

RF Test Data for 2.4G WiFi (Conducted Measurements)

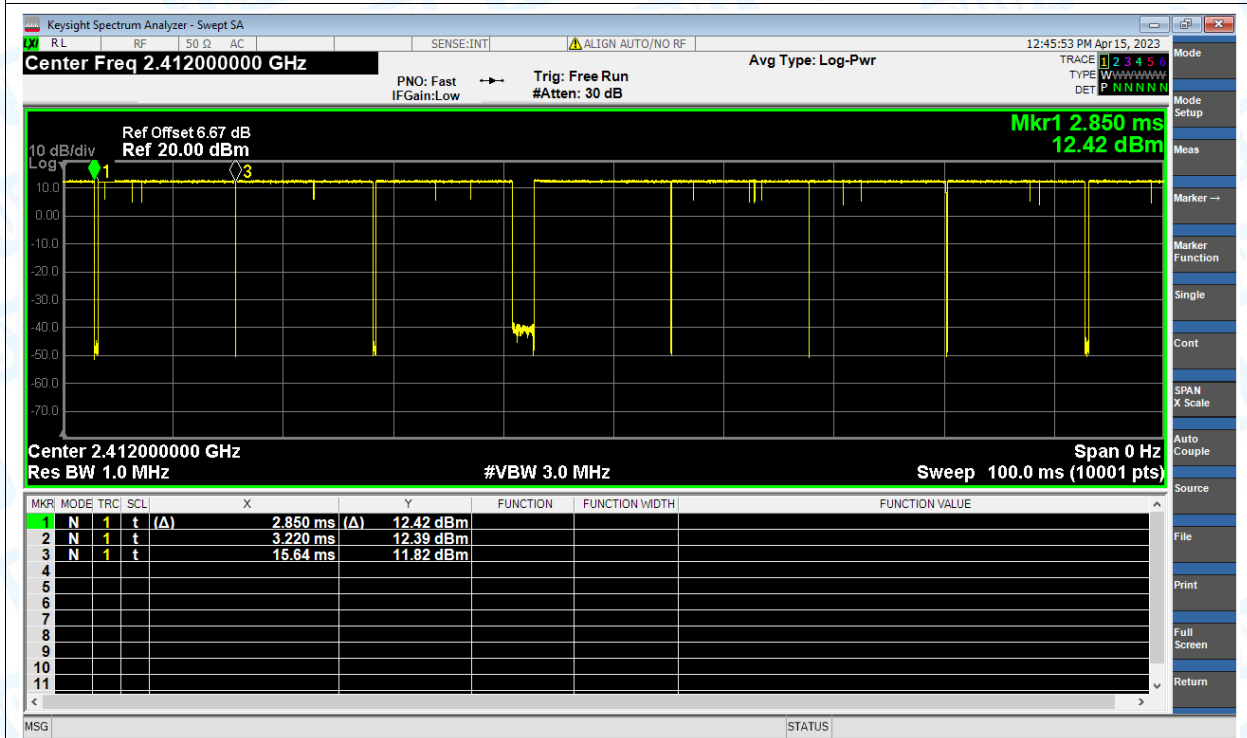
General Description of EUT	
Product Name:	Smart PTZ Camera
Test Model:	CB1
Sample ID:	RW-C-202304-0103-6-2#
Environmental Conditions	
Temperature:	24°C
Relative Humidity:	50%
Test Voltage:	DC 5V
Test Engineer:	LiuJiming
Note: For a more detailed features description, please refer to the report TBR-C-202304-0103-11 The report only show the worst case data.	

Duty Cycle

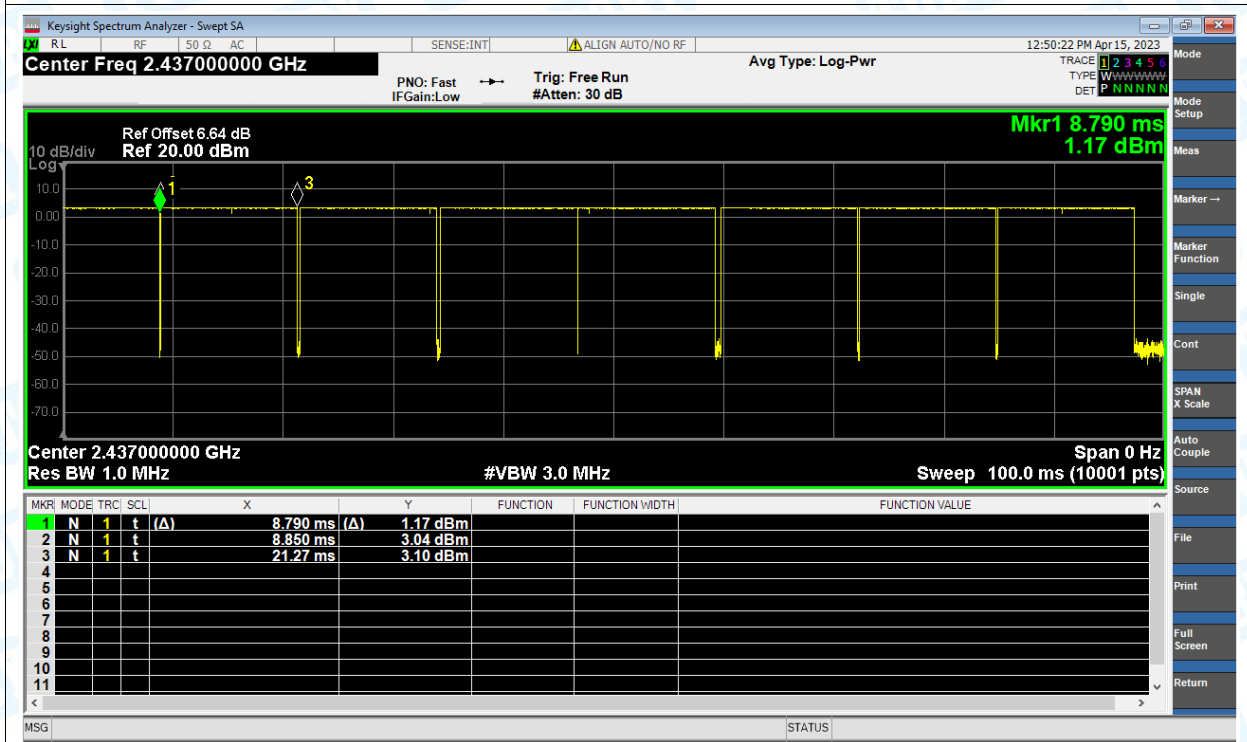
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	97.11	0.13	0.08
NVNT	b	2437	Ant1	99.52	0.02	0.08
NVNT	b	2462	Ant1	96.96	0.13	0.08
NVNT	g	2412	Ant1	91.56	0.38	0.49
NVNT	g	2437	Ant1	95.39	0.2	0.48
NVNT	g	2462	Ant1	97.18	0.12	0.48
NVNT	n(HT20)	2412	Ant1	88.07	0.55	0.52
NVNT	n(HT20)	2437	Ant1	88.48	0.53	0.52
NVNT	n(HT20)	2462	Ant1	88.07	0.55	0.52

Test Graphs

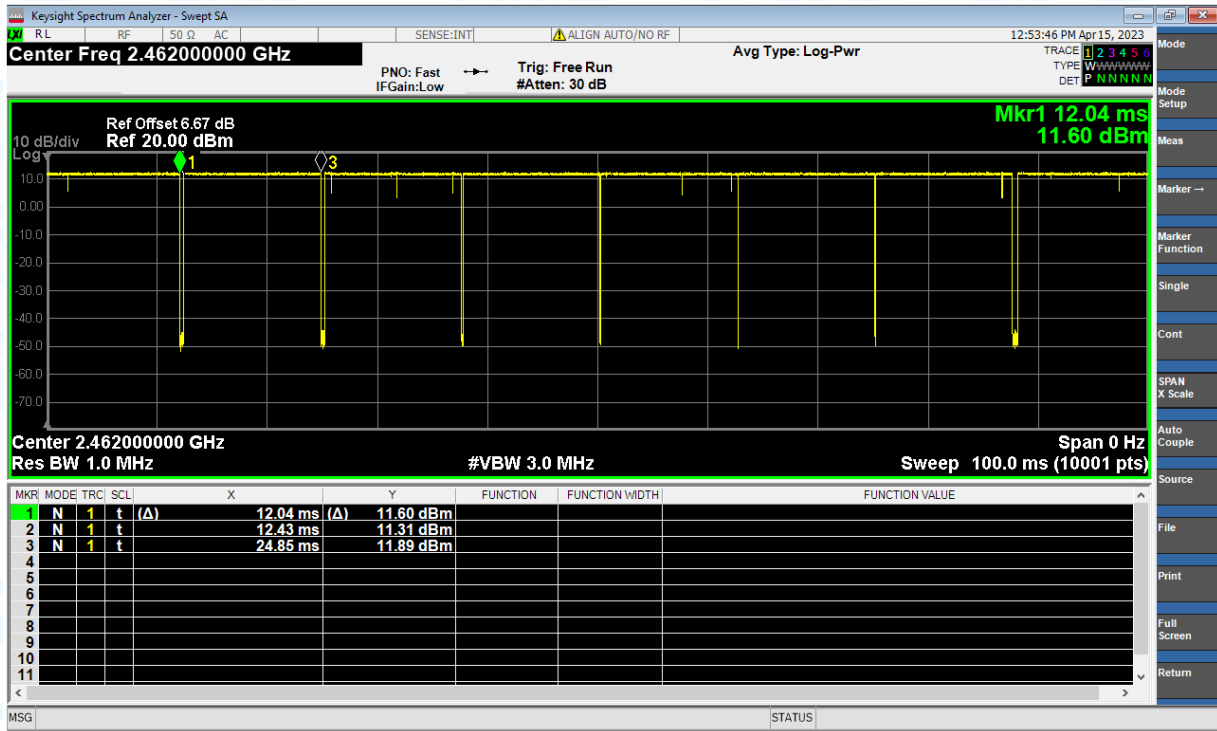
Duty Cycle NVNT b 2412MHz Ant1



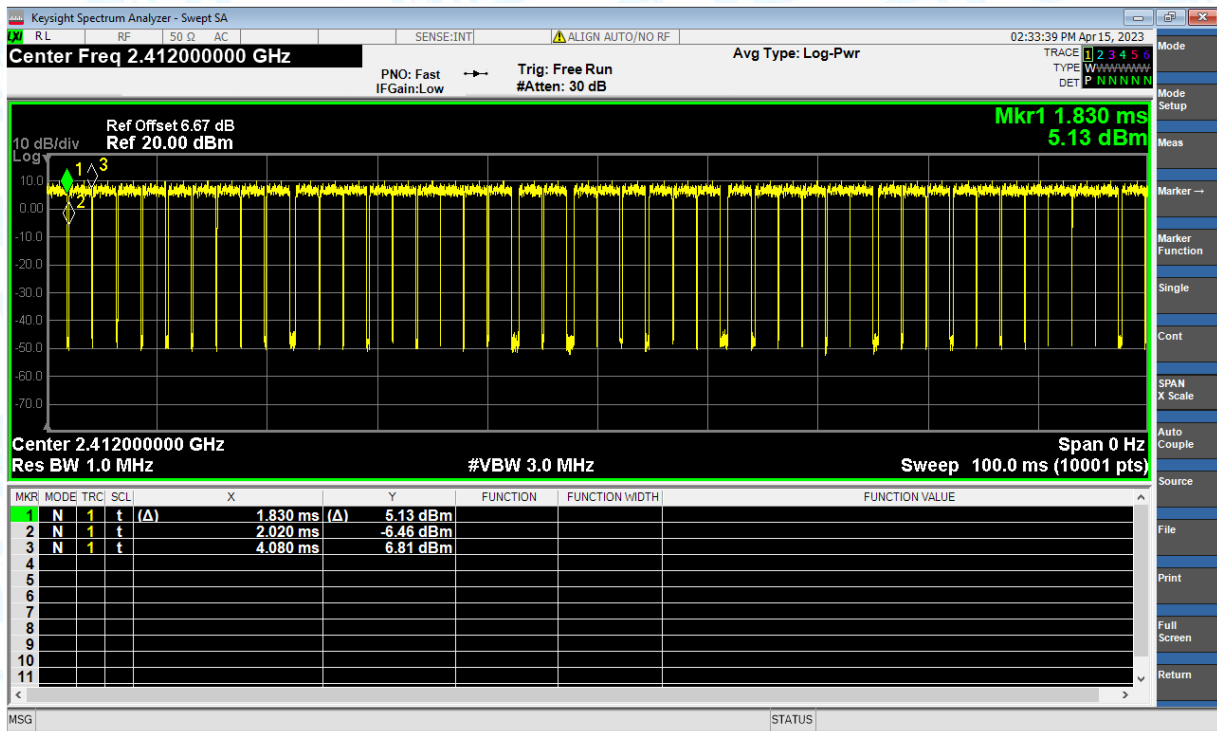
Duty Cycle NVNT b 2437MHz Ant1



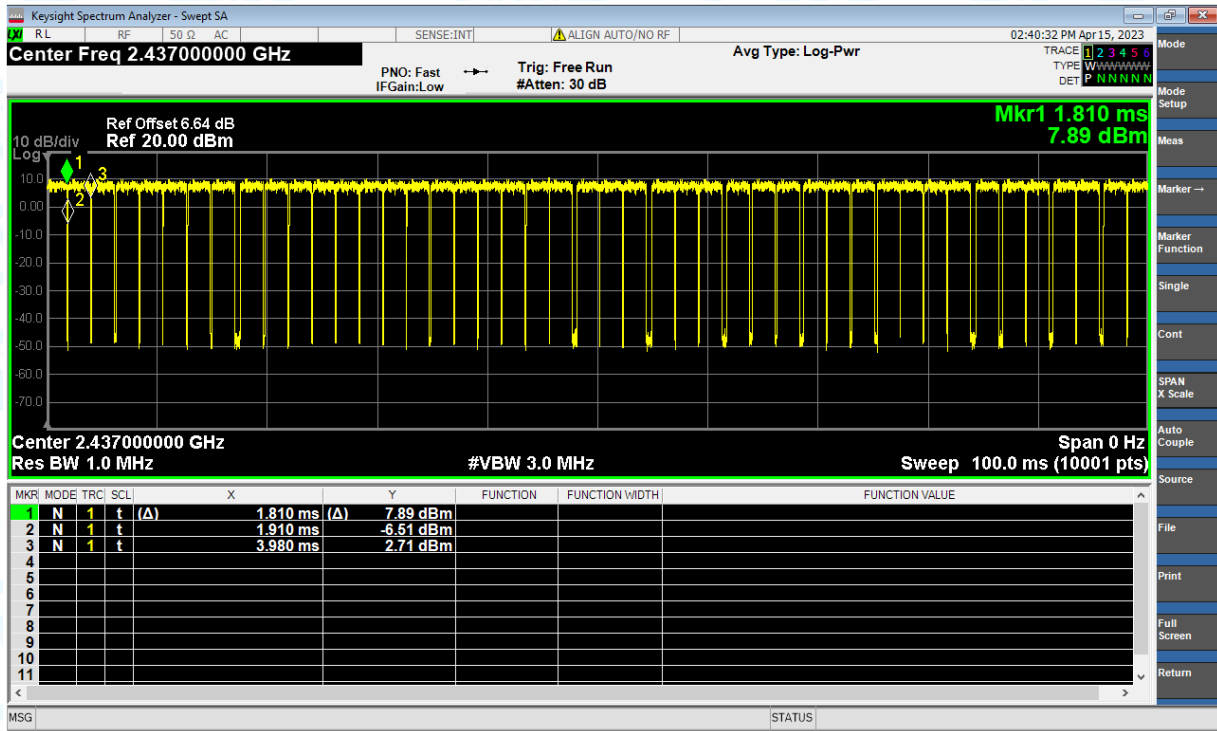
Duty Cycle NVNT b 2462MHz Ant1



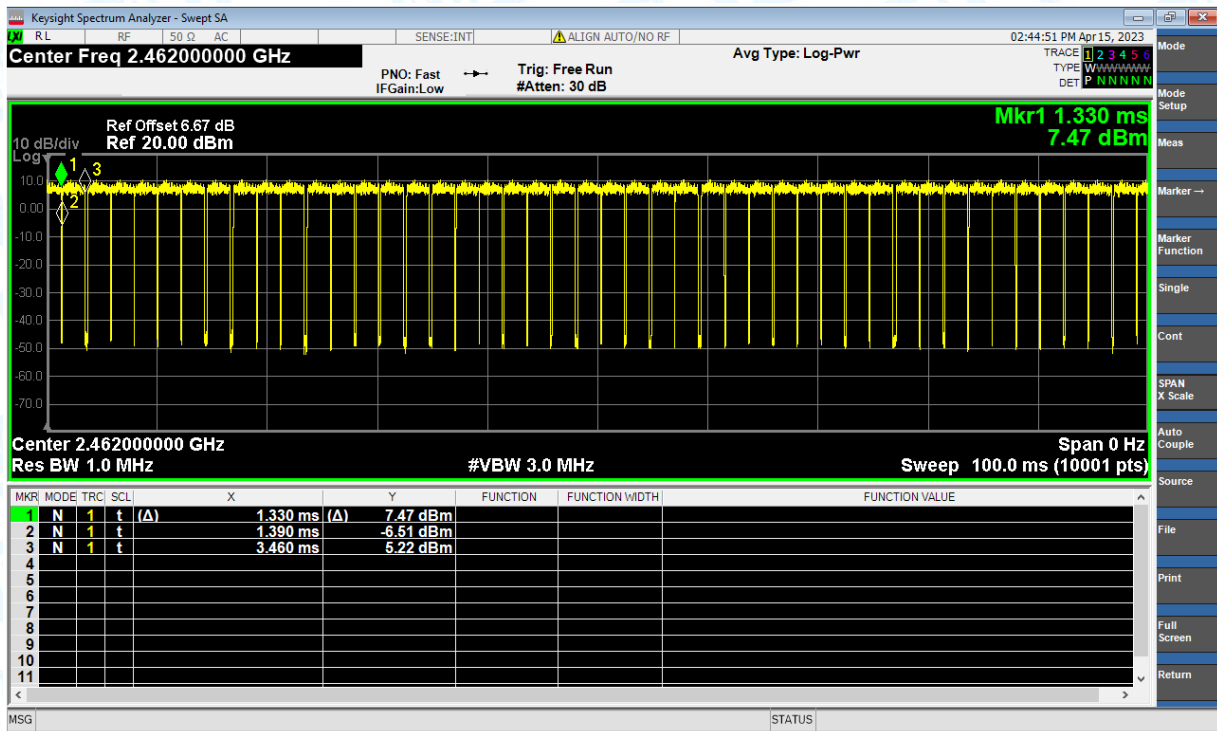
Duty Cycle NVNT g 2412MHz Ant1



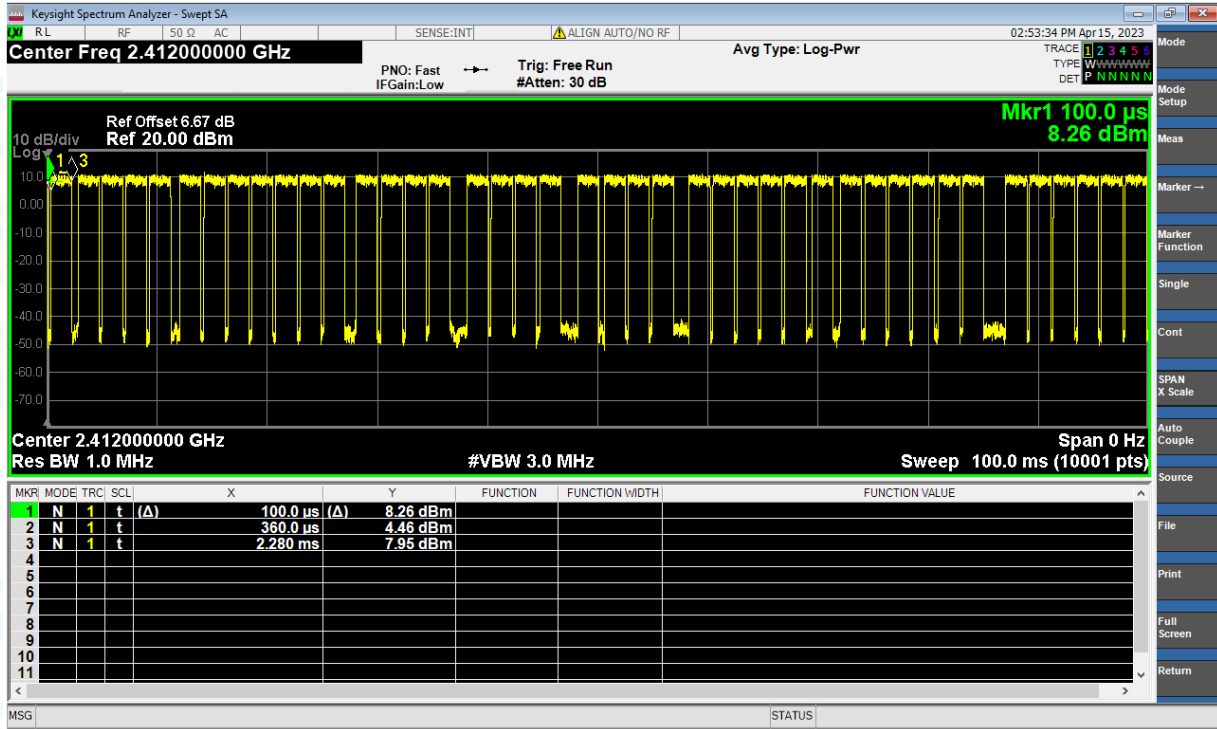
Duty Cycle NVNT g 2437MHz Ant1



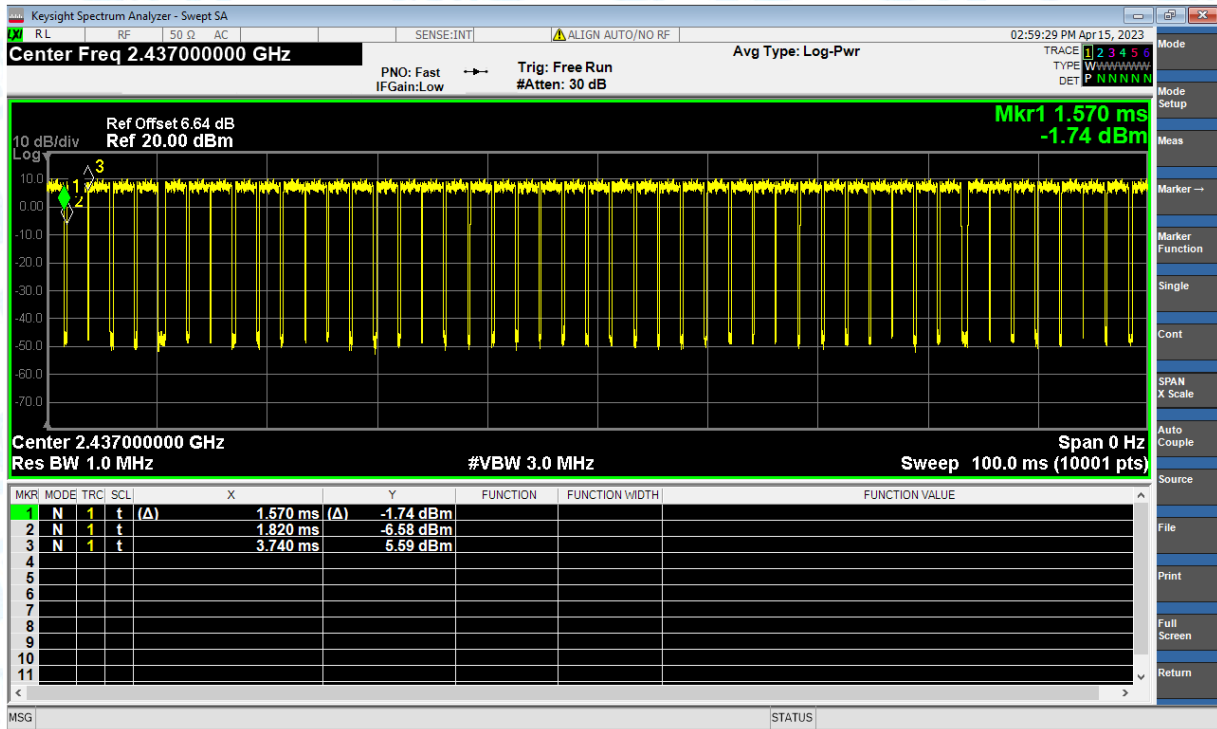
Duty Cycle NVNT g 2462MHz Ant1



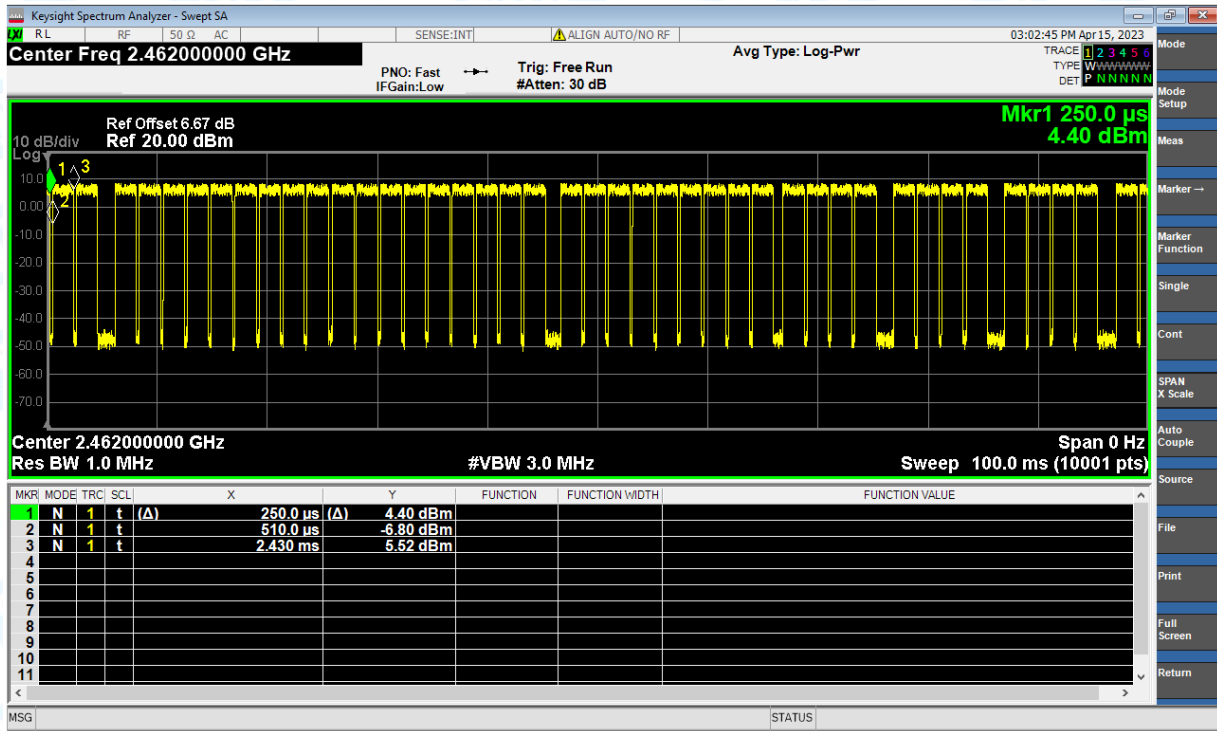
Duty Cycle NVNT n(HT20) 2412MHz Ant1



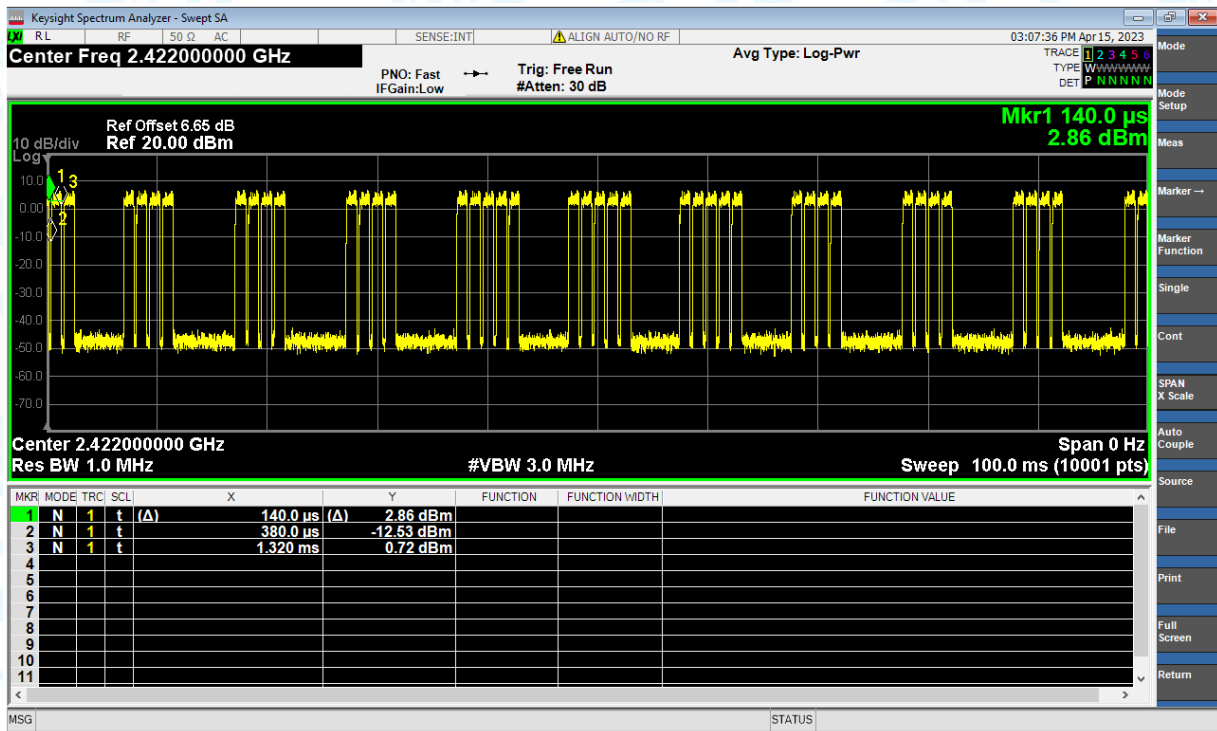
Duty Cycle NVNT n(HT20) 2437MHz Ant1



Duty Cycle NVNT n(HT20) 2462MHz Ant1



Duty Cycle NVNT n(HT40) 2422MHz Ant1



Maximum Conducted Output Power

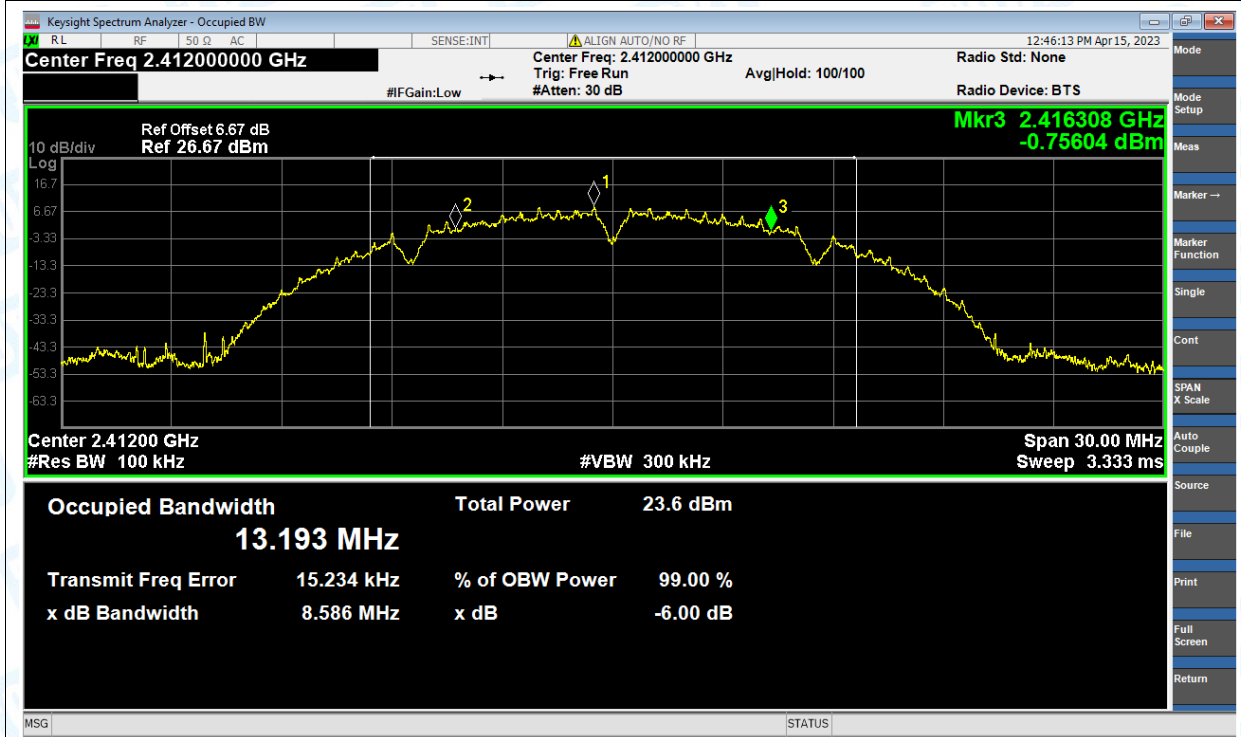
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	16.711	30	Pass
NVNT	b	2437	Ant1	16.603	30	Pass
NVNT	b	2462	Ant1	16.137	30	Pass
NVNT	g	2412	Ant1	15.112	30	Pass
NVNT	g	2437	Ant1	15.566	30	Pass
NVNT	g	2462	Ant1	15.29	30	Pass
NVNT	n(HT20)	2412	Ant1	14.062	30	Pass
NVNT	n(HT20)	2437	Ant1	14.354	30	Pass
NVNT	n(HT20)	2462	Ant1	14.214	30	Pass

-6dB Bandwidth

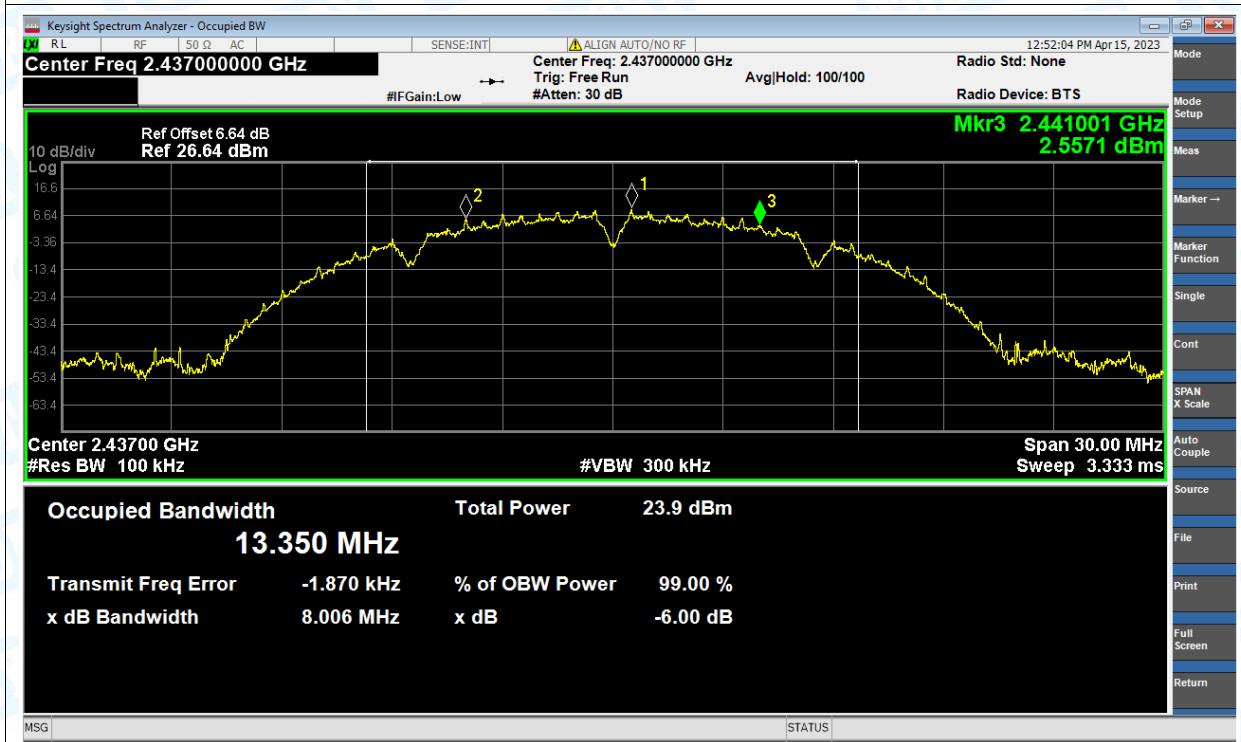
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.59	0.5	Pass
NVNT	b	2437	Ant1	8.01	0.5	Pass
NVNT	b	2462	Ant1	8.99	0.5	Pass
NVNT	g	2412	Ant1	16.35	0.5	Pass
NVNT	g	2437	Ant1	16.35	0.5	Pass
NVNT	g	2462	Ant1	16.33	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.56	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.53	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.24	0.5	Pass

Test Graphs

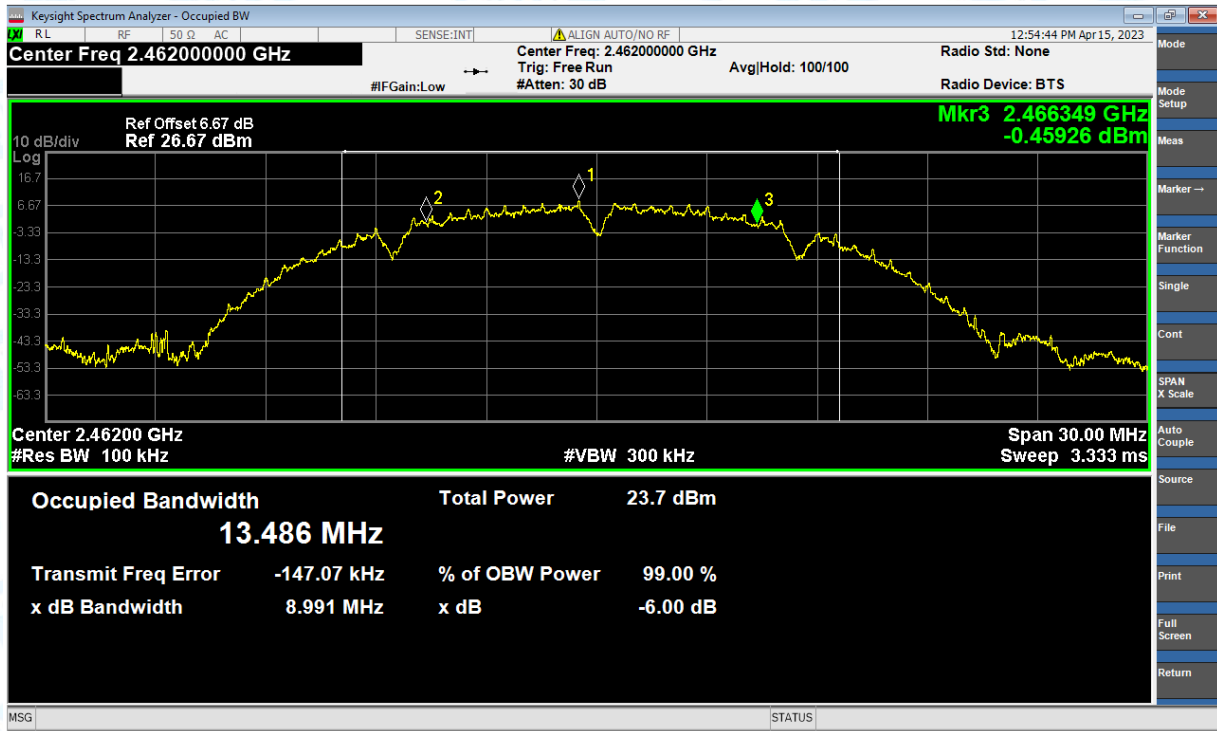
-6dB Bandwidth NVNT b 2412MHz Ant1



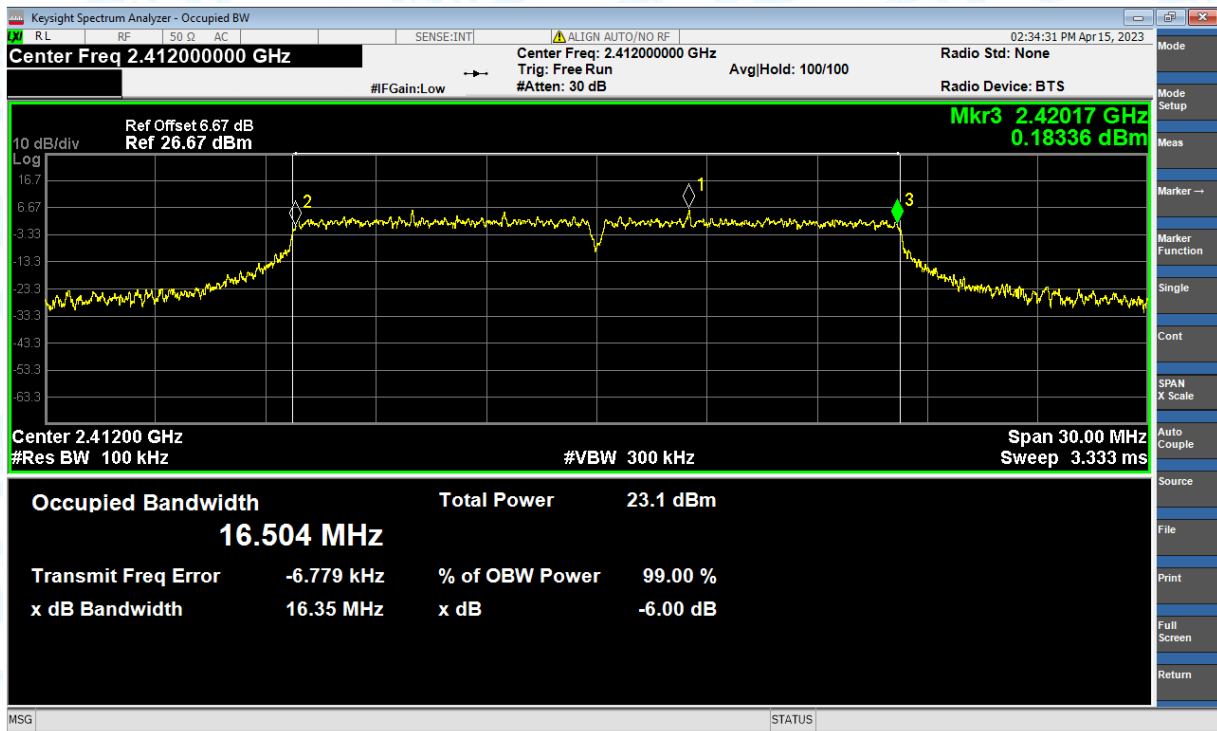
-6dB Bandwidth NVNT b 2437MHz Ant1



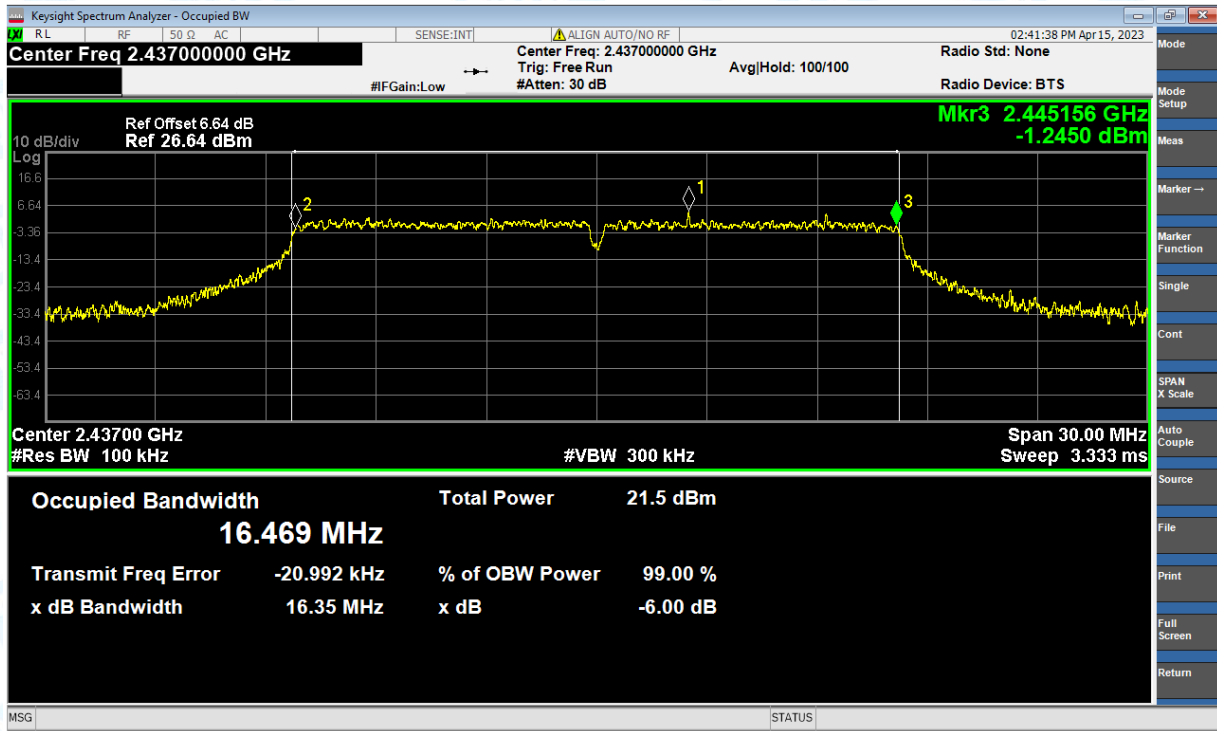
-6dB Bandwidth NVNT b 2462MHz Ant1



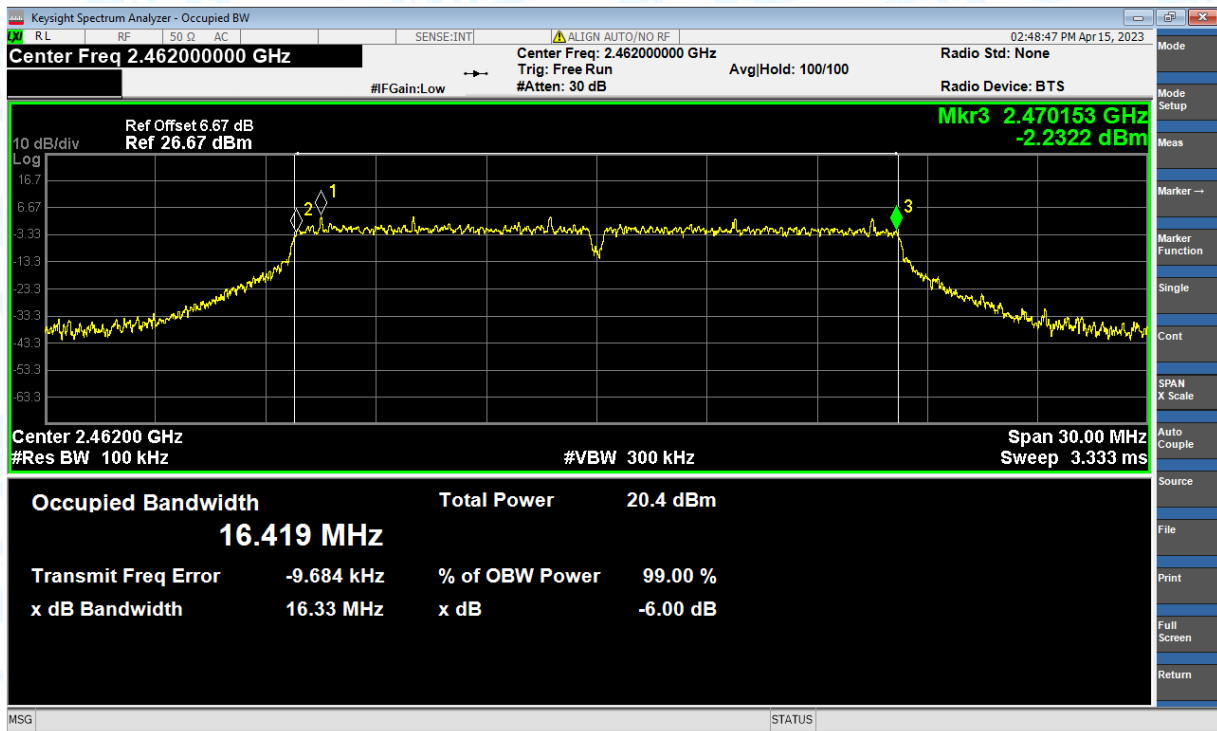
-6dB Bandwidth NVNT g 2412MHz Ant1



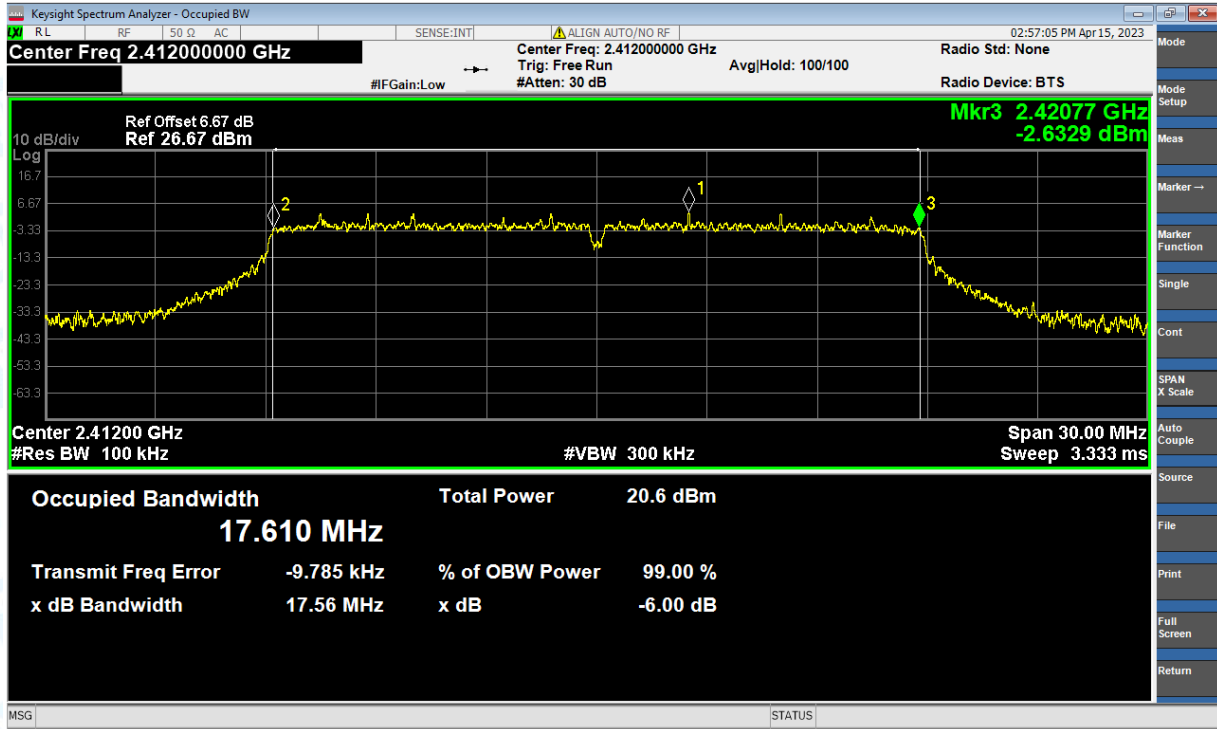
-6dB Bandwidth NVNT g 2437MHz Ant1



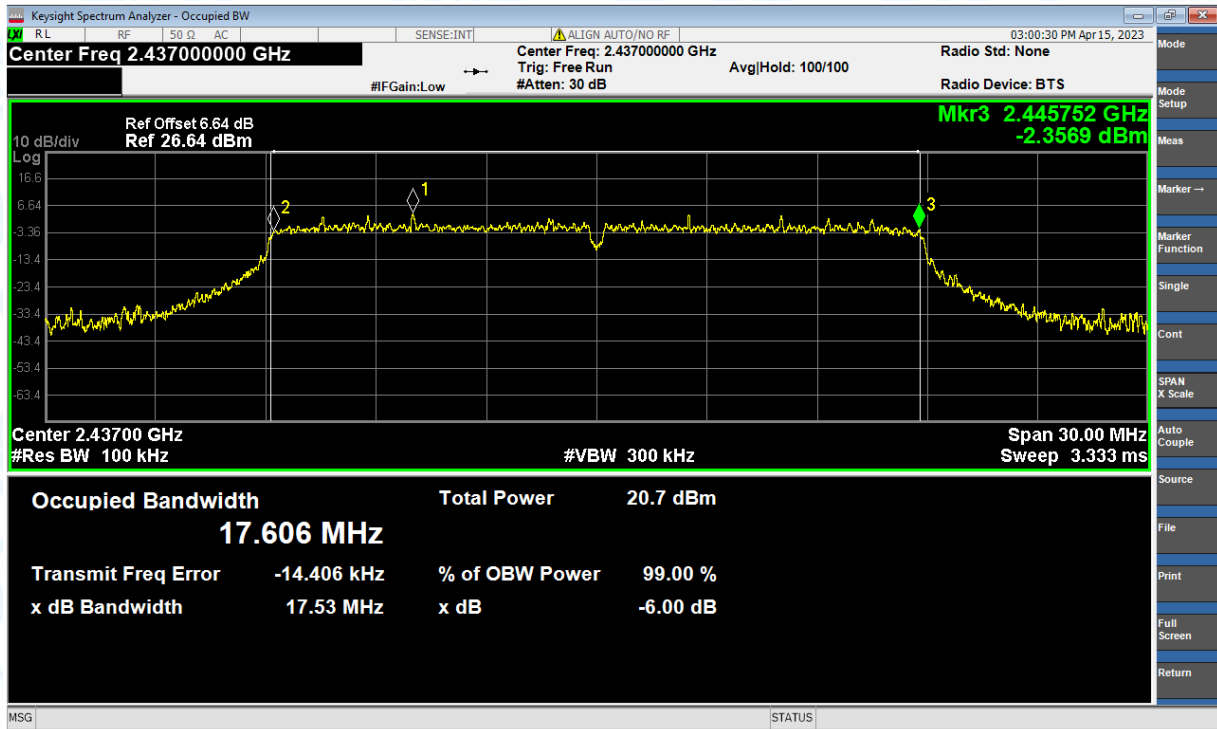
-6dB Bandwidth NVNT g 2462MHz Ant1

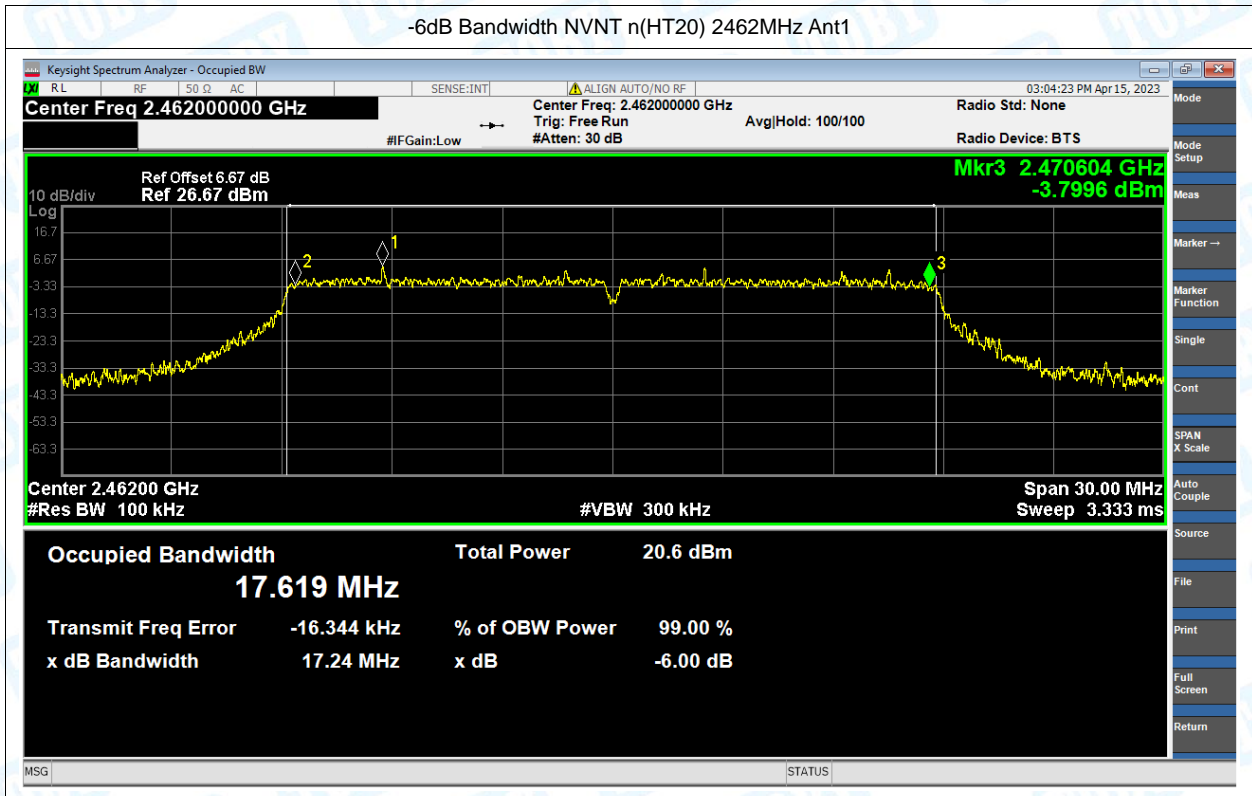


-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



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



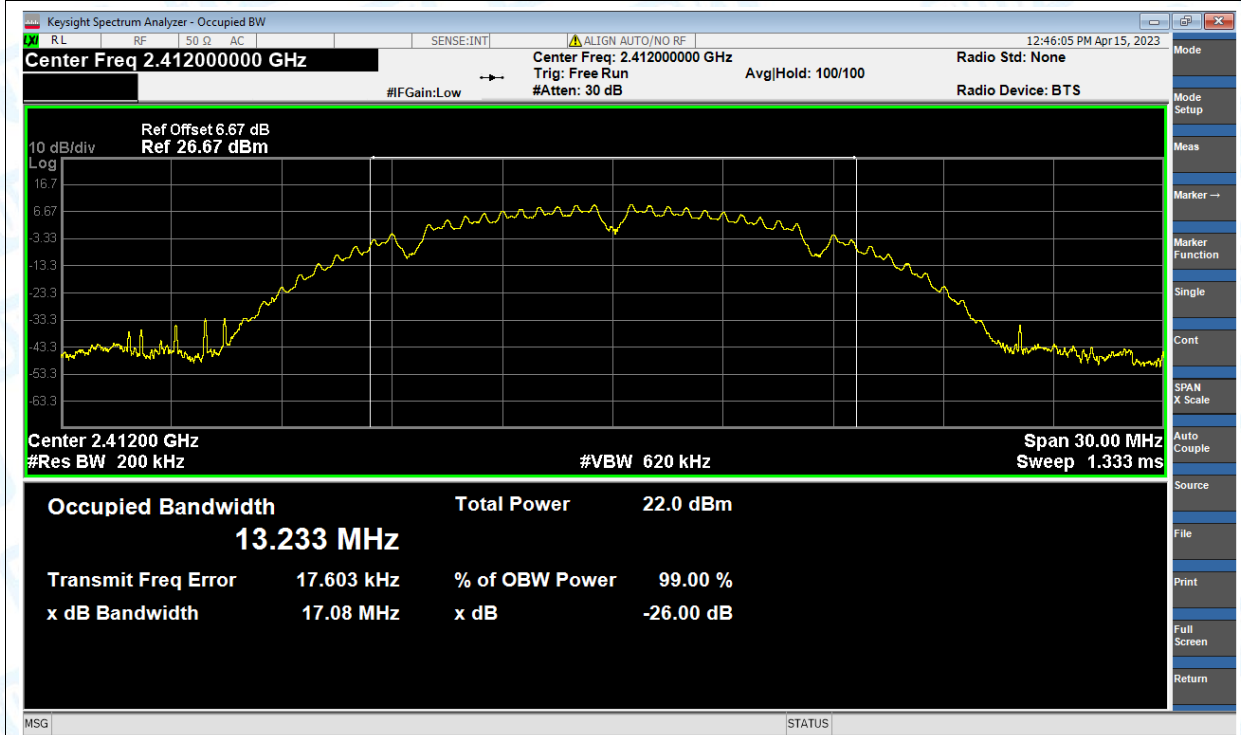


Occupied Channel Bandwidth

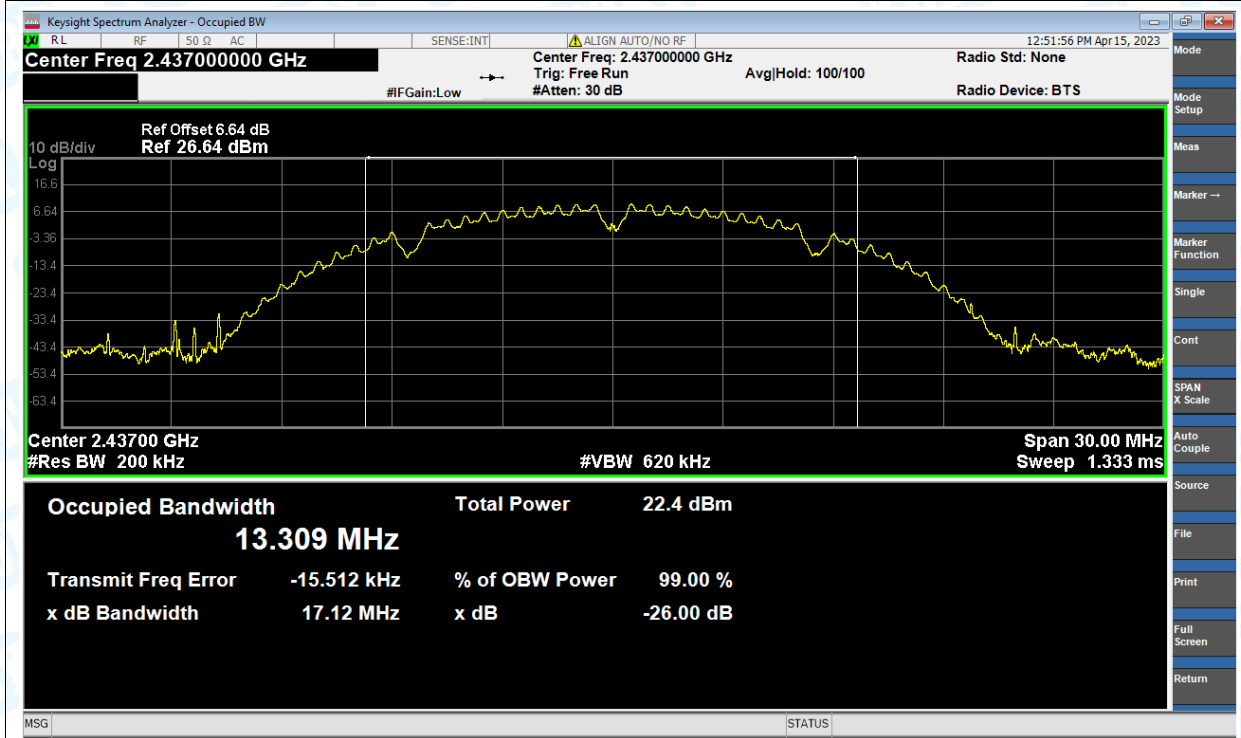
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.233
NVNT	b	2437	Ant1	13.309
NVNT	b	2462	Ant1	13.477
NVNT	g	2412	Ant1	16.647
NVNT	g	2437	Ant1	16.611
NVNT	g	2462	Ant1	16.596
NVNT	n(HT20)	2412	Ant1	17.629
NVNT	n(HT20)	2437	Ant1	17.662
NVNT	n(HT20)	2462	Ant1	17.705

Test Graphs

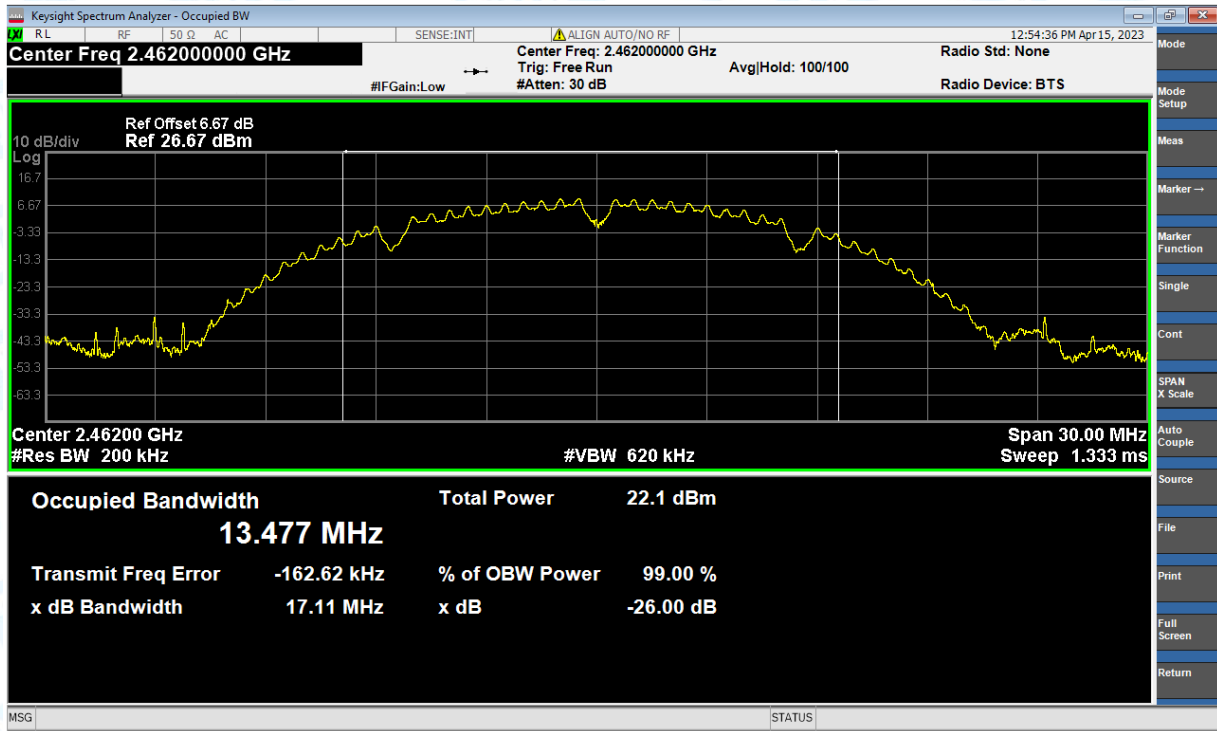
OBV NVNT b 2412MHz Ant1



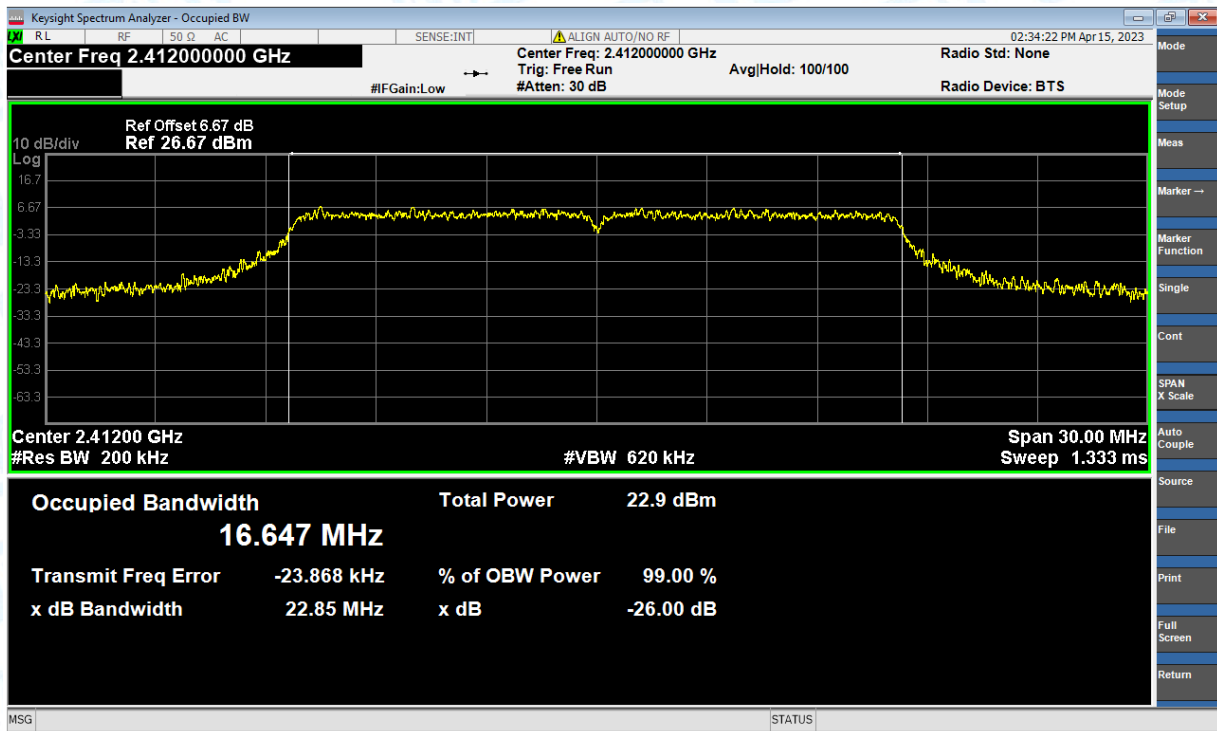
OBV NVNT b 2437MHz Ant1



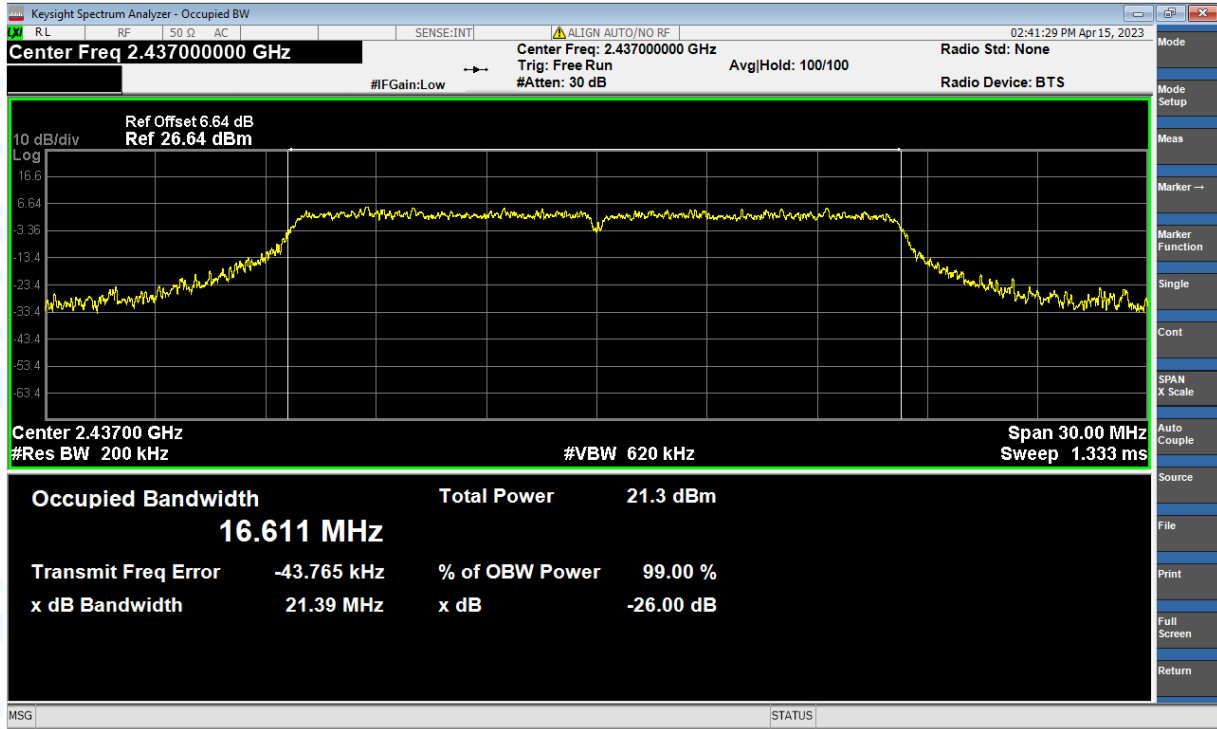
OBW NVNT b 2462MHz Ant1



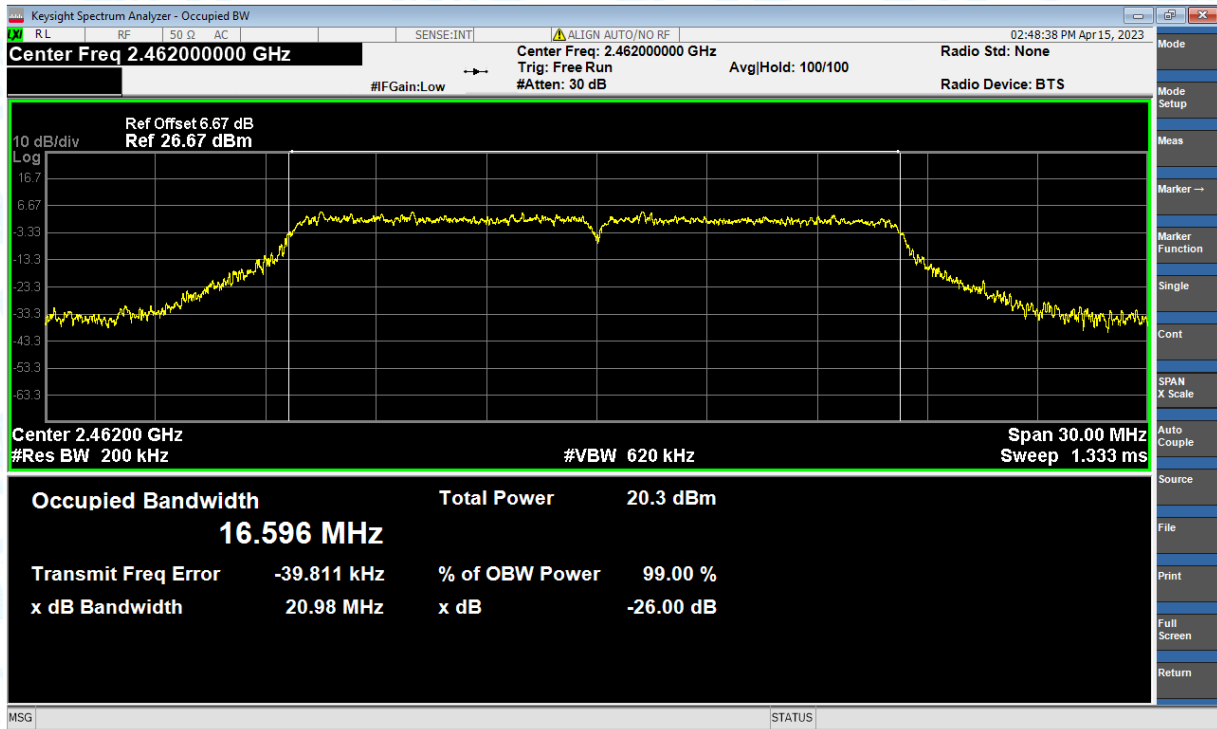
OBW NVNT g 2412MHz Ant1



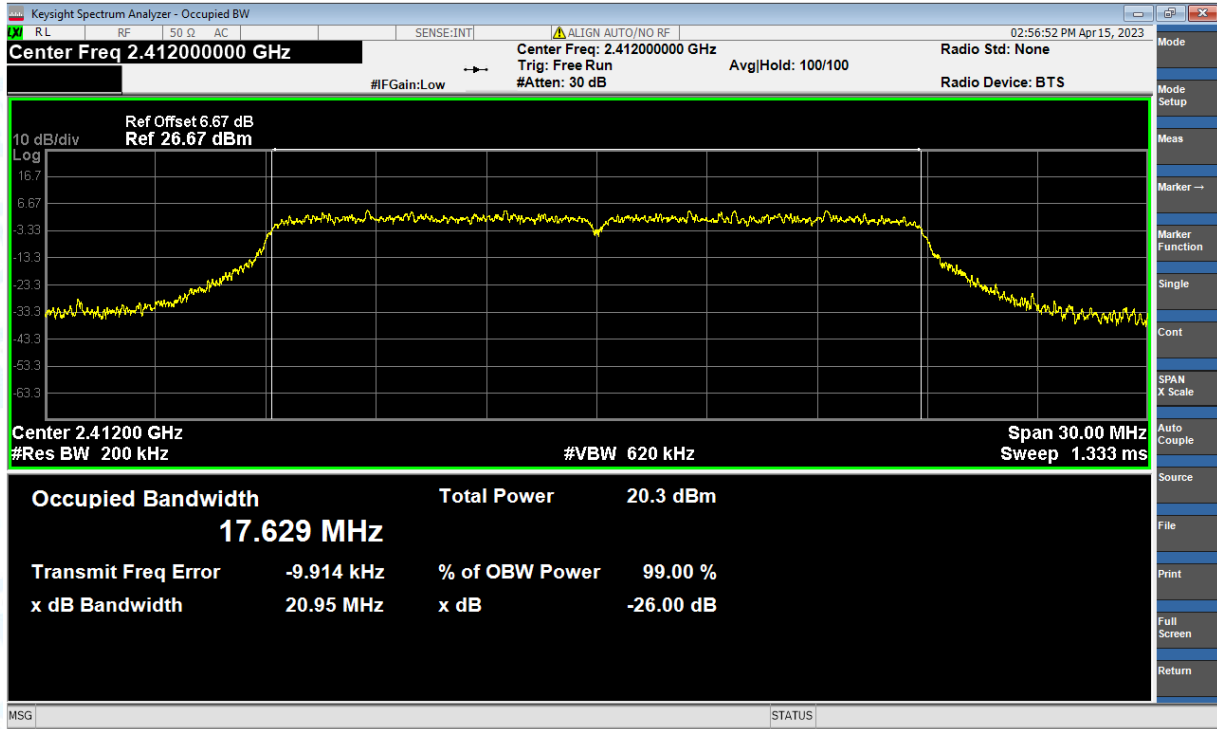
OBW NVNT g 2437MHz Ant1



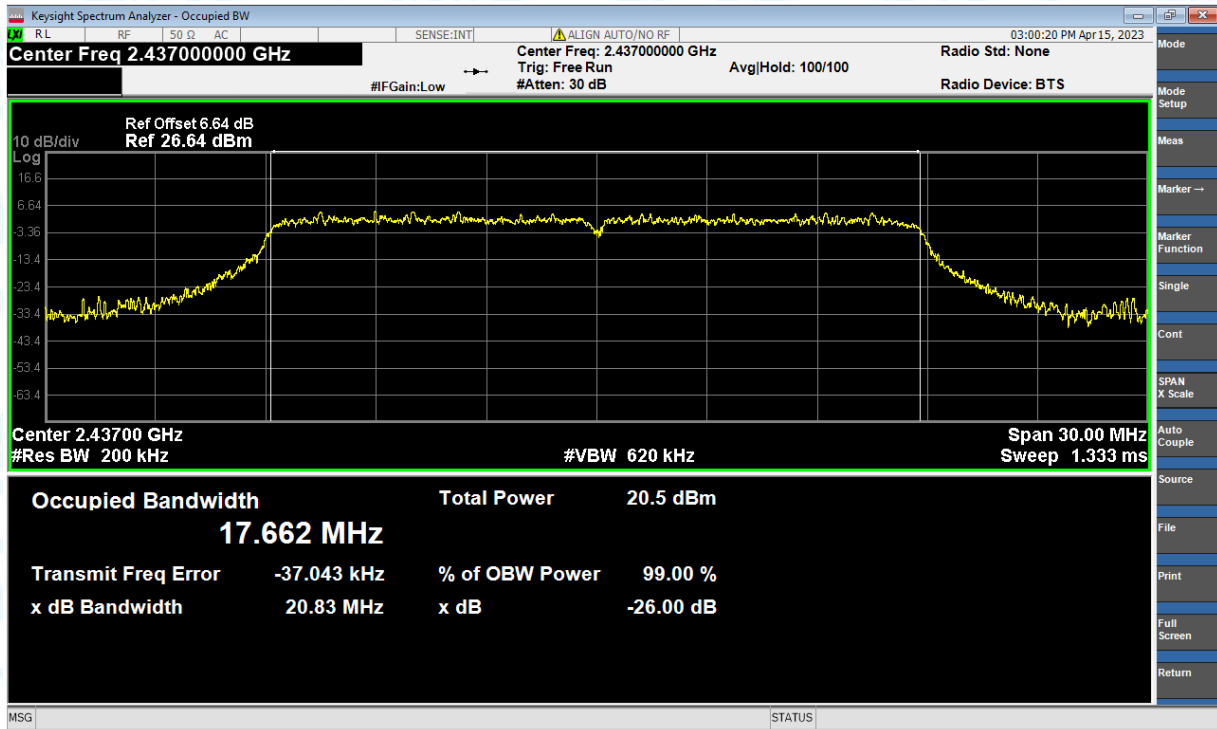
OBW NVNT g 2462MHz Ant1

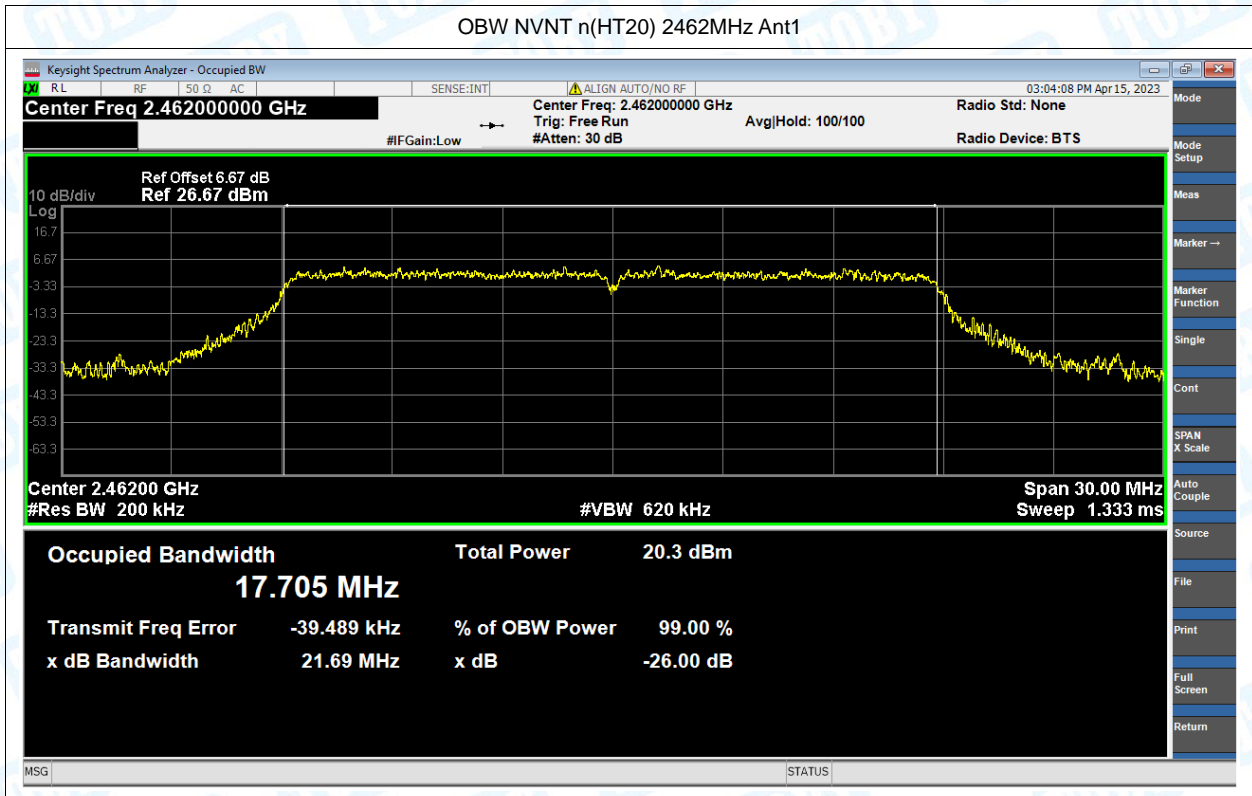


OBW NVNT n(HT20) 2412MHz Ant1



OBW NVNT n(HT20) 2437MHz Ant1





Maximum Power Spectral Density Level

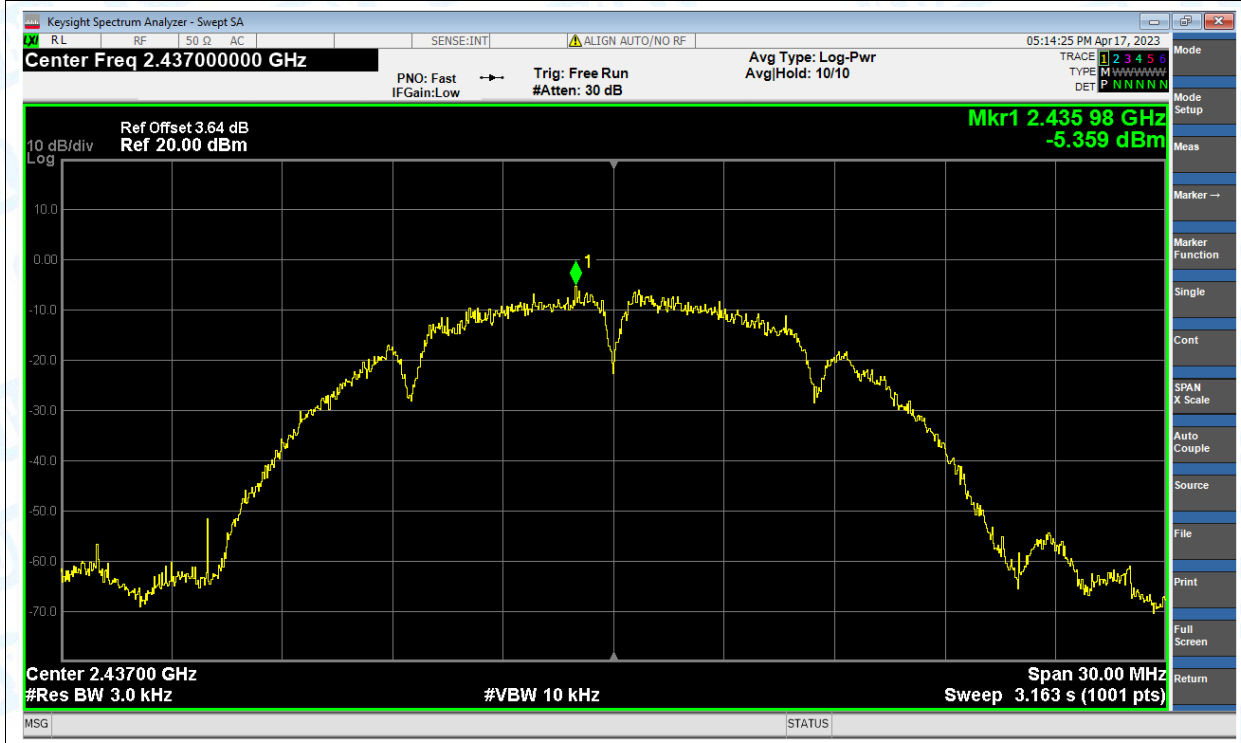
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-5.38	8	Pass
NVNT	b	2437	Ant1	-5.359	8	Pass
NVNT	b	2462	Ant1	-5.845	8	Pass
NVNT	g	2412	Ant1	-8.763	8	Pass
NVNT	g	2437	Ant1	-8.94	8	Pass
NVNT	g	2462	Ant1	-10.353	8	Pass
NVNT	n(HT20)	2412	Ant1	-9.956	8	Pass
NVNT	n(HT20)	2437	Ant1	-9.45	8	Pass
NVNT	n(HT20)	2462	Ant1	-10.723	8	Pass

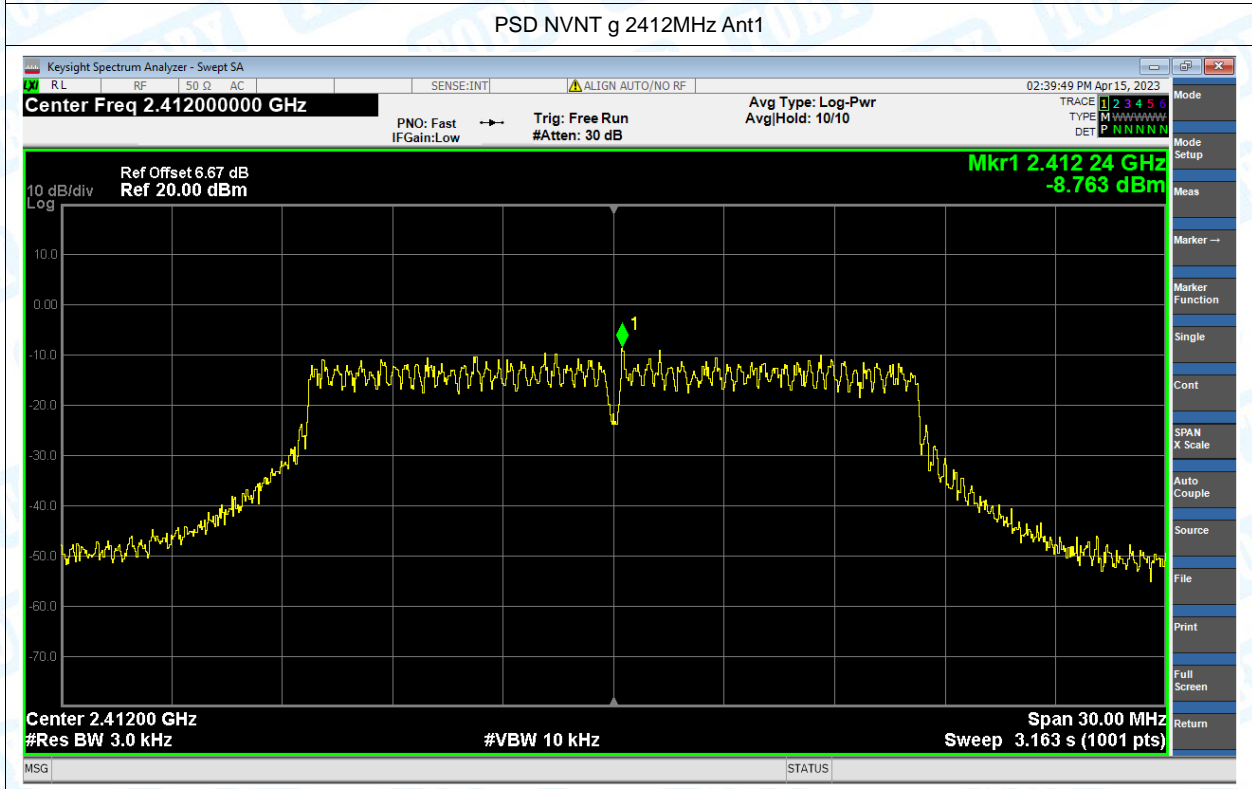
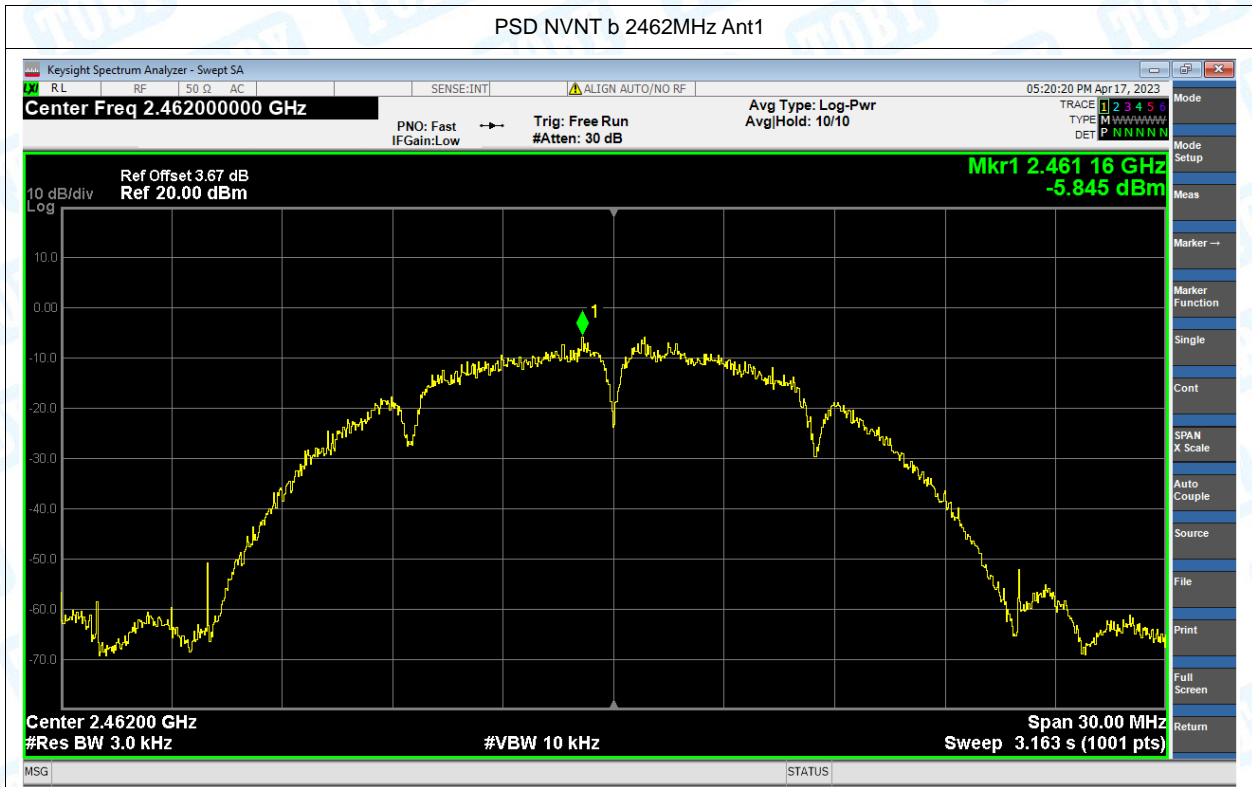
Test Graphs

PSD NVNT b 2412MHz Ant1

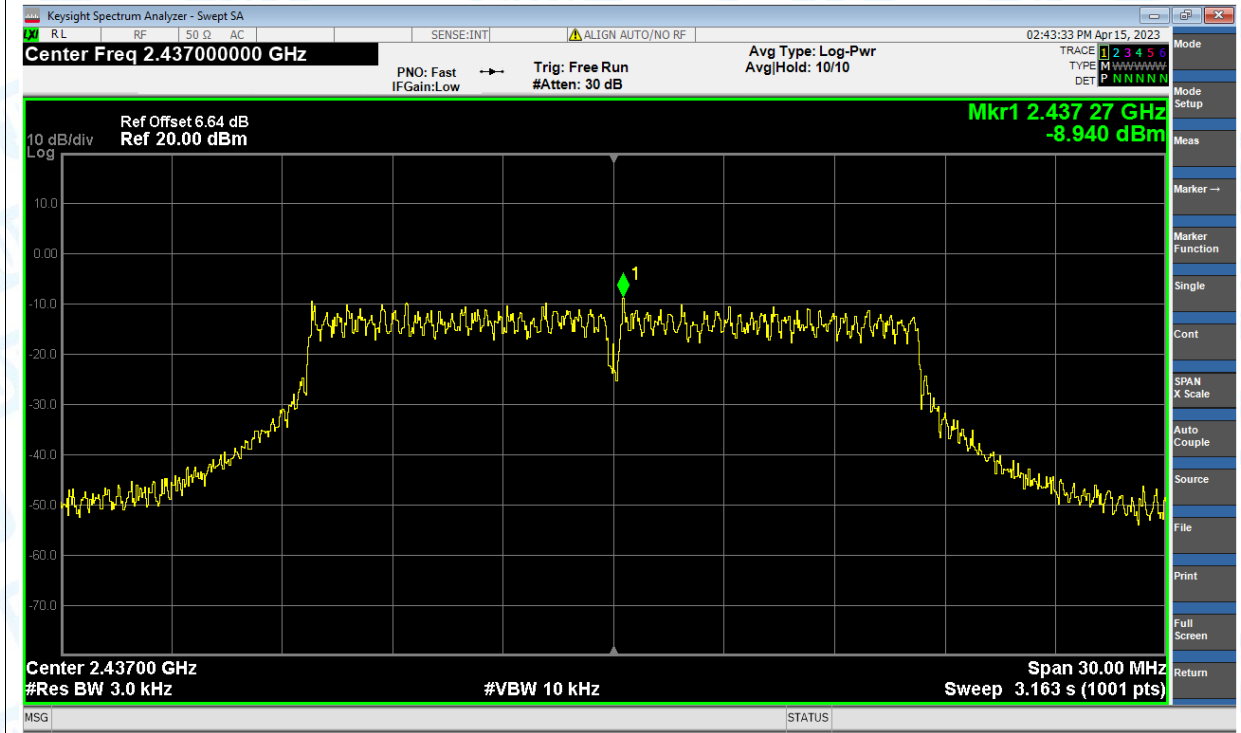


PSD NVNT b 2437MHz Ant1

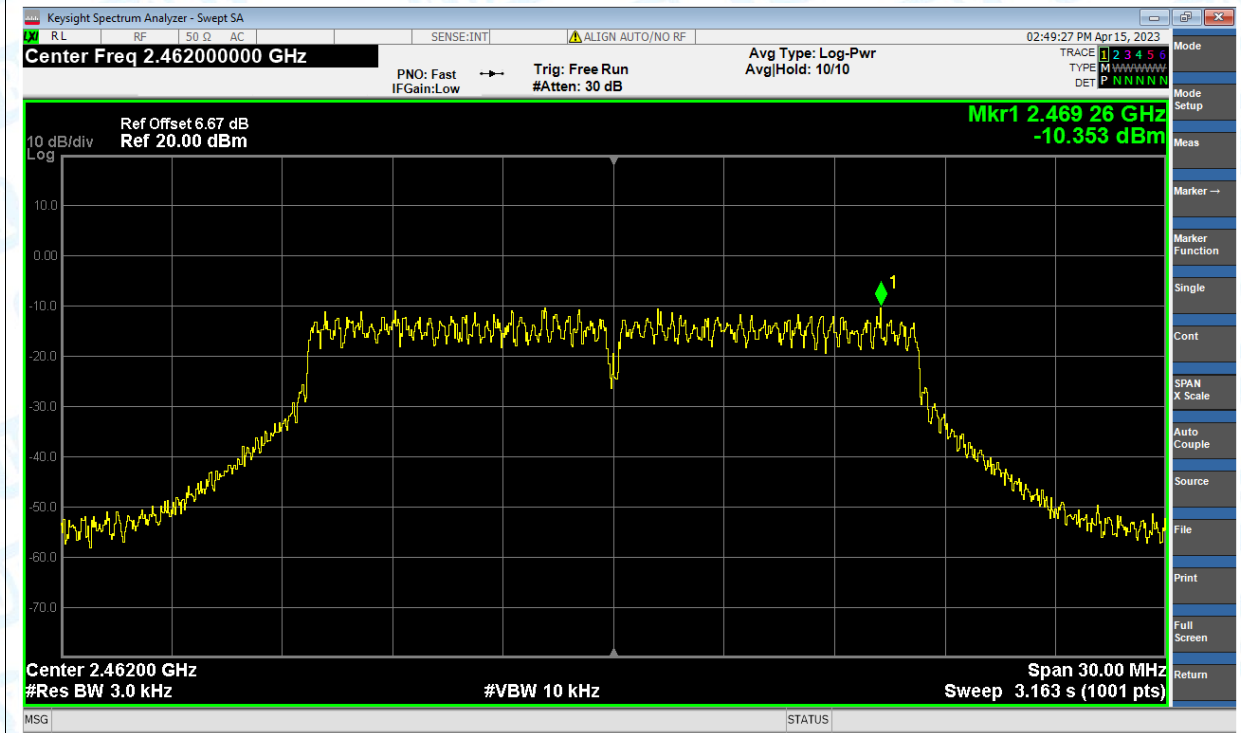




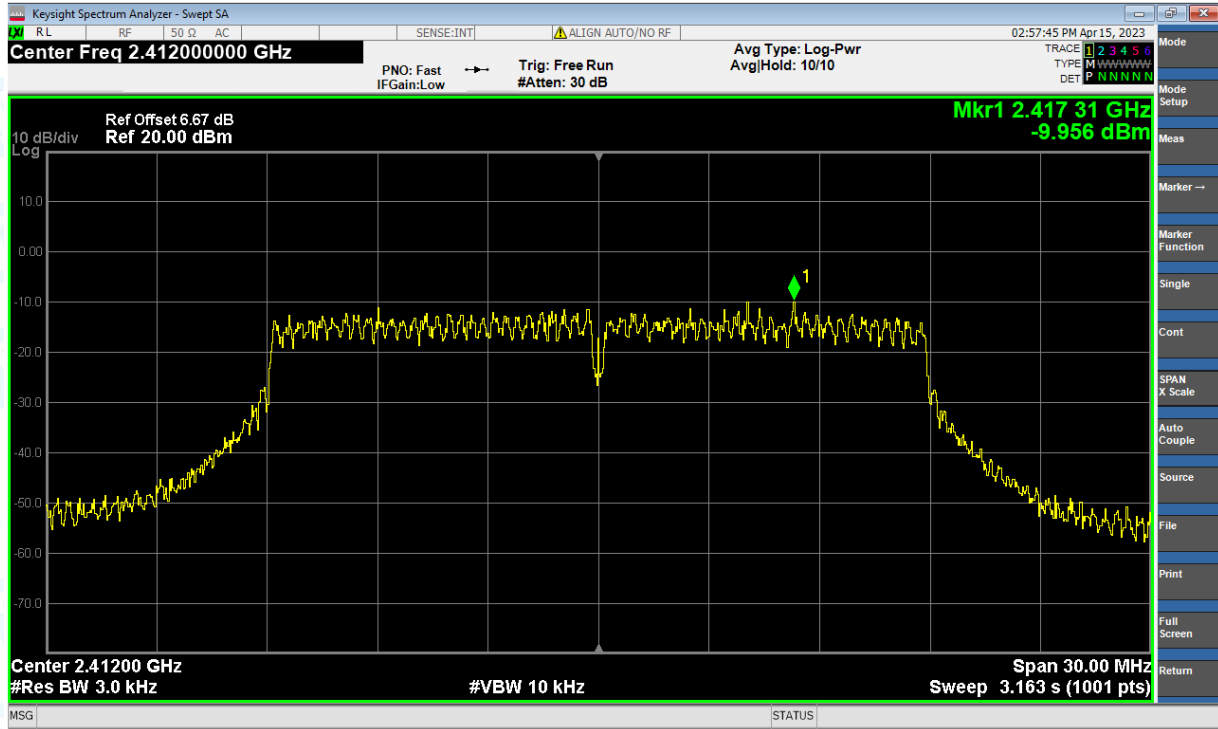
PSD NVNT g 2437MHz Ant1



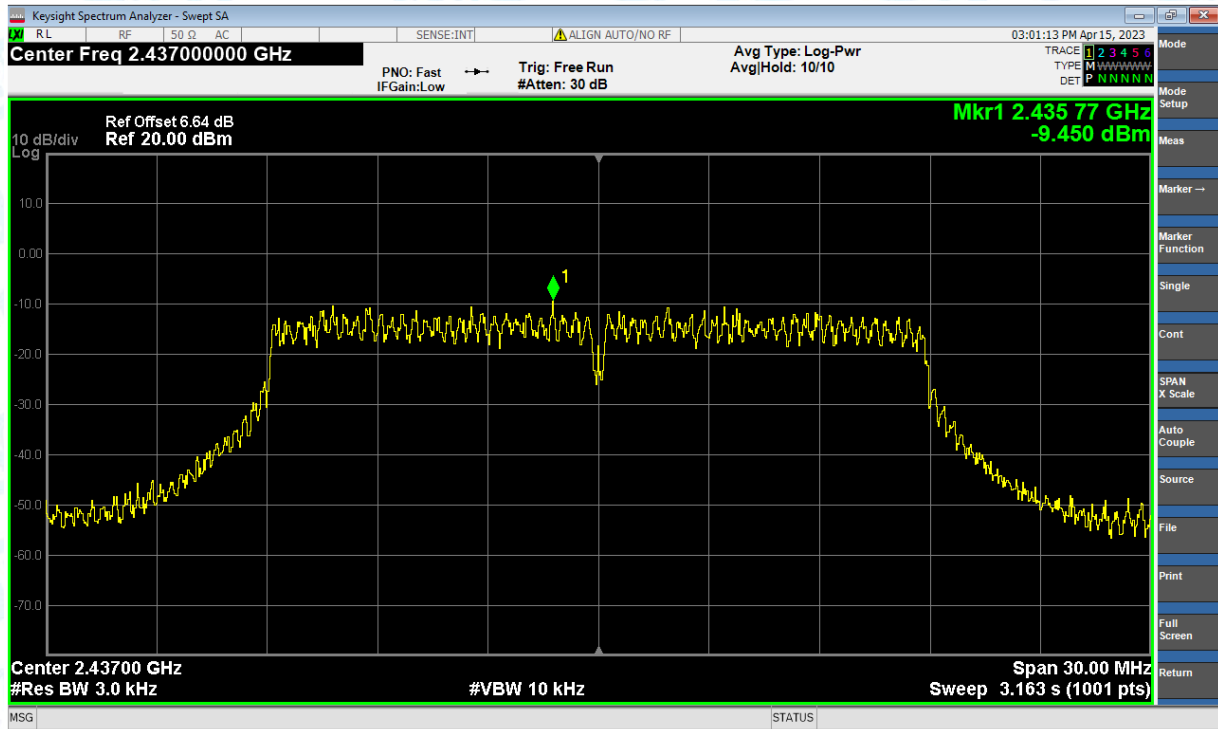
PSD NVNT g 2462MHz Ant1

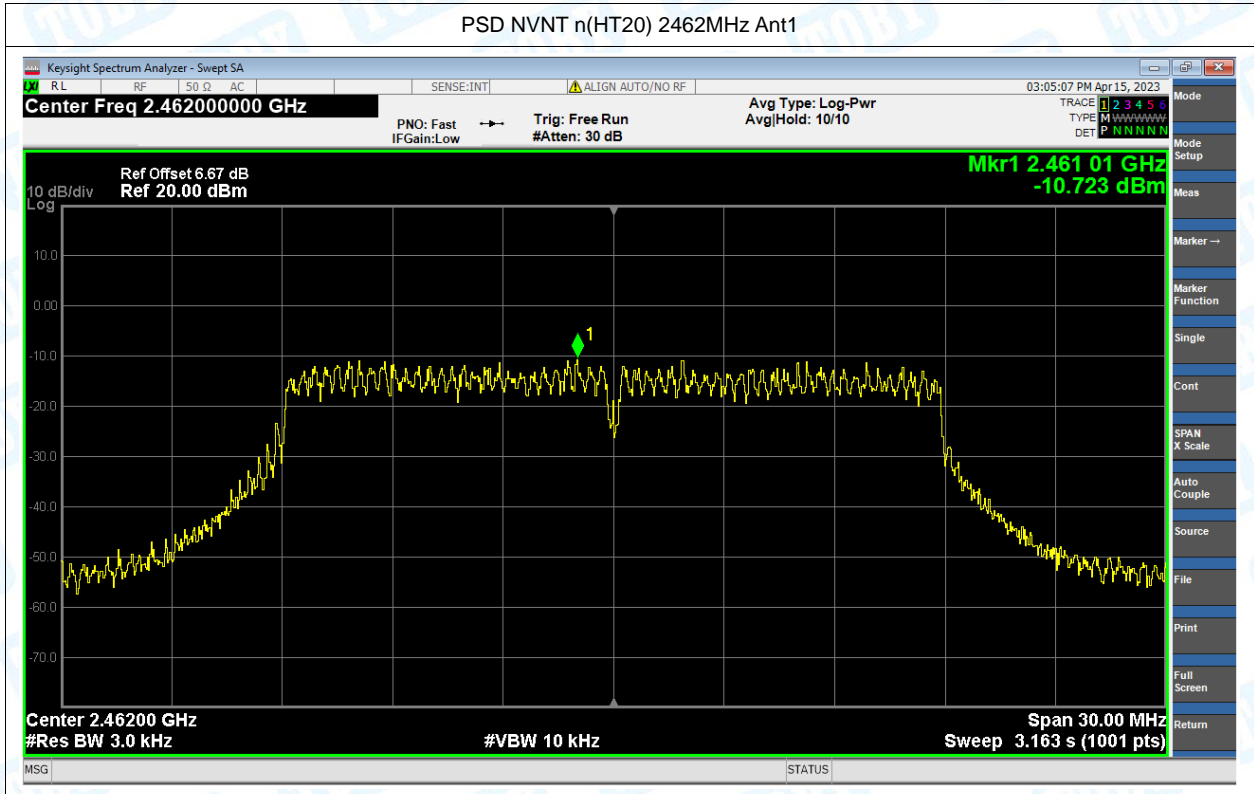


PSD NVNT n(HT20) 2412MHz Ant1



PSD NVNT n(HT20) 2437MHz Ant1





Band Edge

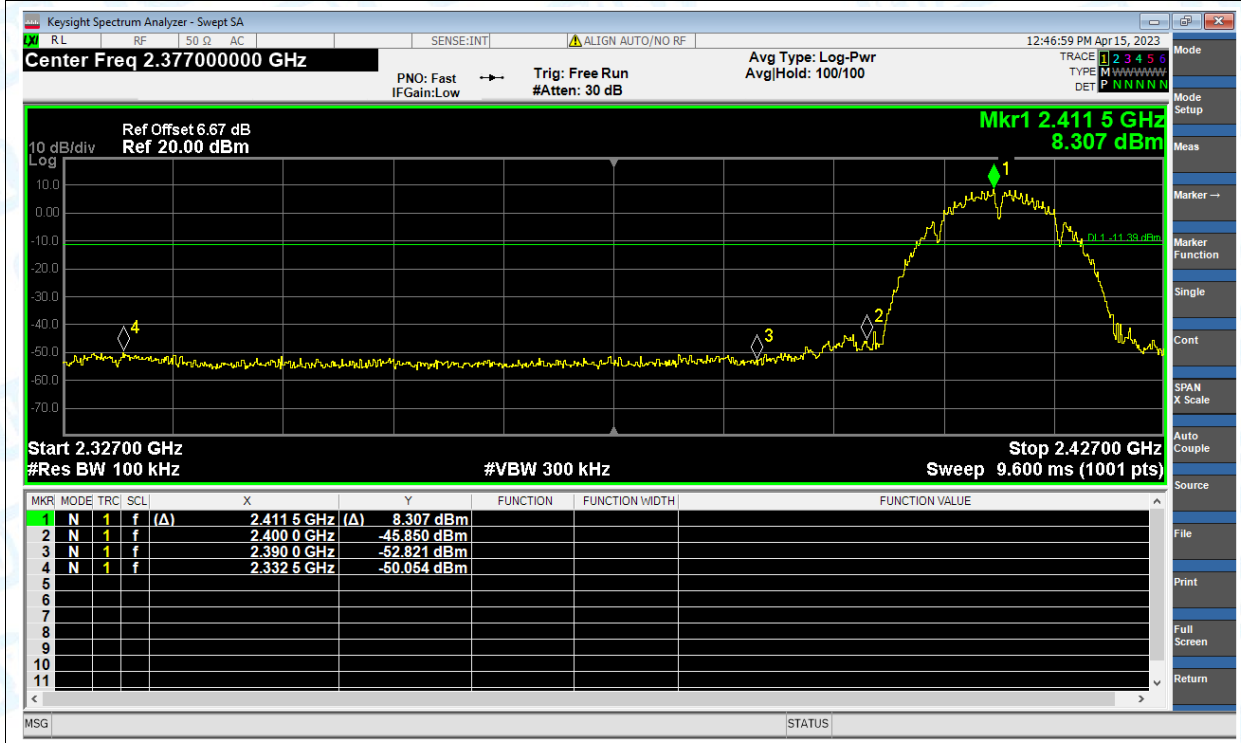
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-58.66	-20	Pass
NVNT	b	2462	Ant1	-58.65	-20	Pass
NVNT	g	2412	Ant1	-41.26	-20	Pass
NVNT	g	2462	Ant1	-42.91	-20	Pass
NVNT	n(HT20)	2412	Ant1	-42.94	-20	Pass
NVNT	n(HT20)	2462	Ant1	-42.94	-20	Pass

Test Graphs

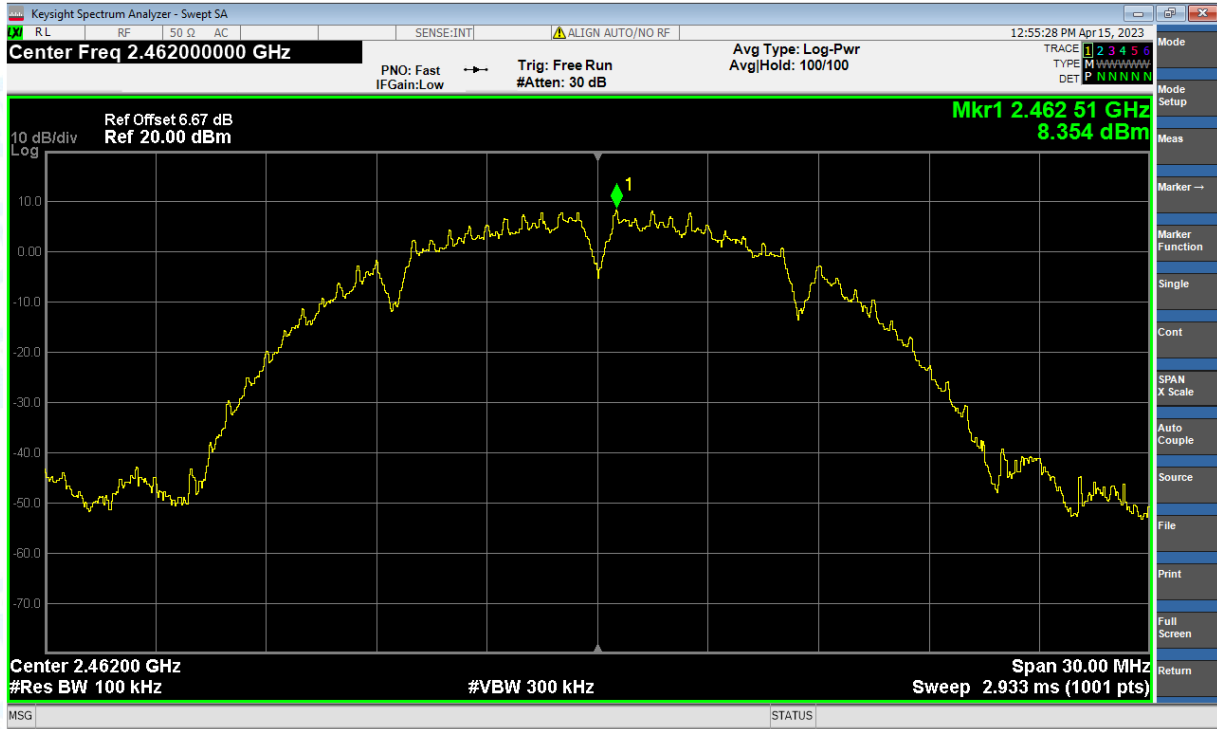
Band Edge NVNT b 2412MHz Ant1 Ref



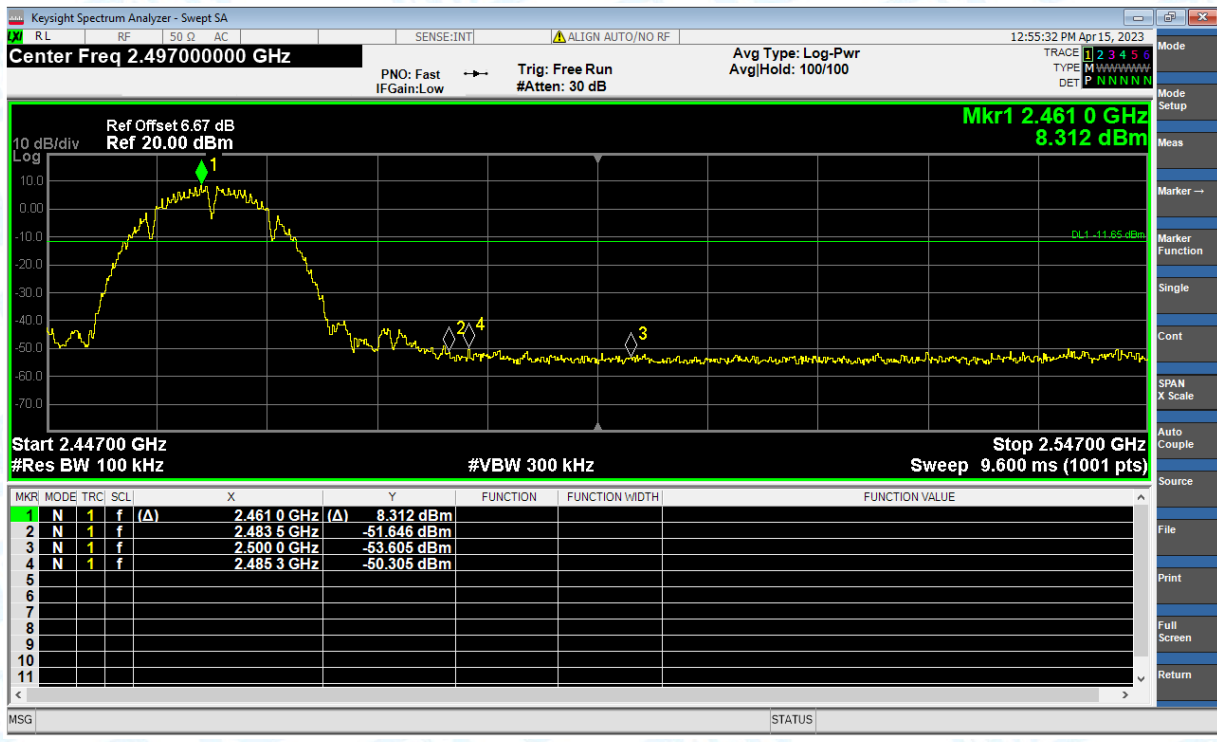
Band Edge NVNT b 2412MHz Ant1 Emission



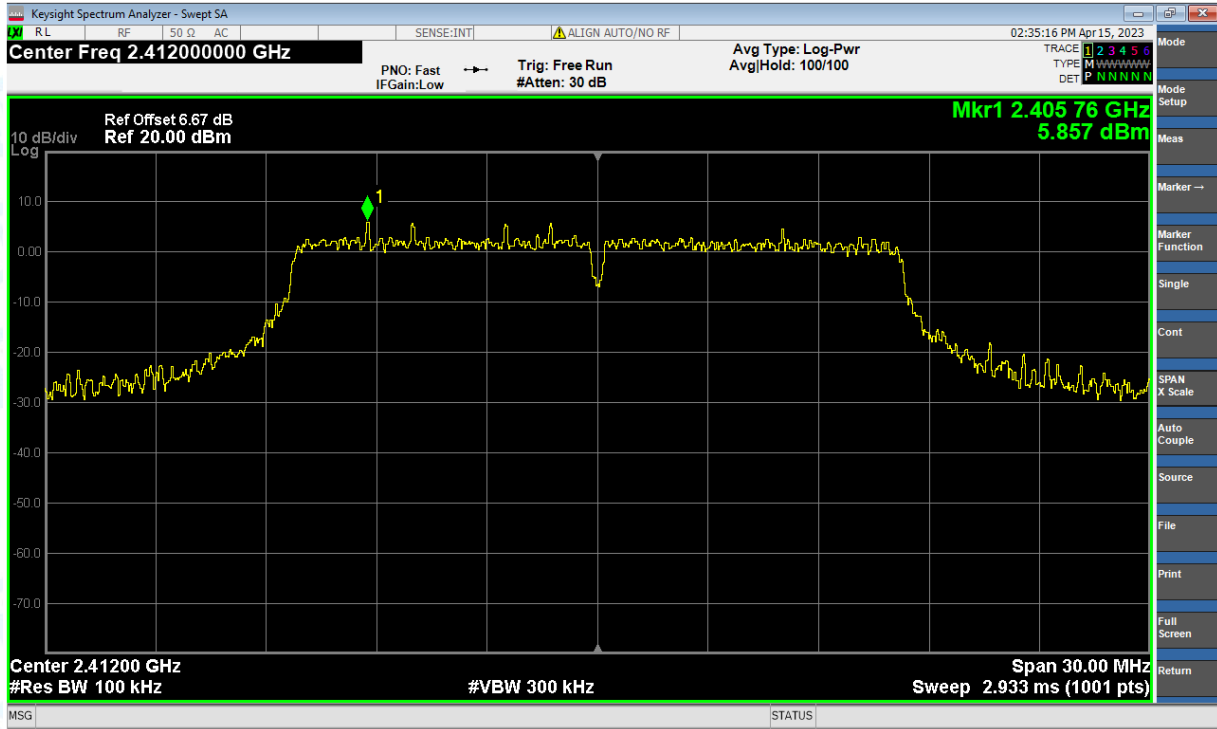
Band Edge NVNT b 2462MHz Ant1 Ref



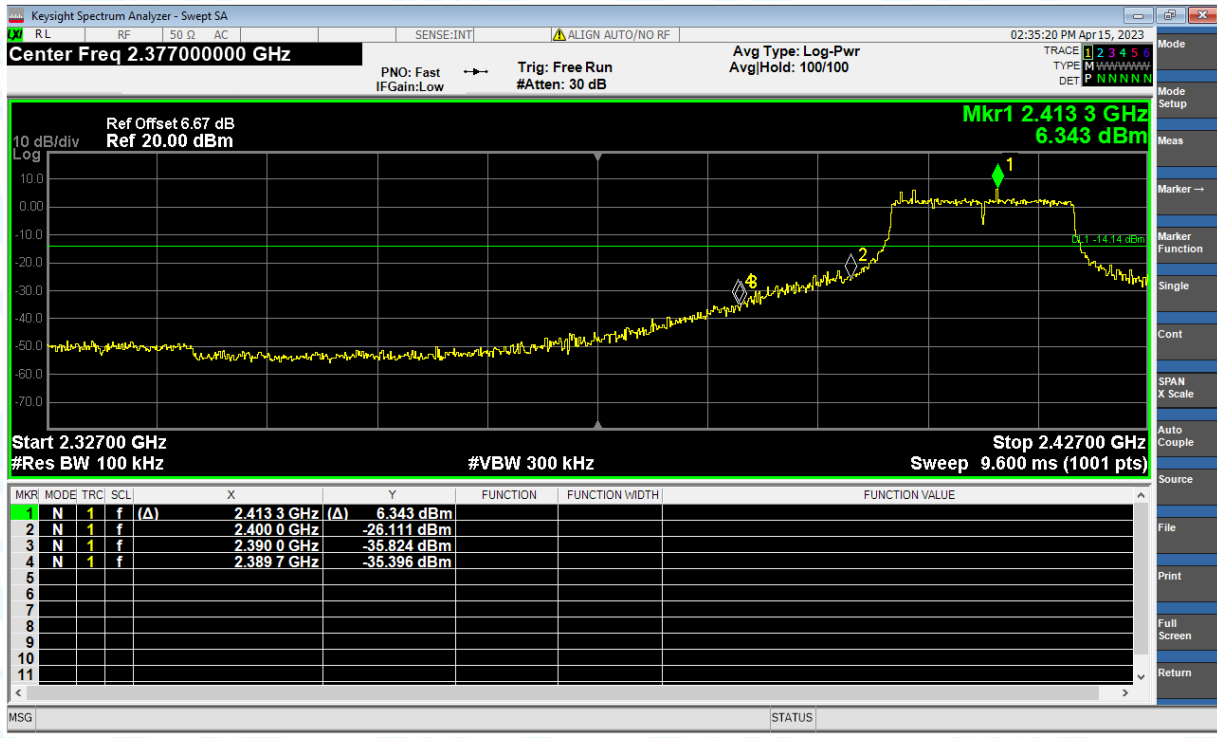
Band Edge NVNT b 2462MHz Ant1 Emission

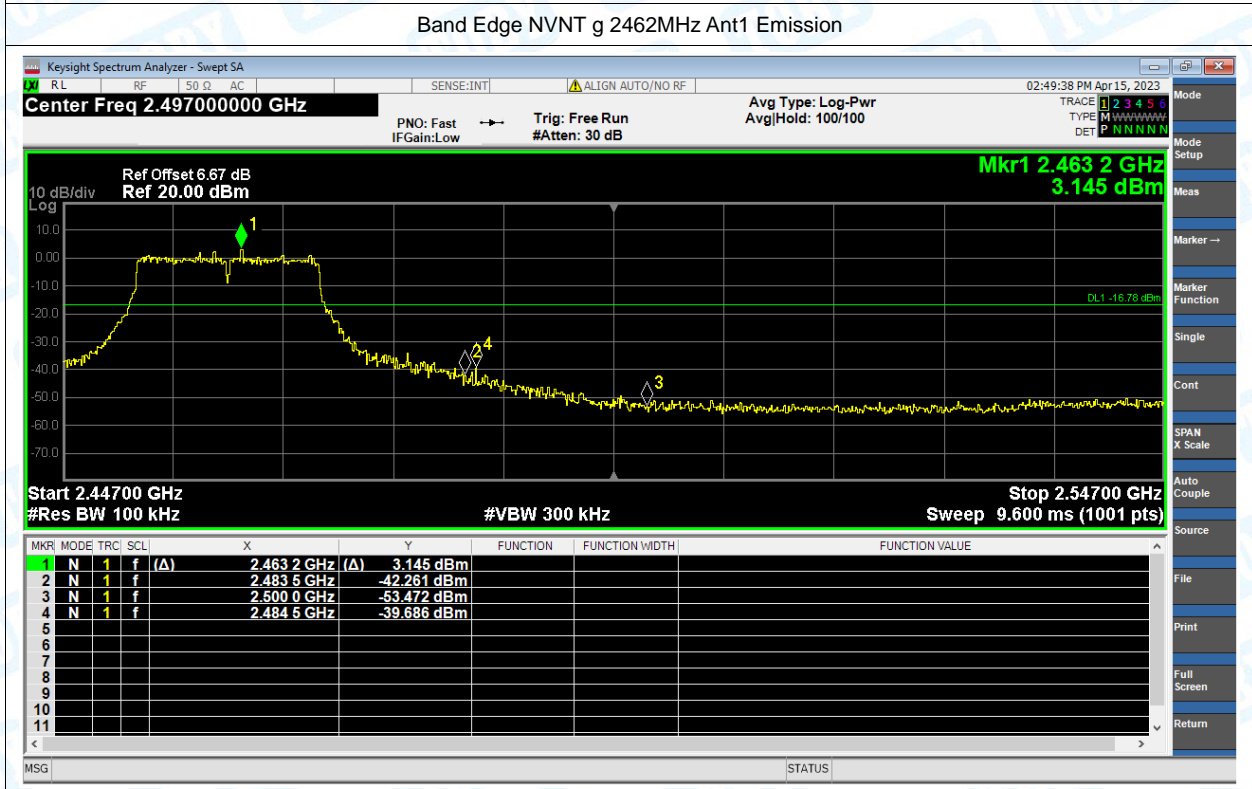
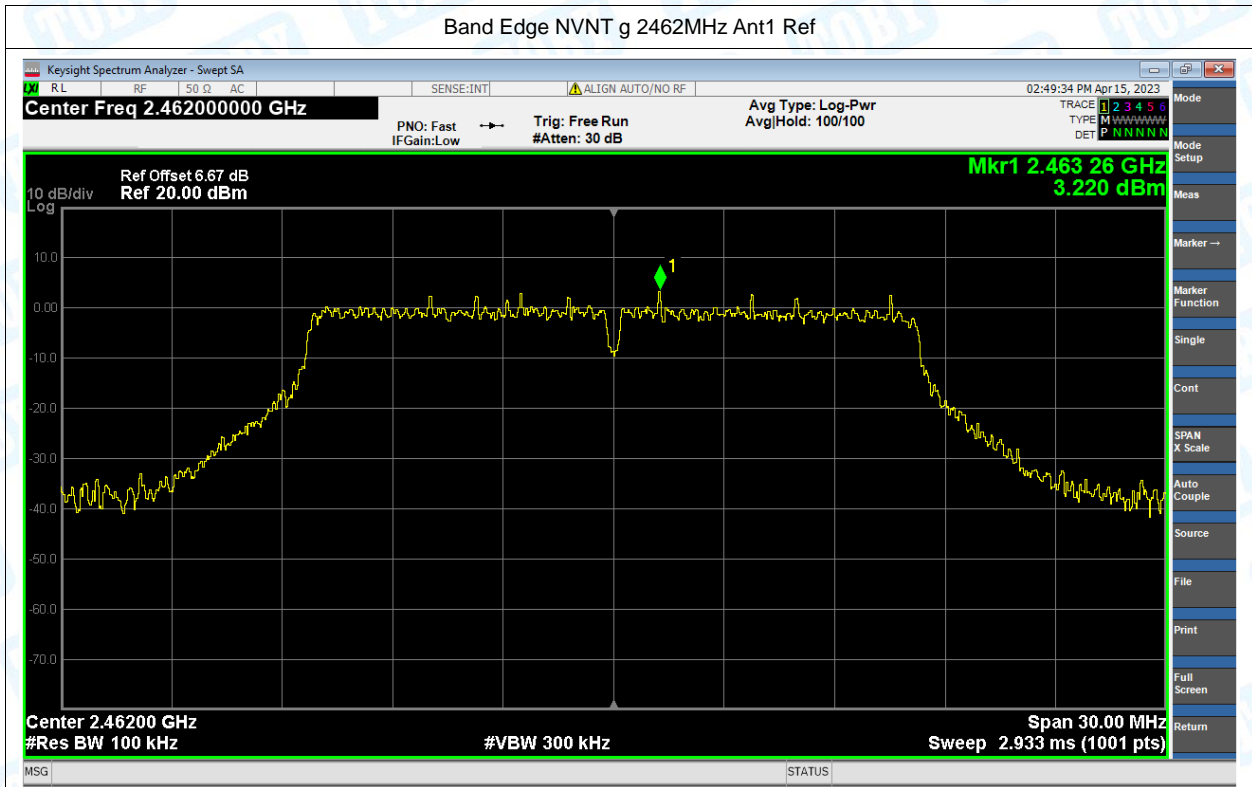


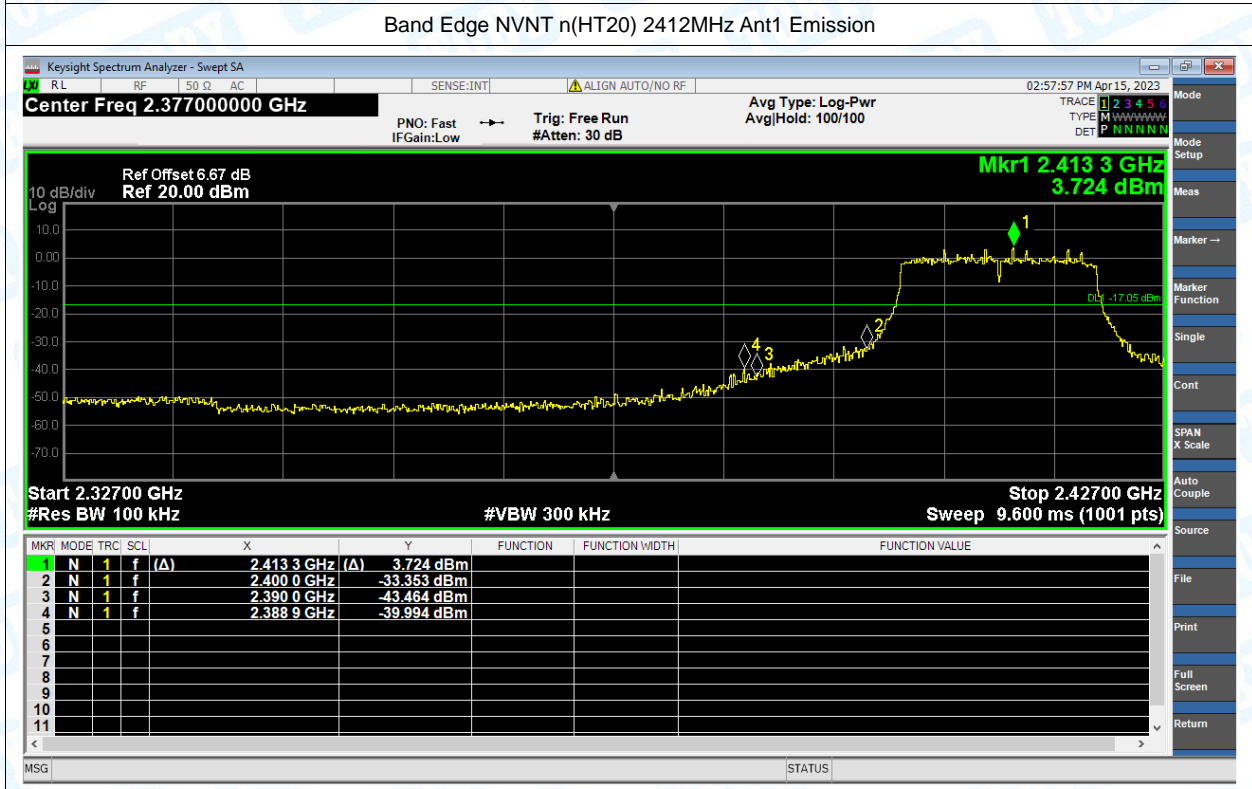
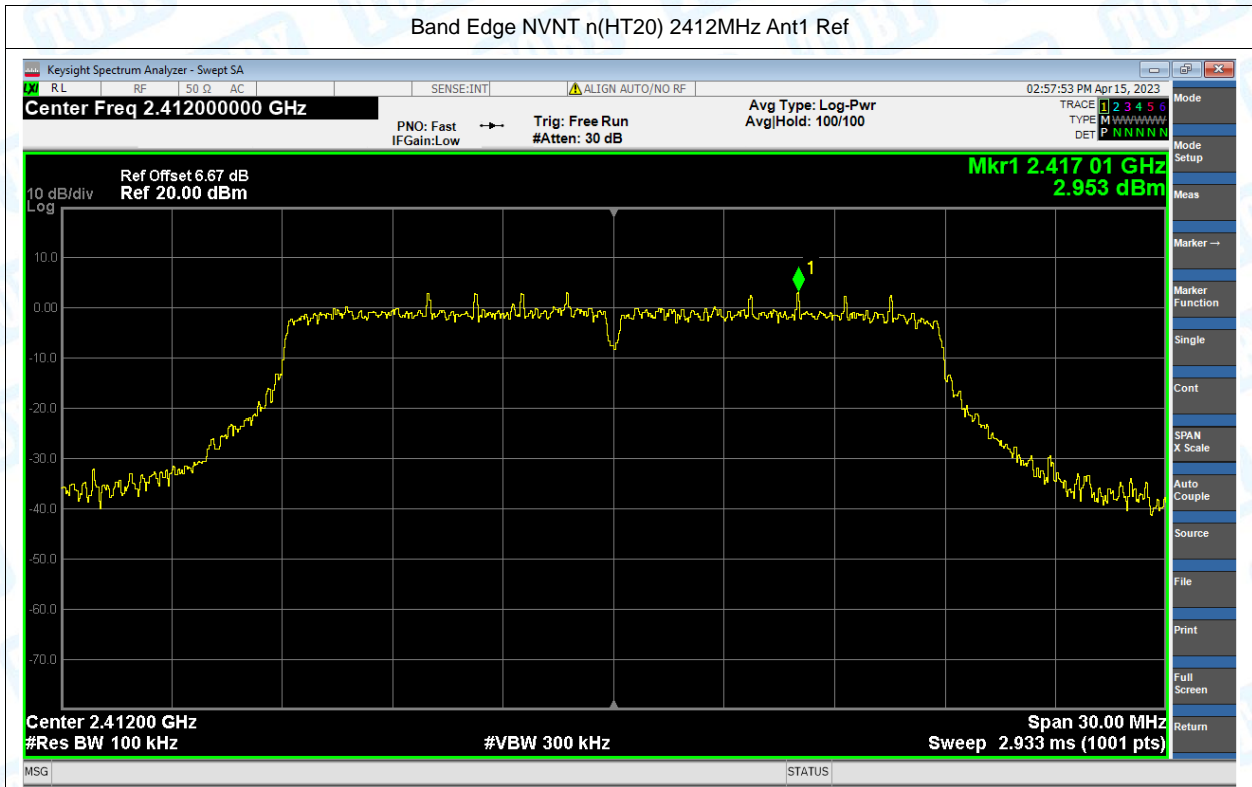
Band Edge NVNT g 2412MHz Ant1 Ref

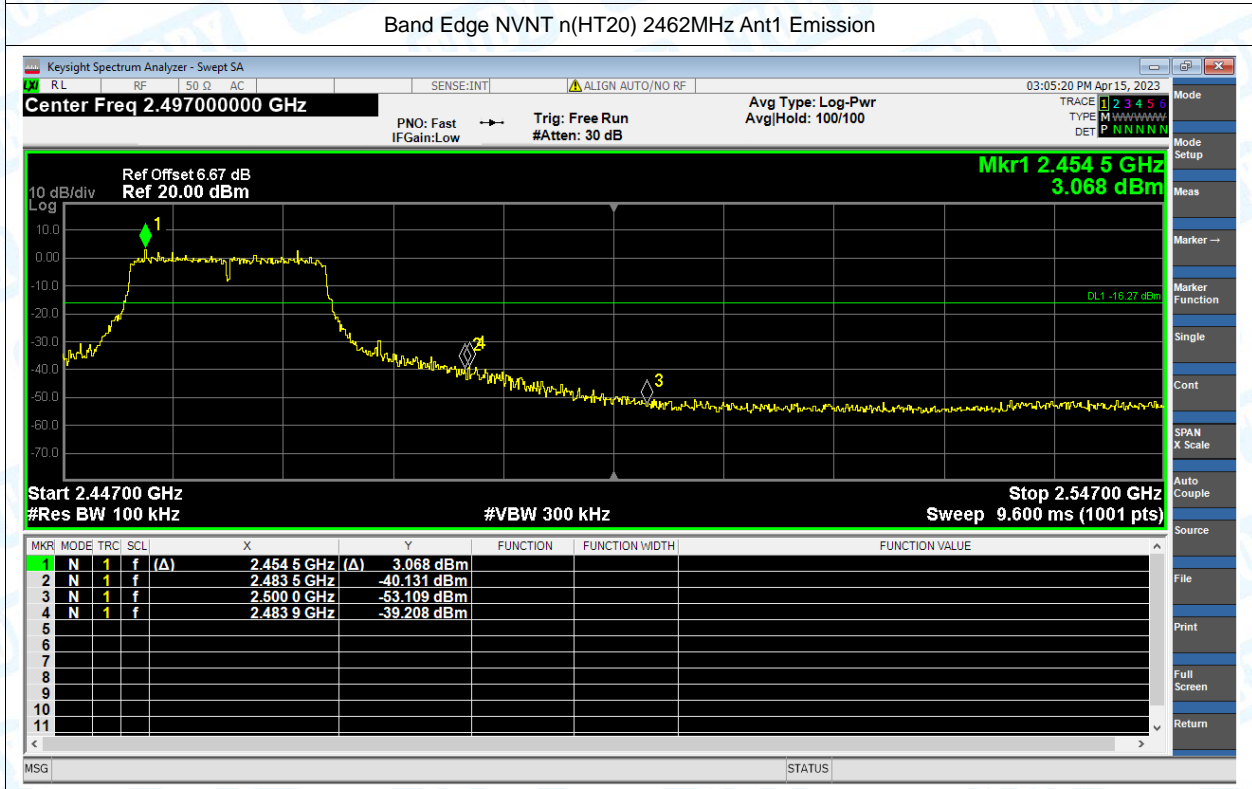
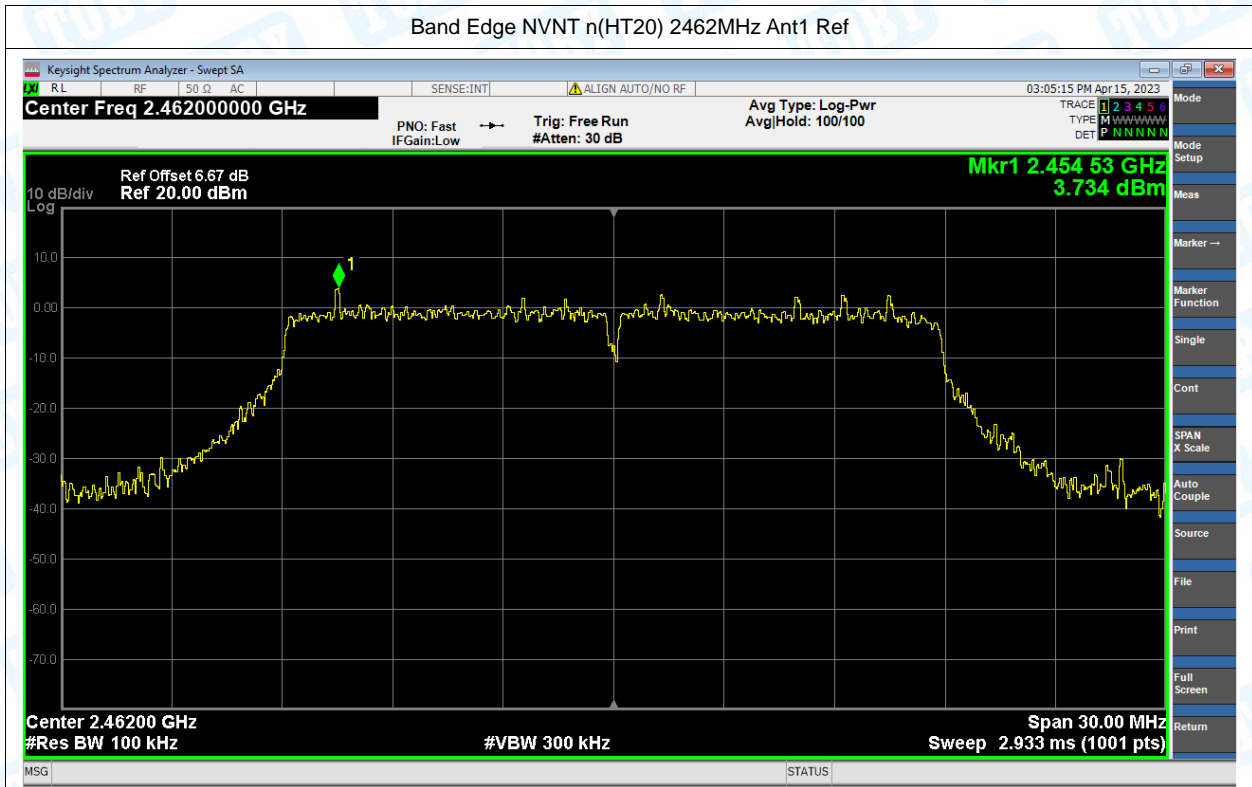


Band Edge NVNT g 2412MHz Ant1 Emission







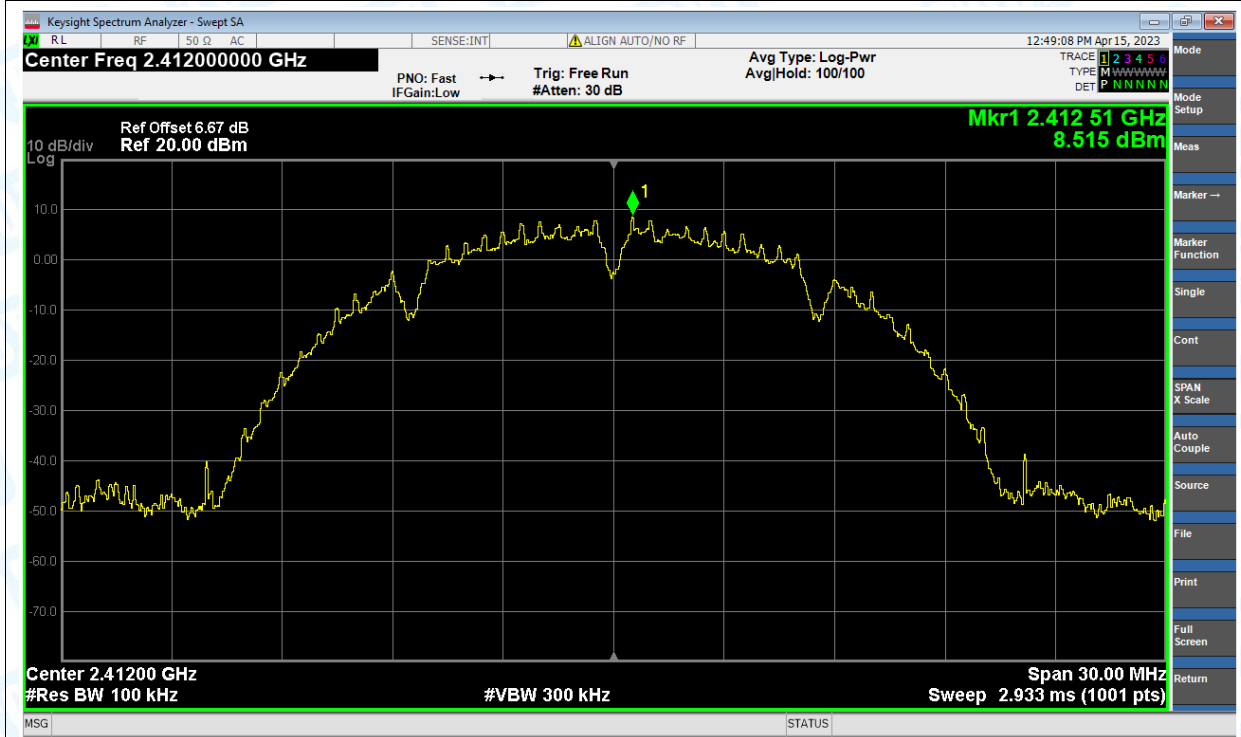


Conducted RF Spurious Emission

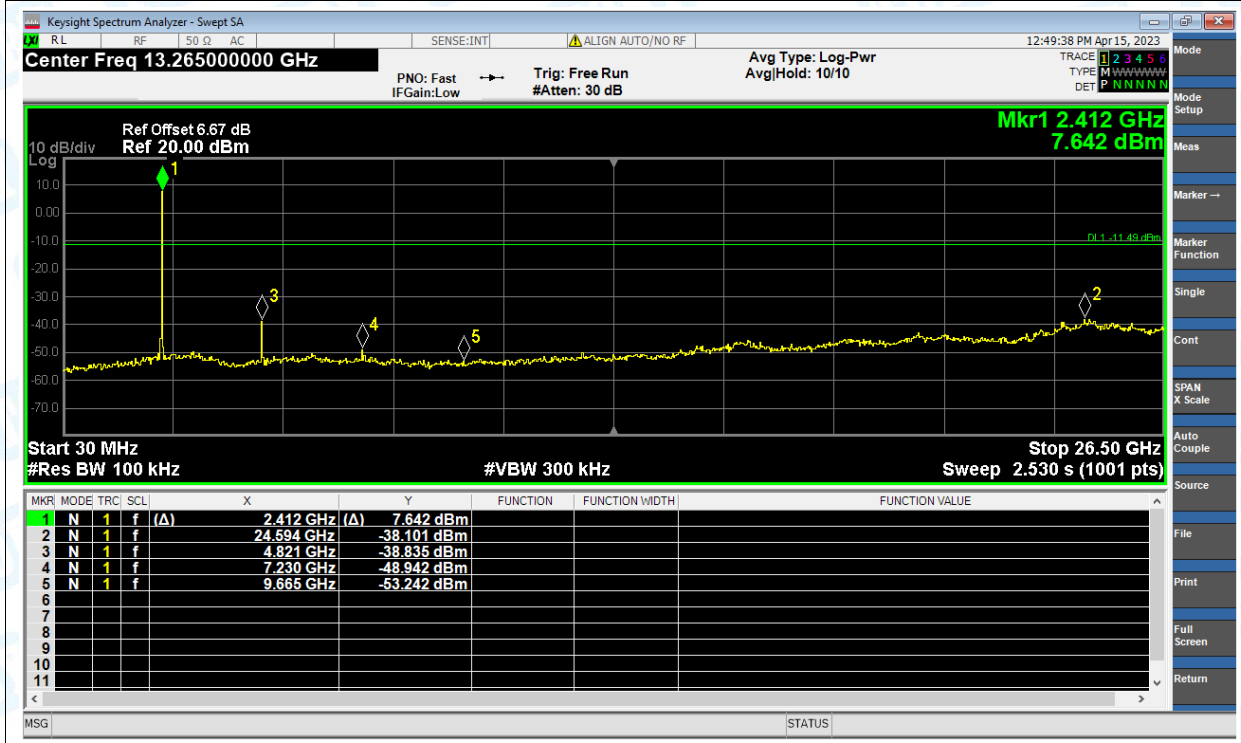
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.62	-20	Pass
NVNT	b	2437	Ant1	-46.61	-20	Pass
NVNT	b	2462	Ant1	-46.4	-20	Pass
NVNT	g	2412	Ant1	-44.23	-20	Pass
NVNT	g	2437	Ant1	-43.03	-20	Pass
NVNT	g	2462	Ant1	-41.58	-20	Pass
NVNT	n(HT20)	2412	Ant1	-40.16	-20	Pass
NVNT	n(HT20)	2437	Ant1	-41.88	-20	Pass
NVNT	n(HT20)	2462	Ant1	-40.59	-20	Pass

Test Graphs

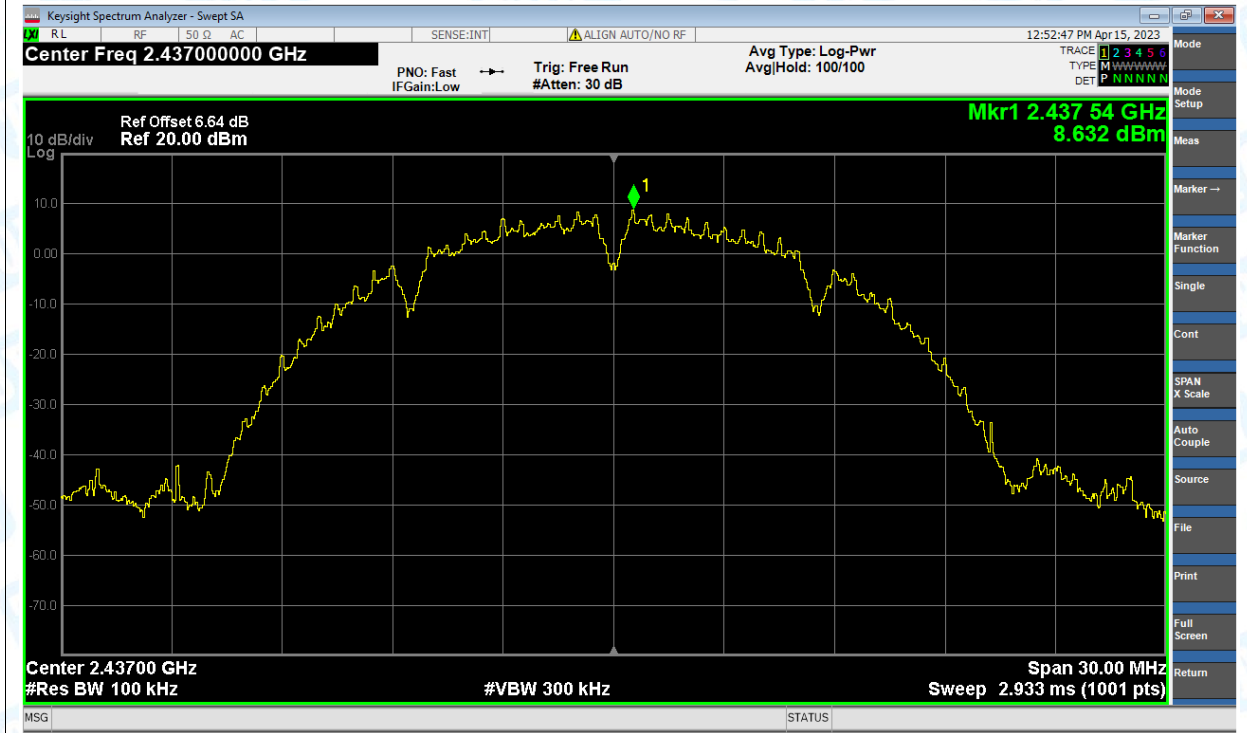
Tx. Spurious NVNT b 2412MHz Ant1 Ref



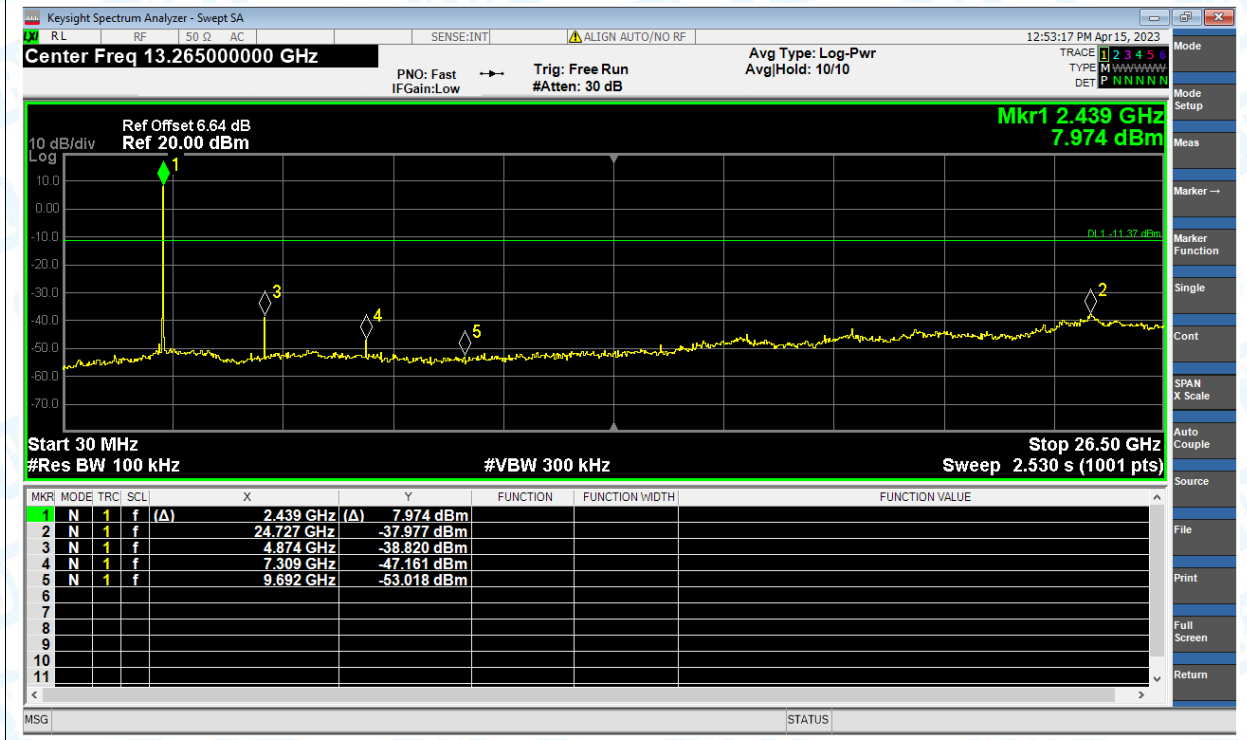
Tx. Spurious NVNT b 2412MHz Ant1 Emission



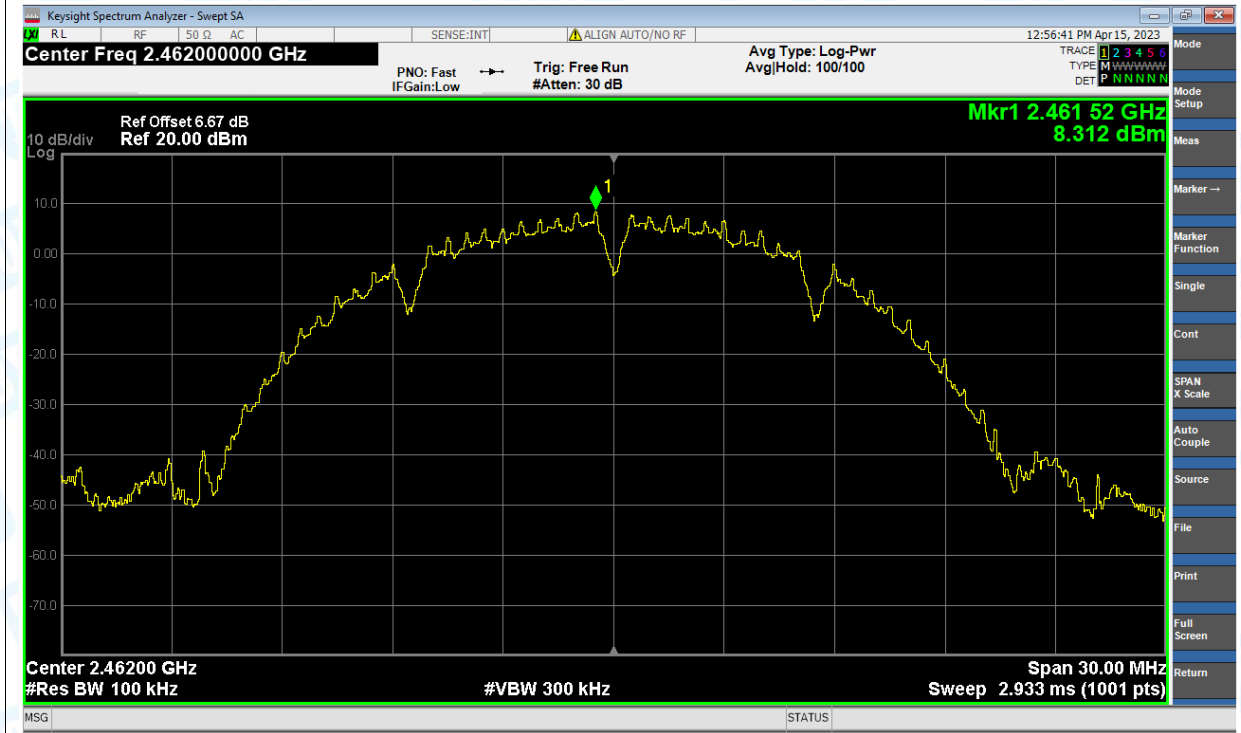
Tx. Spurious NVNT b 2437MHz Ant1 Ref



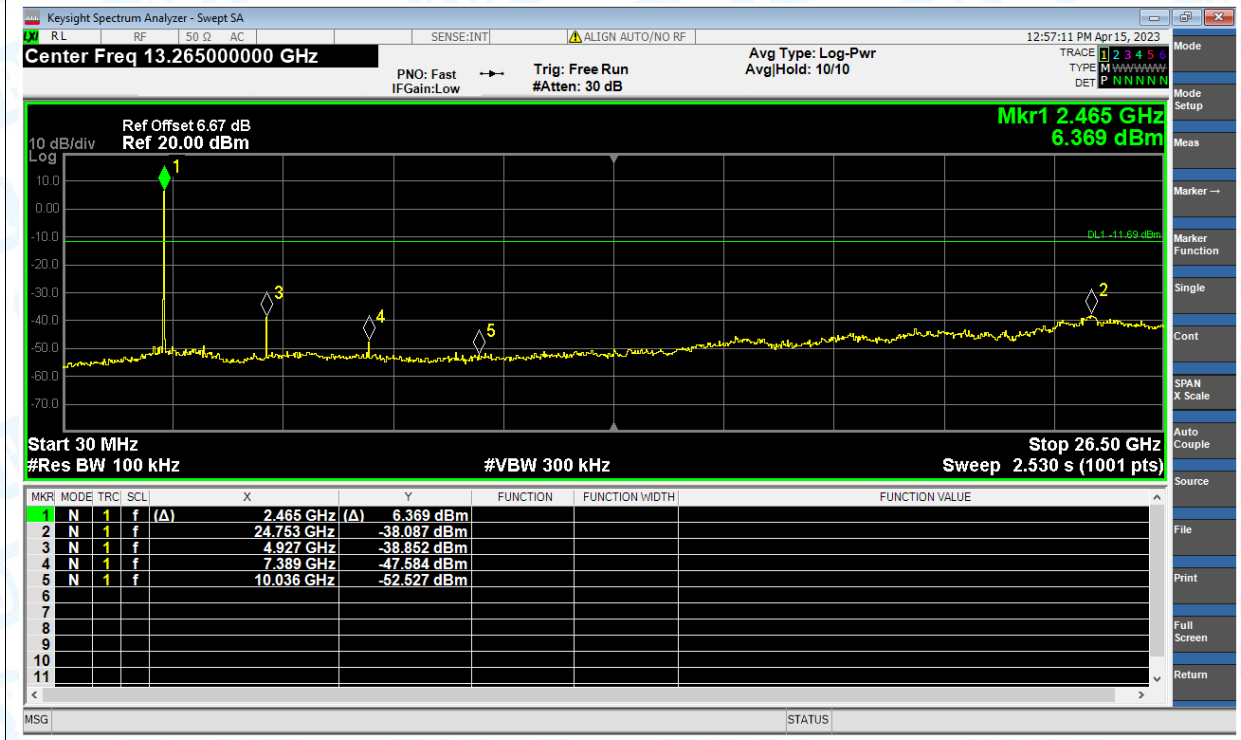
Tx. Spurious NVNT b 2437MHz Ant1 Emission



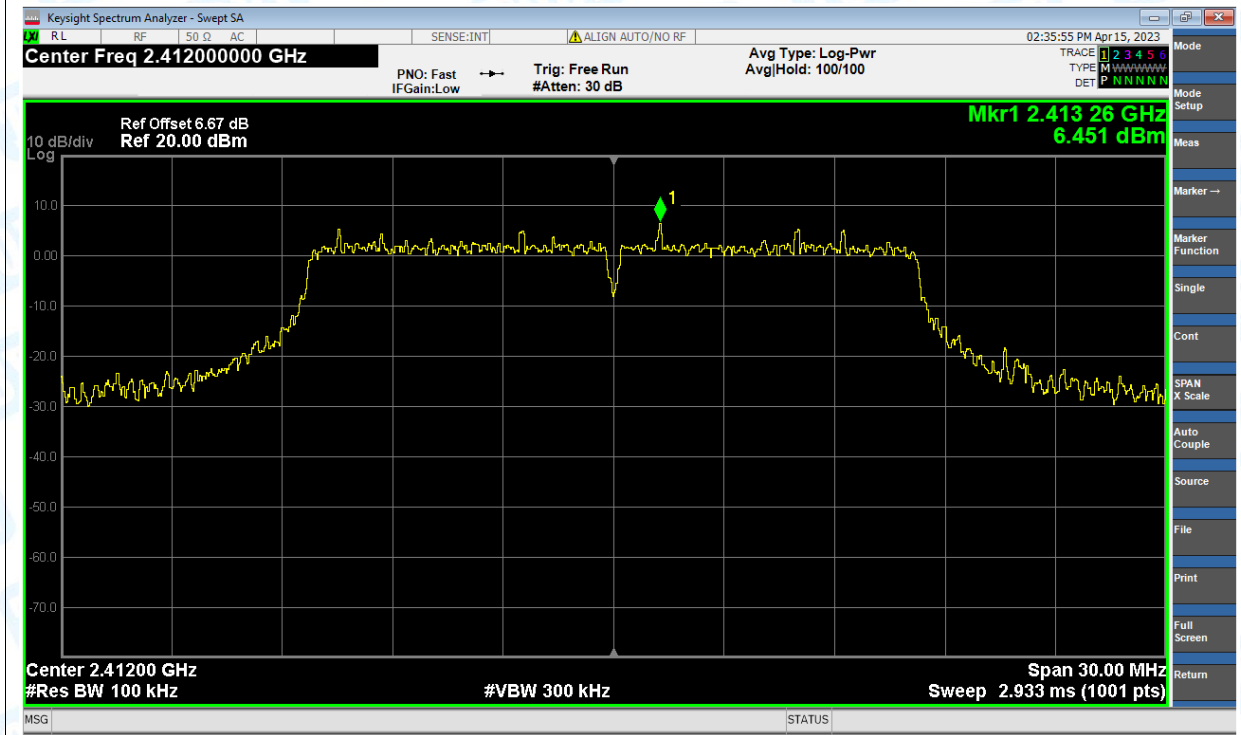
Tx. Spurious NVNT b 2462MHz Ant1 Ref



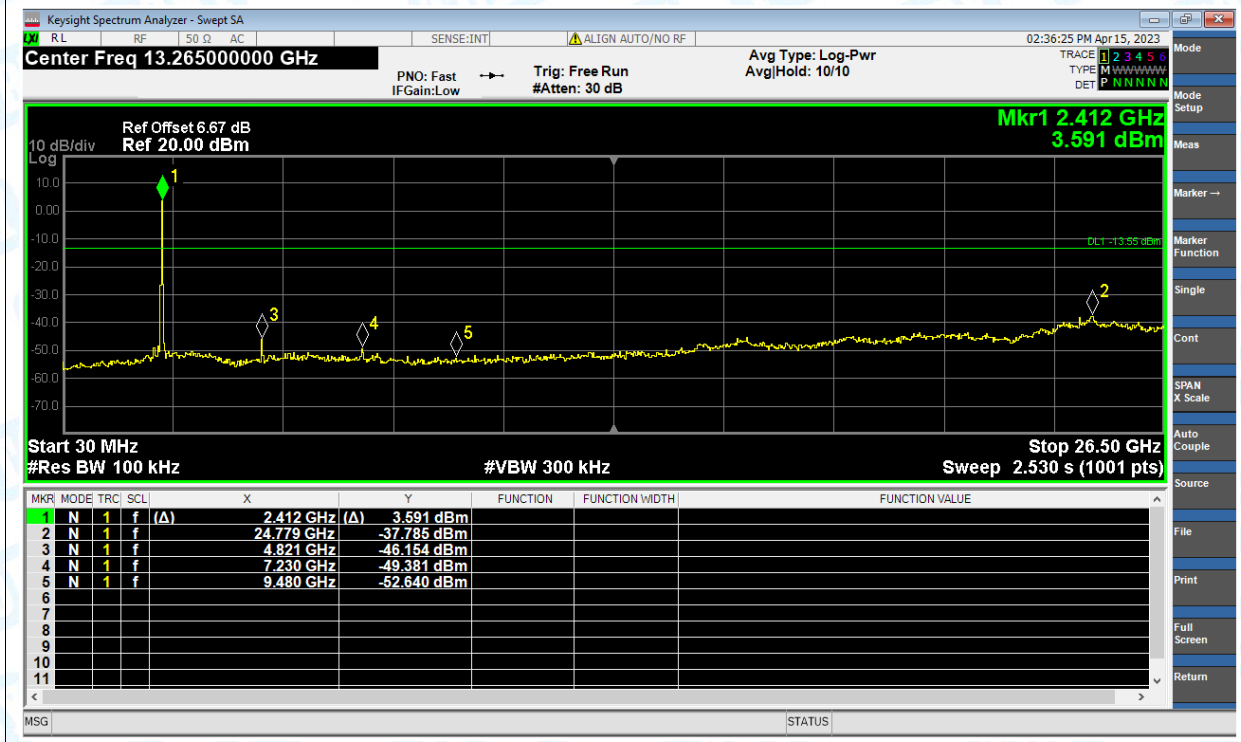
Tx. Spurious NVNT b 2462MHz Ant1 Emission



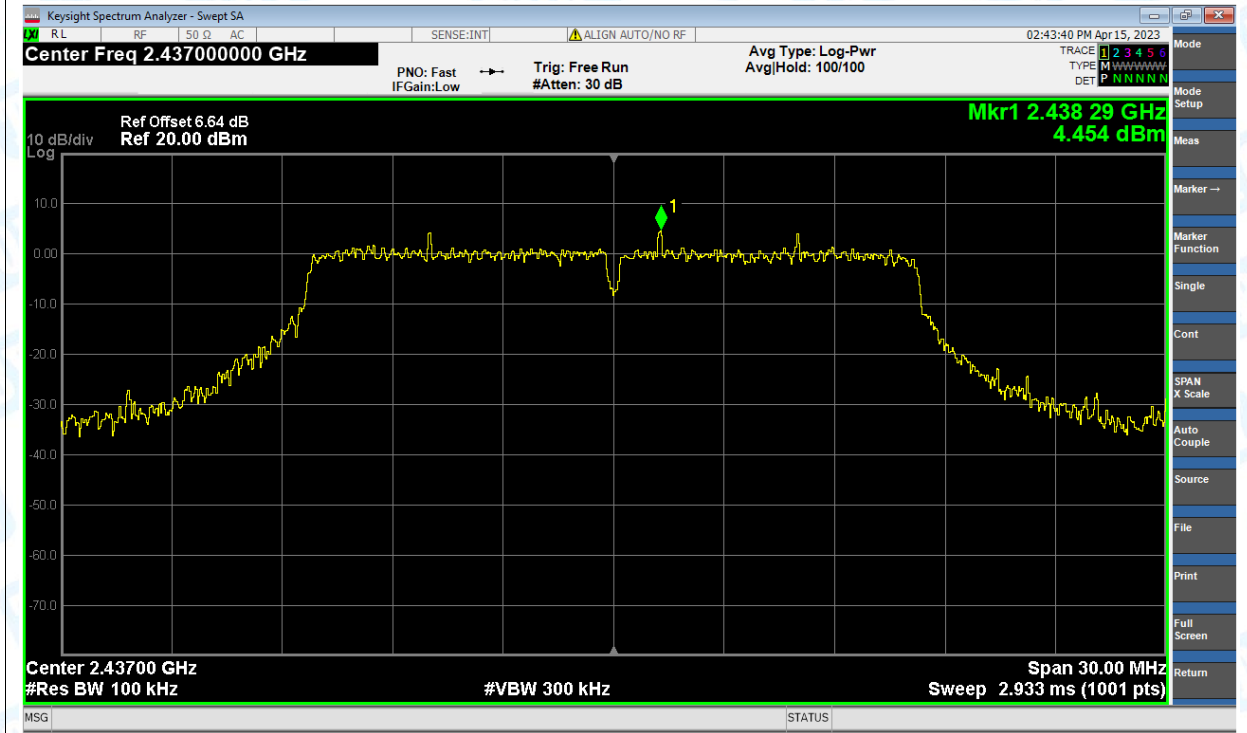
Tx. Spurious NVNT g 2412MHz Ant1 Ref



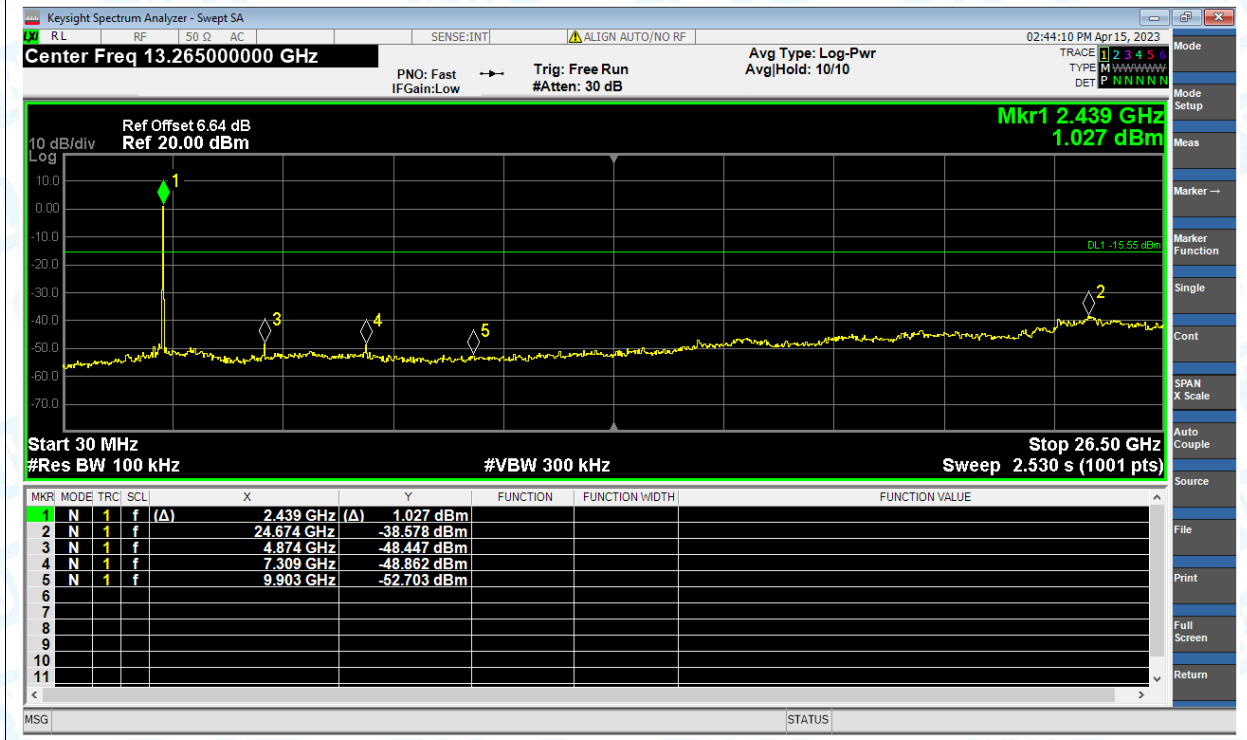
Tx. Spurious NVNT g 2412MHz Ant1 Emission



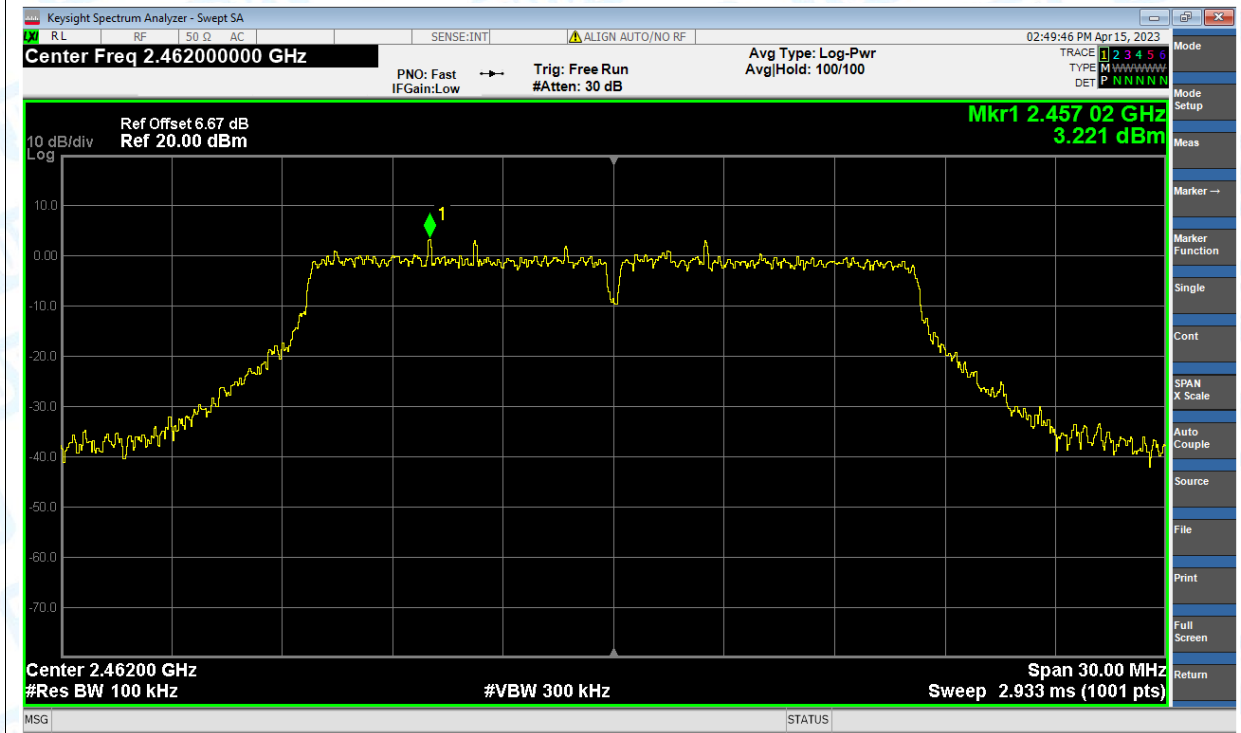
Tx. Spurious NVNT g 2437MHz Ant1 Ref



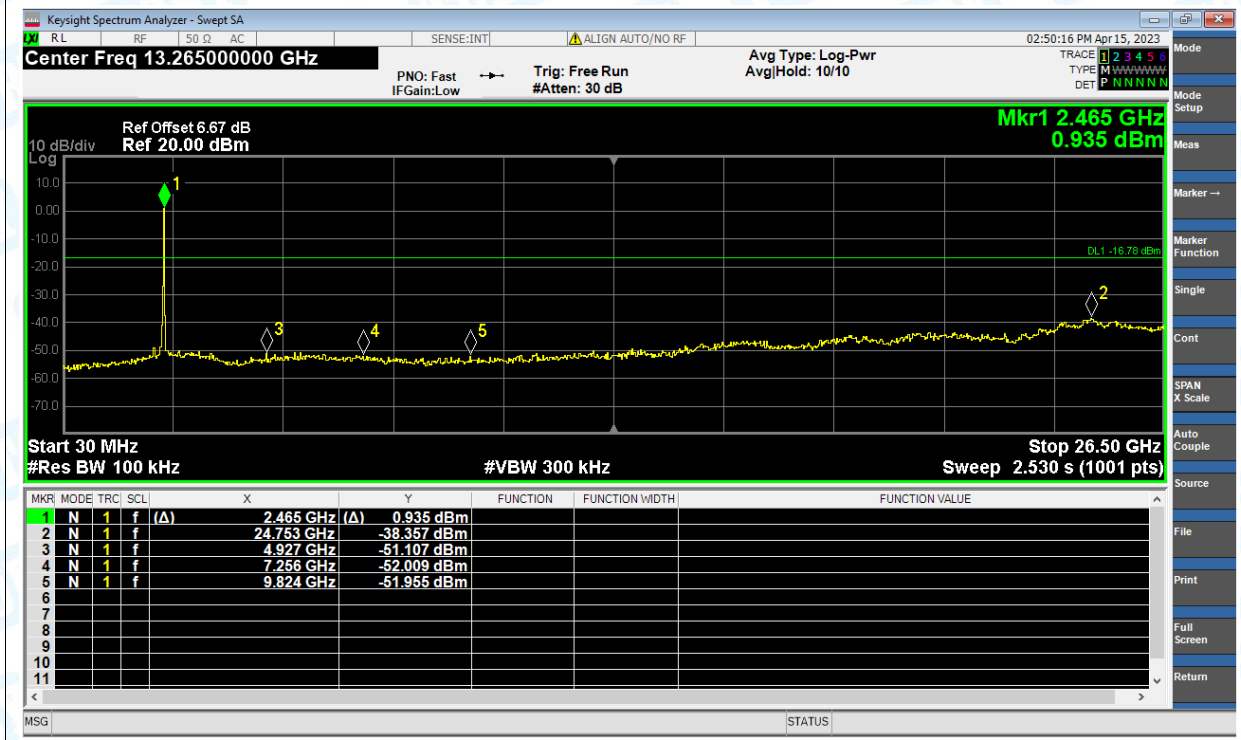
Tx. Spurious NVNT g 2437MHz Ant1 Emission



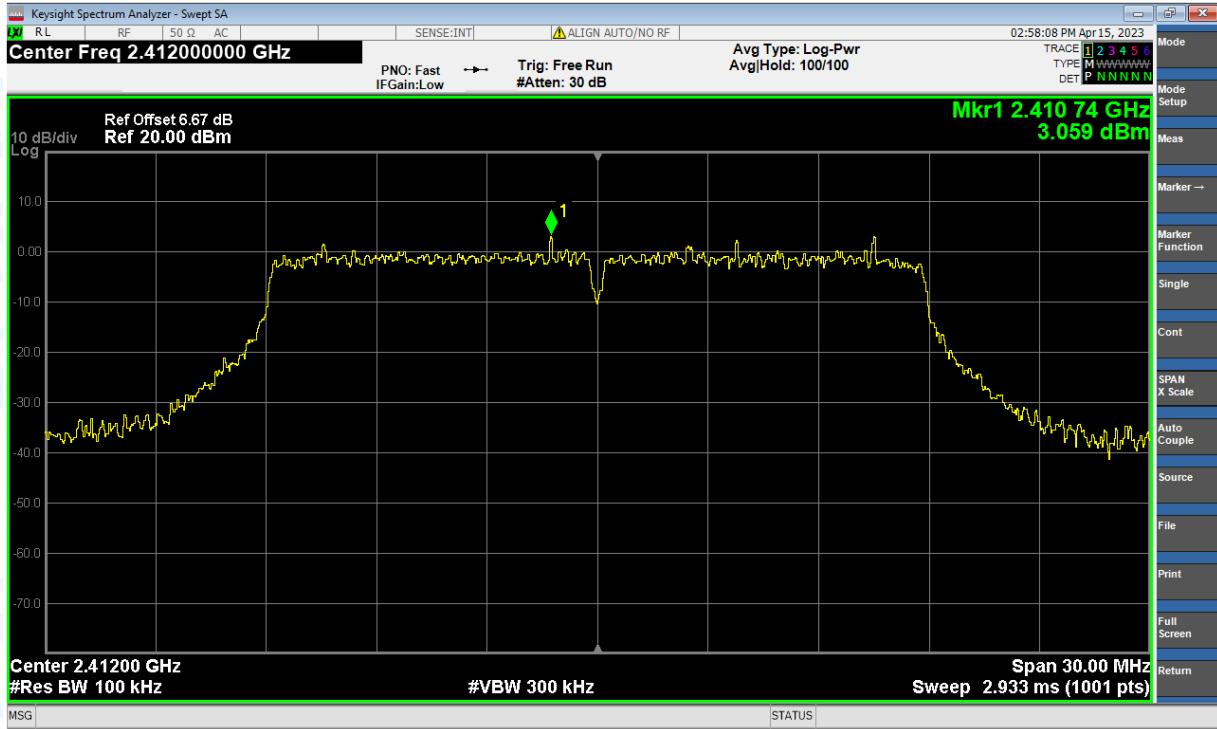
Tx. Spurious NVNT g 2462MHz Ant1 Ref



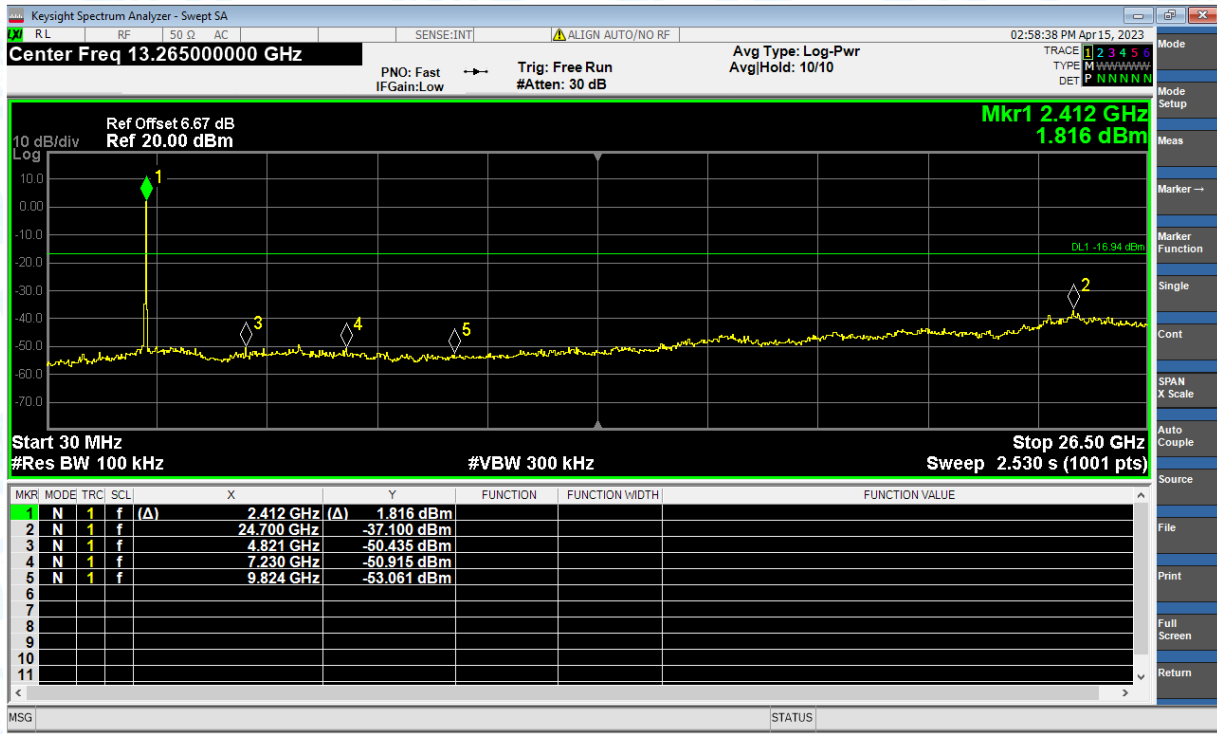
Tx. Spurious NVNT g 2462MHz Ant1 Emission



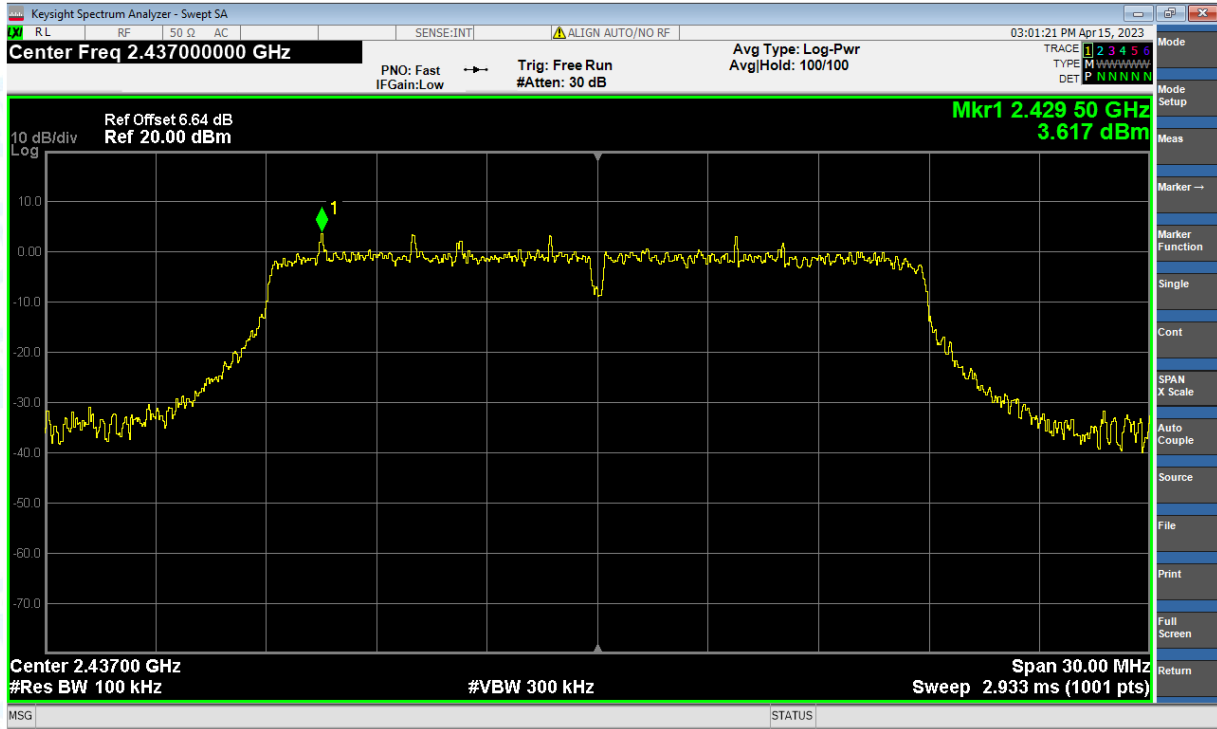
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



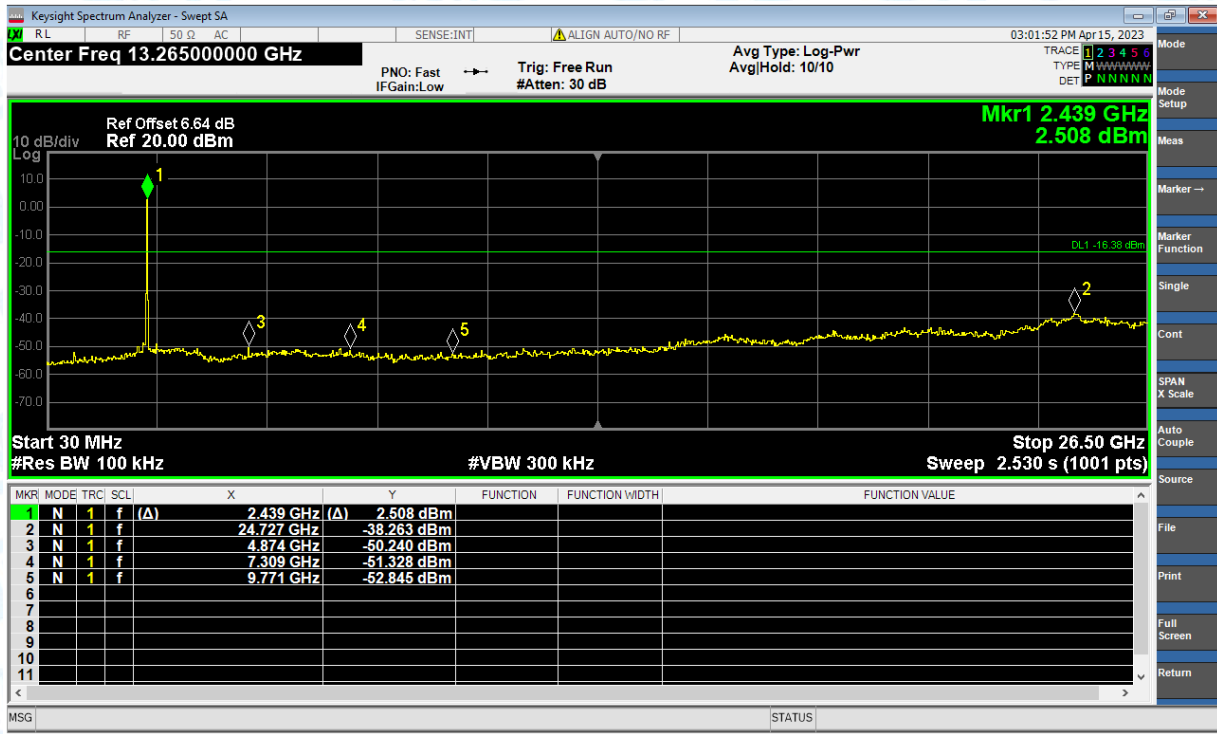
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



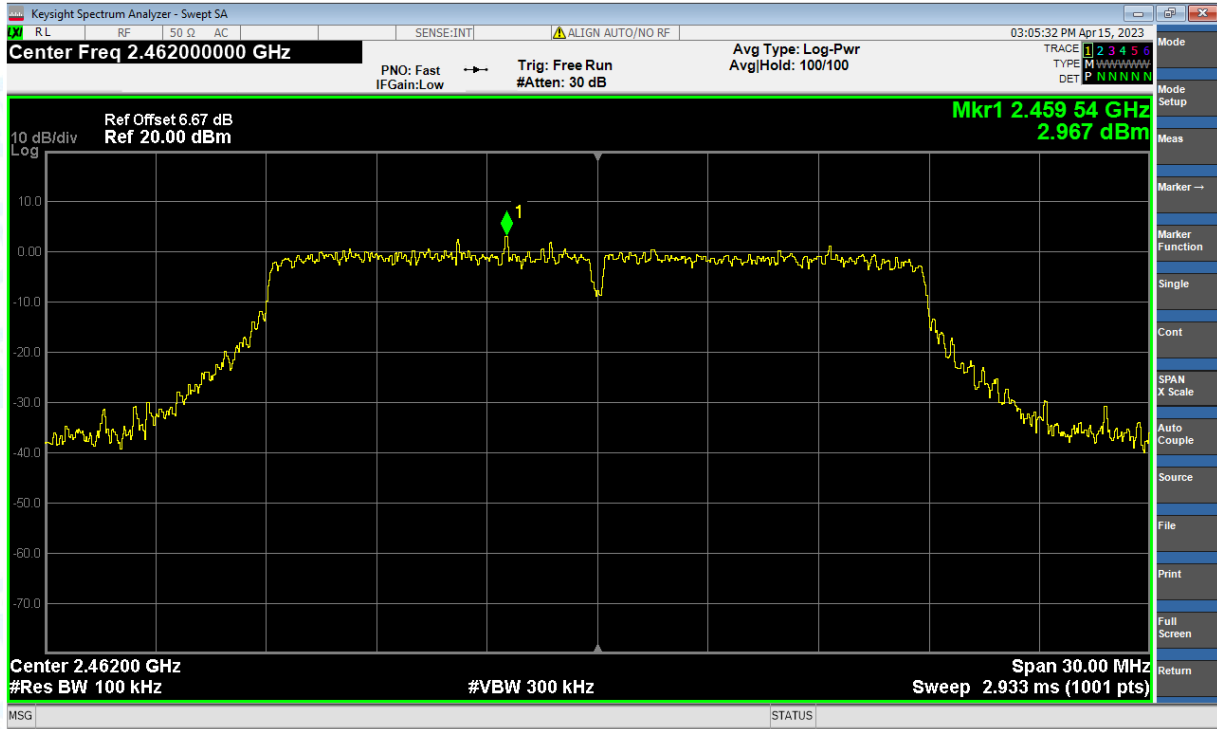
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



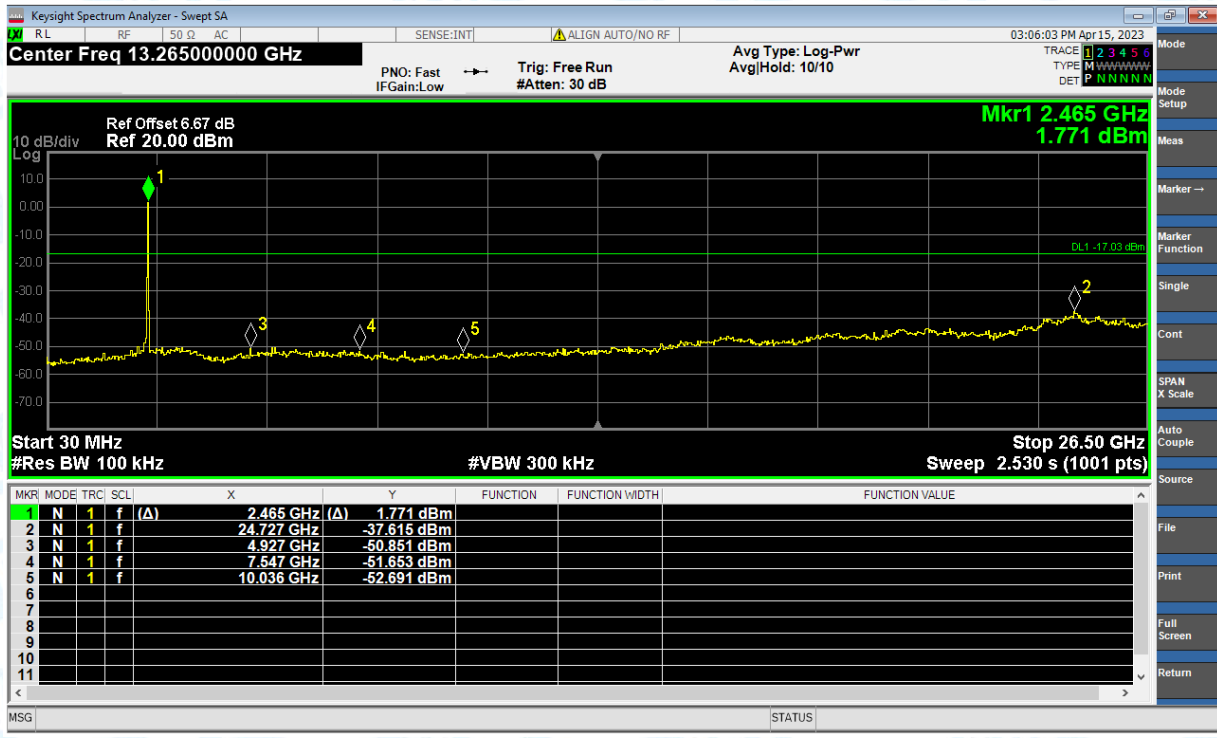
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



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



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

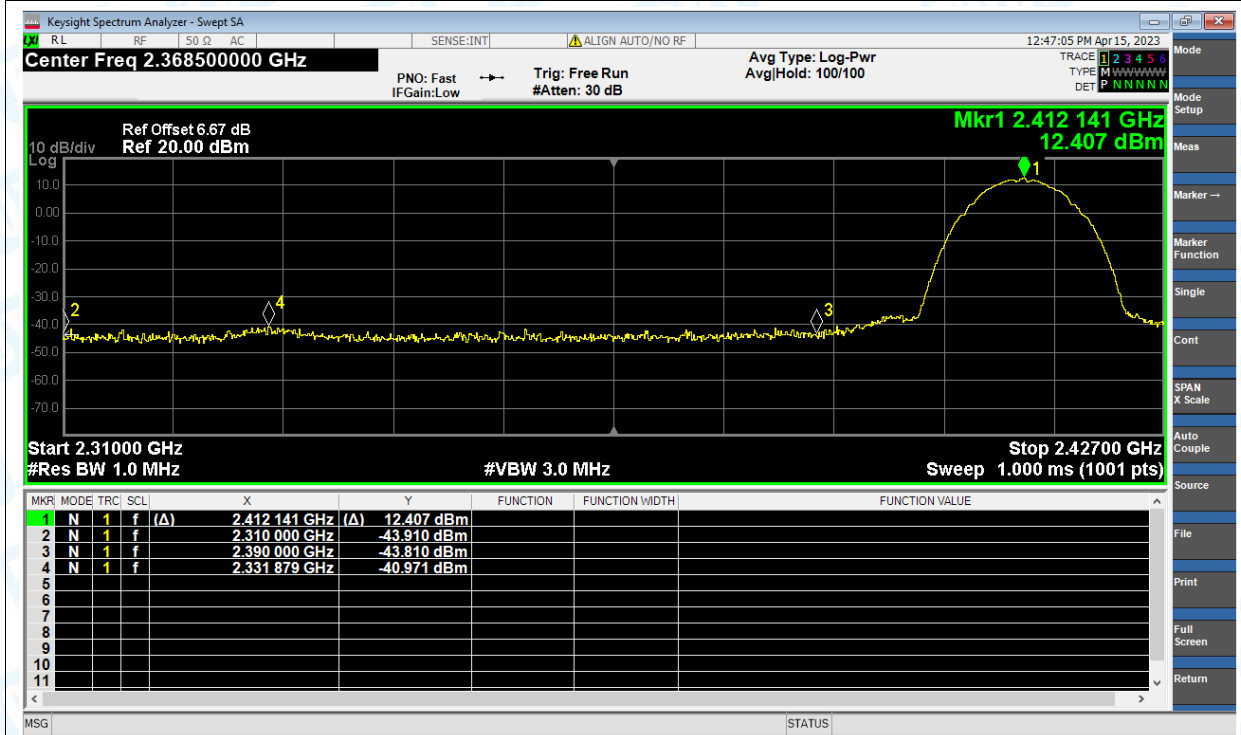


Restrict Band

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	-43.91	2	53.35	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-54.69	2	42.57	Average	54	Pass
NVNT	b	2412	Ant1	2331.879	-40.97	2	56.29	Peak	74	Pass
NVNT	b	2412	Ant1	2330.943	-51.44	2	45.82	Average	54	Pass
NVNT	b	2412	Ant1	2390	-43.81	2	53.45	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-53.58	2	43.68	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-42.92	2	54.34	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-51.81	2	45.45	Average	54	Pass
NVNT	b	2462	Ant1	2488.446	-41.35	2	55.91	Peak	74	Pass
NVNT	b	2462	Ant1	2483.517	-51.81	2	45.45	Average	54	Pass
NVNT	b	2462	Ant1	2500	-43.87	2	53.39	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-53.87	2	43.39	Average	54	Pass
NVNT	g	2412	Ant1	2310	-43.57	2	53.69	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-54.3	2	42.96	Average	54	Pass
NVNT	g	2412	Ant1	2389.911	-23.35	2	73.91	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-43.51	2	53.75	Average	54	Pass
NVNT	g	2412	Ant1	2390	-27.35	2	69.91	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-43.44	2	53.82	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-31.76	2	65.5	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-45.38	2	51.88	Average	54	Pass
NVNT	g	2462	Ant1	2483.57	-29.29	2	67.97	Peak	74	Pass
NVNT	g	2462	Ant1	2483.57	-45.33	2	51.93	Average	54	Pass
NVNT	g	2462	Ant1	2500	-42.49	2	54.77	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-53.44	2	43.82	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-44.35	2	52.91	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-54.39	2	42.87	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.209	-28.74	2	68.52	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-44.64	2	52.62	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-31.37	2	65.89	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-44.43	2	52.83	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-29.39	2	67.87	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-44.27	2	52.99	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.729	-26.15	2	71.11	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2484.047	-44.22	2	53.04	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-41.64	2	55.62	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-52.88	2	44.38	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



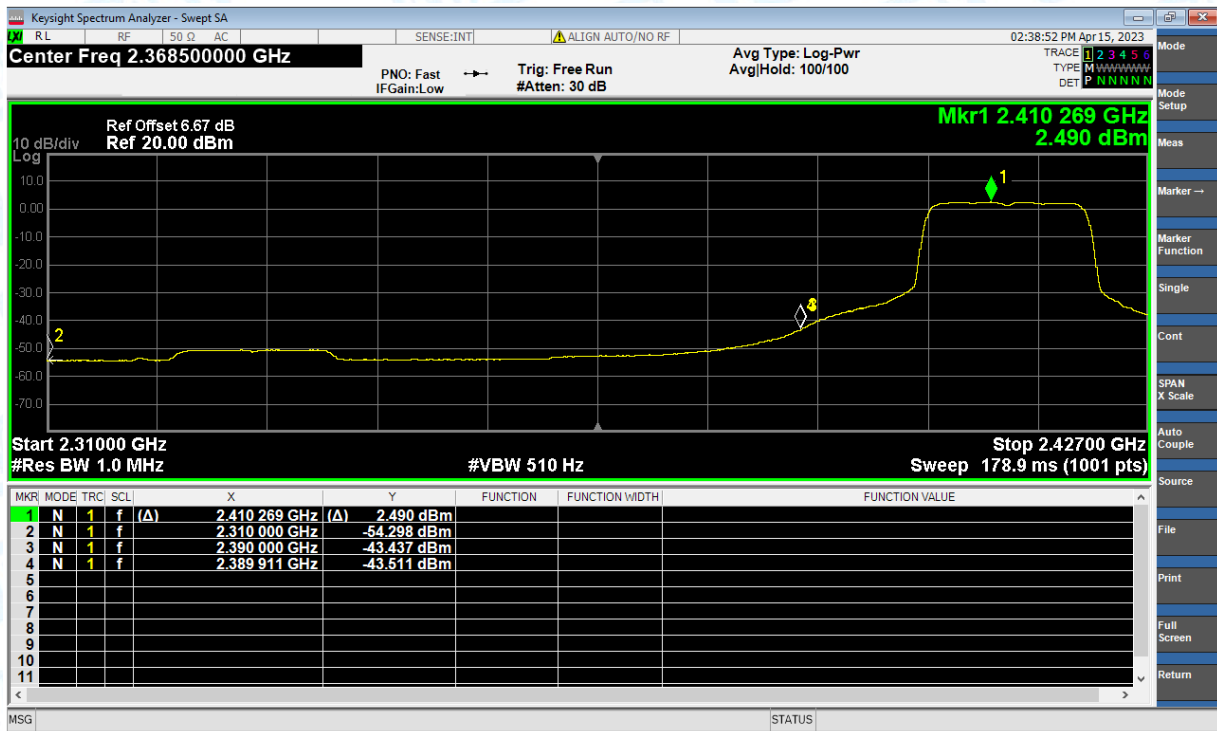
Restrict Band NVNT b 2462MHz Ant1 Average



Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average

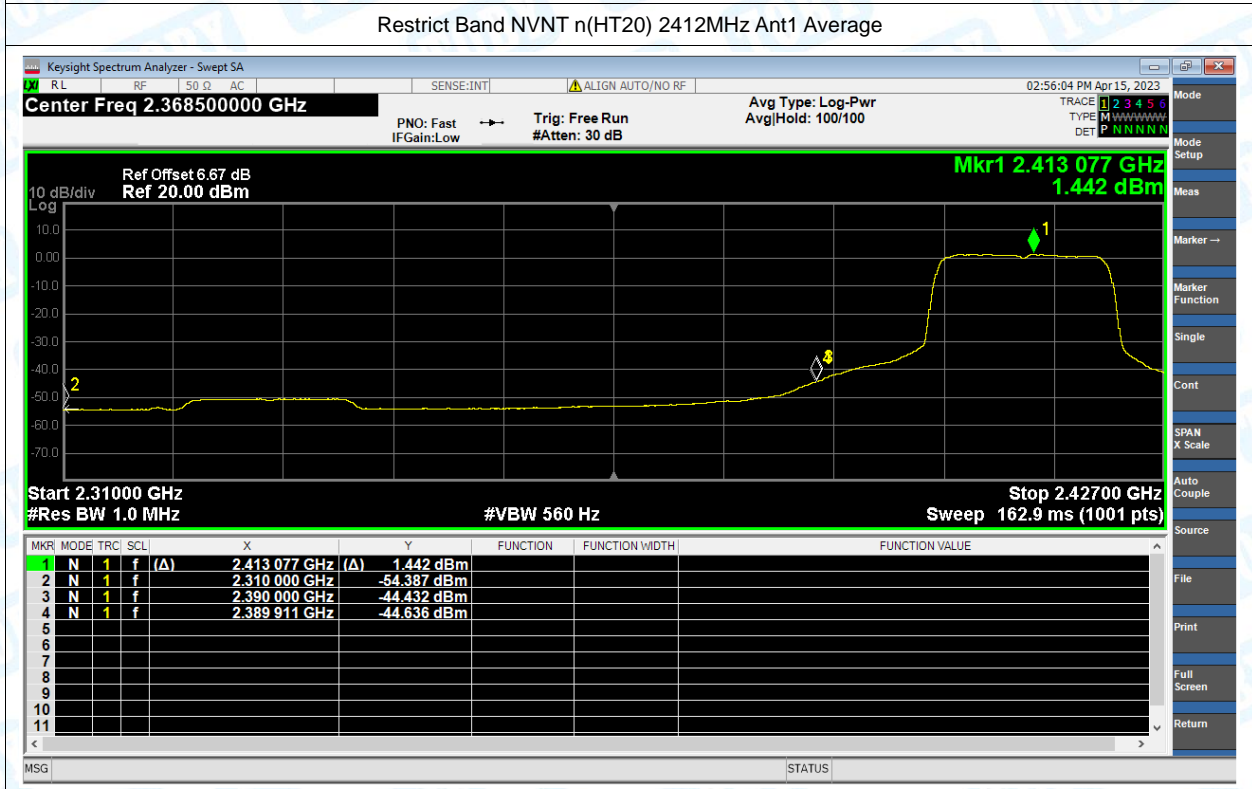
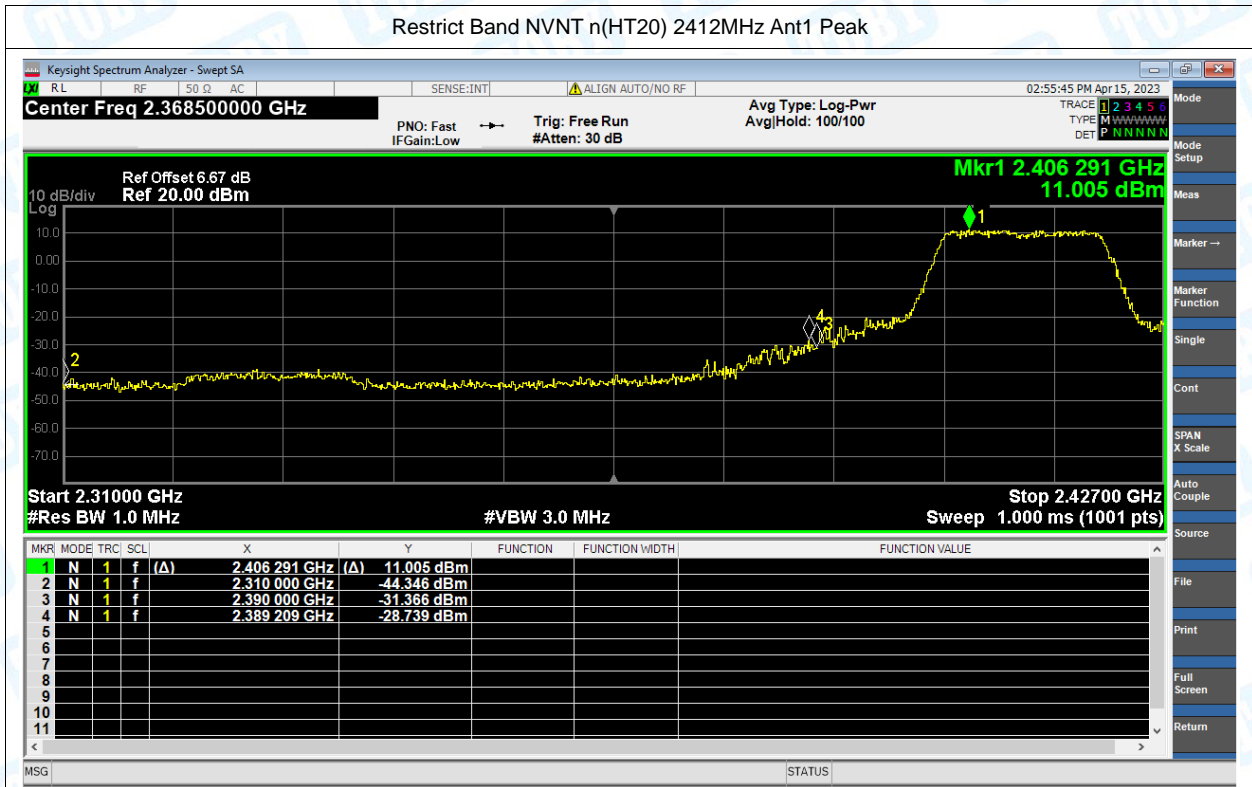


Restrict Band NVNT g 2462MHz Ant1 Peak



Restrict Band NVNT g 2462MHz Ant1 Average





Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2462MHz Ant1 Average

