

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

General Description of EUT	
Product Name:	RUGGEDIZED HAND-HELD DEVICE
Test Model:	CHAMELEON 5R V2 DUAL
Sample ID:	202202_0108-01-4
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	DC 3.85V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202202-0108-14	

Contents

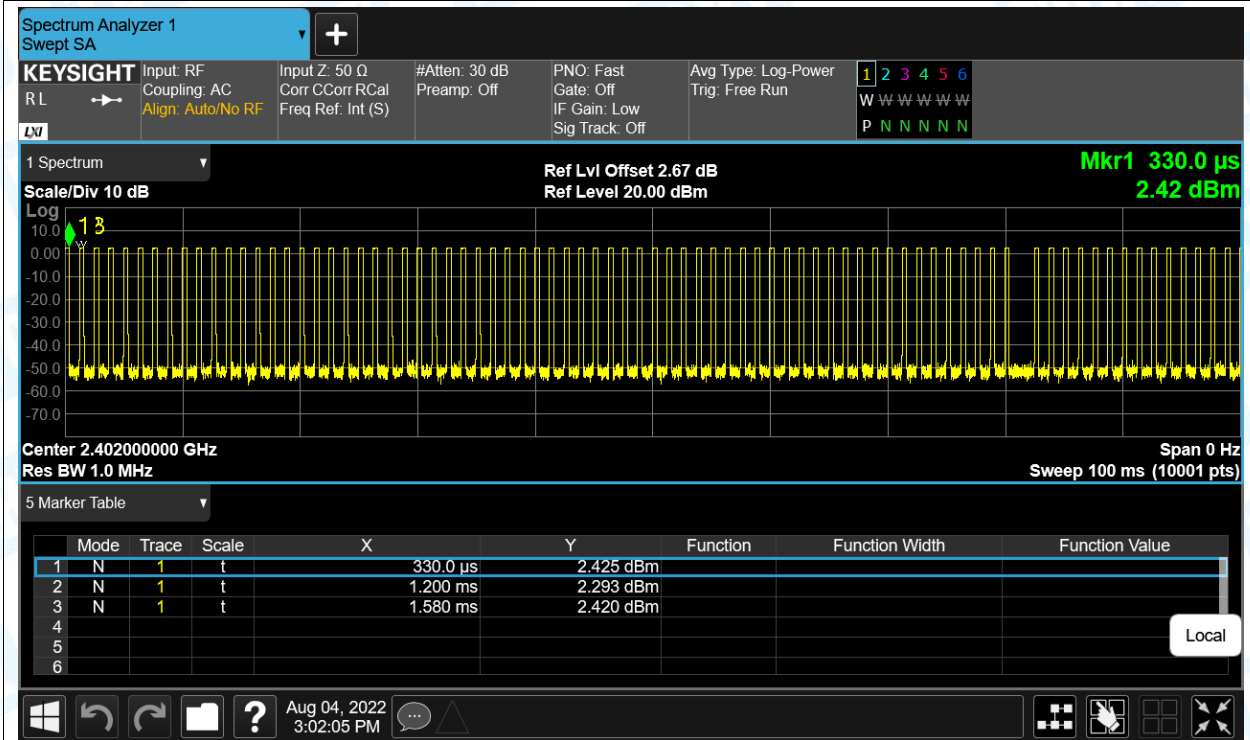
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1. Duty Cycle

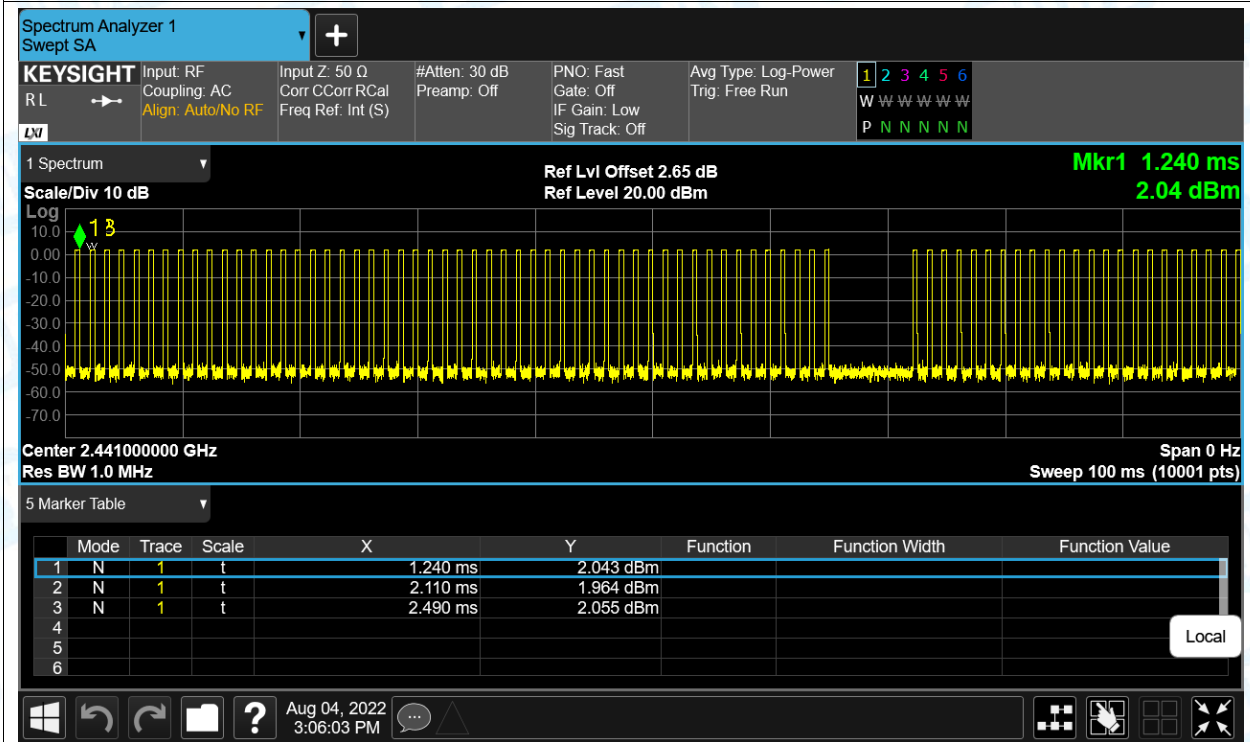
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.77	5.12	2.63
NVNT	1-DH1	2441	Ant1	29.24	5.34	2.63
NVNT	1-DH1	2480	Ant1	30.39	5.17	2.63
NVNT	2-DH1	2402	Ant1	29.69	5.27	2.56
NVNT	2-DH1	2441	Ant1	31.6	5	2.56
NVNT	2-DH1	2480	Ant1	30.7	5.13	2.56
NVNT	3-DH1	2402	Ant1	31.21	5.06	2.56
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	32	4.95	2.56

Test Graphs

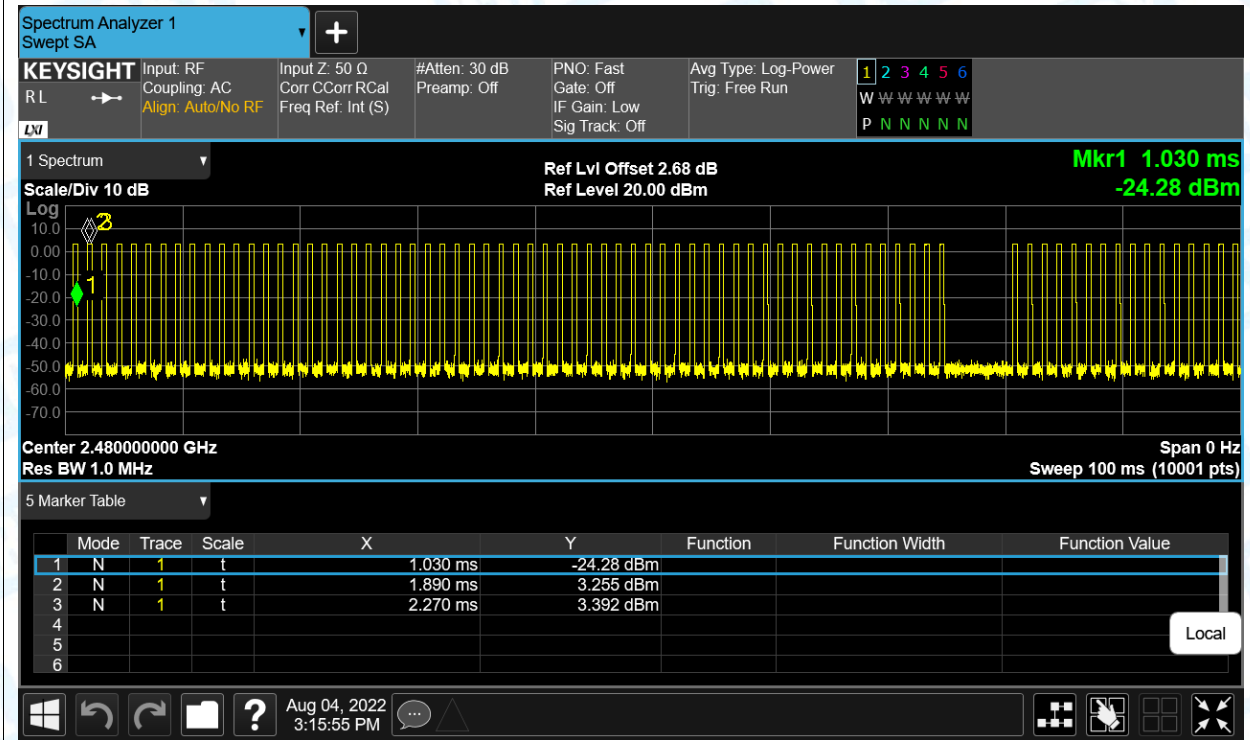
Duty Cycle NVNT 1-DH1 2402MHz Ant1



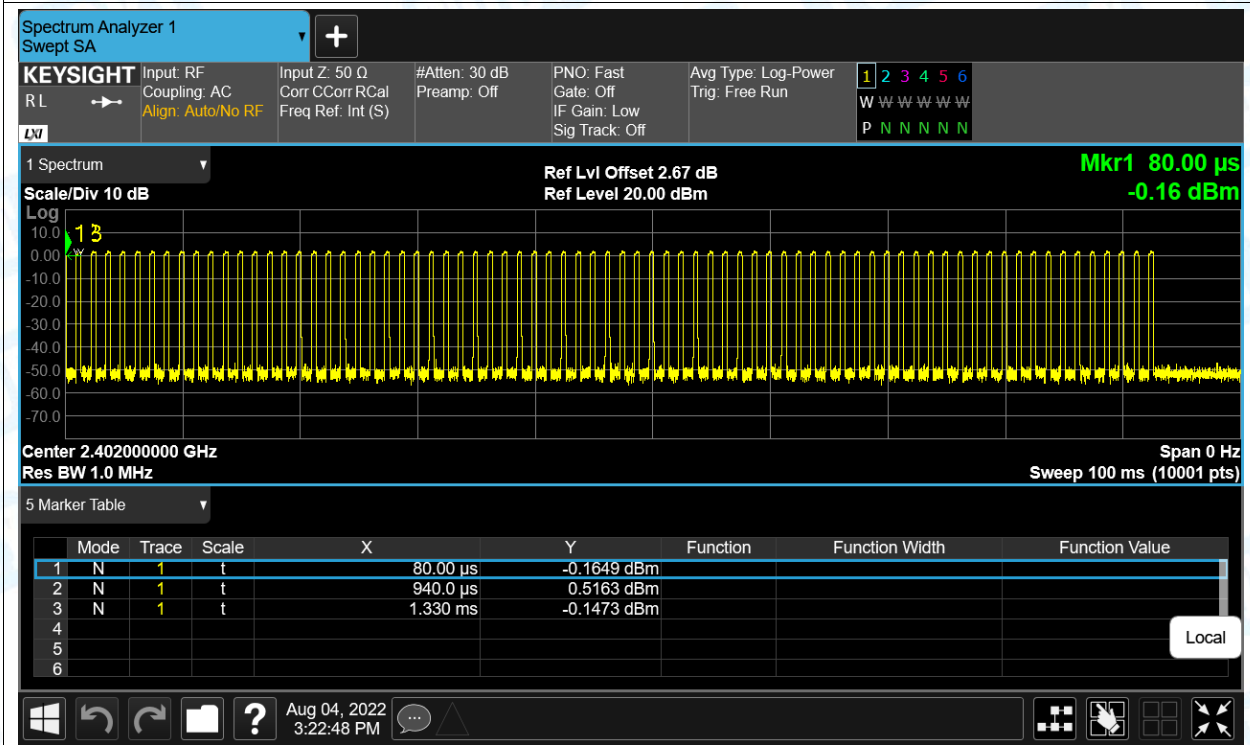
Duty Cycle NVNT 1-DH1 2441MHz Ant1



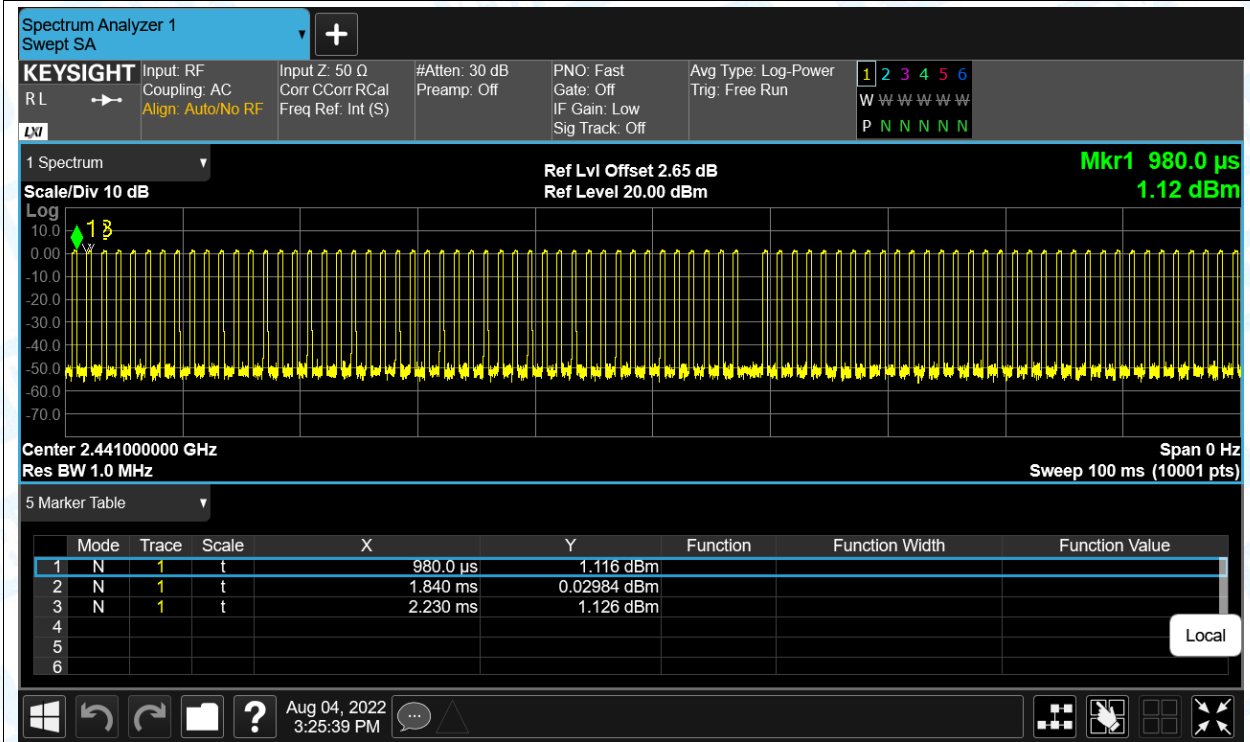
Duty Cycle NVNT 1-DH1 2480MHz Ant1



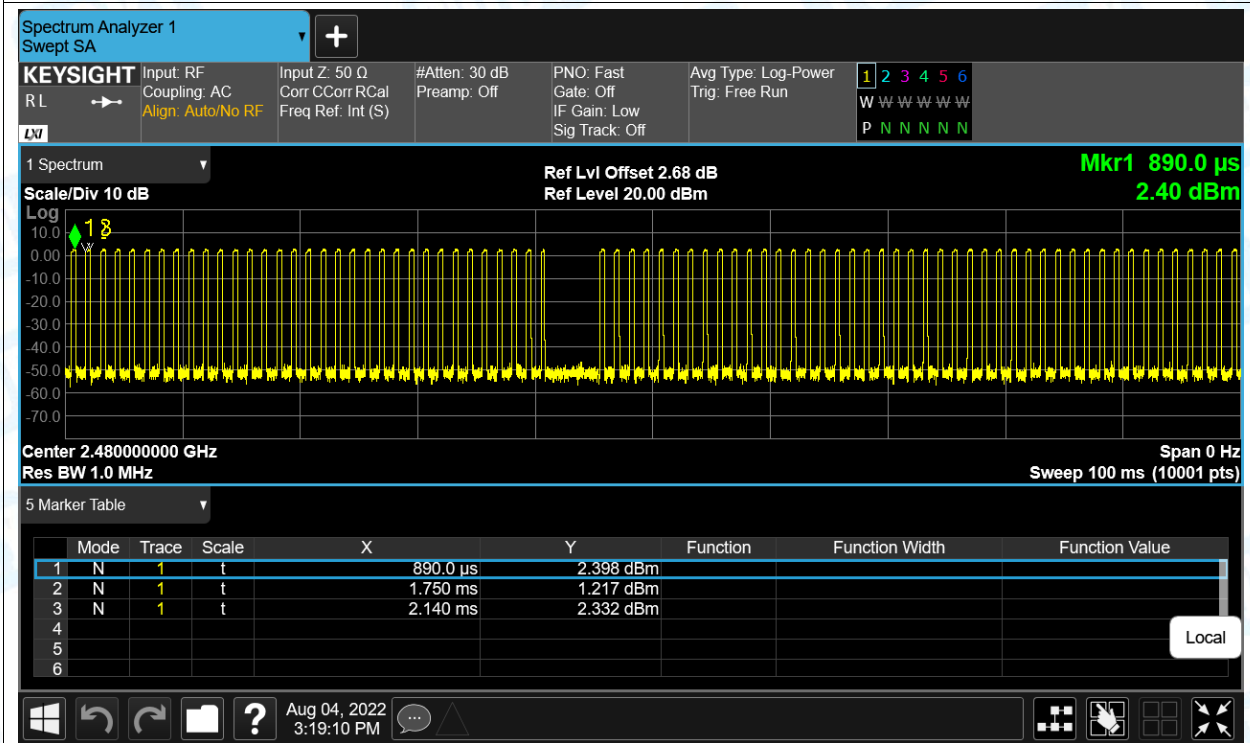
Duty Cycle NVNT 2-DH1 2402MHz Ant1



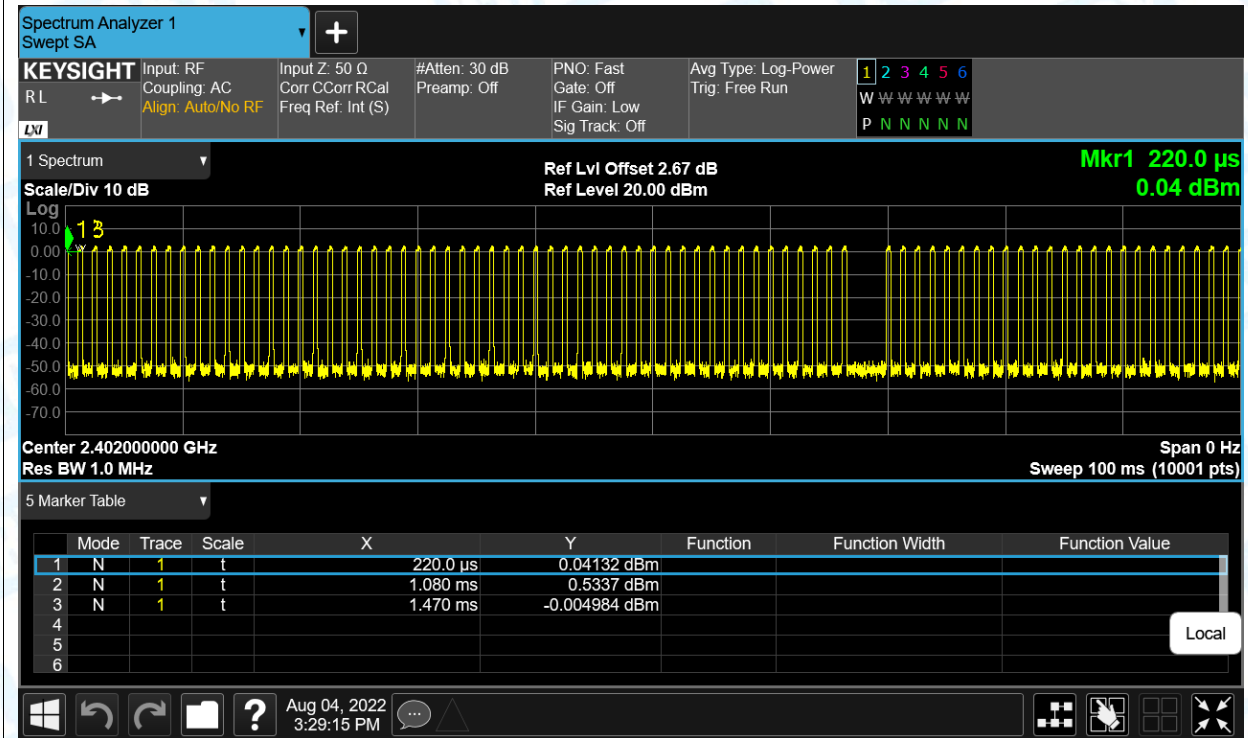
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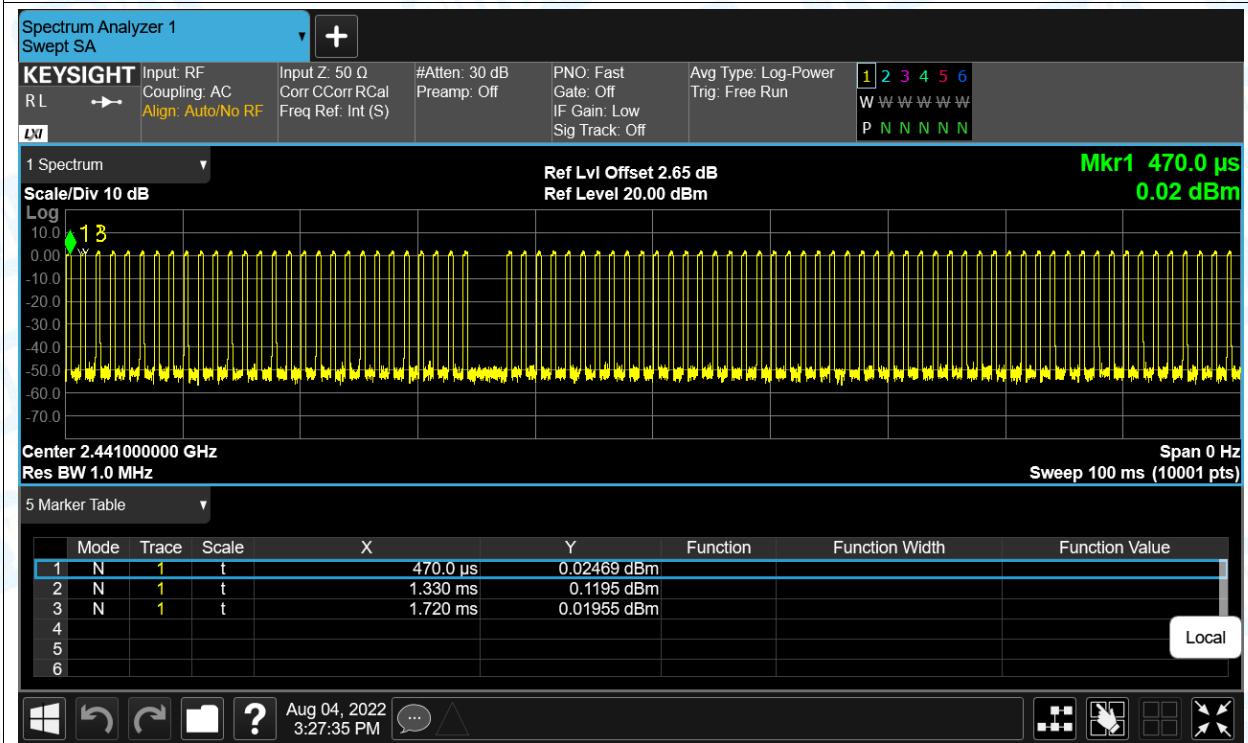
Duty Cycle NVNT 2-DH1 2480MHz Ant1

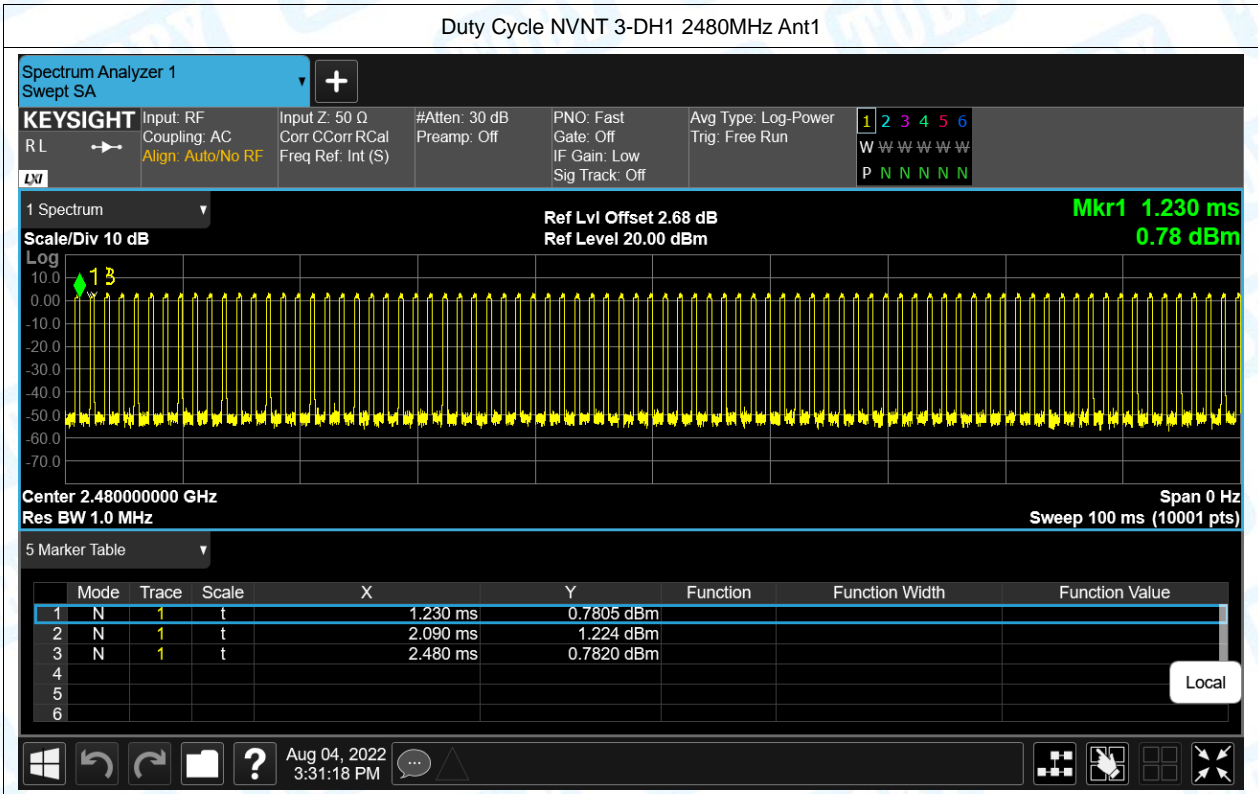


Duty Cycle NVNT 3-DH1 2402MHz Ant1



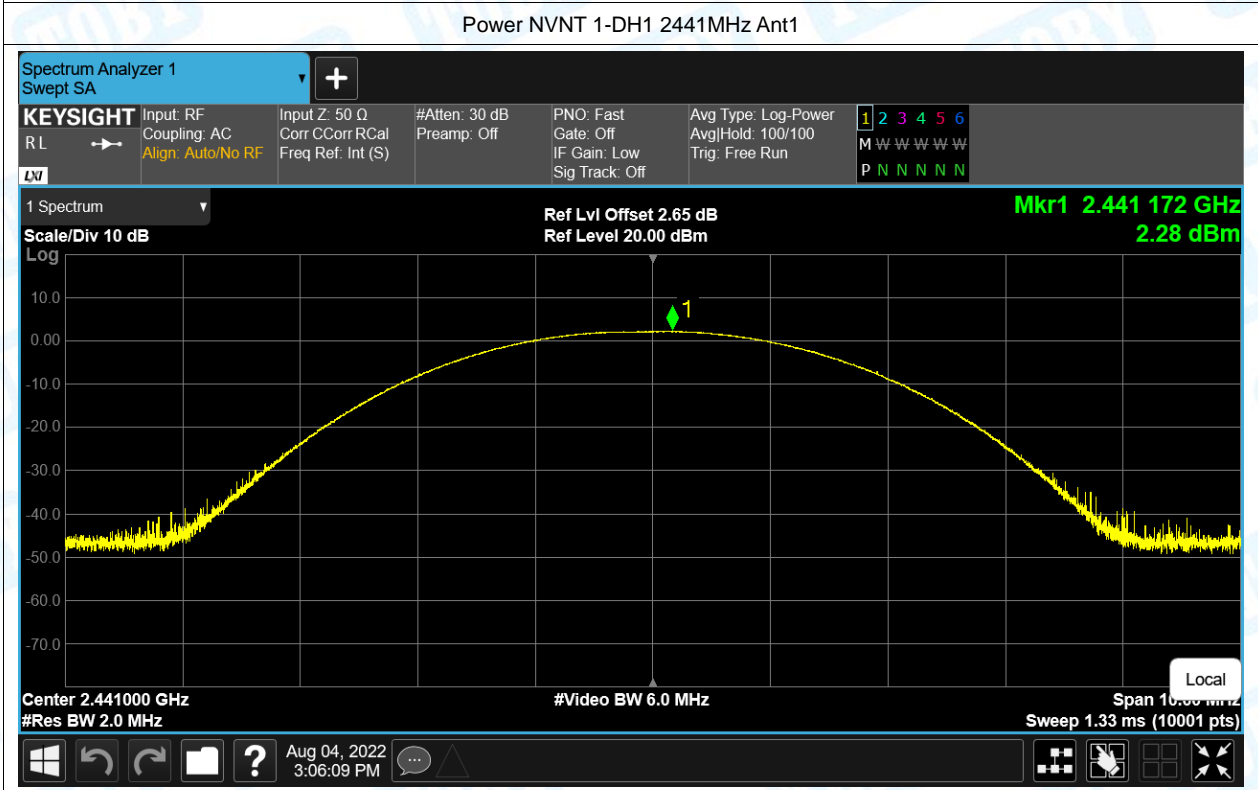
Duty Cycle NVNT 3-DH1 2441MHz Ant1



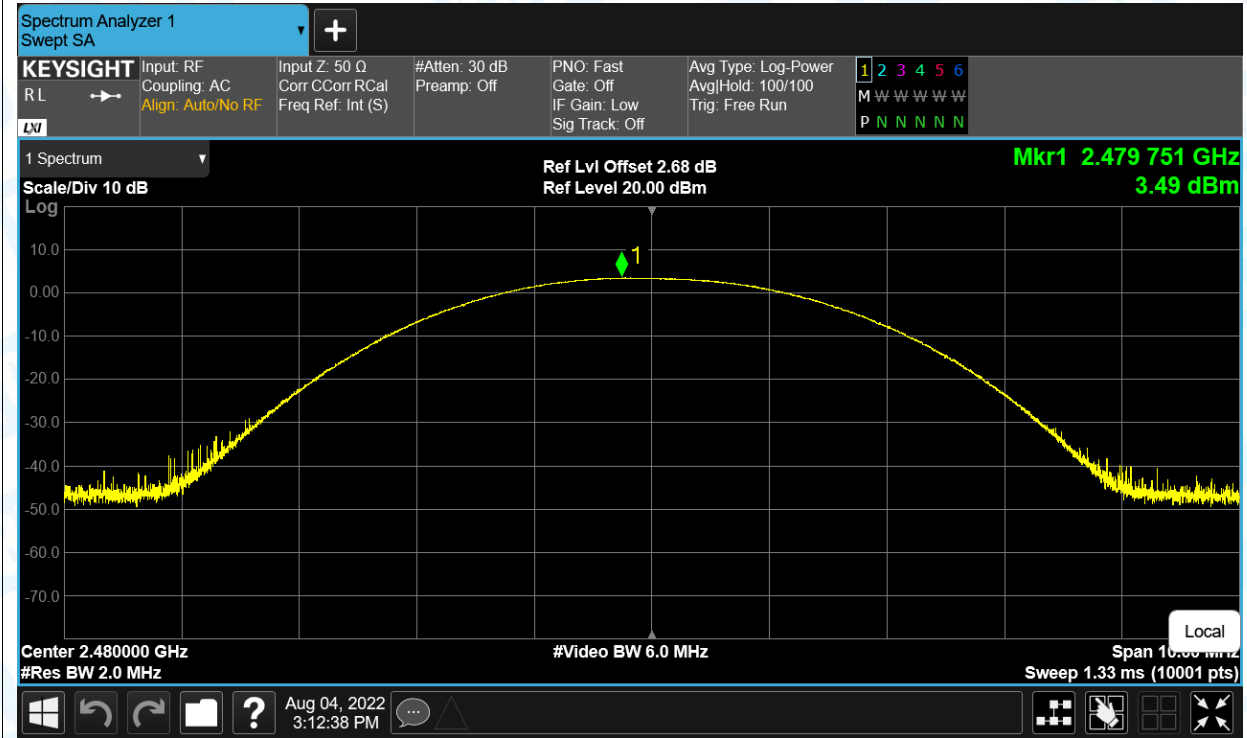


2. Maximum Conducted Output Power

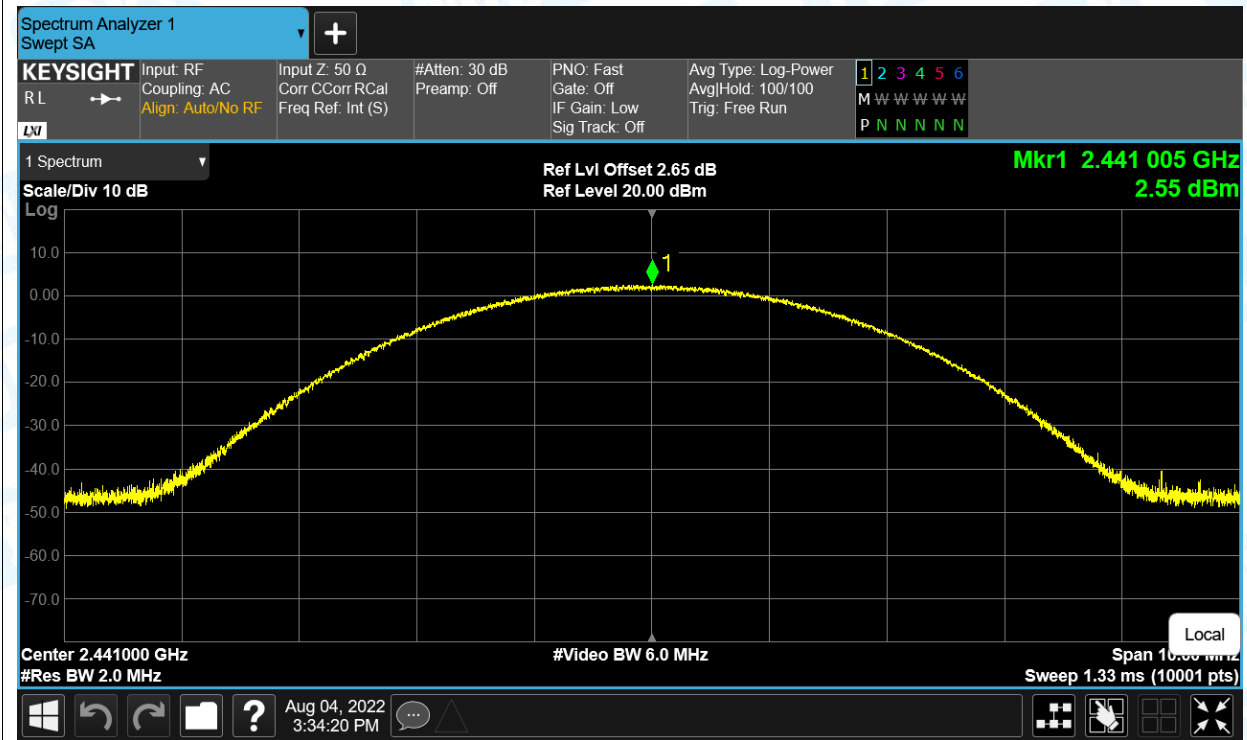
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	2.676	21	Pass
NVNT	1-DH1	2441	Ant1	2.279	21	Pass
NVNT	1-DH1	2480	Ant1	3.487	21	Pass
NVNT	1-DH3	2441	Ant1	2.555	21	Pass
NVNT	1-DH5	2441	Ant1	2.29	21	Pass
NVNT	2-DH1	2402	Ant1	2.608	21	Pass
NVNT	2-DH1	2441	Ant1	2.272	21	Pass
NVNT	2-DH1	2480	Ant1	3.554	21	Pass
NVNT	2-DH3	2441	Ant1	2.372	21	Pass
NVNT	2-DH5	2441	Ant1	2.337	21	Pass
NVNT	3-DH1	2402	Ant1	3.004	21	Pass
NVNT	3-DH1	2441	Ant1	2.705	21	Pass
NVNT	3-DH1	2480	Ant1	3.957	21	Pass
NVNT	3-DH3	2441	Ant1	2.619	21	Pass
NVNT	3-DH5	2441	Ant1	2.69	21	Pass



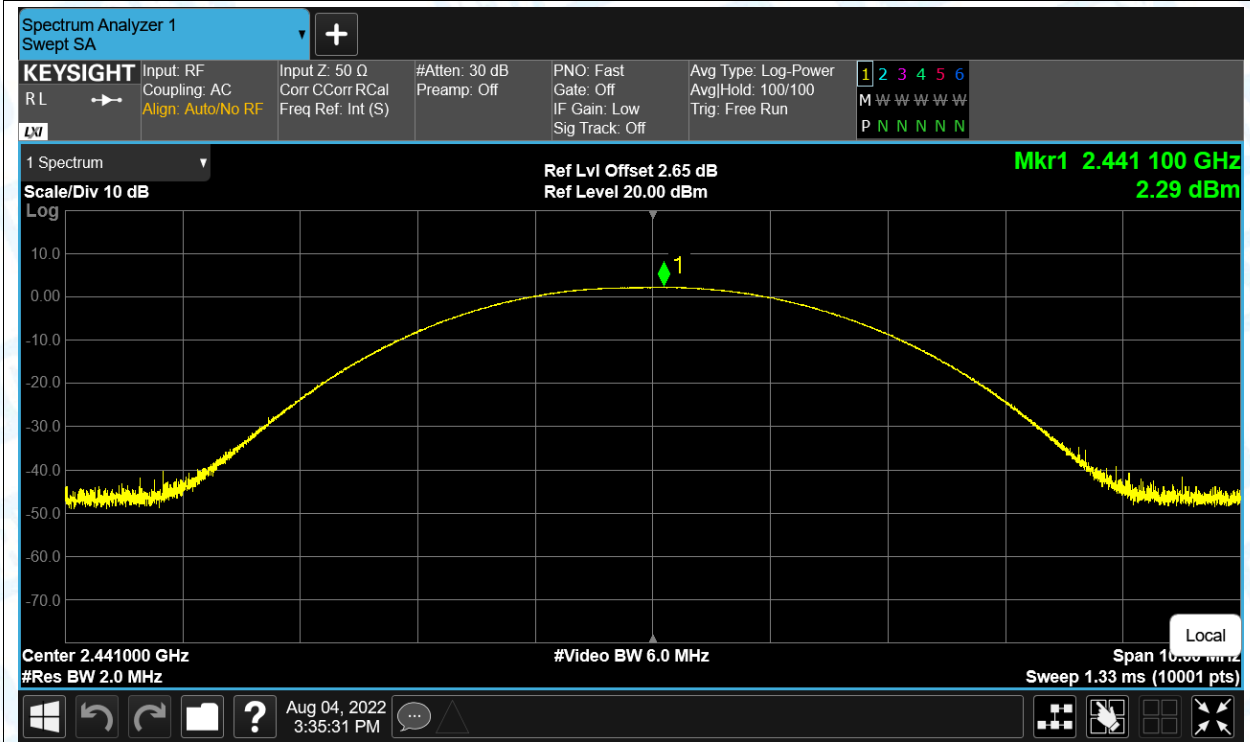
Power NVNT 1-DH1 2480MHz Ant1



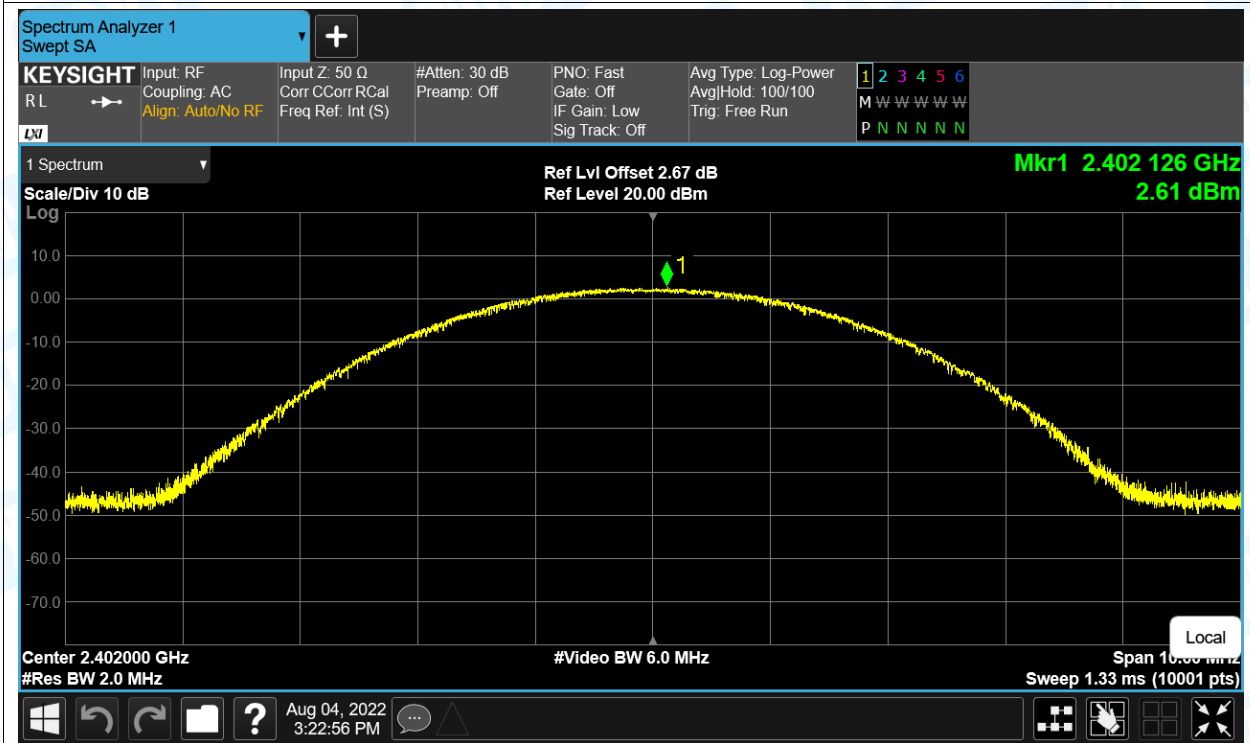
Power NVNT 1-DH3 2441MHz Ant1



Power NVNT 1-DH5 2441MHz Ant1



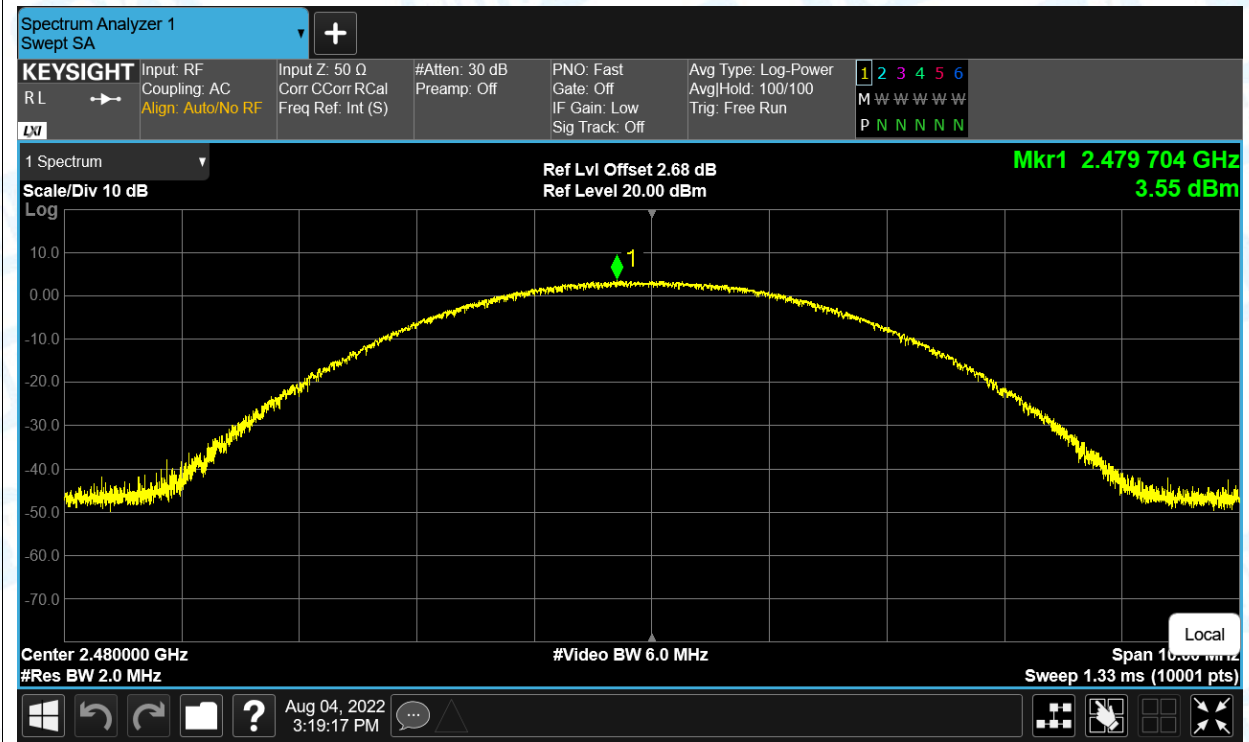
Power NVNT 2-DH1 2402MHz Ant1



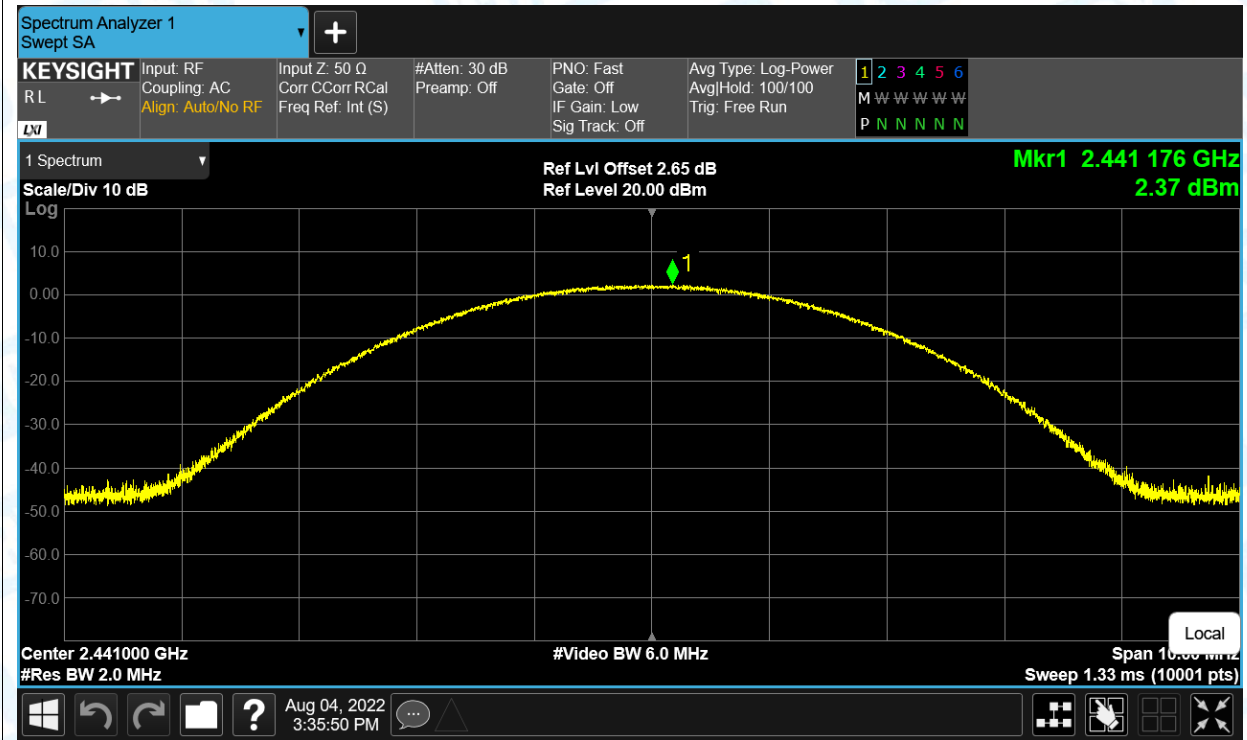
Power NVNT 2-DH1 2441MHz Ant1



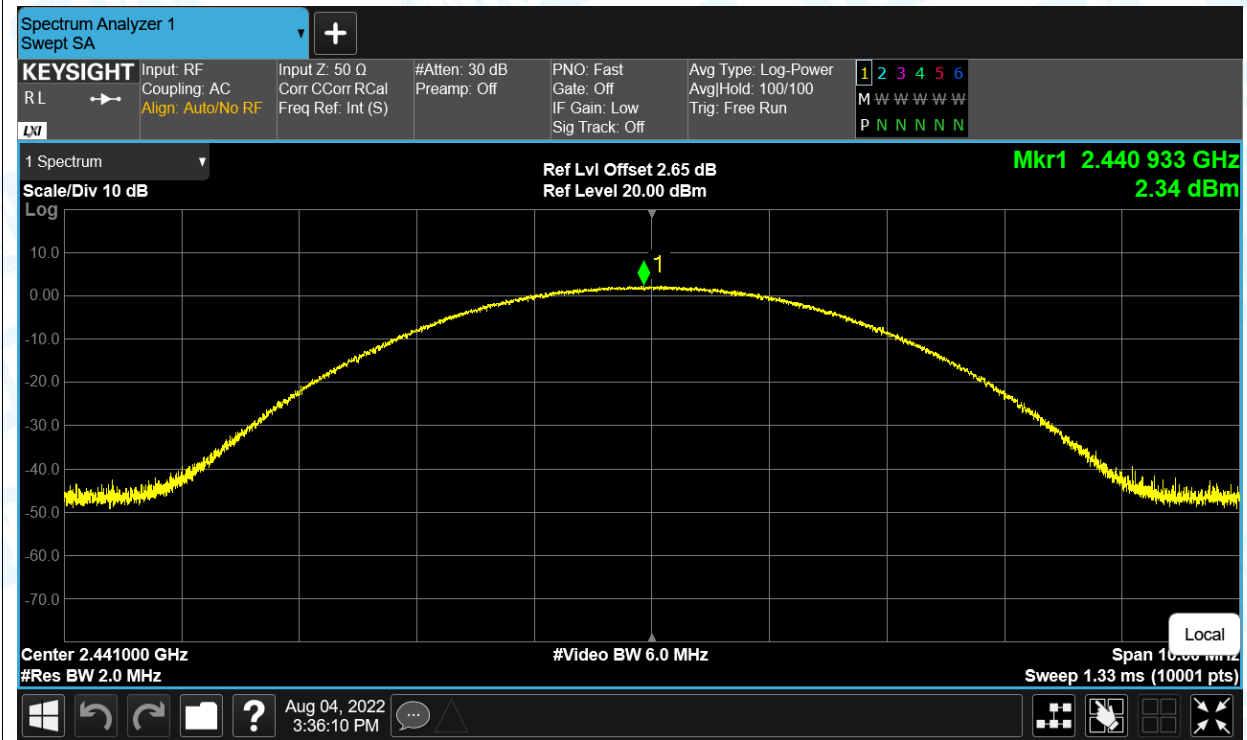
Power NVNT 2-DH1 2480MHz Ant1



Power NVNT 2-DH3 2441MHz Ant1



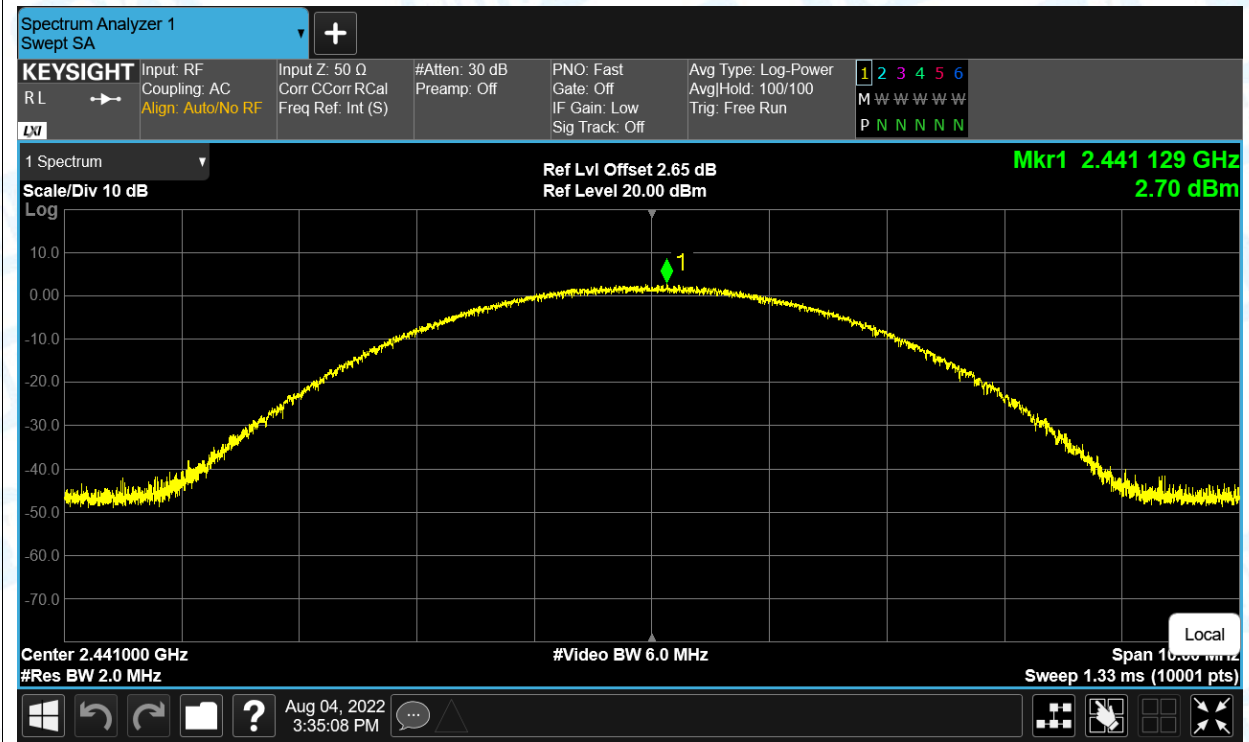
Power NVNT 2-DH5 2441MHz Ant1

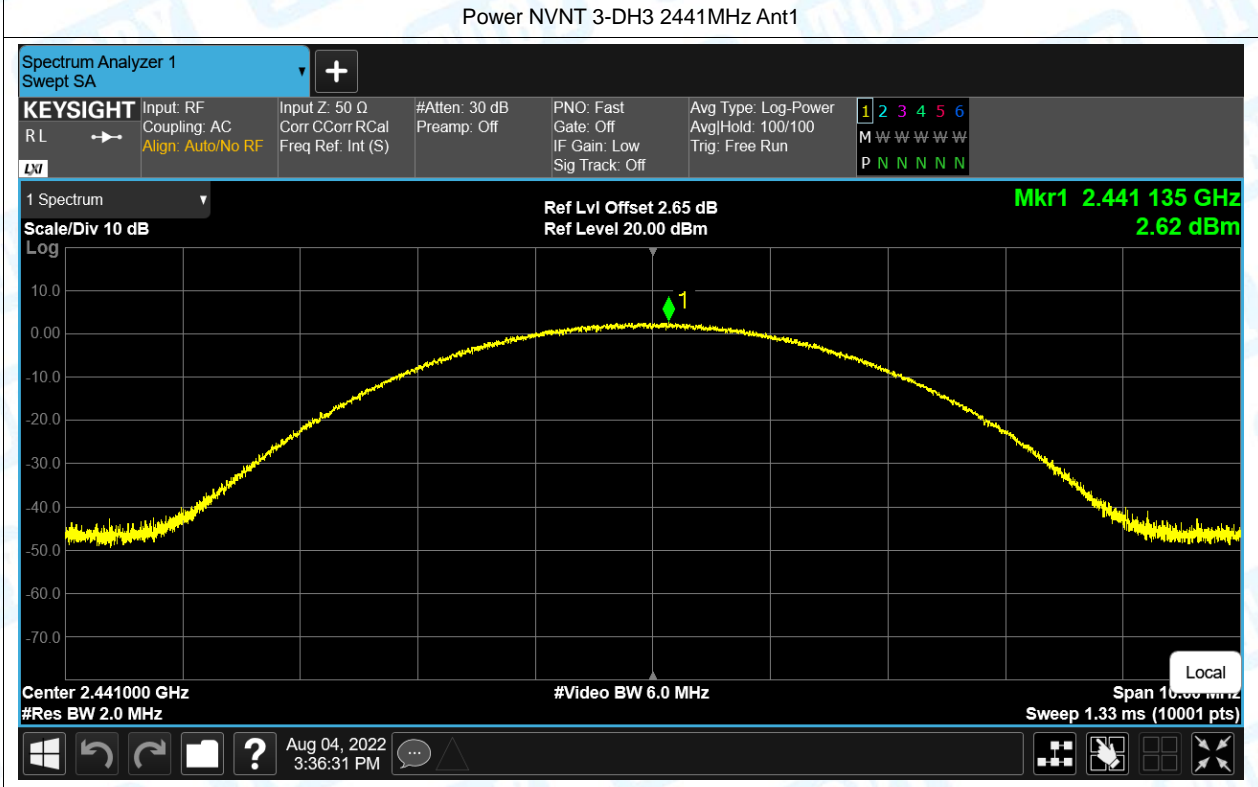


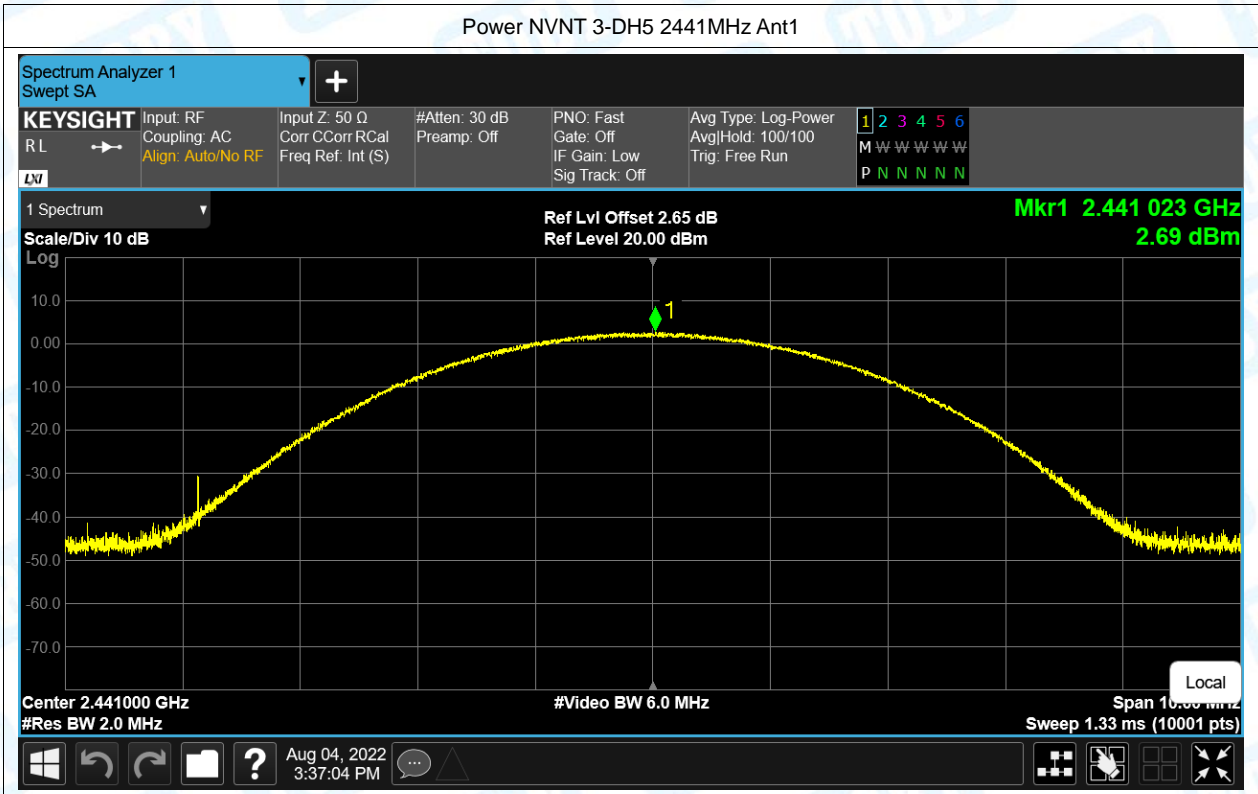
Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1





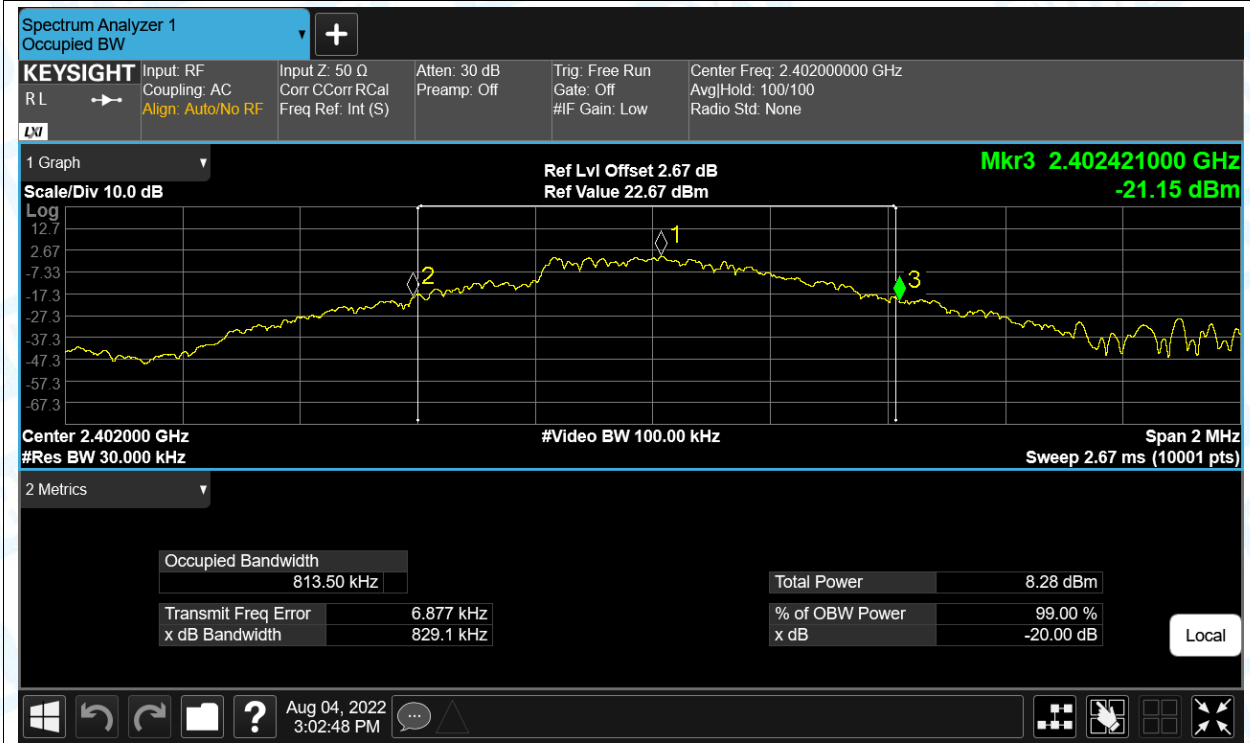


3. -20dB Bandwidth

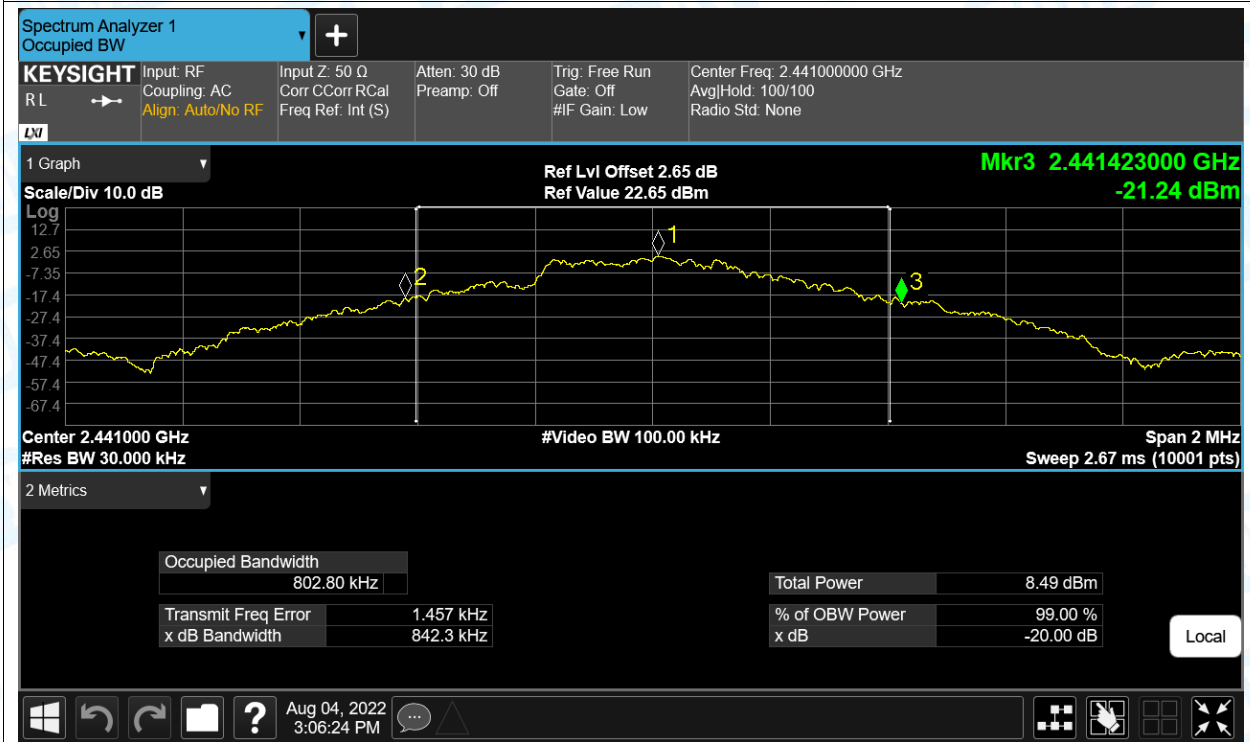
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.83	0	Pass
NVNT	1-DH1	2441	Ant1	0.84	0	Pass
NVNT	1-DH1	2480	Ant1	0.86	0	Pass
NVNT	2-DH1	2402	Ant1	1.26	0	Pass
NVNT	2-DH1	2441	Ant1	1.27	0	Pass
NVNT	2-DH1	2480	Ant1	1.26	0	Pass
NVNT	3-DH1	2402	Ant1	1.22	0	Pass
NVNT	3-DH1	2441	Ant1	1.22	0	Pass
NVNT	3-DH1	2480	Ant1	1.23	0	Pass

Test Graphs

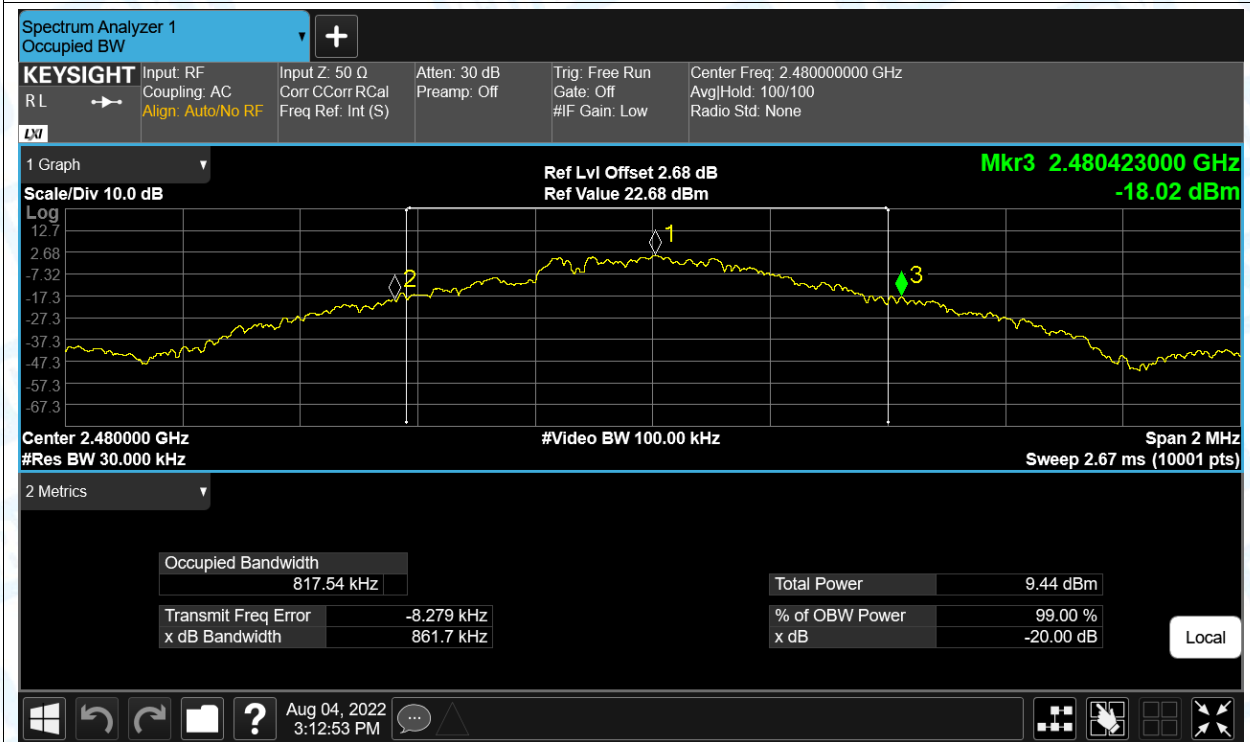
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



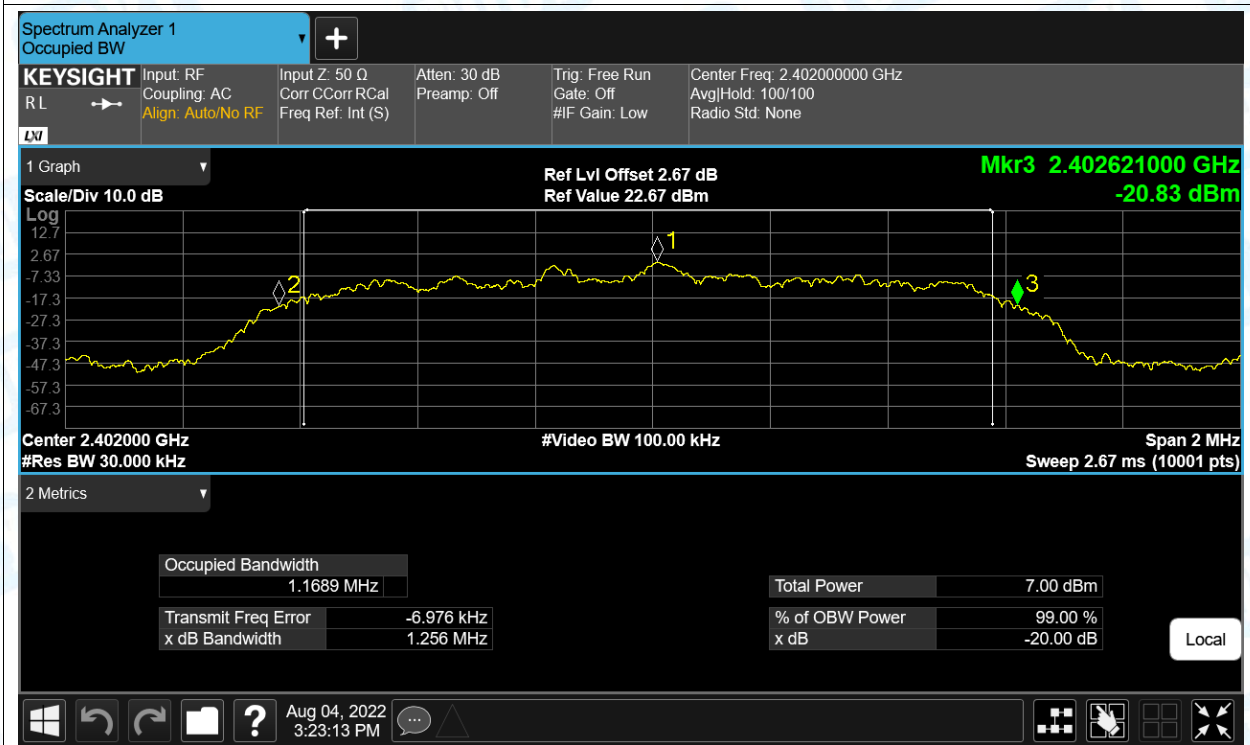
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



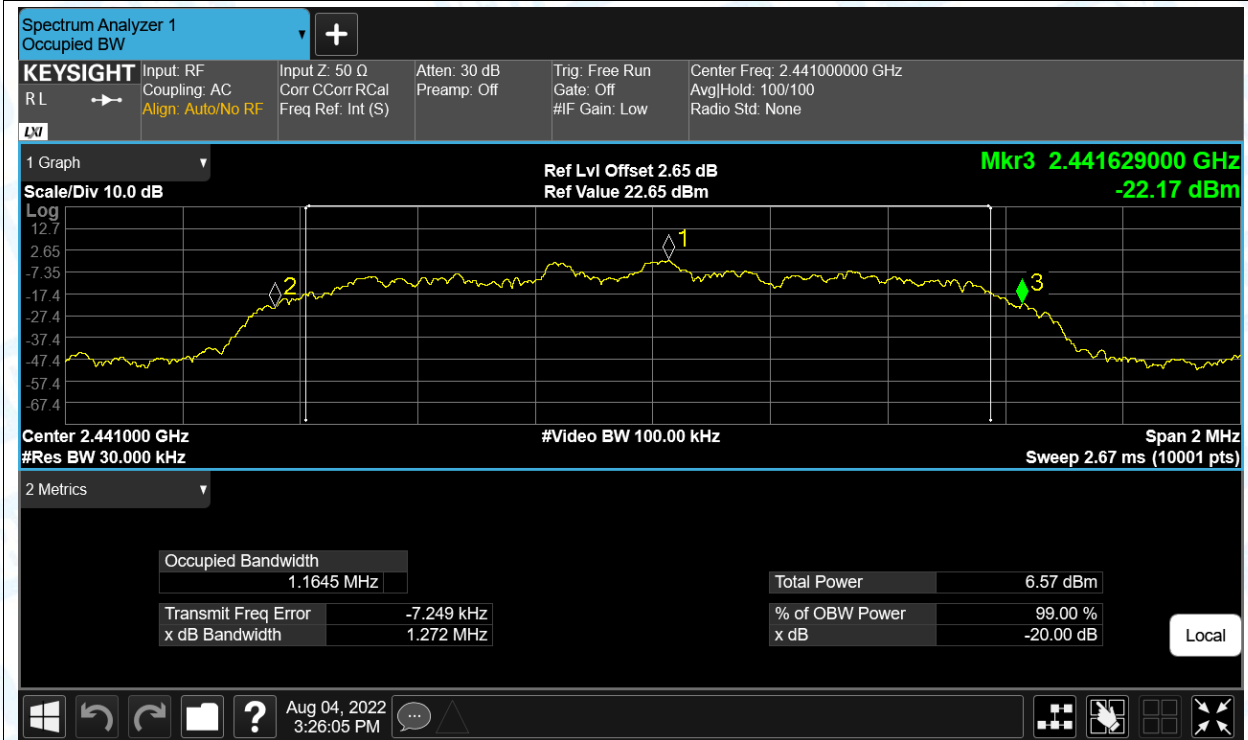
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



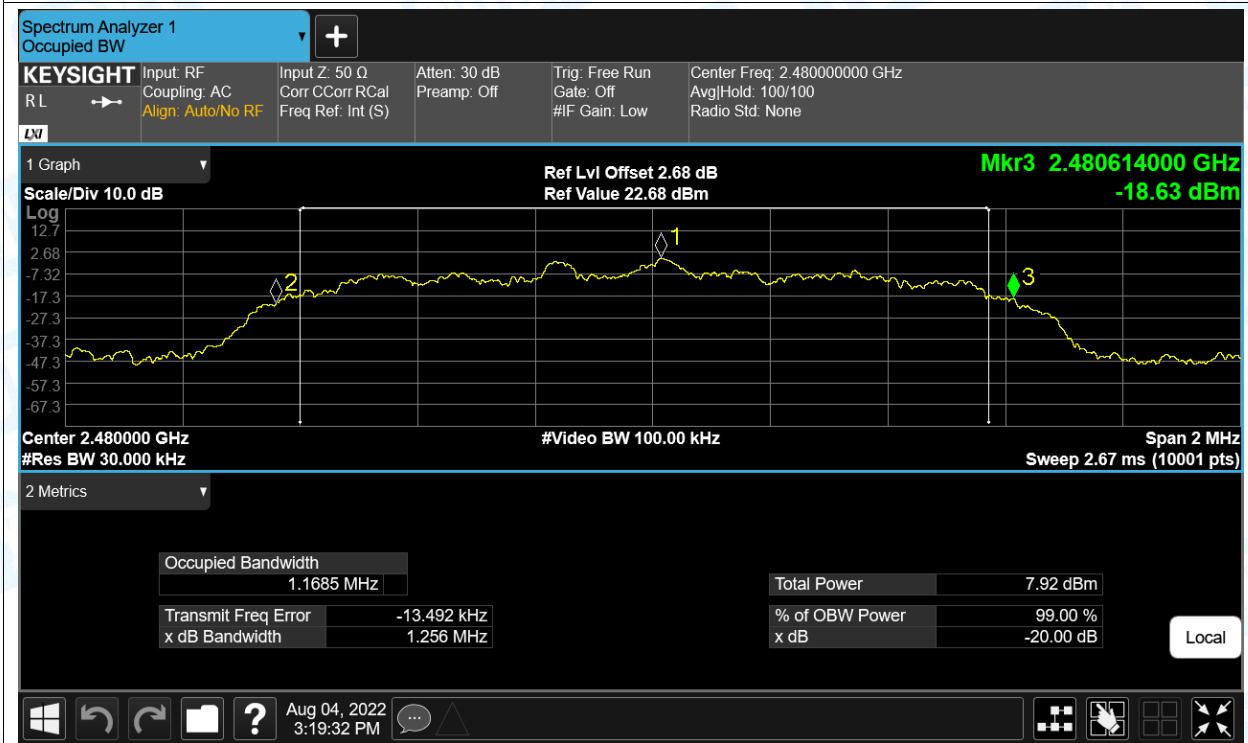
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



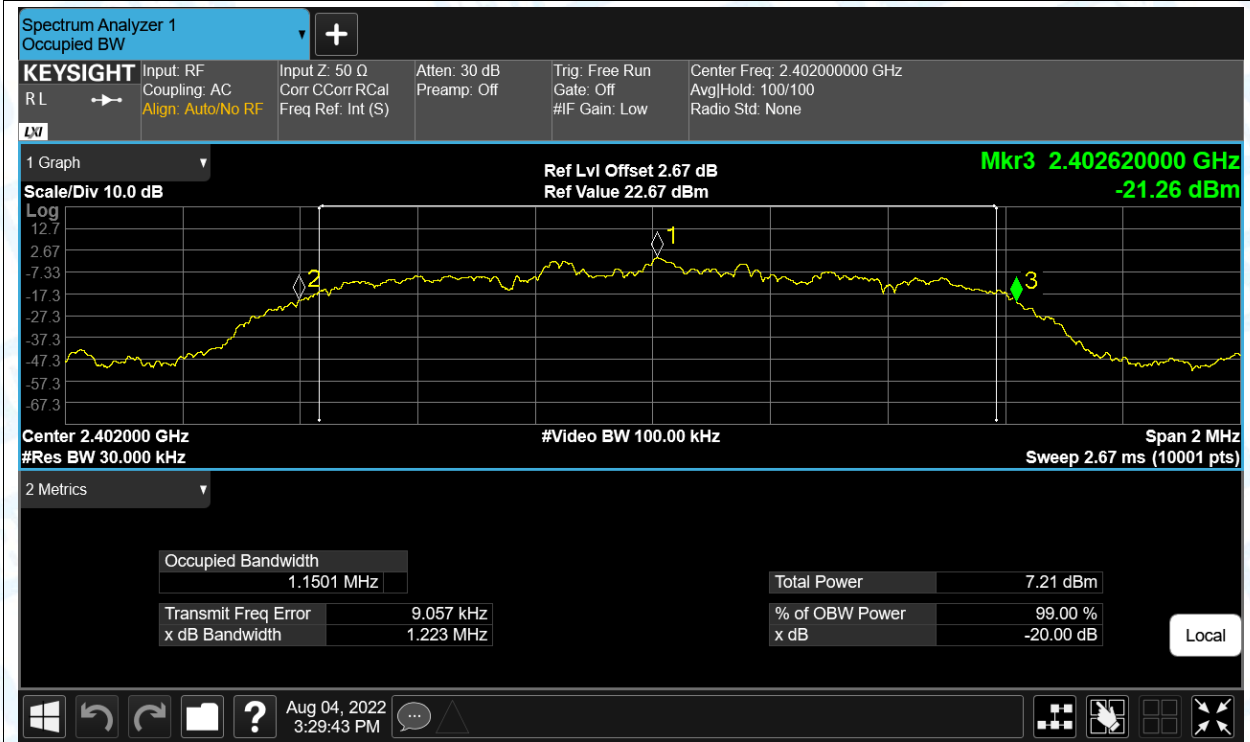
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



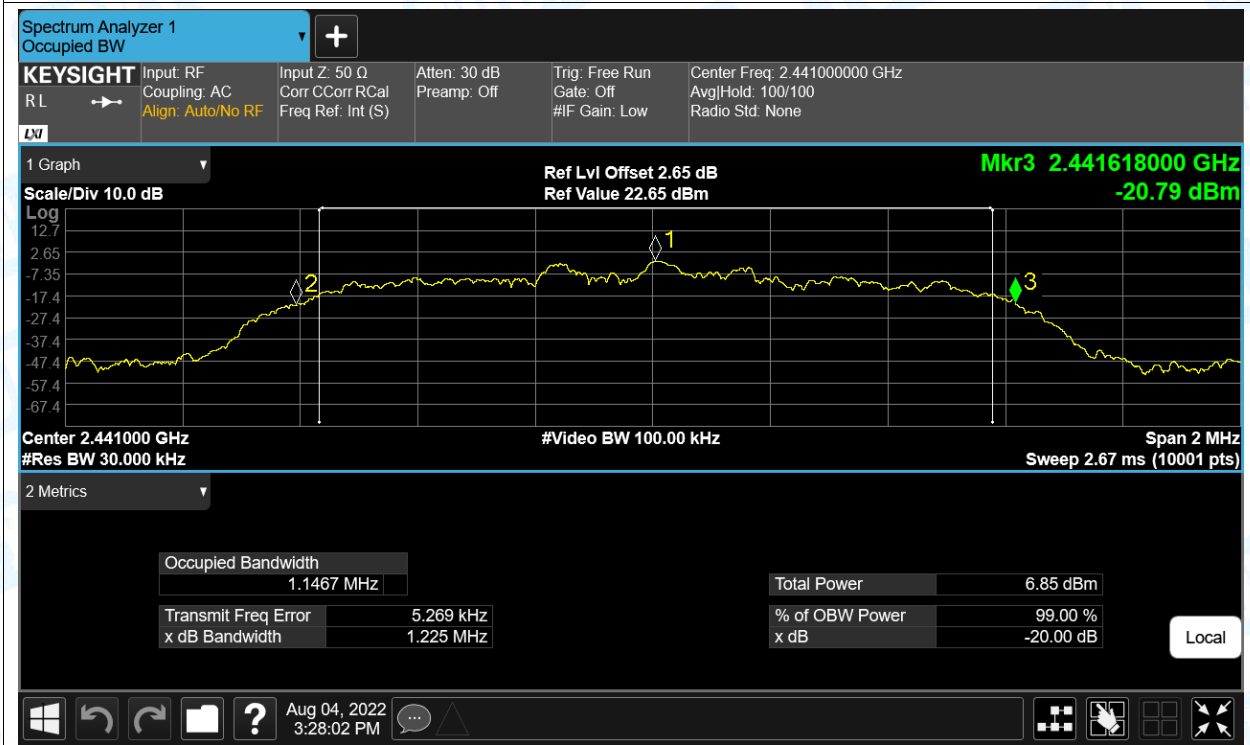
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

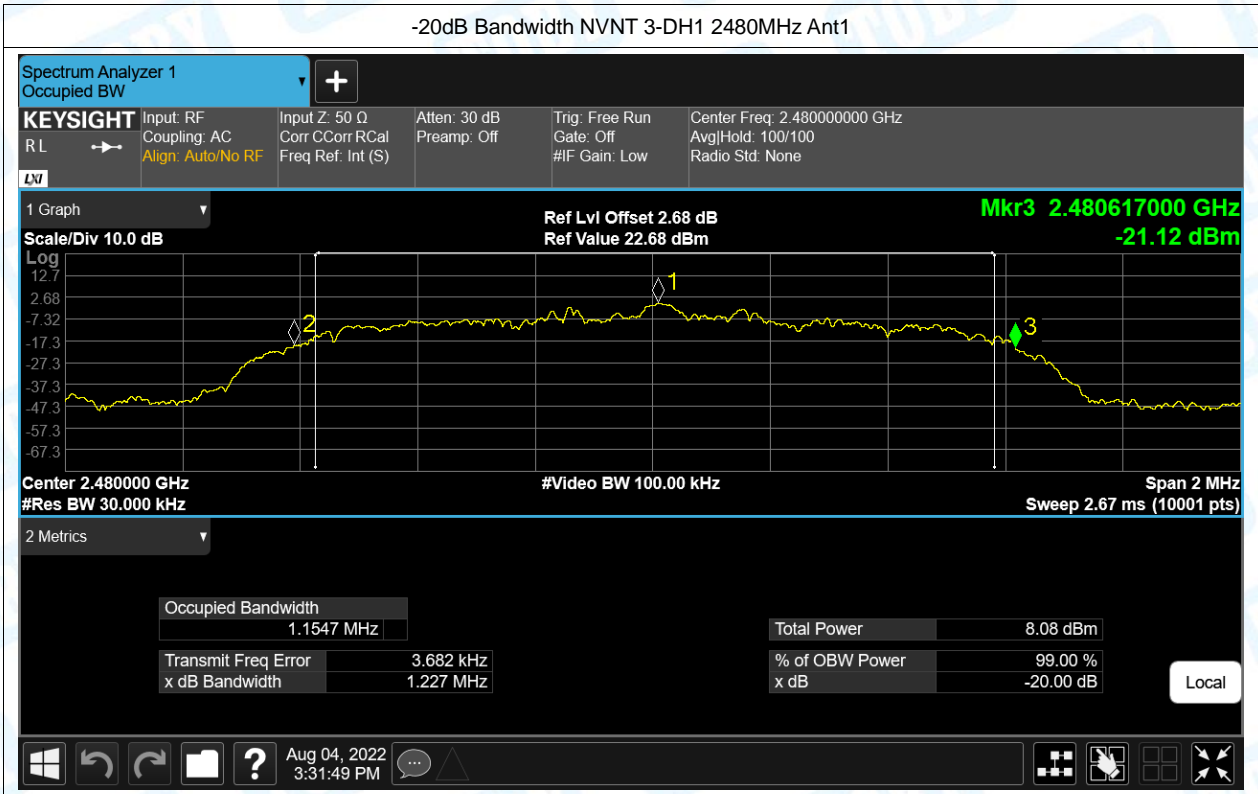


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



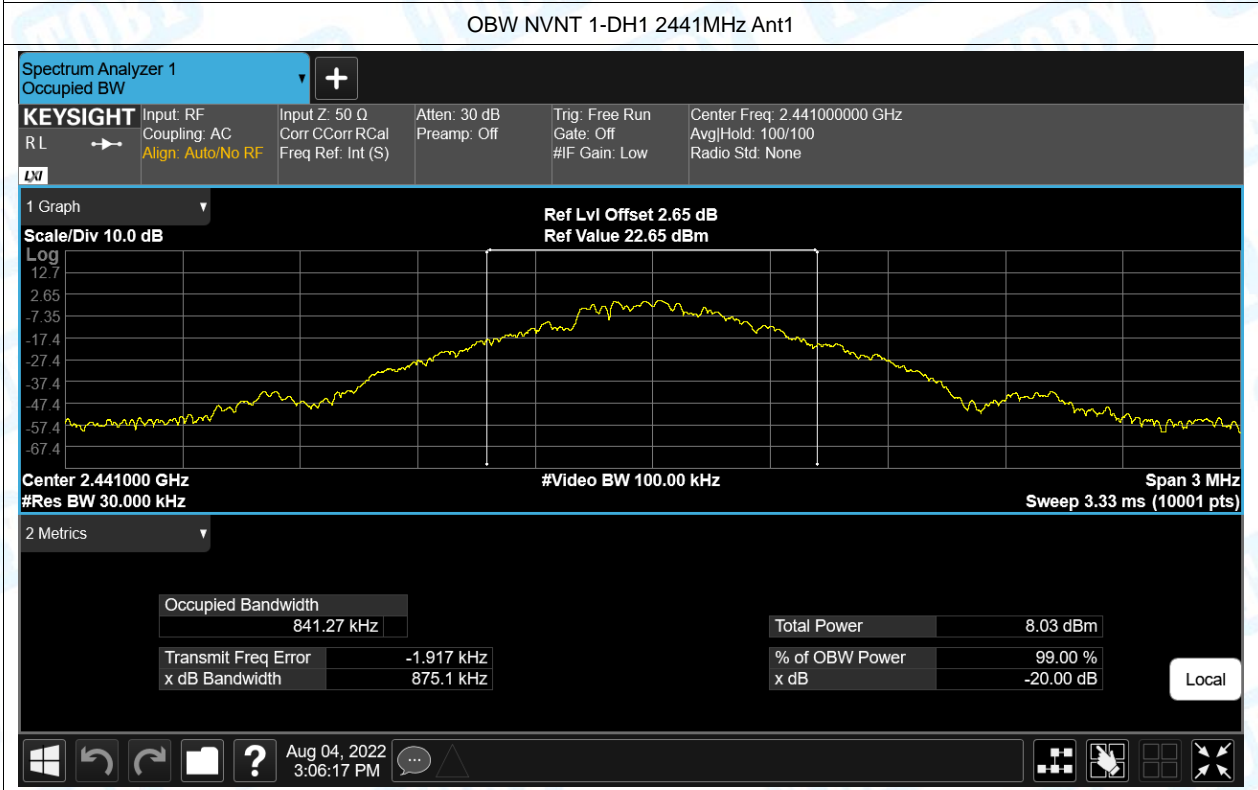
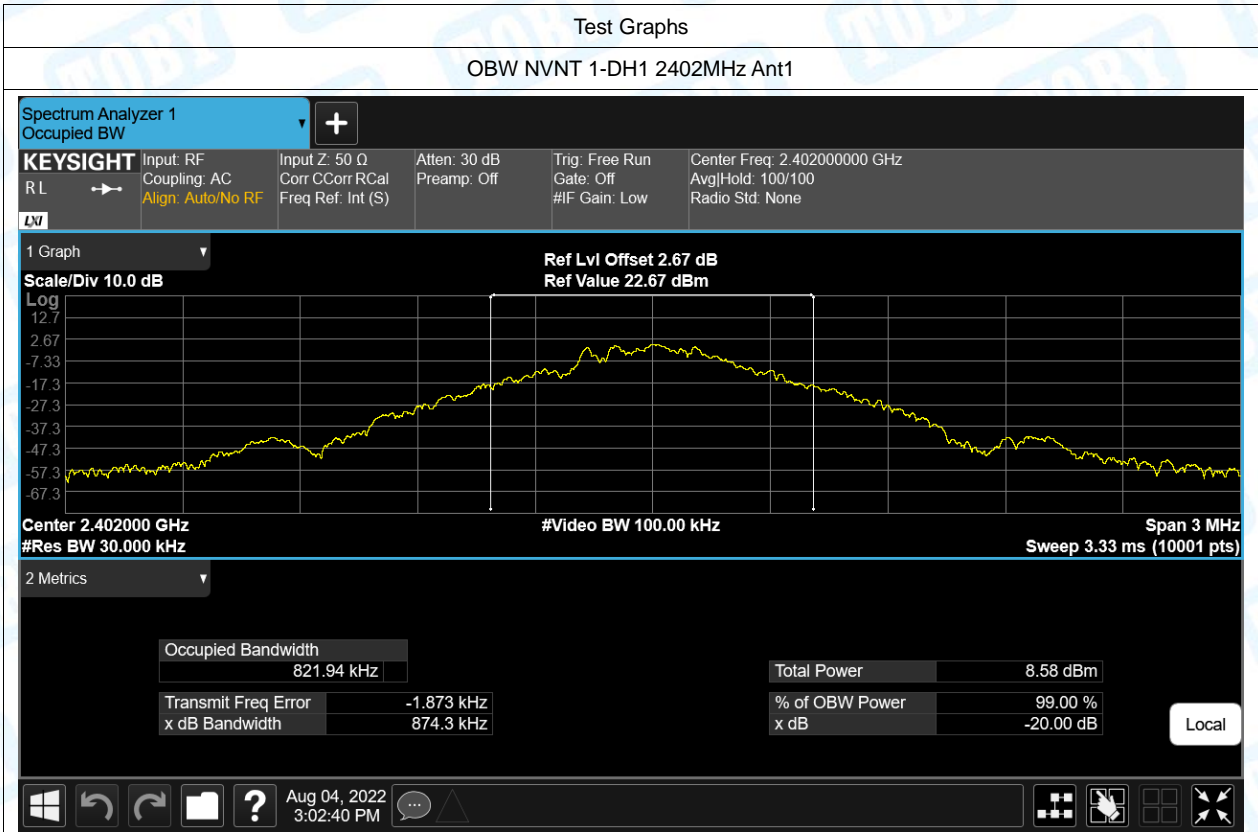
-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.822
NVNT	1-DH1	2441	Ant1	0.841
NVNT	1-DH1	2480	Ant1	0.81
NVNT	2-DH1	2402	Ant1	1.172
NVNT	2-DH1	2441	Ant1	1.174
NVNT	2-DH1	2480	Ant1	1.161
NVNT	3-DH1	2402	Ant1	1.152
NVNT	3-DH1	2441	Ant1	1.146
NVNT	3-DH1	2480	Ant1	1.143



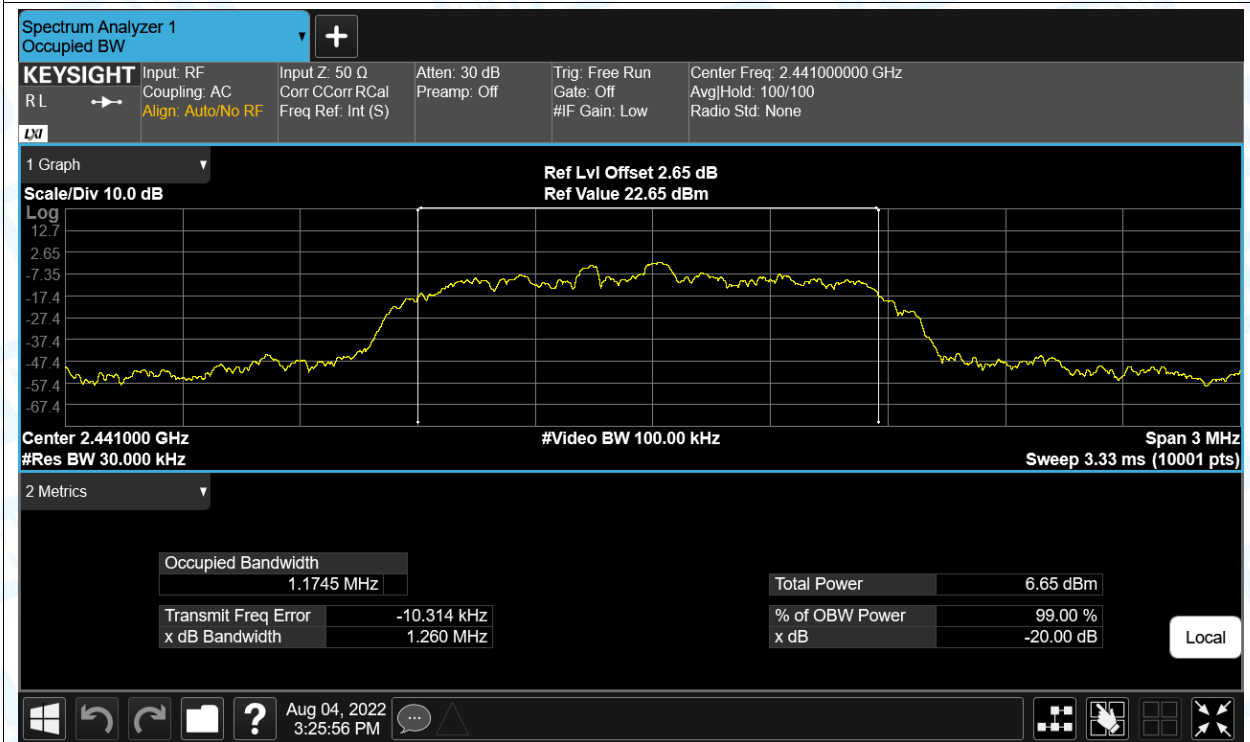
OBW NVNT 1-DH1 2480MHz Ant1



OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1



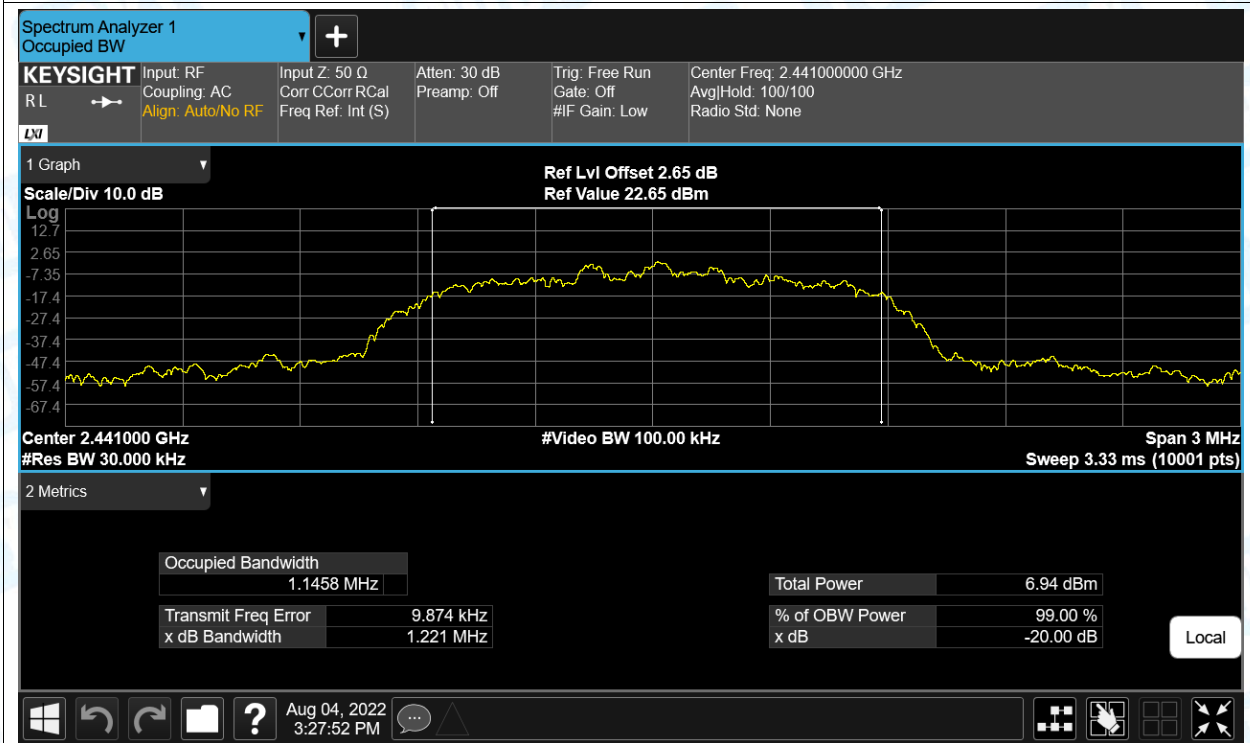
OBW NVNT 2-DH1 2480MHz Ant1

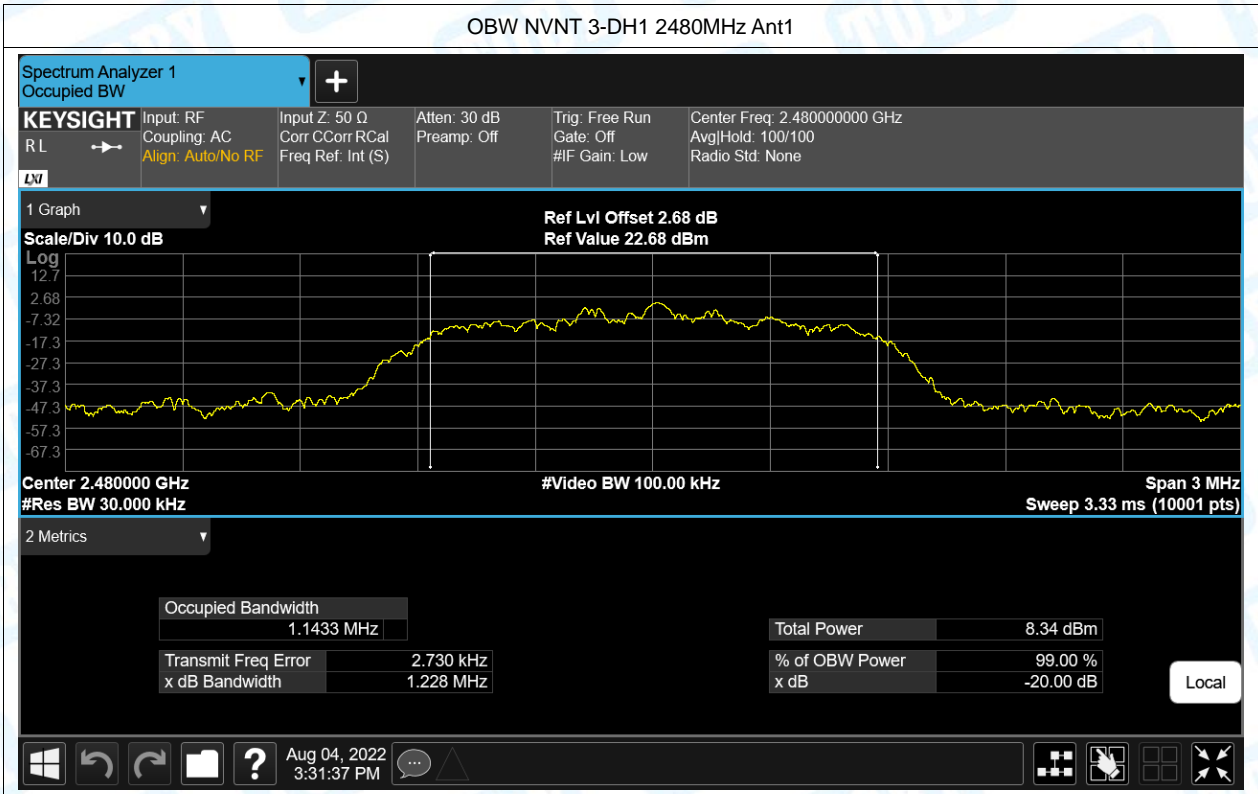


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1



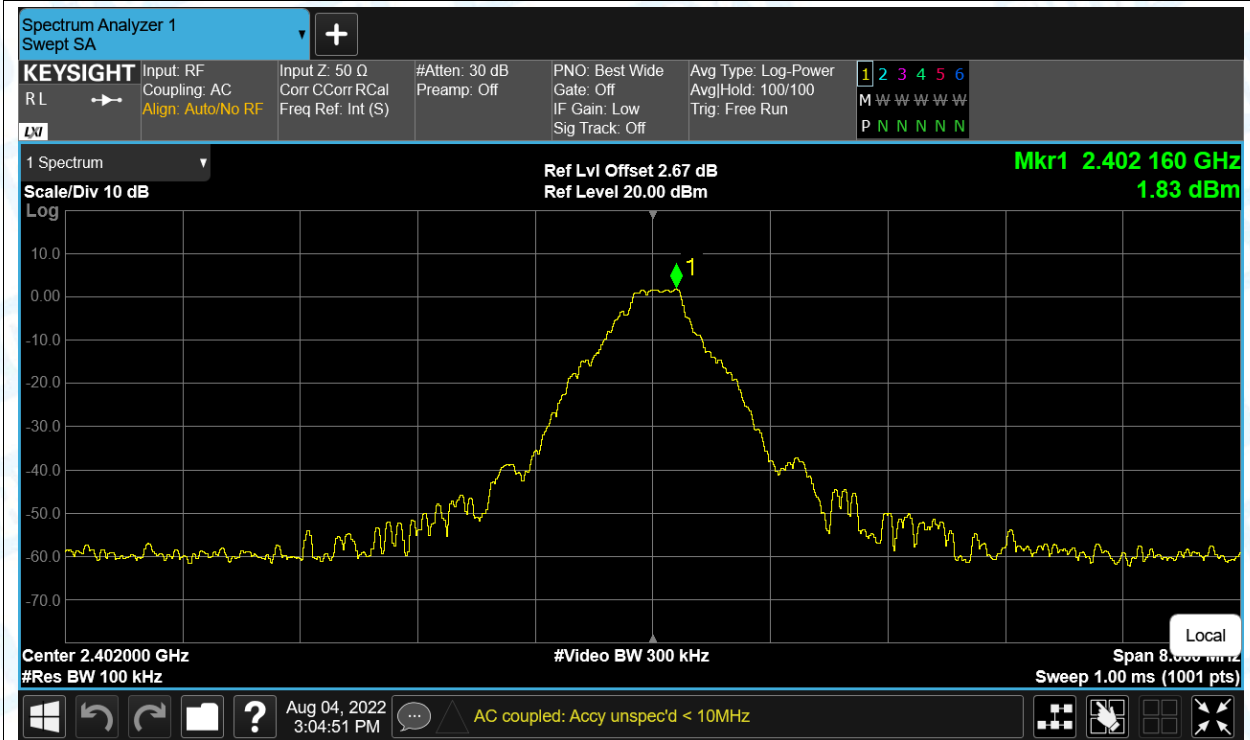


5. Band Edge

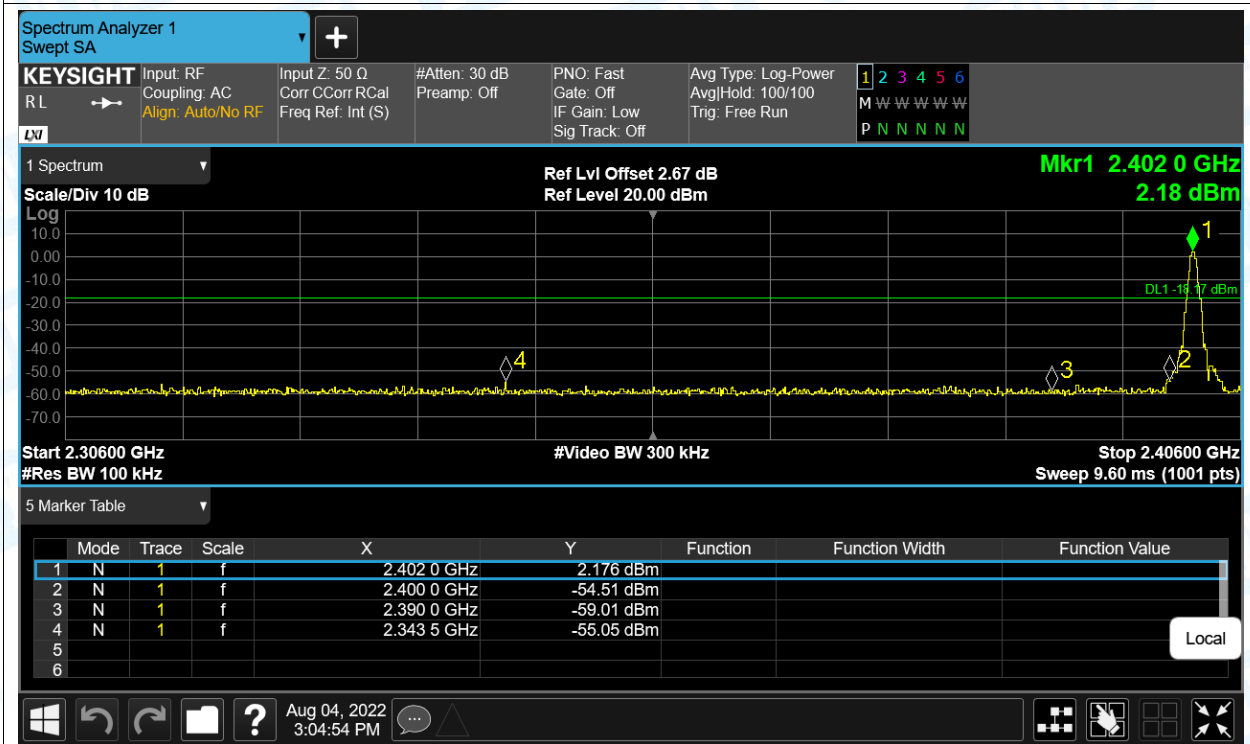
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-56.88	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-59.63	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-56.22	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-57.65	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-56.18	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-57.41	-20	Pass

Test Graphs

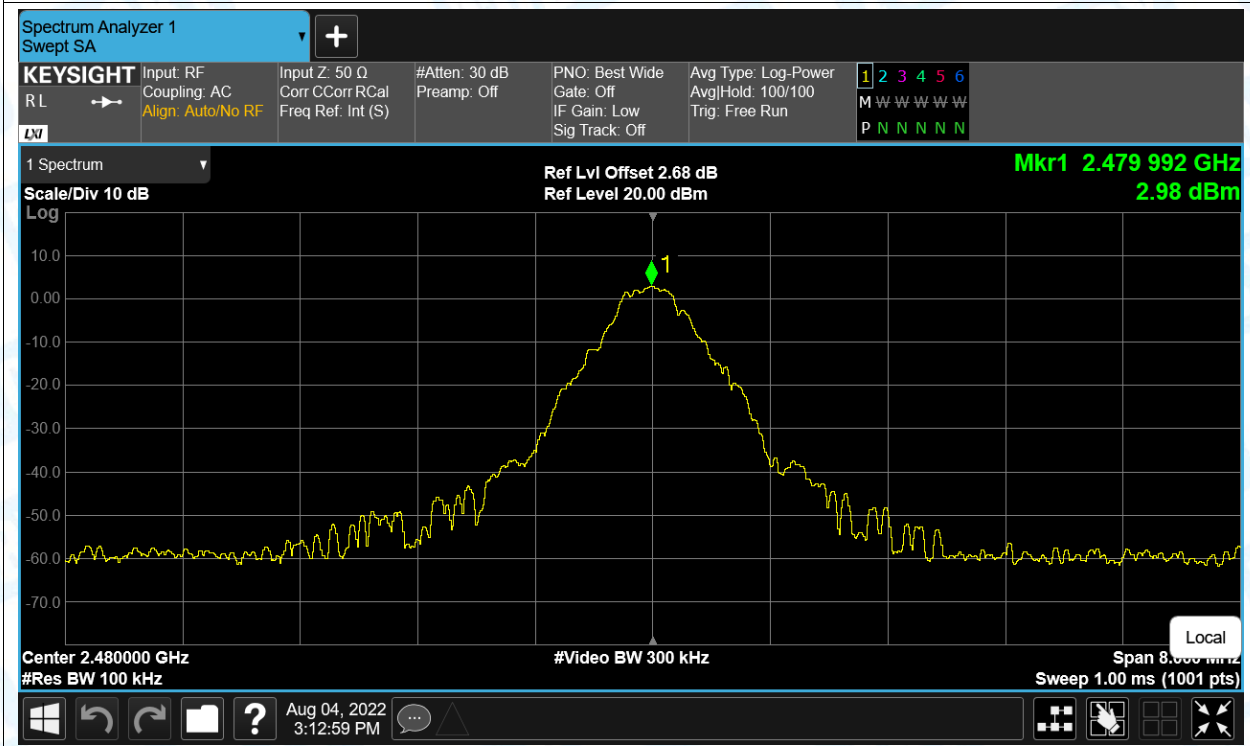
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref



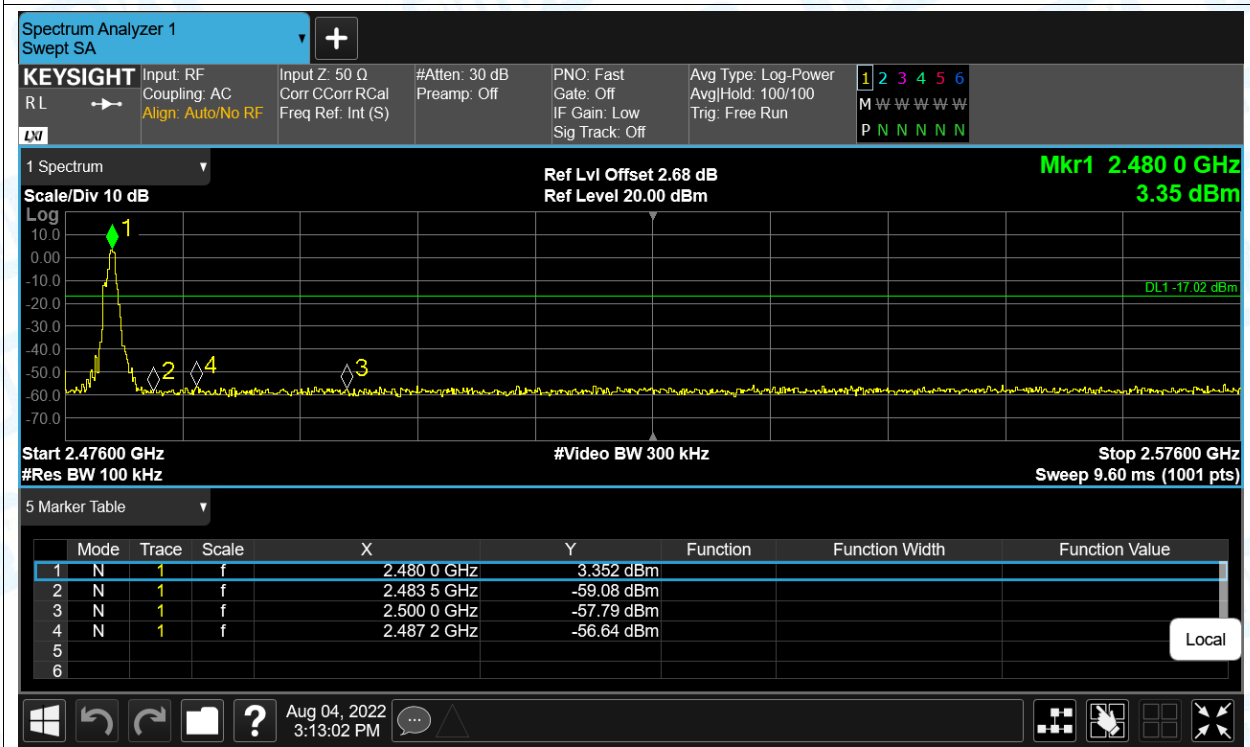
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

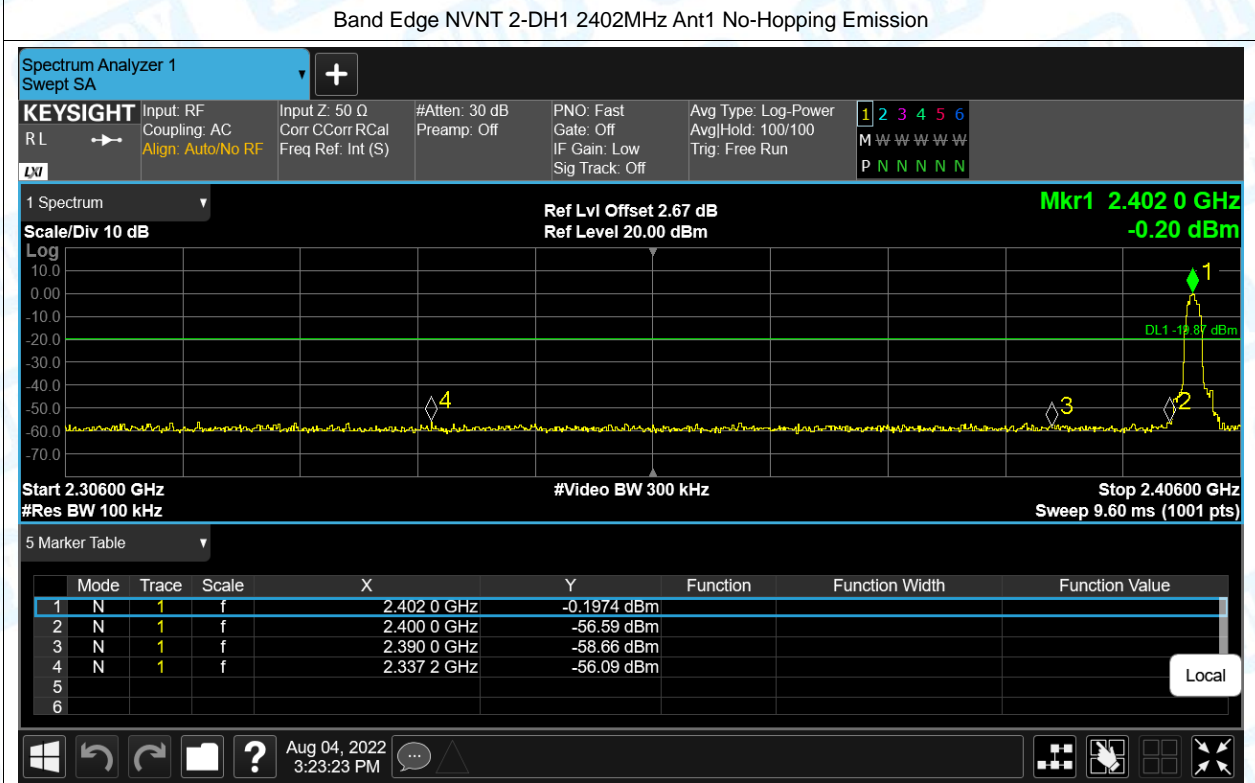
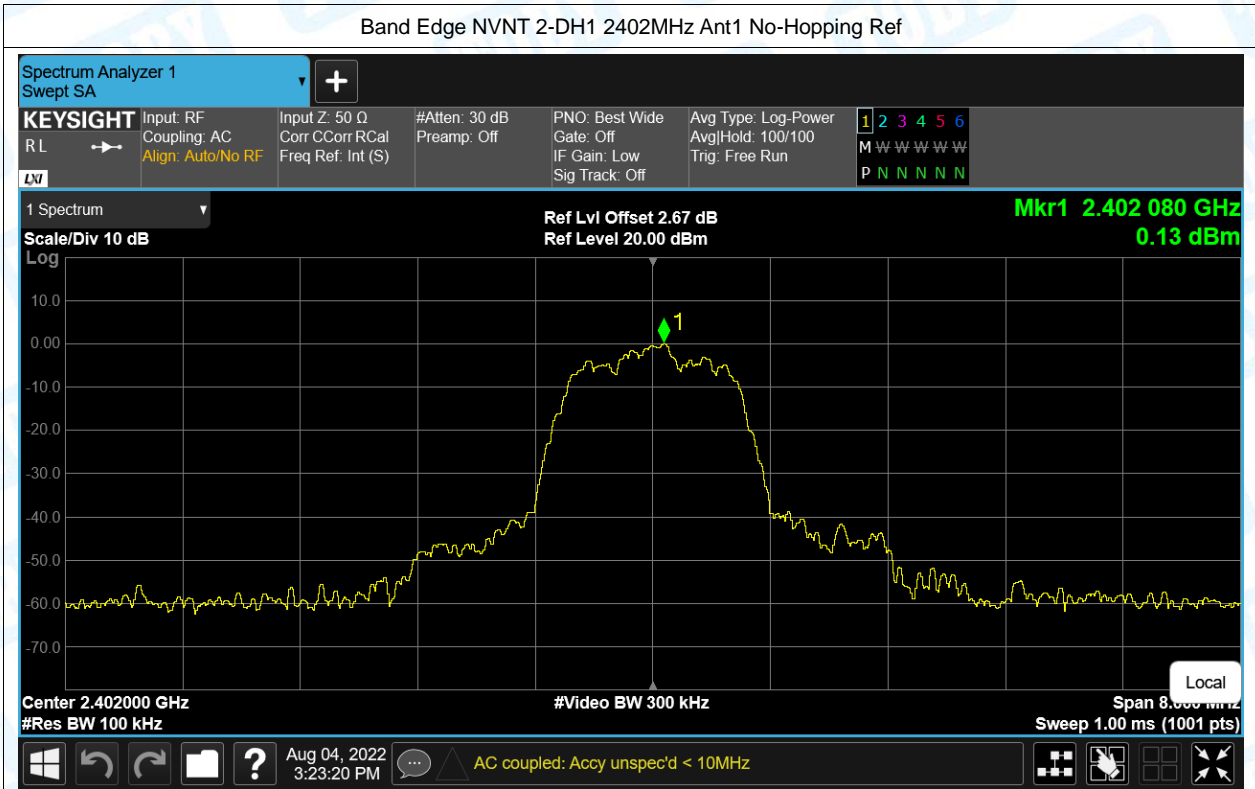


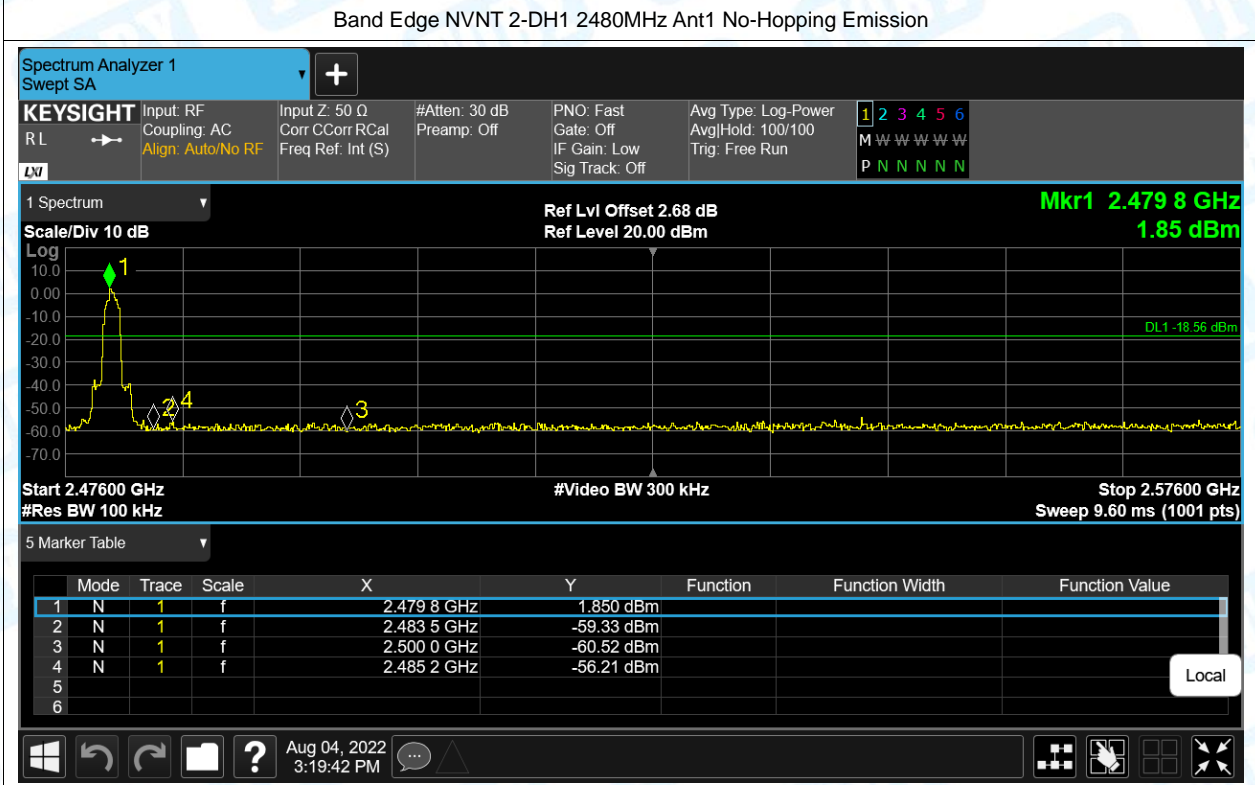
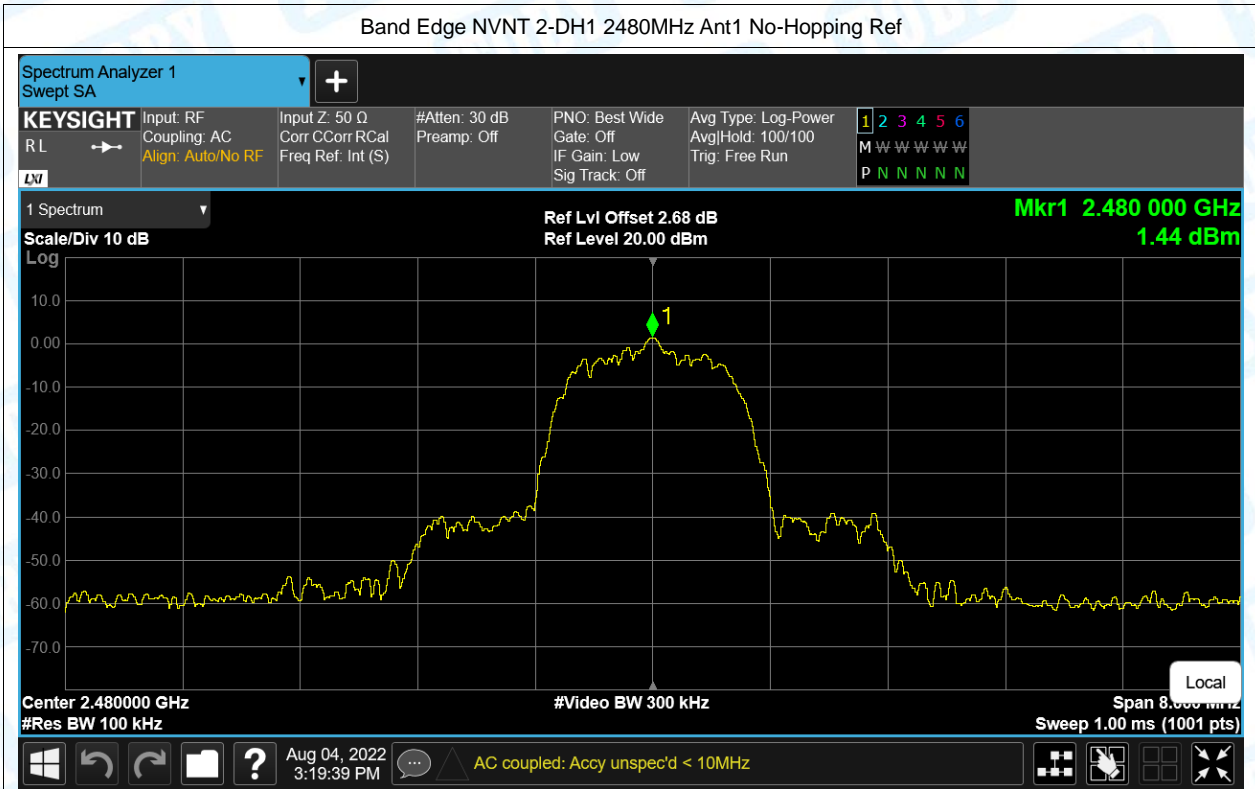
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref

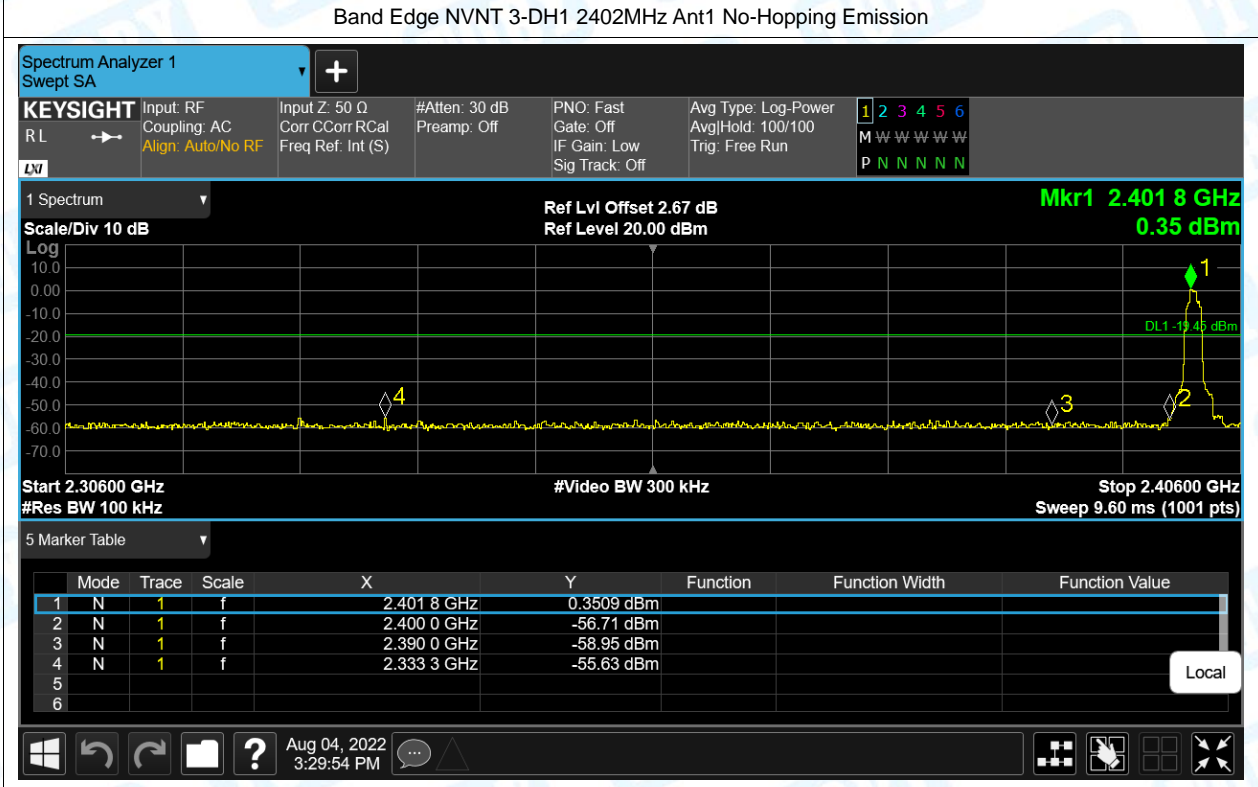
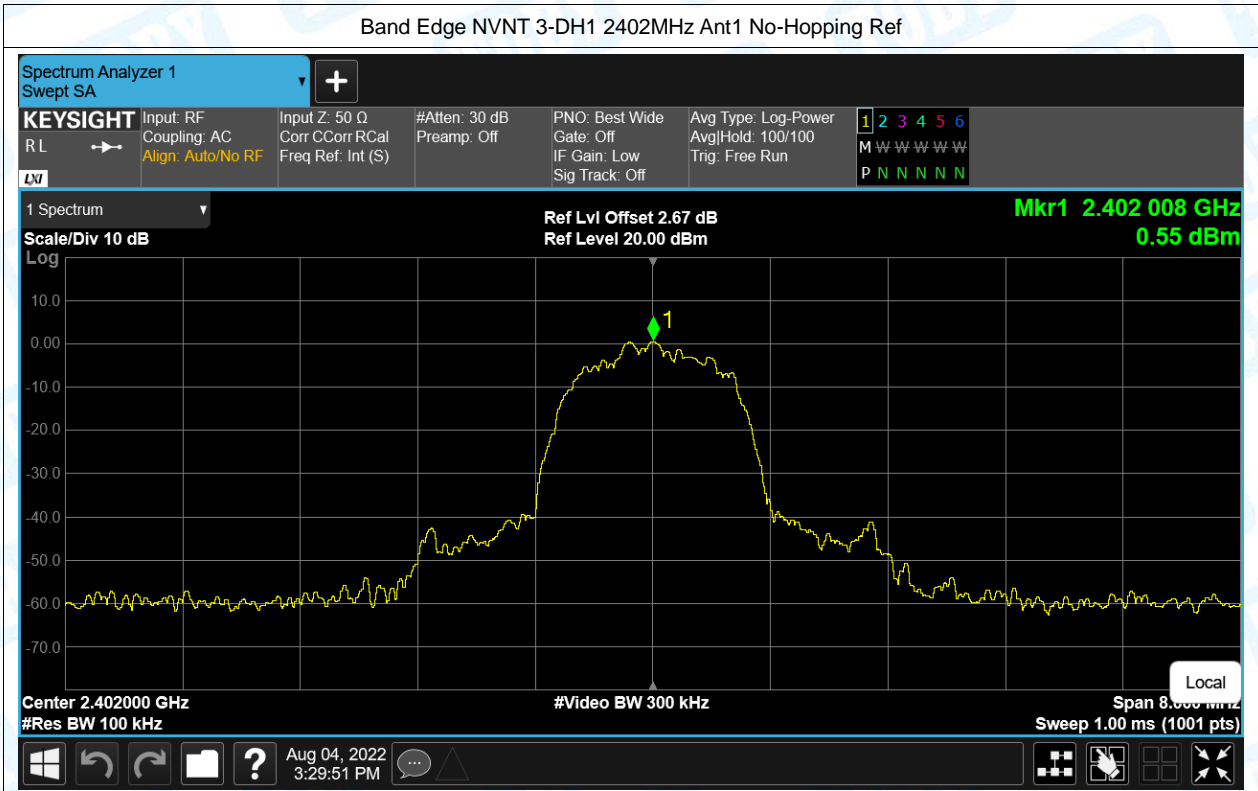


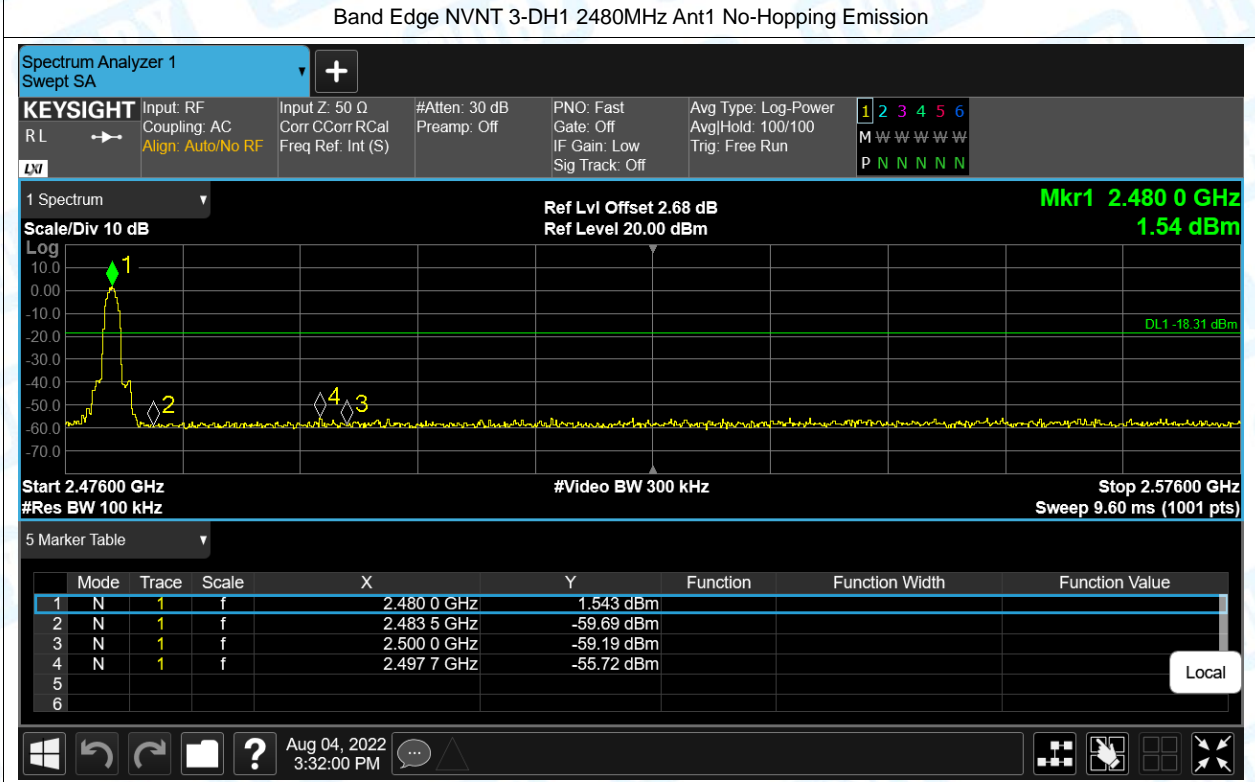
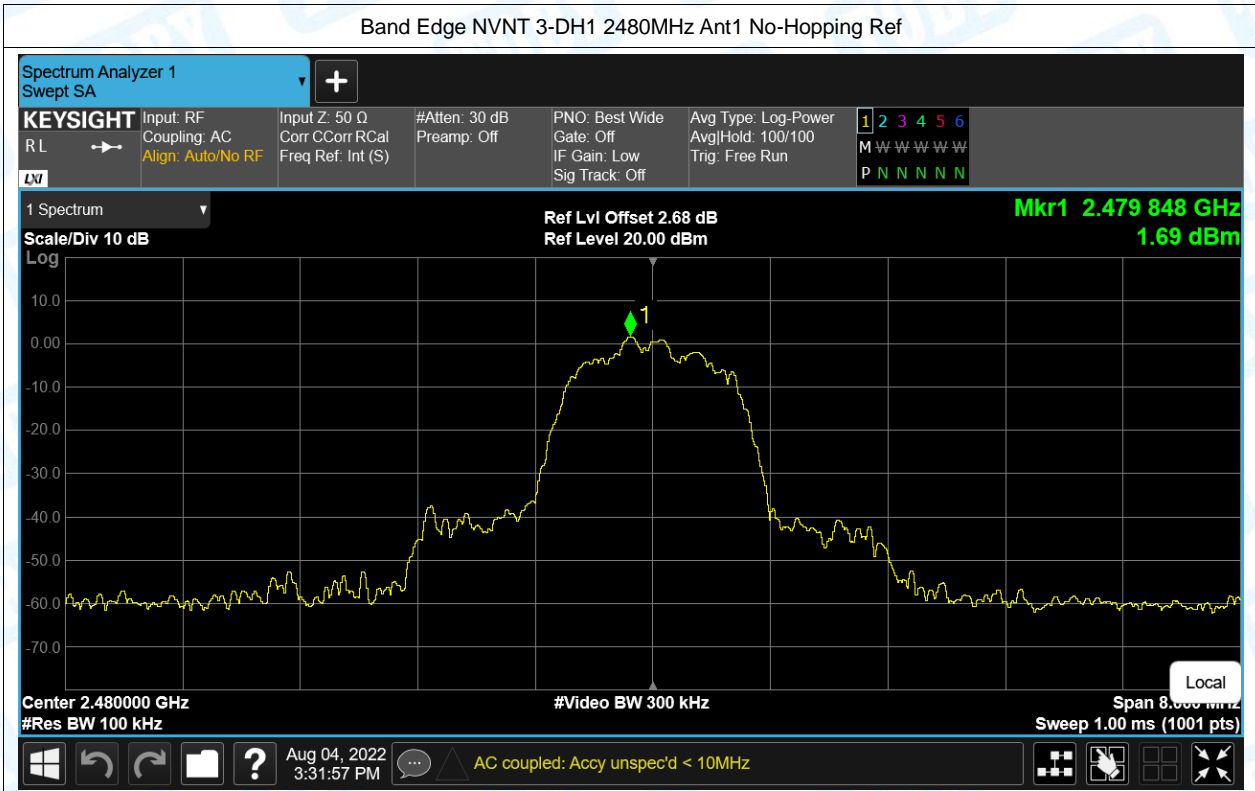
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission









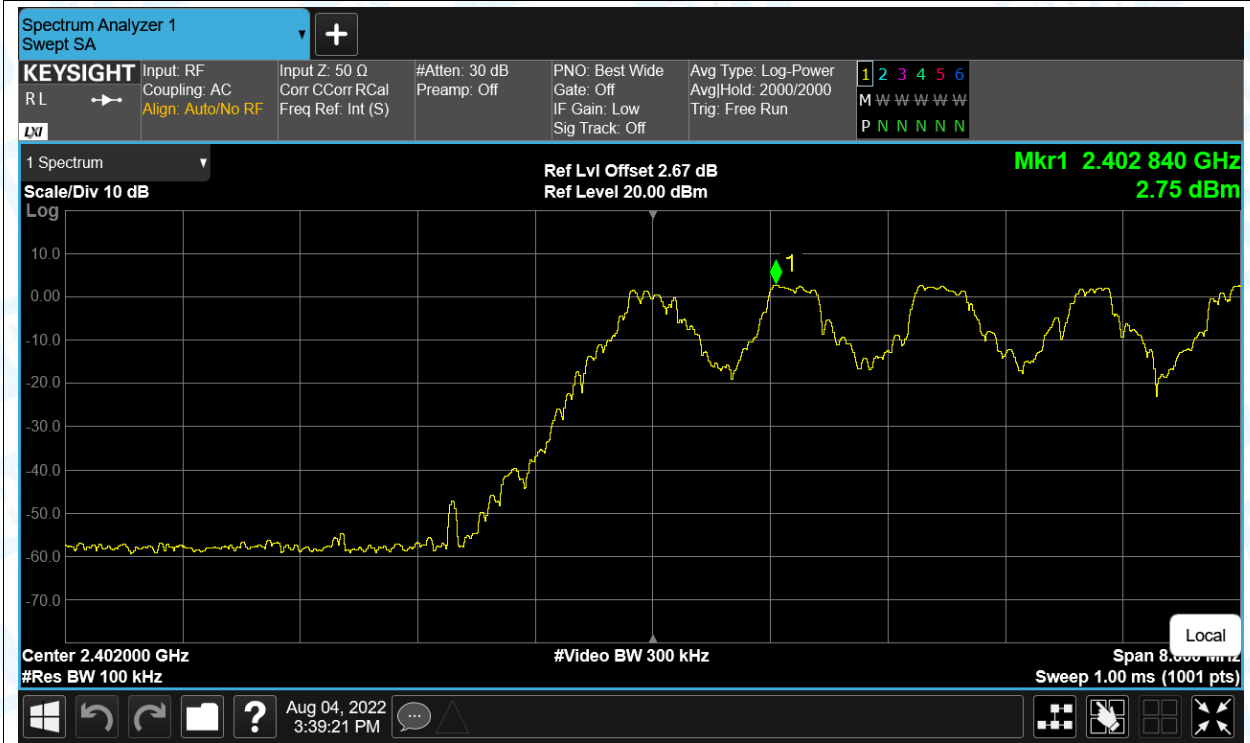


6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-58.35	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-58.77	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-55.86	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-57.31	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-55.23	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-57.76	-20	Pass

Test Graphs

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



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

