

RF Test Data for 2.4G WiFi (Conducted Measurements)

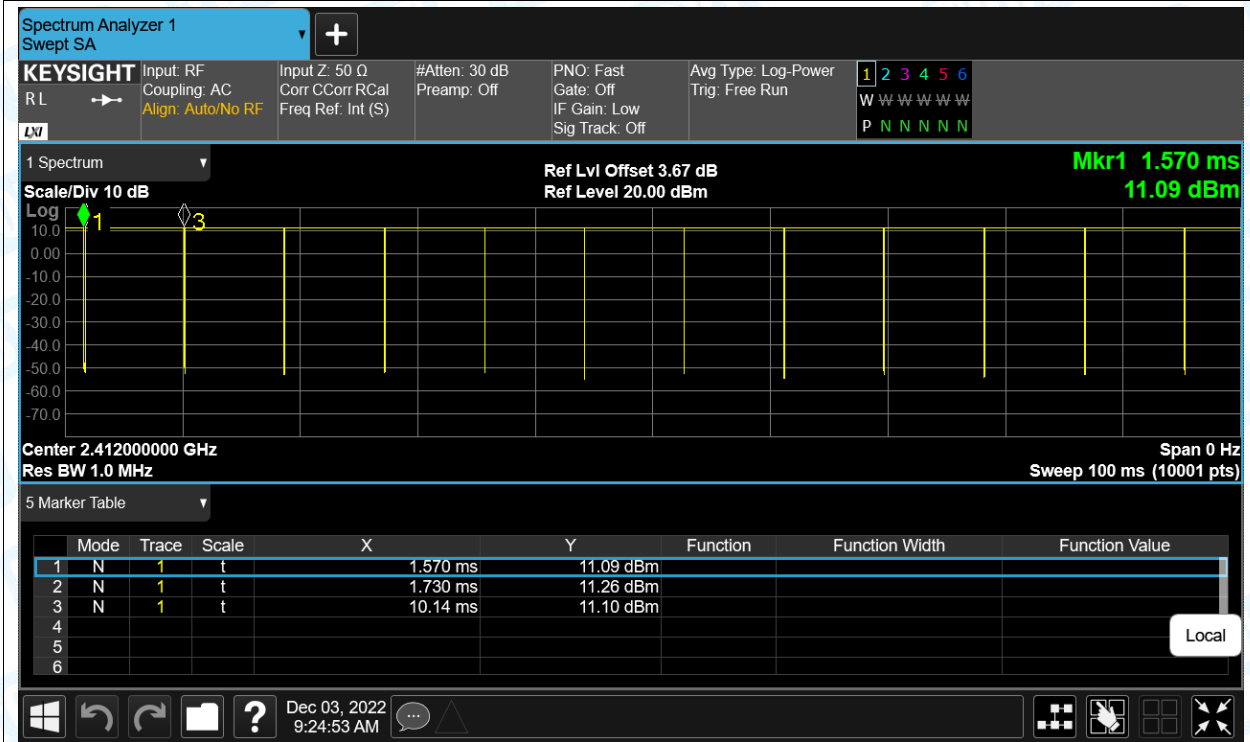
General Description of EUT	
Product Name:	RMS7688A IOT Router Module
Test Model:	RMS7688A
Sample ID:	202210-0264-4-2#
Environmental Conditions	
Temperature:	23°C
Relative Humidity:	50%
Test Voltage:	DC 3.3V
Test Engineer:	LiuJiming
Note: For a more detailed features description, please refer to the report TBR-C-202210-0264-7.	

Duty Cycle

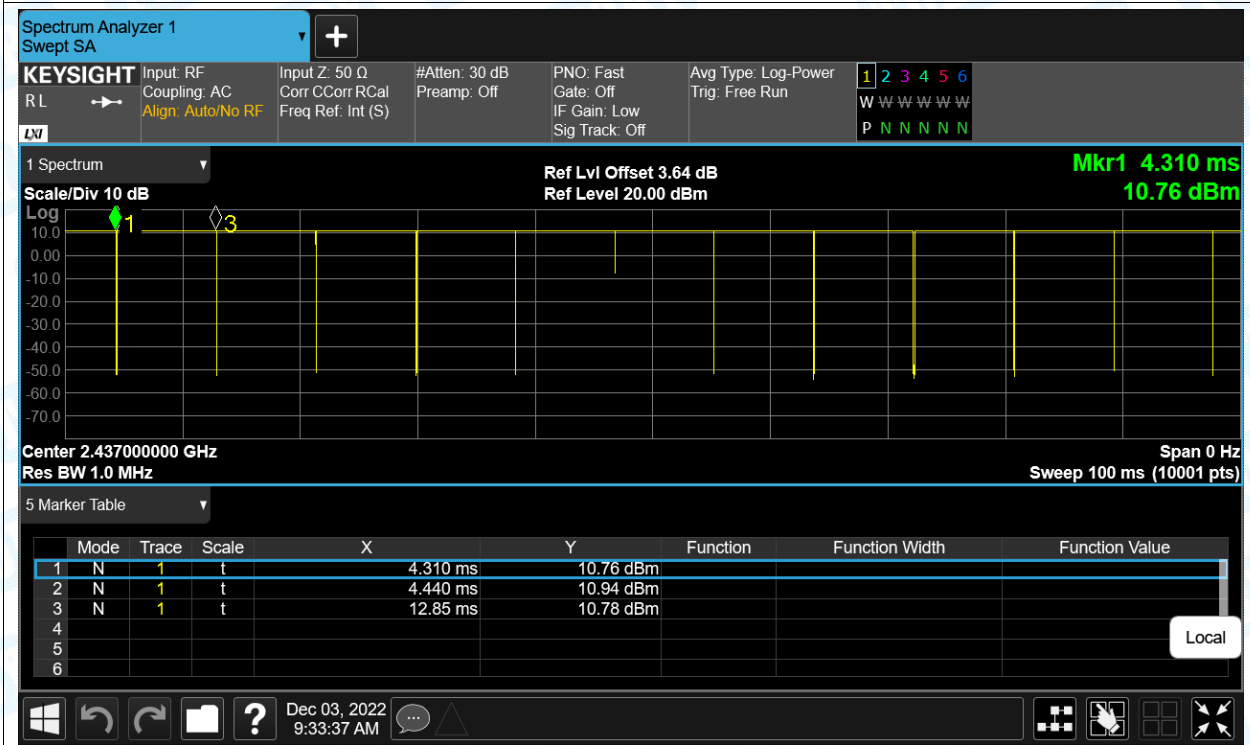
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	98.13	0.08	0.10
NVNT	b	2437	Ant1	98.48	0.07	0.10
NVNT	b	2462	Ant1	99.06	0.04	0.10
NVNT	g	2412	Ant1	93.33	0.3	0.71
NVNT	g	2437	Ant1	94.59	0.24	0.71
NVNT	g	2462	Ant1	97.2	0.12	0.72
NVNT	n(HT20)	2412	Ant1	92.25	0.35	0.76
NVNT	n(HT20)	2437	Ant1	94.24	0.26	0.76
NVNT	n(HT20)	2462	Ant1	96.32	0.16	0.76
NVNT	n(HT40)	2422	Ant1	89.04	0.5	1.54
NVNT	n(HT40)	2437	Ant1	87.84	0.56	1.54
NVNT	n(HT40)	2452	Ant1	94.2	0.26	1.54

Test Graphs

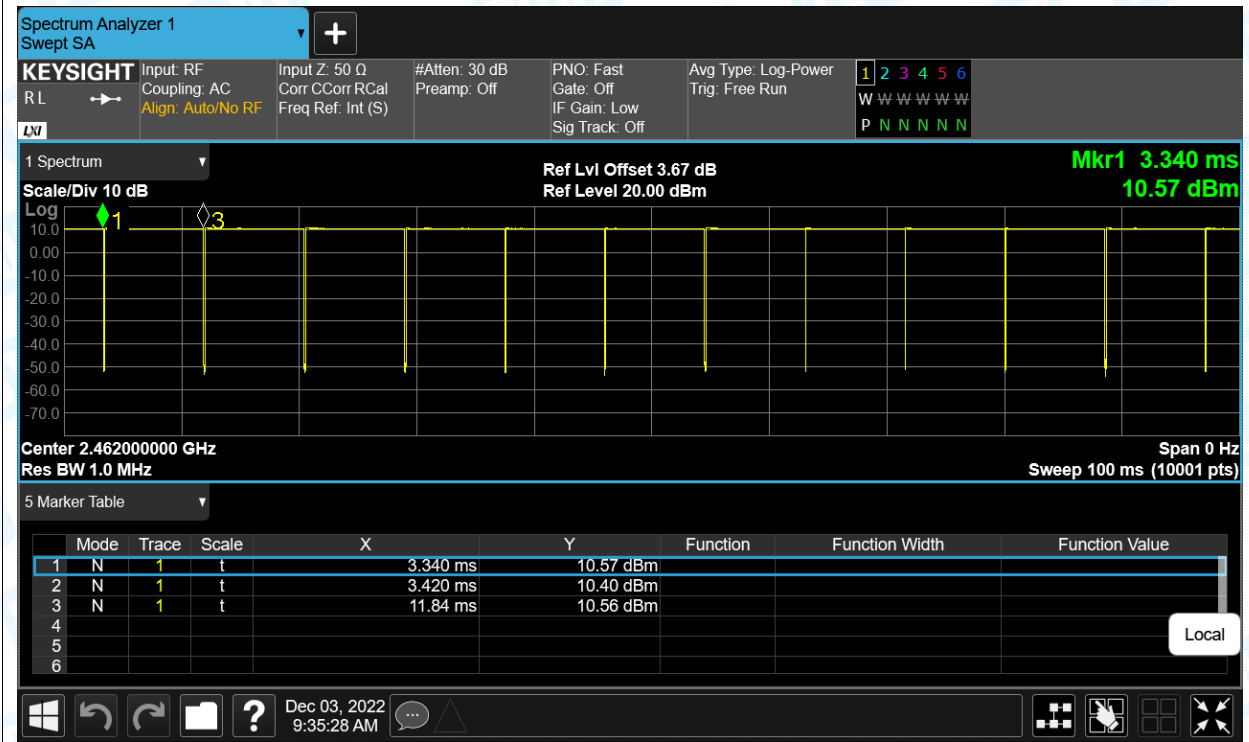
Duty Cycle NVNT b 2412MHz Ant1



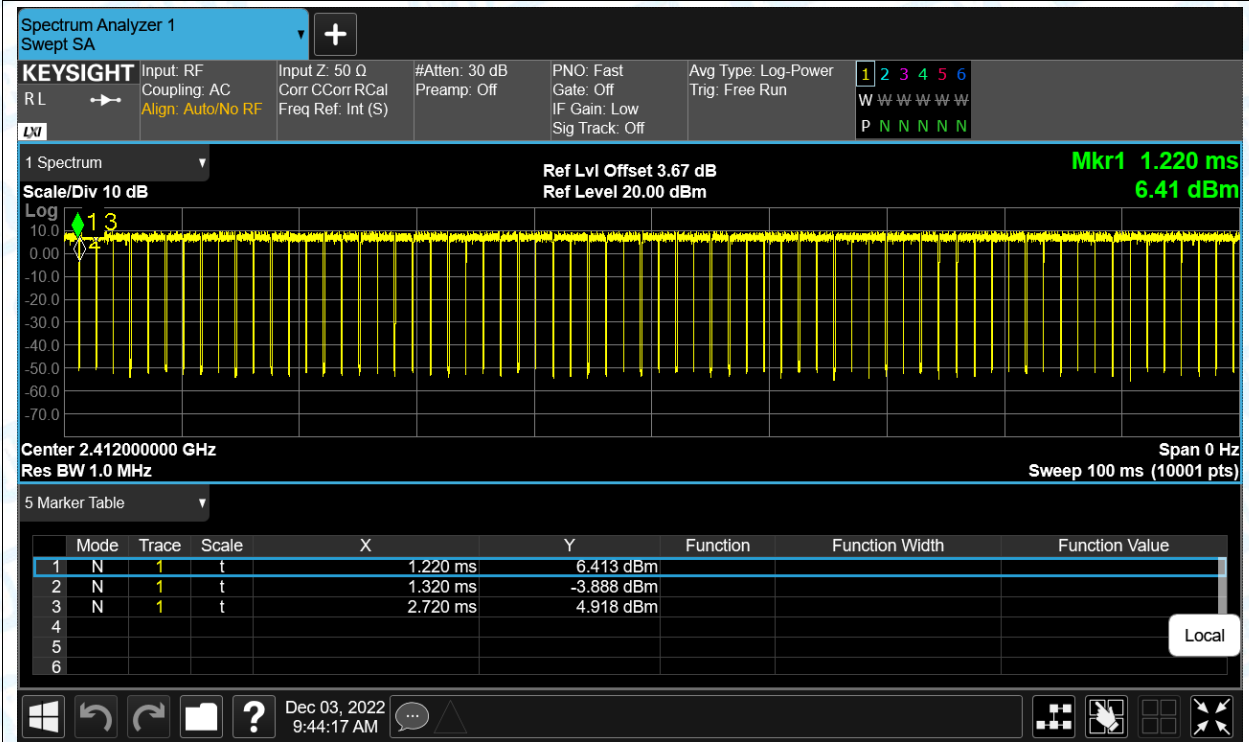
Duty Cycle NVNT b 2437MHz Ant1



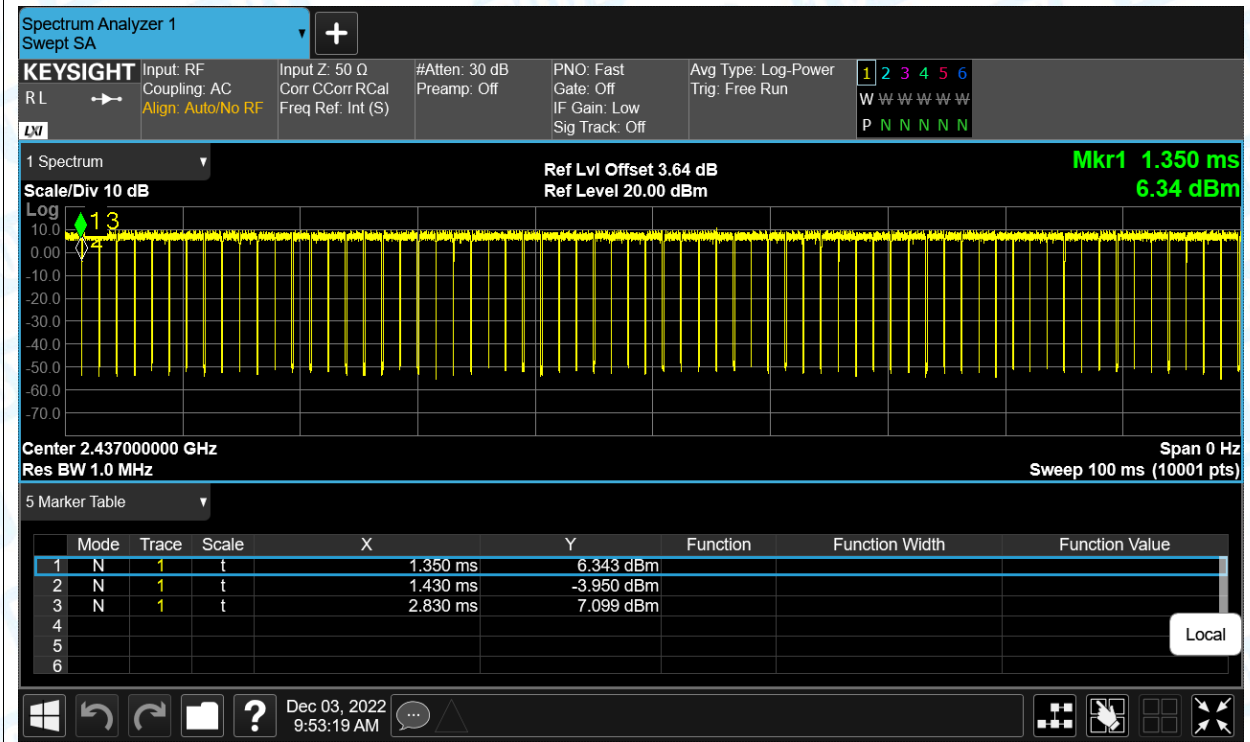
Duty Cycle NVNT b 2462MHz Ant1



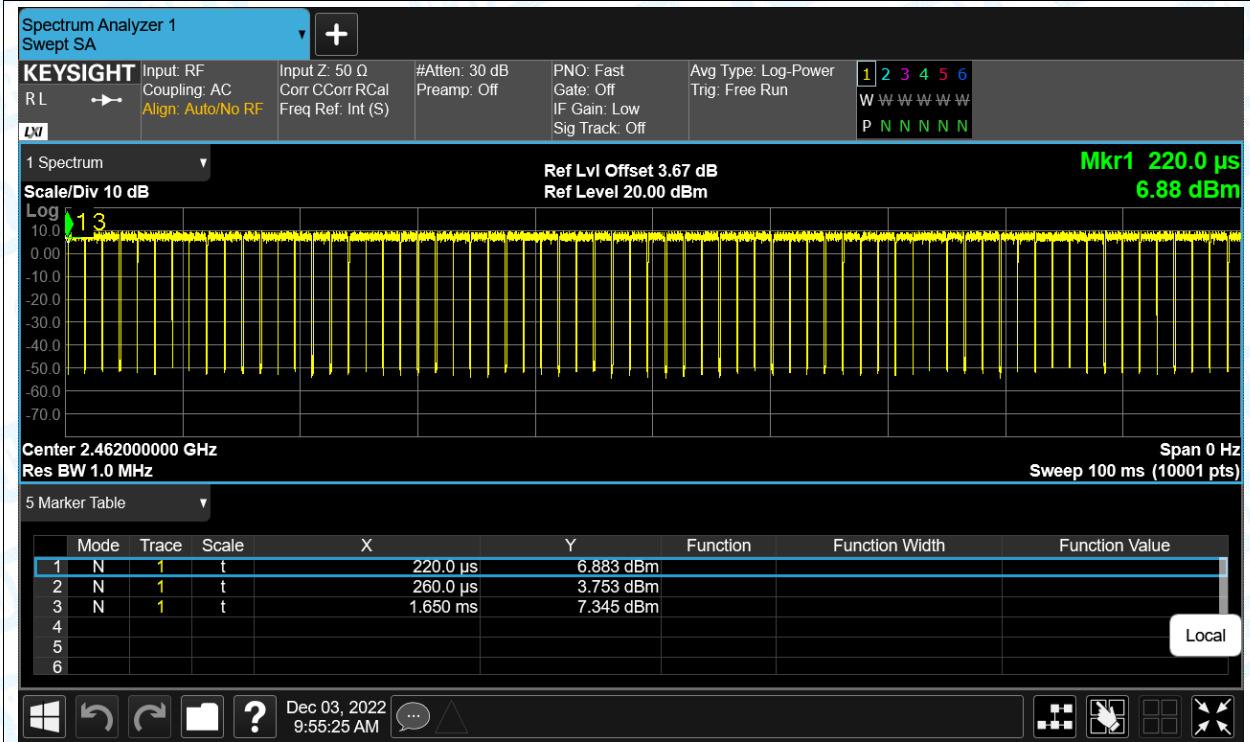
Duty Cycle NVNT g 2412MHz Ant1



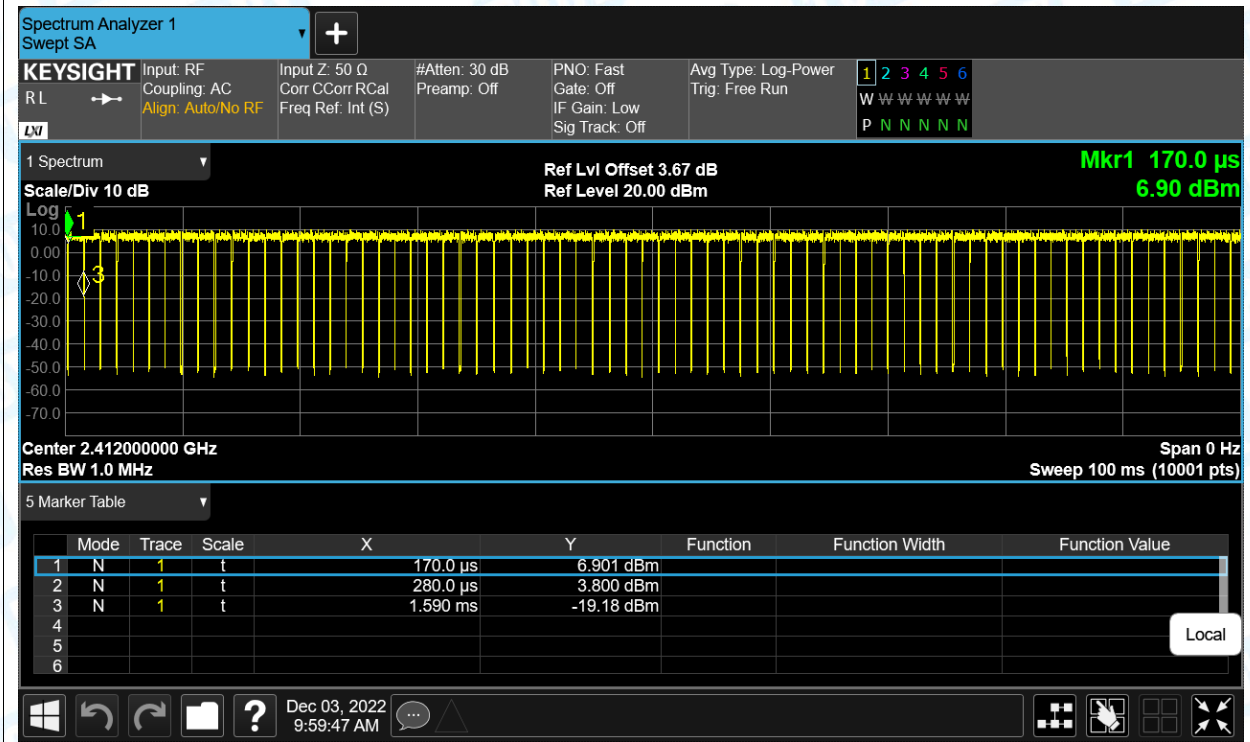
Duty Cycle NVNT g 2437MHz Ant1



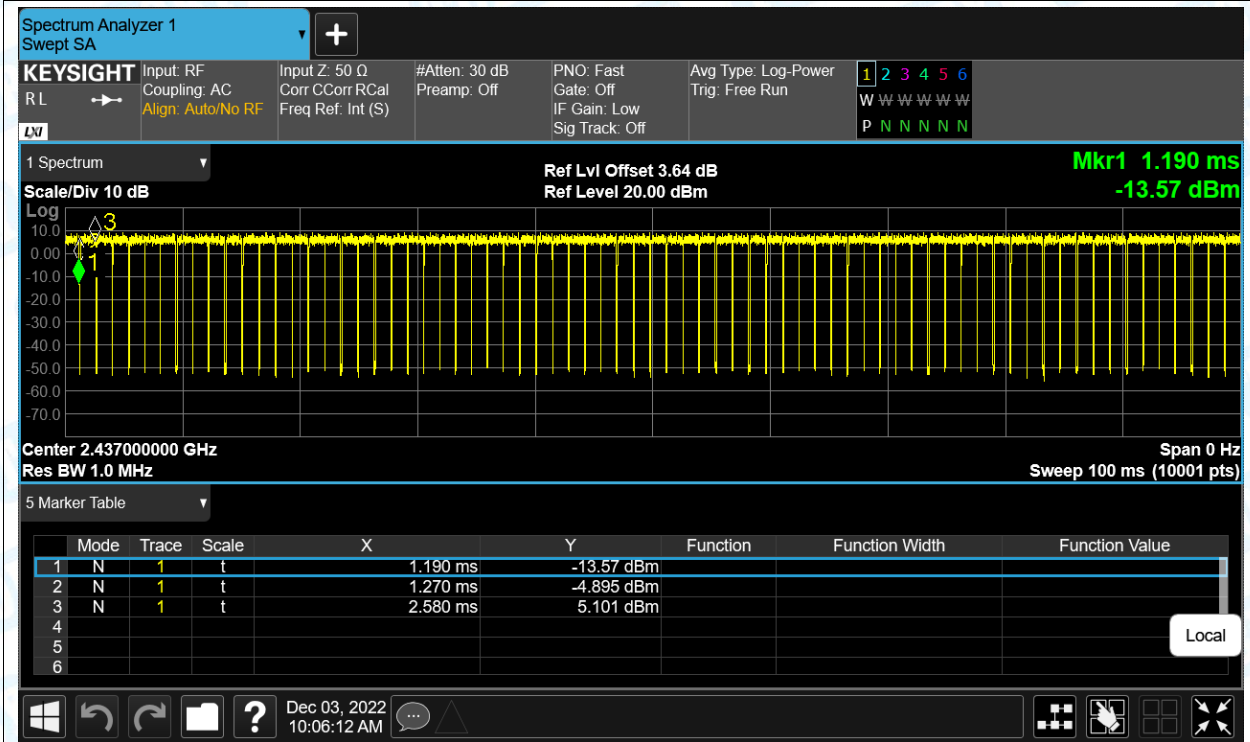
Duty Cycle NVNT g 2462MHz Ant1



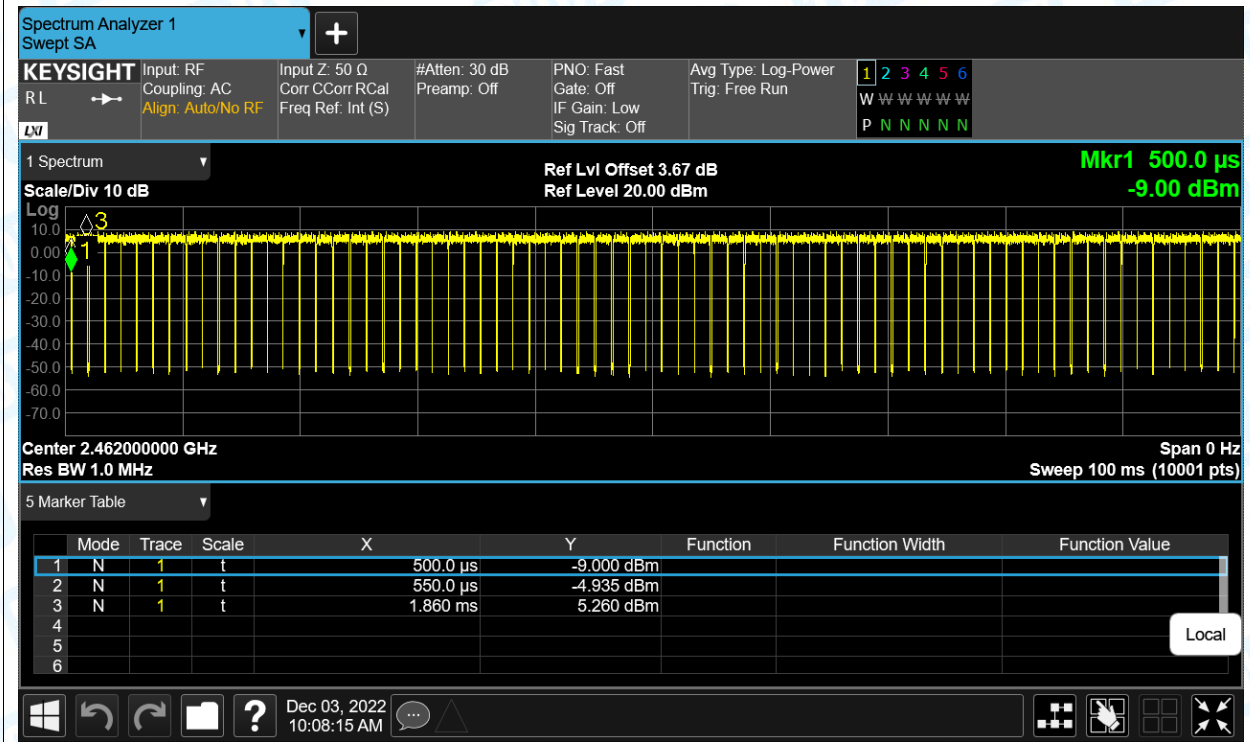
Duty Cycle NVNT n(HT20) 2412MHz Ant1



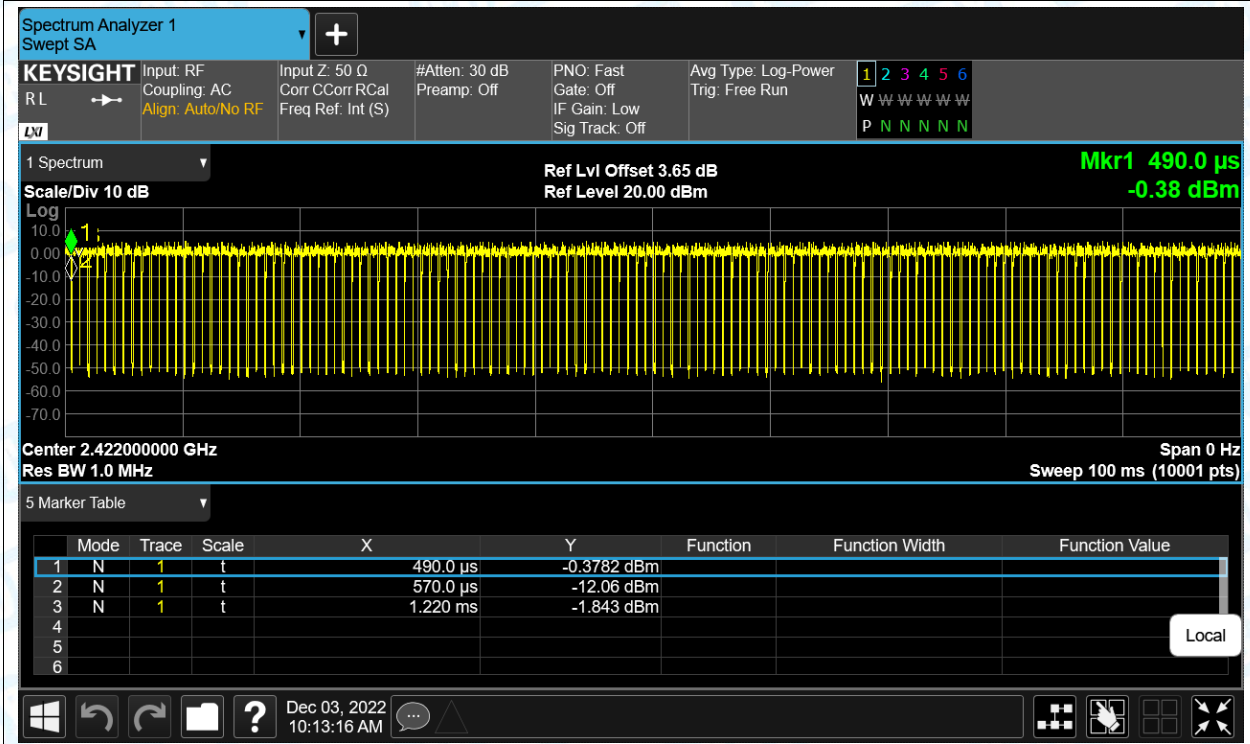
Duty Cycle NVNT n(HT20) 2437MHz Ant1



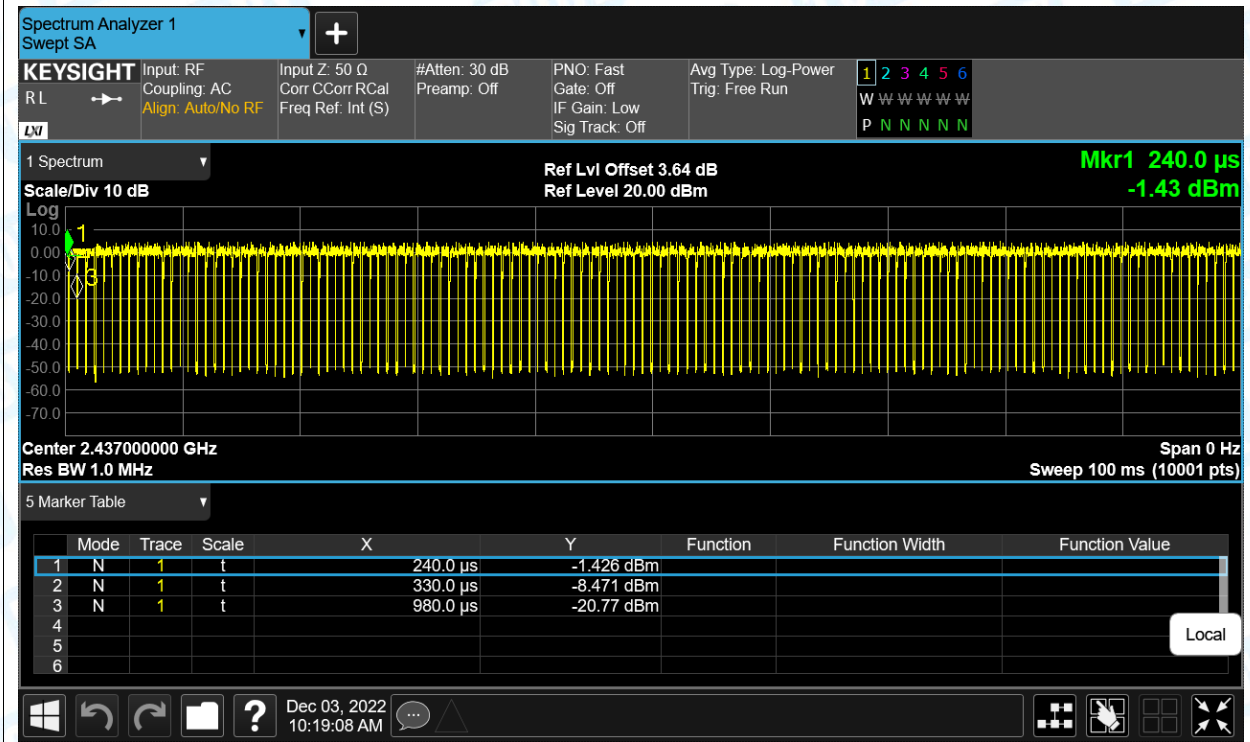
Duty Cycle NVNT n(HT20) 2462MHz Ant1



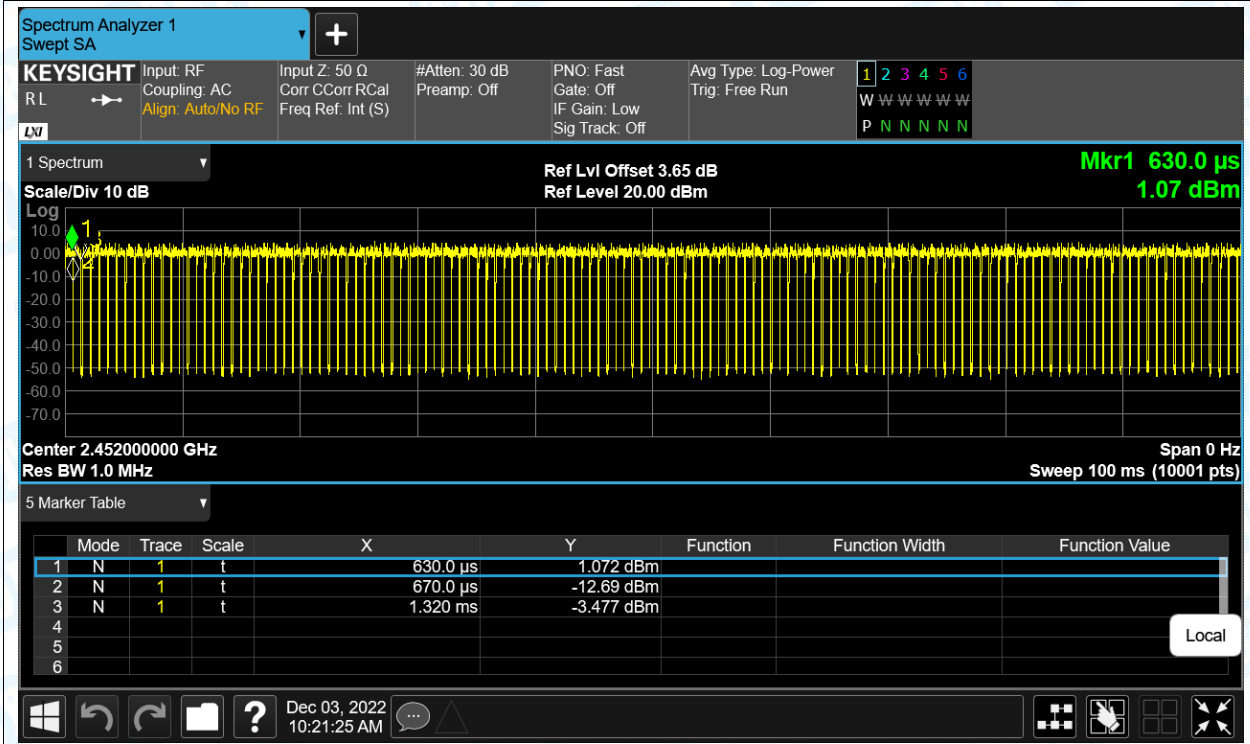
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



Maximum Conducted Output Power

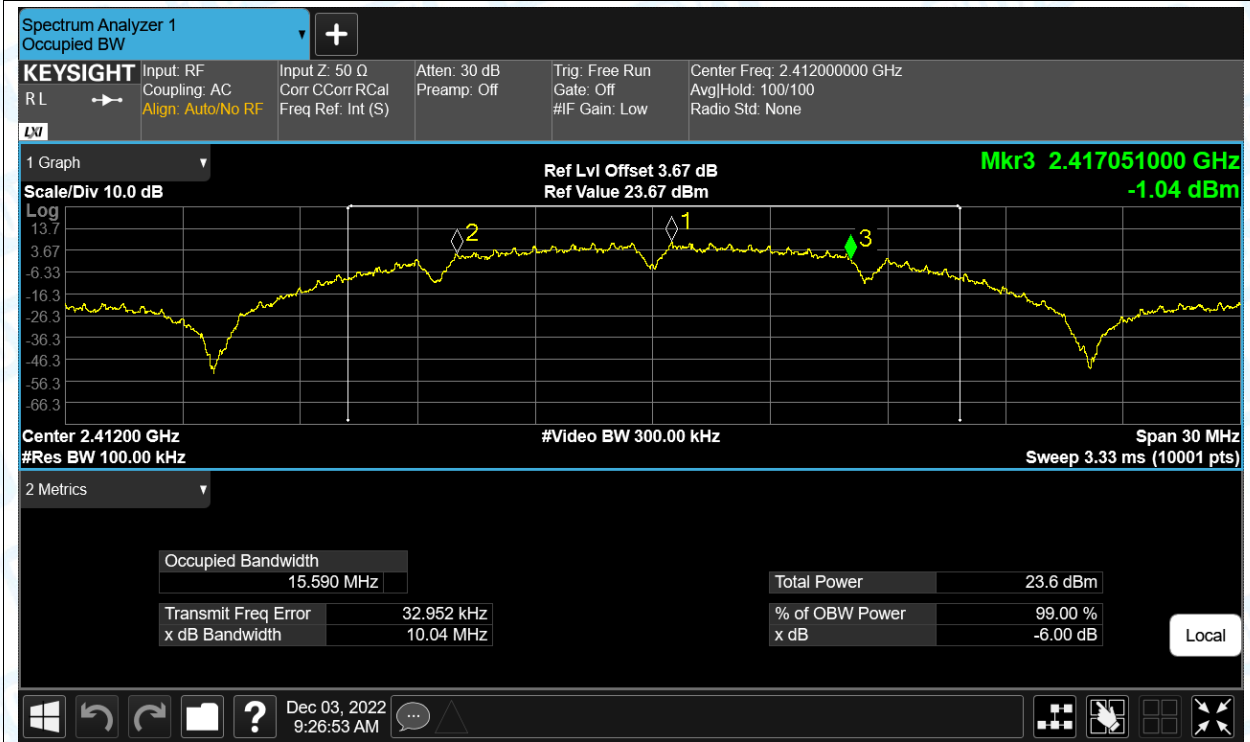
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.183	30	Pass
NVNT	b	2437	Ant1	17.229	30	Pass
NVNT	b	2462	Ant1	16.278	30	Pass
NVNT	g	2412	Ant1	14.216	30	Pass
NVNT	g	2437	Ant1	13.115	30	Pass
NVNT	g	2462	Ant1	12.597	30	Pass
NVNT	n(HT20)	2412	Ant1	12.414	30	Pass
NVNT	n(HT20)	2437	Ant1	12.338	30	Pass
NVNT	n(HT20)	2462	Ant1	12.098	30	Pass
NVNT	n(HT40)	2422	Ant1	13.967	30	Pass
NVNT	n(HT40)	2437	Ant1	12.797	30	Pass
NVNT	n(HT40)	2452	Ant1	13.692	30	Pass

-6dB Bandwidth

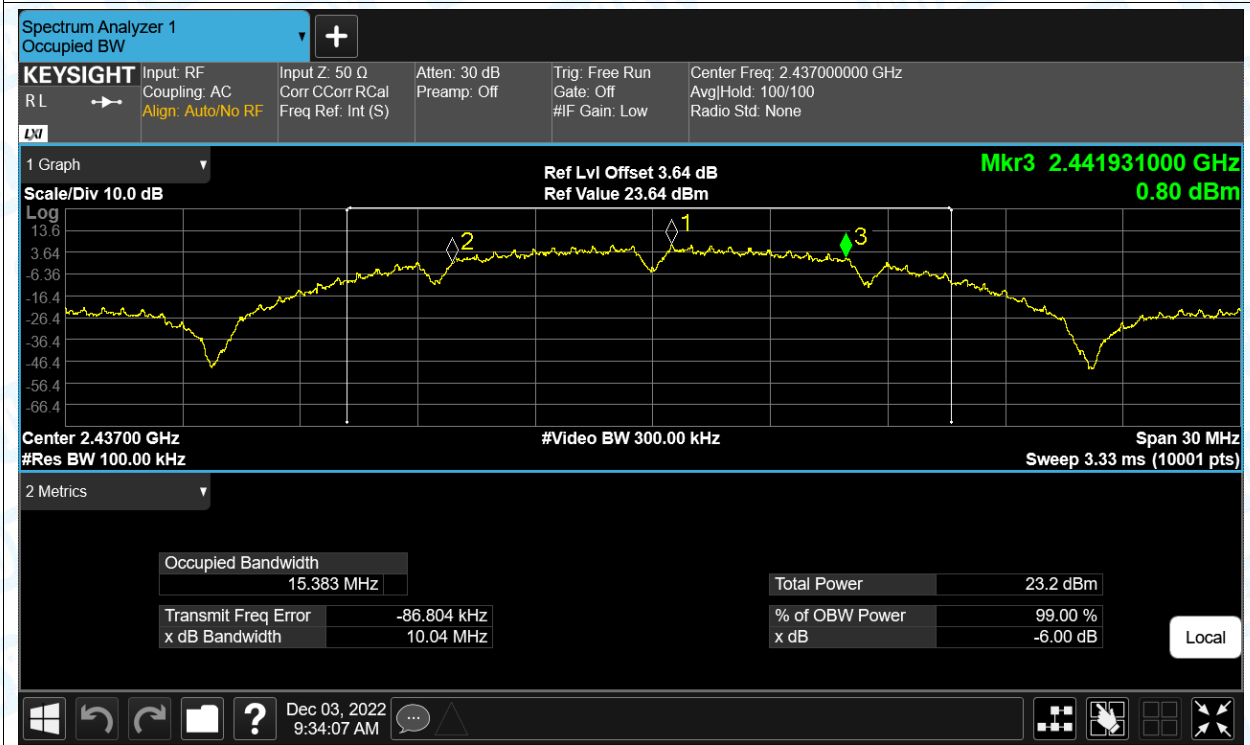
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.04	0.5	Pass
NVNT	b	2437	Ant1	10.04	0.5	Pass
NVNT	b	2462	Ant1	10.04	0.5	Pass
NVNT	g	2412	Ant1	14.44	0.5	Pass
NVNT	g	2437	Ant1	15.45	0.5	Pass
NVNT	g	2462	Ant1	15	0.5	Pass
NVNT	n(HT20)	2412	Ant1	14.99	0.5	Pass
NVNT	n(HT20)	2437	Ant1	15.07	0.5	Pass
NVNT	n(HT20)	2462	Ant1	13.86	0.5	Pass
NVNT	n(HT40)	2422	Ant1	33.82	0.5	Pass
NVNT	n(HT40)	2437	Ant1	32.59	0.5	Pass
NVNT	n(HT40)	2452	Ant1	33.78	0.5	Pass

Test Graphs

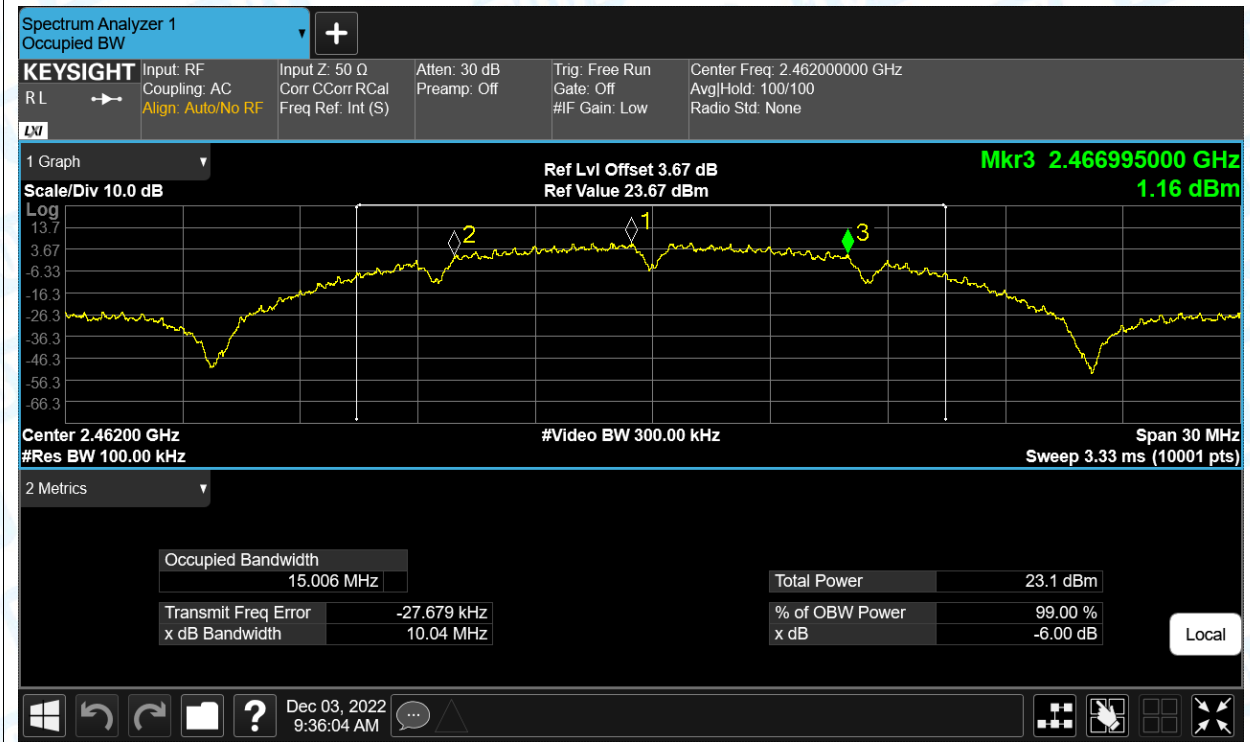
-6dB Bandwidth NVNT b 2412MHz Ant1



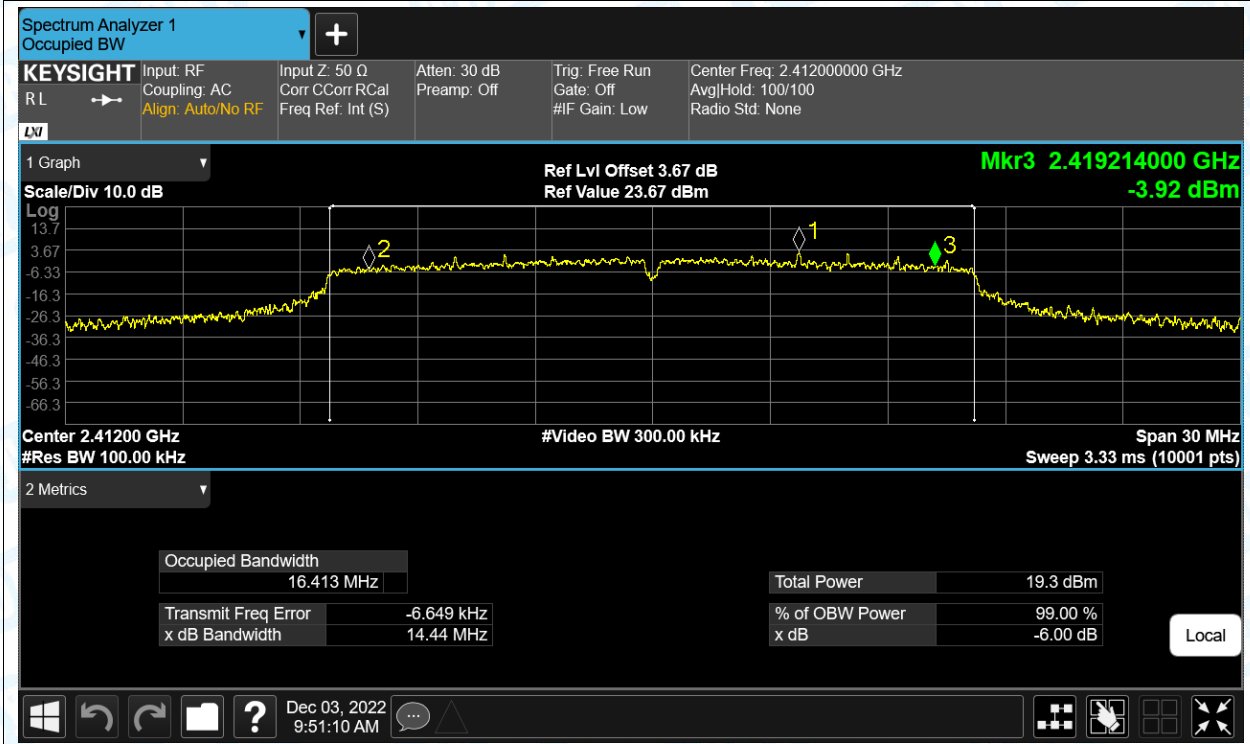
-6dB Bandwidth NVNT b 2437MHz Ant1



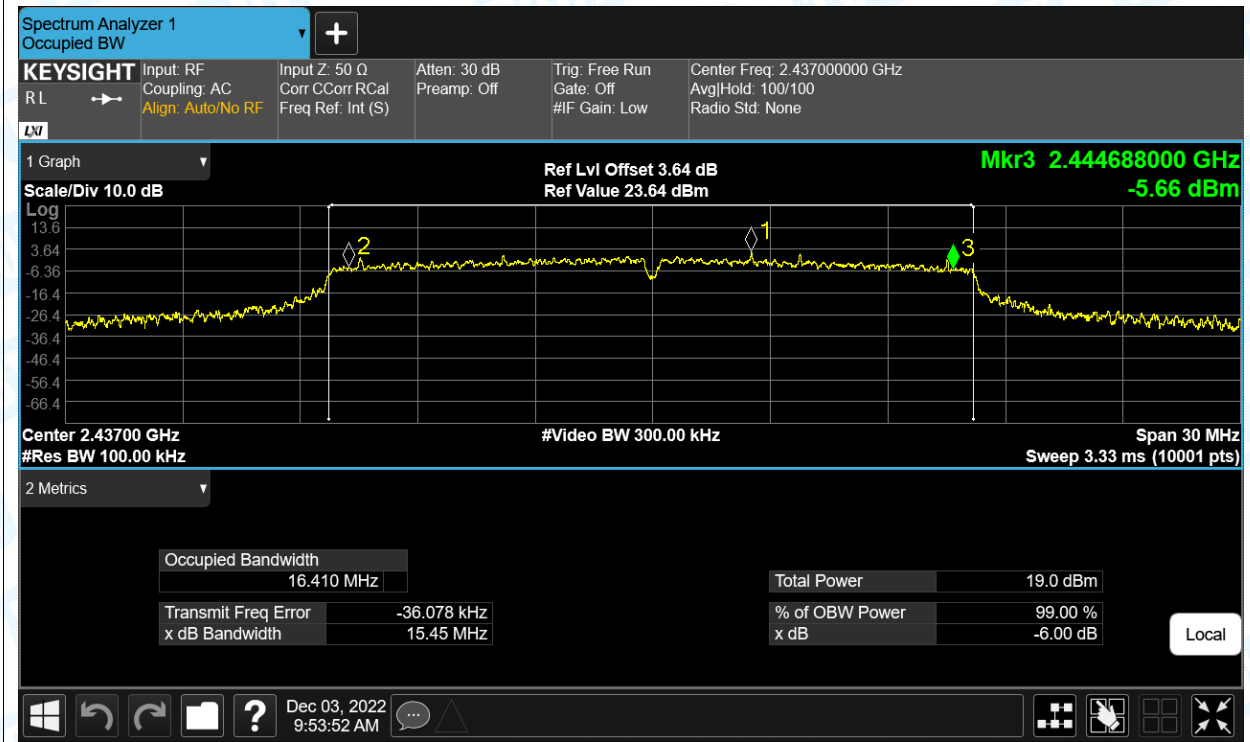
-6dB Bandwidth NVNT b 2462MHz Ant1



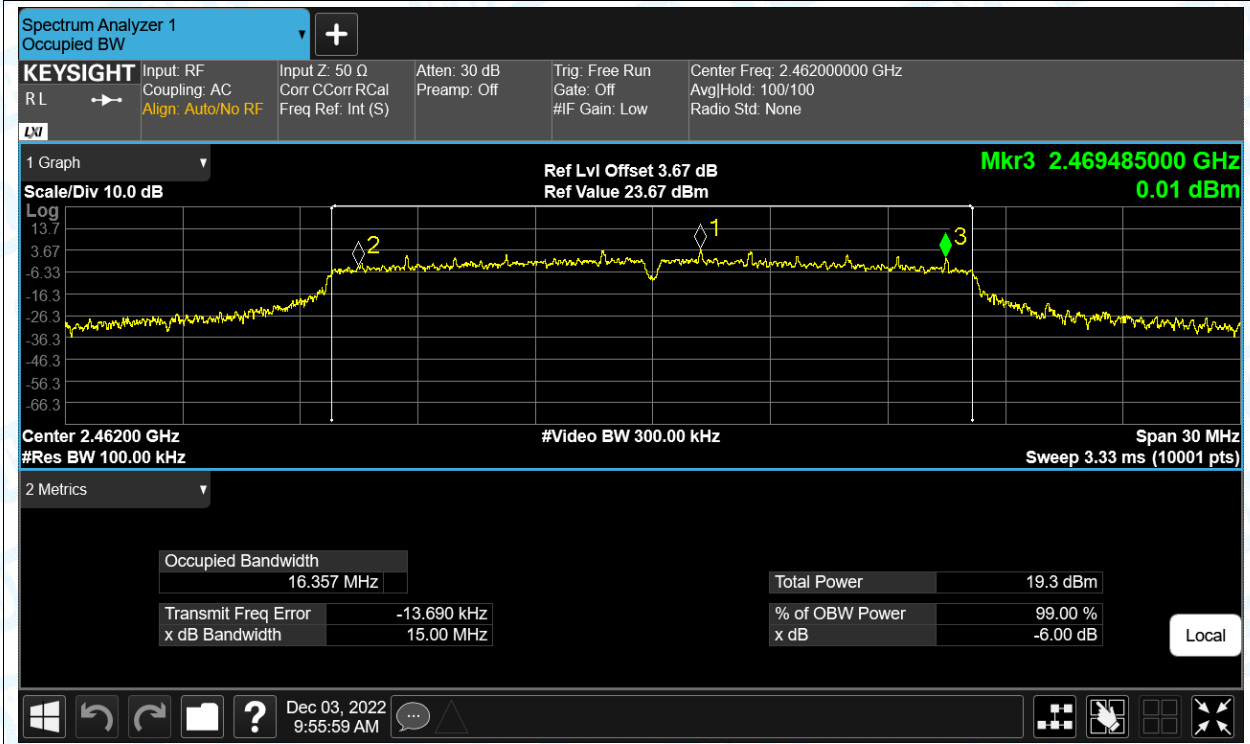
-6dB Bandwidth NVNT g 2412MHz Ant1



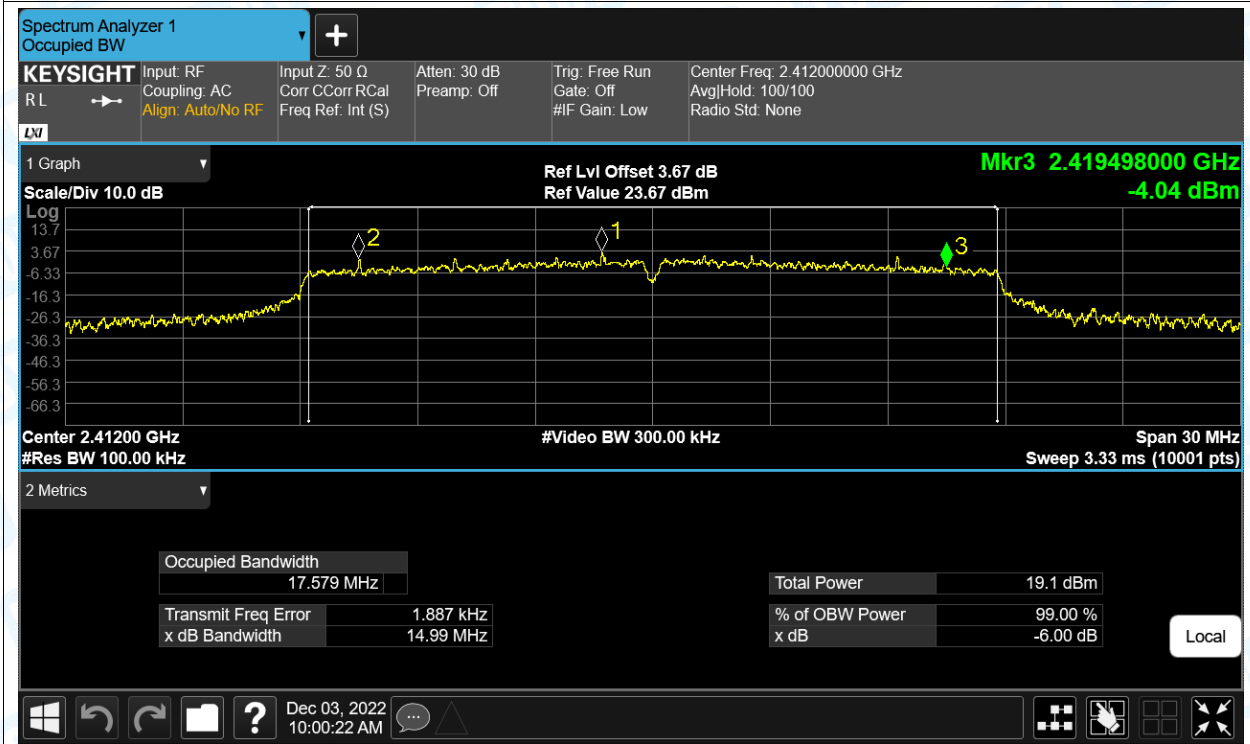
-6dB Bandwidth NVNT g 2437MHz Ant1



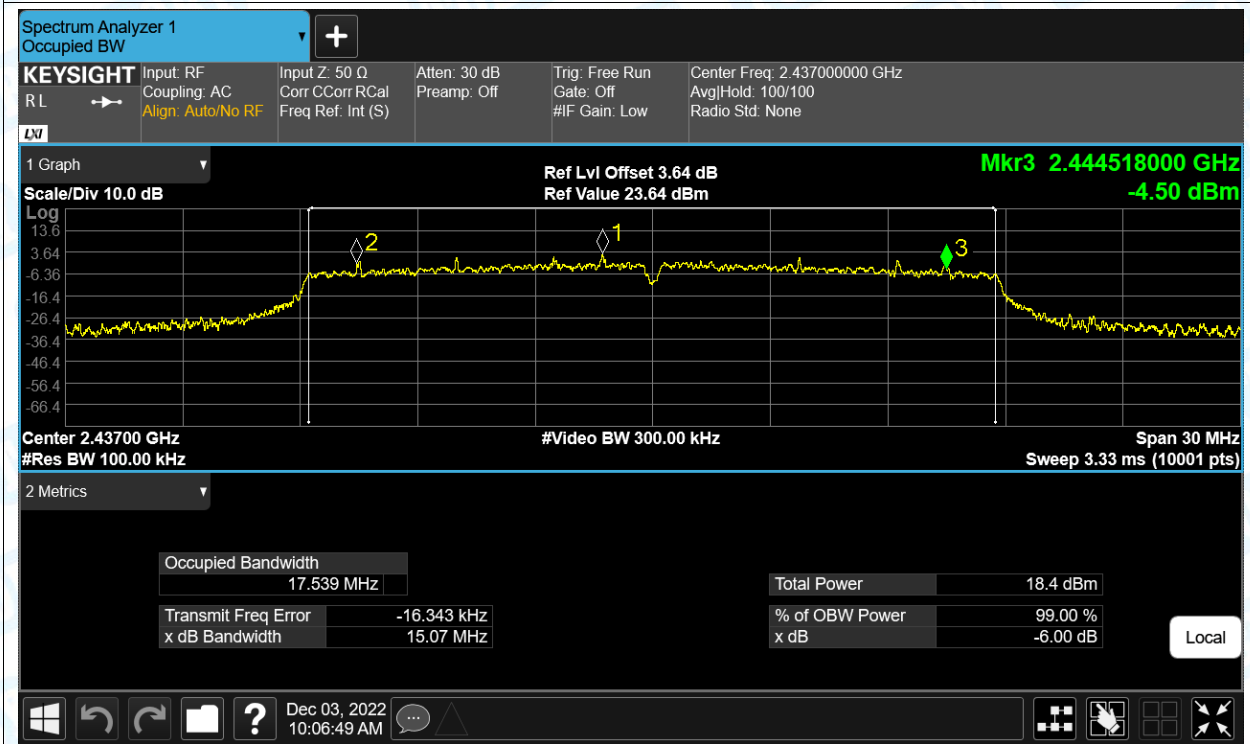
-6dB Bandwidth NVNT g 2462MHz Ant1



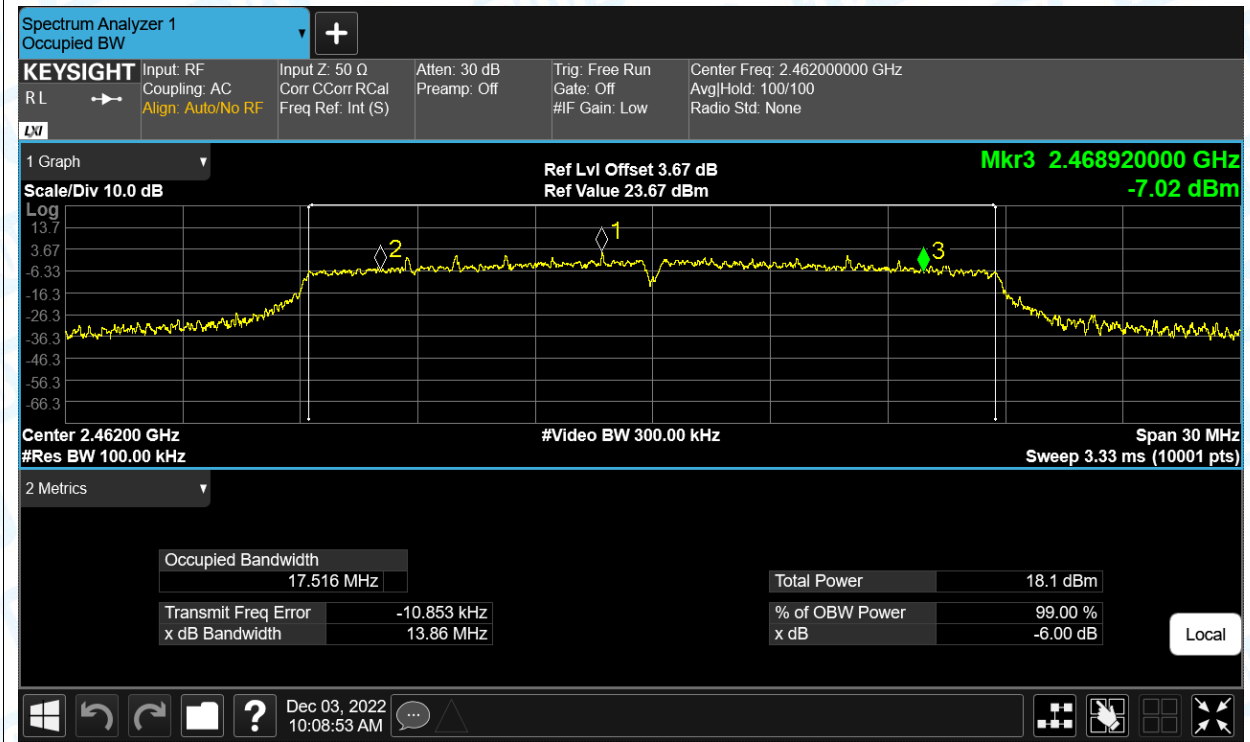
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



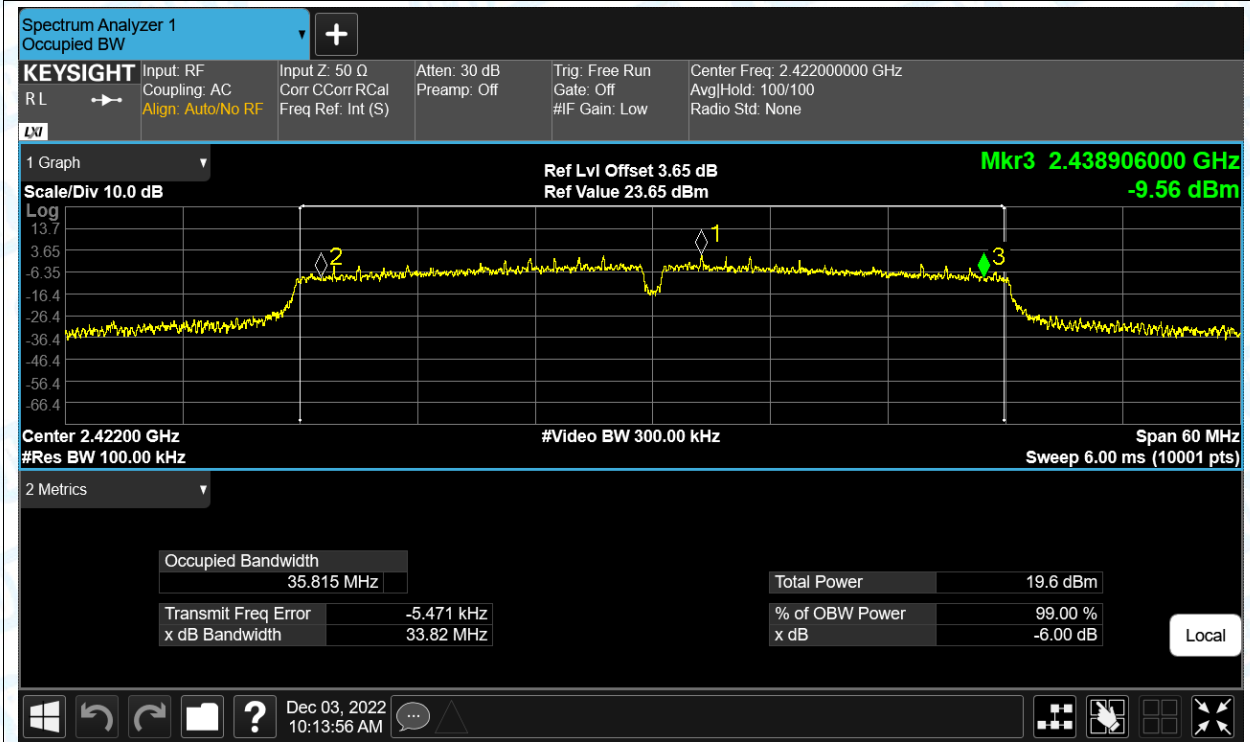
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



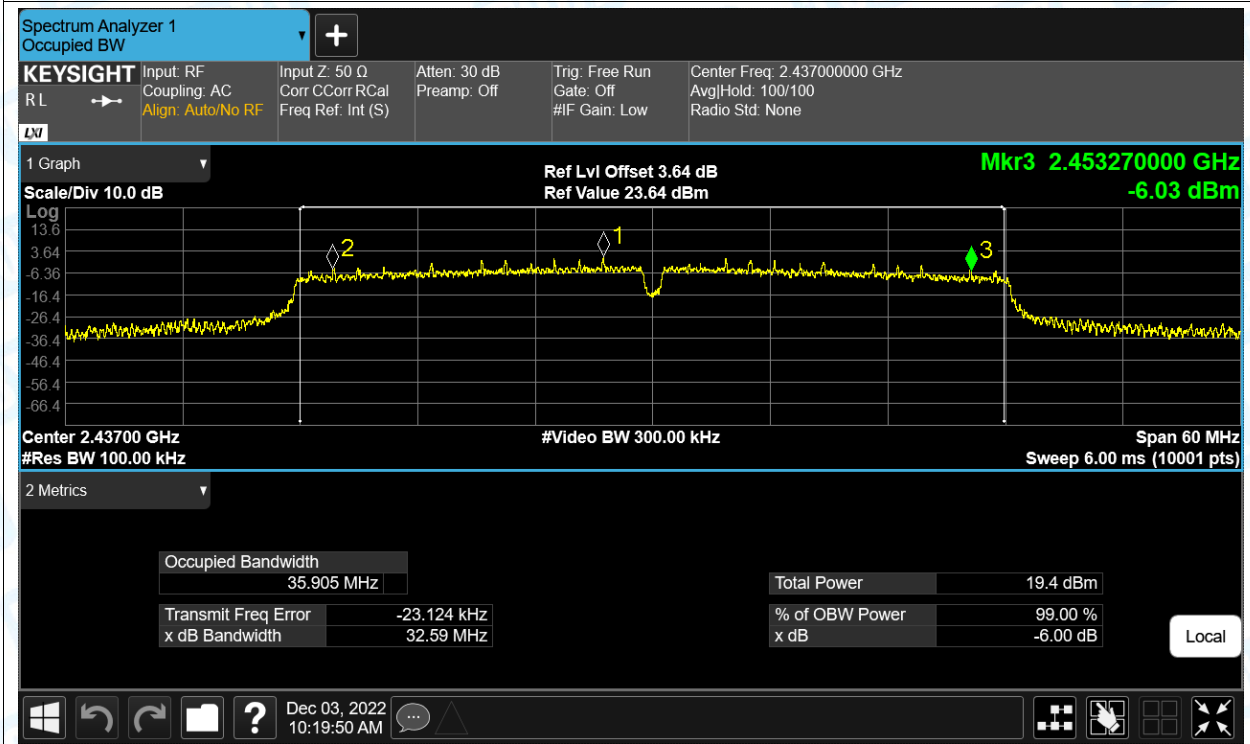
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



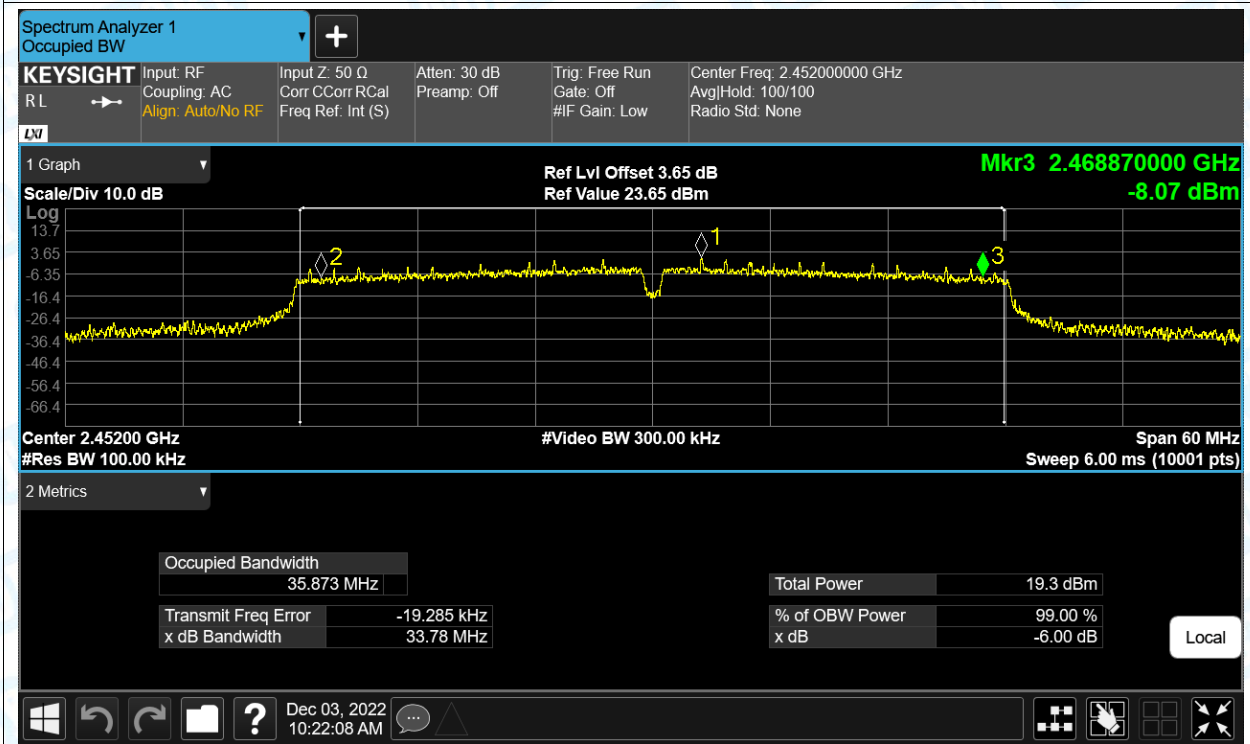
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



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



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

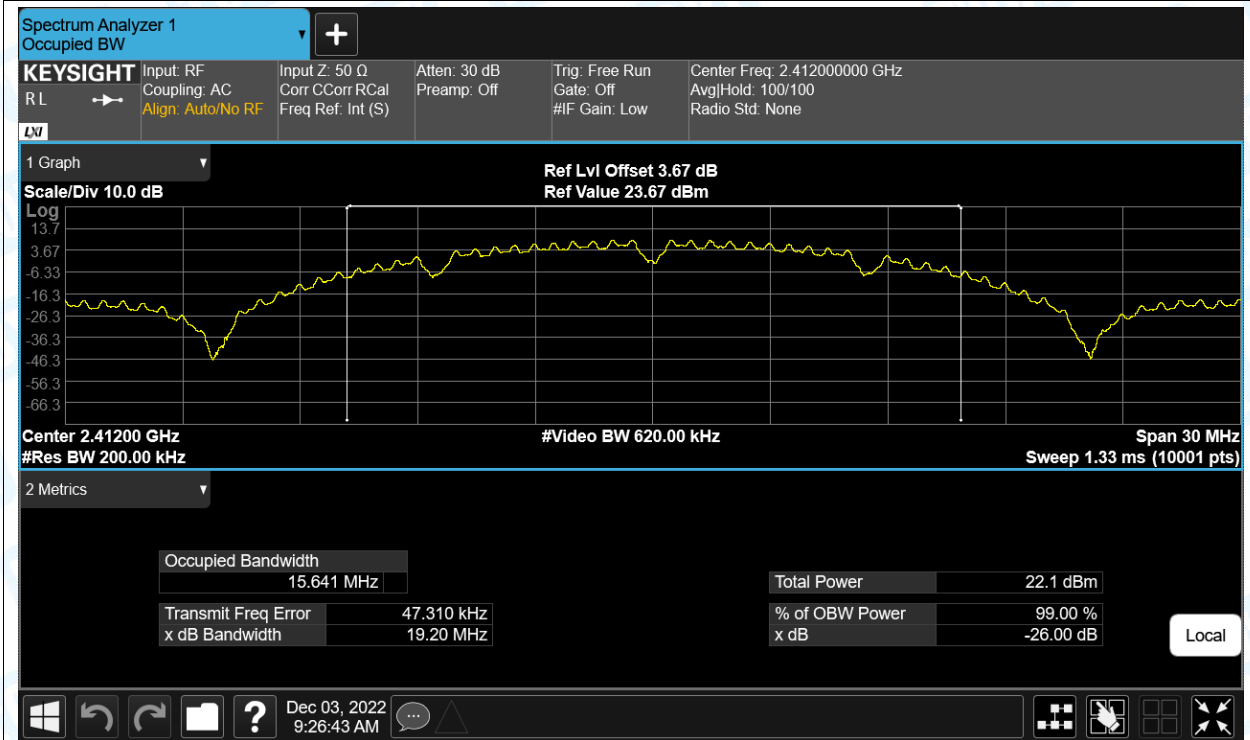


Occupied Channel Bandwidth

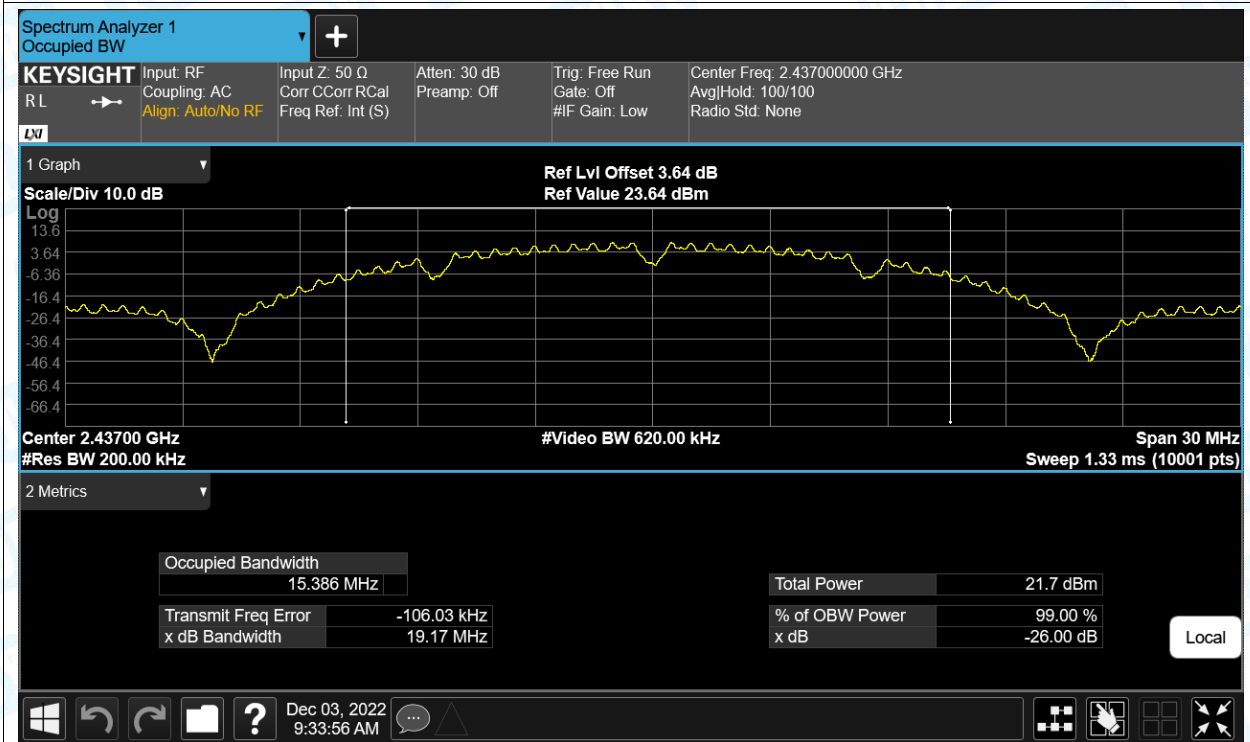
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	15.641
NVNT	b	2437	Ant1	15.386
NVNT	b	2462	Ant1	15.022
NVNT	g	2412	Ant1	16.581
NVNT	g	2437	Ant1	16.548
NVNT	g	2462	Ant1	16.466
NVNT	n(HT20)	2412	Ant1	17.609
NVNT	n(HT20)	2437	Ant1	17.578
NVNT	n(HT20)	2462	Ant1	17.543
NVNT	n(HT40)	2422	Ant1	35.943
NVNT	n(HT40)	2437	Ant1	36.017
NVNT	n(HT40)	2452	Ant1	35.988

Test Graphs

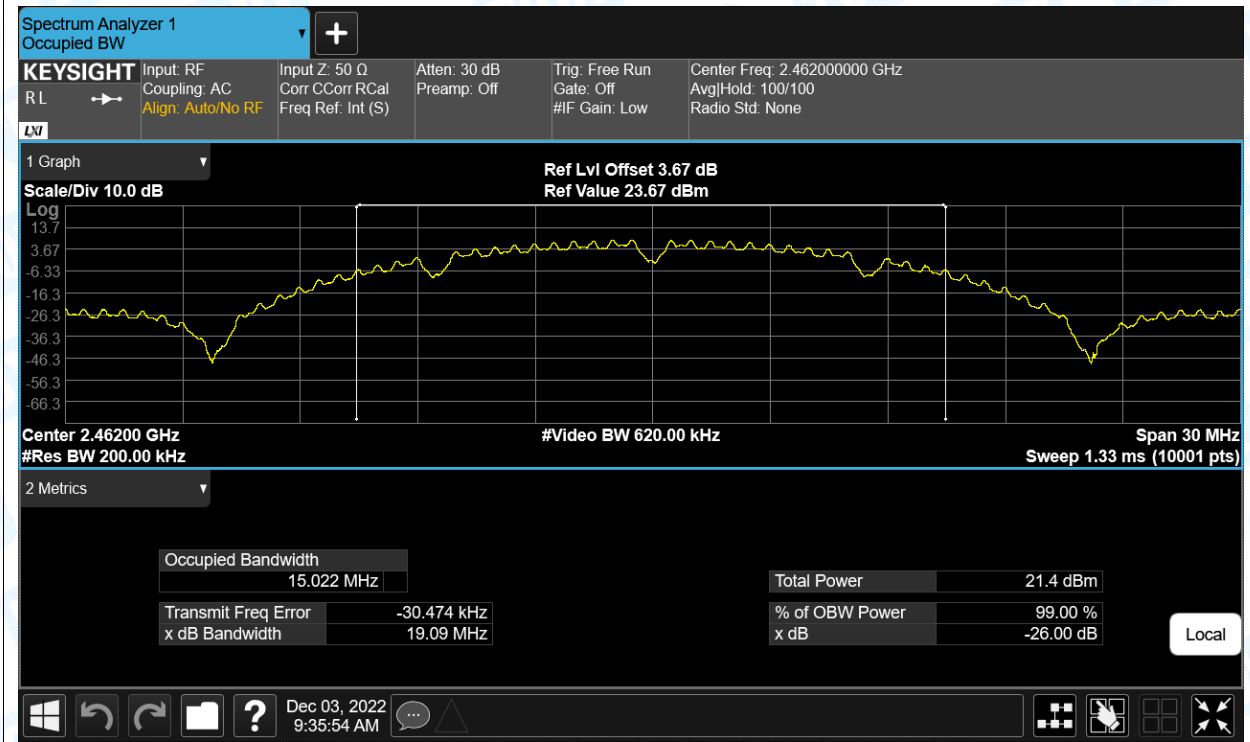
OBW NVNT b 2412MHz Ant1



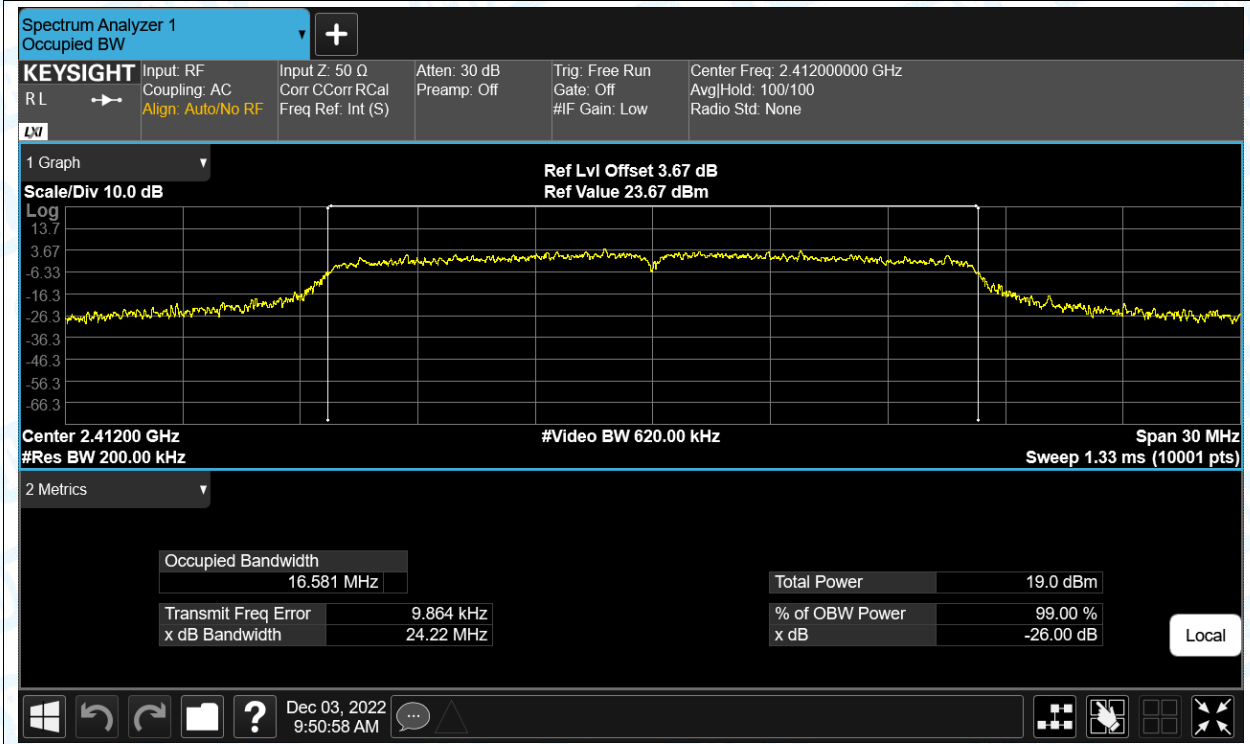
OBW NVNT b 2437MHz Ant1



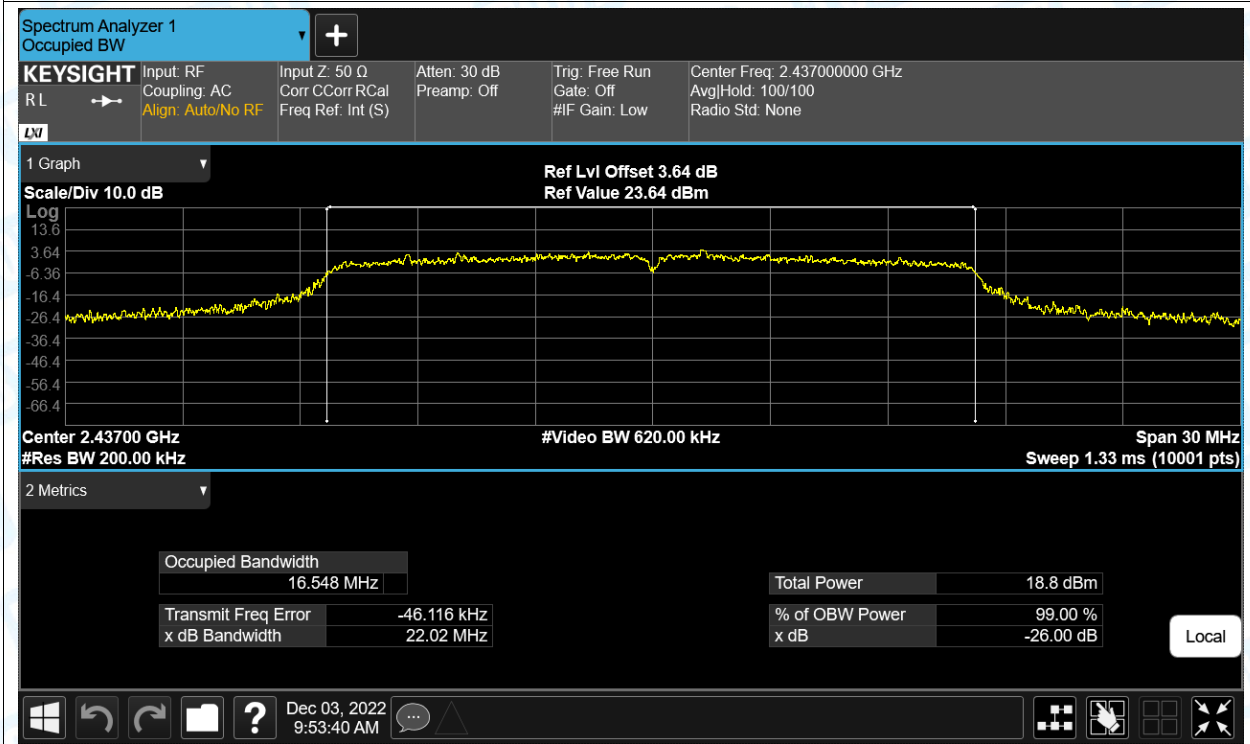
OBW NVNT b 2462MHz Ant1



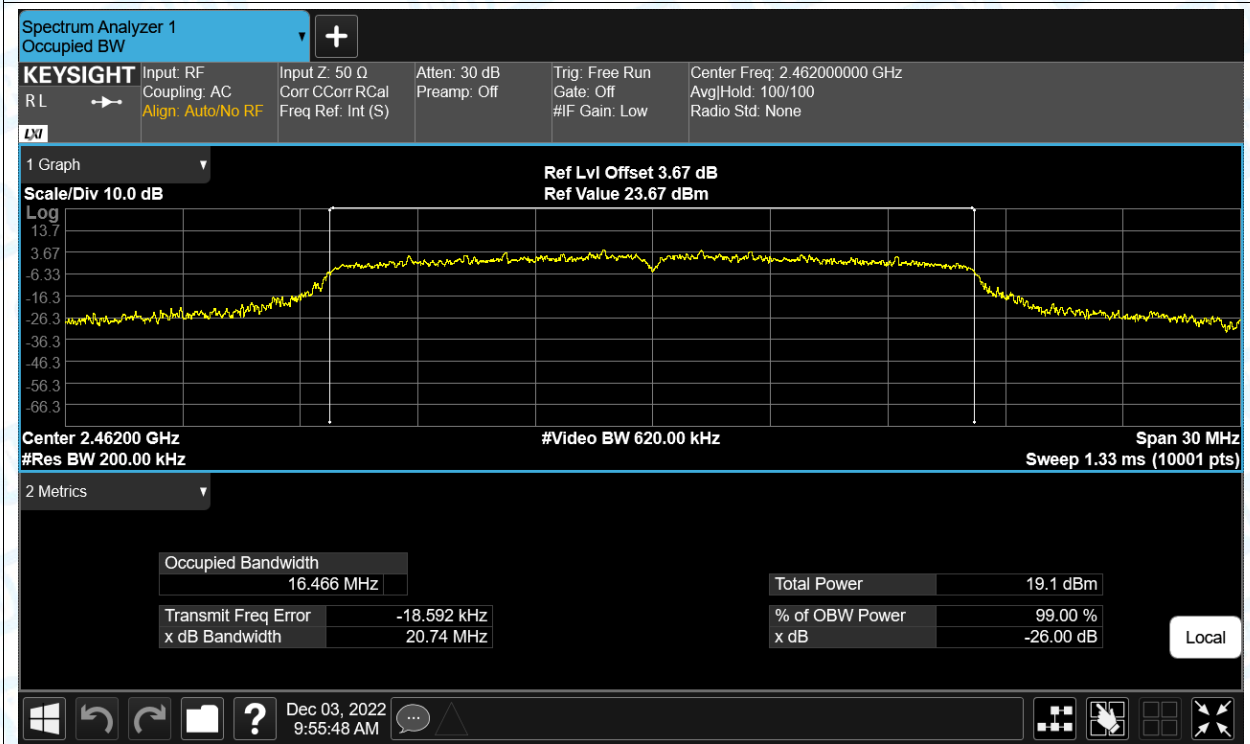
OBW NVNT g 2412MHz Ant1



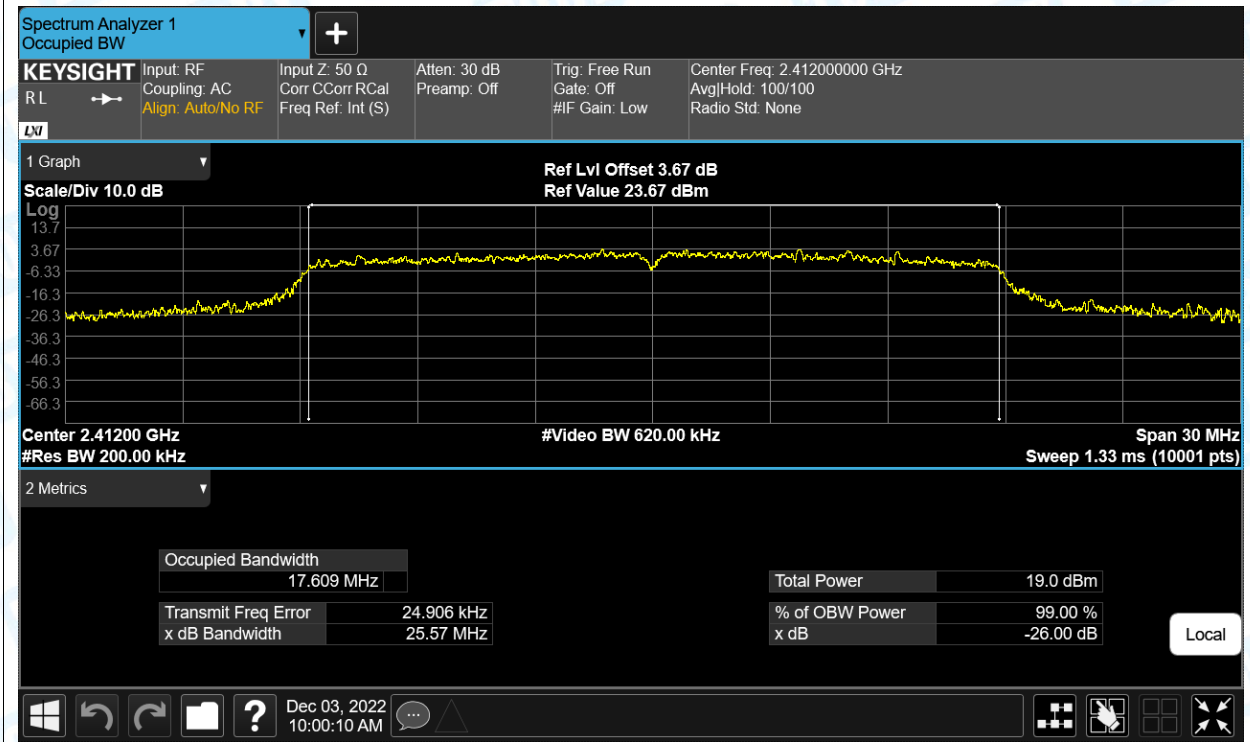
OBW NVNT g 2437MHz Ant1



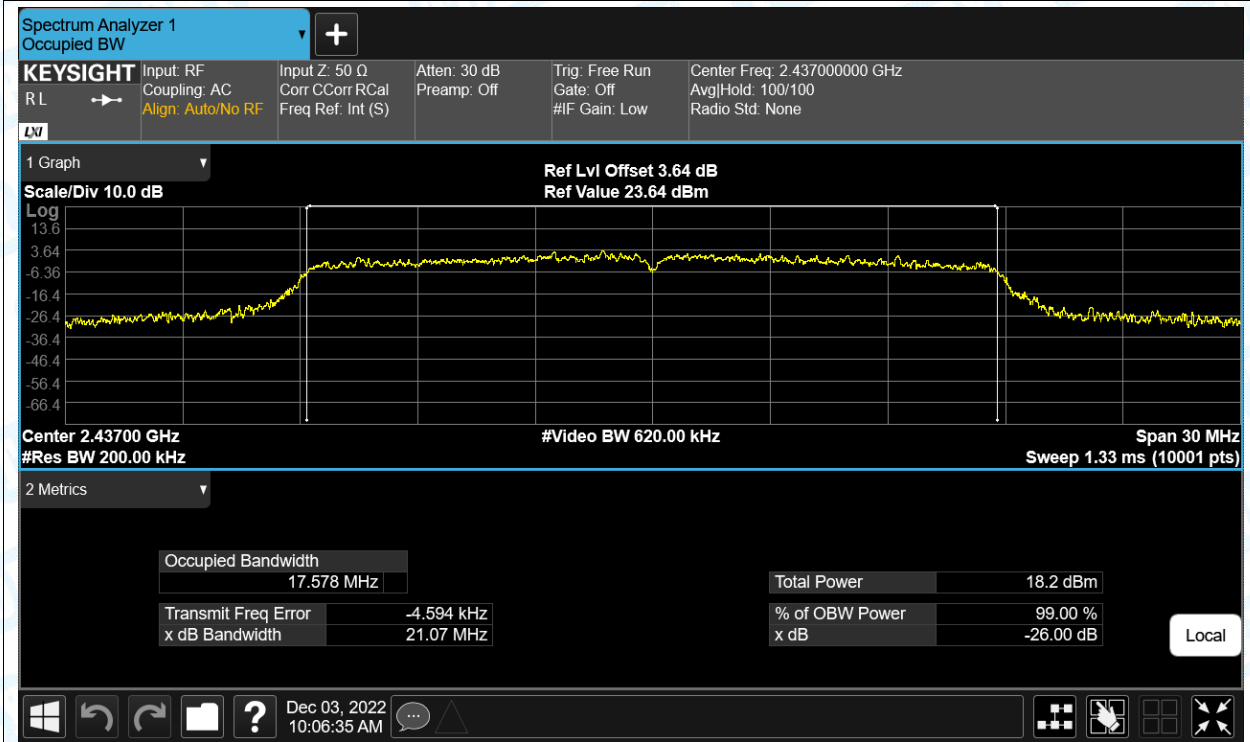
OBW NVNT g 2462MHz Ant1



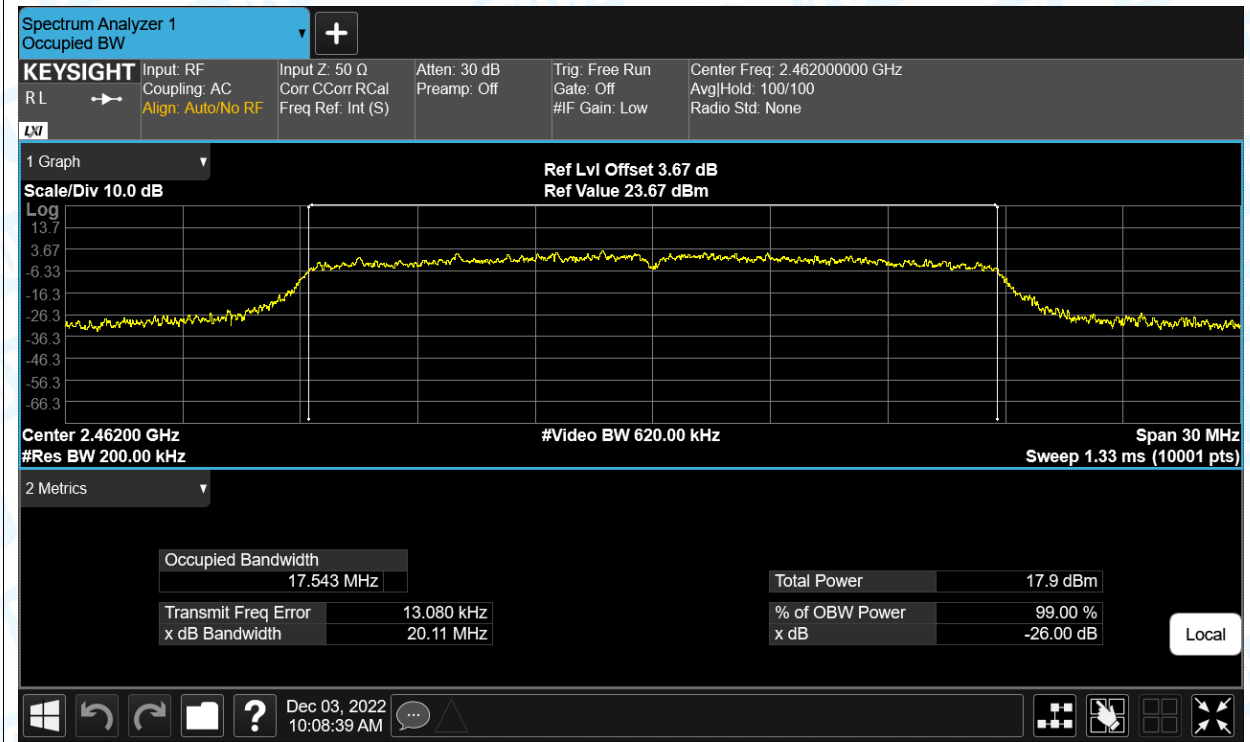
OBW NVNT n(HT20) 2412MHz Ant1



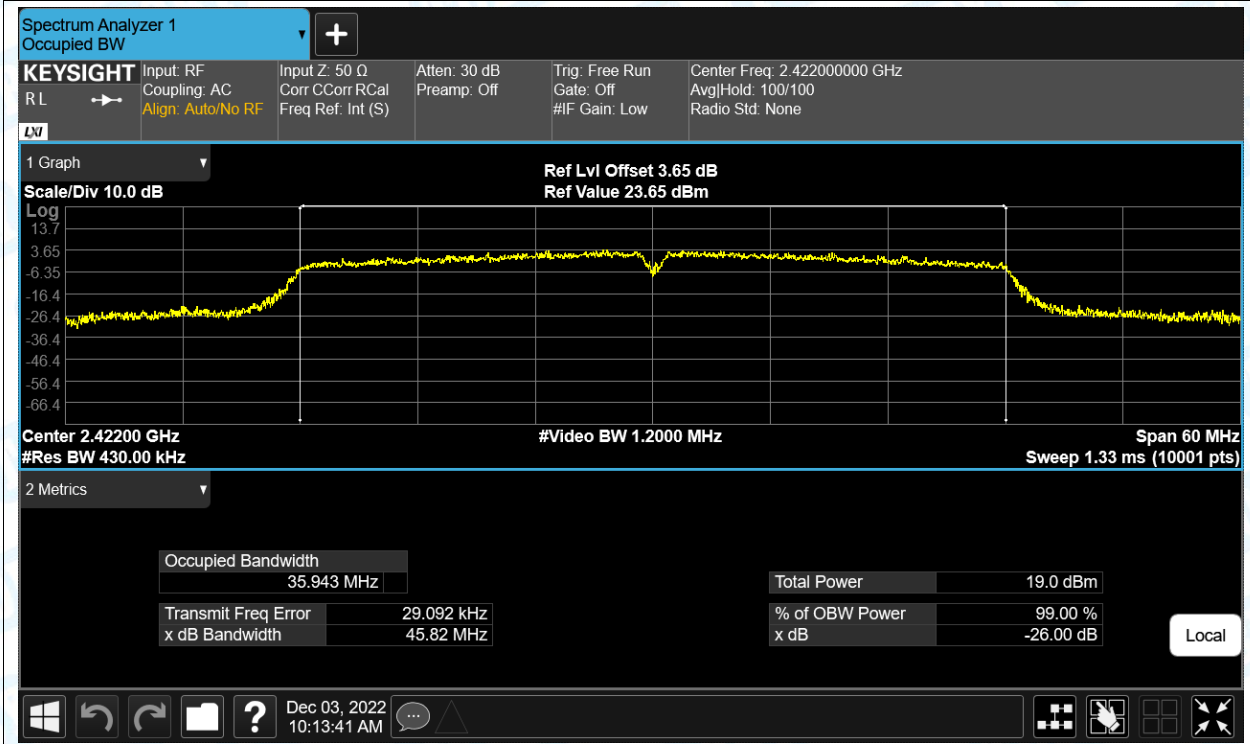
OBW NVNT n(HT20) 2437MHz Ant1



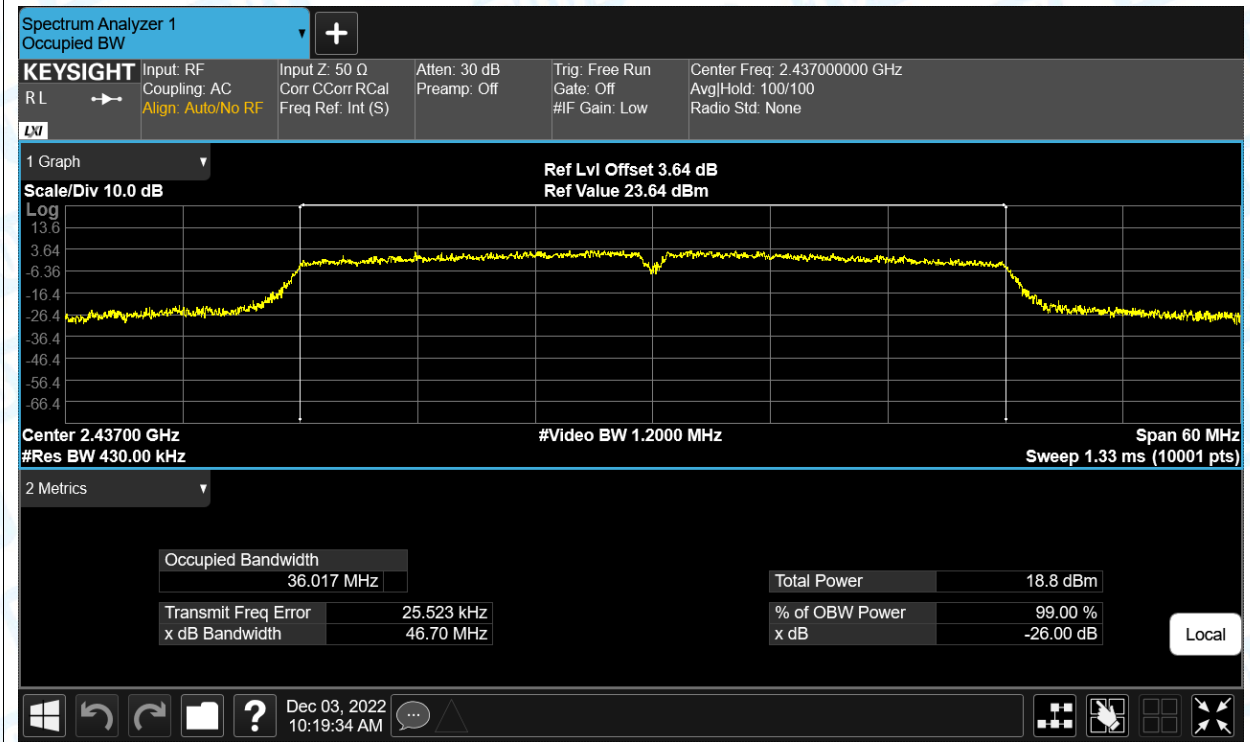
OBW NVNT n(HT20) 2462MHz Ant1



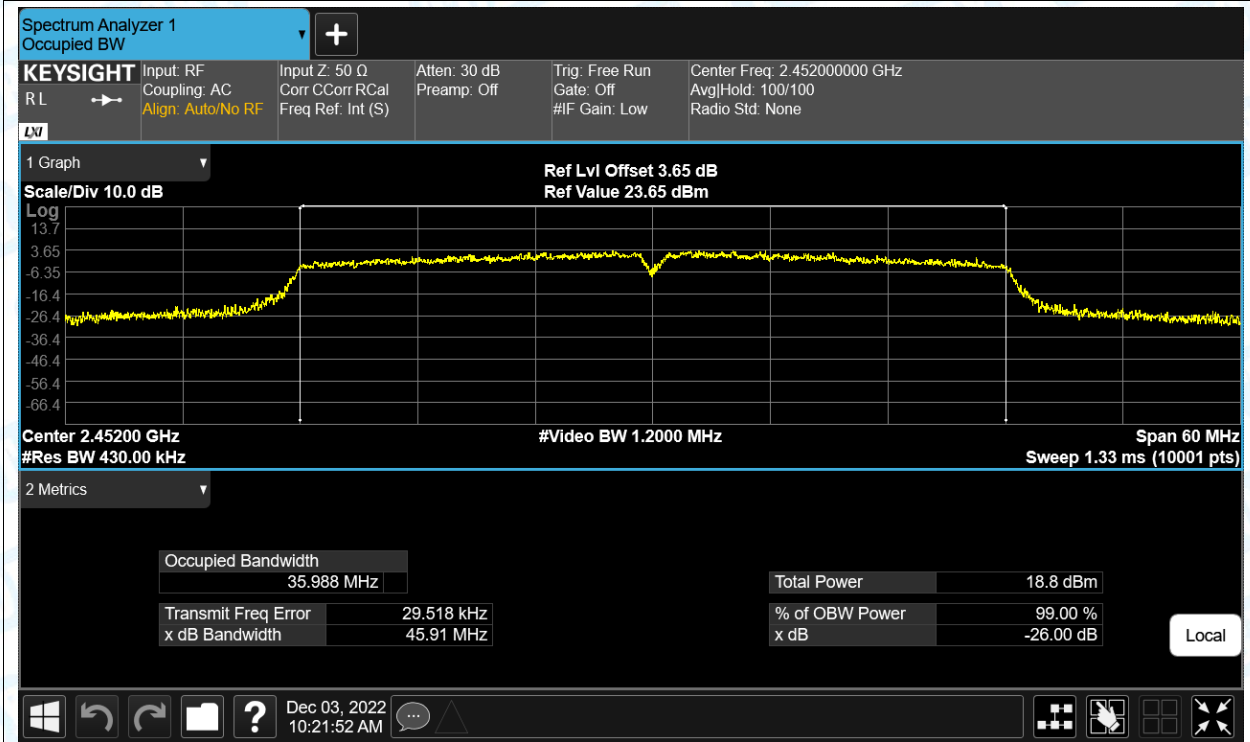
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1

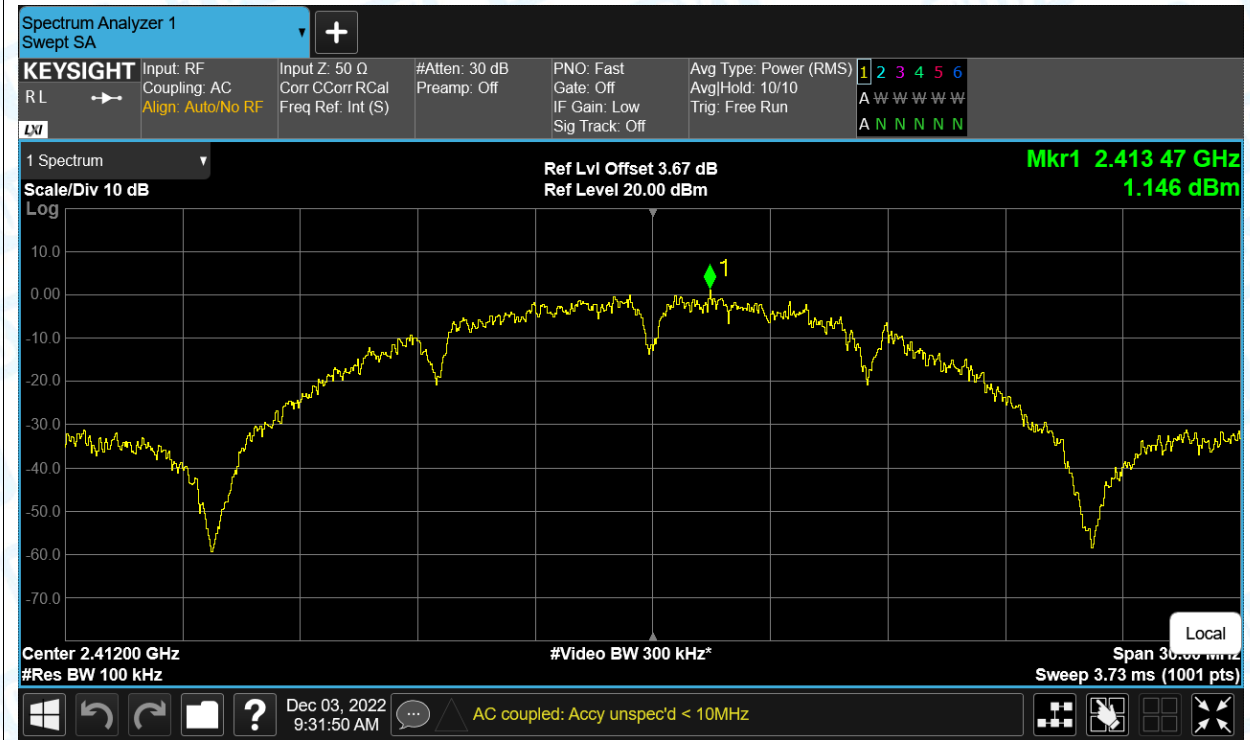


Maximum Power Spectral Density Level

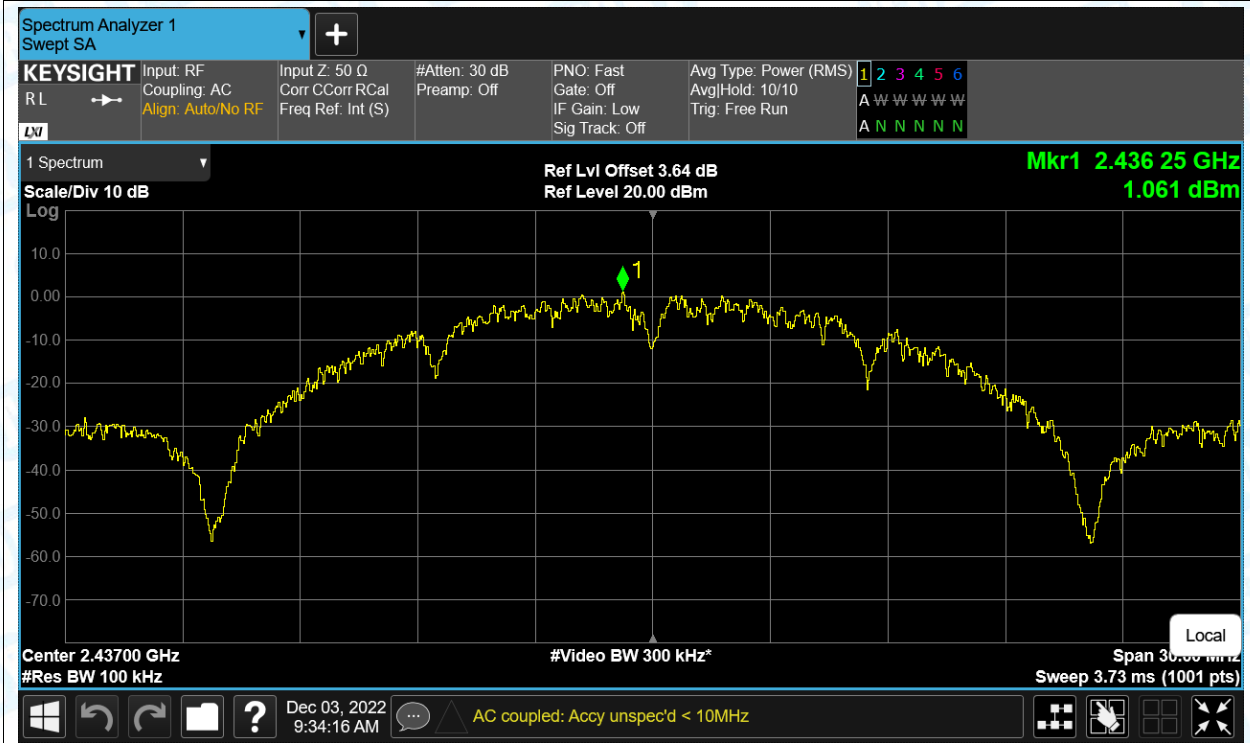
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	1.146	8	Pass
NVNT	b	2437	Ant1	1.061	8	Pass
NVNT	b	2462	Ant1	0.833	8	Pass
NVNT	g	2412	Ant1	-3.861	8	Pass
NVNT	g	2437	Ant1	-5.917	8	Pass
NVNT	g	2462	Ant1	-4.699	8	Pass
NVNT	n(HT20)	2412	Ant1	-4.615	8	Pass
NVNT	n(HT20)	2437	Ant1	-5.37	8	Pass
NVNT	n(HT20)	2462	Ant1	-6.362	8	Pass
NVNT	n(HT40)	2422	Ant1	-6.859	8	Pass
NVNT	n(HT40)	2437	Ant1	-8.365	8	Pass
NVNT	n(HT40)	2452	Ant1	-7.255	8	Pass

Test Graphs

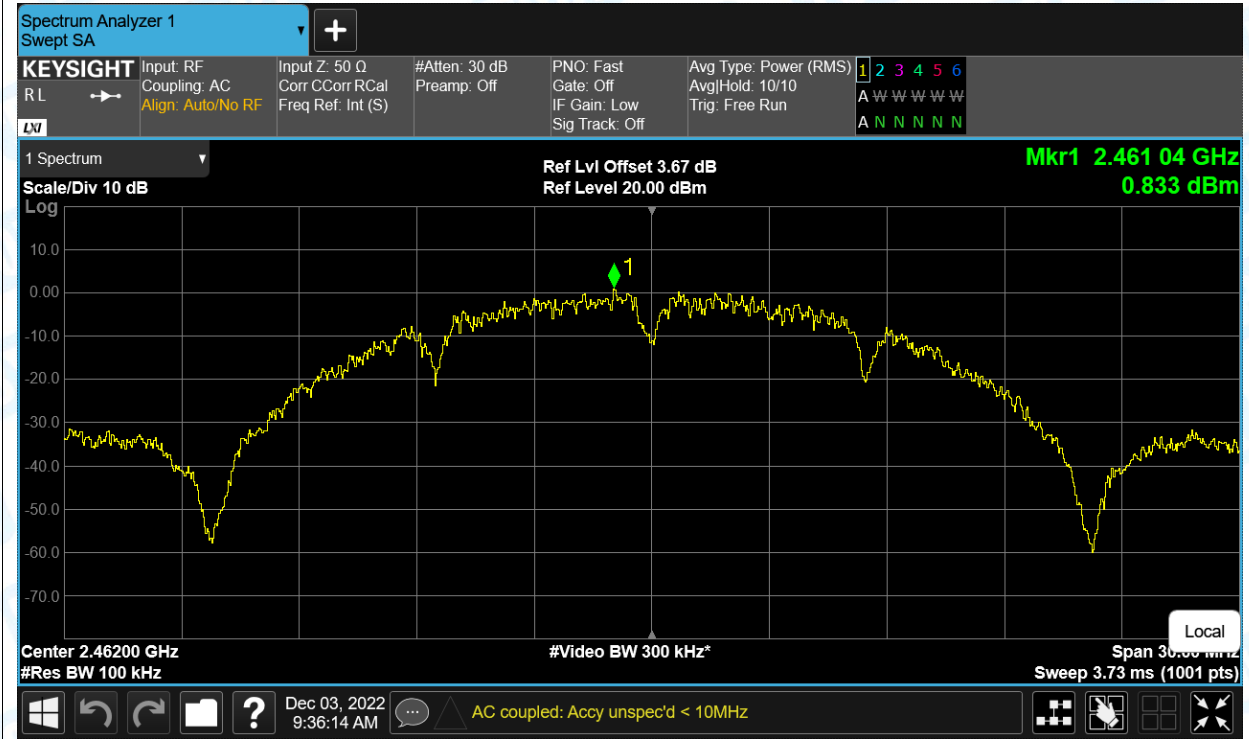
PSD NVNT b 2412MHz Ant1



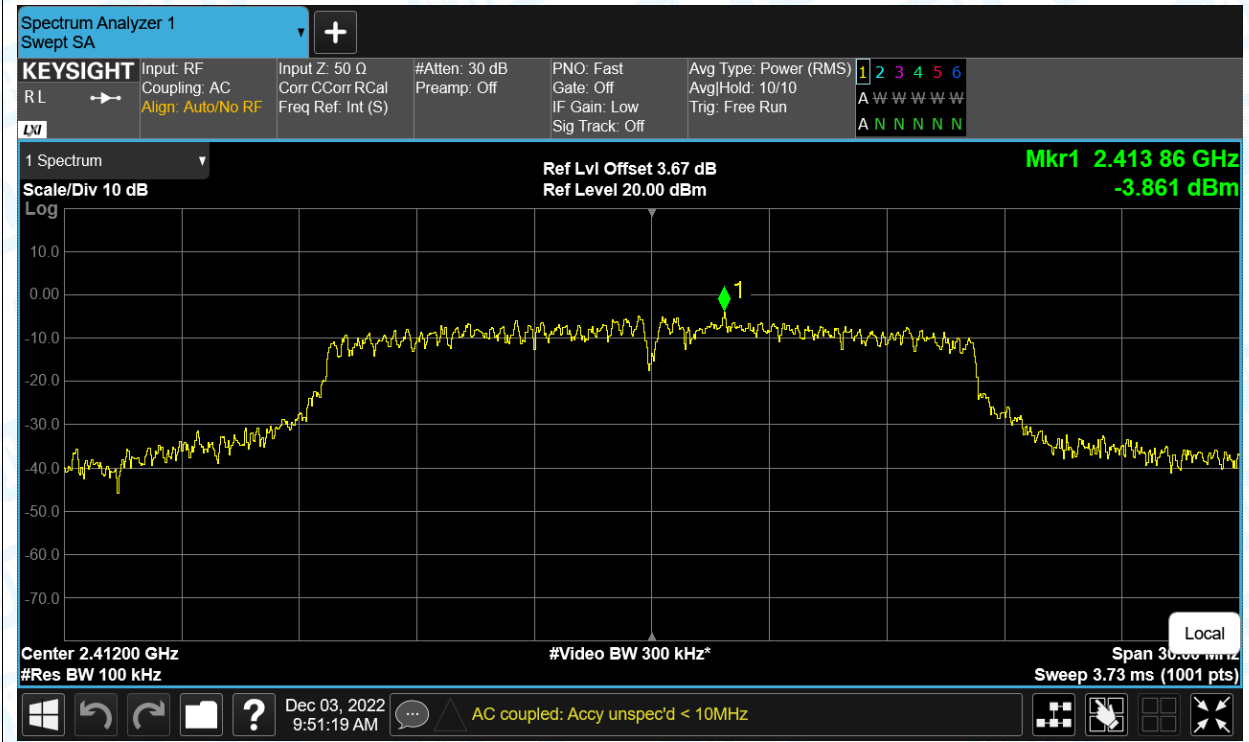
PSD NVNT b 2437MHz Ant1



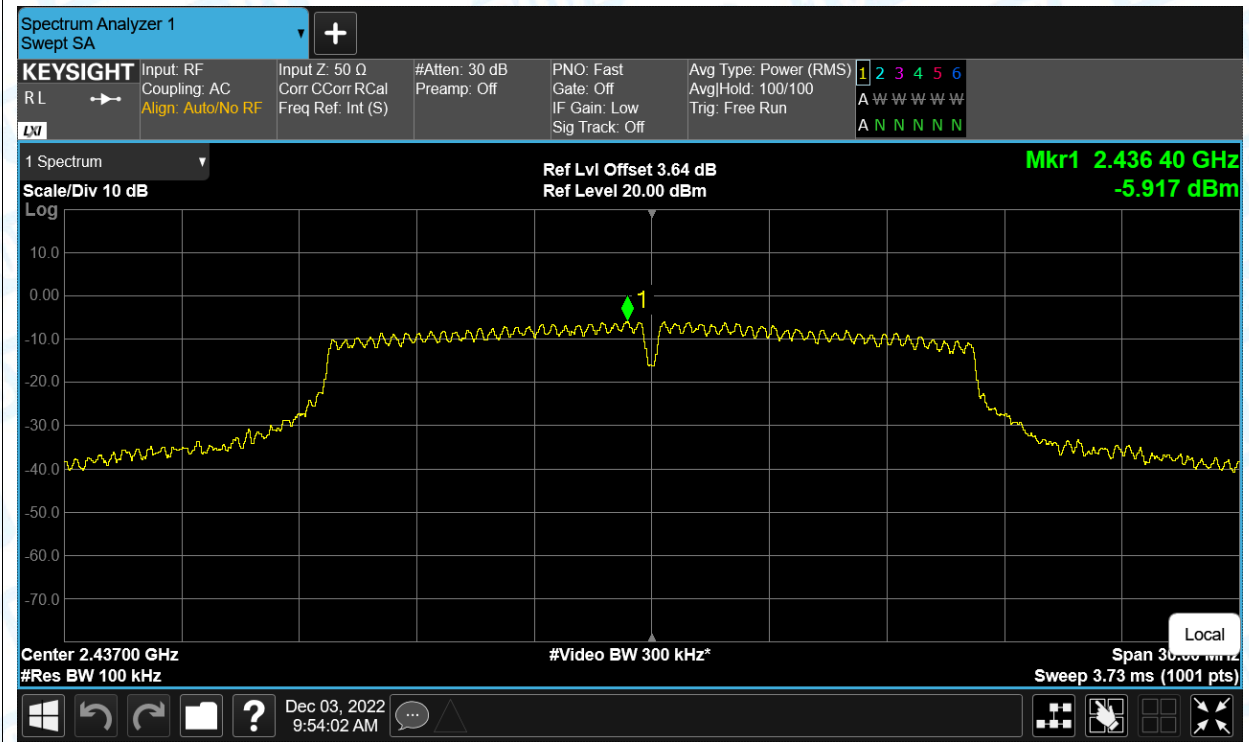
PSD NVNT b 2462MHz Ant1



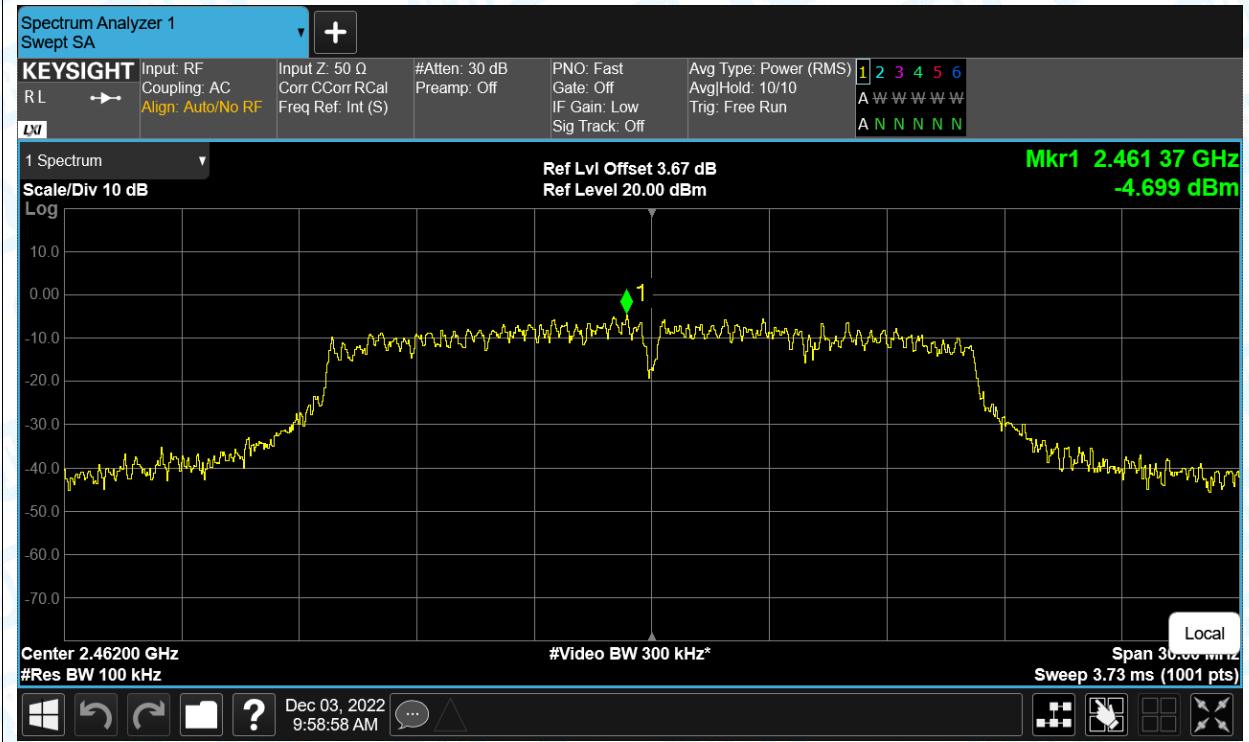
PSD NVNT g 2412MHz Ant1



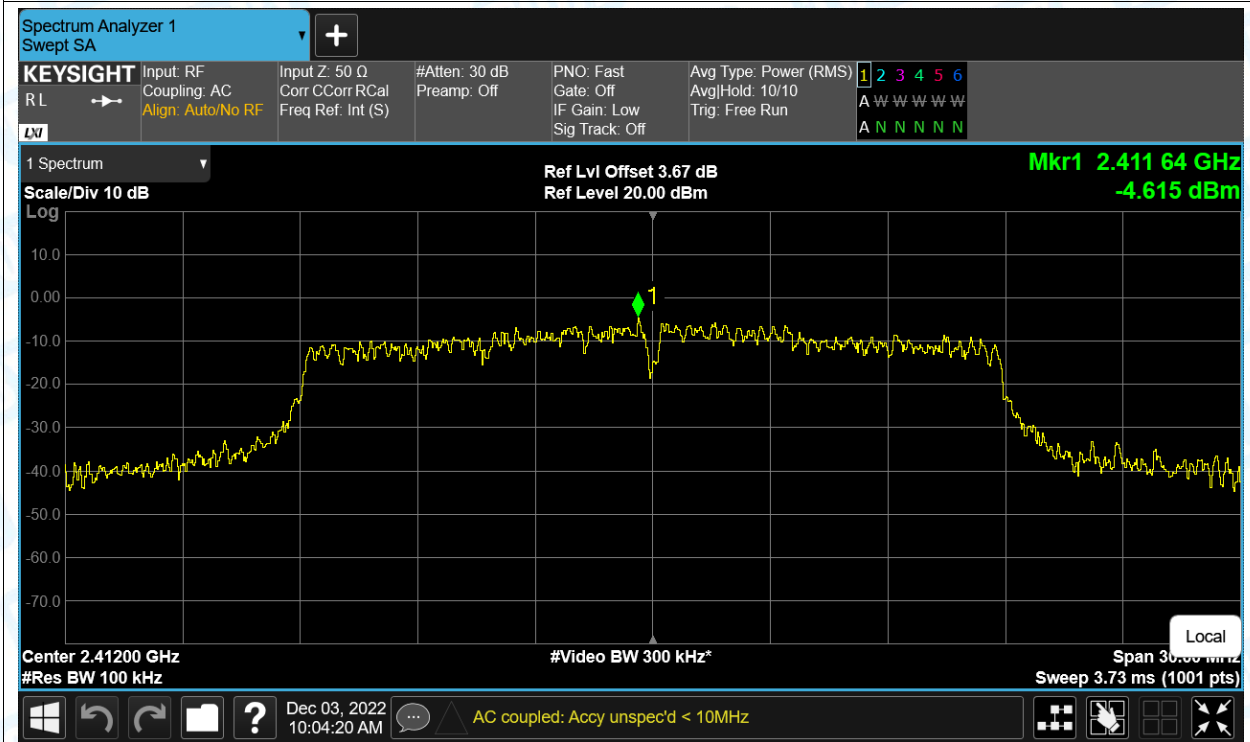
PSD NVNT g 2437MHz Ant1



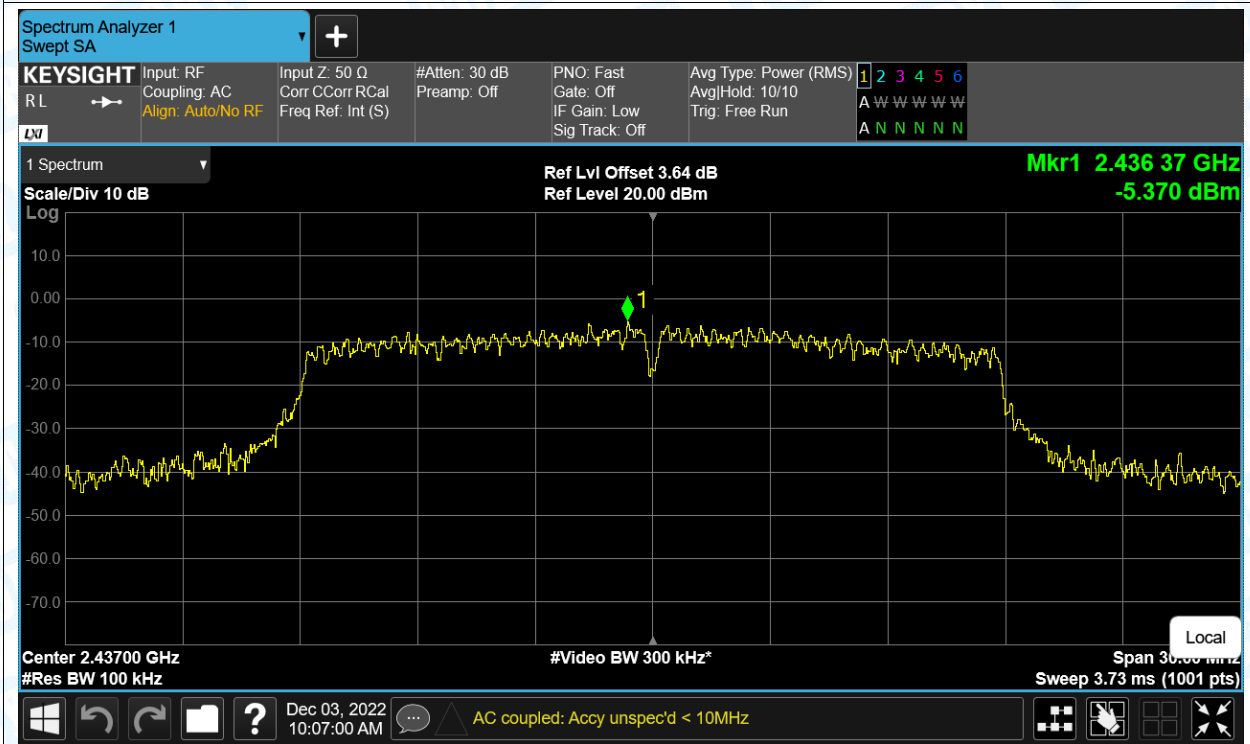
PSD NVNT g 2462MHz Ant1



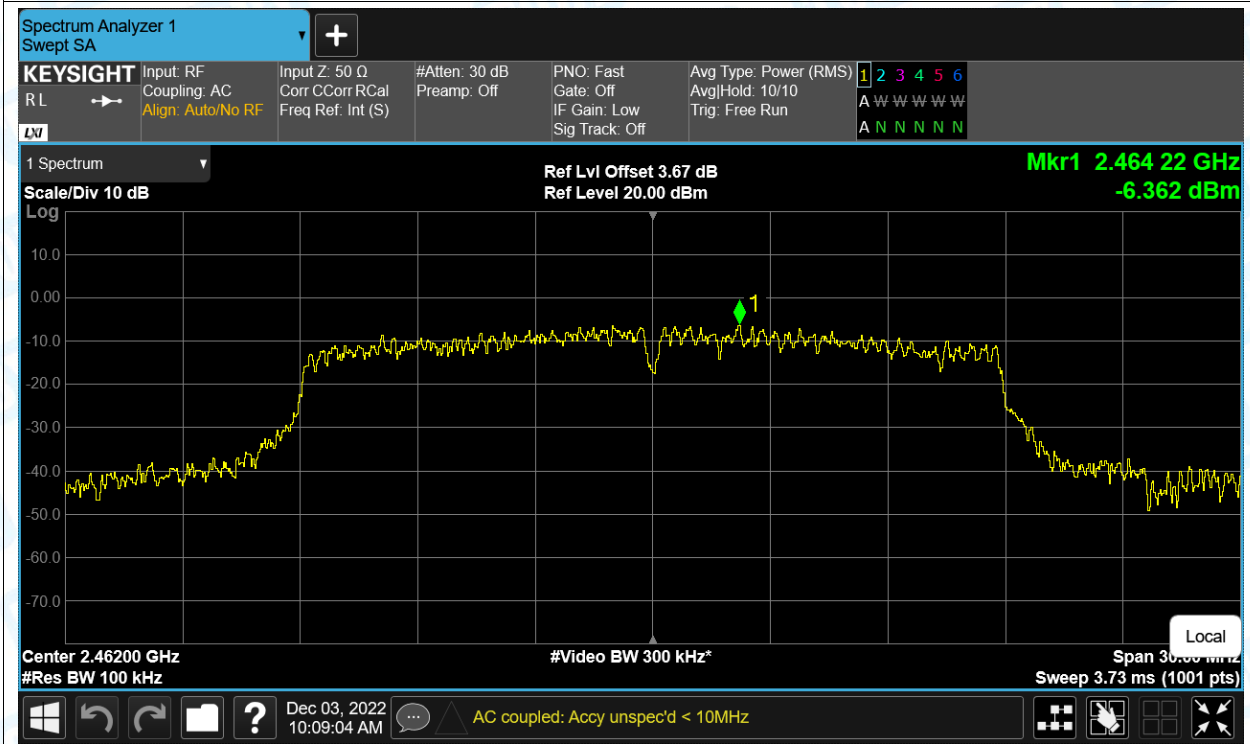
PSD NVNT n(HT20) 2412MHz Ant1



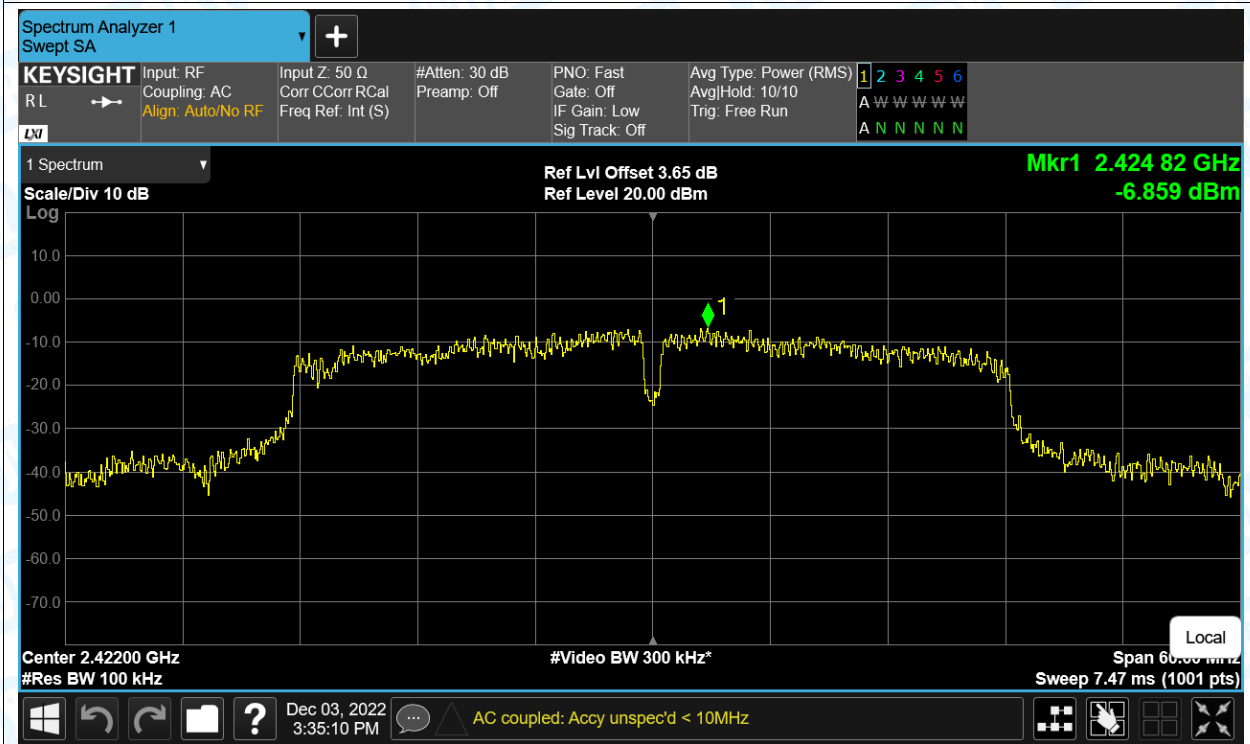
PSD NVNT n(HT20) 2437MHz Ant1



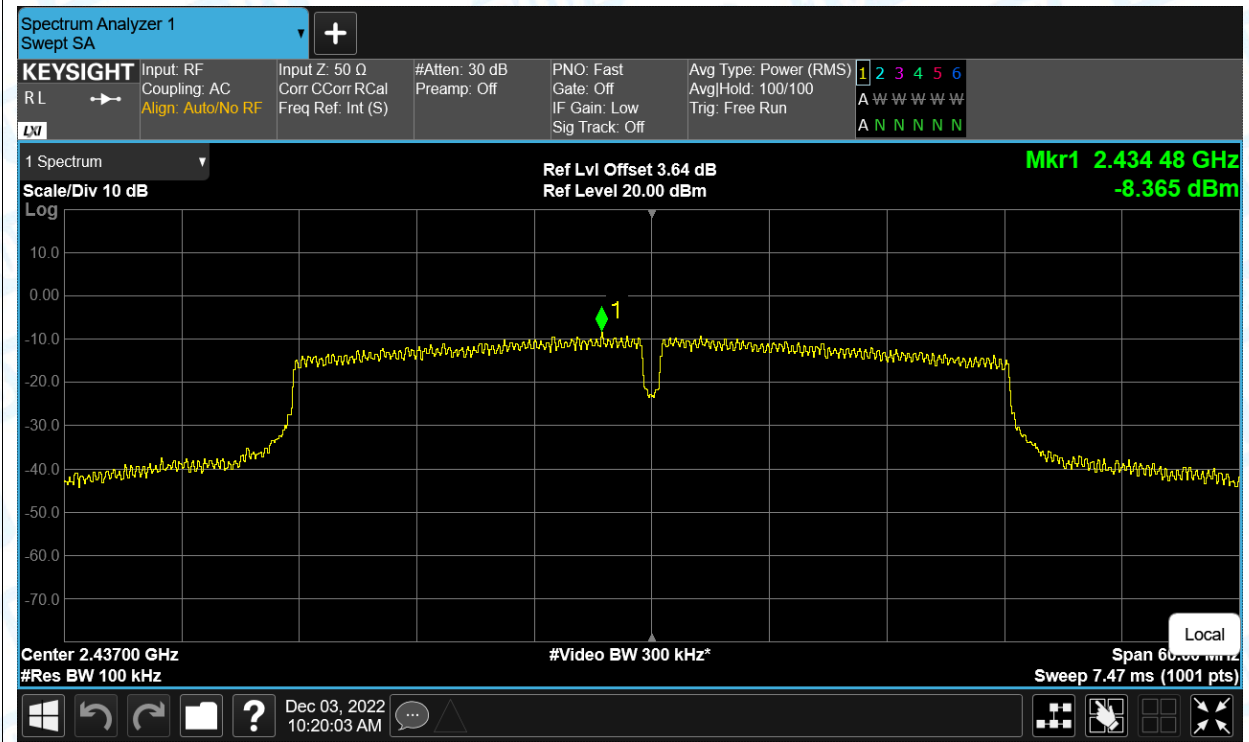
PSD NVNT n(HT20) 2462MHz Ant1



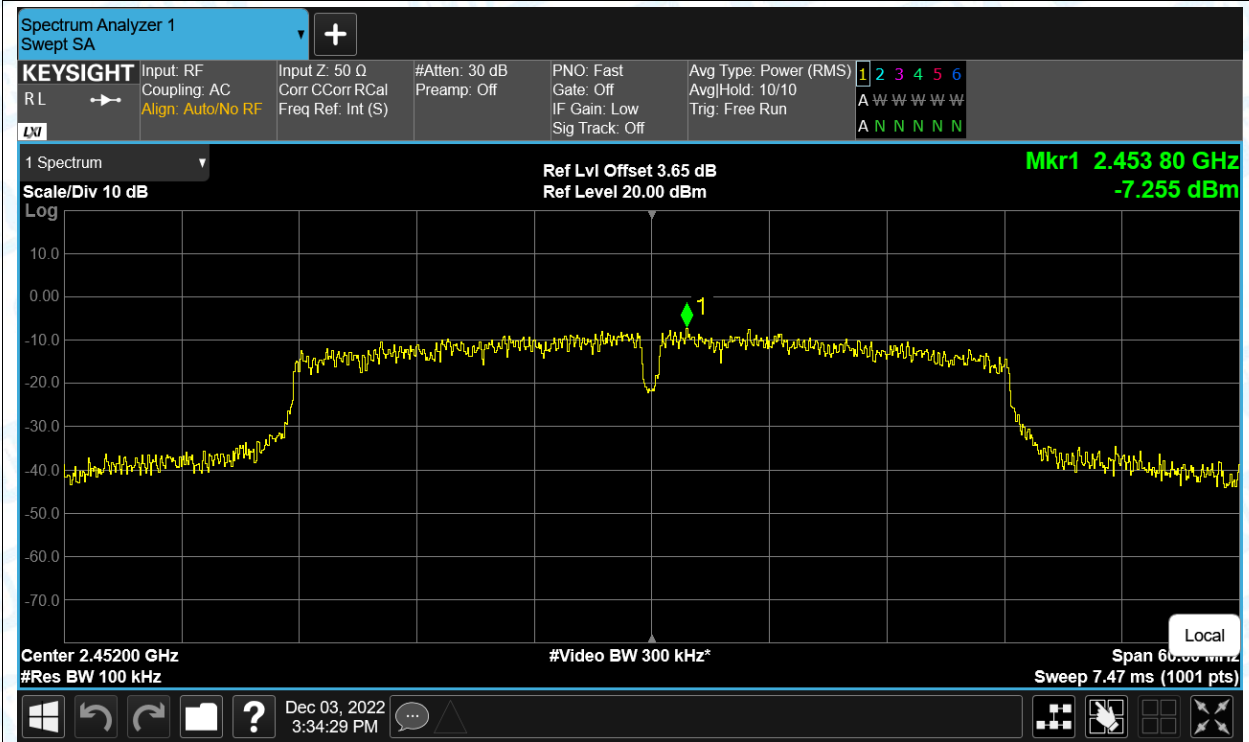
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

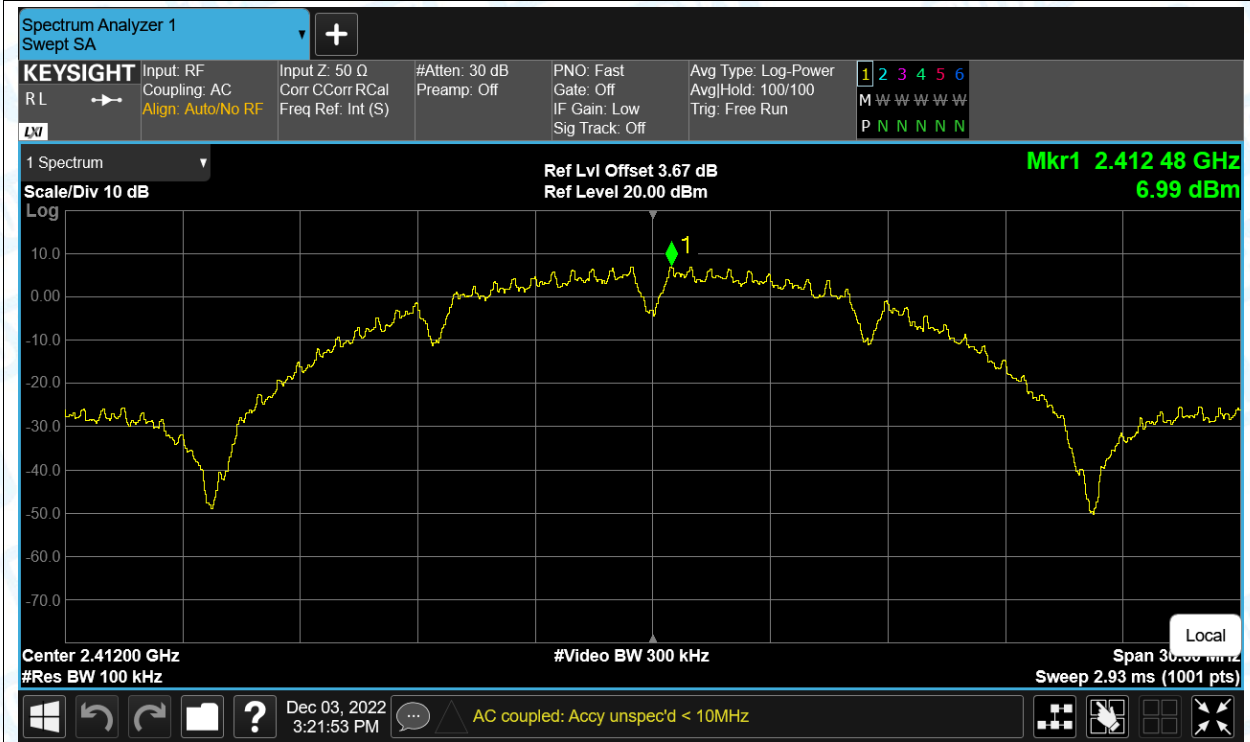


Band Edge

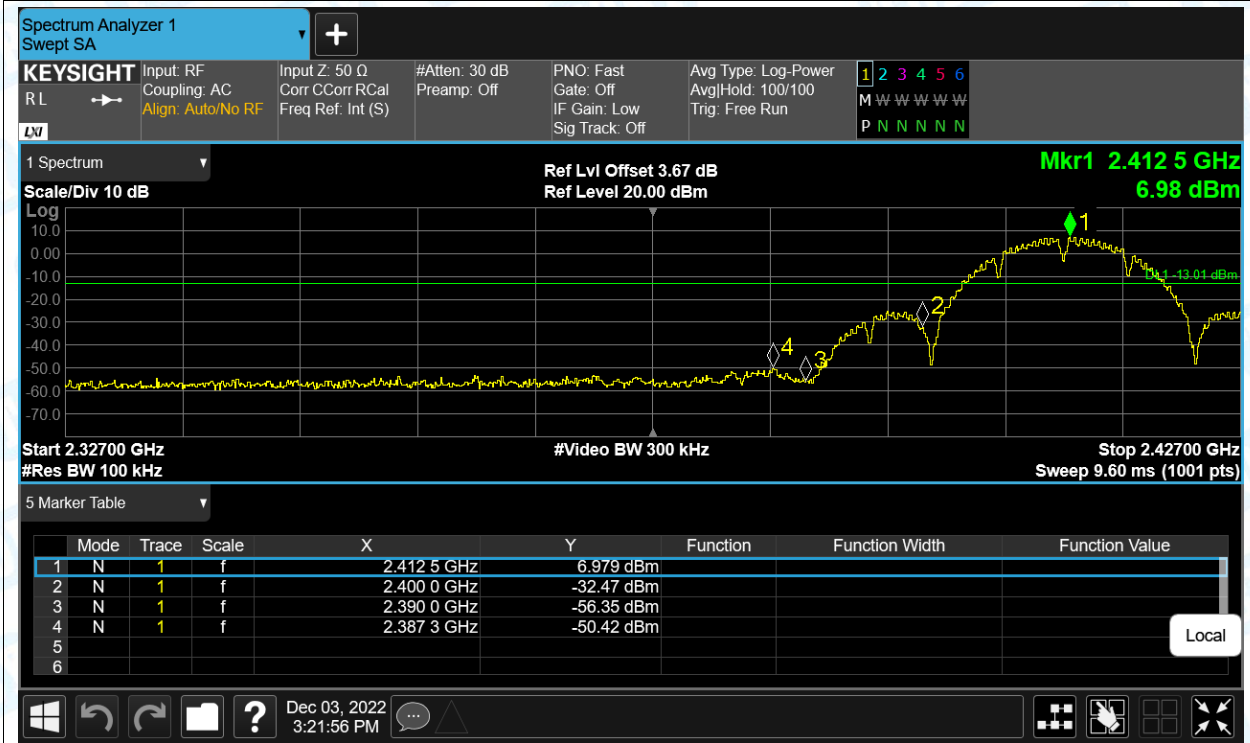
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-57.41	-20	Pass
NVNT	b	2462	Ant1	-53.52	-20	Pass
NVNT	g	2412	Ant1	-46.41	-20	Pass
NVNT	g	2462	Ant1	-44.7	-20	Pass
NVNT	n(HT20)	2412	Ant1	-42.52	-20	Pass
NVNT	n(HT20)	2462	Ant1	-41.93	-20	Pass
NVNT	n(HT40)	2422	Ant1	-31.95	-20	Pass
NVNT	n(HT40)	2452	Ant1	-33.05	-20	Pass

Test Graphs

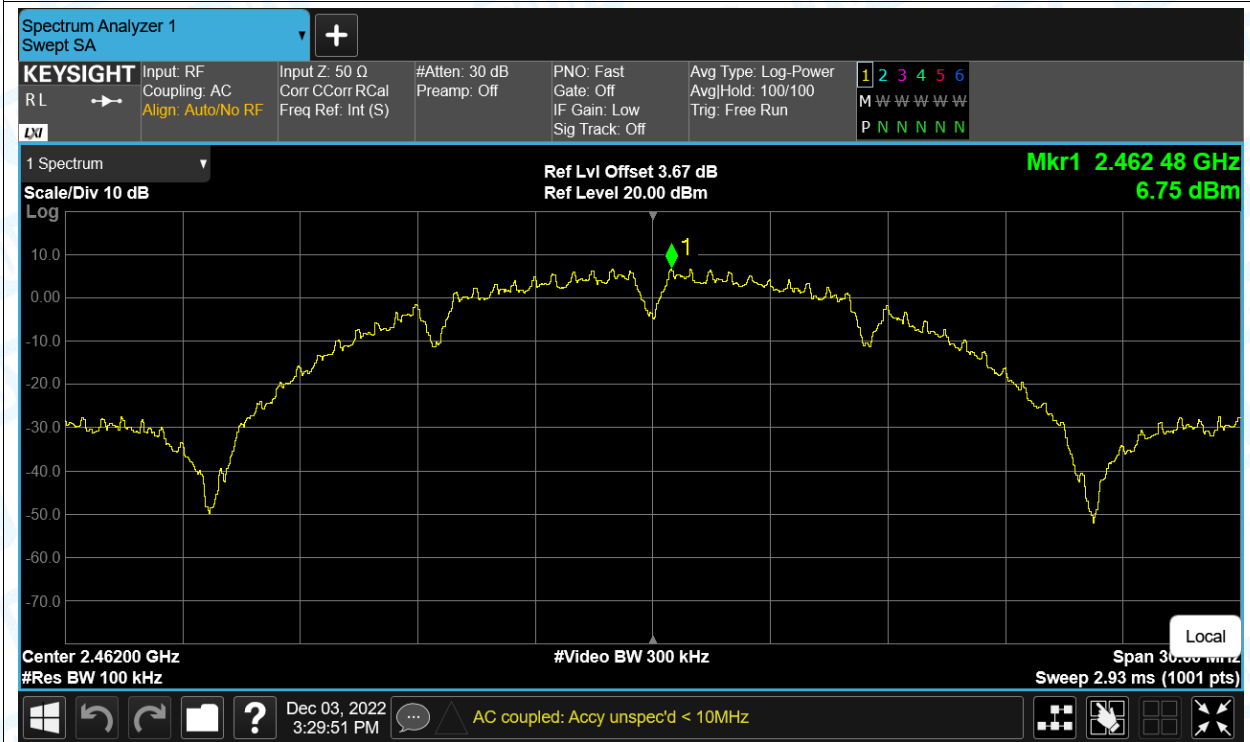
Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission

