

RF Test Data for Bluetooth (Conducted Measurements)

General Description of EUT	
Product Name:	X62
Test Model:	X62
Sample ID:	HC-C-202601-0177-02-01#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Lily Zhang
Note: For a more detailed features description, please refer to the report TBR-C-202601-0177-15 The report only show the worst case data.	

Contents

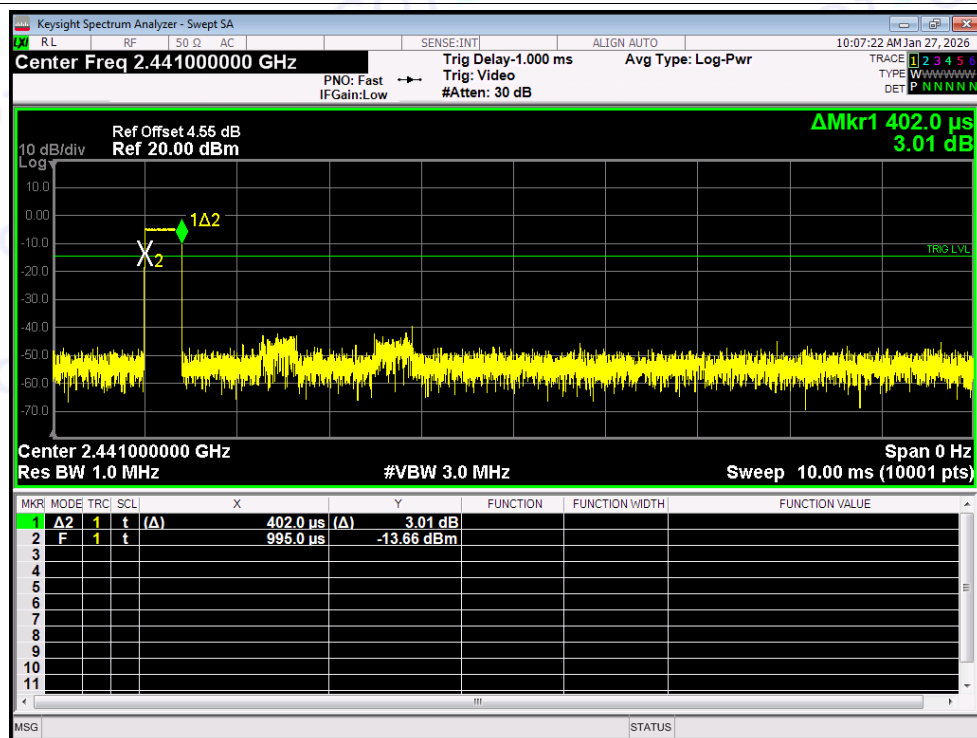
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1.Dwell Time

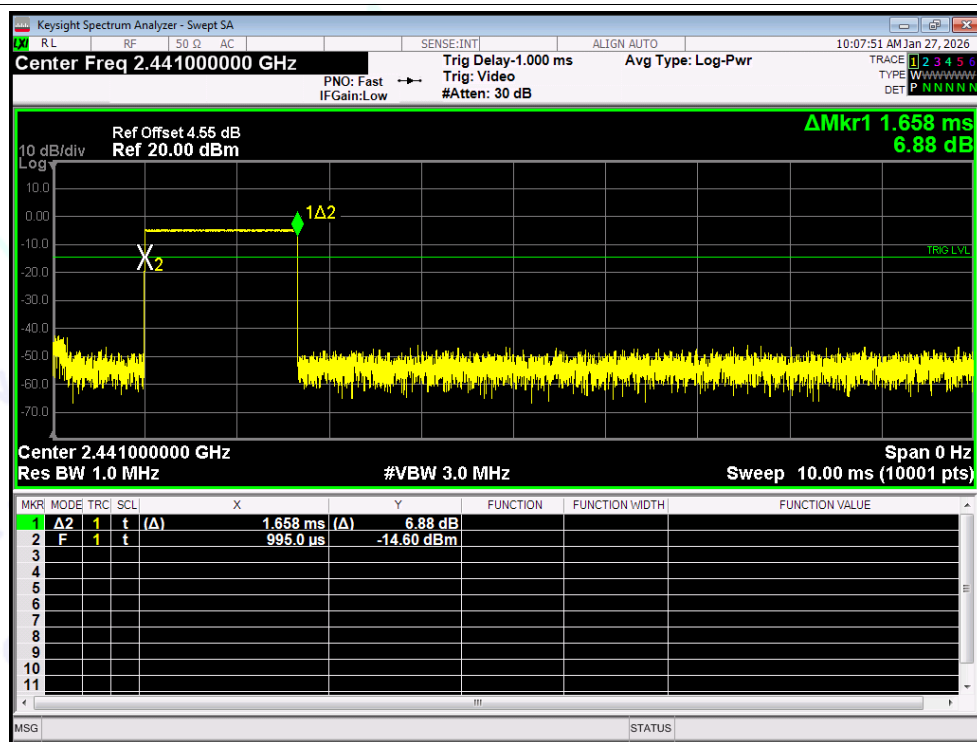
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.402	128.64	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.658	265.28	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.906	309.973	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.412	131.84	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.664	266.24	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.911	310.507	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.414	132.48	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.663	266.08	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.914	310.827	31600	400	Pass

Test Graphs

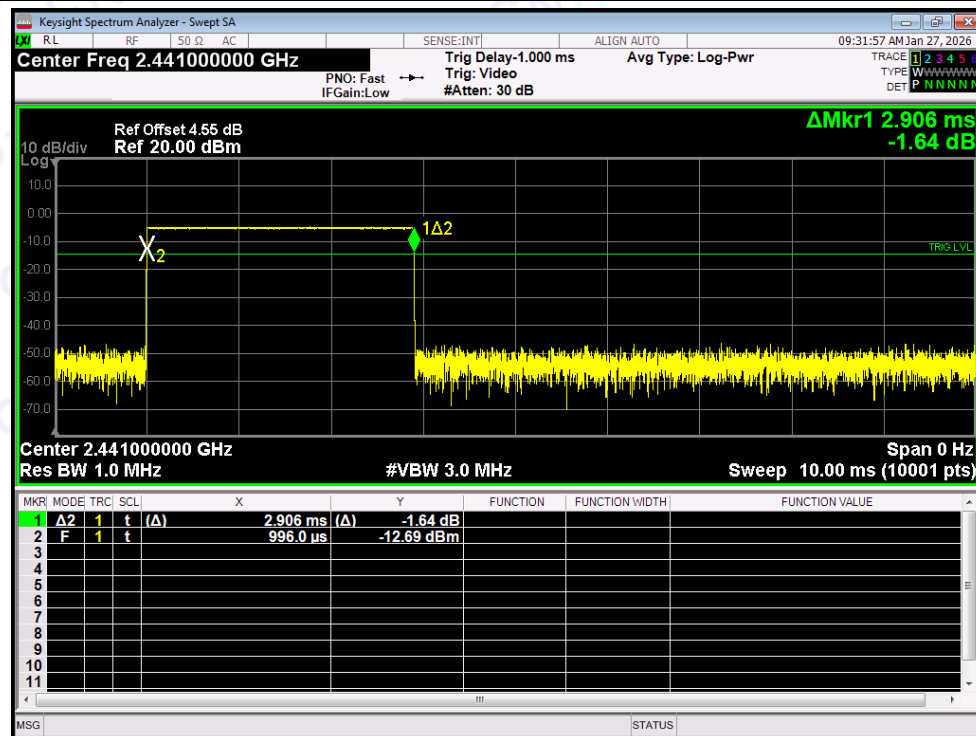
Dwell NVNT 1-DH1 2441MHz Ant1



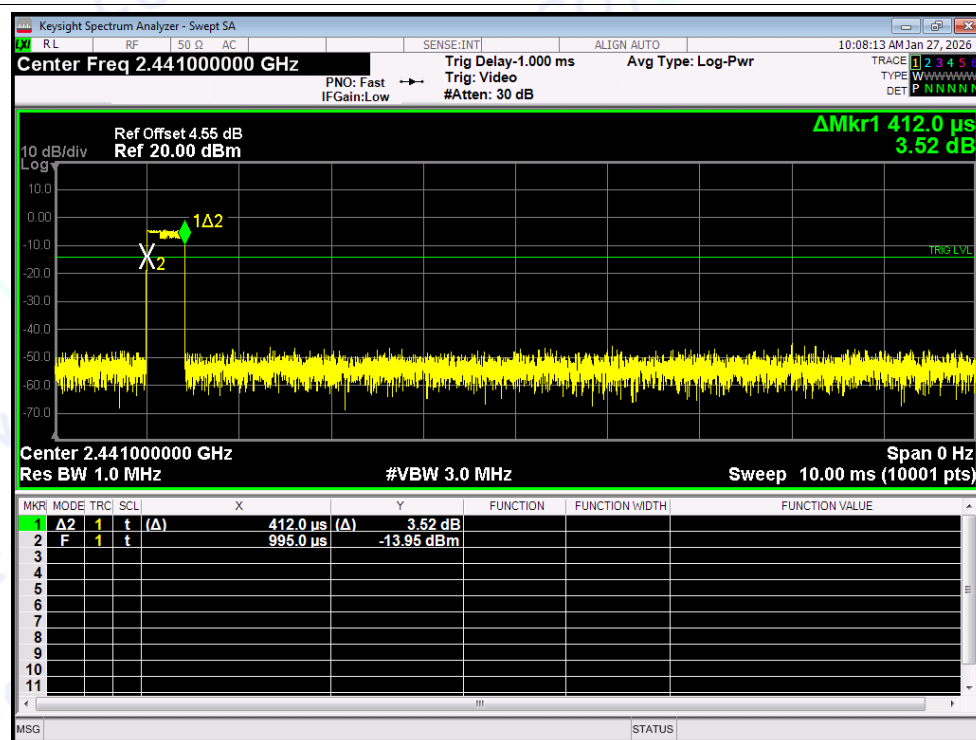
Dwell NVNT 1-DH3 2441MHz Ant1



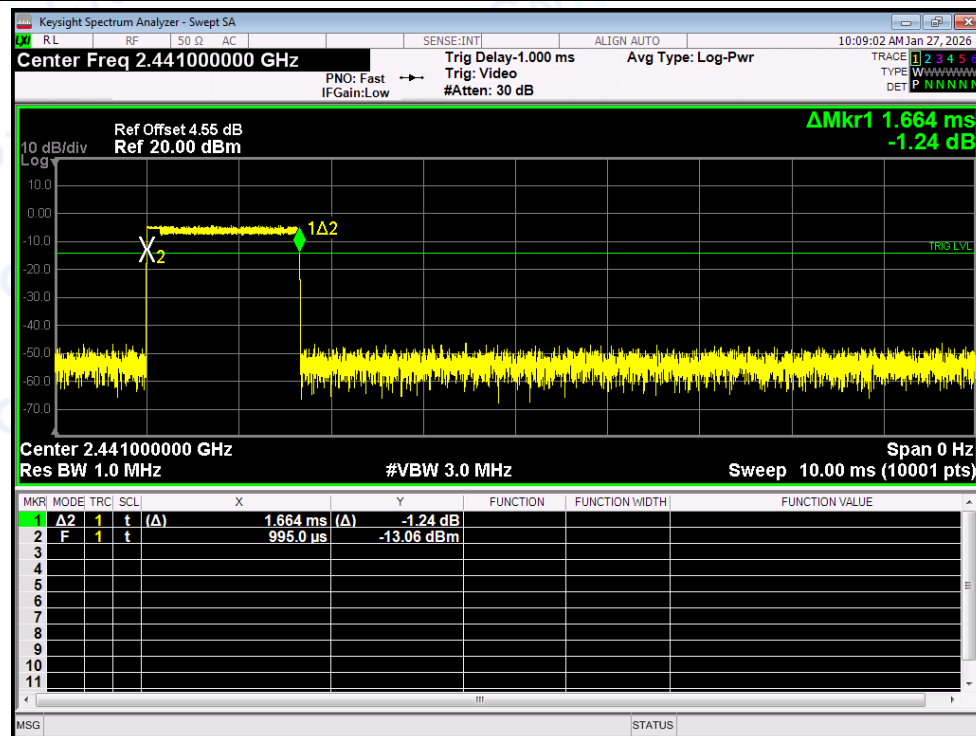
Dwell NVNT 1-DH5 2441MHz Ant1



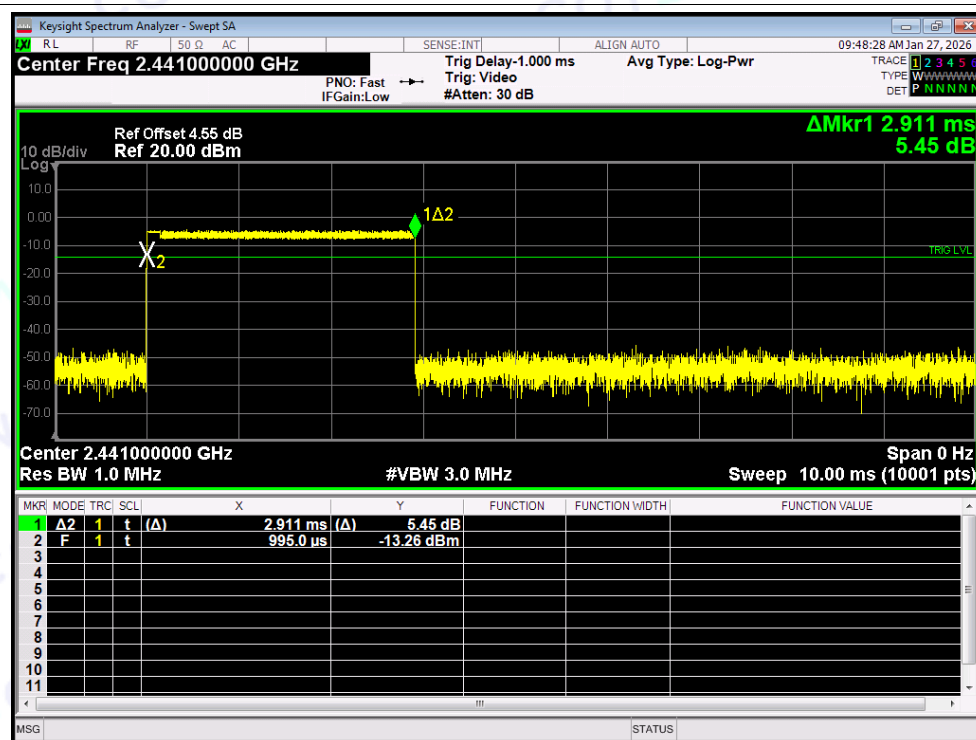
Dwell NVNT 2-DH1 2441MHz Ant1



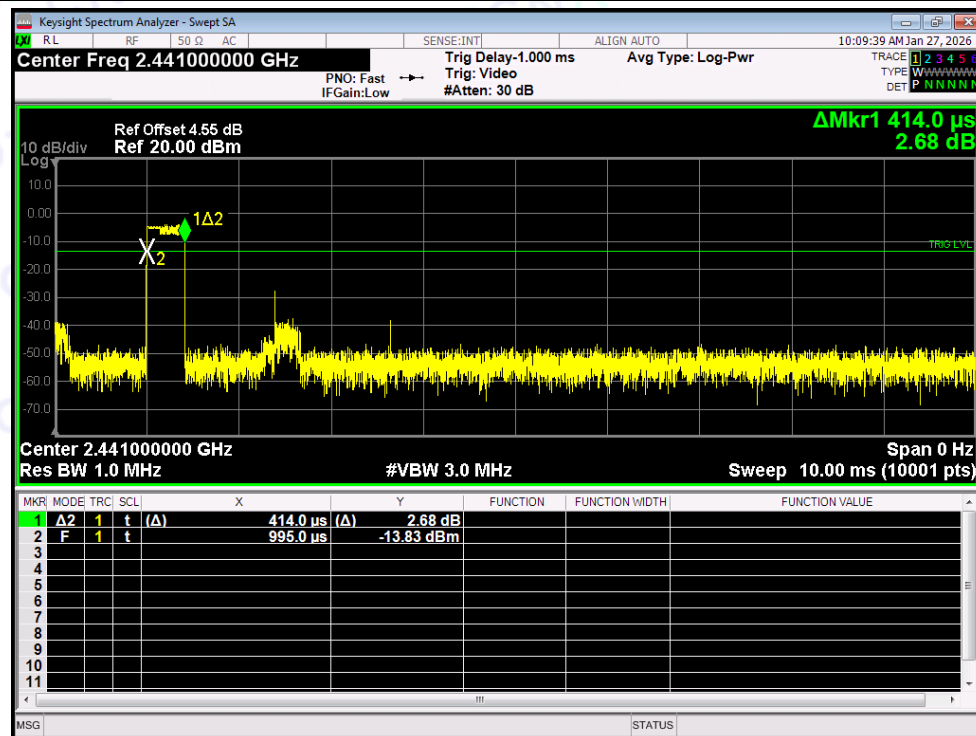
Dwell NVNT 2-DH3 2441MHz Ant1



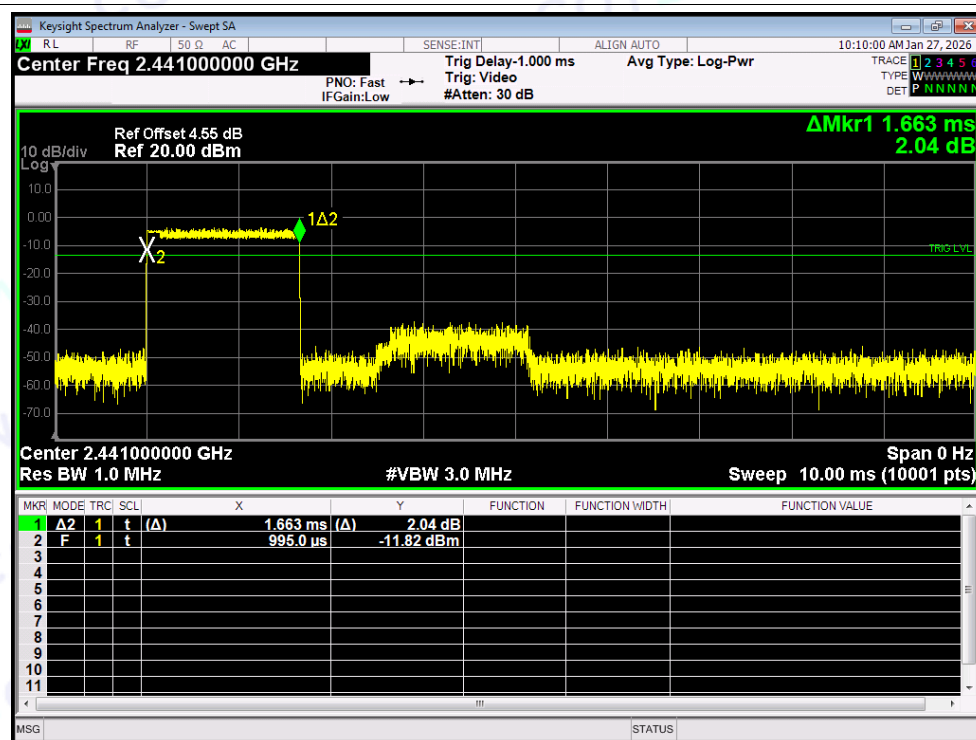
Dwell NVNT 2-DH5 2441MHz Ant1

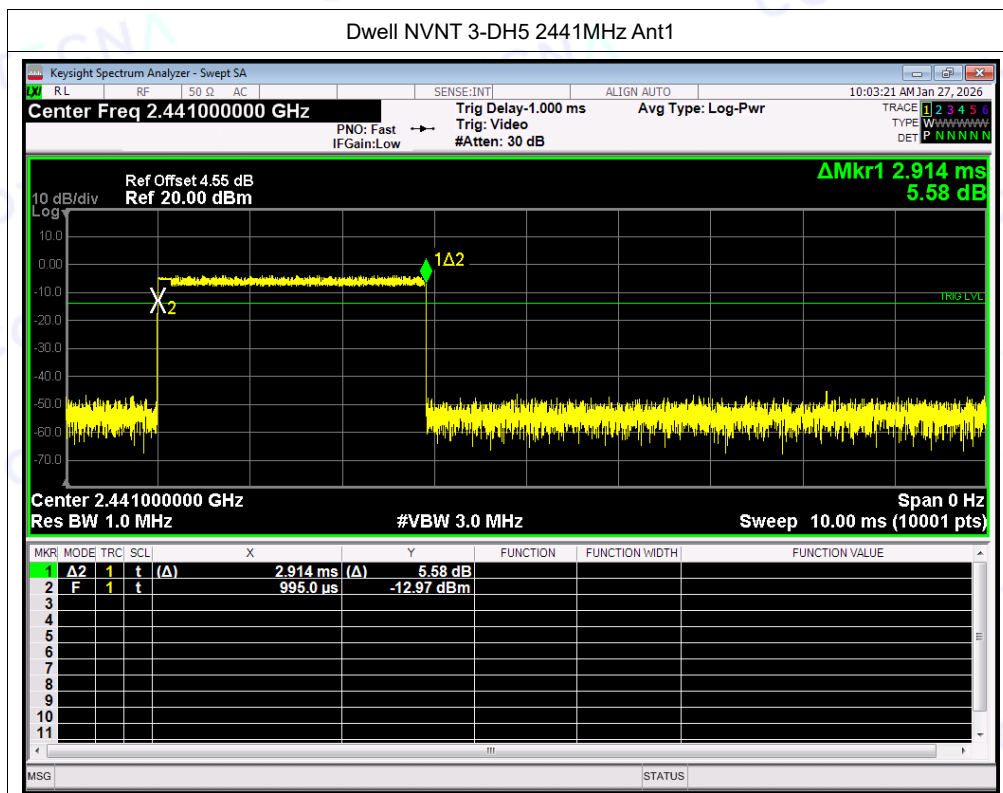


Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



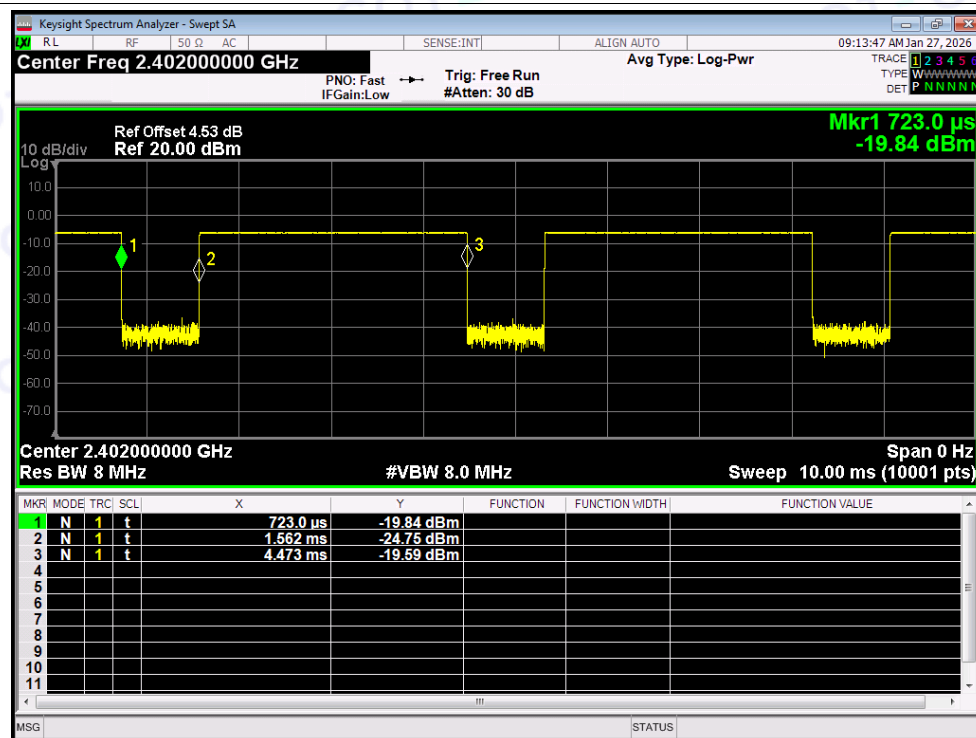


2.Duty Cycle

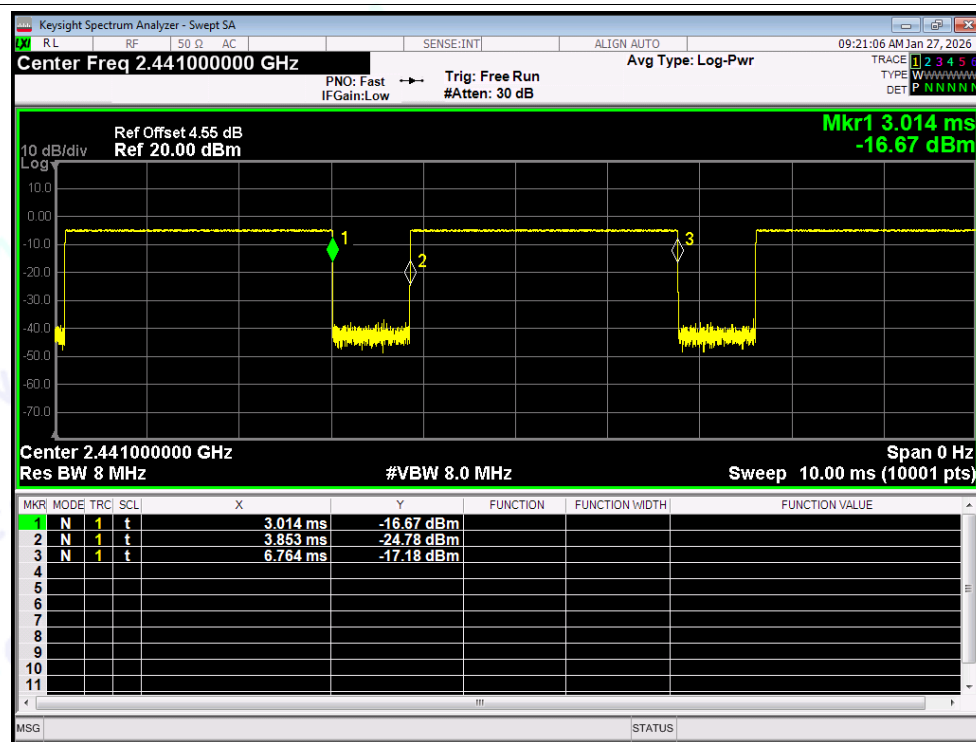
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH5	2402	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2441	Ant1	77.63	1.1	0.34
NVNT	1-DH5	2480	Ant1	77.65	1.1	0.34
NVNT	2-DH5	2402	Ant1	77.79	1.09	0.34
NVNT	2-DH5	2441	Ant1	77.79	1.09	0.34
NVNT	2-DH5	2480	Ant1	77.79	1.09	0.34
NVNT	3-DH5	2402	Ant1	77.87	1.09	0.34
NVNT	3-DH5	2441	Ant1	77.89	1.09	0.34
NVNT	3-DH5	2480	Ant1	77.89	1.09	0.34

Test Graphs

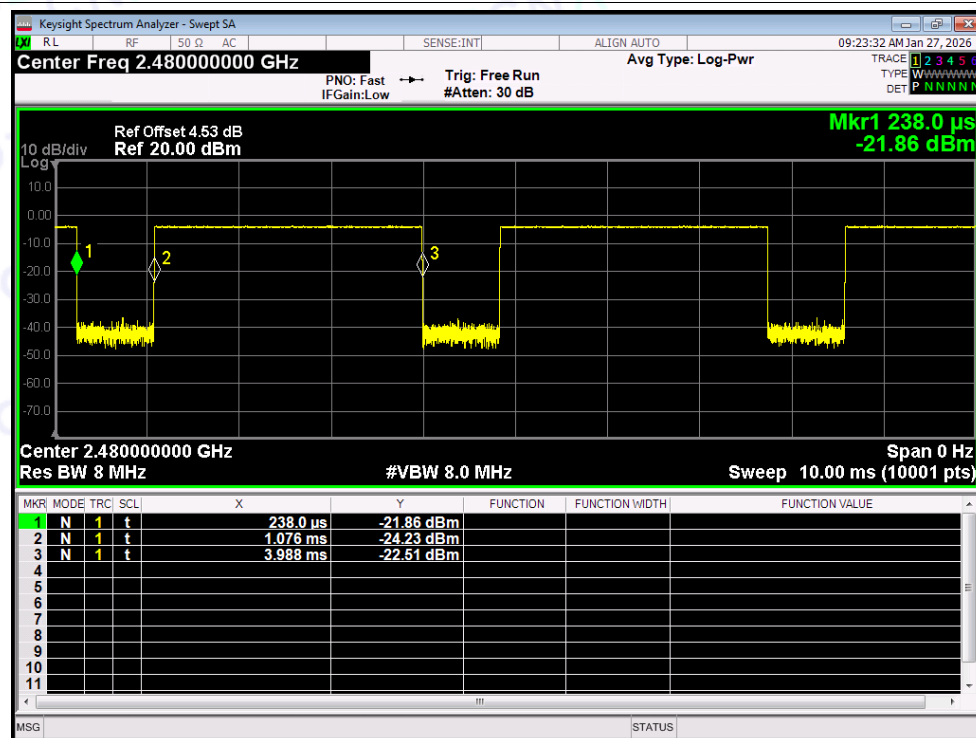
Duty Cycle NVNT 1-DH5 2402MHz Ant1



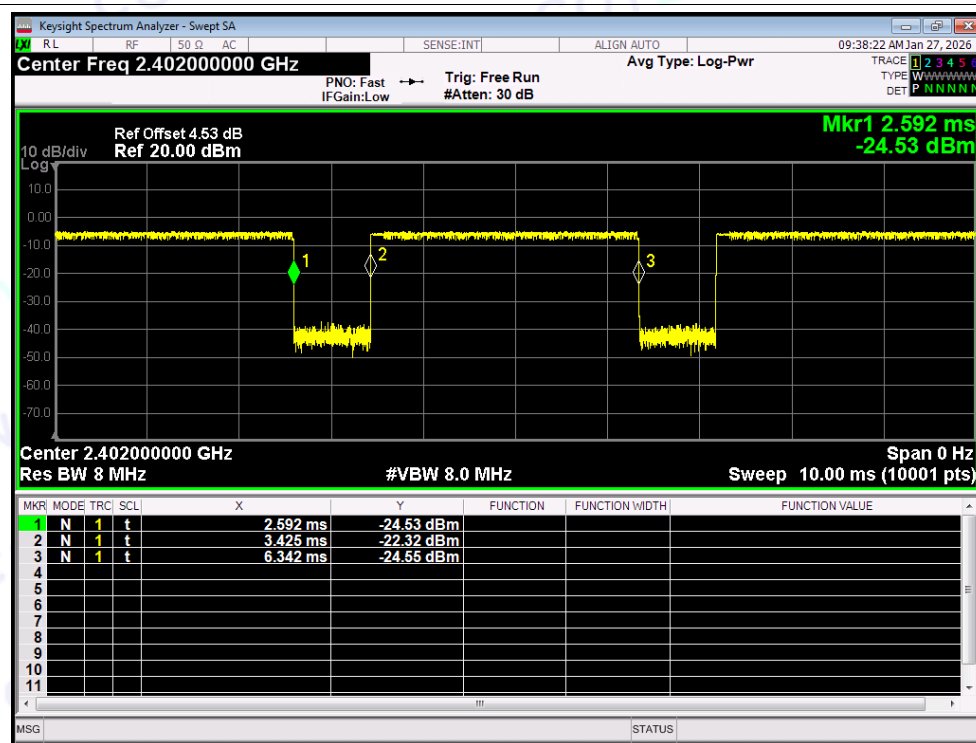
Duty Cycle NVNT 1-DH5 2441MHz Ant1



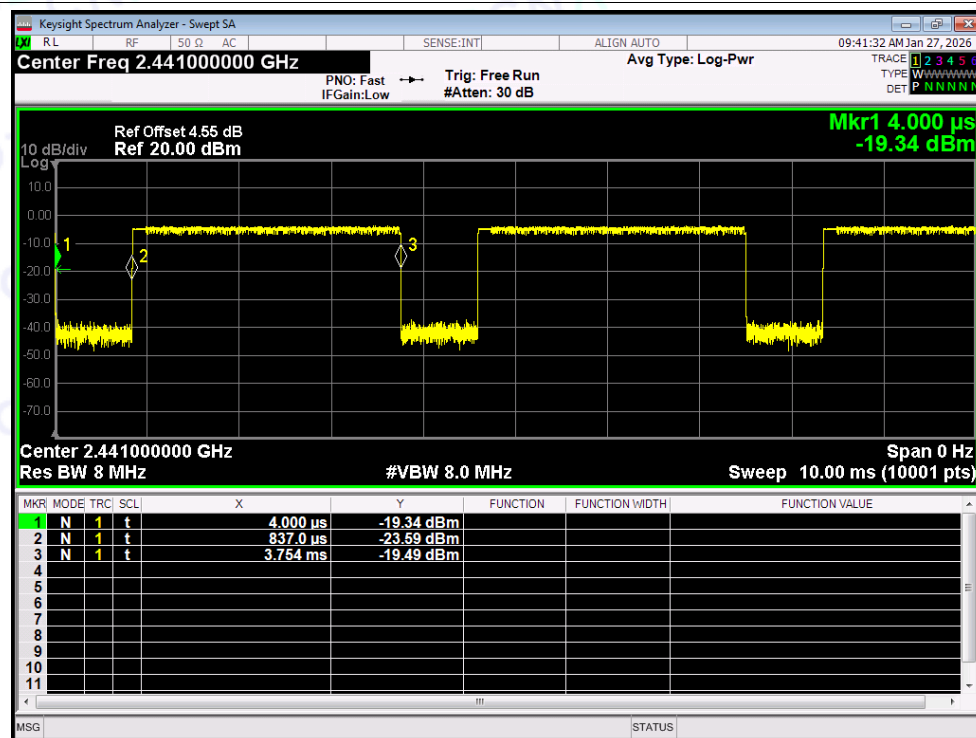
Duty Cycle NVNT 1-DH5 2480MHz Ant1



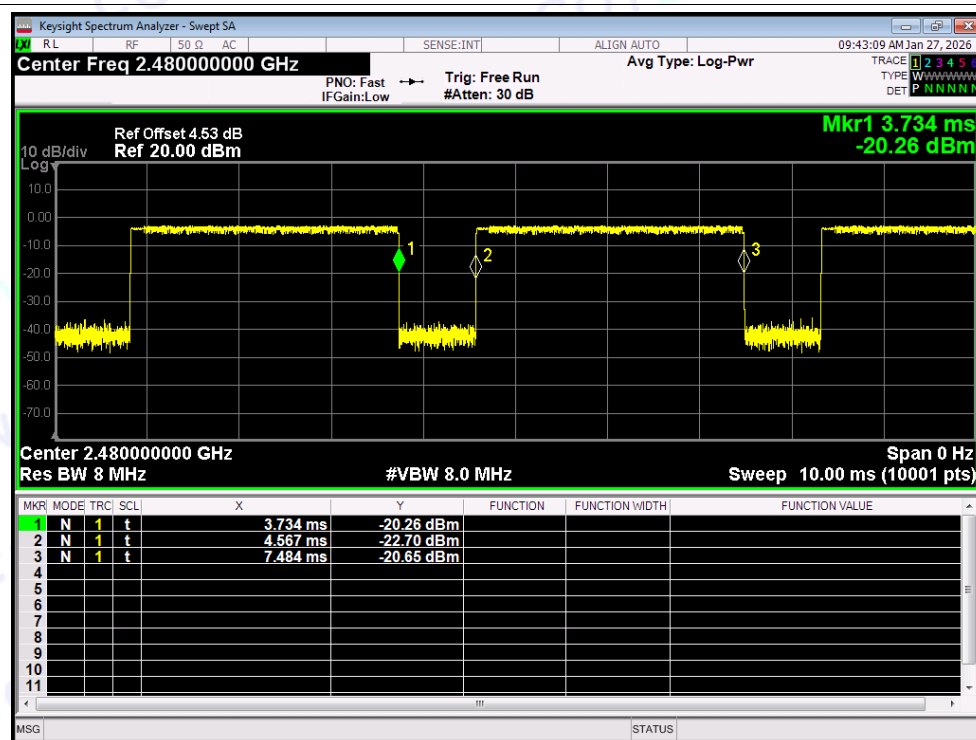
Duty Cycle NVNT 2-DH5 2402MHz Ant1



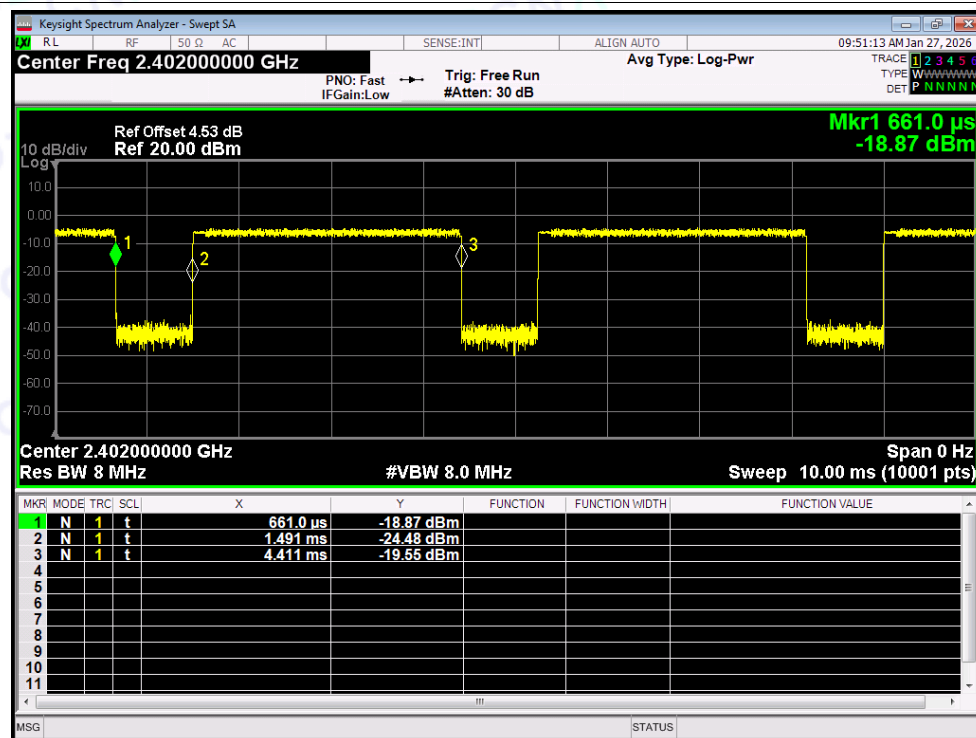
Duty Cycle NVNT 2-DH5 2441MHz Ant1



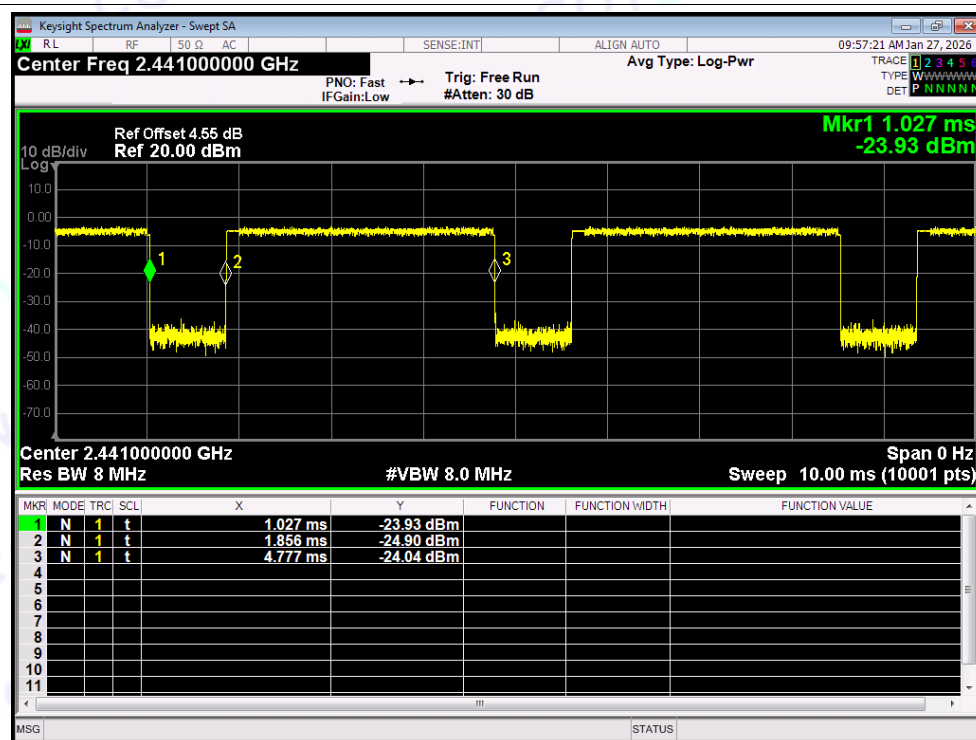
Duty Cycle NVNT 2-DH5 2480MHz Ant1

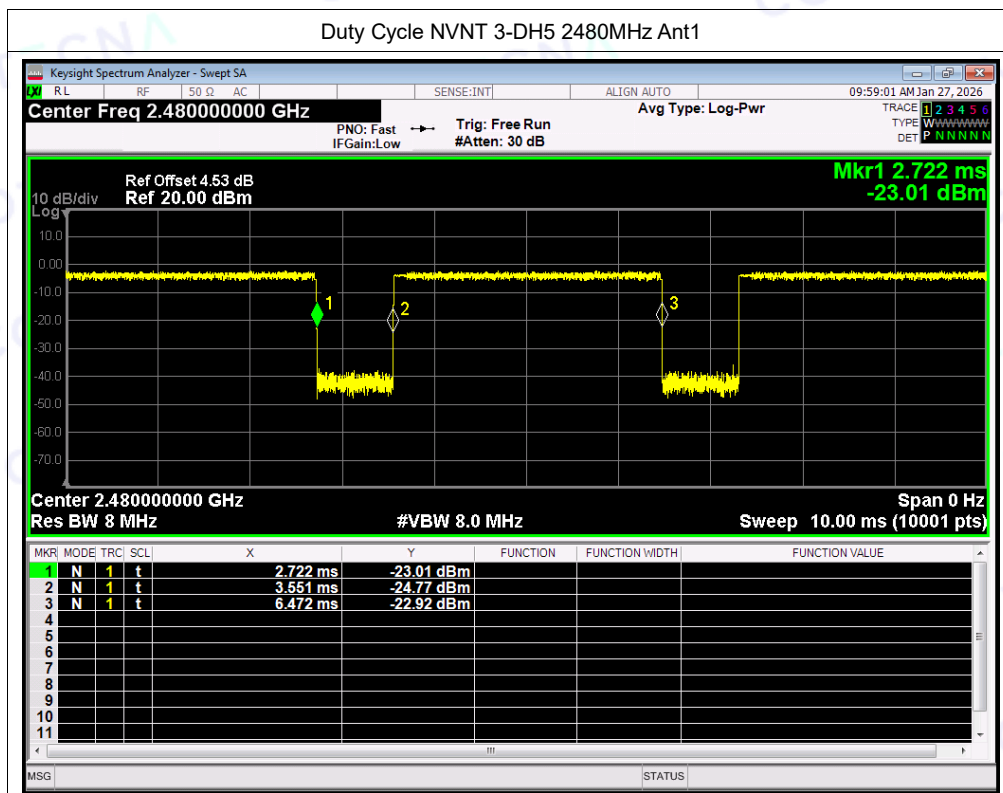


Duty Cycle NVNT 3-DH5 2402MHz Ant1



Duty Cycle NVNT 3-DH5 2441MHz Ant1



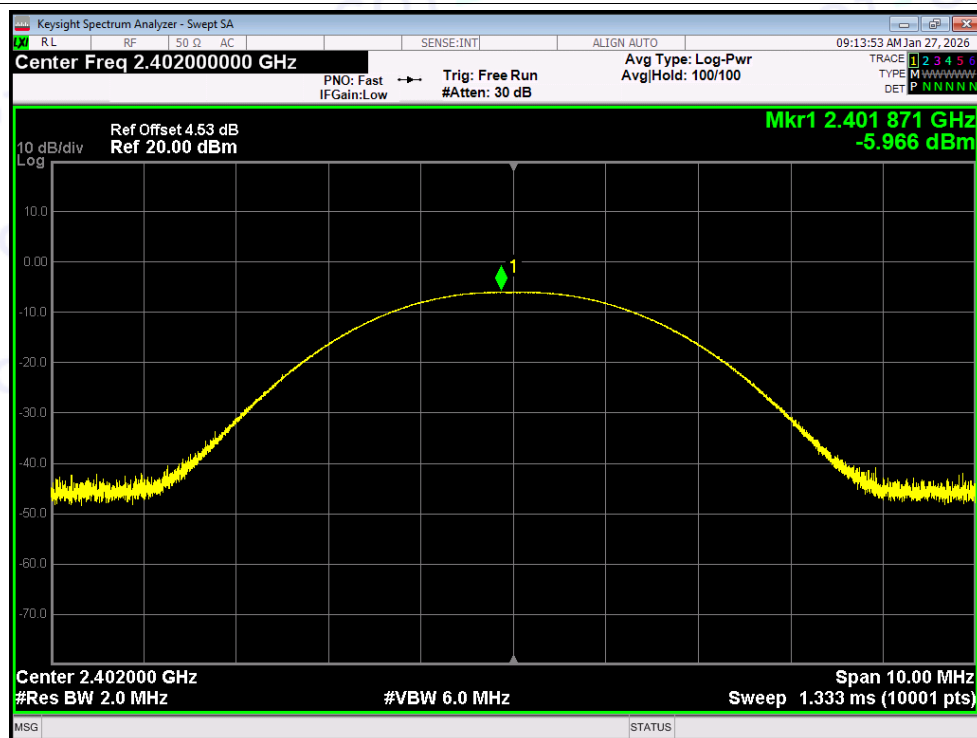


3.Maximum Conducted Output Power

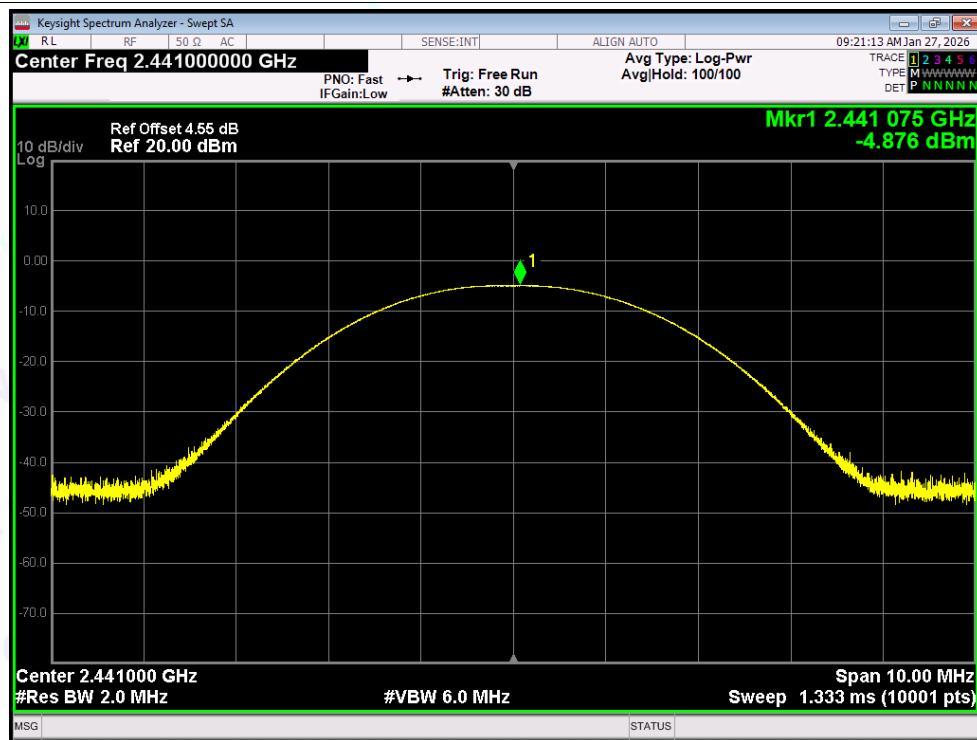
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH5	2402	Ant1	-5.966	21	Pass
NVNT	1-DH5	2441	Ant1	-4.876	21	Pass
NVNT	1-DH5	2480	Ant1	-3.915	21	Pass
NVNT	2-DH5	2402	Ant1	-5.239	21	Pass
NVNT	2-DH5	2441	Ant1	-4.056	21	Pass
NVNT	2-DH5	2480	Ant1	-3.084	21	Pass
NVNT	3-DH5	2402	Ant1	-4.807	21	Pass
NVNT	3-DH5	2441	Ant1	-3.64	21	Pass
NVNT	3-DH5	2480	Ant1	-2.623	21	Pass

Test Graphs

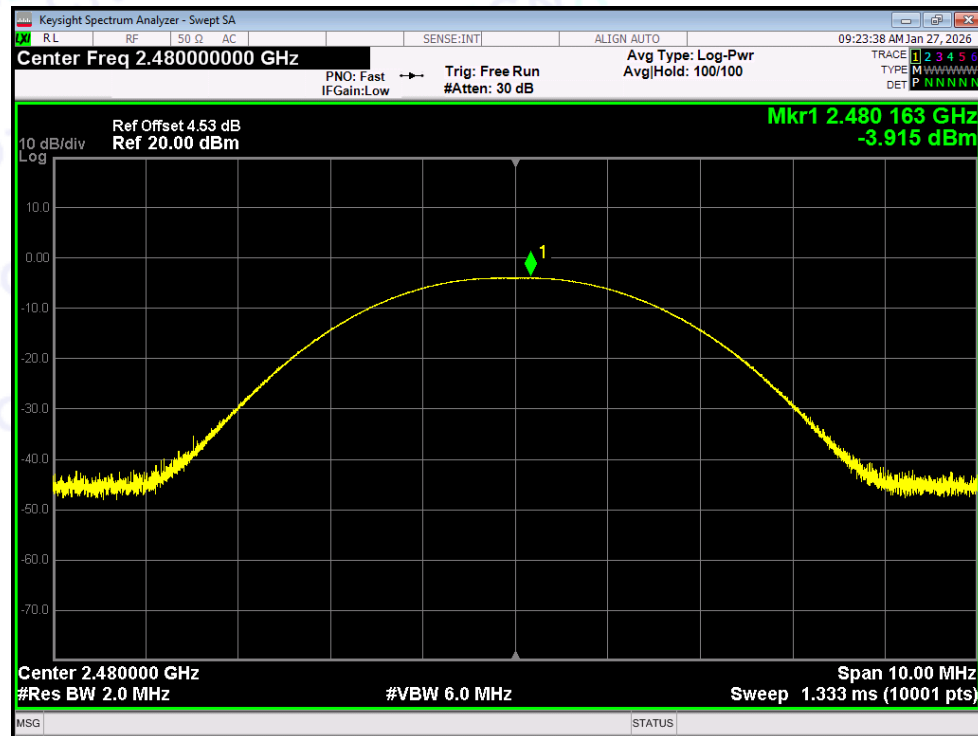
Power NVNT 1-DH5 2402MHz Ant1



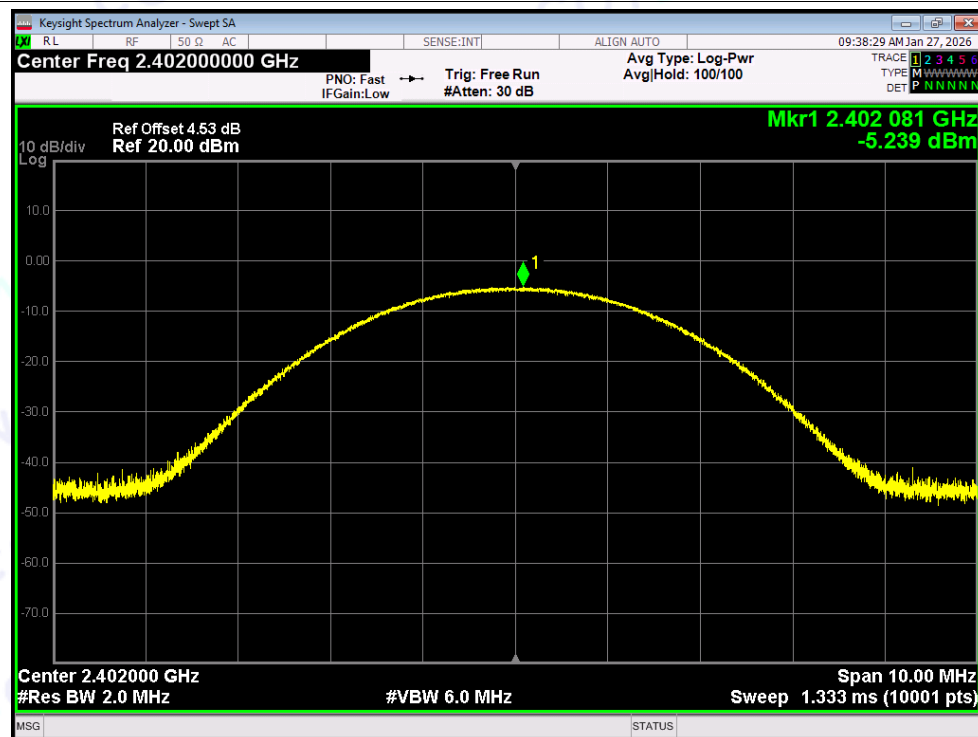
Power NVNT 1-DH5 2441MHz Ant1



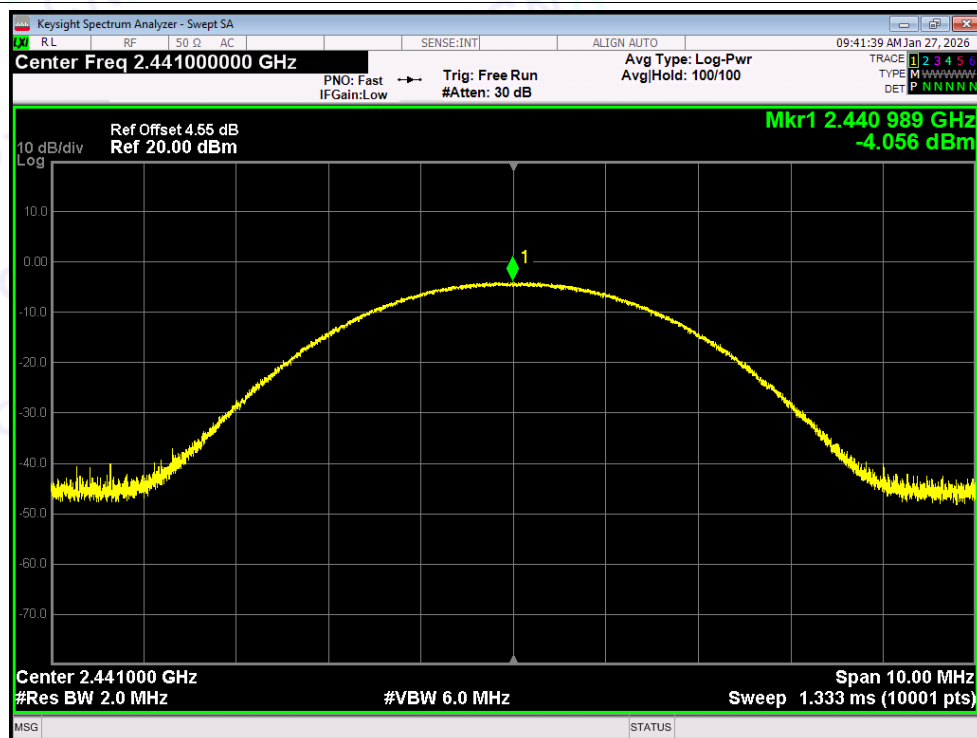
Power NVNT 1-DH5 2480MHz Ant1



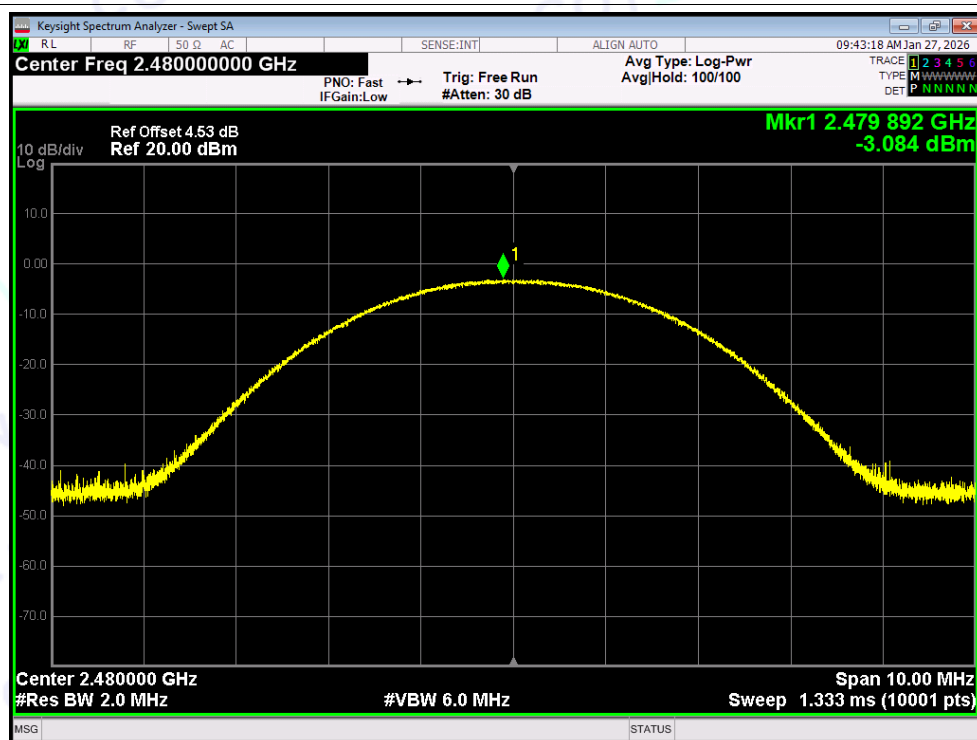
Power NVNT 2-DH5 2402MHz Ant1



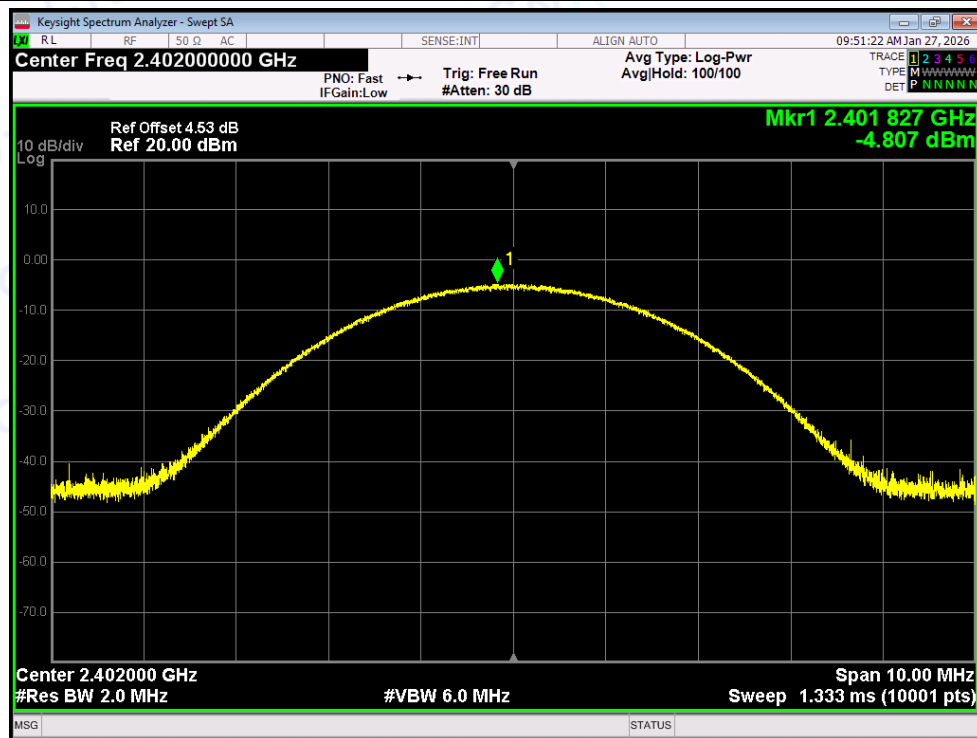
Power NVNT 2-DH5 2441MHz Ant1



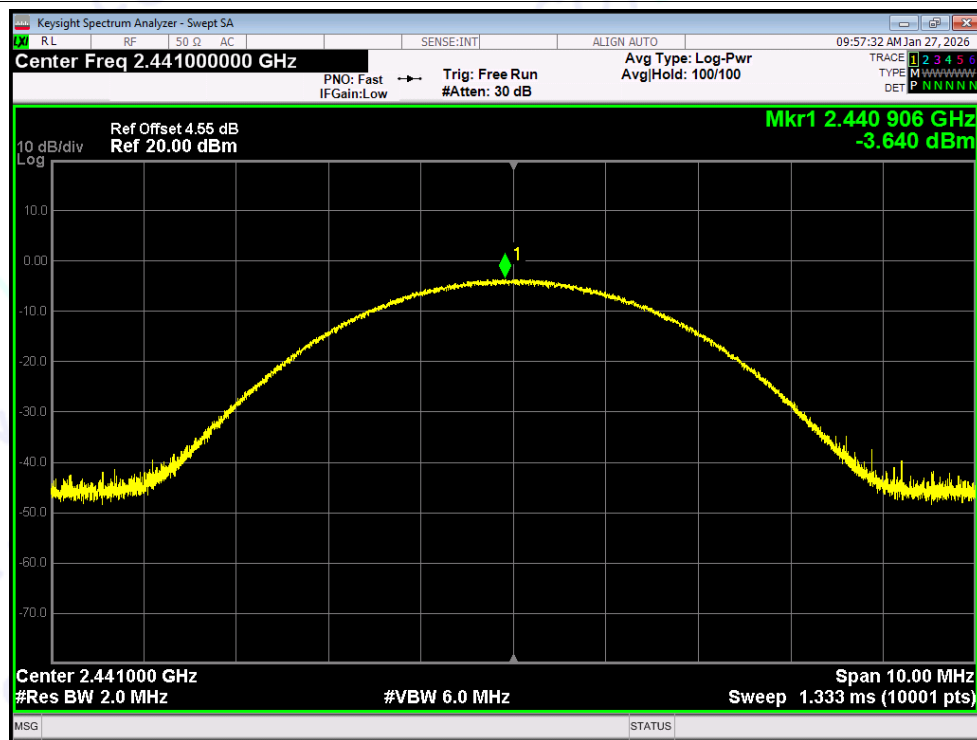
Power NVNT 2-DH5 2480MHz Ant1

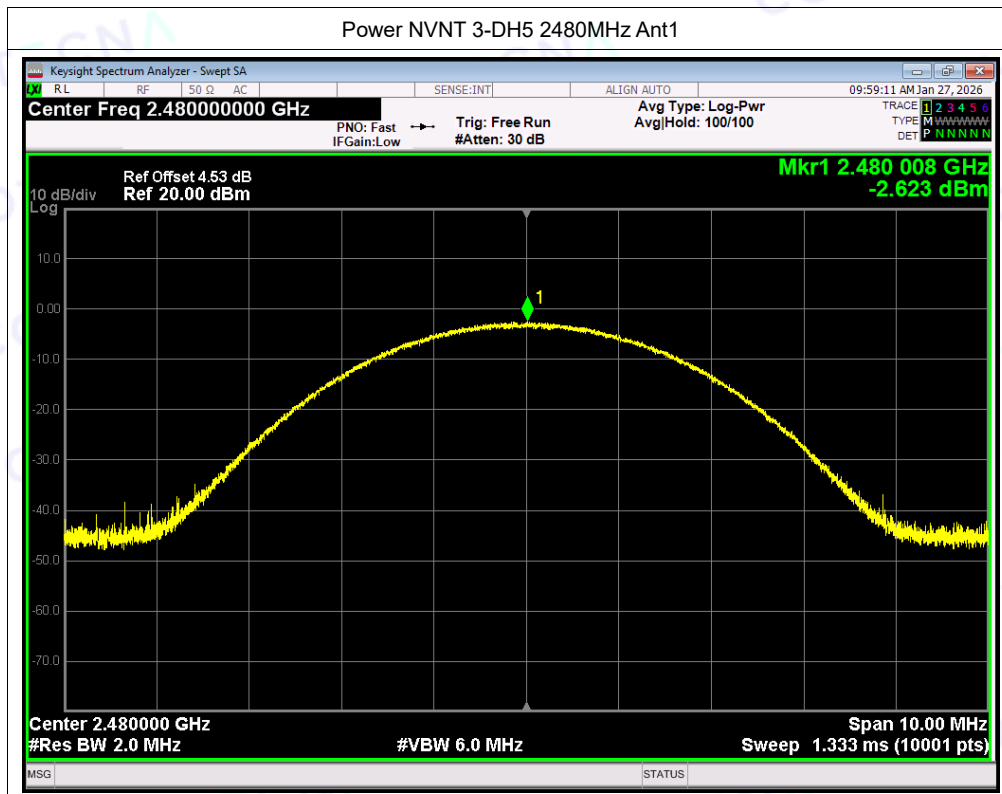


Power NVNT 3-DH5 2402MHz Ant1



Power NVNT 3-DH5 2441MHz Ant1



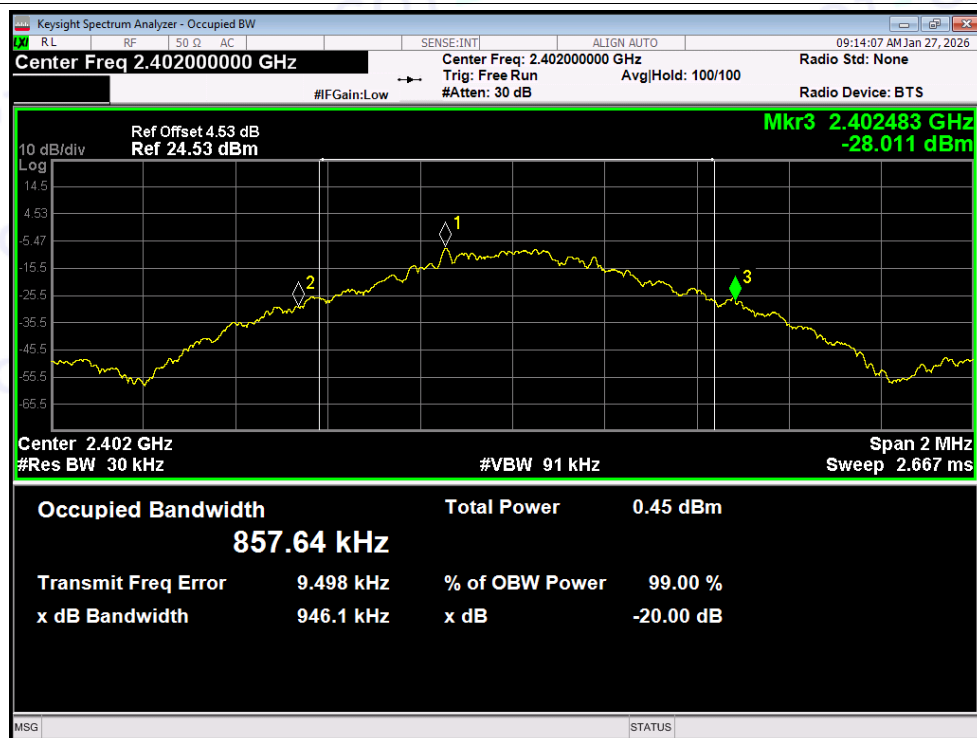


4.-20dB Bandwidth

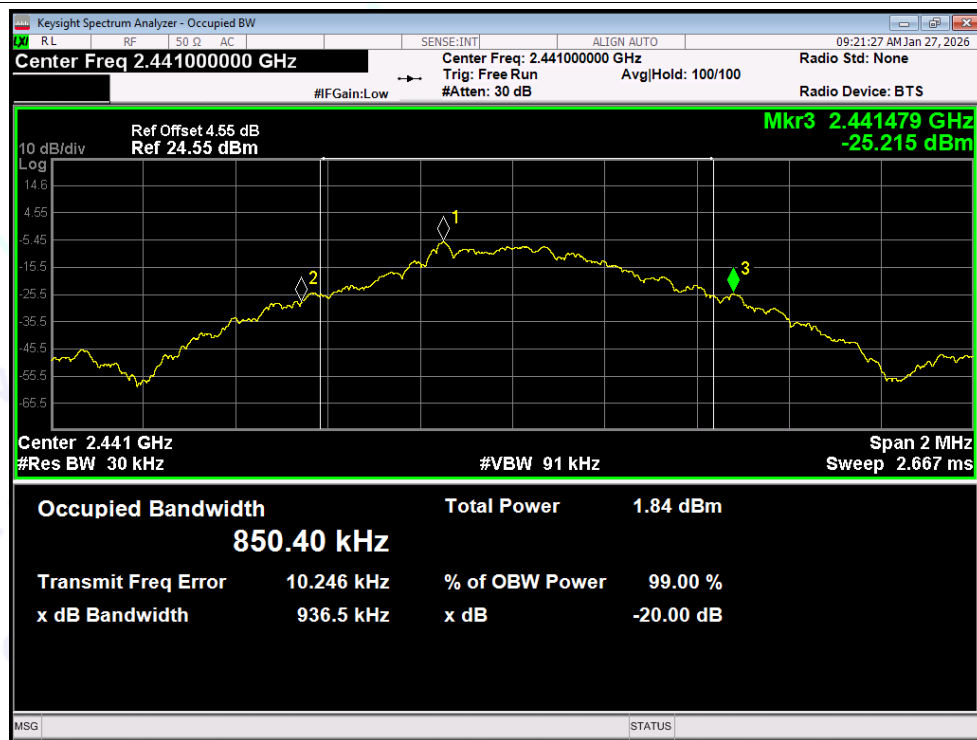
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH5	2402	Ant1	0.95	0	Pass
NVNT	1-DH5	2441	Ant1	0.94	0	Pass
NVNT	1-DH5	2480	Ant1	0.95	0	Pass
NVNT	2-DH5	2402	Ant1	1.25	0	Pass
NVNT	2-DH5	2441	Ant1	1.26	0	Pass
NVNT	2-DH5	2480	Ant1	1.27	0	Pass
NVNT	3-DH5	2402	Ant1	1.27	0	Pass
NVNT	3-DH5	2441	Ant1	1.27	0	Pass
NVNT	3-DH5	2480	Ant1	1.28	0	Pass

Test Graphs

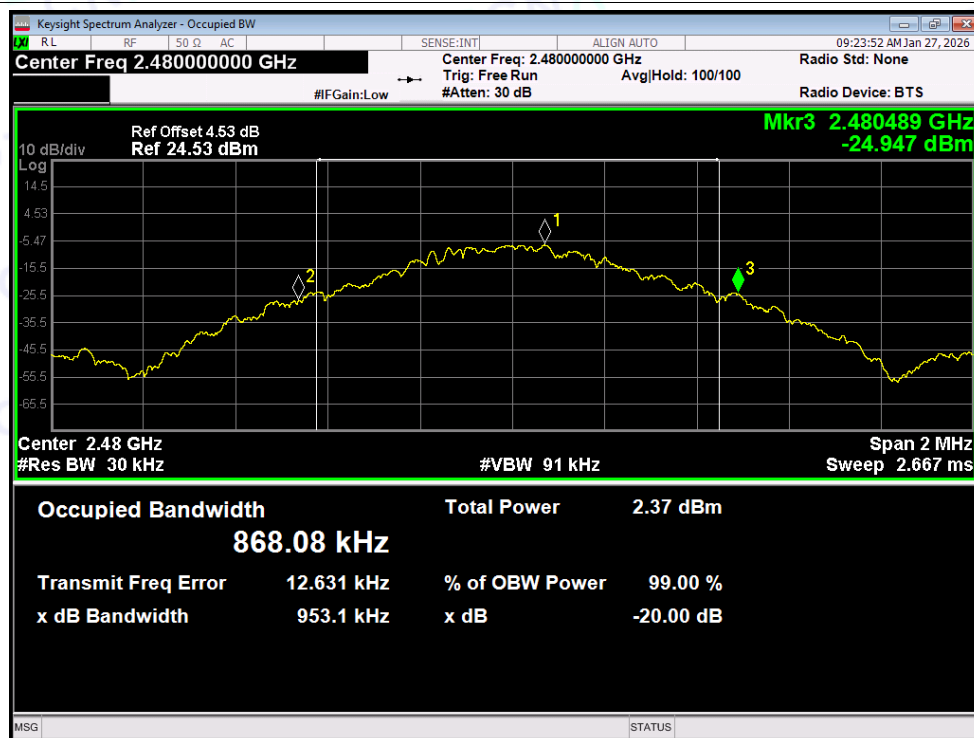
-20dB Bandwidth NVNT 1-DH5 2402MHz Ant1



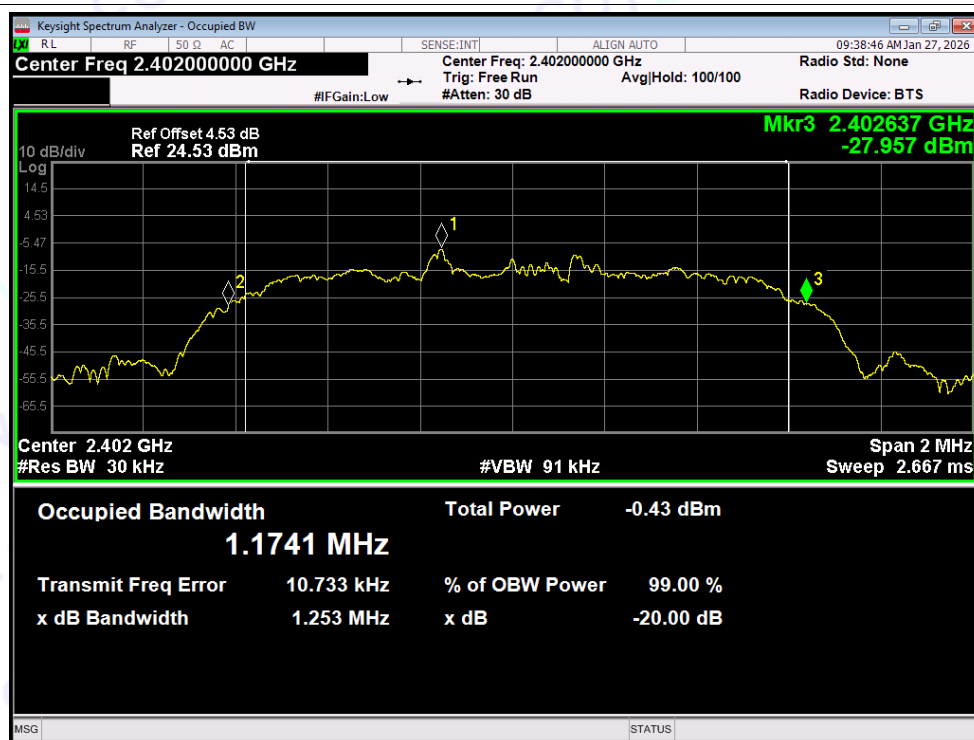
-20dB Bandwidth NVNT 1-DH5 2441MHz Ant1



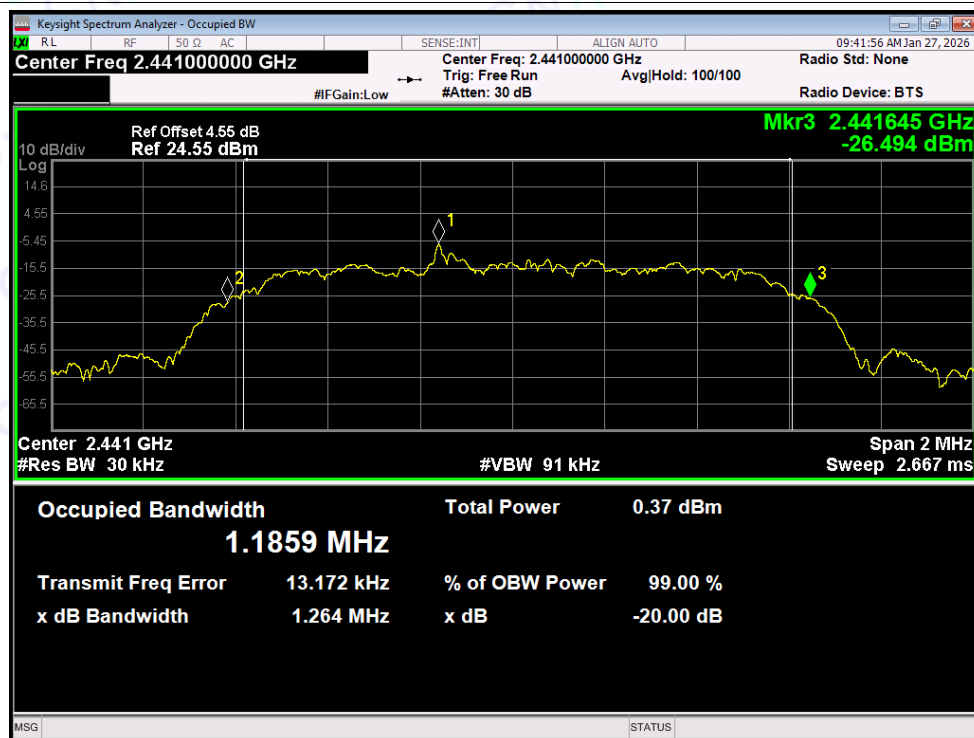
-20dB Bandwidth NVNT 1-DH5 2480MHz Ant1



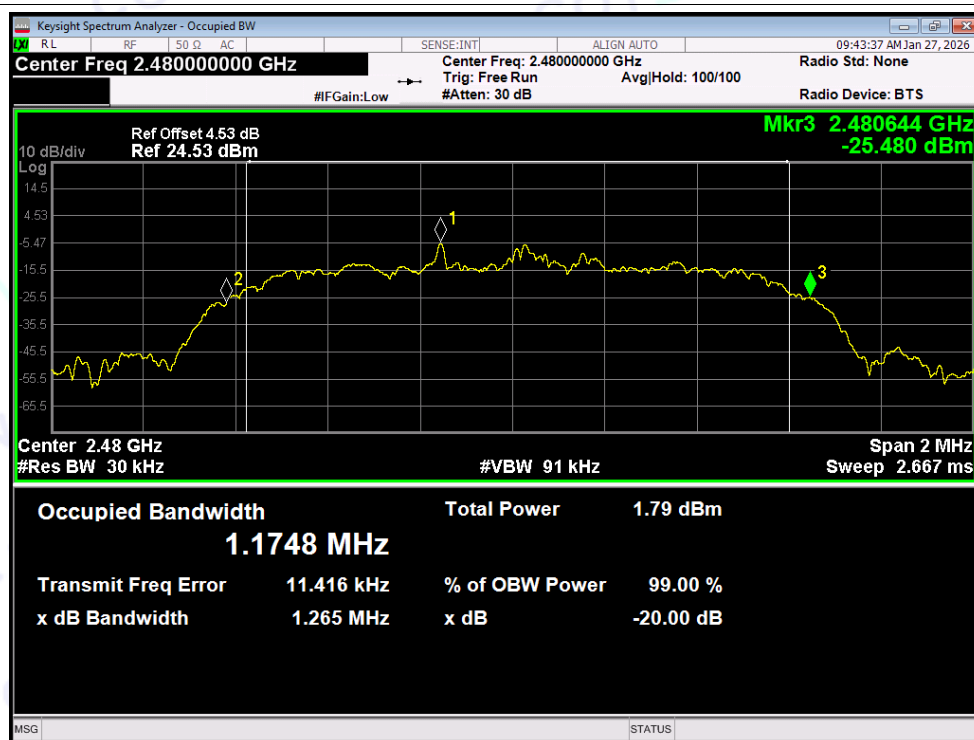
-20dB Bandwidth NVNT 2-DH5 2402MHz Ant1



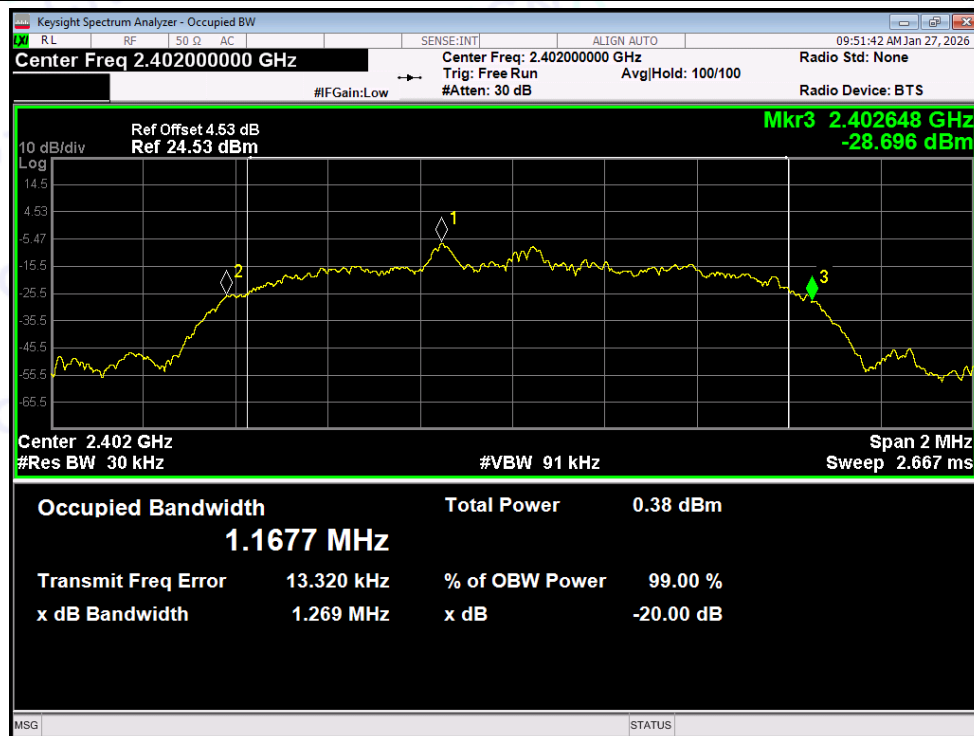
-20dB Bandwidth NVNT 2-DH5 2441MHz Ant1



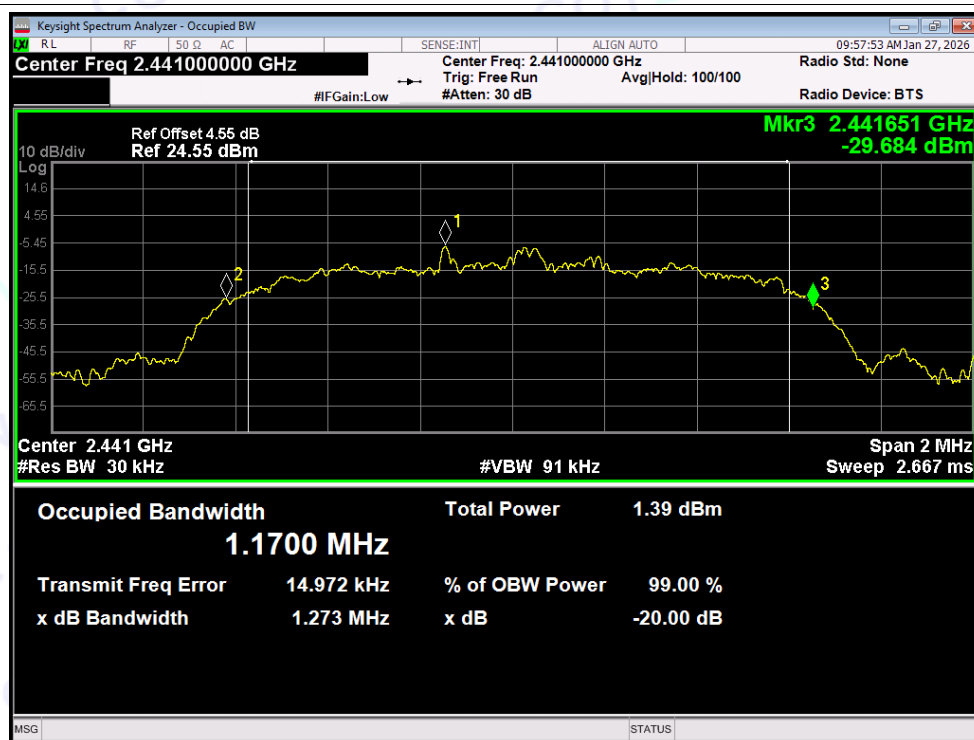
-20dB Bandwidth NVNT 2-DH5 2480MHz Ant1

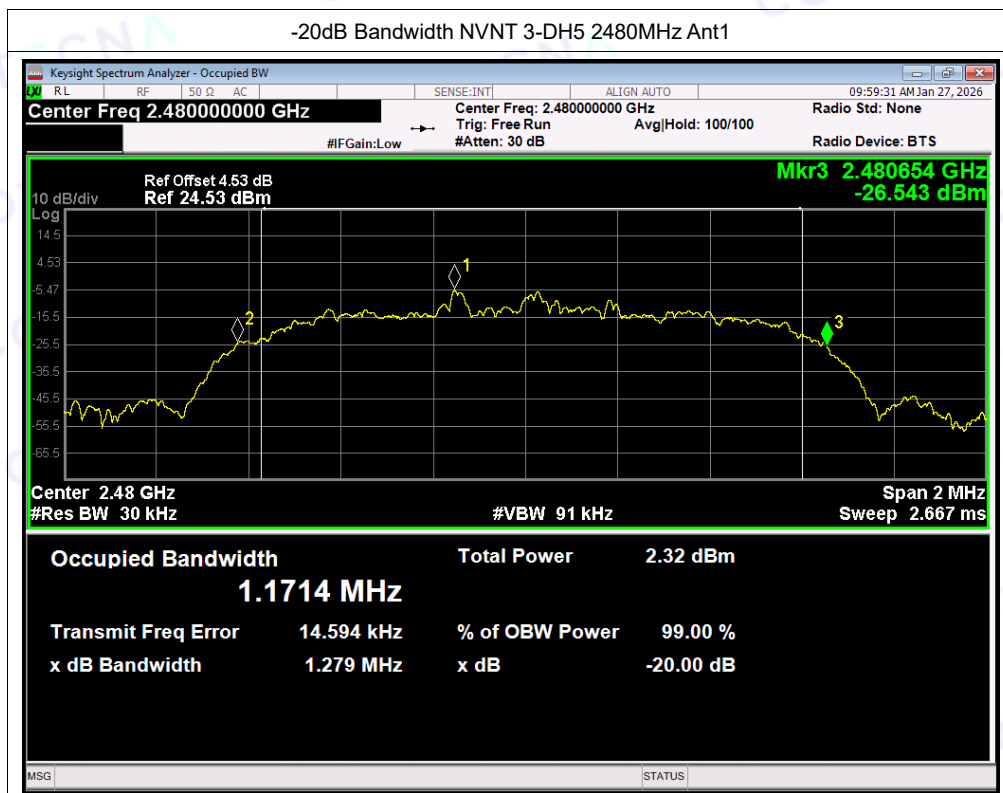


-20dB Bandwidth NVNT 3-DH5 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH5 2441MHz Ant1



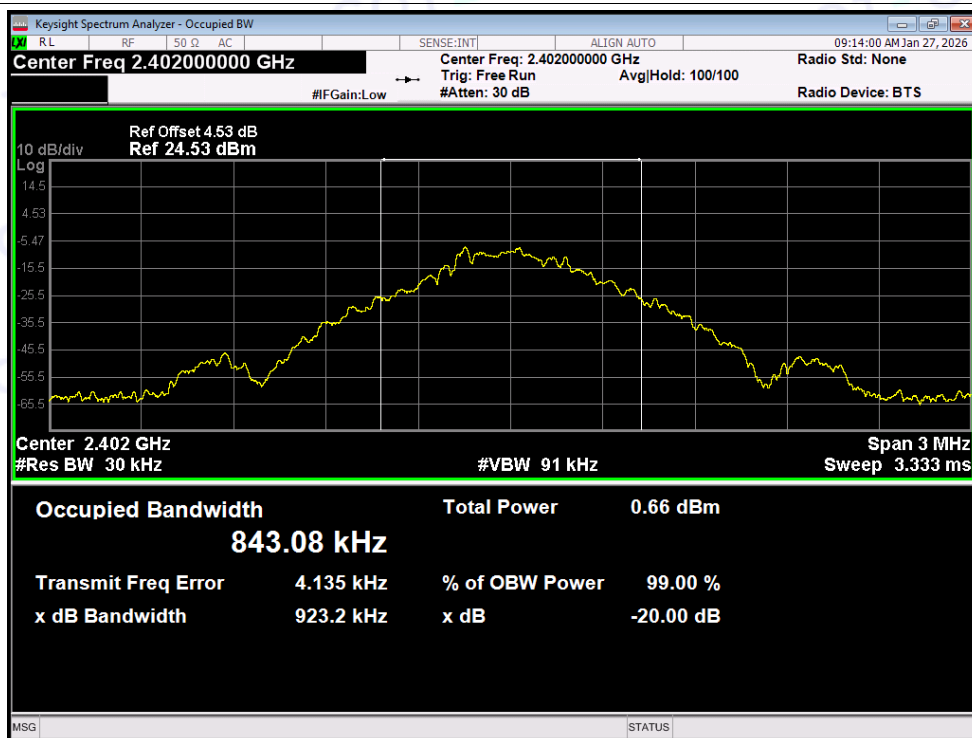


5.Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH5	2402	Ant1	0.843
NVNT	1-DH5	2441	Ant1	0.853
NVNT	1-DH5	2480	Ant1	0.872
NVNT	2-DH5	2402	Ant1	1.174
NVNT	2-DH5	2441	Ant1	1.149
NVNT	2-DH5	2480	Ant1	1.177
NVNT	3-DH5	2402	Ant1	1.167
NVNT	3-DH5	2441	Ant1	1.168
NVNT	3-DH5	2480	Ant1	1.164

Test Graphs

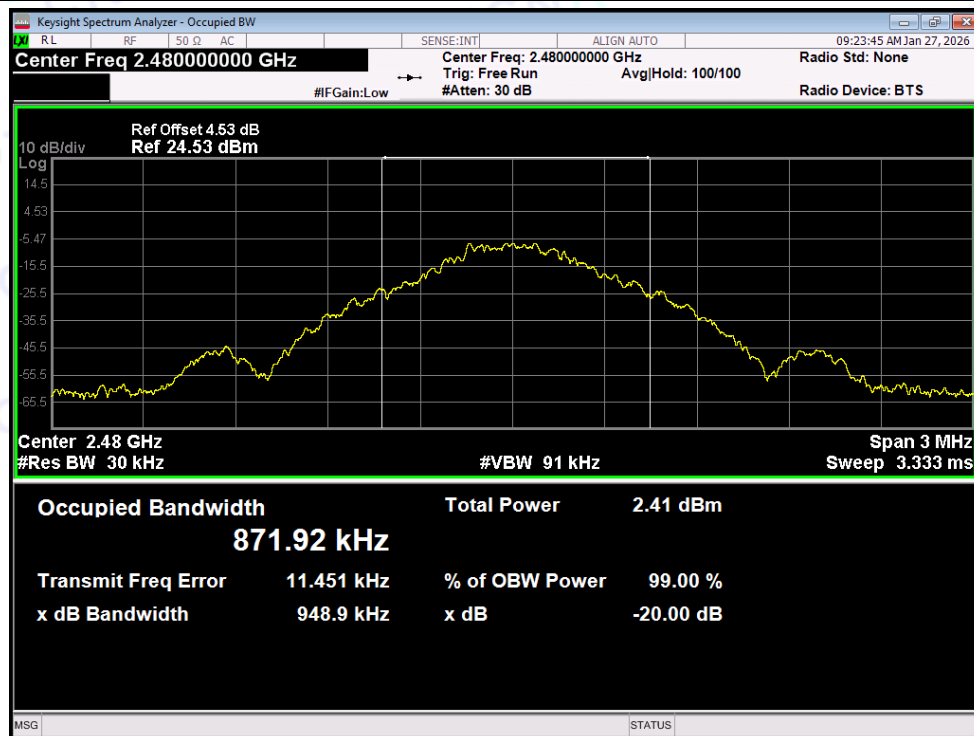
OBW NVNT 1-DH5 2402MHz Ant1



OBW NVNT 1-DH5 2441MHz Ant1



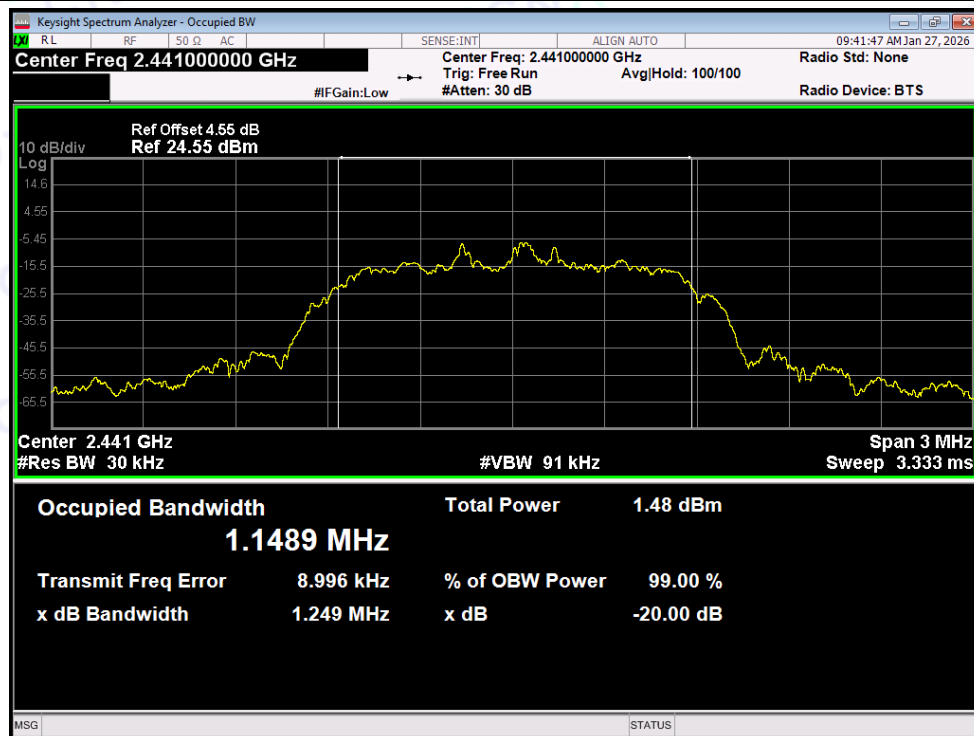
OBW NVNT 1-DH5 2480MHz Ant1



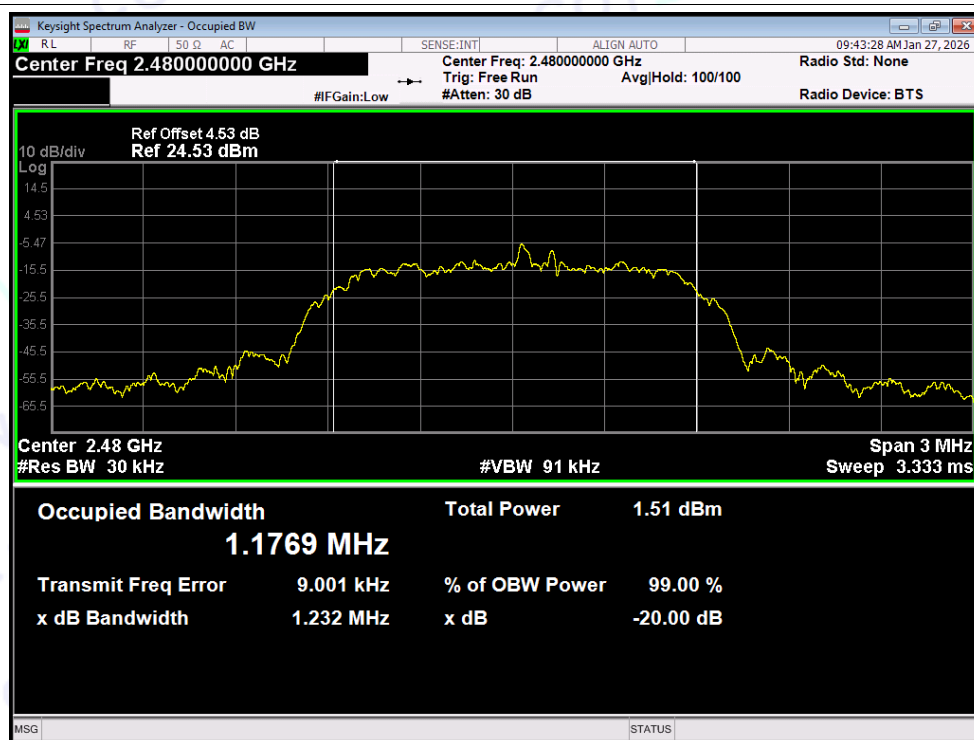
OBW NVNT 2-DH5 2402MHz Ant1



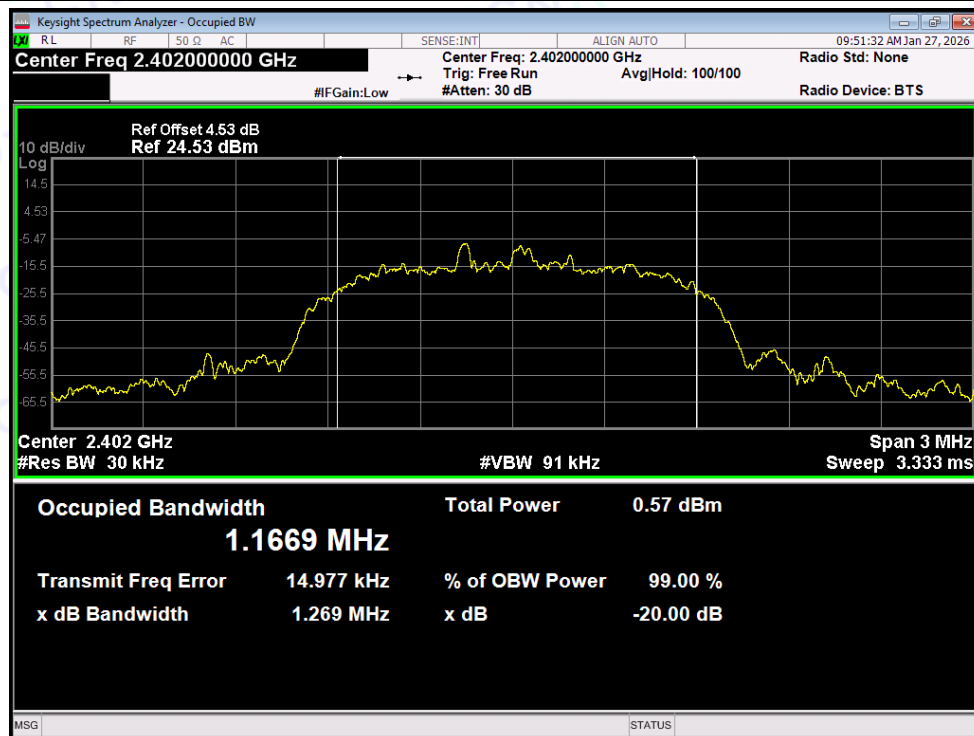
OBW NVNT 2-DH5 2441MHz Ant1



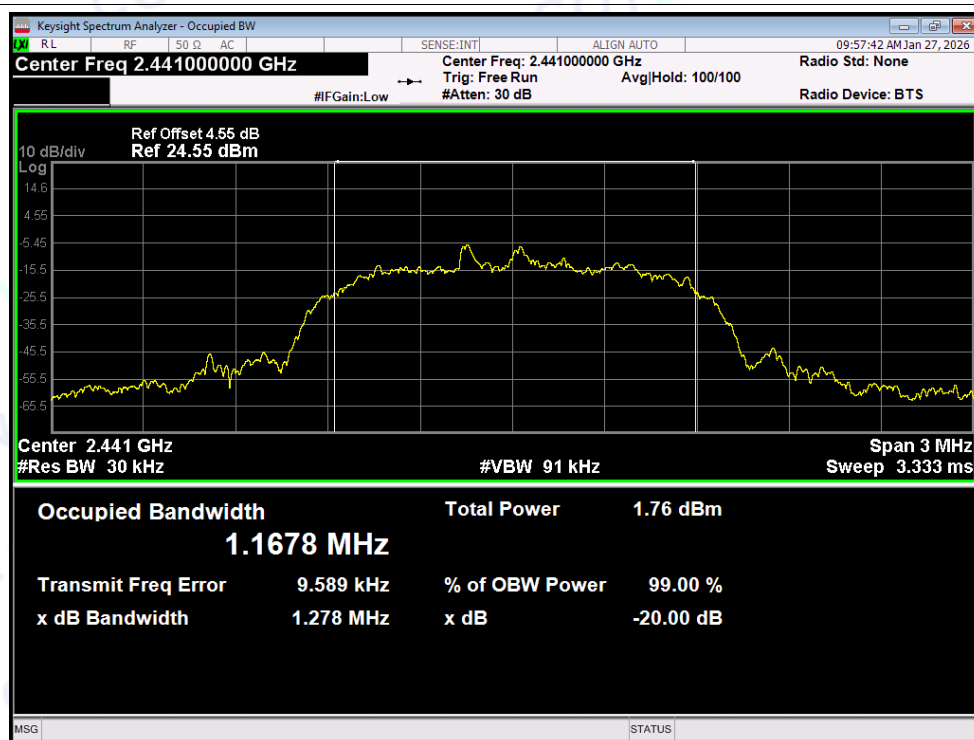
OBW NVNT 2-DH5 2480MHz Ant1

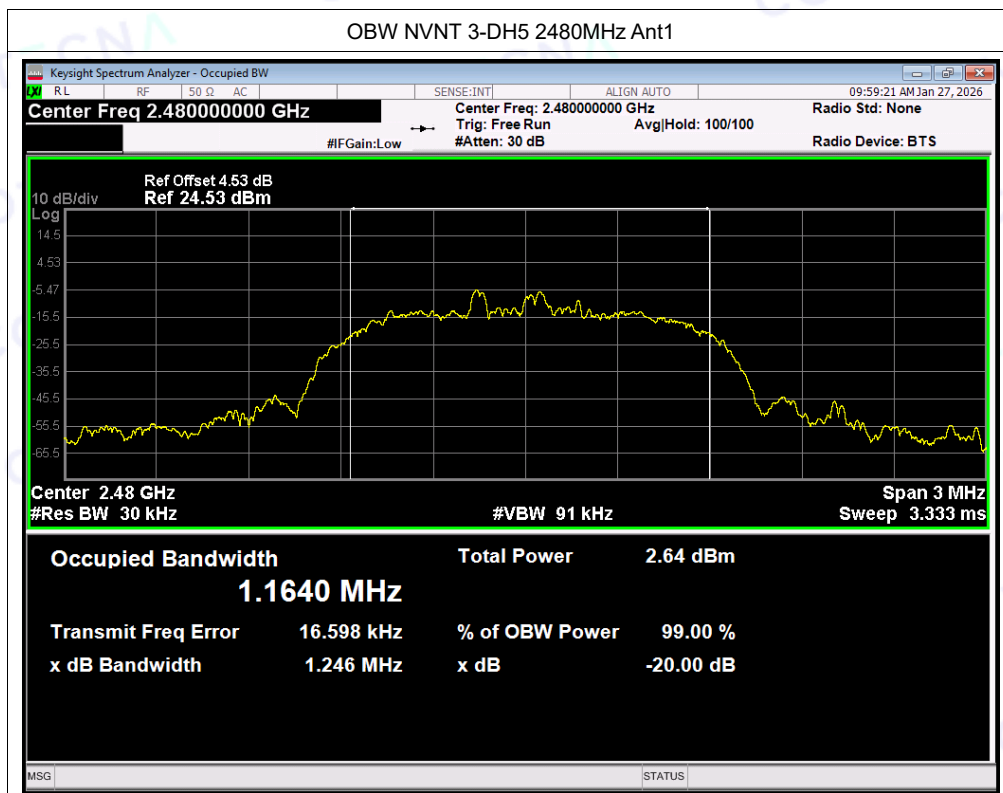


OBW NVNT 3-DH5 2402MHz Ant1



OBW NVNT 3-DH5 2441MHz Ant1



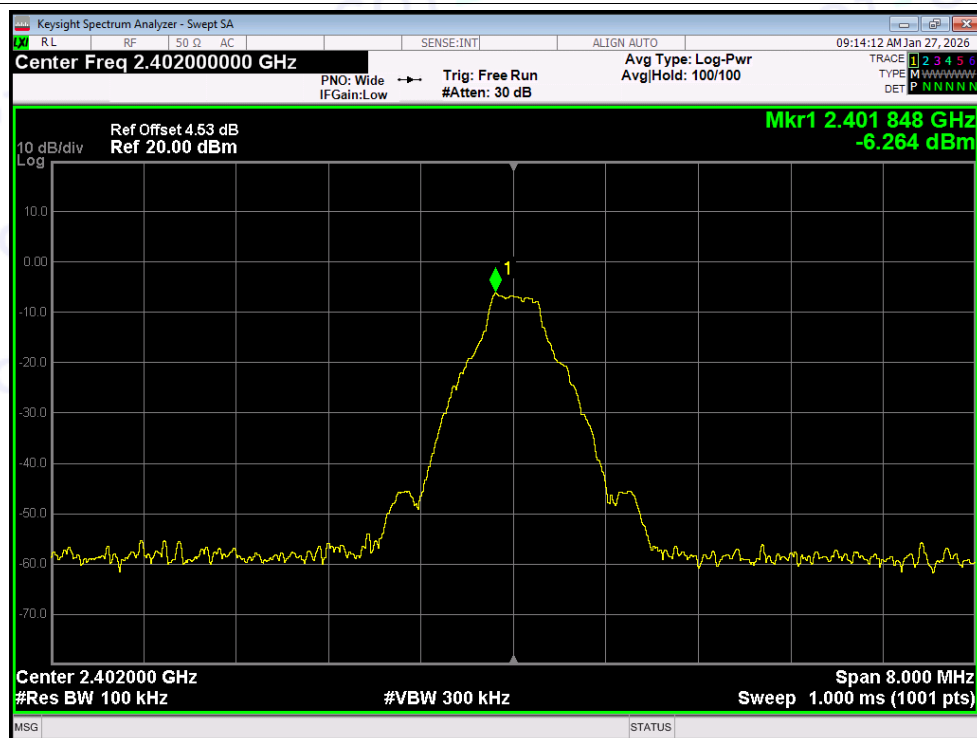


6.Band Edge

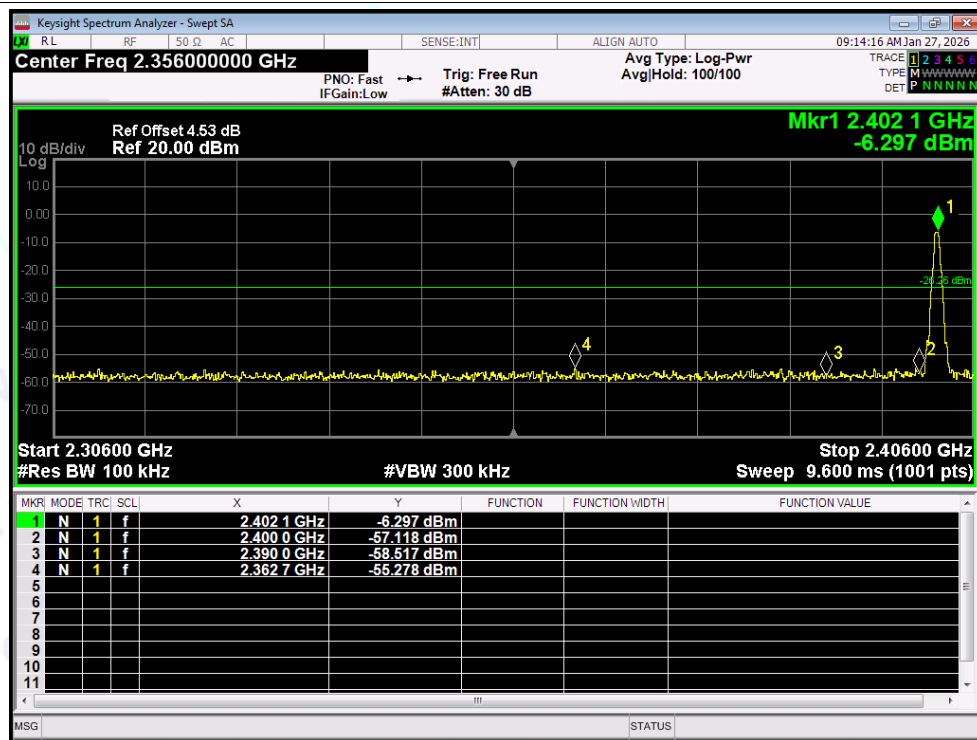
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	-49.02	-20	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	-49.86	-20	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	-48.48	-20	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	-49.8	-20	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	-47.58	-20	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	-50.22	-20	Pass

Test Graphs

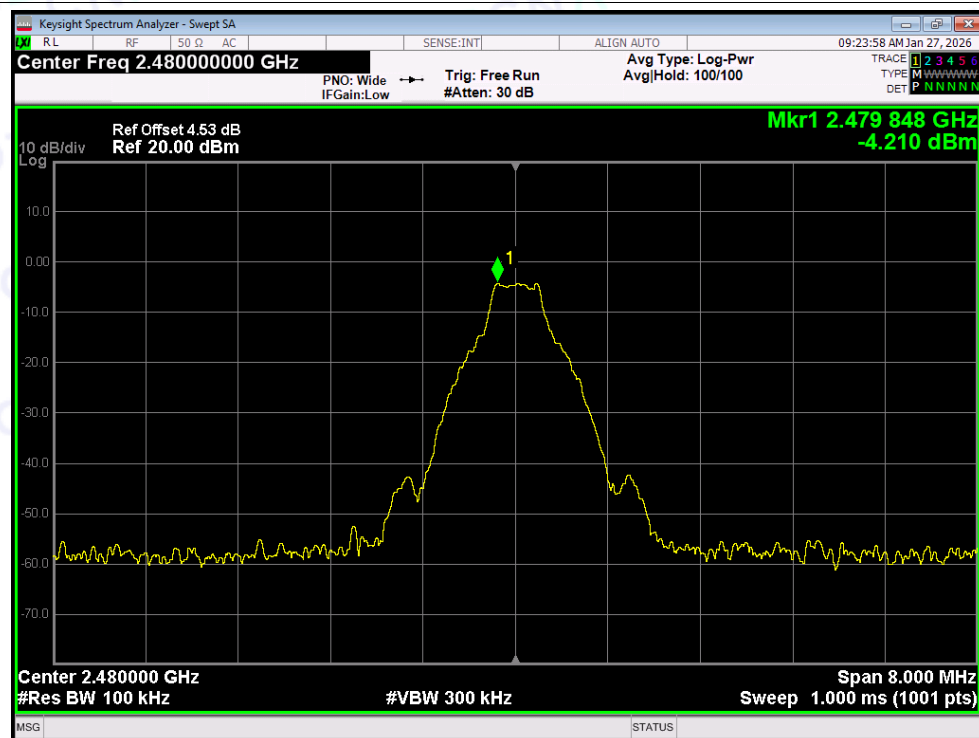
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Ref



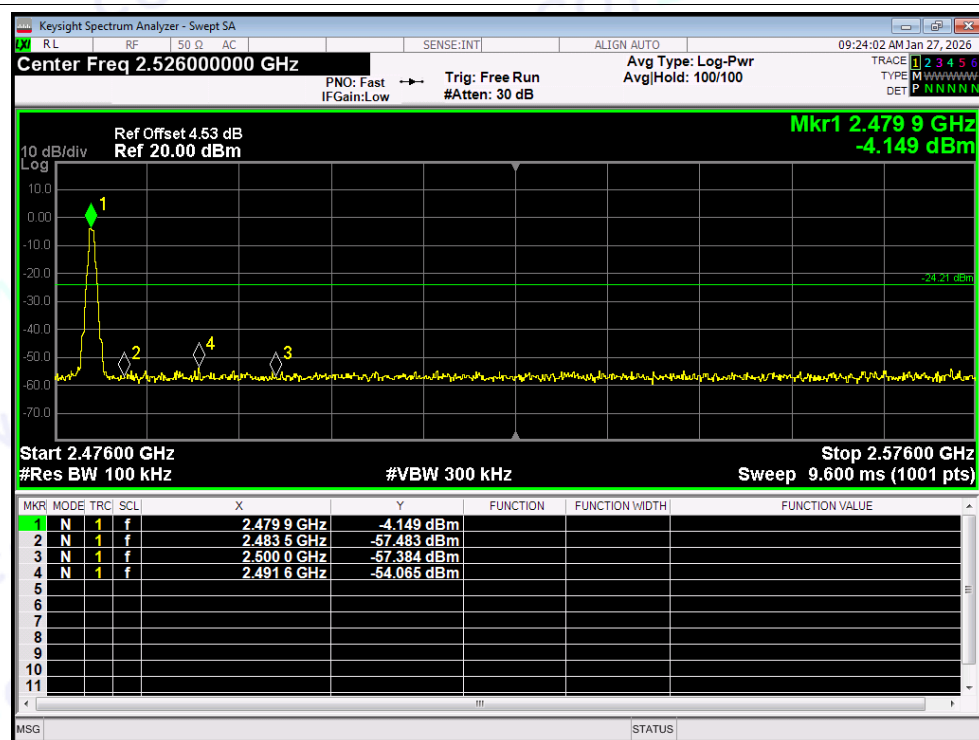
Band Edge NVNT 1-DH5 2402MHz Ant1 No-Hopping Emission



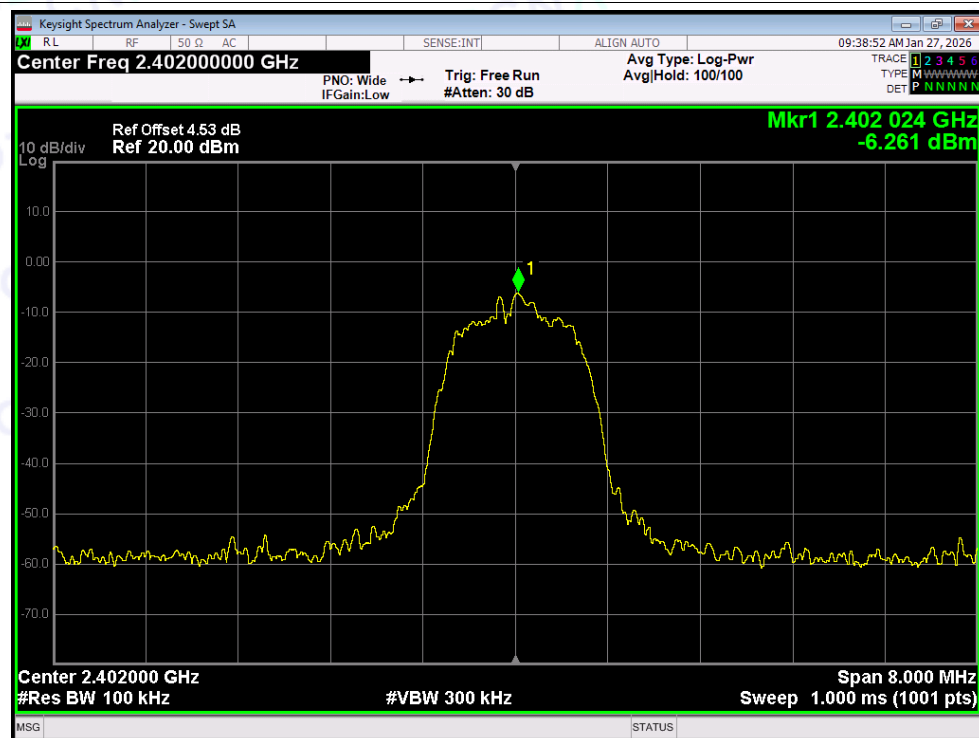
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Ref



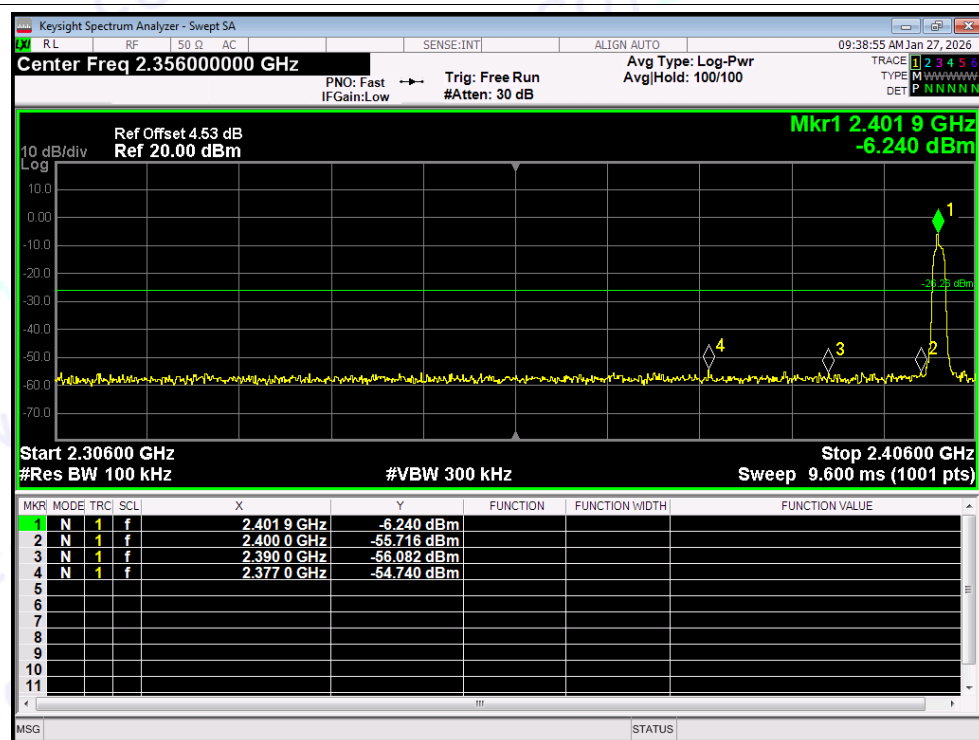
Band Edge NVNT 1-DH5 2480MHz Ant1 No-Hopping Emission



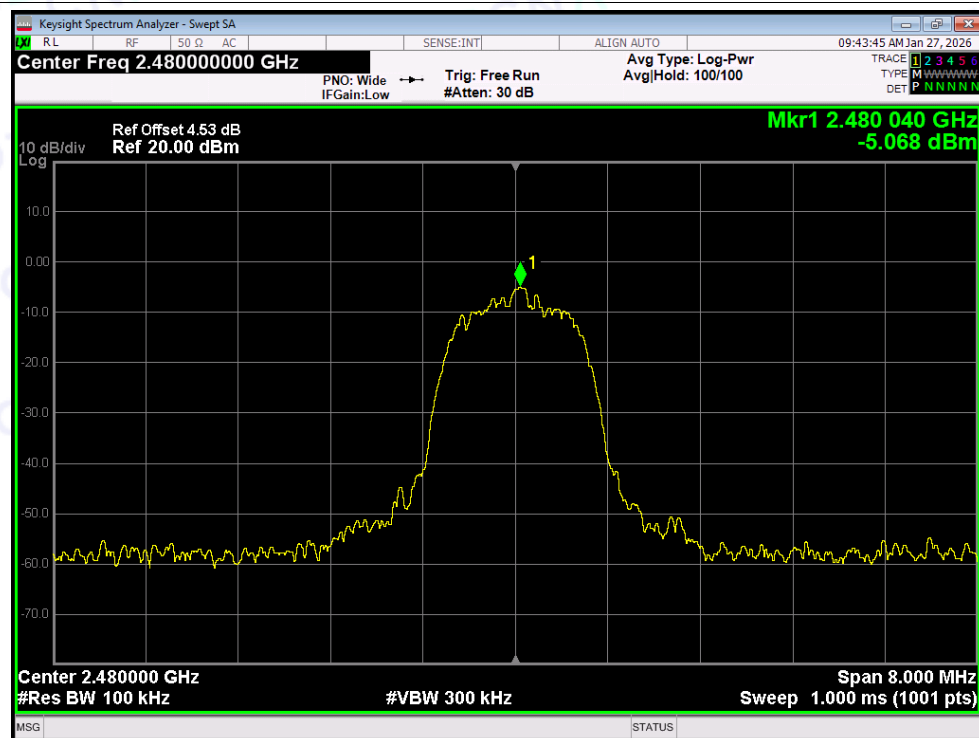
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Ref



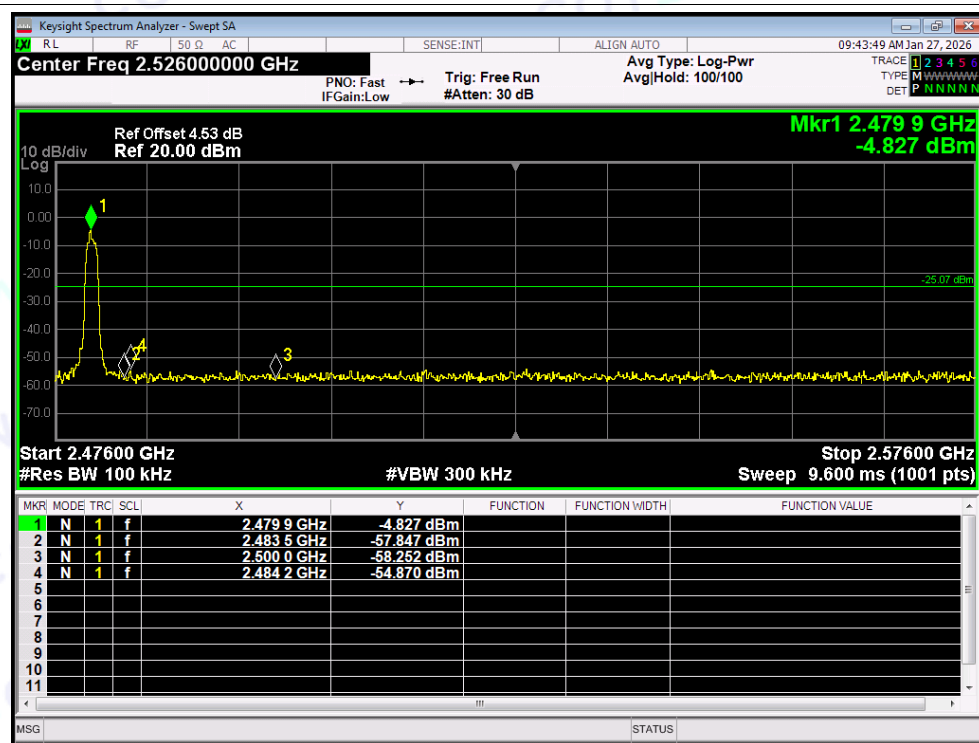
Band Edge NVNT 2-DH5 2402MHz Ant1 No-Hopping Emission



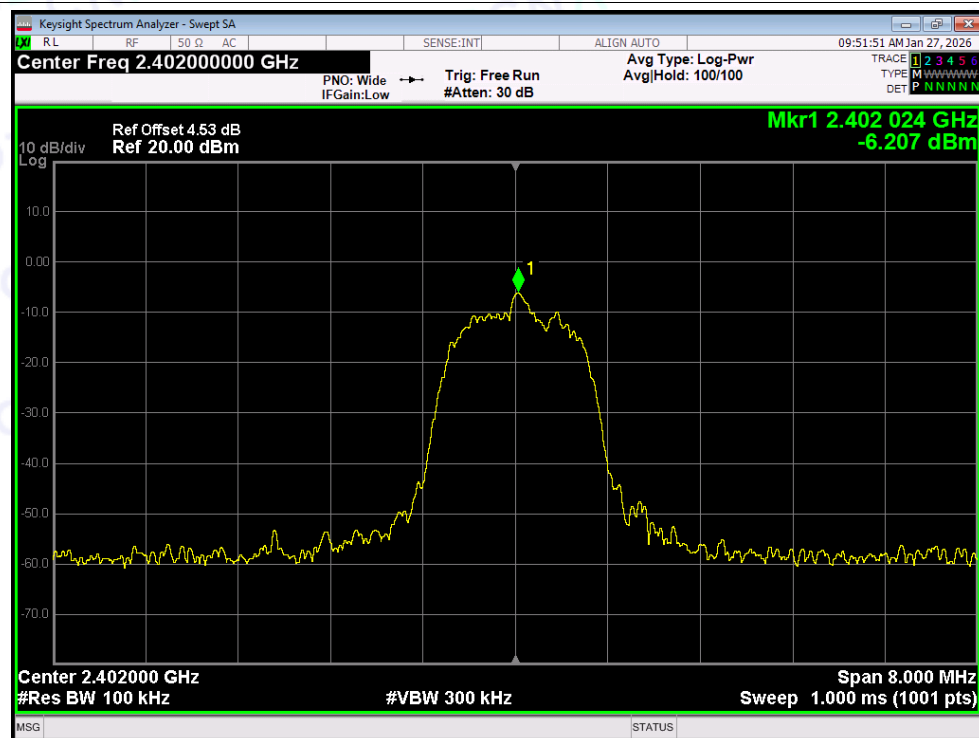
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Ref



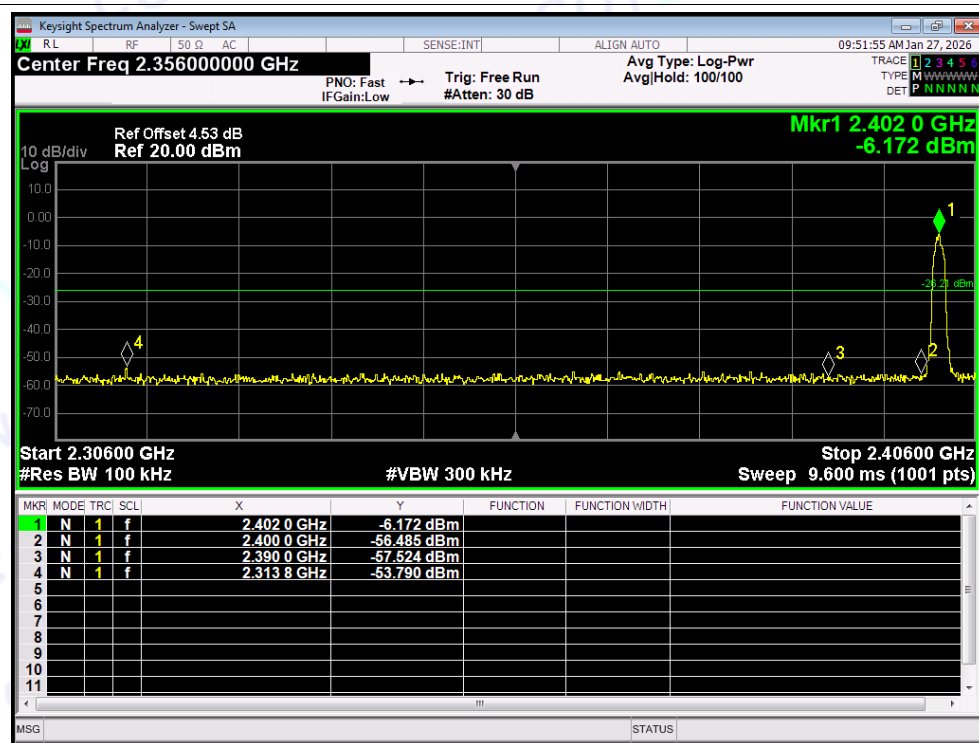
Band Edge NVNT 2-DH5 2480MHz Ant1 No-Hopping Emission



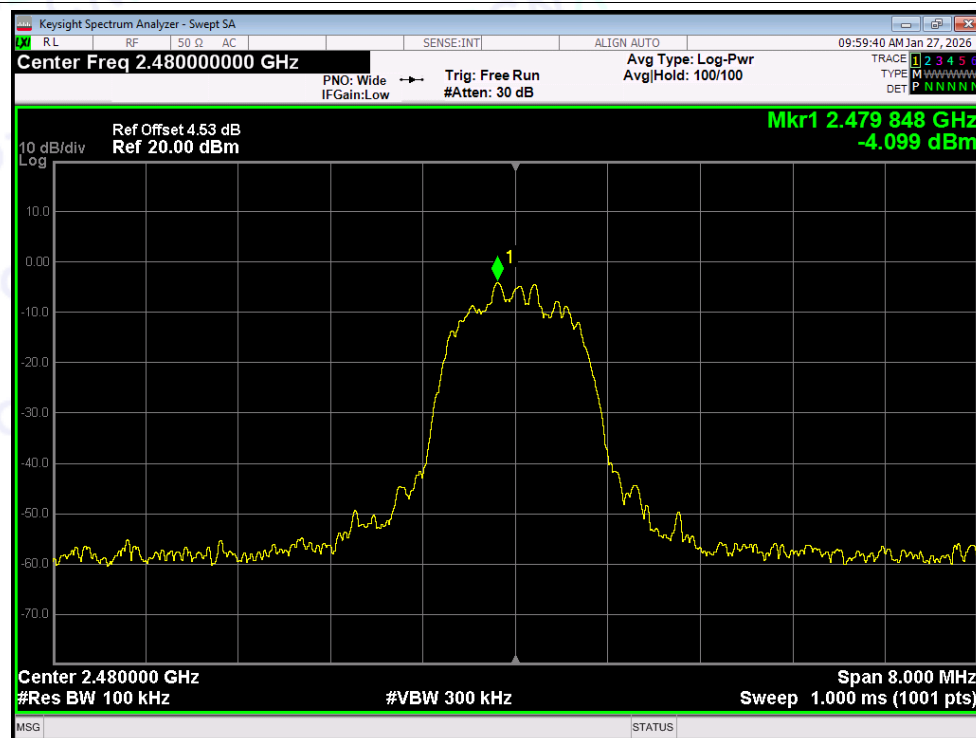
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Ref



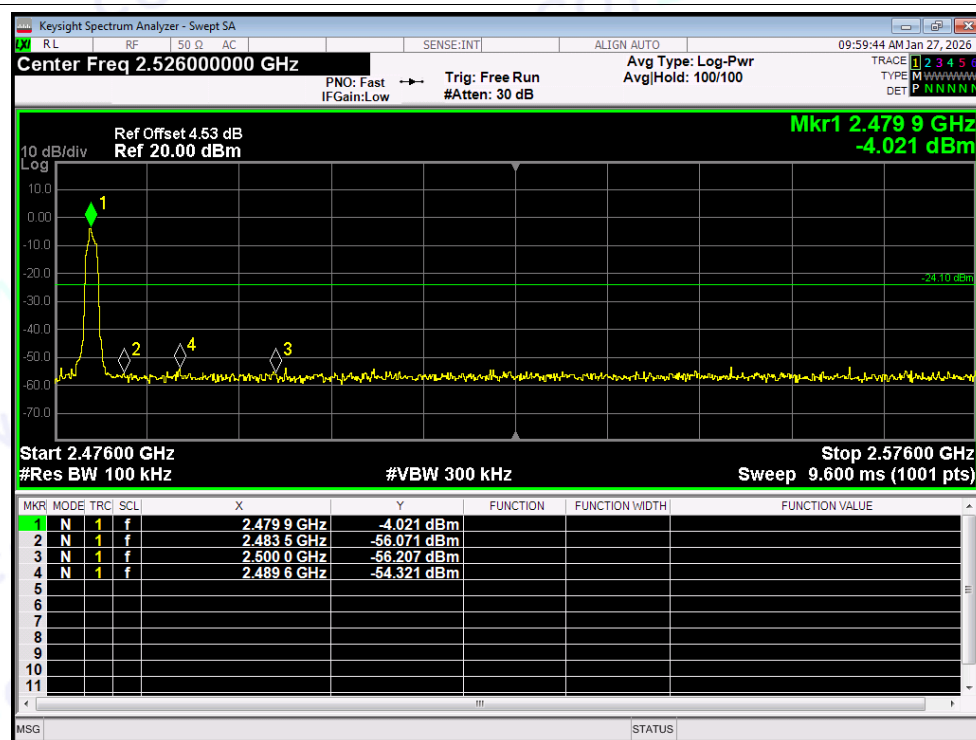
Band Edge NVNT 3-DH5 2402MHz Ant1 No-Hopping Emission



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Ref



Band Edge NVNT 3-DH5 2480MHz Ant1 No-Hopping Emission

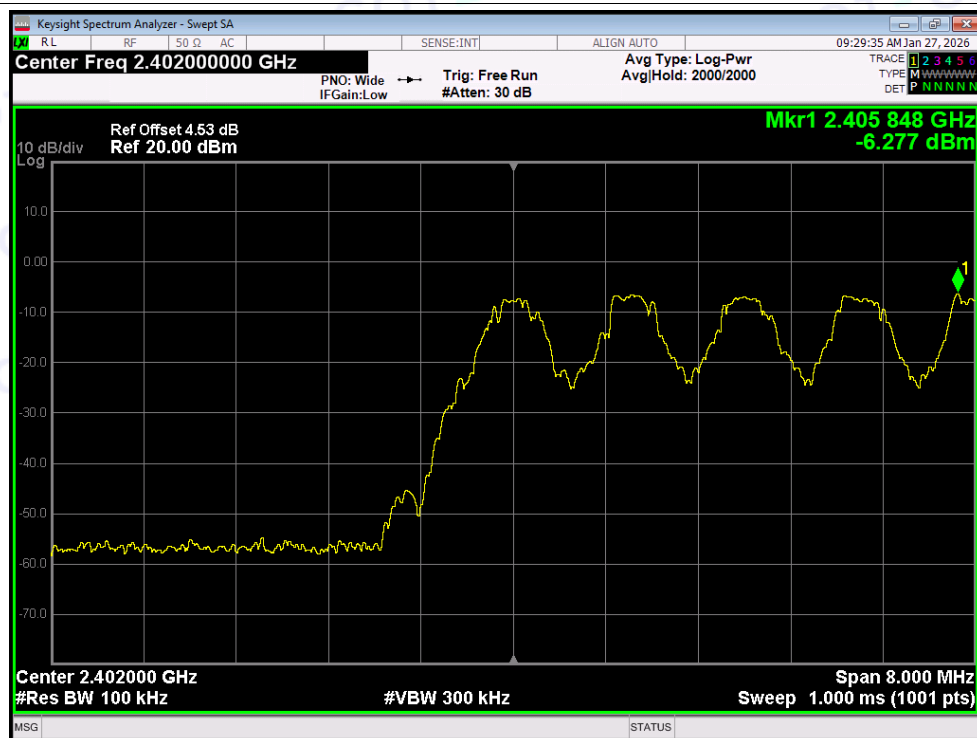


7. Band Edge(Hopping)

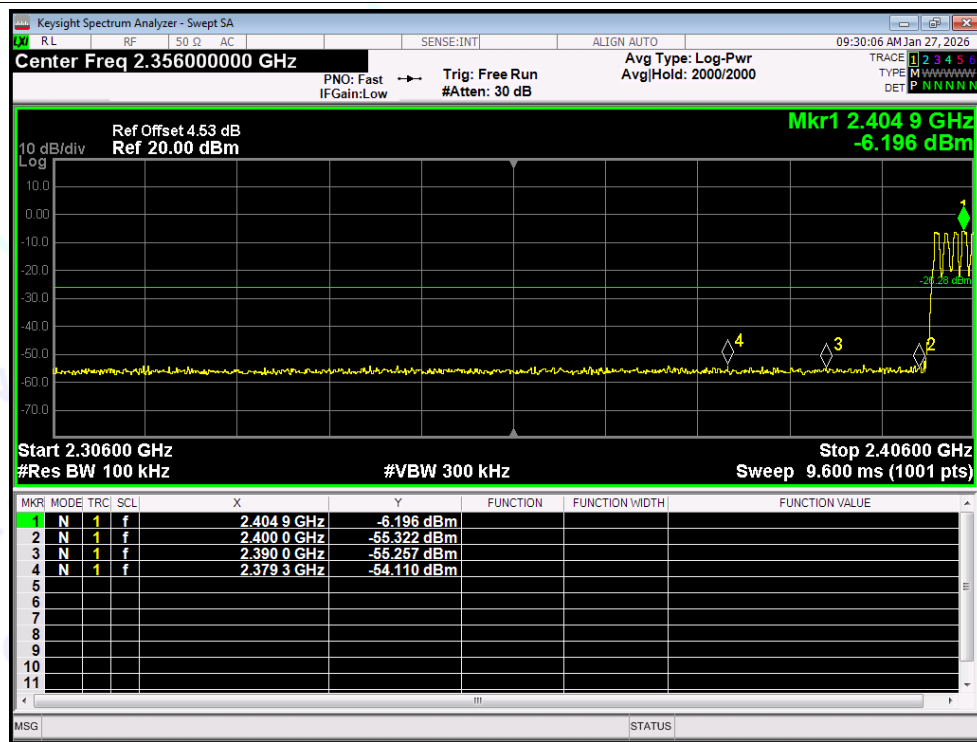
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	Hopping	-47.83	-20	Pass
NVNT	1-DH5	2480	Ant1	Hopping	-49.62	-20	Pass
NVNT	2-DH5	2402	Ant1	Hopping	-47.71	-20	Pass
NVNT	2-DH5	2480	Ant1	Hopping	-49.89	-20	Pass
NVNT	3-DH5	2402	Ant1	Hopping	-47.91	-20	Pass
NVNT	3-DH5	2480	Ant1	Hopping	-49.56	-20	Pass

Test Graphs

Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Ref



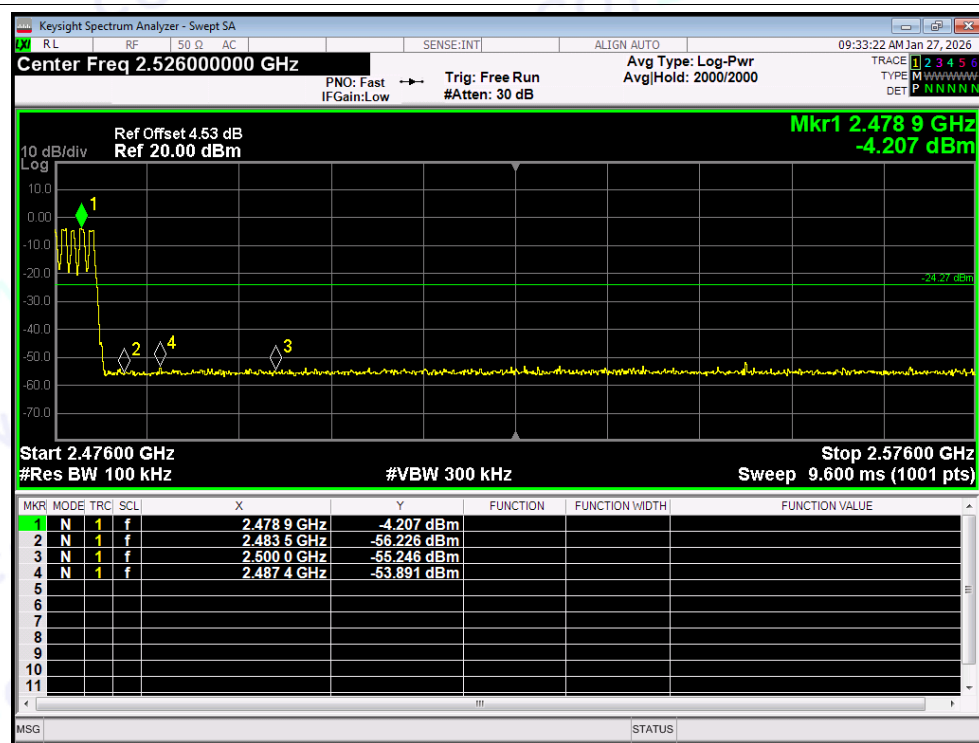
Band Edge(Hopping) NVNT 1-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Ref



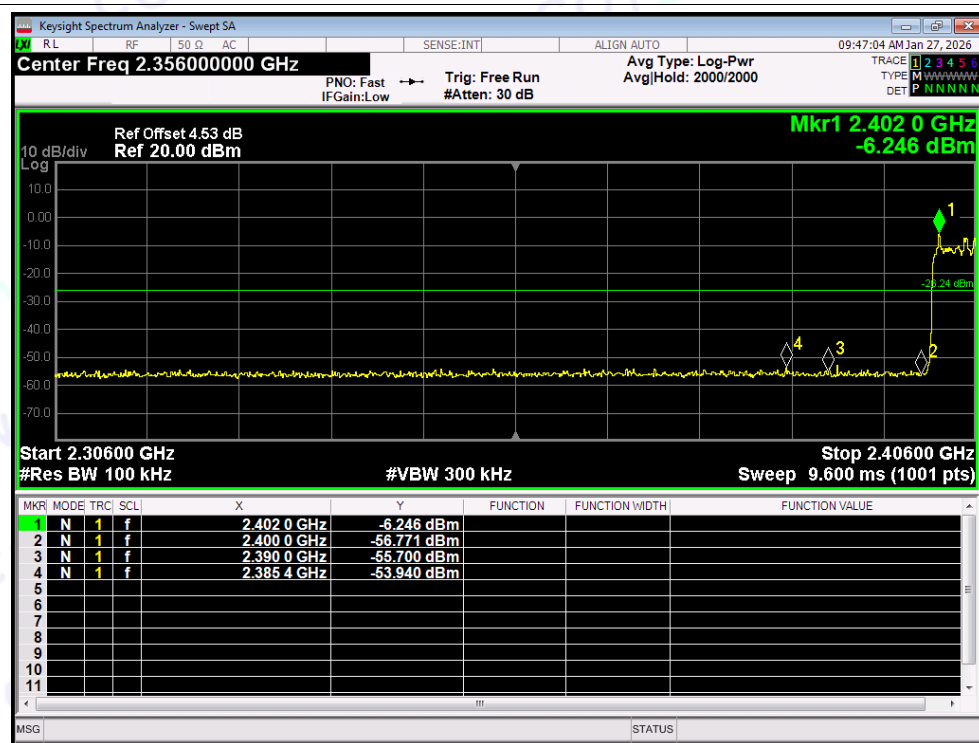
Band Edge(Hopping) NVNT 1-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Ref



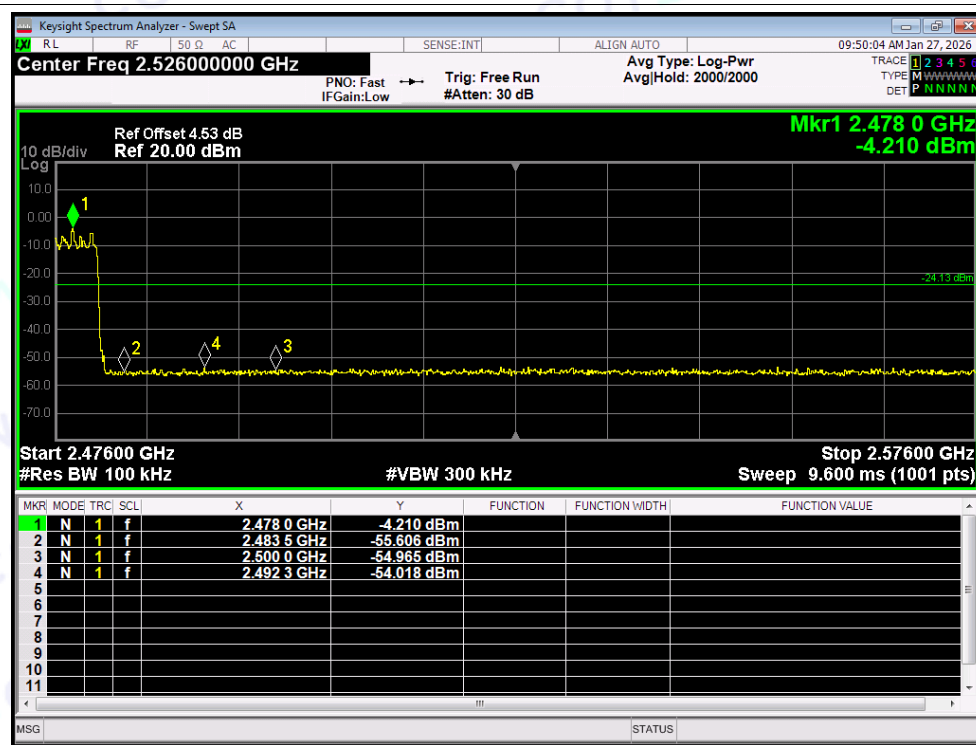
Band Edge(Hopping) NVNT 2-DH5 2402MHz Ant1 Hopping Emission



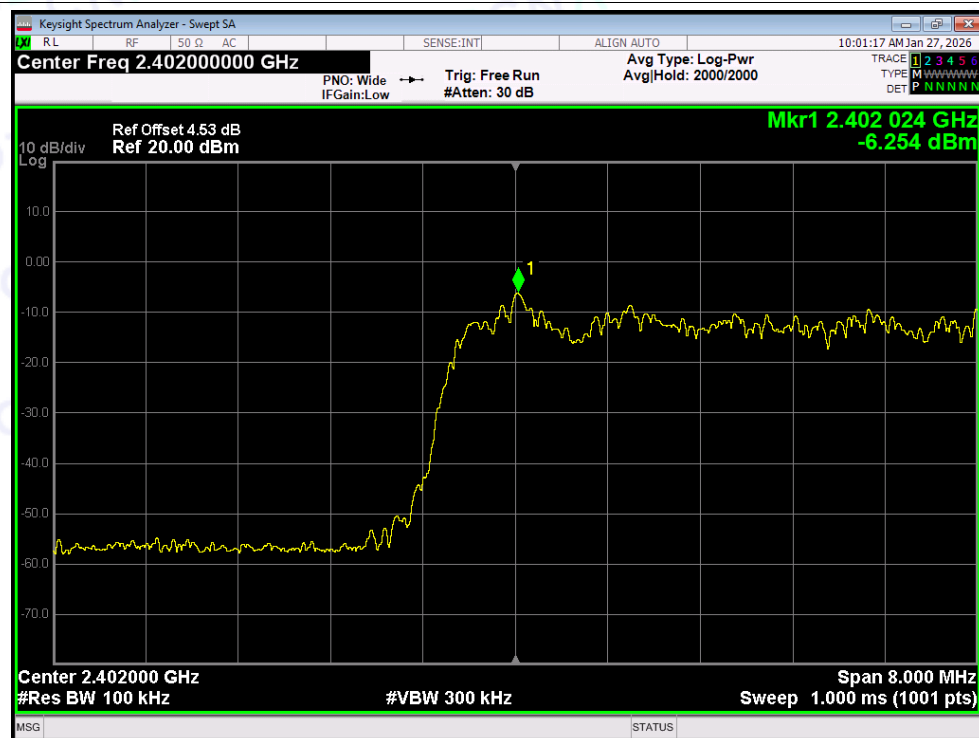
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Ref



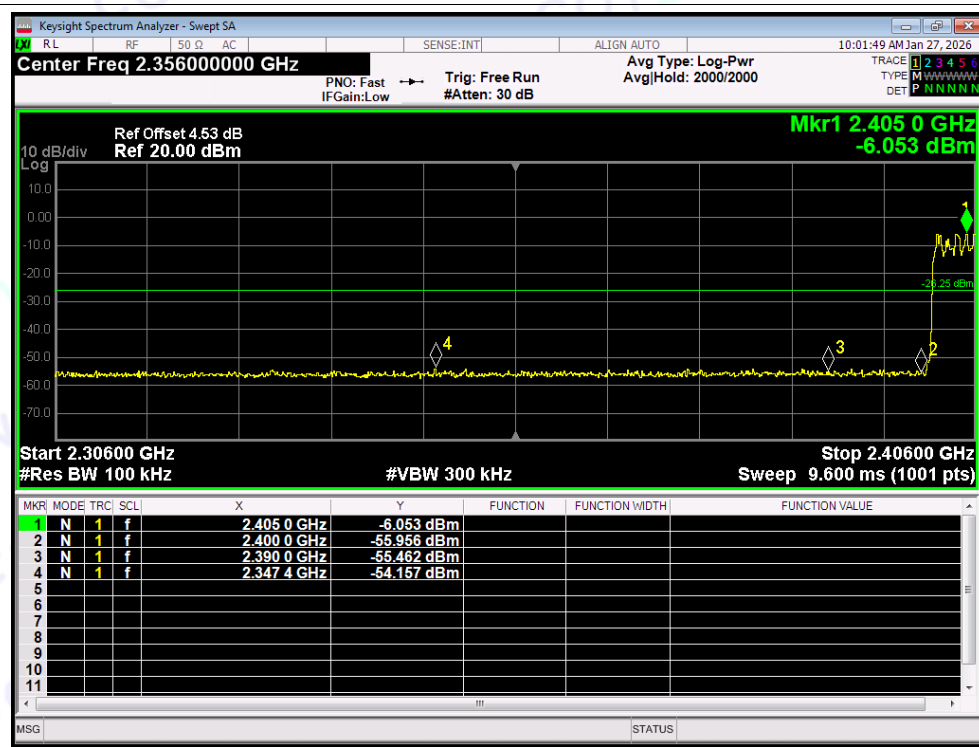
Band Edge(Hopping) NVNT 2-DH5 2480MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Ref



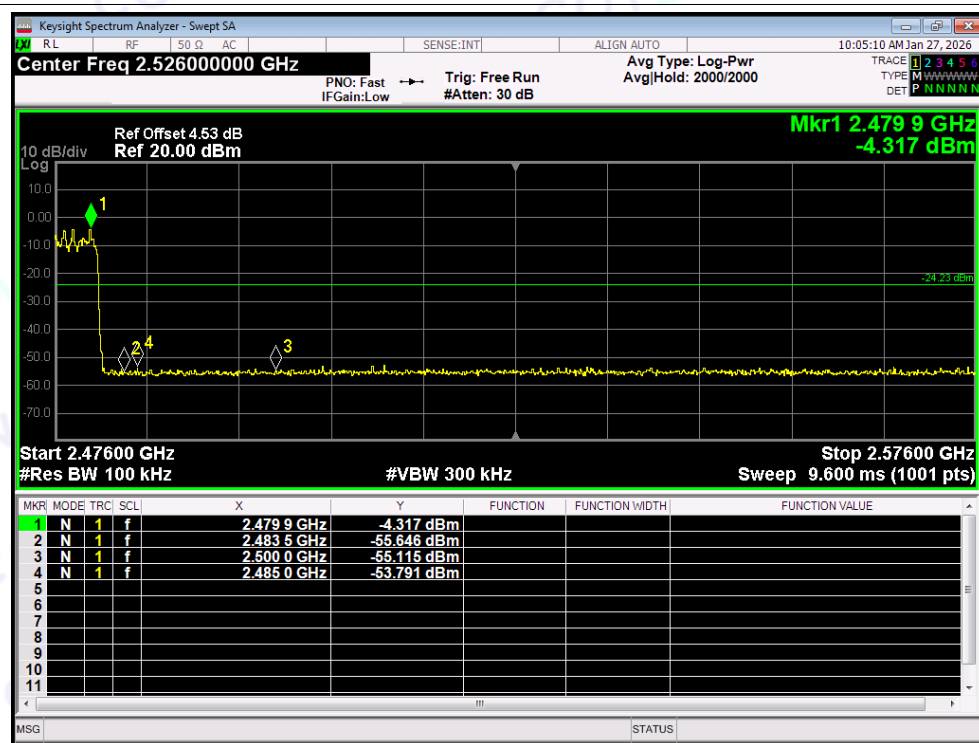
Band Edge(Hopping) NVNT 3-DH5 2402MHz Ant1 Hopping Emission



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Ref



Band Edge(Hopping) NVNT 3-DH5 2480MHz Ant1 Hopping Emission

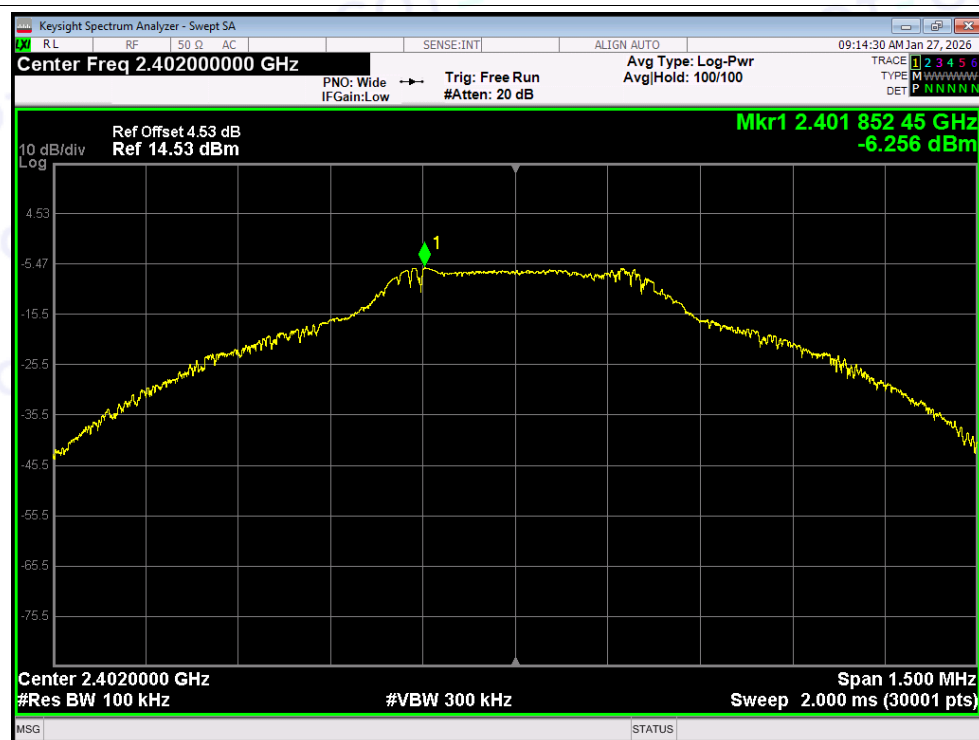


8. Conducted RF Spurious Emission

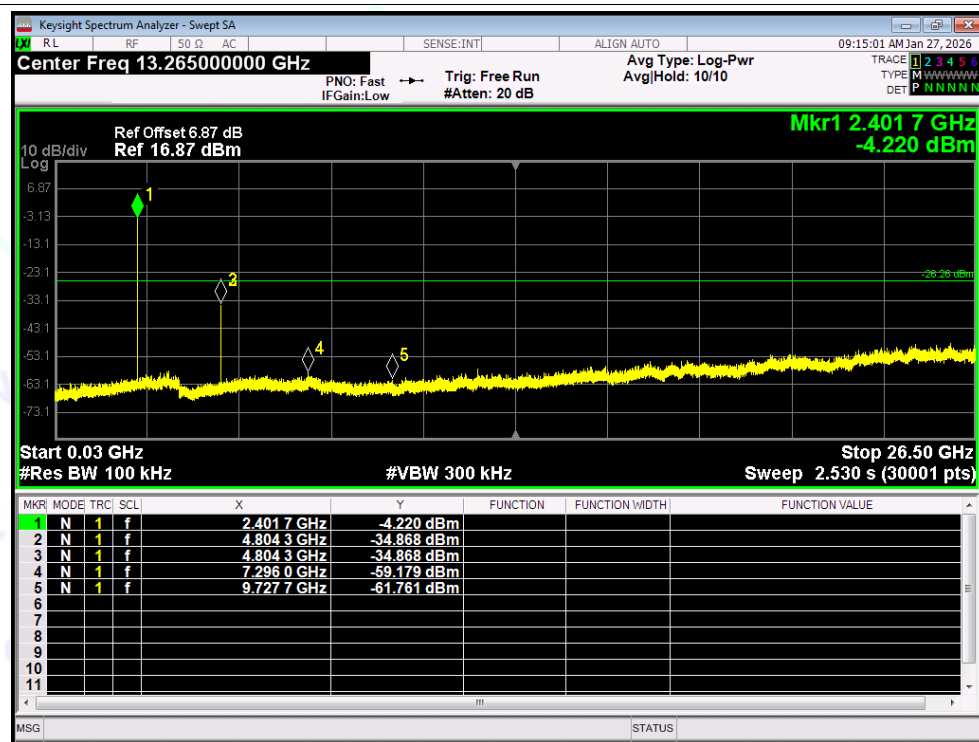
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH5	2402	Ant1	-28.61	-20	Pass
NVNT	1-DH5	2441	Ant1	-30.06	-20	Pass
NVNT	1-DH5	2480	Ant1	-34.35	-20	Pass
NVNT	2-DH5	2402	Ant1	-35.23	-20	Pass
NVNT	2-DH5	2441	Ant1	-36.58	-20	Pass
NVNT	2-DH5	2480	Ant1	-37.6	-20	Pass
NVNT	3-DH5	2402	Ant1	-30.53	-20	Pass
NVNT	3-DH5	2441	Ant1	-36.97	-20	Pass
NVNT	3-DH5	2480	Ant1	-34.85	-20	Pass

Test Graphs

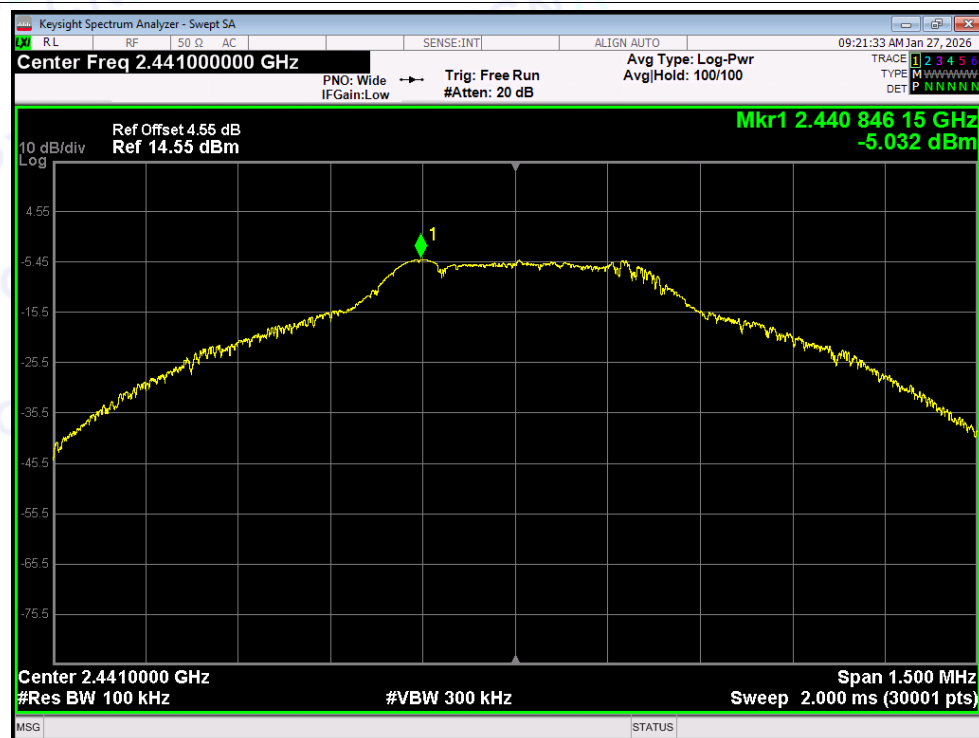
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Ref



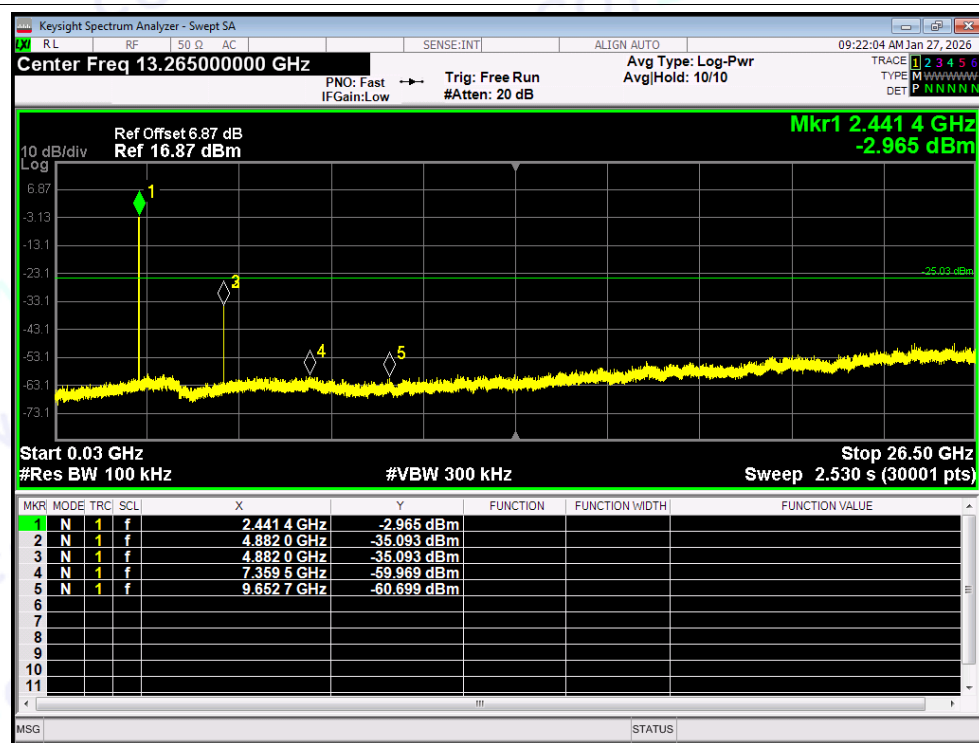
Tx. Spurious NVNT 1-DH5 2402MHz Ant1 Emission



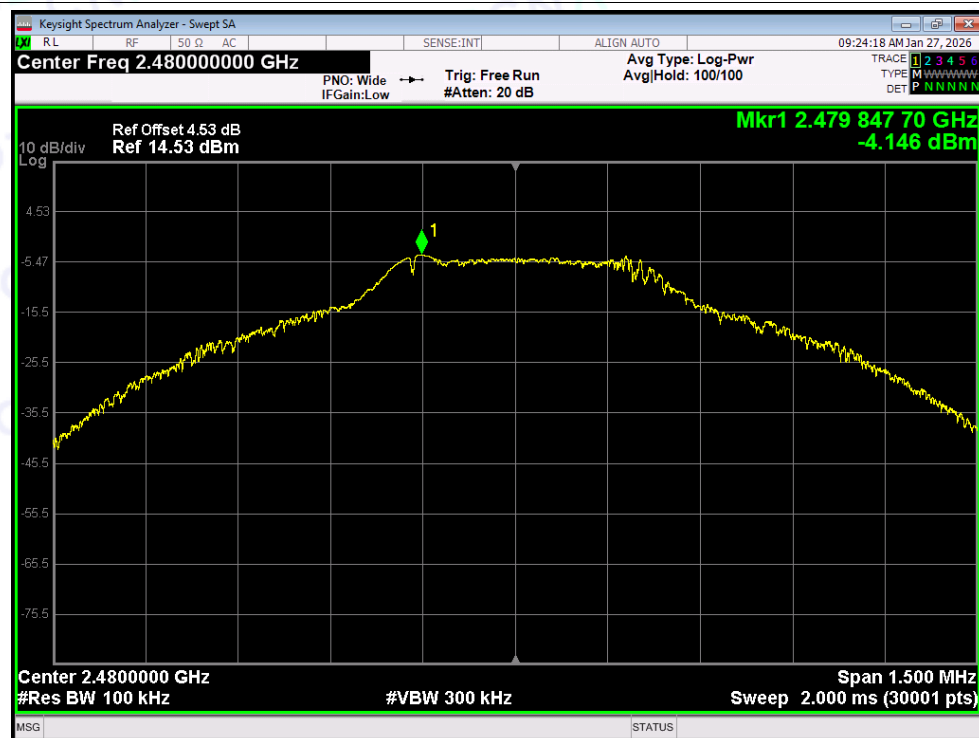
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Ref



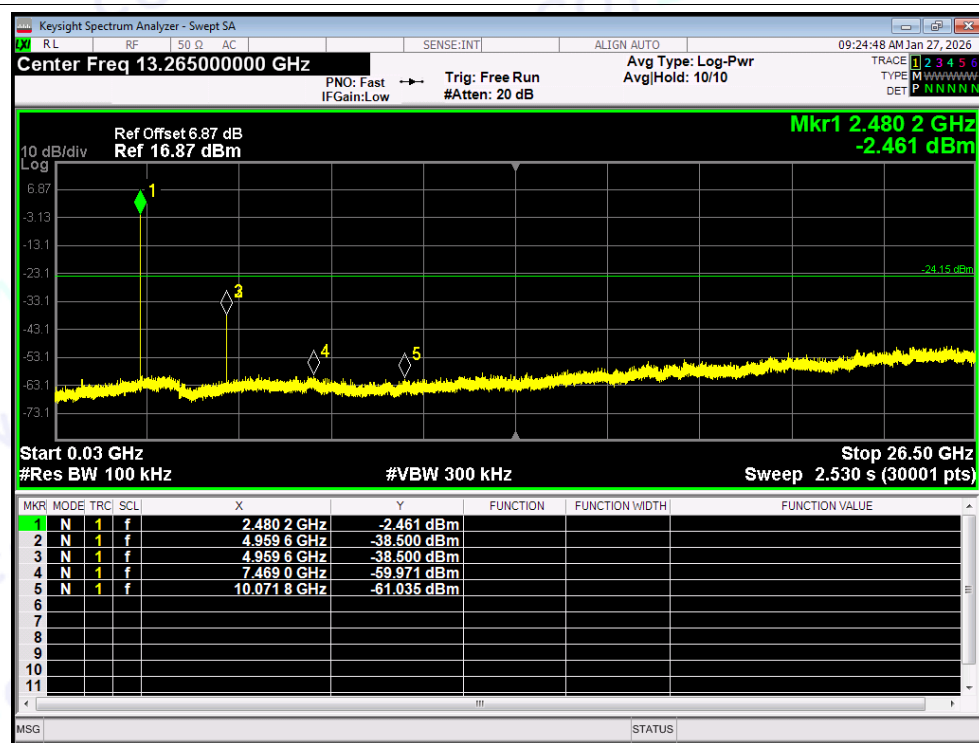
Tx. Spurious NVNT 1-DH5 2441MHz Ant1 Emission



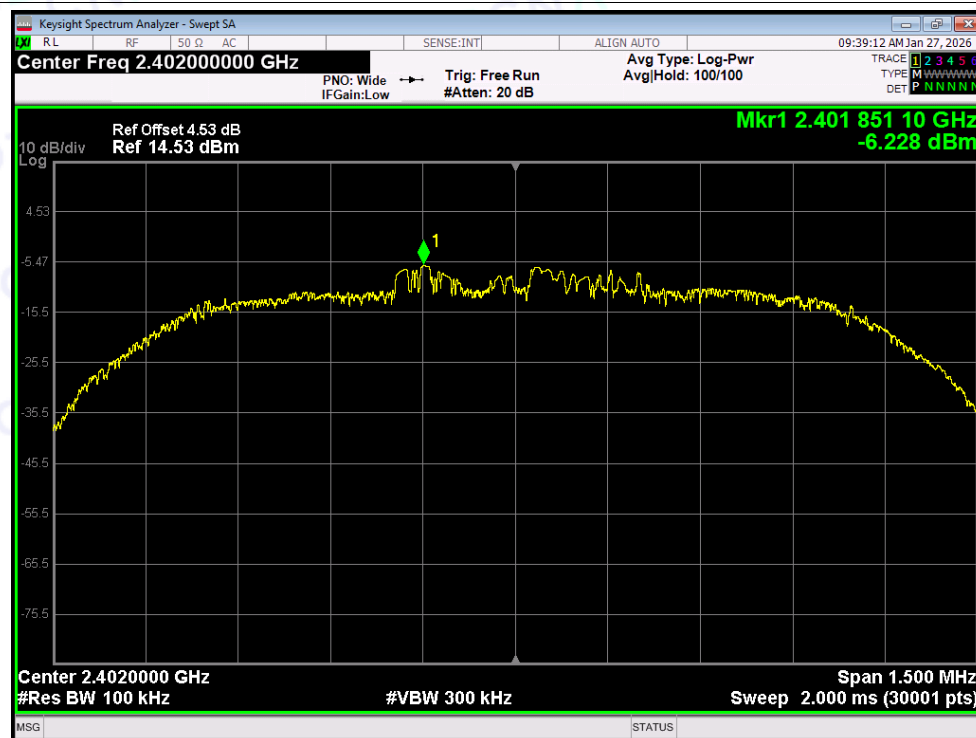
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Ref



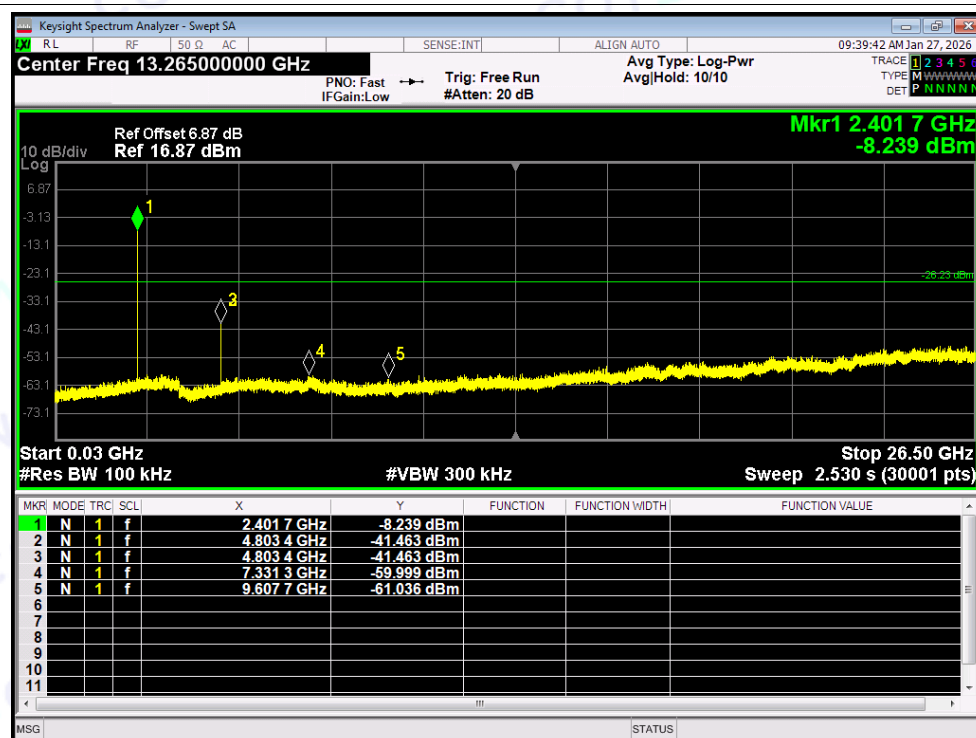
Tx. Spurious NVNT 1-DH5 2480MHz Ant1 Emission



Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Ref



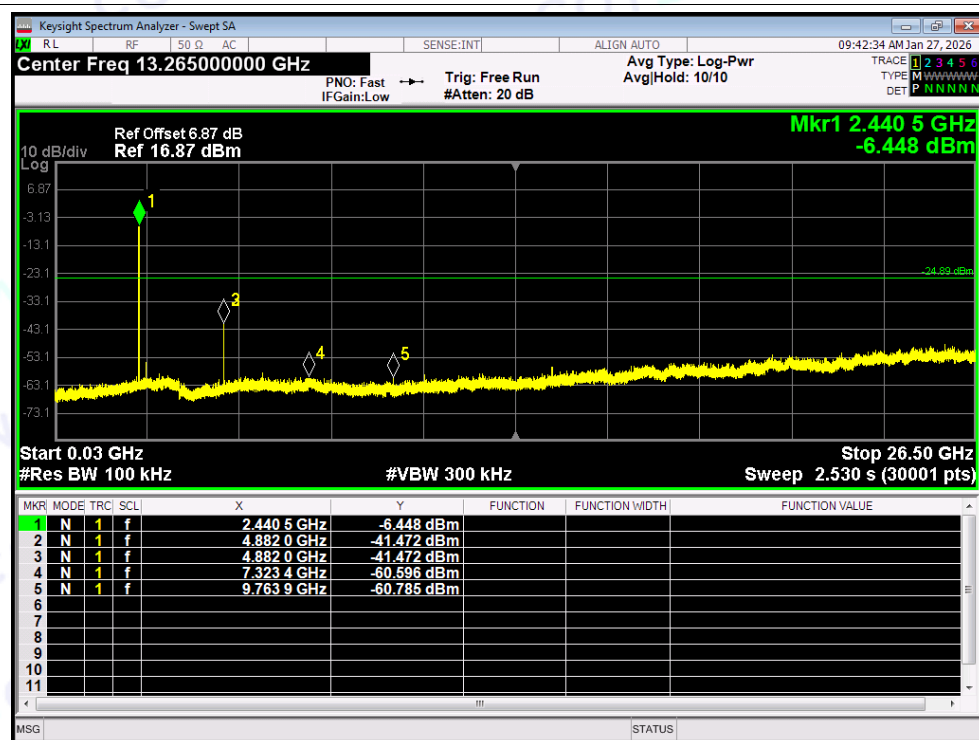
Tx. Spurious NVNT 2-DH5 2402MHz Ant1 Emission



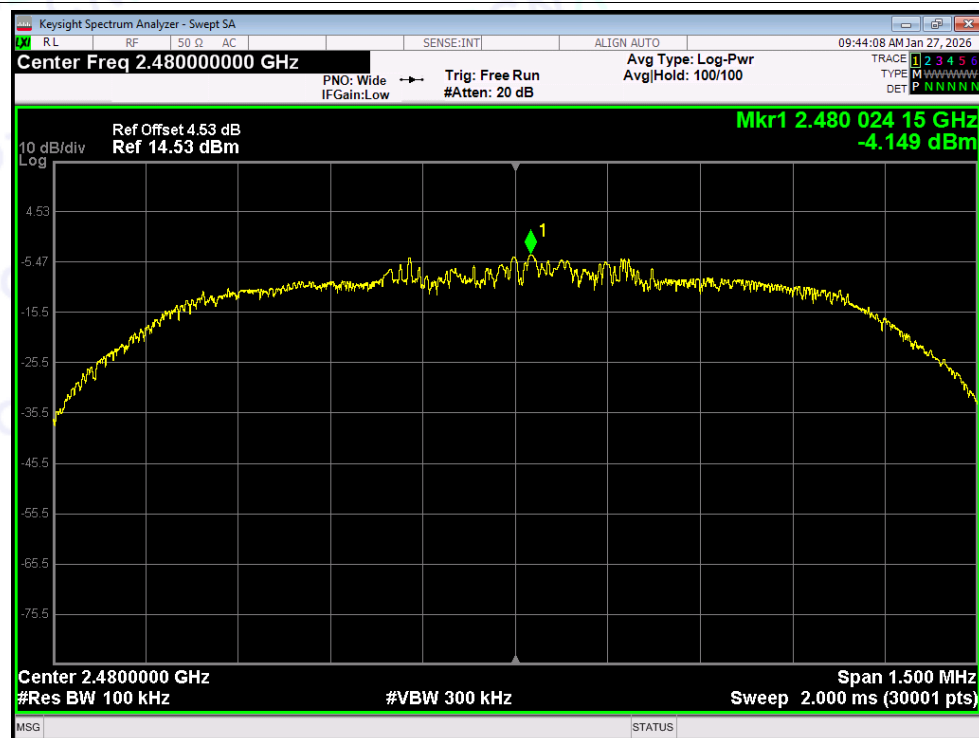
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Ref



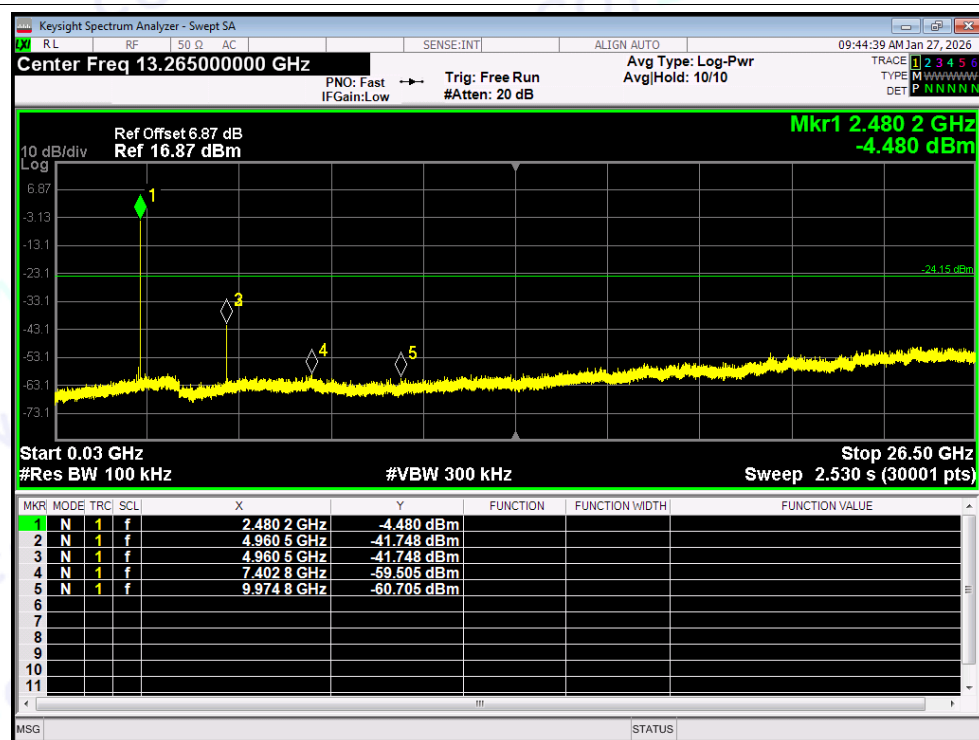
Tx. Spurious NVNT 2-DH5 2441MHz Ant1 Emission



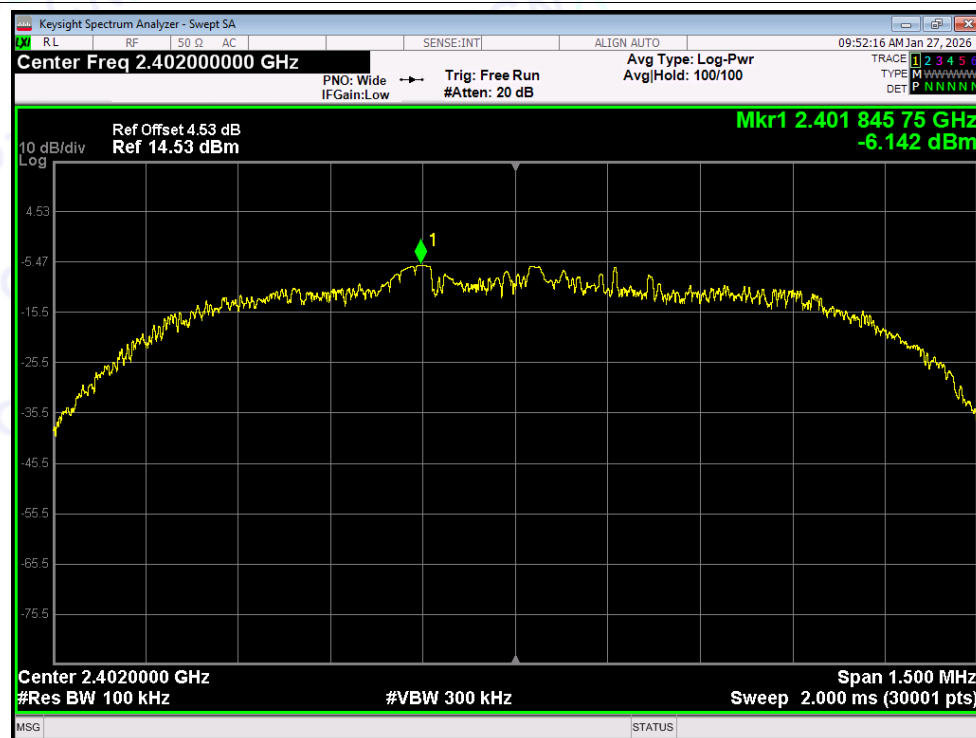
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Ref



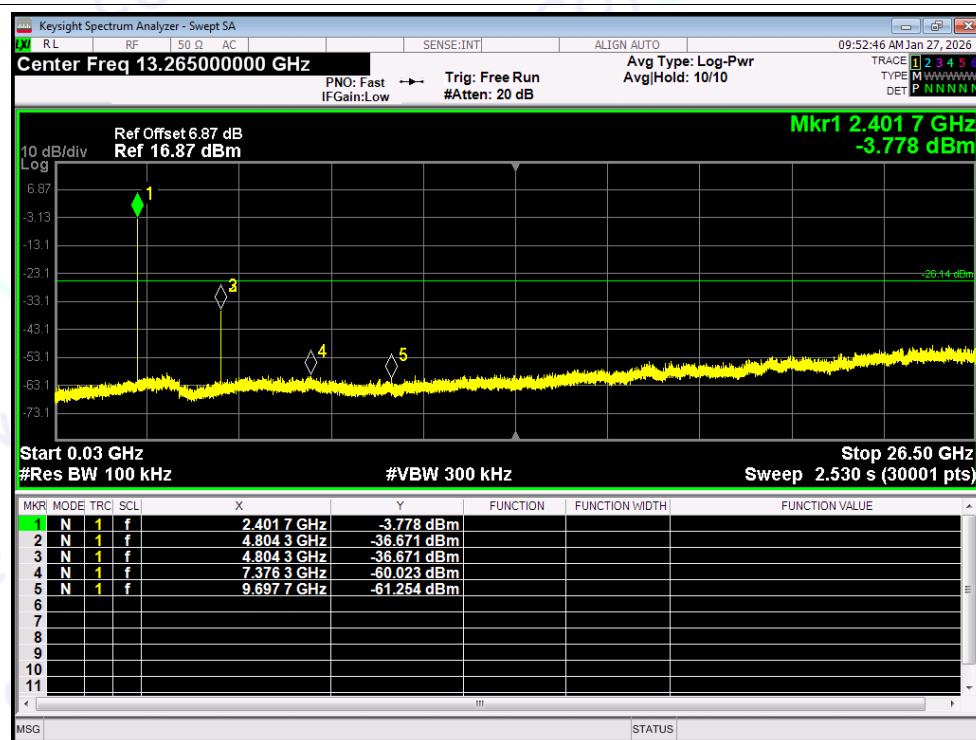
Tx. Spurious NVNT 2-DH5 2480MHz Ant1 Emission



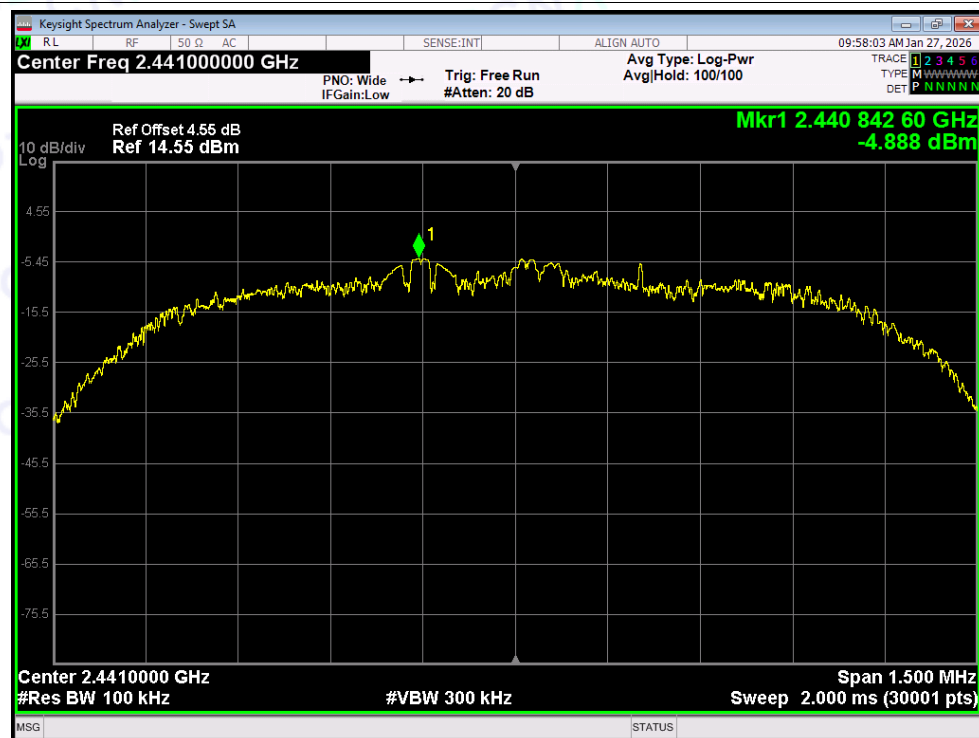
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Ref



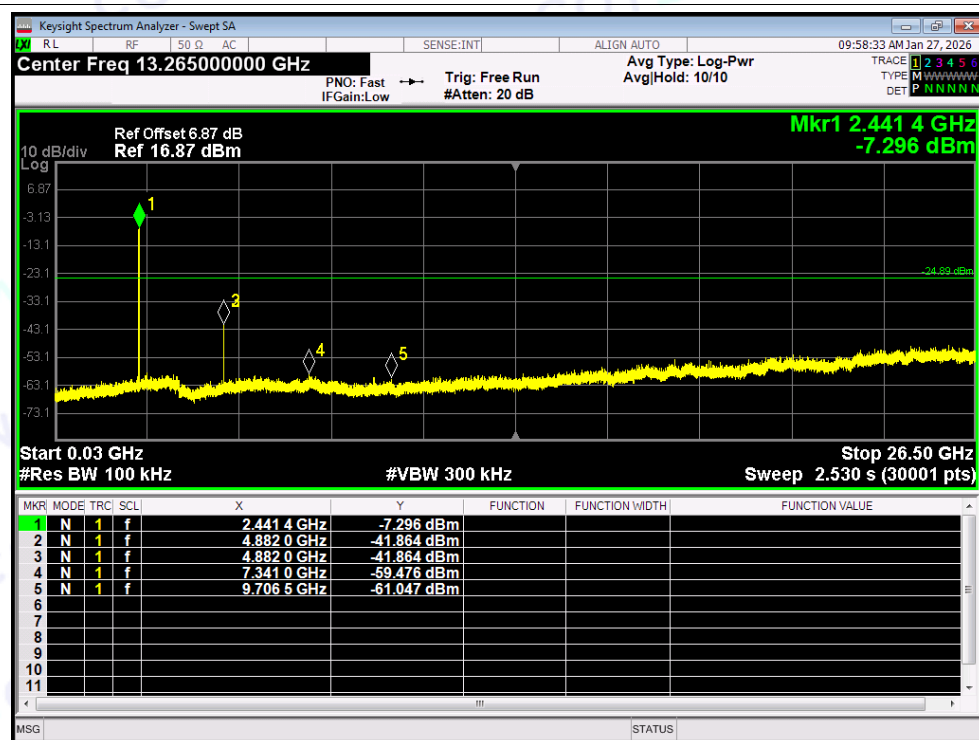
Tx. Spurious NVNT 3-DH5 2402MHz Ant1 Emission



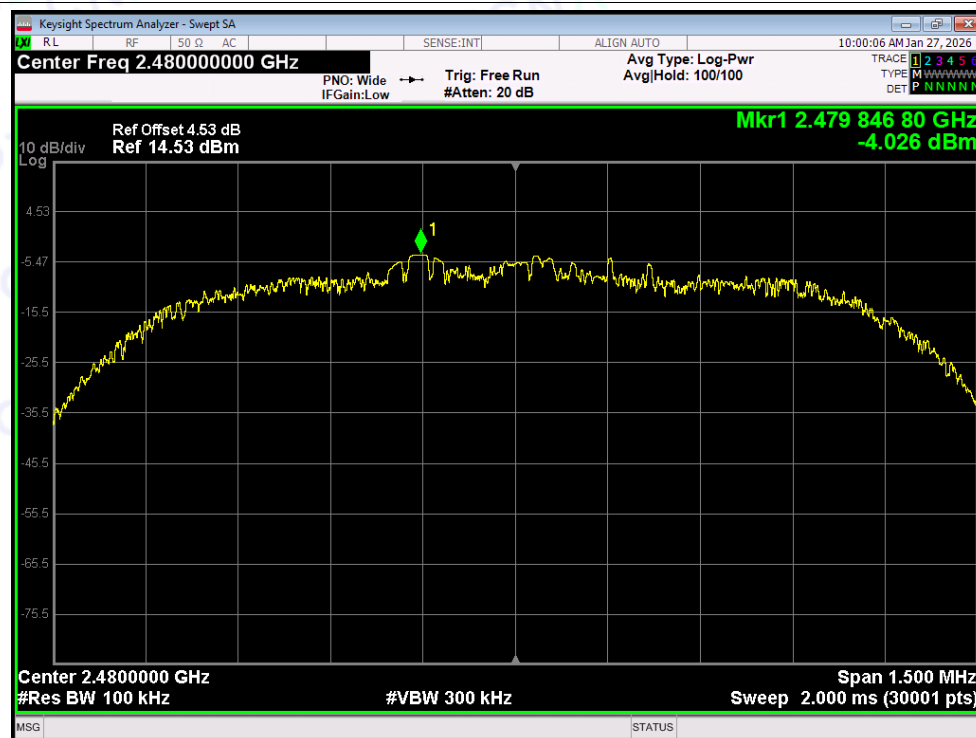
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Ref



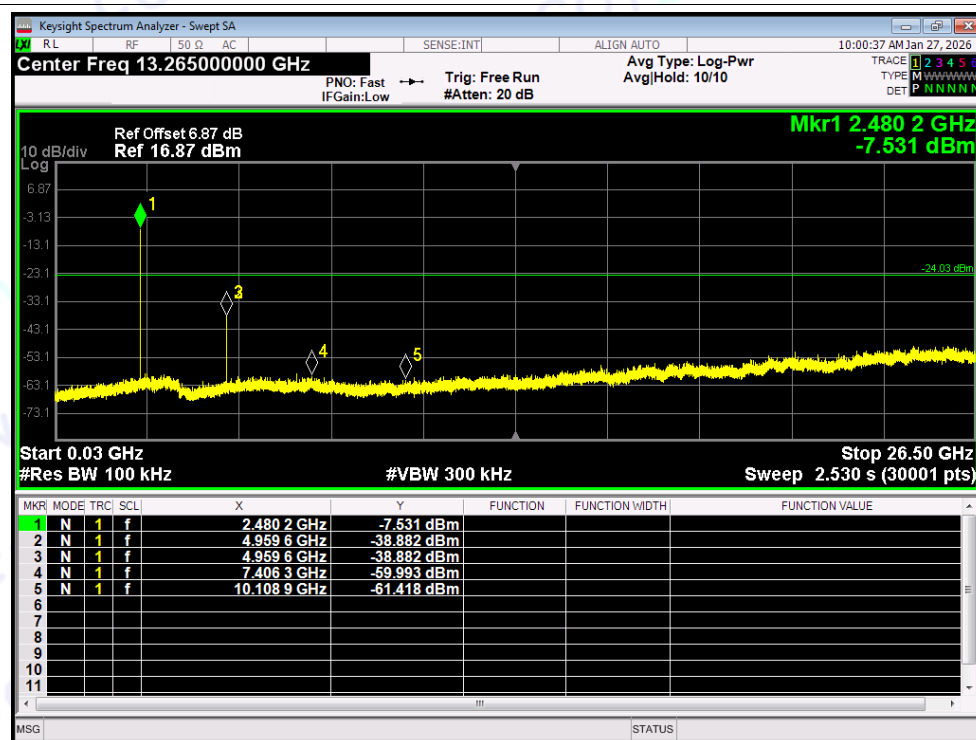
Tx. Spurious NVNT 3-DH5 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH5 2480MHz Ant1 Emission

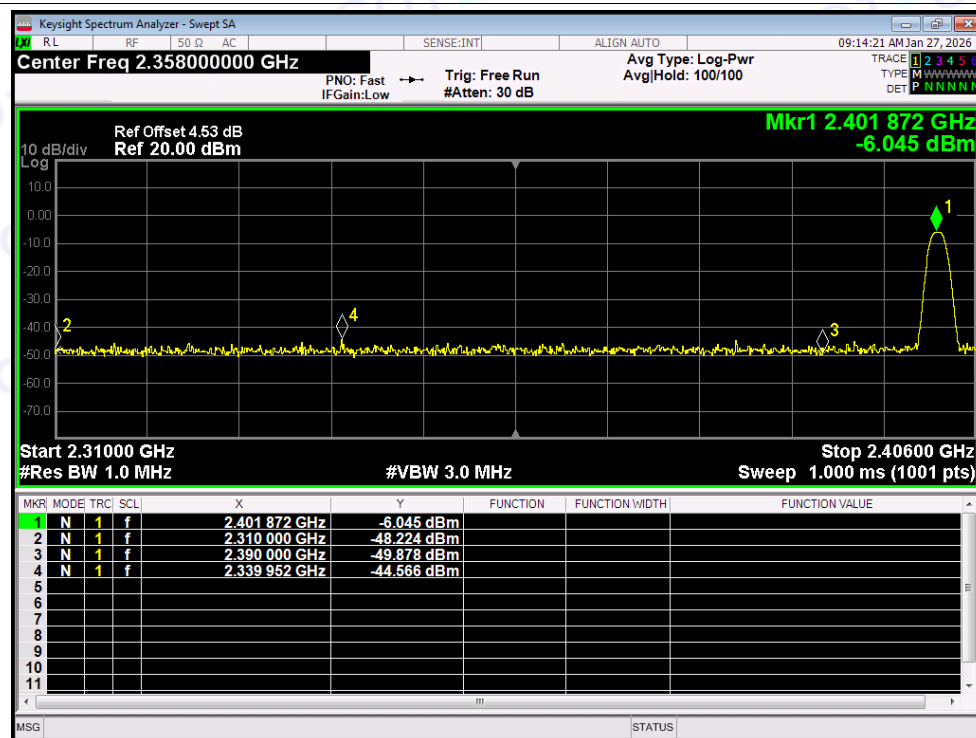


9.Restrict Band

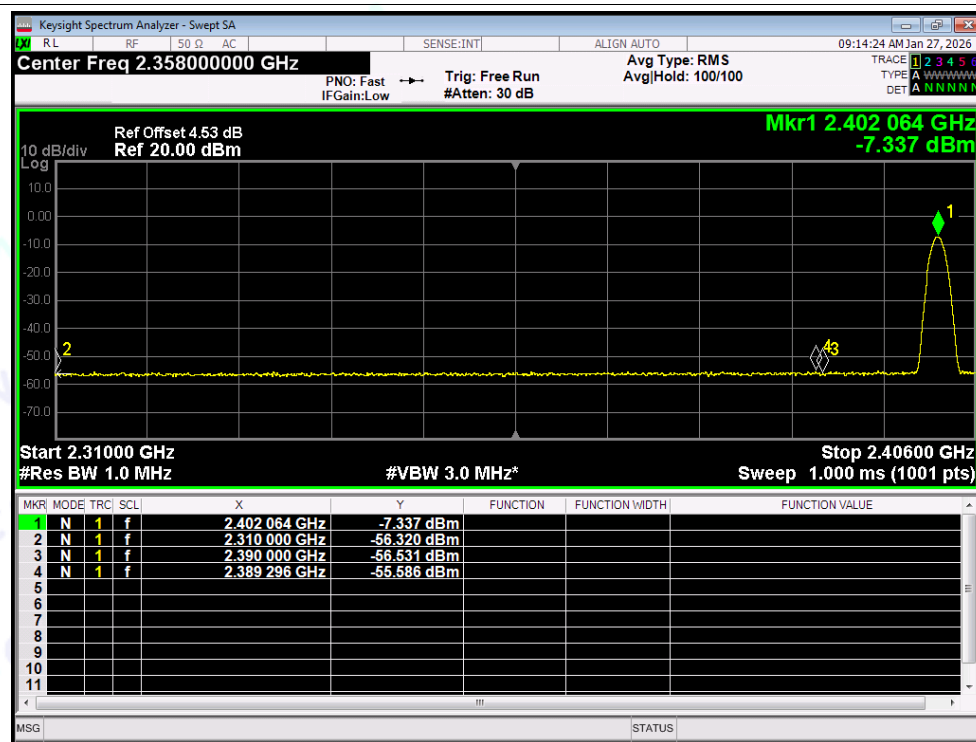
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-48.22	2	-	49.04	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2310	-56.32	2	1.1	42.04	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2339.952	-44.57	2	-	52.69	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2389.296	-55.59	2	1.1	42.77	Average	54	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-49.88	2	-	47.38	Peak	74	Pass
NVNT	1-DH5	2402	Ant1	No-Hopping	2390	-56.53	2	1.1	41.83	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-47.94	2	-	49.32	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2483.5	-56.18	2	1.1	42.18	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2485.024	-44.74	2	-	52.52	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2489.8	-54.7	2	1.1	43.66	Average	54	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-47.53	2	-	49.73	Peak	74	Pass
NVNT	1-DH5	2480	Ant1	No-Hopping	2500	-55.9	2	1.1	42.46	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-47.52	2	-	49.74	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2310	-56.53	2	1.09	41.82	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2327.184	-45.68	2	-	51.58	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2377.584	-55.25	2	1.09	43.1	Average	54	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-49.35	2	-	47.91	Peak	74	Pass
NVNT	2-DH5	2402	Ant1	No-Hopping	2390	-56.36	2	1.09	41.99	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-47.9	2	-	49.36	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.5	-54.95	2	1.09	43.4	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2484.088	-44.45	2	-	52.81	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2483.512	-54.95	2	1.09	43.4	Average	54	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-48.04	2	-	49.22	Peak	74	Pass
NVNT	2-DH5	2480	Ant1	No-Hopping	2500	-55.62	2	1.09	42.73	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-47.81	2	-	49.45	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2310	-56.97	2	1.09	41.38	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2372.4	-45.37	2	-	51.89	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2367.792	-55.53	2	1.09	42.82	Average	54	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-47.85	2	-	49.41	Peak	74	Pass
NVNT	3-DH5	2402	Ant1	No-Hopping	2390	-56.31	2	1.09	42.04	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-48.05	2	-	49.21	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2483.5	-55.66	2	1.09	42.69	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2499.904	-44.58	2	-	52.68	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2487.424	-54.88	2	1.09	43.47	Average	54	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-46.22	2	-	51.04	Peak	74	Pass
NVNT	3-DH5	2480	Ant1	No-Hopping	2500	-55.7	2	1.09	42.65	Average	54	Pass

Test Graphs

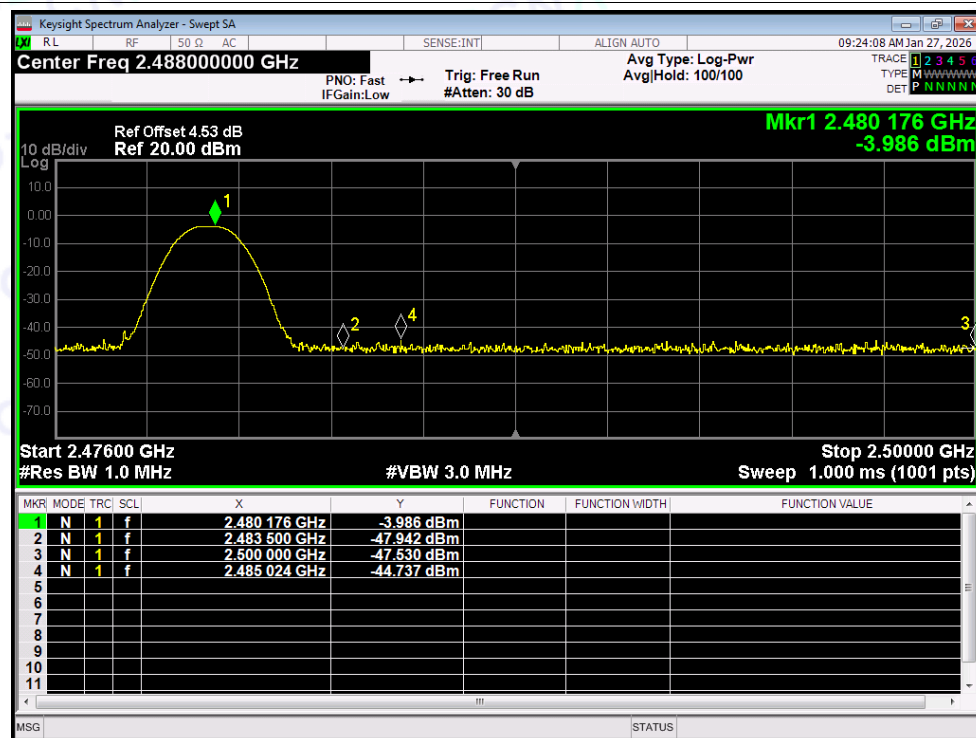
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Peak



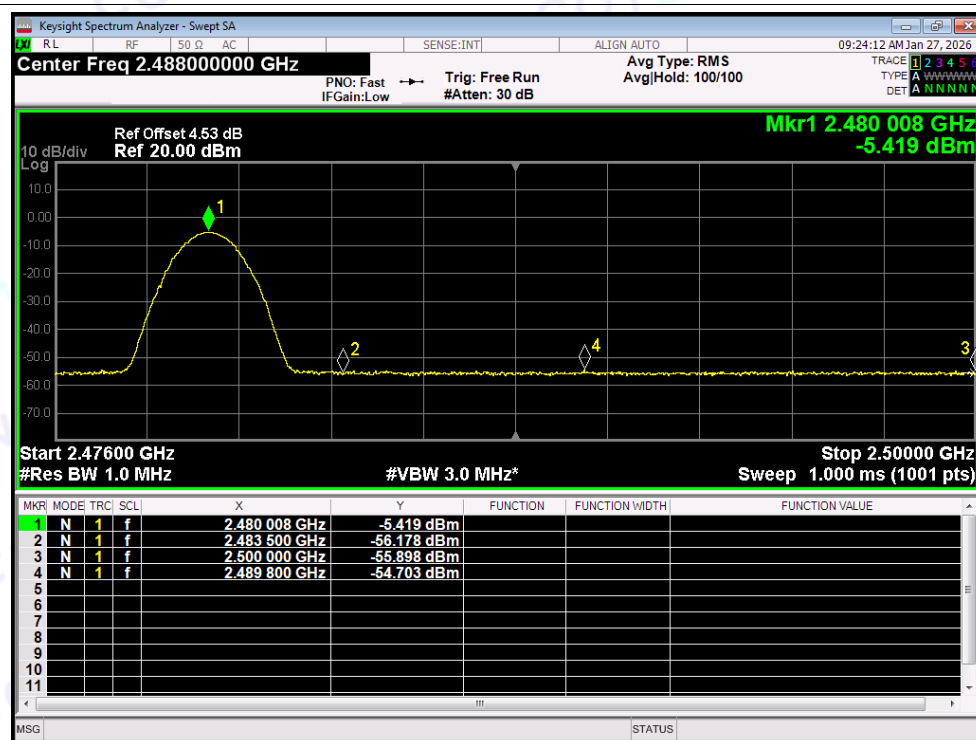
Restrict Band NVNT 1-DH5 2402MHz Ant1 No-Hopping Average



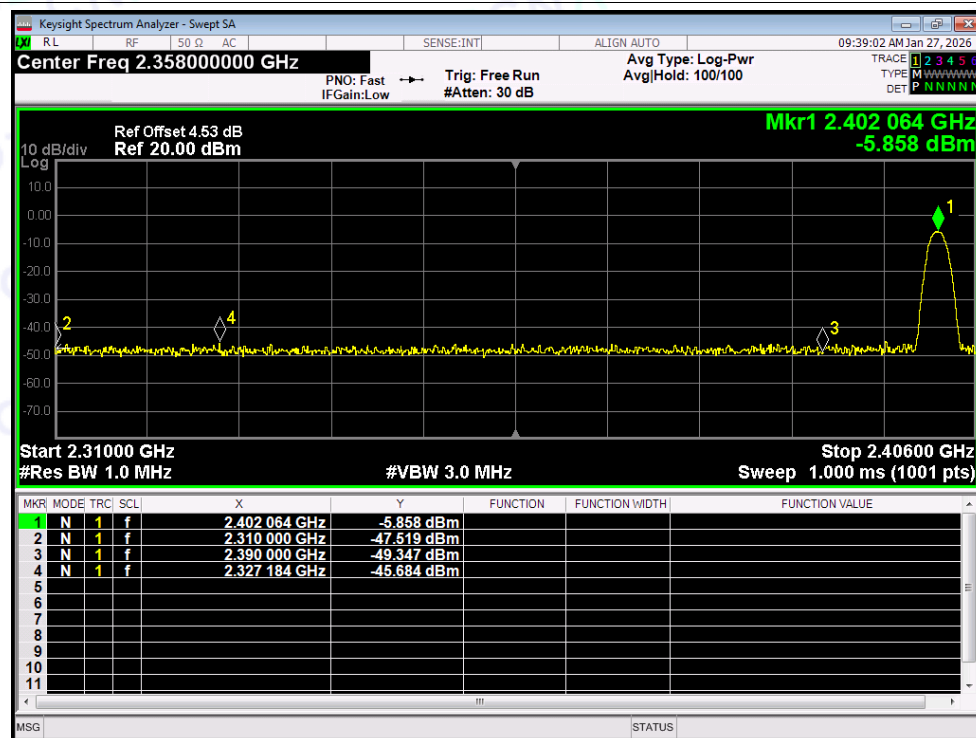
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Peak



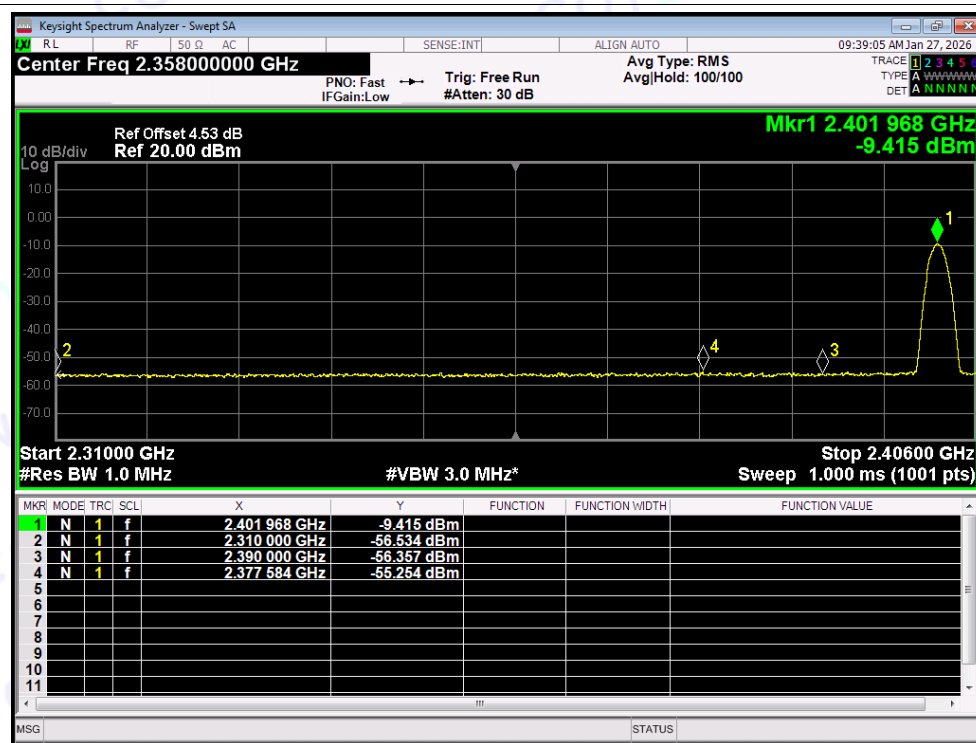
Restrict Band NVNT 1-DH5 2480MHz Ant1 No-Hopping Average



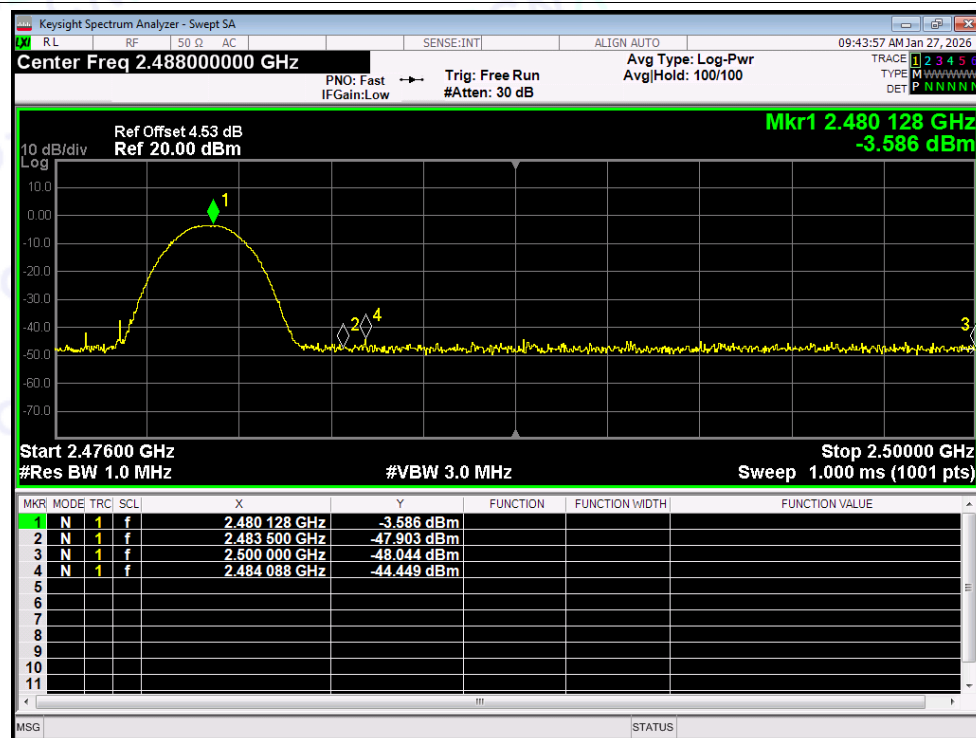
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Peak



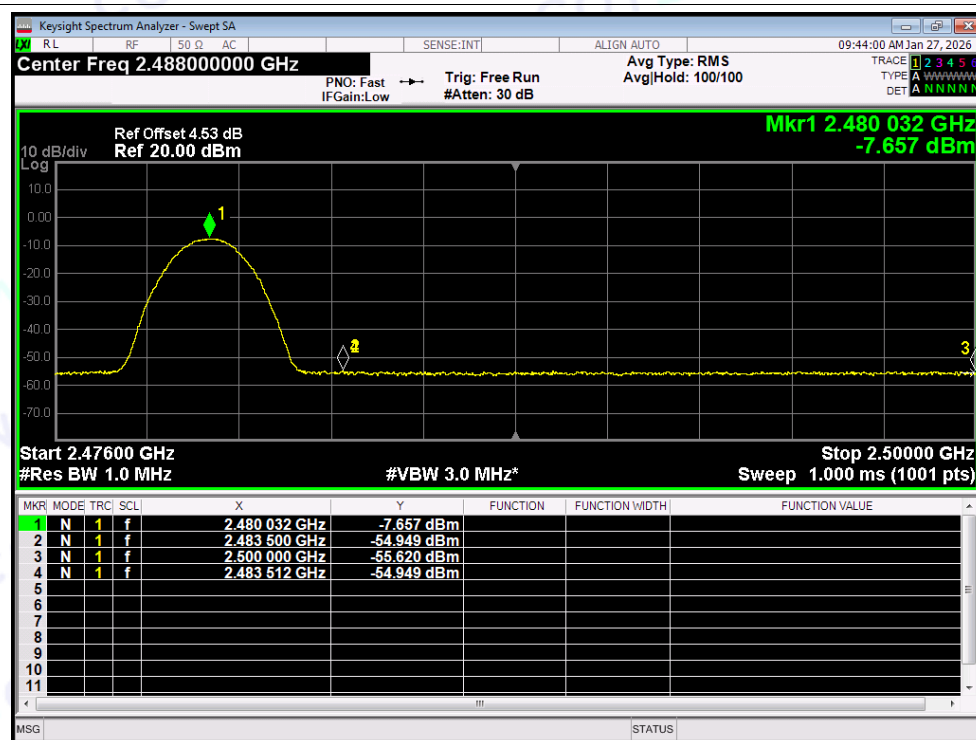
Restrict Band NVNT 2-DH5 2402MHz Ant1 No-Hopping Average



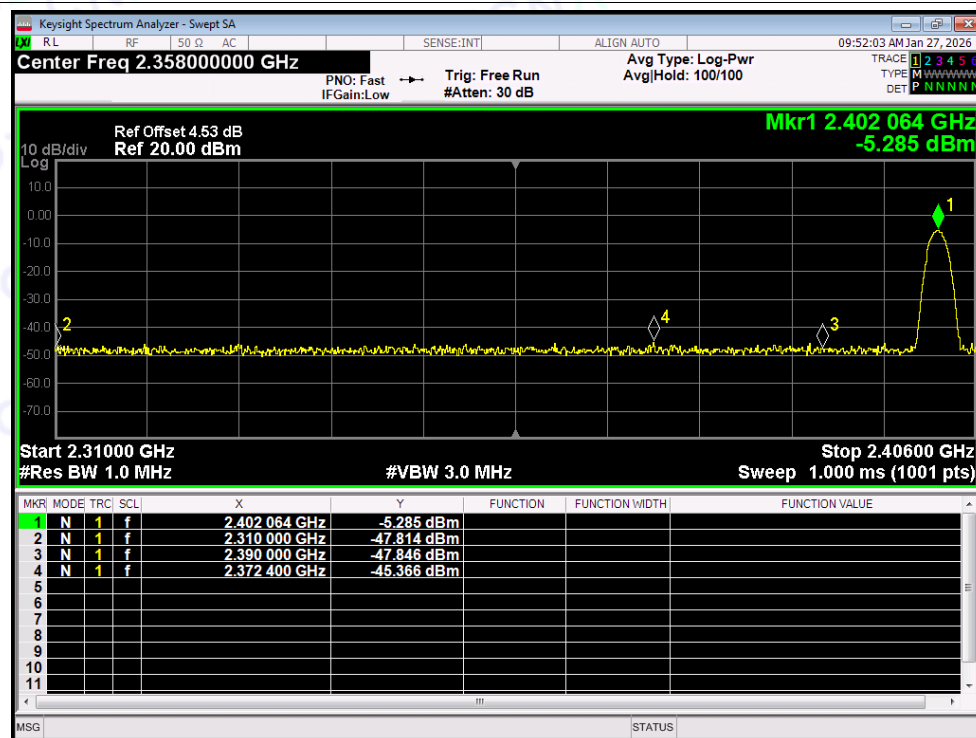
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Peak



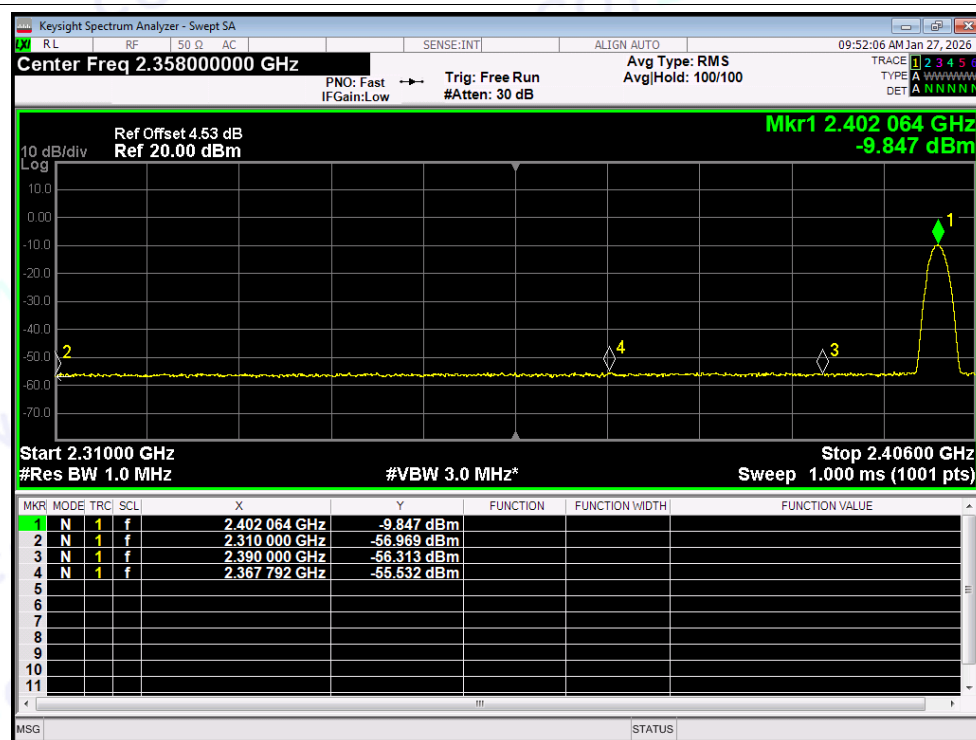
Restrict Band NVNT 2-DH5 2480MHz Ant1 No-Hopping Average



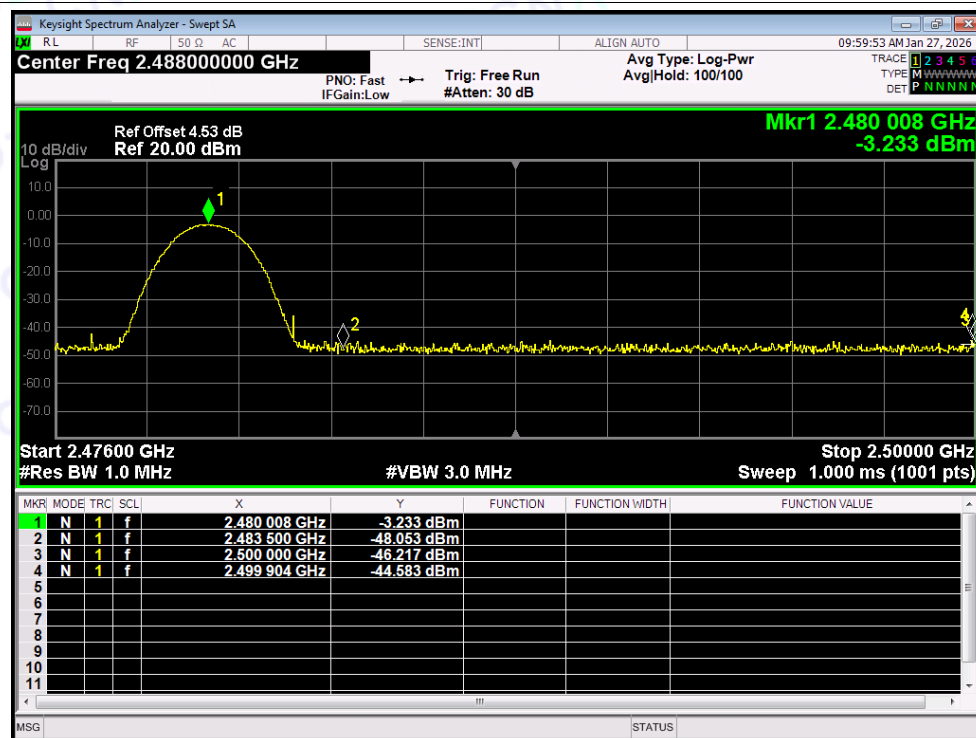
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Peak



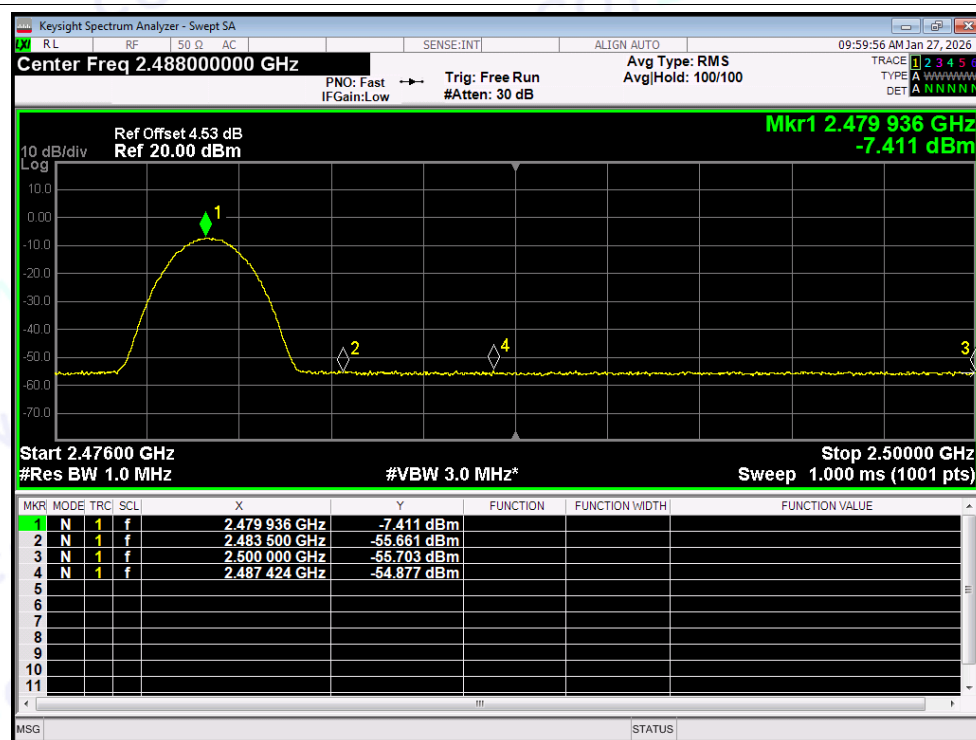
Restrict Band NVNT 3-DH5 2402MHz Ant1 No-Hopping Average



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Peak



Restrict Band NVNT 3-DH5 2480MHz Ant1 No-Hopping Average

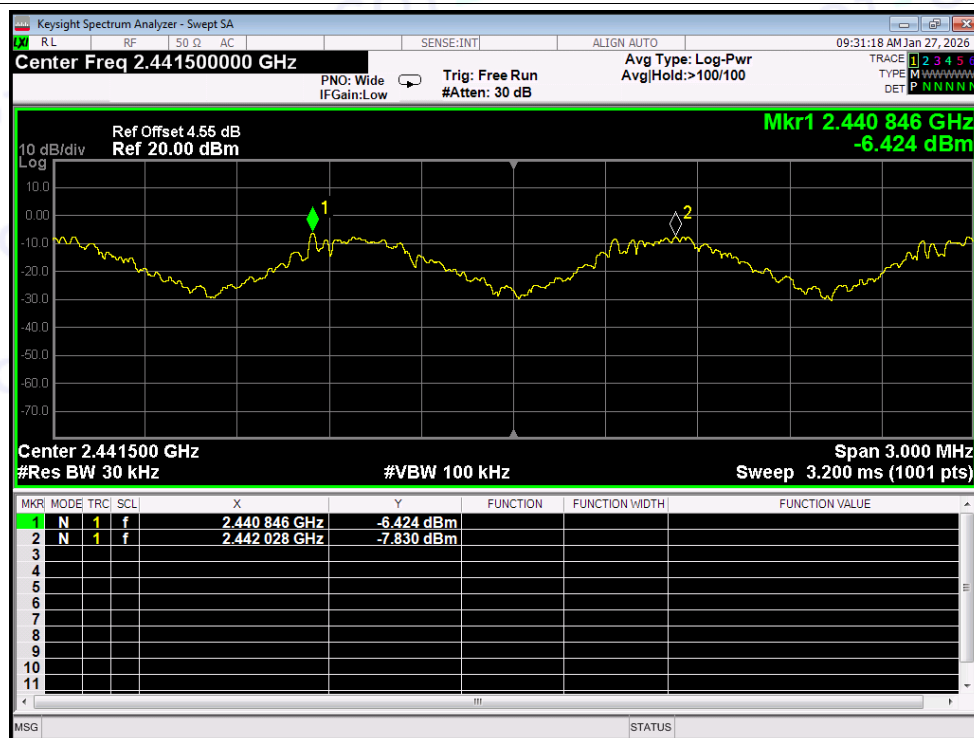


10.Carrier Frequencies Separation

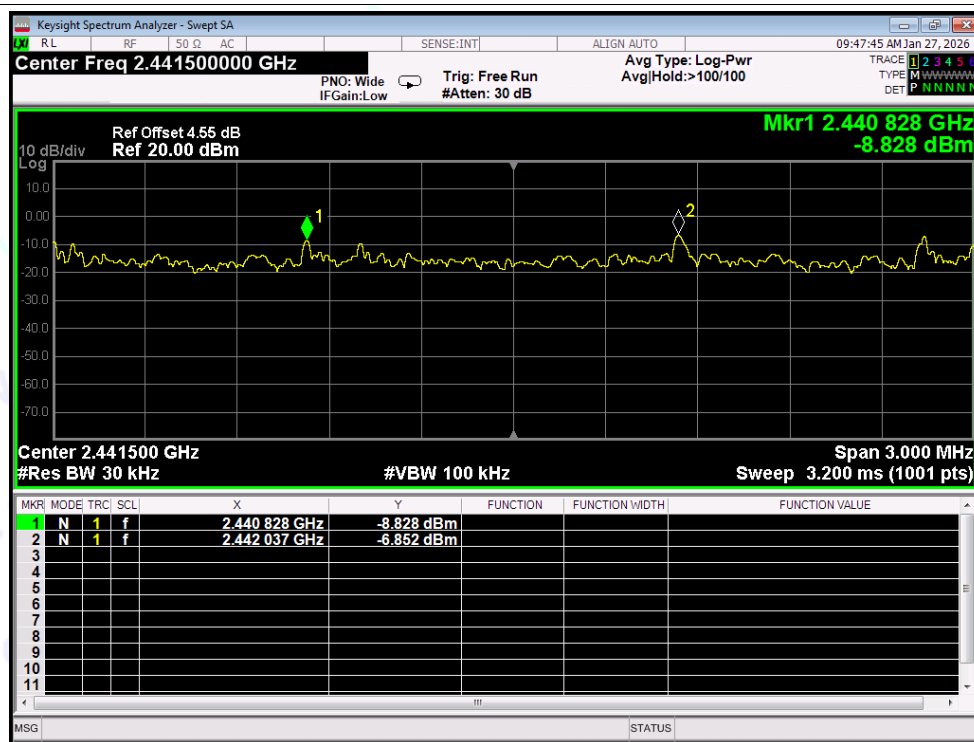
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH5	Ant1	2440.846	2442.028	1.182	0.627	Pass
NVNT	2-DH5	Ant1	2440.828	2442.037	1.209	0.84	Pass
NVNT	3-DH5	Ant1	2440.843	2442.031	1.188	0.847	Pass

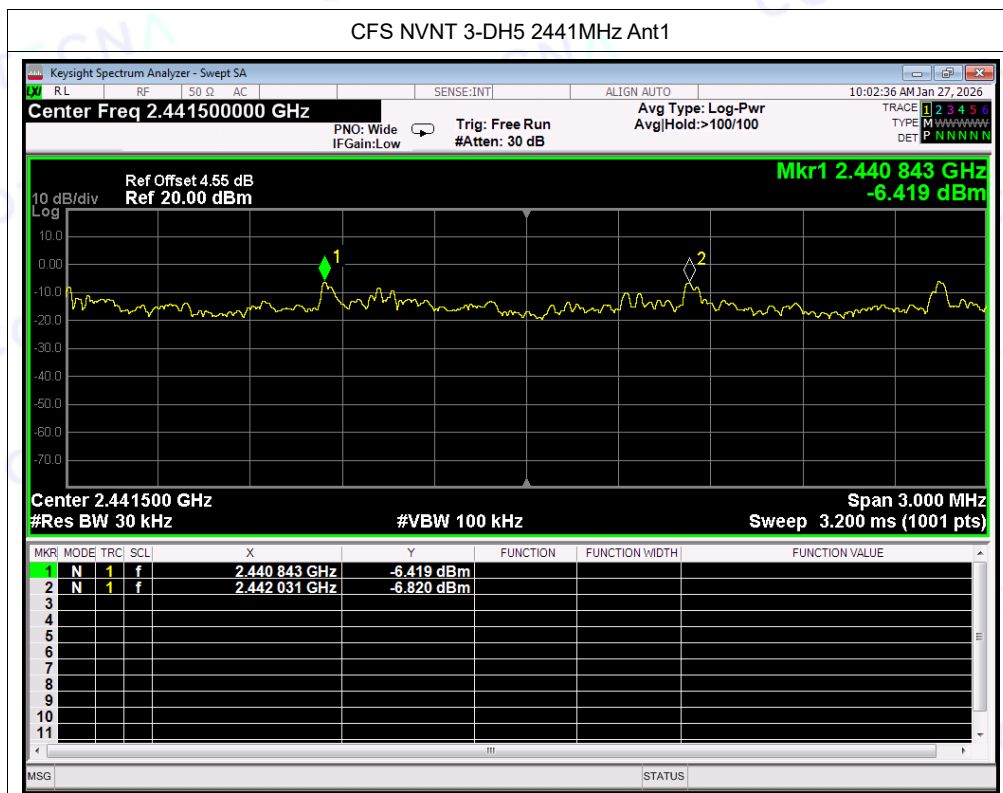
Test Graphs

CFS NVNT 1-DH5 2441MHz Ant1



CFS NVNT 2-DH5 2441MHz Ant1



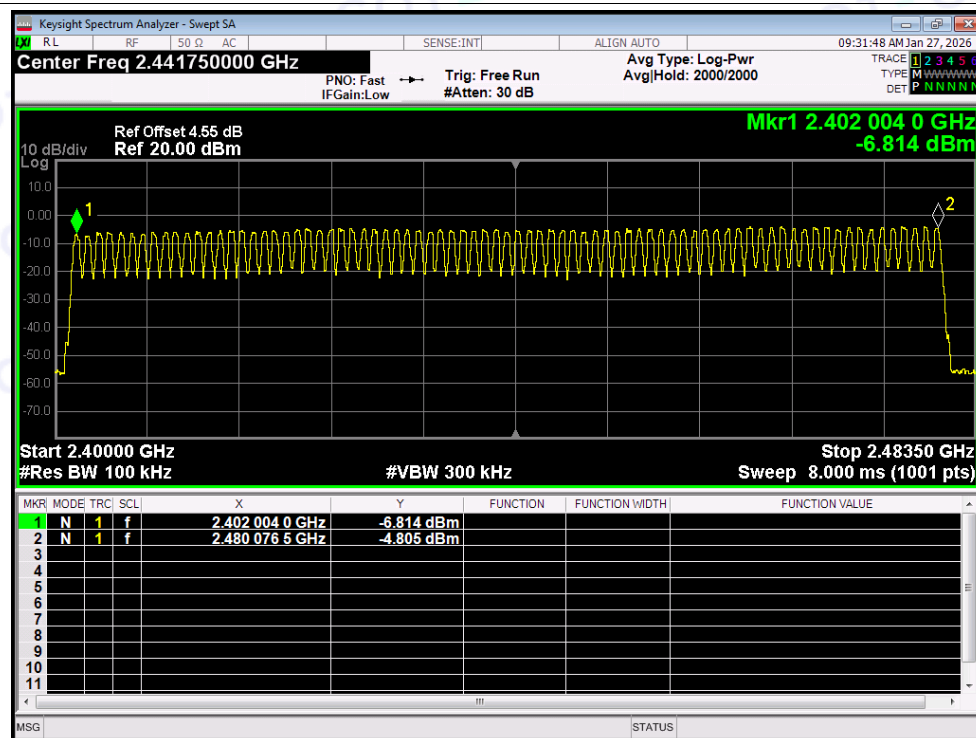


11.Number of Hopping Channel

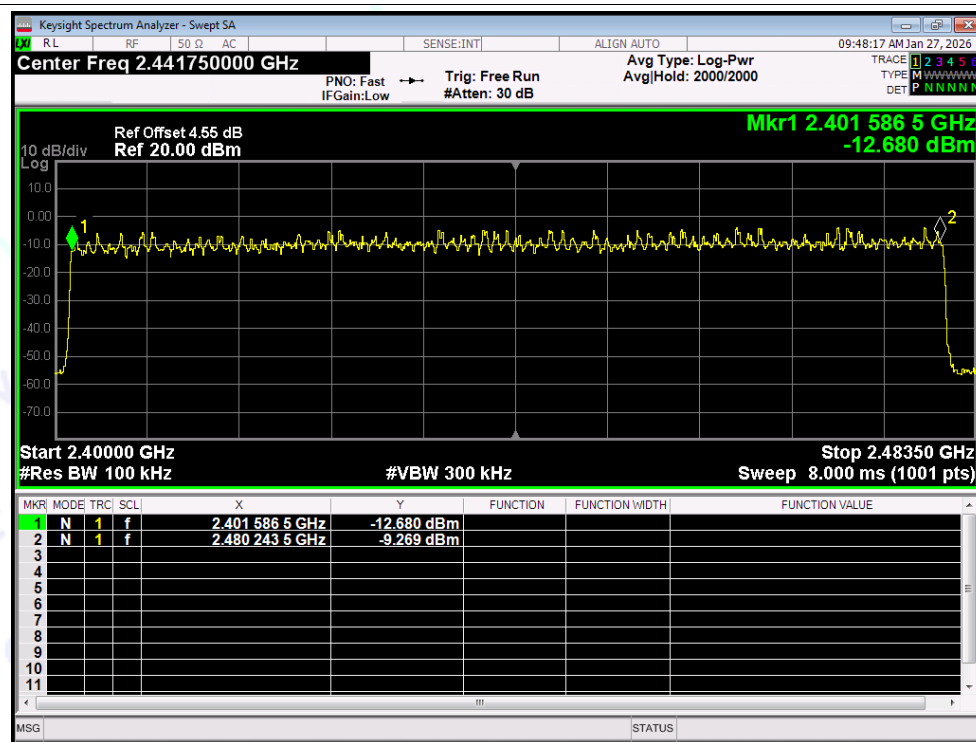
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH5	Ant1	79	15	Pass
NVNT	2-DH5	Ant1	79	15	Pass
NVNT	3-DH5	Ant1	79	15	Pass

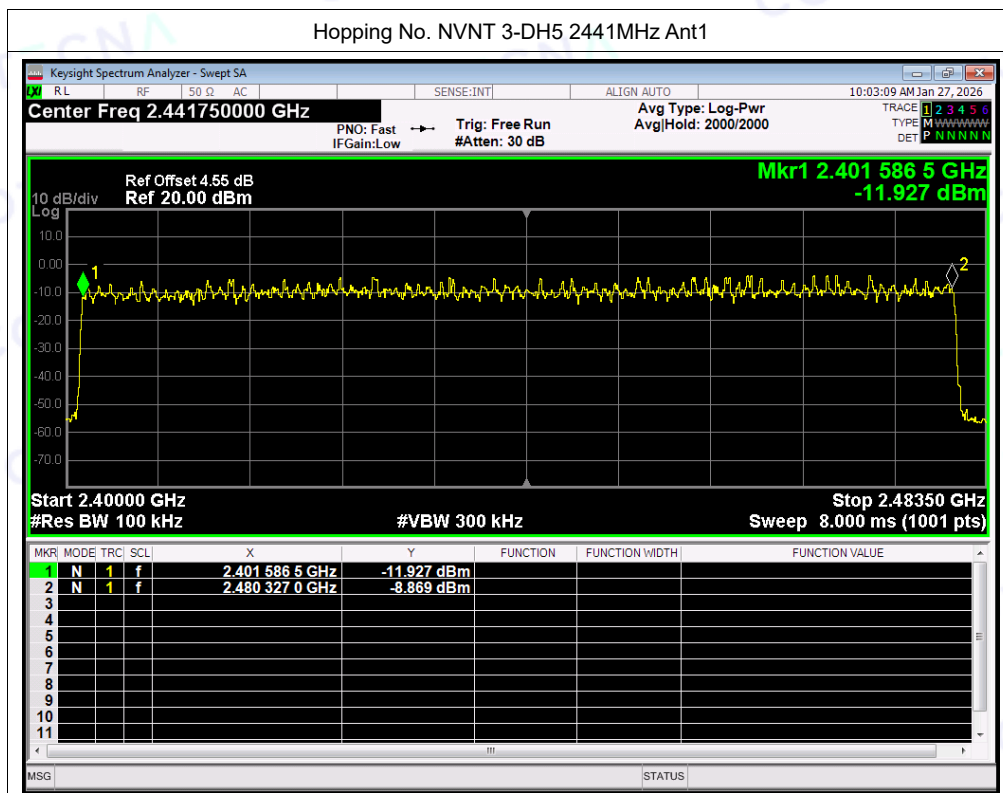
Test Graphs

Hopping No. NVNT 1-DH5 2441MHz Ant1



Hopping No. NVNT 2-DH5 2441MHz Ant1





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