

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

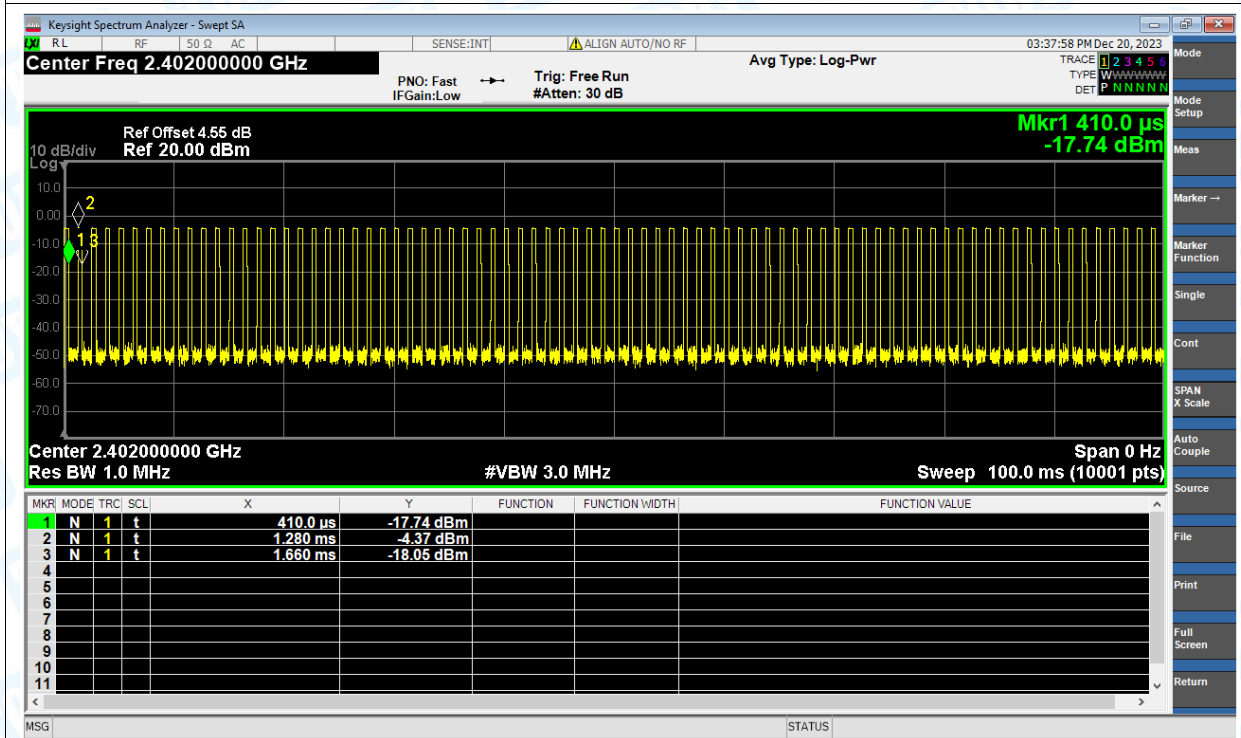
General Description of EUT	
<b>Product Name:</b>	AINote
<b>Test Model:</b>	inkNote Color+
<b>Sample ID:</b>	HC-C-202311-0325-04-01-2#
Environmental Conditions	
<b>Temperature:</b>	23.8°C
<b>Relative Humidity:</b>	48%
<b>Test Voltage:</b>	DC 3.7V
<b>Test Engineer:</b>	Zhou Zhen
Note: For a more detailed features description, please refer to the report TBR-C-202311-0325-6 The report only show the worst case data.	

## 1. Duty Cycle

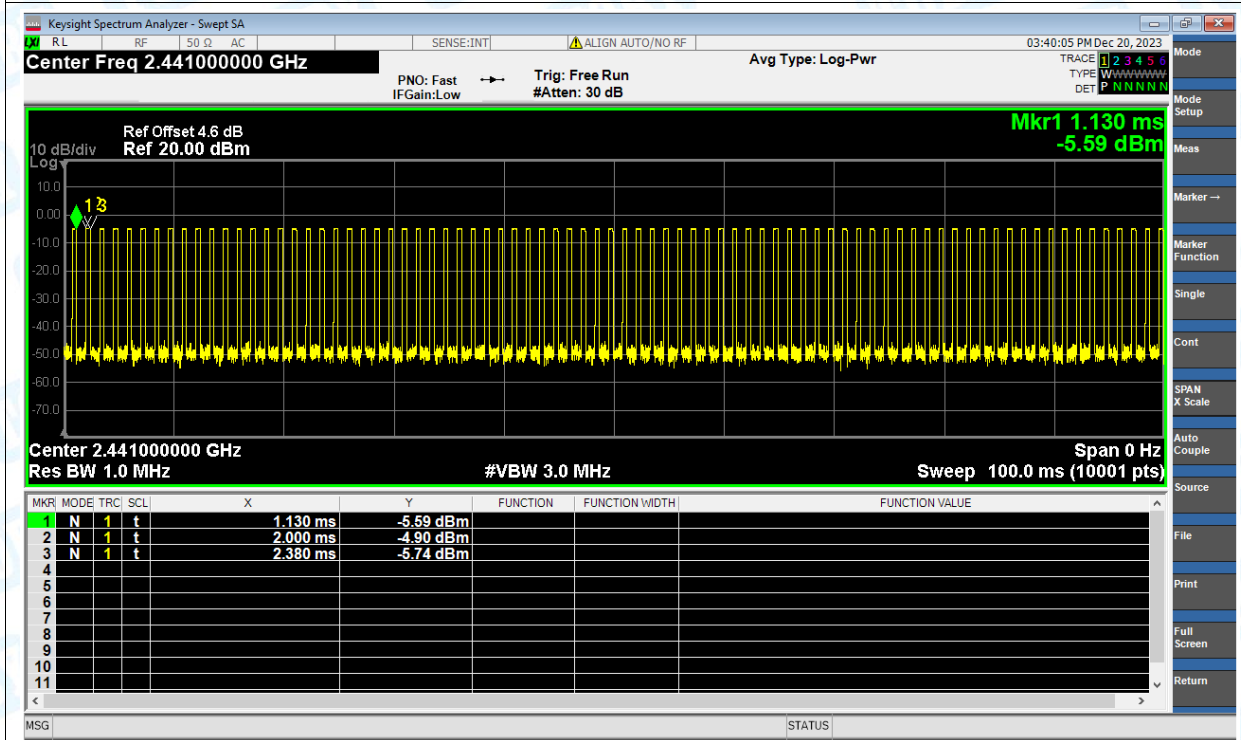
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	30.4	5.17	2.63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

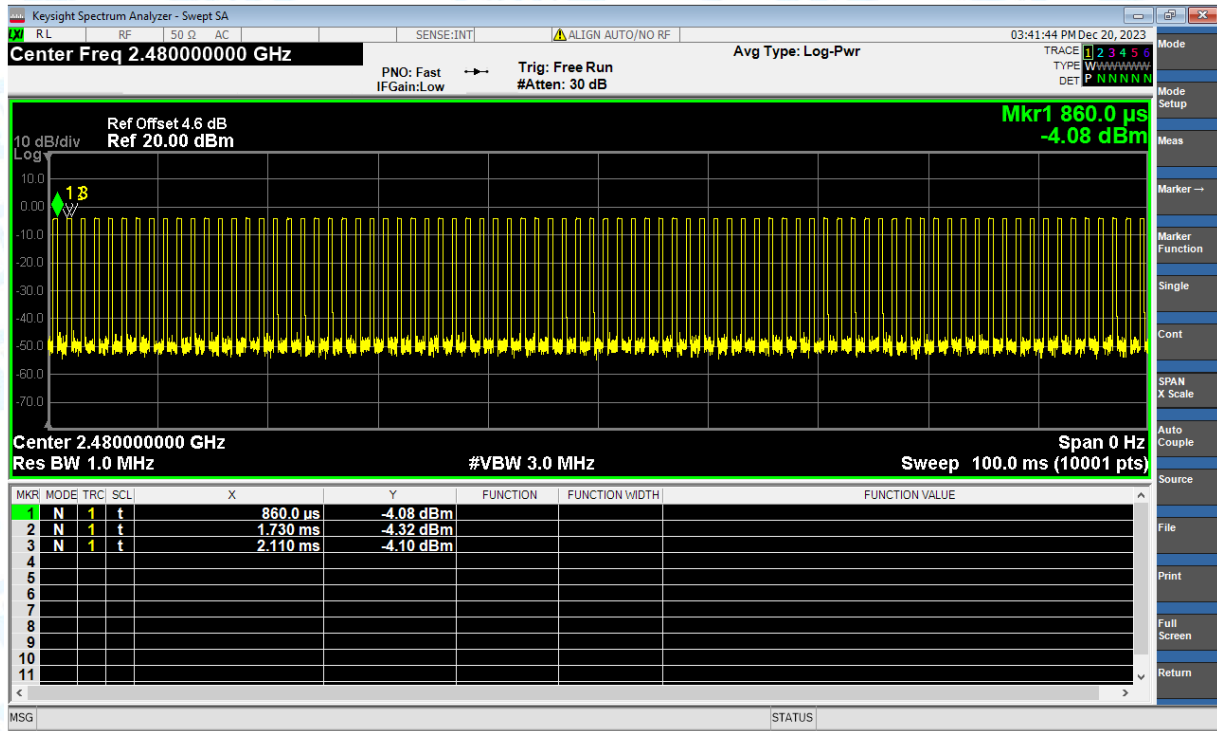
Duty Cycle NVNT 1-DH1 2402MHz Ant1



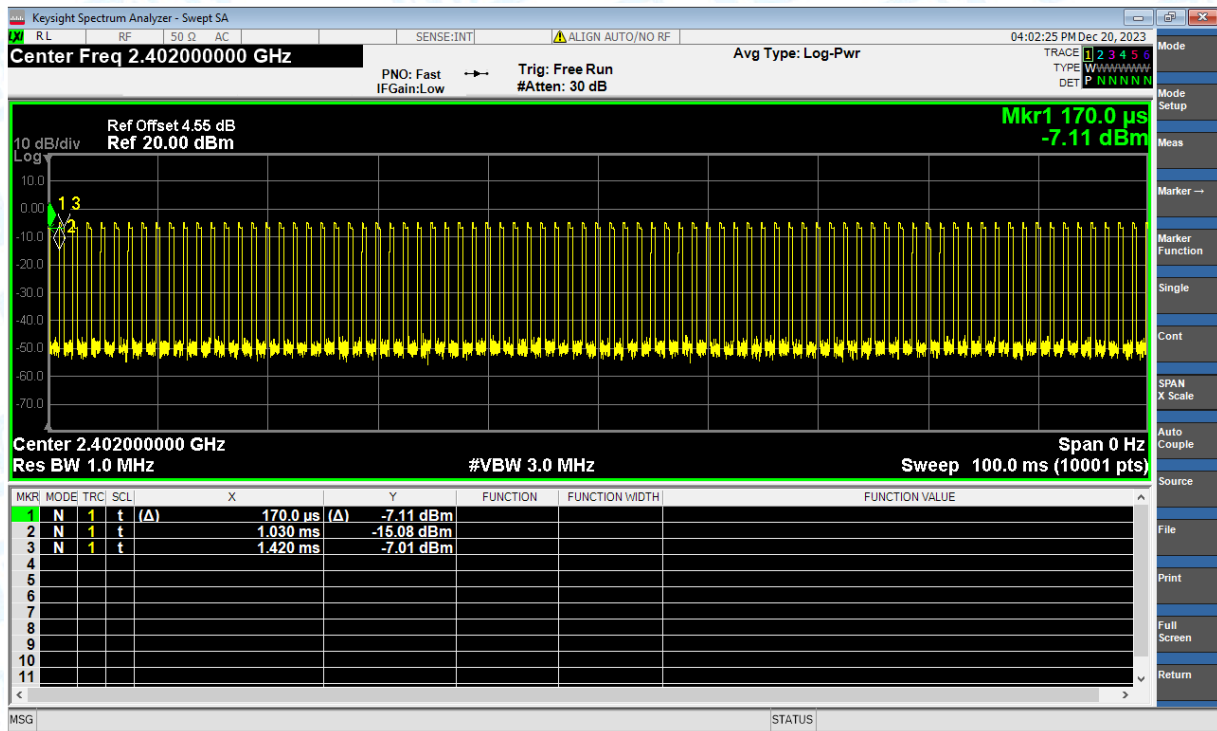
Duty Cycle NVNT 1-DH1 2441MHz Ant1



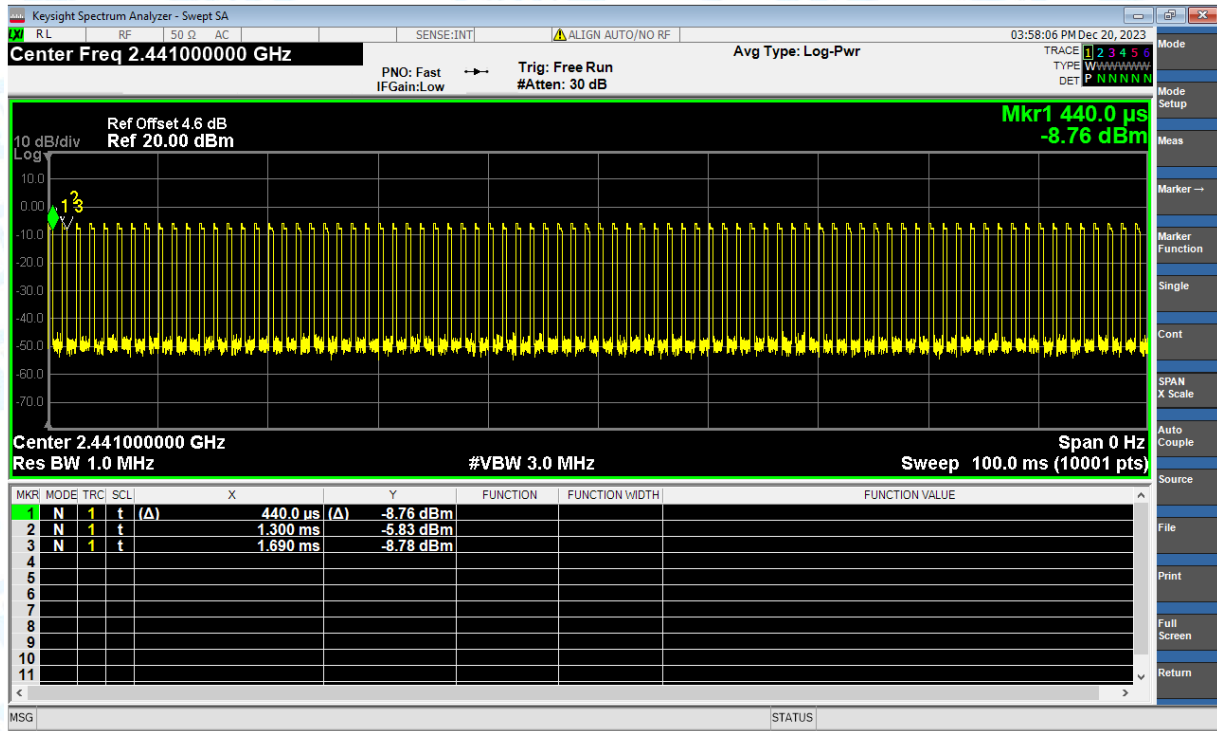
Duty Cycle NVNT 1-DH1 2480MHz Ant1



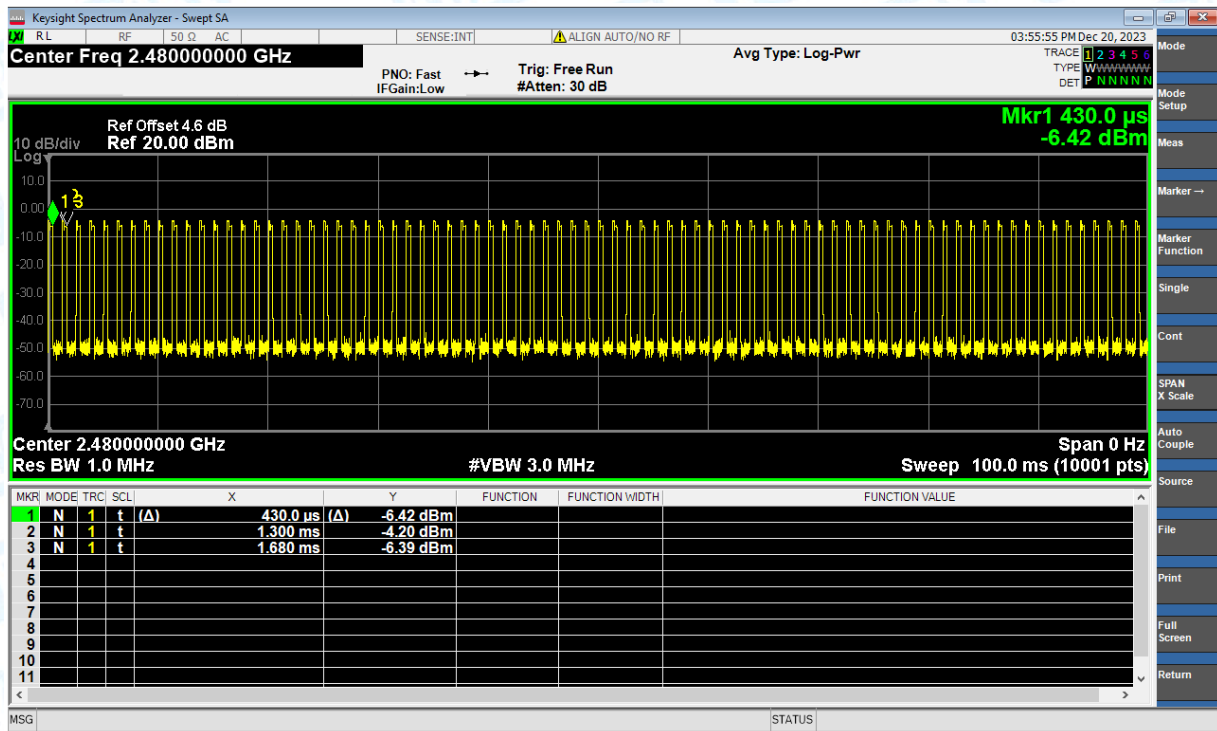
Duty Cycle NVNT 2-DH1 2402MHz Ant1



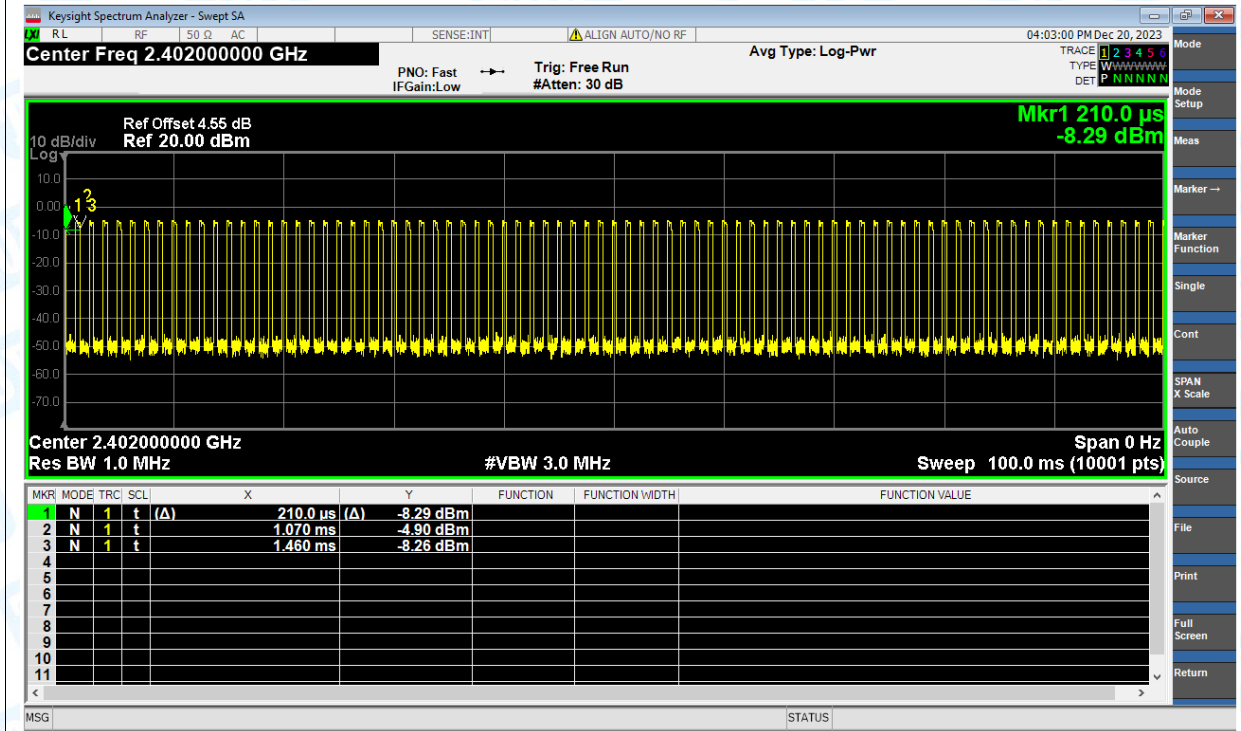
Duty Cycle NVNT 2-DH1 2441MHz Ant1



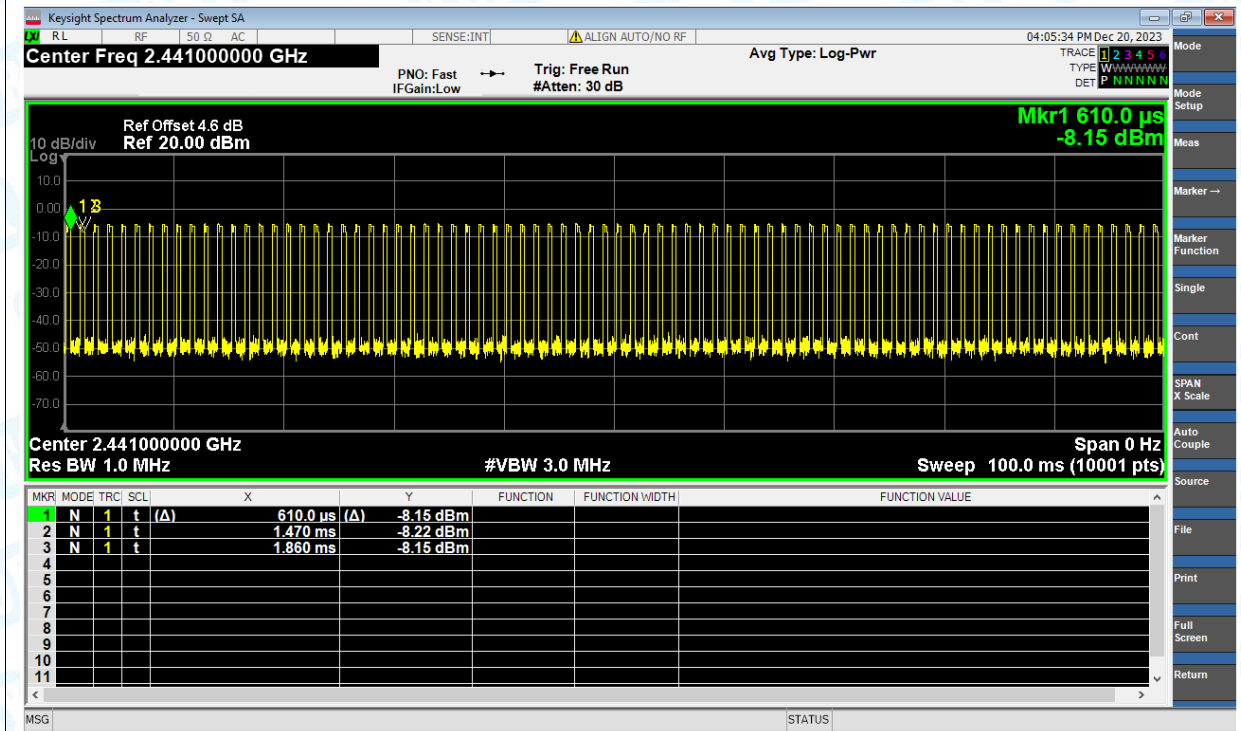
Duty Cycle NVNT 2-DH1 2480MHz Ant1

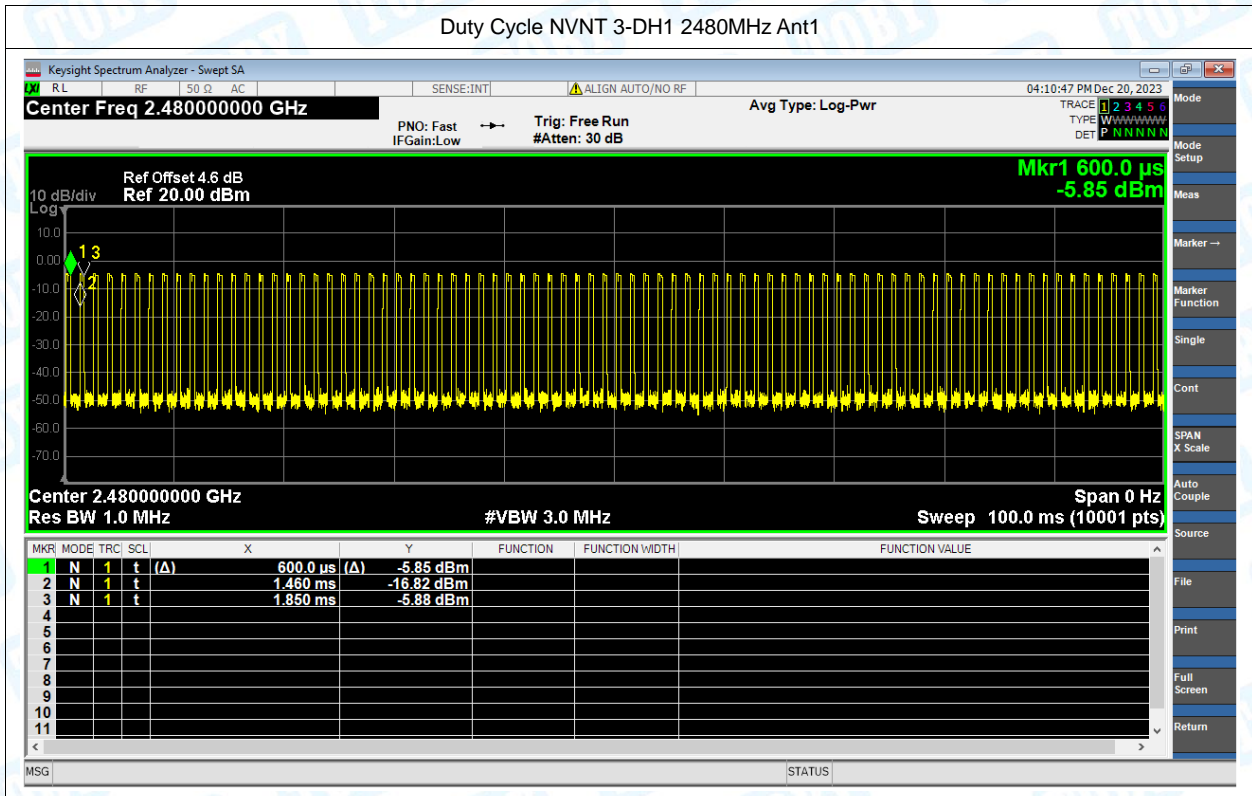


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





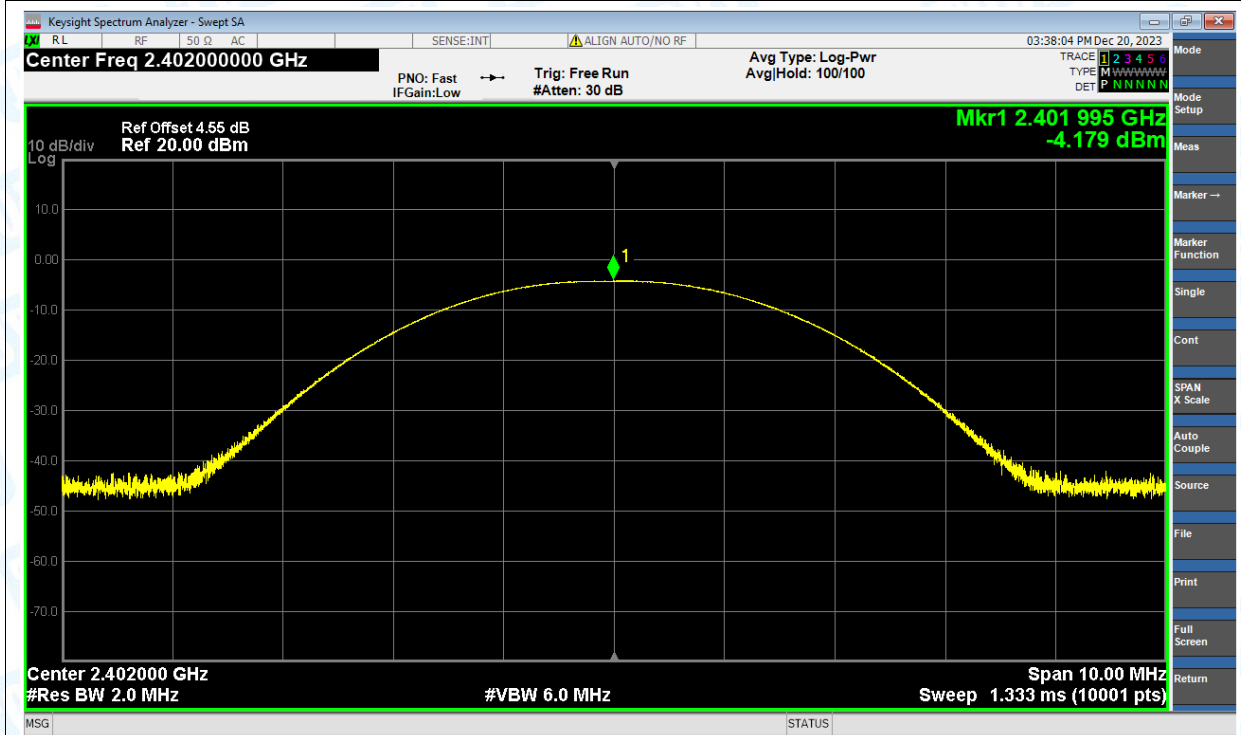
## 2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-4.179	21	Pass
NVNT	1-DH1	2441	Ant1	-4.713	21	Pass
NVNT	1-DH1	2480	Ant1	-3.848	21	Pass
NVNT	2-DH1	2402	Ant1	-4.895	21	Pass
NVNT	2-DH1	2441	Ant1	-5.663	21	Pass
NVNT	2-DH1	2480	Ant1	-4.070	21	Pass
NVNT	3-DH1	2402	Ant1	-4.836	21	Pass
NVNT	3-DH1	2441	Ant1	-5.149	21	Pass
NVNT	3-DH1	2480	Ant1	-4.342	21	Pass

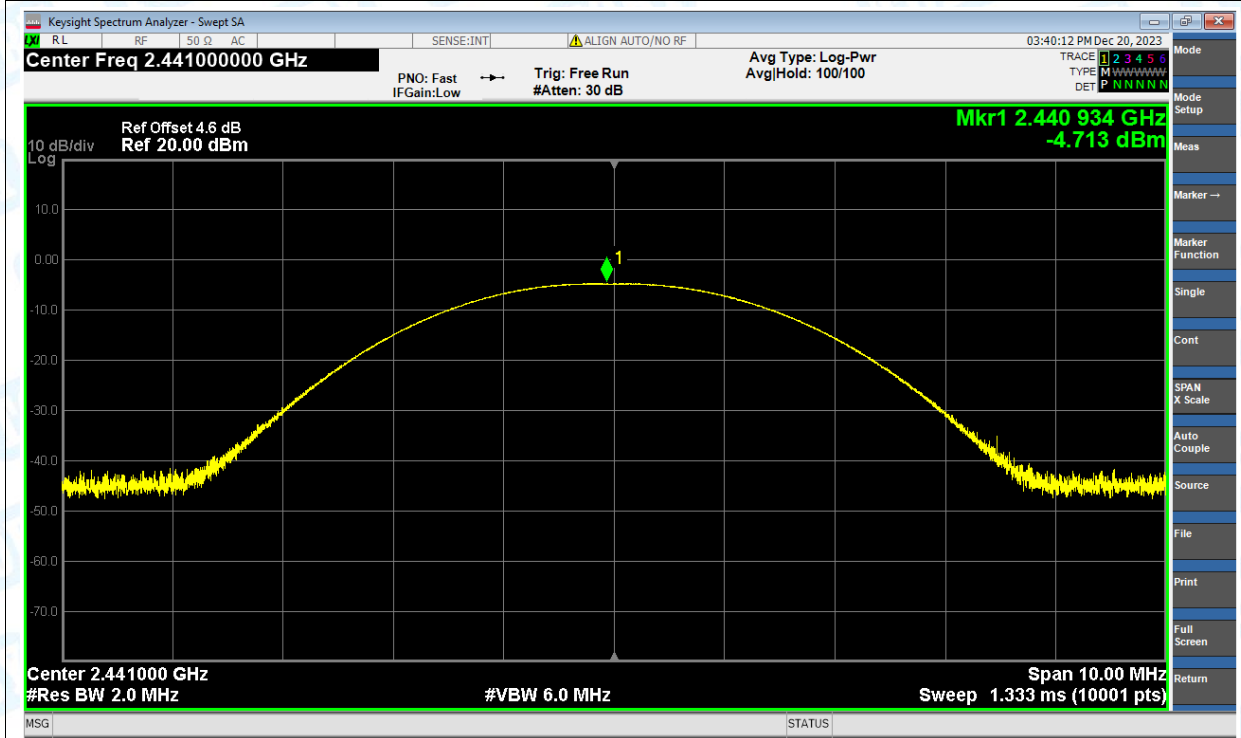


Test Graphs

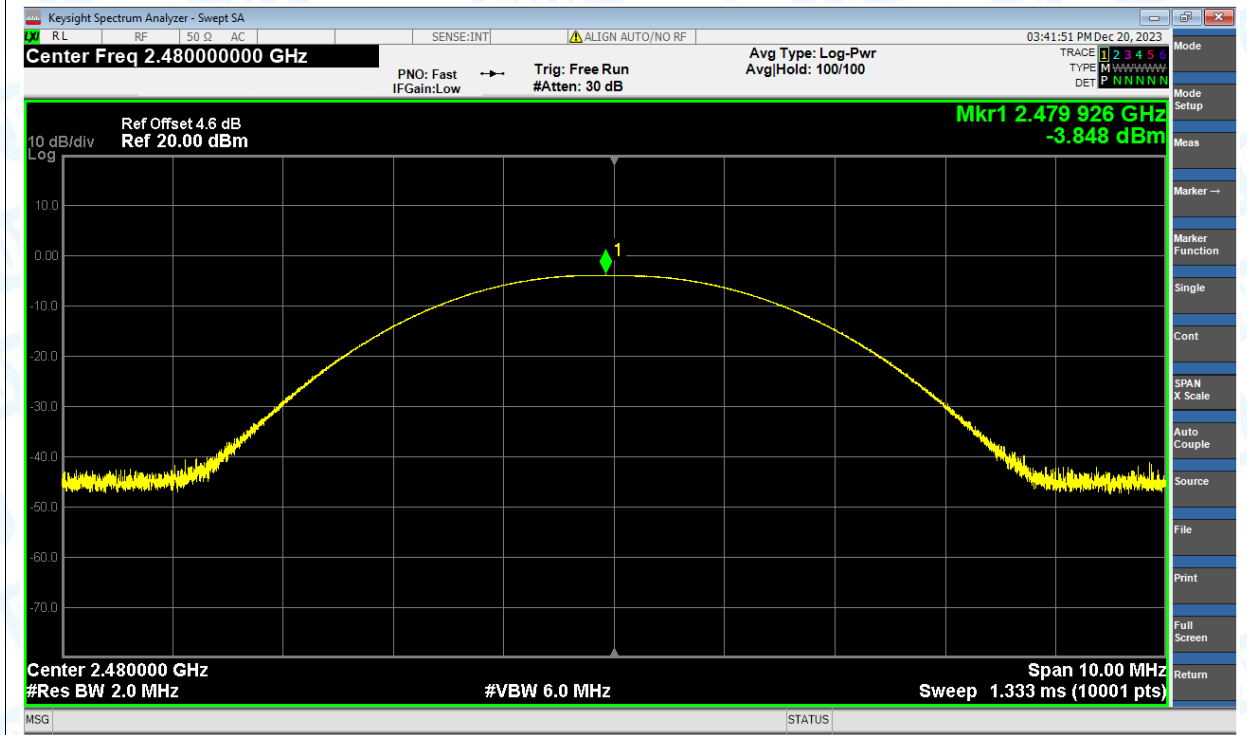
Power NVNT 1-DH1 2402MHz Ant1



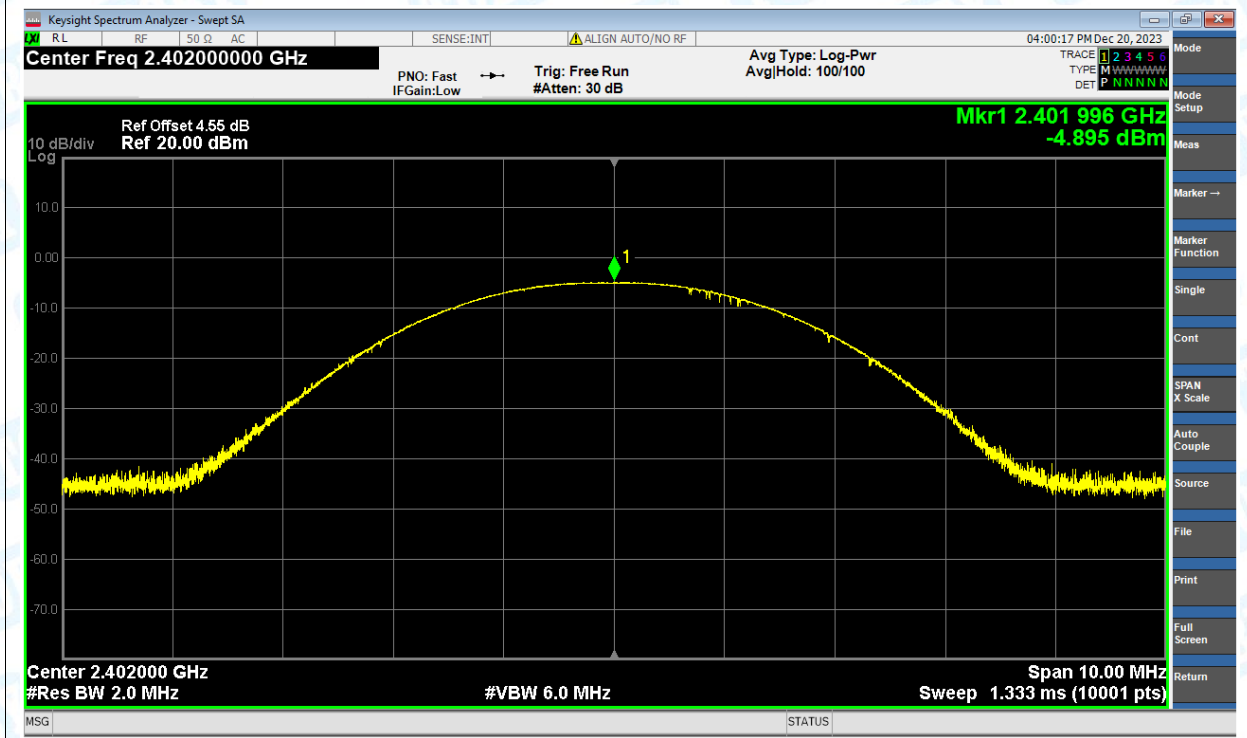
Power NVNT 1-DH1 2441MHz Ant1



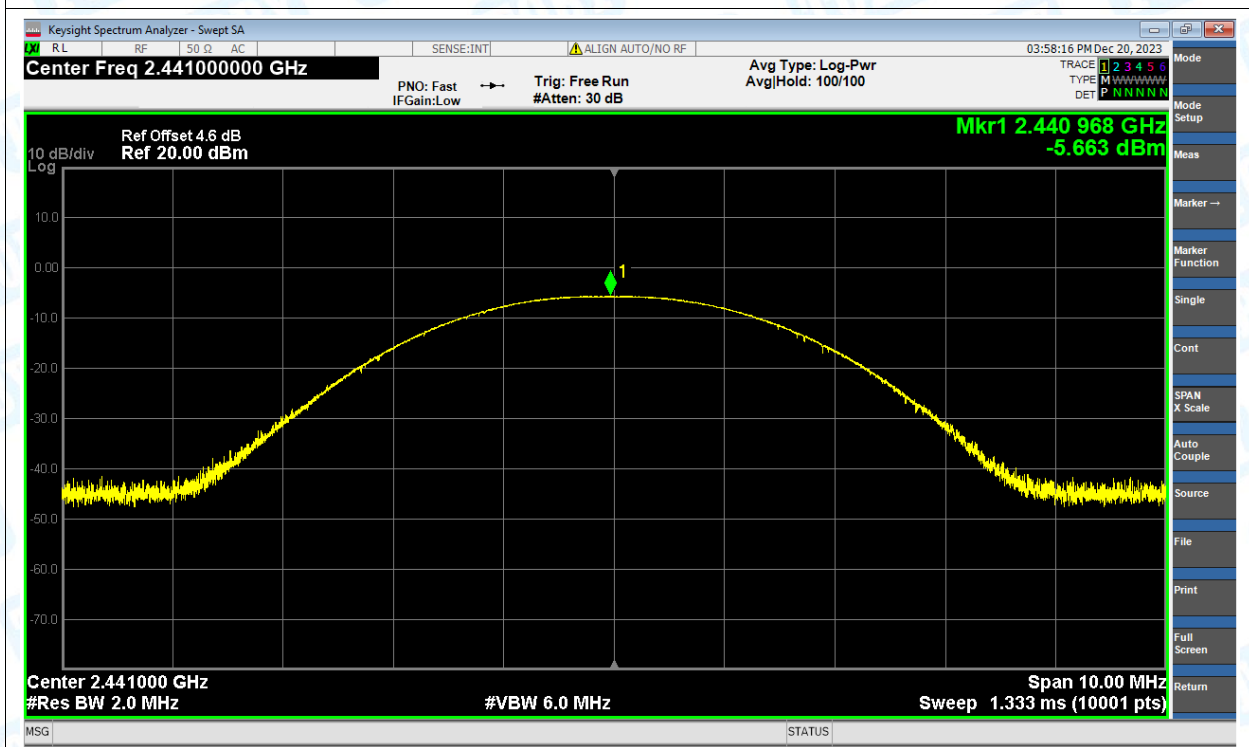
Power NVNT 1-DH1 2480MHz Ant1



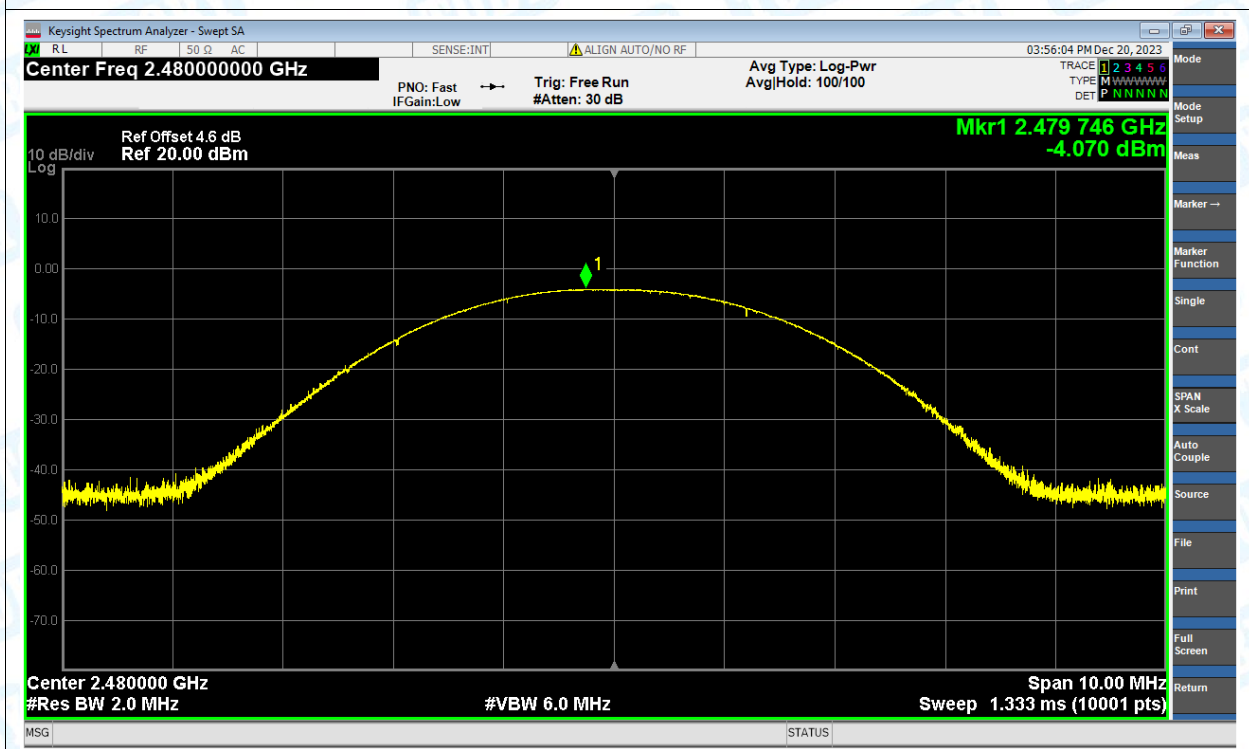
Power NVNT 2-DH1 2402MHz Ant1



Power NVNT 2-DH1 2441MHz Ant1



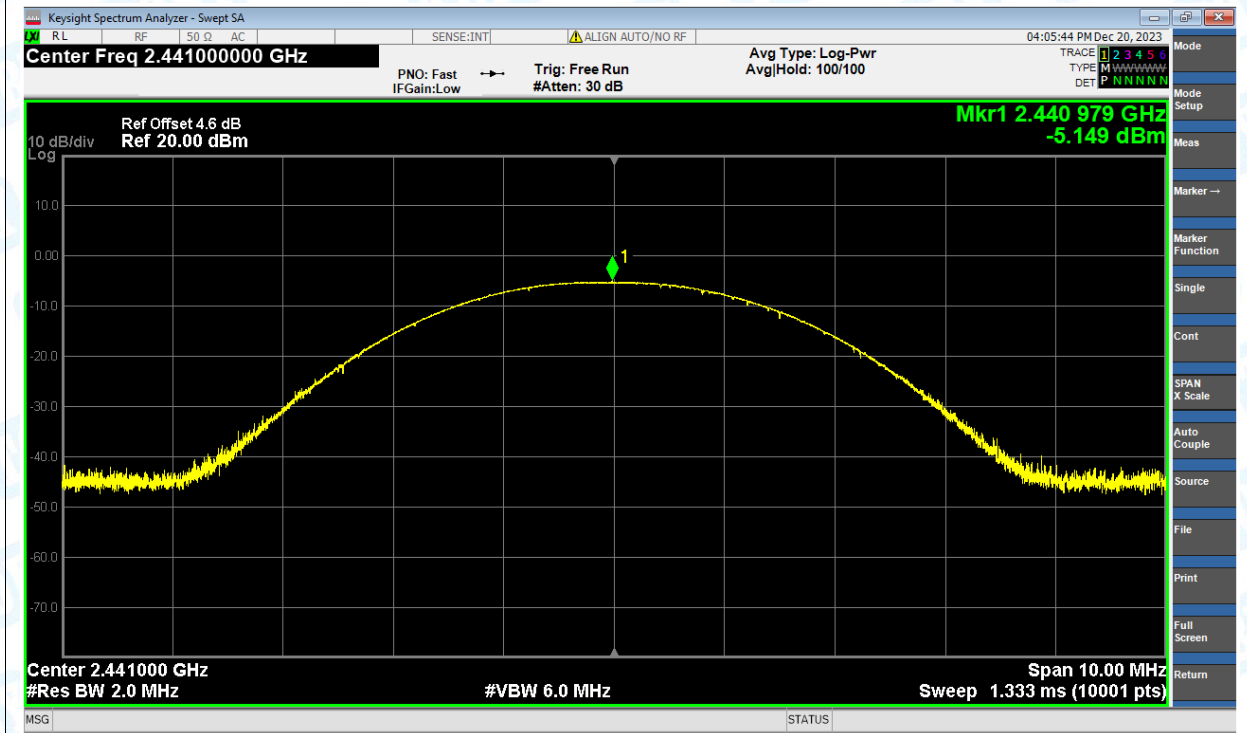
Power NVNT 2-DH1 2480MHz Ant1



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	0.93	----	Pass
NVNT	1-DH1	2480	Ant1	0.84	----	Pass
NVNT	2-DH1	2402	Ant1	1.29	----	Pass
NVNT	2-DH1	2441	Ant1	1.27	----	Pass
NVNT	2-DH1	2480	Ant1	1.28	----	Pass
NVNT	3-DH1	2402	Ant1	1.26	----	Pass
NVNT	3-DH1	2441	Ant1	1.26	----	Pass
NVNT	3-DH1	2480	Ant1	1.25	----	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



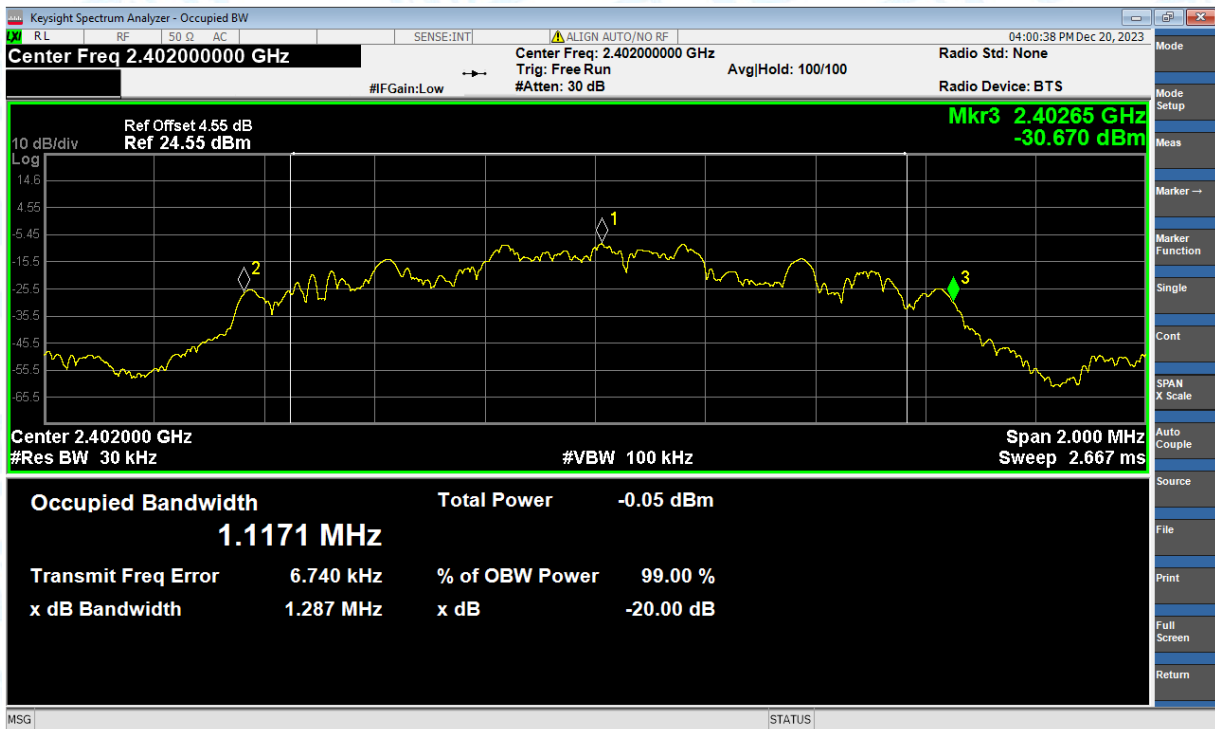
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1

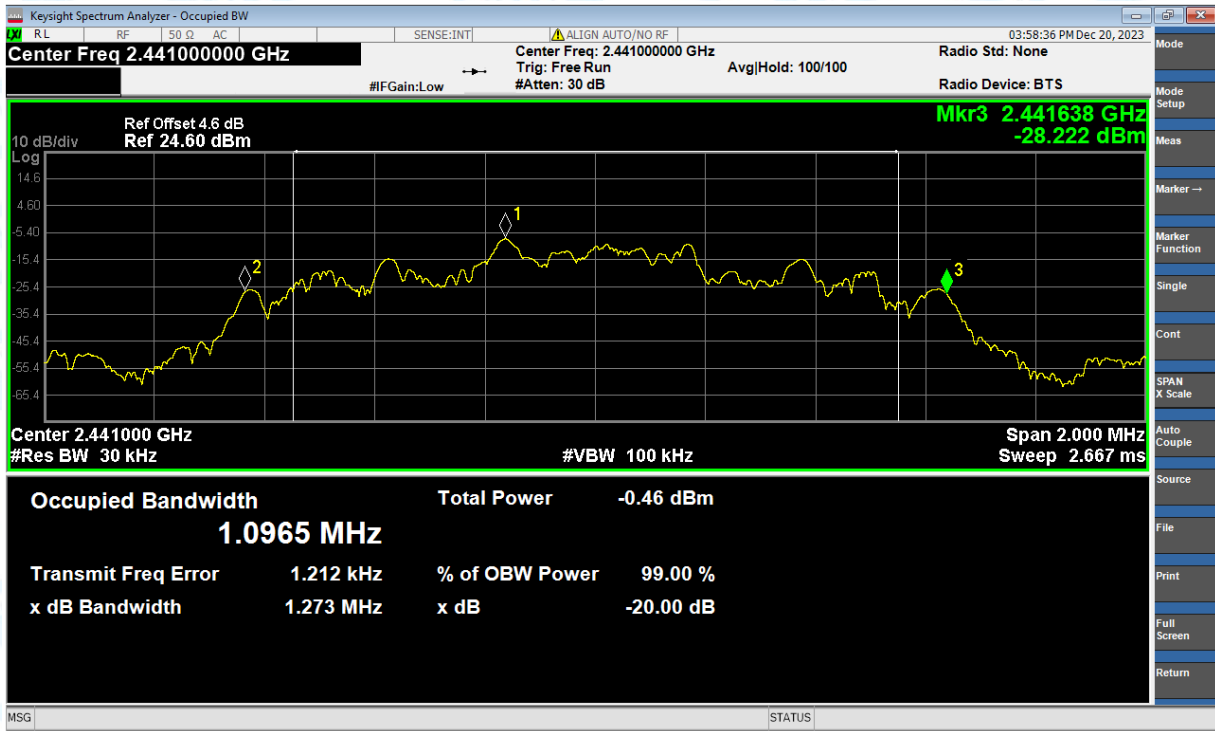


-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1

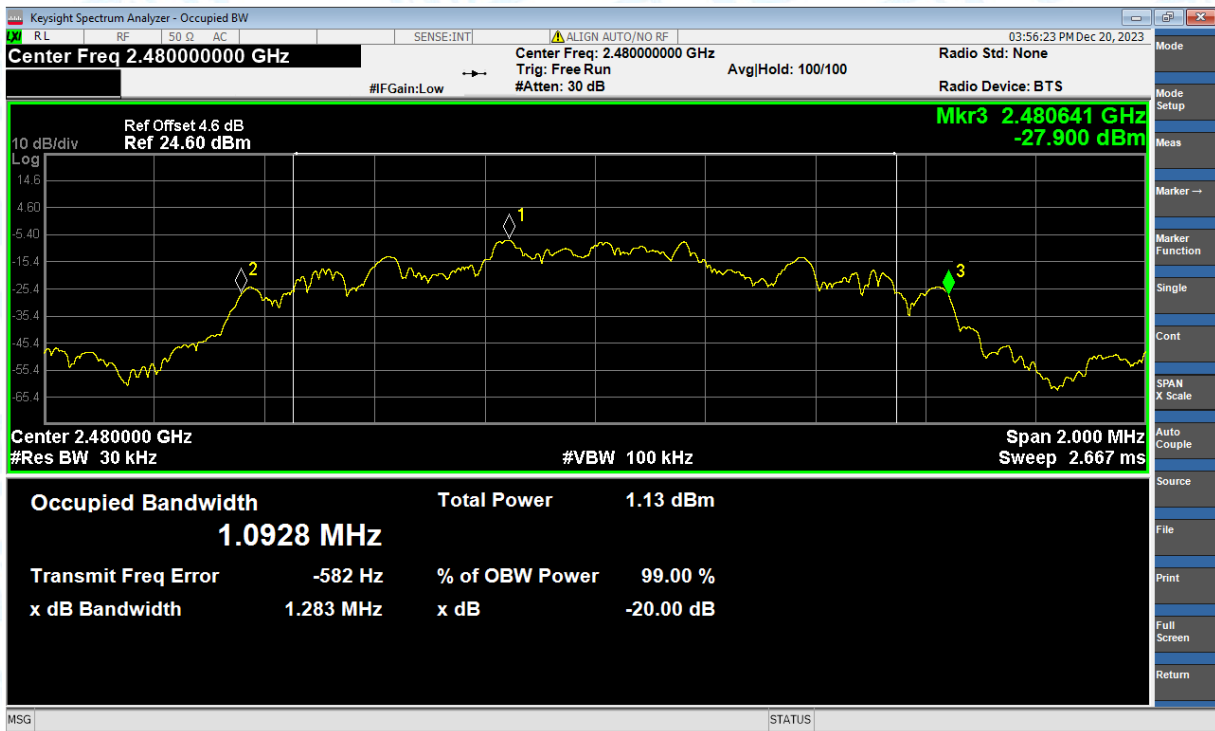




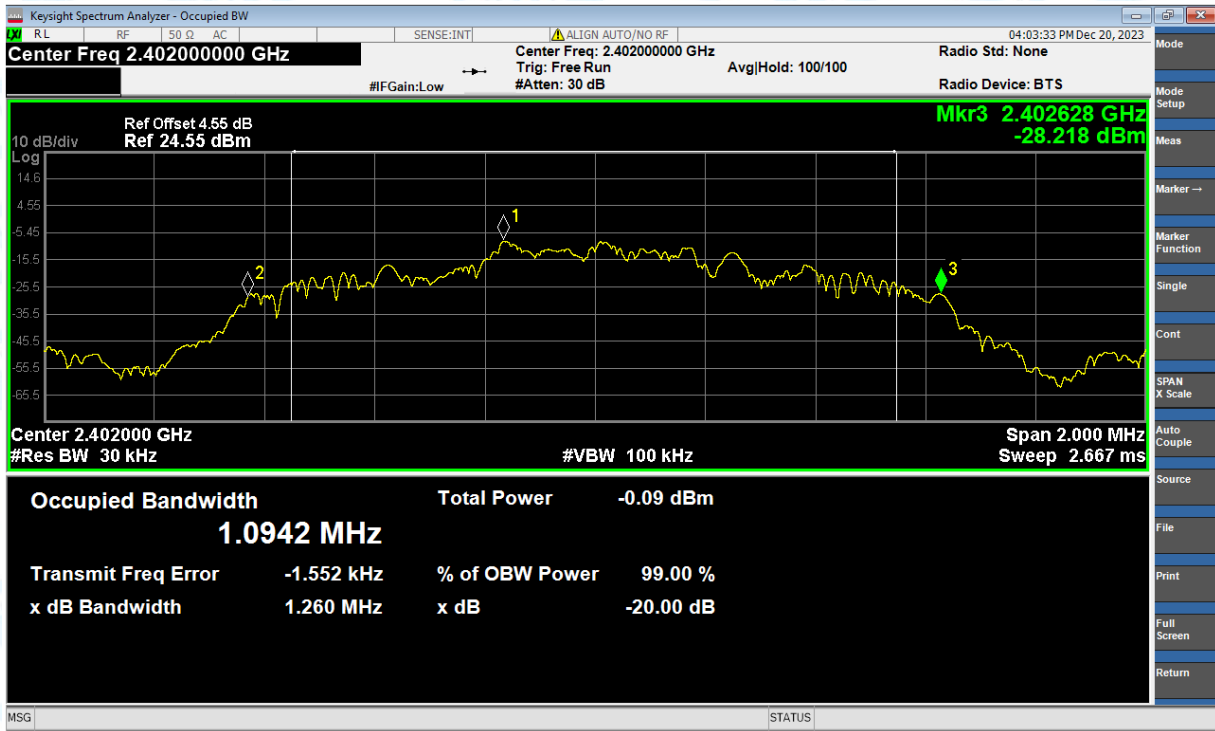
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



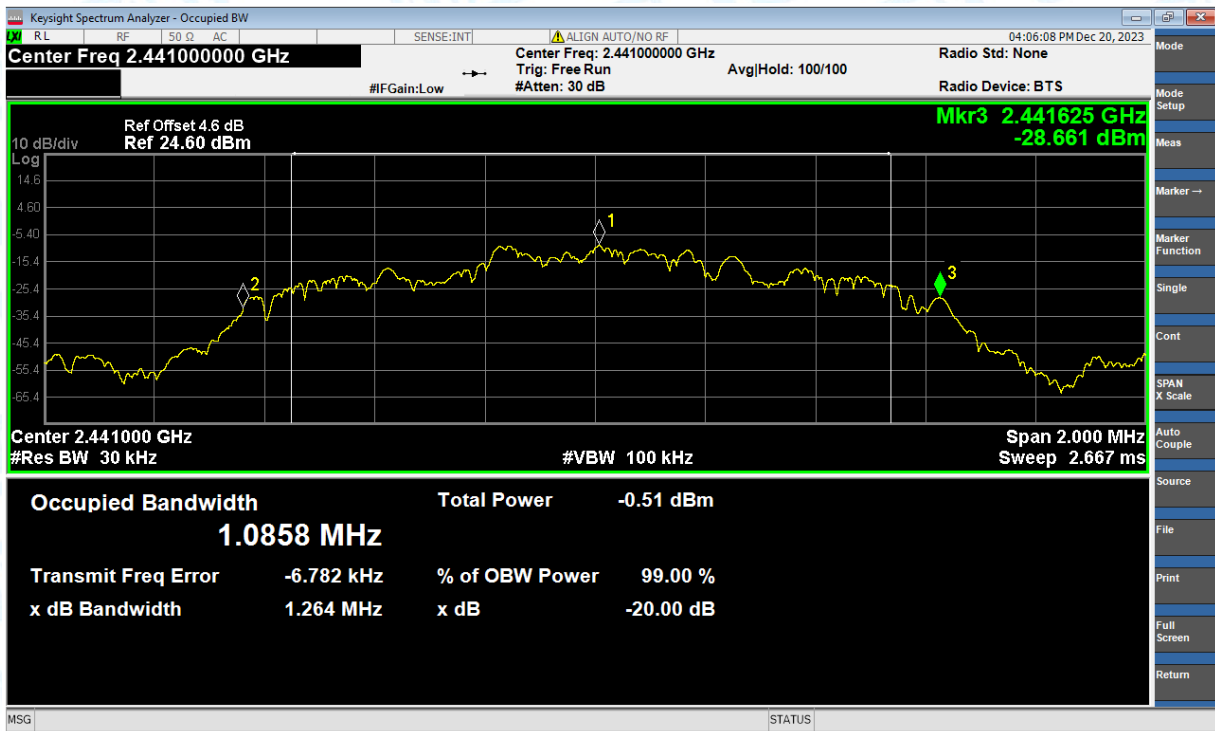
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

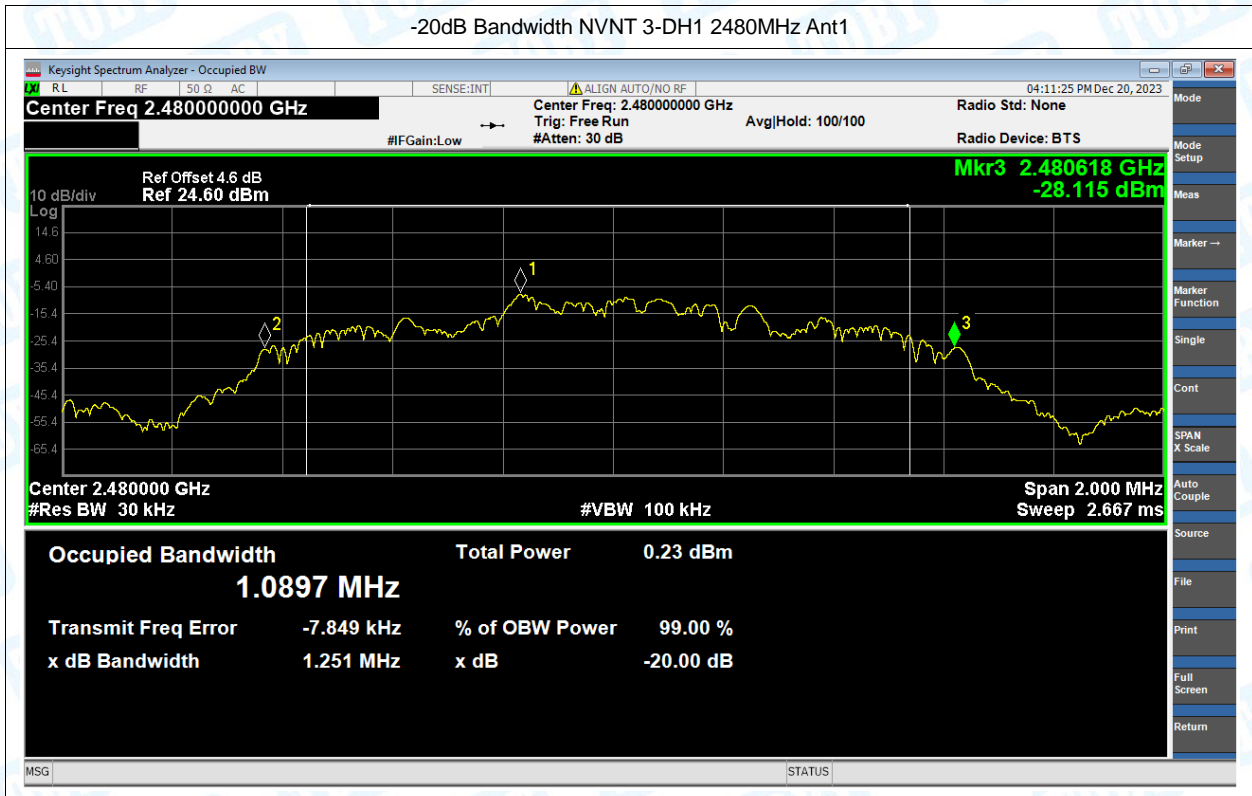


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



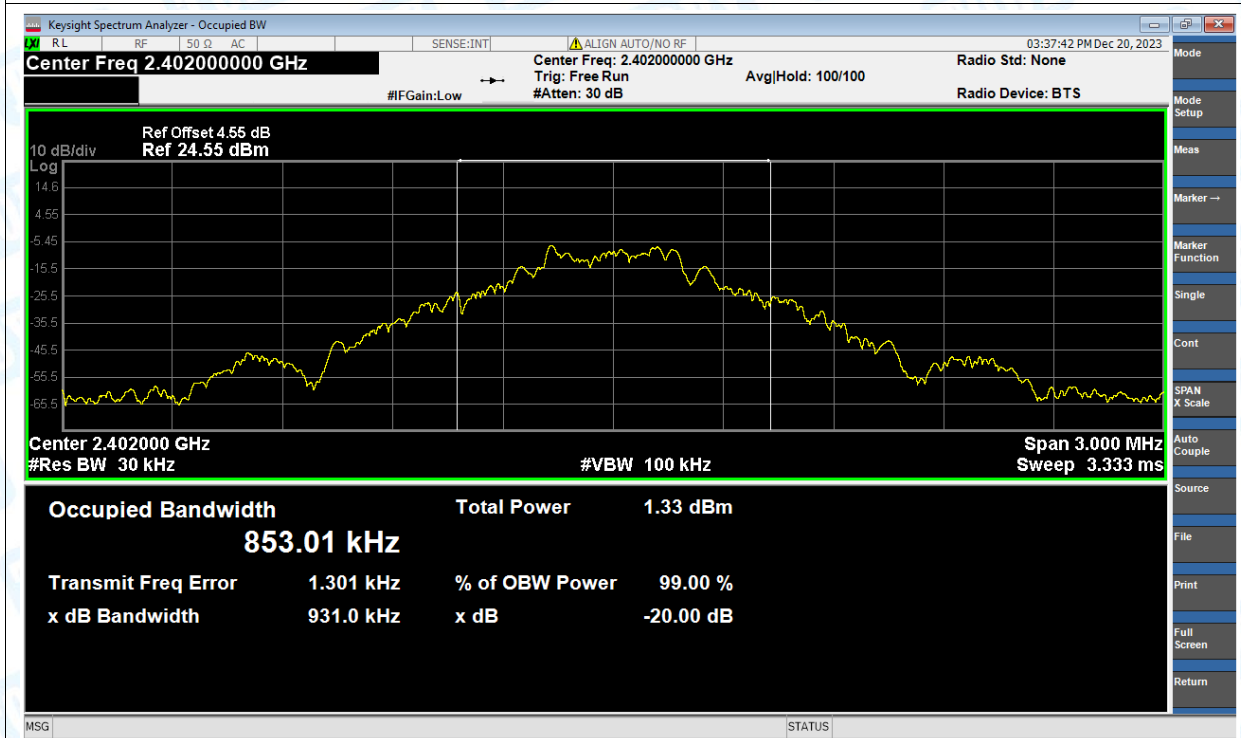


## 4. Occupied Channel Bandwidth

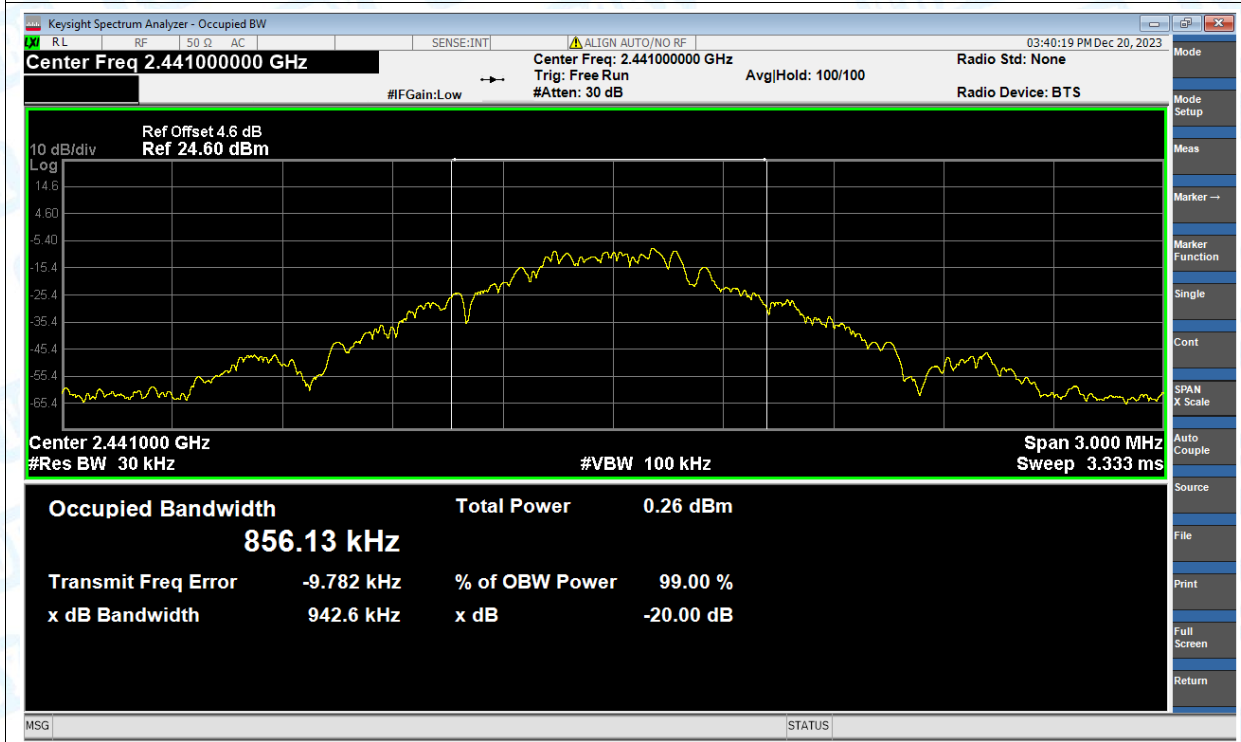
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.853
NVNT	1-DH1	2441	Ant1	0.856
NVNT	1-DH1	2480	Ant1	0.851
NVNT	2-DH1	2402	Ant1	1.074
NVNT	2-DH1	2441	Ant1	1.105
NVNT	2-DH1	2480	Ant1	1.094
NVNT	3-DH1	2402	Ant1	1.082
NVNT	3-DH1	2441	Ant1	1.106
NVNT	3-DH1	2480	Ant1	1.058

Test Graphs

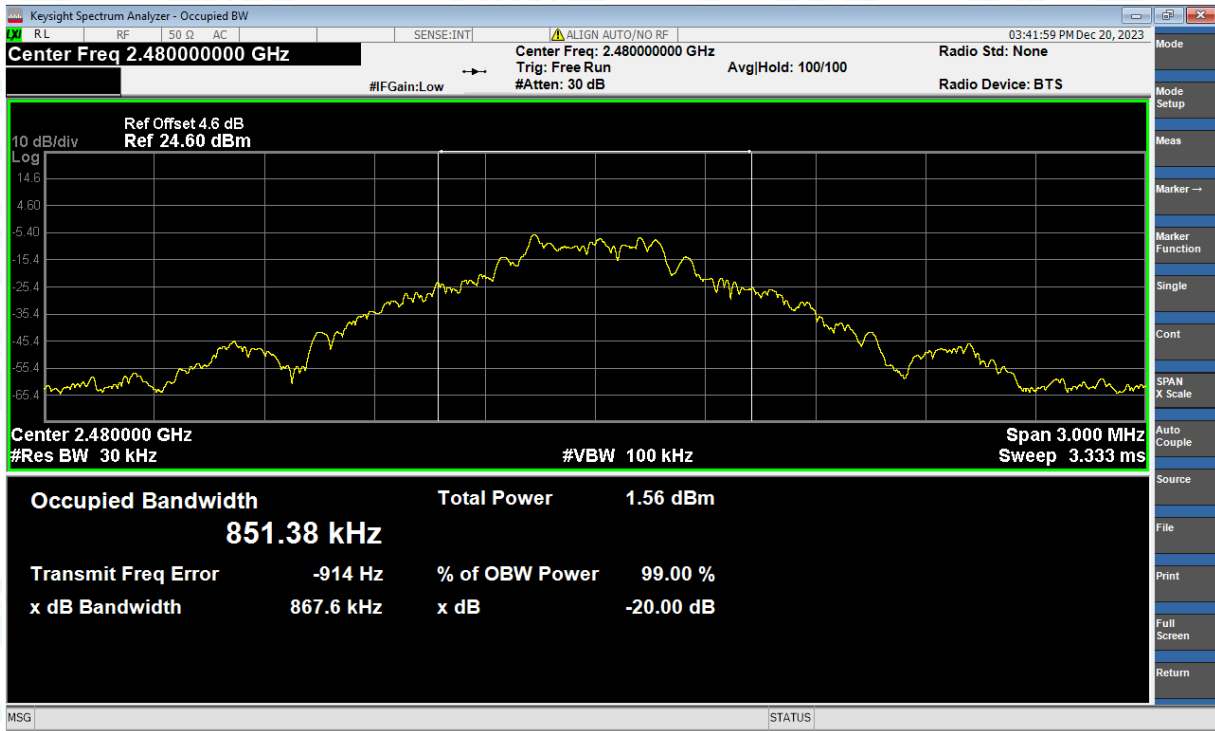
OBW NVNT 1-DH1 2402MHz Ant1



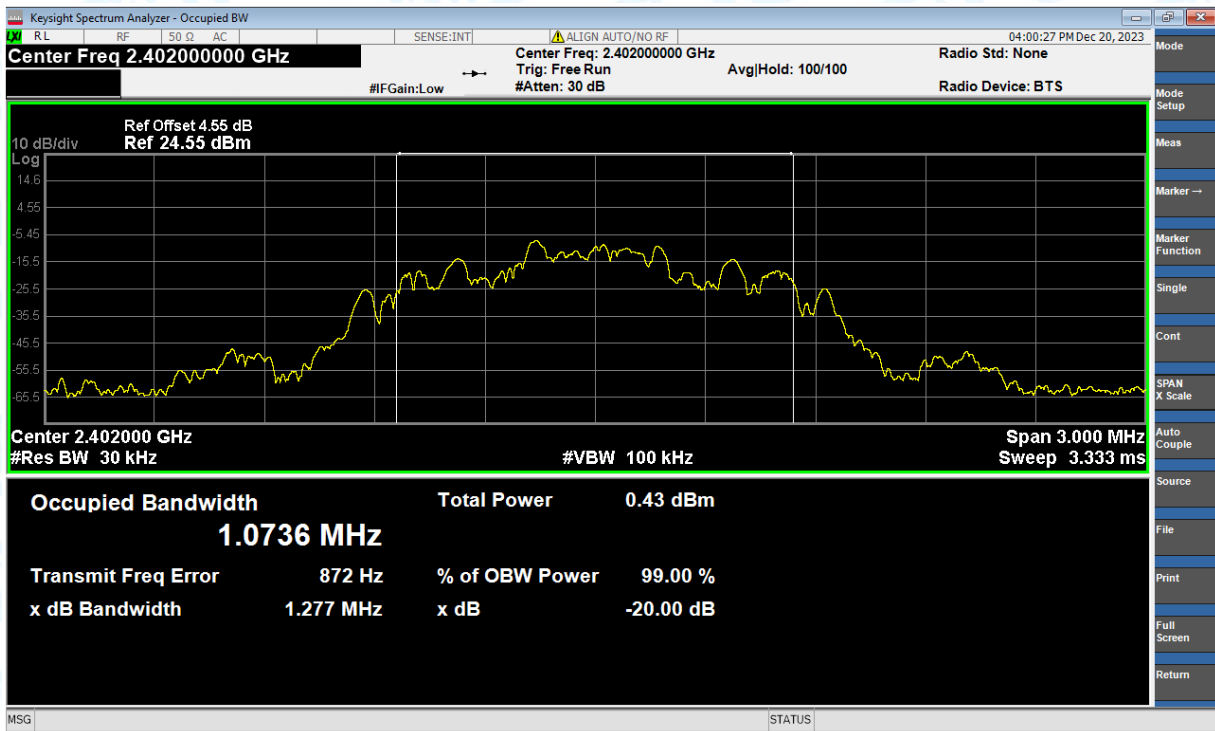
OBW NVNT 1-DH1 2441MHz Ant1



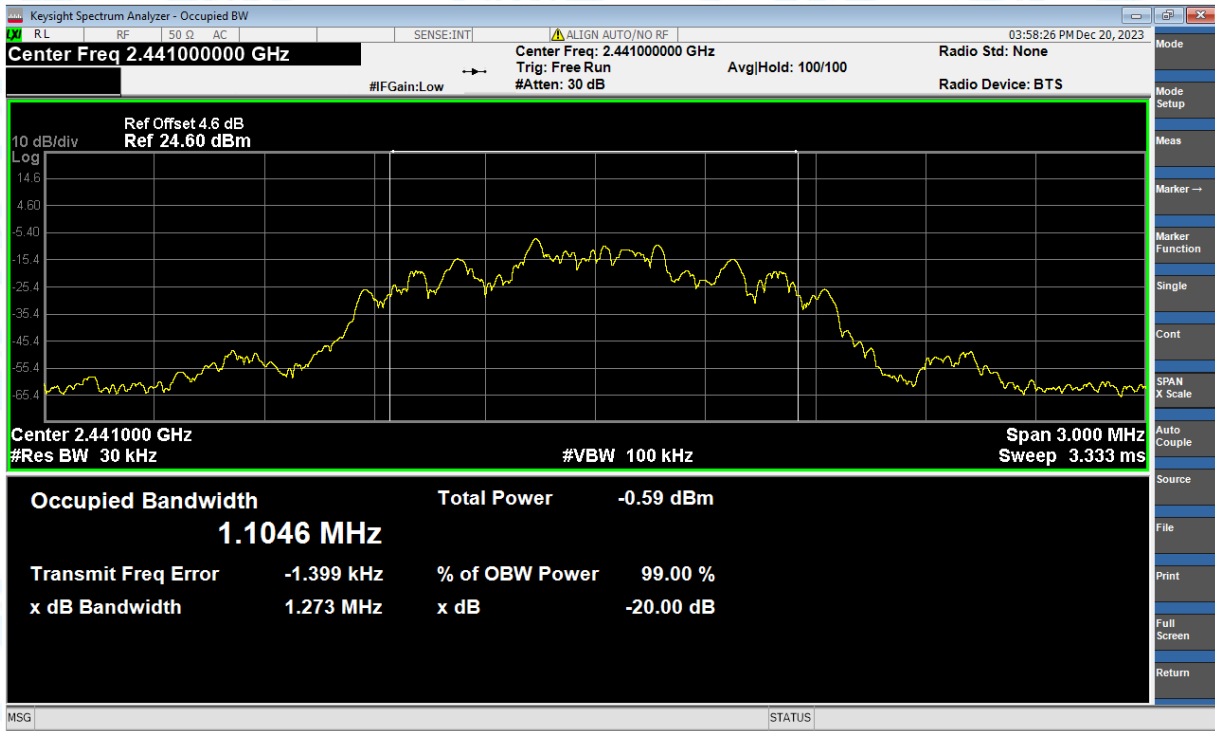
OBW NVNT 1-DH1 2480MHz Ant1



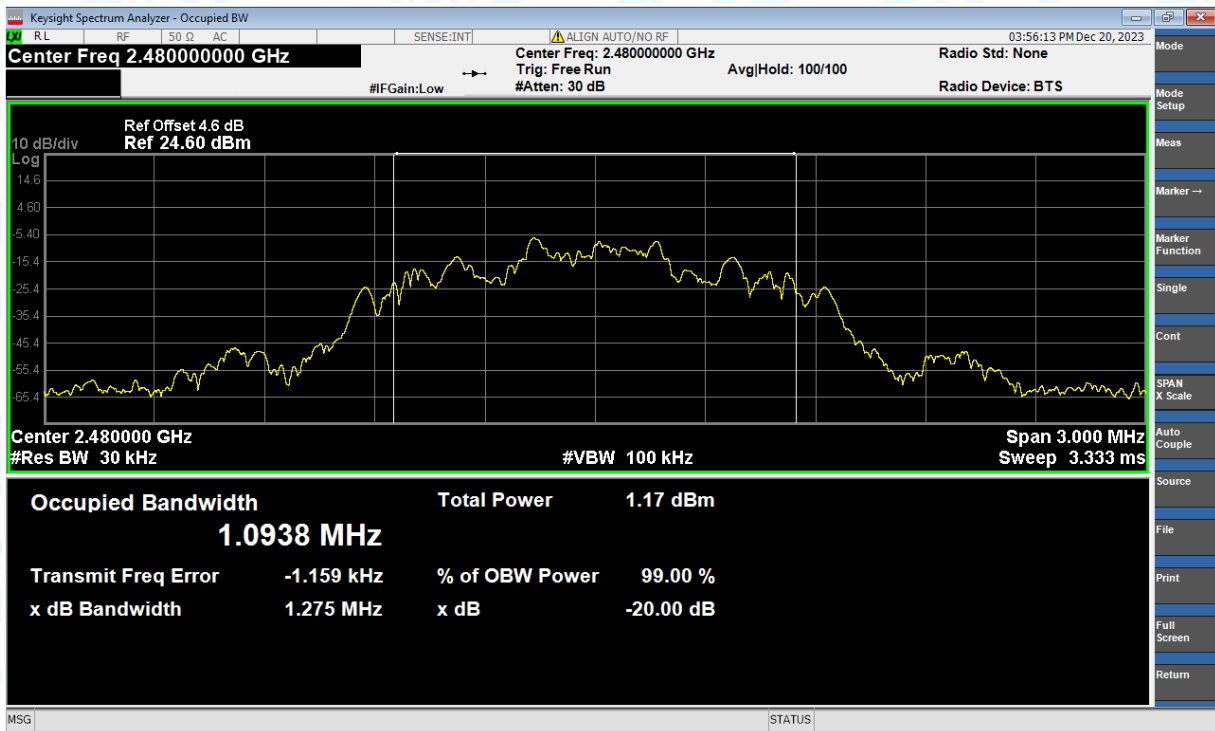
OBW NVNT 2-DH1 2402MHz Ant1



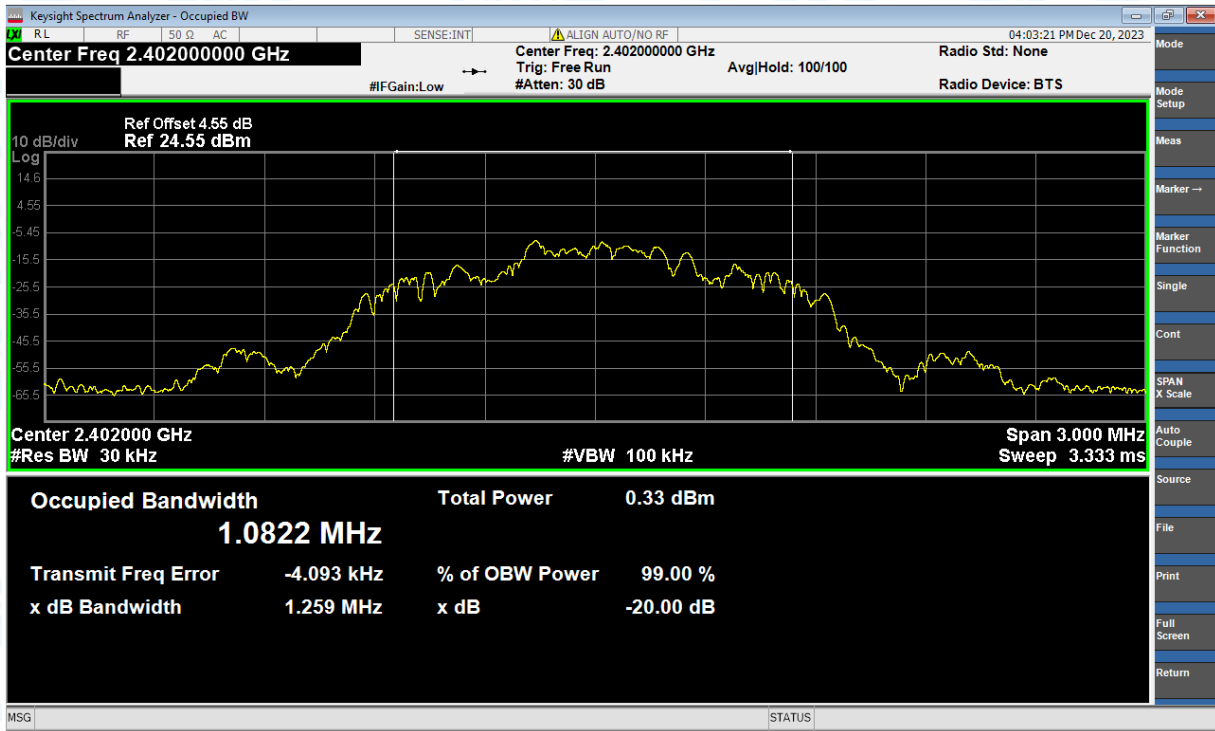
OBW NVNT 2-DH1 2441MHz Ant1



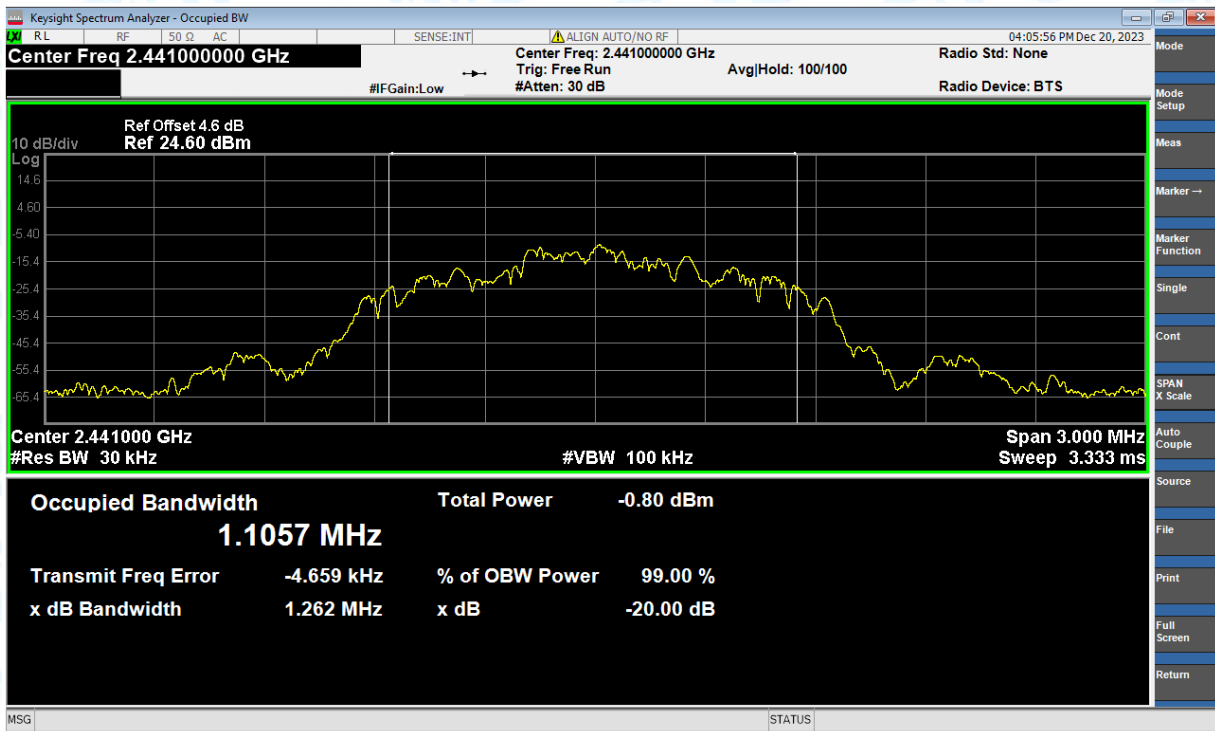
OBW NVNT 2-DH1 2480MHz Ant1



OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





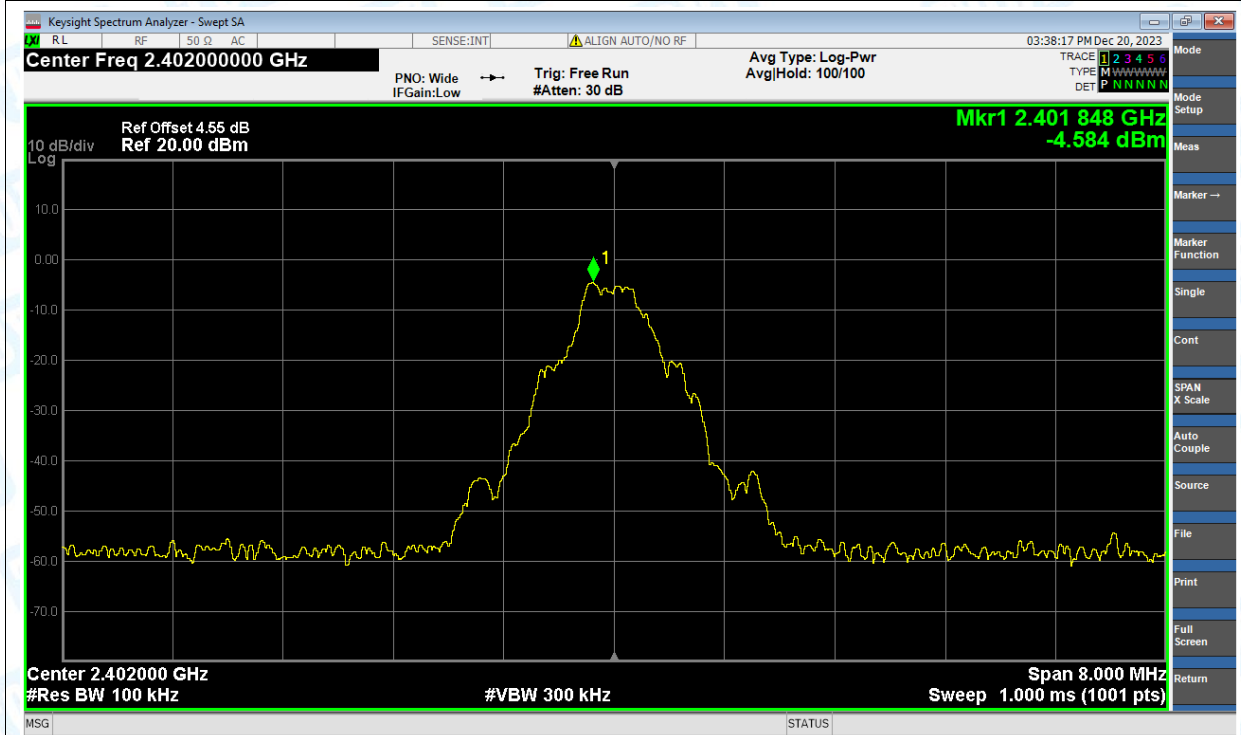


## 5. Band Edge

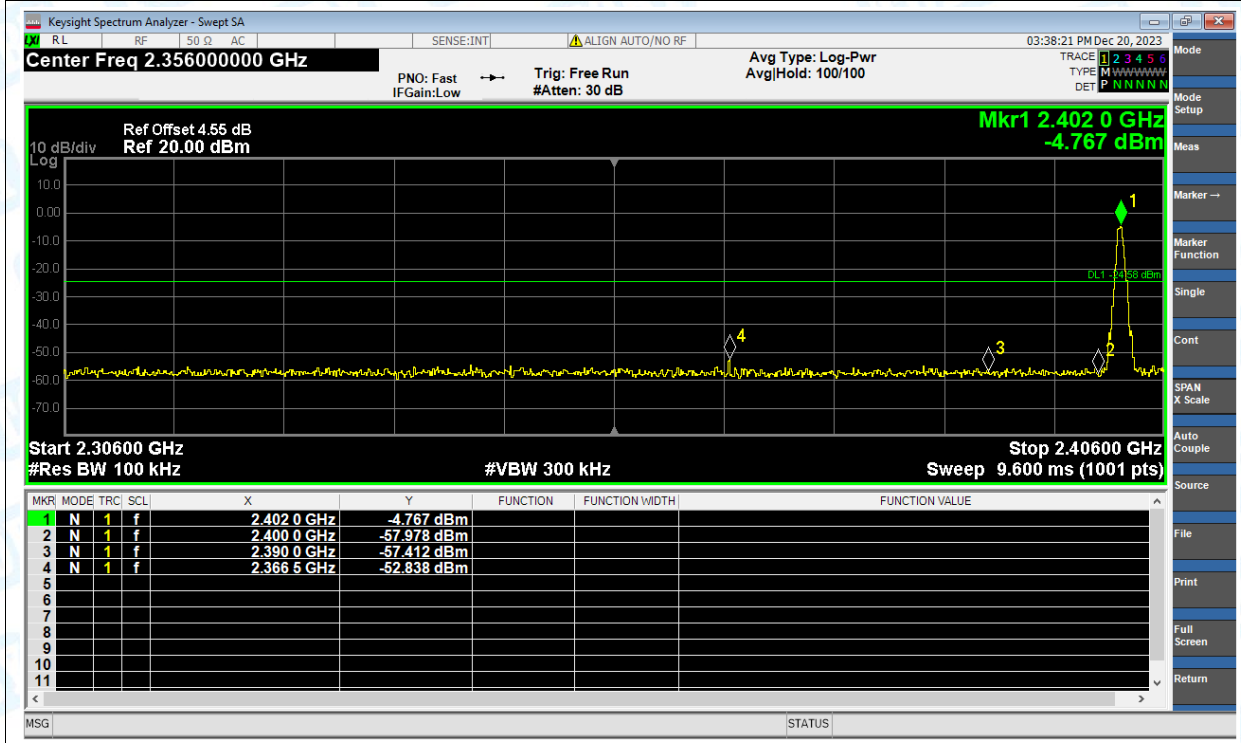
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-48.26	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-50.17	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-48.49	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-49.15	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-49.76	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-49.32	-20	Pass

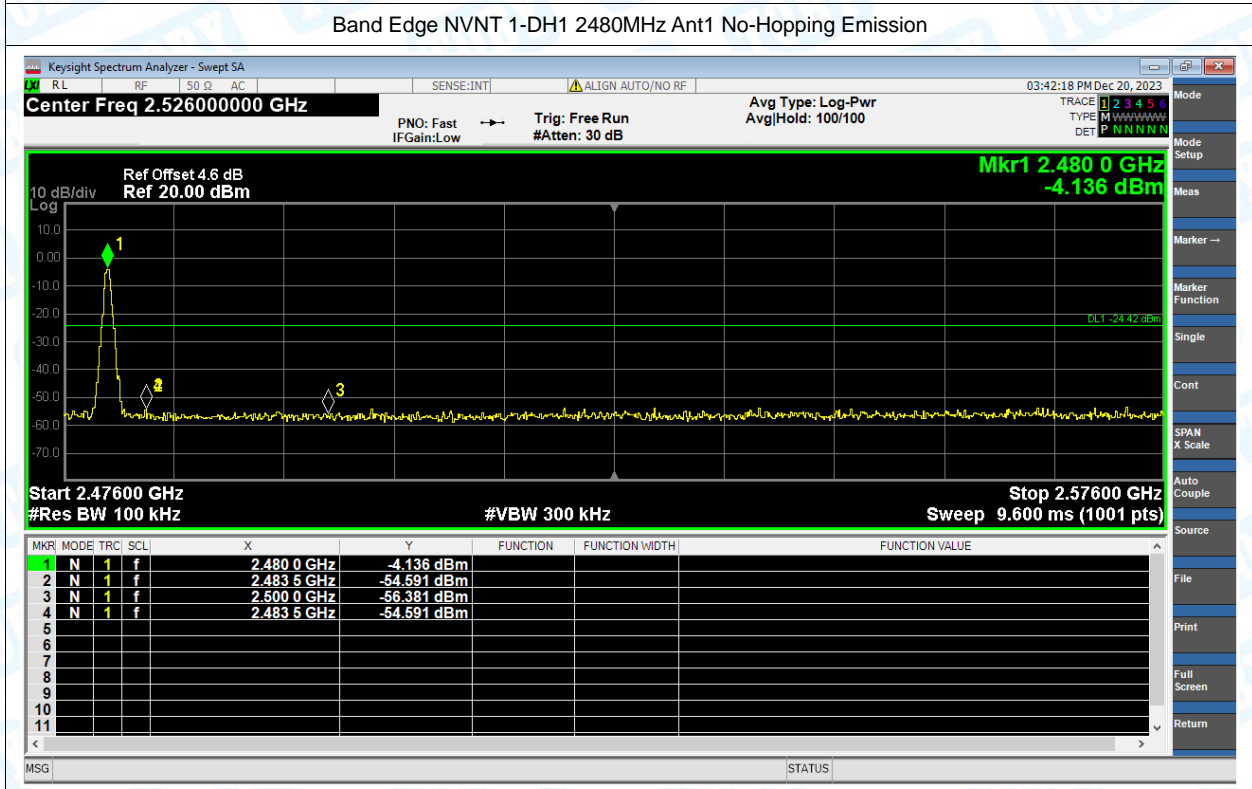
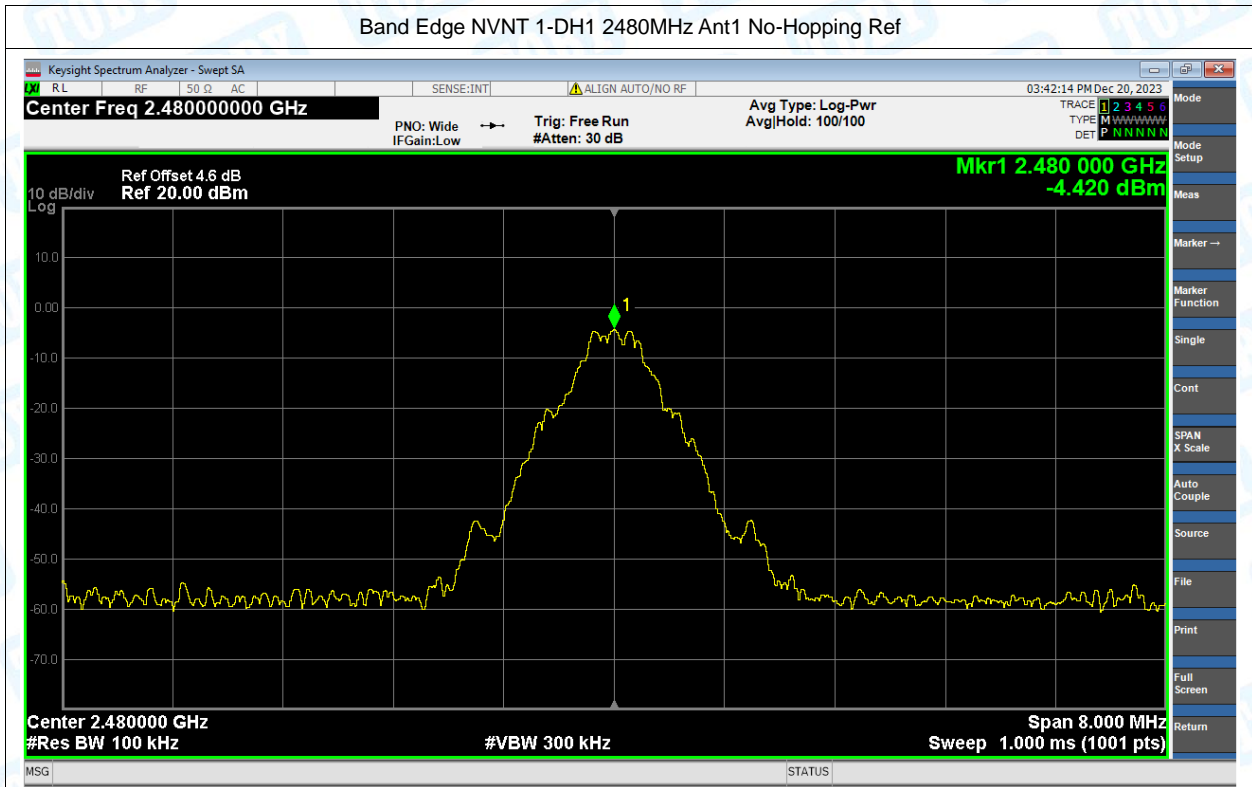
Test Graphs

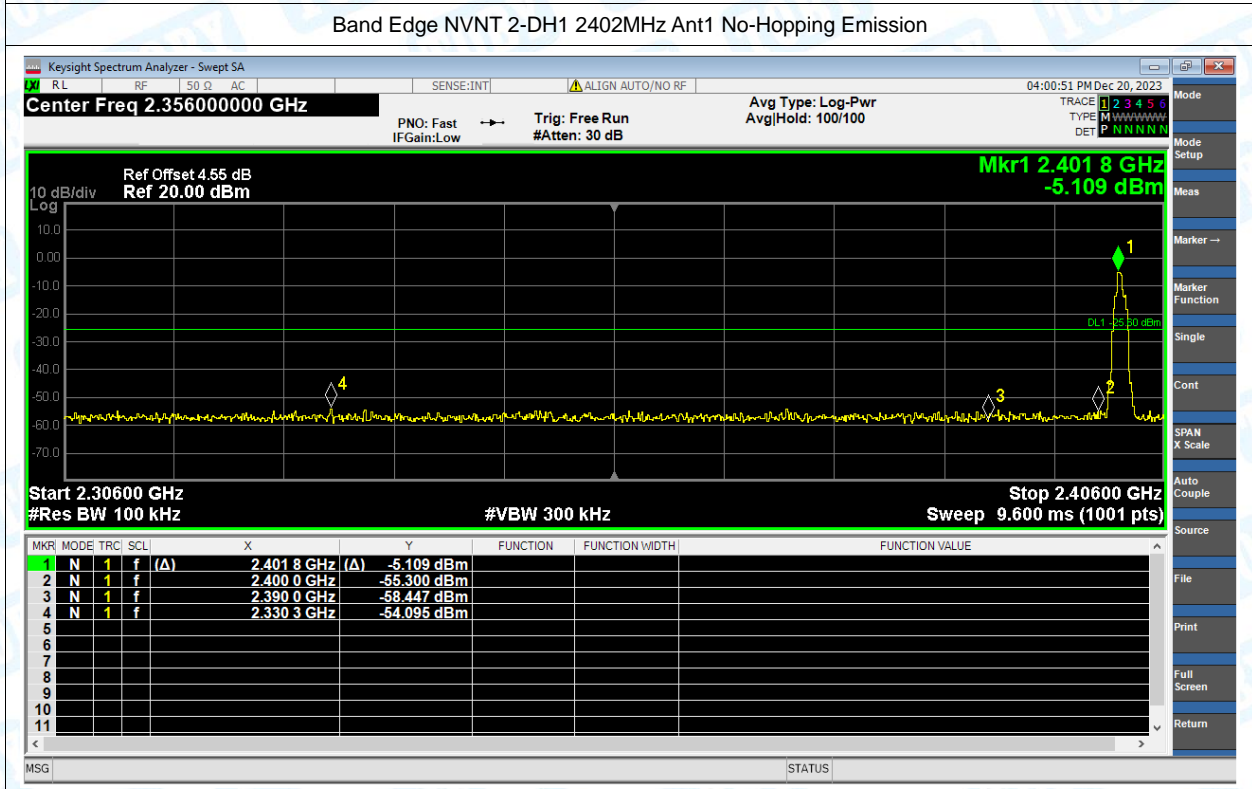
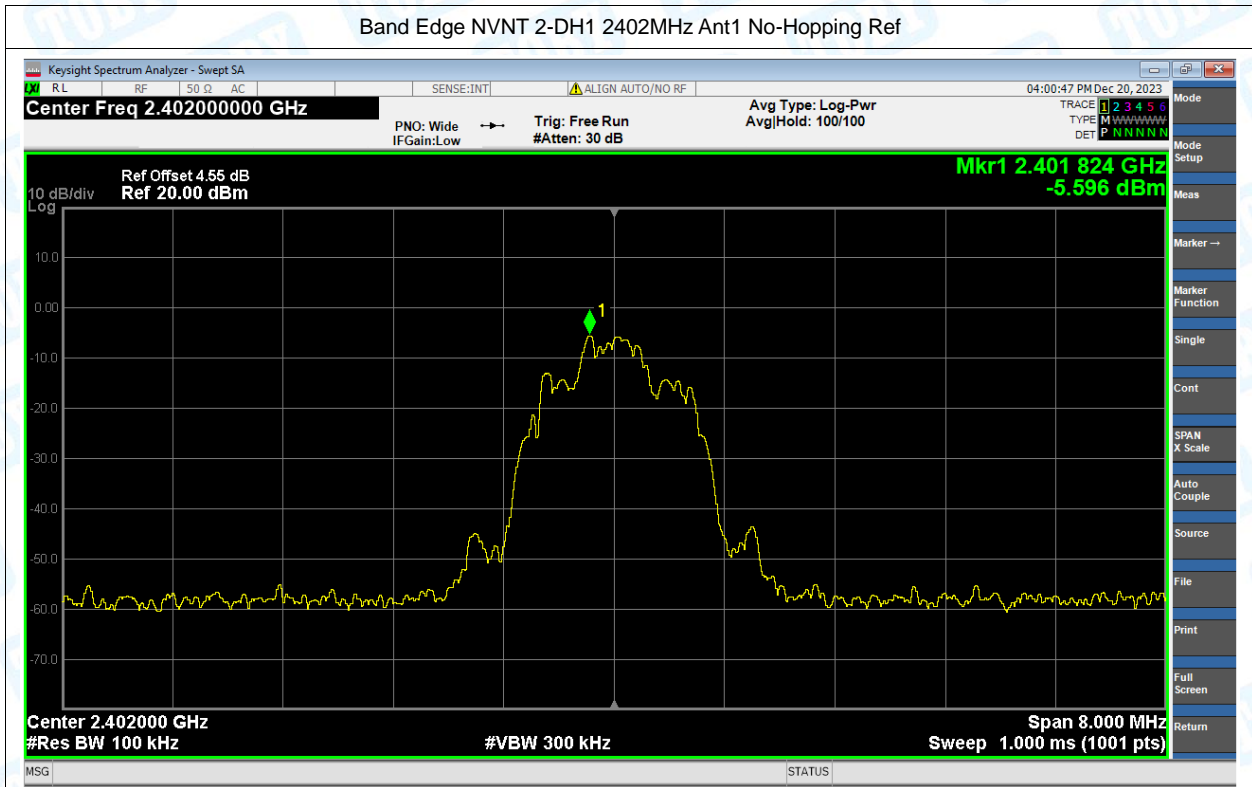
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



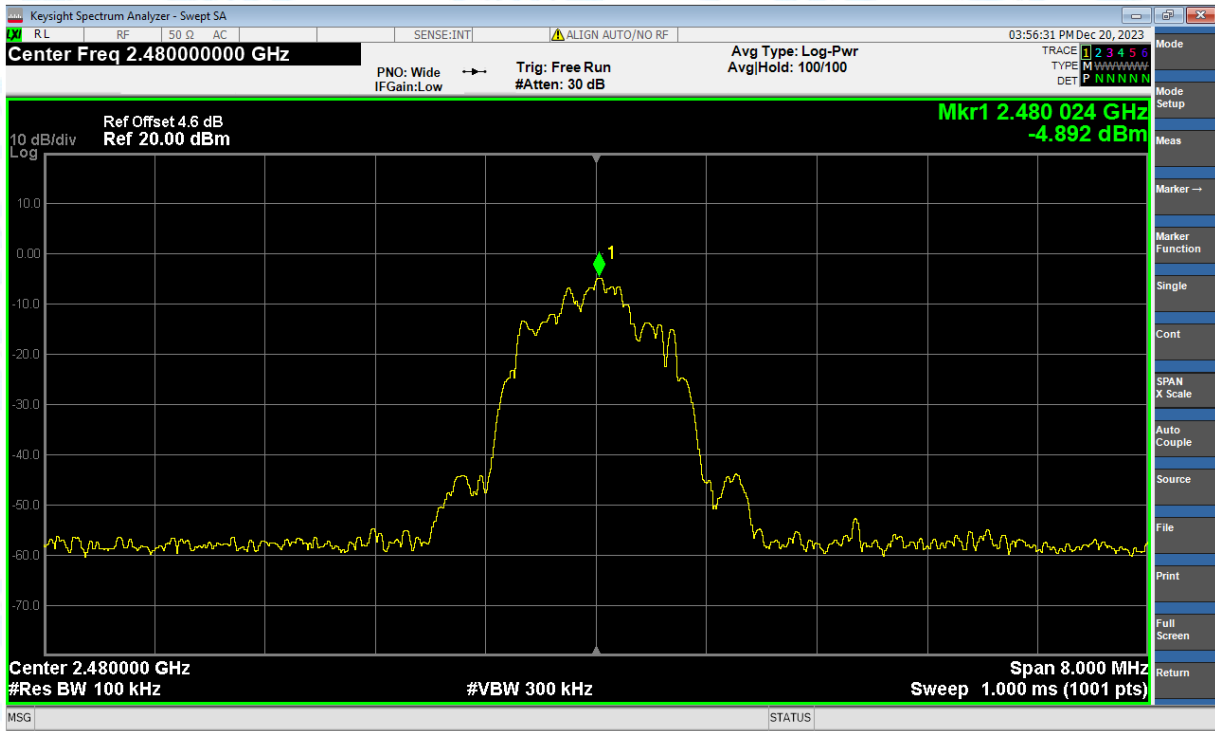
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



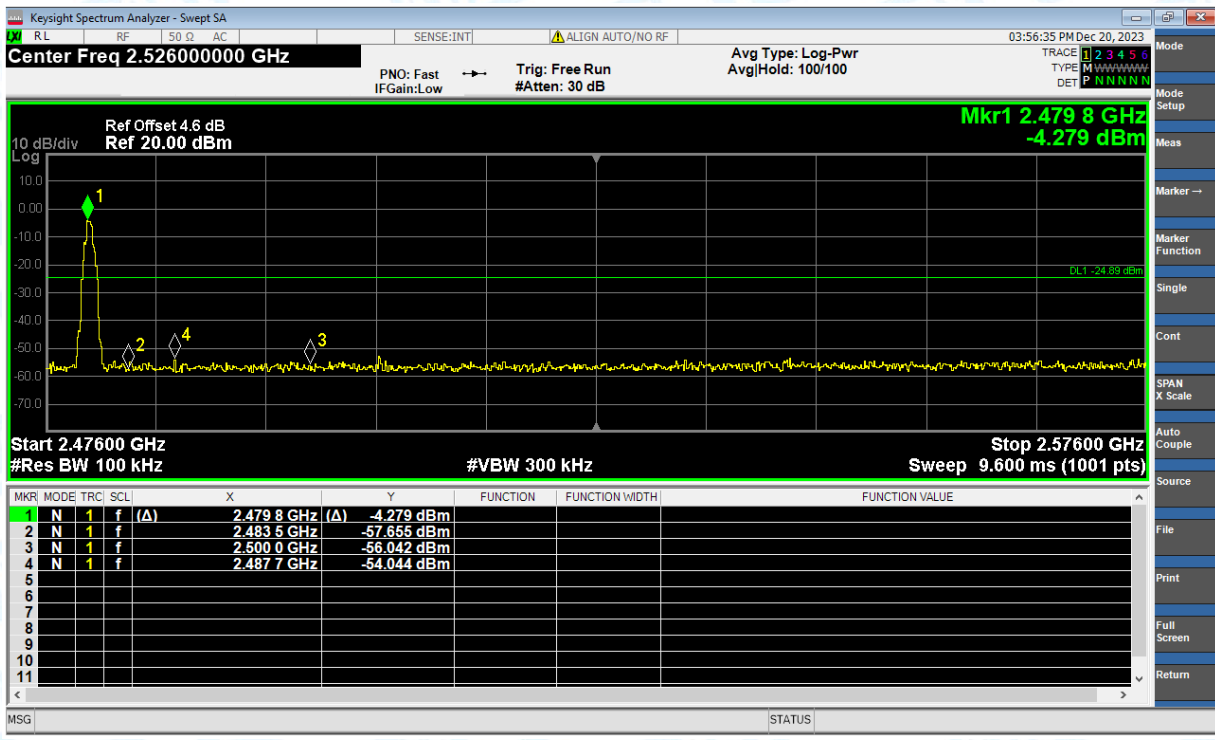


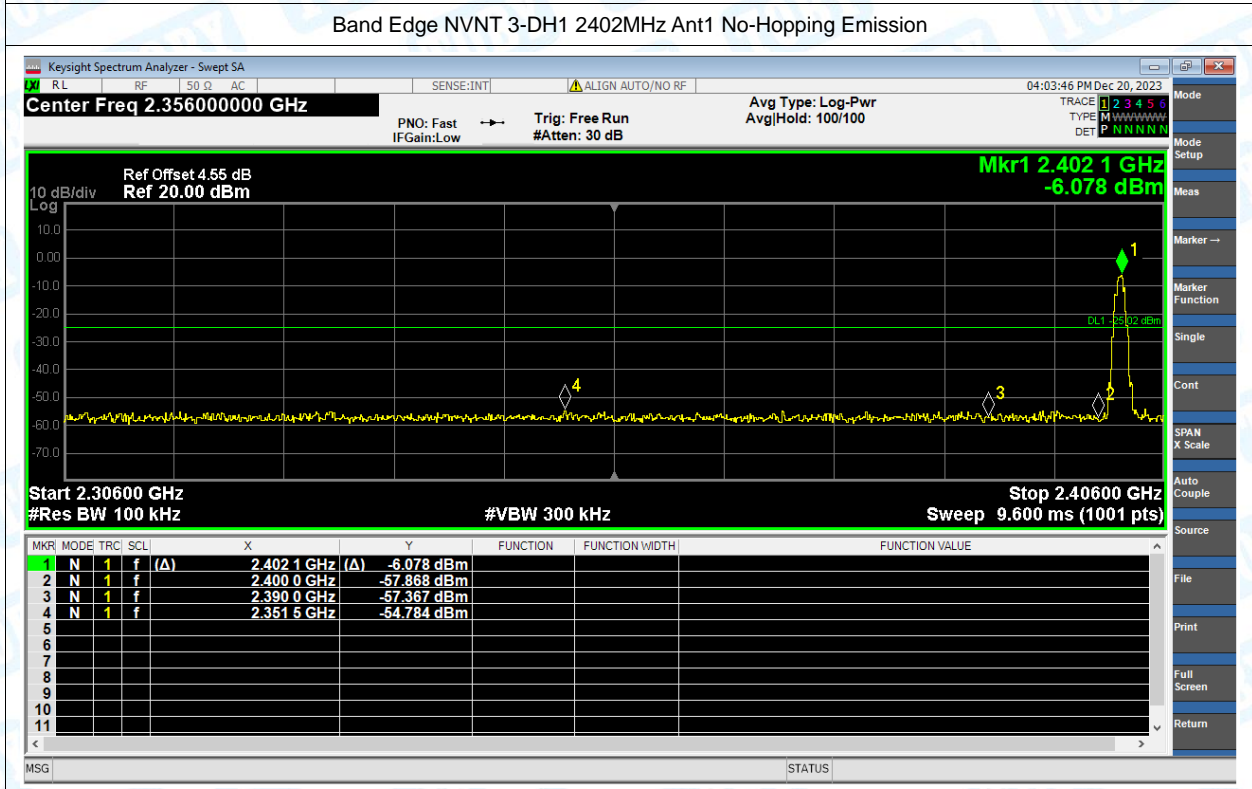
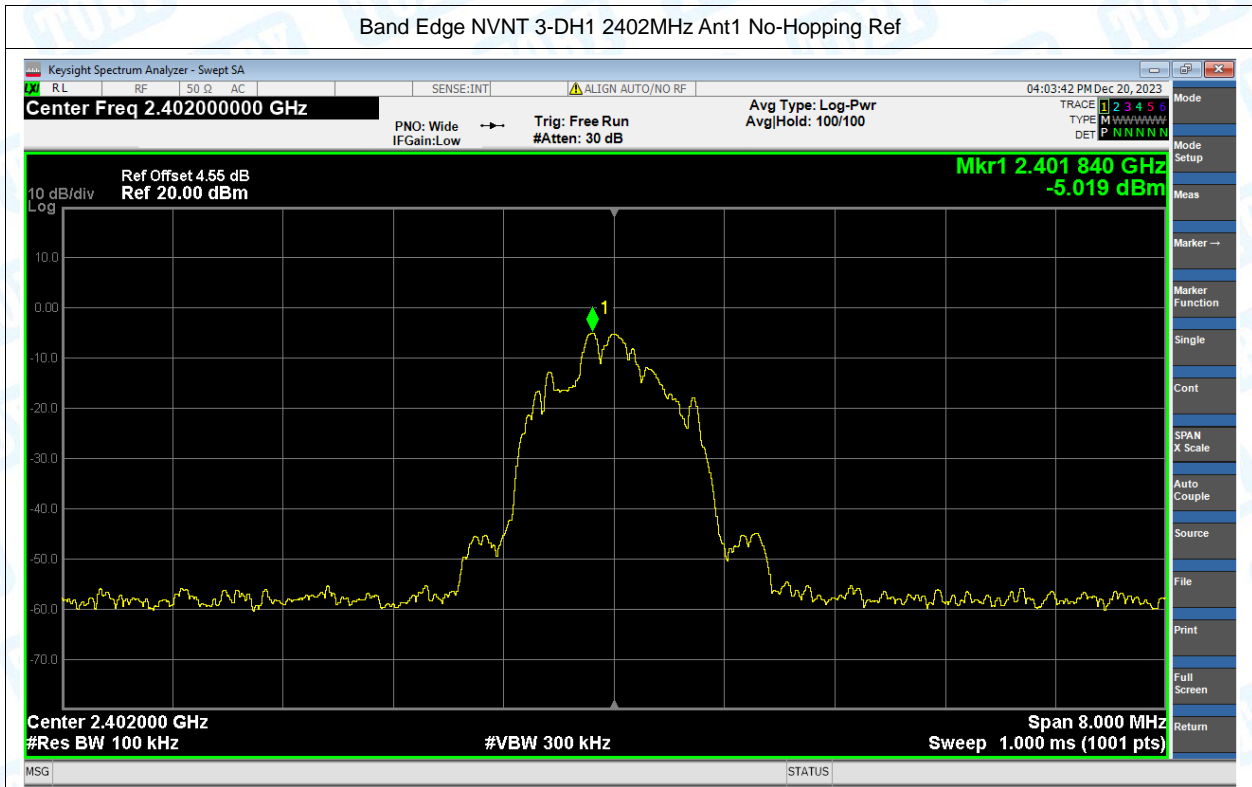


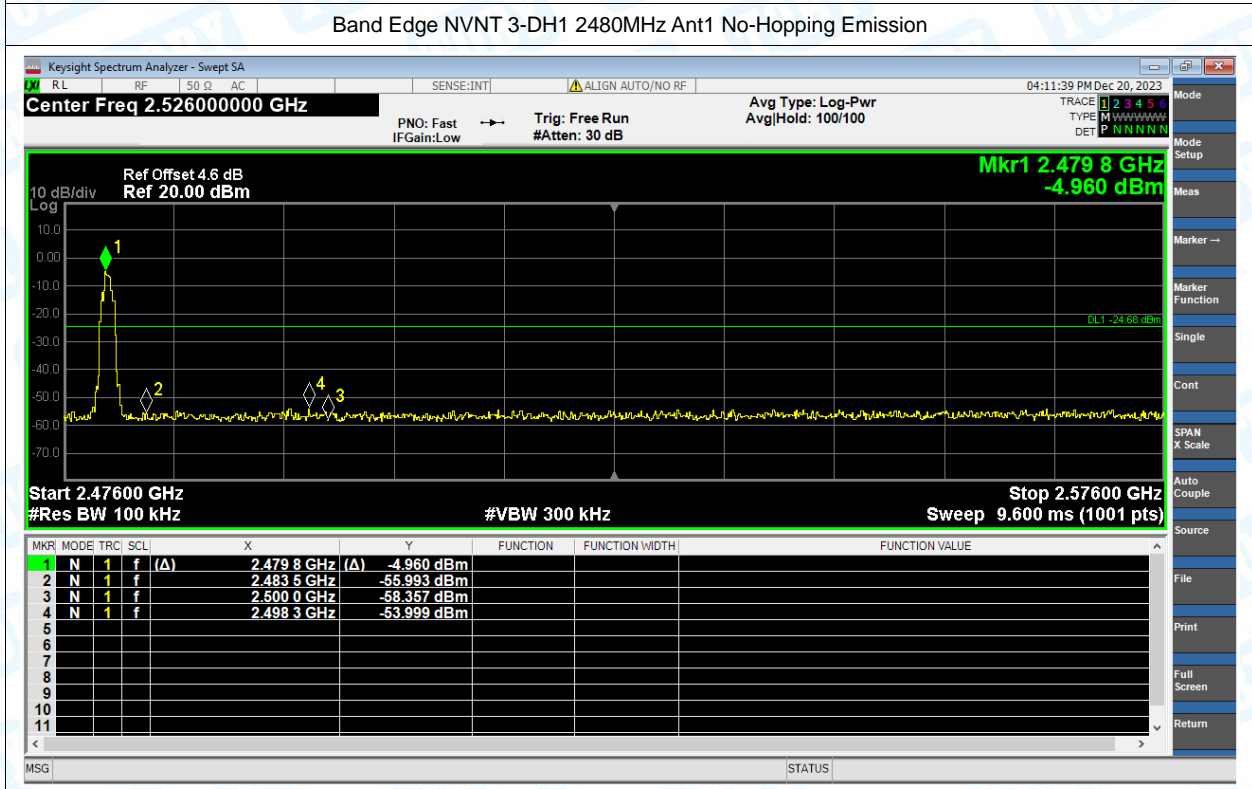
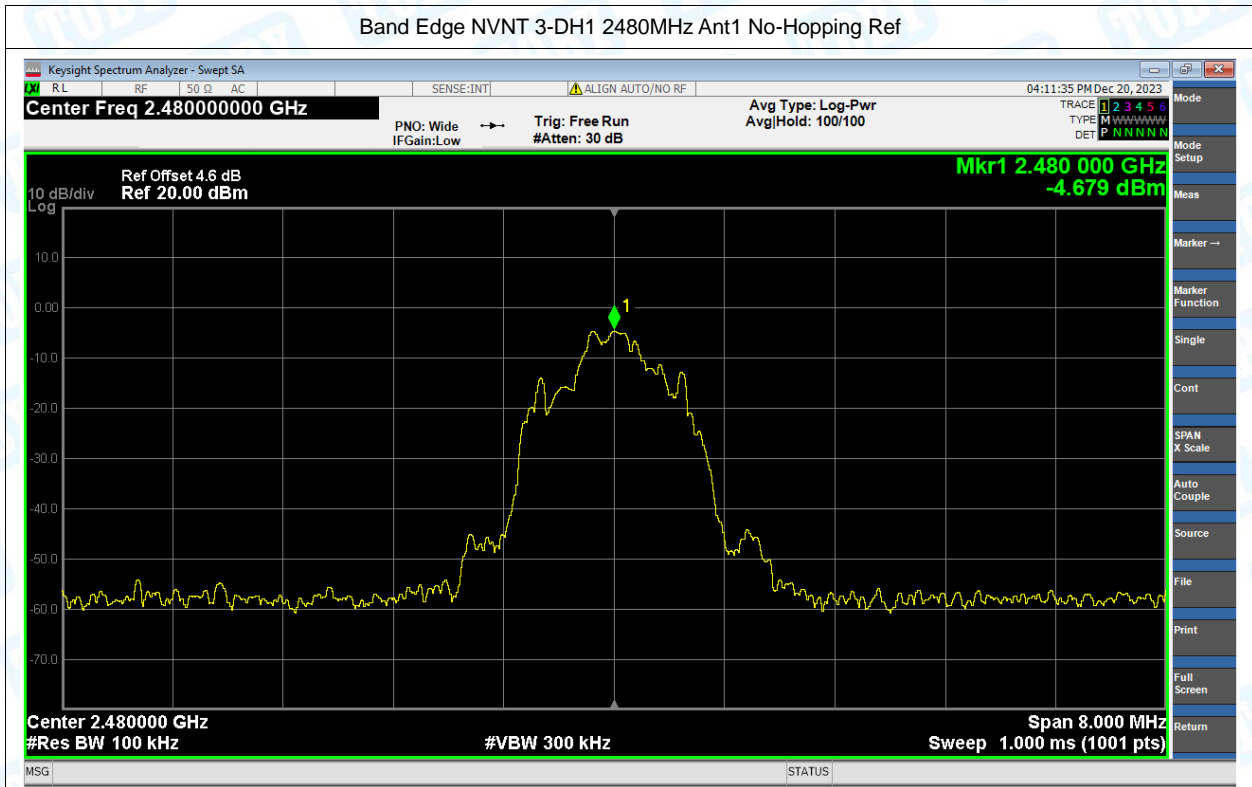
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



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







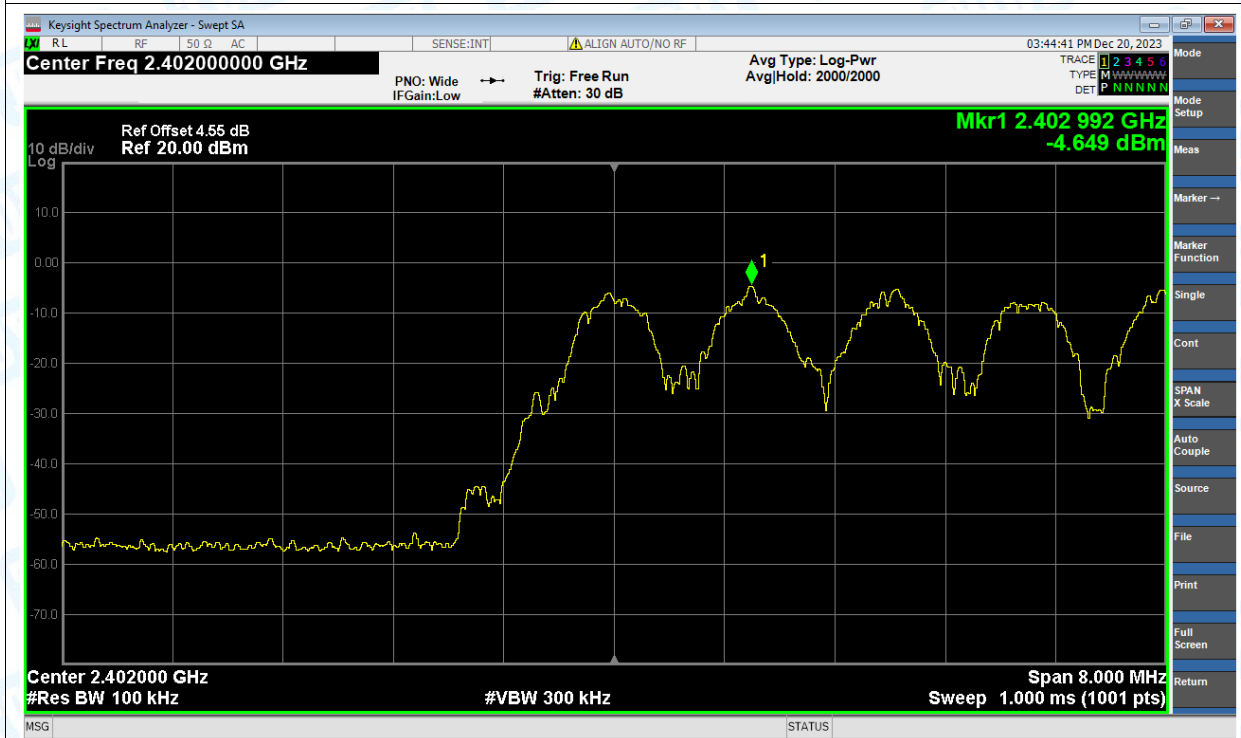


## 6. Band Edge(Hopping)

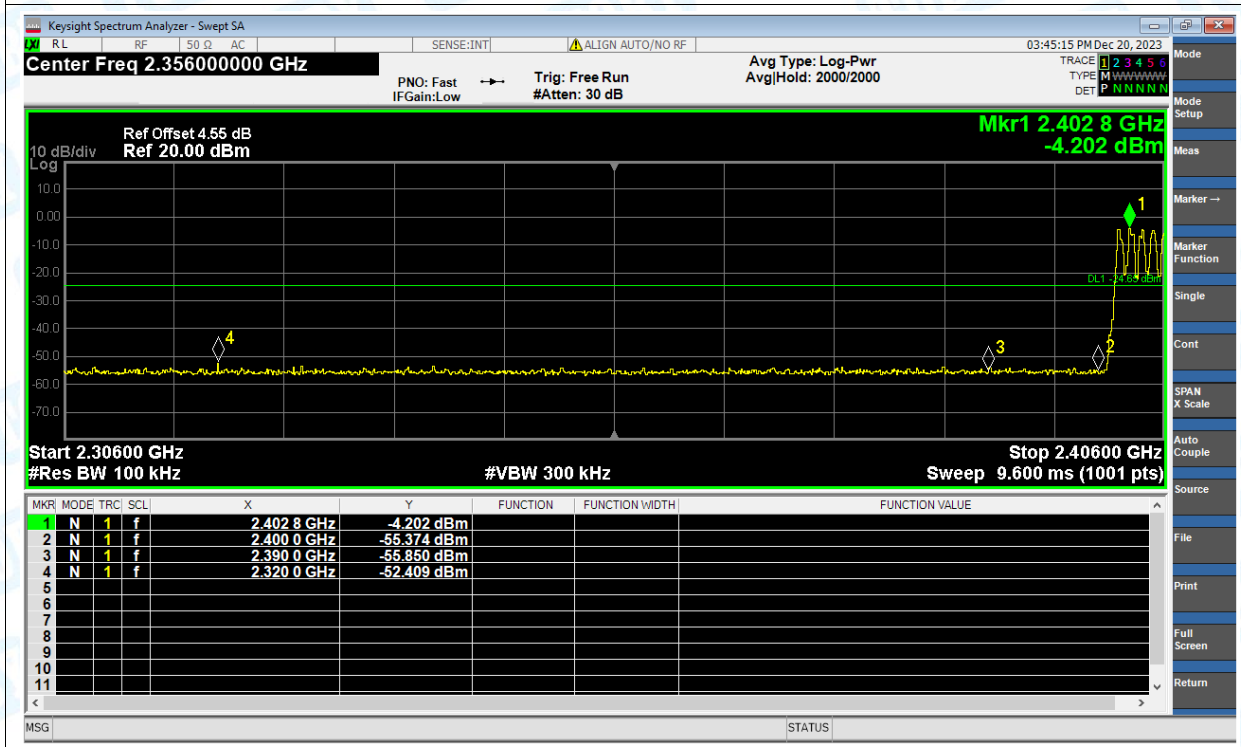
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-47.76	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-49.77	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-49.32	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-49.18	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-49.14	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-48.99	-20	Pass

Test Graphs

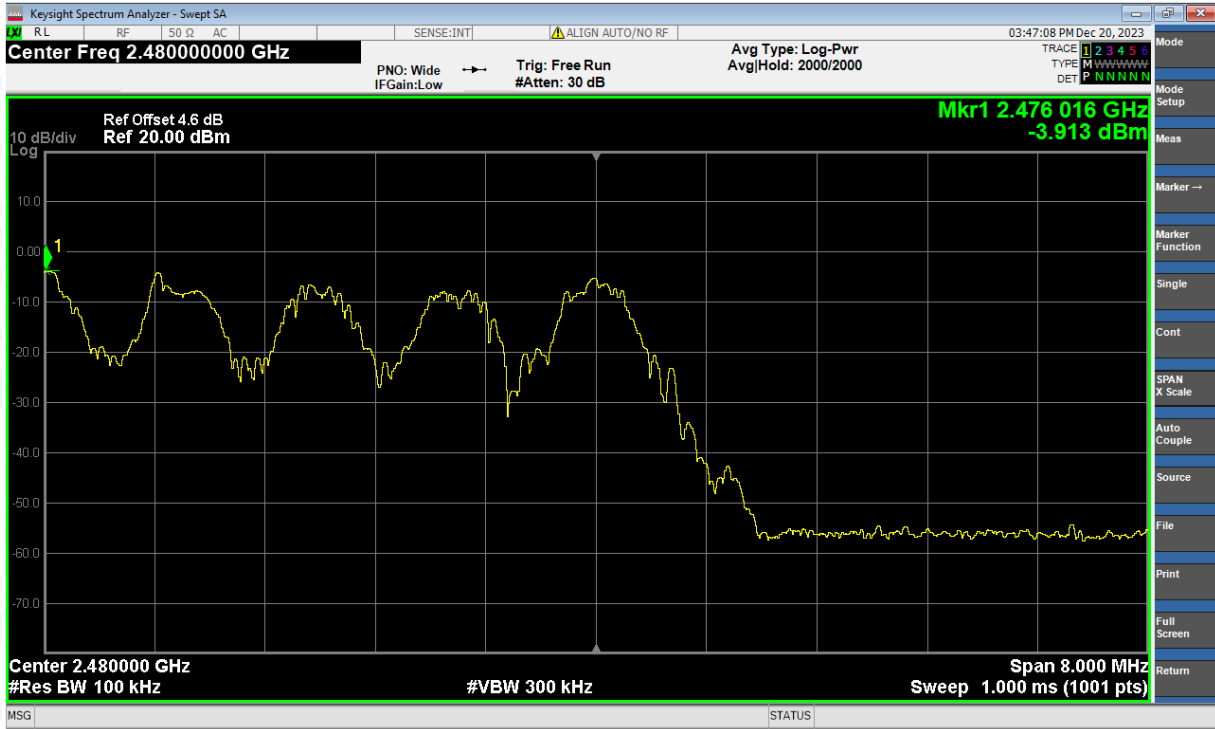
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



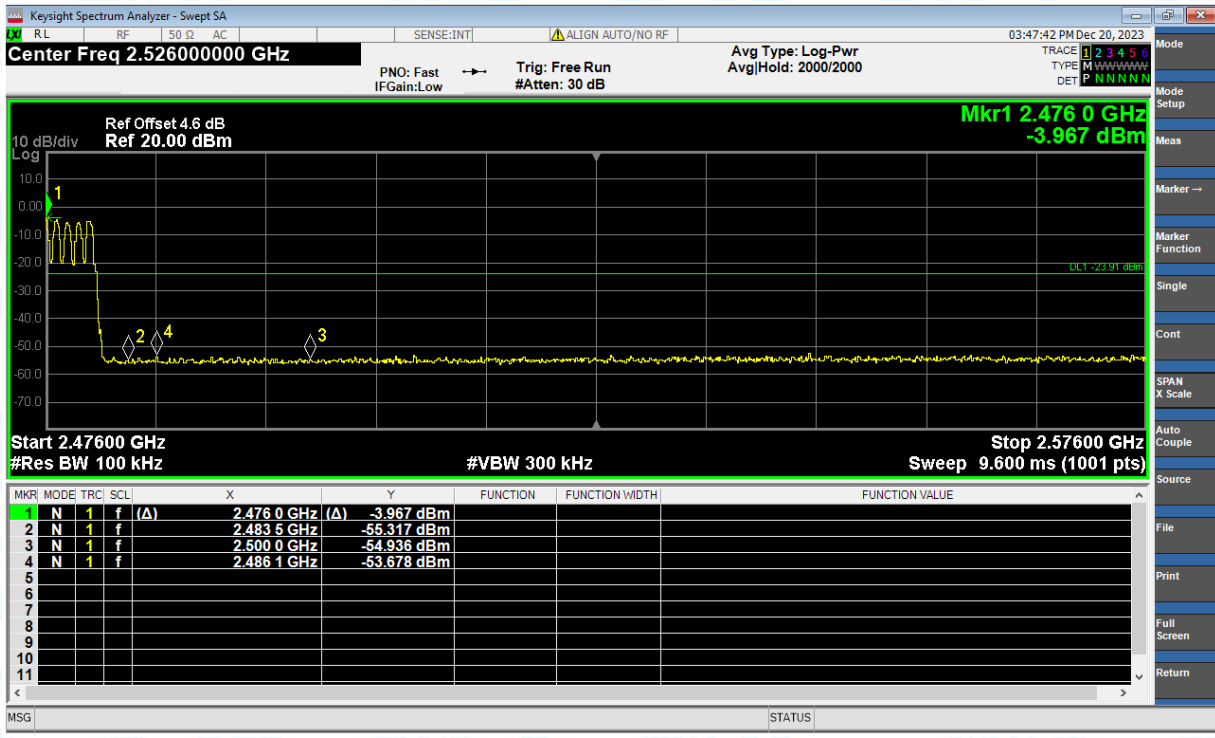
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



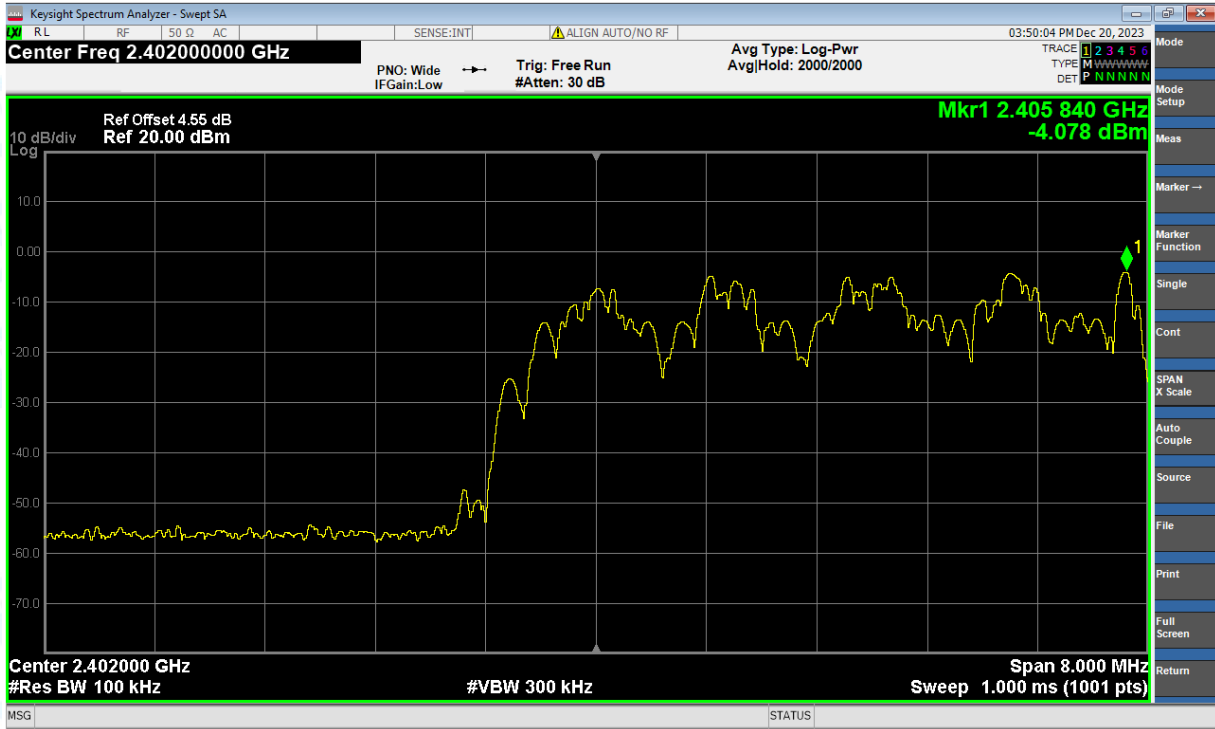
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



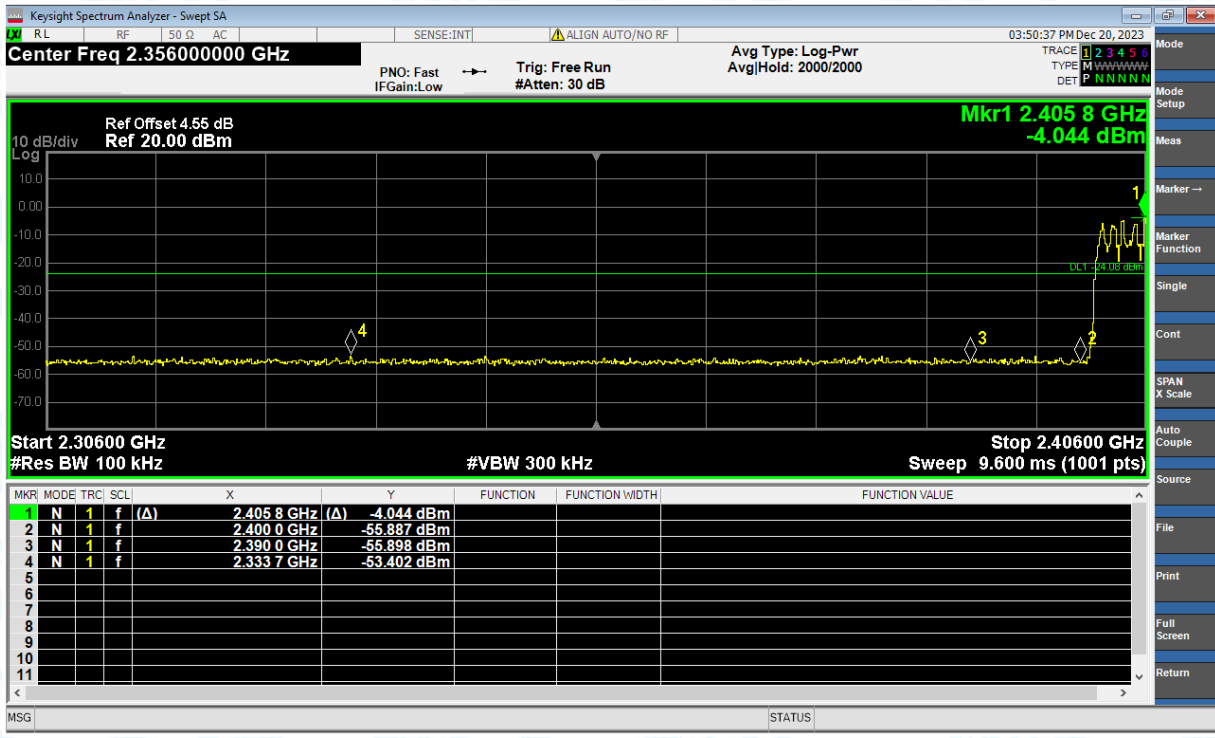
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



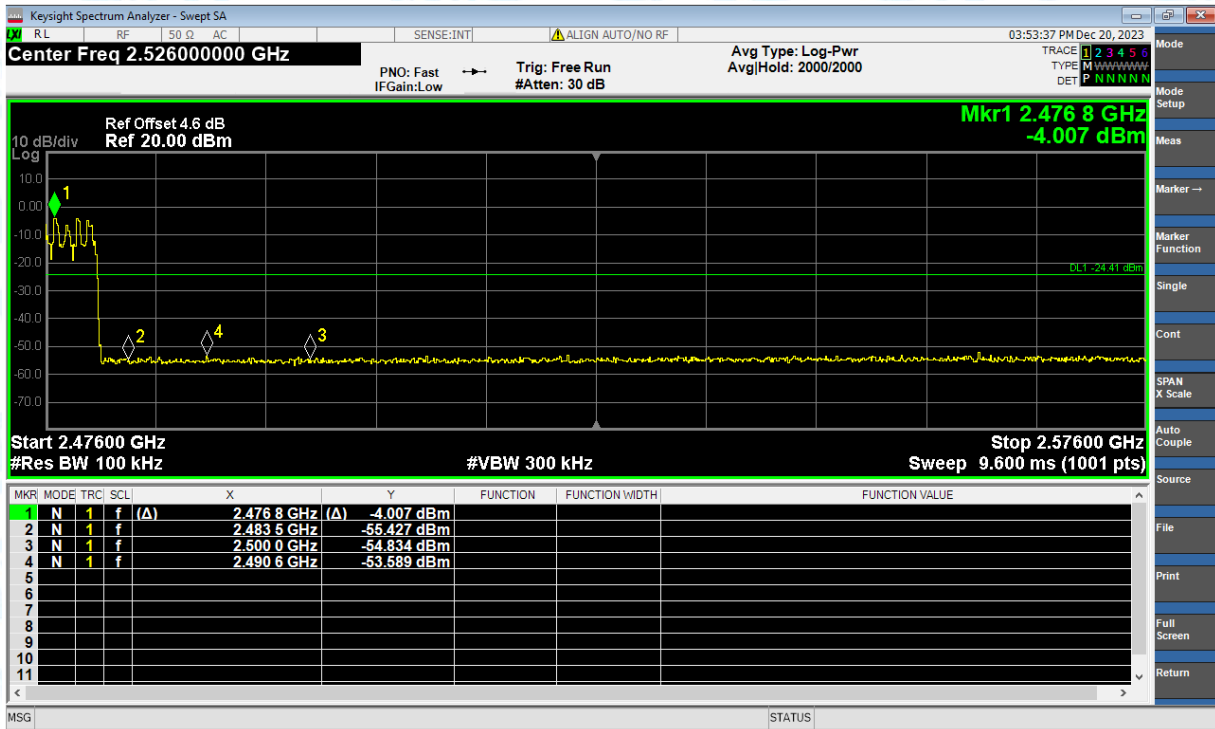
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



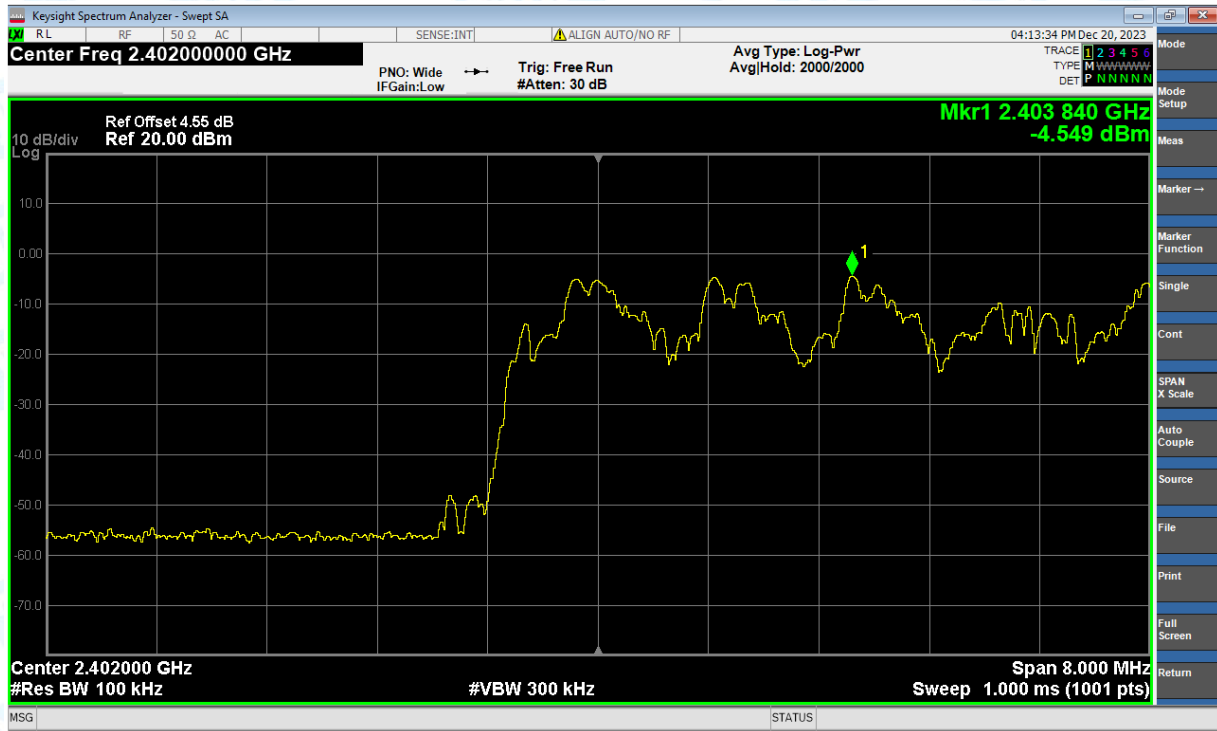
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



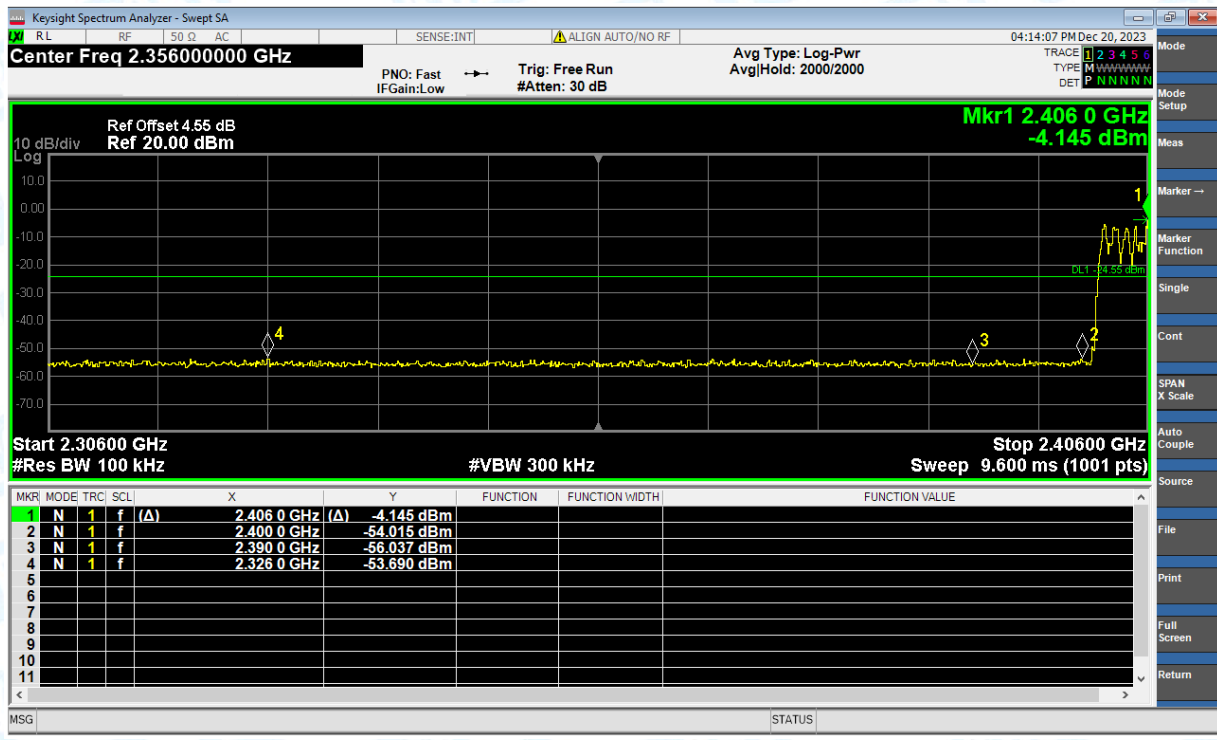
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



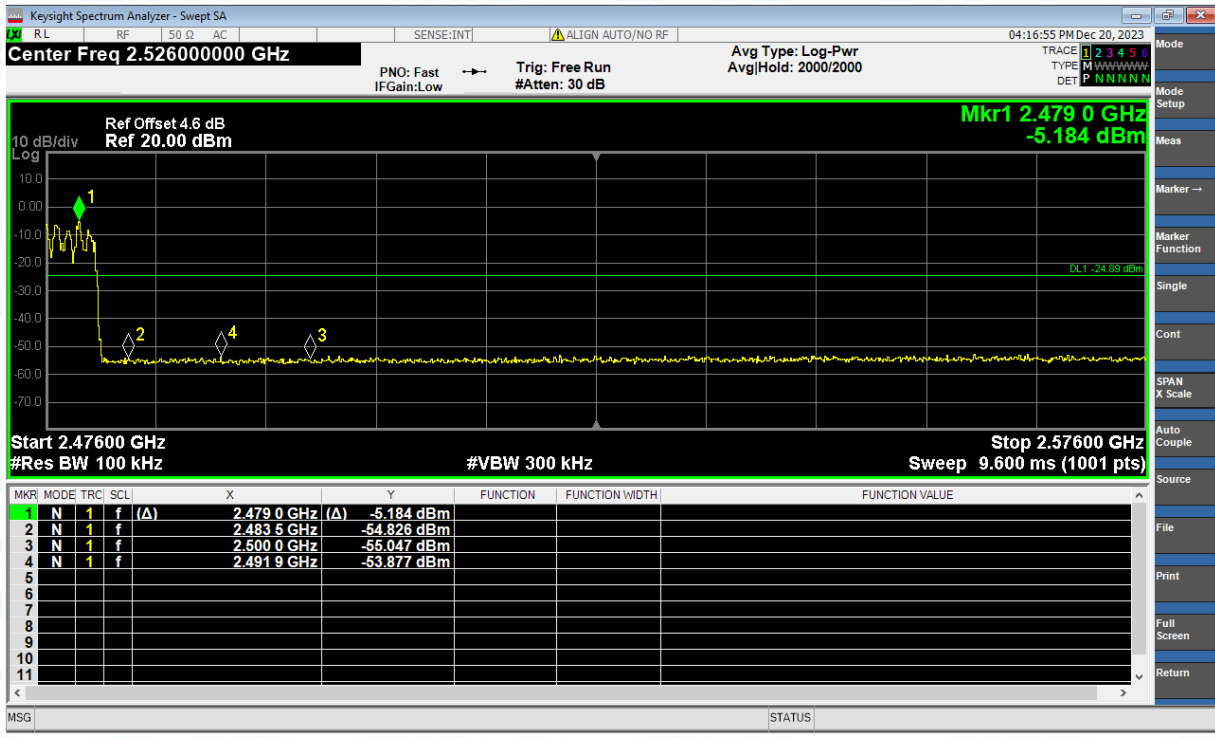
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



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



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



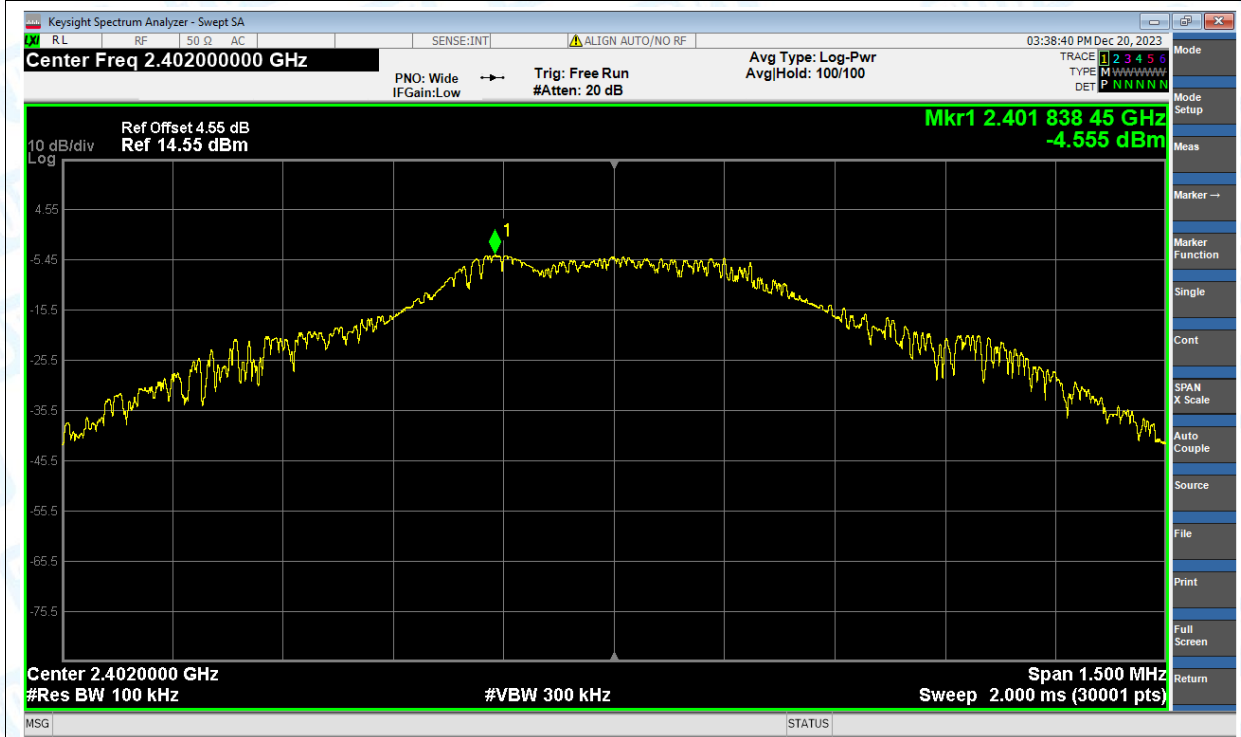
## 7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-44.87	-20	Pass
NVNT	1-DH1	2441	Ant1	-44.64	-20	Pass
NVNT	1-DH1	2480	Ant1	-45.91	-20	Pass
NVNT	2-DH1	2402	Ant1	-44.17	-20	Pass
NVNT	2-DH1	2441	Ant1	-43.86	-20	Pass
NVNT	2-DH1	2480	Ant1	-45.46	-20	Pass
NVNT	3-DH1	2402	Ant1	-44.22	-20	Pass
NVNT	3-DH1	2441	Ant1	-44.05	-20	Pass
NVNT	3-DH1	2480	Ant1	-45.18	-20	Pass



Test Graphs

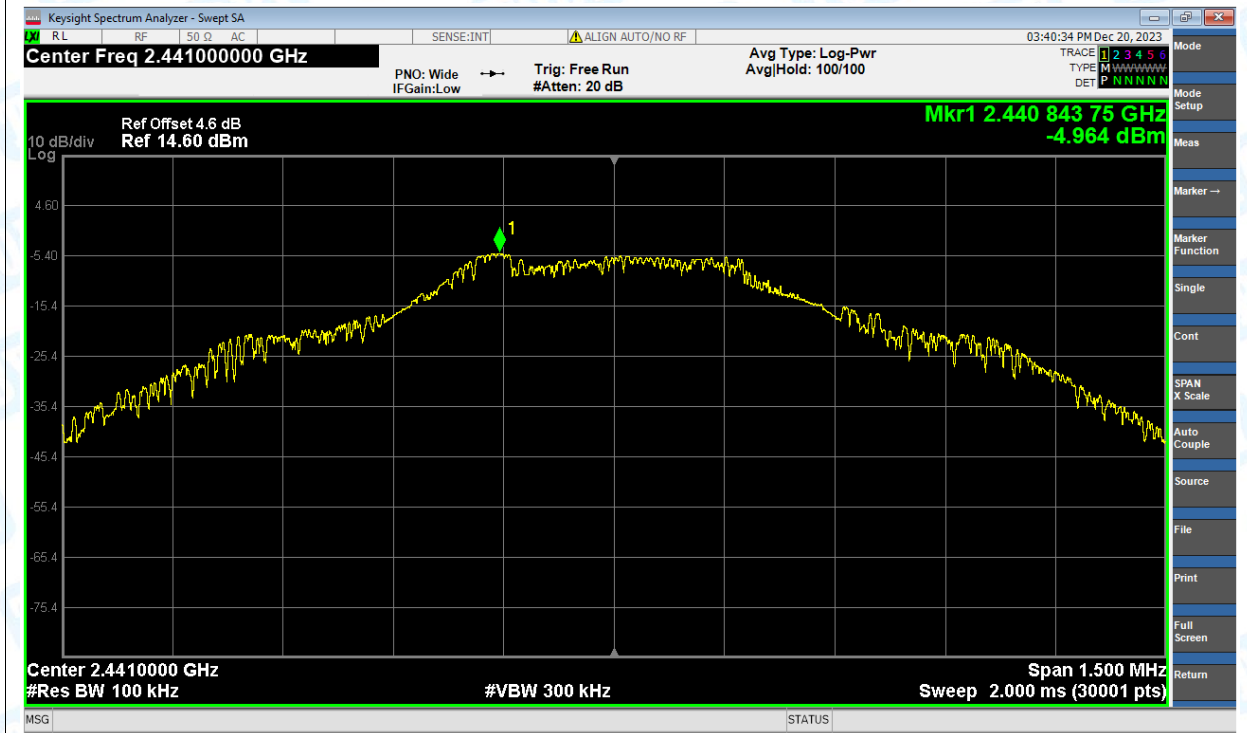
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



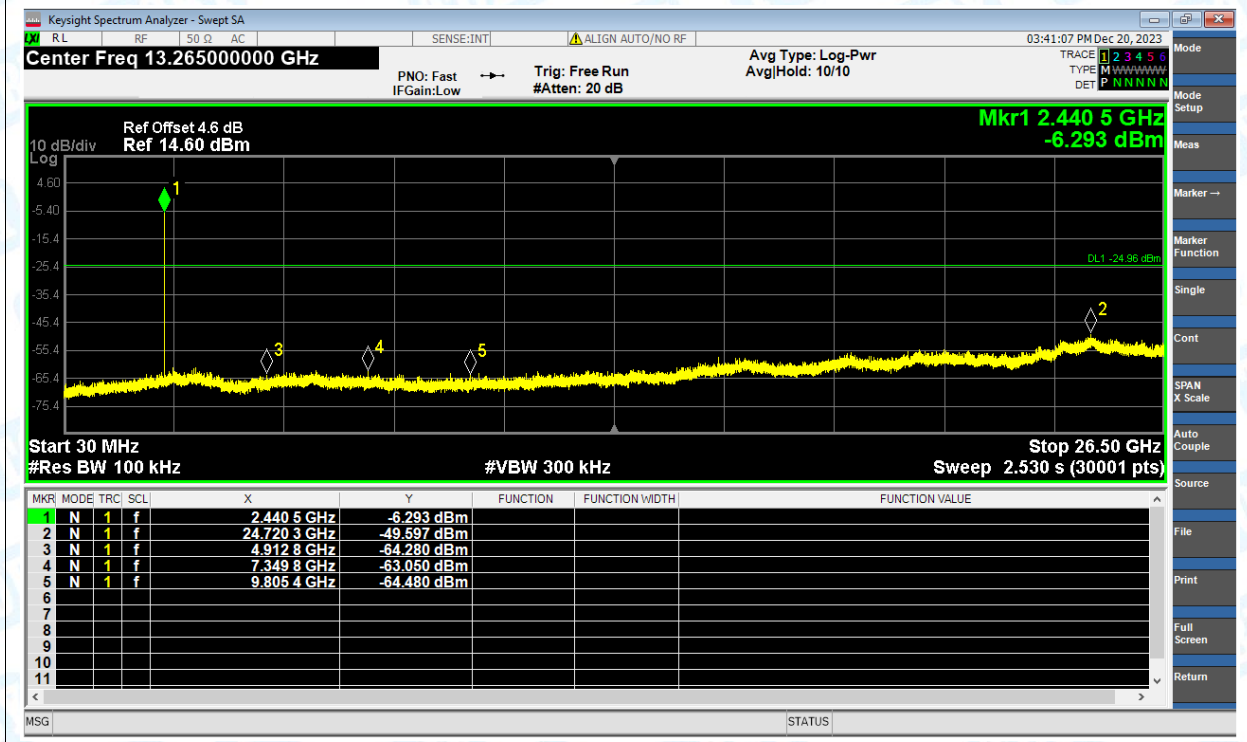
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



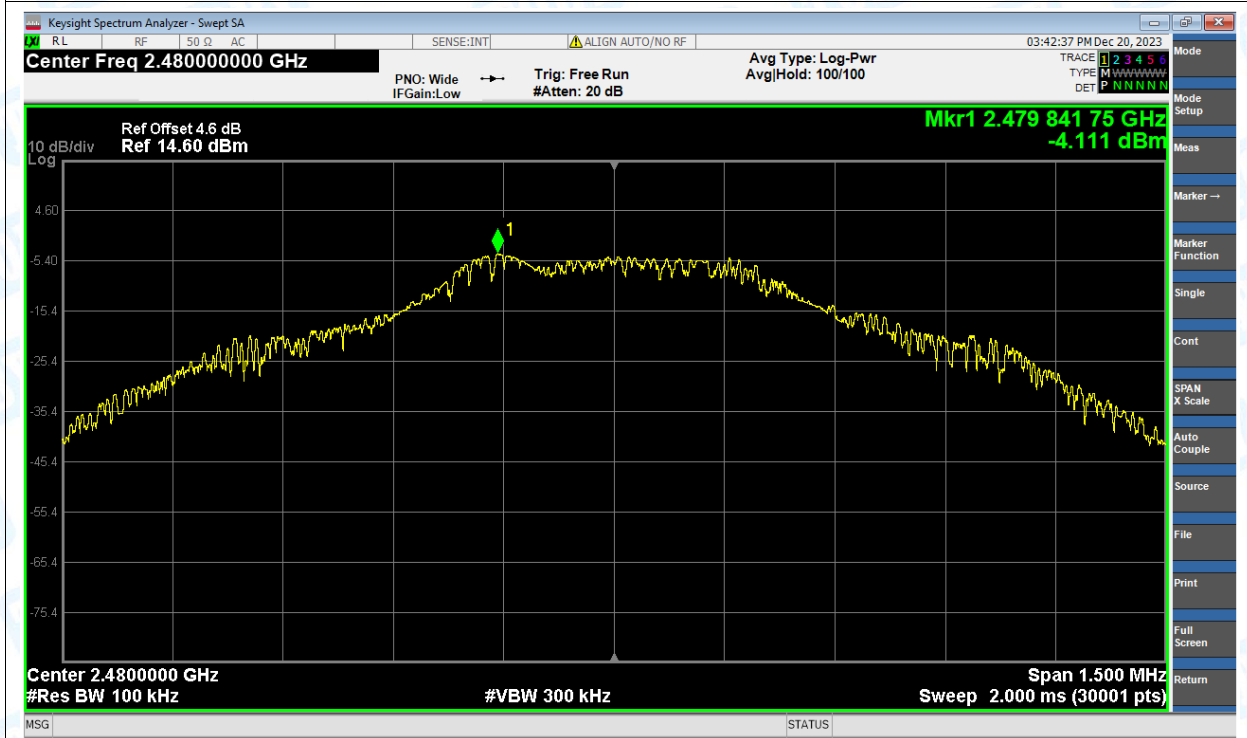
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



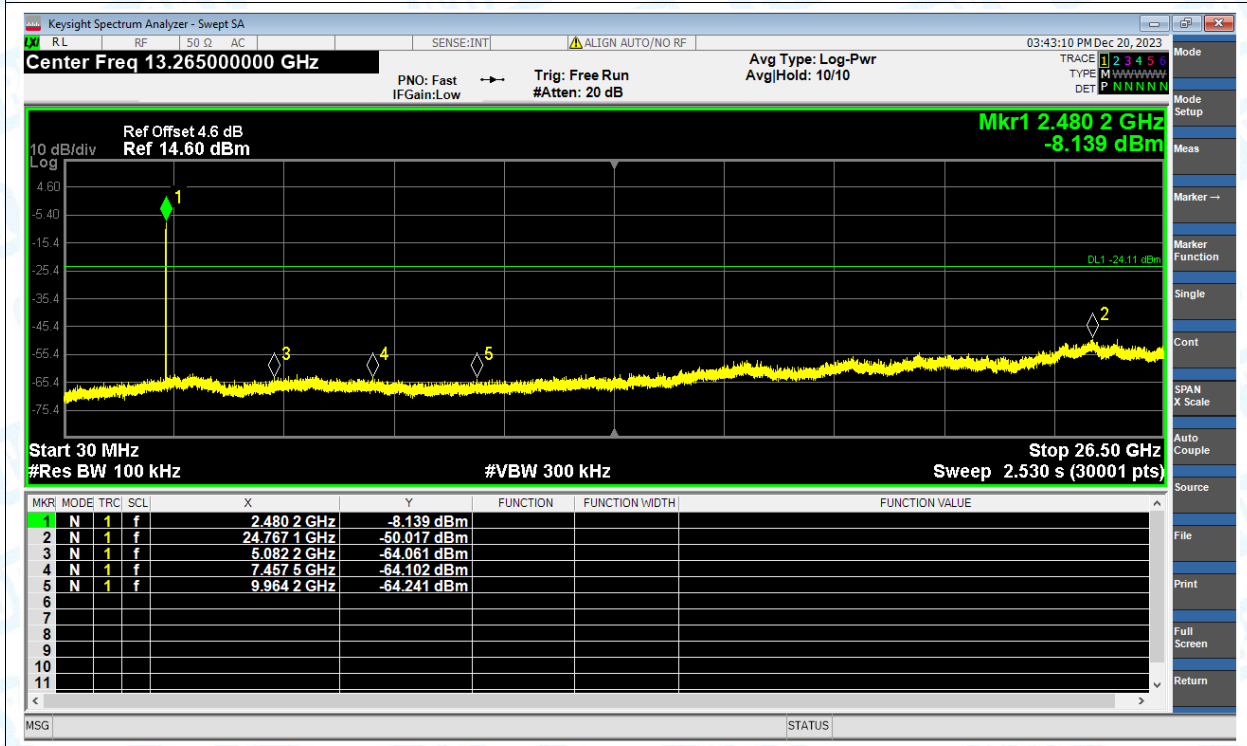
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



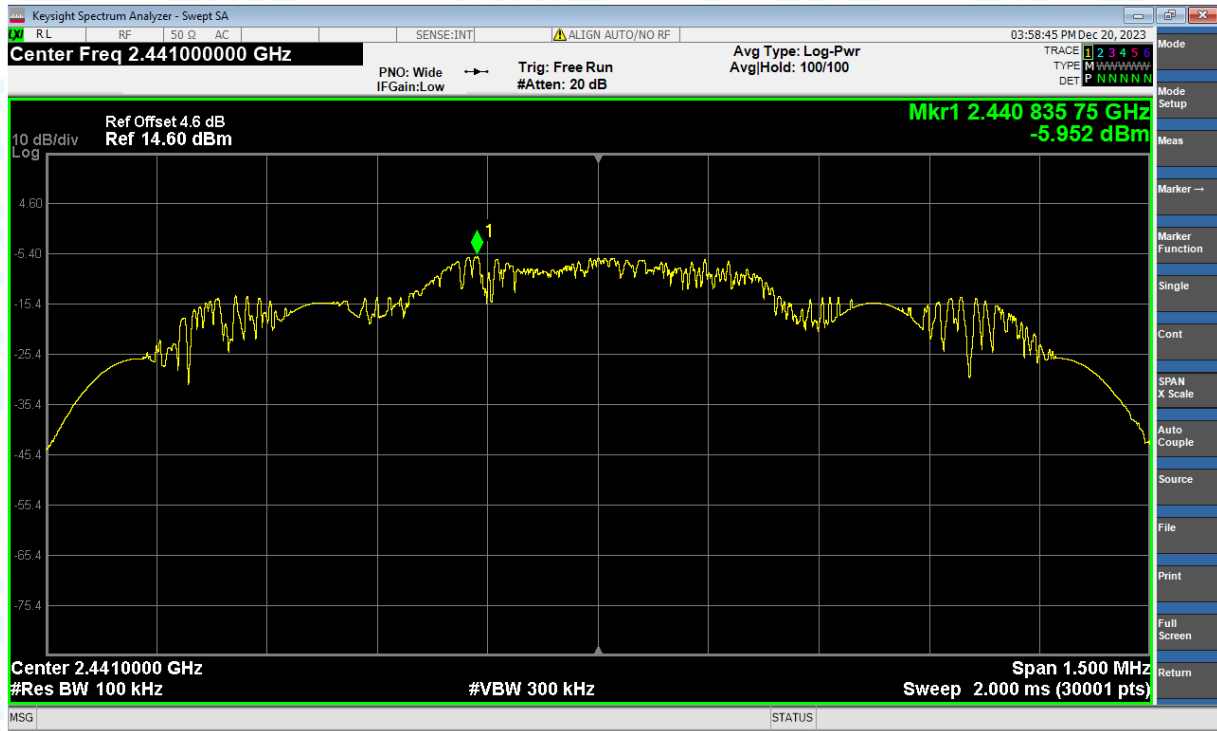
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



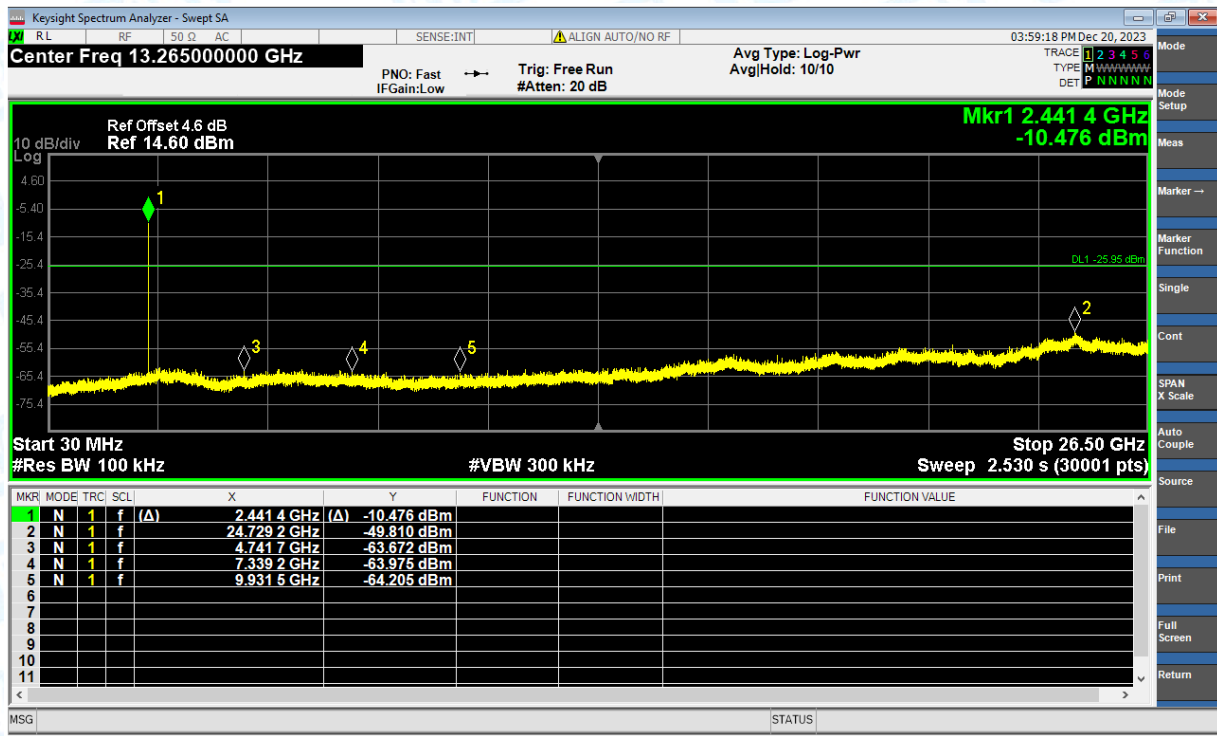
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



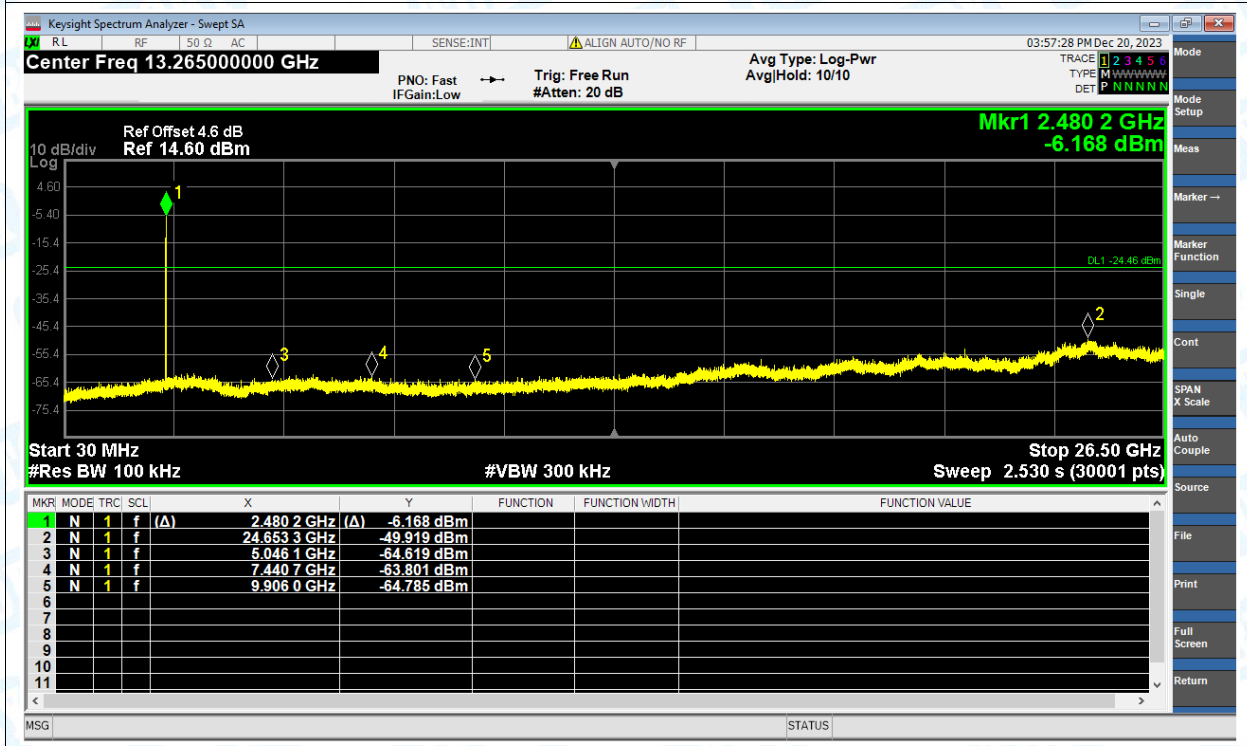
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



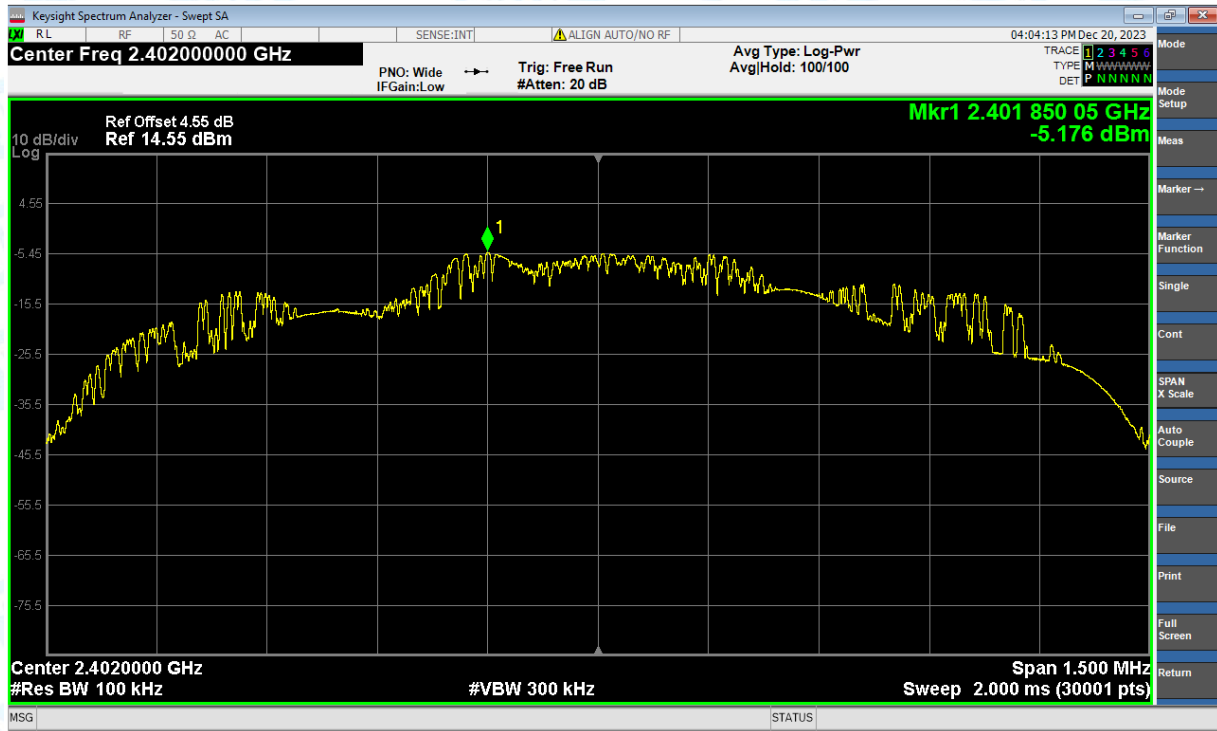
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



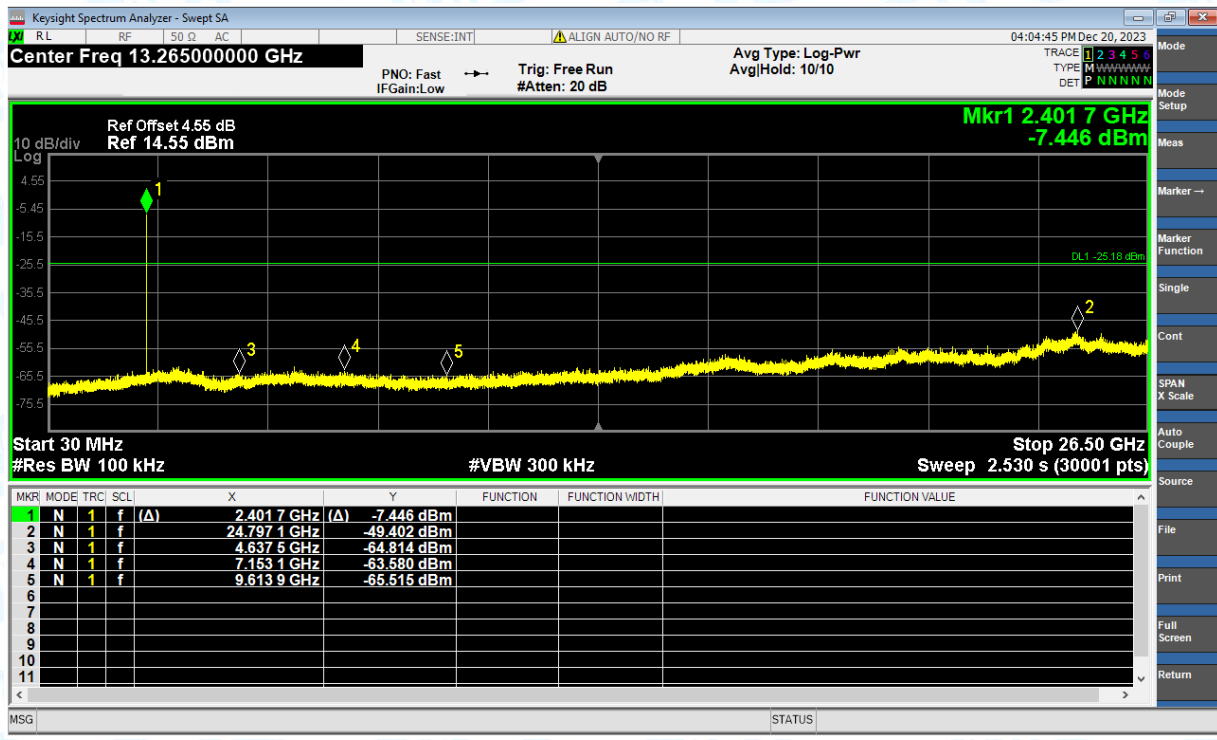
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



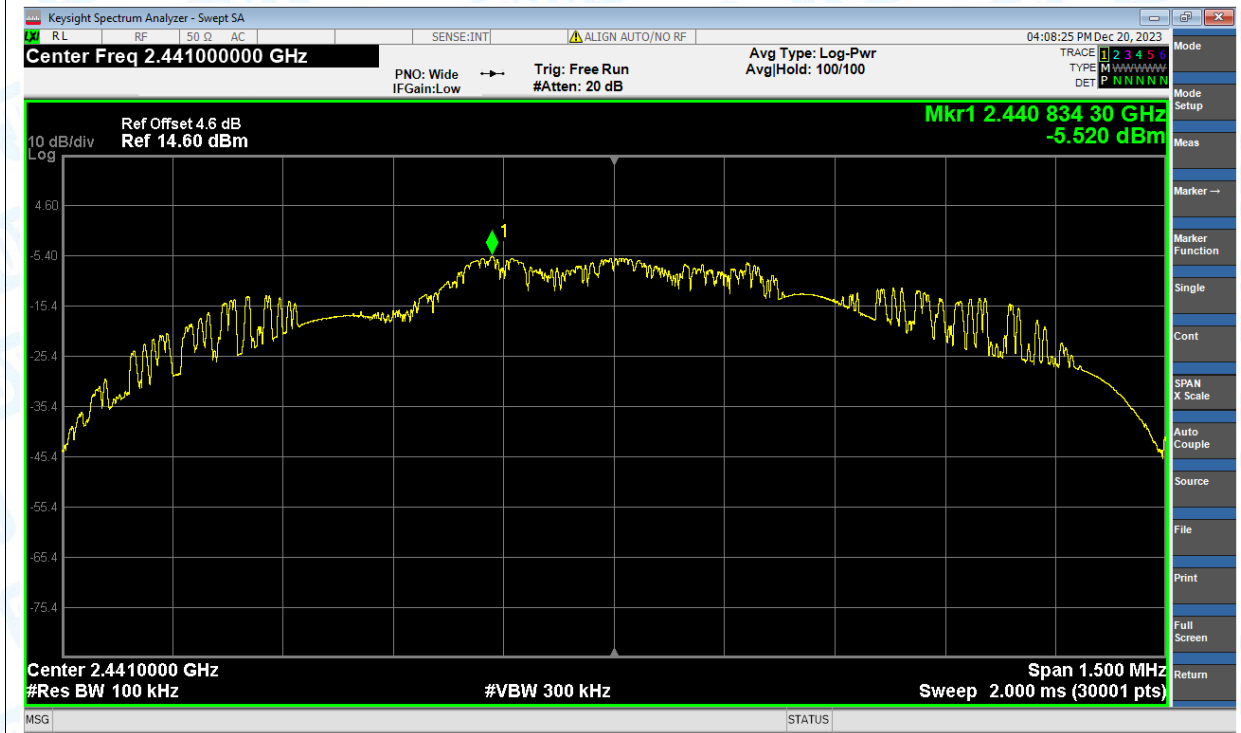
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



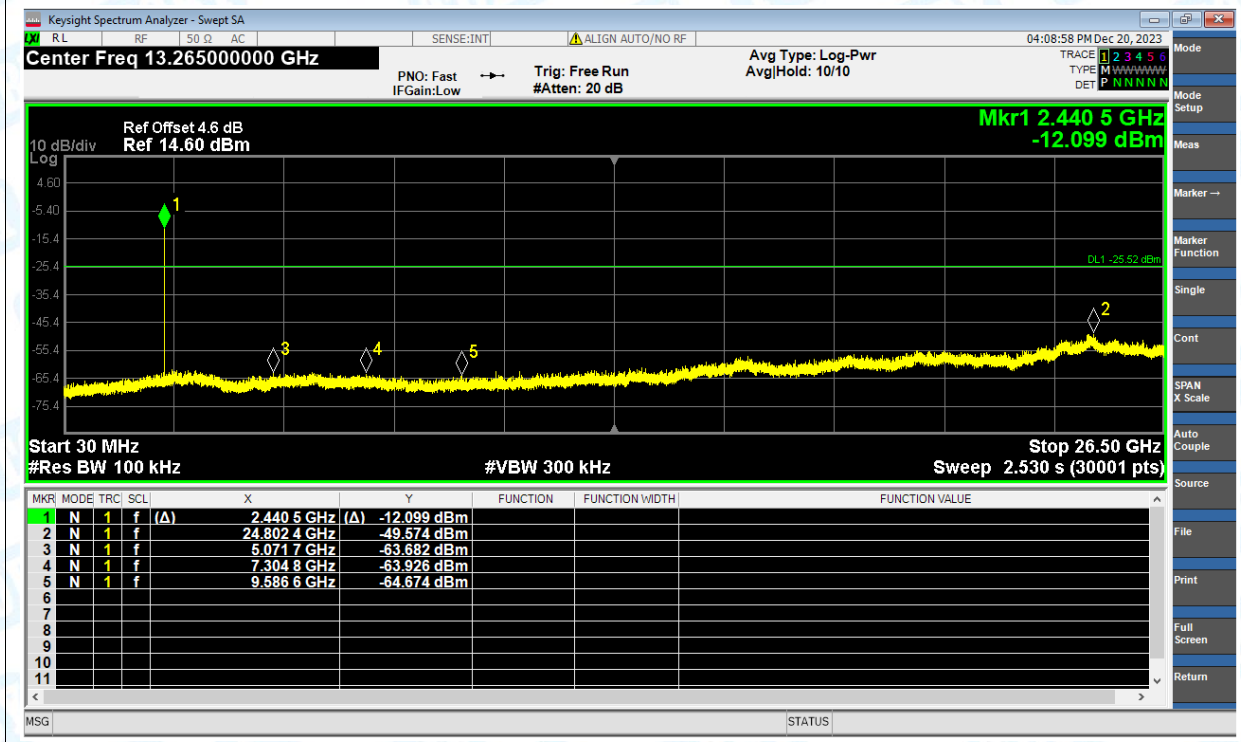
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref

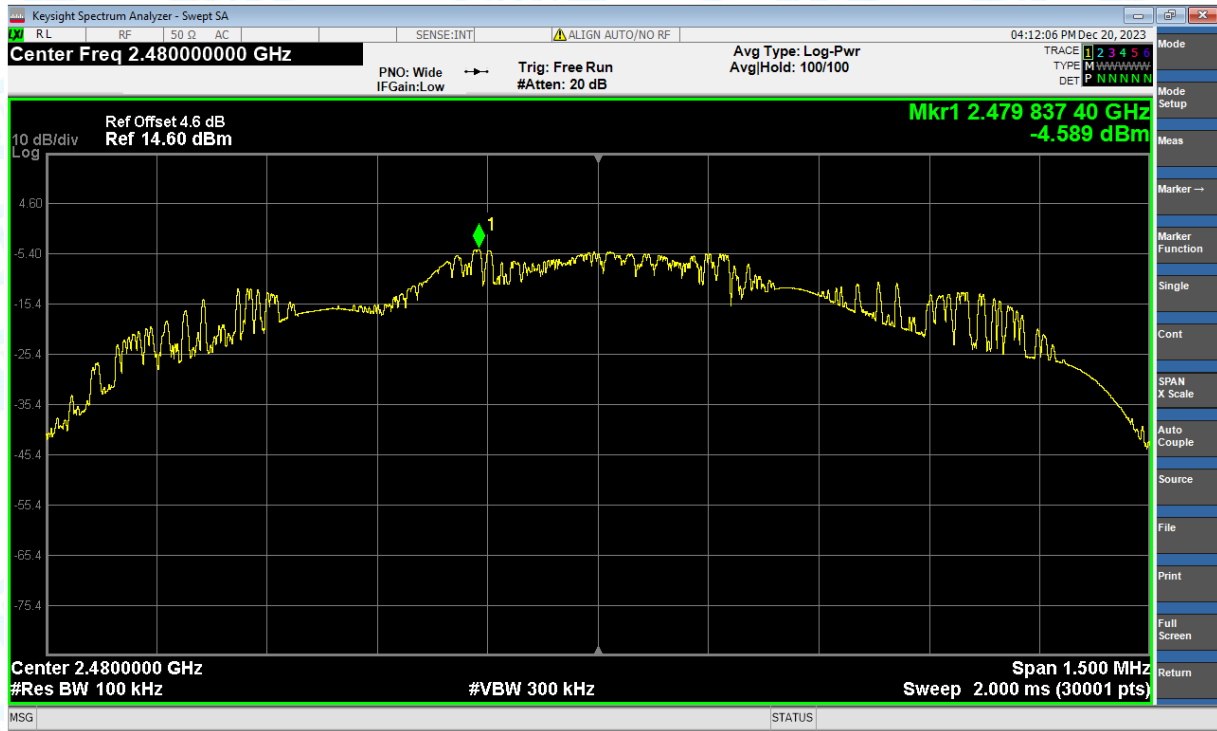


Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission

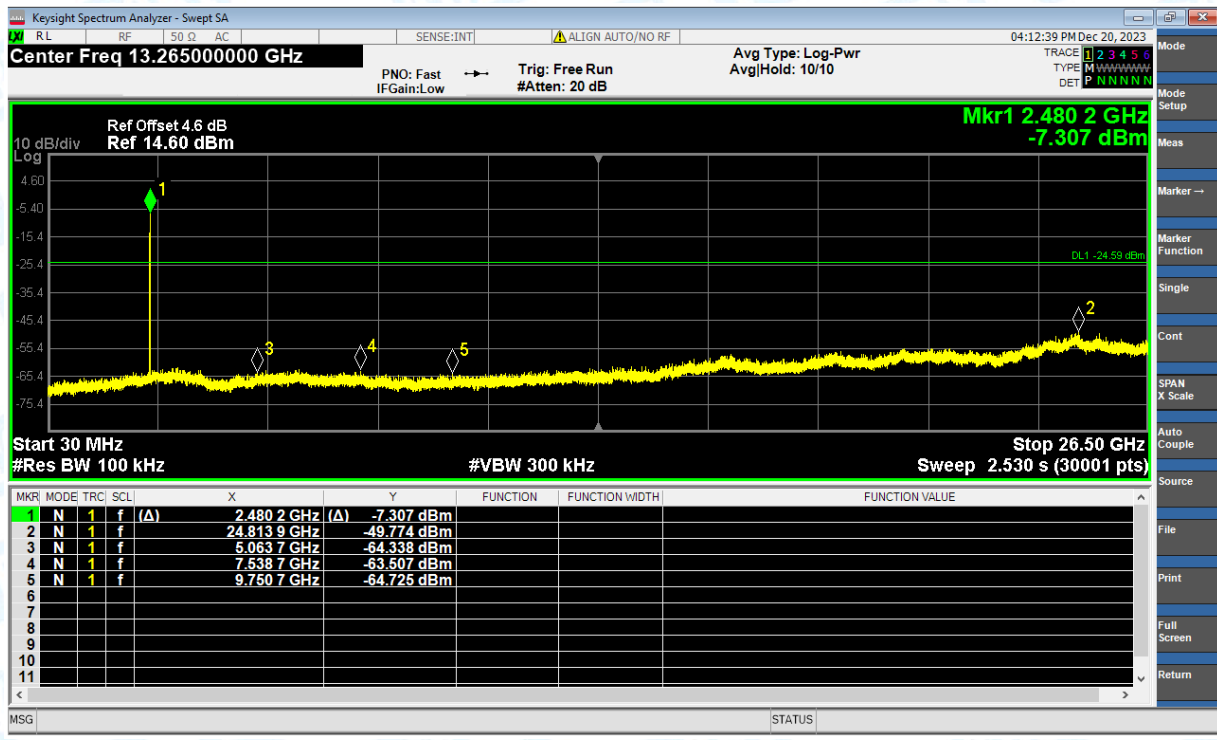




Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

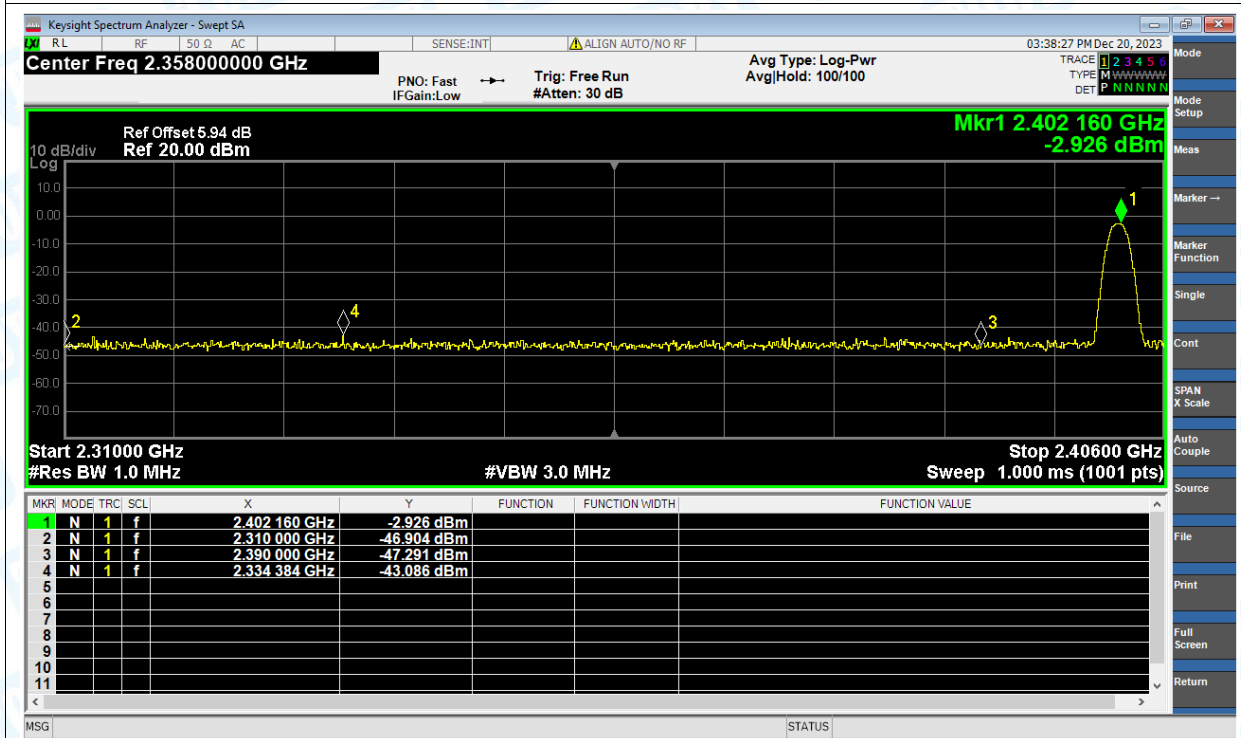


## 8. Restrict Band

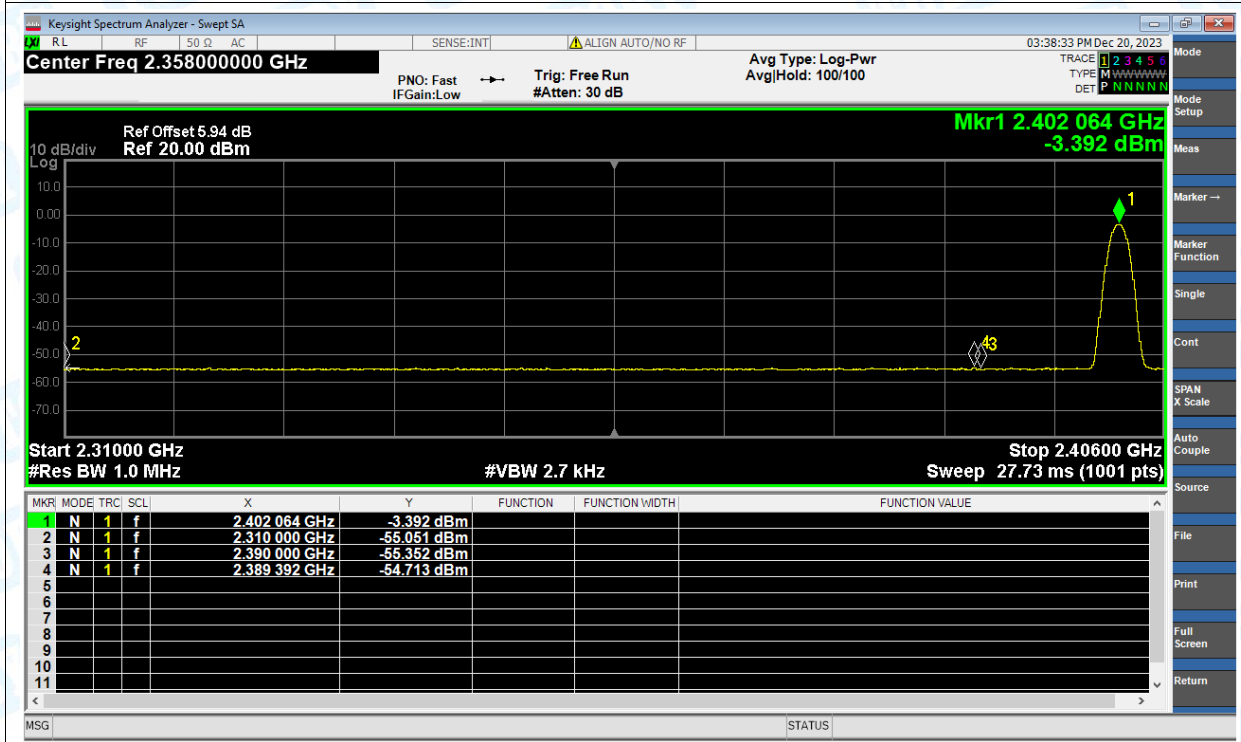
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-46.9	2	50.36	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-55.05	2	42.21	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2334.384	-43.09	2	54.17	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2389.392	-54.71	2	42.55	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-46.36	2	50.9	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.46	2	41.8	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.53	2	50.73	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.92	2	42.34	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2494.264	-43.38	2	53.88	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2490.016	-54.5	2	42.76	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-45.68	2	51.58	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-55.18	2	42.08	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-46.52	2	50.74	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.5	2	41.76	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2330.448	-43.75	2	53.51	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2338.224	-54.83	2	42.43	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-46.53	2	50.73	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-55.26	2	42	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-46.51	2	50.75	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-54.83	2	42.43	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2486.848	-42.61	2	54.65	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2486.848	-54.42	2	42.84	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-46.56	2	50.7	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-55.35	2	41.91	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-46.4	2	50.86	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-55.36	2	41.9	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2388.432	-42.85	2	54.41	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2361.84	-54.79	2	42.47	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.94	2	50.32	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-54.7	2	42.56	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-46.74	2	50.52	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-55.15	2	42.11	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2490.592	-43.23	2	54.03	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2489.08	-54.68	2	42.58	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-45.86	2	51.4	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-55.18	2	42.08	Average	54	Pass

Test Graphs

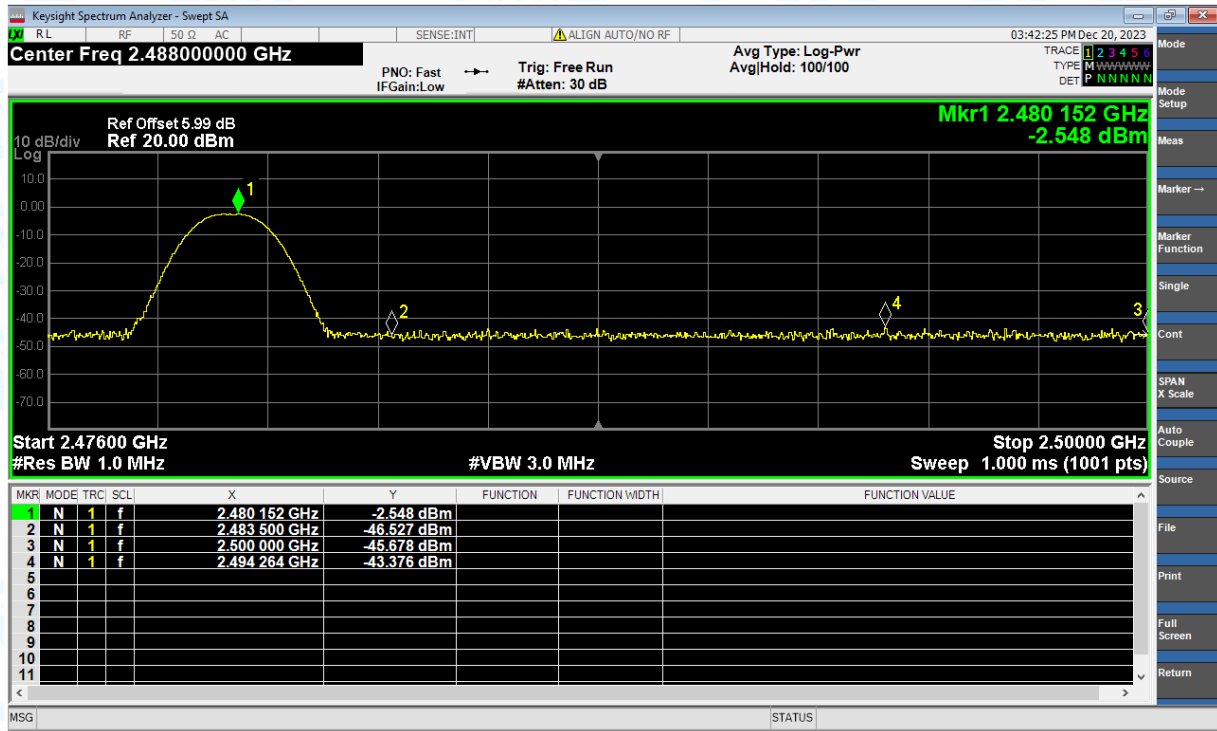
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



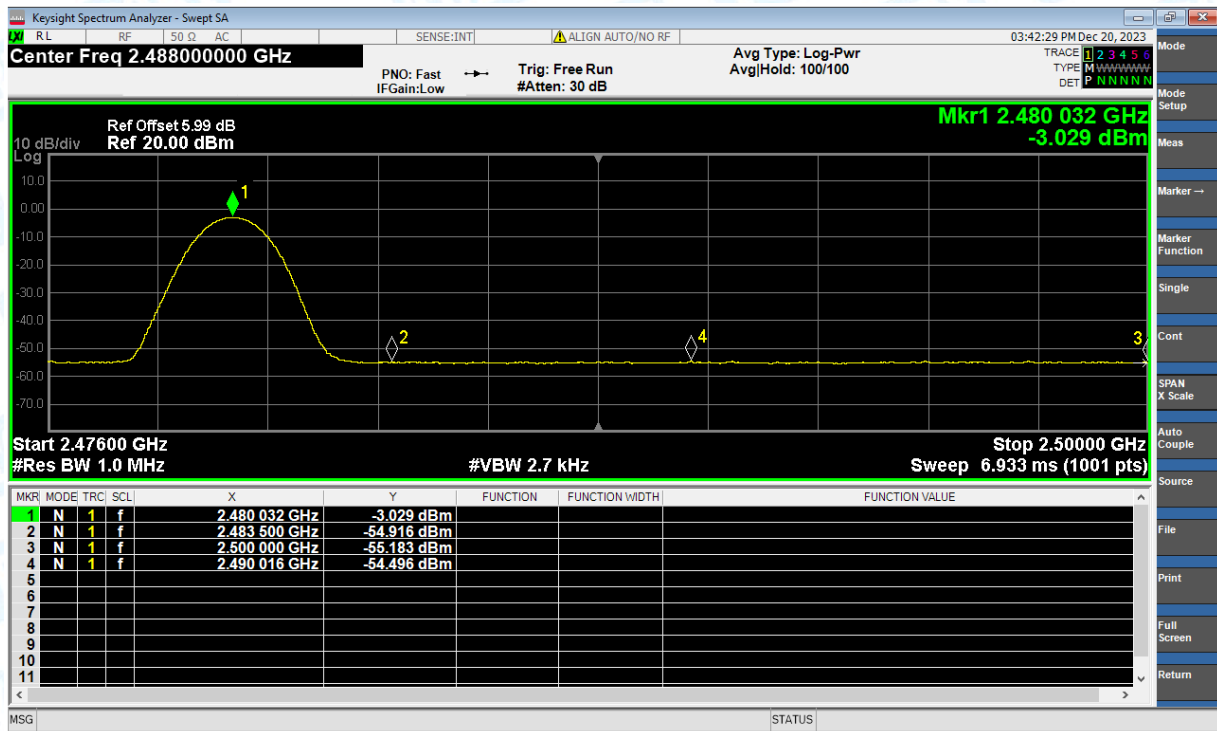
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



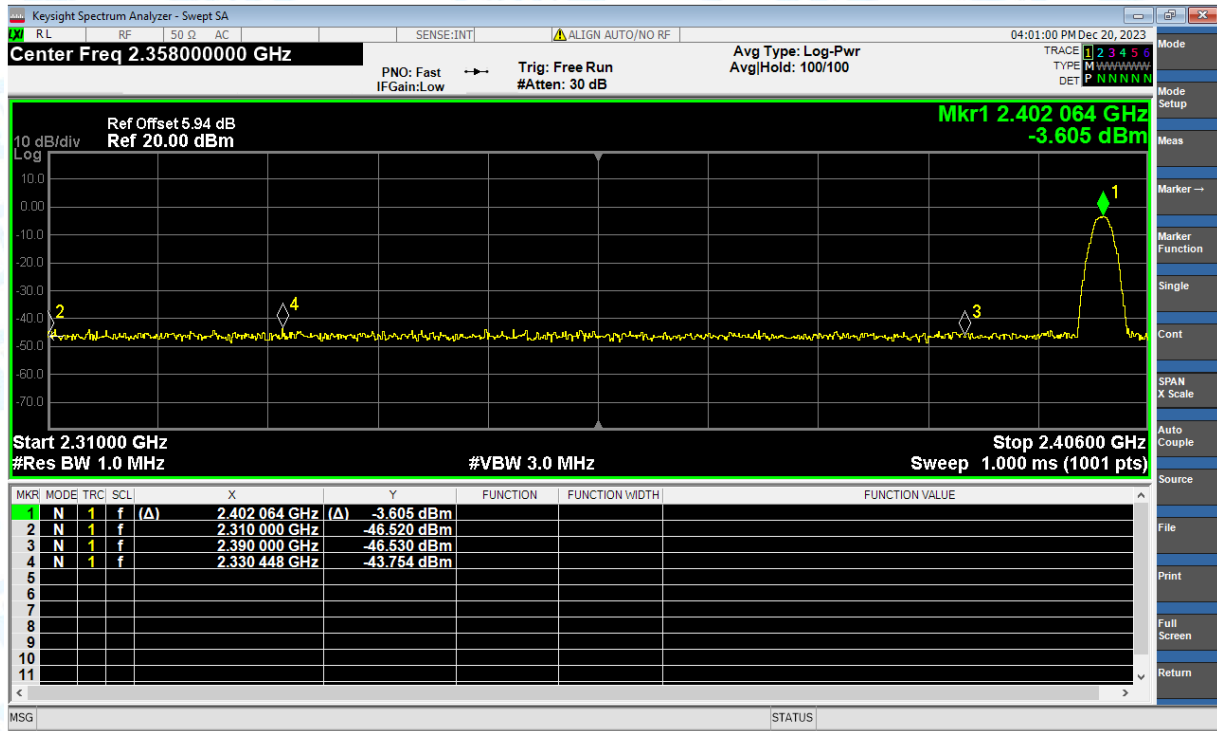
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



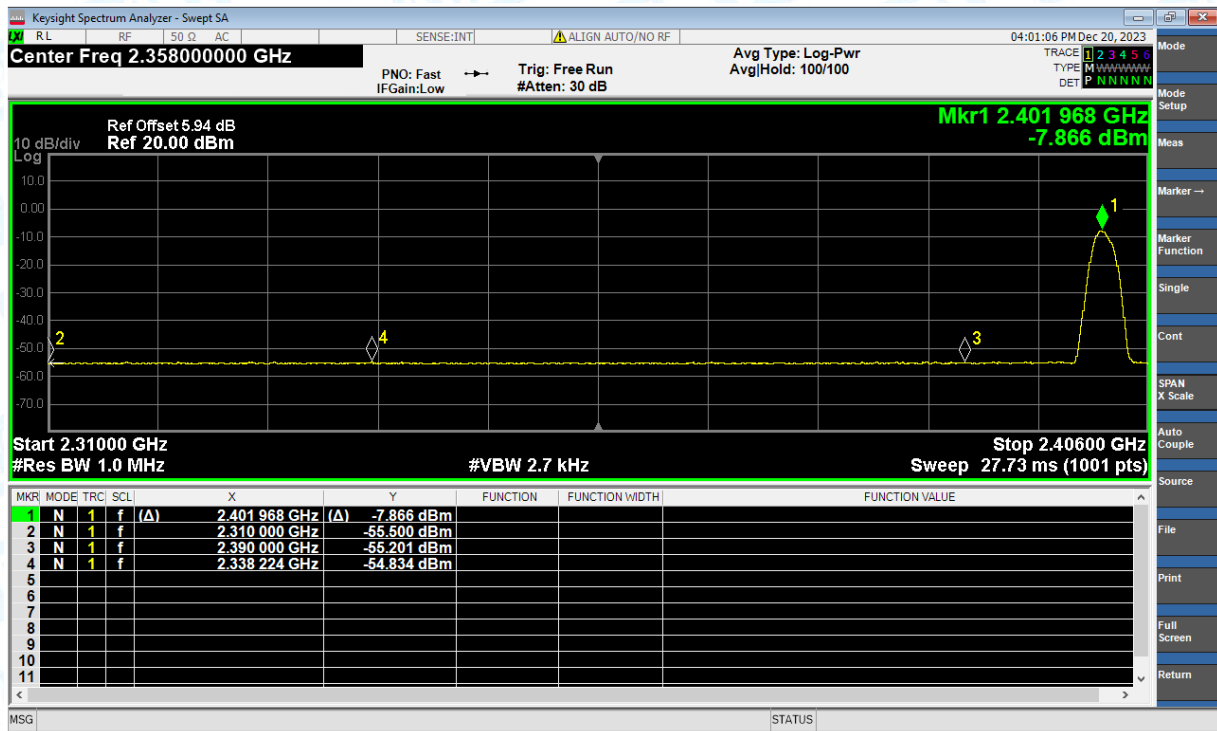
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



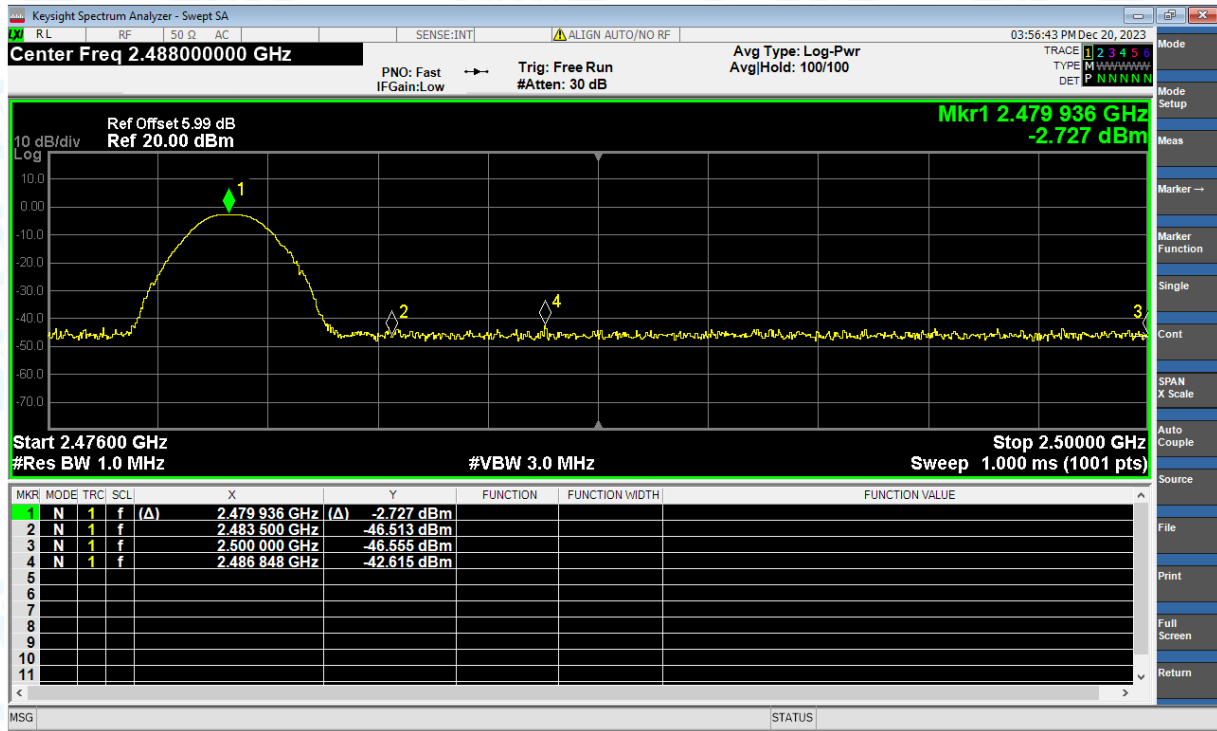
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



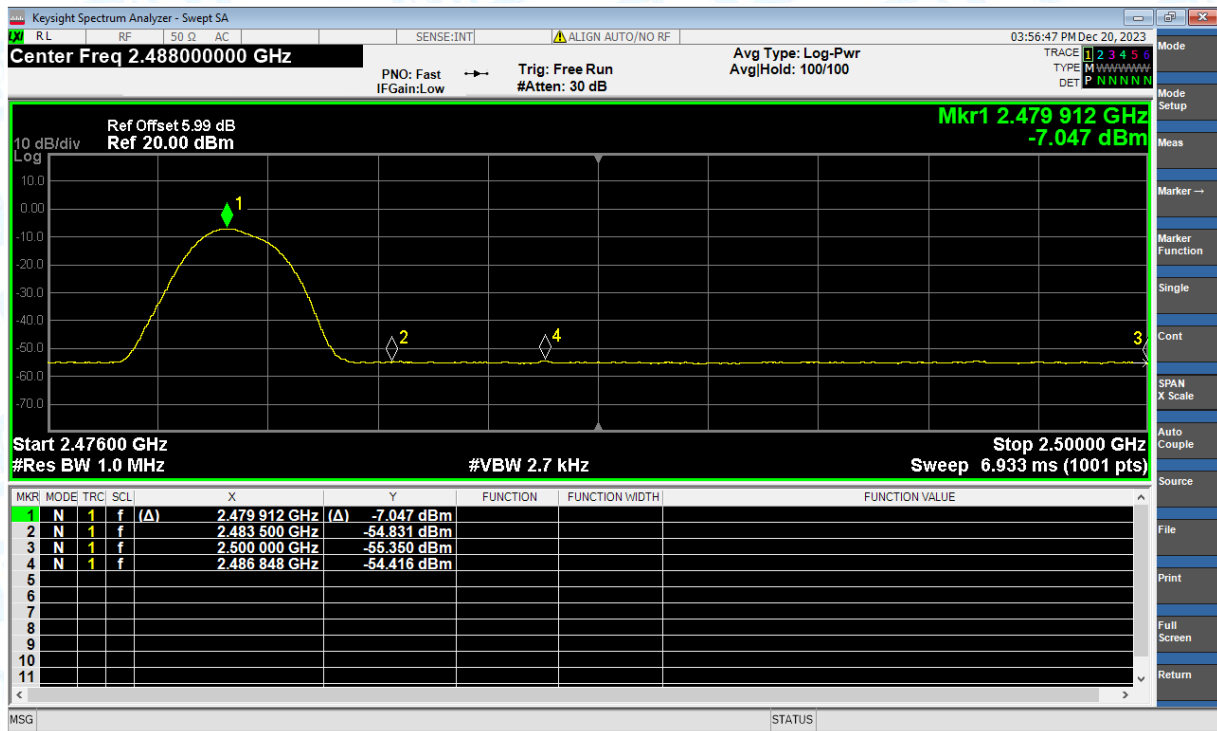
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



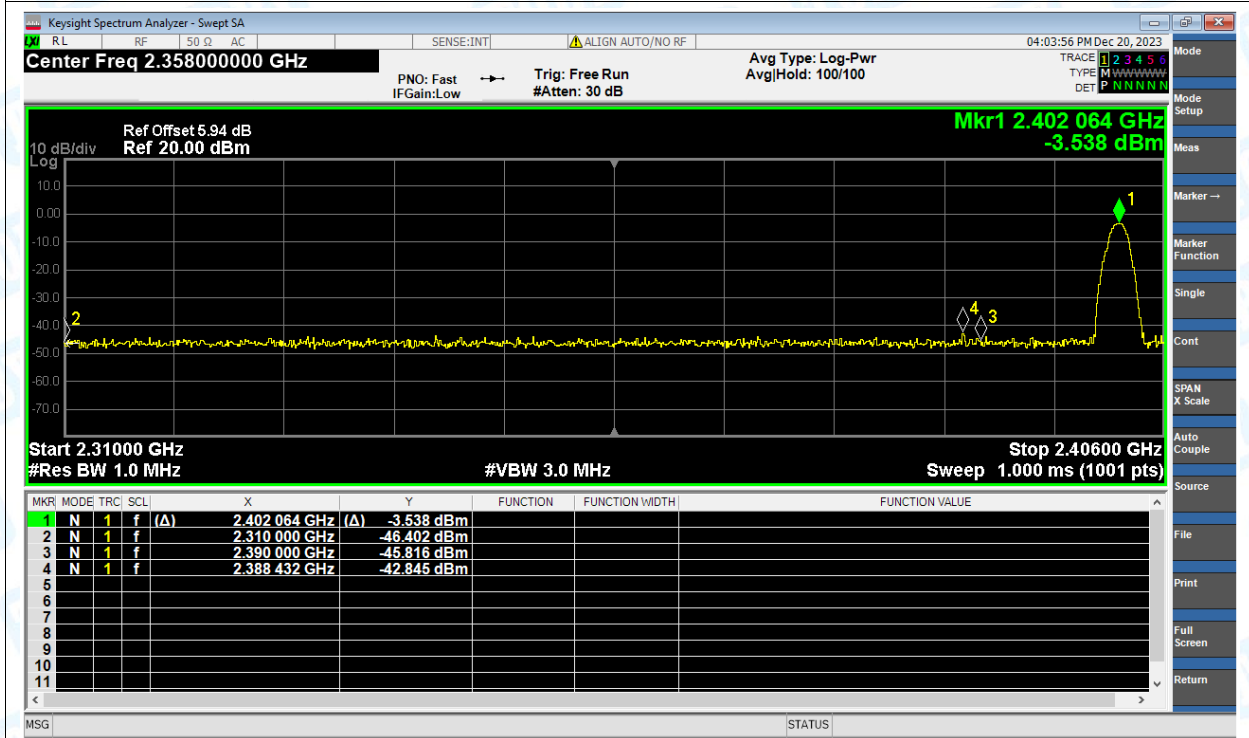
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



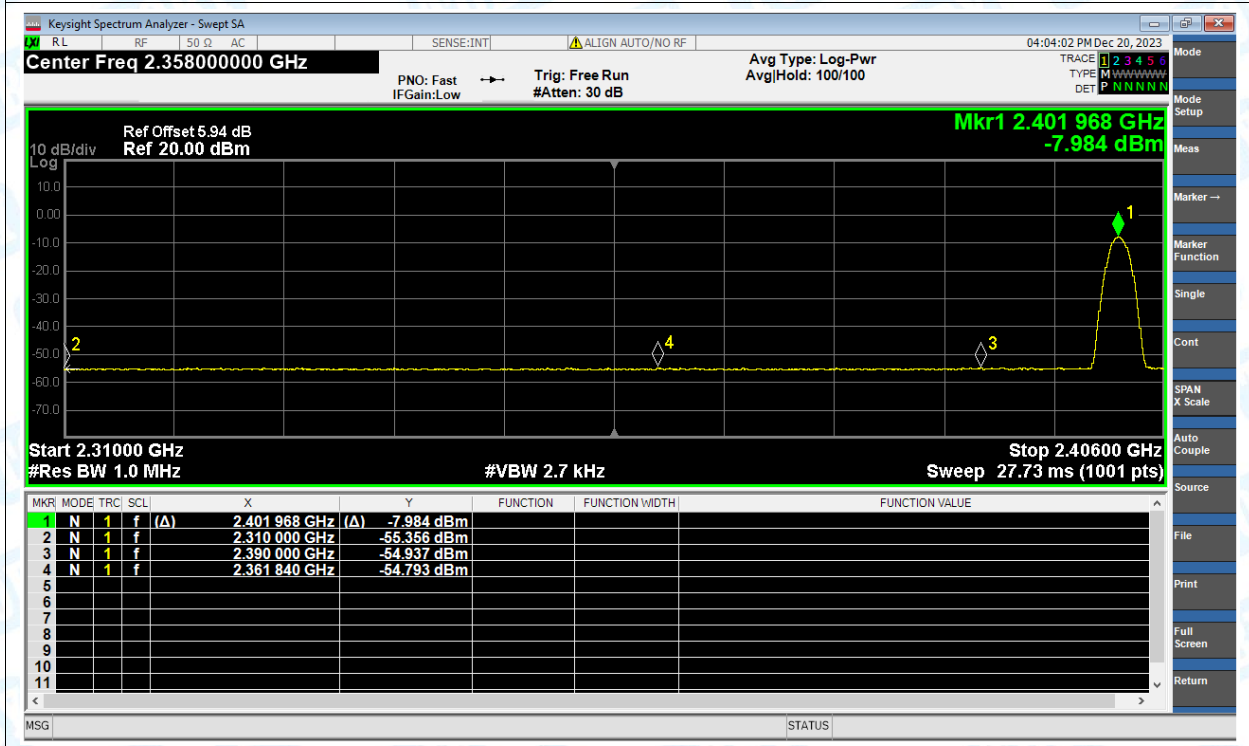
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



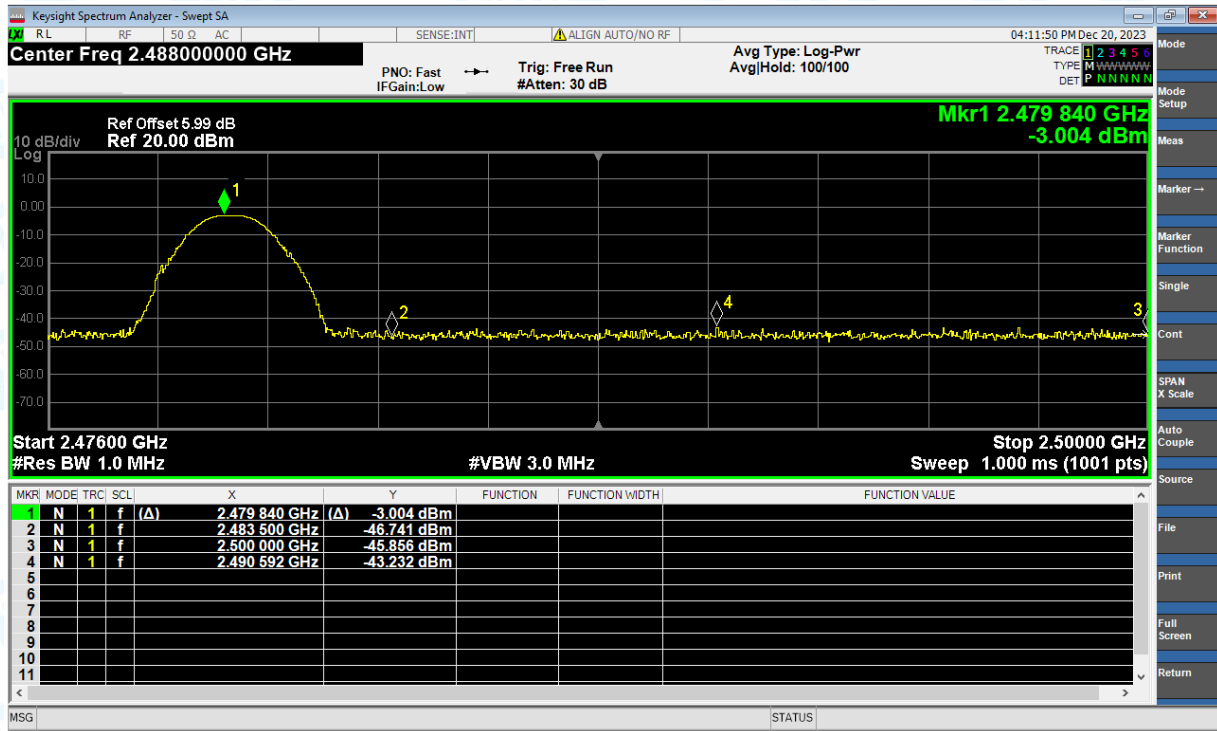
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



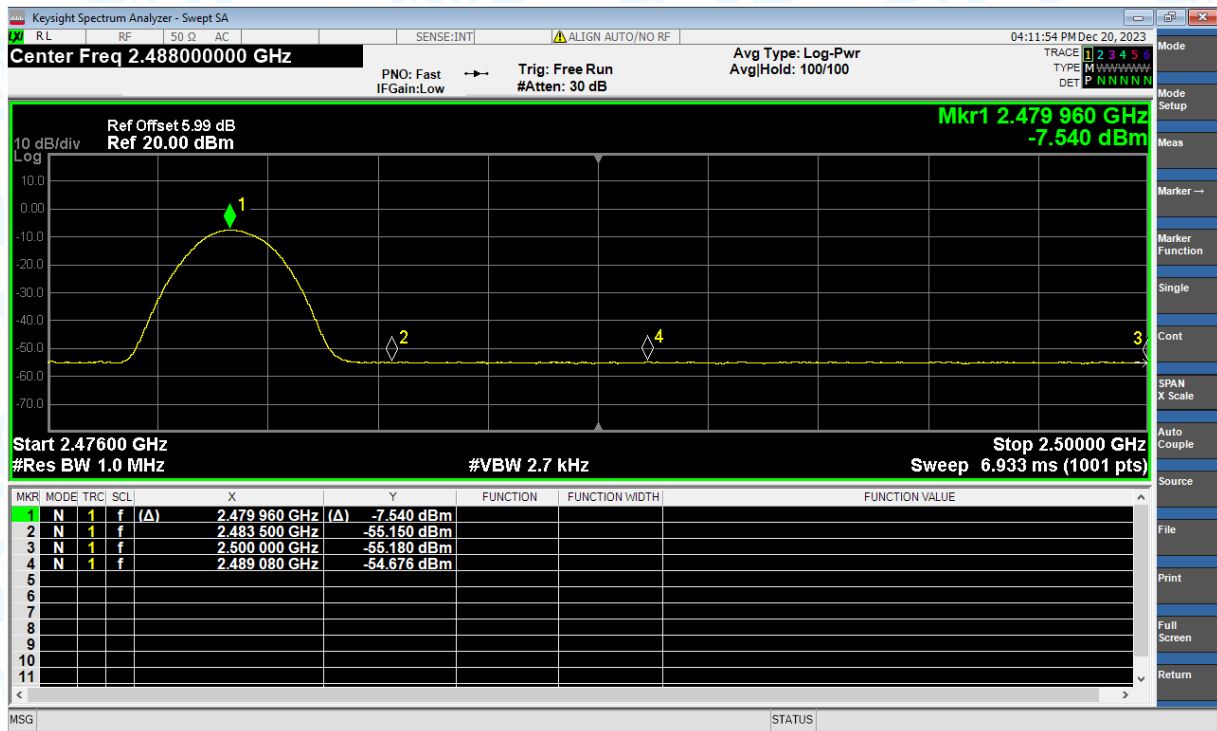
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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





## 9. Carrier Frequencies Separation

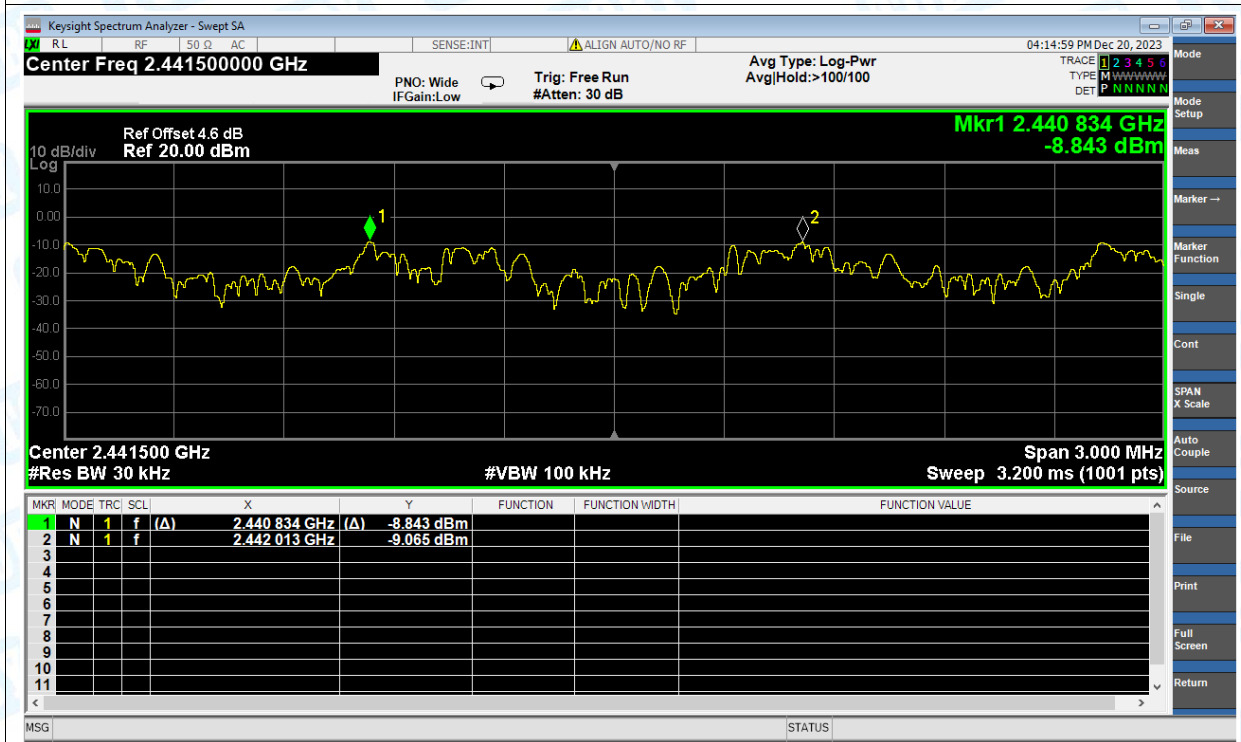
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.014	2442.118	1.104	0.62	Pass
NVNT	2-DH1	Ant1	2440.834	2442.013	1.179	0.86	Pass
NVNT	3-DH1	Ant1	2440.834	2442.013	1.179	0.84	Pass

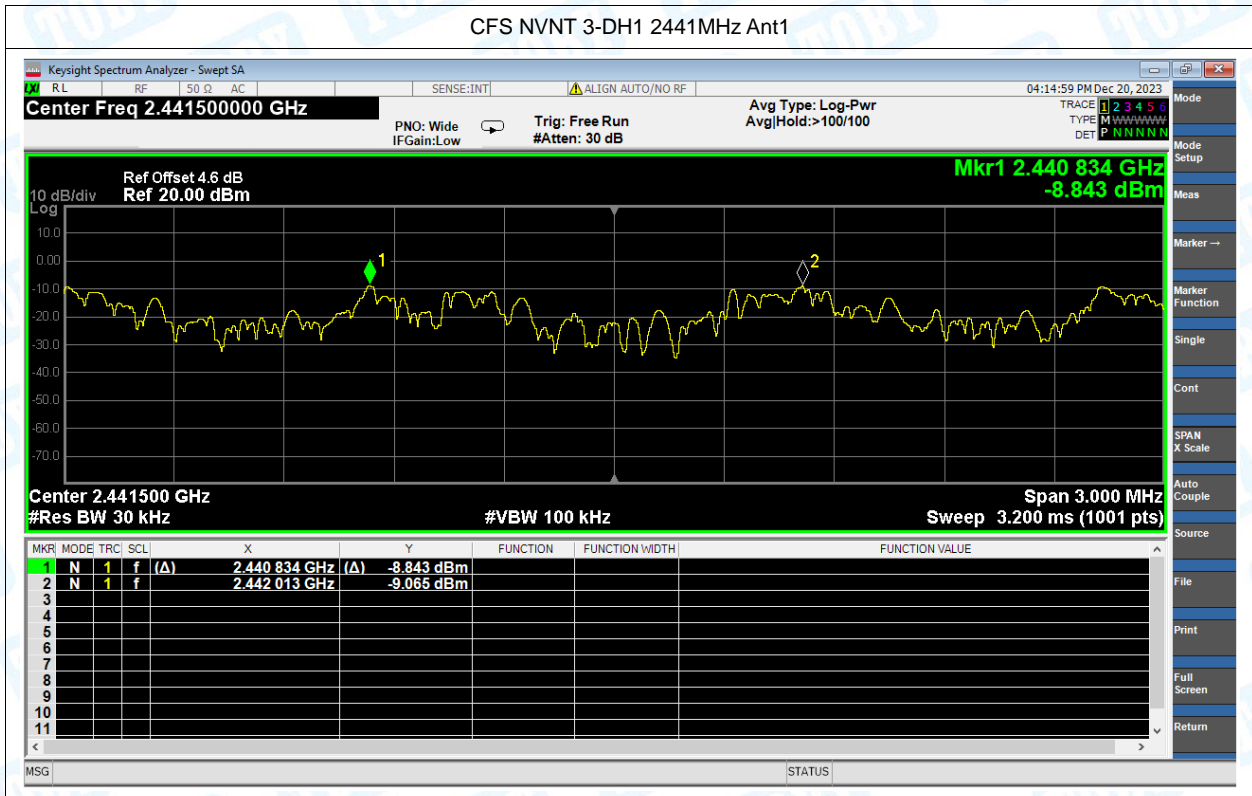
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



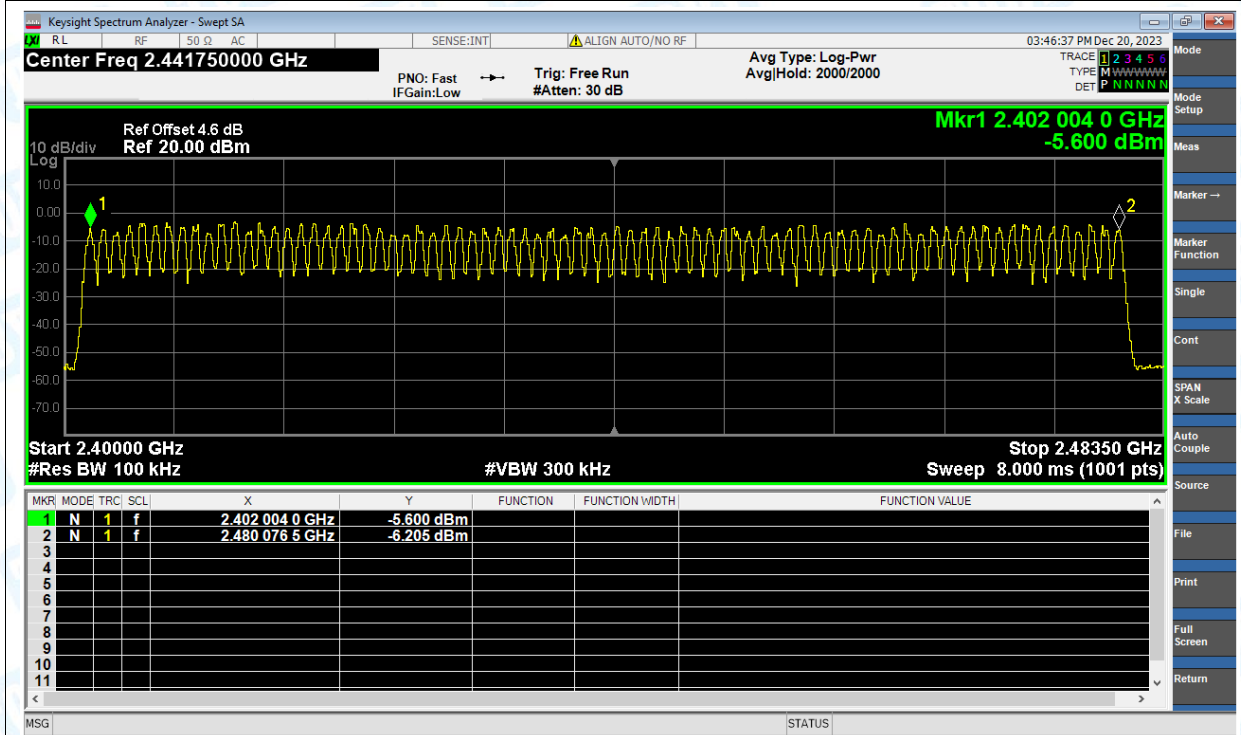


## 10. Number of Hopping Channel

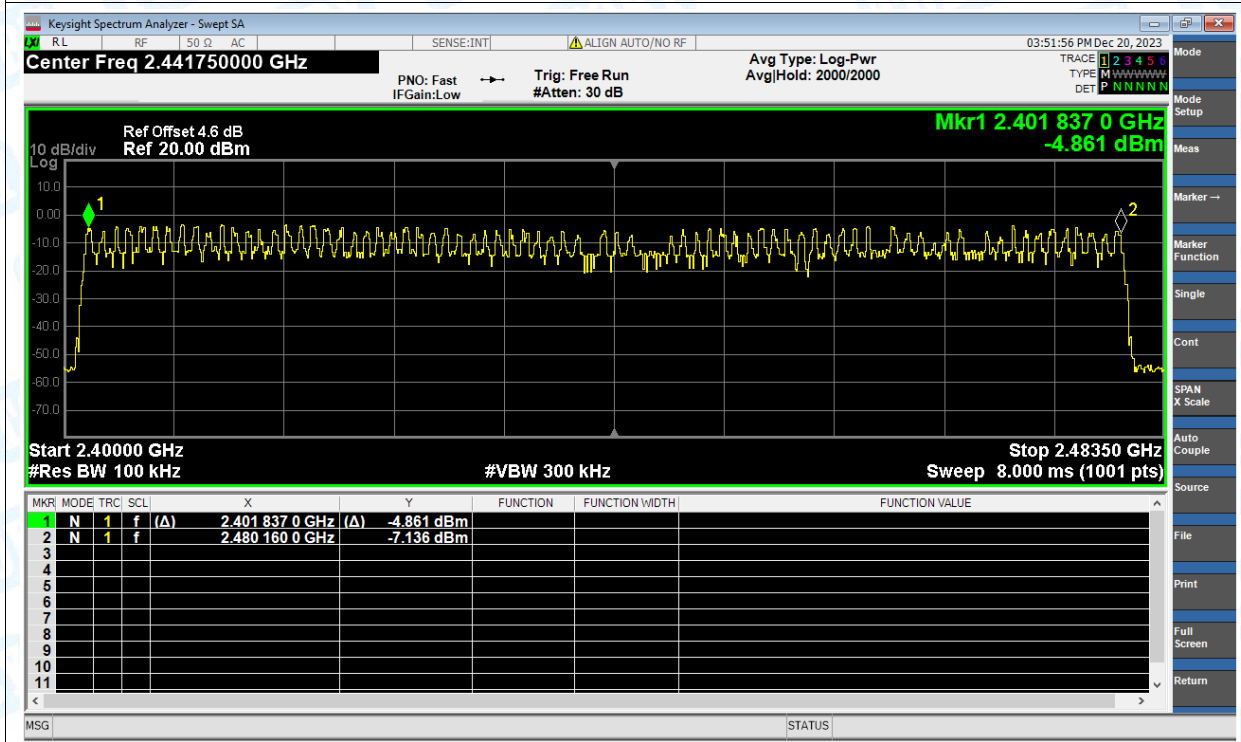
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

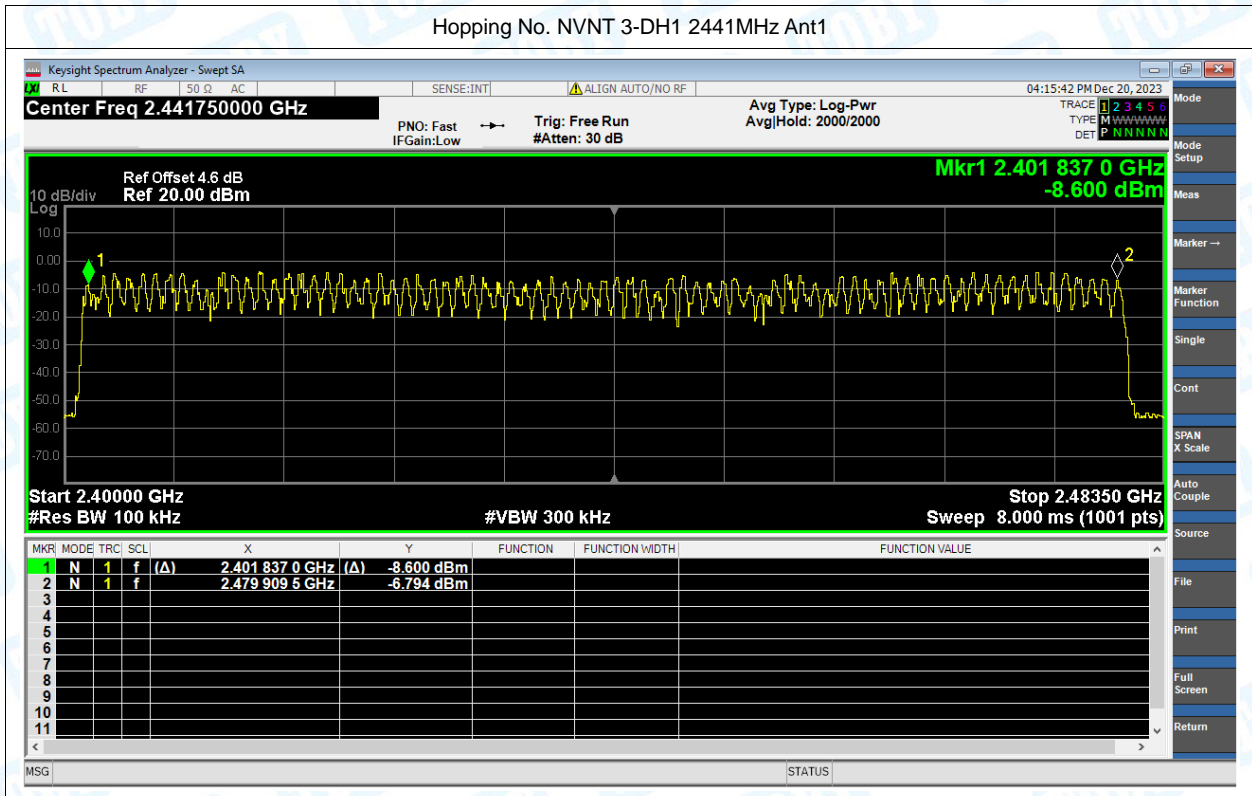
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



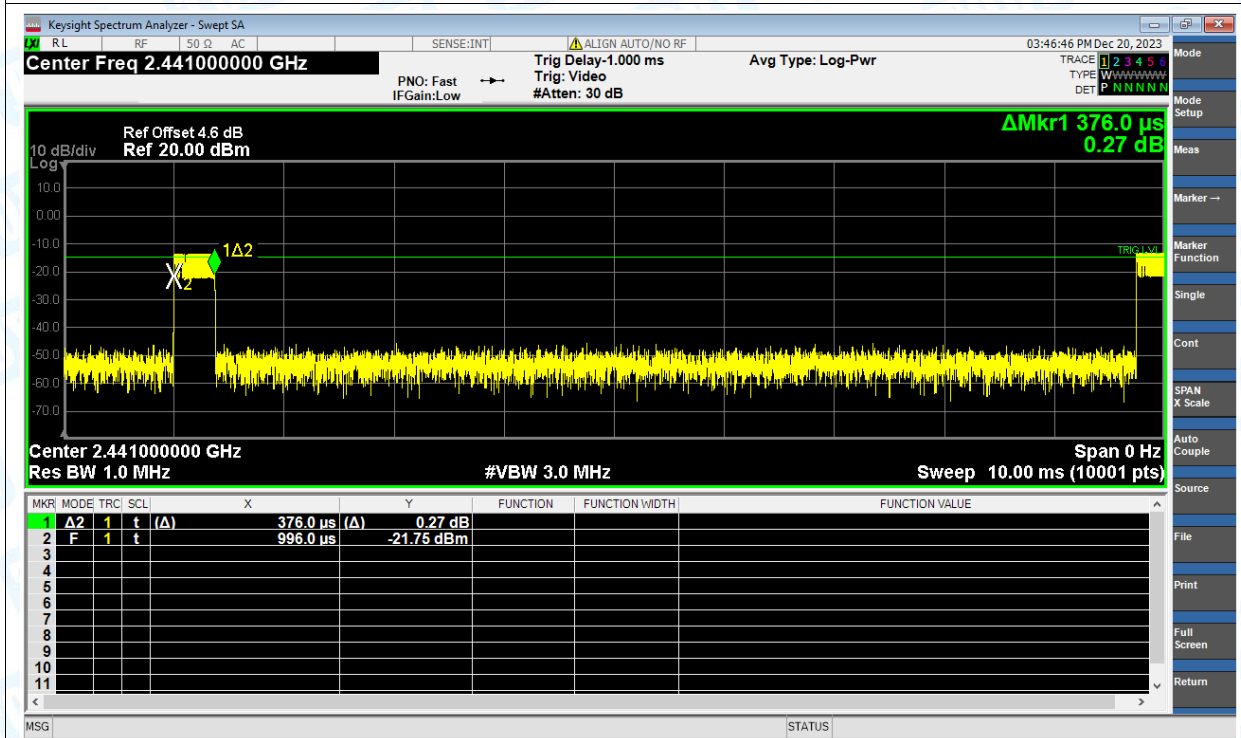


## 11. Dwell Time

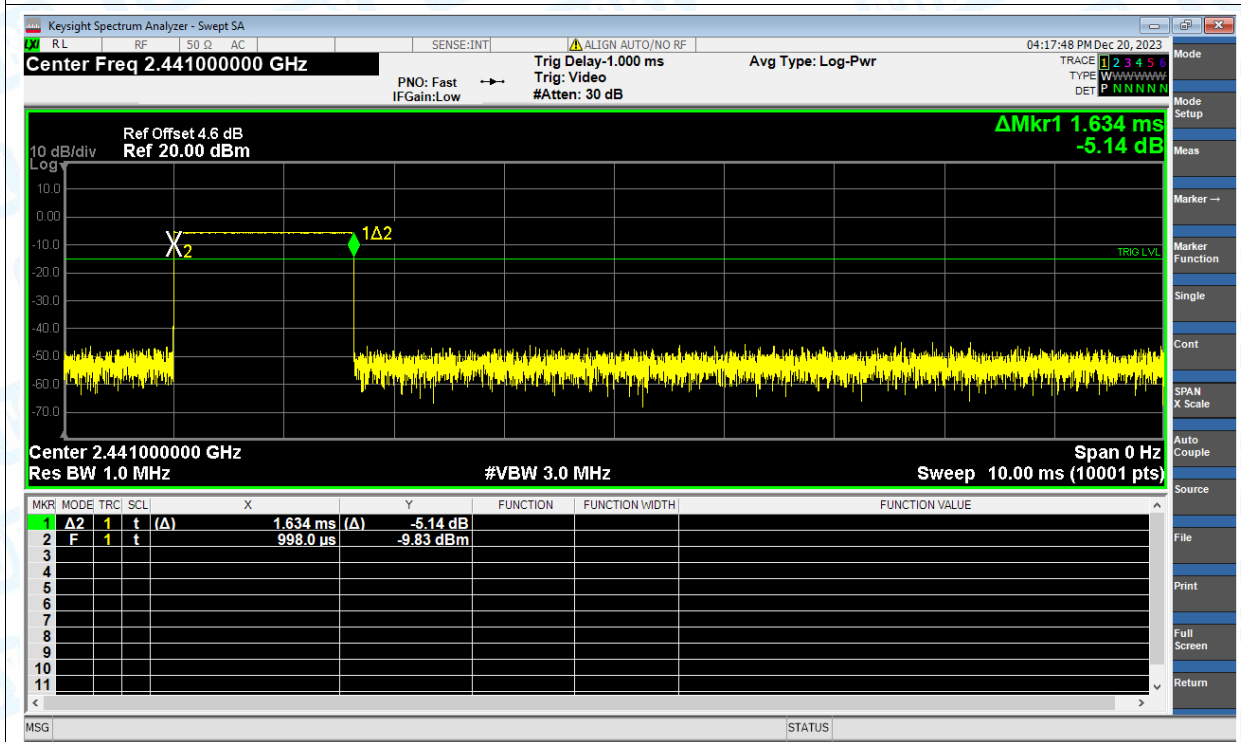
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.376	120.32	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.634	261.44	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.882	307.413	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.384	122.88	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.88	307.2	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.636	261.76	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.885	307.733	31600	400	Pass

Test Graphs

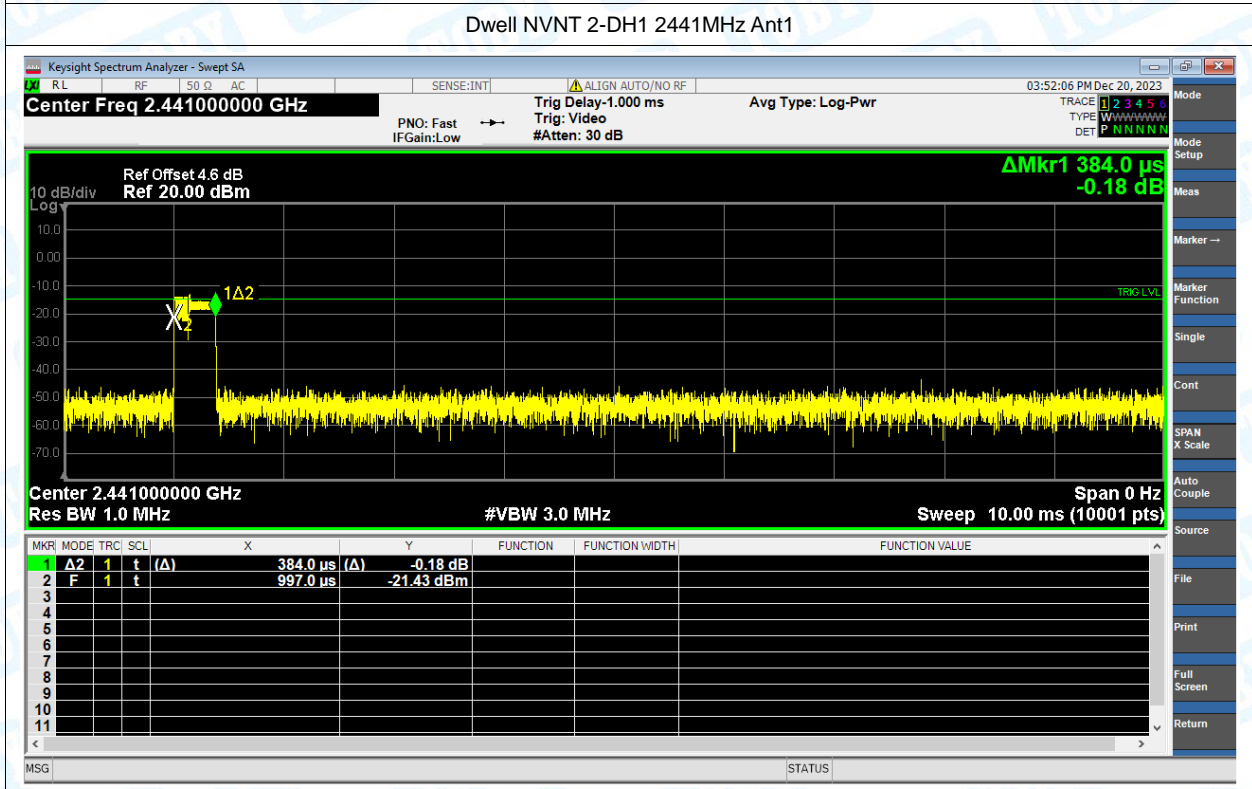
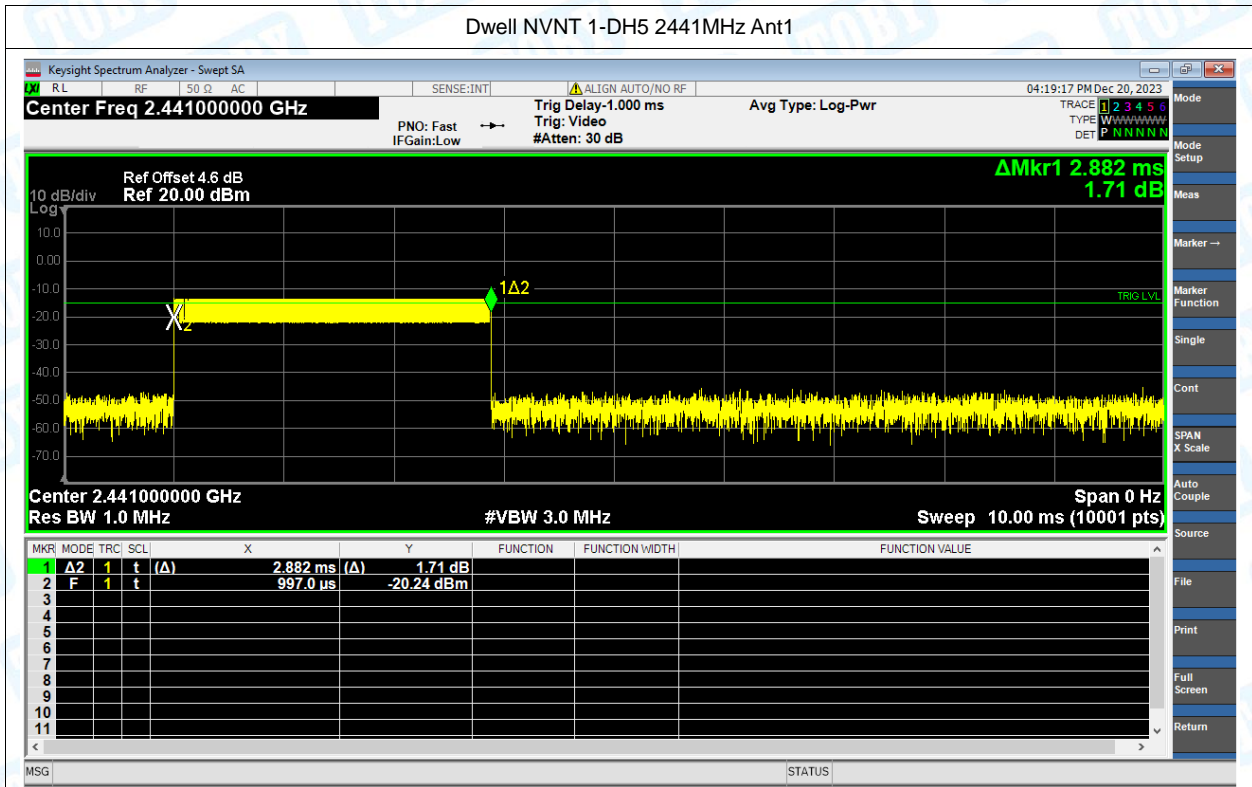
Dwell NVNT 1-DH1 2441MHz Ant1



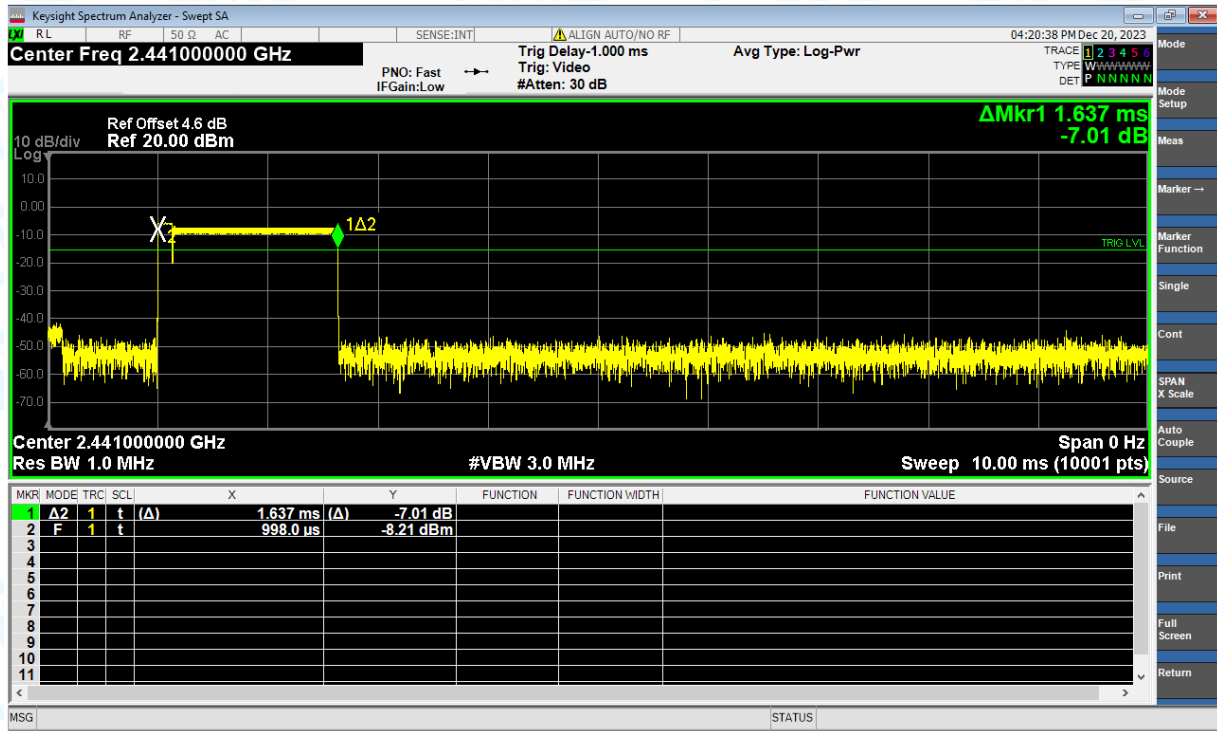
Dwell NVNT 1-DH3 2441MHz Ant1



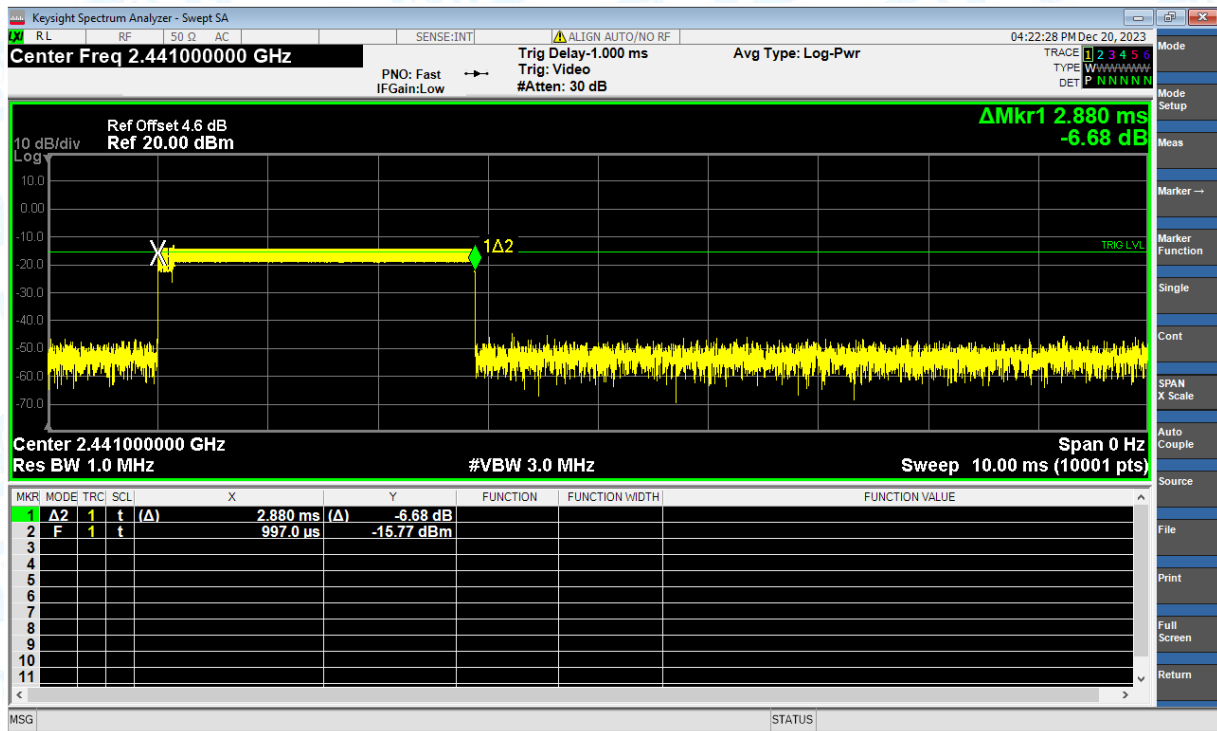




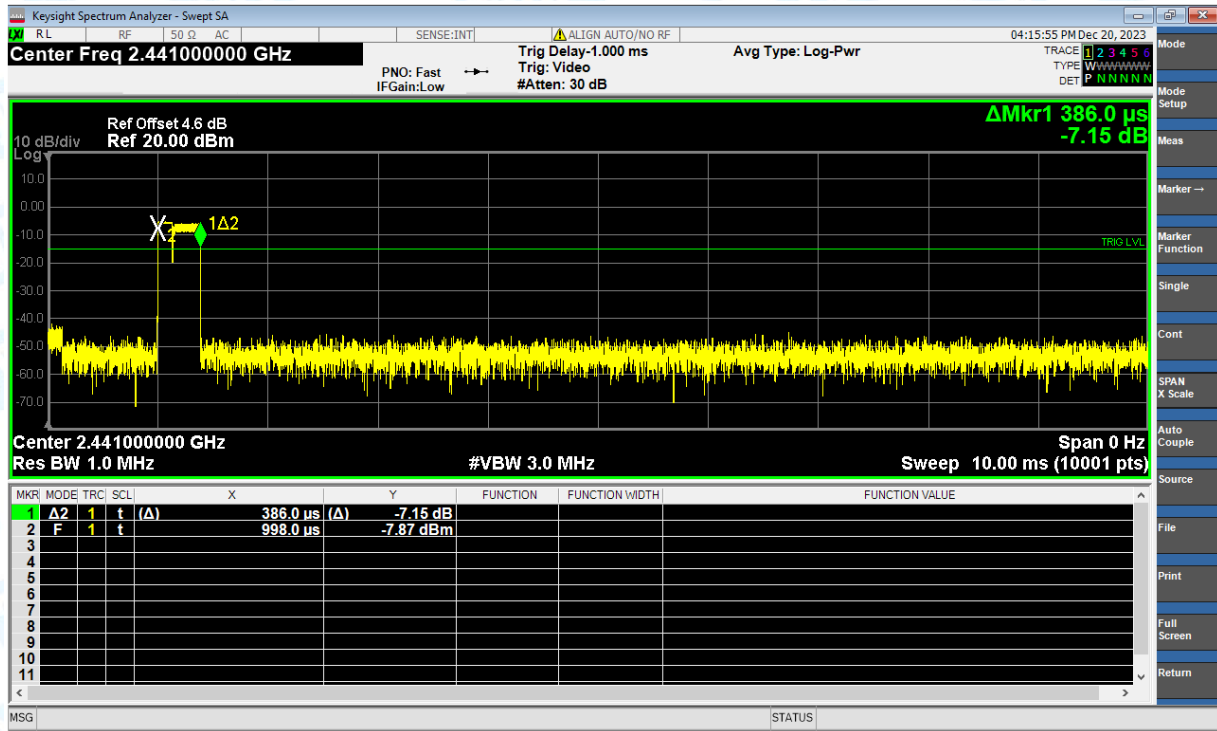
Dwell NVNT 2-DH3 2441MHz Ant1



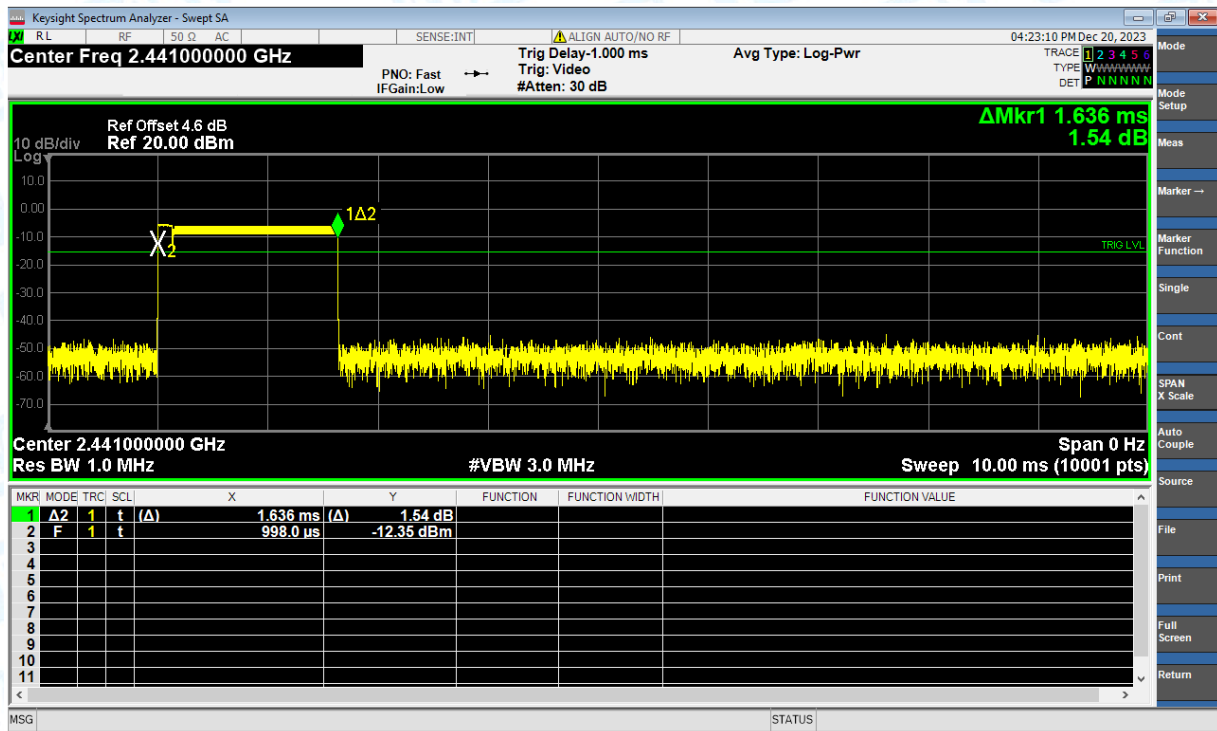
Dwell NVNT 2-DH5 2441MHz Ant1

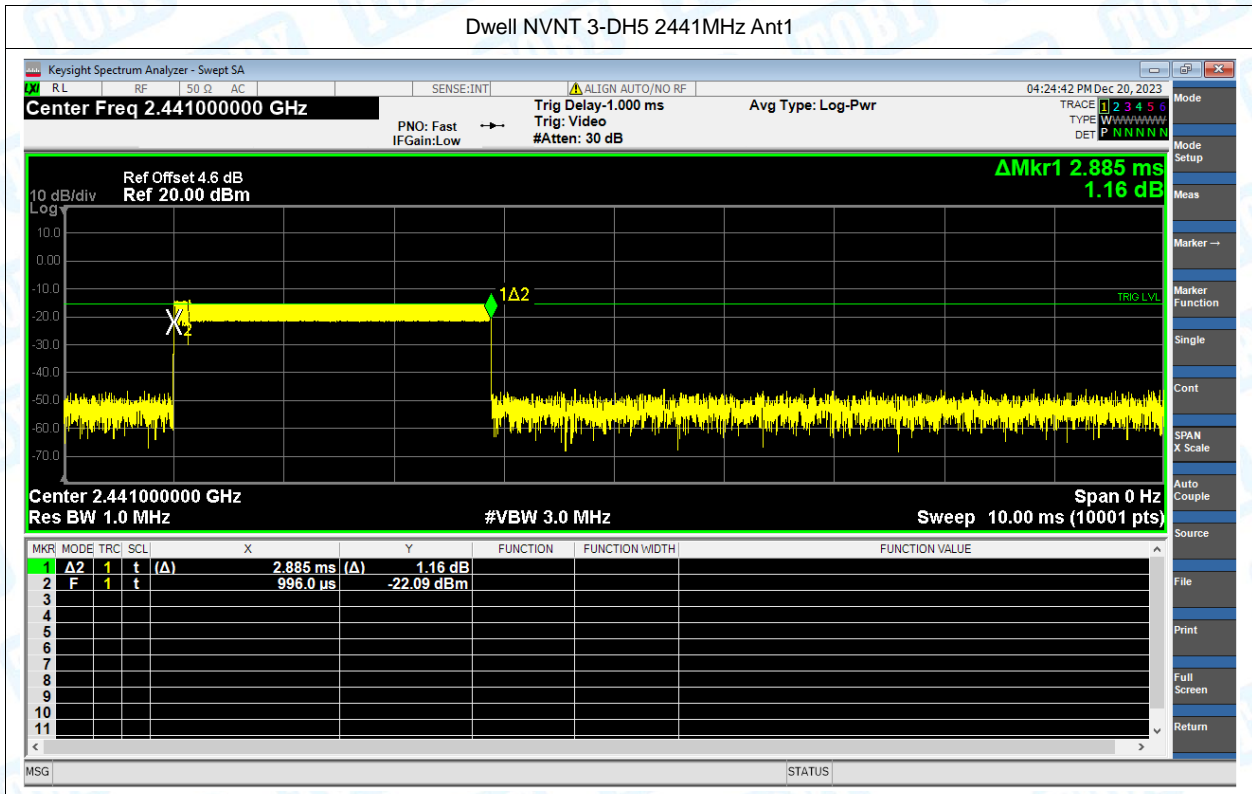


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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