

RF Test Data for Bluetooth(BR+EDR) (Conducted Measurements)

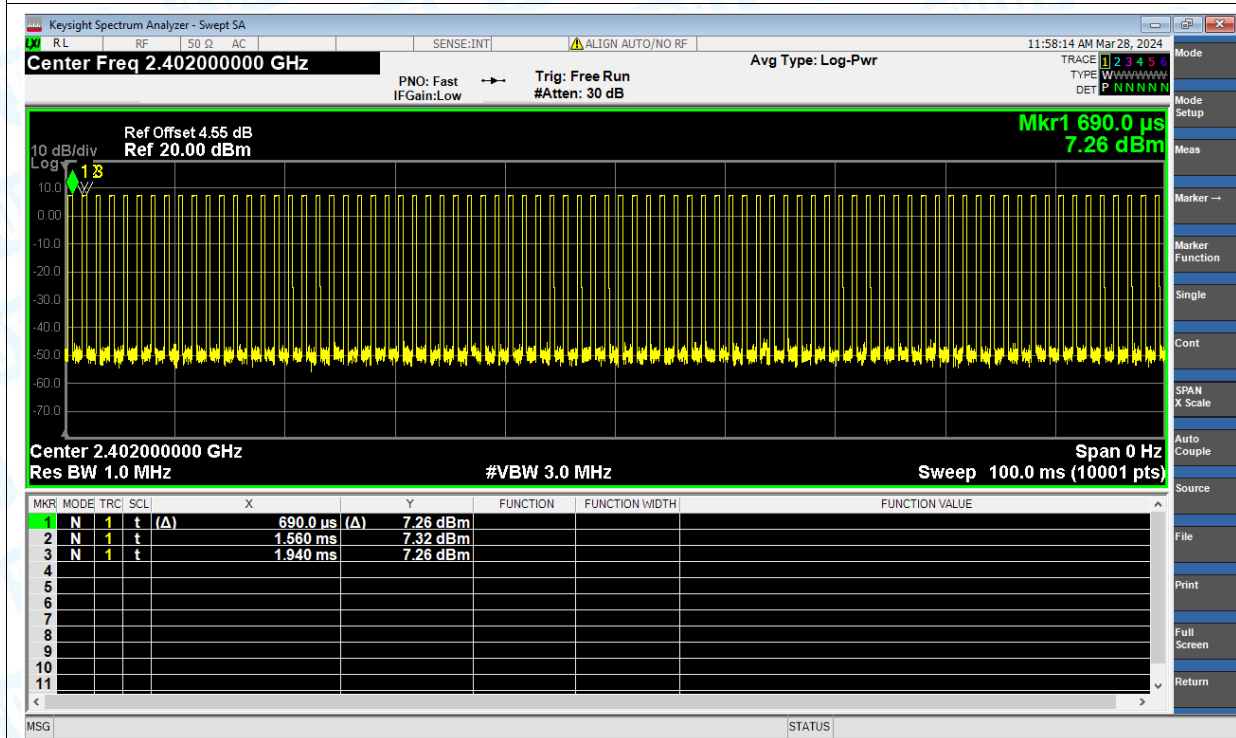
General Description of EUT	
Product Name:	Smart Watch
Test Model:	KT76
Sample ID:	RW-C-202403-0237-7-2#
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 3.7V
Test Engineer:	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202403-0237-9 The report only show the worst case data.	

1. Duty Cycle

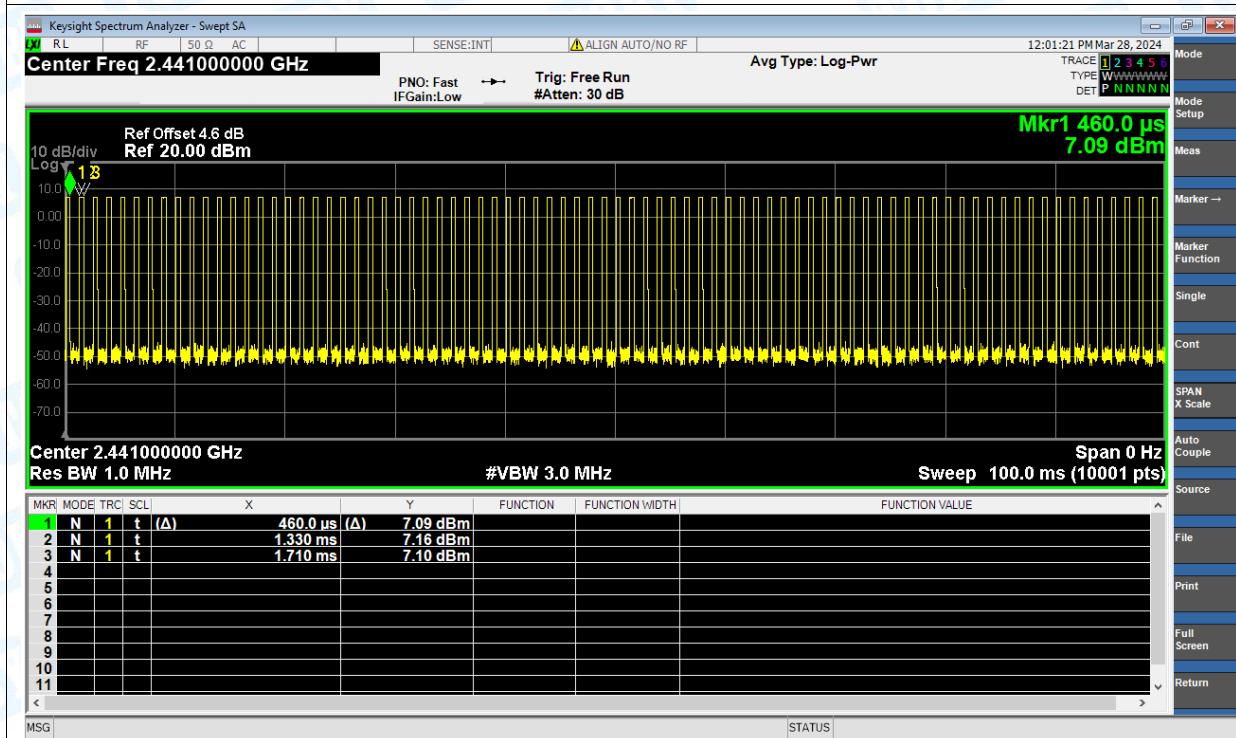
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	32.0	4.95	2.50
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

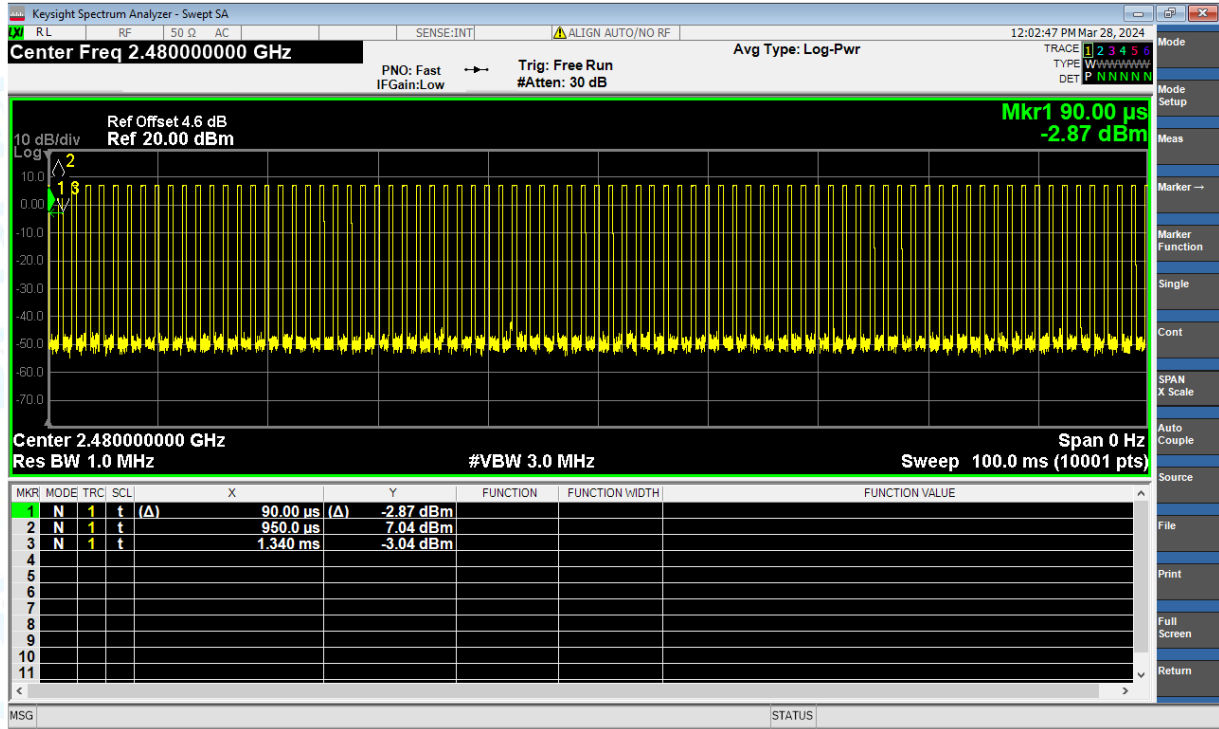
Duty Cycle NVNT 1-DH1 2402MHz Ant1



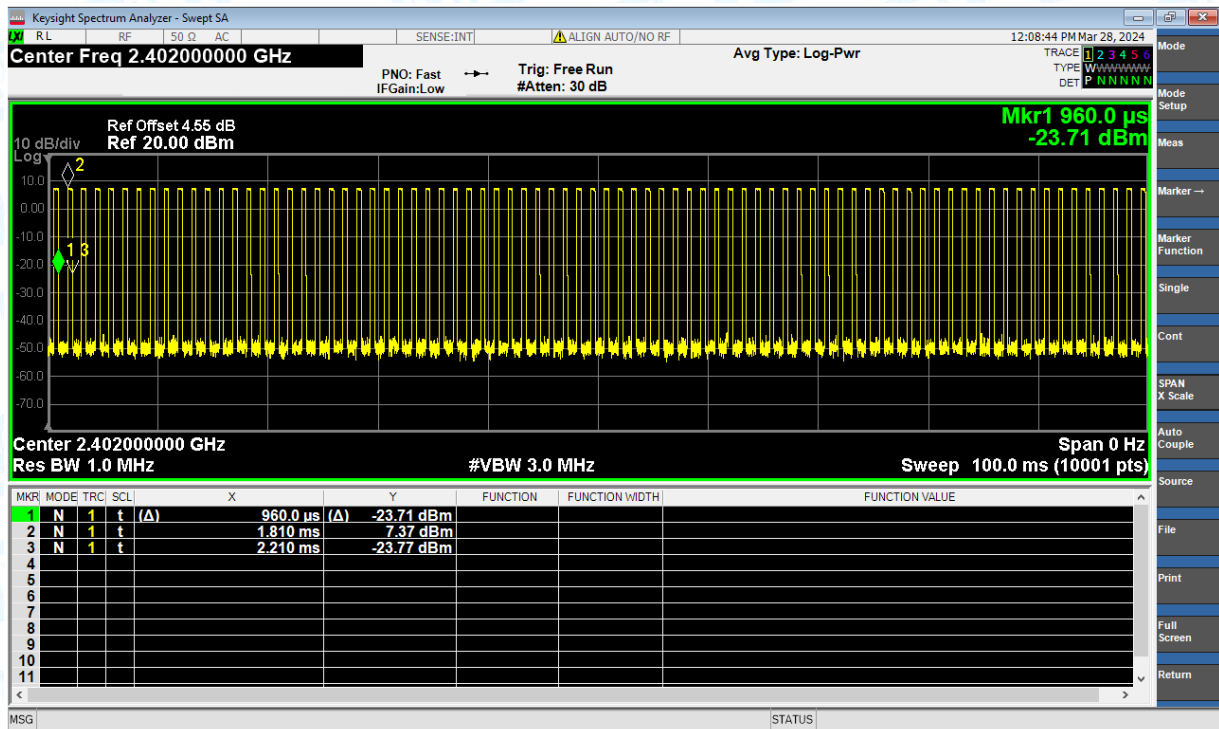
Duty Cycle NVNT 1-DH1 2441MHz Ant1



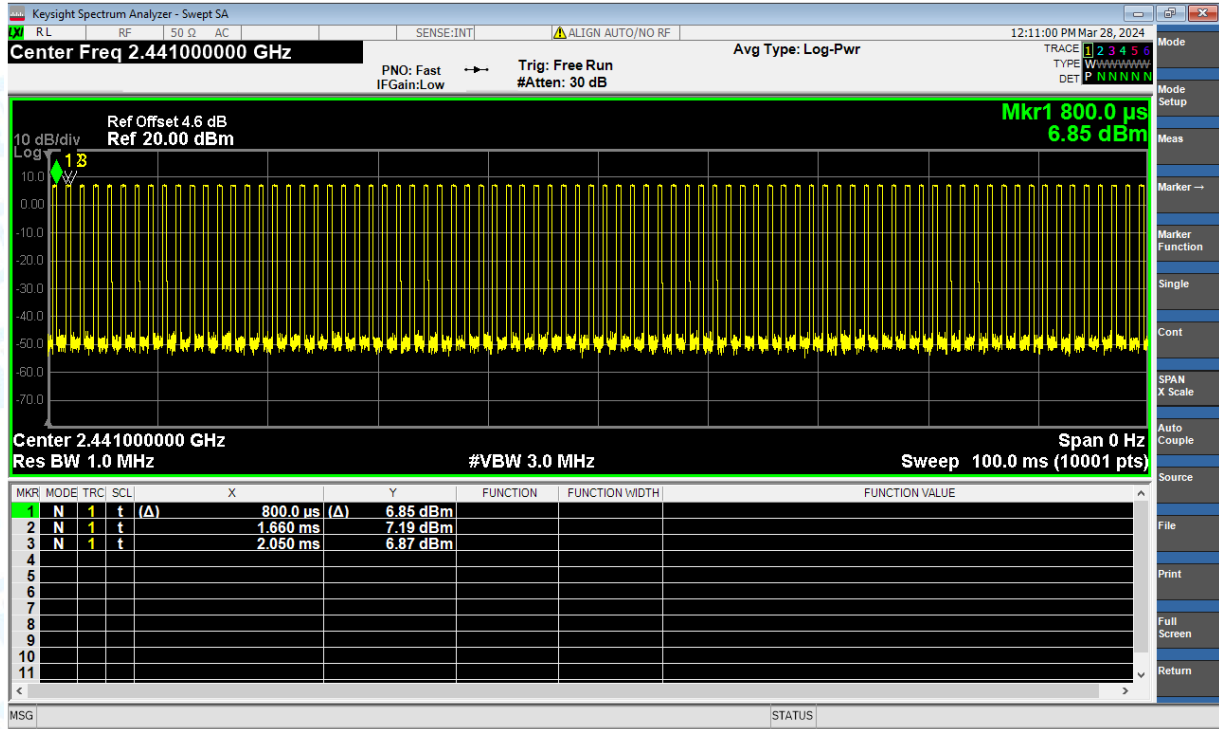
Duty Cycle NVNT 1-DH1 2480MHz Ant1



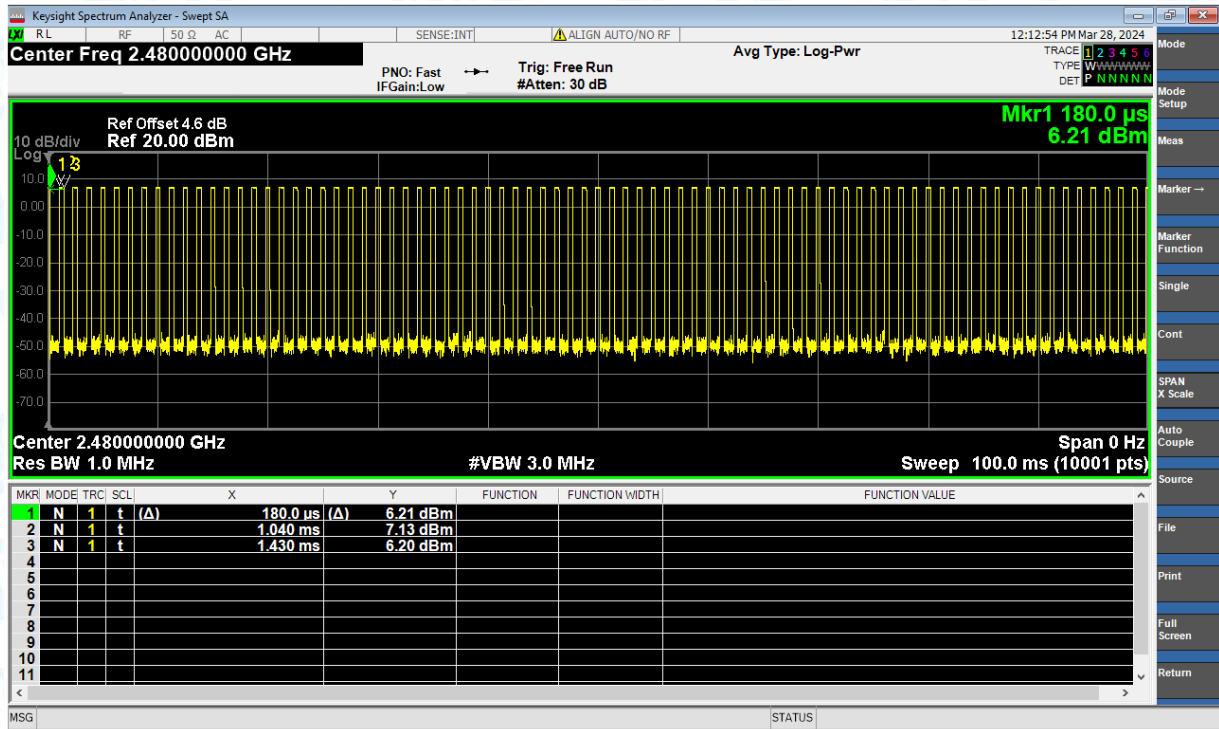
Duty Cycle NVNT 2-DH1 2402MHz Ant1



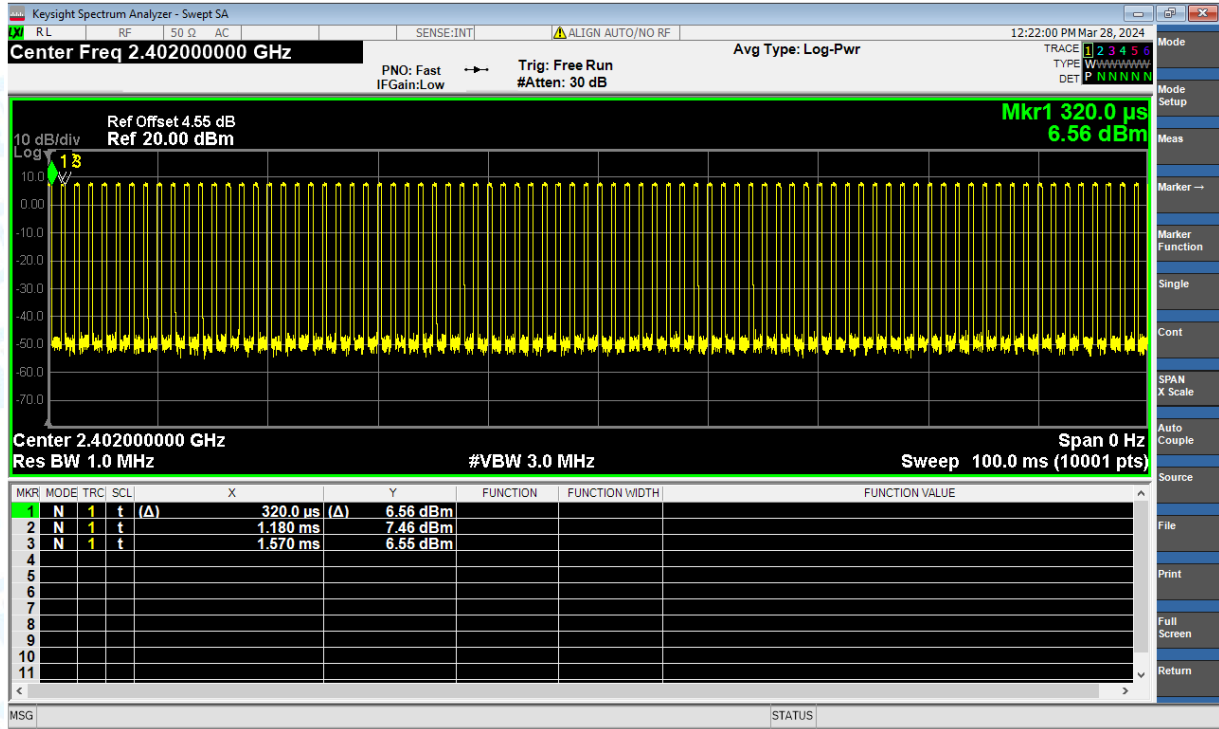
Duty Cycle NVNT 2-DH1 2441MHz Ant1



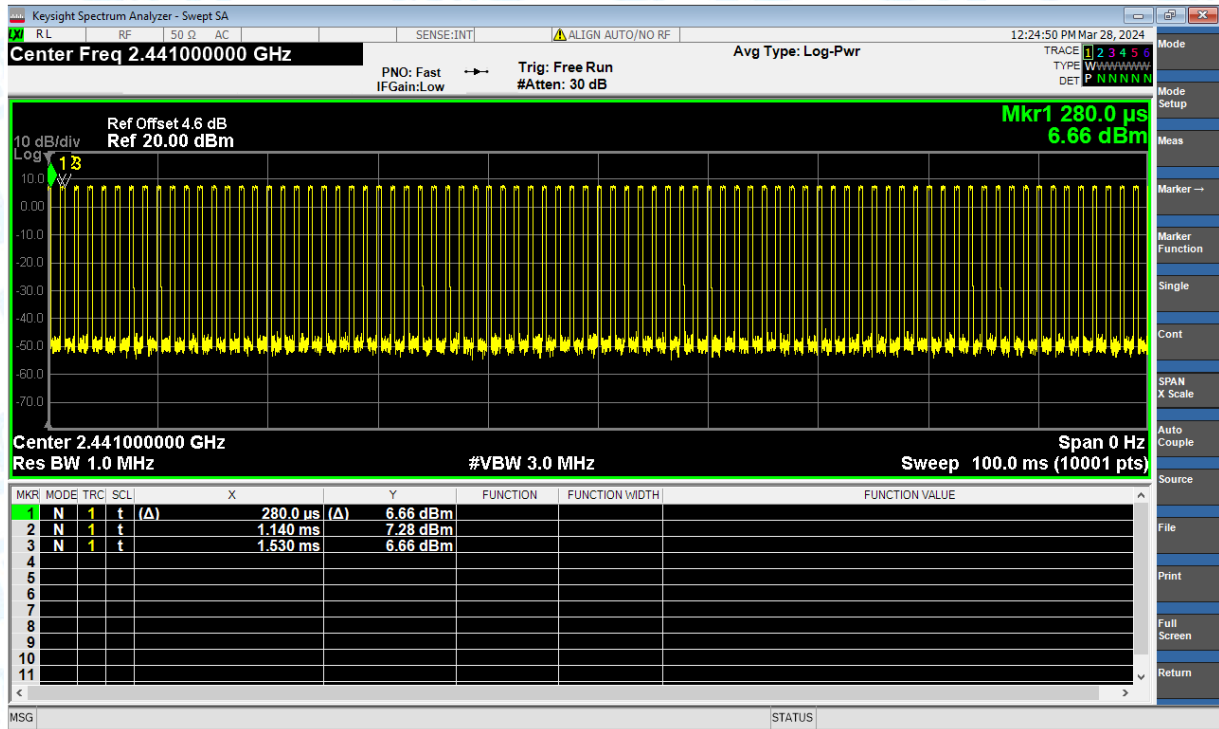
Duty Cycle NVNT 2-DH1 2480MHz Ant1

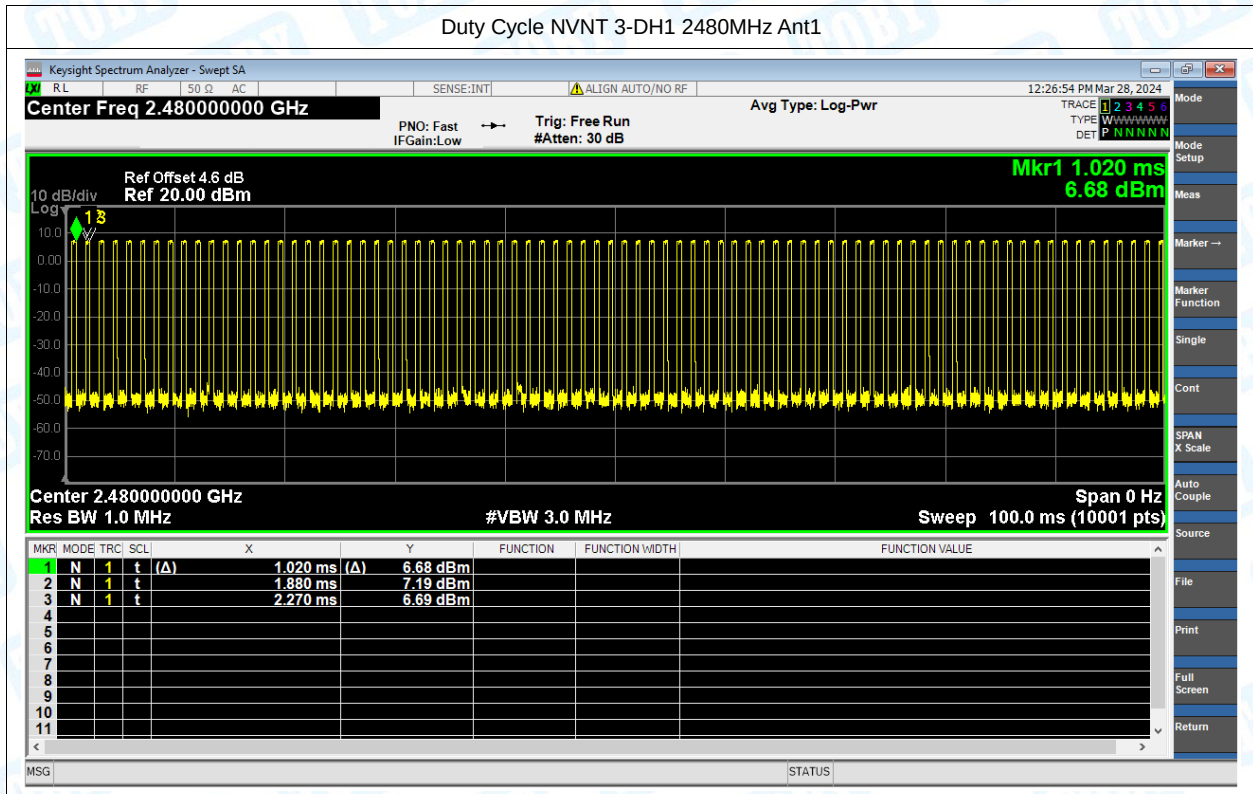


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





2. Maximum Conducted Output Power

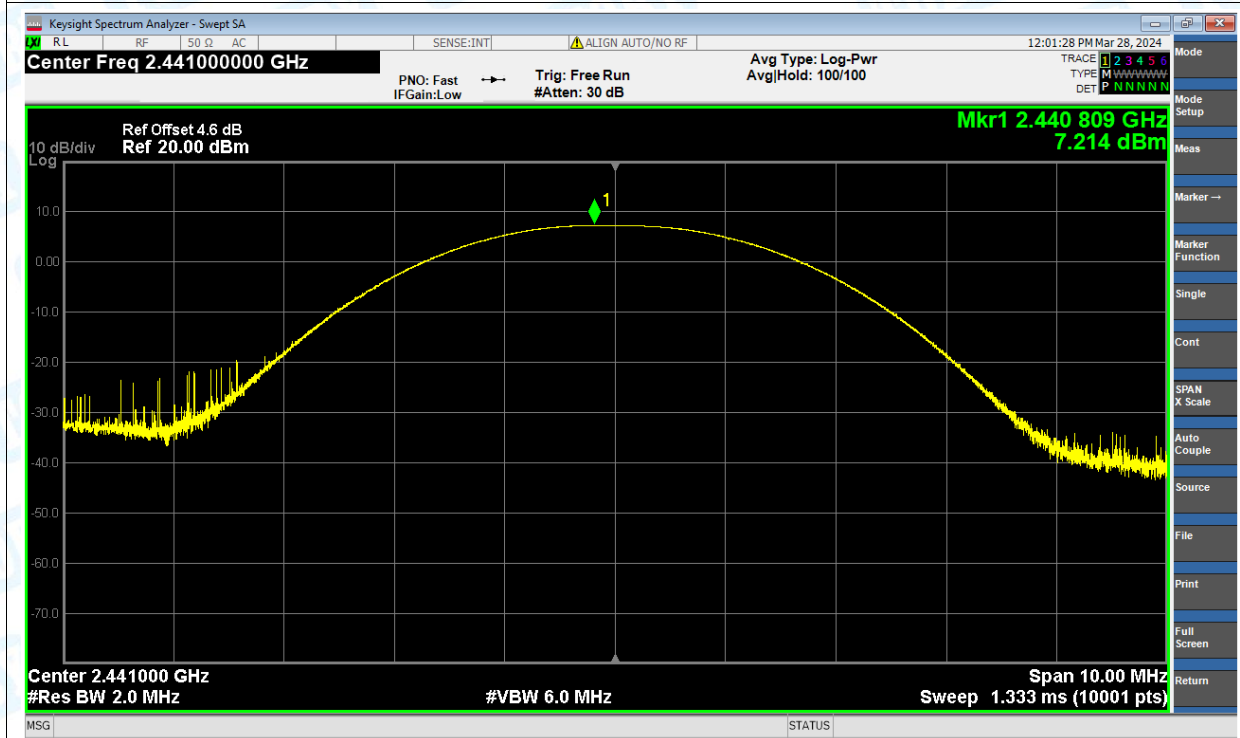
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	7.386	21	Pass
NVNT	1-DH1	2441	Ant1	7.214	21	Pass
NVNT	1-DH1	2480	Ant1	7.157	21	Pass
NVNT	2-DH1	2402	Ant1	7.921	21	Pass
NVNT	2-DH1	2441	Ant1	7.617	21	Pass
NVNT	2-DH1	2480	Ant1	7.521	21	Pass
NVNT	3-DH1	2402	Ant1	8.250	21	Pass
NVNT	3-DH1	2441	Ant1	7.892	21	Pass
NVNT	3-DH1	2480	Ant1	7.790	21	Pass

Test Graphs

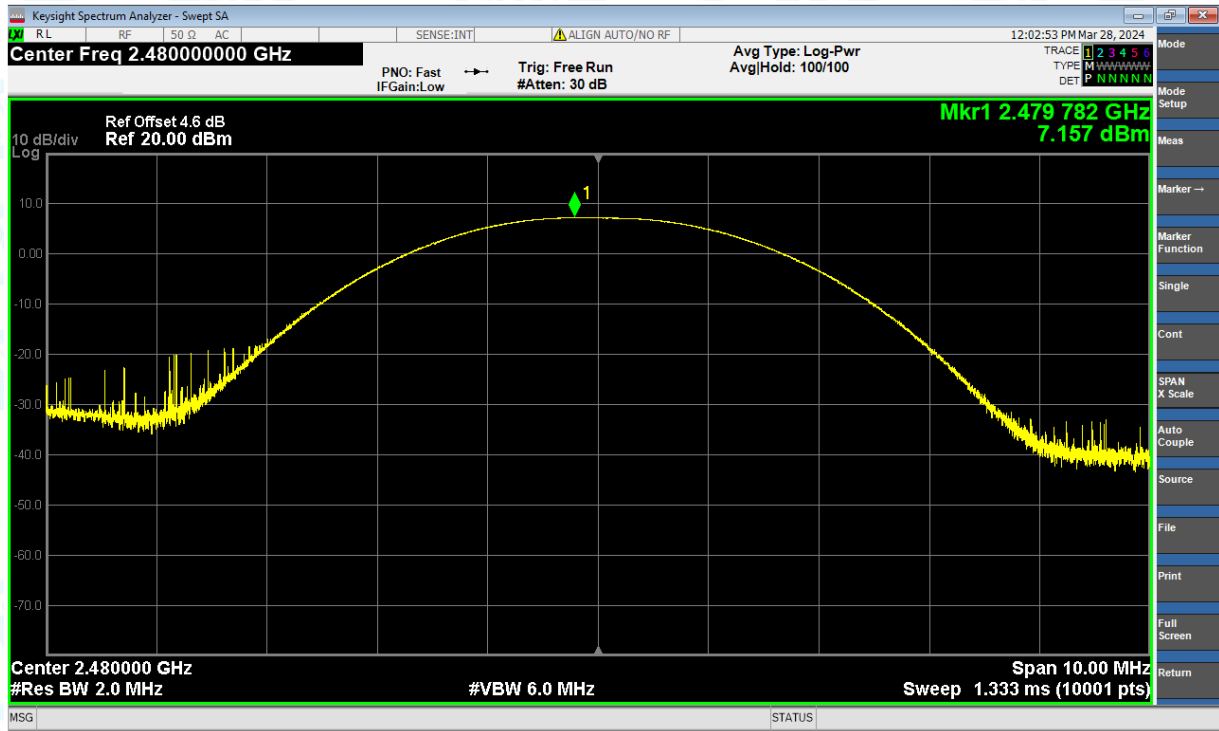
Power NVNT 1-DH1 2402MHz Ant1



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



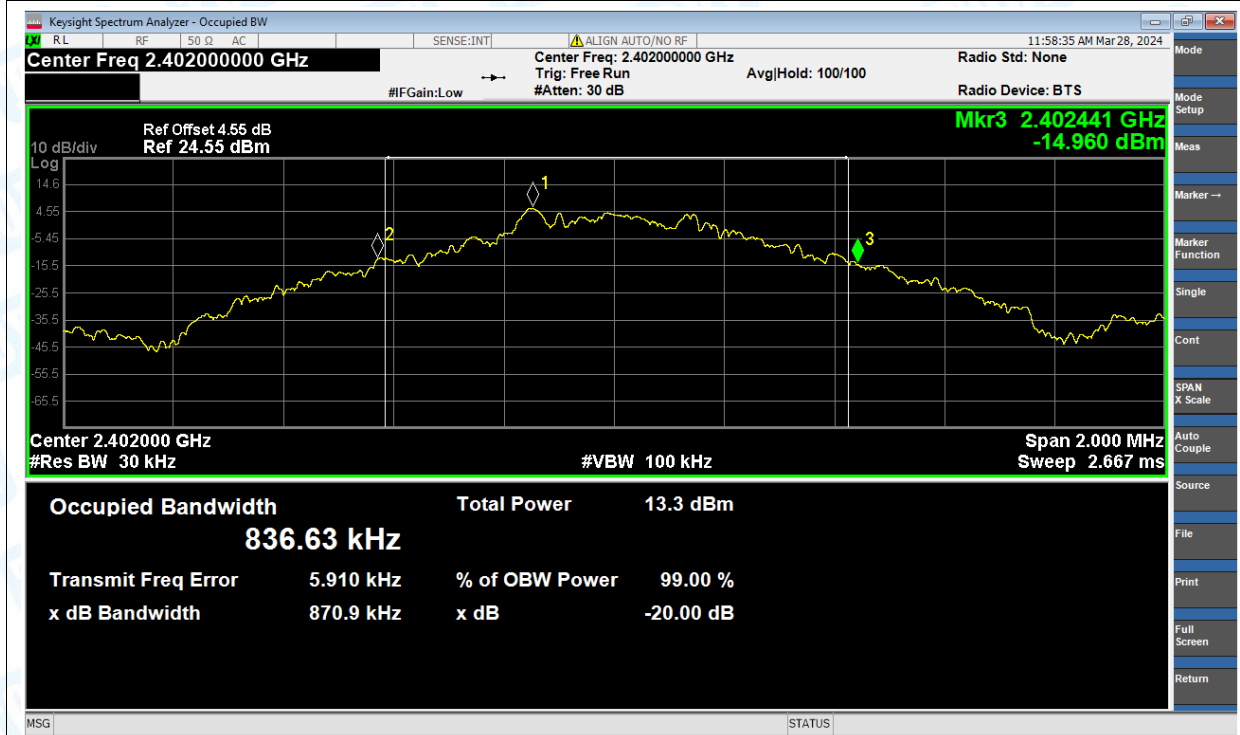


3. -20dB Bandwidth

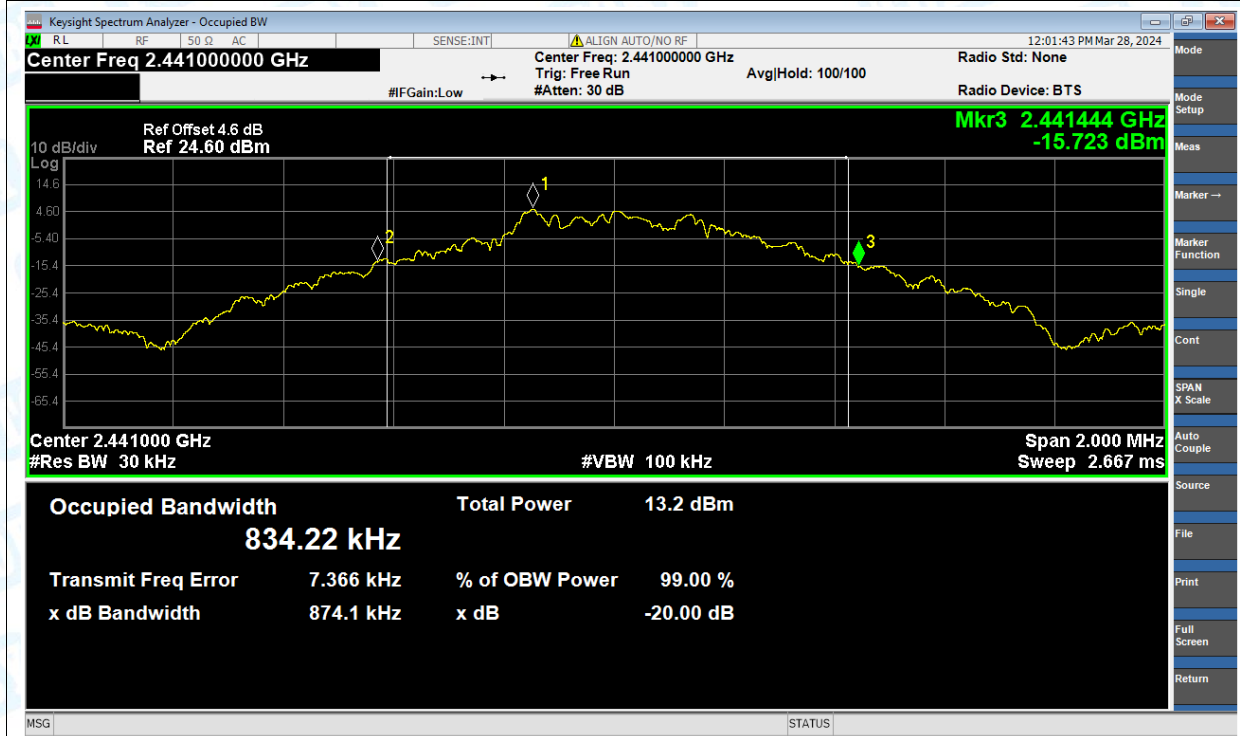
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.87	----	Pass
NVNT	1-DH1	2480	Ant1	0.87	----	Pass
NVNT	2-DH1	2402	Ant1	1.24	----	Pass
NVNT	2-DH1	2441	Ant1	1.27	----	Pass
NVNT	2-DH1	2480	Ant1	1.28	----	Pass
NVNT	3-DH1	2402	Ant1	1.22	----	Pass
NVNT	3-DH1	2441	Ant1	1.24	----	Pass
NVNT	3-DH1	2480	Ant1	1.24	----	Pass

Test Graphs

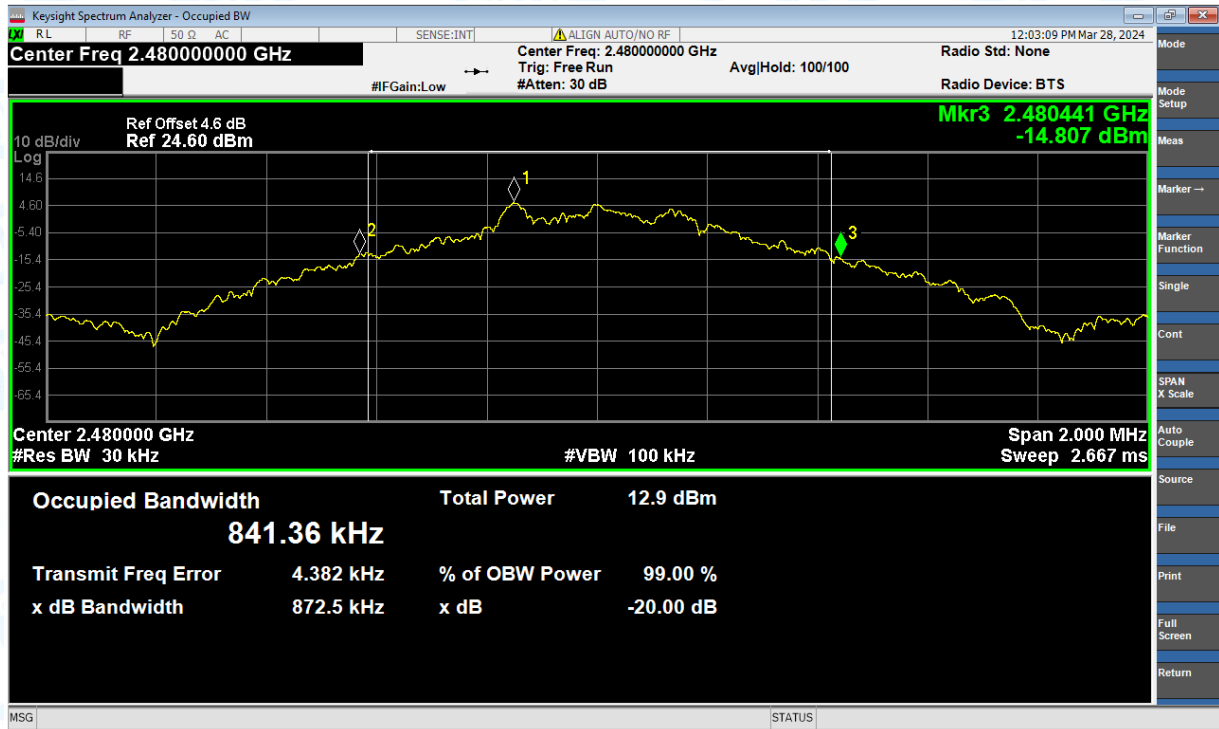
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



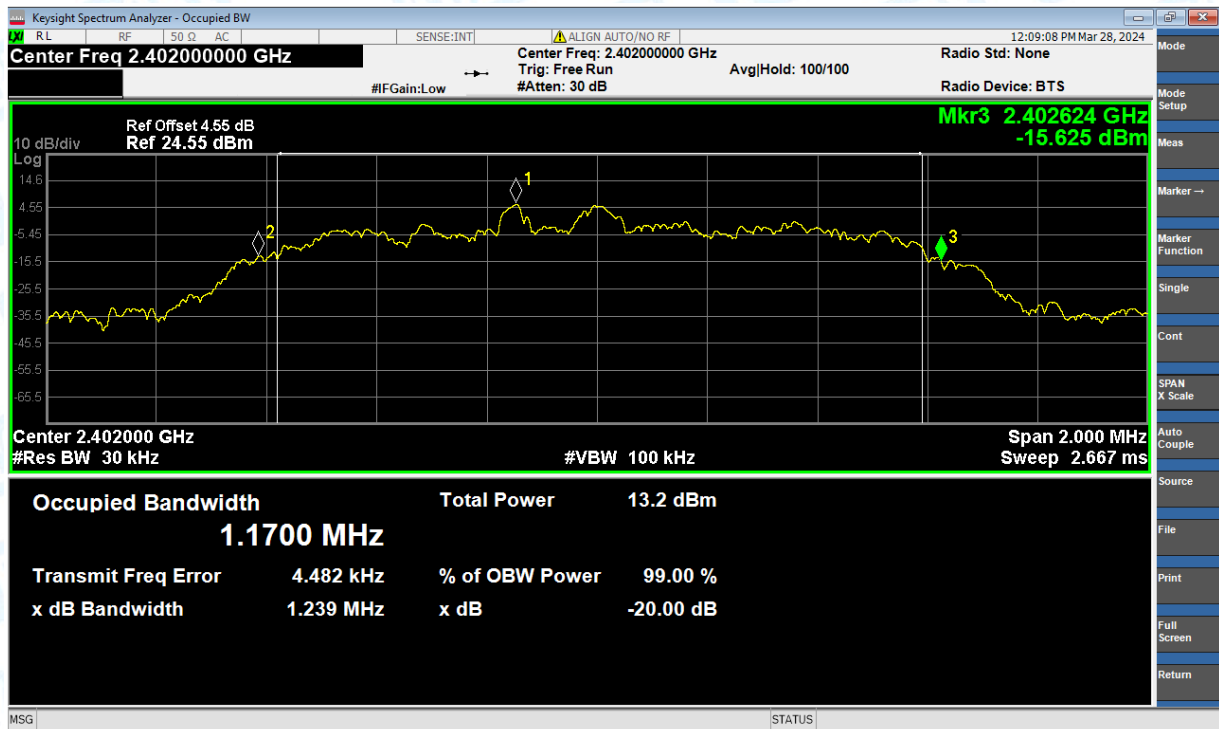
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



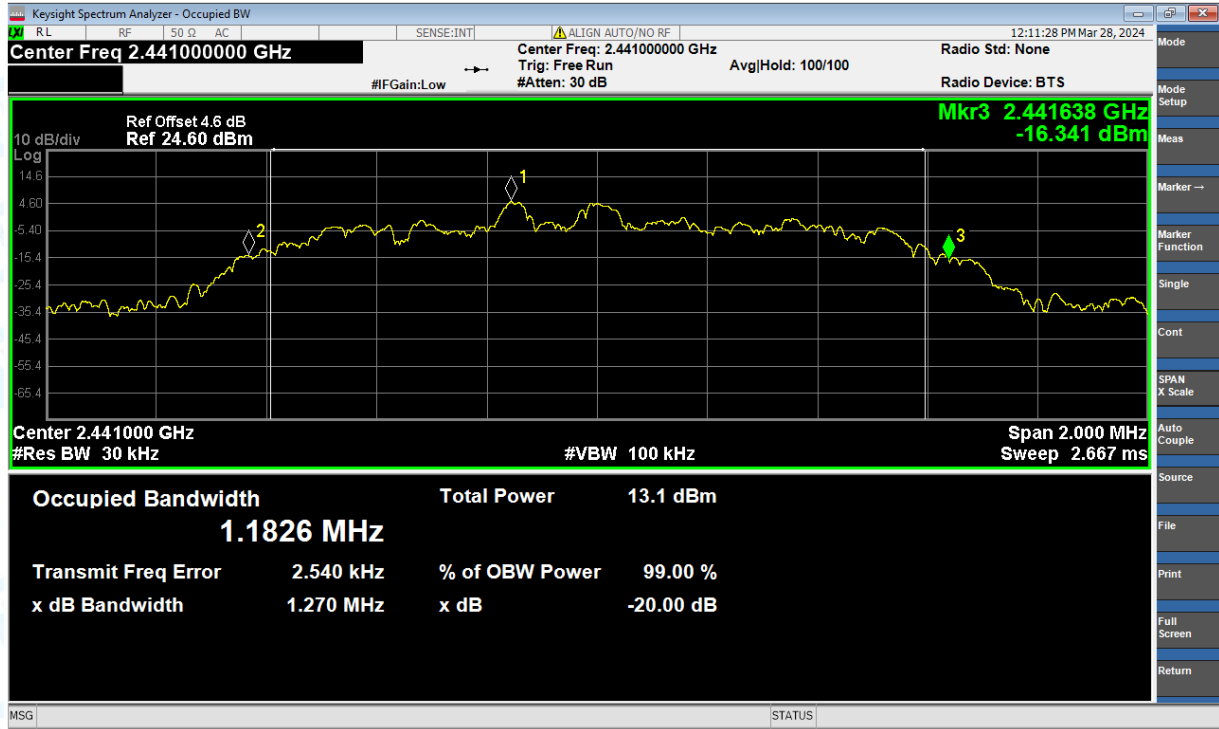
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



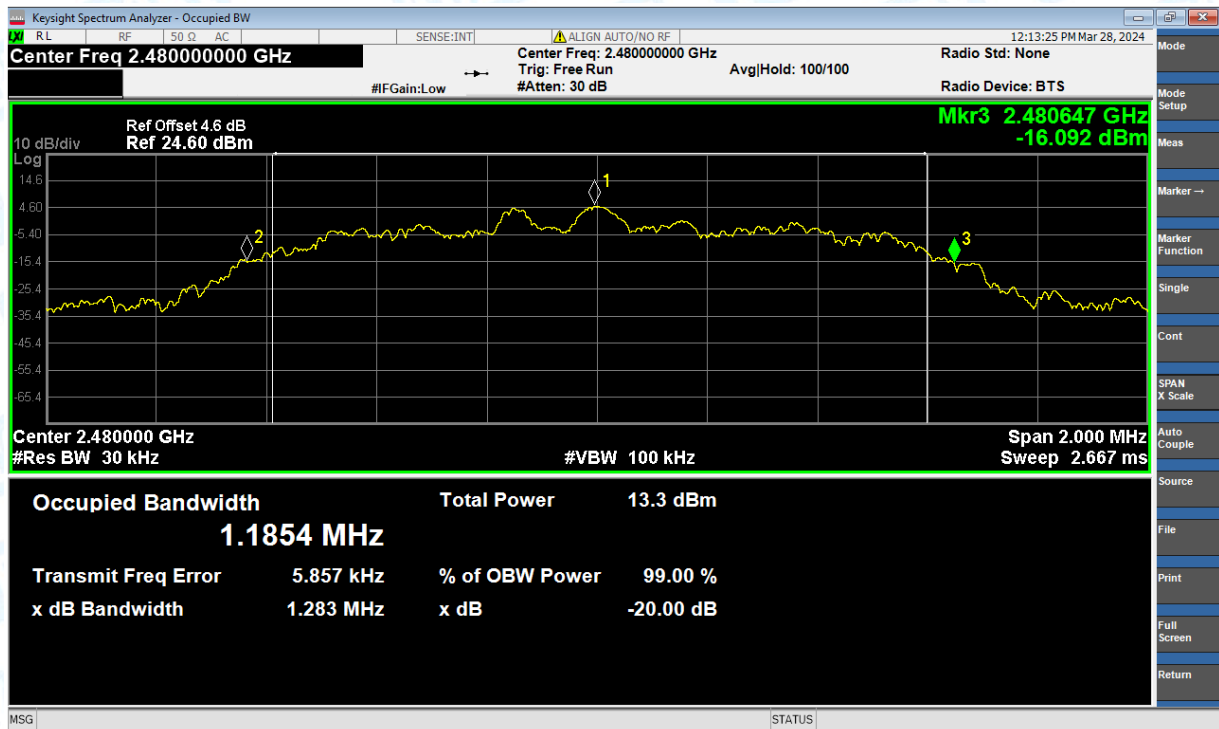
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



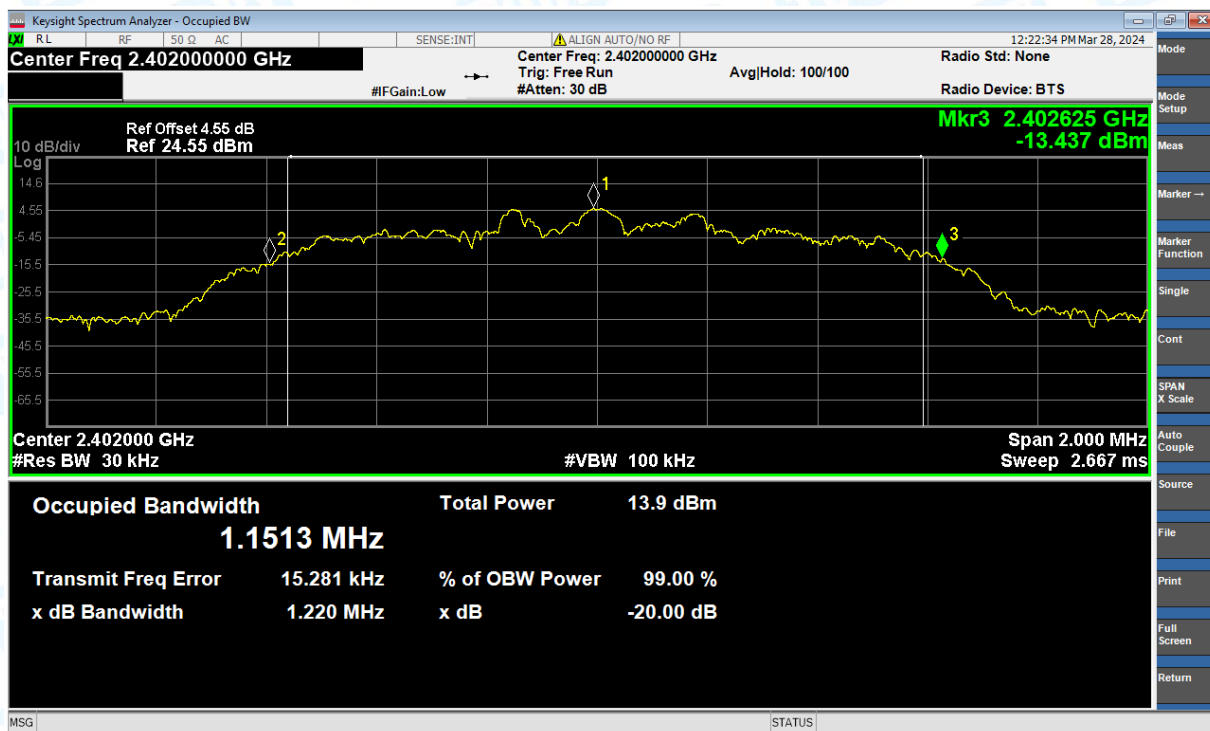
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



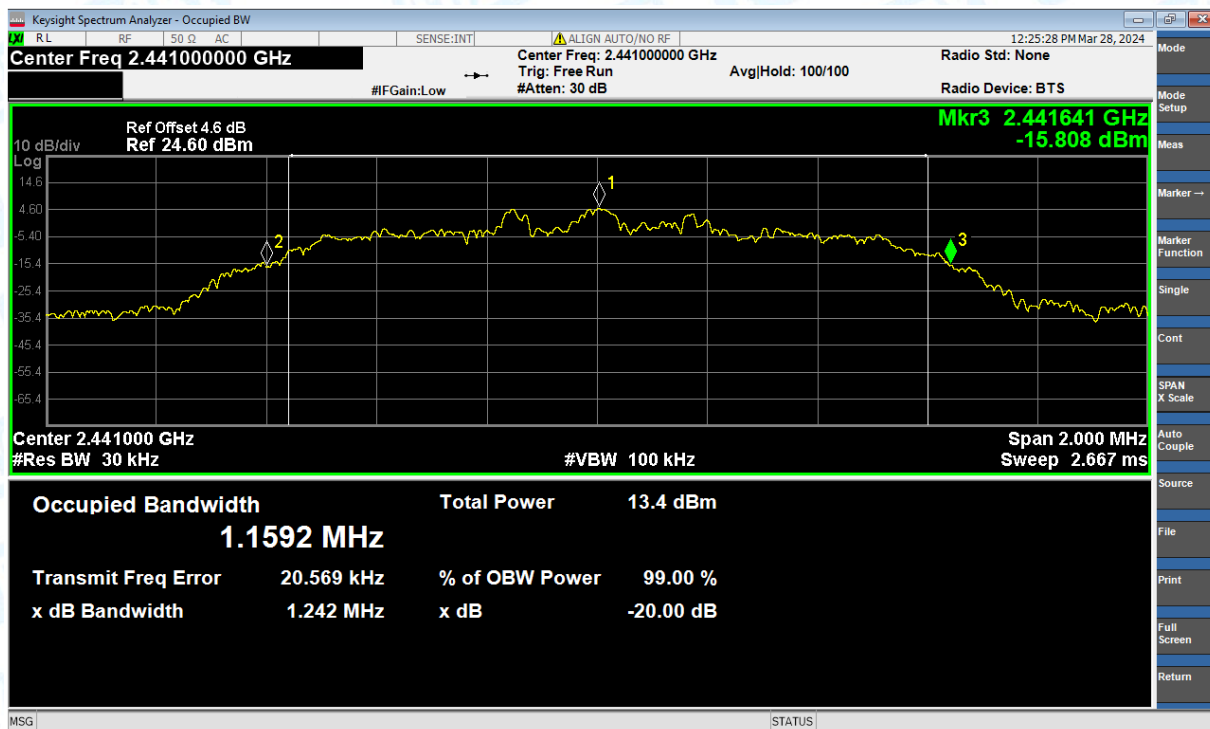
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

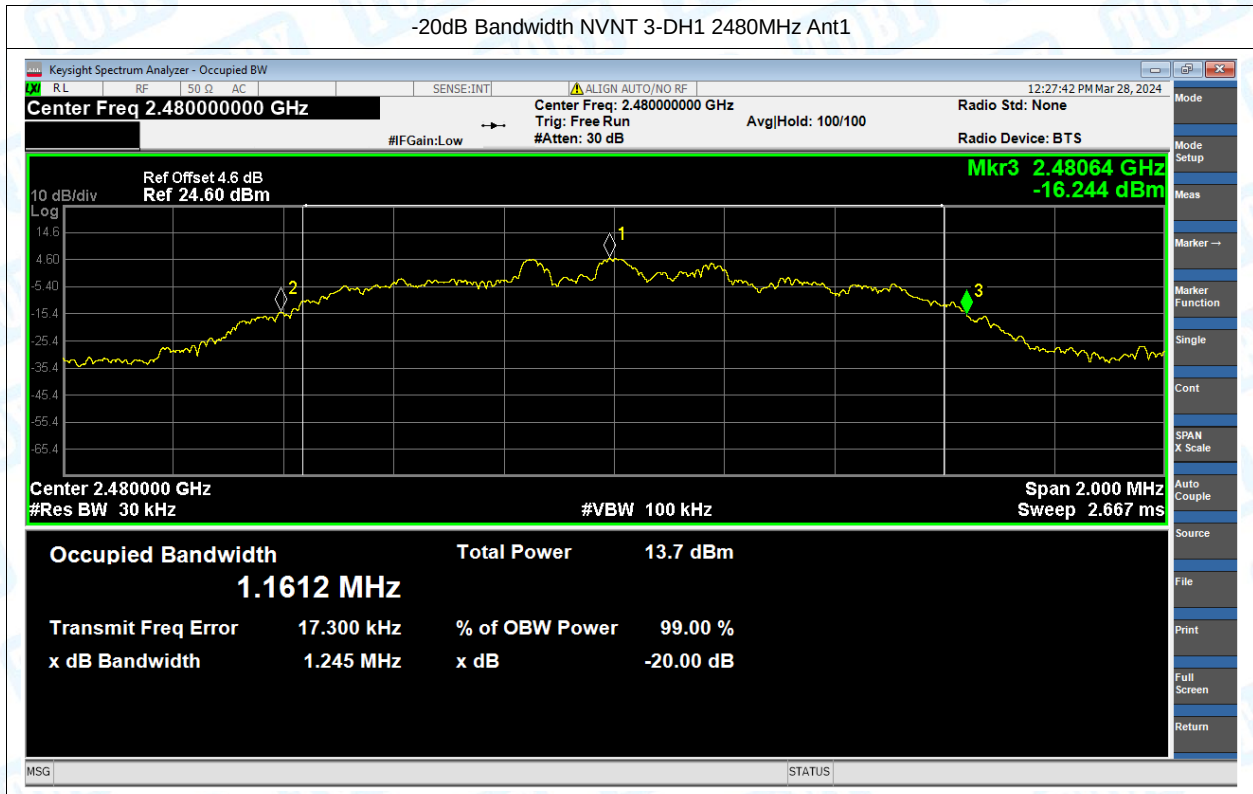


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



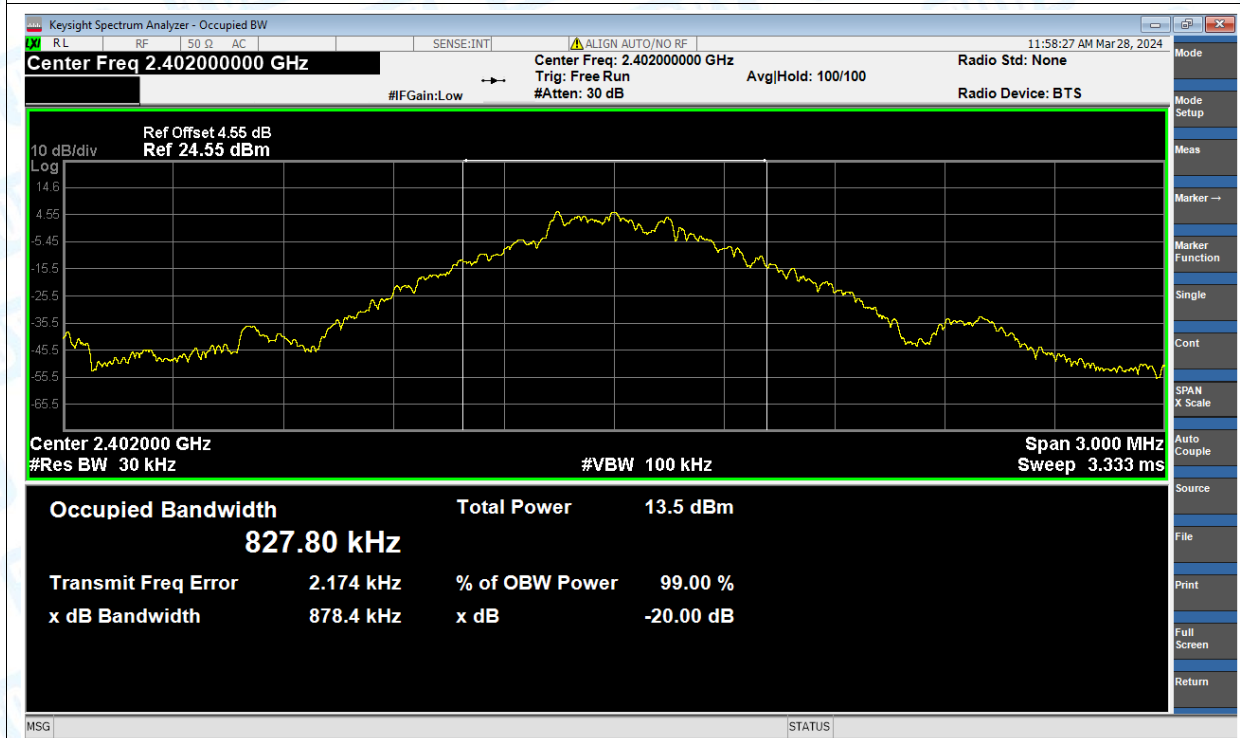


4. Occupied Channel Bandwidth

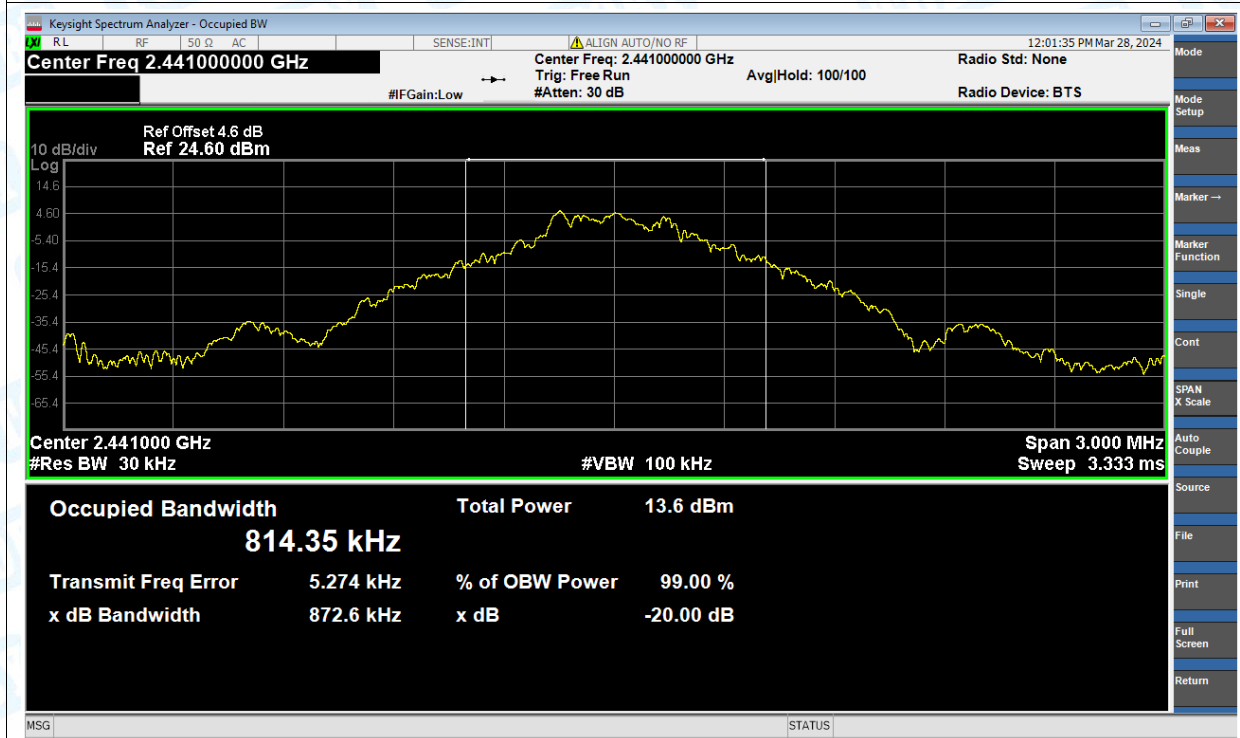
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.828
NVNT	1-DH1	2441	Ant1	0.814
NVNT	1-DH1	2480	Ant1	0.844
NVNT	2-DH1	2402	Ant1	1.173
NVNT	2-DH1	2441	Ant1	1.188
NVNT	2-DH1	2480	Ant1	1.180
NVNT	3-DH1	2402	Ant1	1.157
NVNT	3-DH1	2441	Ant1	1.164
NVNT	3-DH1	2480	Ant1	1.191

Test Graphs

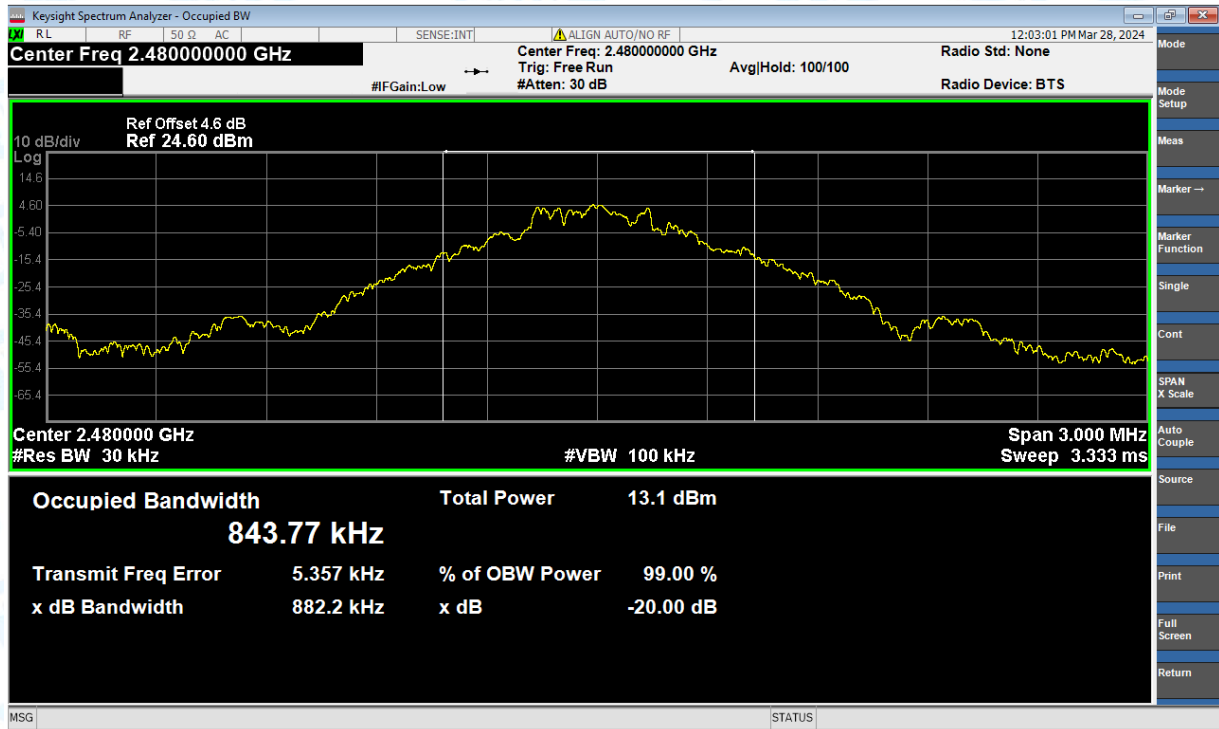
OBW NVNT 1-DH1 2402MHz Ant1



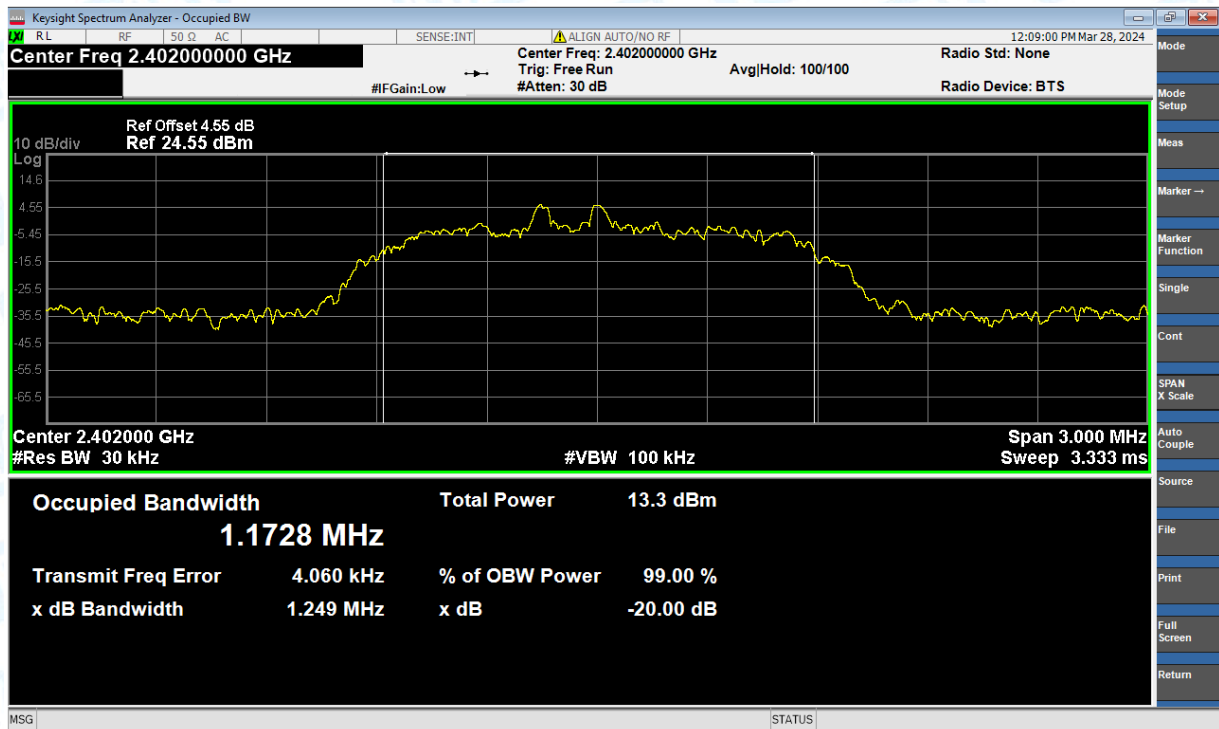
OBW NVNT 1-DH1 2441MHz Ant1



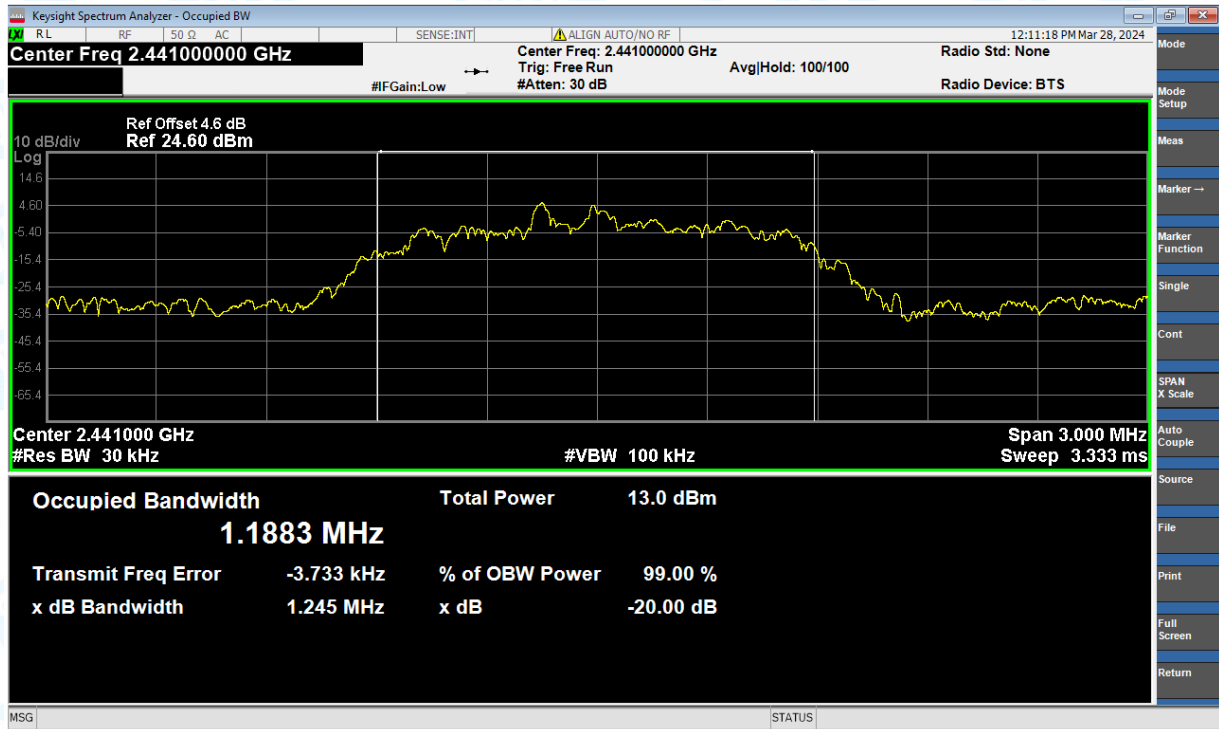
OBW NVNT 1-DH1 2480MHz Ant1



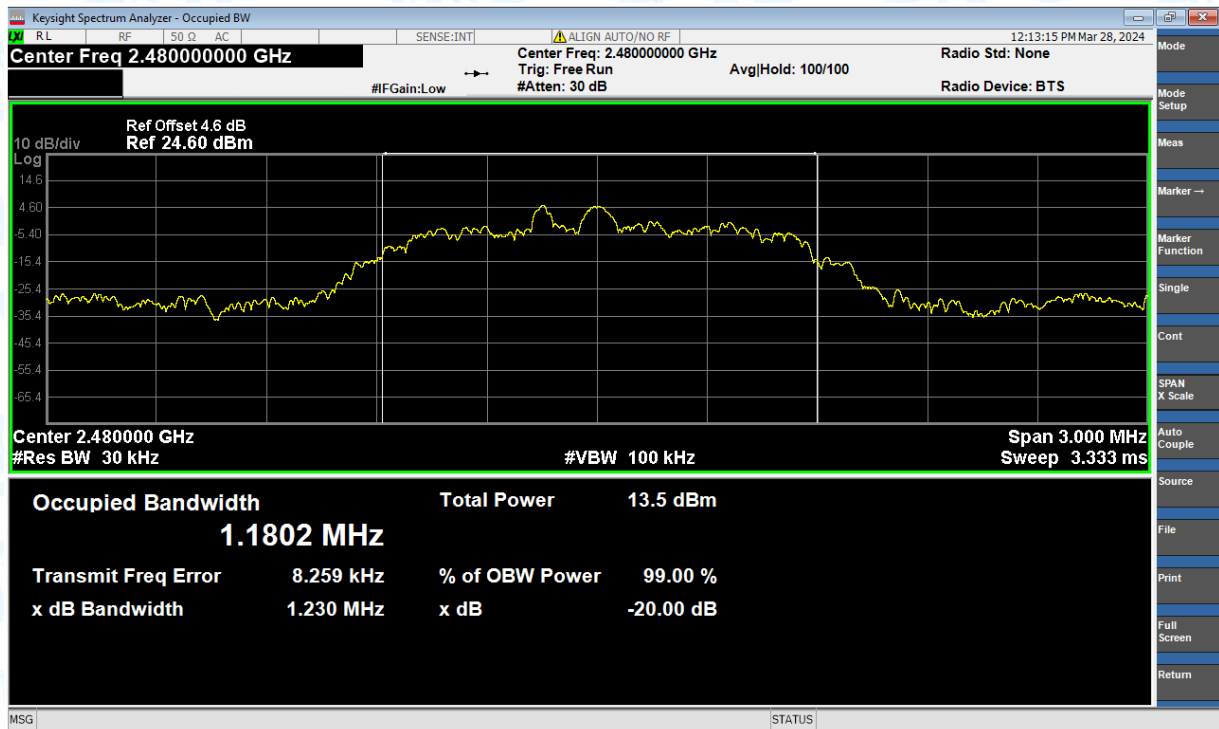
OBW NVNT 2-DH1 2402MHz Ant1



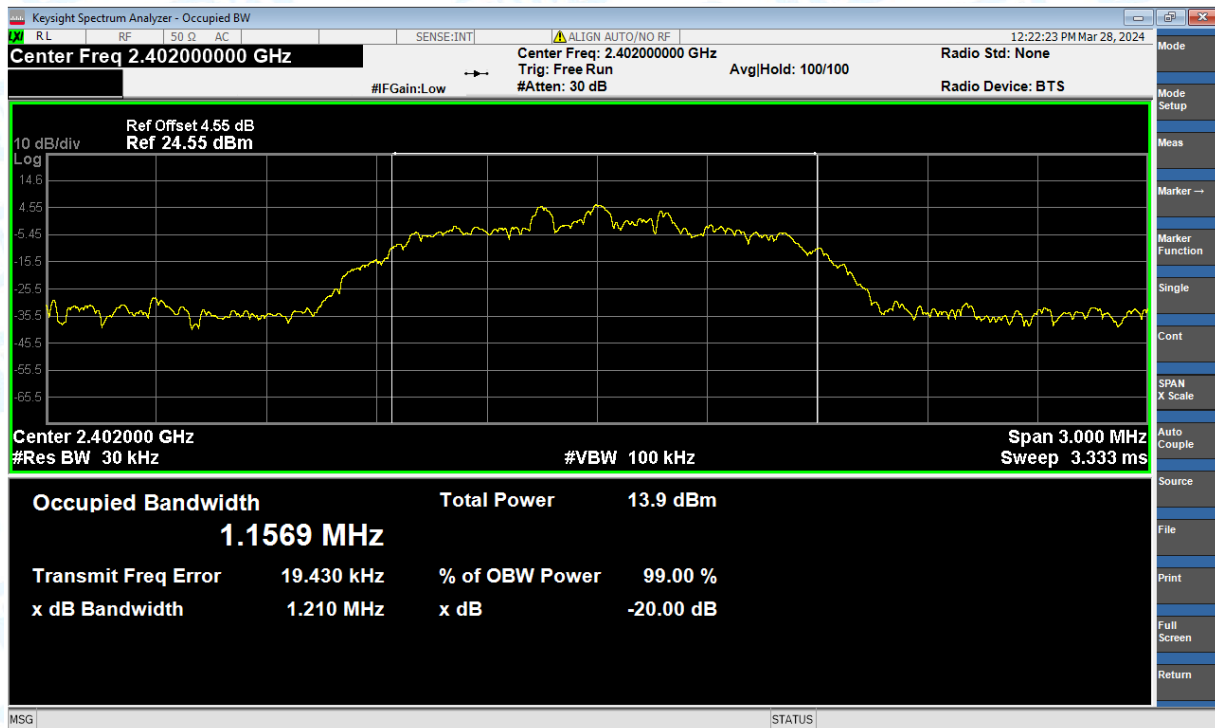
OBW NVNT 2-DH1 2441MHz Ant1



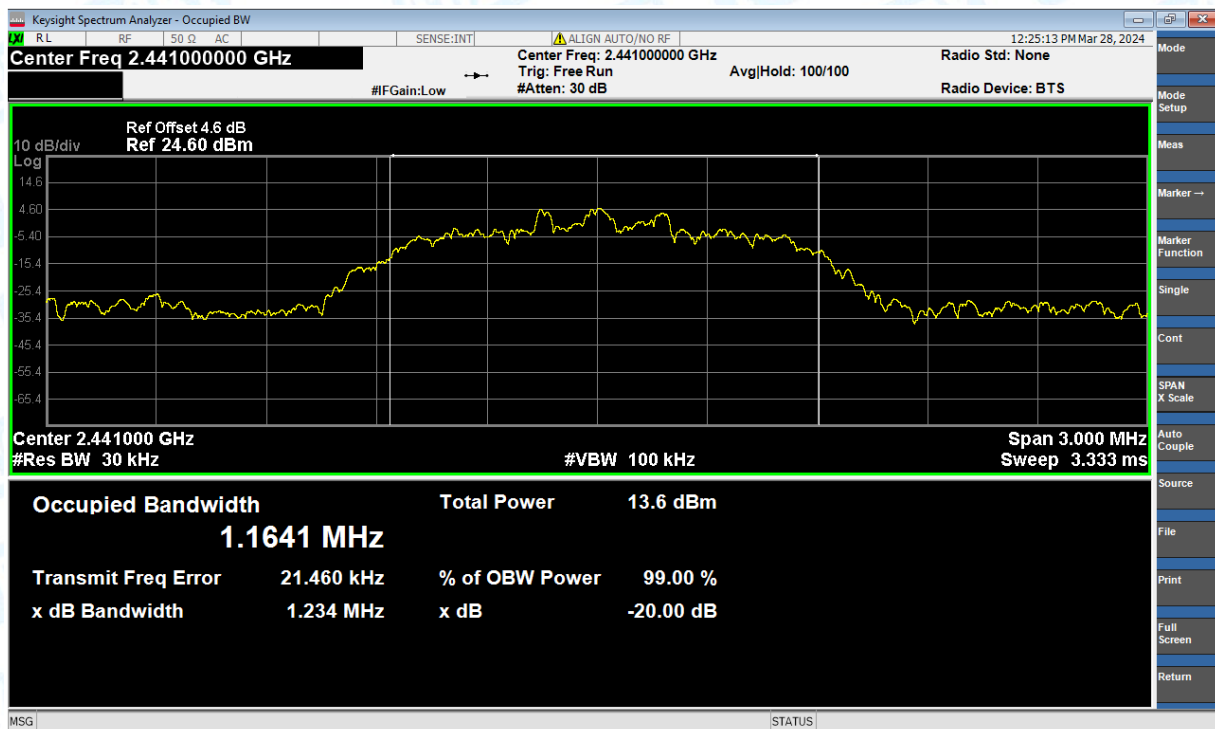
OBW NVNT 2-DH1 2480MHz Ant1

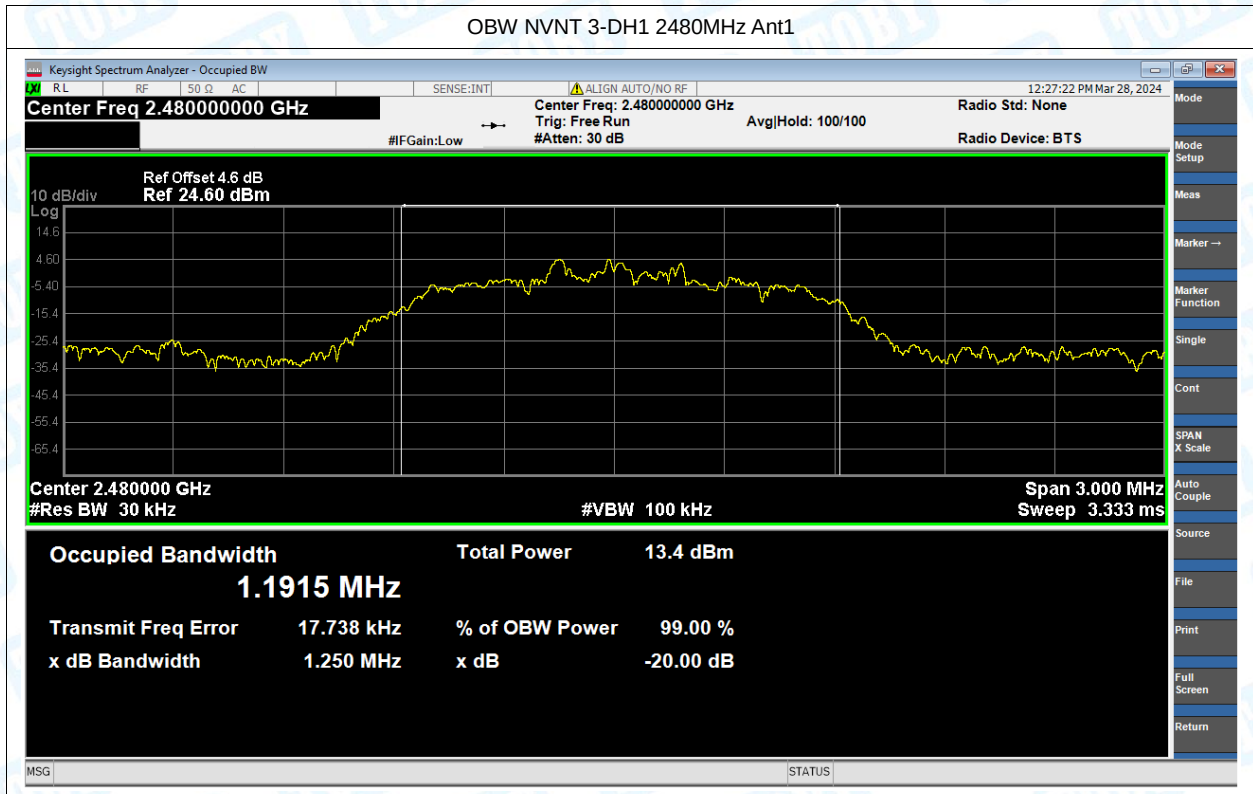


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



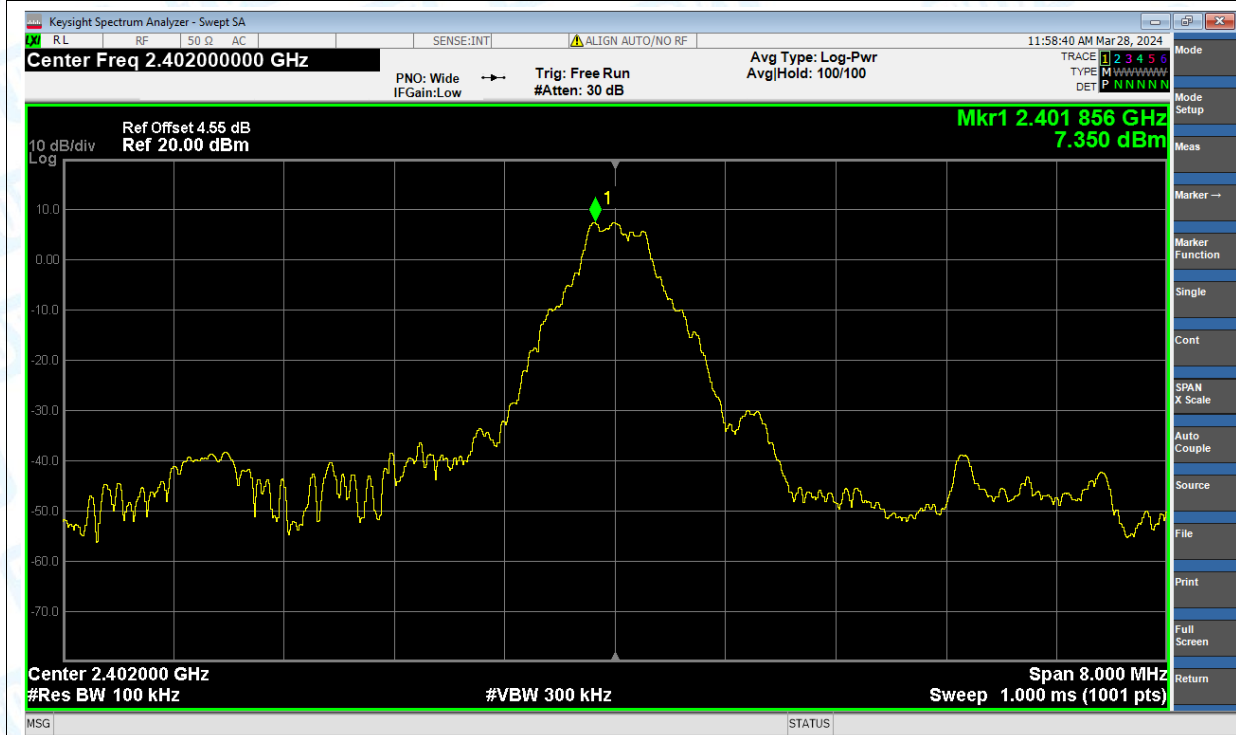


5. Band Edge

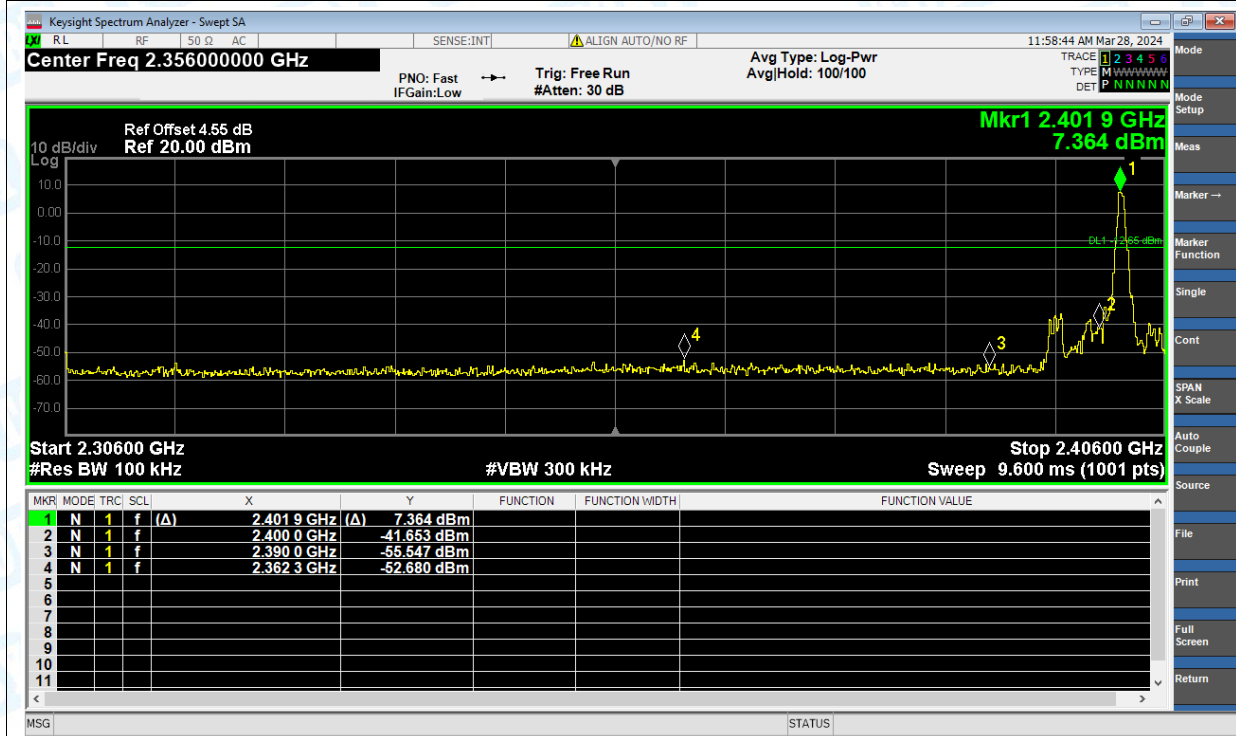
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-60.03	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-52.80	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-59.92	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-53.84	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-58.08	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-52.19	-20	Pass

Test Graphs

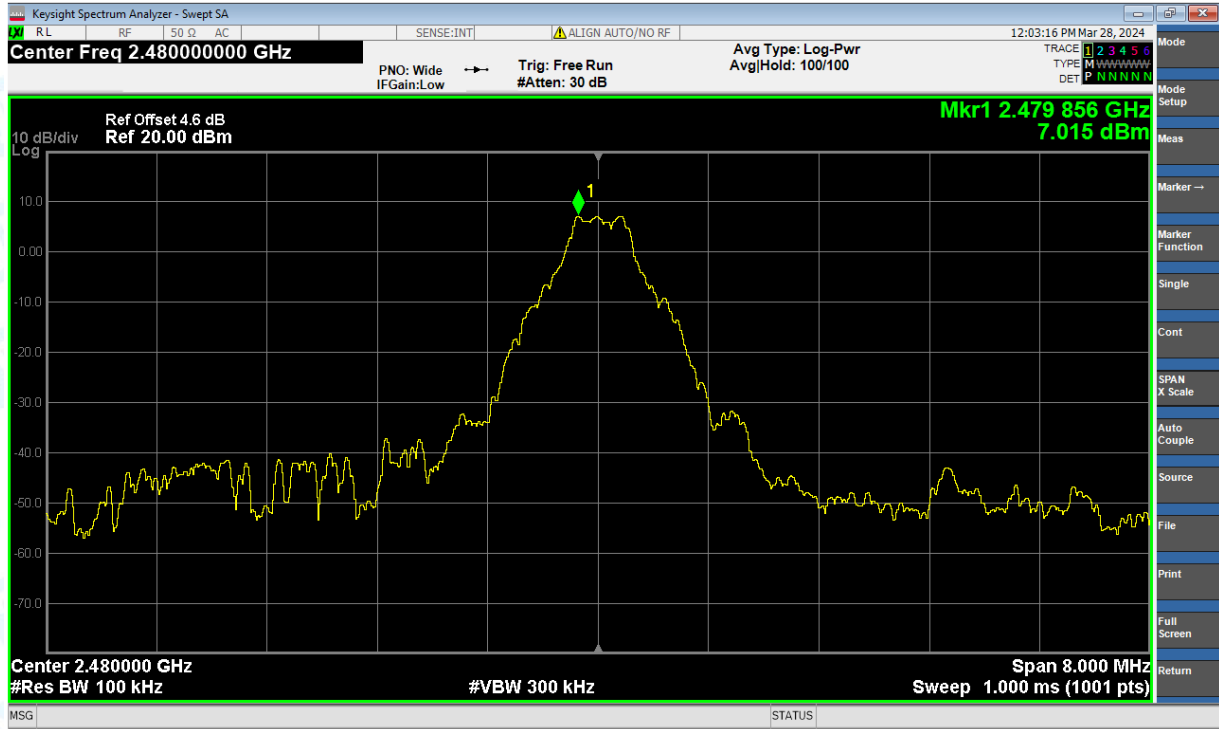
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



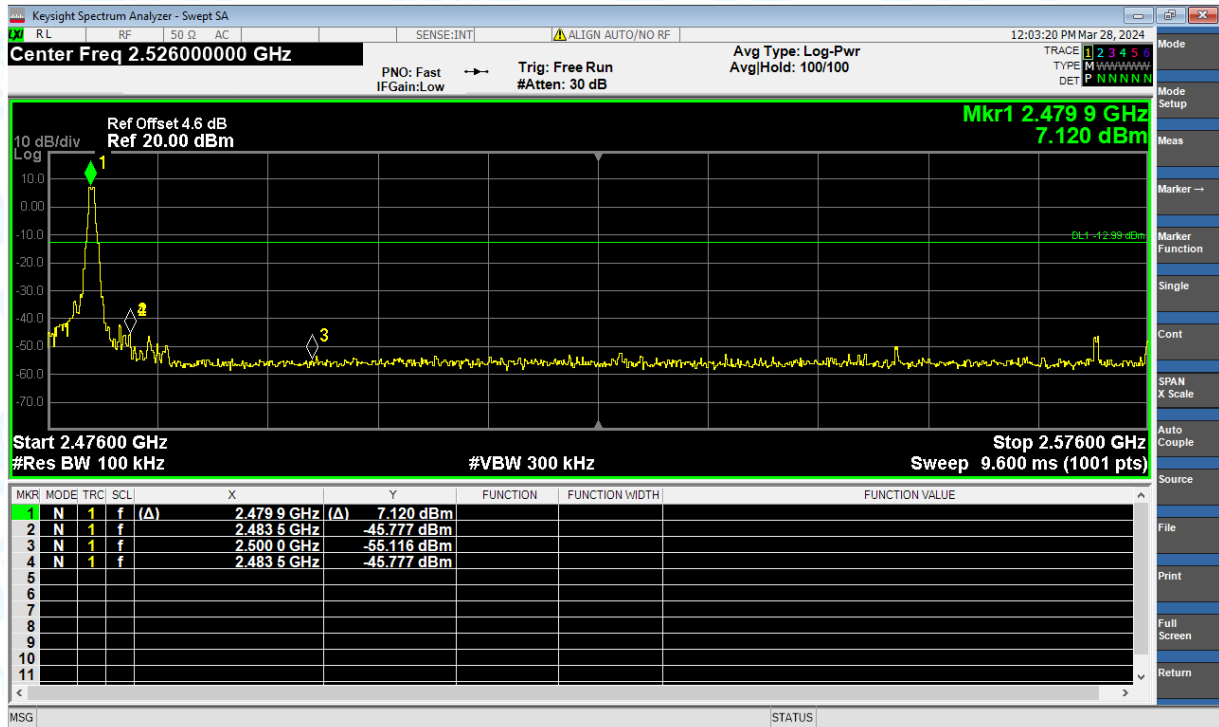
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



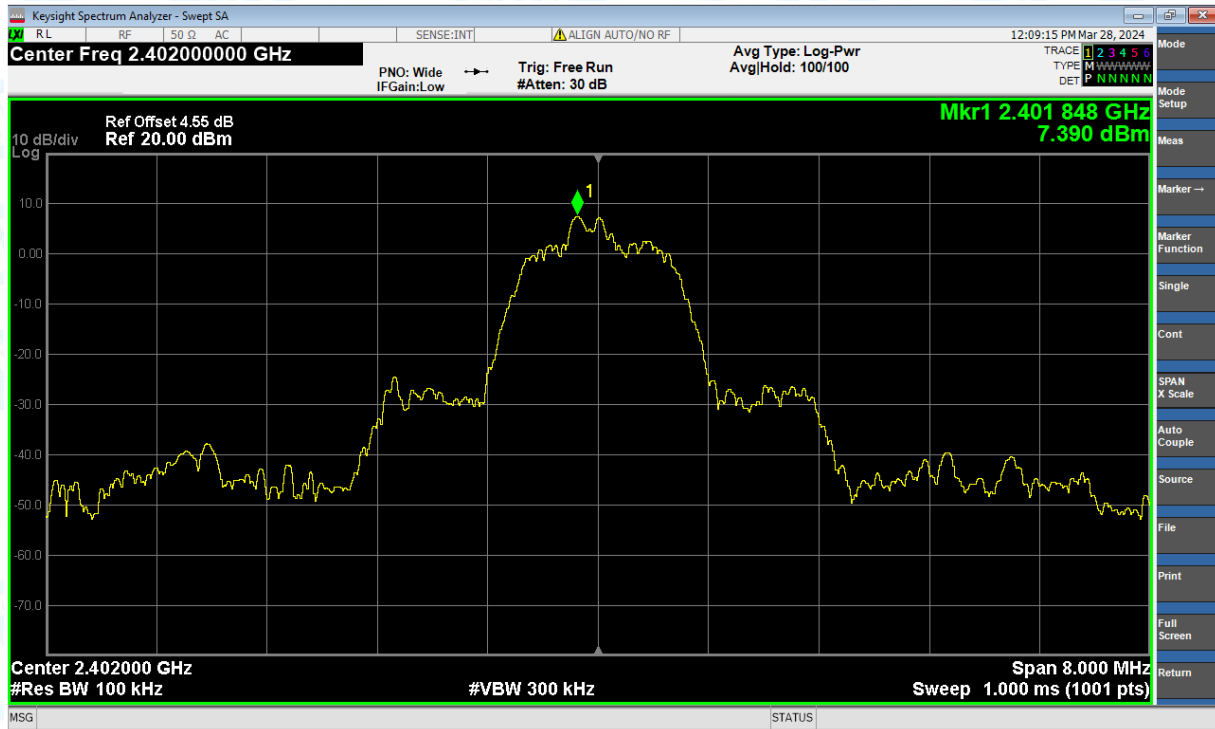
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



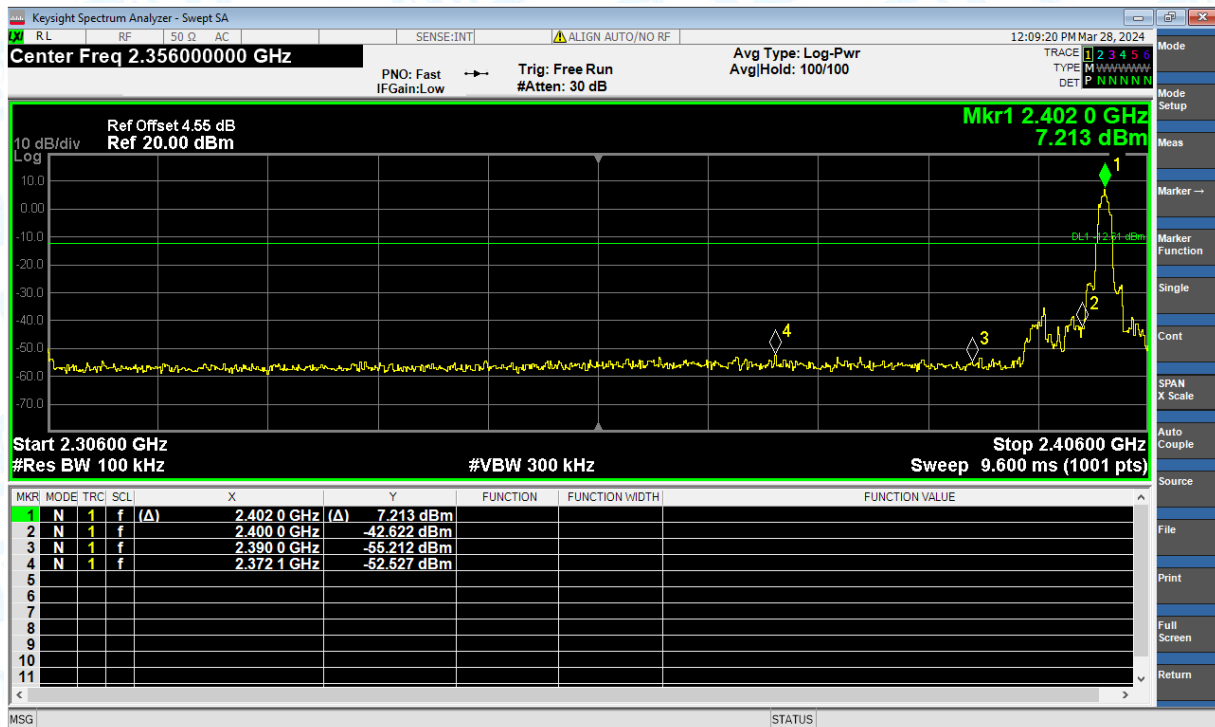
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



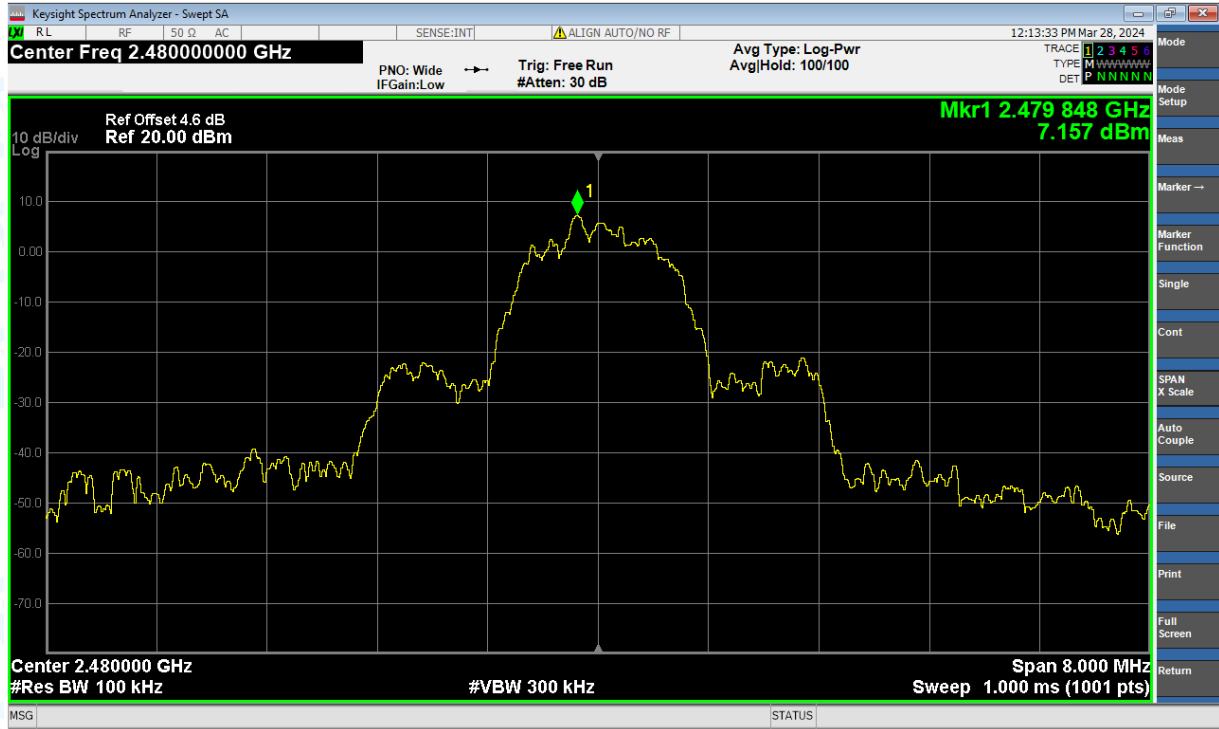
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



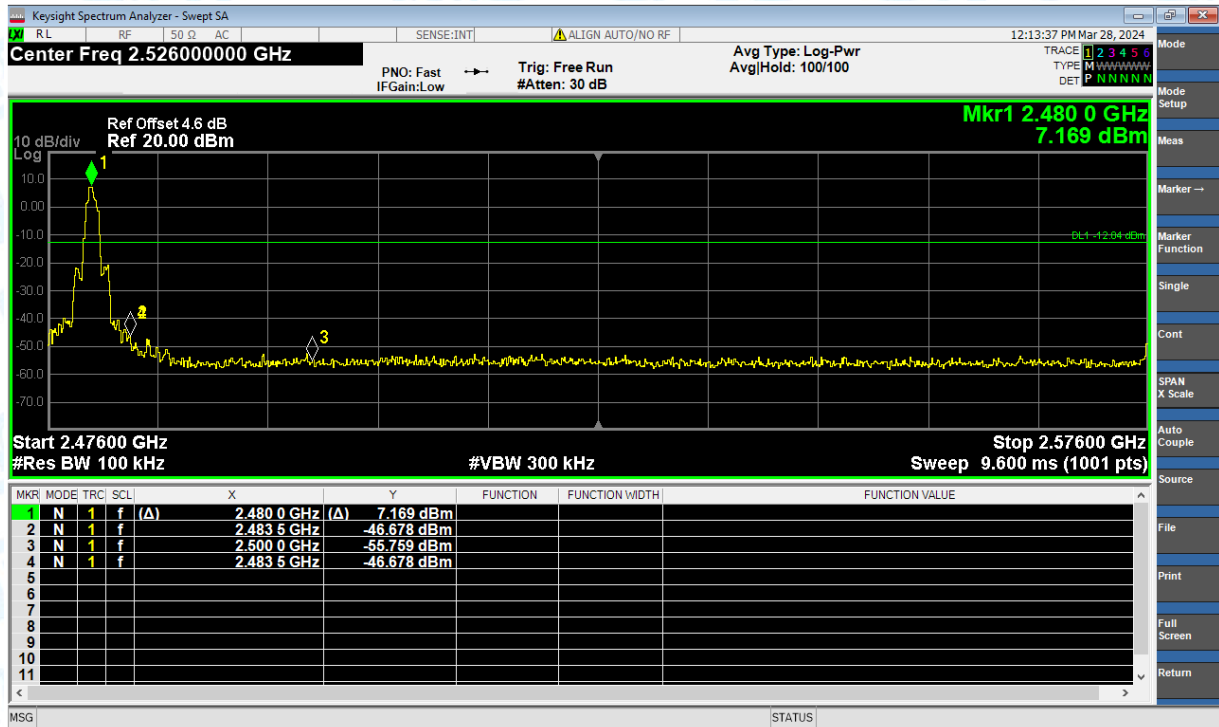
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



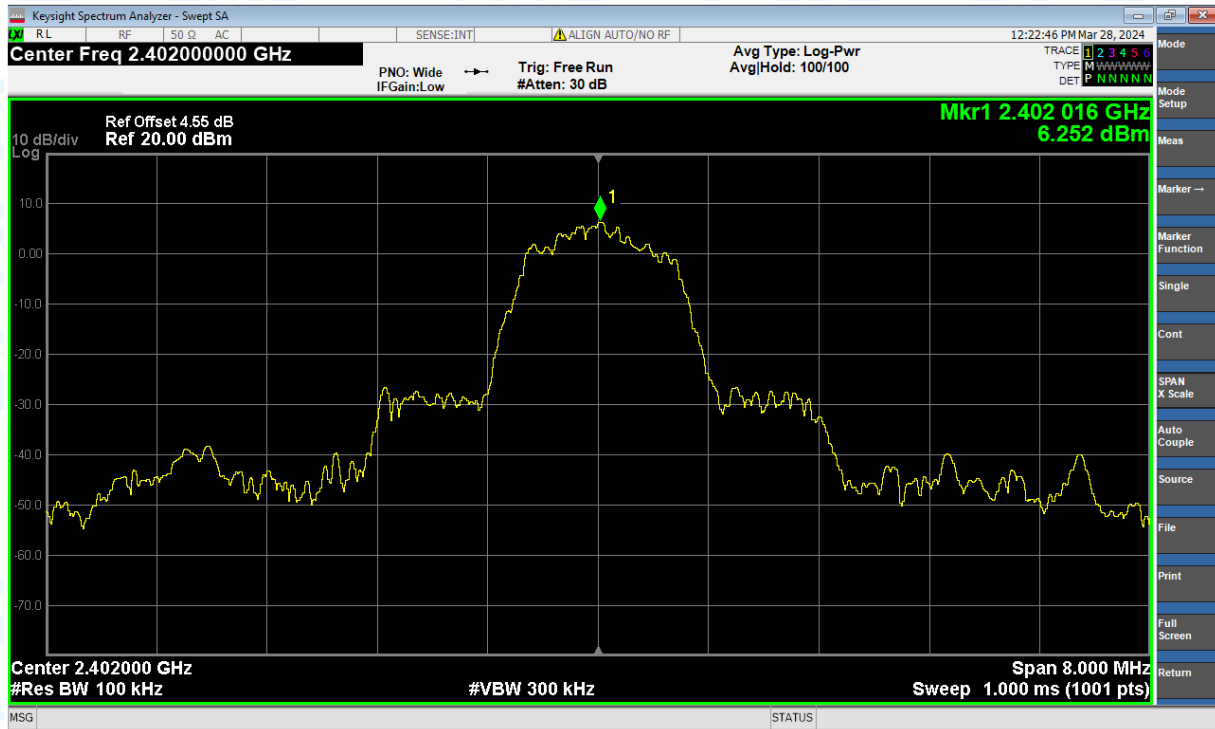
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



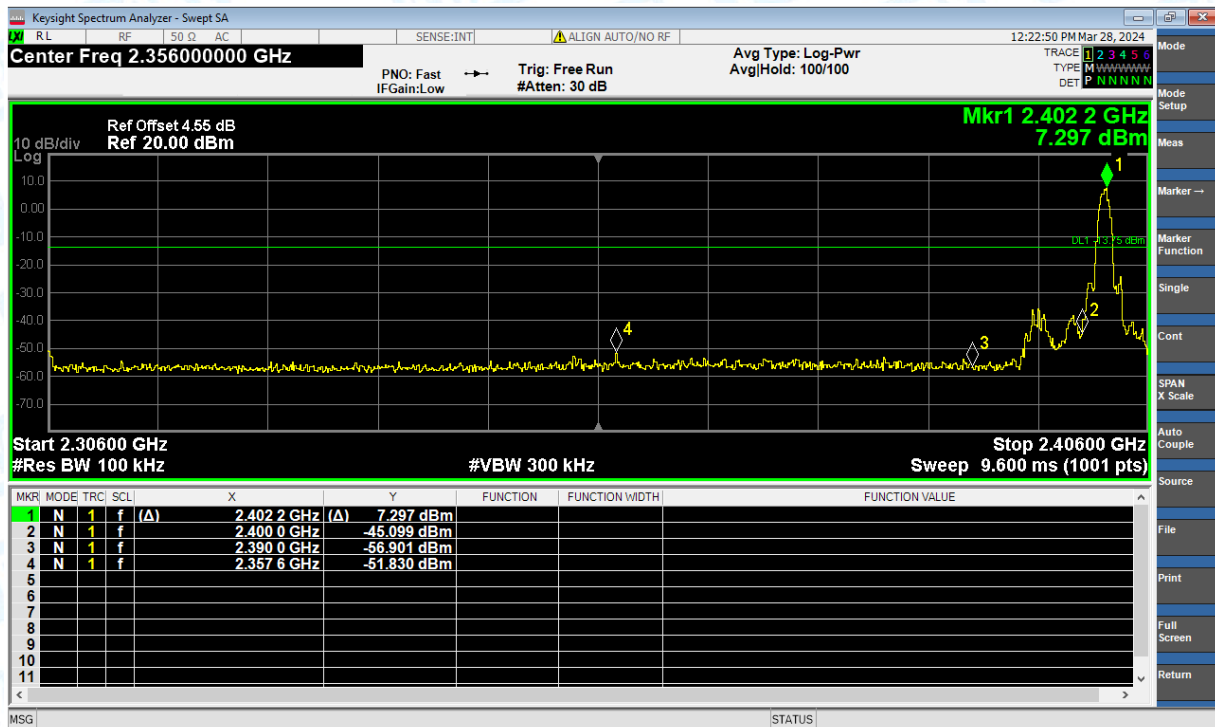
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



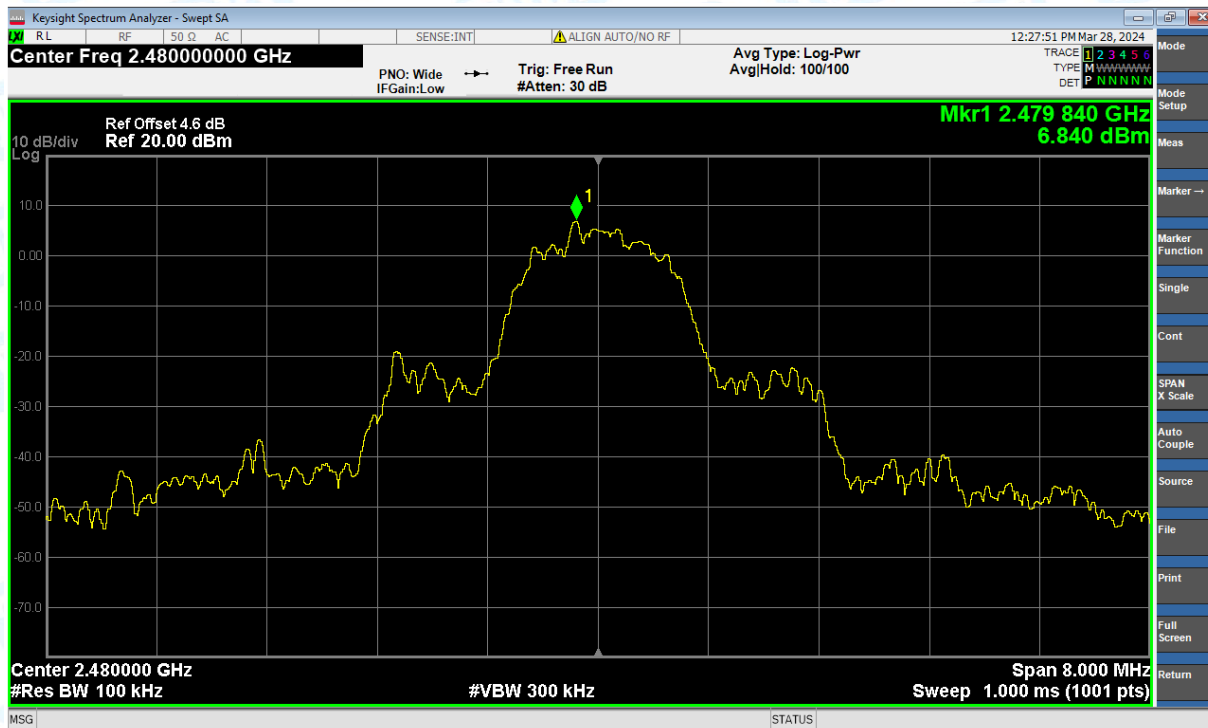
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



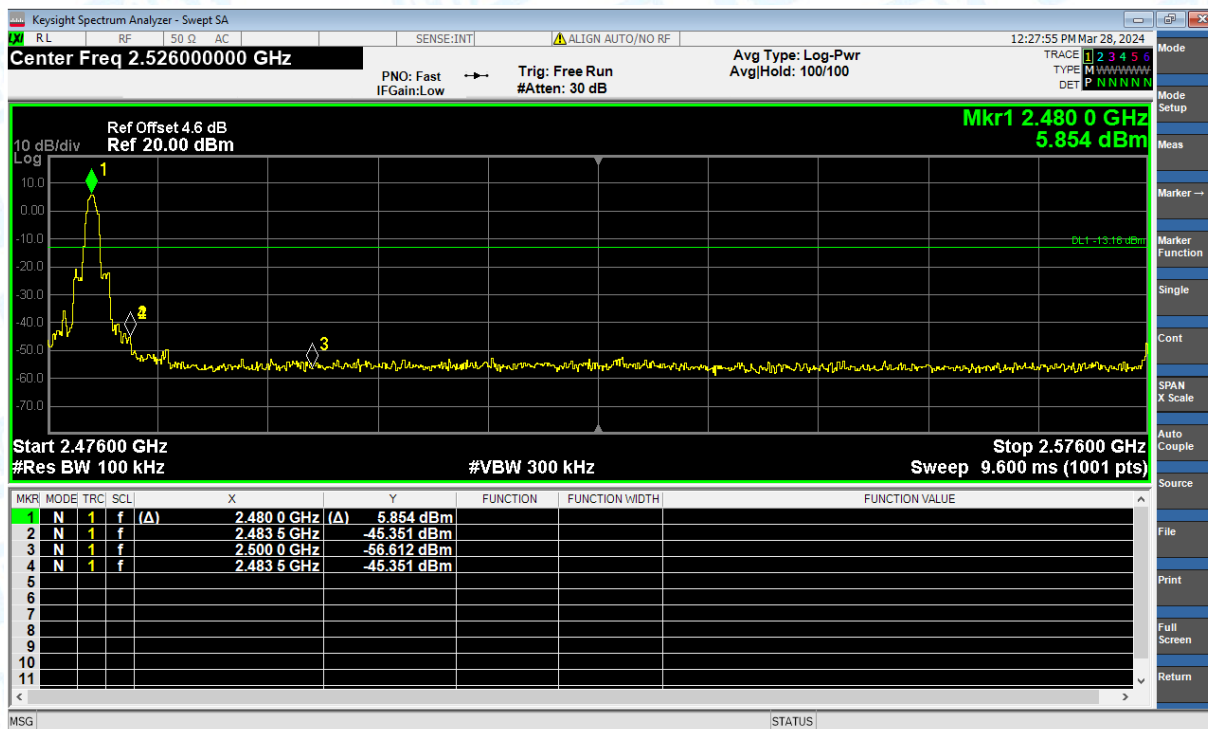
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



6. Band Edge(Hopping)

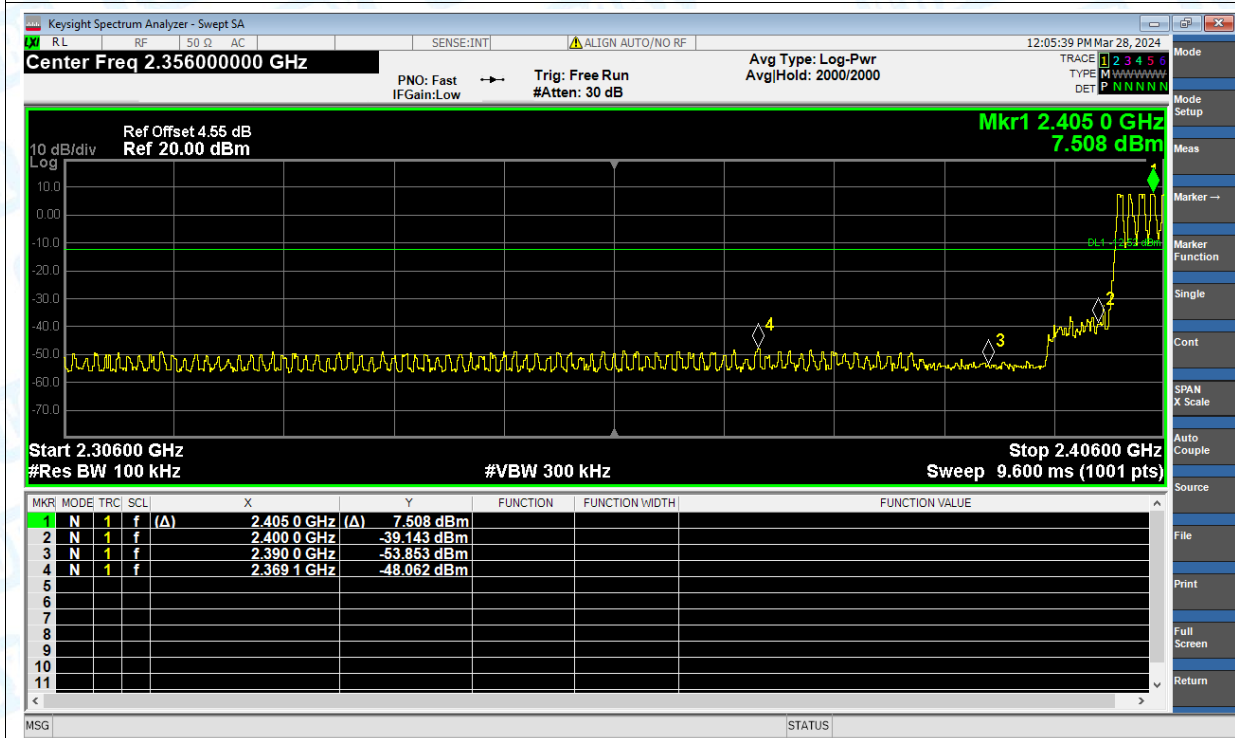
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-55.54	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-53.51	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-55.03	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-56.60	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.39	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-54.69	-20	Pass

Test Graphs

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



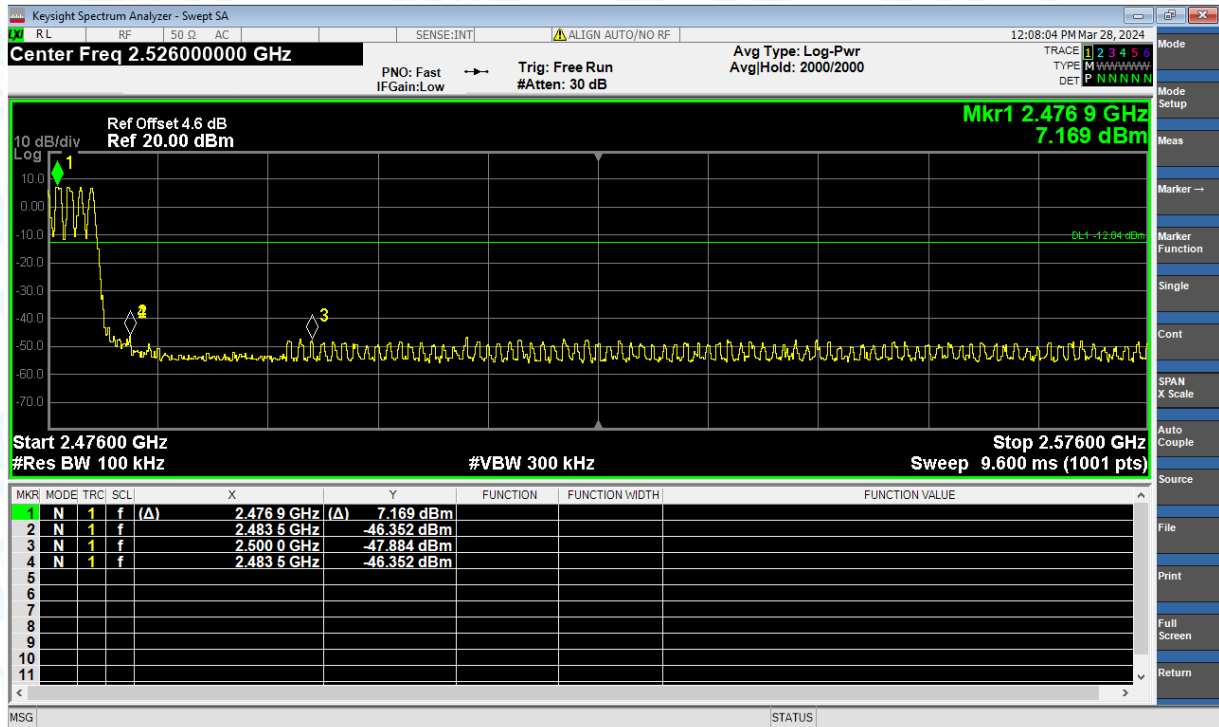
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



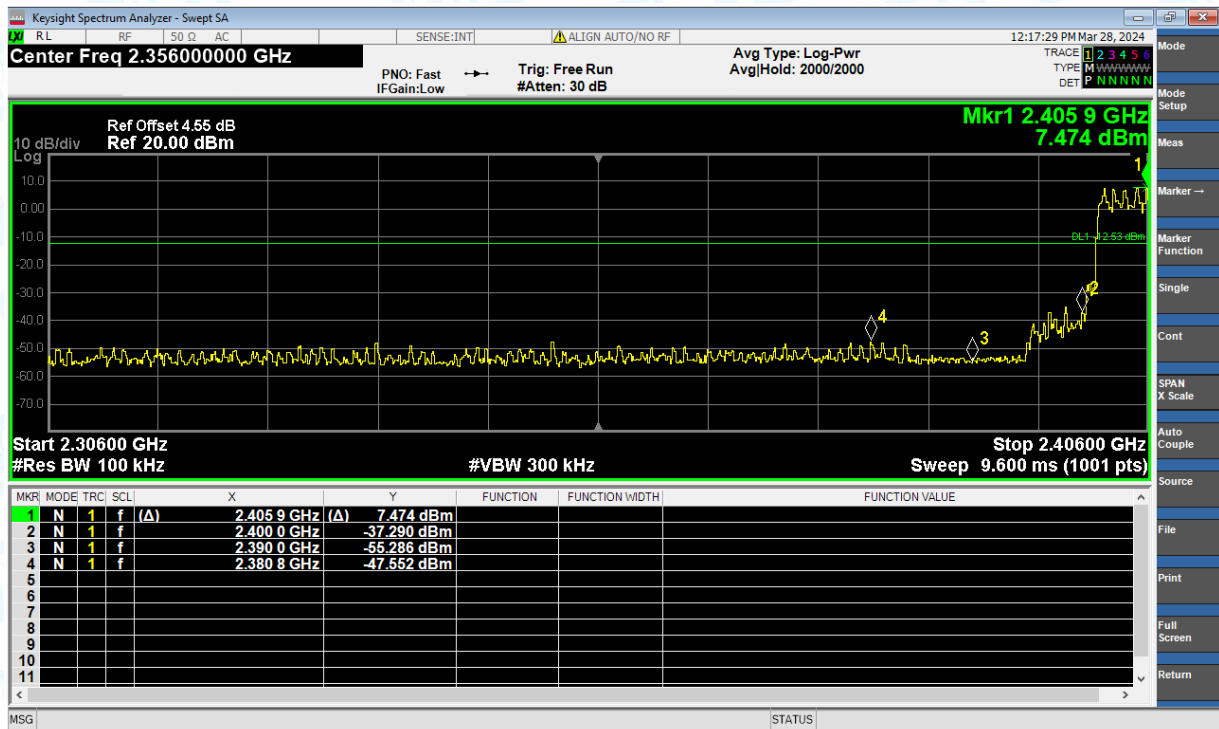
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



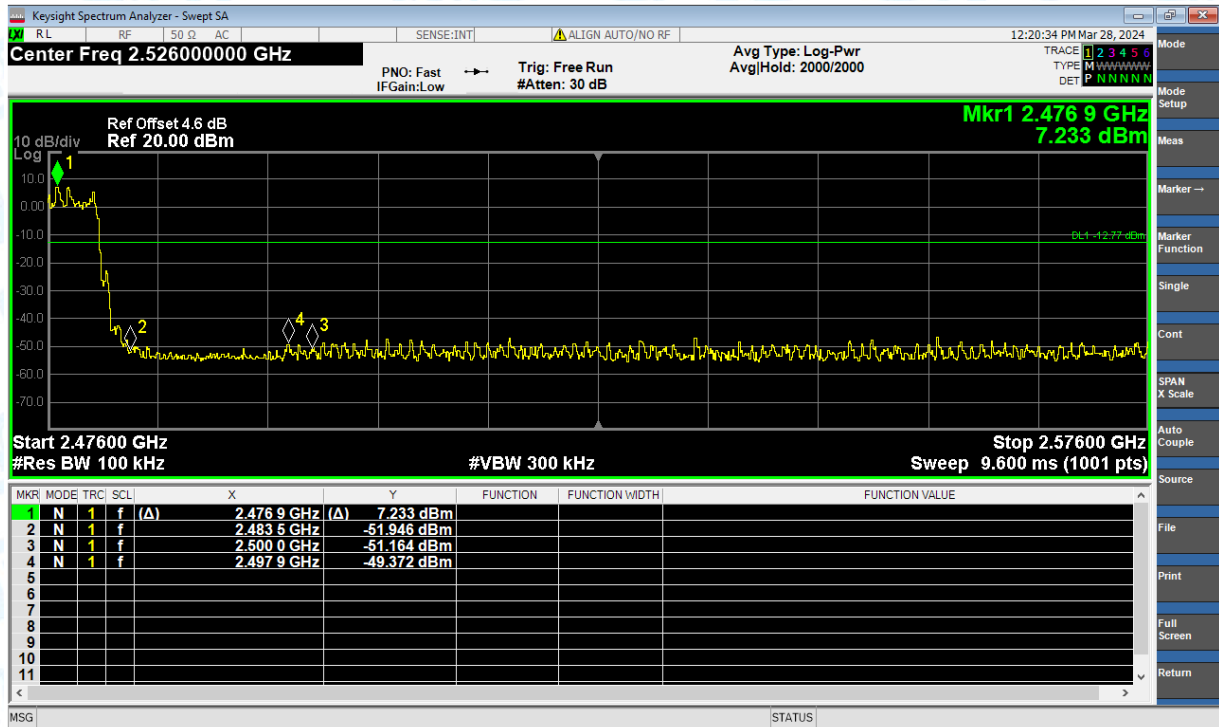
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



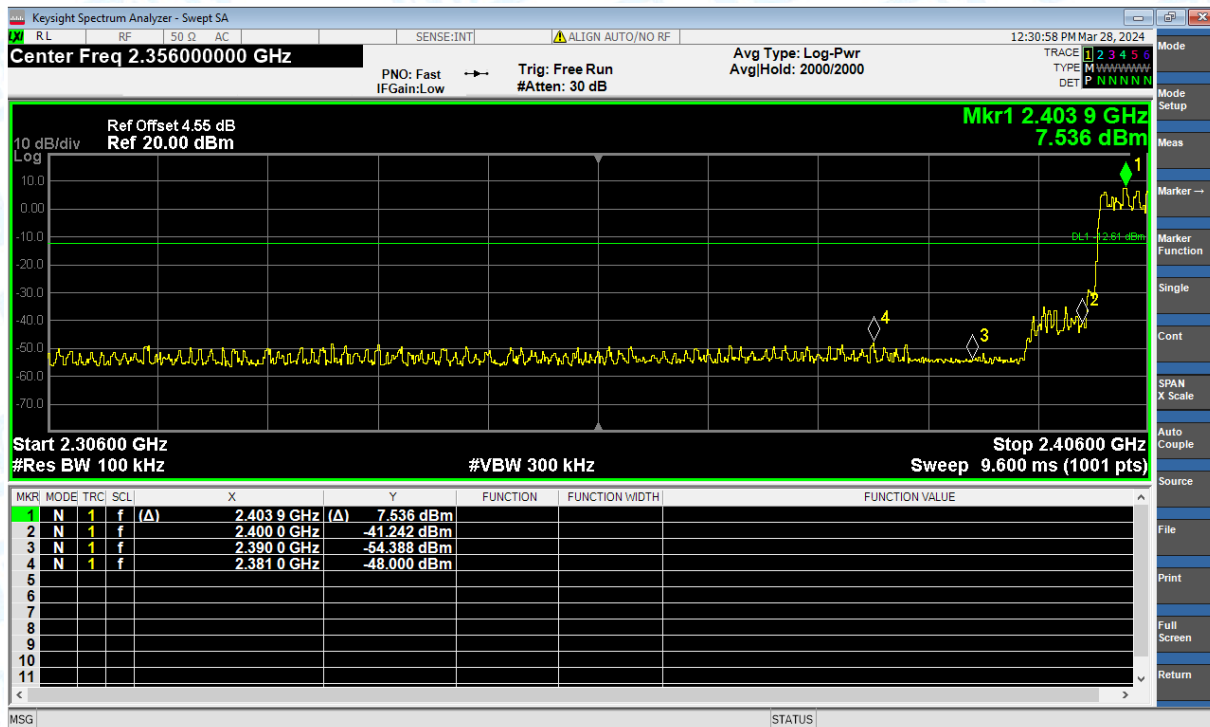
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



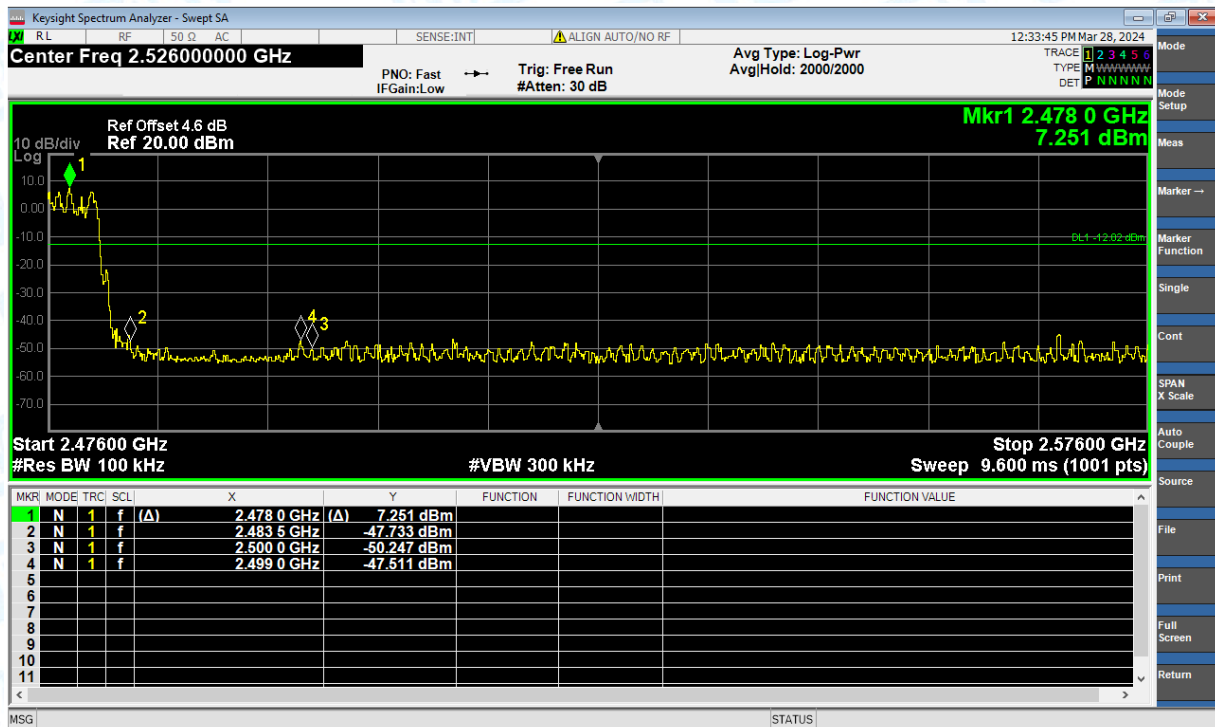
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Emission

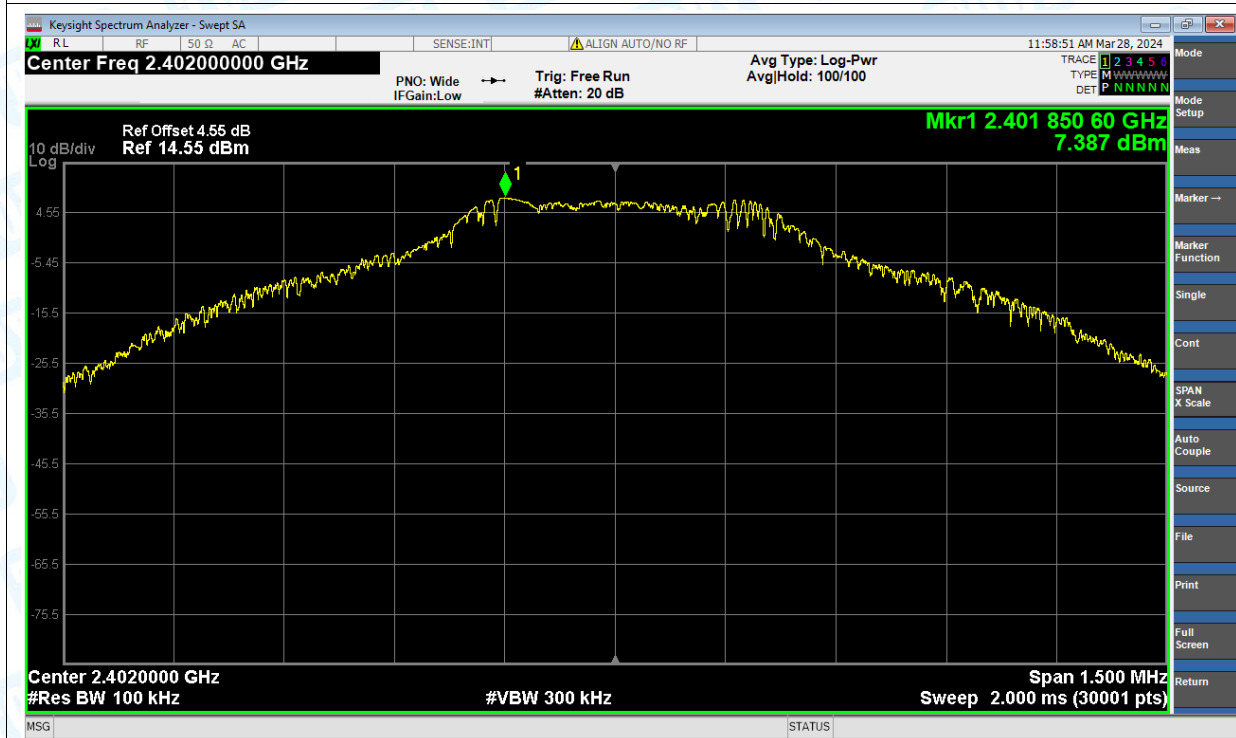


7. Conducted RF Spurious Emission

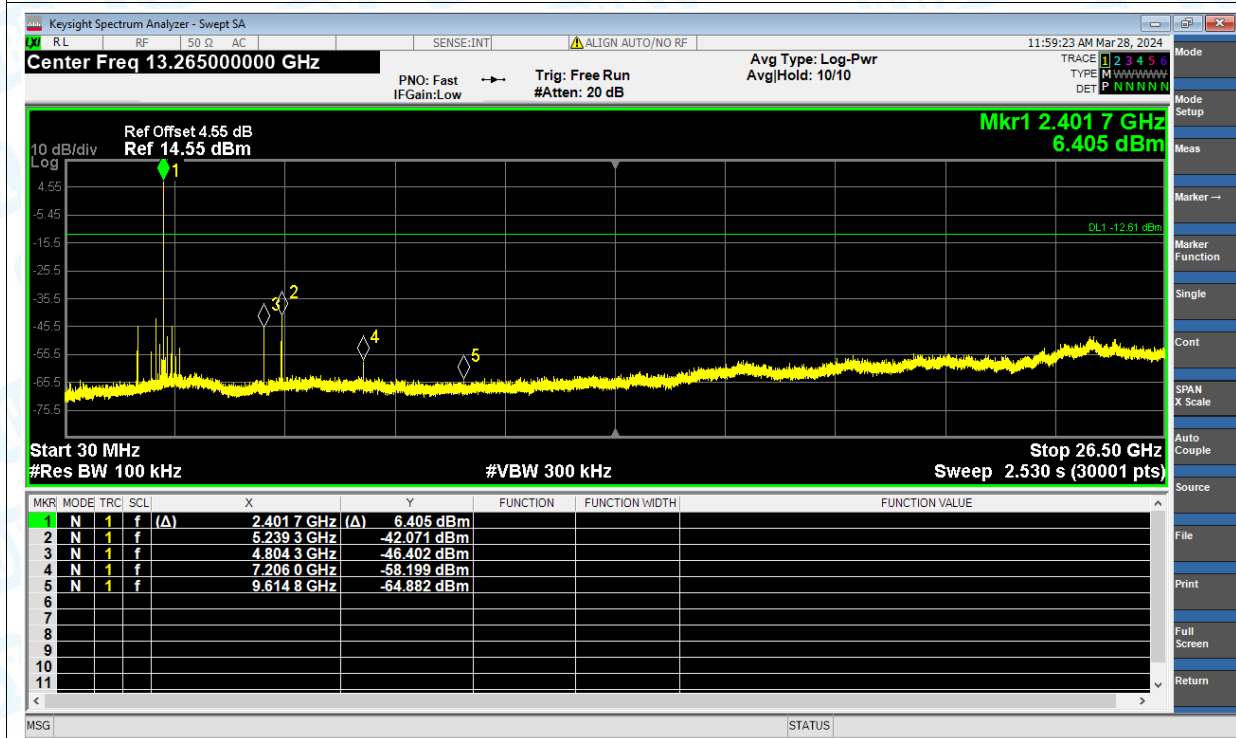
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-49.46	-20	Pass
NVNT	1-DH1	2441	Ant1	-49.29	-20	Pass
NVNT	1-DH1	2480	Ant1	-46.97	-20	Pass
NVNT	2-DH1	2402	Ant1	-48.96	-20	Pass
NVNT	2-DH1	2441	Ant1	-48.18	-20	Pass
NVNT	2-DH1	2480	Ant1	-46.61	-20	Pass
NVNT	3-DH1	2402	Ant1	-50.28	-20	Pass
NVNT	3-DH1	2441	Ant1	-48.46	-20	Pass
NVNT	3-DH1	2480	Ant1	-46.03	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



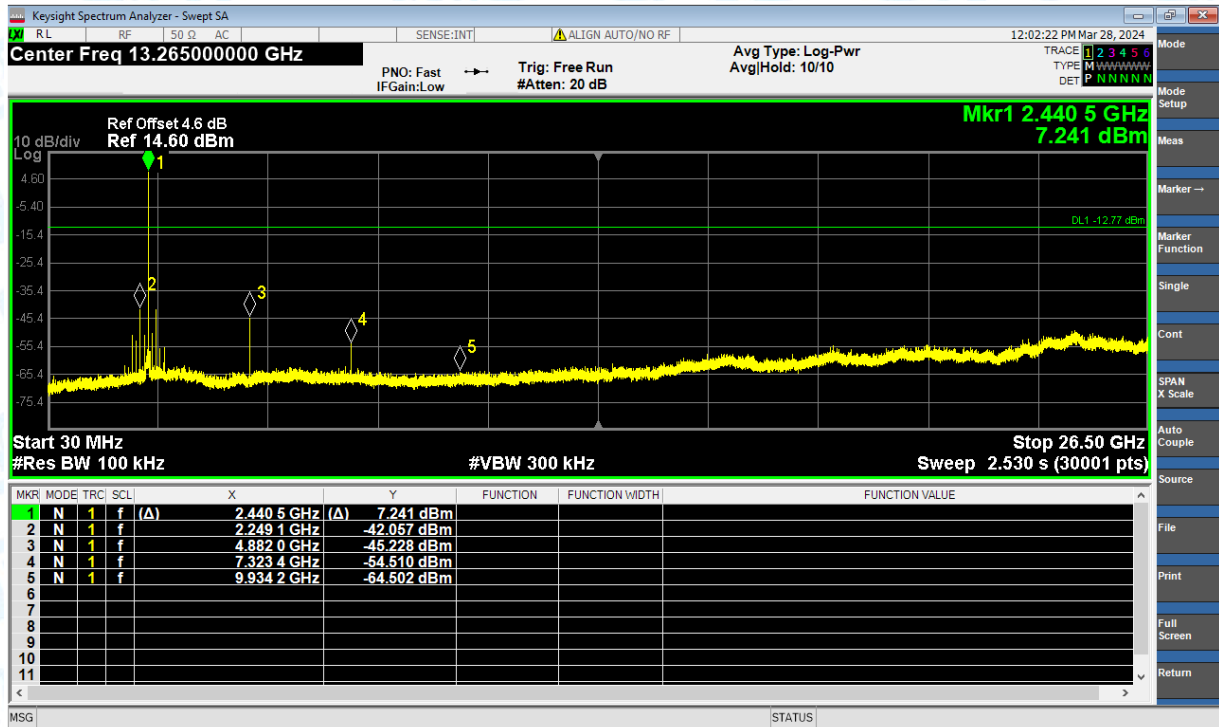
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



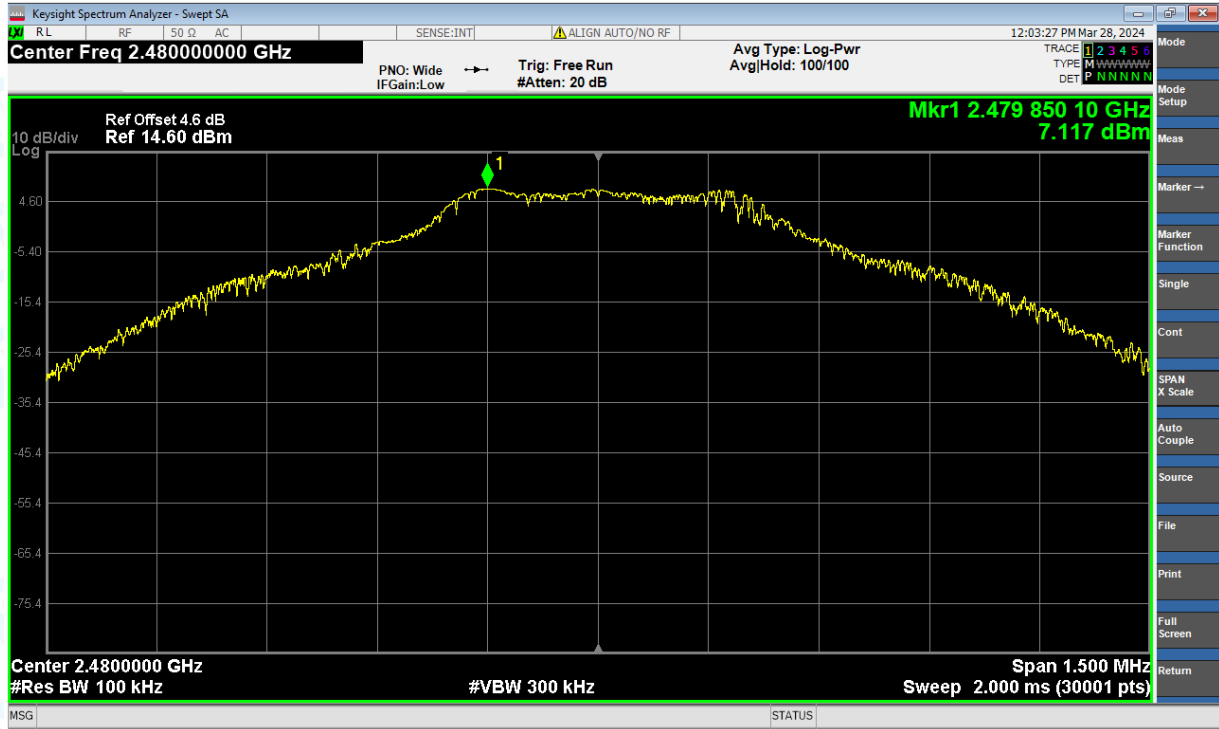
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



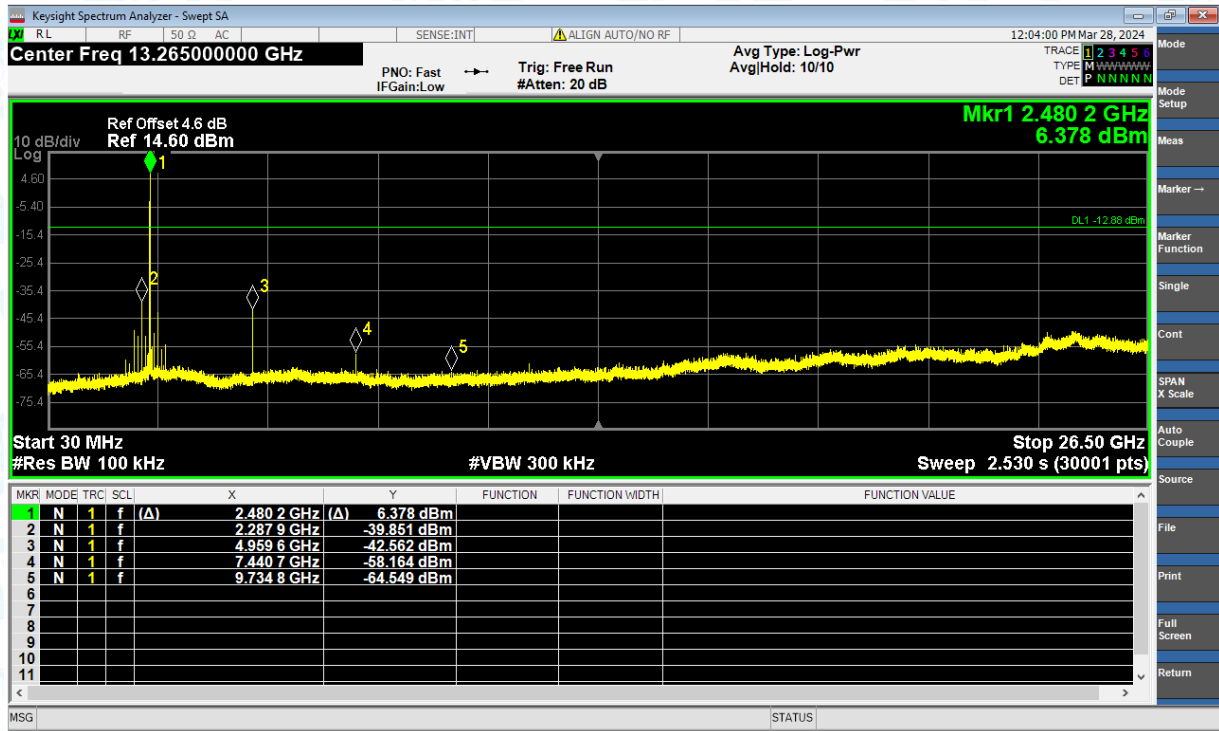
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



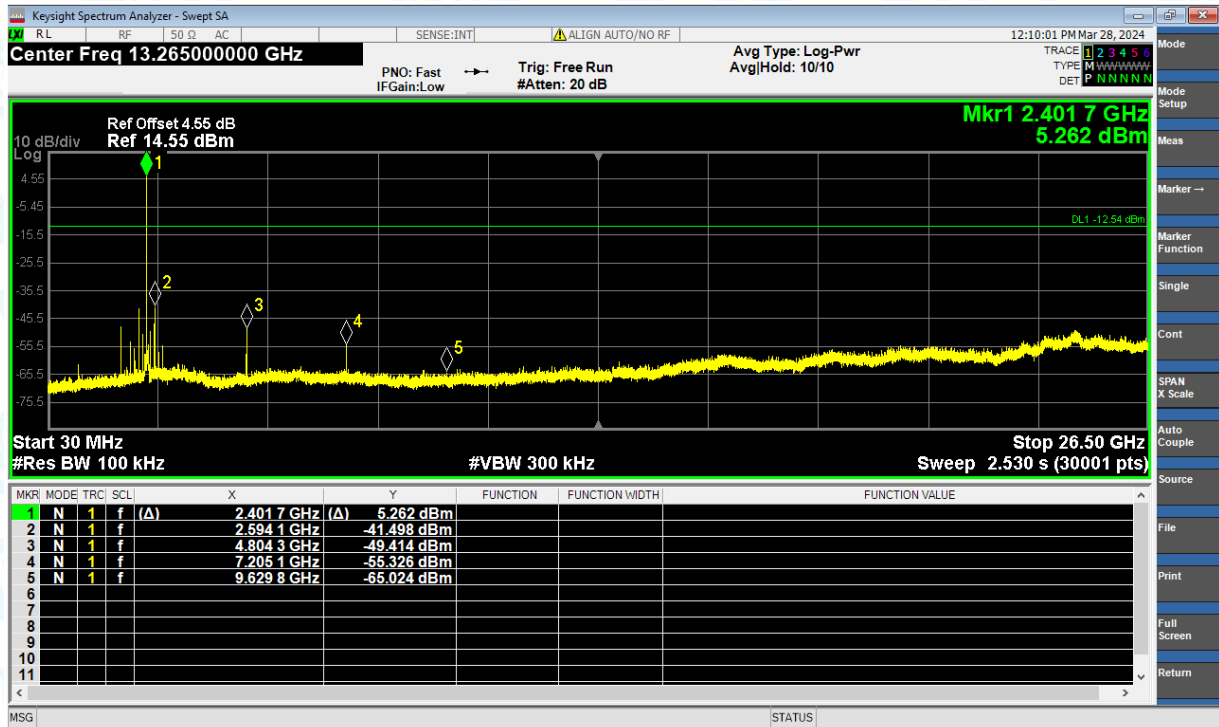
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



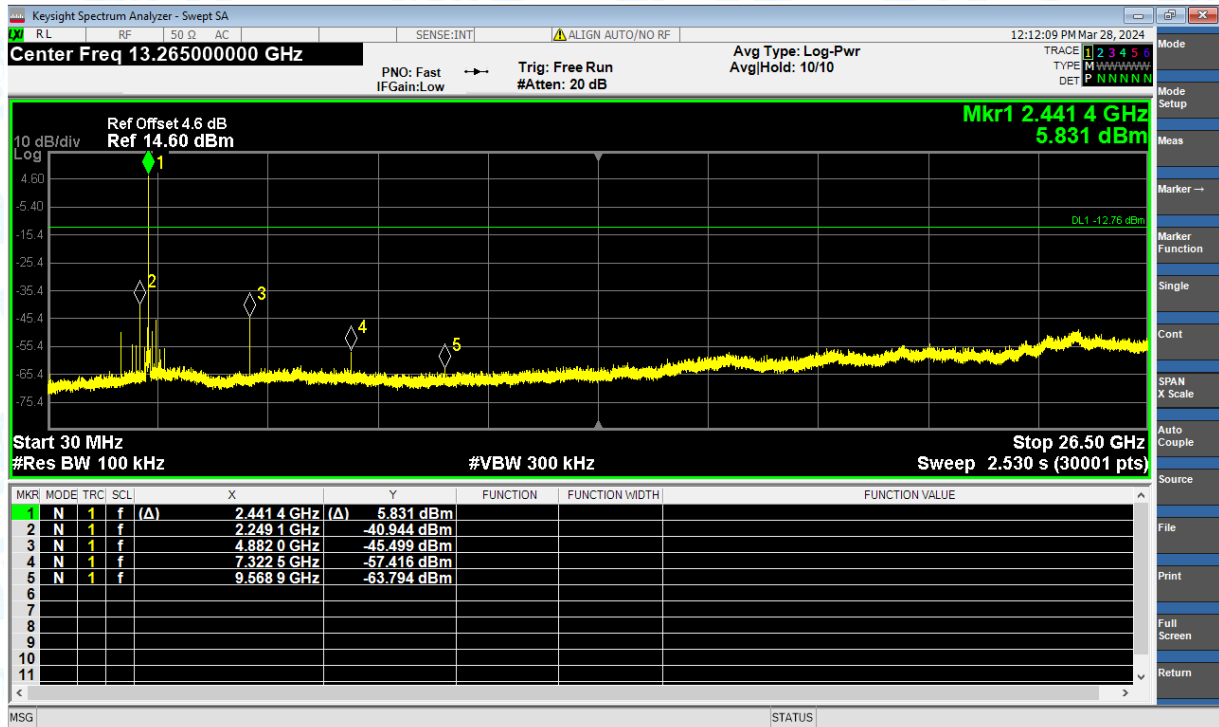
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



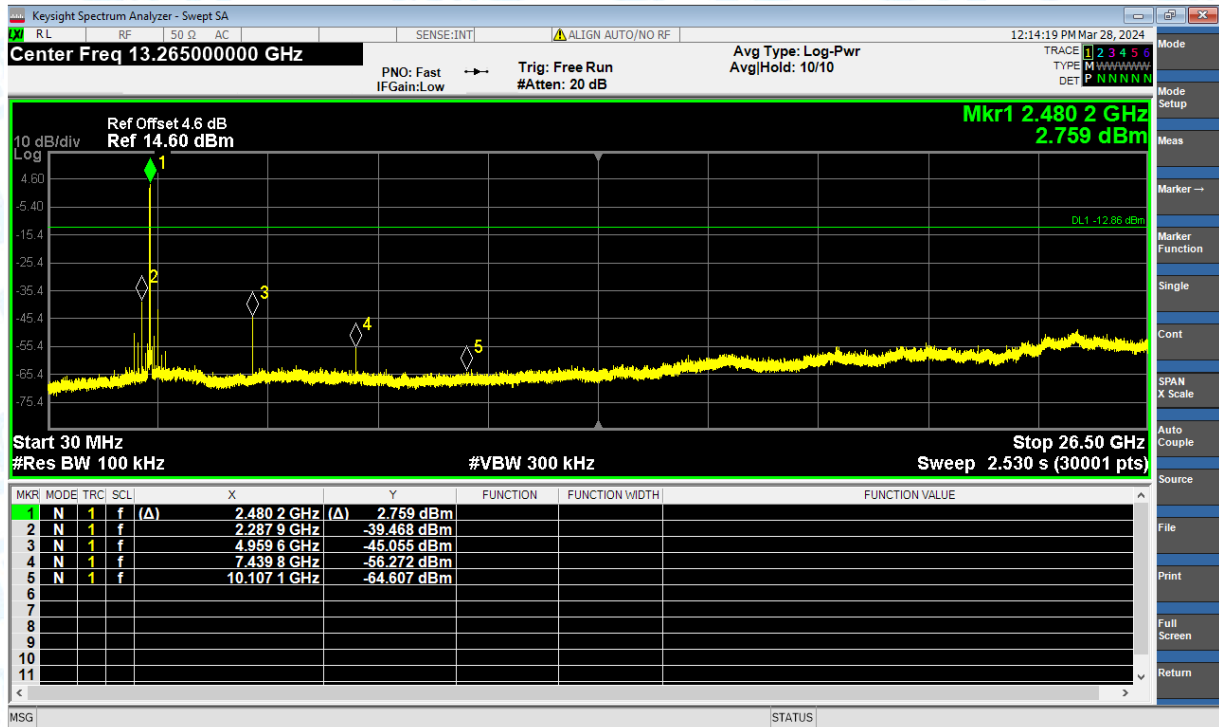
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



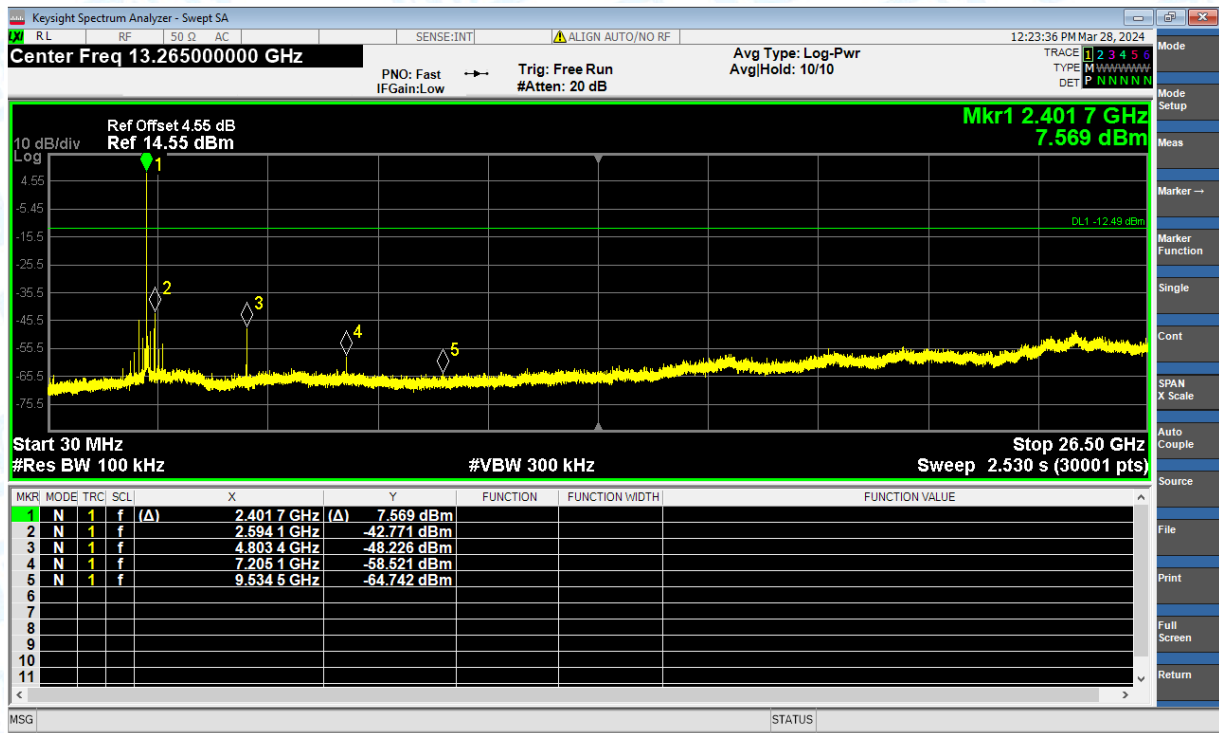
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



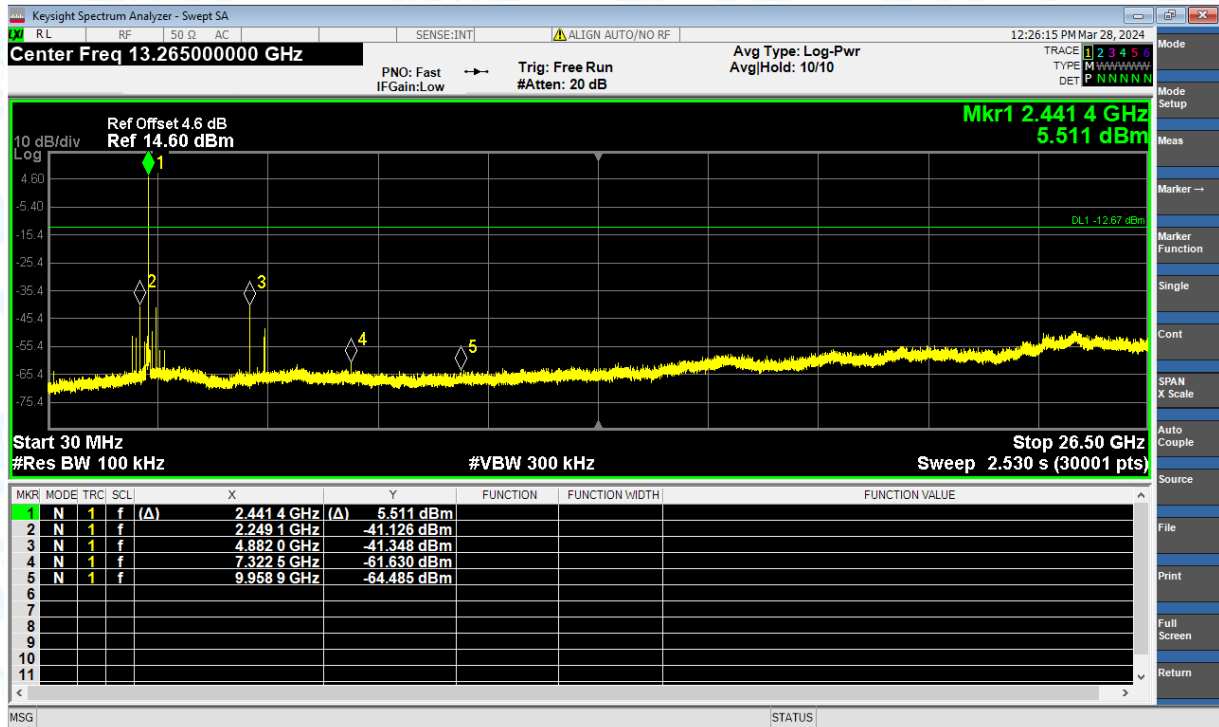
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



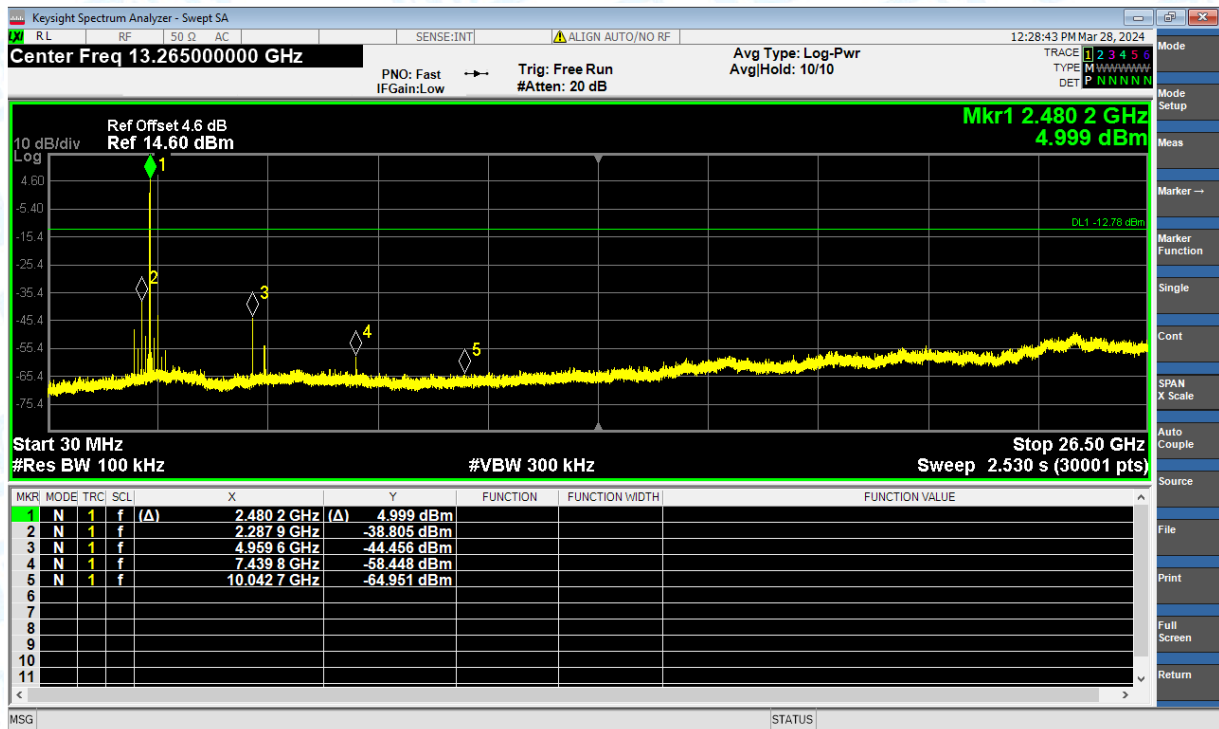
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

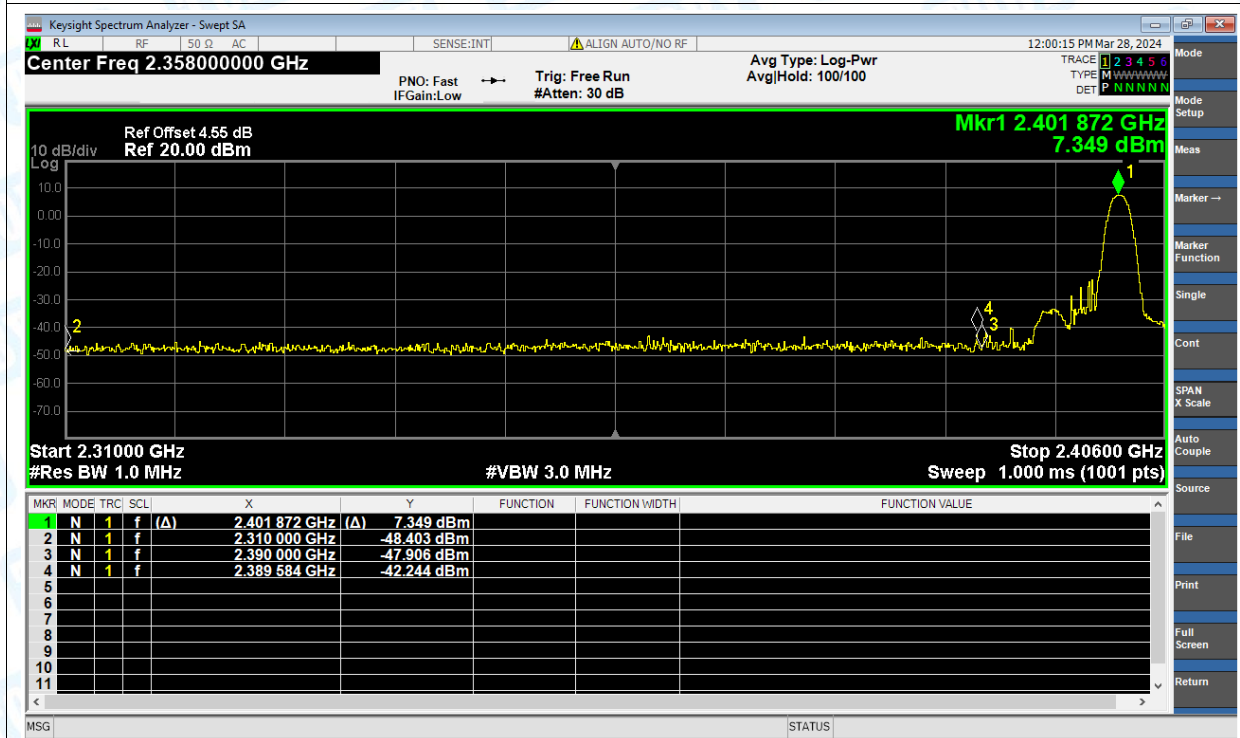


8. Restrict Band

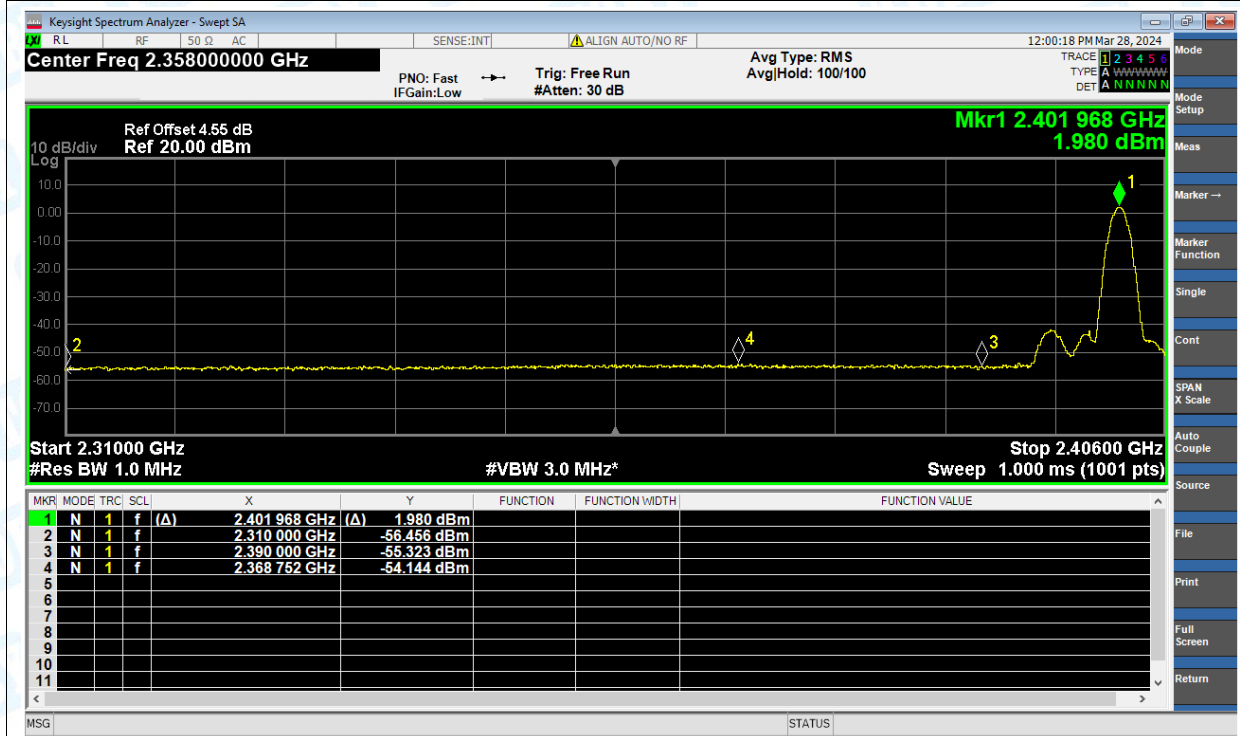
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-48.4	2	-	48.86	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.46	2	5.17	45.97	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.584	-42.24	2	-	55.02	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2368.752	-54.14	2	5.17	48.29	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-47.91	2	-	49.35	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.32	2	5.17	47.11	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-40.45	2	-	56.81	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-51.04	2	5.06	51.28	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2485.072	-37.65	2	-	59.61	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.56	-50.83	2	5.06	51.49	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.75	2	-	50.51	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.61	2	5.06	47.71	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.53	2	-	49.73	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.08	2	4.95	47.13	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2385.552	-43.26	2	-	54	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2354.832	-54.01	2	4.95	48.2	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.94	2	-	49.32	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-54.85	2	4.95	47.36	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-39.7	2	-	57.56	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-49.77	2	5.06	52.55	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.24	-36.53	2	-	60.73	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.536	-49.15	2	5.06	53.17	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-45.52	2	-	51.74	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.9	2	5.06	47.42	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-45.55	2	-	51.71	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.55	2	5.06	46.77	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2366.544	-42.4	2	-	54.86	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2354.448	-54.23	2	5.06	48.09	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.27	2	-	50.99	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-55.74	2	5.06	46.58	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-41.6	2	-	55.66	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-49.99	2	5.06	52.33	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.8	-37	2	-	60.26	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.656	-49.91	2	5.06	52.41	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.59	2	-	50.67	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-54.46	2	5.06	47.86	Average	54	Pass

Test Graphs

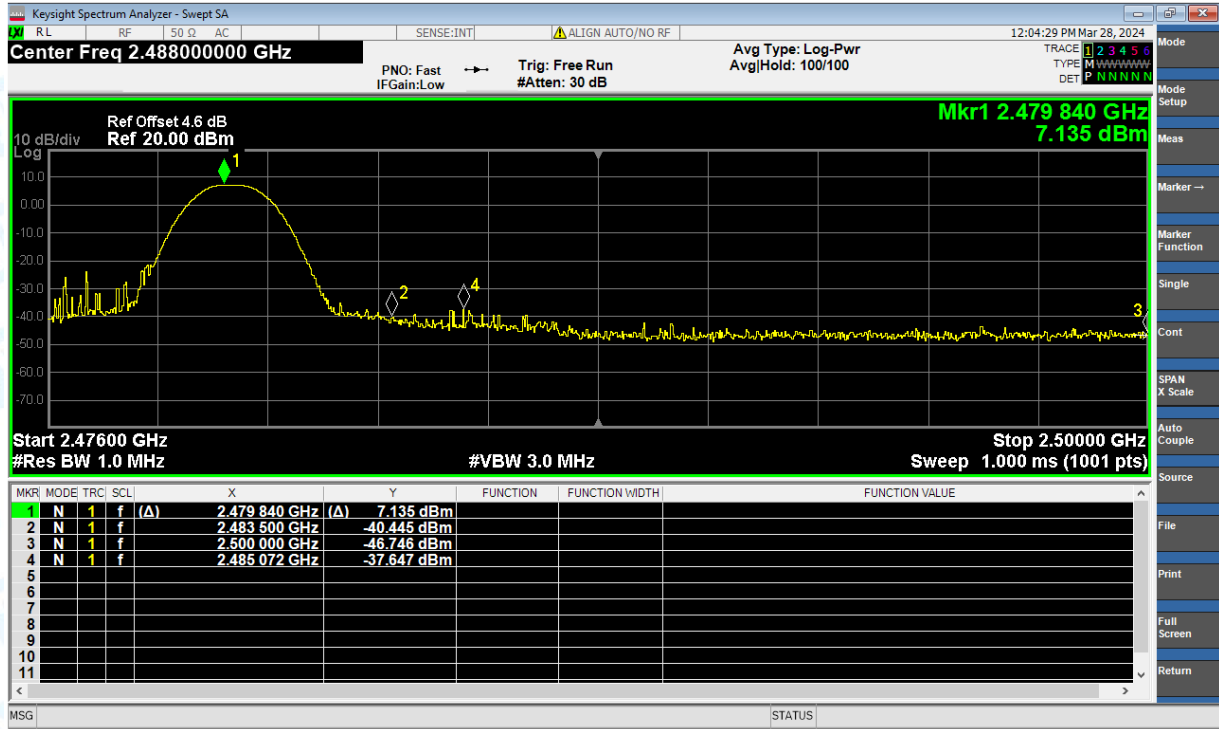
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



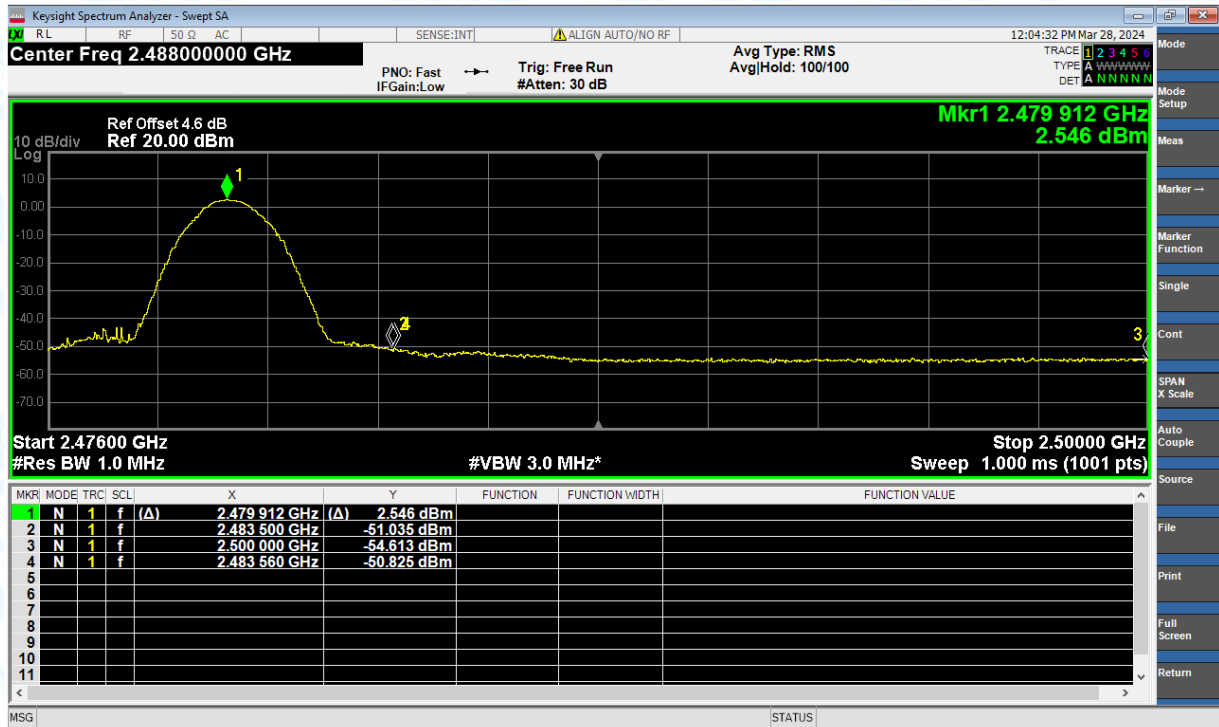
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



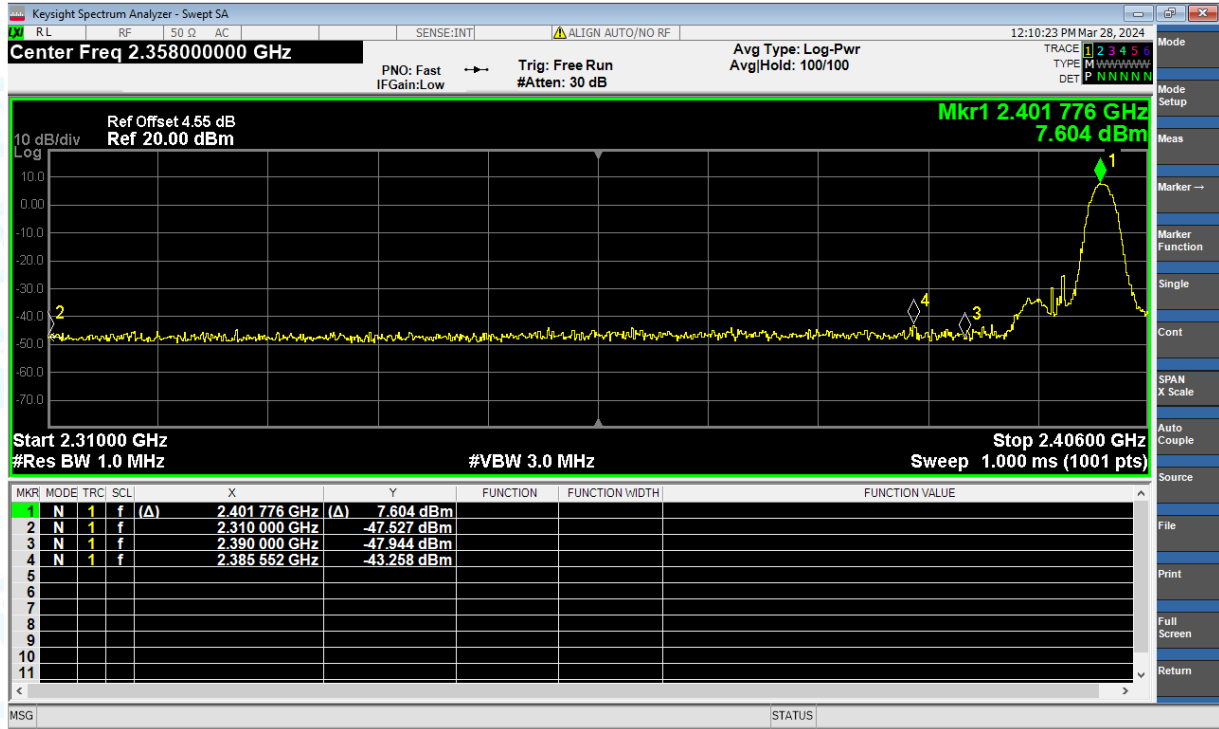
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



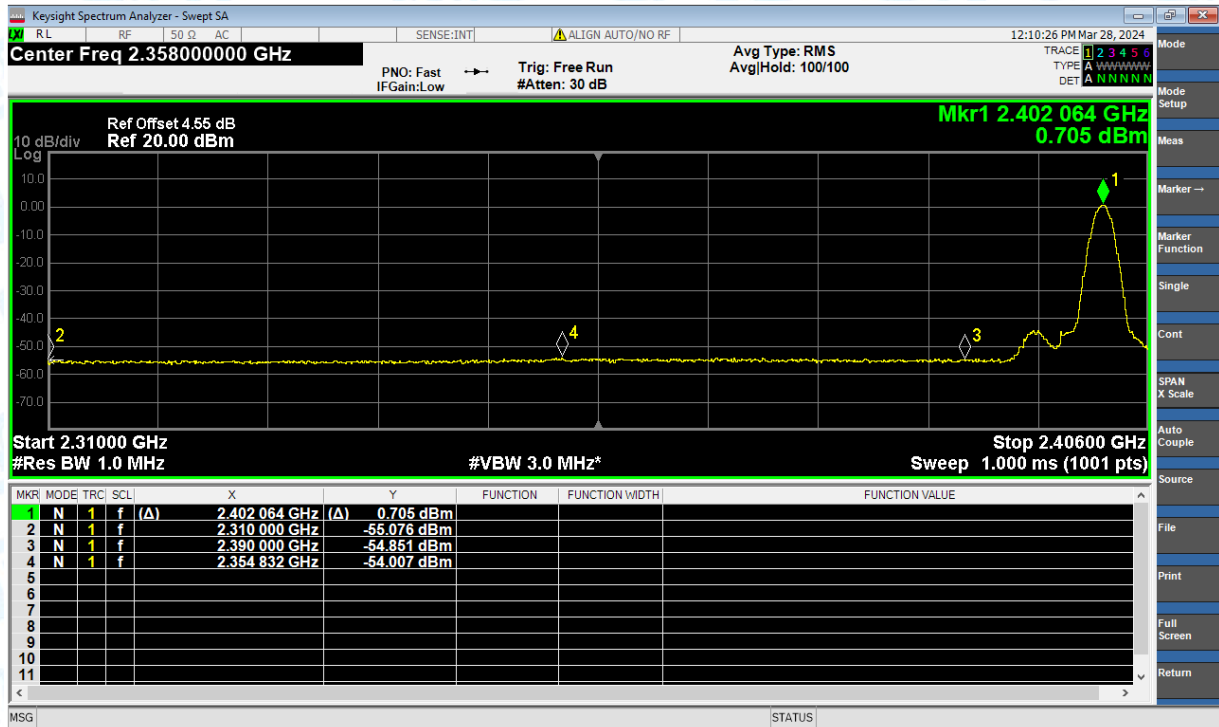
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



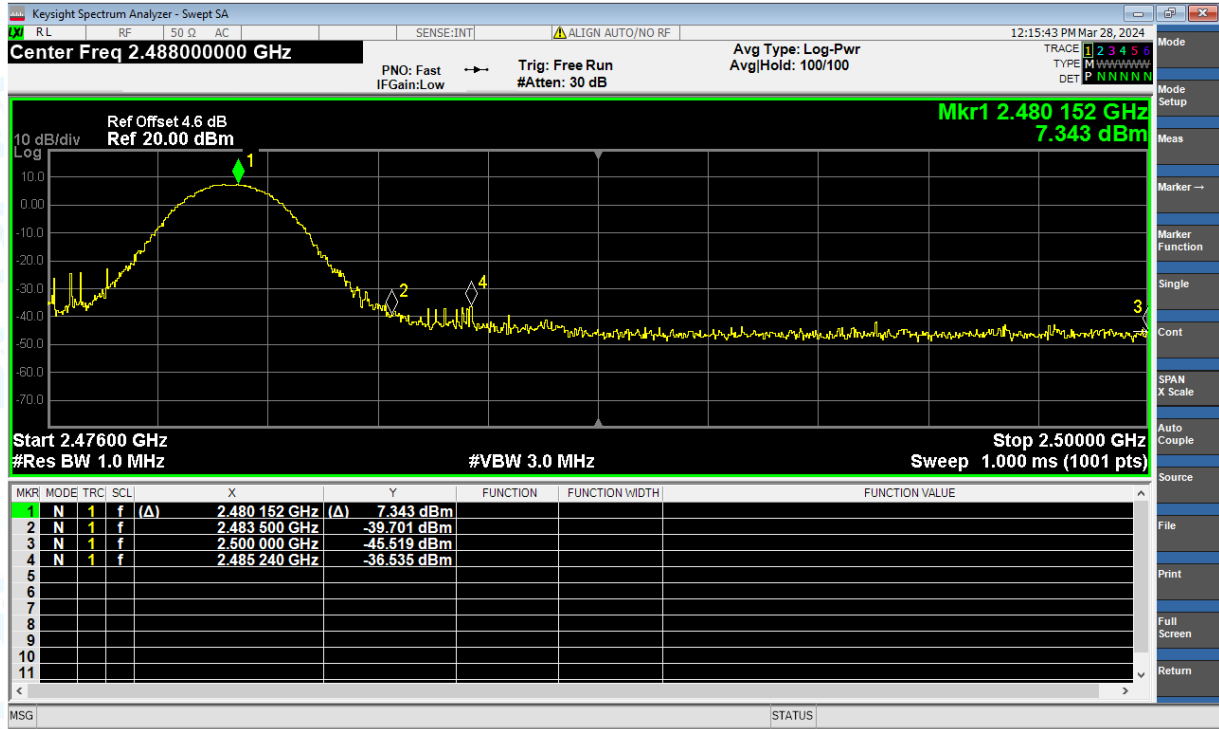
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



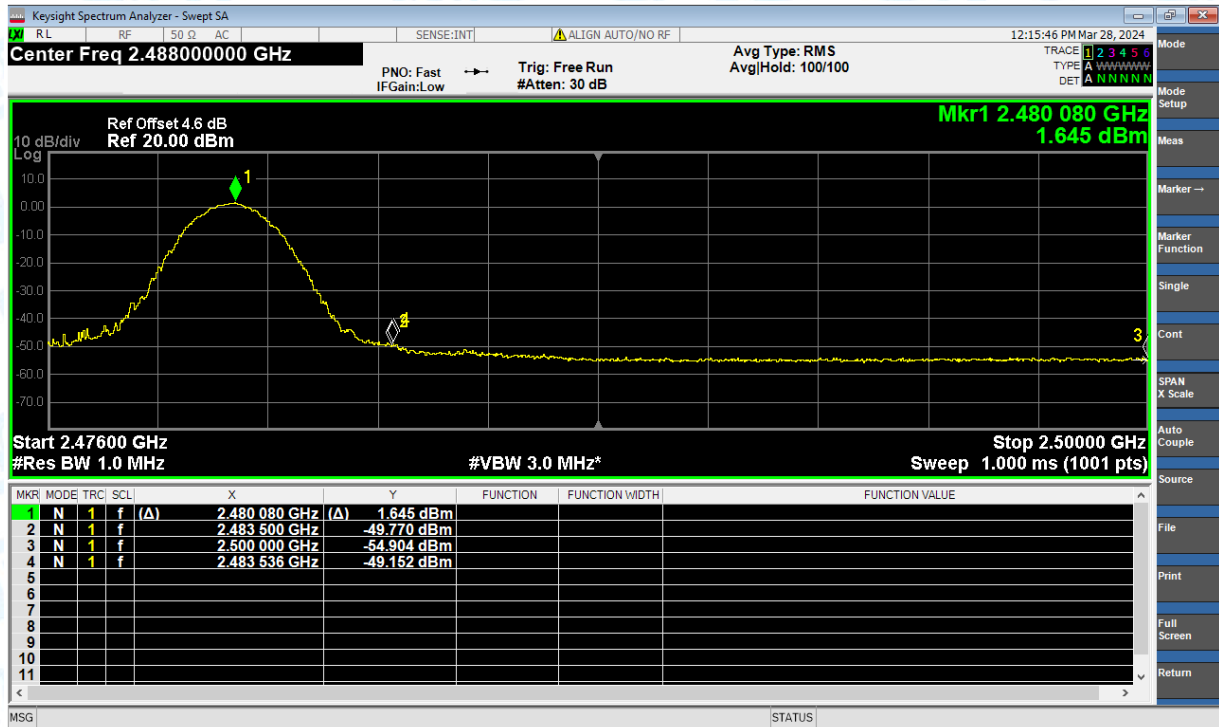
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



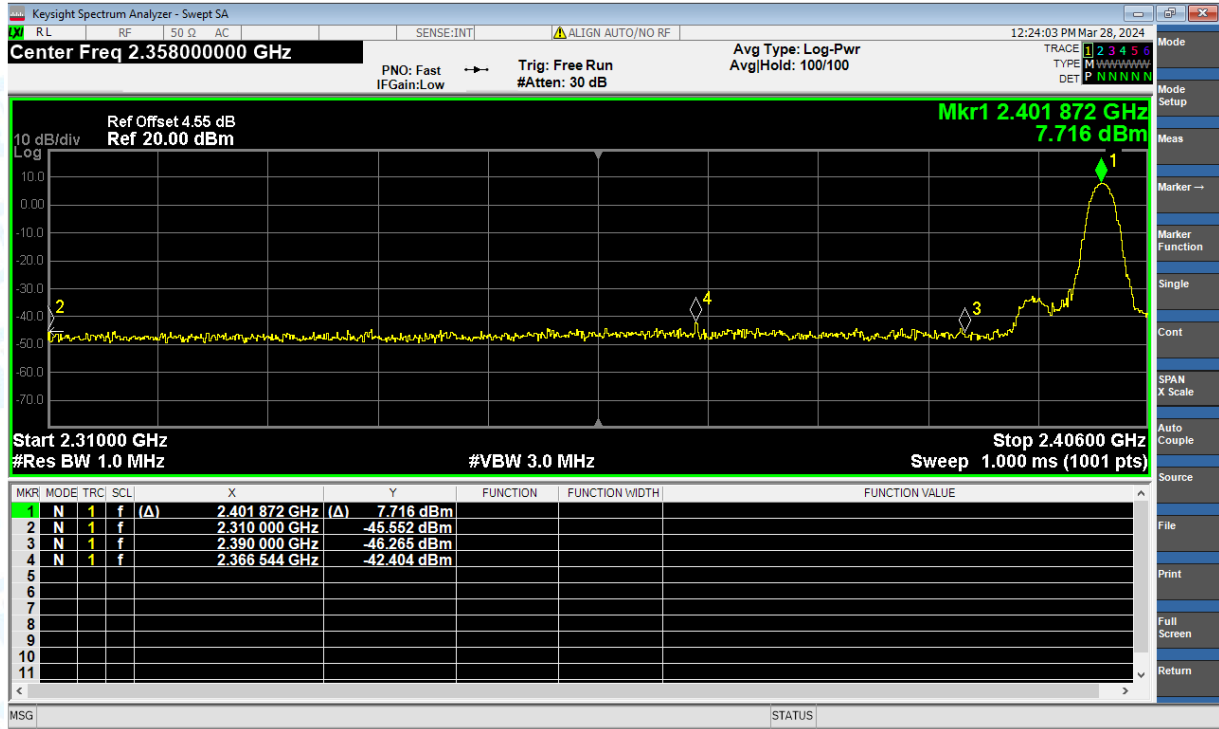
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



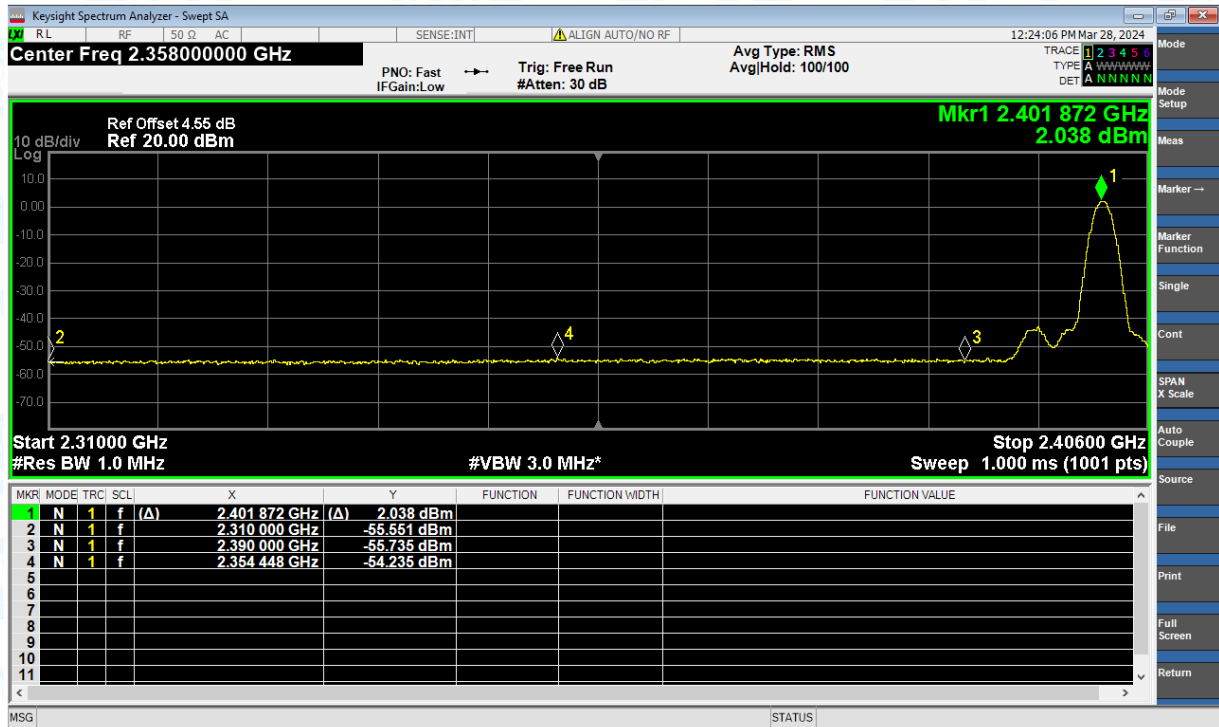
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



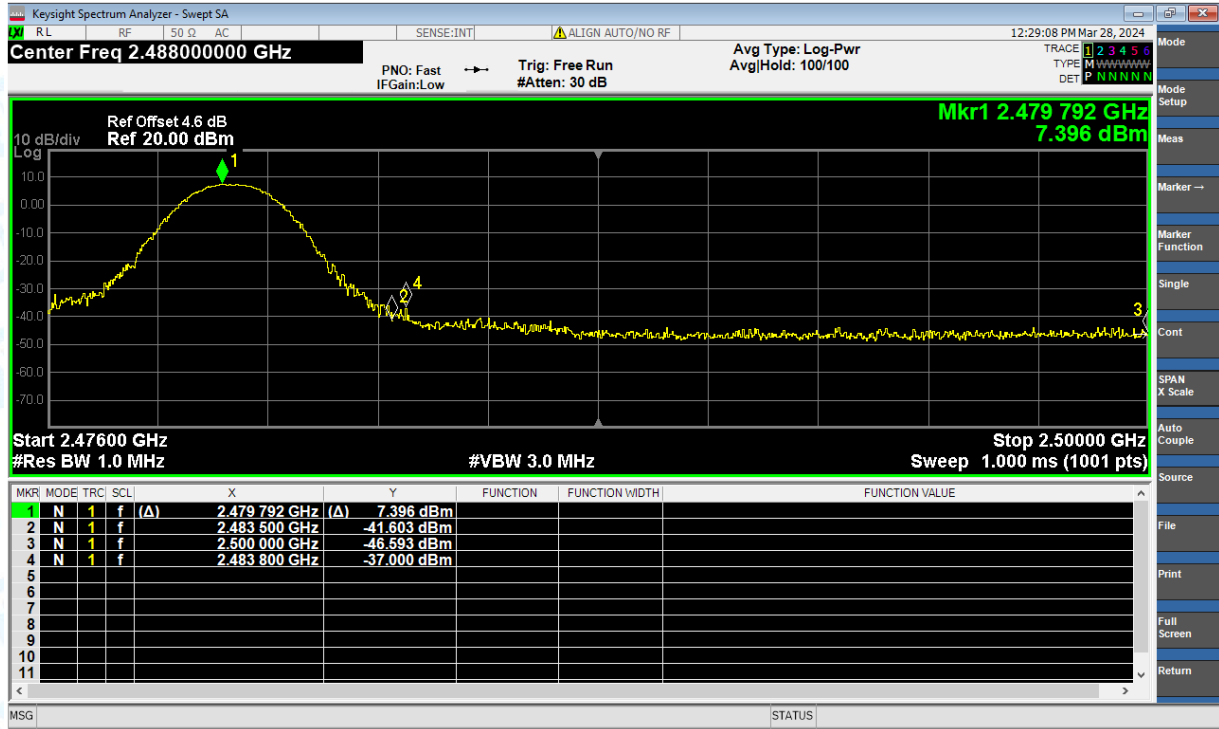
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



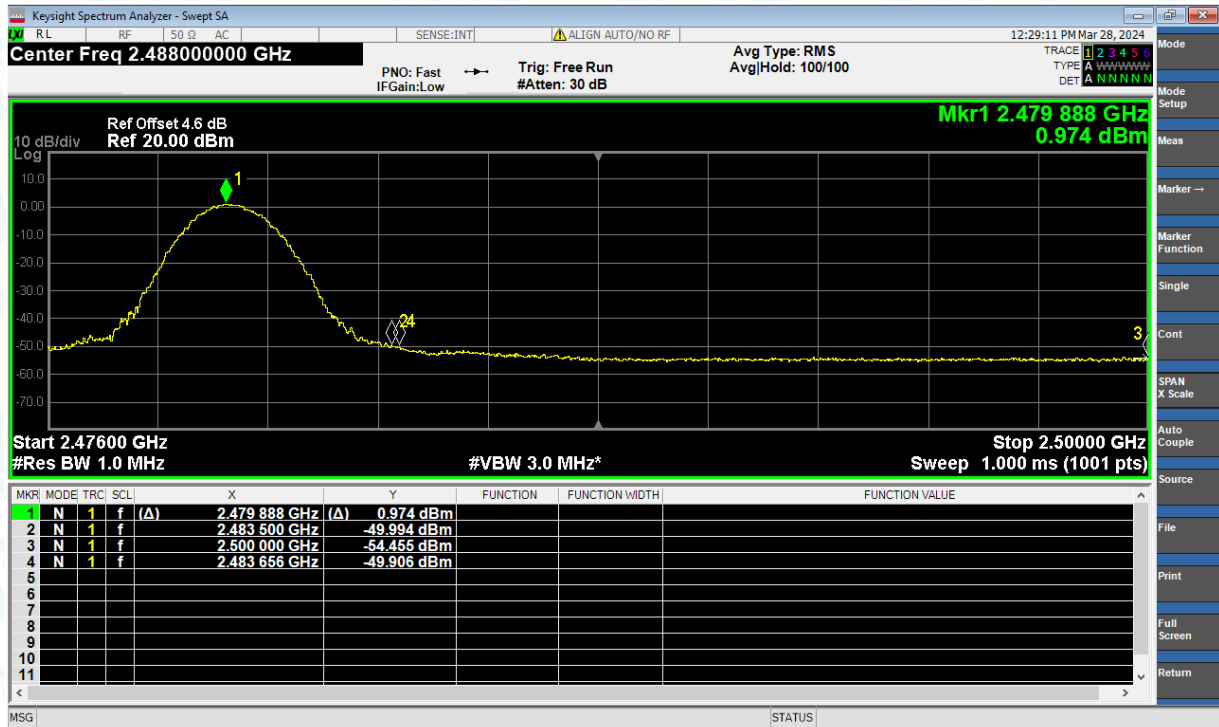
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

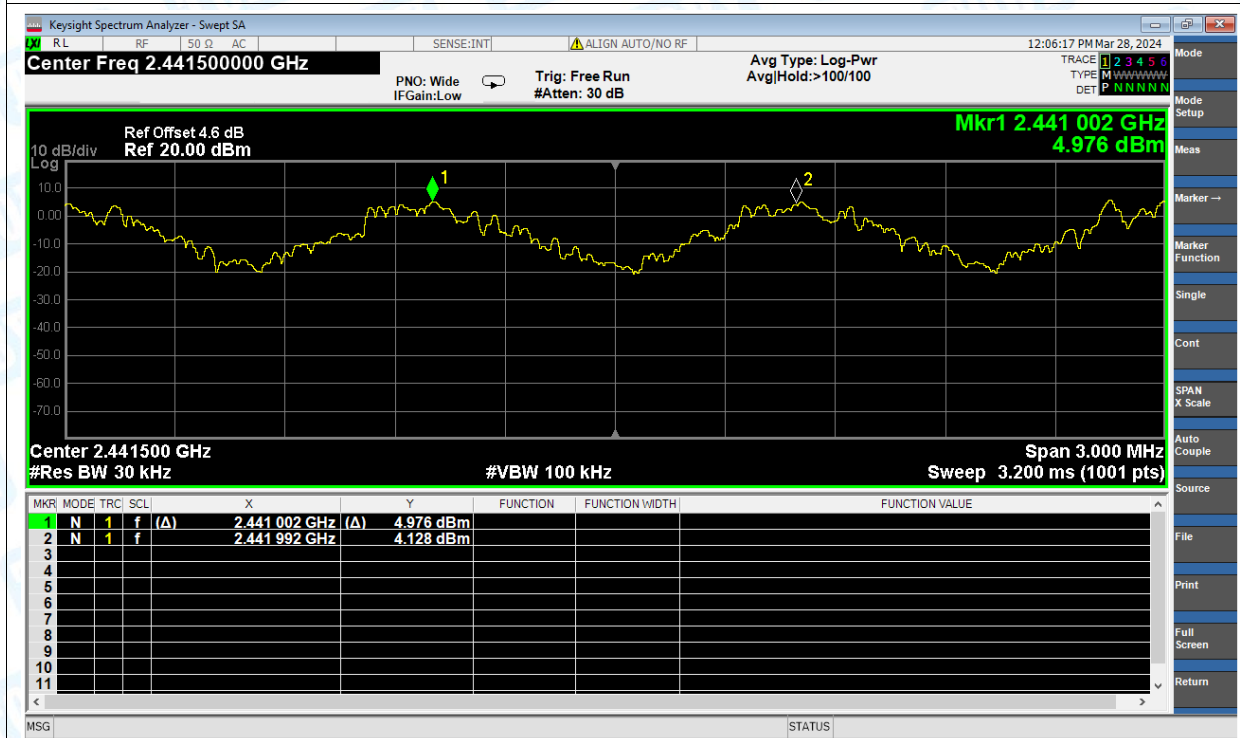


9. Carrier Frequencies Separation

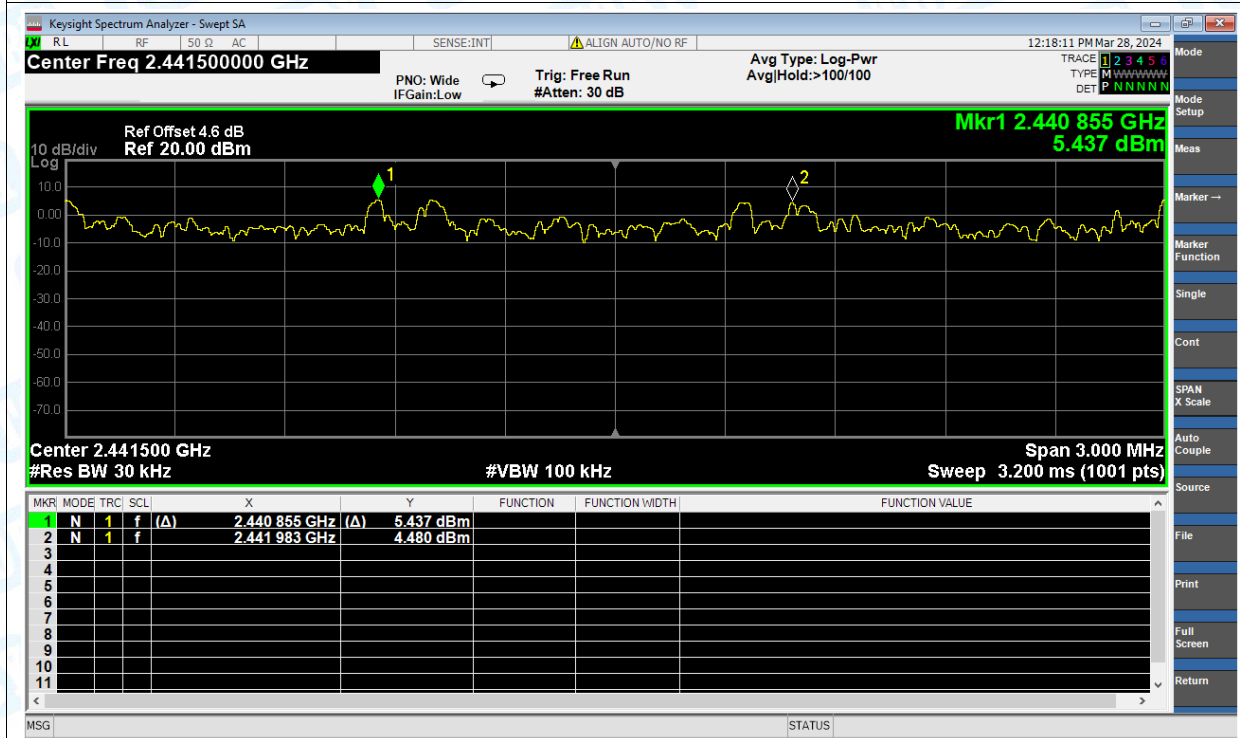
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.002	2441.992	0.99	0.580	Pass
NVNT	2-DH1	Ant1	2440.855	2441.983	1.128	0.853	Pass
NVNT	3-DH1	Ant1	2440.987	2441.992	1.005	0.827	Pass

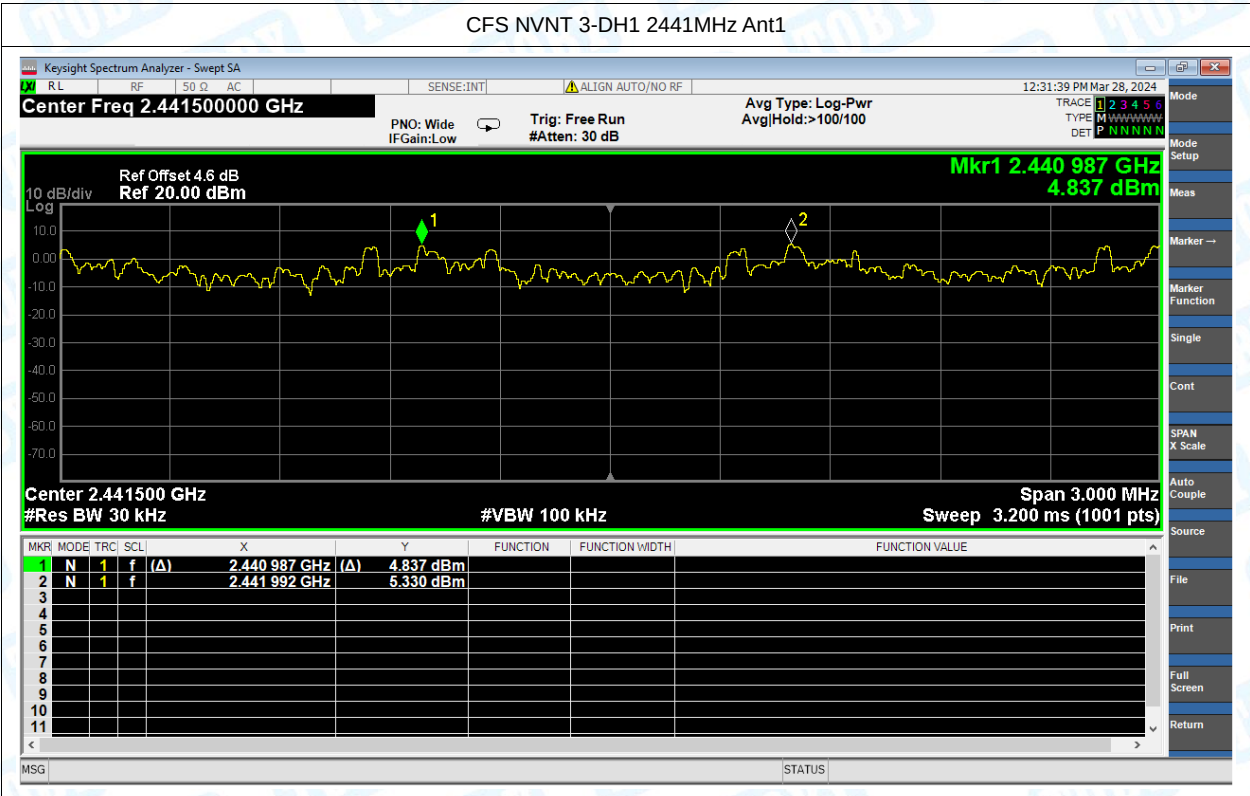
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



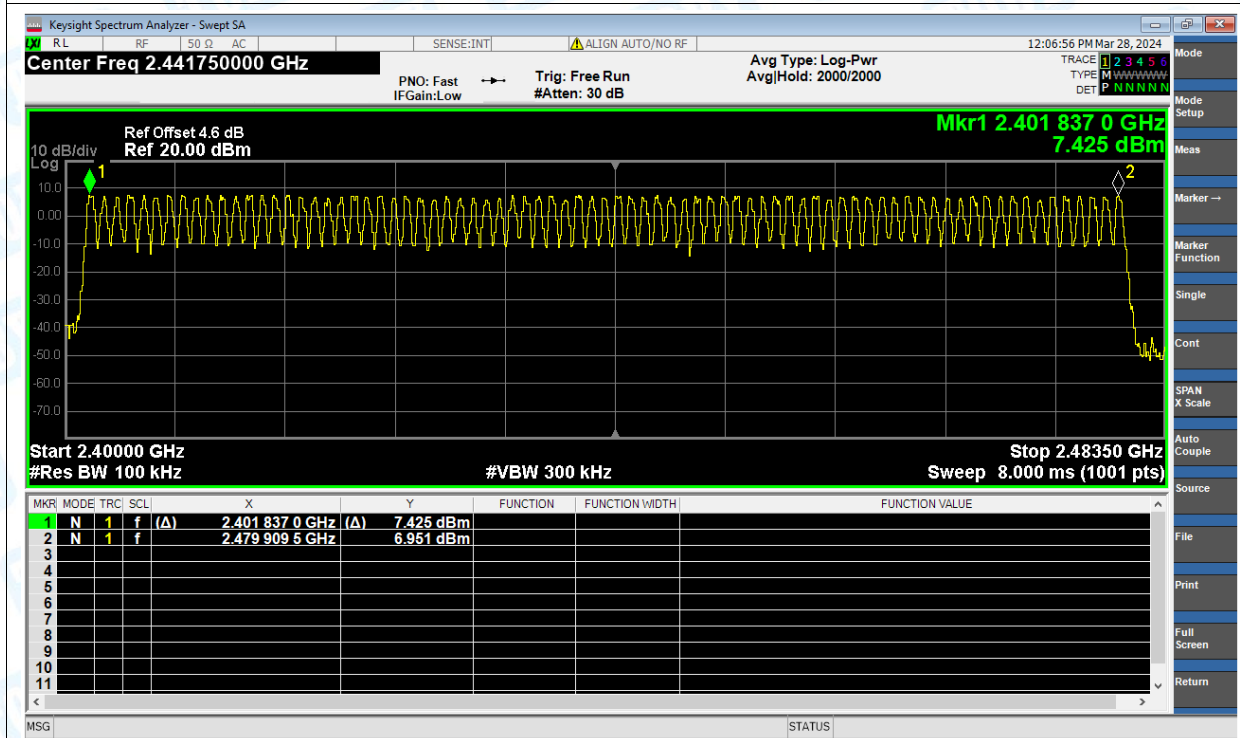


10. Number of Hopping Channel

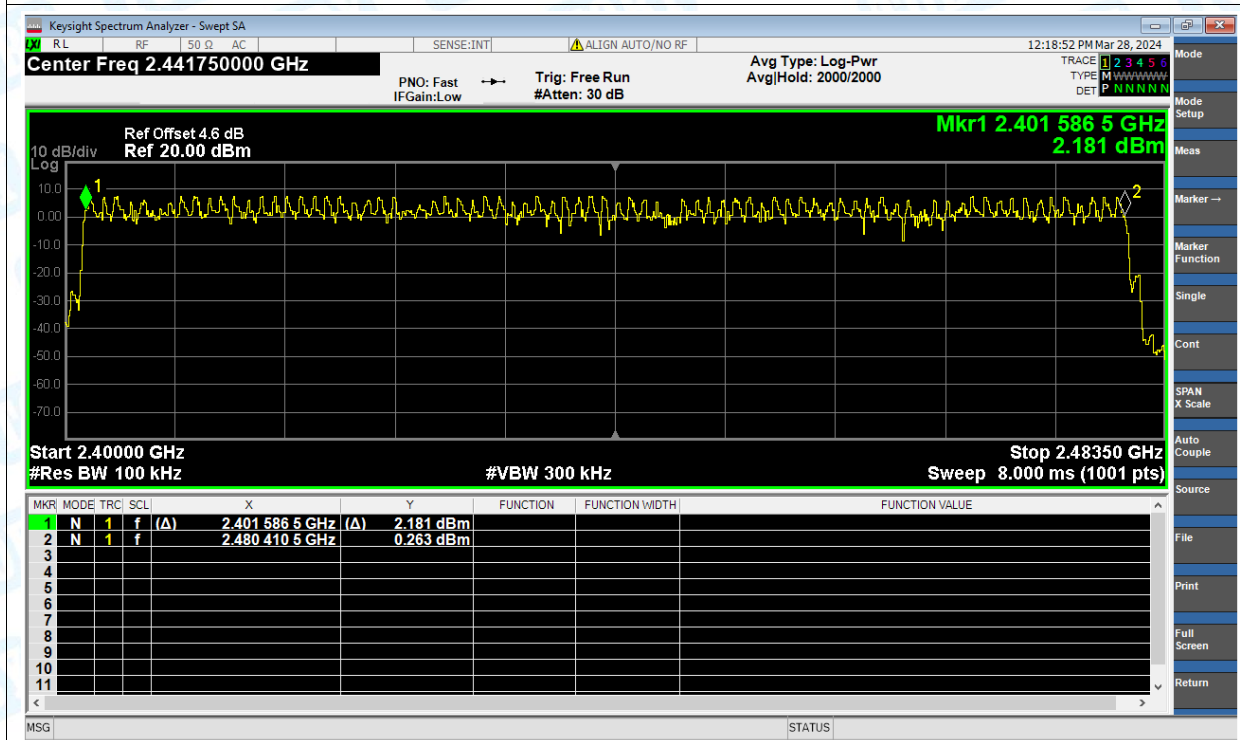
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

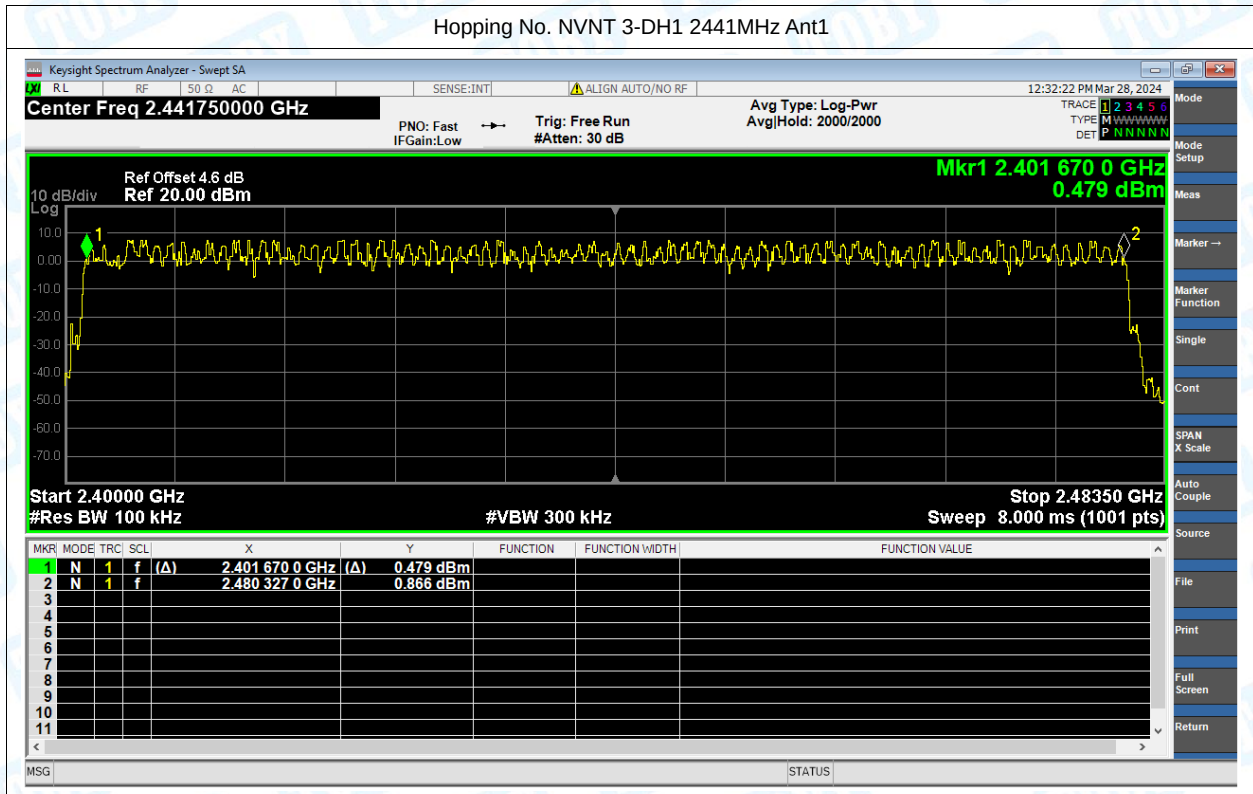
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



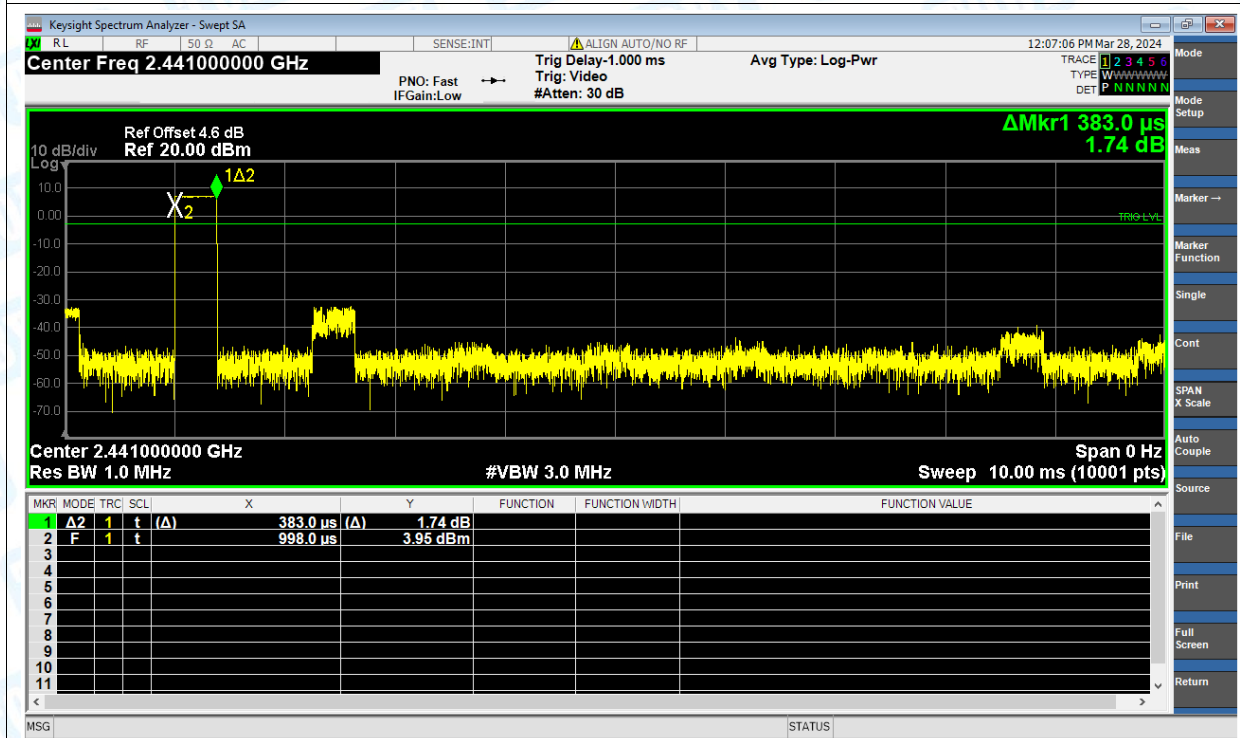


11. Dwell Time

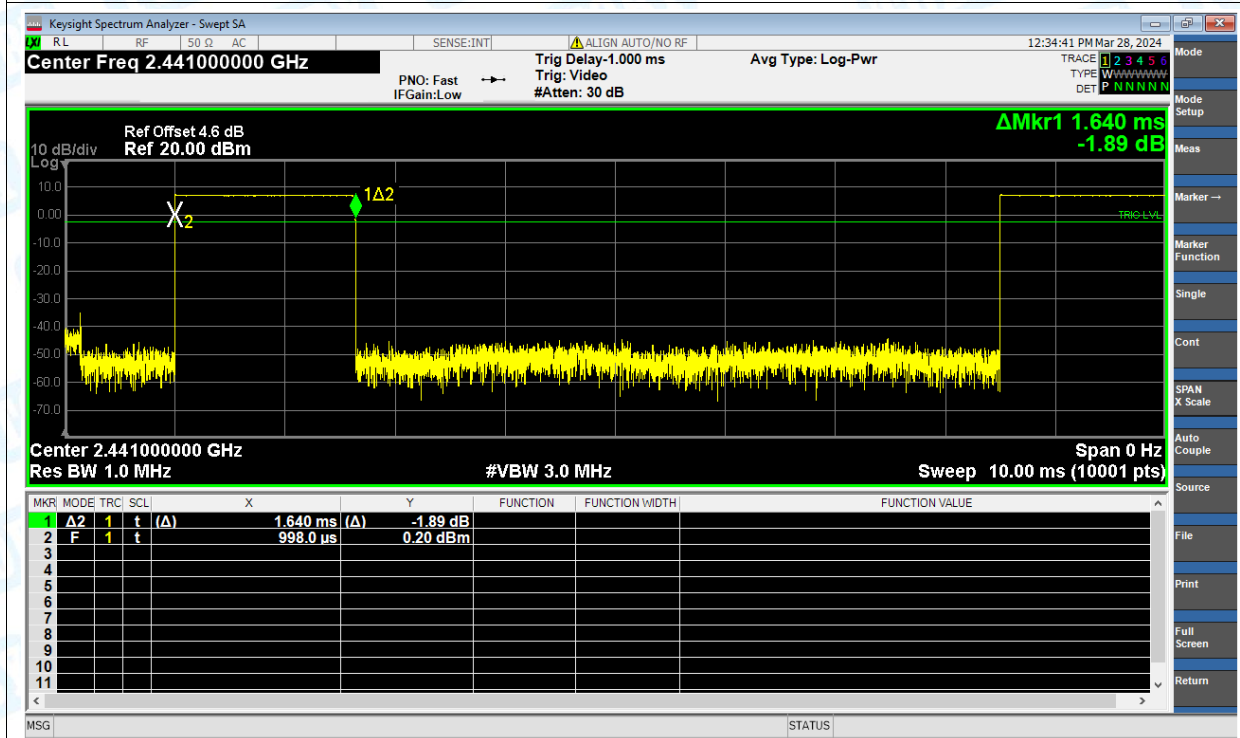
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.64	262.4	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	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	2.895	308.8	31600	400	Pass

Test Graphs

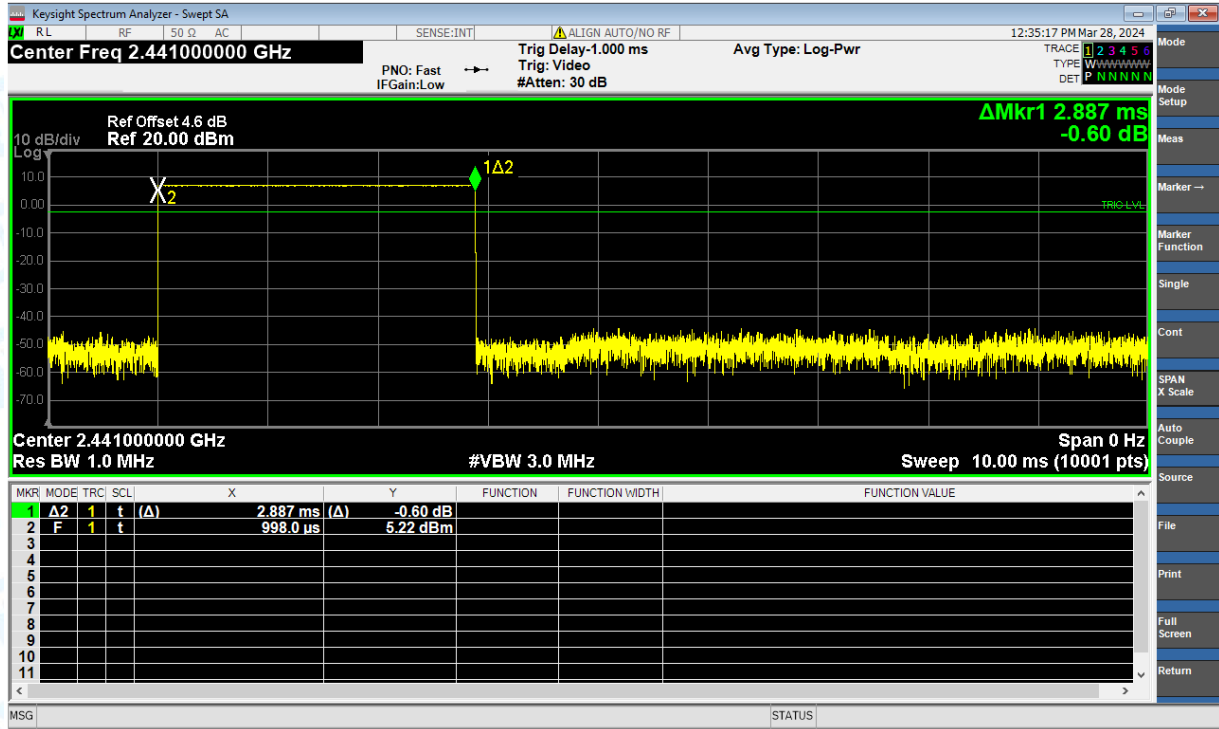
Dwell NVNT 1-DH1 2441MHz Ant1



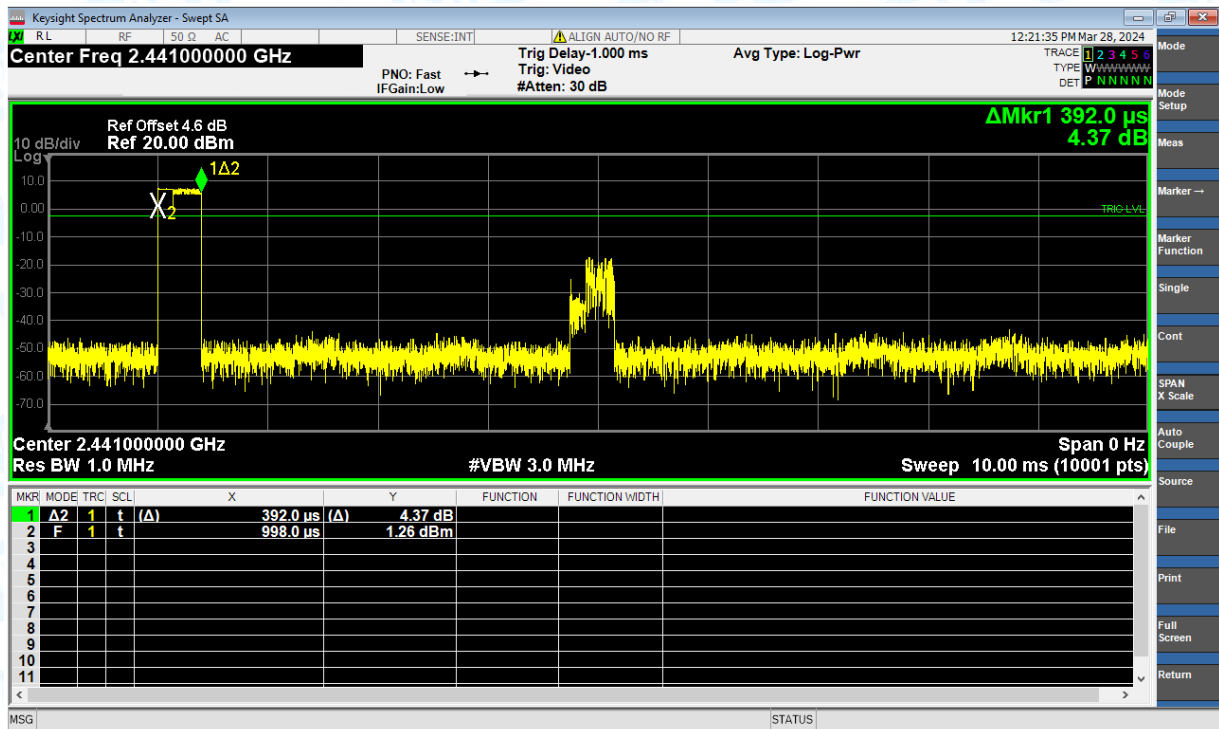
Dwell NVNT 1-DH3 2441MHz Ant1



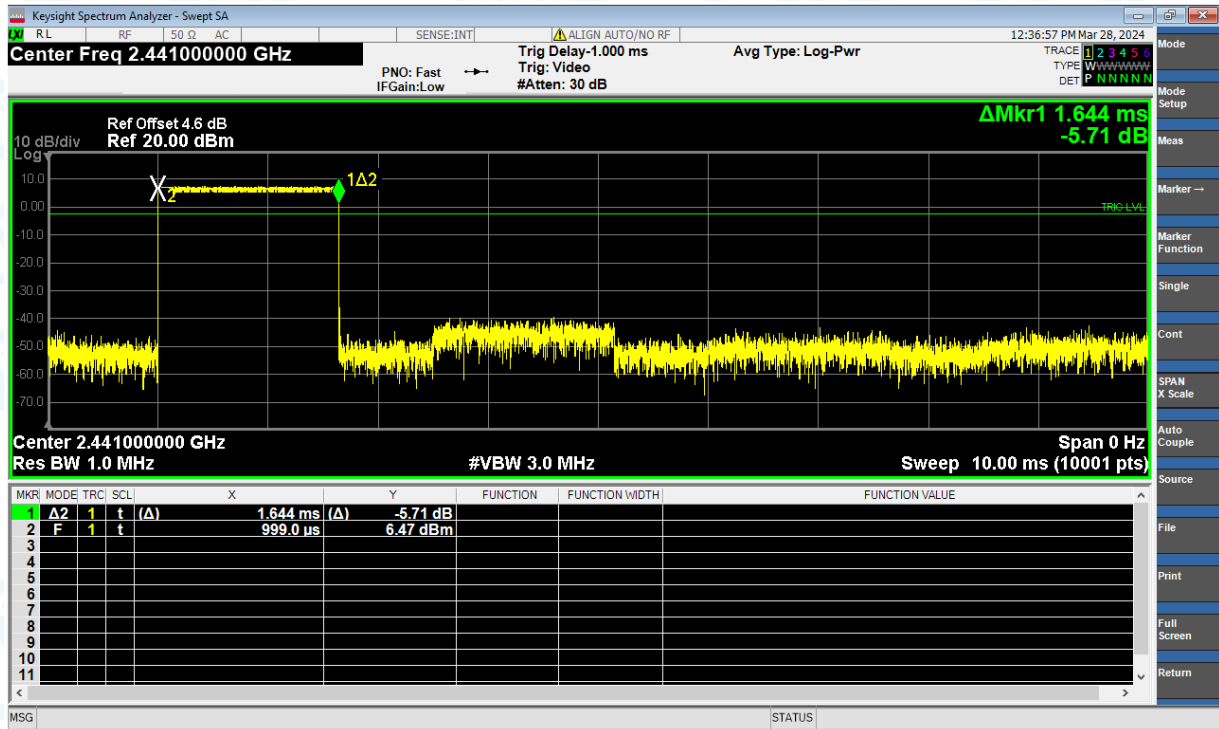
Dwell NVNT 1-DH5 2441MHz Ant1



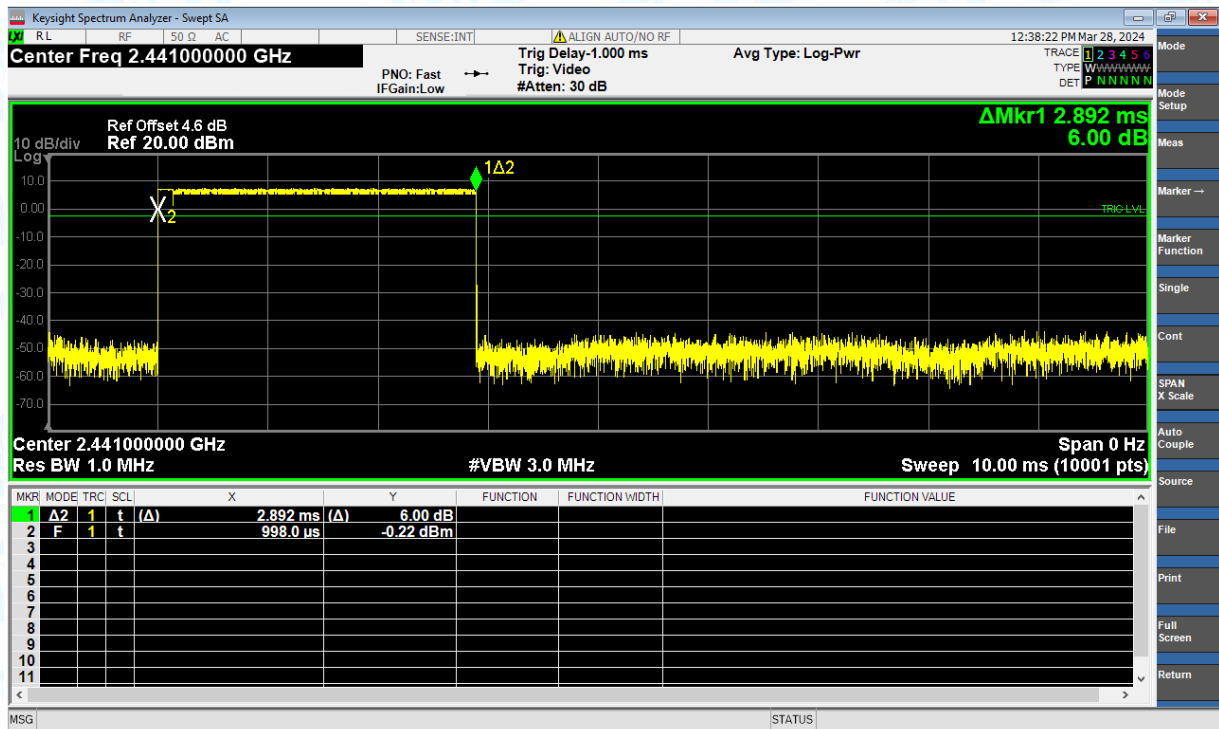
Dwell NVNT 2-DH1 2441MHz Ant1



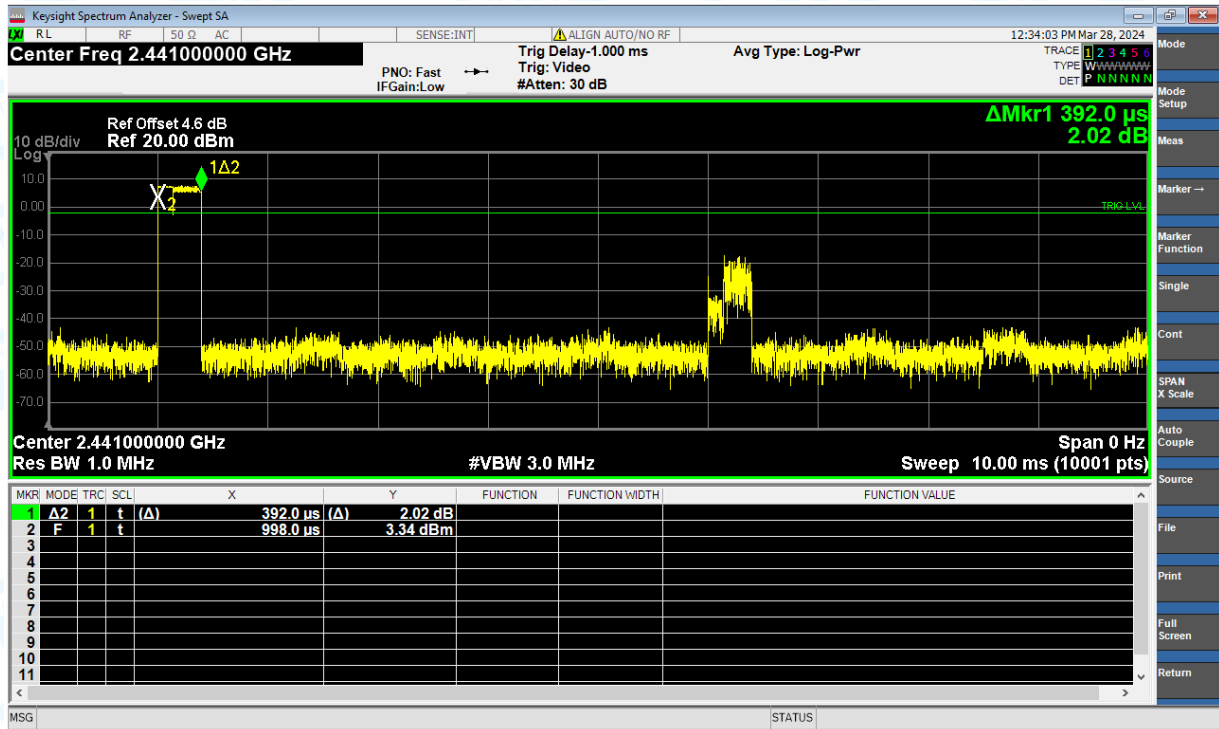
Dwell NVNT 2-DH3 2441MHz Ant1



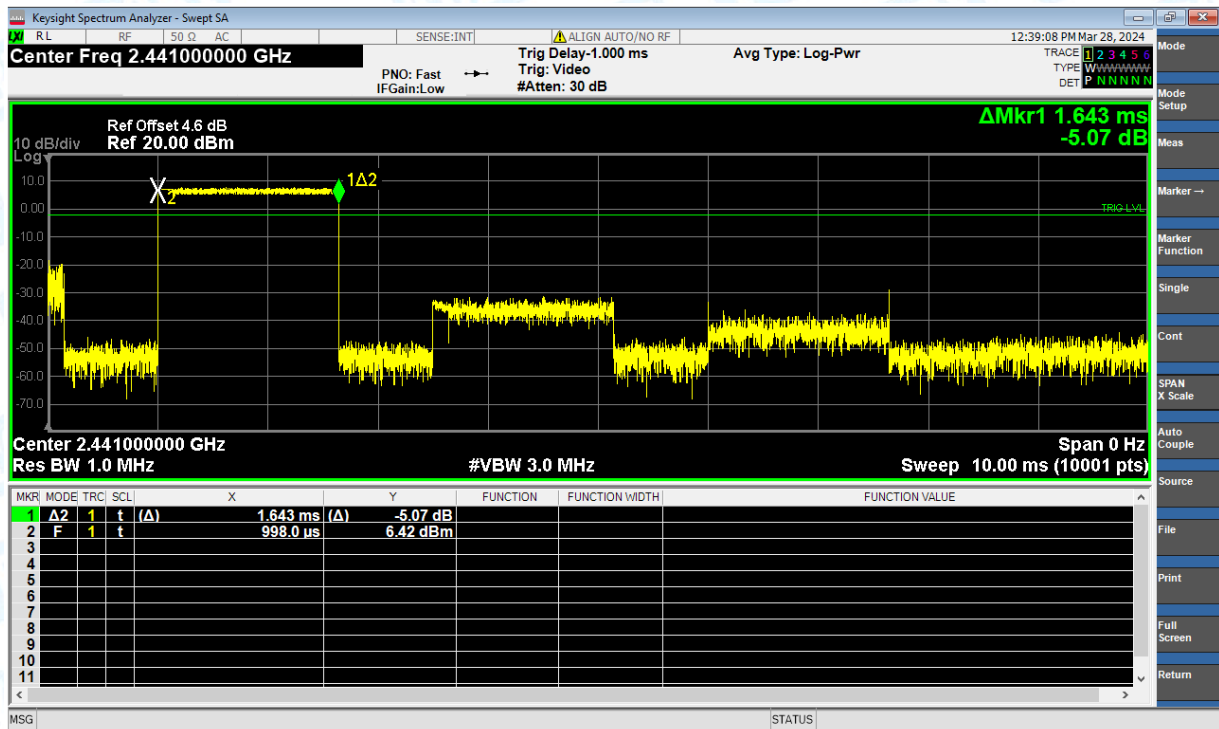
Dwell NVNT 2-DH5 2441MHz Ant1

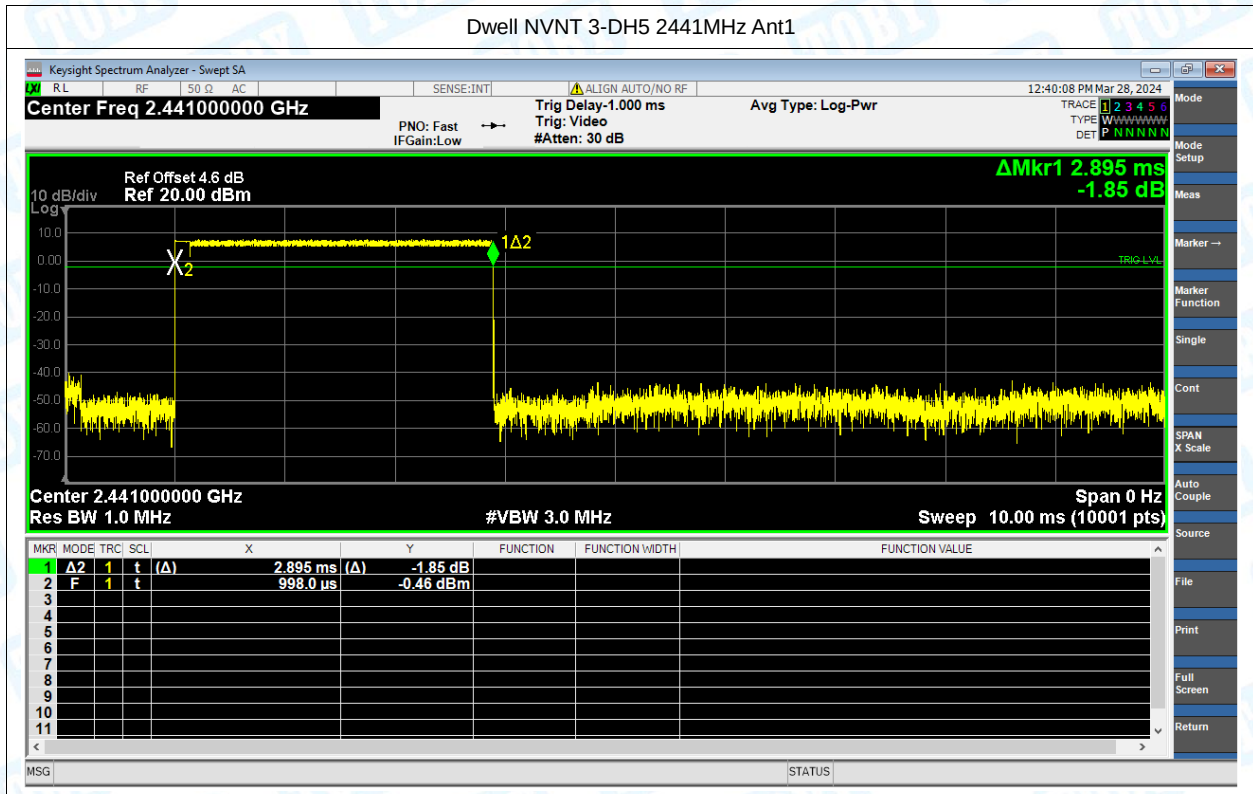


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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