RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	**Smart PTZ Camera**
Test Model:	**X52**
Sample ID:	**202209-0141_01-2**
Environmental Conditions	
Temperature:	**25℃**
Relative Humidity:	**55%**
Test Voltage:	**DC 12V**
Test Engineer:	**Huang jian ping**
Note: For a more detailed features description, please refer to the report TBR-C-202209-0141-7	

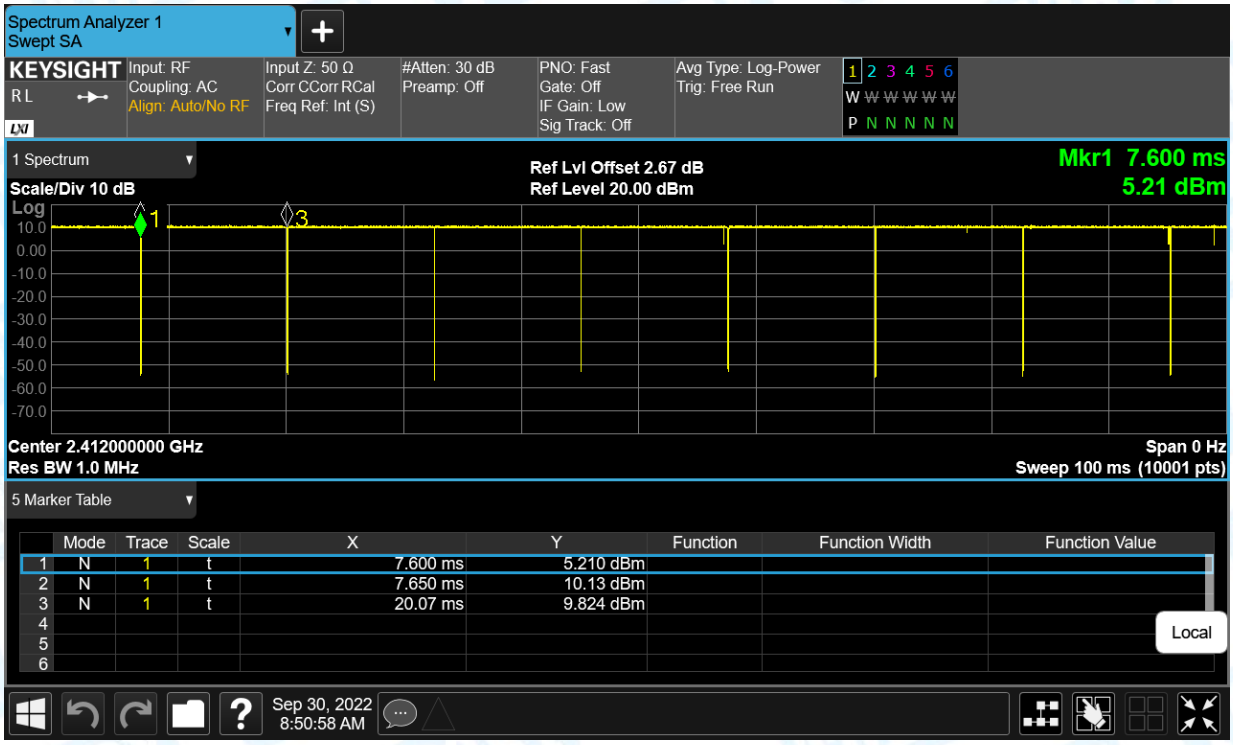
Contents

1. Duty Cycle

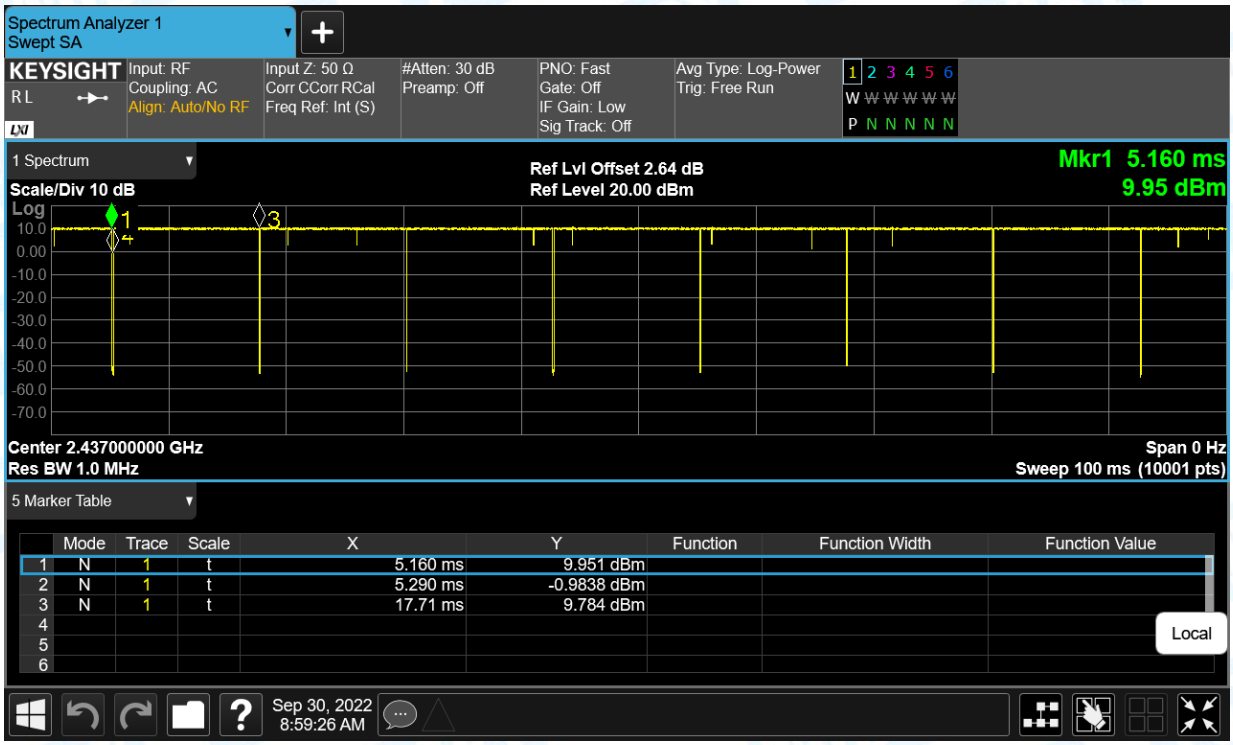
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.6	0.02	0.08
NVNT	b	2437	Ant1	98.96	0.05	0.08
NVNT	b	2462	Ant1	99.28	0.03	0.08
NVNT	g	2412	Ant1	94.52	0.24	0.48
NVNT	g	2437	Ant1	98.1	0.08	0.49
NVNT	g	2462	Ant1	92.79	0.32	0.49
NVNT	n(HT20)	2412	Ant1	91.87	0.37	0.52
NVNT	n(HT20)	2437	Ant1	96.97	0.13	0.52
NVNT	n(HT20)	2462	Ant1	94.12	0.26	0.52
NVNT	n(HT40)	2422	Ant1	89.62	0.48	1.05
NVNT	n(HT40)	2437	Ant1	95.96	0.18	1.05
NVNT	n(HT40)	2452	Ant1	87.04	0.6	1.06

Test Graphs

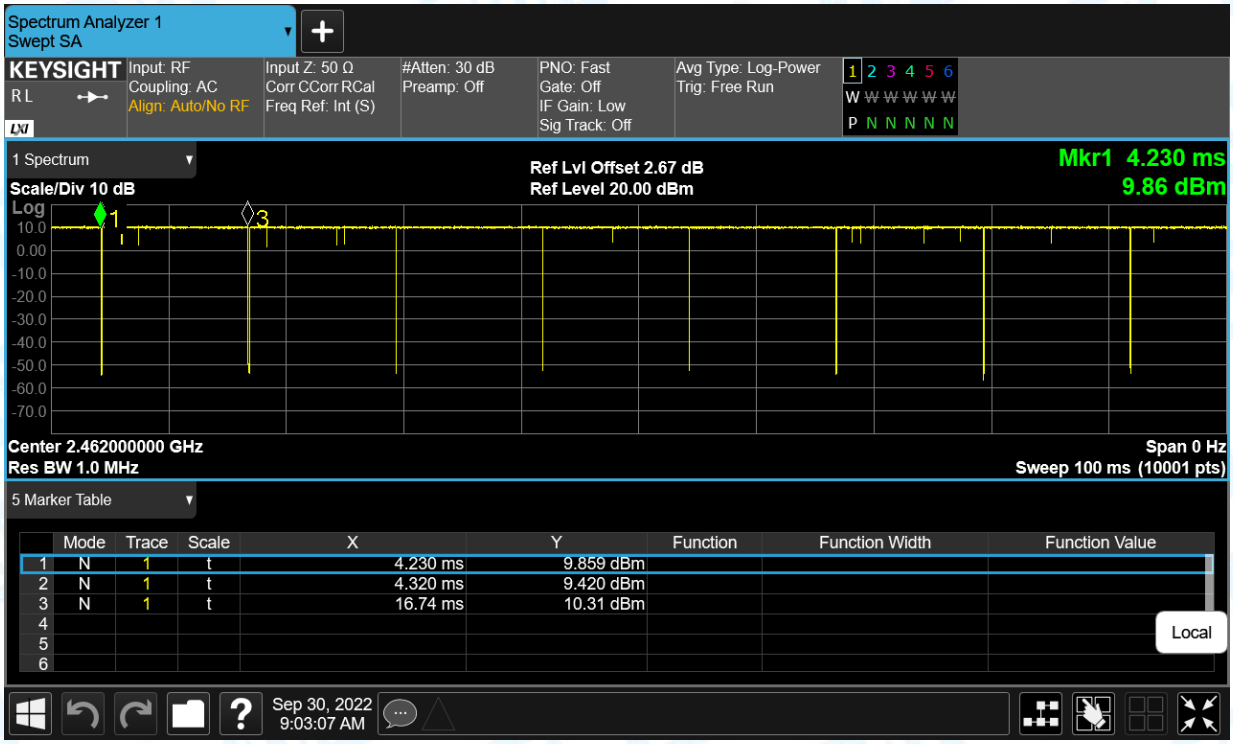
Duty Cycle NVNT b 2412MHz Ant1



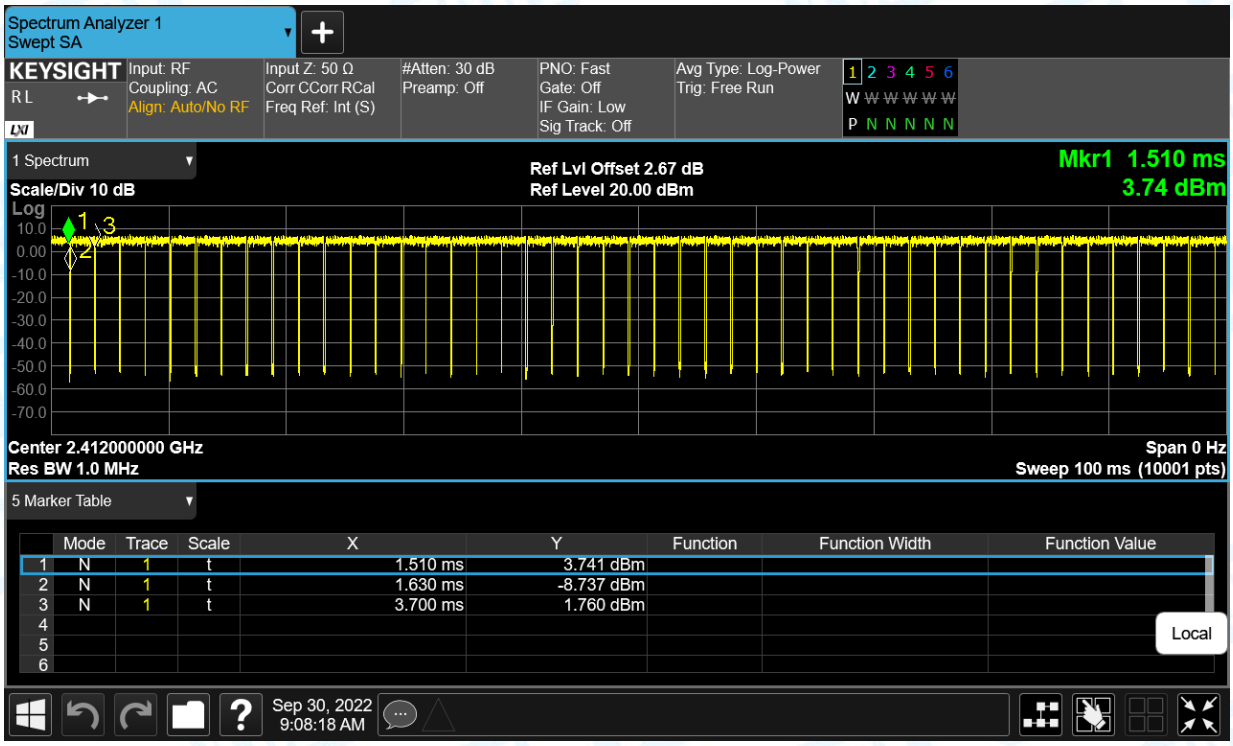
Duty Cycle NVNT b 2437MHz Ant1



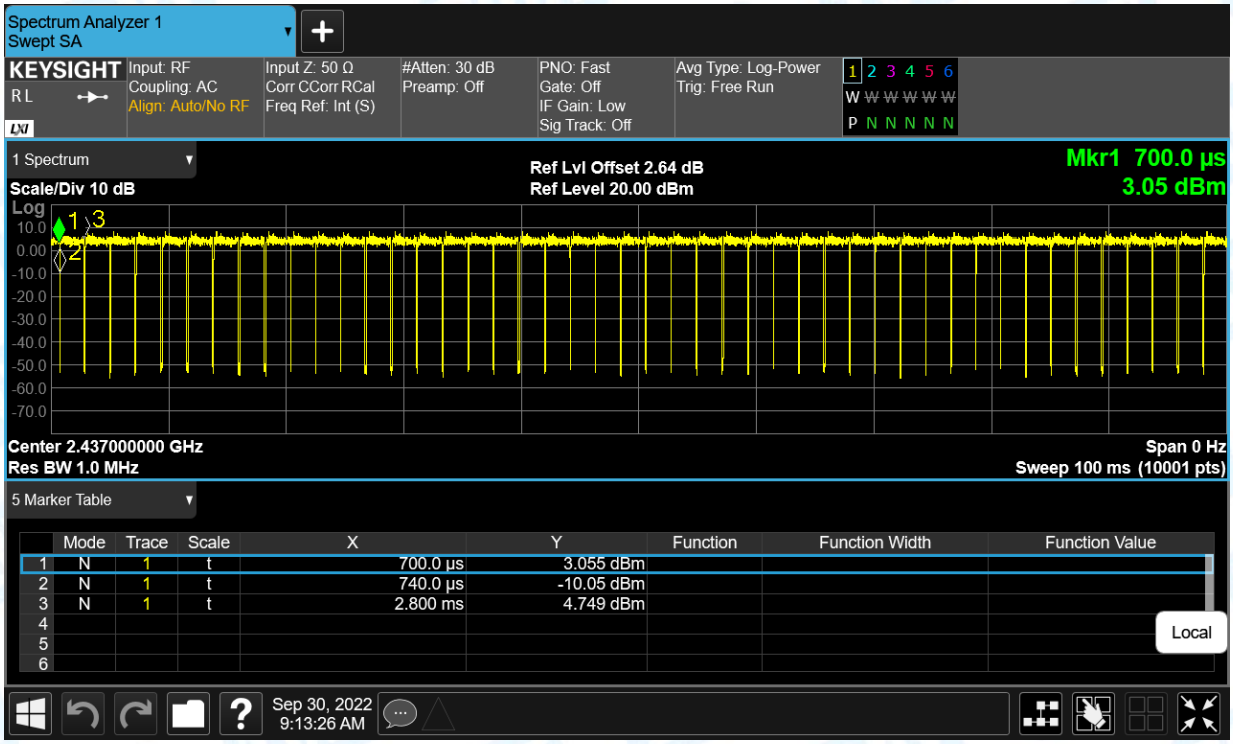
Duty Cycle NVNT b 2462MHz Ant1



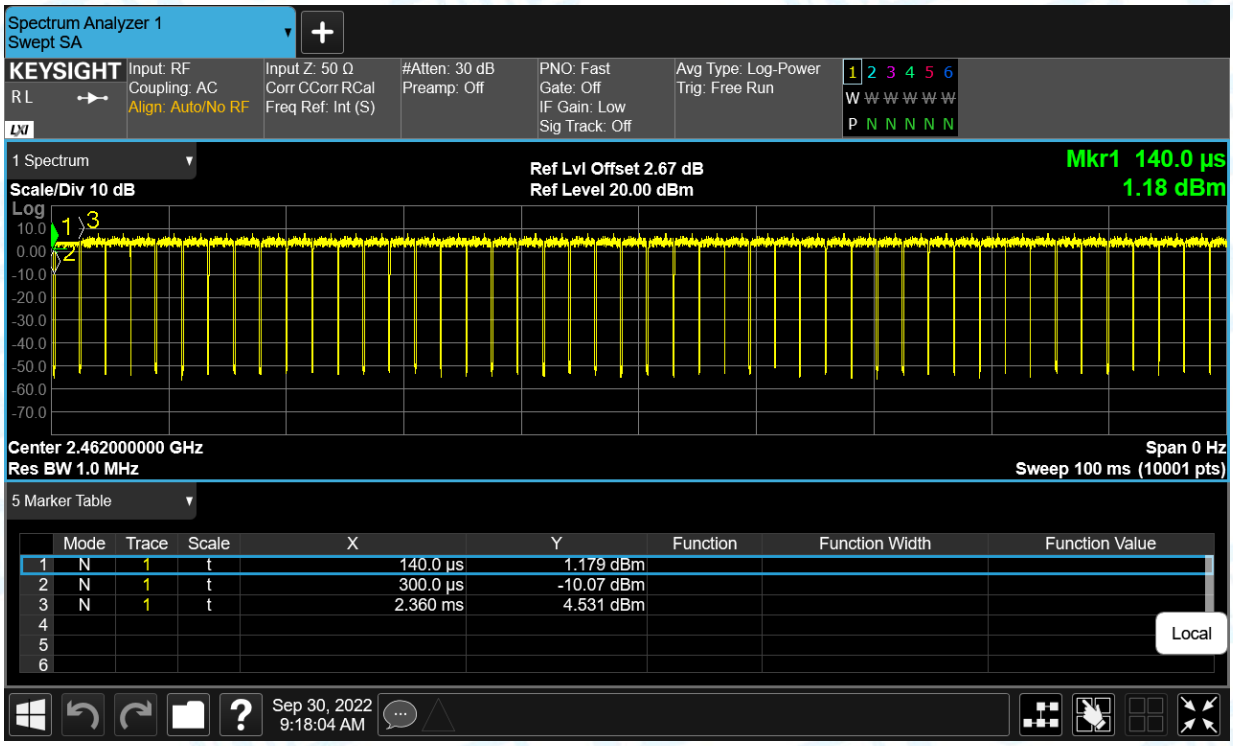
Duty Cycle NVNT g 2412MHz Ant1



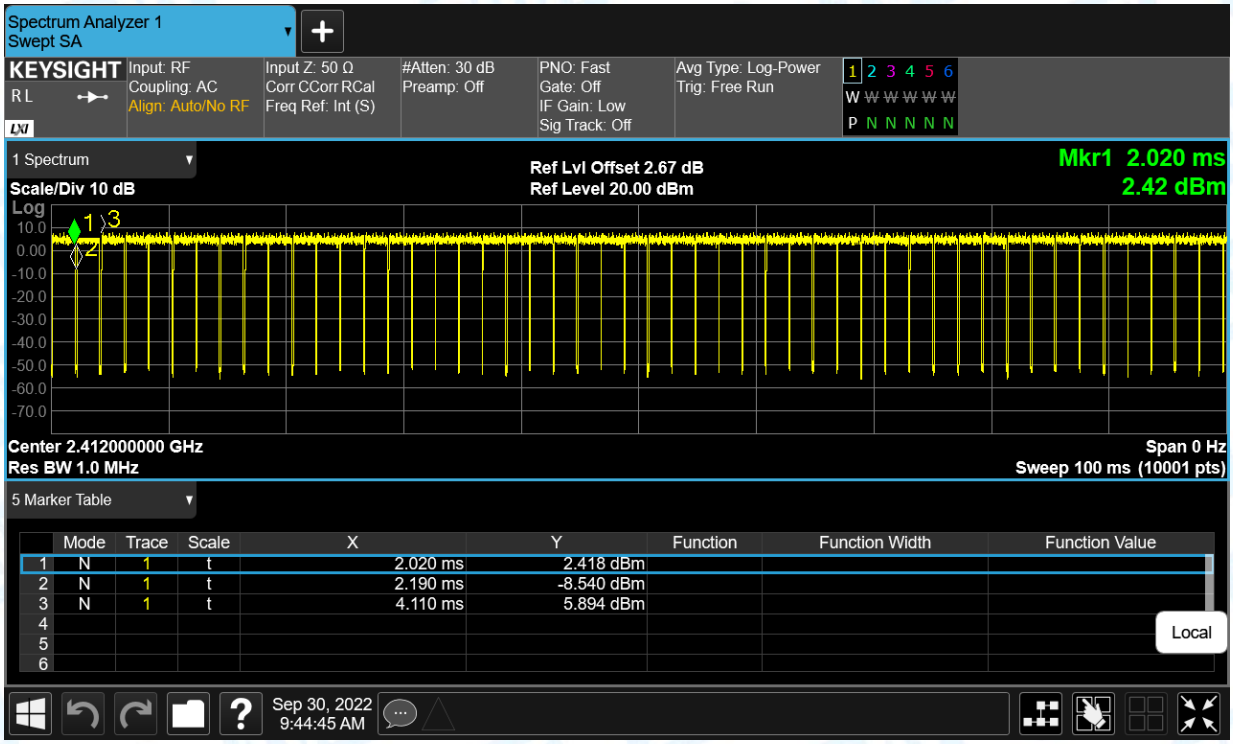
Duty Cycle NVNT g 2437MHz Ant1



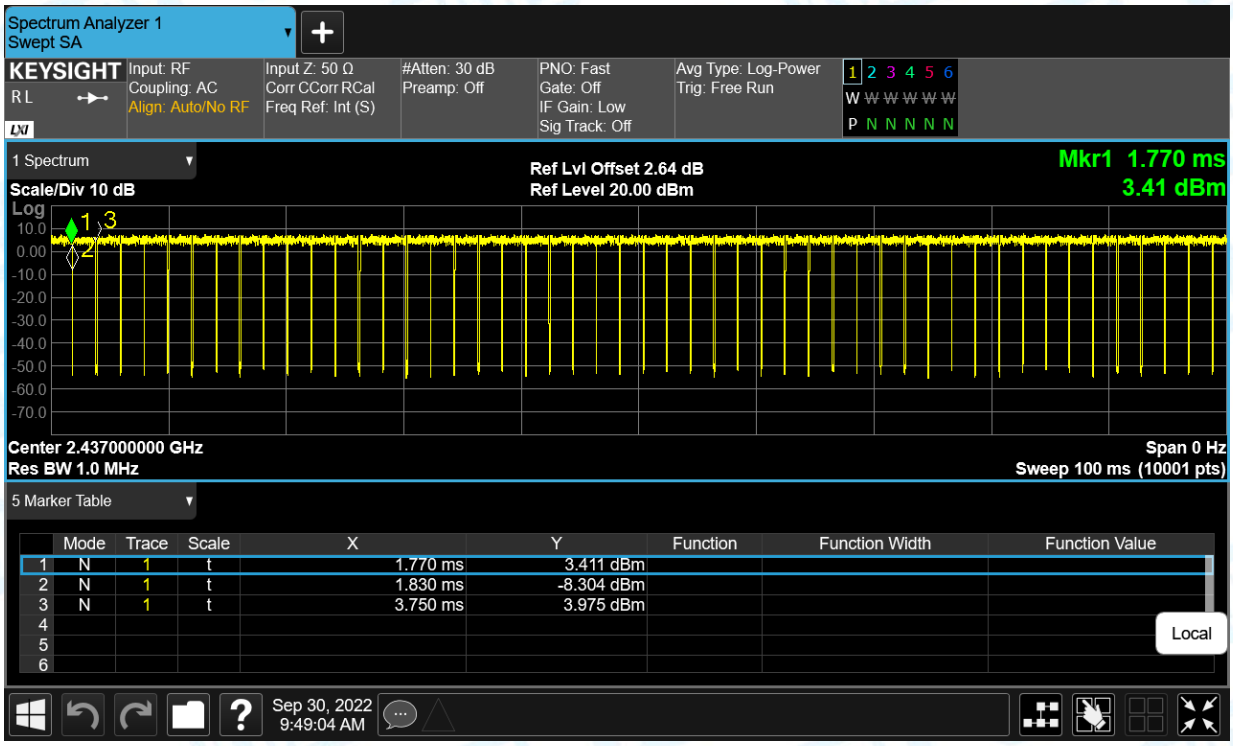
Duty Cycle NVNT g 2462MHz Ant1



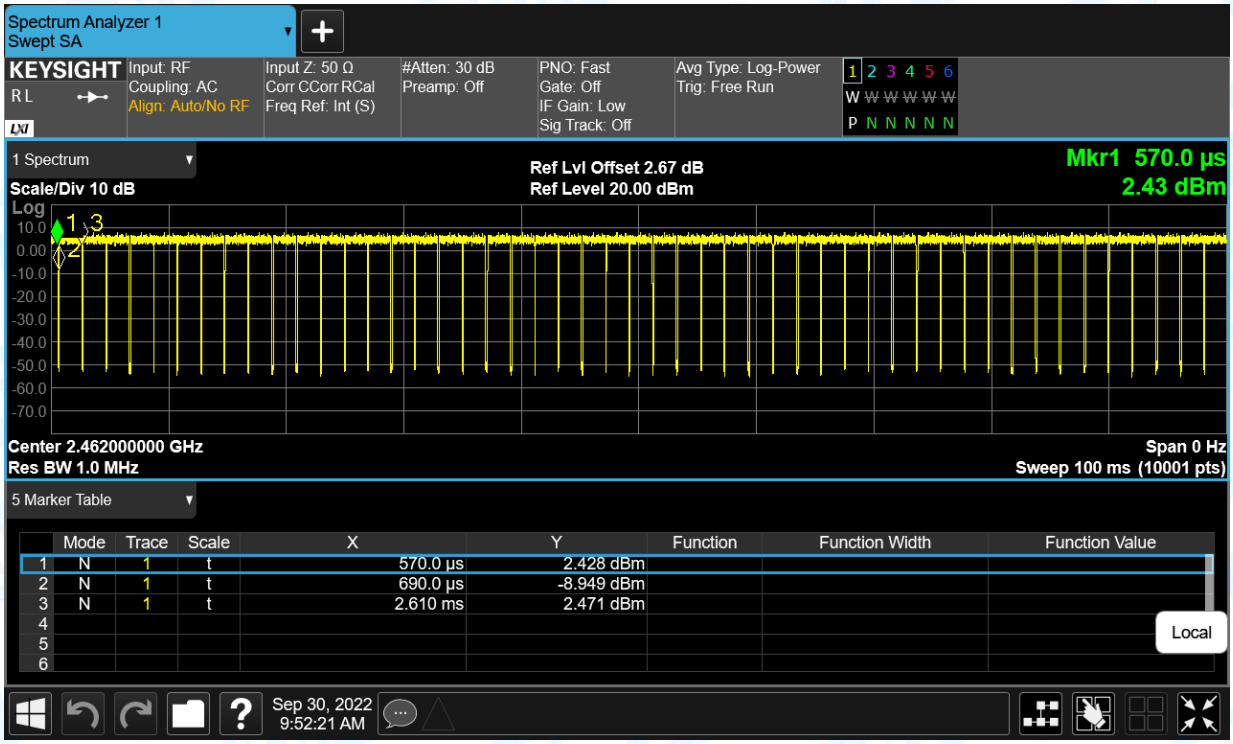
Duty Cycle NVNT n(HT20) 2412MHz Ant1



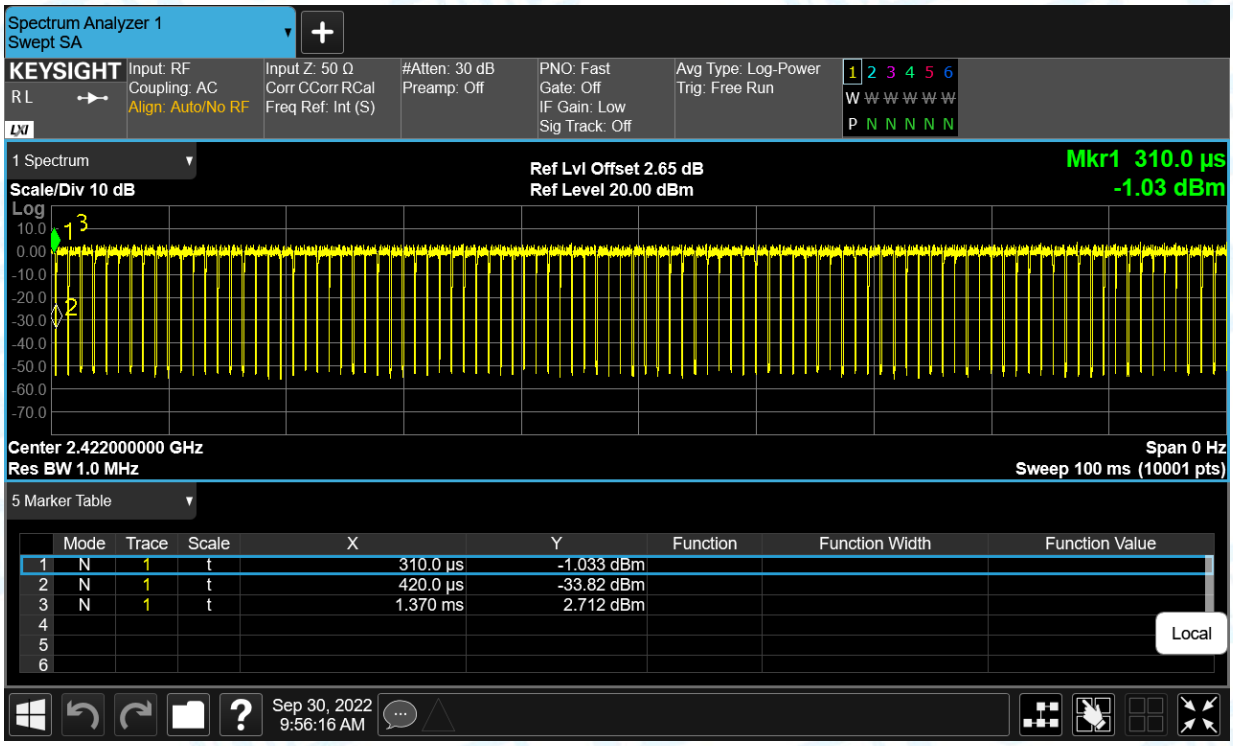
Duty Cycle NVNT n(HT20) 2437MHz Ant1



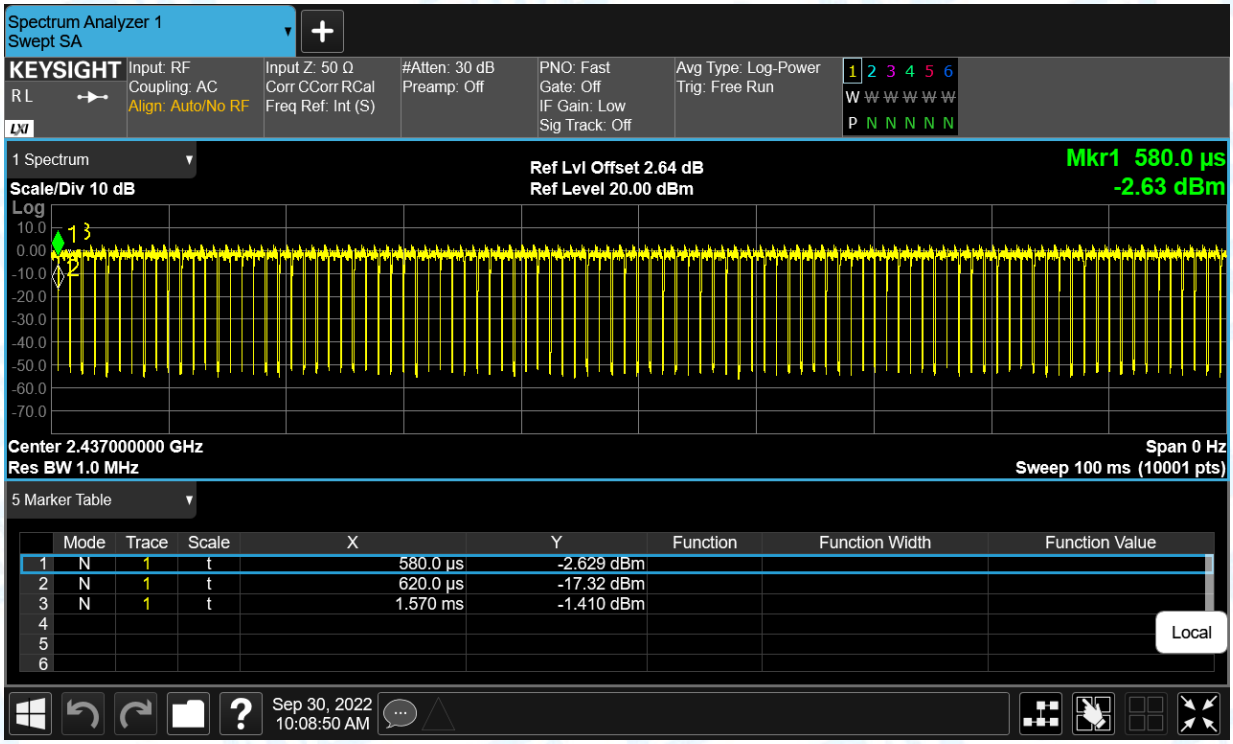
Duty Cycle NVNT n(HT20) 2462MHz Ant1



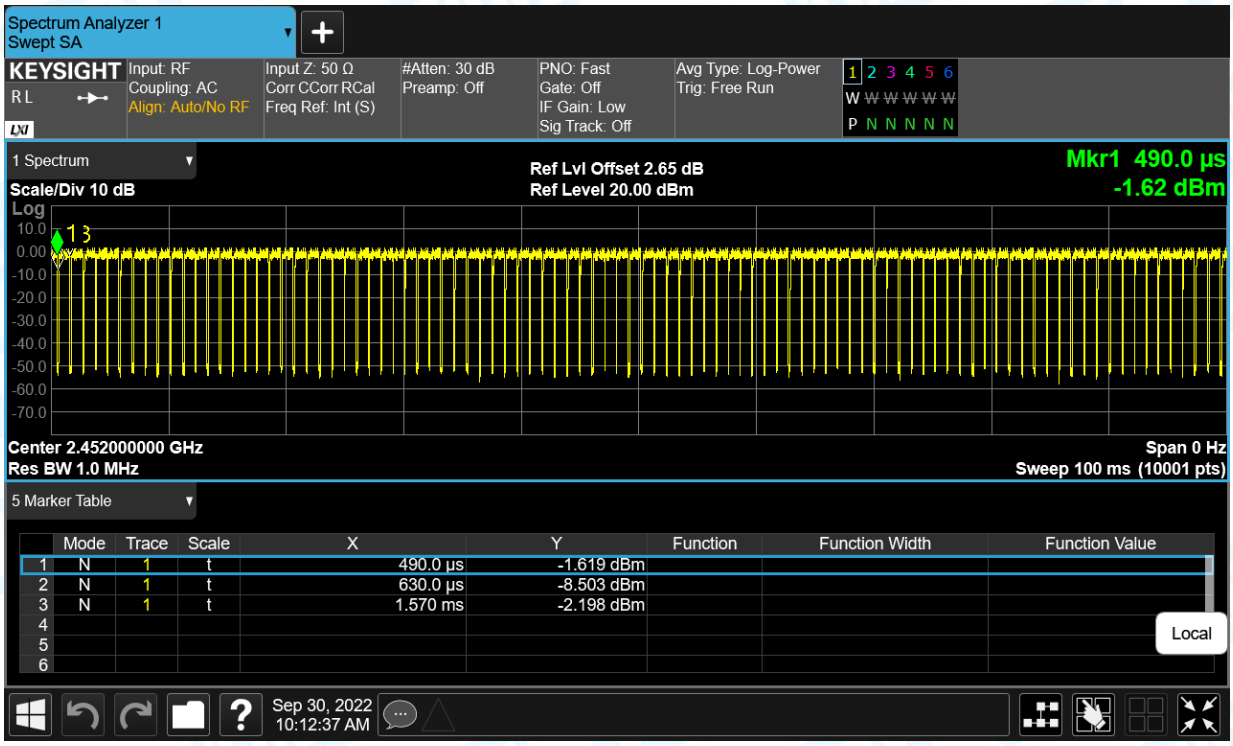
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



2. Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.151	30	Pass
NVNT	b	2437	Ant1	17.091	30	Pass
NVNT	b	2462	Ant1	17.211	30	Pass
NVNT	g	2412	Ant1	17.418	30	Pass
NVNT	g	2437	Ant1	17.269	30	Pass
NVNT	g	2462	Ant1	17.225	30	Pass
NVNT	n(HT20)	2412	Ant1	17.102	30	Pass
NVNT	n(HT20)	2437	Ant1	17.219	30	Pass
NVNT	n(HT20)	2462	Ant1	17.09	30	Pass
NVNT	n(HT40)	2422	Ant1	16.696	30	Pass
NVNT	n(HT40)	2437	Ant1	17.396	30	Pass
NVNT	n(HT40)	2452	Ant1	17.645	30	Pass

3. -6dB Bandwidth

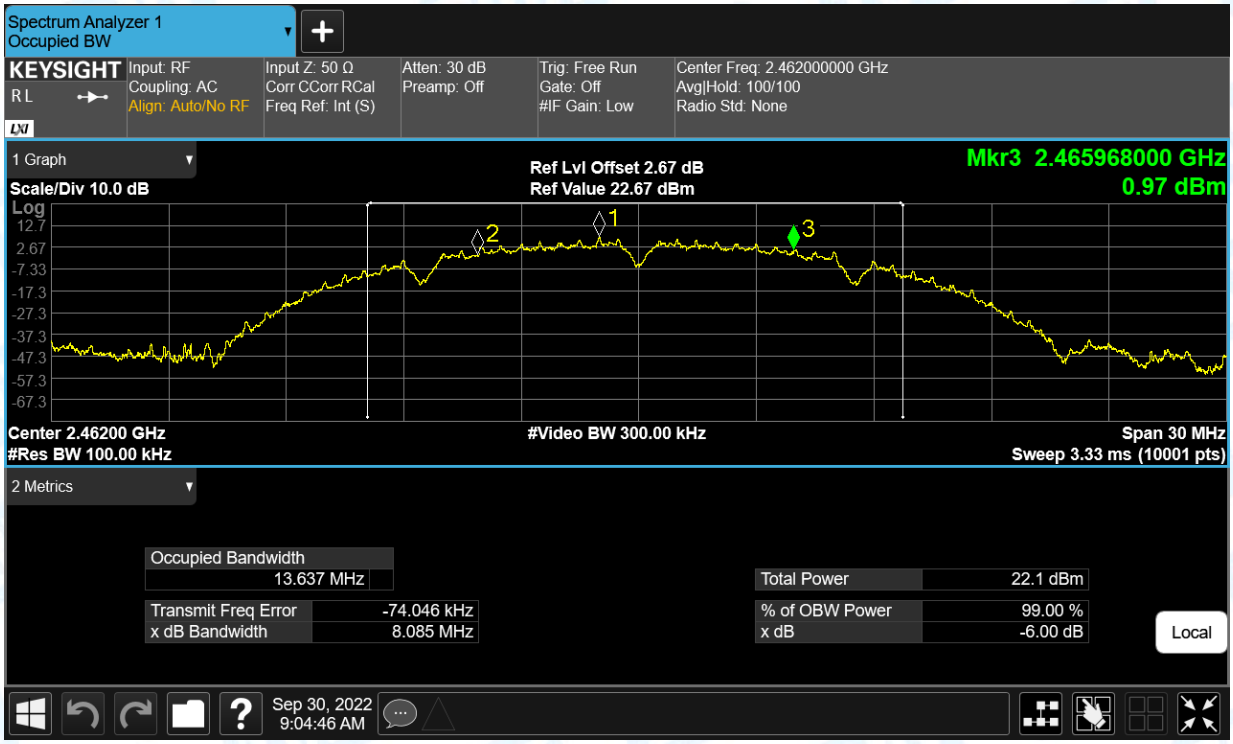
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.57	0.5	Pass
NVNT	b	2437	Ant1	8.06	0.5	Pass
NVNT	b	2462	Ant1	8.08	0.5	Pass
NVNT	g	2412	Ant1	16.33	0.5	Pass
NVNT	g	2437	Ant1	16.34	0.5	Pass
NVNT	g	2462	Ant1	16.39	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.55	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.33	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.31	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.89	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.66	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.68	0.5	Pass

Test Graphs

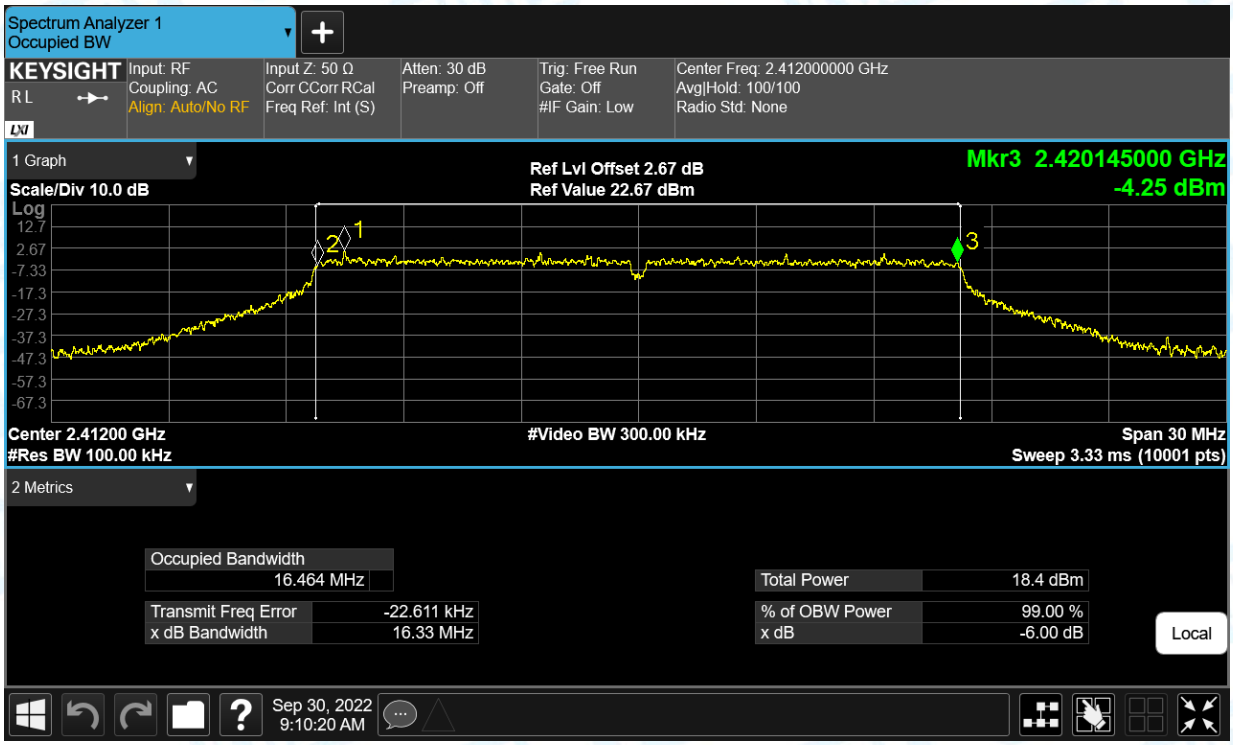
-6dB Bandwidth NVNT b 2412MHz Ant1

-6dB Bandwidth NVNT b 2437MHz Ant1

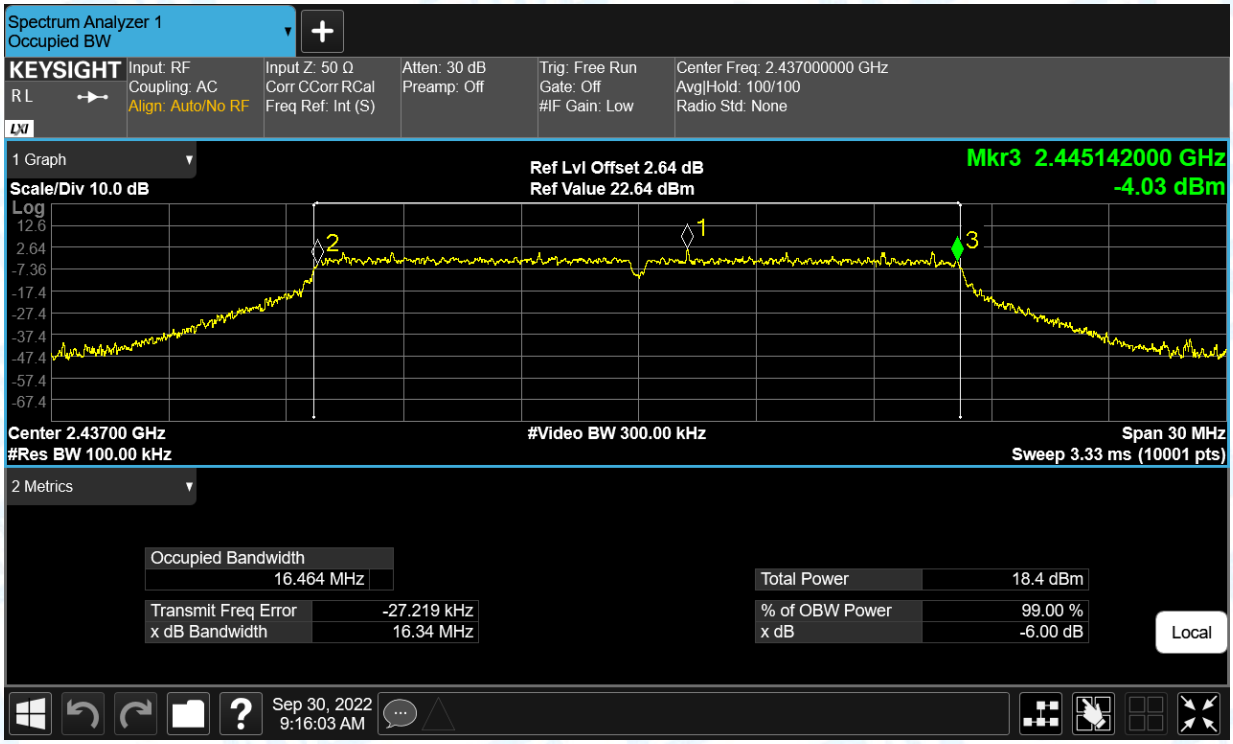
-6dB Bandwidth NVNT b 2462MHz Ant1



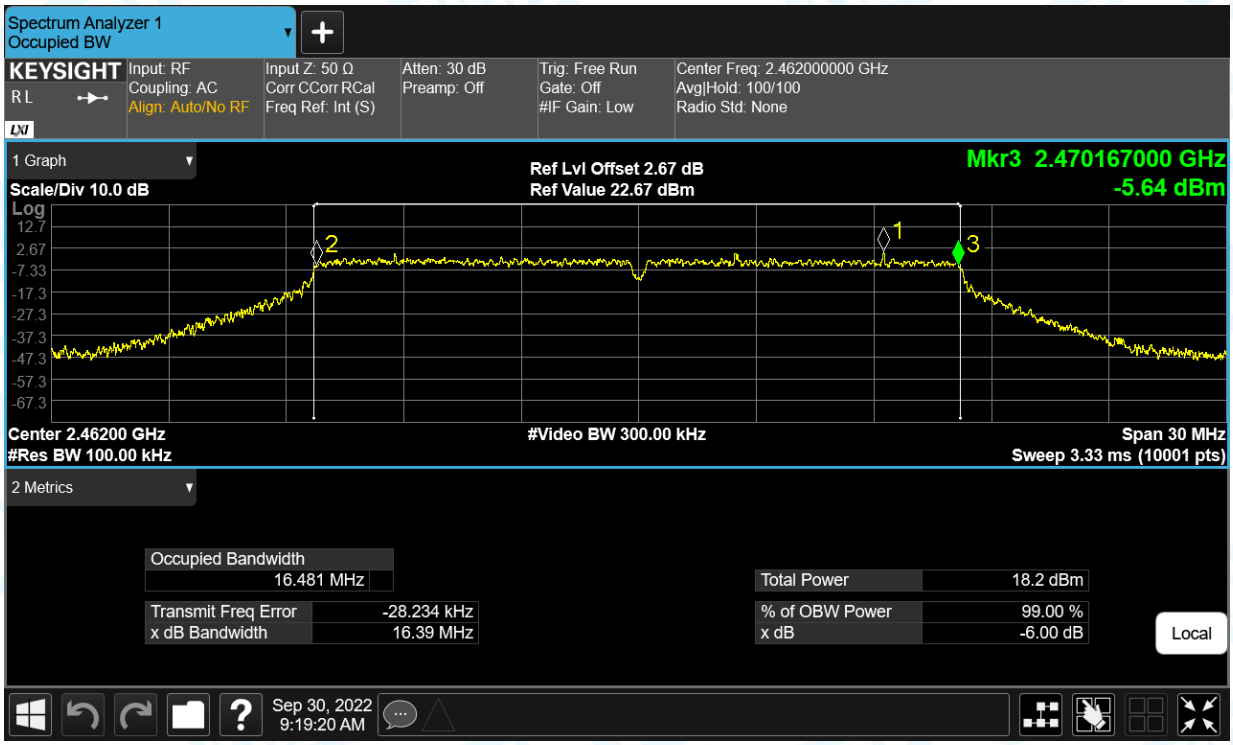
-6dB Bandwidth NVNT g 2412MHz Ant1



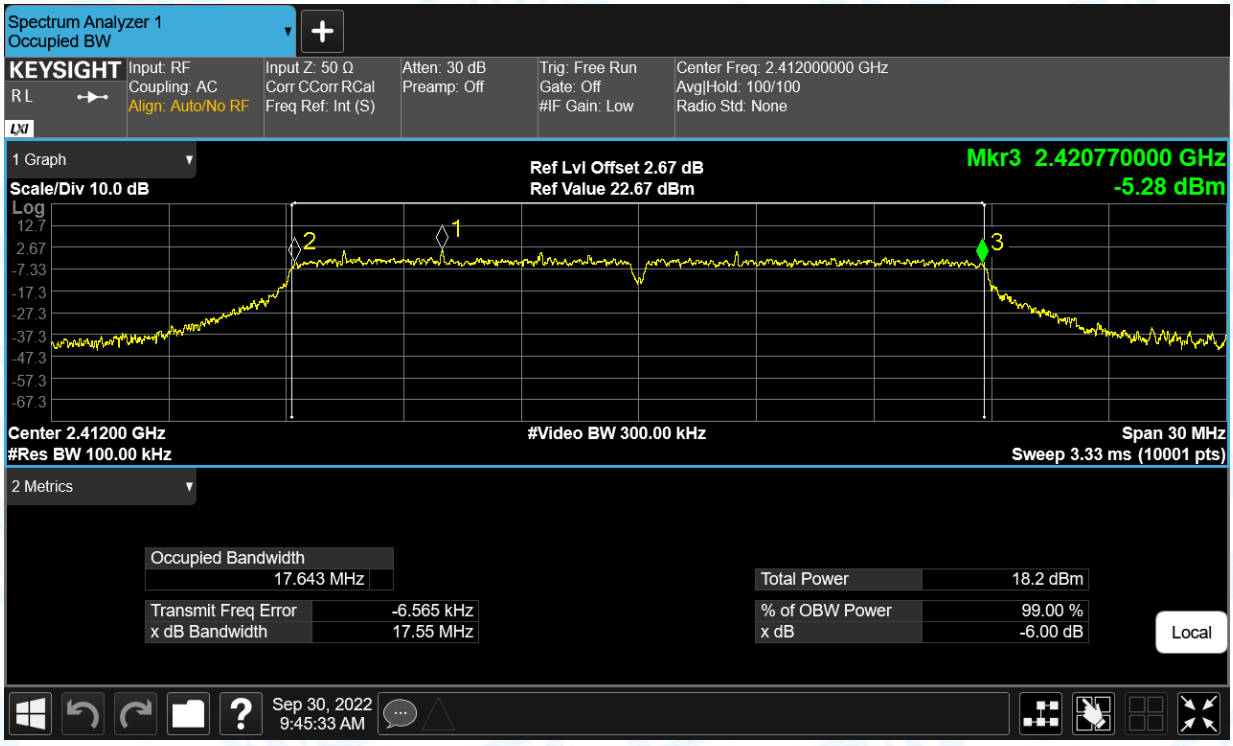
-6dB Bandwidth NVNT g 2437MHz Ant1



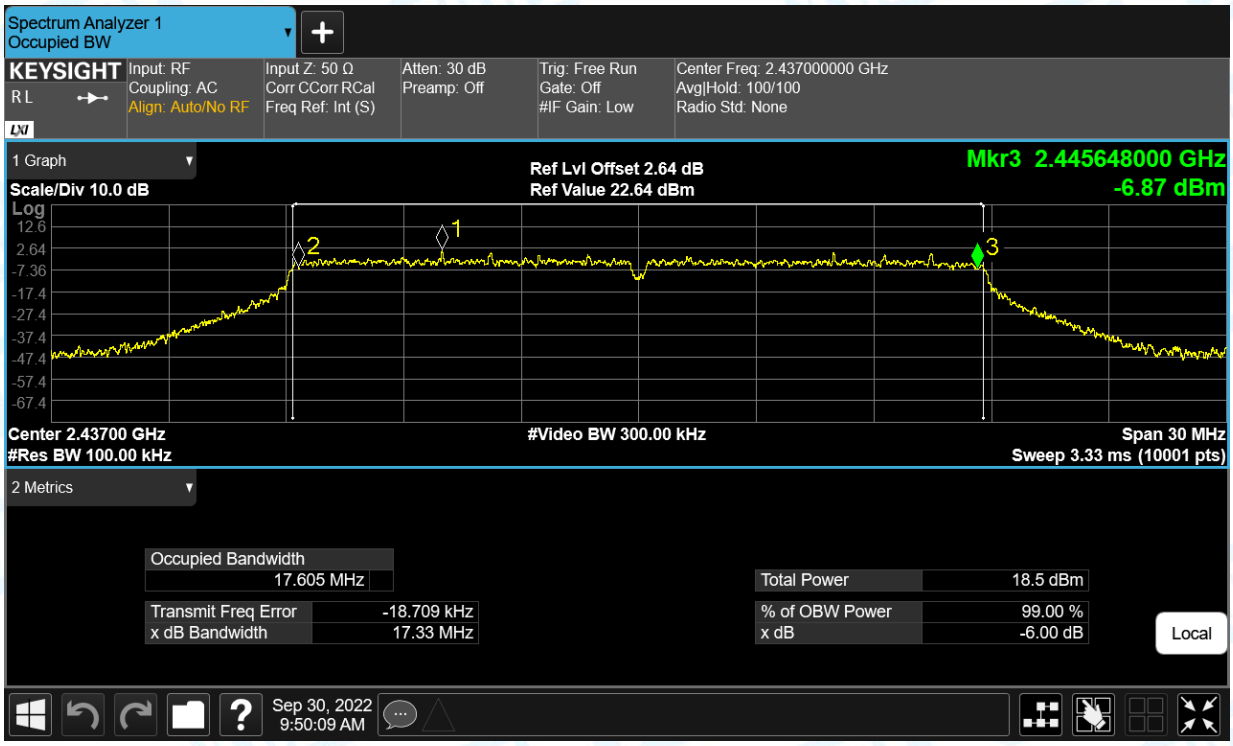
-6dB Bandwidth NVNT g 2462MHz Ant1



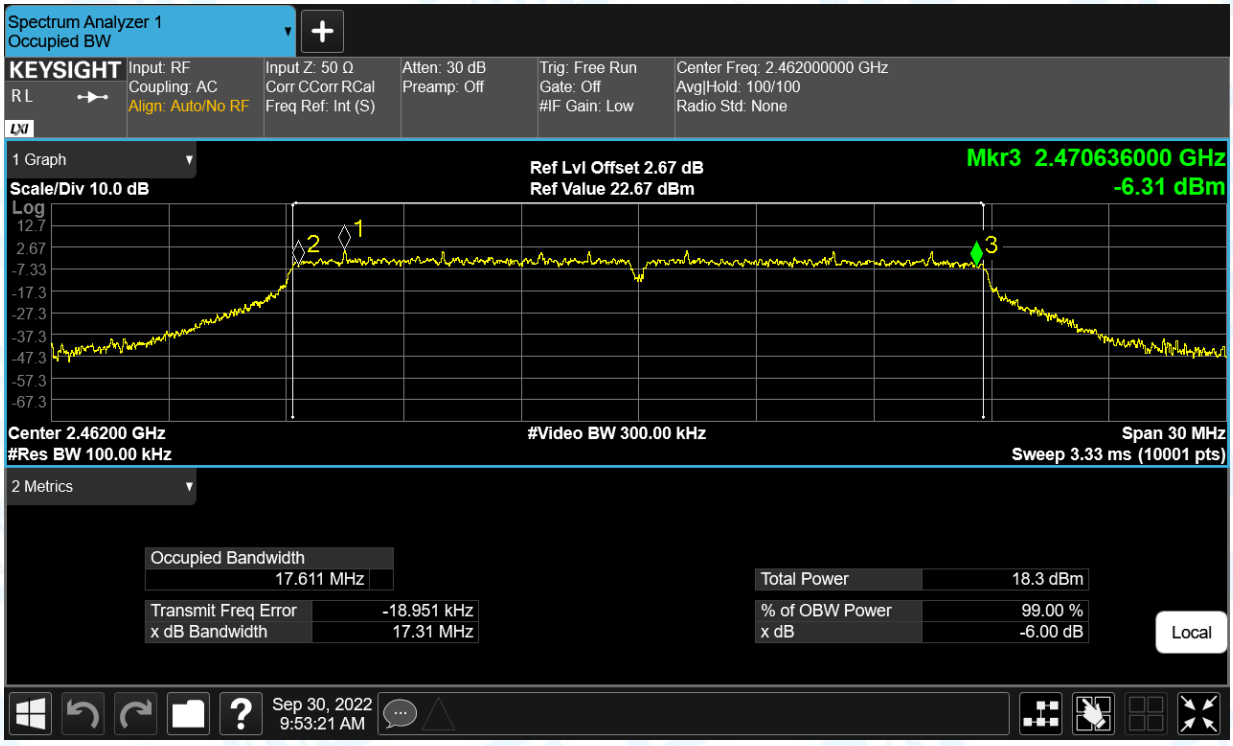
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



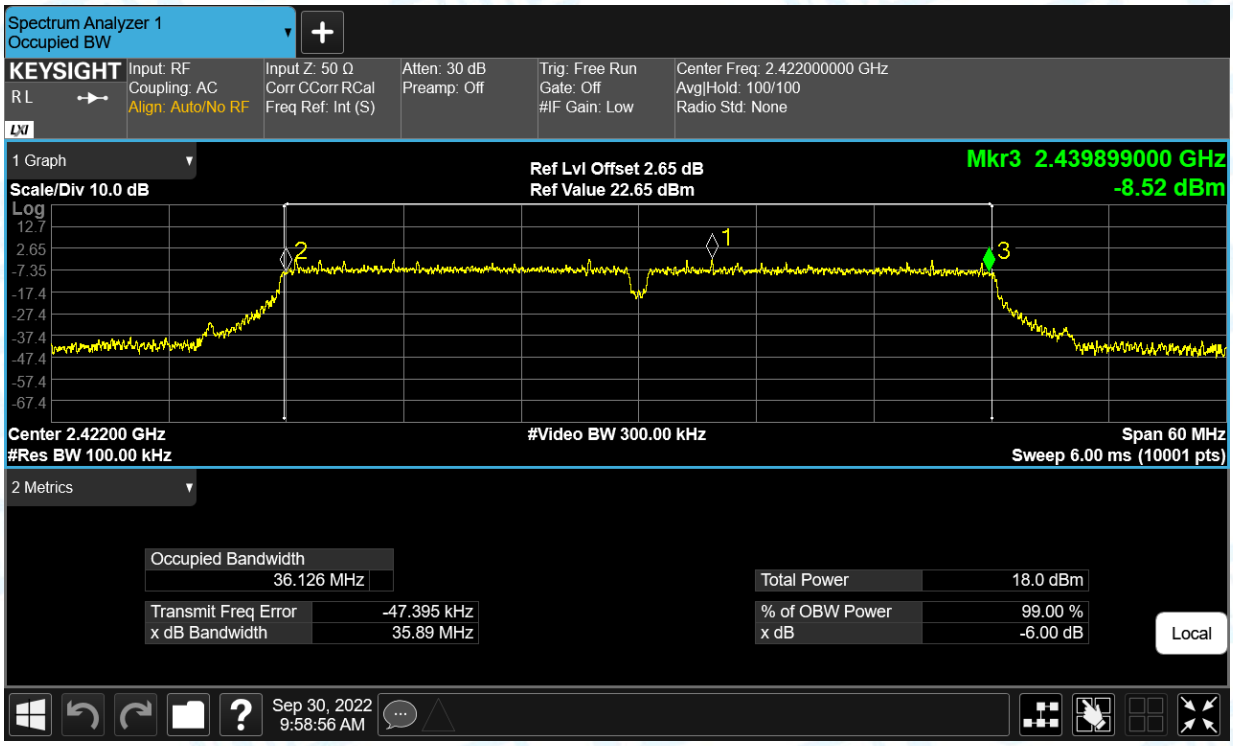
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



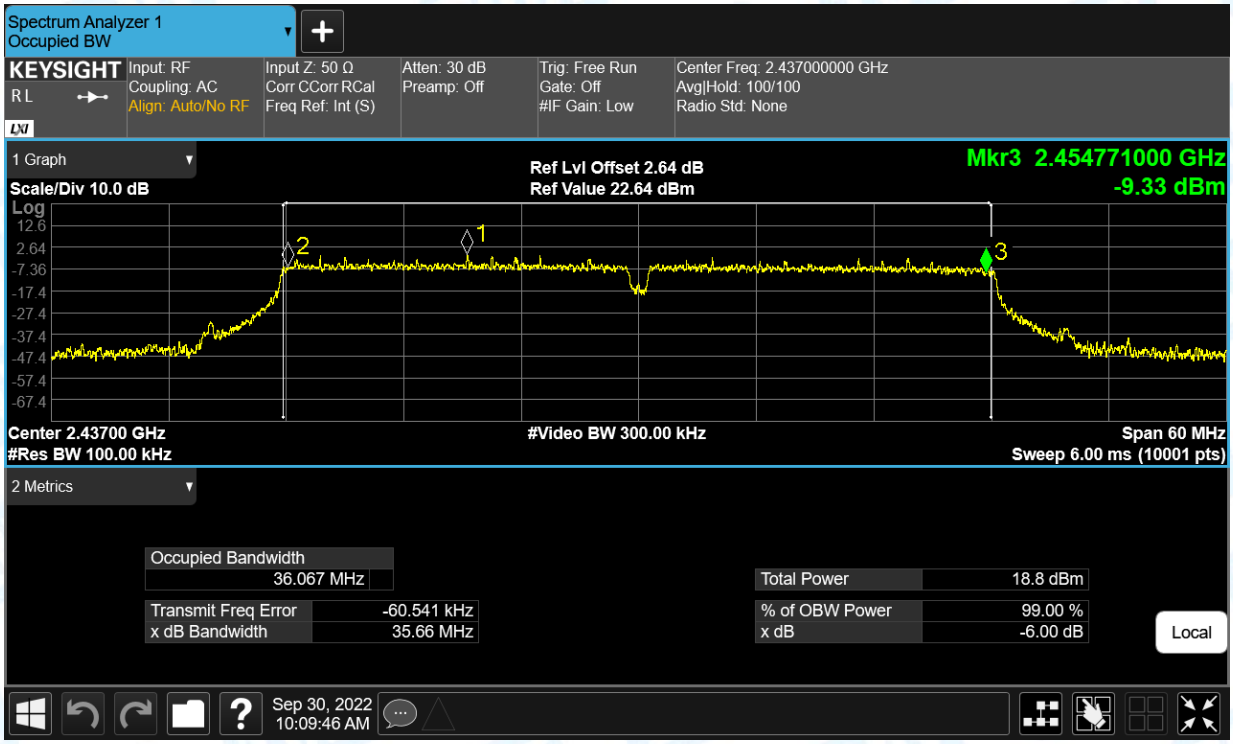
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



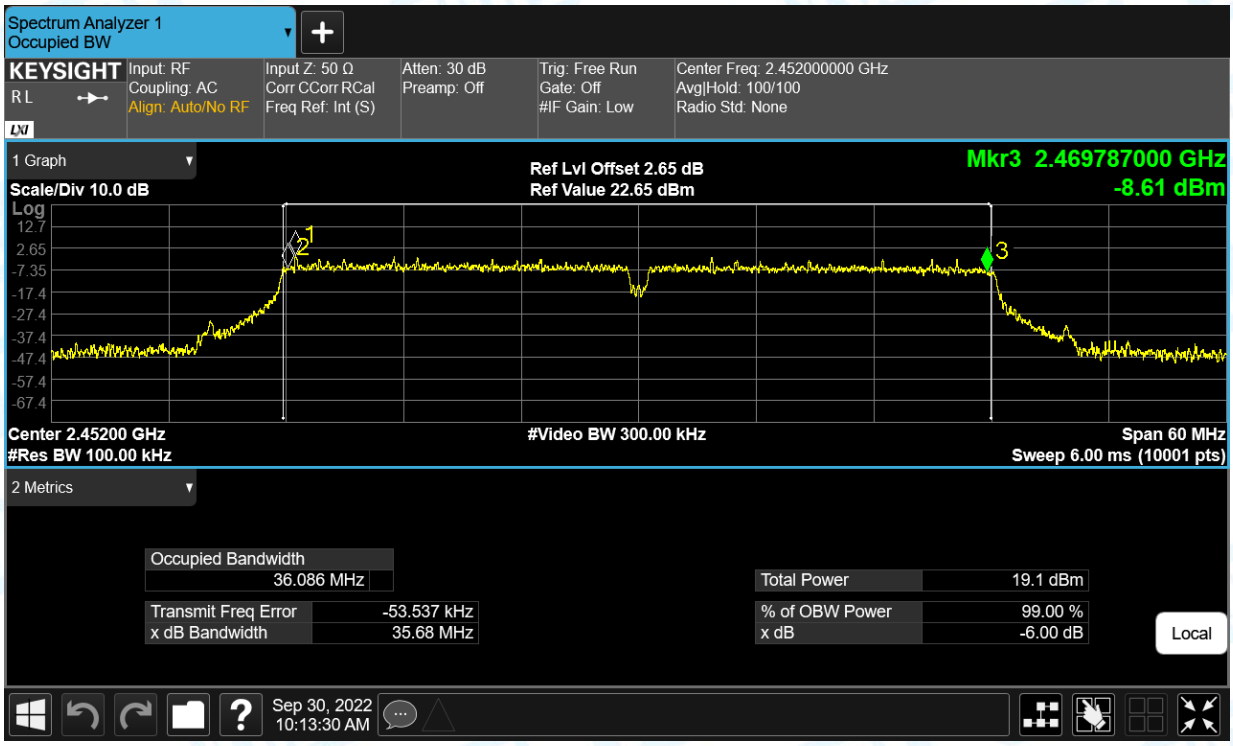
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2437MHz Ant1



-6dB Bandwidth NVNT n(HT40) 2452MHz Ant1

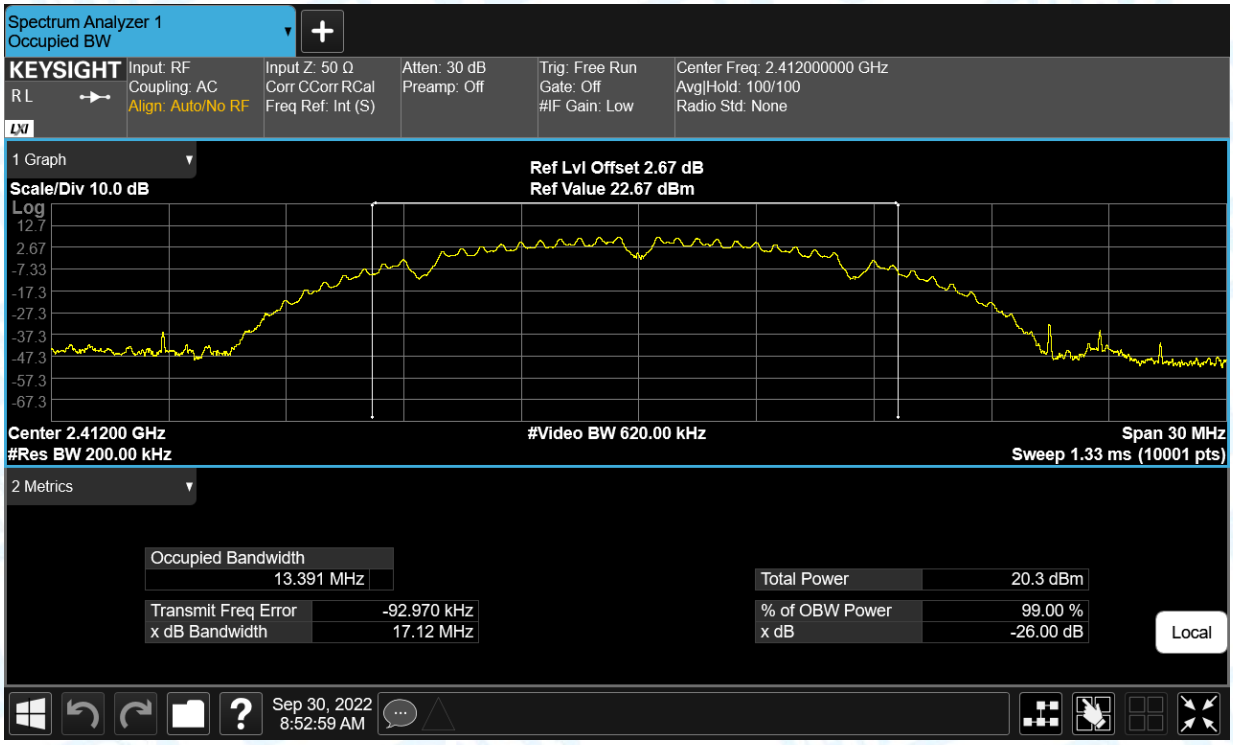


4. Occupied Channel Bandwidth

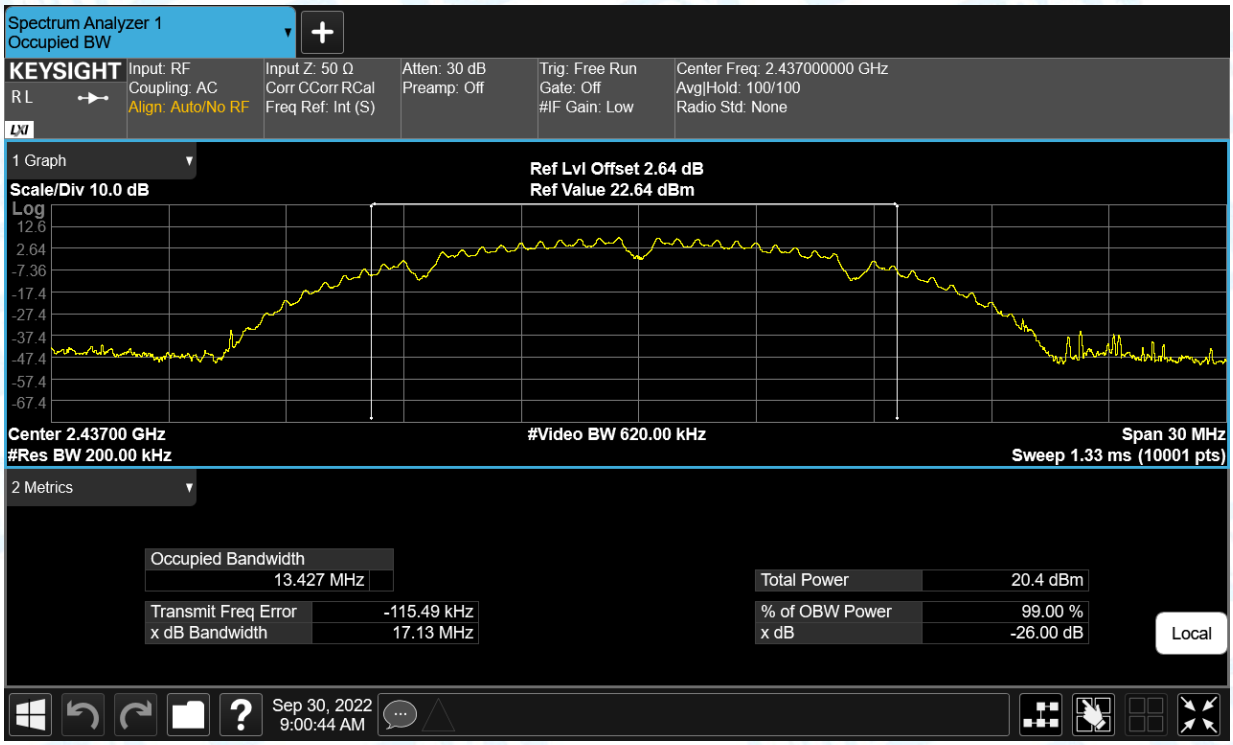
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.391
NVNT	b	2437	Ant1	13.427
NVNT	b	2462	Ant1	13.608
NVNT	g	2412	Ant1	16.564
NVNT	g	2437	Ant1	16.601
NVNT	g	2462	Ant1	16.605
NVNT	n(HT20)	2412	Ant1	17.694
NVNT	n(HT20)	2437	Ant1	17.665
NVNT	n(HT20)	2462	Ant1	17.693
NVNT	n(HT40)	2422	Ant1	36.288
NVNT	n(HT40)	2437	Ant1	36.211
NVNT	n(HT40)	2452	Ant1	36.222

Test Graphs

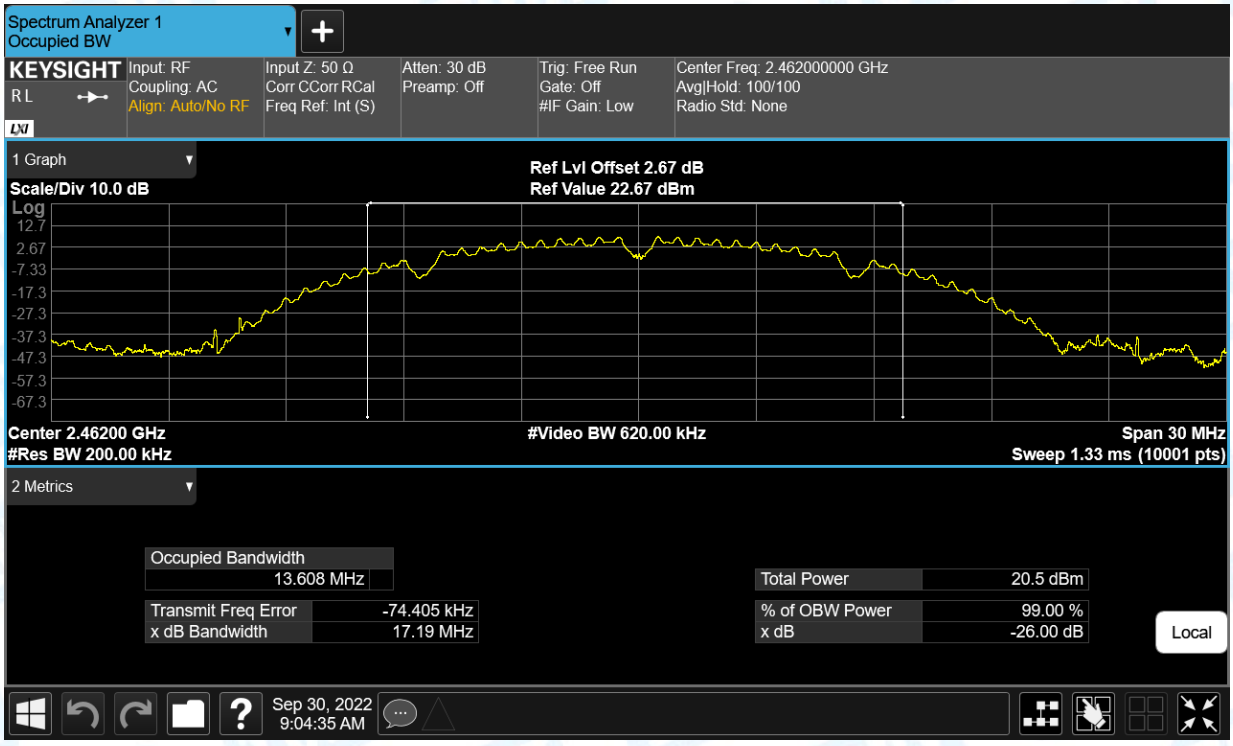
OBW NVNT b 2412MHz Ant1



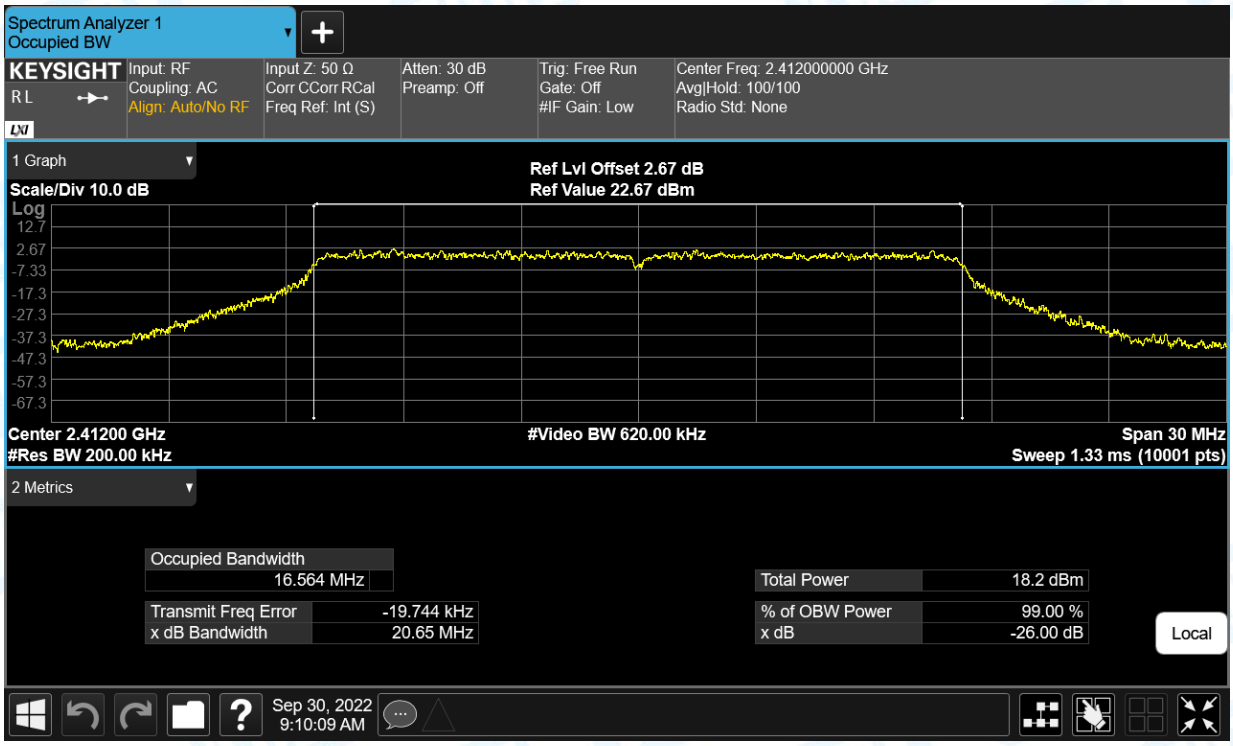
OBW NVNT b 2437MHz Ant1



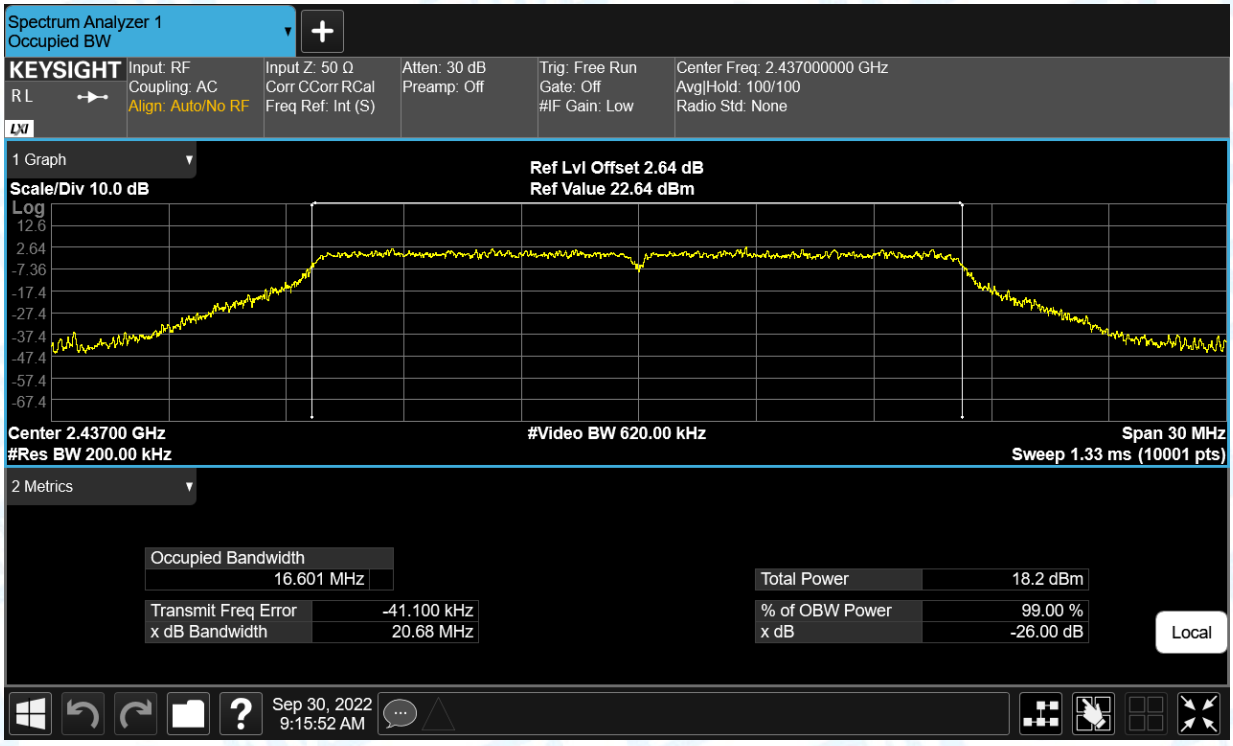
OBW NVNT b 2462MHz Ant1



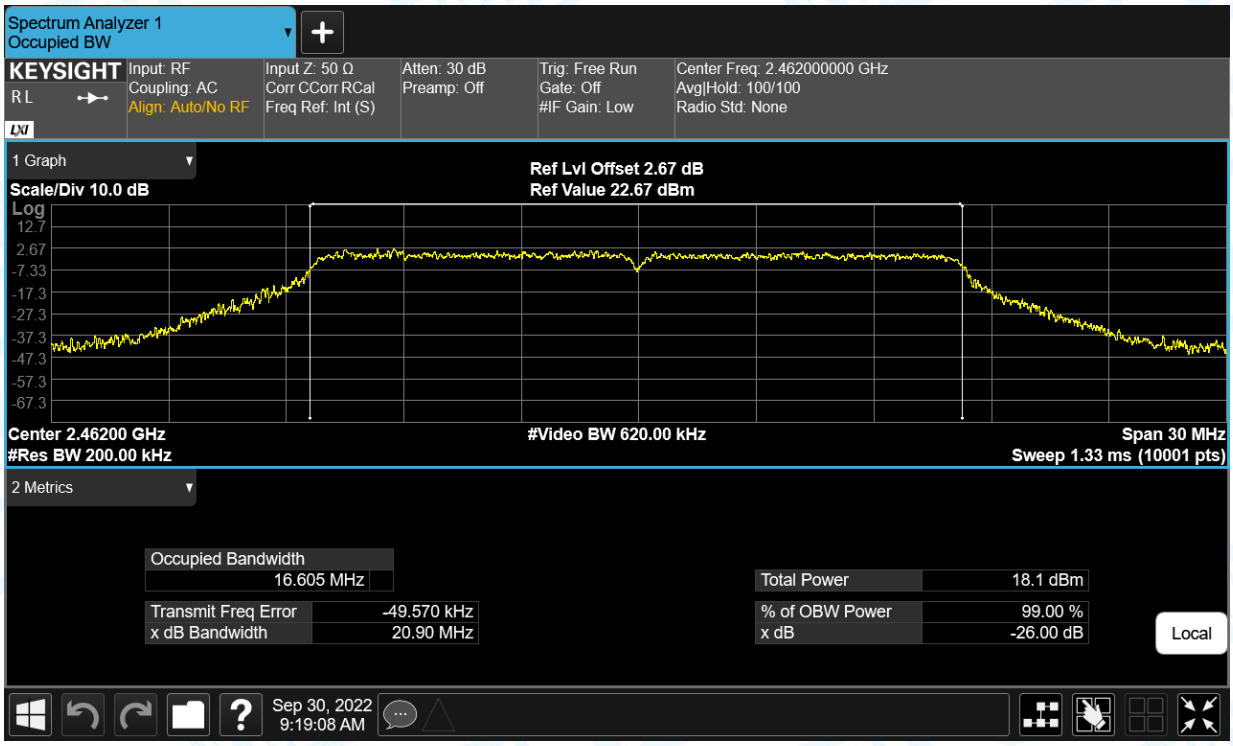
OBW NVNT g 2412MHz Ant1



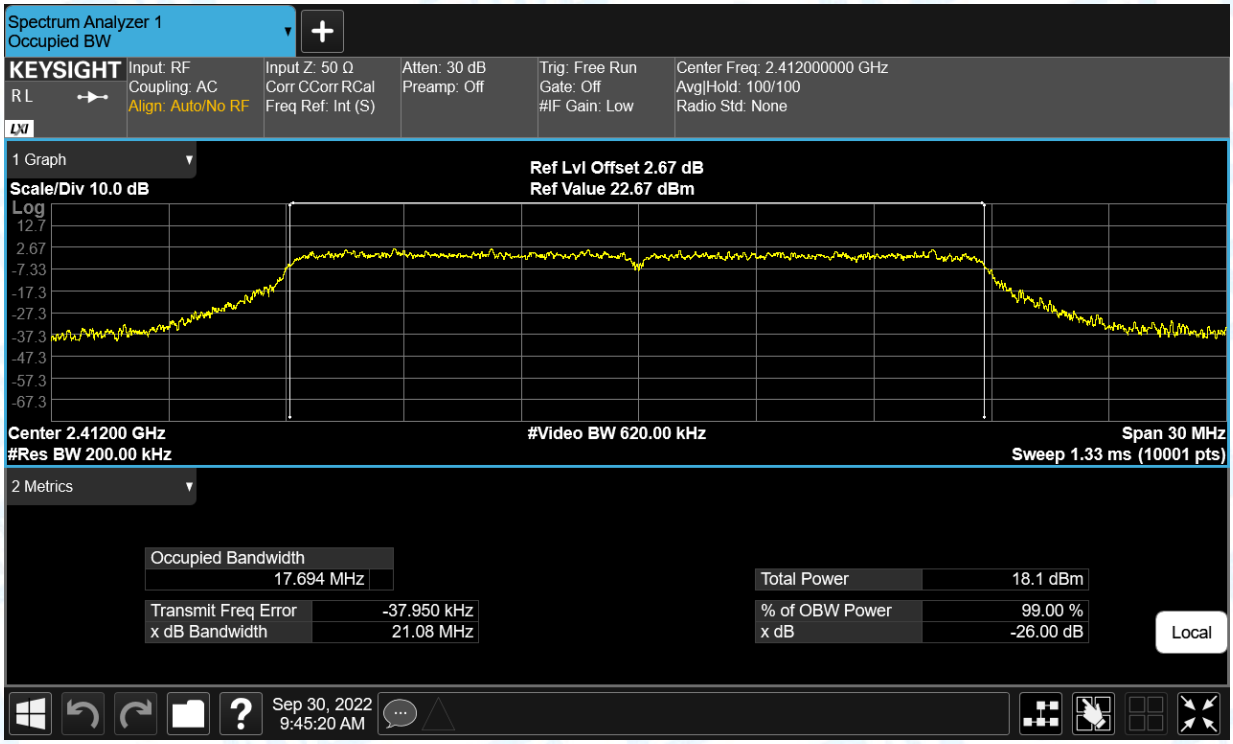
OBW NVNT g 2437MHz Ant1



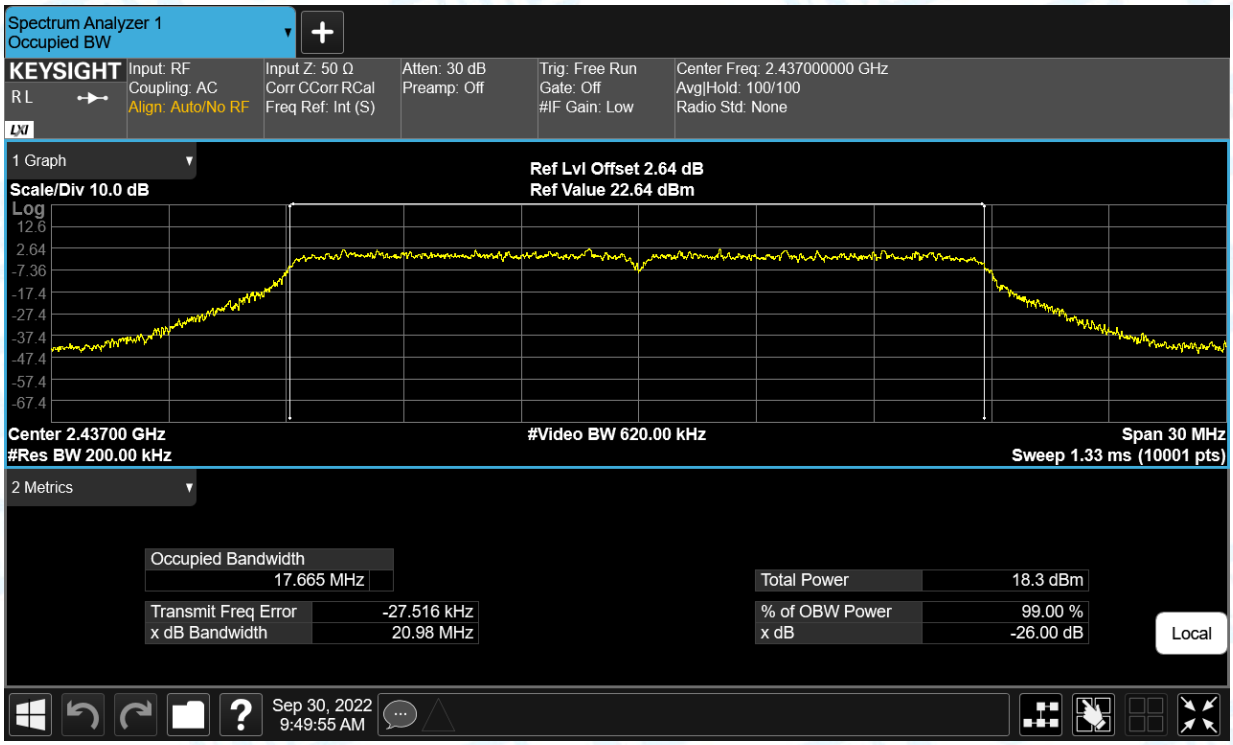
OBW NVNT g 2462MHz Ant1



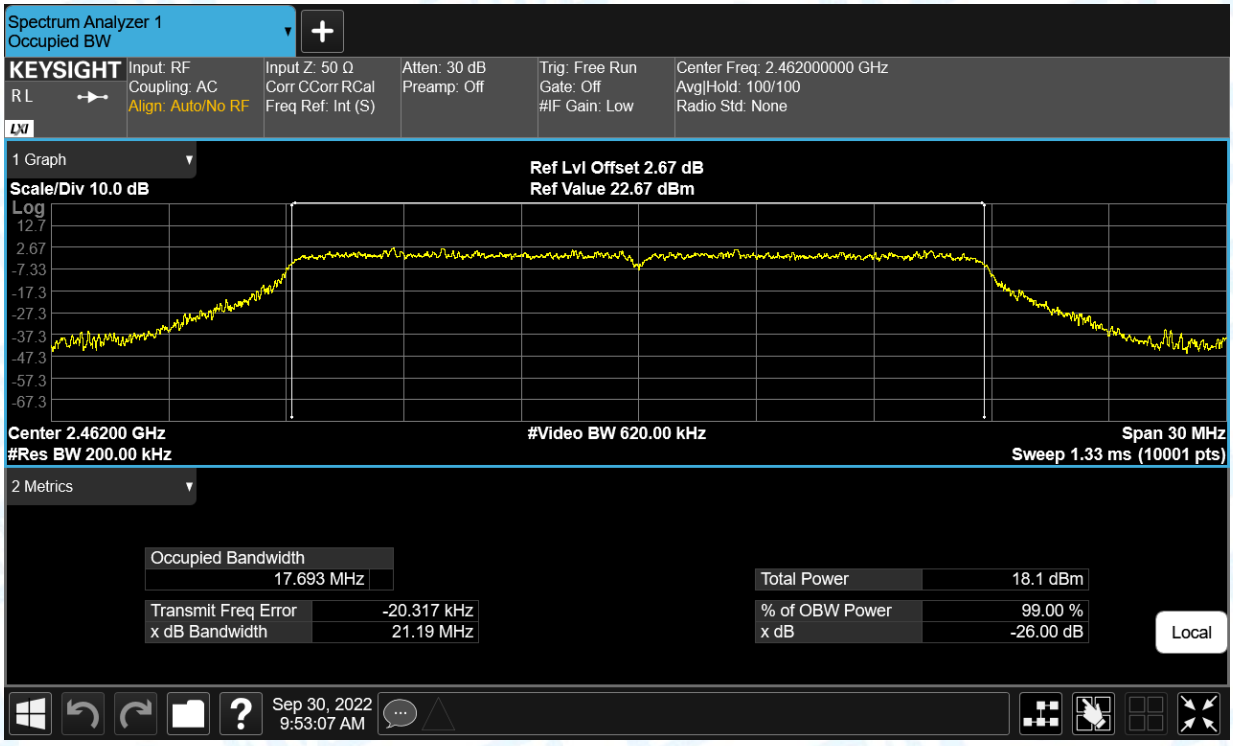
OBW NVNT n(HT20) 2412MHz Ant1



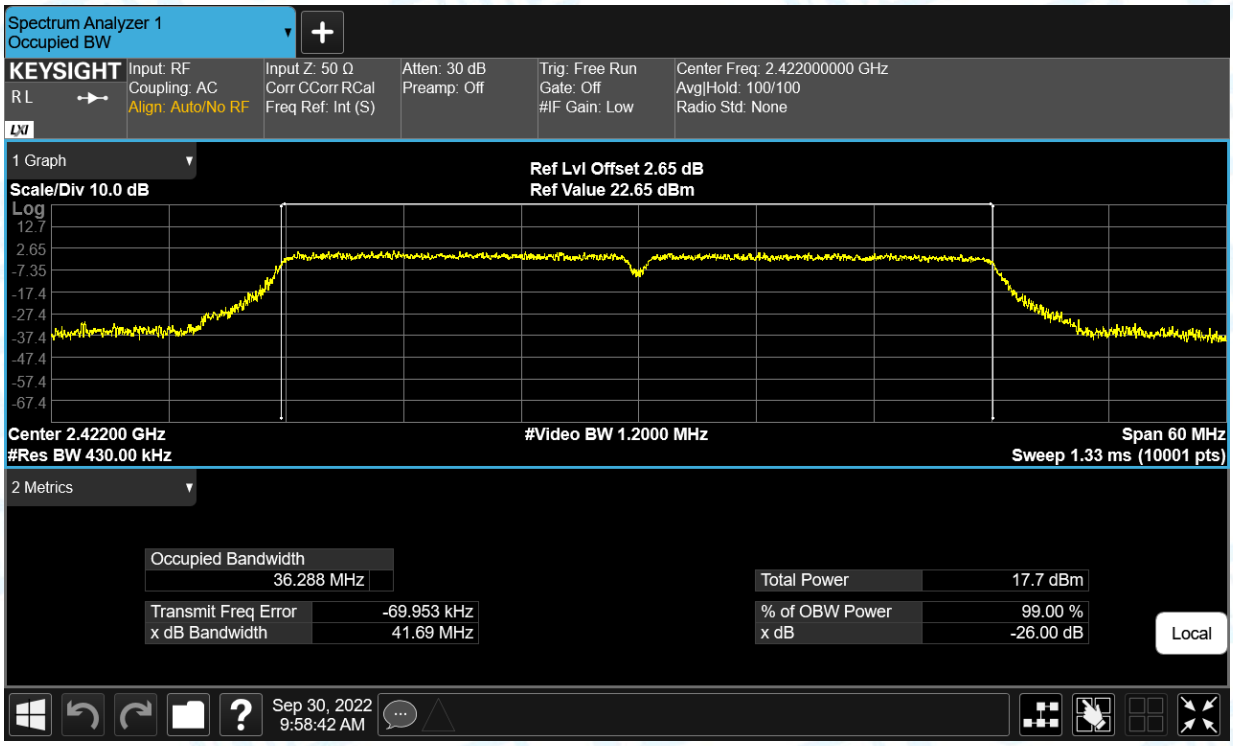
OBW NVNT n(HT20) 2437MHz Ant1



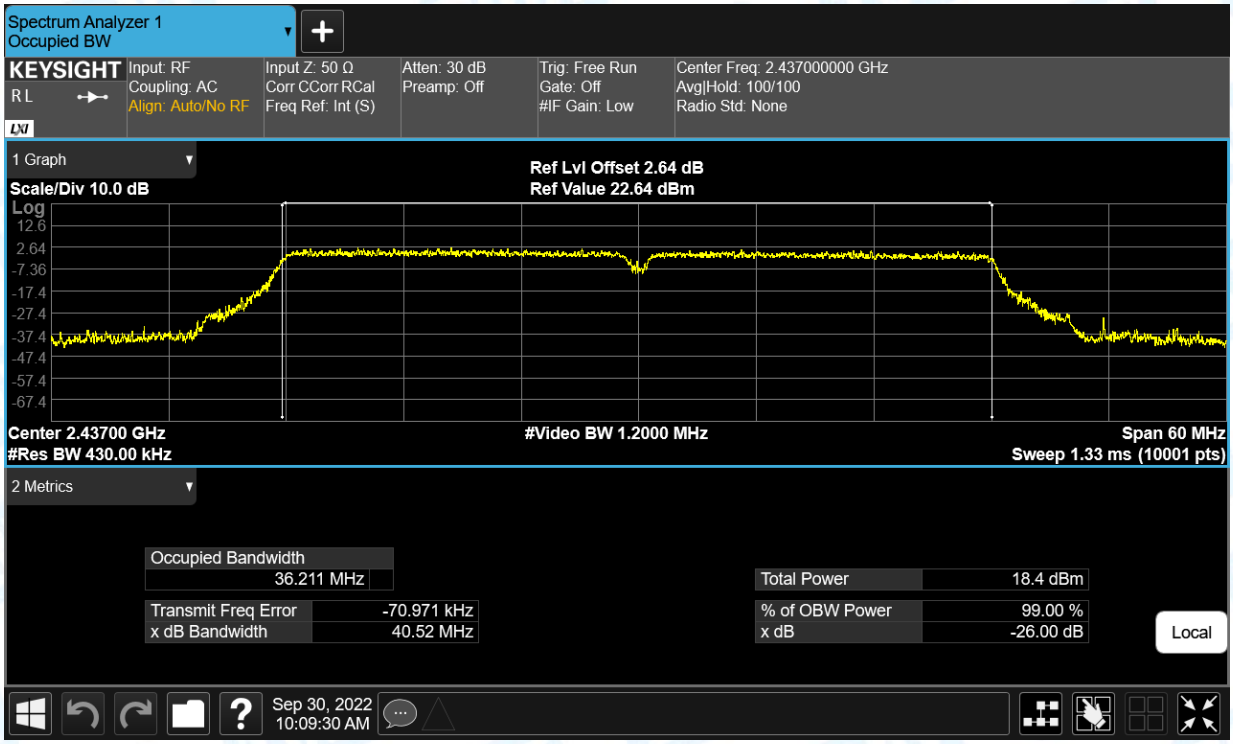
OBW NVNT n(HT20) 2462MHz Ant1



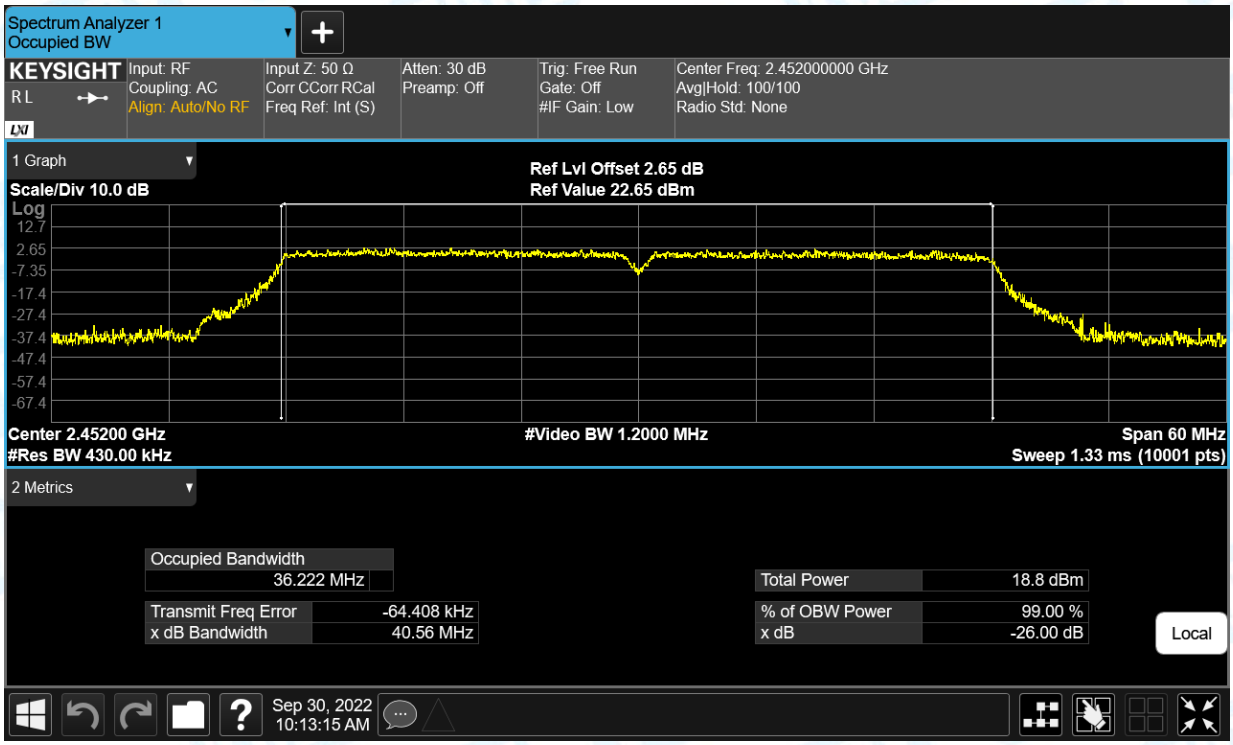
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1

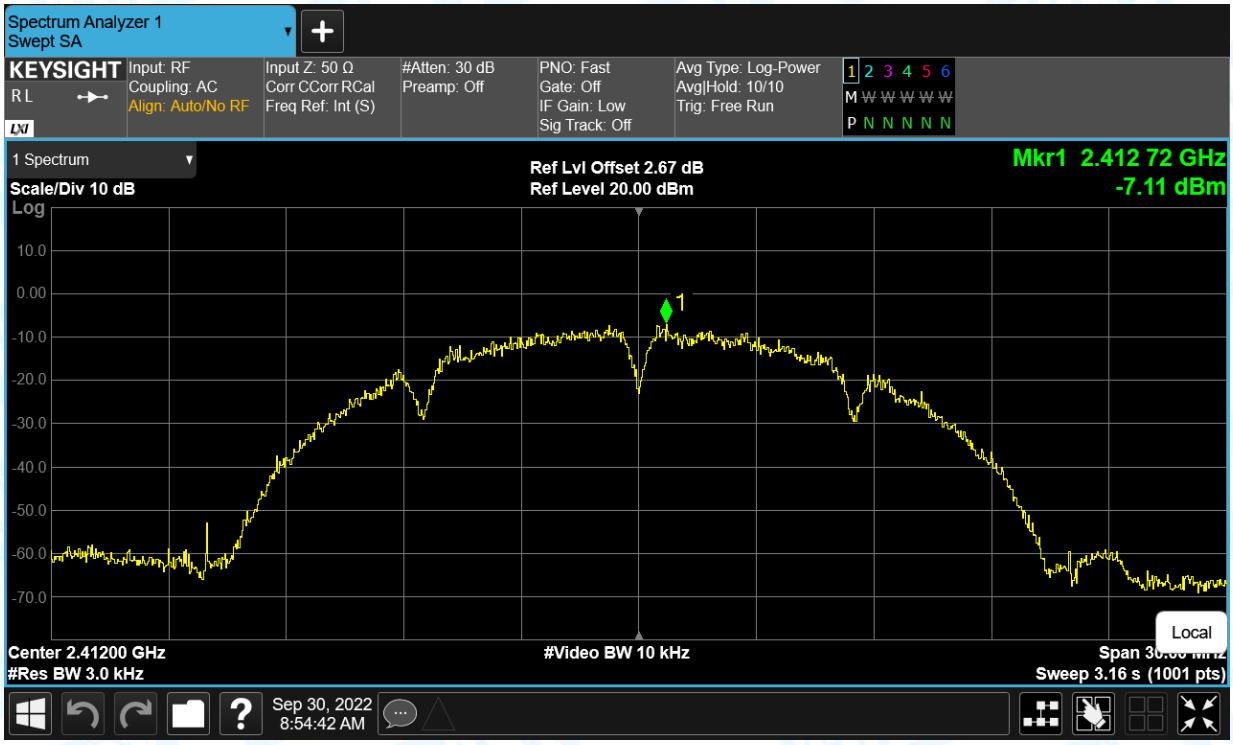


5. Maximum Power Spectral Density Level

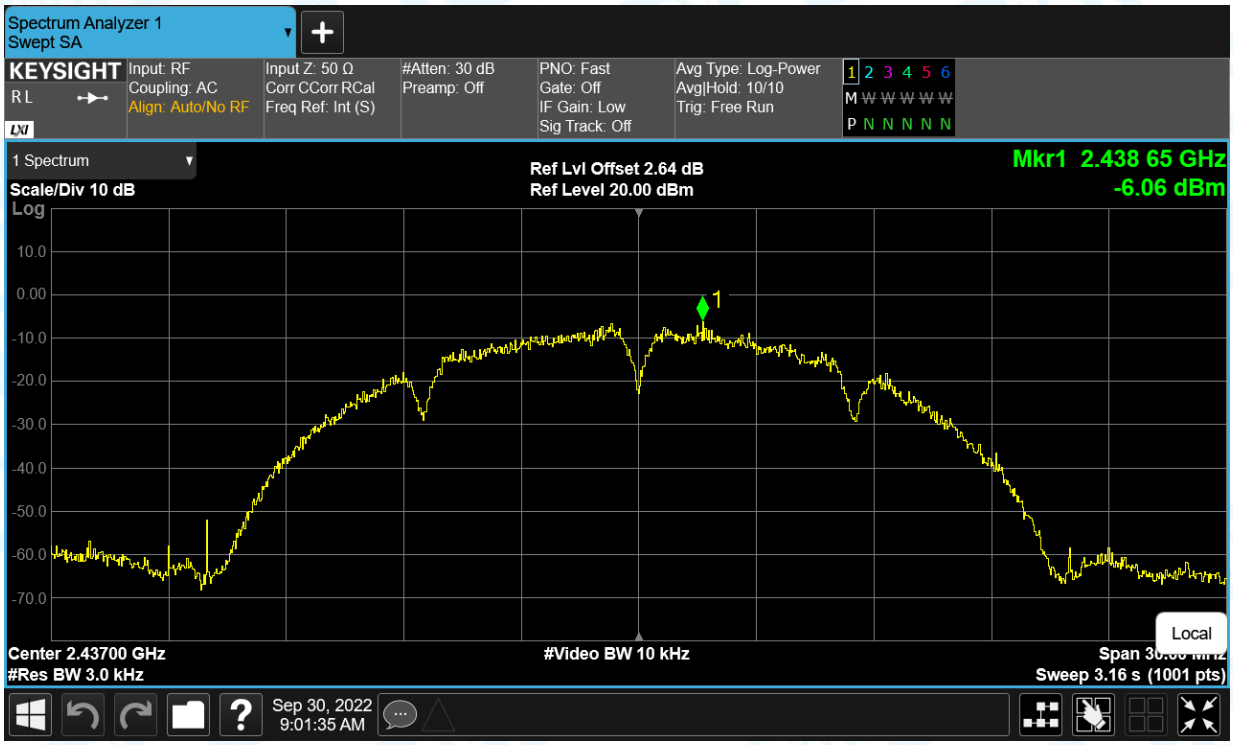
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-7.109	8	Pass
NVNT	b	2437	Ant1	-6.063	8	Pass
NVNT	b	2462	Ant1	-7.266	8	Pass
NVNT	g	2412	Ant1	-11.162	8	Pass
NVNT	g	2437	Ant1	-12.704	8	Pass
NVNT	g	2462	Ant1	-12.325	8	Pass
NVNT	n(HT20)	2412	Ant1	-12.398	8	Pass
NVNT	n(HT20)	2437	Ant1	-12.202	8	Pass
NVNT	n(HT20)	2462	Ant1	-11.91	8	Pass
NVNT	n(HT40)	2422	Ant1	-15.942	8	Pass
NVNT	n(HT40)	2437	Ant1	-15.118	8	Pass
NVNT	n(HT40)	2452	Ant1	-14.901	8	Pass

Test Graphs

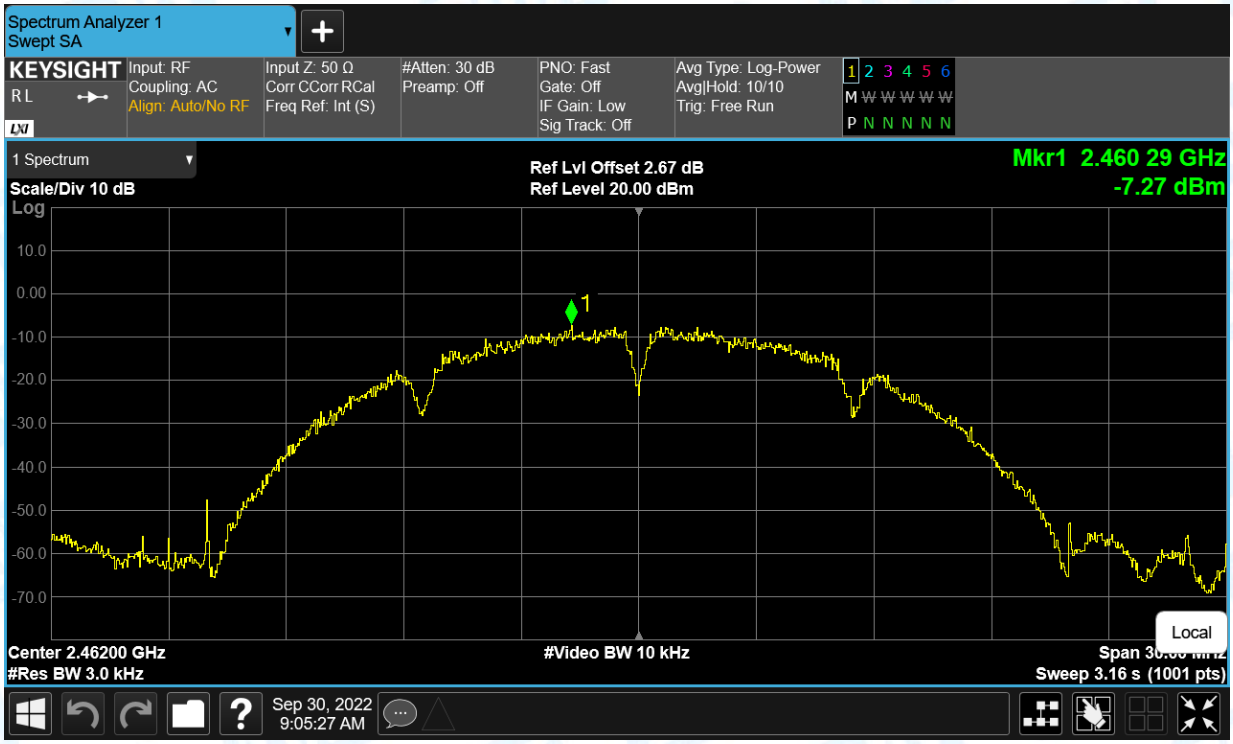
PSD NVNT b 2412MHz Ant1



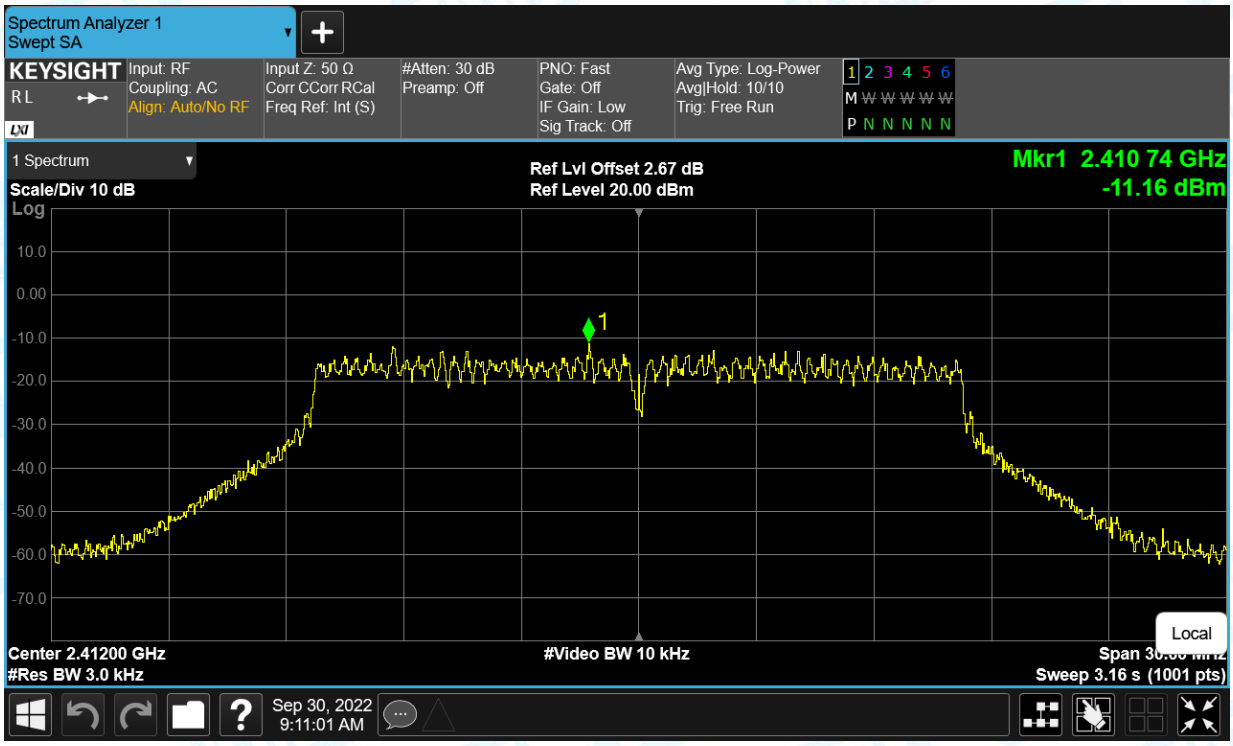
PSD NVNT b 2437MHz Ant1



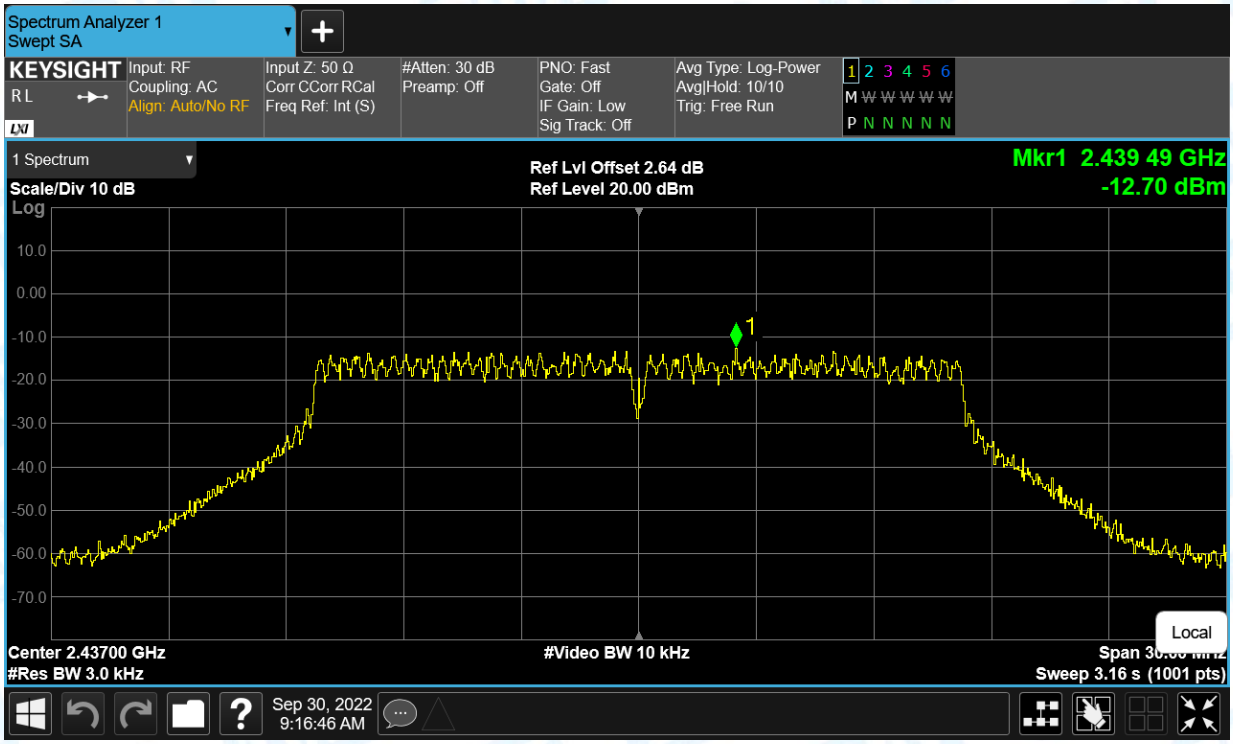
PSD NVNT b 2462MHz Ant1



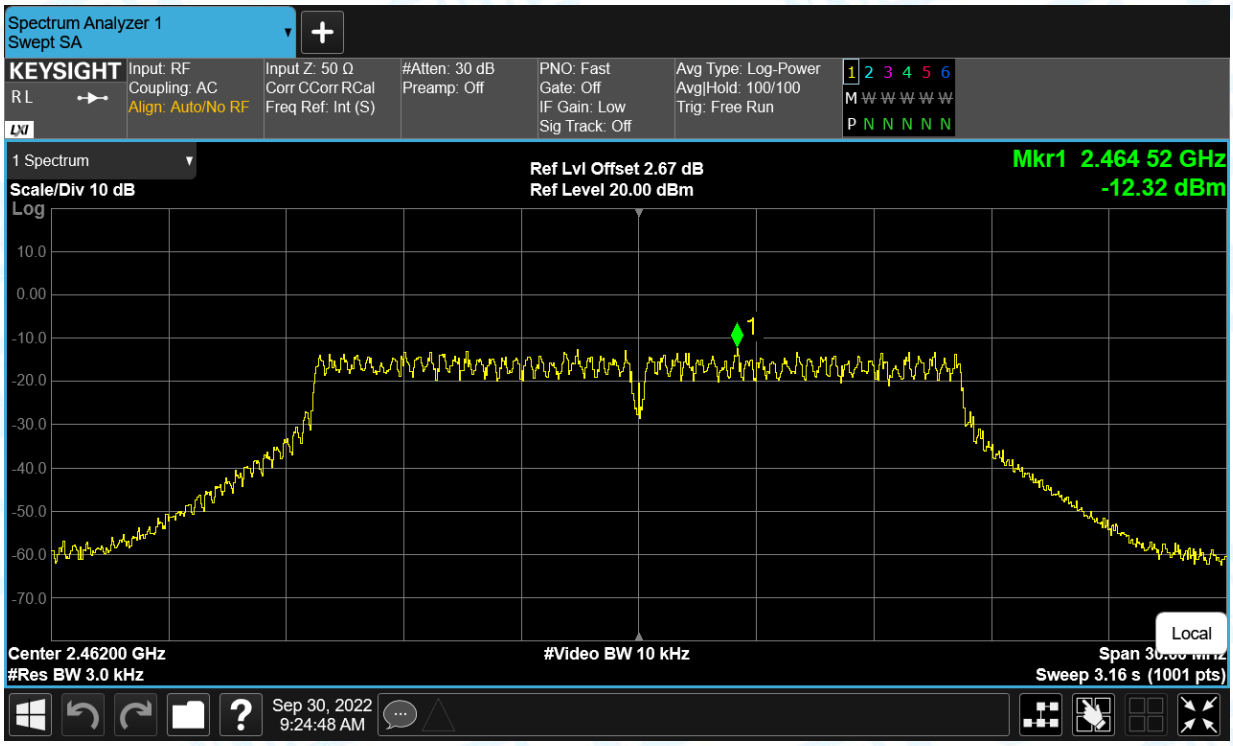
PSD NVNT g 2412MHz Ant1



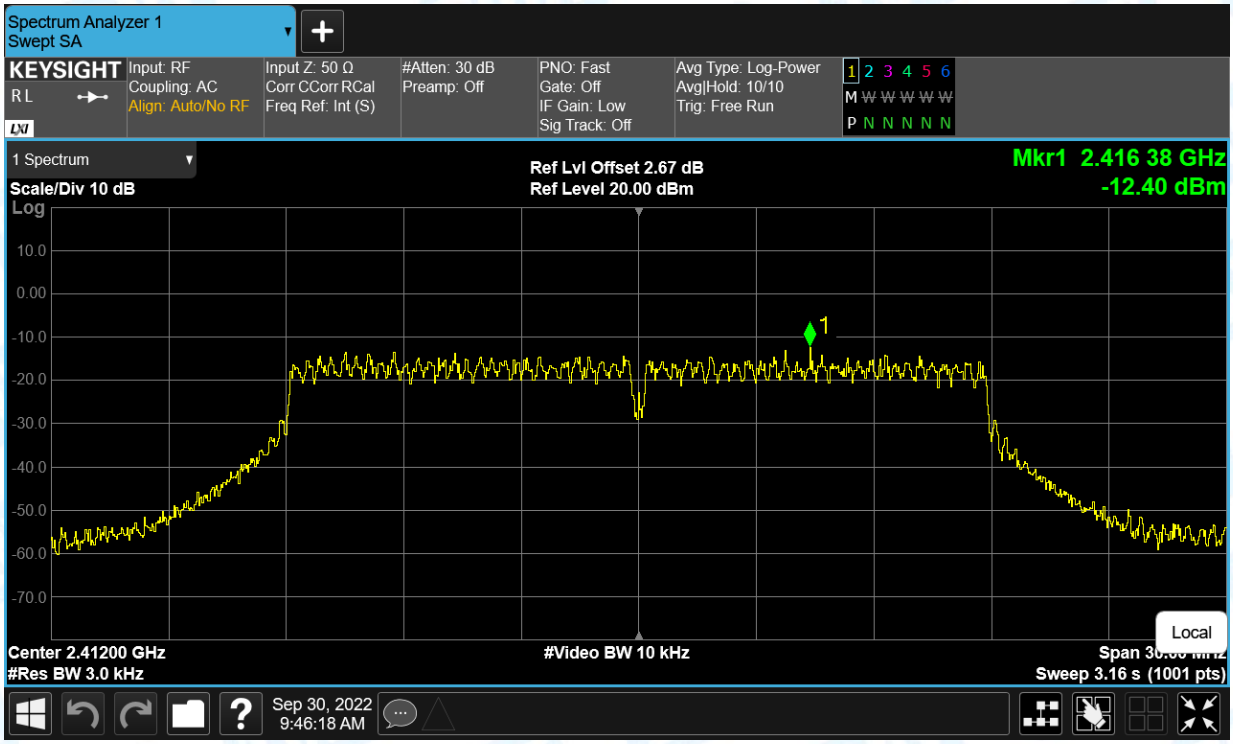
PSD NVNT g 2437MHz Ant1



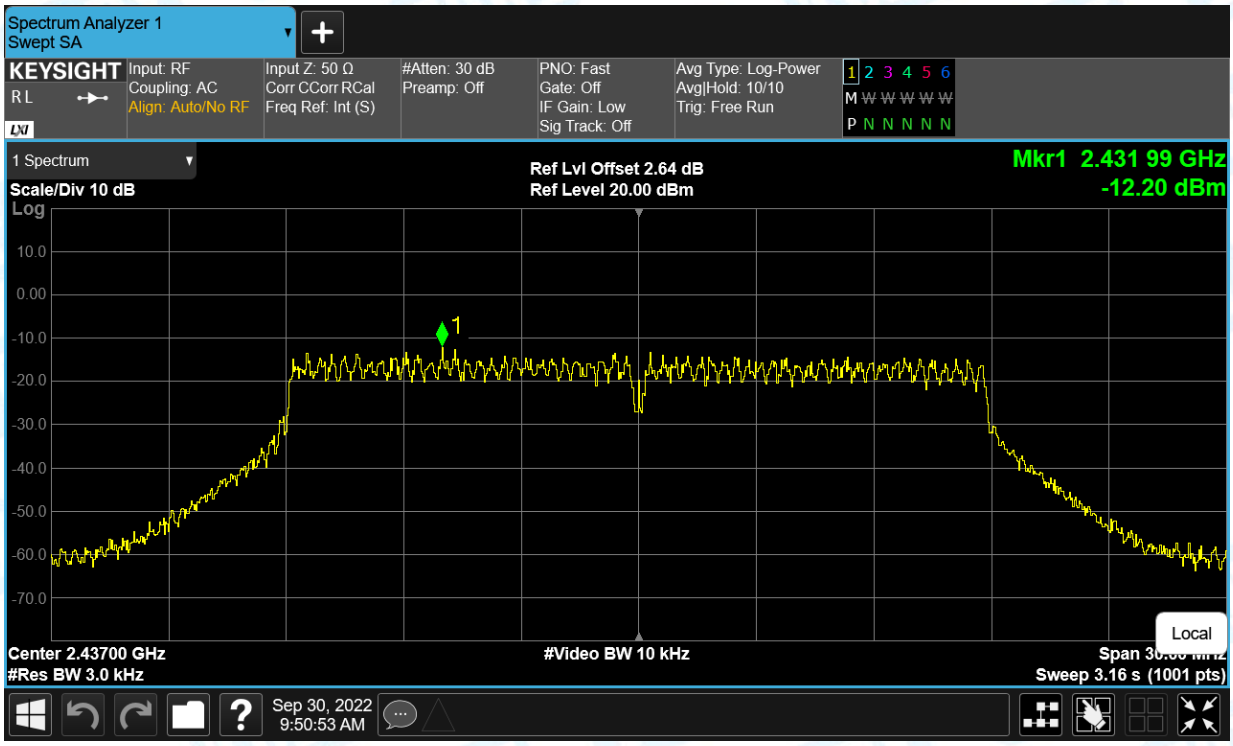
PSD NVNT g 2462MHz Ant1



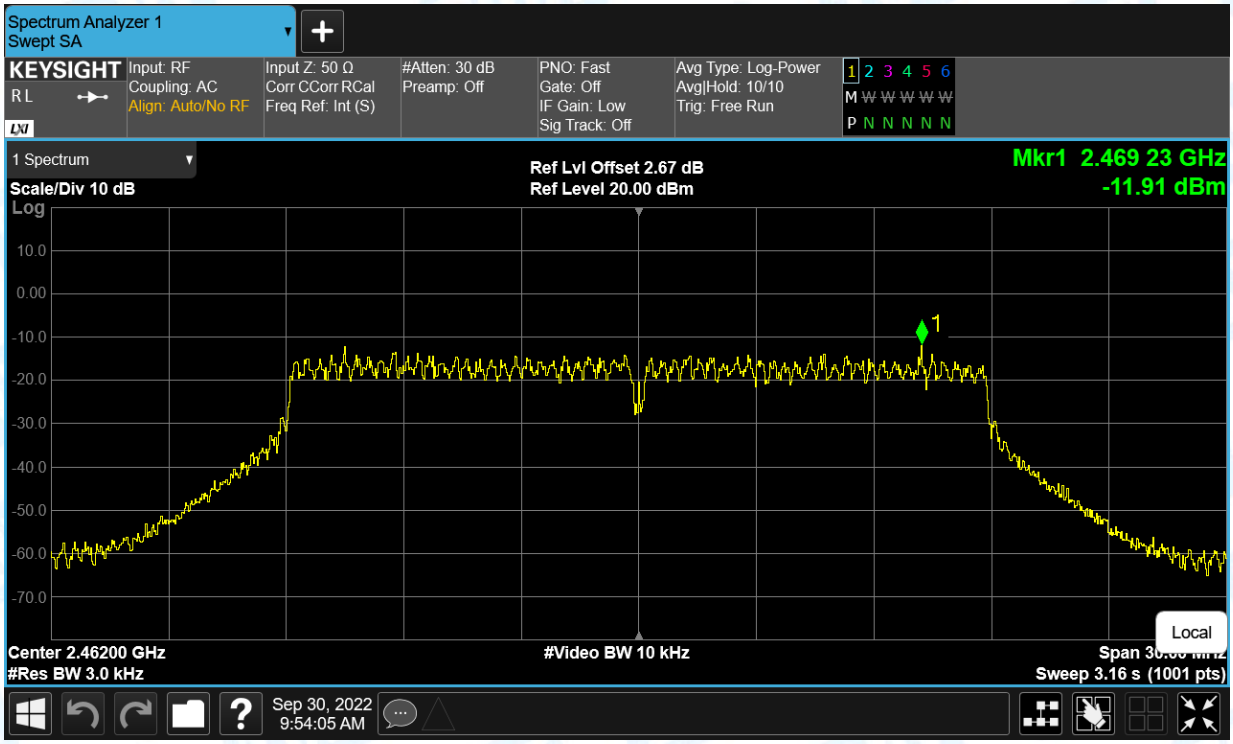
PSD NVNT n(HT20) 2412MHz Ant1



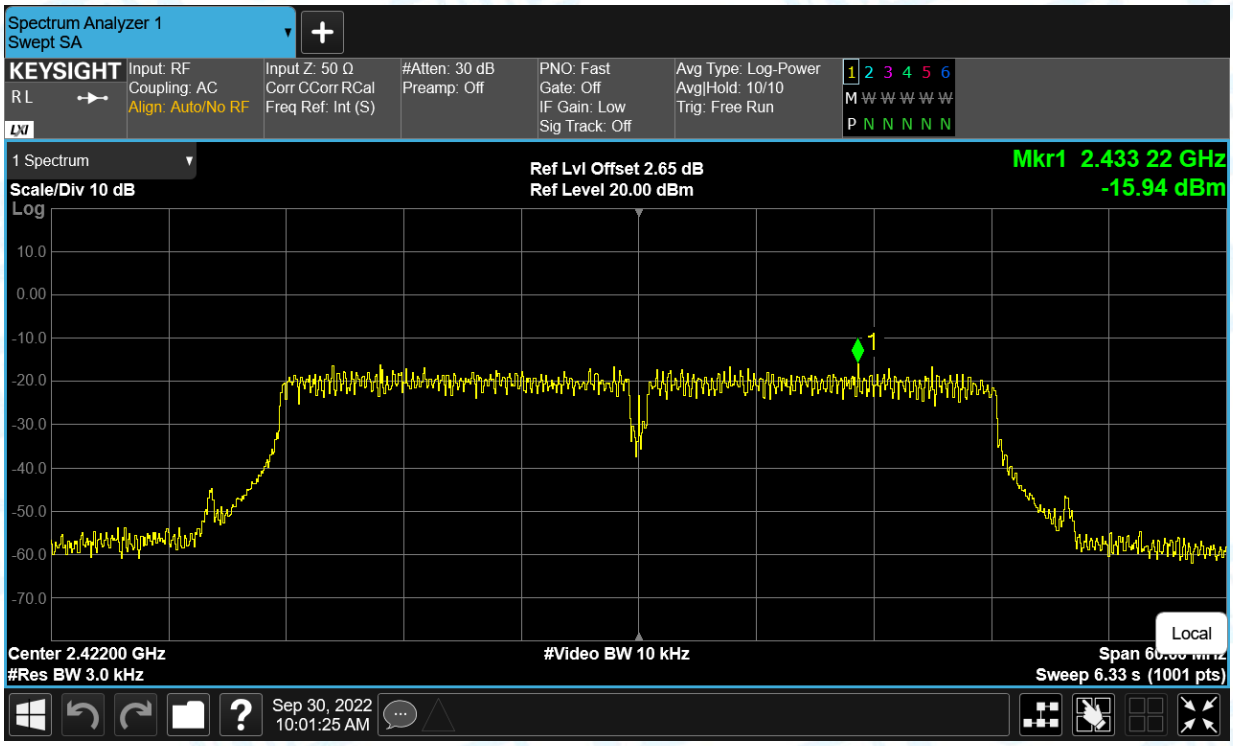
PSD NVNT n(HT20) 2437MHz Ant1



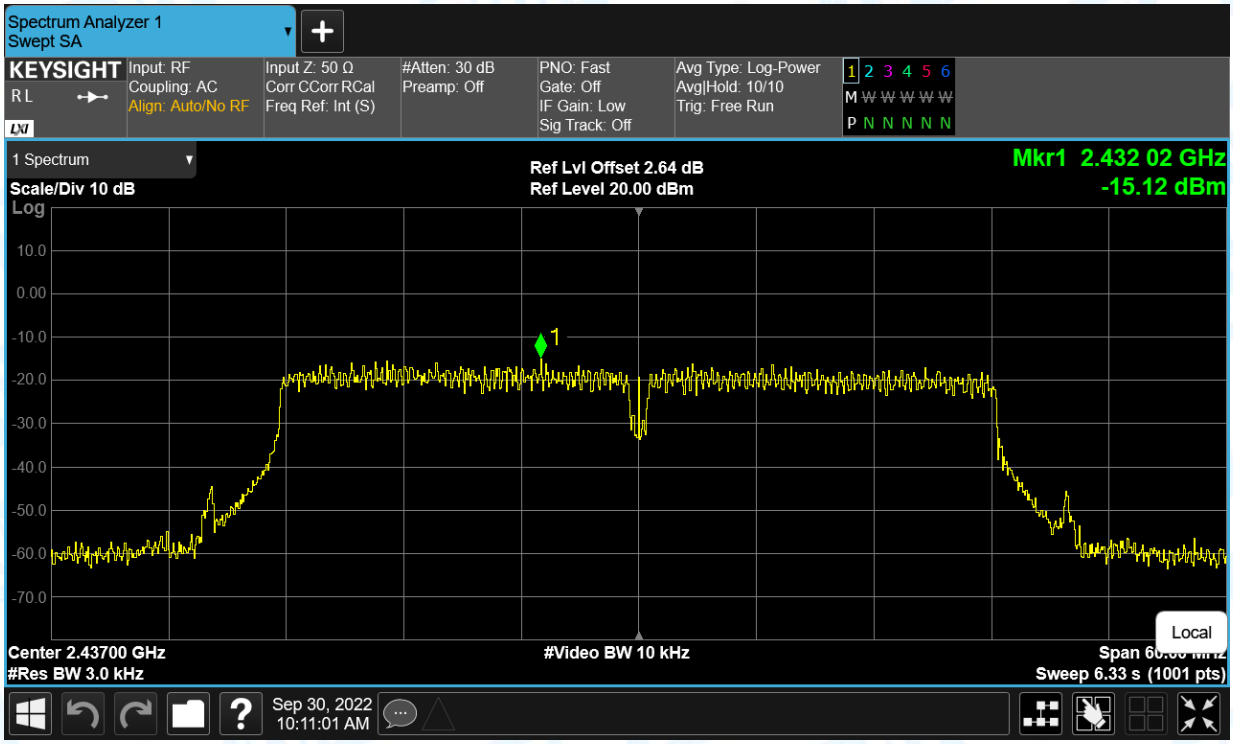
PSD NVNT n(HT20) 2462MHz Ant1



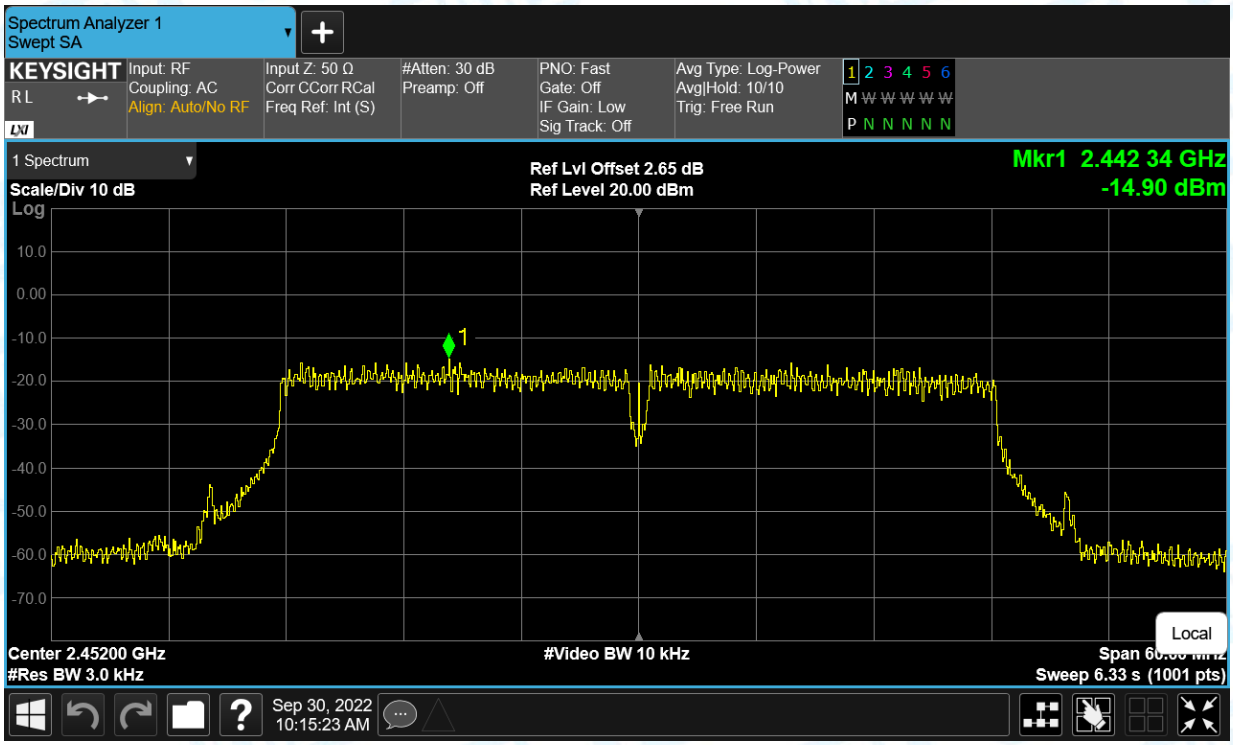
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

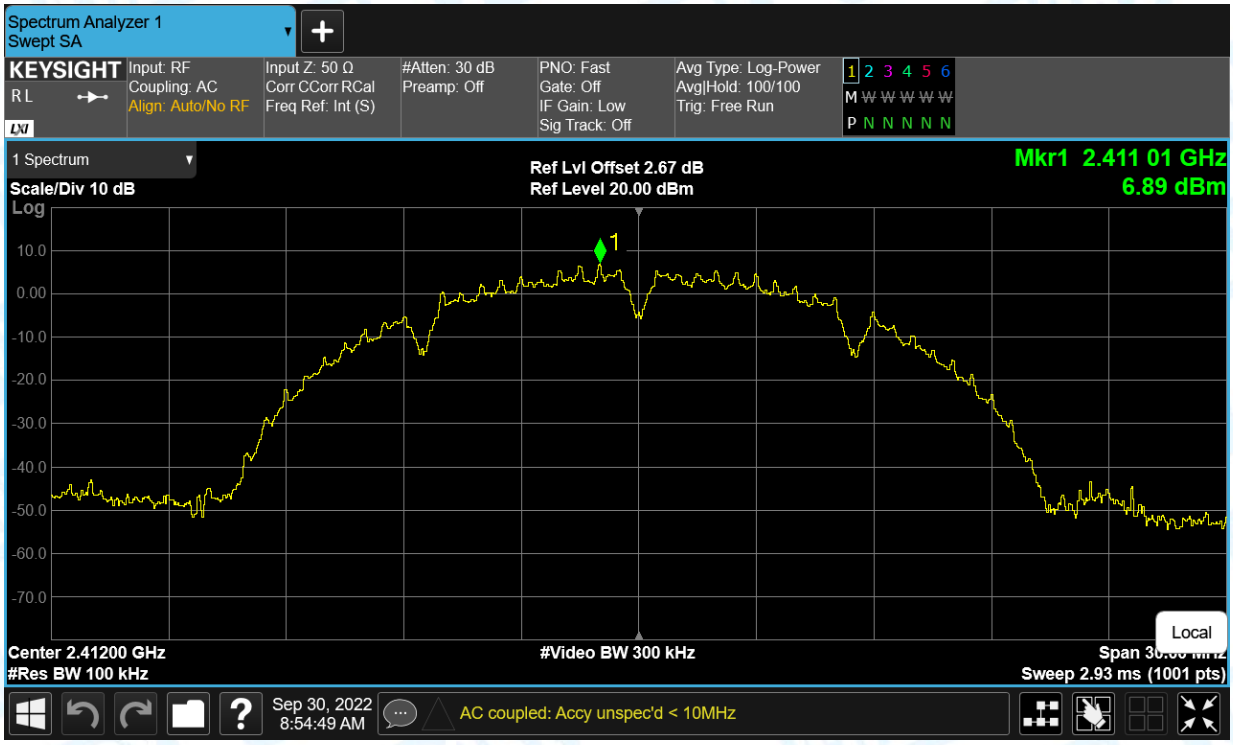


6. Band Edge

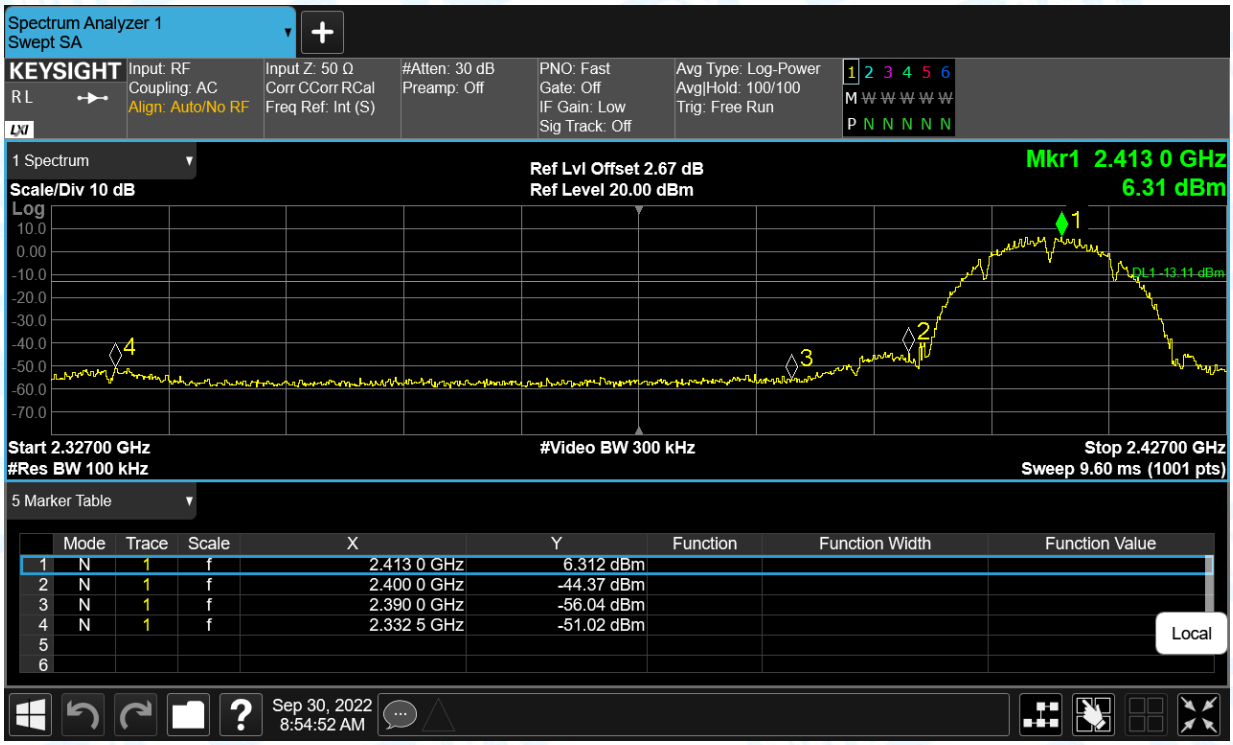
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-57.91	-20	Pass
NVNT	b	2462	Ant1	-59.01	-20	Pass
NVNT	g	2412	Ant1	-48.77	-20	Pass
NVNT	g	2462	Ant1	-47.13	-20	Pass
NVNT	n(HT20)	2412	Ant1	-44.83	-20	Pass
NVNT	n(HT20)	2462	Ant1	-47.32	-20	Pass
NVNT	n(HT40)	2422	Ant1	-40	-20	Pass
NVNT	n(HT40)	2452	Ant1	-41.18	-20	Pass

Test Graphs

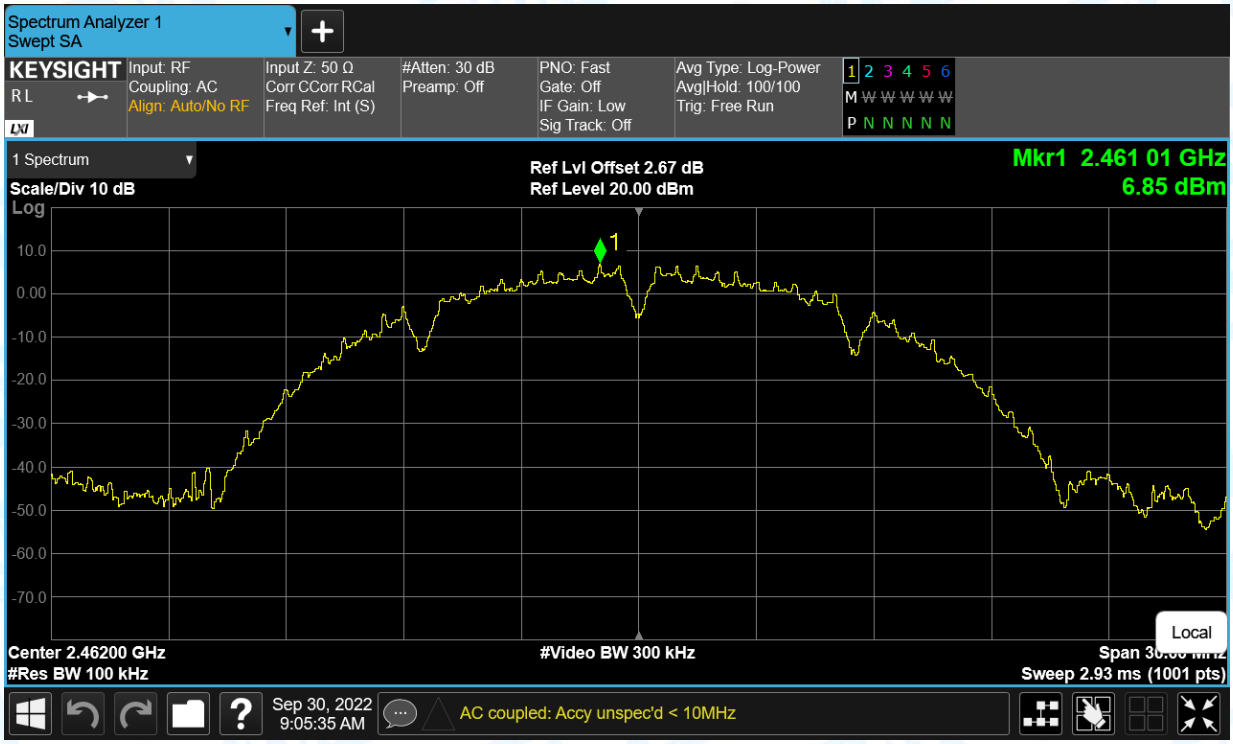
Band Edge NVNT b 2412MHz Ant1 Ref



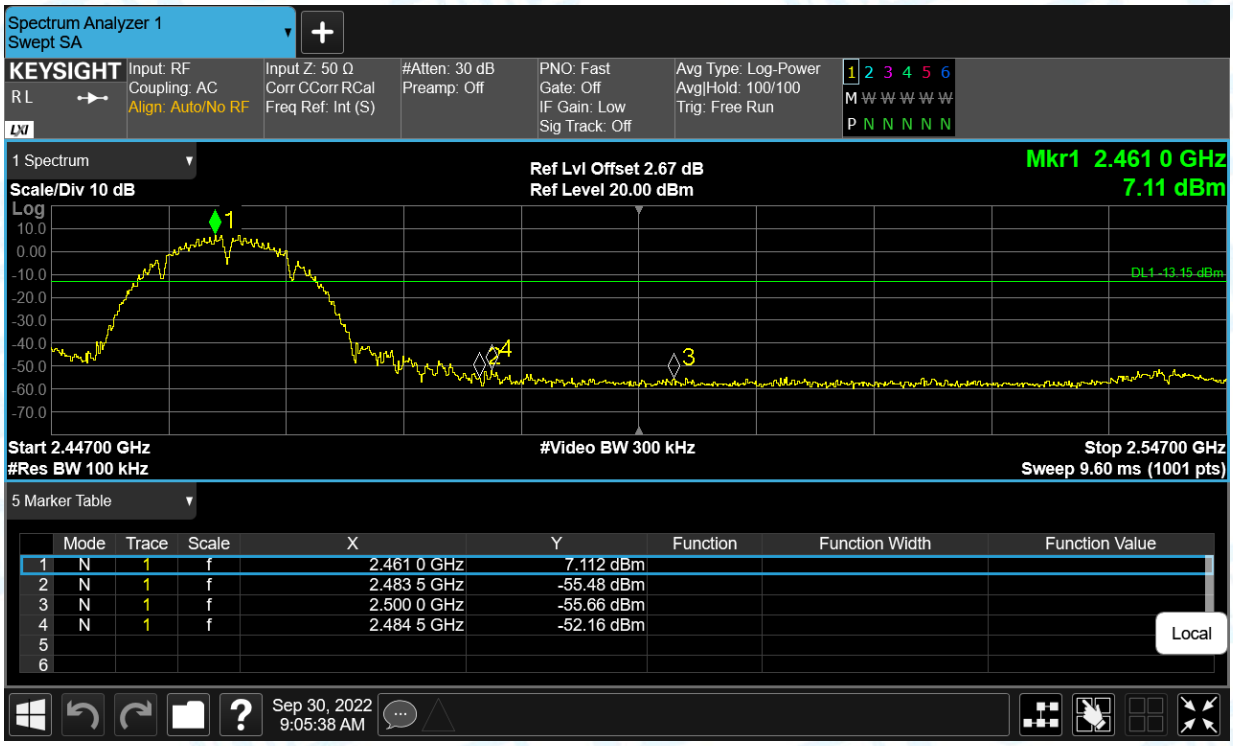
Band Edge NVNT b 2412MHz Ant1 Emission



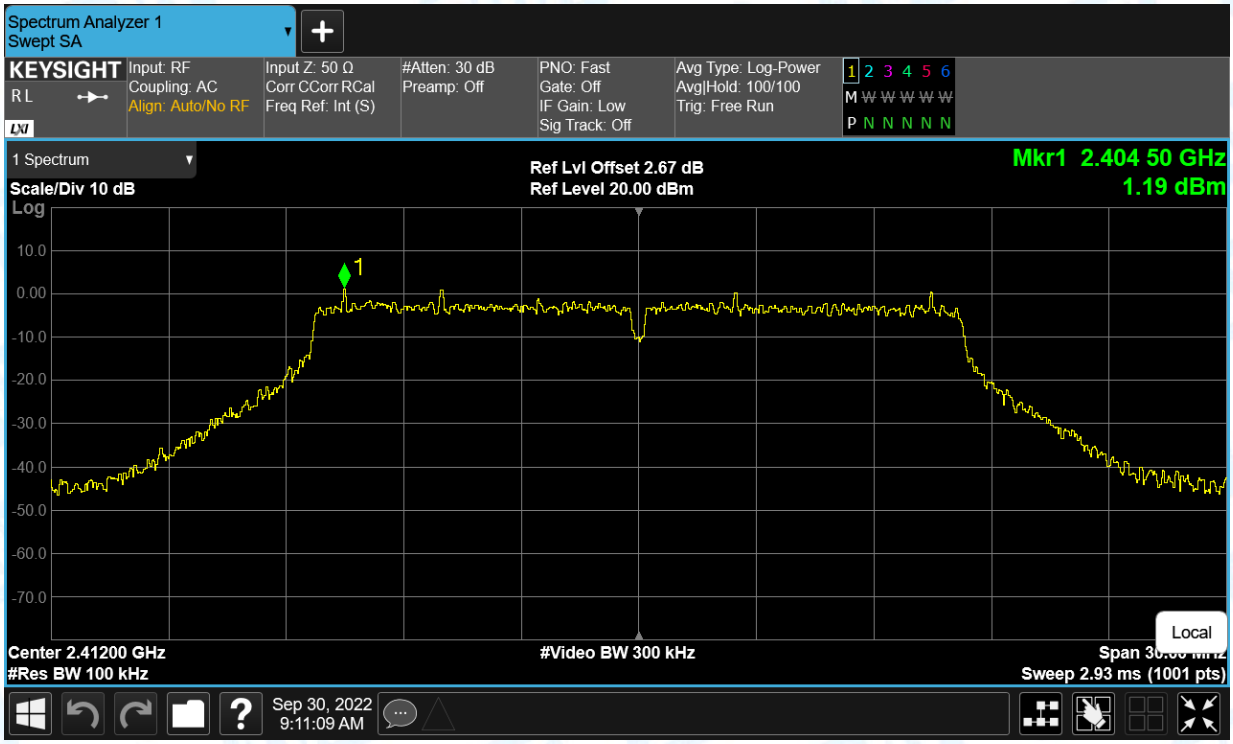
Band Edge NVNT b 2462MHz Ant1 Ref



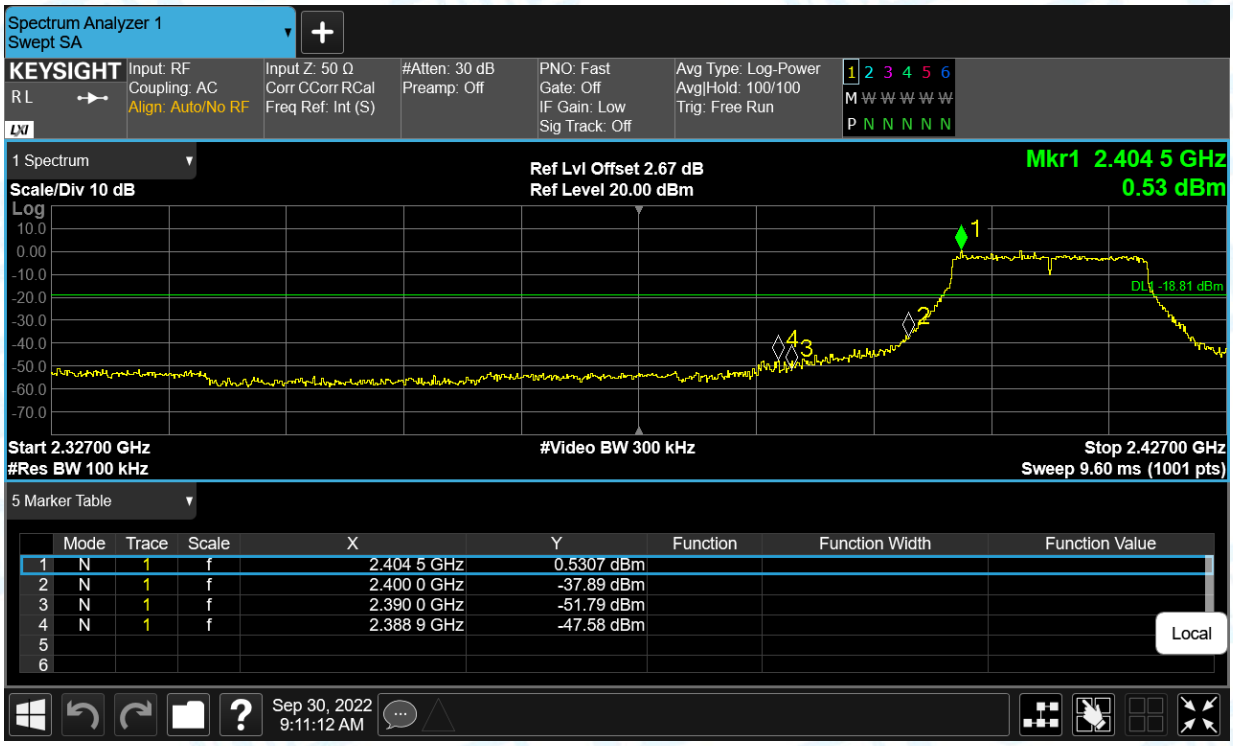
Band Edge NVNT b 2462MHz Ant1 Emission



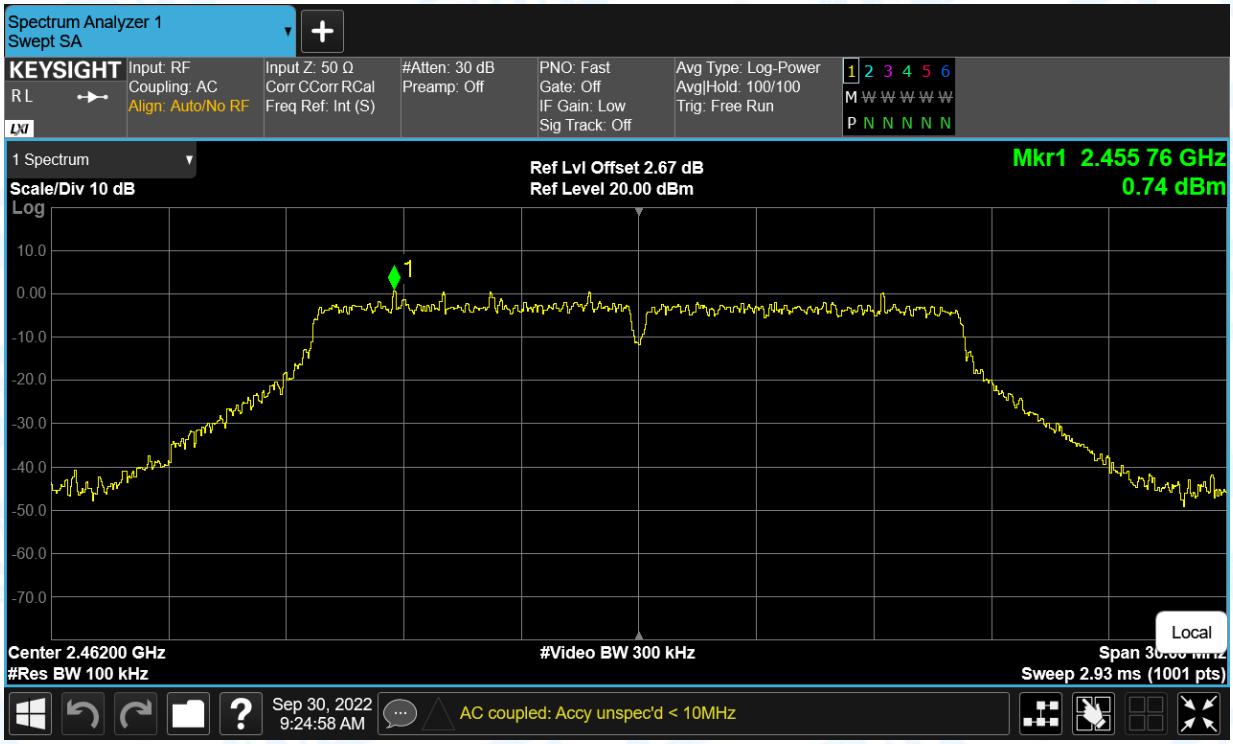
Band Edge NVNT g 2412MHz Ant1 Ref



Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission