

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

General Description of EUT	
Product Name:	Alto X6
Test Model:	Alto X6
Sample ID:	202206-0362-04#
Environmental Conditions	
Temperature:	25°C
Relative Humidity:	55%
Test Voltage:	AC 120V/60Hz
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202206-0362-2.	

Contents

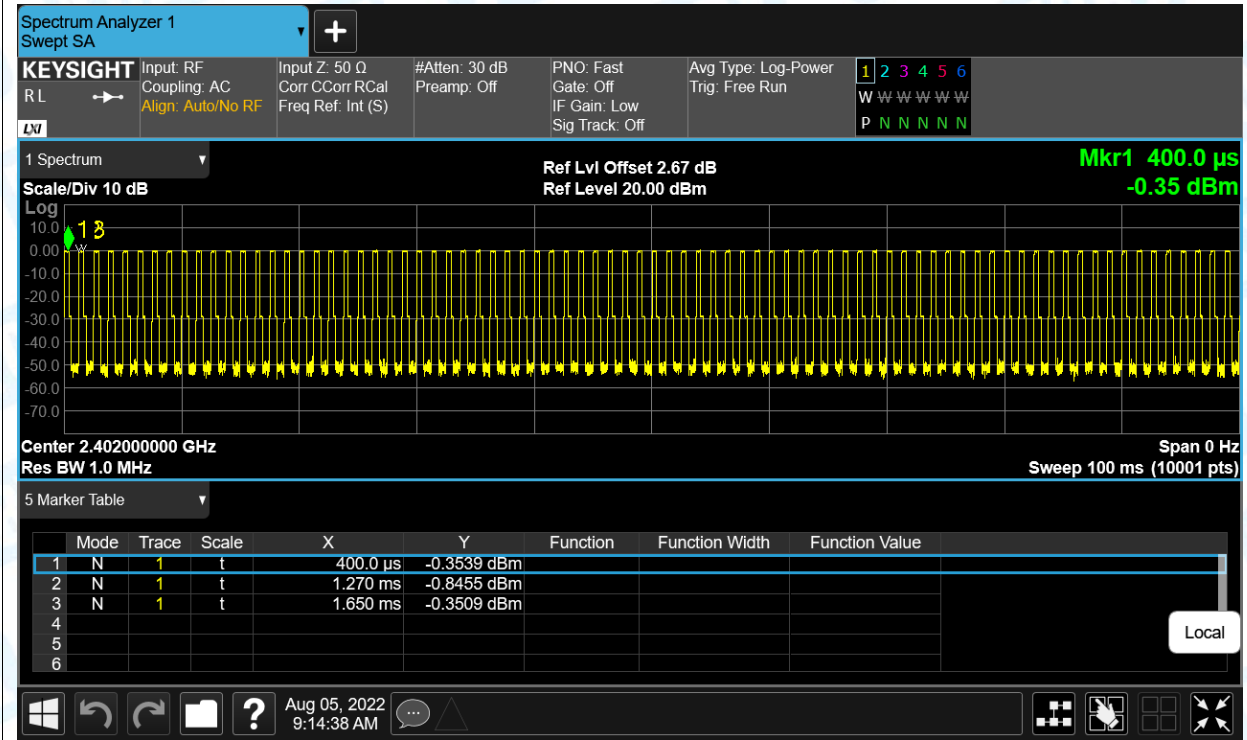
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1. Duty Cycle

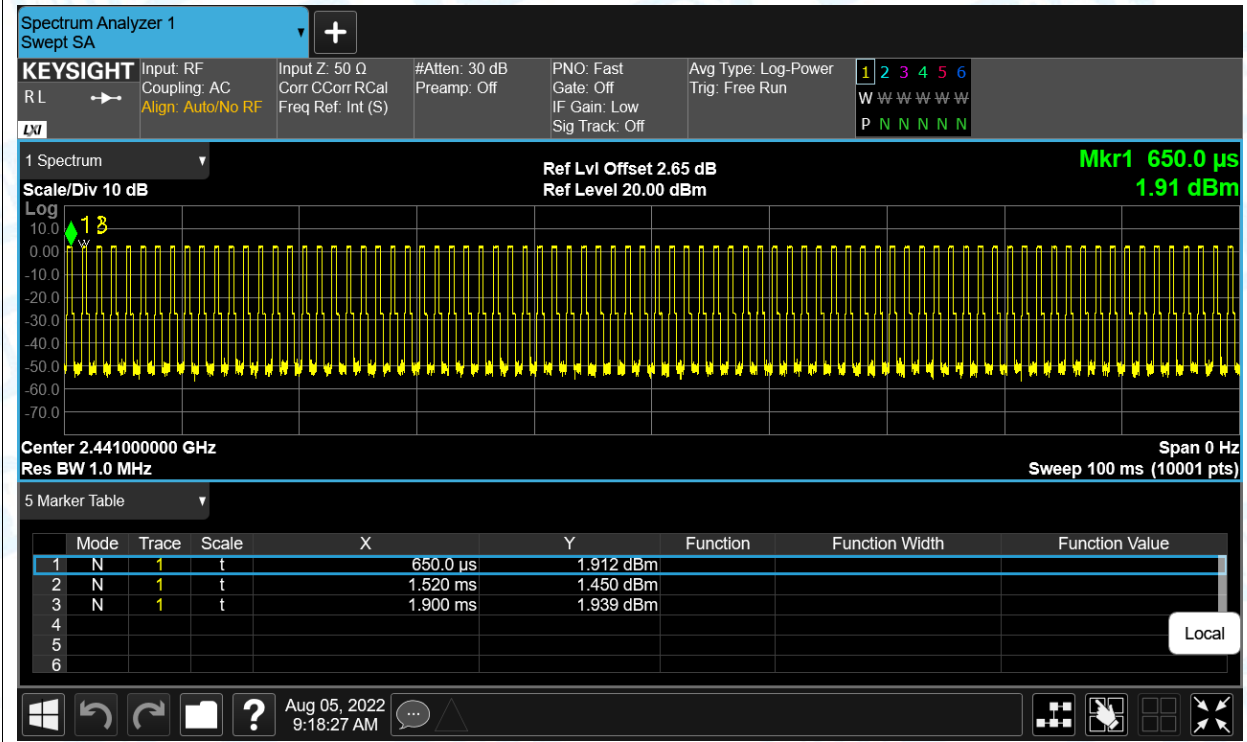
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	31.2	5.06	2.63
NVNT	1-DH1	2441	Ant1	31.2	5.06	2.63
NVNT	1-DH1	2480	Ant1	31.2	5.06	2.63
NVNT	2-DH1	2402	Ant1	32	4.95	2.56
NVNT	2-DH1	2441	Ant1	31.26	5.05	2.63
NVNT	2-DH1	2480	Ant1	31.28	5.05	2.63
NVNT	3-DH1	2402	Ant1	32	4.95	2.56
NVNT	3-DH1	2441	Ant1	32	4.95	2.56
NVNT	3-DH1	2480	Ant1	31.99	4.95	2.56

Test Graphs

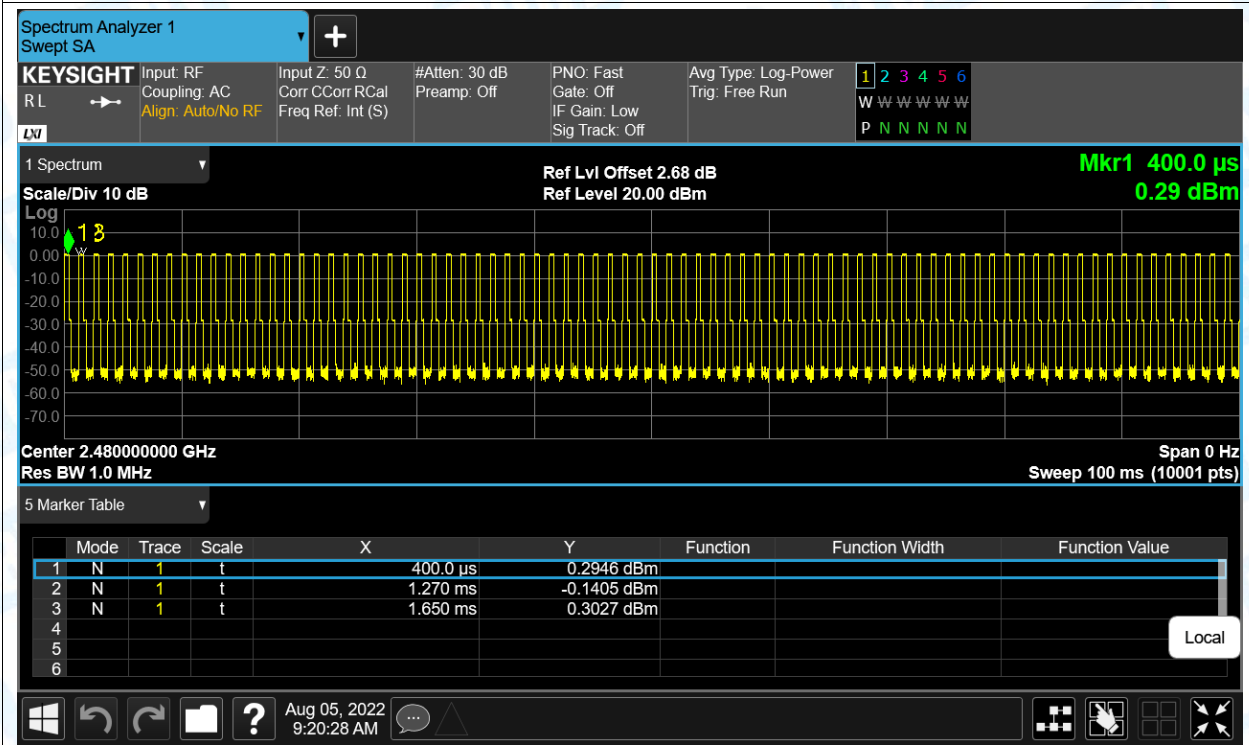
Duty Cycle NVNT 1-DH1 2402MHz Ant1



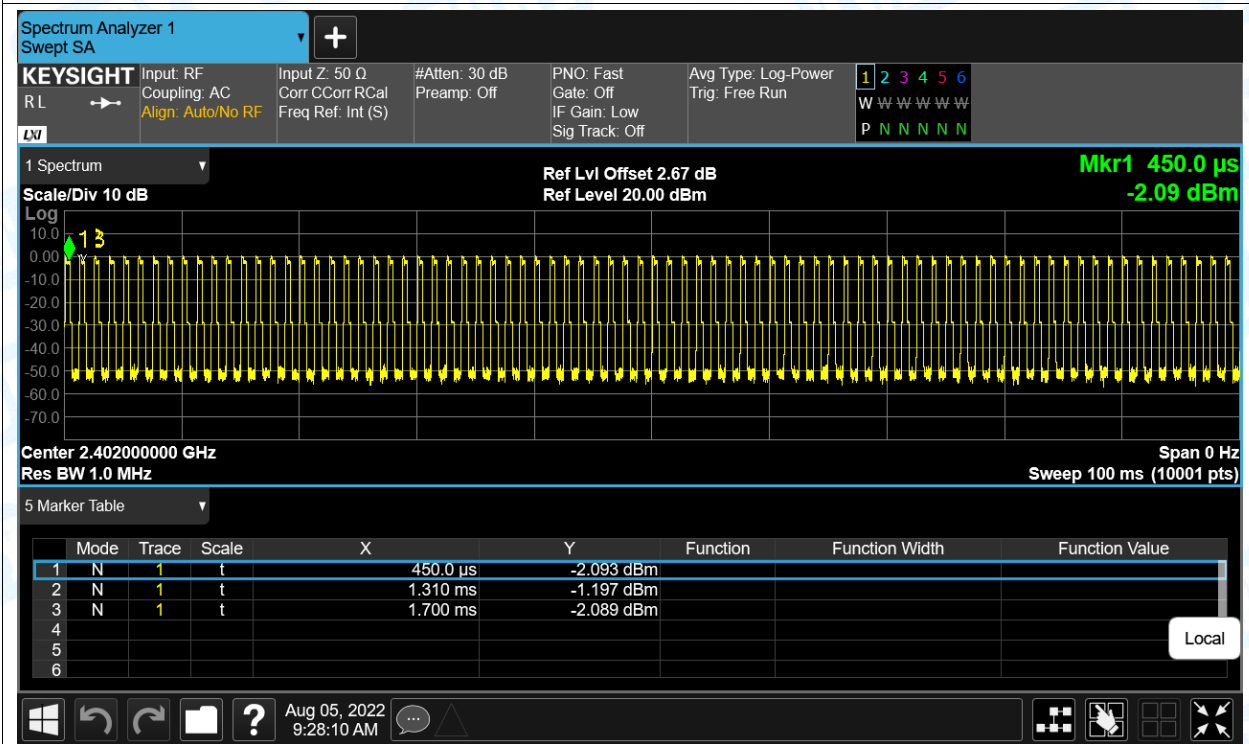
Duty Cycle NVNT 1-DH1 2441MHz Ant1



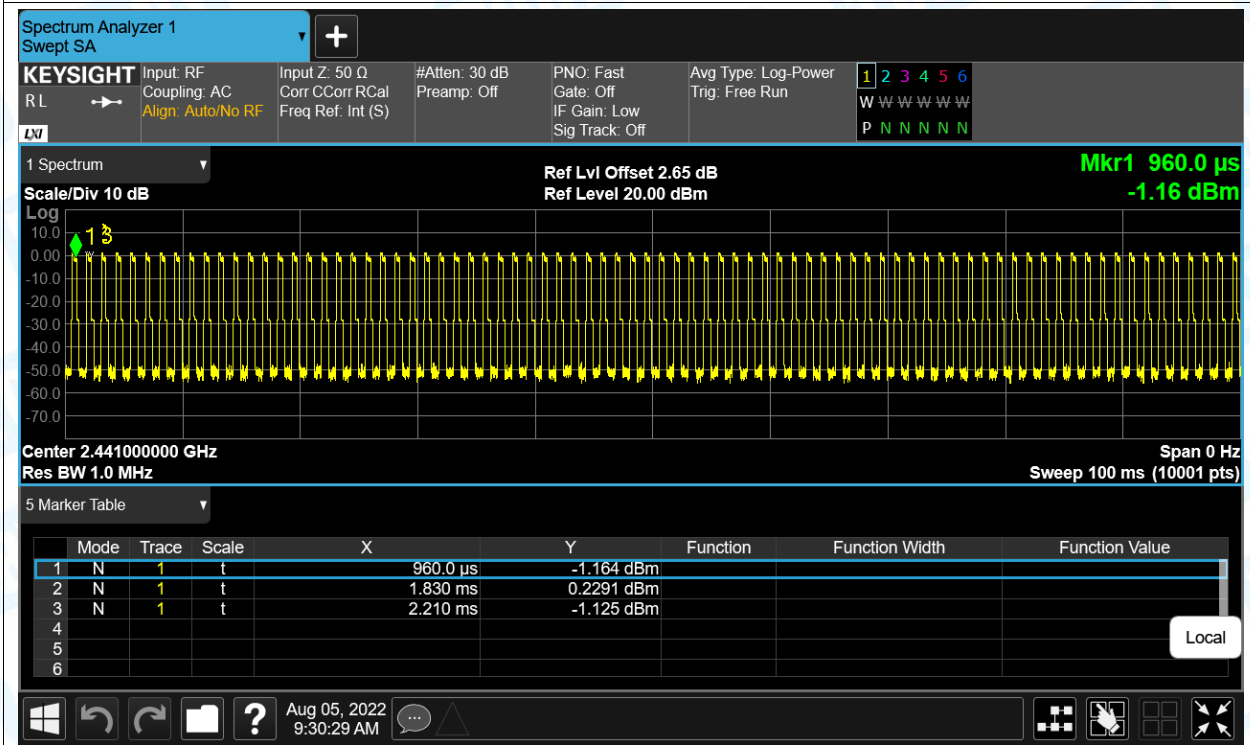
Duty Cycle NVNT 1-DH1 2480MHz Ant1



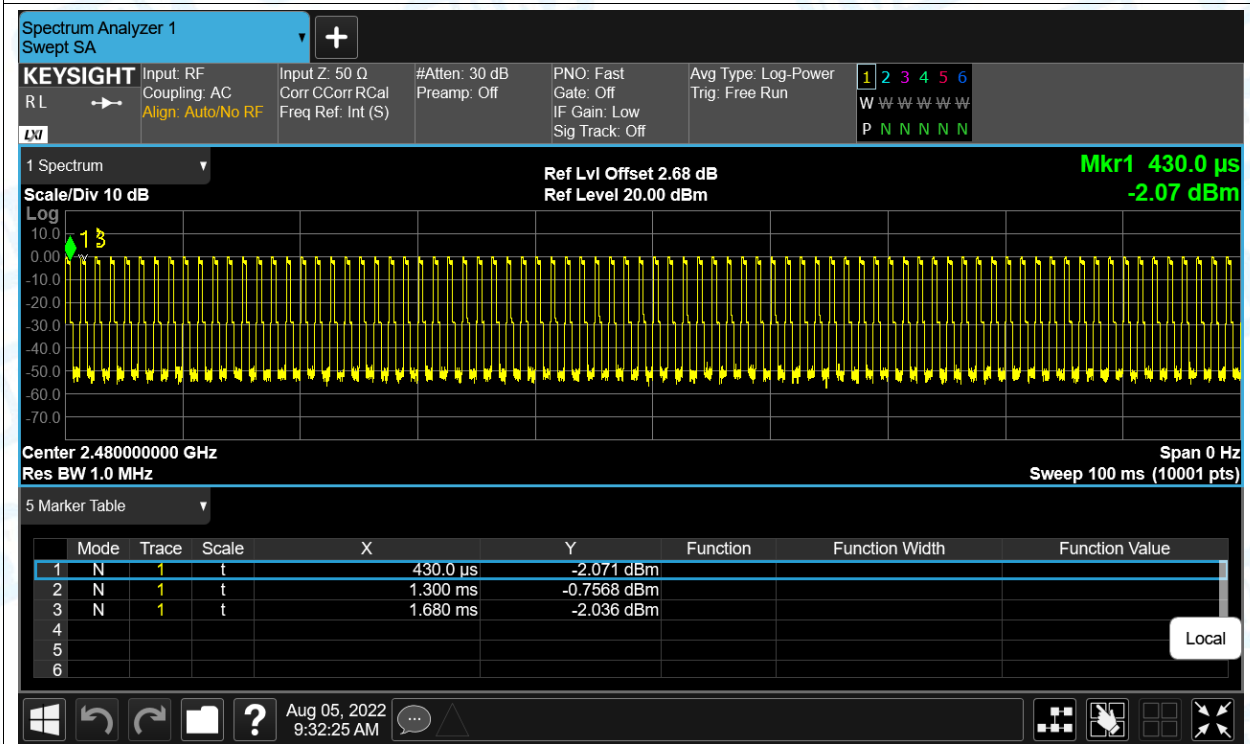
Duty Cycle NVNT 2-DH1 2402MHz Ant1



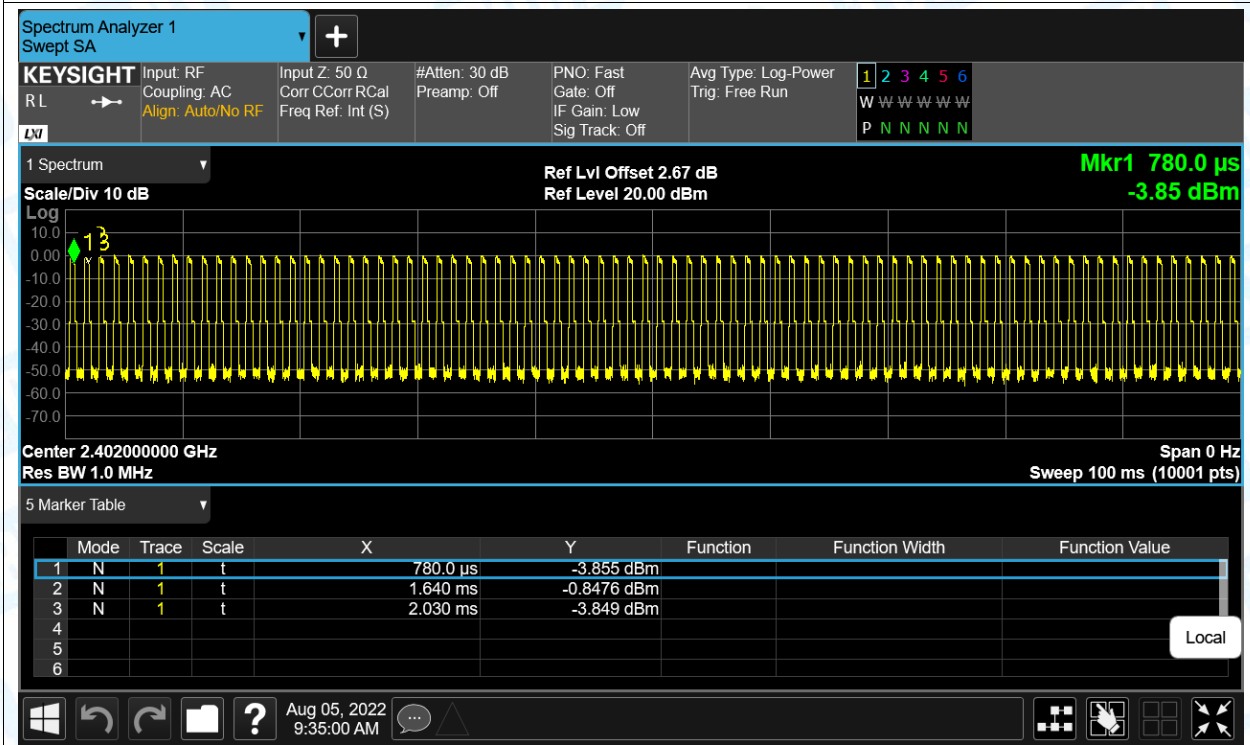
Duty Cycle NVNT 2-DH1 2441MHz Ant1



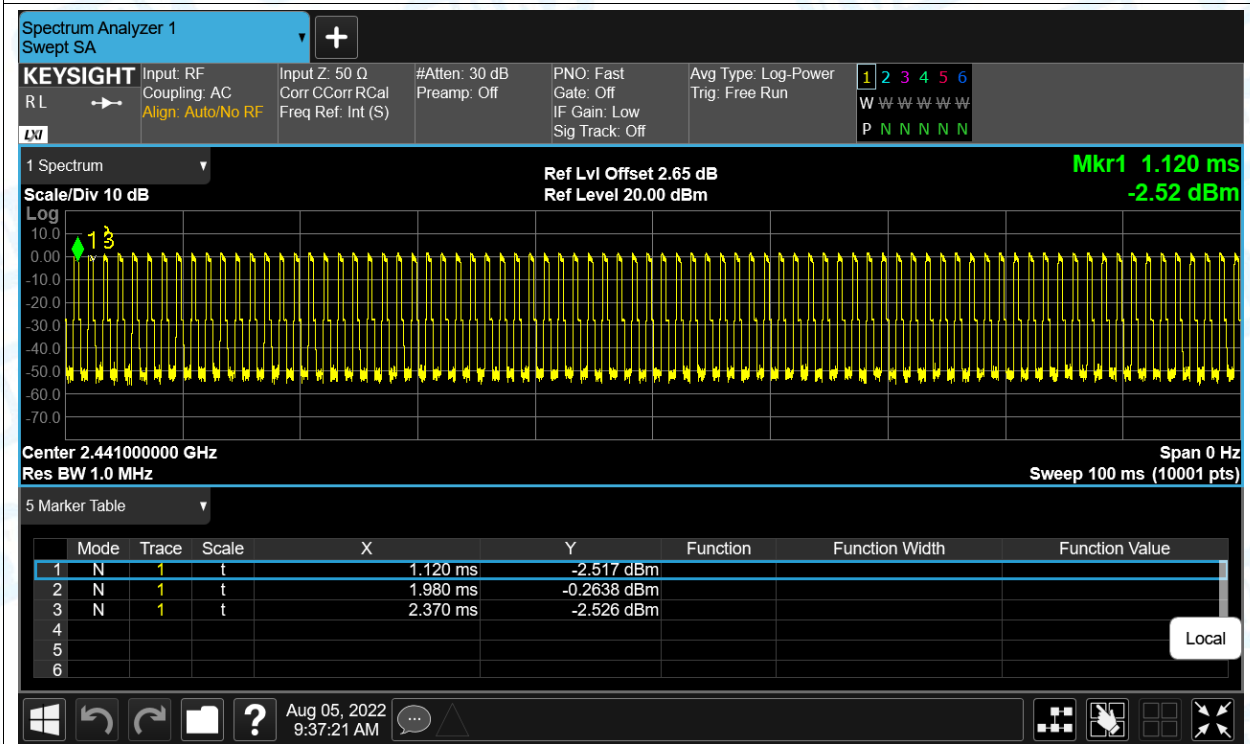
Duty Cycle NVNT 2-DH1 2480MHz Ant1

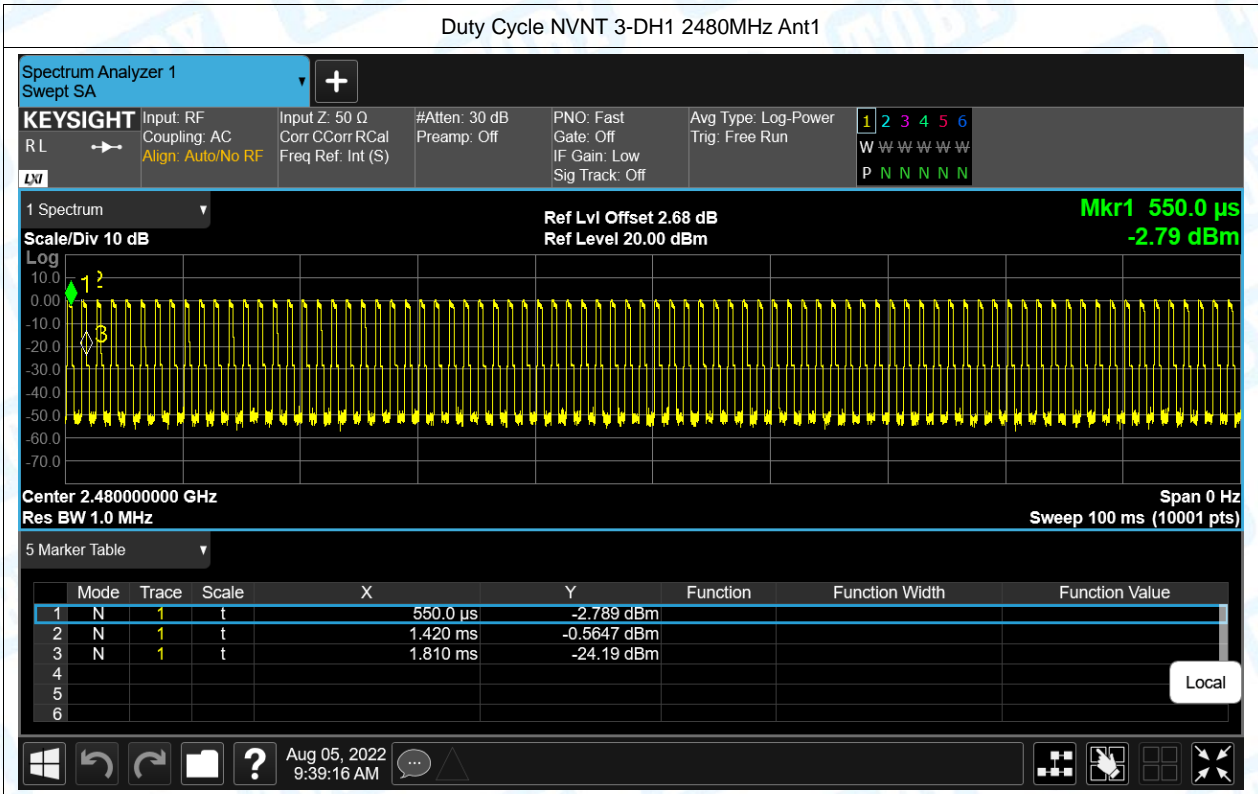


Duty Cycle NVNT 3-DH1 2402MHz Ant1



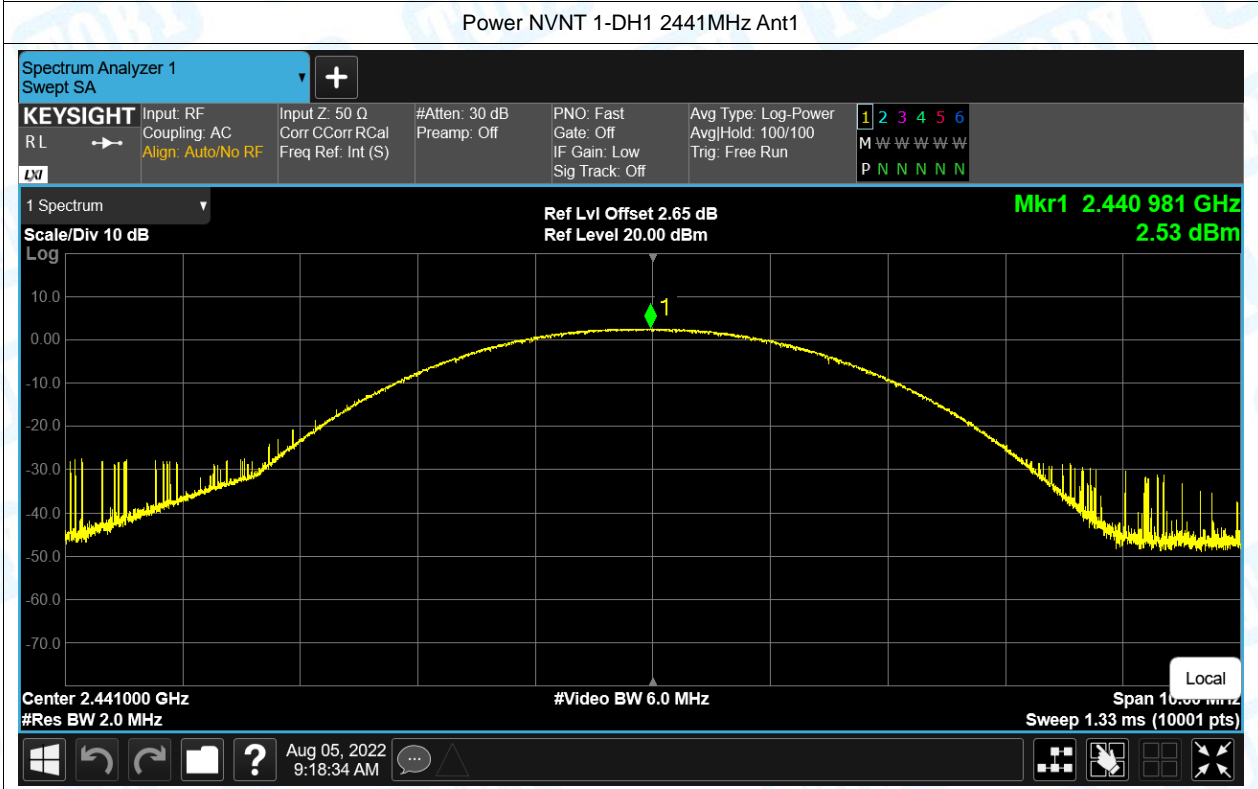
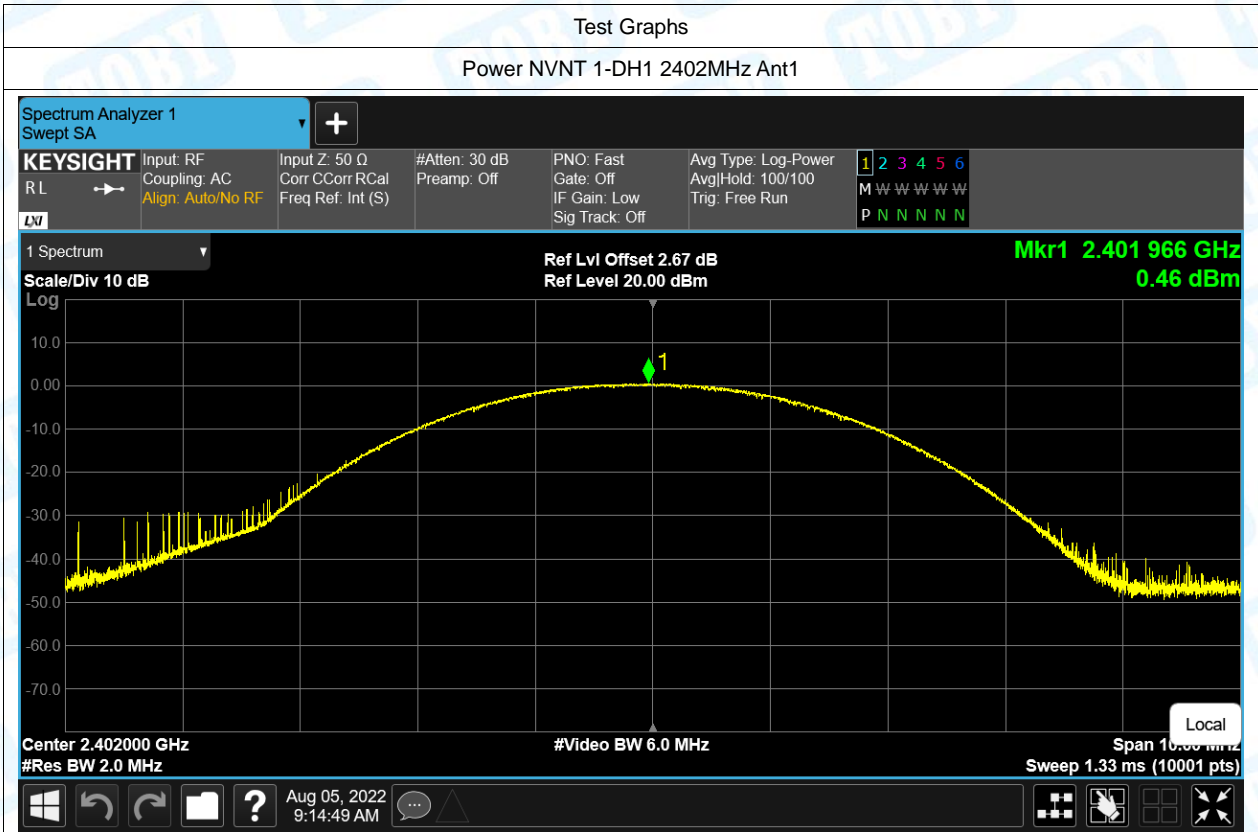
Duty Cycle NVNT 3-DH1 2441MHz Ant1

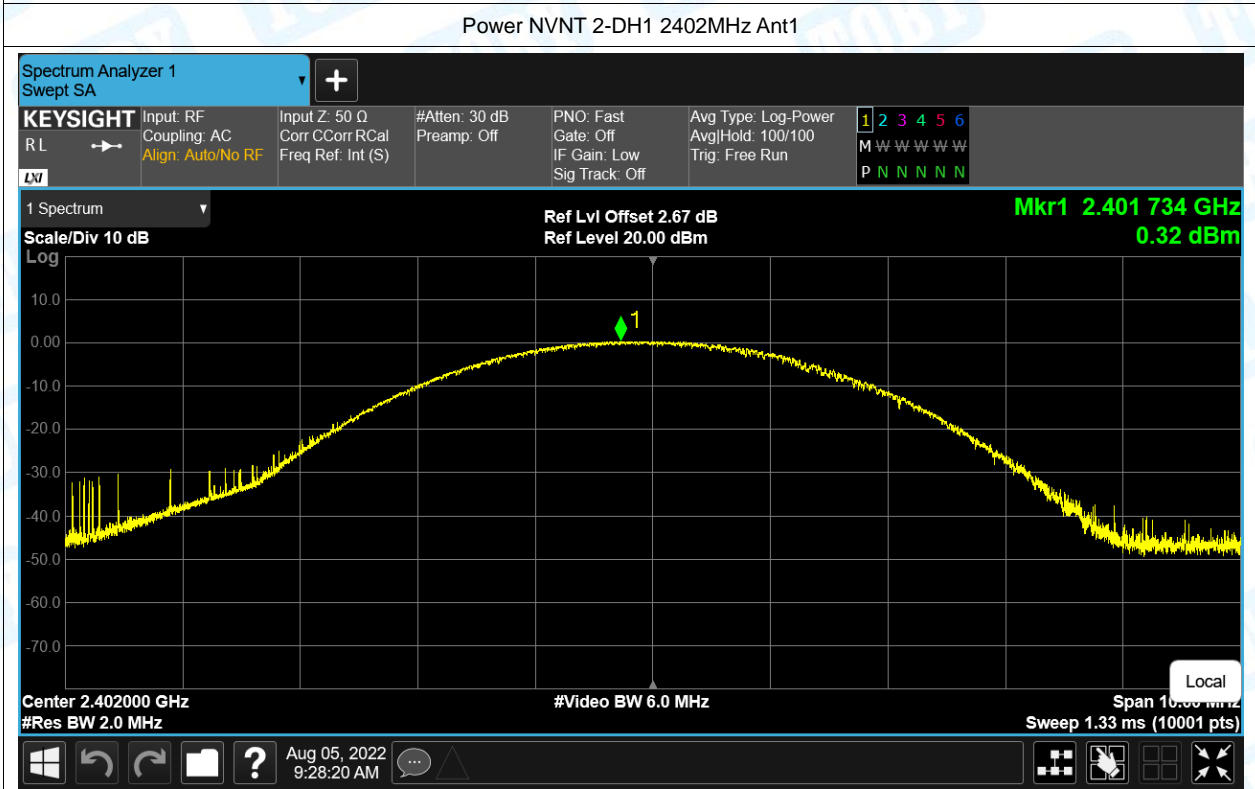
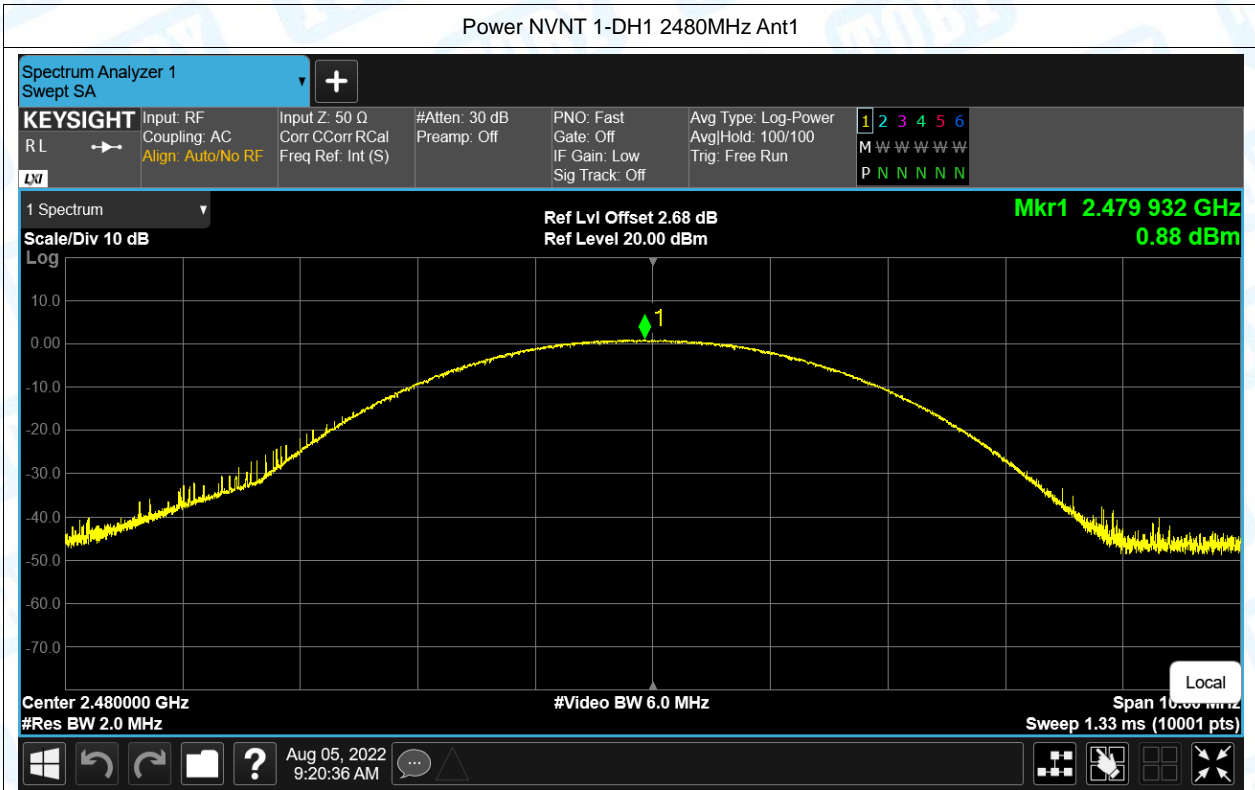


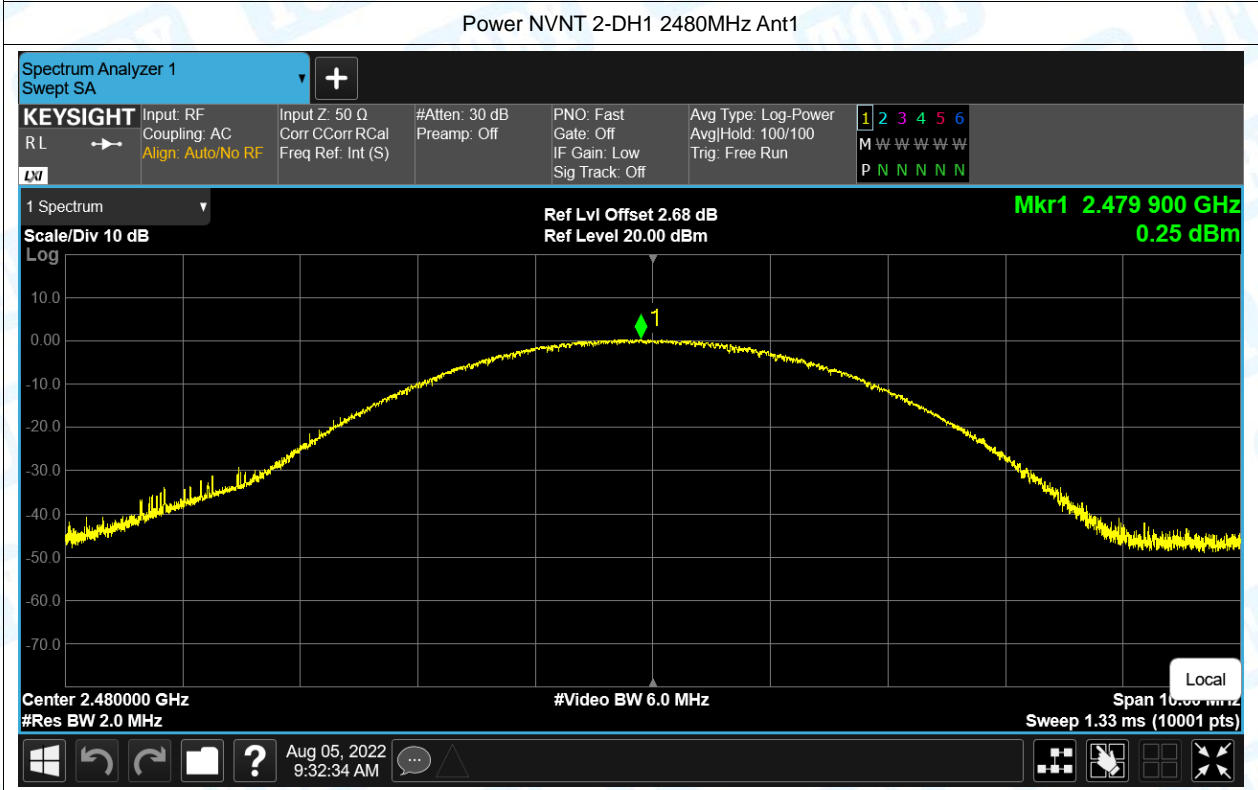


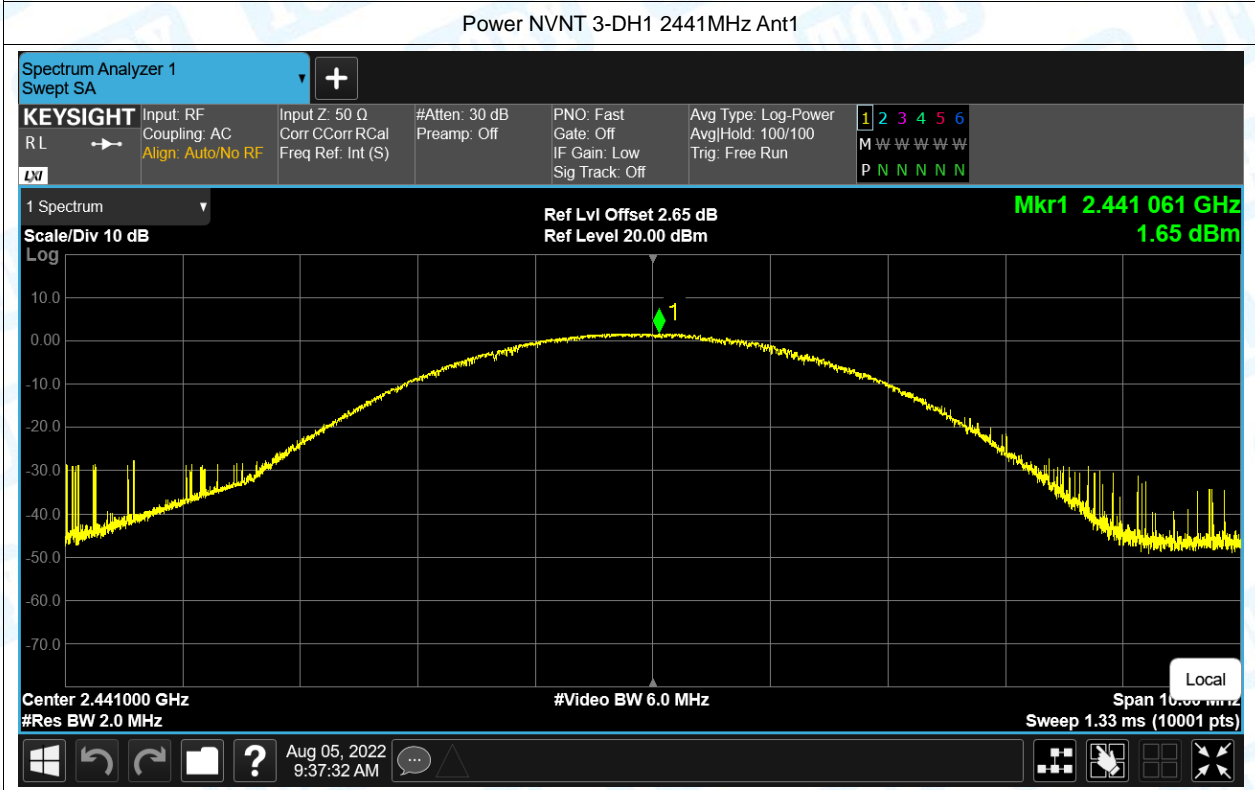
2. Maximum Conducted Output Power

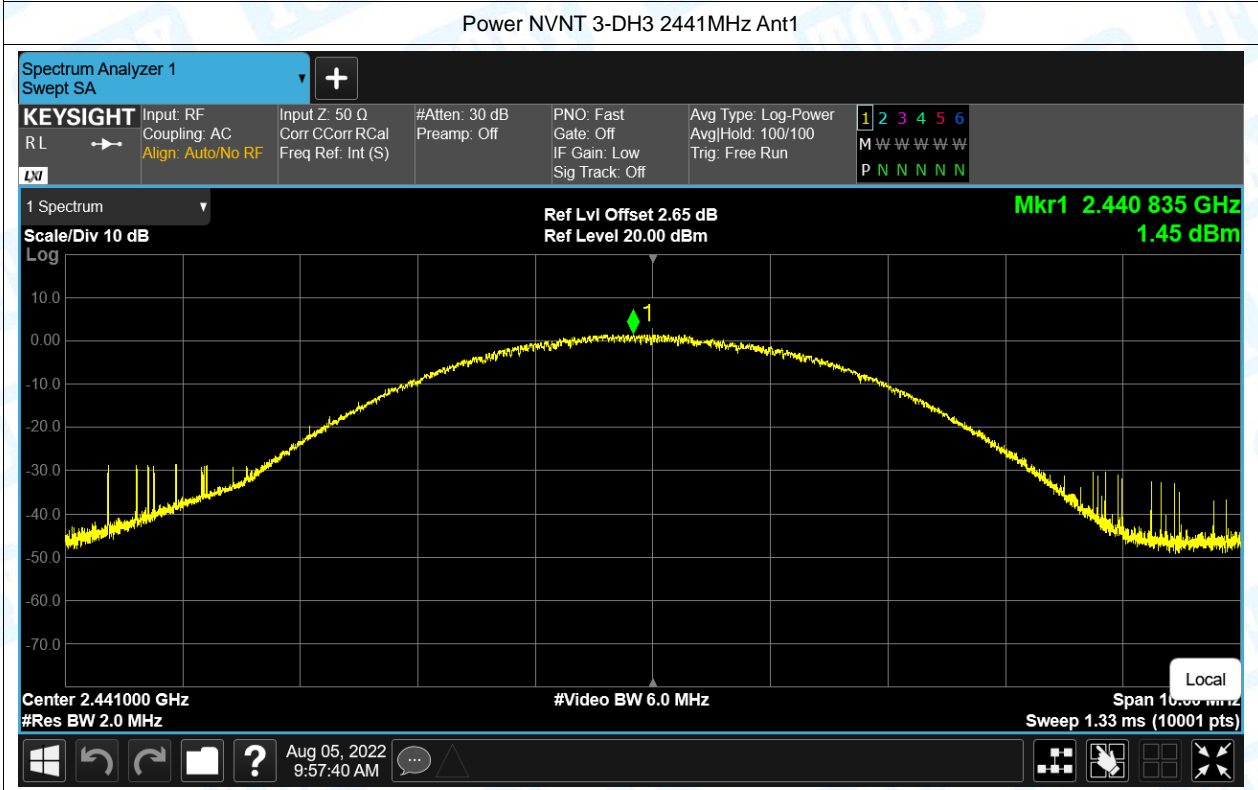
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	0.465	21	Pass
NVNT	1-DH1	2441	Ant1	2.531	21	Pass
NVNT	1-DH1	2480	Ant1	0.884	21	Pass
NVNT	2-DH1	2402	Ant1	0.319	21	Pass
NVNT	2-DH1	2441	Ant1	1.326	21	Pass
NVNT	2-DH1	2480	Ant1	0.25	21	Pass
NVNT	3-DH1	2402	Ant1	0.27	21	Pass
NVNT	3-DH1	2441	Ant1	1.647	21	Pass
NVNT	3-DH1	2480	Ant1	0.432	21	Pass

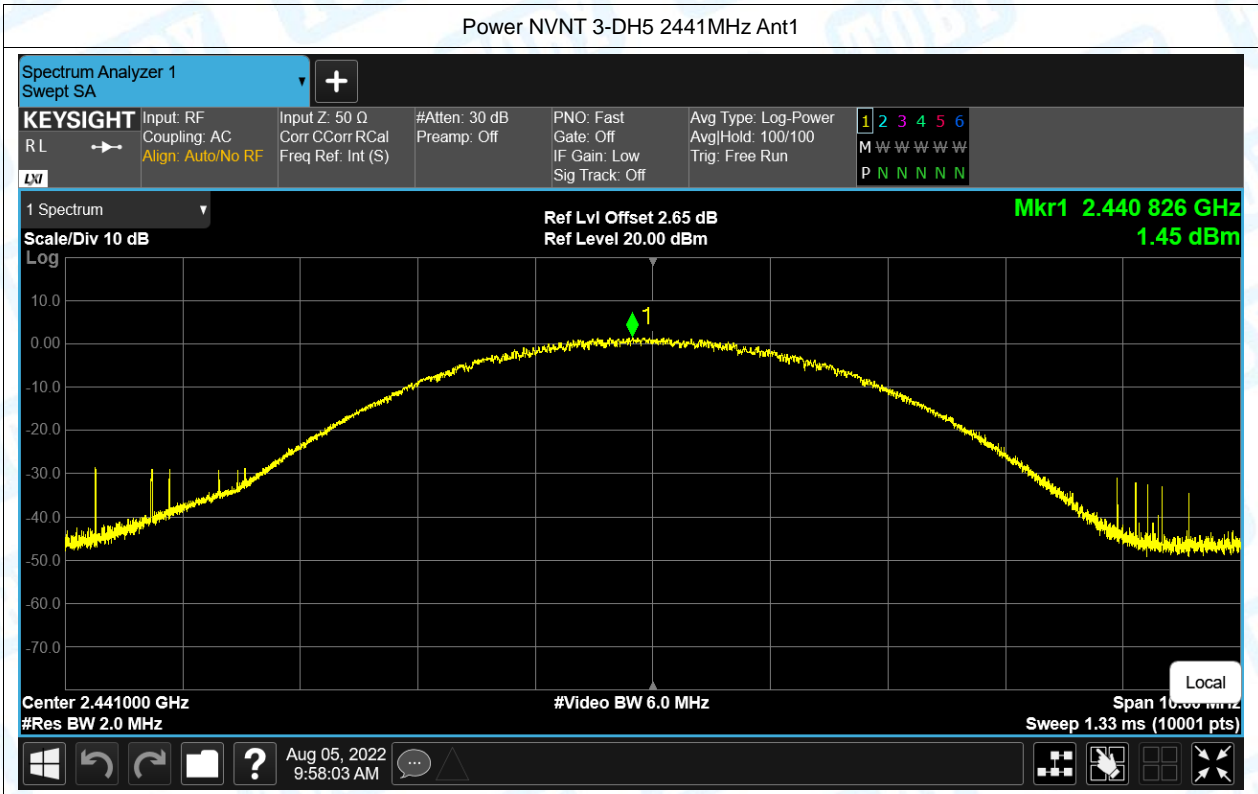










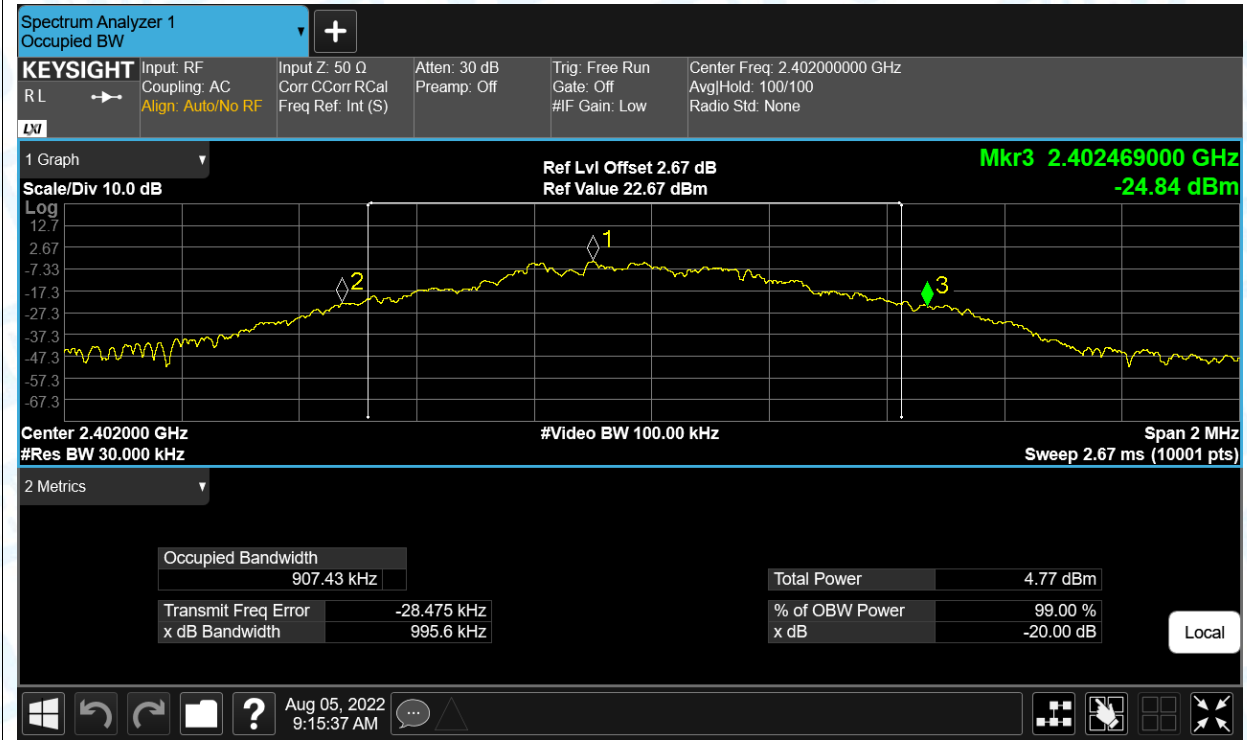


3. -20dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	Limit -20 dB Bandwidth (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	1	0	Pass
NVNT	1-DH1	2441	Ant1	1.01	0	Pass
NVNT	1-DH1	2480	Ant1	1.01	0	Pass
NVNT	2-DH1	2402	Ant1	1.26	0	Pass
NVNT	2-DH1	2441	Ant1	1.28	0	Pass
NVNT	2-DH1	2480	Ant1	1.26	0	Pass
NVNT	3-DH1	2402	Ant1	1.27	0	Pass
NVNT	3-DH1	2441	Ant1	1.27	0	Pass
NVNT	3-DH1	2480	Ant1	1.26	0	Pass

Test Graphs

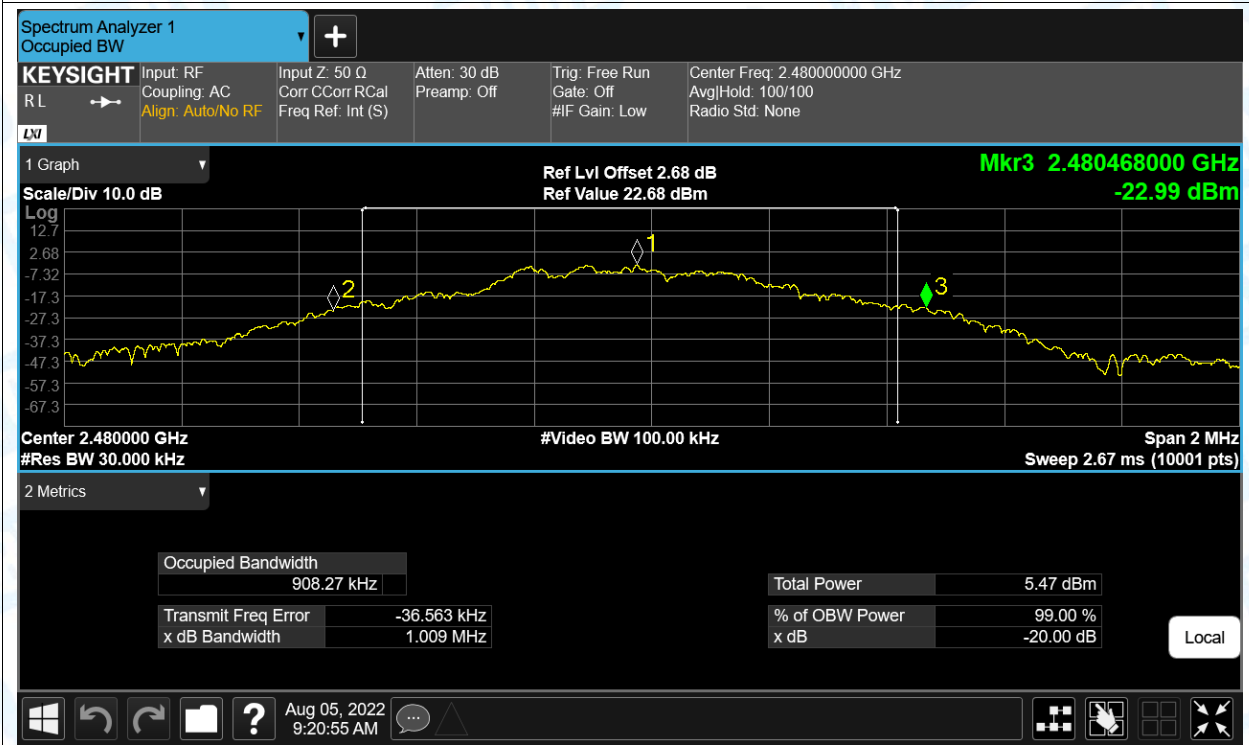
-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1



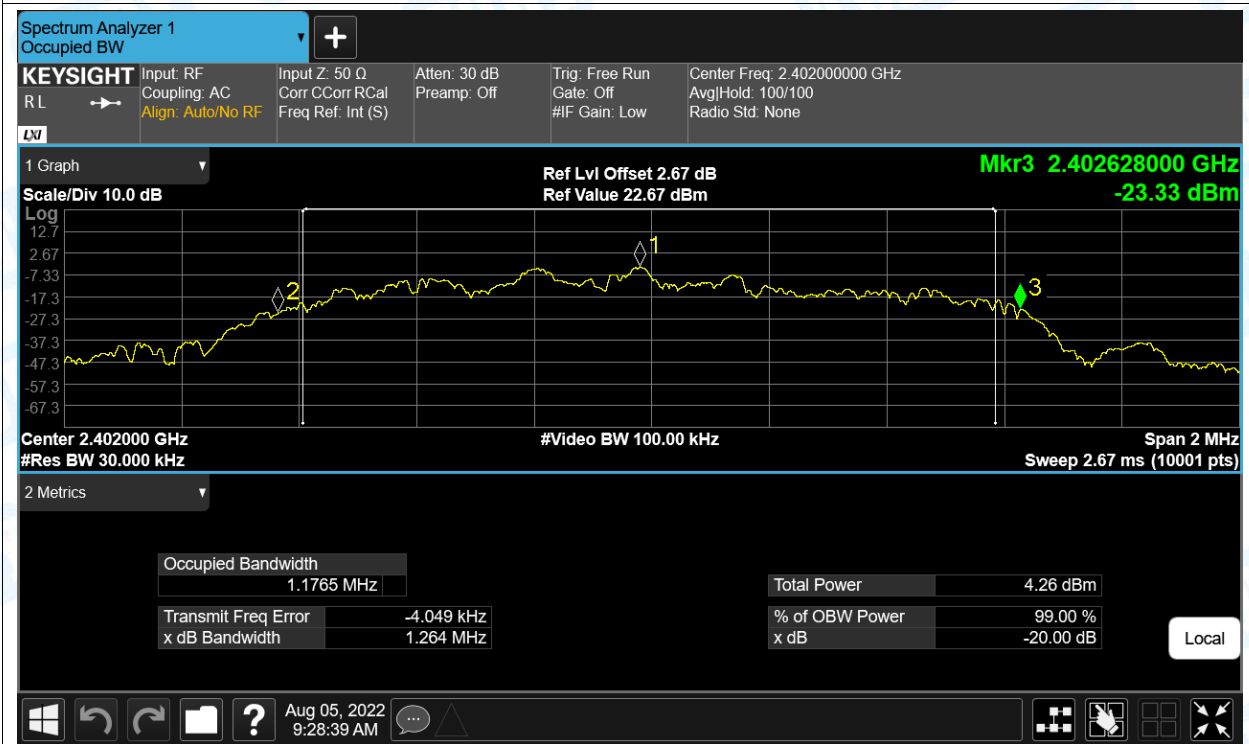
-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1



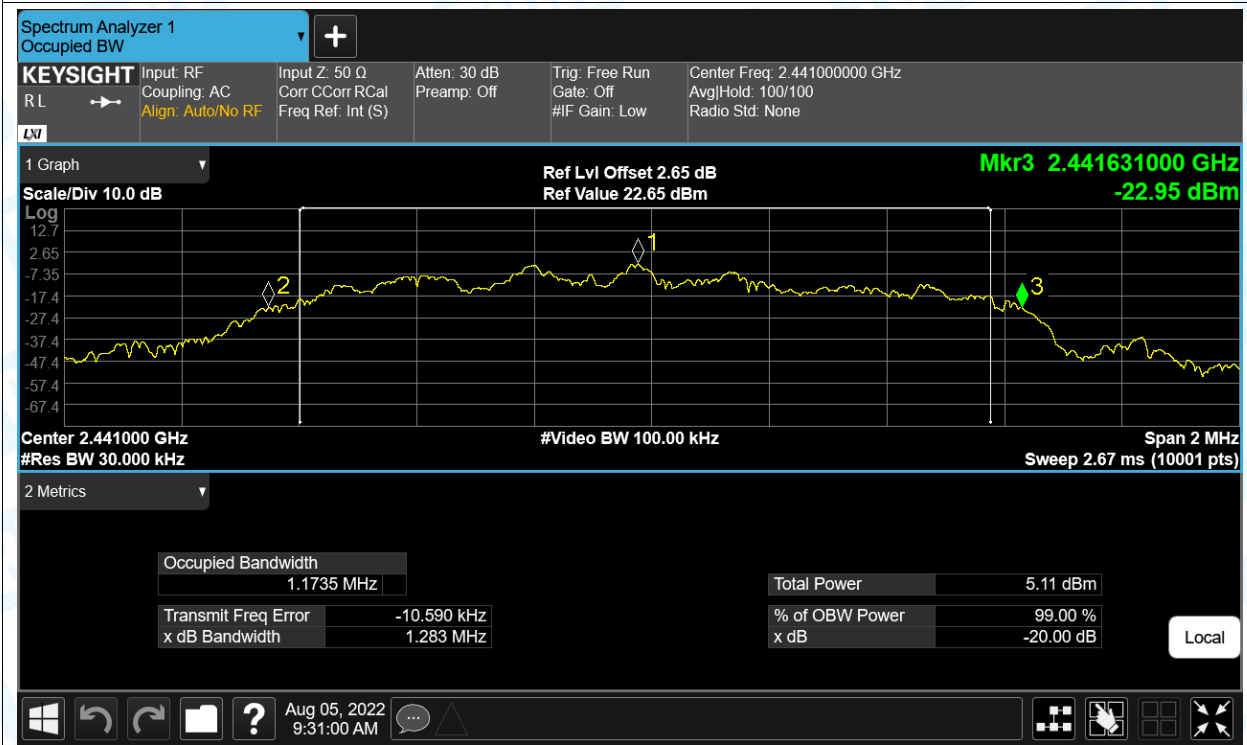
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



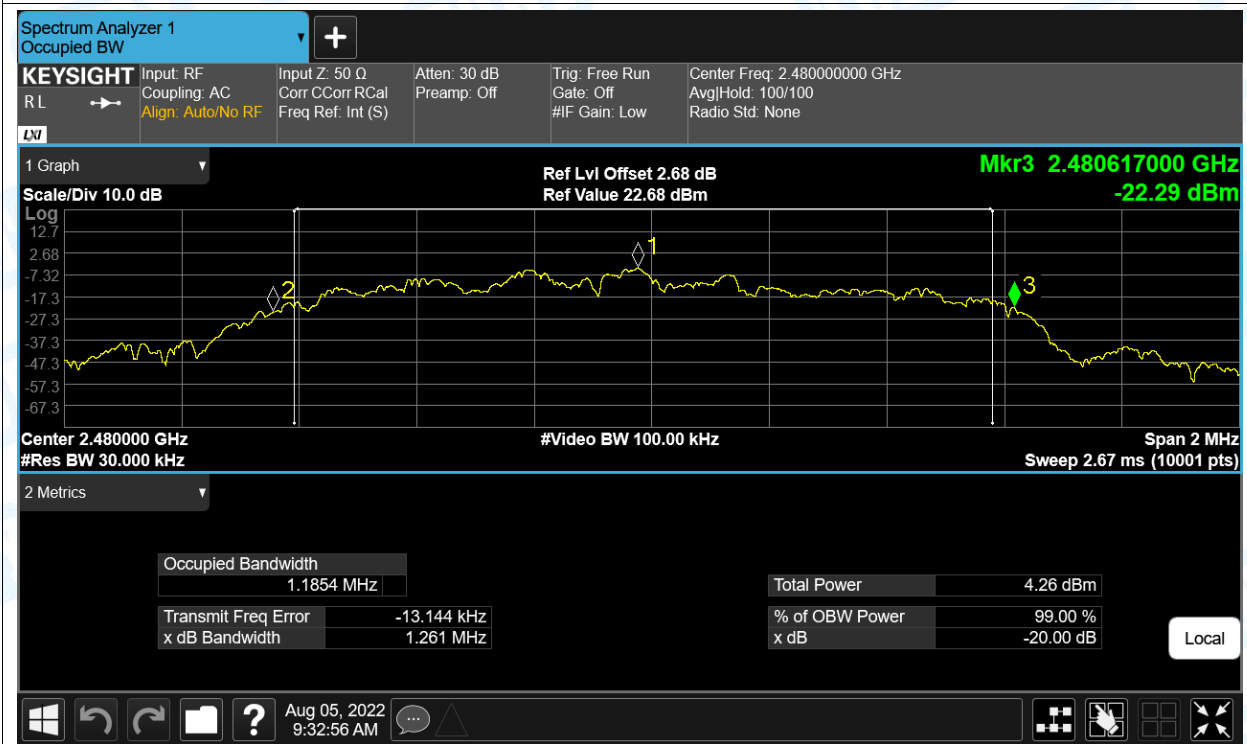
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



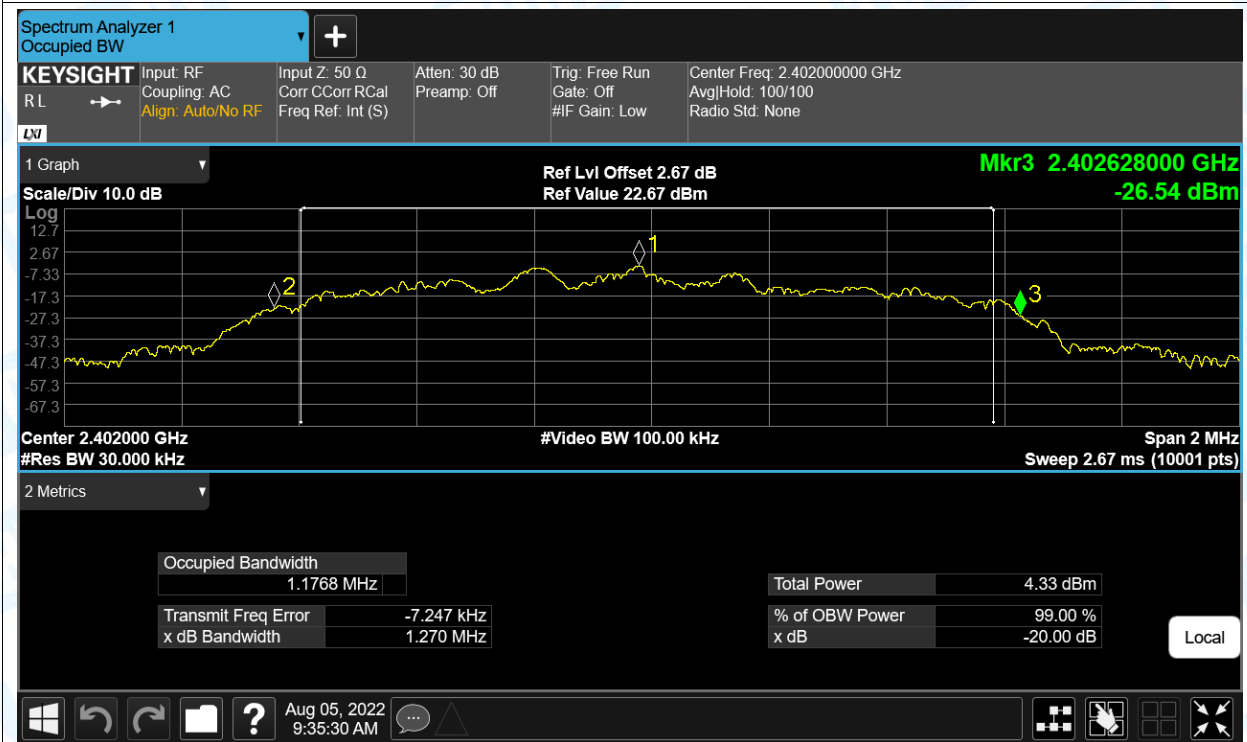
-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1



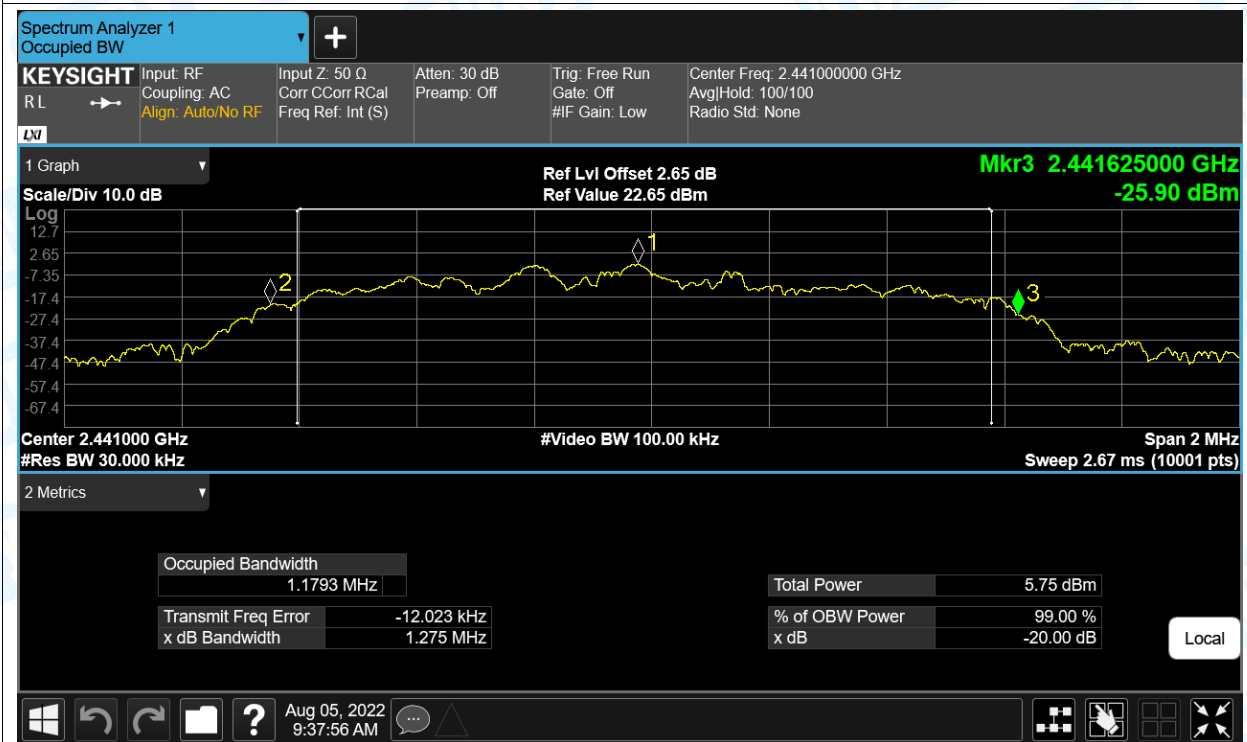
-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

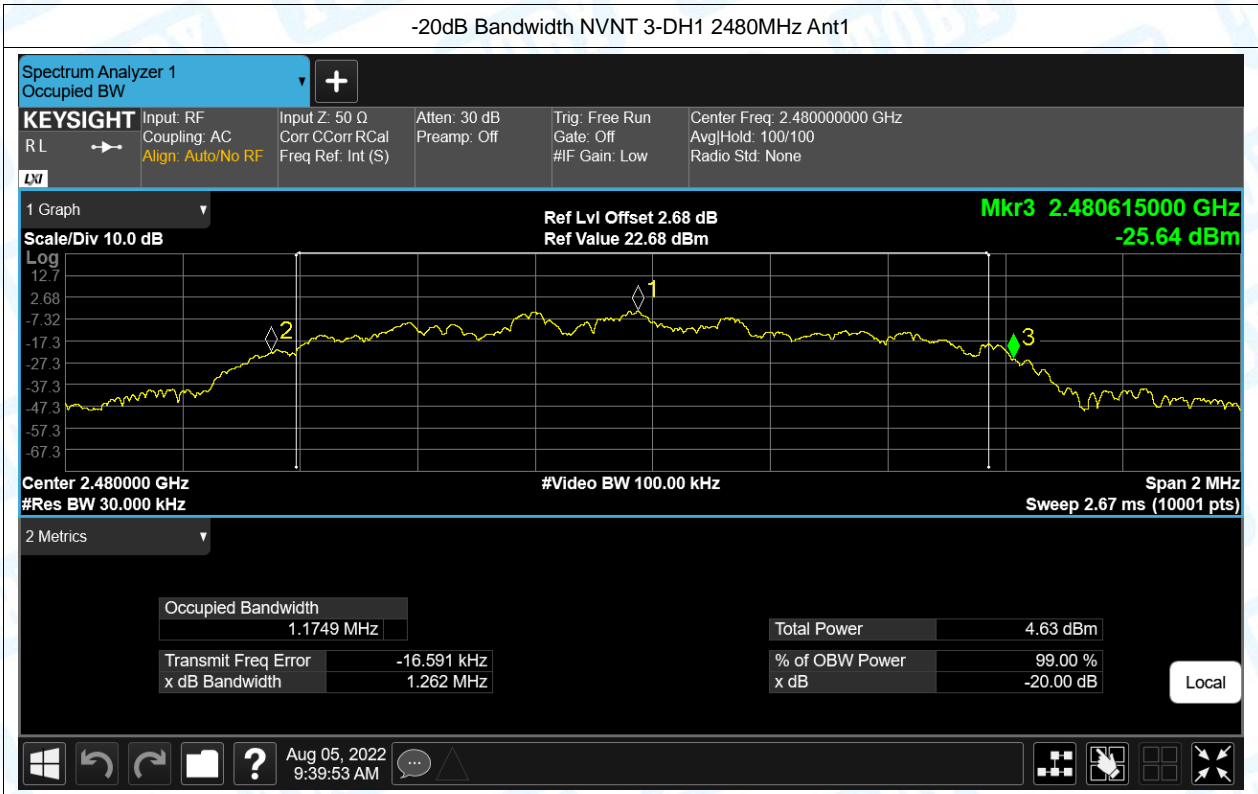


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1



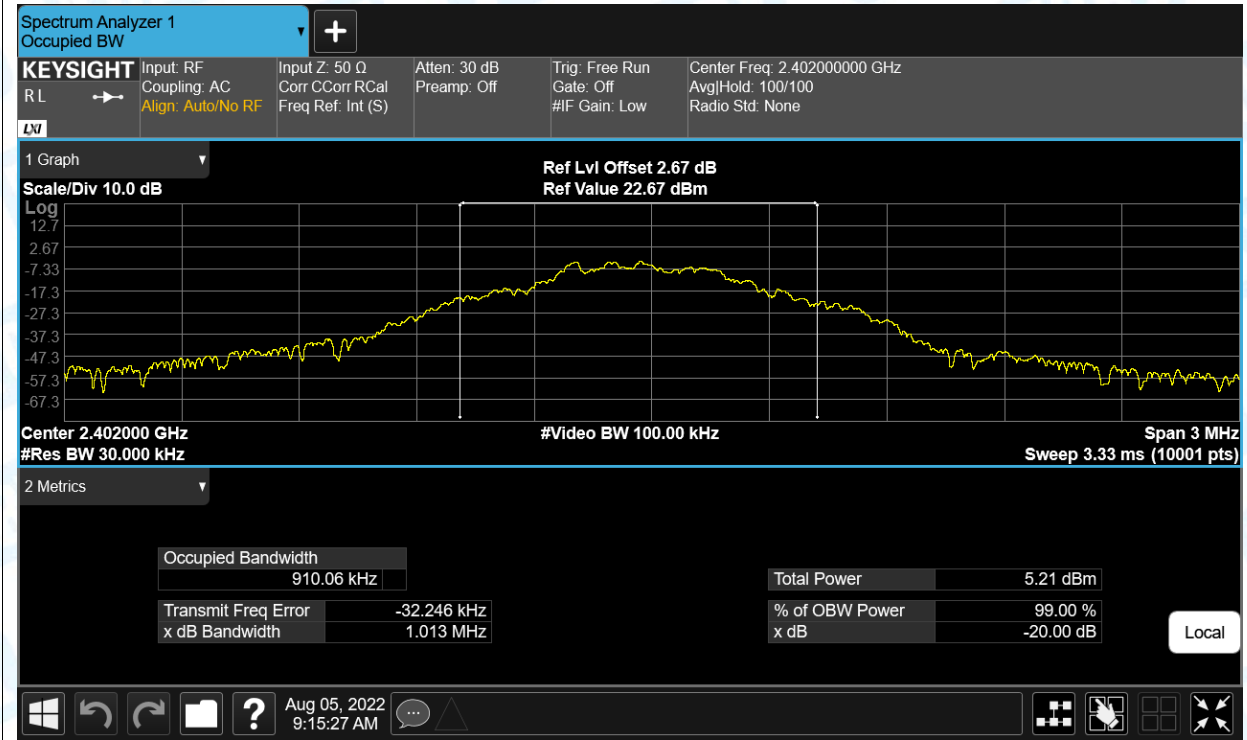


4. Occupied Channel Bandwidth

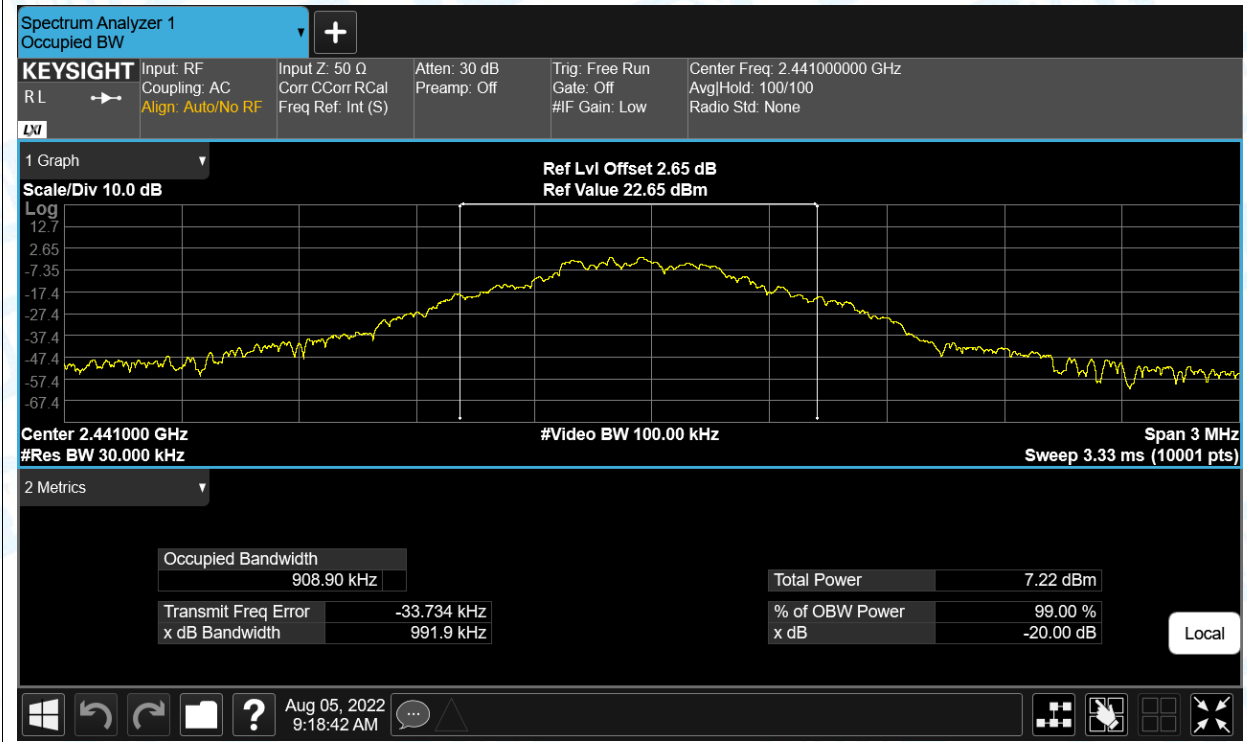
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.91
NVNT	1-DH1	2441	Ant1	0.909
NVNT	1-DH1	2480	Ant1	0.911
NVNT	2-DH1	2402	Ant1	1.191
NVNT	2-DH1	2441	Ant1	1.18
NVNT	2-DH1	2480	Ant1	1.196
NVNT	3-DH1	2402	Ant1	1.183
NVNT	3-DH1	2441	Ant1	1.188
NVNT	3-DH1	2480	Ant1	1.174

Test Graphs

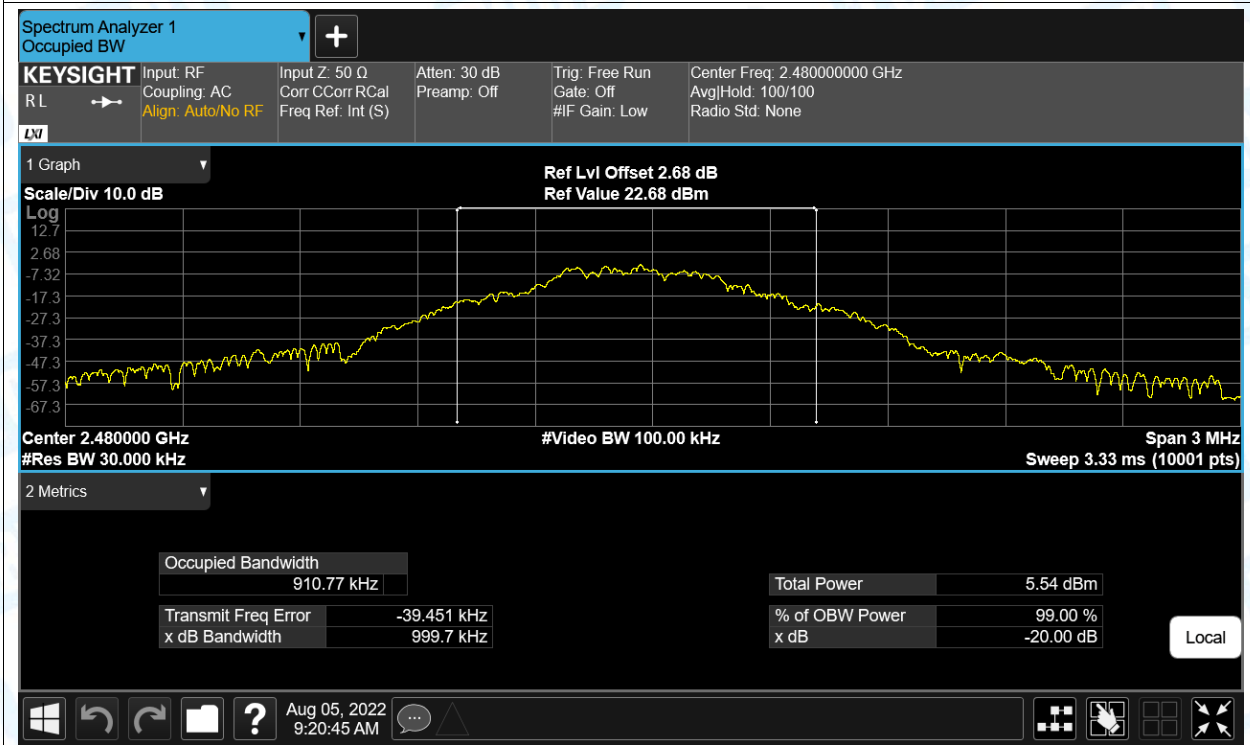
OBW NVNT 1-DH1 2402MHz Ant1



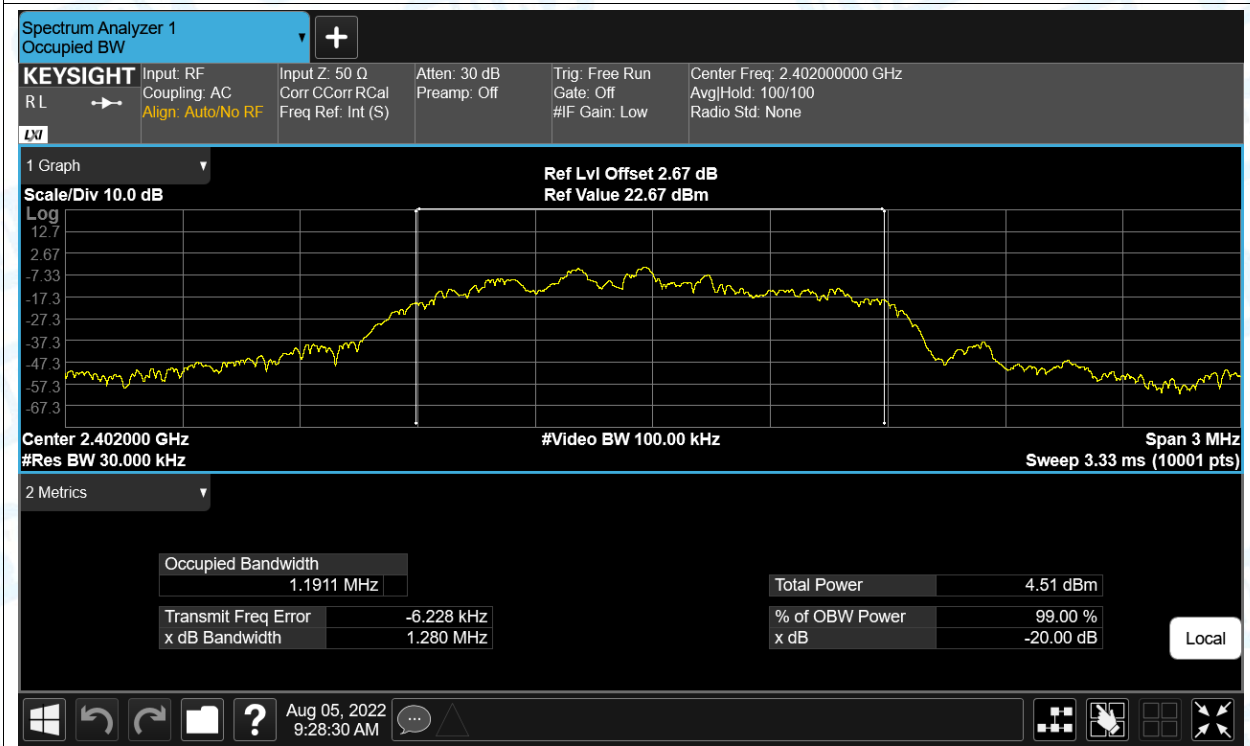
OBW NVNT 1-DH1 2441MHz Ant1

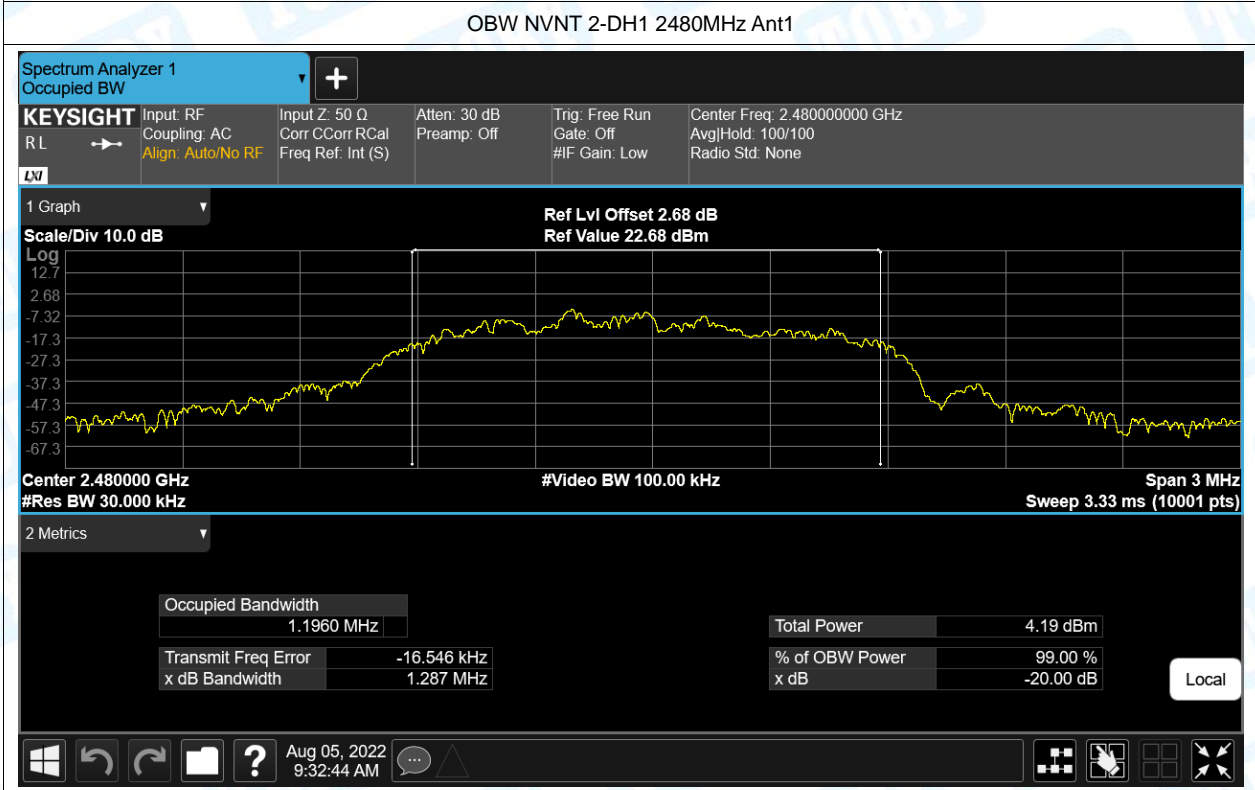
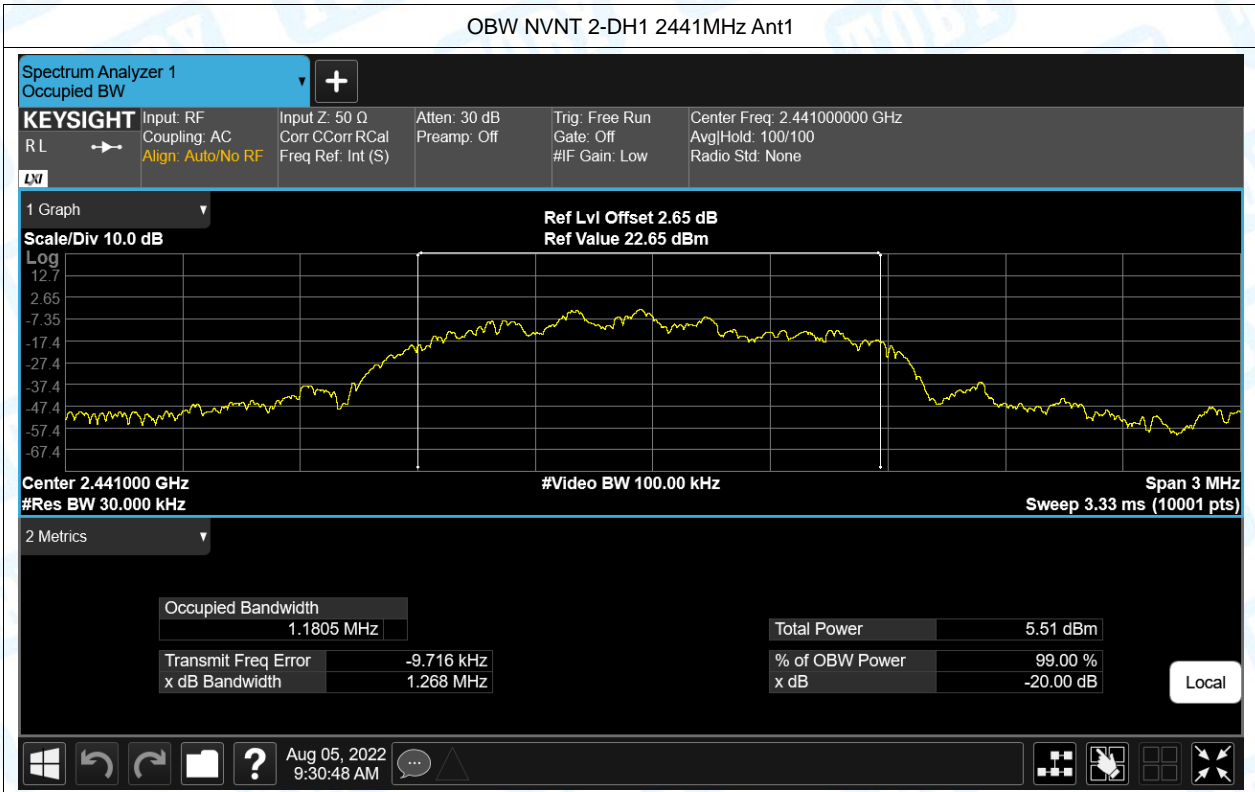


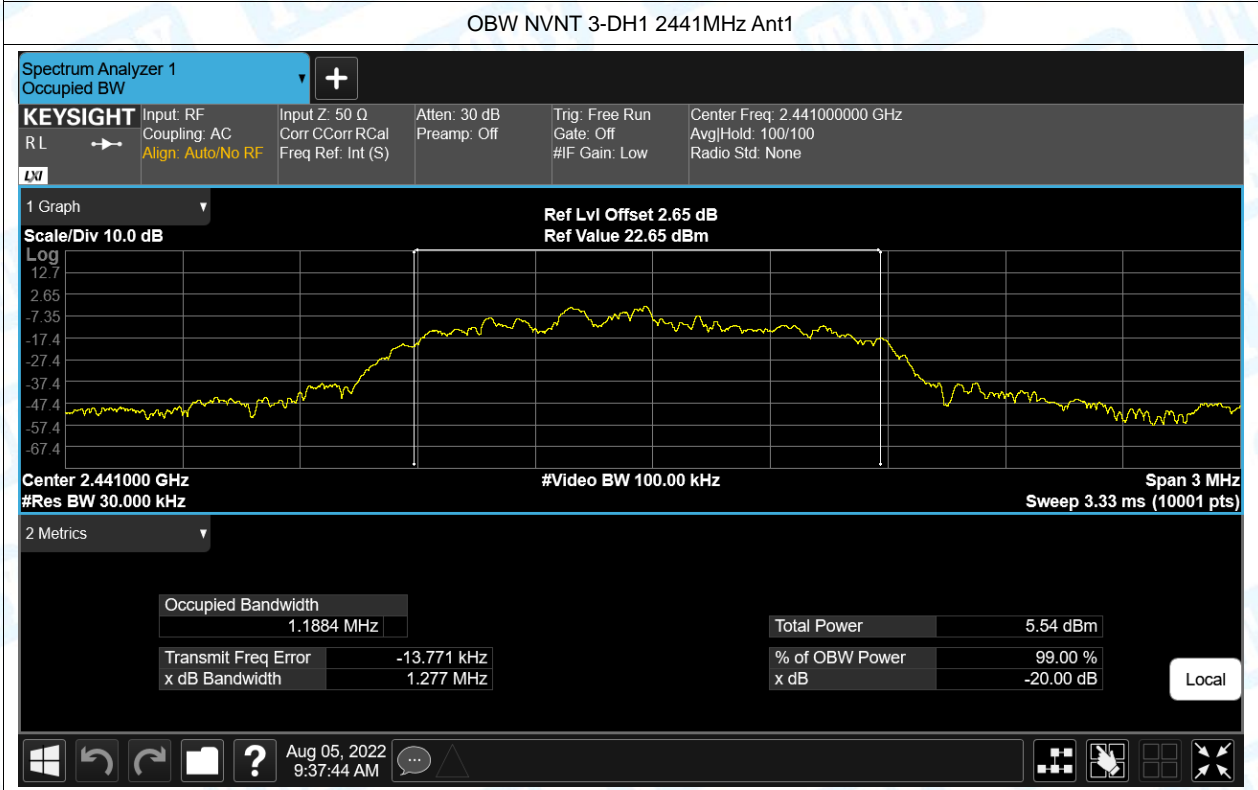
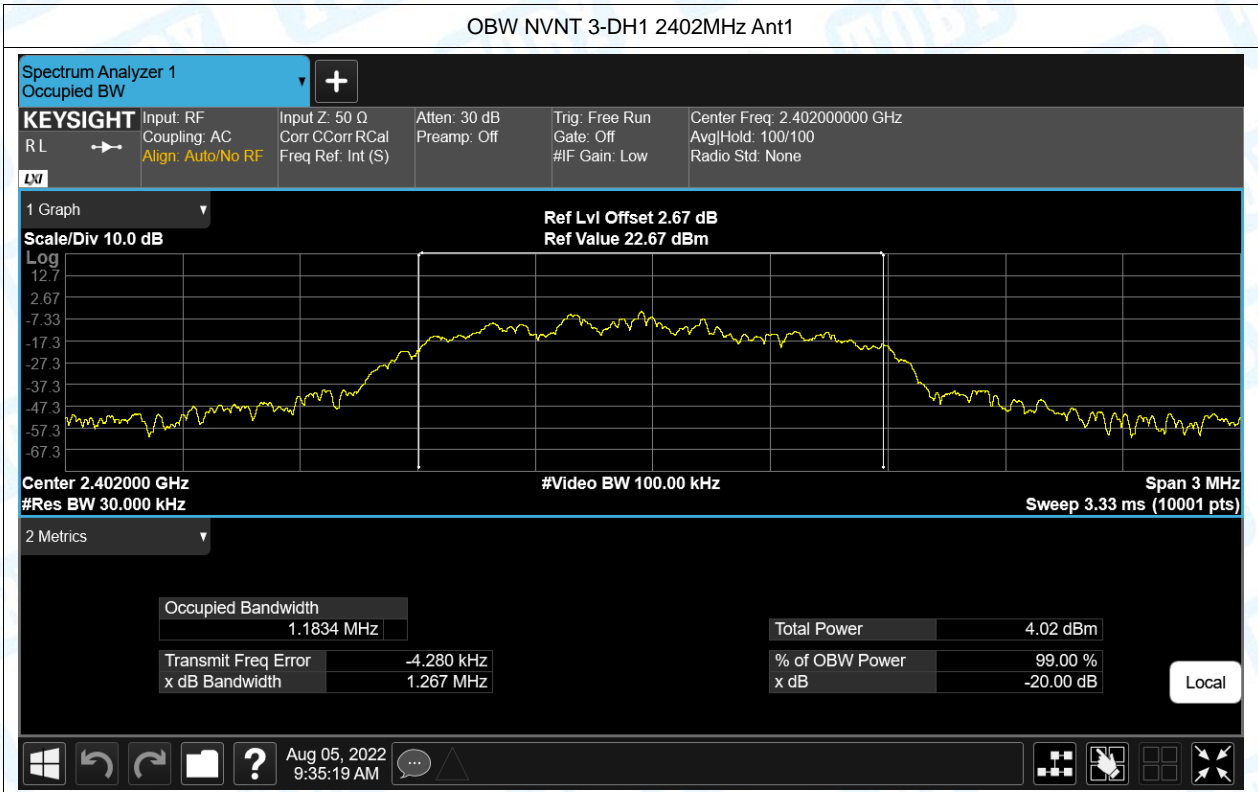
OBW NVNT 1-DH1 2480MHz Ant1

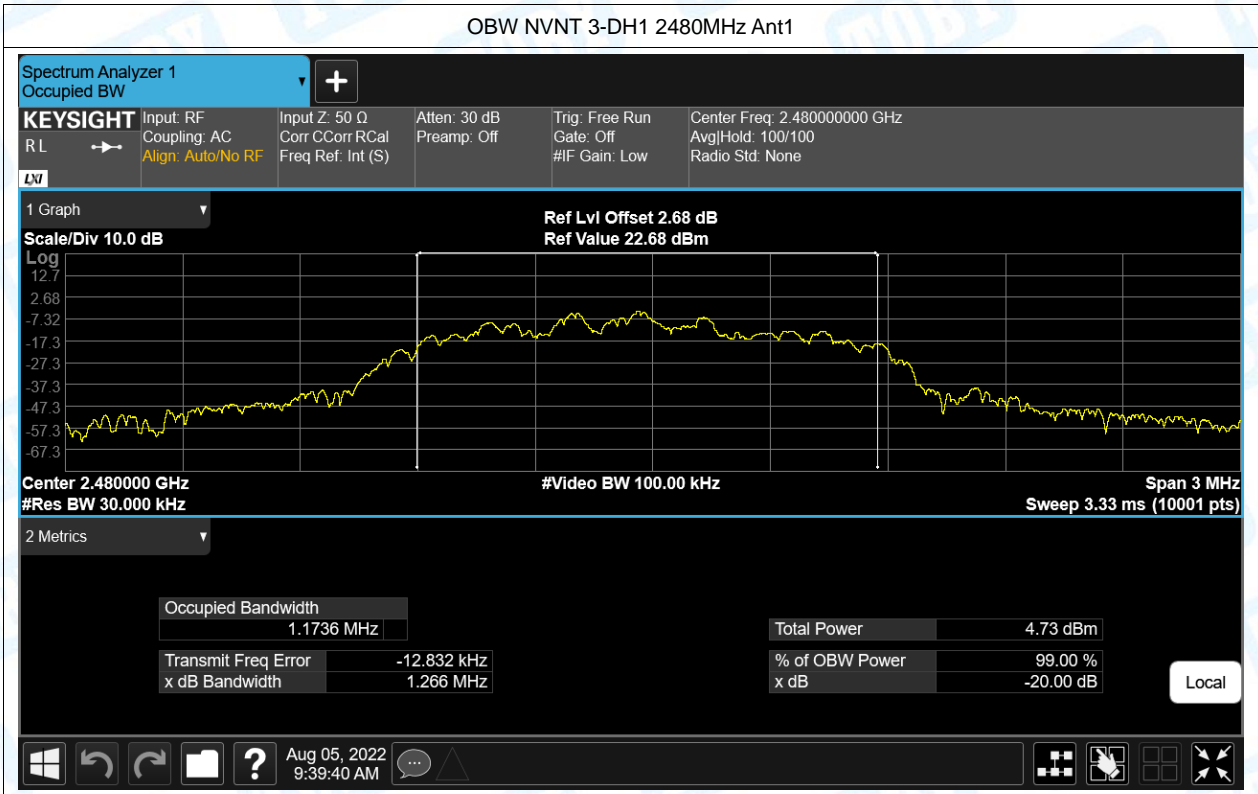


OBW NVNT 2-DH1 2402MHz Ant1







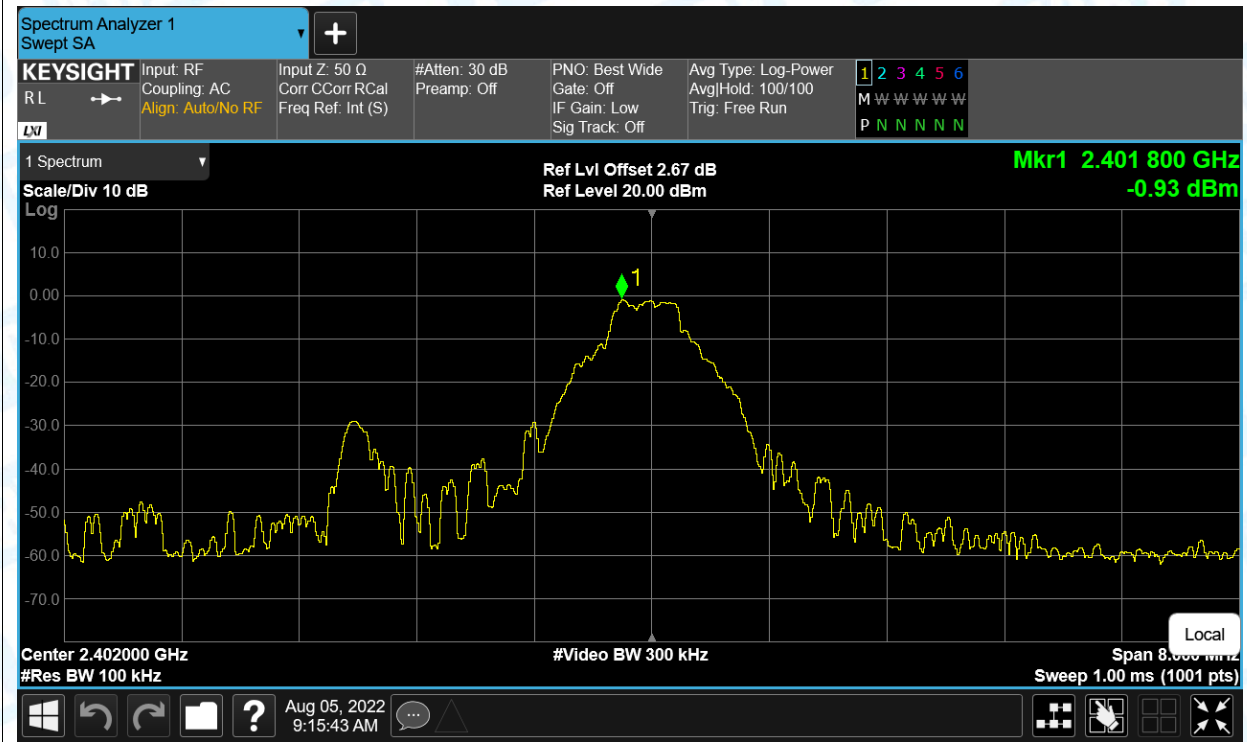


5. Band Edge

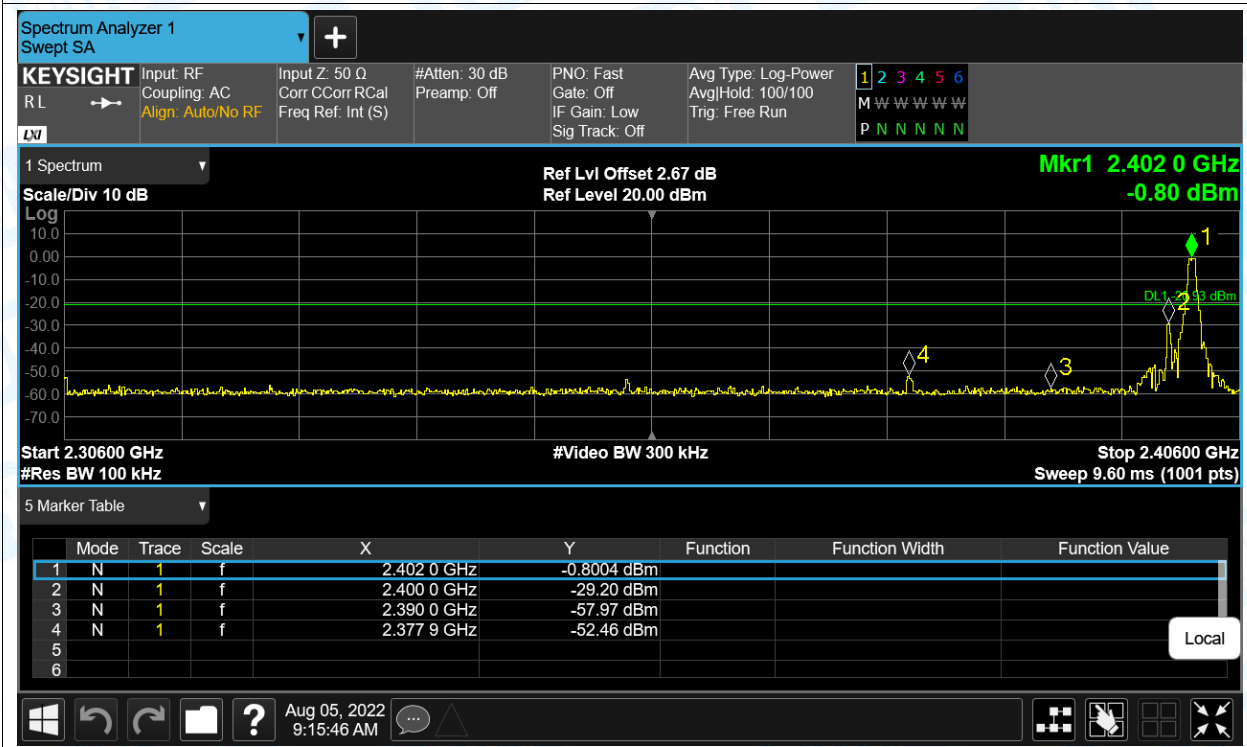
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-51.53	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.51	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-53	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-55.09	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-52.58	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.75	-20	Pass

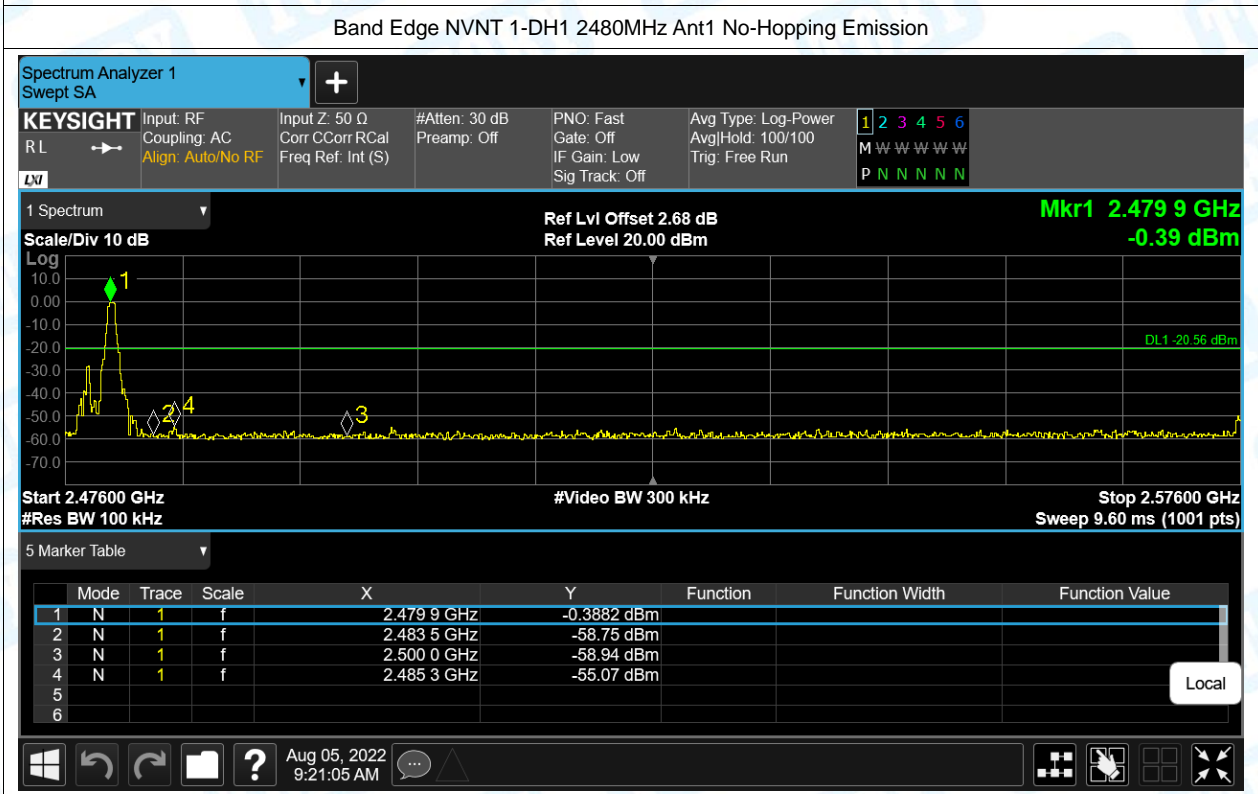
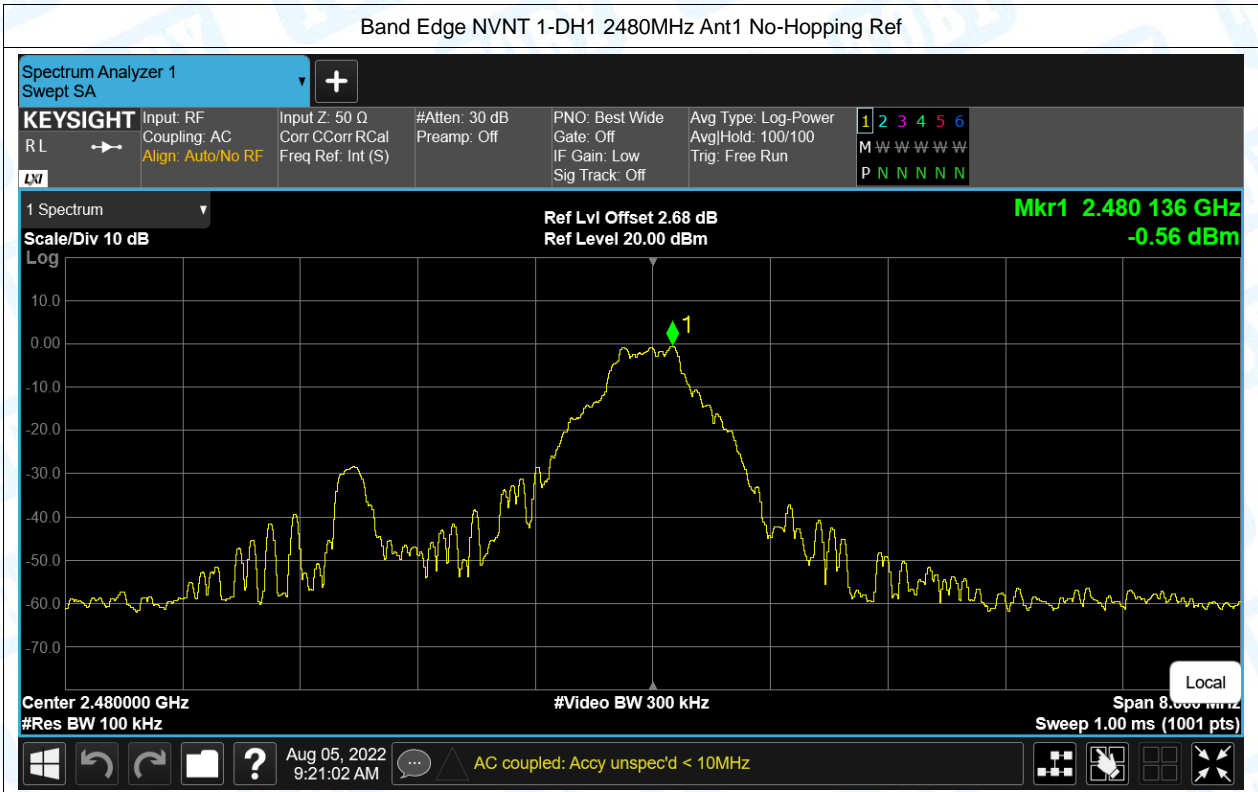
Test Graphs

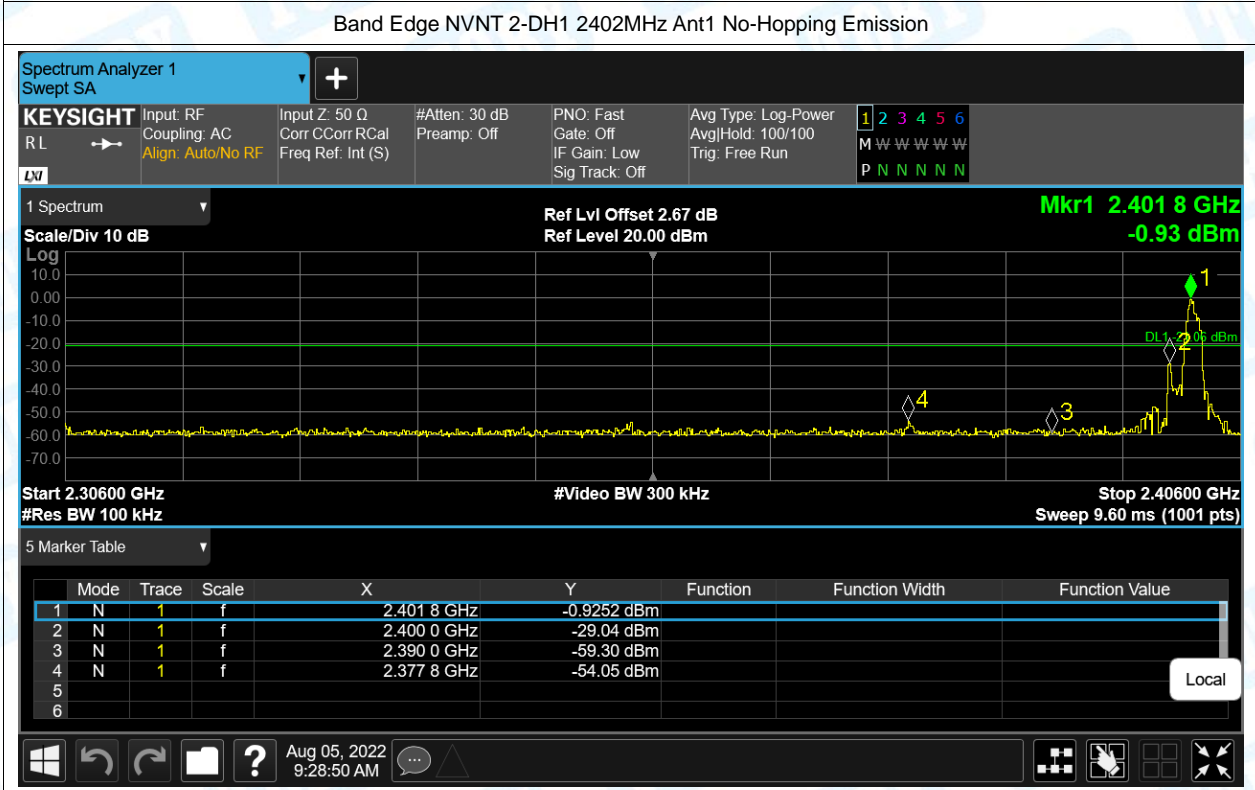
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Ref

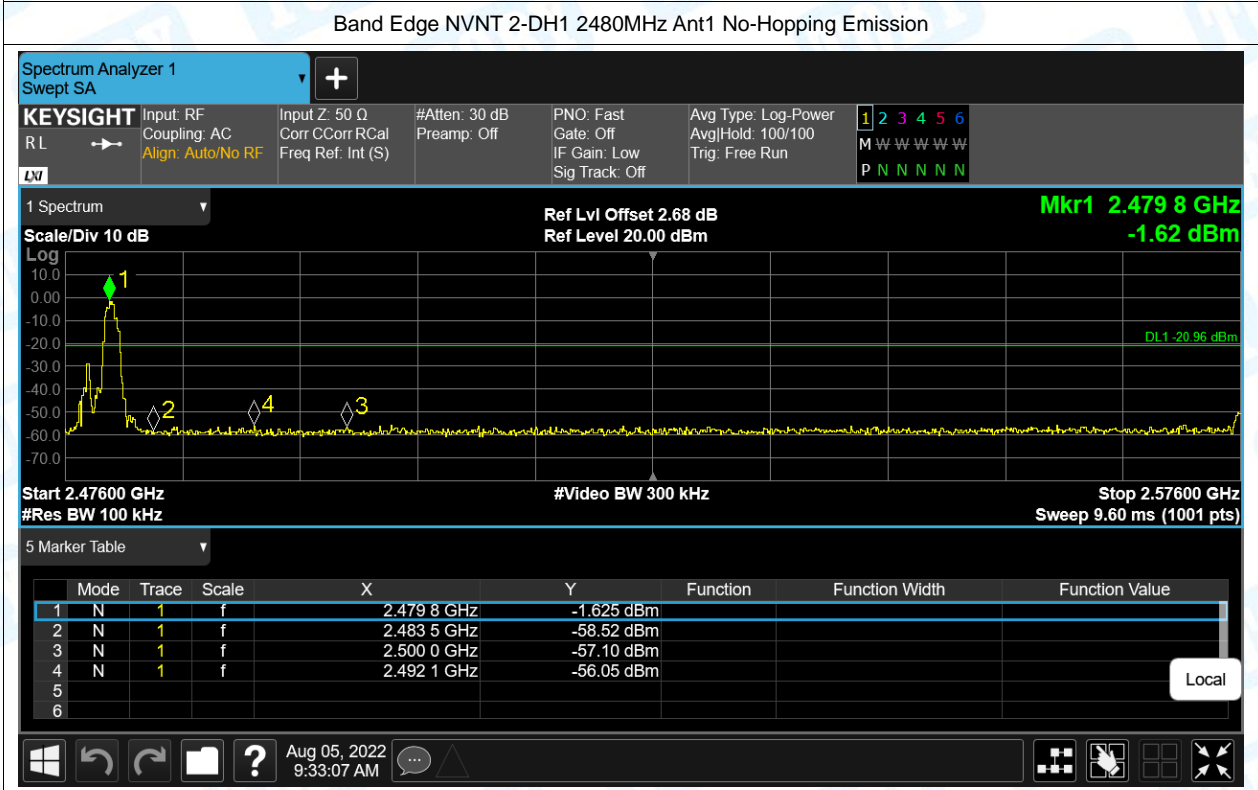
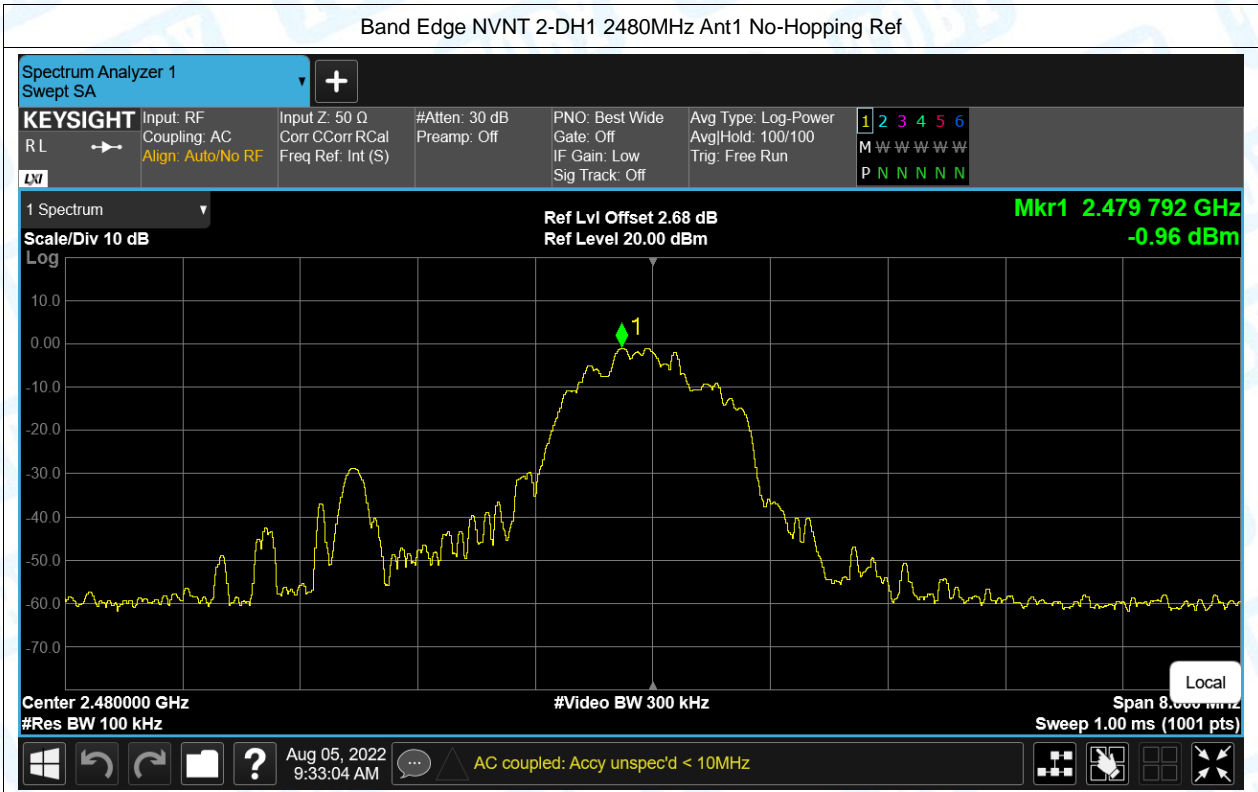


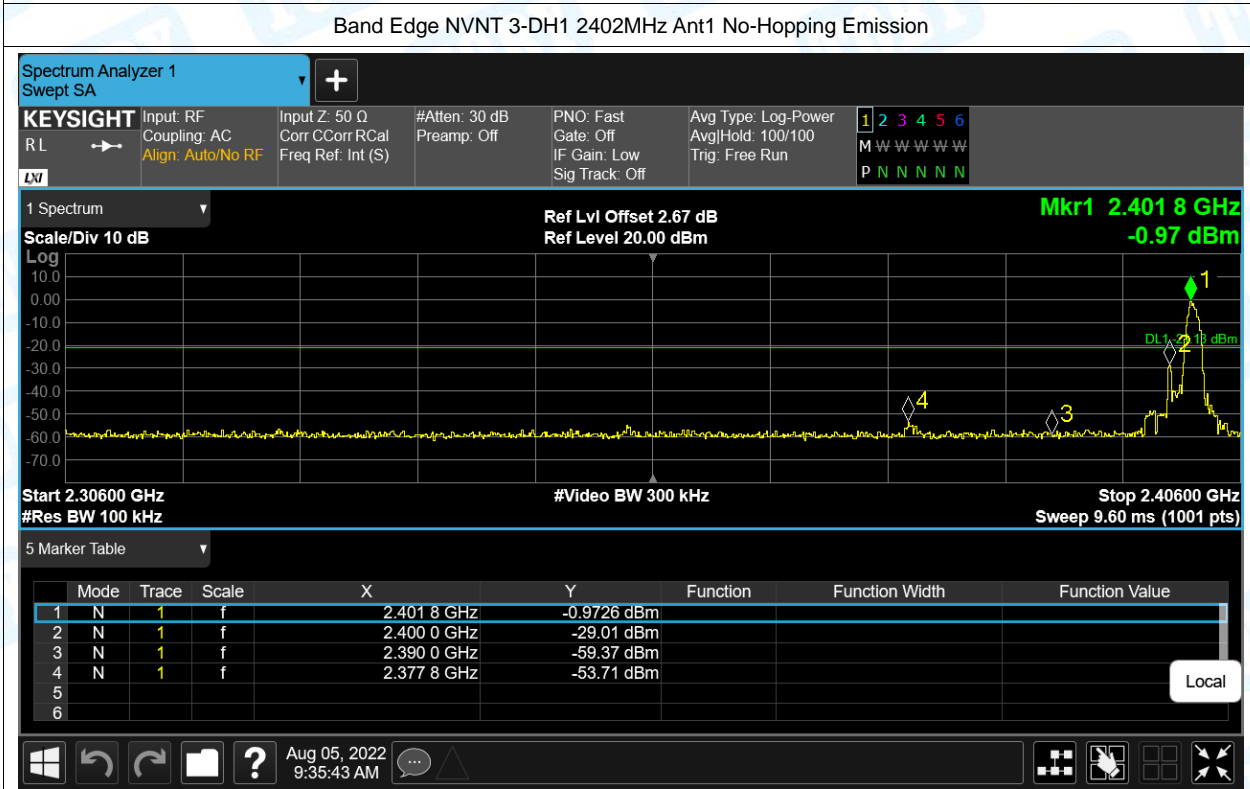
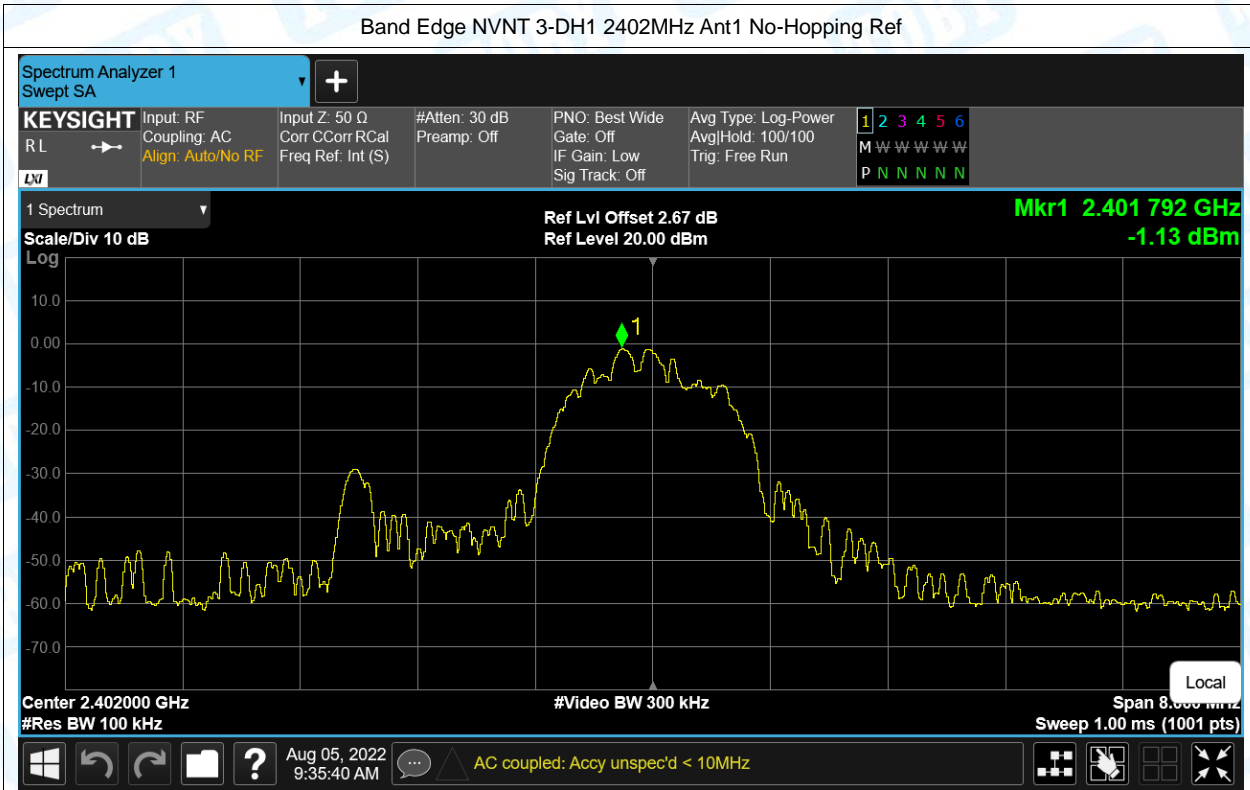
Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

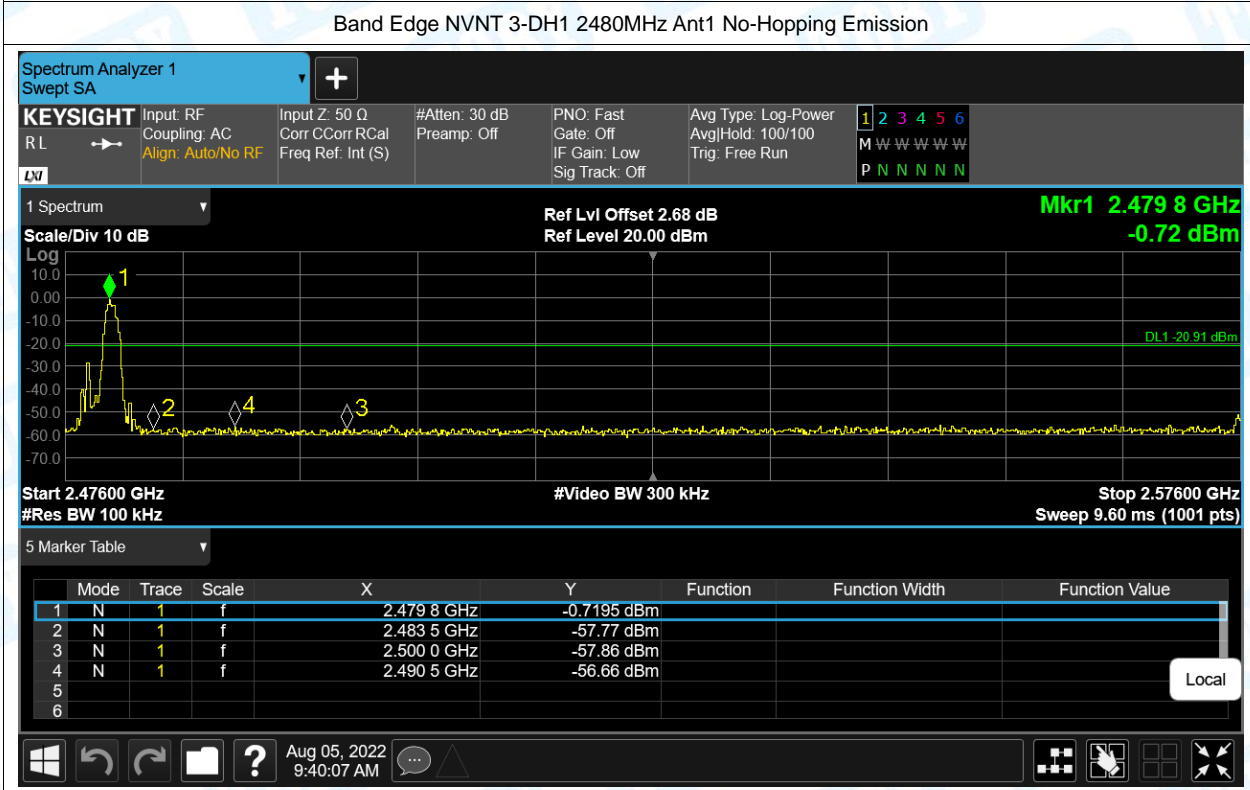
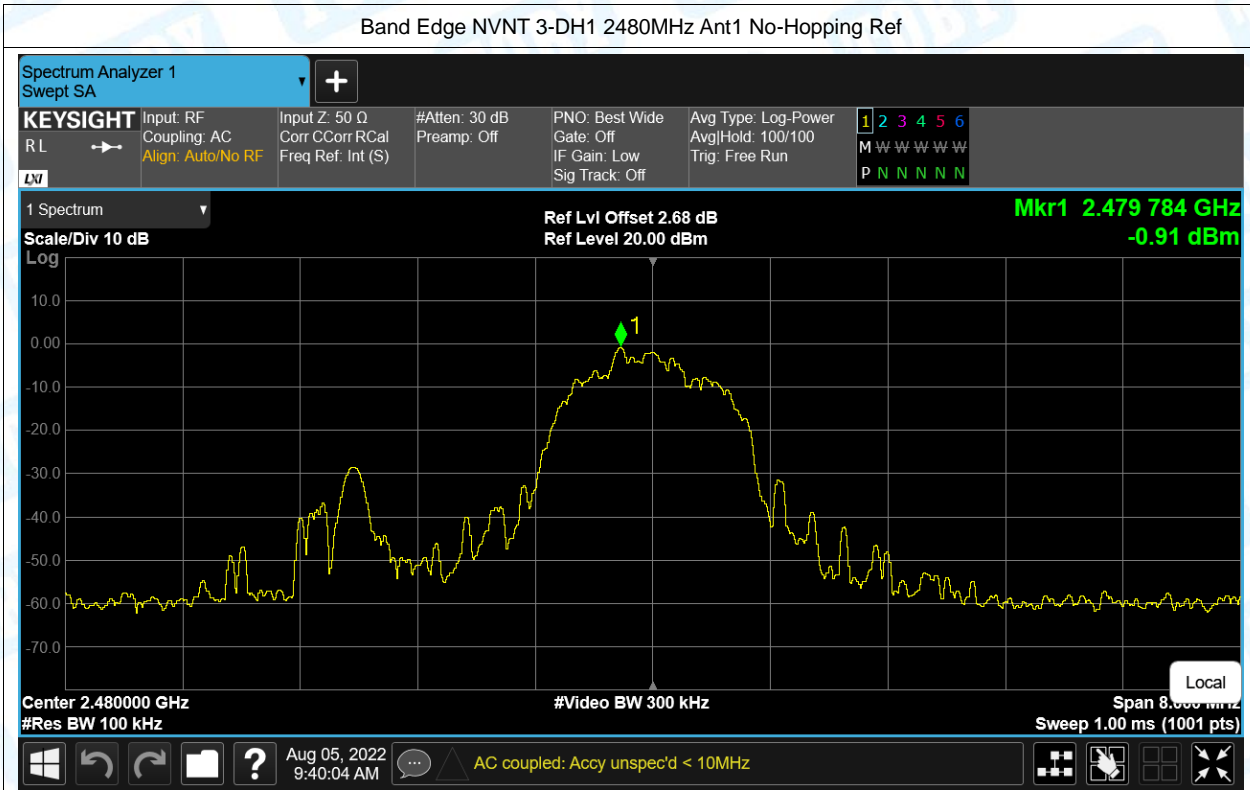










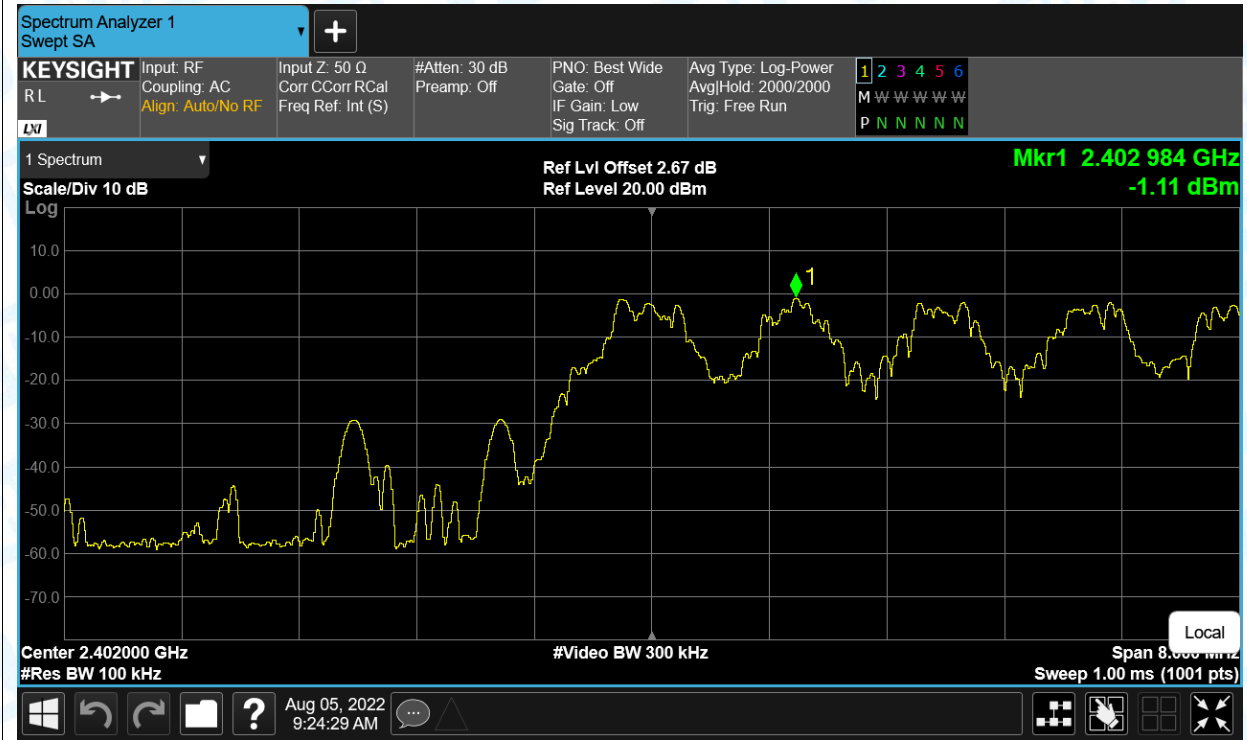


6. Band Edge(Hopping)

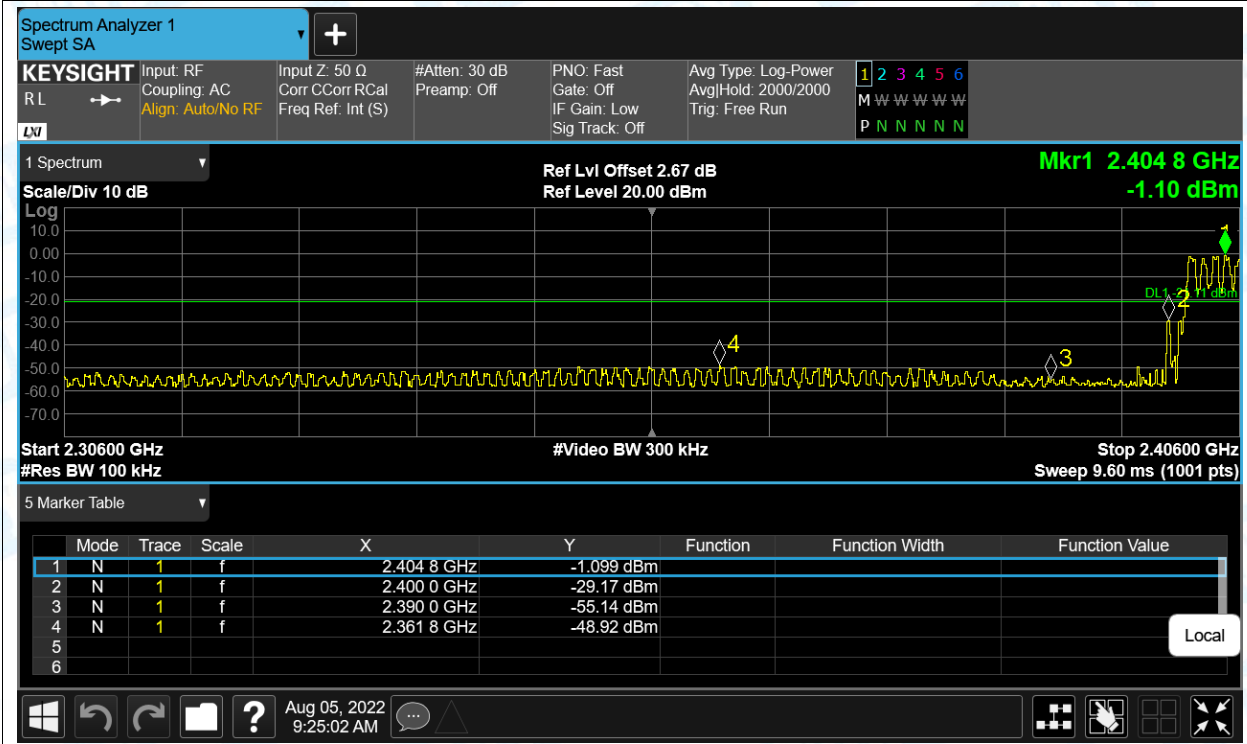
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-47.81	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-47.21	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-47.41	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-48.14	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-49.3	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-46.95	-20	Pass

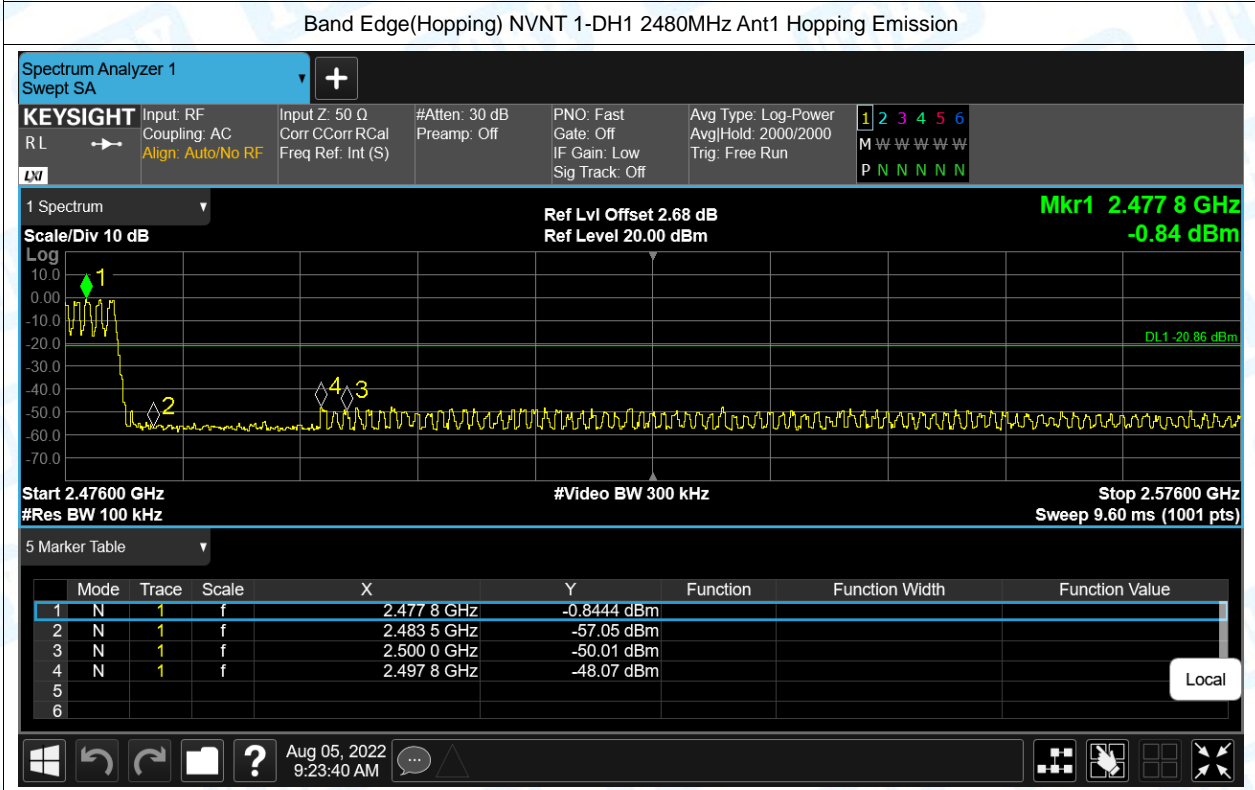
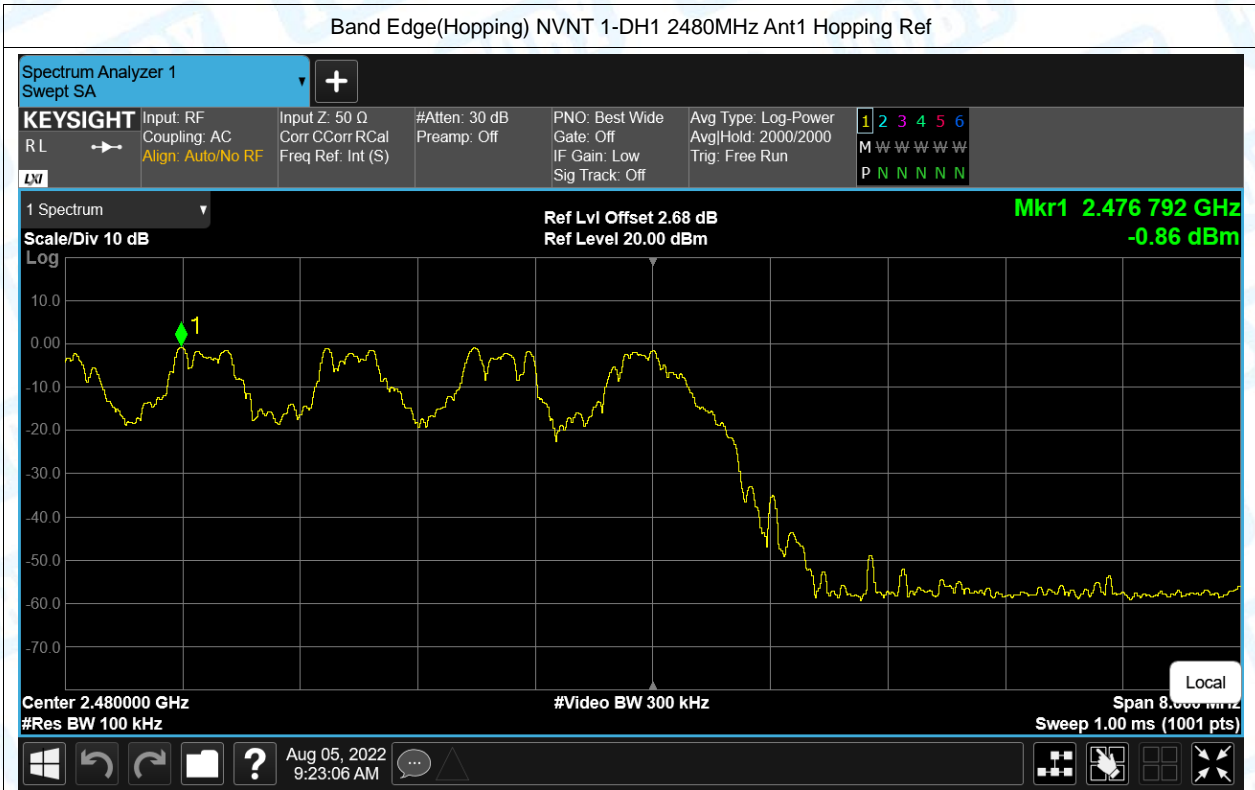
Test Graphs

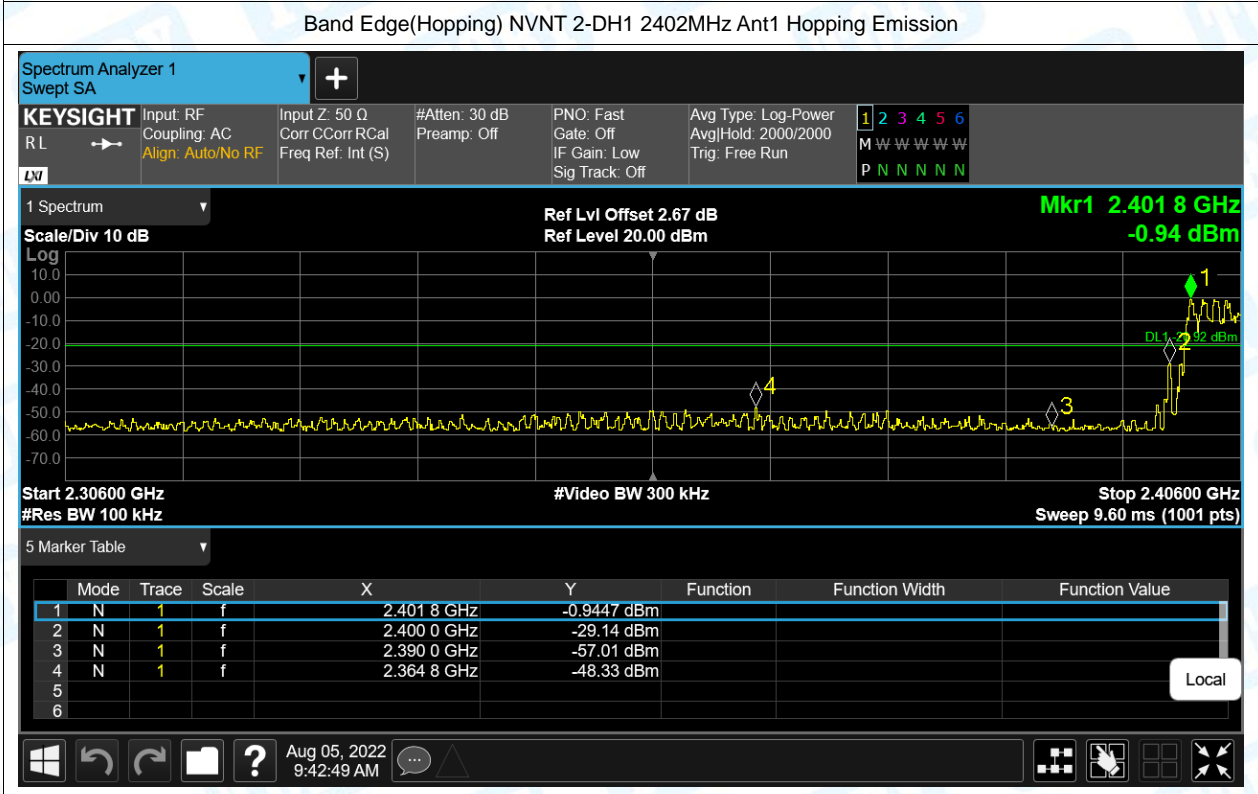
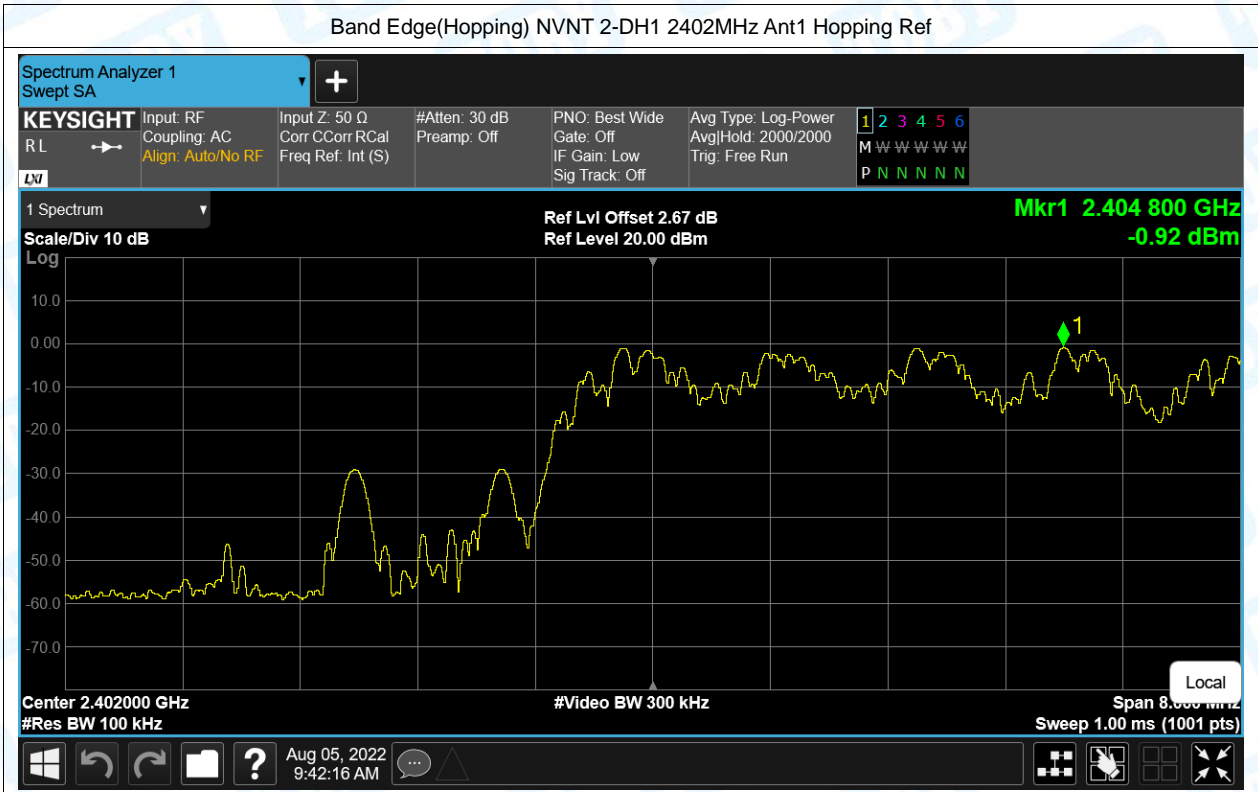
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Ref

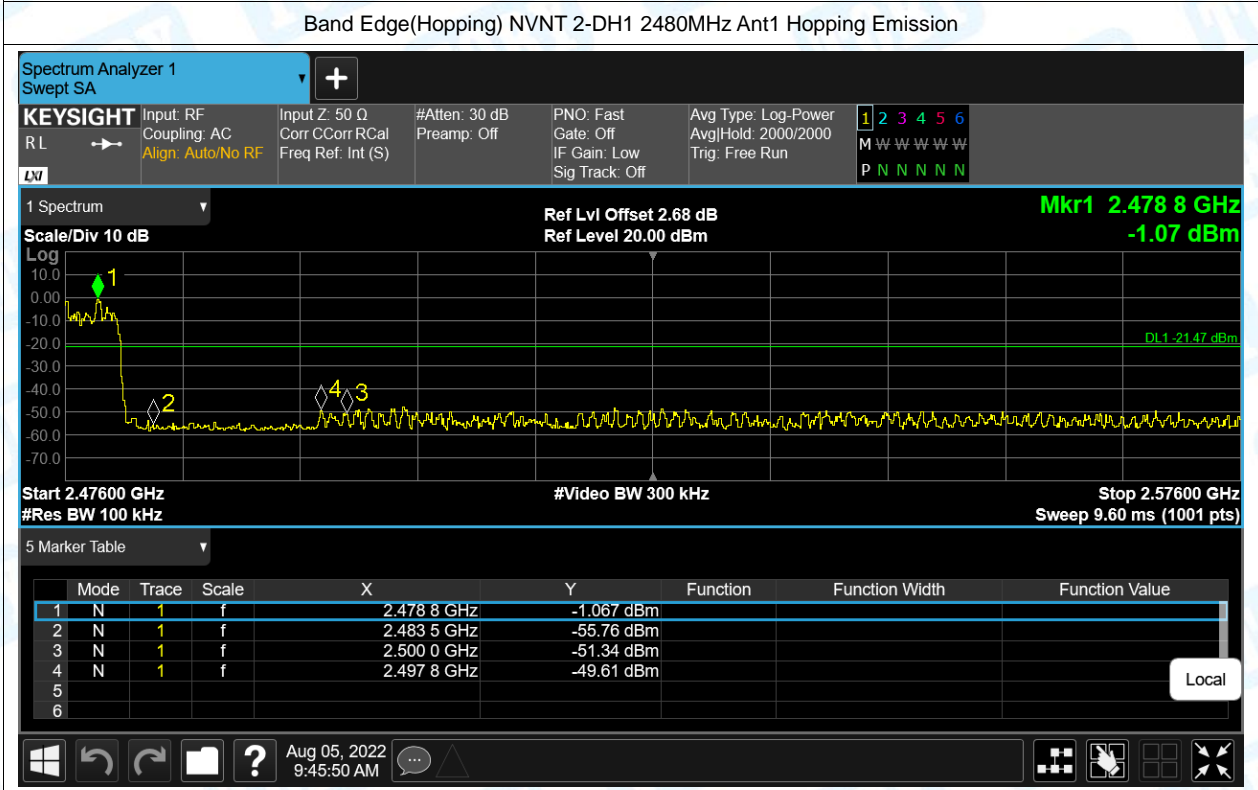


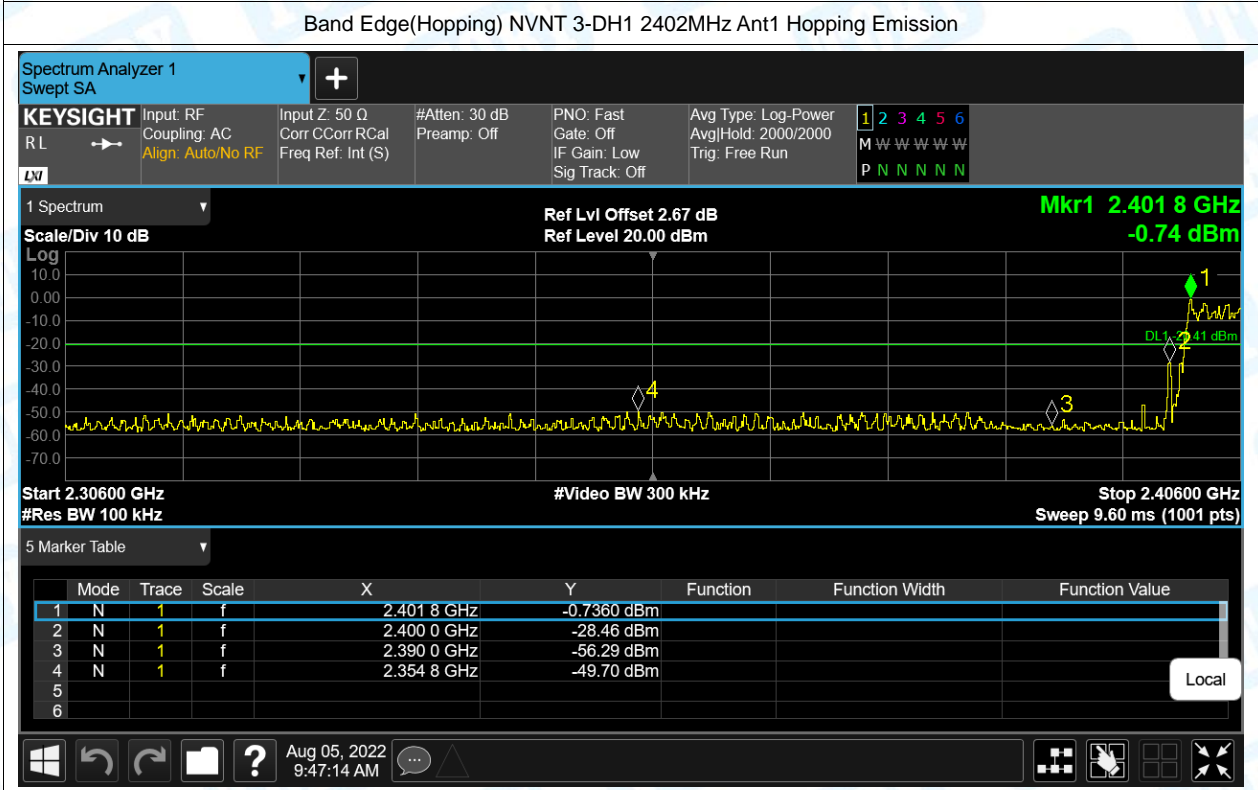
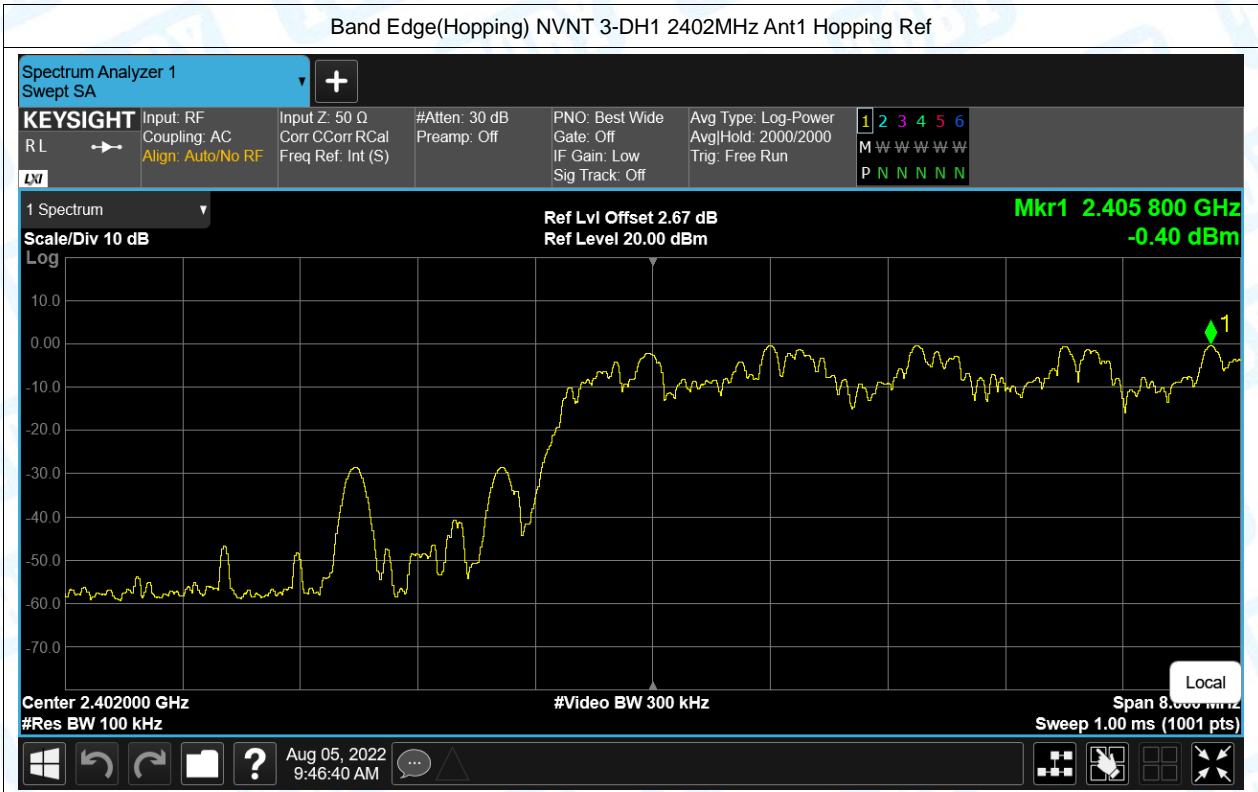
Band Edge(Hopping) NVNT 1-DH1 2402MHz Ant1 Hopping Emission

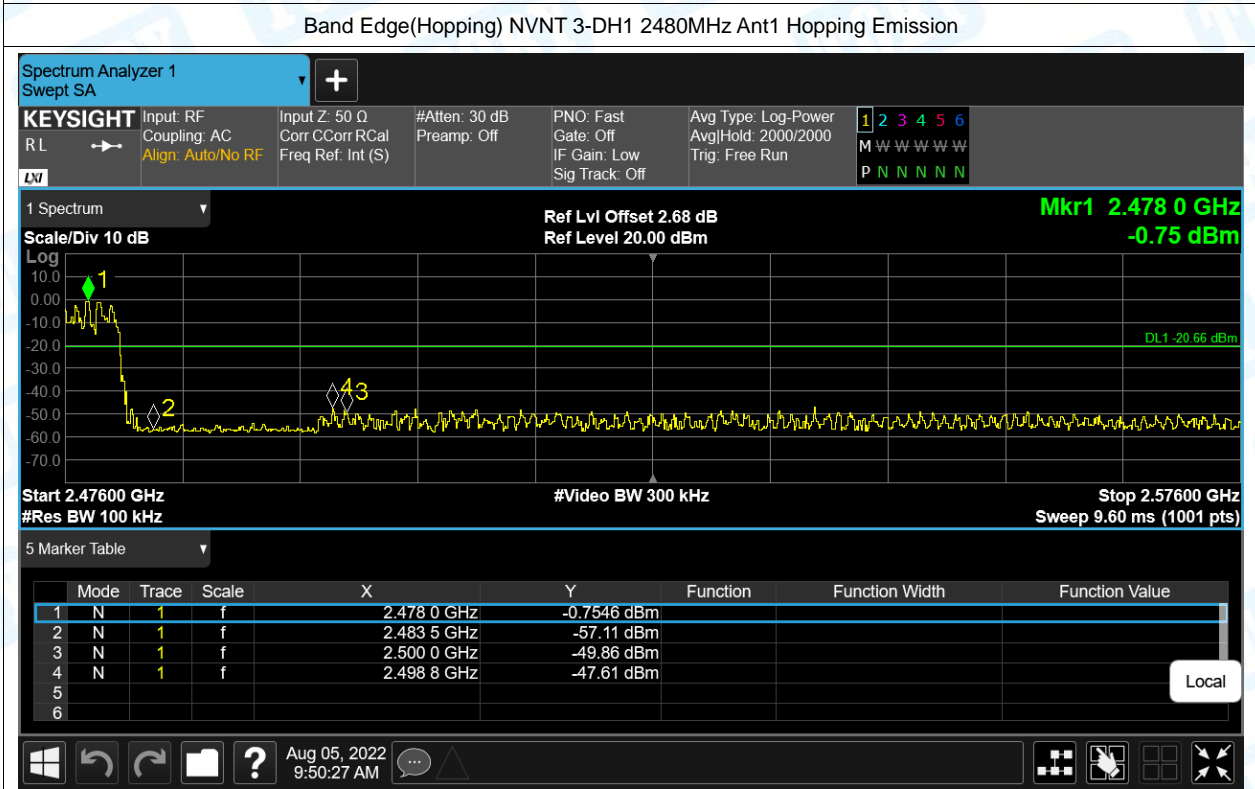
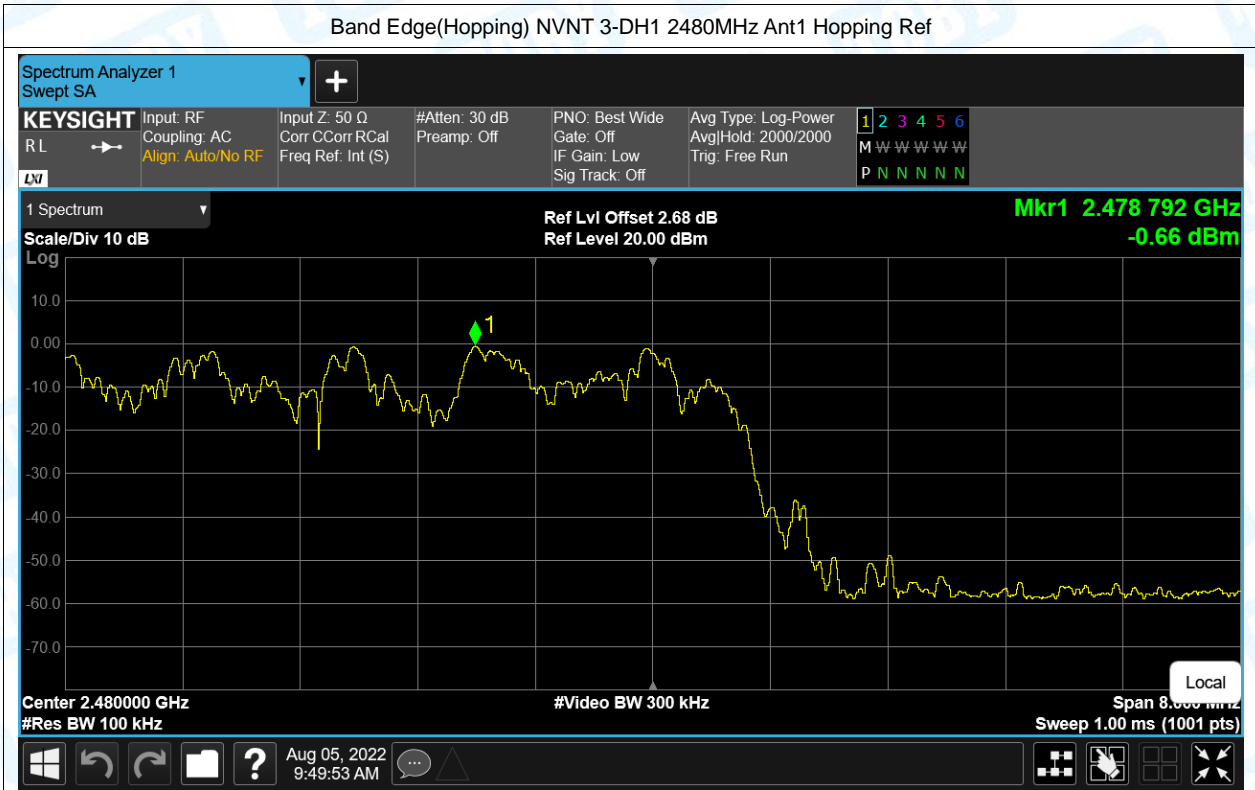










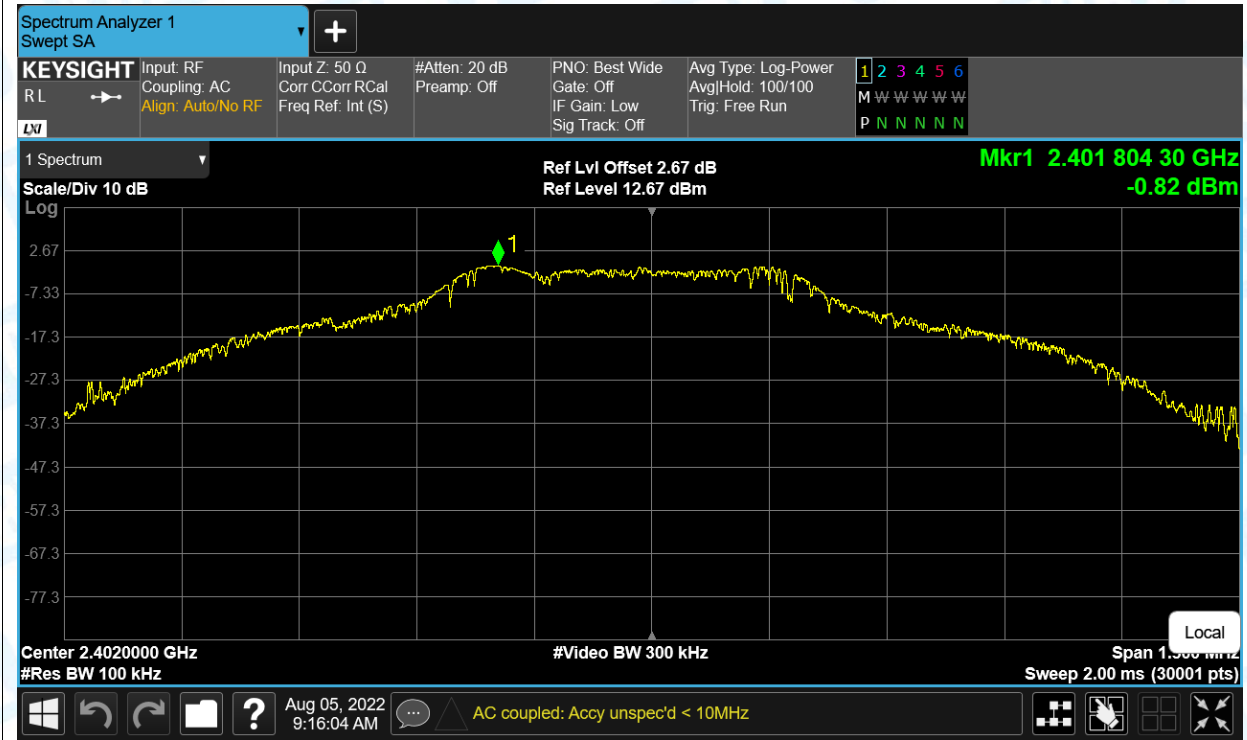


7. Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	-40.88	-20	Pass
NVNT	1-DH1	2441	Ant1	-35.86	-20	Pass
NVNT	1-DH1	2480	Ant1	-42.09	-20	Pass
NVNT	2-DH1	2402	Ant1	-40.6	-20	Pass
NVNT	2-DH1	2441	Ant1	-40.84	-20	Pass
NVNT	2-DH1	2480	Ant1	-49.97	-20	Pass
NVNT	3-DH1	2402	Ant1	-43.52	-20	Pass
NVNT	3-DH1	2441	Ant1	-39.39	-20	Pass
NVNT	3-DH1	2480	Ant1	-44.28	-20	Pass

Test Graphs

Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Ref



Tx. Spurious NVNT 1-DH1 2402MHz Ant1 Emission

