RF Test Data for 2.4G WiFi (Conducted Measurements)

General Description of EUT	
Product Name:	Dash Cam
Test Model:	COXPAL A11T
Sample ID:	202205-0327_01-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	DC 5V
Test Engineer:	Huangjianping
Note: For a more detailed features description, please refer to the report TBR-C-202205-0327-2	

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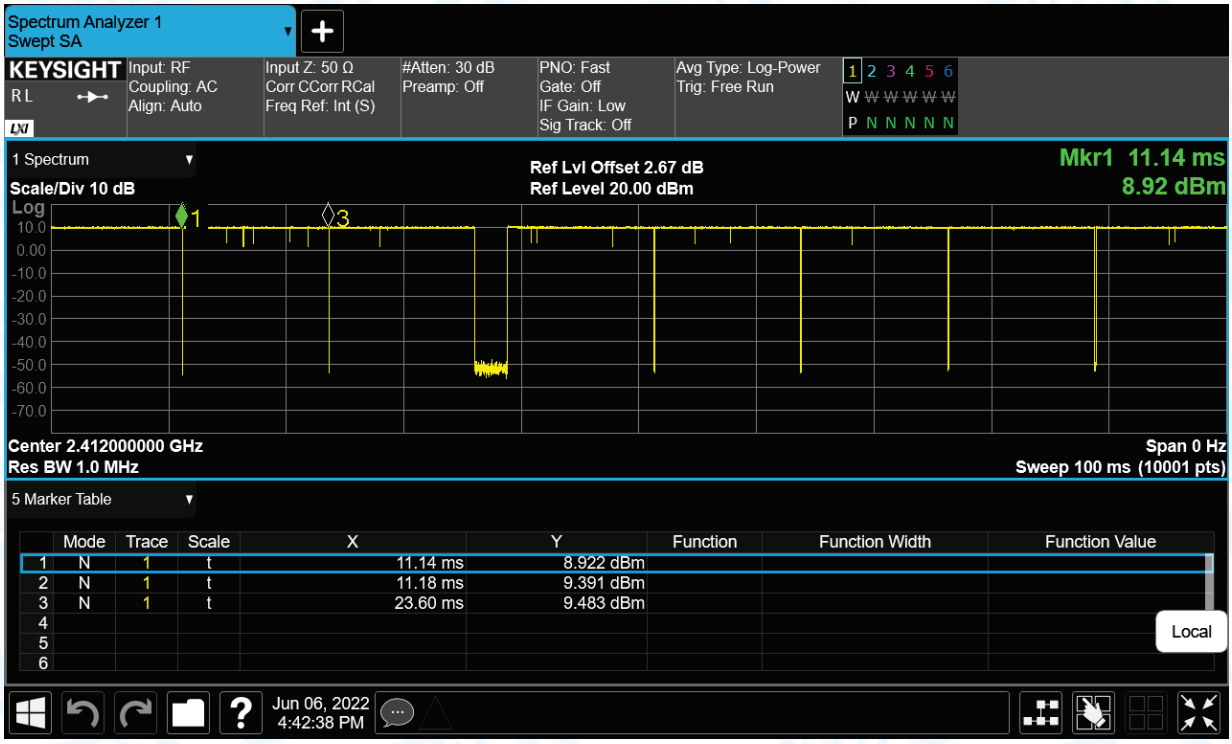
1. Duty Cycle

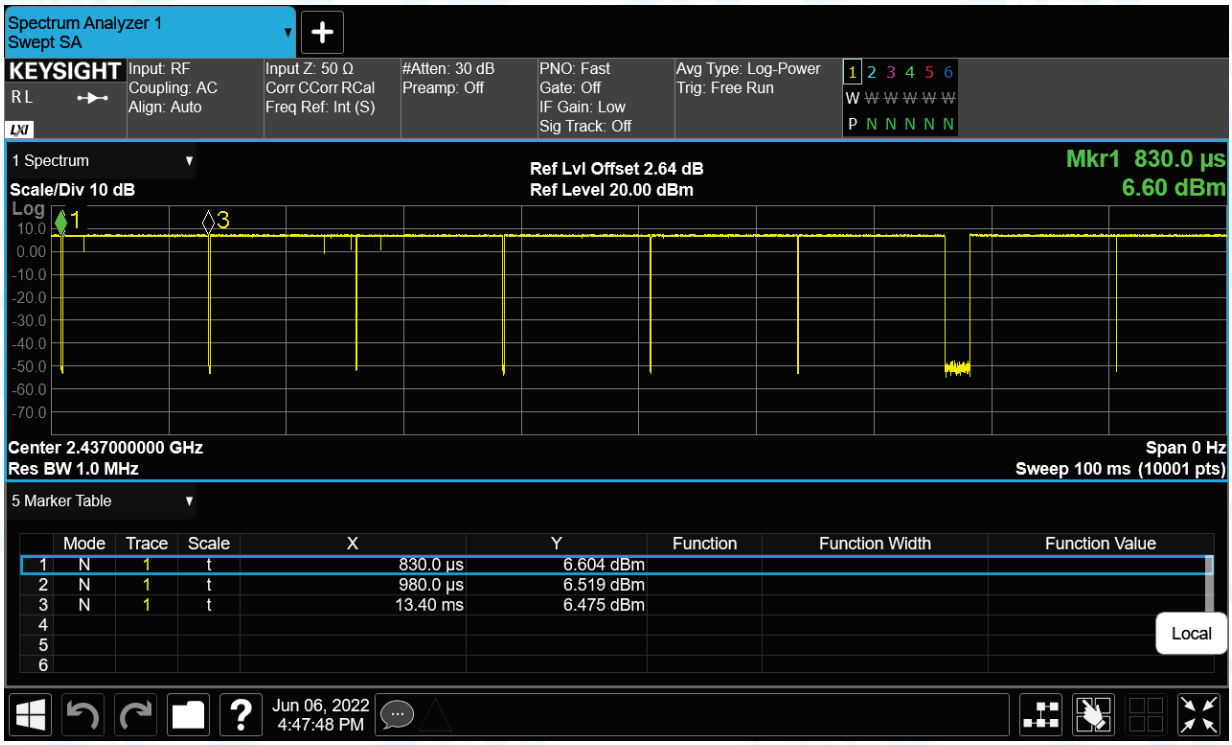
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	96.84	0.14	0.08
NVNT	b	2437	Ant1	97.22	0.12	0.08
NVNT	b	2462	Ant1	99.14	0.04	0.08
NVNT	g	2412	Ant1	20.79	6.82	0.48
NVNT	g	2437	Ant1	20.77	6.83	0.48
NVNT	g	2462	Ant1	20.75	6.83	0.49
NVNT	n(HT20)	2412	Ant1	19.32	7.14	0.52
NVNT	n(HT20)	2437	Ant1	19.36	7.13	0.52
NVNT	n(HT20)	2462	Ant1	19.31	7.14	0.52

Test Graphs

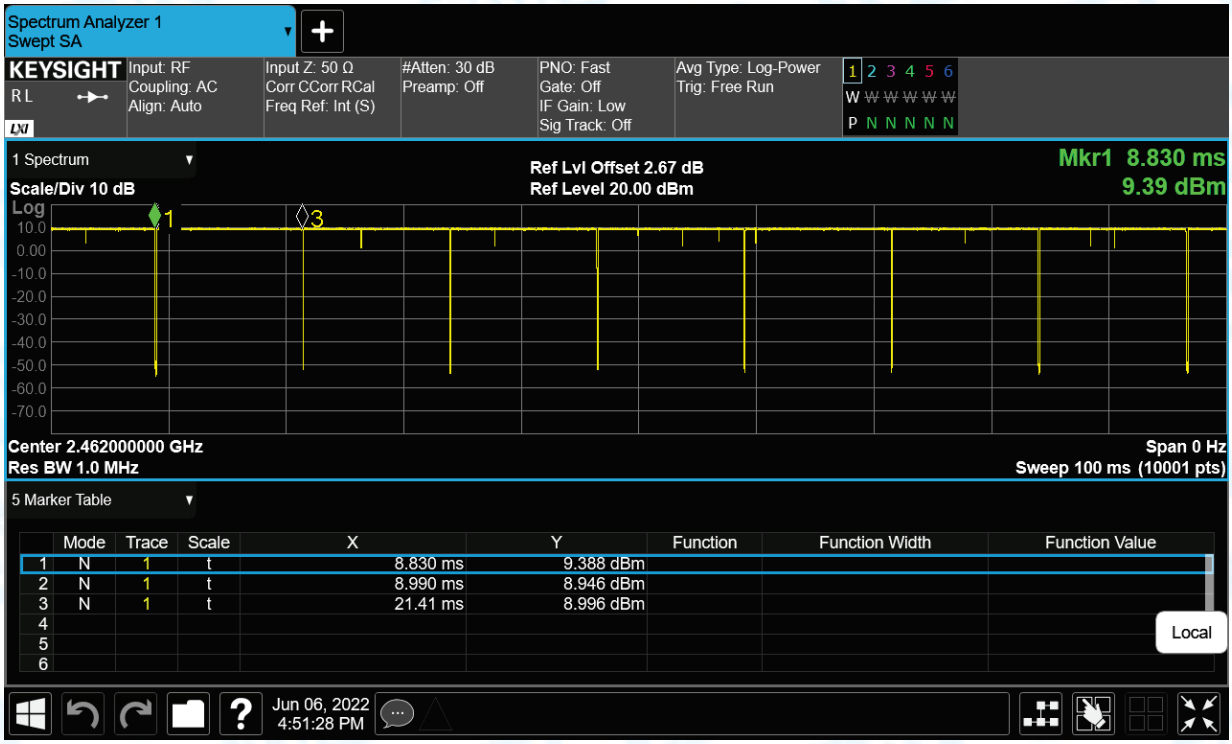
Duty Cycle NVNT b 2412MHz Ant1



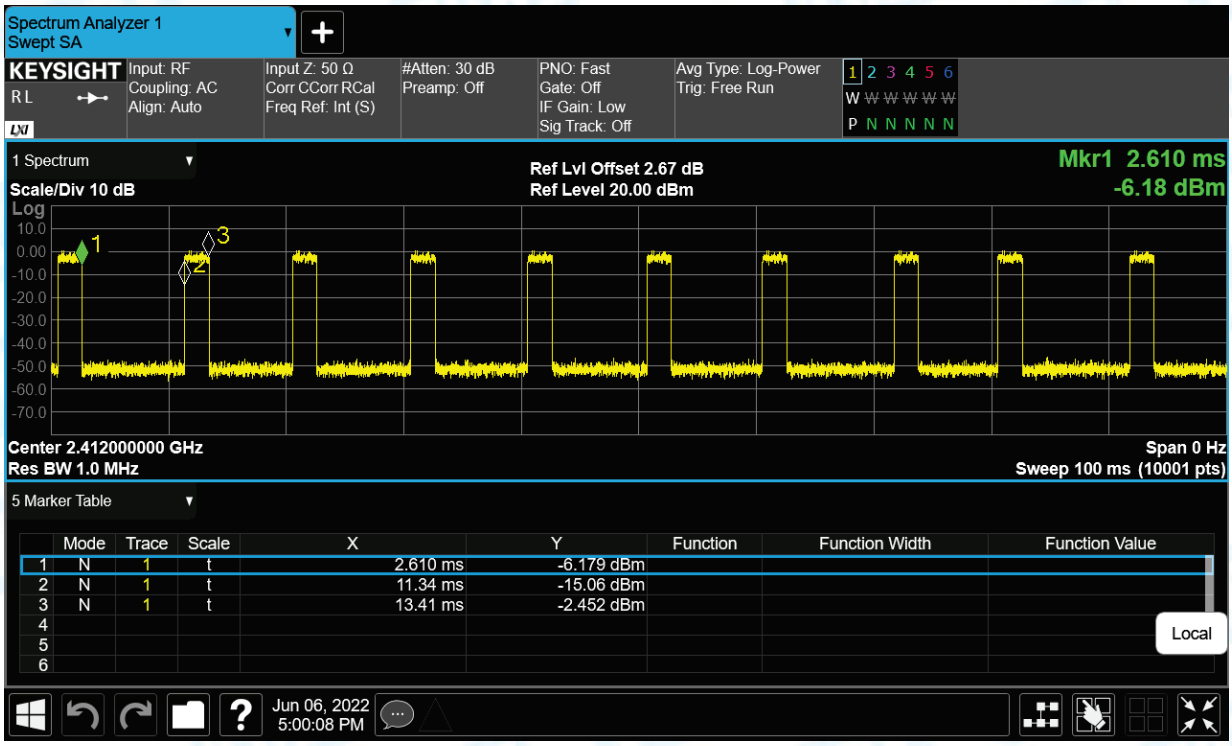
Duty Cycle NVNT b 2437MHz Ant1



Duty Cycle NVNT b 2462MHz Ant1

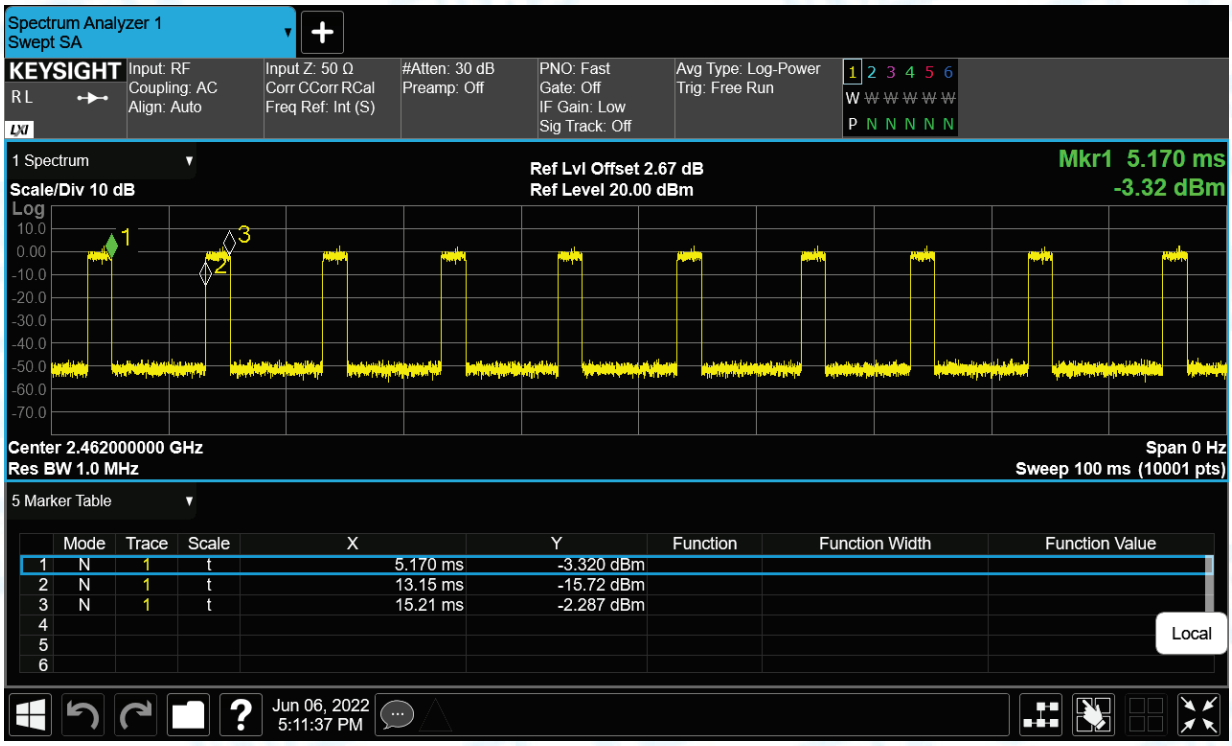


Duty Cycle NVNT g 2412MHz Ant1

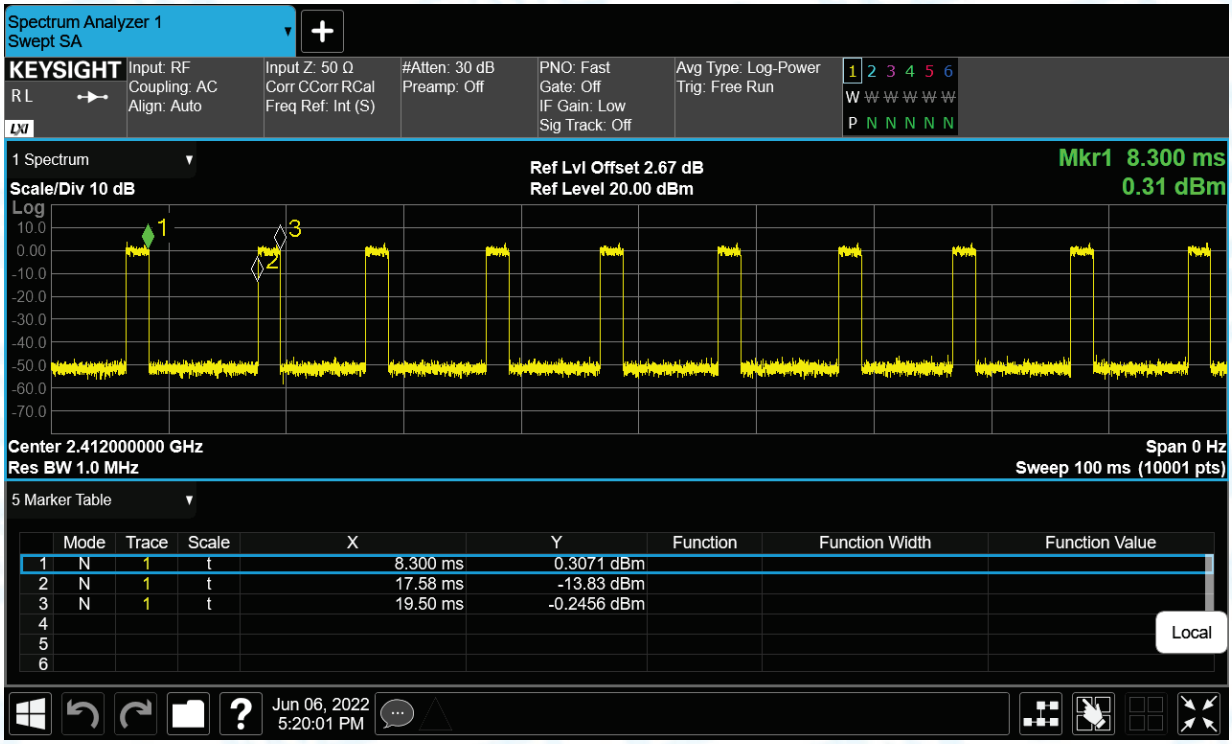


Duty Cycle NVNT g 2437MHz Ant1

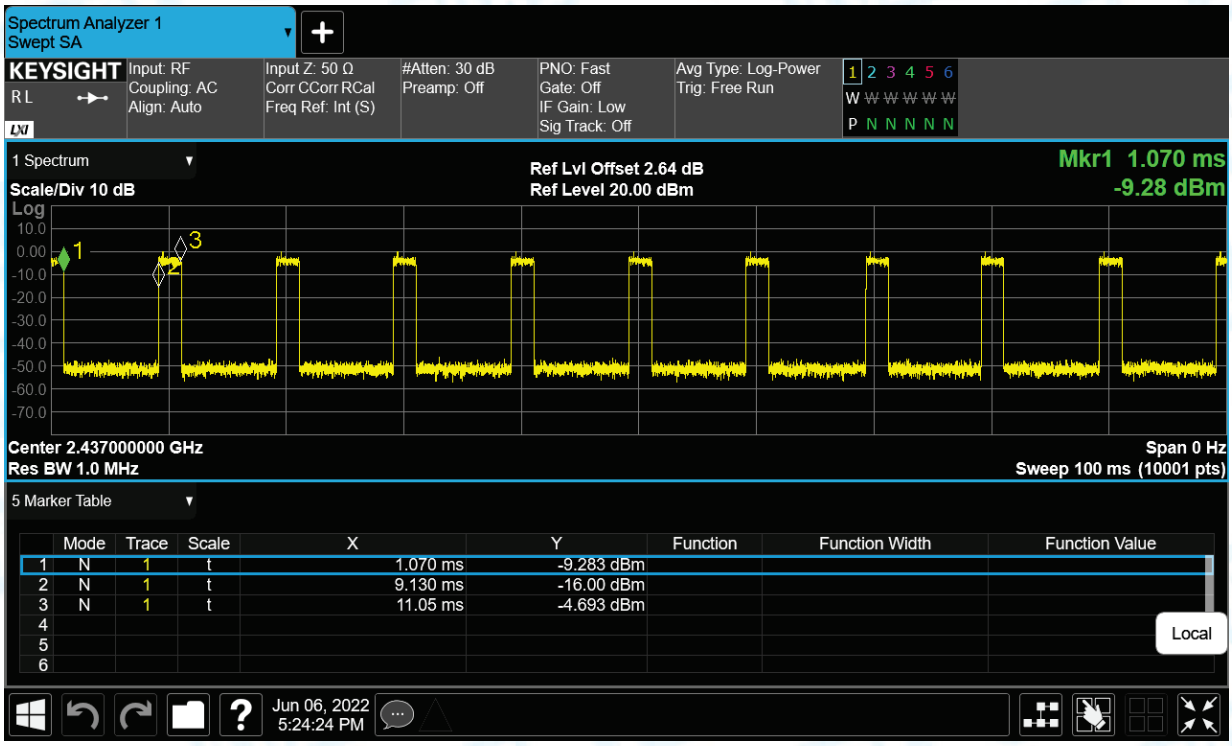
Duty Cycle NVNT g 2462MHz Ant1



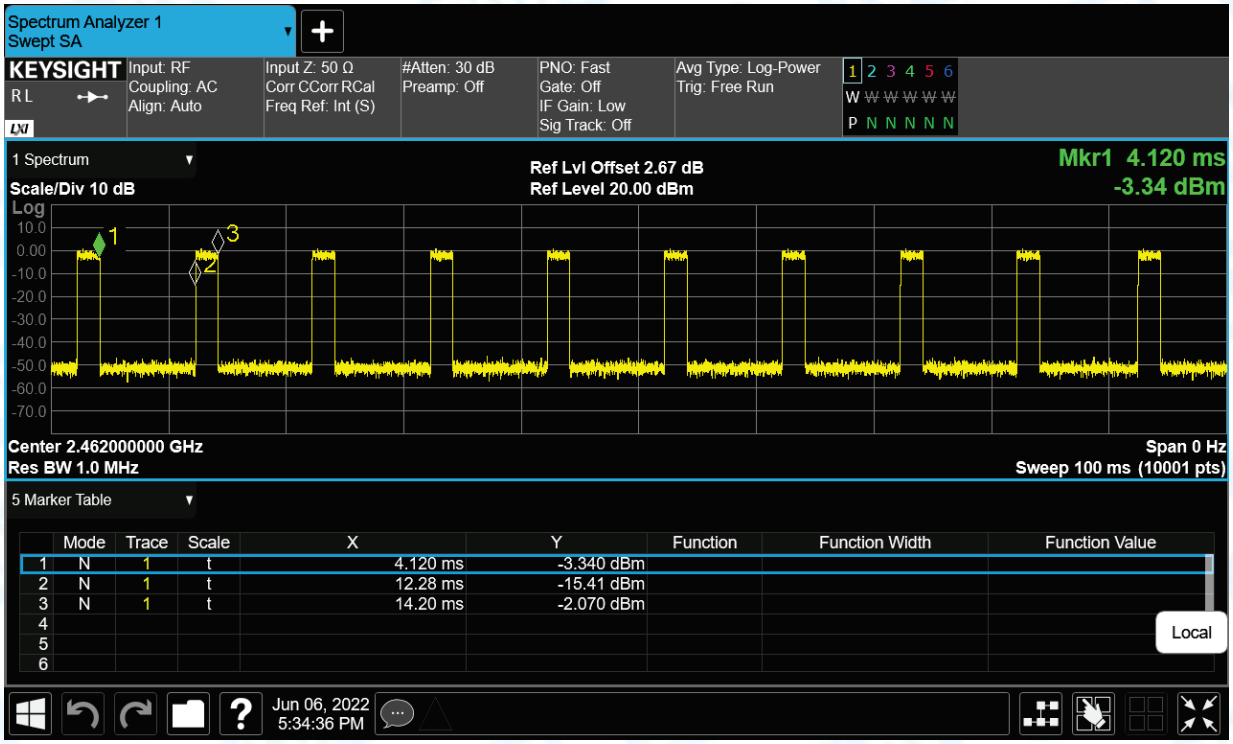
Duty Cycle NVNT n(HT20) 2412MHz Ant1



Duty Cycle NVNT n(HT20) 2437MHz Ant1



Duty Cycle NVNT n(HT20) 2462MHz Ant1



2. Maximum Conducted Output Power

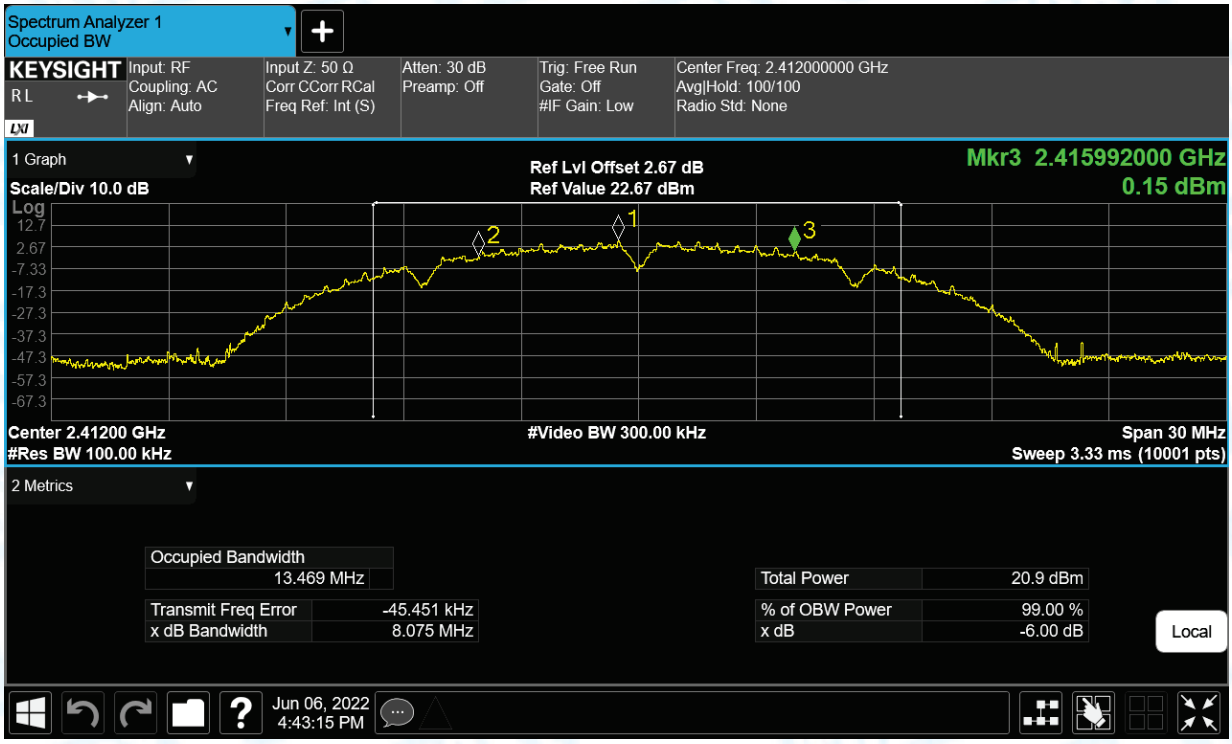
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.075	30	Pass
NVNT	b	2437	Ant1	16.281	30	Pass
NVNT	b	2462	Ant1	15.681	30	Pass
NVNT	g	2412	Ant1	8.14	30	Pass
NVNT	g	2437	Ant1	9.121	30	Pass
NVNT	g	2462	Ant1	8.9	30	Pass
NVNT	n(HT20)	2412	Ant1	8.429	30	Pass
NVNT	n(HT20)	2437	Ant1	9.719	30	Pass
NVNT	n(HT20)	2462	Ant1	9.042	30	Pass

3. -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.07	0.5	Pass
NVNT	b	2437	Ant1	8.05	0.5	Pass
NVNT	b	2462	Ant1	8.54	0.5	Pass
NVNT	g	2412	Ant1	16.5	0.5	Pass
NVNT	g	2437	Ant1	16.3	0.5	Pass
NVNT	g	2462	Ant1	16.36	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.56	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.59	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.64	0.5	Pass

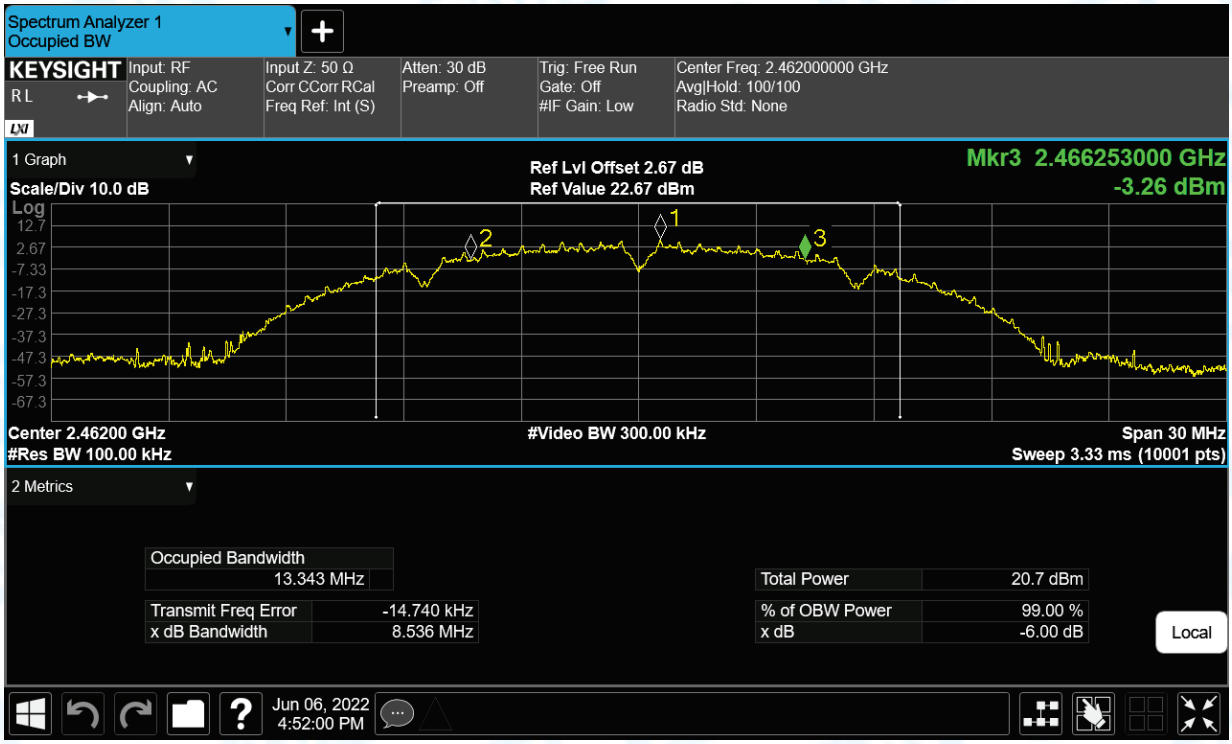
Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

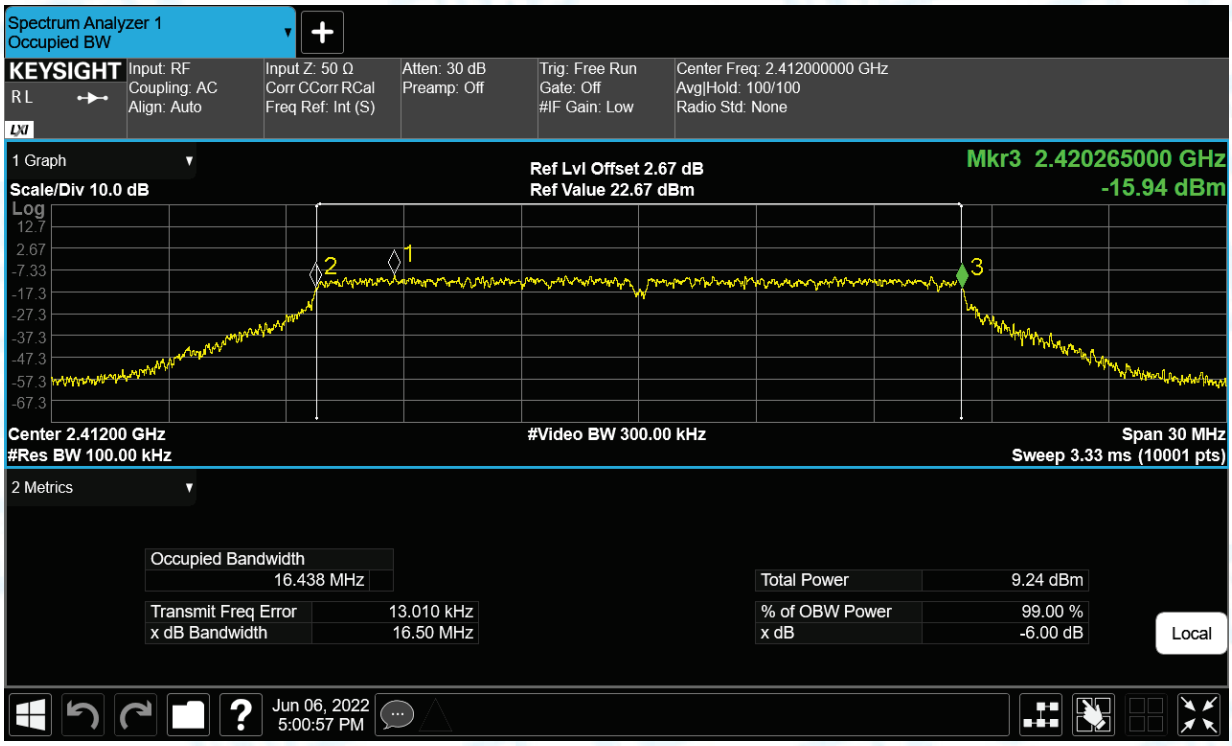


-6dB Bandwidth NVNT b 2437MHz Ant1

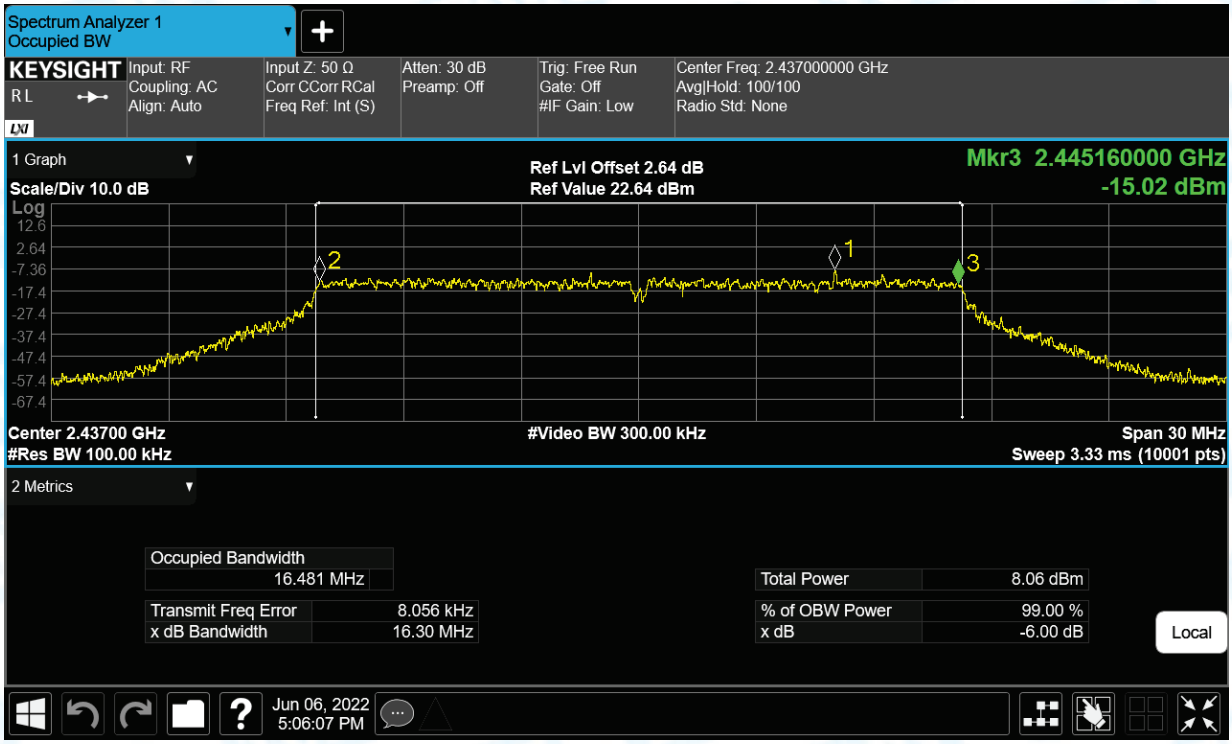
-6dB Bandwidth NVNT b 2462MHz Ant1



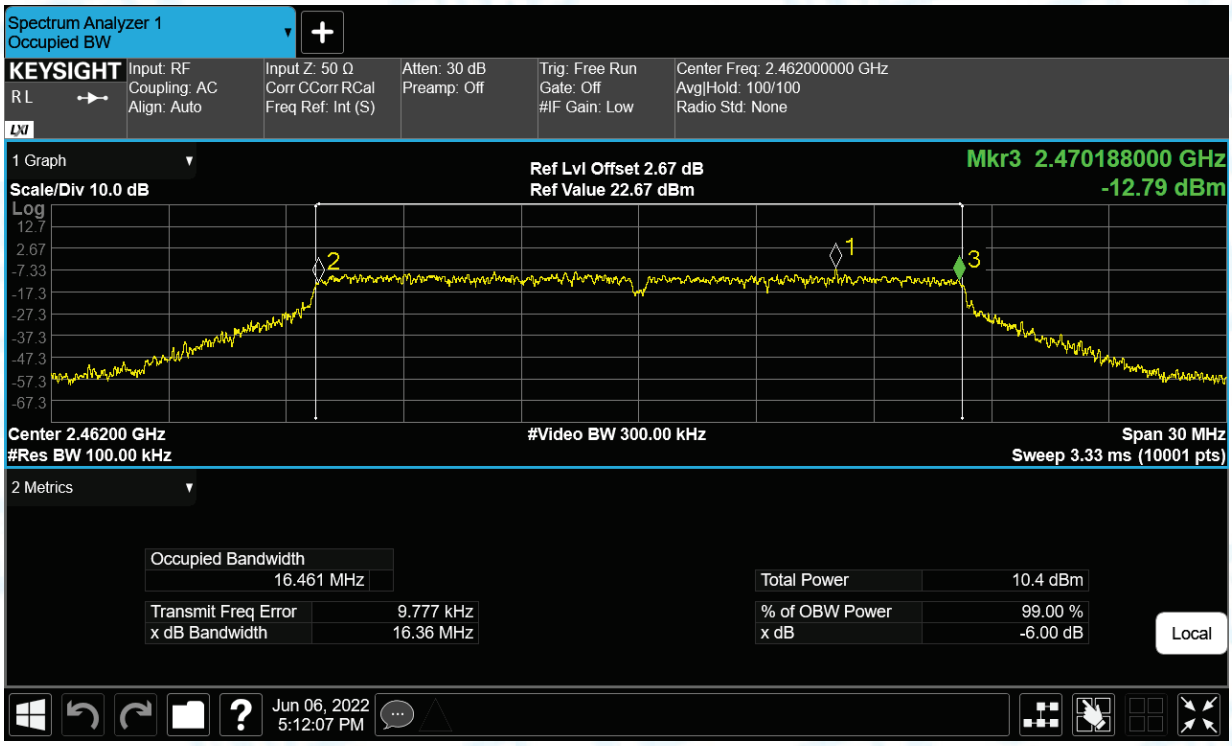
-6dB Bandwidth NVNT g 2412MHz Ant1



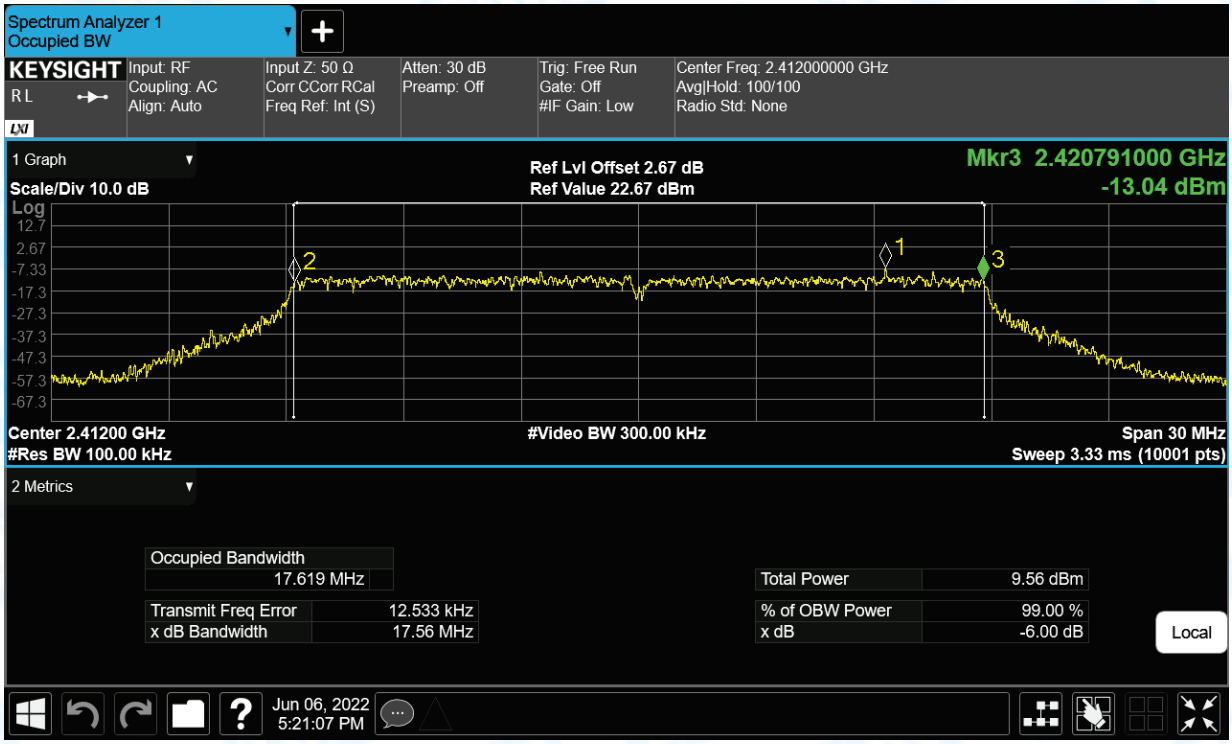
-6dB Bandwidth NVNT g 2437MHz Ant1



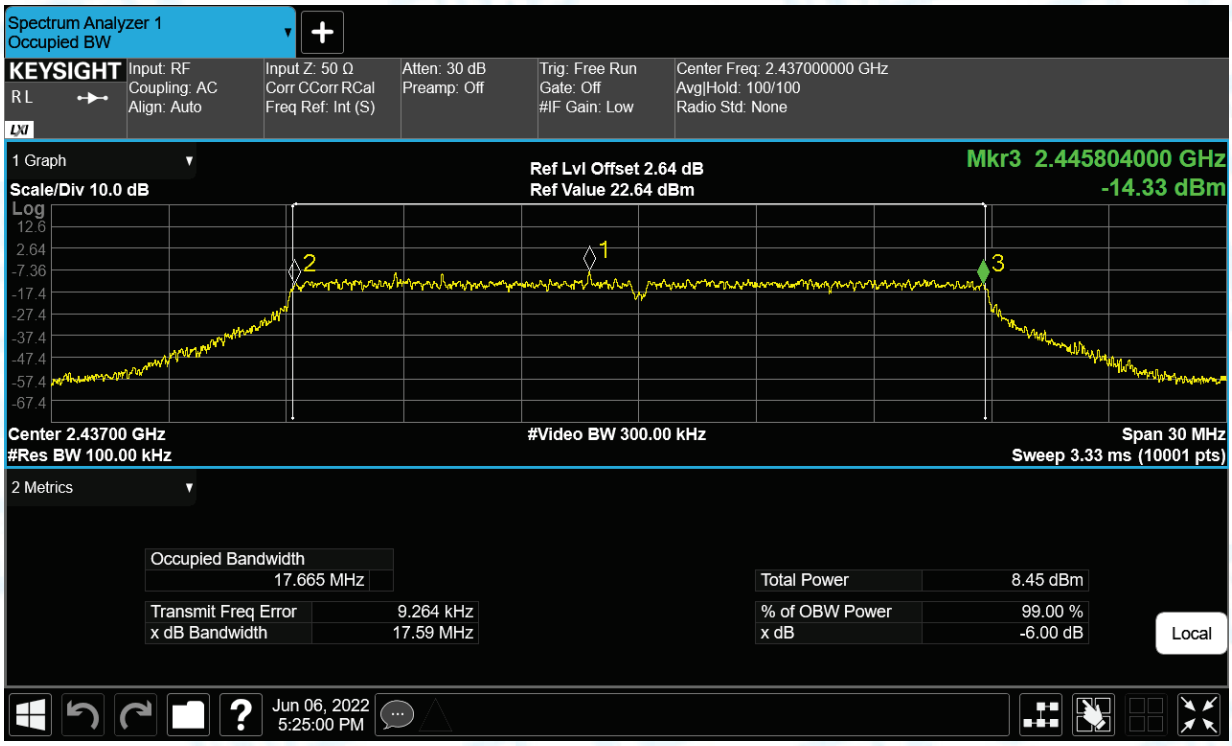
-6dB Bandwidth NVNT g 2462MHz Ant1



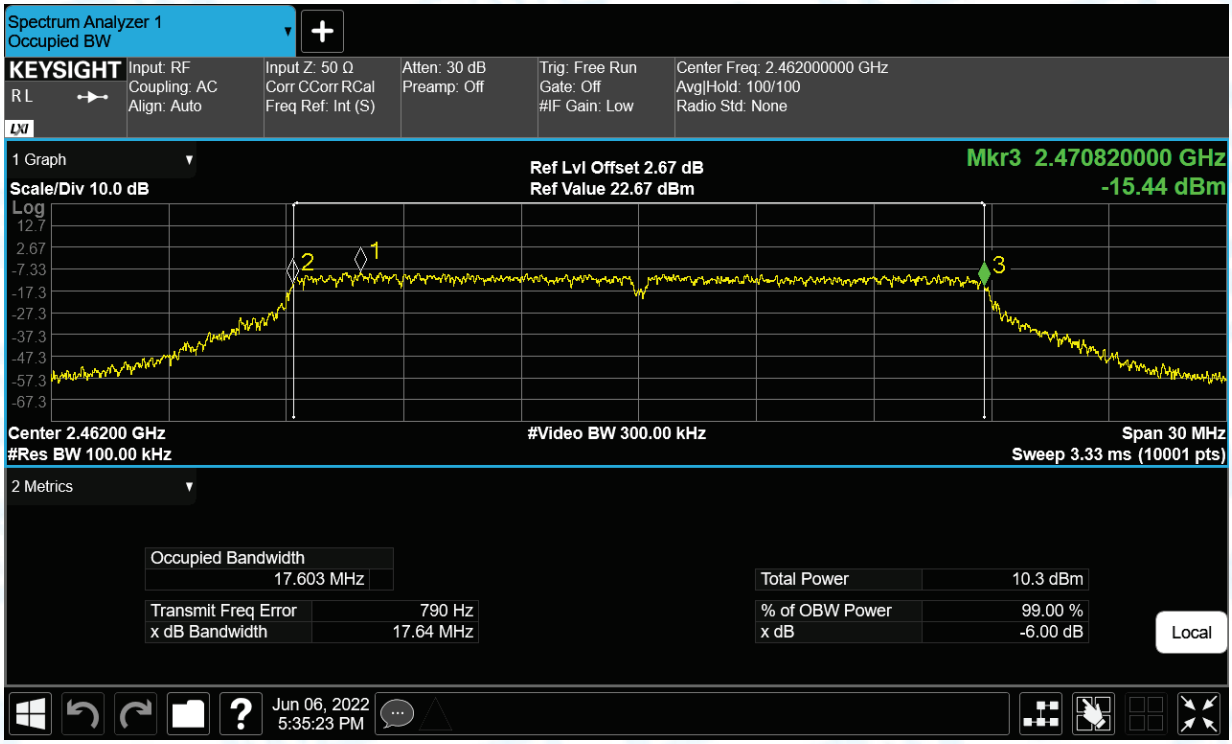
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



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



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

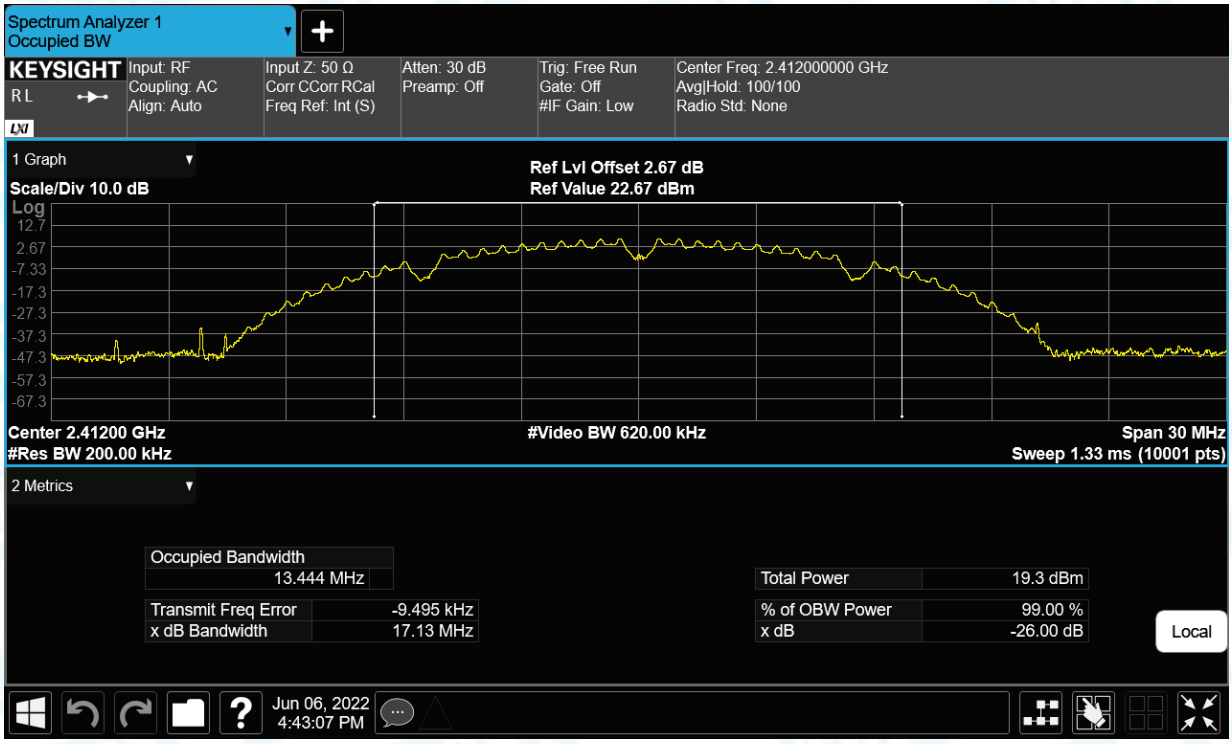


4. Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.444
NVNT	b	2437	Ant1	13.564
NVNT	b	2462	Ant1	13.363
NVNT	g	2412	Ant1	16.527
NVNT	g	2437	Ant1	16.619
NVNT	g	2462	Ant1	16.51
NVNT	n(HT20)	2412	Ant1	17.647
NVNT	n(HT20)	2437	Ant1	17.703
NVNT	n(HT20)	2462	Ant1	17.678

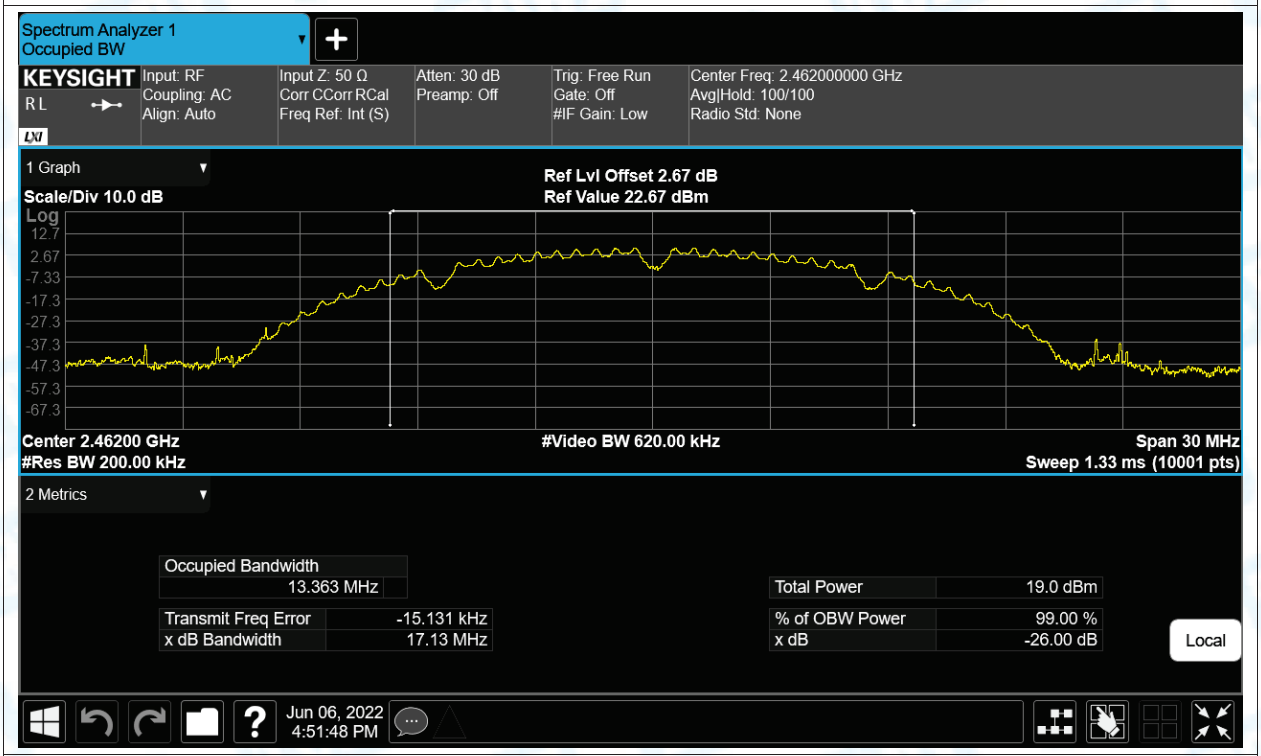
Test Graphs

OBW NVNT b 2412MHz Ant1

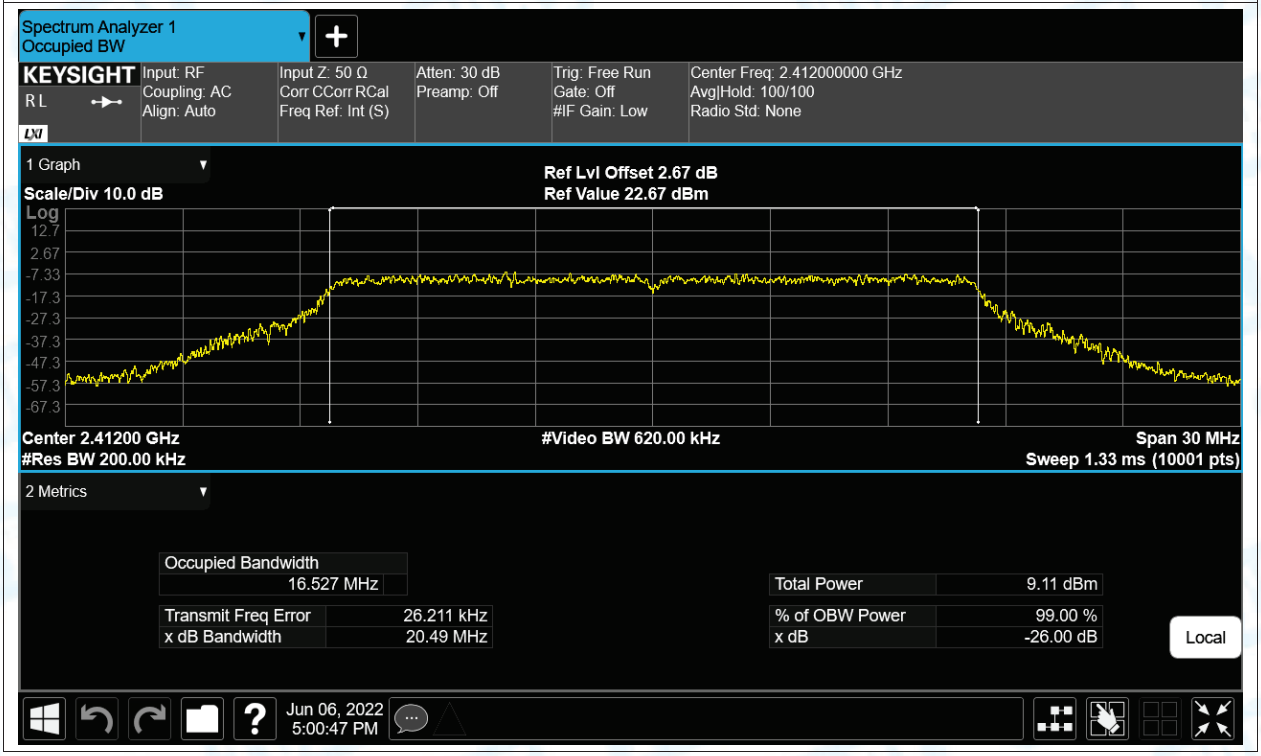


OBW NVNT b 2437MHz Ant1

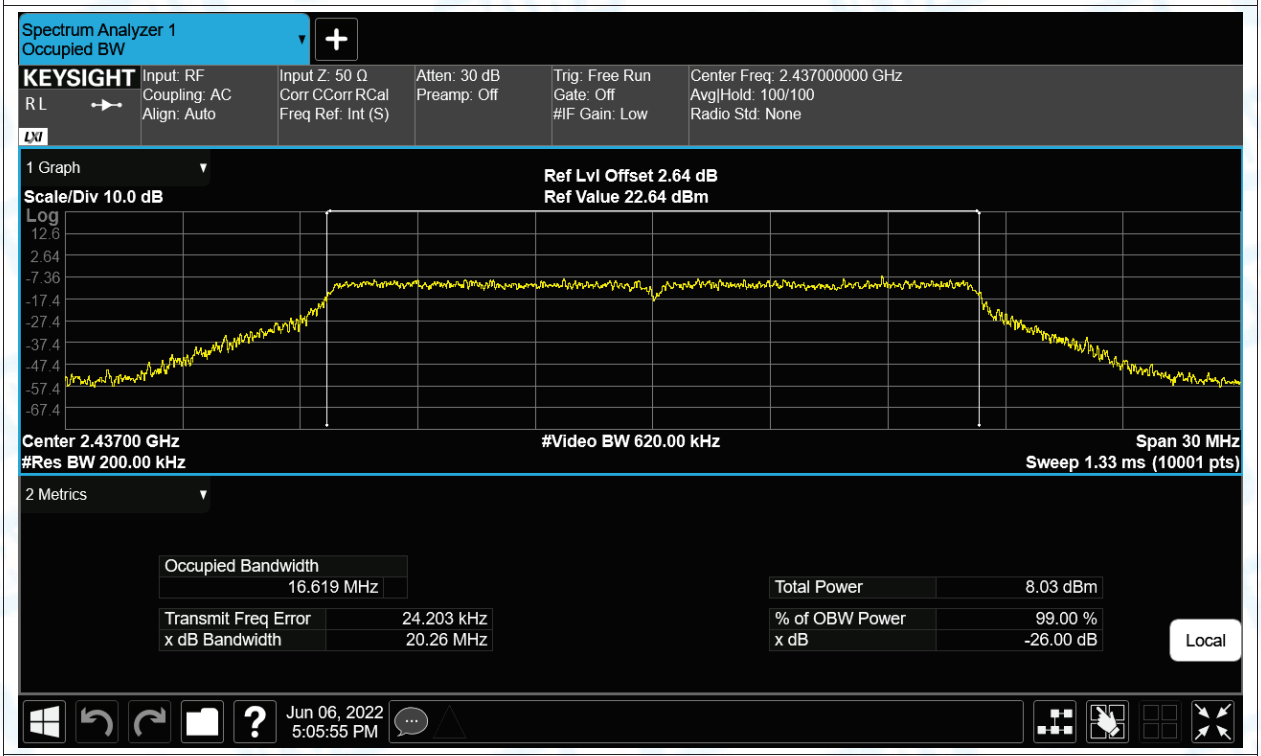
OBW NVNT b 2462MHz Ant1



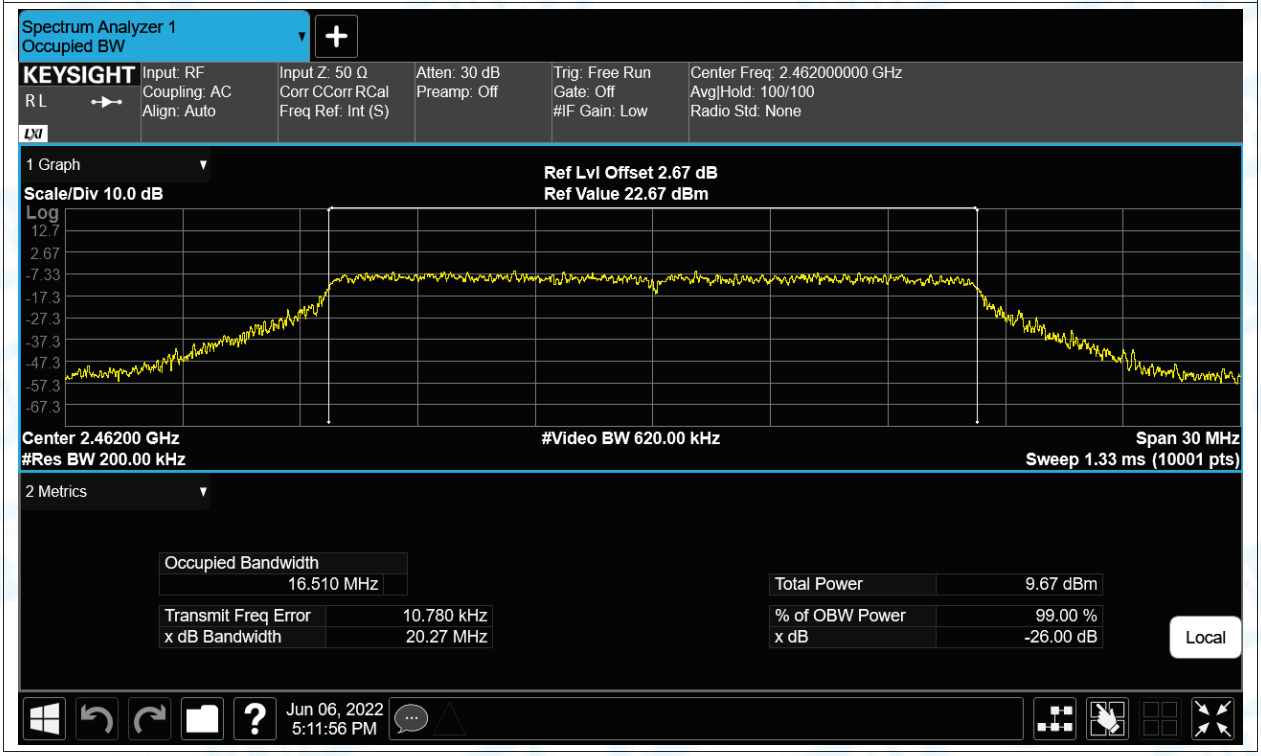
OBW NVNT g 2412MHz Ant1



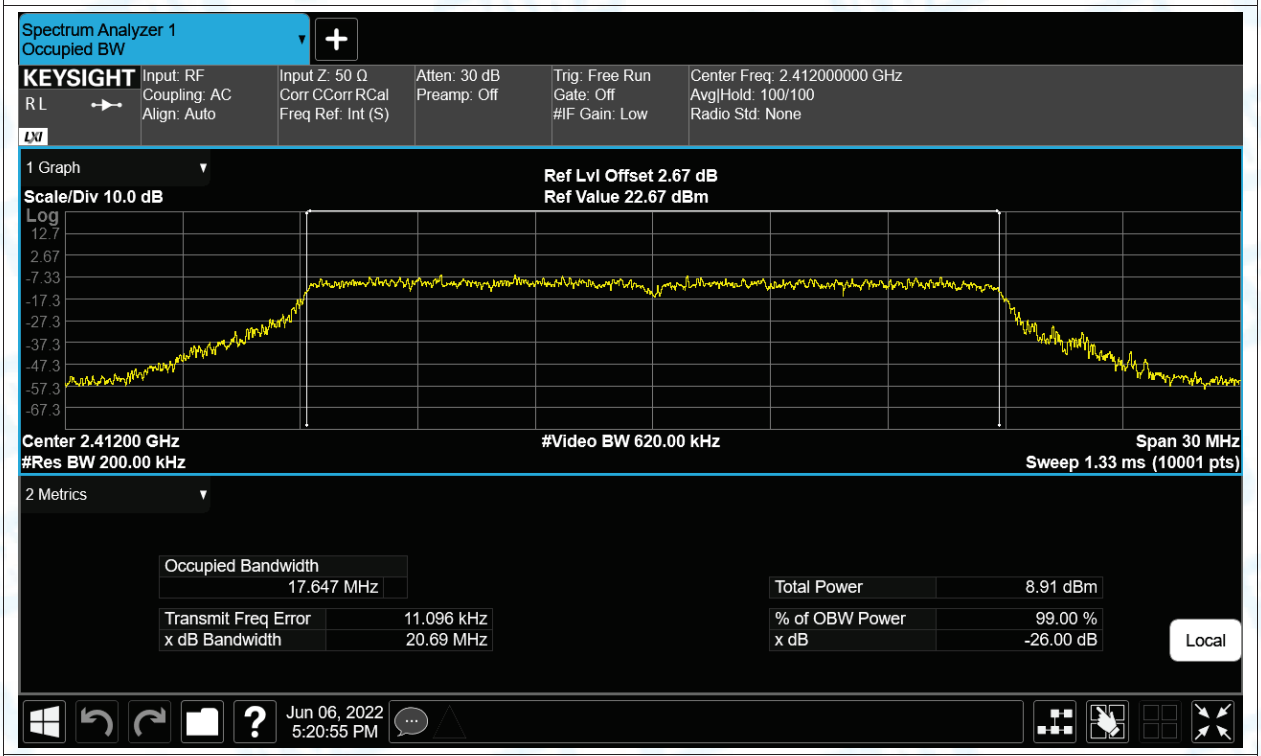
OBW NVNT g 2437MHz Ant1



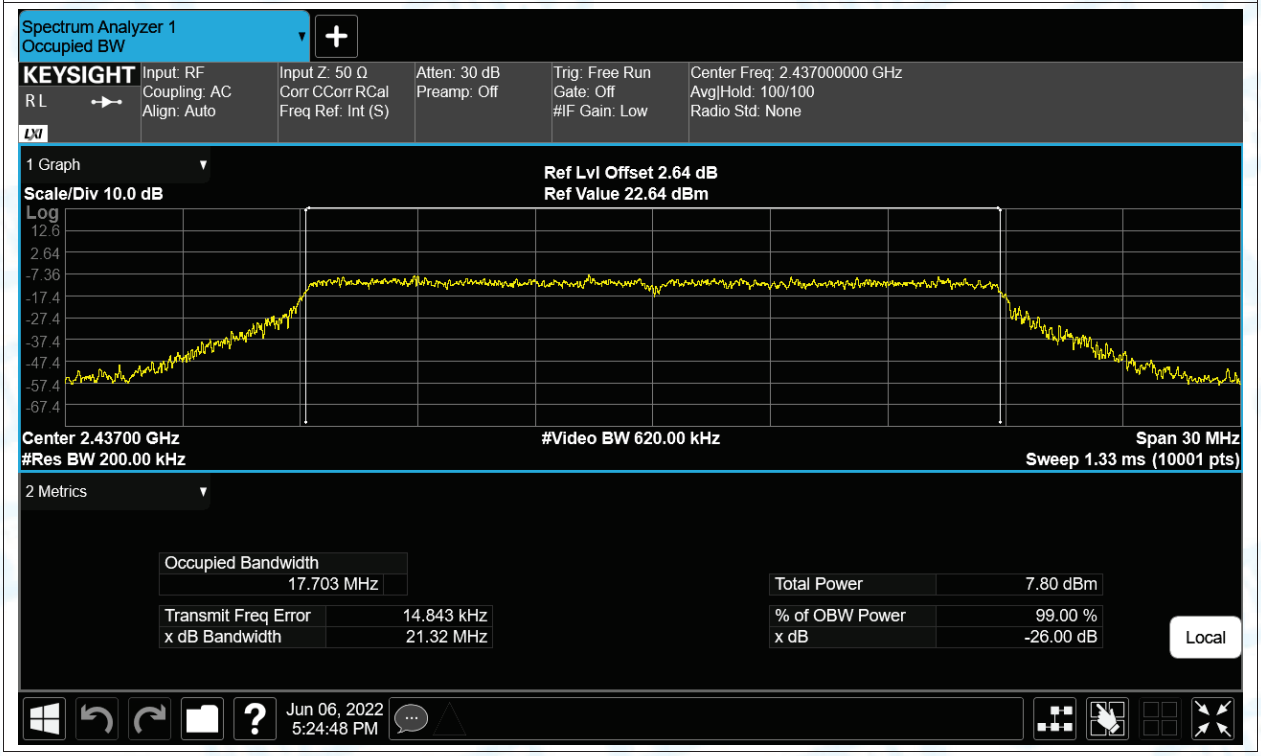
OBW NVNT g 2462MHz Ant1



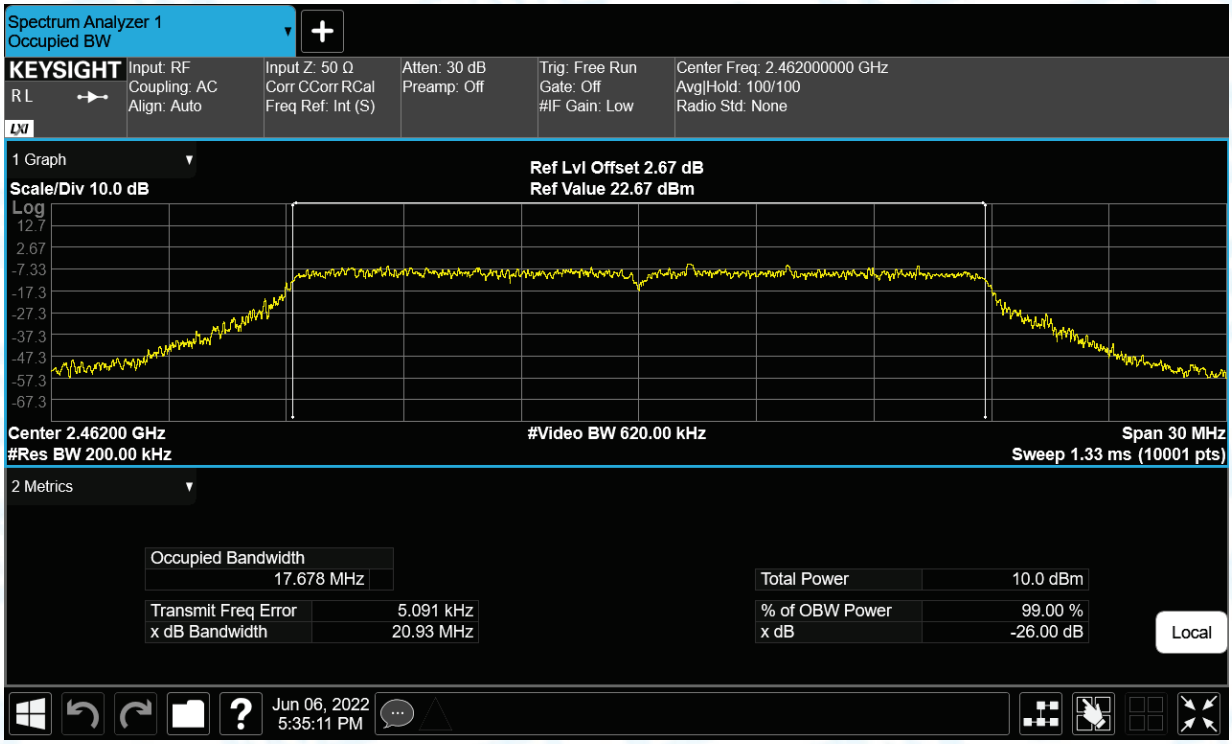
OBW NVNT n(HT20) 2412MHz Ant1



OBW NVNT n(HT20) 2437MHz Ant1



OBW NVNT n(HT20) 2462MHz Ant1

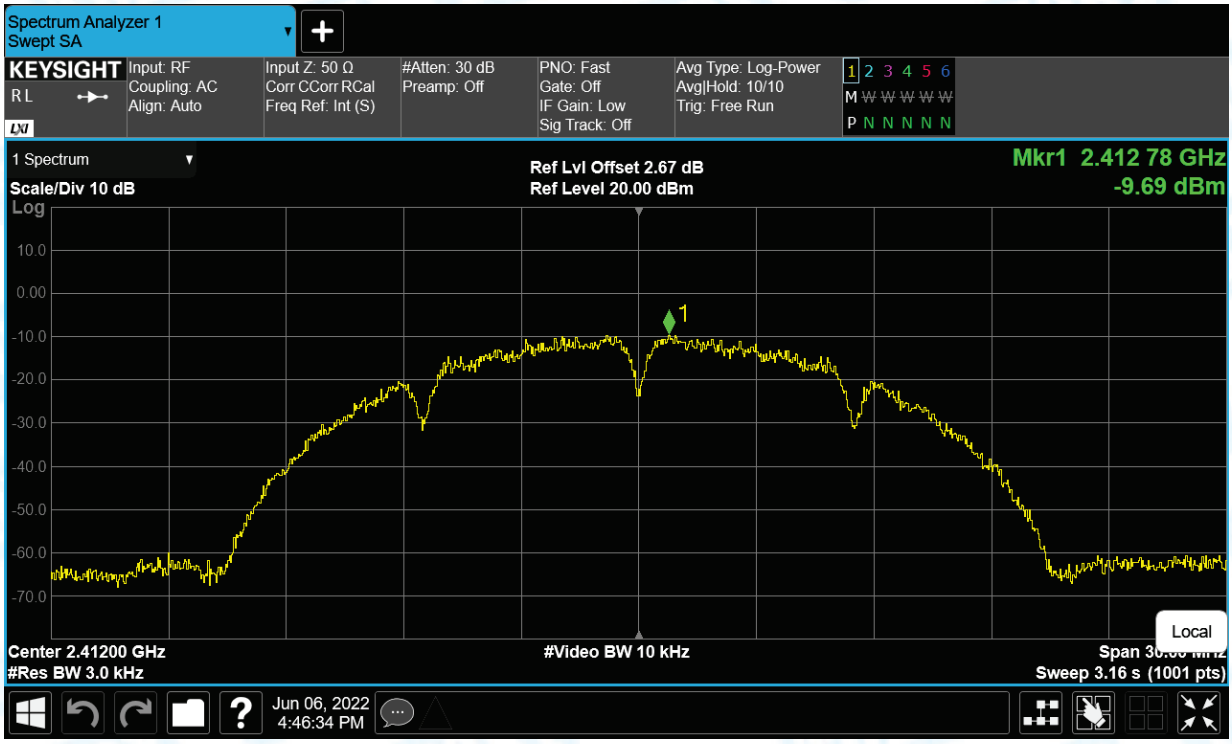


5. Maximum Power Spectral Density Level

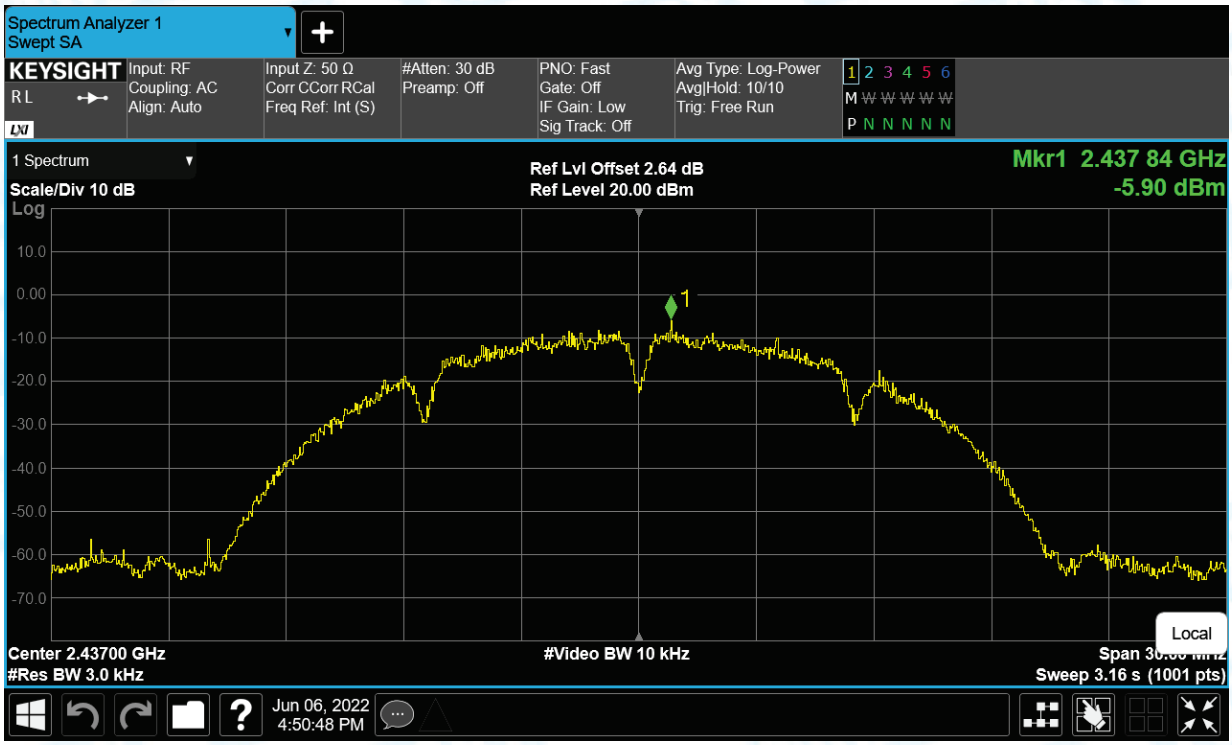
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-9.688	8	Pass
NVNT	b	2437	Ant1	-5.903	8	Pass
NVNT	b	2462	Ant1	-8.114	8	Pass
NVNT	g	2412	Ant1	-19.249	8	Pass
NVNT	g	2437	Ant1	-19.274	8	Pass
NVNT	g	2462	Ant1	-18.985	8	Pass
NVNT	n(HT20)	2412	Ant1	-20.953	8	Pass
NVNT	n(HT20)	2437	Ant1	-18.878	8	Pass
NVNT	n(HT20)	2462	Ant1	-19.833	8	Pass

Test Graphs

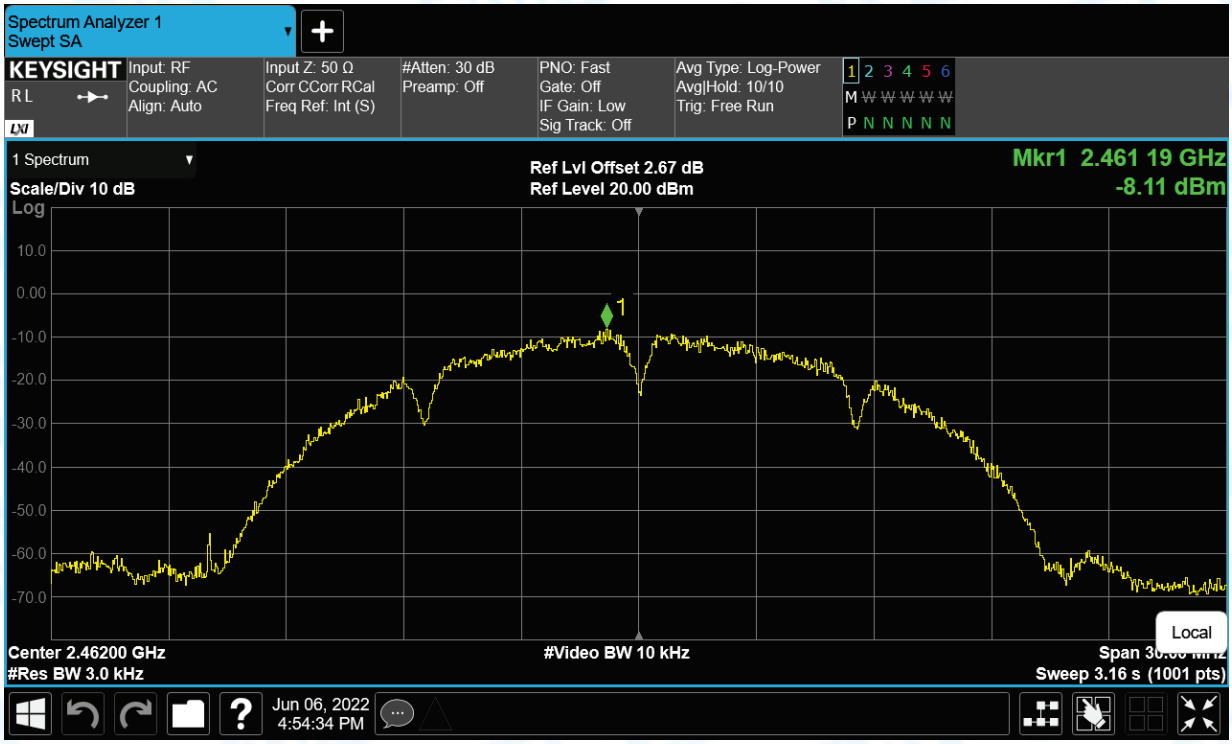
PSD NVNT b 2412MHz Ant1



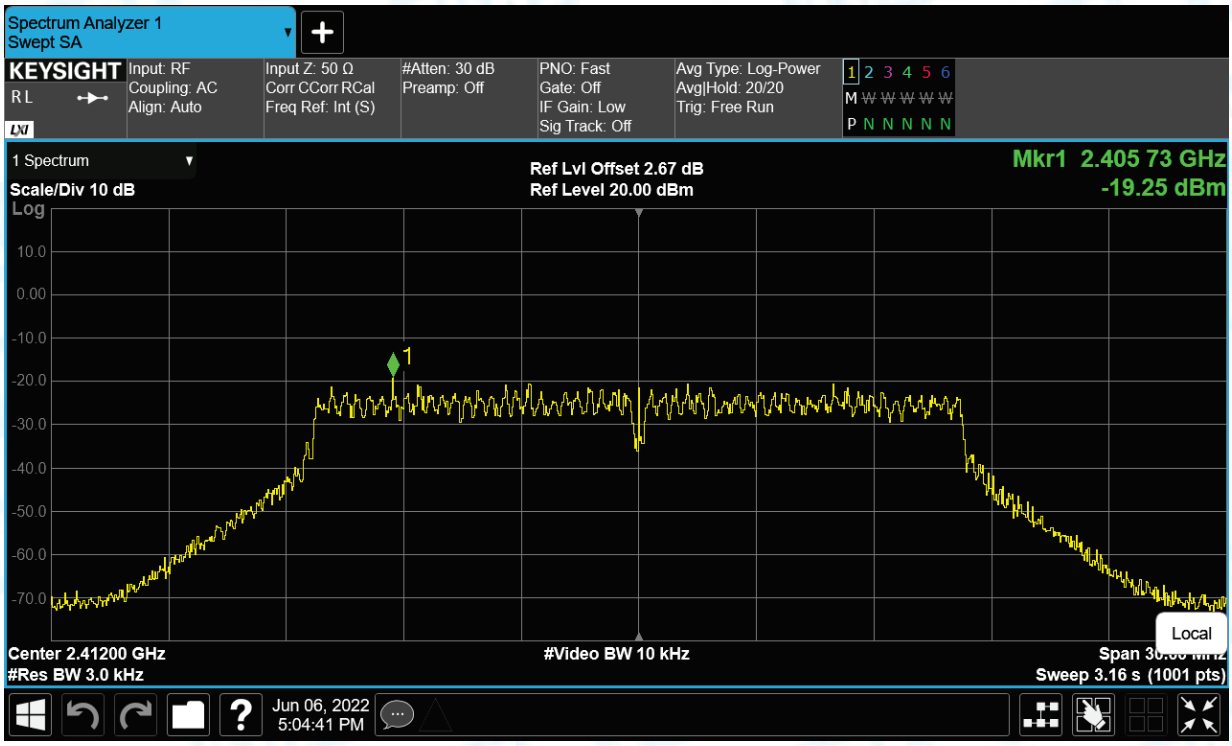
PSD NVNT b 2437MHz Ant1



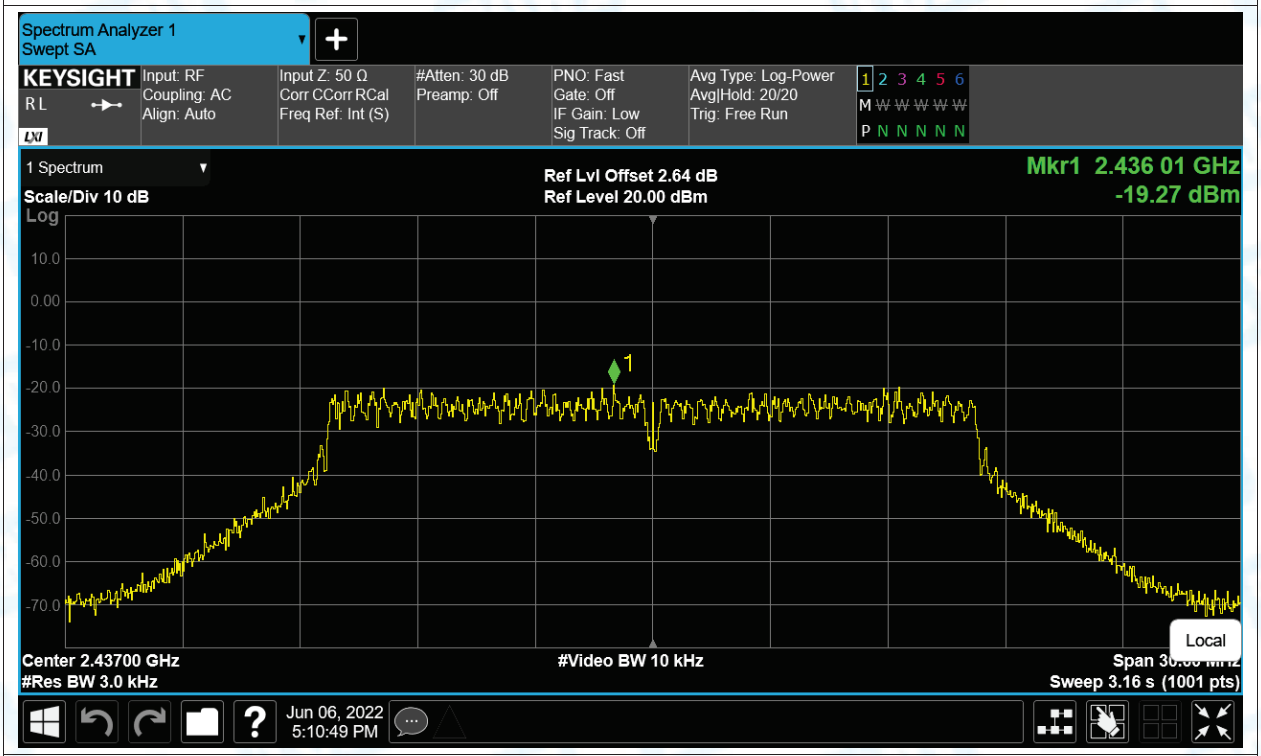
PSD NVNT b 2462MHz Ant1



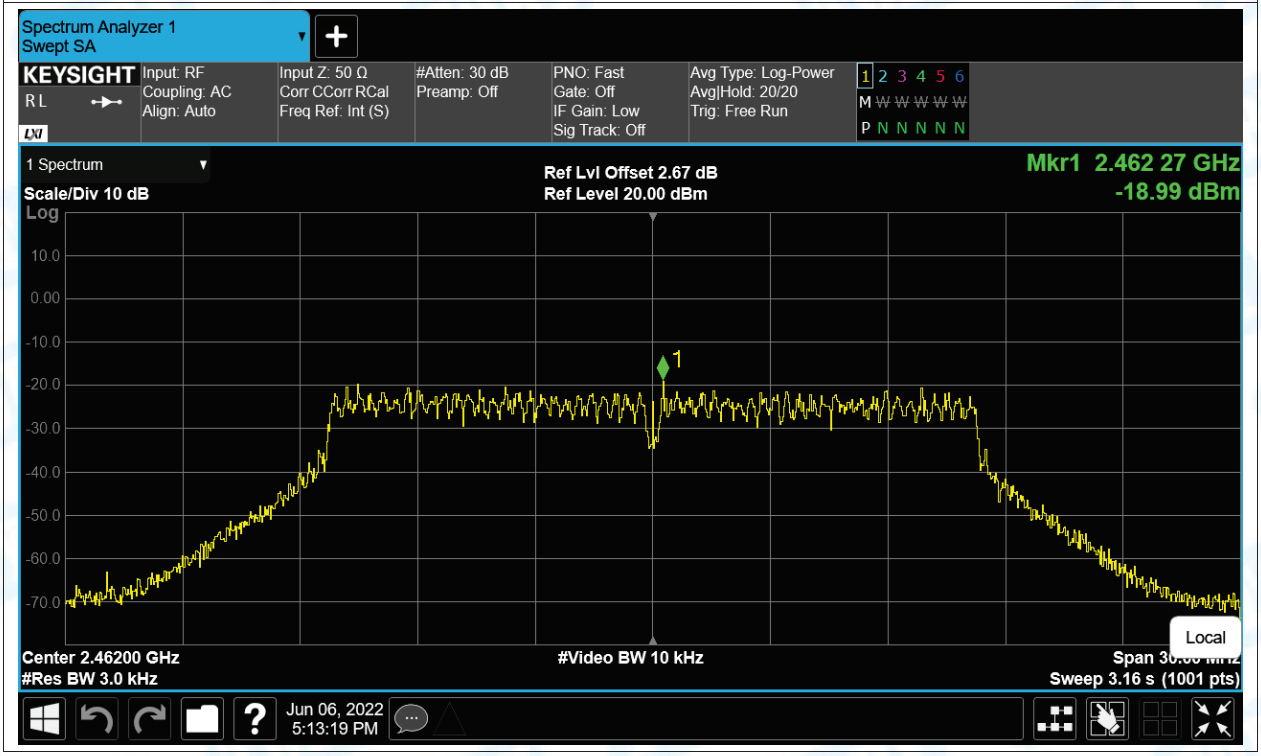
PSD NVNT g 2412MHz Ant1



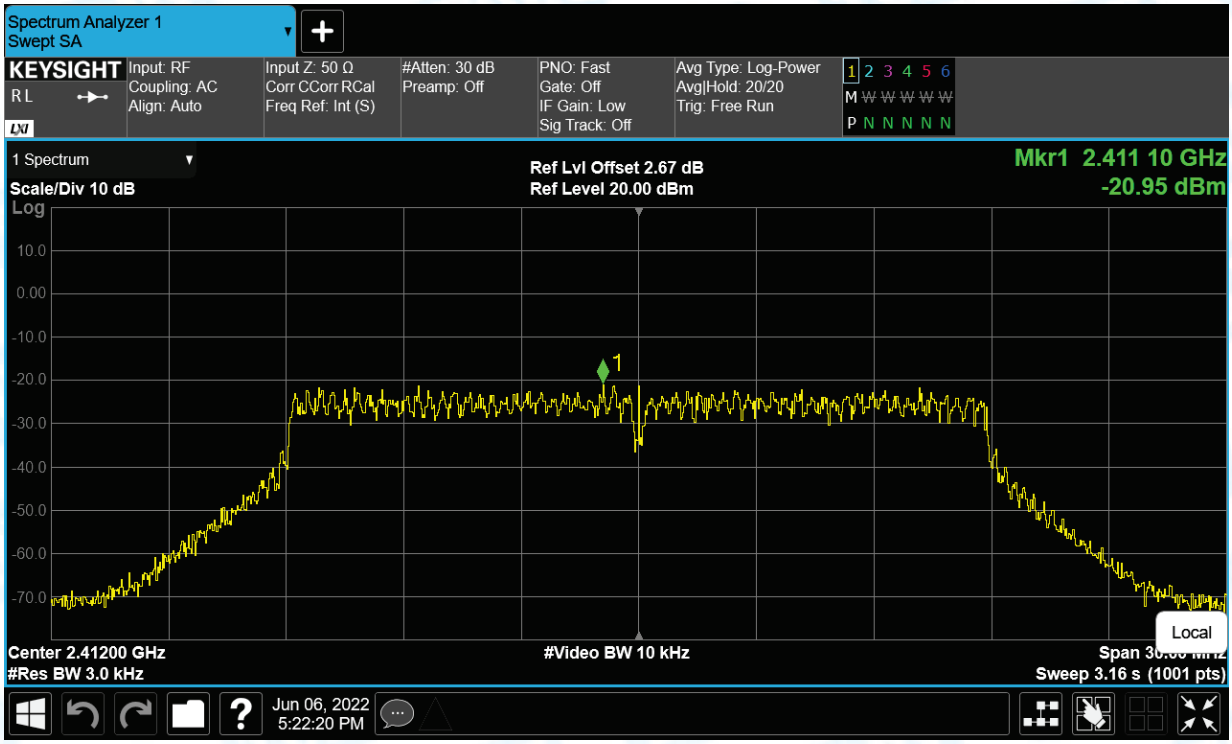
PSD NVNT g 2437MHz Ant1



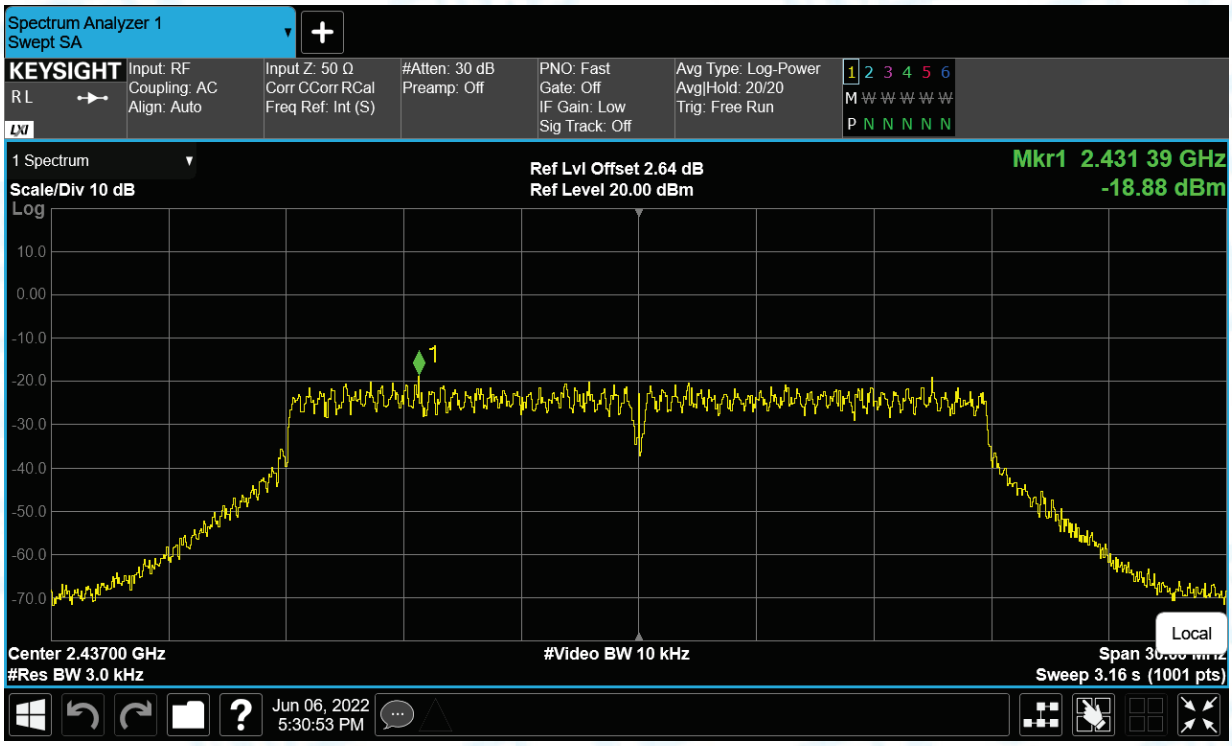
PSD NVNT g 2462MHz Ant1



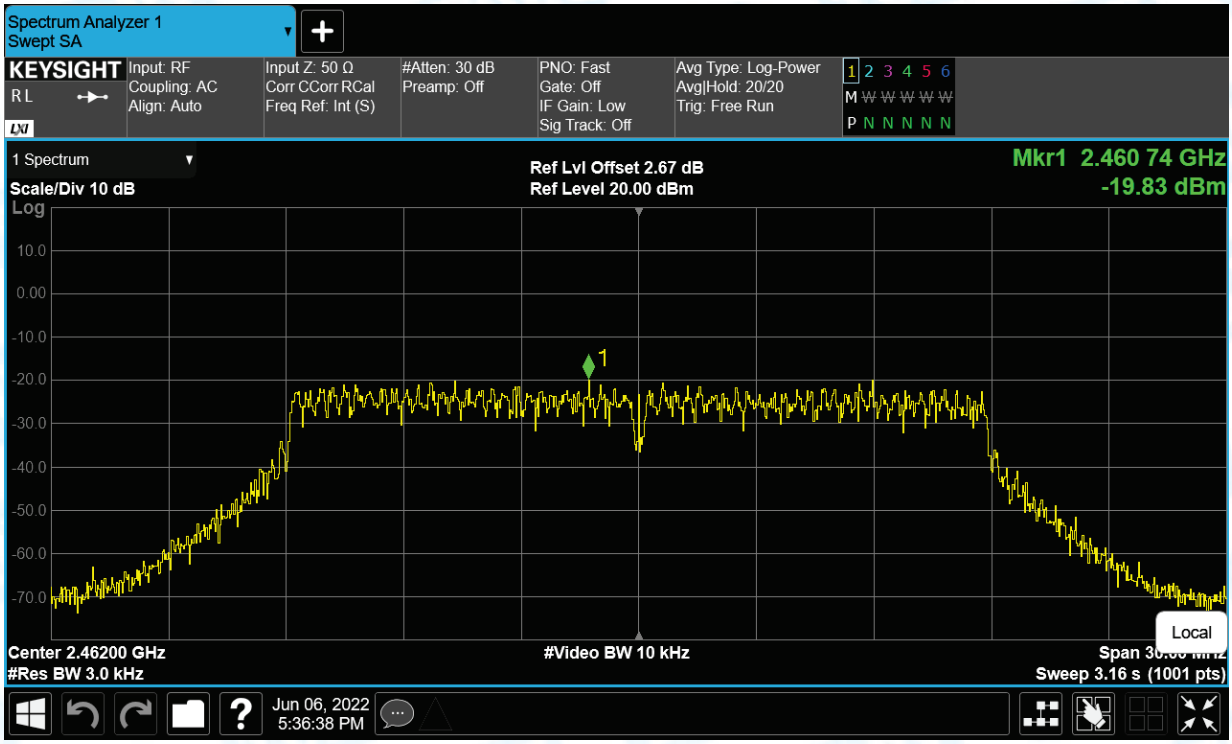
PSD NVNT n(HT20) 2412MHz Ant1



PSD NVNT n(HT20) 2437MHz Ant1



PSD NVNT n(HT20) 2462MHz Ant1

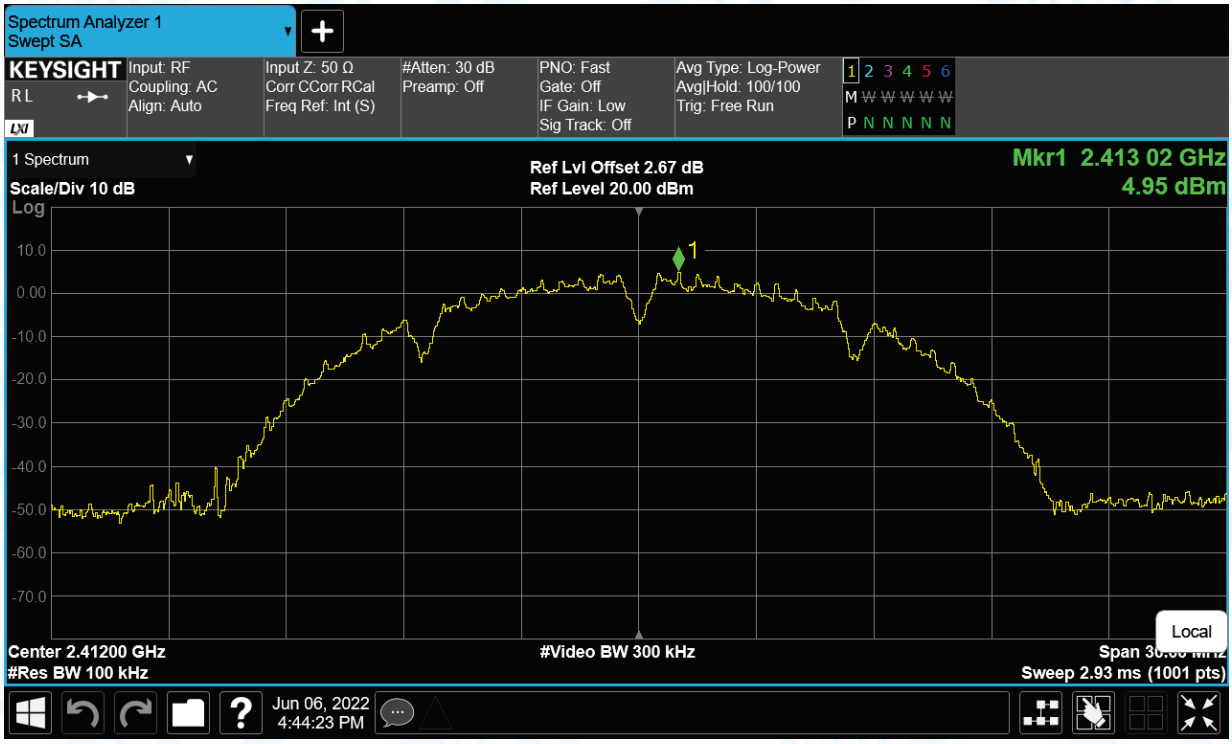


6. Band Edge

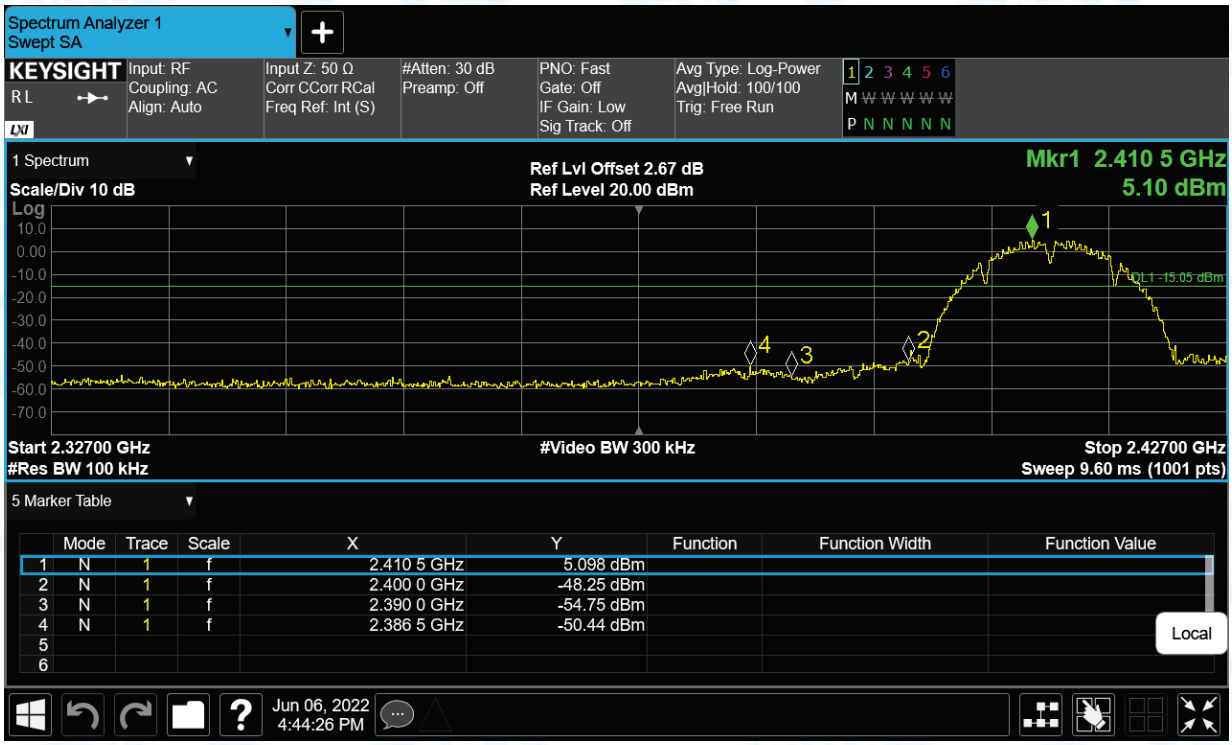
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-55.39	-20	Pass
NVNT	b	2462	Ant1	-57.08	-20	Pass
NVNT	g	2412	Ant1	-48.59	-20	Pass
NVNT	g	2462	Ant1	-47.33	-20	Pass
NVNT	n(HT20)	2412	Ant1	-46.49	-20	Pass
NVNT	n(HT20)	2462	Ant1	-48.06	-20	Pass

Test Graphs

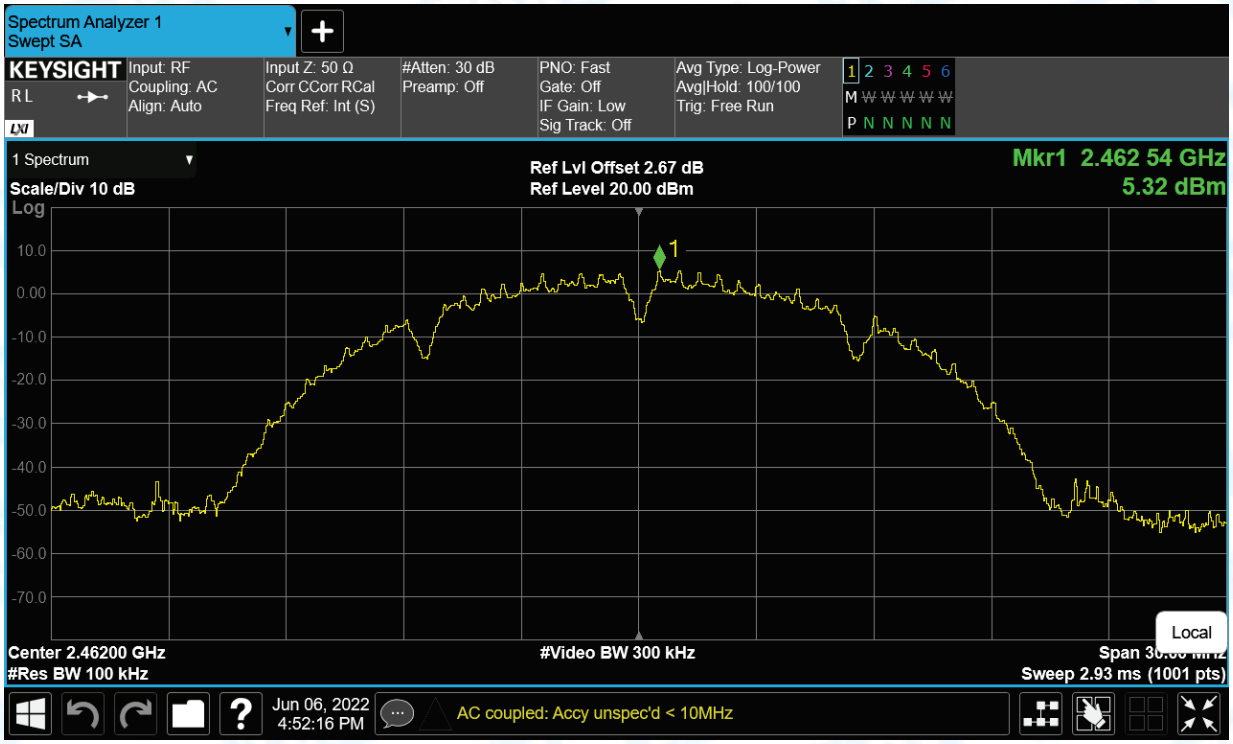
Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

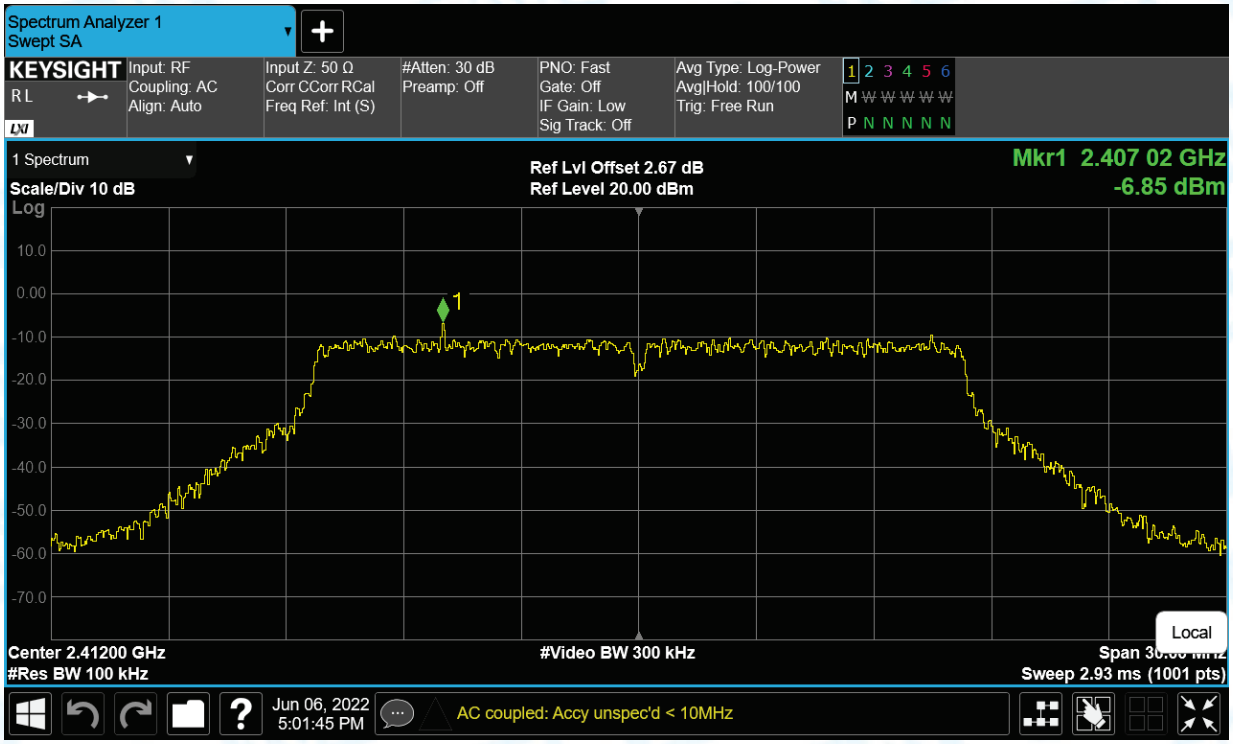


Band Edge NVNT b 2462MHz Ant1 Ref

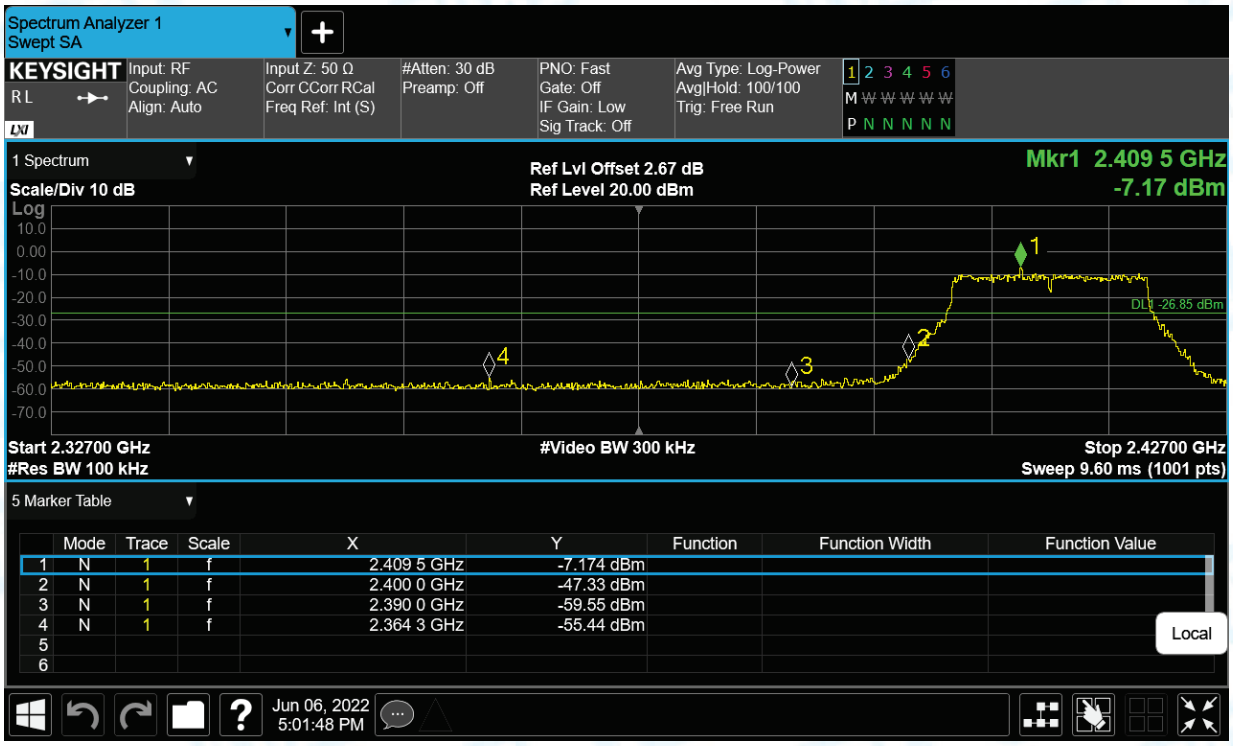


Band Edge NVNT b 2462MHz Ant1 Emission

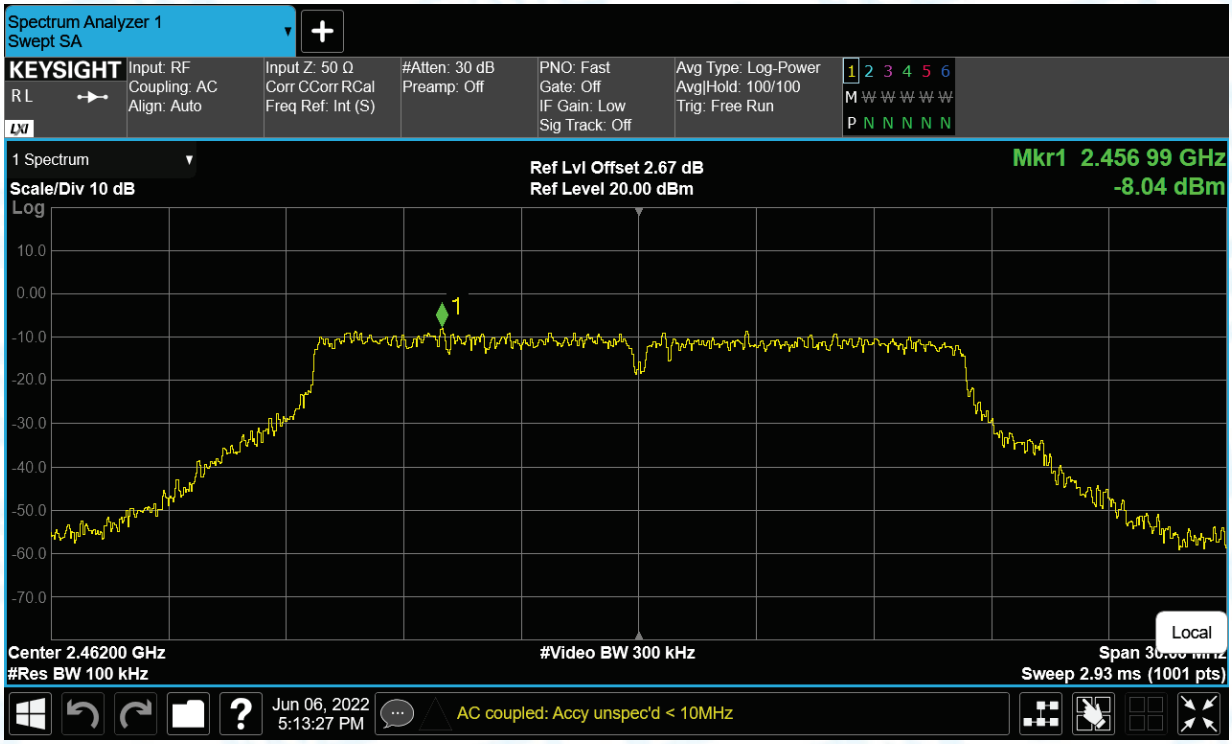
Band Edge NVNT g 2412MHz Ant1 Ref



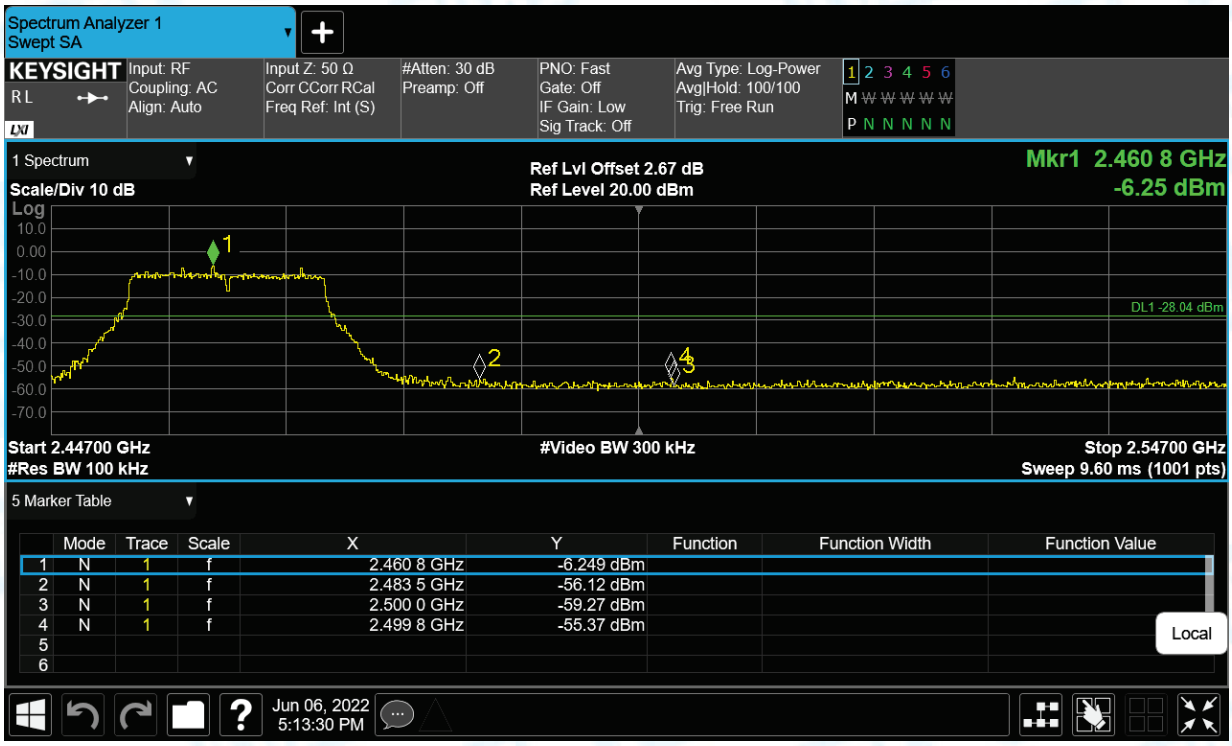
Band Edge NVNT g 2412MHz Ant1 Emission



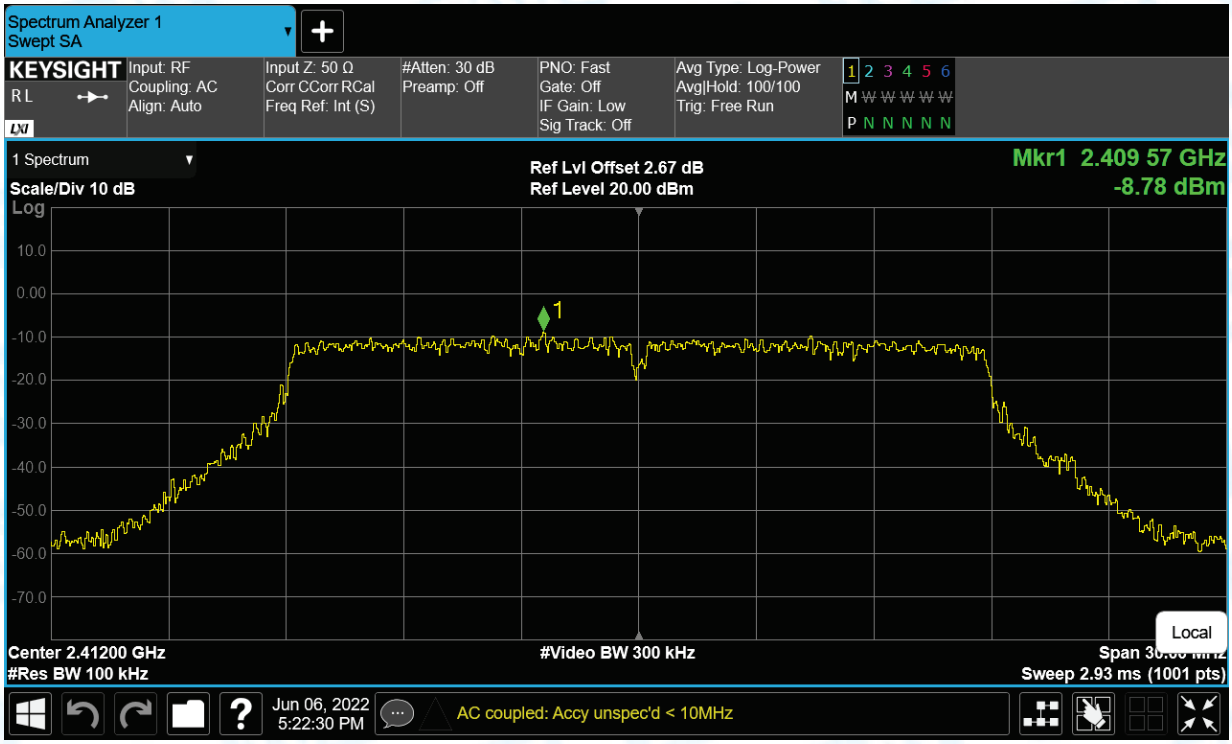
Band Edge NVNT g 2462MHz Ant1 Ref



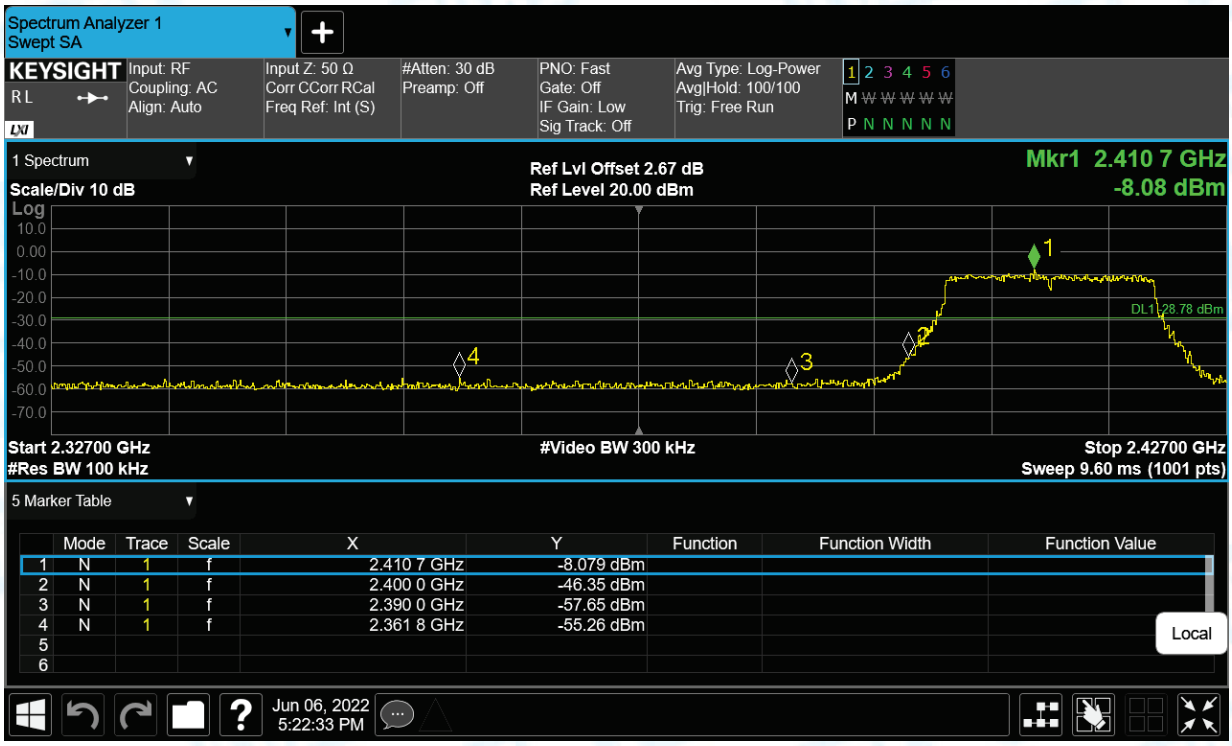
Band Edge NVNT g 2462MHz Ant1 Emission



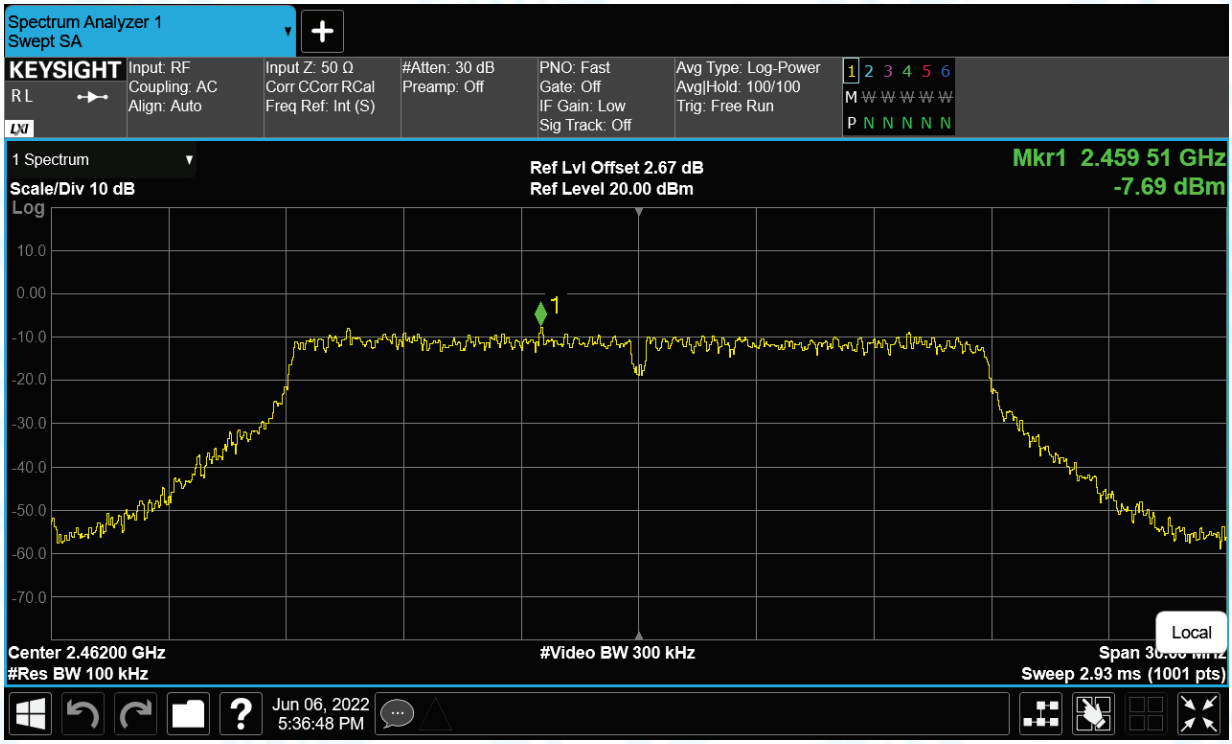
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



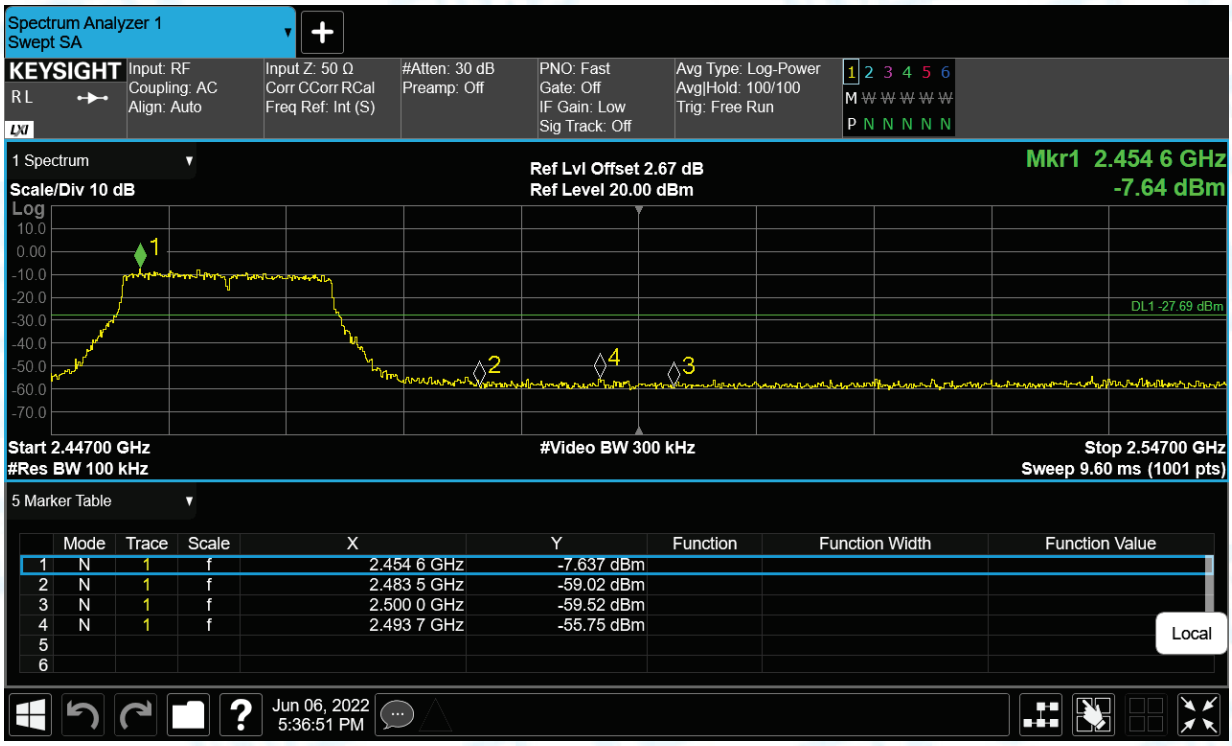
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission



Band Edge NVNT n(HT20) 2462MHz Ant1 Ref



Band Edge NVNT n(HT20) 2462MHz Ant1 Emission

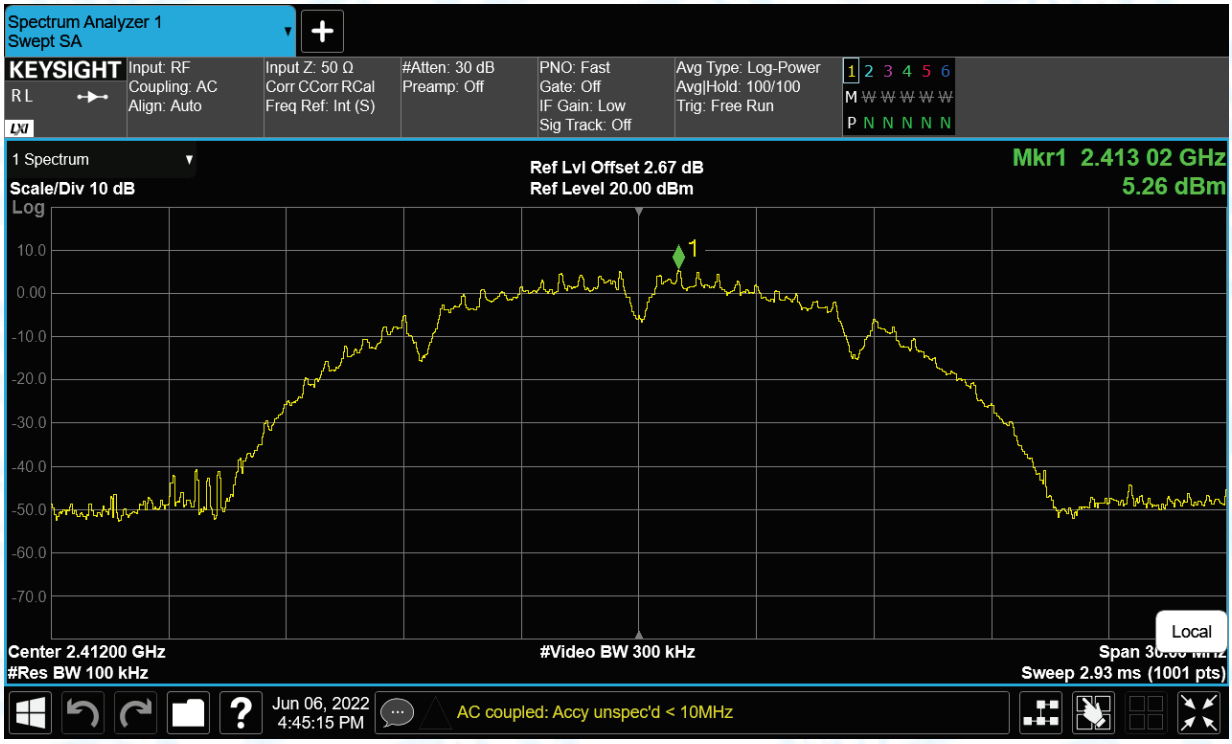


7. Conducted RF Spurious Emission

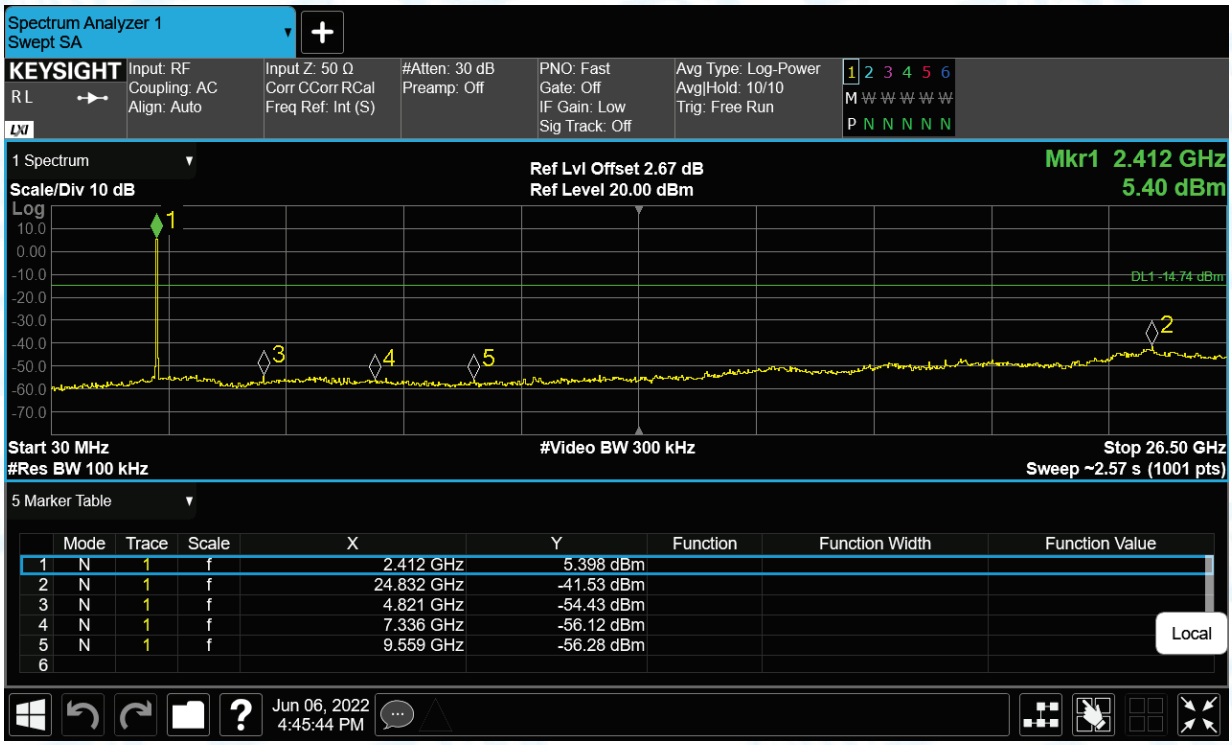
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.79	-20	Pass
NVNT	b	2437	Ant1	-45.41	-20	Pass
NVNT	b	2462	Ant1	-47.03	-20	Pass
NVNT	g	2412	Ant1	-34.42	-20	Pass
NVNT	g	2437	Ant1	-30.87	-20	Pass
NVNT	g	2462	Ant1	-35.13	-20	Pass
NVNT	n(HT20)	2412	Ant1	-34.04	-20	Pass
NVNT	n(HT20)	2437	Ant1	-31.91	-20	Pass
NVNT	n(HT20)	2462	Ant1	-34.99	-20	Pass

Test Graphs

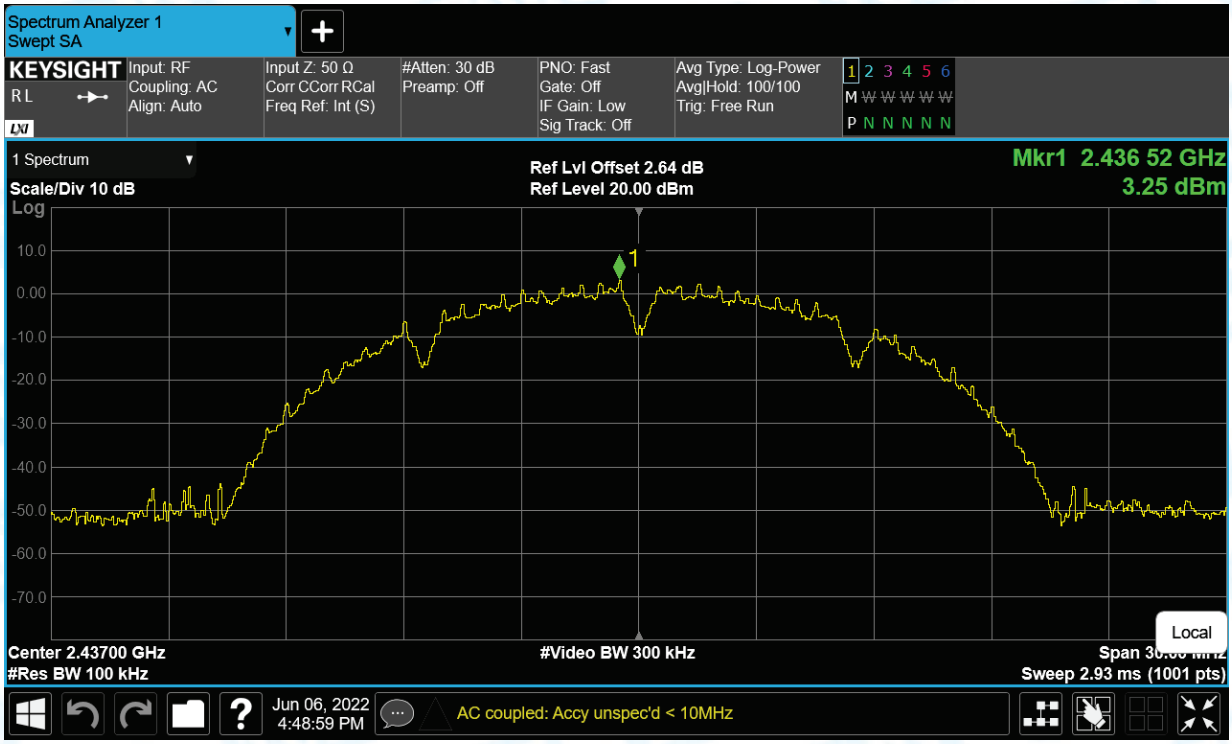
Tx. Spurious NVNT b 2412MHz Ant1 Ref



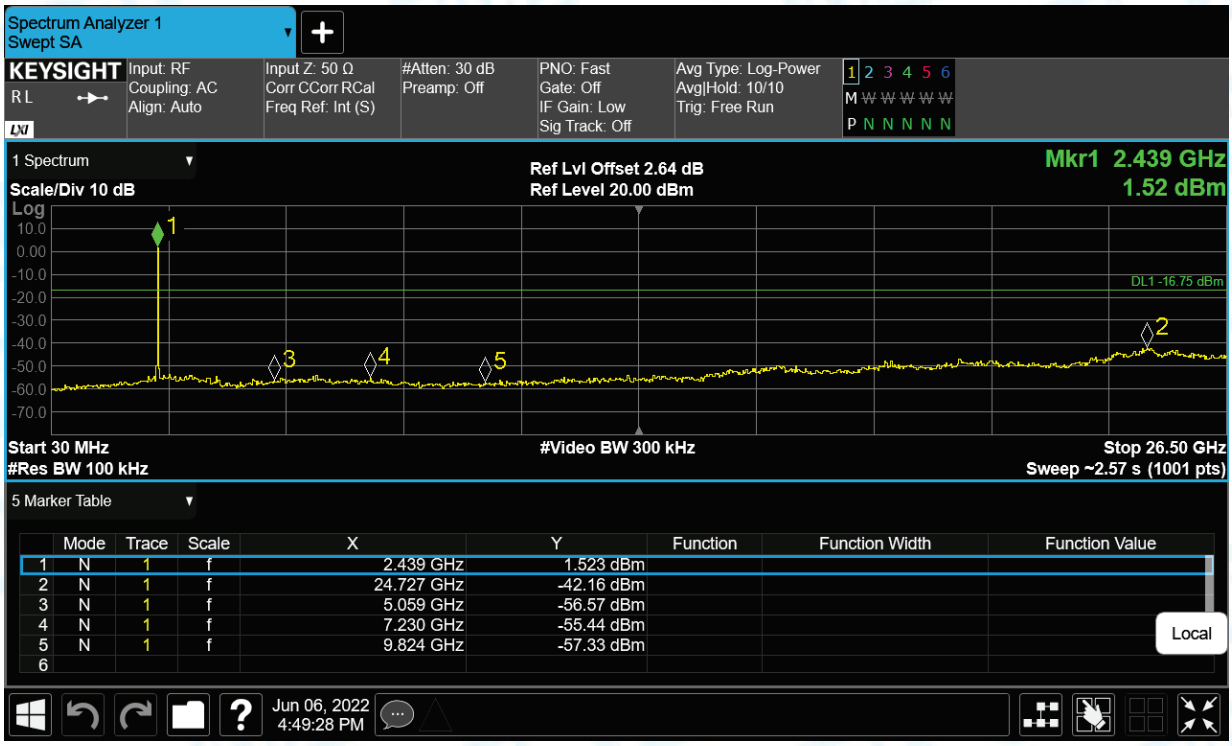
Tx. Spurious NVNT b 2412MHz Ant1 Emission



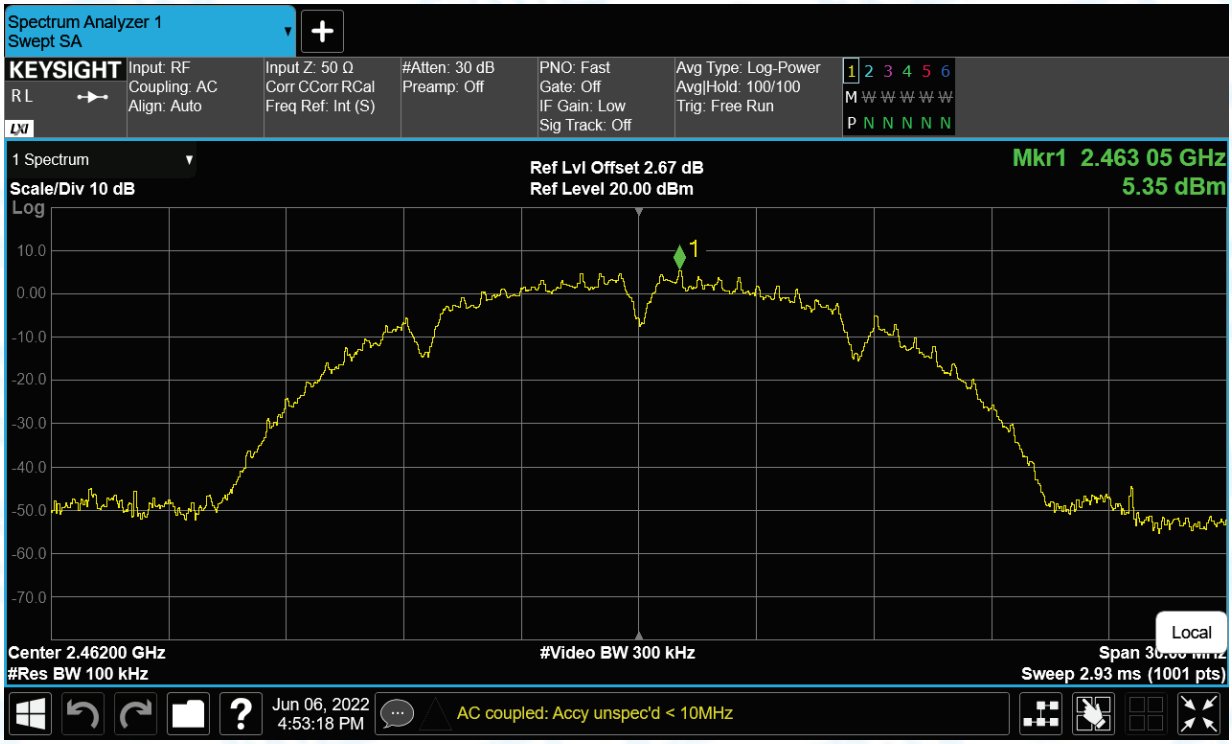
Tx. Spurious NVNT b 2437MHz Ant1 Ref



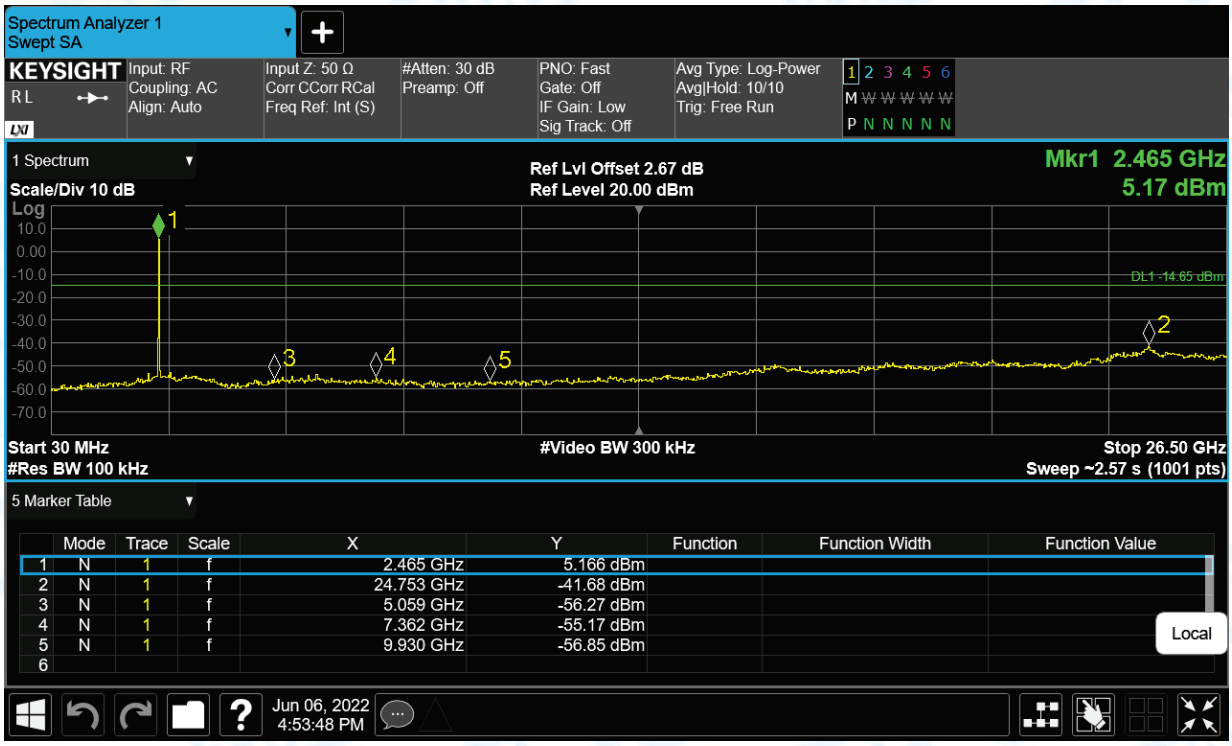
Tx. Spurious NVNT b 2437MHz Ant1 Emission



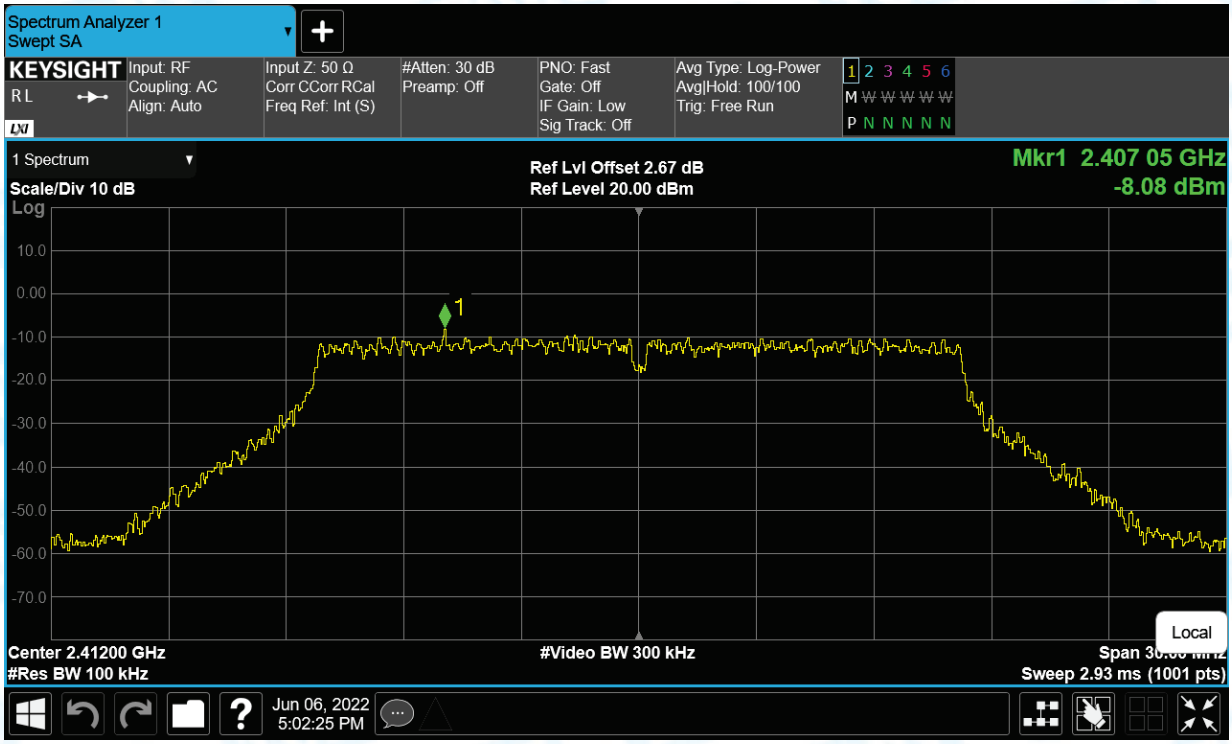
Tx. Spurious NVNT b 2462MHz Ant1 Ref



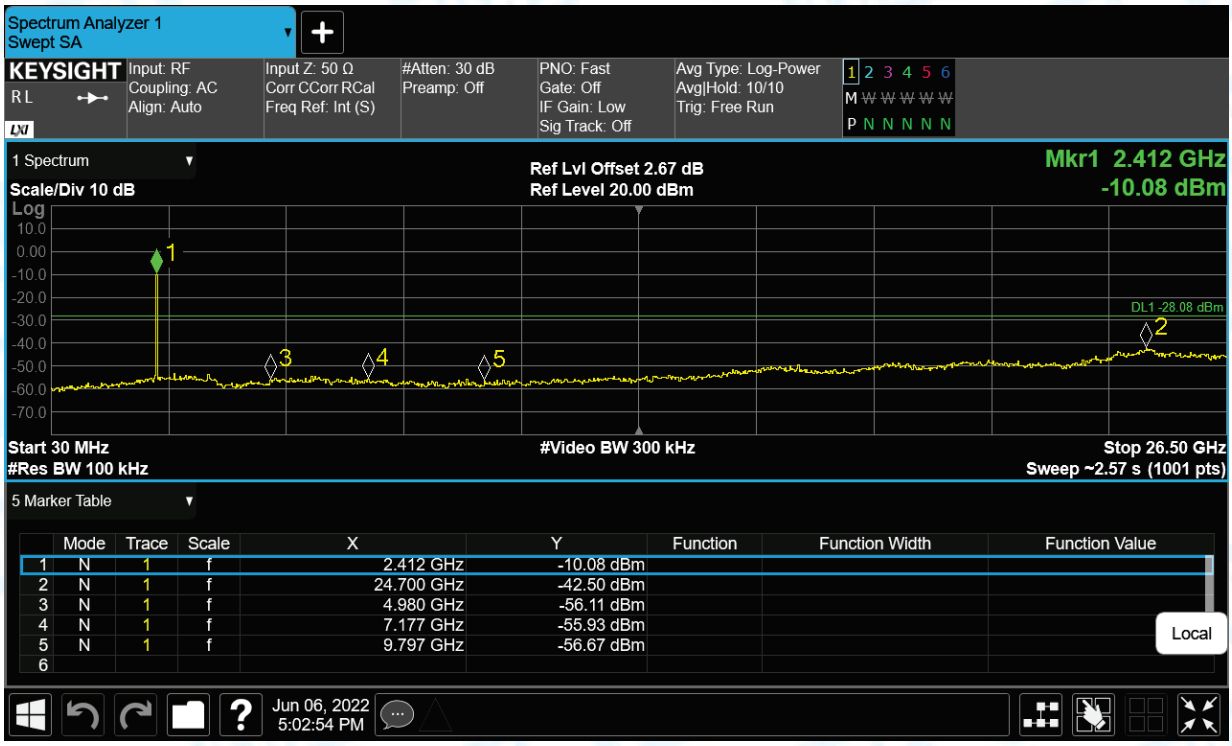
Tx. Spurious NVNT b 2462MHz Ant1 Emission



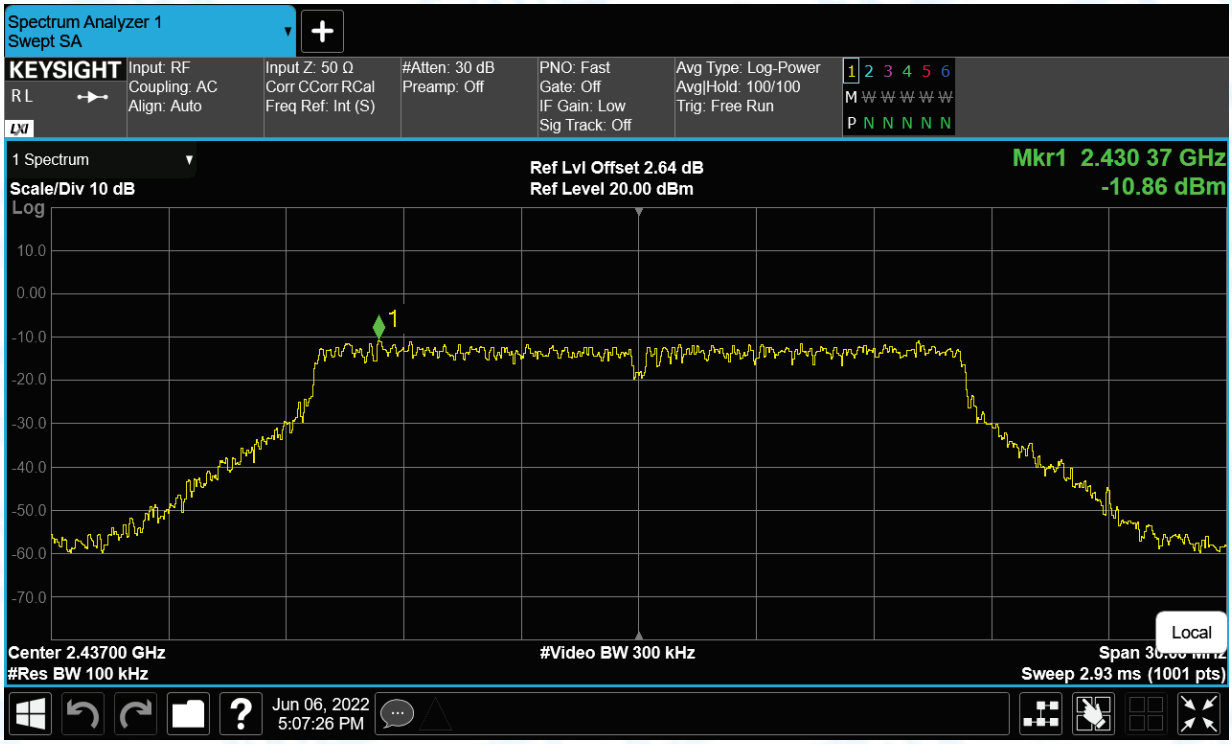
Tx. Spurious NVNT g 2412MHz Ant1 Ref



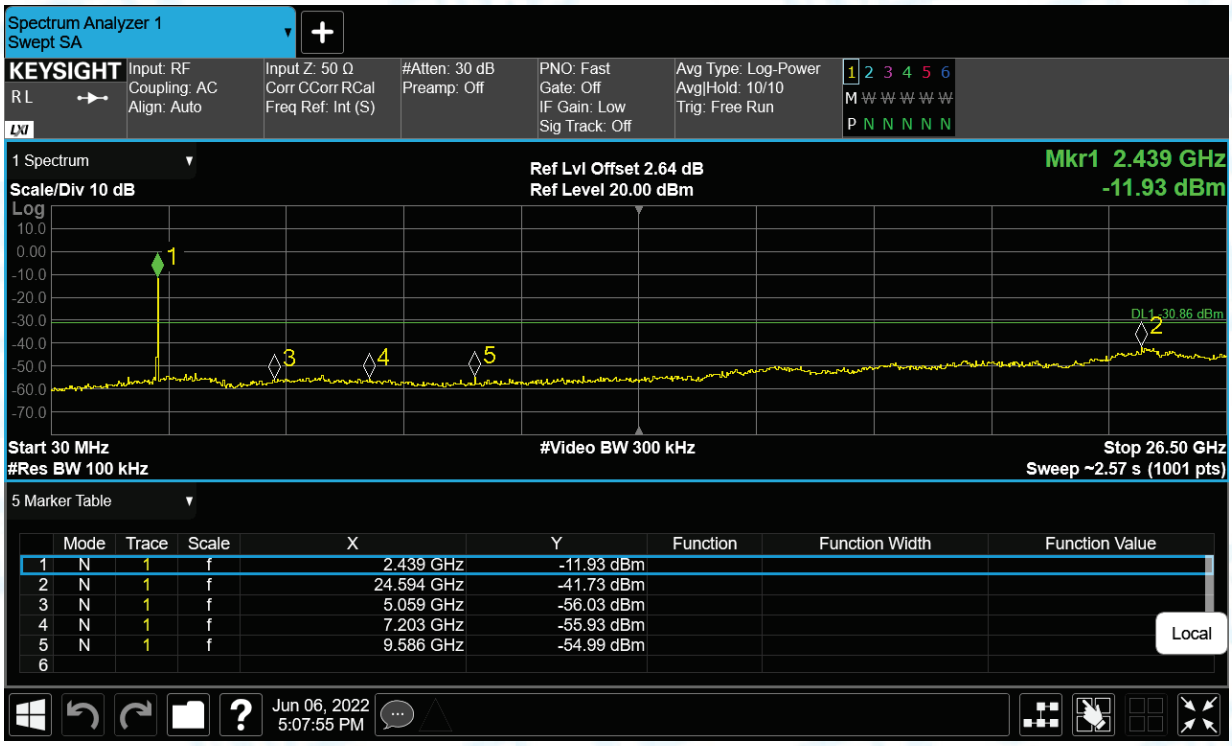
Tx. Spurious NVNT g 2412MHz Ant1 Emission



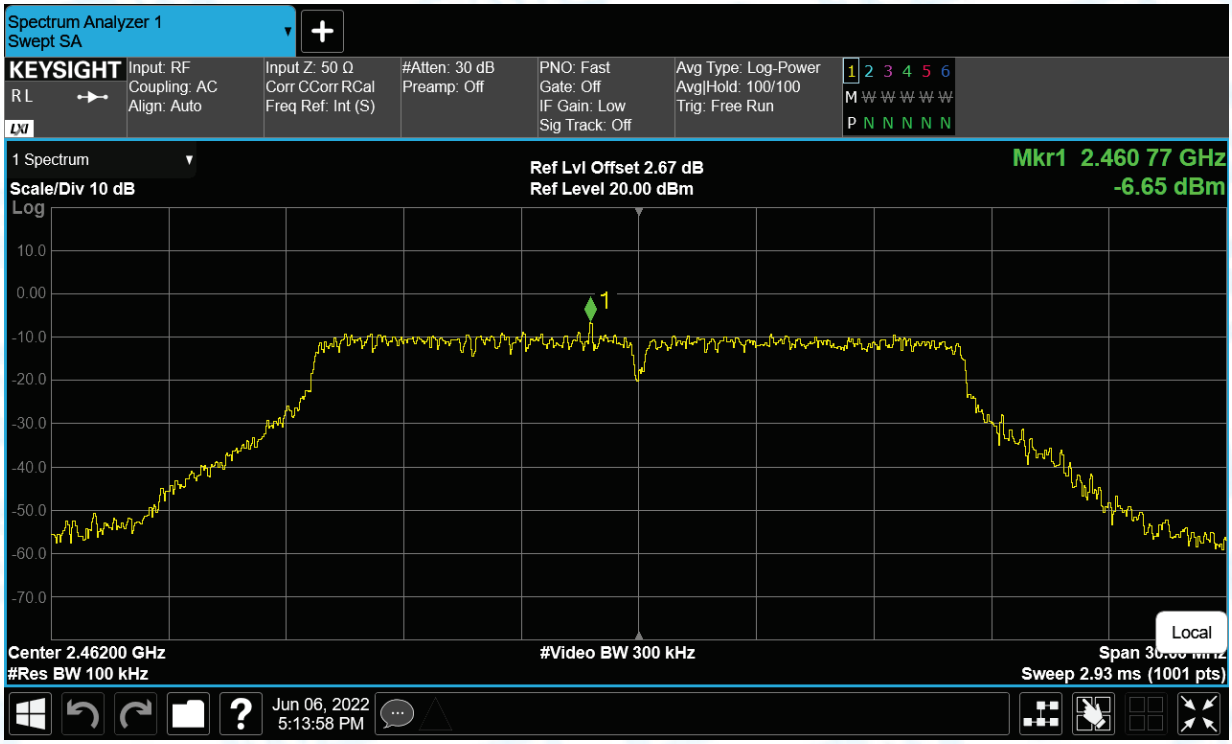
Tx. Spurious NVNT g 2437MHz Ant1 Ref



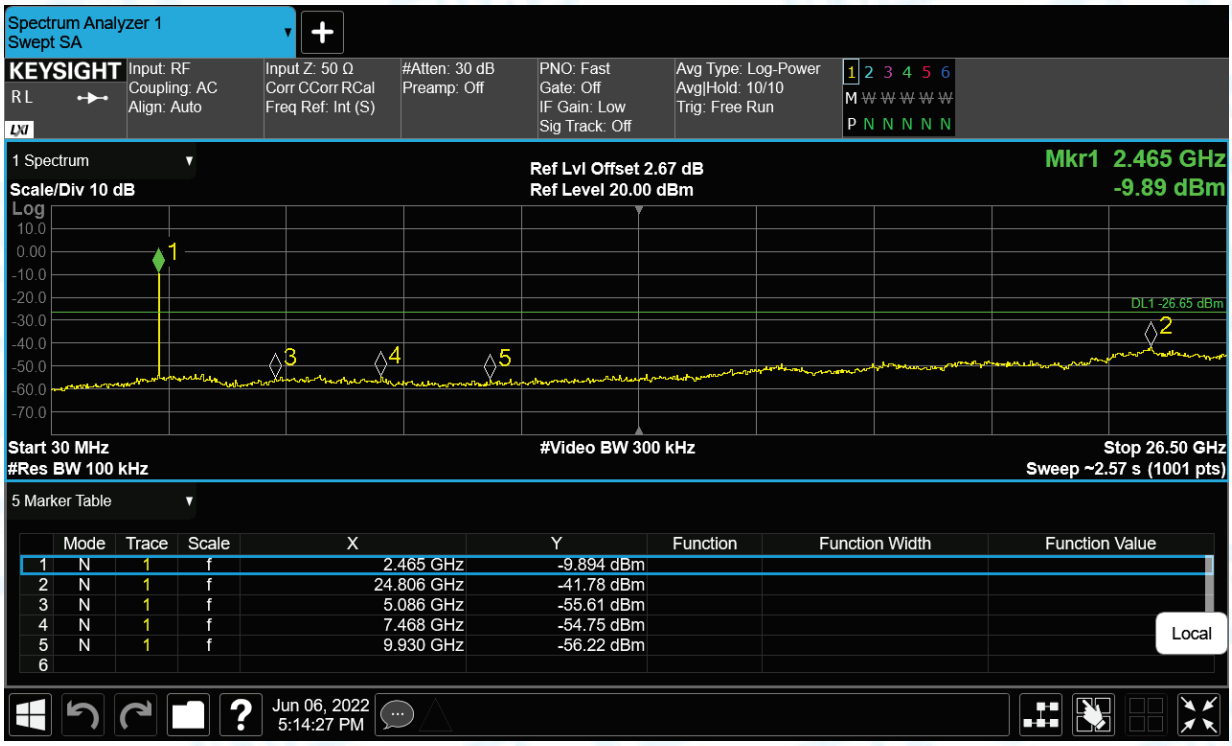
Tx. Spurious NVNT g 2437MHz Ant1 Emission



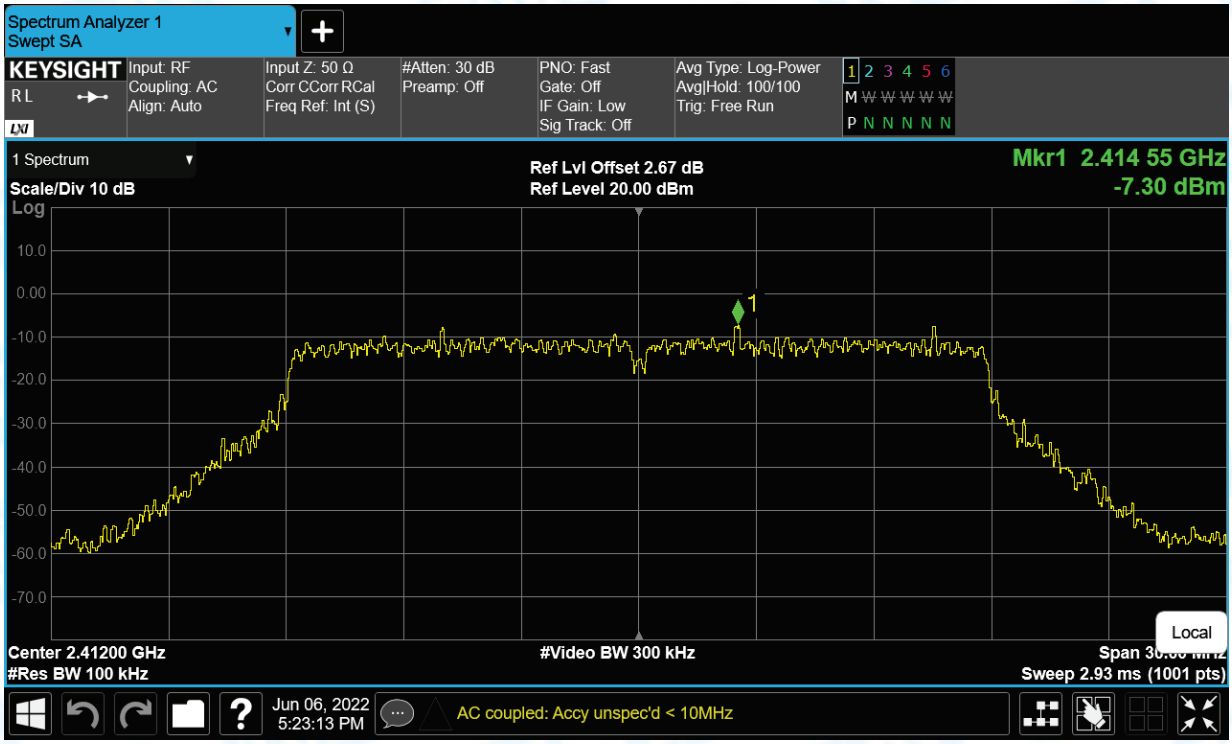
Tx. Spurious NVNT g 2462MHz Ant1 Ref



Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



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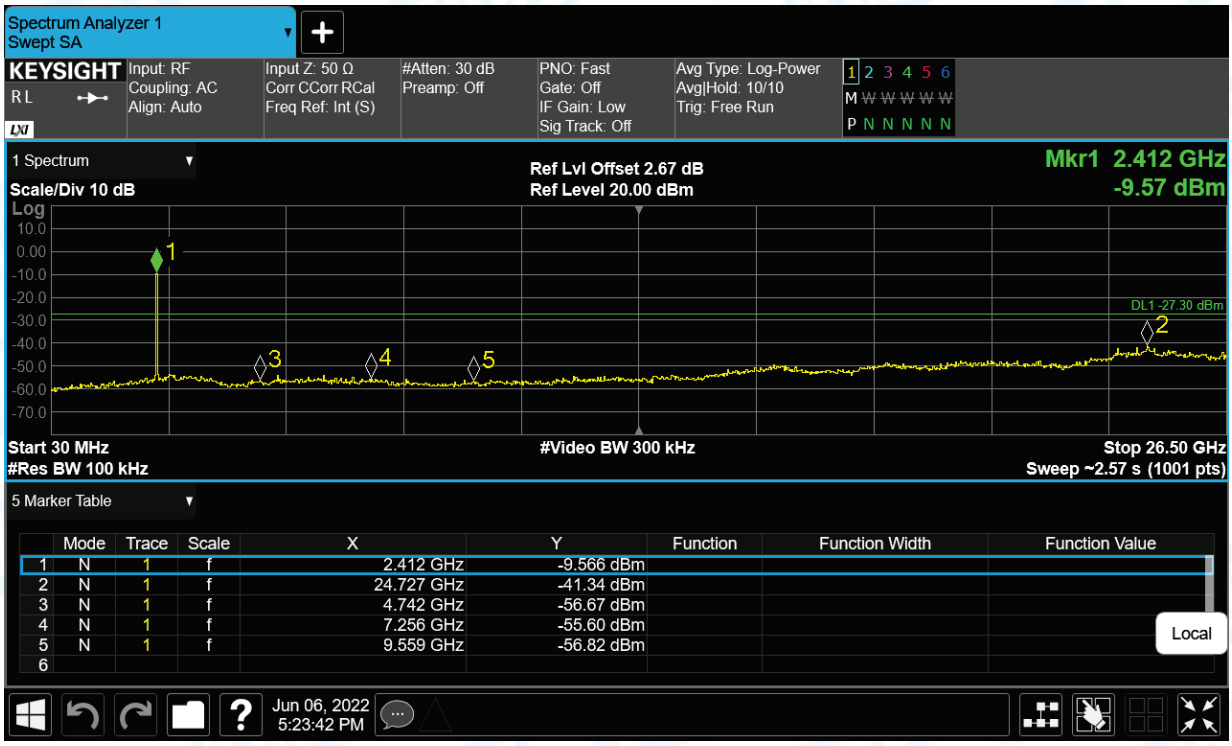

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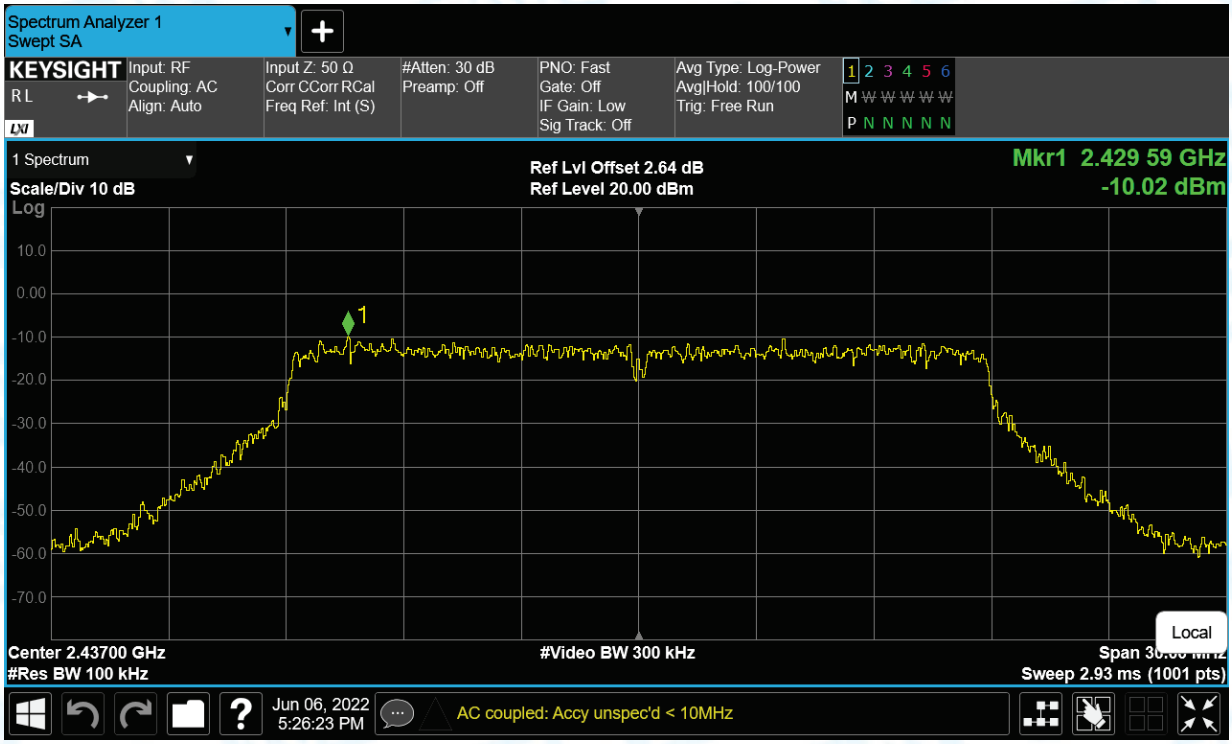

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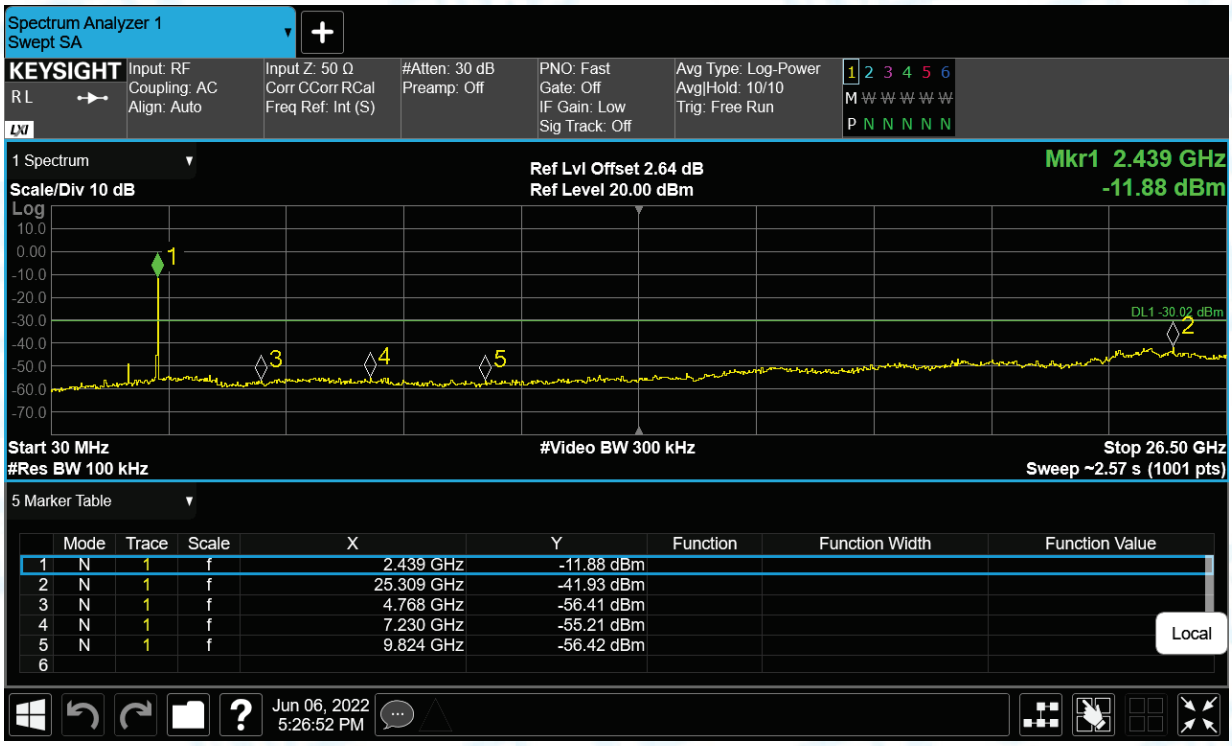
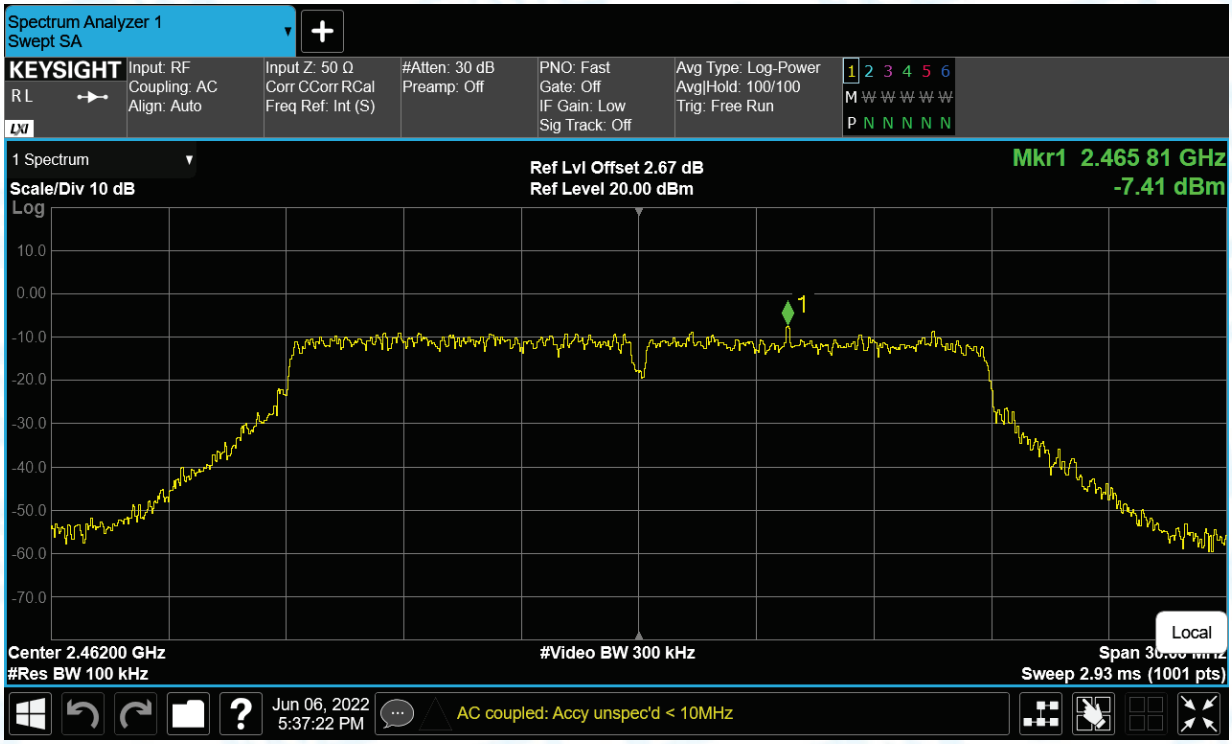
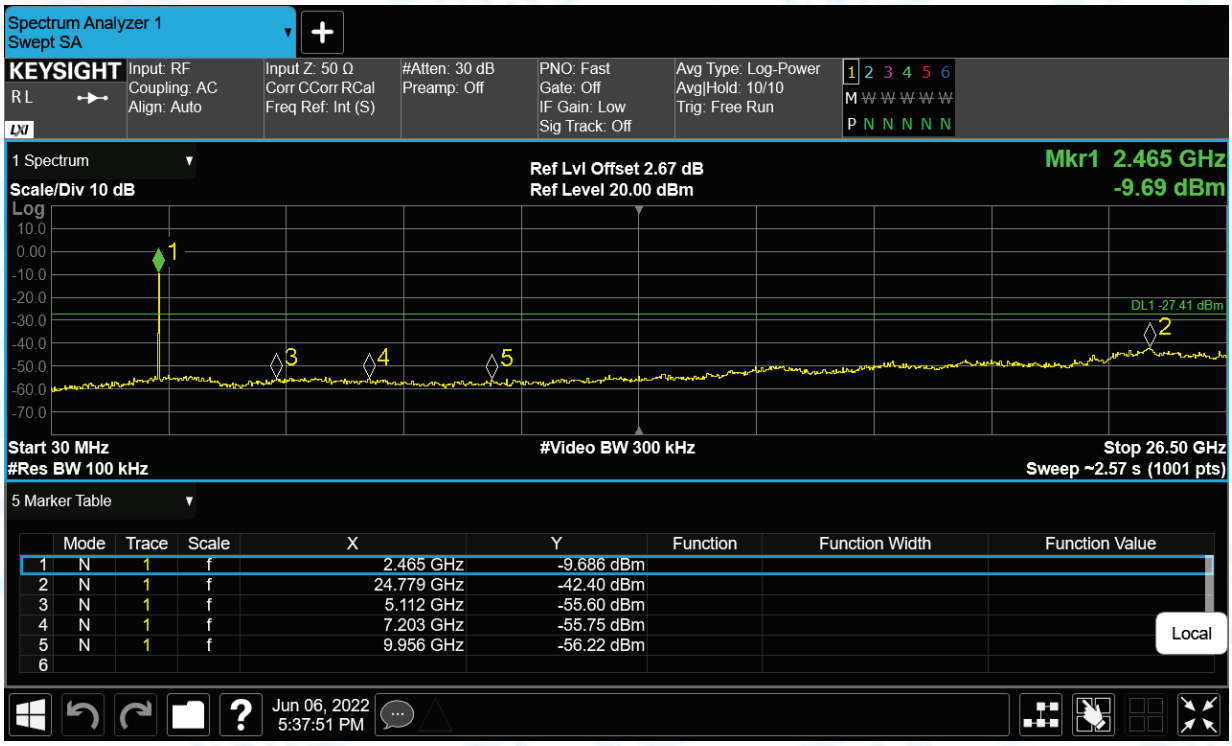


Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission

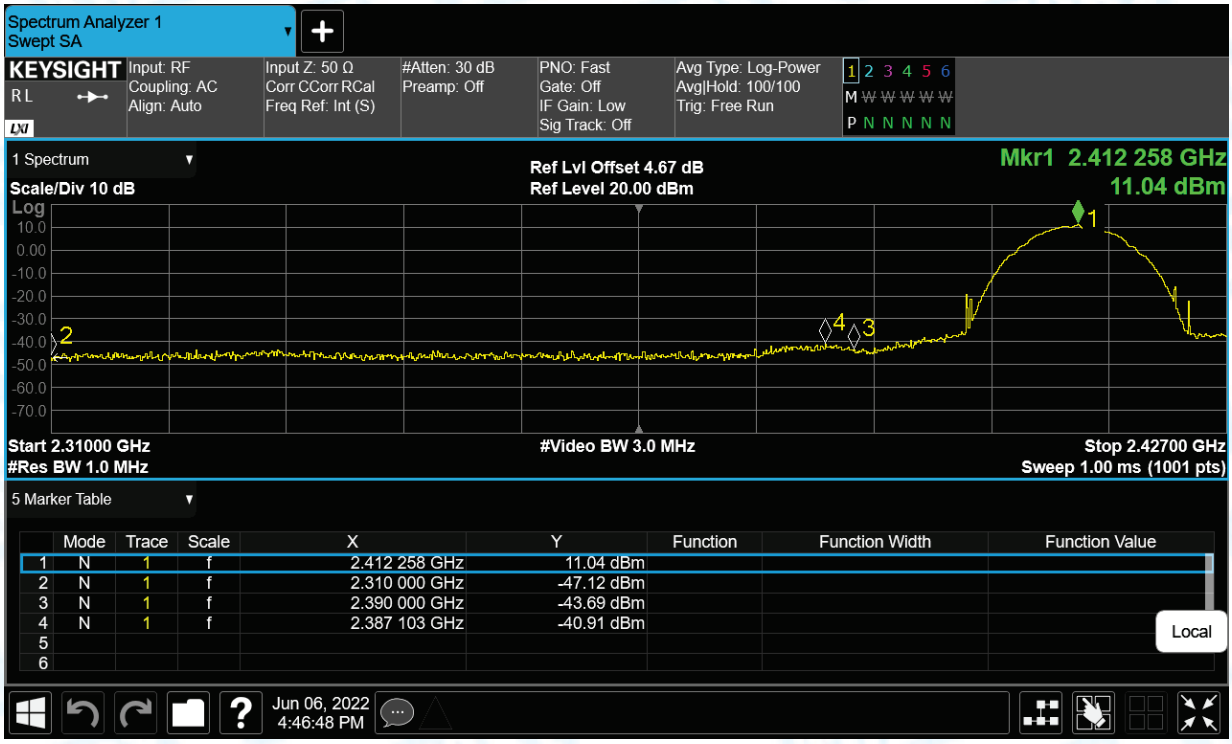


8. Restrict Band

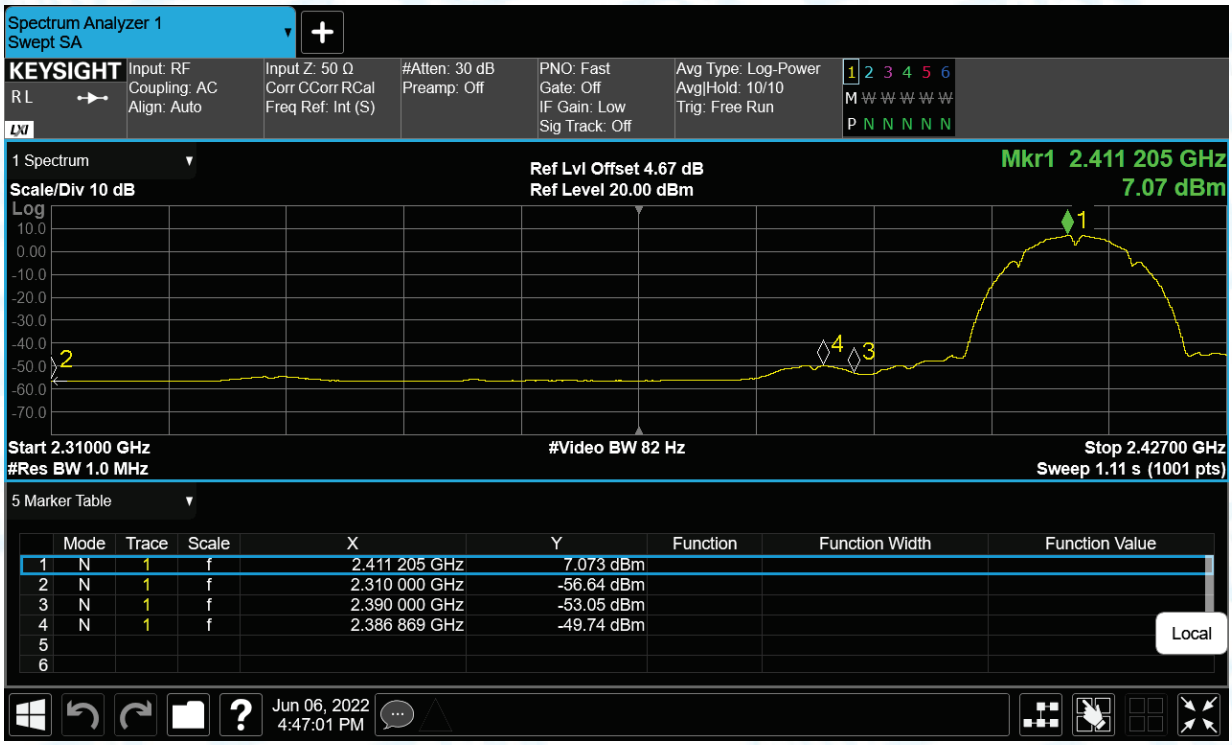
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-47.12	2	50.14	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-56.64	2	40.62	Average	54	Pass
NVNT	b	2412	Ant1	2387.103	-40.91	2	56.35	Peak	74	Pass
NVNT	b	2412	Ant1	2386.869	-49.74	2	47.52	Average	54	Pass
NVNT	b	2412	Ant1	2390	-43.69	2	53.57	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-53.05	2	44.21	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-42.8	2	54.46	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-51.78	2	45.48	Average	54	Pass
NVNT	b	2462	Ant1	2486.22	-40.17	2	57.09	Peak	74	Pass
NVNT	b	2462	Ant1	2487.28	-49.94	2	47.32	Average	54	Pass
NVNT	b	2462	Ant1	2500	-44.44	2	52.82	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-55.99	2	41.27	Average	54	Pass
NVNT	g	2412	Ant1	2310	-45.86	2	51.4	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-56.61	2	40.65	Average	54	Pass
NVNT	g	2412	Ant1	2360.076	-43.9	2	53.36	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-55.23	2	42.03	Average	54	Pass
NVNT	g	2412	Ant1	2390	-45.15	2	52.11	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-55.12	2	42.14	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-47.39	2	49.87	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-55.37	2	41.89	Average	54	Pass
NVNT	g	2462	Ant1	2491.308	-43.51	2	53.75	Peak	74	Pass
NVNT	g	2462	Ant1	2483.676	-55.34	2	41.92	Average	54	Pass
NVNT	g	2462	Ant1	2500	-45.58	2	51.68	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-56.43	2	40.83	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-47.97	2	49.29	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-56.51	2	40.75	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2377.275	-42.99	2	54.27	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.092	-55.11	2	42.15	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-44.41	2	52.85	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-55.21	2	42.05	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-48.06	2	49.2	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-55.07	2	42.19	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2494.488	-43.86	2	53.4	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.57	-54.95	2	42.31	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-47.73	2	49.53	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-56.36	2	40.9	Average	54	Pass

Test Graphs

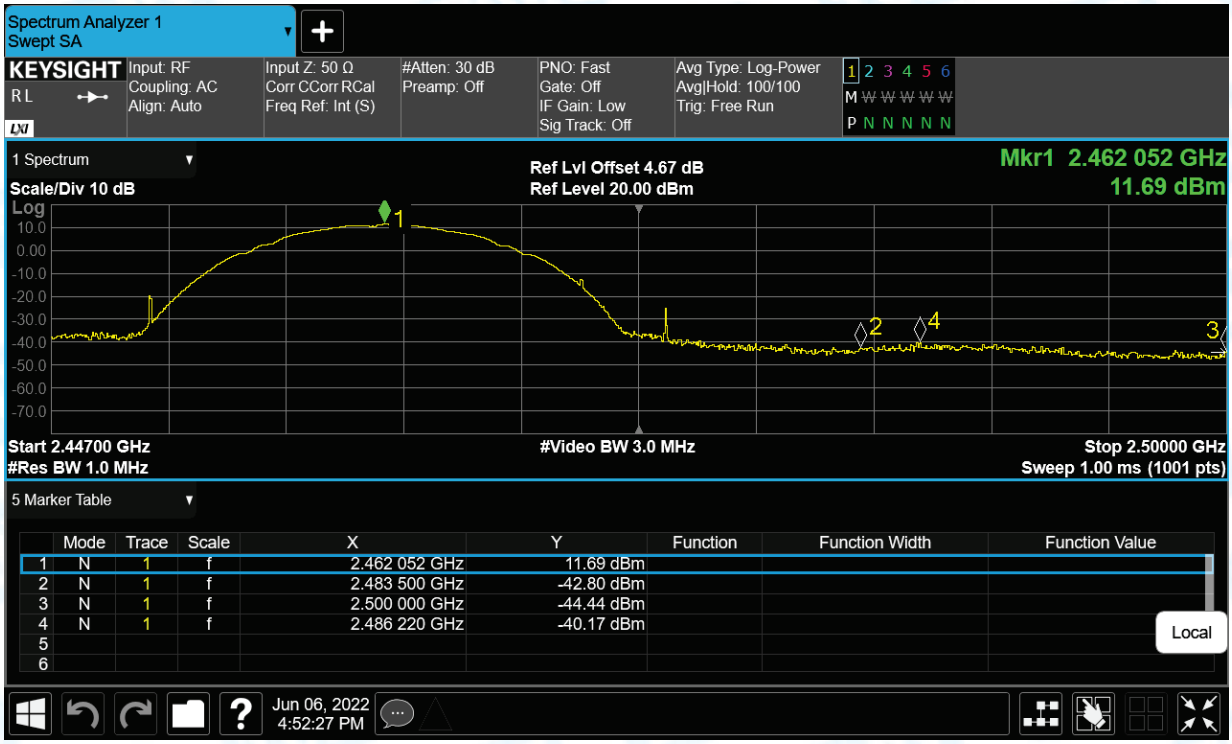
Restrict Band NVNT b 2412MHz Ant1 Peak



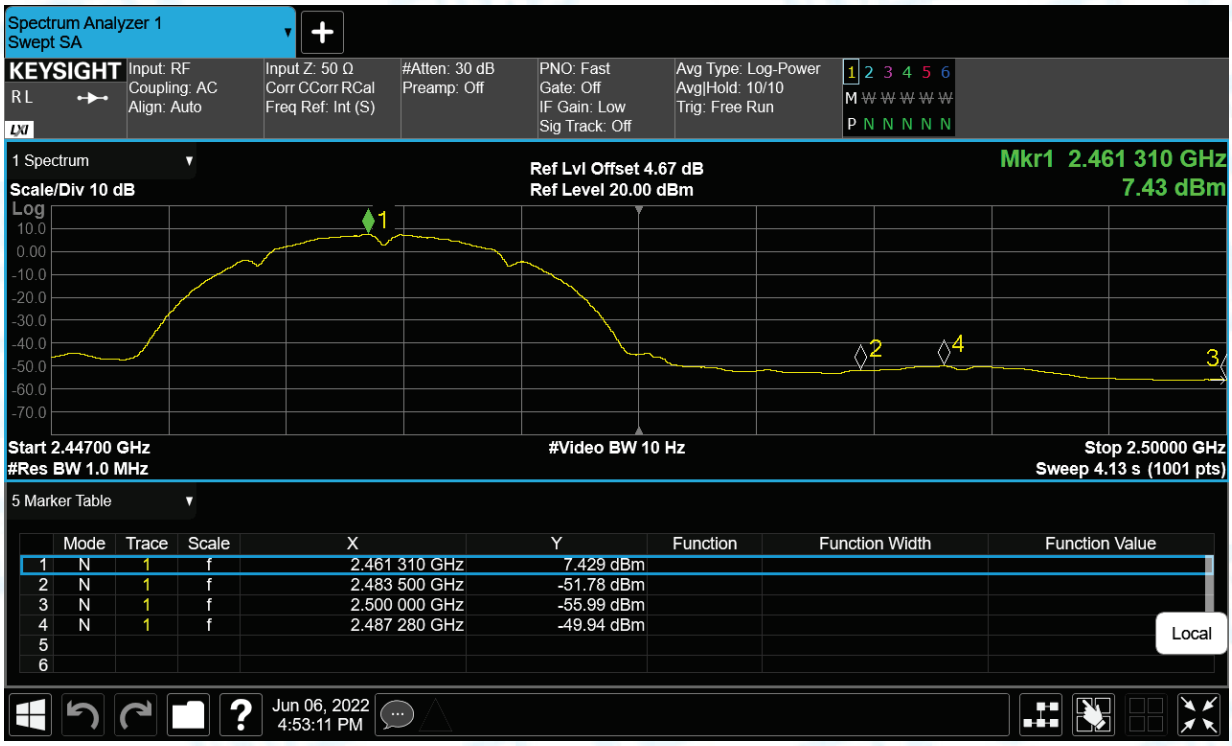
Restrict Band NVNT b 2412MHz Ant1 Average



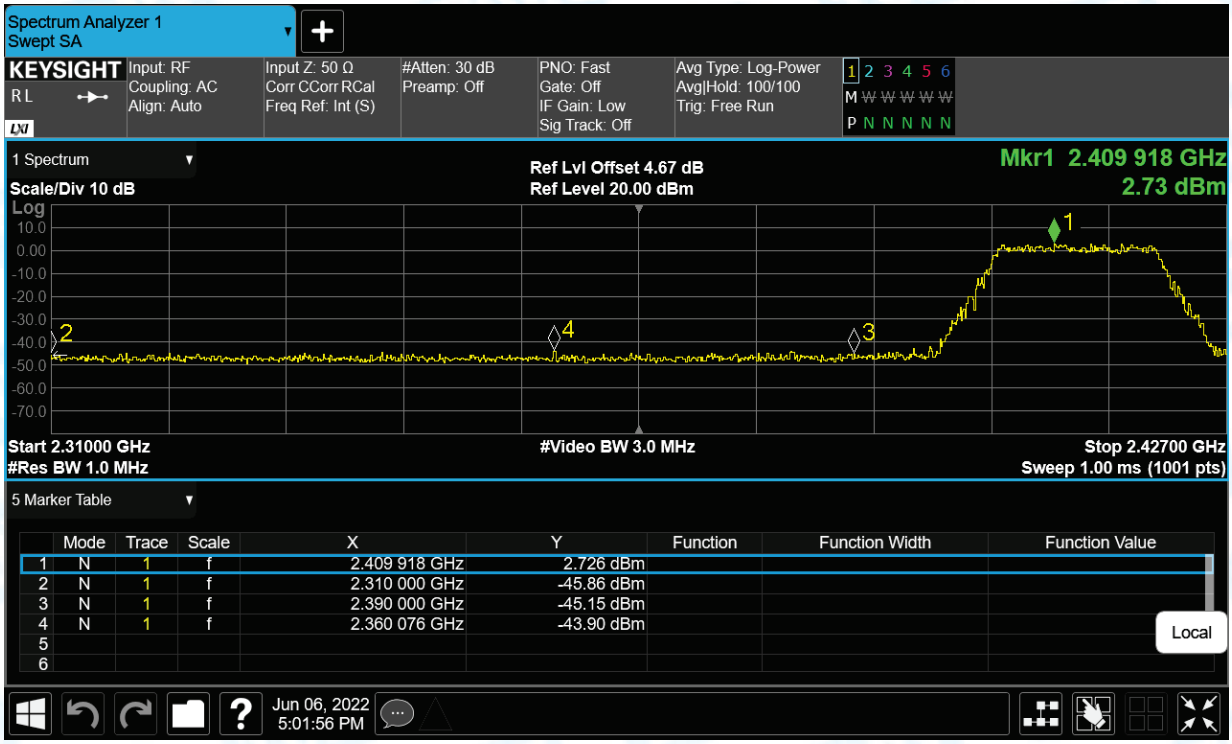
Restrict Band NVNT b 2462MHz Ant1 Peak



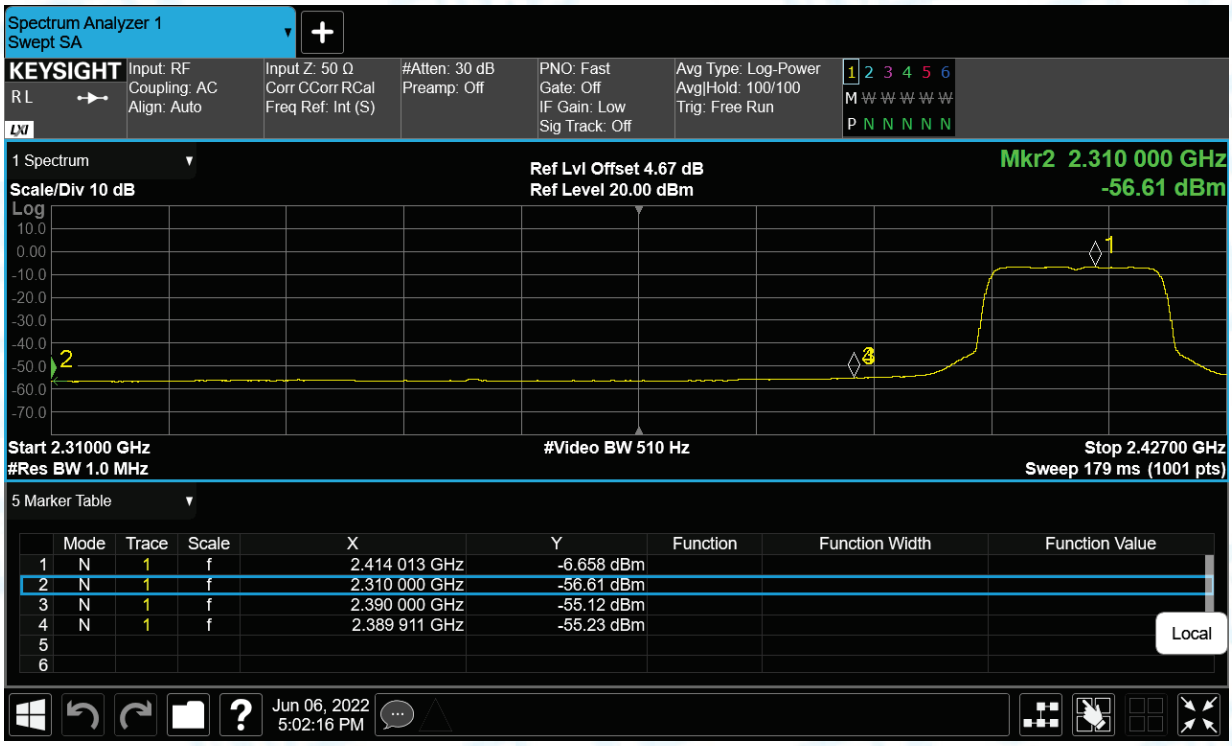
Restrict Band NVNT b 2462MHz Ant1 Average



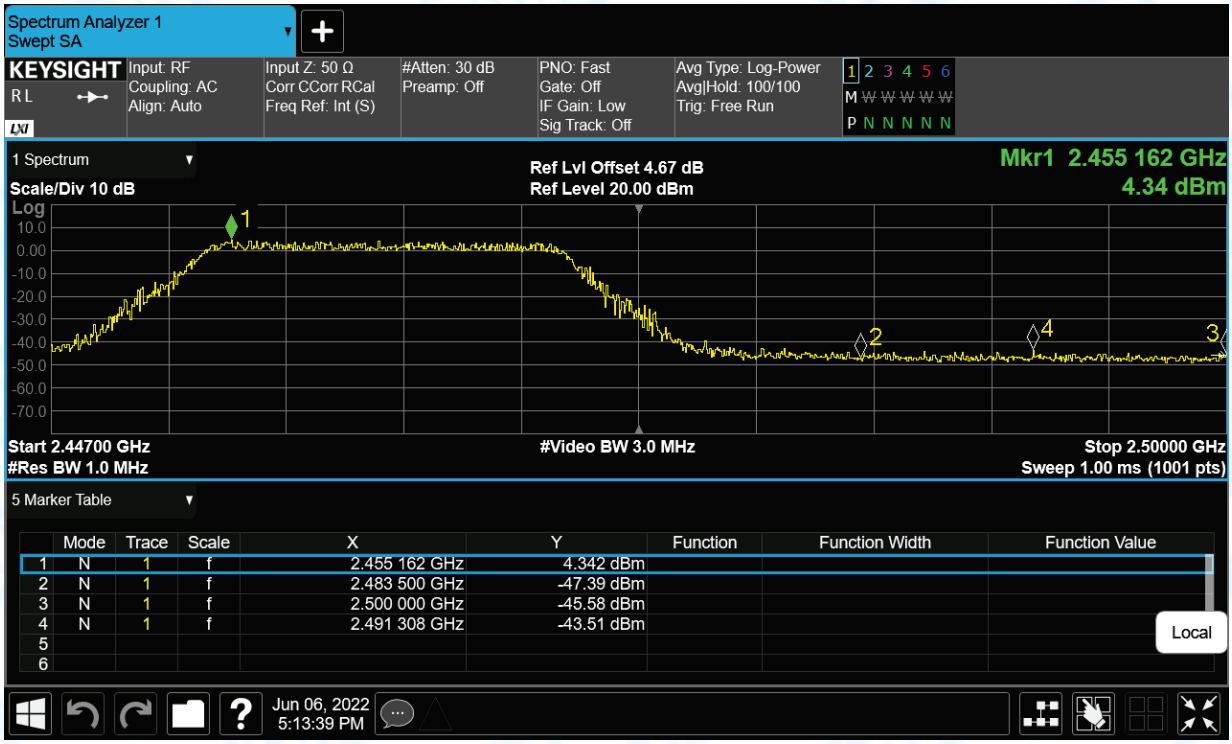
Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average

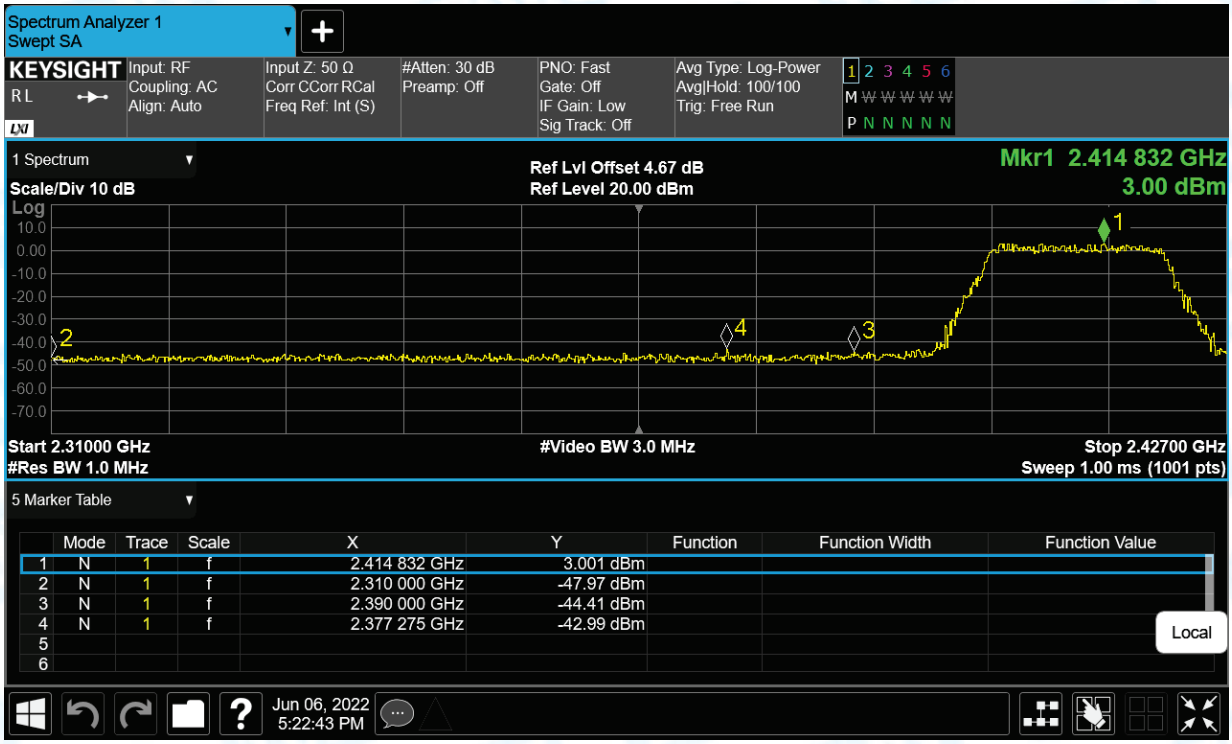


Restrict Band NVNT g 2462MHz Ant1 Peak

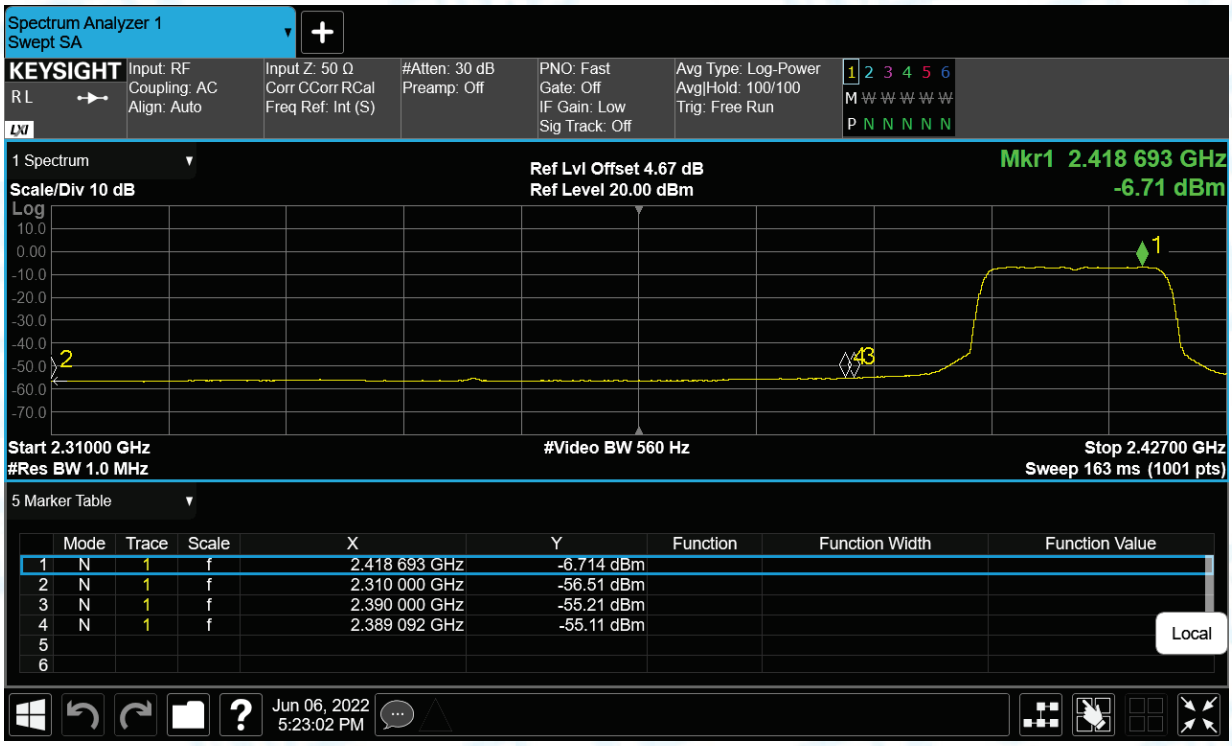


Restrict Band NVNT g 2462MHz Ant1 Average

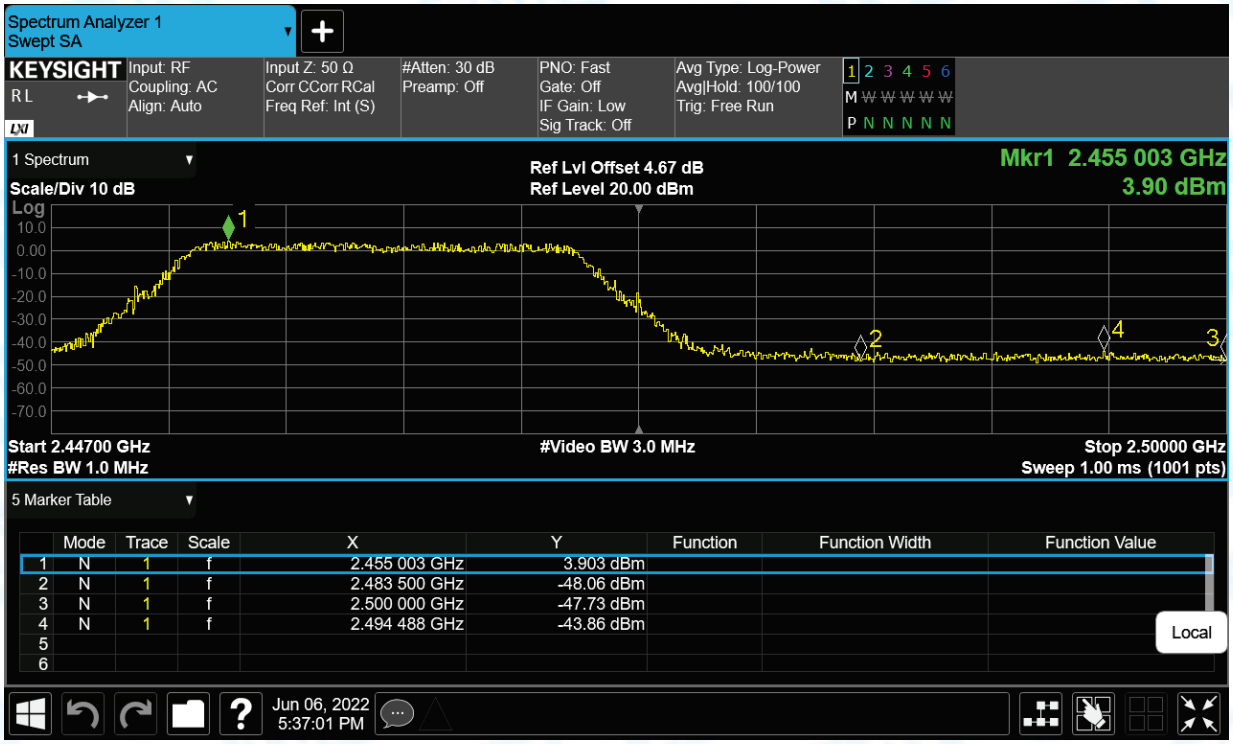
Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2462MHz Ant1 Average