

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

General Description of EUT	
<b>Product Name:</b>	2.1 CH 3D soundbar with build-in subwoofer
<b>Test Model:</b>	L220BW
<b>Sample ID:</b>	202211-0129-1-2#
Environmental Conditions	
<b>Temperature:</b>	25°C
<b>Relative Humidity:</b>	55%
<b>Test Voltage:</b>	AC 120V
<b>Test Engineer:</b>	Liujiming
Note: For a more detailed features description, please refer to the report TBR-C-202211-0129-1	

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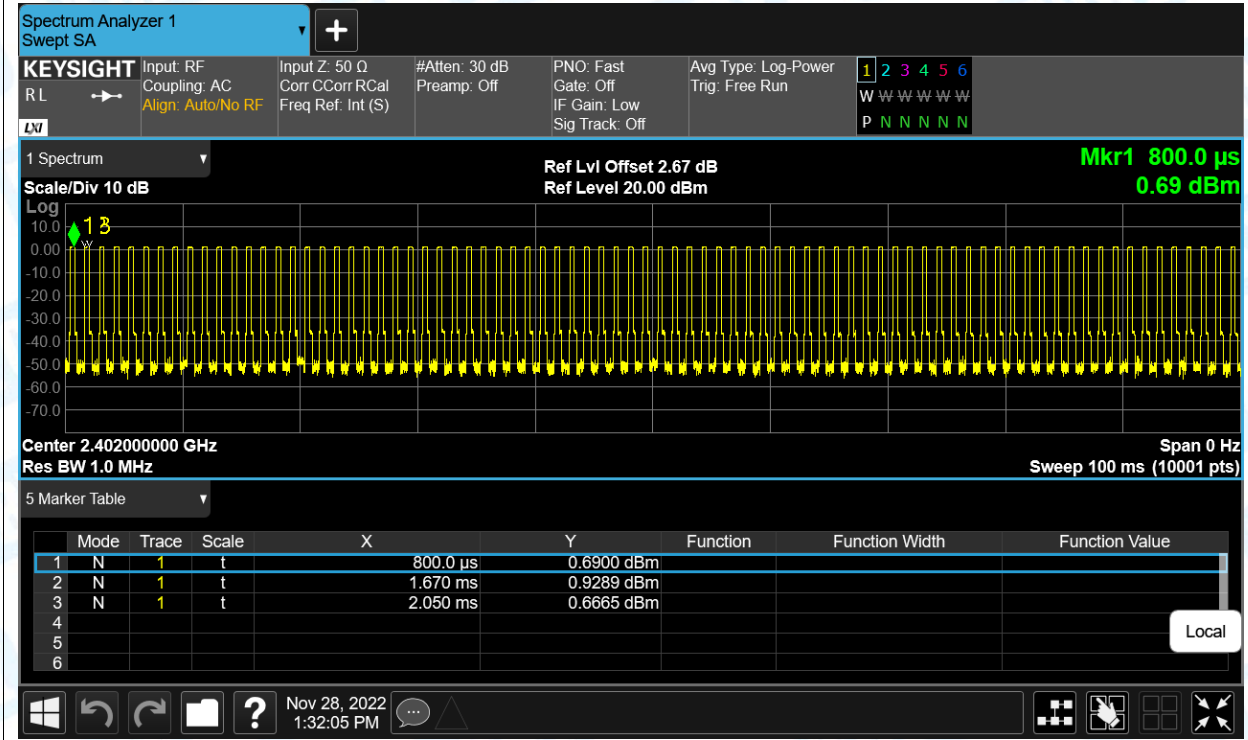


## 1. Duty Cycle

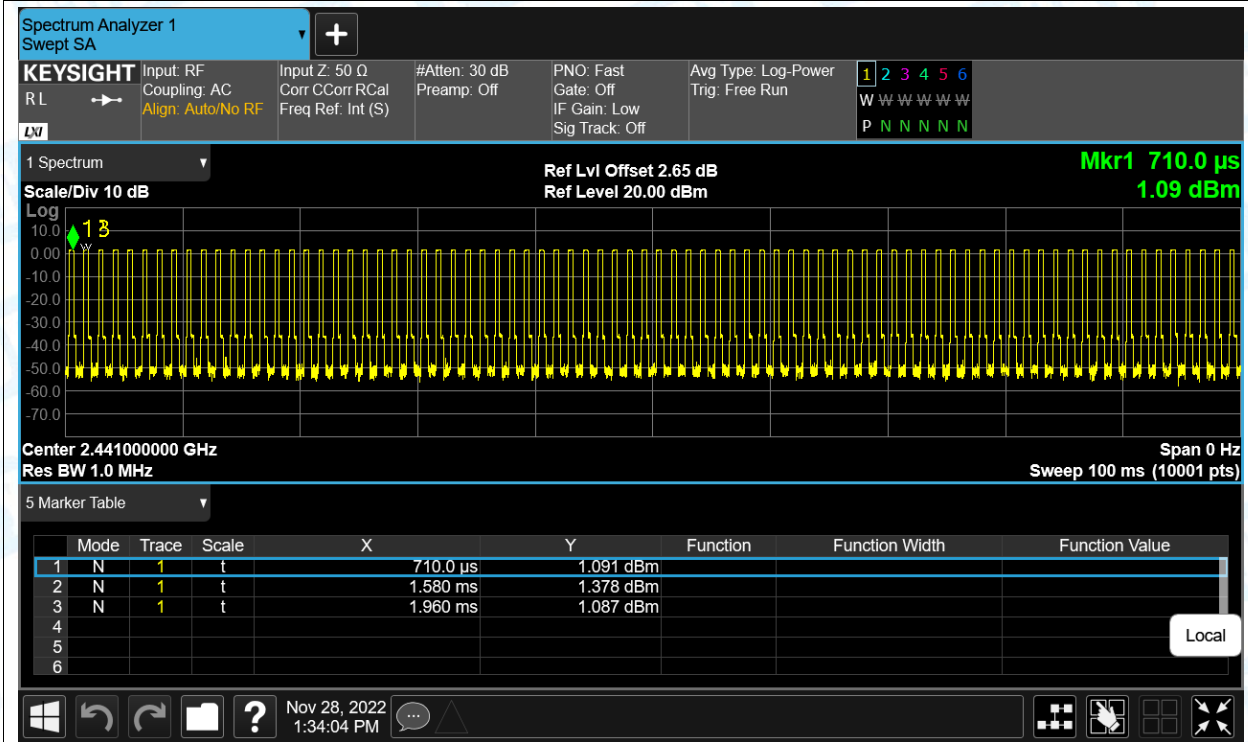
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	1-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2441	Ant1	30.4	5.17	2.63
NVNT	1-DH1	2480	Ant1	30.4	5.17	2.63
NVNT	2-DH1	2402	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	2-DH1	2480	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2402	Ant1	30.4	5.17	2.63
NVNT	3-DH1	2441	Ant1	31.2	5.06	2.56
NVNT	3-DH1	2480	Ant1	31.2	5.06	2.56

Test Graphs

Duty Cycle NVNT 1-DH1 2402MHz Ant1

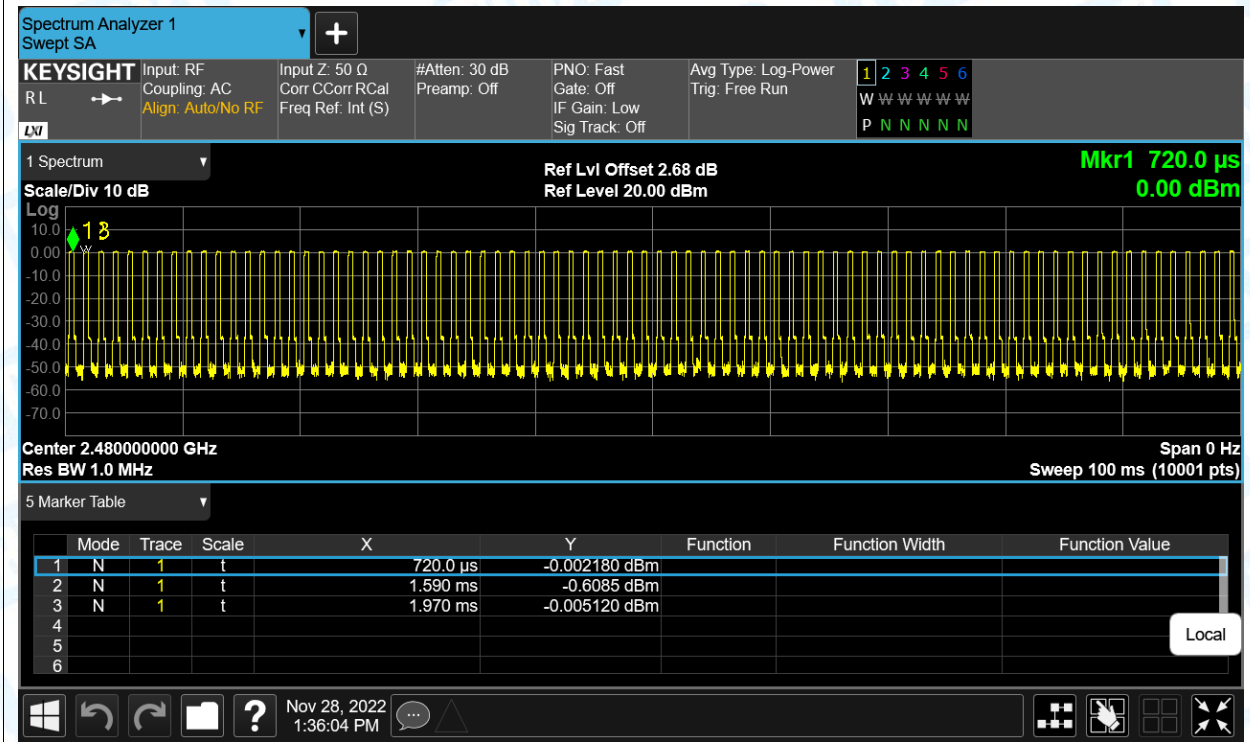


Duty Cycle NVNT 1-DH1 2441MHz Ant1

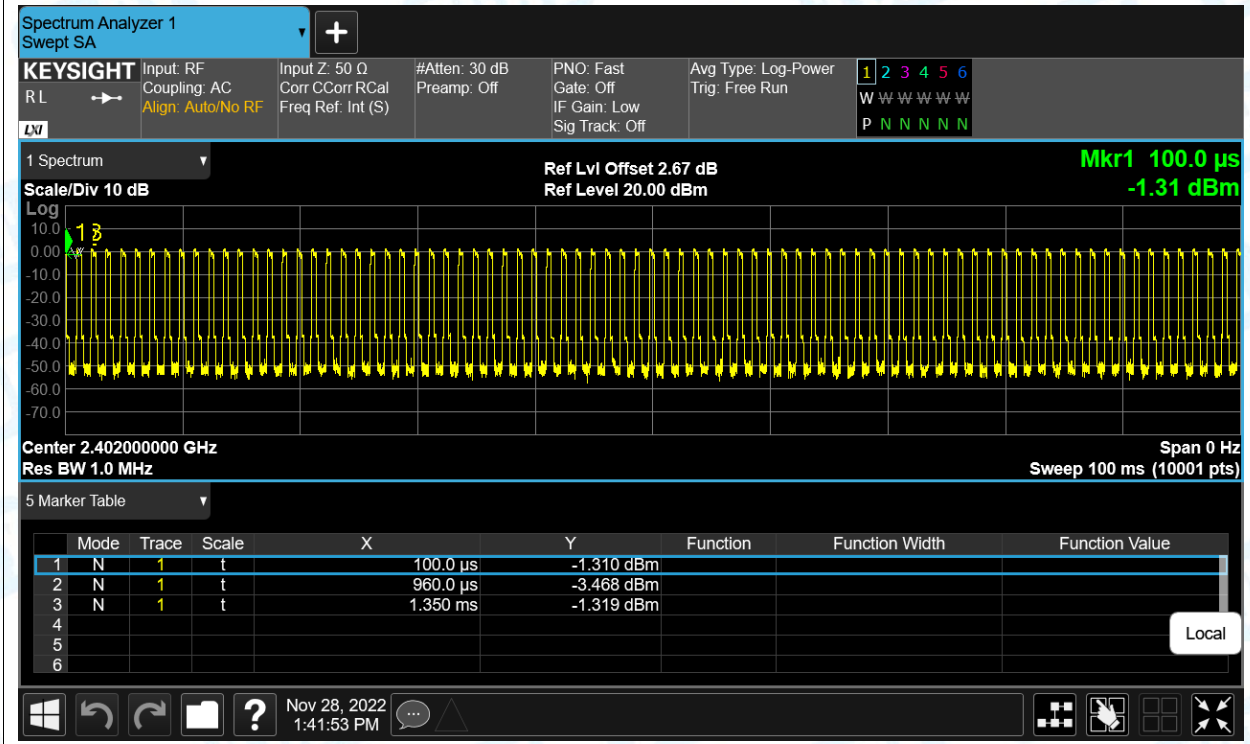




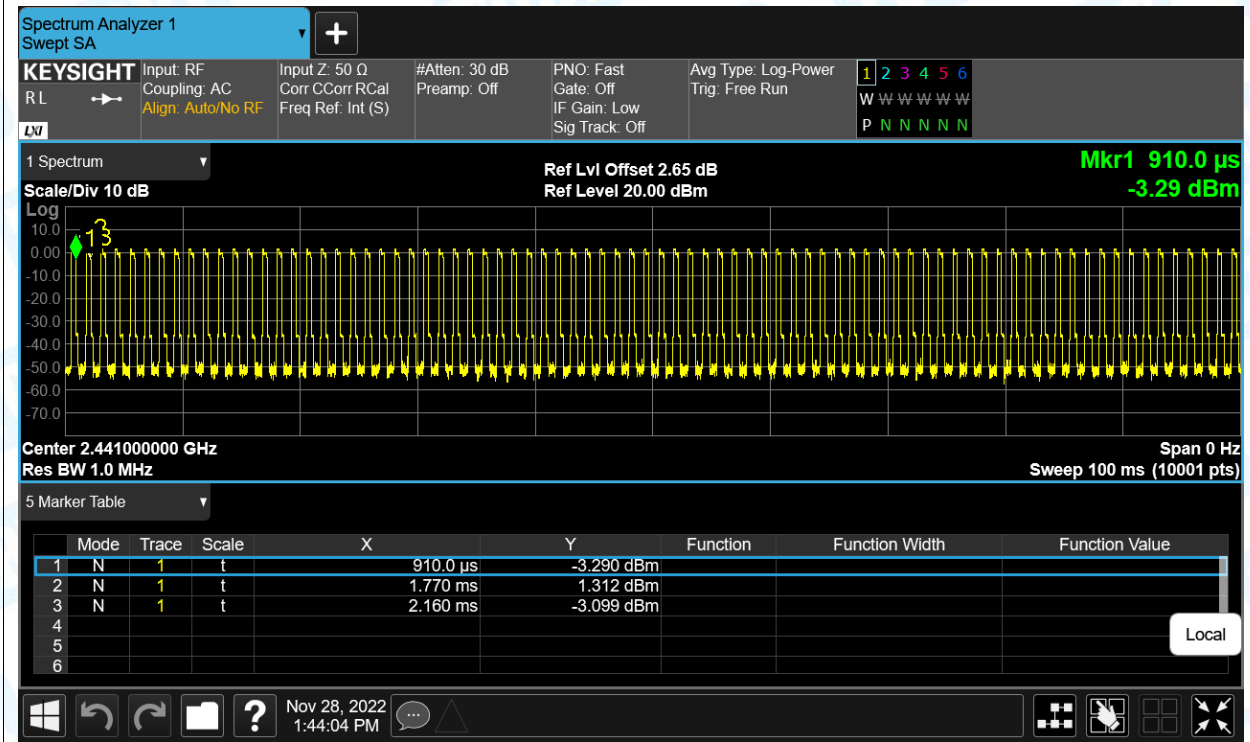
Duty Cycle NVNT 1-DH1 2480MHz Ant1



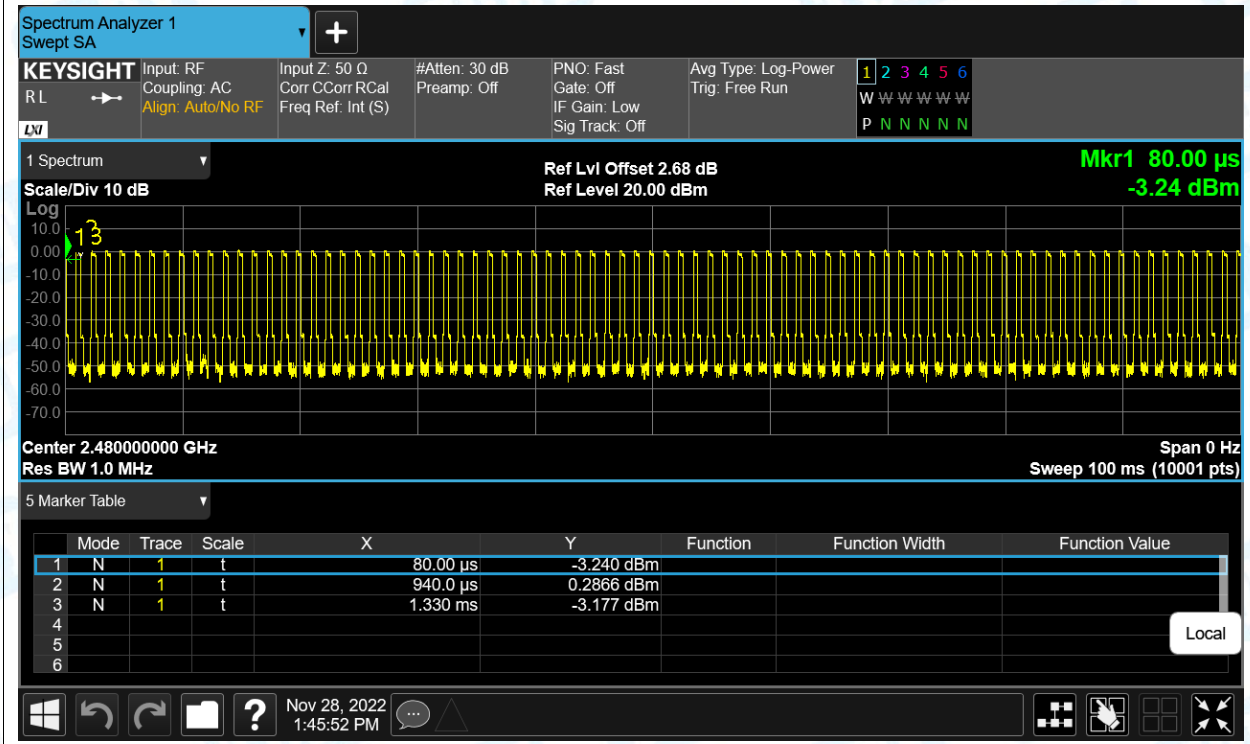
Duty Cycle NVNT 2-DH1 2402MHz Ant1



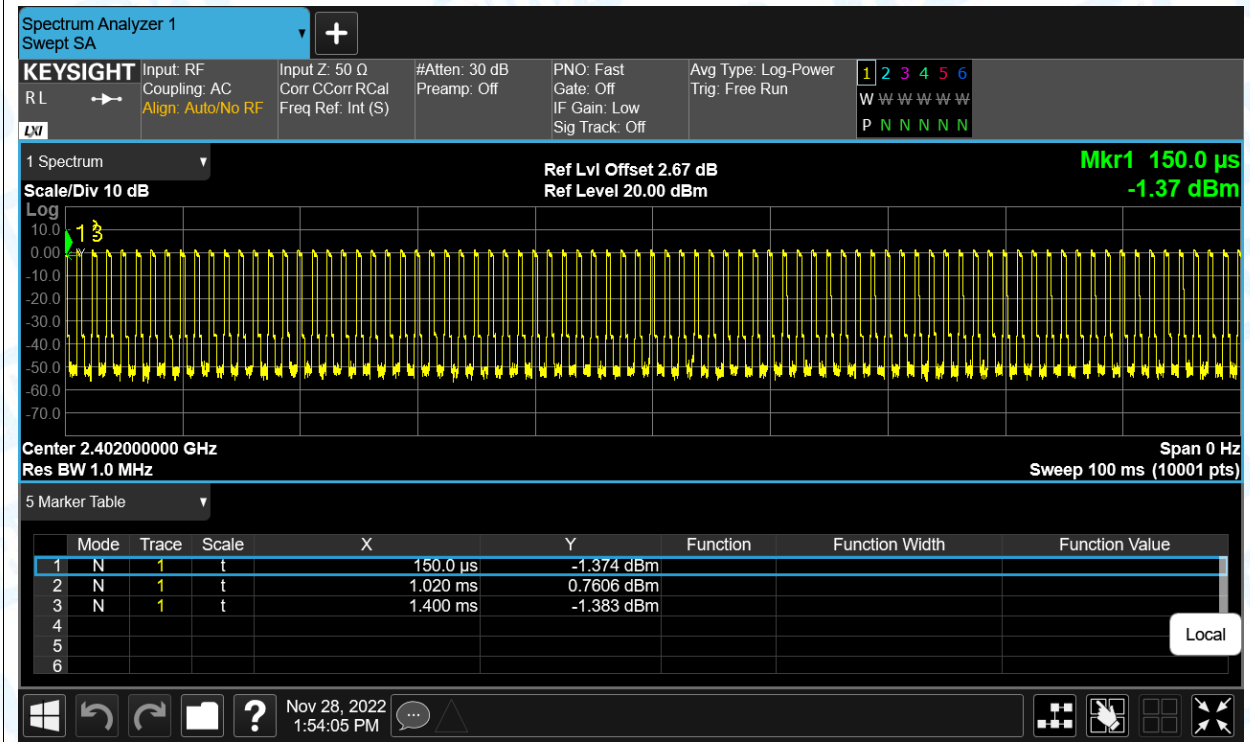
Duty Cycle NVNT 2-DH1 2441MHz Ant1



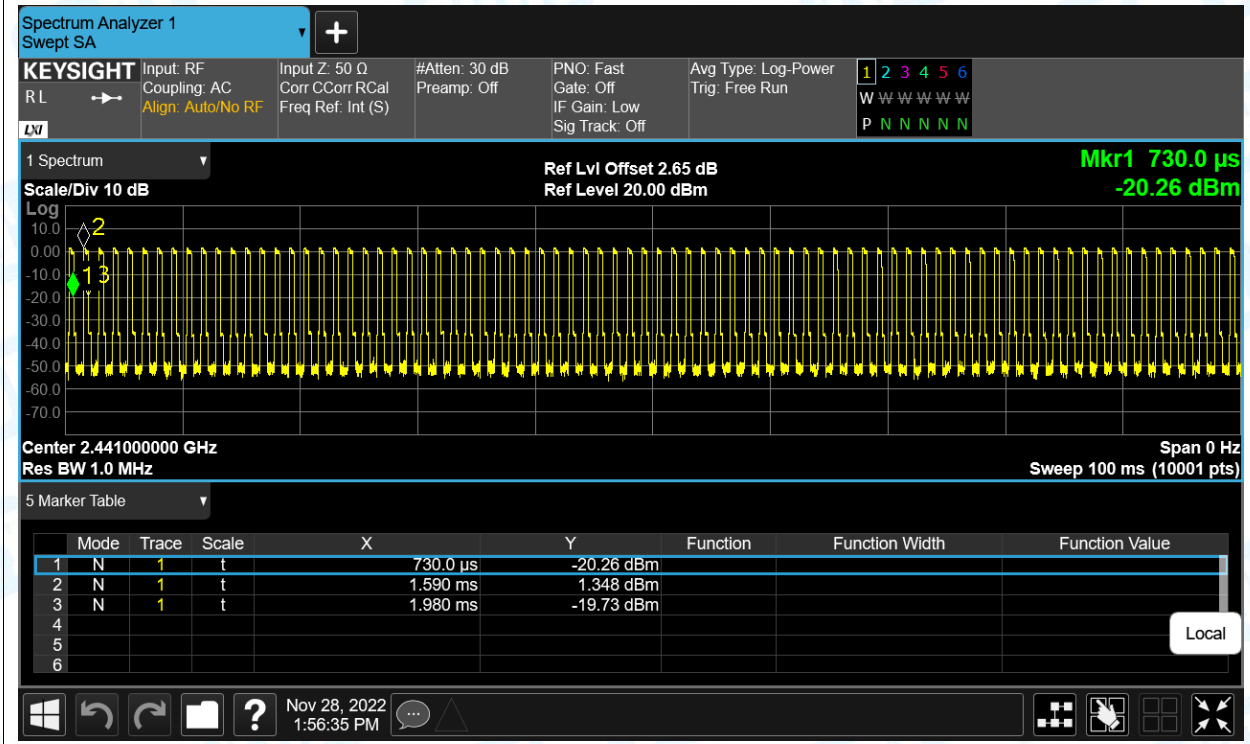
Duty Cycle NVNT 2-DH1 2480MHz Ant1



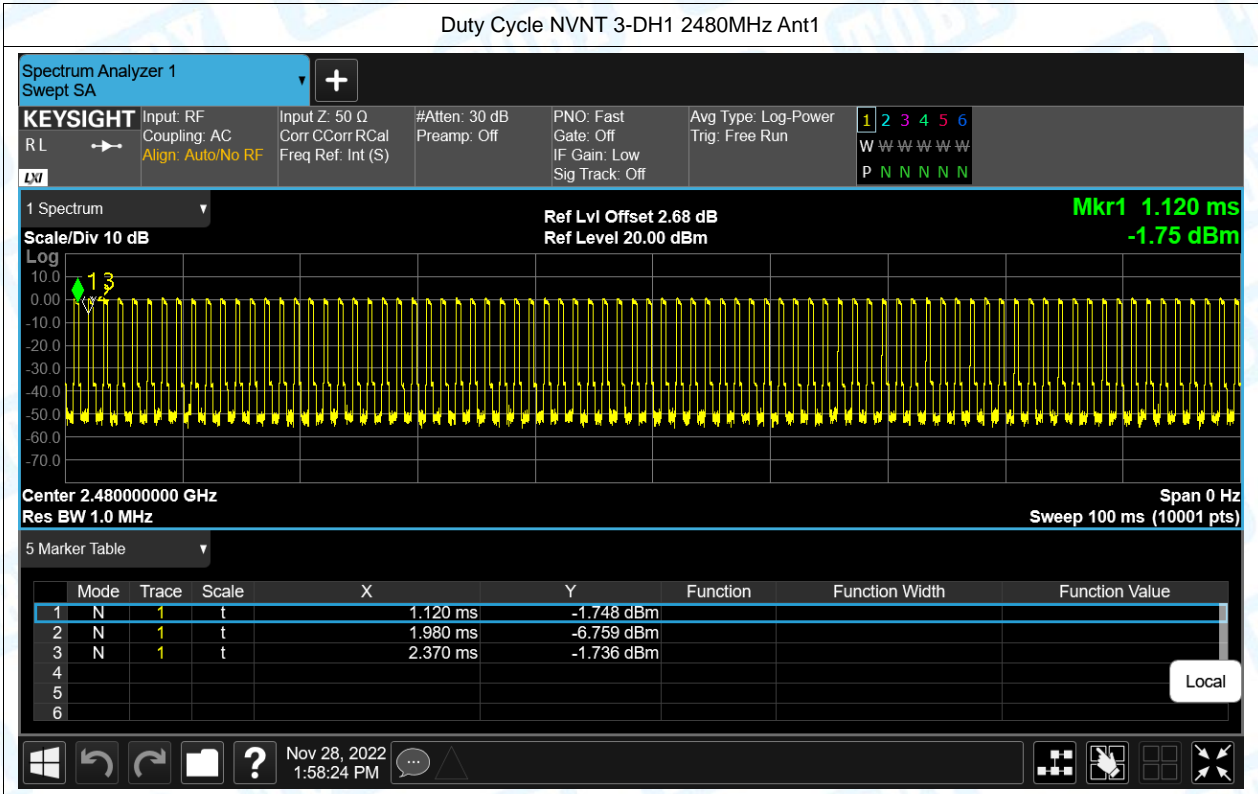
Duty Cycle NVNT 3-DH1 2402MHz Ant1



Duty Cycle NVNT 3-DH1 2441MHz Ant1







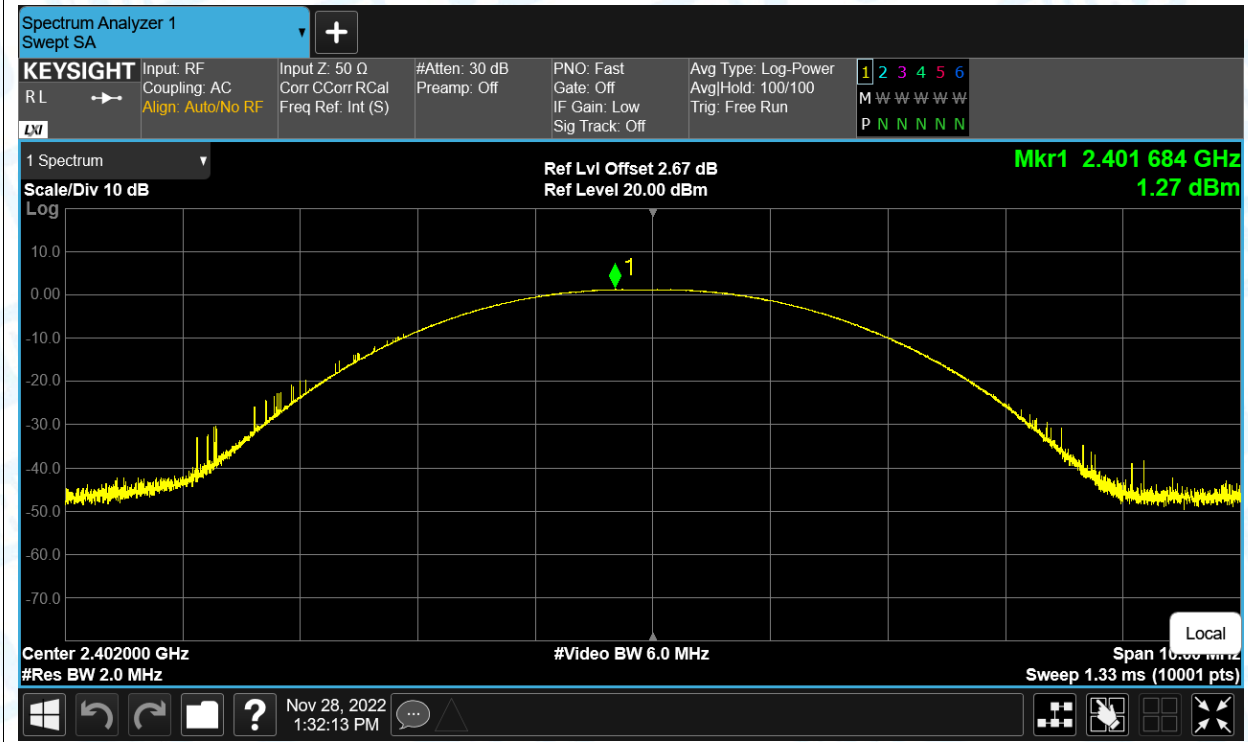


## 2. Maximum Conducted Output Power

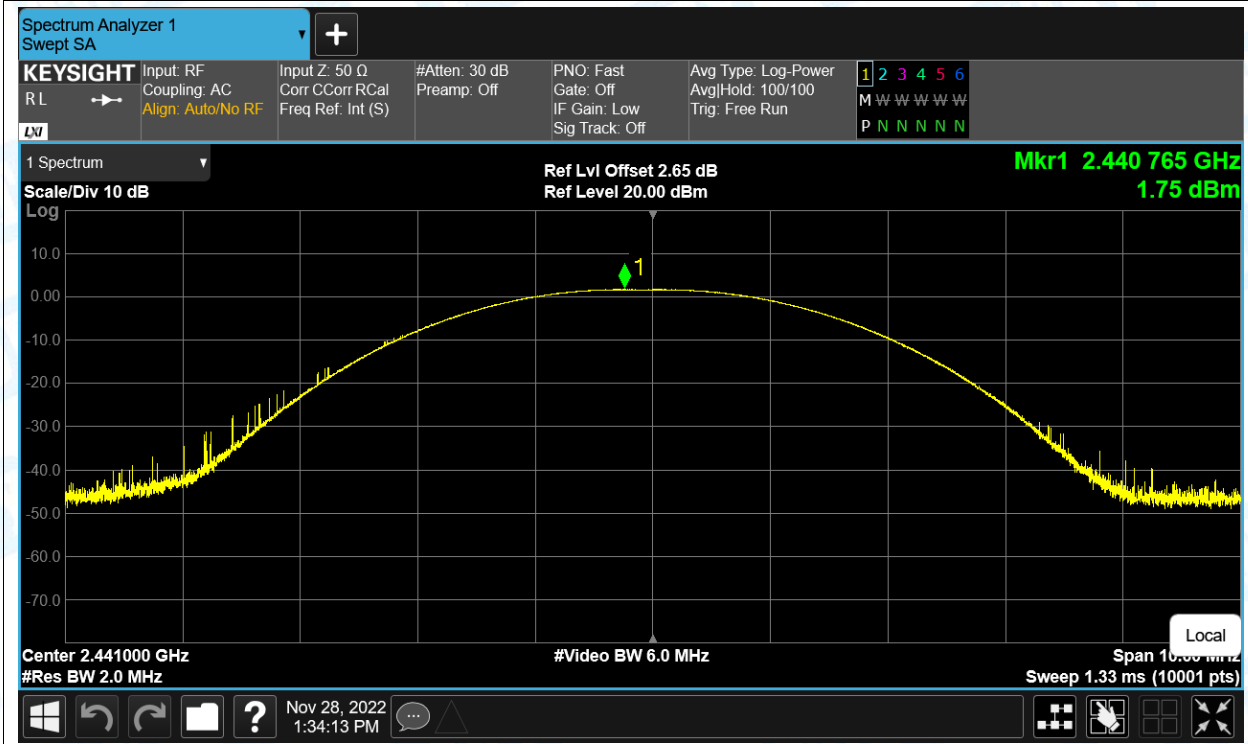
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	1-DH1	2402	Ant1	1.272	21	Pass
NVNT	1-DH1	2441	Ant1	1.755	21	Pass
NVNT	1-DH1	2480	Ant1	0.651	21	Pass
NVNT	2-DH1	2402	Ant1	1.118	21	Pass
NVNT	2-DH1	2441	Ant1	1.71	21	Pass
NVNT	2-DH1	2480	Ant1	0.625	21	Pass
NVNT	3-DH1	2402	Ant1	1.147	21	Pass
NVNT	3-DH1	2441	Ant1	1.71	21	Pass
NVNT	3-DH1	2480	Ant1	0.709	21	Pass

Test Graphs

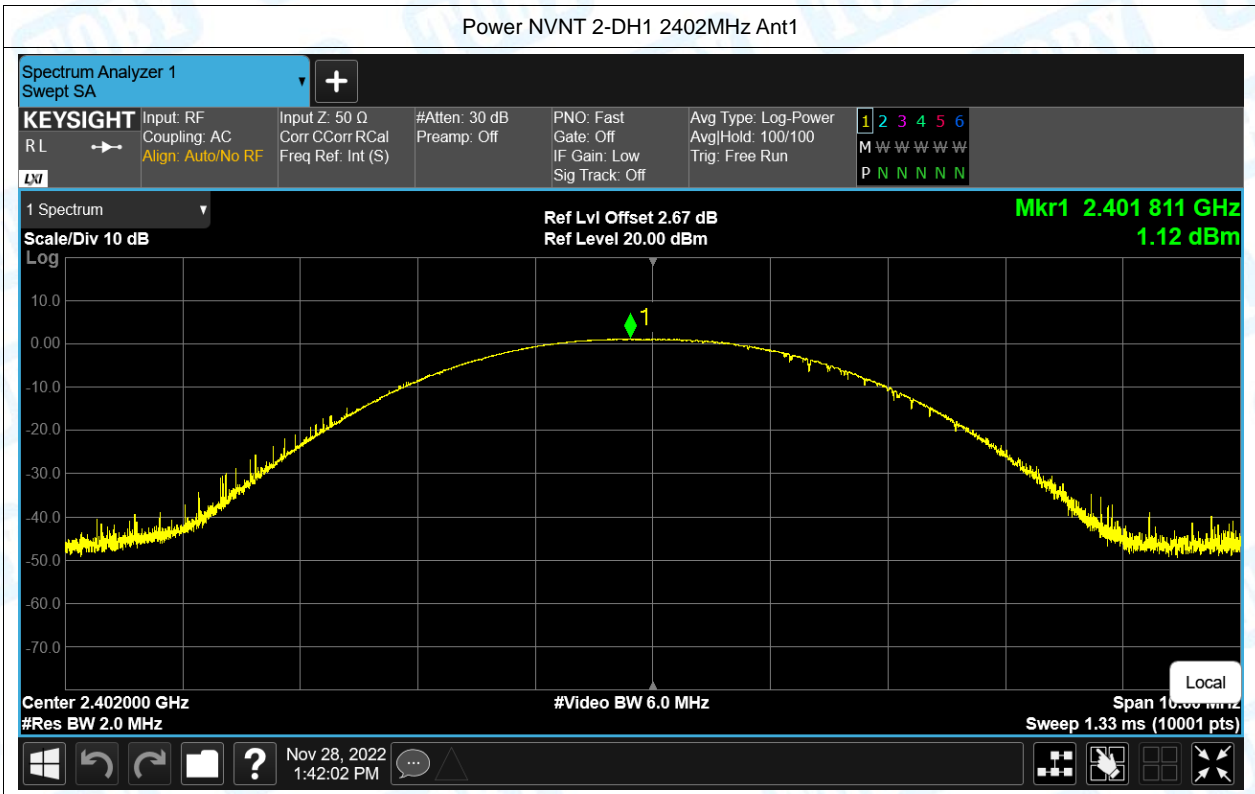
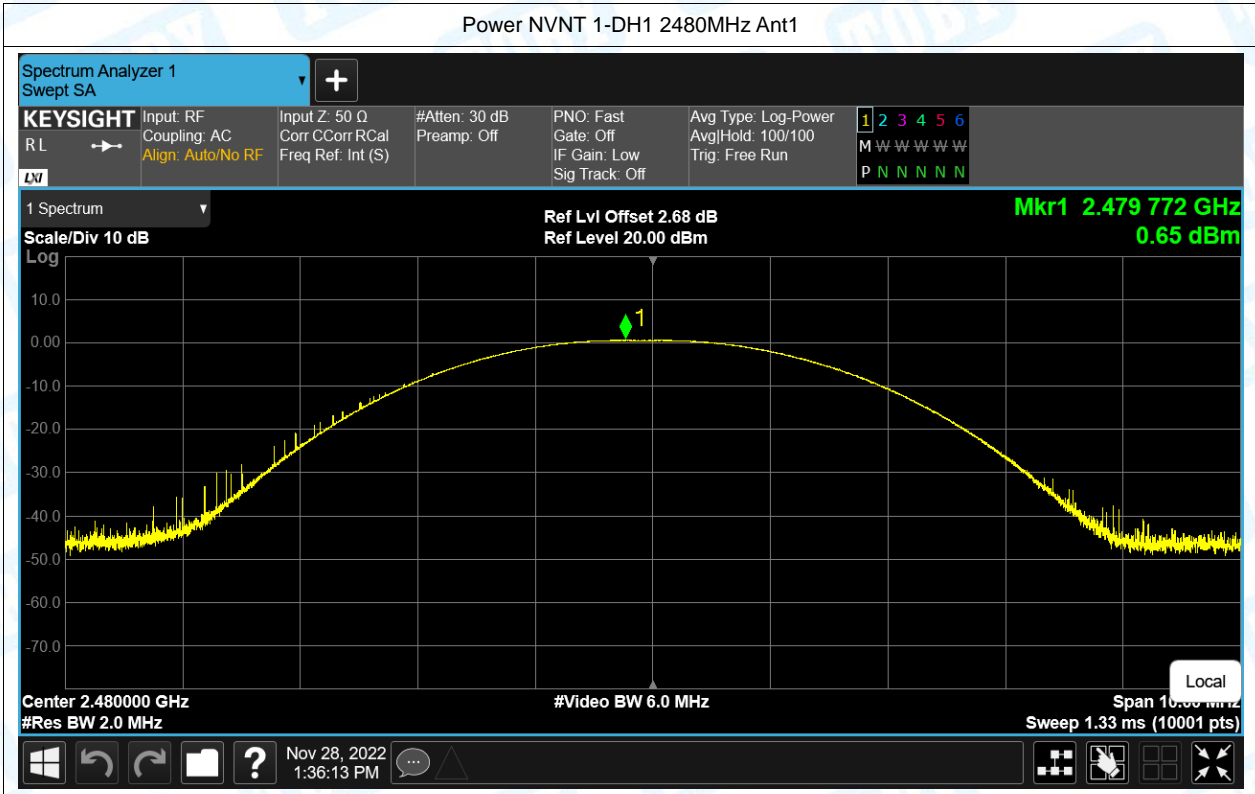
Power NVNT 1-DH1 2402MHz Ant1



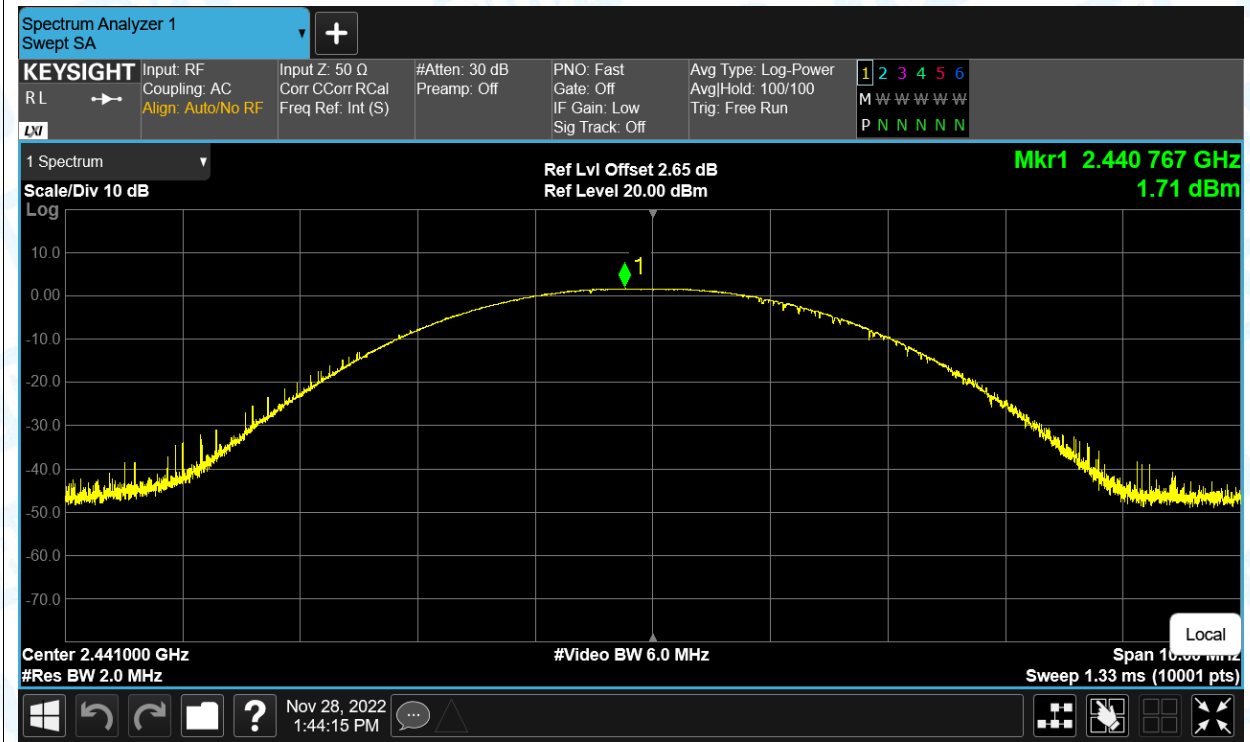
Power NVNT 1-DH1 2441MHz Ant1



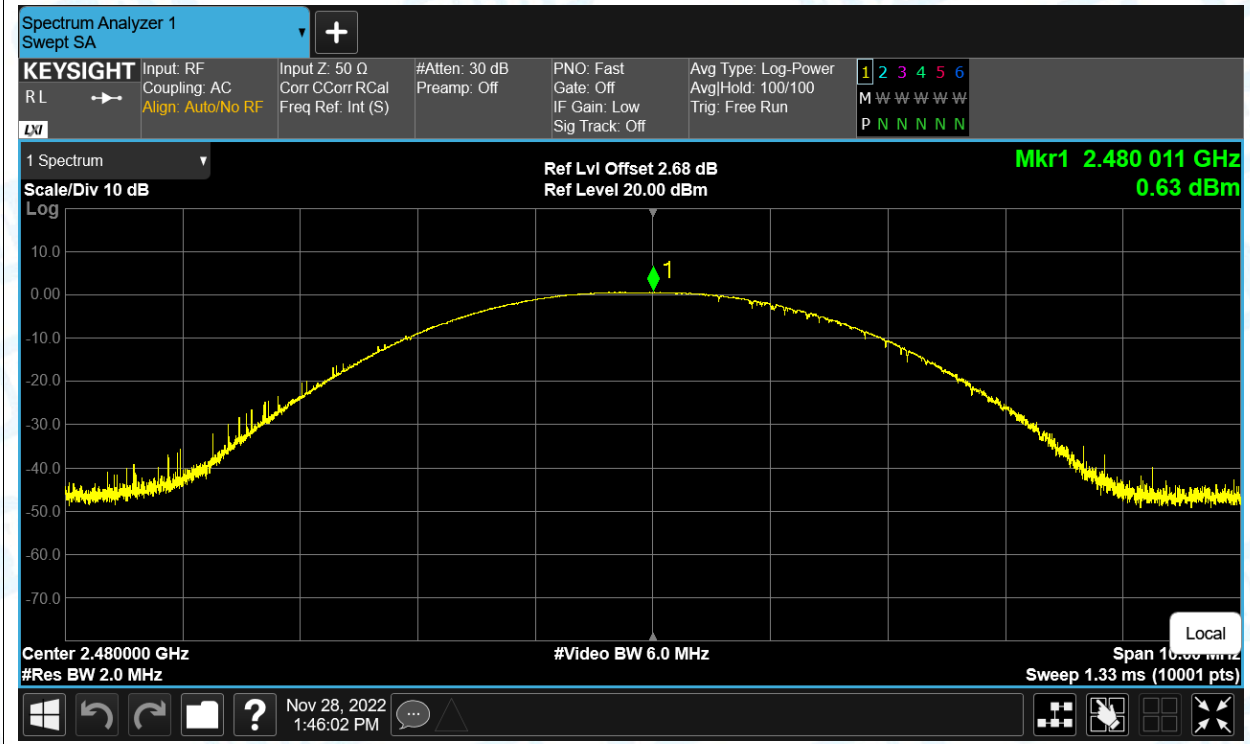




Power NVNT 2-DH1 2441MHz Ant1

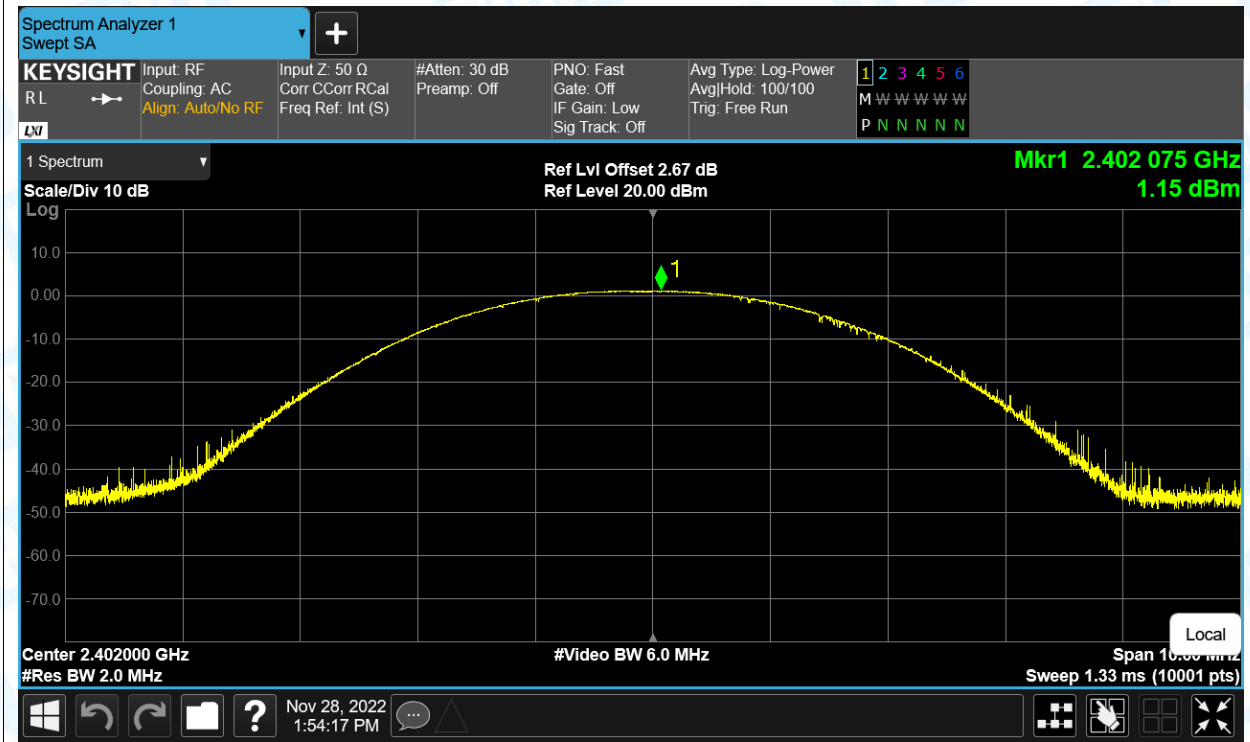


Power NVNT 2-DH1 2480MHz Ant1

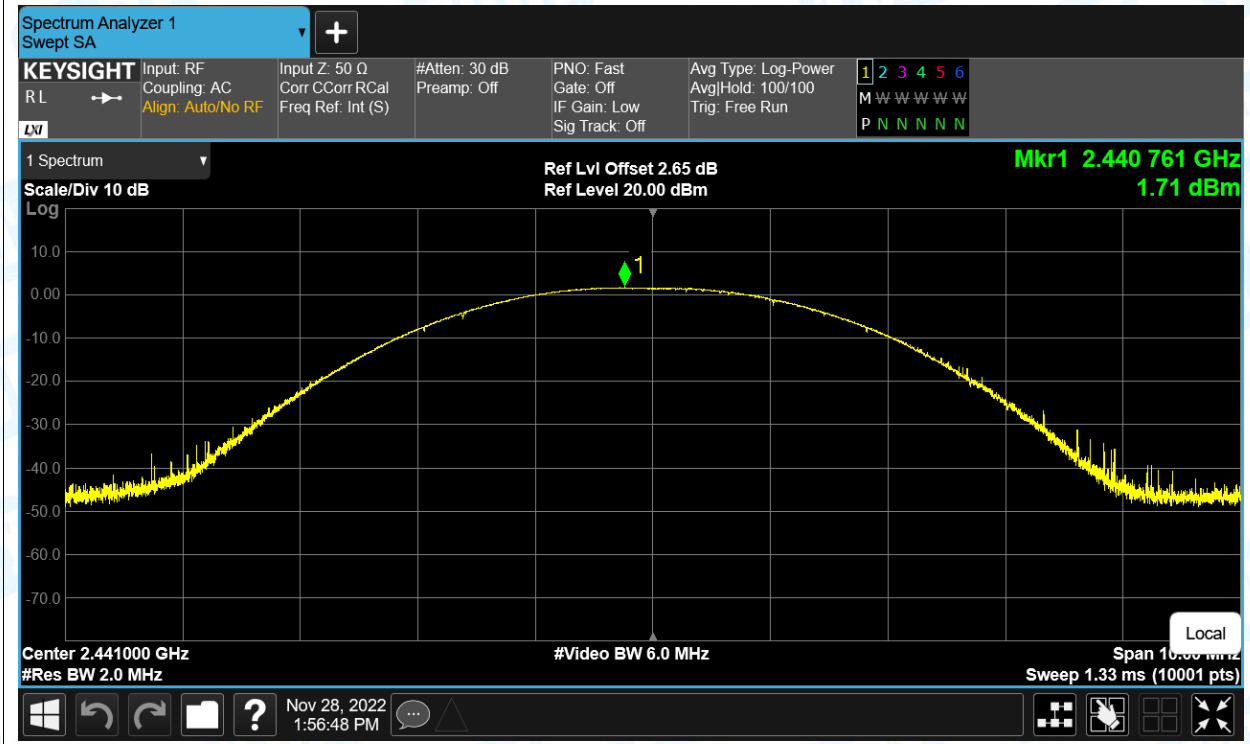


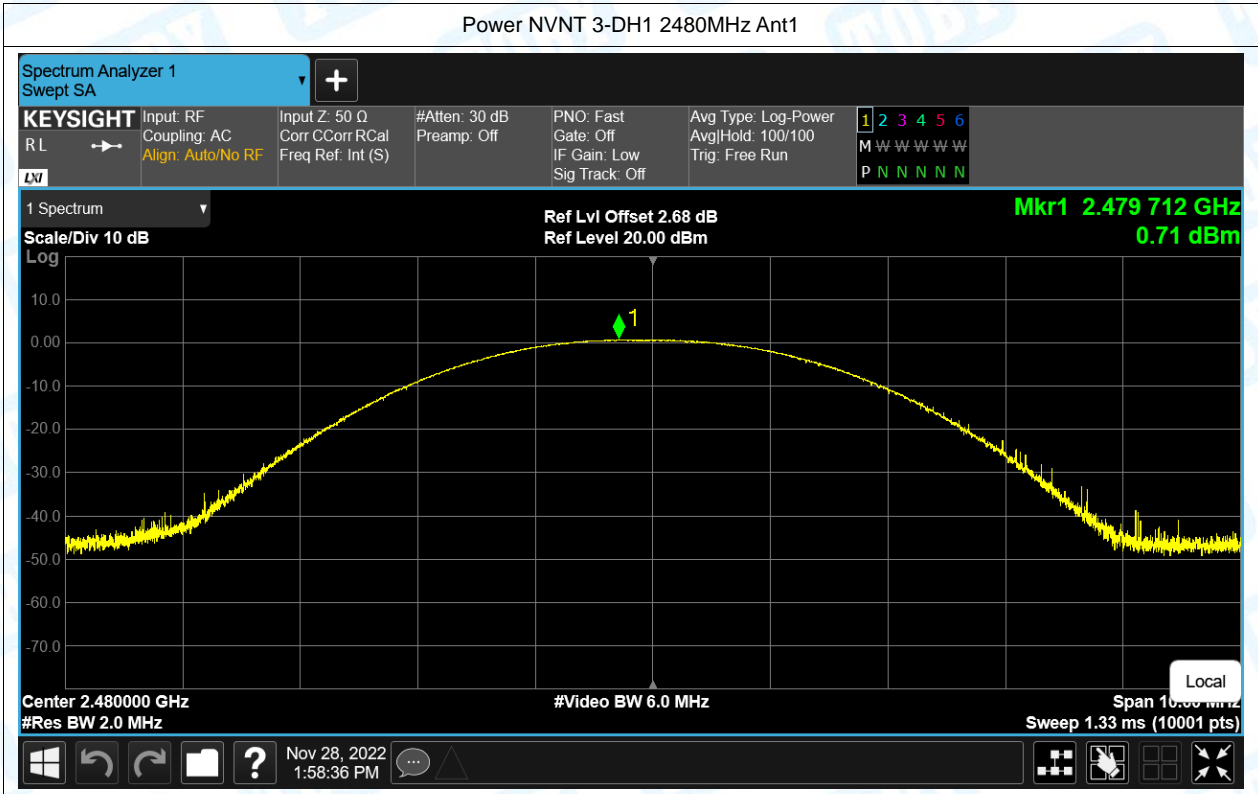


Power NVNT 3-DH1 2402MHz Ant1



Power NVNT 3-DH1 2441MHz Ant1





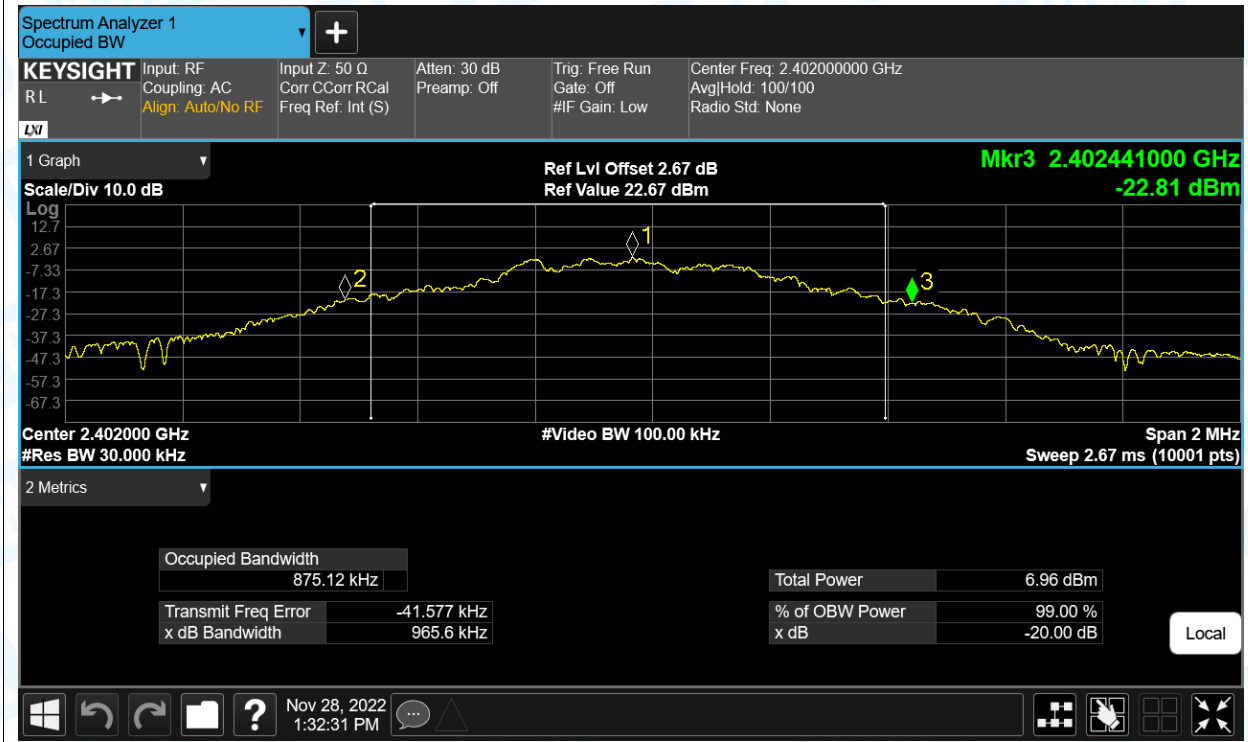


### 3. -20dB Bandwidth

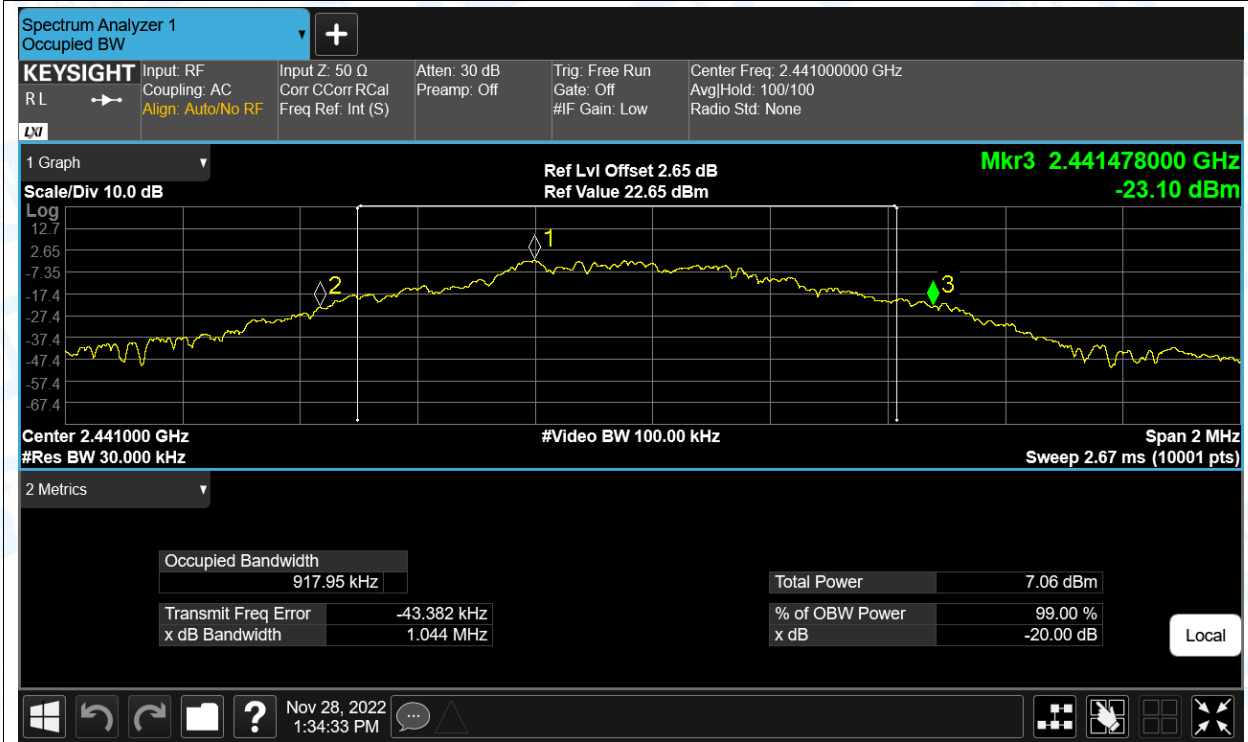
Condition	Mode	Frequency (MHz)	Antenna	-20 dB Bandwidth (MHz)	2/3 *20dB BW (MHz)	Verdict
NVNT	1-DH1	2402	Ant1	0.97	0.647	Pass
NVNT	1-DH1	2441	Ant1	1.04	0.693	Pass
NVNT	1-DH1	2480	Ant1	0.97	0.647	Pass
NVNT	2-DH1	2402	Ant1	1.26	0.840	Pass
NVNT	2-DH1	2441	Ant1	1.26	0.840	Pass
NVNT	2-DH1	2480	Ant1	1.27	0.847	Pass
NVNT	3-DH1	2402	Ant1	1.26	0.840	Pass
NVNT	3-DH1	2441	Ant1	1.27	0.847	Pass
NVNT	3-DH1	2480	Ant1	1.28	0.853	Pass

Test Graphs

-20dB Bandwidth NVNT 1-DH1 2402MHz Ant1

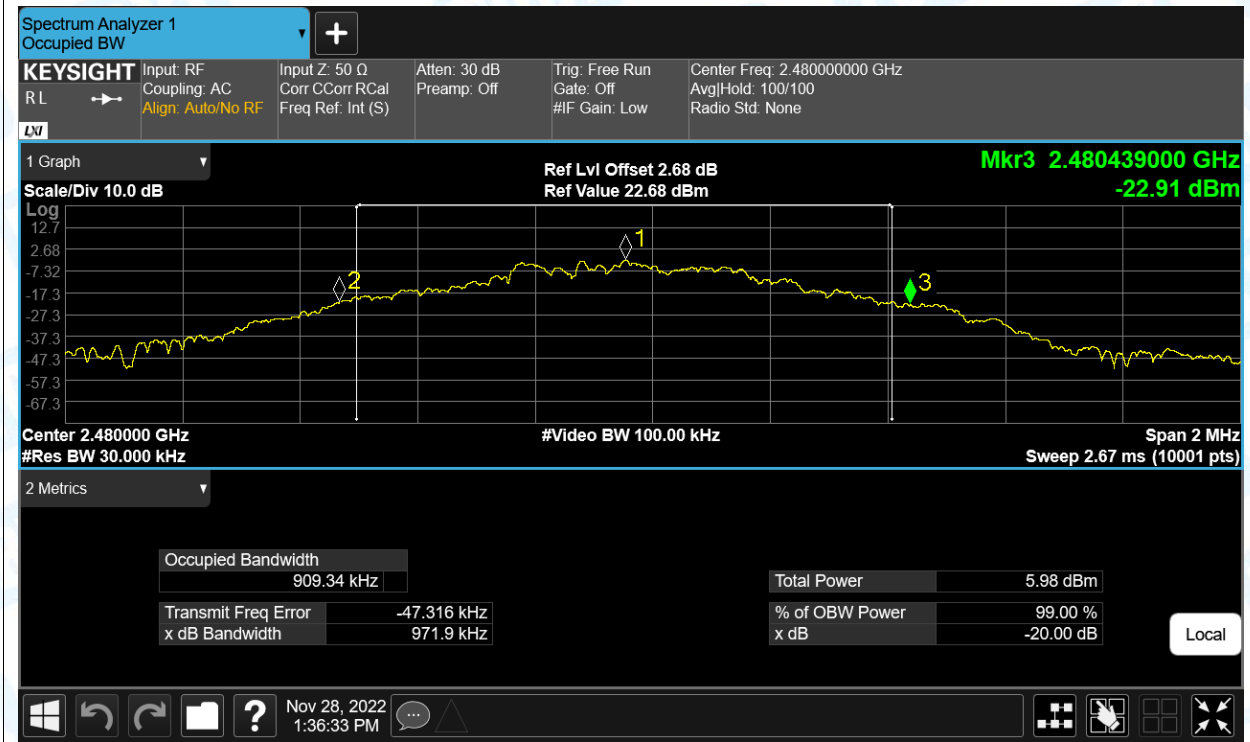


-20dB Bandwidth NVNT 1-DH1 2441MHz Ant1

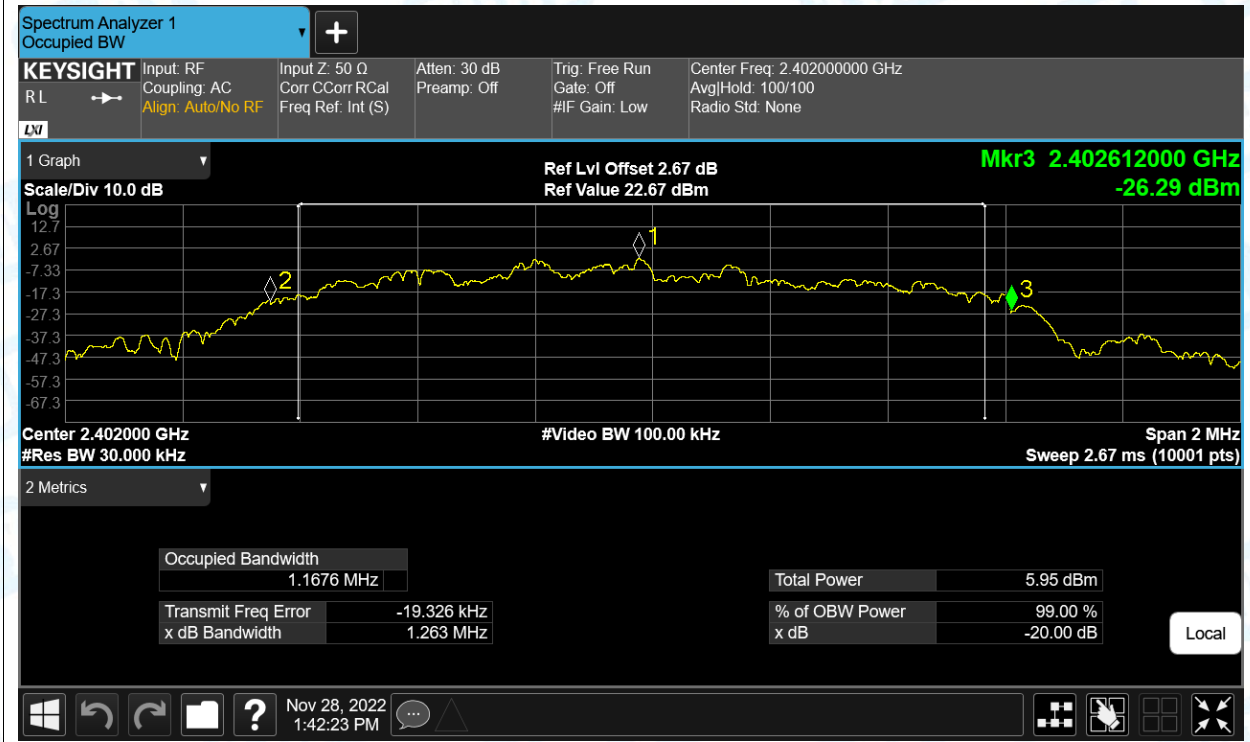




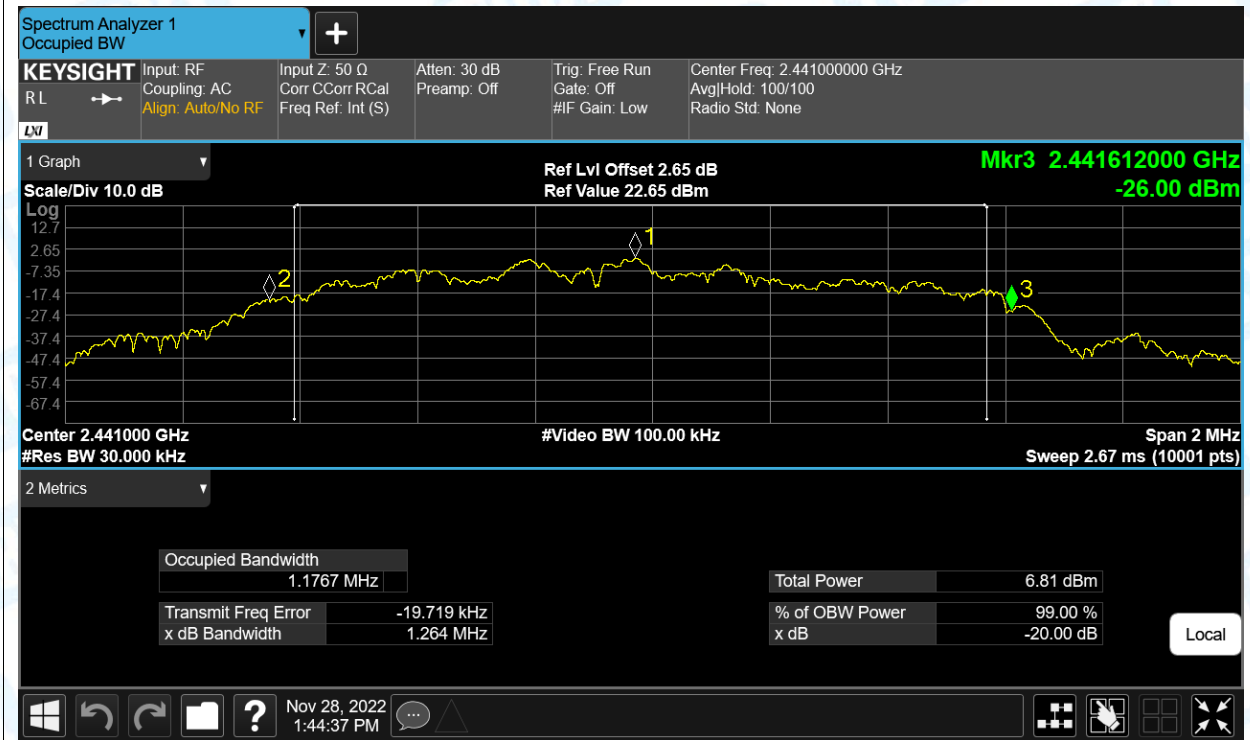
-20dB Bandwidth NVNT 1-DH1 2480MHz Ant1



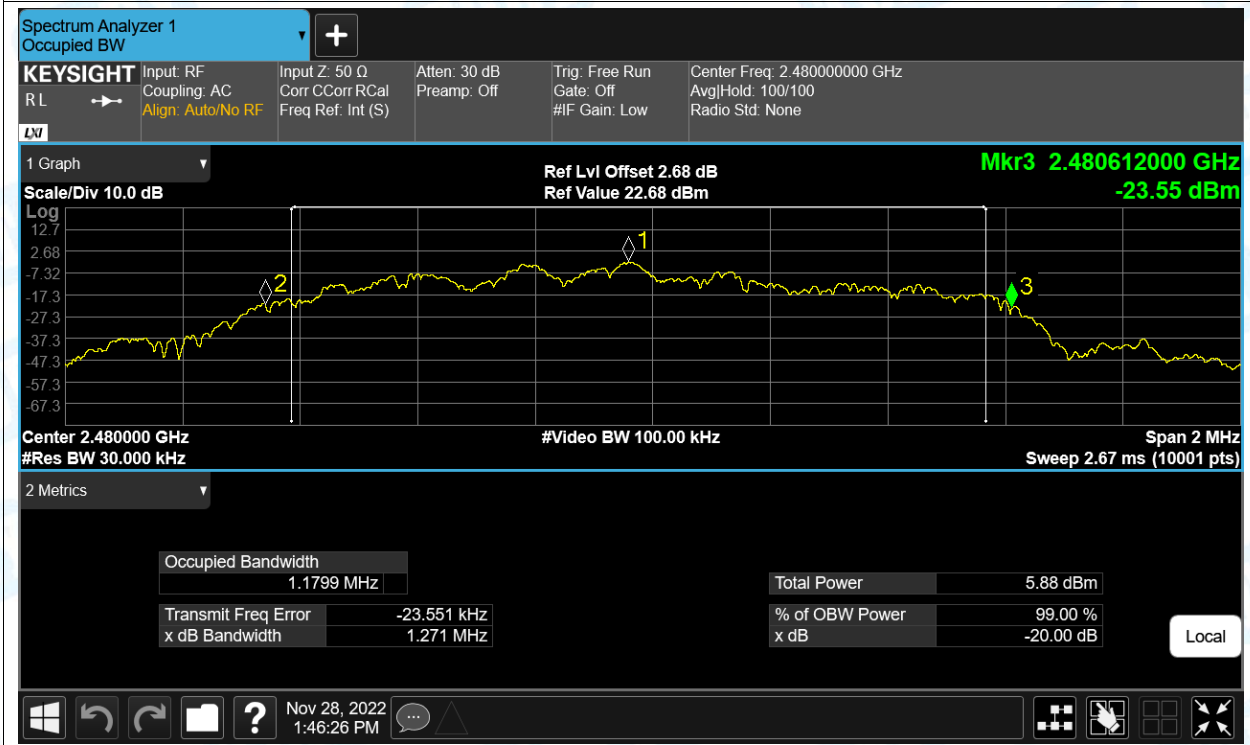
-20dB Bandwidth NVNT 2-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 2-DH1 2441MHz Ant1

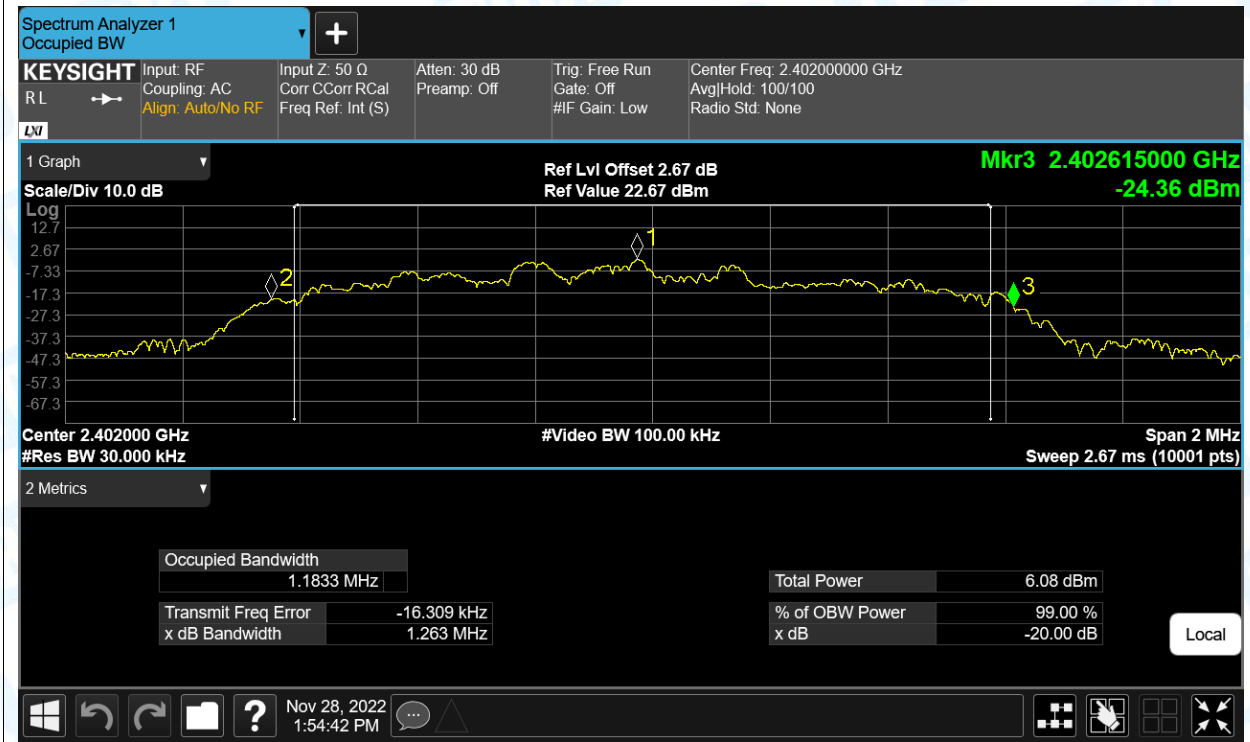


-20dB Bandwidth NVNT 2-DH1 2480MHz Ant1

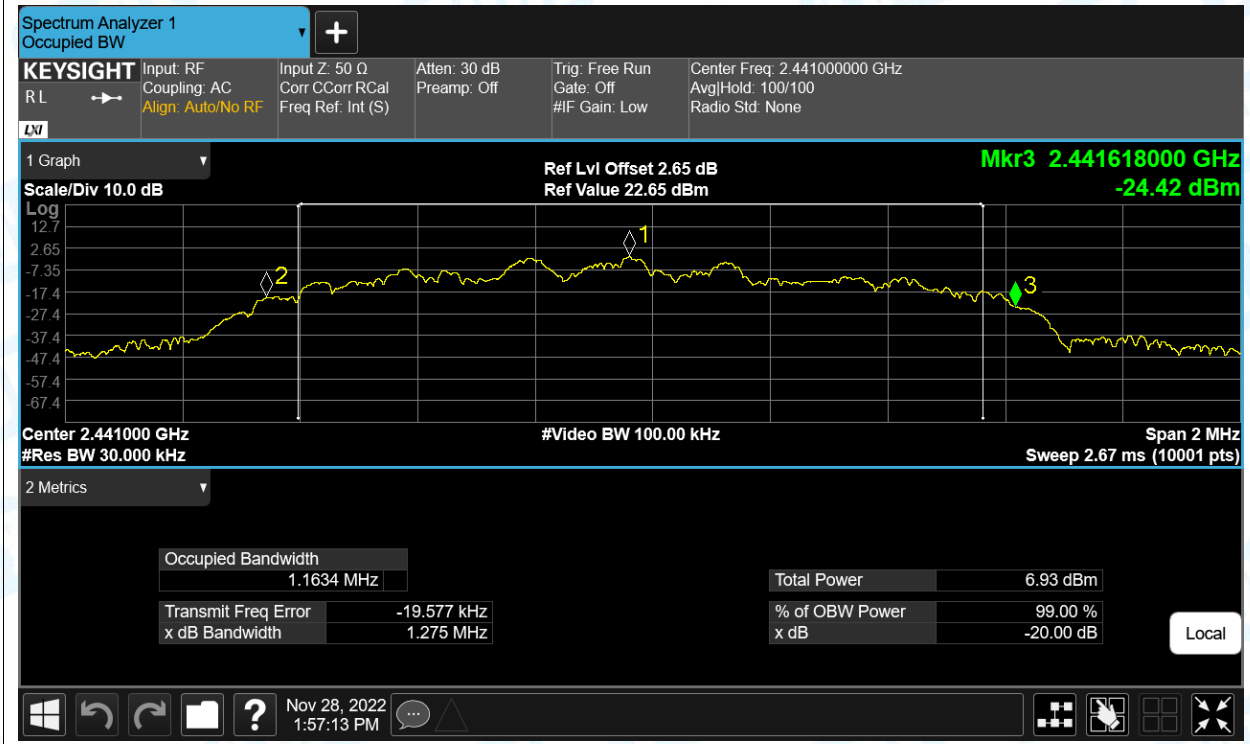


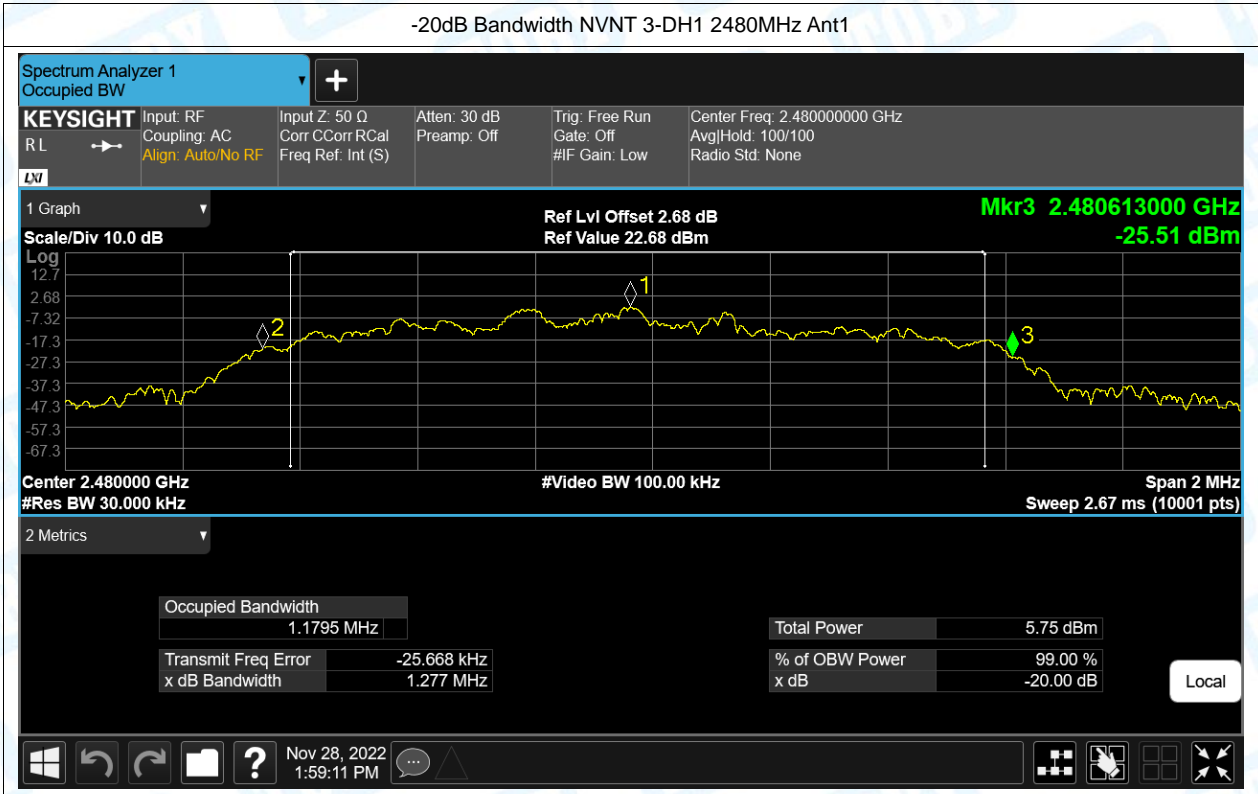


-20dB Bandwidth NVNT 3-DH1 2402MHz Ant1



-20dB Bandwidth NVNT 3-DH1 2441MHz Ant1





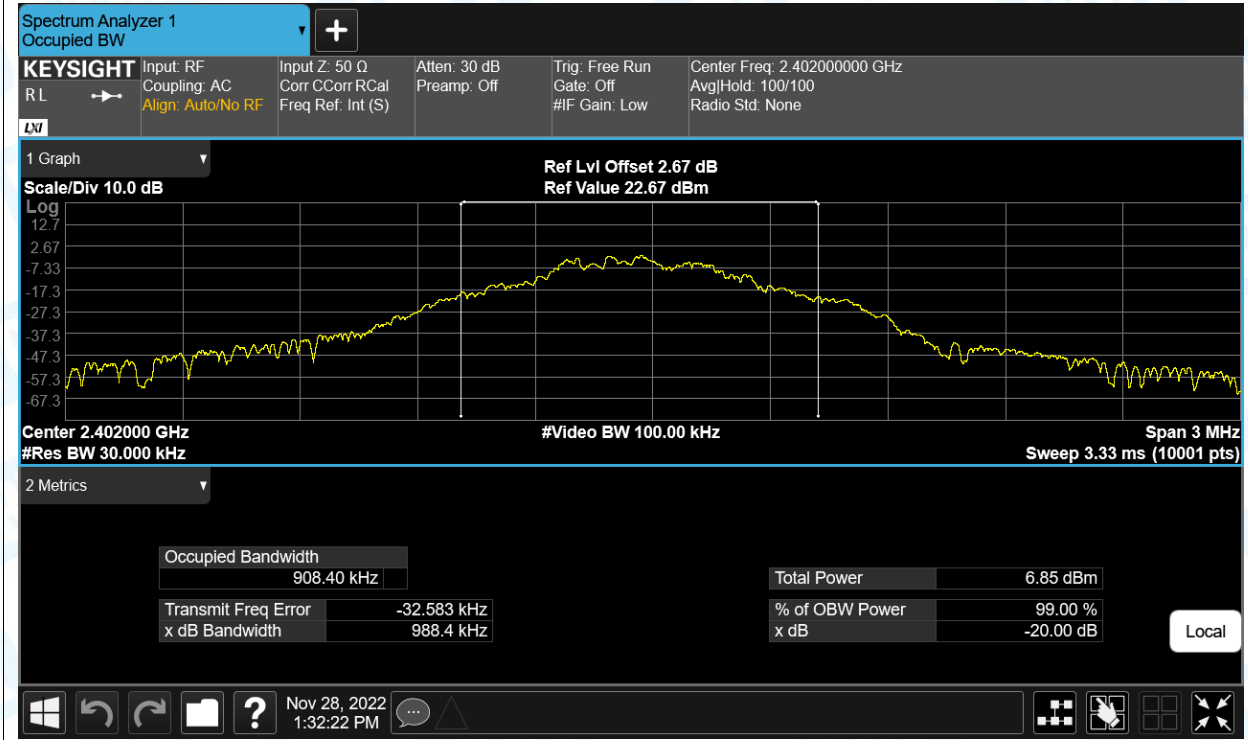


## 4. Occupied Channel Bandwidth

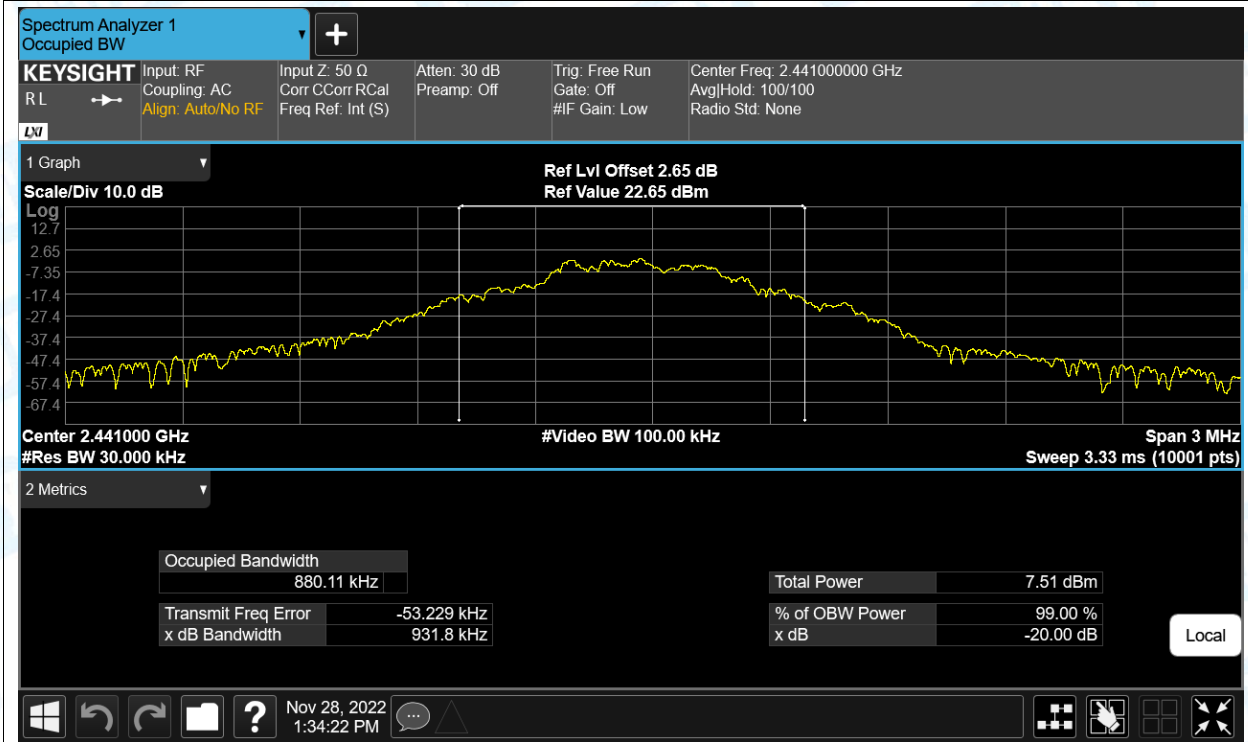
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	1-DH1	2402	Ant1	0.908
NVNT	1-DH1	2441	Ant1	0.88
NVNT	1-DH1	2480	Ant1	0.905
NVNT	2-DH1	2402	Ant1	1.186
NVNT	2-DH1	2441	Ant1	1.19
NVNT	2-DH1	2480	Ant1	1.177
NVNT	3-DH1	2402	Ant1	1.173
NVNT	3-DH1	2441	Ant1	1.183
NVNT	3-DH1	2480	Ant1	1.176

Test Graphs

OBW NVNT 1-DH1 2402MHz Ant1

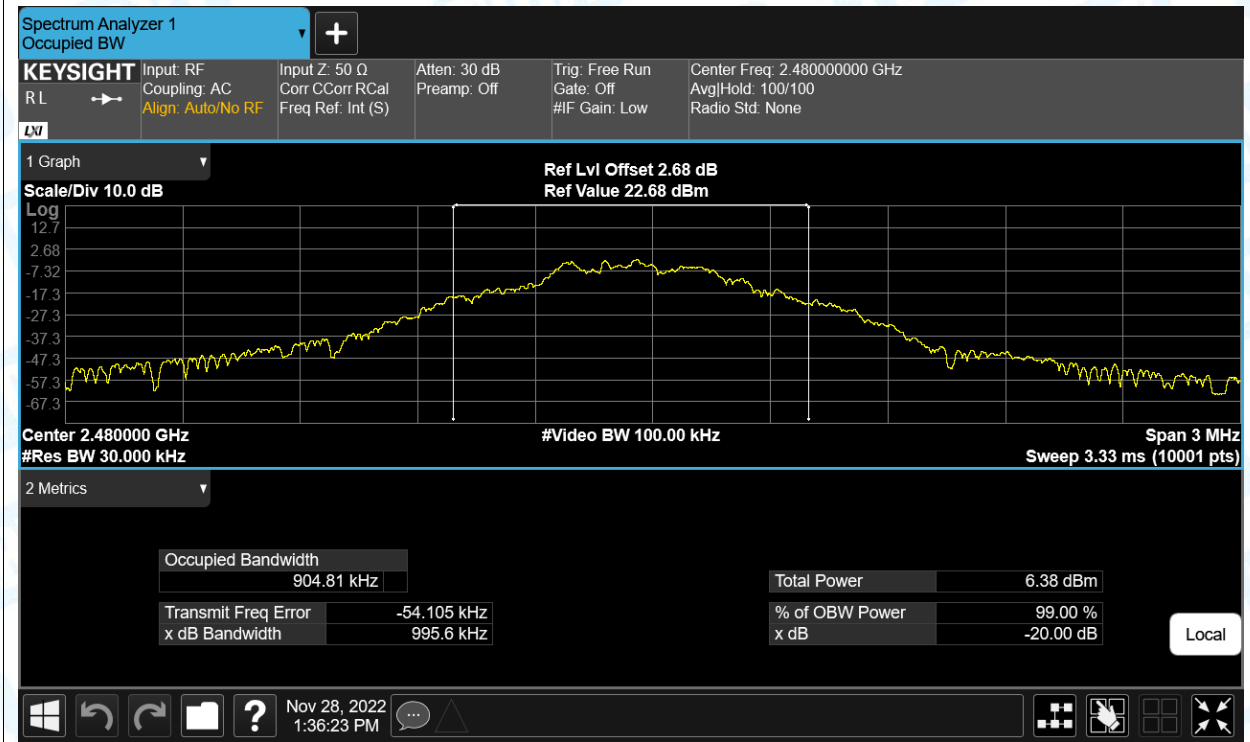


OBW NVNT 1-DH1 2441MHz Ant1

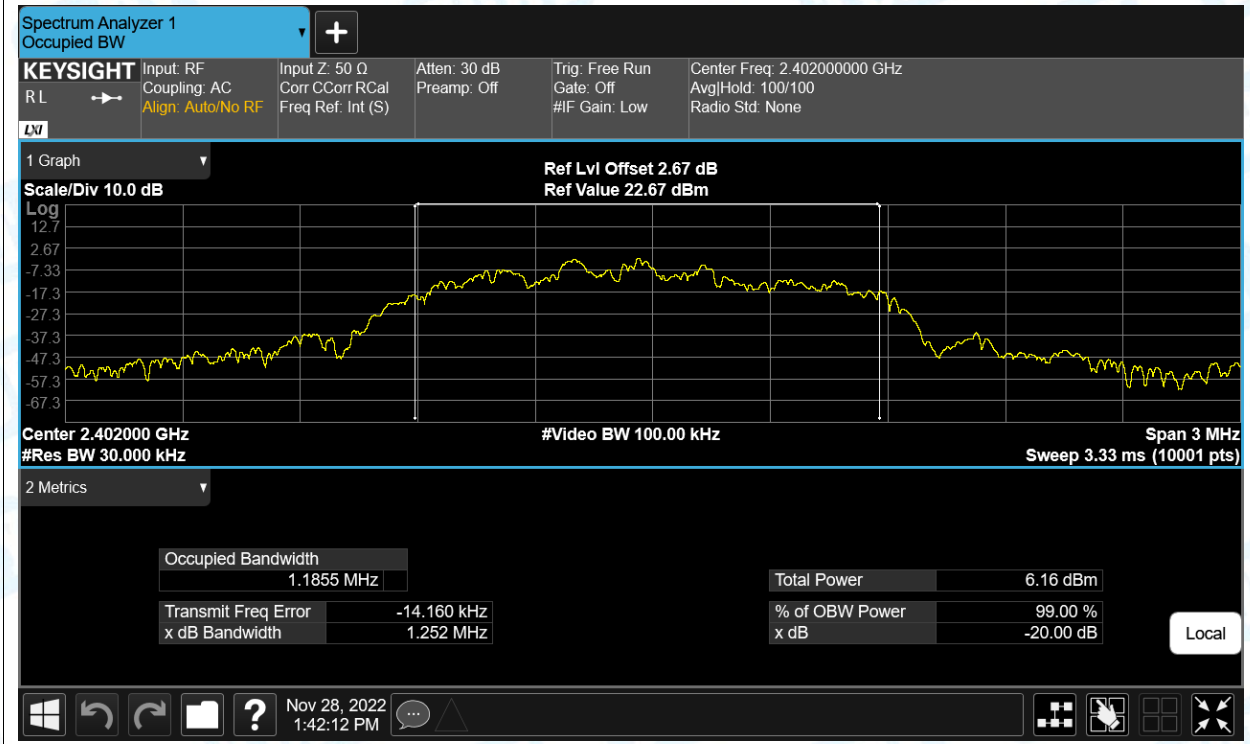




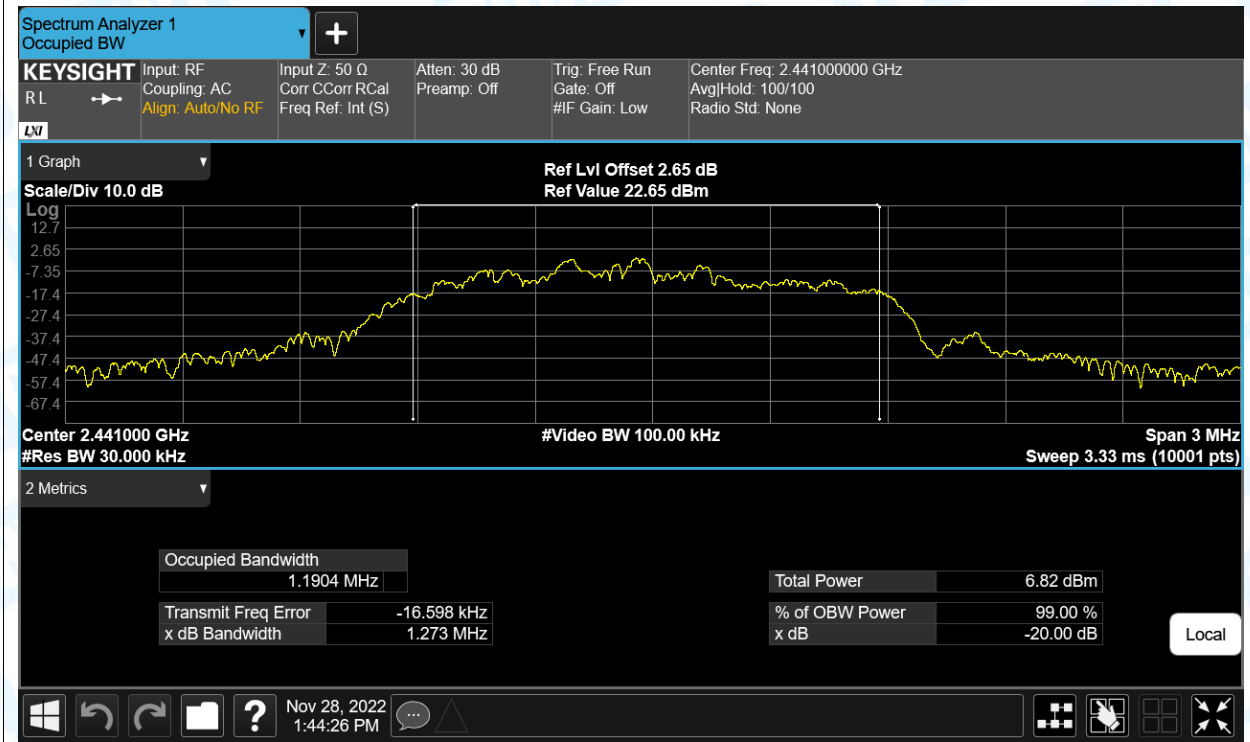
OBW NVNT 1-DH1 2480MHz Ant1



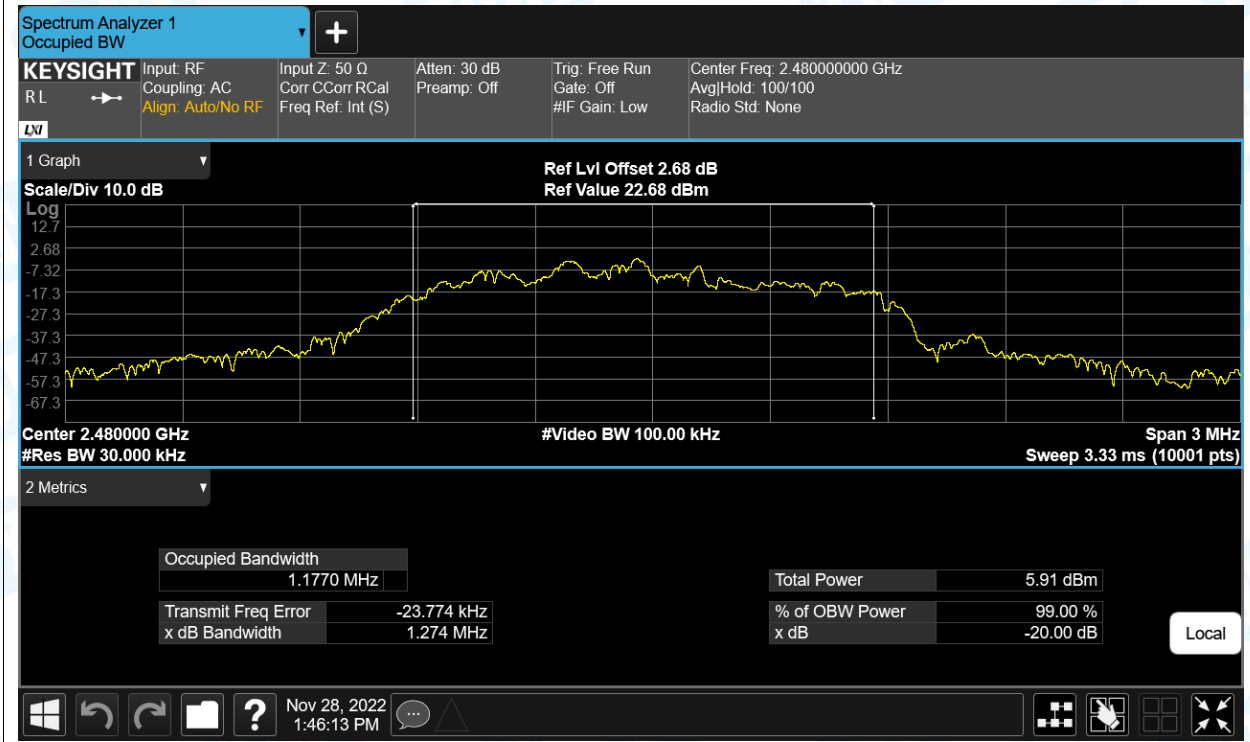
OBW NVNT 2-DH1 2402MHz Ant1



OBW NVNT 2-DH1 2441MHz Ant1

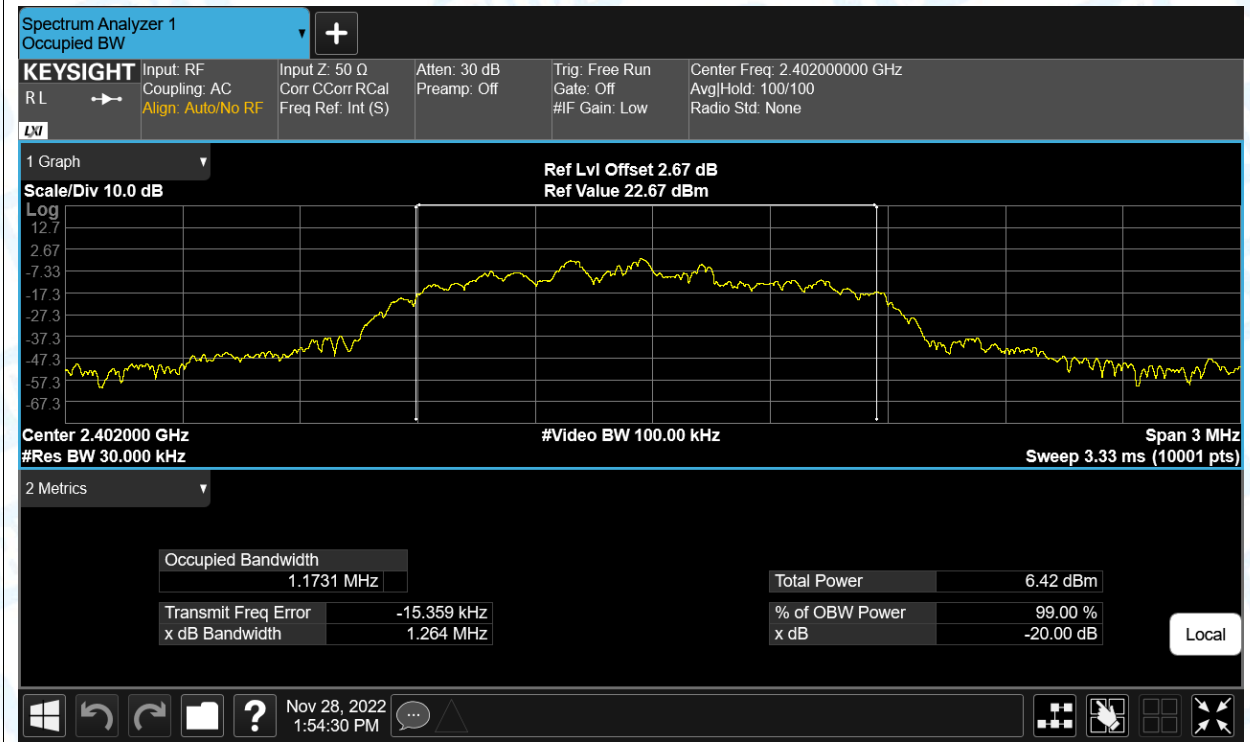


OBW NVNT 2-DH1 2480MHz Ant1

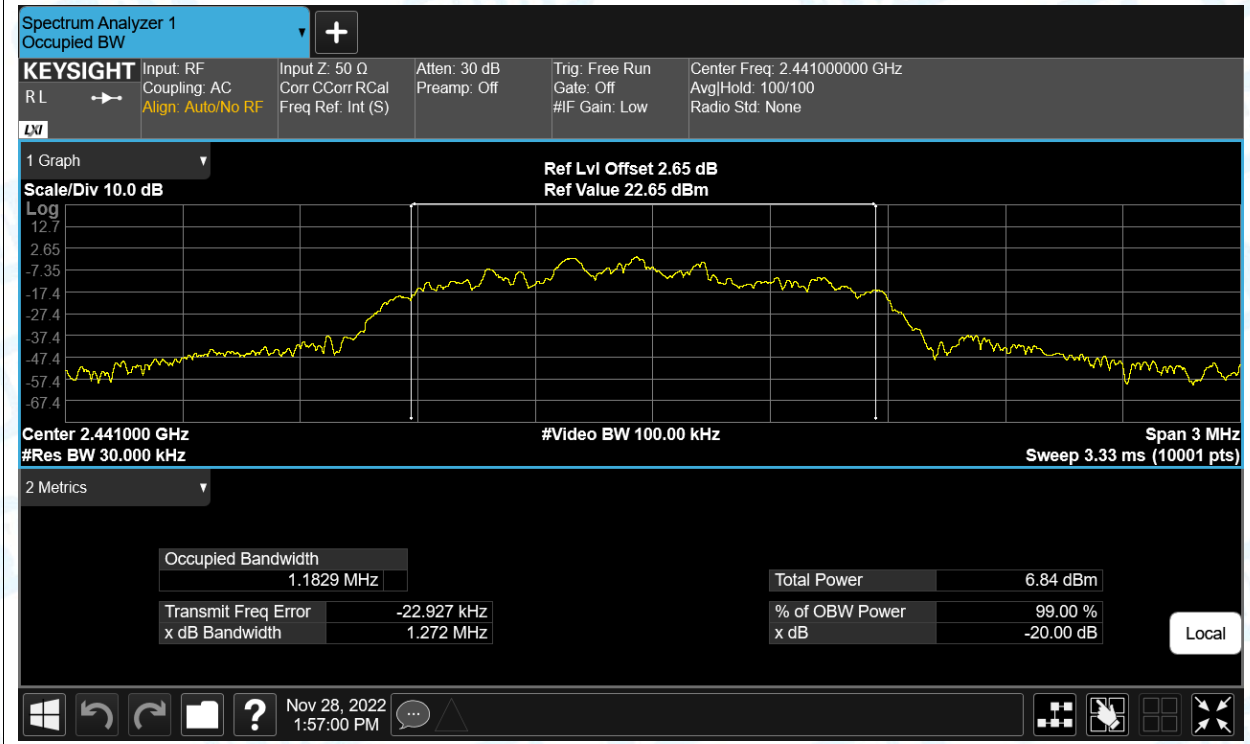


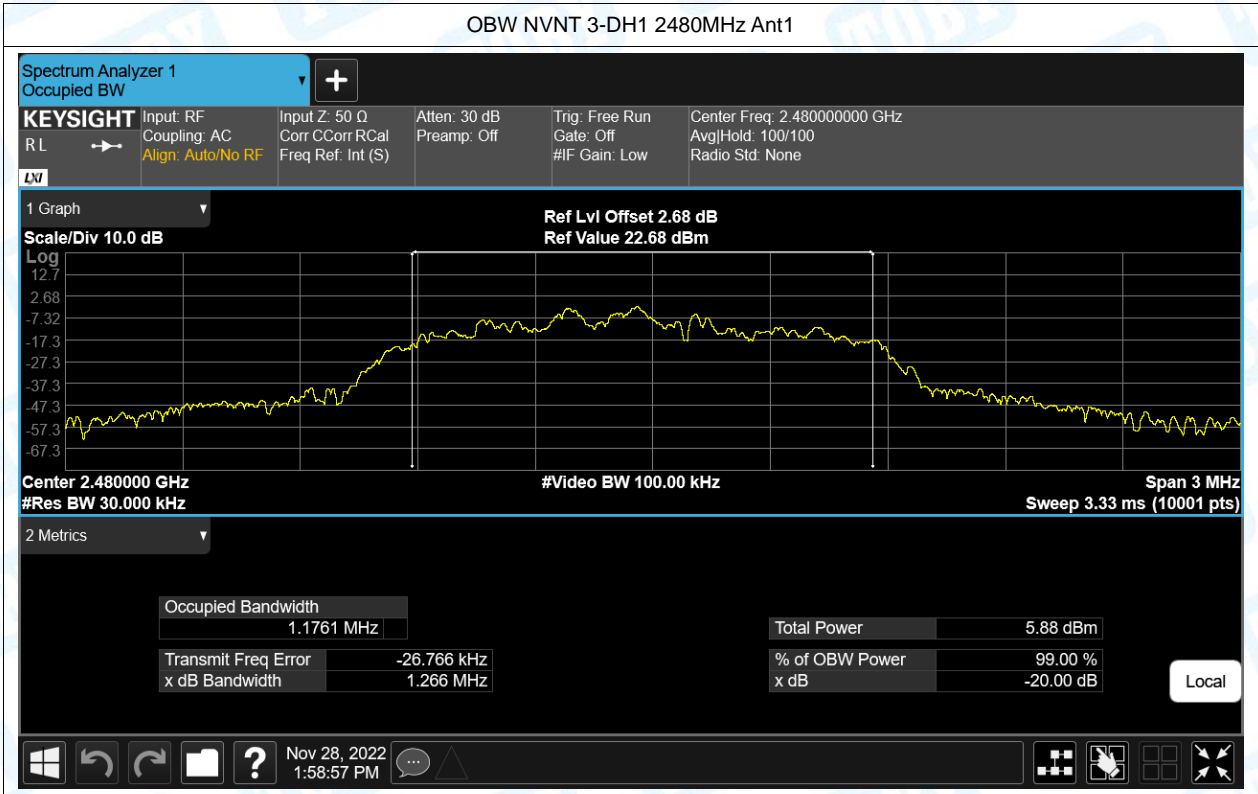


OBW NVNT 3-DH1 2402MHz Ant1



OBW NVNT 3-DH1 2441MHz Ant1





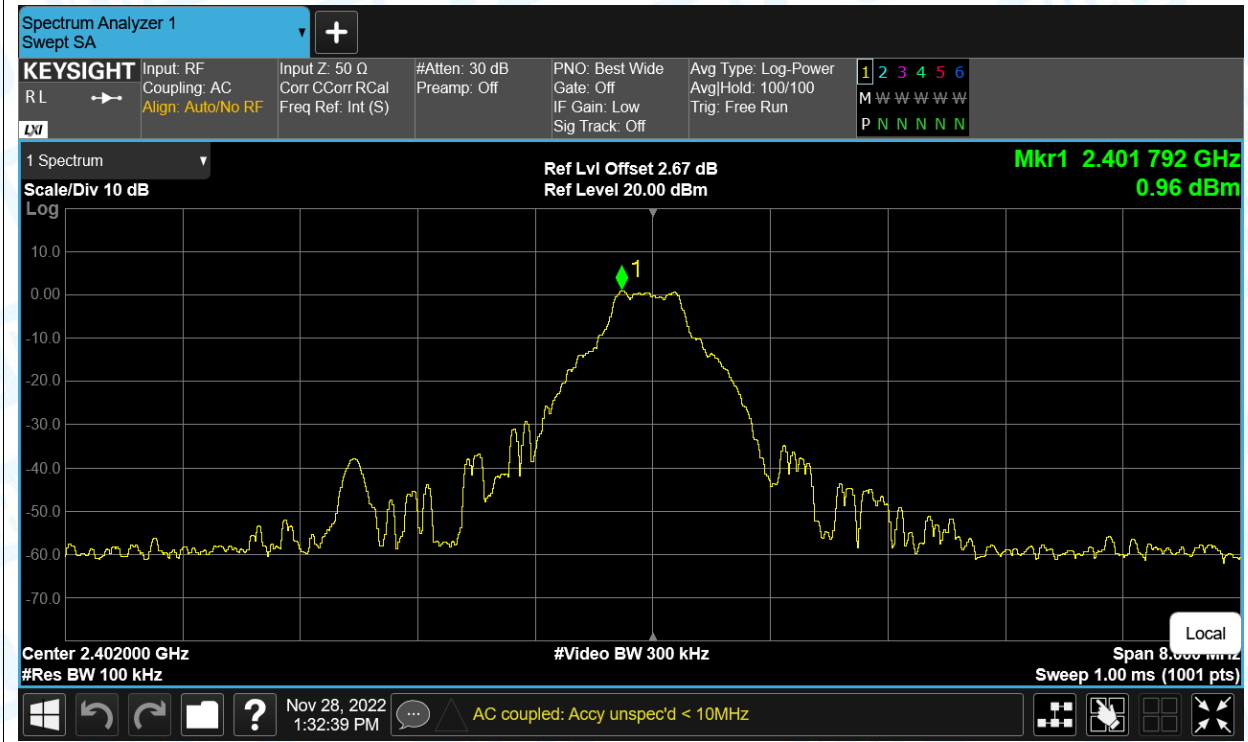


## 5. Band Edge

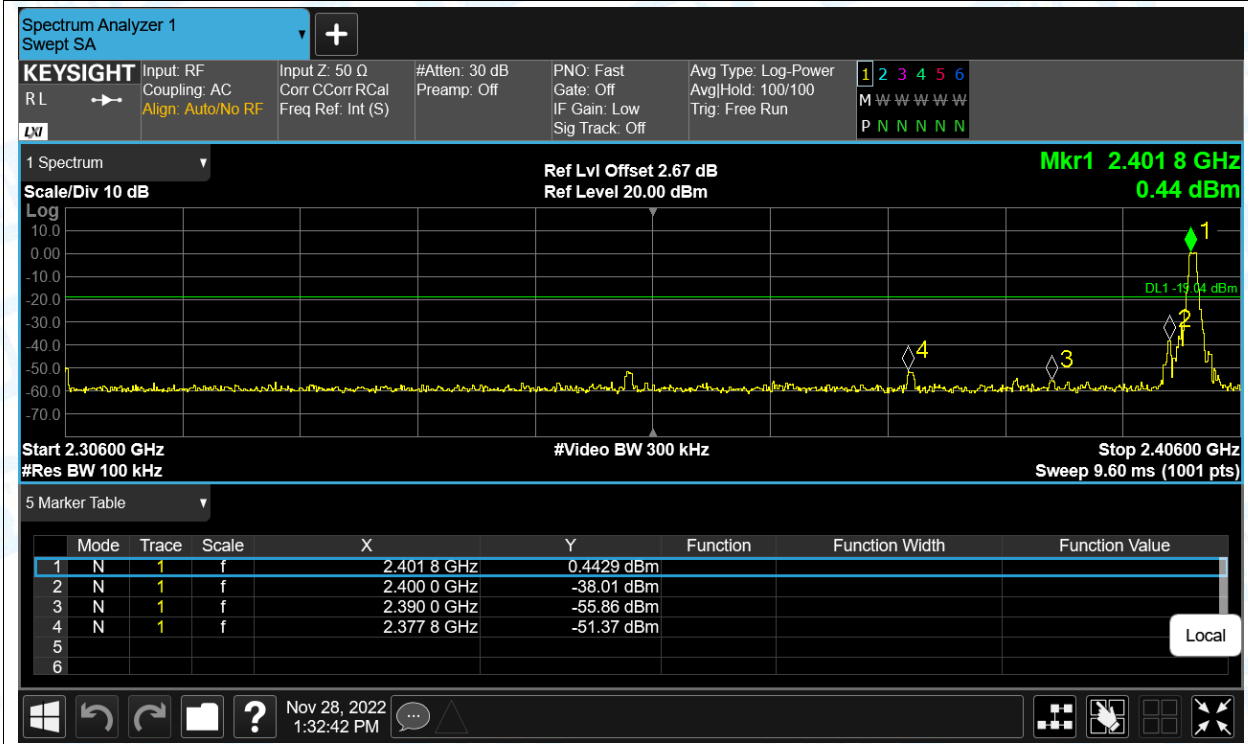
Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	No-Hopping	-52.33	-20	Pass
NVNT	1-DH1	2480	Ant1	No-Hopping	-54.22	-20	Pass
NVNT	2-DH1	2402	Ant1	No-Hopping	-51.81	-20	Pass
NVNT	2-DH1	2480	Ant1	No-Hopping	-56.35	-20	Pass
NVNT	3-DH1	2402	Ant1	No-Hopping	-50.64	-20	Pass
NVNT	3-DH1	2480	Ant1	No-Hopping	-55.97	-20	Pass

Test Graphs

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

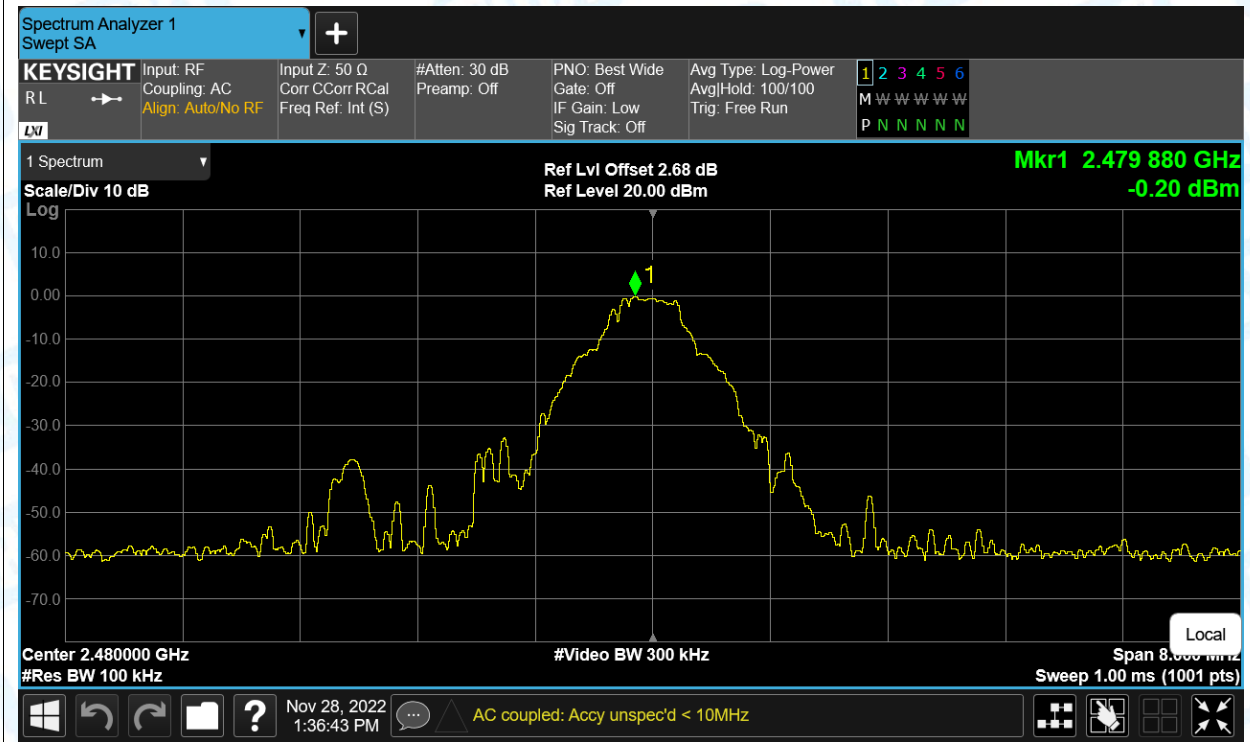


Band Edge NVNT 1-DH1 2402MHz Ant1 No-Hopping Emission

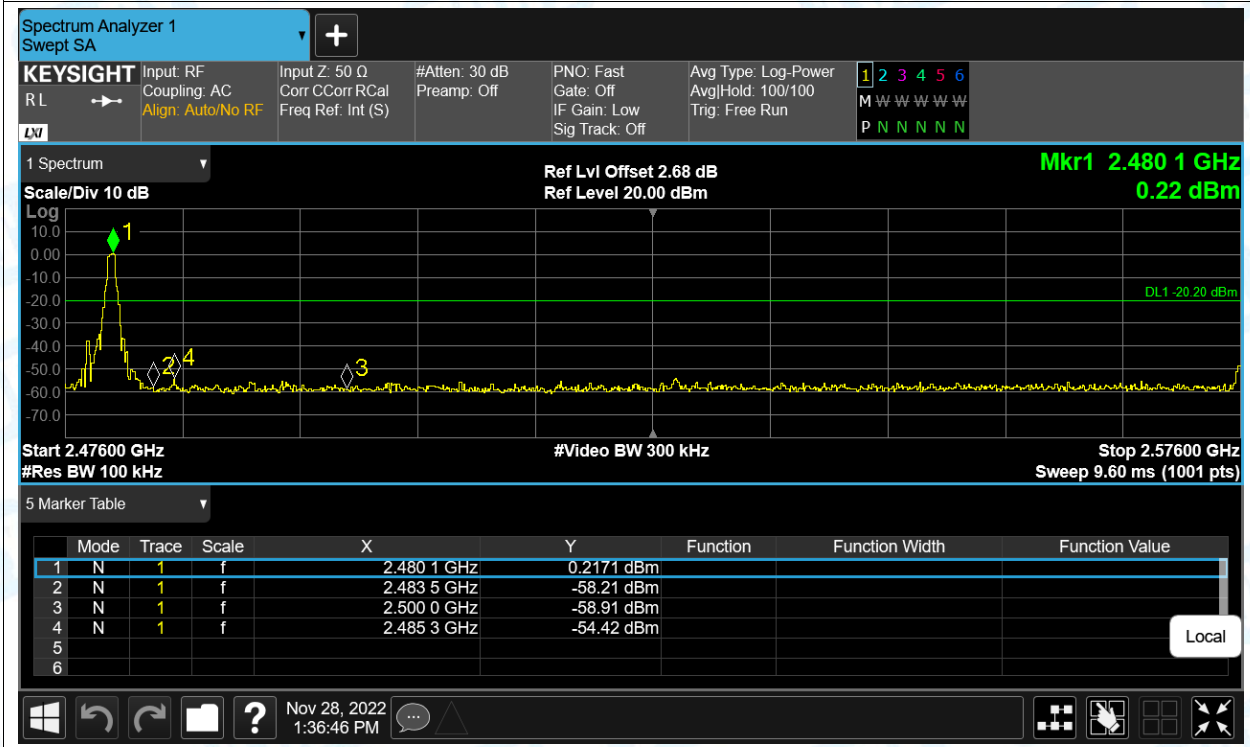




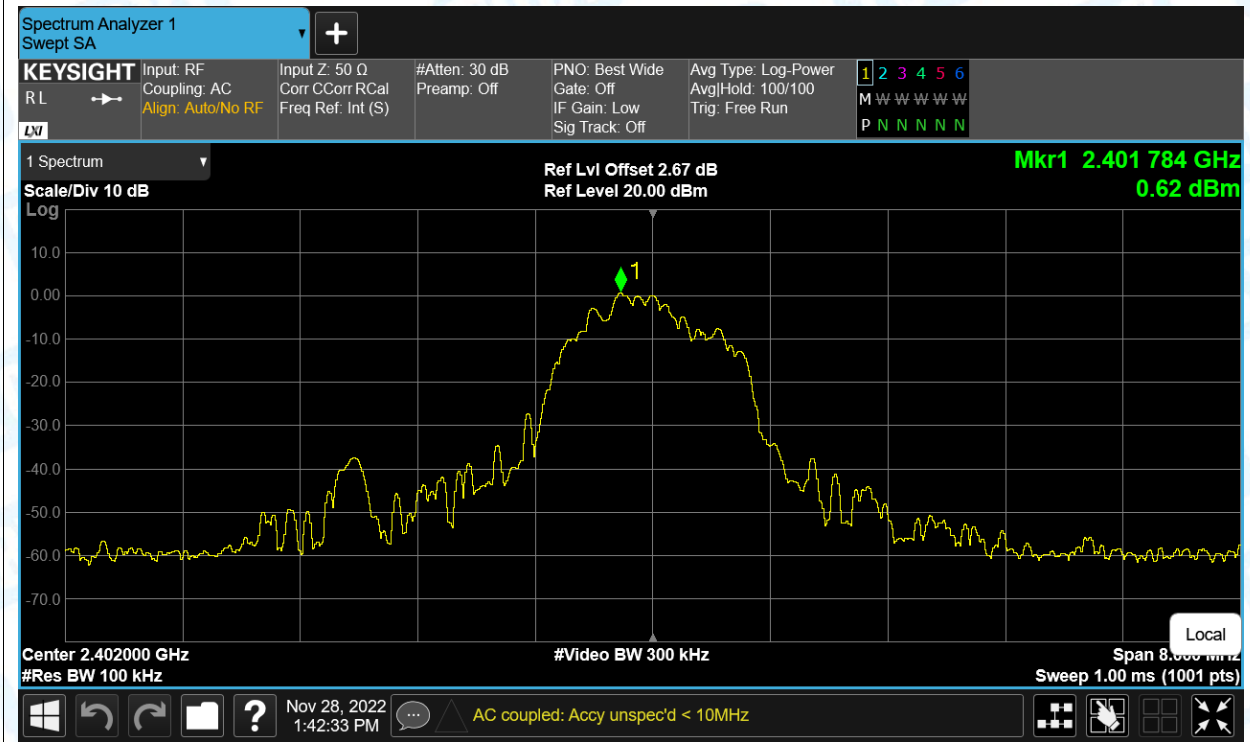
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Ref



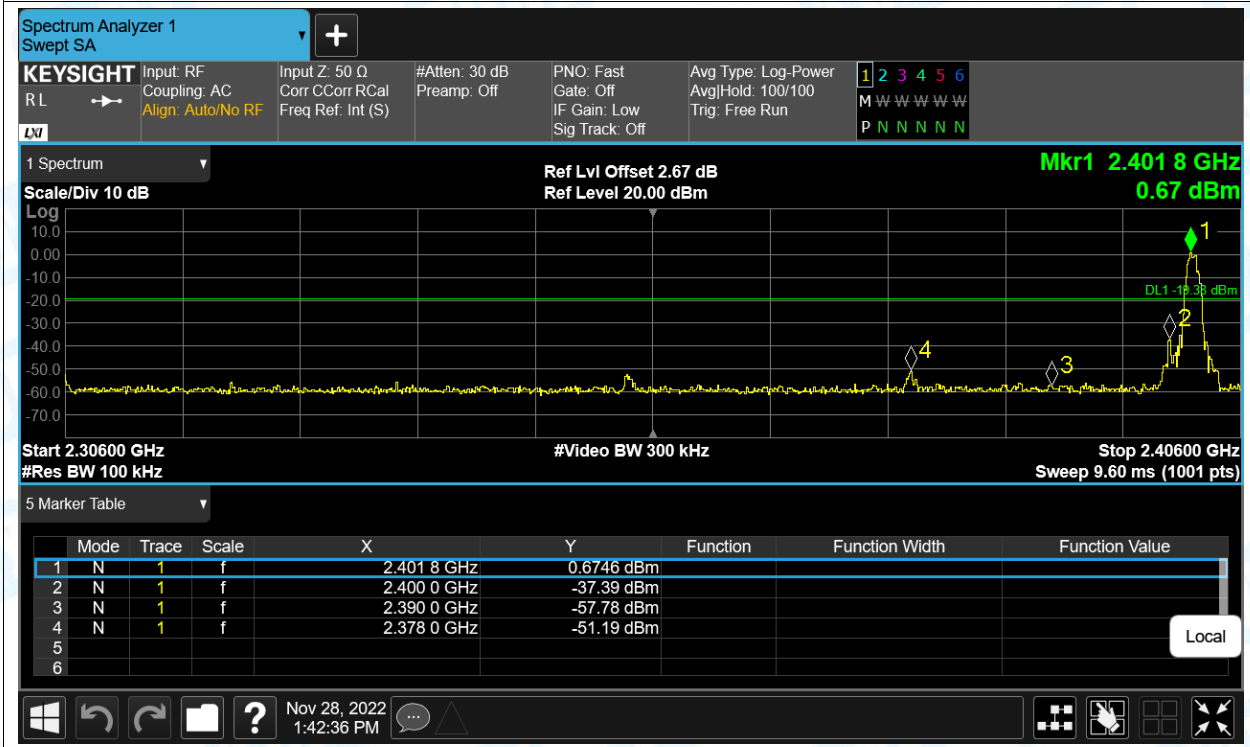
Band Edge NVNT 1-DH1 2480MHz Ant1 No-Hopping Emission



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



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

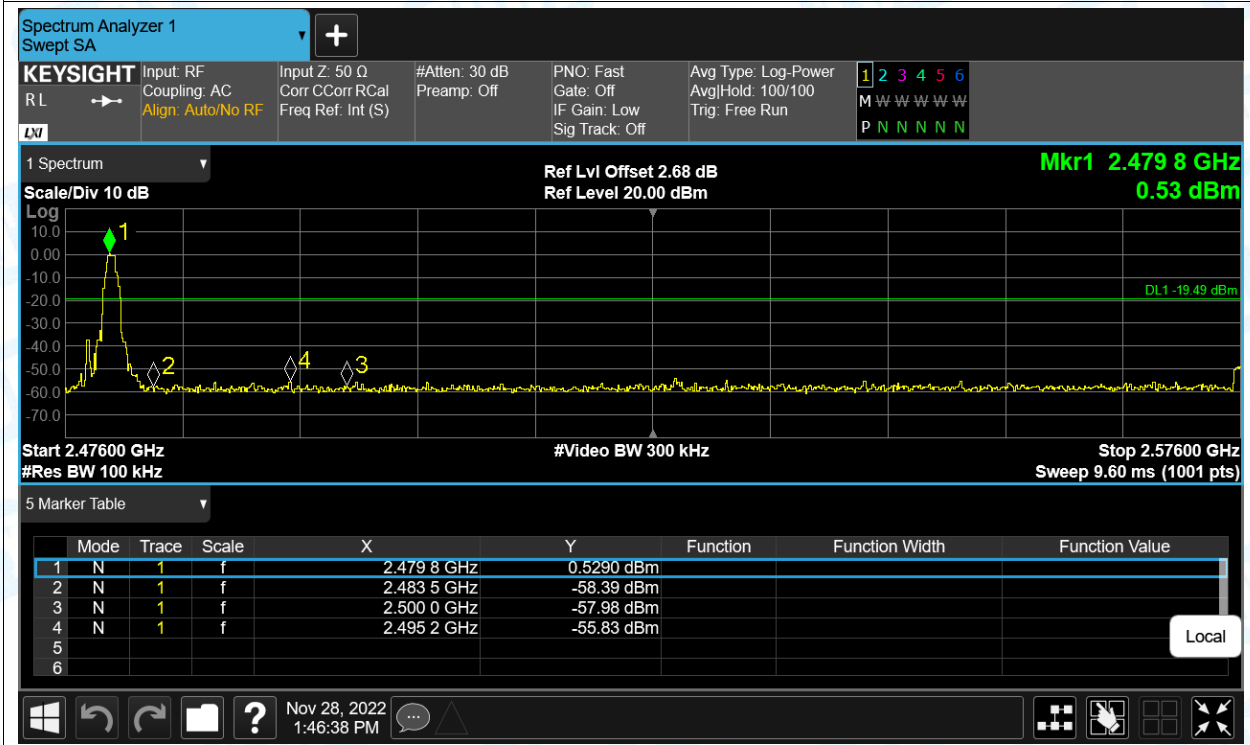




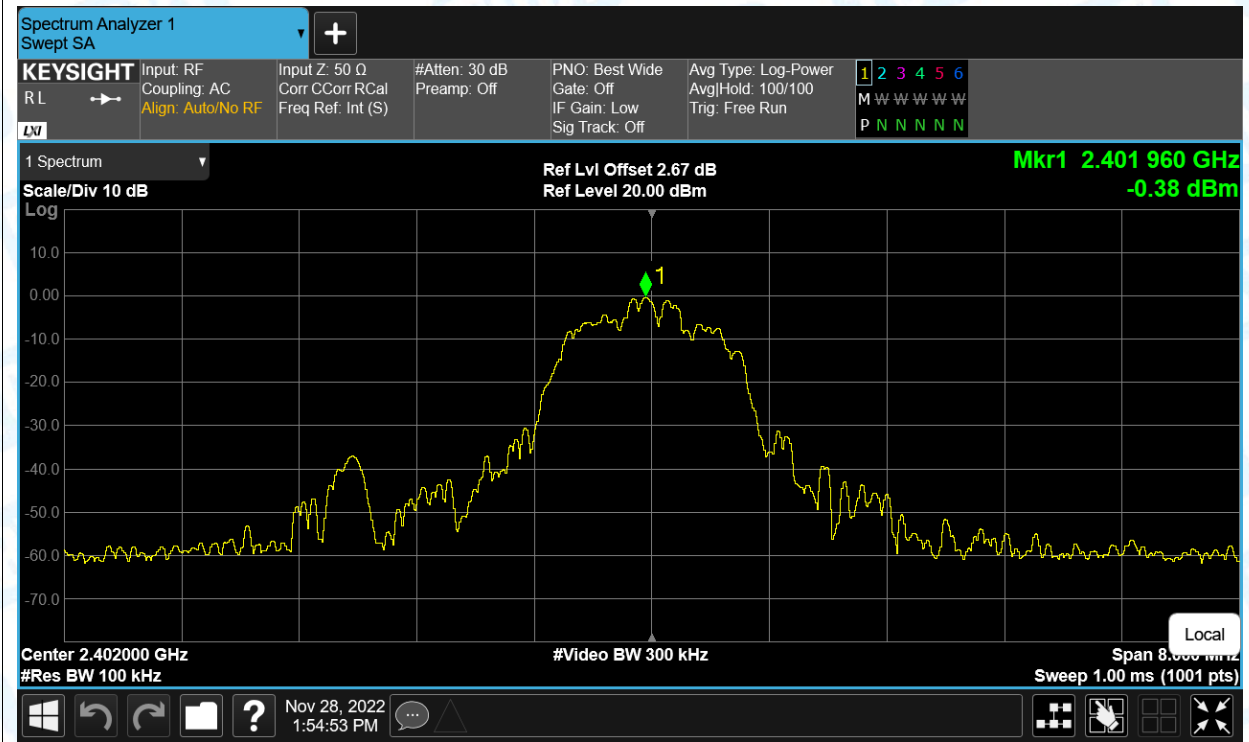
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Ref



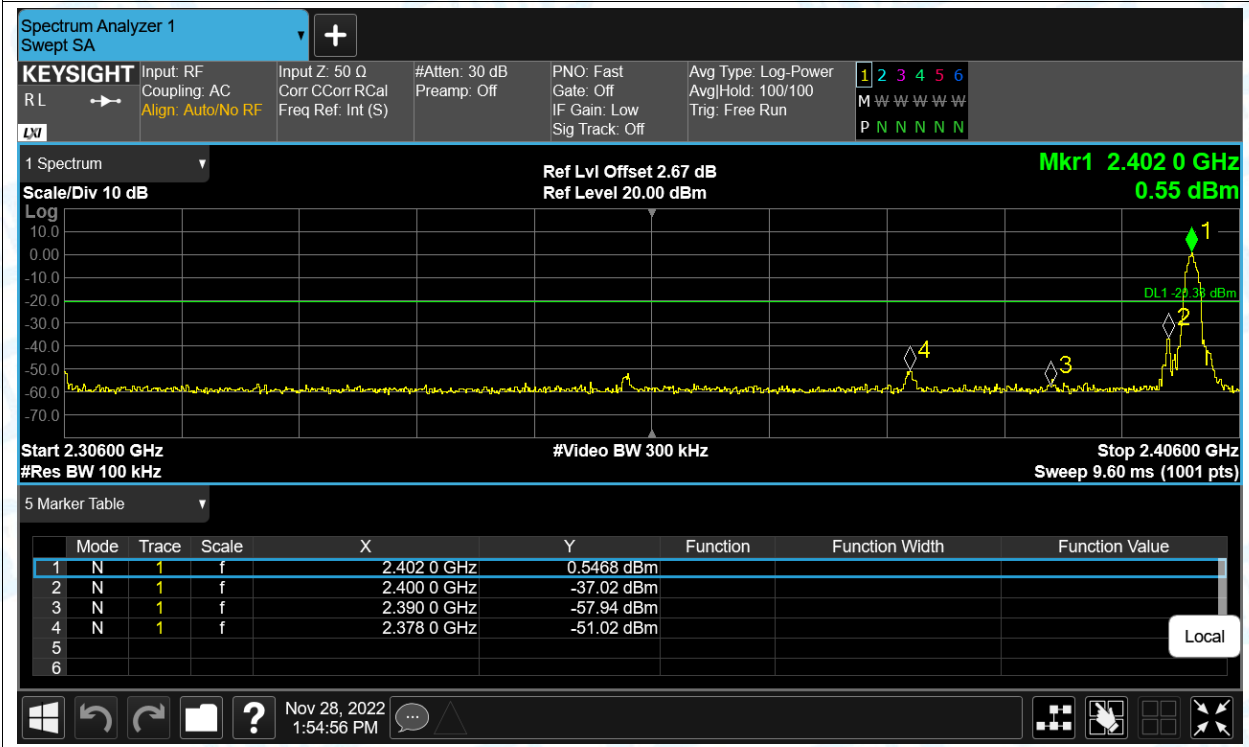
Band Edge NVNT 2-DH1 2480MHz Ant1 No-Hopping Emission



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

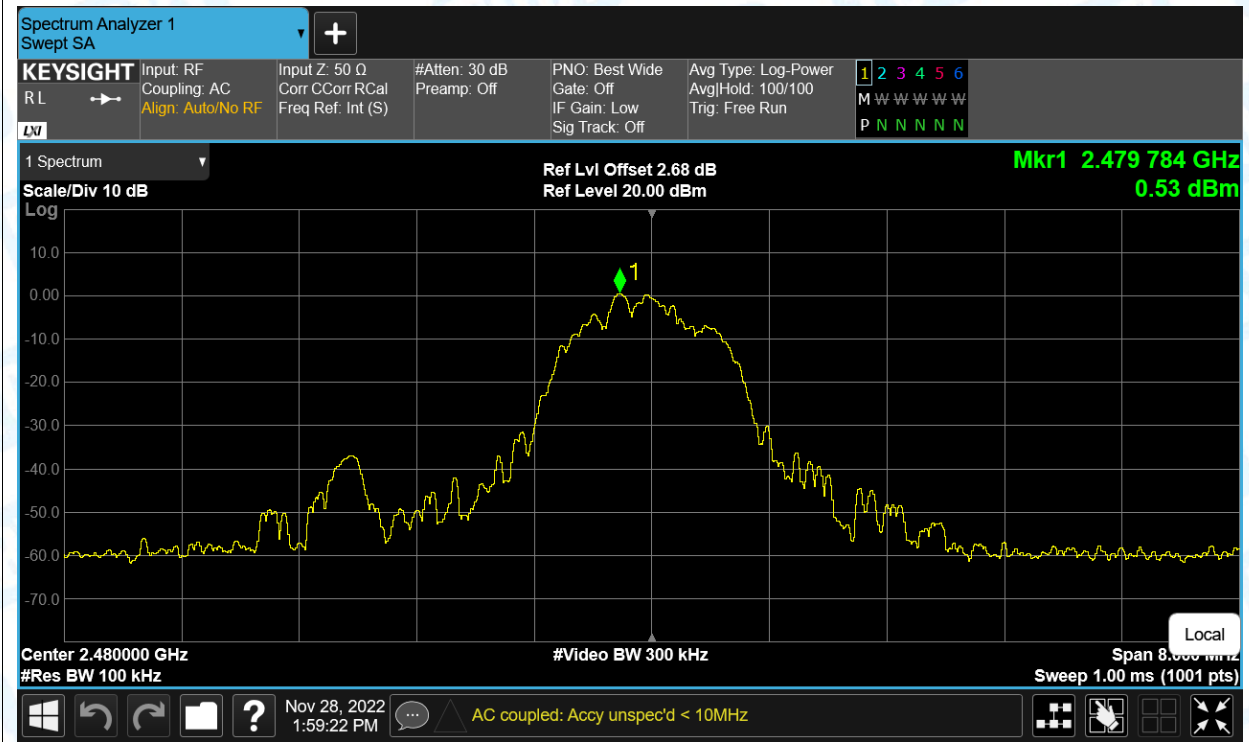


Band Edge NVNT 3-DH1 2402MHz Ant1 No-Hopping Emission

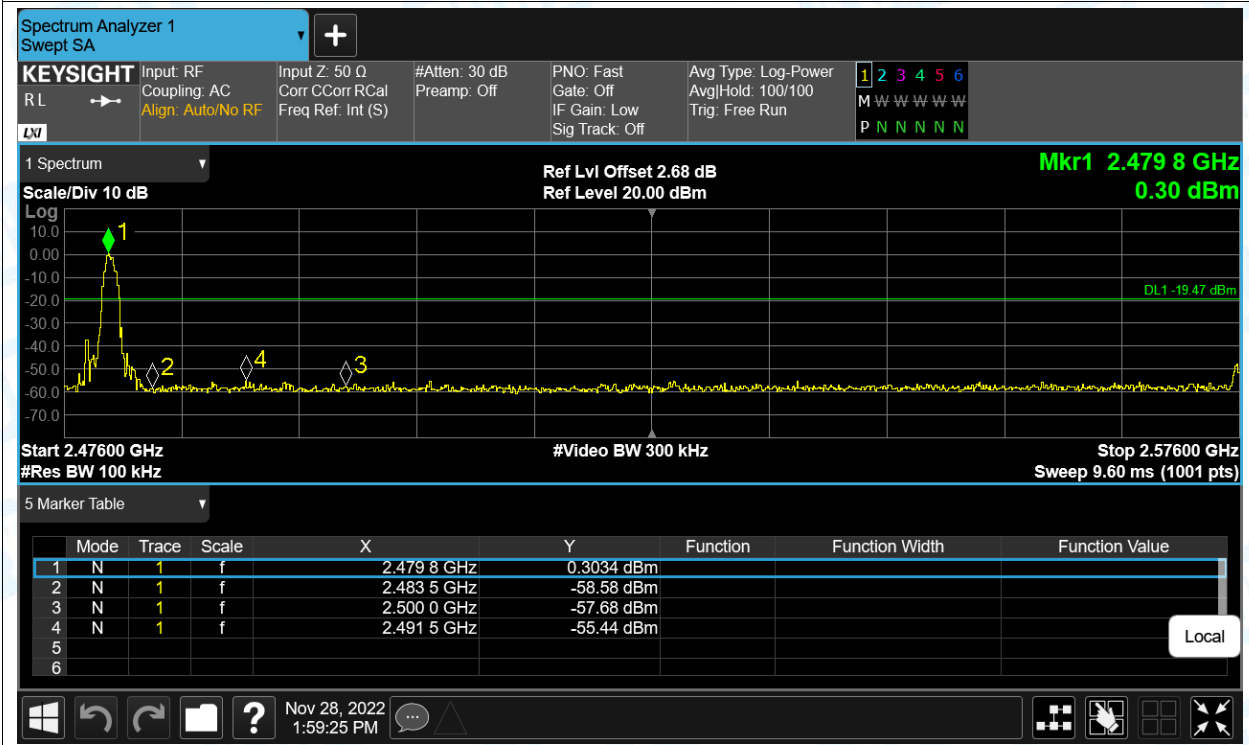




Band Edge NVNT 3-DH1 2480MHz Ant1 No-Hopping Ref



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



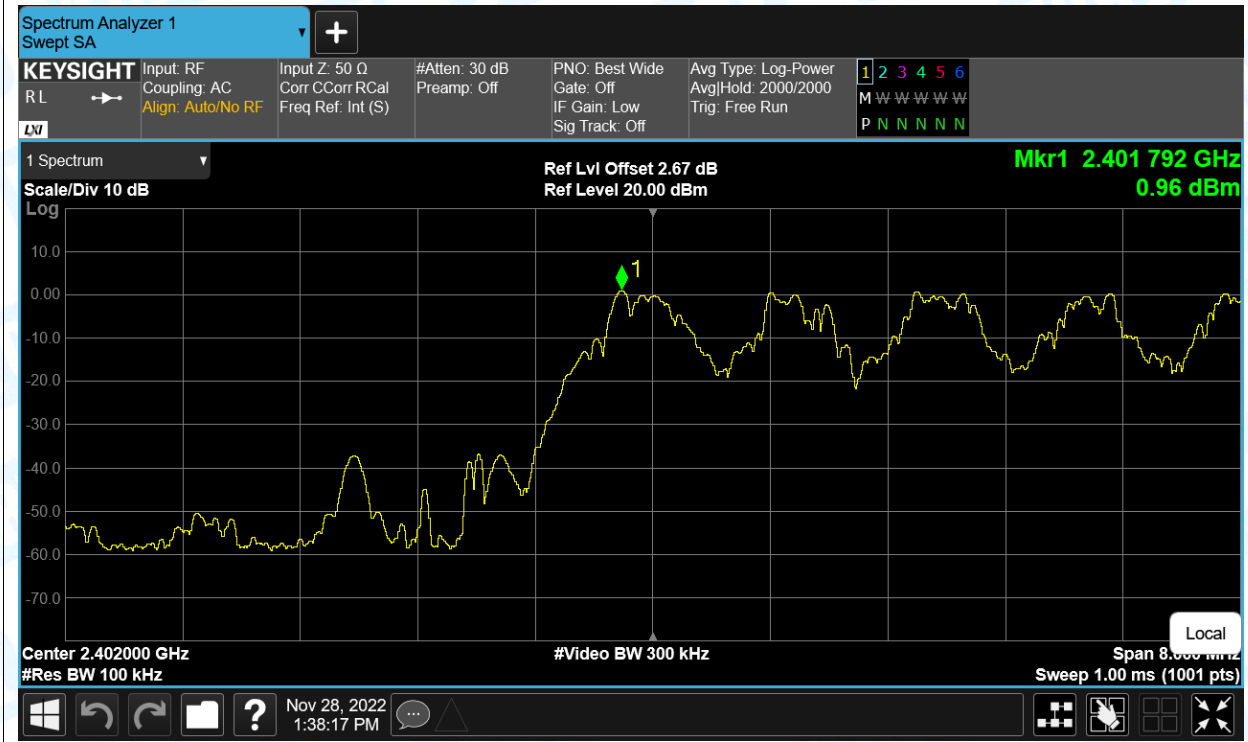
## 6. Band Edge(Hopping)

Condition	Mode	Frequency (MHz)	Antenna	Hopping Mode	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	1-DH1	2402	Ant1	Hopping	-49.59	-20	Pass
NVNT	1-DH1	2480	Ant1	Hopping	-45.08	-20	Pass
NVNT	2-DH1	2402	Ant1	Hopping	-49.41	-20	Pass
NVNT	2-DH1	2480	Ant1	Hopping	-45.96	-20	Pass
NVNT	3-DH1	2402	Ant1	Hopping	-50.03	-20	Pass
NVNT	3-DH1	2480	Ant1	Hopping	-45.39	-20	Pass



Test Graphs

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



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

