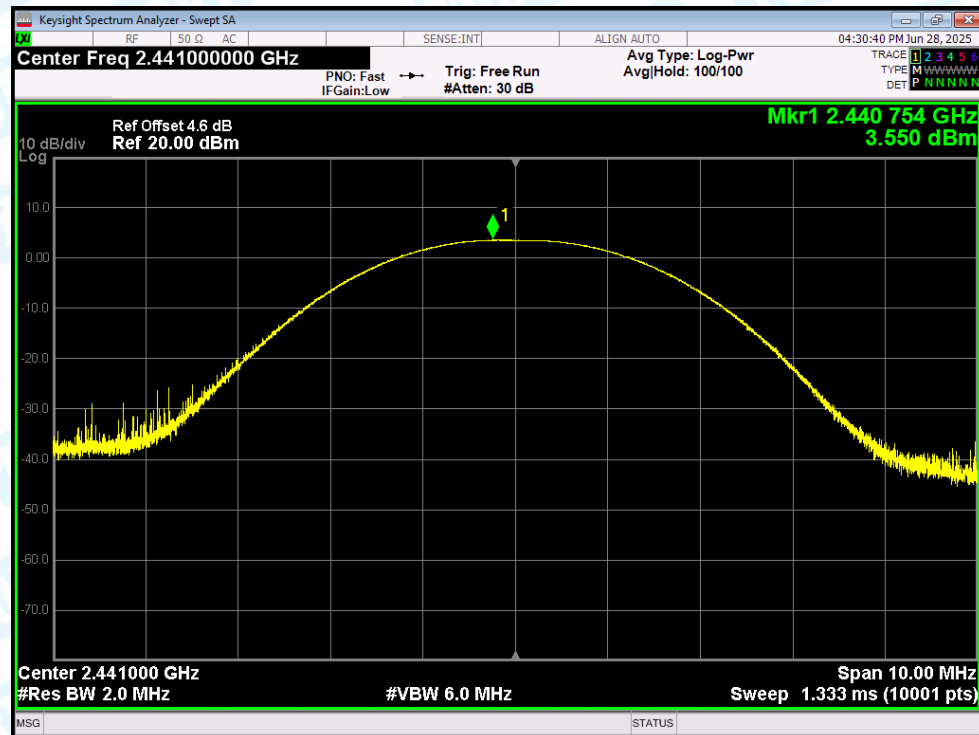
Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.539	21	Pass
NVNT	1-DH1	2441	Ant1	3.55	21	Pass
NVNT	1-DH1	2480	Ant1	3.663	21	Pass
NVNT	1-DH3	2441	Ant1	3.538	21	Pass
NVNT	1-DH5	2441	Ant1	3.518	21	Pass
NVNT	2-DH1	2402	Ant1	4.214	21	Pass
NVNT	2-DH1	2441	Ant1	4.124	21	Pass
NVNT	2-DH1	2480	Ant1	4.082	21	Pass
NVNT	2-DH3	2441	Ant1	4.331	21	Pass
NVNT	2-DH5	2441	Ant1	4.077	21	Pass
NVNT	3-DH1	2402	Ant1	4.637	21	Pass
NVNT	3-DH1	2441	Ant1	4.395	21	Pass
NVNT	3-DH1	2480	Ant1	4.35	21	Pass
NVNT	3-DH3	2441	Ant1	4.315	21	Pass
NVNT	3-DH5	2441	Ant1	4.338	21	Pass

Test Graphs

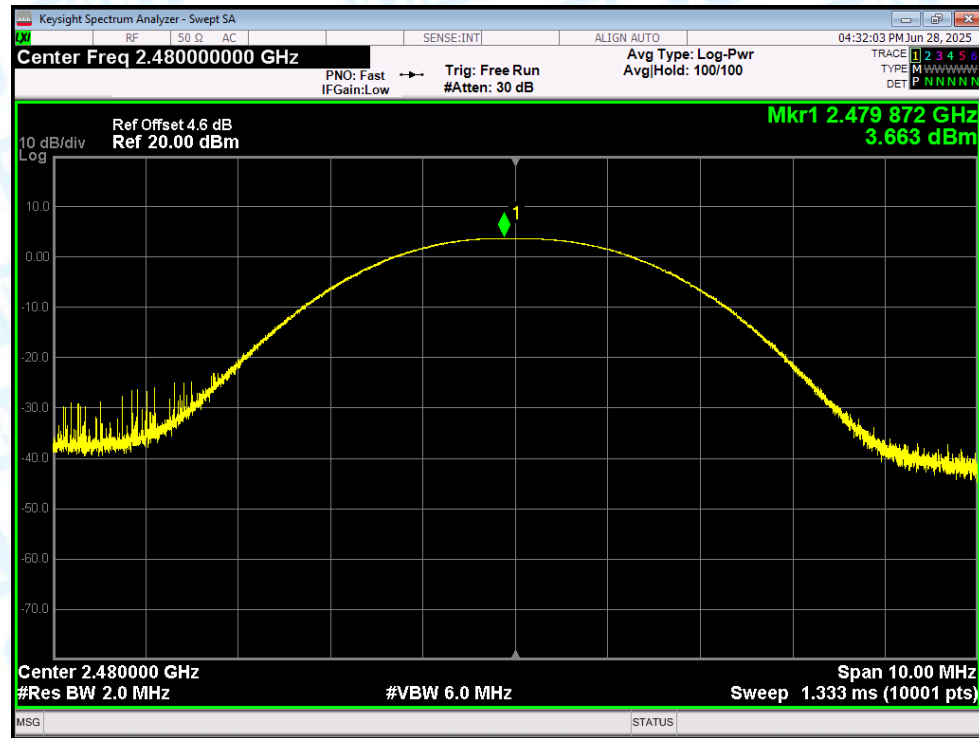
Power NVNT 1-DH1 2402MHz Ant1



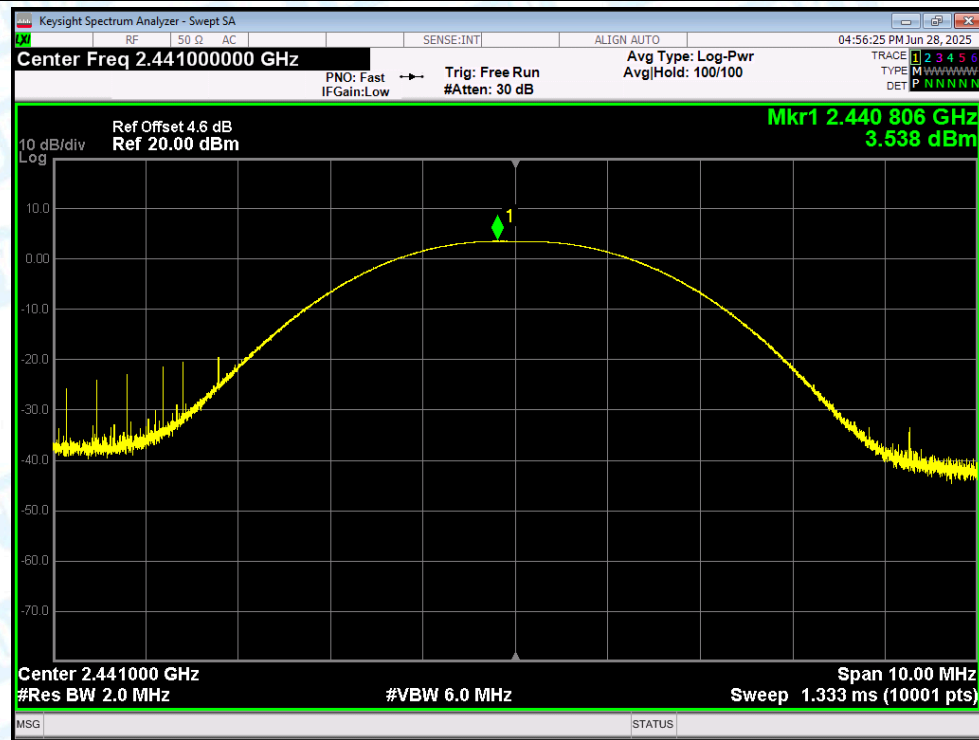
Power NVNT 1-DH1 2441MHz Ant1



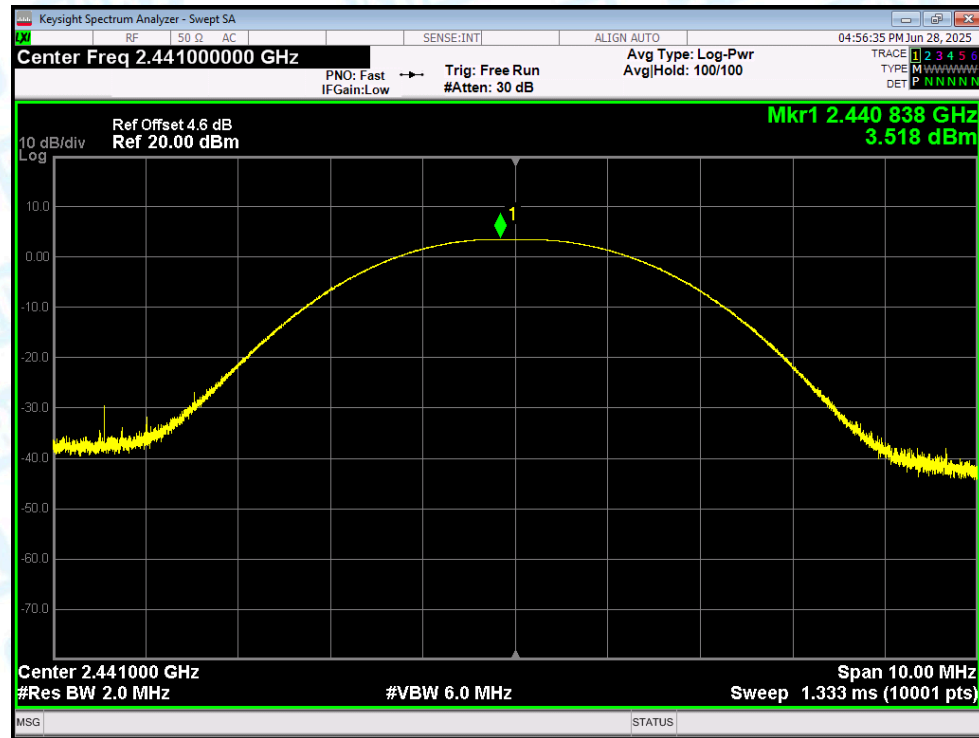
Power NVNT 1-DH1 2480MHz Ant1



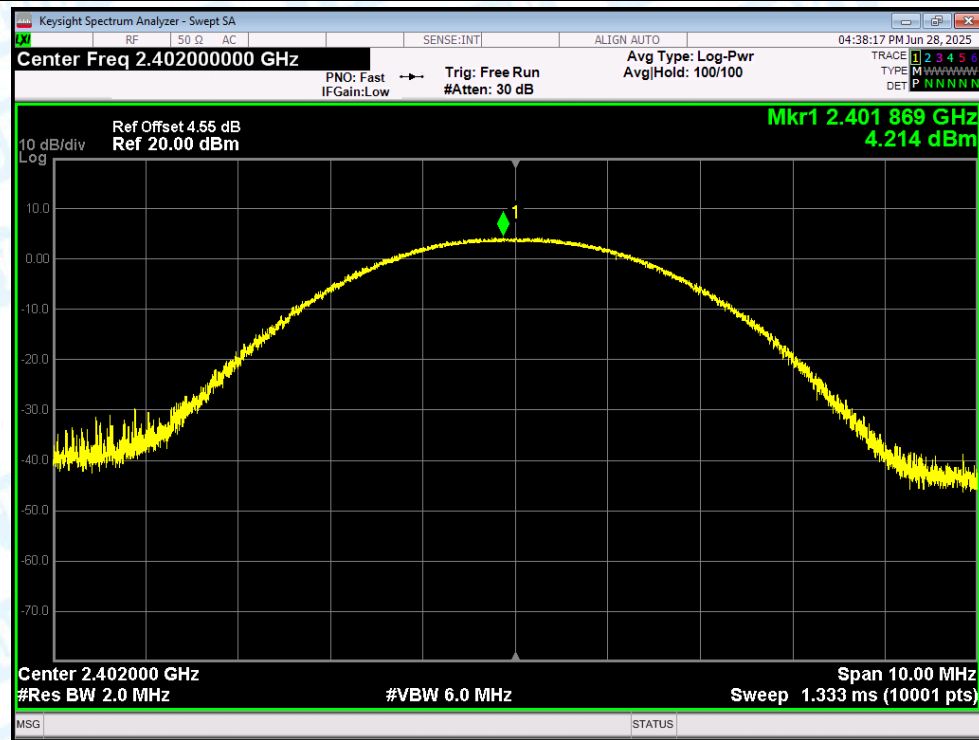
Power NVNT 1-DH3 2441MHz Ant1



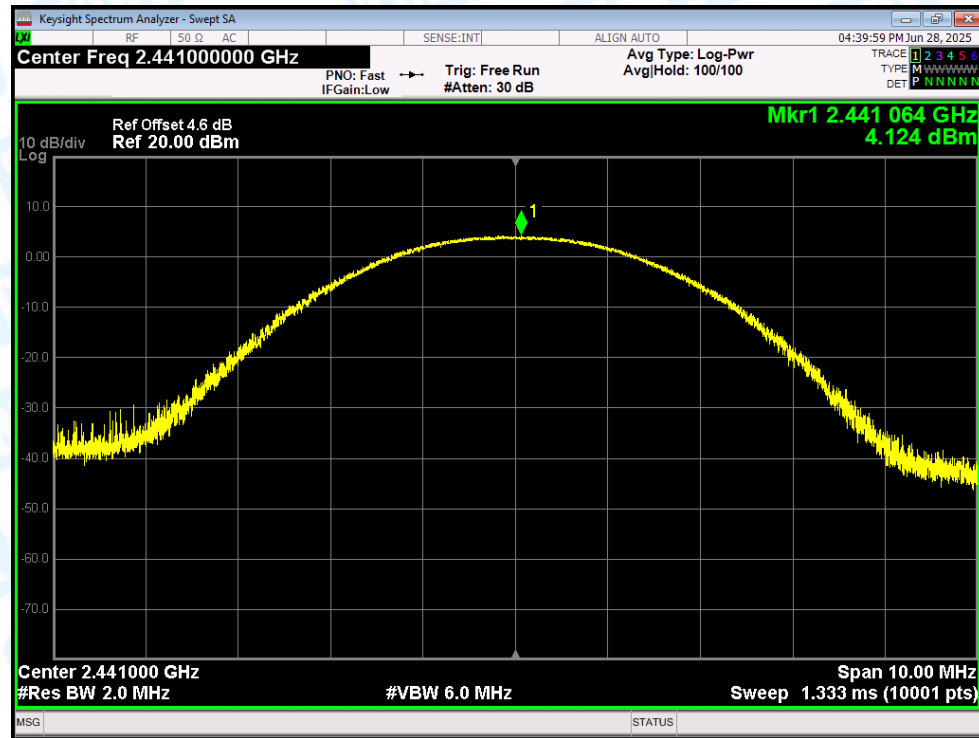
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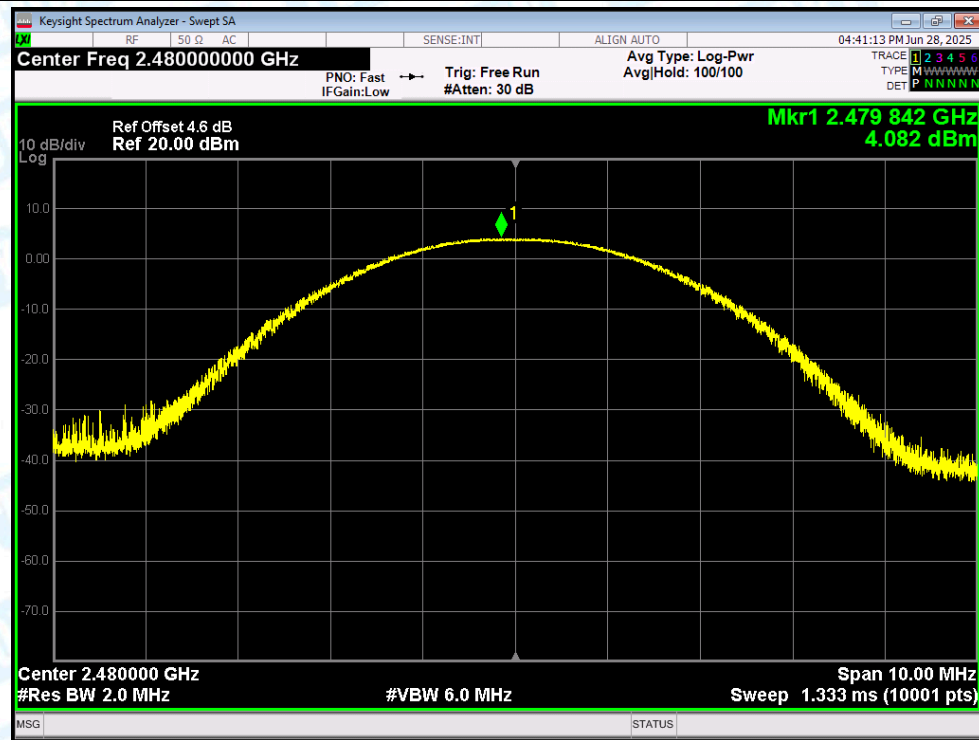
Power NVNT 2-DH1 2402MHz Ant1



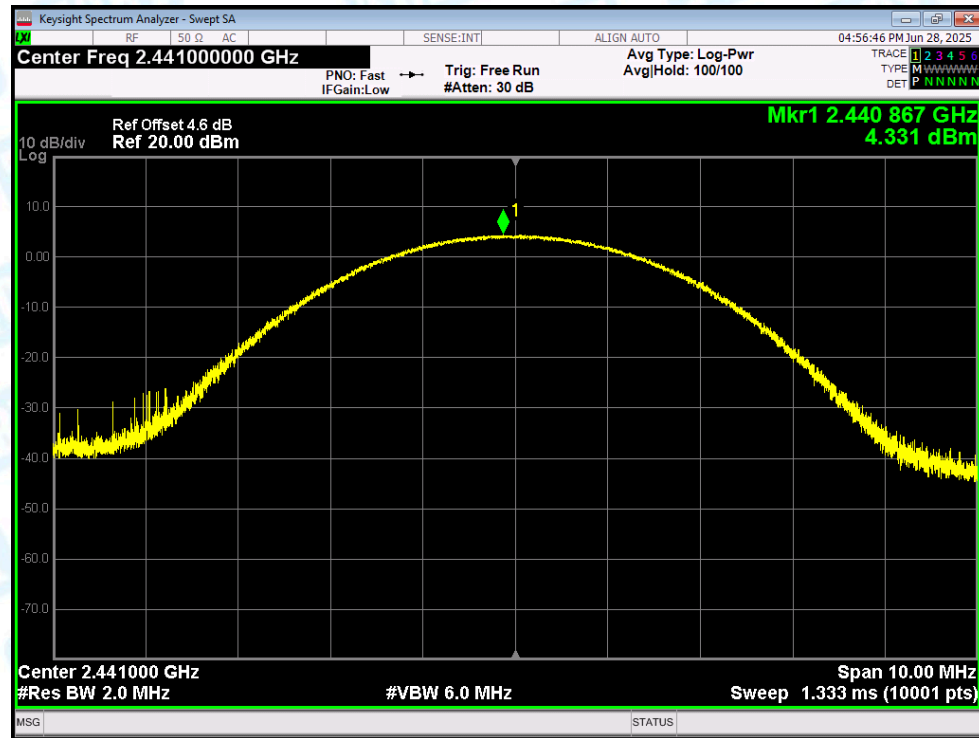
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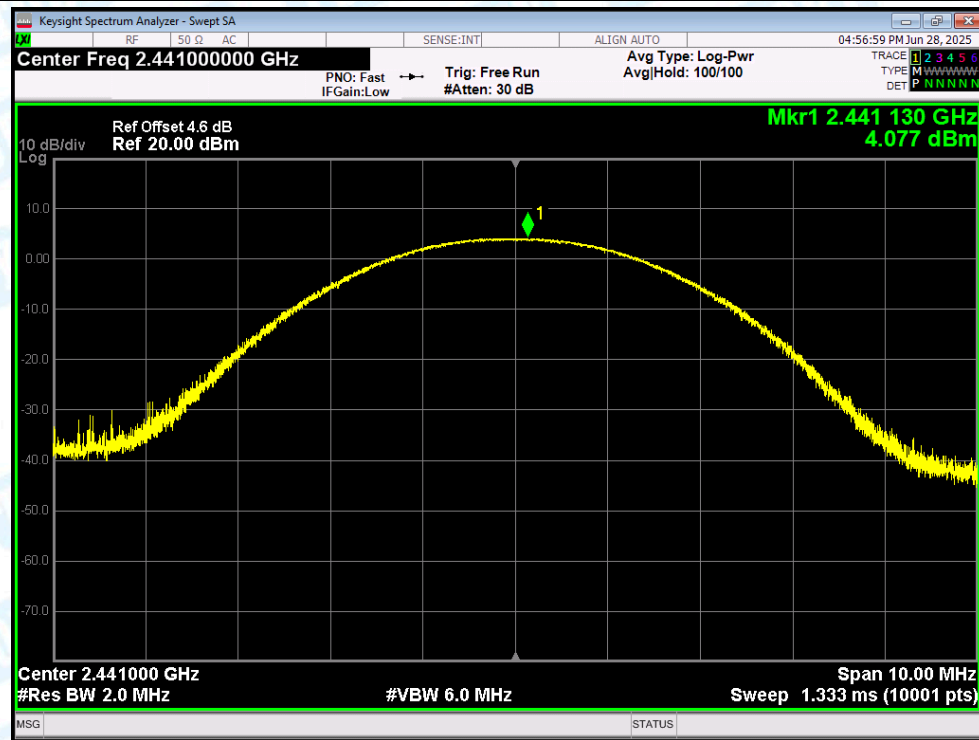
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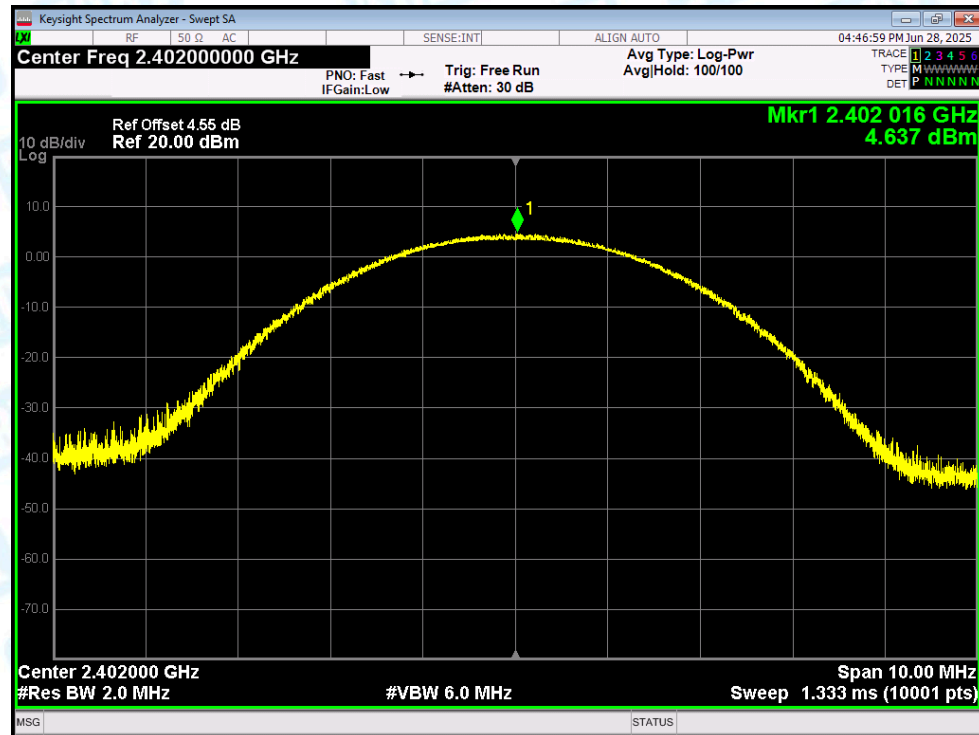
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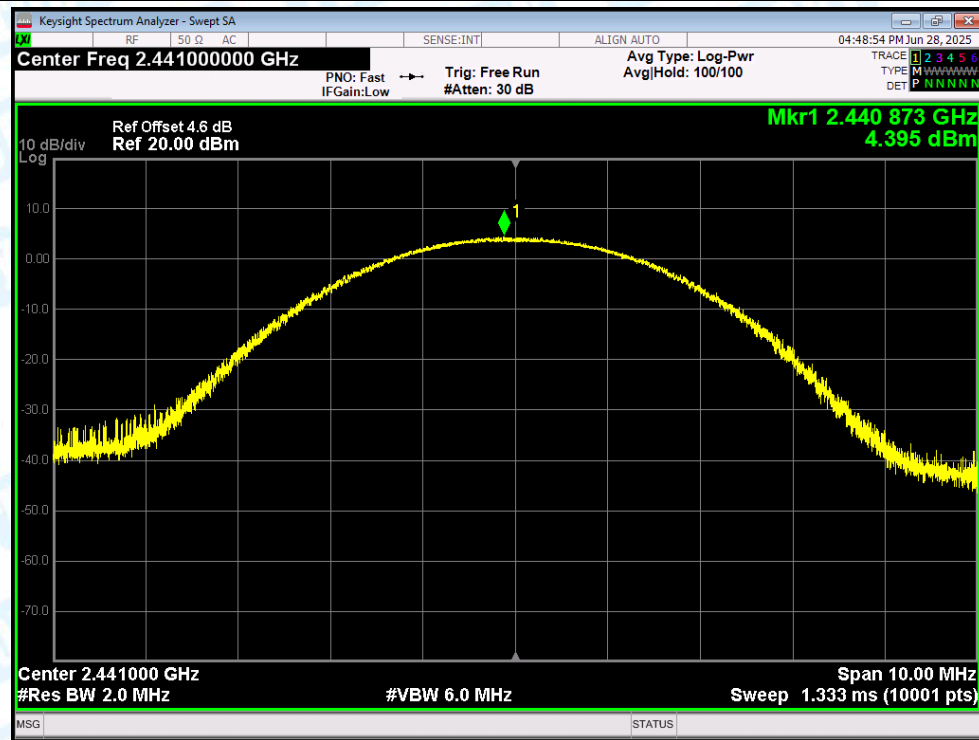
Power NVNT 2-DH5 2441MHz Ant1



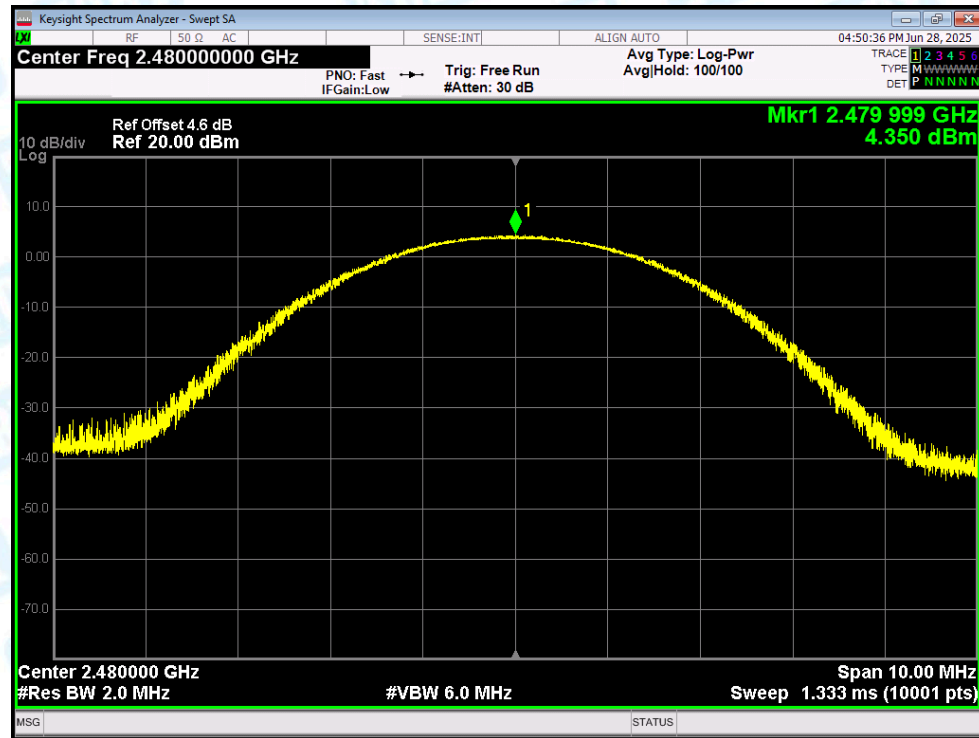
Power NVNT 3-DH1 2402MHz Ant1



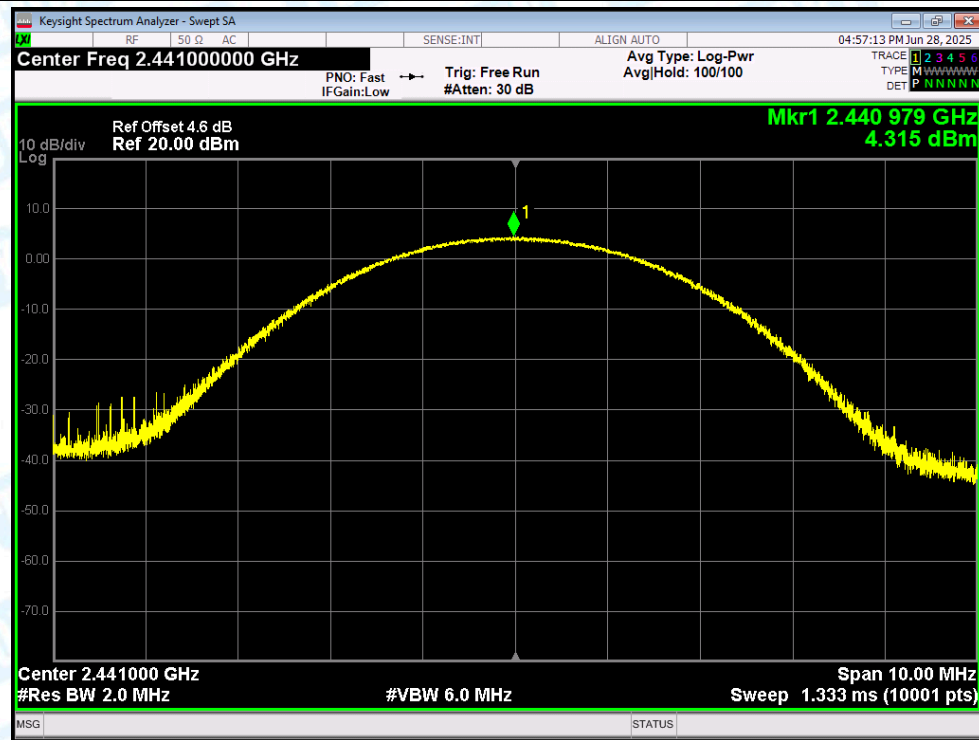
Power NVNT 3-DH1 2441MHz Ant1

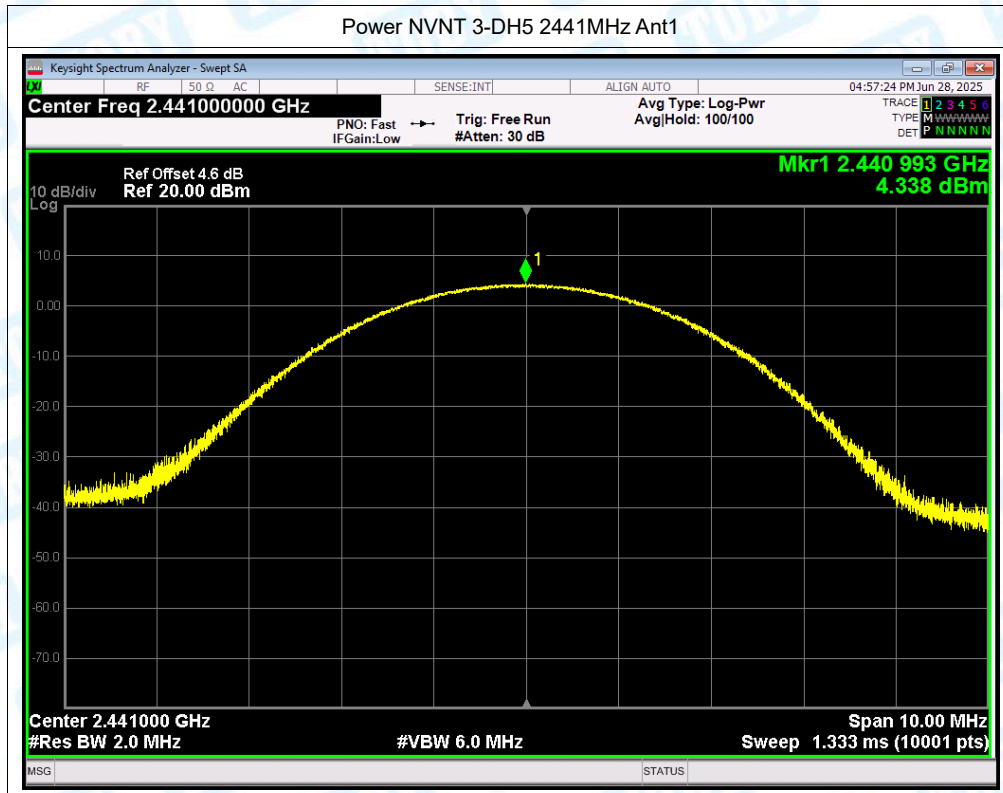


Power NVNT 3-DH1 2480MHz Ant1



Power NVNT 3-DH3 2441MHz Ant1



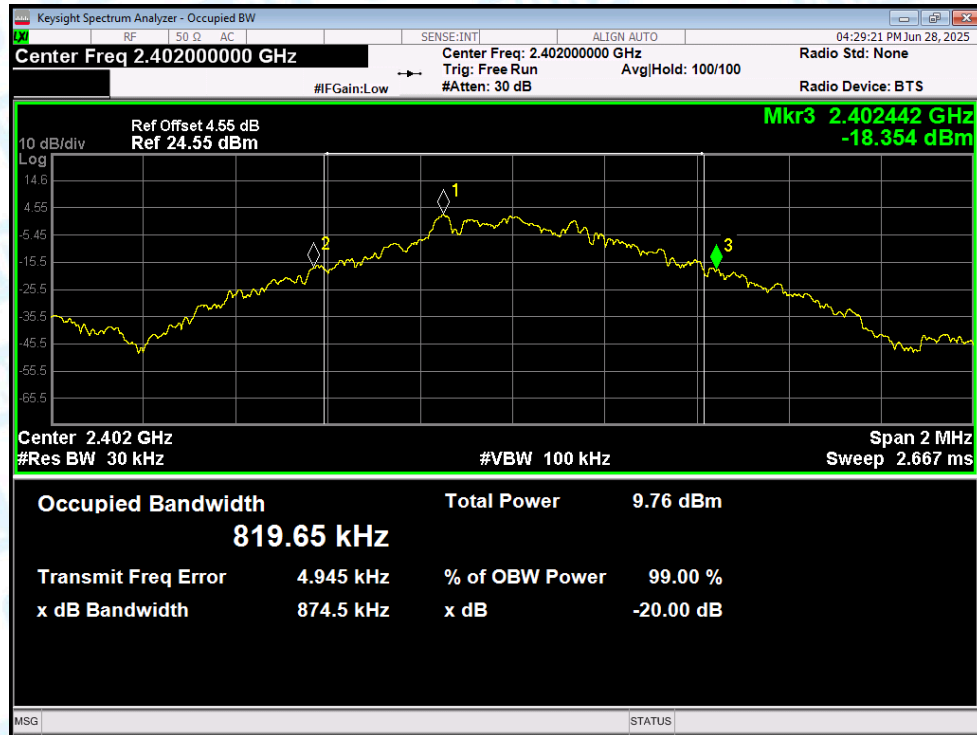


3. -20dB Bandwidth

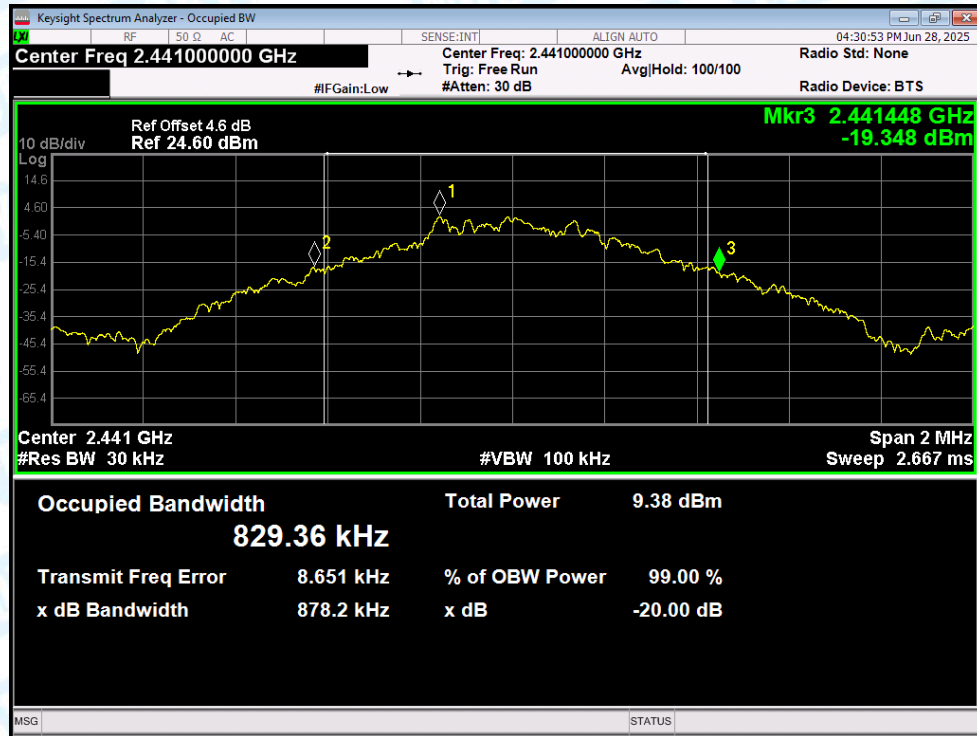
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	0	Pass
NVNT	1-DH1	2441	Ant1	0.88	0	Pass
NVNT	1-DH1	2480	Ant1	0.87	0	Pass
NVNT	2-DH1	2402	Ant1	1.23	0	Pass
NVNT	2-DH1	2441	Ant1	1.26	0	Pass
NVNT	2-DH1	2480	Ant1	1.22	0	Pass
NVNT	3-DH1	2402	Ant1	1.24	0	Pass
NVNT	3-DH1	2441	Ant1	1.24	0	Pass
NVNT	3-DH1	2480	Ant1	1.24	0	Pass

Test Graphs

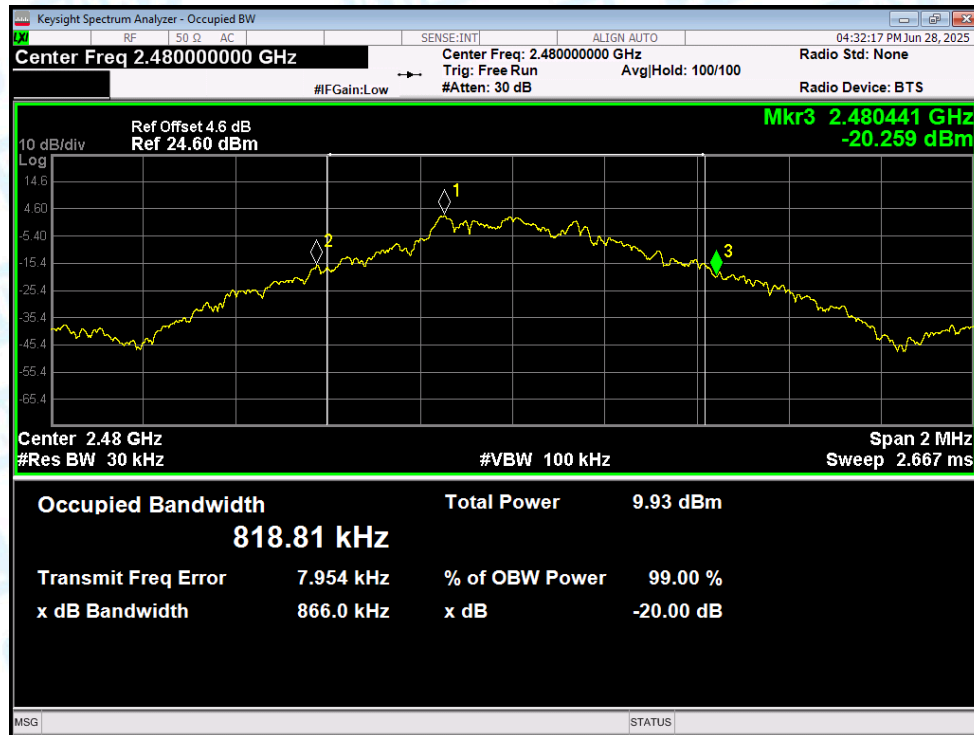
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



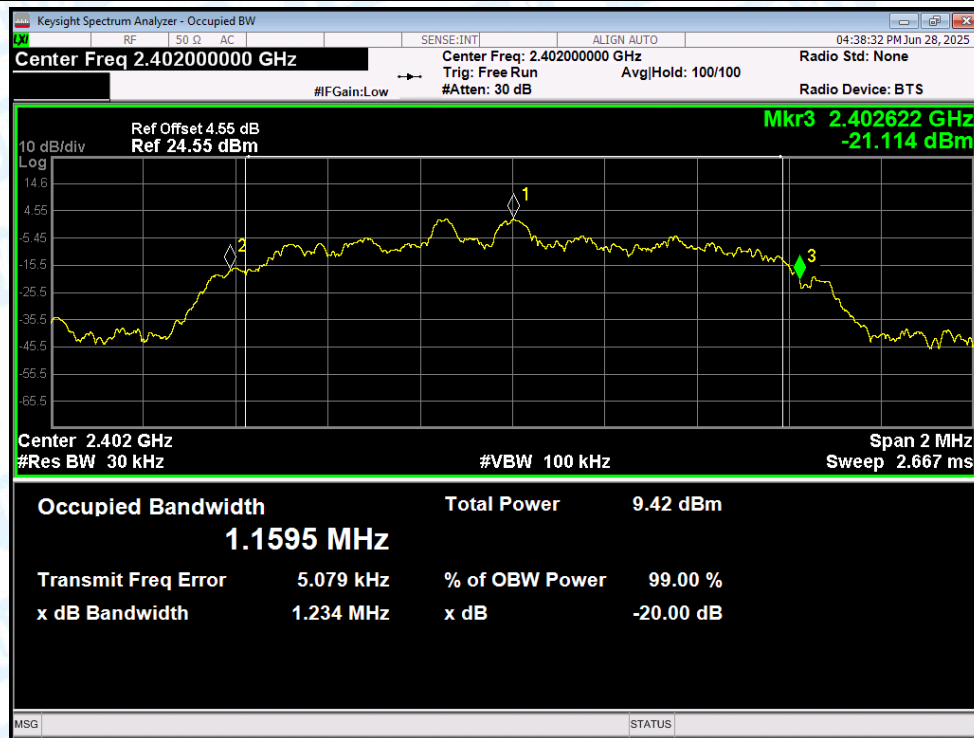
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



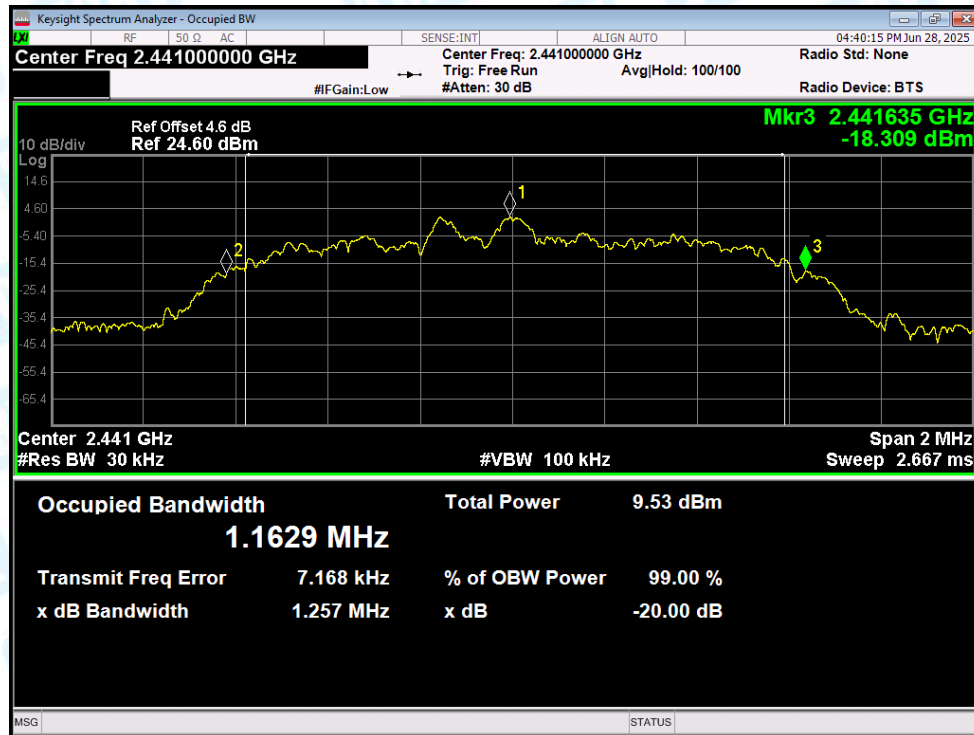
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



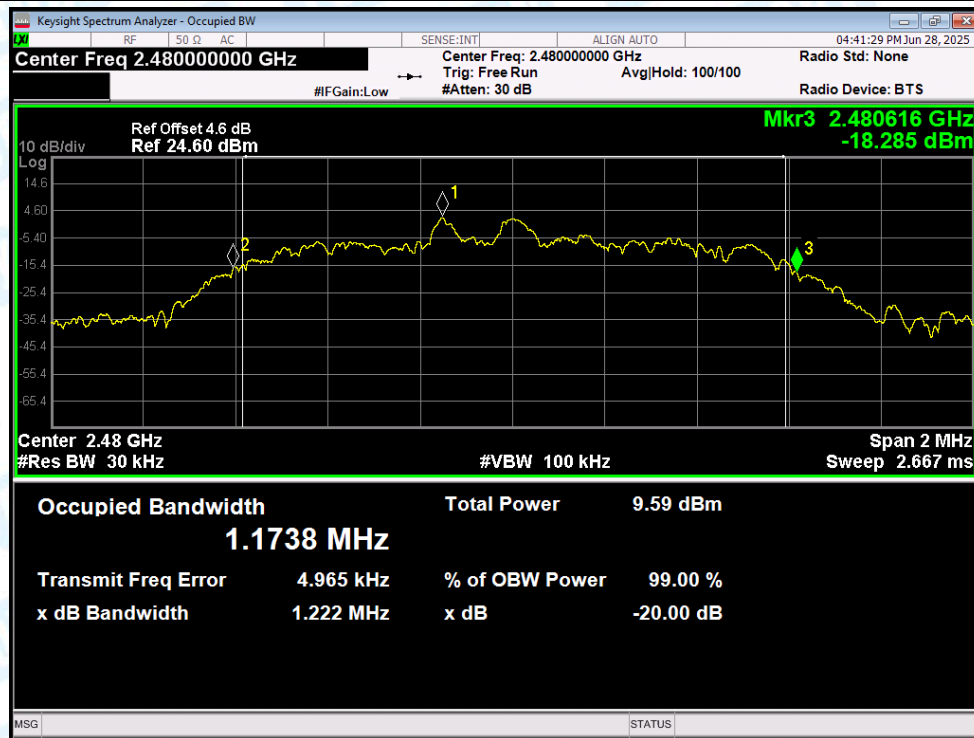
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



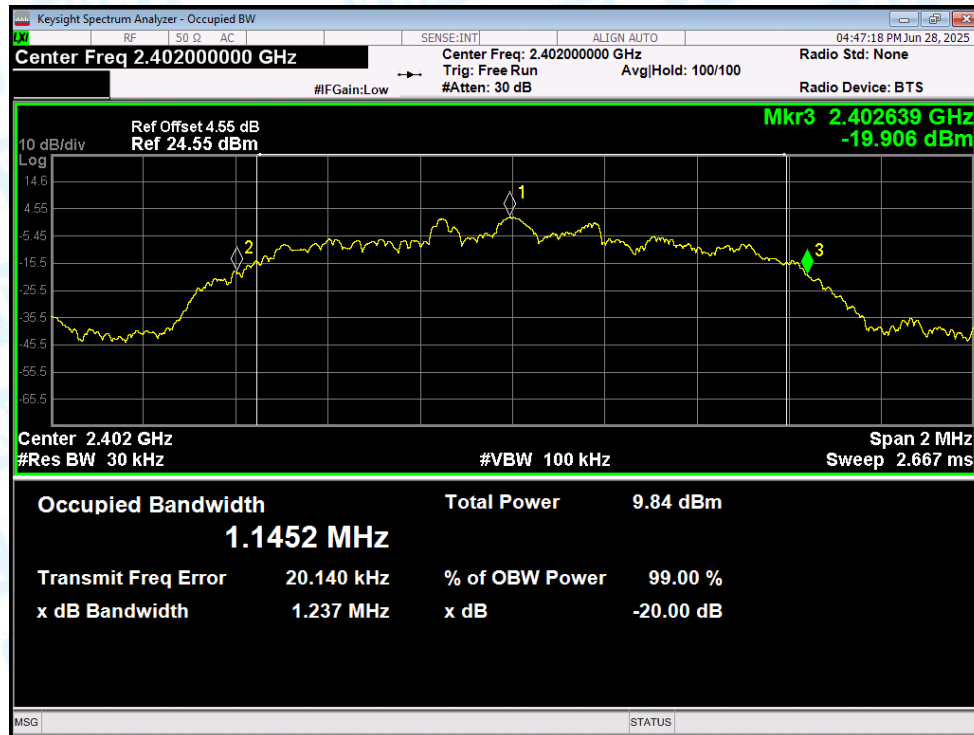
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



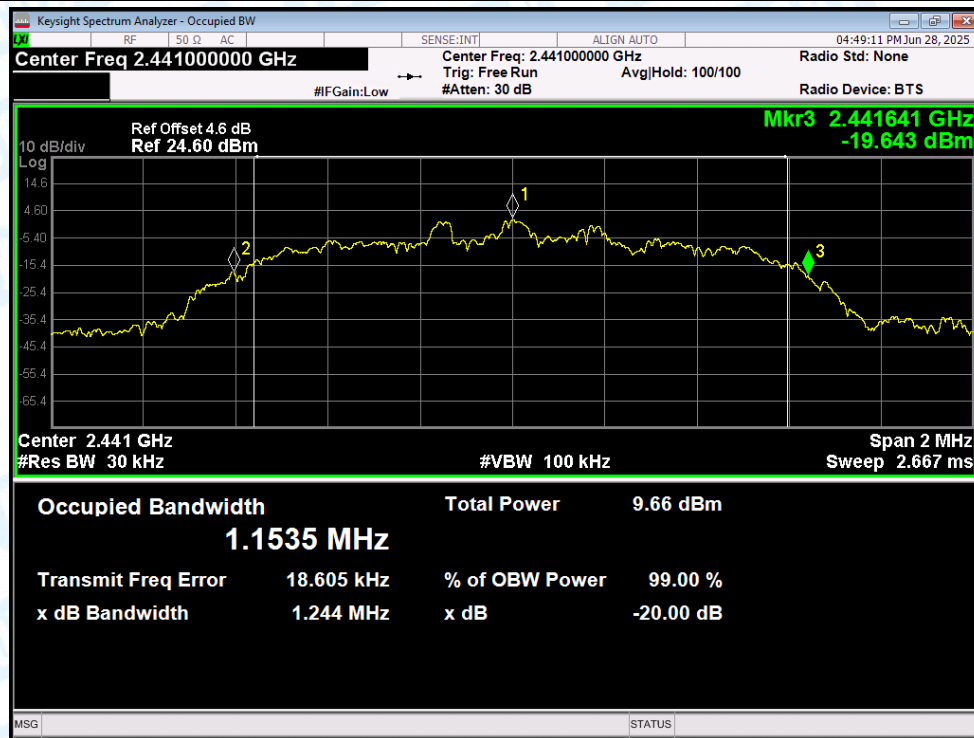
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

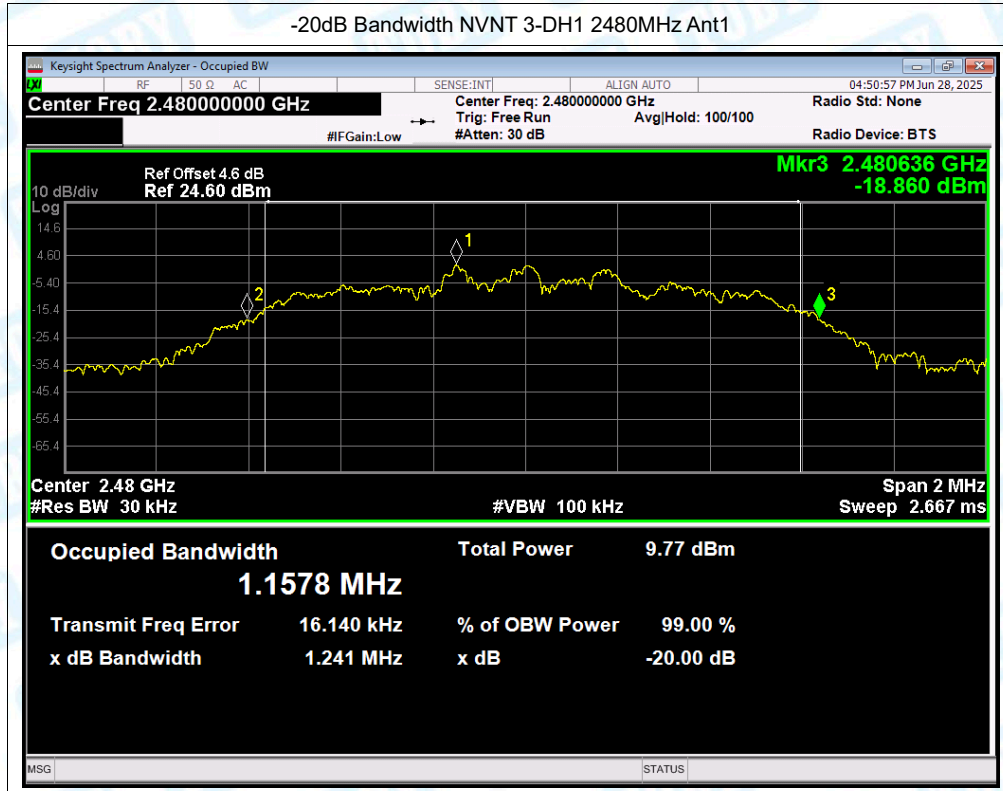


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



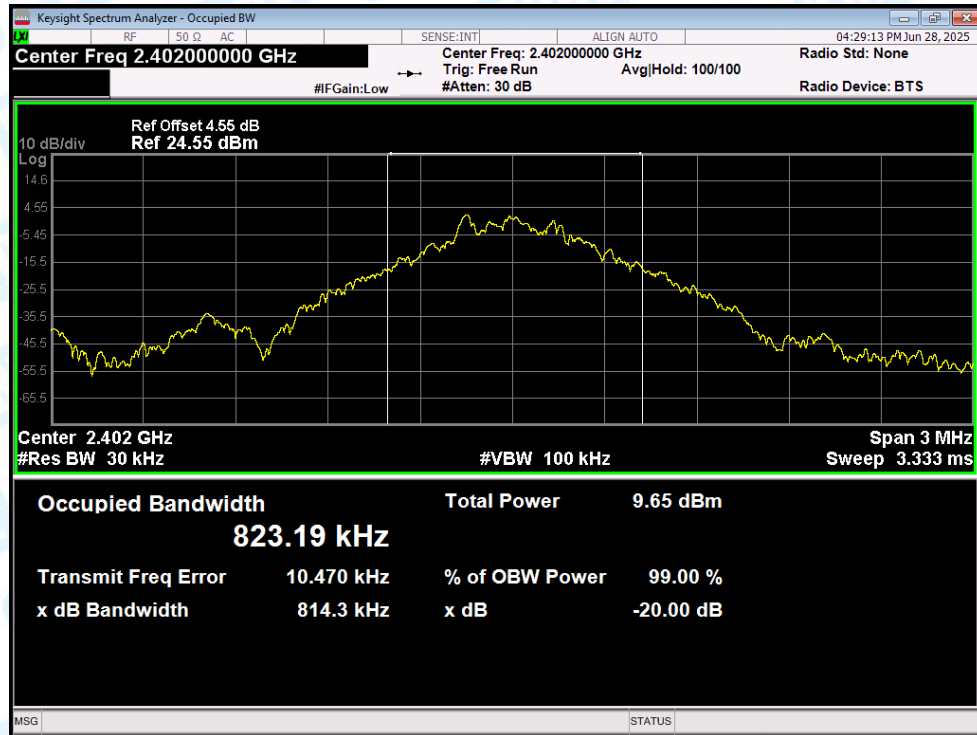


4. Occupied Channel Bandwidth

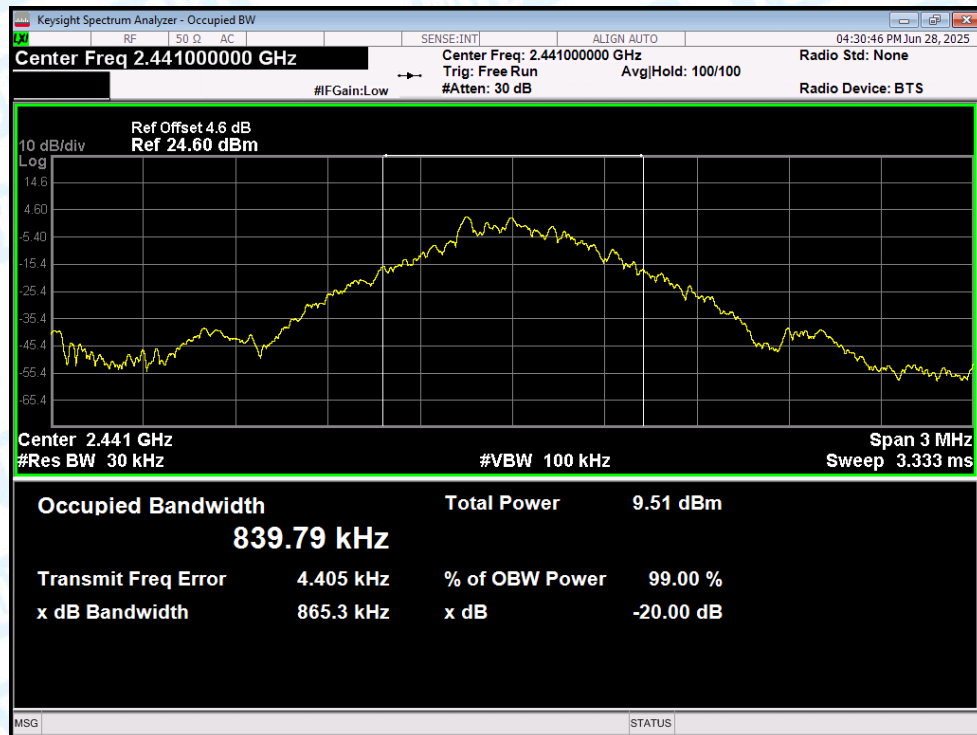
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.823
NVNT	1-DH1	2441	Ant1	0.84
NVNT	1-DH1	2480	Ant1	0.828
NVNT	2-DH1	2402	Ant1	1.171
NVNT	2-DH1	2441	Ant1	1.16
NVNT	2-DH1	2480	Ant1	1.196
NVNT	3-DH1	2402	Ant1	1.149
NVNT	3-DH1	2441	Ant1	1.167
NVNT	3-DH1	2480	Ant1	1.172

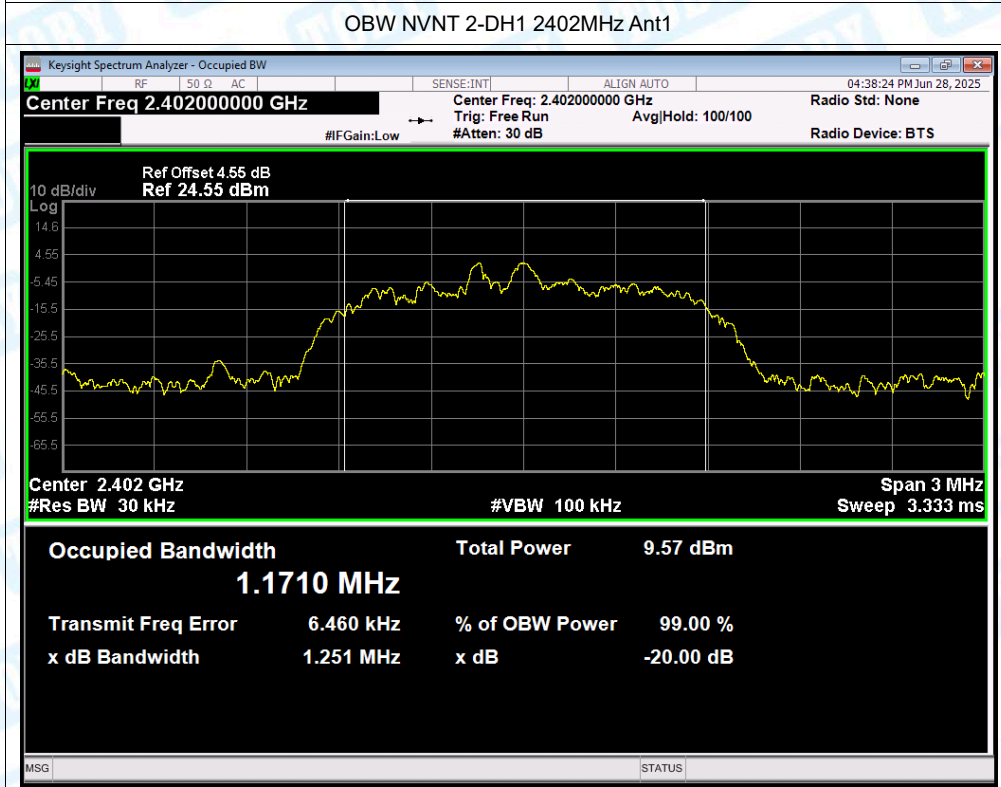
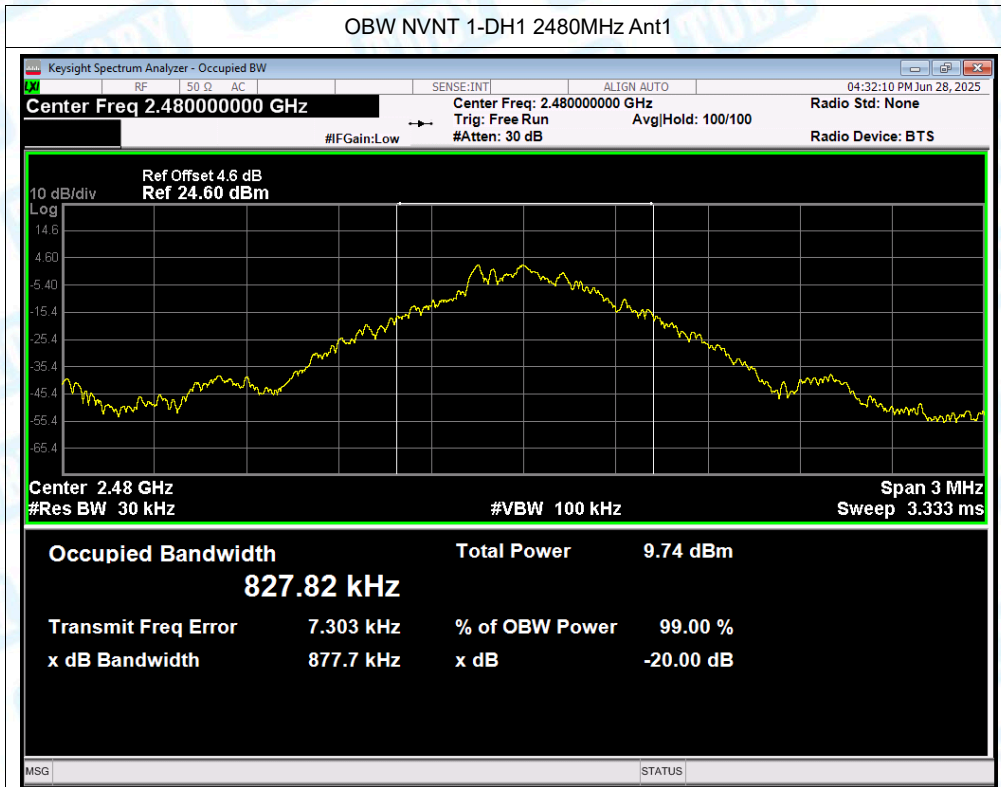
Test Graphs

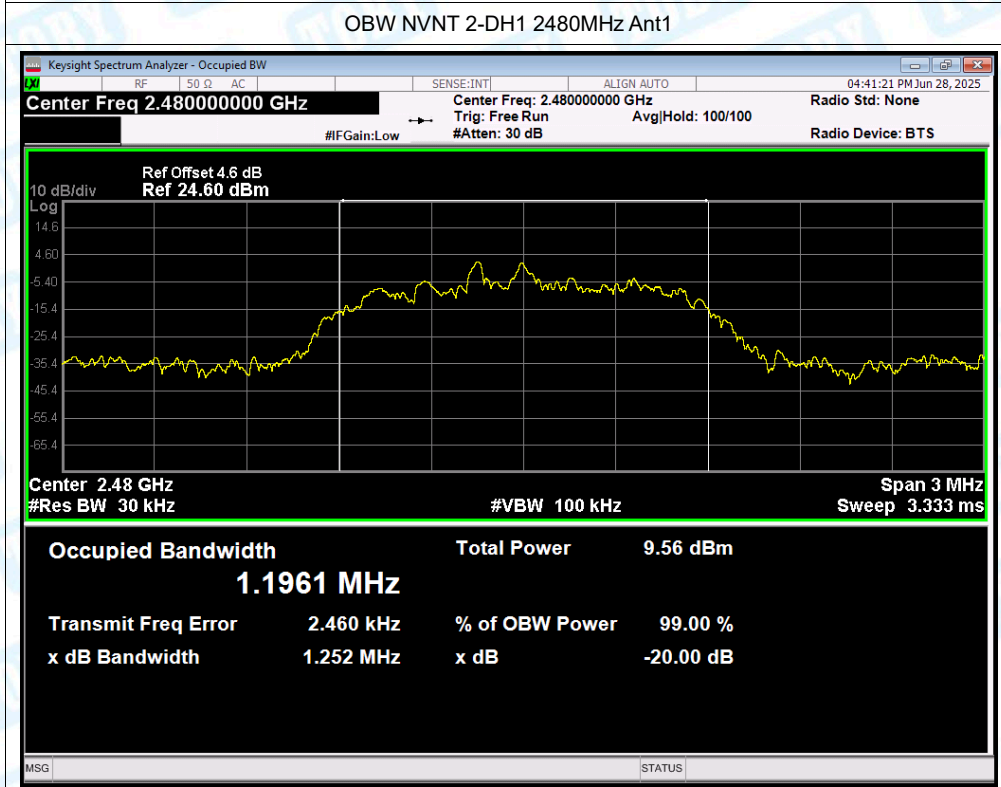
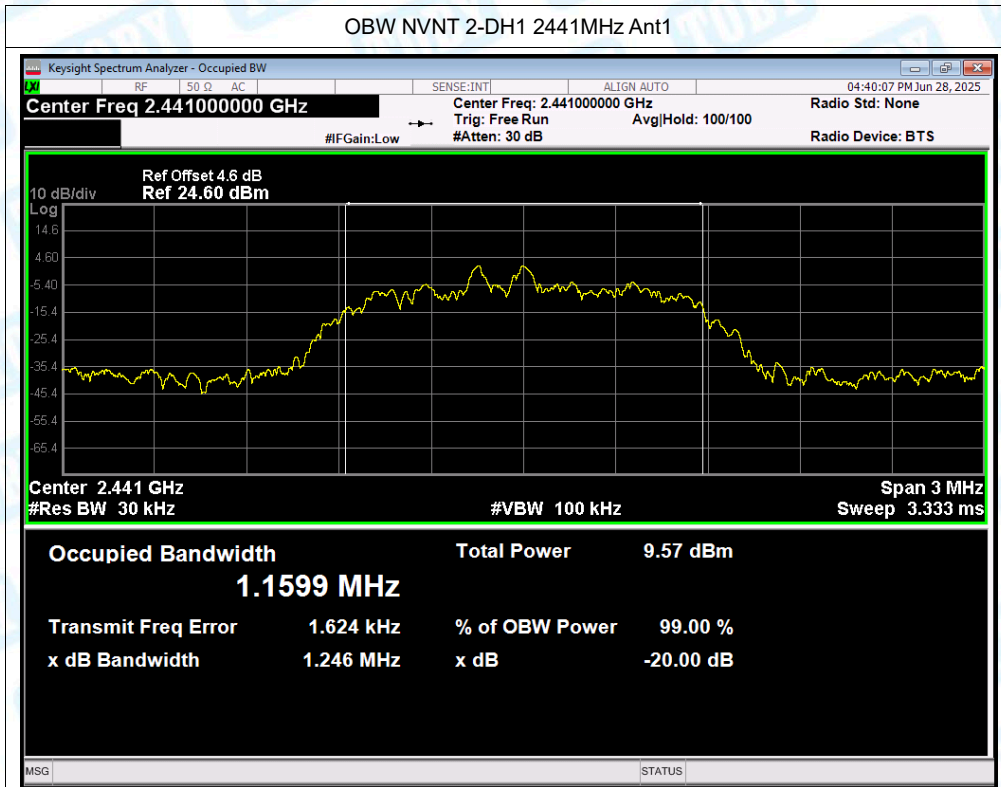
OBW NVNT 1-DH1 2402MHz Ant1



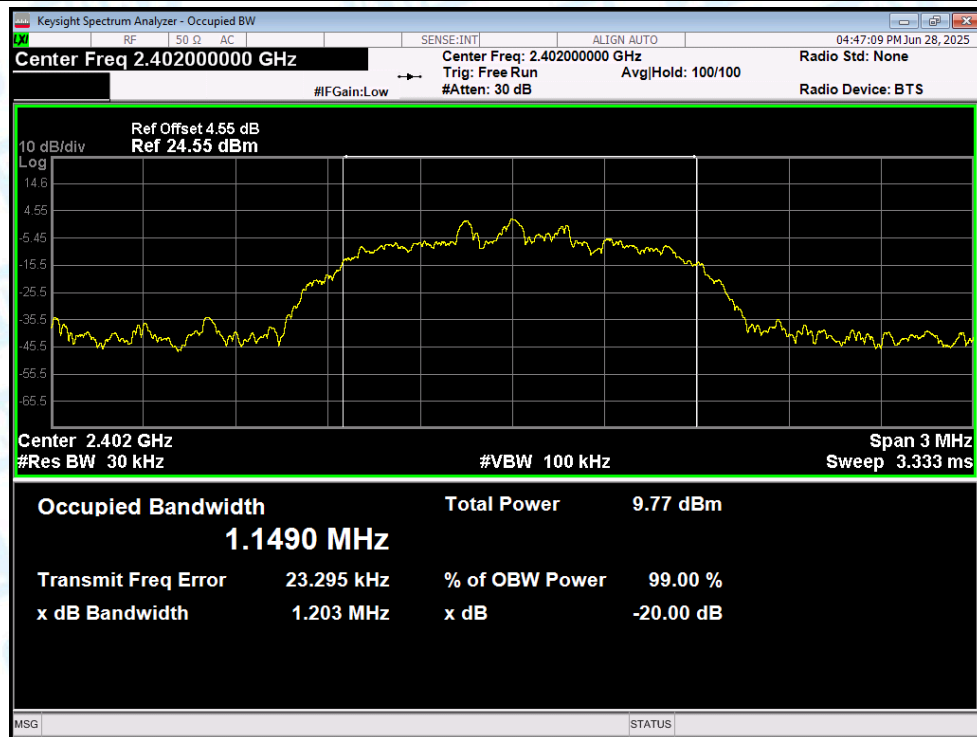
OBW NVNT 1-DH1 2441MHz Ant1



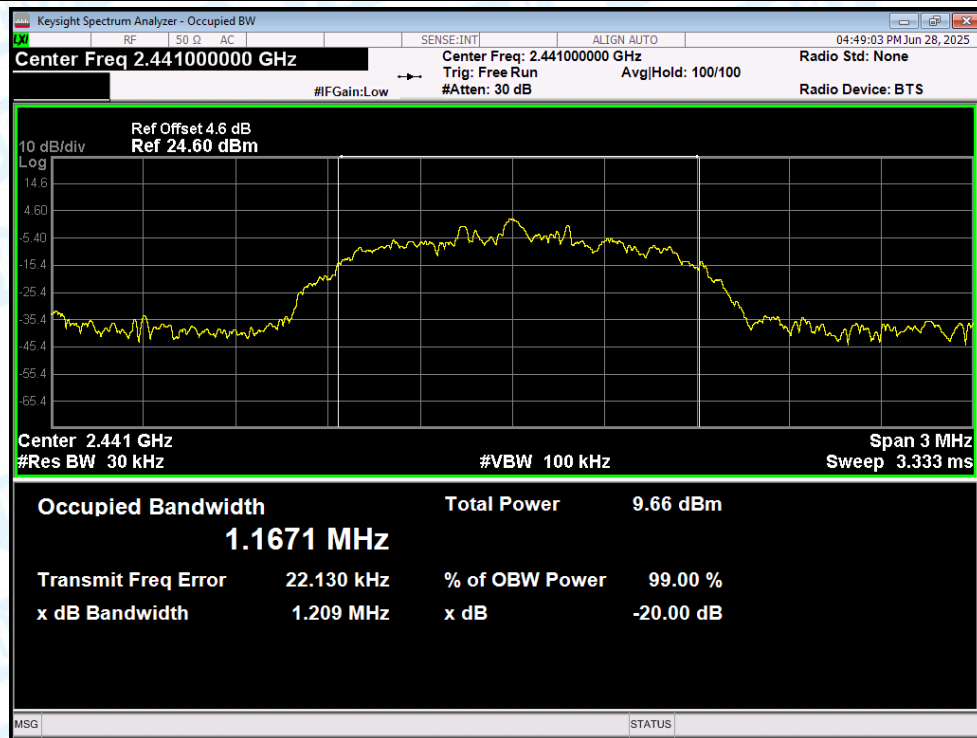


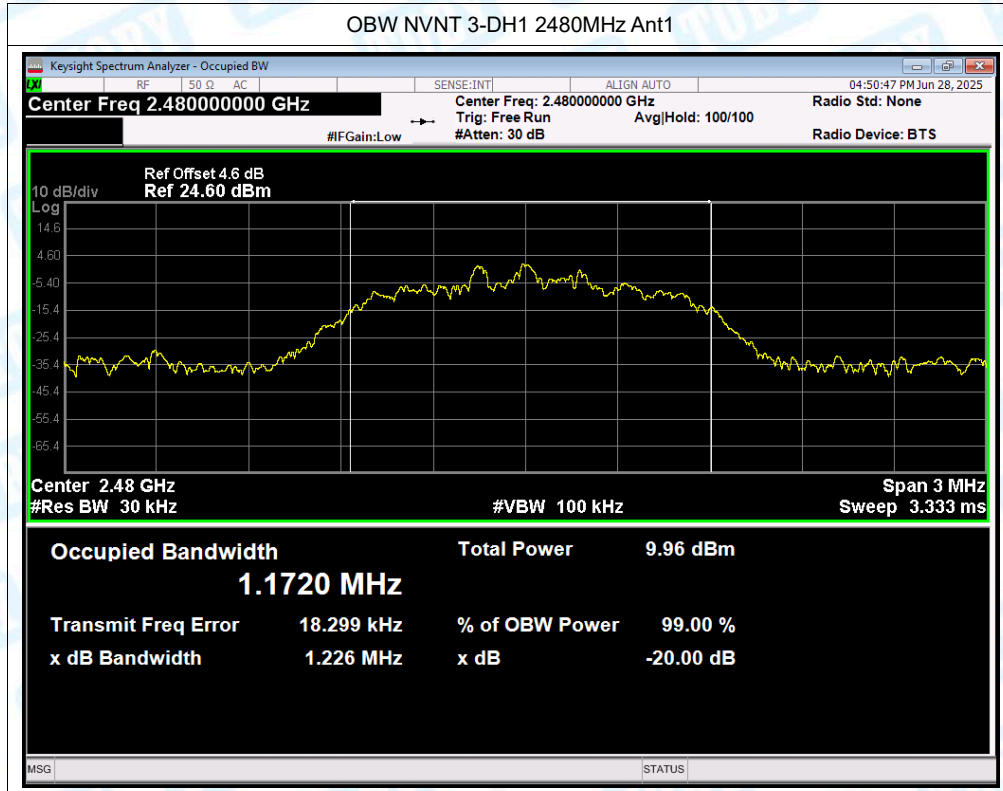


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



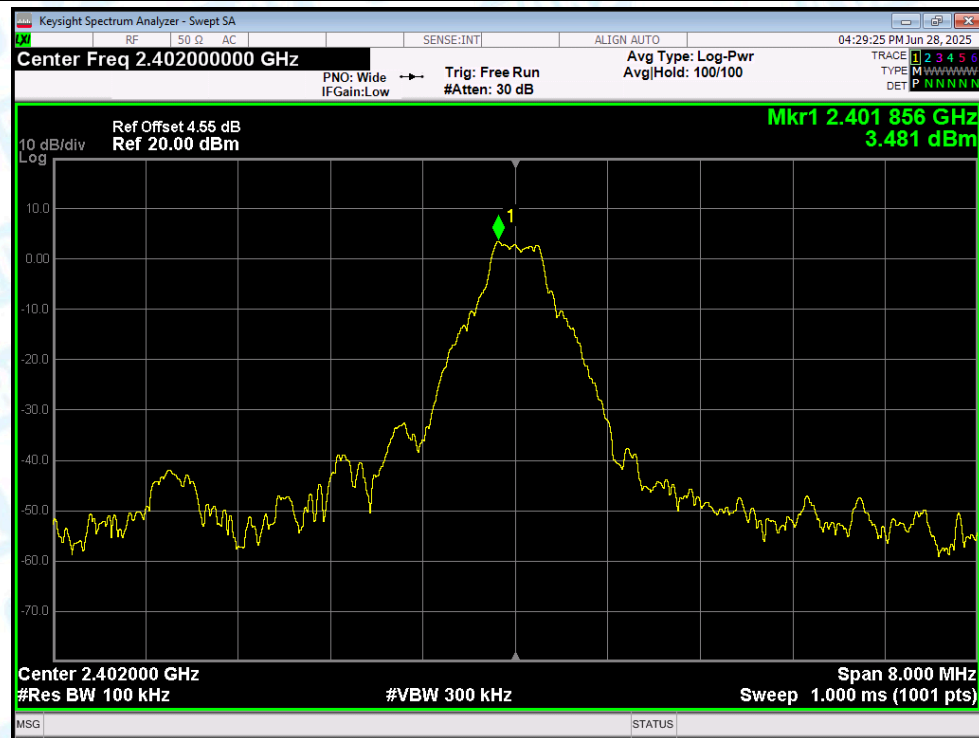


5. Band Edge

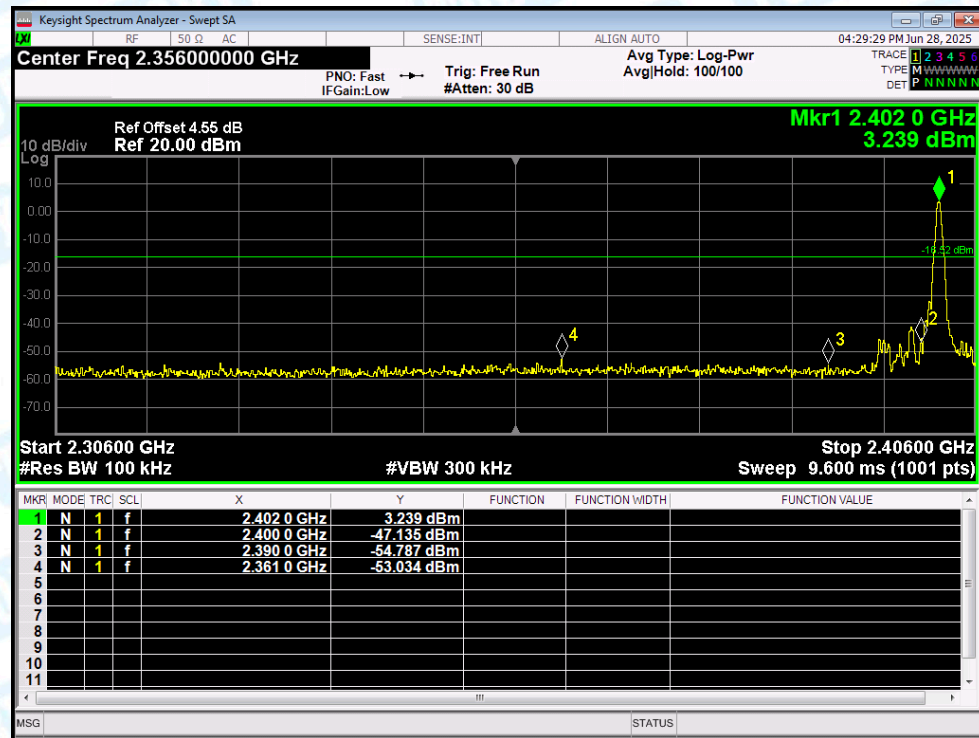
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-56.51	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-49.89	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-58.16	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-52.96	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-57.23	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-48.36	-20	Pass

Test Graphs

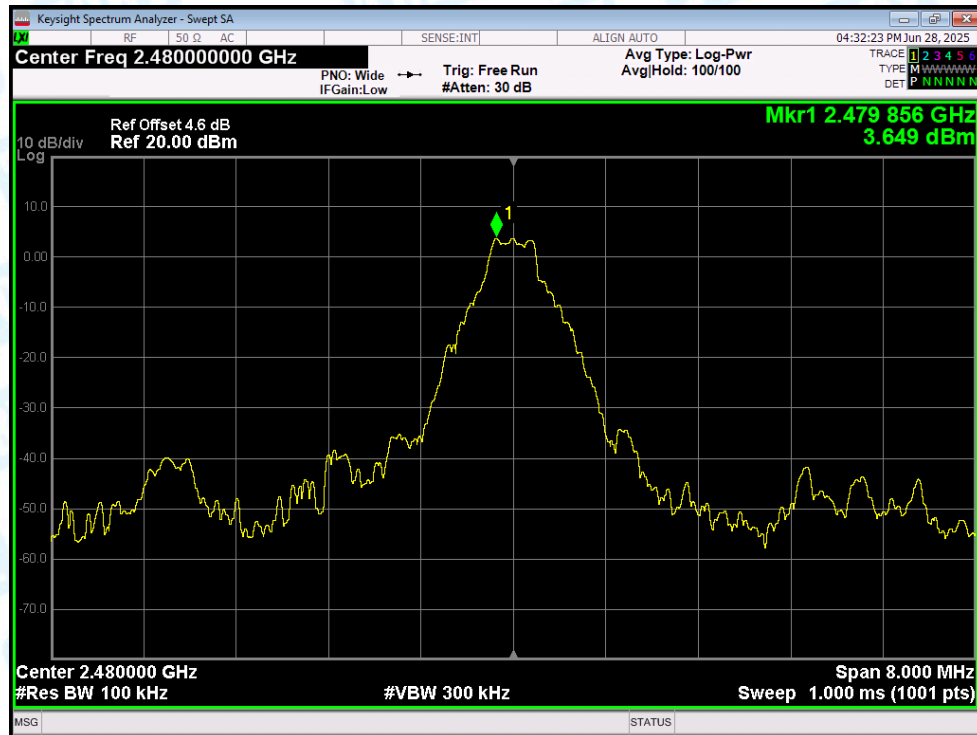
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



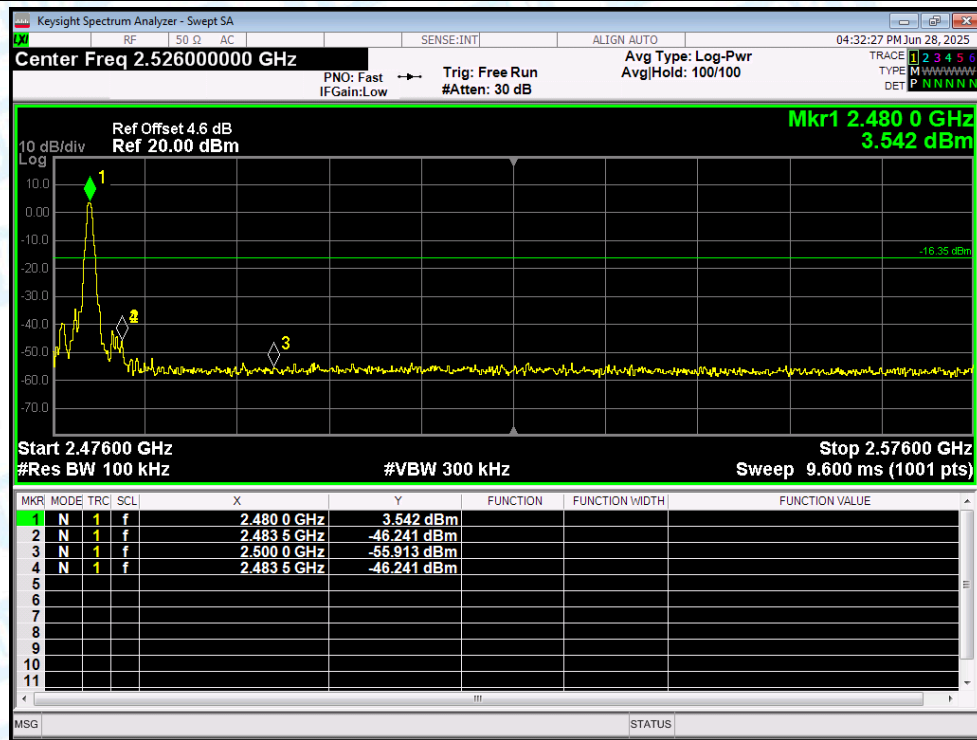
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

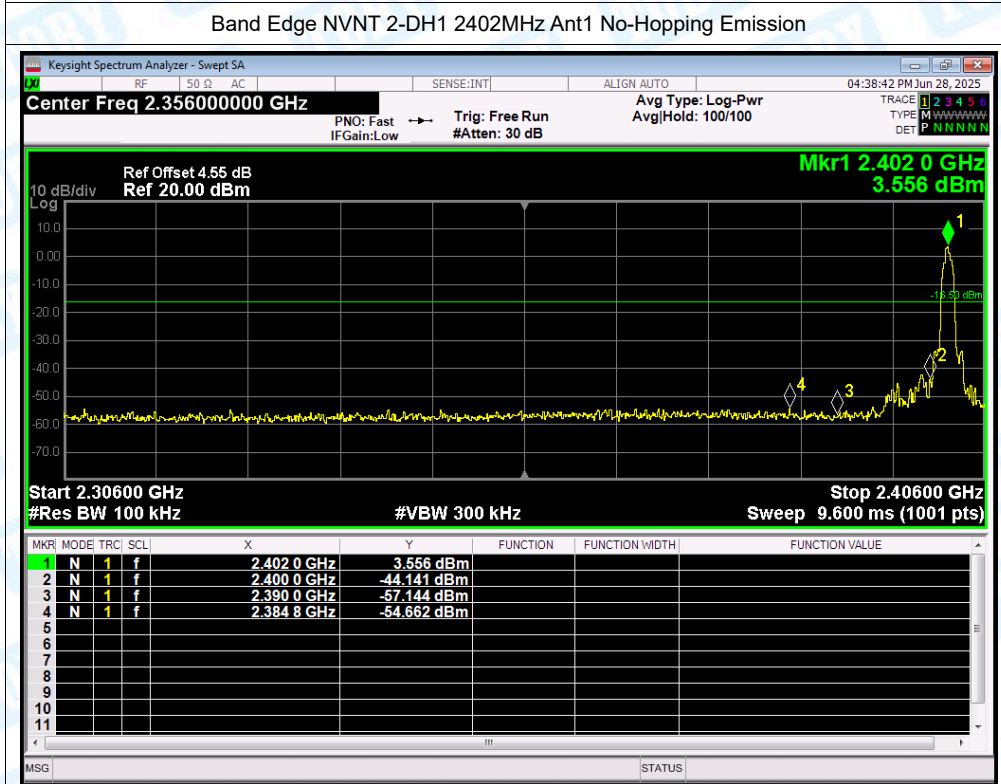


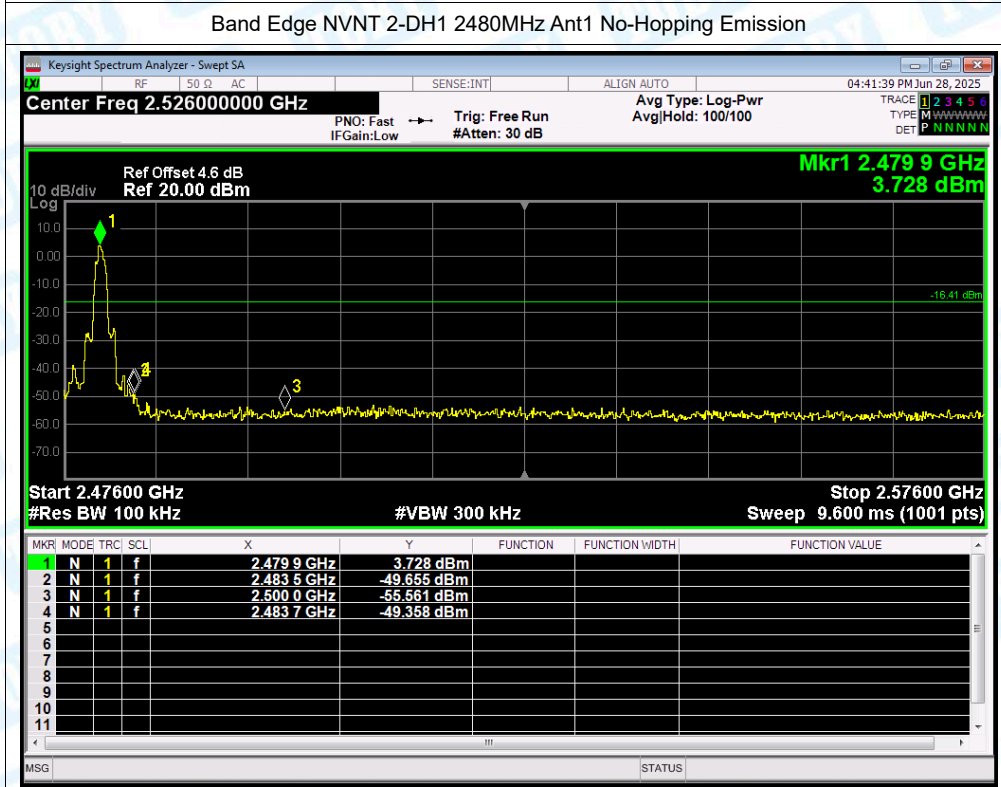
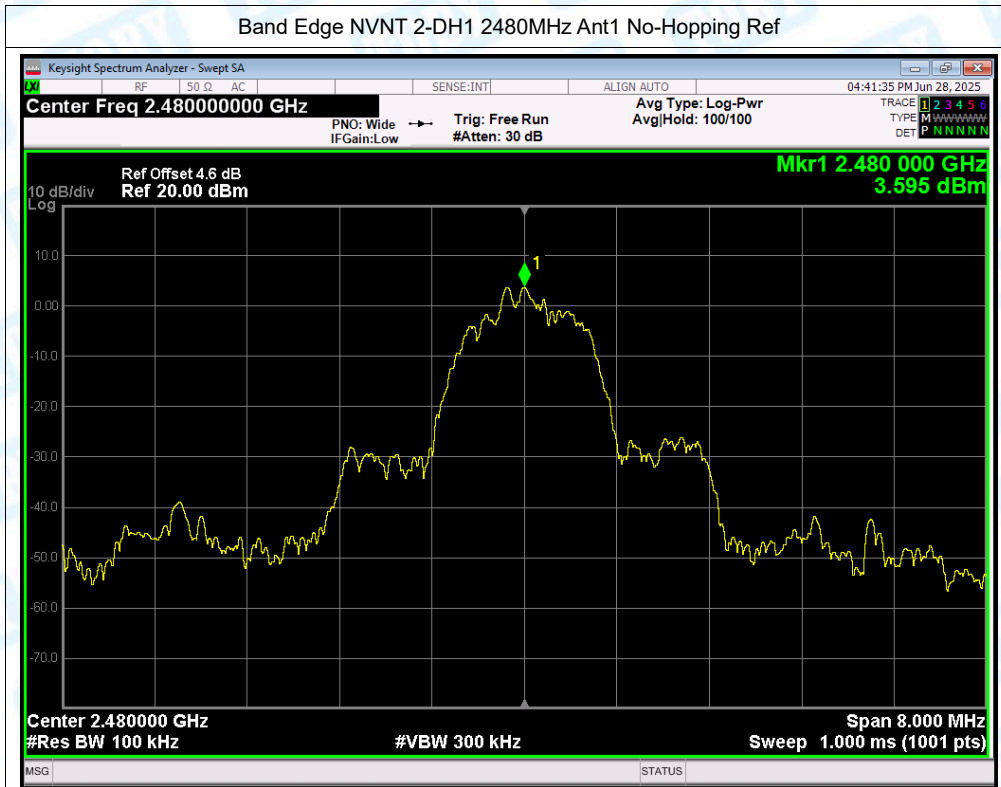
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



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



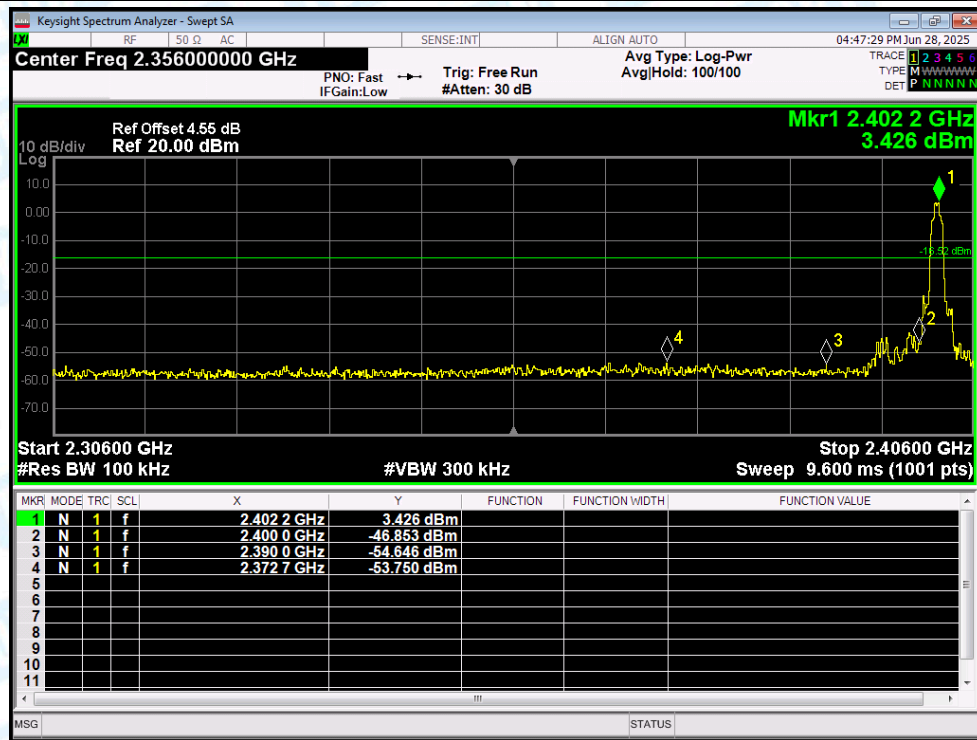




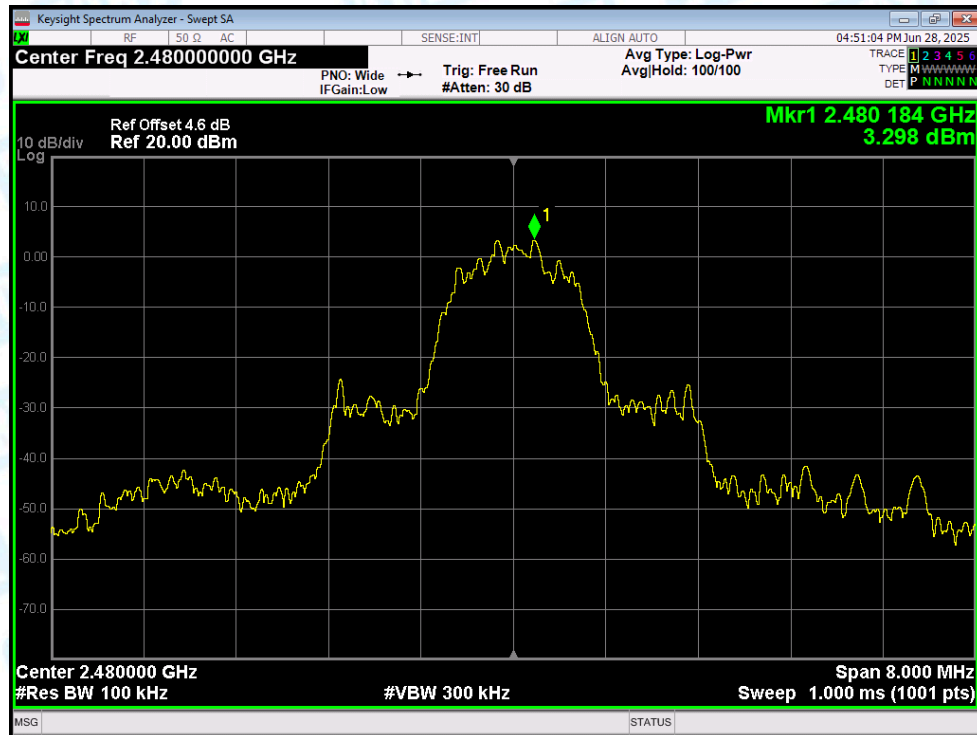
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



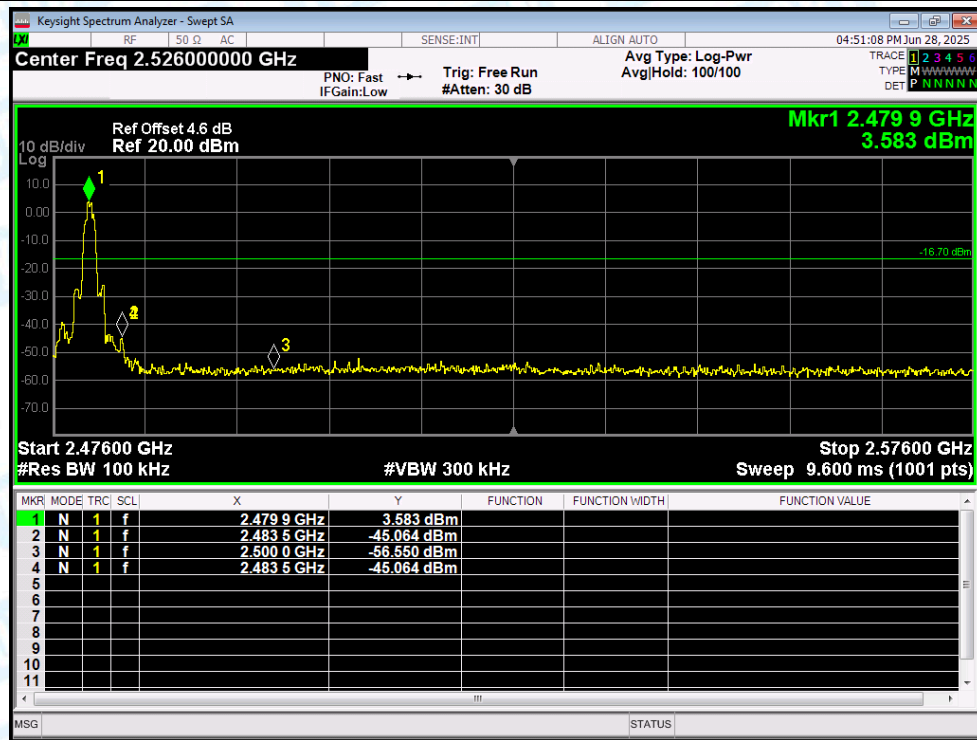
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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

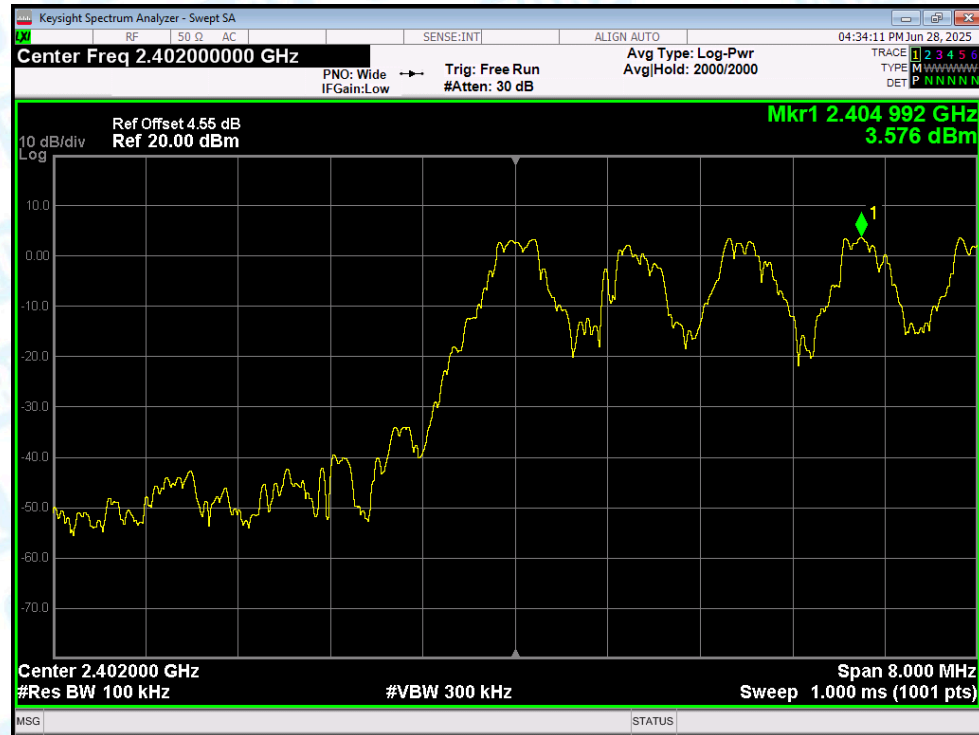


6. Band Edge(Hopping)

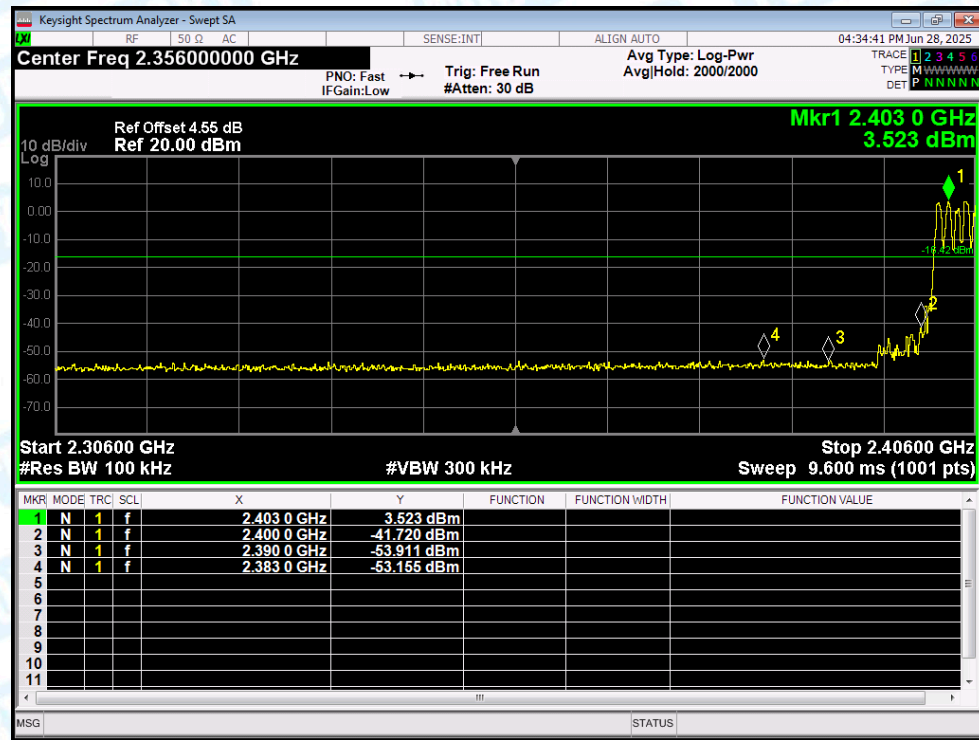
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-56.74	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-48.4	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.38	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-49.99	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.91	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-50.42	-20	Pass

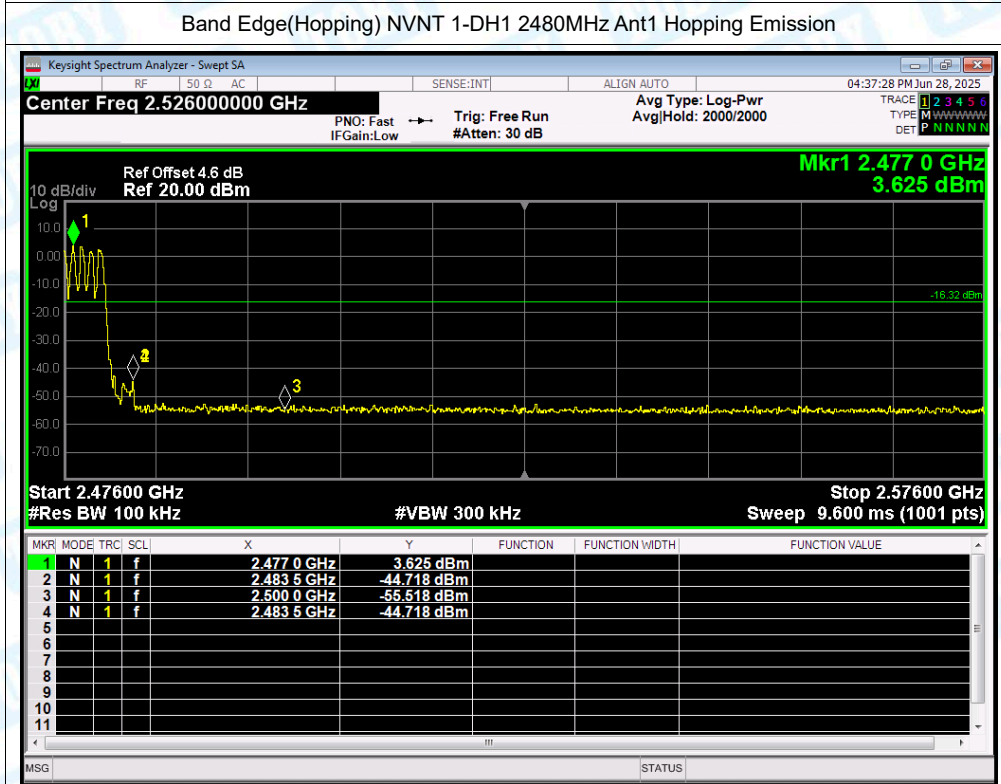
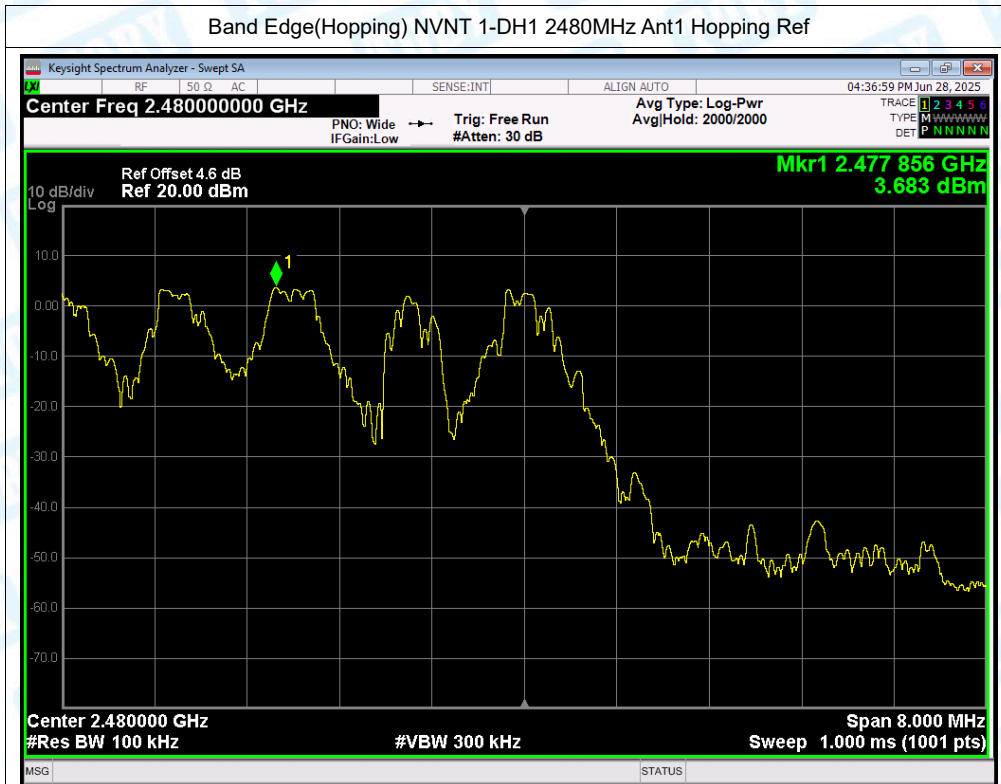
Test Graphs

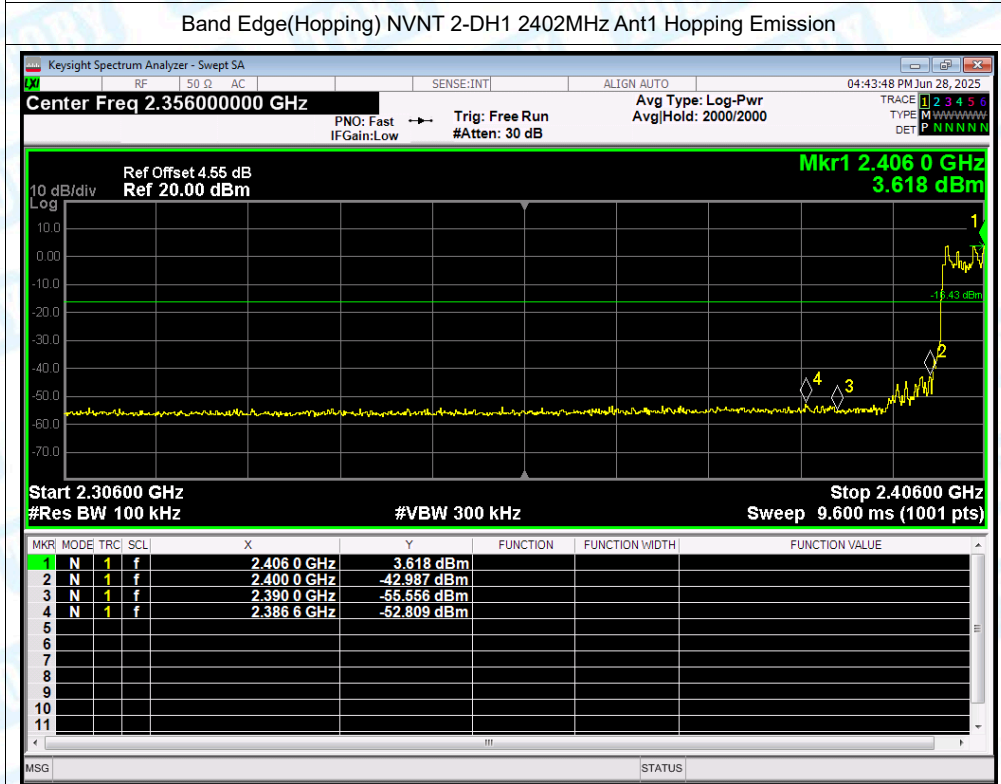
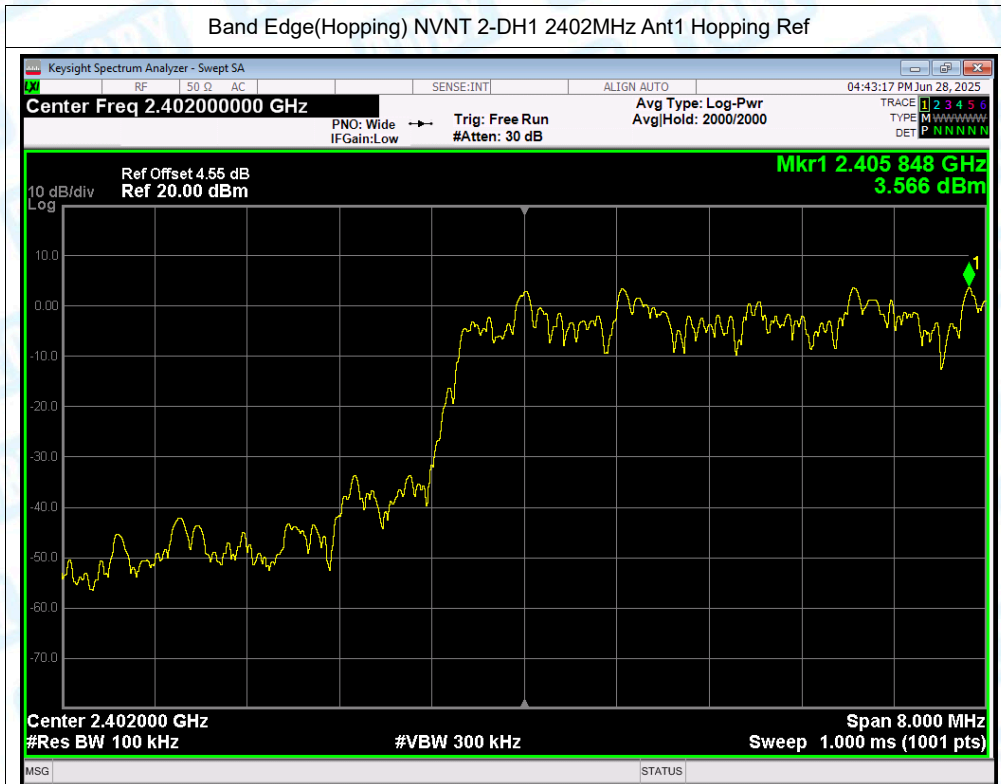
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref

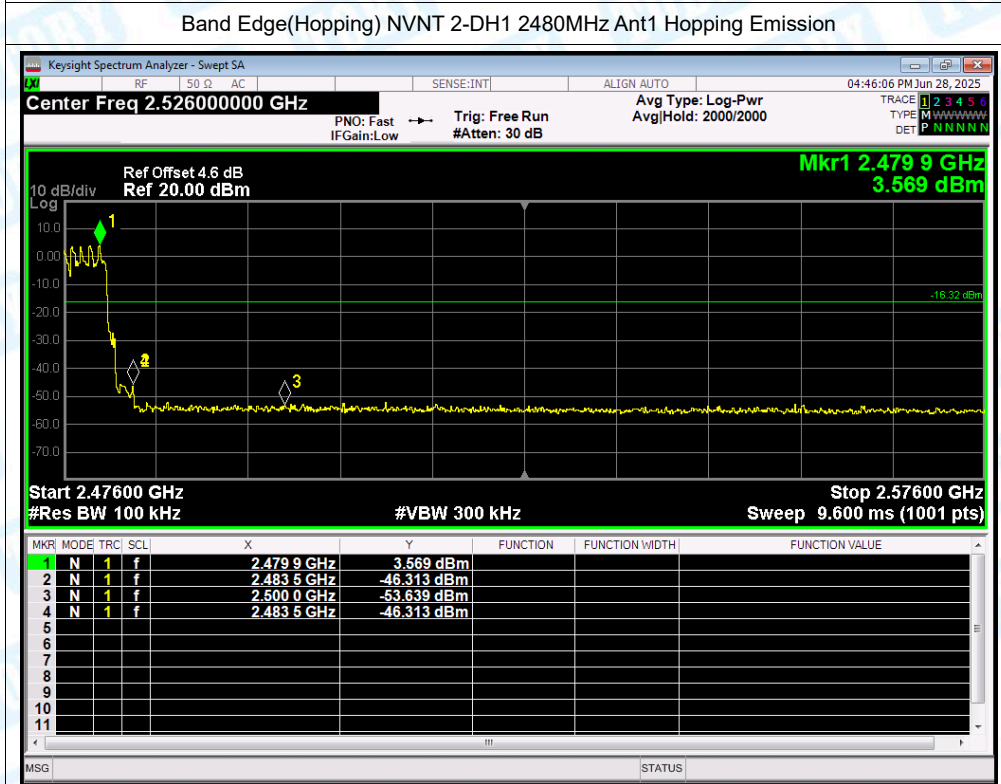
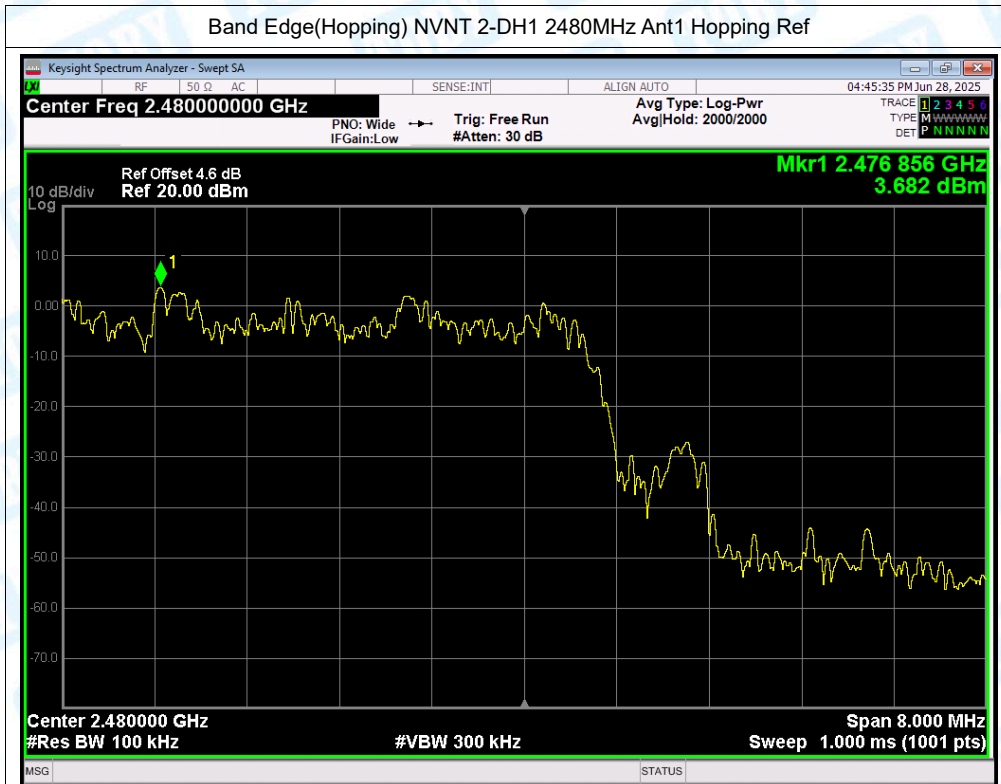


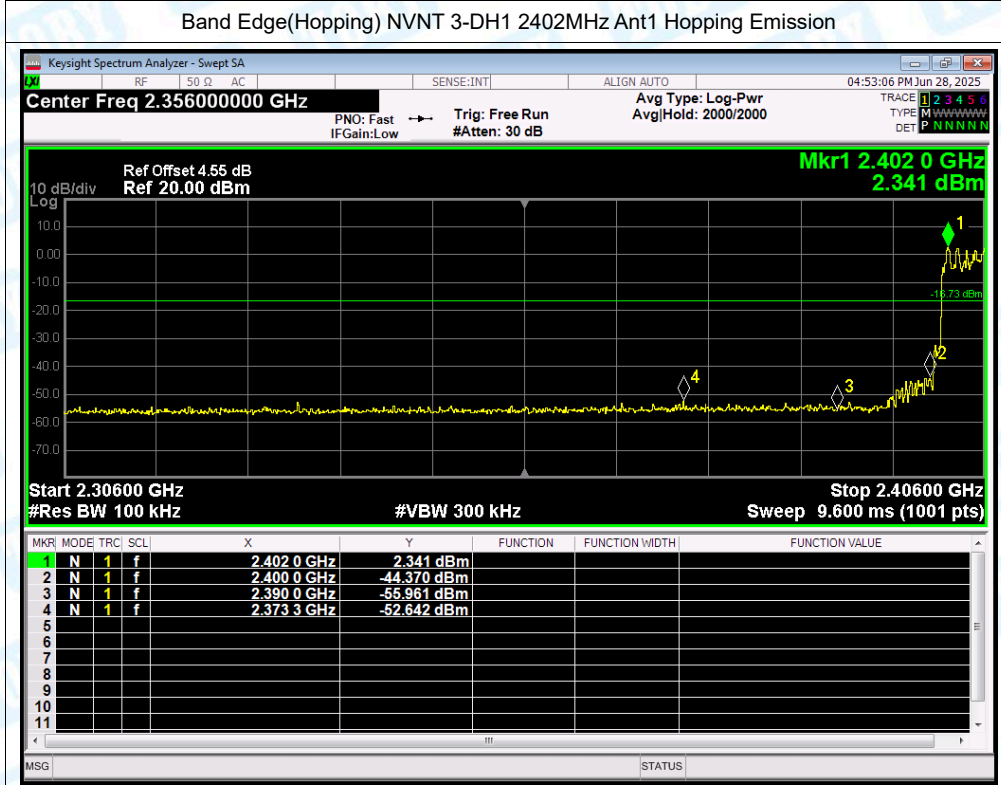
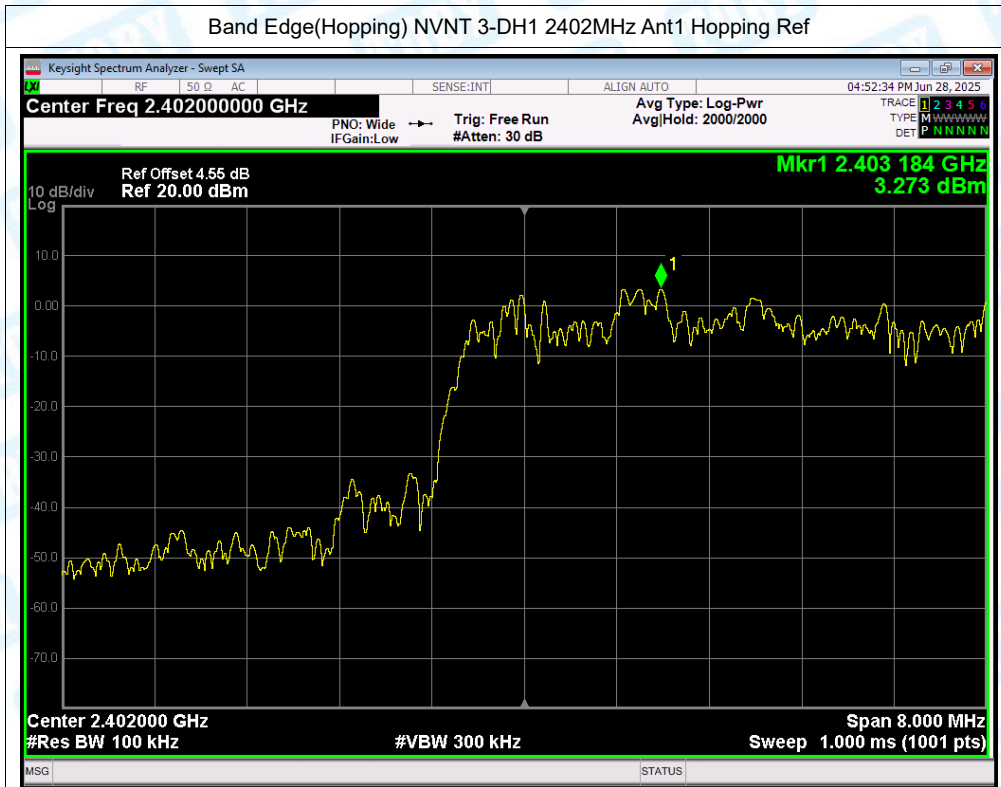
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

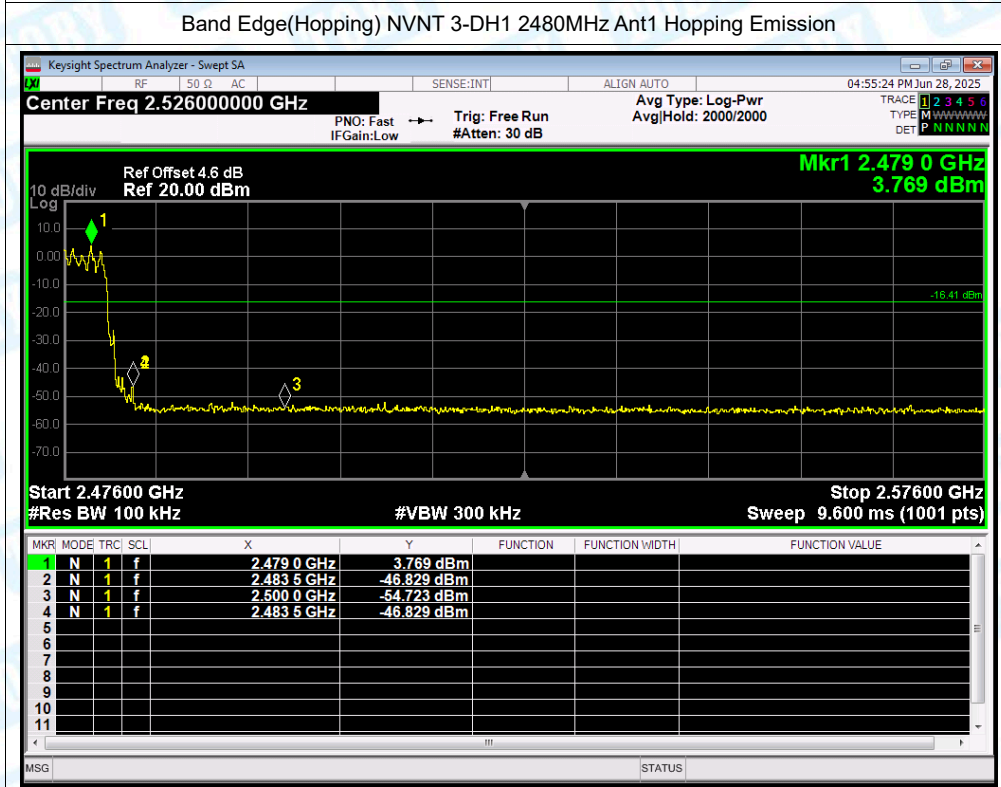












7. Conducted RF Spurious Emission

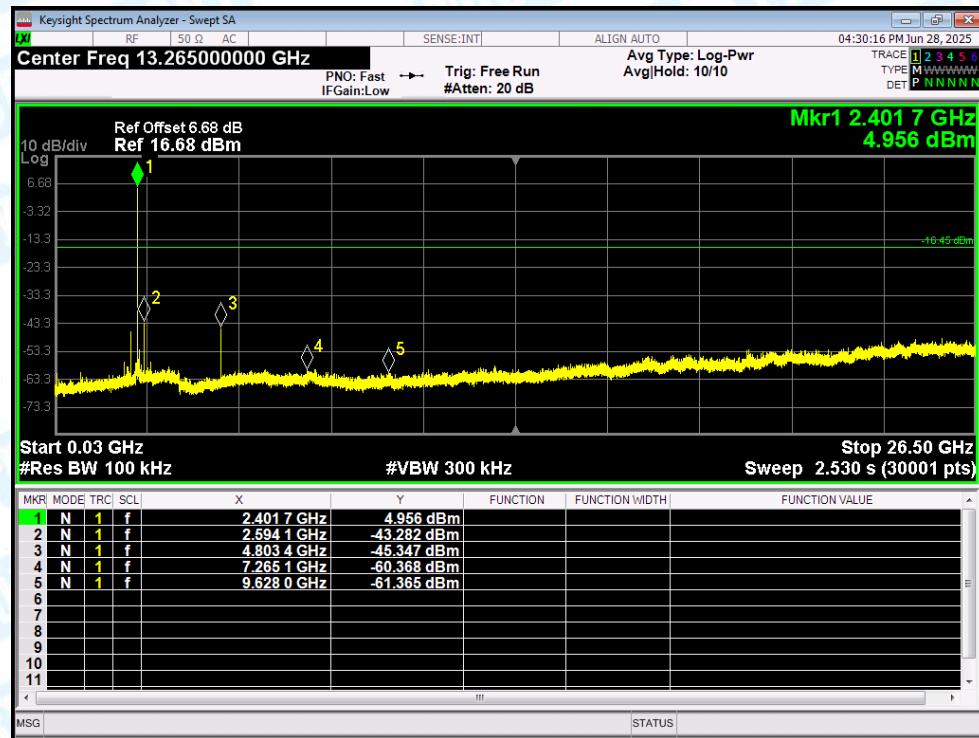
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-46.83	-20	Pass
NVNT	1-DH1	2441	Ant1	-48.73	-20	Pass
NVNT	1-DH1	2480	Ant1	-50.5	-20	Pass
NVNT	2-DH1	2402	Ant1	-46.22	-20	Pass
NVNT	2-DH1	2441	Ant1	-50.78	-20	Pass
NVNT	2-DH1	2480	Ant1	-51.44	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.24	-20	Pass
NVNT	3-DH1	2441	Ant1	-48.22	-20	Pass
NVNT	3-DH1	2480	Ant1	-47.3	-20	Pass

Test Graphs

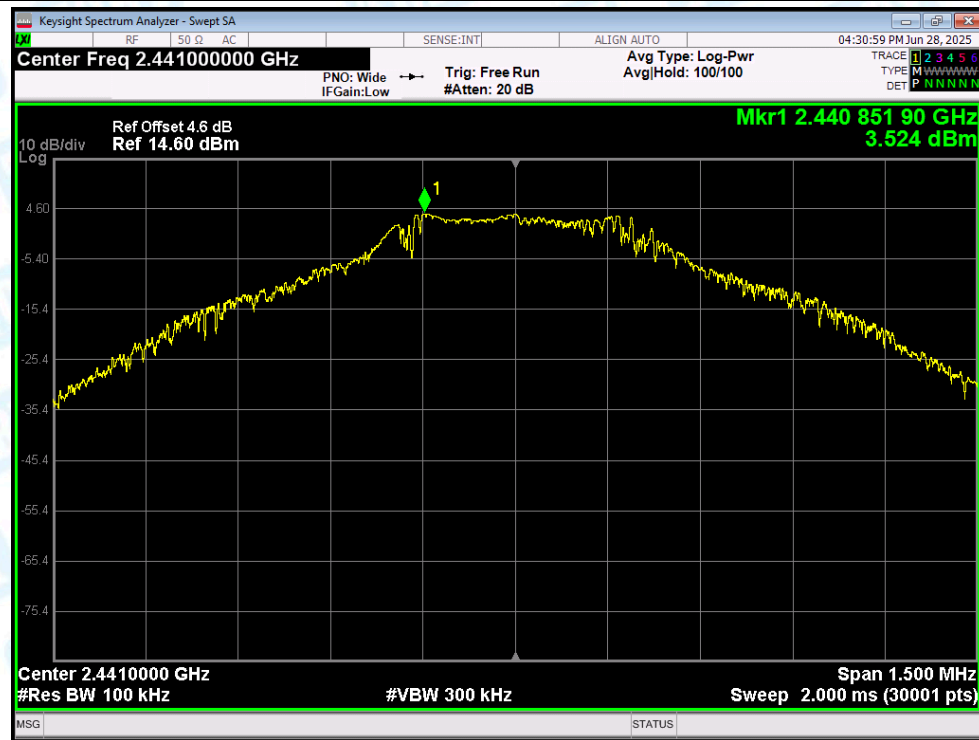
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



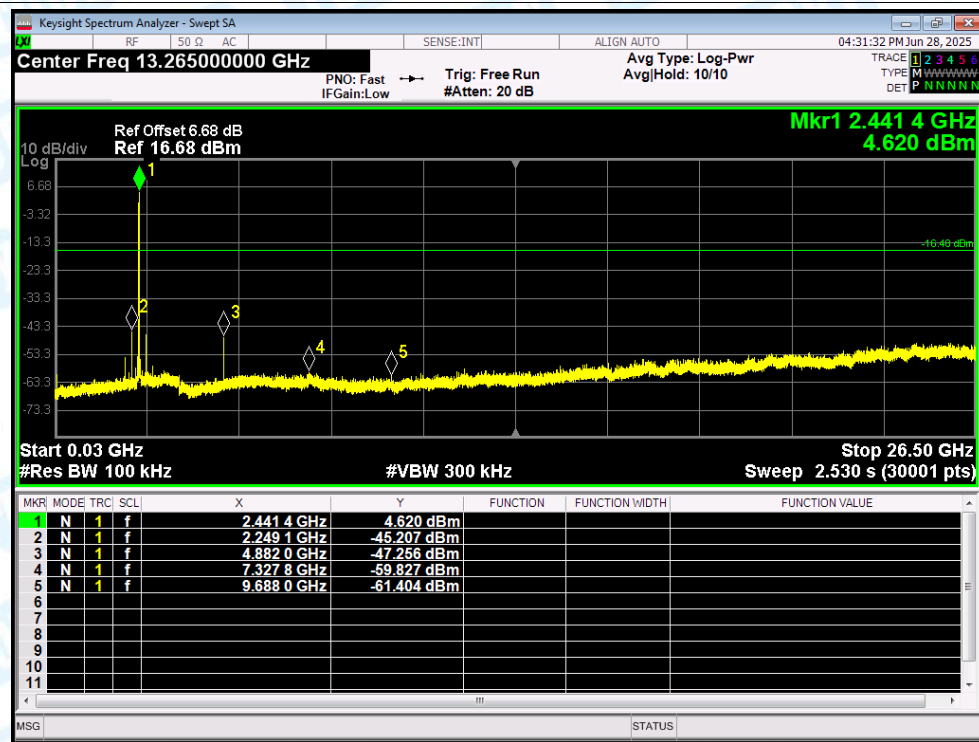
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



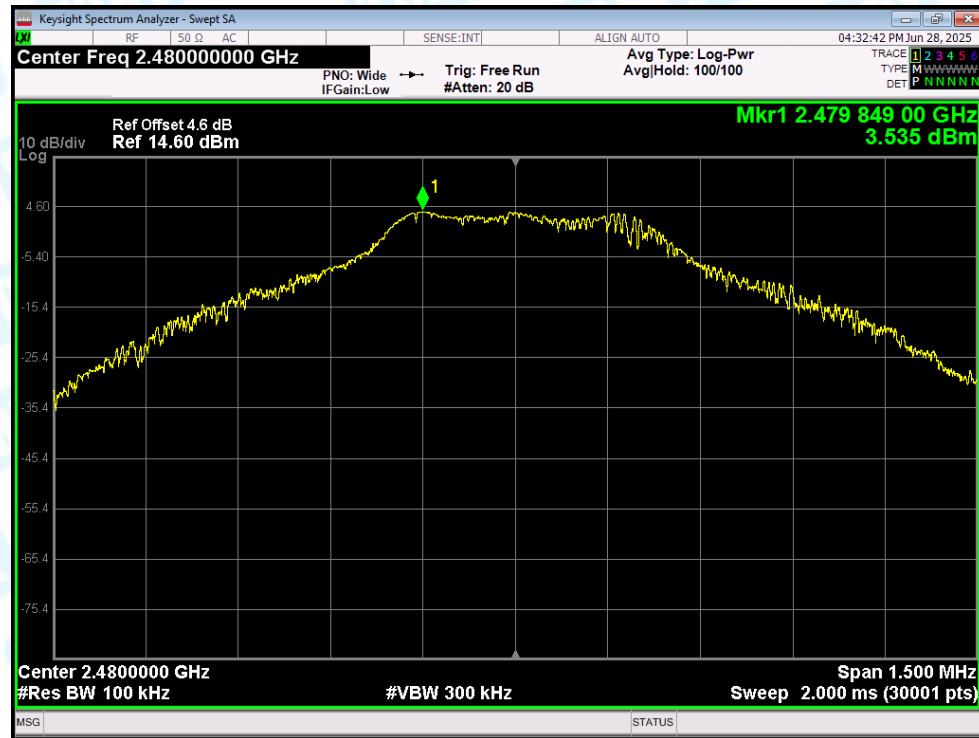
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



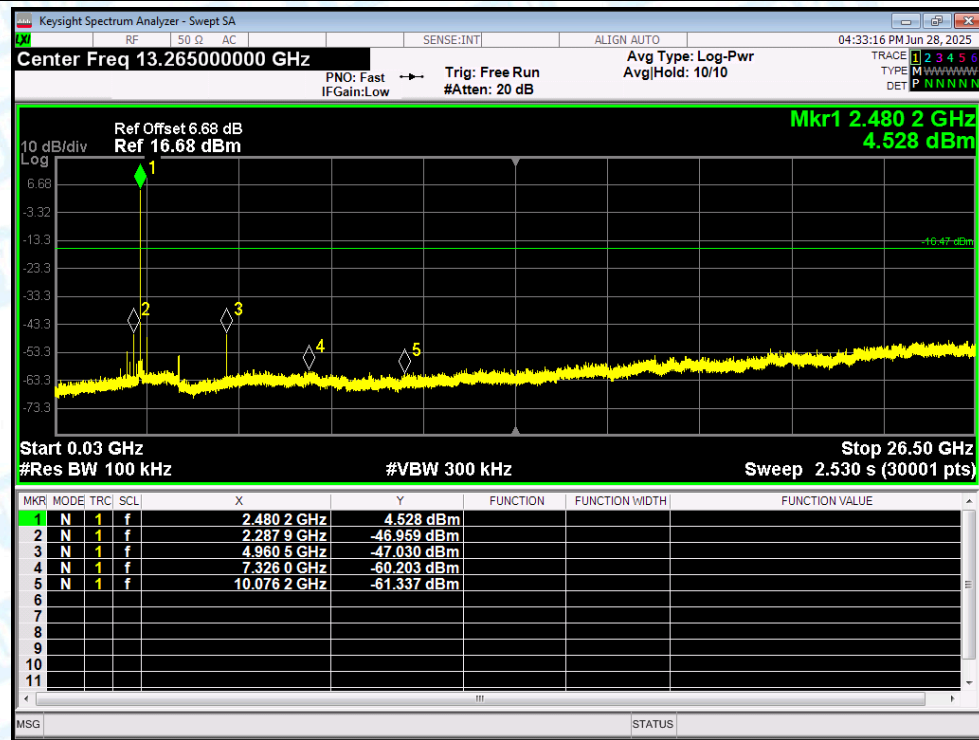
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



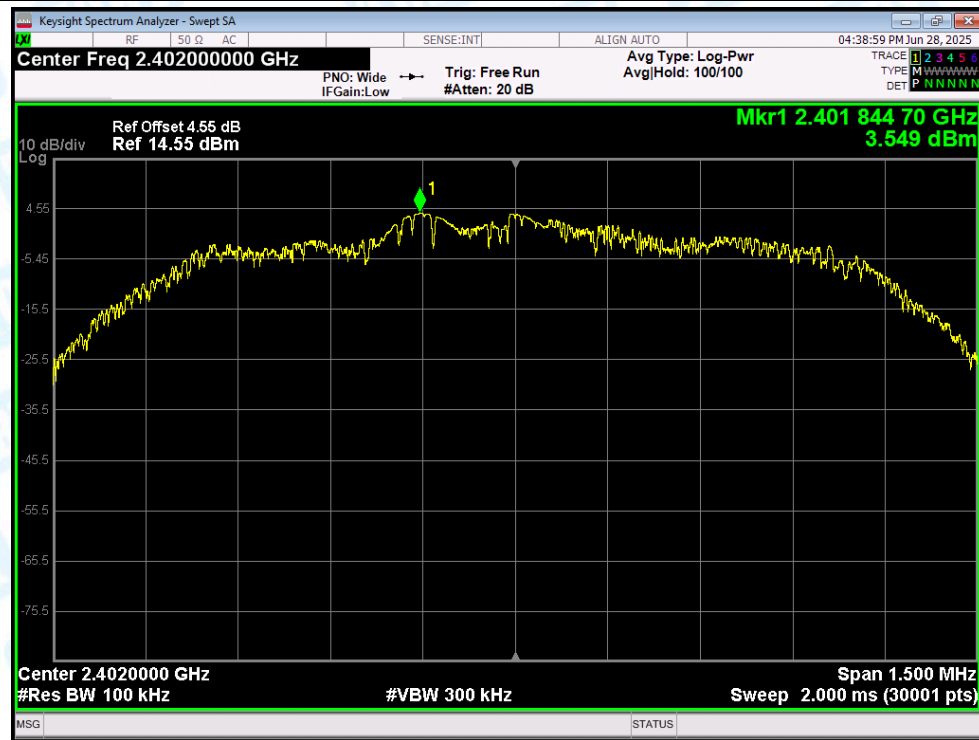
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



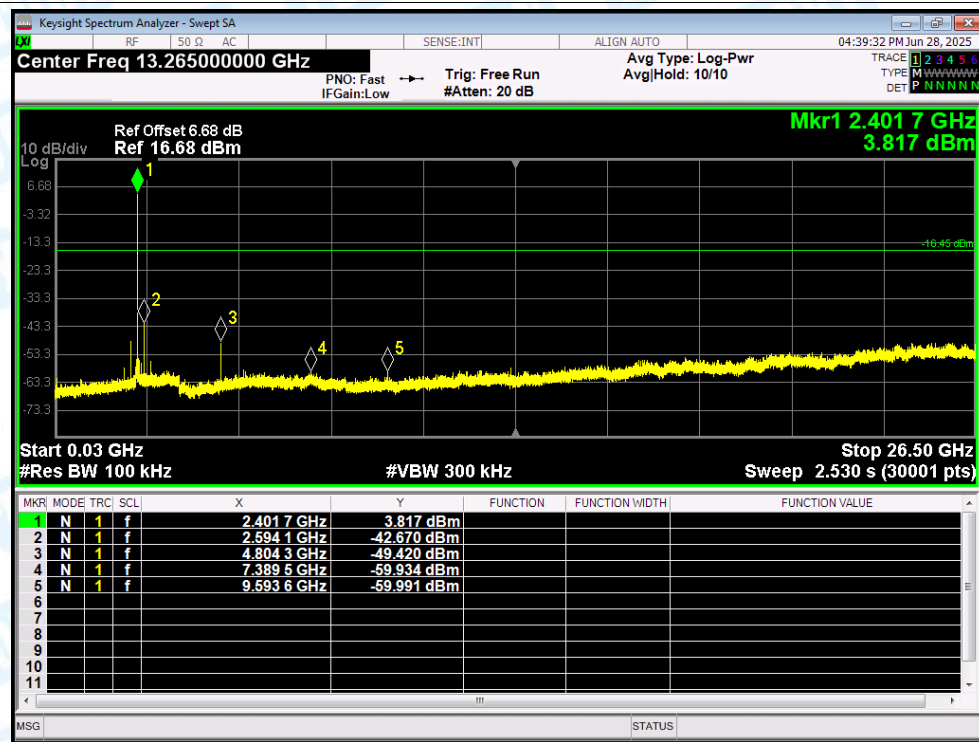
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



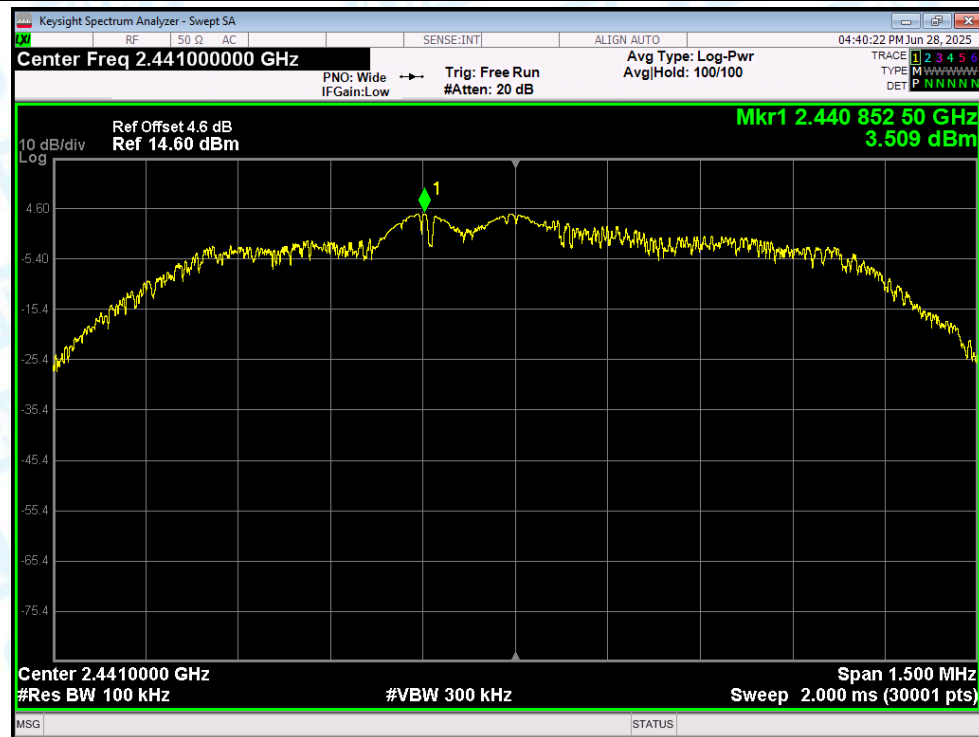
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



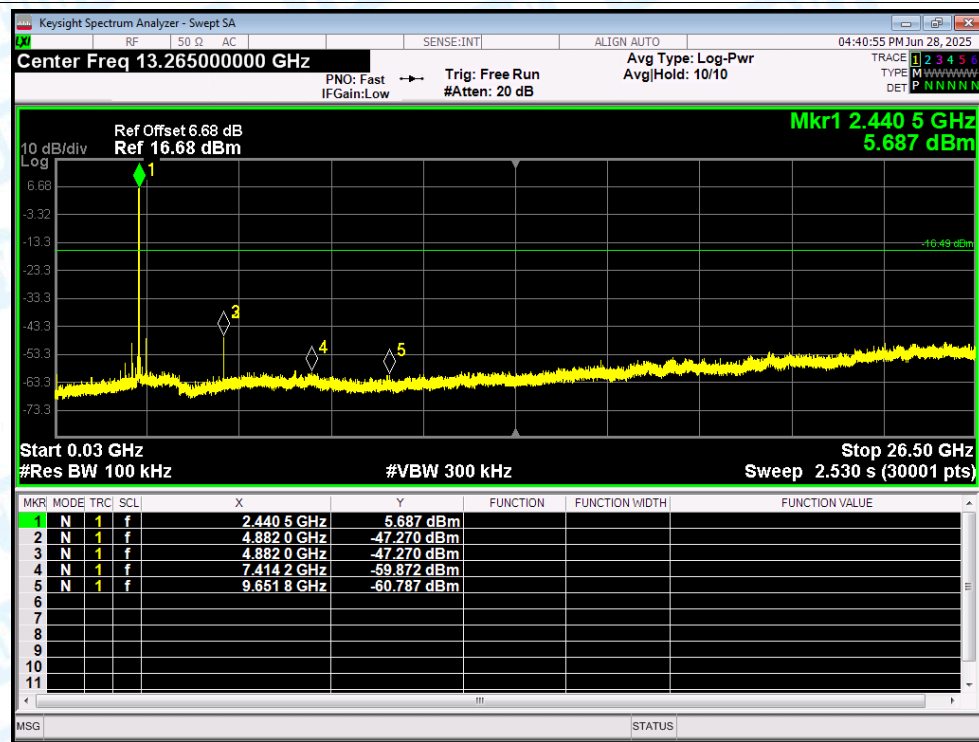
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



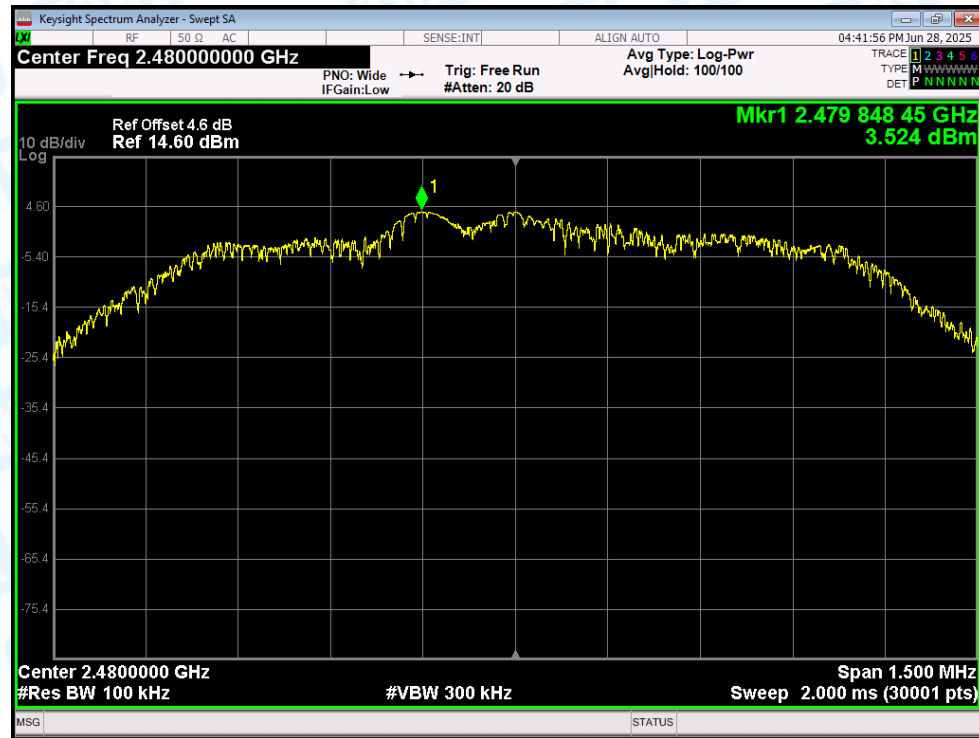
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



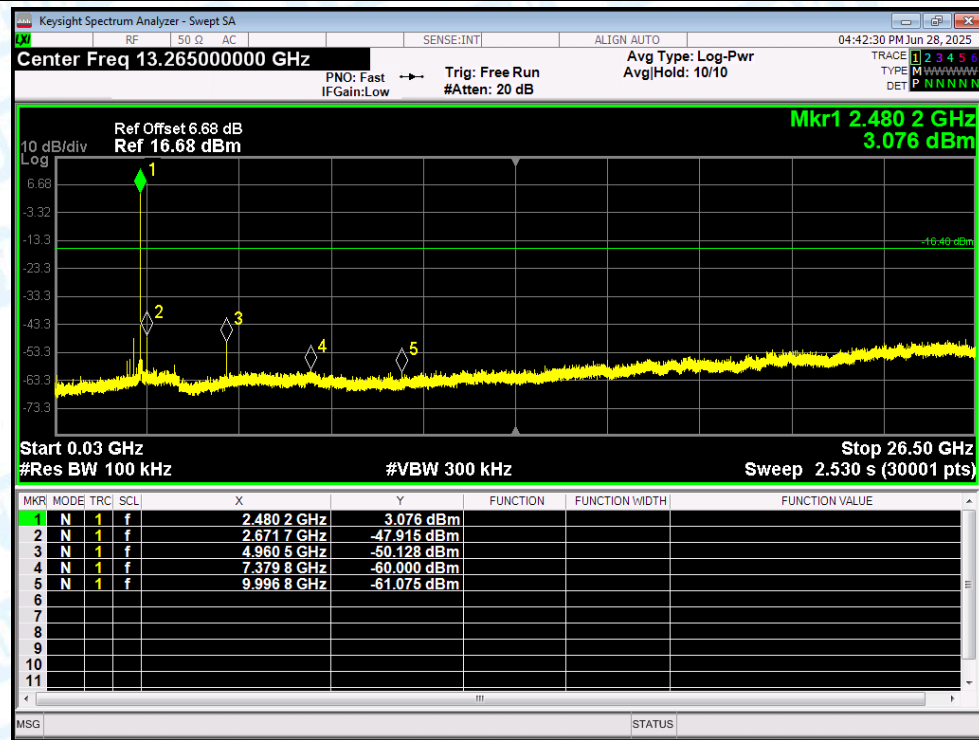
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



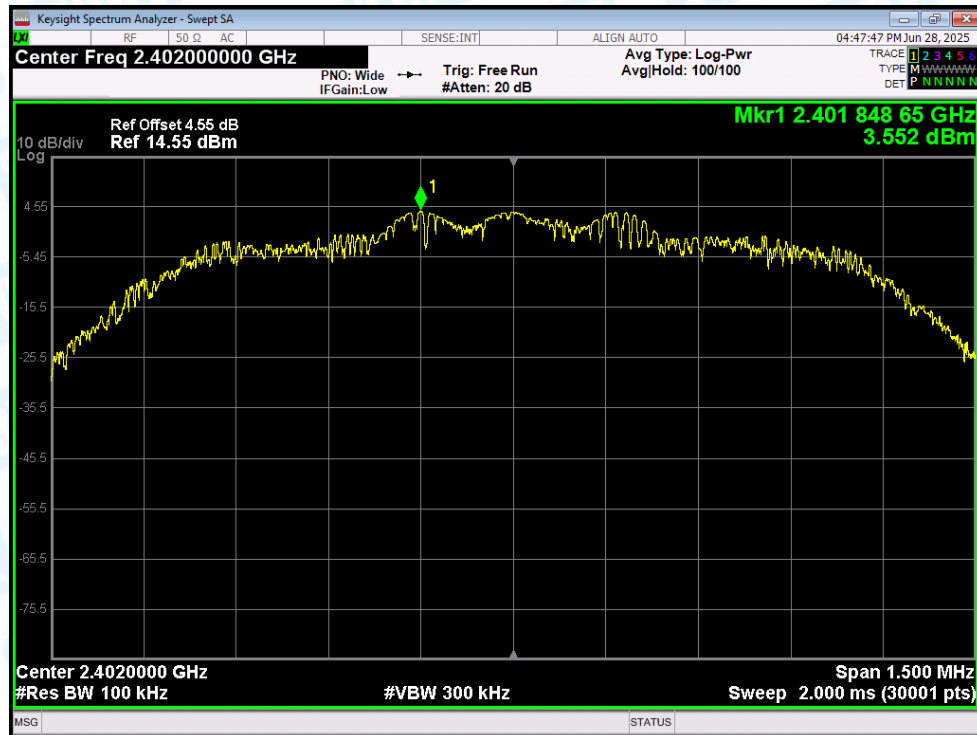
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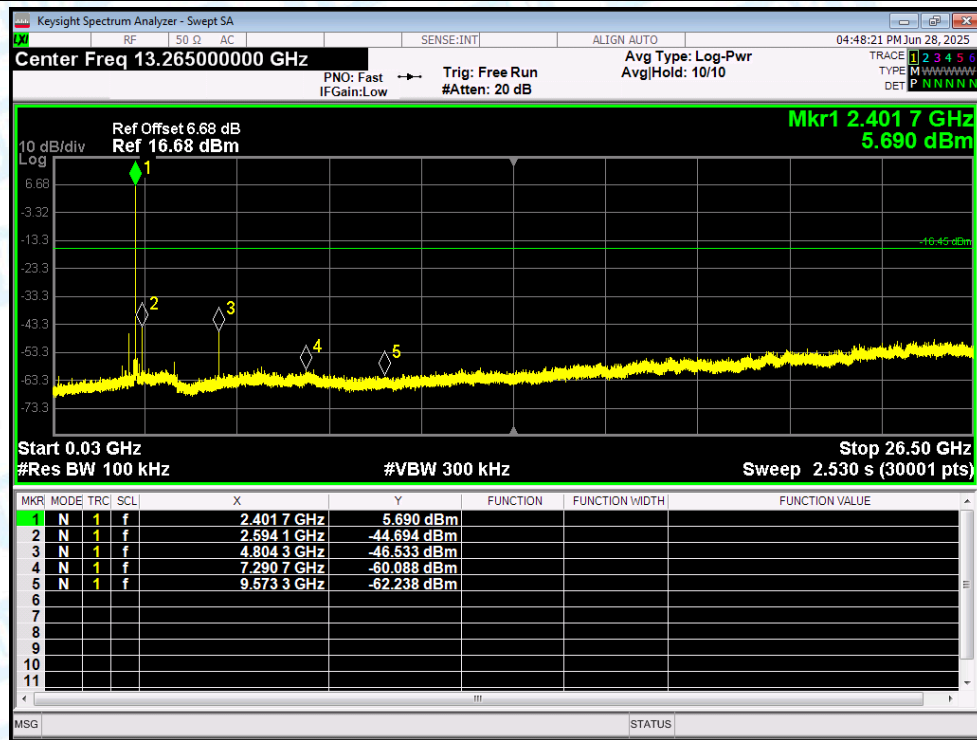
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



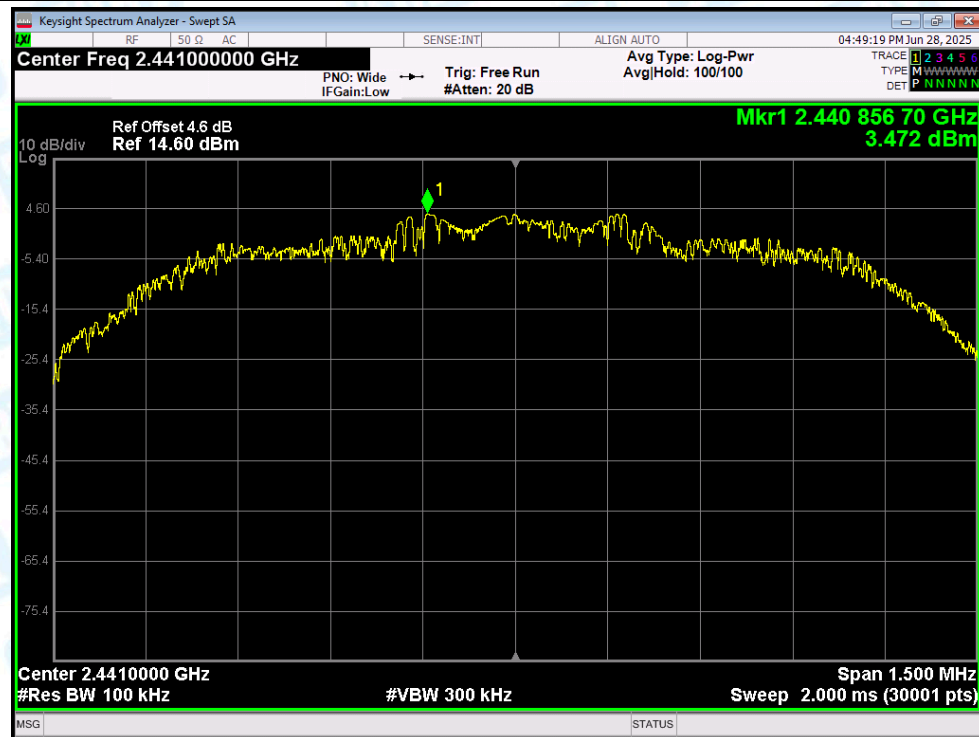
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



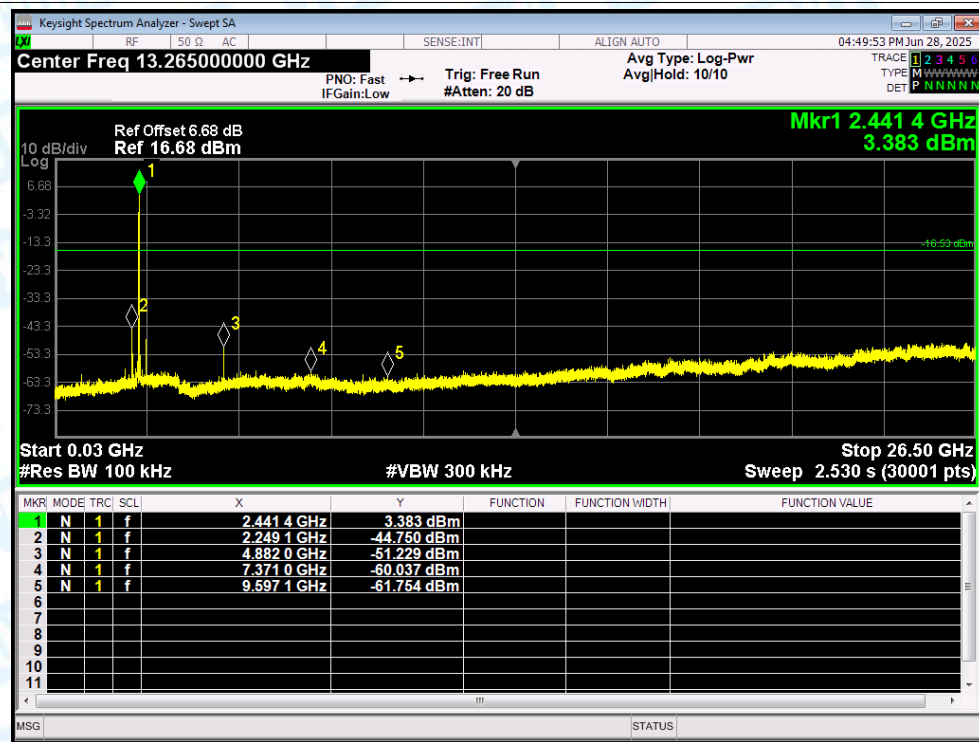
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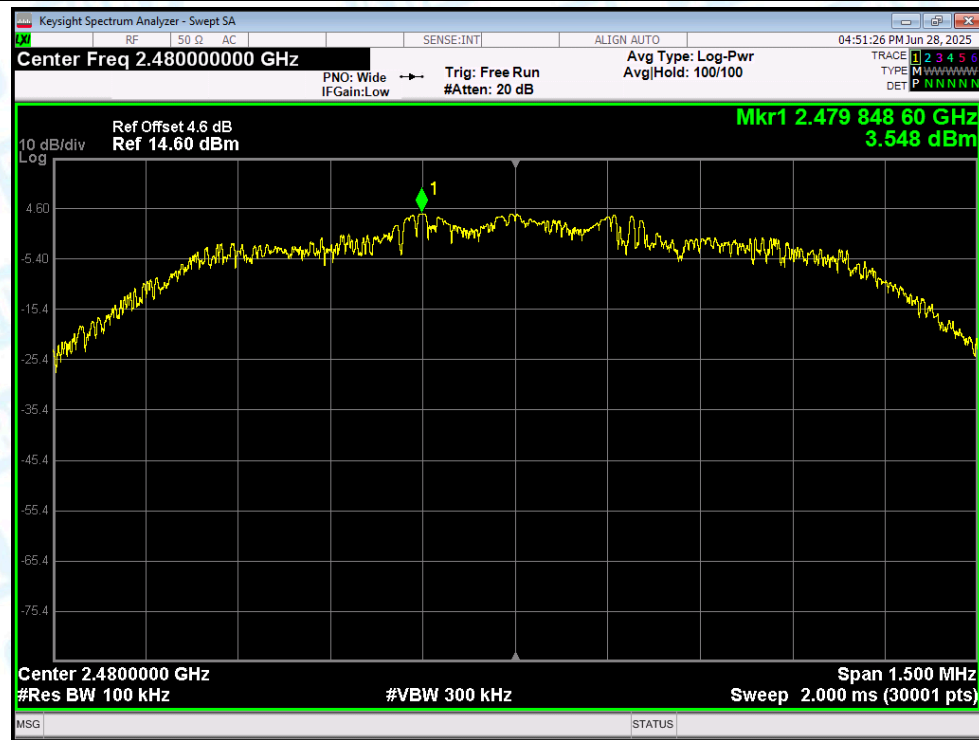
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



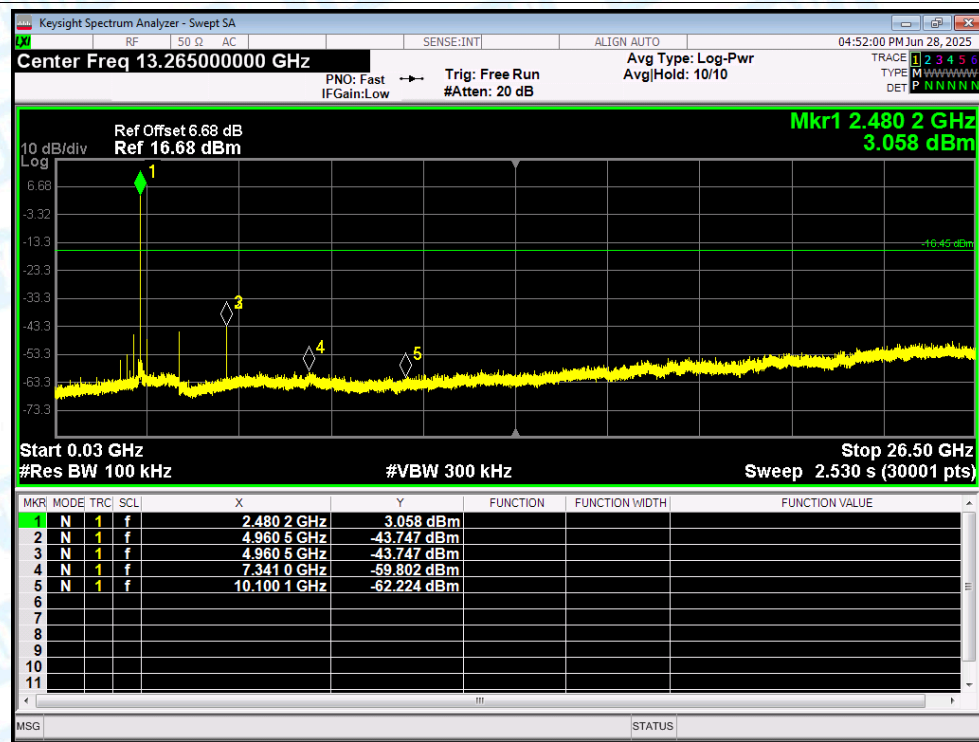
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

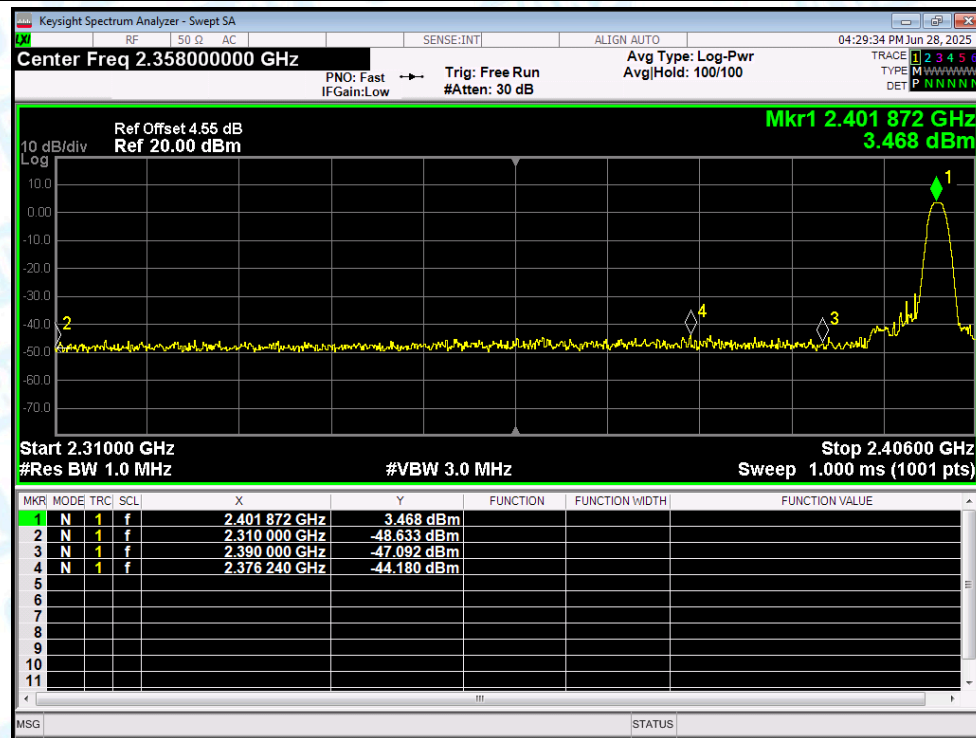


8. Restrict Band

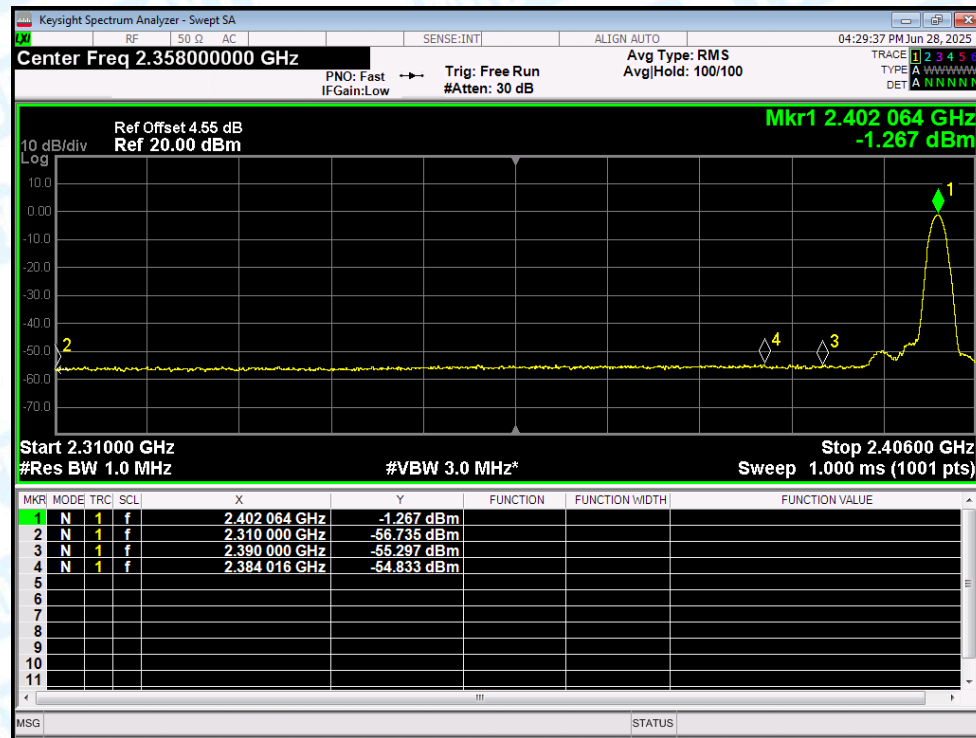
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.63	2	-	48.63	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.74	2	0	40.52	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2376.24	-44.18	2	-	53.08	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2384.016	-54.83	2	0	42.43	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.09	2	-	50.17	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.3	2	0	41.96	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-41.38	2	-	55.88	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-49.73	2	5.06	52.59	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.56	-39.54	2	-	57.72	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-49.58	2	5.06	52.74	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.91	2	-	50.35	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.44	2	5.06	46.88	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.52	2	-	48.74	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.9	2	5.06	46.42	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2362.608	-44.41	2	-	52.85	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2364.24	-54.85	2	5.06	47.47	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.68	2	-	49.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.61	2	5.06	46.71	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-38.09	2	-	59.17	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-50.81	2	5.06	51.51	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.512	-38.09	2	-	59.17	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.776	-50.76	2	5.06	51.56	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-45.56	2	-	51.7	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.41	2	5.06	46.91	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-48.53	2	-	48.73	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.34	2	4.95	45.87	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2355.216	-44.2	2	-	53.06	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2374.512	-54.84	2	4.95	47.37	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-48.16	2	-	49.1	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.8	2	4.95	46.41	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-41.29	2	-	55.97	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-50.81	2	4.95	51.4	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.632	-39.33	2	-	57.93	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.512	-50.81	2	4.95	51.4	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-47.72	2	-	49.54	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.23	2	4.95	46.98	Average	54	Pass

Test Graphs

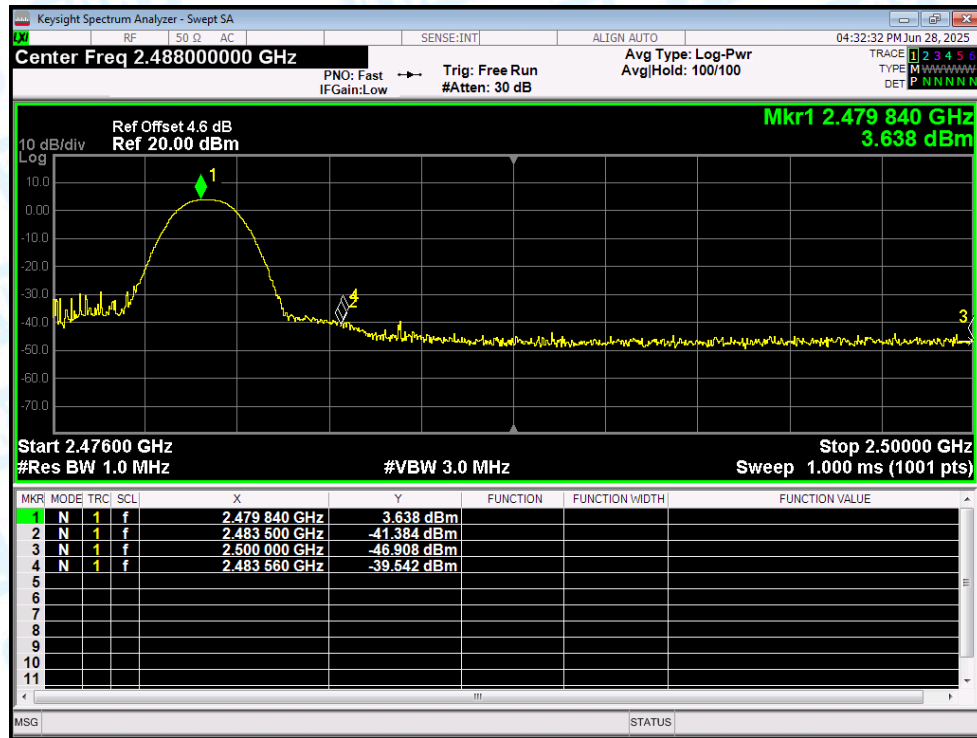
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



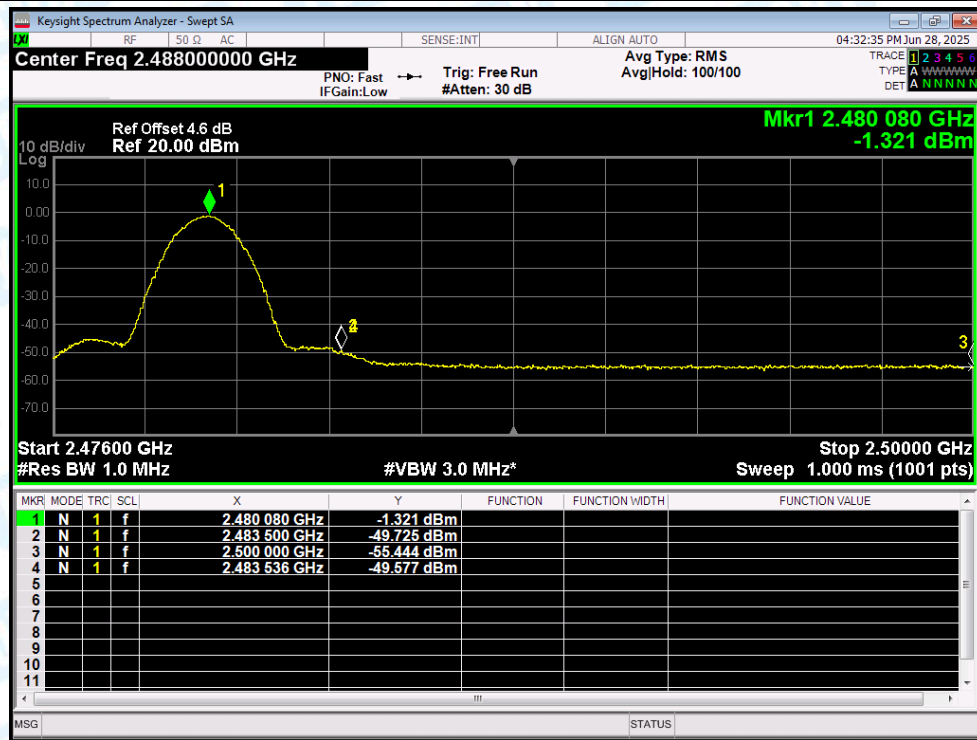
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



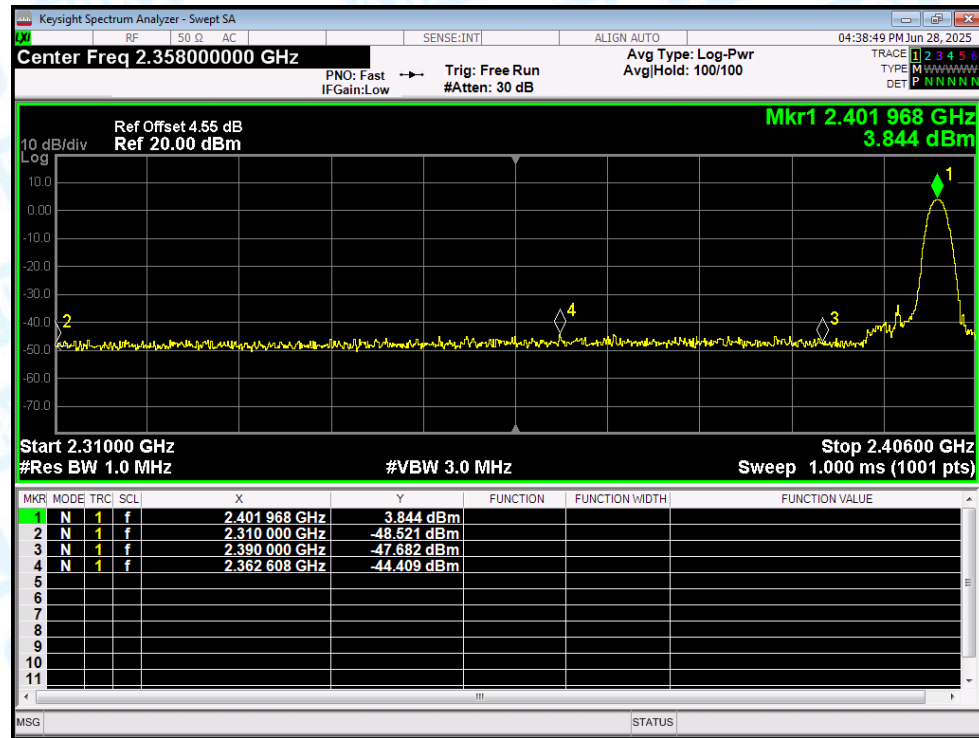
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



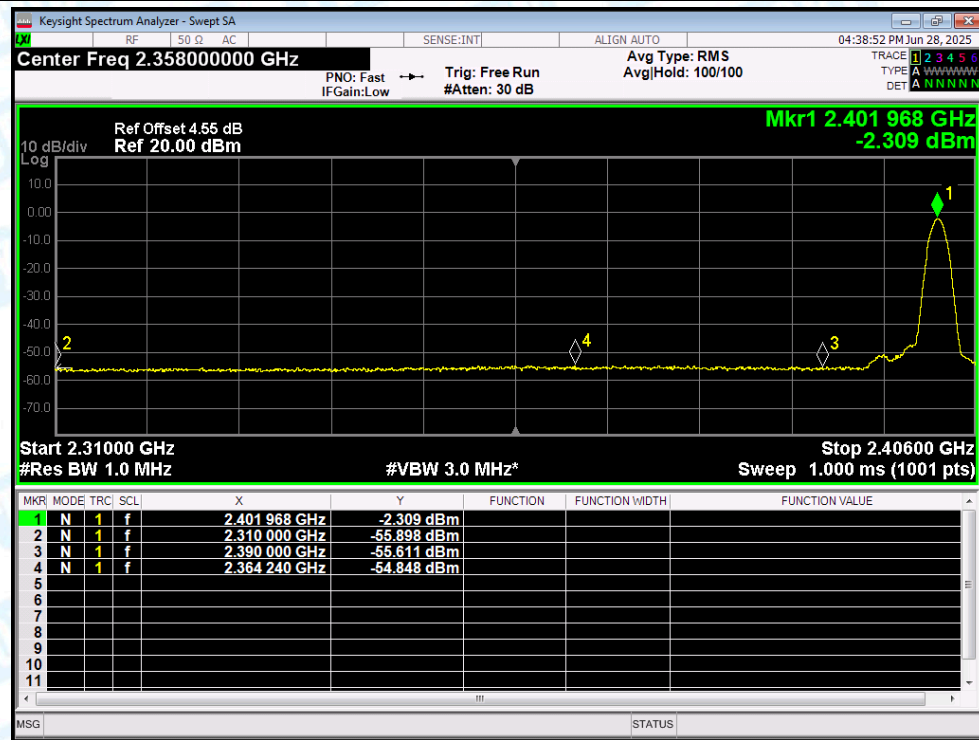
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



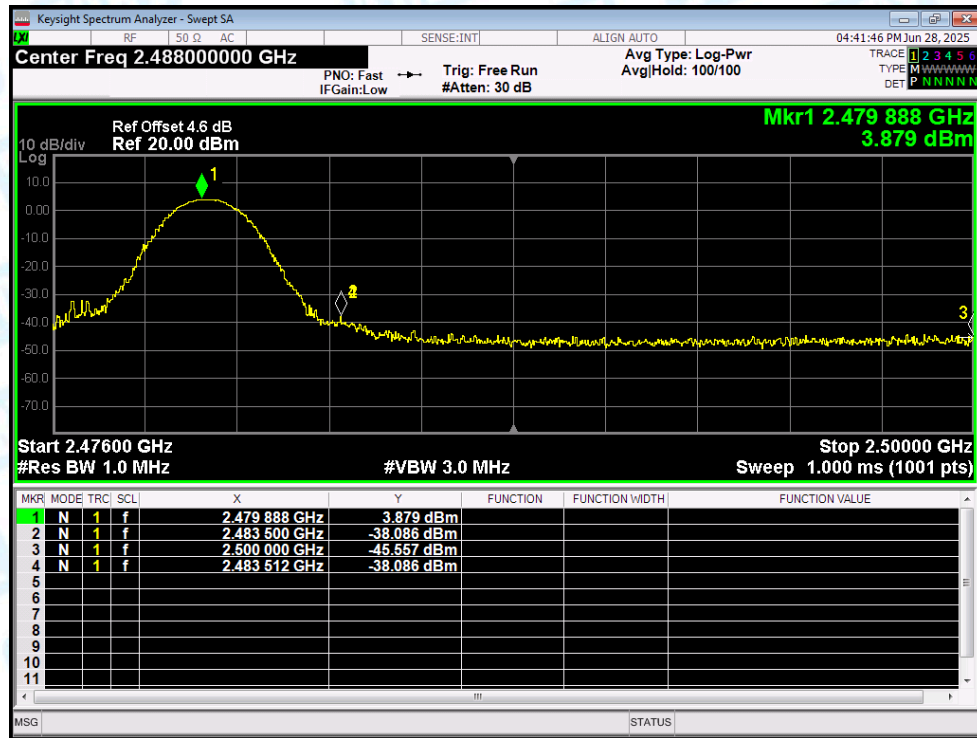
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



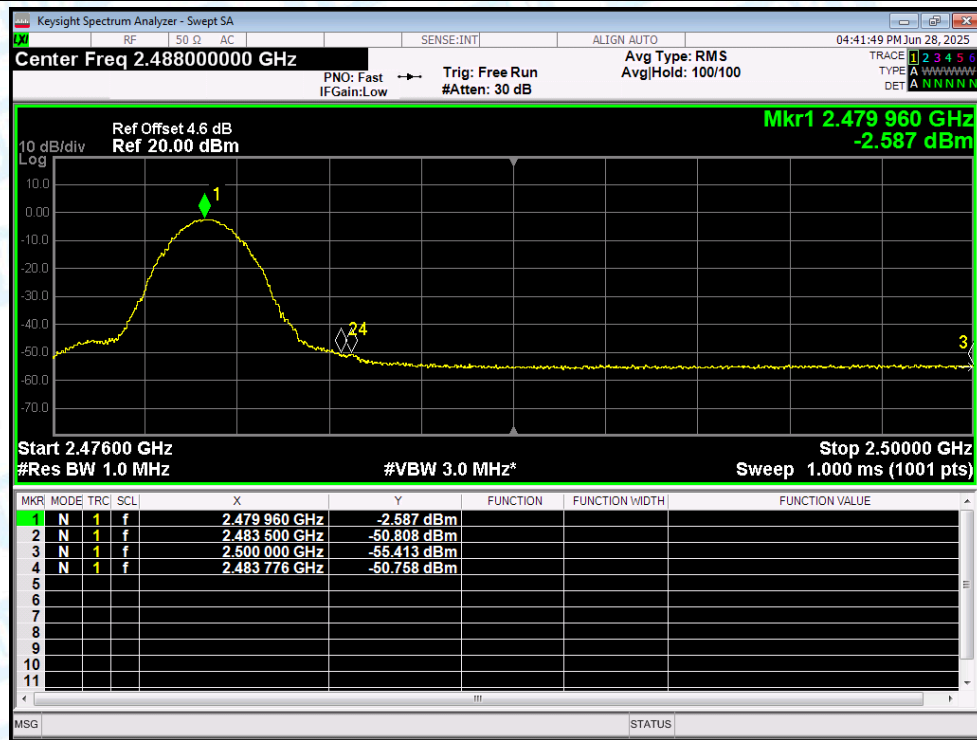
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



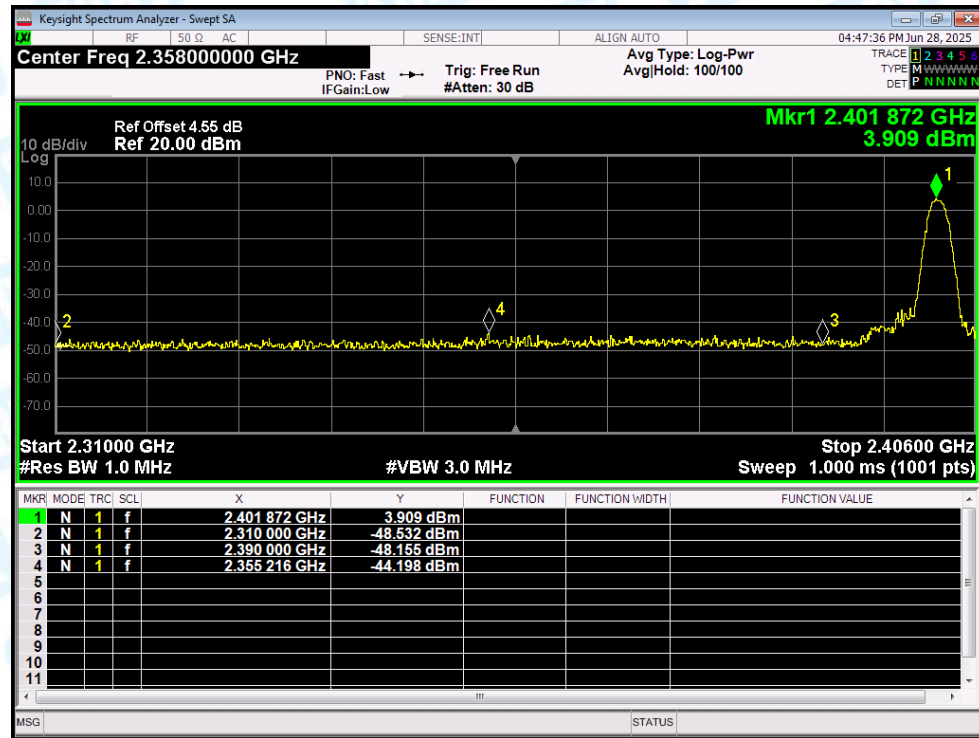
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



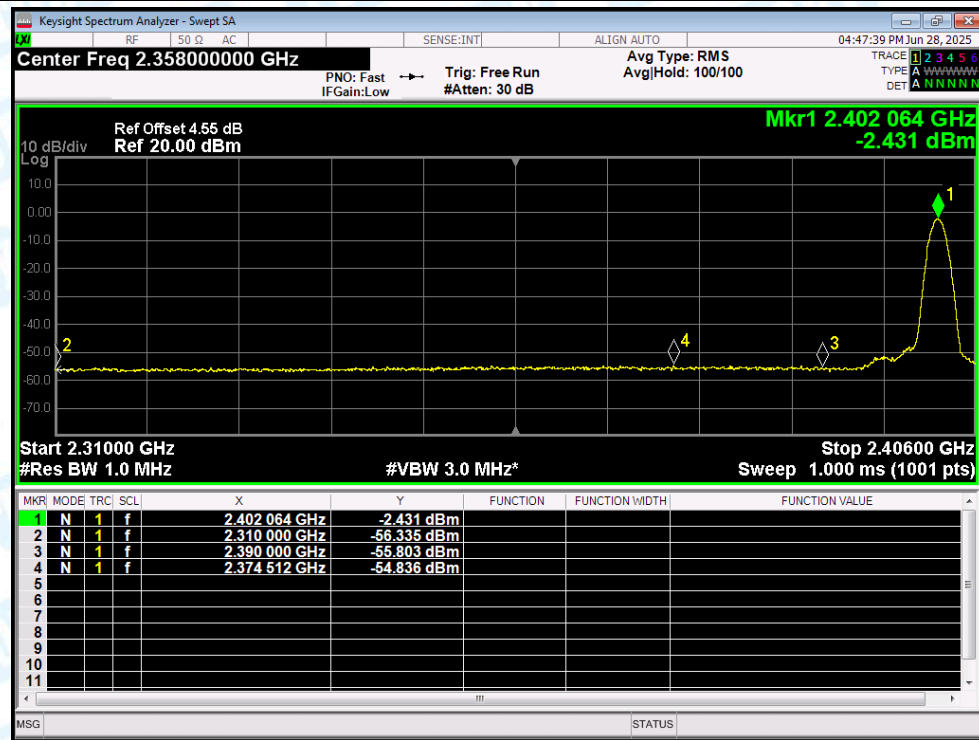
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



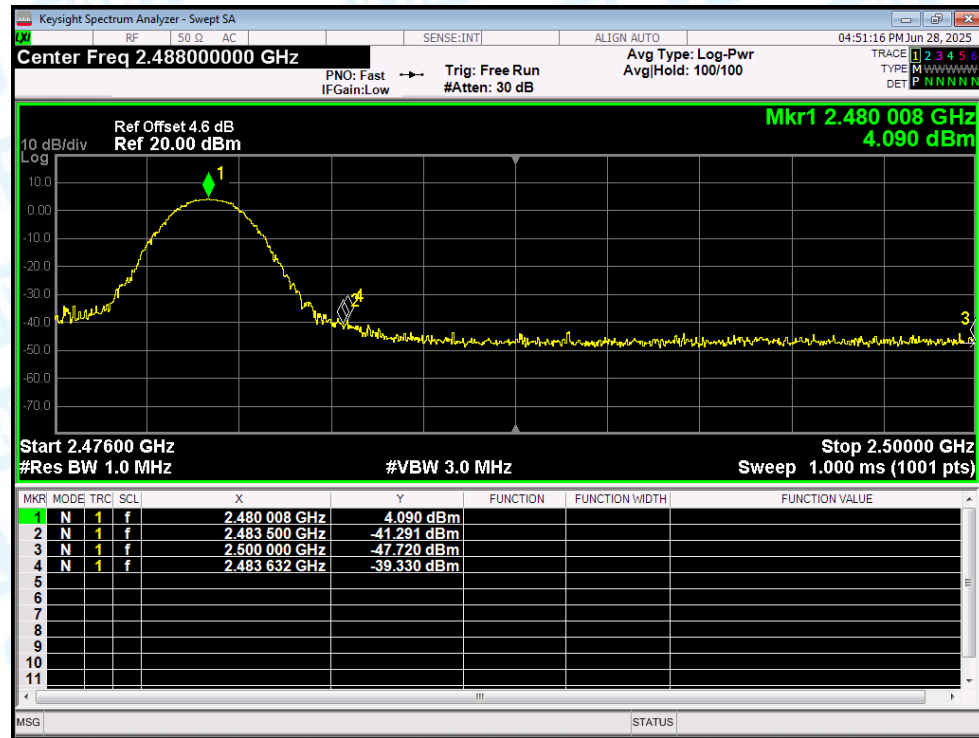
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



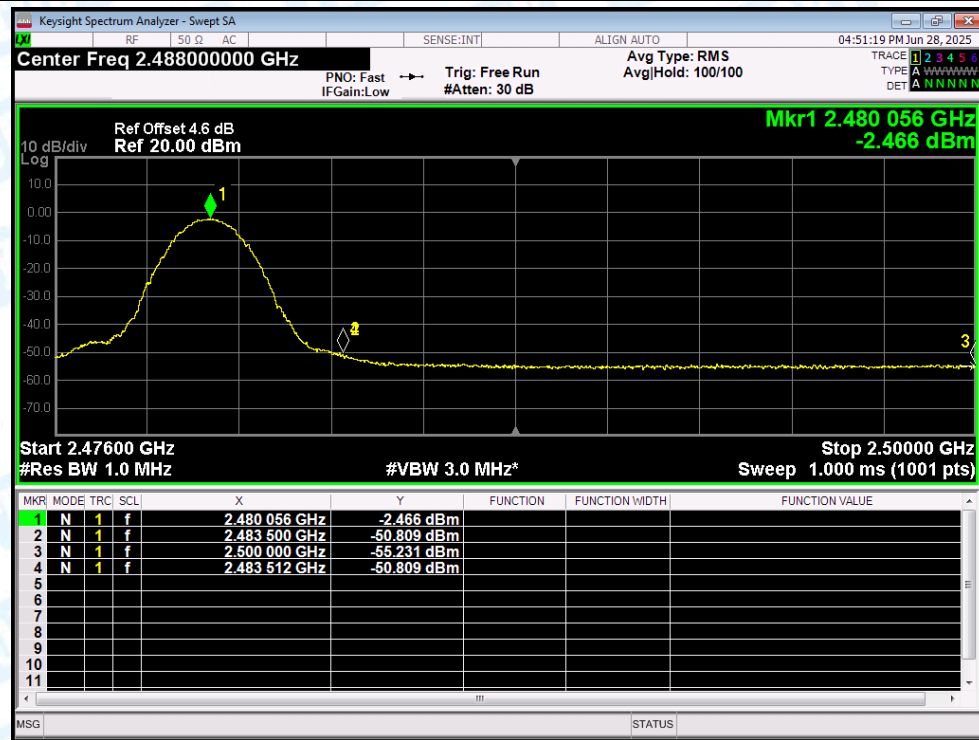
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

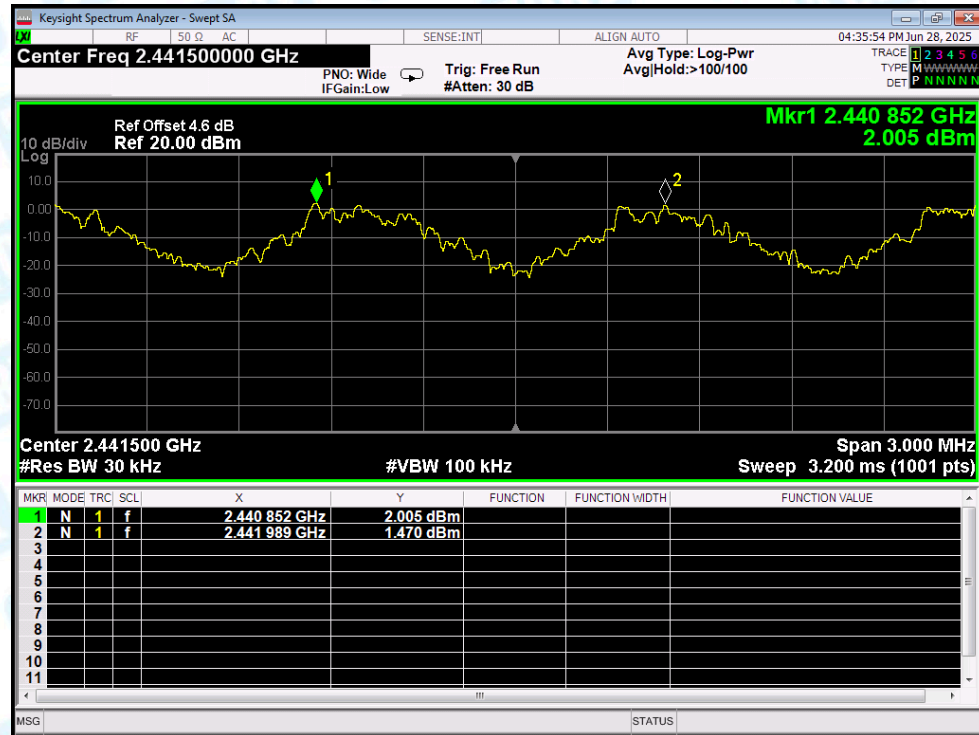


9. Carrier Frequencies Separation

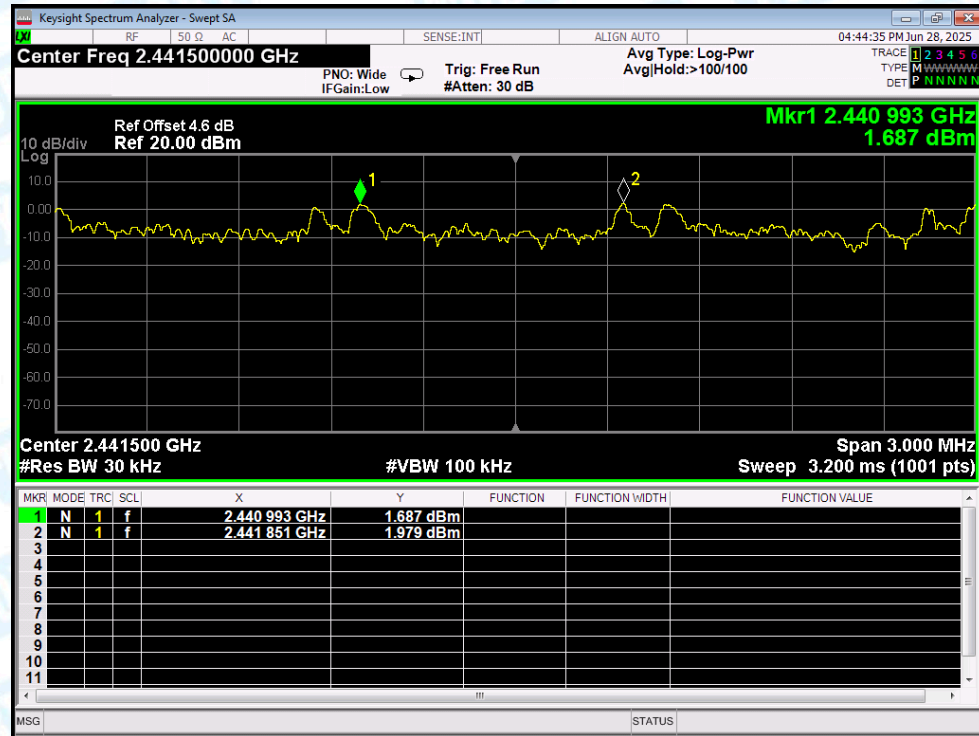
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.852	2441.989	1.137	0.587	Pass
NVNT	2-DH1	Ant1	2440.993	2441.851	0.858	0.84	Pass
NVNT	3-DH1	Ant1	2441.002	2441.989	0.987	0.827	Pass

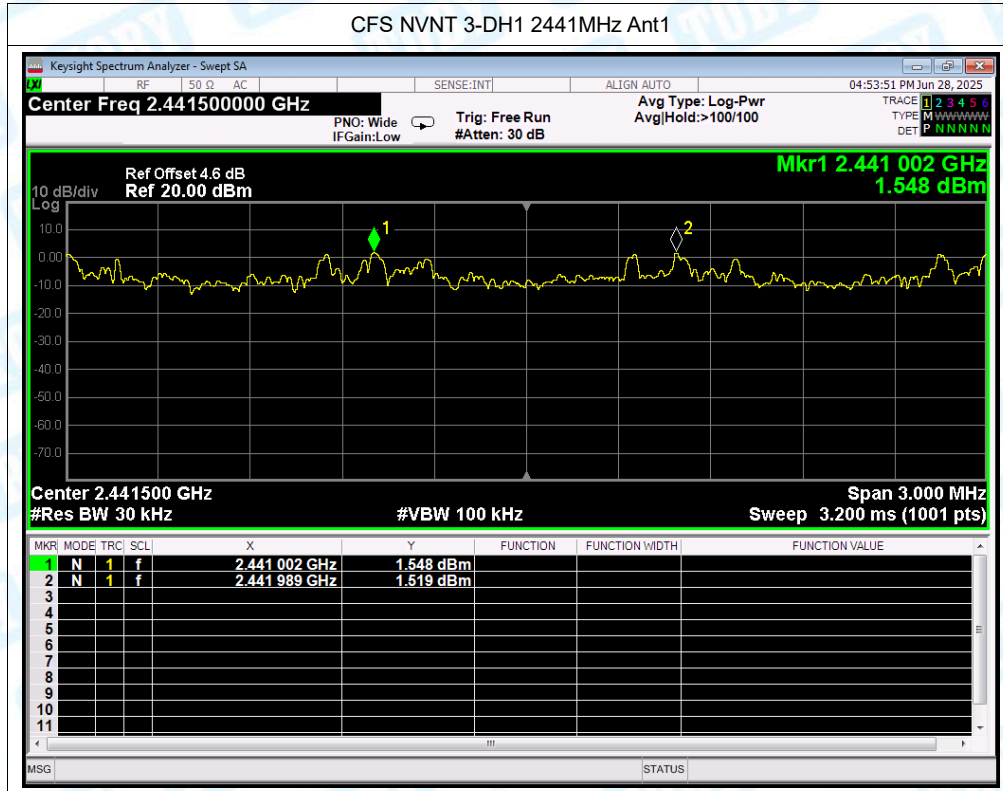
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



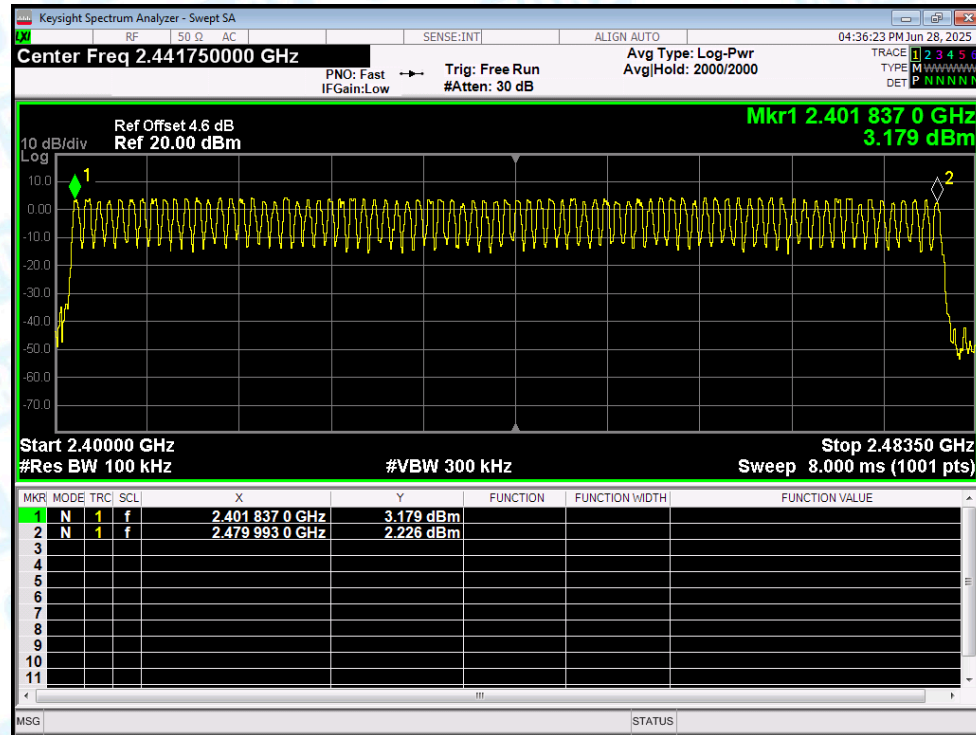


10. Number of Hopping Channel

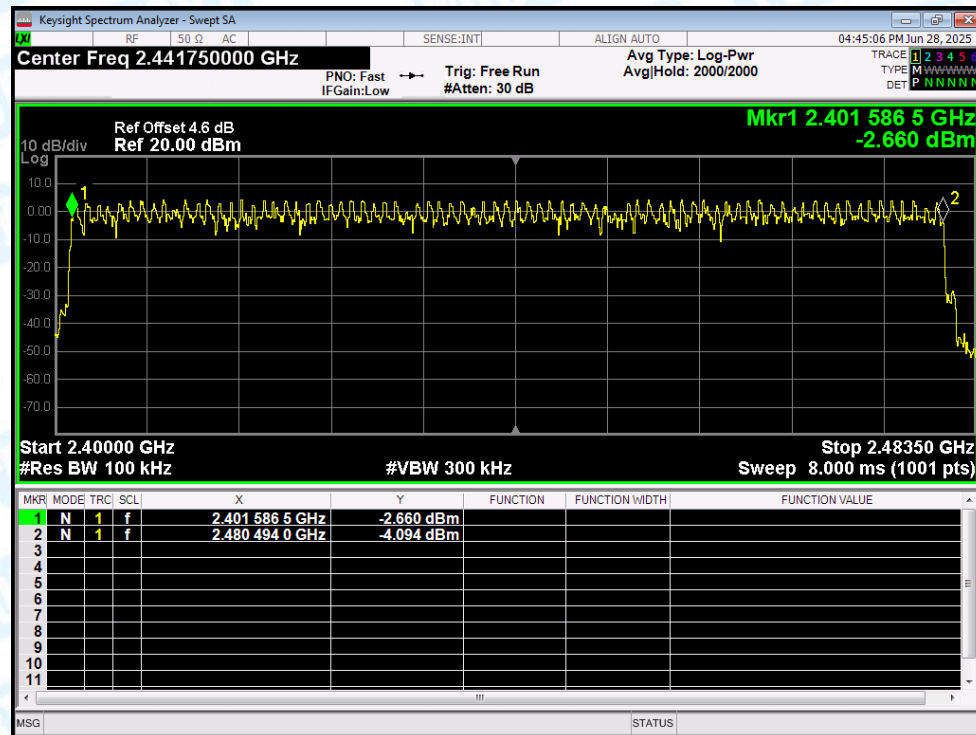
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

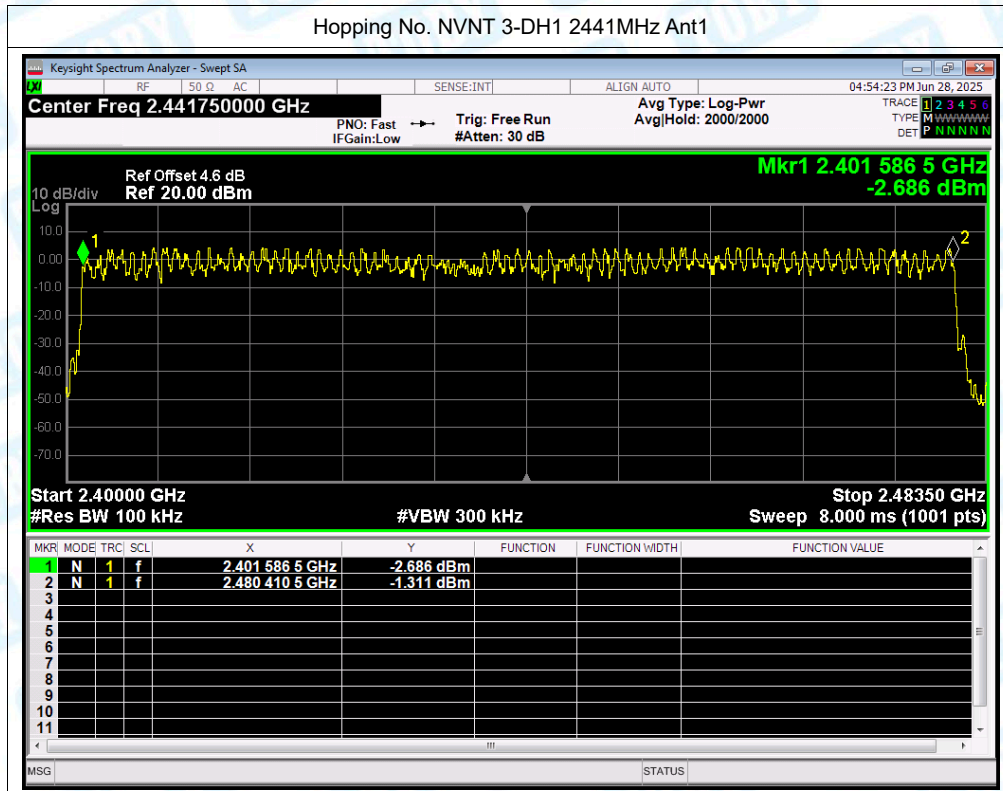
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



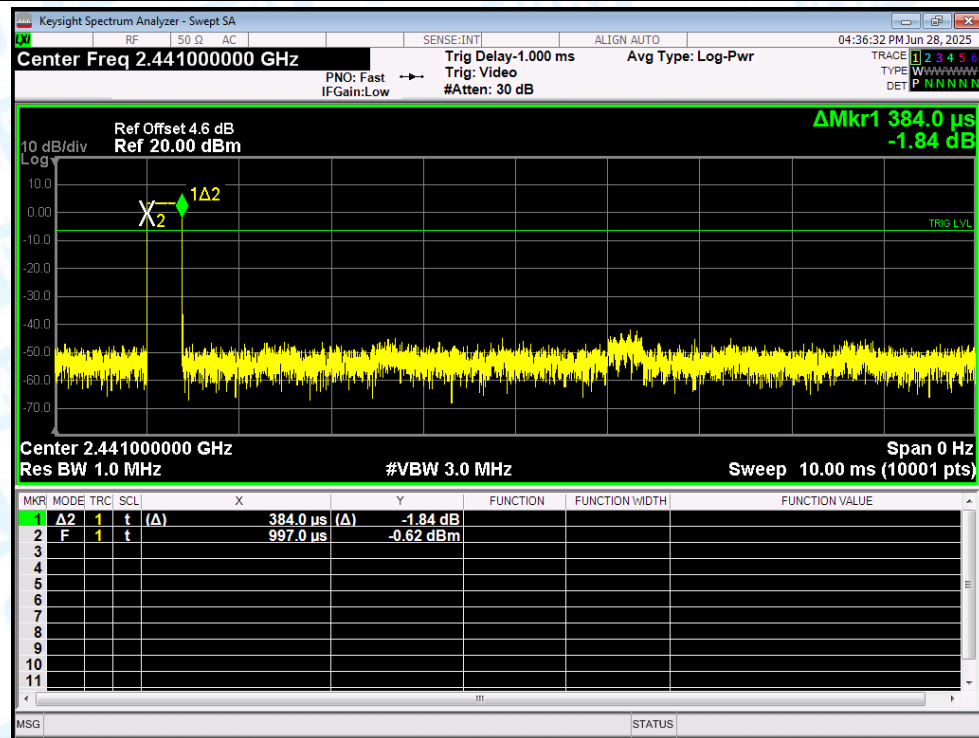


11. Dwell Time

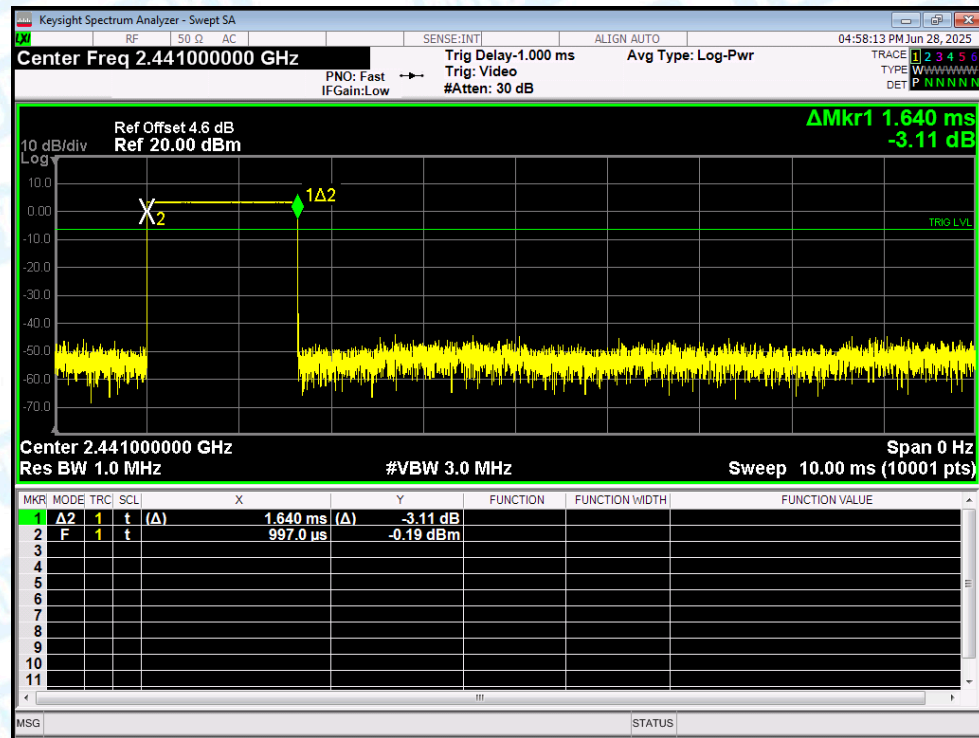
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.384	122.88	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.64	262.4	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.888	308.053	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.393	125.76	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.645	263.2	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.893	308.587	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.393	125.76	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.644	263.04	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.895	308.8	31600	400	Pass

Test Graphs

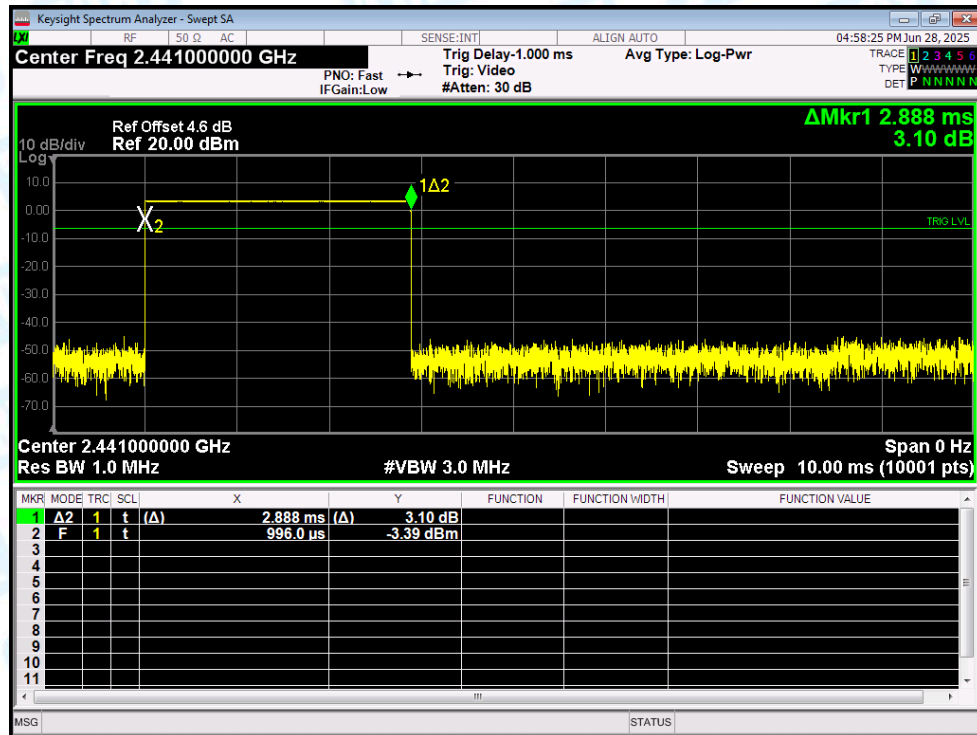
Dwell NVNT 1-DH1 2441MHz Ant1



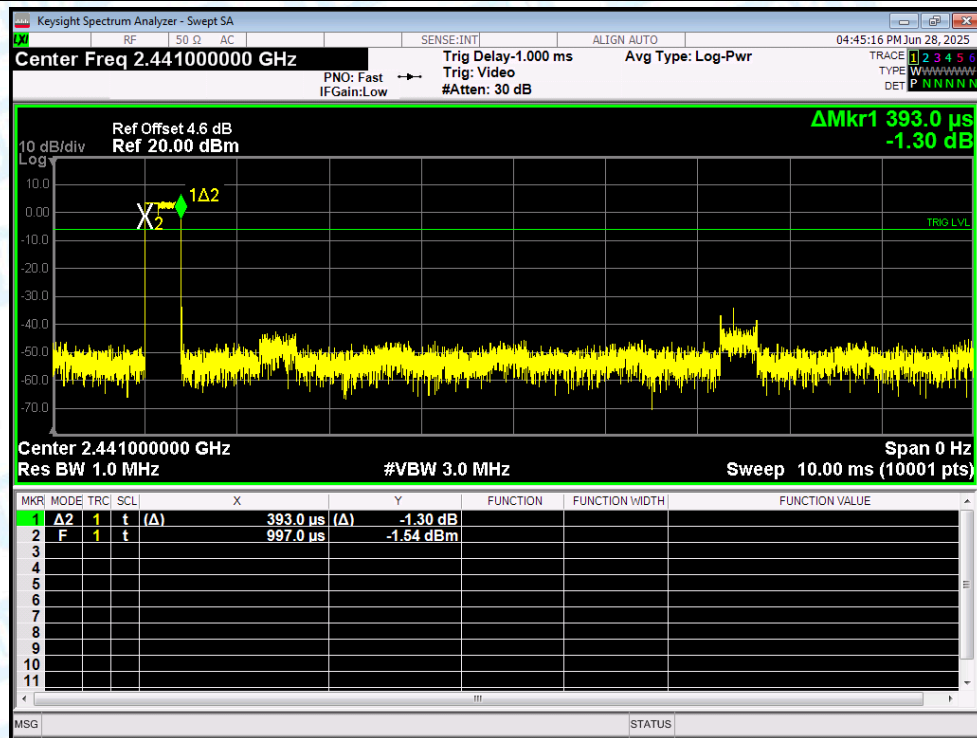
Dwell NVNT 1-DH3 2441MHz Ant1



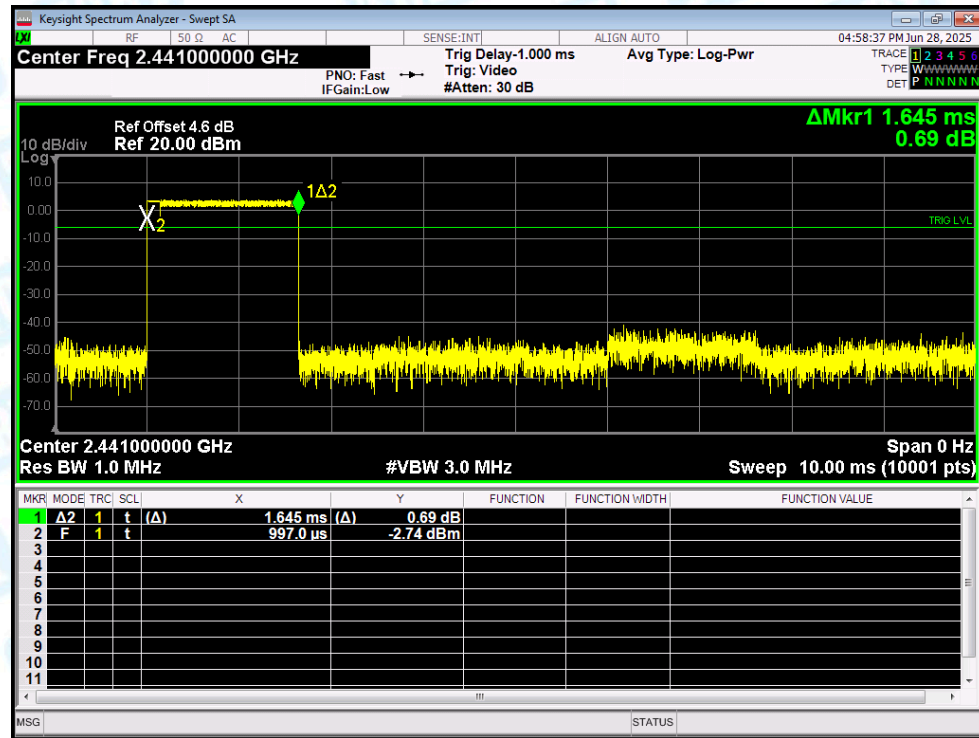
Dwell NVNT 1-DH5 2441MHz Ant1



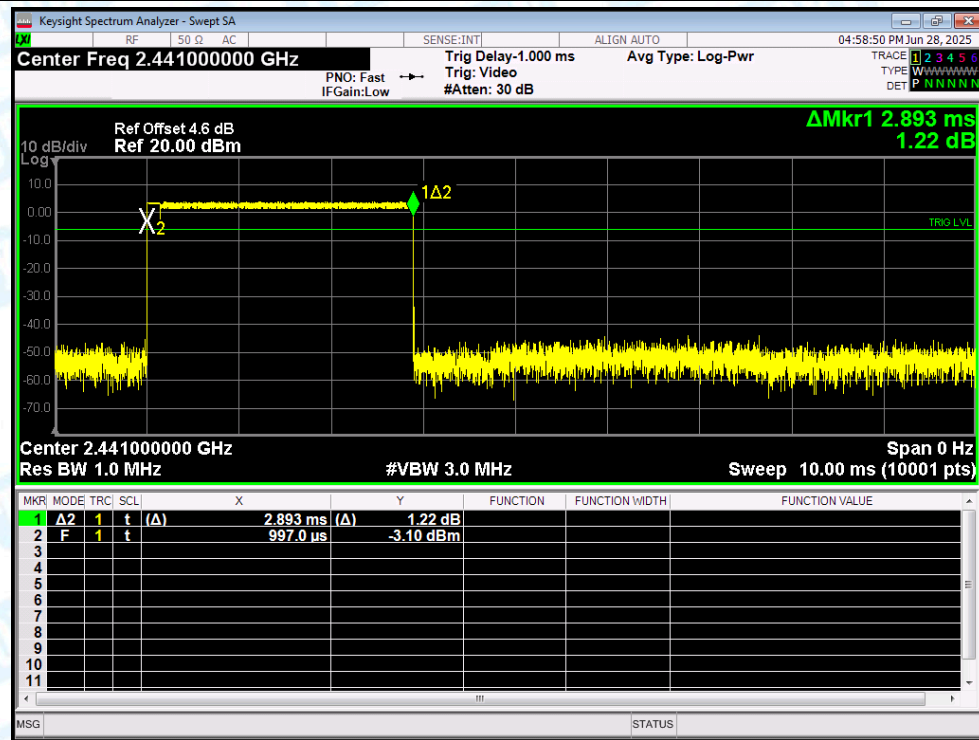
Dwell NVNT 2-DH1 2441MHz Ant1



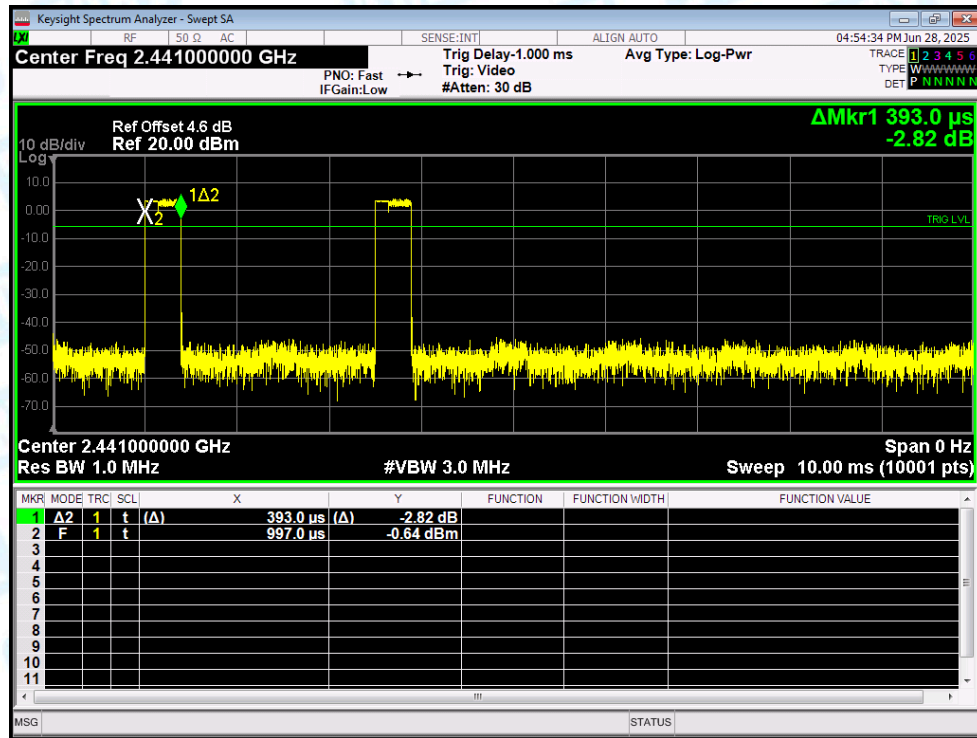
Dwell NVNT 2-DH3 2441MHz Ant1



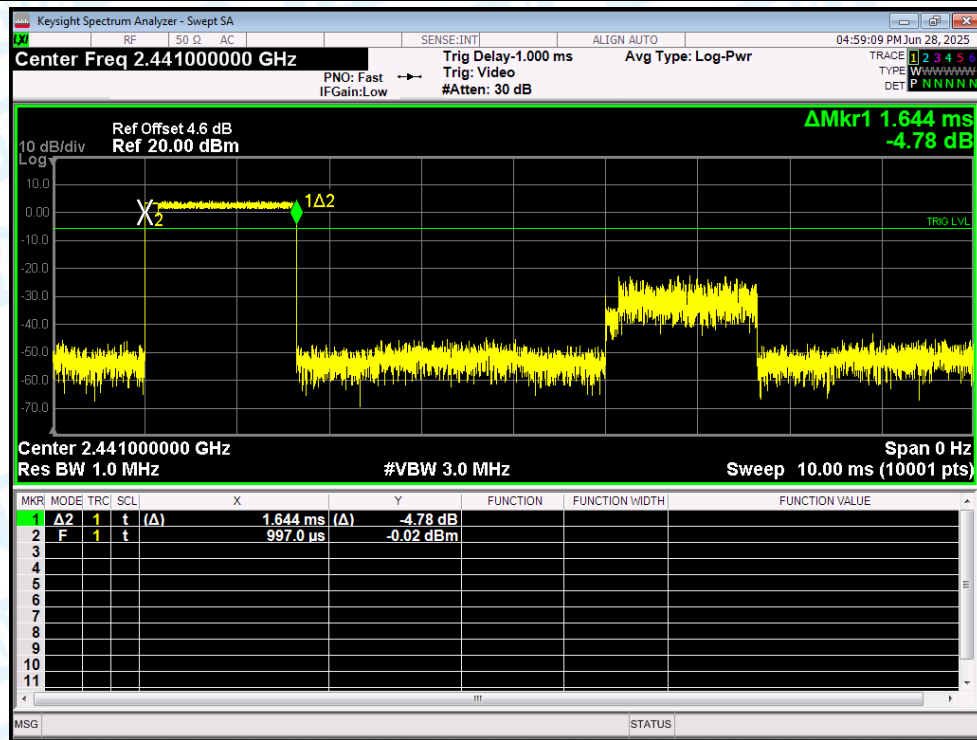
Dwell NVNT 2-DH5 2441MHz Ant1

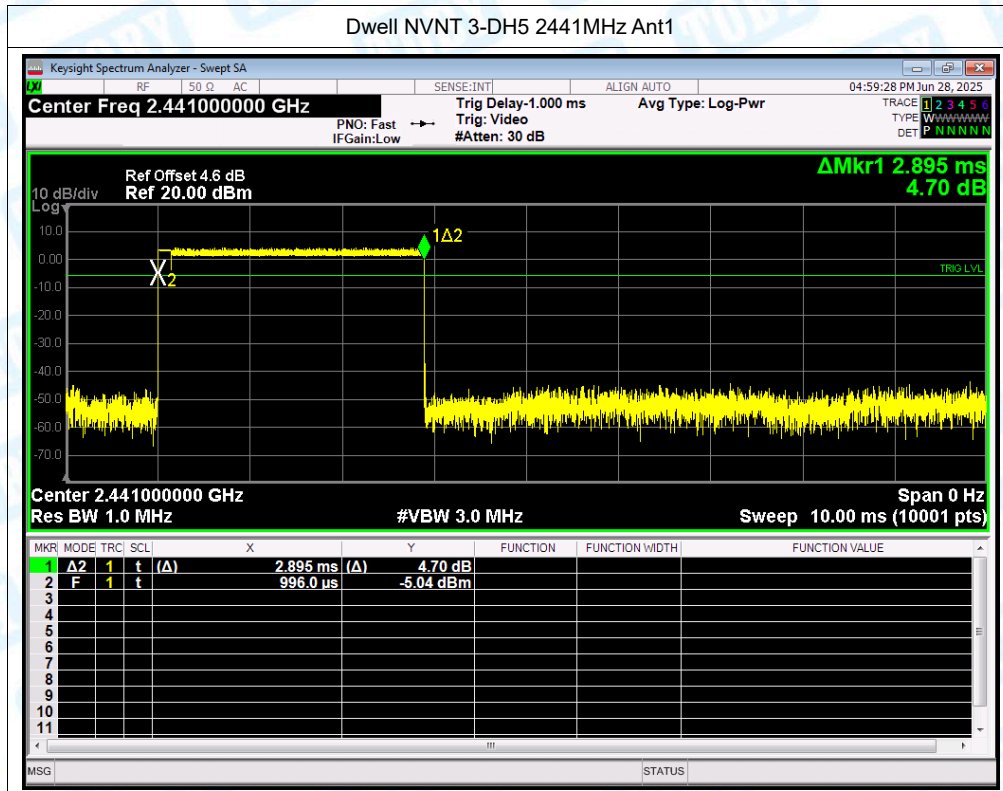


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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