

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

General Description of EUT	
<b>Product Name:</b>	2.4GHz Digital Wireless Audio Baby Unit
<b>Test Model:</b>	HB168
<b>Sample ID:</b>	202311-0255-2-2#
Environmental Conditions	
<b>Temperature:</b>	25°C
<b>Relative Humidity:</b>	55%
<b>Test Voltage:</b>	DC 5V
<b>Test Engineer:</b>	Li ying jing
Note: For a more detailed features description, please refer to the report TBR-C-202311-0255-3 The report only show the worst case data.	

## Contents

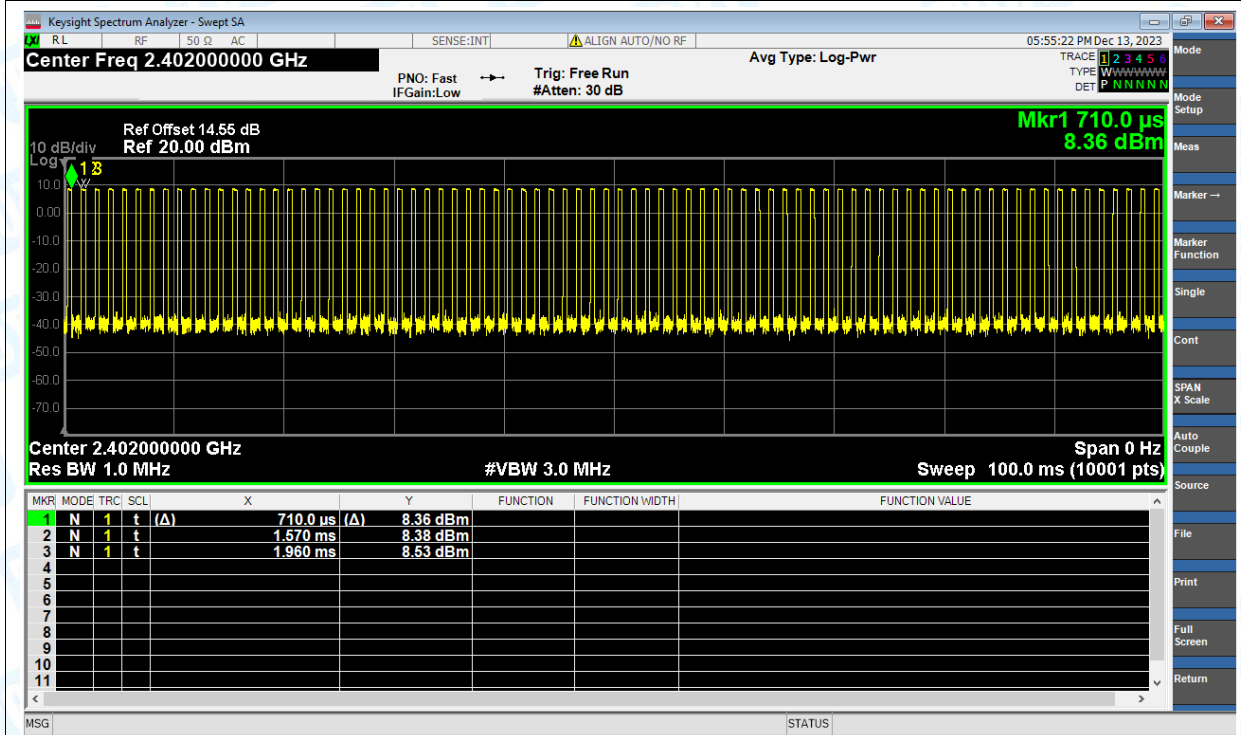
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# 1. Duty Cycle

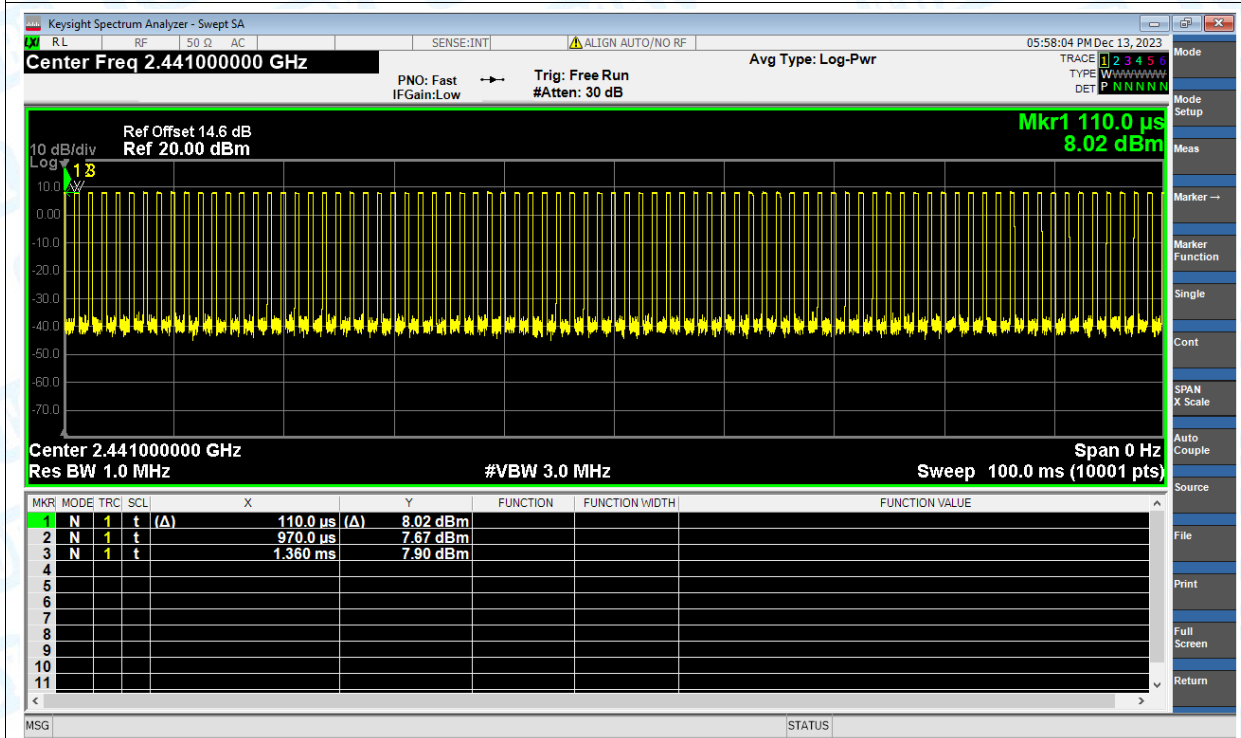
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56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

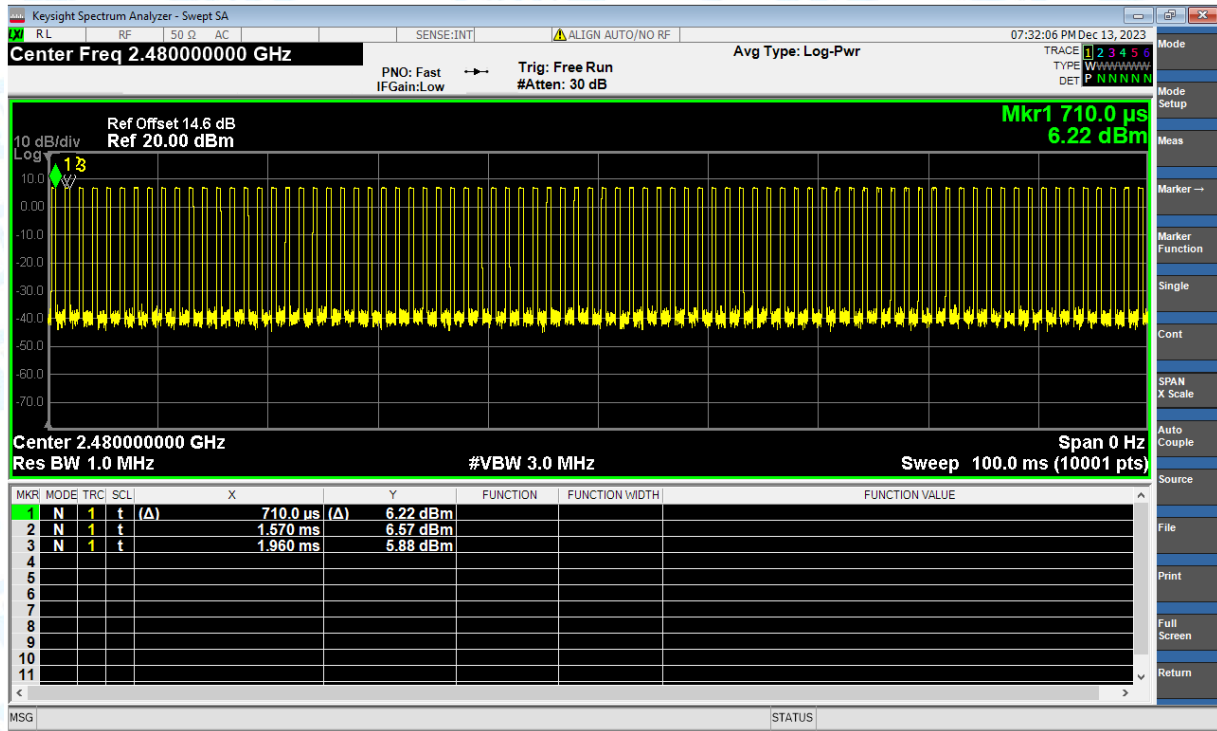
Duty Cycle NVNT 1-DH1 2402MHz Ant1



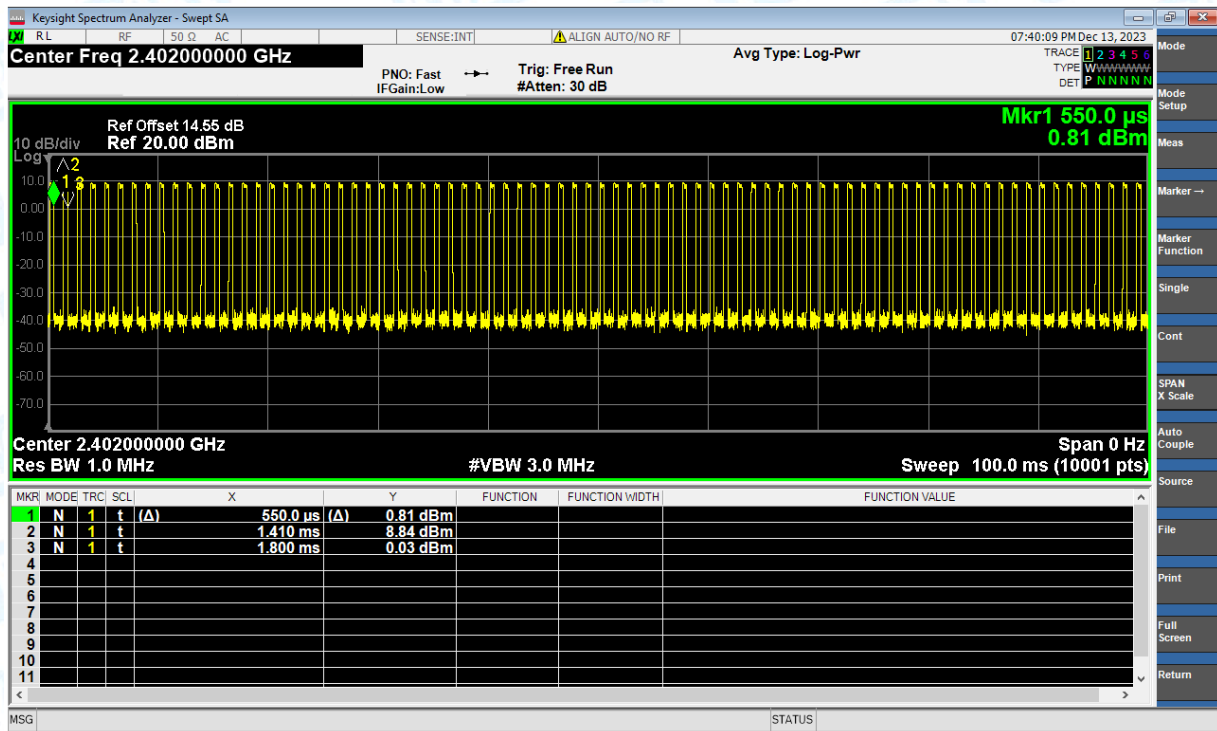
Duty Cycle NVNT 1-DH1 2441MHz Ant1



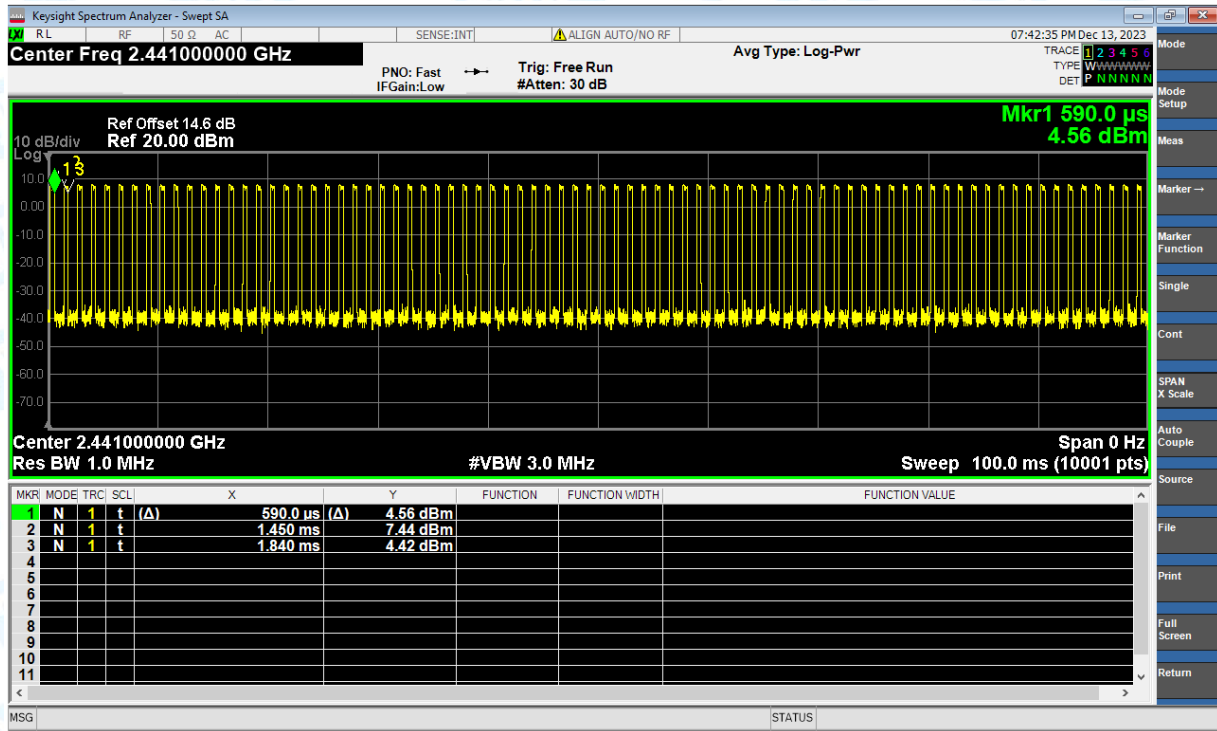
Duty Cycle NVNT 1-DH1 2480MHz Ant1



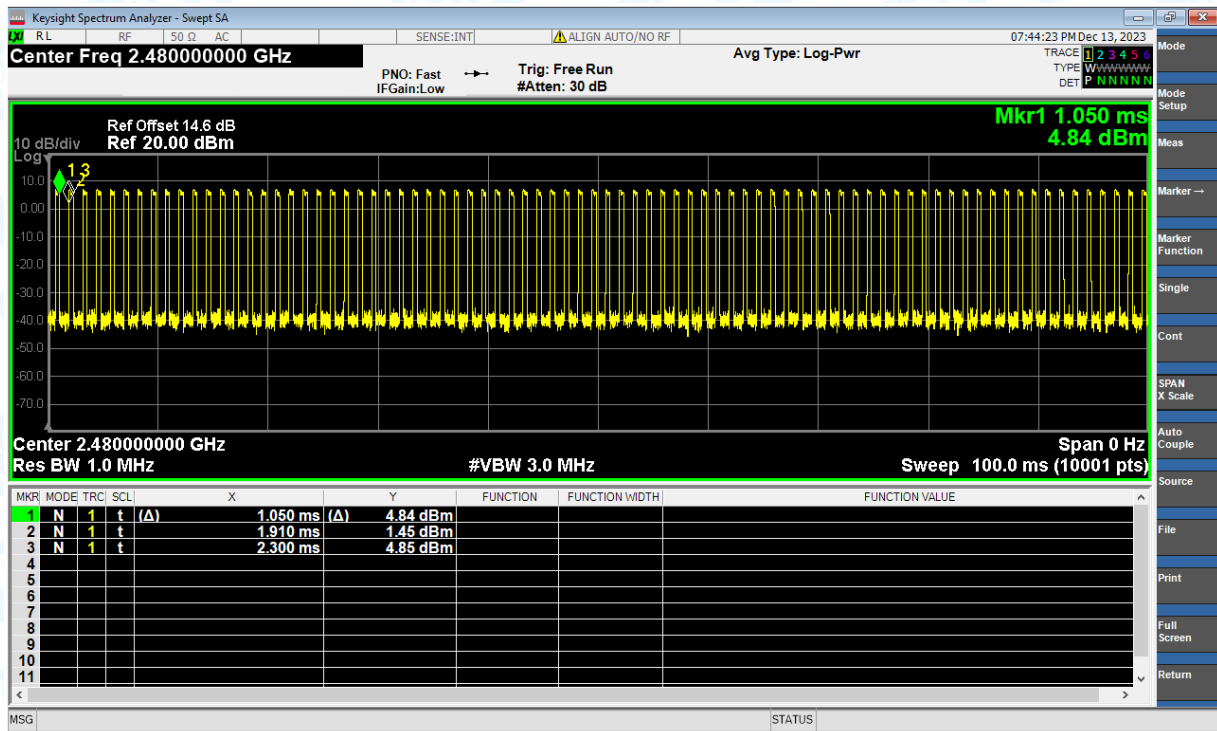
Duty Cycle NVNT 2-DH1 2402MHz Ant1



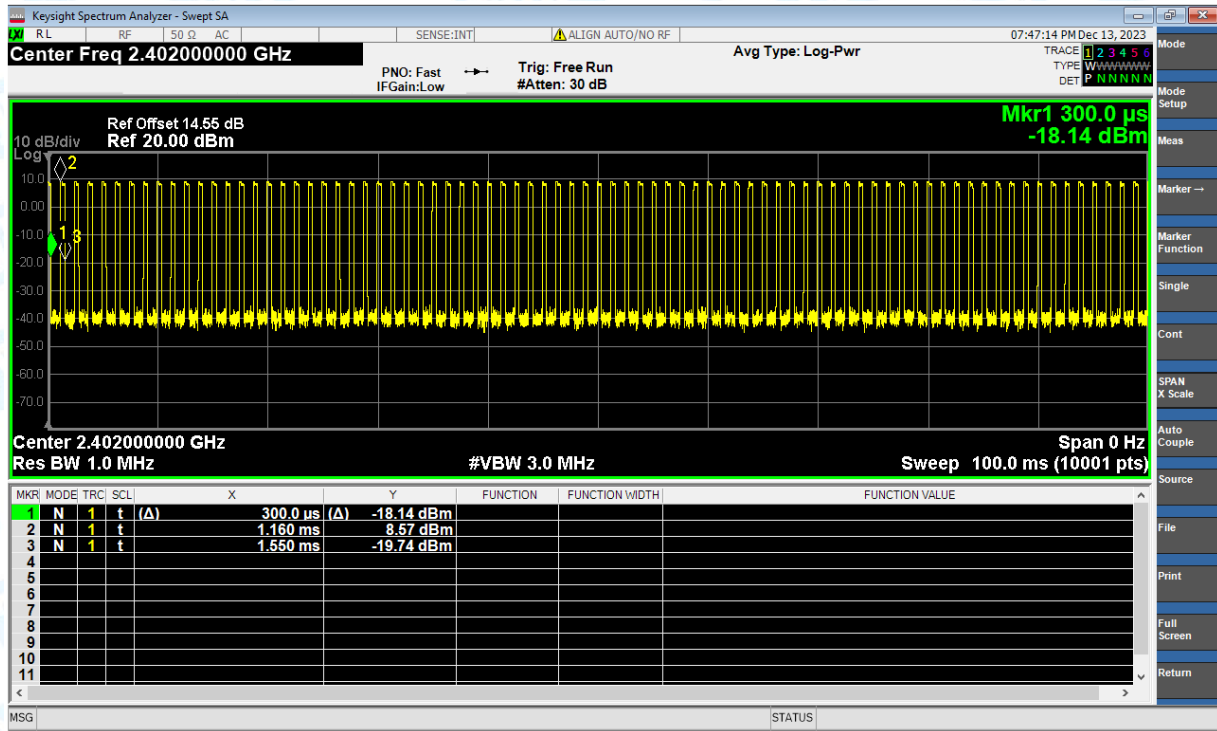
Duty Cycle NVNT 2-DH1 2441MHz Ant1



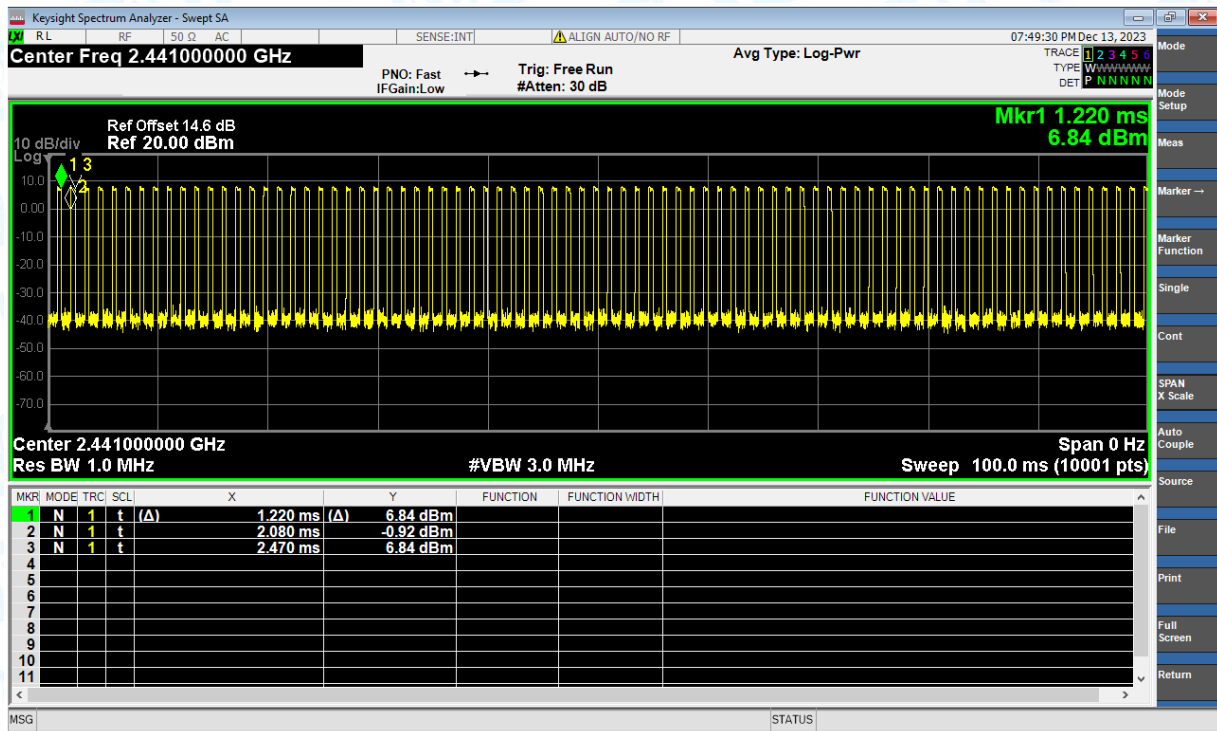
Duty Cycle NVNT 2-DH1 2480MHz Ant1

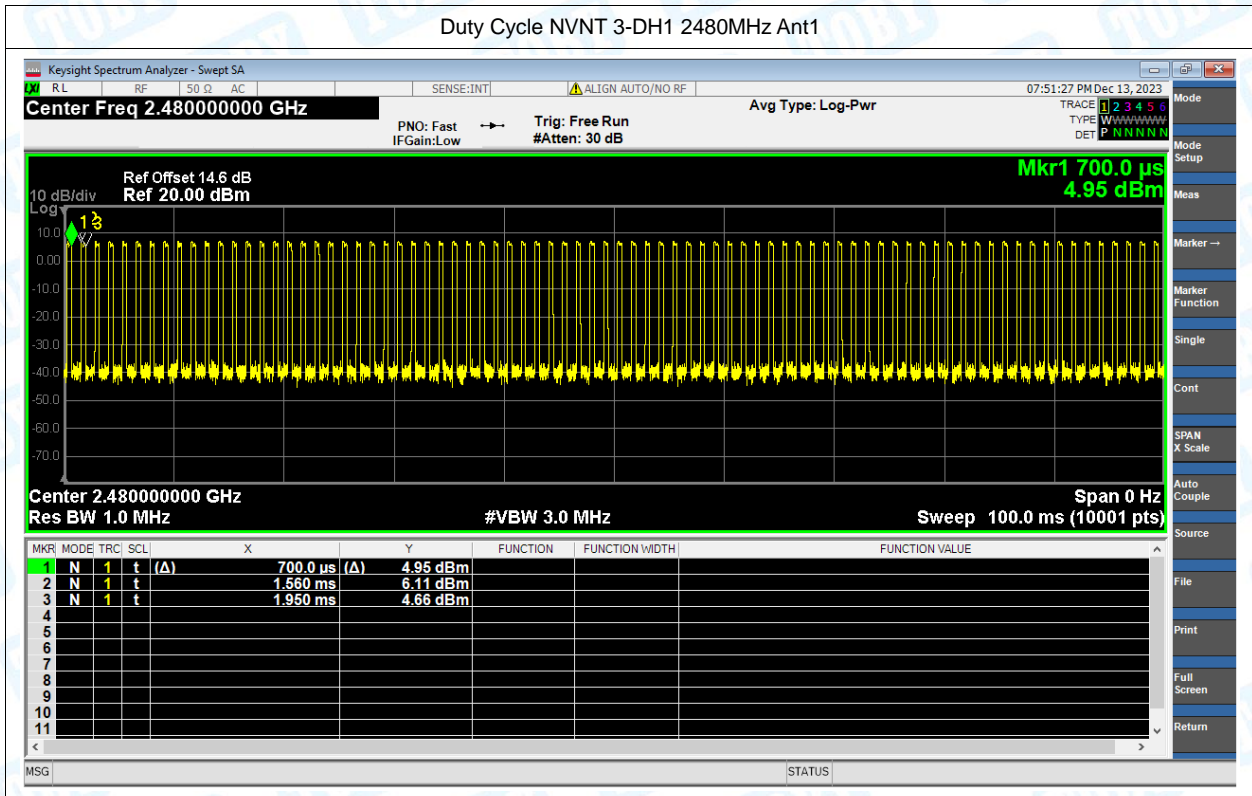


Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1





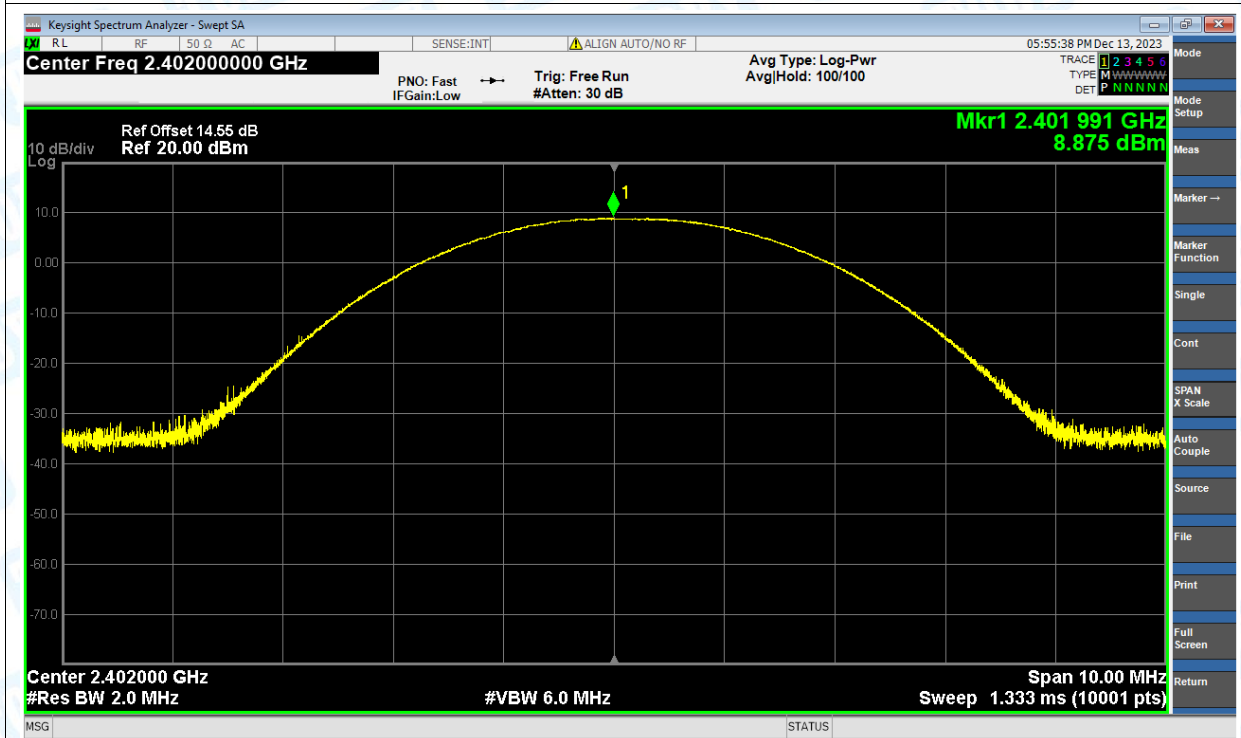


## 2. Maximum Conducted Output Power

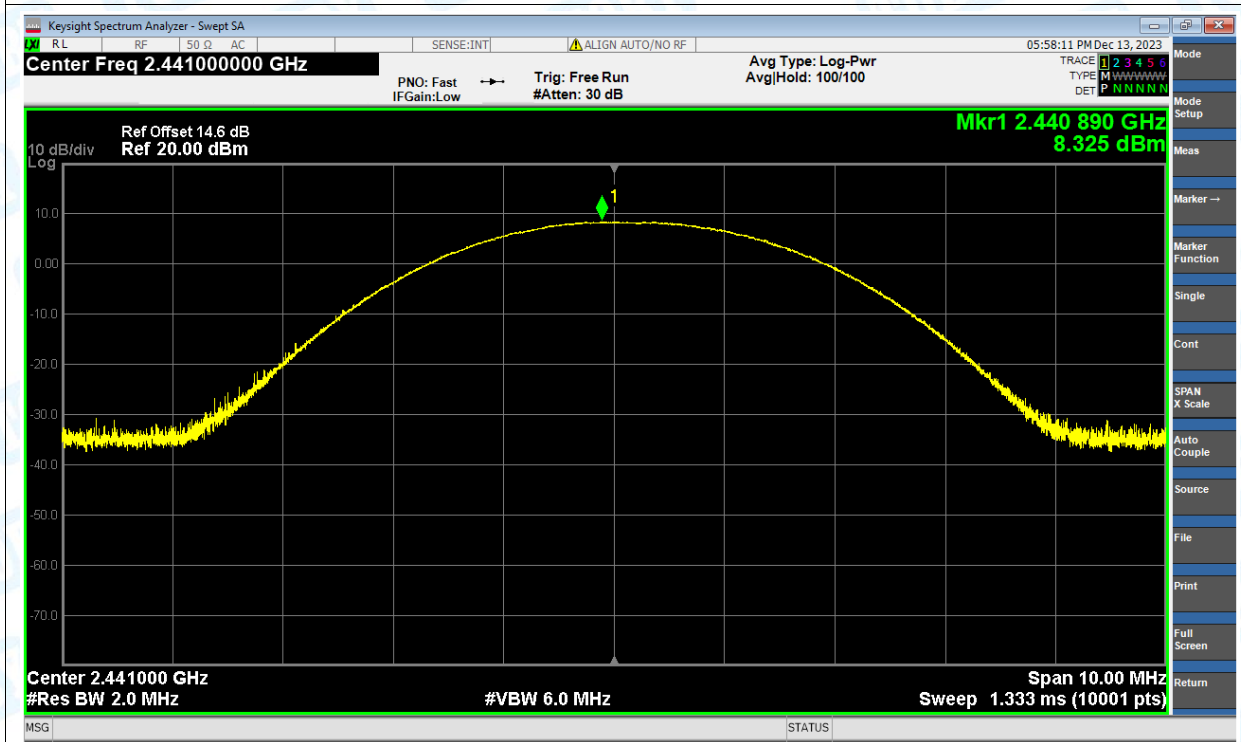
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	8.875	21	Pass
NVNT	1-DH1	2441	Ant1	8.325	21	Pass
NVNT	1-DH1	2480	Ant1	7.115	21	Pass
NVNT	2-DH1	2402	Ant1	9.410	21	Pass
NVNT	2-DH1	2441	Ant1	8.077	21	Pass
NVNT	2-DH1	2480	Ant1	7.090	21	Pass
NVNT	3-DH1	2402	Ant1	9.269	21	Pass
NVNT	3-DH1	2441	Ant1	8.139	21	Pass
NVNT	3-DH1	2480	Ant1	7.149	21	Pass

Test Graphs

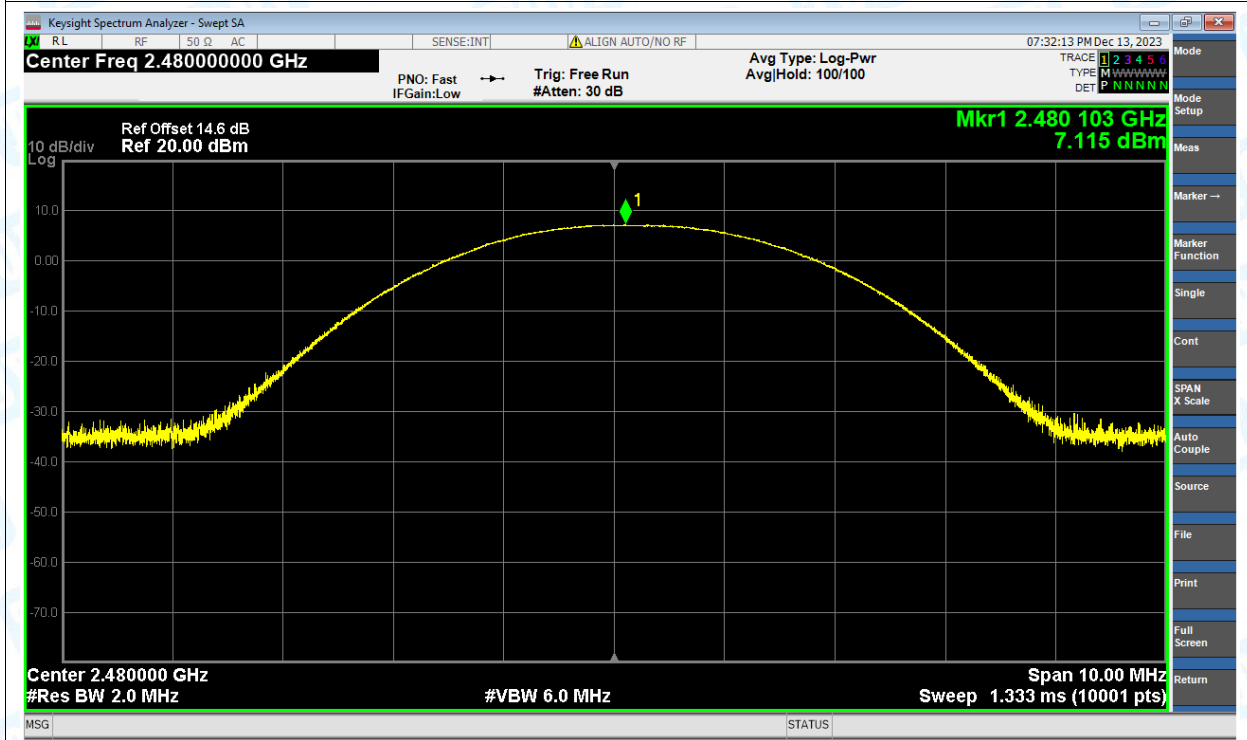
Power NVNT 1-DH1 2402MHz Ant1



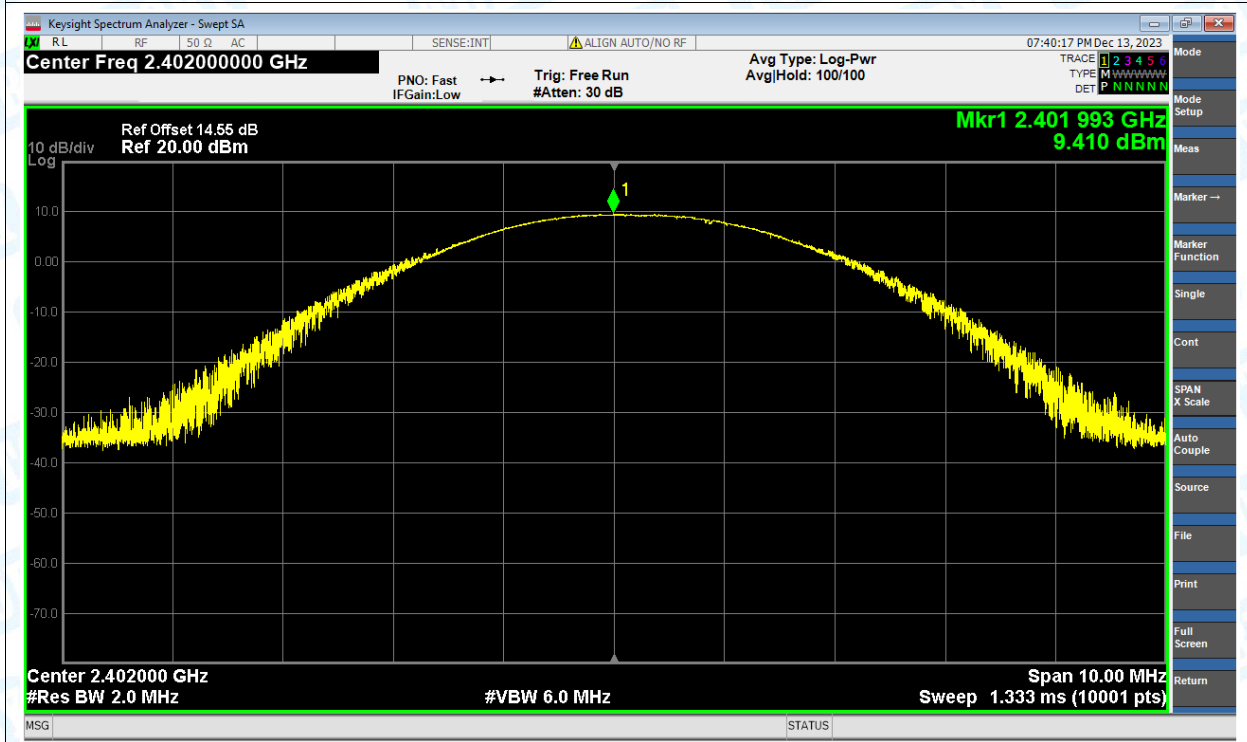
Power NVNT 1-DH1 2441MHz Ant1



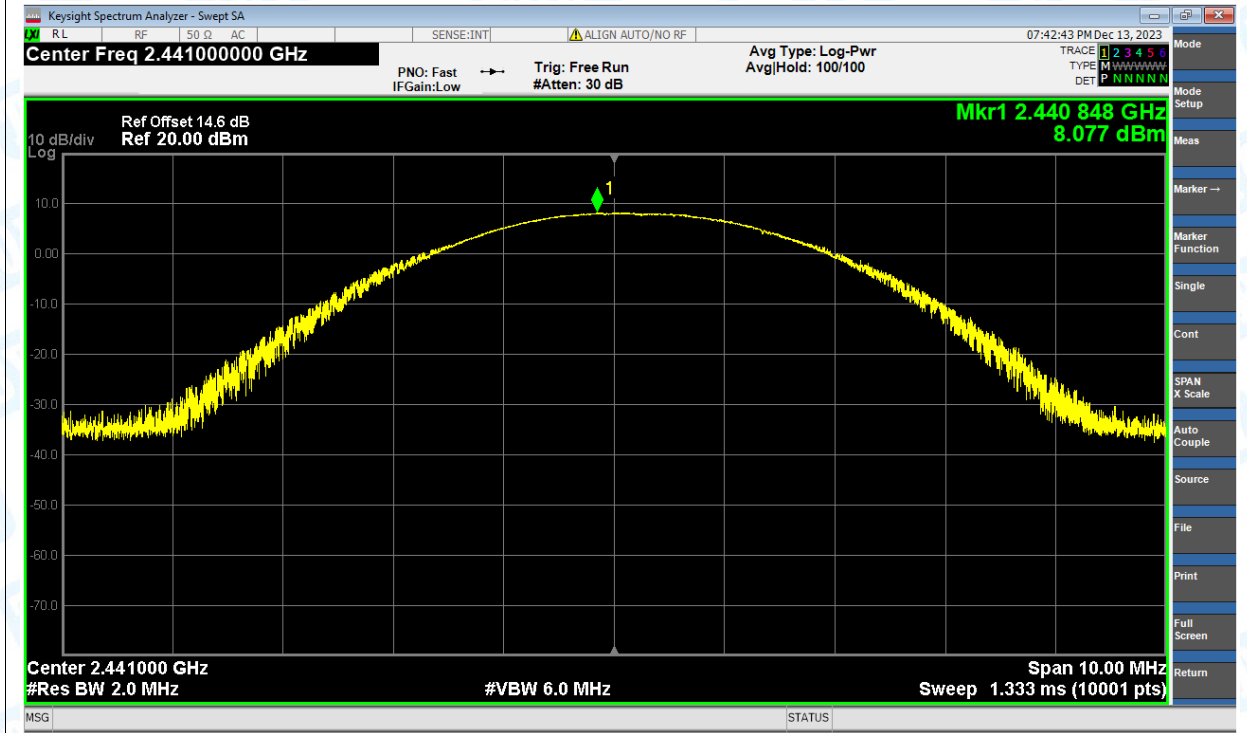
Power NVNT 1-DH1 2480MHz Ant1



Power NVNT 2-DH1 2402MHz Ant1



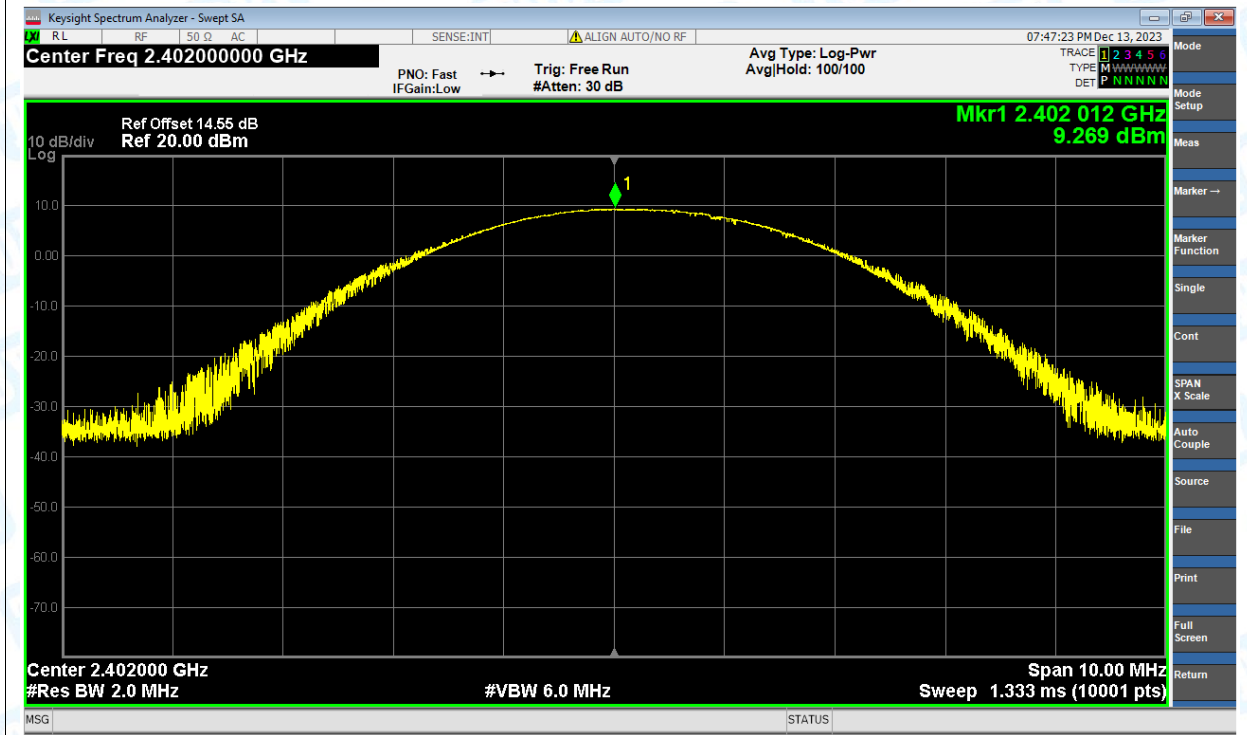
Power NVNT 2-DH1 2441MHz Ant1



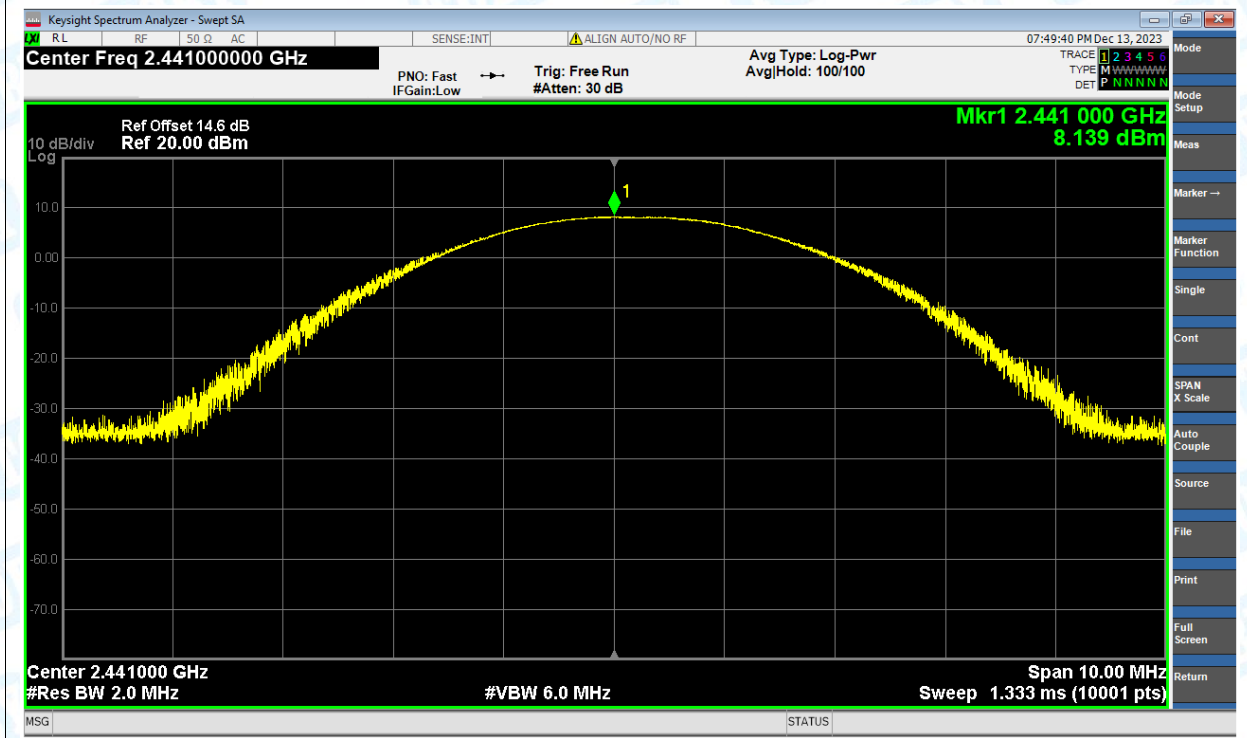
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



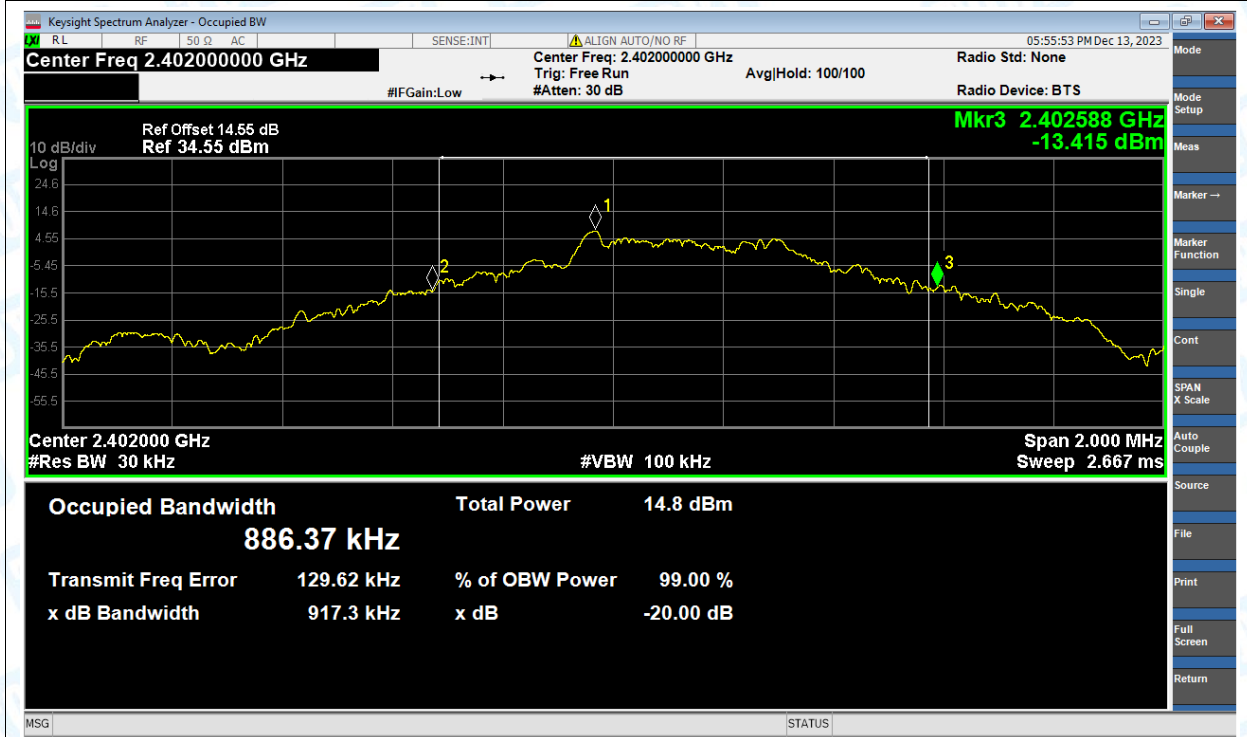


### 3.-20dB Bandwidth

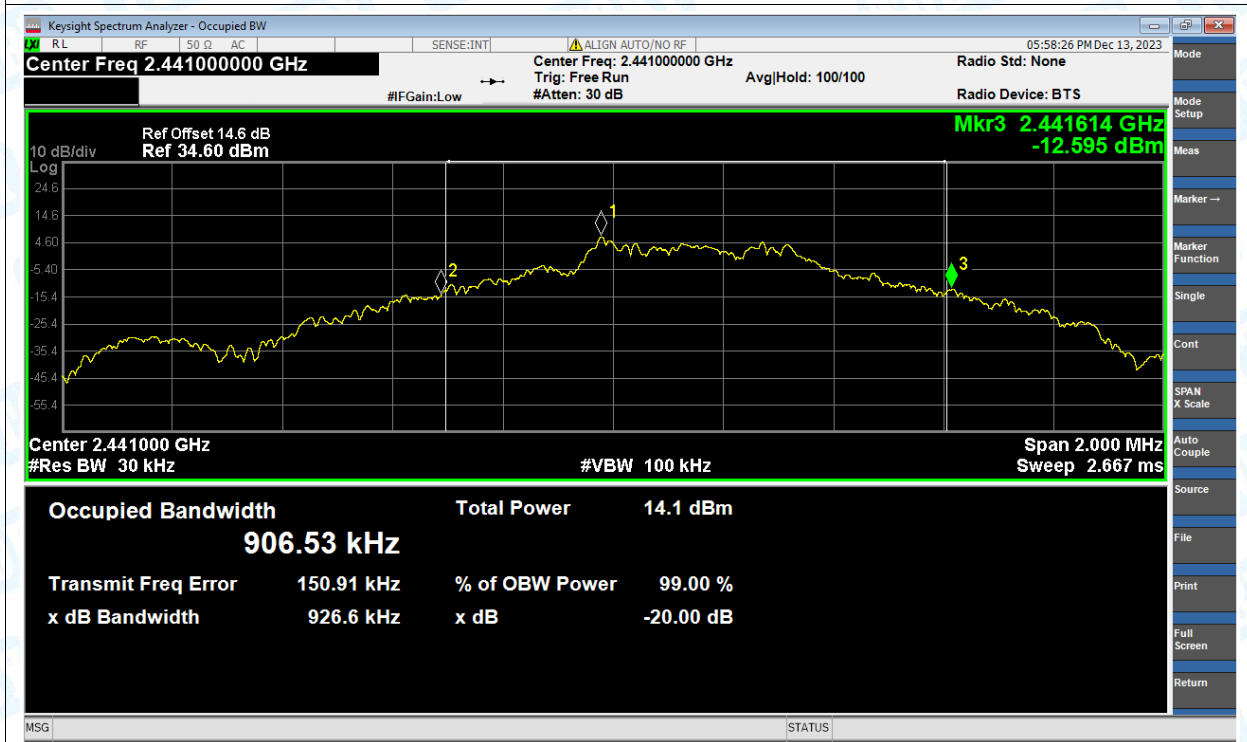
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.92	----	Pass
NVNT	1-DH1	2441	Ant1	0.93	----	Pass
NVNT	1-DH1	2480	Ant1	0.92	----	Pass
NVNT	2-DH1	2402	Ant1	1.22	----	Pass
NVNT	2-DH1	2441	Ant1	1.22	----	Pass
NVNT	2-DH1	2480	Ant1	1.23	----	Pass
NVNT	3-DH1	2402	Ant1	1.20	----	Pass
NVNT	3-DH1	2441	Ant1	1.20	----	Pass
NVNT	3-DH1	2480	Ant1	1.21	----	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1

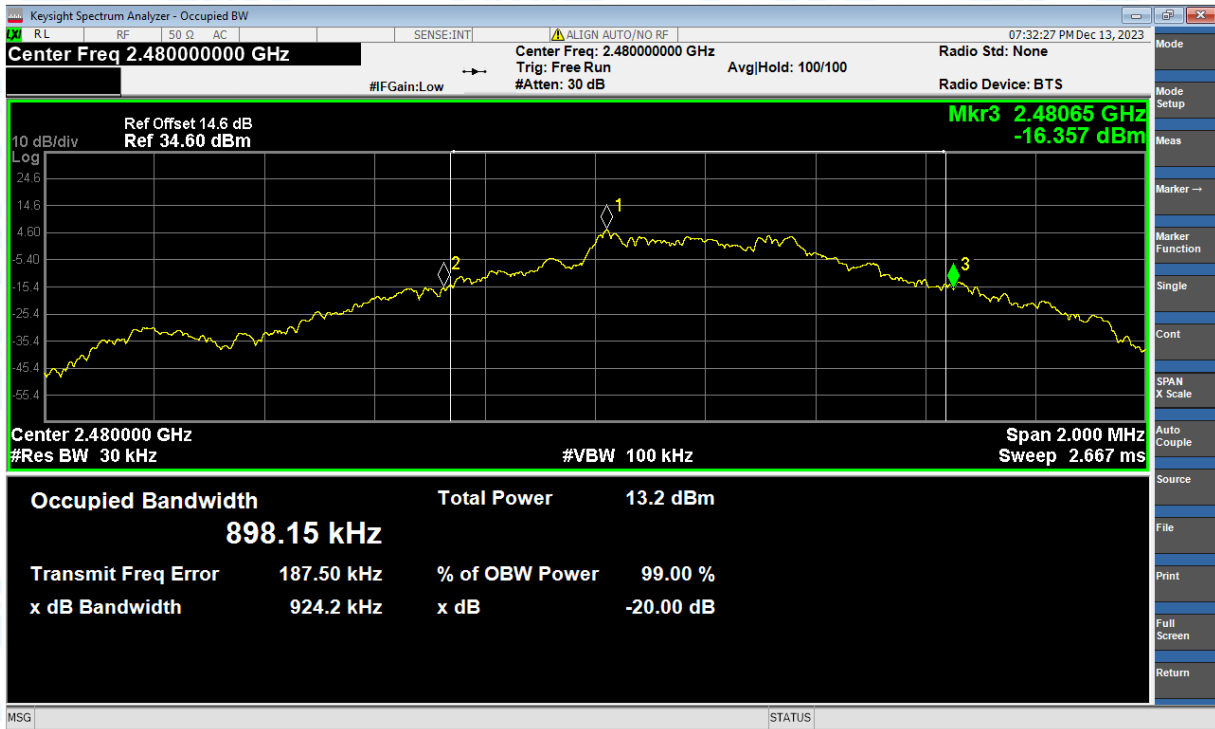


-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1

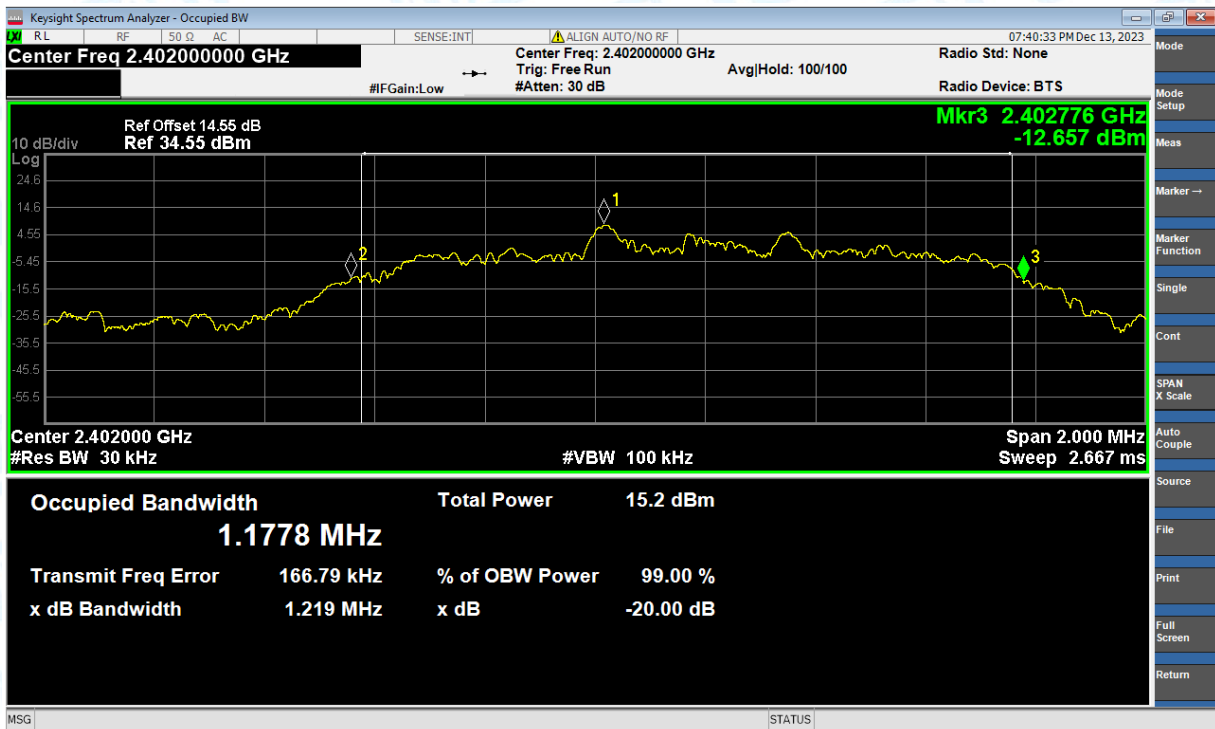




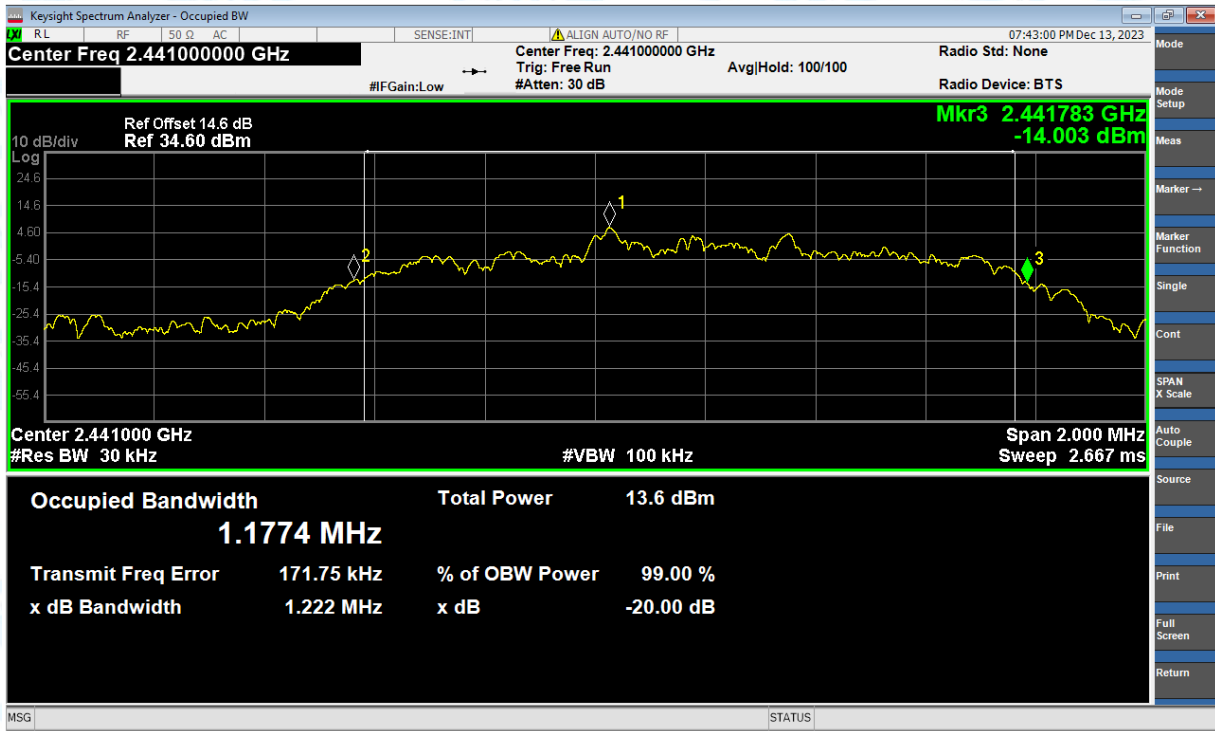
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



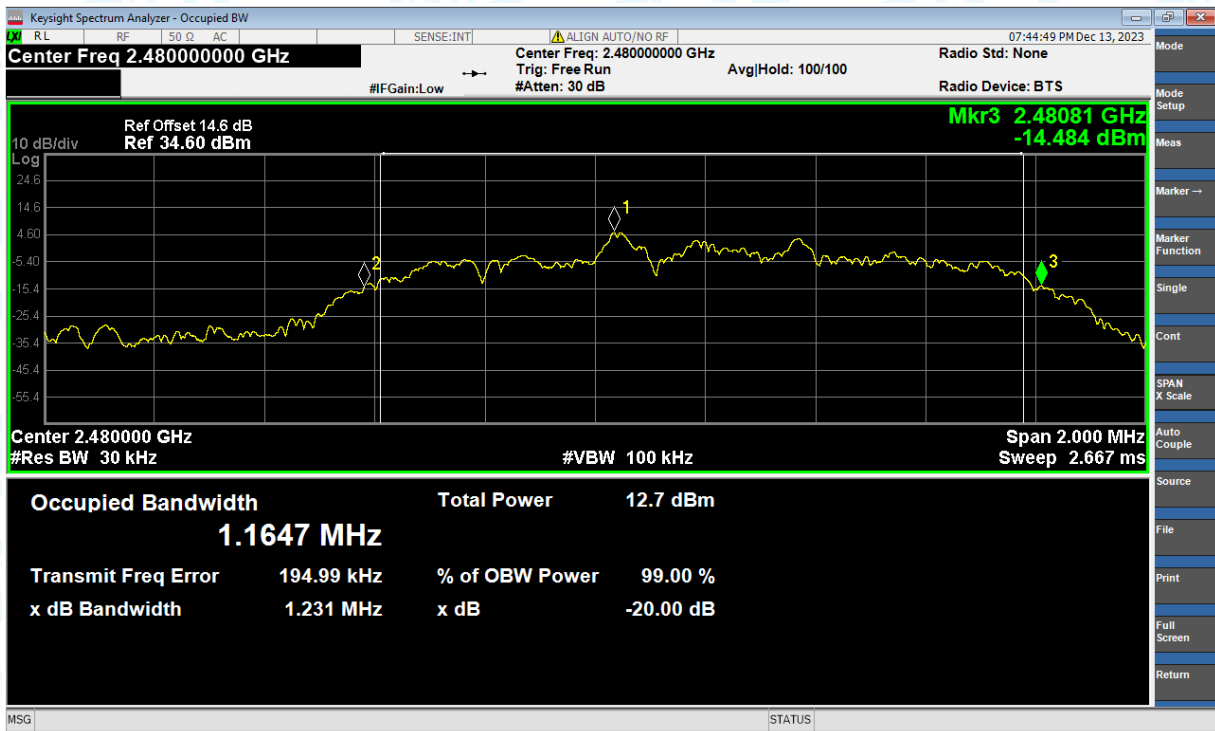
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



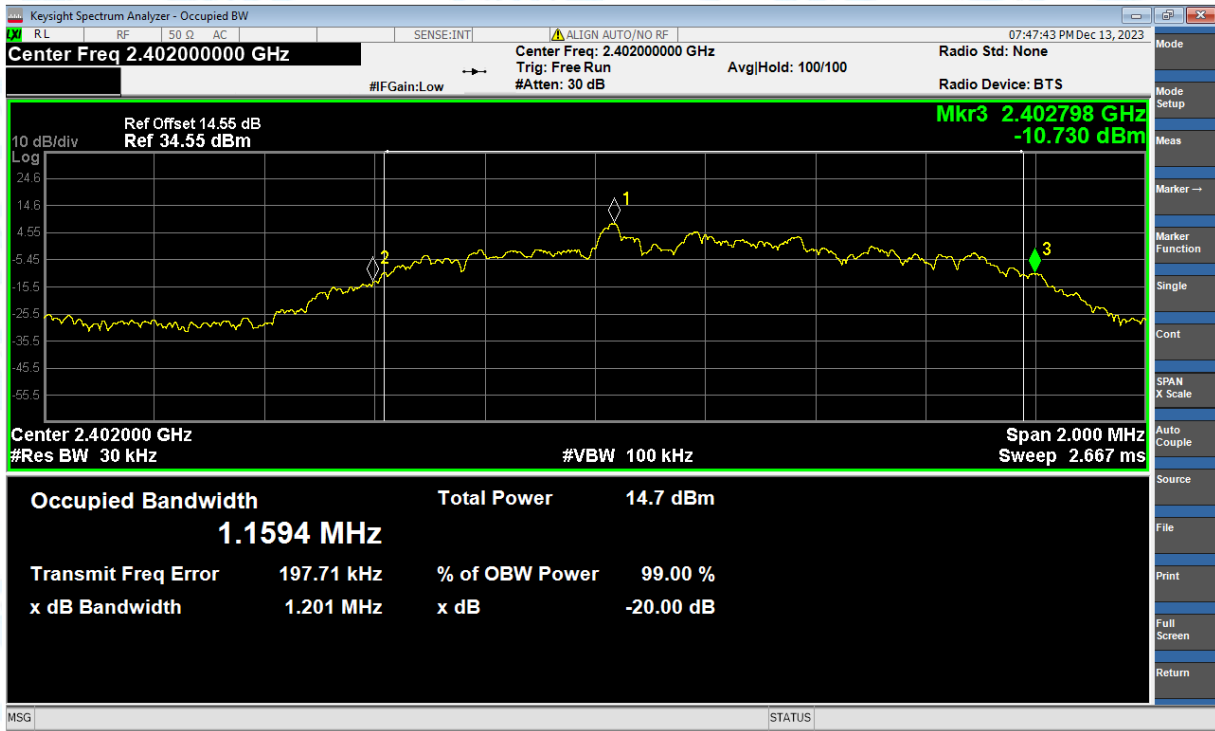
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



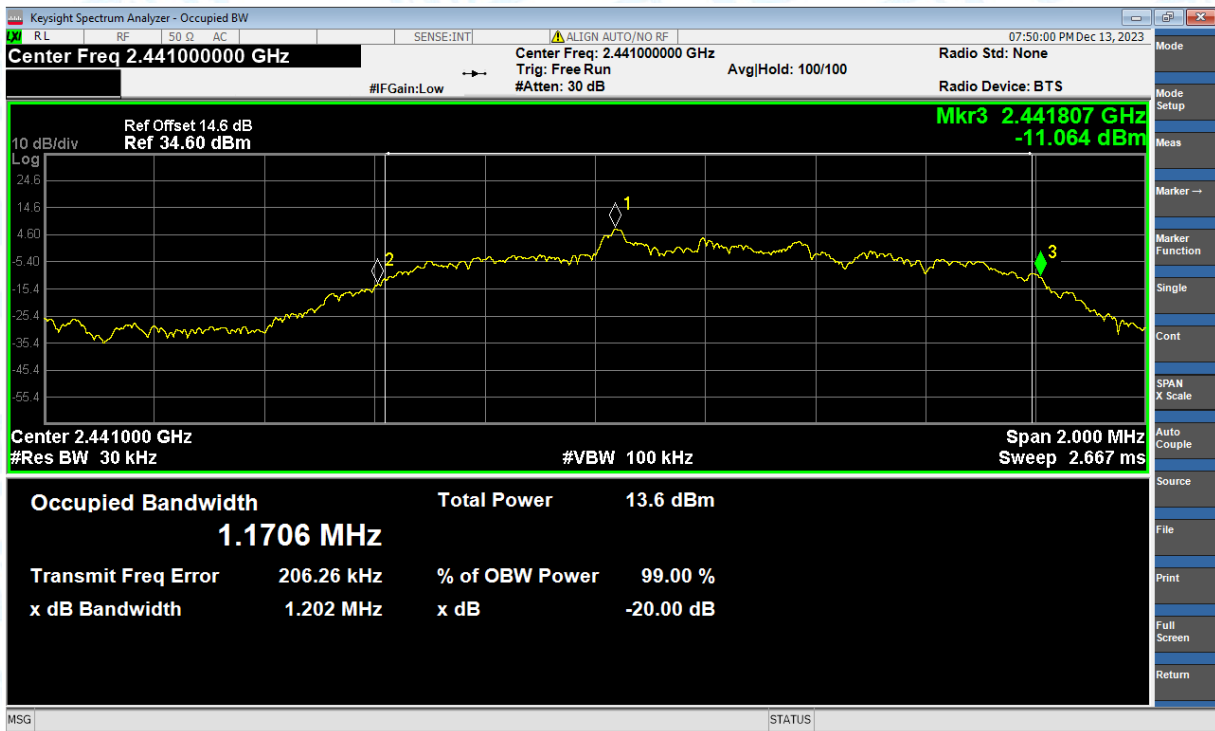
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

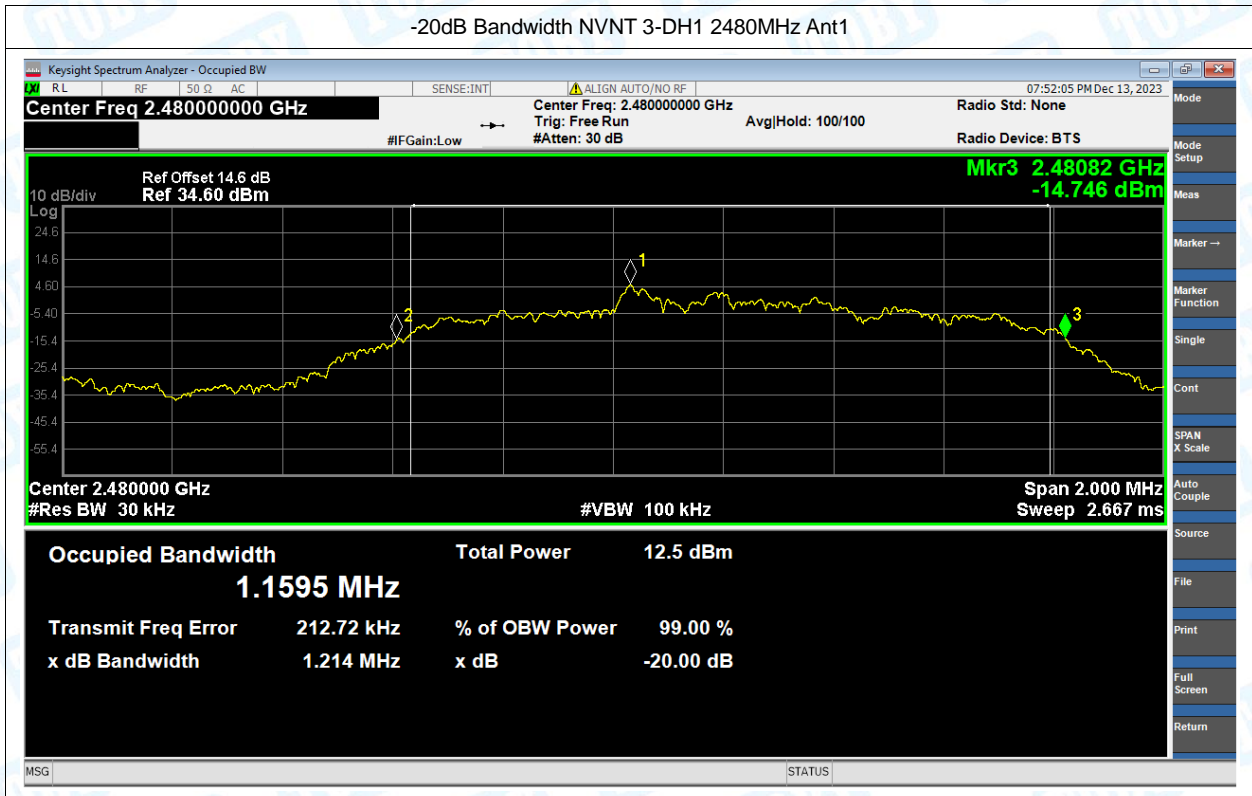


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



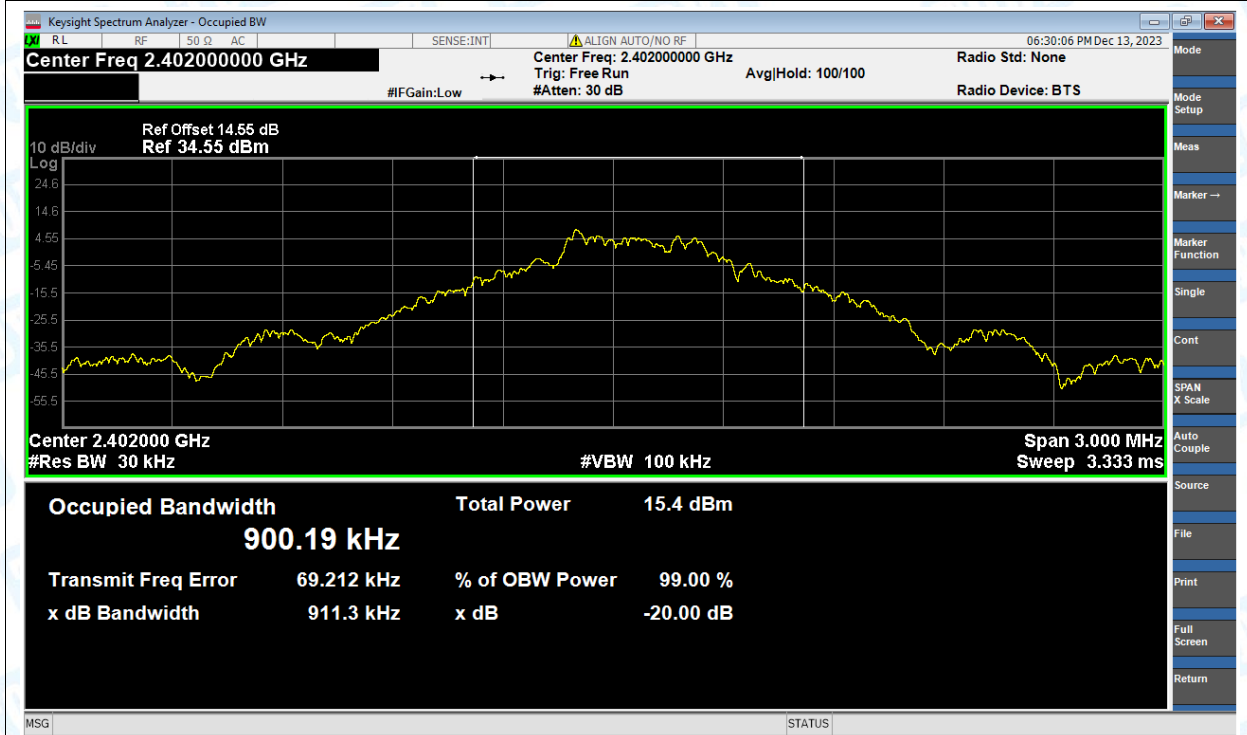


## 4. Occupied Channel Bandwidth

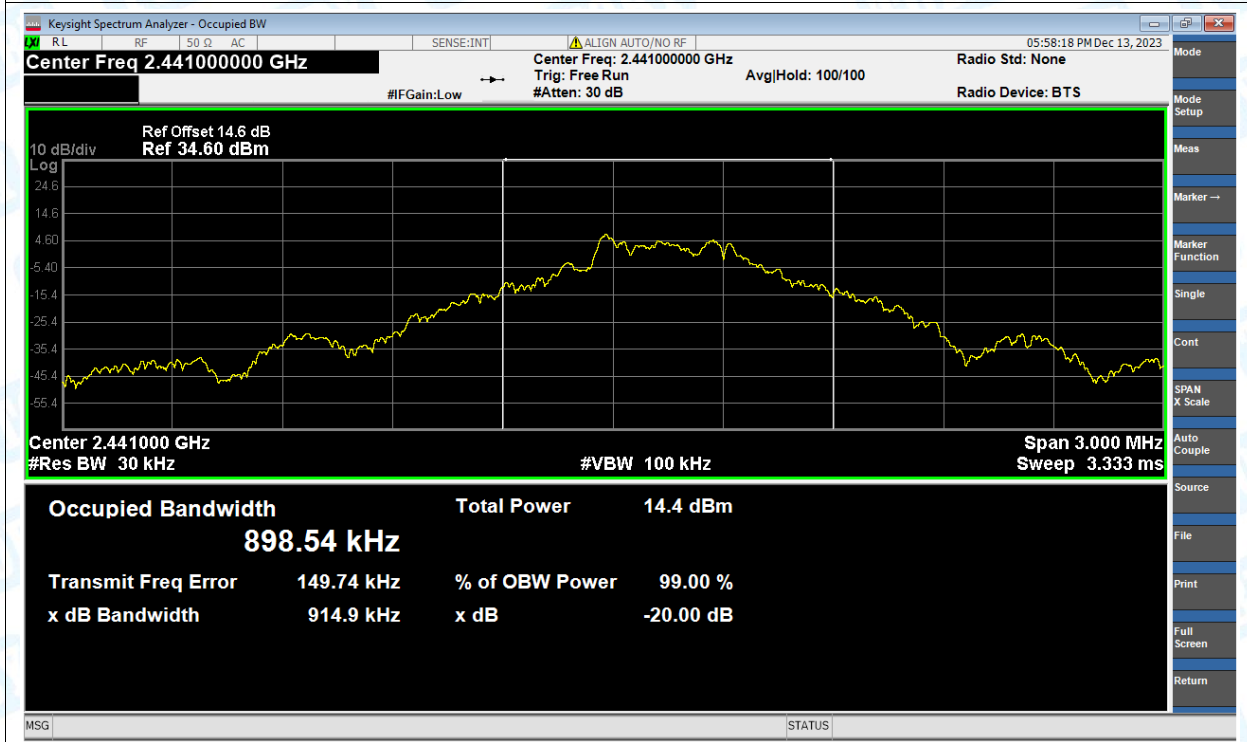
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.900
NVNT	1-DH1	2441	Ant1	0.899
NVNT	1-DH1	2480	Ant1	0.899
NVNT	2-DH1	2402	Ant1	1.197
NVNT	2-DH1	2441	Ant1	1.183
NVNT	2-DH1	2480	Ant1	1.175
NVNT	3-DH1	2402	Ant1	1.180
NVNT	3-DH1	2441	Ant1	1.181
NVNT	3-DH1	2480	Ant1	1.171

Test Graphs

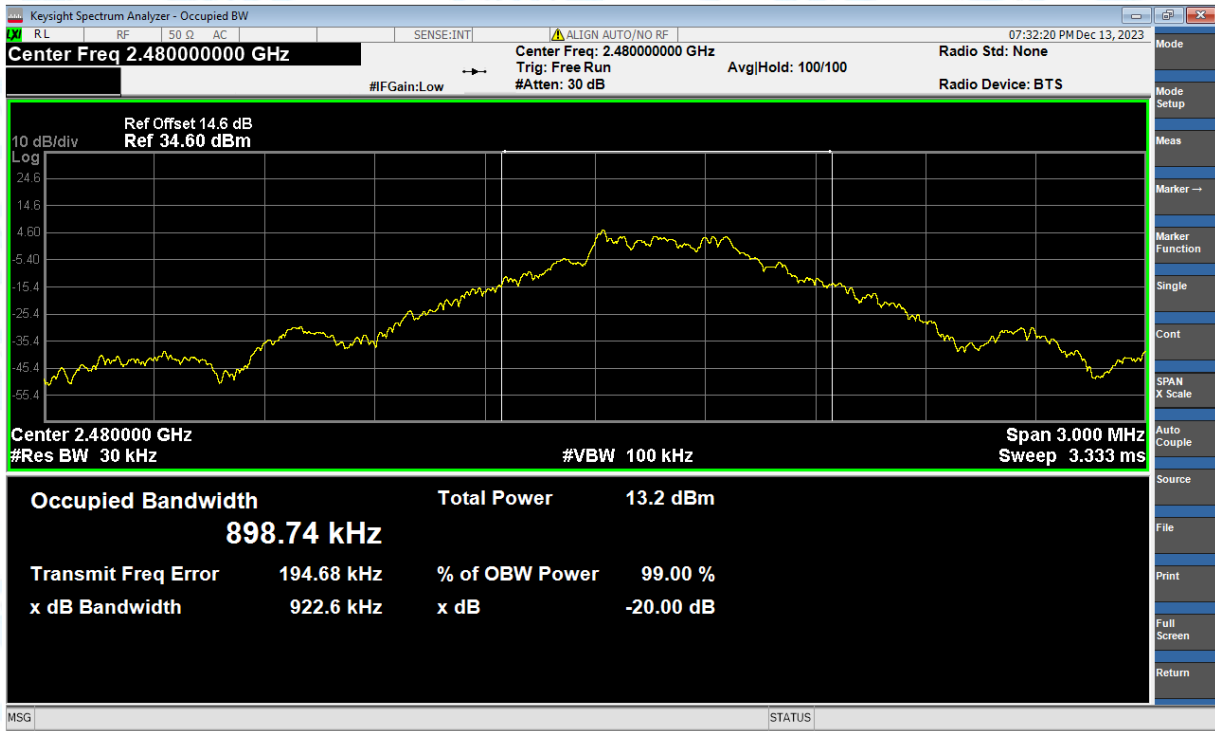
OBW NVNT 1-DH1 2402MHz Ant1



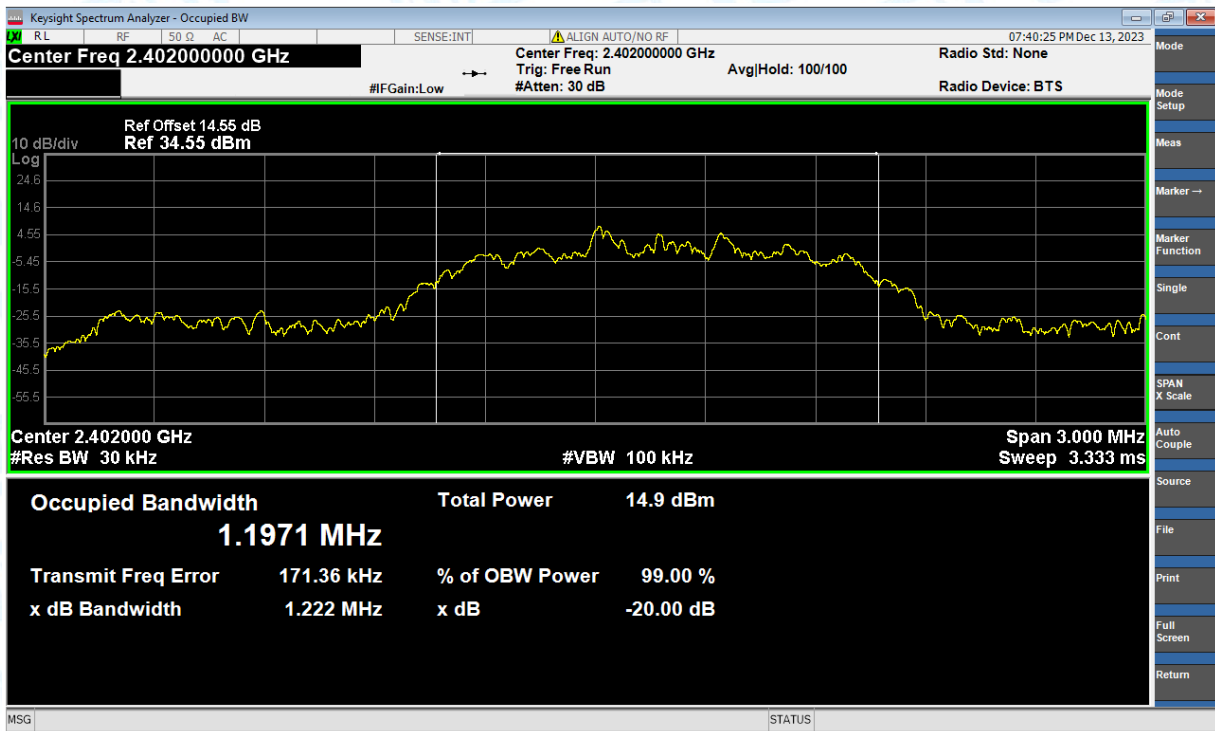
OBW NVNT 1-DH1 2441MHz Ant1



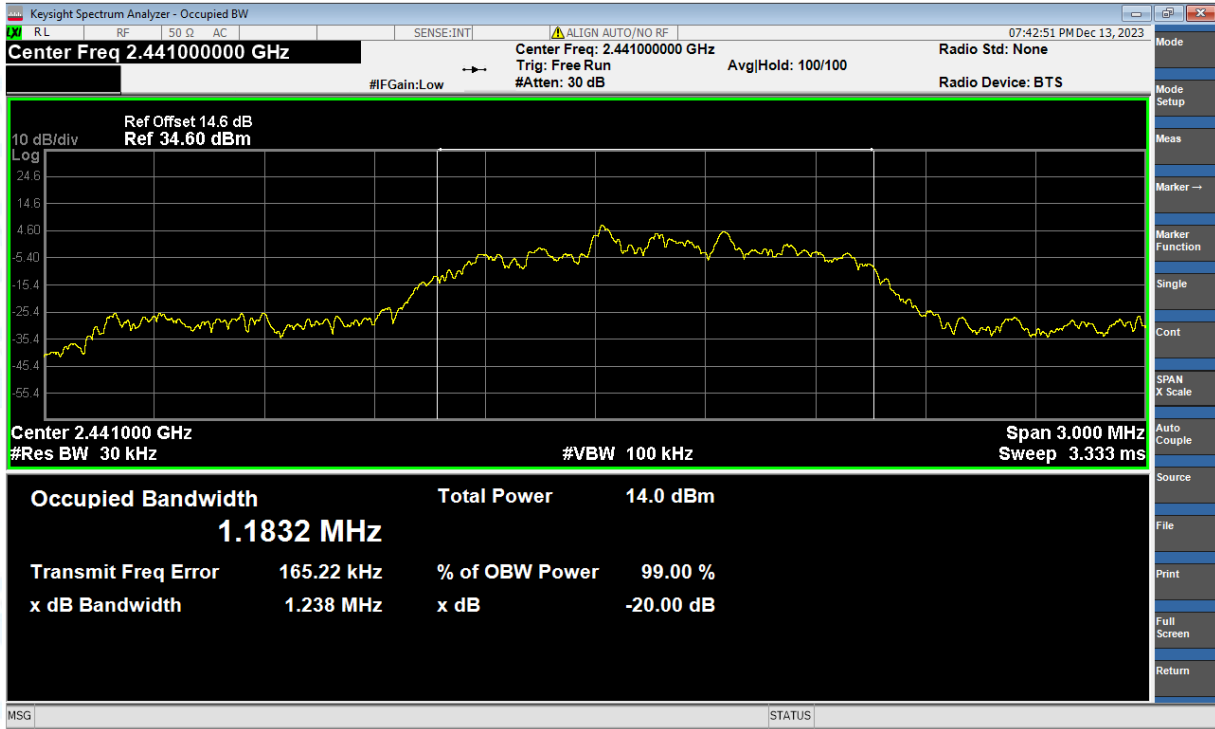
OBW NVNT 1-DH1 2480MHz Ant1



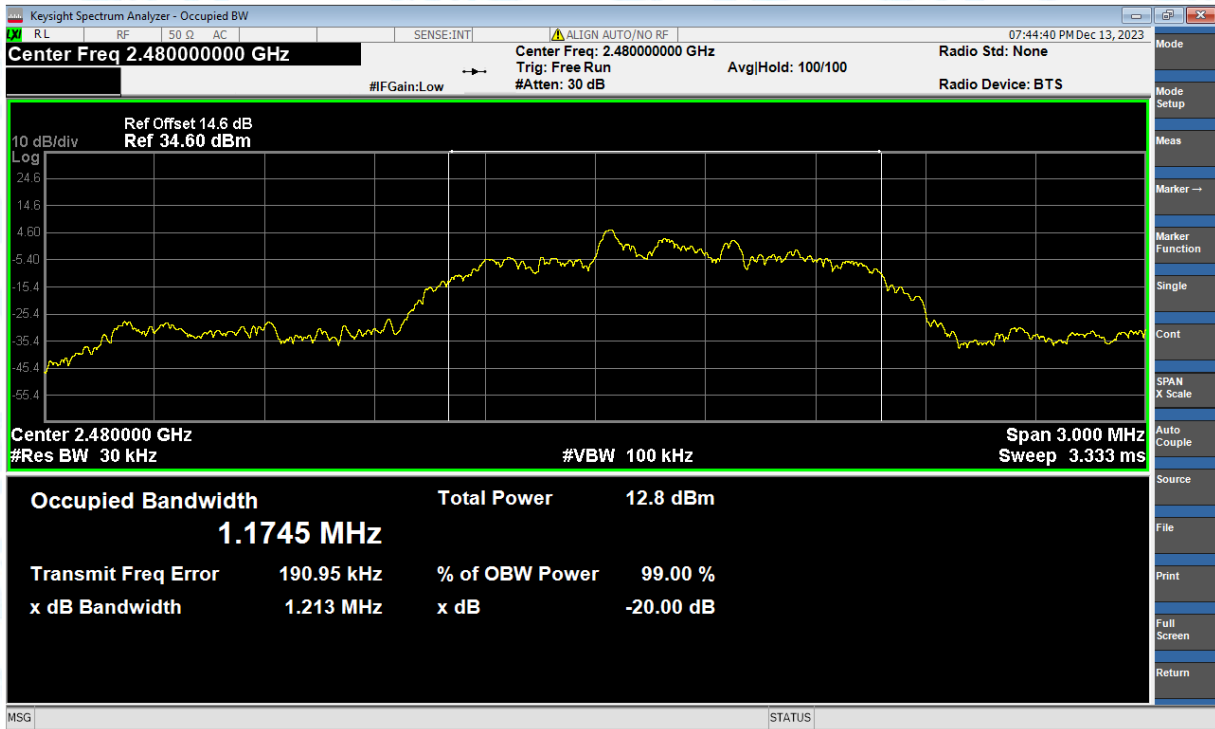
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1

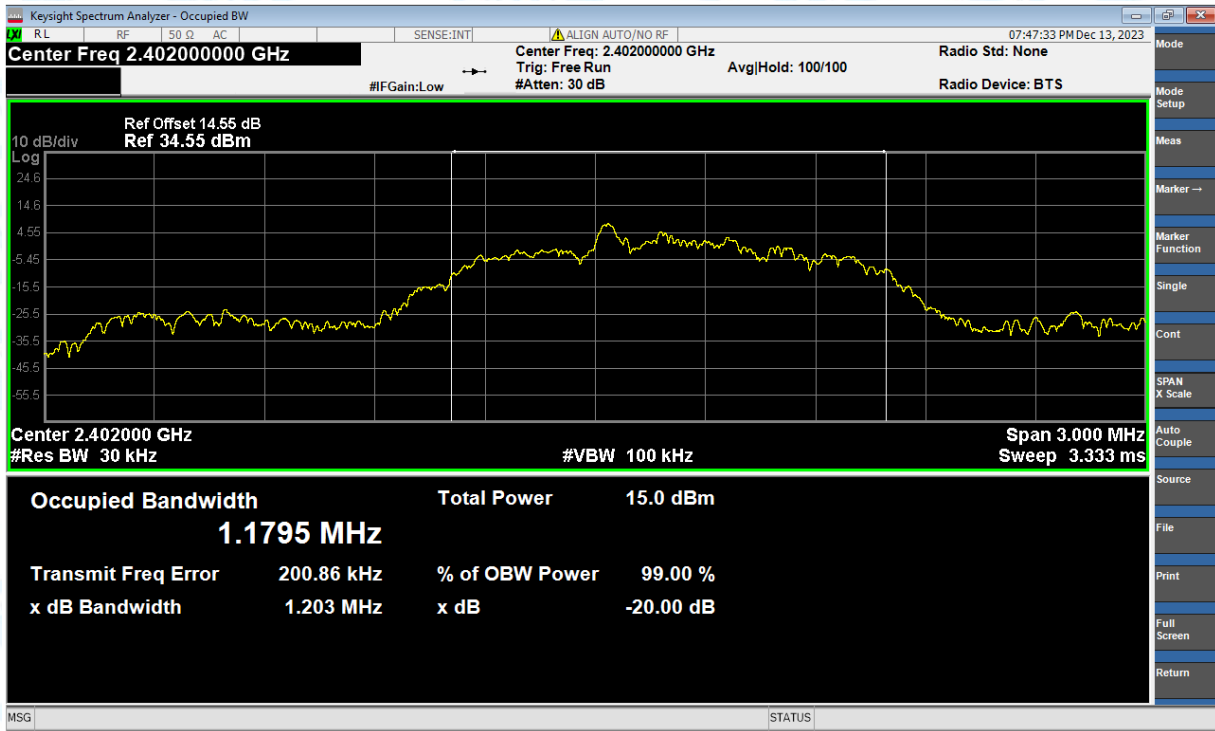


OBW NVNT 2-DH1 2480MHz Ant1

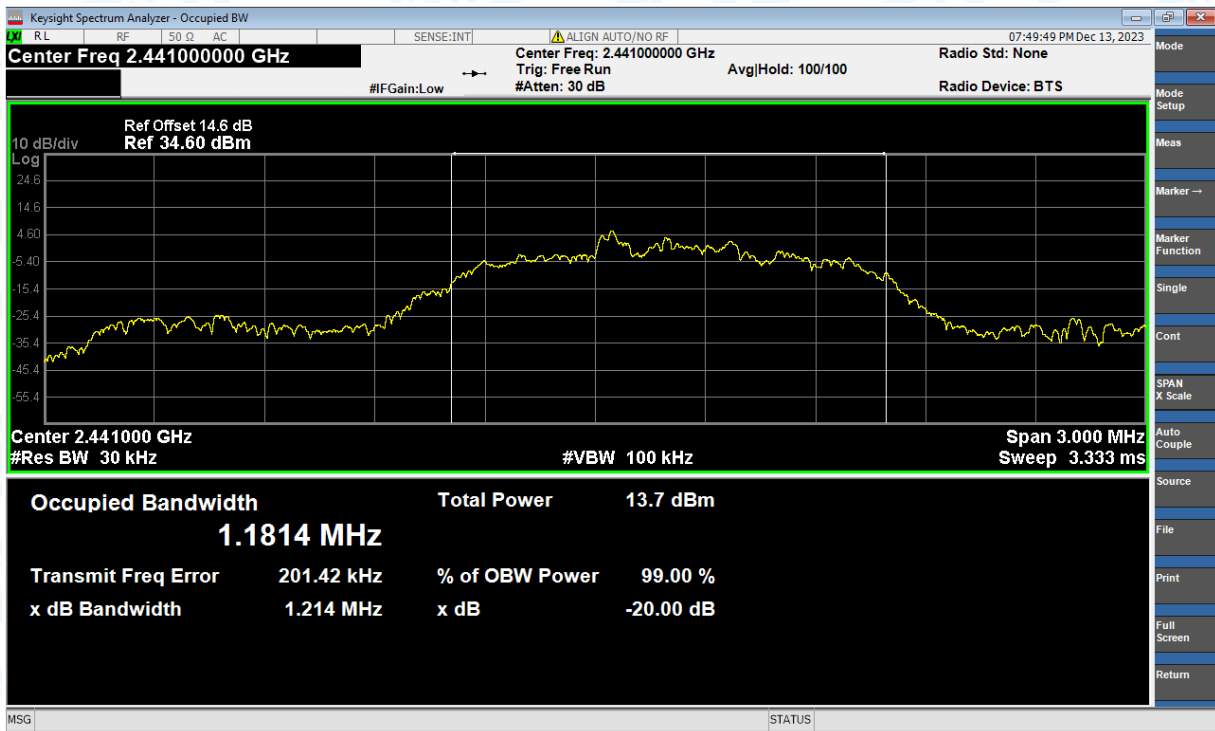


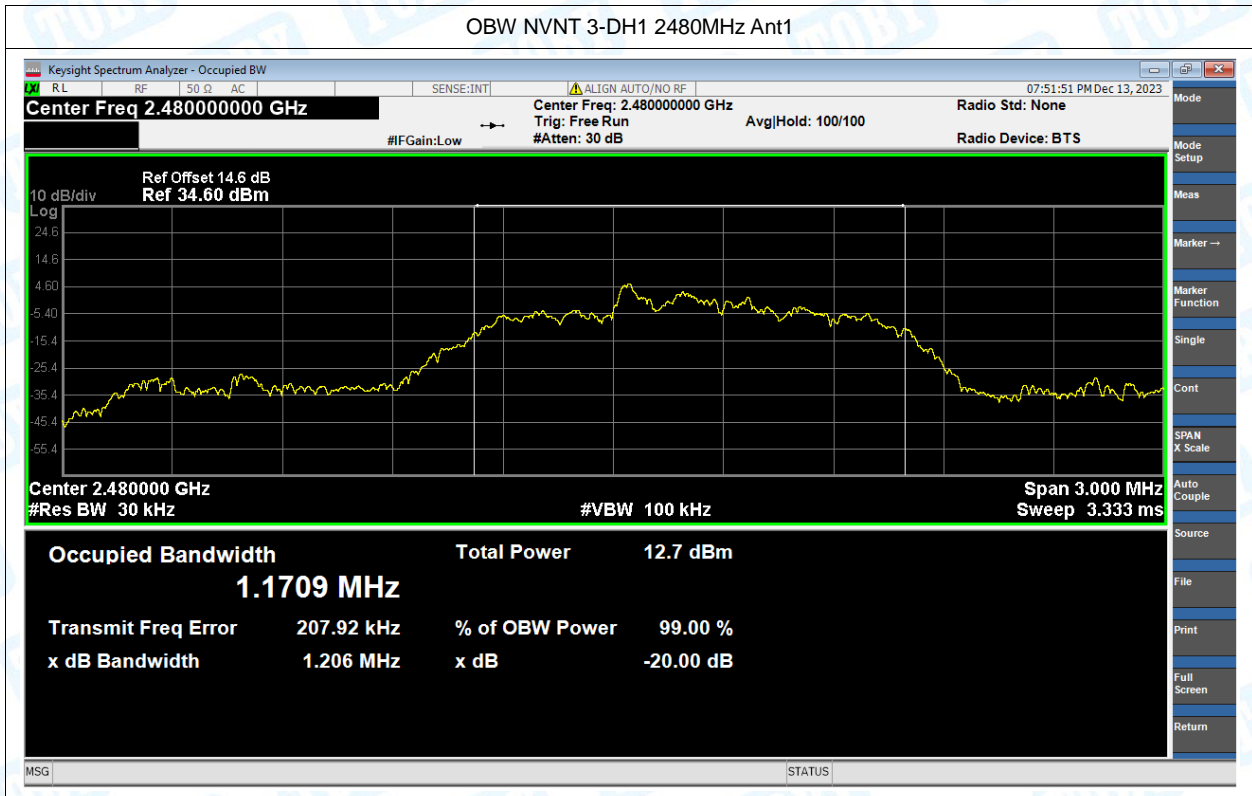


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



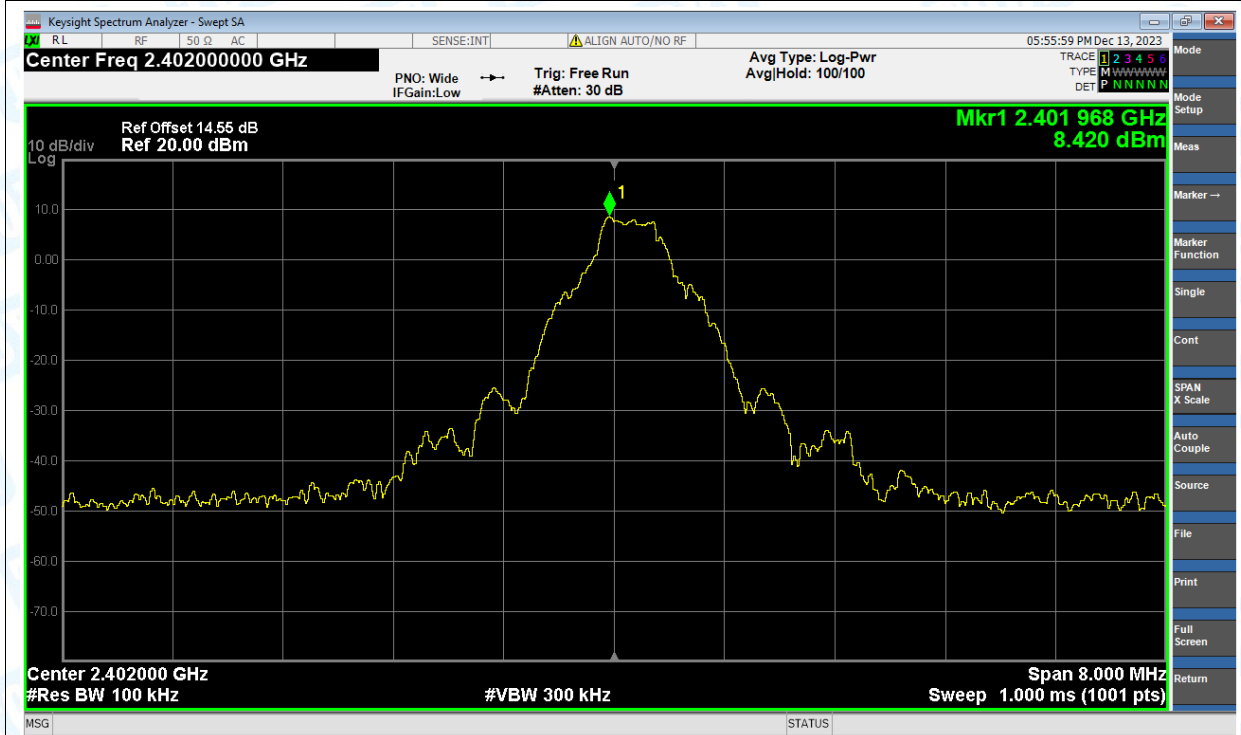


## 5. Band Edge

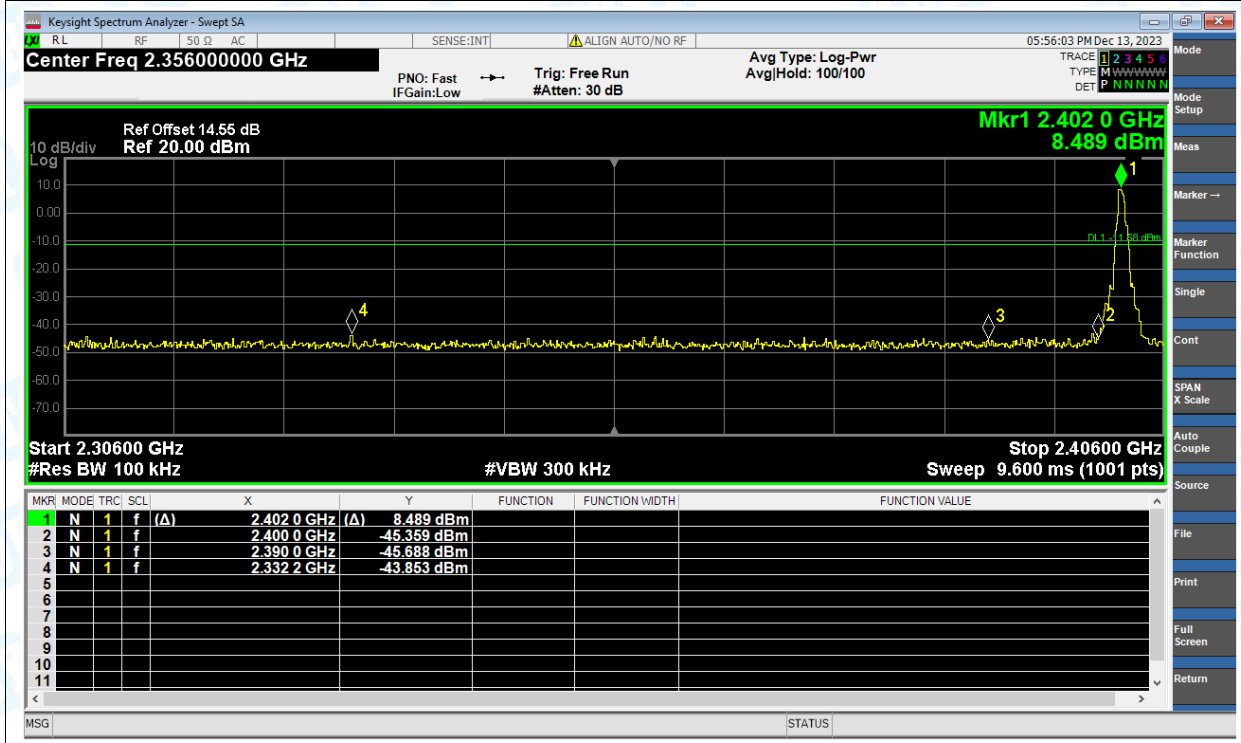
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-52.27	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-50.63	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-53.07	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-50.11	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-52.89	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-51.38	-20	Pass

Test Graphs

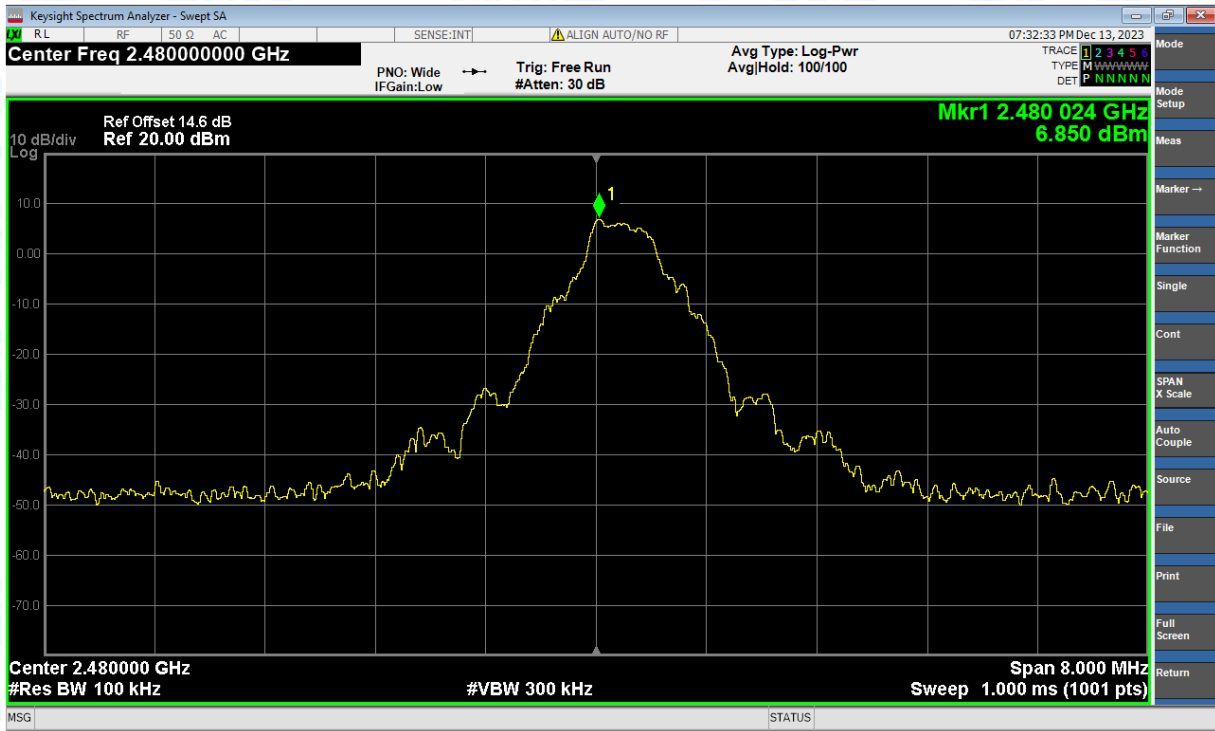
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



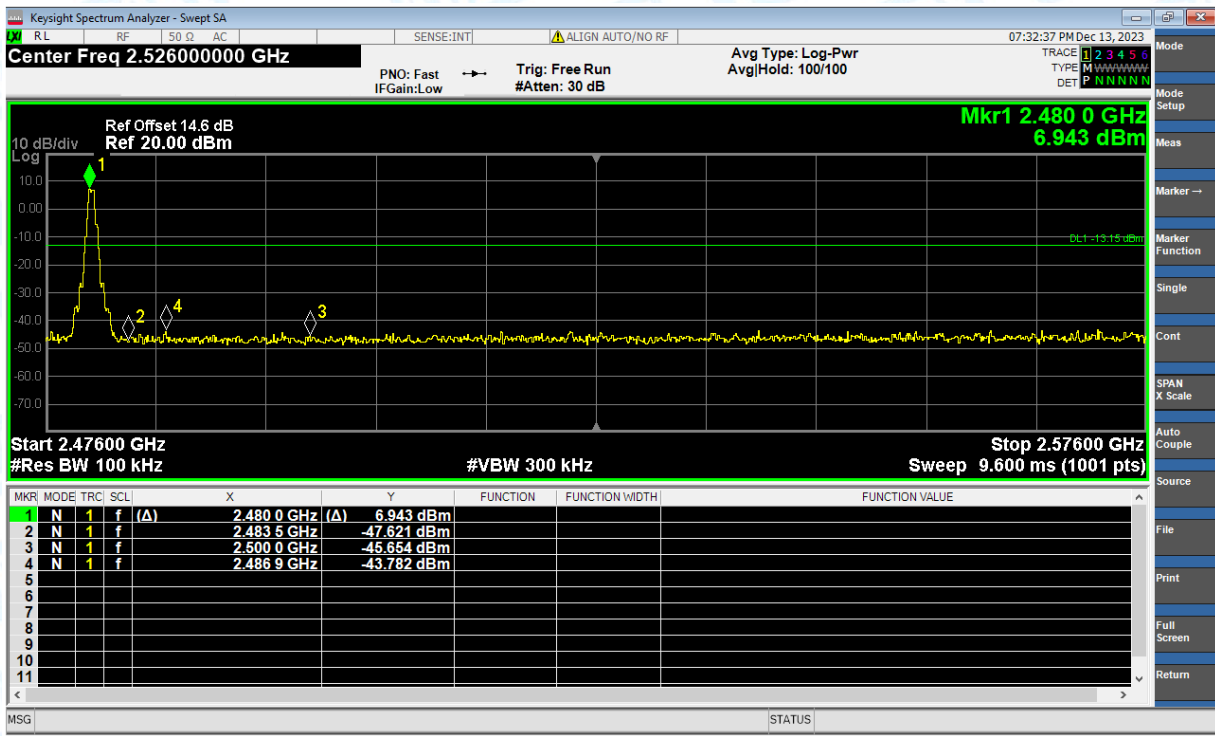
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

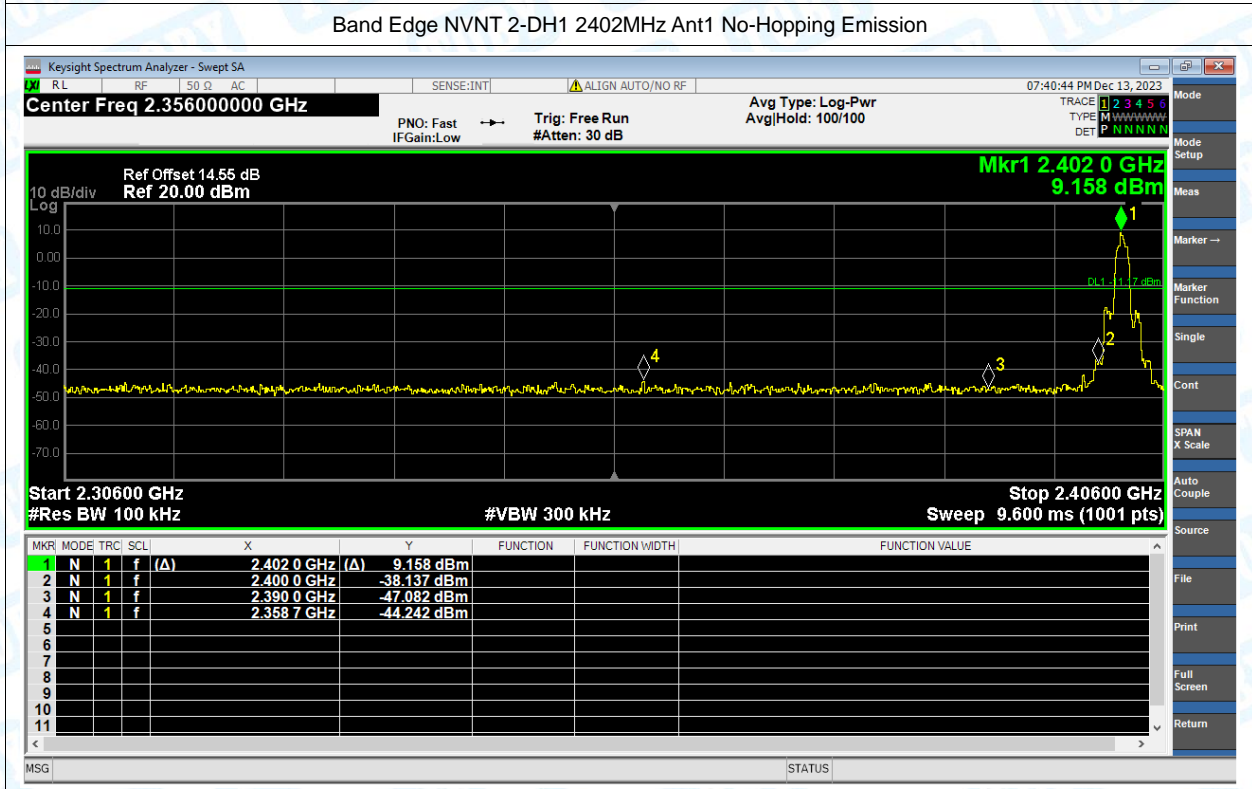
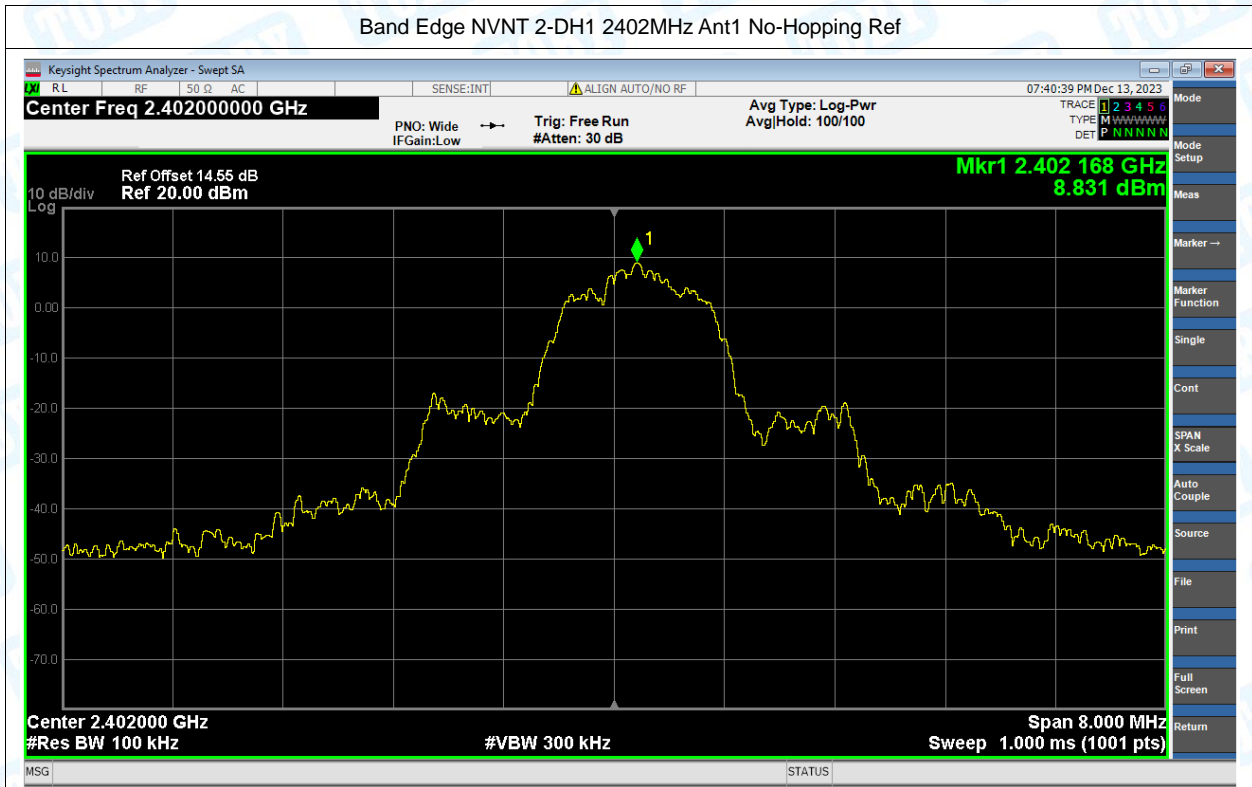


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

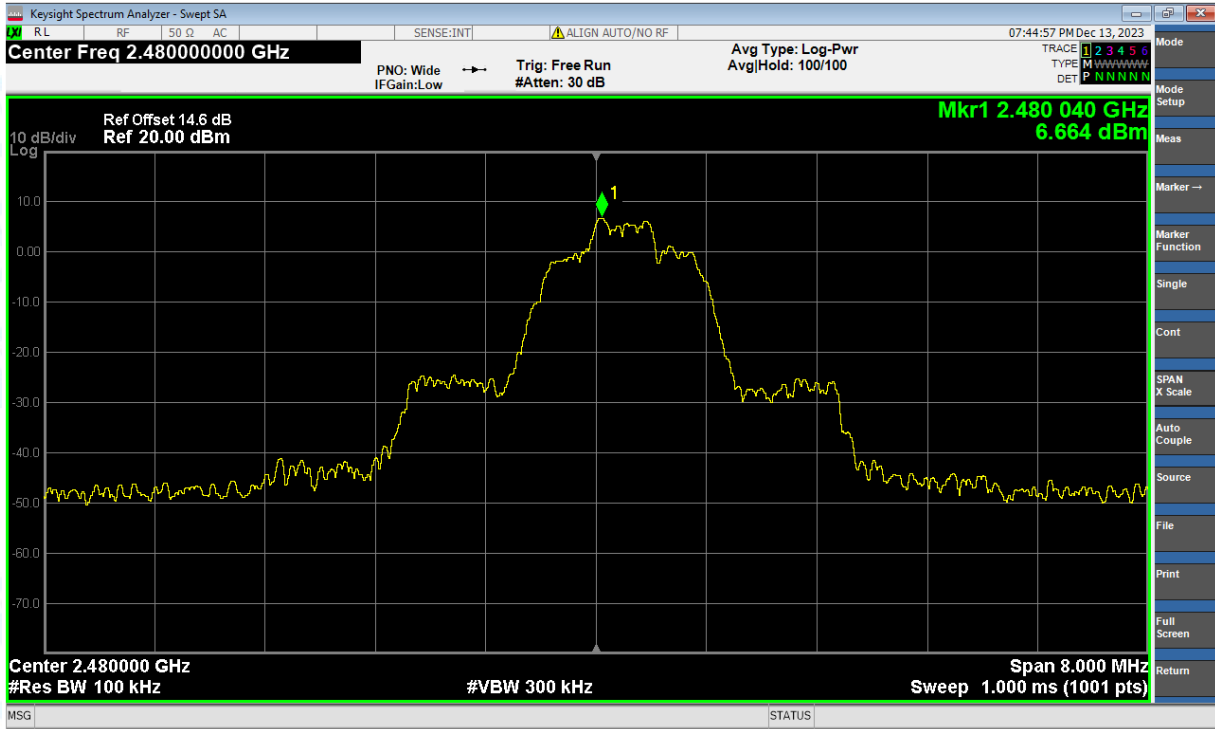


Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission

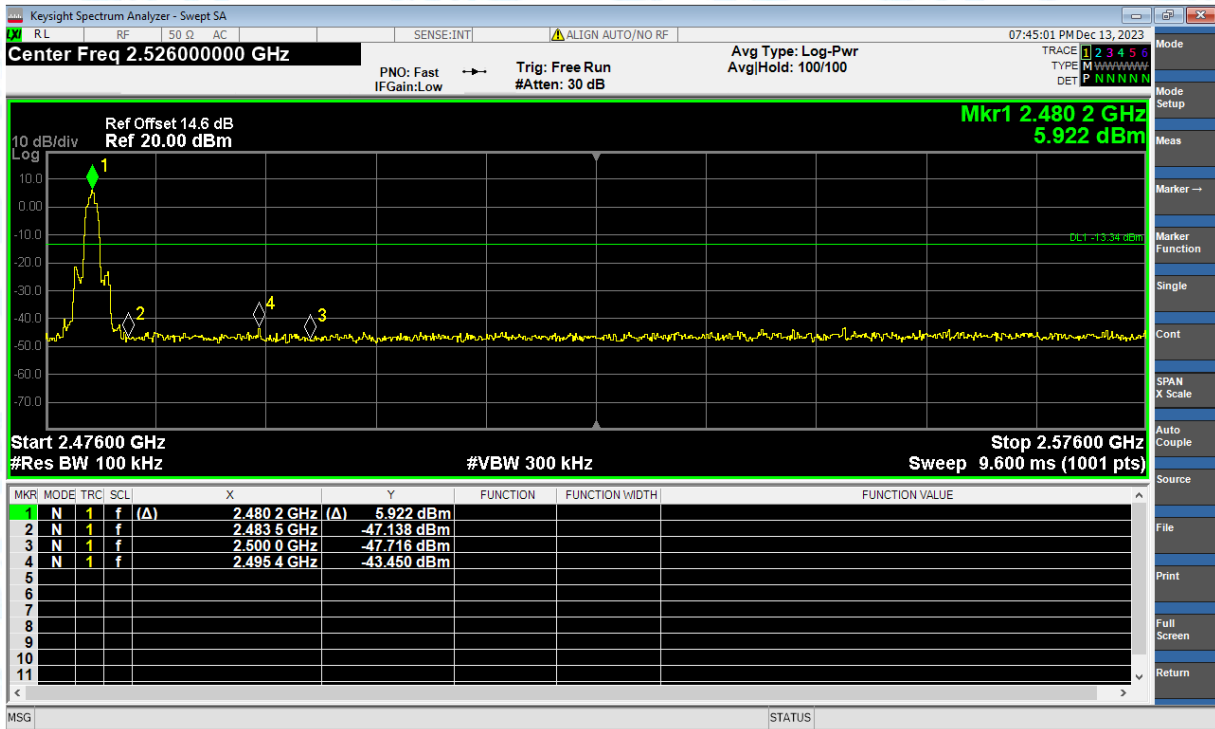




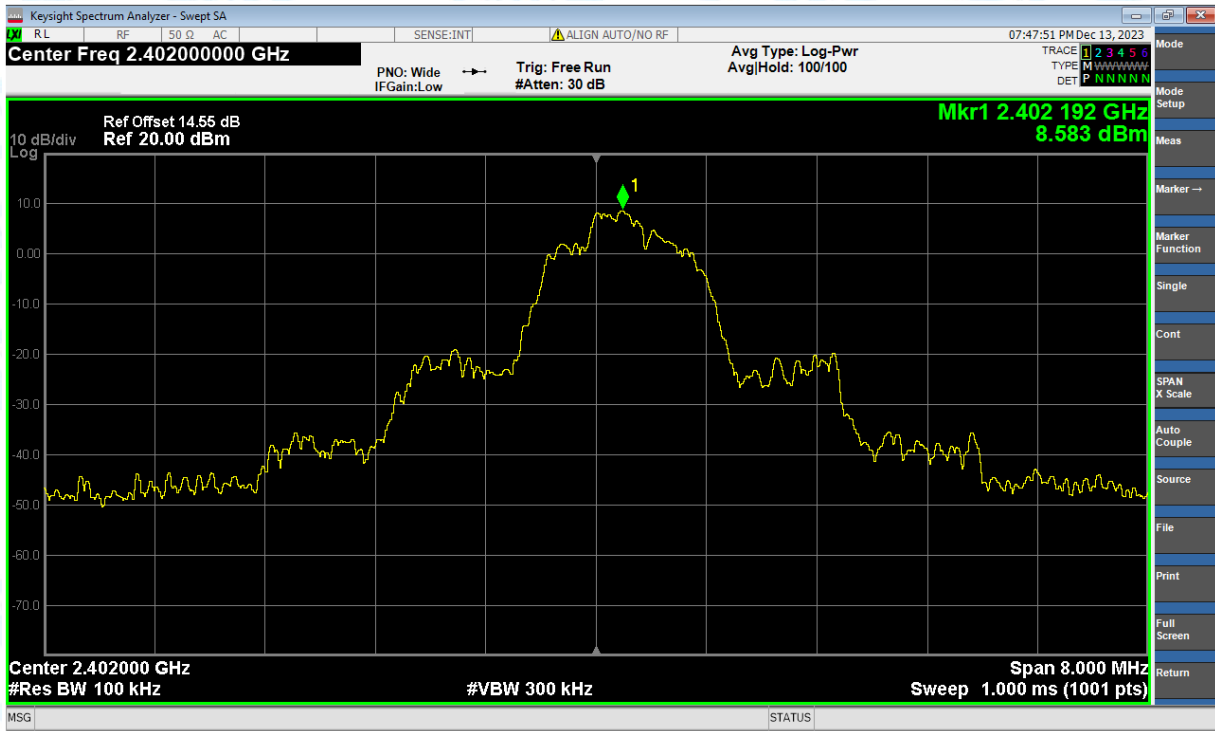
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



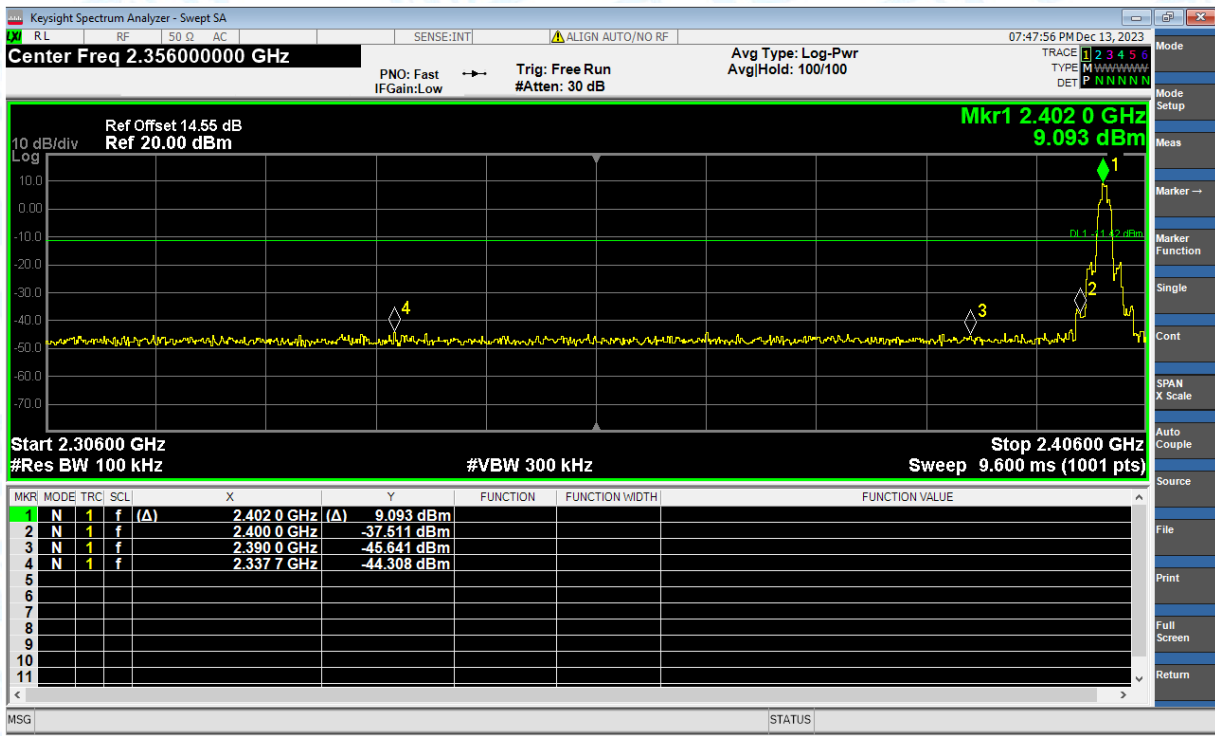
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



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

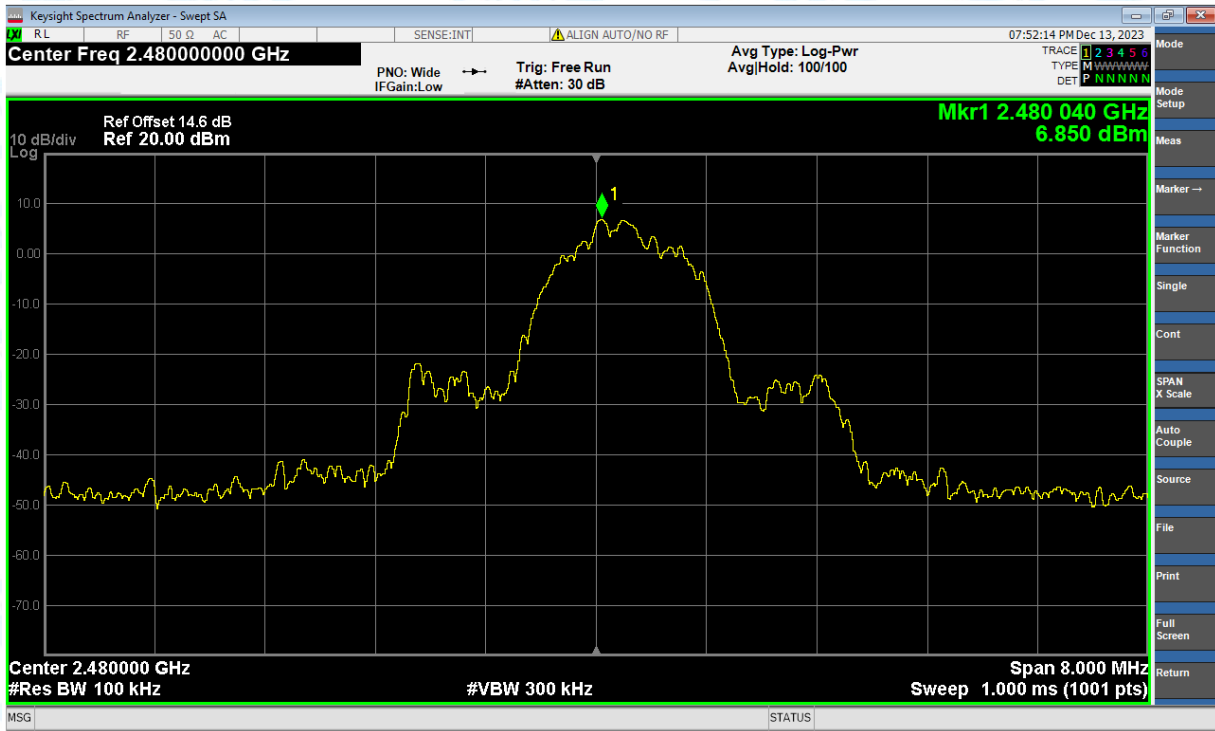


Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission

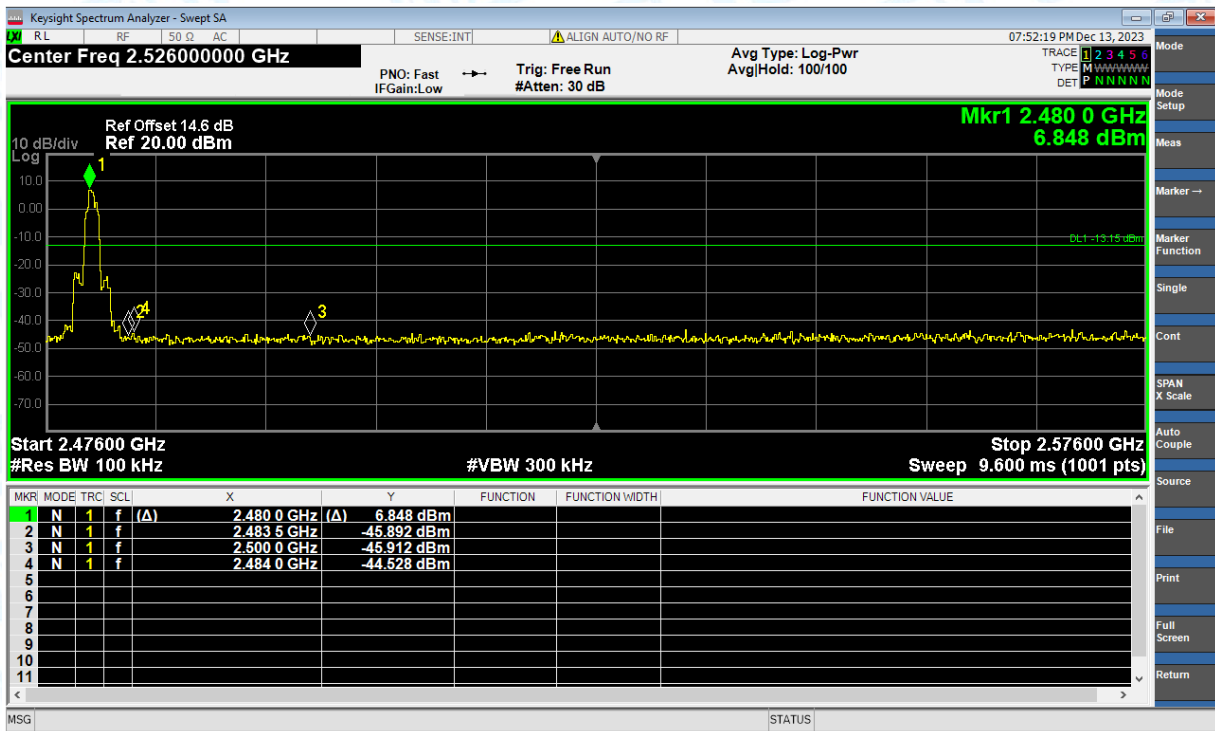




Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



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

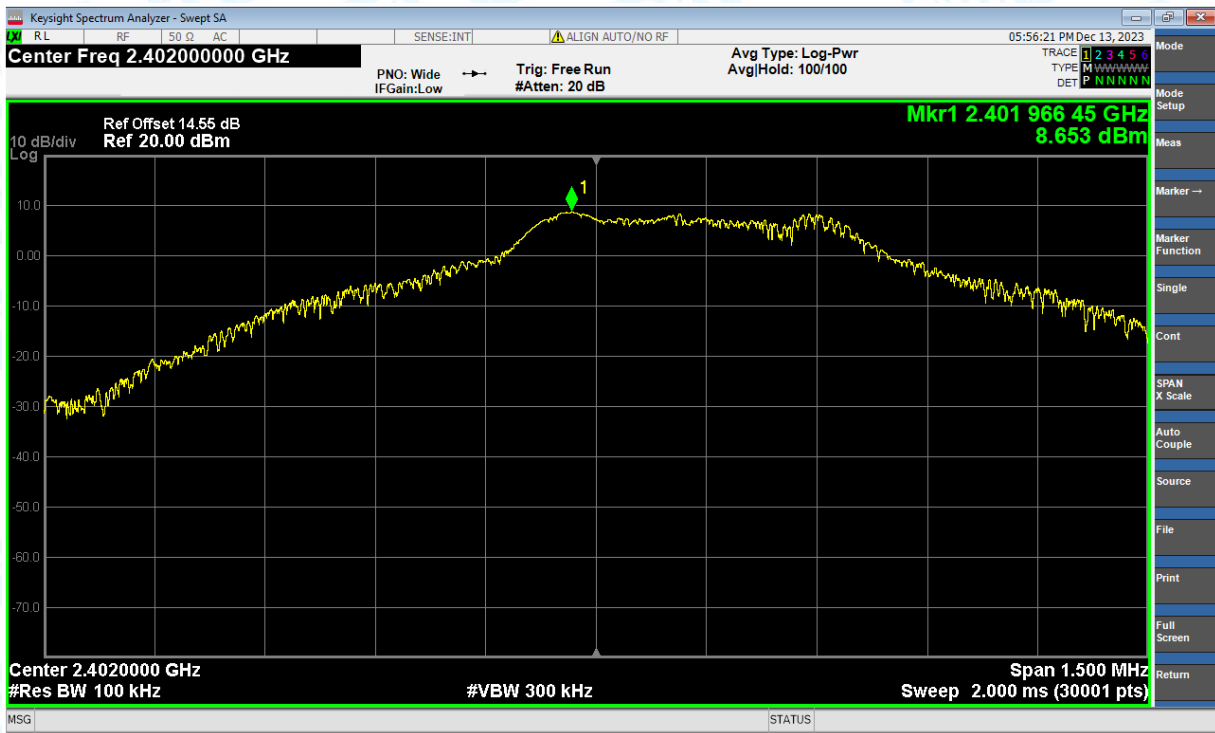


## 6. Conducted RF Spurious Emission

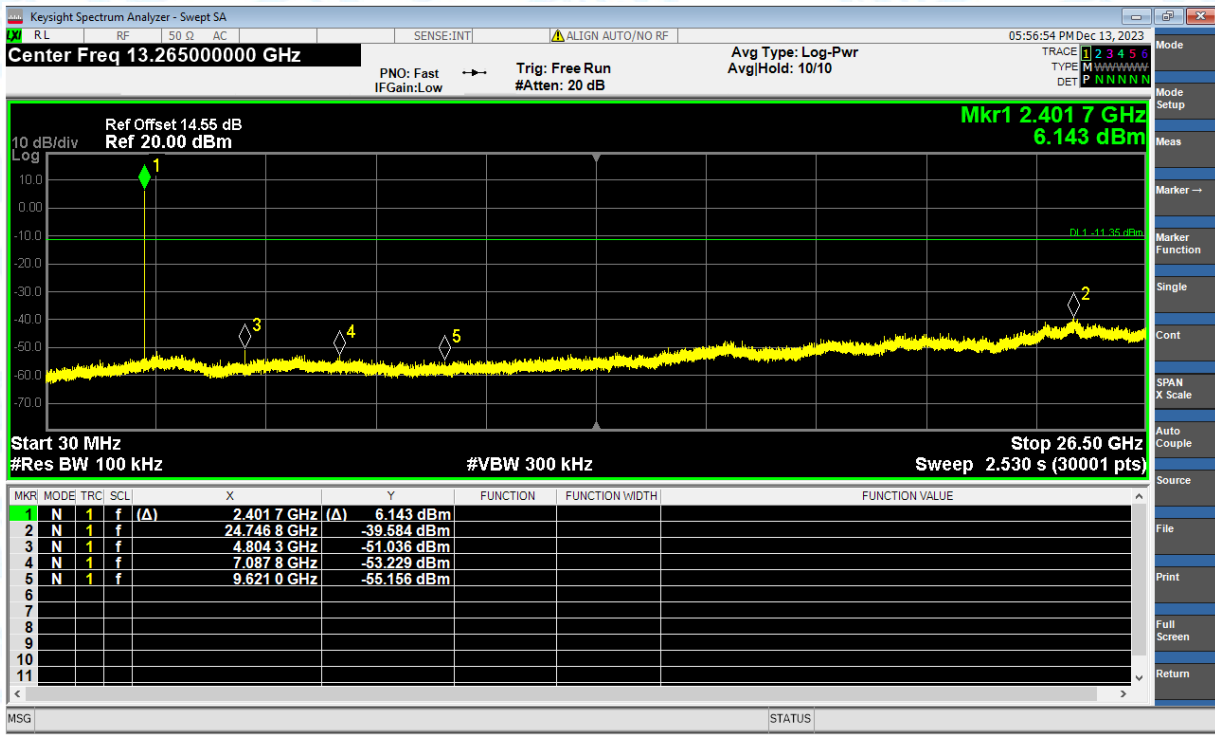
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-48.23	-20	Pass
NVNT	1-DH1	2441	Ant1	-47.94	-20	Pass
NVNT	1-DH1	2480	Ant1	-46.69	-20	Pass
NVNT	2-DH1	2402	Ant1	-48.58	-20	Pass
NVNT	2-DH1	2441	Ant1	-47.36	-20	Pass
NVNT	2-DH1	2480	Ant1	-46.57	-20	Pass
NVNT	3-DH1	2402	Ant1	-48.16	-20	Pass
NVNT	3-DH1	2441	Ant1	-47.11	-20	Pass
NVNT	3-DH1	2480	Ant1	-45.91	-20	Pass

Test Graphs

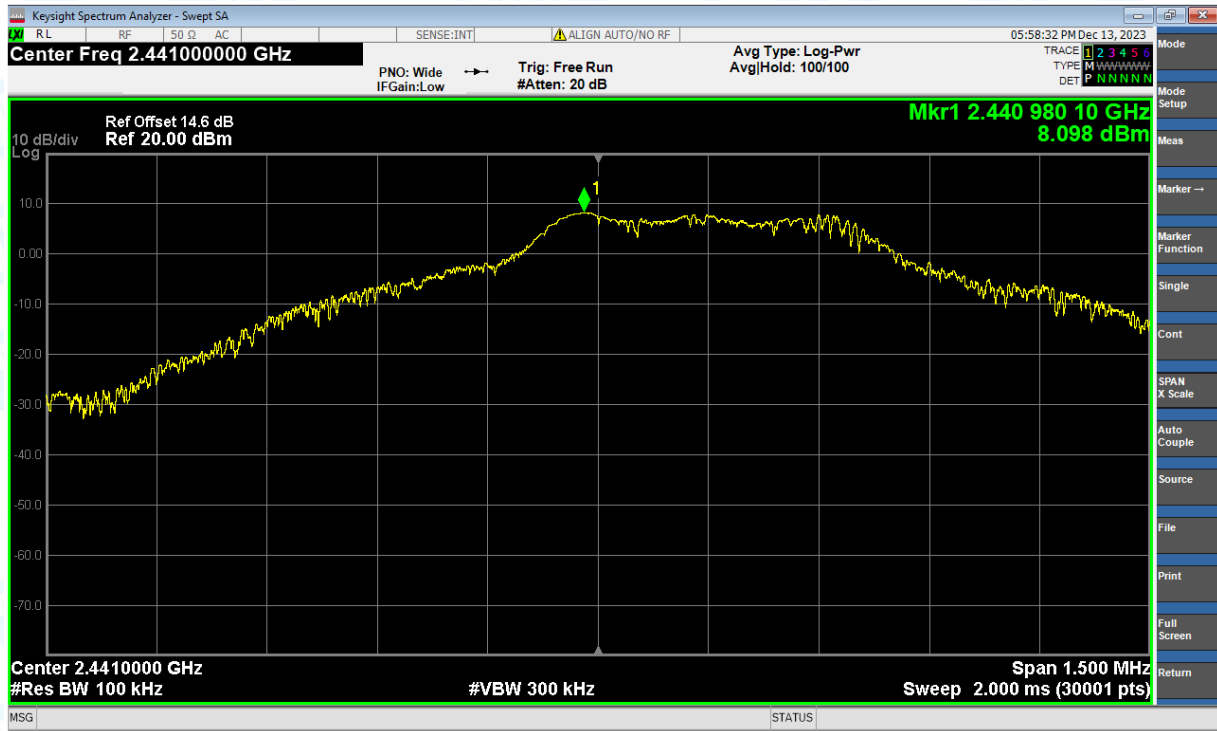
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



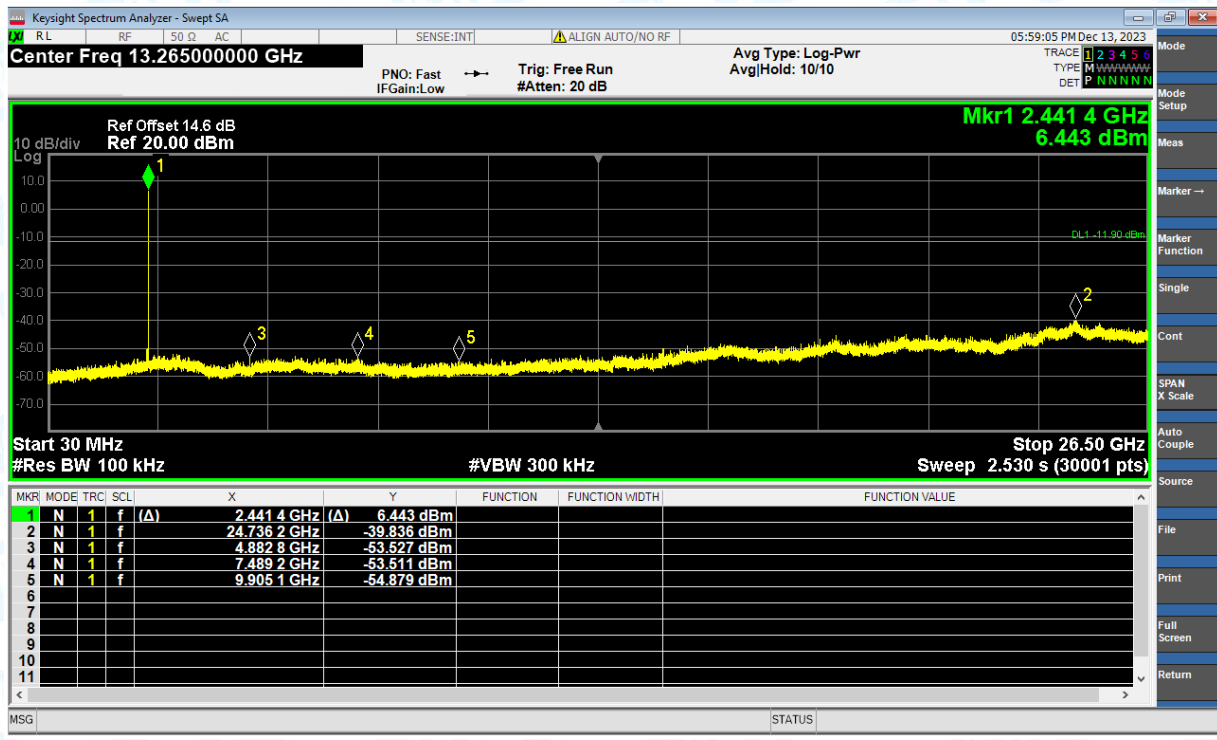
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



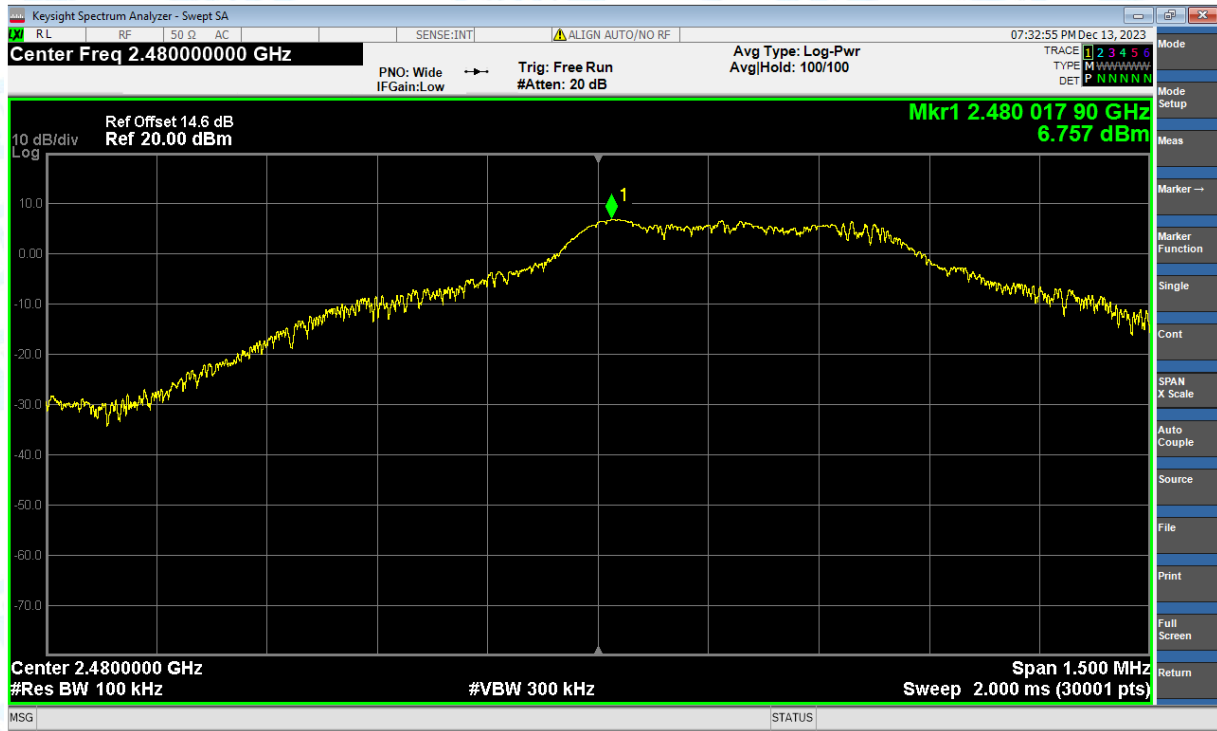
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



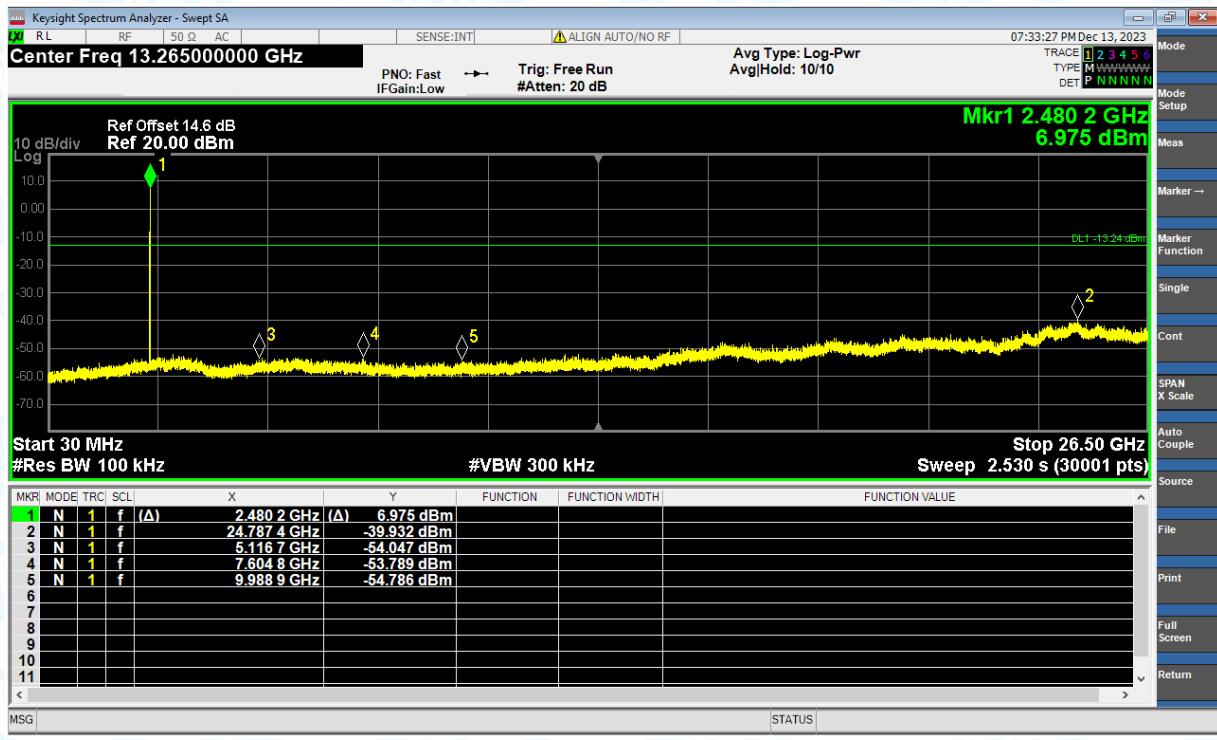
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



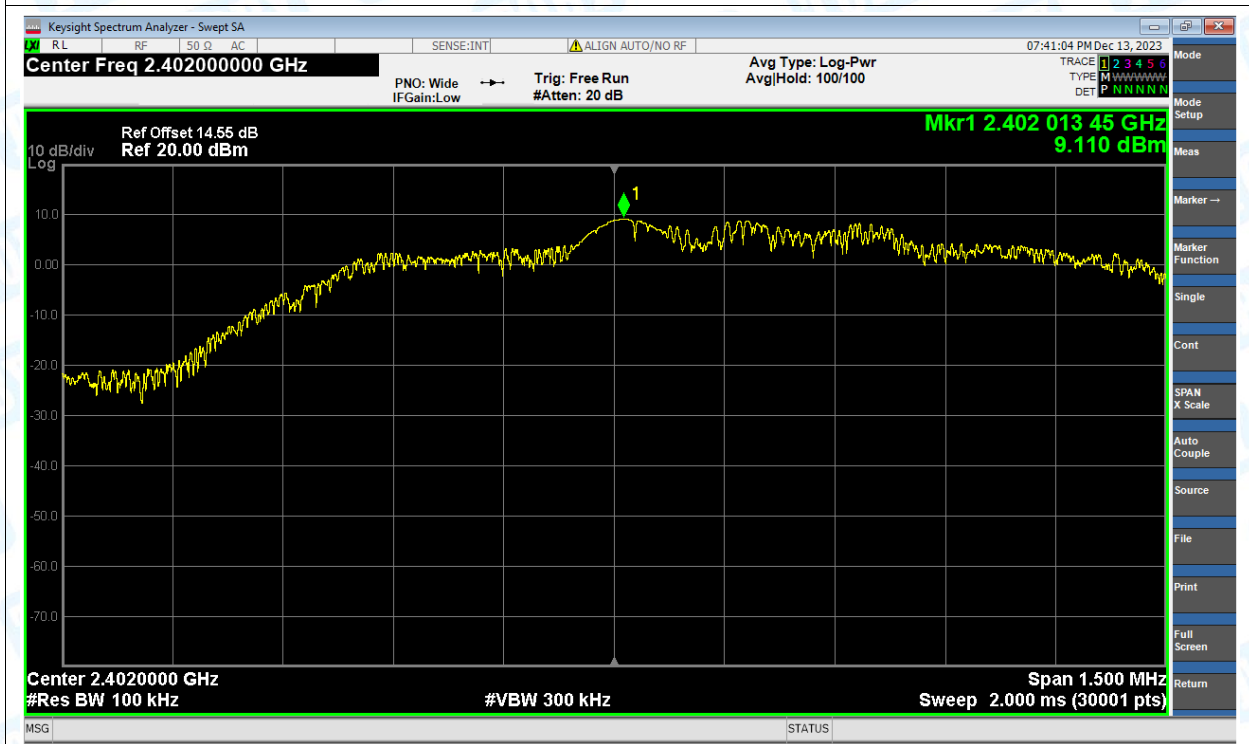
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



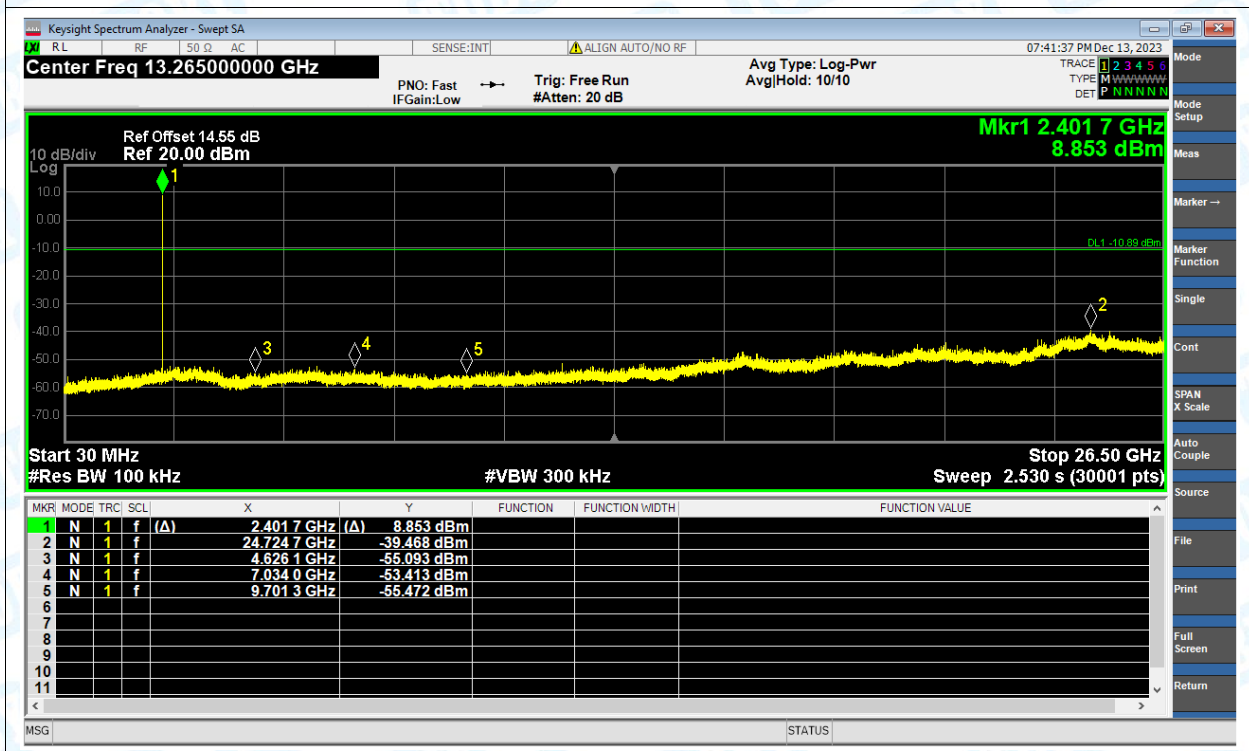
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



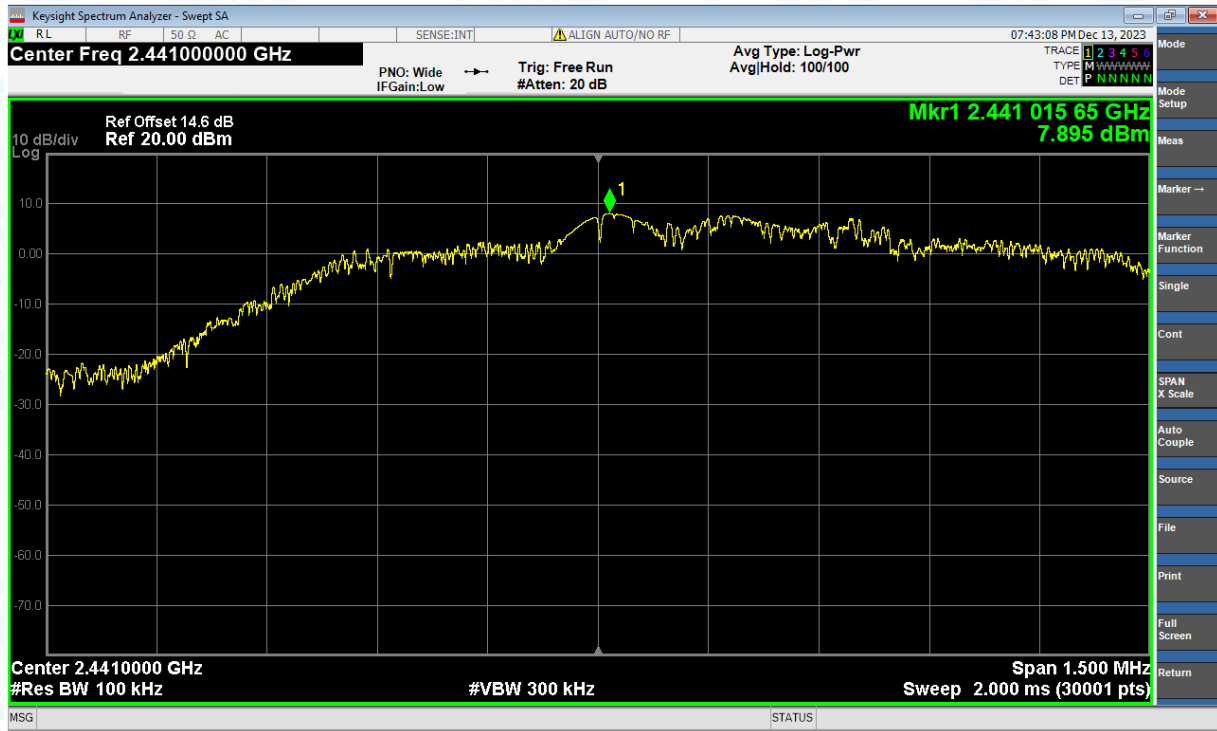
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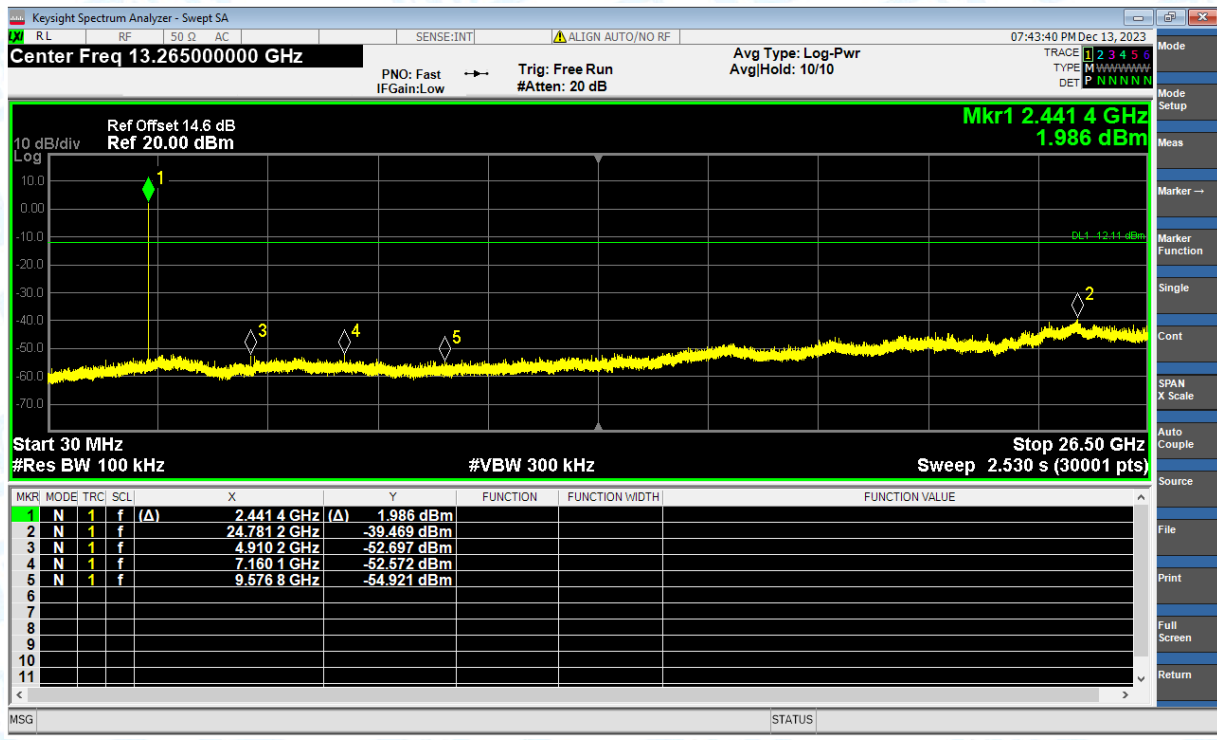
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



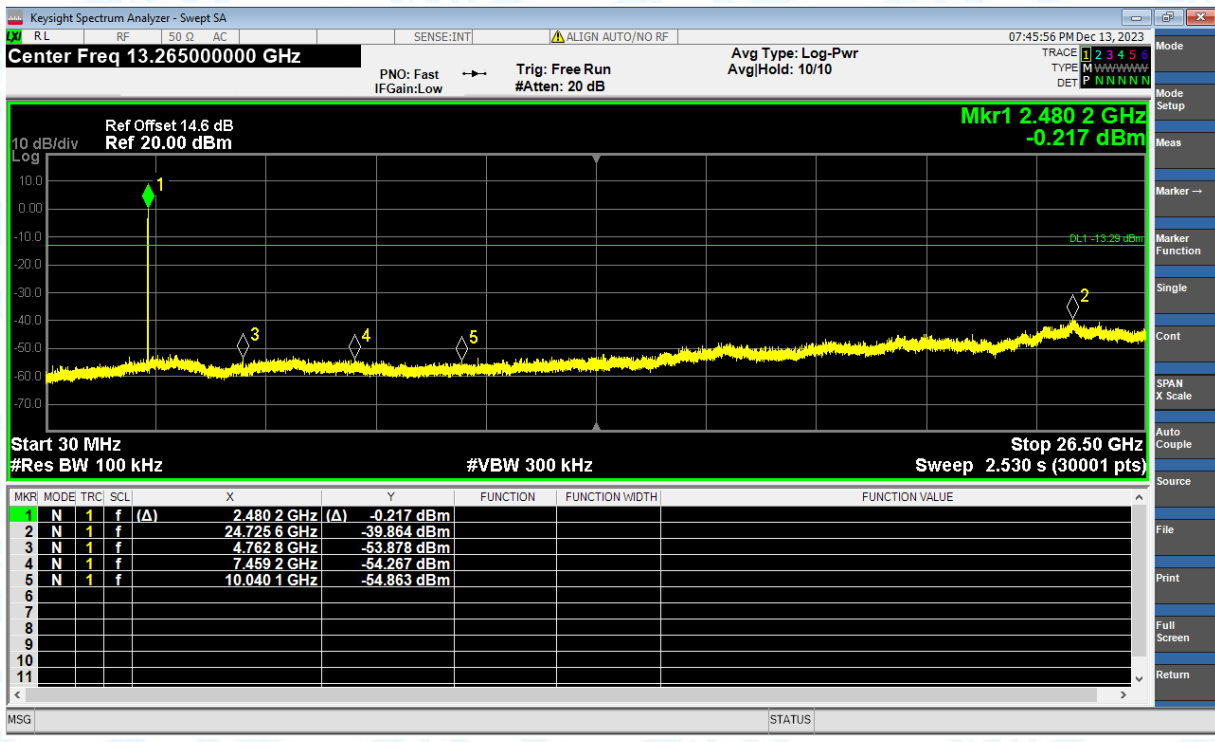
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref

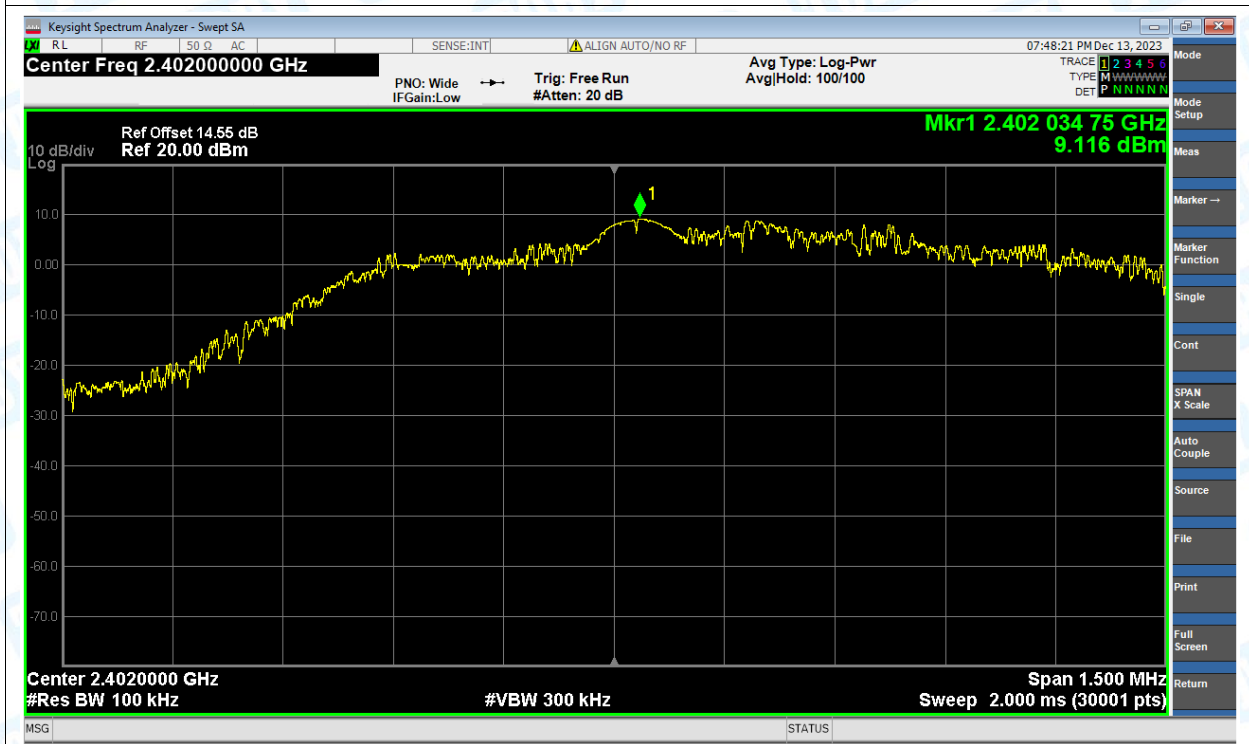


Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

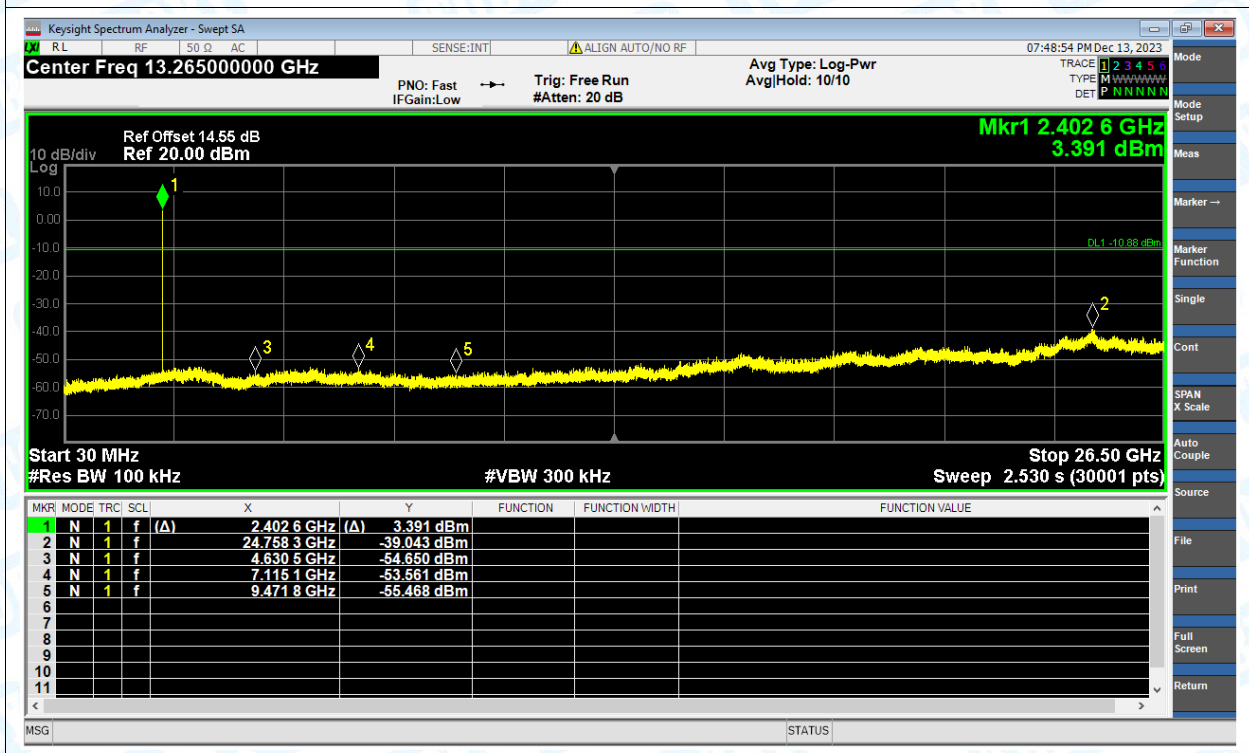




Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



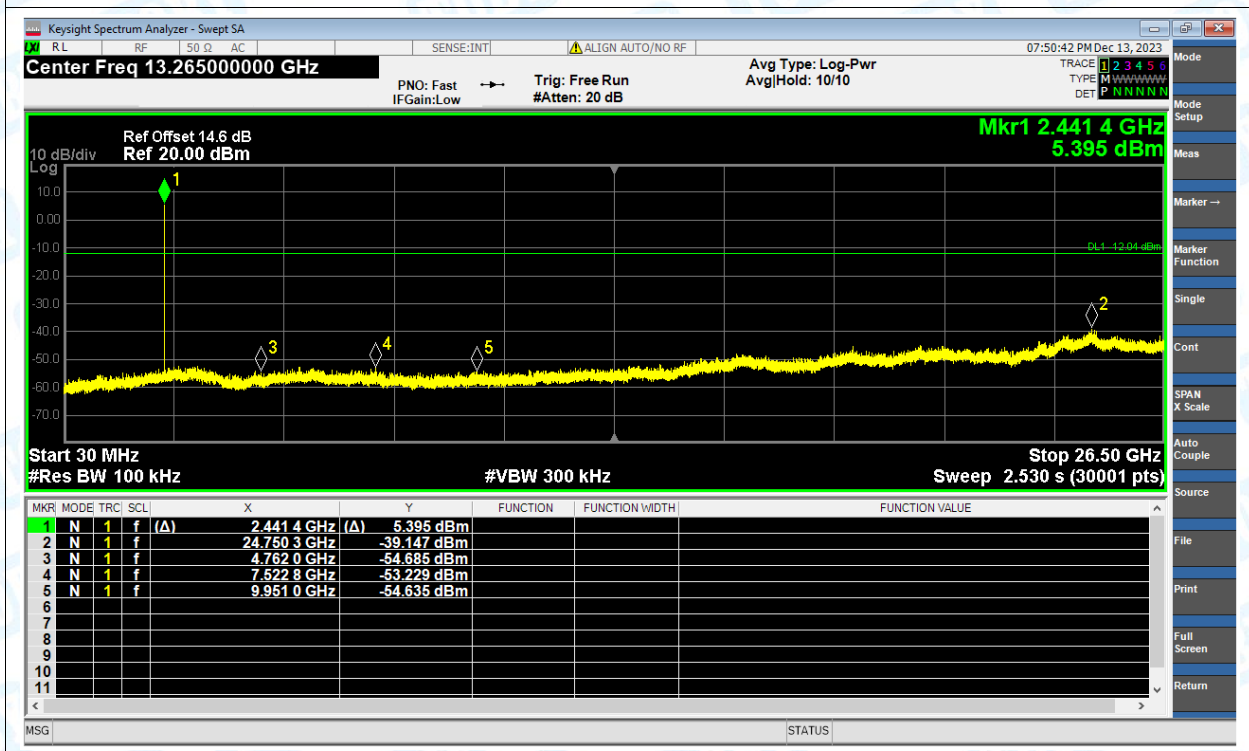
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



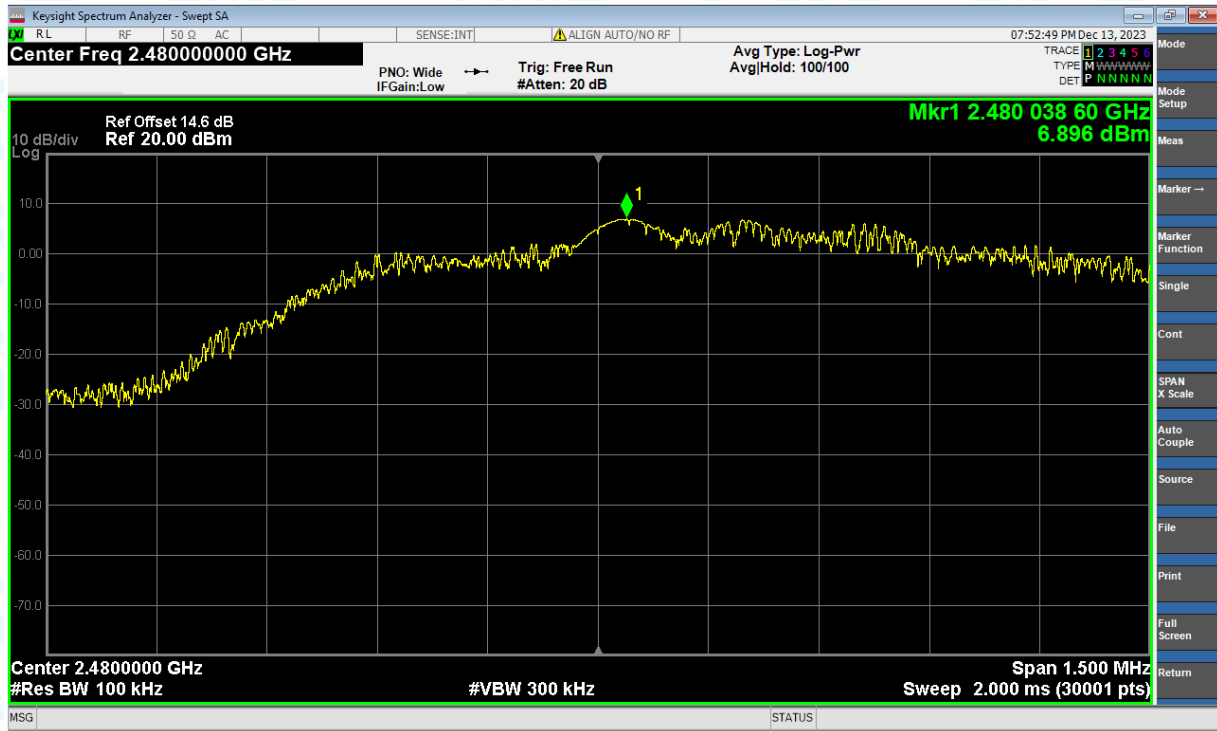
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



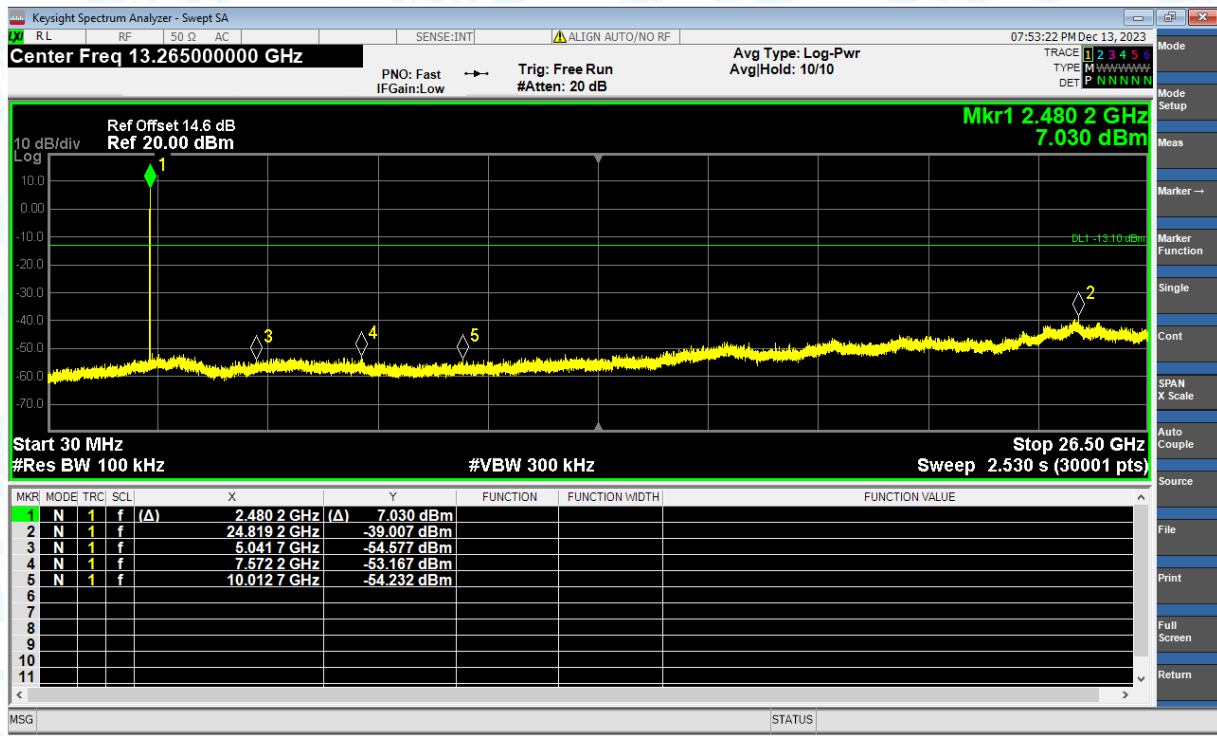
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

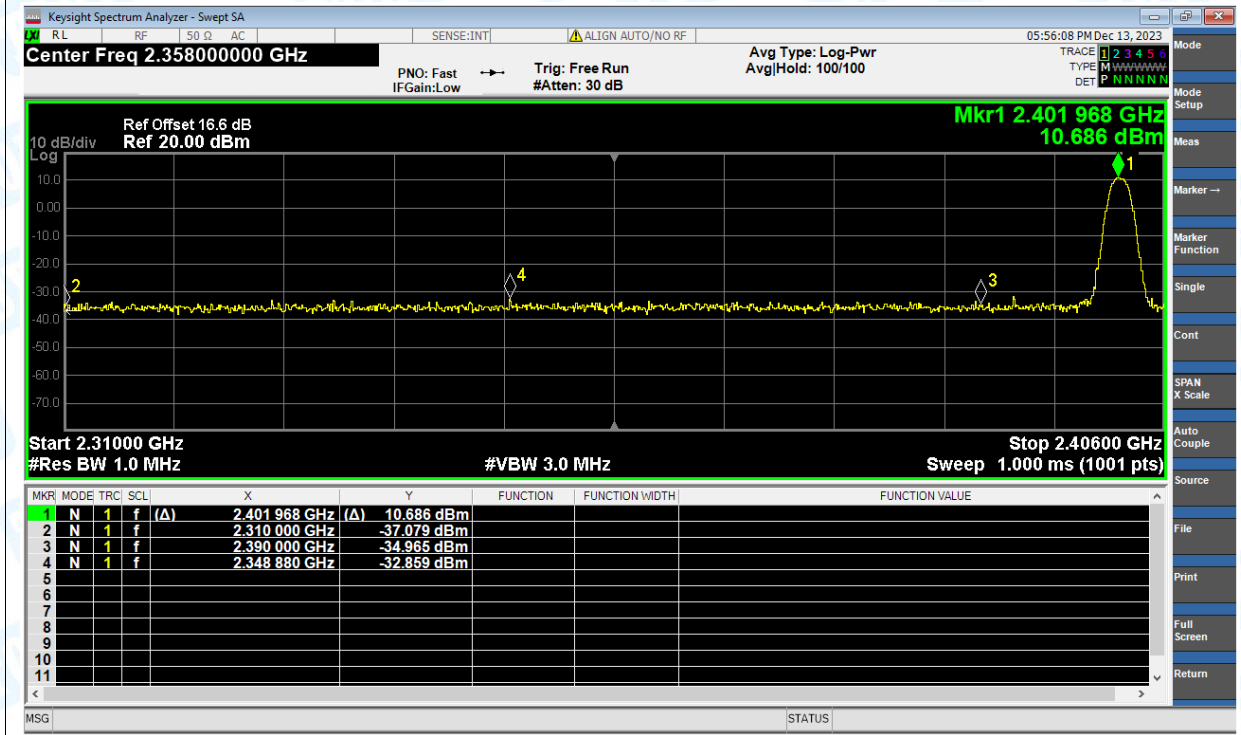


## 7. Restrict Band

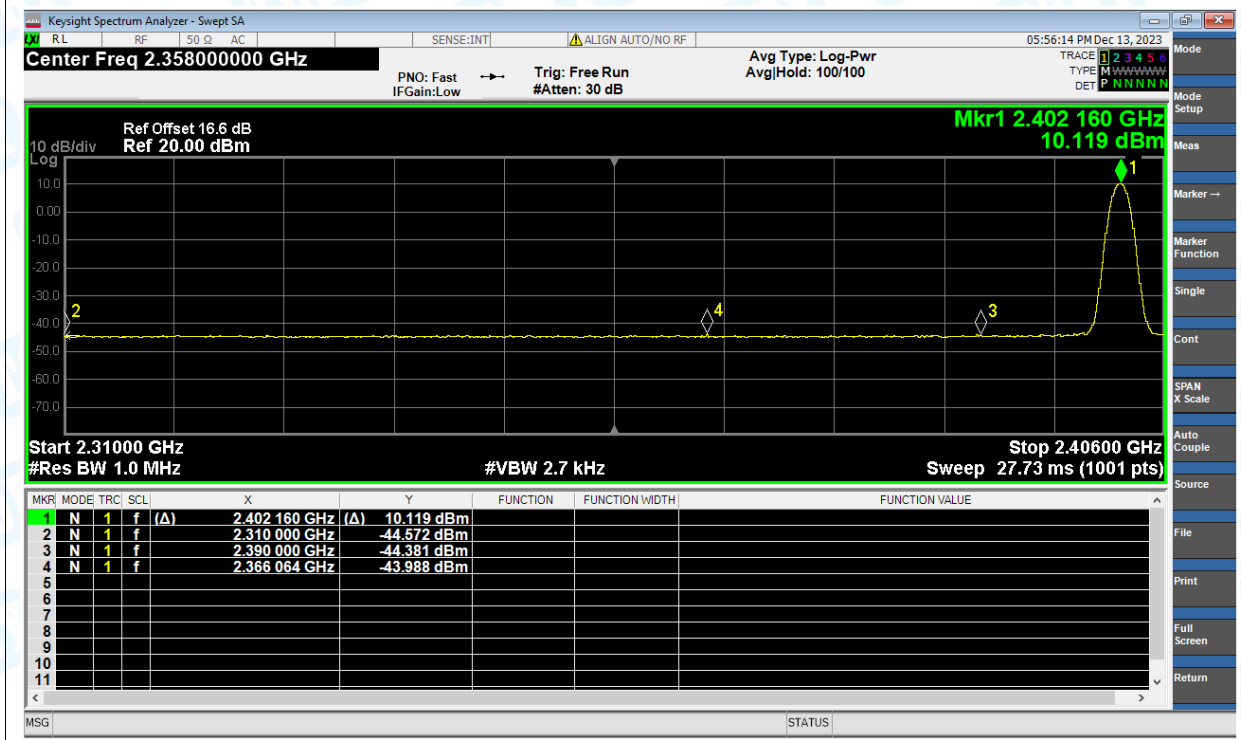
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-37.08	2.05	60.23	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-44.57	2.05	52.74	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2348.88	-32.86	2.05	64.45	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2366.064	-43.99	2.05	53.32	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-35.33	2.05	61.98	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-44.44	2.05	52.87	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-34.04	2.05	63.27	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-43.79	2.05	53.52	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2492.008	-31.06	2.05	66.25	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2484.664	-43.75	2.05	53.56	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-34.23	2.05	63.08	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-44.38	2.05	52.93	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-34.73	2.05	62.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-44.54	2.05	52.77	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2313.168	-33.23	2.05	64.08	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2316.72	-44.12	2.05	53.19	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-35.73	2.05	61.58	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-44.66	2.05	52.65	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-35.39	2.05	61.92	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-43.9	2.05	53.41	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2493.328	-32.1	2.05	65.21	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.656	-43.7	2.05	53.61	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-35.72	2.05	61.59	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-44.3	2.05	53.01	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-36.54	2.05	60.77	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-44.75	2.05	52.56	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2384.496	-33.04	2.05	64.27	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2321.136	-44.13	2.05	53.18	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-36.58	2.05	60.73	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-44.64	2.05	52.67	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-35.96	2.05	61.35	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-43.96	2.05	53.35	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2491	-31.38	2.05	65.93	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.872	-43.85	2.05	53.46	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-34.79	2.05	62.52	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-44.4	2.05	52.91	Average	54	Pass

Test Graphs

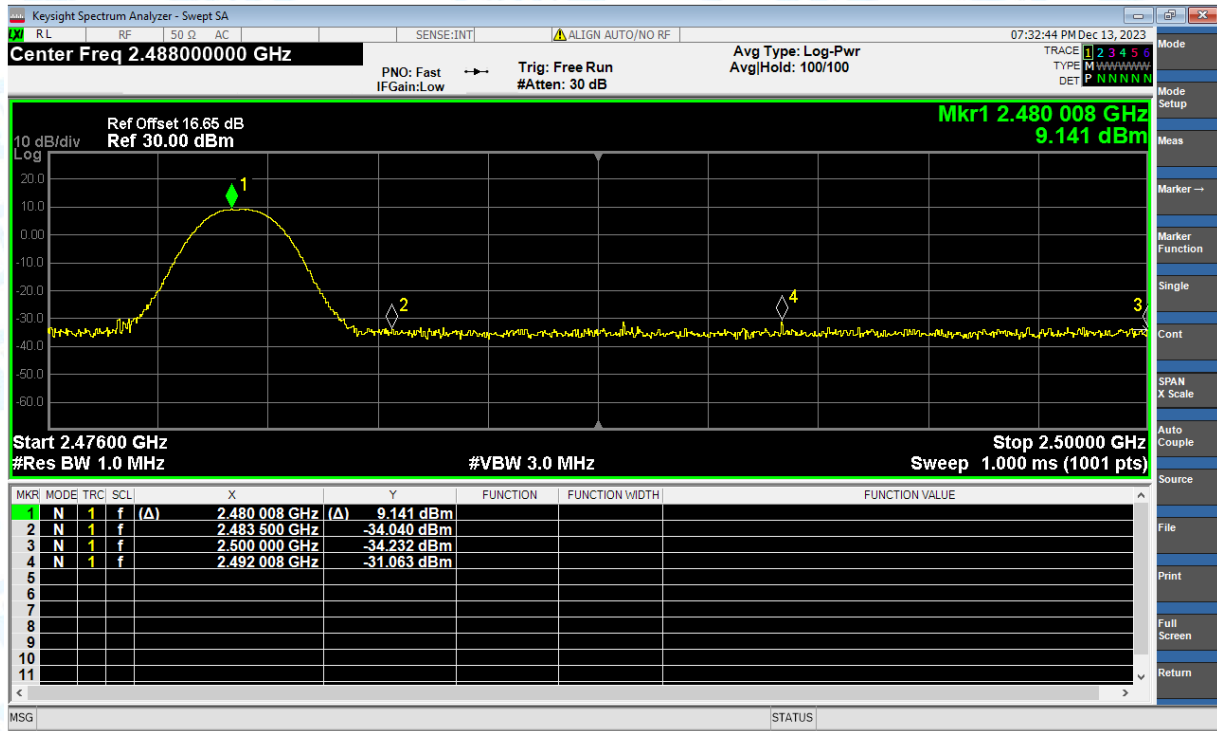
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



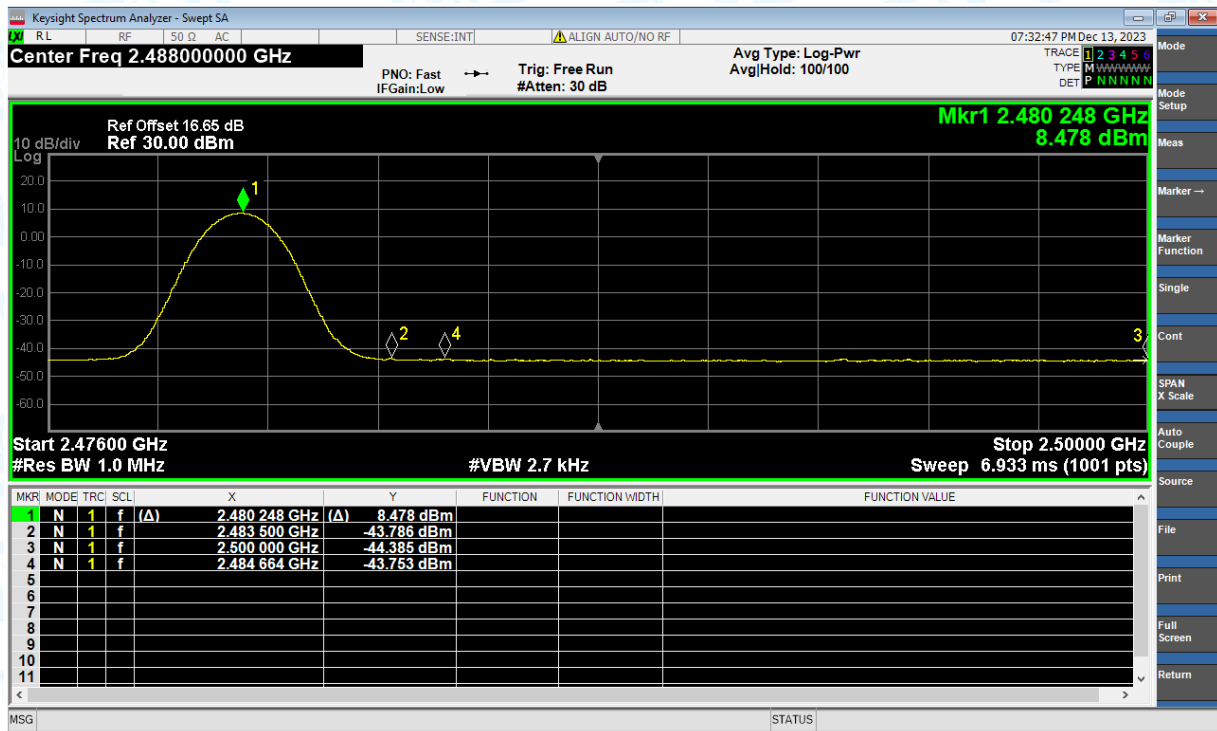
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



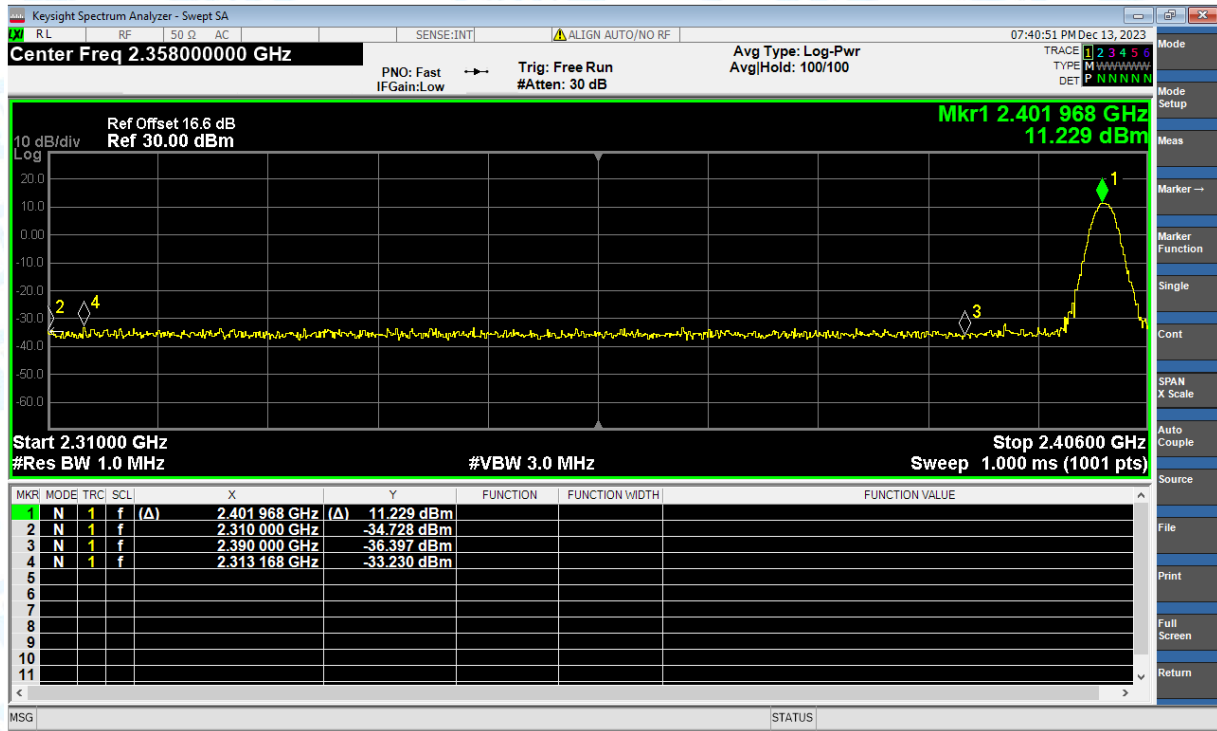
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



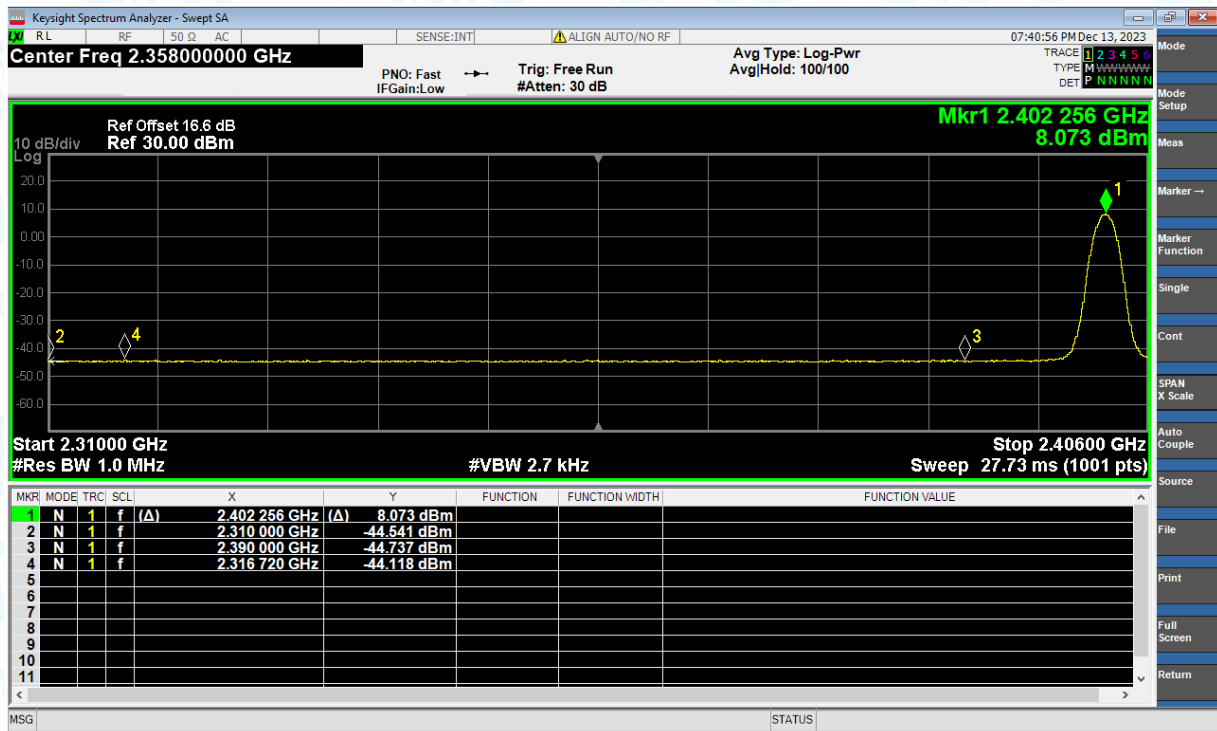
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



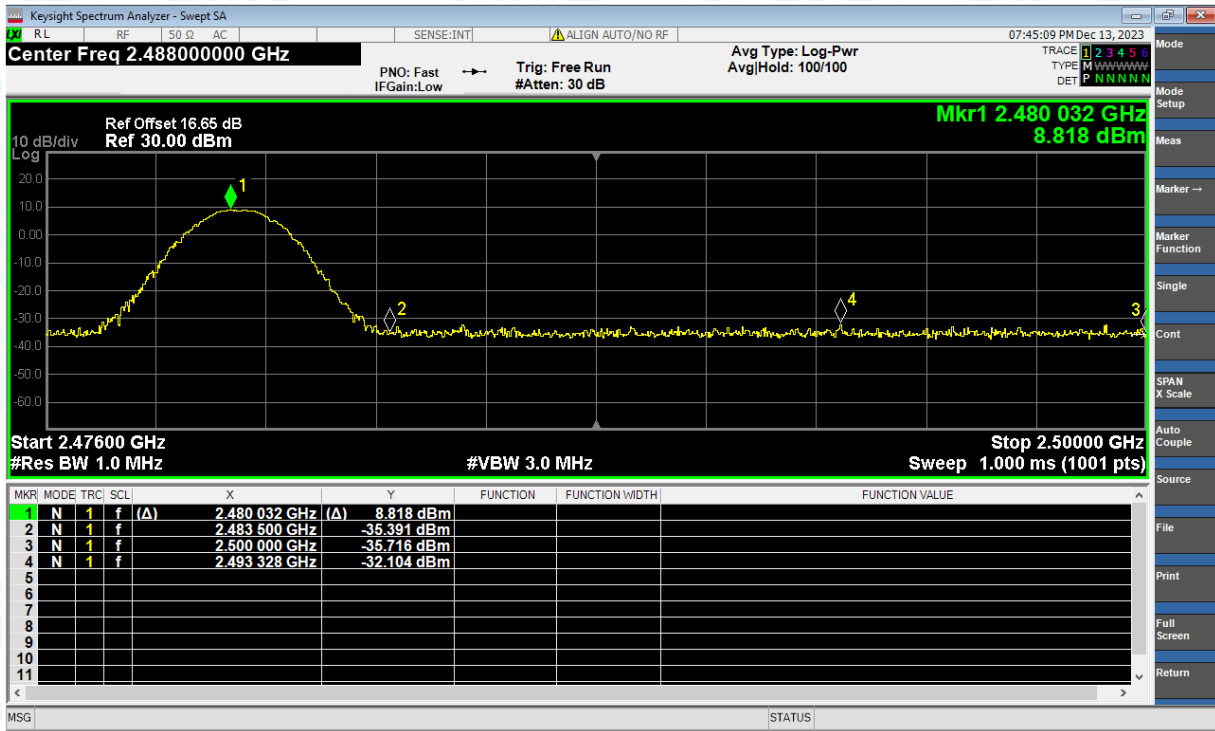
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



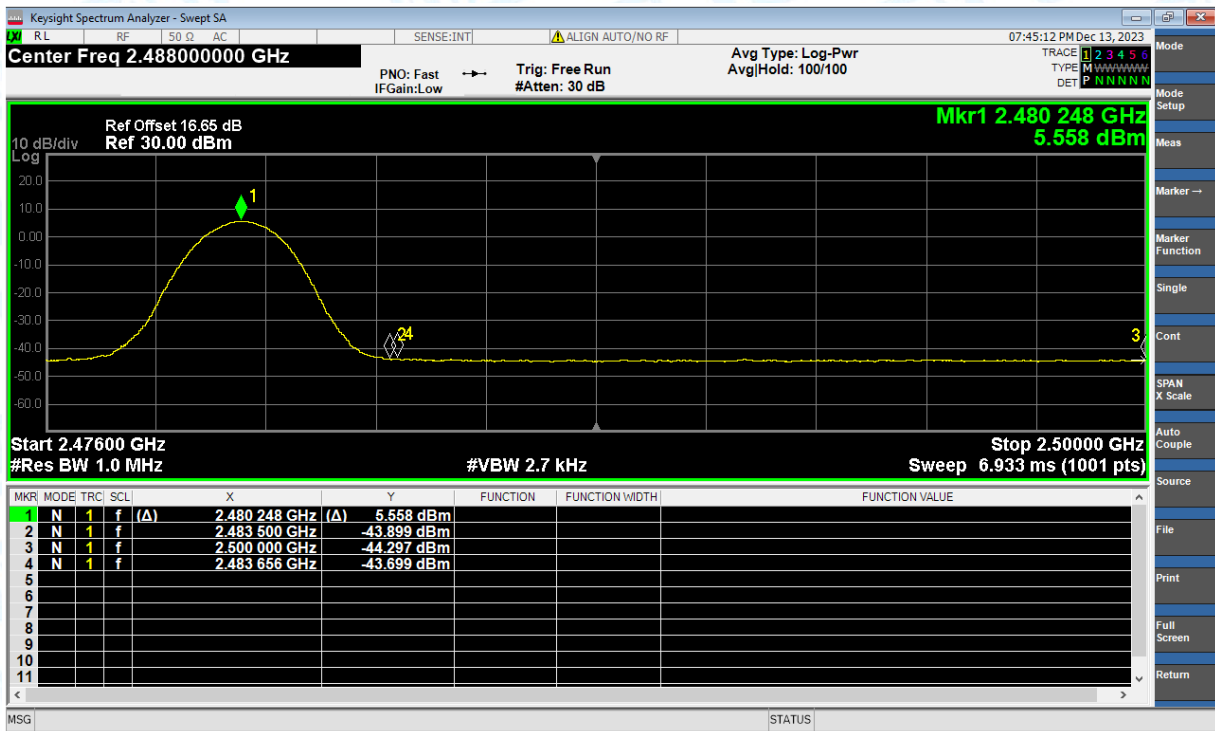
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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

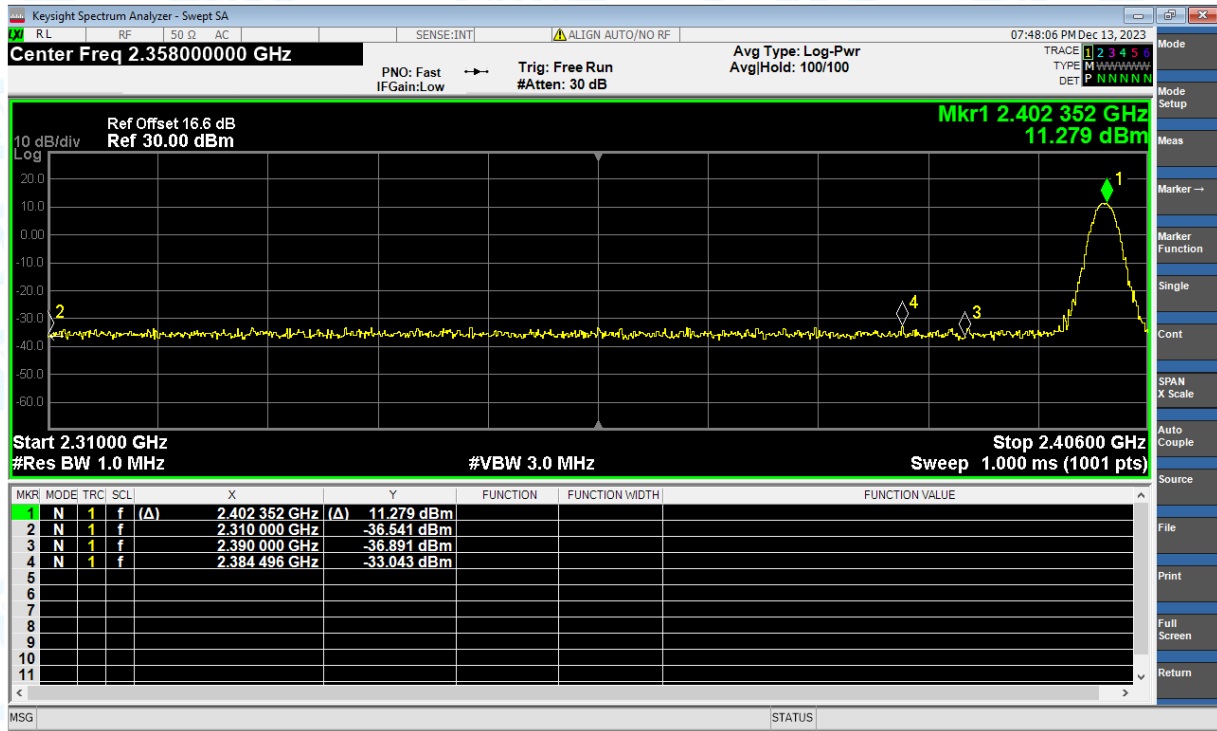


Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average

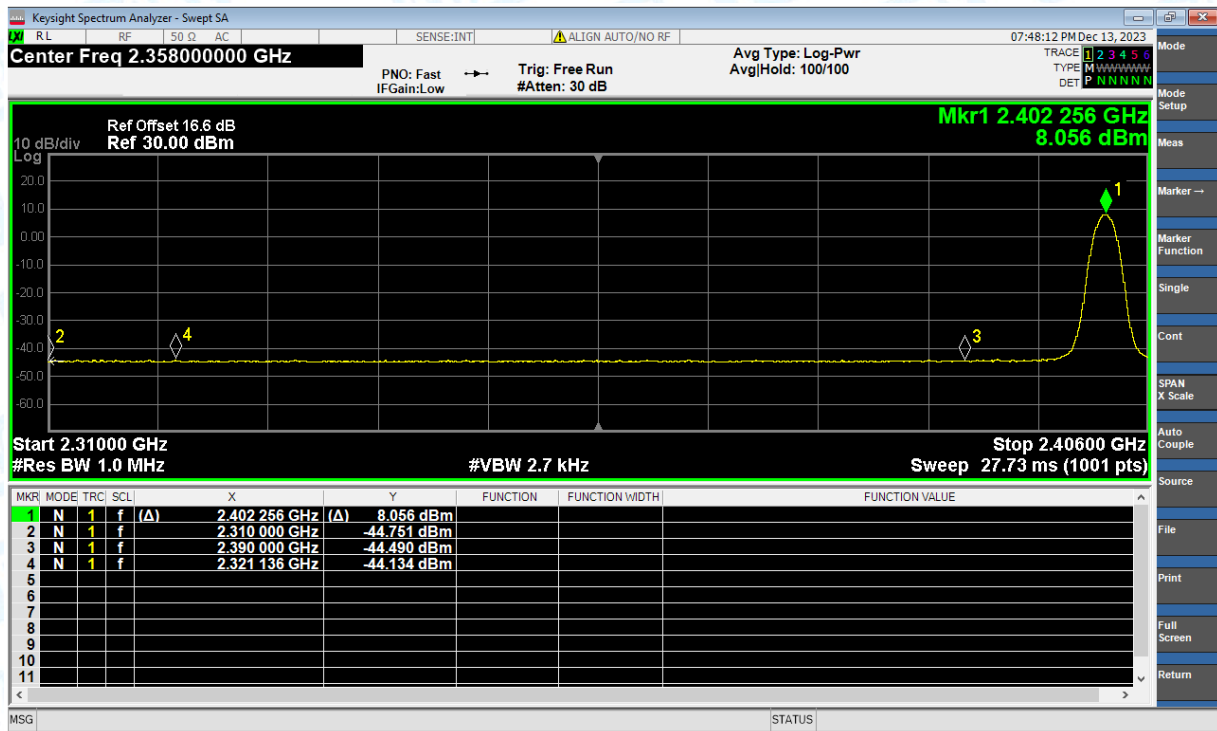




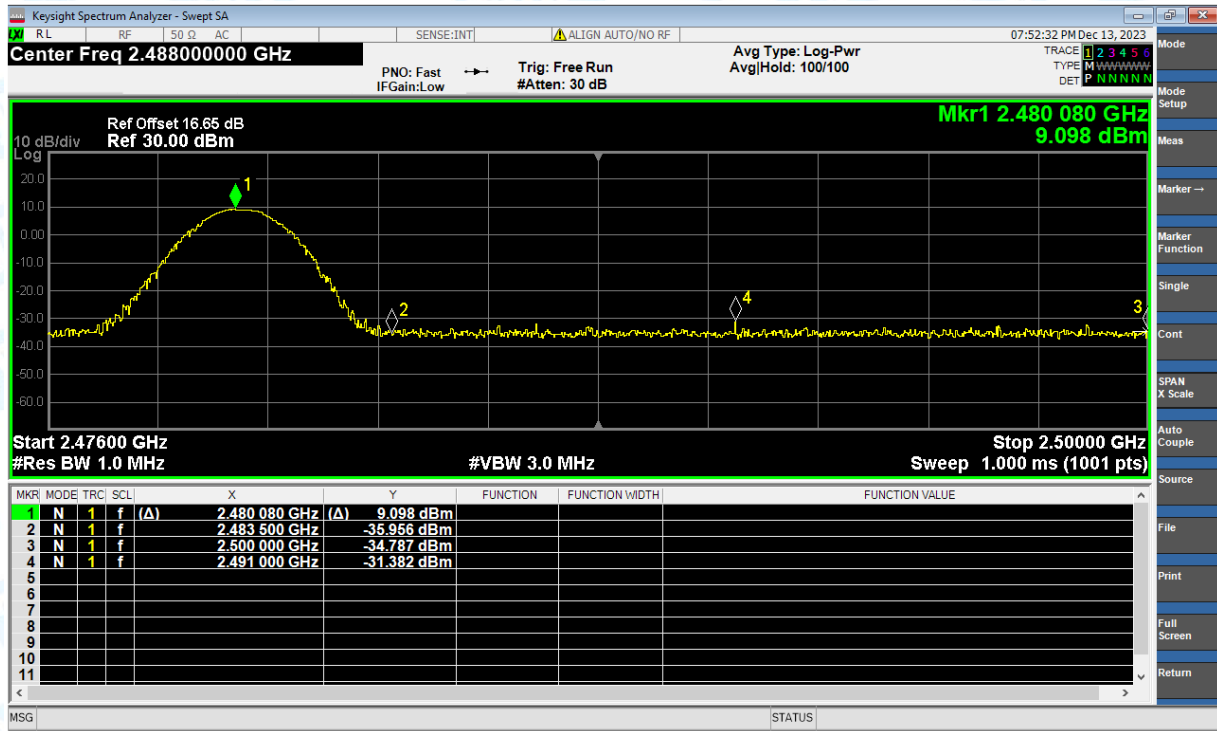
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



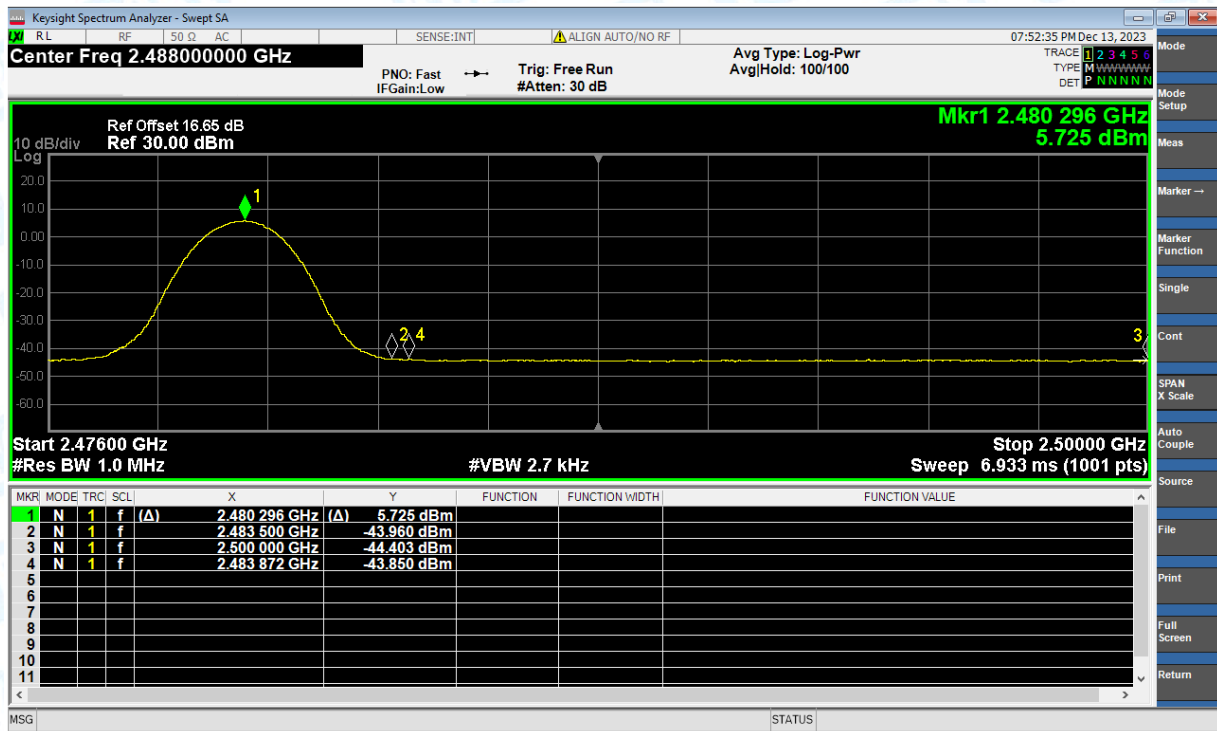
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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



## 8. Band Edge(Hopping)

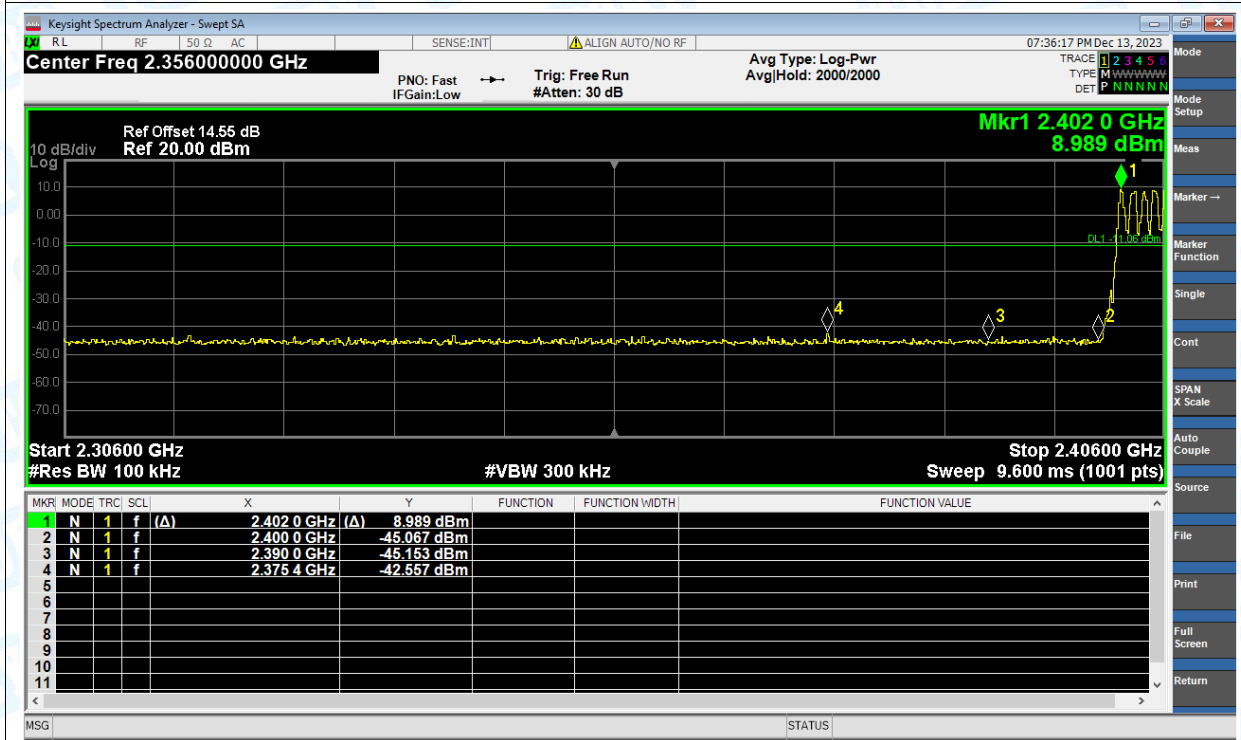
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-51.50	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-49.65	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.35	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-50.34	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-52.27	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-50.60	-20	Pass

Test Graphs

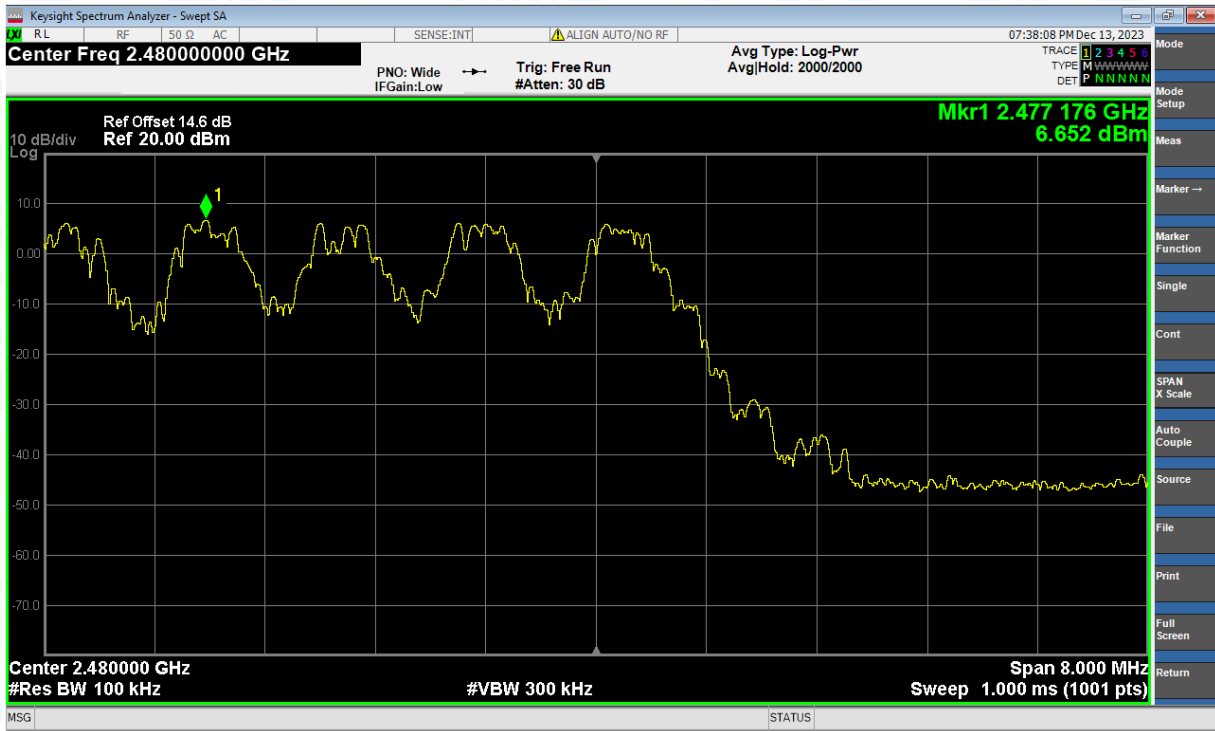
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



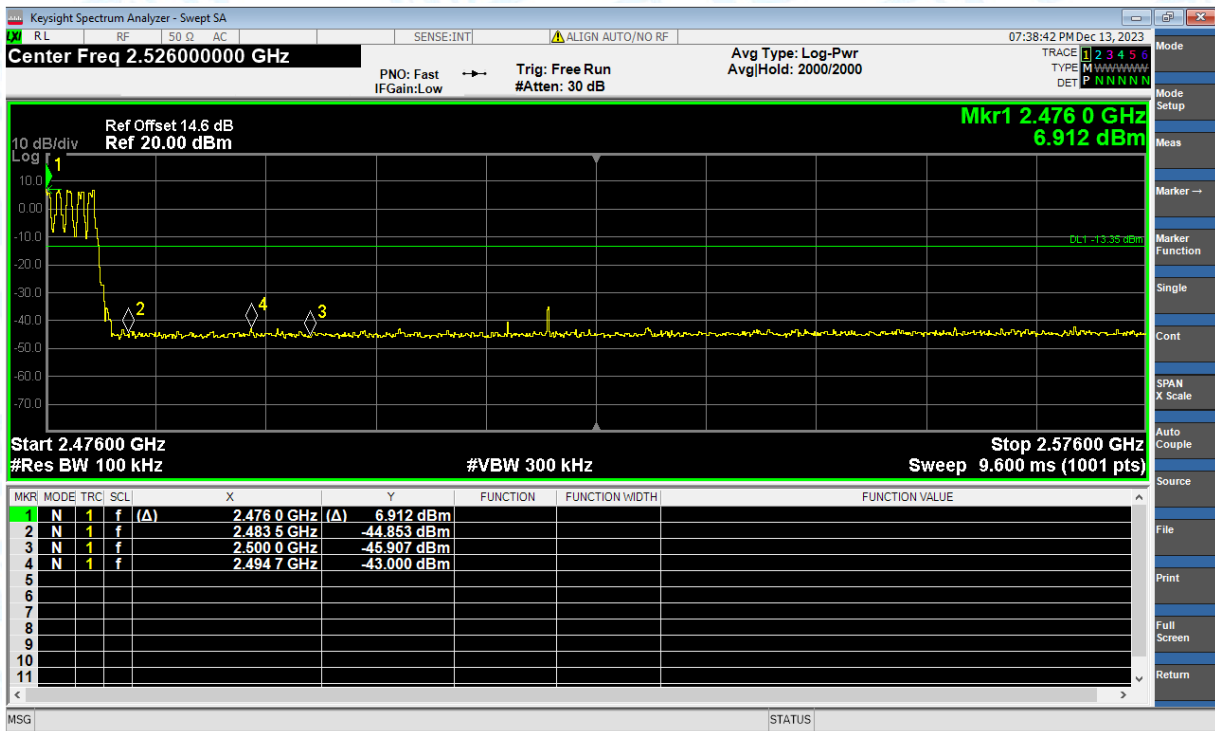
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



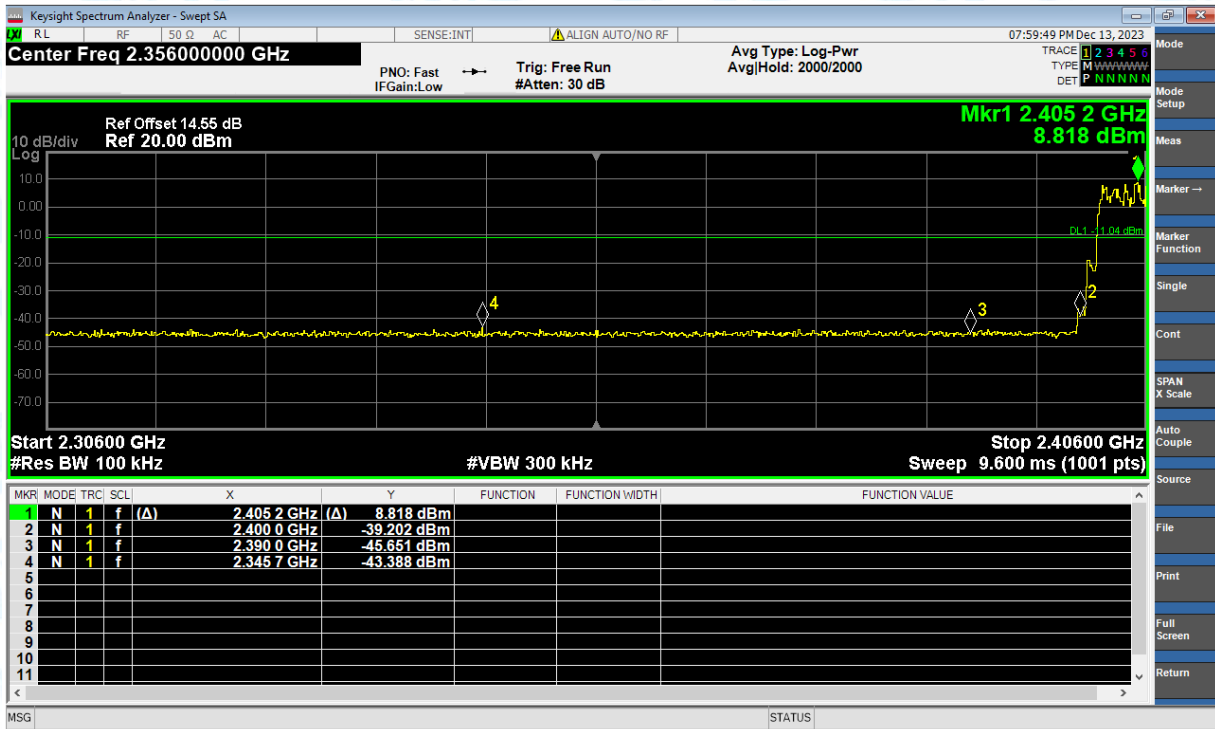
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



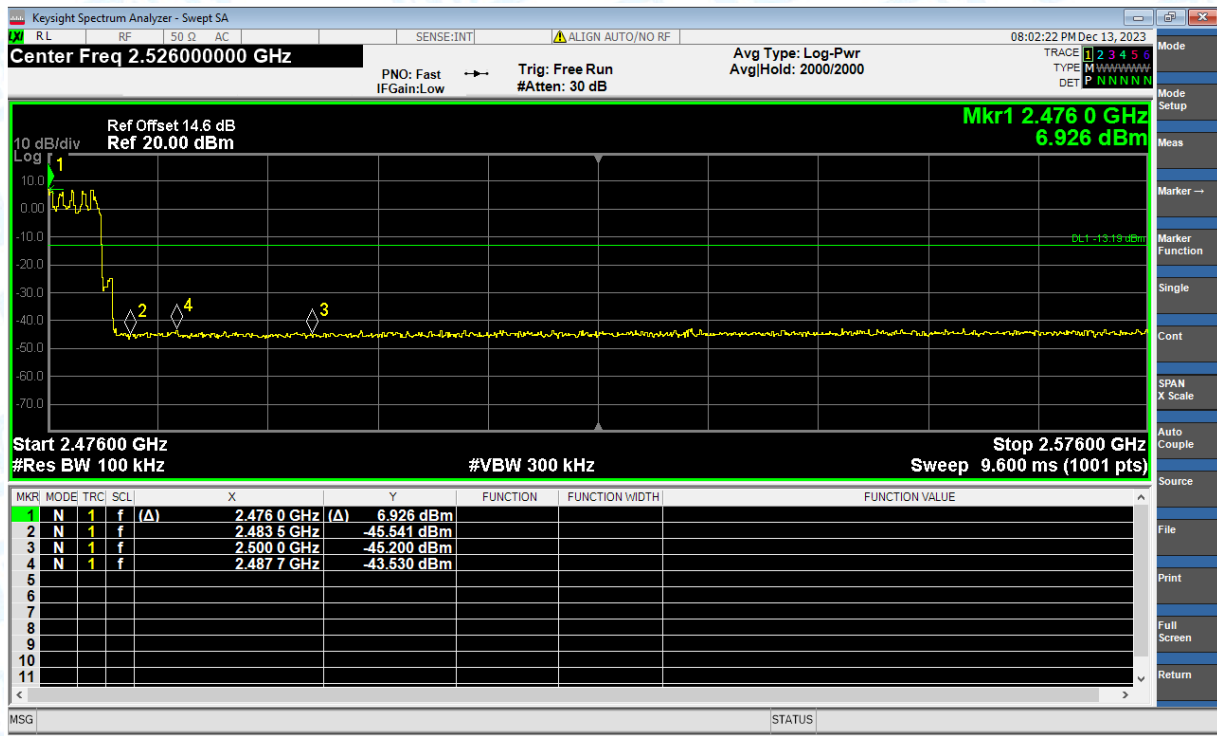
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



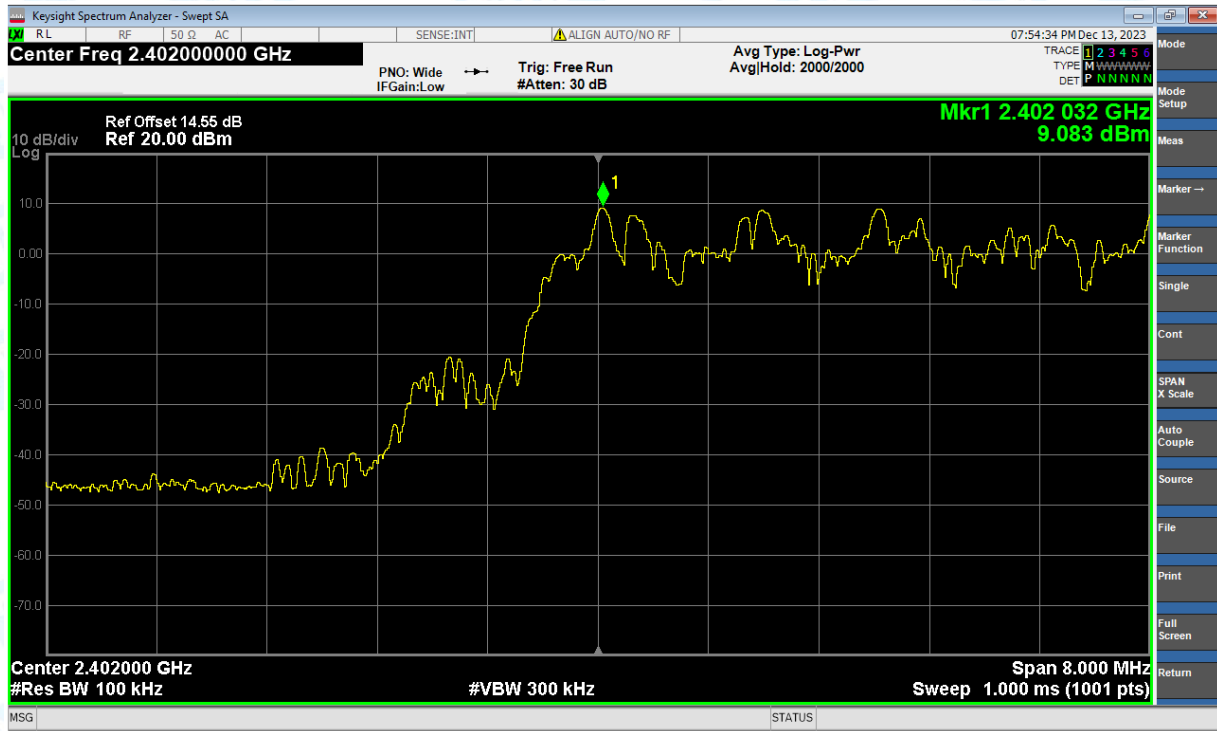
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Ref



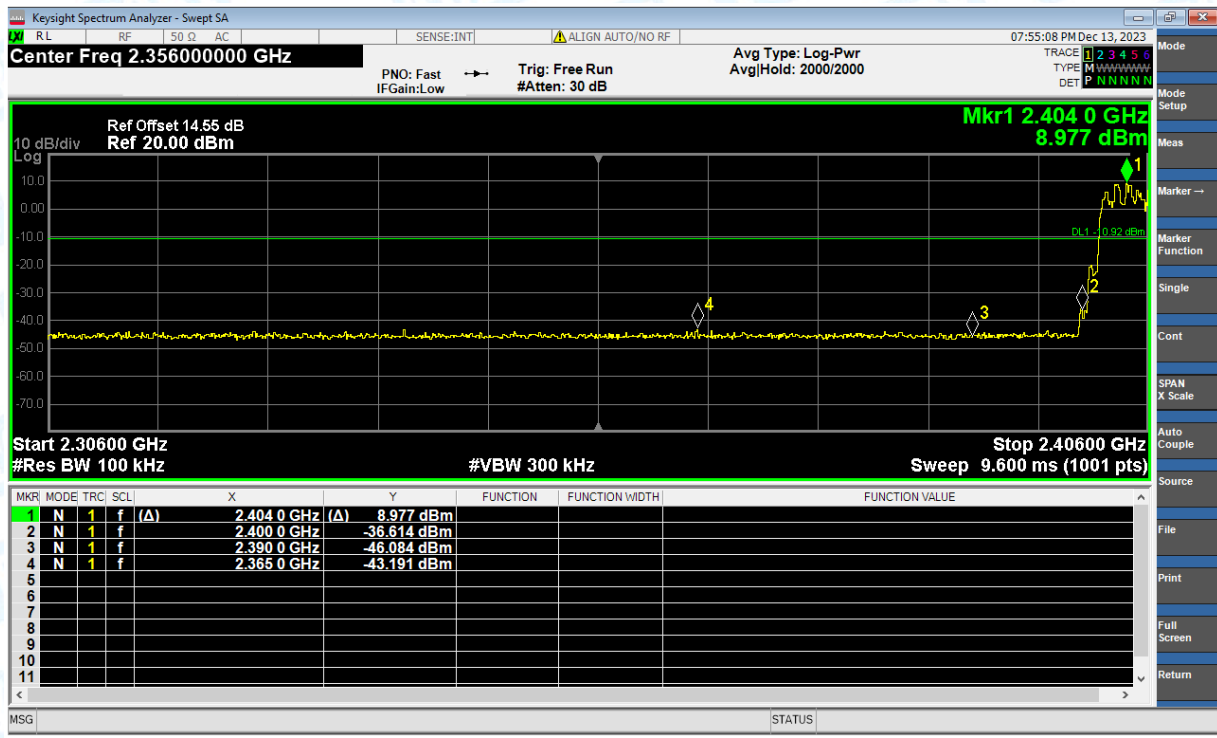
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



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

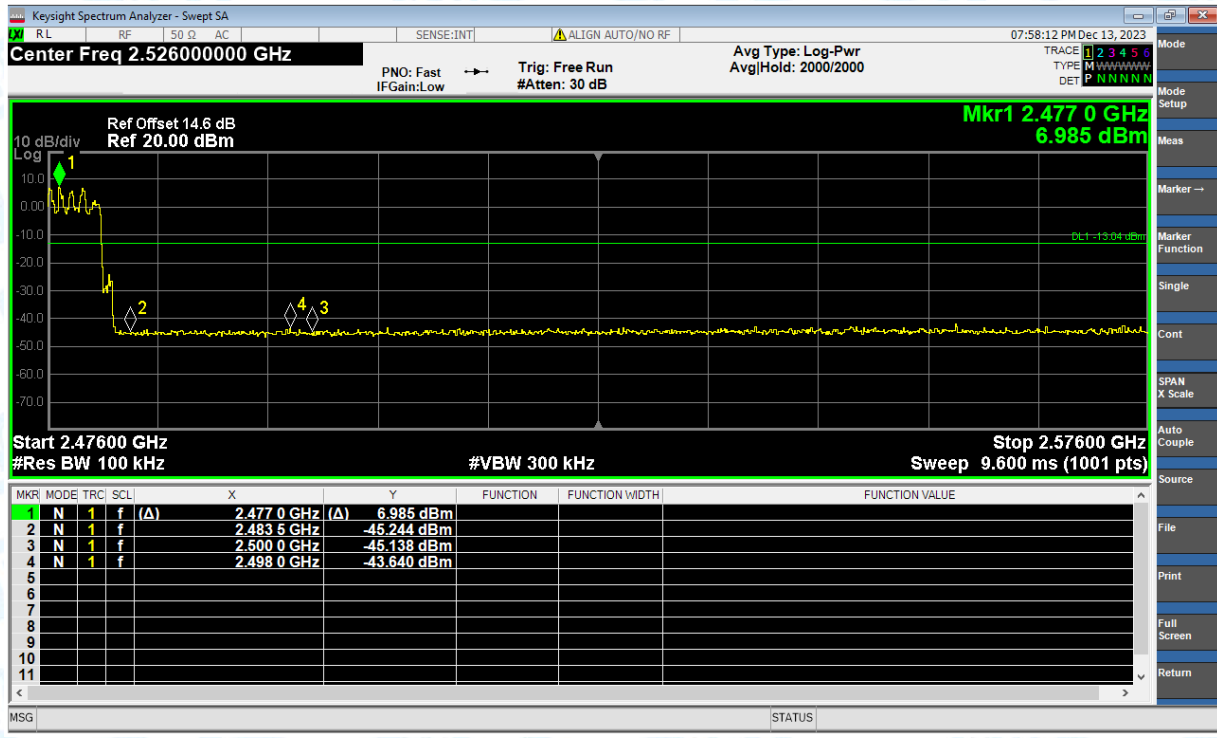




Band Edge(Hopping) NVNT 3-DH1 2480MHz Ant1 Hopping Ref



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

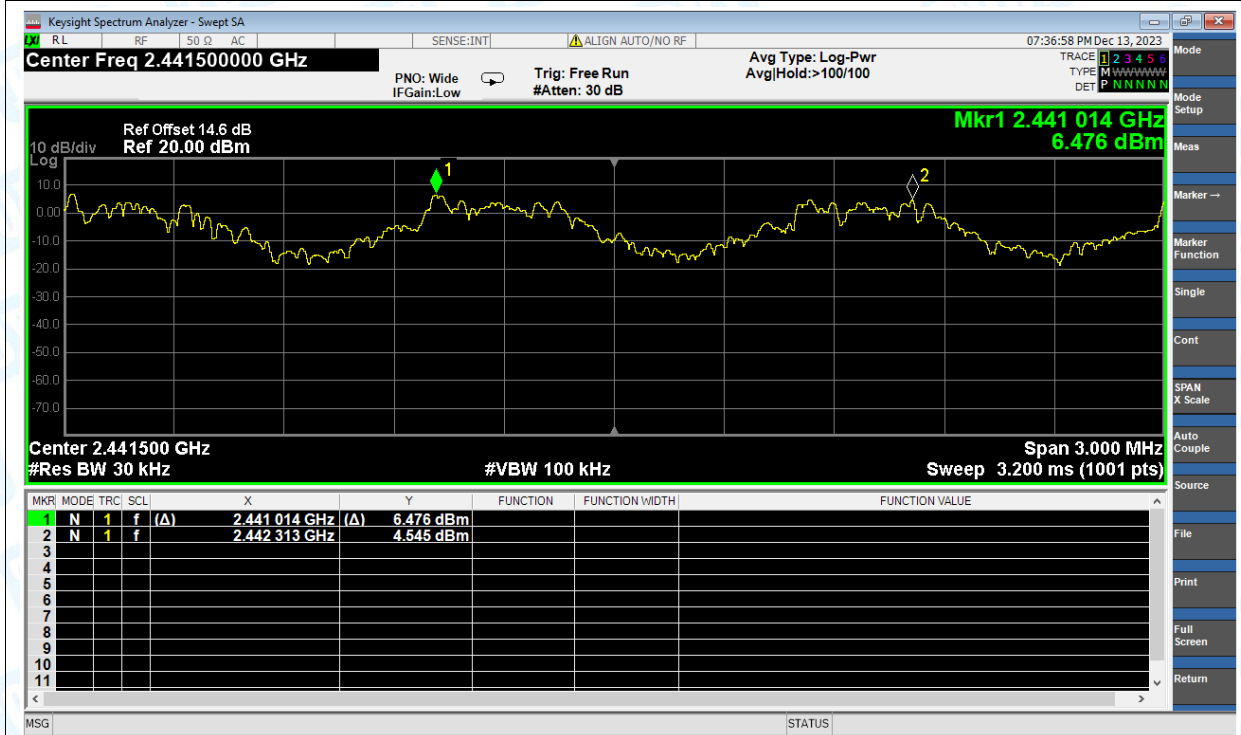


## 9. Carrier Frequencies Separation

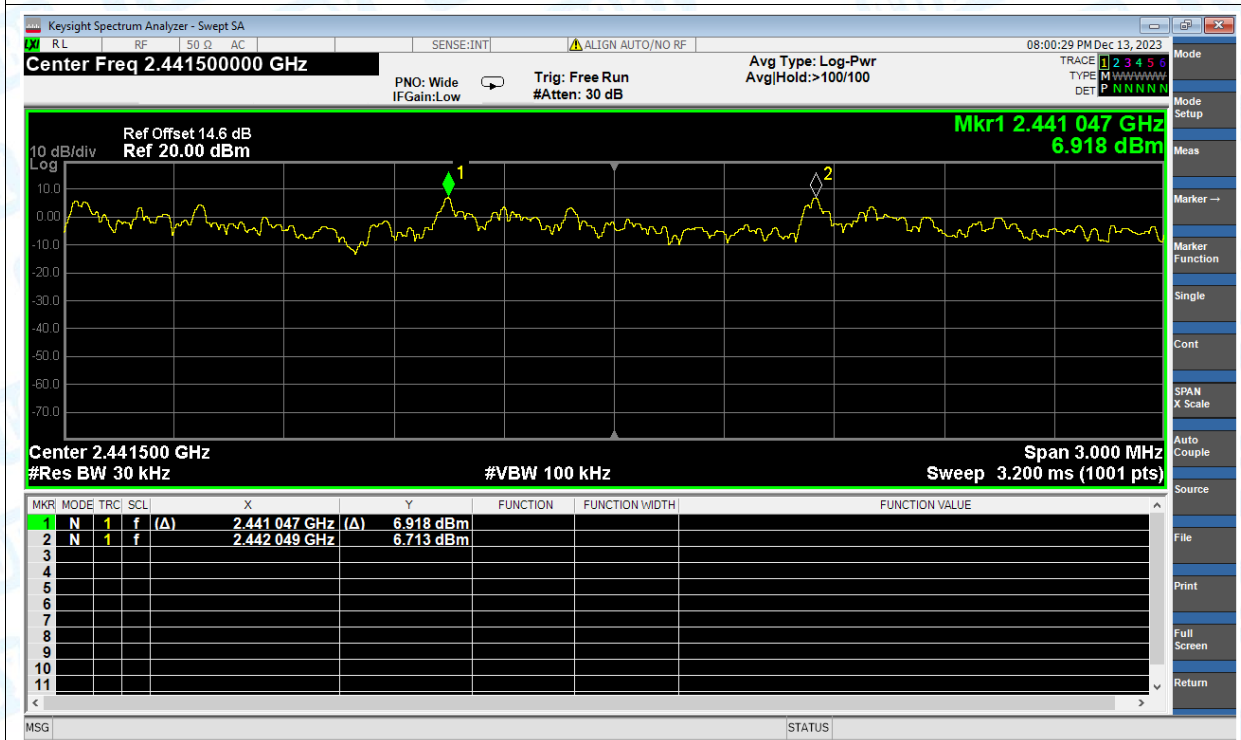
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2441.014	2442.313	1.299	0.62	Pass
NVNT	2-DH1	Ant1	2441.047	2442.049	1.002	0.82	Pass
NVNT	3-DH1	Ant1	2441.035	2442.163	1.128	0.81	Pass

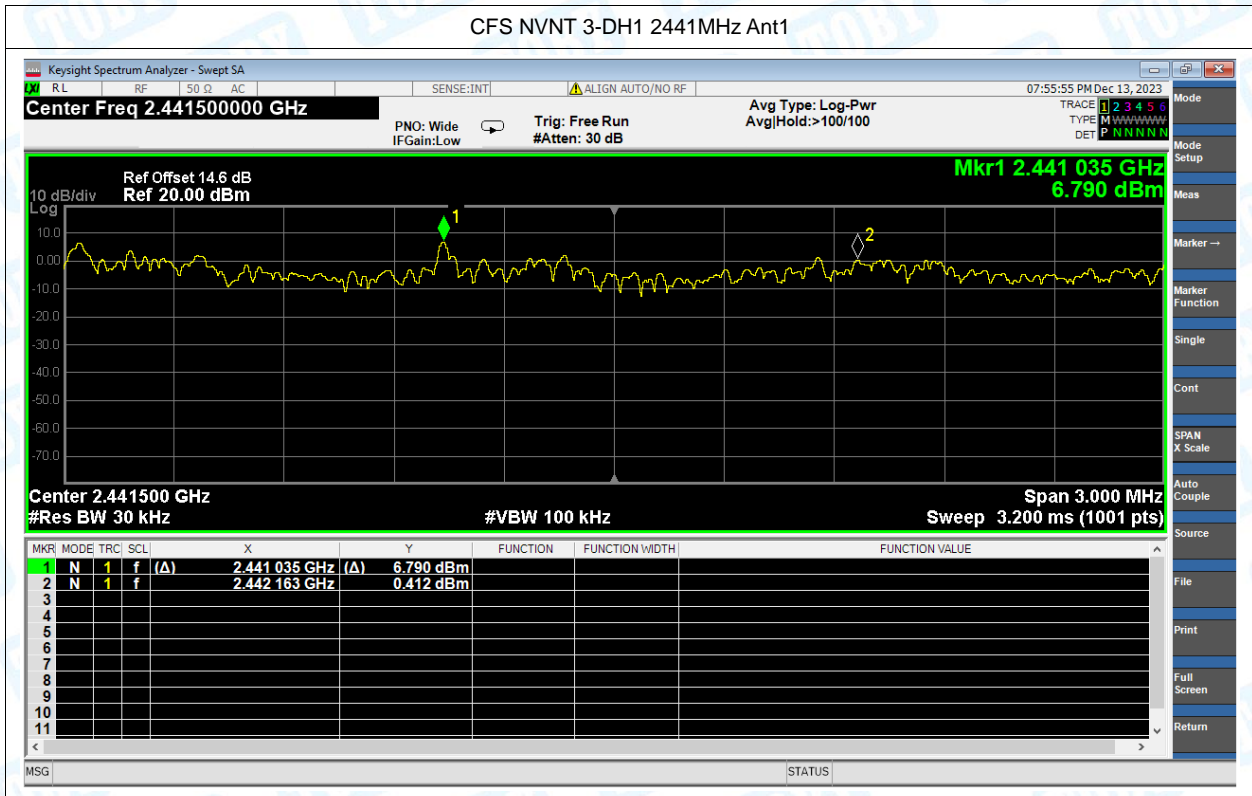
Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1



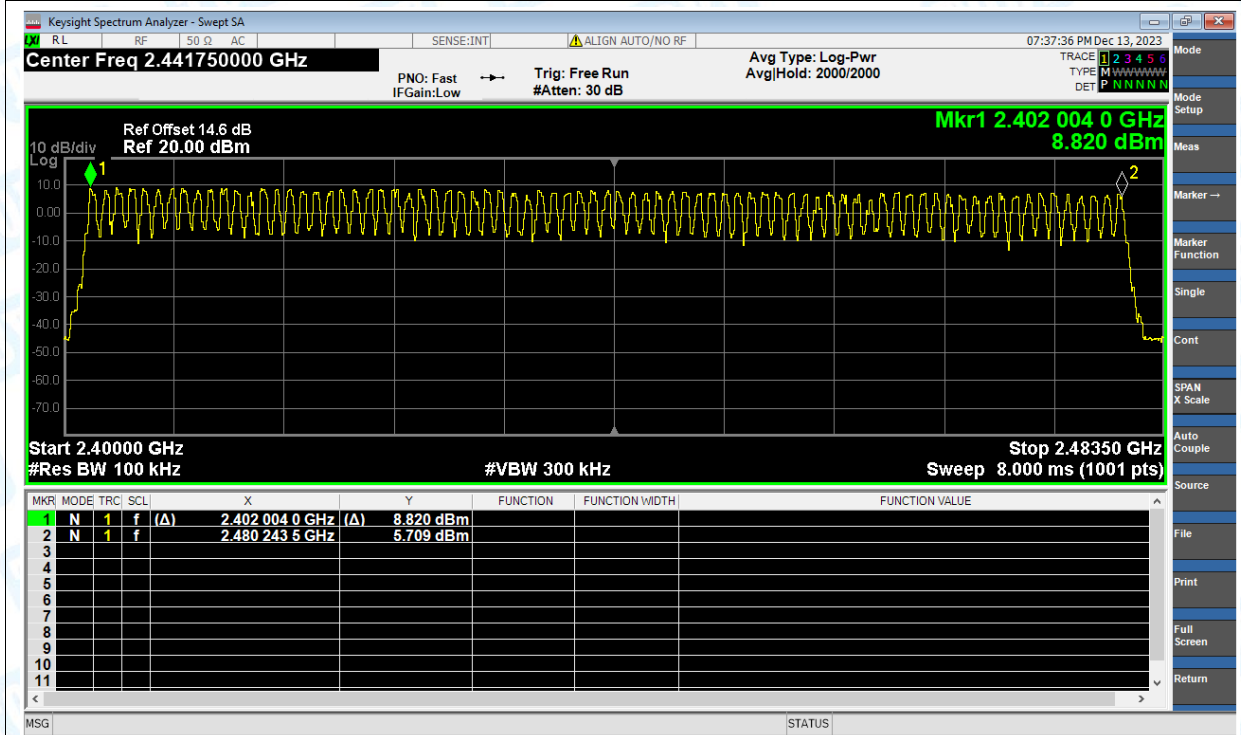


## 10. Number of Hopping Channel

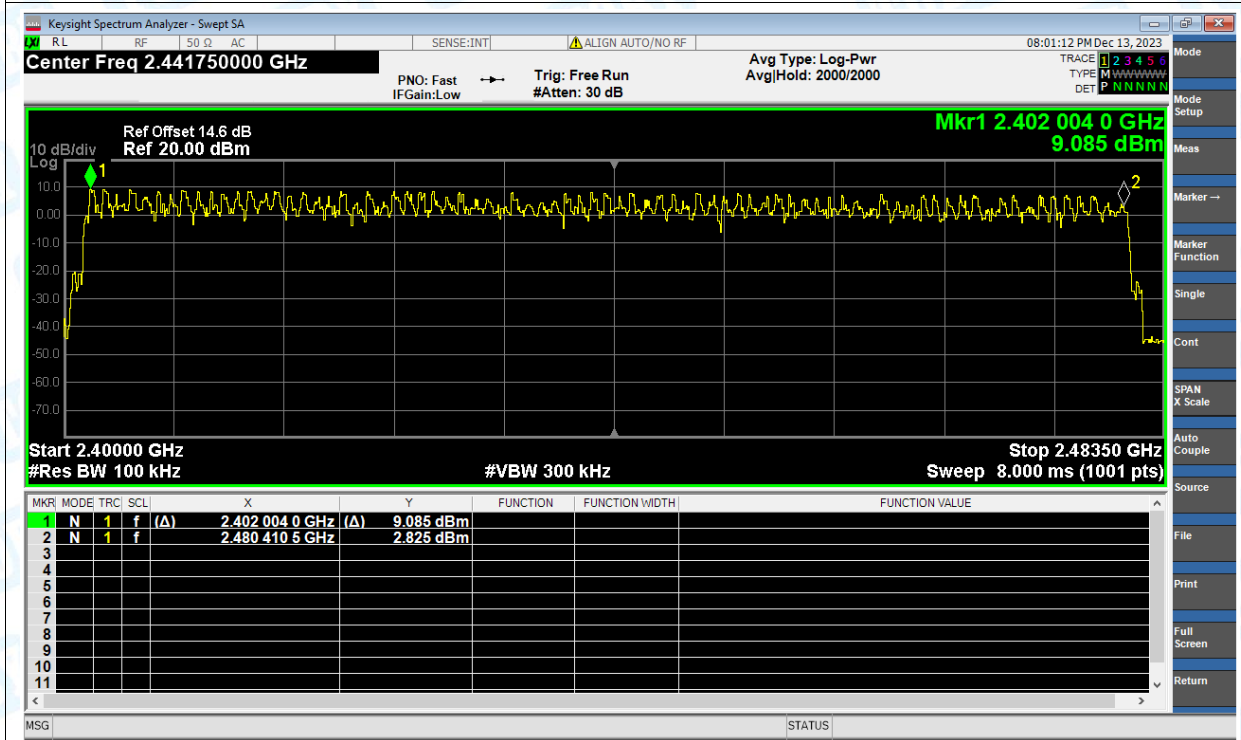
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

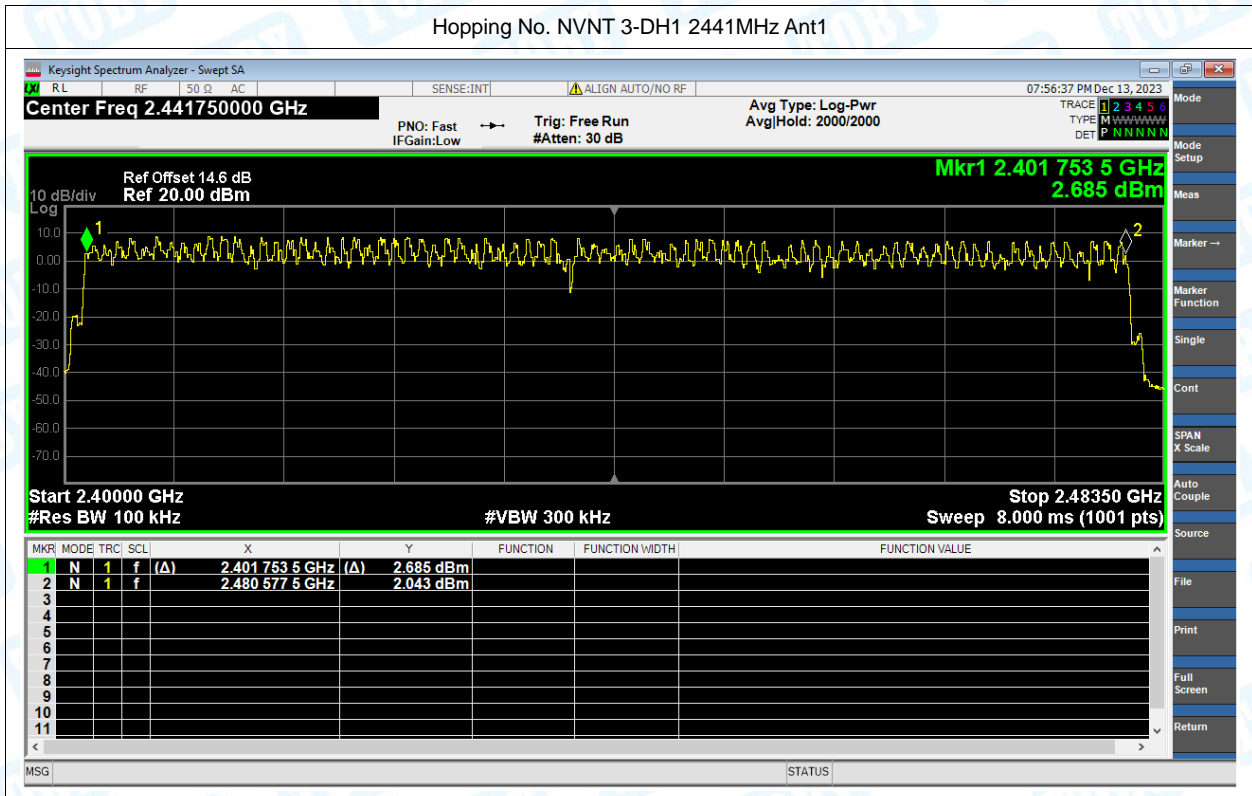
Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1





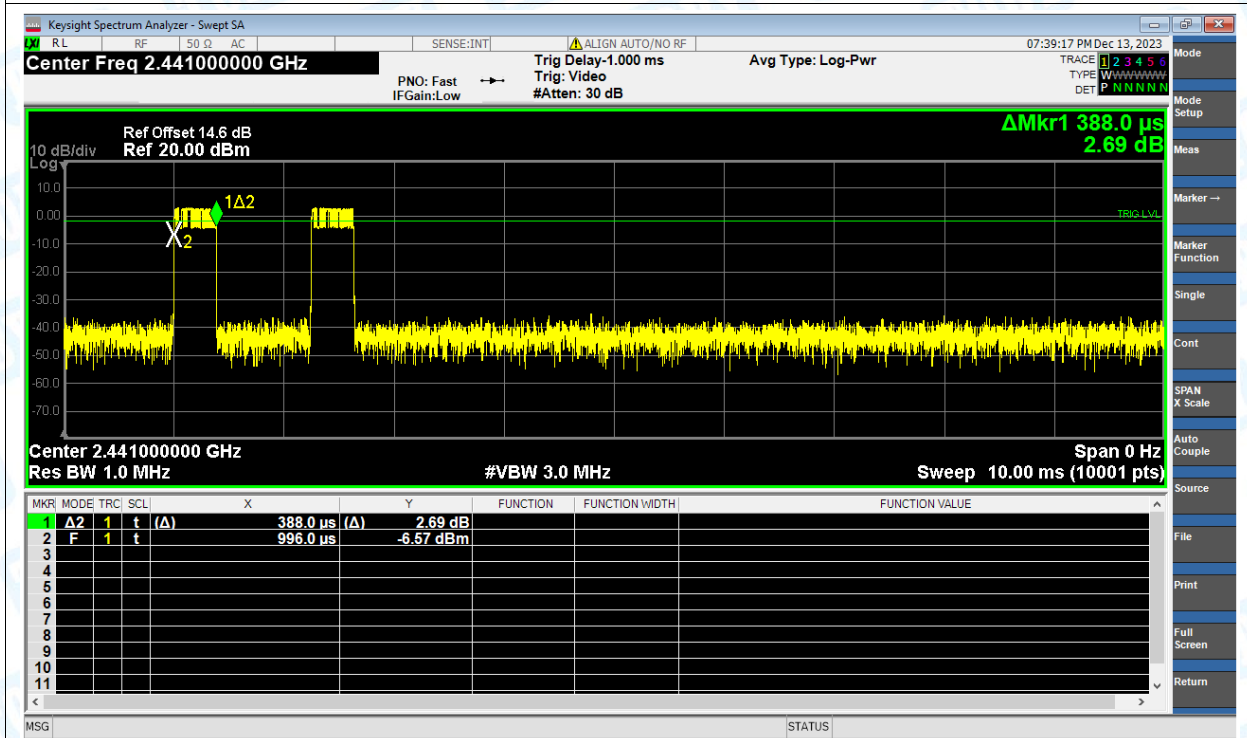
## 11. Dwell Time

Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.388	124.16	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.645	263.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.893	308.587	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.387	123.84	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.639	262.24	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.386	123.52	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.637	261.92	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.887	307.947	31600	400	Pass

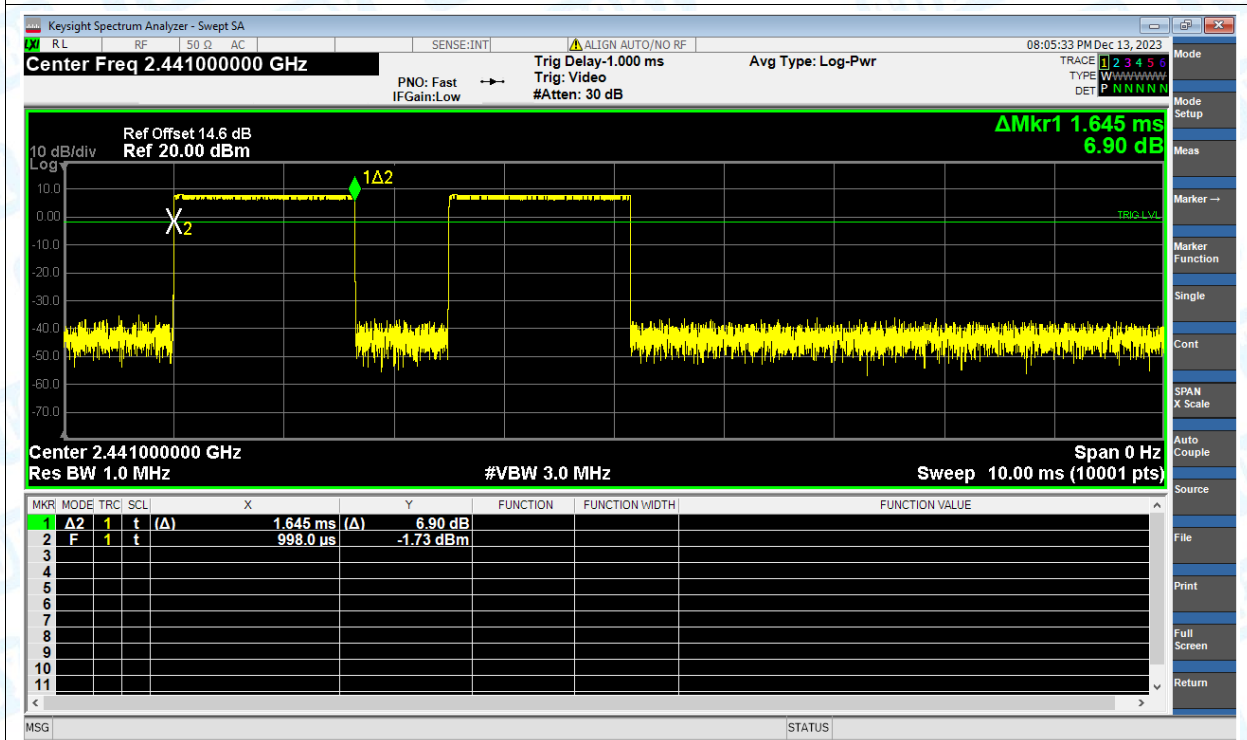


Test Graphs

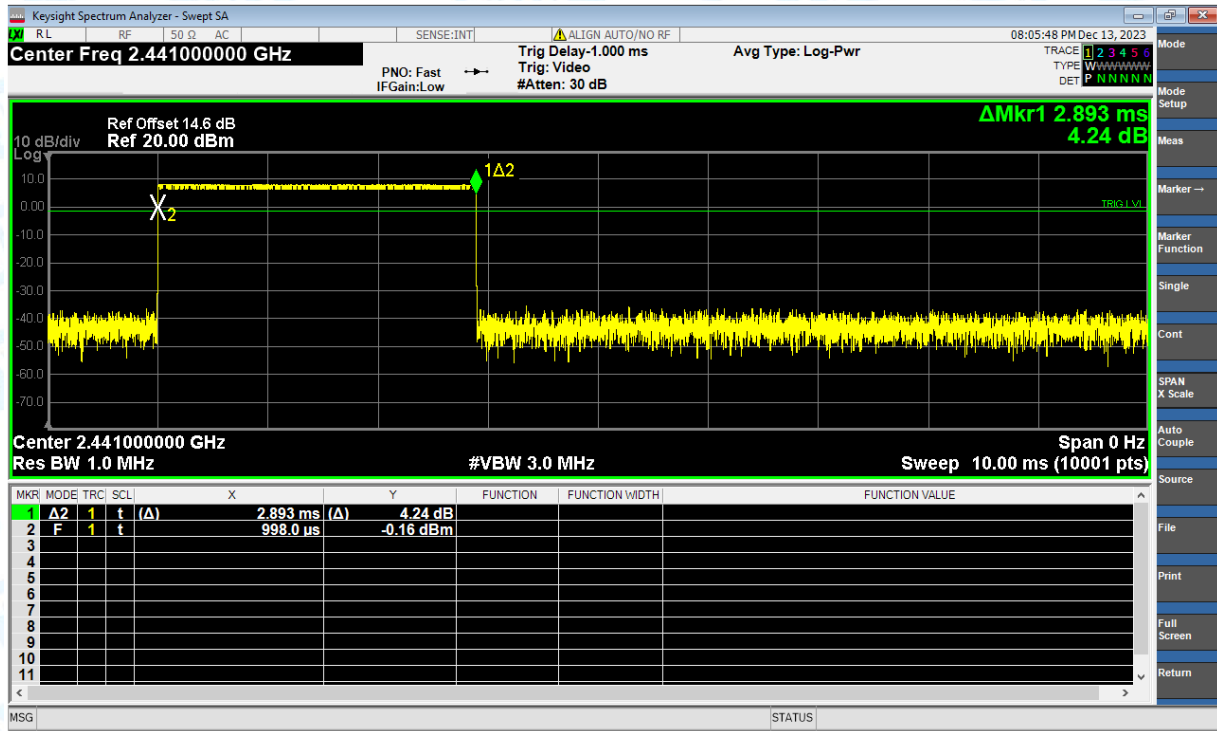
Dwell NVNT 1-DH1 2441MHz Ant1



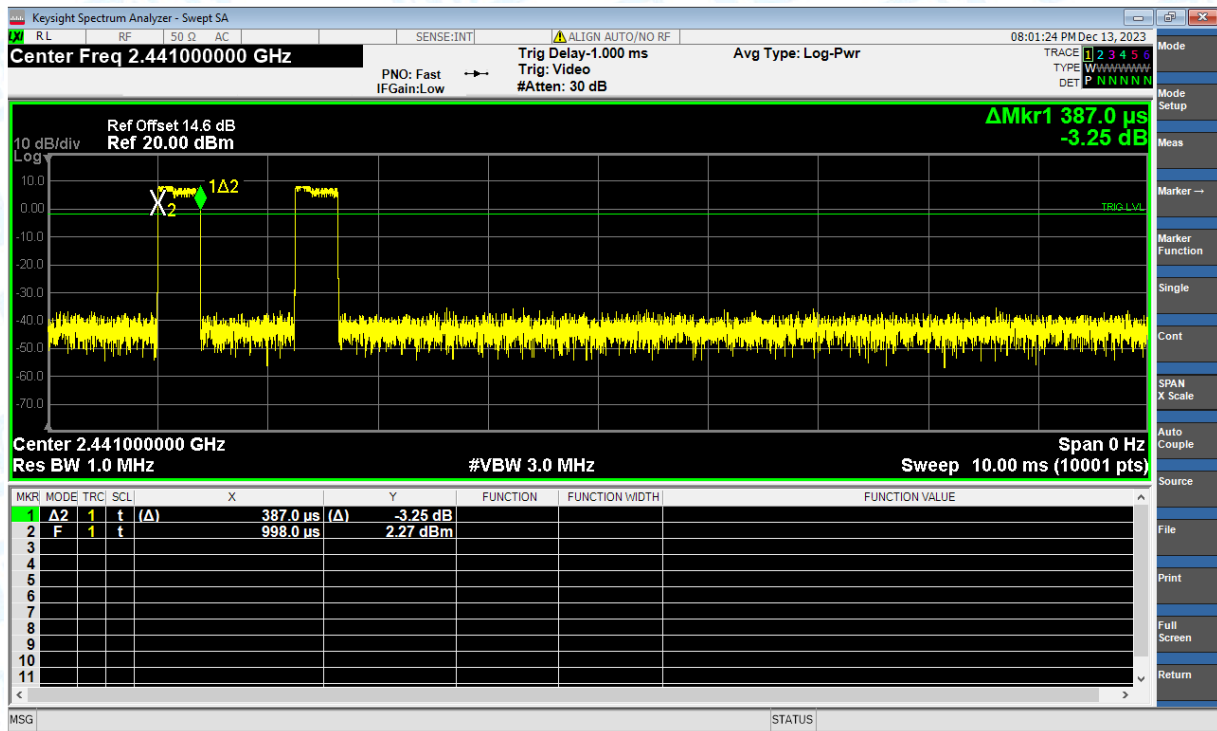
Dwell NVNT 1-DH3 2441MHz Ant1



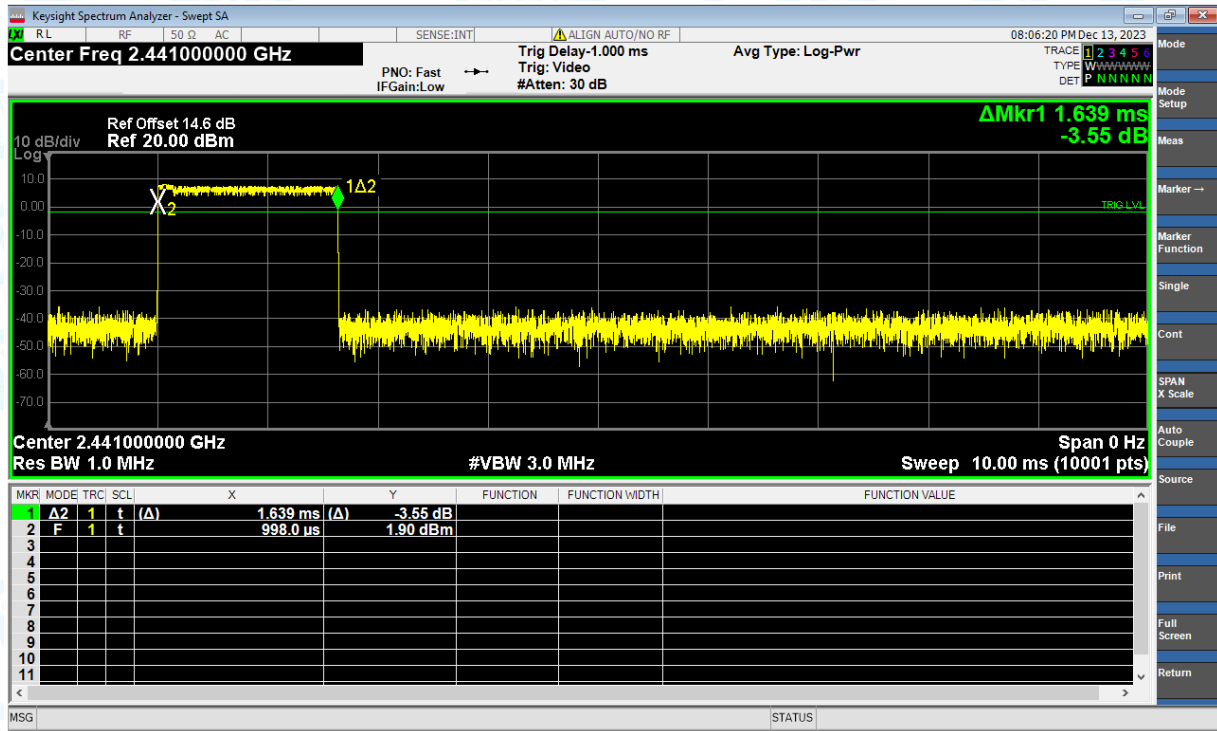
Dwell NVNT 1-DH5 2441MHz Ant1



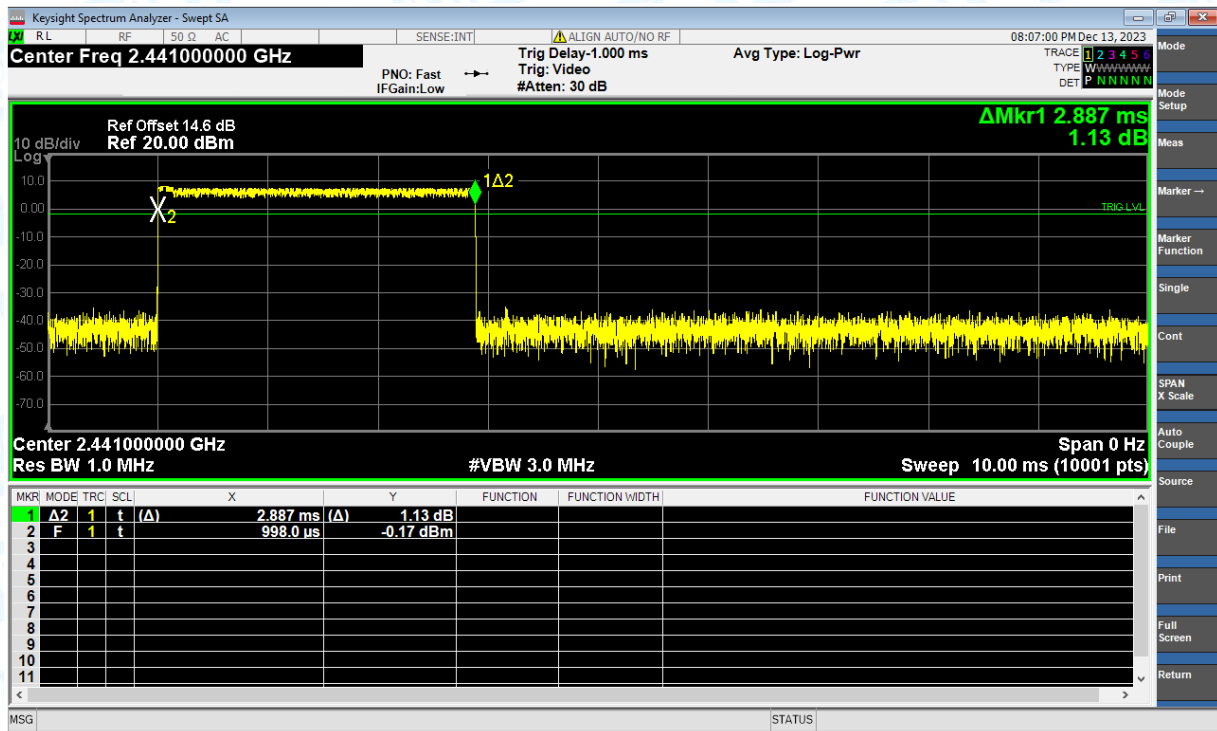
Dwell NVNT 2-DH1 2441MHz Ant1



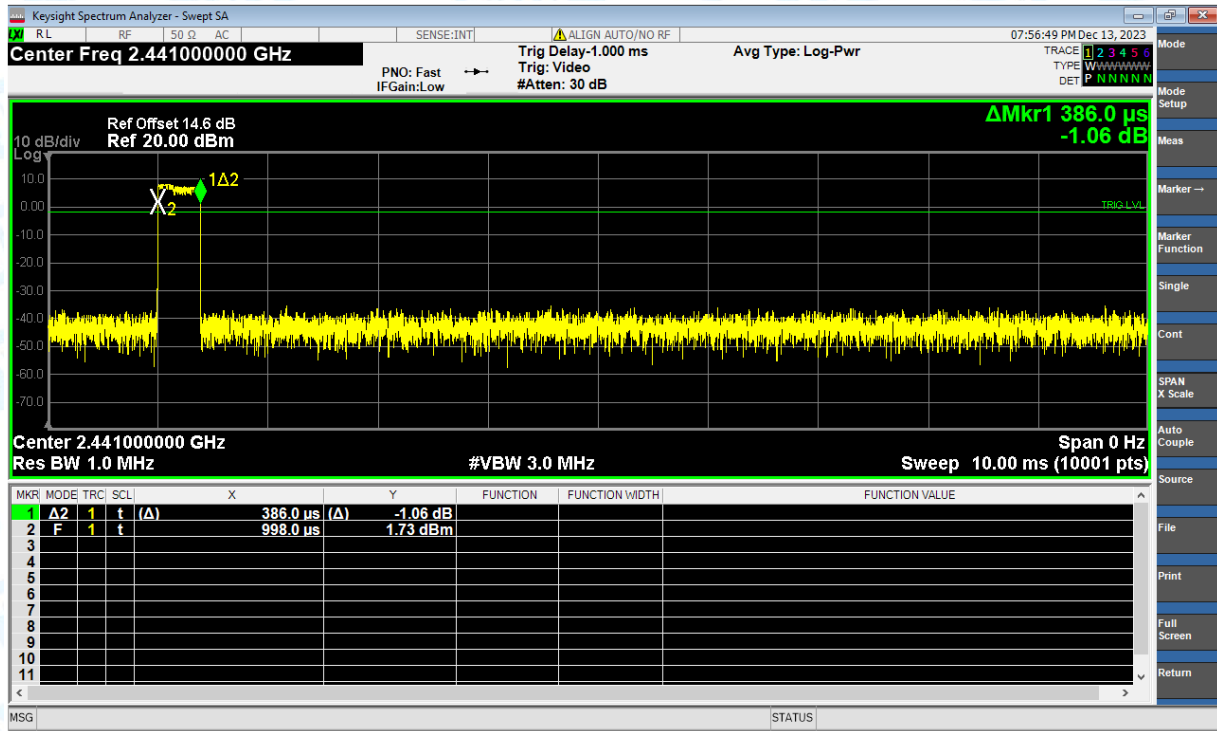
Dwell NVNT 2-DH3 2441MHz Ant1



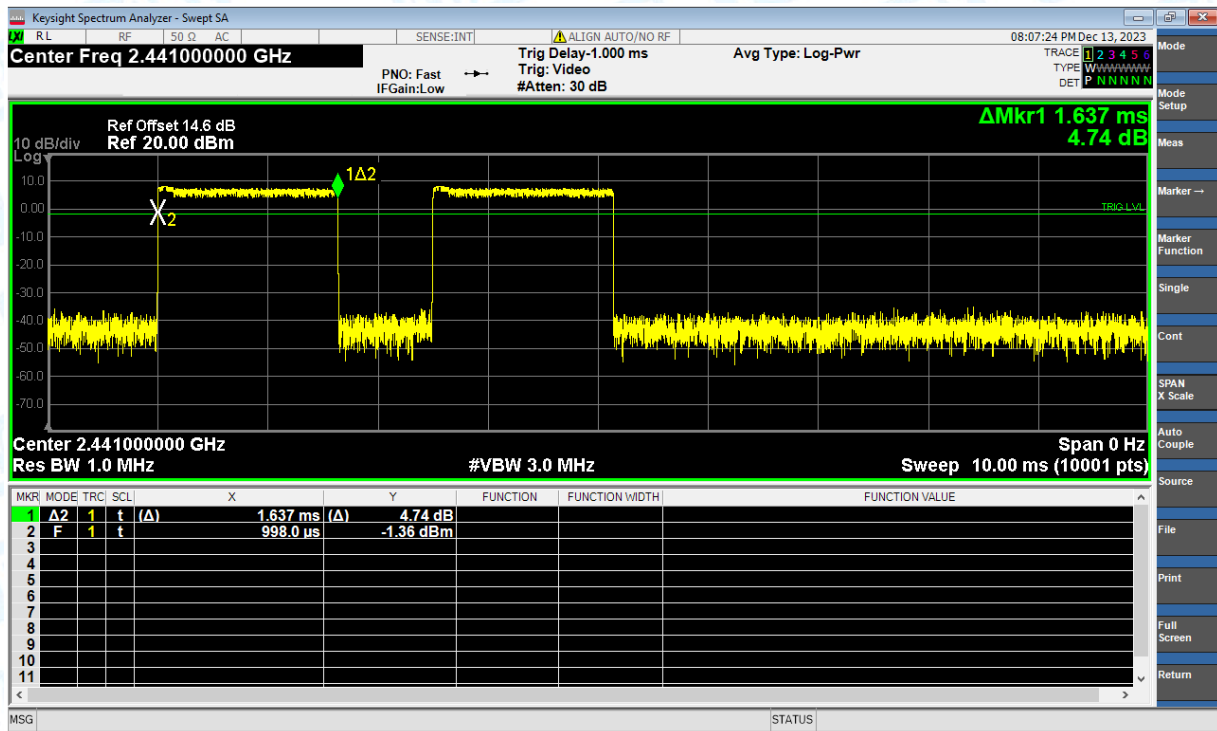
Dwell NVNT 2-DH5 2441MHz Ant1

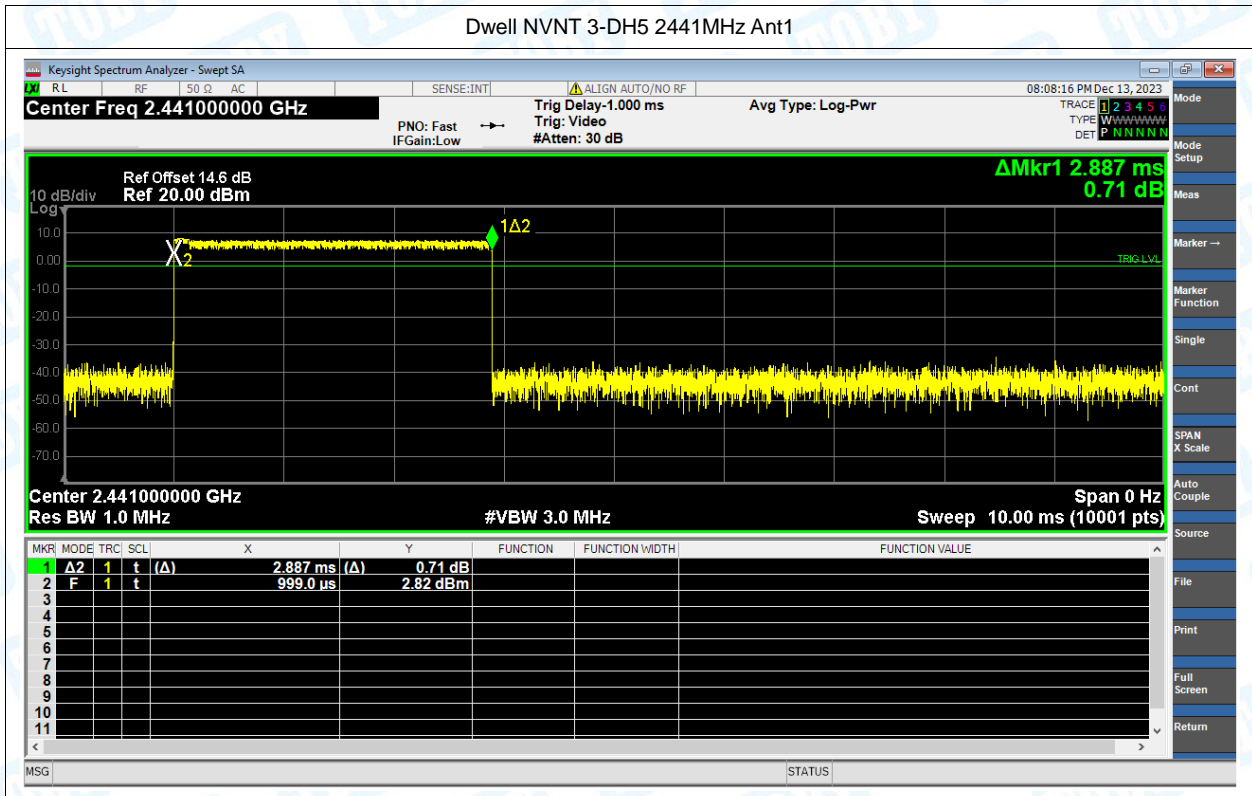


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1





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