

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

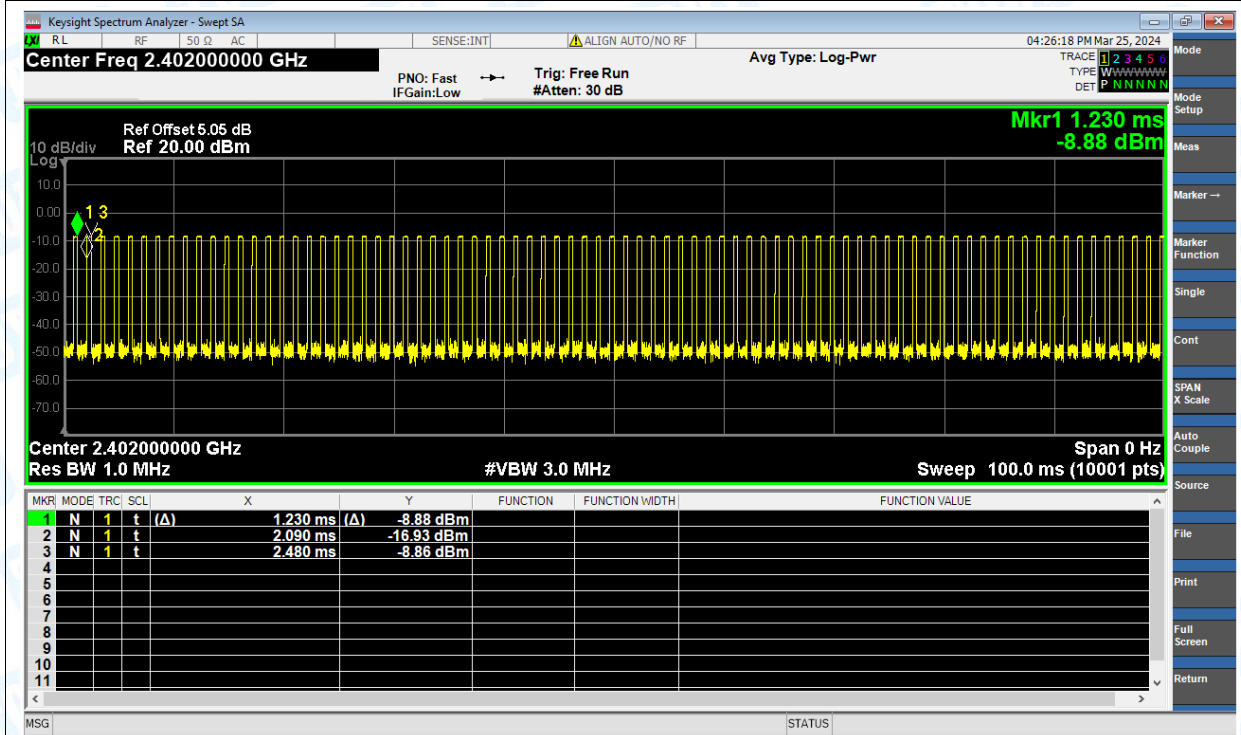
General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	picun H1
Sample ID:	RW-C-202403-0006-9-2#
Environmental Conditions	
Temperature:	23.8°C
Relative Humidity:	48%
Test Voltage:	DC 3.7V
Test Engineer:	ZKN ZHOU
Note: For a more detailed features description, please refer to the report TBR-C-202403-0006-14 The report only show the worst case data.	

1. Duty Cycle

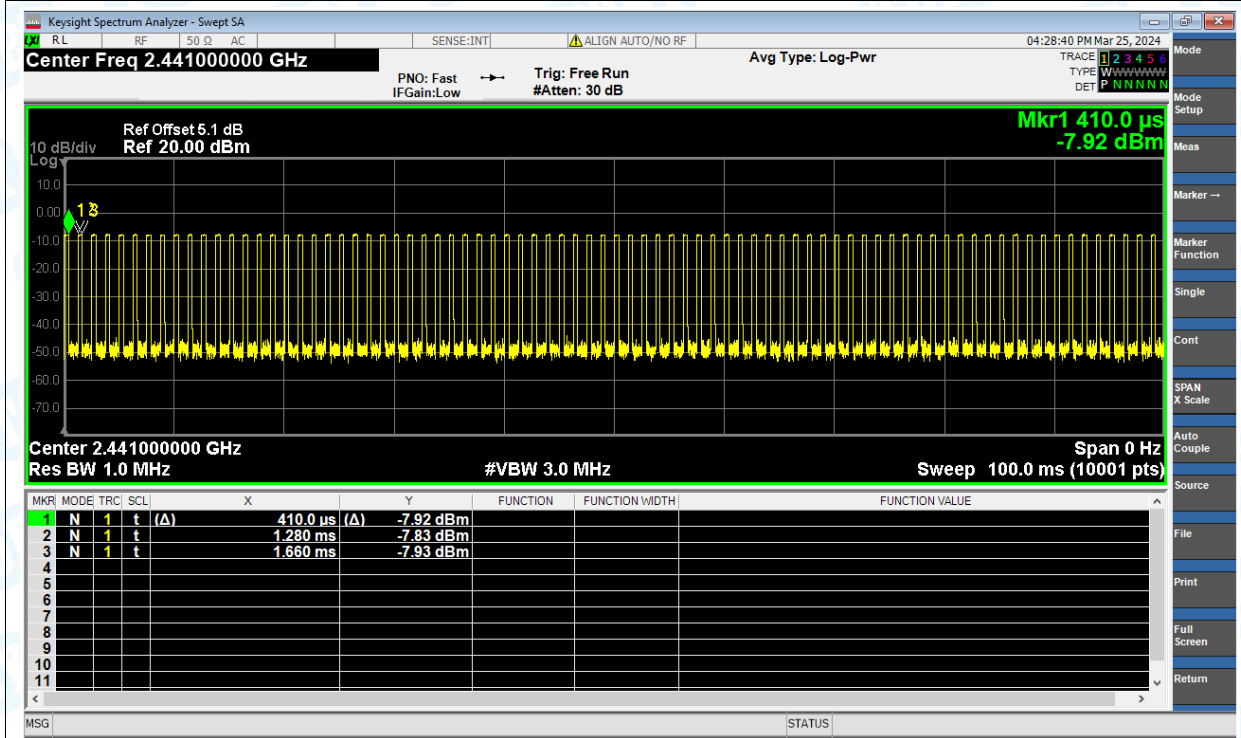
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	32.0	4.95	2.50

Test Graphs

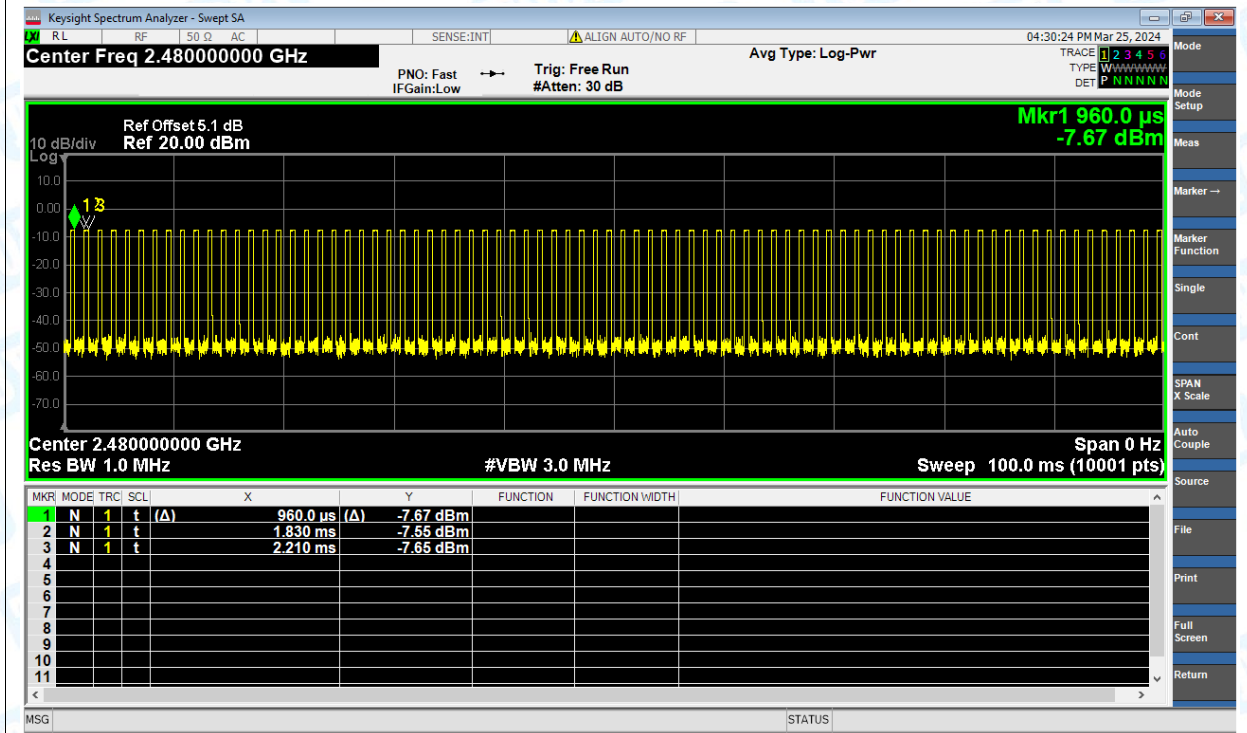
Duty Cycle NVNT 1-DH1 2402MHz Ant1



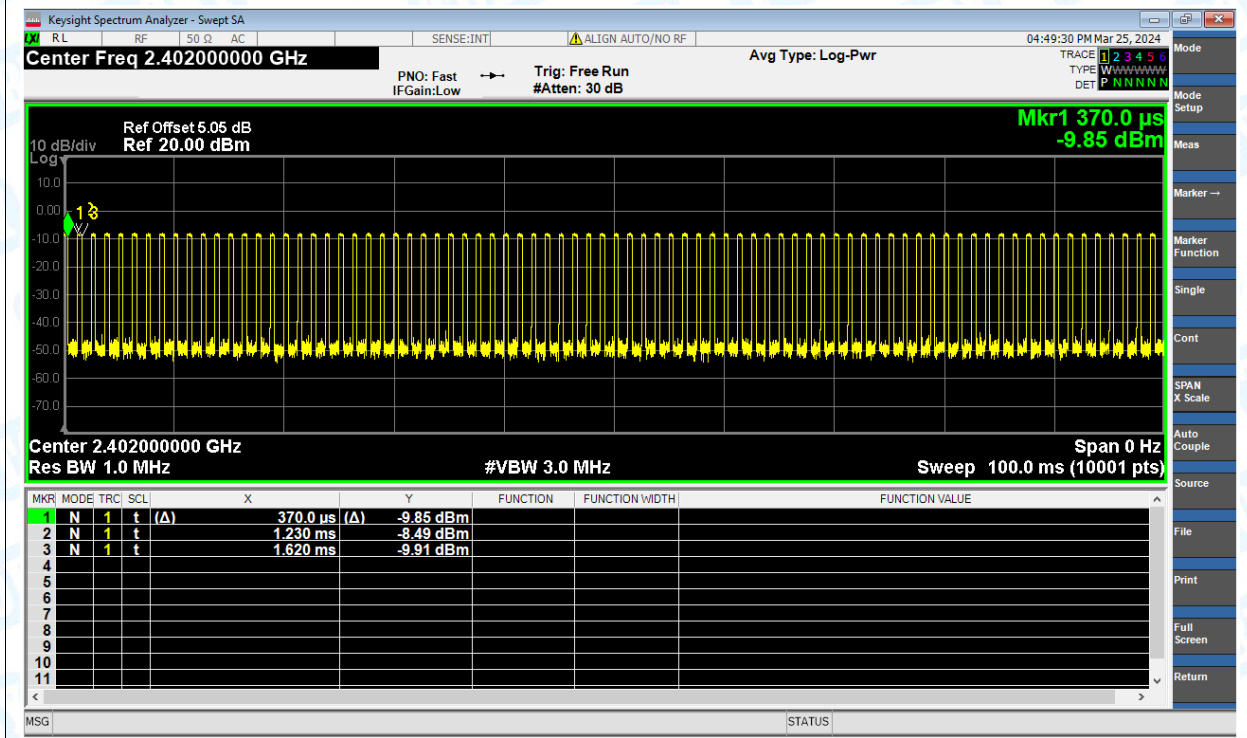
Duty Cycle NVNT 1-DH1 2441MHz Ant1



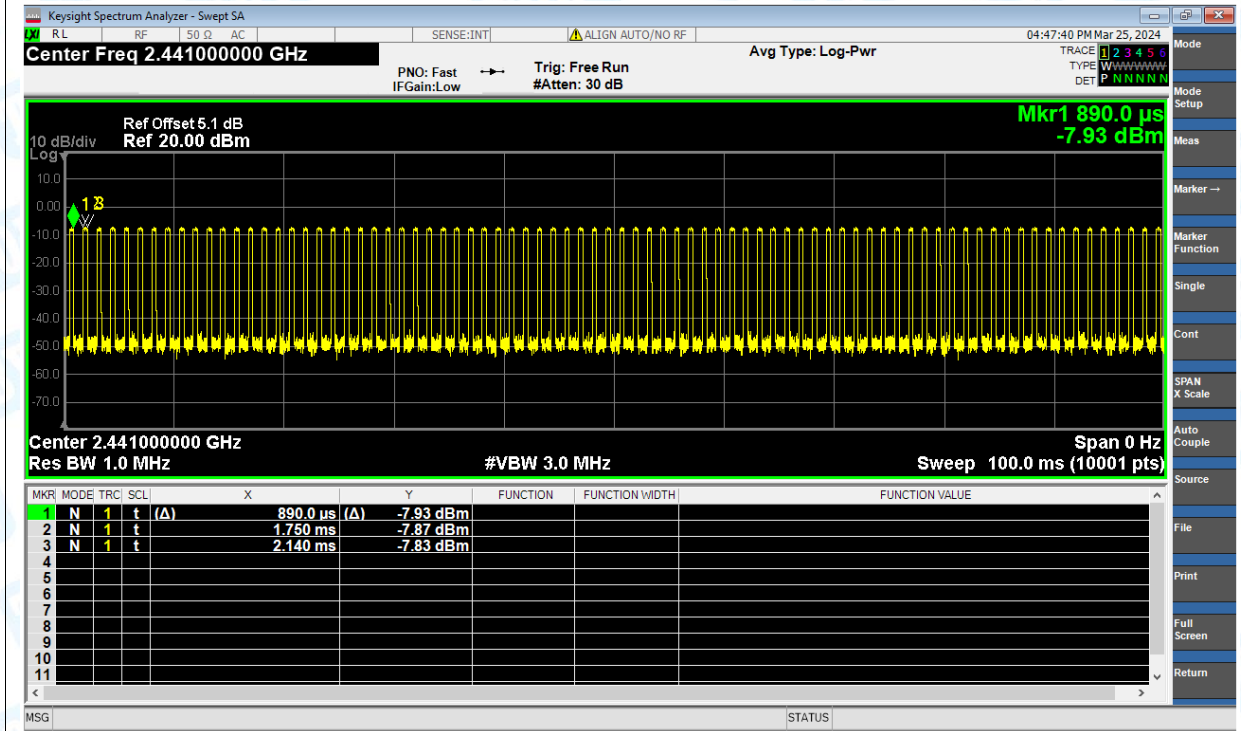
Duty Cycle NVNT 1-DH1 2480MHz Ant1



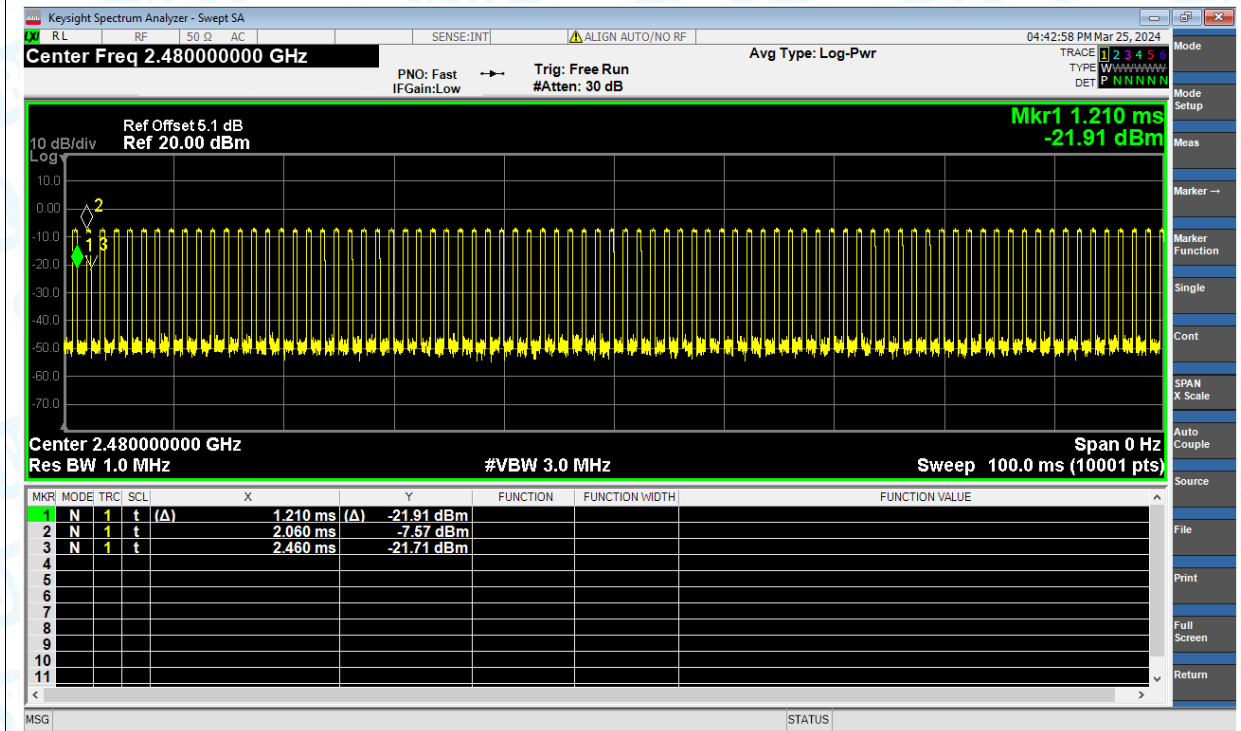
Duty Cycle NVNT 2-DH1 2402MHz Ant1



Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

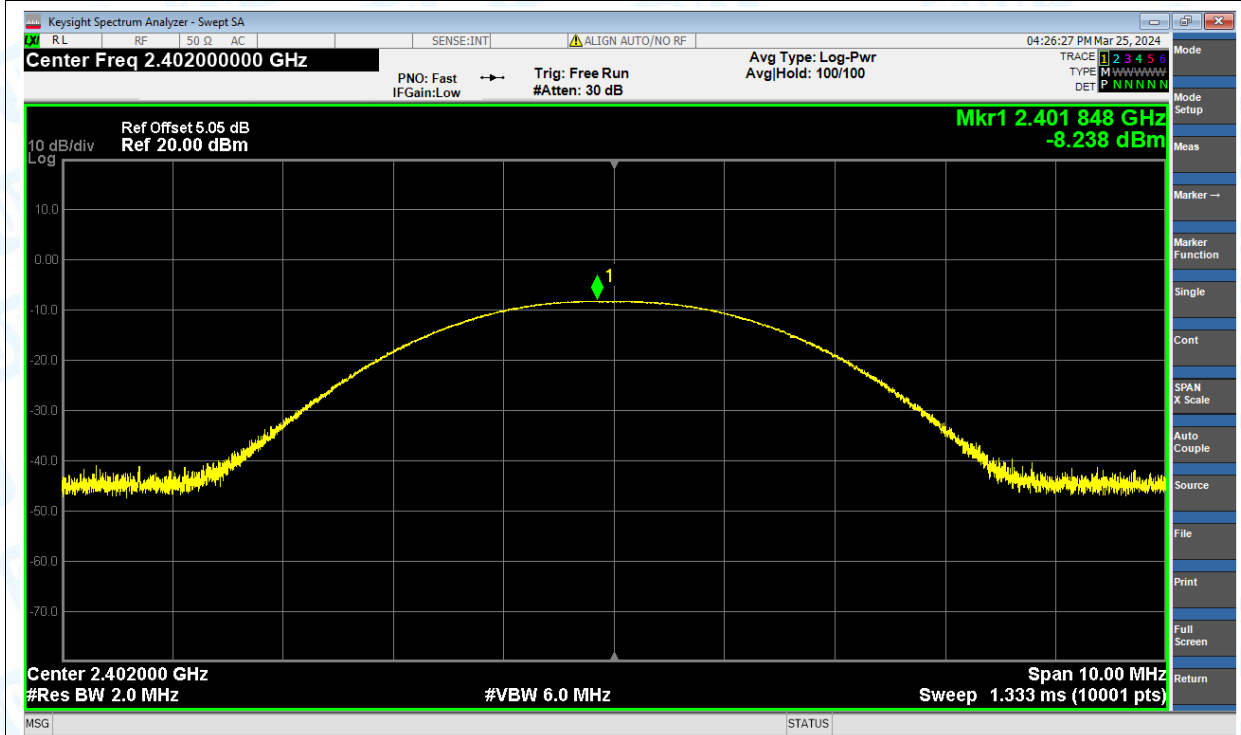


2. Maximum Conducted Output Power

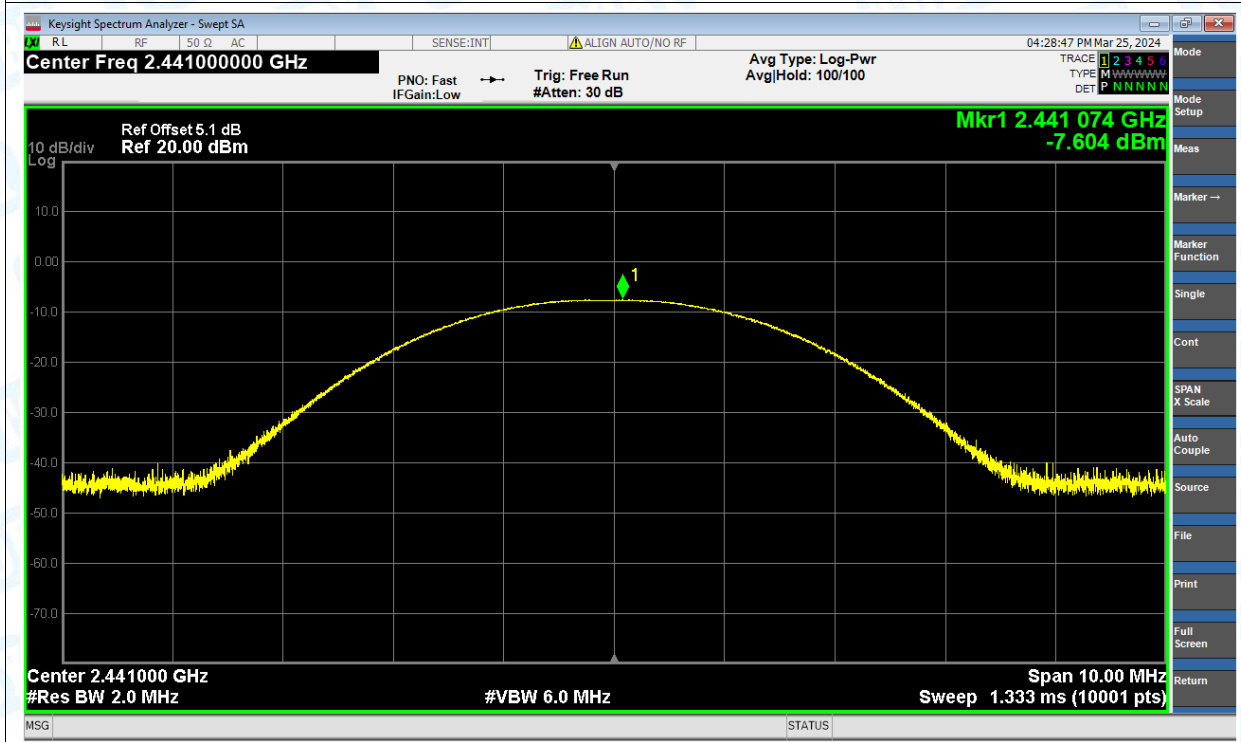
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-8.238	21	Pass
NVNT	1-DH1	2441	Ant1	-7.604	21	Pass
NVNT	1-DH1	2480	Ant1	-7.345	21	Pass
NVNT	2-DH1	2402	Ant1	-7.357	21	Pass
NVNT	2-DH1	2441	Ant1	-6.771	21	Pass
NVNT	2-DH1	2480	Ant1	-6.423	21	Pass

Test Graphs

Power NVNT 1-DH1 2402MHz Ant1



Power NVNT 1-DH1 2441MHz Ant1





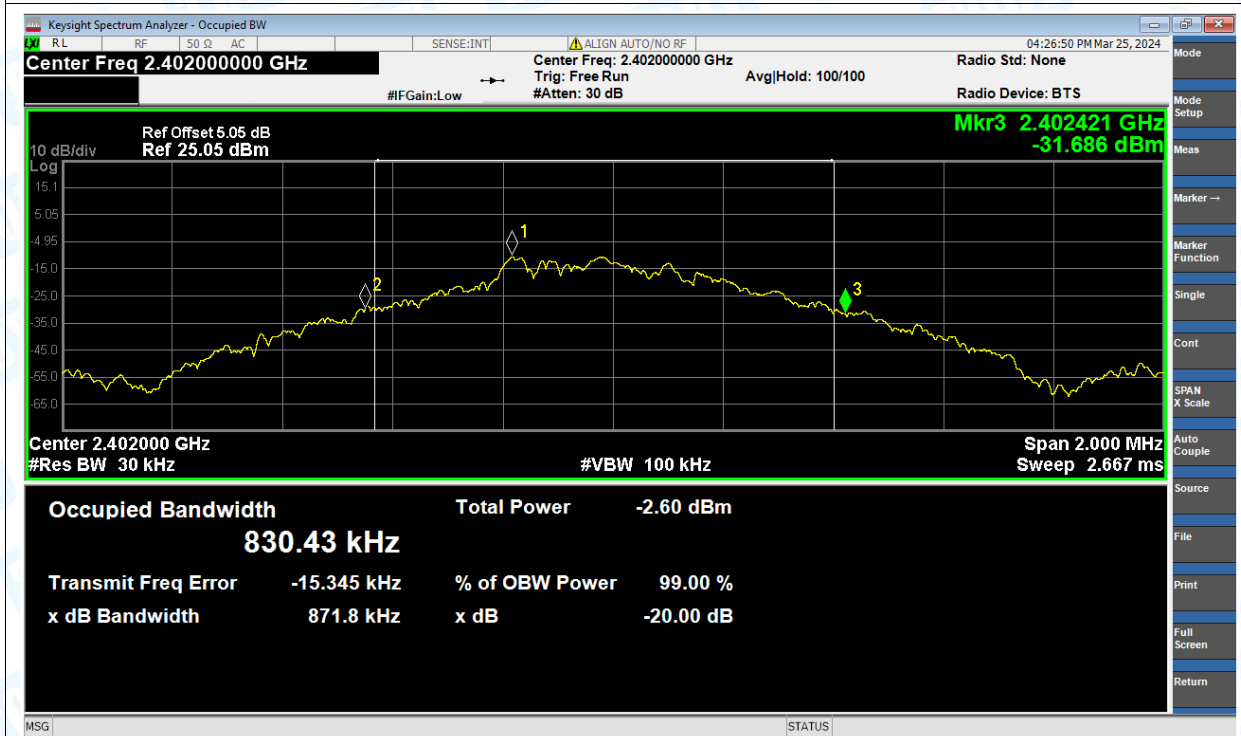


3. -20dB Bandwidth

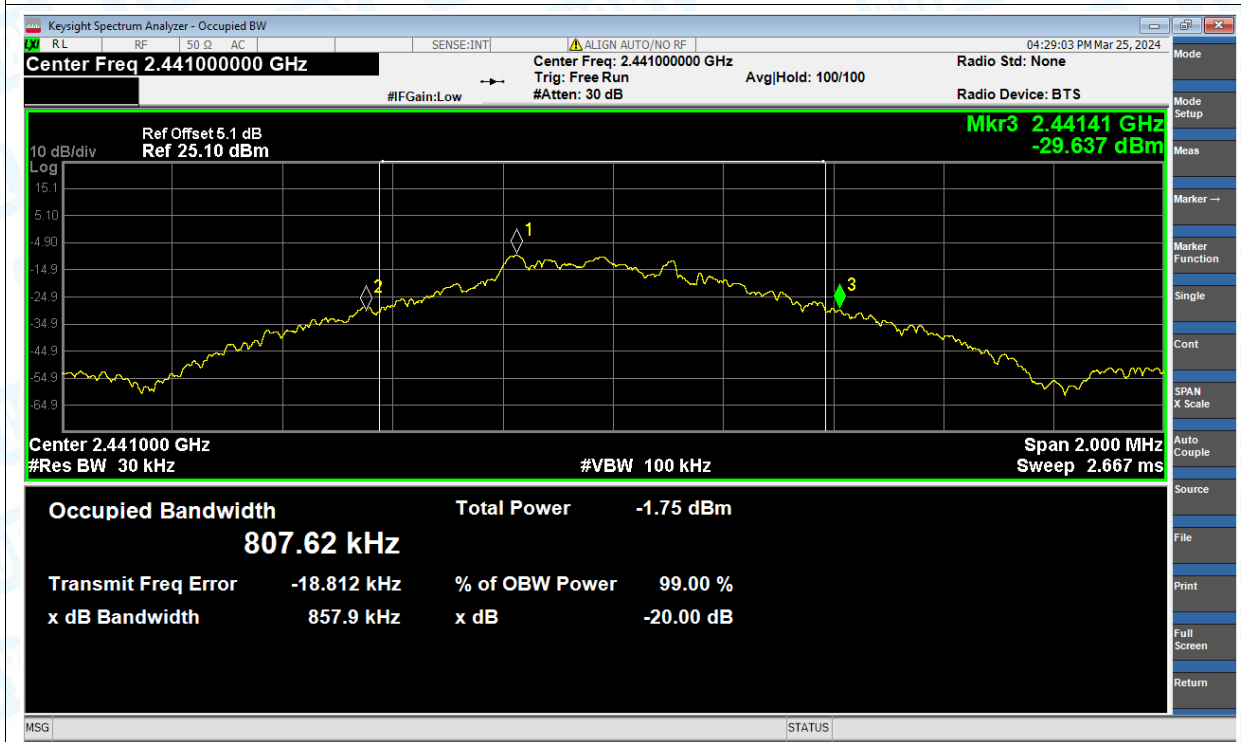
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.87	----	Pass
NVNT	1-DH1	2441	Ant1	0.86	----	Pass
NVNT	1-DH1	2480	Ant1	0.86	----	Pass
NVNT	2-DH1	2402	Ant1	1.23	----	Pass
NVNT	2-DH1	2441	Ant1	1.23	----	Pass
NVNT	2-DH1	2480	Ant1	1.25	----	Pass

Test Graphs

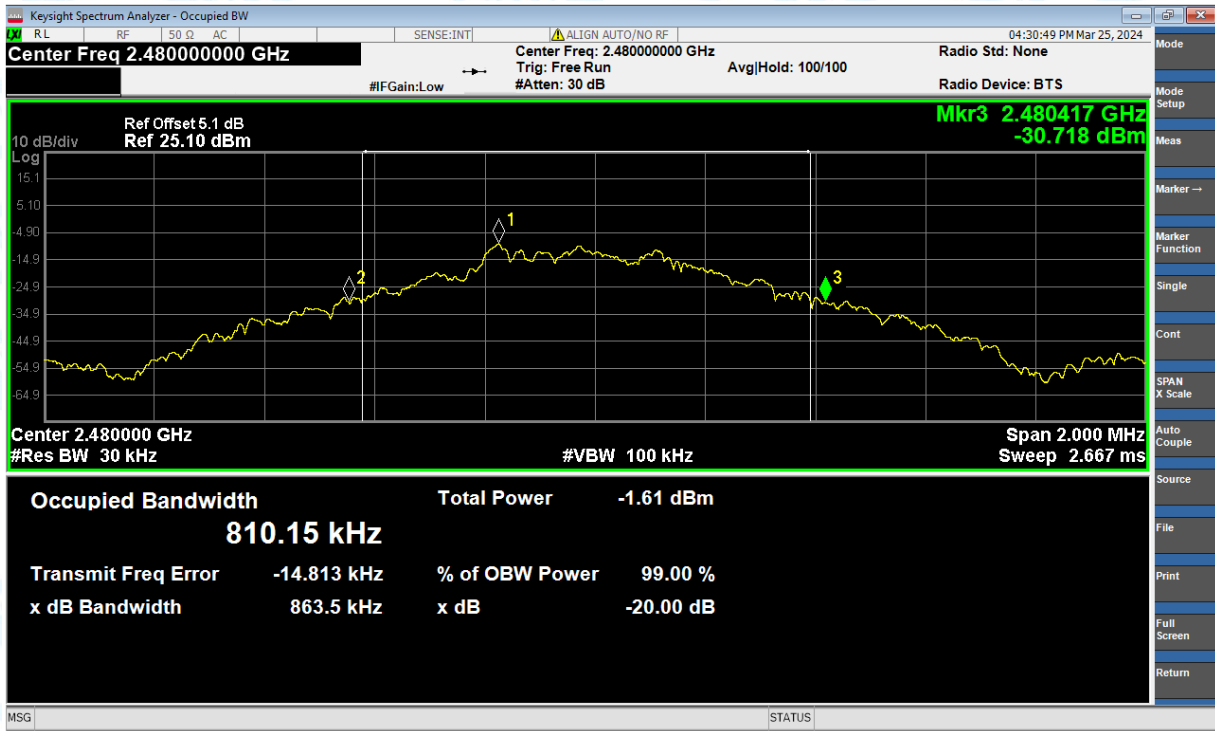
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



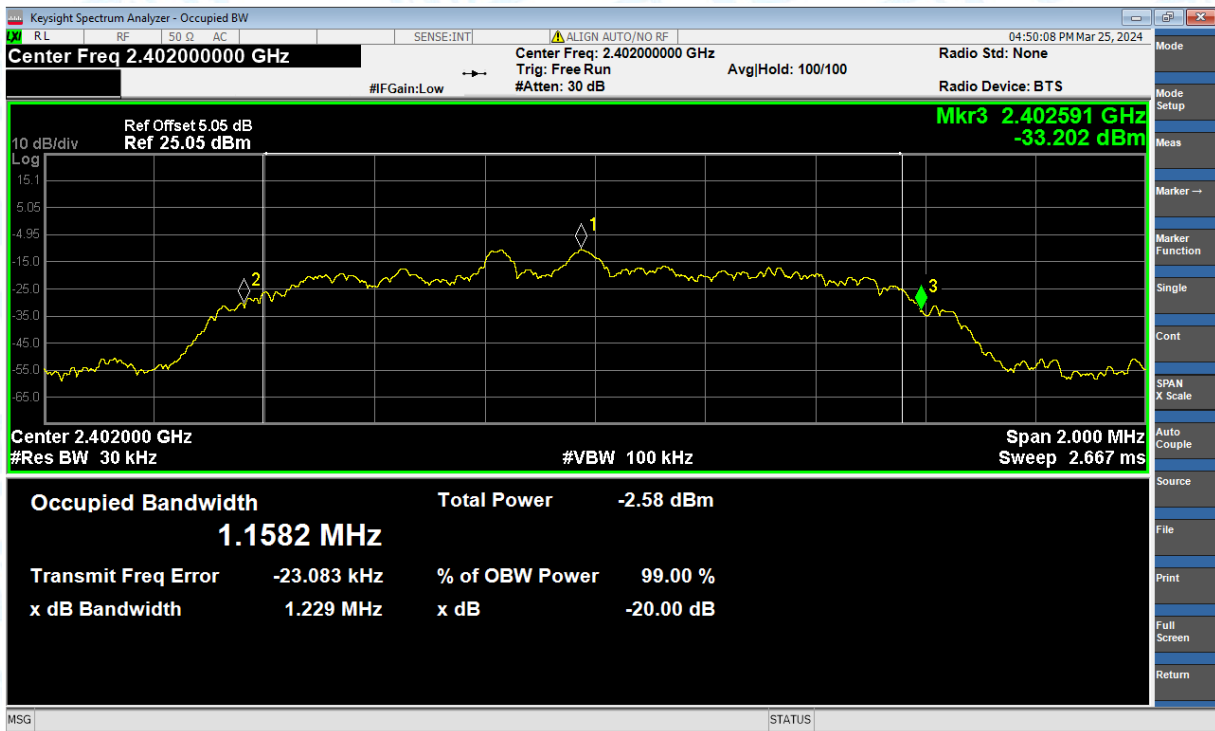
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



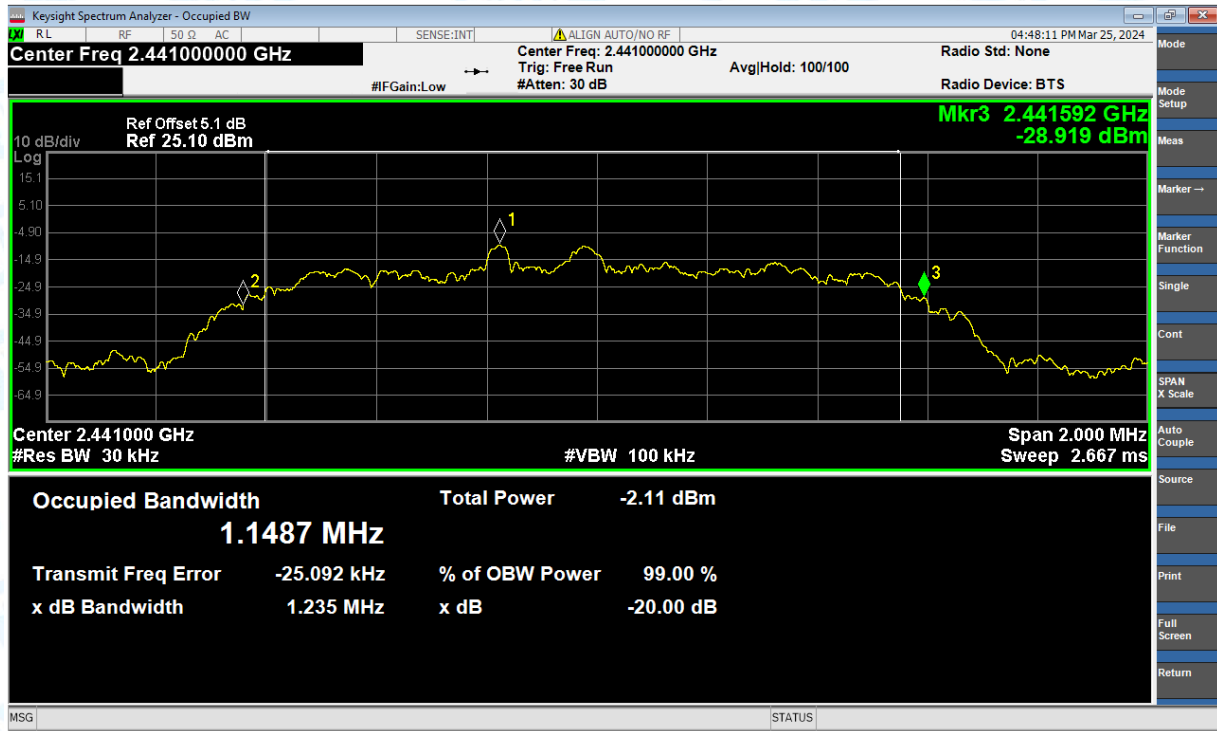
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



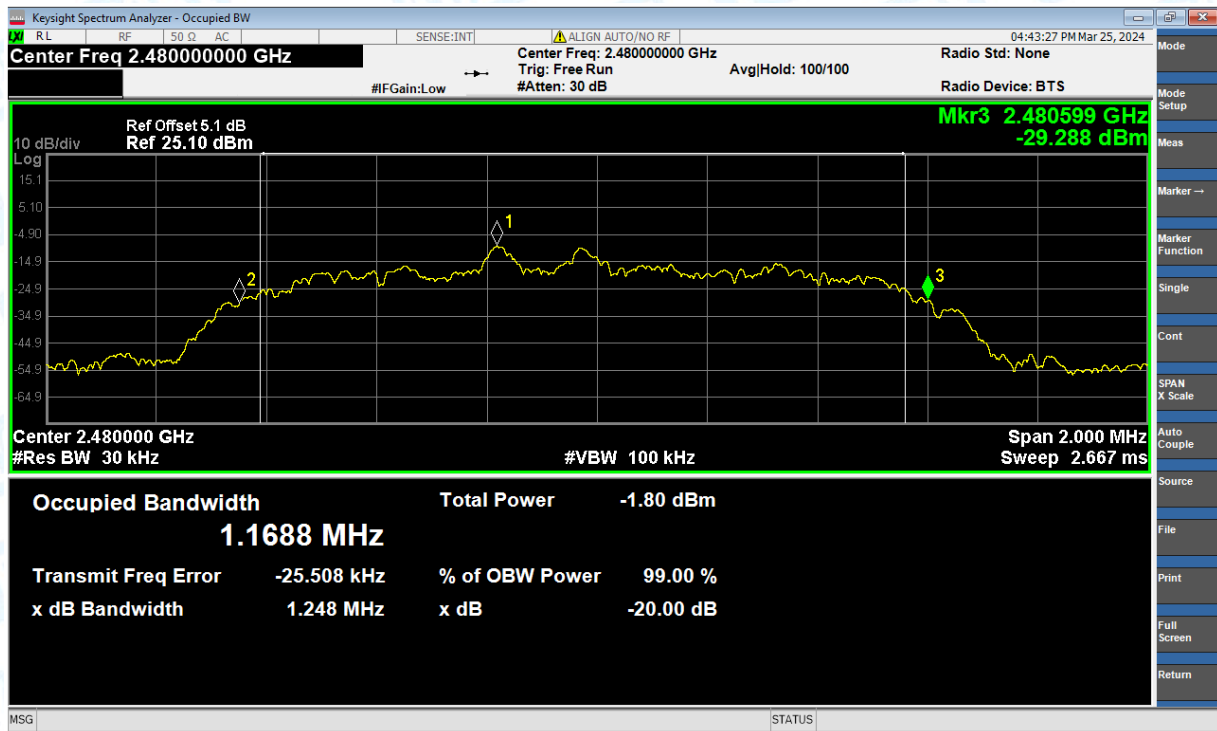
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

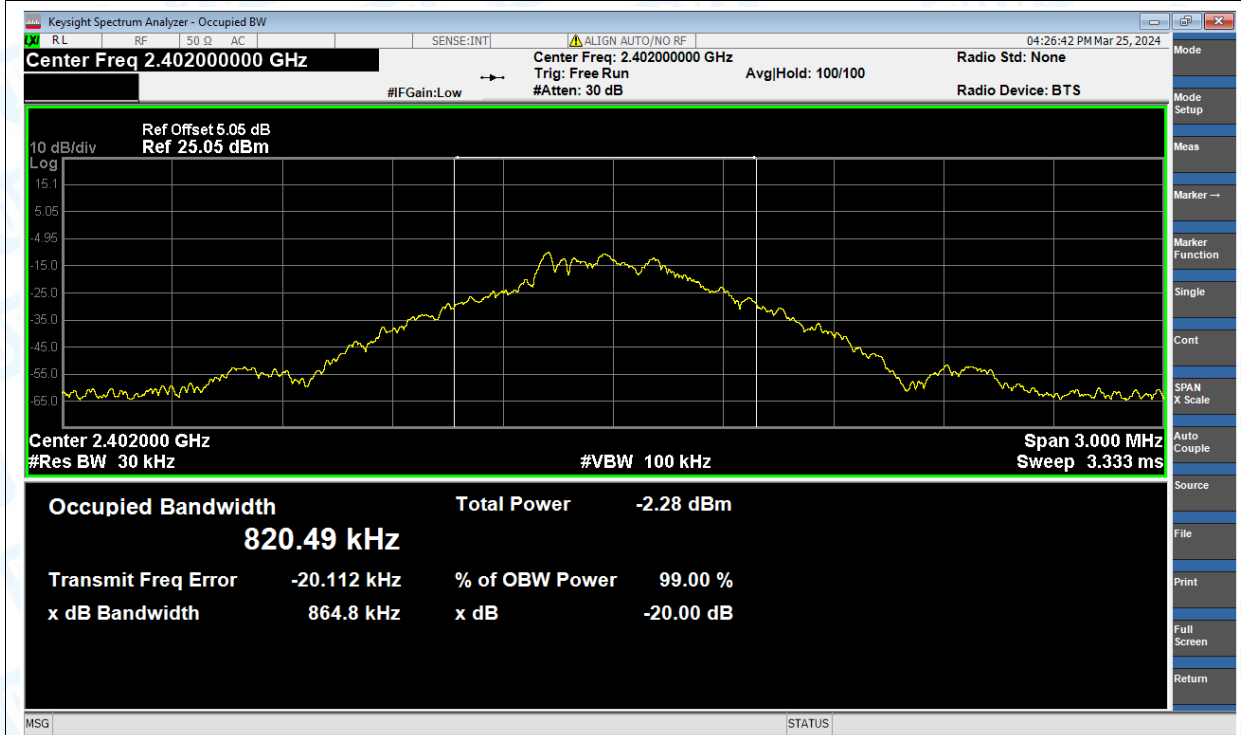


4. Occupied Channel Bandwidth

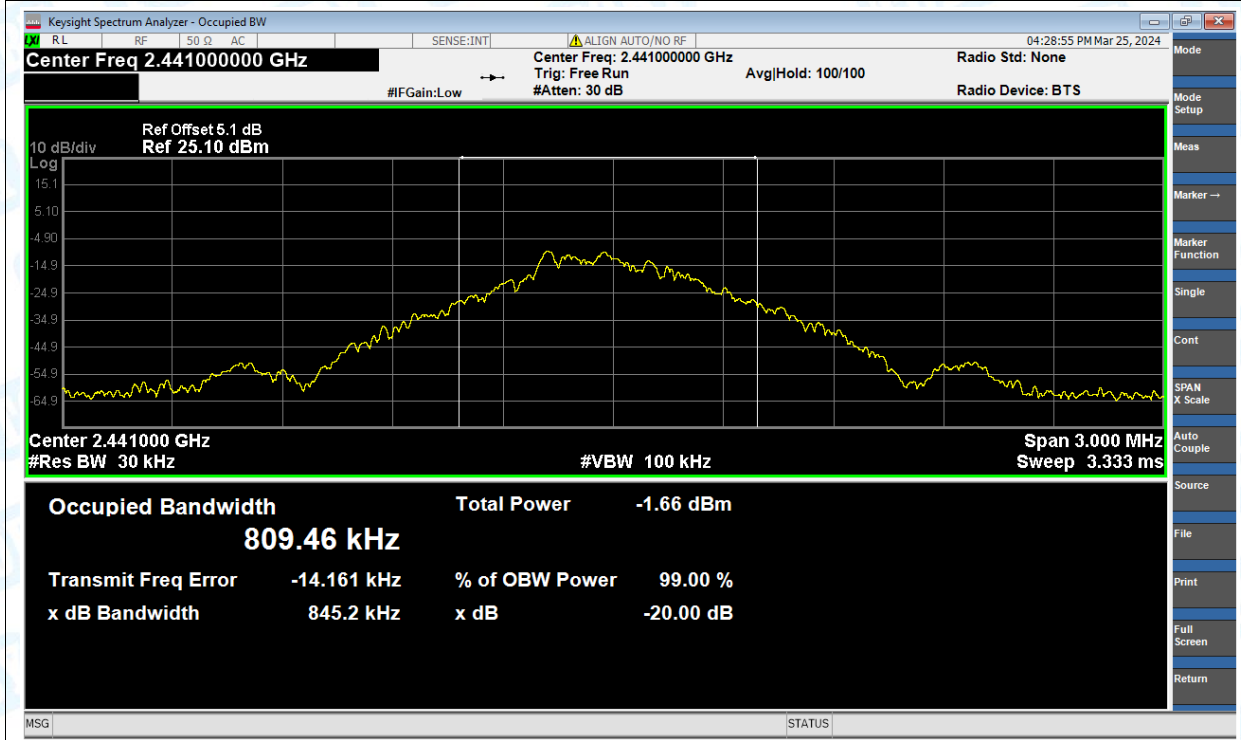
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.820
NVNT	1-DH1	2441	Ant1	0.809
NVNT	1-DH1	2480	Ant1	0.815
NVNT	2-DH1	2402	Ant1	1.168
NVNT	2-DH1	2441	Ant1	1.166
NVNT	2-DH1	2480	Ant1	1.162

Test Graphs

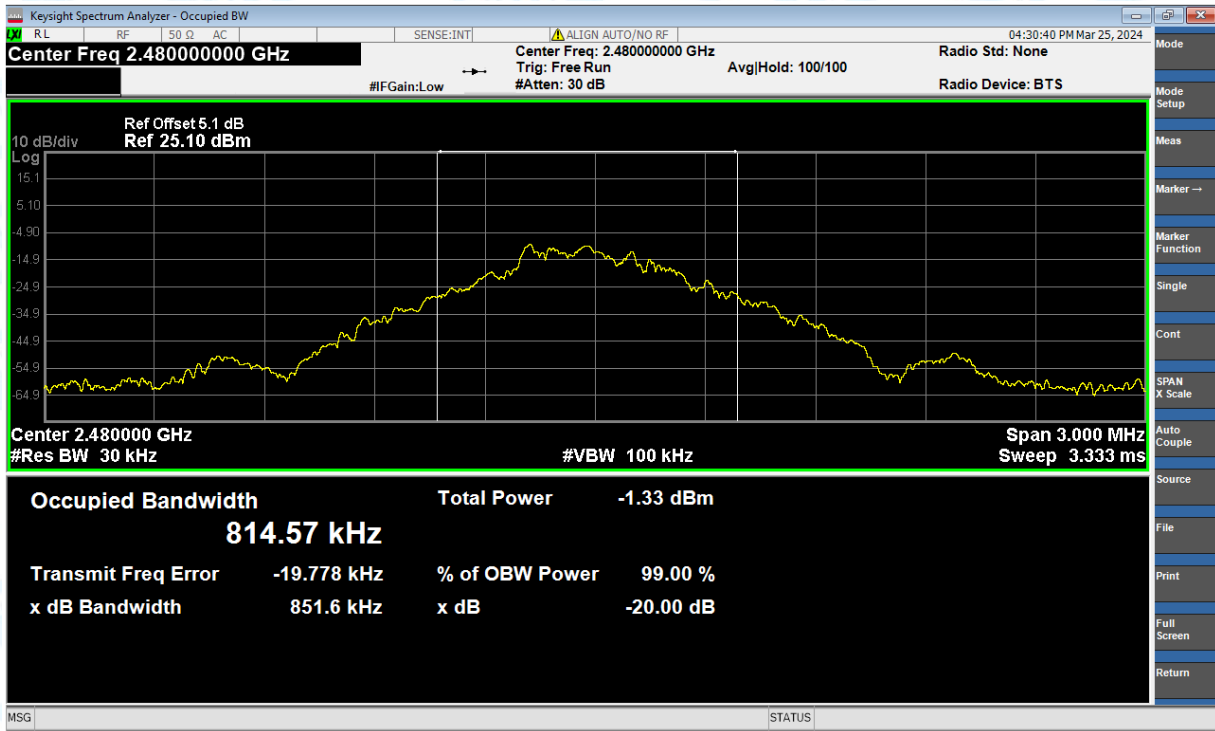
OBW NVNT 1-DH1 2402MHz Ant1



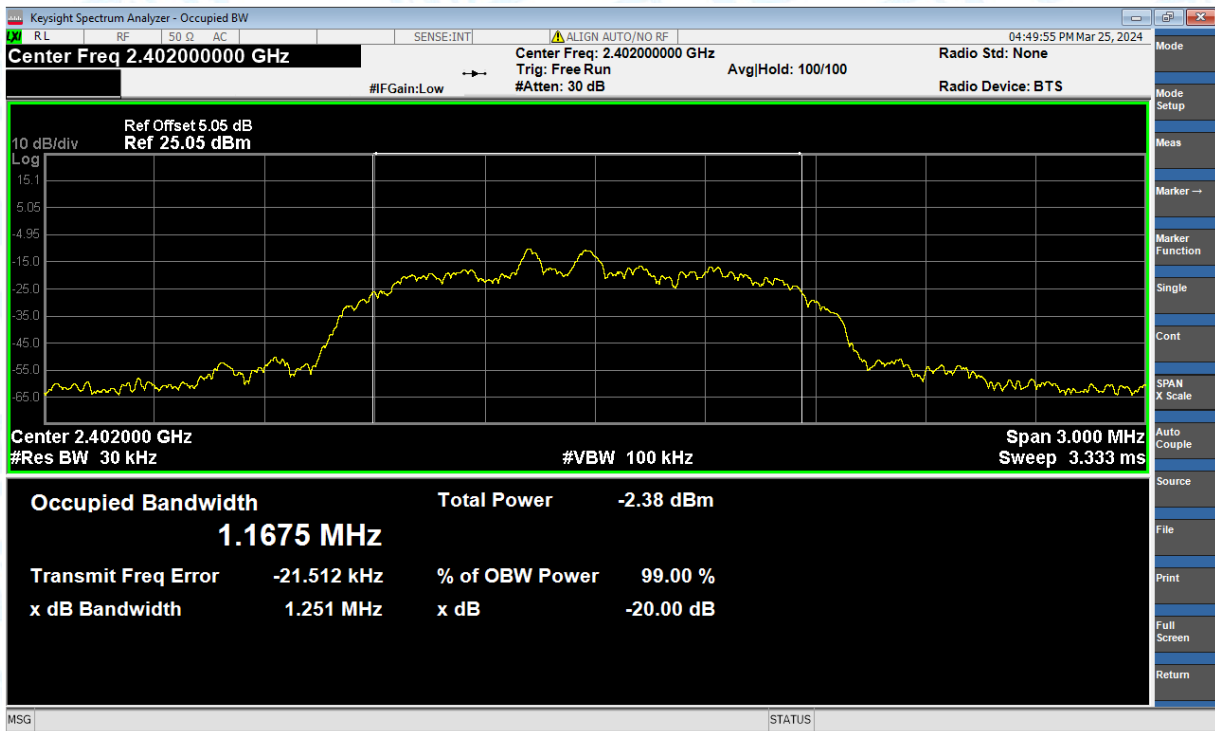
OBW NVNT 1-DH1 2441MHz Ant1



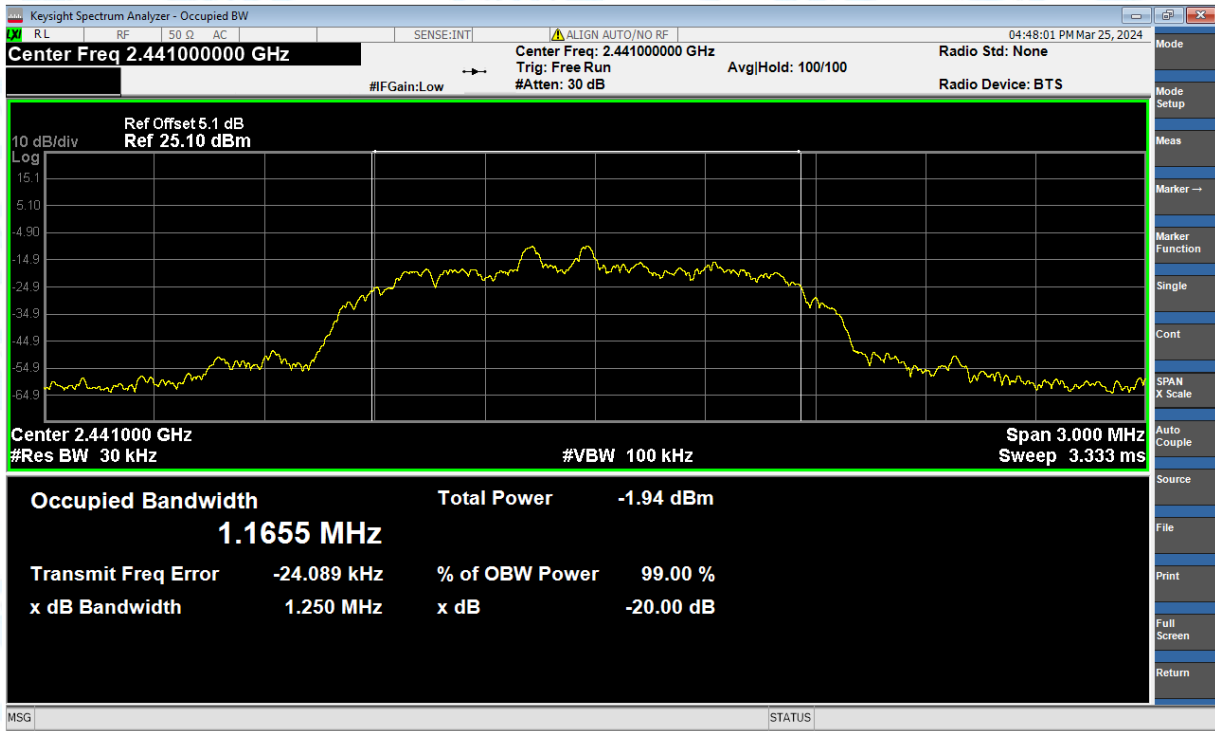
OBW NVNT 1-DH1 2480MHz Ant1



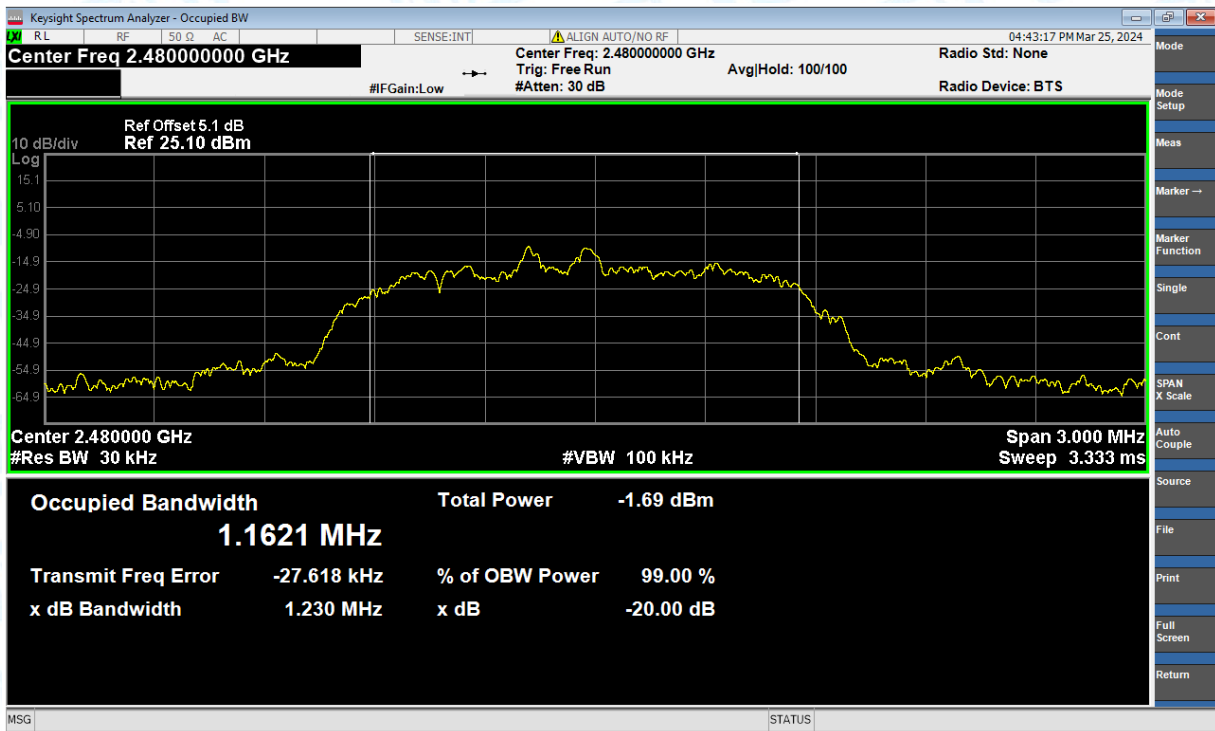
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



OBW NVNT 2-DH1 2480MHz Ant1

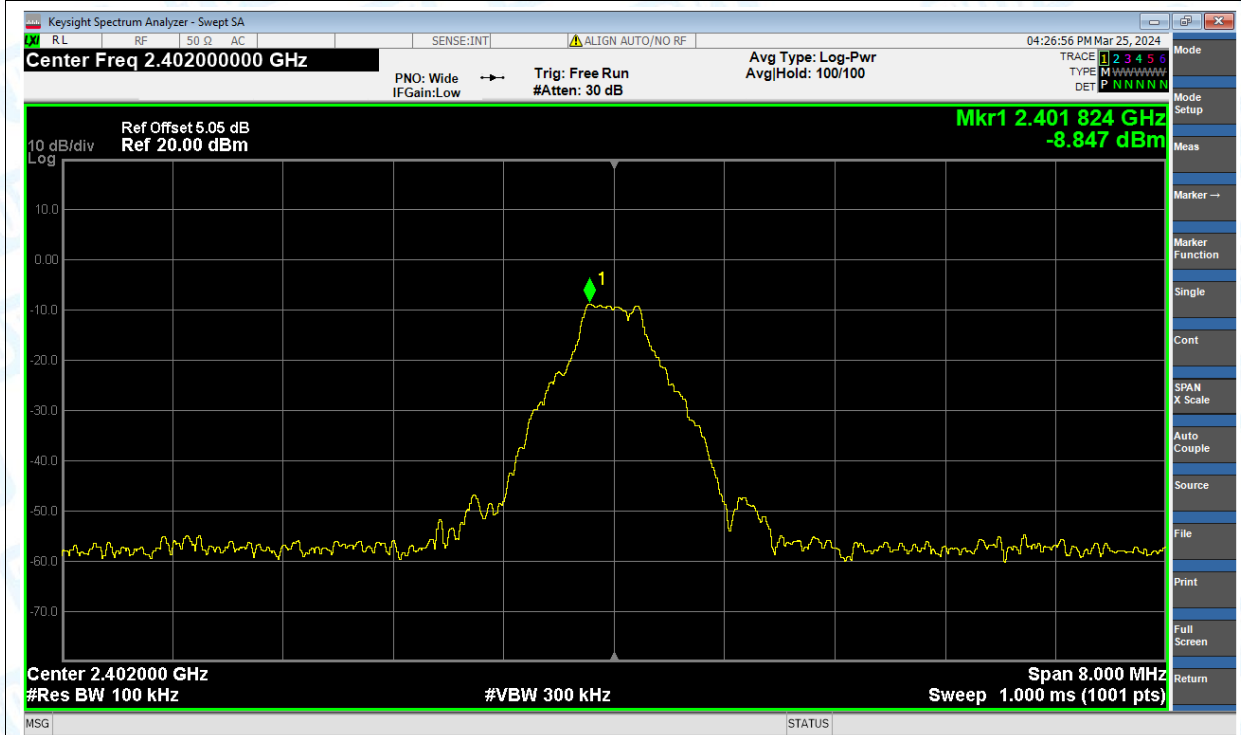


5. Band Edge

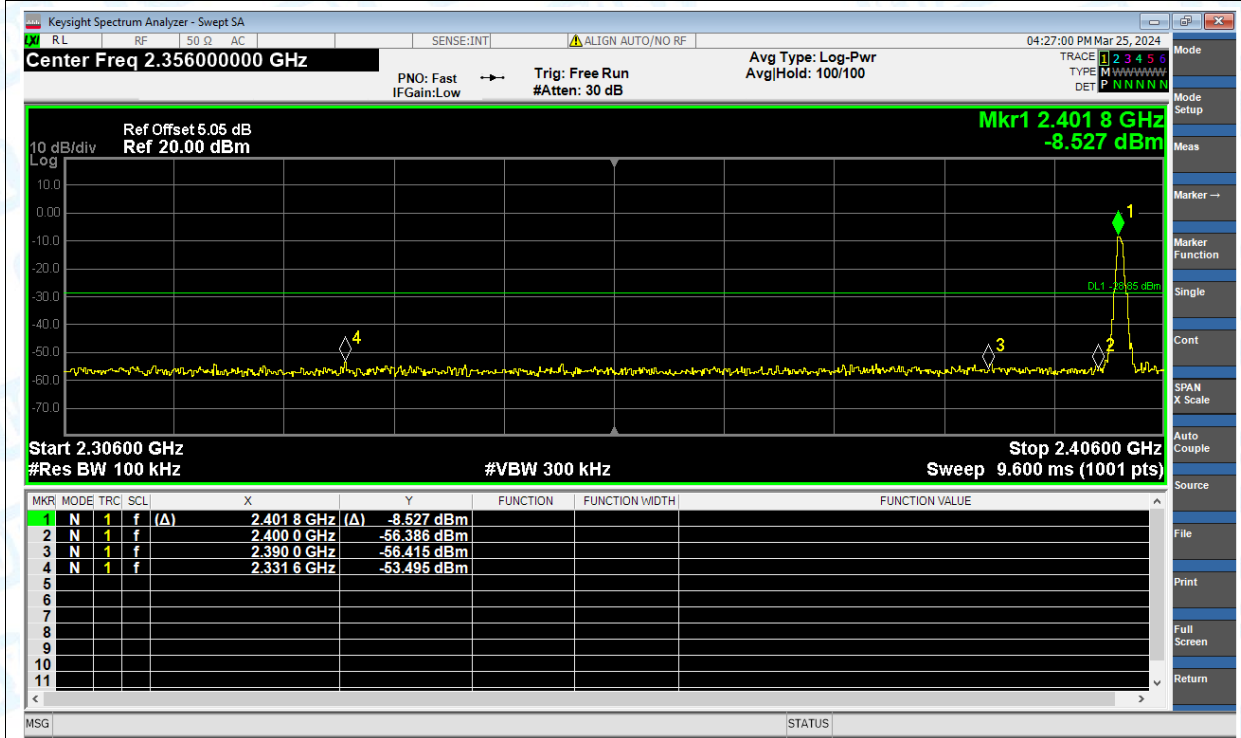
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-44.65	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-46.12	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-44.48	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-46.36	-20	Pass

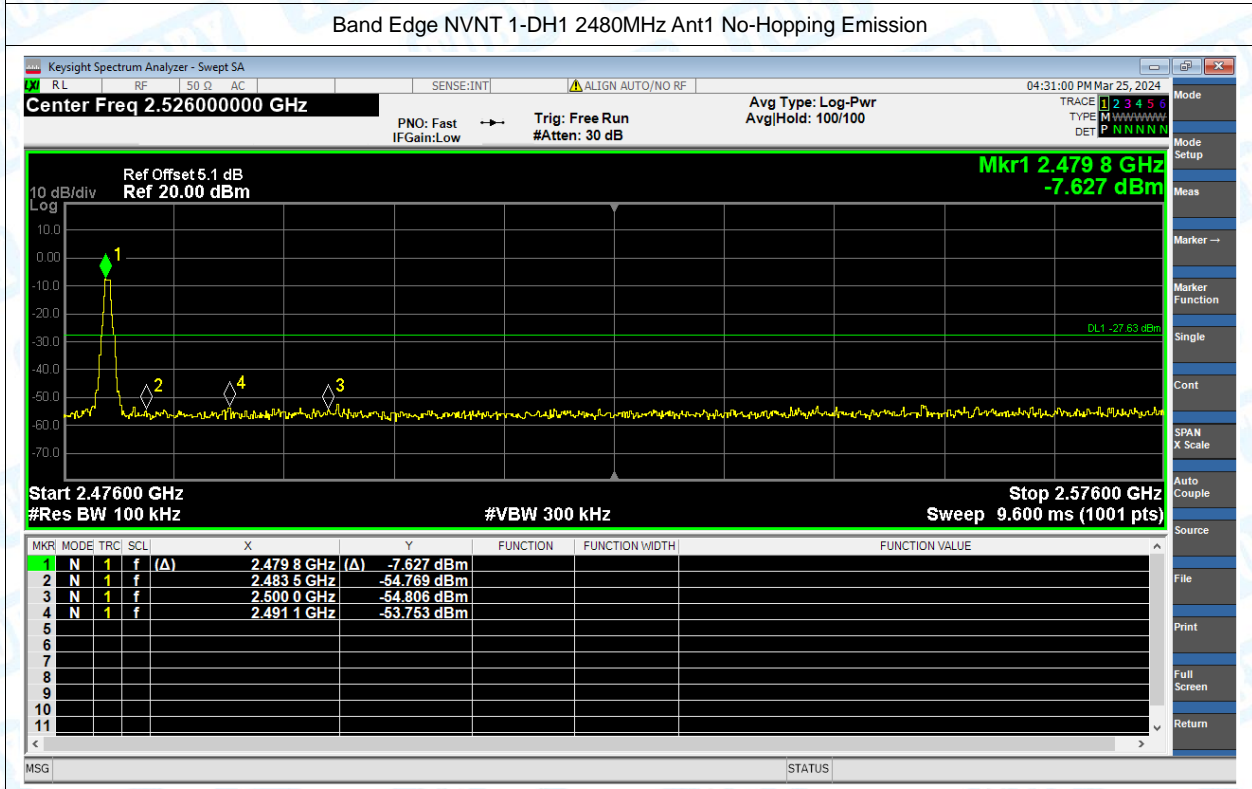
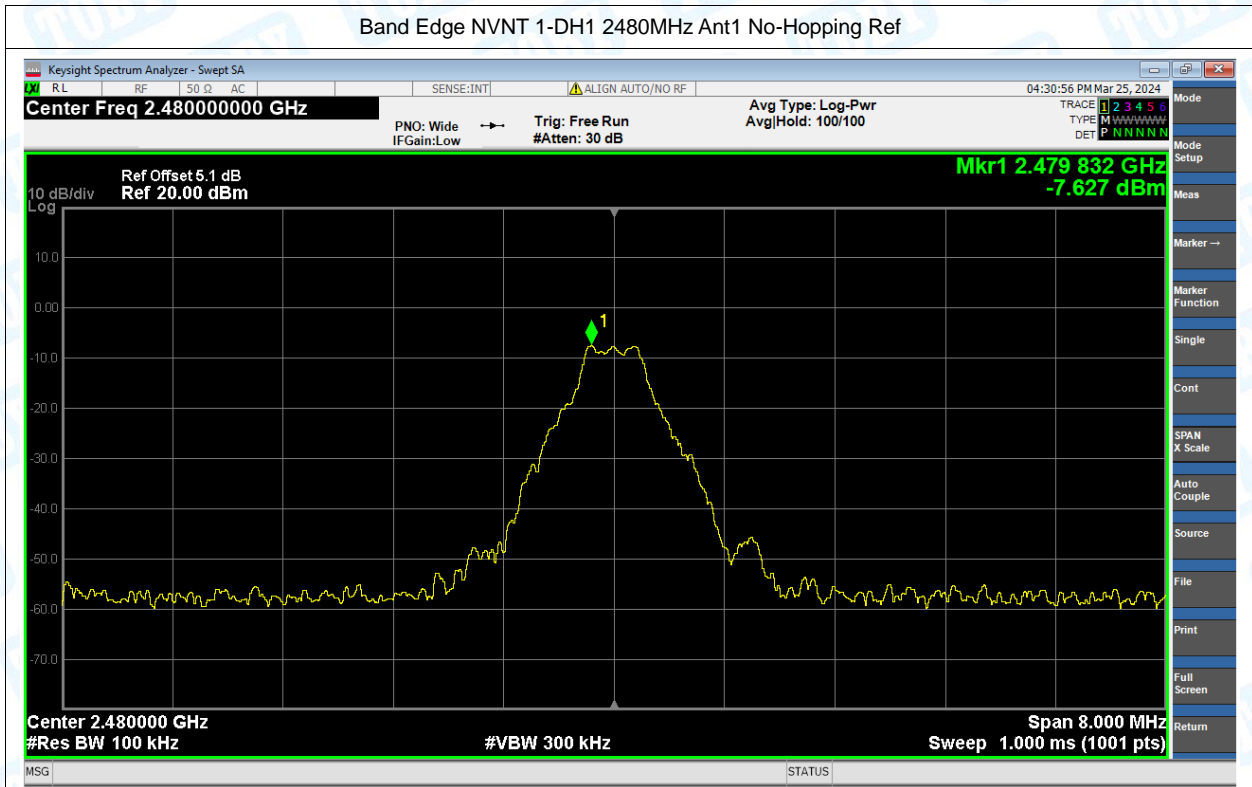
Test Graphs

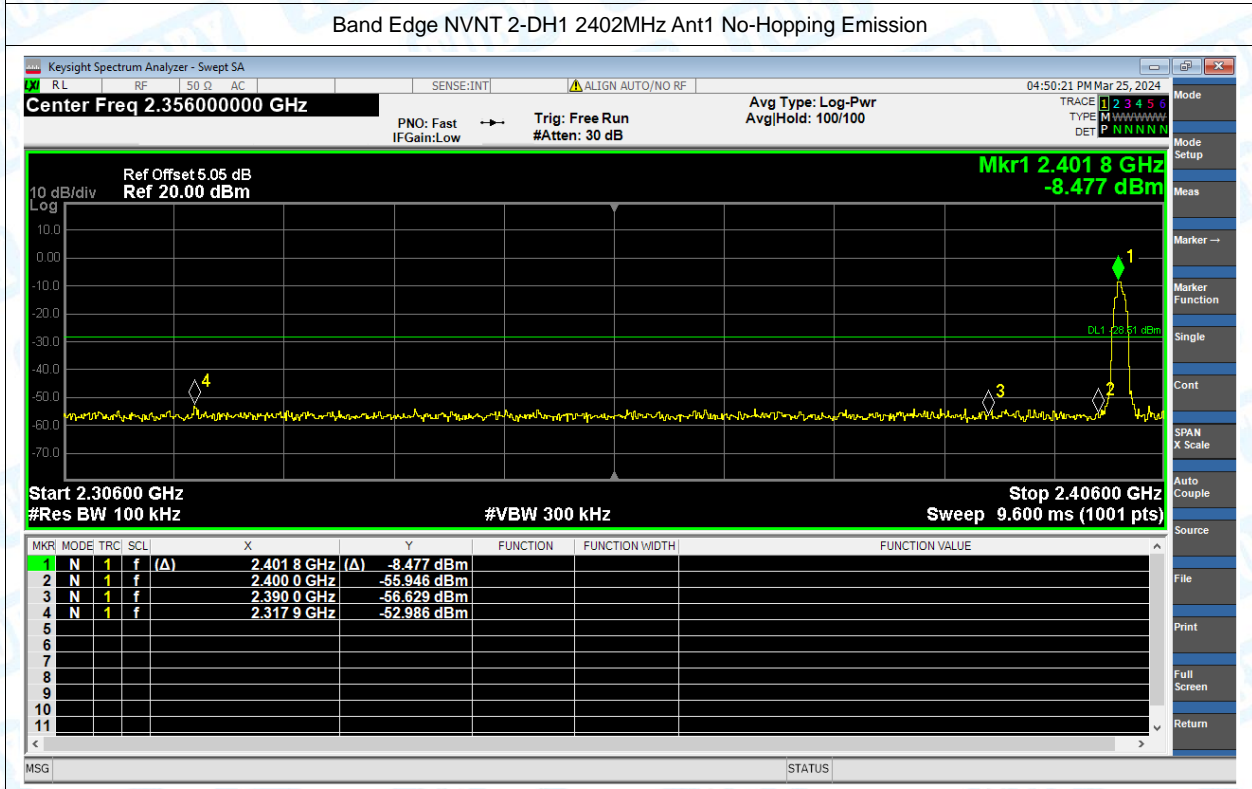
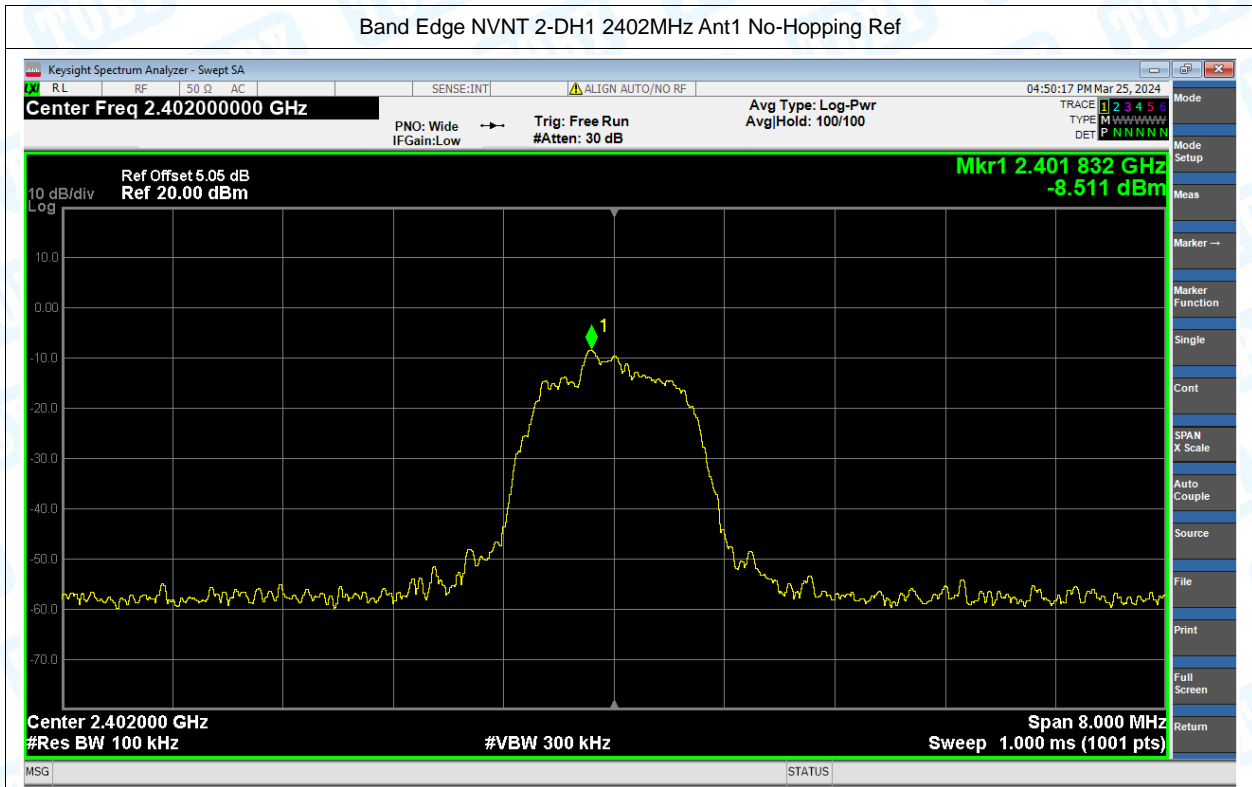
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

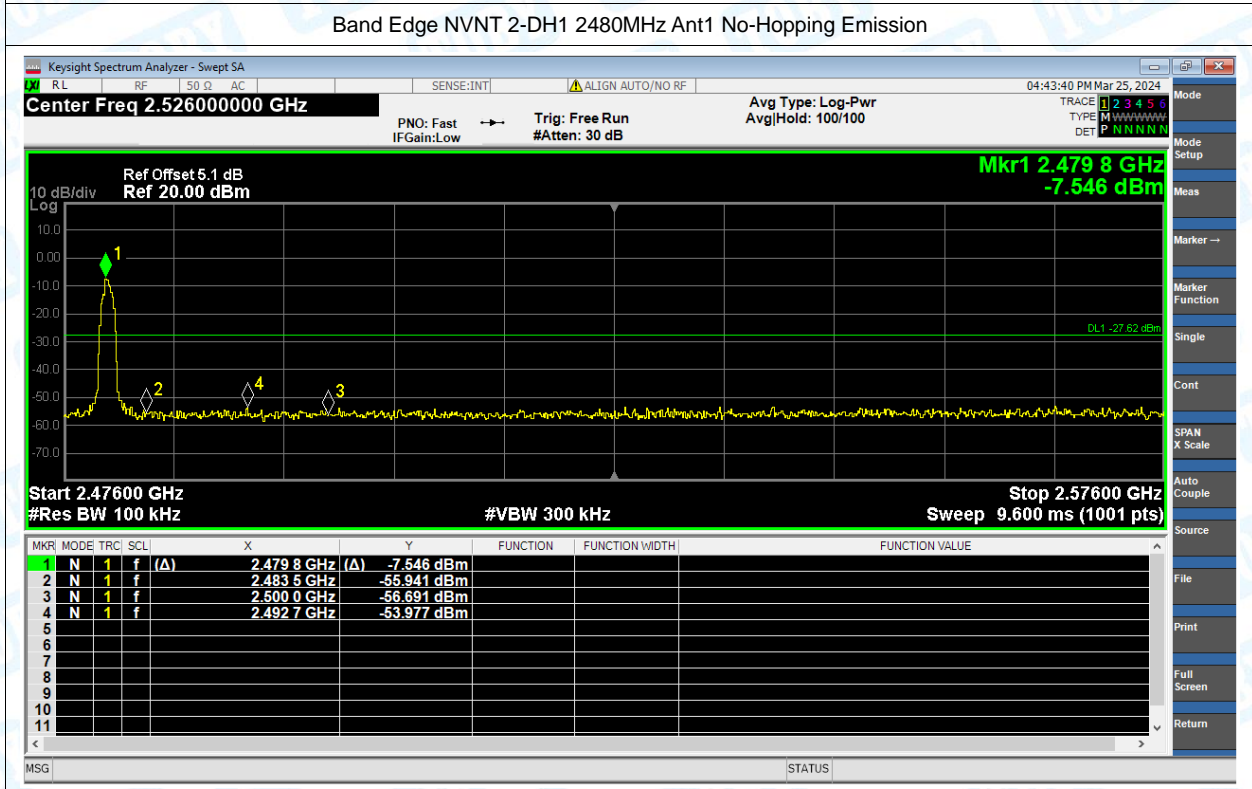
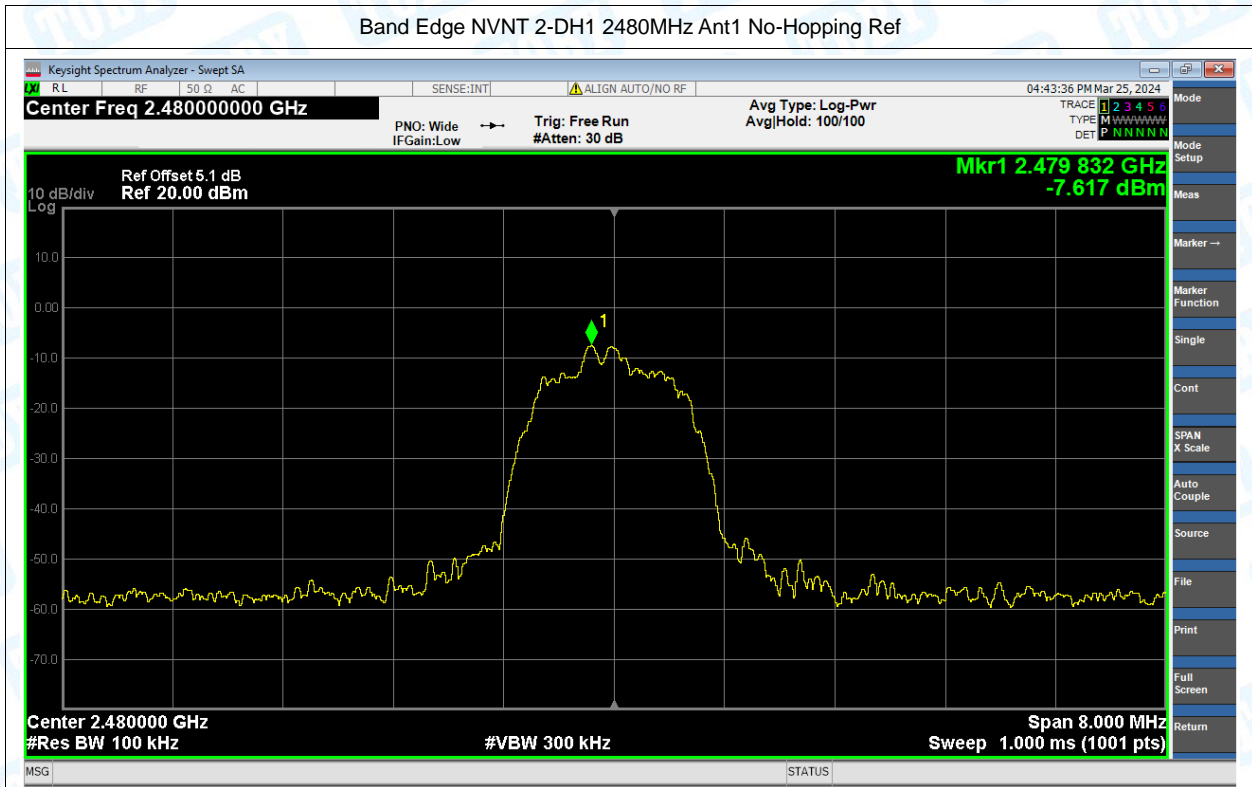


Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission







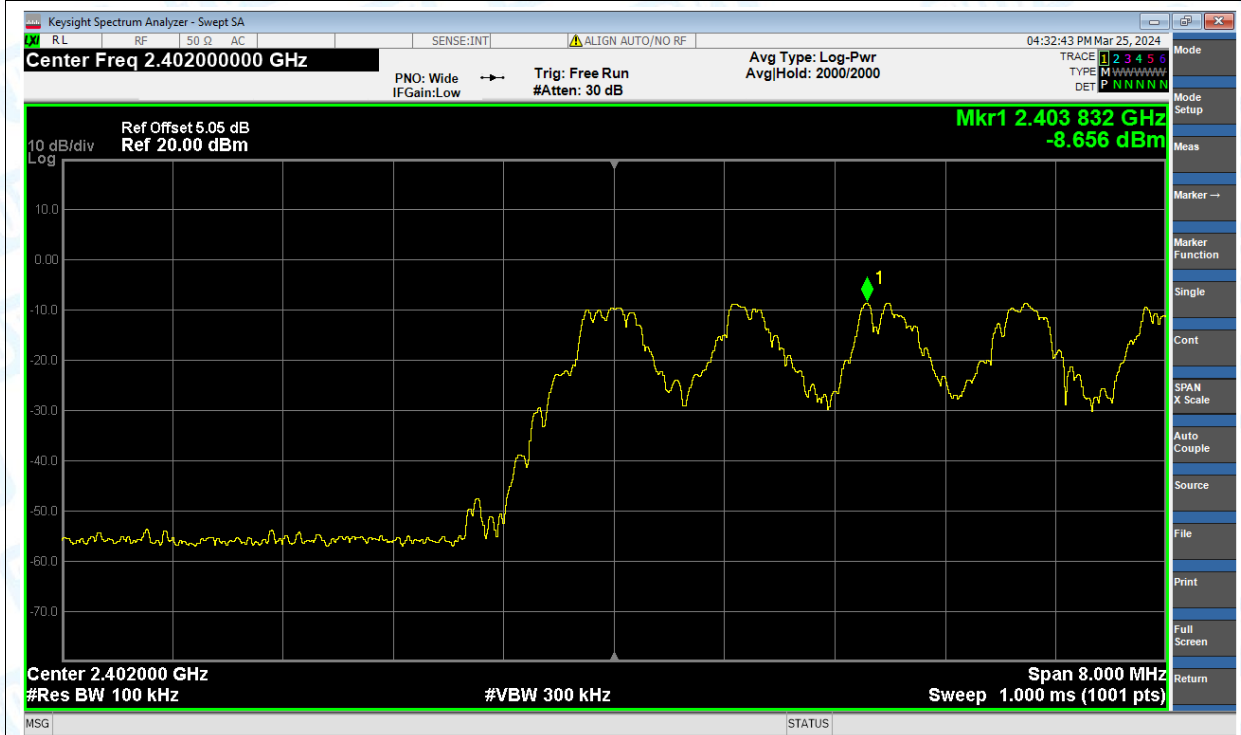


6. Band Edge(Hopping)

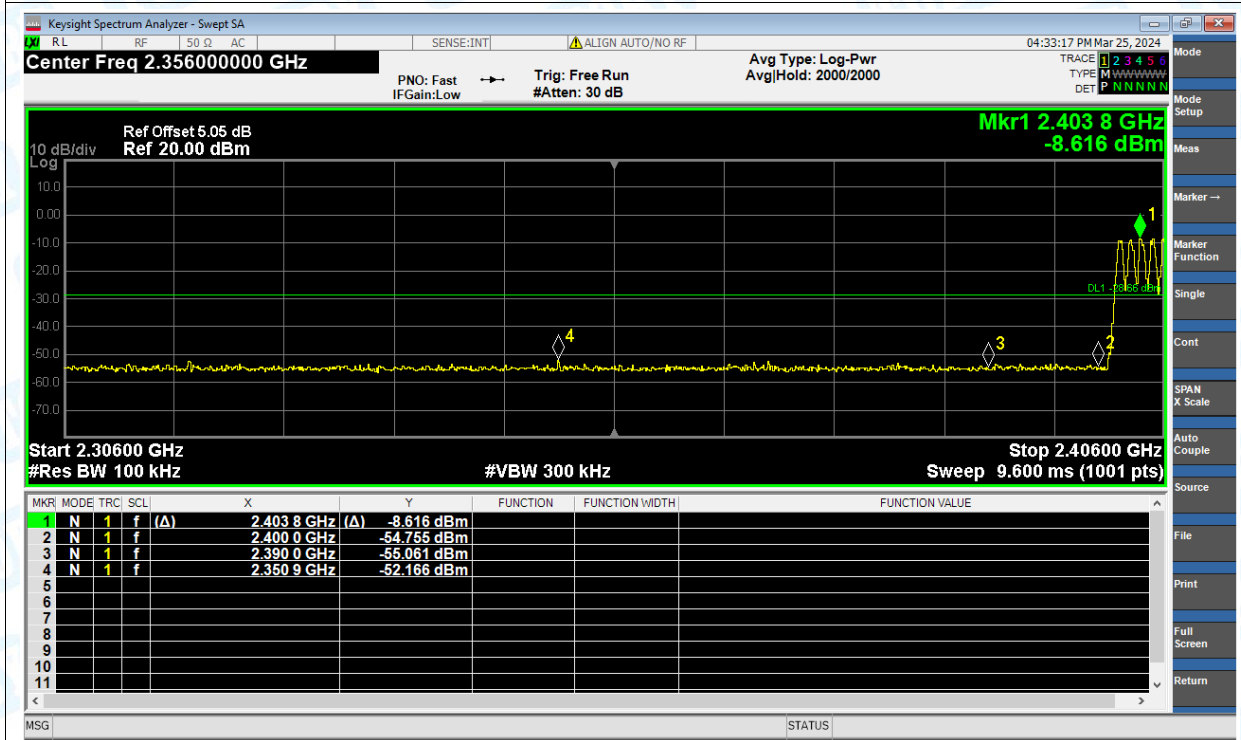
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-43.51	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-44.64	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-44.34	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-44.66	-20	Pass

Test Graphs

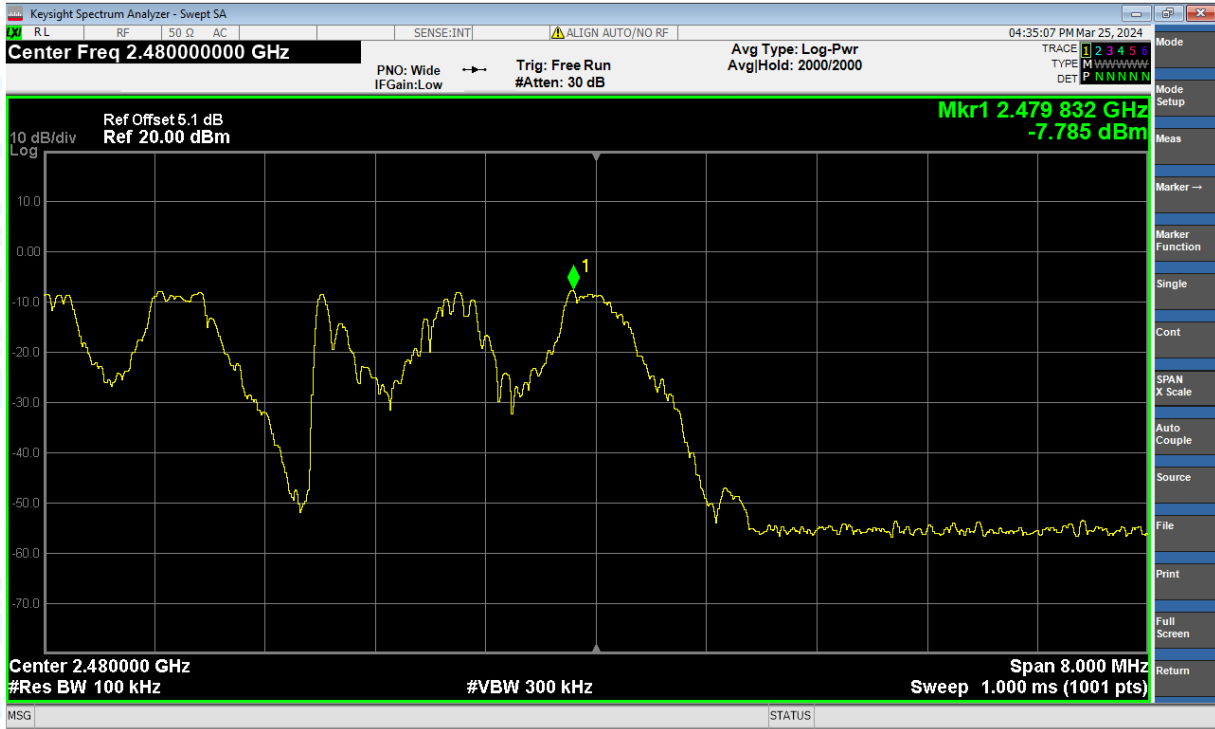
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



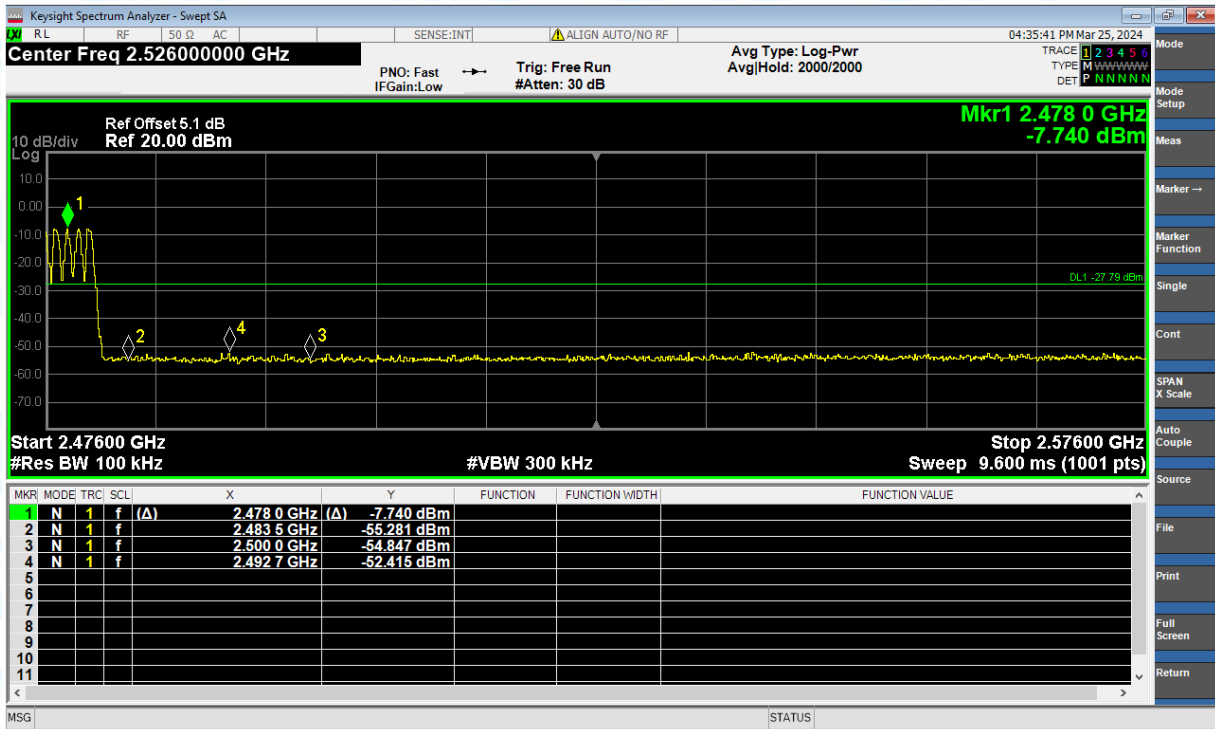
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



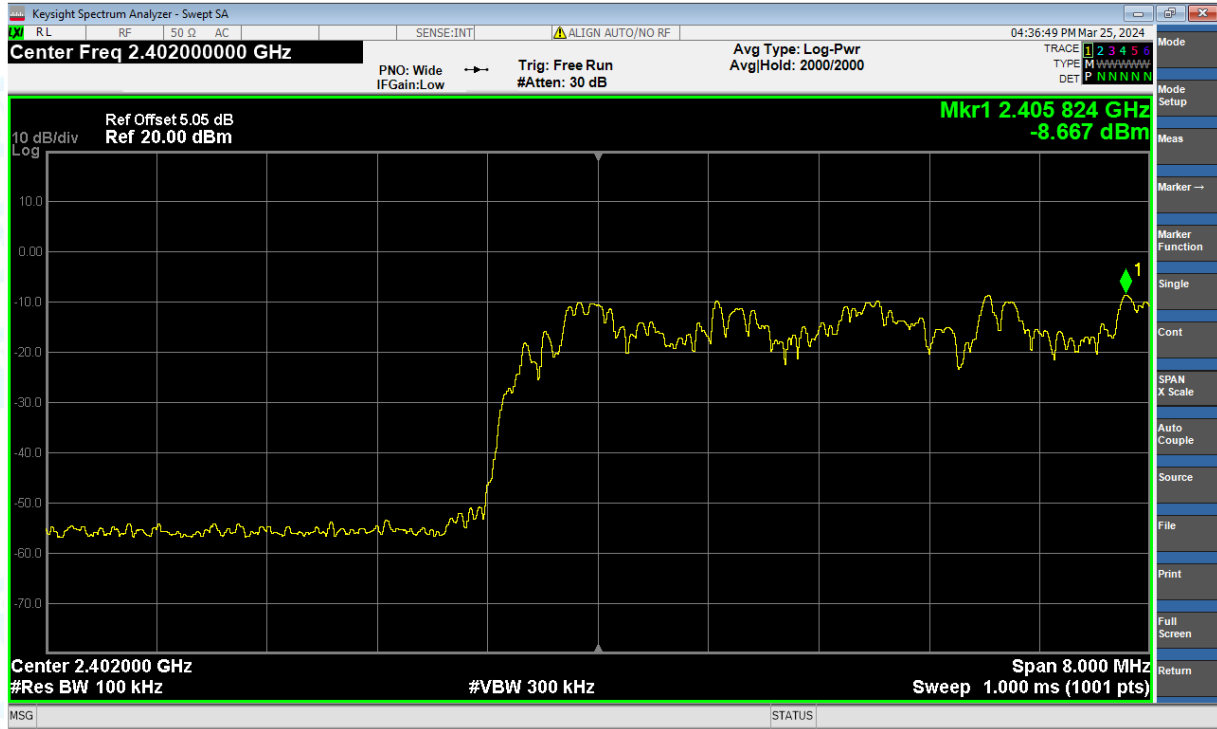
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



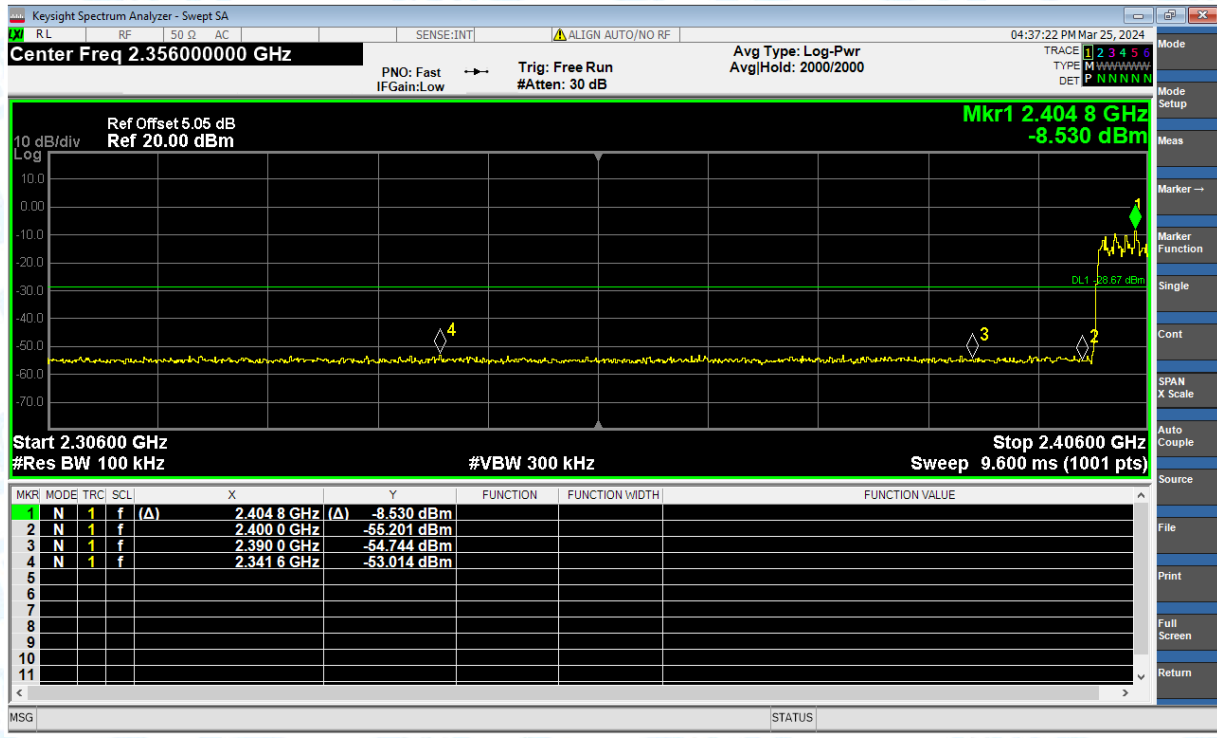
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



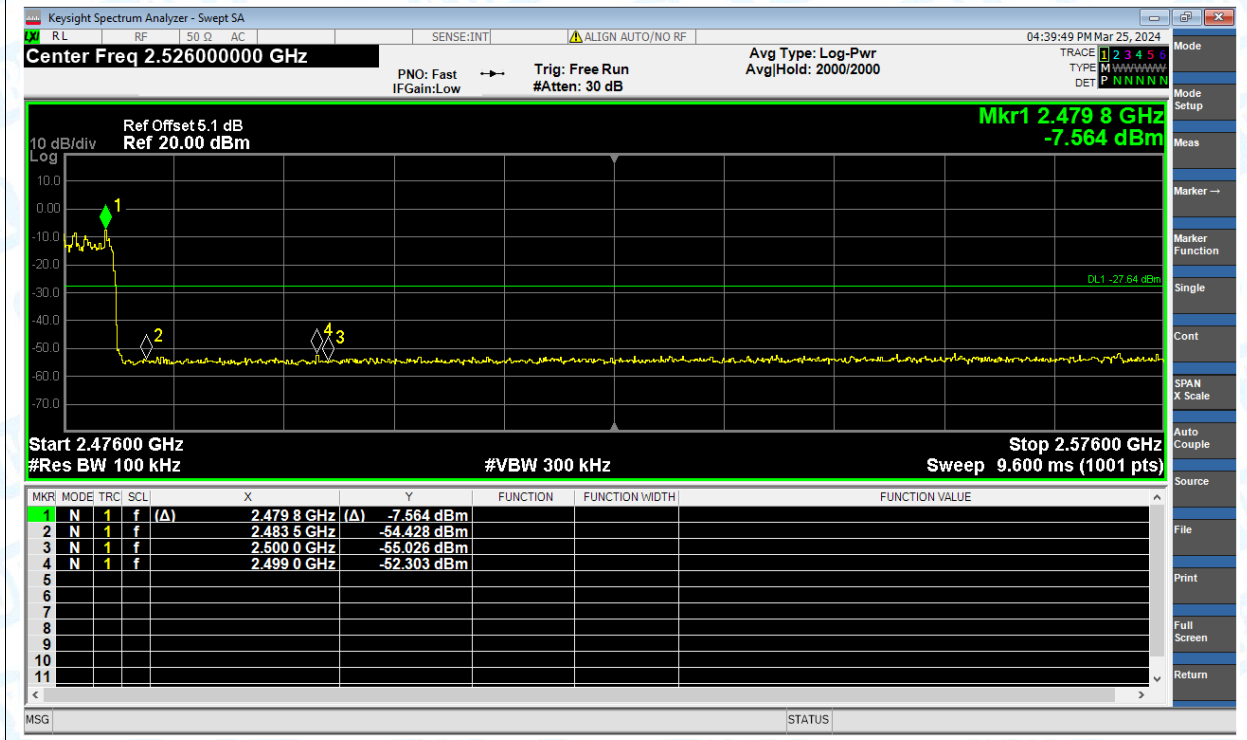
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



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

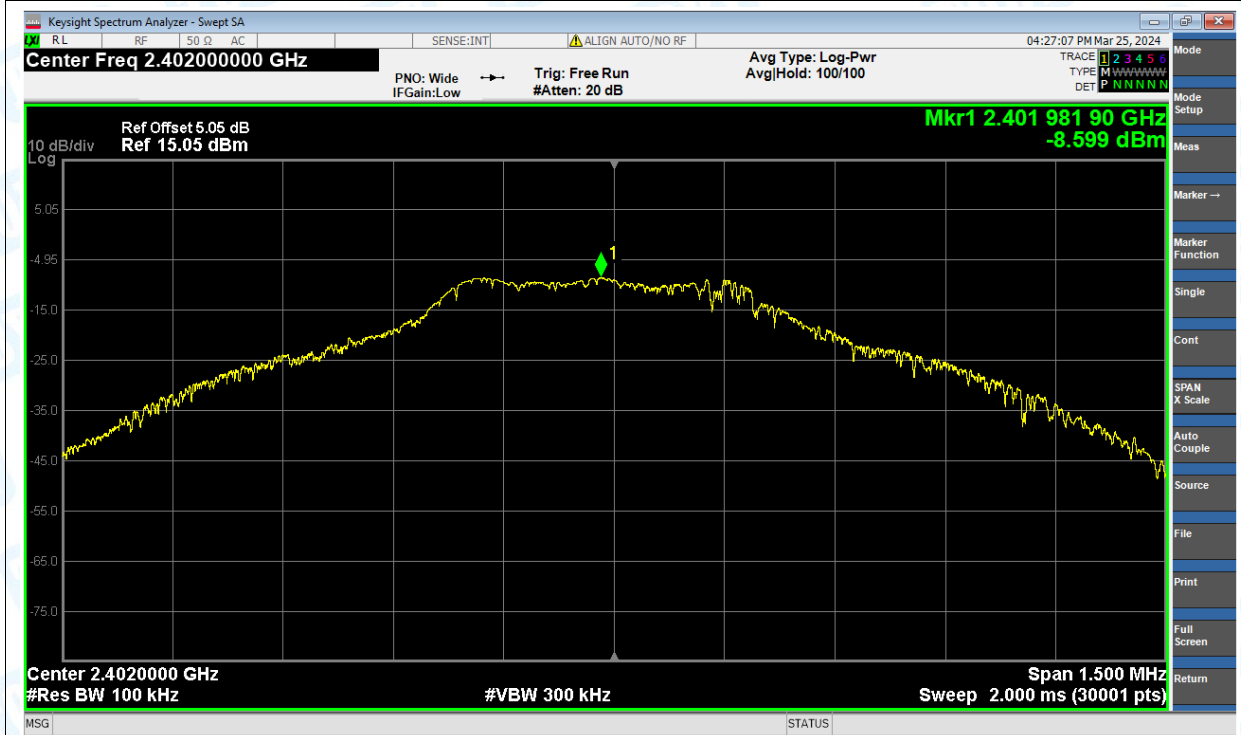


7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-40.24	-20	Pass
NVNT	1-DH1	2441	Ant1	-41.83	-20	Pass
NVNT	1-DH1	2480	Ant1	-41.97	-20	Pass
NVNT	2-DH1	2402	Ant1	-40.30	-20	Pass
NVNT	2-DH1	2441	Ant1	-40.74	-20	Pass
NVNT	2-DH1	2480	Ant1	-41.50	-20	Pass

Test Graphs

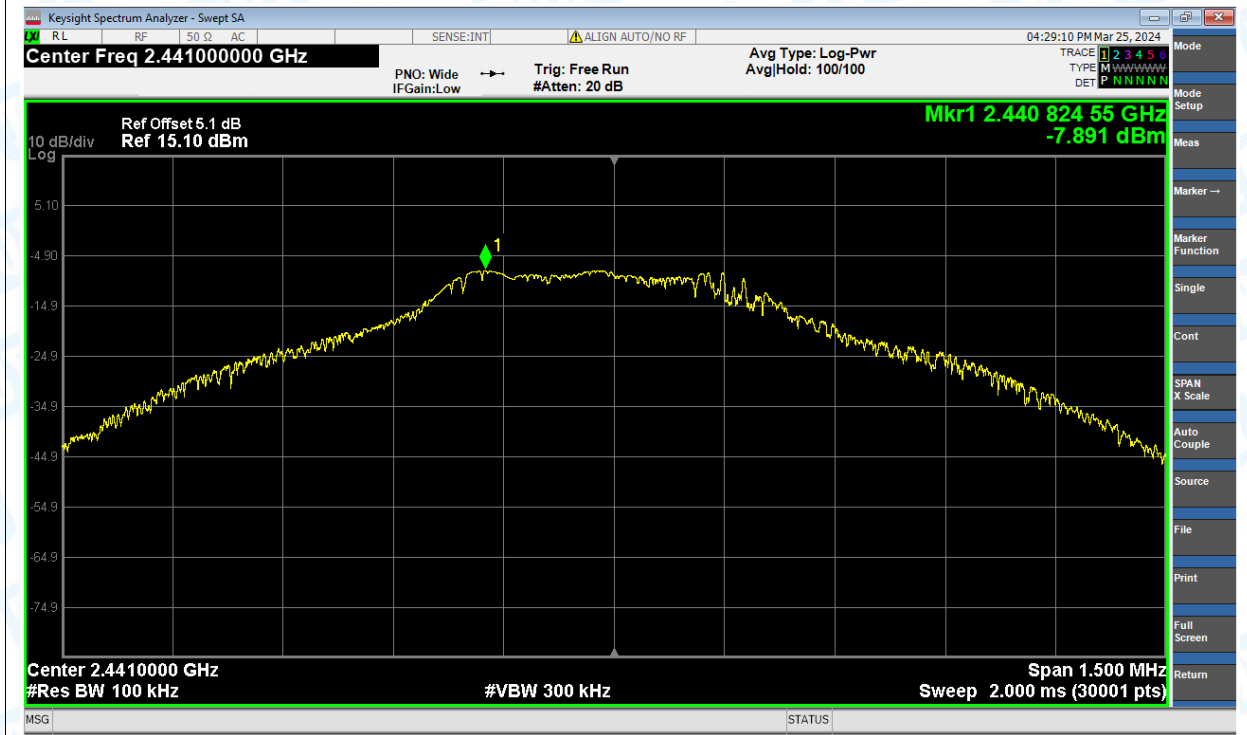
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



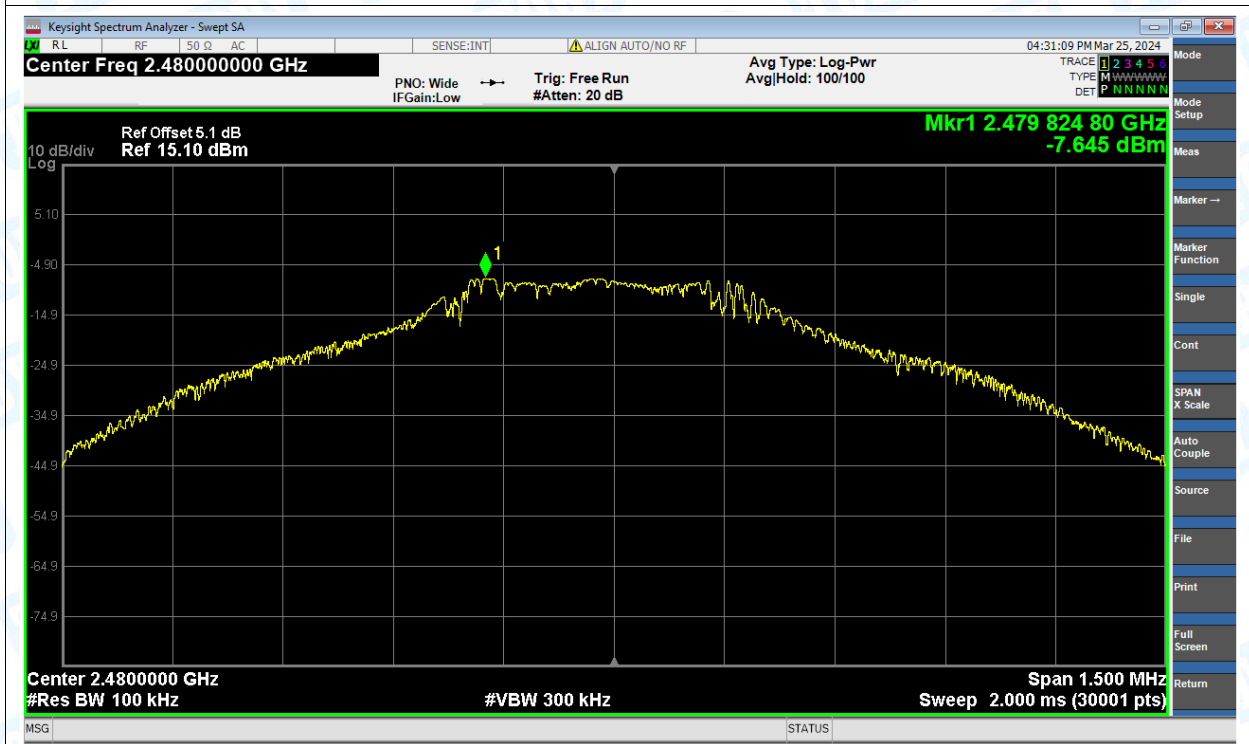
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



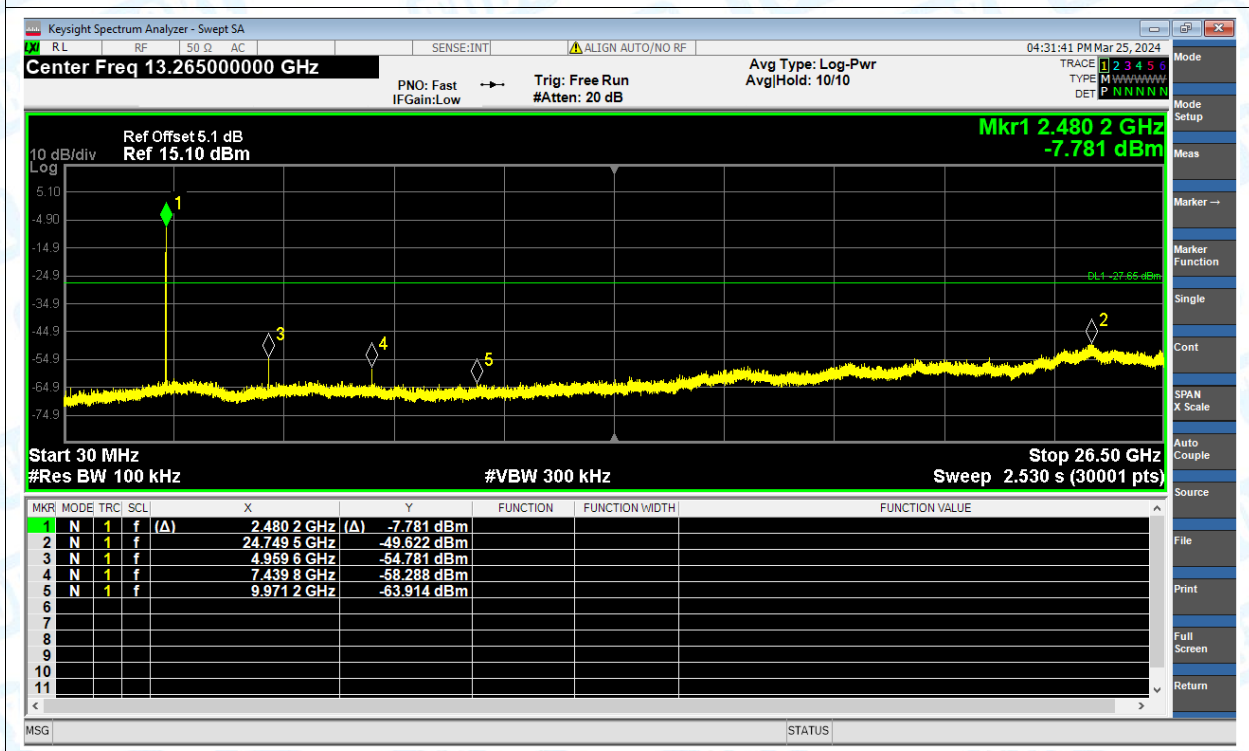
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



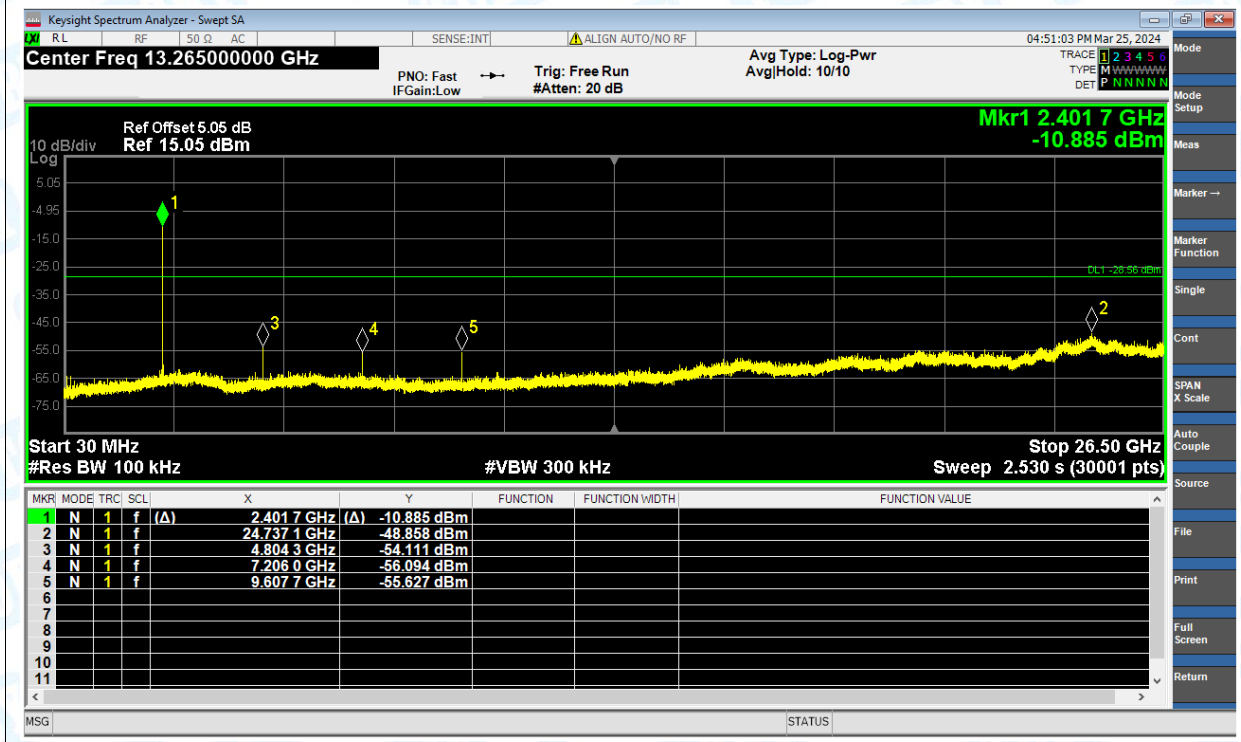
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



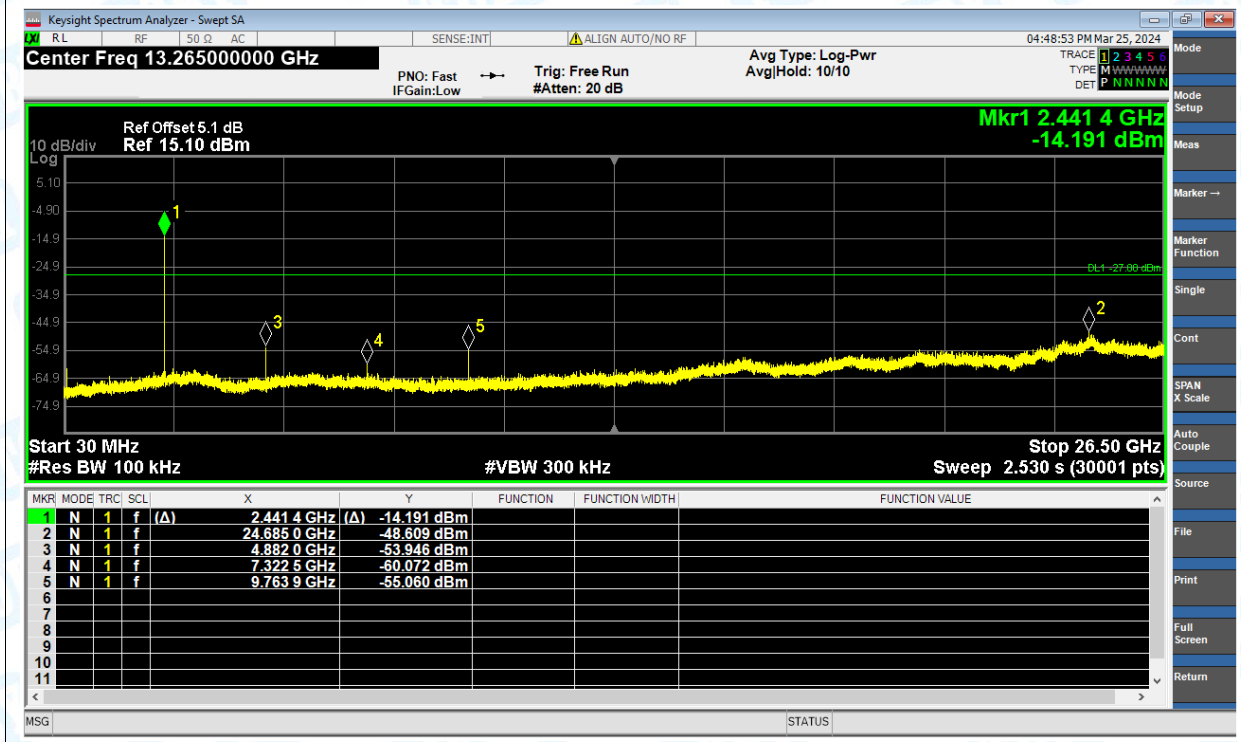
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



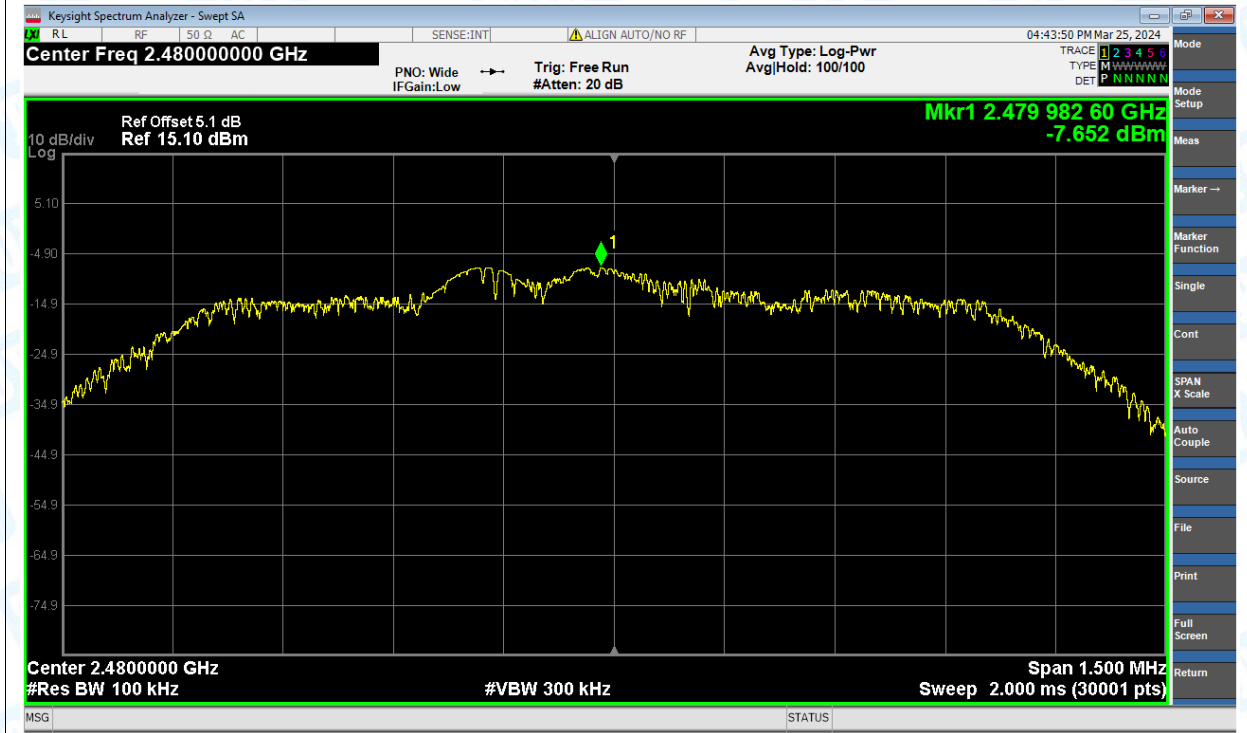
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



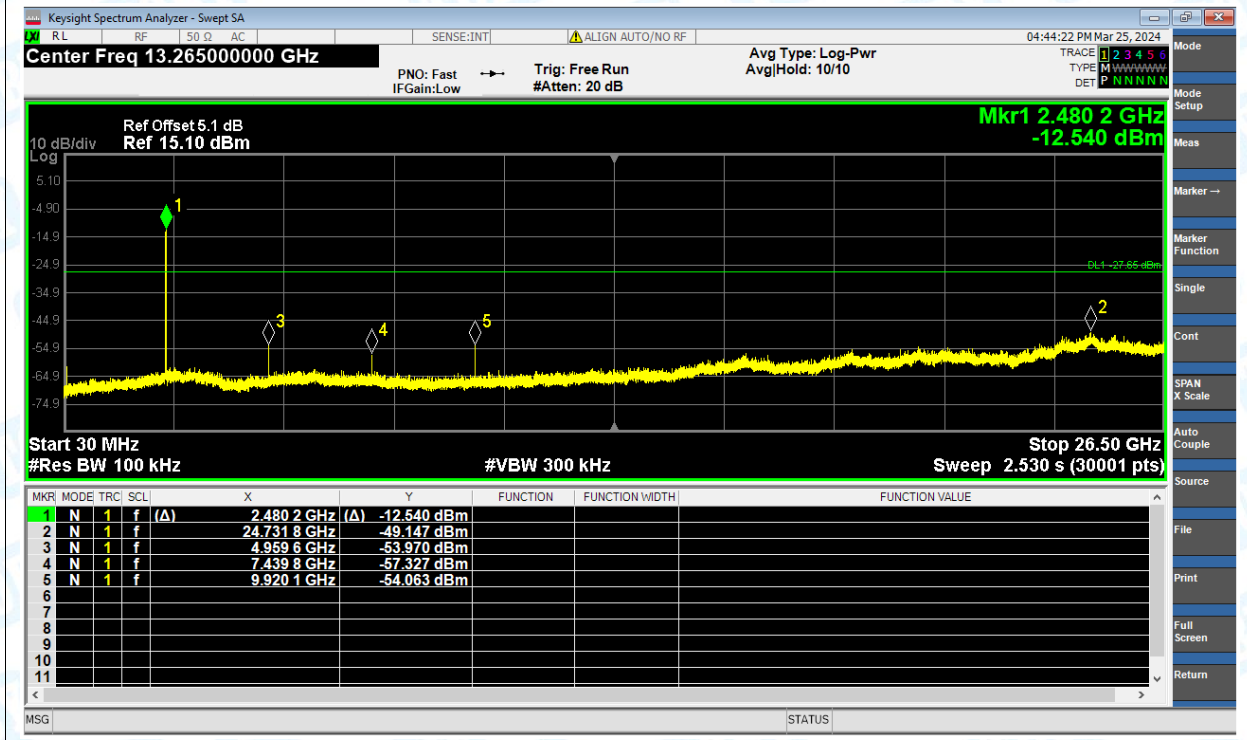
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

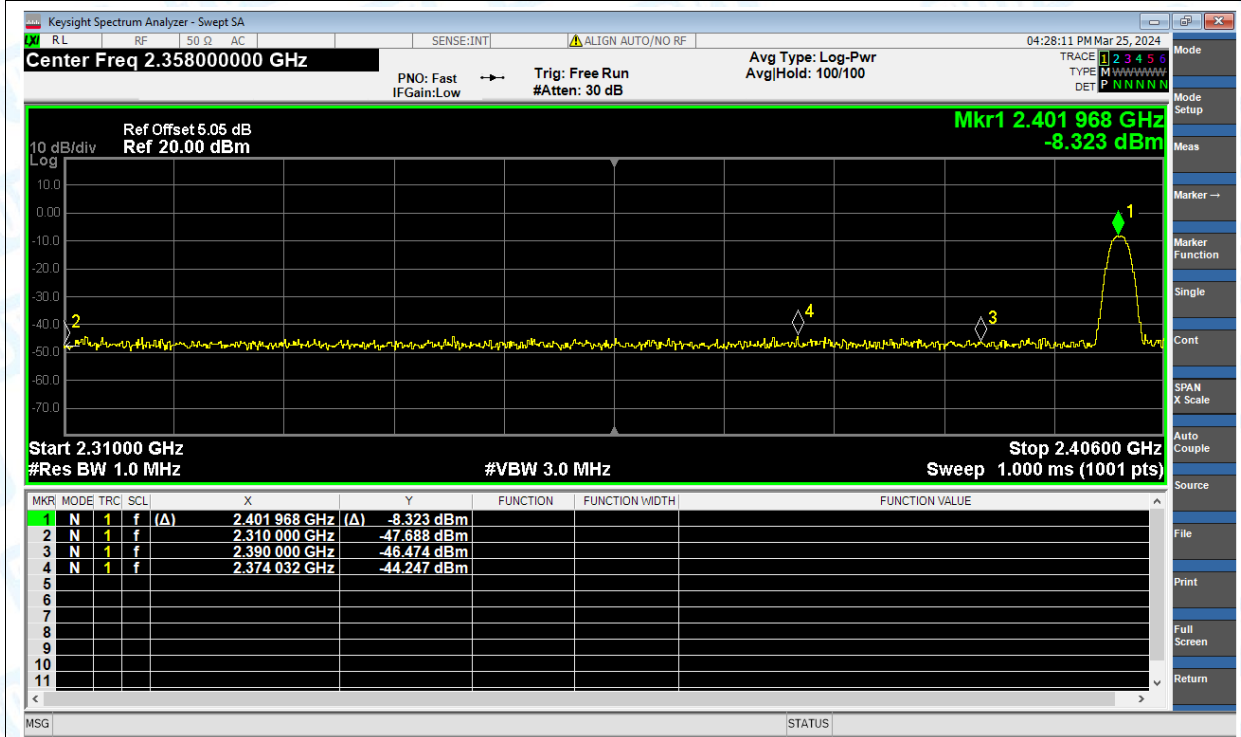


8. Restrict Band

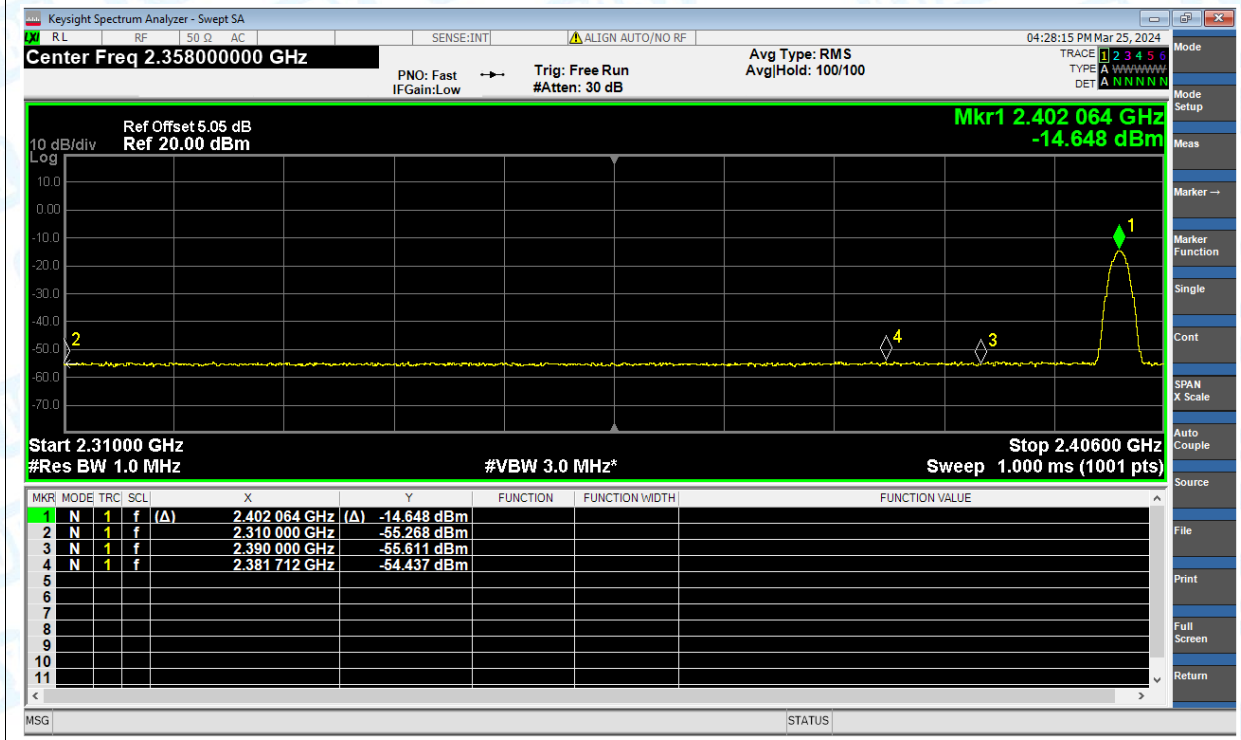
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.69	2.67	-	50.24	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.27	2.67	5.06	47.72	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2374.032	-44.25	2.67	-	53.68	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2381.712	-54.44	2.67	5.06	48.55	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.47	2.67	-	51.46	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.61	2.67	5.06	47.38	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-47.71	2.67	-	50.22	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.01	2.67	5.17	48.09	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2497.36	-43.45	2.67	-	54.48	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2495.752	-54.06	2.67	5.17	49.04	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-46.31	2.67	-	51.62	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.08	2.67	5.17	48.02	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-47.11	2.67	-	50.82	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-54.94	2.67	5.06	48.05	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2387.664	-43.5	2.67	-	54.43	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2380.176	-54.36	2.67	5.06	48.63	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.68	2.67	-	52.25	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-54.92	2.67	5.06	48.07	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.62	2.67	-	51.31	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.97	2.67	4.95	47.91	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2494.384	-44.25	2.67	-	53.68	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2491.816	-54.02	2.67	4.95	48.86	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-47.16	2.67	-	50.77	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.25	2.67	4.95	47.63	Average	54	Pass

Test Graphs

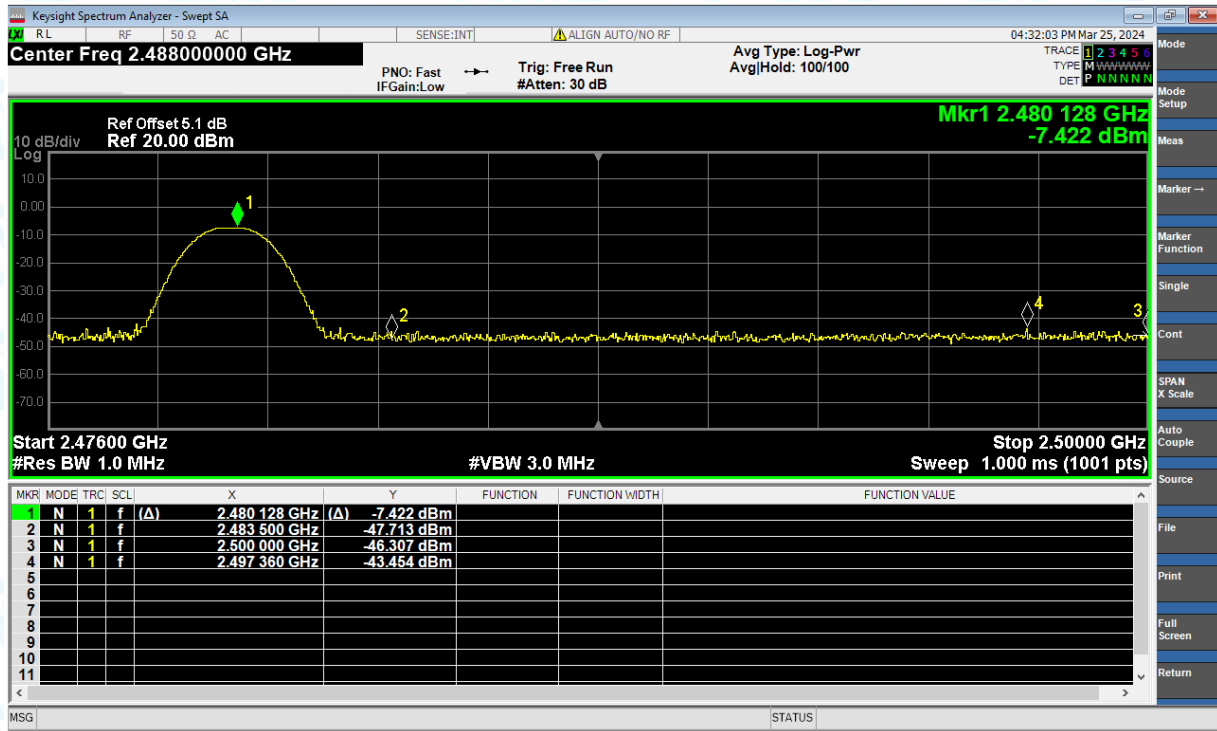
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



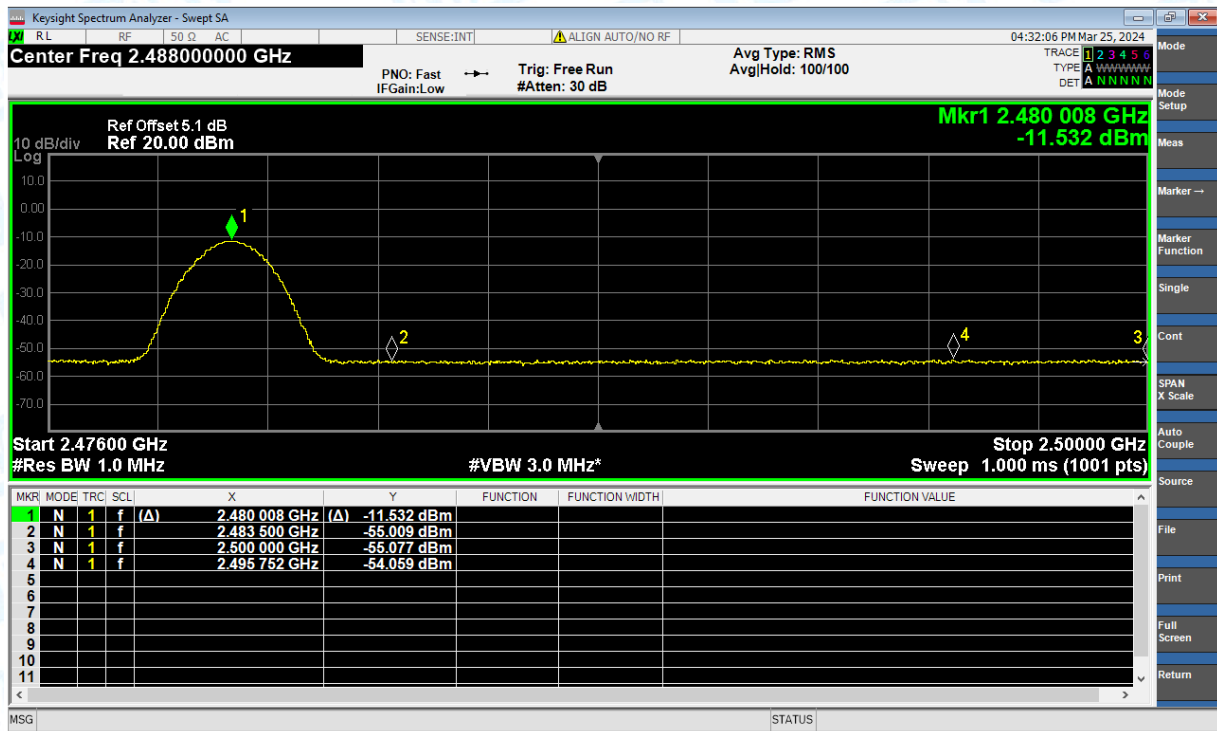
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



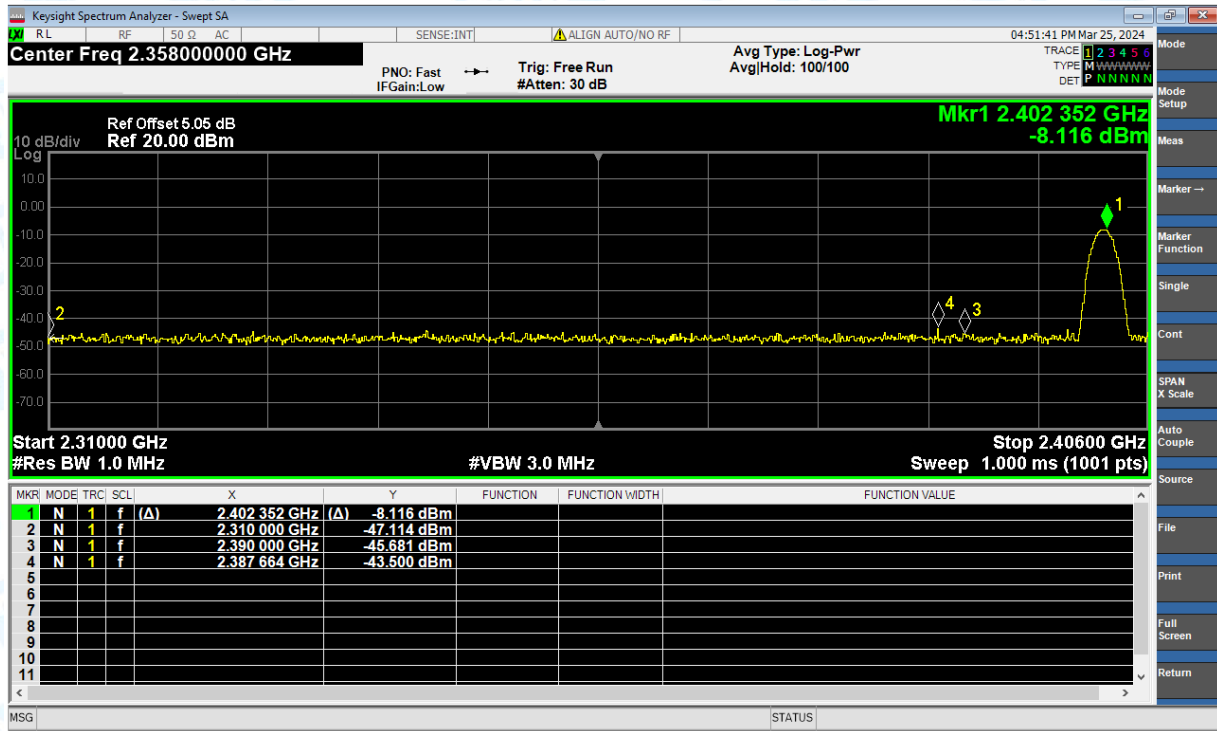
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



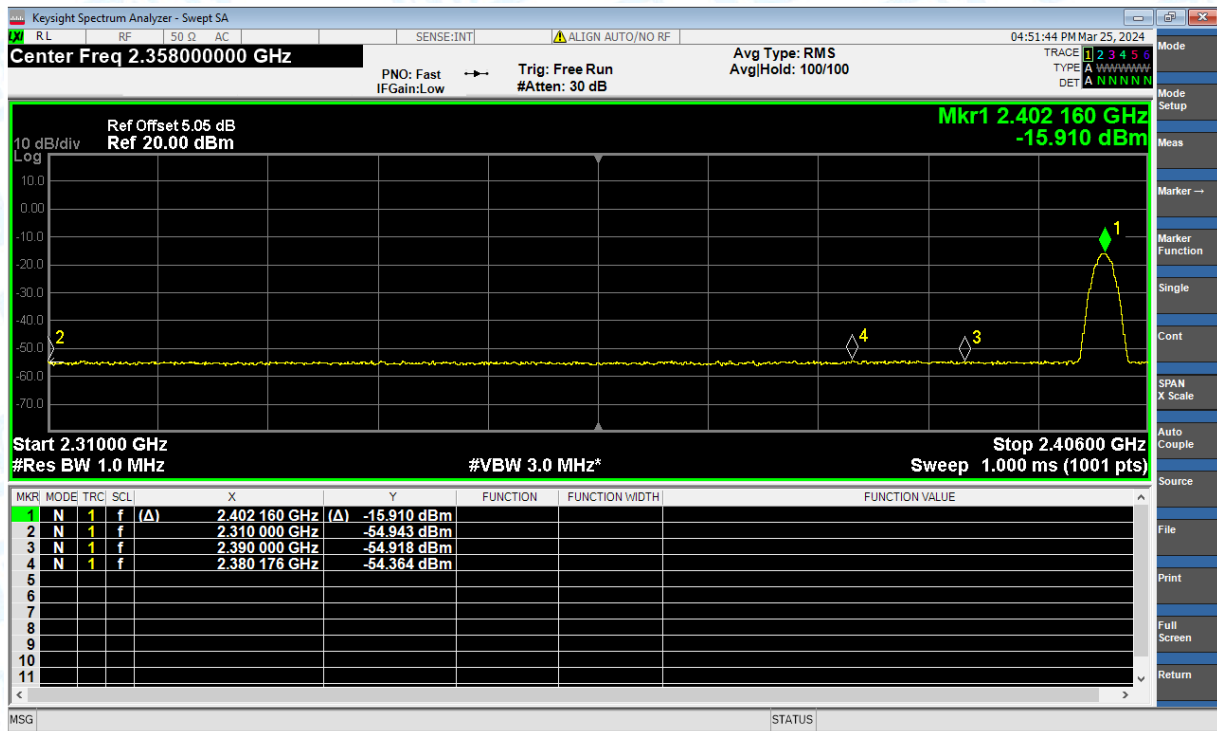
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



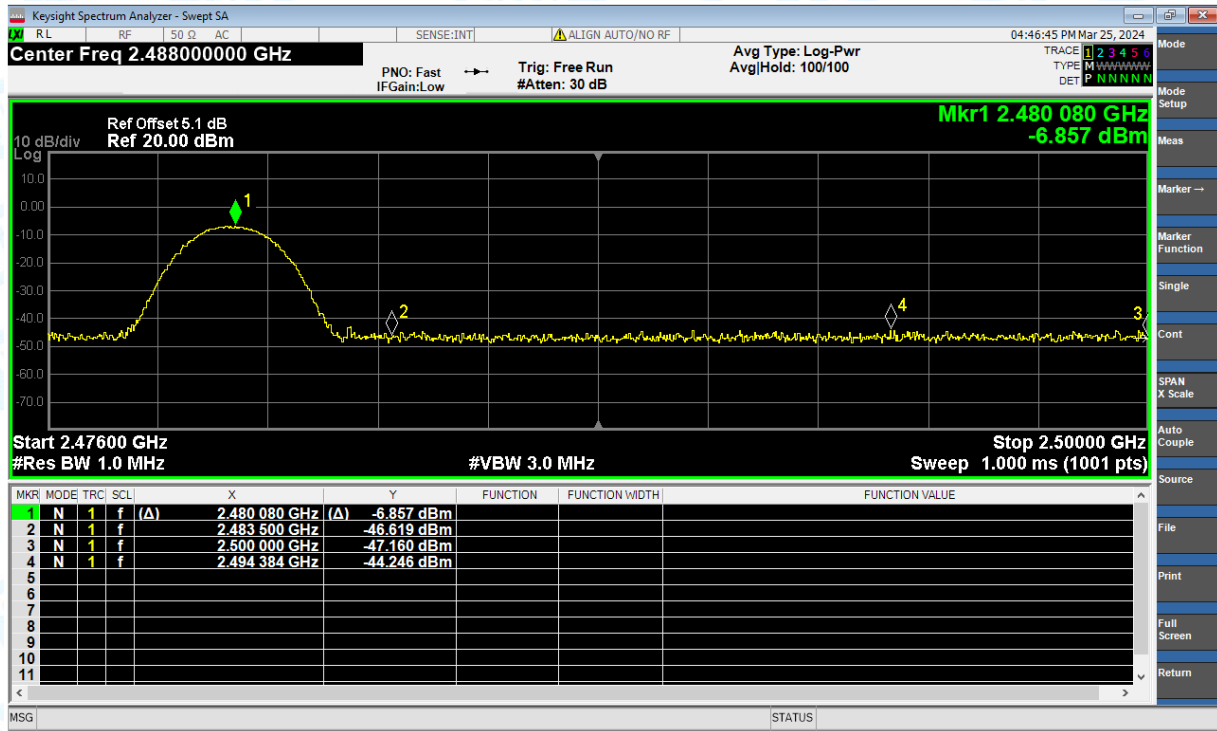
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



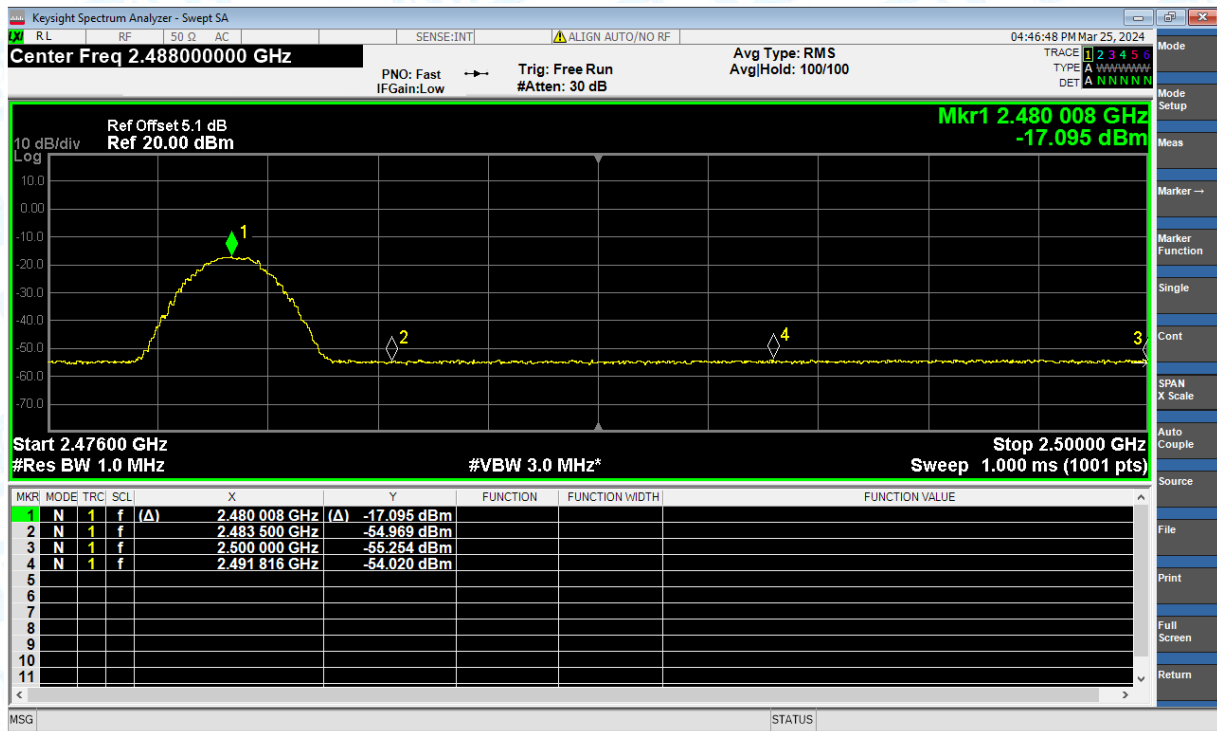
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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



9. Carrier Frequencies Separation

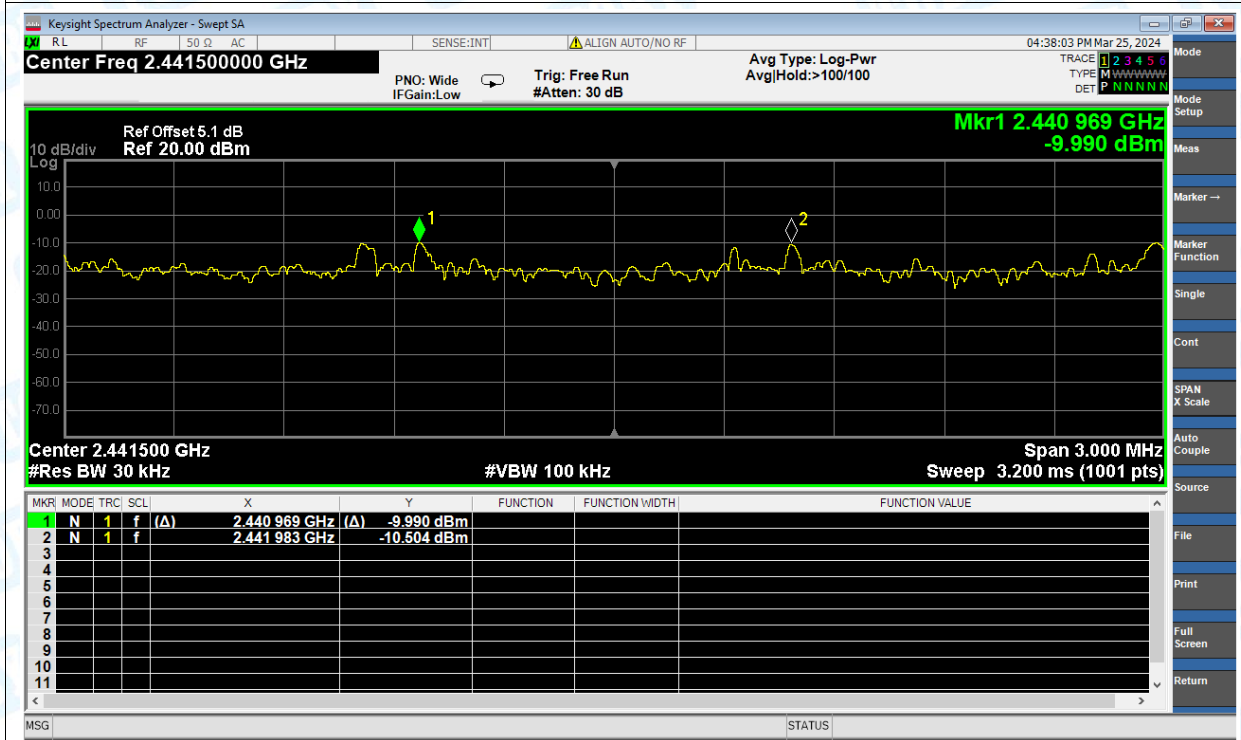
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.819	2441.872	1.053	0.580	Pass
NVNT	2-DH1	Ant1	2440.969	2441.983	1.014	0.833	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

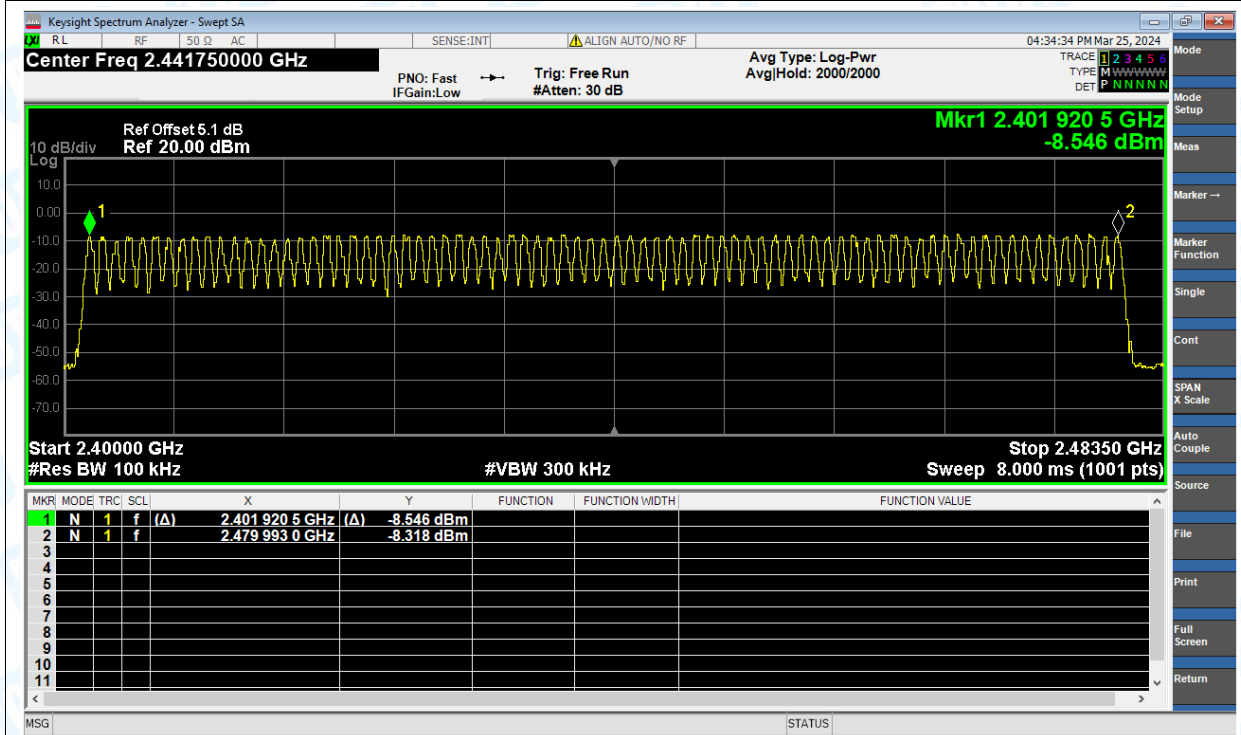


10. Number of Hopping Channel

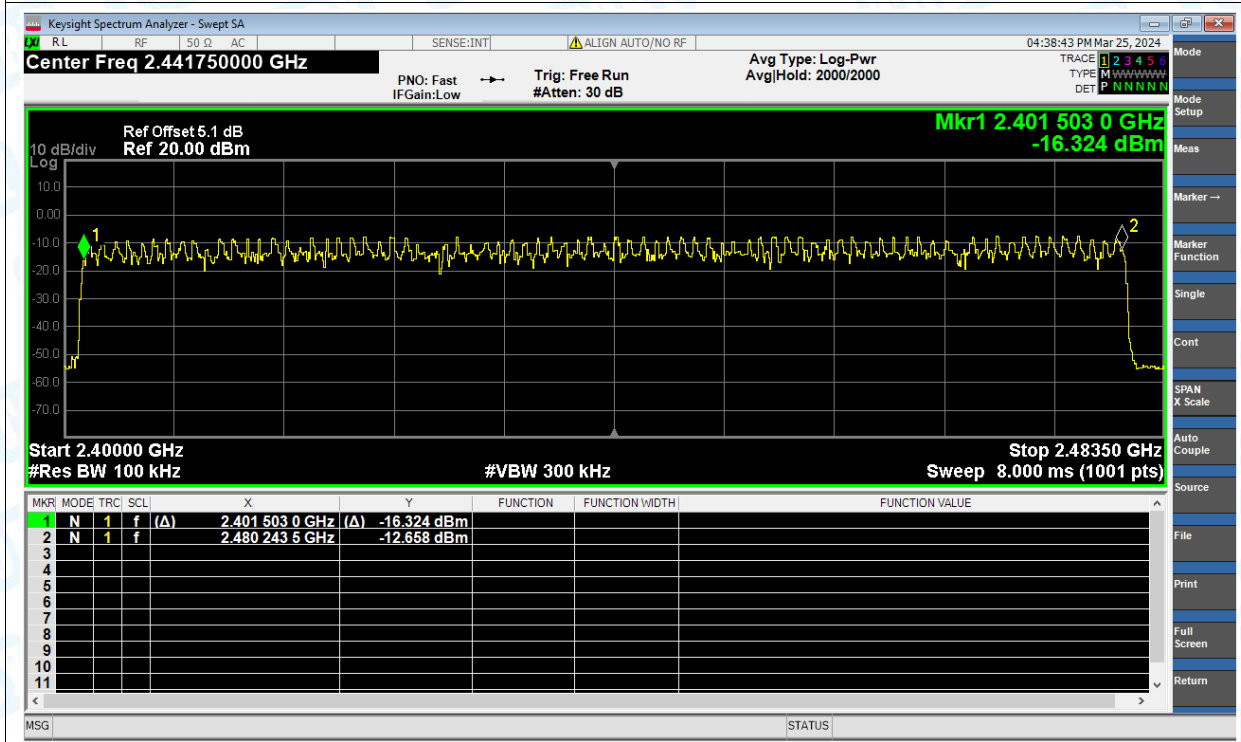
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

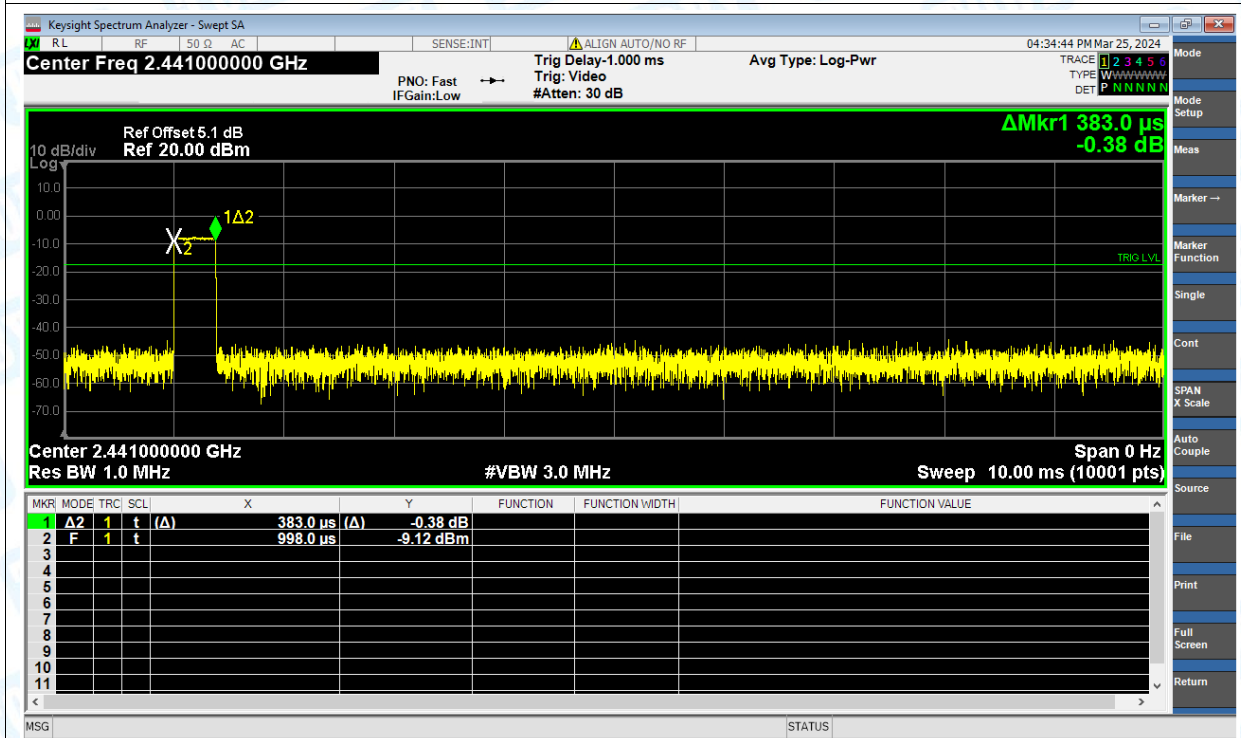


11. Dwell Time

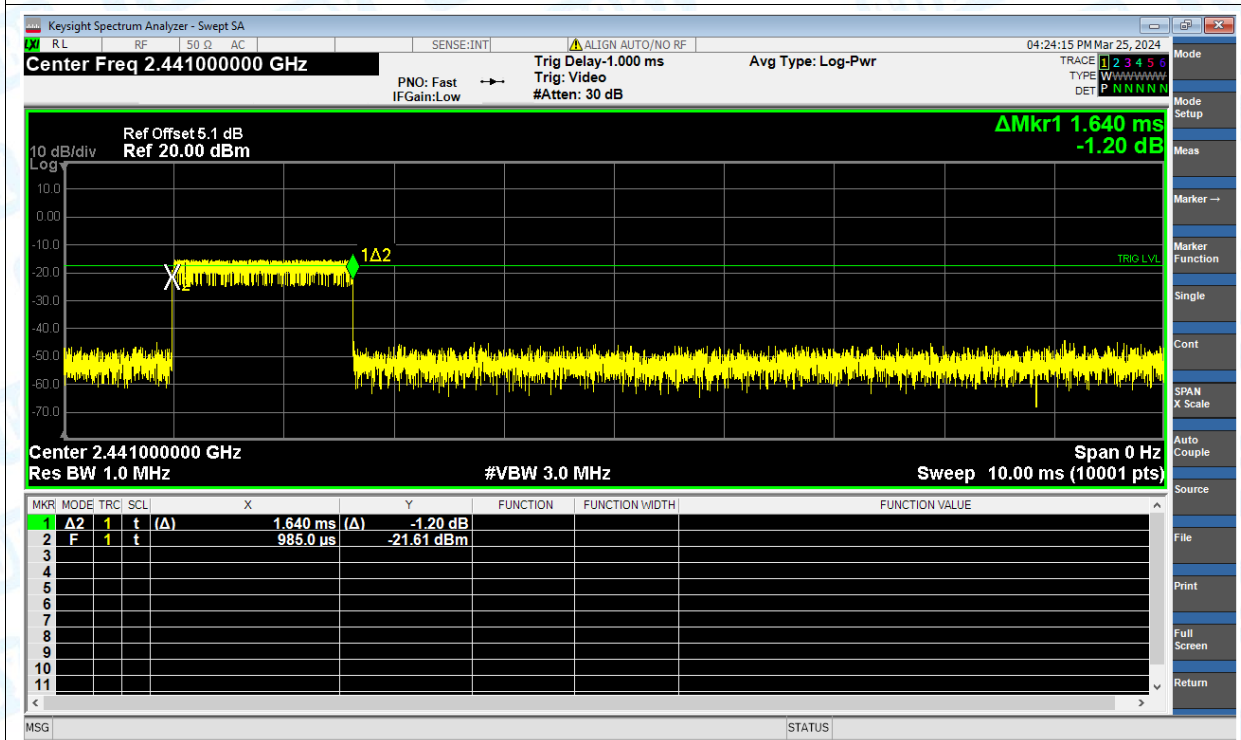
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.64	262.4	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.393	125.76	31600	400	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

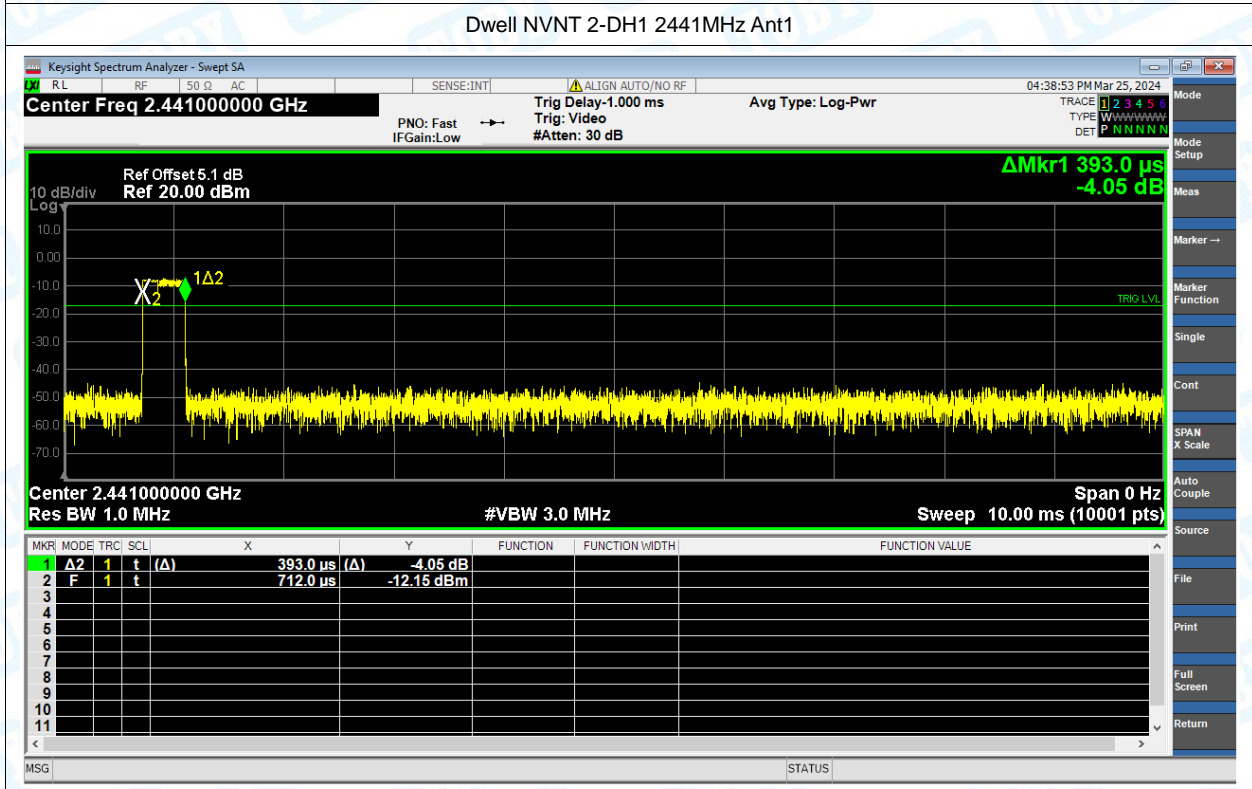
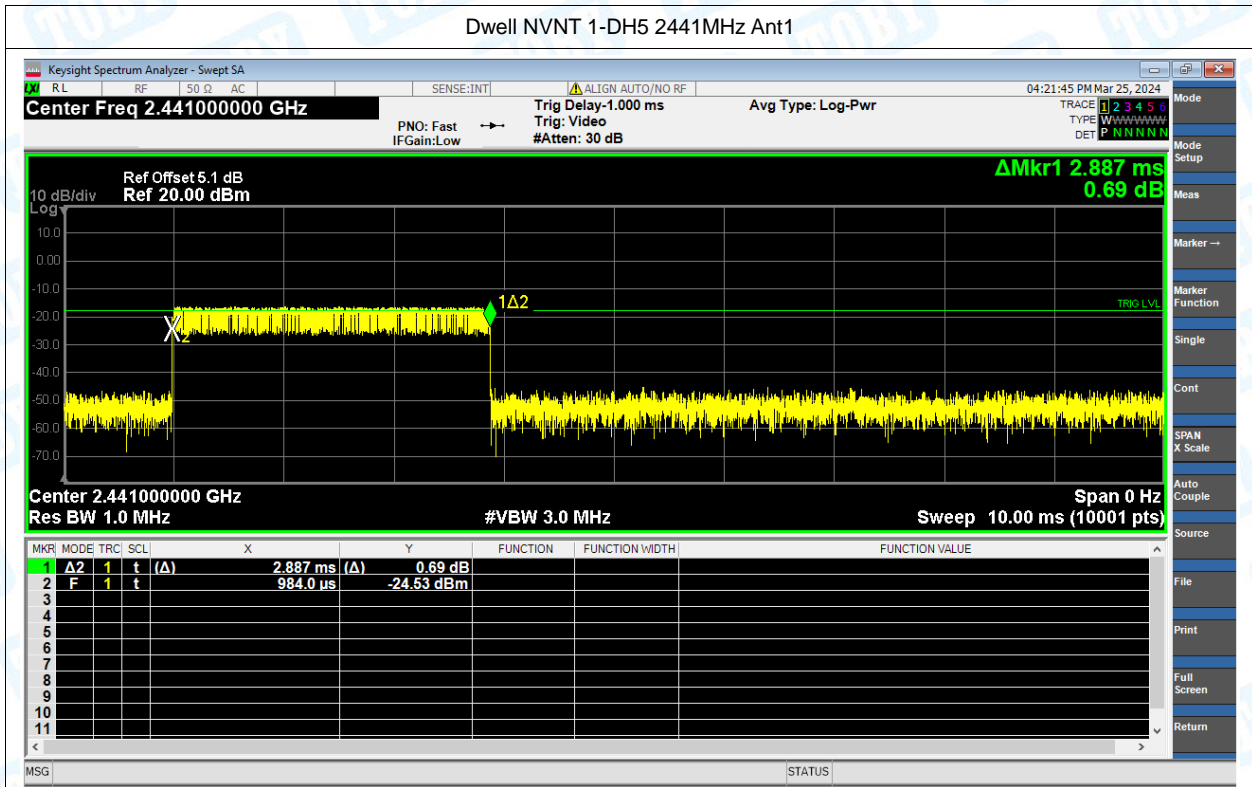
Test Graphs

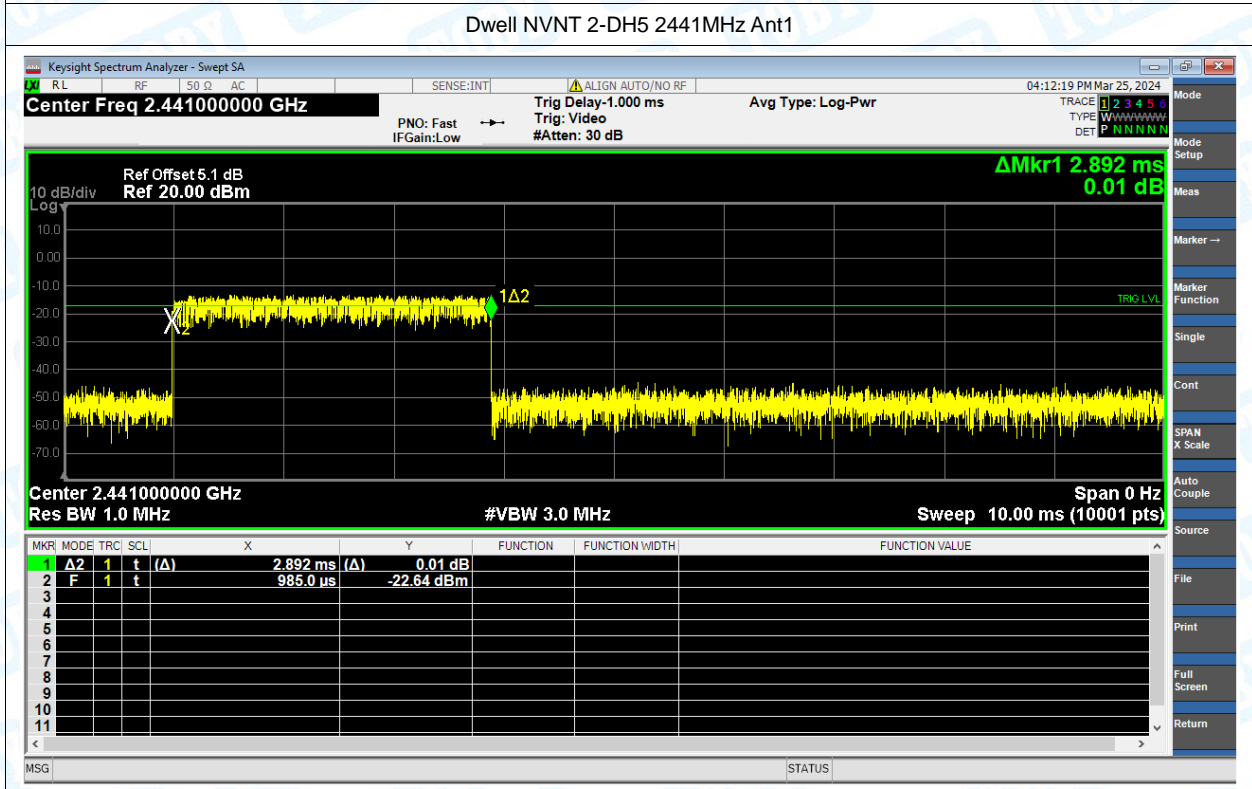
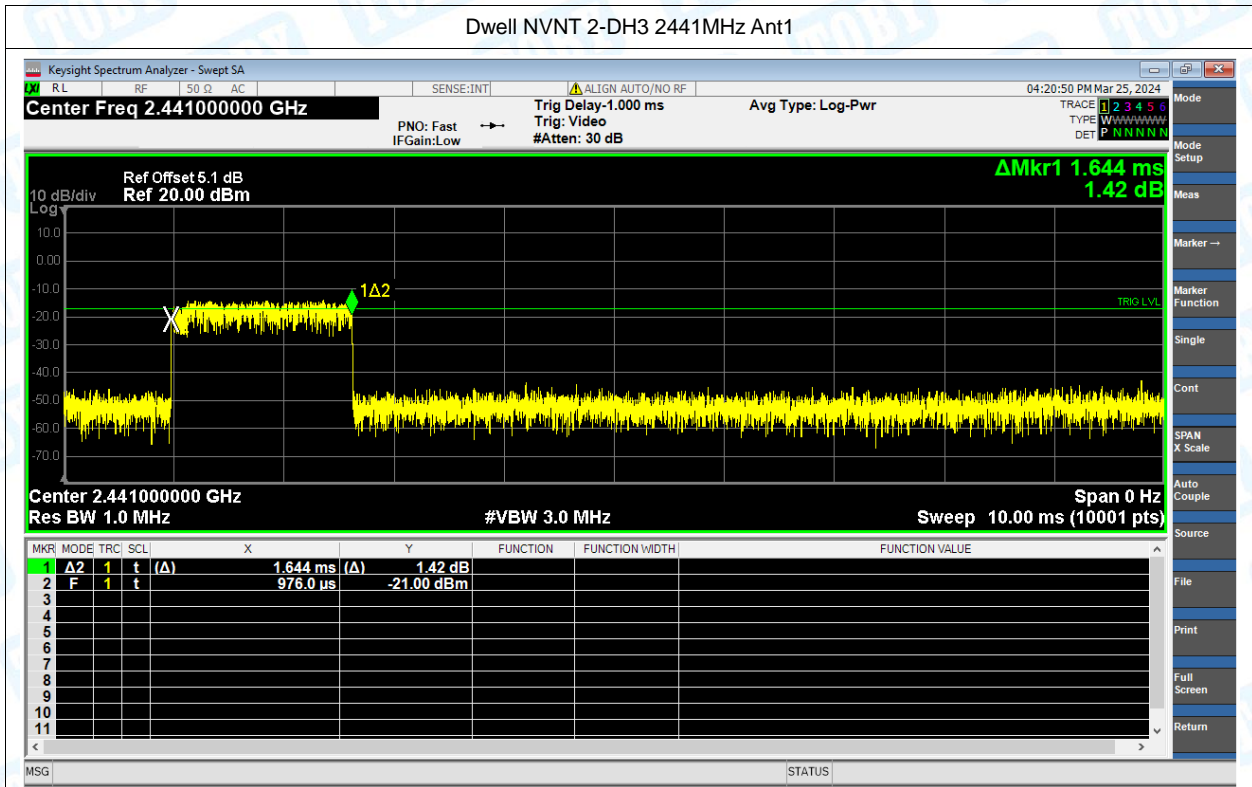
Dwell NVNT 1-DH1 2441MHz Ant1



Dwell NVNT 1-DH3 2441MHz Ant1







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