RF Test Data for Bluetooth(BDR+EDR) (Conducted Measurements)

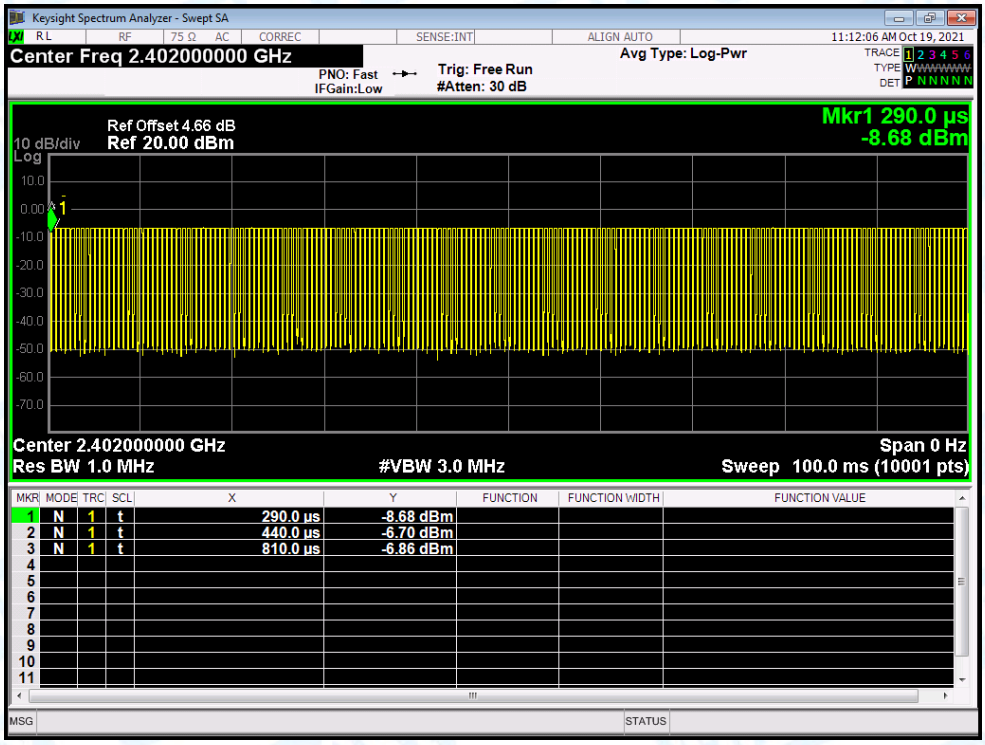
General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	UG-06
Sample ID:	20210907-11-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	48%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TB-FCC184129	

1. Duty Cycle

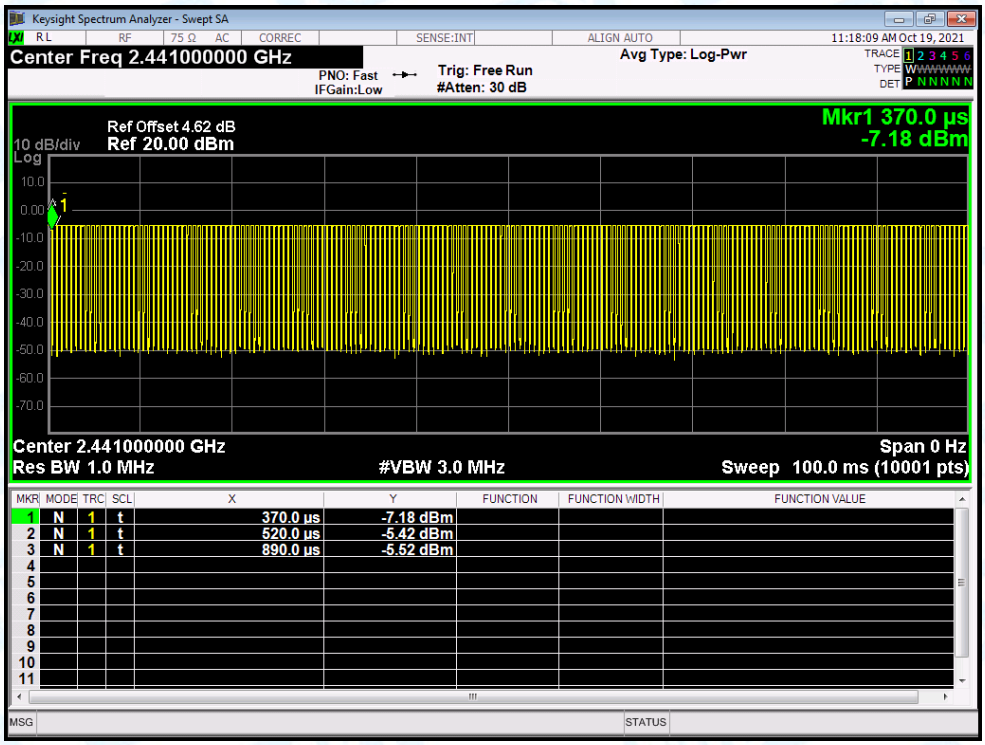
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	73.34	1.35	2.7
NVNT	1-DH1	2441	Ant1	73.26	1.35	2.7
NVNT	1-DH1	2480	Ant1	73.31	1.35	2.7
NVNT	2-DH1	2402	Ant1	53.81	2.69	2.63
NVNT	2-DH1	2441	Ant1	53.77	2.69	2.63
NVNT	2-DH1	2480	Ant1	53.69	2.7	2.63
NVNT	3-DH1	2402	Ant1	41.14	3.86	2.63
NVNT	3-DH1	2441	Ant1	41.05	3.87	2.63
NVNT	3-DH1	2480	Ant1	41.05	3.87	2.63

Test Graphs

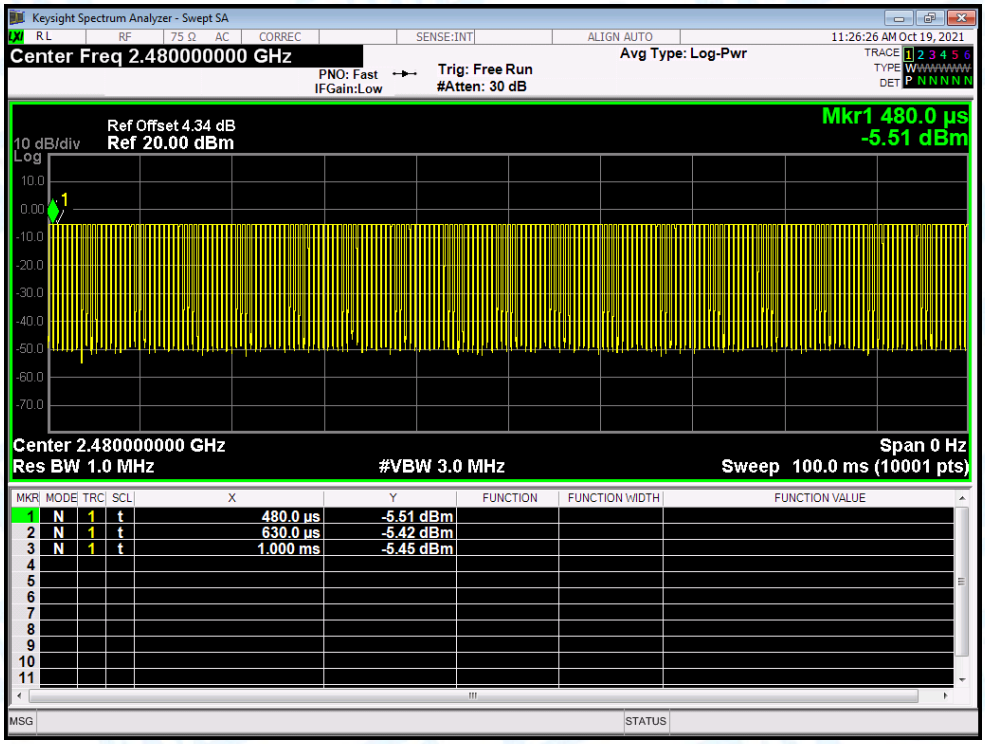
Duty Cycle NVNT 1-DH1 2402MHz Ant1



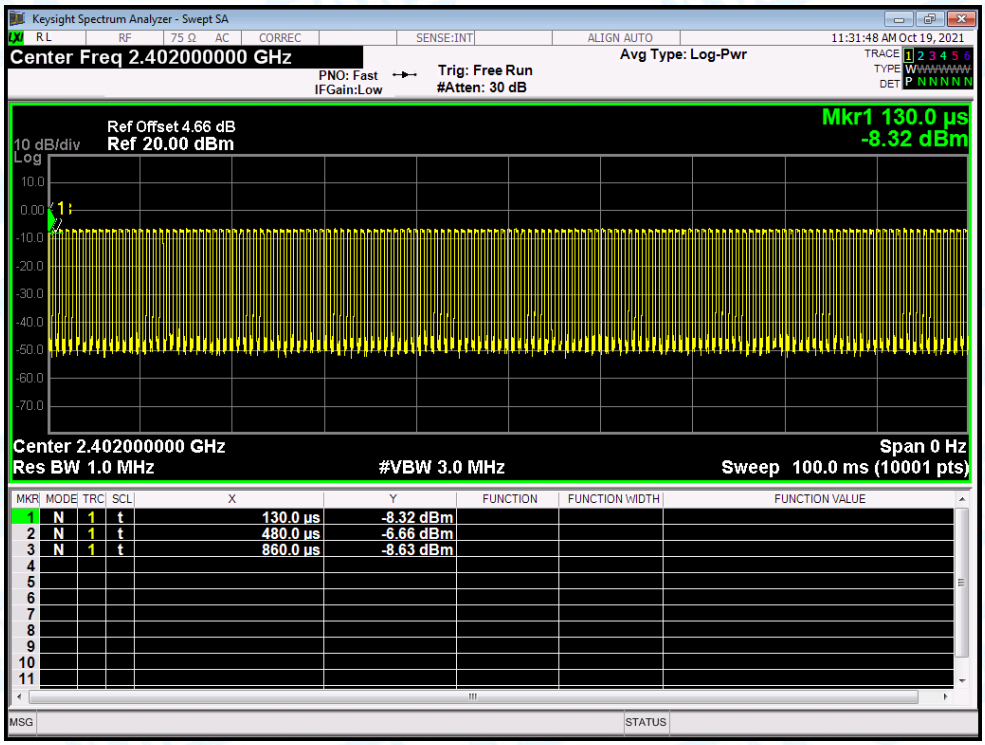
Duty Cycle NVNT 1-DH1 2441MHz Ant1



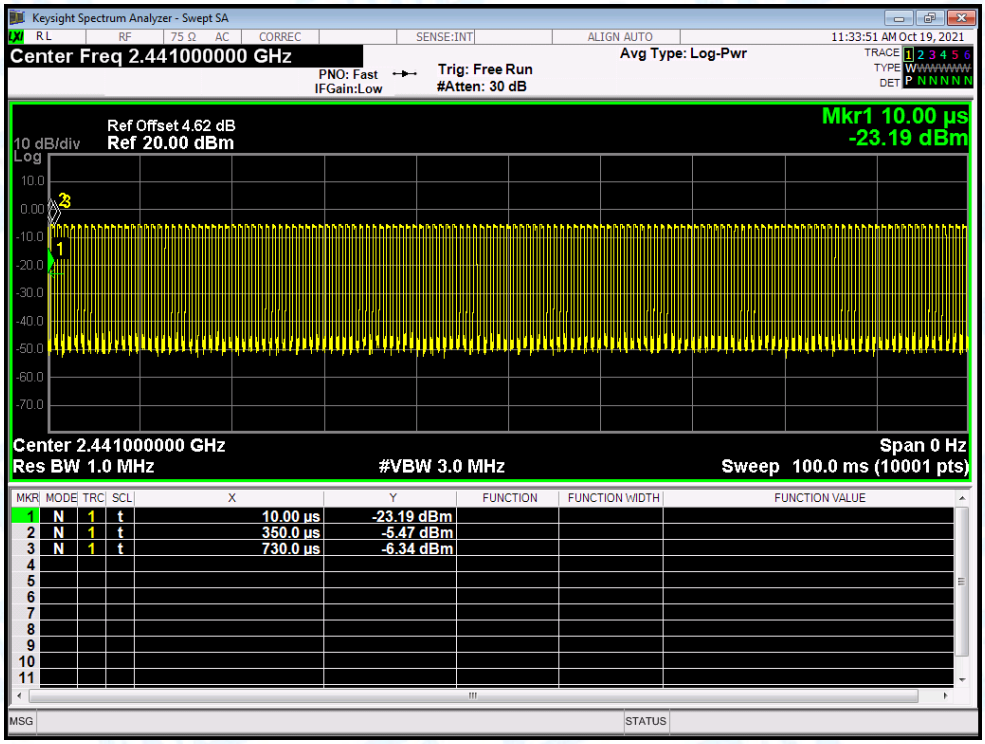
Duty Cycle NVNT 1-DH1 2480MHz Ant1



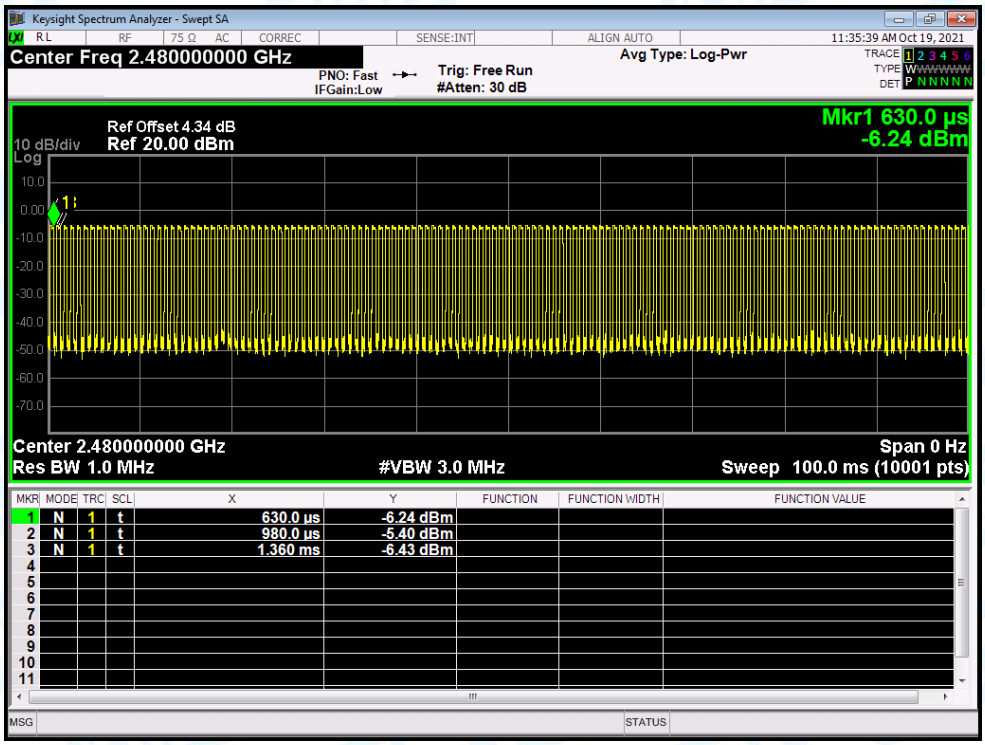
Duty Cycle NVNT 2-DH1 2402MHz Ant1



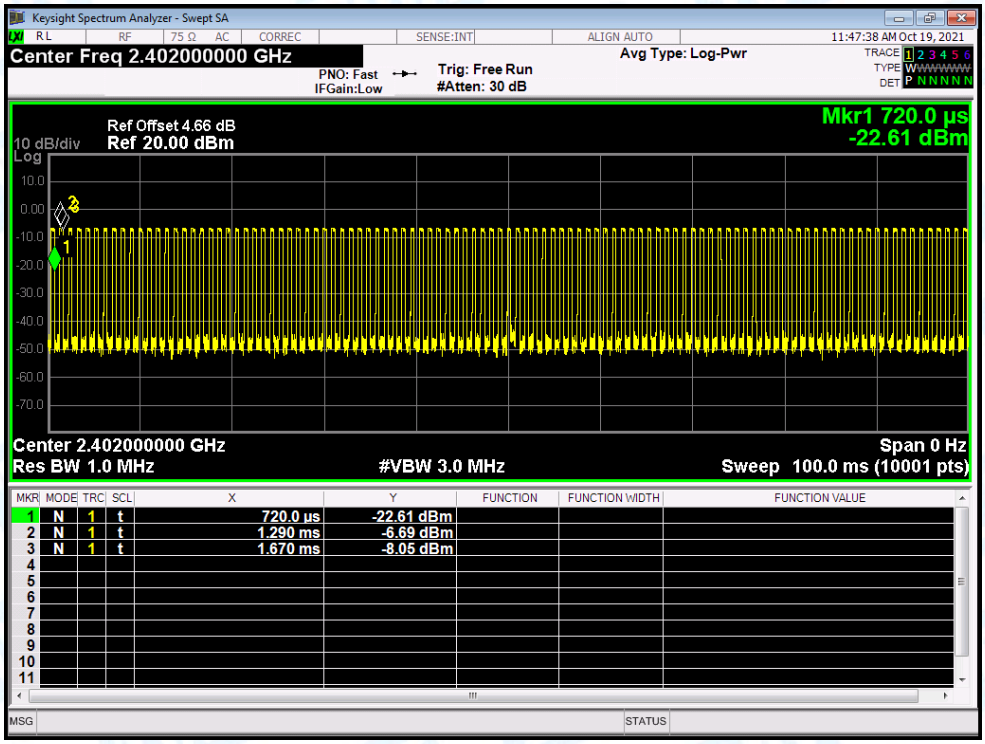
Duty Cycle NVNT 2-DH1 2441MHz Ant1



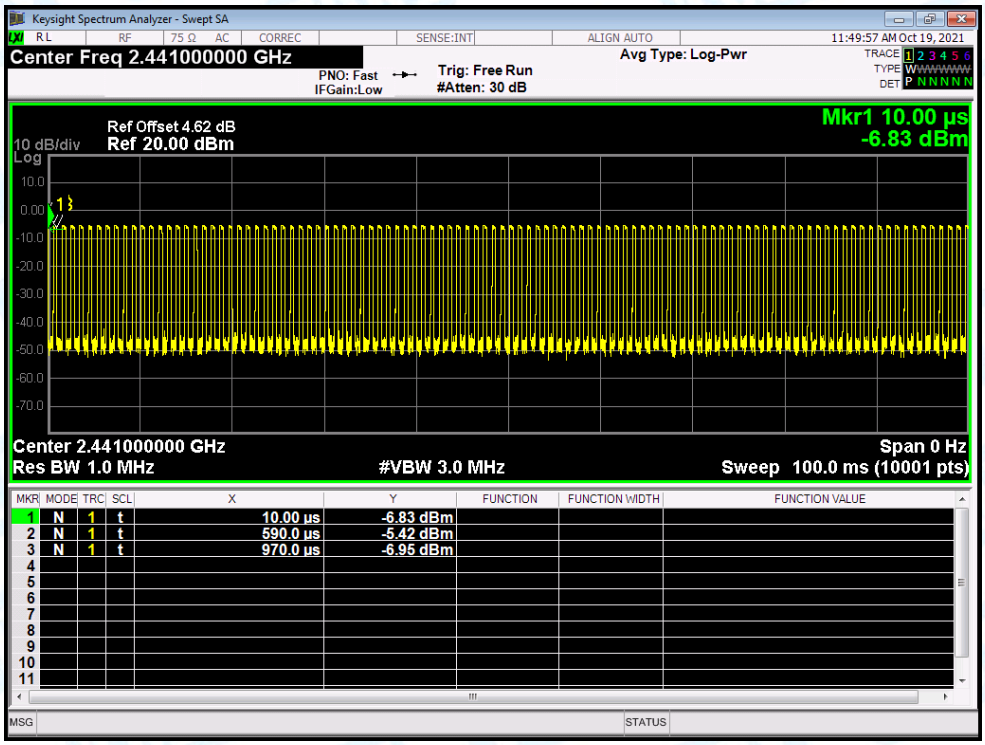
Duty Cycle NVNT 2-DH1 2480MHz Ant1



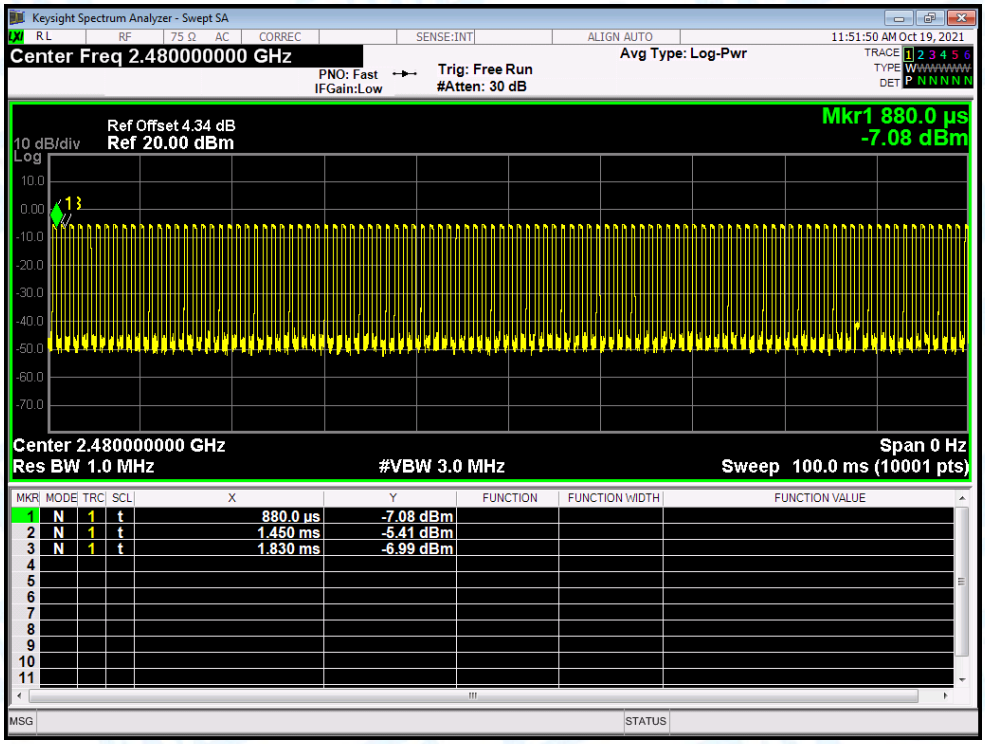
Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



Duty Cycle NVNT 3-DH1 2480MHz Ant1

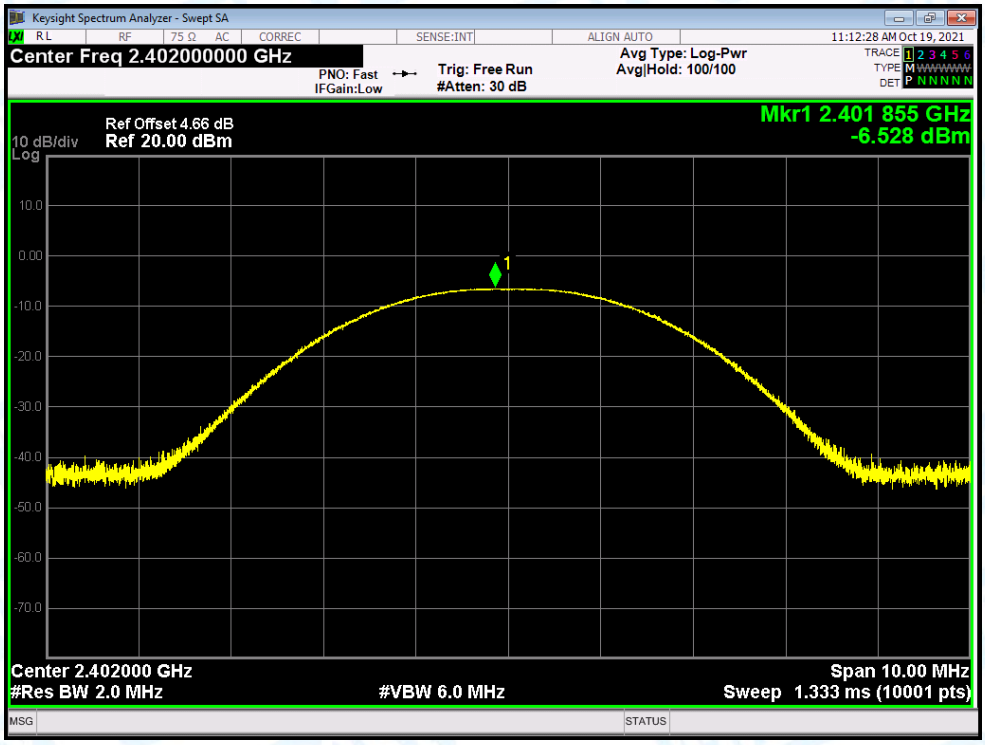


2. Maximum Conducted Output Power

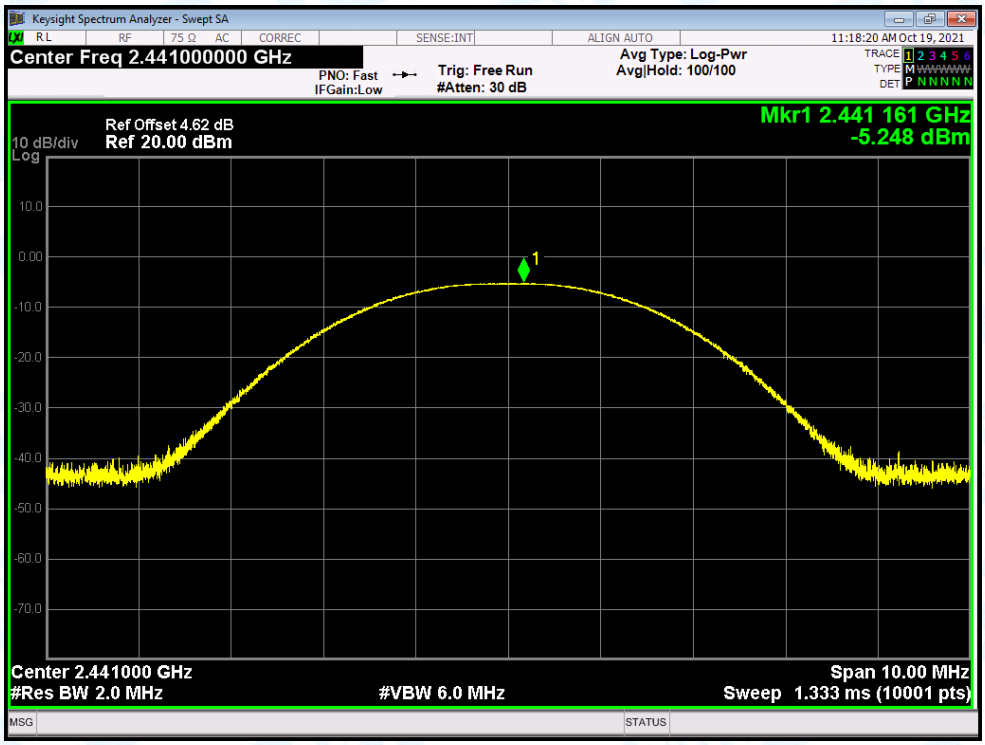
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	-6.528	21	Pass
NVNT	1-DH1	2441	Ant1	-5.248	21	Pass
NVNT	1-DH1	2480	Ant1	-5.203	21	Pass
NVNT	2-DH1	2402	Ant1	-6.501	21	Pass
NVNT	2-DH1	2441	Ant1	-5.291	21	Pass
NVNT	2-DH1	2480	Ant1	-5.268	21	Pass
NVNT	3-DH1	2402	Ant1	-6.48	21	Pass
NVNT	3-DH1	2441	Ant1	-5.19	21	Pass
NVNT	3-DH1	2480	Ant1	-5.115	21	Pass

Test Graphs

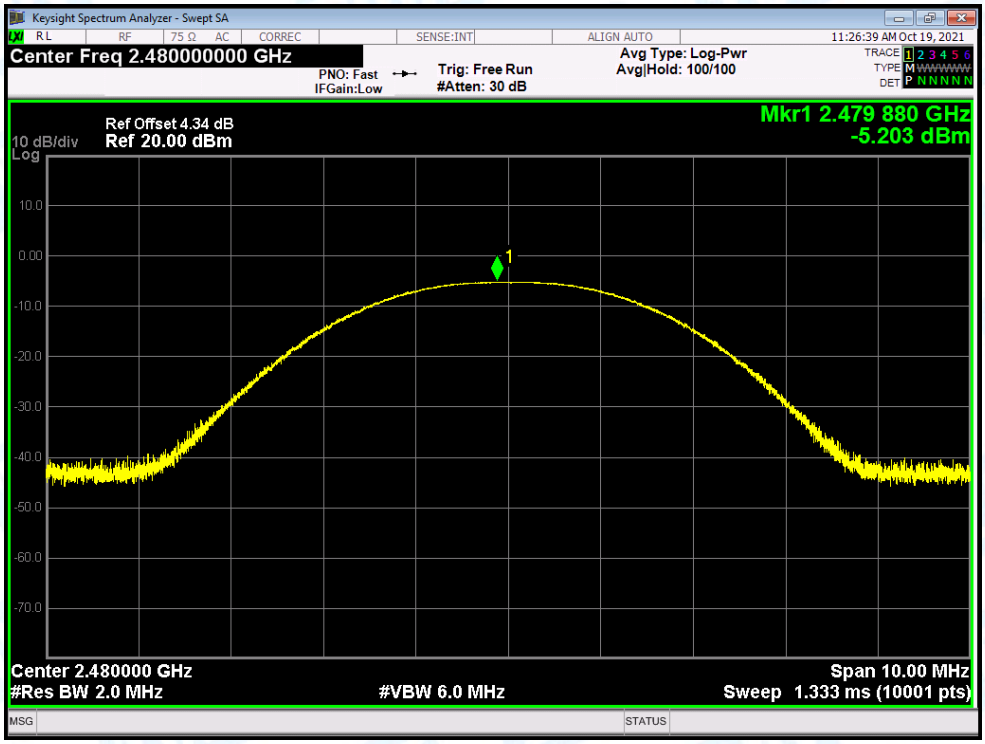
Power NVNT 1-DH1 2402MHz Ant1



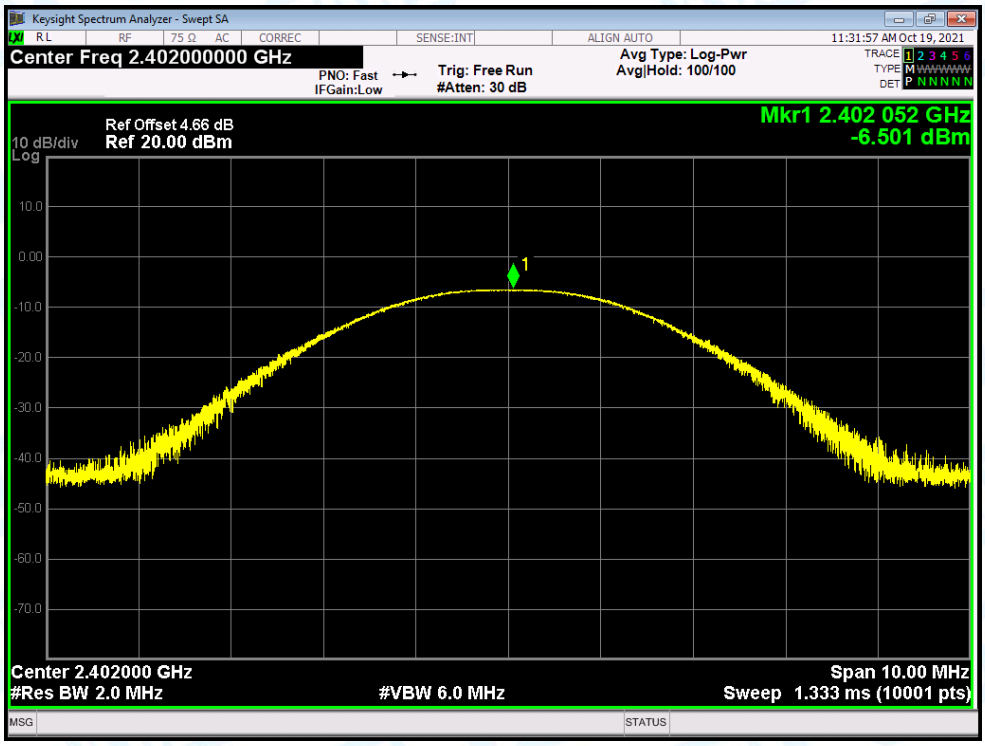
Power NVNT 1-DH1 2441MHz Ant1



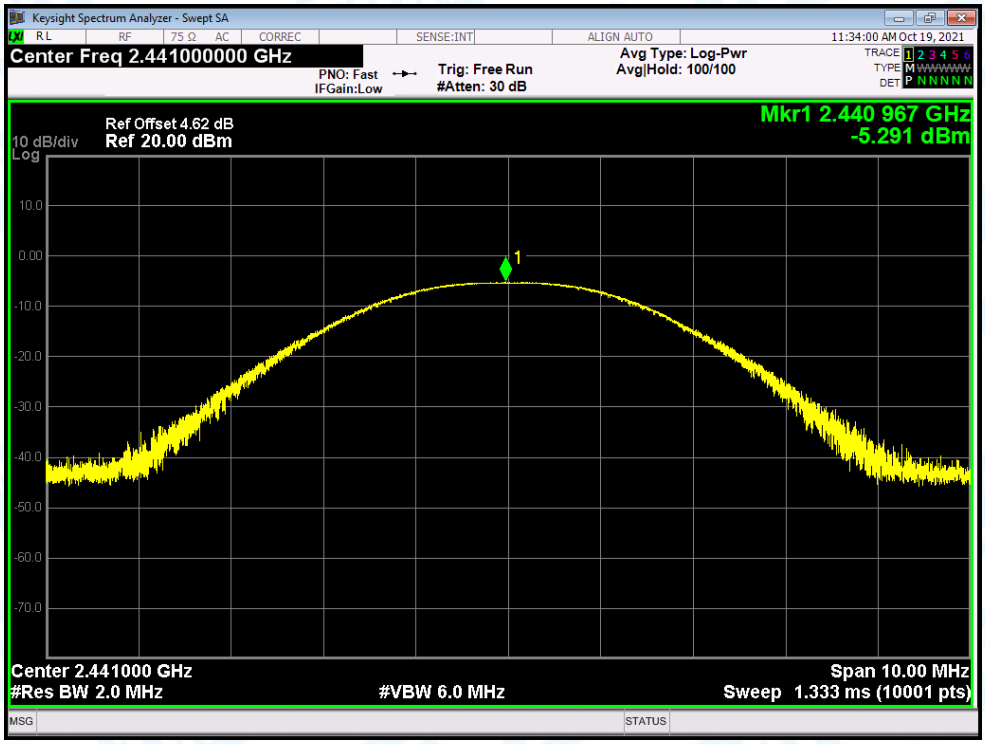
Power NVNT 1-DH1 2480MHz Ant1



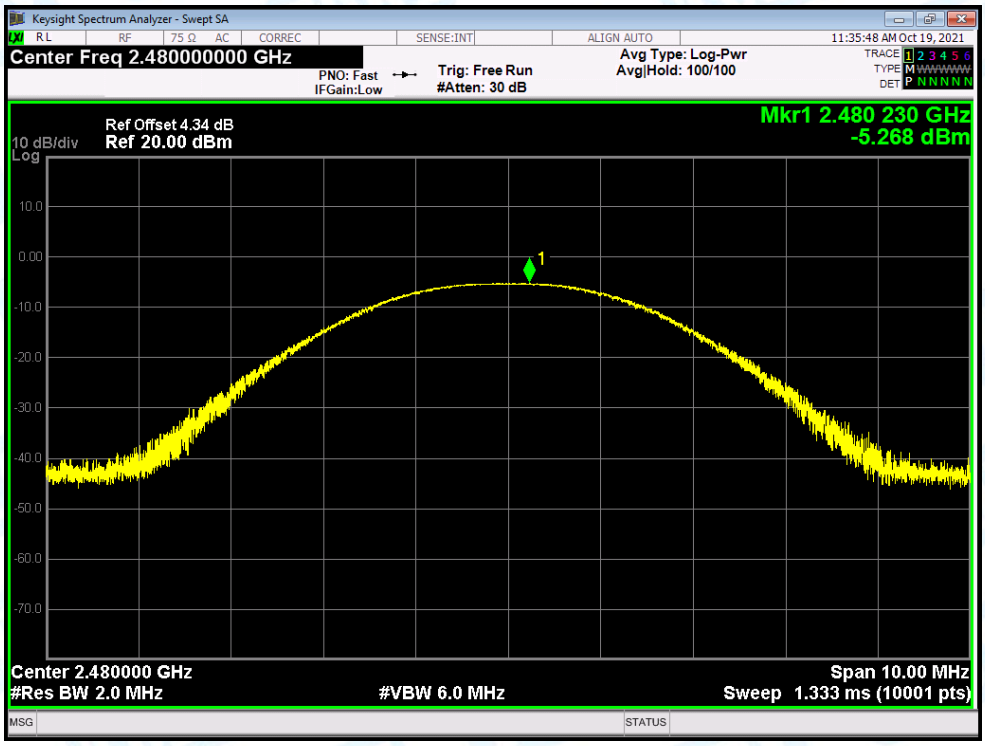
Power NVNT 2-DH1 2402MHz Ant1



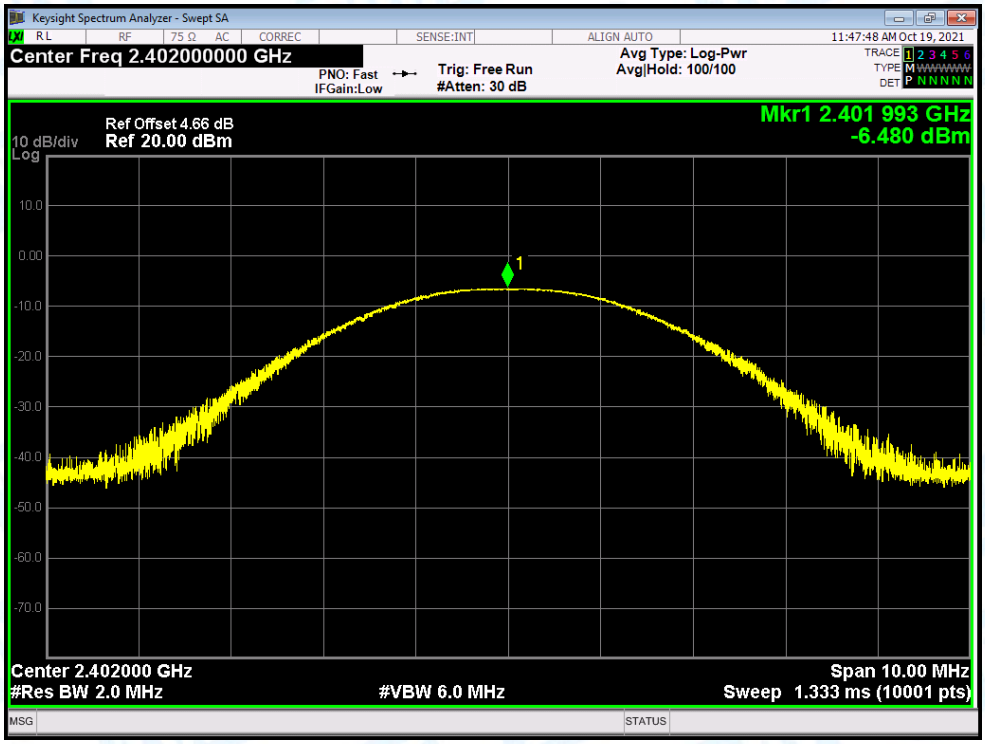
Power NVNT 2-DH1 2441MHz Ant1



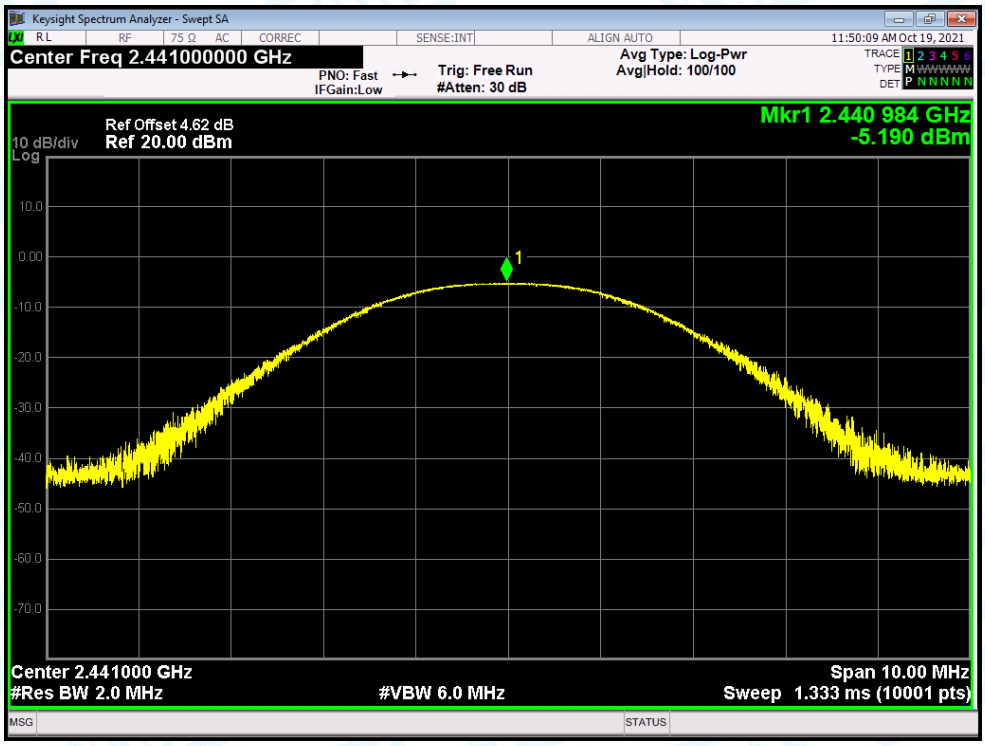
Power NVNT 2-DH1 2480MHz Ant1



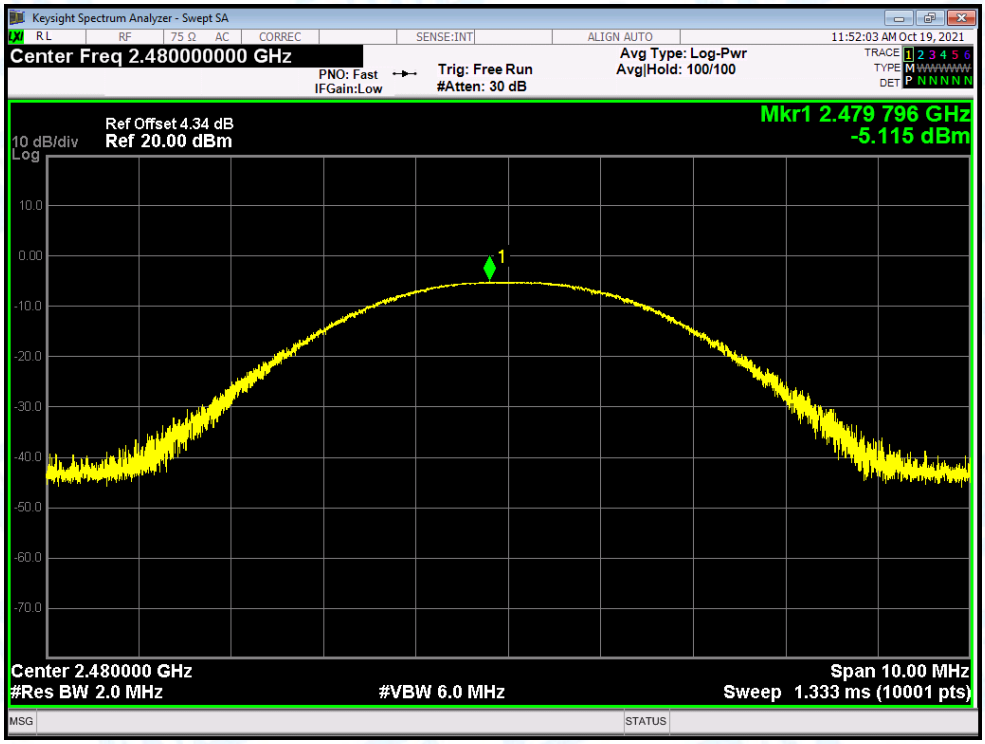
Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1



Power NVNT 3-DH1 2480MHz Ant1

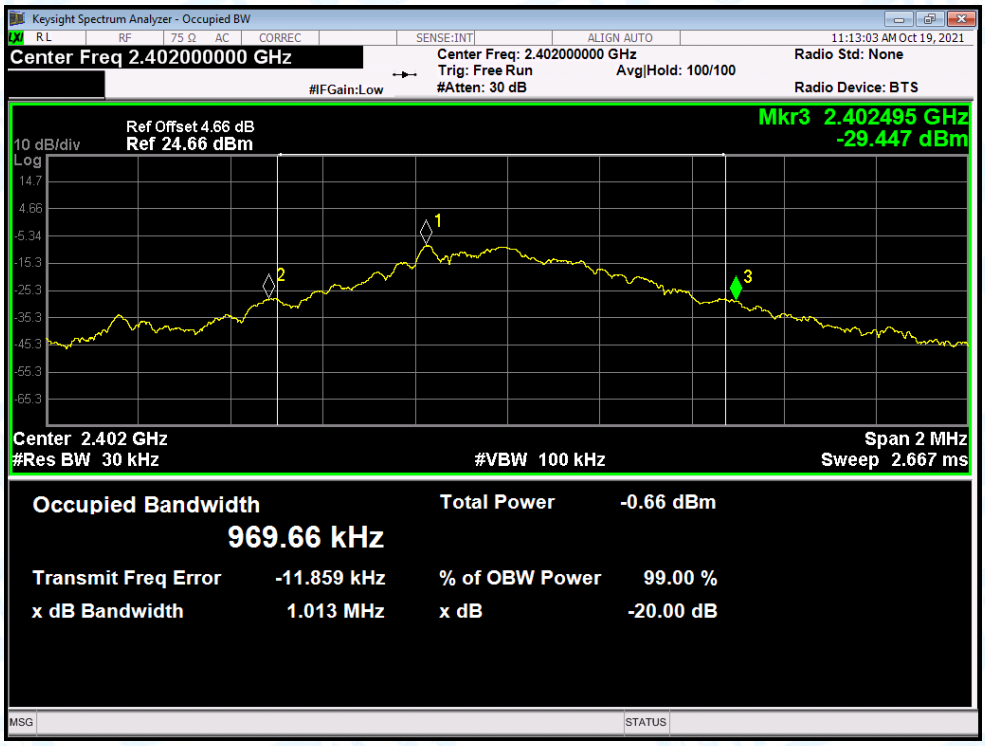


3. -20dB Bandwidth

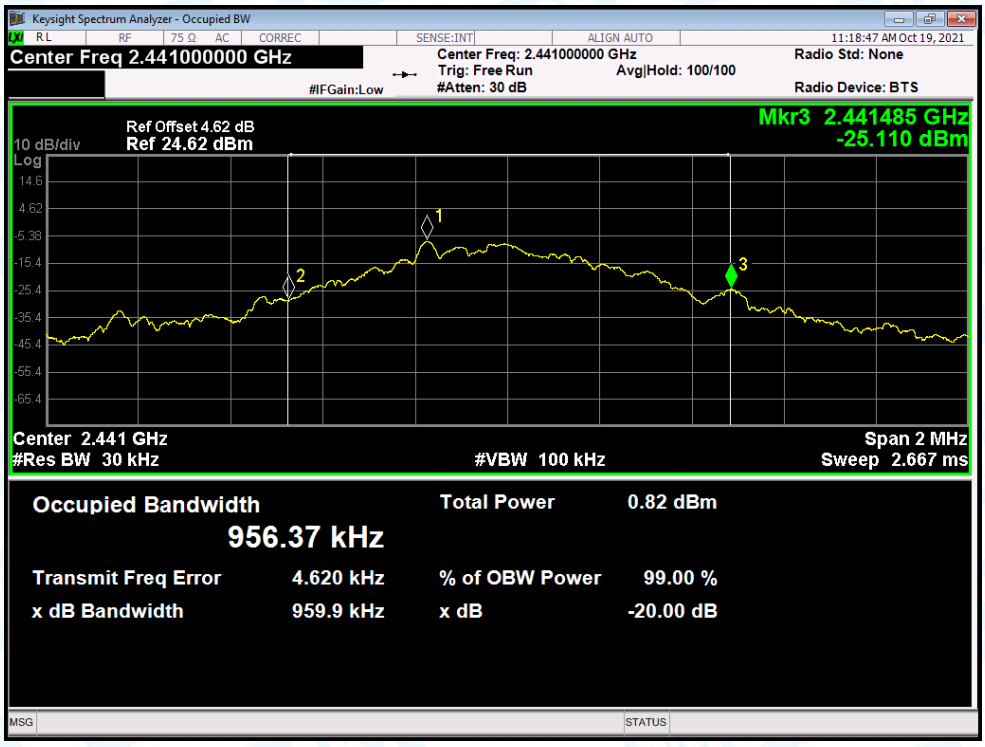
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	1.013	0	Pass
NVNT	1-DH1	2441	Ant1	0.96	0	Pass
NVNT	1-DH1	2480	Ant1	0.971	0	Pass
NVNT	2-DH1	2402	Ant1	1.22	0	Pass
NVNT	2-DH1	2441	Ant1	1.217	0	Pass
NVNT	2-DH1	2480	Ant1	1.236	0	Pass
NVNT	3-DH1	2402	Ant1	1.225	0	Pass
NVNT	3-DH1	2441	Ant1	1.225	0	Pass
NVNT	3-DH1	2480	Ant1	1.225	0	Pass

Test Graphs

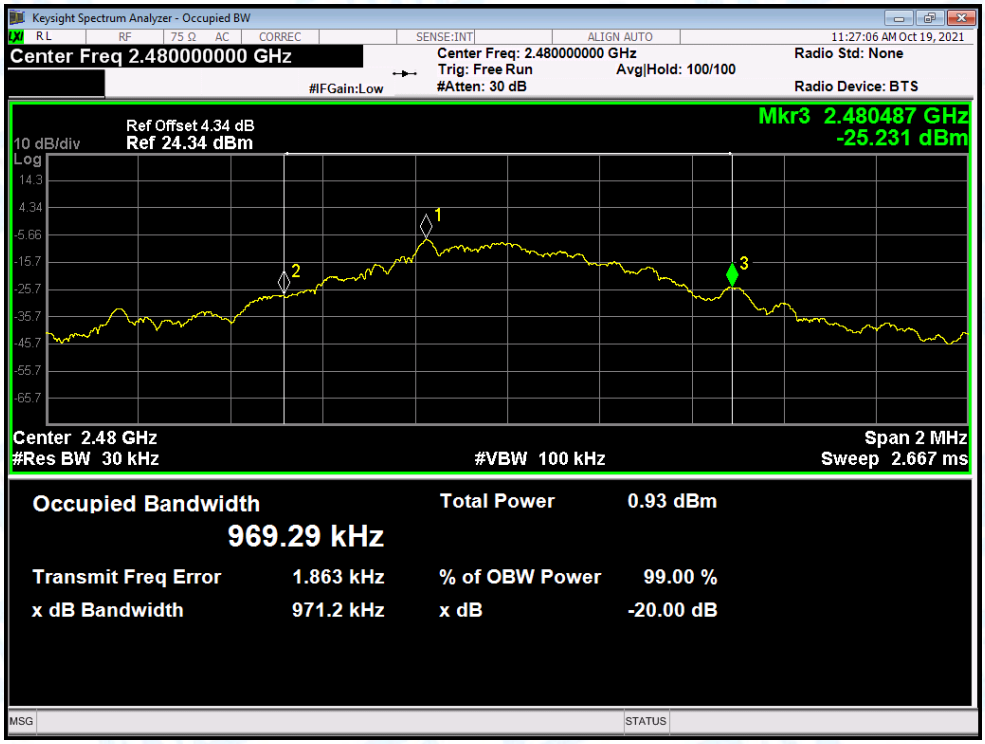
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



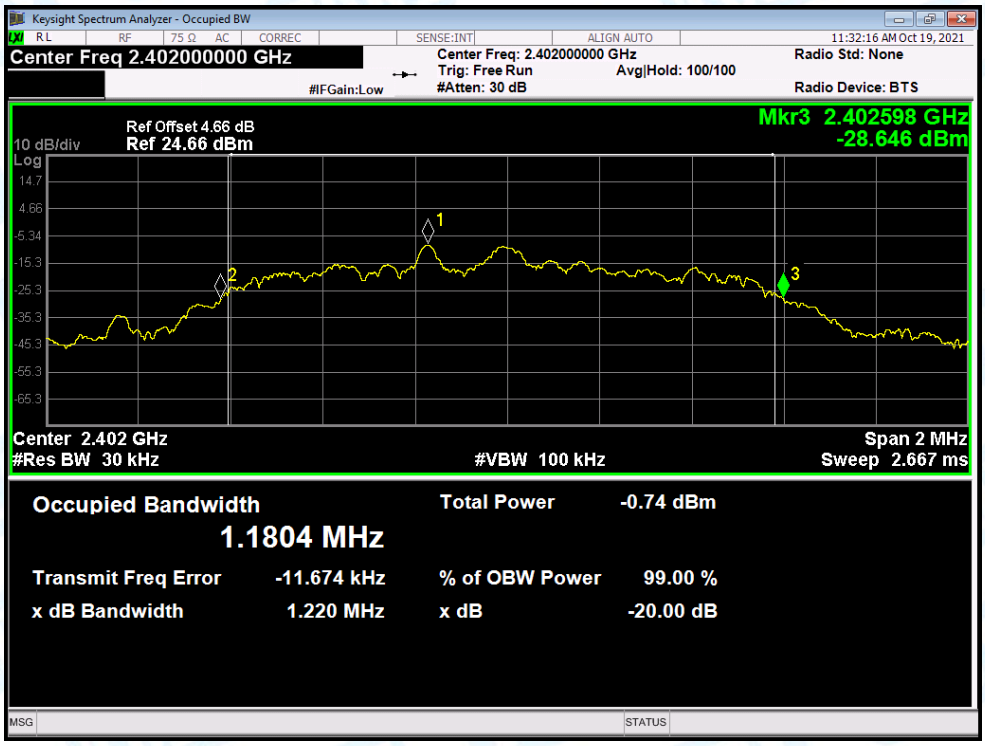
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



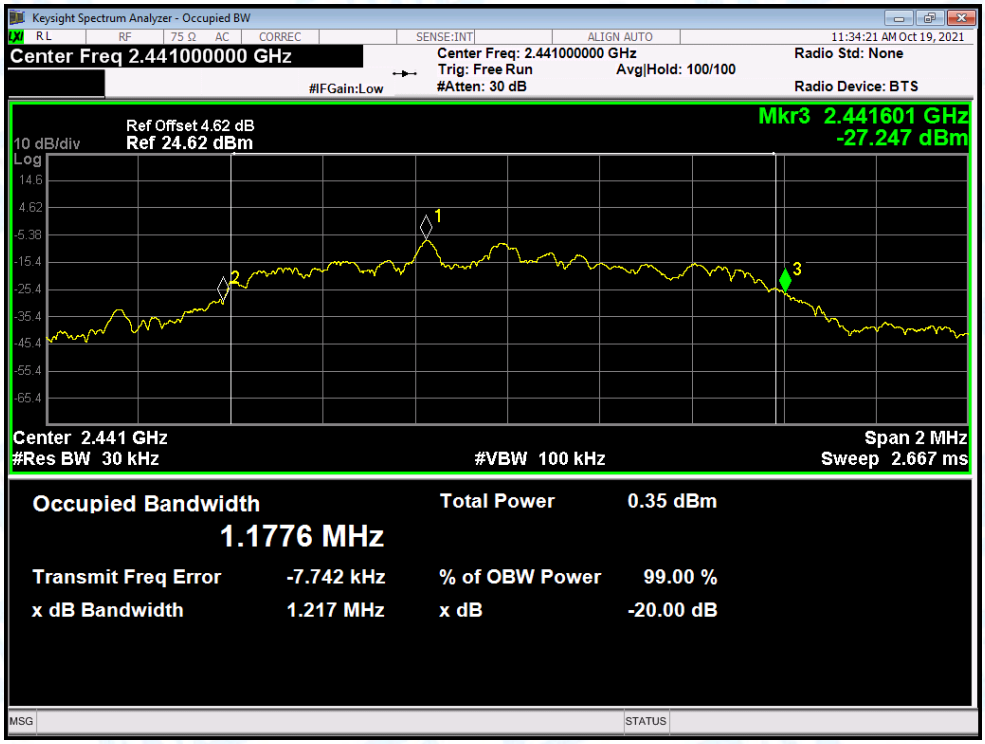
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



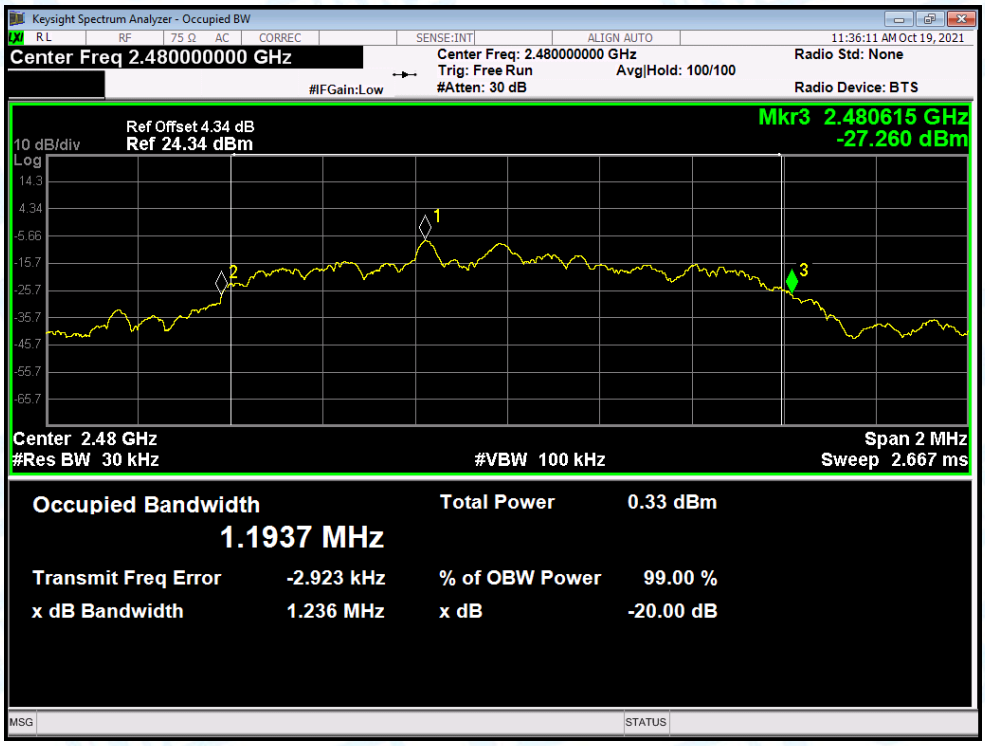
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



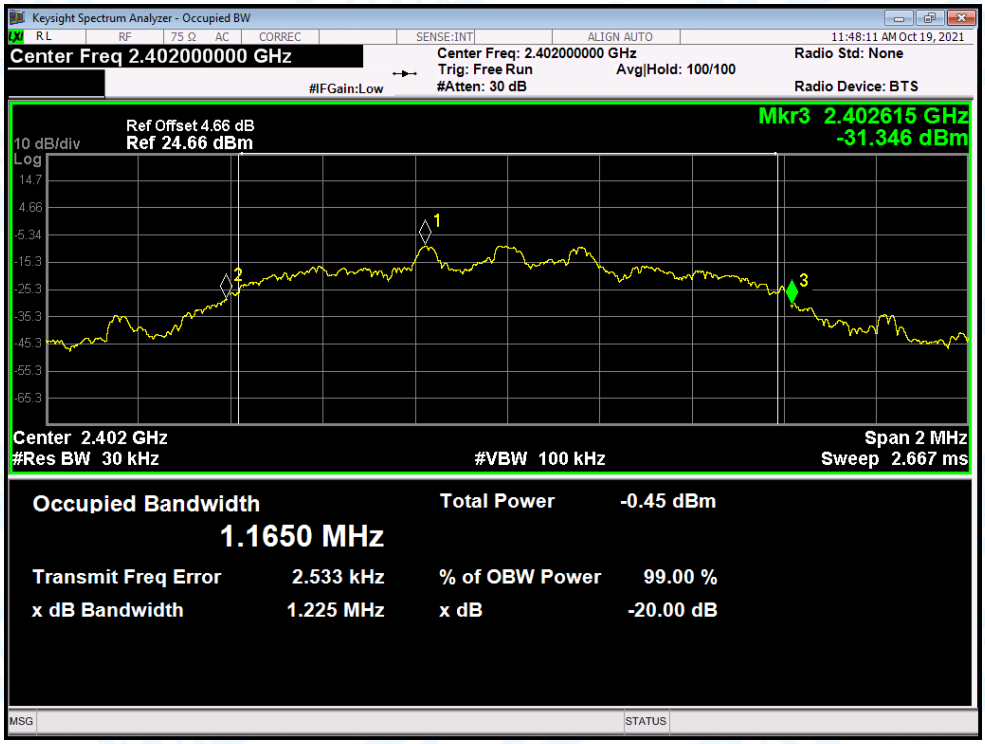
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



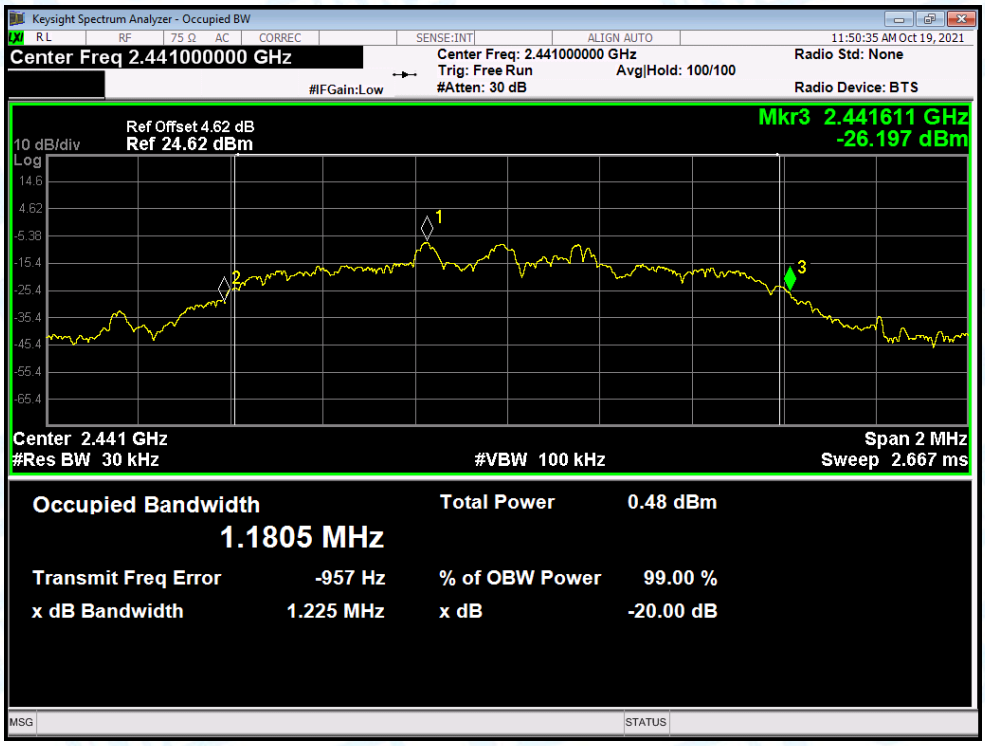
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



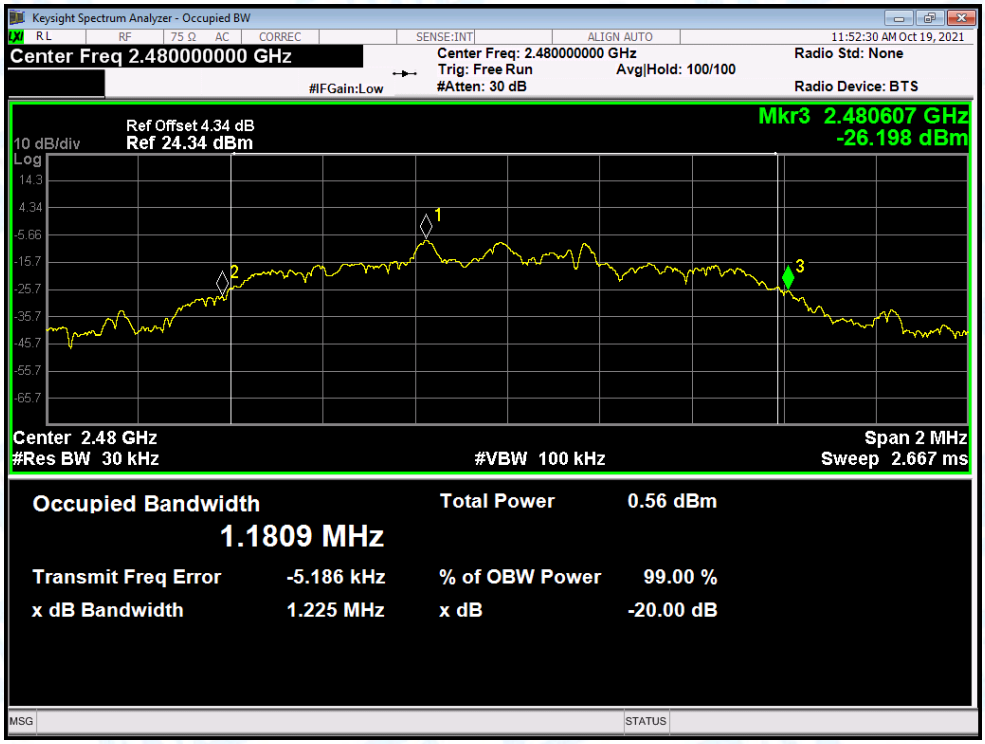
-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1

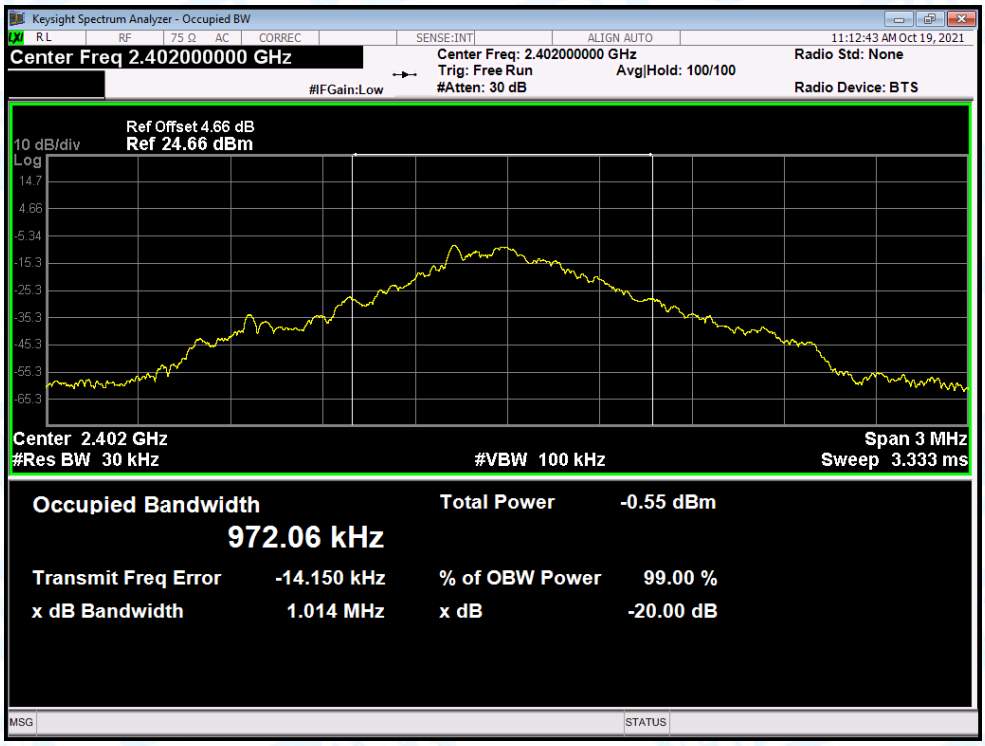


4. Occupied Channel Bandwidth

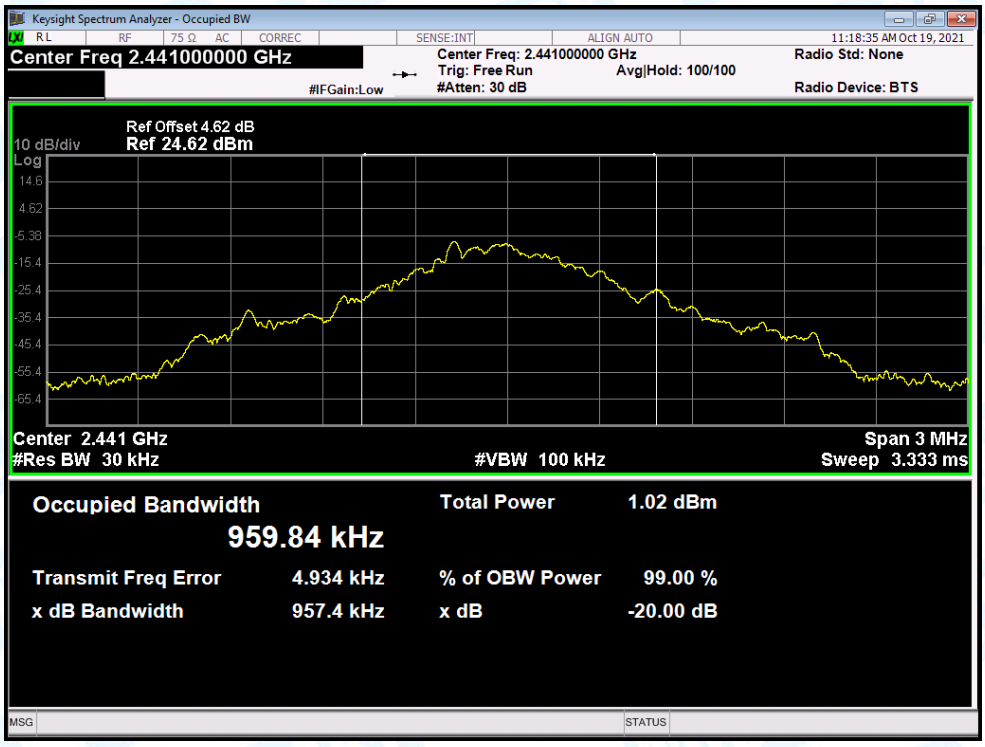
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.9720627071
NVNT	1-DH1	2441	Ant1	0.9598381355
NVNT	1-DH1	2480	Ant1	0.9736047827
NVNT	2-DH1	2402	Ant1	1.195969906
NVNT	2-DH1	2441	Ant1	1.19213483
NVNT	2-DH1	2480	Ant1	1.214380368
NVNT	3-DH1	2402	Ant1	1.18551742
NVNT	3-DH1	2441	Ant1	1.182606296
NVNT	3-DH1	2480	Ant1	1.195063449

Test Graphs

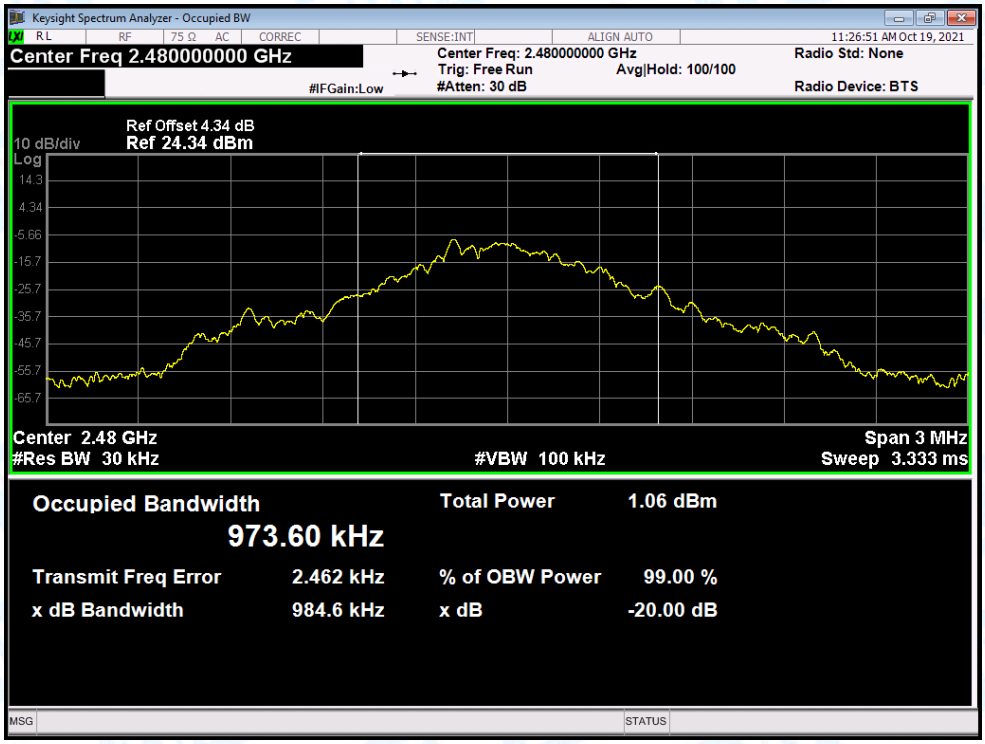
OBW NVNT 1-DH1 2402MHz Ant1



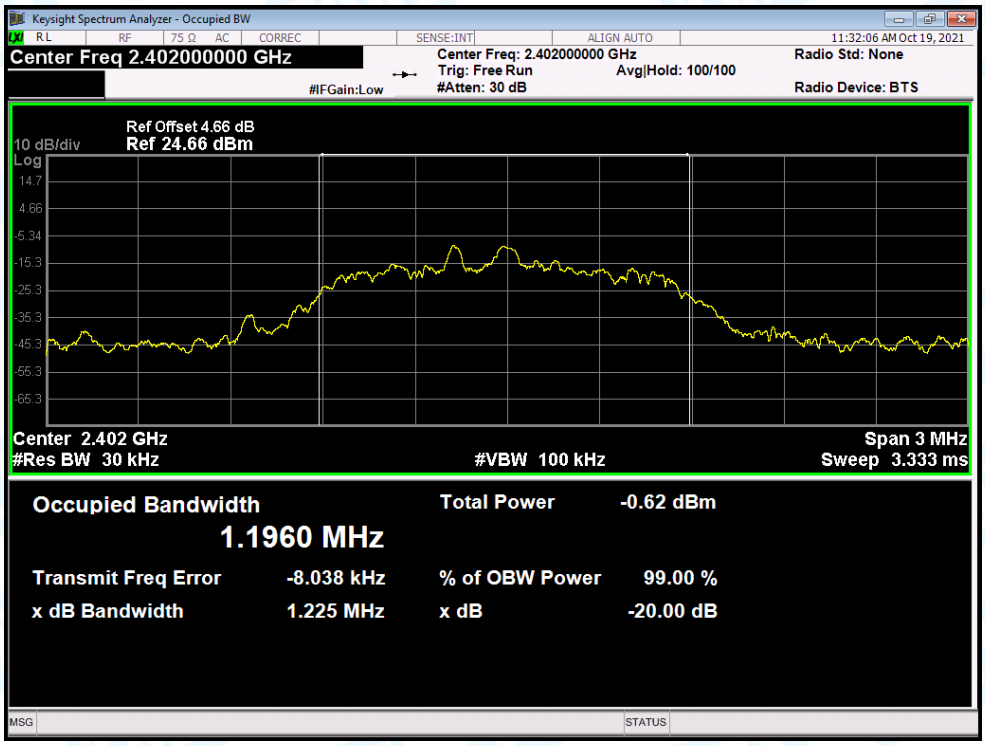
OBW NVNT 1-DH1 2441MHz Ant1



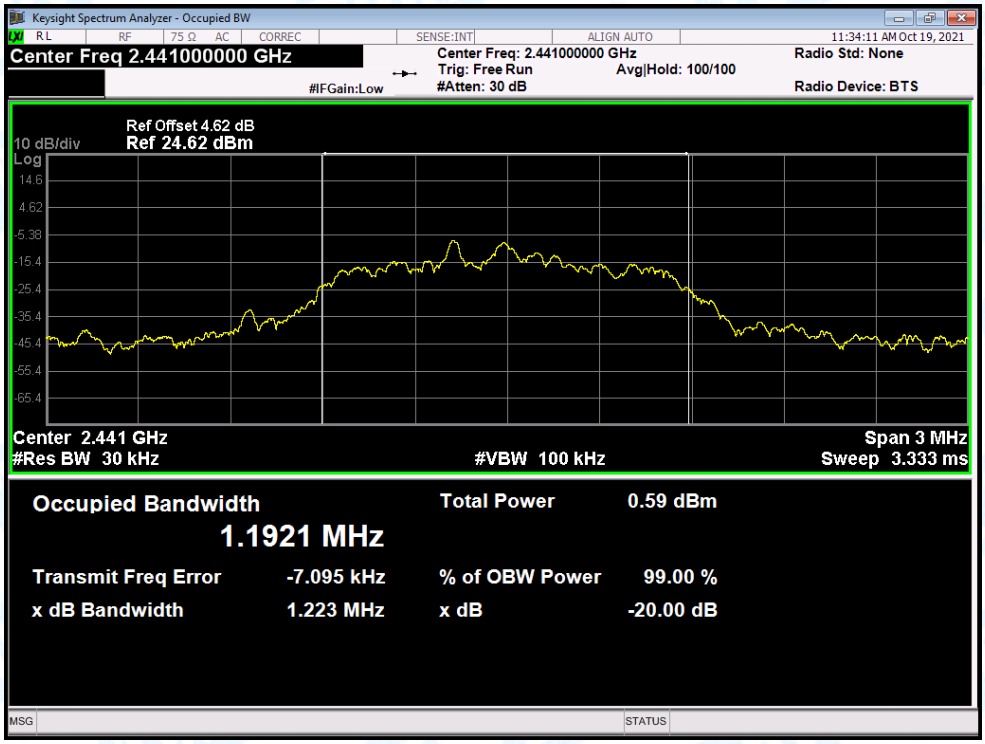
OBW NVNT 1-DH1 2480MHz Ant1



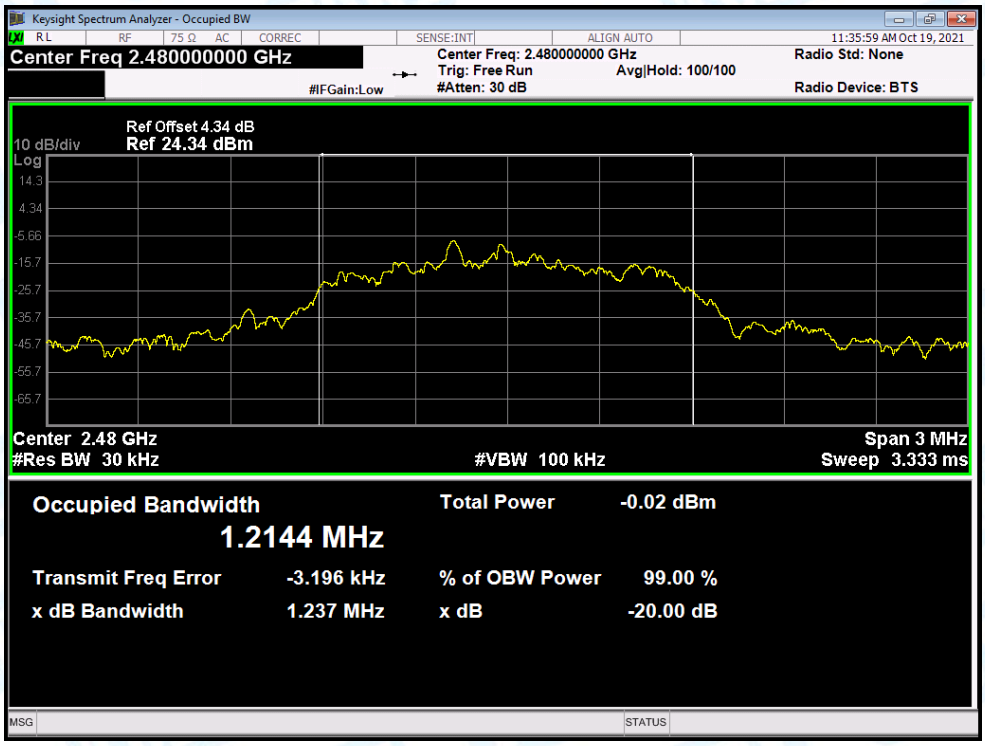
OBW NVNT 2-DH1 2402MHz Ant1



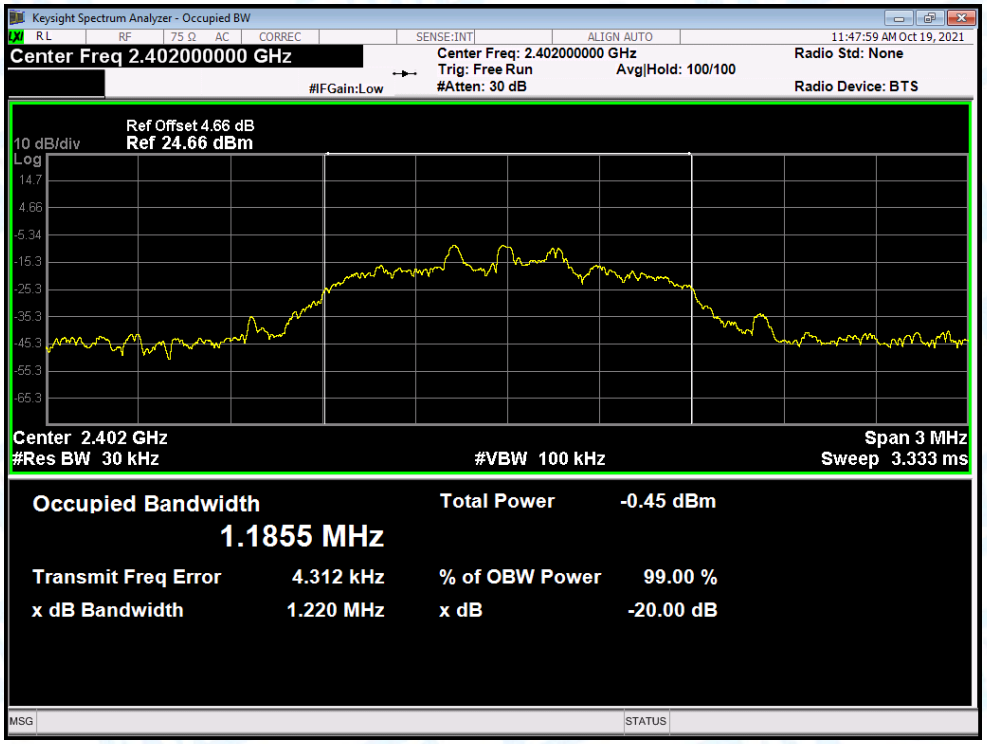
OBW NVNT 2-DH1 2441MHz Ant1



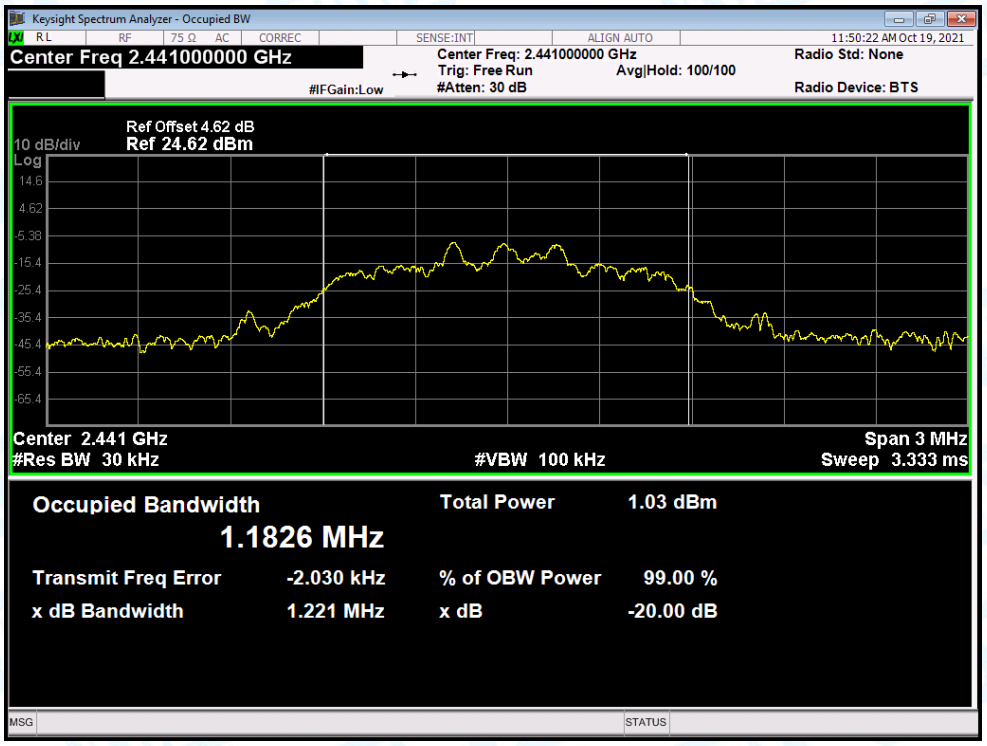
OBW NVNT 2-DH1 2480MHz Ant1



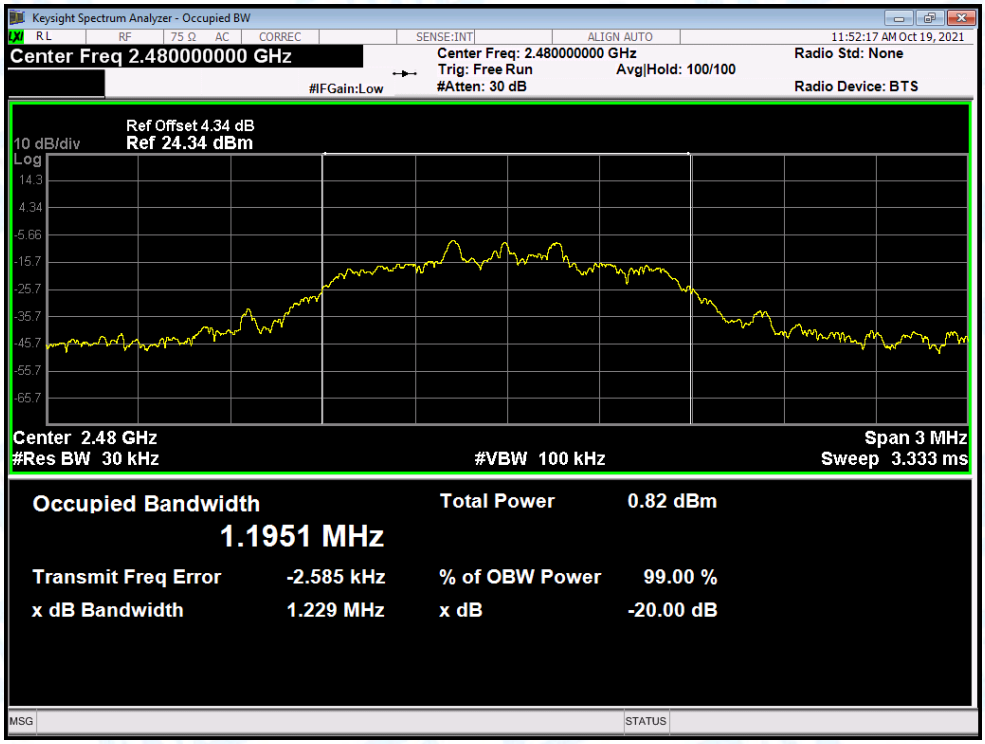
OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



OBW NVNT 3-DH1 2480MHz Ant1

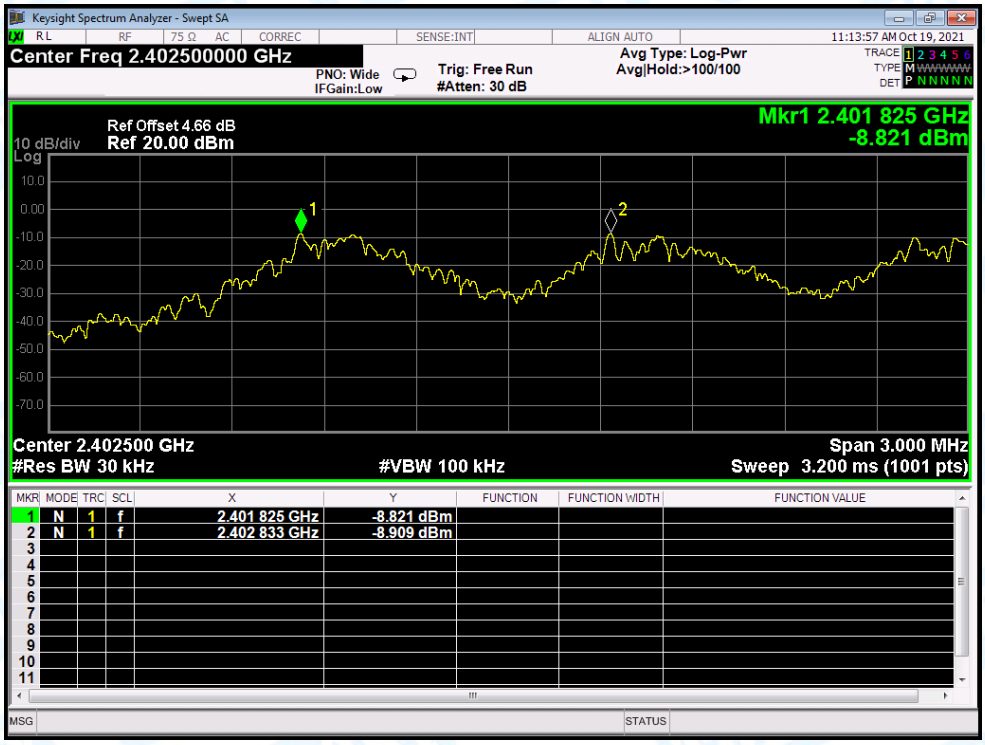


5. Carrier Frequencies Separation

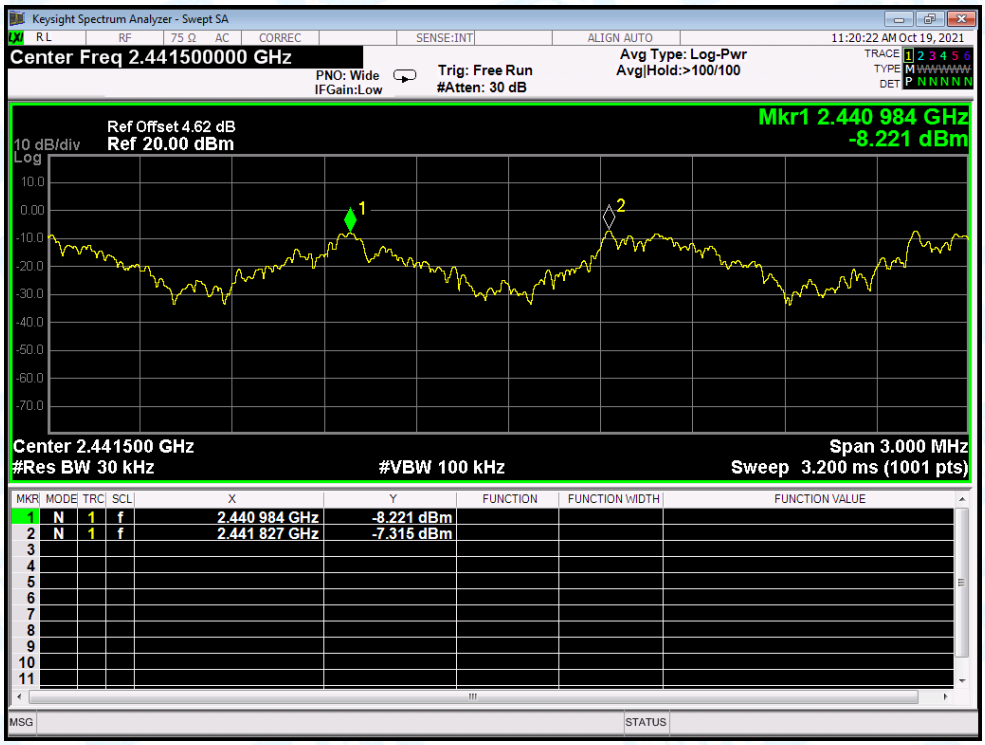
Condition	Mode	Antenna	Hopping Freq1 (MHz)	Hopping Freq2 (MHz)	HFS (MHz)	Limit (MHz)	Verdict
NVNT	1-DH1	Ant1	2401.825	2402.833	1.008	0.675	Pass
NVNT	1-DH1	Ant1	2440.984	2441.827	0.843	0.64	Pass
NVNT	1-DH1	Ant1	2478.972	2479.968	0.996	0.647	Pass
NVNT	2-DH1	Ant1	2401.984	2402.992	1.008	0.813	Pass
NVNT	2-DH1	Ant1	2440.831	2441.833	1.002	0.811	Pass
NVNT	2-DH1	Ant1	2478.825	2479.821	0.996	0.824	Pass
NVNT	3-DH1	Ant1	2401.813	2402.833	1.02	0.817	Pass
NVNT	3-DH1	Ant1	2440.825	2441.818	0.993	0.817	Pass
NVNT	3-DH1	Ant1	2478.831	2480.169	1.338	0.817	Pass

Test Graphs

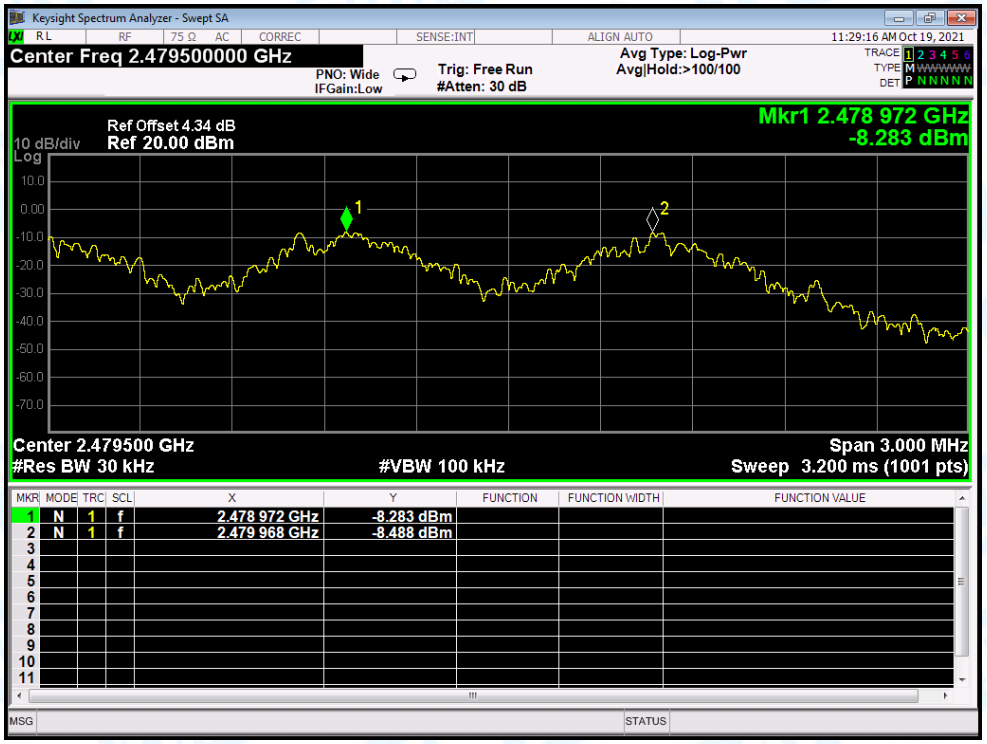
CFS NVNT 1-DH1 2402MHz Ant1



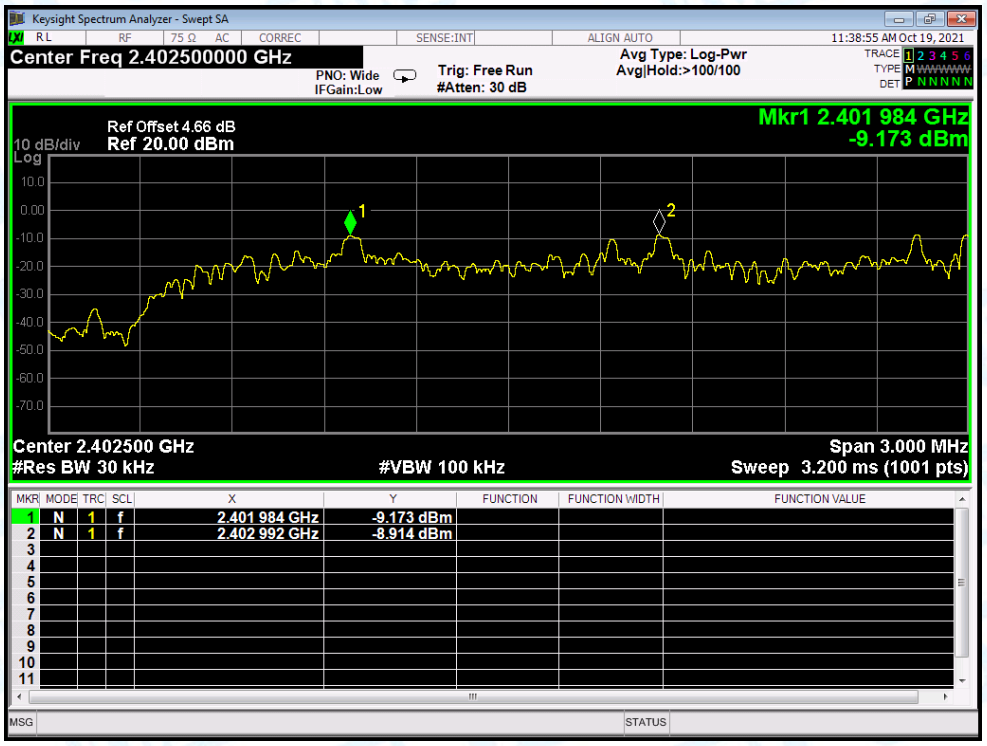
CFS NVNT 1-DH1 2441MHz Ant1



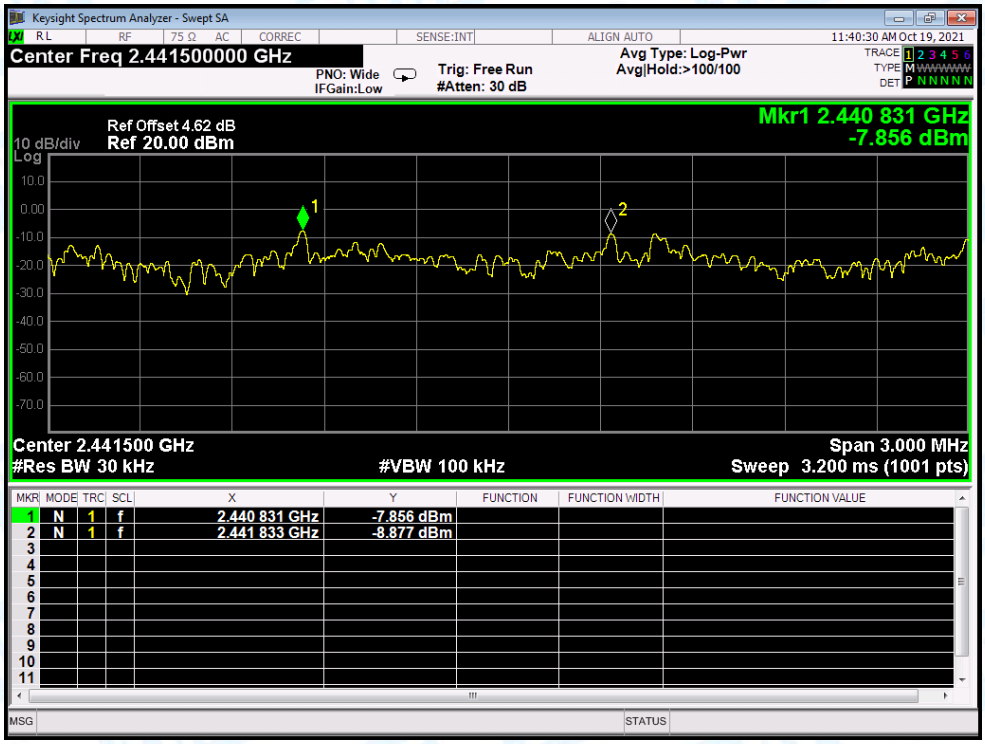
CFS NVNT 1-DH1 2480MHz Ant1



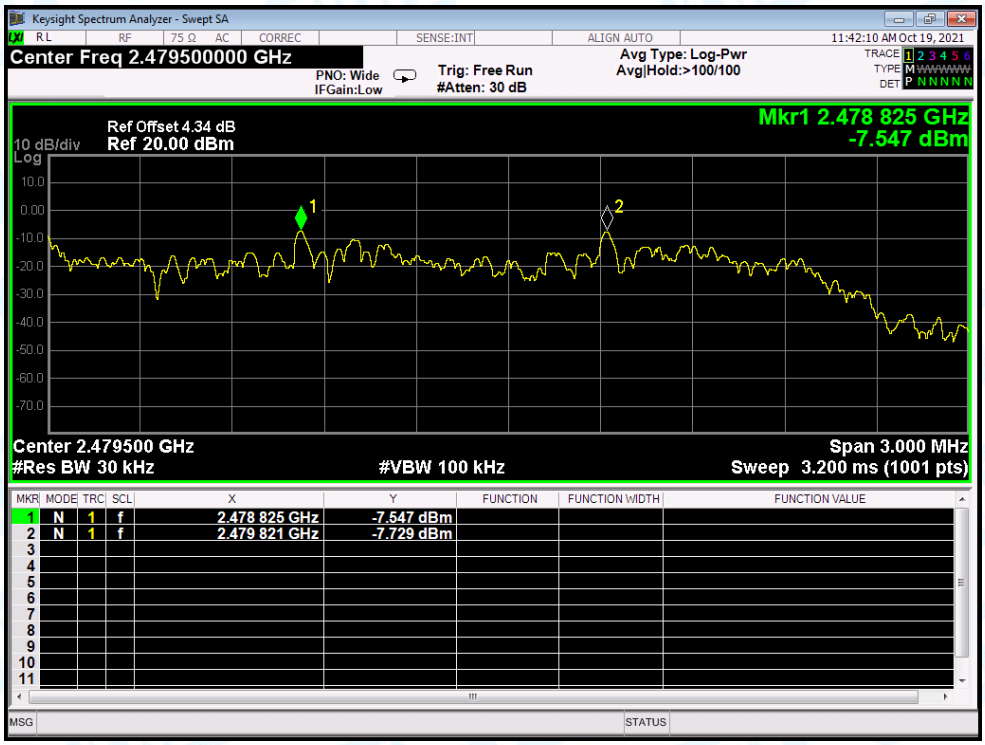
CFS NVNT 2-DH1 2402MHz Ant1



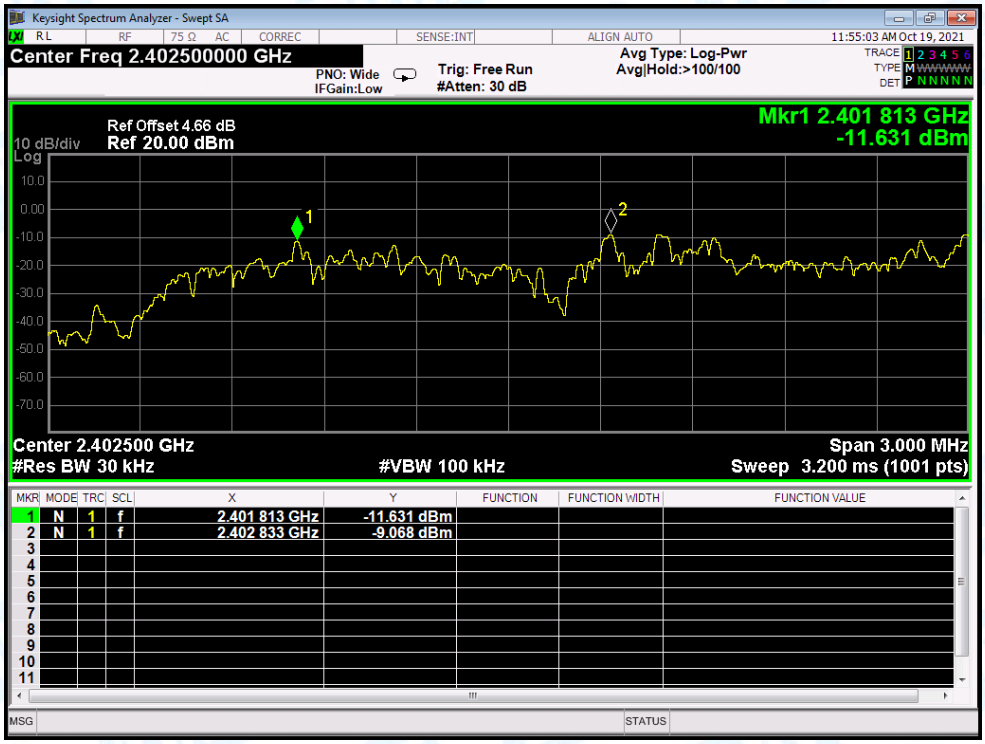
CFS NVNT 2-DH1 2441MHz Ant1



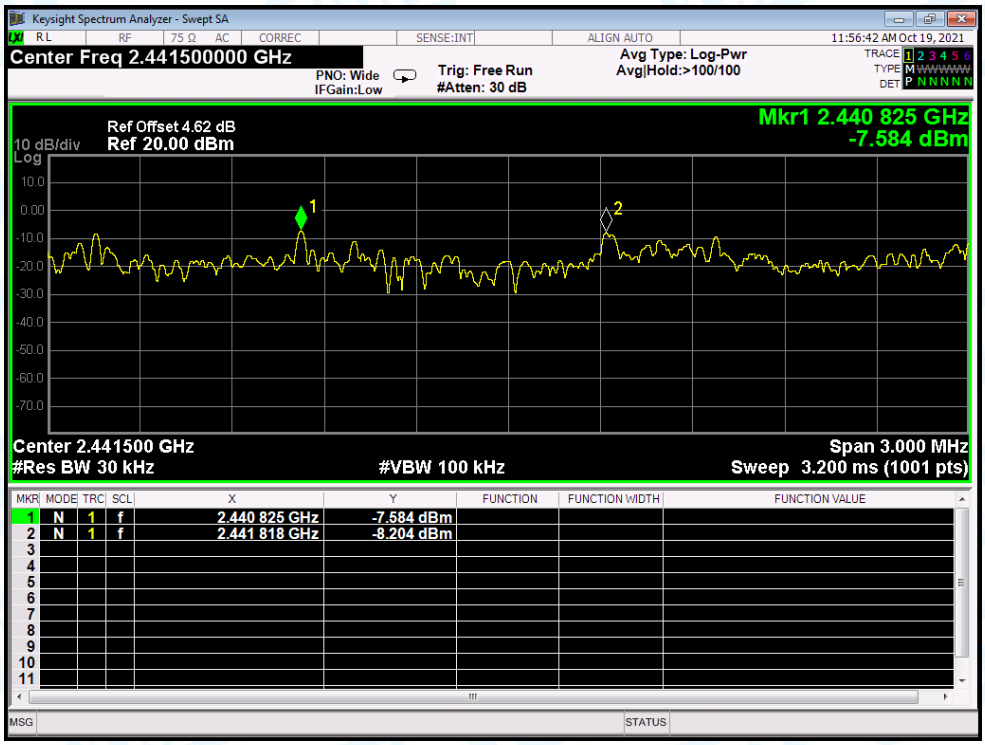
CFS NVNT 2-DH1 2480MHz Ant1



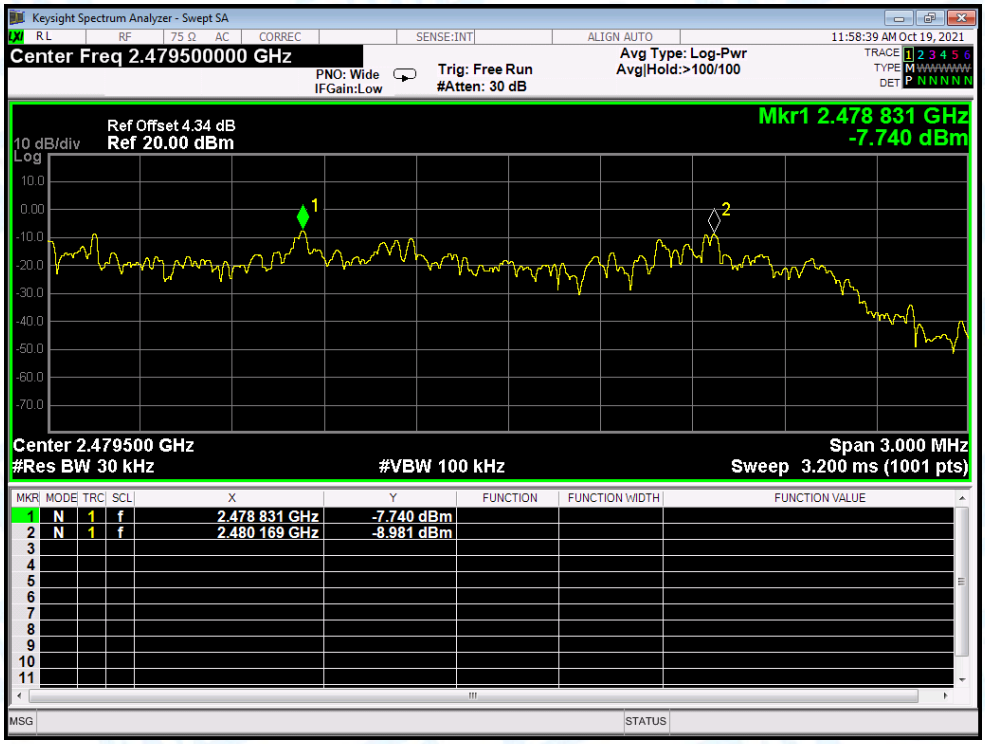
CFS NVNT 3-DH1 2402MHz Ant1



CFS NVNT 3-DH1 2441MHz Ant1



CFS NVNT 3-DH1 2480MHz Ant1

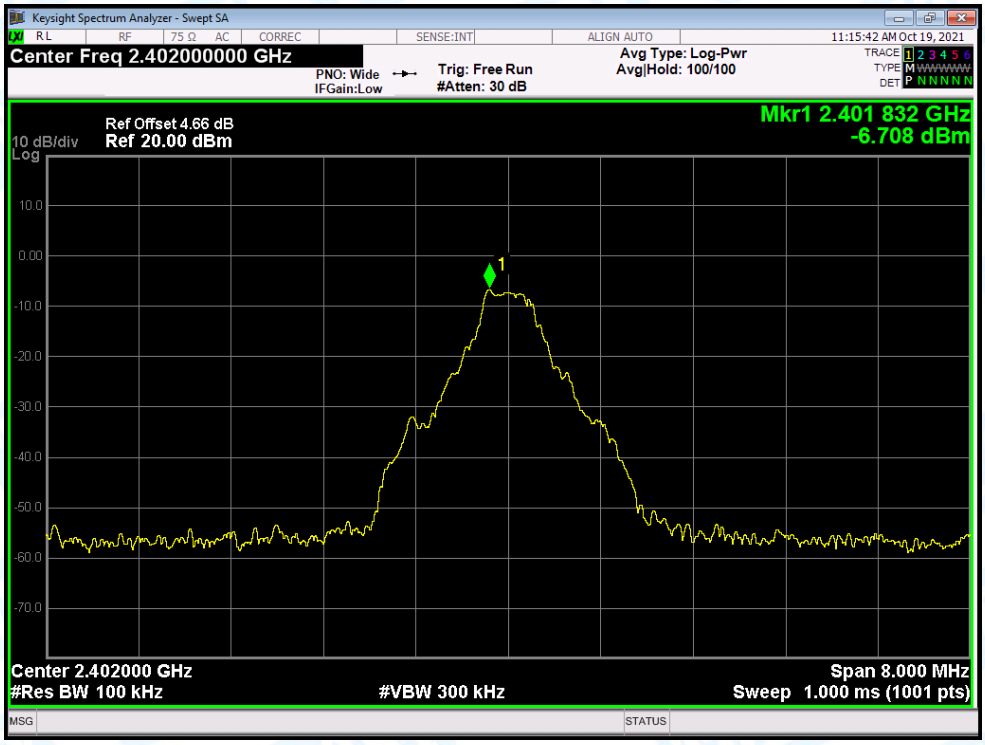


6. Band Edge

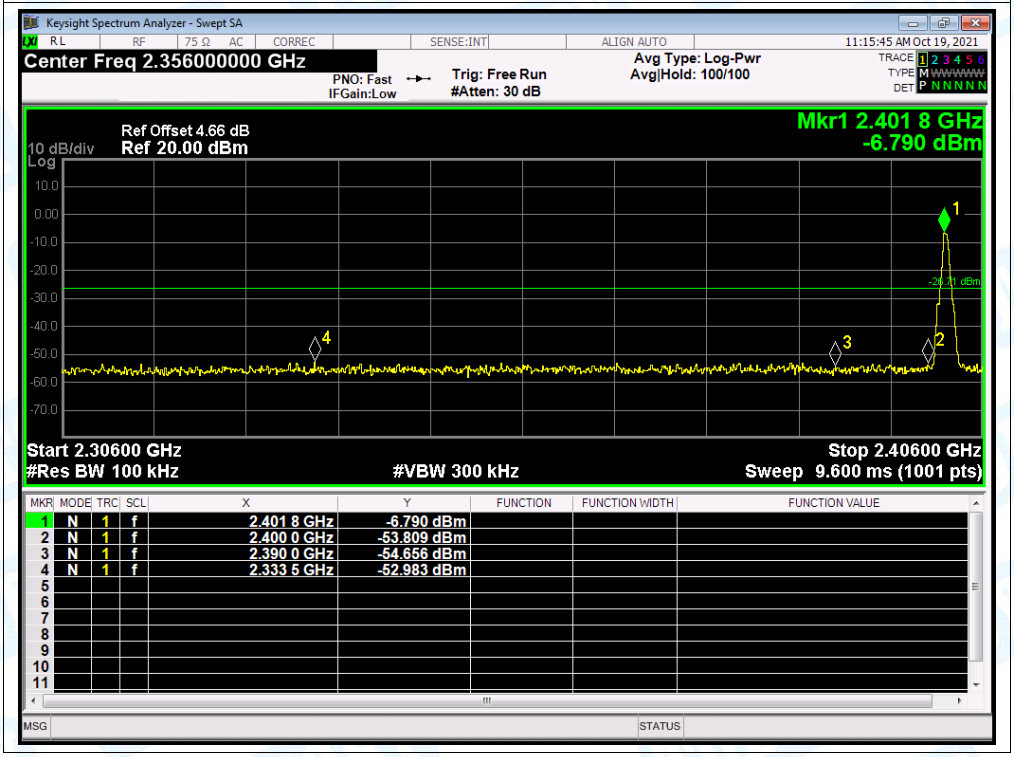
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-46.27	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-47.07	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-45.18	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-47.29	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-45.78	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-46.6	-20	Pass

Test Graphs

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

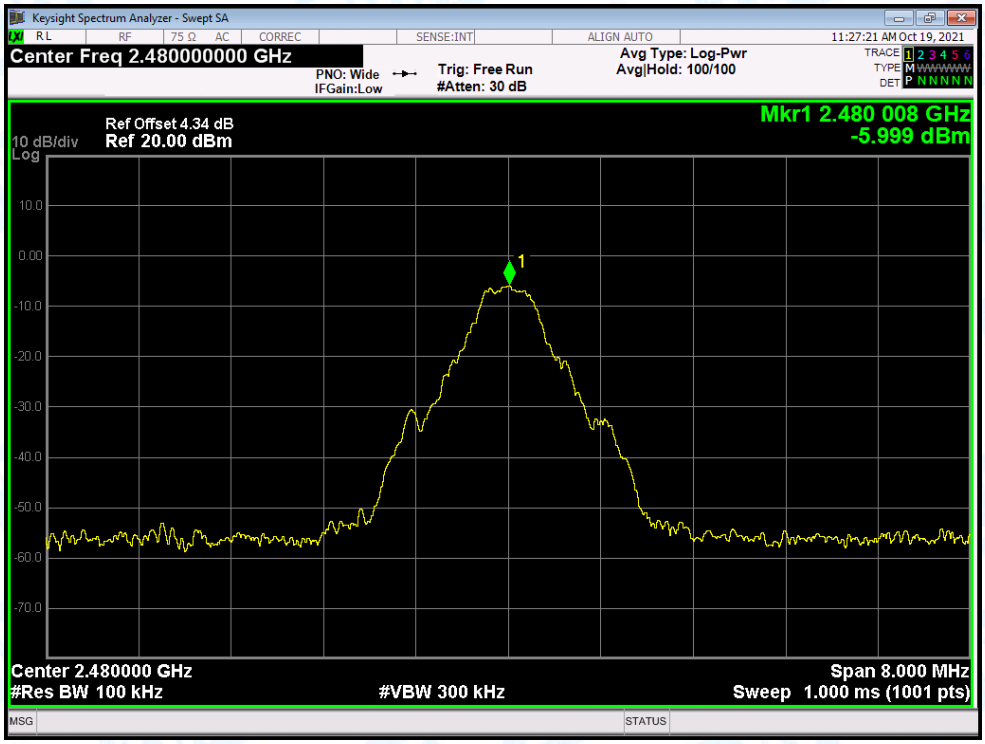


Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

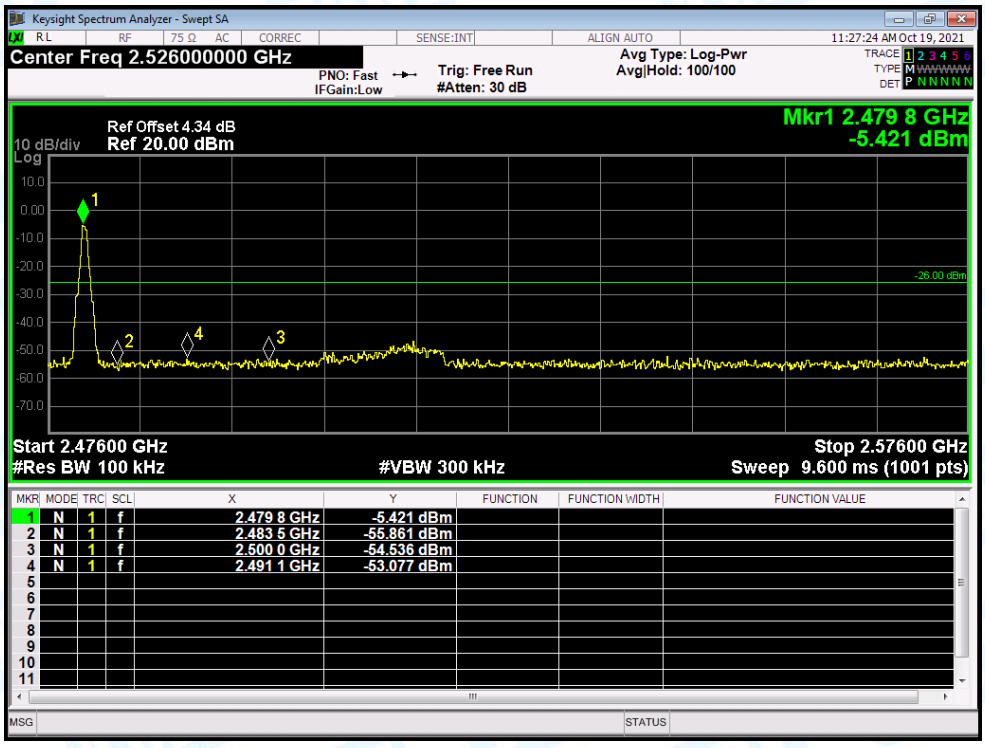


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401 8 GHz	-6.790 dBm			
2	N	1	f	2.400 0 GHz	-53.809 dBm			
3	N	1	f	2.390 0 GHz	-54.656 dBm			
4	N	1	f	2.333 5 GHz	-52.983 dBm			

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



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



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.479 8 GHz	-5.421 dBm			
2	N	1	f	2.483 5 GHz	-55.861 dBm			
3	N	1	f	2.500 0 GHz	-54.536 dBm			
4	N	1	f	2.491 1 GHz	-53.077 dBm			
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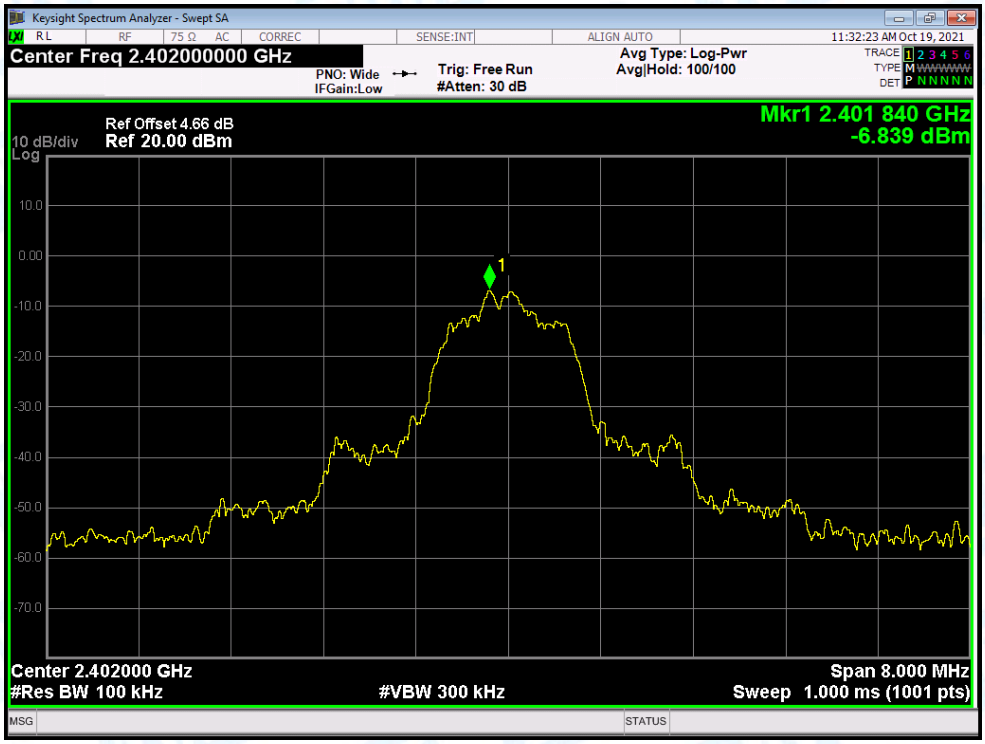
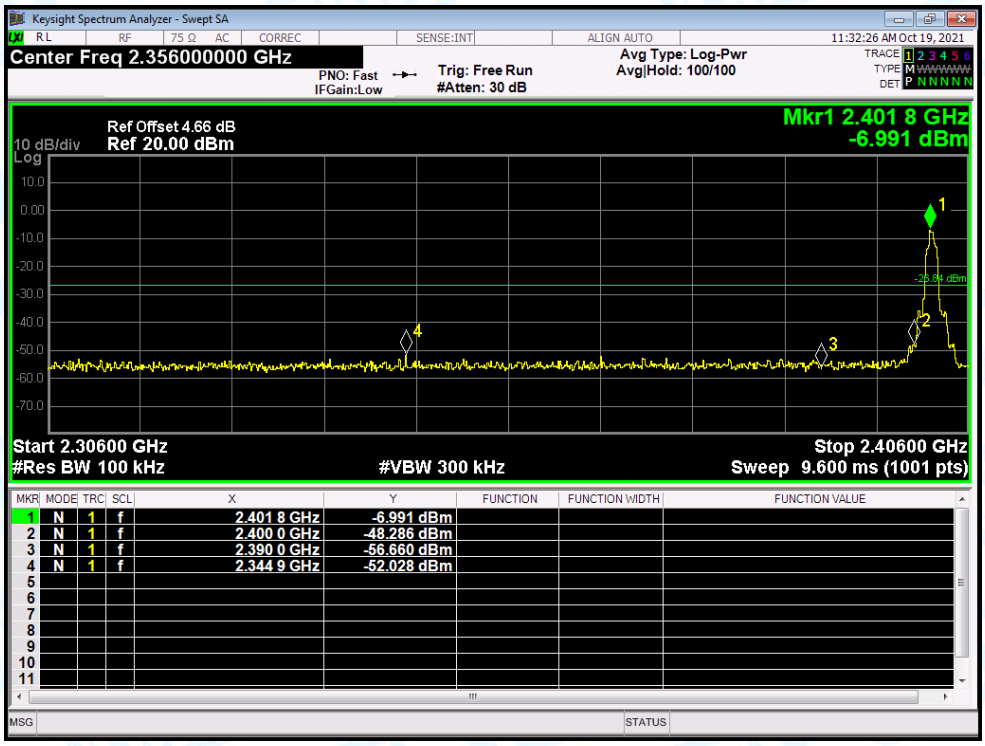
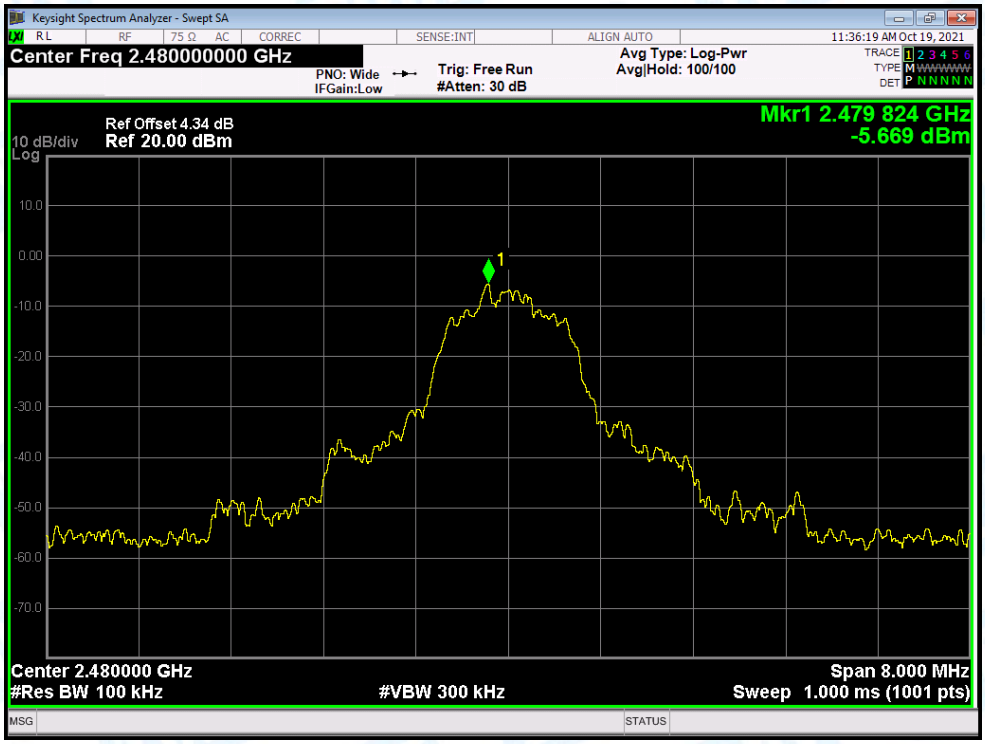
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



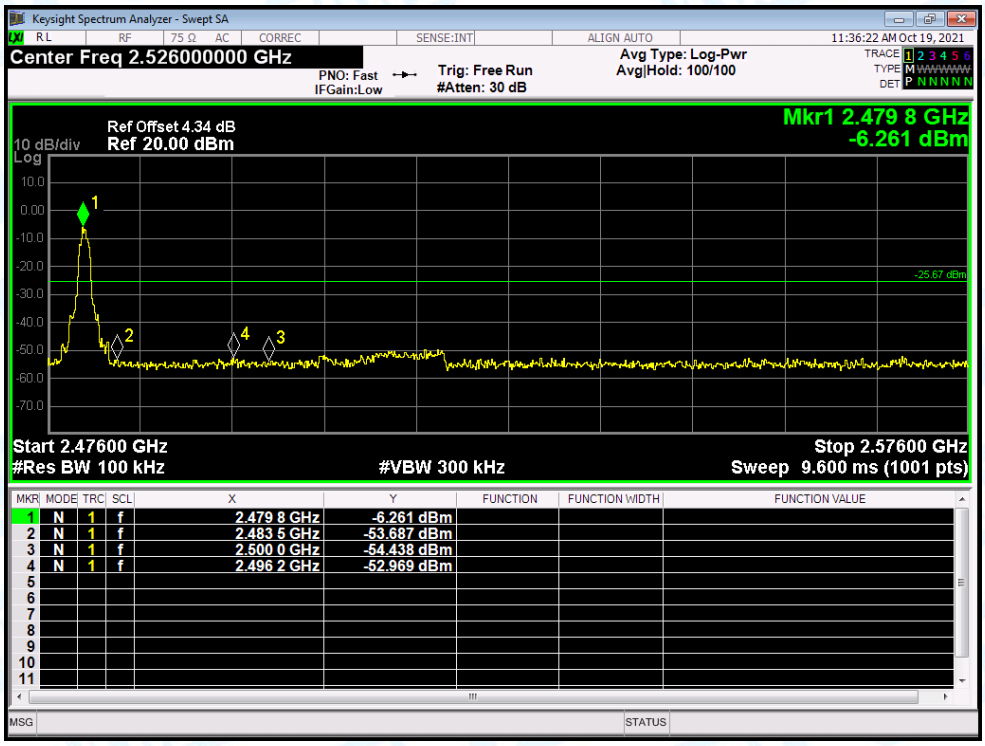
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



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

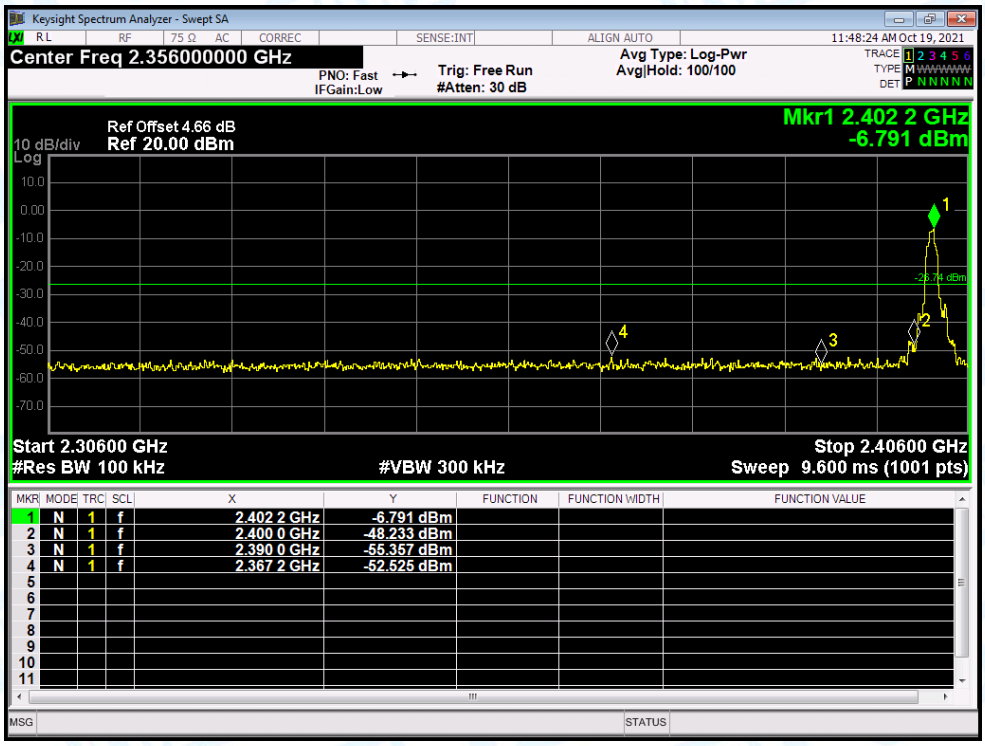


Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



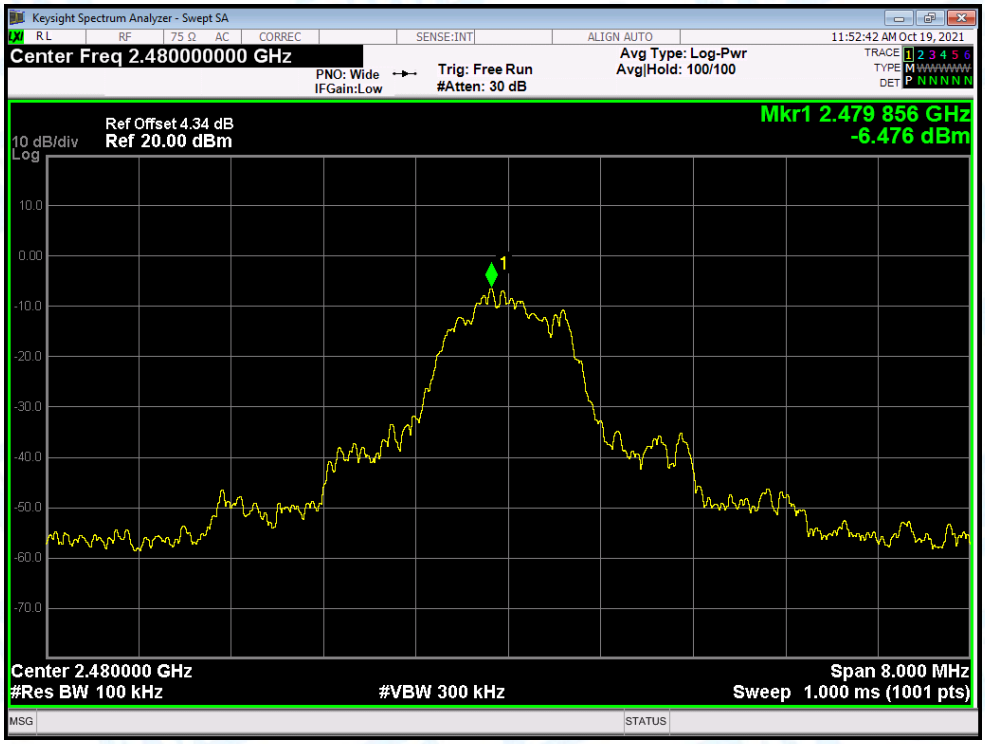
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref

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

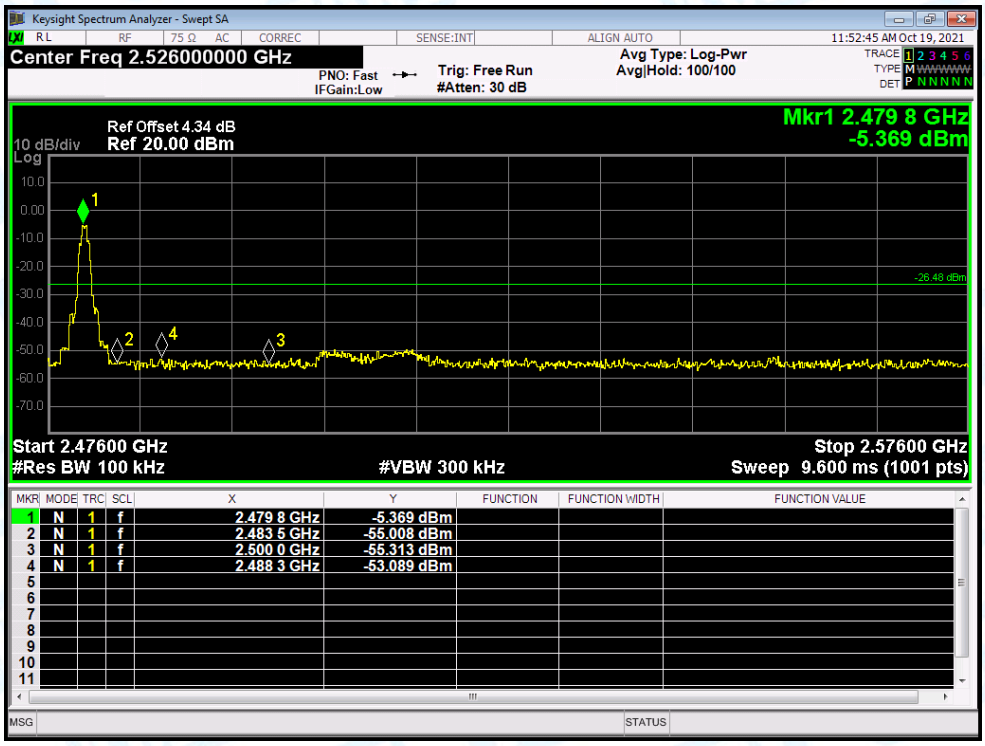


MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.402 2 GHz	-6.791 dBm			
2	N	1	f	2.400 0 GHz	-48.233 dBm			
3	N	1	f	2.390 0 GHz	-55.357 dBm			
4	N	1	f	2.367 2 GHz	-52.525 dBm			
5								
6								
7								
8								
9								
10								
11								

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



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



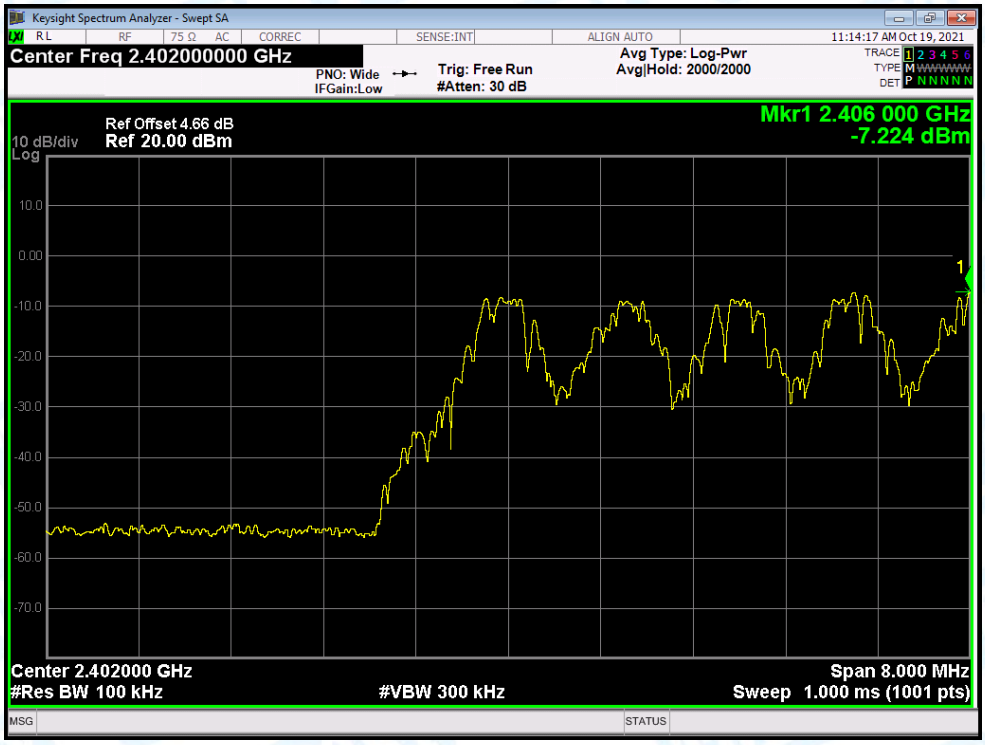
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.479 8 GHz	-5.369 dBm			
2	N	1	f	2.483 5 GHz	-55.008 dBm			
3	N	1	f	2.500 0 GHz	-55.313 dBm			
4	N	1	f	2.488 3 GHz	-53.089 dBm			
5								
6								
7								
8								
9								
10								
11								

7. Band Edge(Hopping)

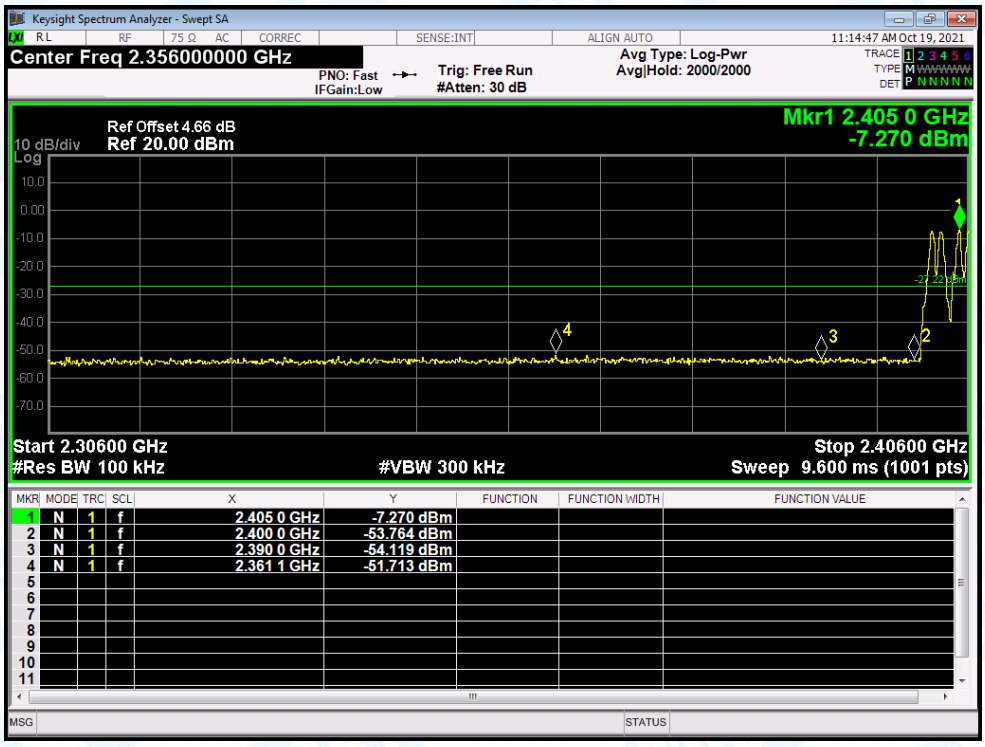
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-44.49	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-45.28	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-44.69	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-45.24	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-43.72	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-45.43	-20	Pass

Test Graphs

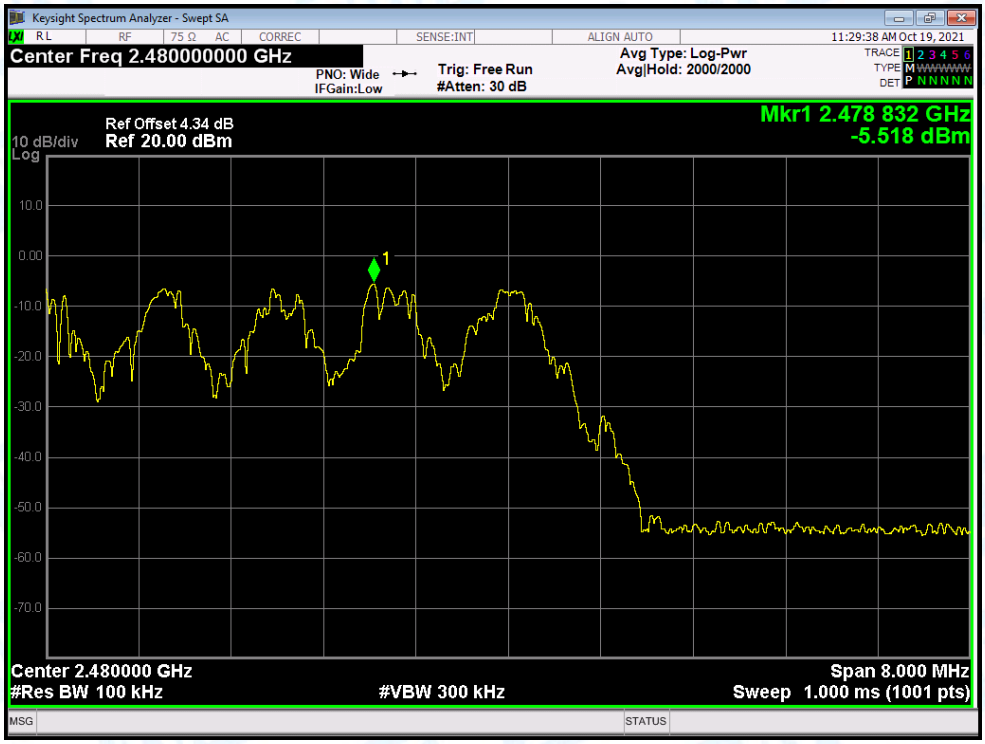
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref



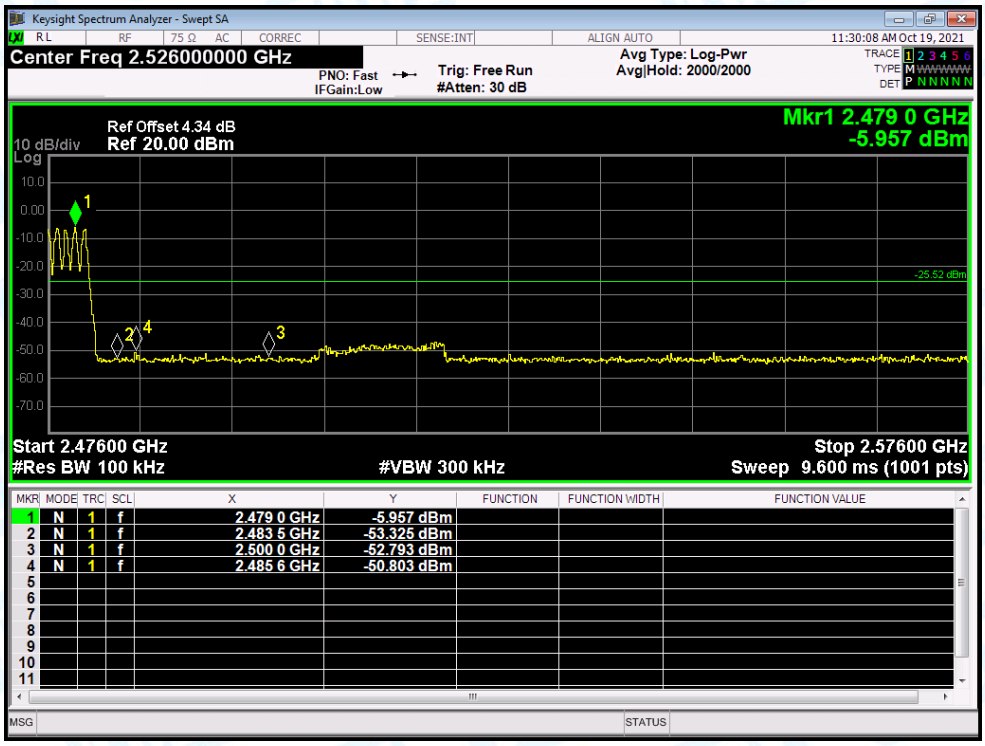
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission



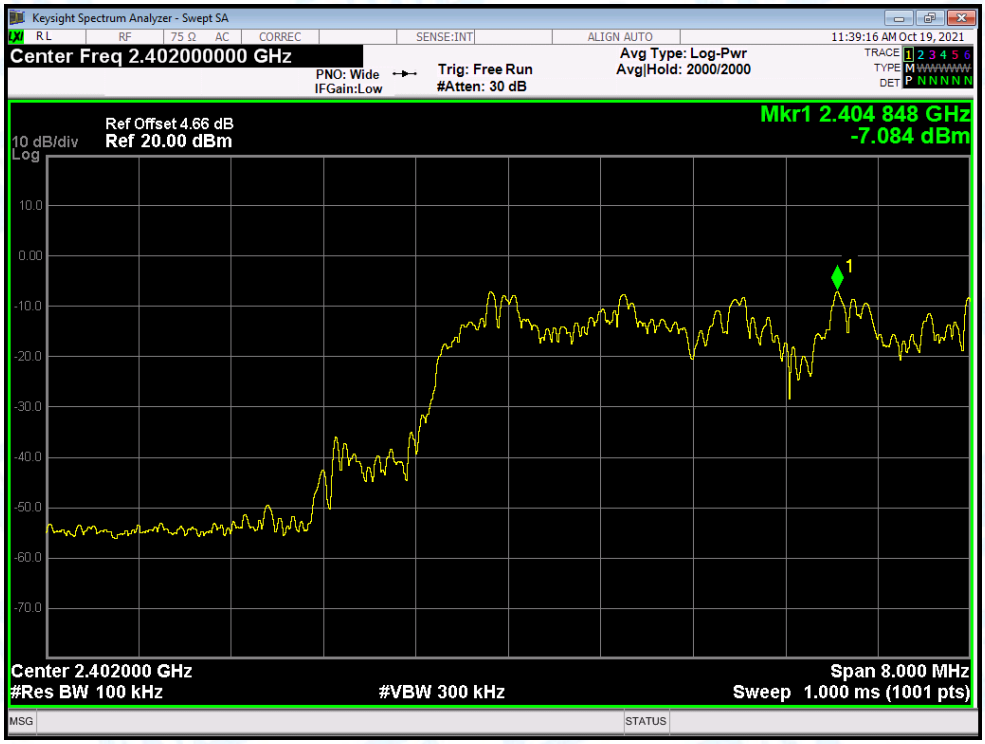
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



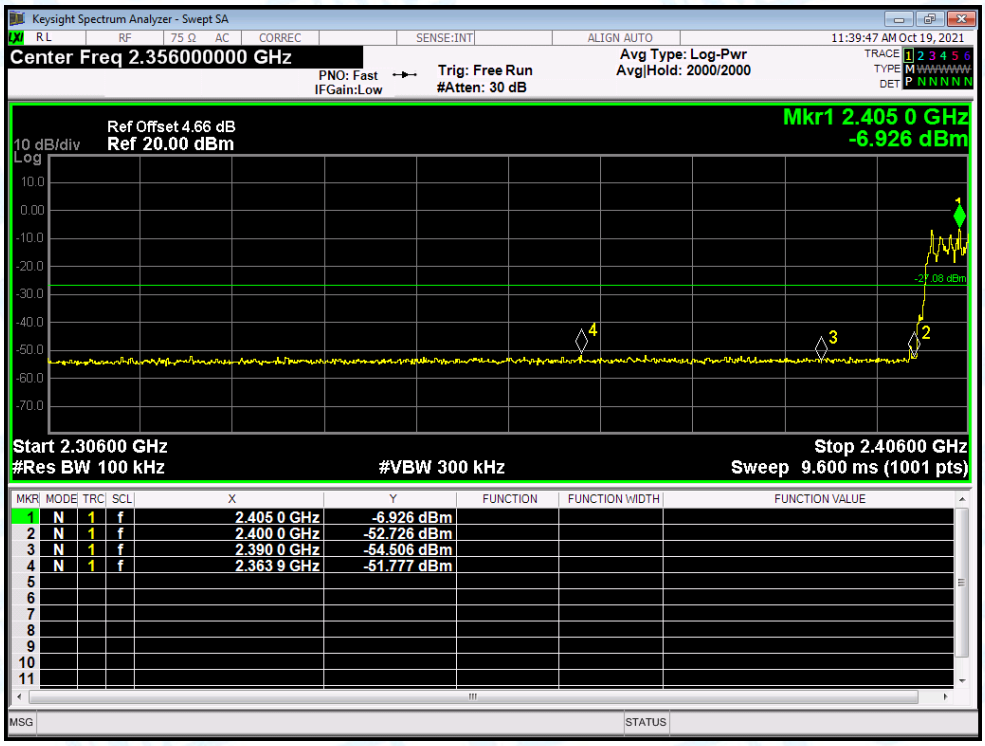
Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Emission



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



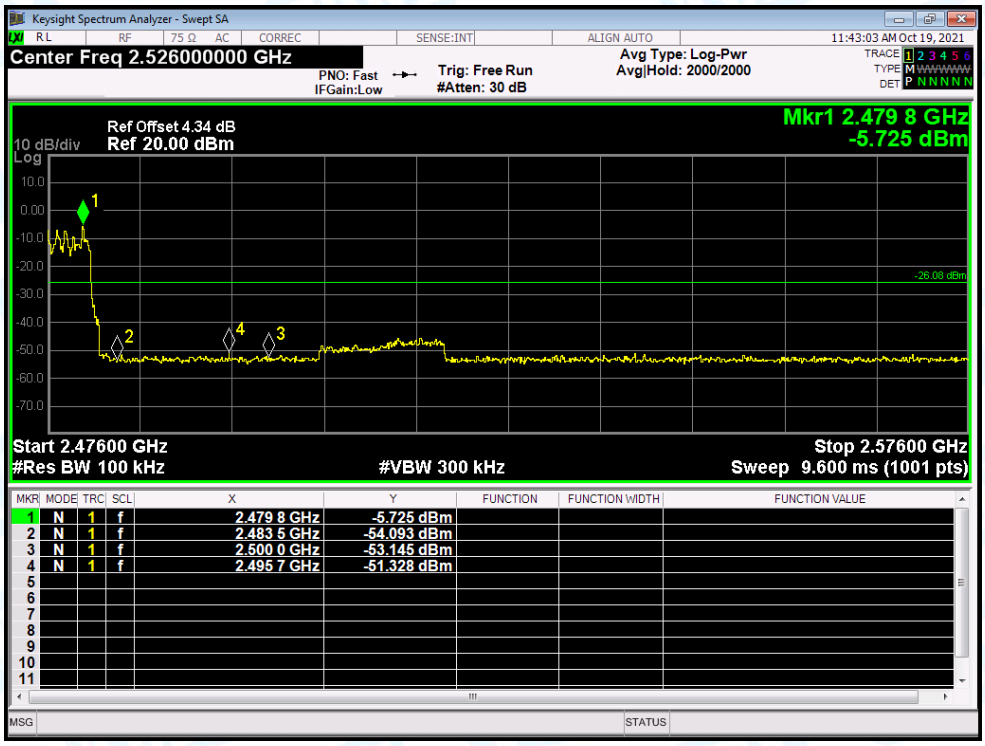
Band Edge(Hopping) NVNT 2-DH1 2402MHz Ant1 Hopping Emission



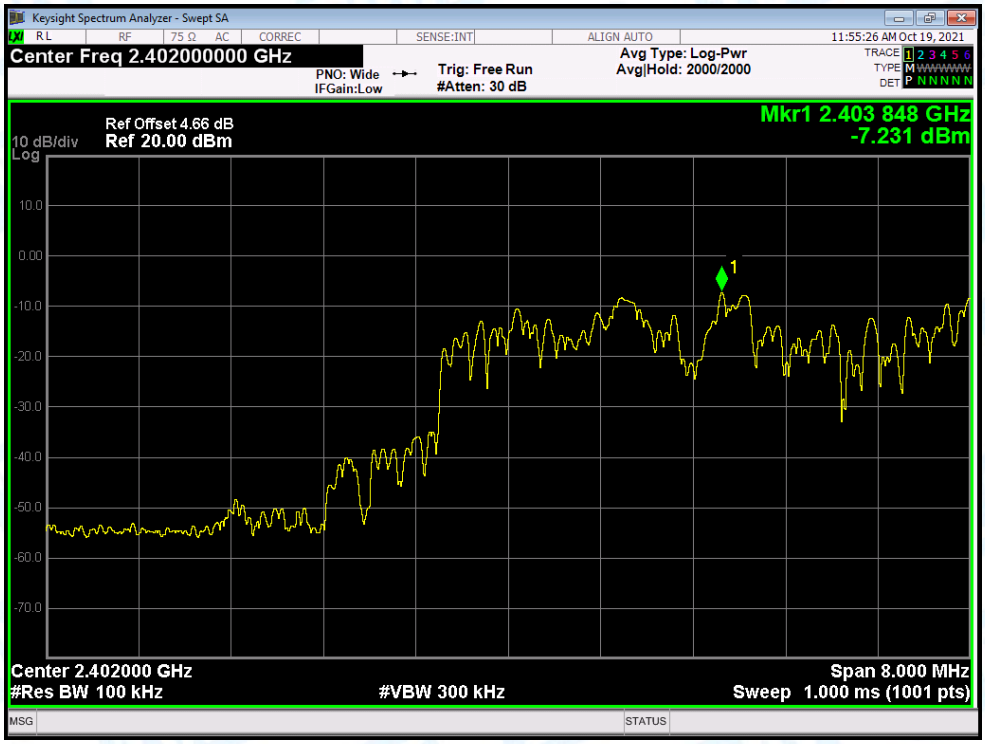
MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.405 0 GHz	-6.926 dBm			
2	N	1	f	2.400 0 GHz	-52.726 dBm			
3	N	1	f	2.390 0 GHz	-54.506 dBm			
4	N	1	f	2.363 9 GHz	-51.777 dBm			
5								
6								
7								
8								
9								
10								
11								

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

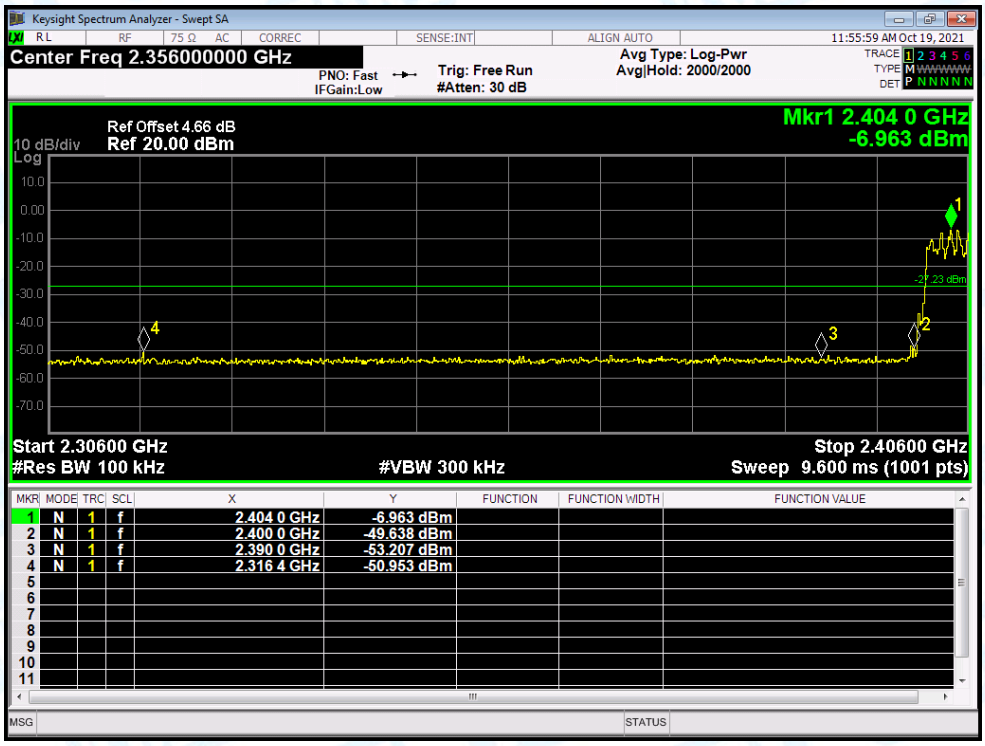
Band Edge(Hopping) NVNT 2-DH1 2480MHz Ant1 Hopping Emission



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



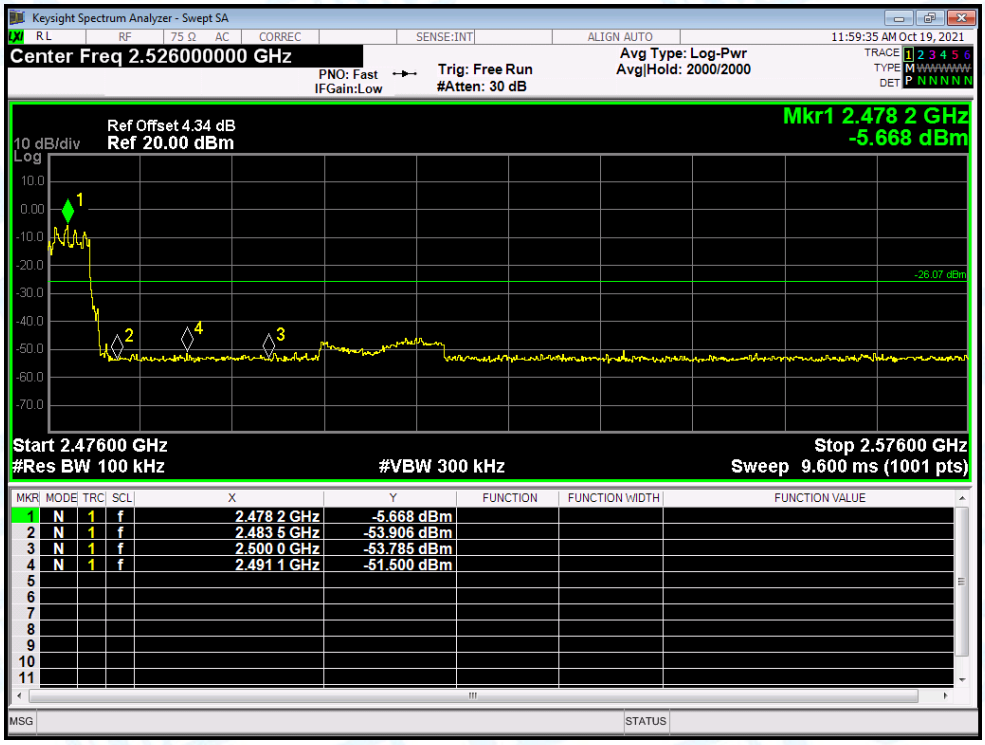
Band Edge(Hopping) NVNT 3-DH1 2402MHz Ant1 Hopping Emission



MKR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.404 0 GHz	-6.963 dBm			
2	N	1	f	2.400 0 GHz	-49.638 dBm			
3	N	1	f	2.390 0 GHz	-53.207 dBm			
4	N	1	f	2.316 4 GHz	-50.953 dBm			
5								
6								
7								
8								
9								
10								
11								

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

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

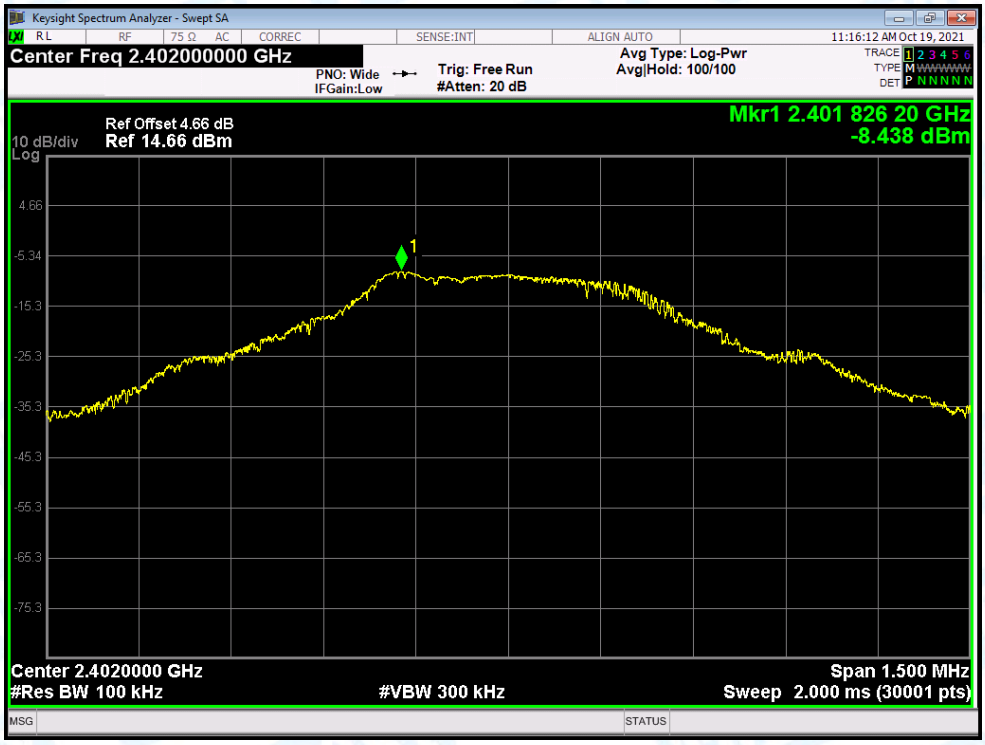


8. Conducted RF Spurious Emission

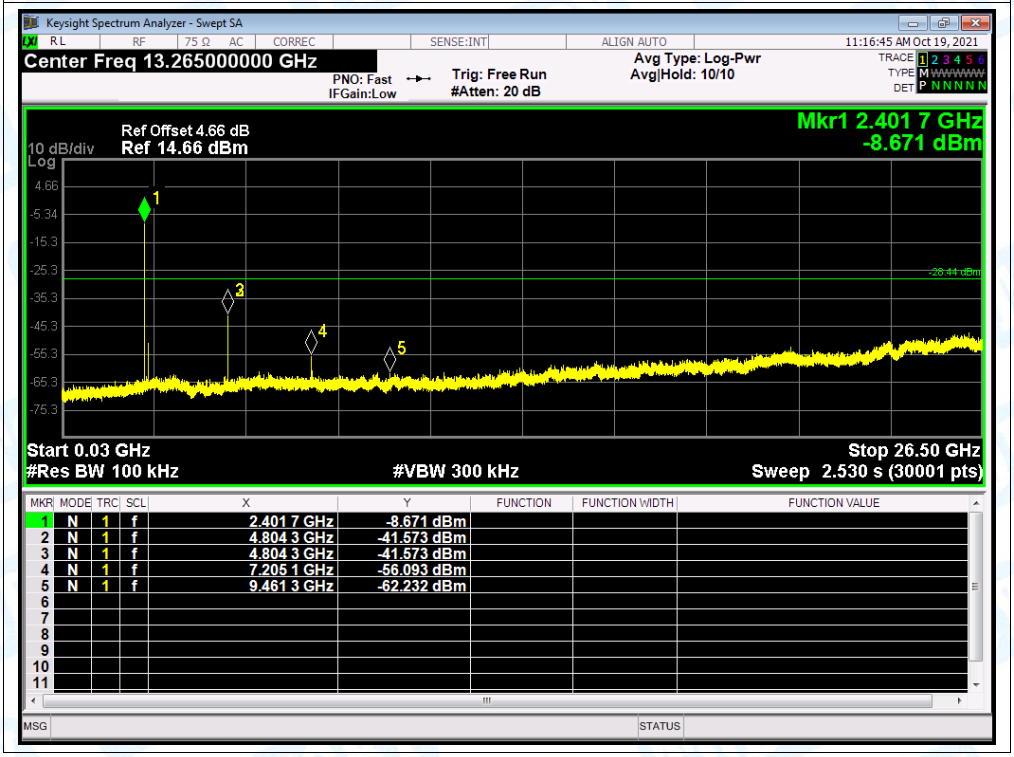
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-33.13	-20	Pass
NVNT	1-DH1	2441	Ant1	-39.01	-20	Pass
NVNT	1-DH1	2480	Ant1	-40	-20	Pass
NVNT	2-DH1	2402	Ant1	-33.48	-20	Pass
NVNT	2-DH1	2441	Ant1	-37.02	-20	Pass
NVNT	2-DH1	2480	Ant1	-41.48	-20	Pass
NVNT	3-DH1	2402	Ant1	-36.14	-20	Pass
NVNT	3-DH1	2441	Ant1	-38.95	-20	Pass
NVNT	3-DH1	2480	Ant1	-41.14	-20	Pass

Test Graphs

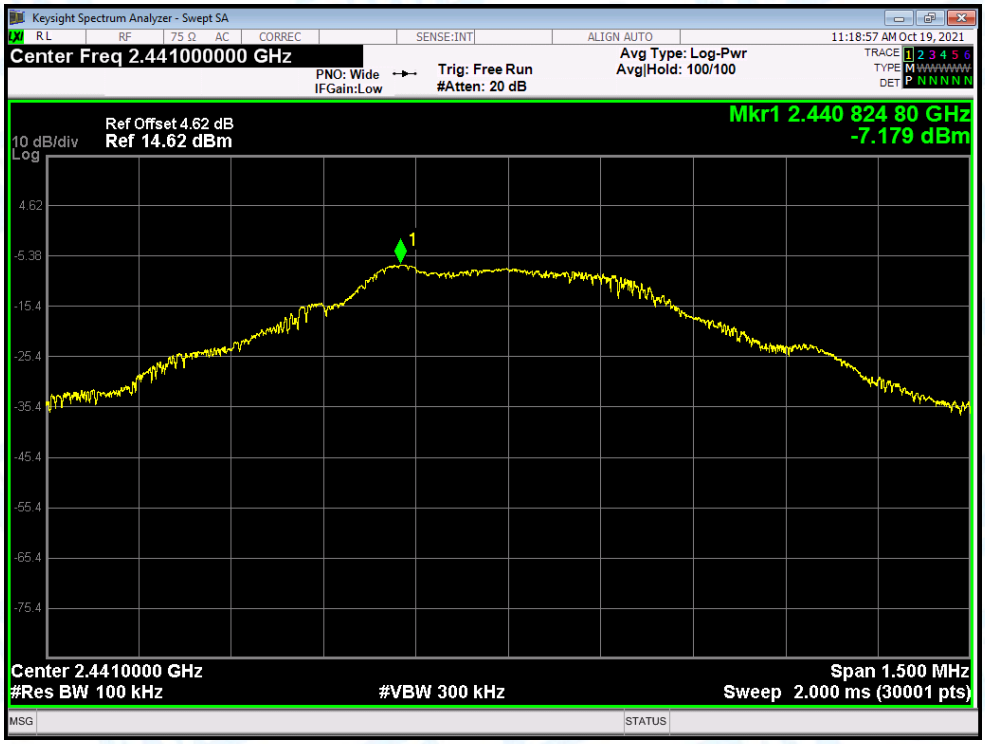
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



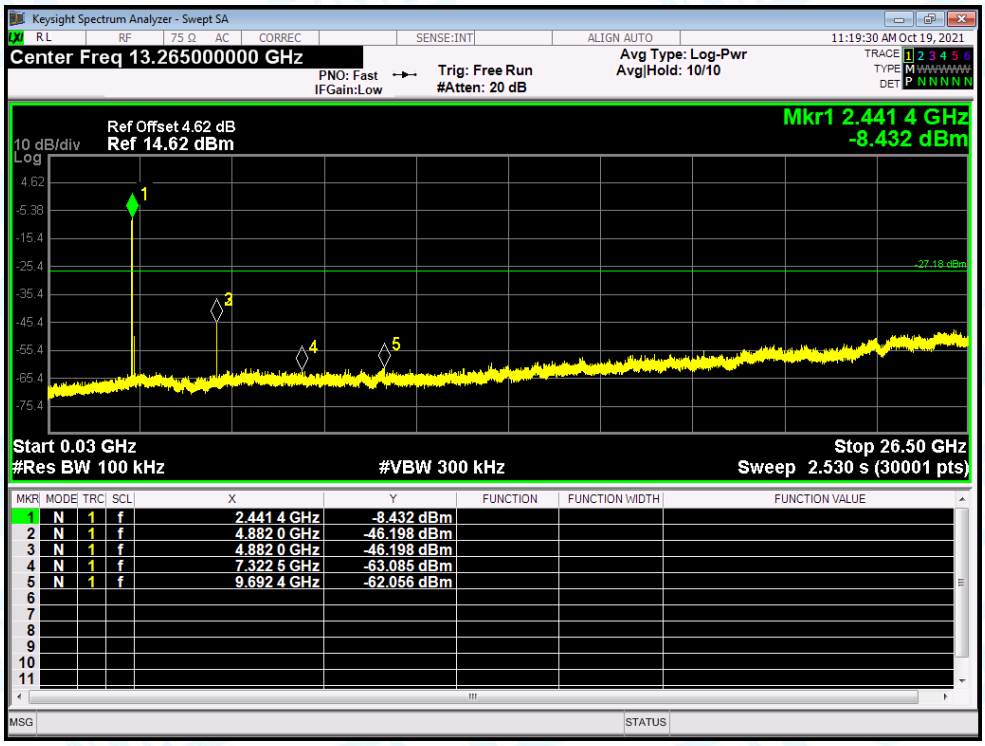
Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission



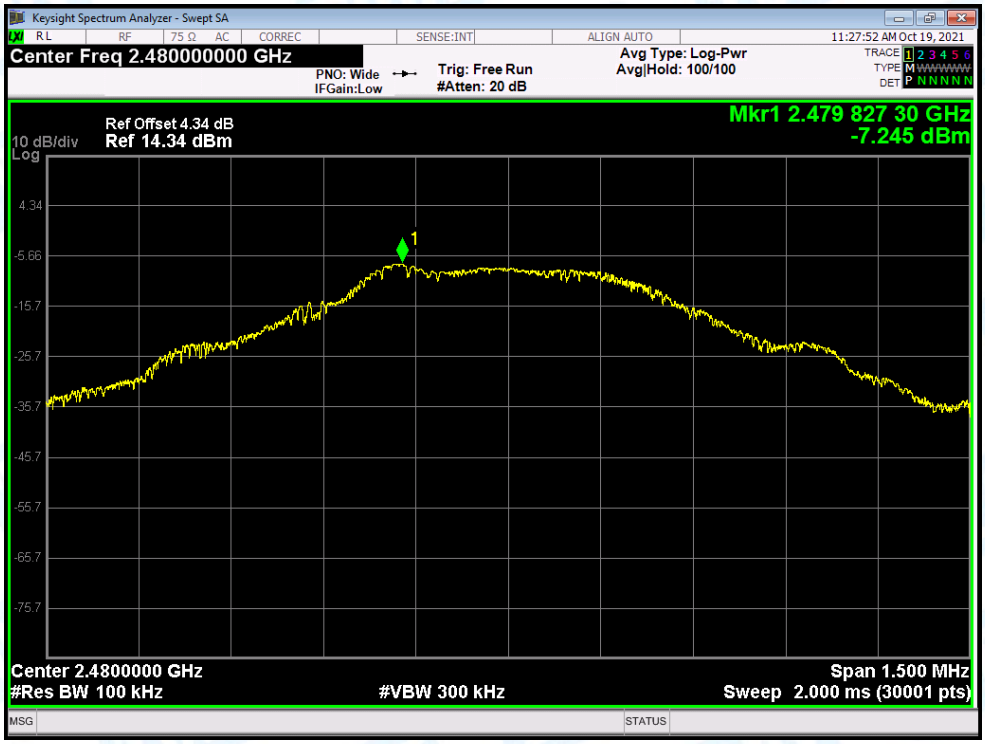
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Ref



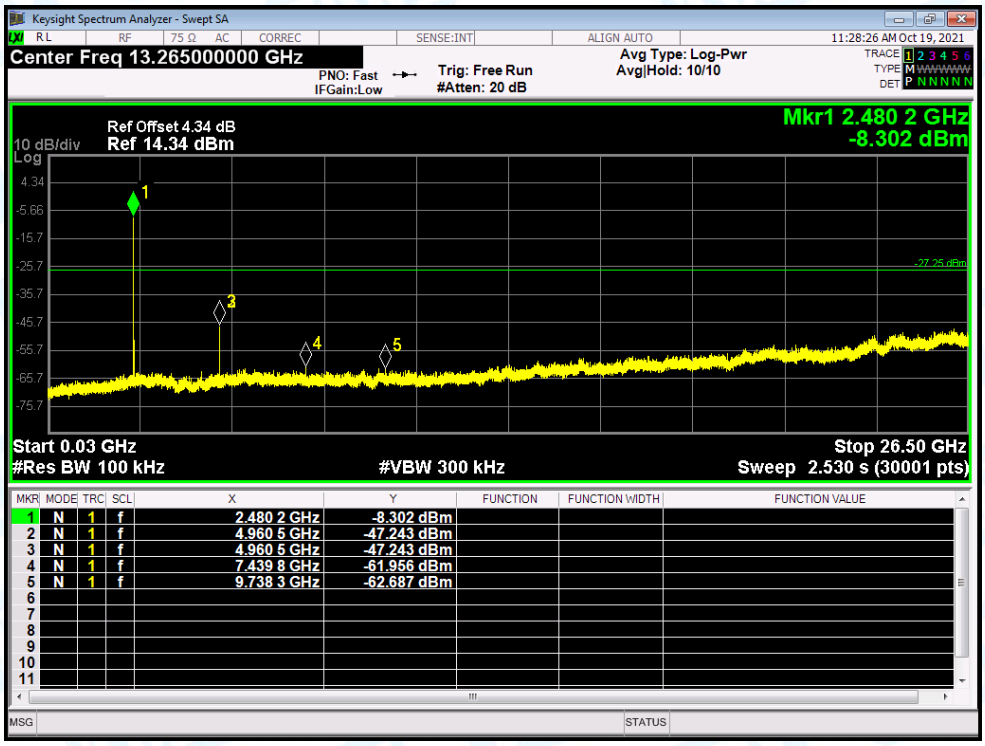
Tx. Spurious NVNT 1-DH1 2441MHz Ant1 Emission



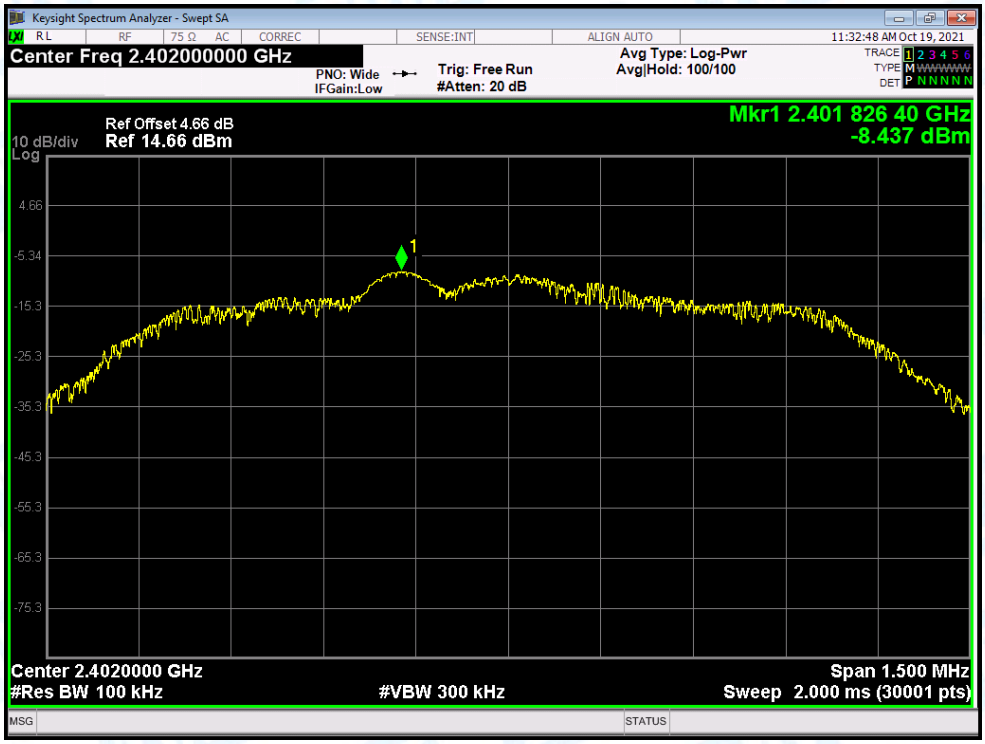
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Ref



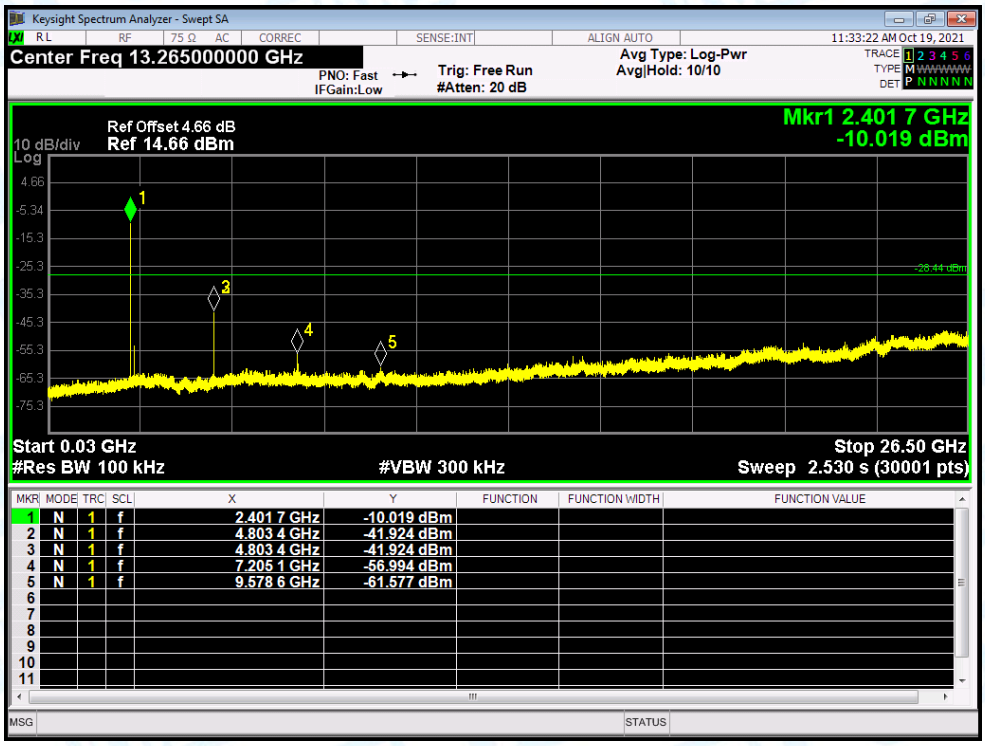
Tx. Spurious NVNT 1-DH1 2480MHz Ant1 Emission



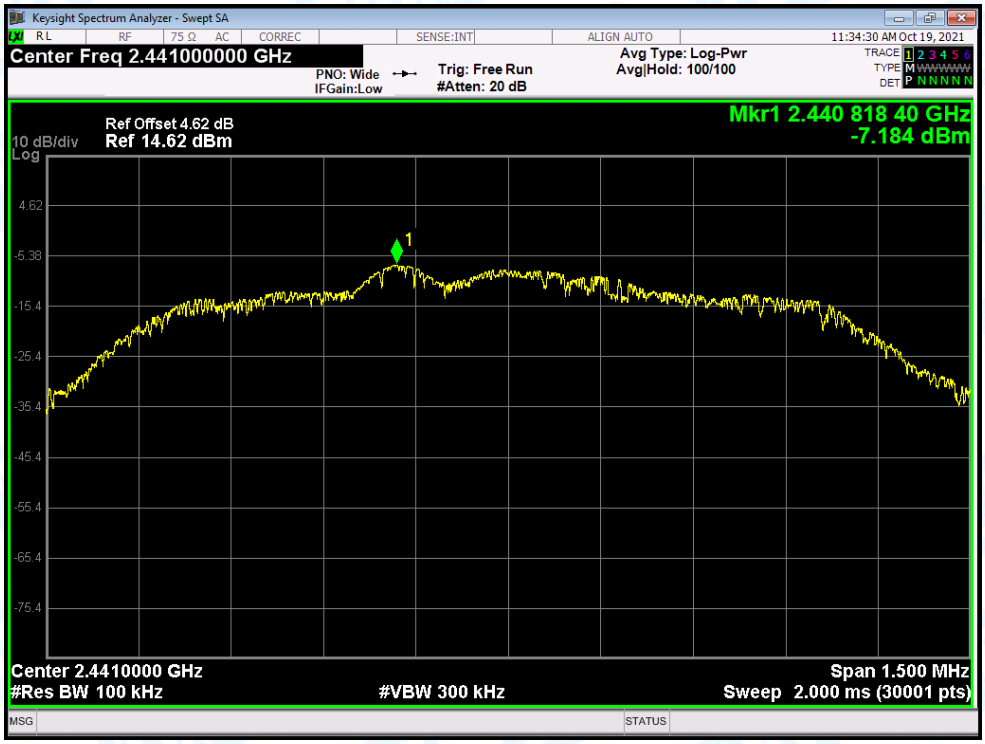
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Ref



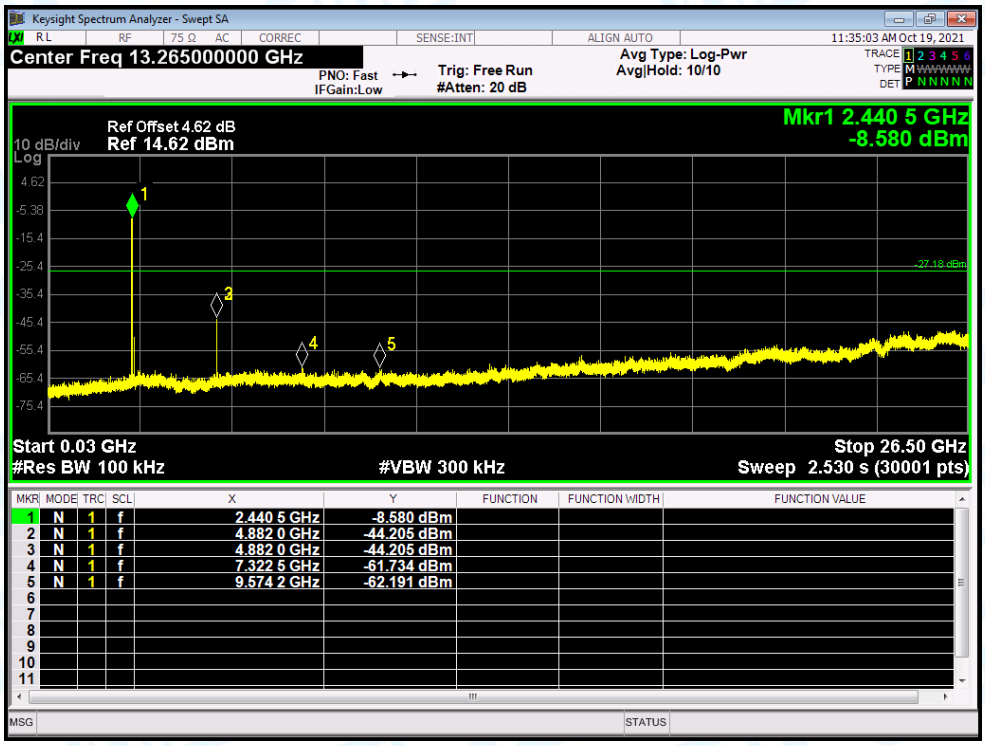
Tx. Spurious NVNT 2-DH1 2402MHz Ant1 Emission



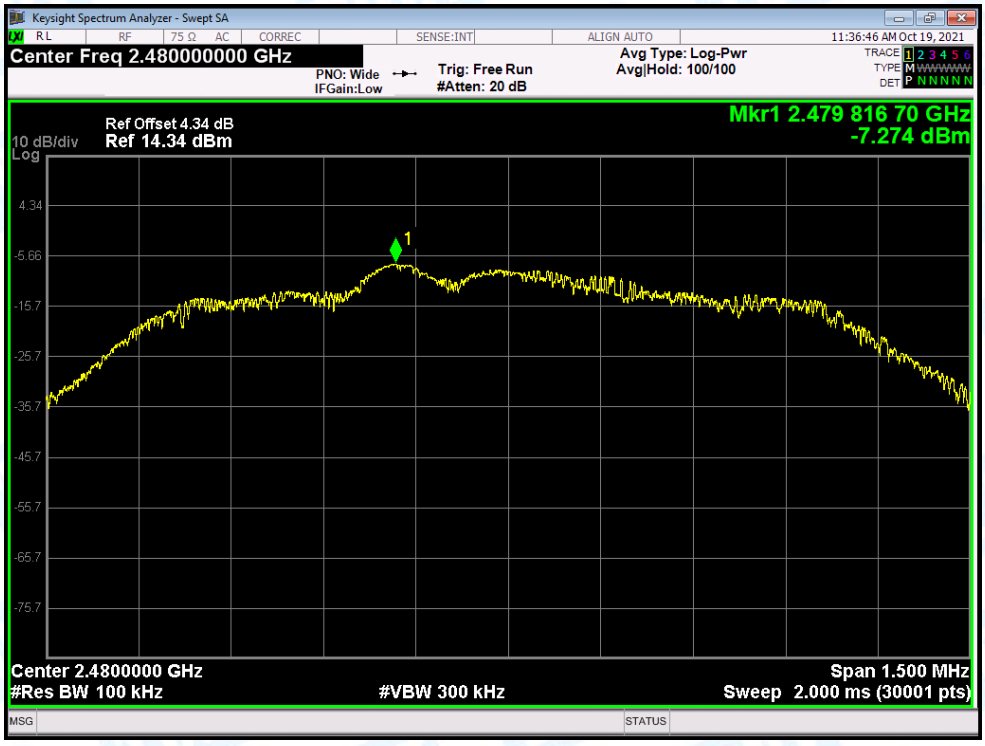
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Ref



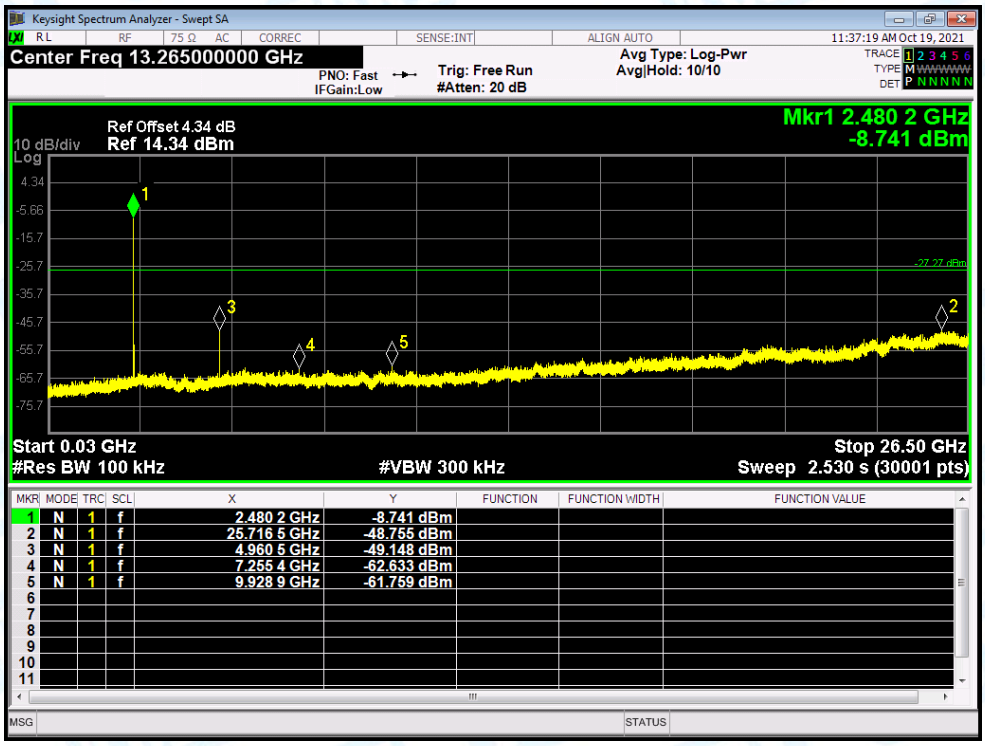
Tx. Spurious NVNT 2-DH1 2441MHz Ant1 Emission



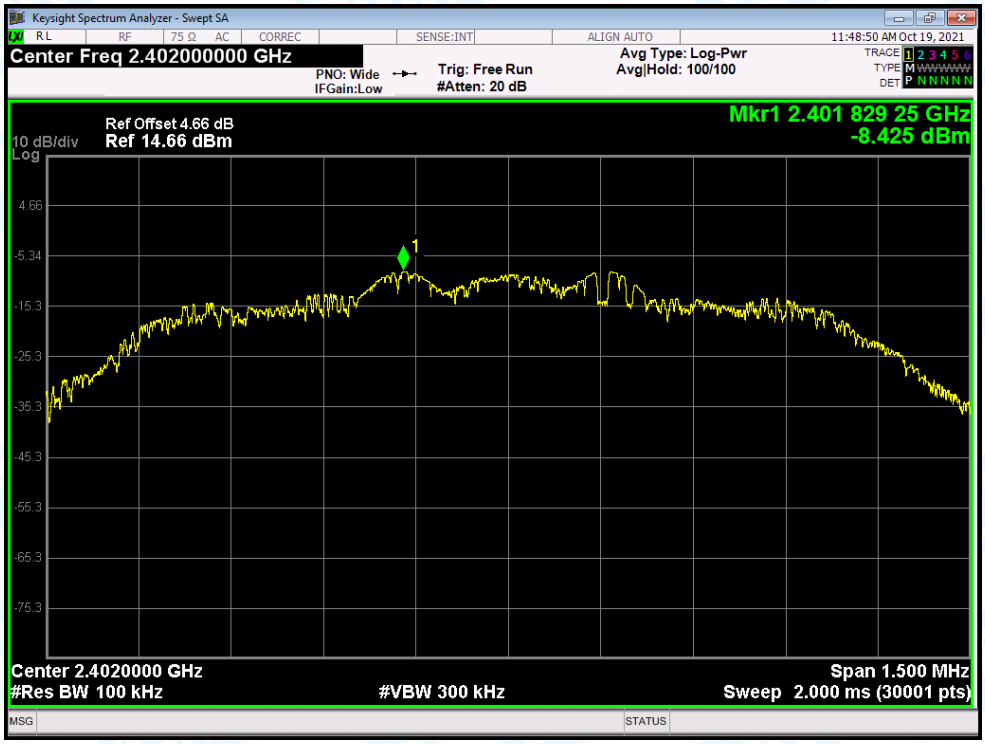
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Ref



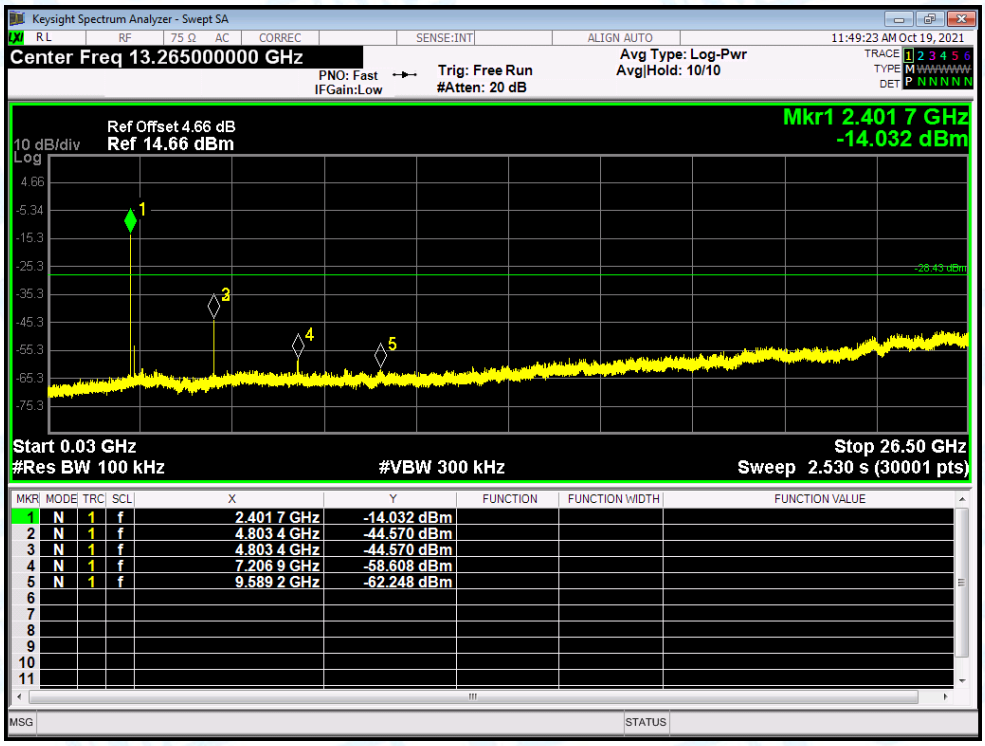
Tx. Spurious NVNT 2-DH1 2480MHz Ant1 Emission



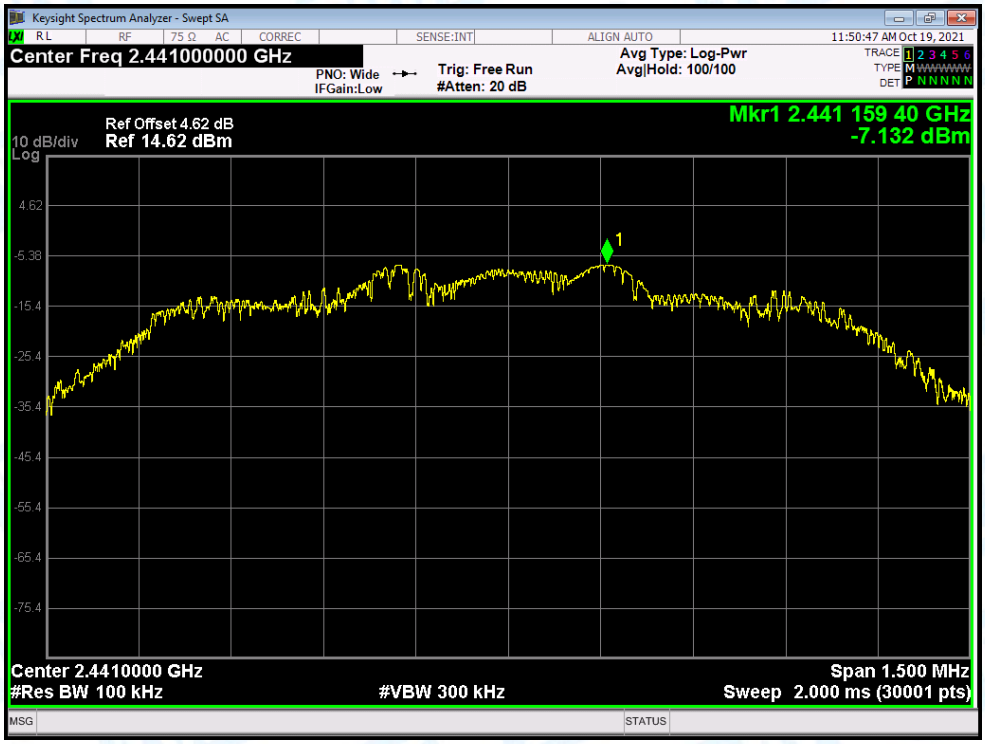
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Ref



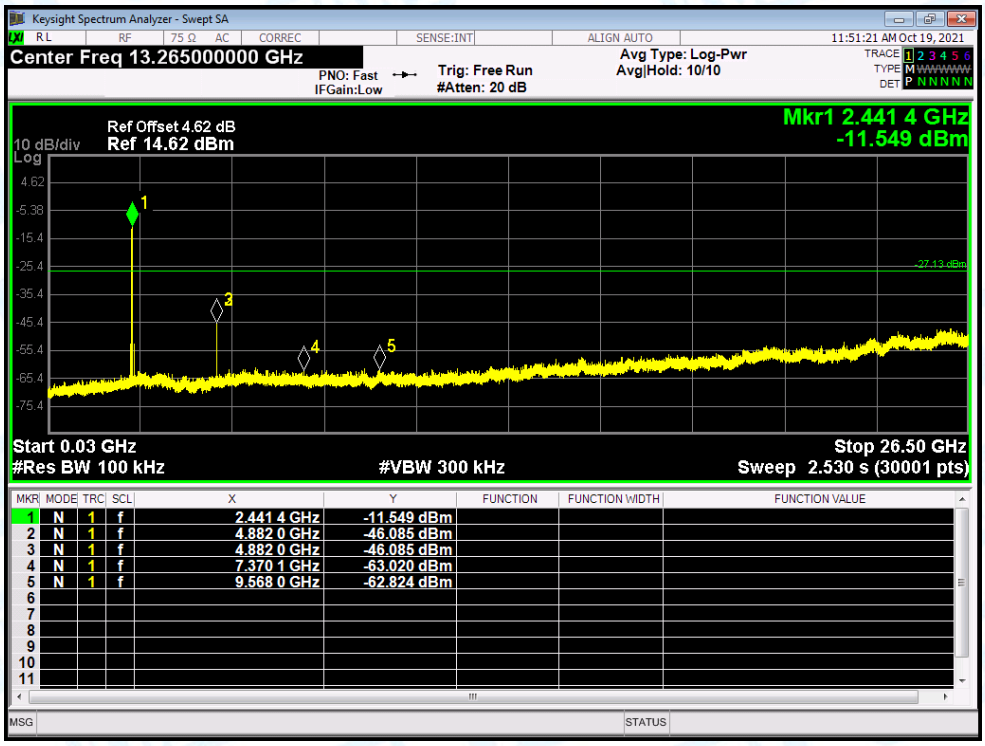
Tx. Spurious NVNT 3-DH1 2402MHz Ant1 Emission



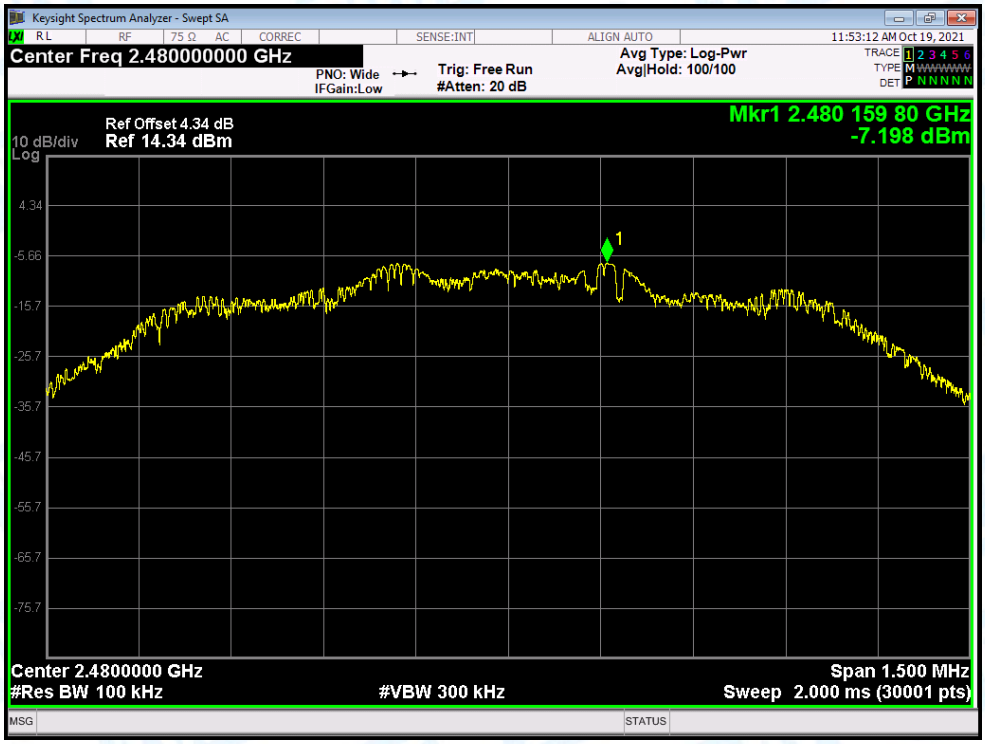
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Ref



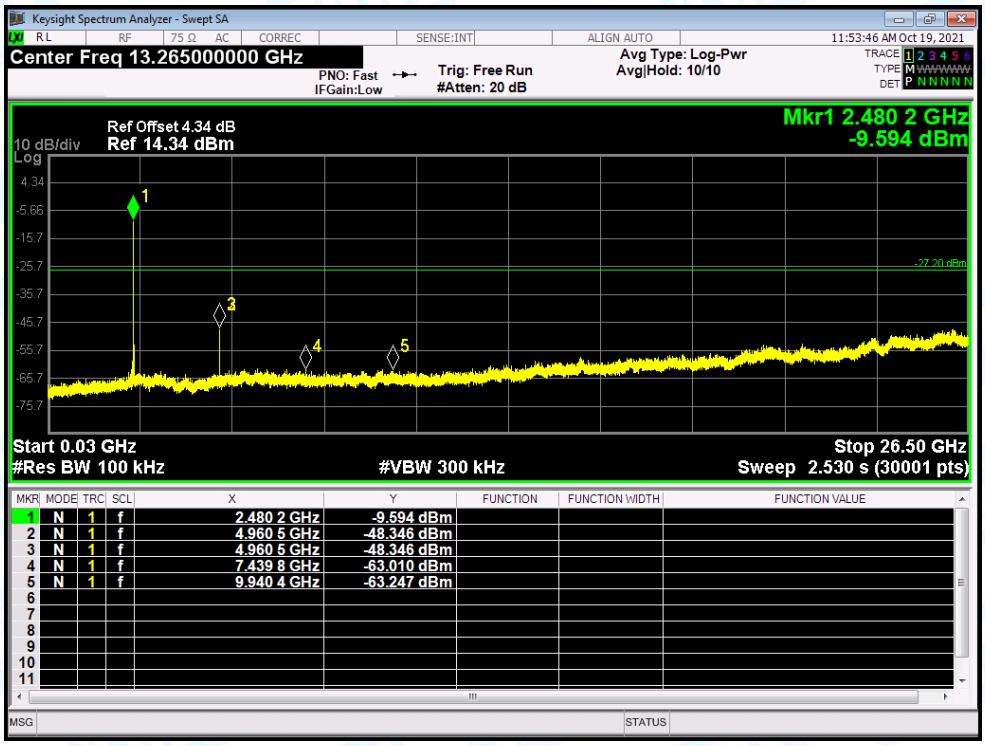
Tx. Spurious NVNT 3-DH1 2441MHz Ant1 Emission



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Ref



Tx. Spurious NVNT 3-DH1 2480MHz Ant1 Emission

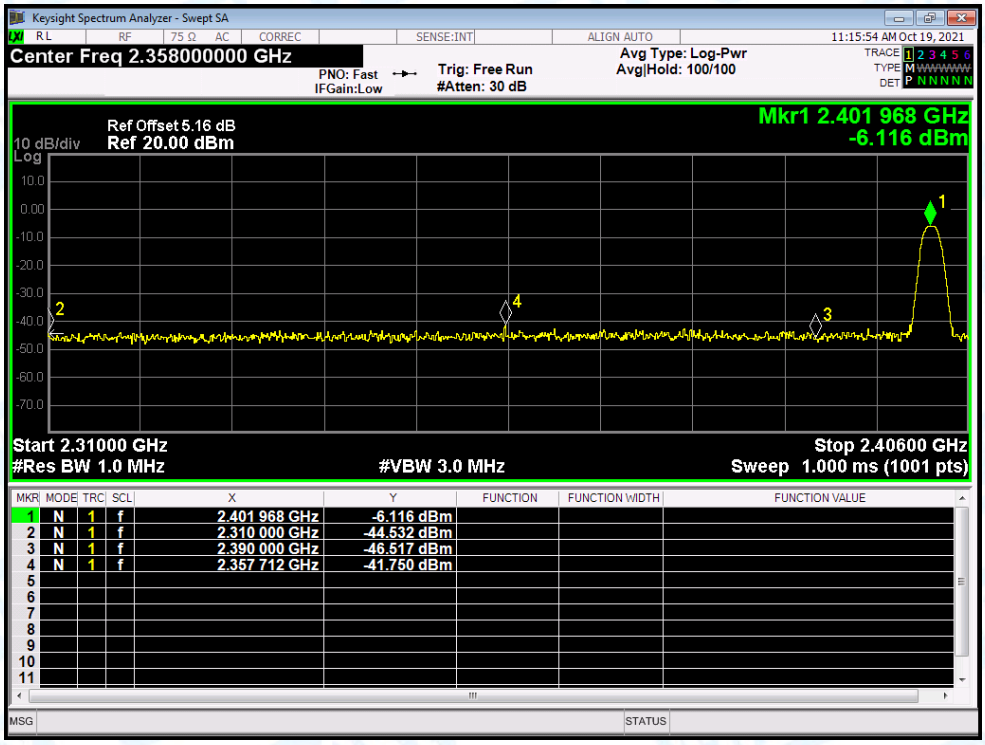


9. Restrict Band

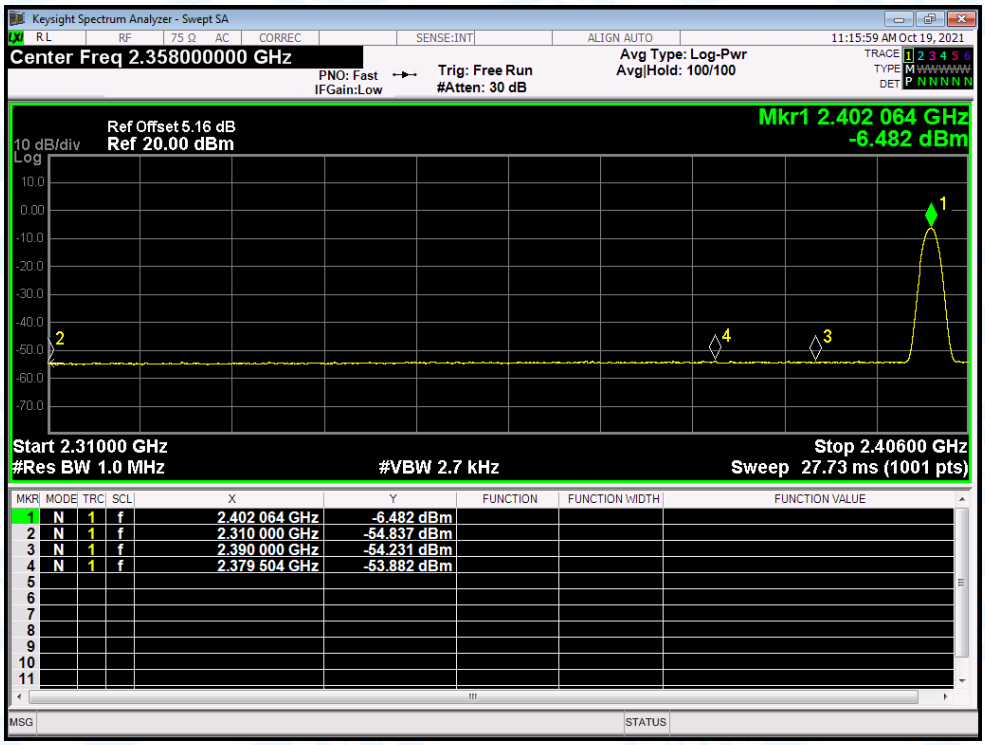
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-45.57	2	51.69	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2310	-54.64	2	42.62	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2357.712	-41.74	2	55.52	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2379.504	-53.88	2	43.38	Average	54	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-45.03	2	52.23	Peak	74	Pass
NVNT	1-DH1	2402	Ant1	No-Hopping	2390	-54.4	2	42.86	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-43.35	2	53.91	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2483.5	-54.18	2	43.08	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2487.616	-41.4	2	55.86	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2492.488	-53.63	2	43.63	Average	54	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-44.4	2	52.86	Peak	74	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	2500	-54.22	2	43.04	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-45.85	2	51.41	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2310	-55.07	2	42.19	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2359.152	-42.64	2	54.62	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2389.104	-53.82	2	43.44	Average	54	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-45.11	2	52.15	Peak	74	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	2390	-54.5	2	42.76	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-45.44	2	51.82	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2483.5	-53.65	2	43.61	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2493.88	-42.13	2	55.13	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2496.568	-53.47	2	43.79	Average	54	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-44.59	2	52.67	Peak	74	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	2500	-54.17	2	43.09	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-46.46	2	50.8	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2310	-54.88	2	42.38	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2380.752	-42.32	2	54.94	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2344.848	-53.98	2	43.28	Average	54	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-46.14	2	51.12	Peak	74	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	2390	-54.41	2	42.85	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-45.42	2	51.84	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.5	-53.24	2	44.02	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2493.184	-41.45	2	55.81	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2483.512	-53.24	2	44.02	Average	54	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-46.63	2	50.63	Peak	74	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	2500	-54.09	2	43.17	Average	54	Pass

Test Graphs

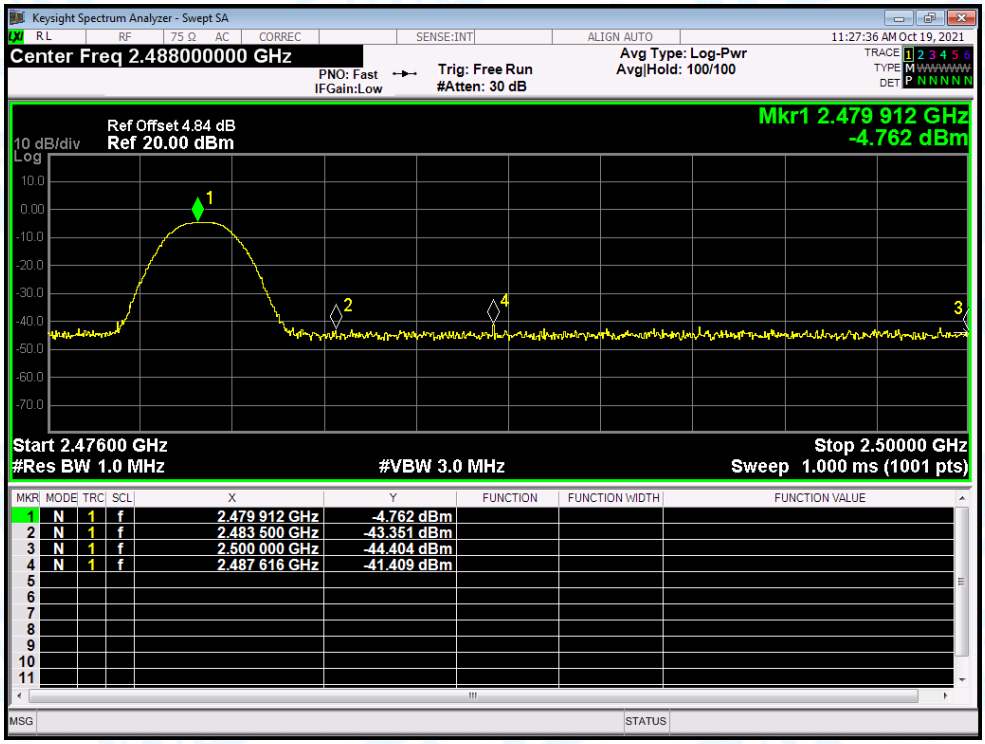
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Peak



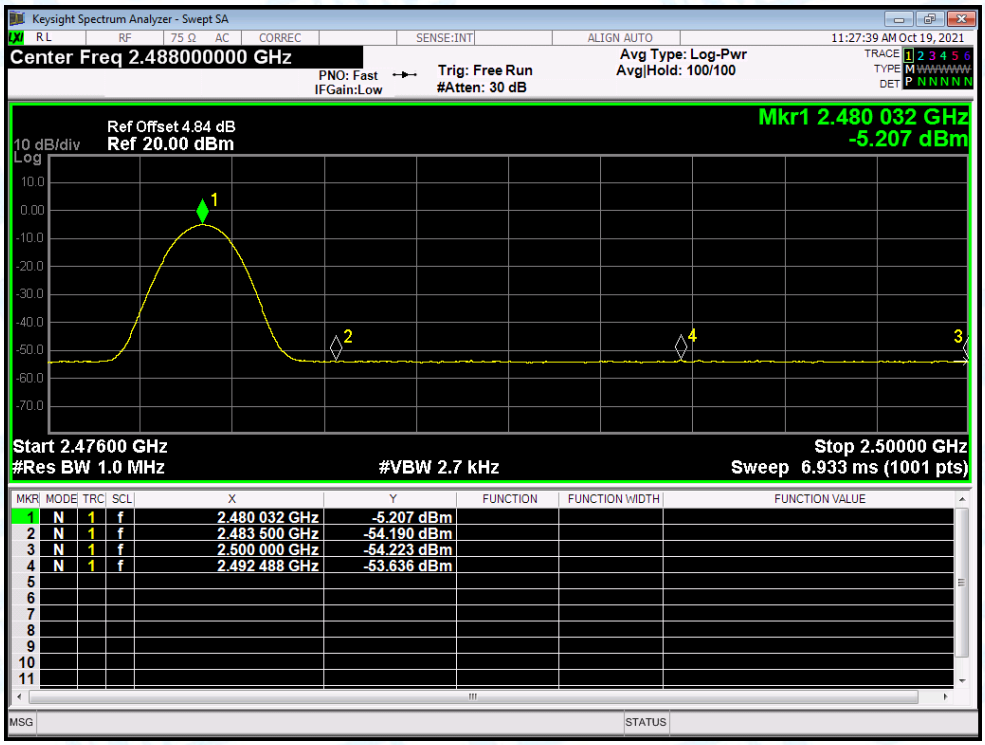
Restrict Band NVNT 1-DH1 2402MHz Ant1 No-Hopping Average



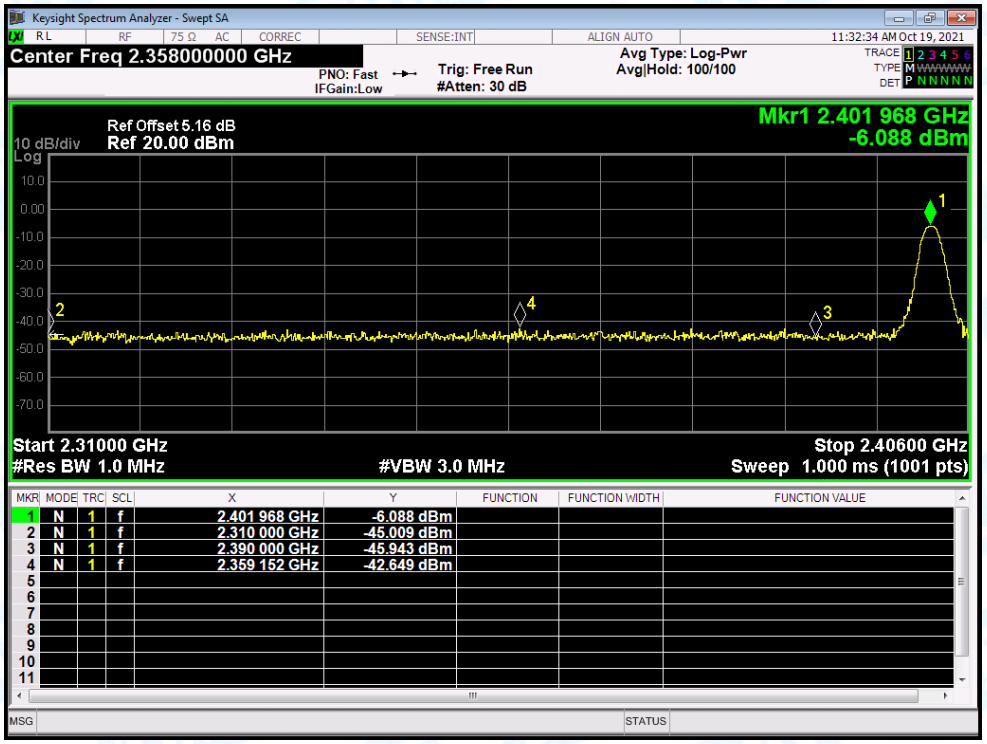
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Peak



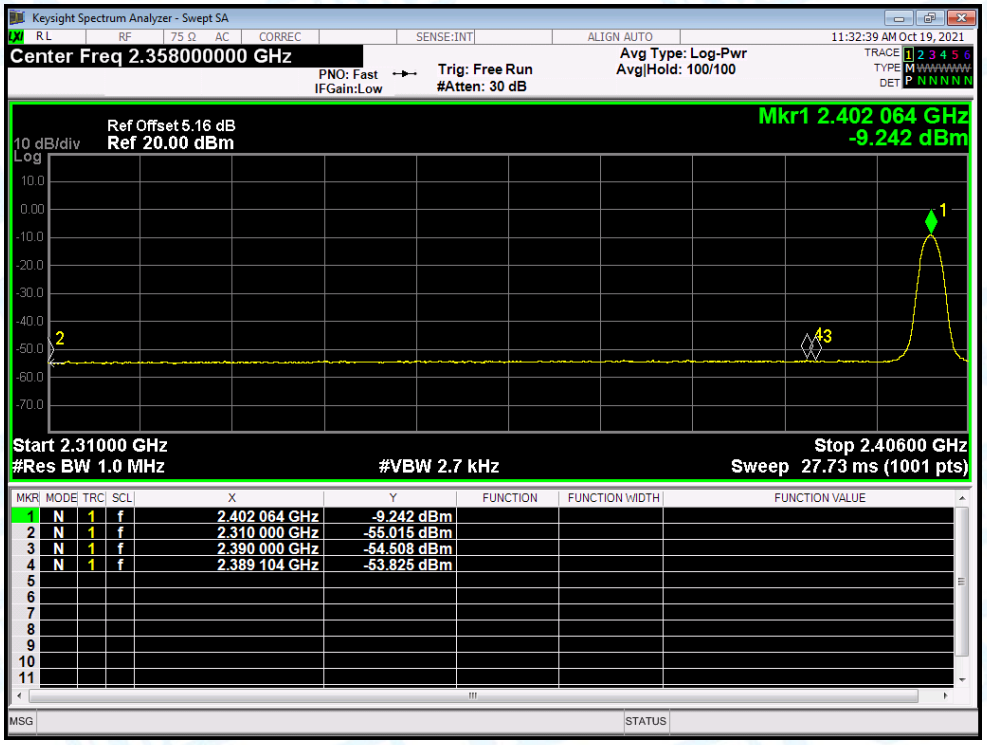
Restrict Band NVNT 1-DH1 2480MHz Ant1 No-Hopping Average



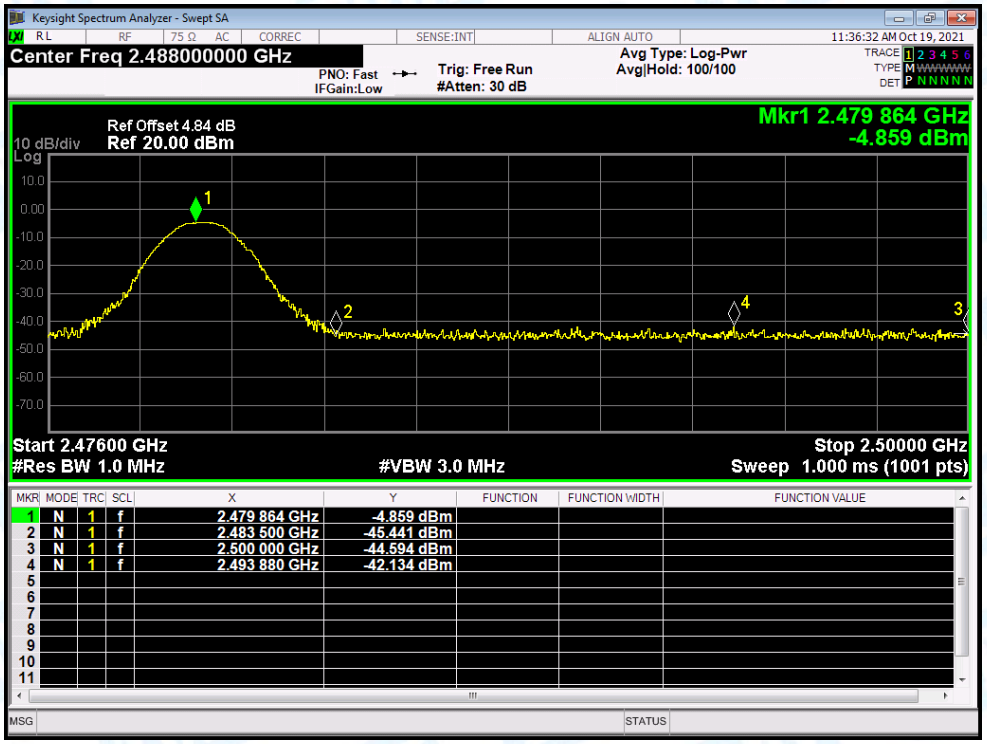
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Peak



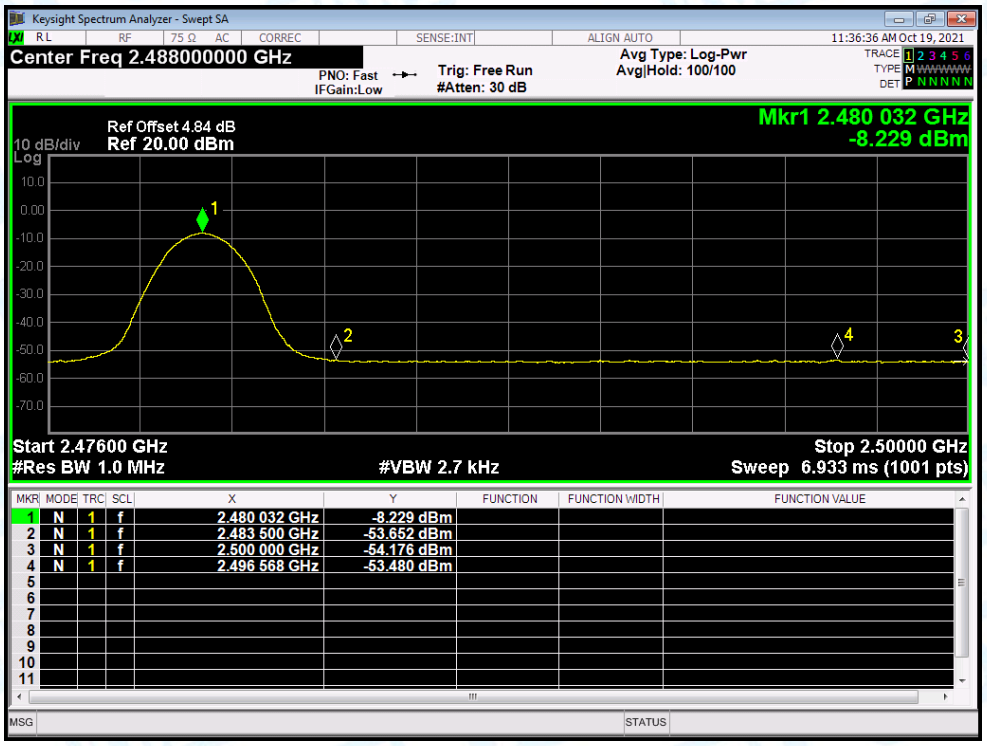
Restrict Band NVNT 2-DH1 2402MHz Ant1 No-Hopping Average



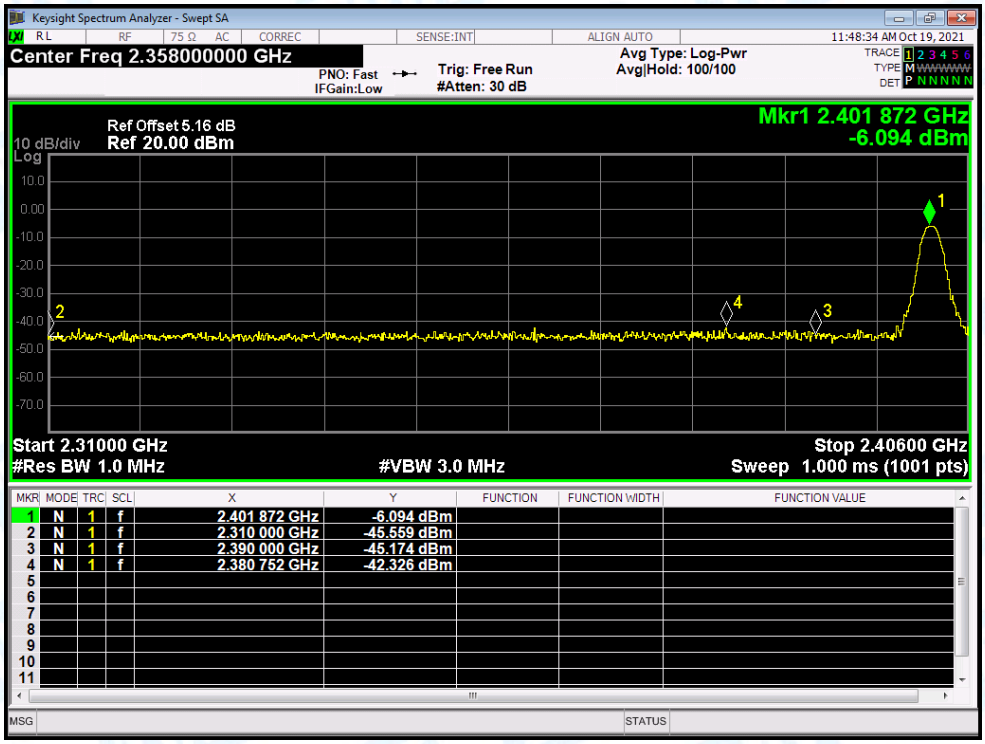
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Peak



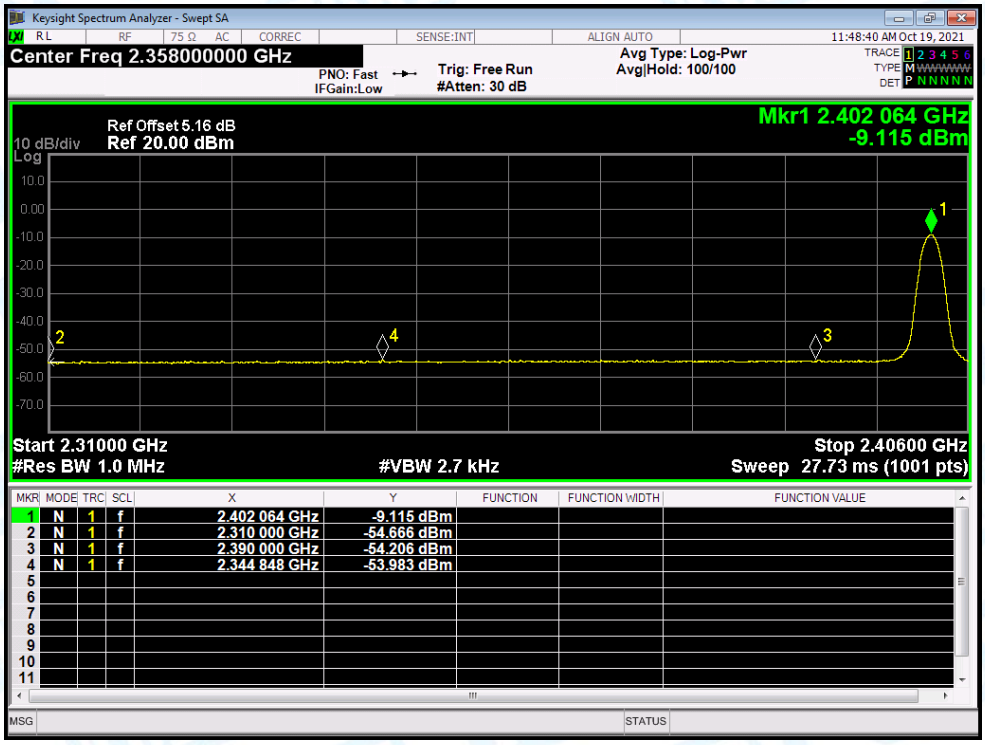
Restrict Band NVNT 2-DH1 2480MHz Ant1 No-Hopping Average



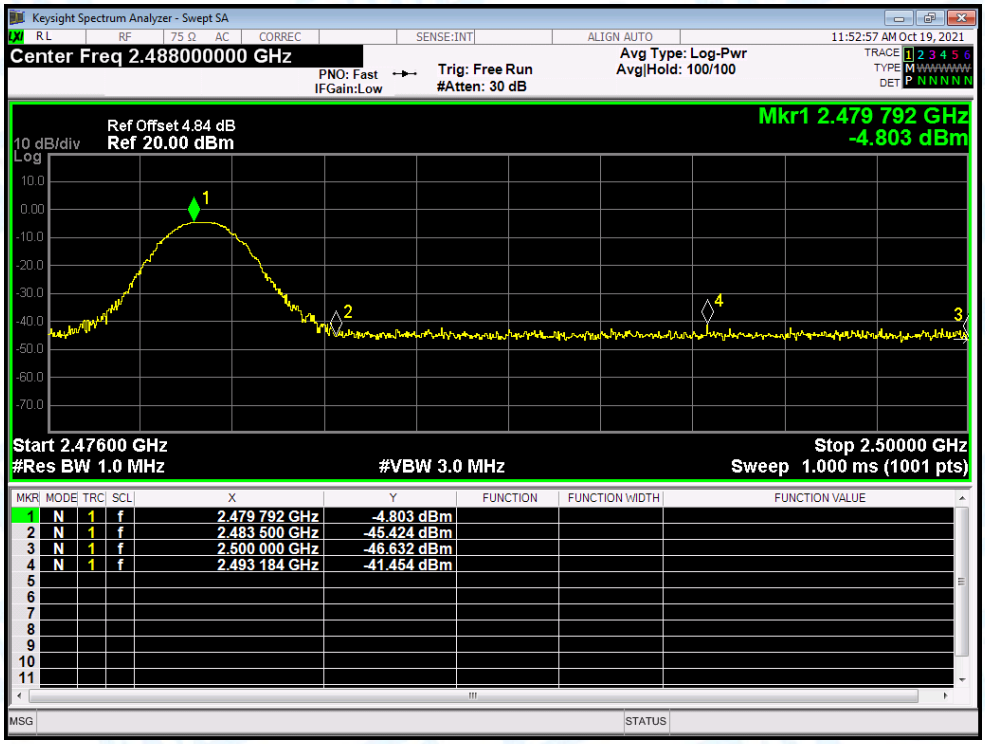
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Peak



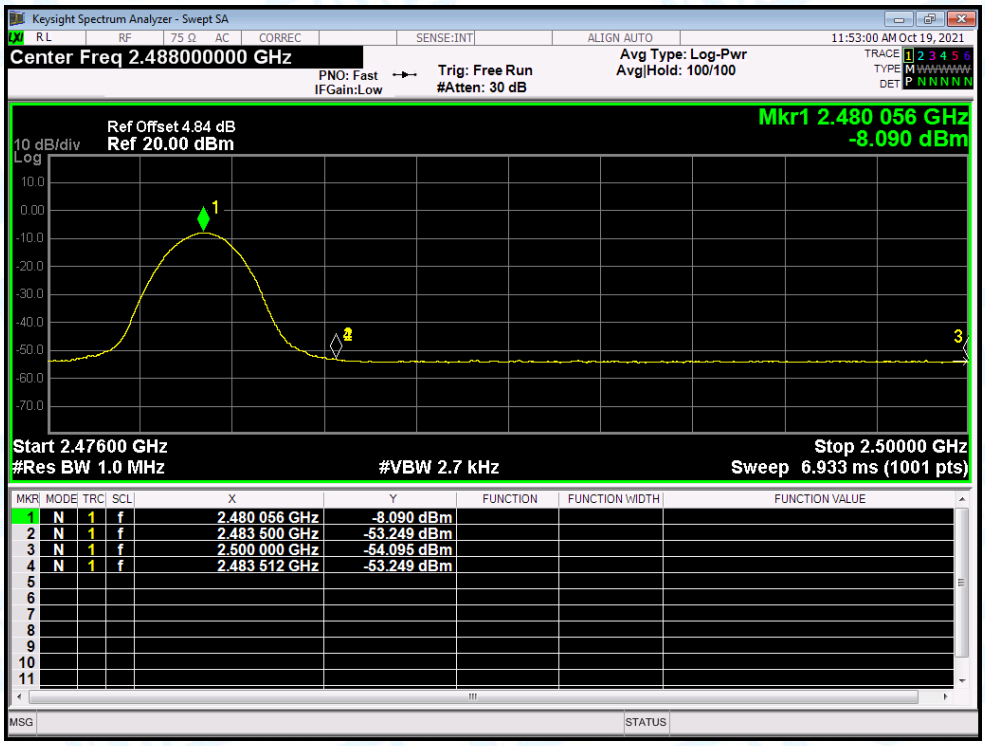
Restrict Band NVNT 3-DH1 2402MHz Ant1 No-Hopping Average



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



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

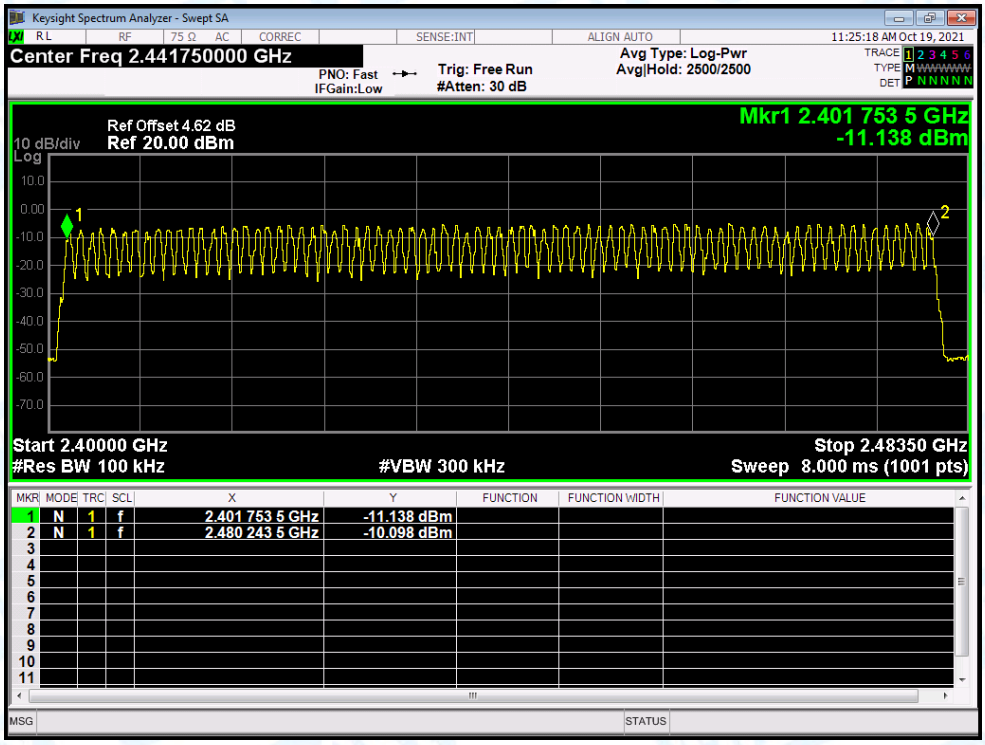


10. Number of Hopping Channel

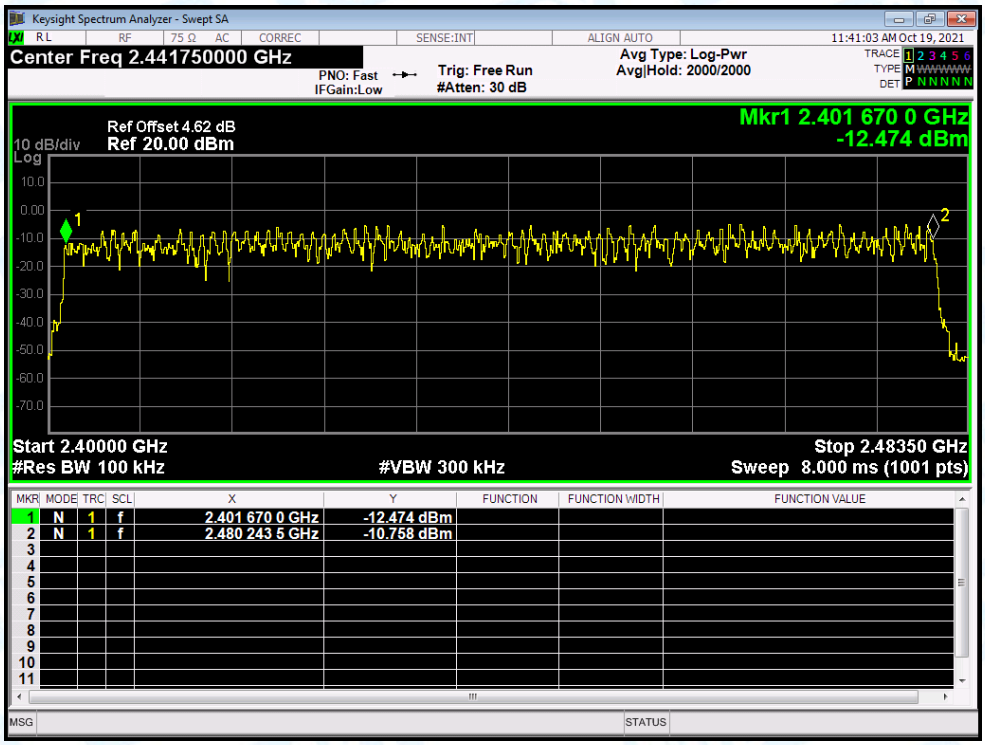
Condition	Mode	Antenna	Hopping Number	Limit	Verdict
NVNT	1-DH1	Ant1	79	15	Pass
NVNT	2-DH1	Ant1	79	15	Pass
NVNT	3-DH1	Ant1	79	15	Pass

Test Graphs

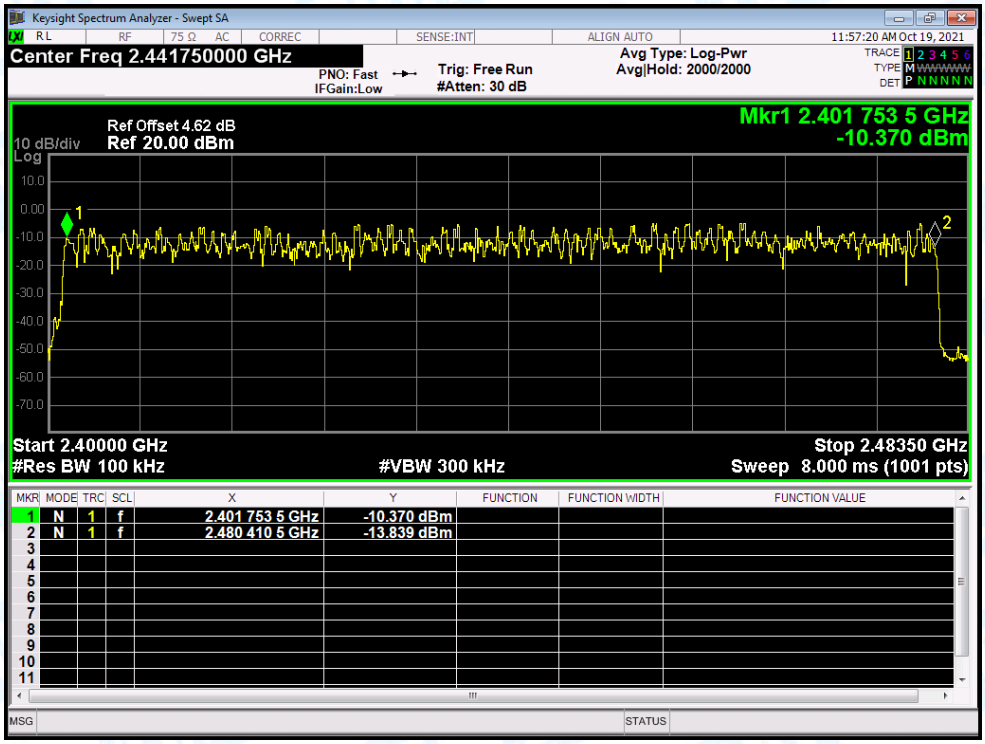
Hopping No. NVNT 1-DH1 2441MHz Ant1



Hopping No. NVNT 2-DH1 2441MHz Ant1



Hopping No. NVNT 3-DH1 2441MHz Ant1

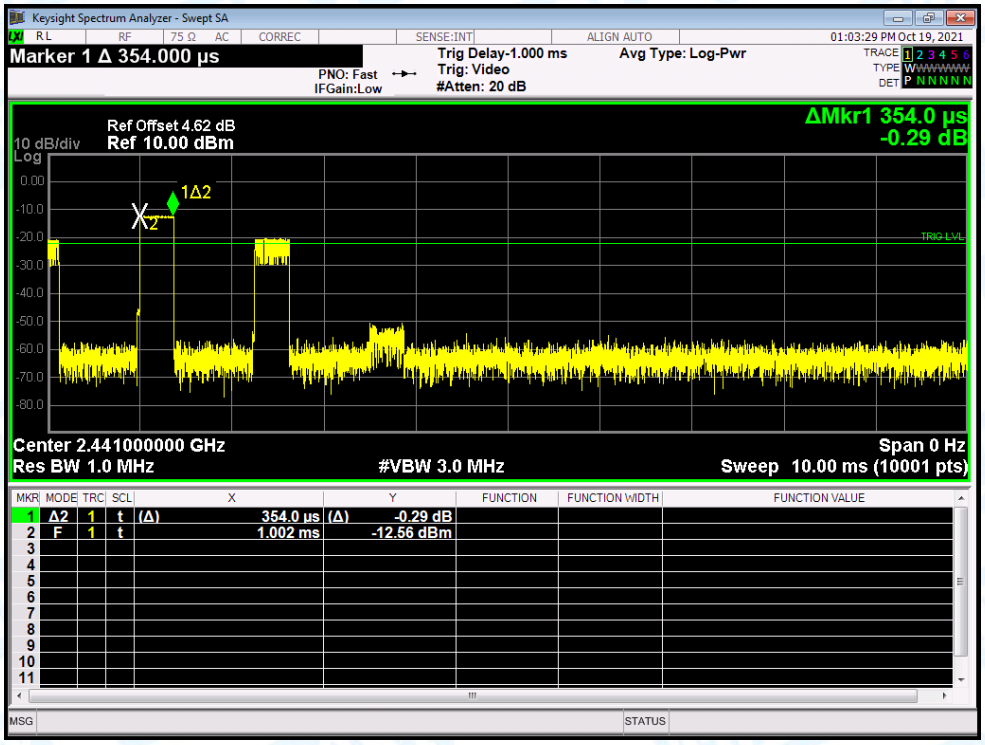


11. Dwell Time

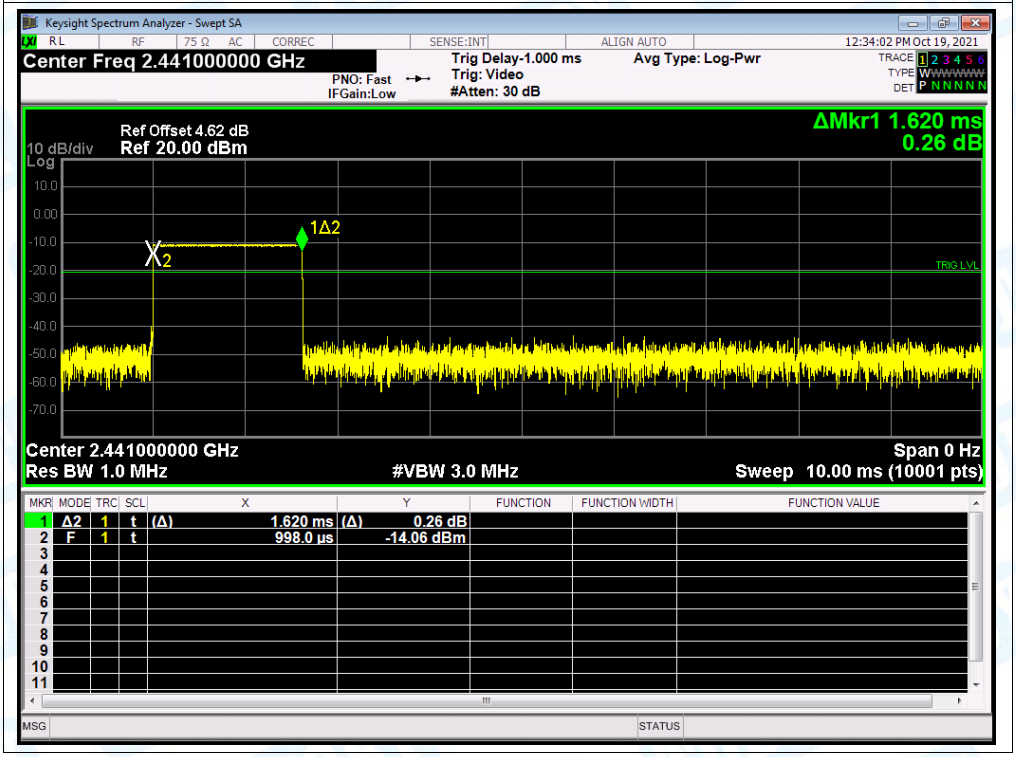
Condition	Mode	Frequency (MHz)	Antenna	Pulse Time (ms)	Total Dwell Time (ms)	Period Time (ms)	Limit (ms)	Verdict
NVNT	1-DH1	2441	Ant1	0.354	36.48	31600	400	Pass
NVNT	1-DH3	2441	Ant1	1.62	259.2	31600	400	Pass
NVNT	1-DH5	2441	Ant1	2.869	306.027	31600	400	Pass
NVNT	2-DH1	2441	Ant1	0.356	39.68	31600	400	Pass
NVNT	2-DH3	2441	Ant1	1.632	261.12	31600	400	Pass
NVNT	2-DH5	2441	Ant1	2.881	307.307	31600	400	Pass
NVNT	3-DH1	2441	Ant1	0.371	39.04	31600	400	Pass
NVNT	3-DH3	2441	Ant1	1.631	260.96	31600	400	Pass
NVNT	3-DH5	2441	Ant1	2.882	307.413	31600	400	Pass

Test Graphs

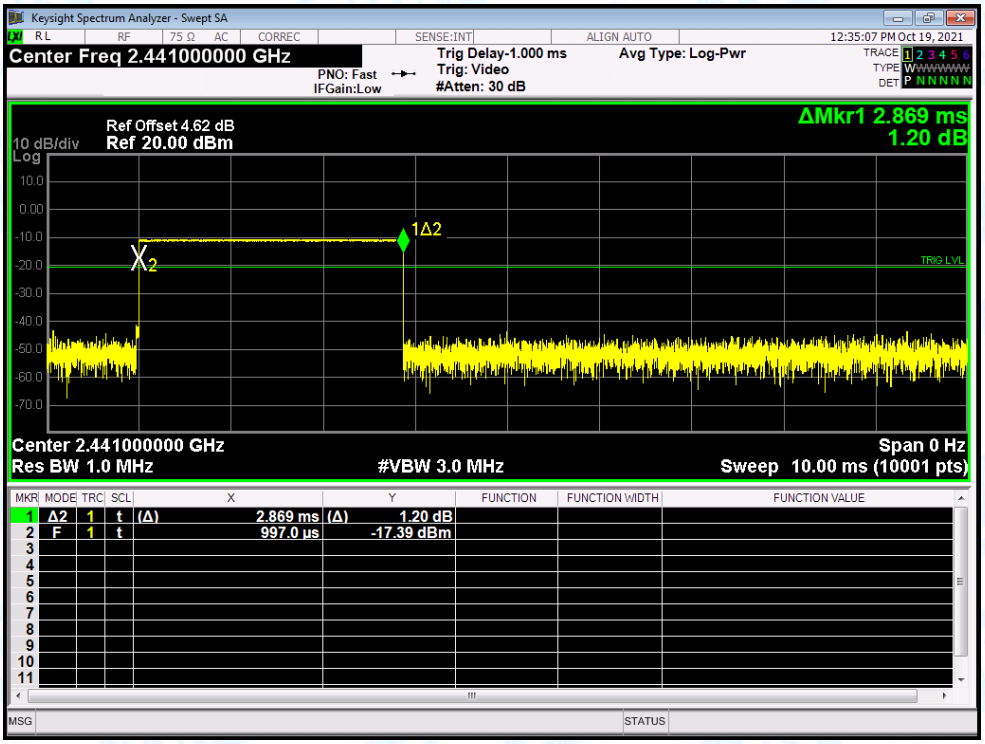
Dwell NVNT 1-DH1 2441MHz Ant1



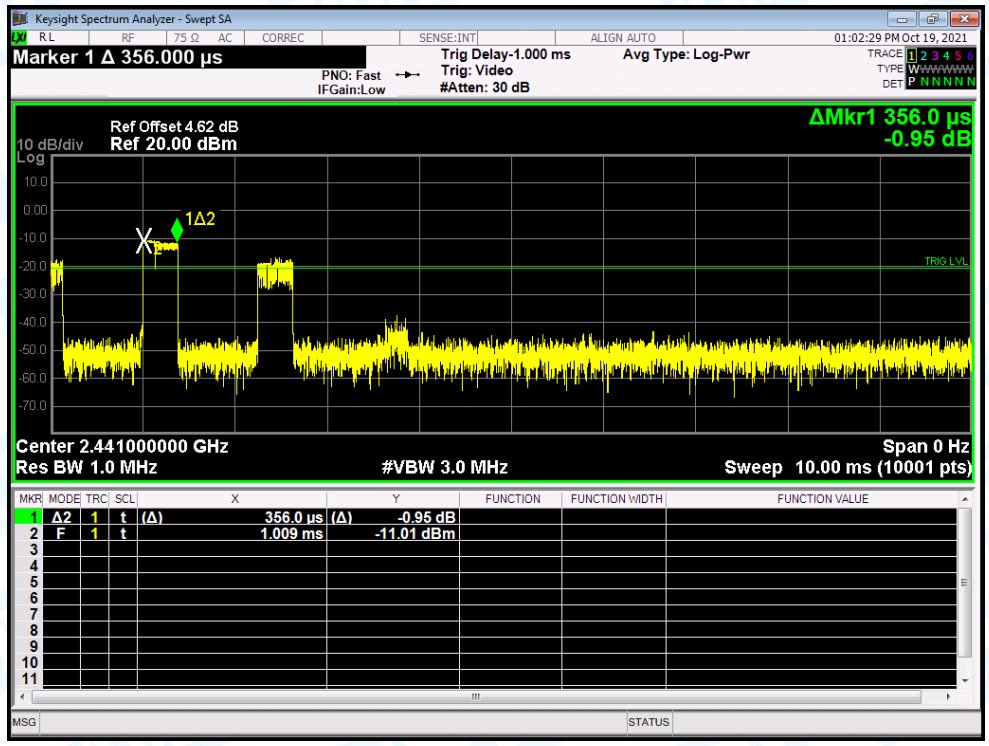
Dwell NVNT 1-DH3 2441MHz Ant1



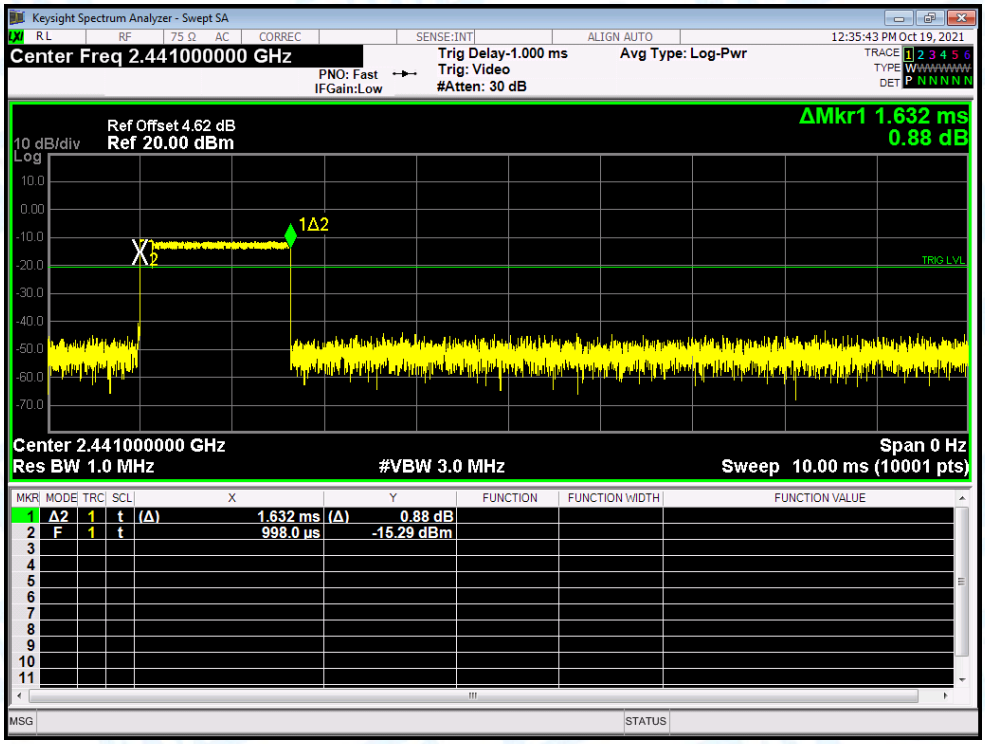
Dwell NVNT 1-DH5 2441MHz Ant1



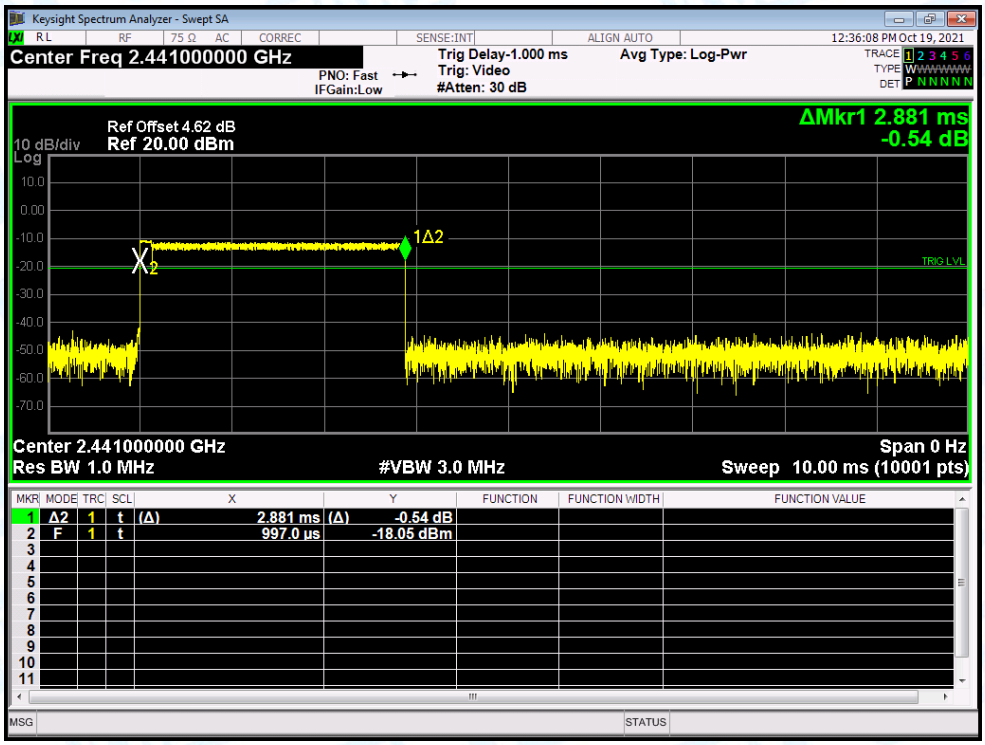
Dwell NVNT 2-DH1 2441MHz Ant1



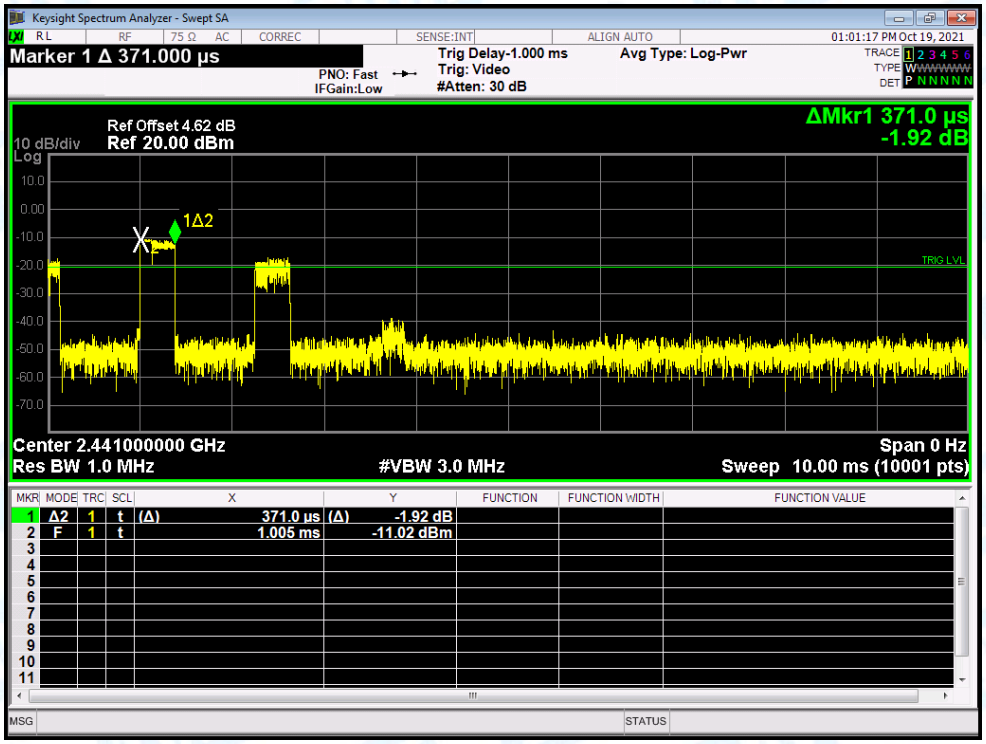
Dwell NVNT 2-DH3 2441MHz Ant1



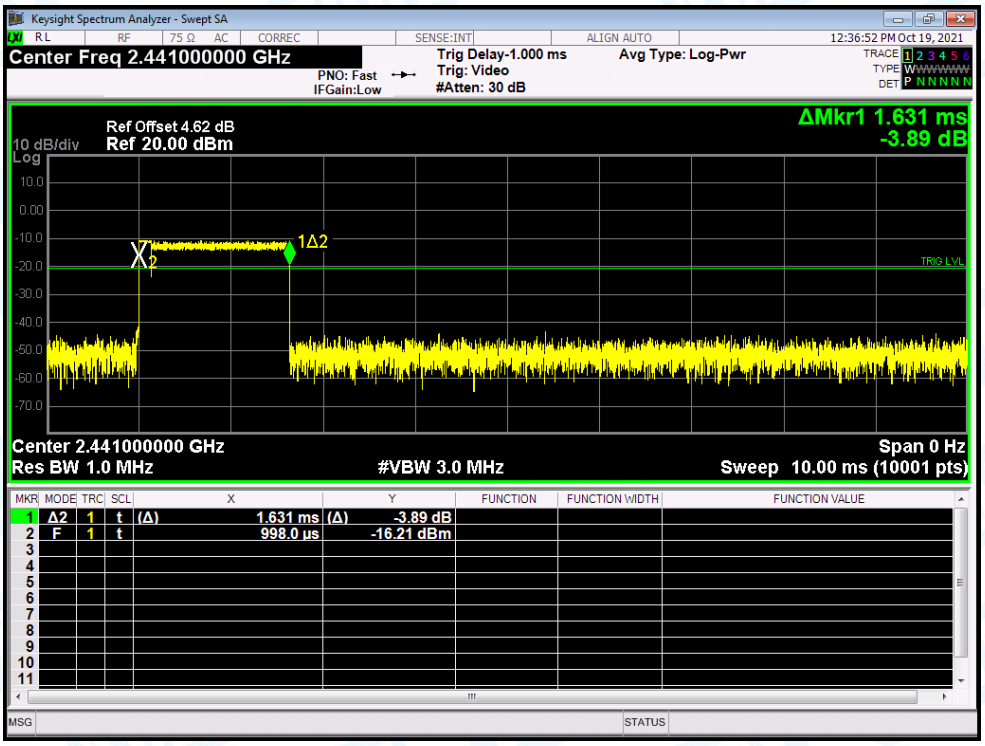
Dwell NVNT 2-DH5 2441MHz Ant1



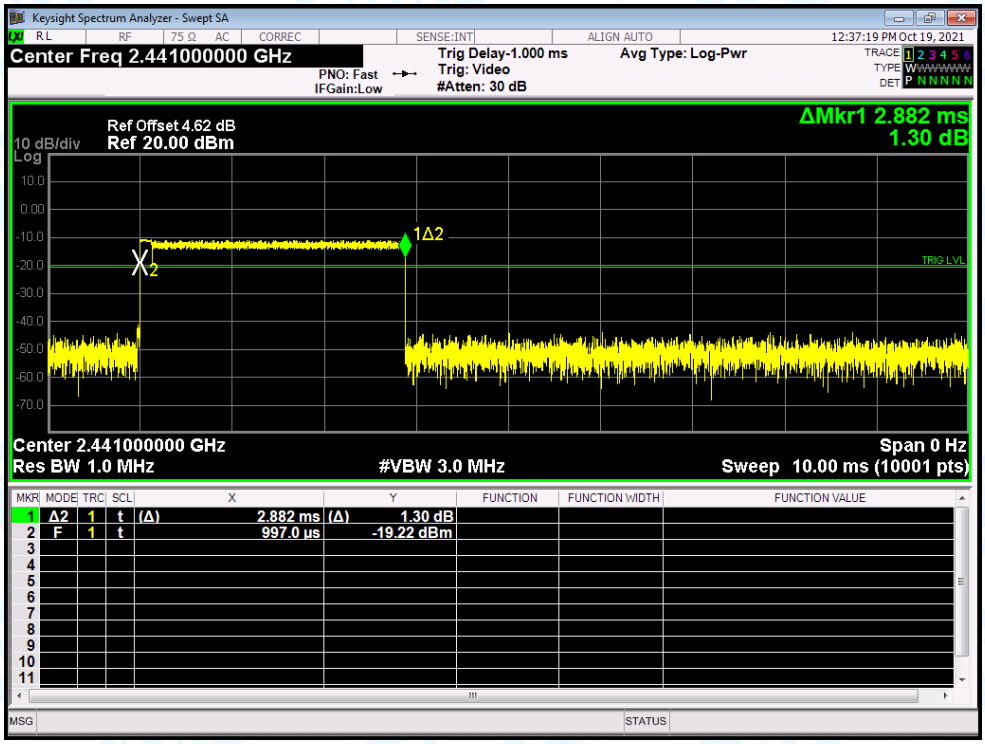
Dwell NVNT 3-DH1 2441MHz Ant1



Dwell NVNT 3-DH3 2441MHz Ant1



Dwell NVNT 3-DH5 2441MHz Ant1



-----End of the report-----