

# RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
<b>Product Name:</b>	Wireless Headphone
<b>Test Model:</b>	picun NC60
<b>Sample ID:</b>	HC-C-202409-0145-02-01
Environmental Conditions	
<b>Temperature:</b>	25.3°C
<b>Relative Humidity:</b>	52.1%
<b>Test Voltage:</b>	DC 3.7V
<b>Test Engineer:</b>	Jolin Lee
Note: For a more detailed features description, please refer to the report TBR-C-202409-0145-4 The report only show the worst case data.	

## Contents

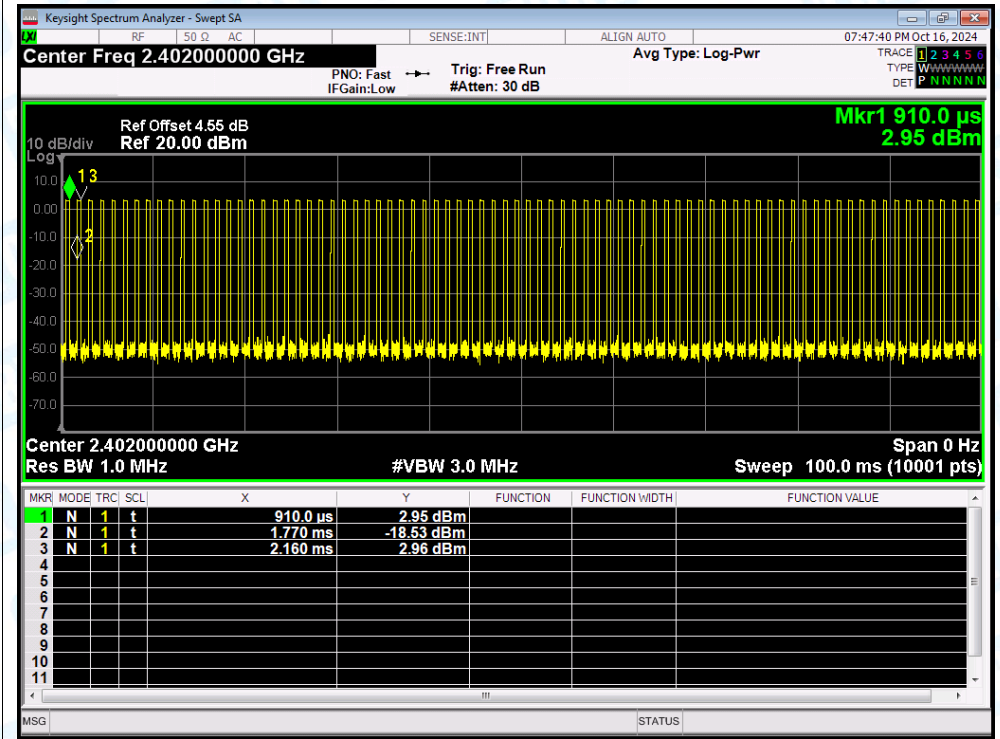
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## 1. Duty Cycle

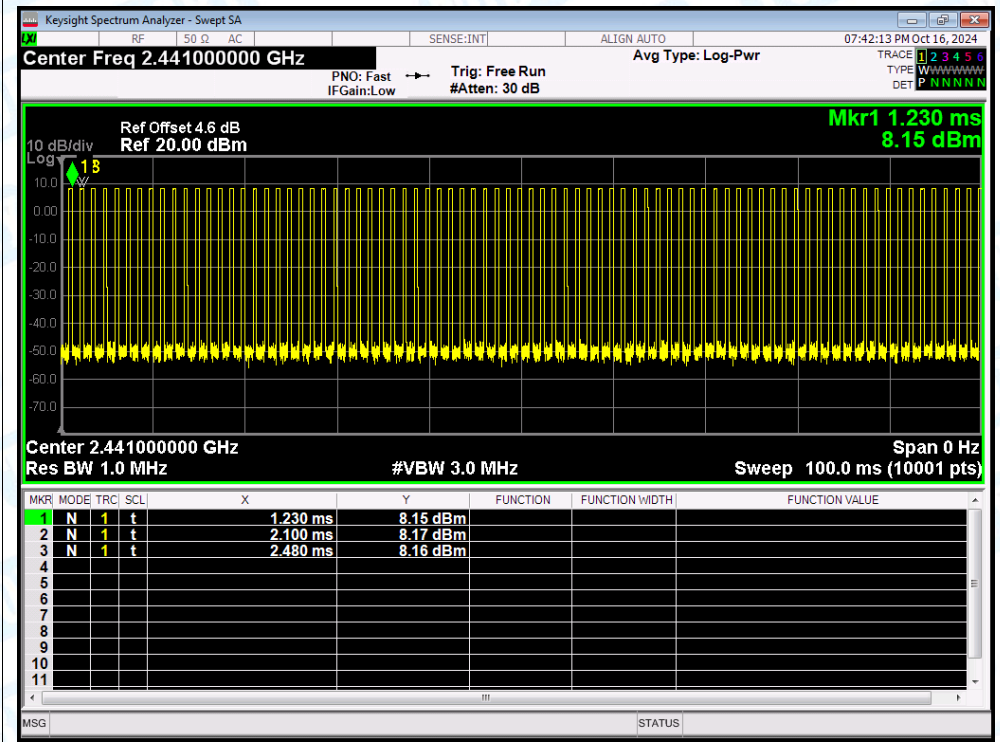
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56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

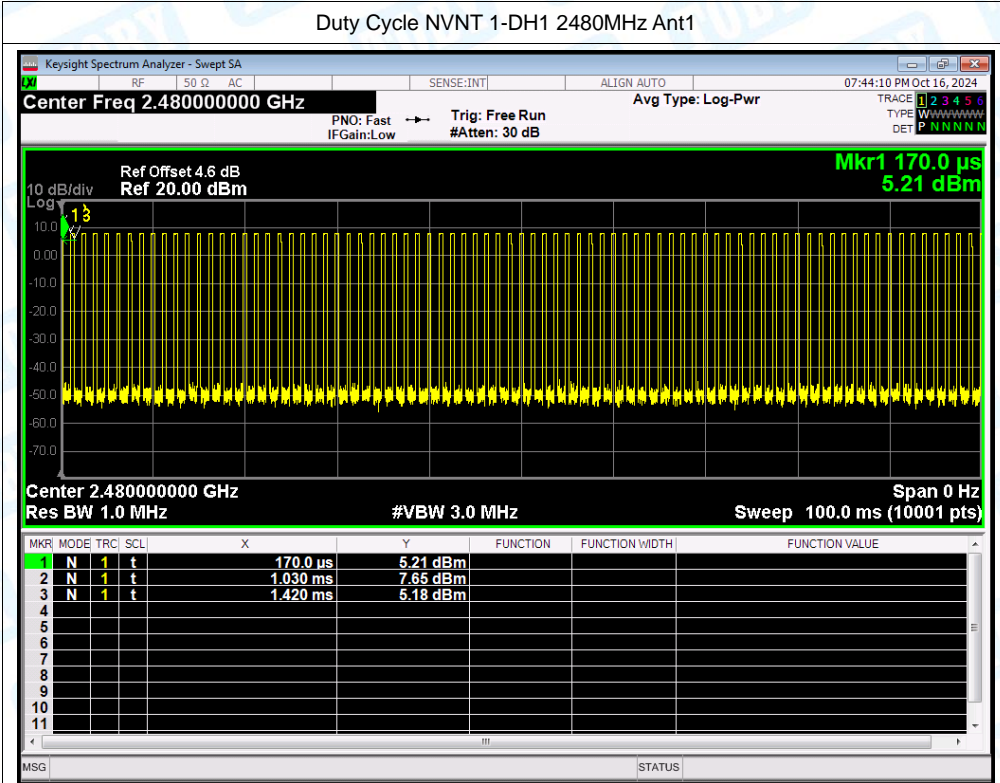
Duty Cycle NVNT 1-DH1 2402MHz Ant1



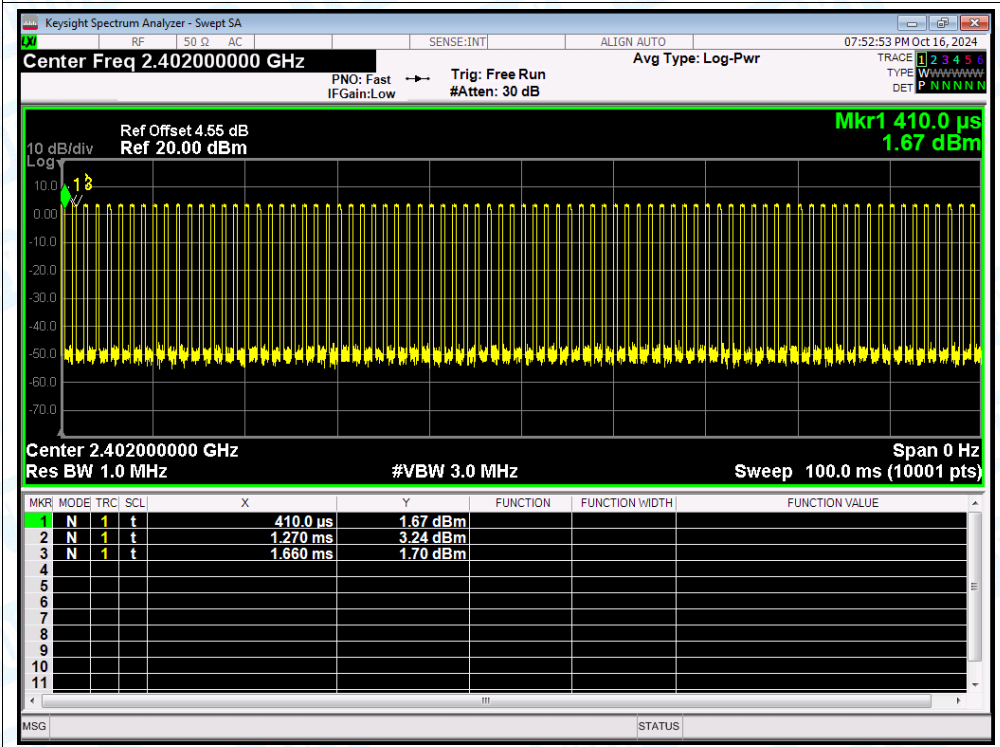
Duty Cycle NVNT 1-DH1 2441MHz Ant1



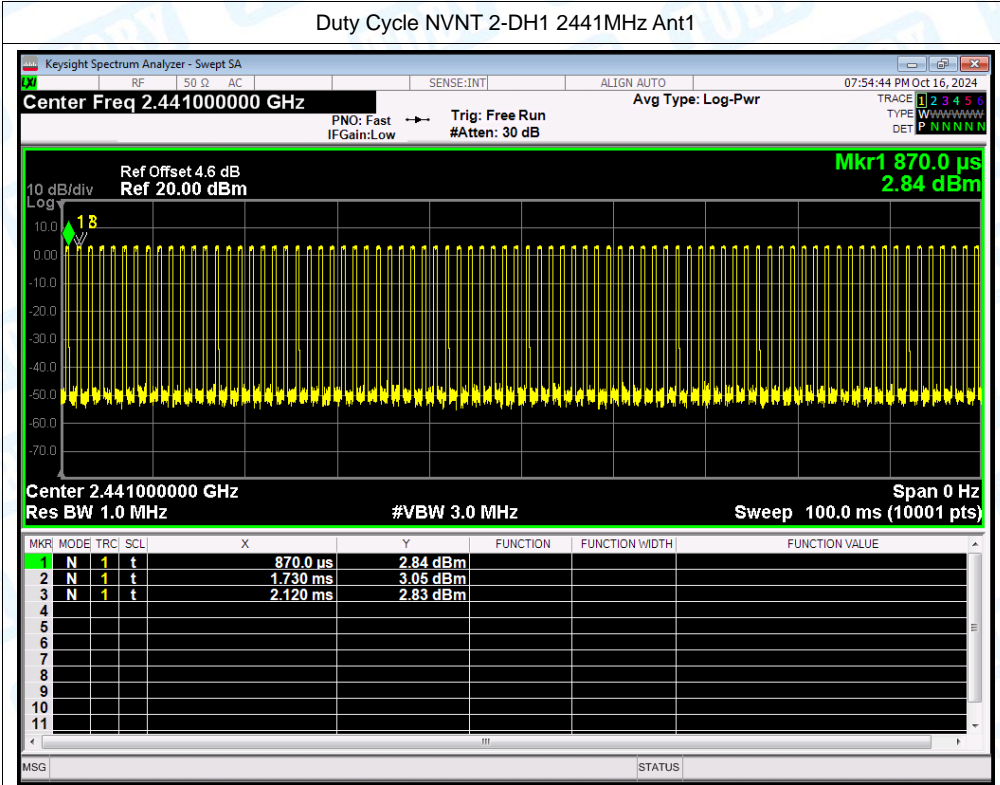
Duty Cycle NVNT 1-DH1 2480MHz Ant1



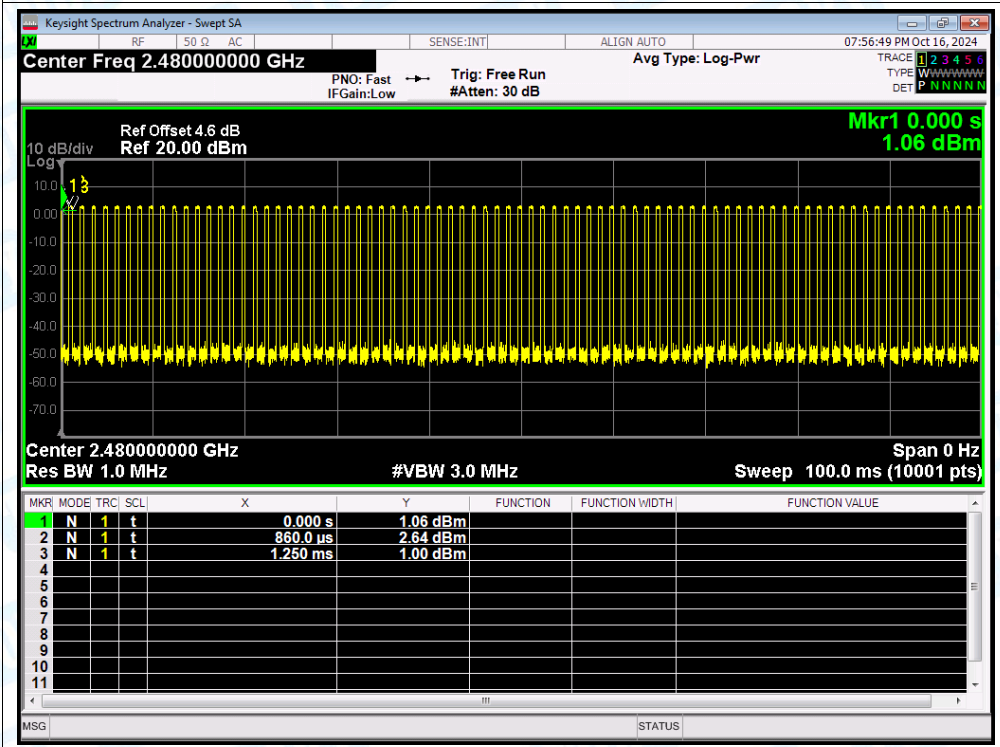
Duty Cycle NVNT 2-DH1 2402MHz Ant1



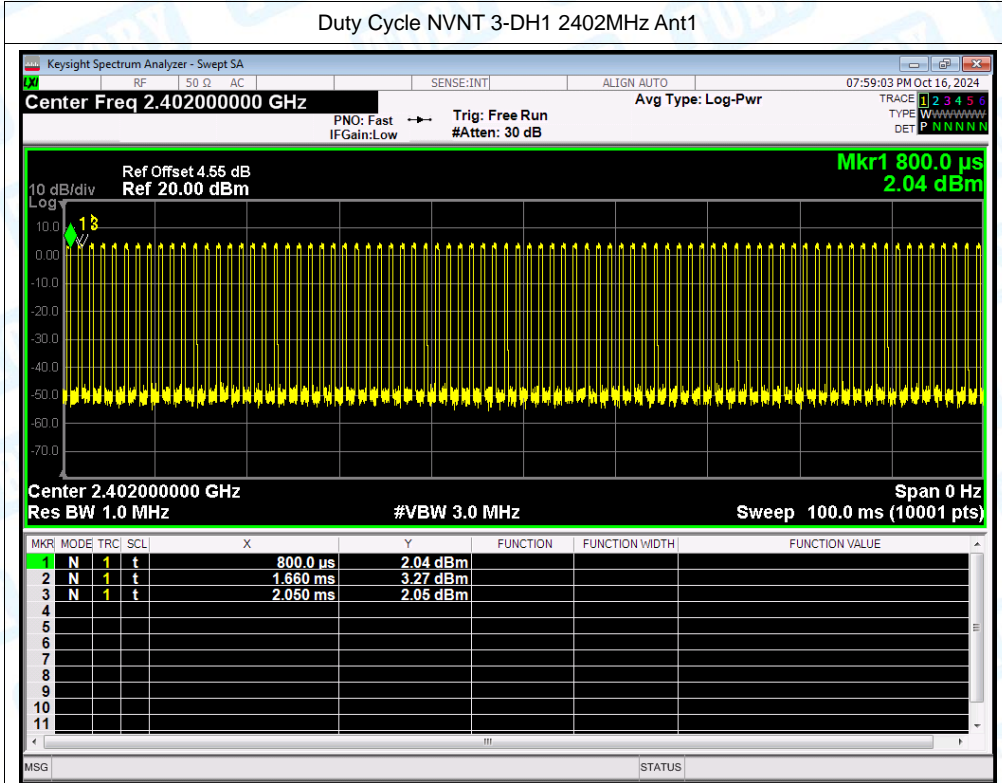
Duty Cycle NVNT 2-DH1 2441MHz Ant1



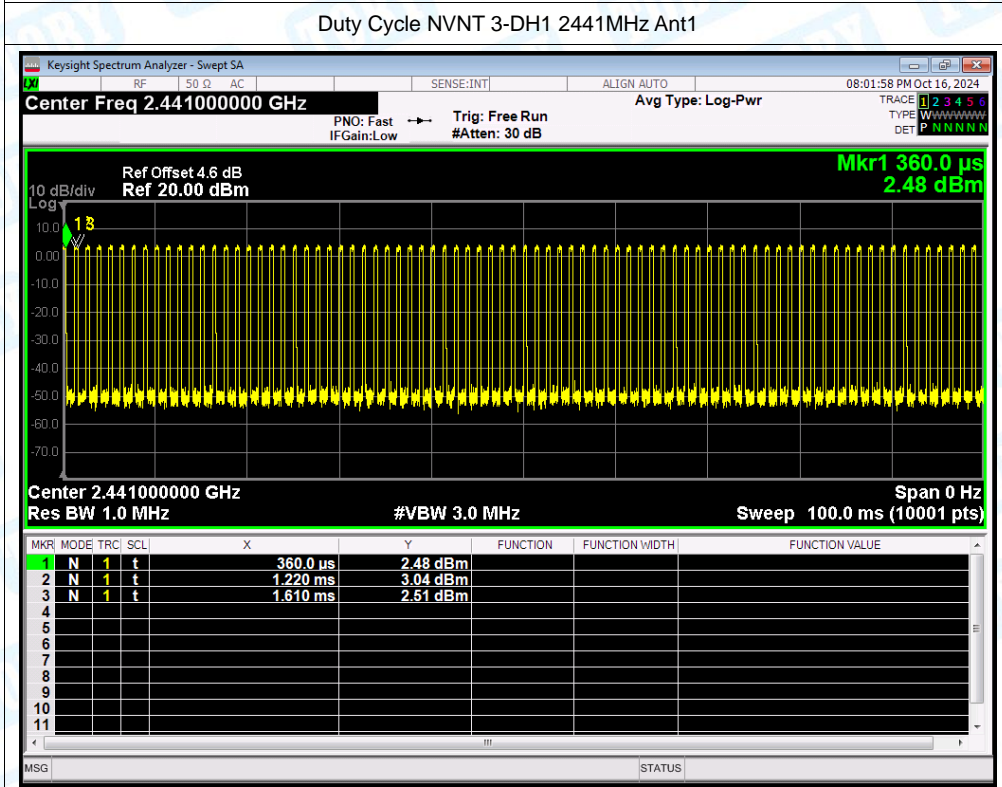
Duty Cycle NVNT 2-DH1 2480MHz Ant1

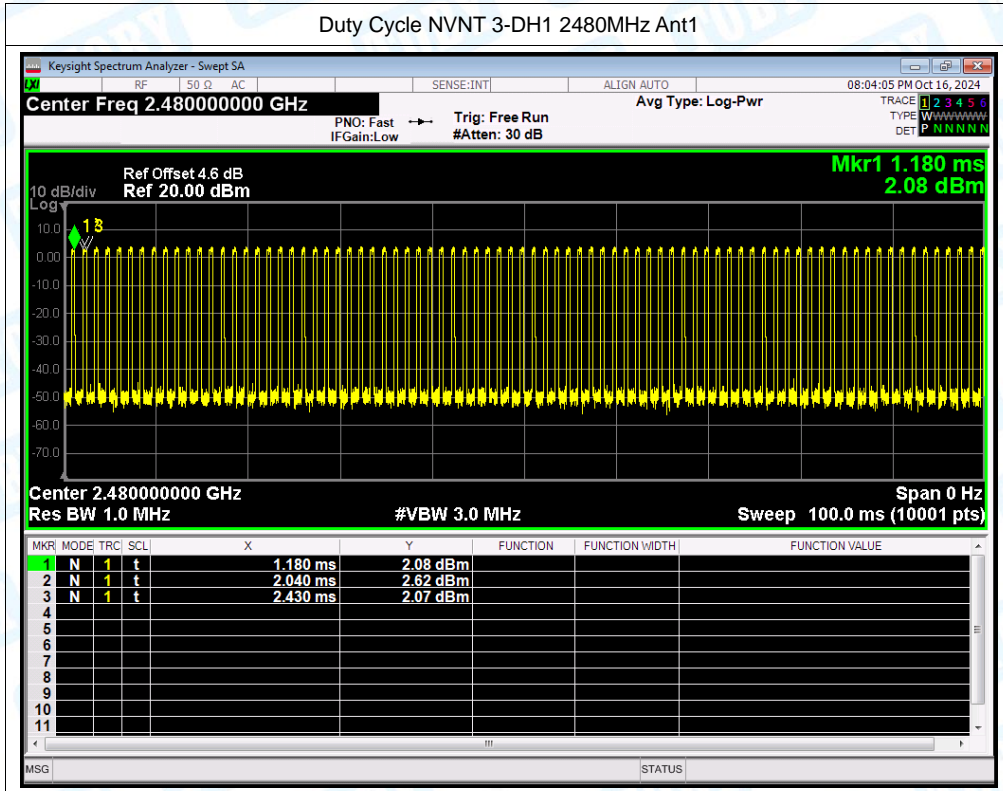


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





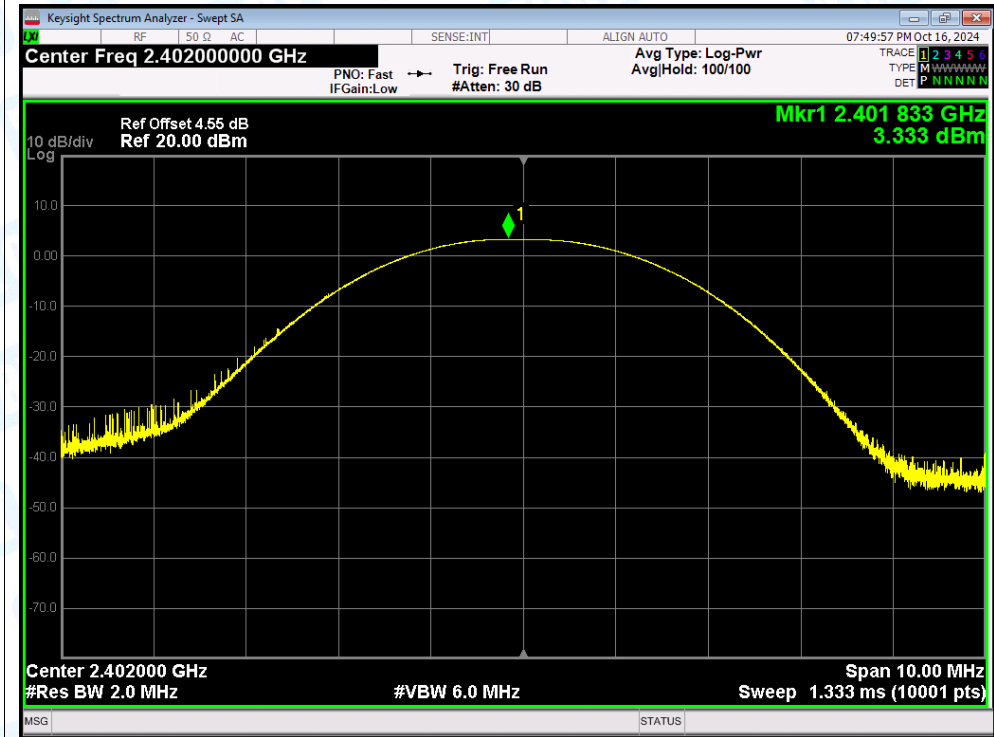


## 2. Maximum Conducted Output Power

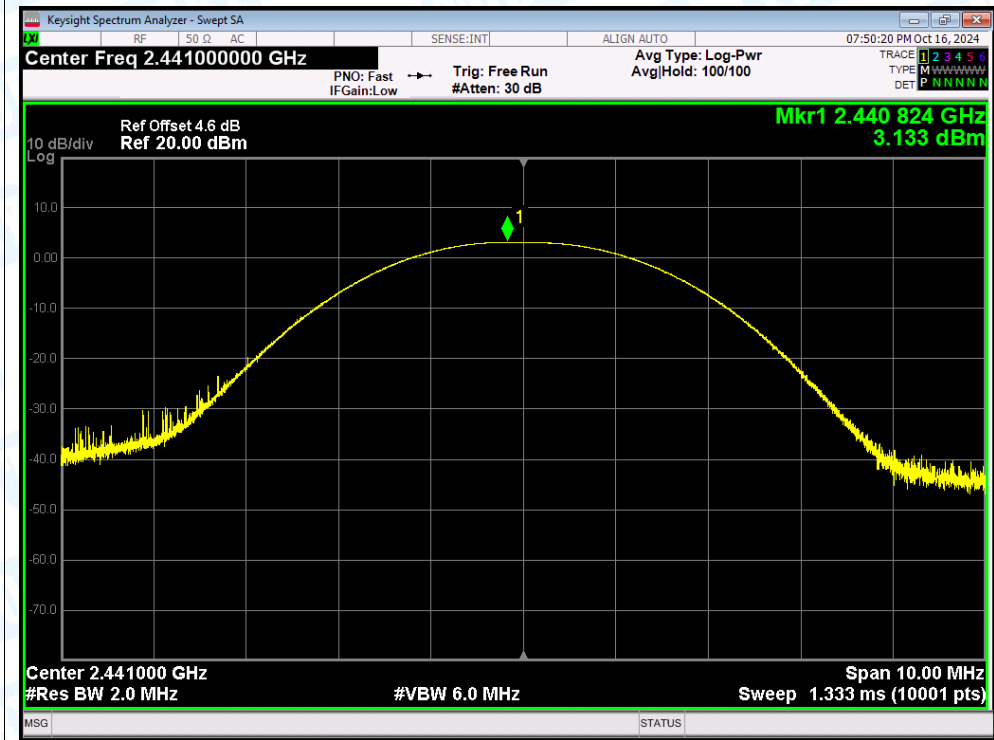
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	3.333	0	3.333	21	Pass
NVNT	1-DH1	2441	Ant1	3.133	0	3.133	21	Pass
NVNT	1-DH1	2480	Ant1	2.679	0	2.679	21	Pass
NVNT	2-DH1	2402	Ant1	4.087	0	4.087	21	Pass
NVNT	2-DH1	2441	Ant1	3.99	0	3.99	21	Pass
NVNT	2-DH1	2480	Ant1	3.555	0	3.555	21	Pass
NVNT	3-DH1	2402	Ant1	4.79	0	4.79	21	Pass
NVNT	3-DH1	2441	Ant1	4.608	0	4.608	21	Pass
NVNT	3-DH1	2480	Ant1	4.17	0	4.17	21	Pass

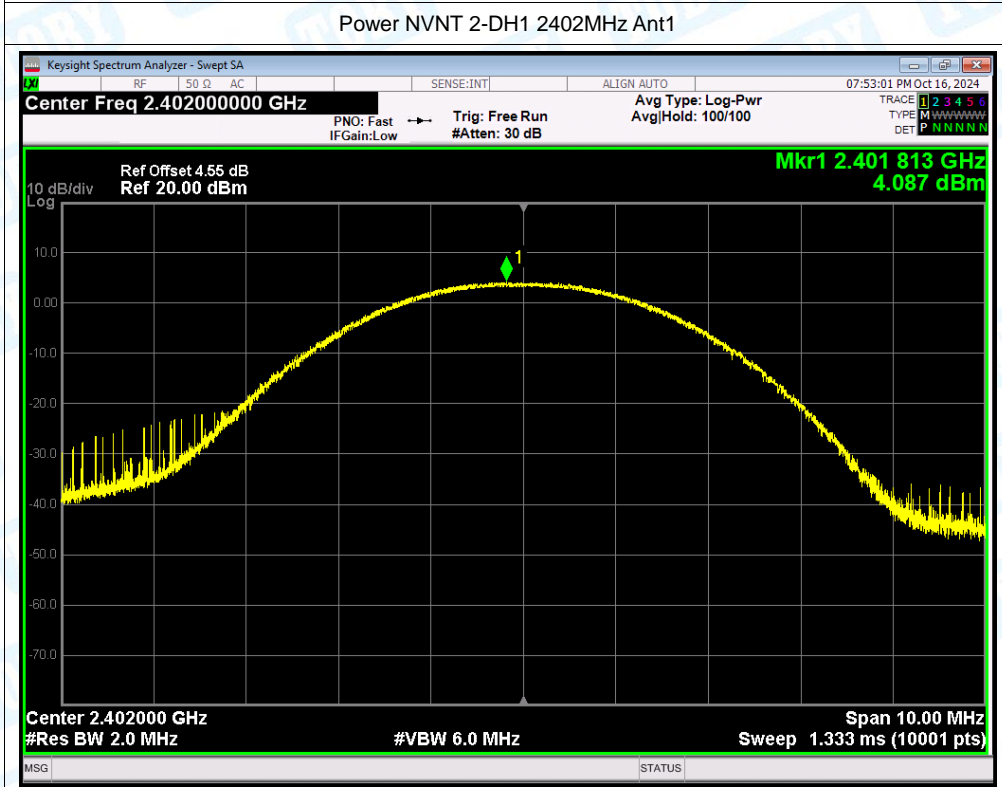
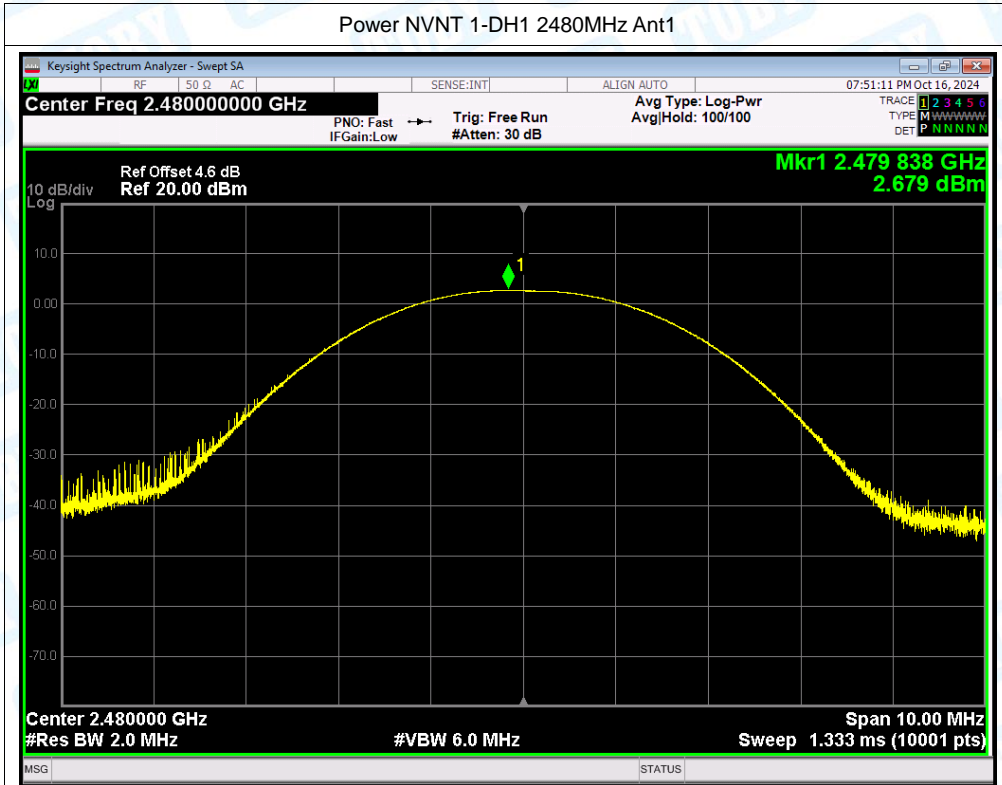
Test Graphs

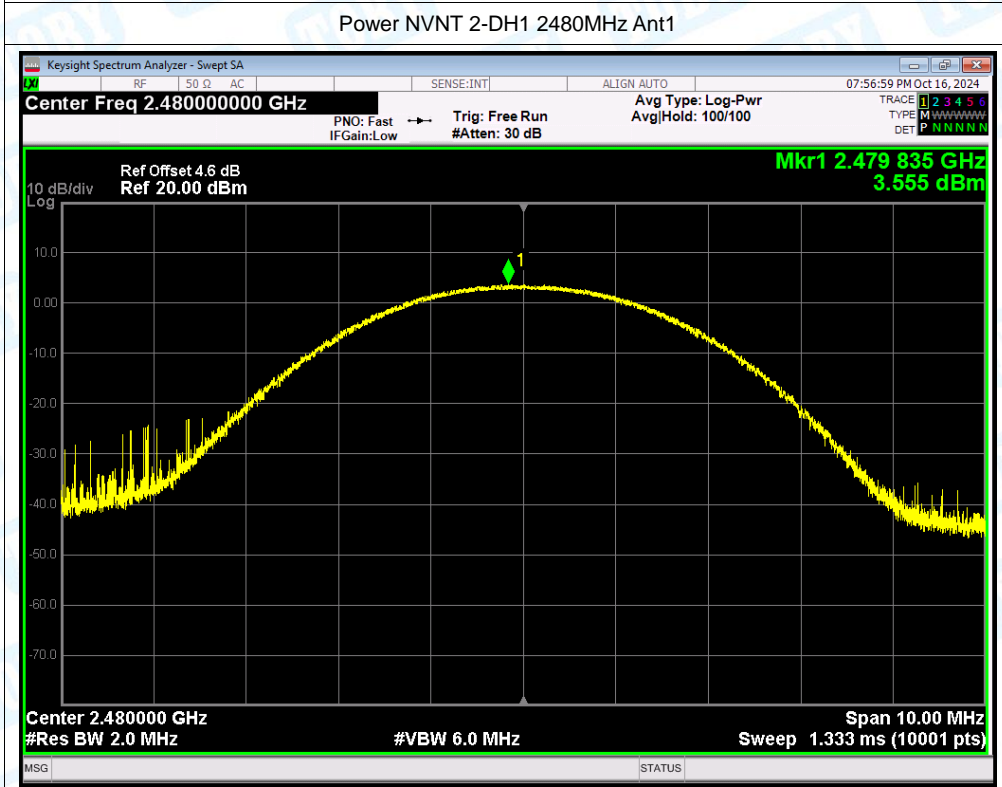
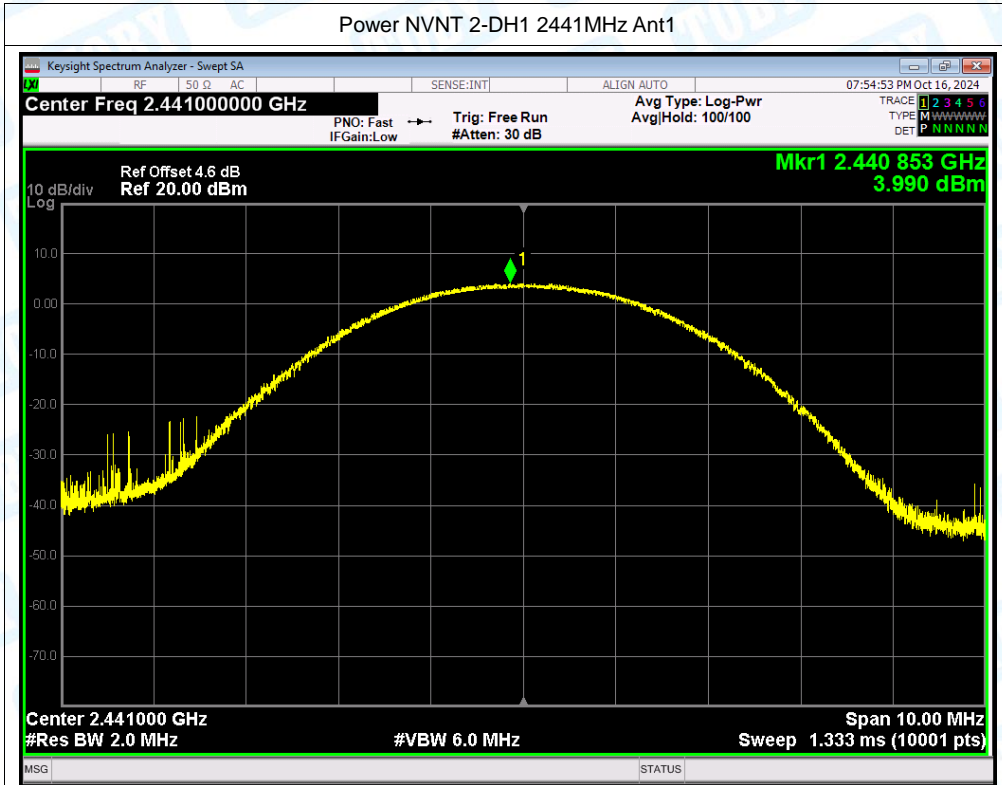
Power NVNT 1-DH1 2402MHz Ant1

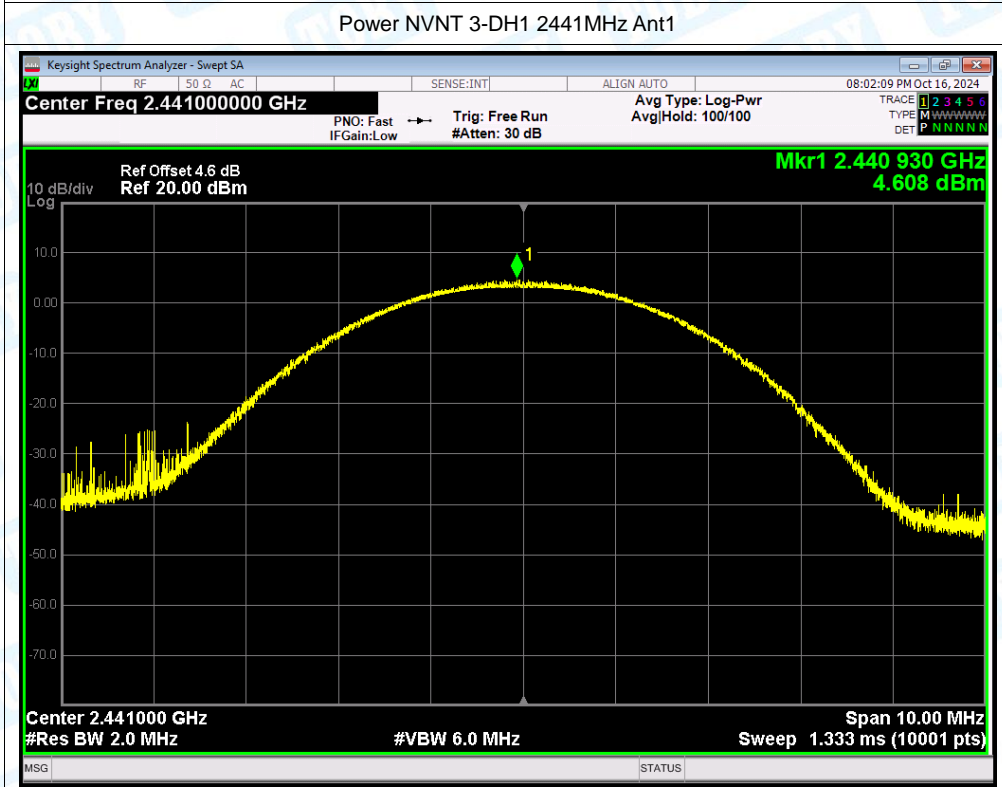
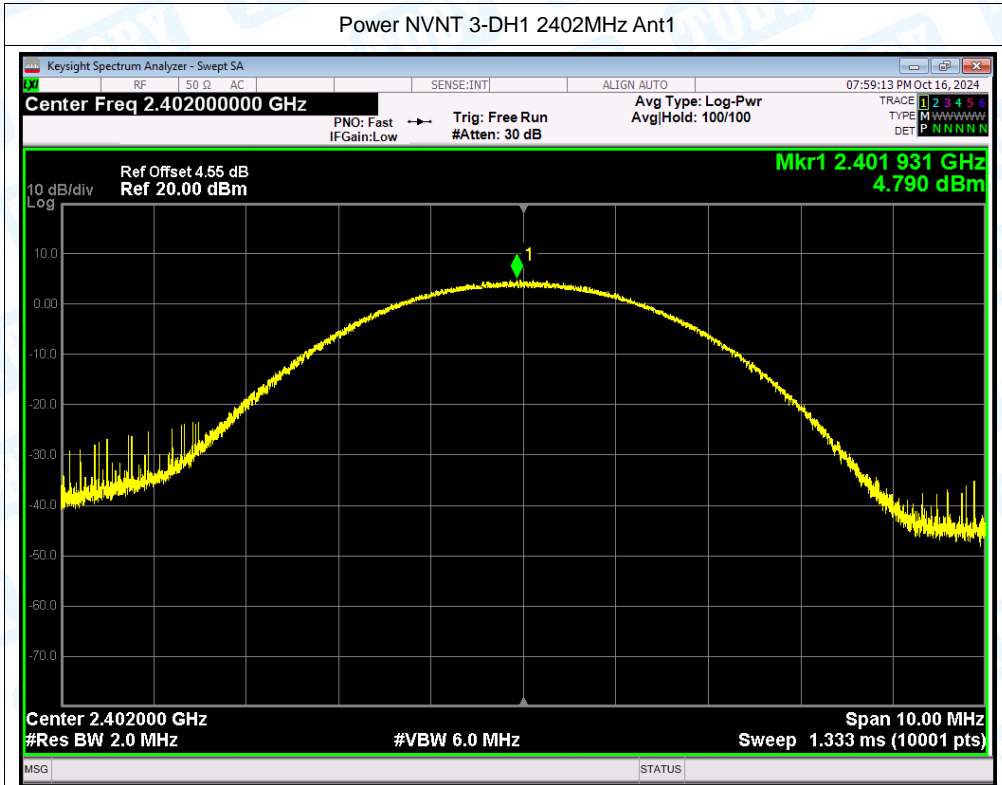


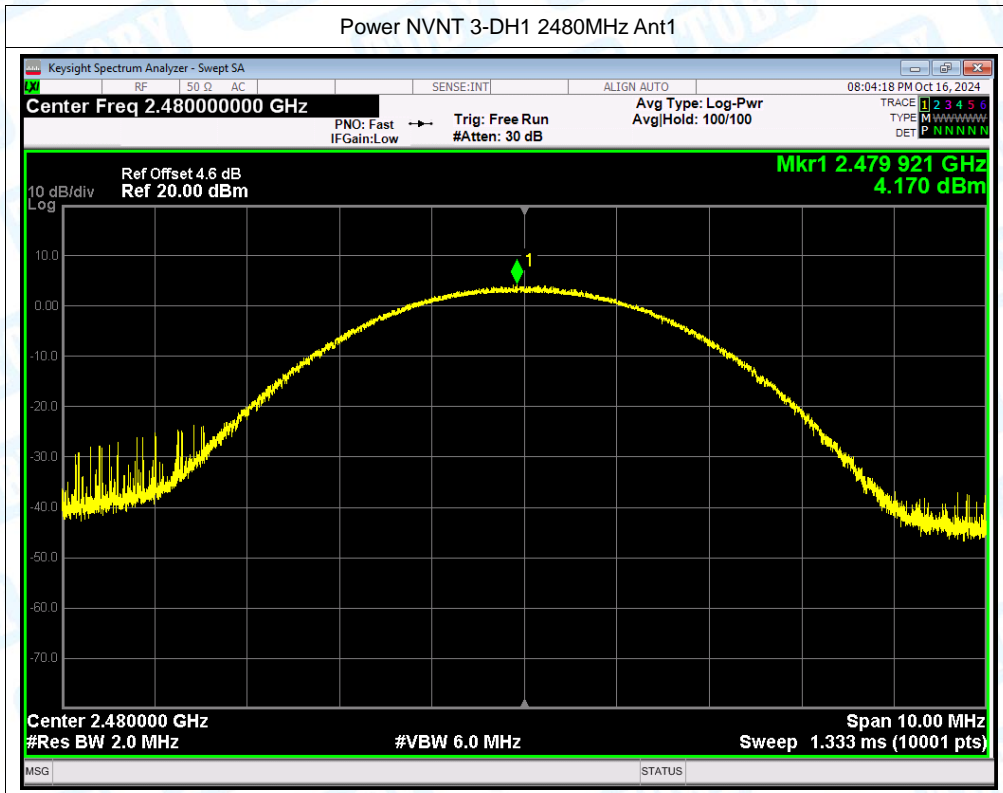
Power NVNT 1-DH1 2441MHz Ant1









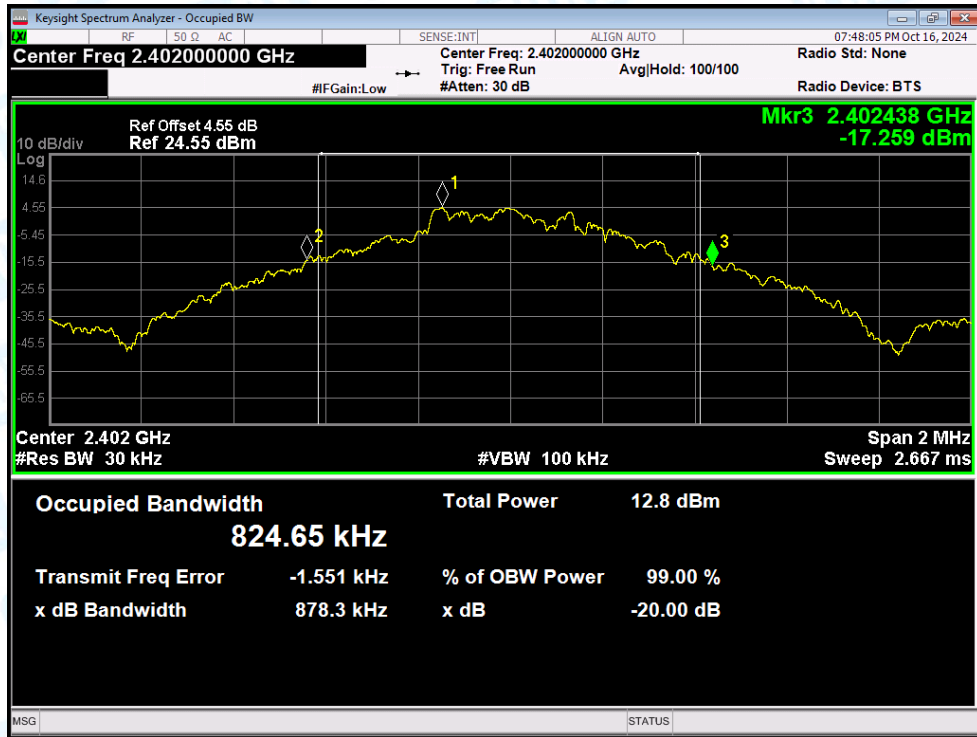


### 3. -20dB Bandwidth

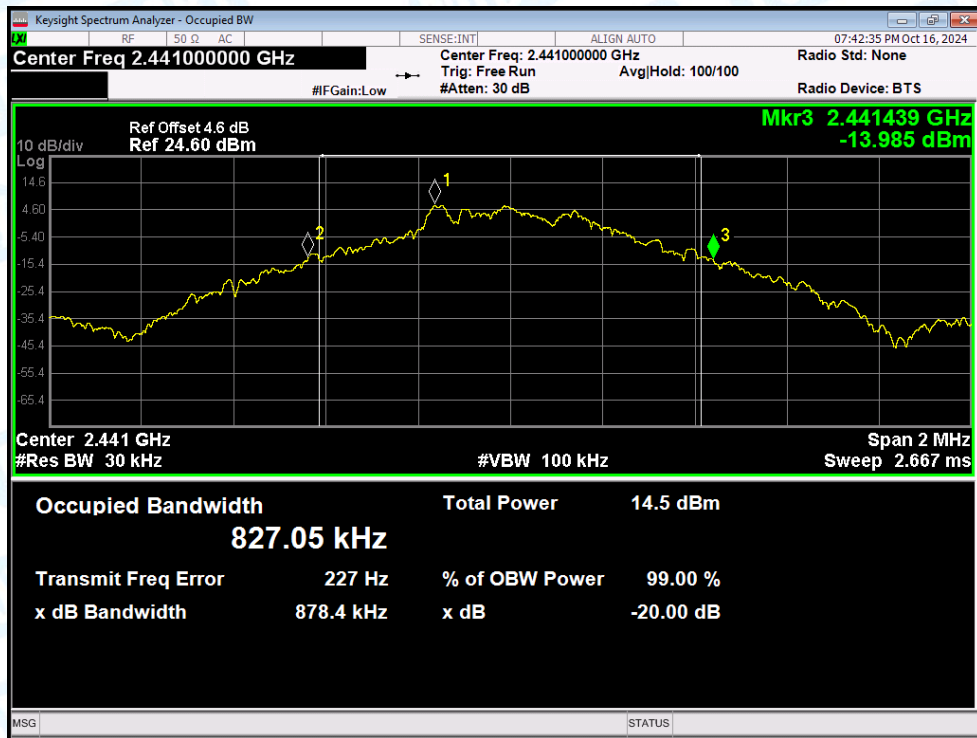
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.88	0	Pass
NVNT	1-DH1	2441	Ant1	0.88	0	Pass
NVNT	1-DH1	2480	Ant1	0.87	0	Pass
NVNT	2-DH1	2402	Ant1	1.25	0	Pass
NVNT	2-DH1	2441	Ant1	1.25	0	Pass
NVNT	2-DH1	2480	Ant1	1.24	0	Pass
NVNT	3-DH1	2402	Ant1	1.24	0	Pass
NVNT	3-DH1	2441	Ant1	1.22	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1

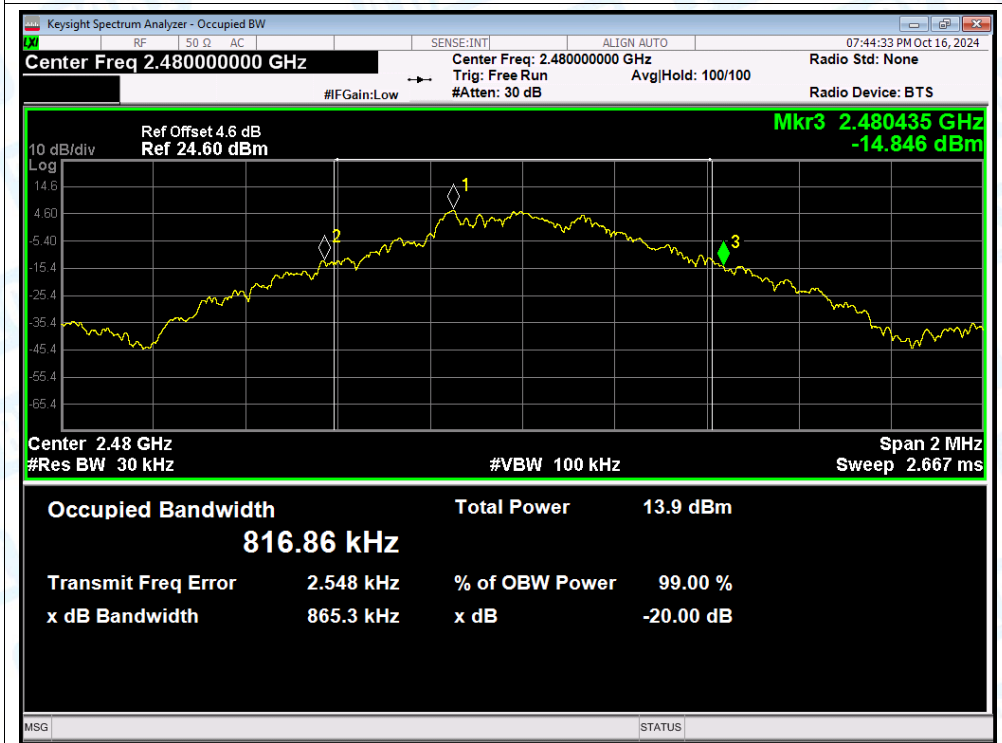


-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1

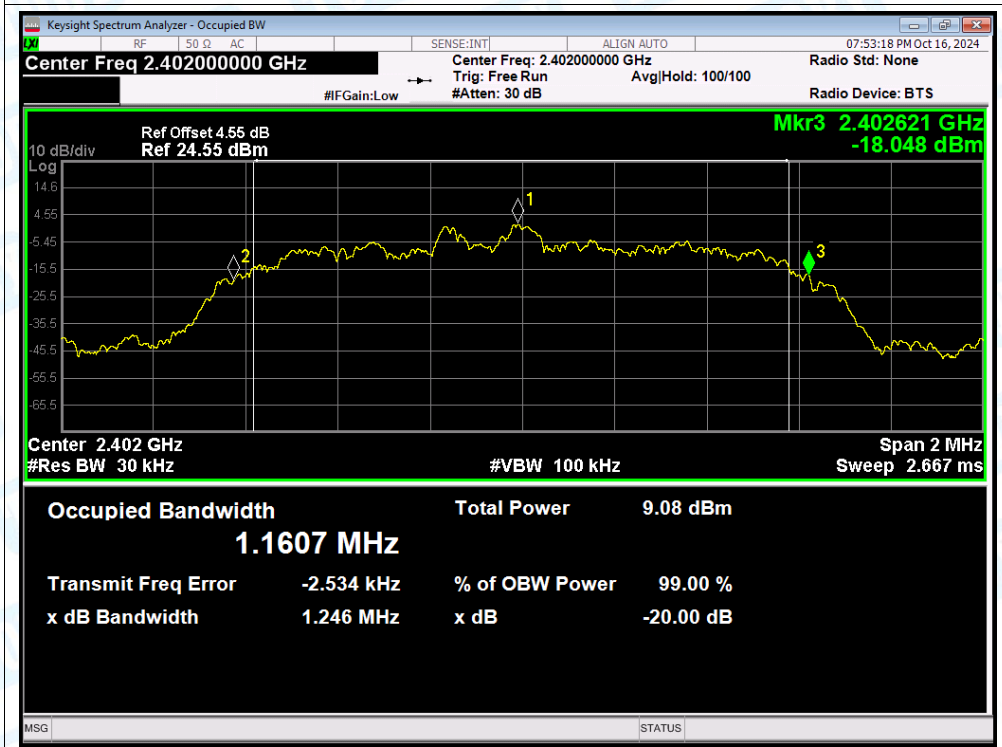




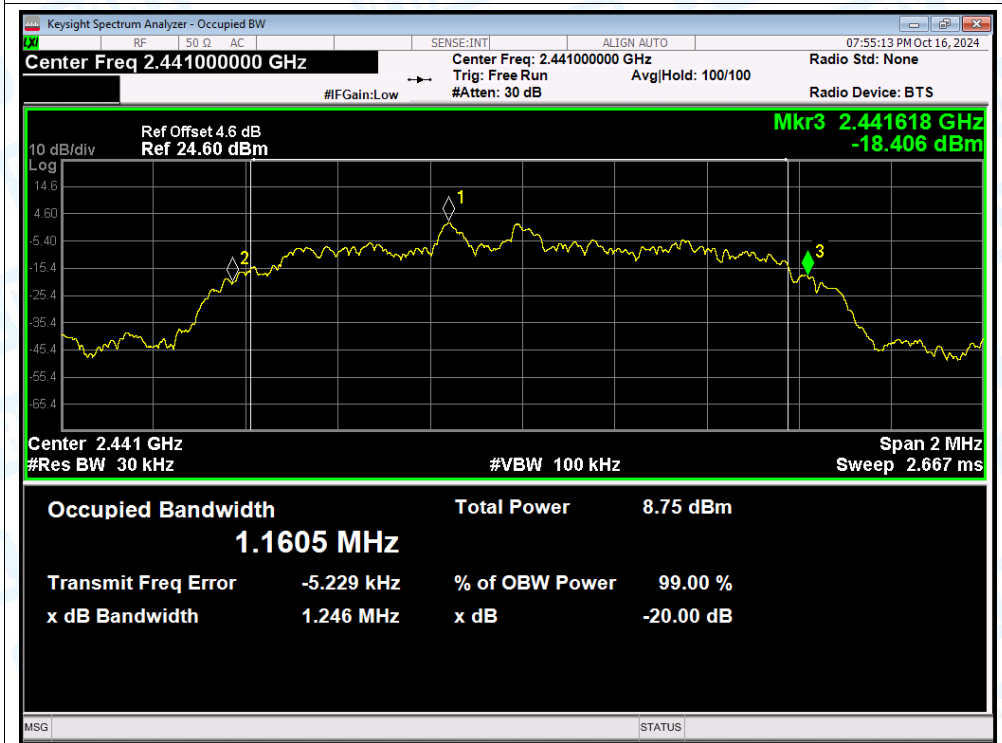
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



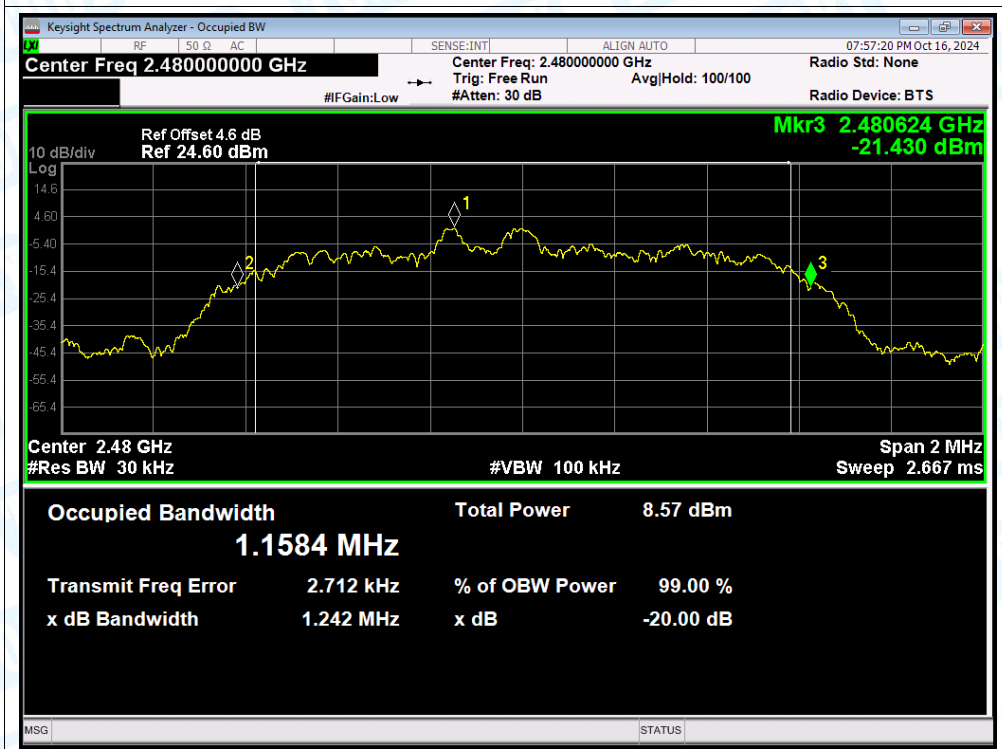
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



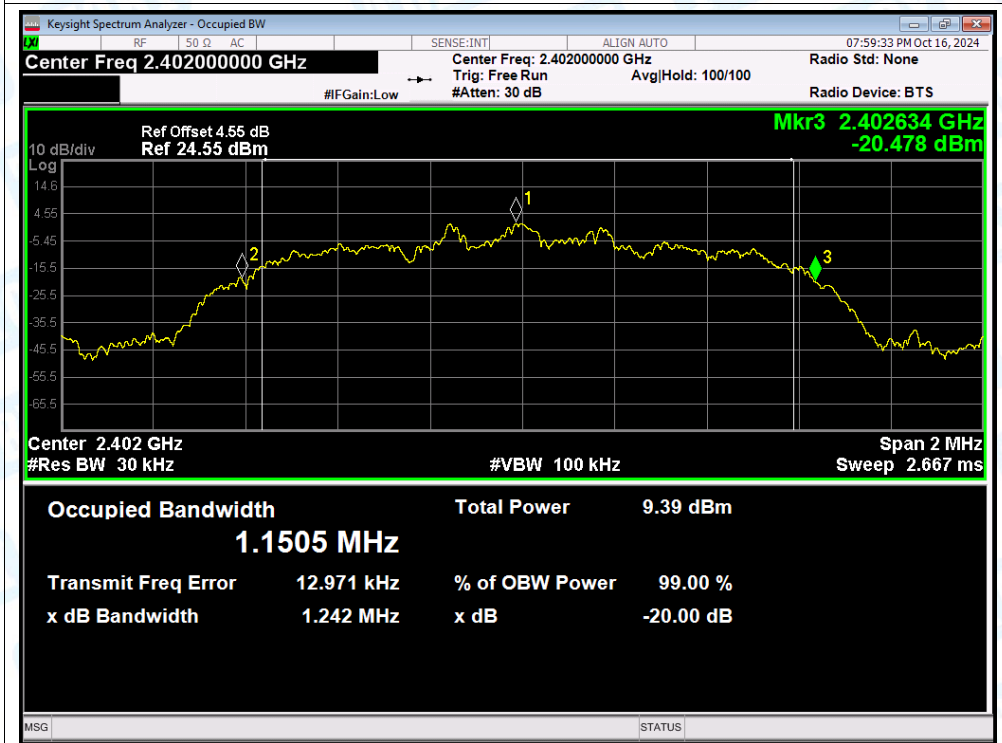
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



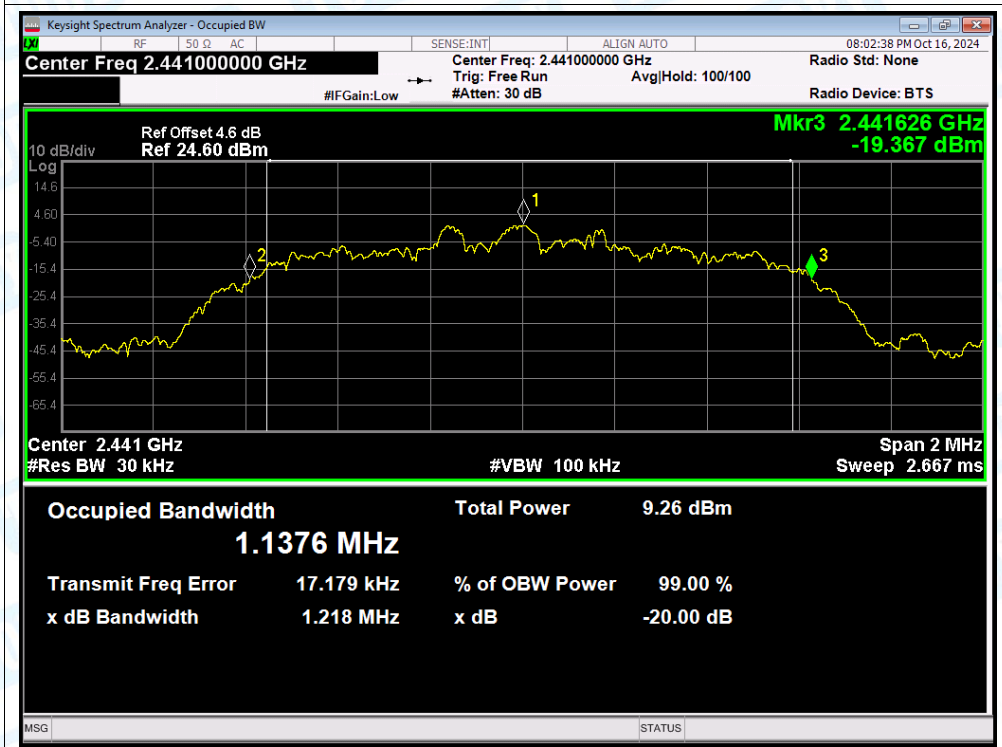
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

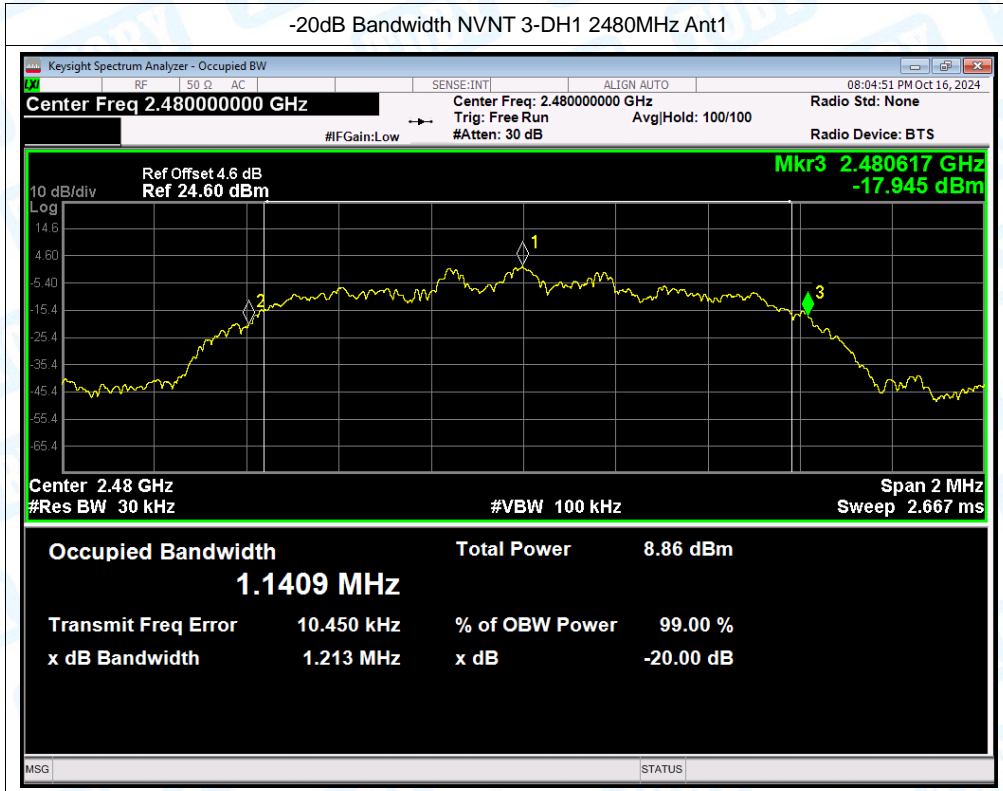


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



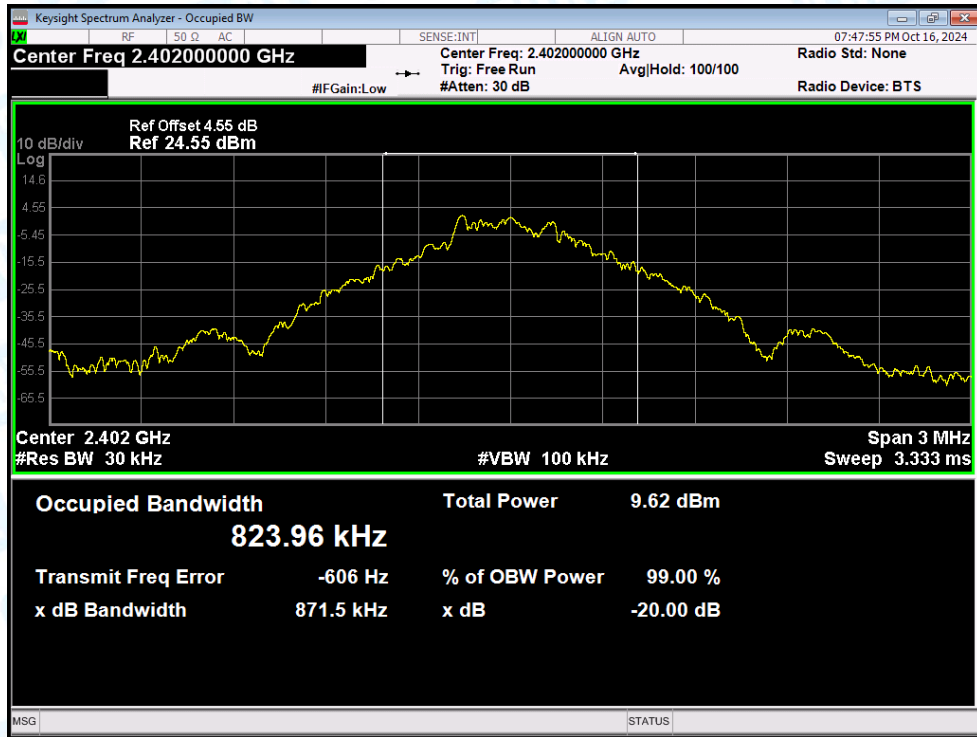


## 4. Occupied Channel Bandwidth

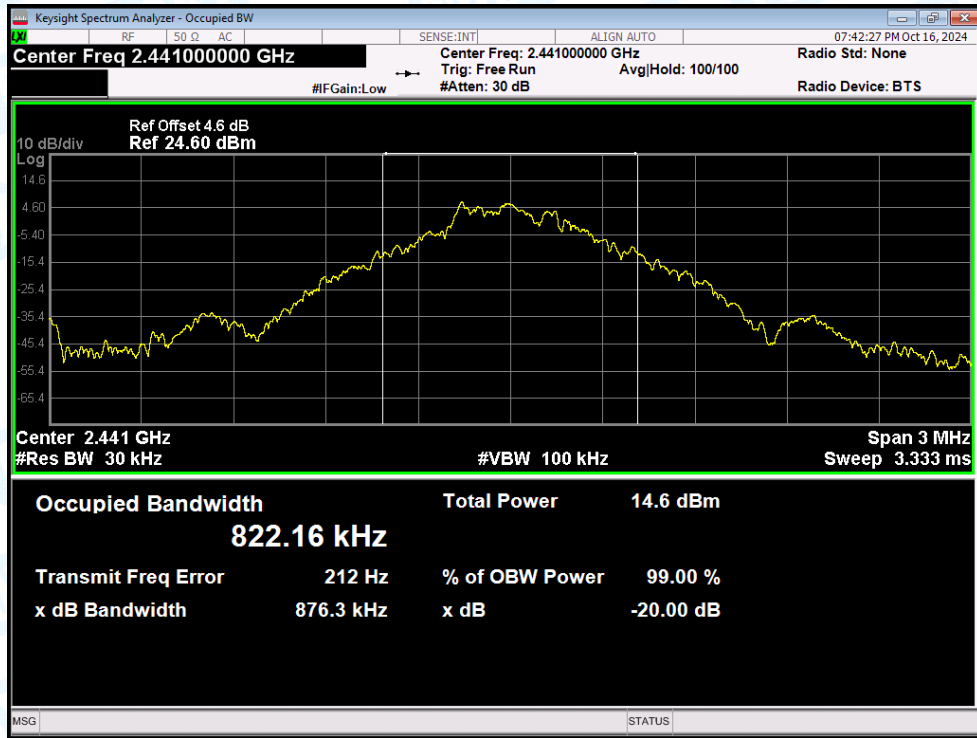
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.824
NVNT	1-DH1	2441	Ant1	0.822
NVNT	1-DH1	2480	Ant1	0.813
NVNT	2-DH1	2402	Ant1	1.176
NVNT	2-DH1	2441	Ant1	1.142
NVNT	2-DH1	2480	Ant1	1.159
NVNT	3-DH1	2402	Ant1	1.146
NVNT	3-DH1	2441	Ant1	1.152
NVNT	3-DH1	2480	Ant1	1.146

Test Graphs

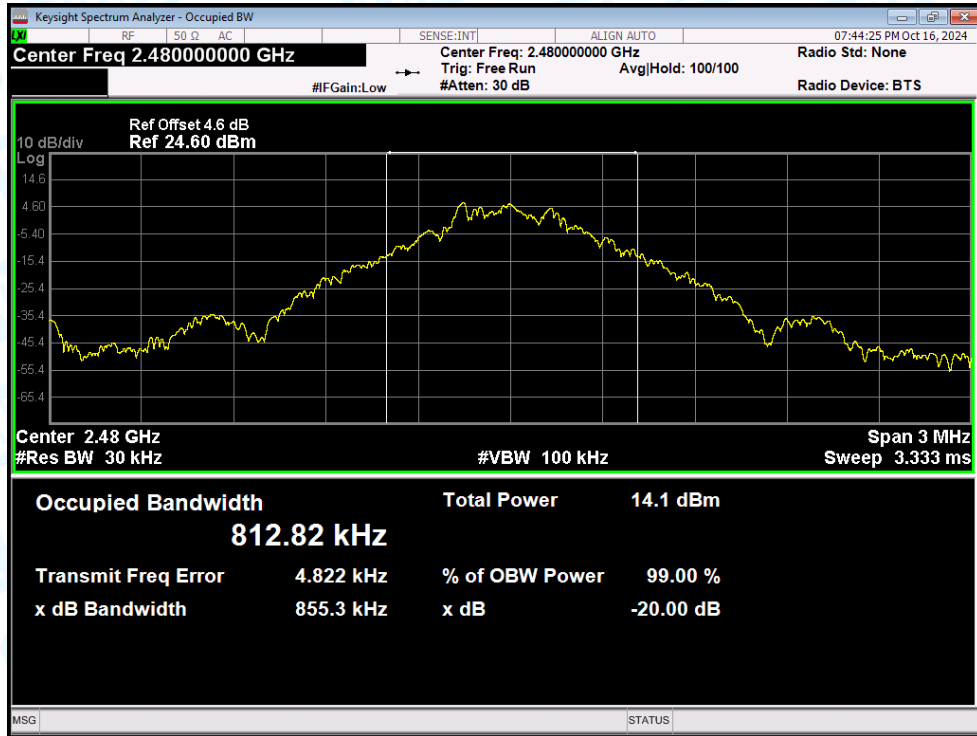
OBW NVNT 1-DH1 2402MHz Ant1



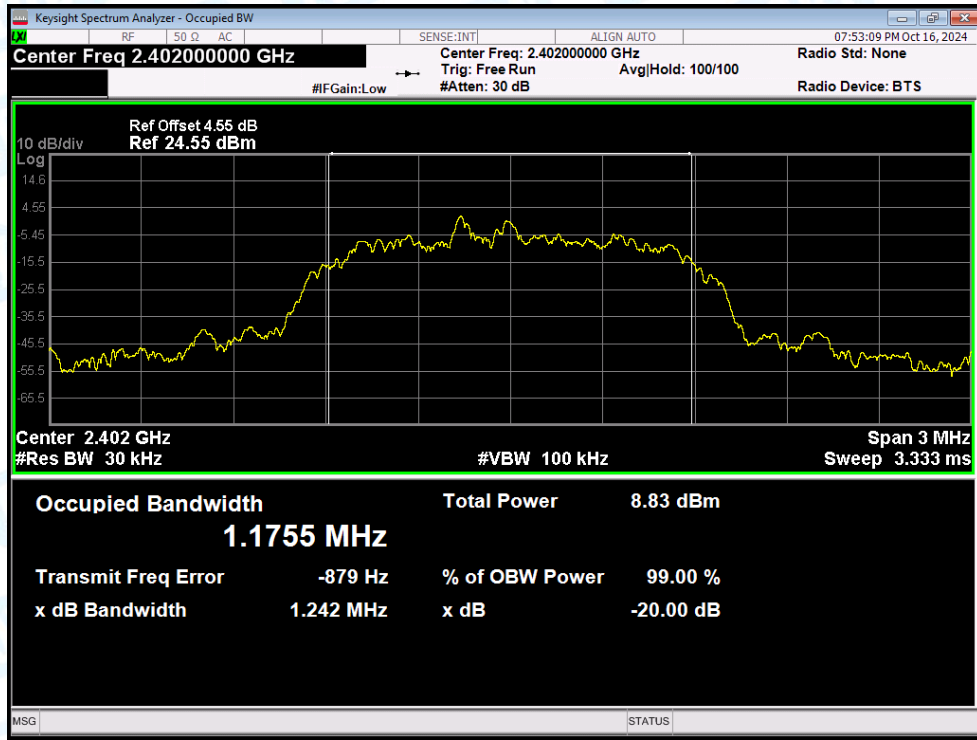
OBW NVNT 1-DH1 2441MHz Ant1

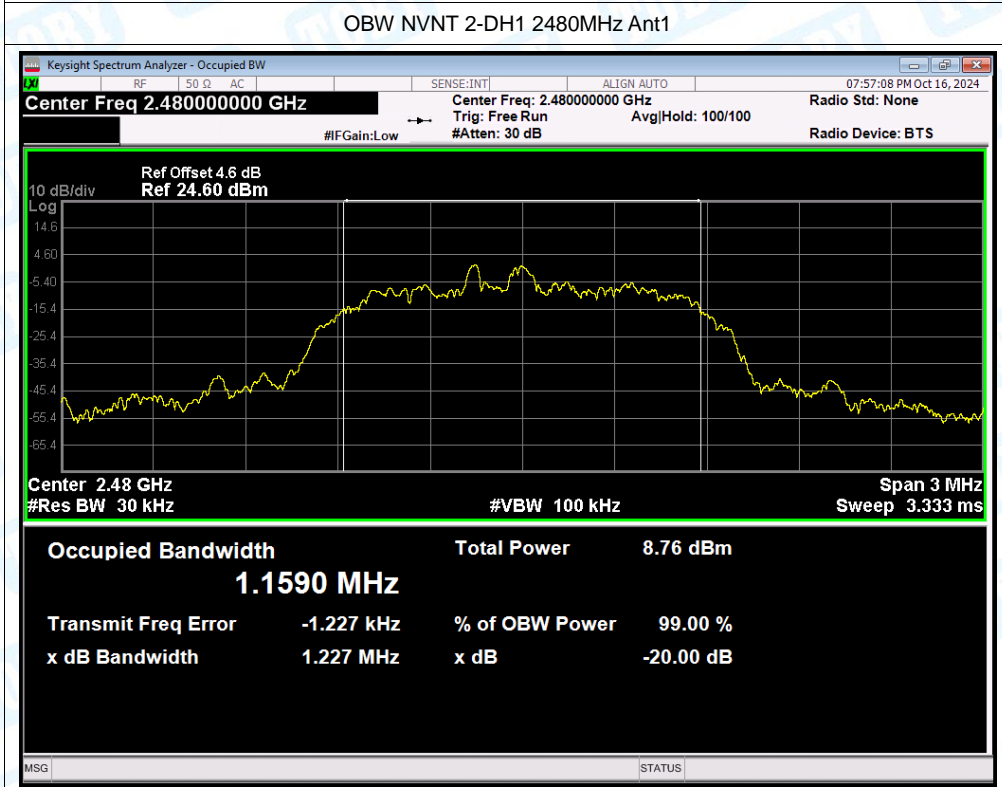
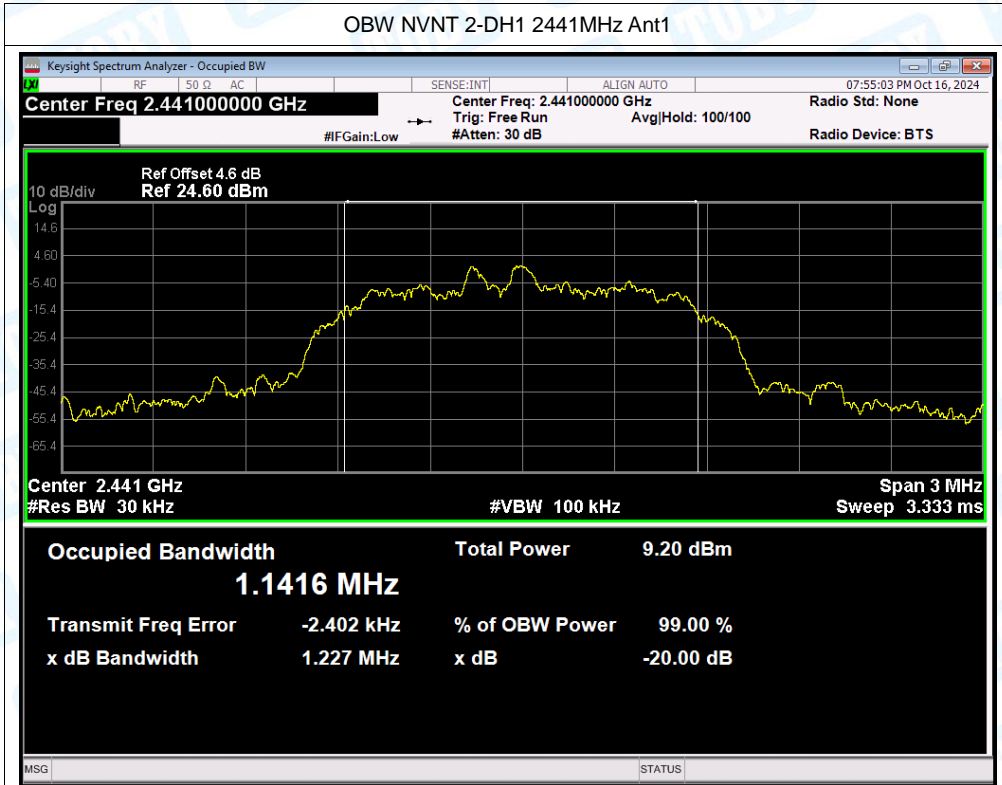


OBW NVNT 1-DH1 2480MHz Ant1



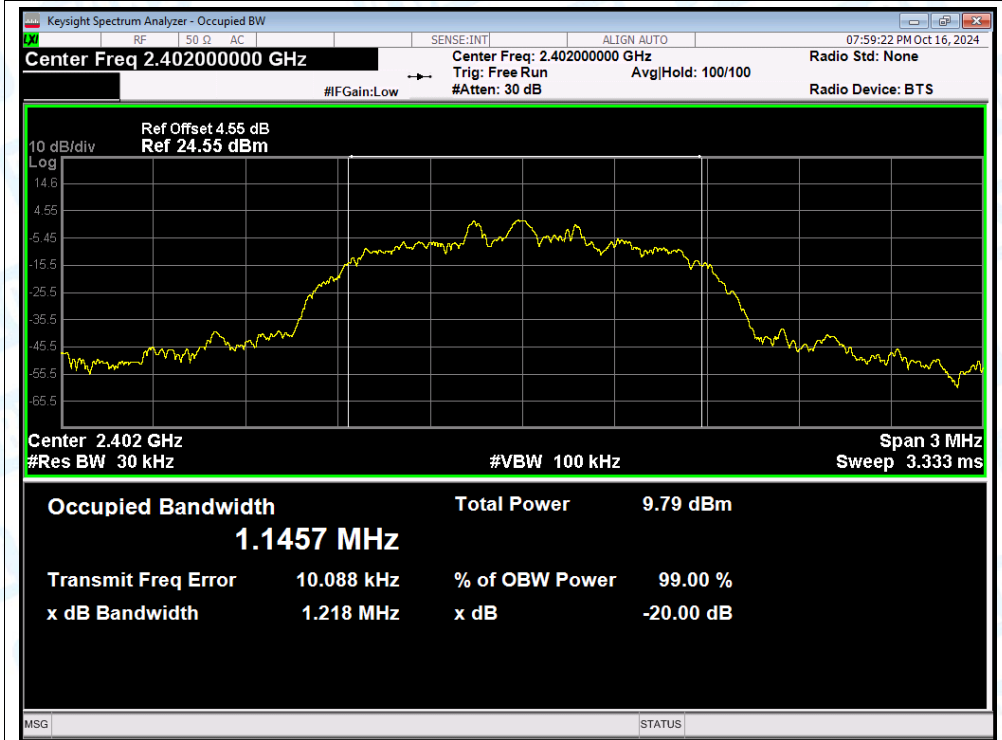
OBW NVNT 2-DH1 2402MHz Ant1



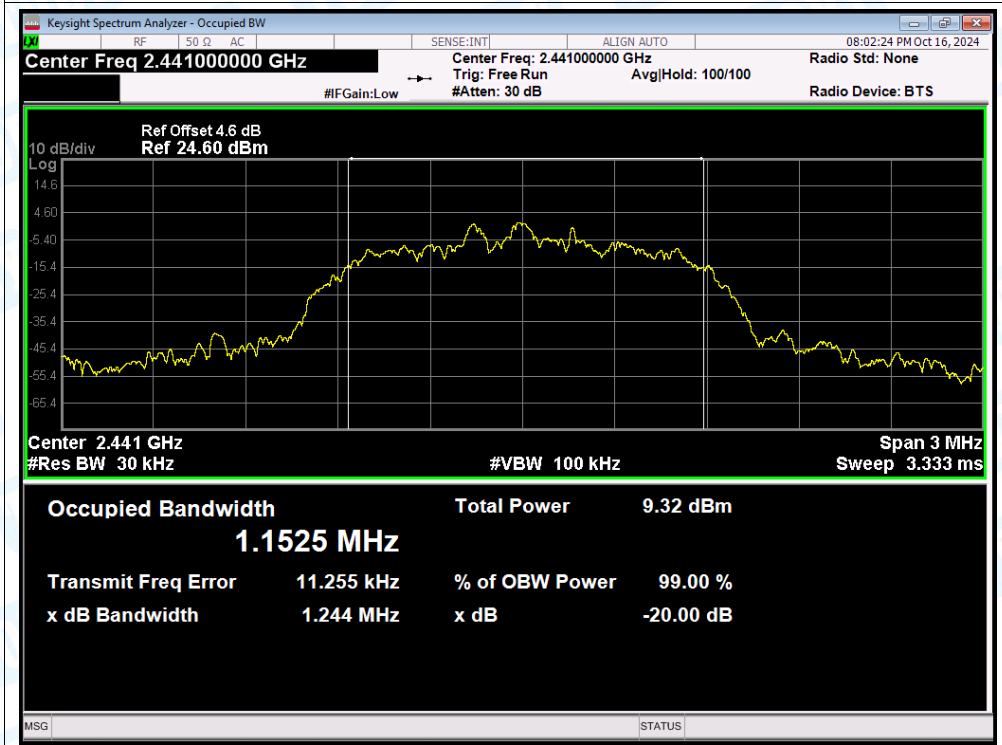


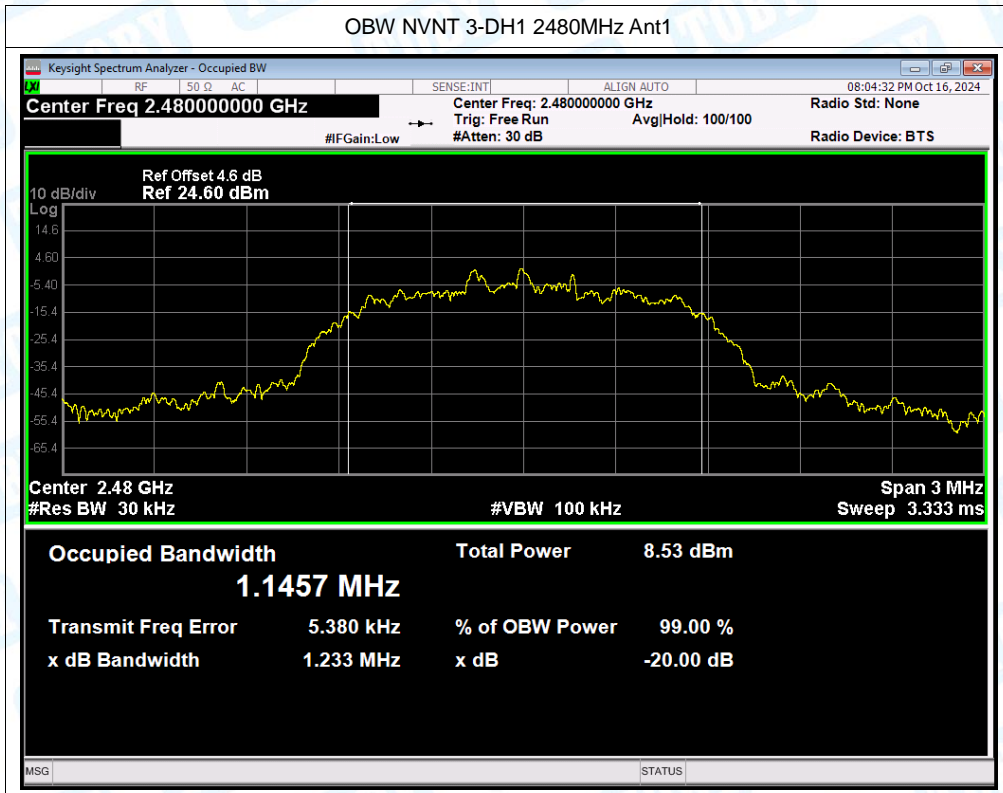


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





## 5. Band Edge

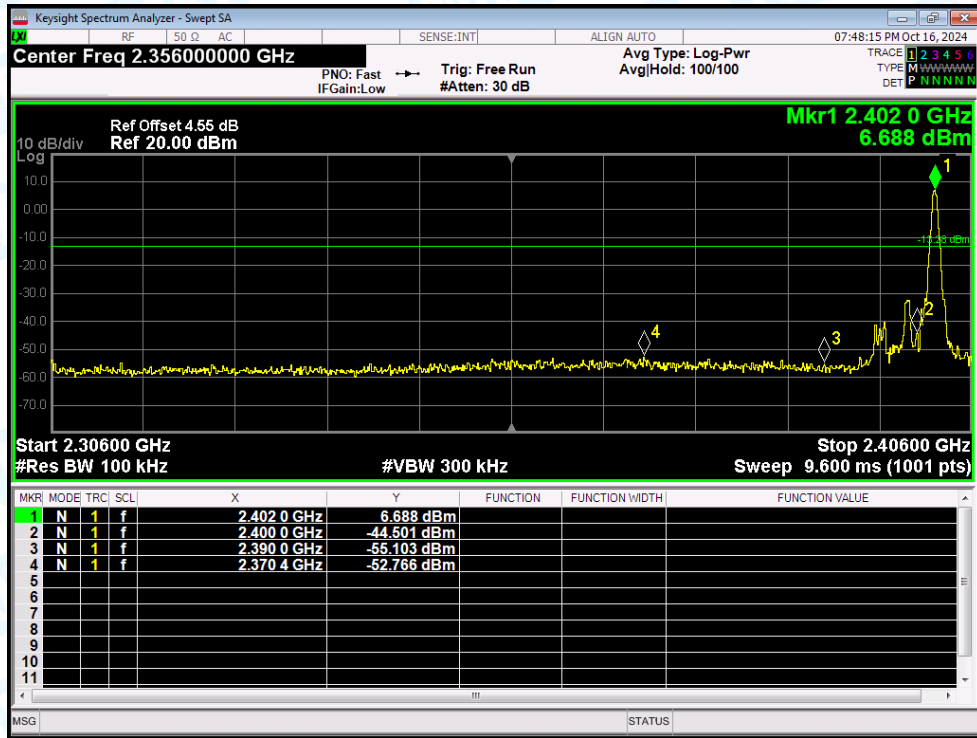
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-59.49	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-50.98	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.63	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-53.9	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-56.87	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-49.25	-20	Pass

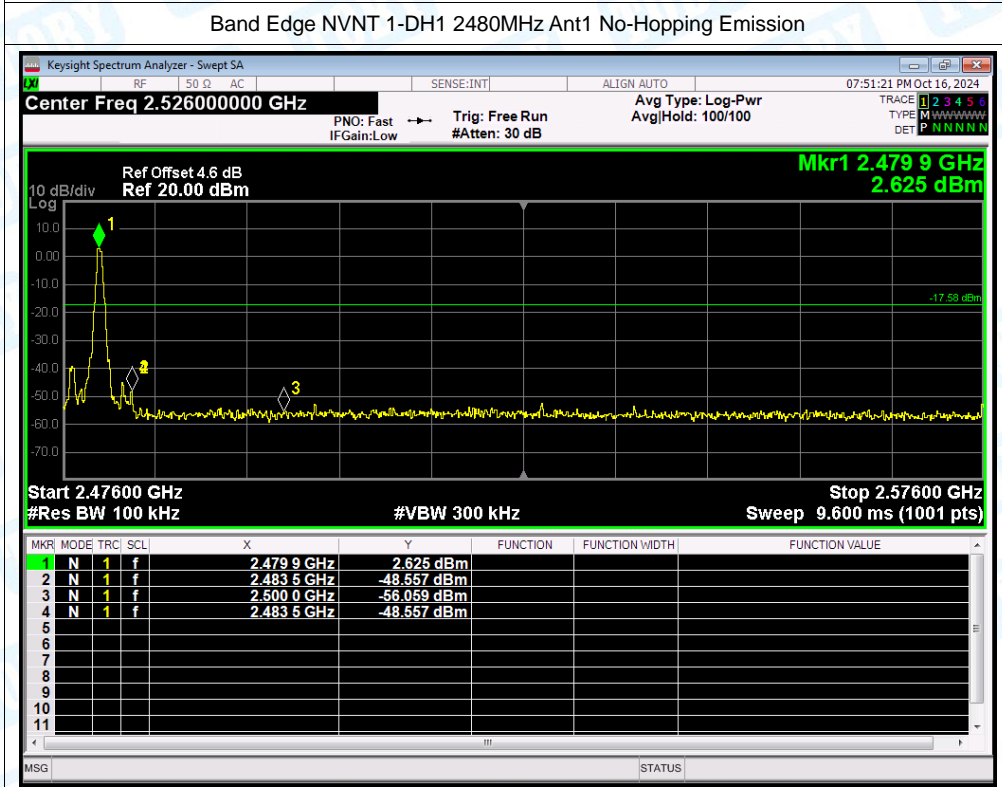
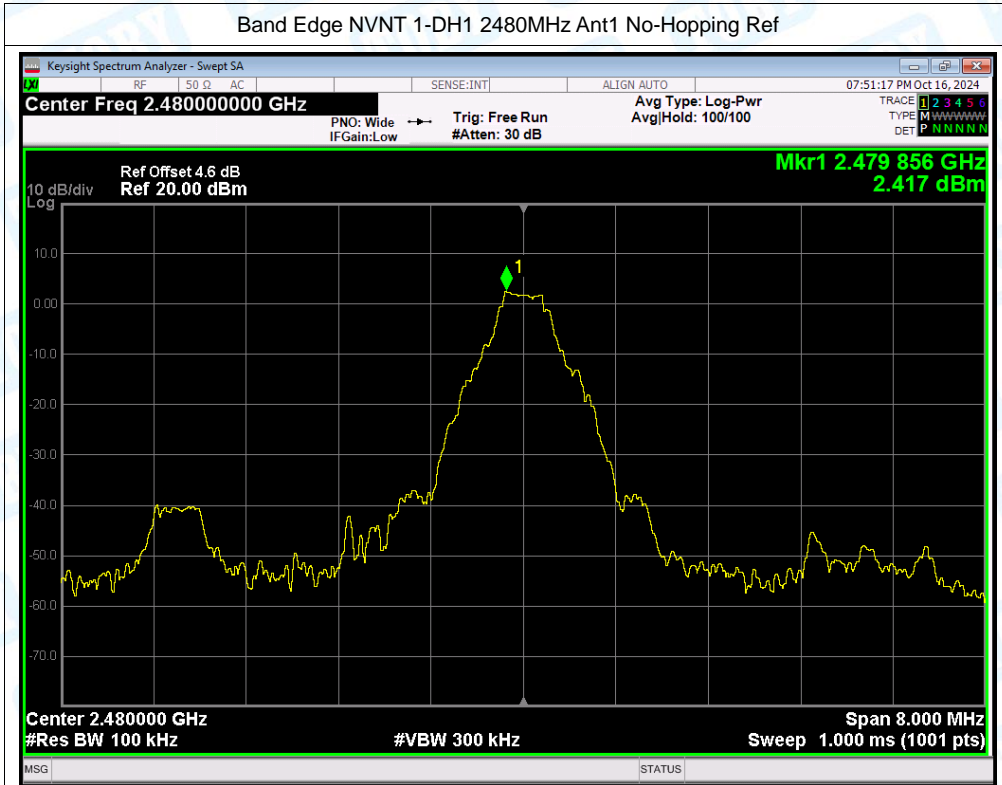
Test Graphs

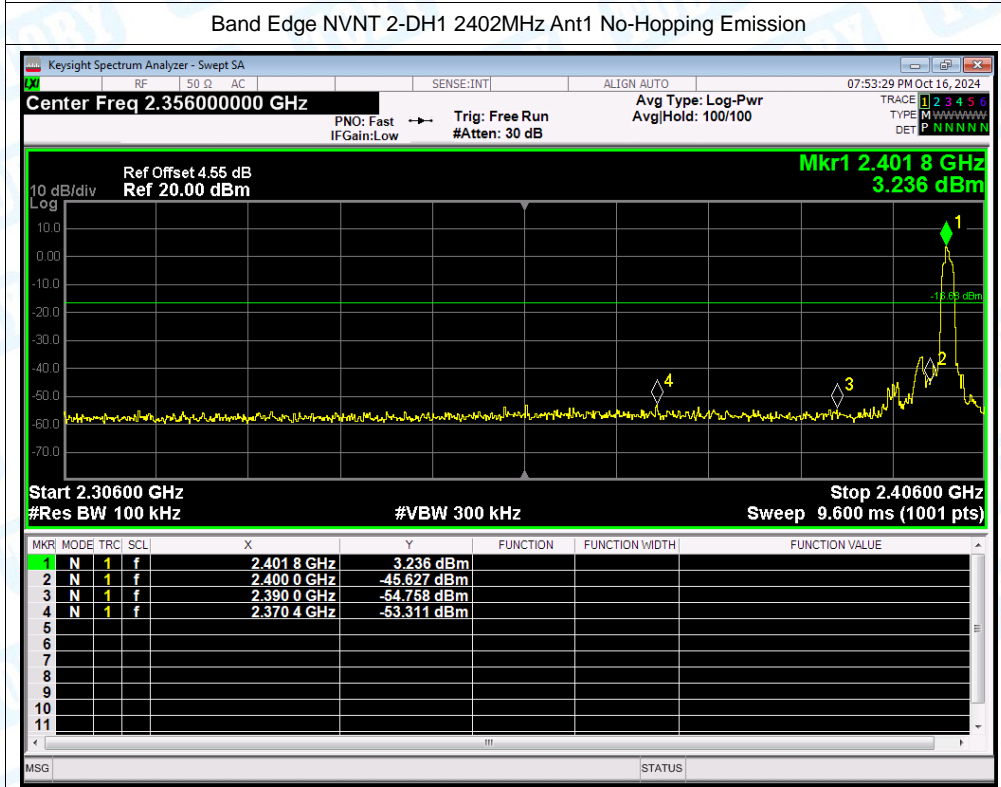
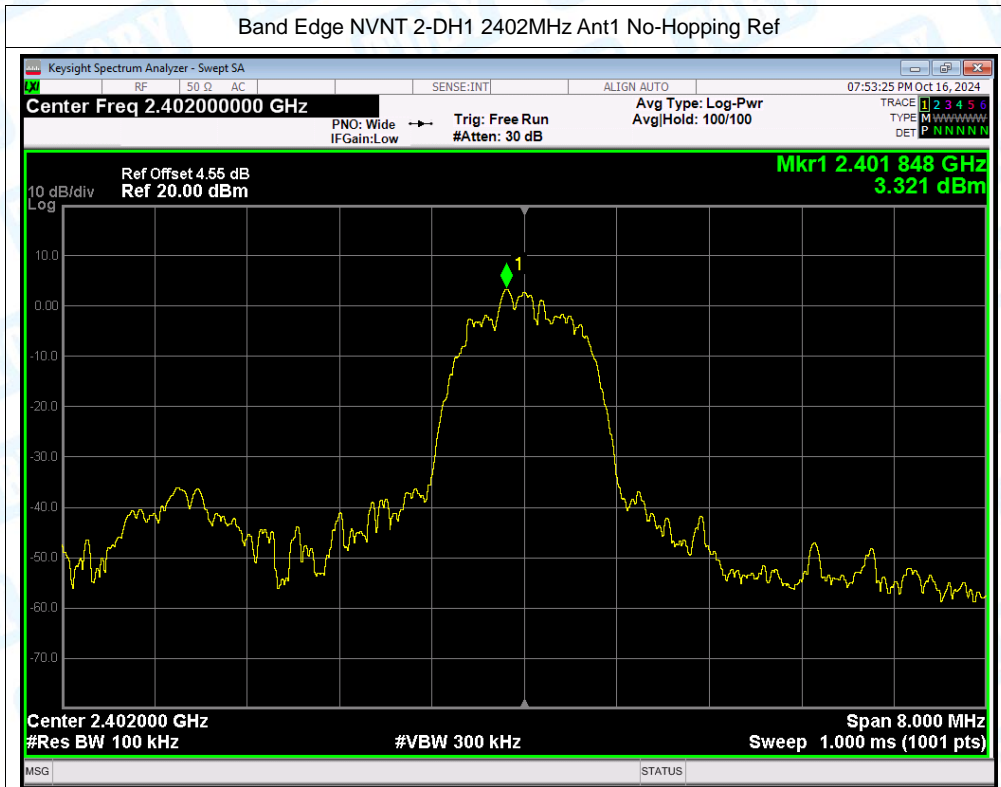
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

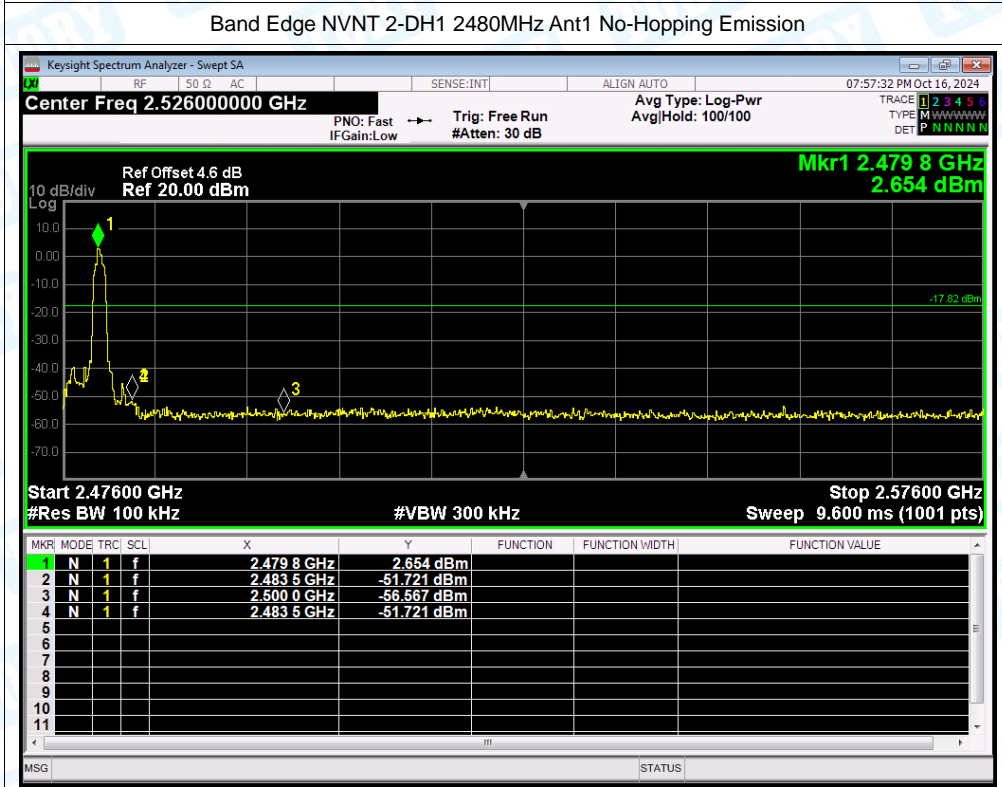
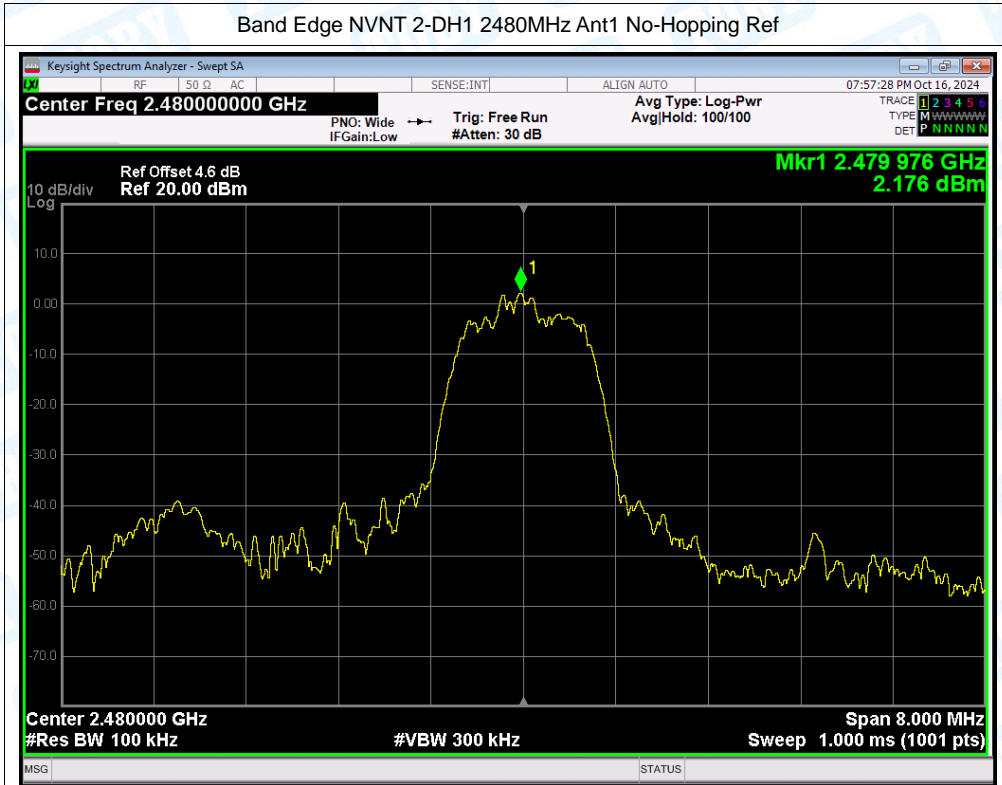


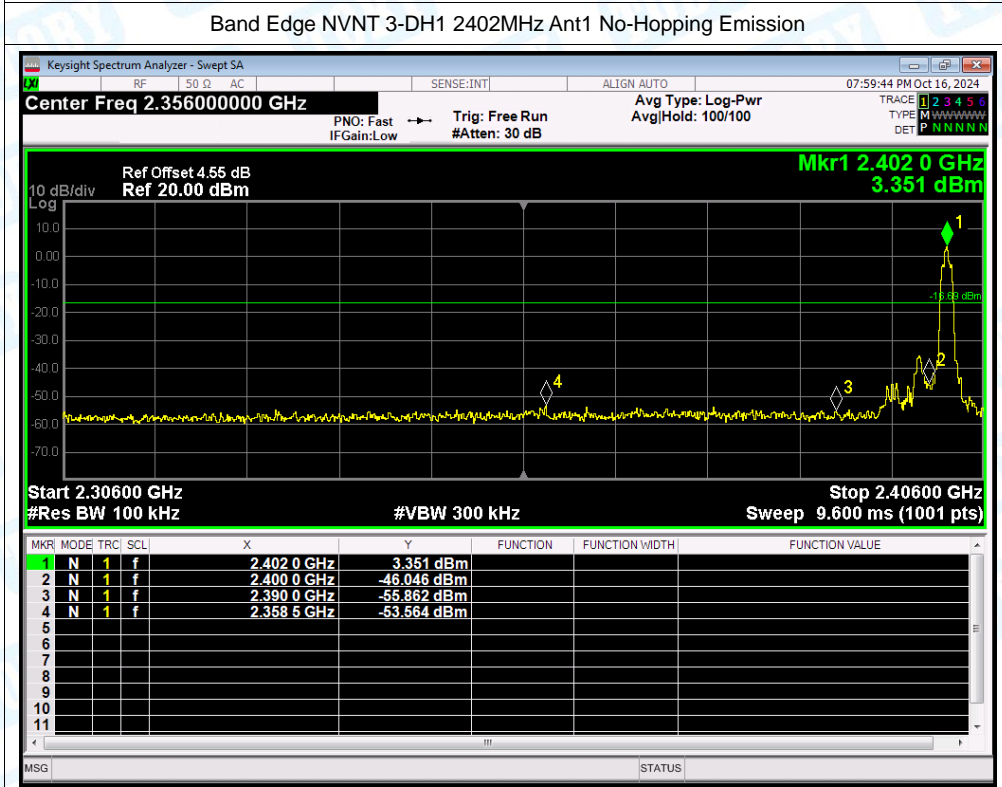
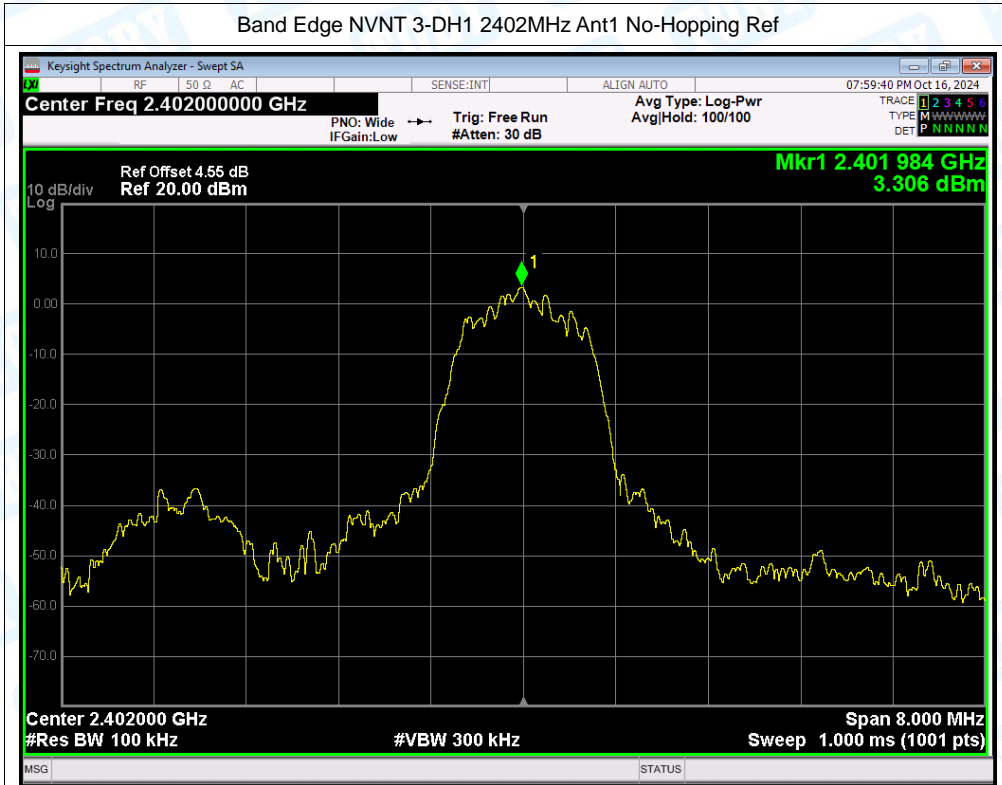
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



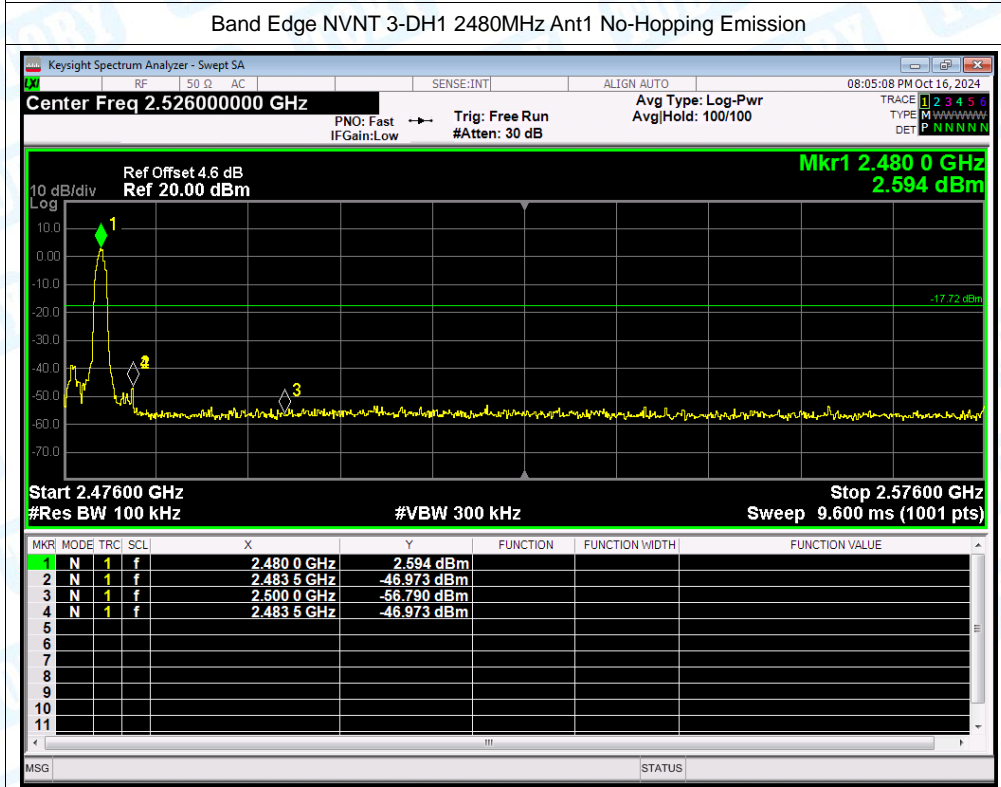
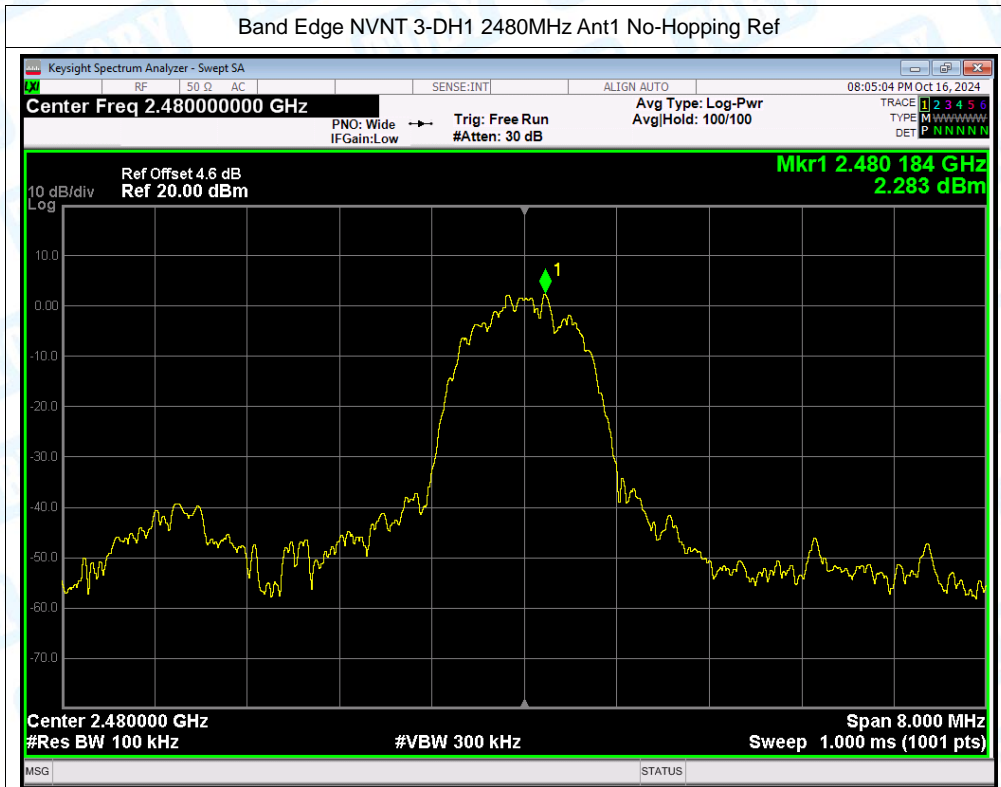










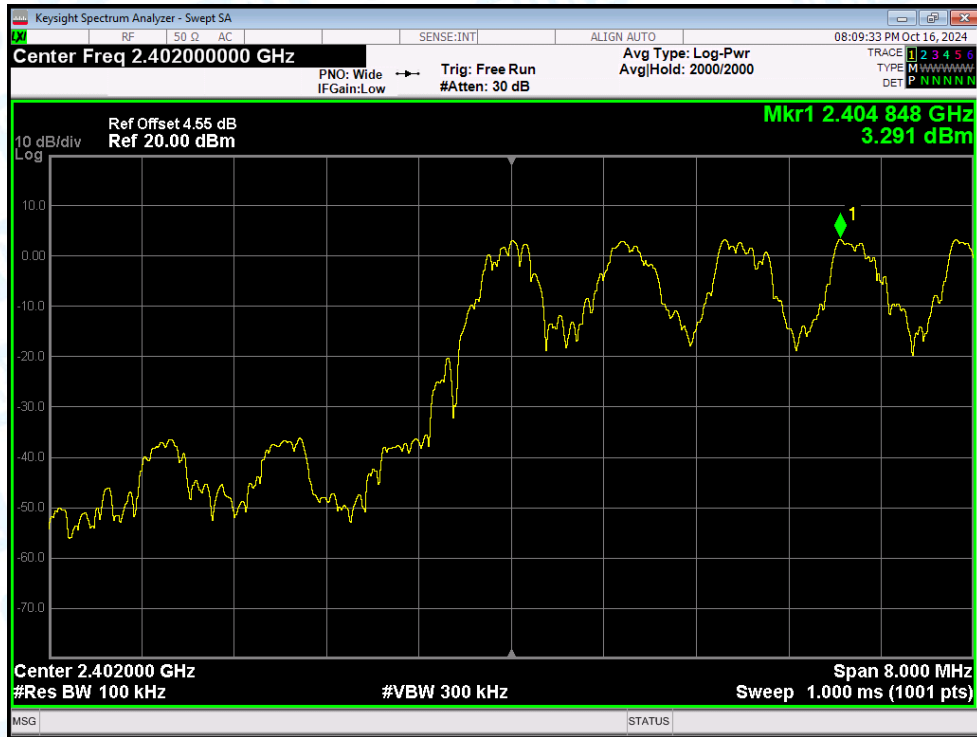


## 6. Band Edge(Hopping)

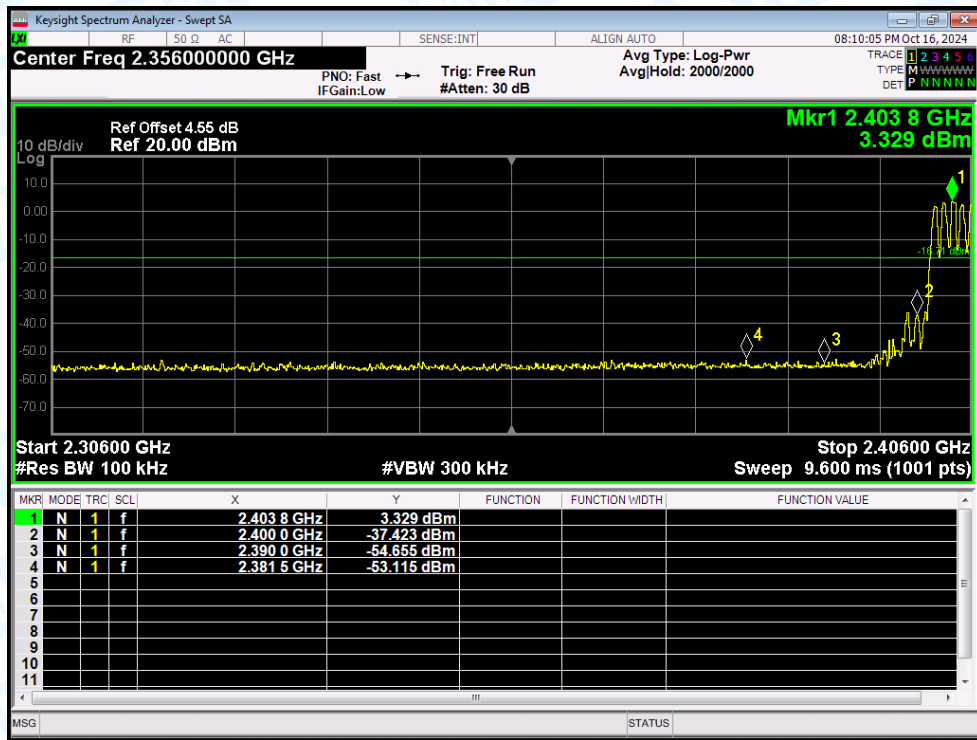
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-56.41	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-52.4	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-56.15	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-55.56	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.79	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-52.65	-20	Pass

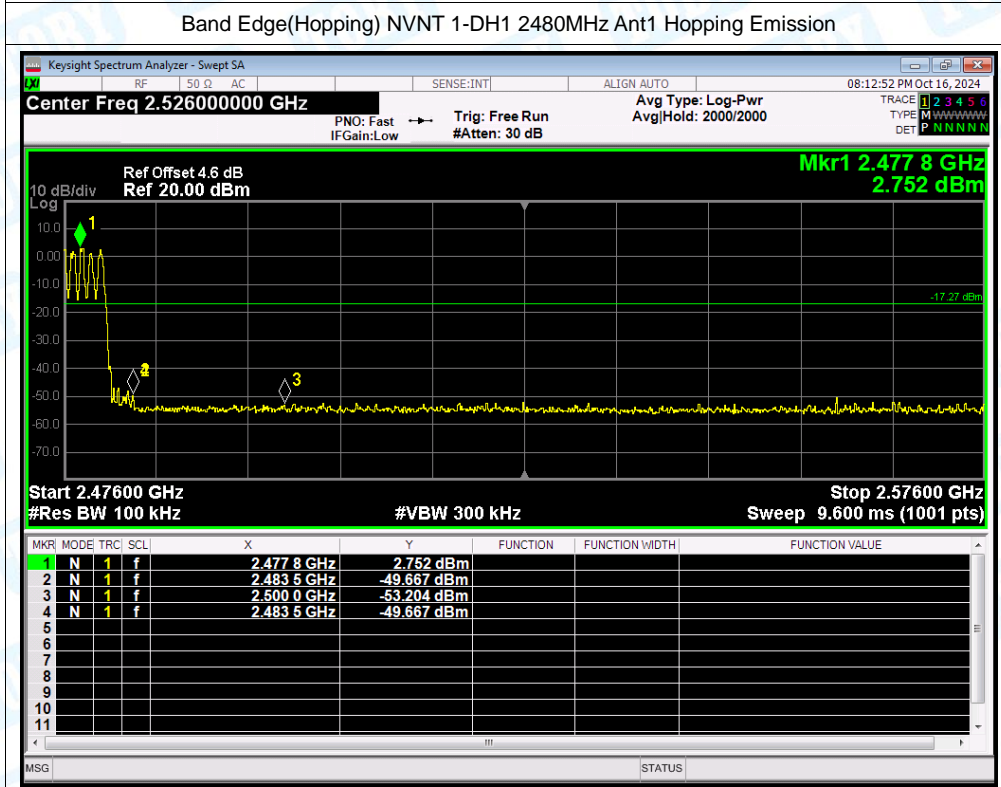
Test Graphs

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

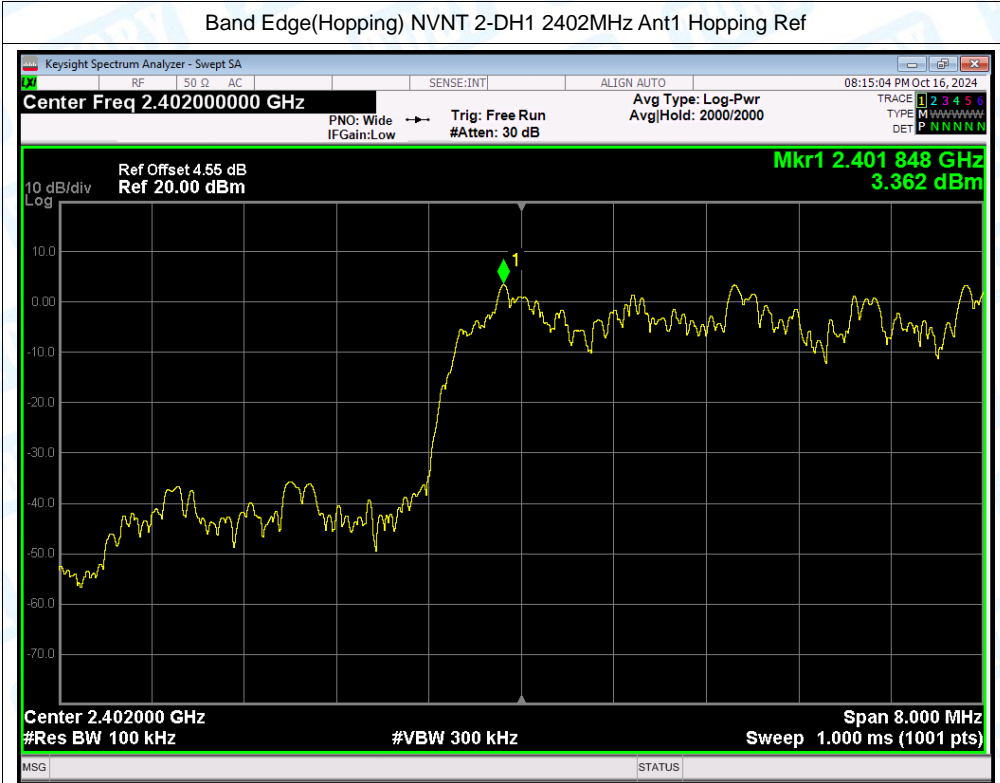


Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

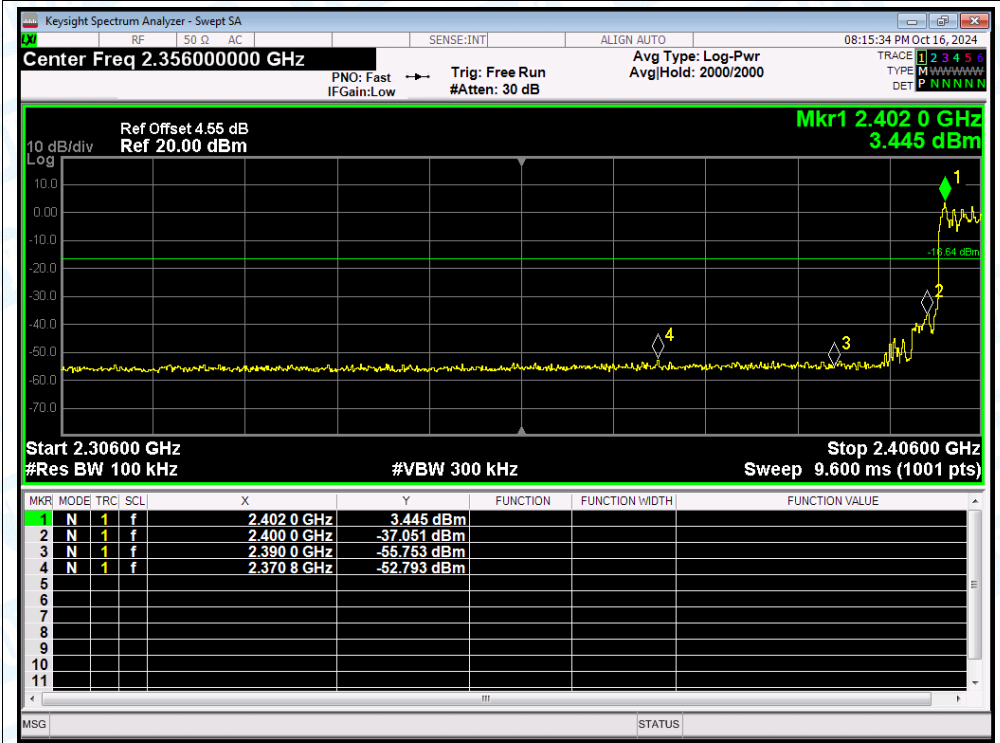


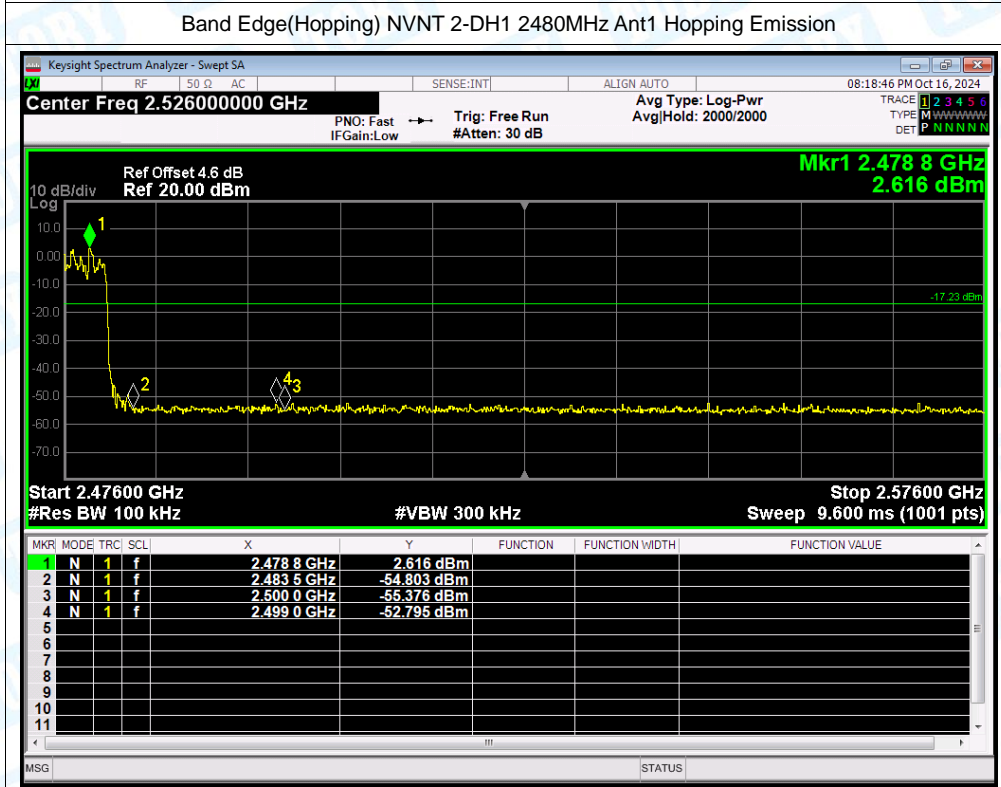
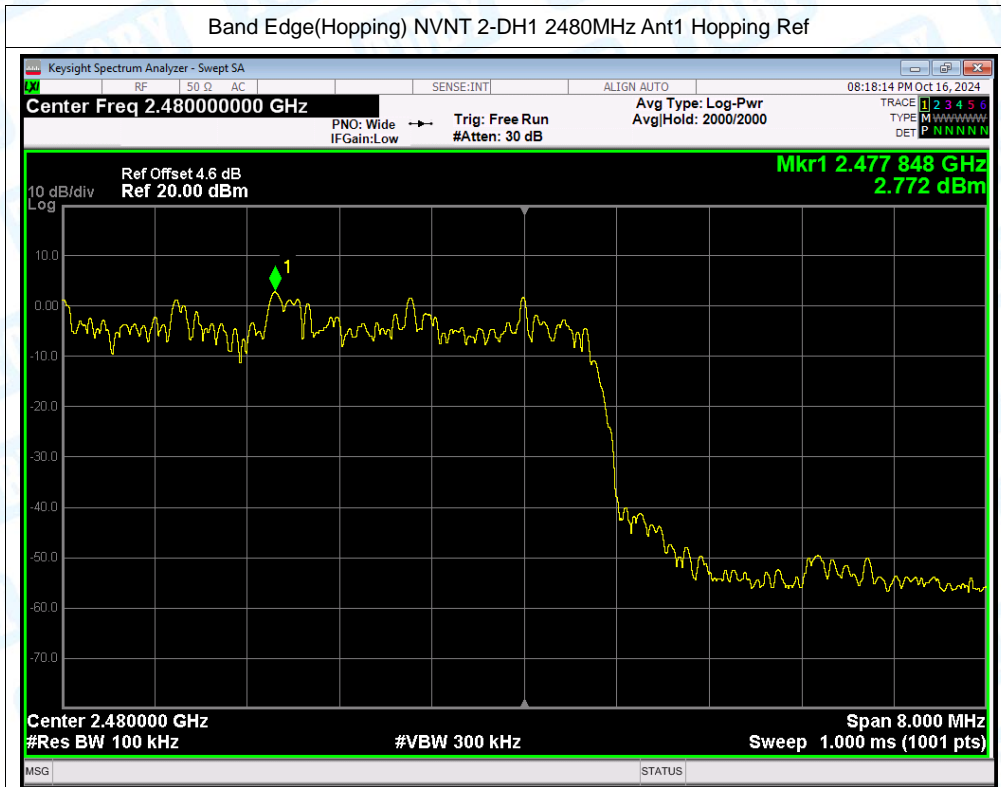


Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Ref



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

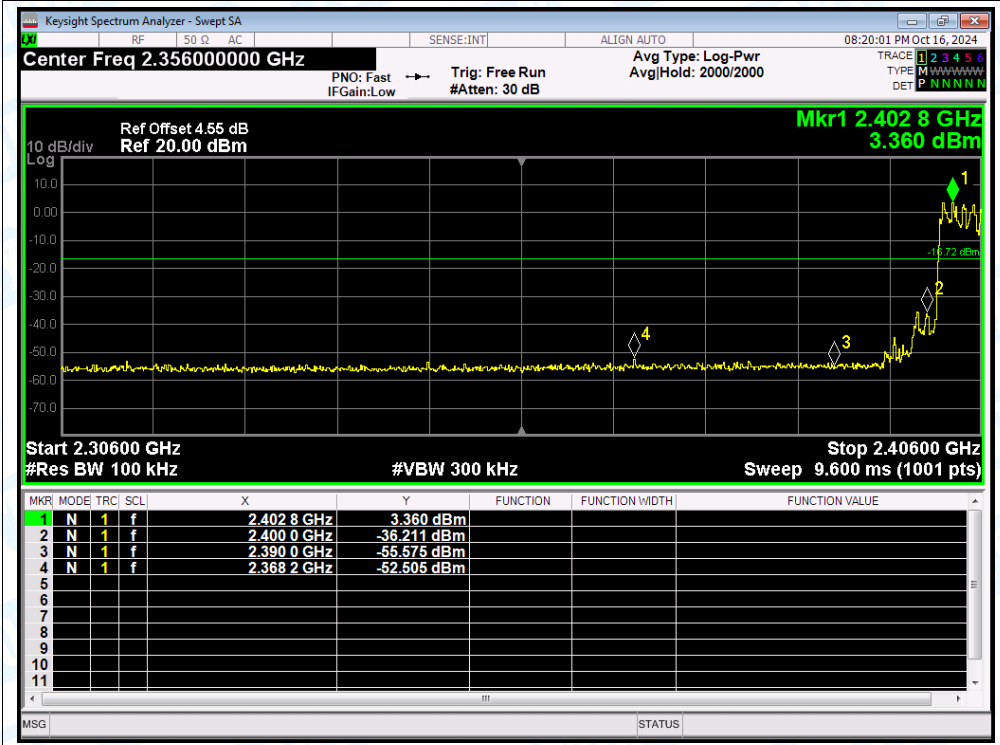


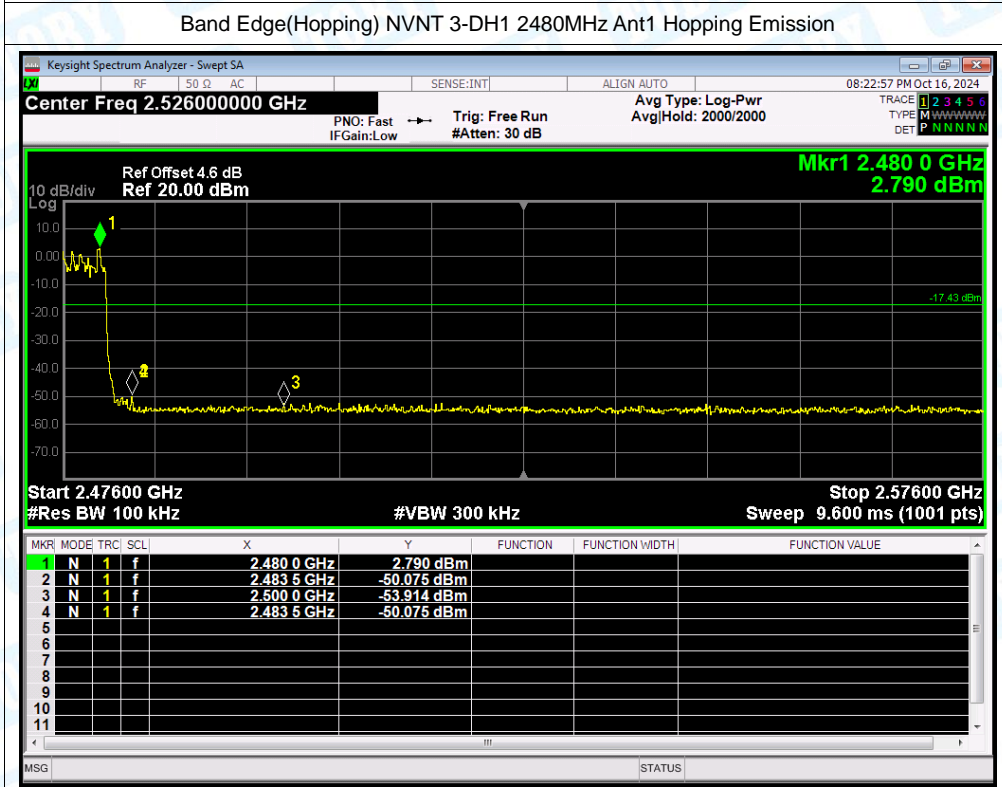


Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Ref



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





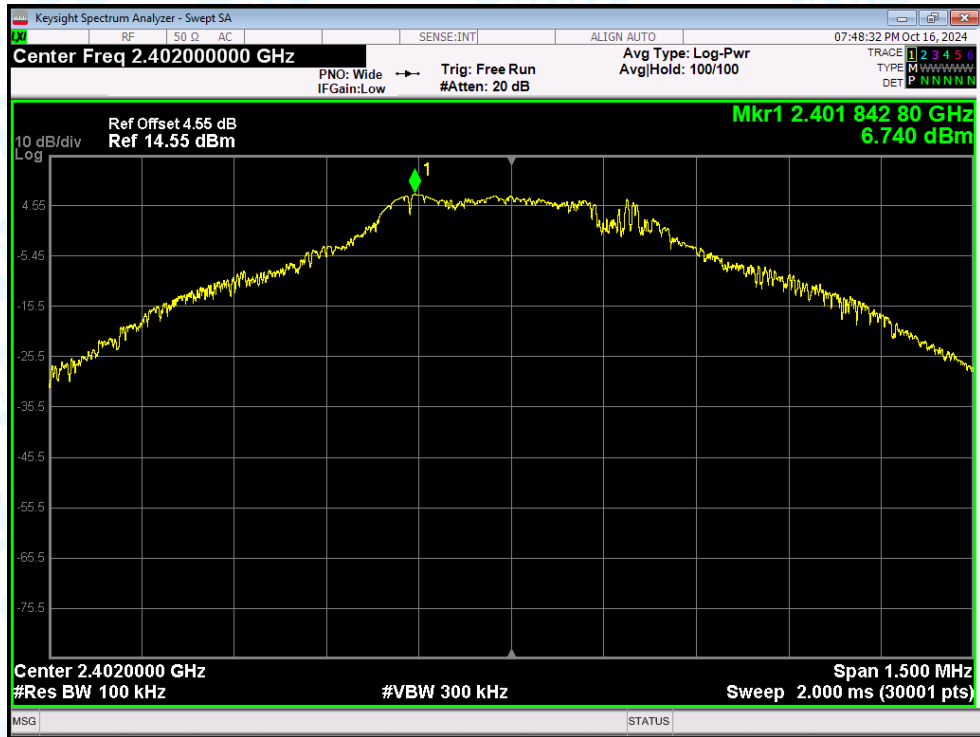


## 7. Conducted RF Spurious Emission

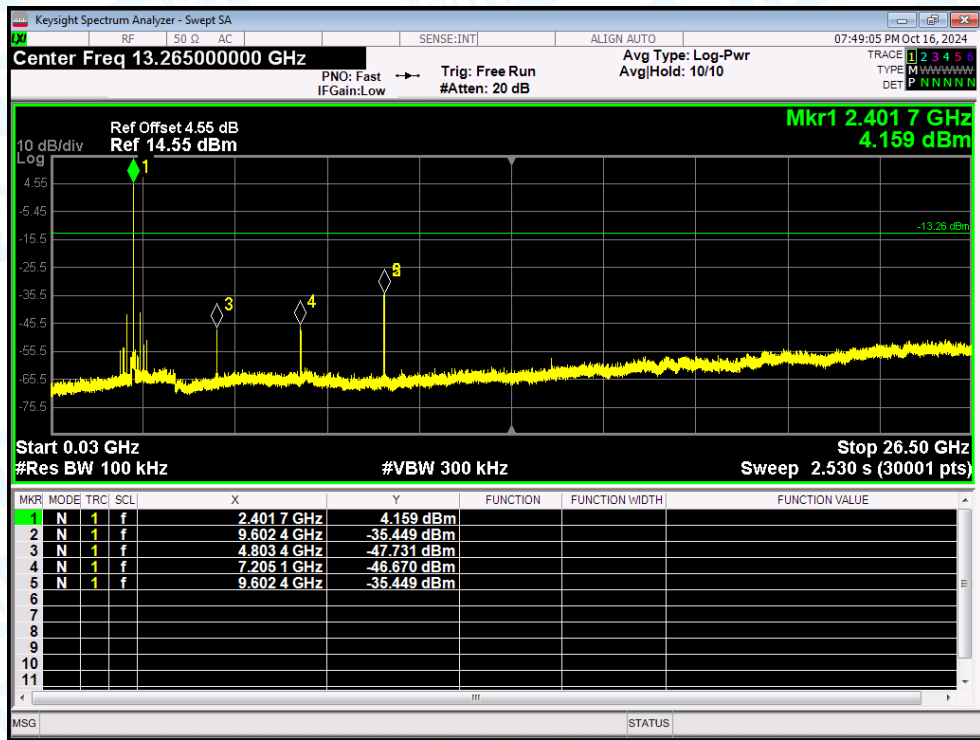
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-42.19	-20	Pass
NVNT	1-DH1	2441	Ant1	-39.22	-20	Pass
NVNT	1-DH1	2480	Ant1	-38.75	-20	Pass
NVNT	2-DH1	2402	Ant1	-39.18	-20	Pass
NVNT	2-DH1	2441	Ant1	-39.39	-20	Pass
NVNT	2-DH1	2480	Ant1	-38.87	-20	Pass
NVNT	3-DH1	2402	Ant1	-39.1	-20	Pass
NVNT	3-DH1	2441	Ant1	-39.18	-20	Pass
NVNT	3-DH1	2480	Ant1	-38.46	-20	Pass

Test Graphs

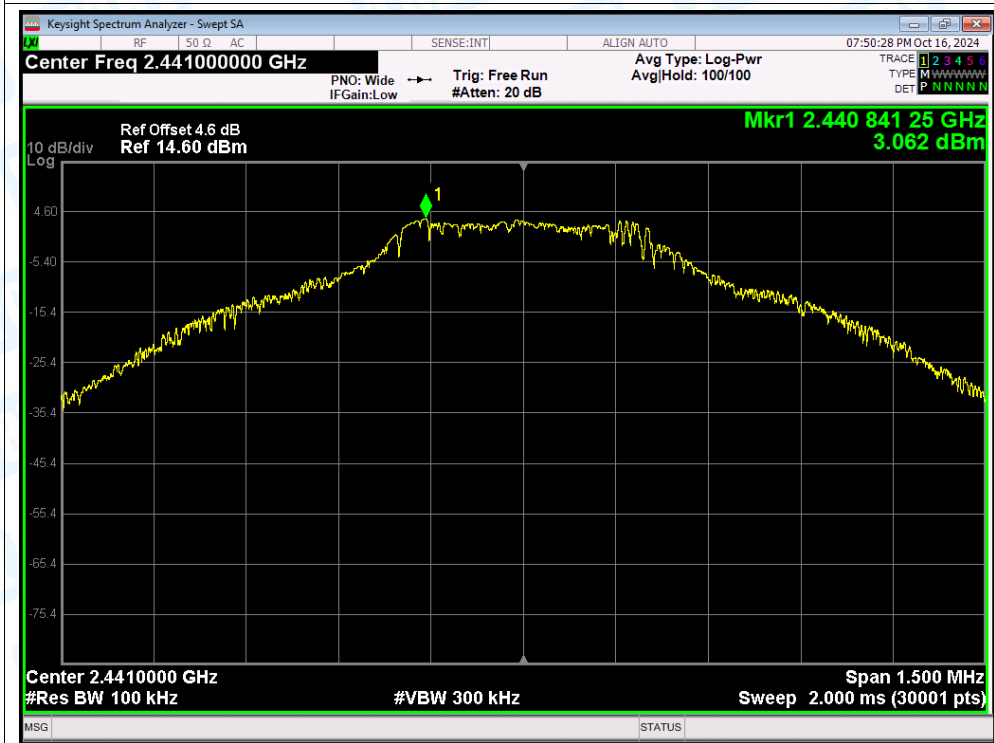
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



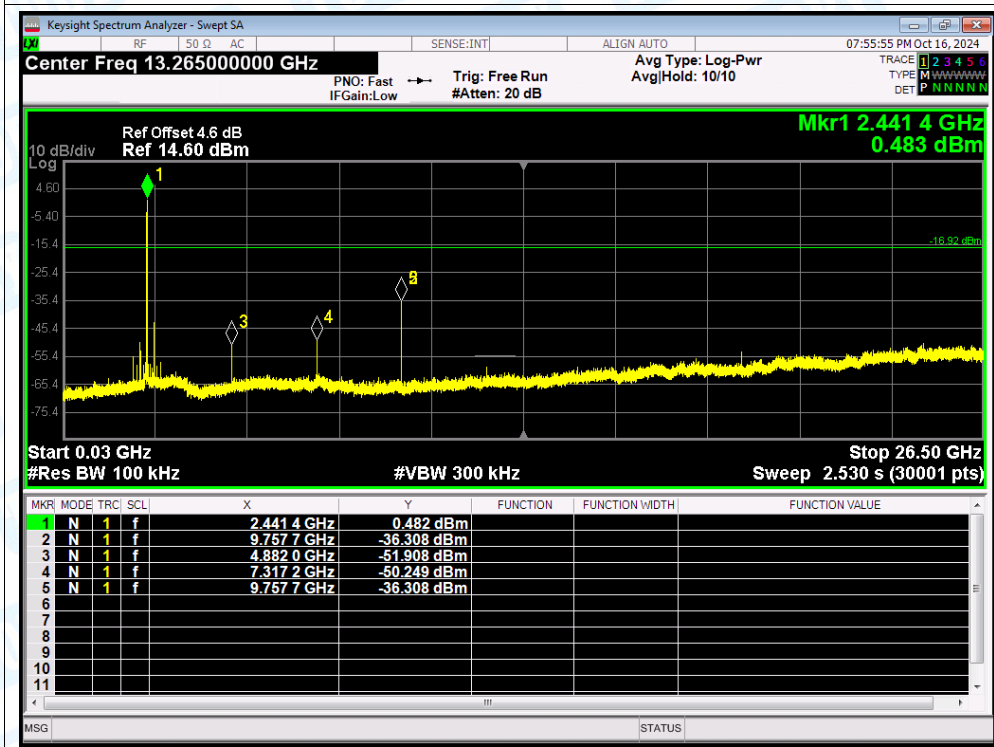
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



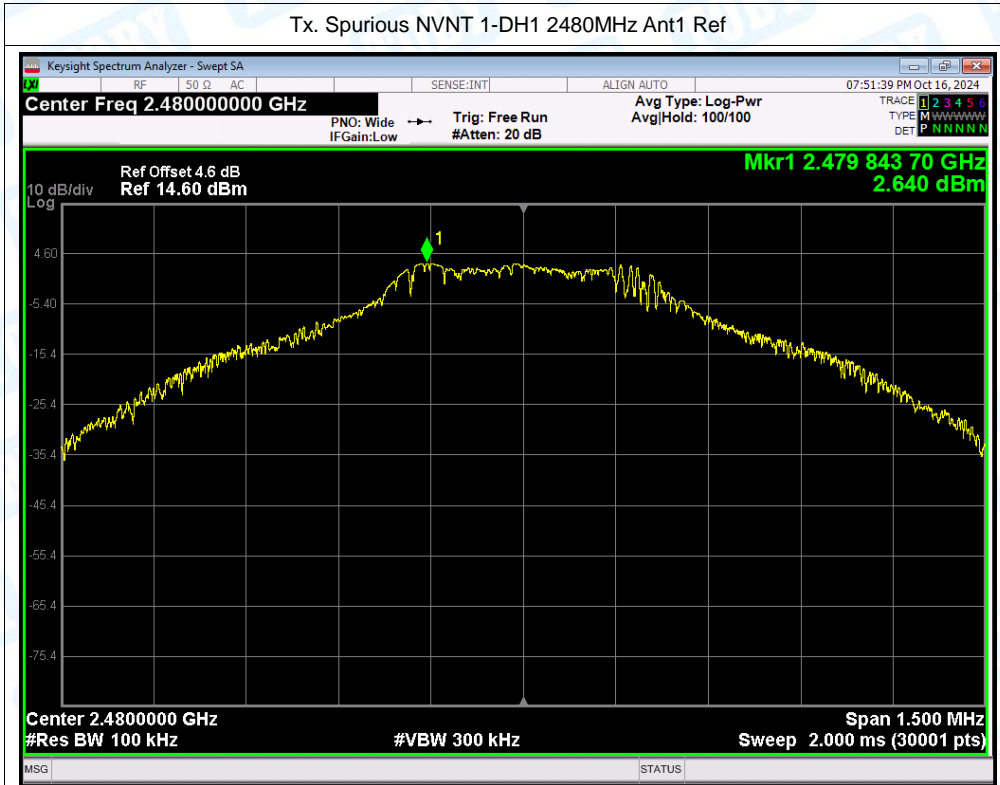
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



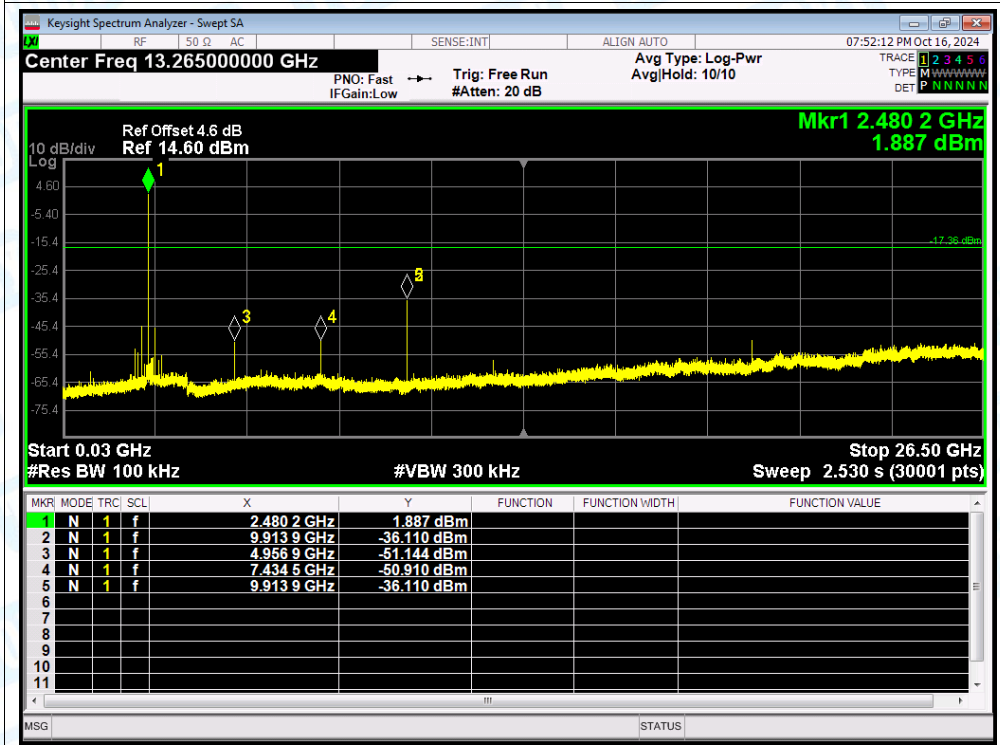
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



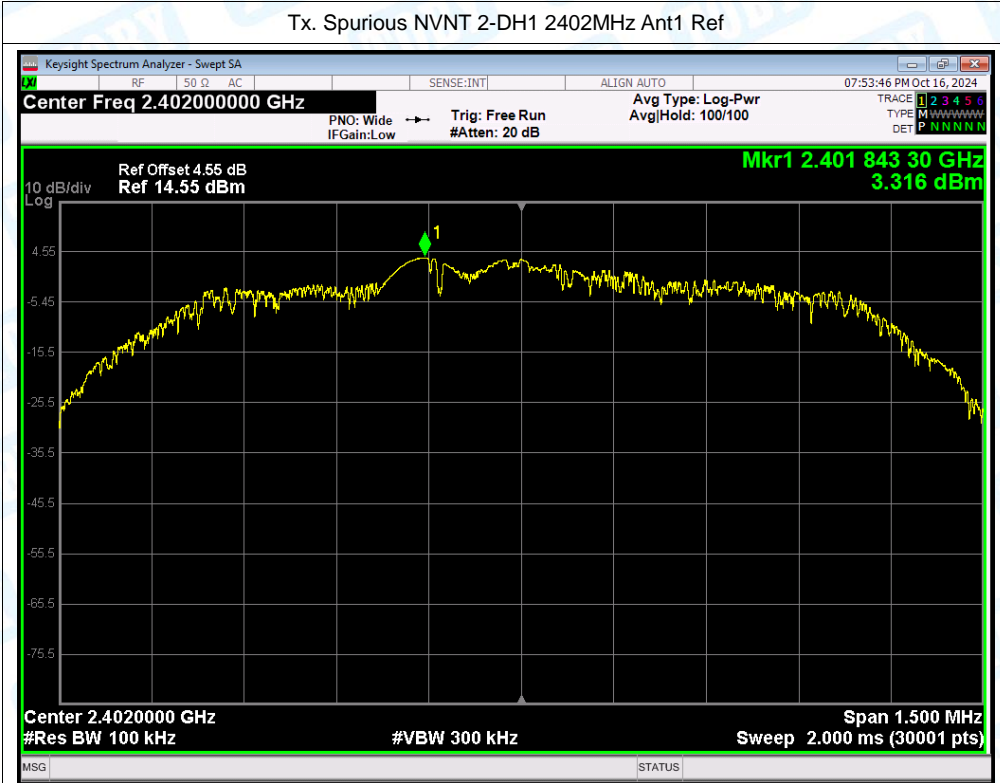
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



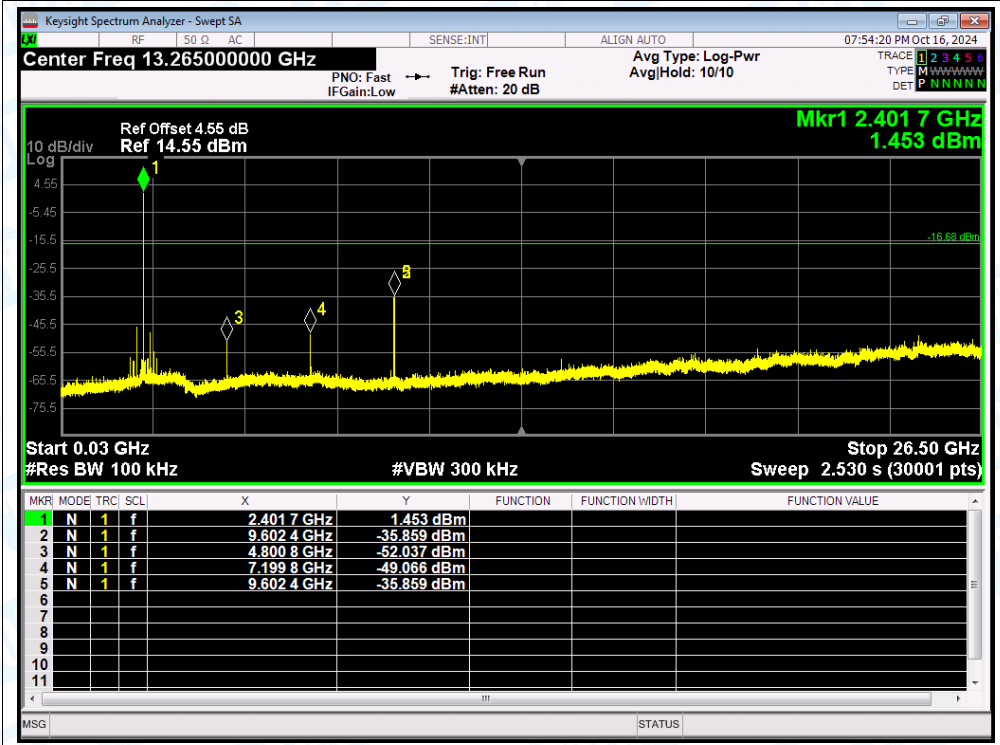
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



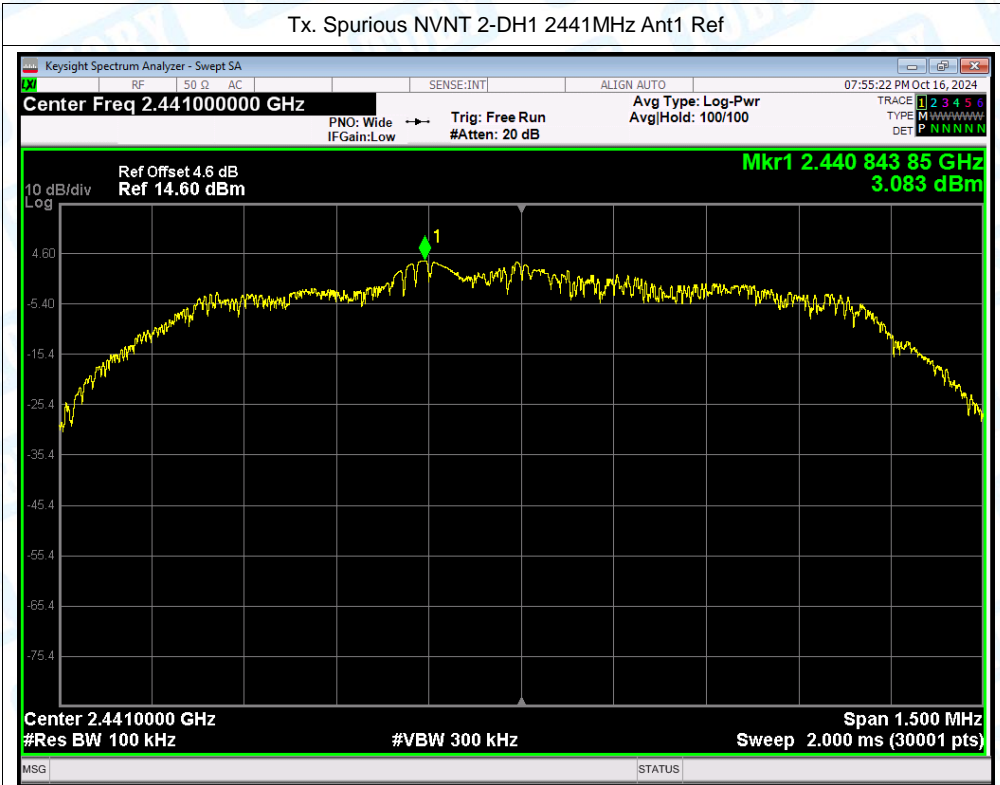
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



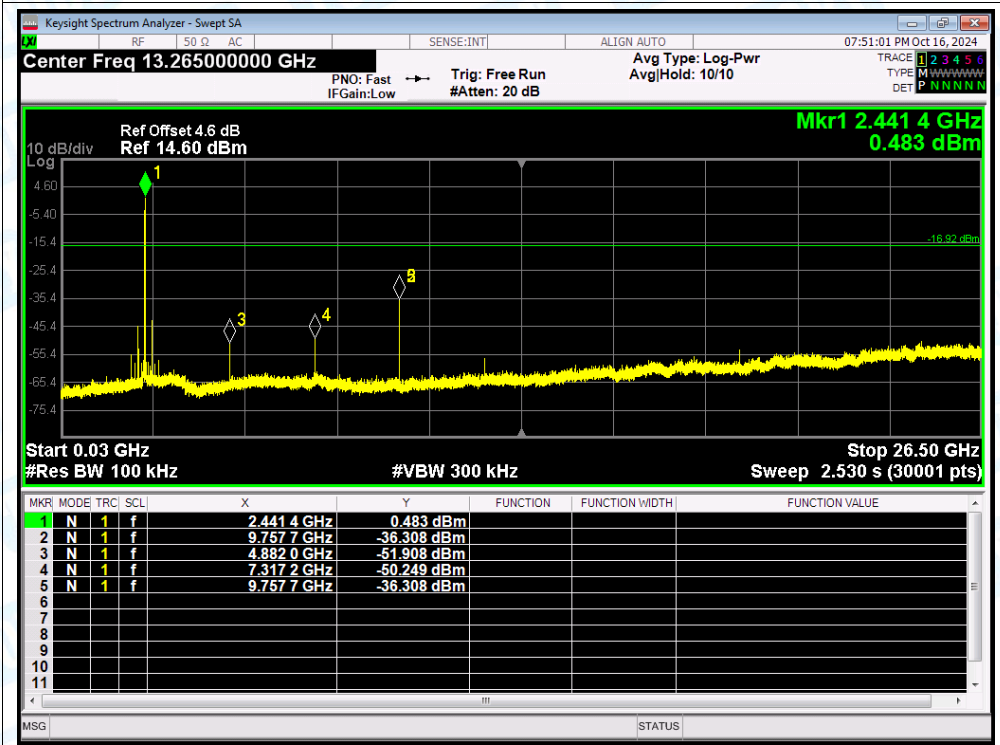
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



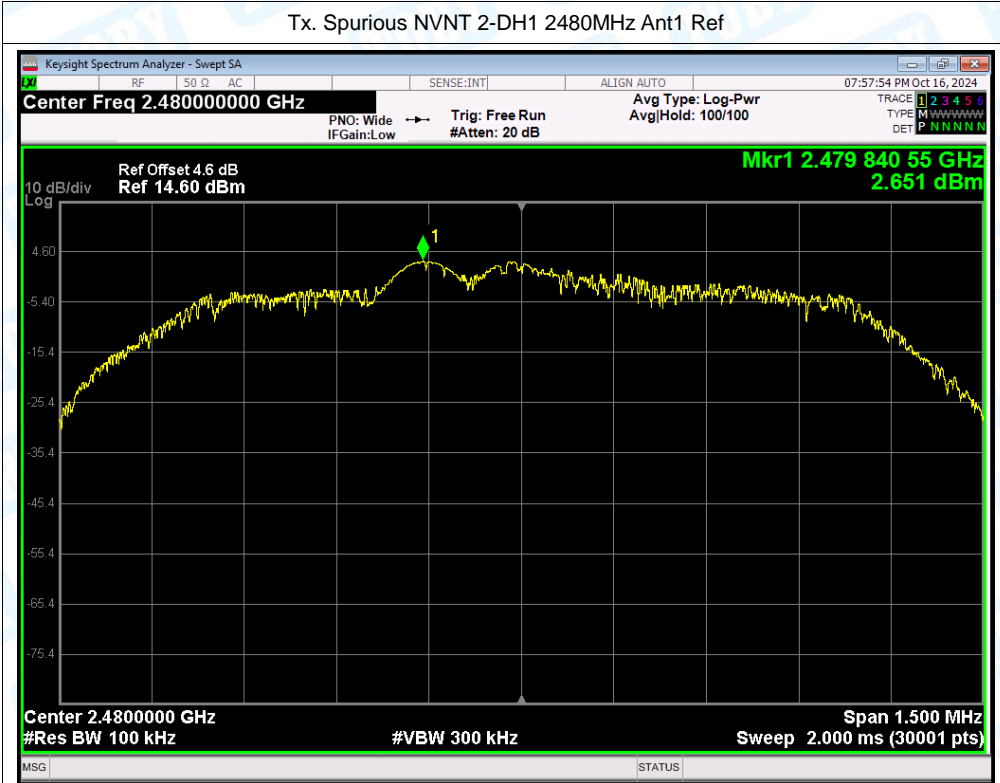
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



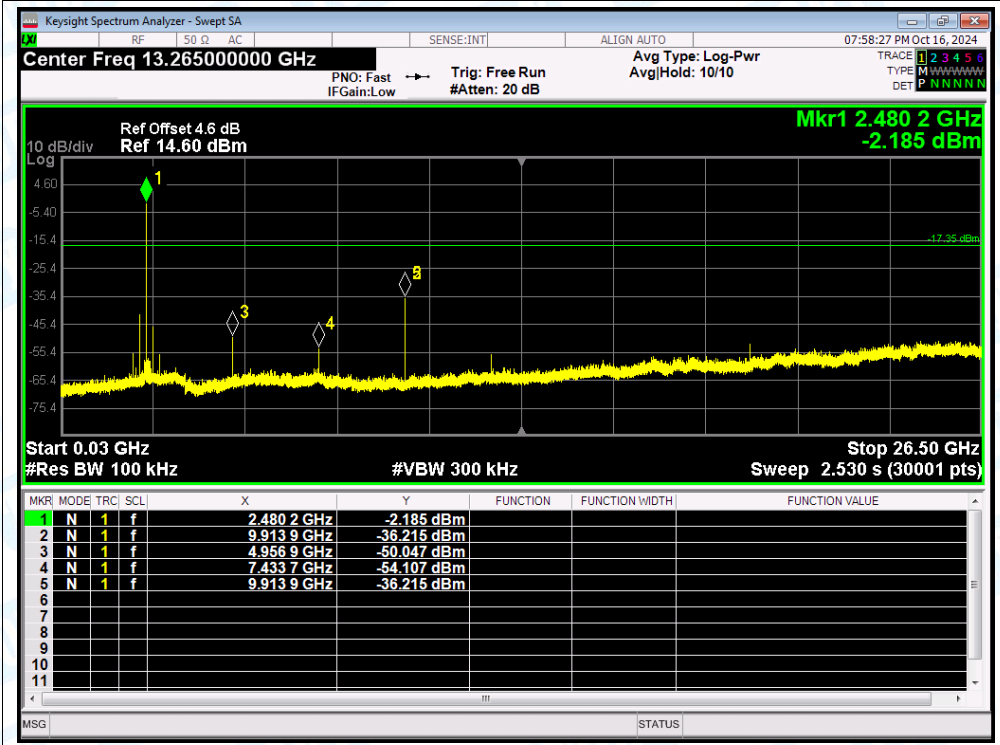
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



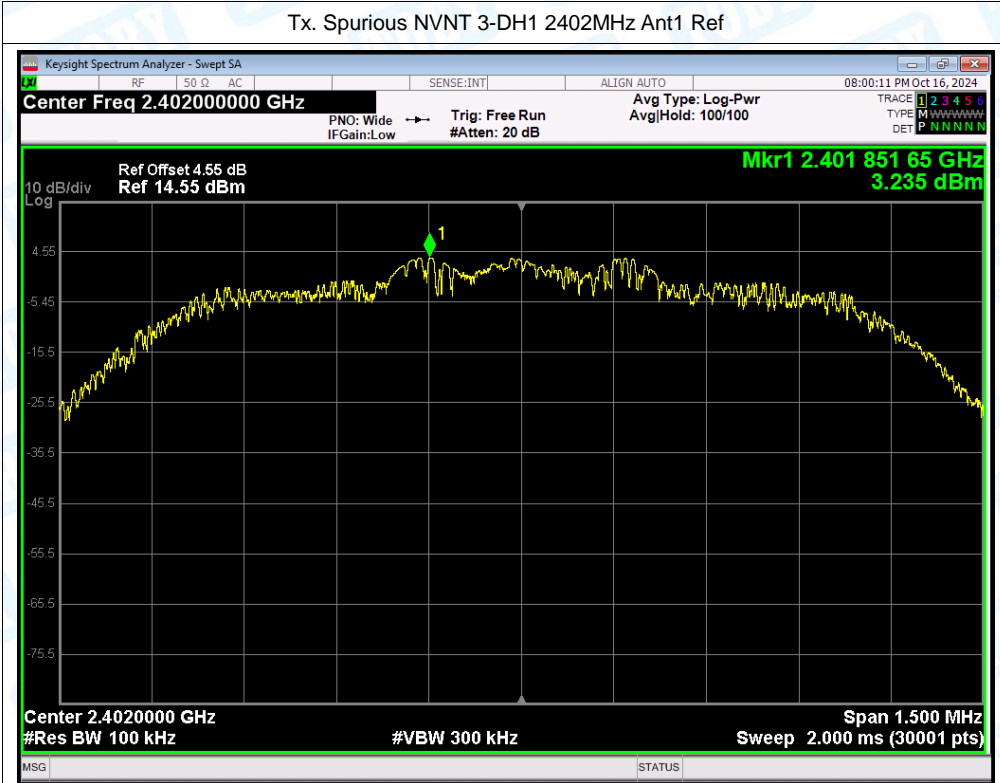
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



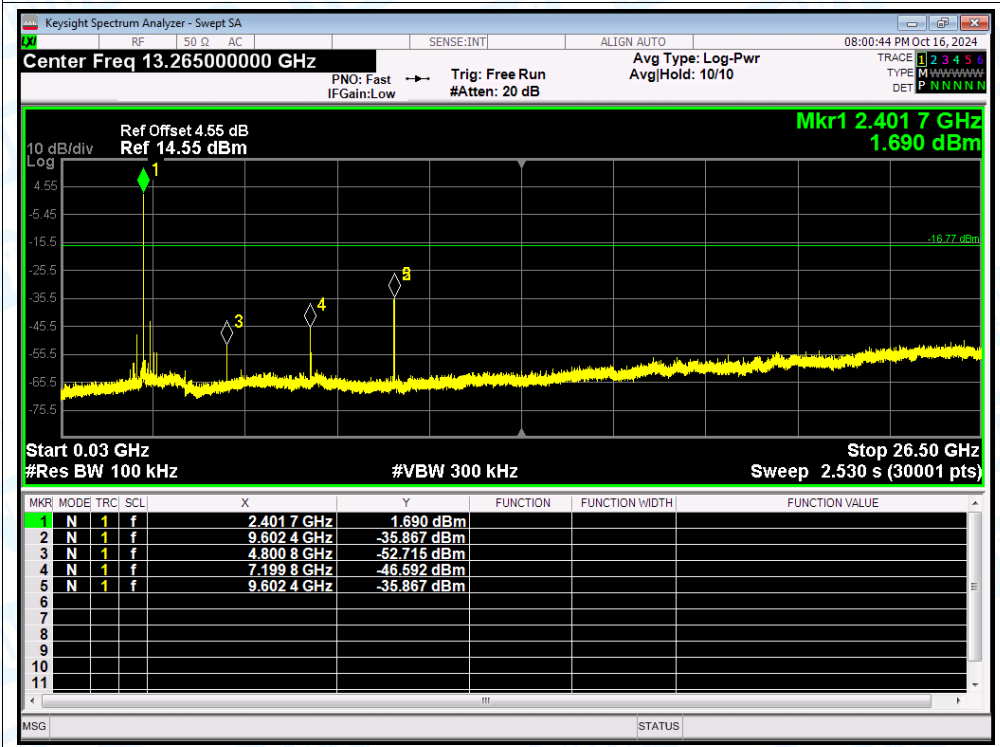
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref

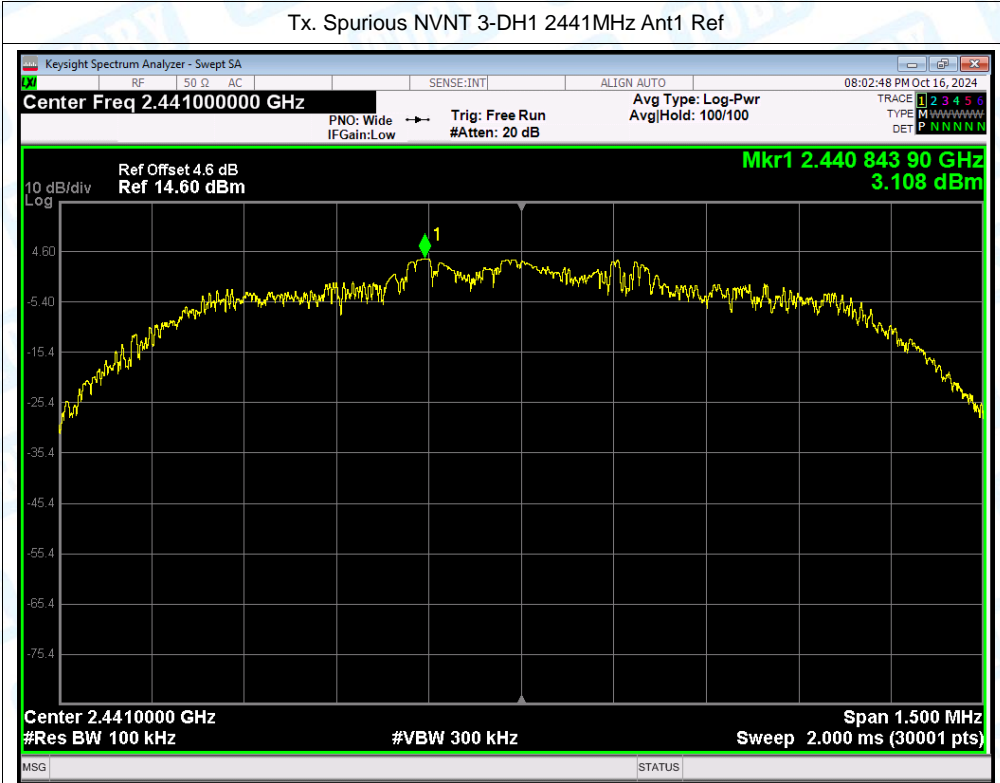


Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission

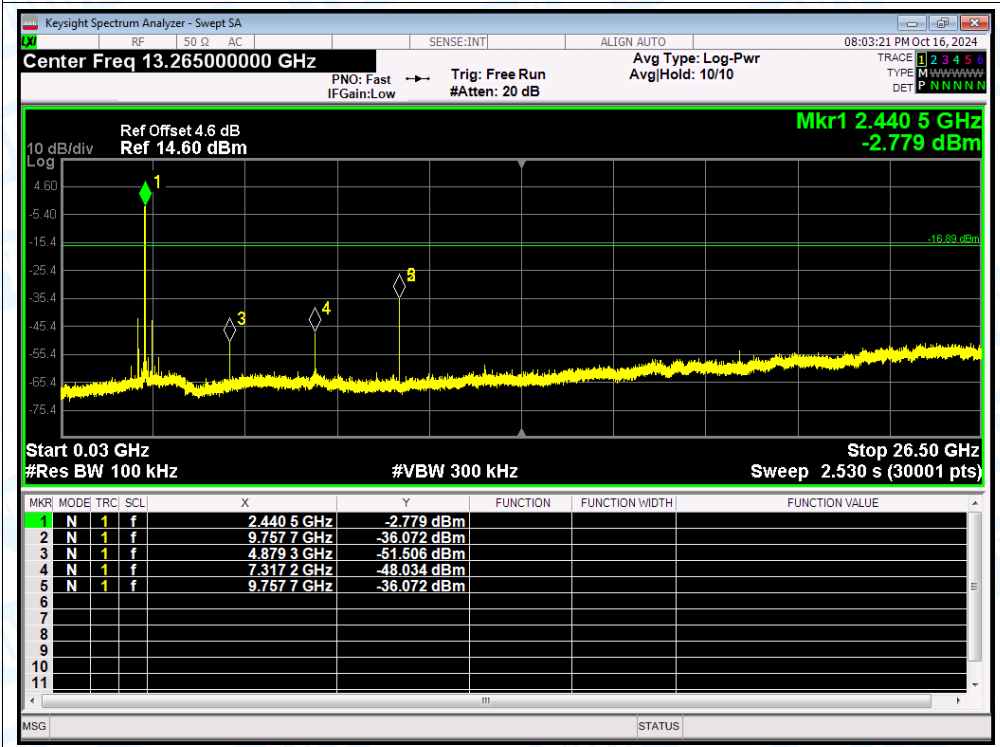




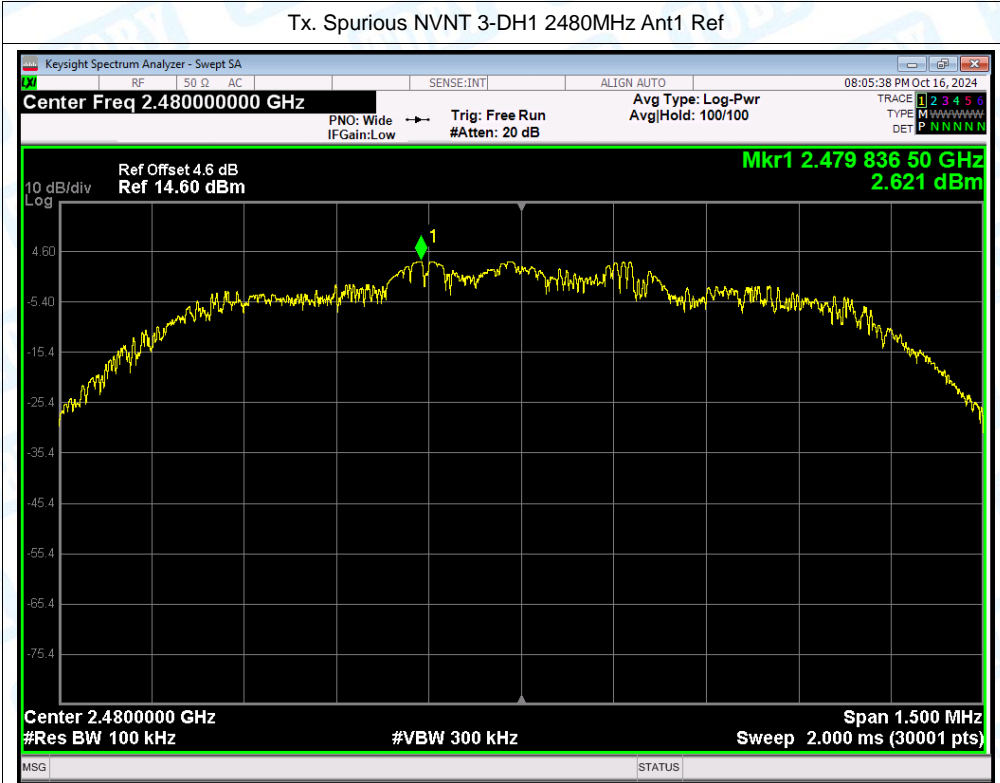
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



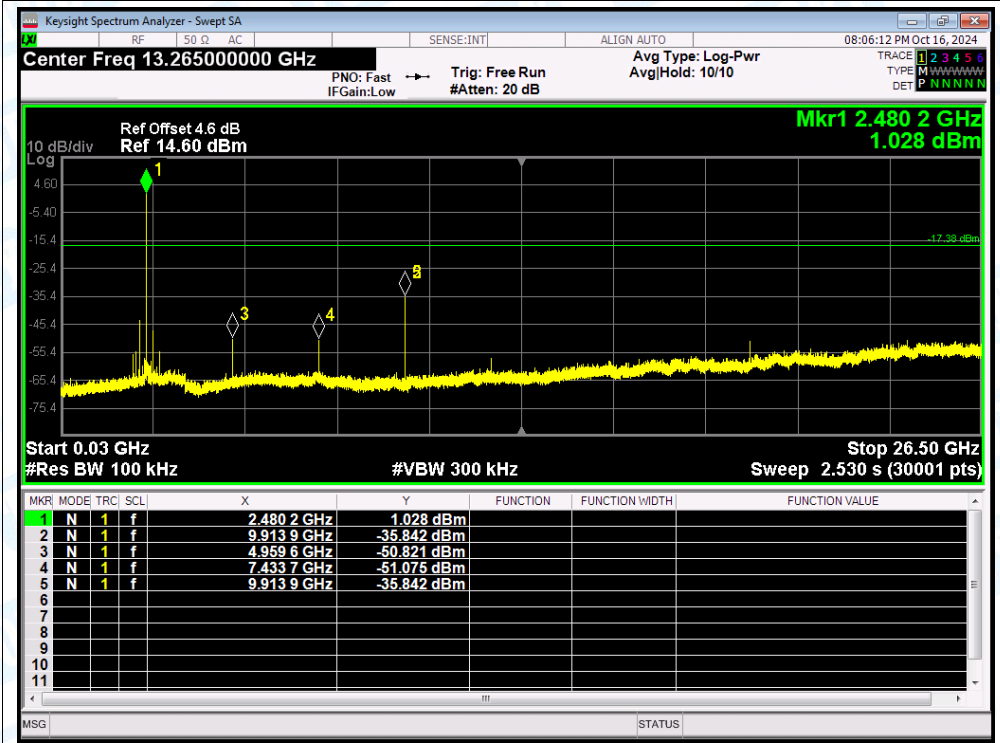
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

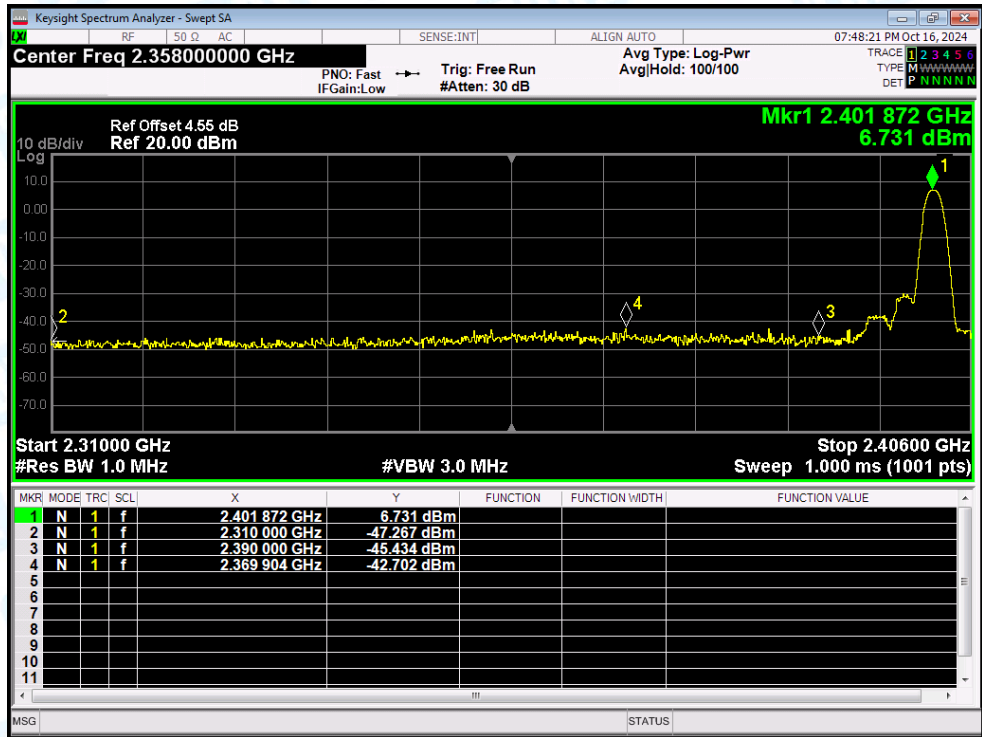


## 8. Restrict Band

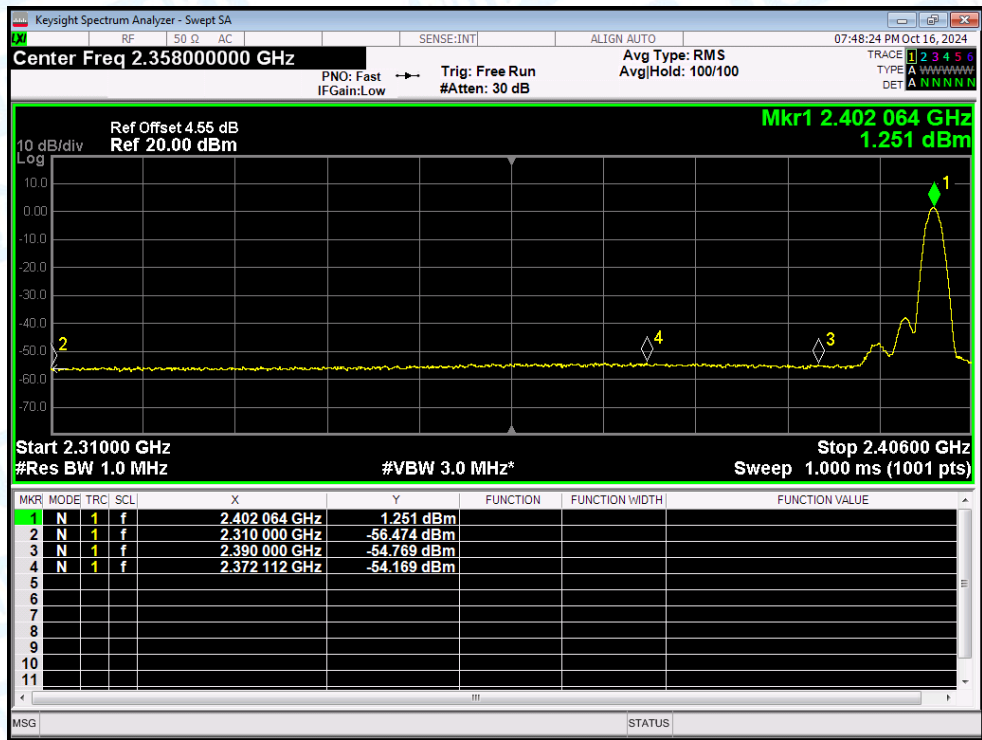
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-47.27	2	-	49.99	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.47	2	5.06	45.85	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2369.904	-42.7	2	-	54.56	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2372.112	-54.17	2	5.06	48.15	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.43	2	-	51.83	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-54.77	2	5.06	47.55	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-42.84	2	-	54.42	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-53.17	2	5.06	49.15	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.656	-42.6	2	-	54.66	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.536	-53.07	2	5.06	49.25	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-47.35	2	-	49.91	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.48	2	5.06	46.84	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-48.66	2	-	48.6	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.23	2	5.06	46.09	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2355.12	-44.09	2	-	53.17	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2367.6	-54.79	2	5.06	47.53	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.12	2	-	51.14	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.53	2	5.06	46.79	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-44.16	2	-	53.1	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-53.36	2	5.06	48.96	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2485.672	-40.32	2	-	56.94	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.56	-52.75	2	5.06	49.57	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.83	2	-	50.43	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.37	2	5.06	46.95	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-49.05	2	-	48.21	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-56.55	2	5.06	45.77	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2375.376	-43.86	2	-	53.4	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2373.552	-54.84	2	5.06	47.48	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.63	2	-	50.63	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-56.14	2	5.06	46.18	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-43.97	2	-	53.29	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-53	2	5.06	49.32	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2485.48	-40.01	2	-	57.25	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.56	-52.81	2	5.06	49.51	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.99	2	-	50.27	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.4	2	5.06	46.92	Average	54	Pass

Test Graphs

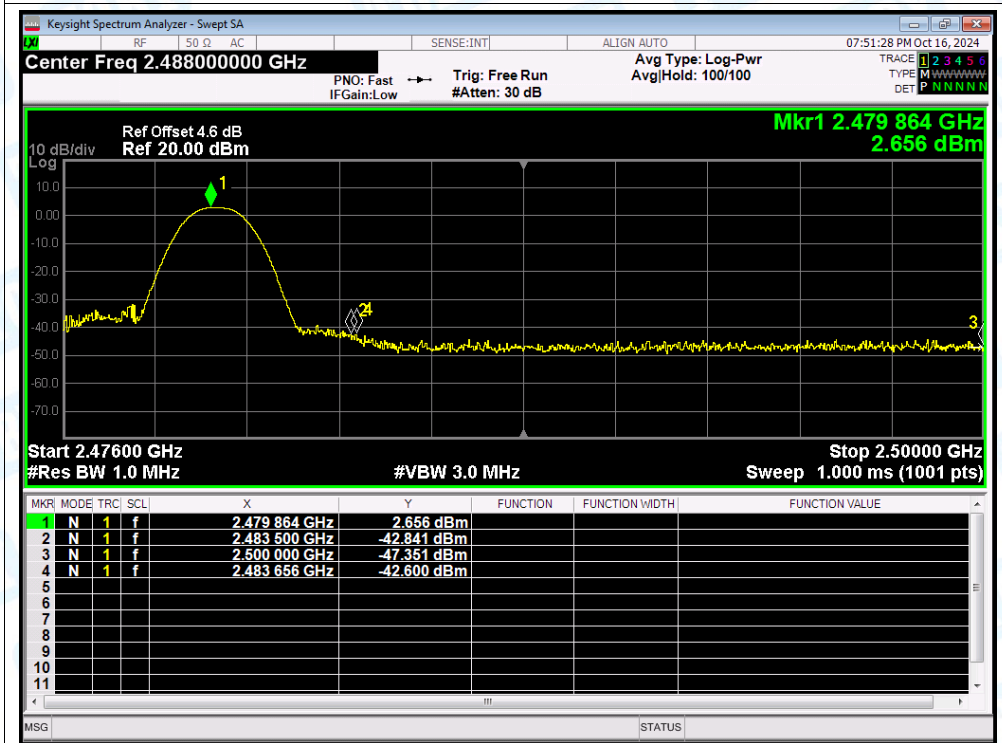
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



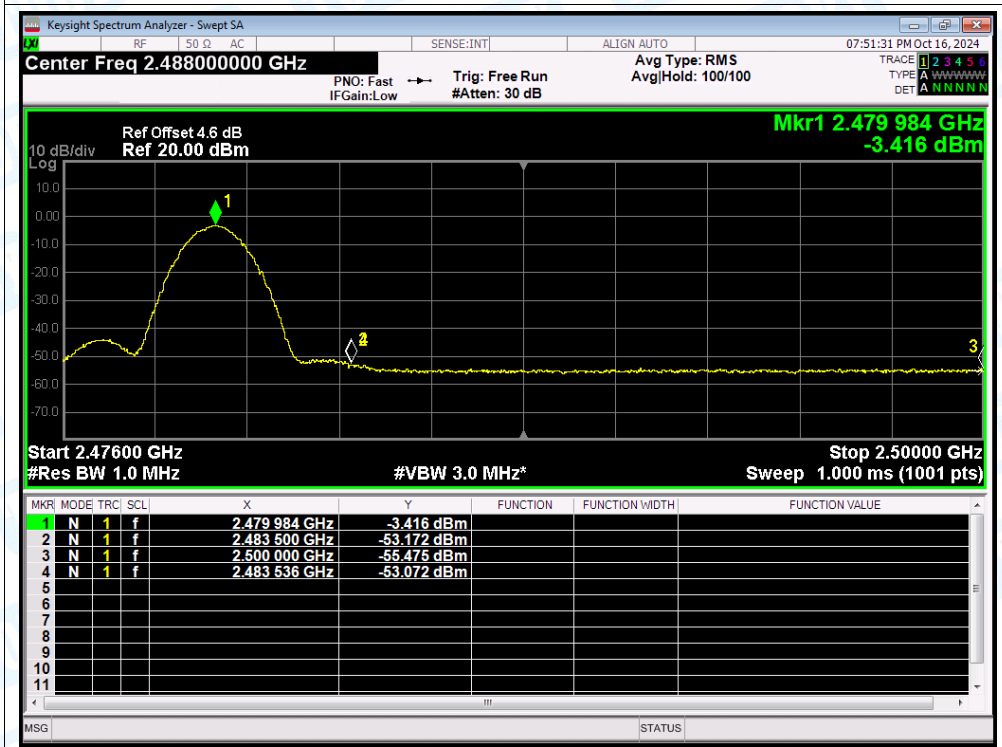
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



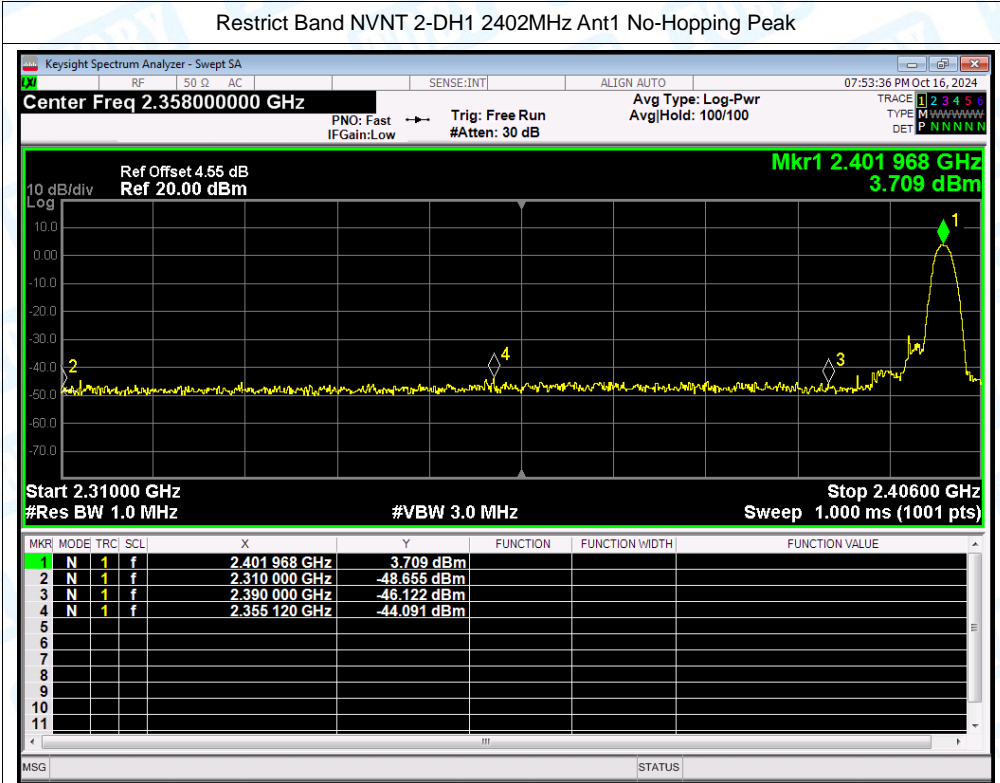
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



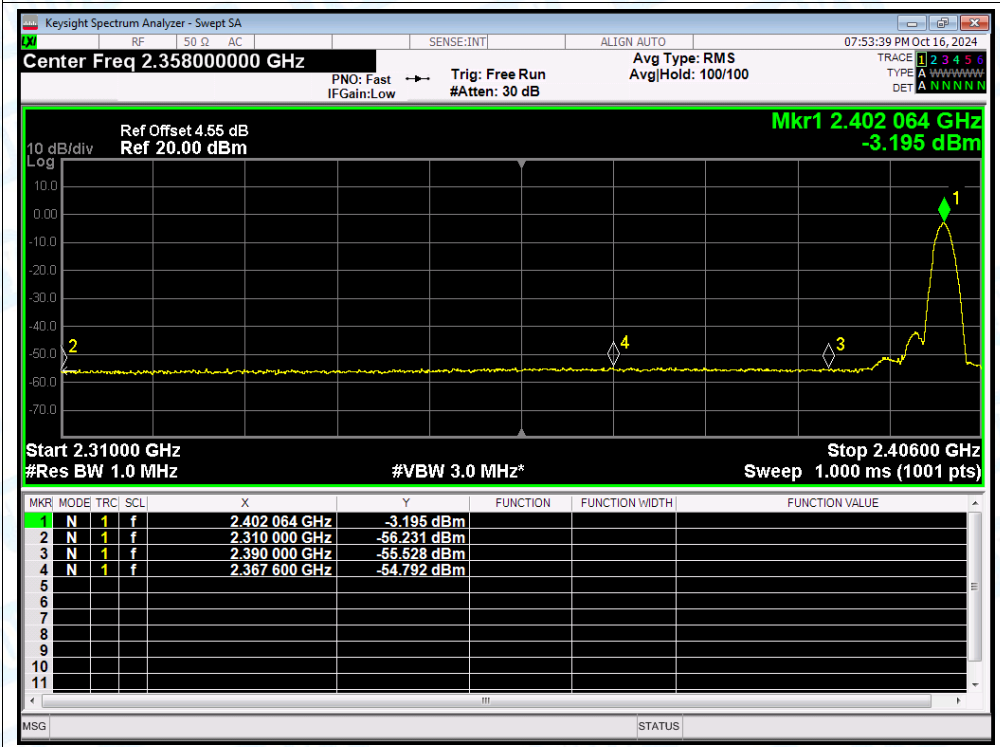
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



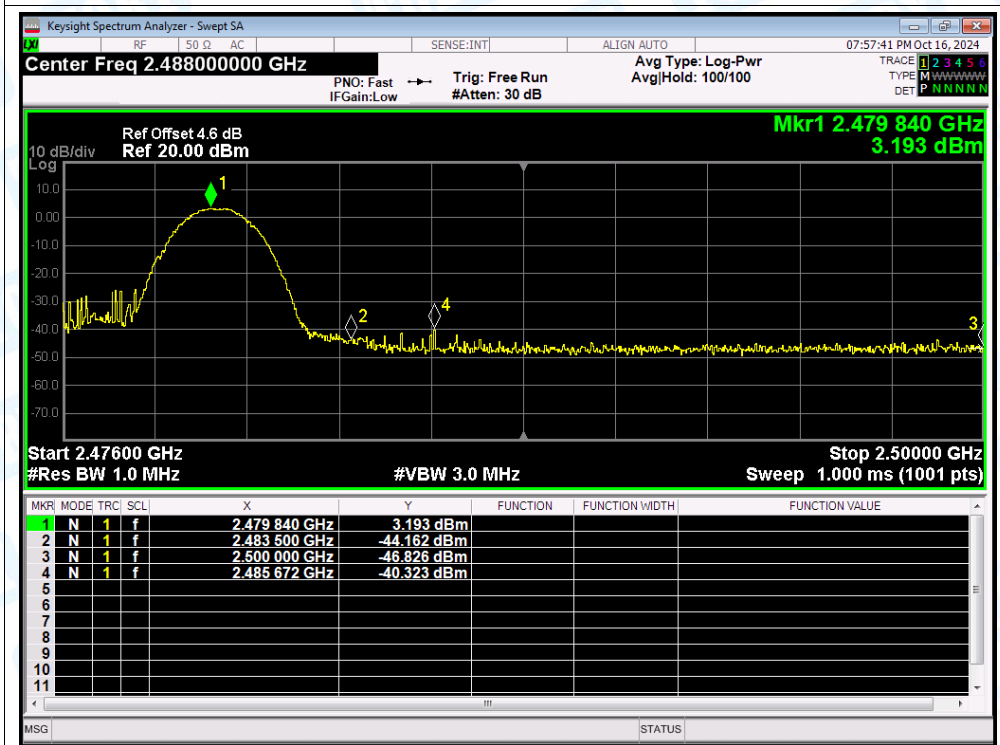
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



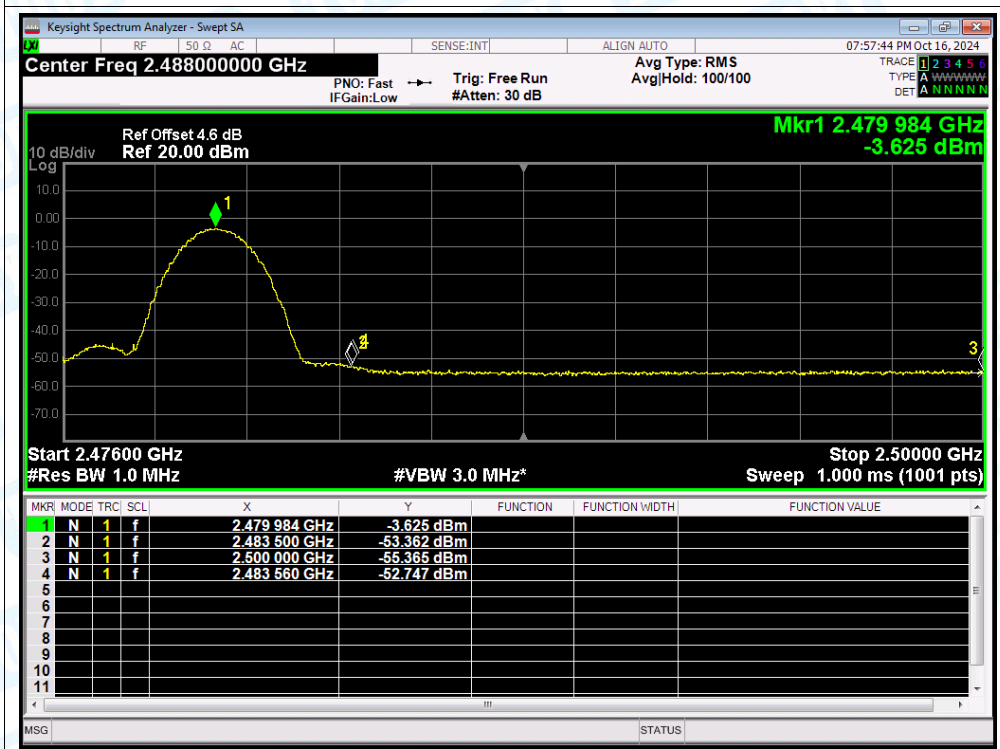
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



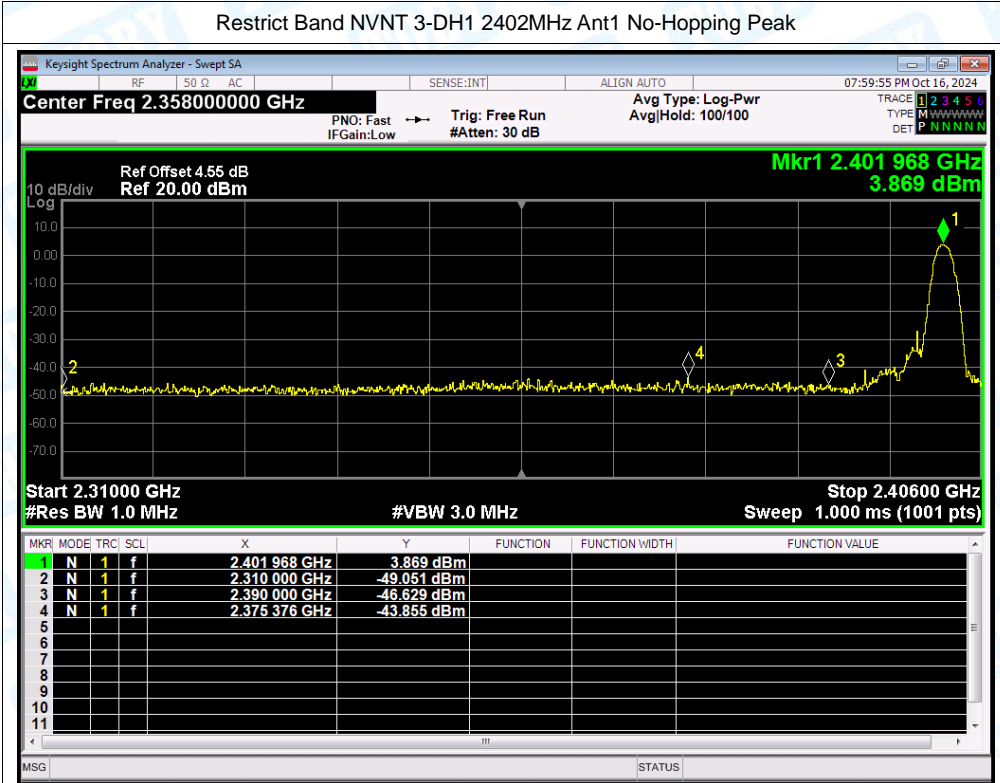
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



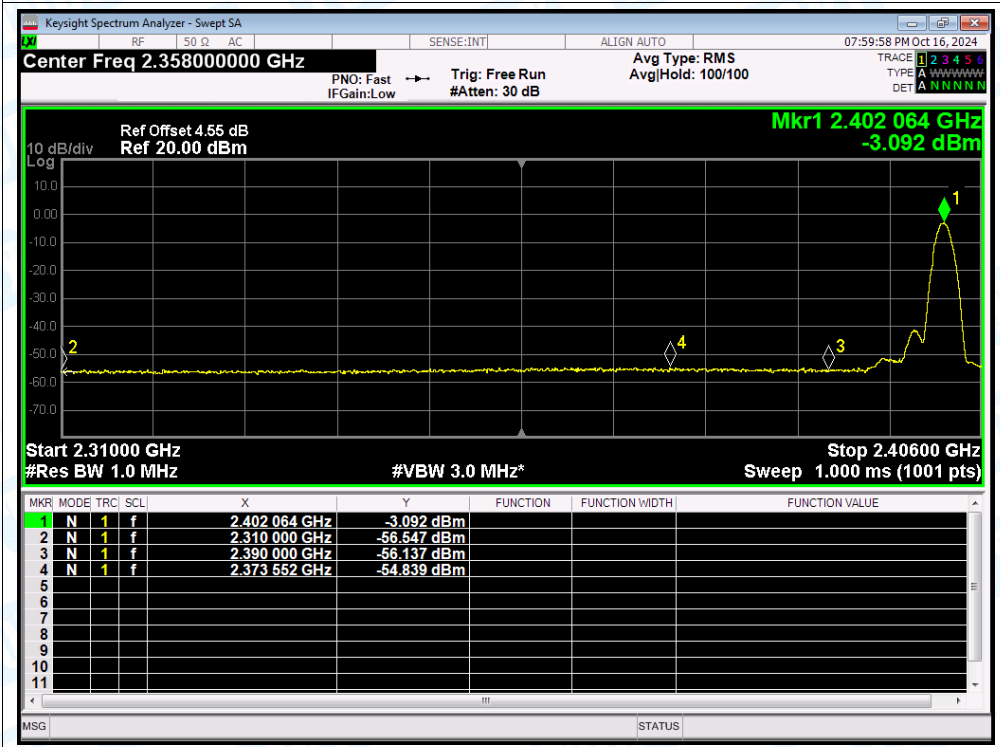
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



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

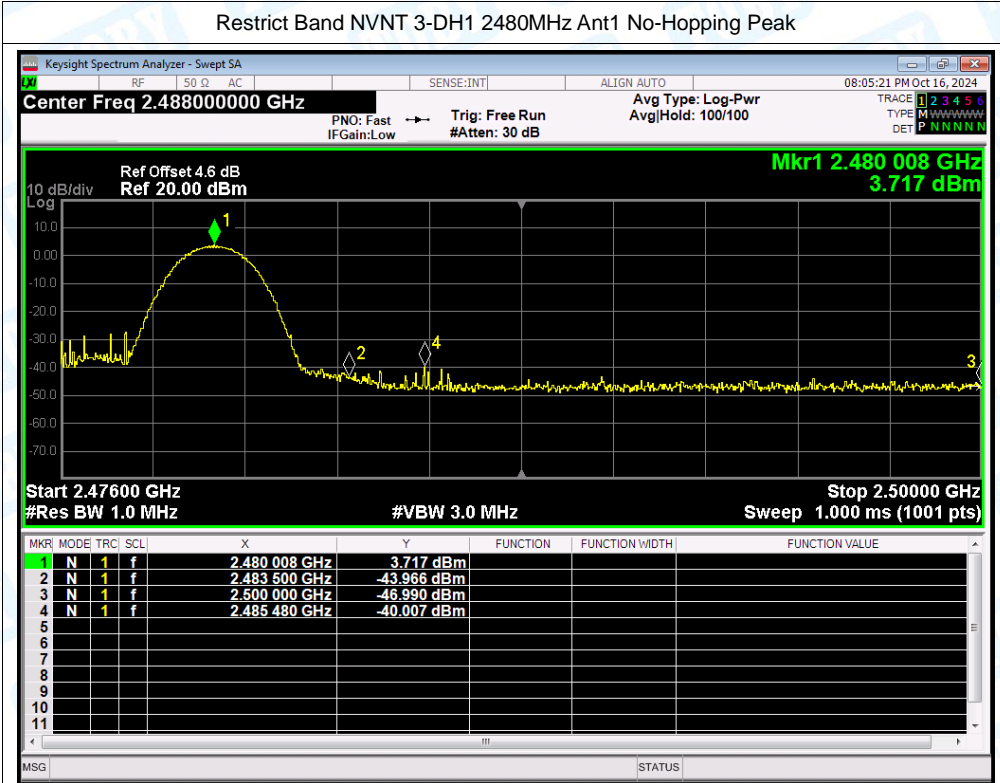


Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average

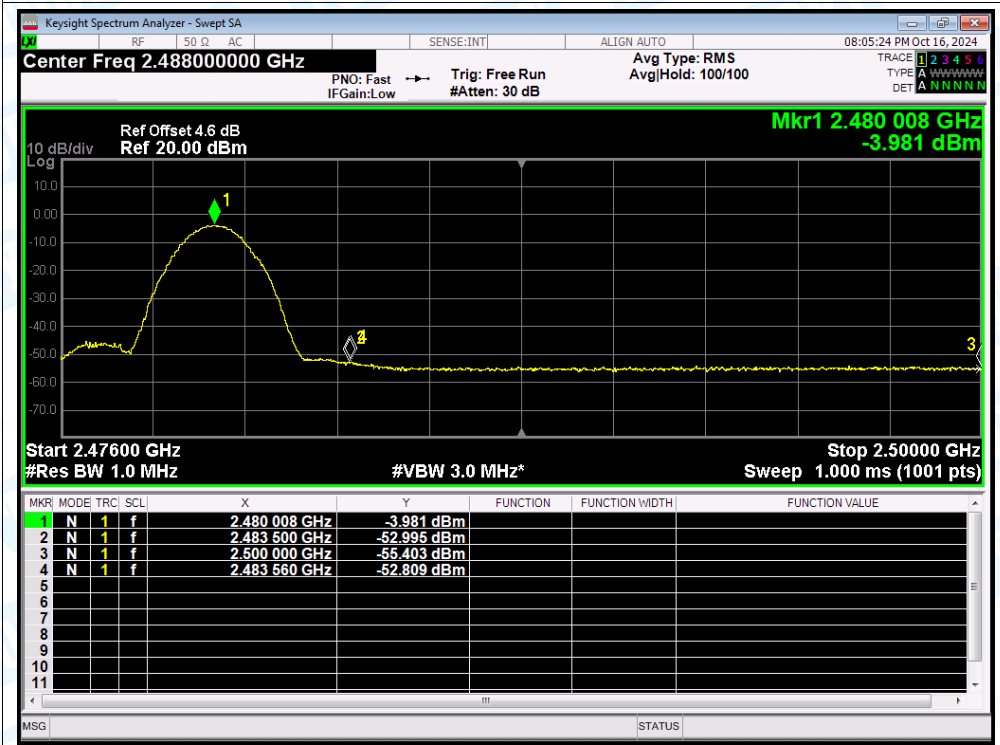




Restrict Band NVNT 3-DH1 2480MHz Ant1 No-Hopping Peak



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

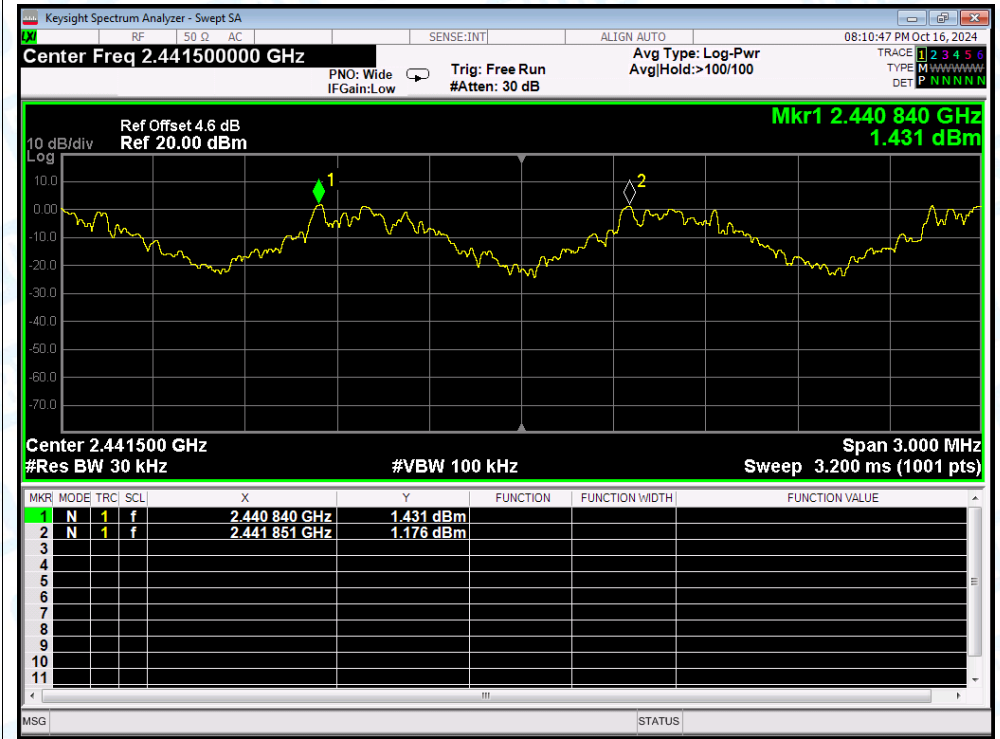


## 9. Carrier Frequencies Separation

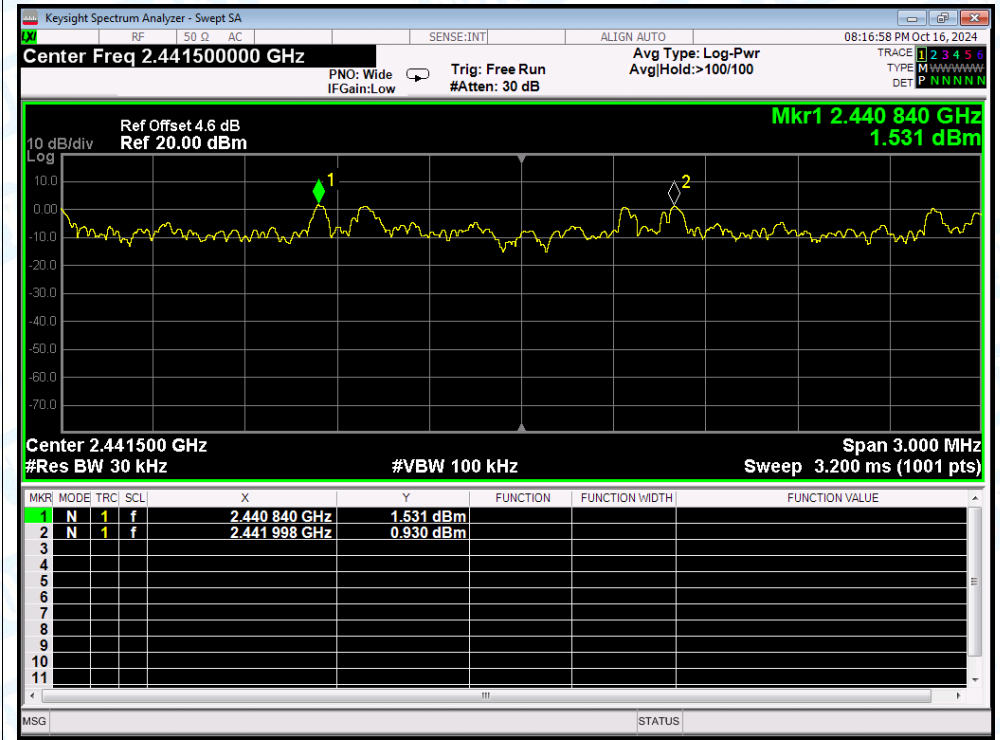
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.84	2441.851	1.011	0.587	Pass
NVNT	2-DH1	Ant1	2440.84	2441.998	1.158	0.833	Pass
NVNT	3-DH1	Ant1	2440.99	2441.983	0.993	0.813	Pass

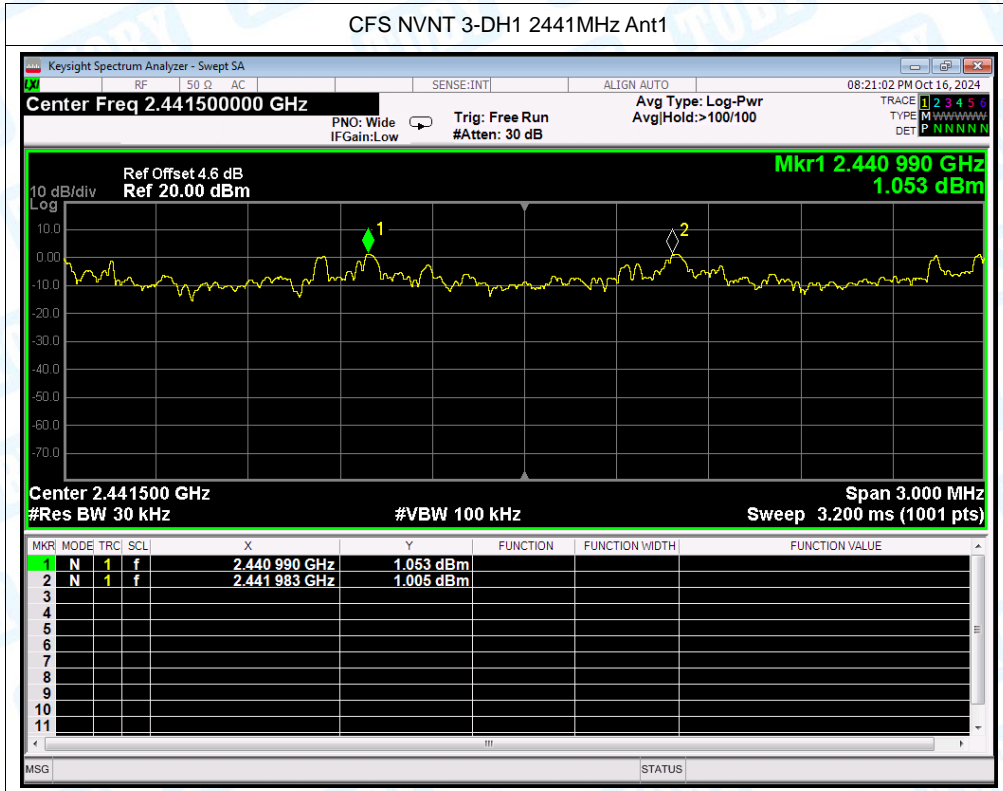
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



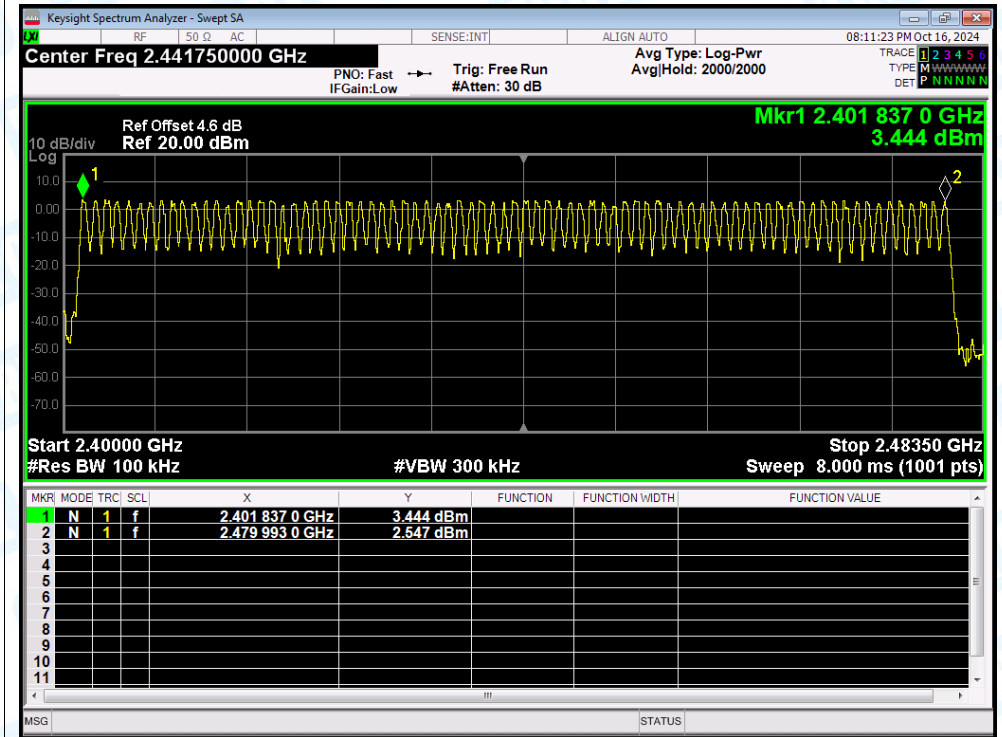


## 10. Number of Hopping Channel

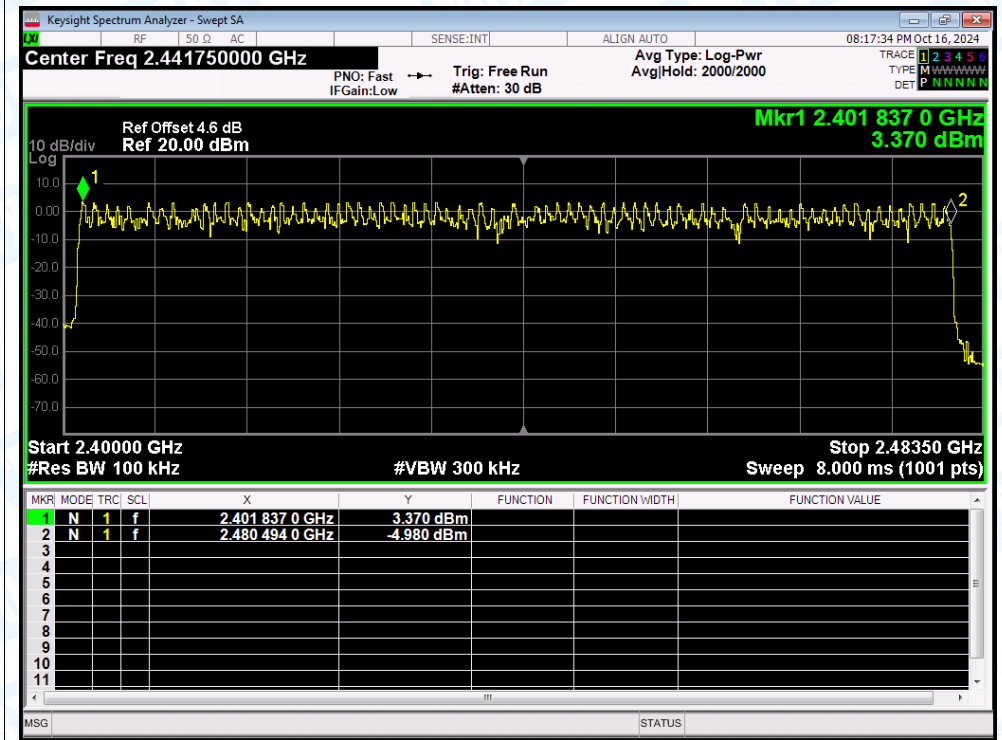
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

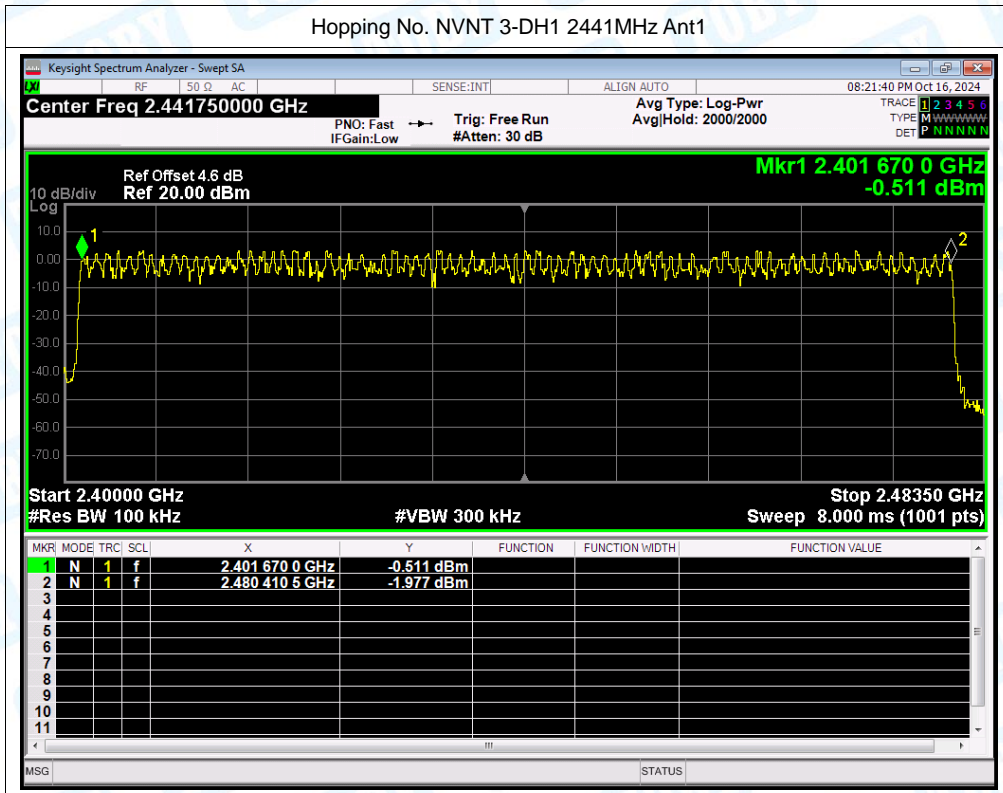
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1





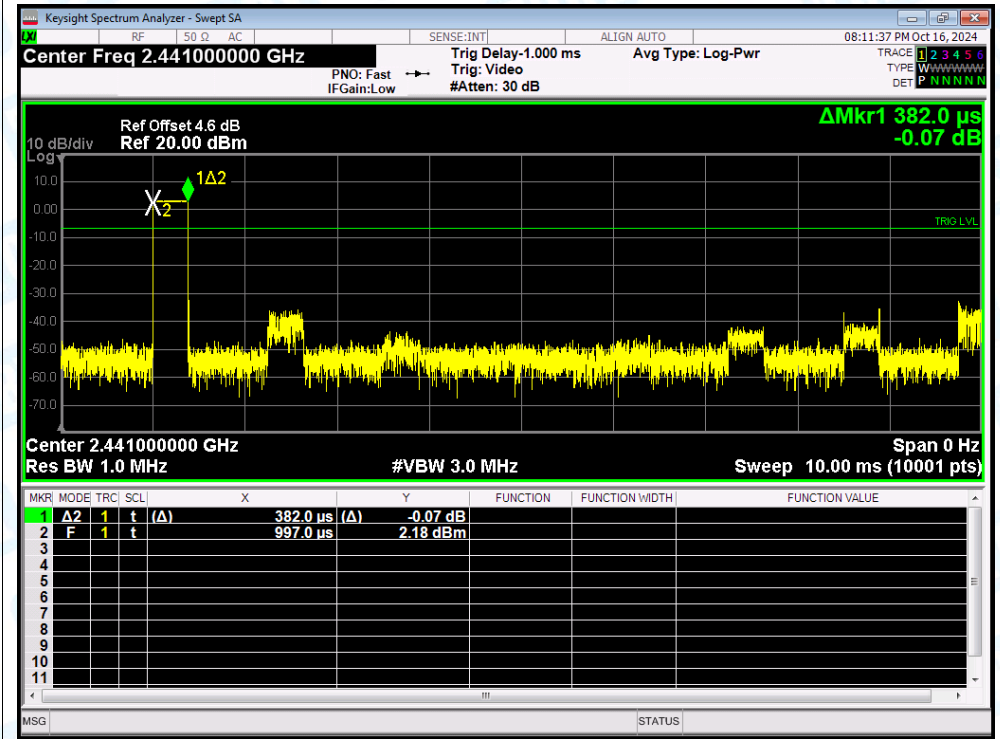
## 11. Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.382	122.24	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.638	262.08	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	2.891	308.373	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.391	125.12	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.893	308.587	31600	400	Pass

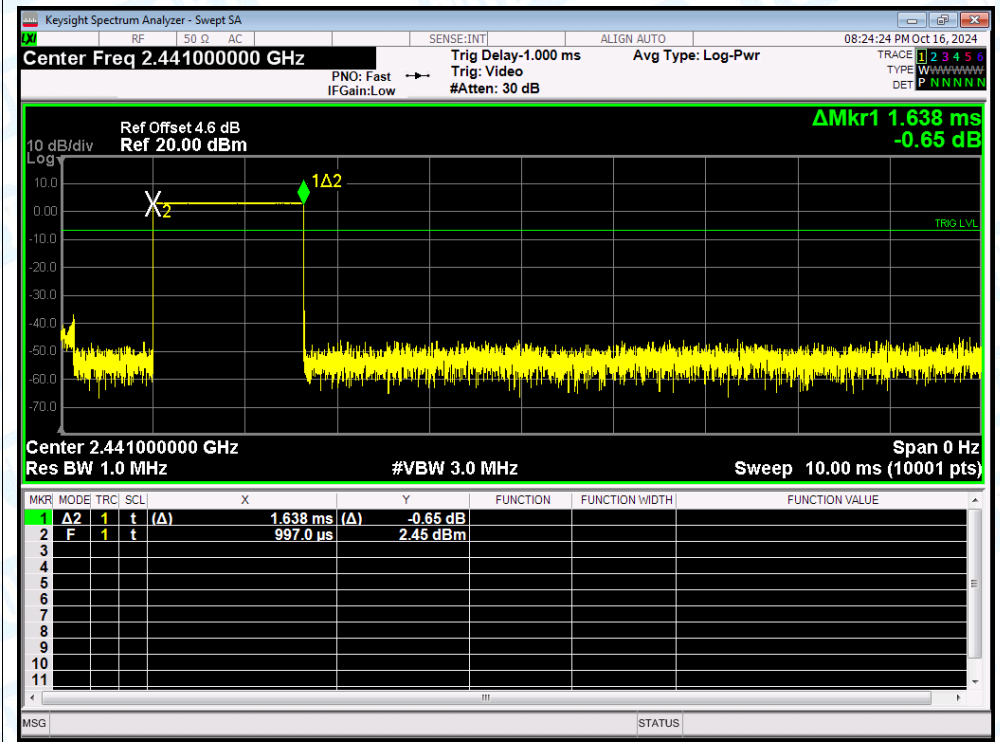


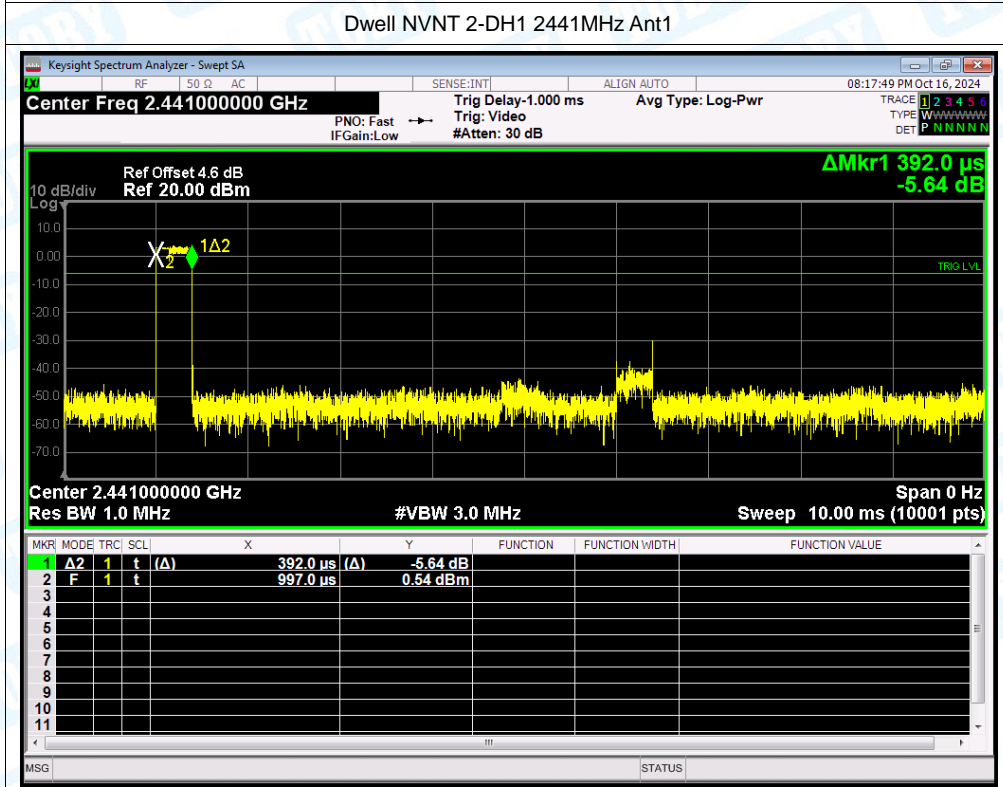
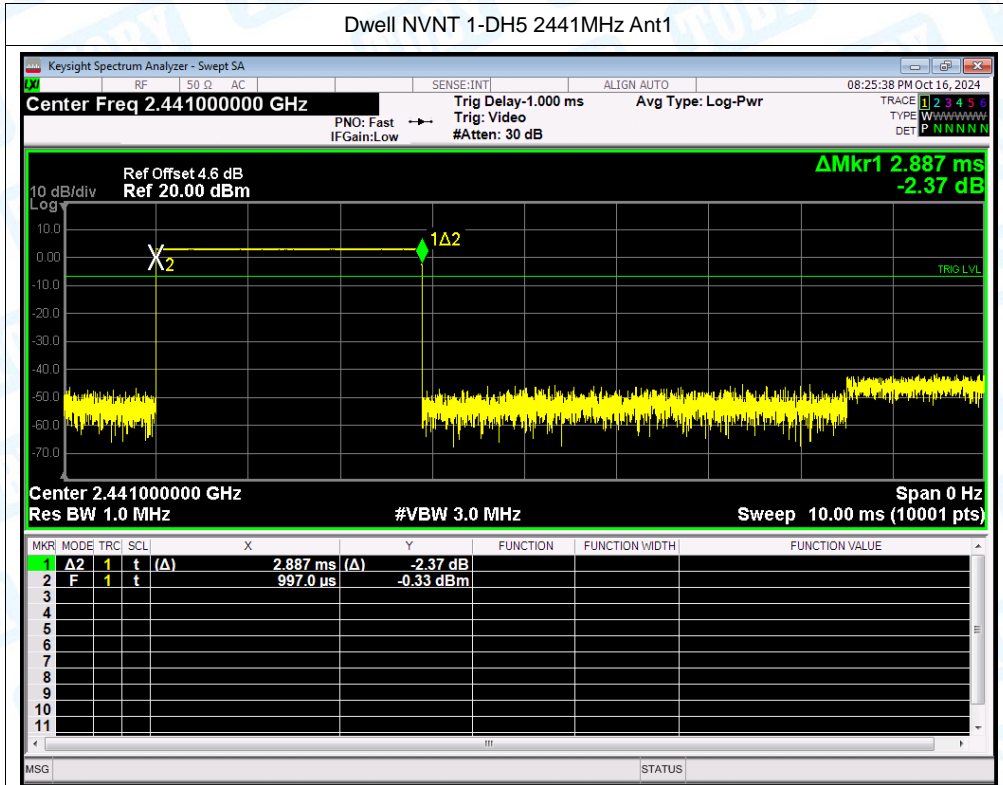
Test Graphs

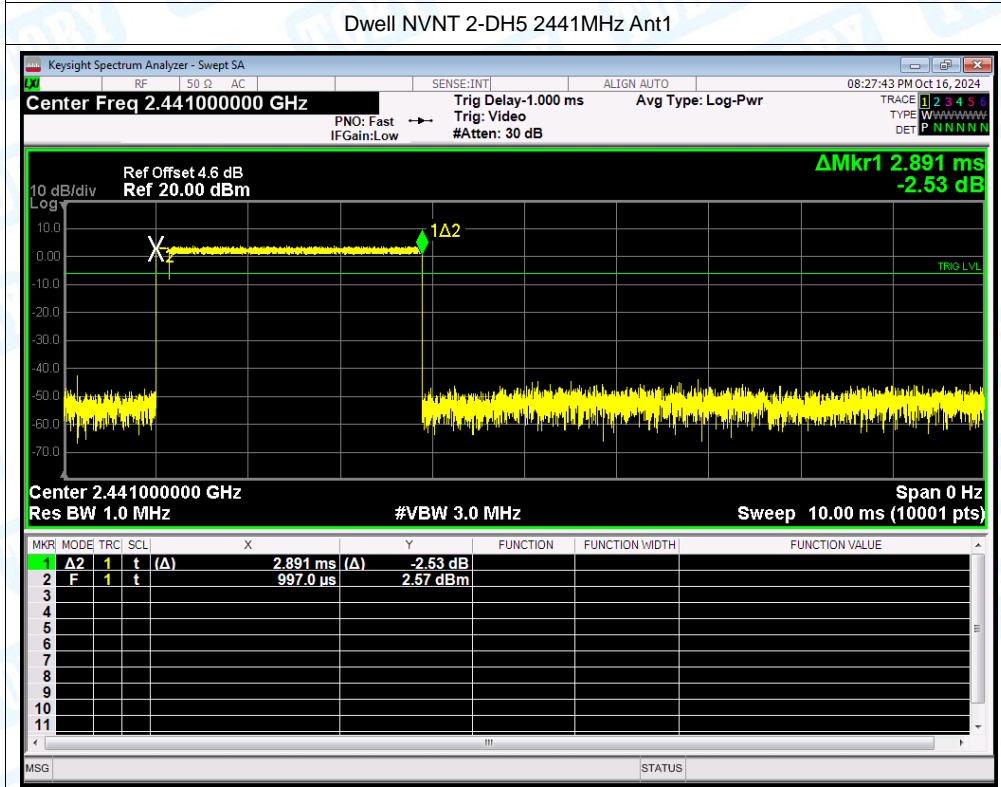
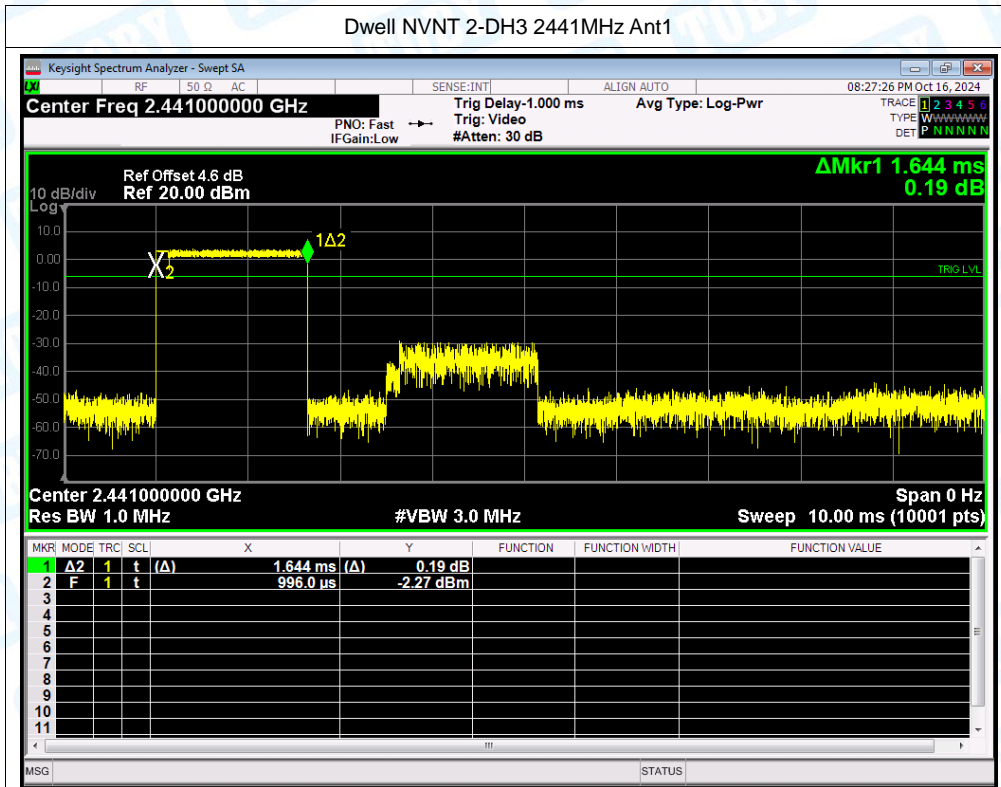
Dwell NVNT 1-DH1 2441MHz Ant1

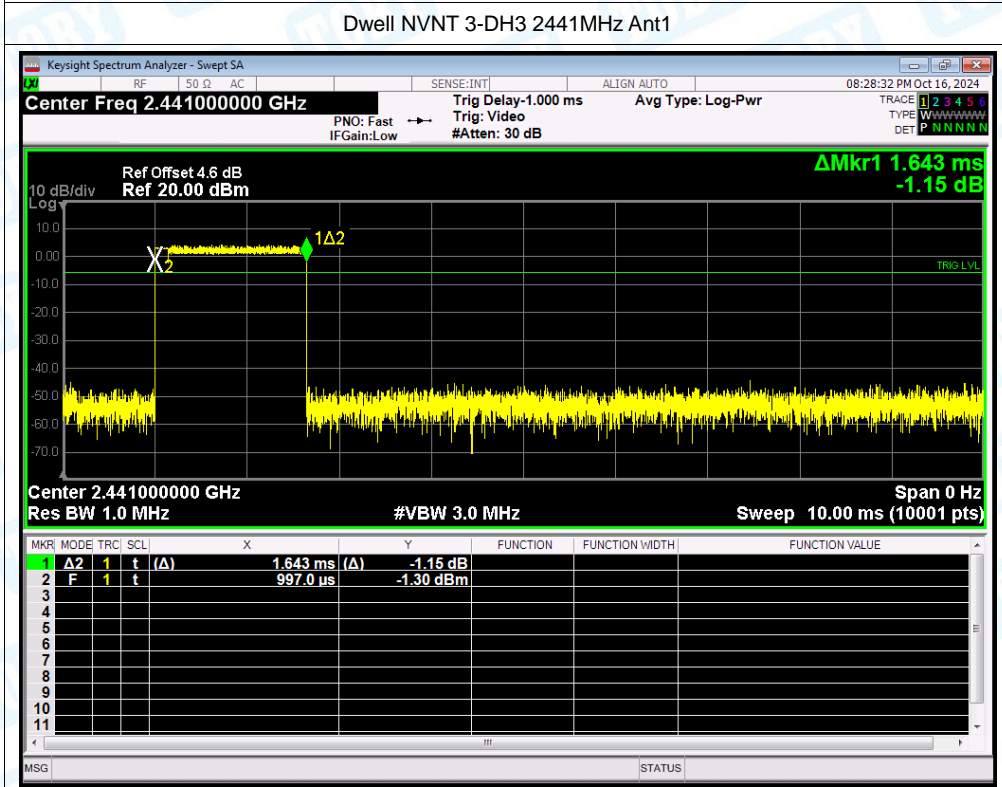
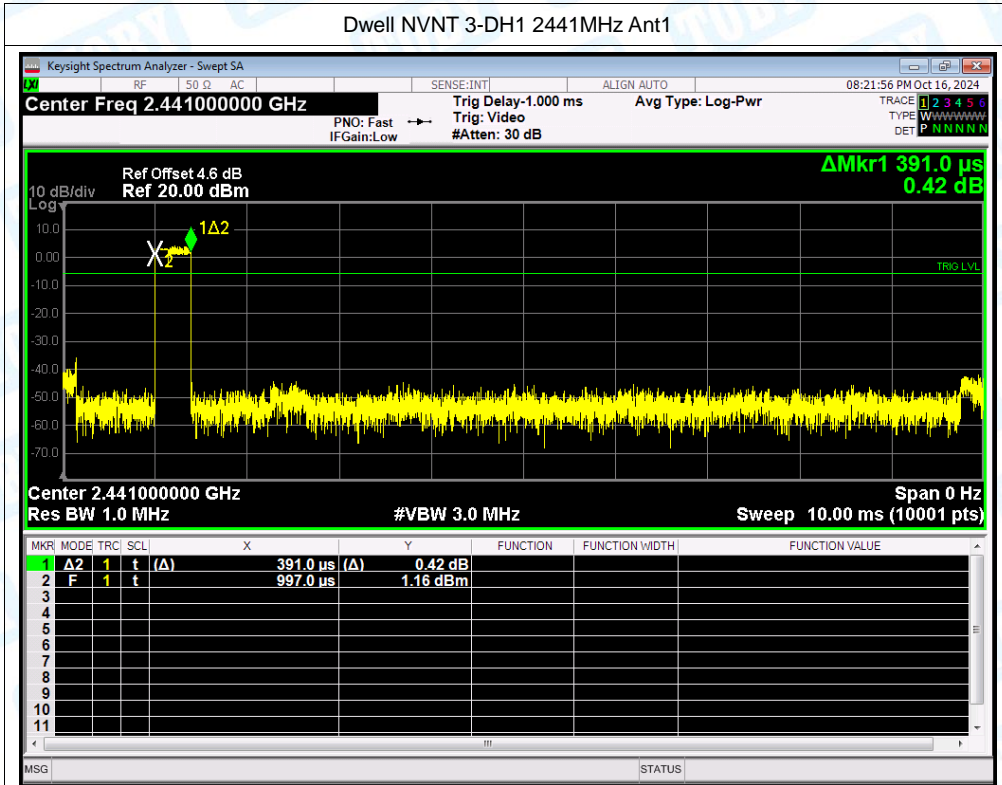


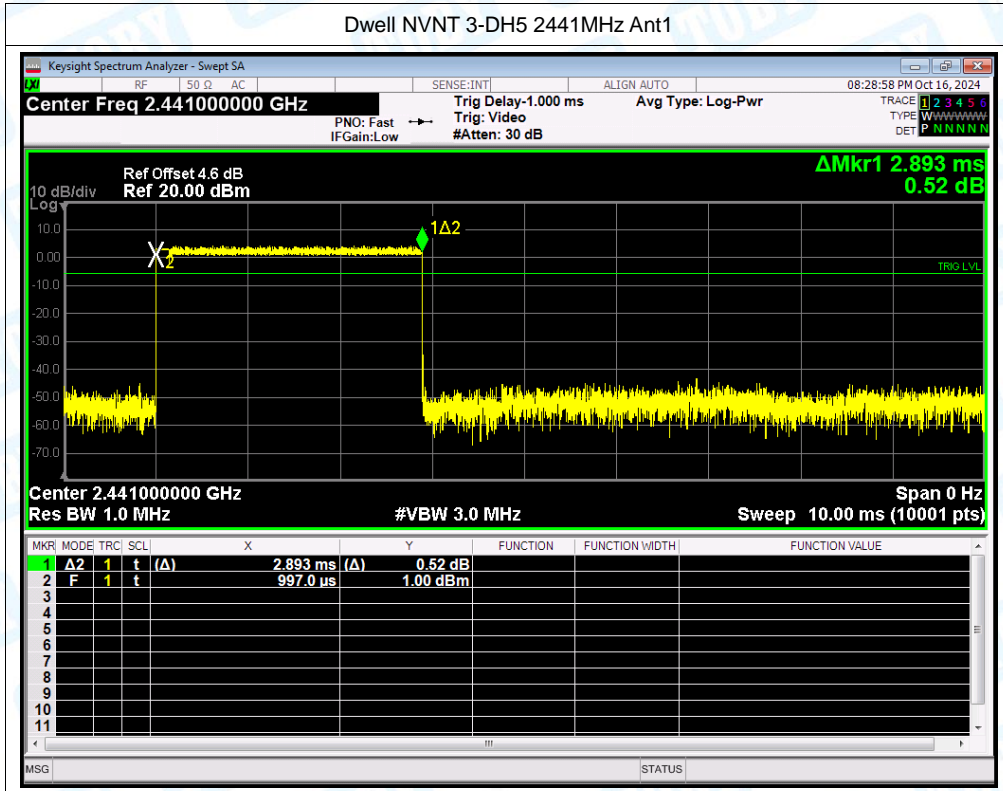
Dwell NVNT 1-DH3 2441MHz Ant1











----END OF REPORT ----