

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	Wireless headset
Test Model:	MINI
Sample ID:	HC-C-202501-0145-01-2#
Environmental Conditions	
Temperature:	24.3℃
Relative Humidity:	46%
Test Voltage:	DC 3.7V
Test Engineer:	ZKN Zhou
Note: For a more detailed features description, please refer to the report TBR-C-202501-0145-10 The report only show the worst case data.	

Contents

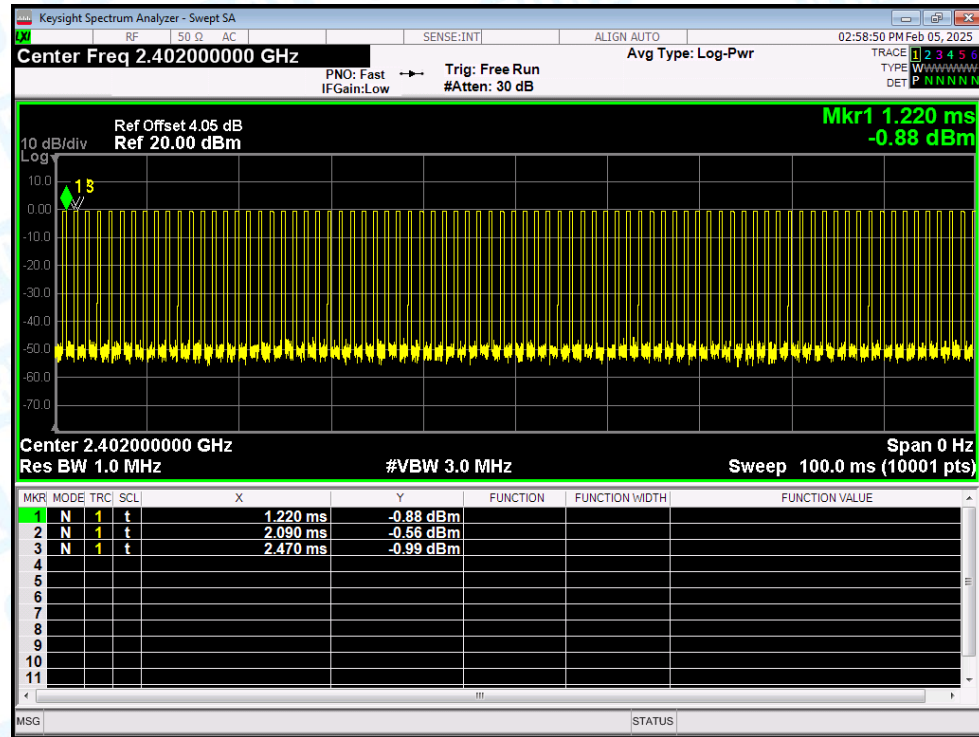
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1. Duty Cycle

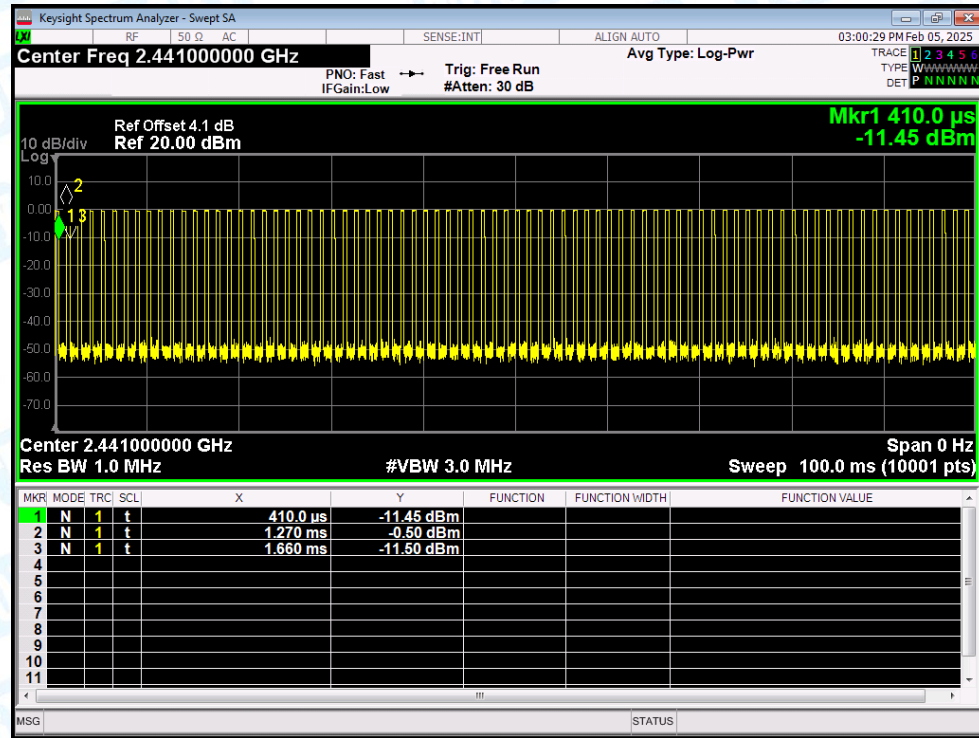
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

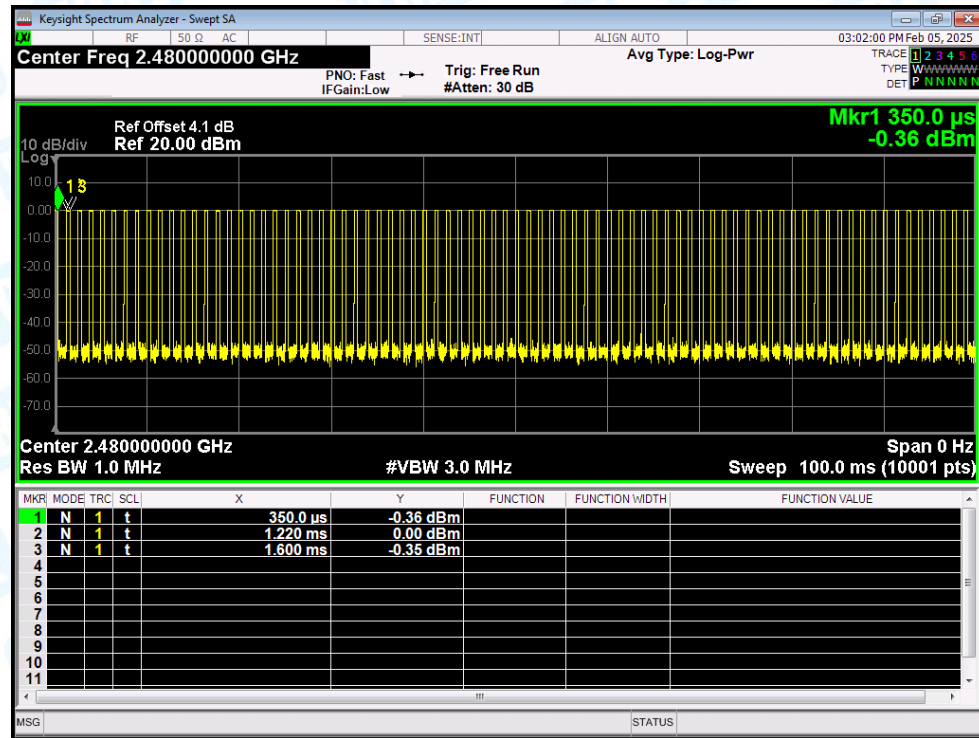
Duty Cycle NVNT 1-DH1 2402MHz Ant1



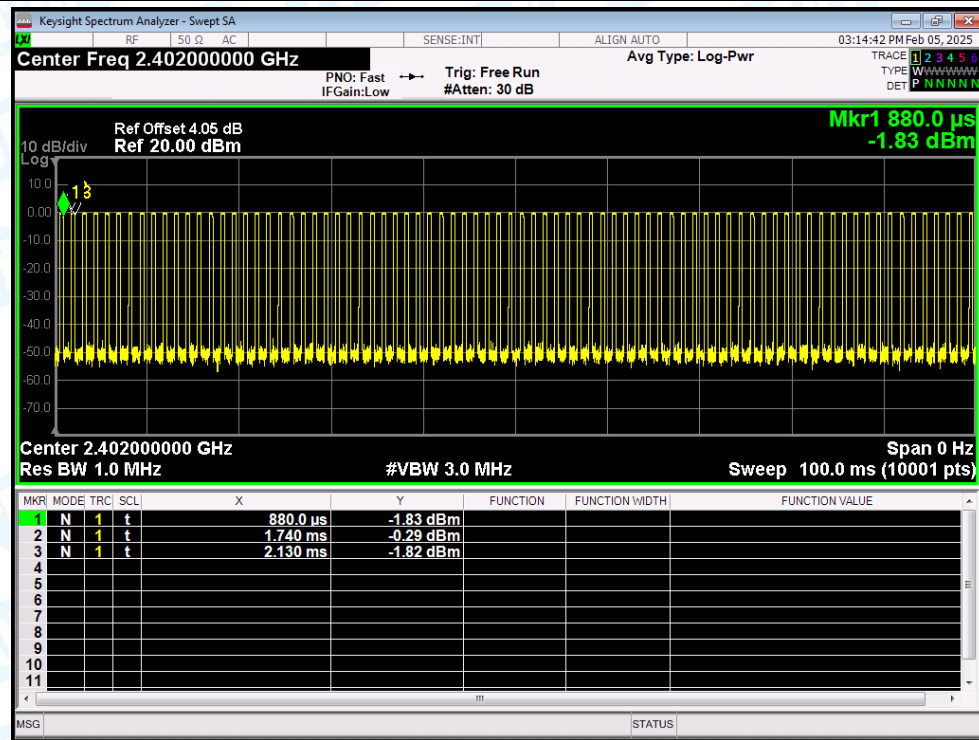
Duty Cycle NVNT 1-DH1 2441MHz Ant1



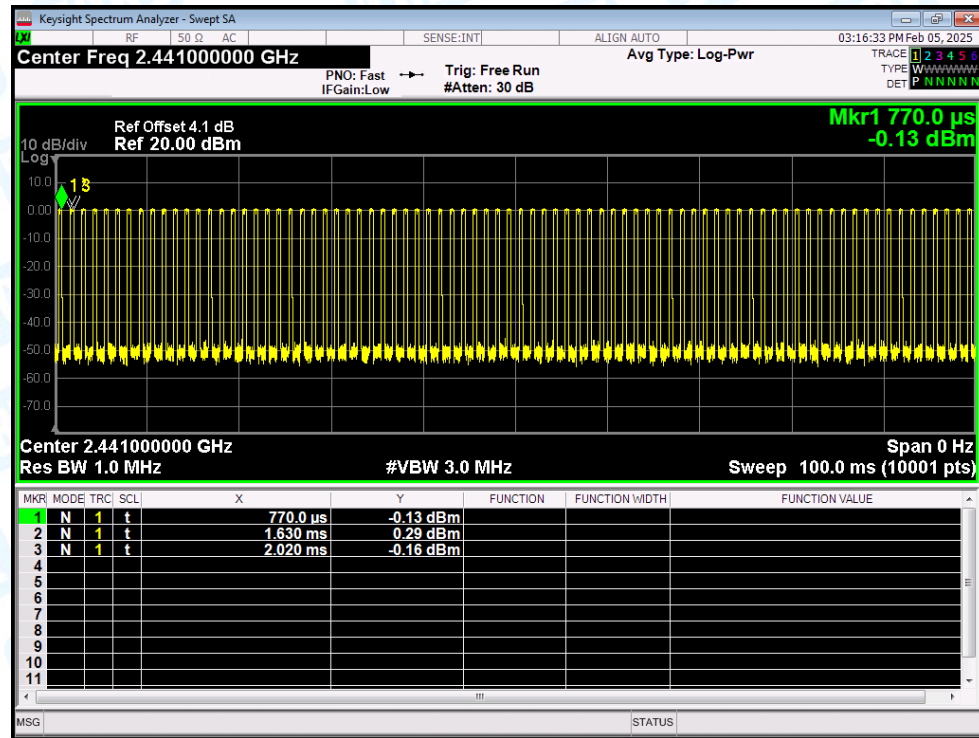
Duty Cycle NVNT 1-DH1 2480MHz Ant1



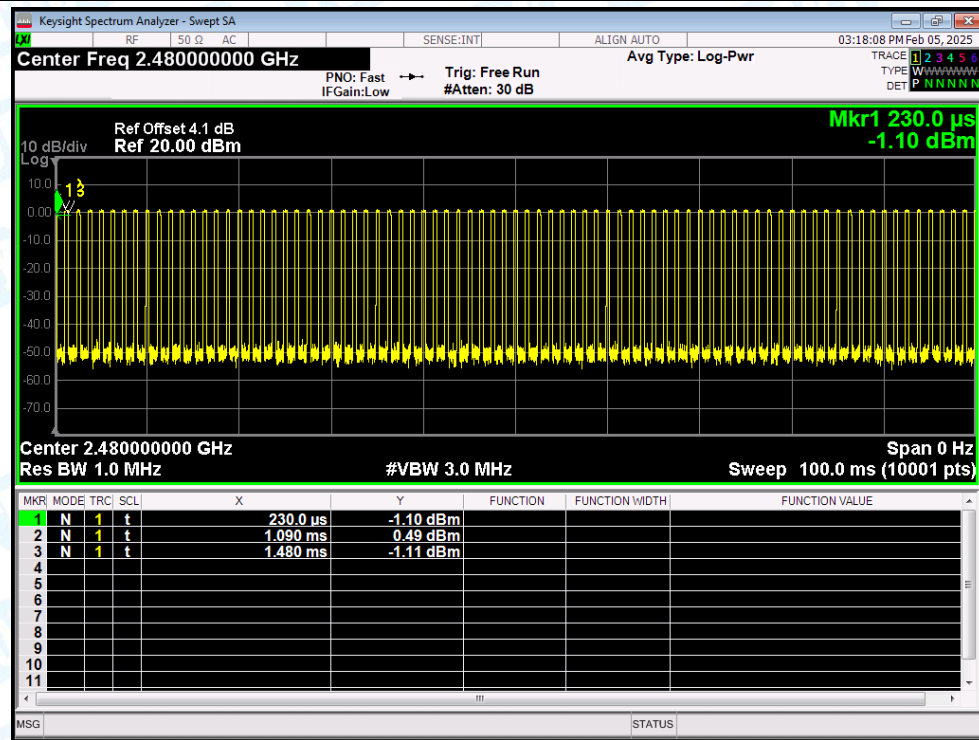
Duty Cycle NVNT 2-DH1 2402MHz Ant1



Duty Cycle NVNT 2-DH1 2441MHz Ant1



Duty Cycle NVNT 2-DH1 2480MHz Ant1

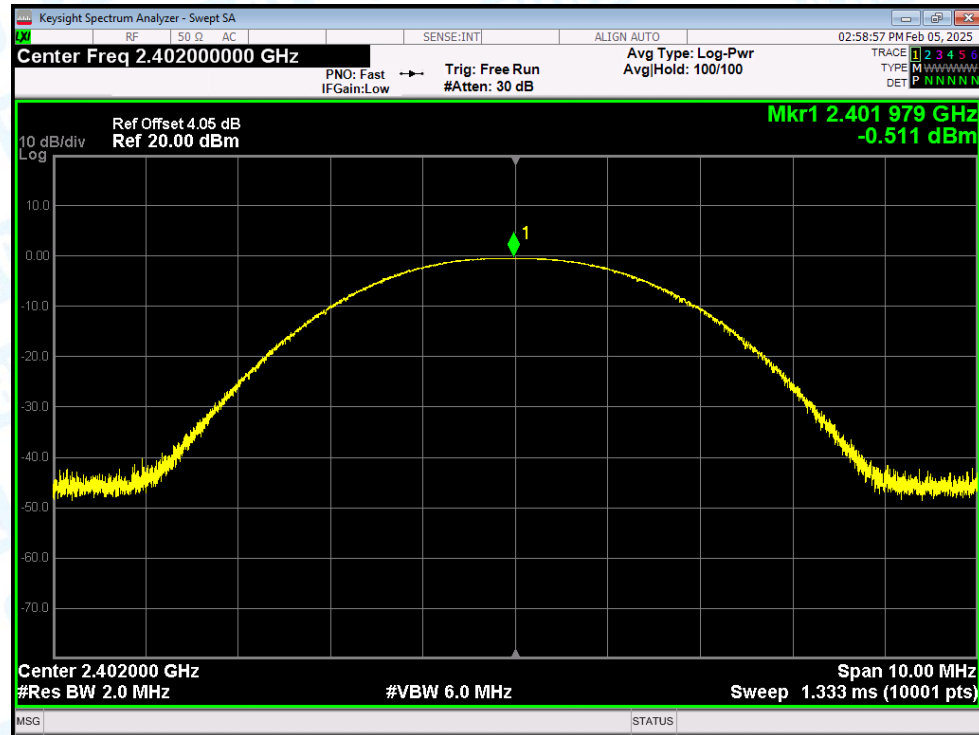


2. Maximum Conducted Output Power

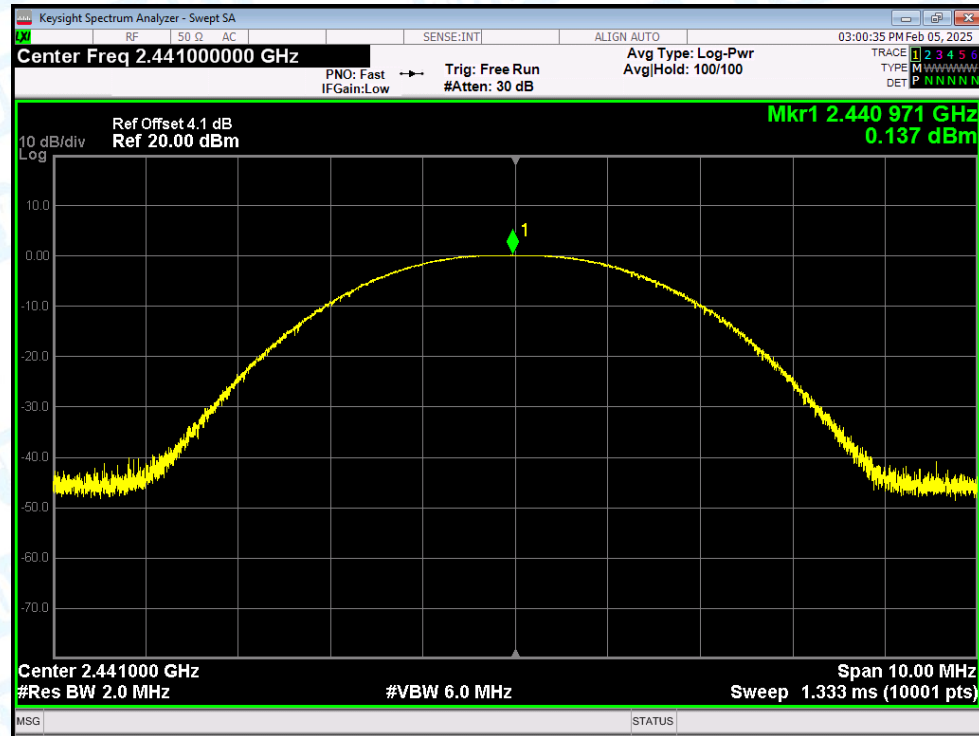
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-0.511	21	Pass
NVNT	1-DH1	2441	Ant1	0.137	21	Pass
NVNT	1-DH1	2480	Ant1	0.422	21	Pass
NVNT	1-DH3	2441	Ant1	0.063	21	Pass
NVNT	1-DH5	2441	Ant1	0.189	21	Pass
NVNT	2-DH1	2402	Ant1	0.45	21	Pass
NVNT	2-DH1	2441	Ant1	1.116	21	Pass
NVNT	2-DH1	2480	Ant1	1.37	21	Pass
NVNT	2-DH3	2441	Ant1	1.052	21	Pass
NVNT	2-DH5	2441	Ant1	1.107	21	Pass

Test Graphs

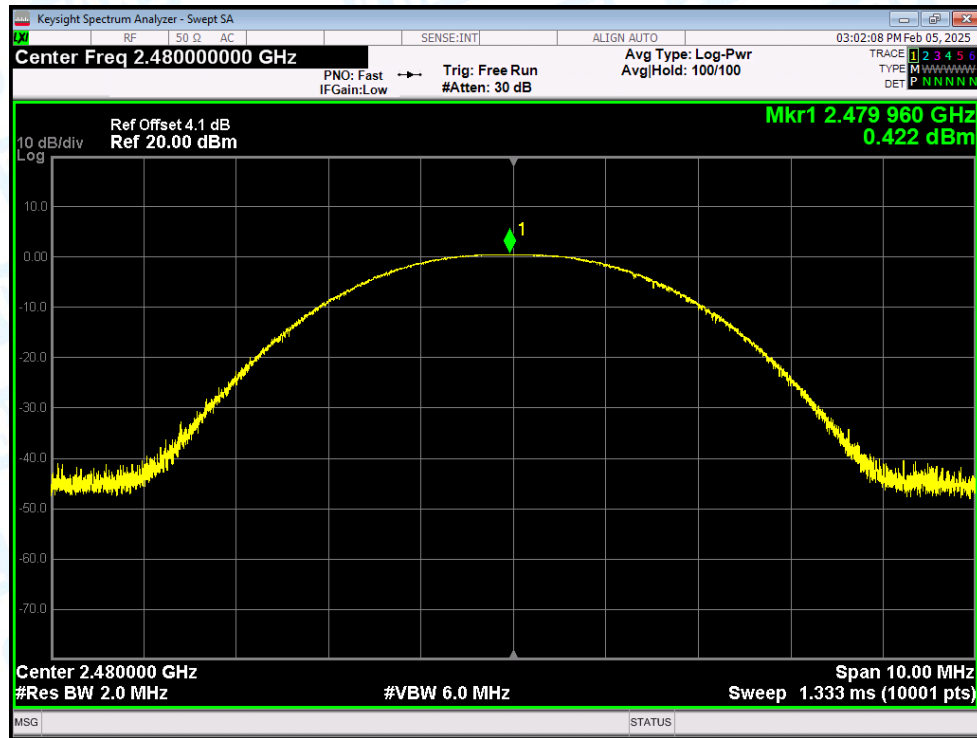
Power NVNT 1-DH1 2402MHz Ant1



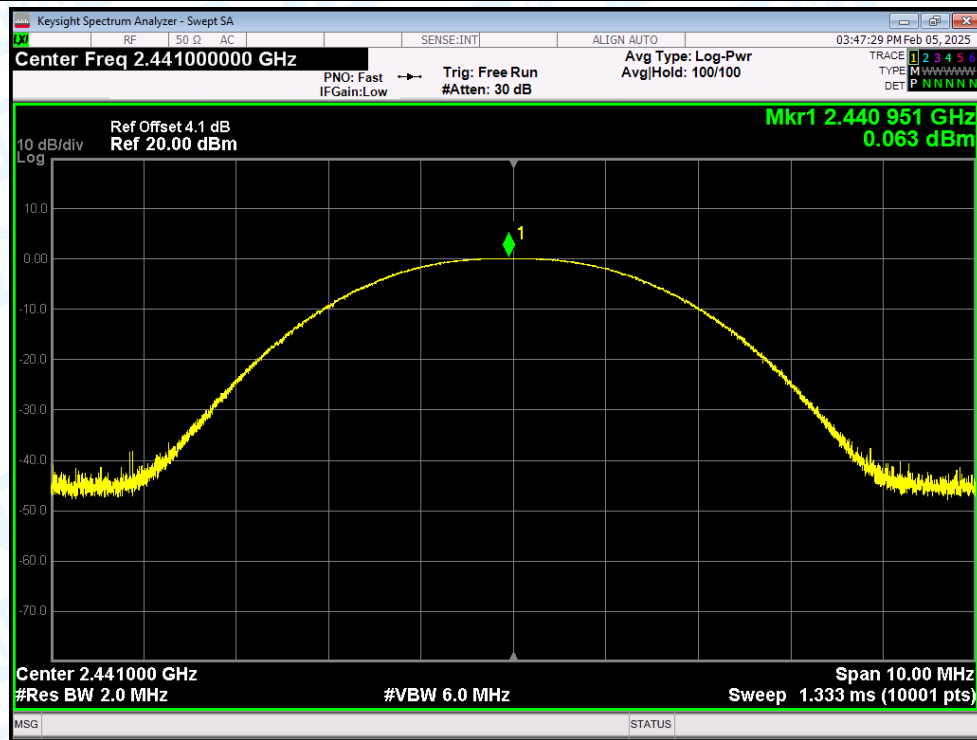
Power NVNT 1-DH1 2441MHz Ant1



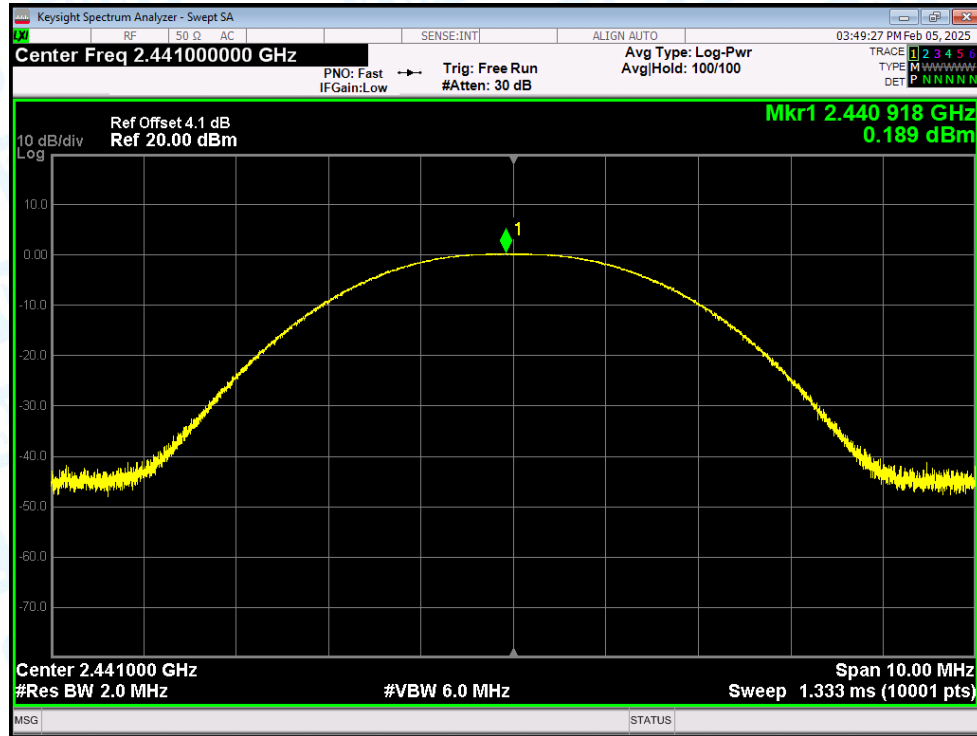
Power NVNT 1-DH1 2480MHz Ant1



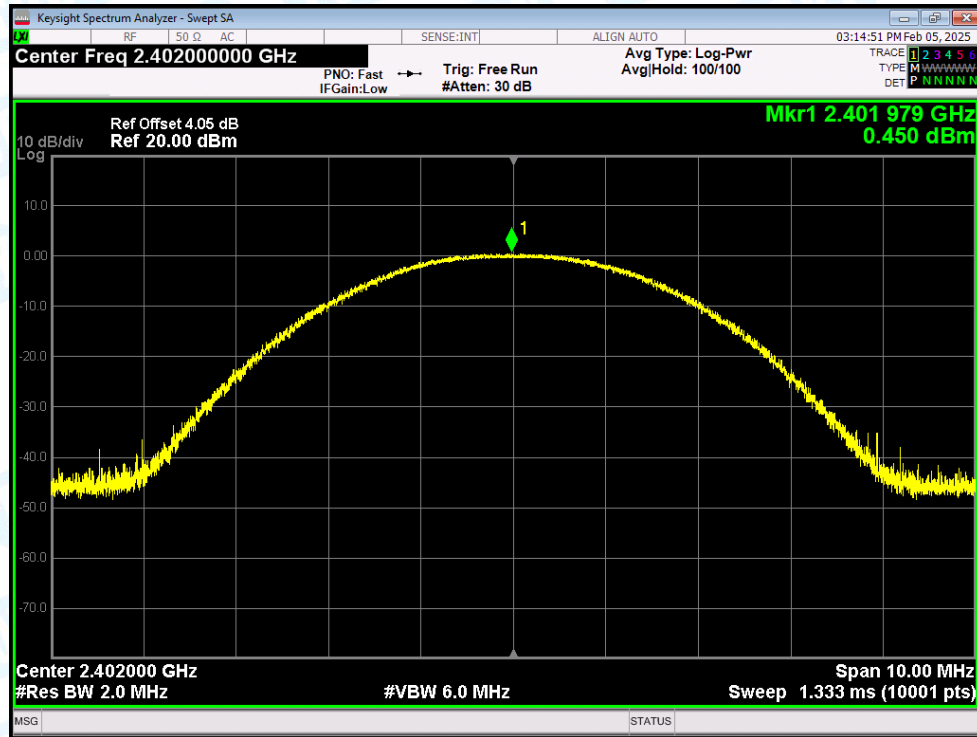
Power NVNT 1-DH3 2441MHz Ant1



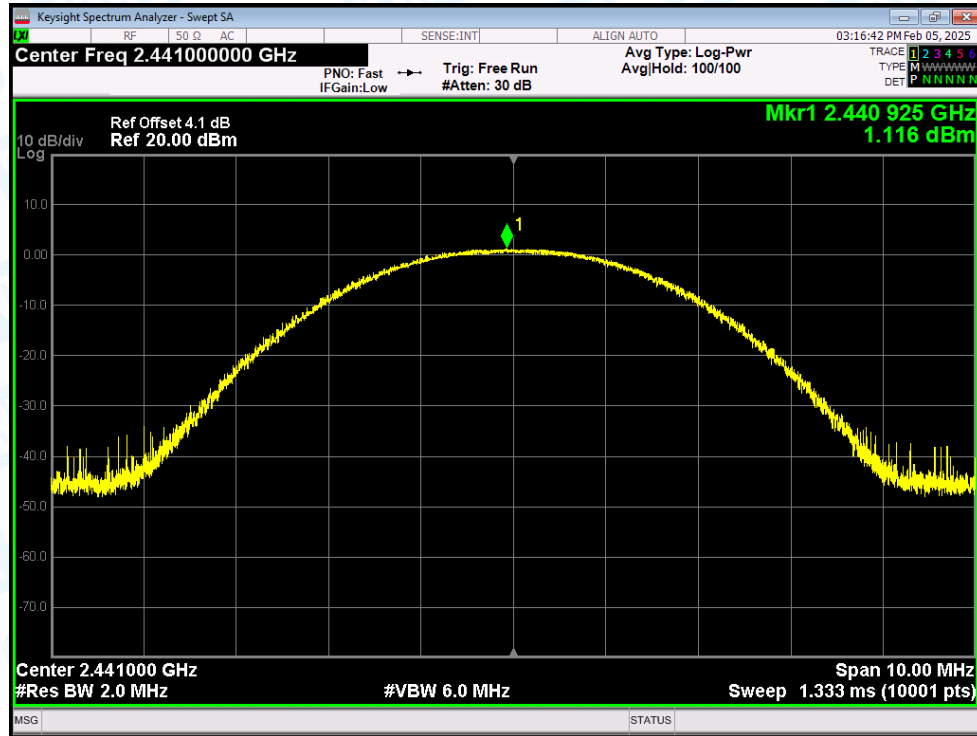
Power NVNT 1-DH5 2441MHz Ant1



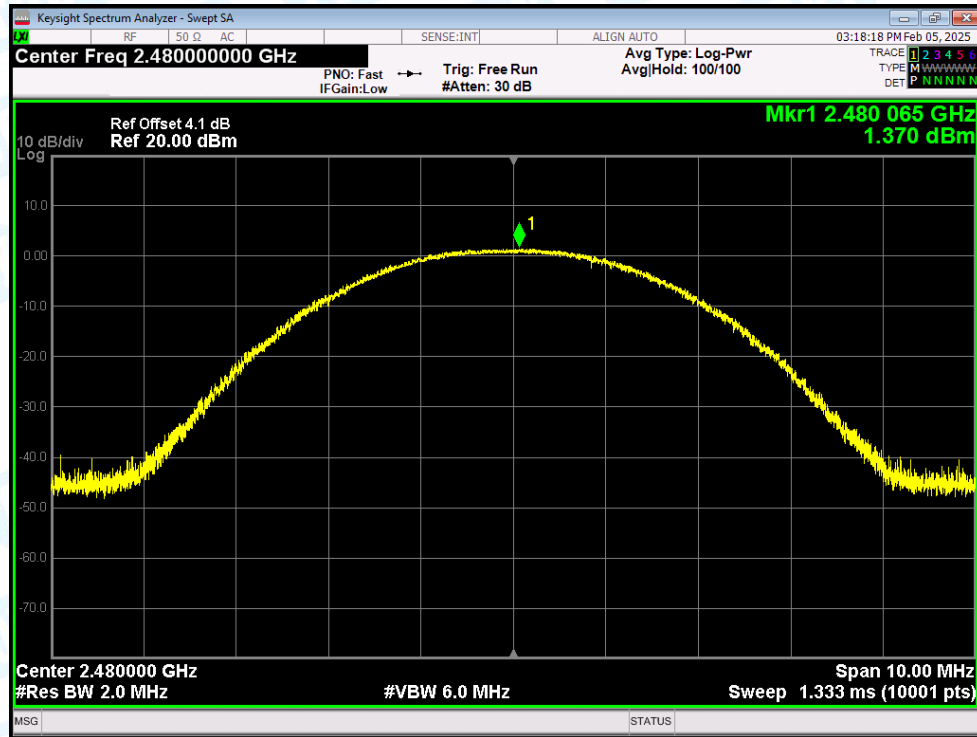
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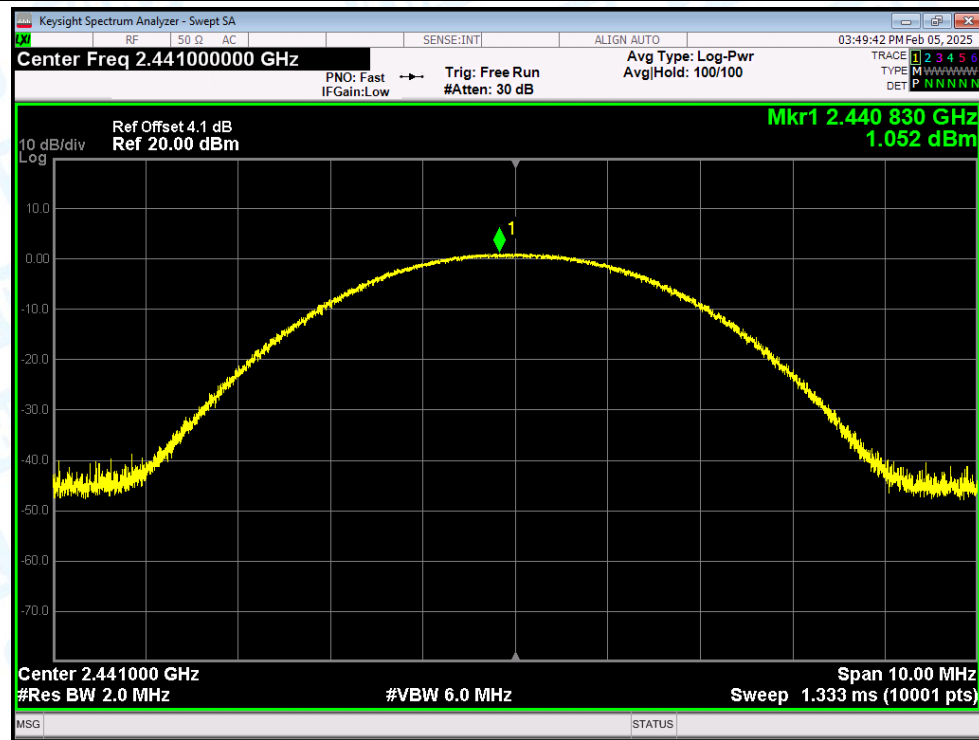
Power NVNT 2-DH1 2441MHz Ant1



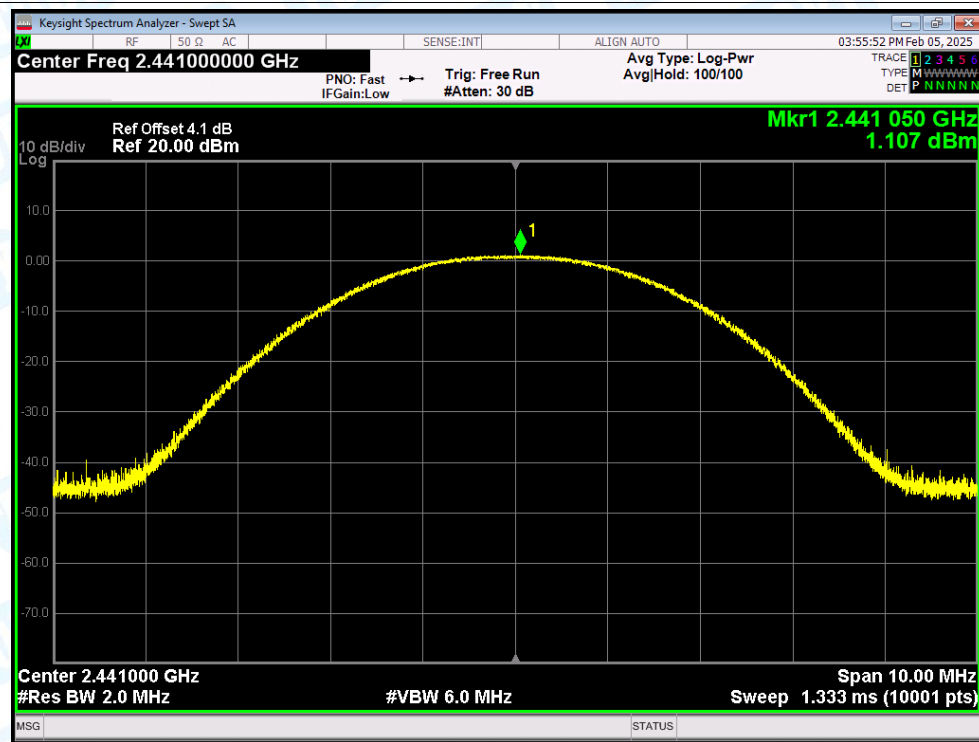
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 2-DH3 2441MHz Ant1



Power NVNT 2-DH5 2441MHz Ant1

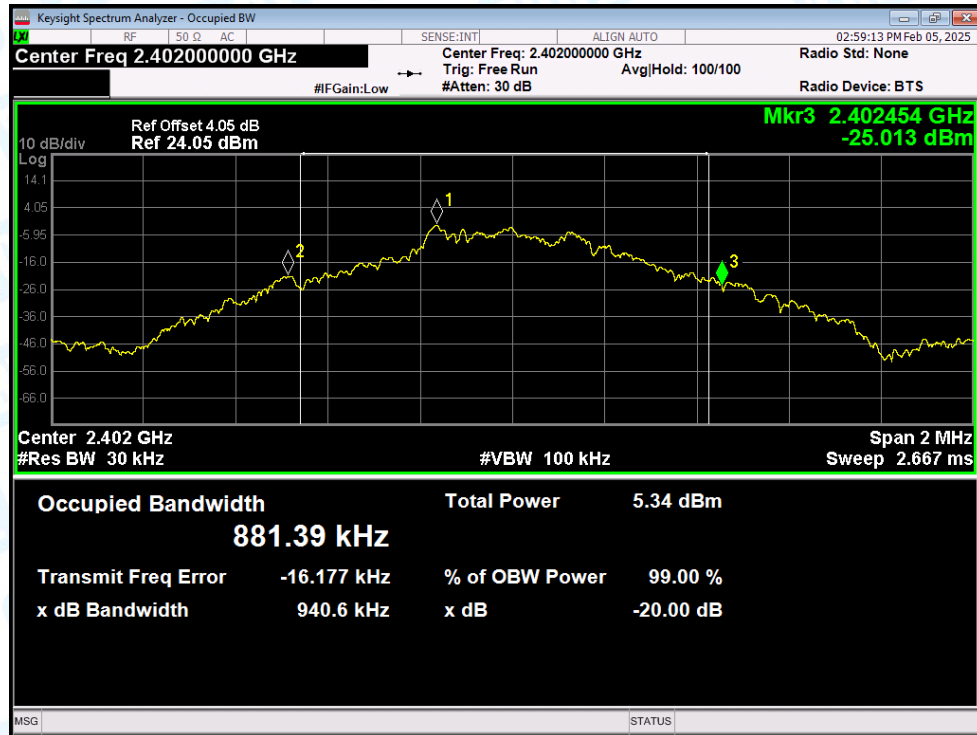


3. -20dB Bandwidth

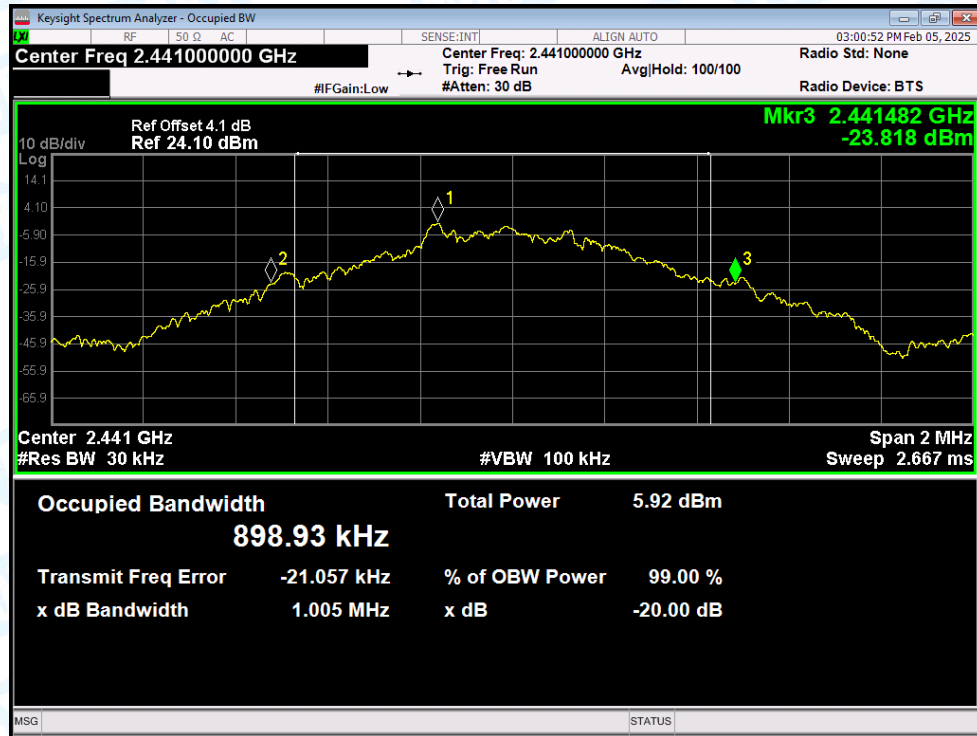
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.94	0	Pass
NVNT	1-DH1	2441	Ant1	1.01	0	Pass
NVNT	1-DH1	2480	Ant1	0.93	0	Pass
NVNT	2-DH1	2402	Ant1	1.24	0	Pass
NVNT	2-DH1	2441	Ant1	1.25	0	Pass
NVNT	2-DH1	2480	Ant1	1.24	0	Pass

Test Graphs

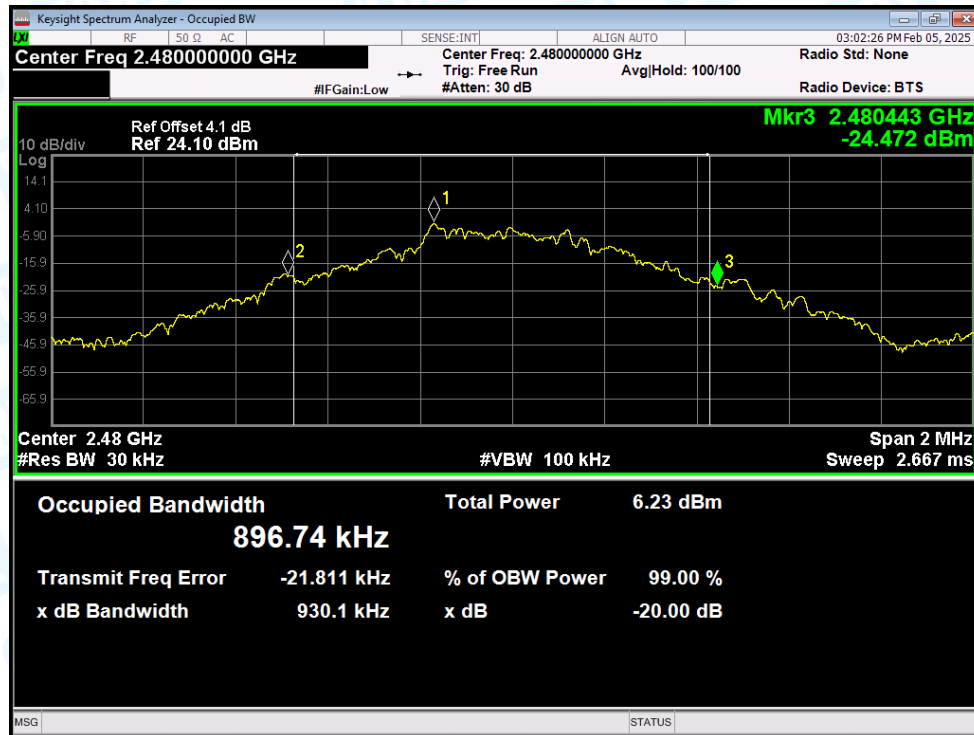
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



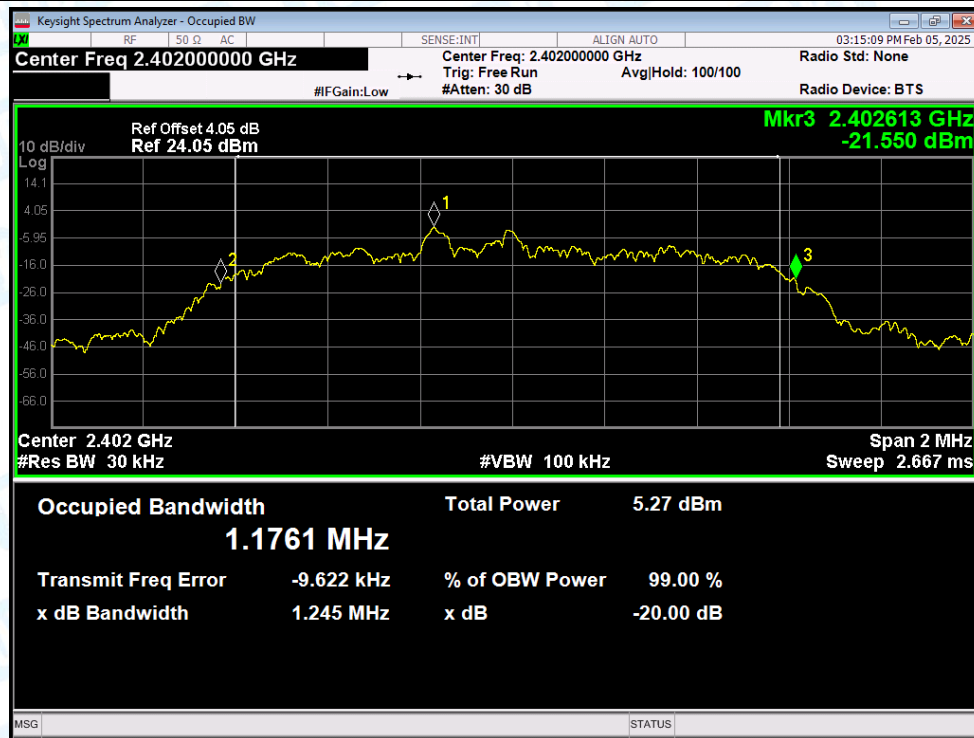
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



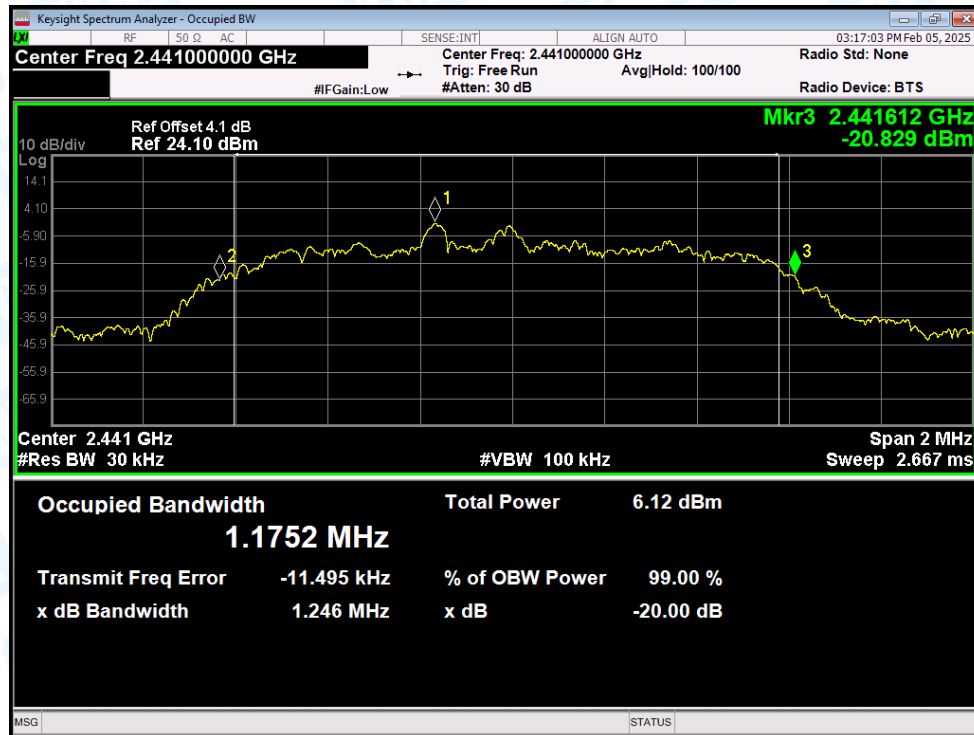
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



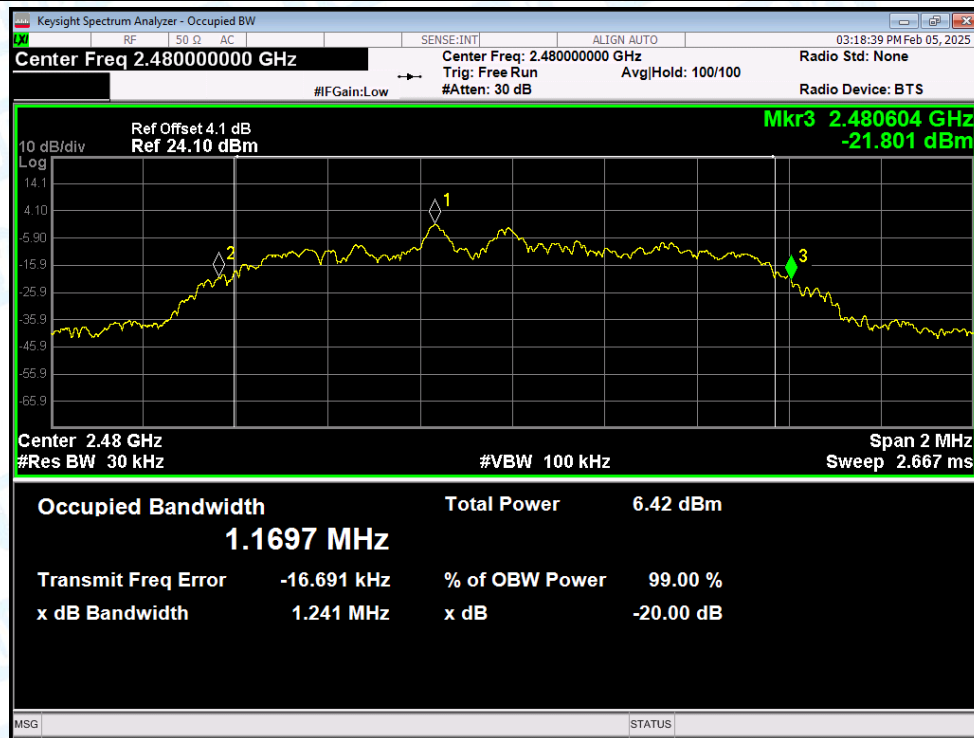
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

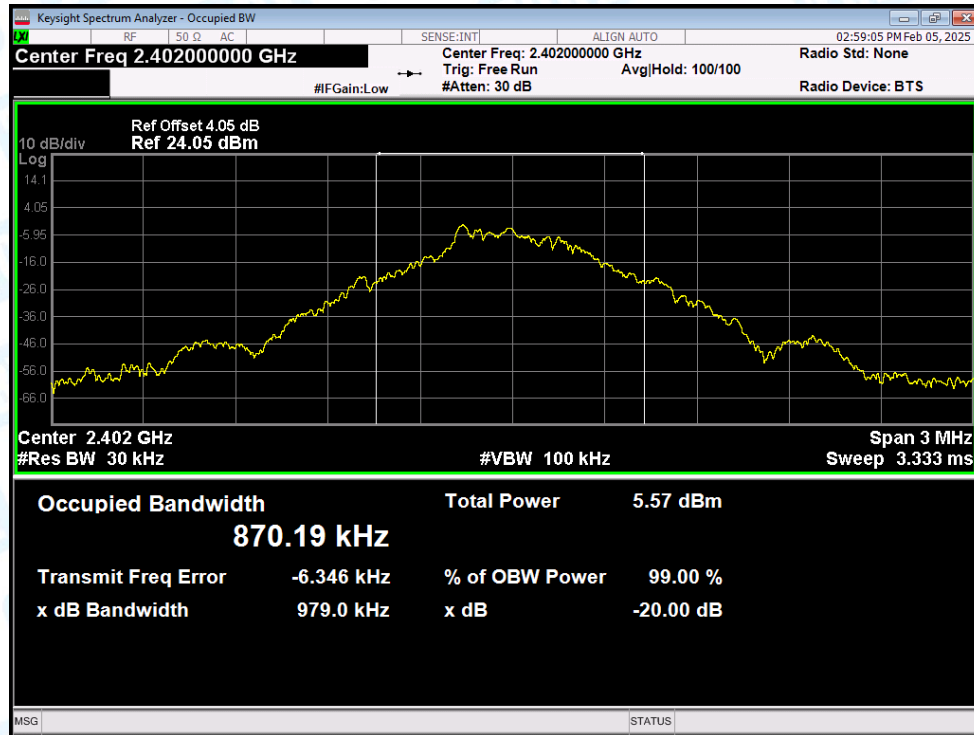


4. Occupied Channel Bandwidth

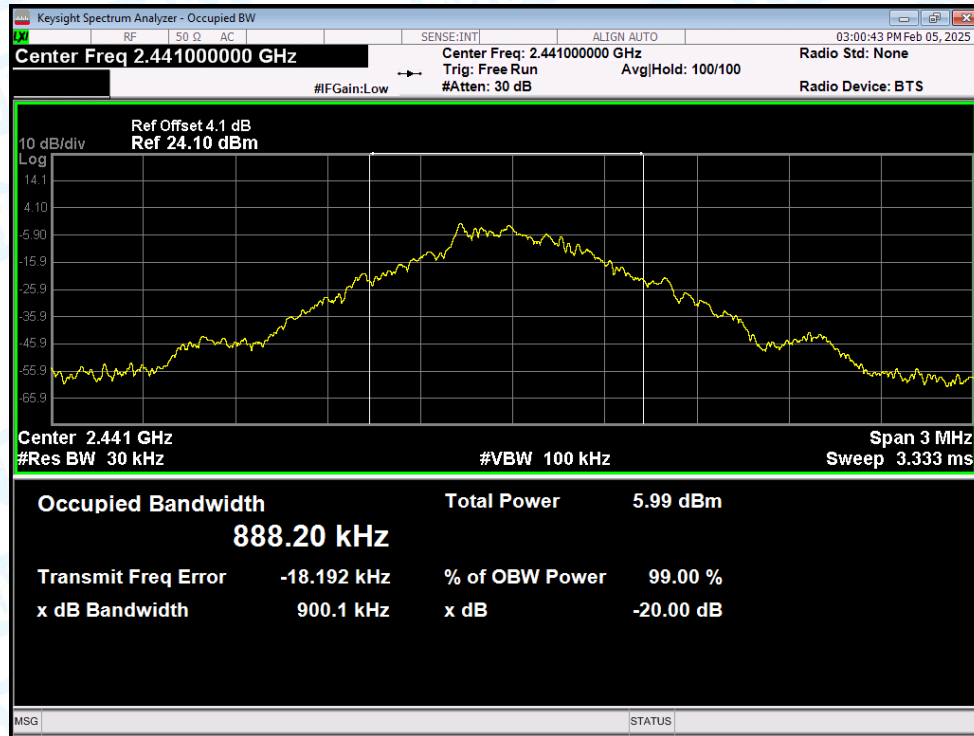
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.87
NVNT	1-DH1	2441	Ant1	0.888
NVNT	1-DH1	2480	Ant1	0.901
NVNT	2-DH1	2402	Ant1	1.172
NVNT	2-DH1	2441	Ant1	1.164
NVNT	2-DH1	2480	Ant1	1.171

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1



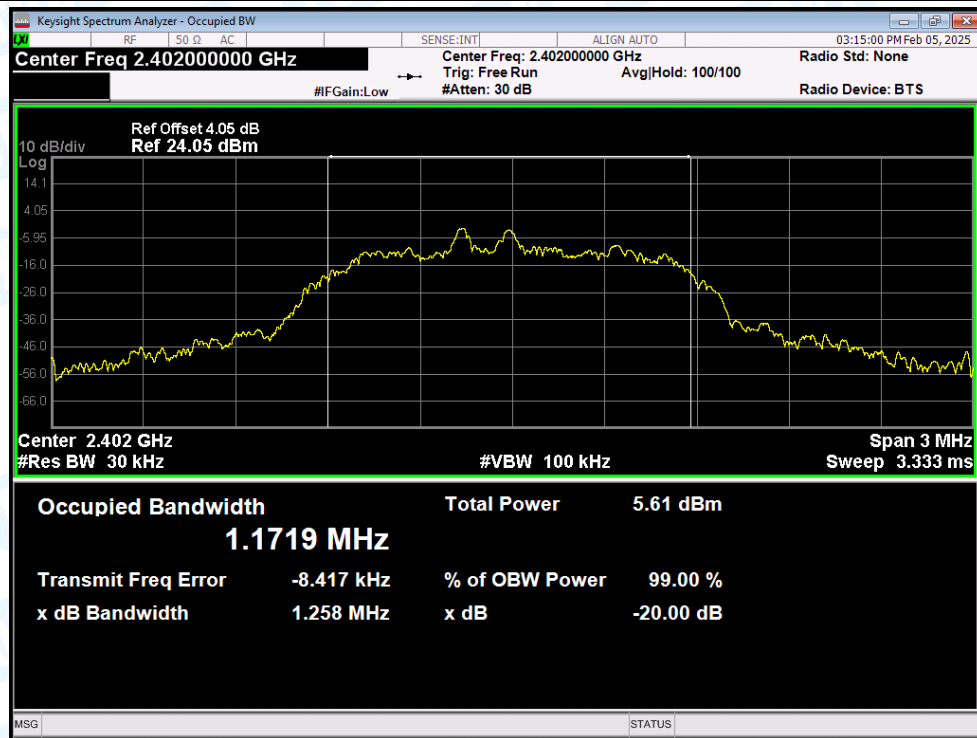
OBW NVNT 1-DH1 2441MHz Ant1



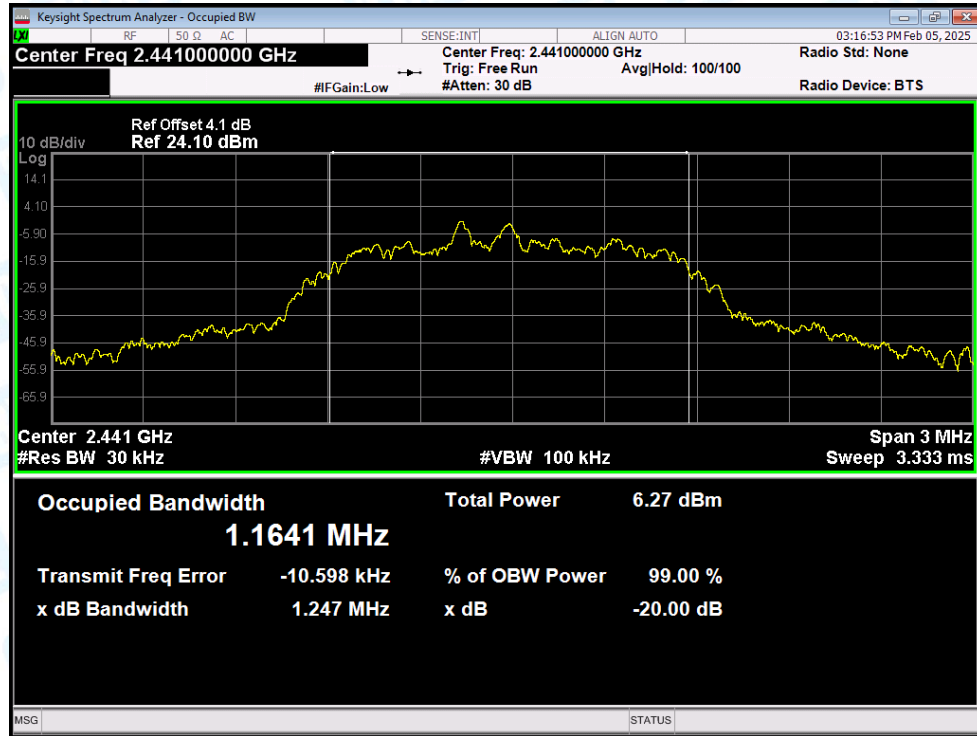
OBW NVNT 1-DH1 2480MHz Ant1



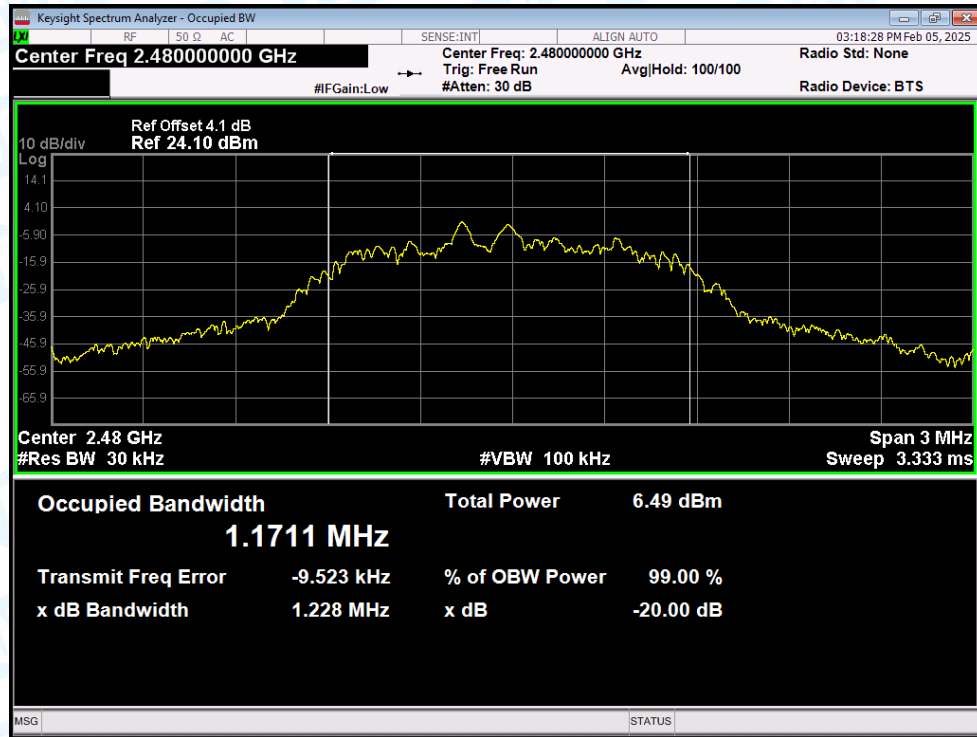
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



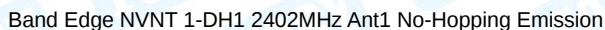
OBW NVNT 2-DH1 2480MHz Ant1



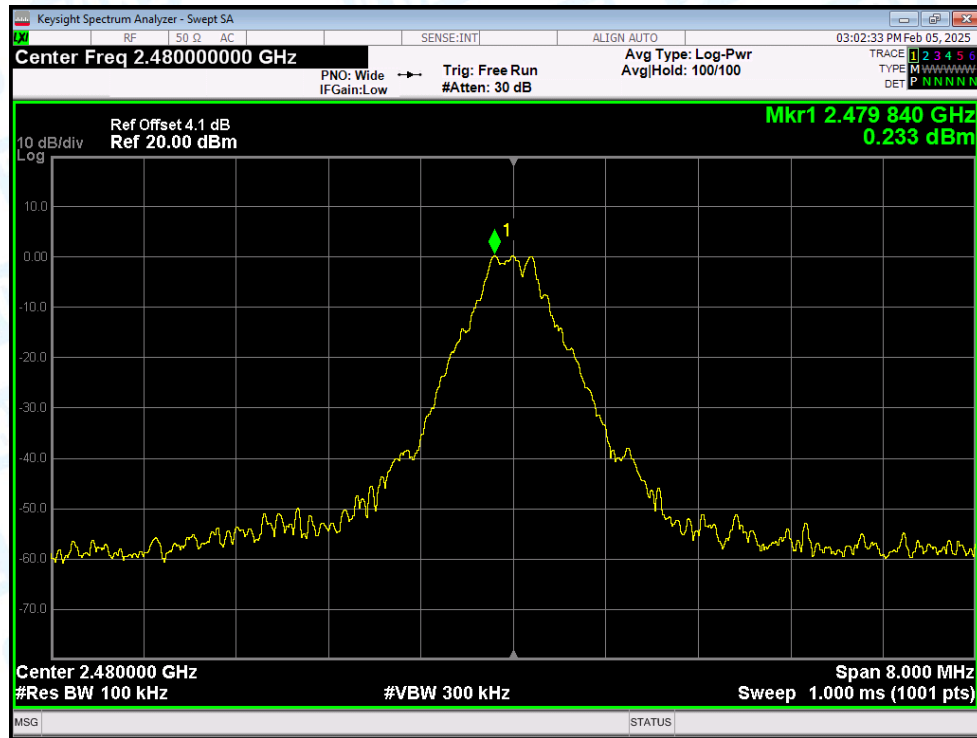
5. Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-52.04	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-52.69	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-52.96	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-54.01	-20	Pass

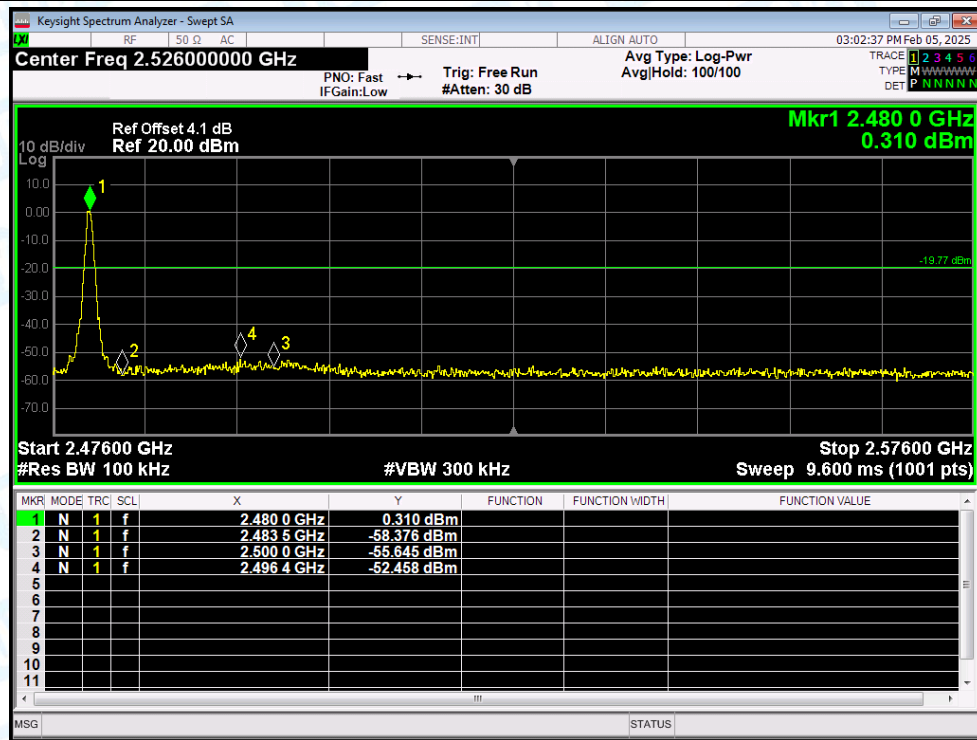
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



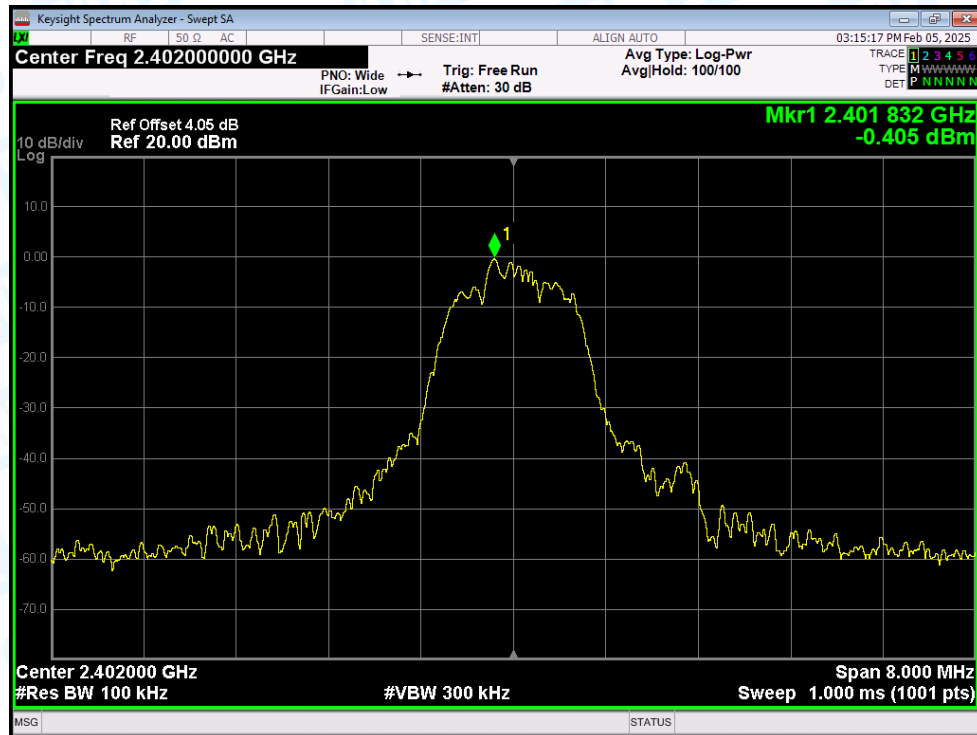
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



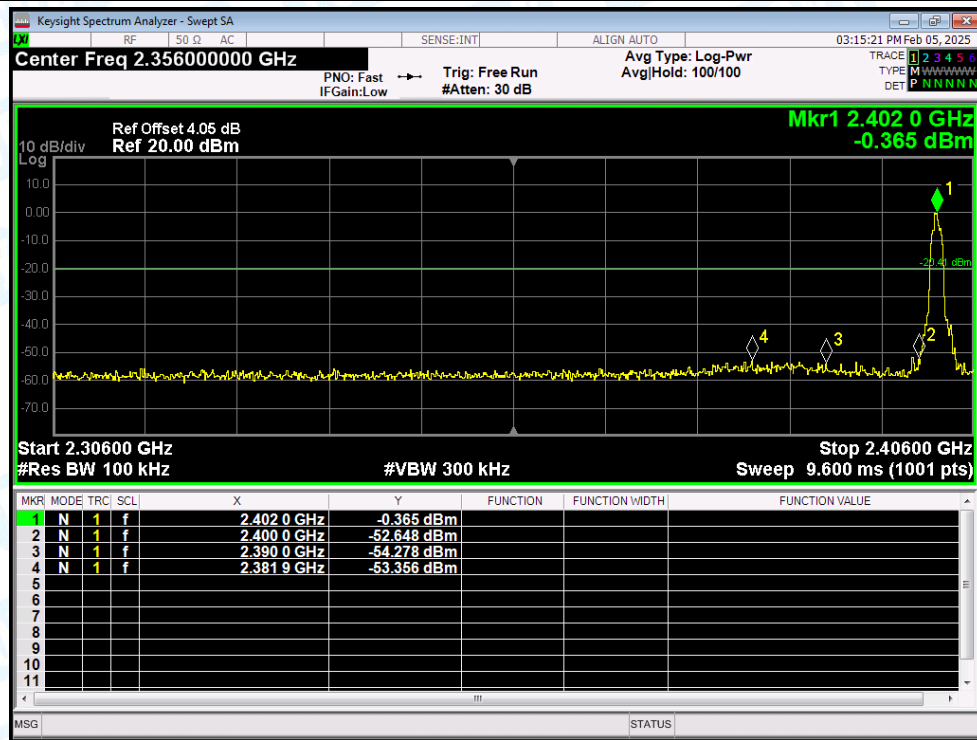
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



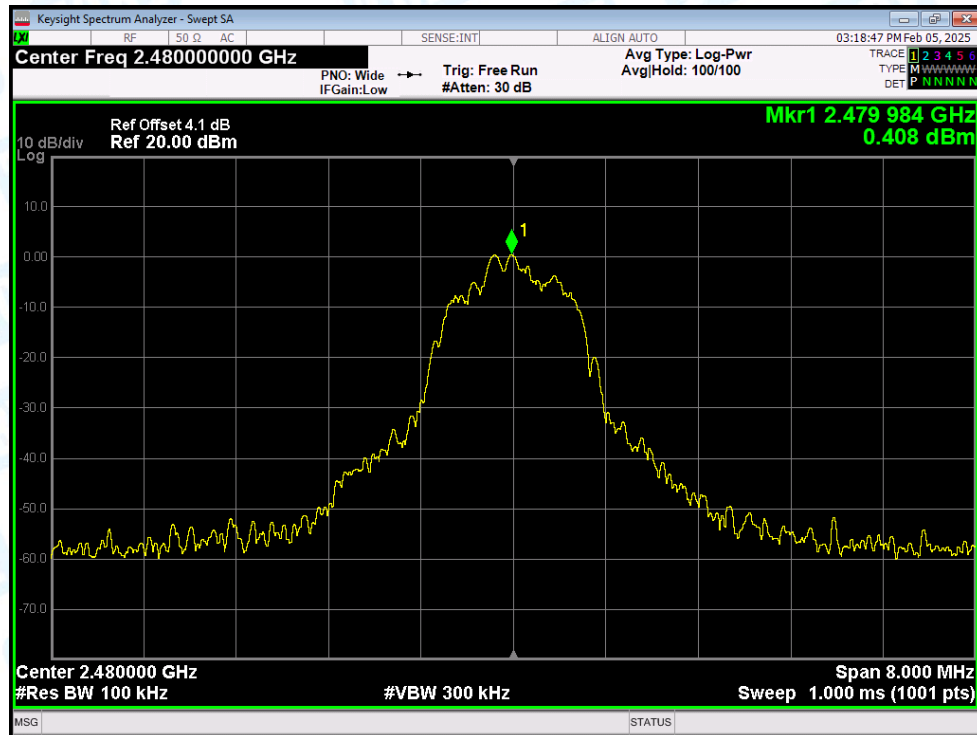
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



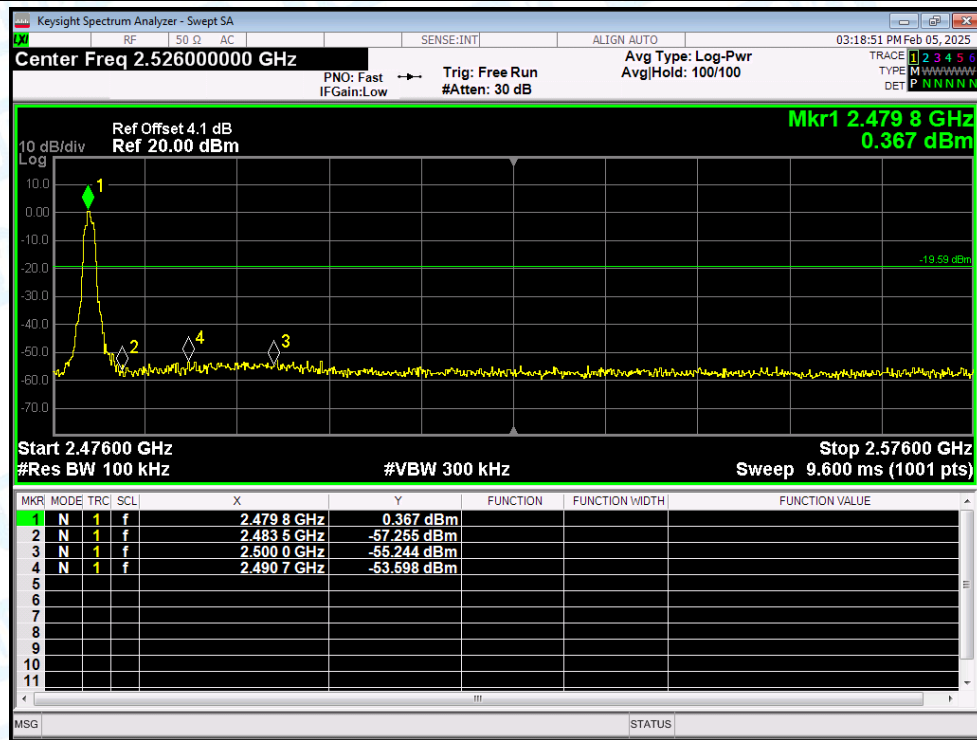
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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



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

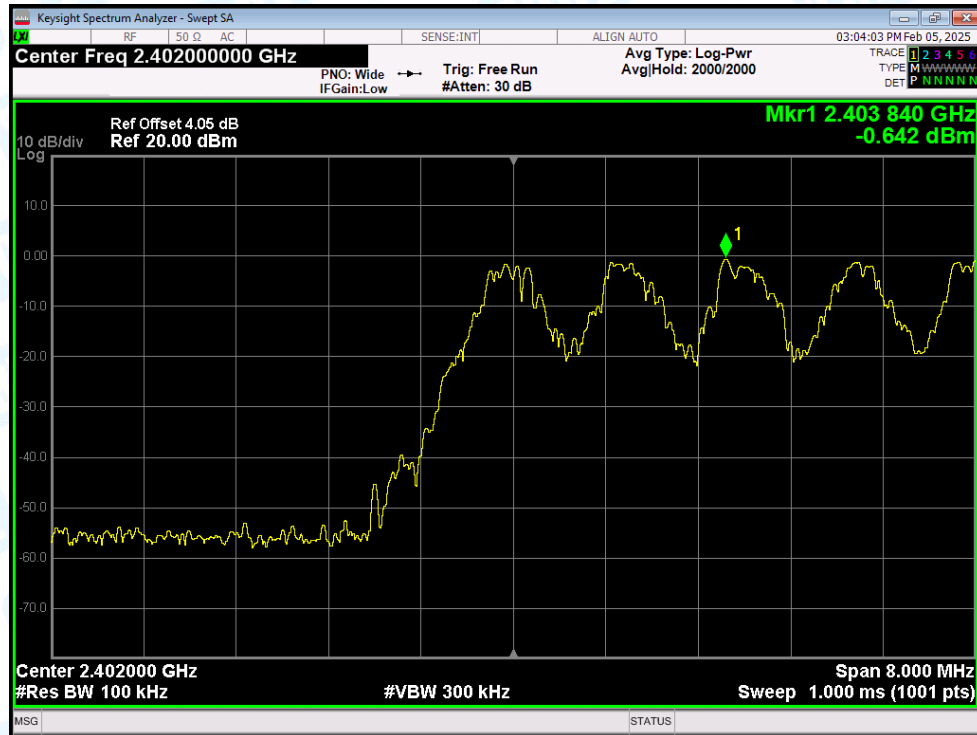


6. Band Edge(Hopping)

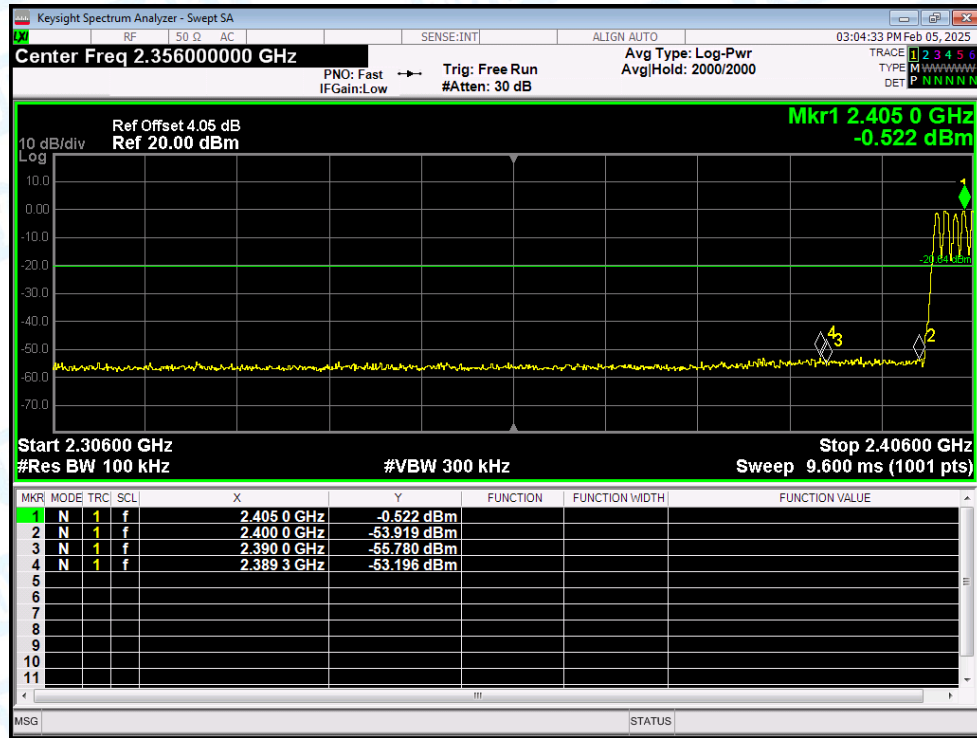
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-52.56	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-52.15	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-52.53	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-51.98	-20	Pass

Test Graphs

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



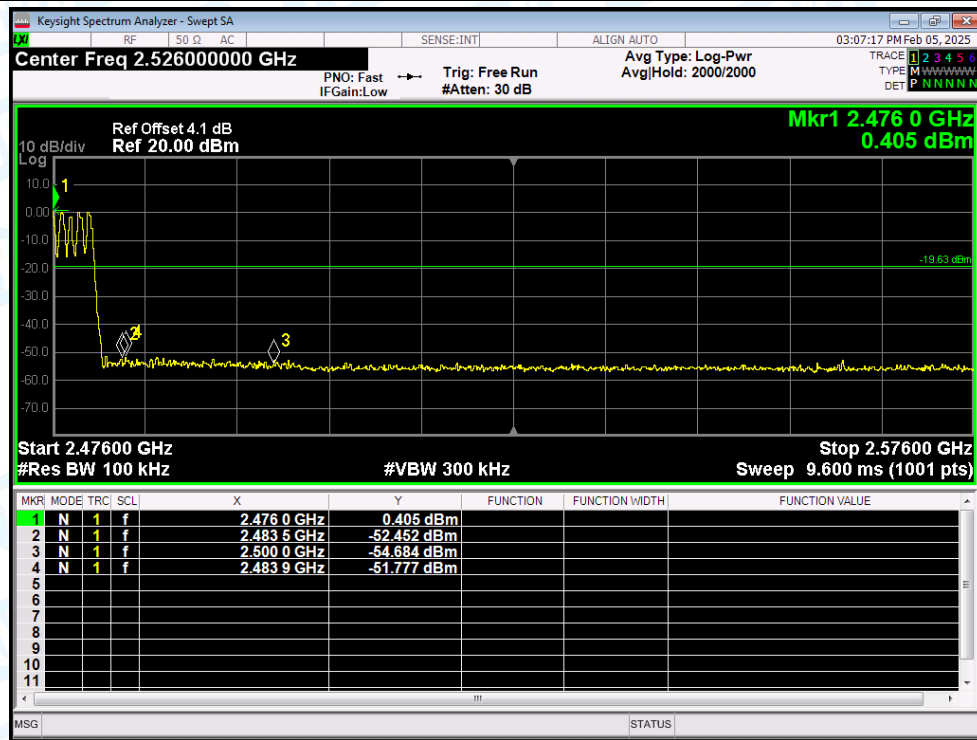
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



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



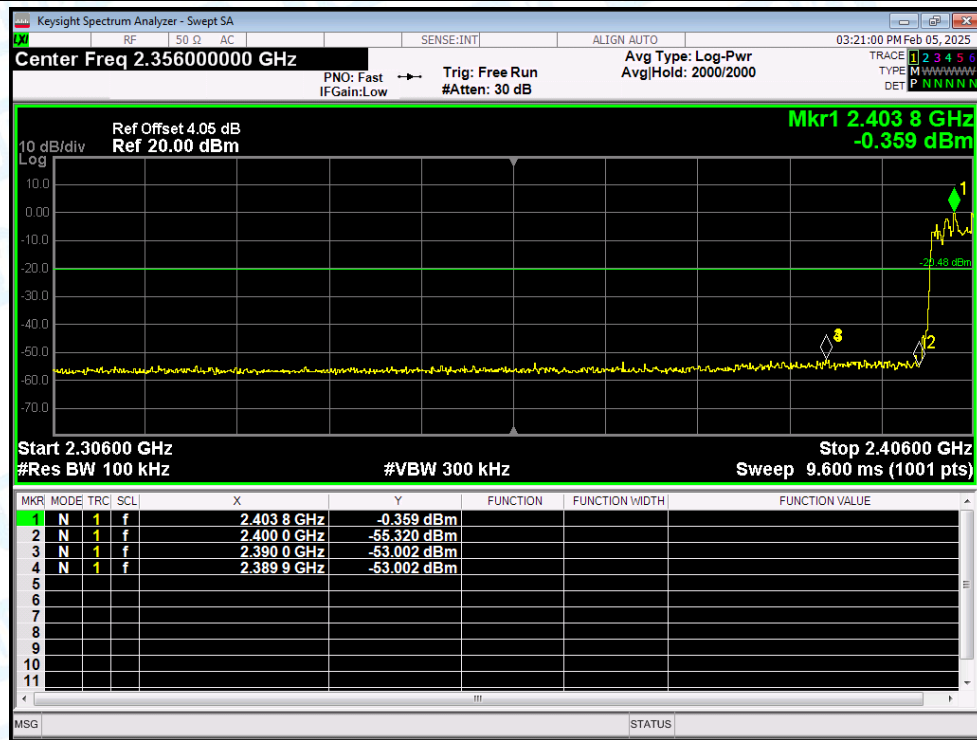
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



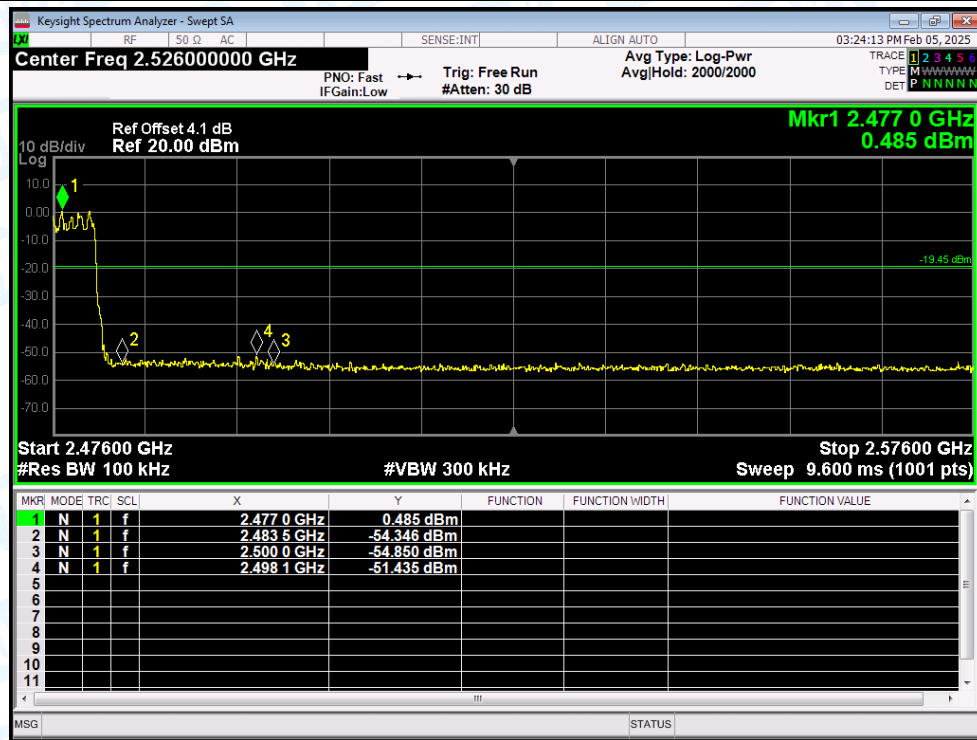
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



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



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

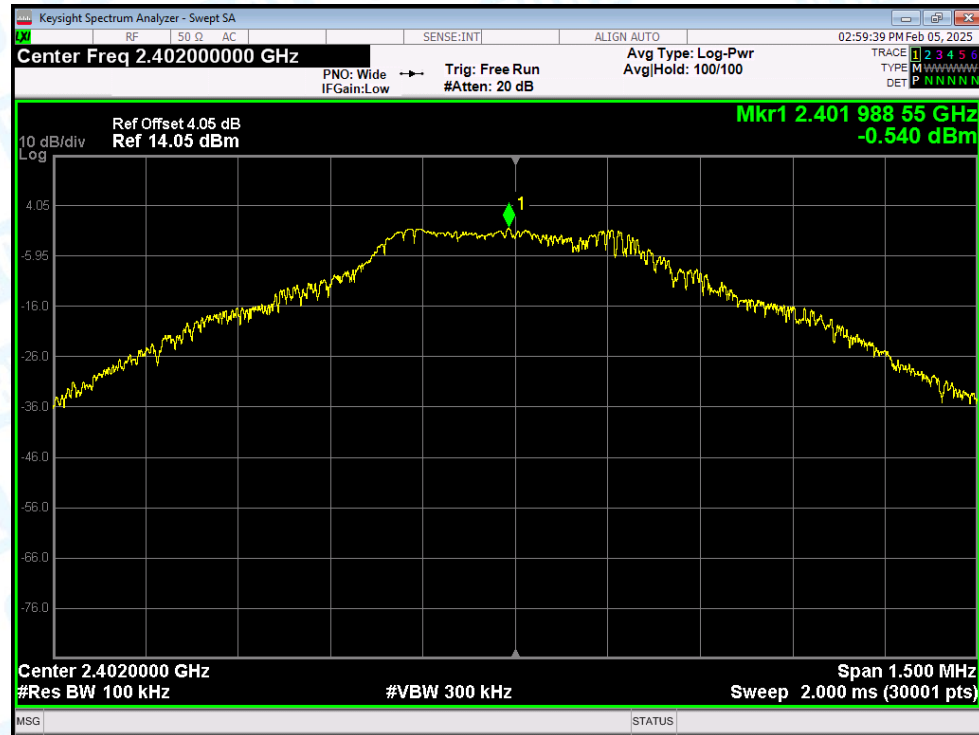


7. Conducted RF Spurious Emission

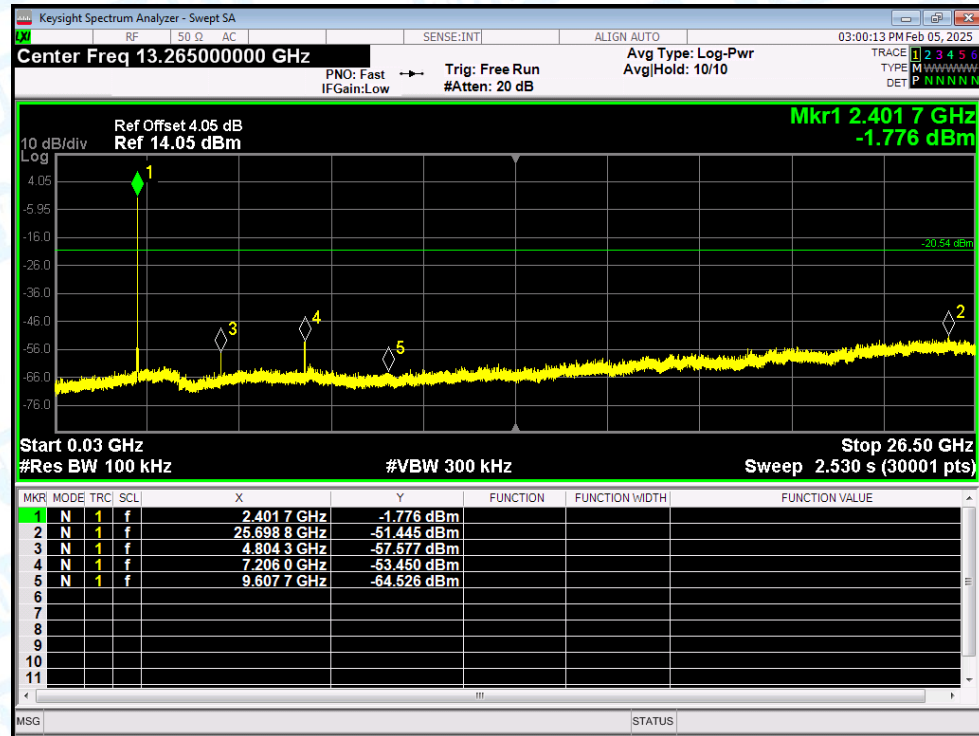
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-50.9	-20	Pass
NVNT	1-DH1	2441	Ant1	-51.7	-20	Pass
NVNT	1-DH1	2480	Ant1	-51.88	-20	Pass
NVNT	2-DH1	2402	Ant1	-51.38	-20	Pass
NVNT	2-DH1	2441	Ant1	-51.99	-20	Pass
NVNT	2-DH1	2480	Ant1	-51.14	-20	Pass

Test Graphs

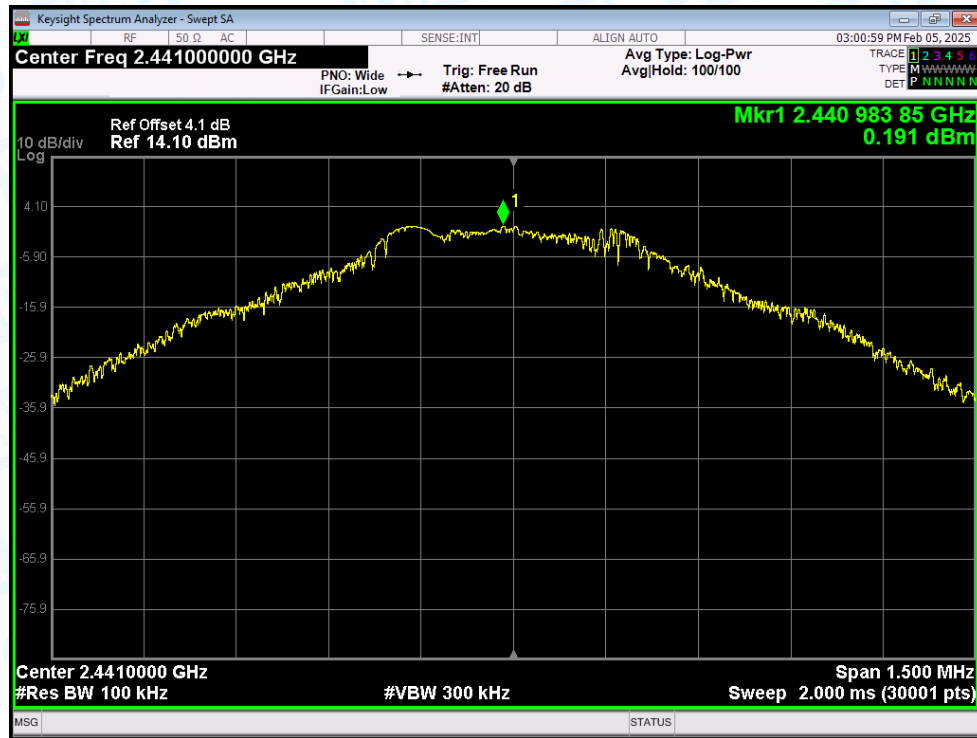
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



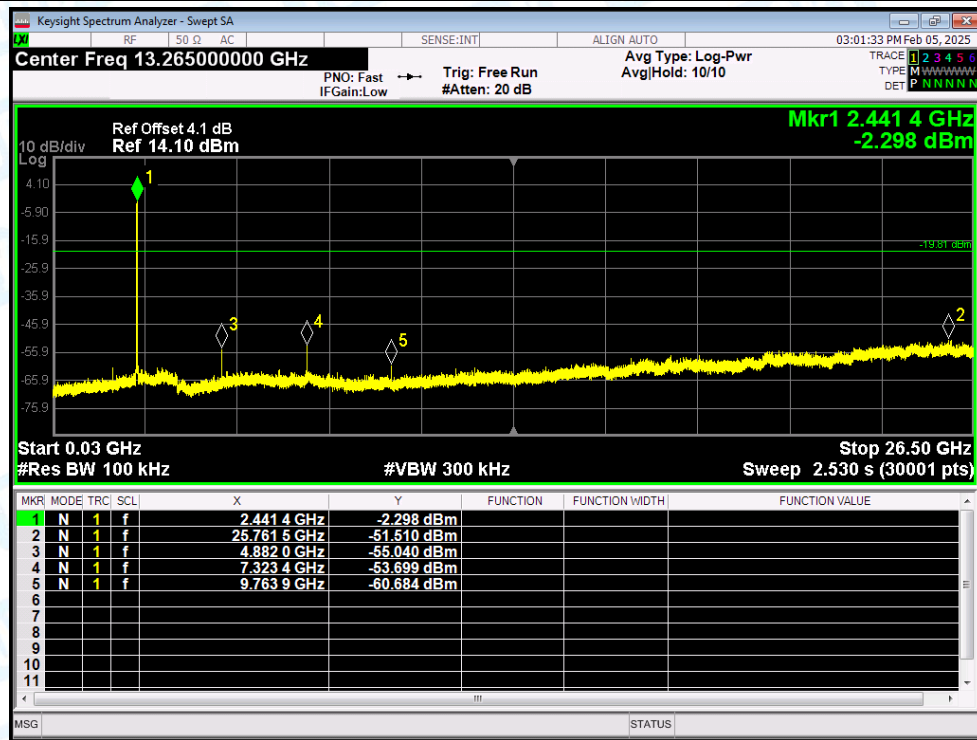
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



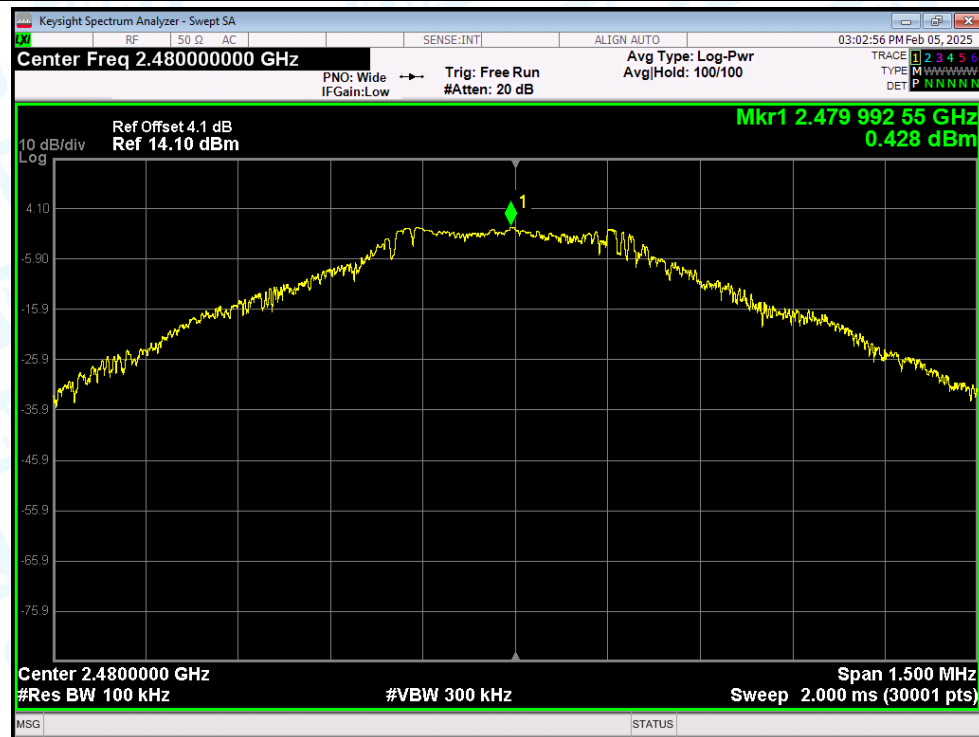
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



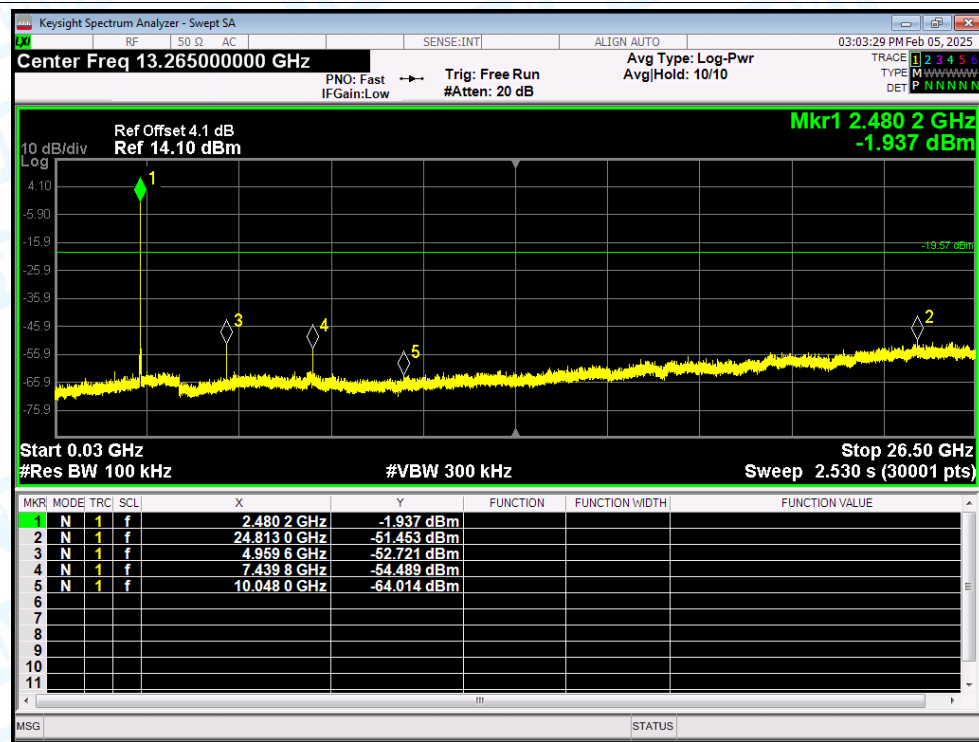
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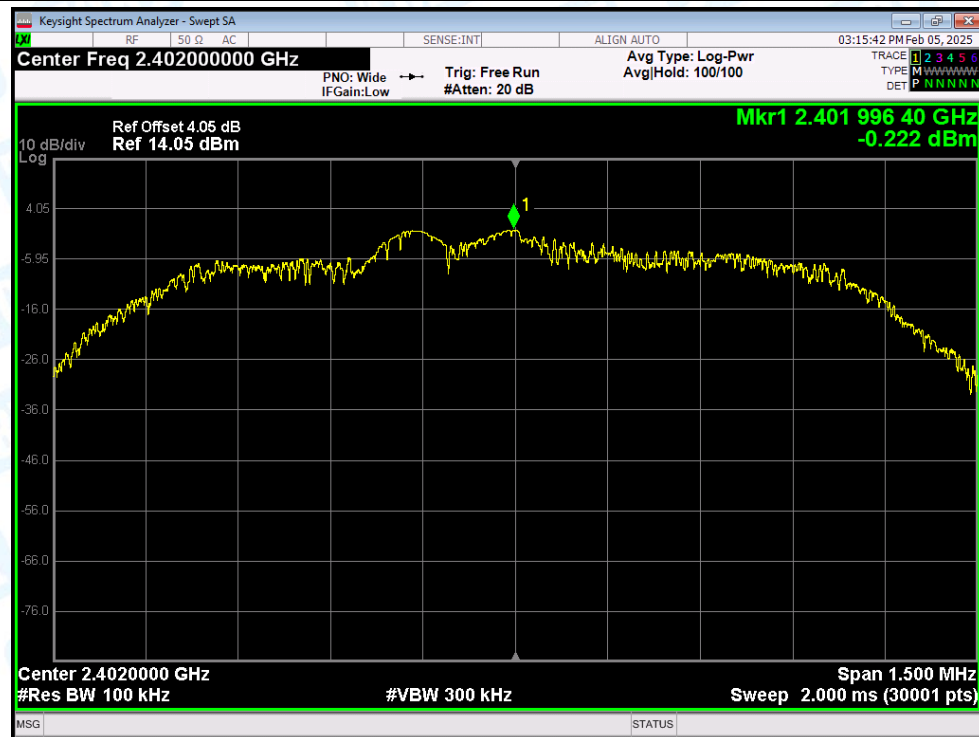
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



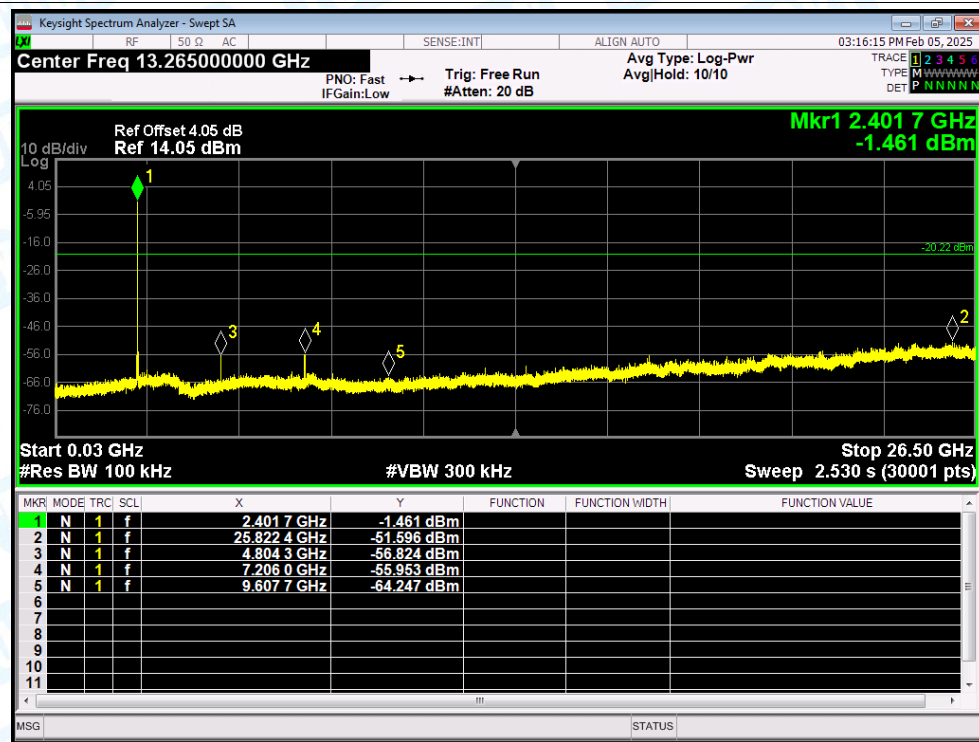
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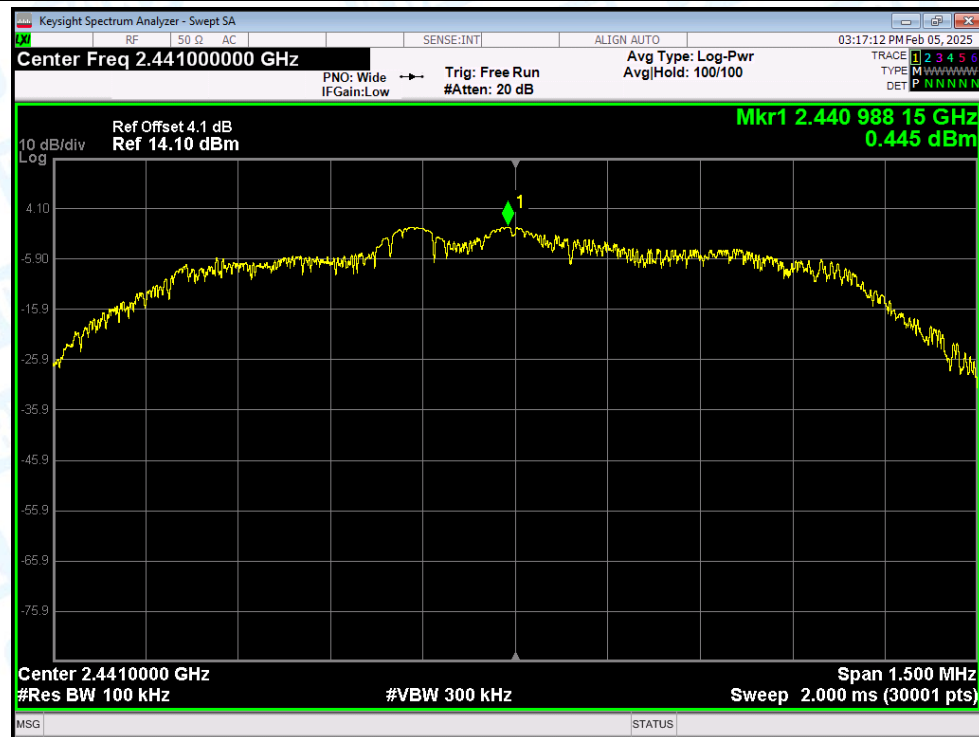
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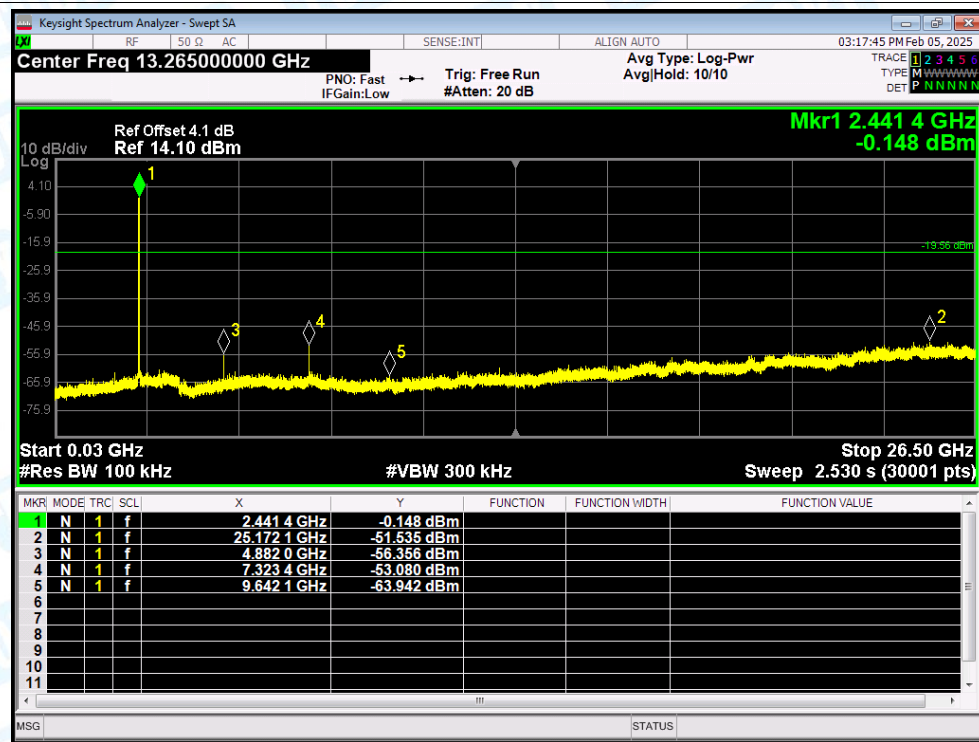
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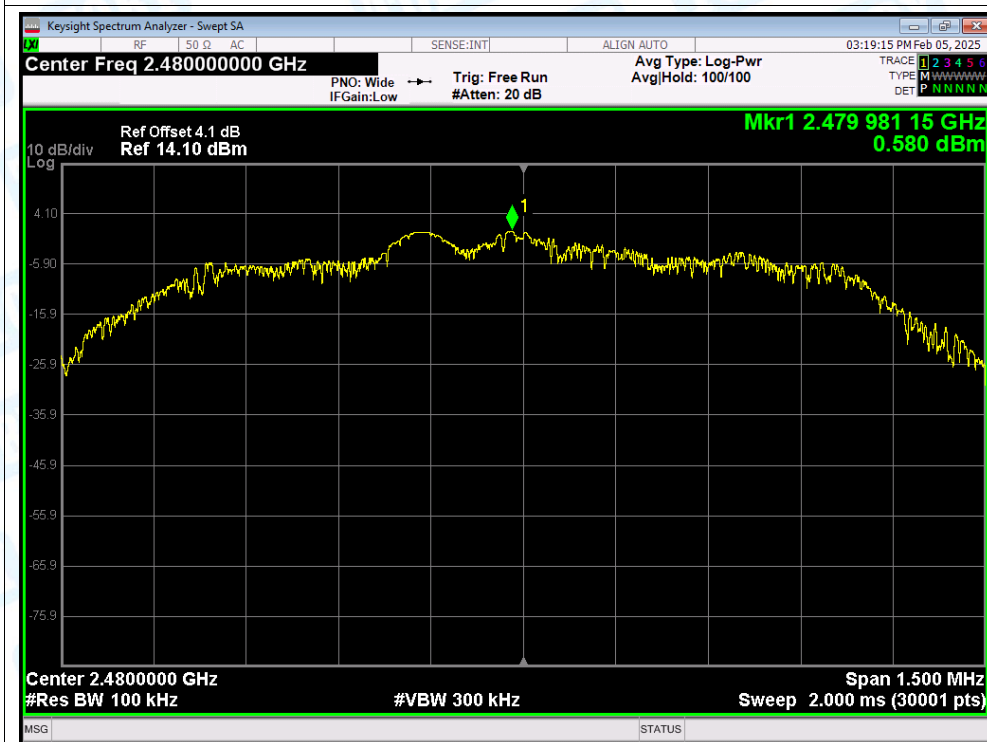
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



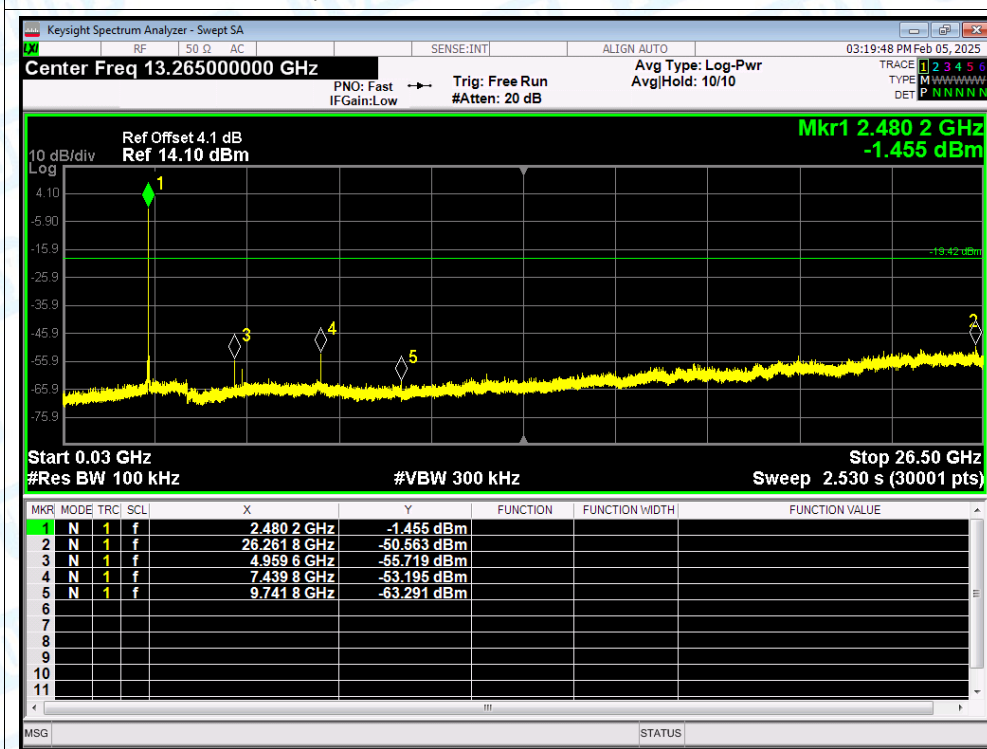
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission

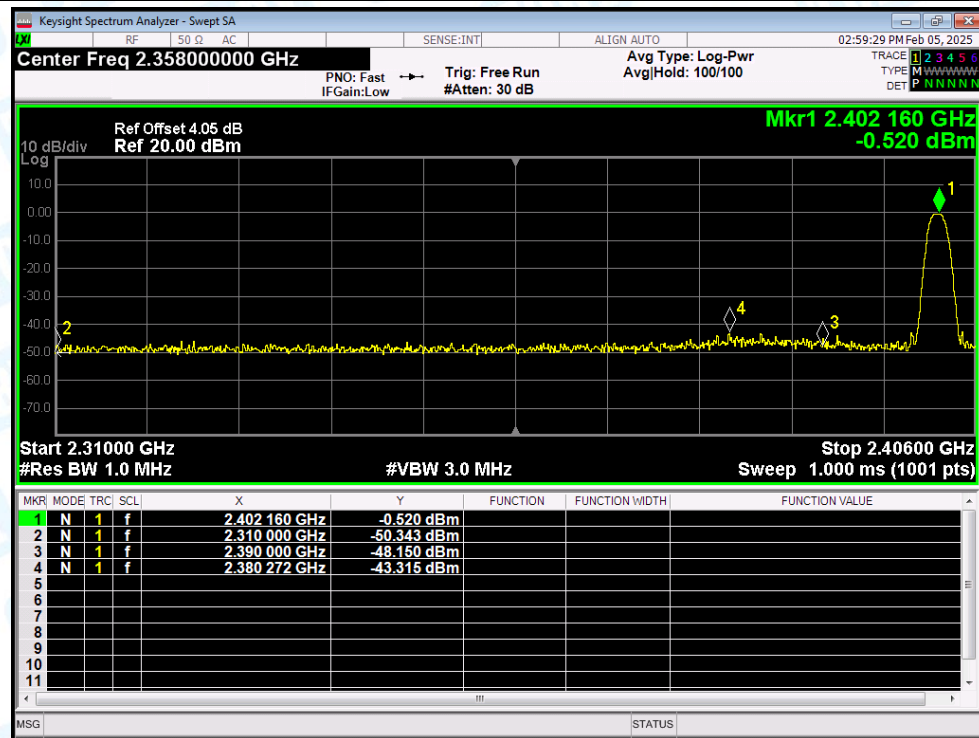


8. Restrict Band

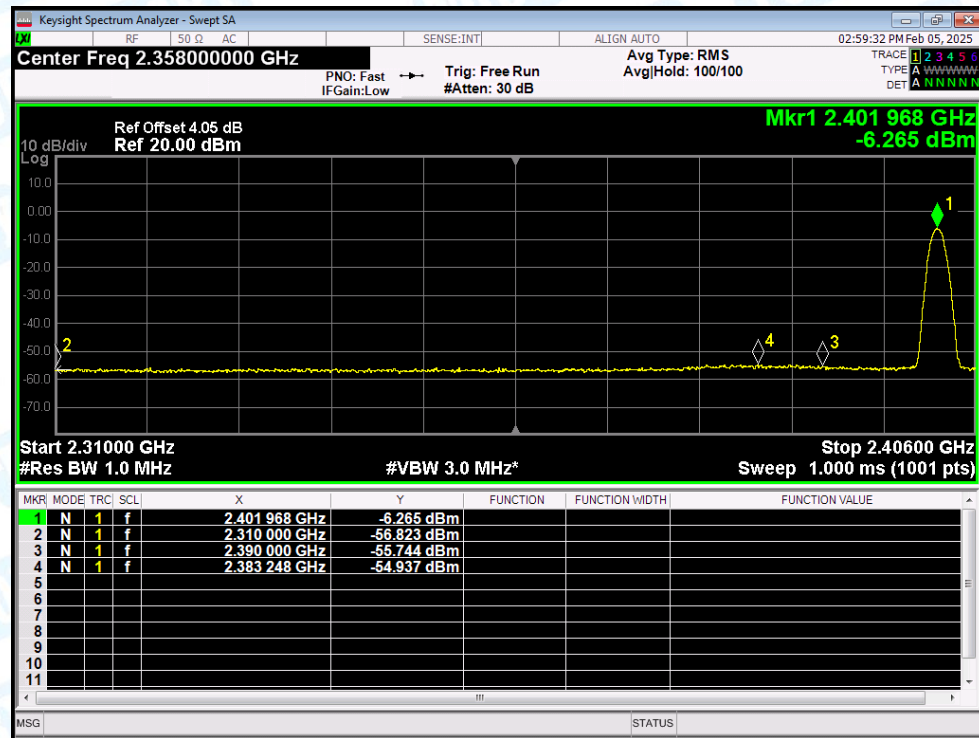
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-50.34	2.5	-	47.42	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-56.82	2.5	5.17	46.11	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2380.272	-43.31	2.5	-	54.45	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2383.248	-54.94	2.5	5.17	47.99	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-48.15	2.5	-	49.61	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-55.74	2.5	5.17	47.19	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-46.58	2.5	-	51.18	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-55.45	2.5	5.17	47.48	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.88	-42.02	2.5	-	55.74	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2499.976	-53.56	2.5	5.17	49.37	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-45.55	2.5	-	52.21	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.19	2.5	5.17	48.74	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-49.06	2.5	-	48.7	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-56.97	2.5	5.06	45.85	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2378.928	-43.68	2.5	-	54.08	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2381.808	-54.29	2.5	5.06	48.53	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-47.39	2.5	-	50.37	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-56.03	2.5	5.06	46.79	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-48.19	2.5	-	49.57	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-55.65	2.5	5.06	47.17	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.608	-38.83	2.5	-	58.93	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2499.52	-53.89	2.5	5.06	48.93	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-44.18	2.5	-	53.58	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.86	2.5	5.06	47.96	Average	54	Pass

Test Graphs

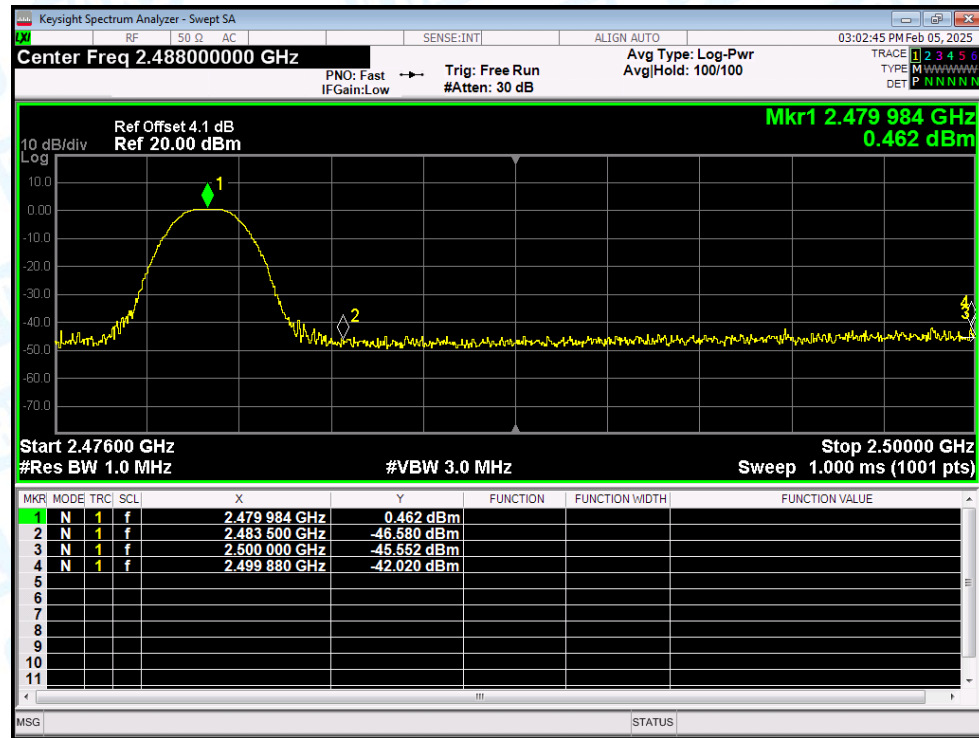
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



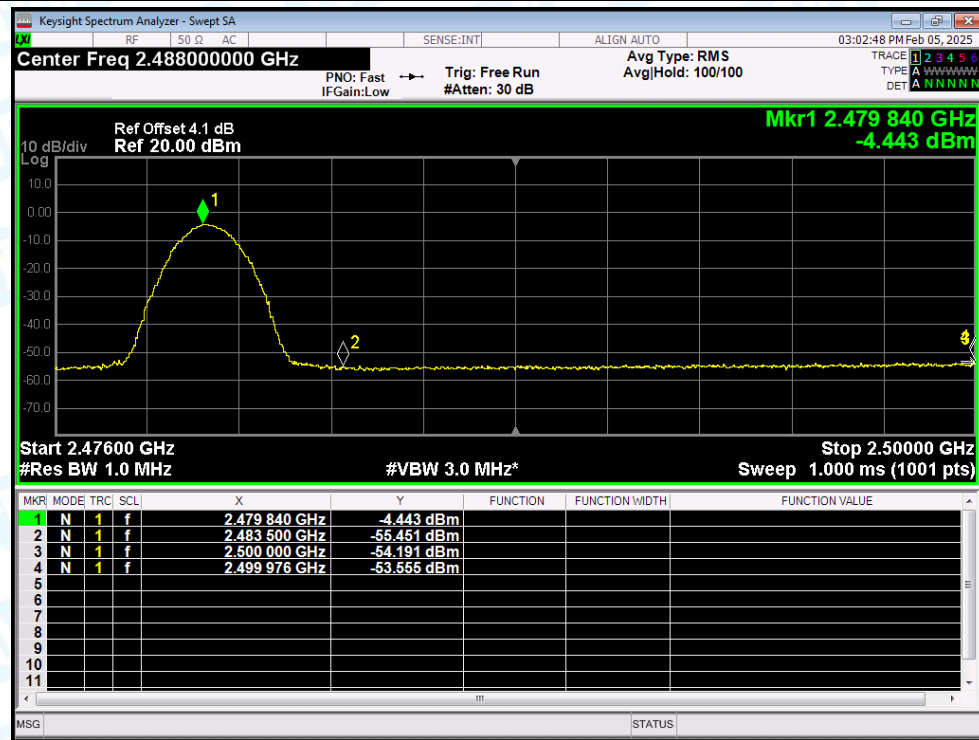
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



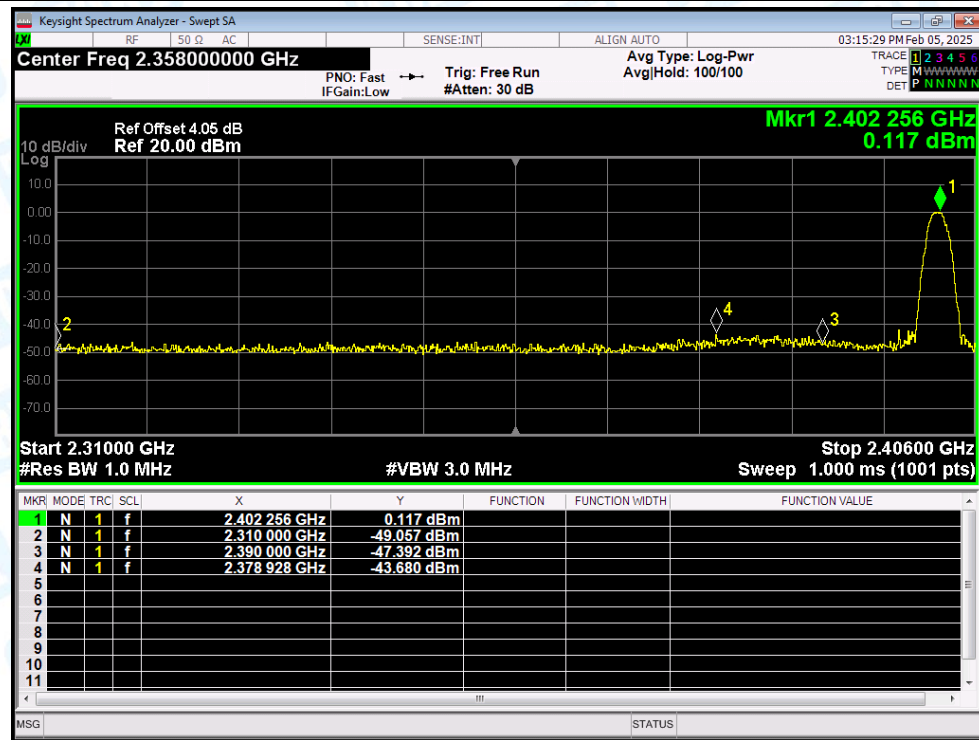
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



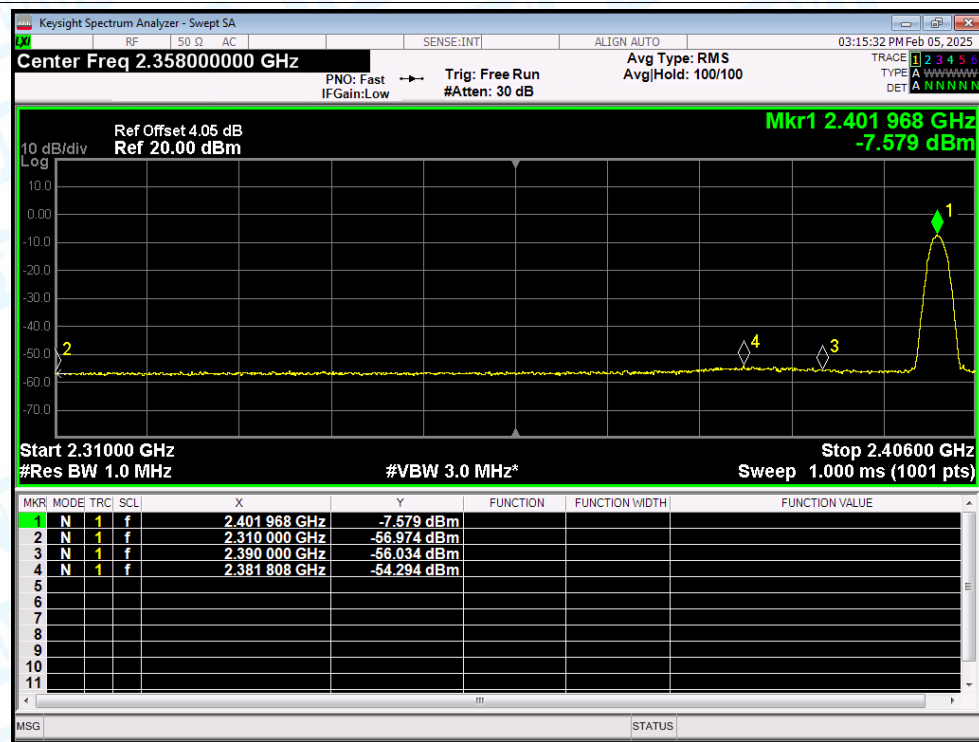
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



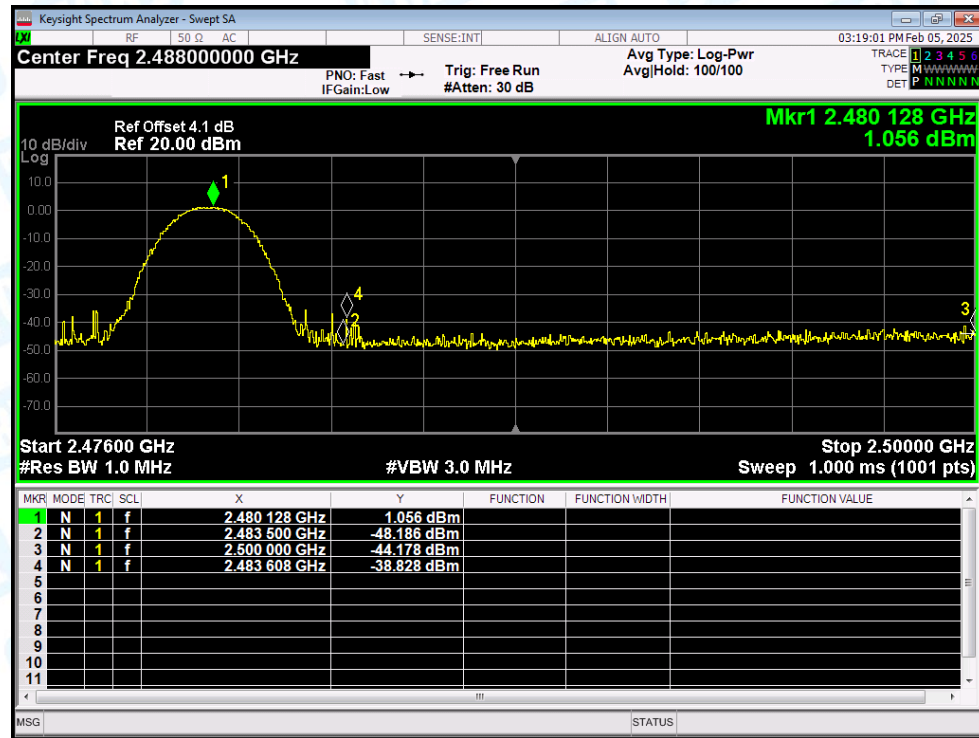
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



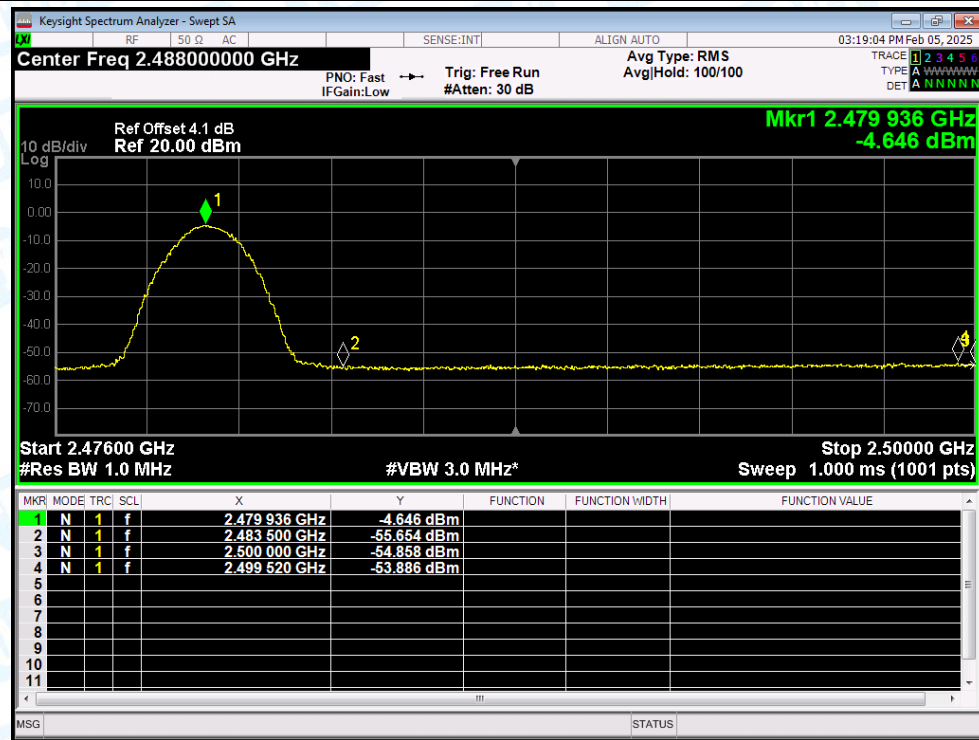
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



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



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

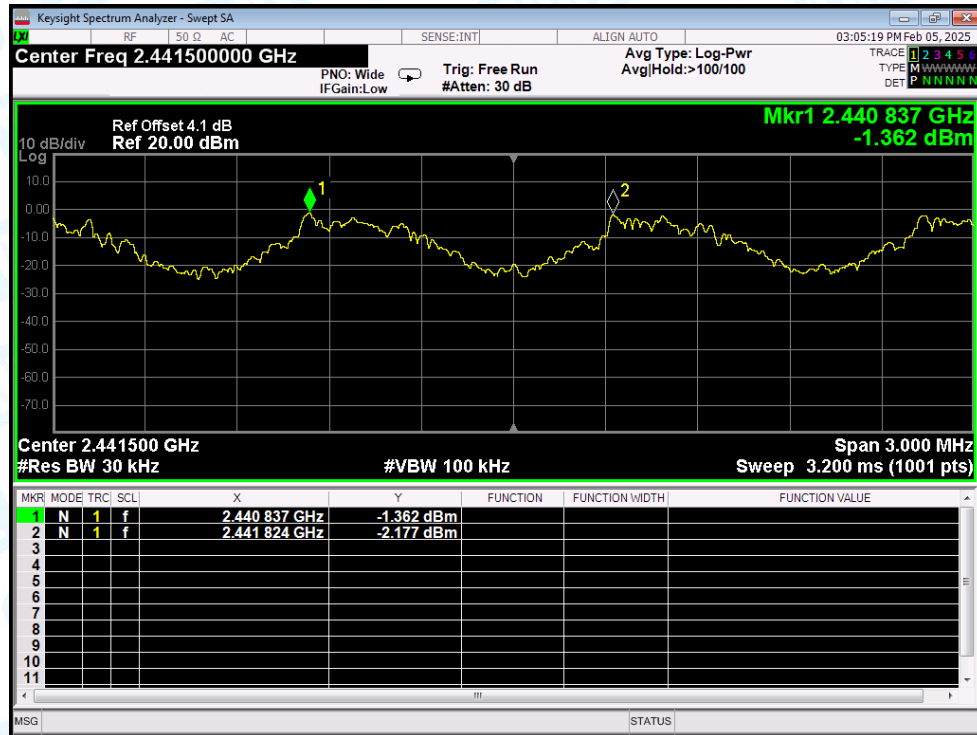


9. Carrier Frequencies Separation

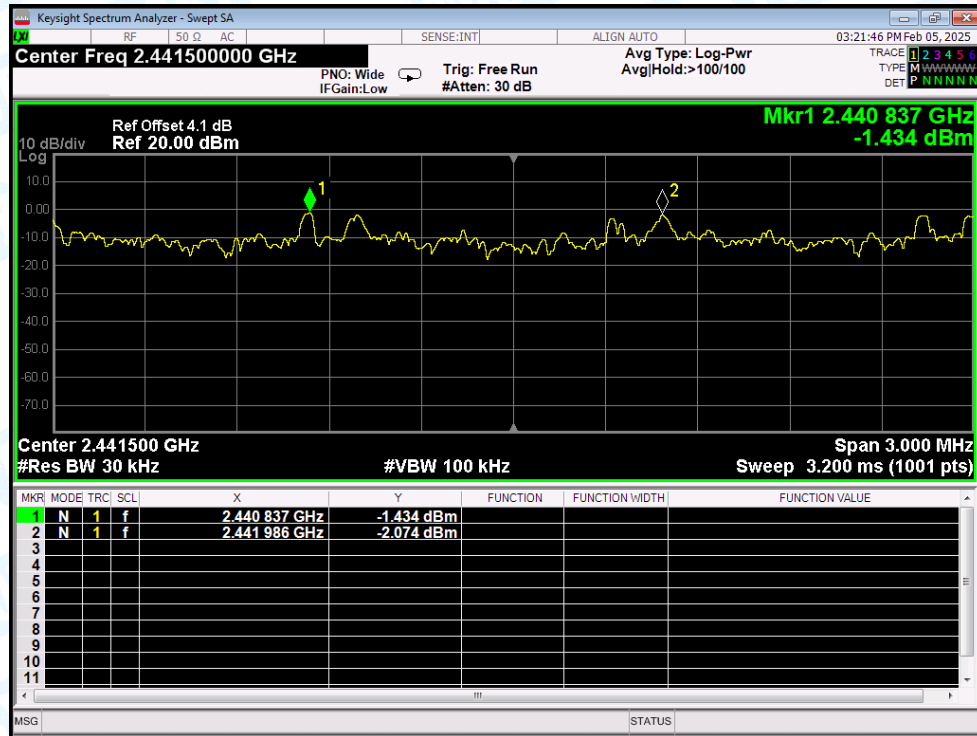
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2440.837	2441.824	0.987	0.673	Pass
NVNT	2-DH1	Ant1	2440.837	2441.986	1.149	0.833	Pass

Test Graphs

CFS NVNT 1-DH1 2441MHz Ant1



CFS NVNT 2-DH1 2441MHz Ant1

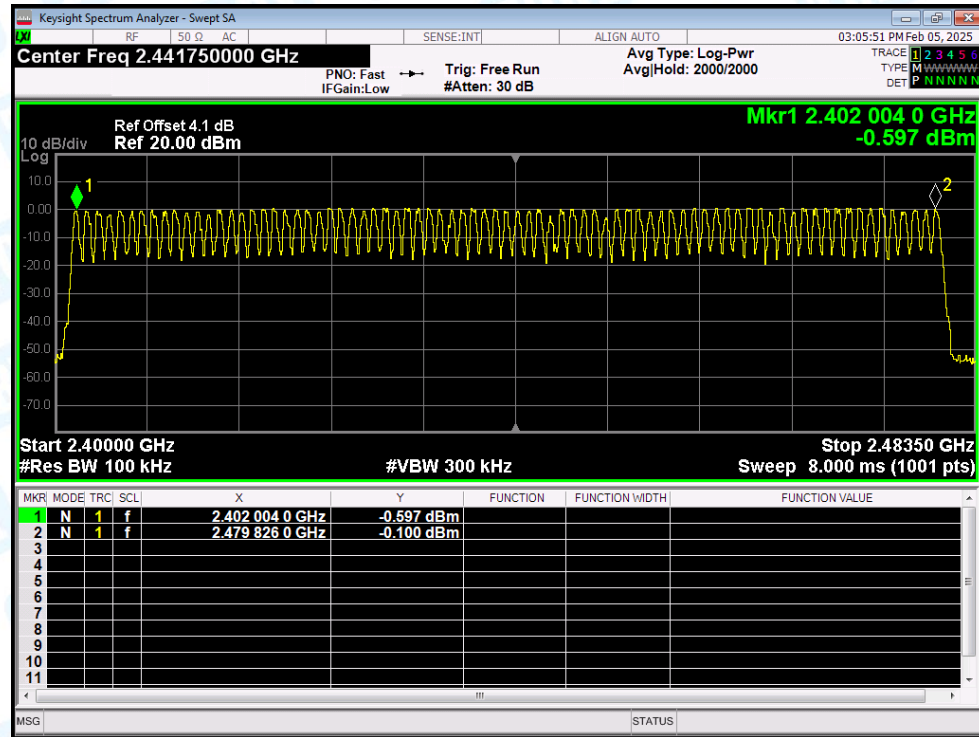


10. Number of Hopping Channel

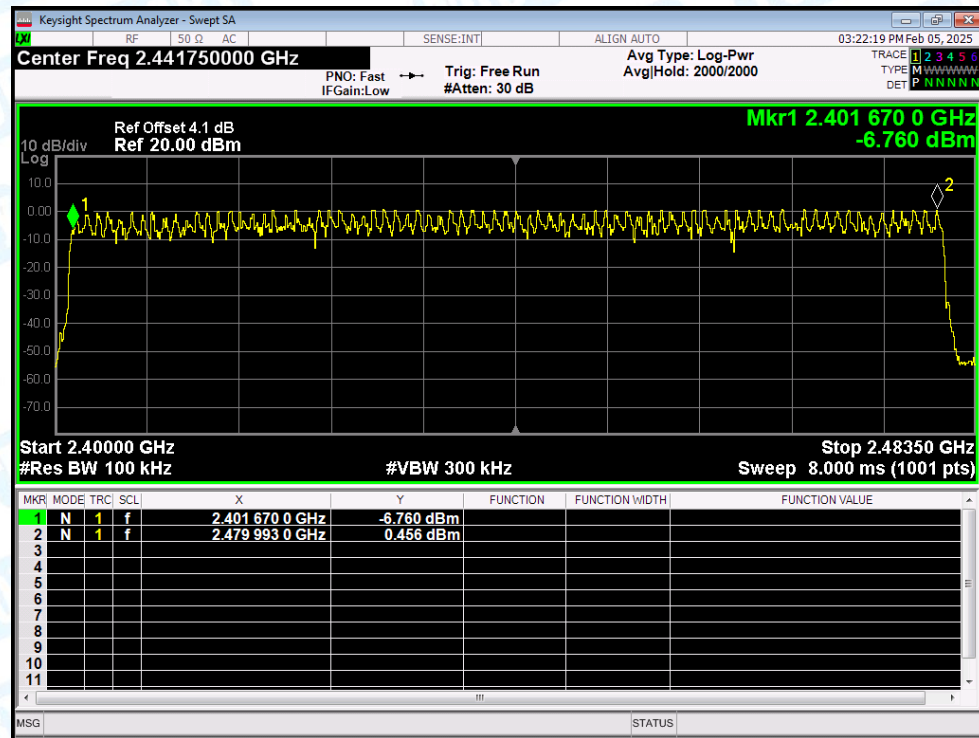
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass

Test Graphs

Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1

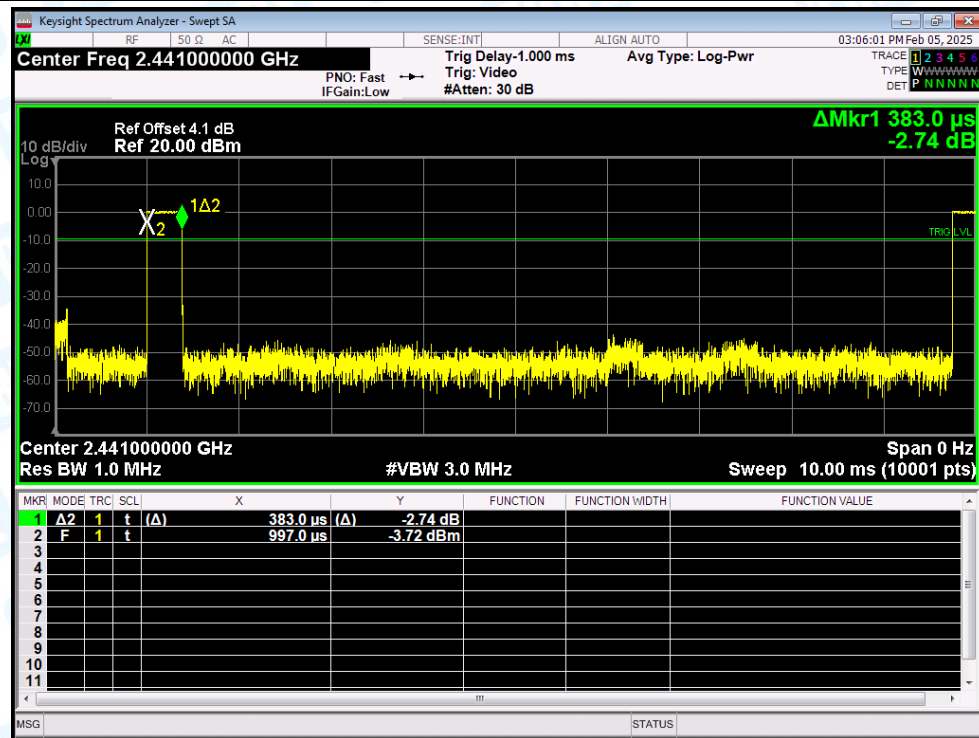


11. Dwell Time

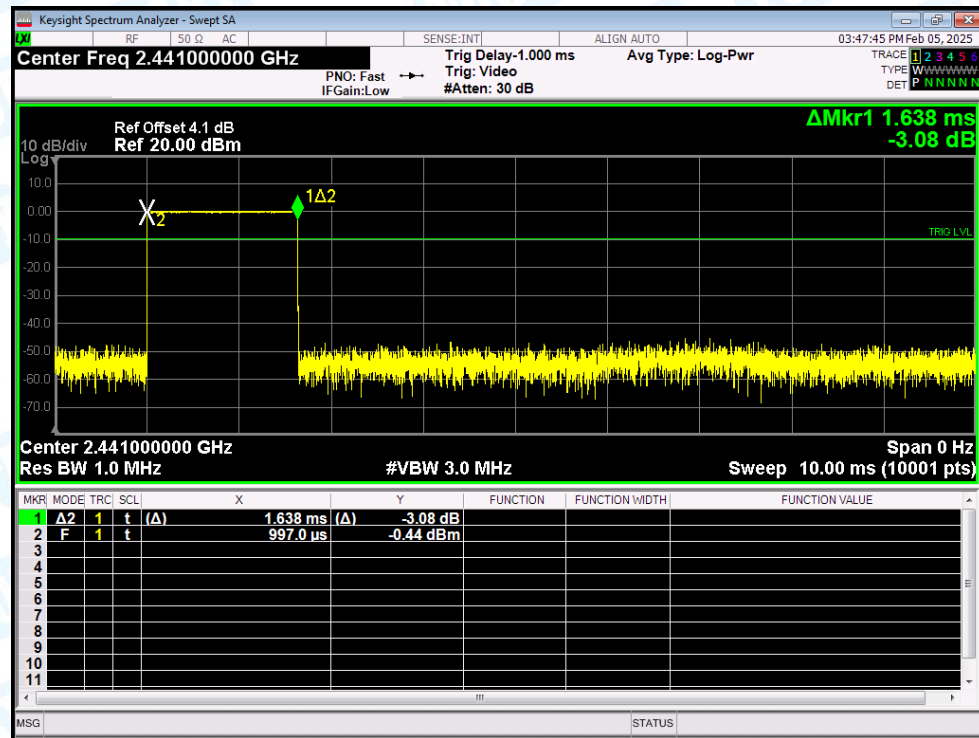
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.383	122.56	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.638	262.08	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.887	307.947	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.392	125.44	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.643	262.88	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.891	308.373	31600	400	Pass

Test Graphs

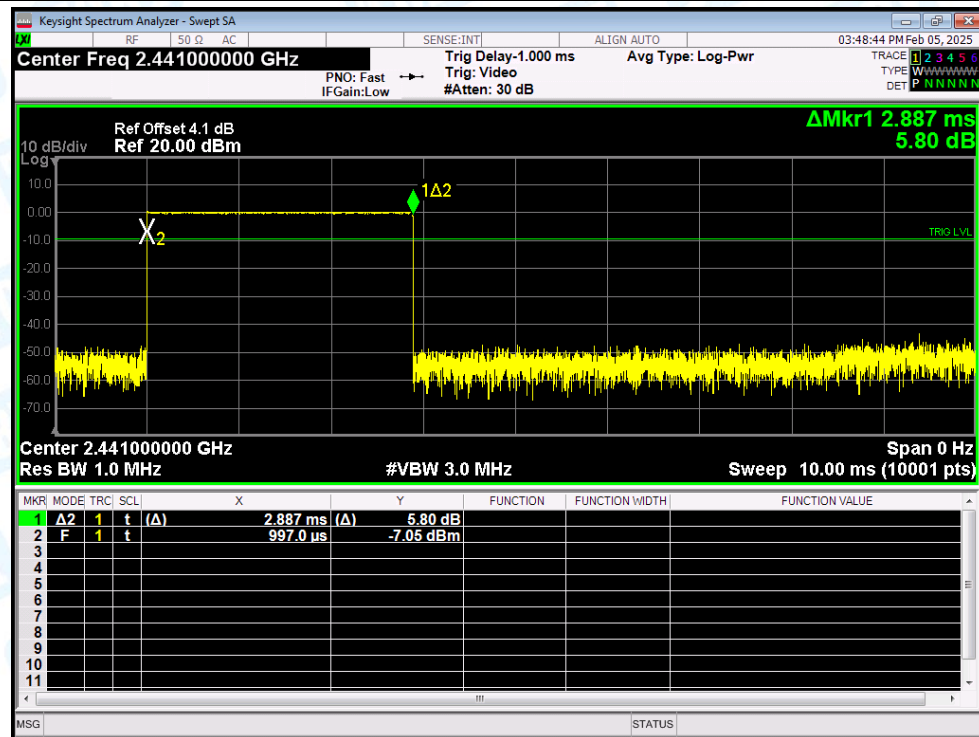
Dwell NVNT 1-DH1 2441MHz Ant1



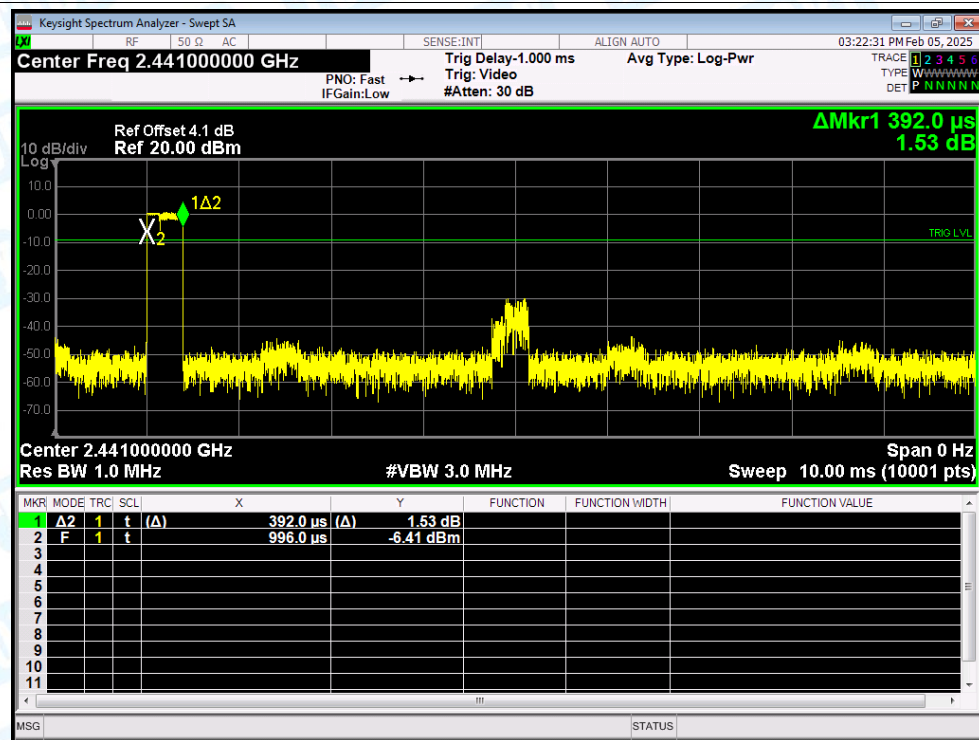
Dwell NVNT 1-DH3 2441MHz Ant1



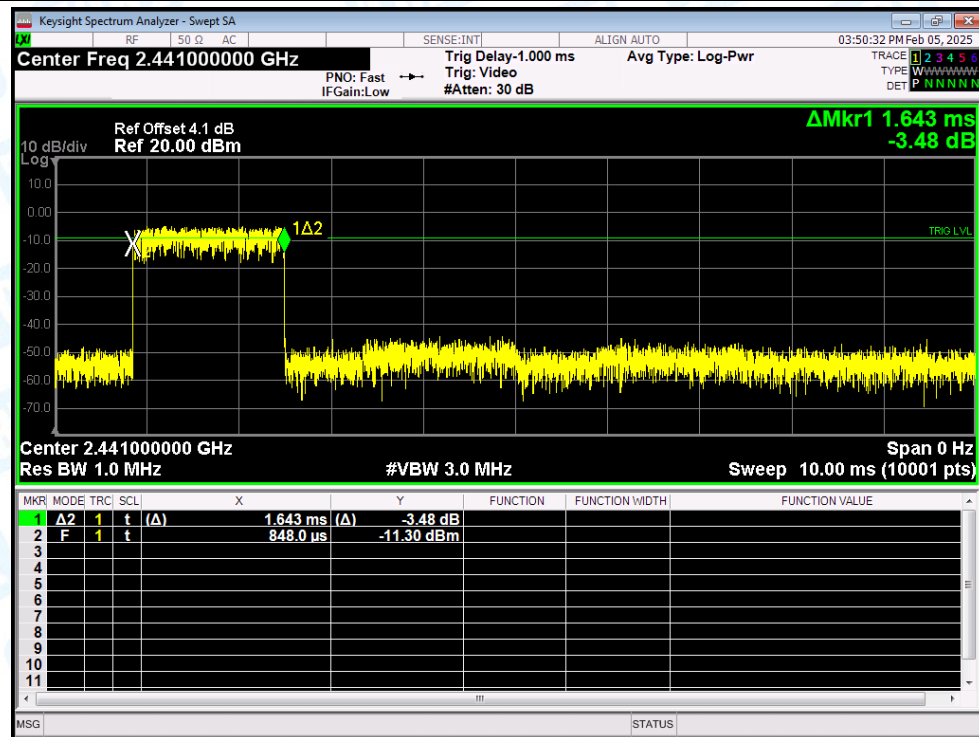
Dwell NVNT 1-DH5 2441MHz Ant1



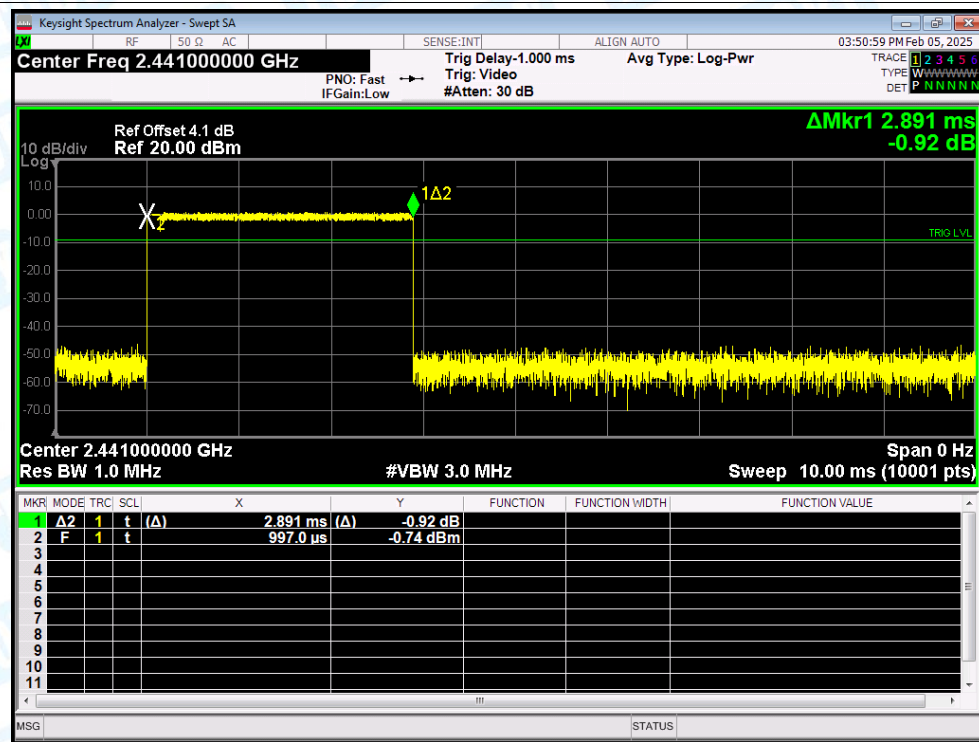
Dwell NVNT 2-DH1 2441MHz Ant1



Dwell NVNT 2-DH3 2441MHz Ant1



Dwell NVNT 2-DH5 2441MHz Ant1



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