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

General Description of EUT	
Product Name:	Smartwatch
Test Model:	B3
Sample ID:	202311-0053-1-2#
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 3.7V
Test Engineer:	Zhou zhen
Note: For a more detailed features description, please refer to the report TBR-C-202311-0053-31 The report only show the worst case data.	

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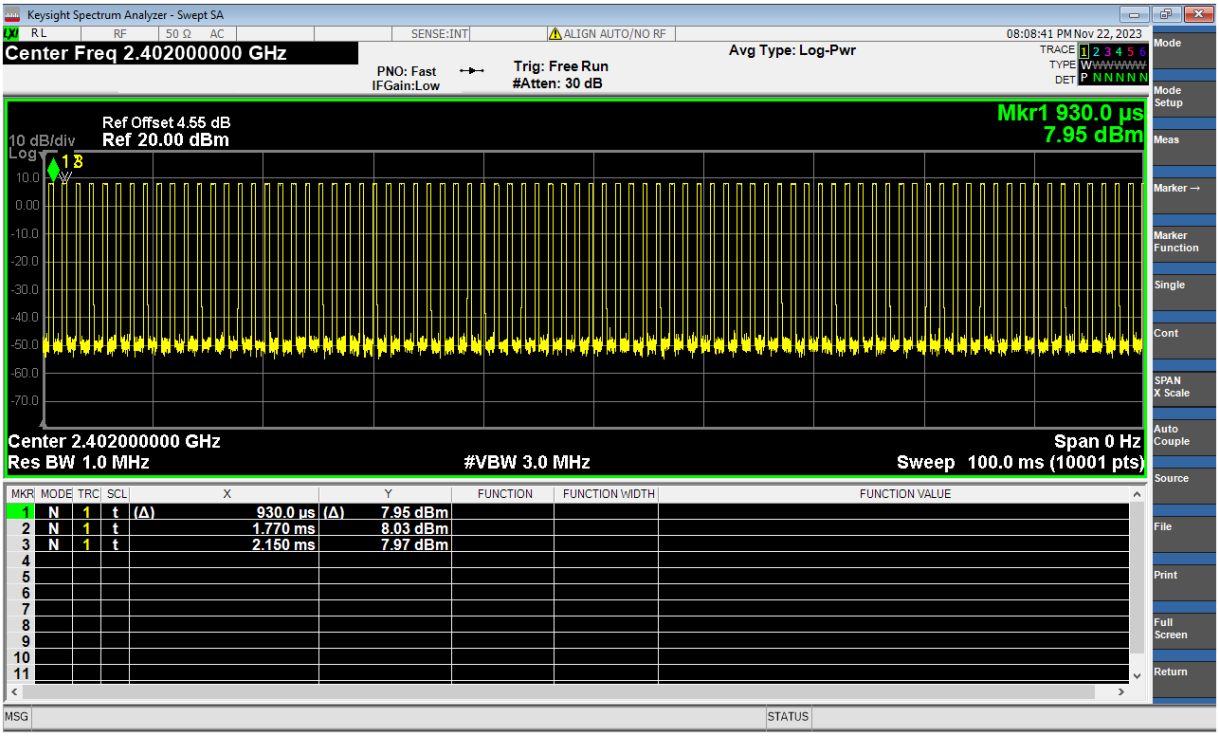
1. Duty Cycle

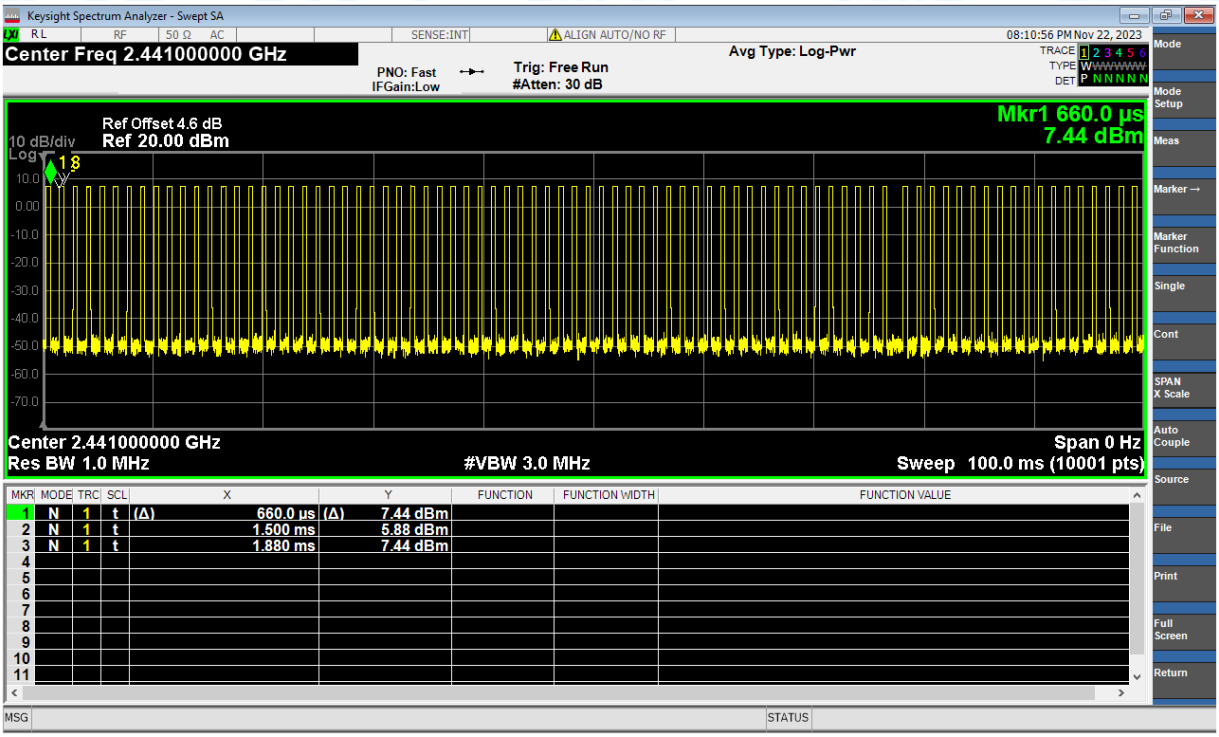
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2441	Ant1	31.15	5.07	2.63
NVNT	1-DH1	2480	Ant1	30.89	5.1	2.63
NVNT	2-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	2-DH1	2441	Ant1	31.45	5.02	2.56
NVNT	2-DH1	2480	Ant1	31.45	5.02	2.56
NVNT	3-DH1	2402	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2441	Ant1	31.71	4.99	2.56
NVNT	3-DH1	2480	Ant1	31.45	5.02	2.56

Test Graphs

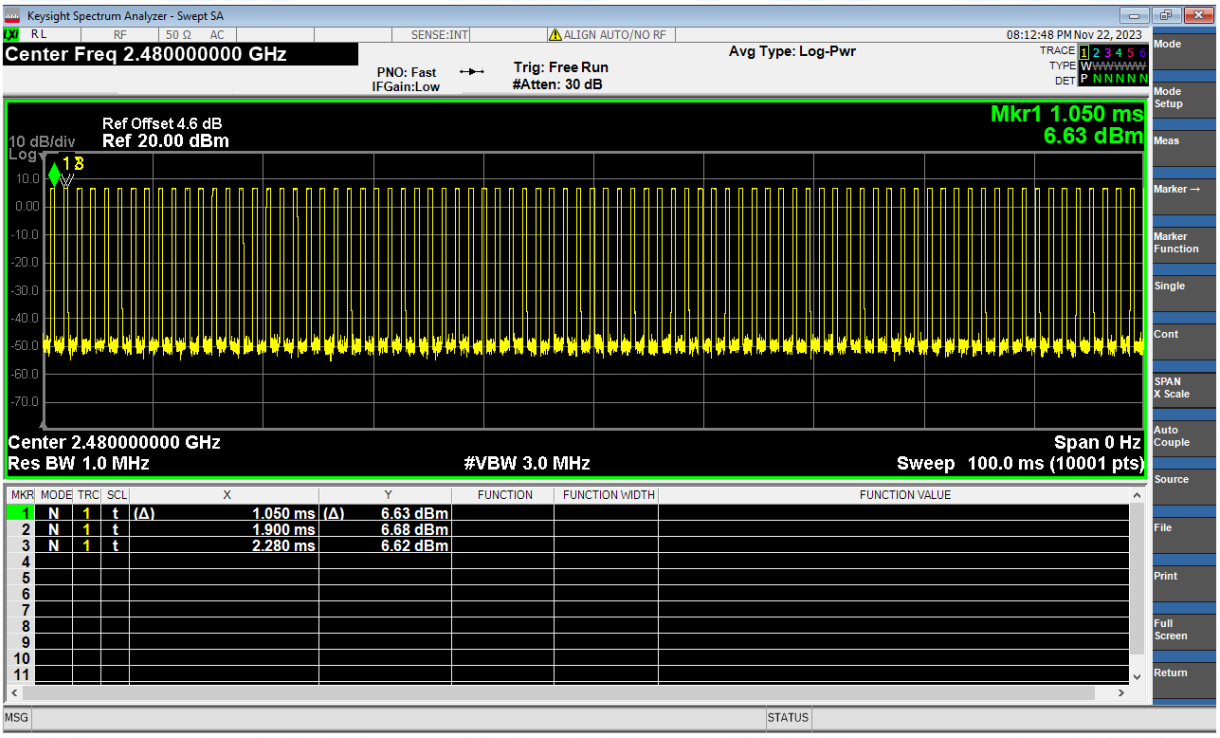
Duty Cycle NVNT 1-DH1 2402MHz Ant1



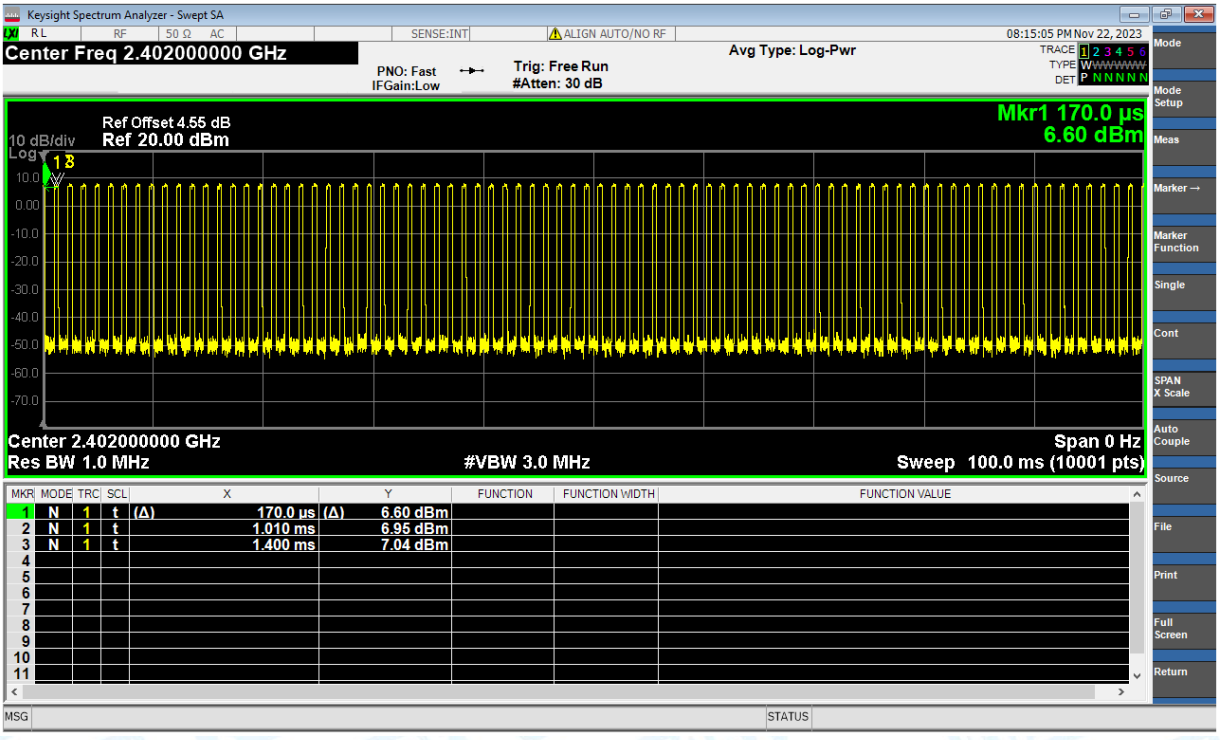
Duty Cycle NVNT 1-DH1 2441MHz Ant1



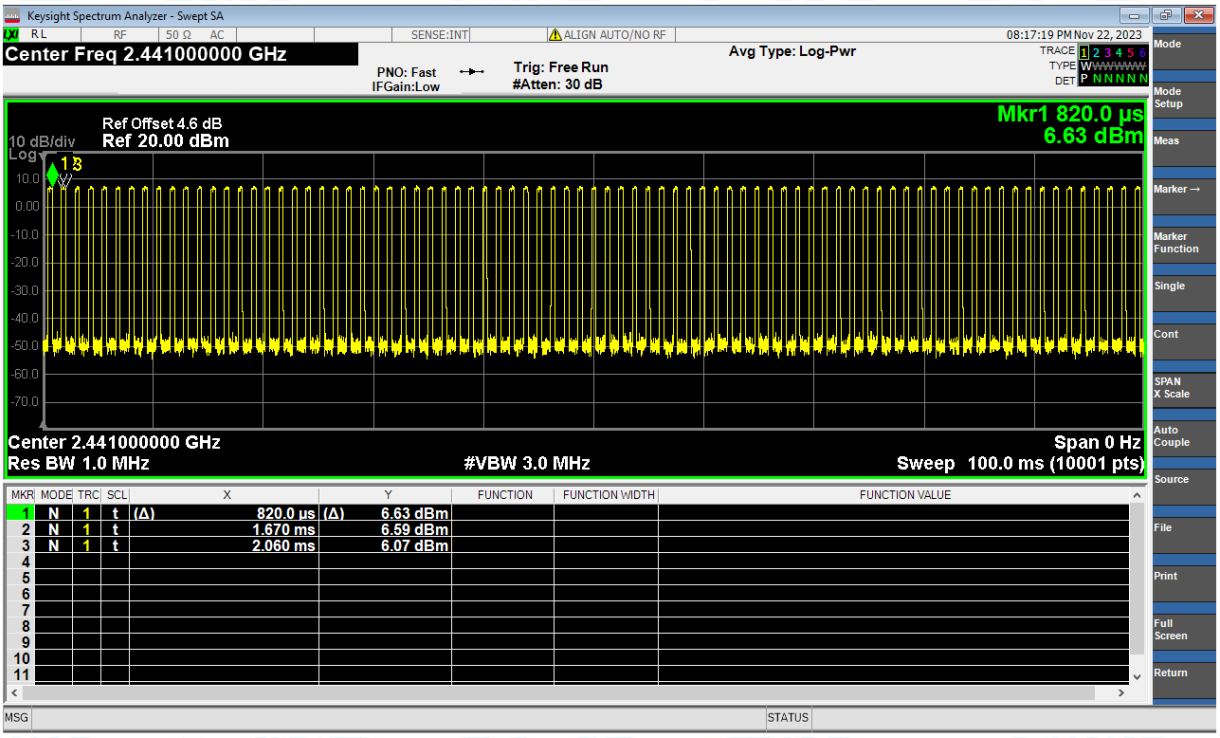
Duty Cycle NVNT 1-DH1 2480MHz Ant1



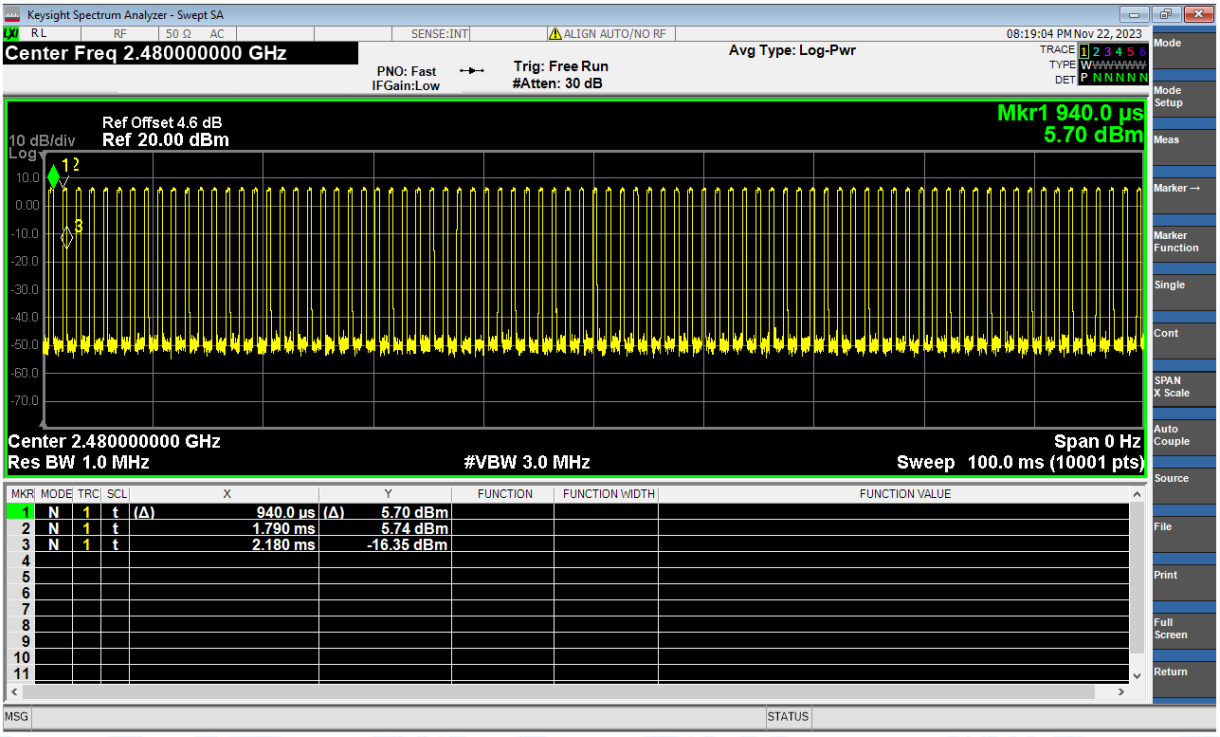
Duty Cycle NVNT 2-DH1 2402MHz Ant1



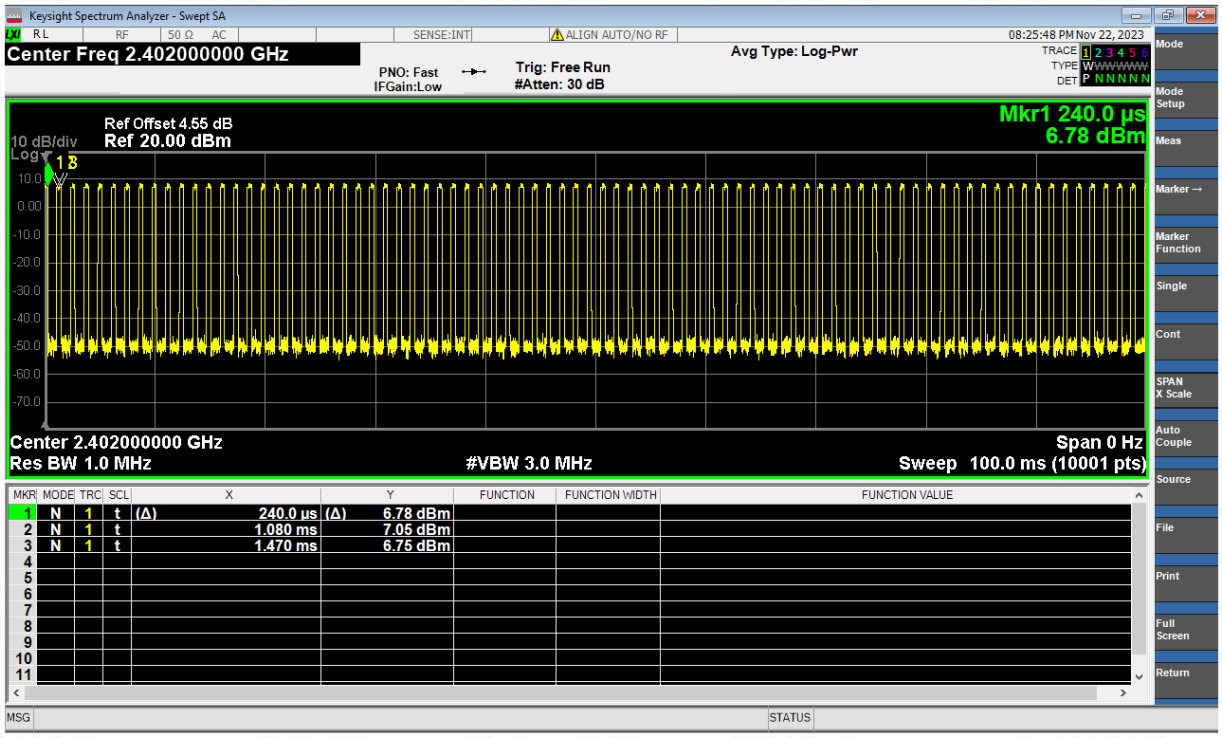
Duty Cycle NVNT 2-DH1 2441MHz Ant1



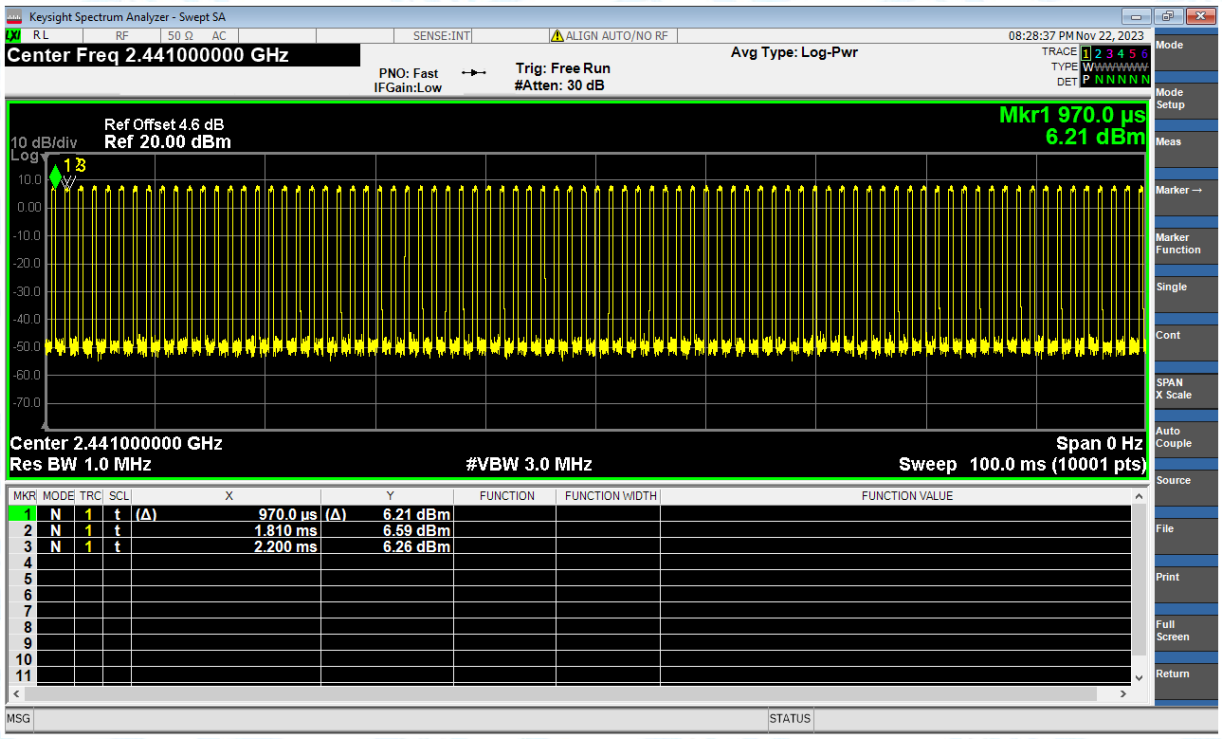
Duty Cycle NVNT 2-DH1 2480MHz Ant1



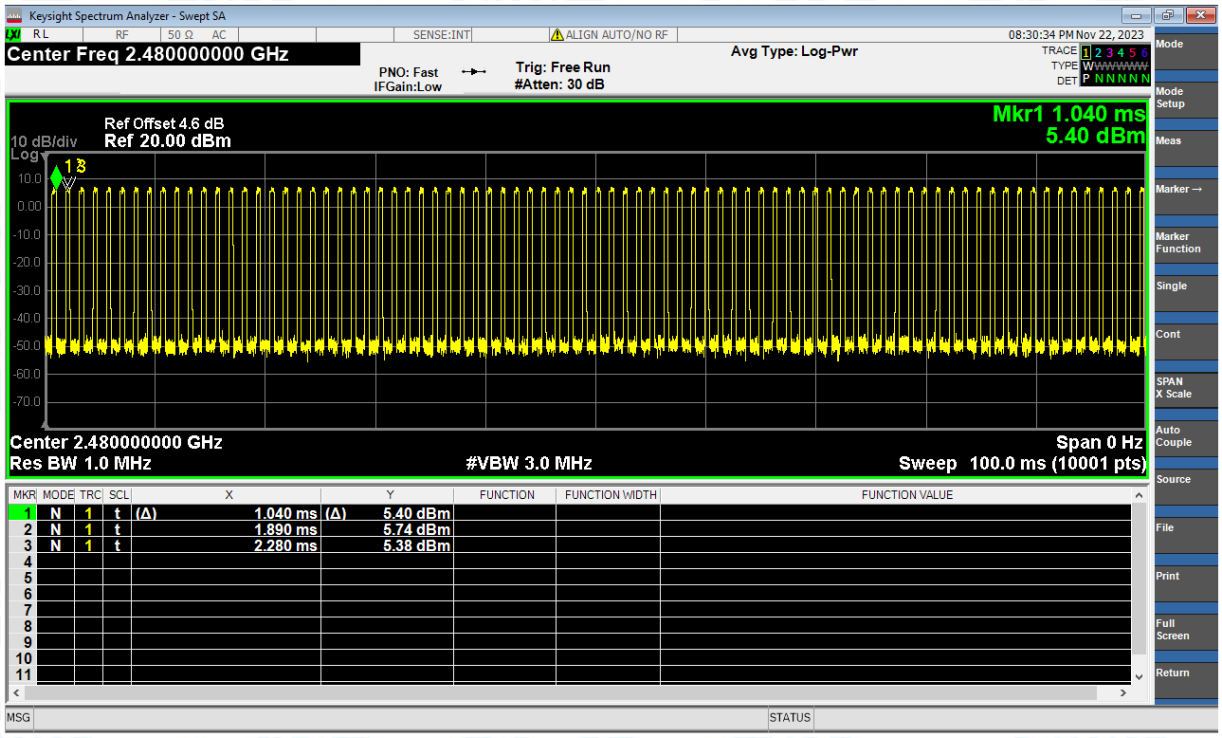
Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1



Duty Cycle NVNT 3-DH1 2480MHz Ant1

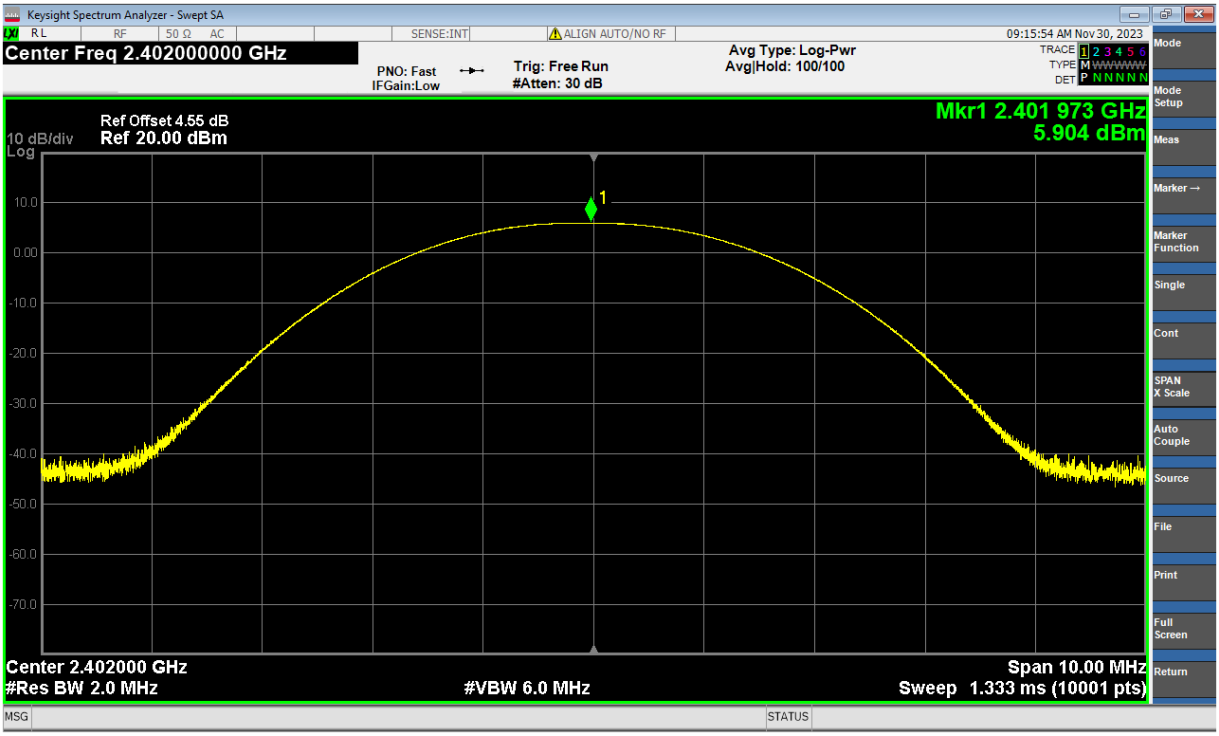


2. Maximum Conducted Output Power

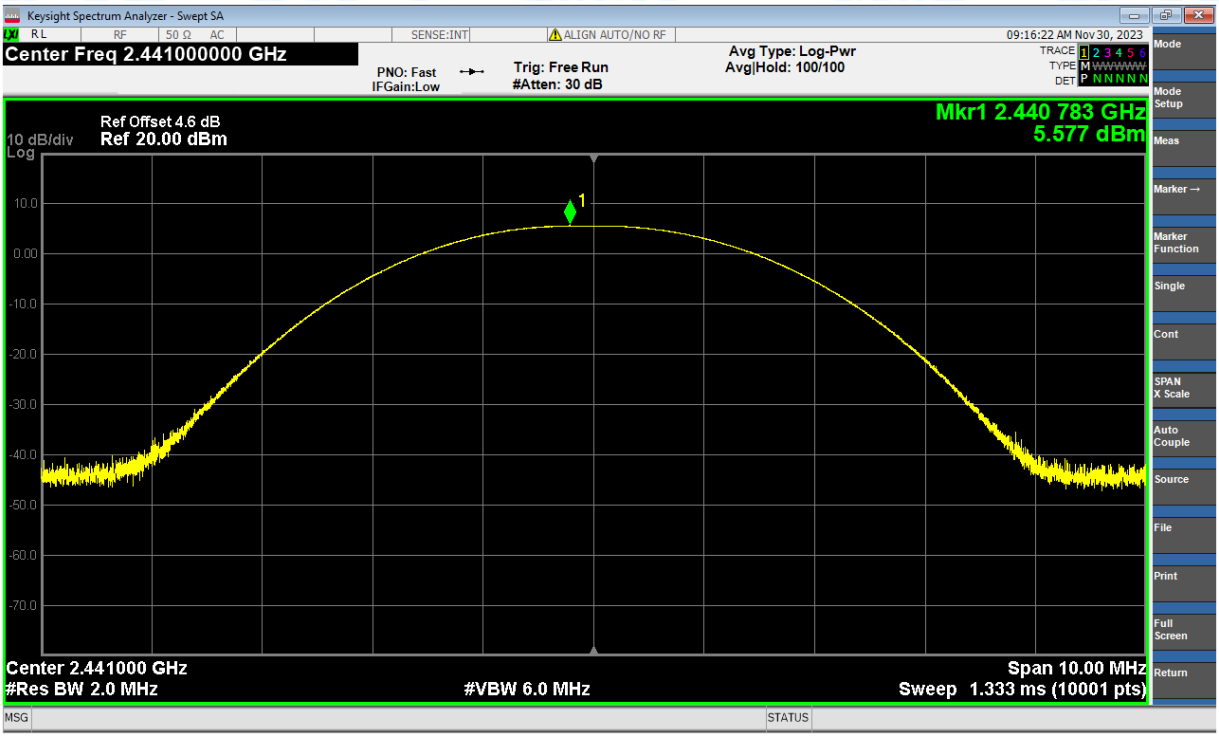
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	5.904	21	Pass
NVNT	1-DH1	2441	Ant1	5.577	21	Pass
NVNT	1-DH1	2480	Ant1	4.673	21	Pass
NVNT	2-DH1	2402	Ant1	6.275	21	Pass
NVNT	2-DH1	2441	Ant1	5.871	21	Pass
NVNT	2-DH1	2480	Ant1	4.901	21	Pass
NVNT	3-DH1	2402	Ant1	6.77	21	Pass
NVNT	3-DH1	2441	Ant1	6.332	21	Pass
NVNT	3-DH1	2480	Ant1	5.499	21	Pass

Test Graphs

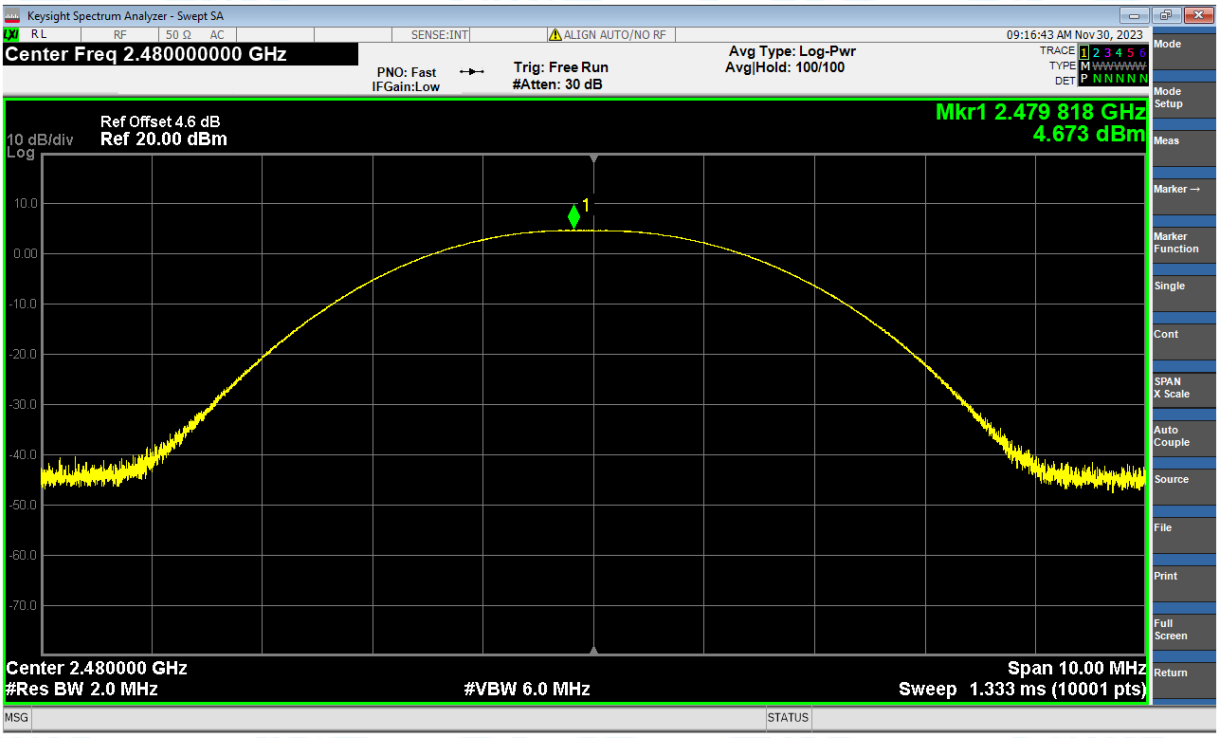
Power NVNT 1-DH1 2402MHz Ant1



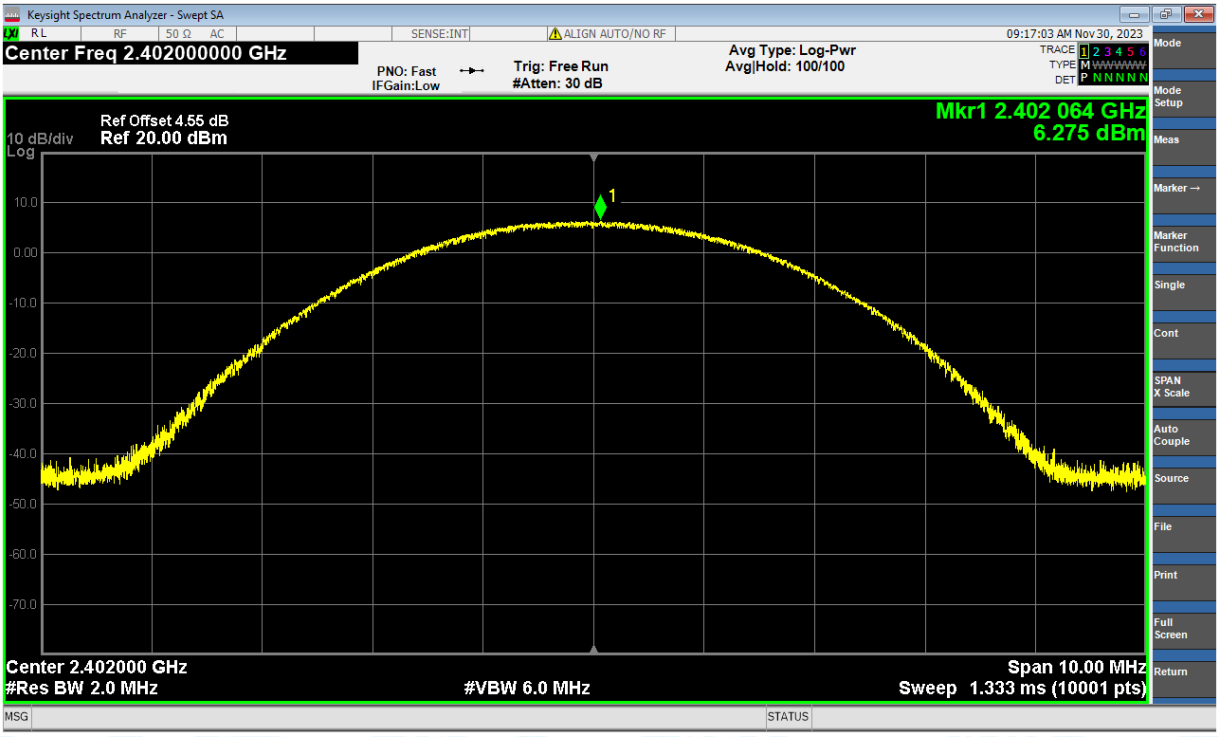
Power NVNT 1-DH1 2441MHz Ant1



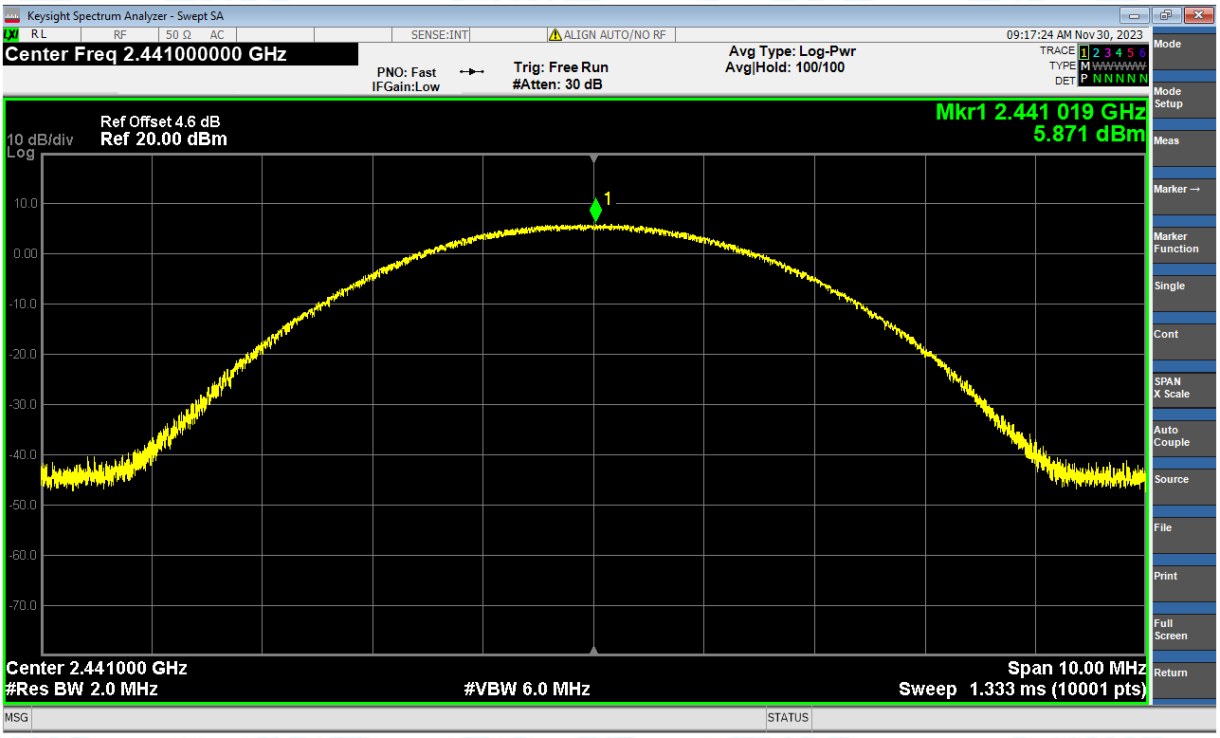
Power NVNT 1-DH1 2480MHz Ant1



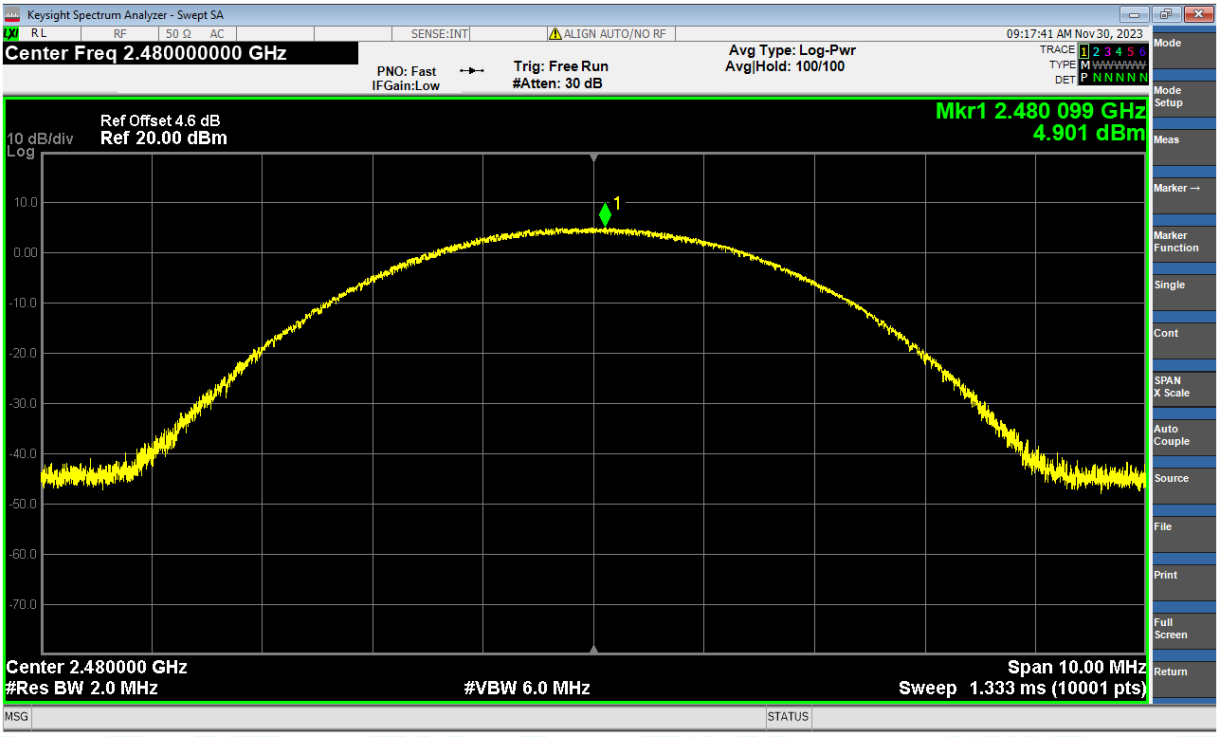
Power NVNT 2-DH1 2402MHz Ant1



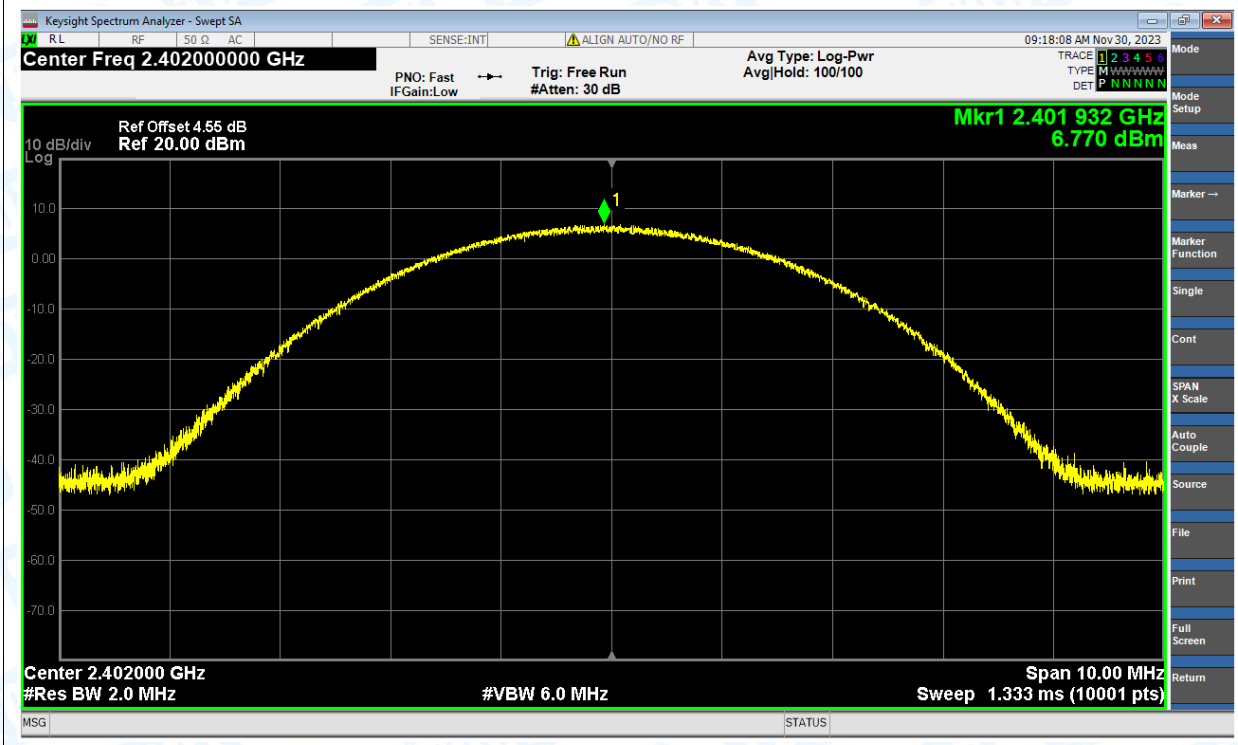
Power NVNT 2-DH1 2441MHz Ant1



Power NVNT 2-DH1 2480MHz Ant1

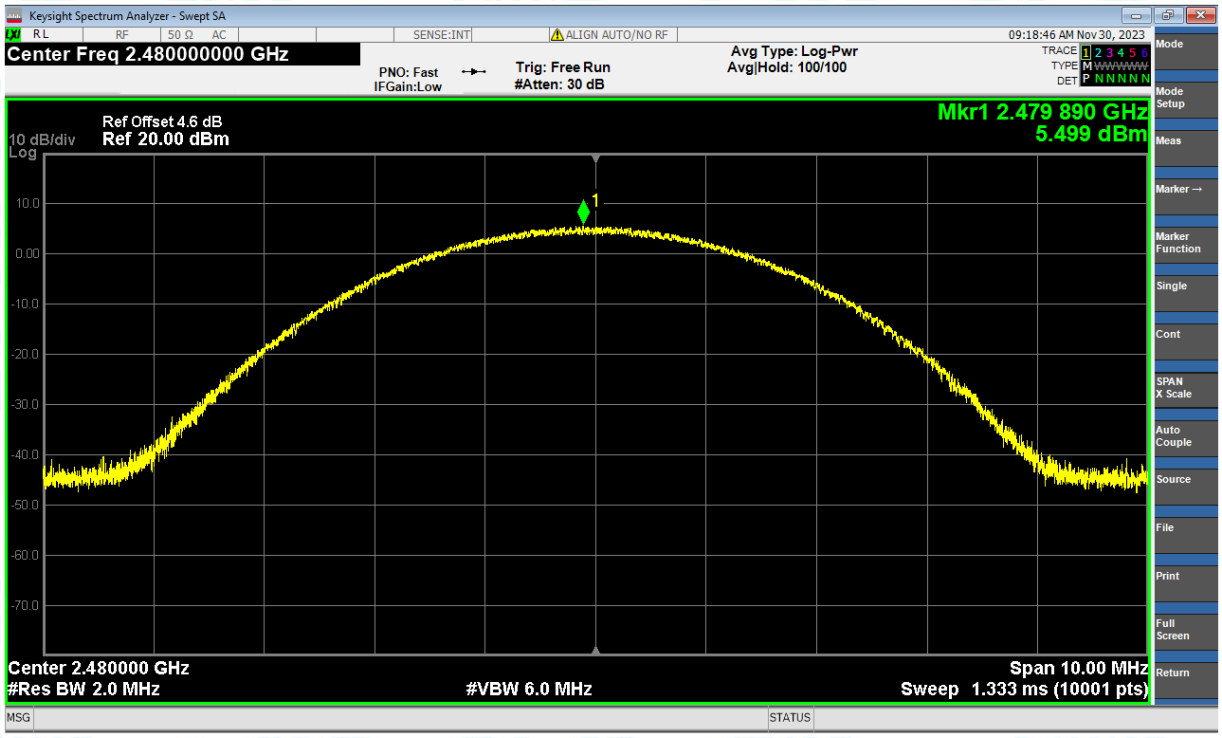


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1

Power NVNT 3-DH1 2480MHz Ant1

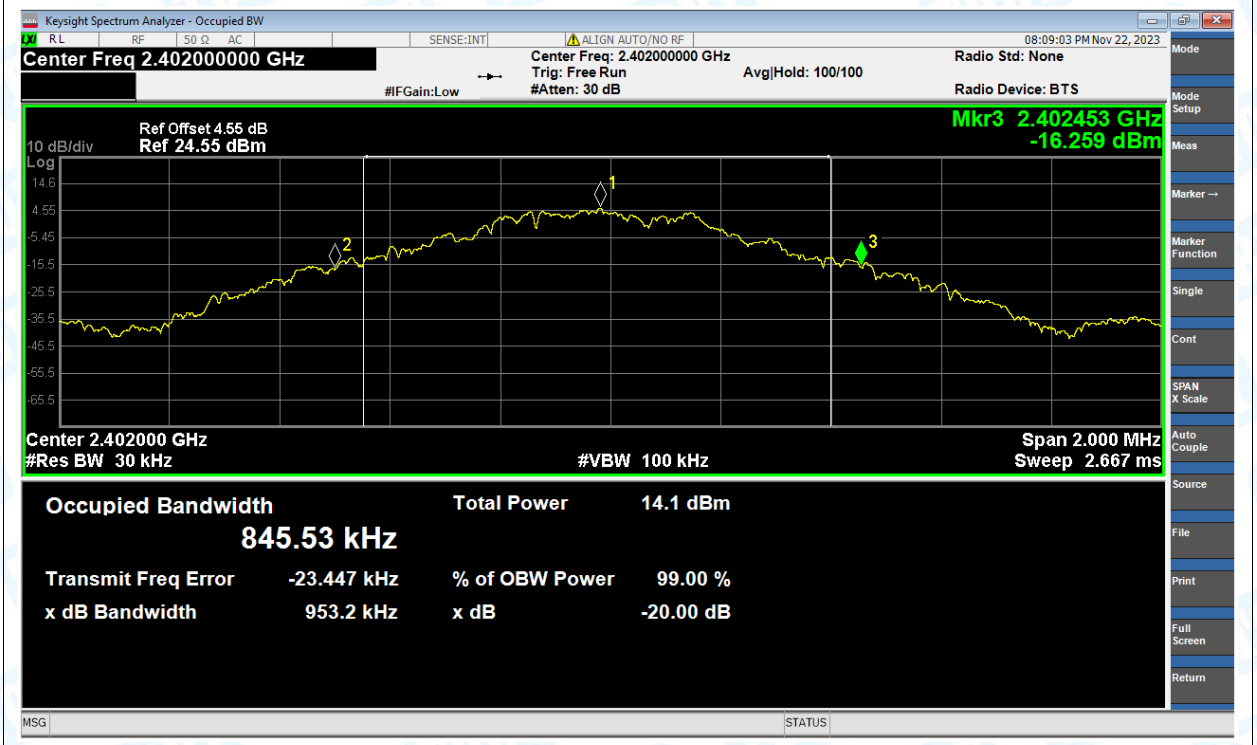


3. -20dB Bandwidth

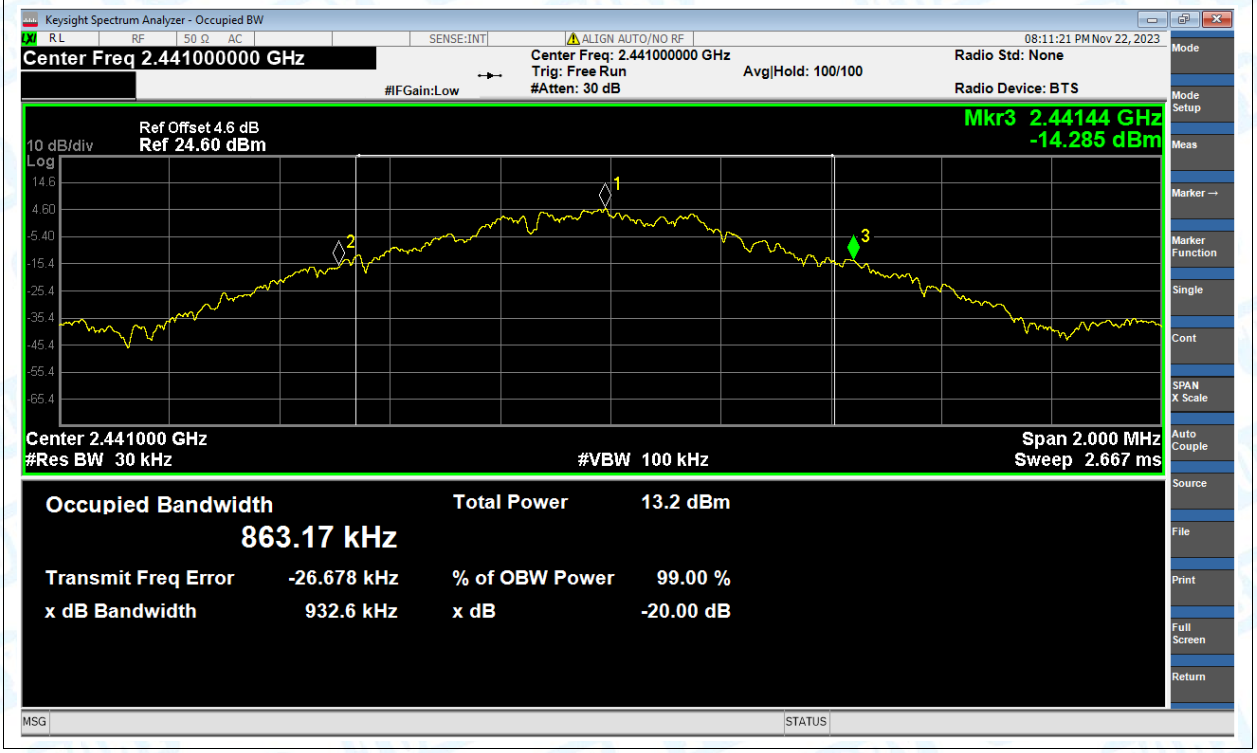
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.95	0	Pass
NVNT	1-DH1	2441	Ant1	0.93	0	Pass
NVNT	1-DH1	2480	Ant1	0.96	0	Pass
NVNT	2-DH1	2402	Ant1	1.28	0	Pass
NVNT	2-DH1	2441	Ant1	1.26	0	Pass
NVNT	2-DH1	2480	Ant1	1.24	0	Pass
NVNT	3-DH1	2402	Ant1	1.22	0	Pass
NVNT	3-DH1	2441	Ant1	1.21	0	Pass
NVNT	3-DH1	2480	Ant1	1.21	0	Pass

Test Graphs

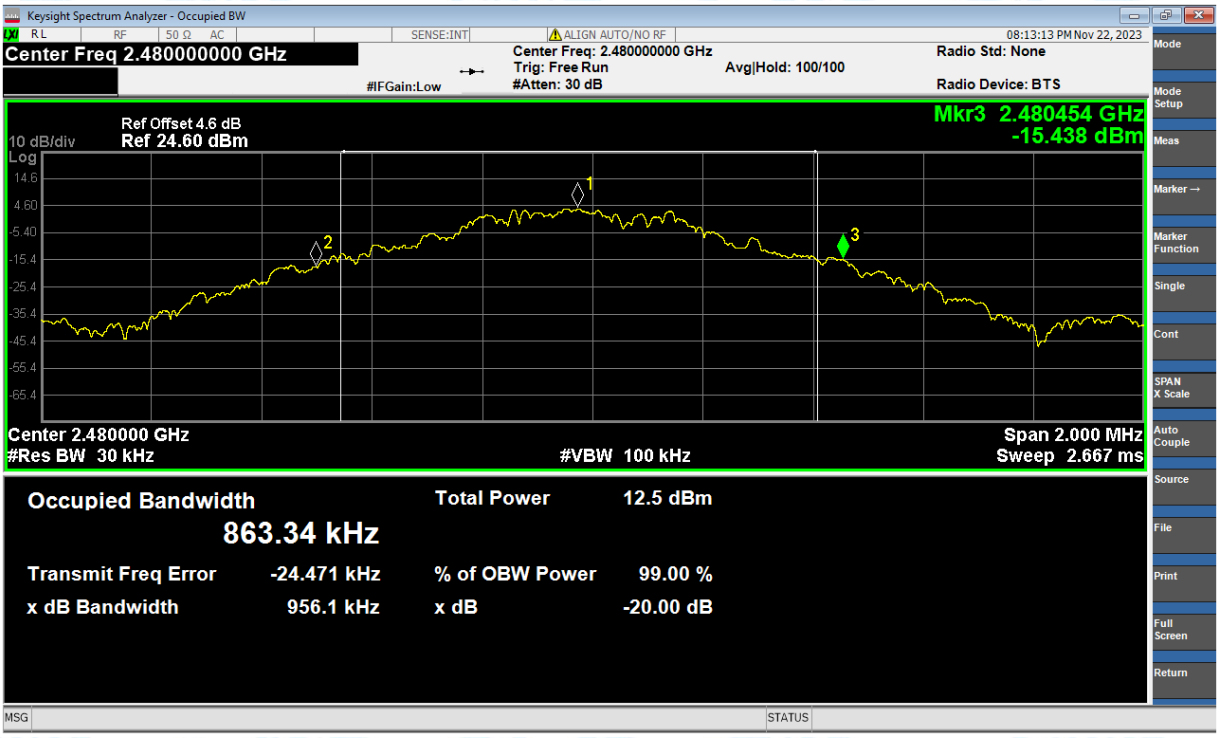
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



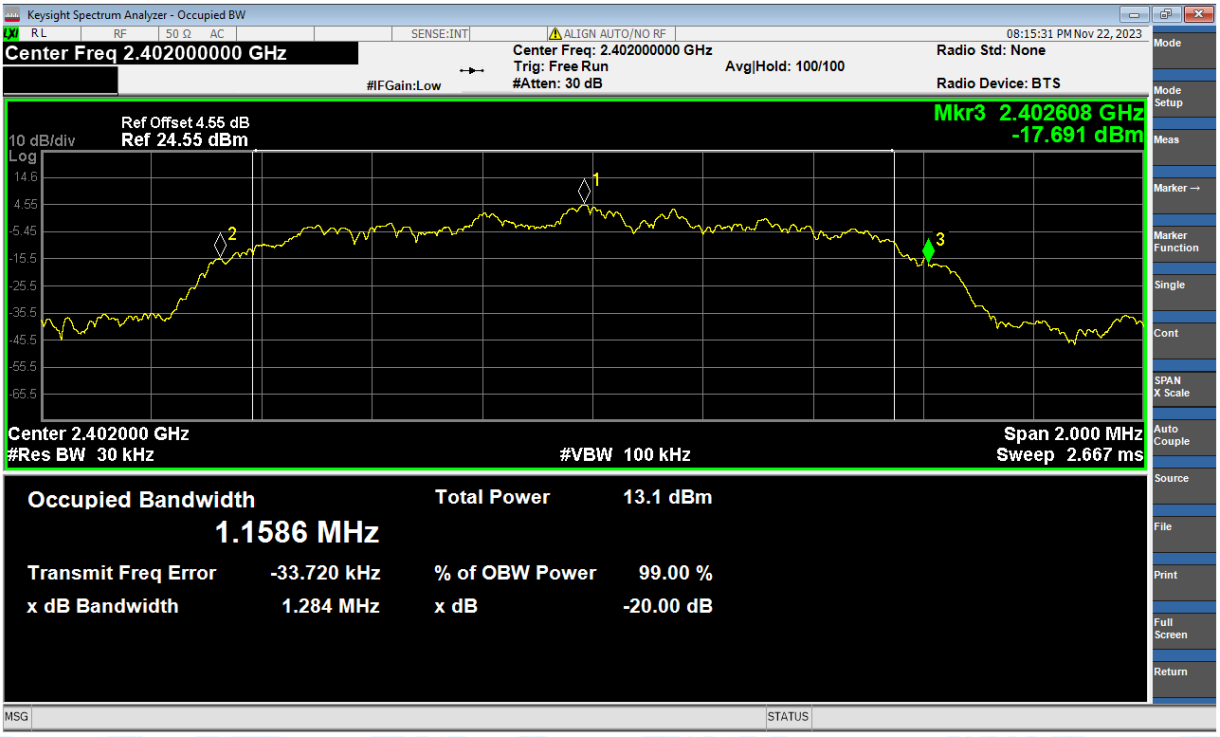
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



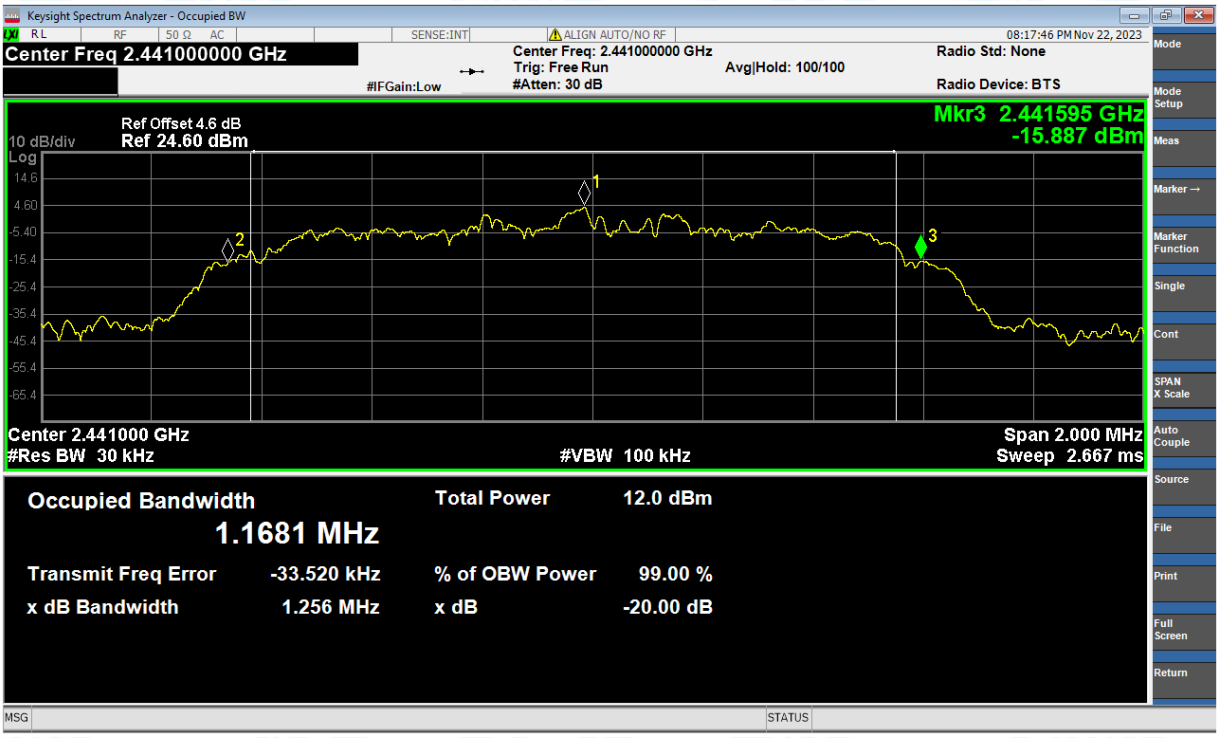
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



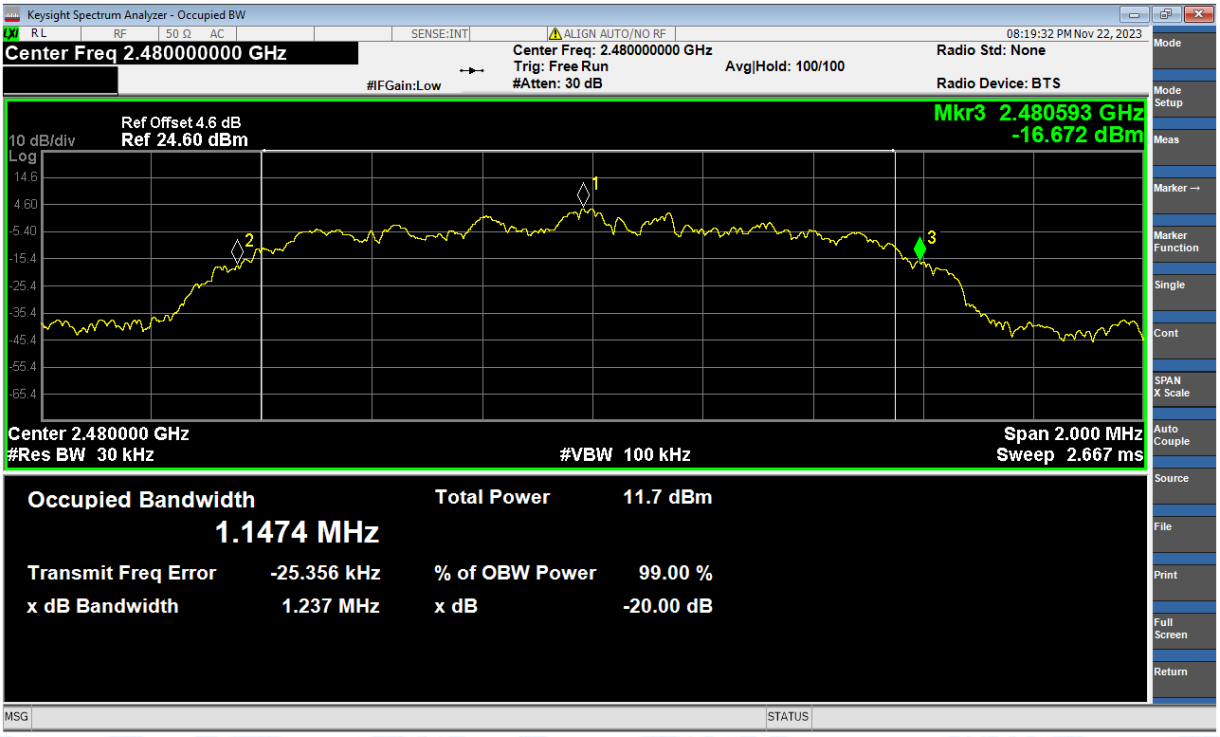
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



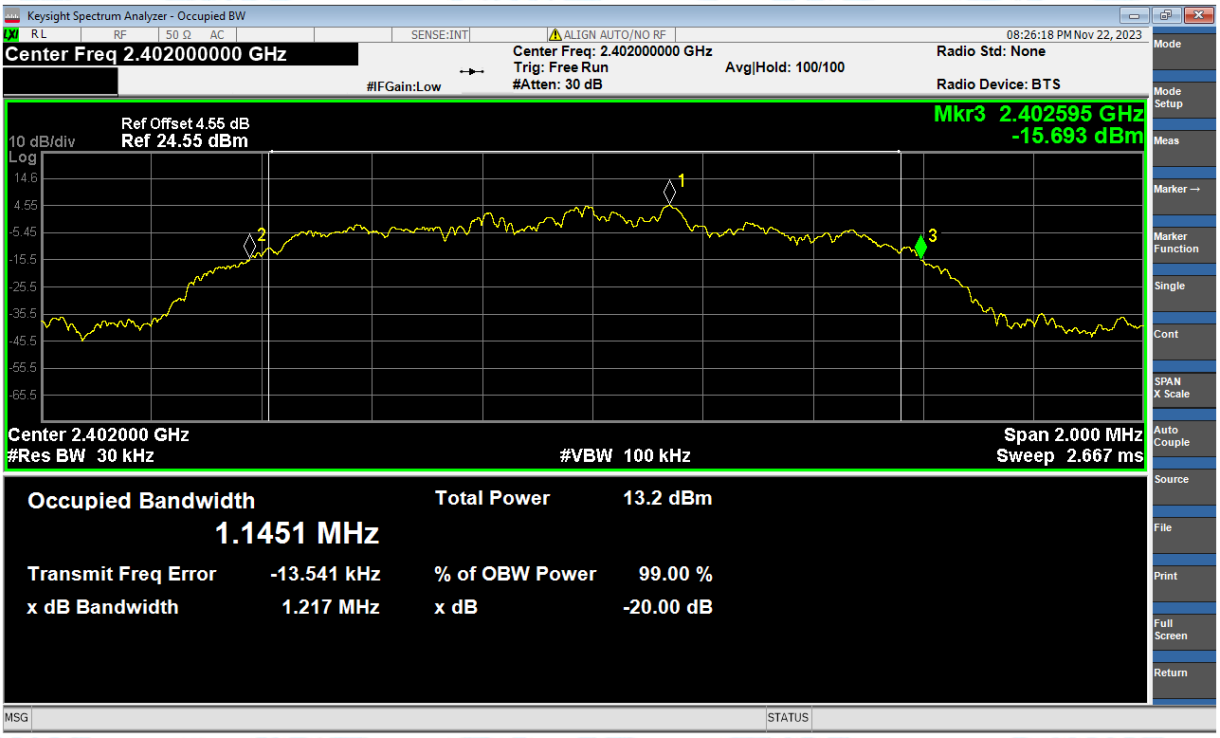
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



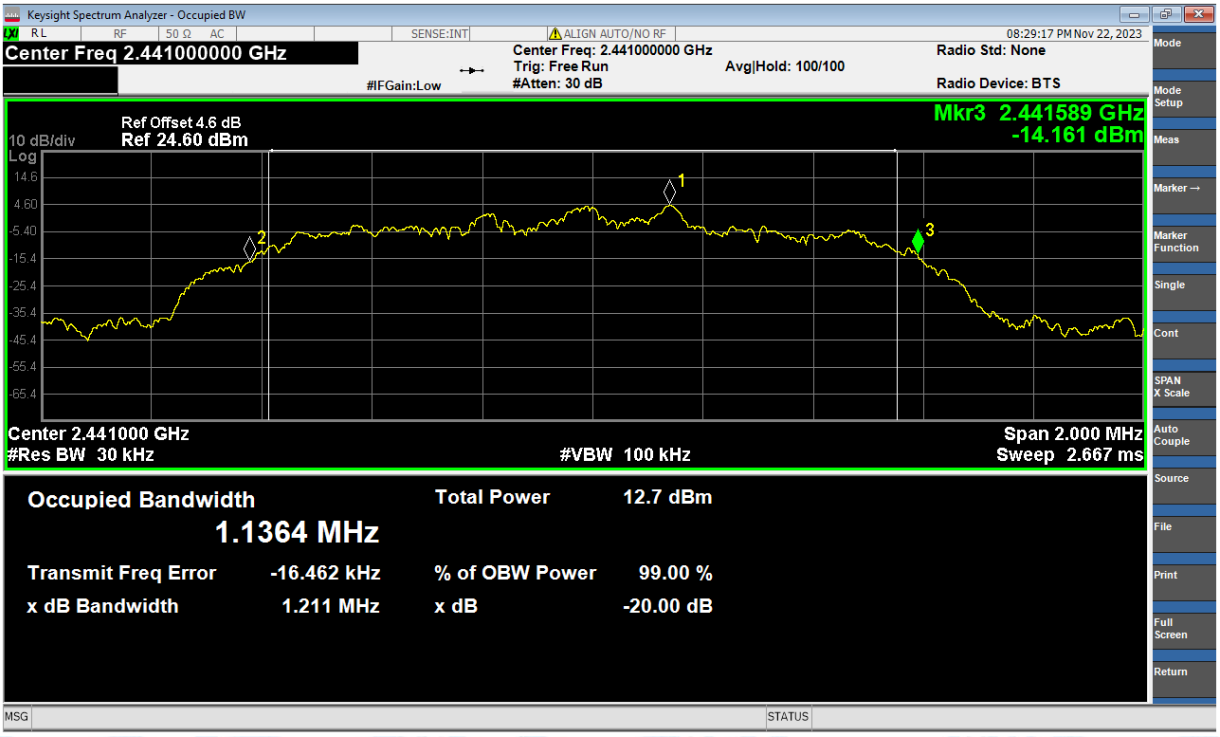
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1



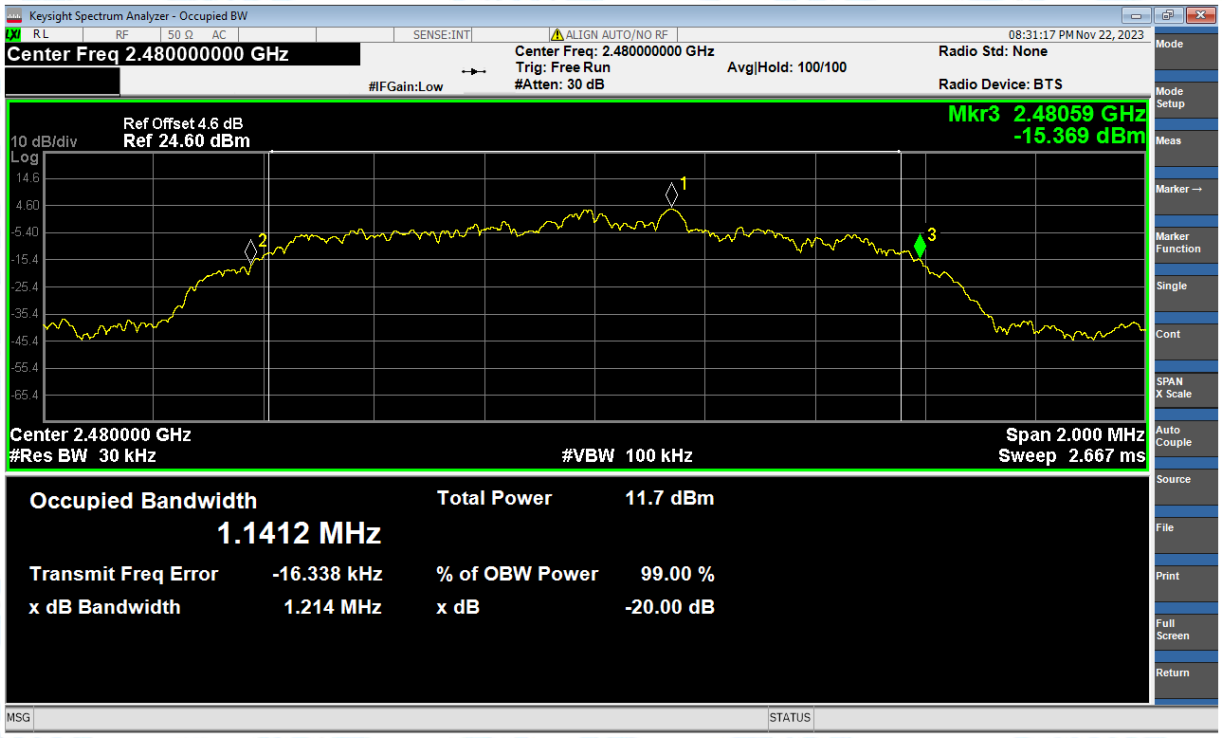
-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2480MHz Ant1

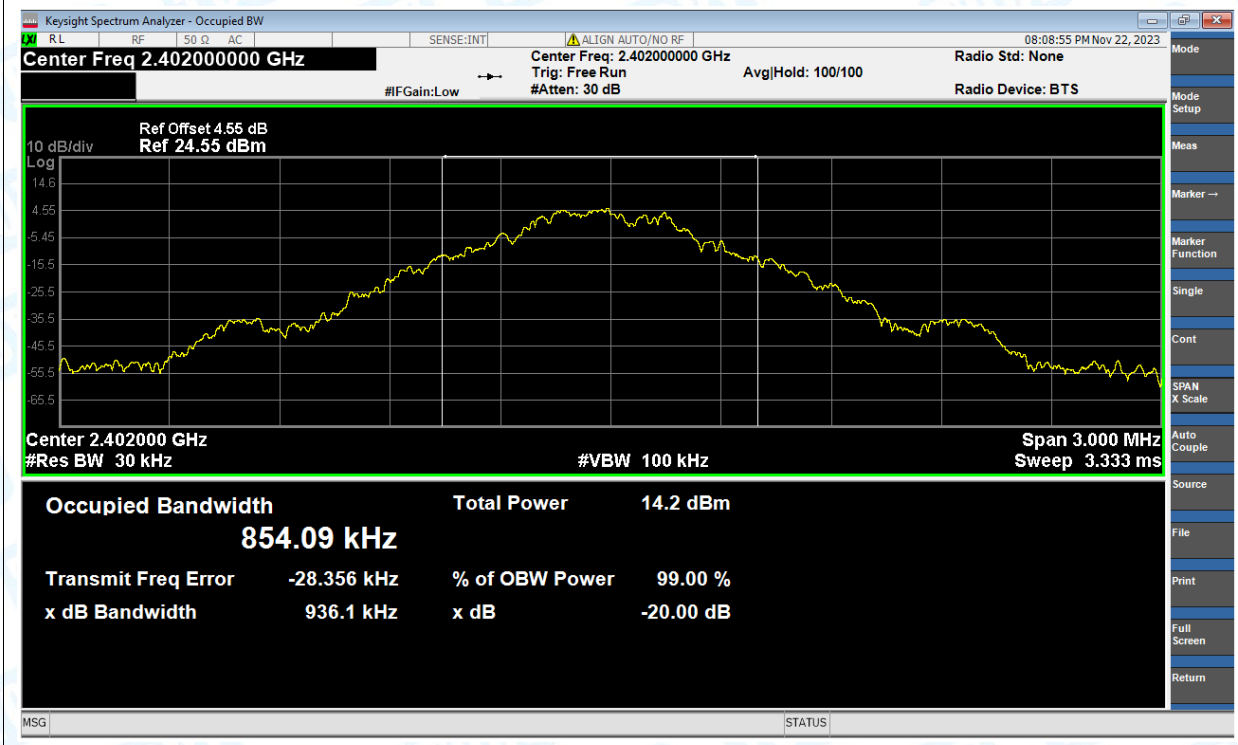


4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.854
NVNT	1-DH1	2441	Ant1	0.844
NVNT	1-DH1	2480	Ant1	0.867
NVNT	2-DH1	2402	Ant1	1.123
NVNT	2-DH1	2441	Ant1	1.157
NVNT	2-DH1	2480	Ant1	1.147
NVNT	3-DH1	2402	Ant1	1.146
NVNT	3-DH1	2441	Ant1	1.119
NVNT	3-DH1	2480	Ant1	1.128

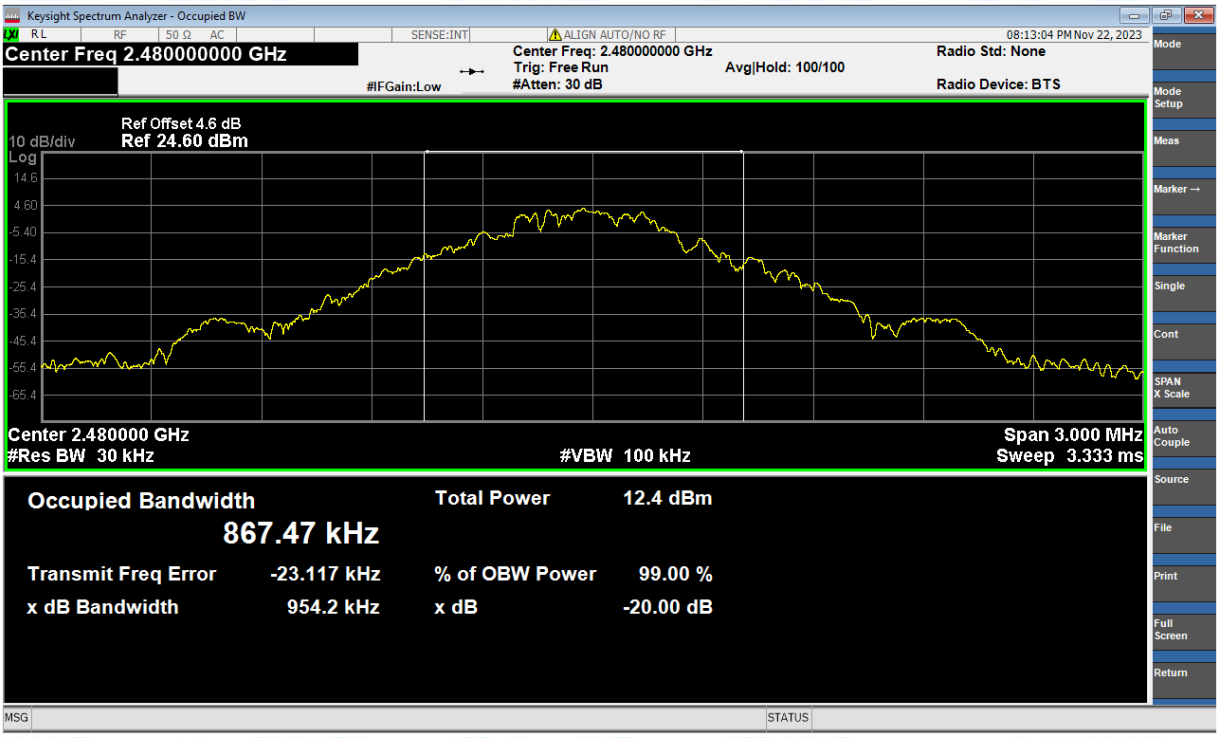
Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1

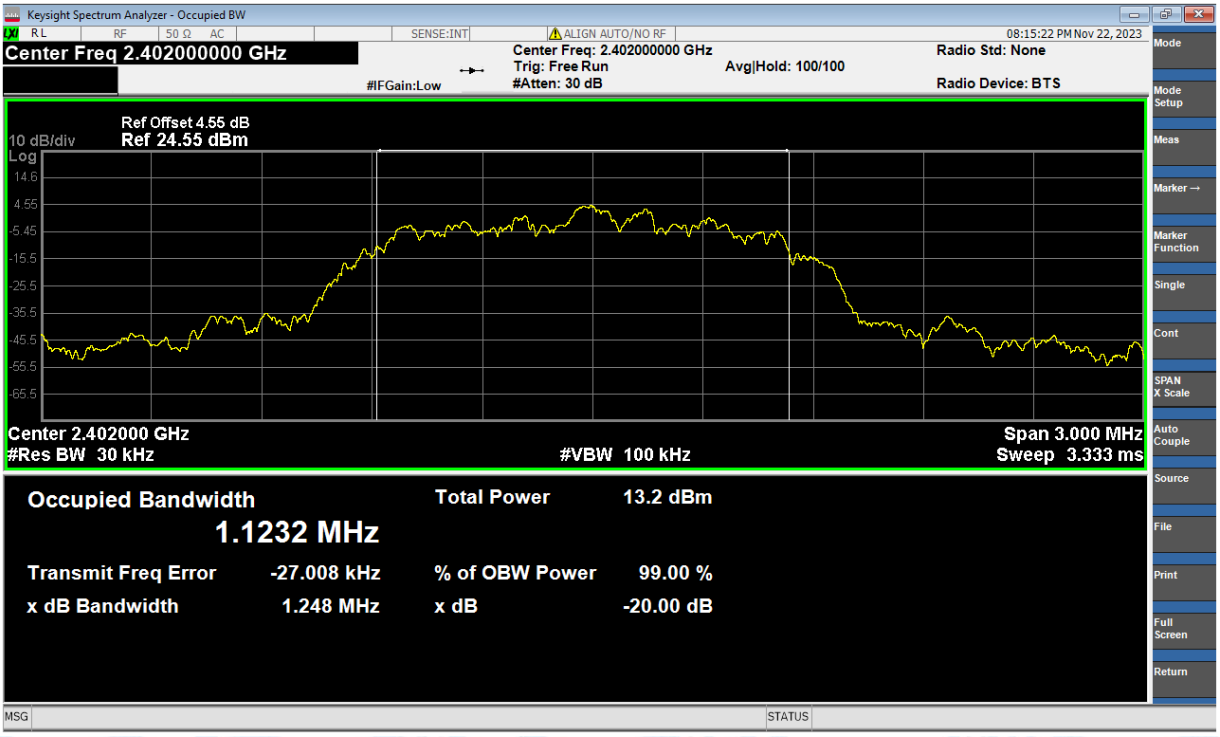


OBW NVNT 1-DH1 2441MHz Ant1

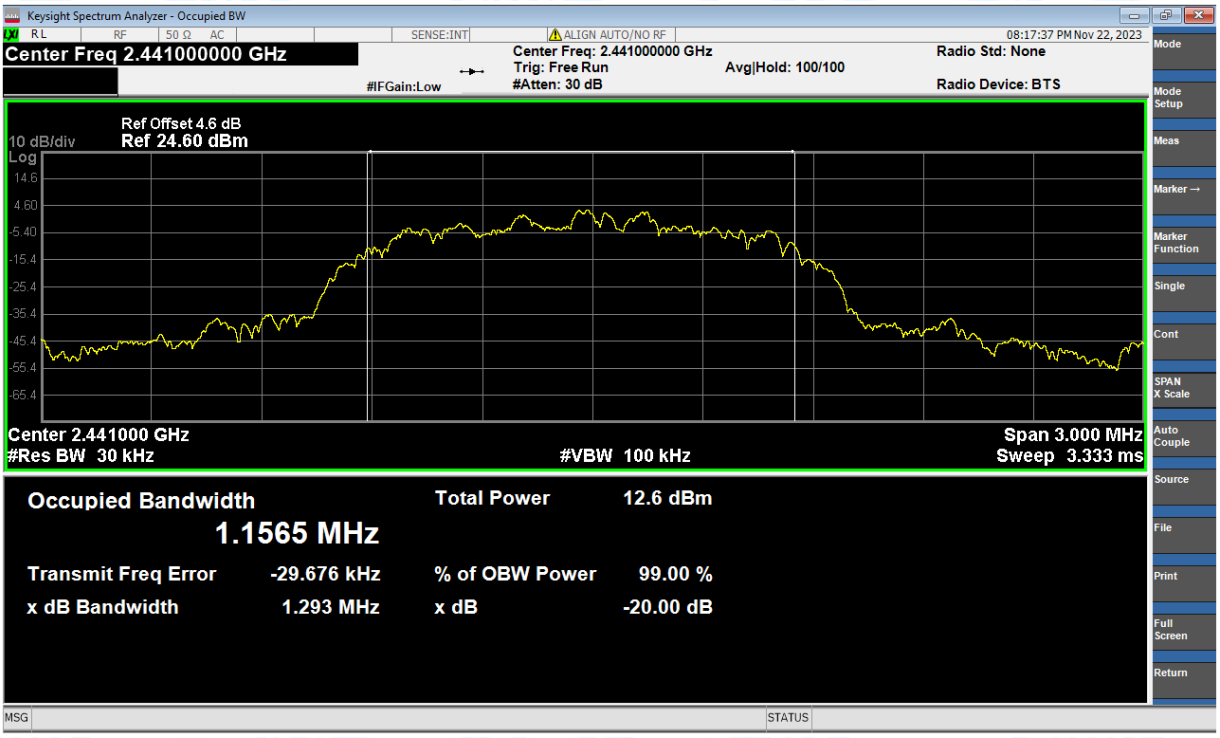
OBW NVNT 1-DH1 2480MHz Ant1



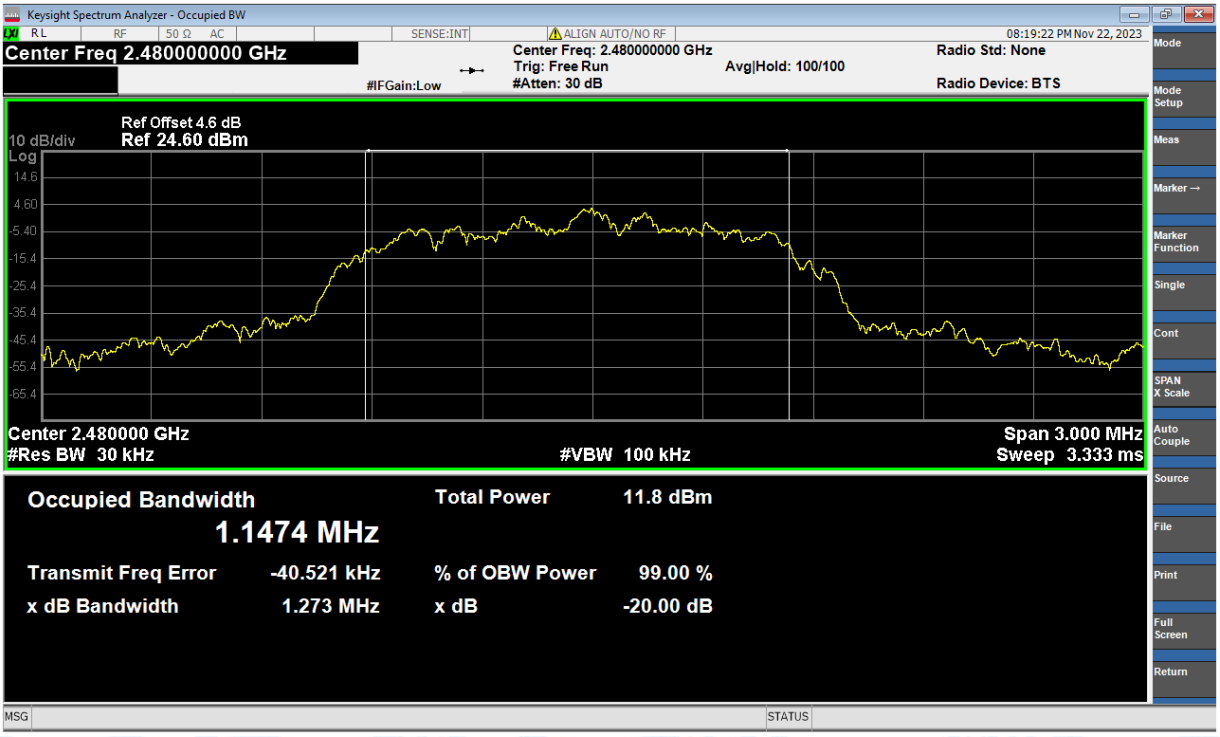
OBW NVNT 2-DH1 2402MHz Ant1



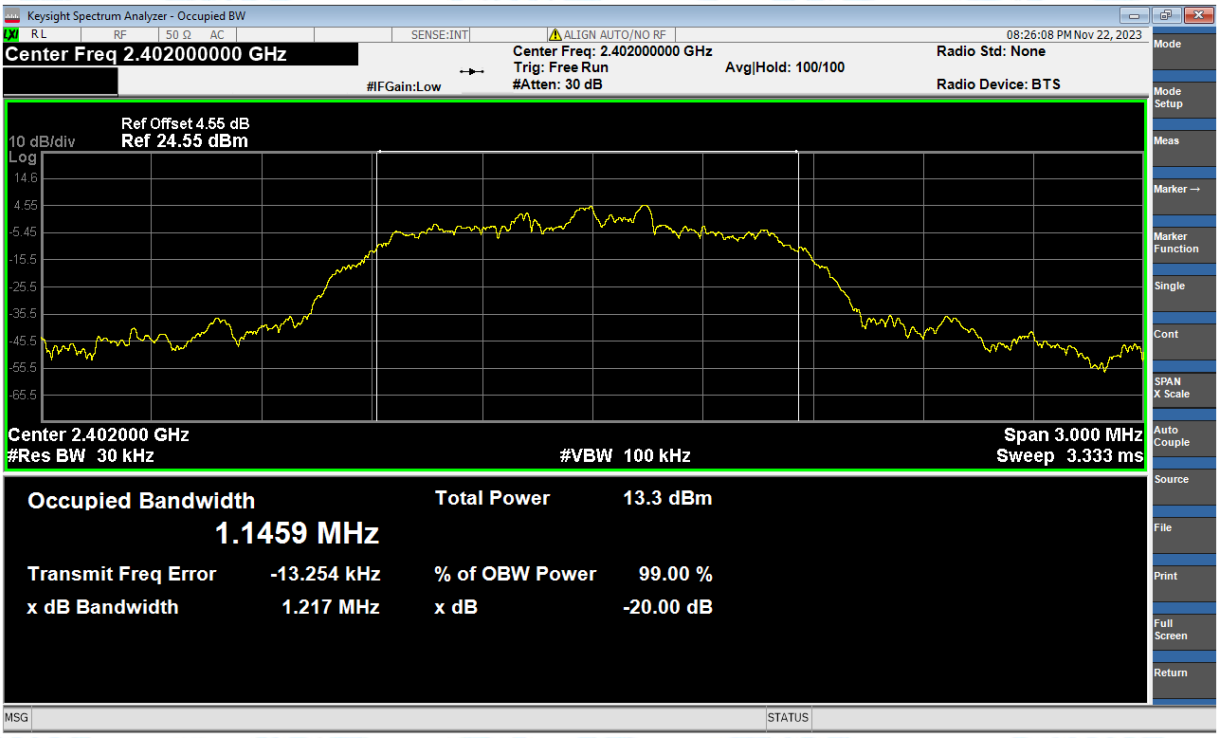
OBW NVNT 2-DH1 2441MHz Ant1



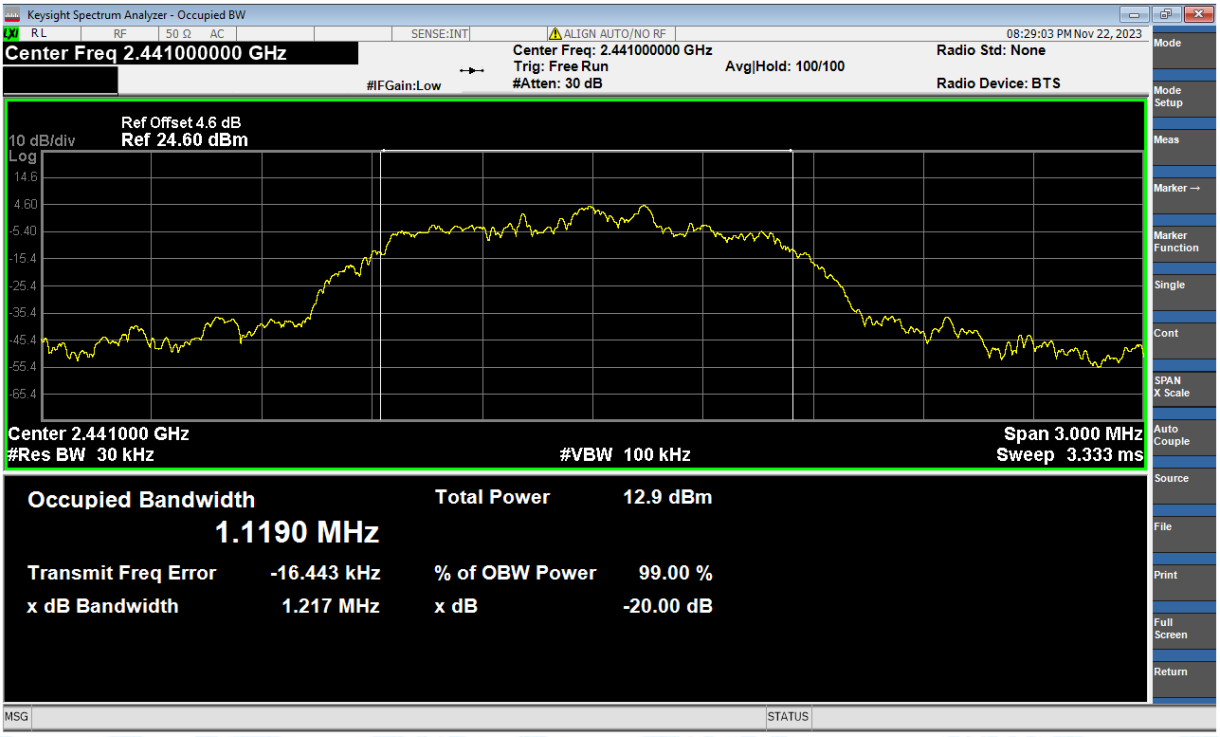
OBW NVNT 2-DH1 2480MHz Ant1



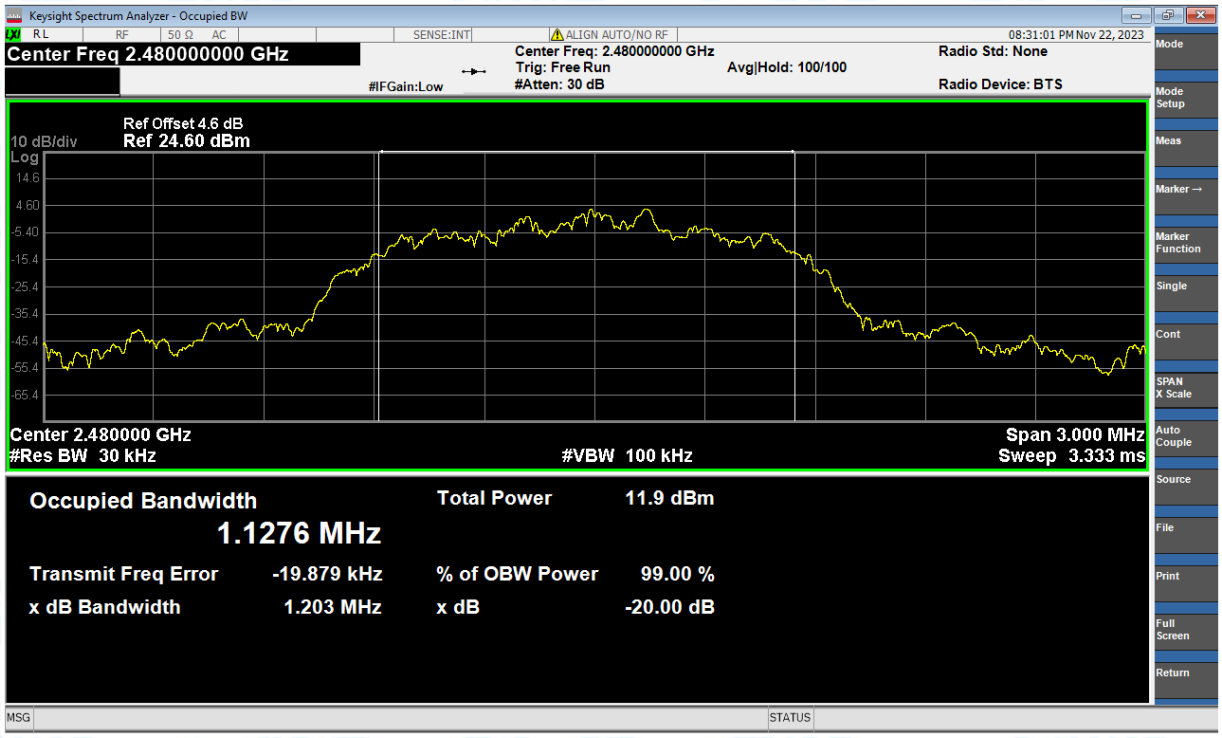
OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



OBW NVNT 3-DH1 2480MHz Ant1

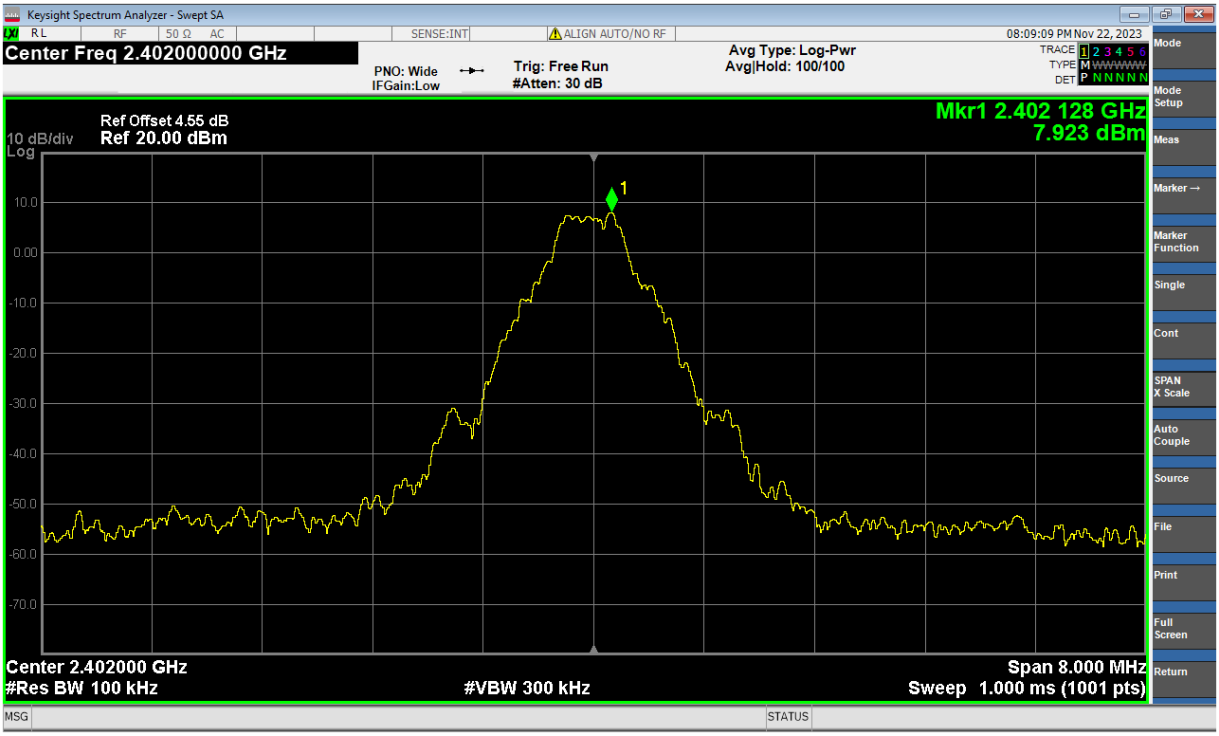


5. Band Edge

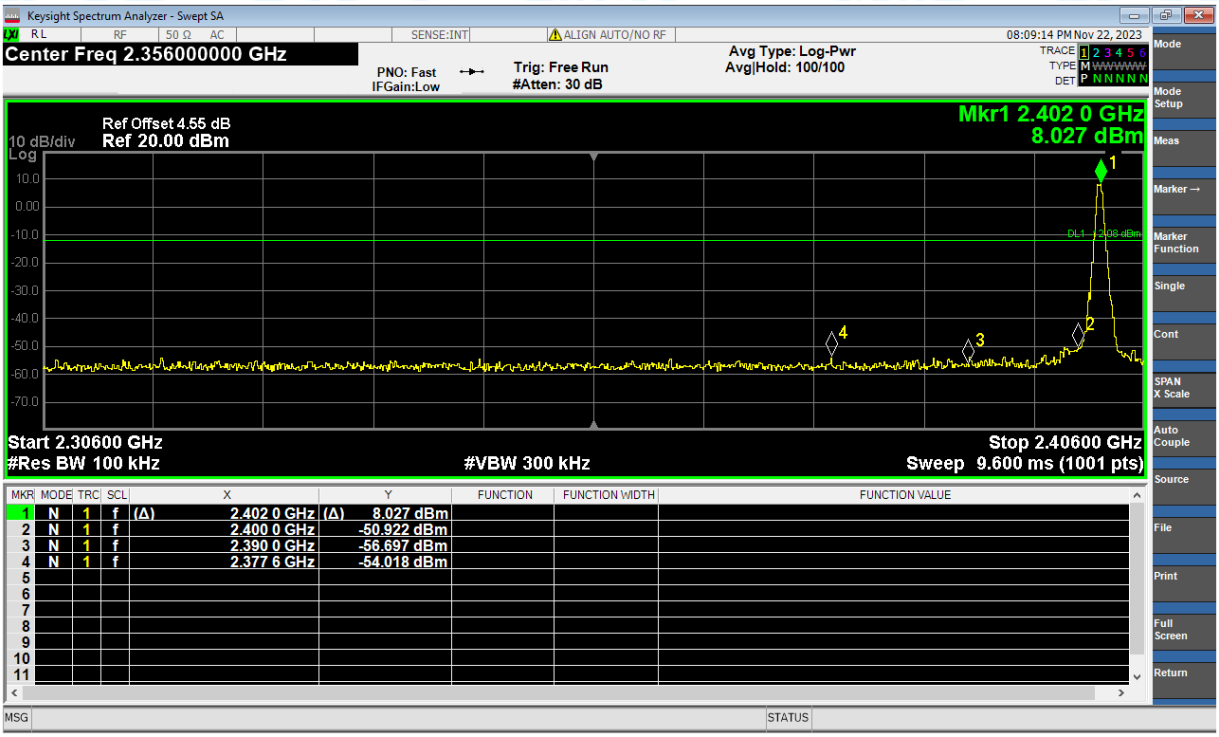
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-61.94	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-59.81	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-60.53	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-58.5	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-60.74	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-59.69	-20	Pass

Test Graphs

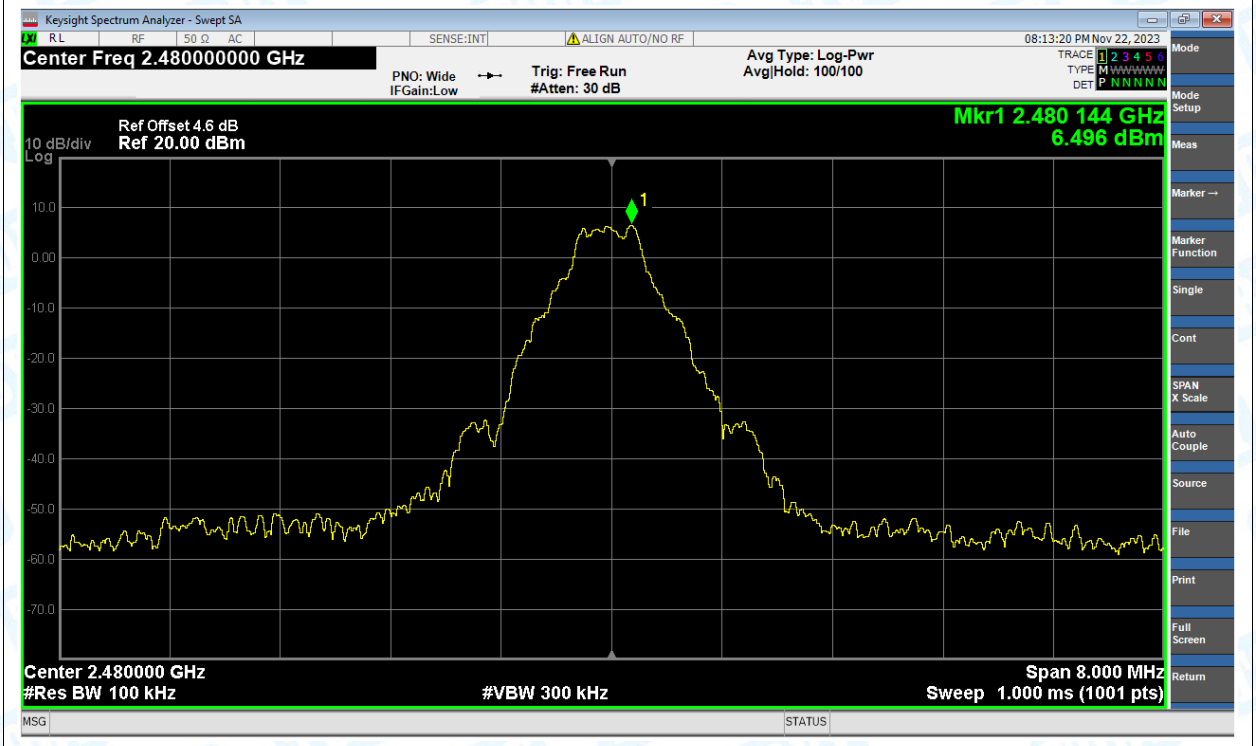
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



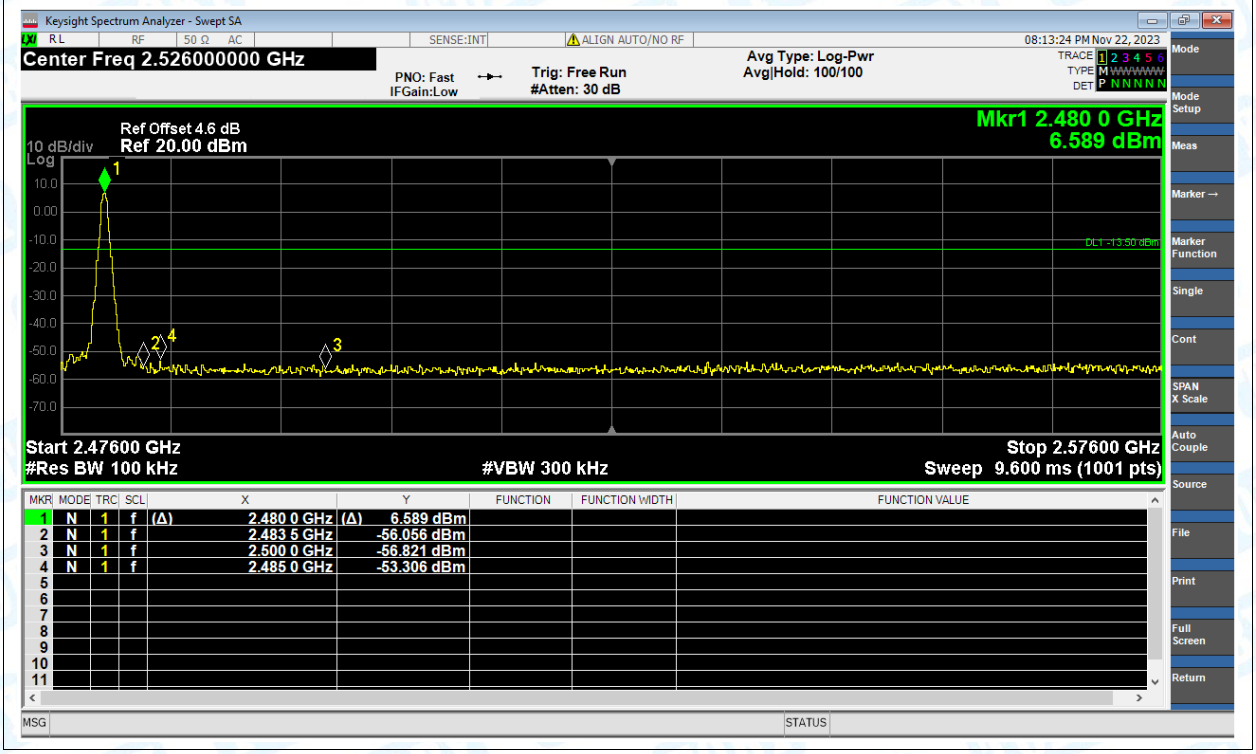
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission



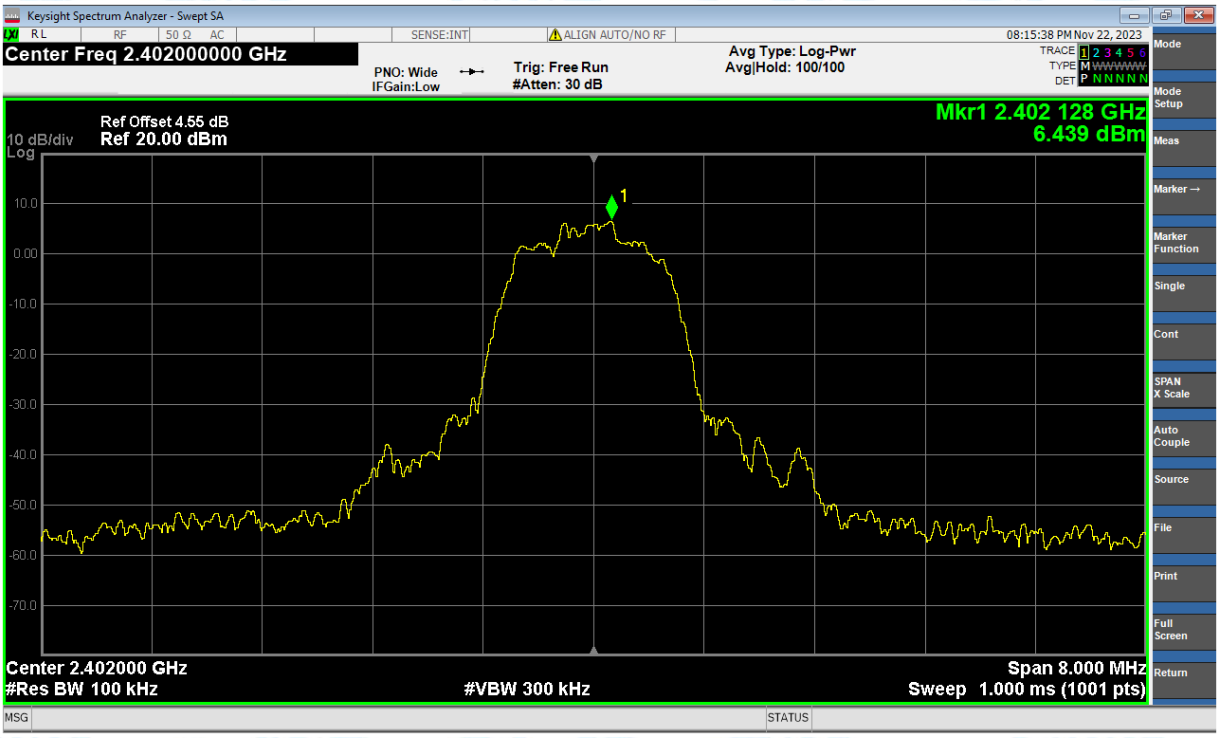
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



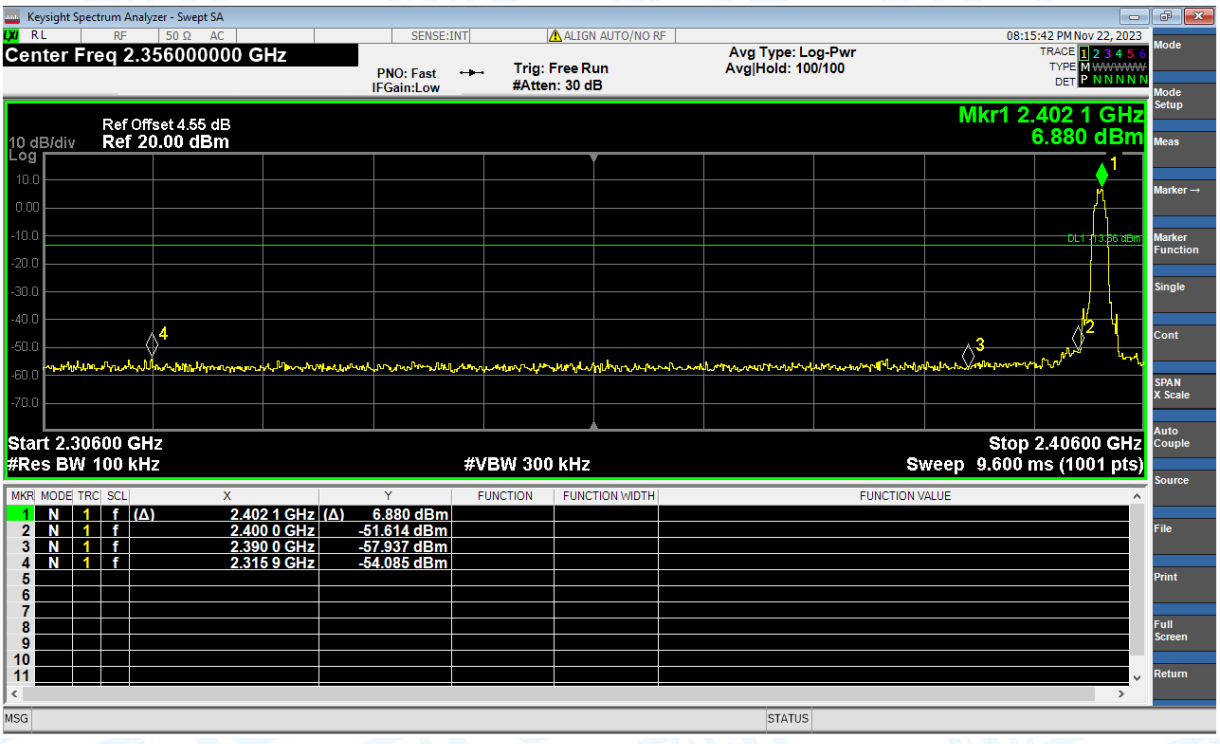
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



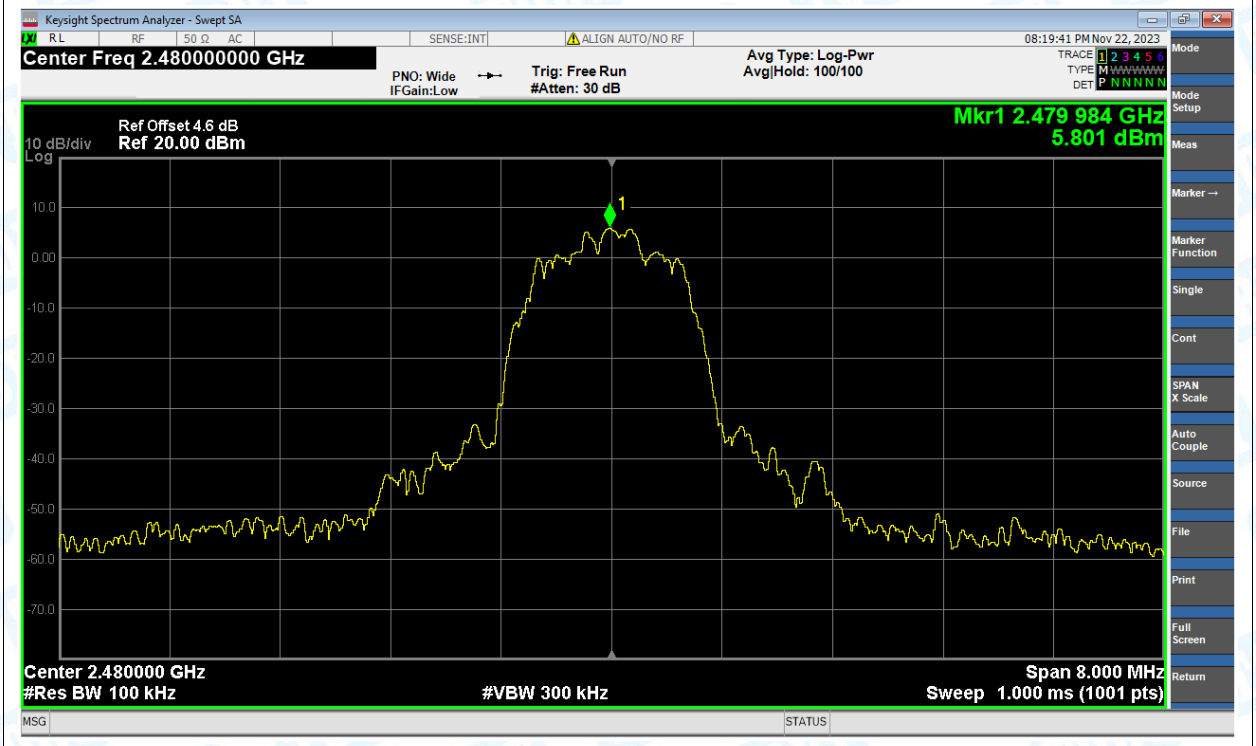
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Ref



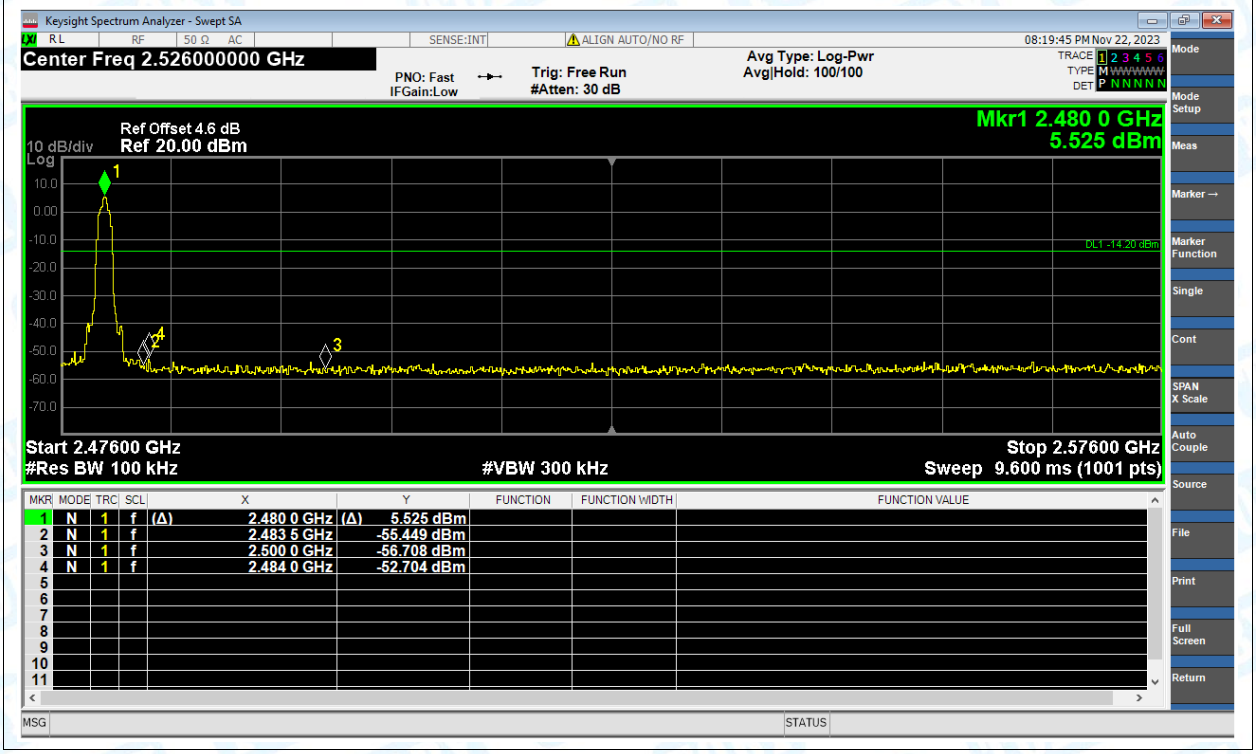
Band Edge NVNT 2-DH1 2402MHz Ant1 No-Hopping Emission



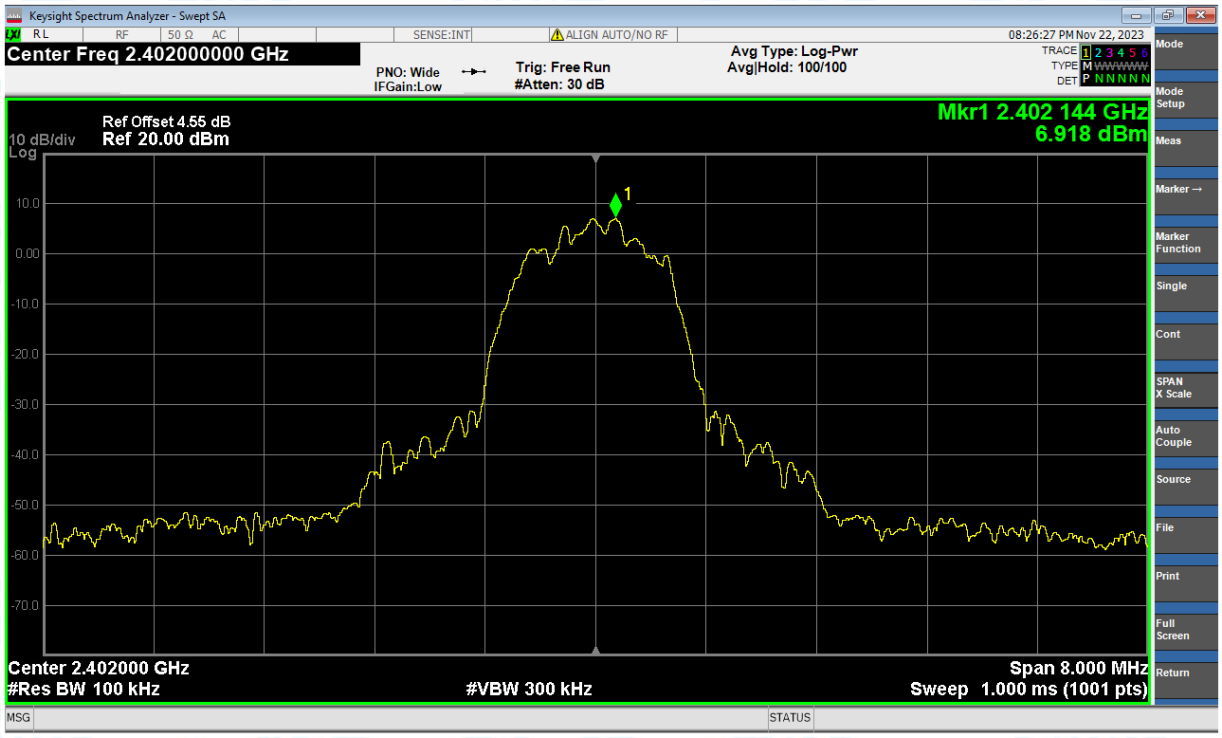
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



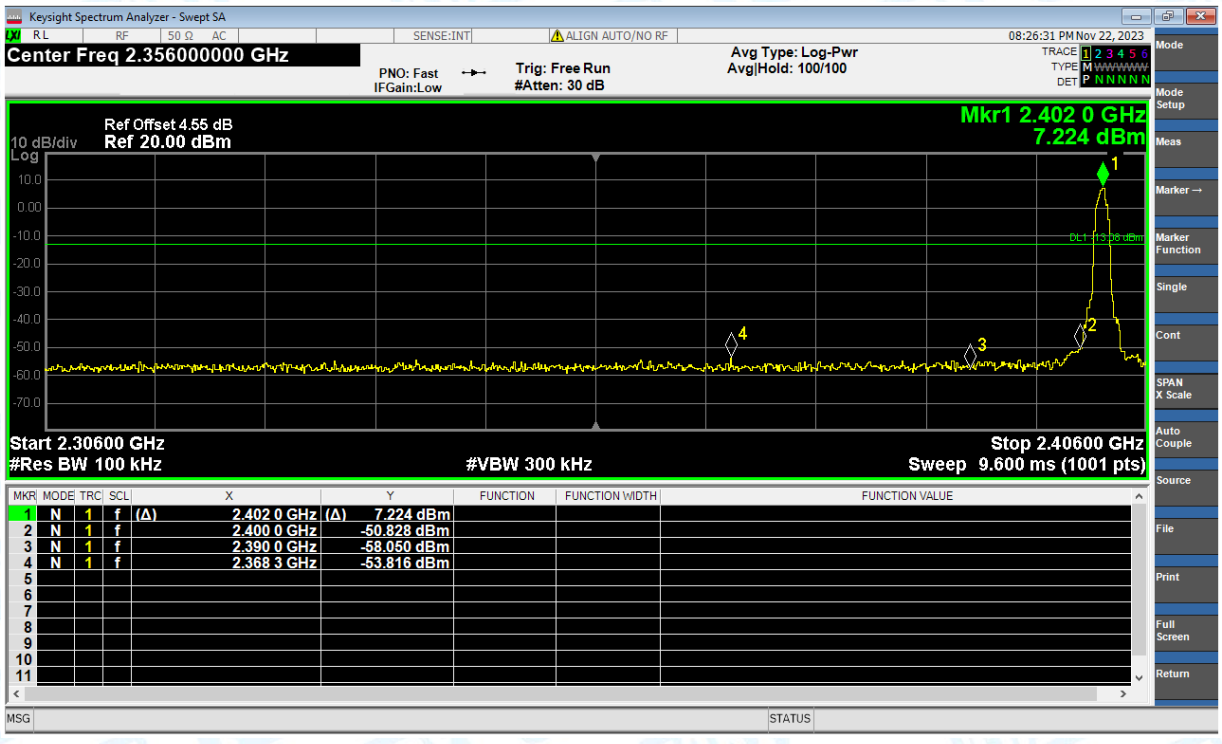
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



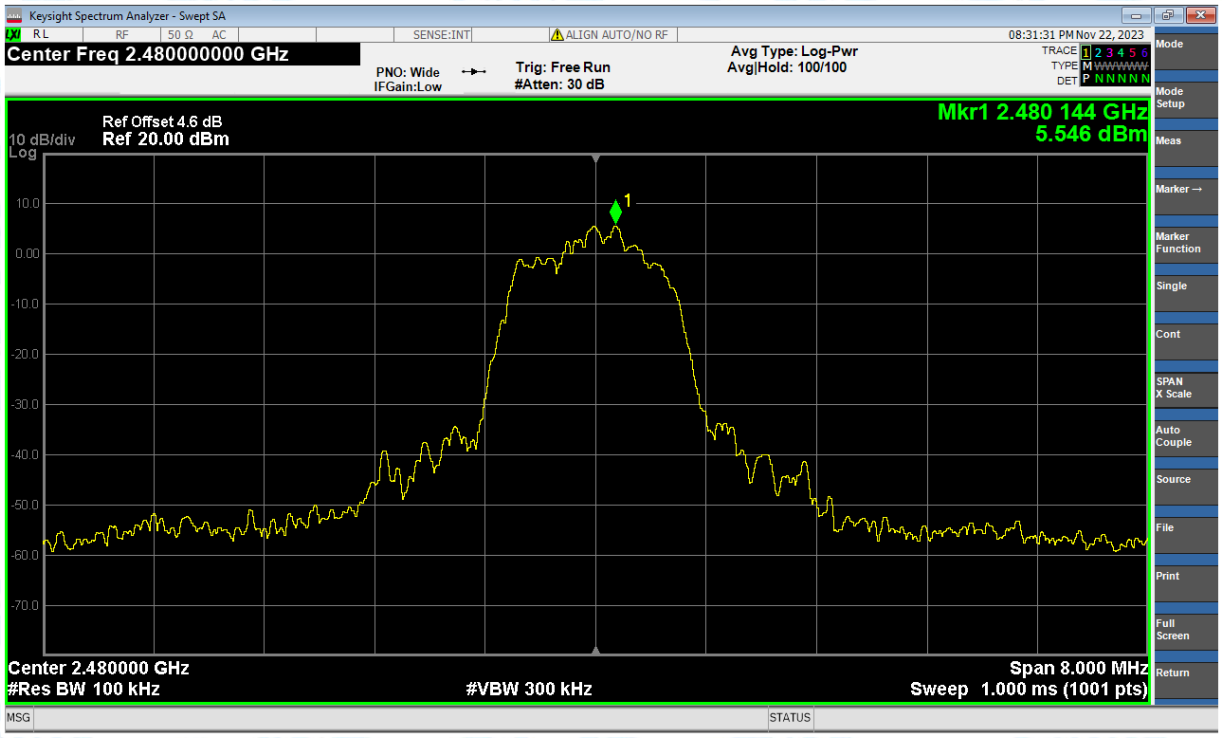
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Ref



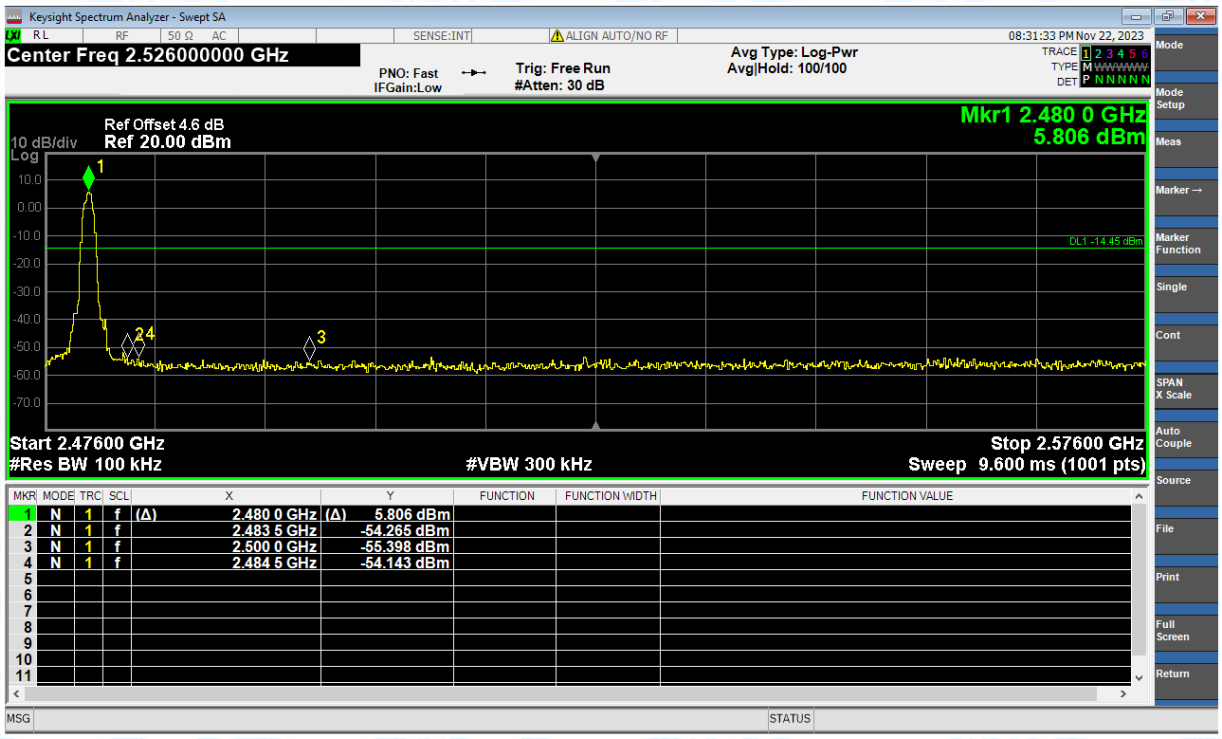
Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission



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



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



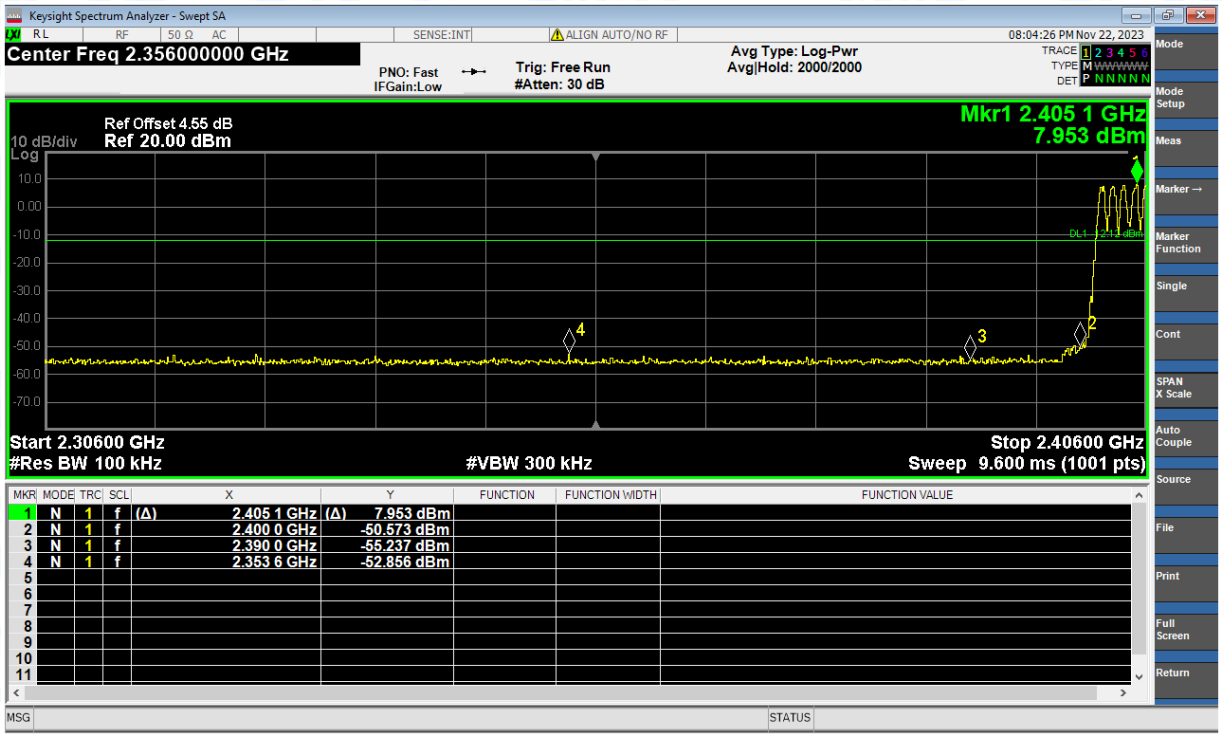
6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-60.74	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-59.25	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-59.79	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-57.58	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-59.57	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-59.11	-20	Pass

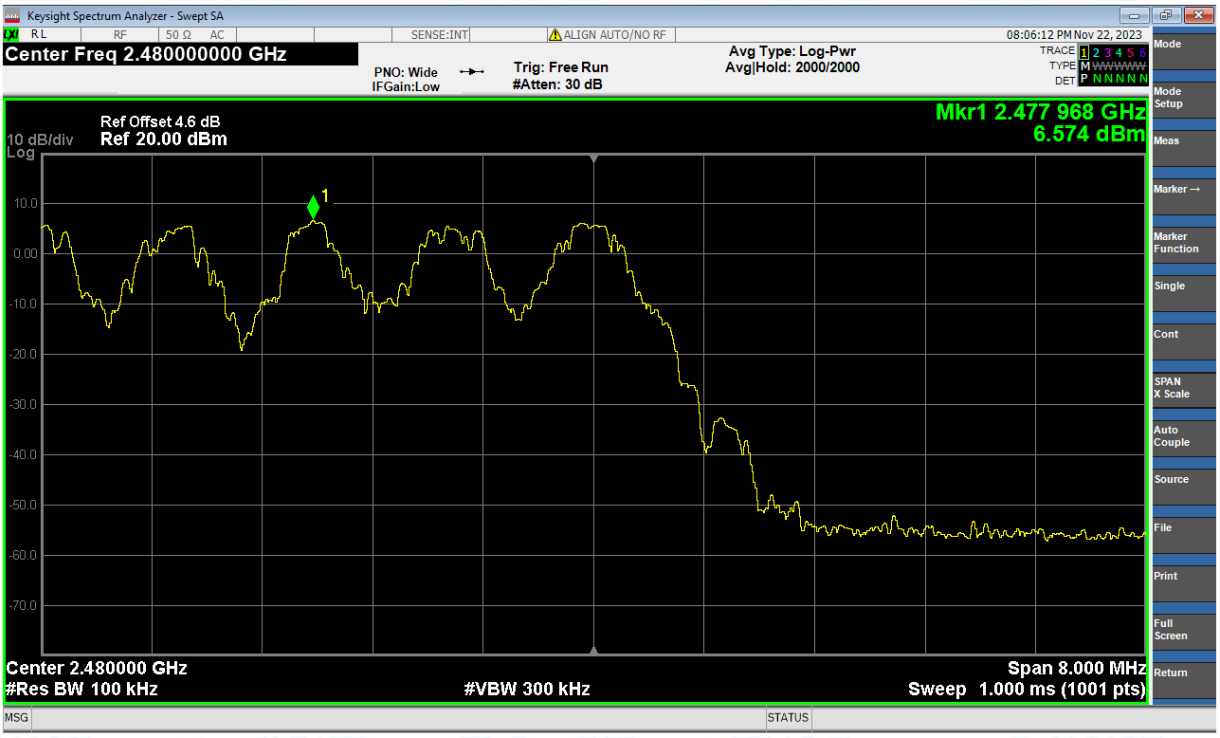
Test Graphs

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

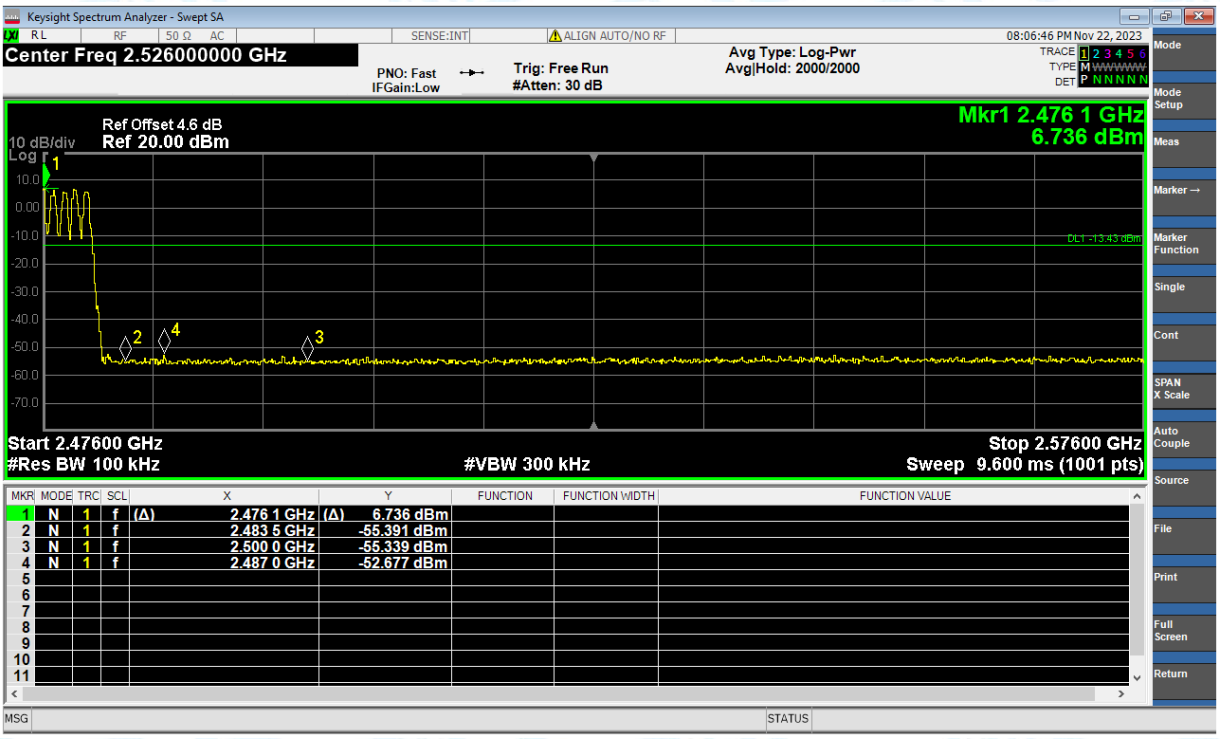
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

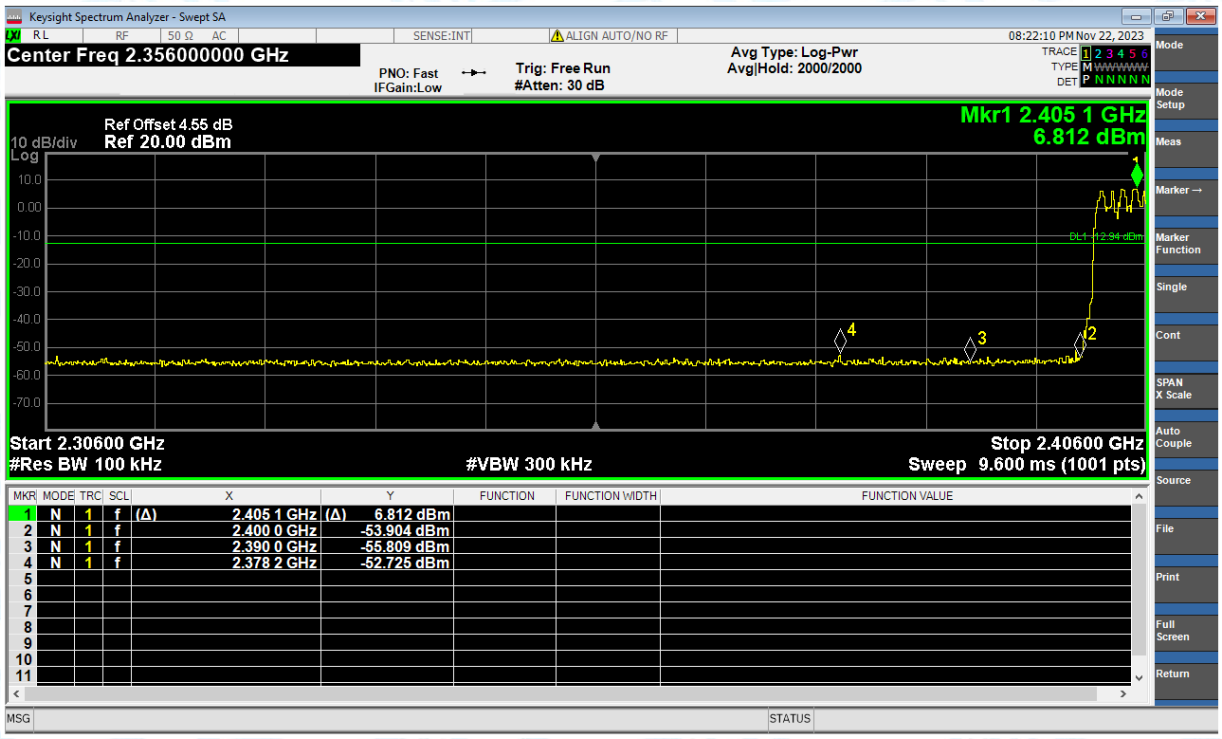


Band Edge(Hopping) NVNT 1-DH1 2480MHz Ant1 Hopping Ref



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