

RF Test Data for 2.4G WiFi (Conducted Measurements)

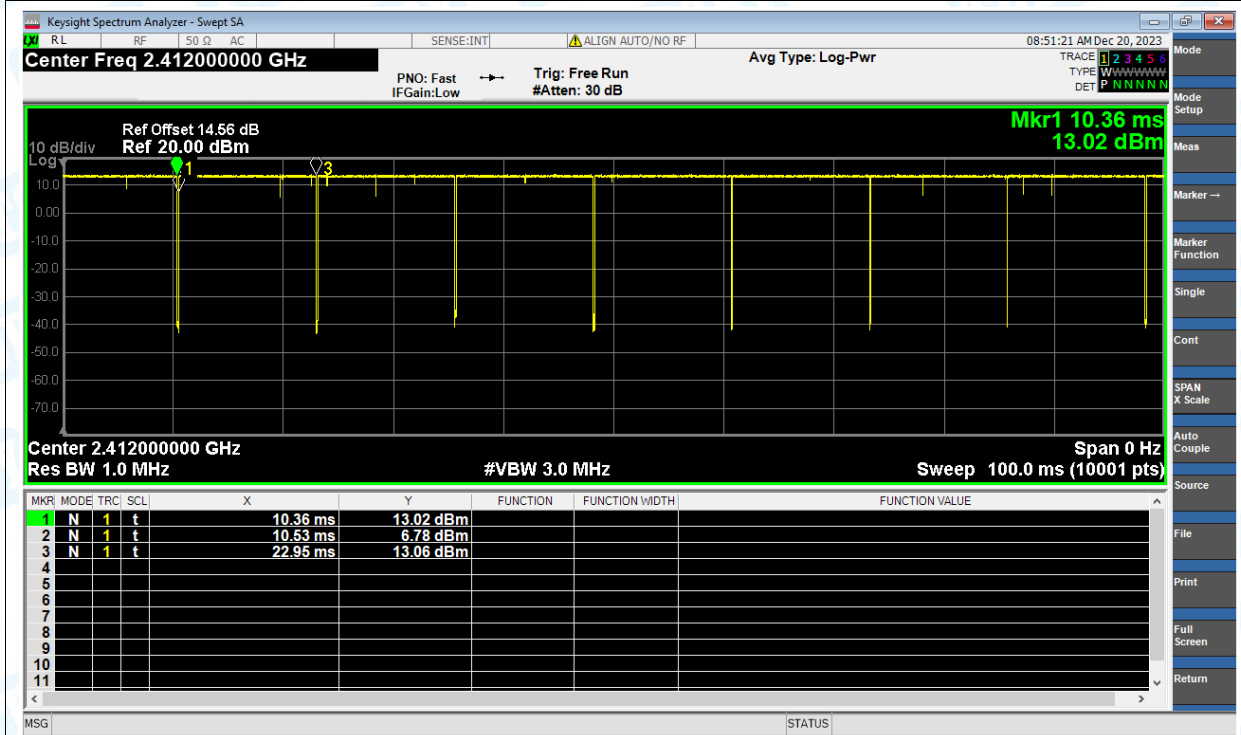
General Description of EUT	
Product Name:	Smart Floodlight Camera
Test Model:	E97P
Sample ID:	HC-C-202312-0138-01-01-2#
Environmental Conditions	
Temperature:	24°C
Relative Humidity:	50%
Test Voltage:	AC 120V
Test Engineer:	Liyijing
Note: For a more detailed features description, please refer to the report TBR-C-202312-0138-9 The report only show the worst case data.	

Duty Cycle

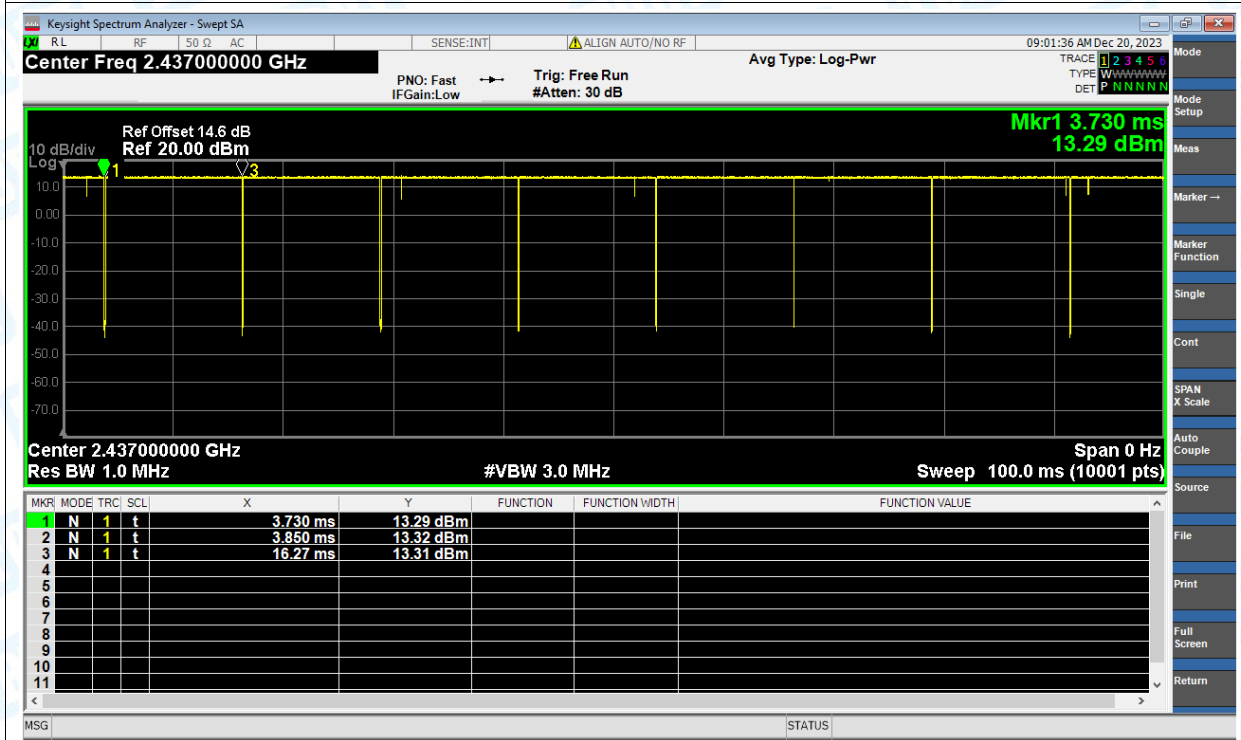
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	98.65	0.06	0.08
NVNT	b	2437	Ant1	99.04	0.04	0.08
NVNT	b	2462	Ant1	99.68	0.01	0.08
NVNT	g	2412	Ant1	94.52	0.24	0.48
NVNT	g	2437	Ant1	94.06	0.27	0.49
NVNT	g	2462	Ant1	95.37	0.21	0.49
NVNT	n(HT20)	2412	Ant1	94.58	0.24	0.52
NVNT	n(HT20)	2437	Ant1	94.58	0.24	0.52
NVNT	n(HT20)	2462	Ant1	95.05	0.22	0.52
NVNT	n(HT40)	2422	Ant1	86.24	0.64	1.06
NVNT	n(HT40)	2437	Ant1	84.82	0.72	1.05
NVNT	n(HT40)	2452	Ant1	95	0.22	1.05

Test Graphs

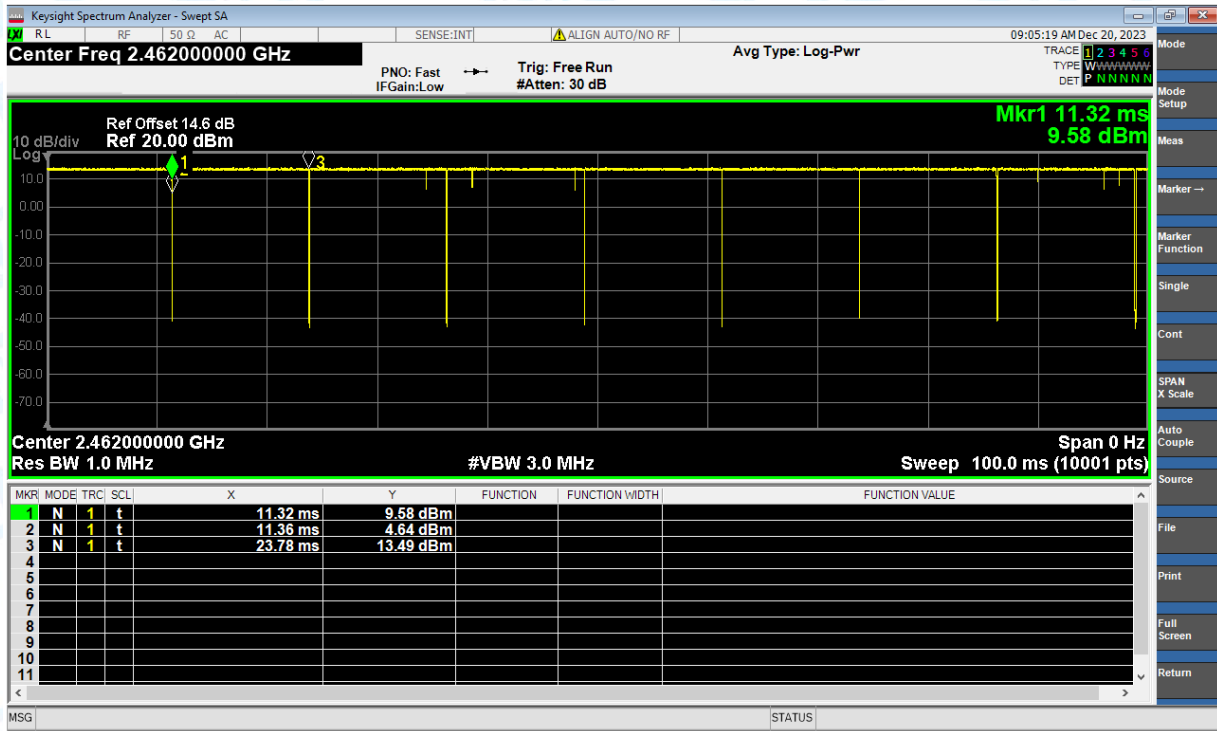
Duty Cycle NVNT b 2412MHz Ant1



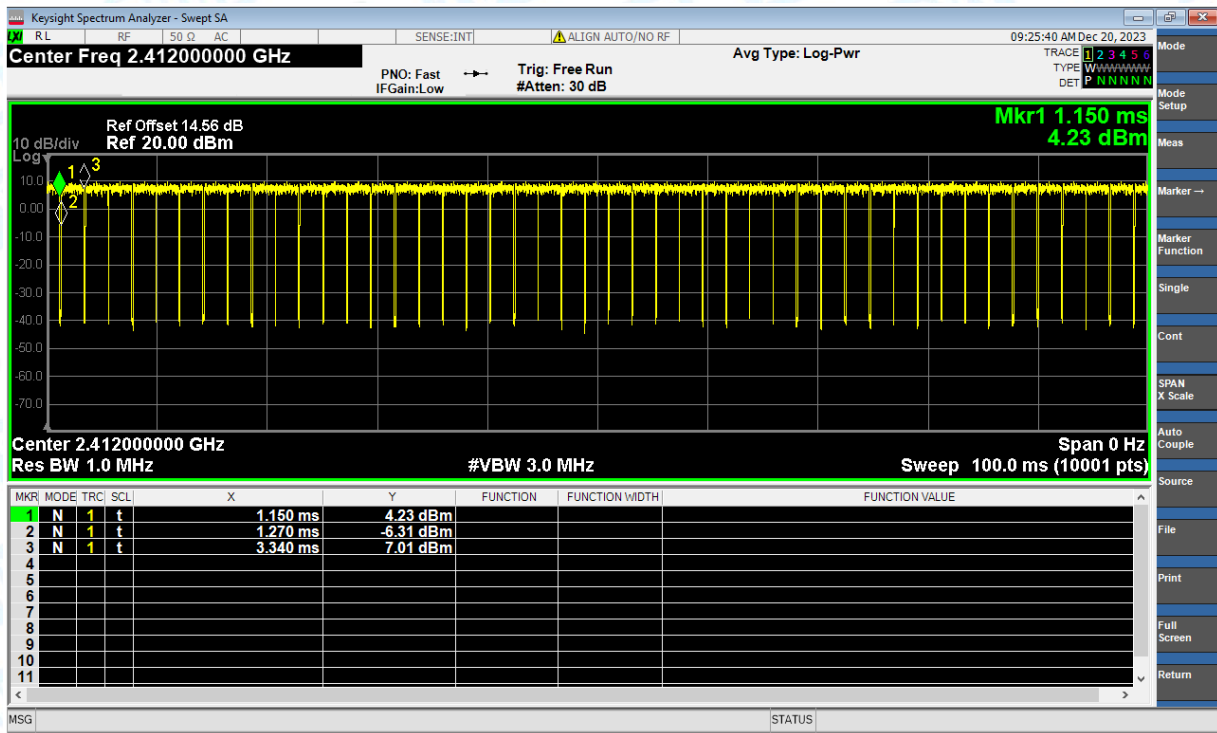
Duty Cycle NVNT b 2437MHz Ant1



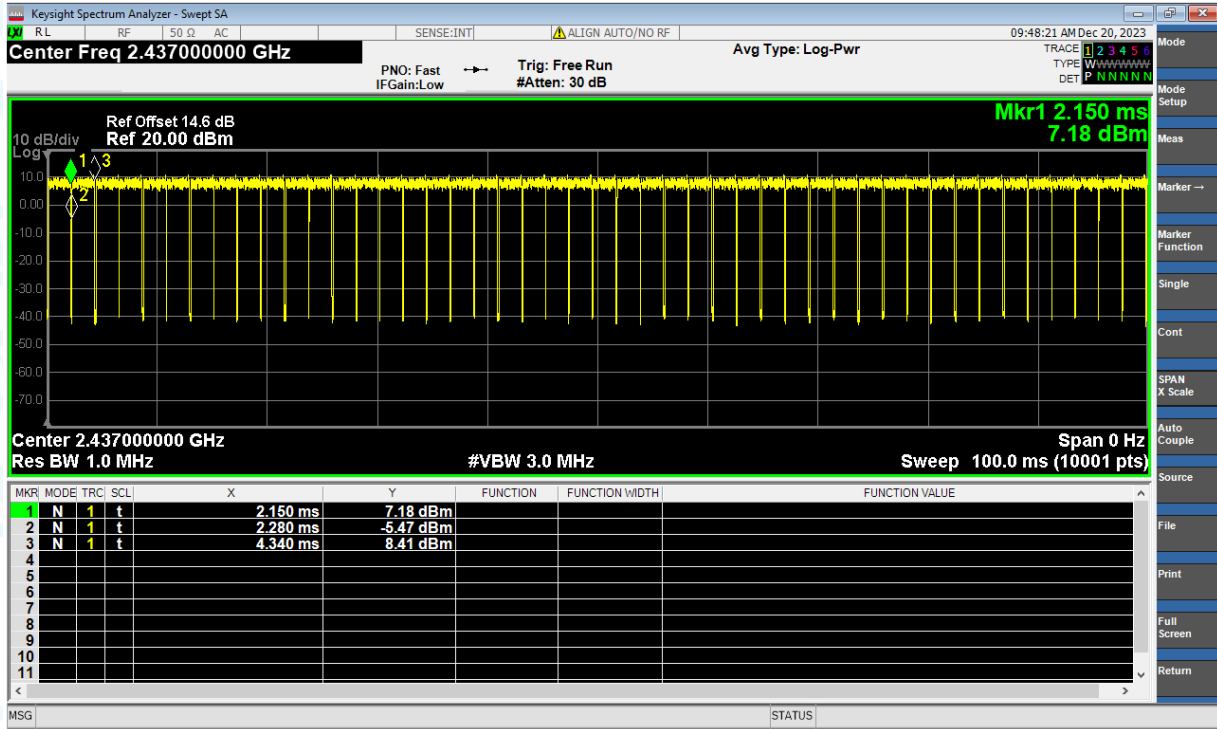
Duty Cycle NVNT b 2462MHz Ant1



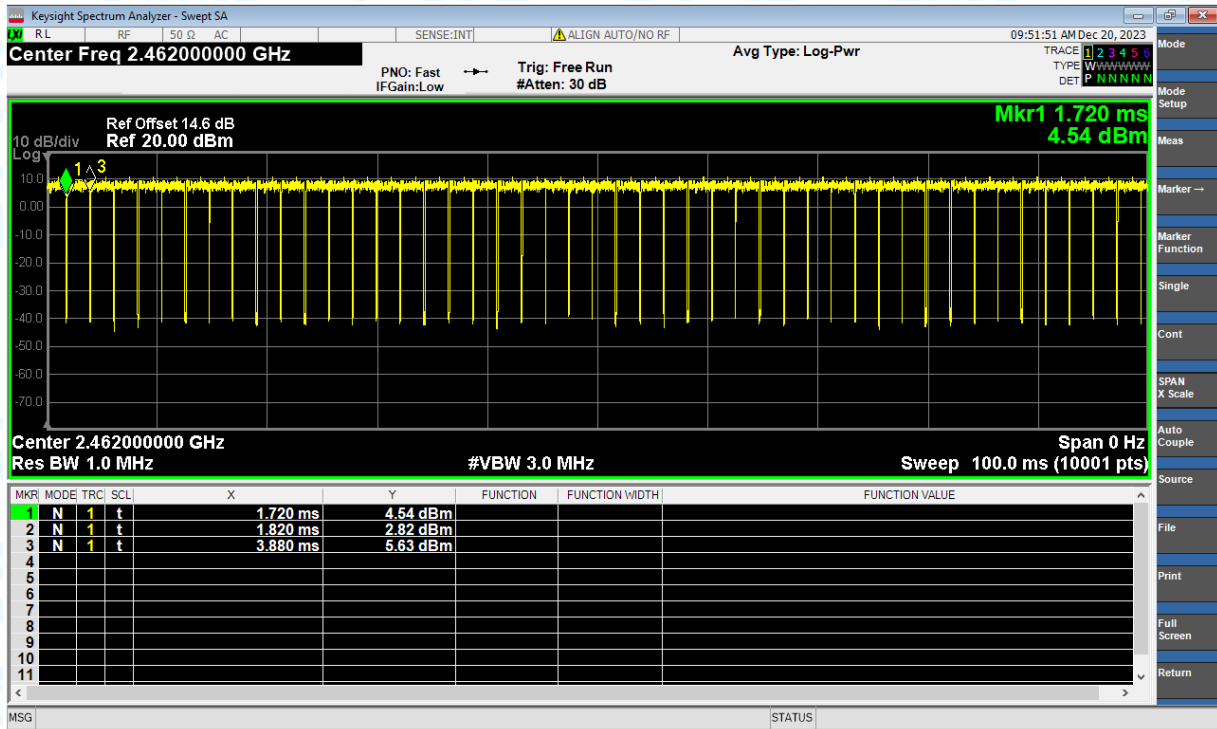
Duty Cycle NVNT g 2412MHz Ant1



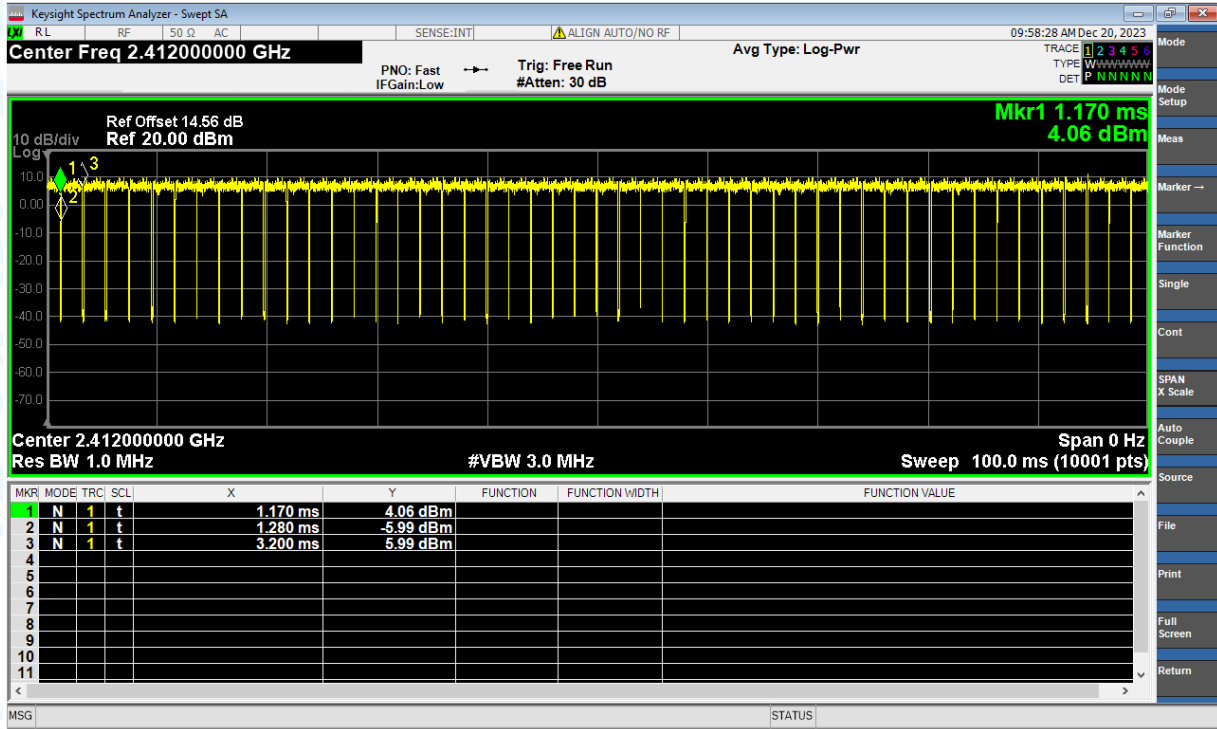
Duty Cycle NVNT g 2437MHz Ant1



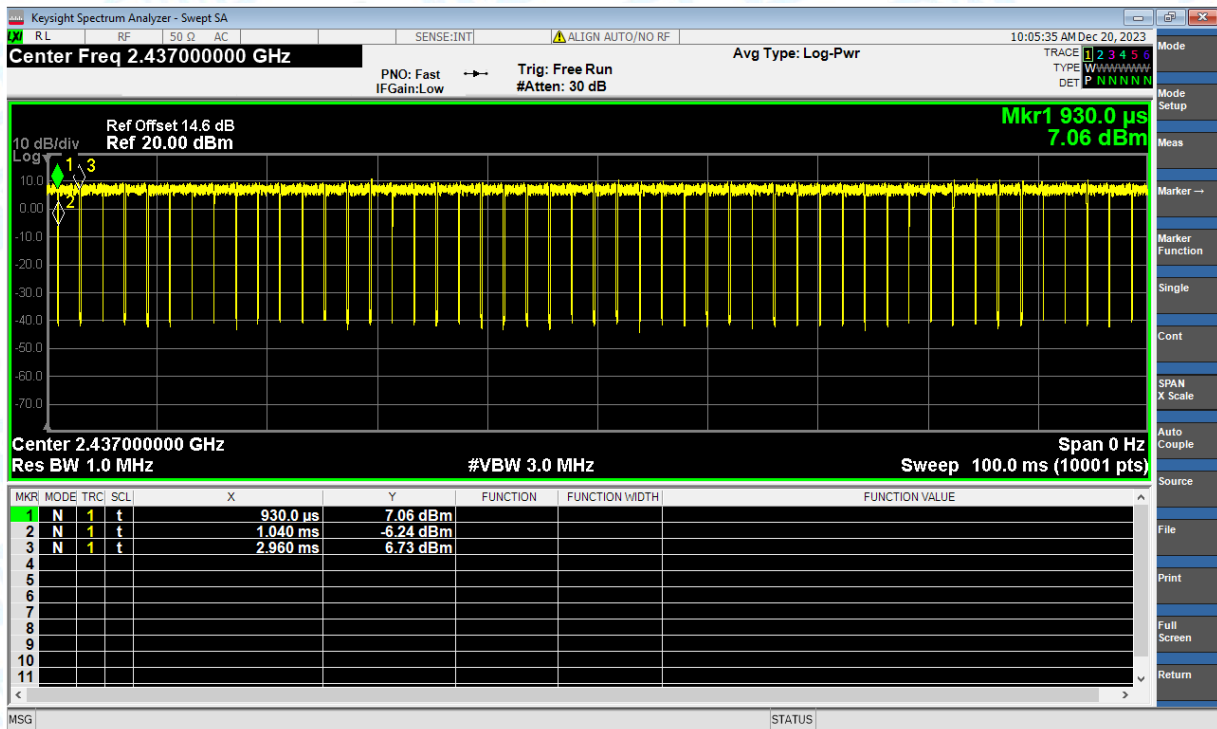
Duty Cycle NVNT g 2462MHz Ant1



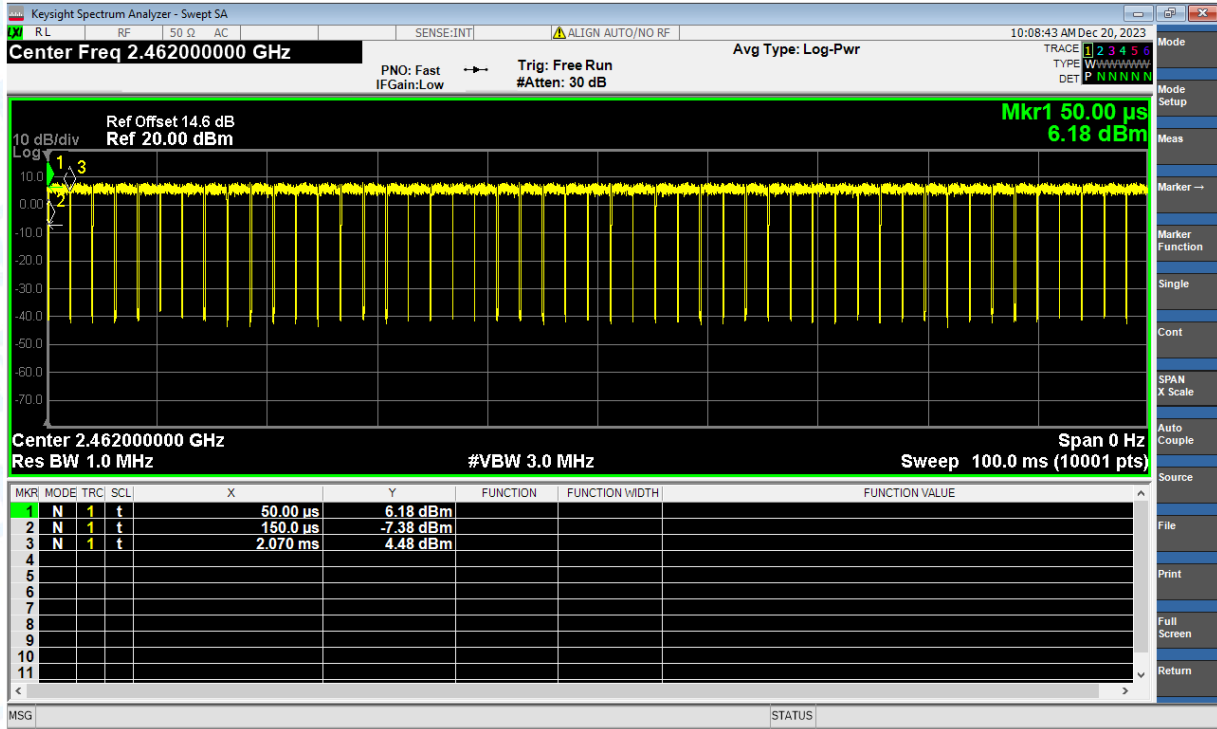
Duty Cycle NVNT n(HT20) 2412MHz Ant1



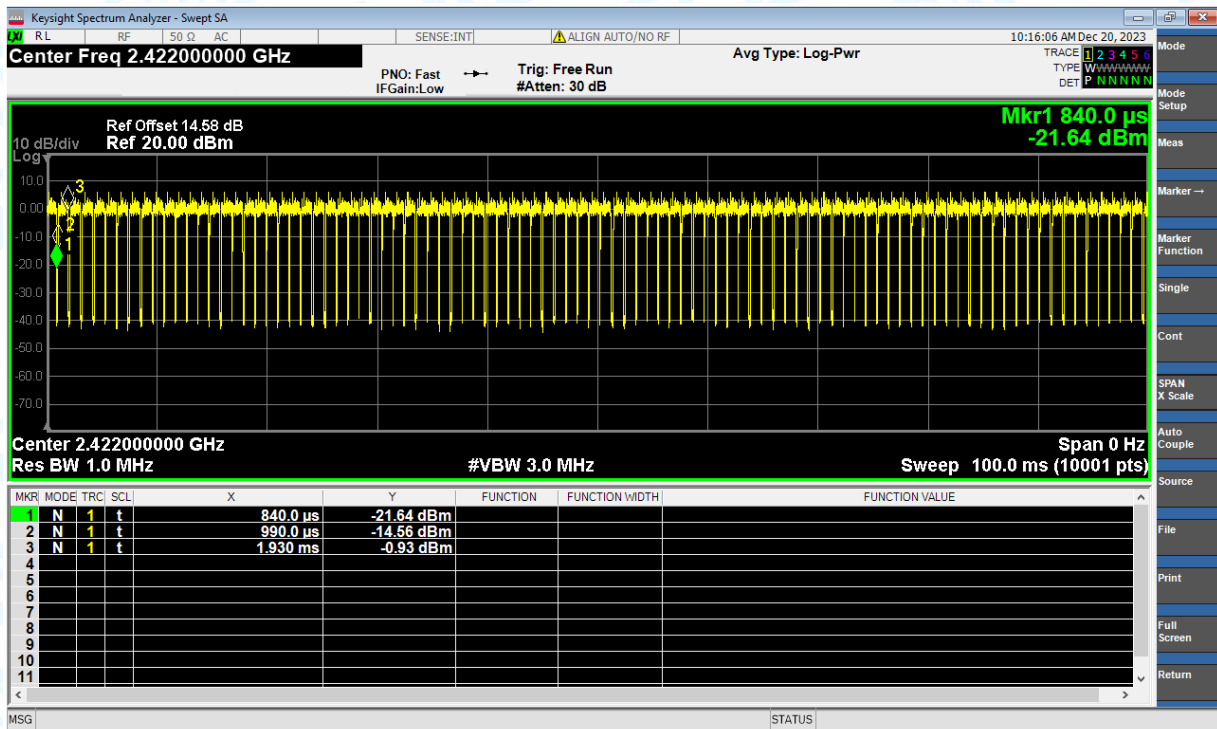
Duty Cycle NVNT n(HT20) 2437MHz Ant1



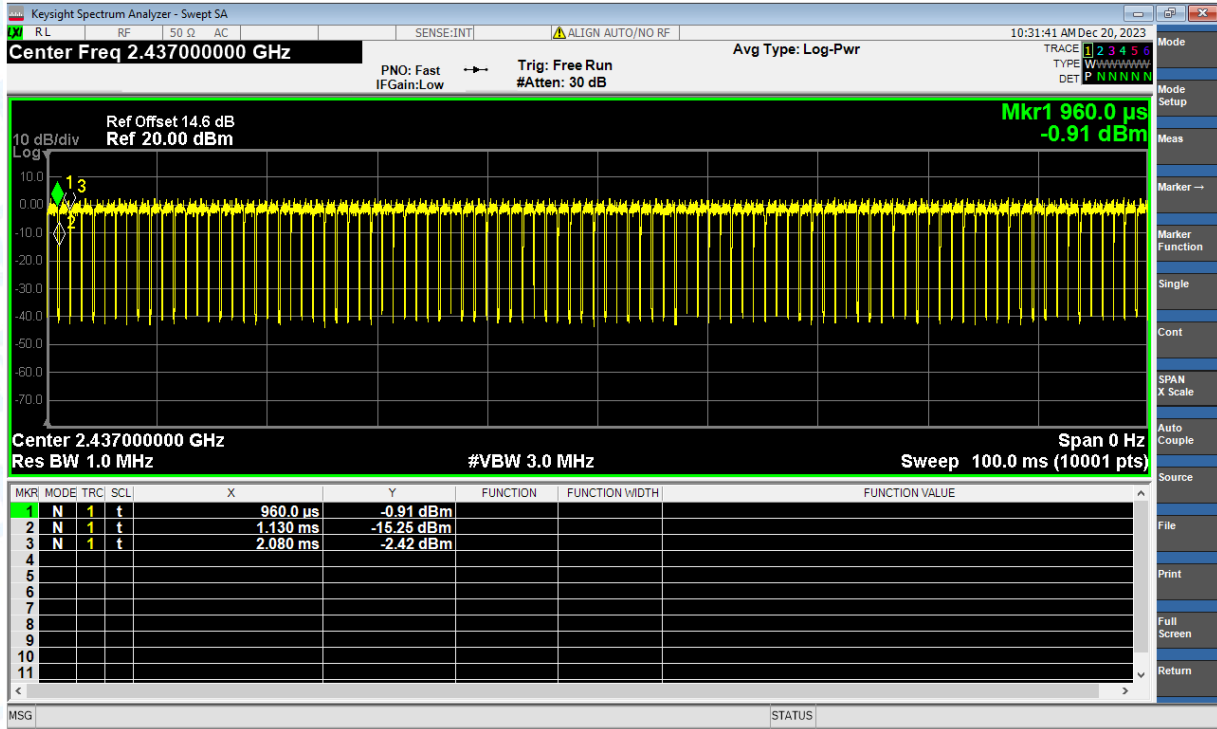
Duty Cycle NVNT n(HT20) 2462MHz Ant1



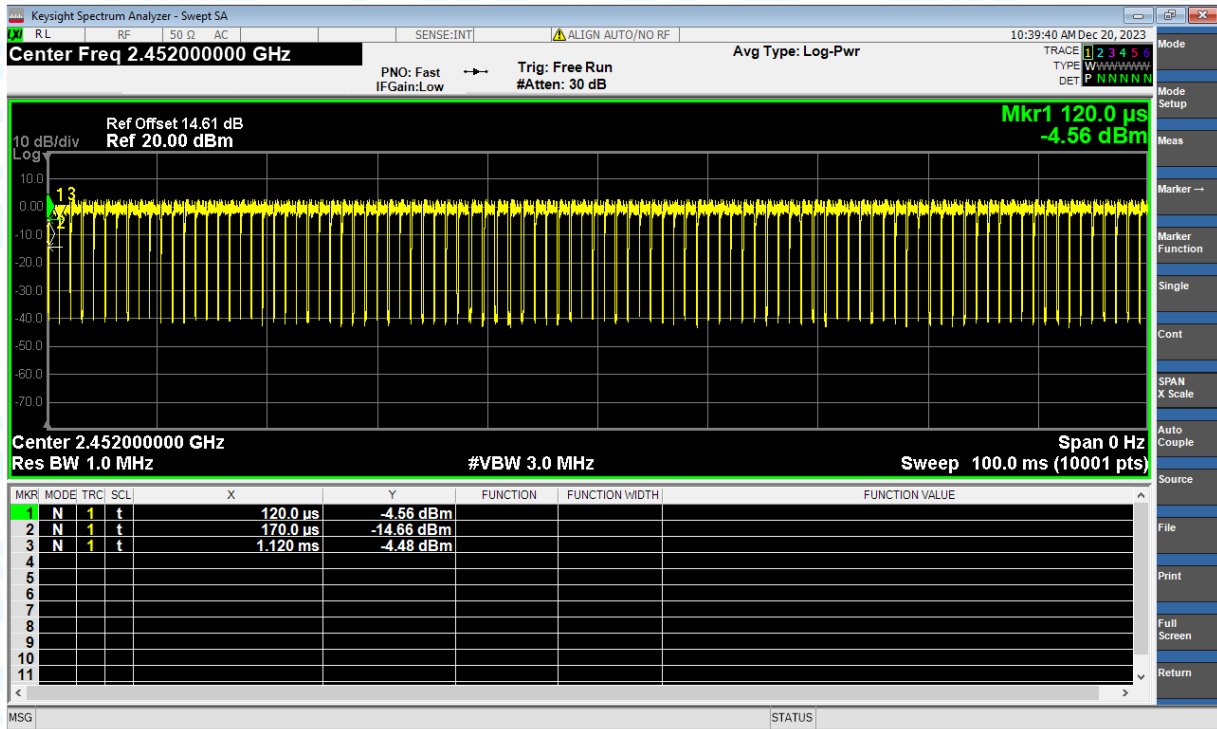
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



Maximum Conducted Output Power

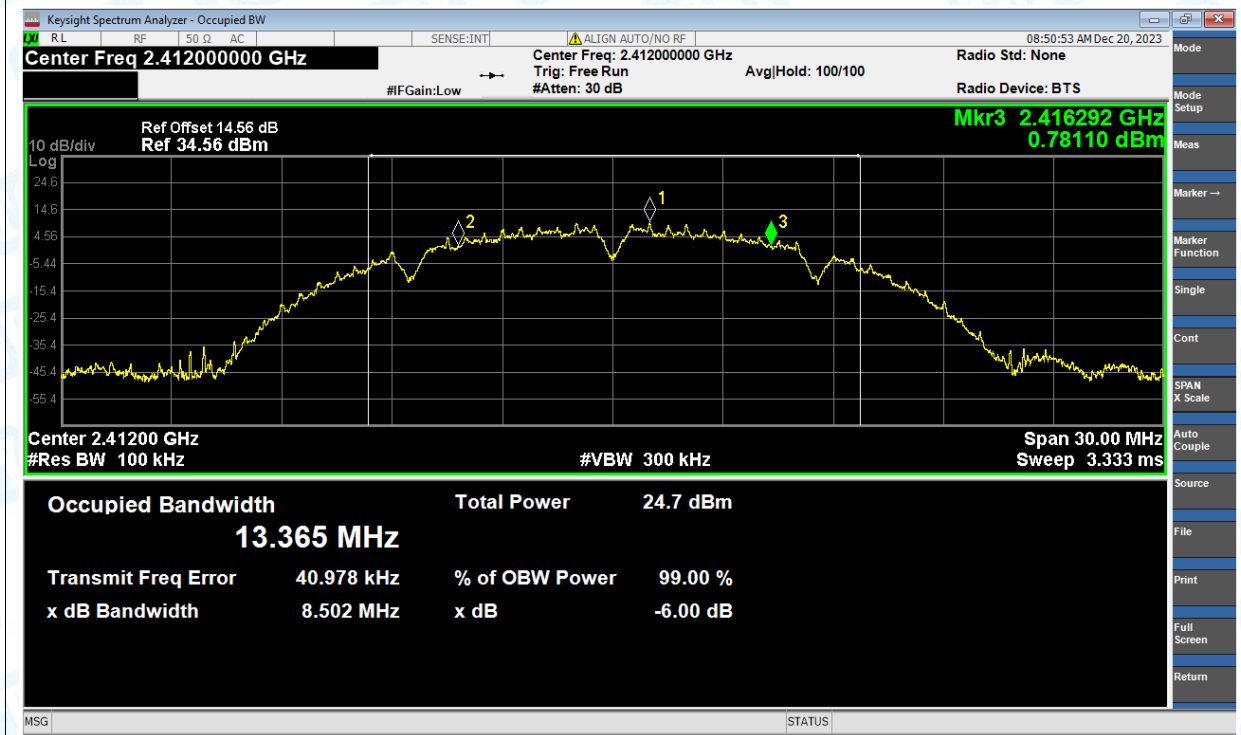
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	18.312	0.06	18.372	30	Pass
NVNT	b	2437	Ant1	18.475	0.04	18.515	30	Pass
NVNT	b	2462	Ant1	18.494	0.01	18.504	30	Pass
NVNT	g	2412	Ant1	14.893	0.24	15.133	30	Pass
NVNT	g	2437	Ant1	15.2	0.27	15.47	30	Pass
NVNT	g	2462	Ant1	15.18	0.21	15.39	30	Pass
NVNT	n(HT20)	2412	Ant1	14.573	0.24	14.813	30	Pass
NVNT	n(HT20)	2437	Ant1	14.504	0.24	14.744	30	Pass
NVNT	n(HT20)	2462	Ant1	14.409	0.22	14.629	30	Pass
NVNT	n(HT40)	2422	Ant1	12.089	0.64	12.729	30	Pass
NVNT	n(HT40)	2437	Ant1	12.903	0.72	13.623	30	Pass
NVNT	n(HT40)	2452	Ant1	11.609	0.22	11.829	30	Pass

-6dB Bandwidth

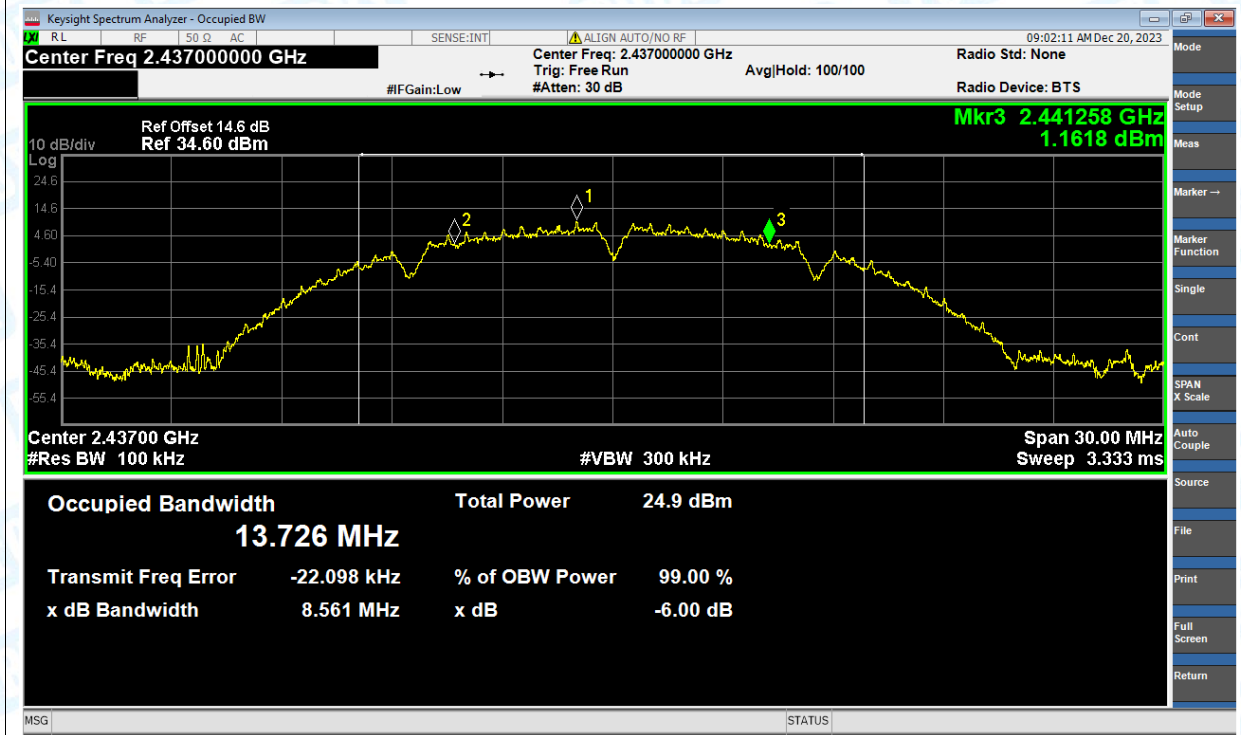
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.5	0.5	Pass
NVNT	b	2437	Ant1	8.56	0.5	Pass
NVNT	b	2462	Ant1	9.51	0.5	Pass
NVNT	g	2412	Ant1	16.35	0.5	Pass
NVNT	g	2437	Ant1	16.34	0.5	Pass
NVNT	g	2462	Ant1	16.35	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.56	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.5	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.3	0.5	Pass
NVNT	n(HT40)	2422	Ant1	35.91	0.5	Pass
NVNT	n(HT40)	2437	Ant1	35.66	0.5	Pass
NVNT	n(HT40)	2452	Ant1	35.47	0.5	Pass

Test Graphs

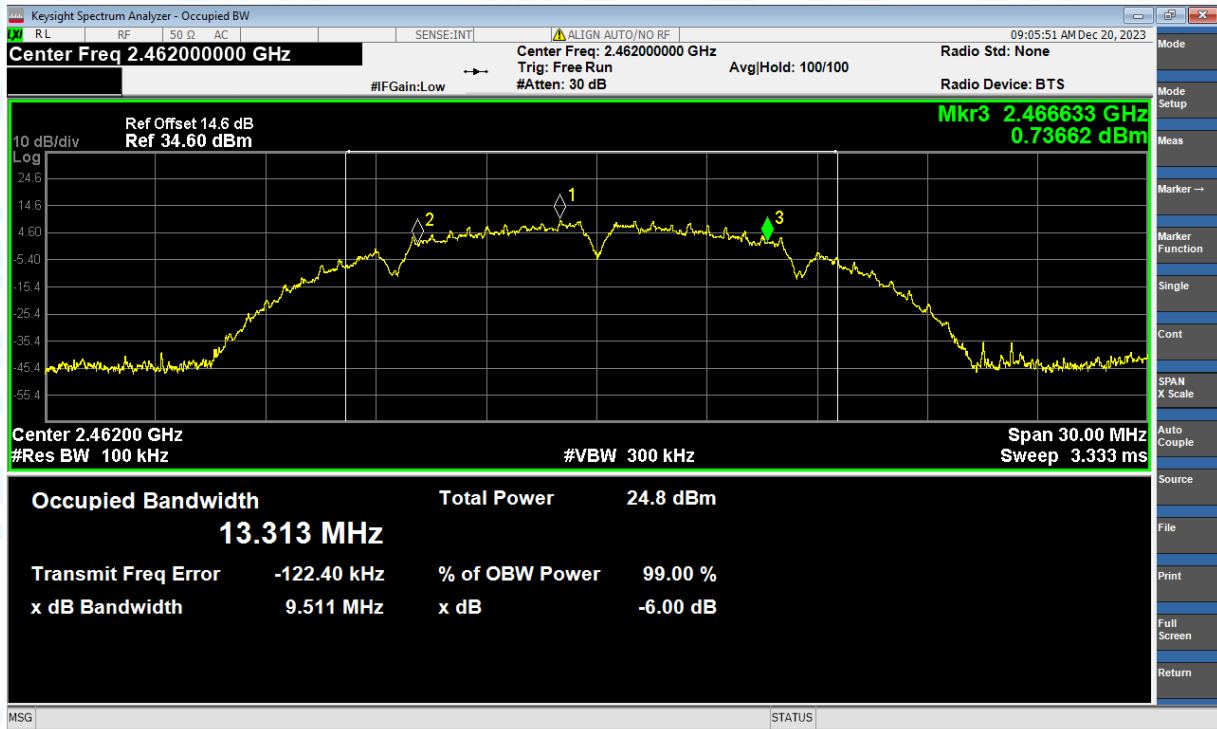
-6dB Bandwidth NVNT b 2412MHz Ant1



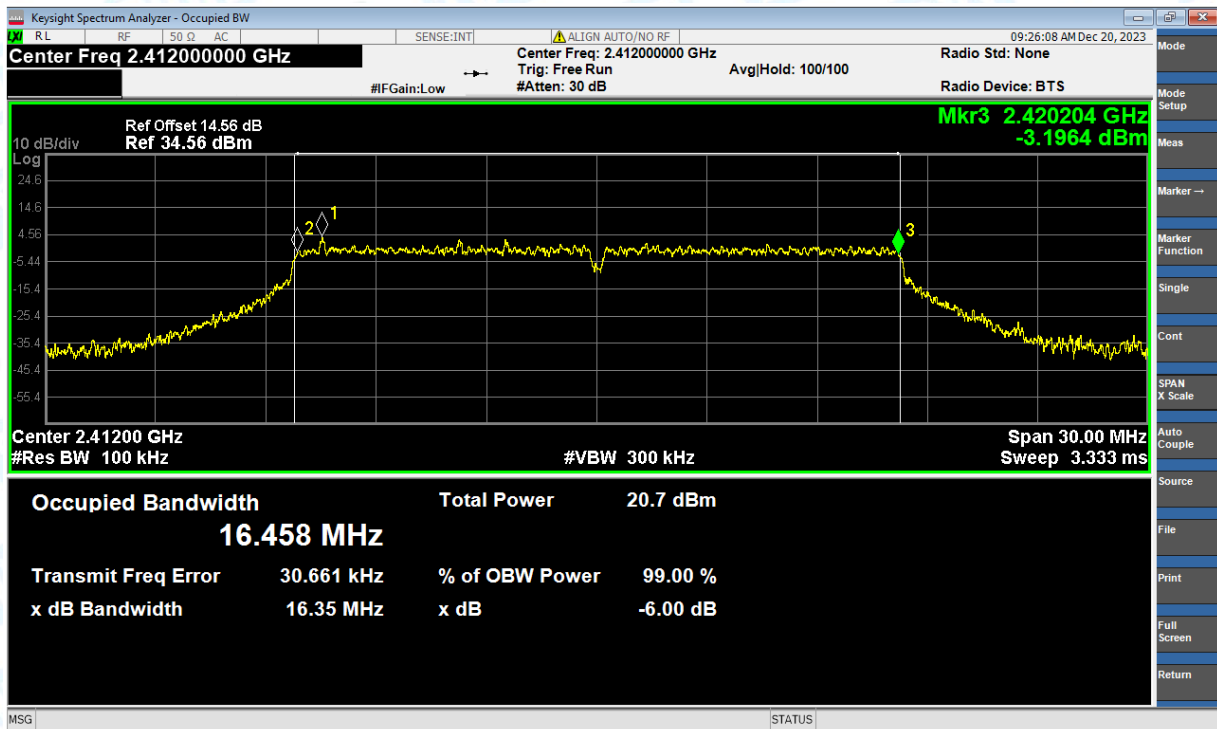
-6dB Bandwidth NVNT b 2437MHz Ant1



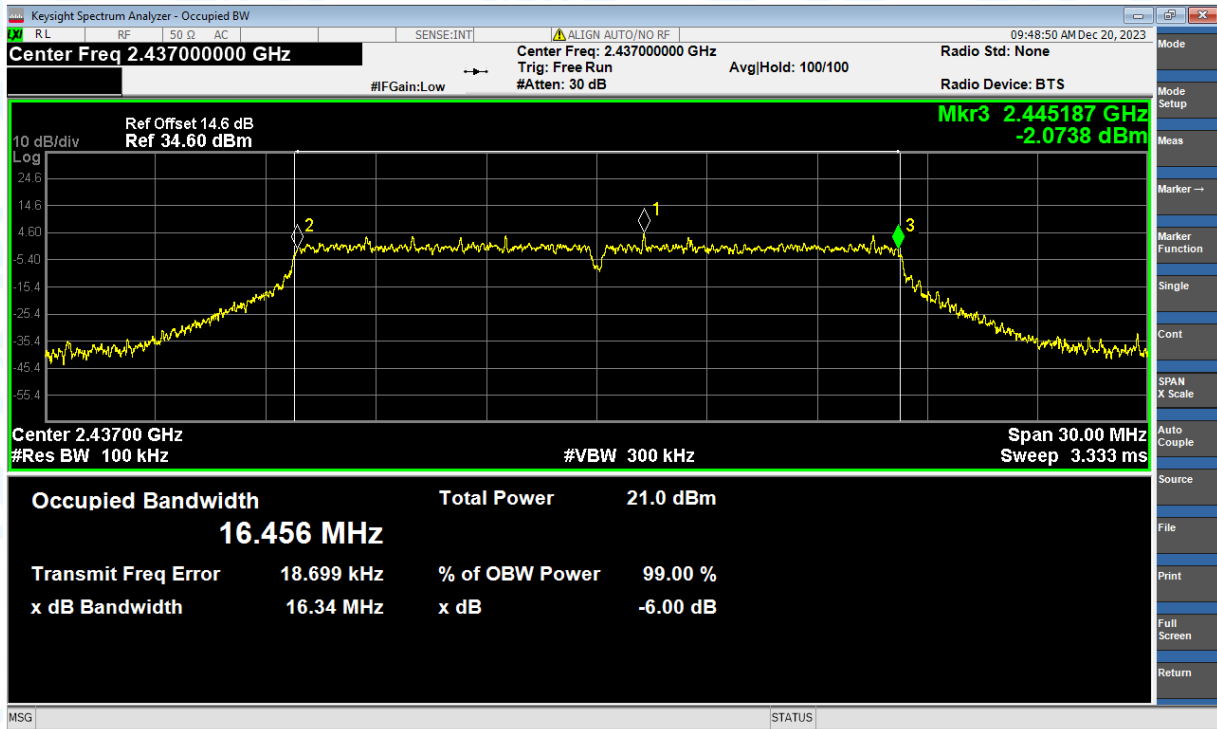
-6dB Bandwidth NVNT b 2462MHz Ant1



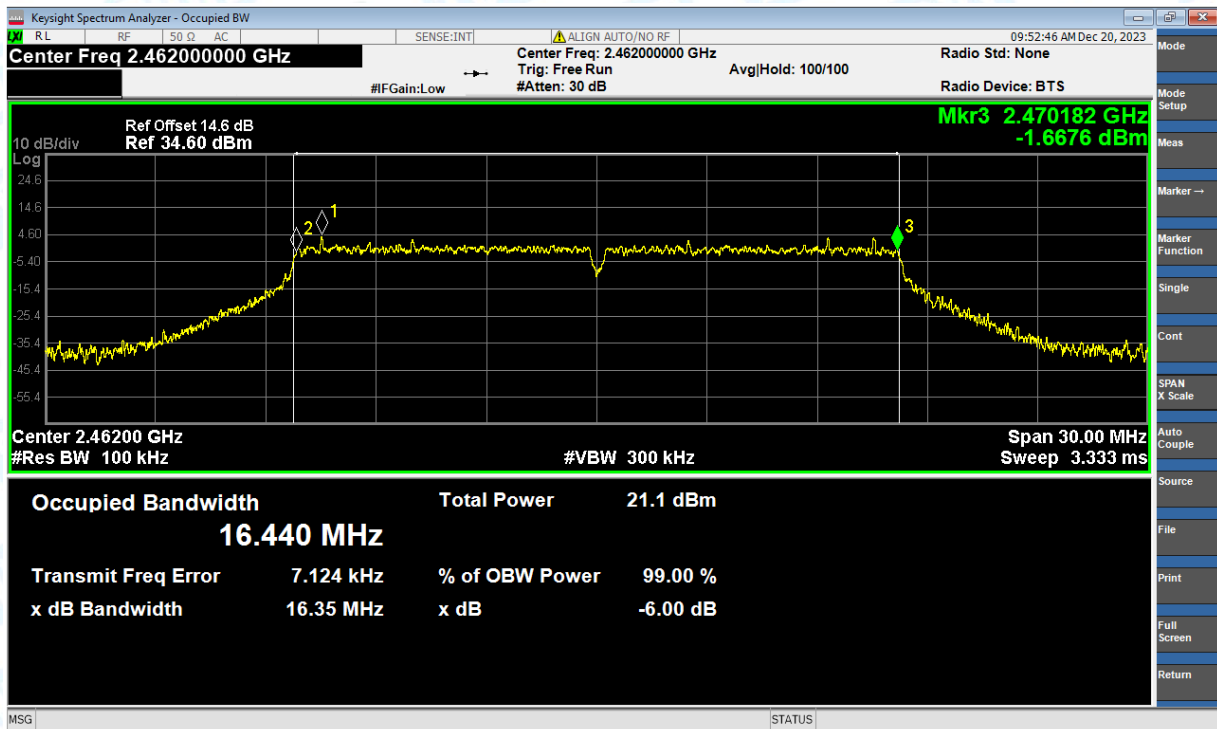
-6dB Bandwidth NVNT g 2412MHz Ant1



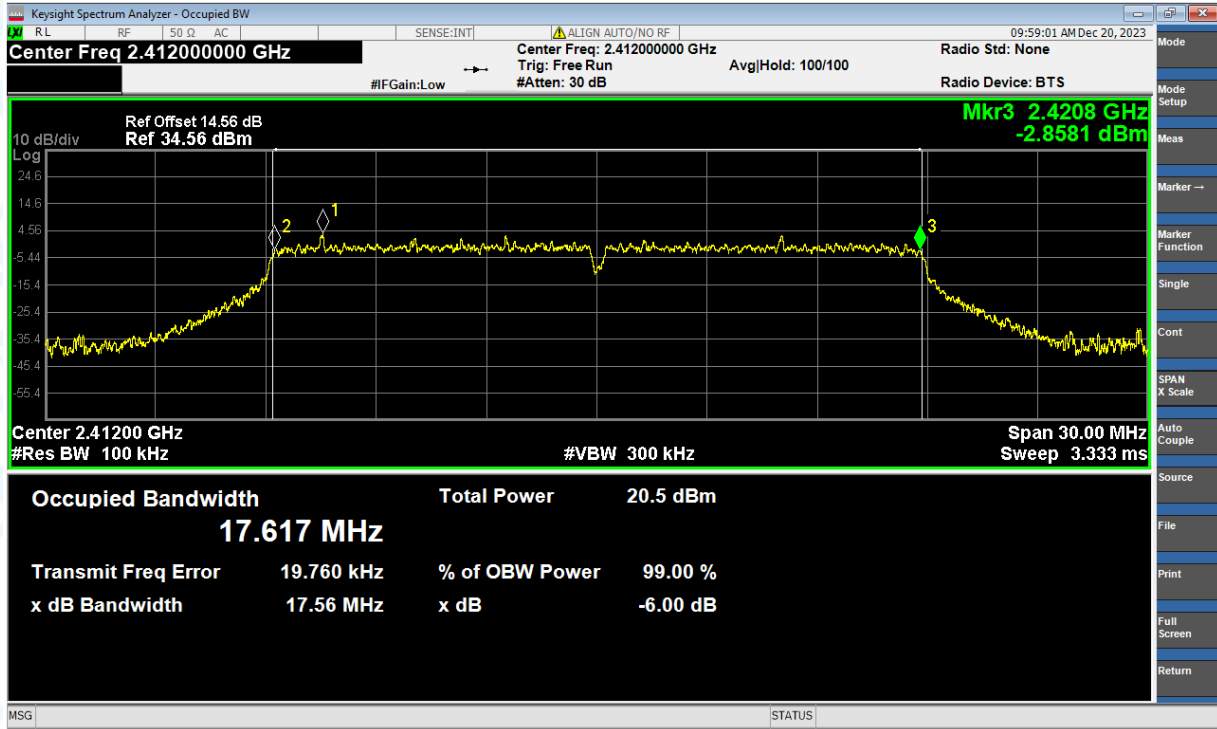
-6dB Bandwidth NVNT g 2437MHz Ant1



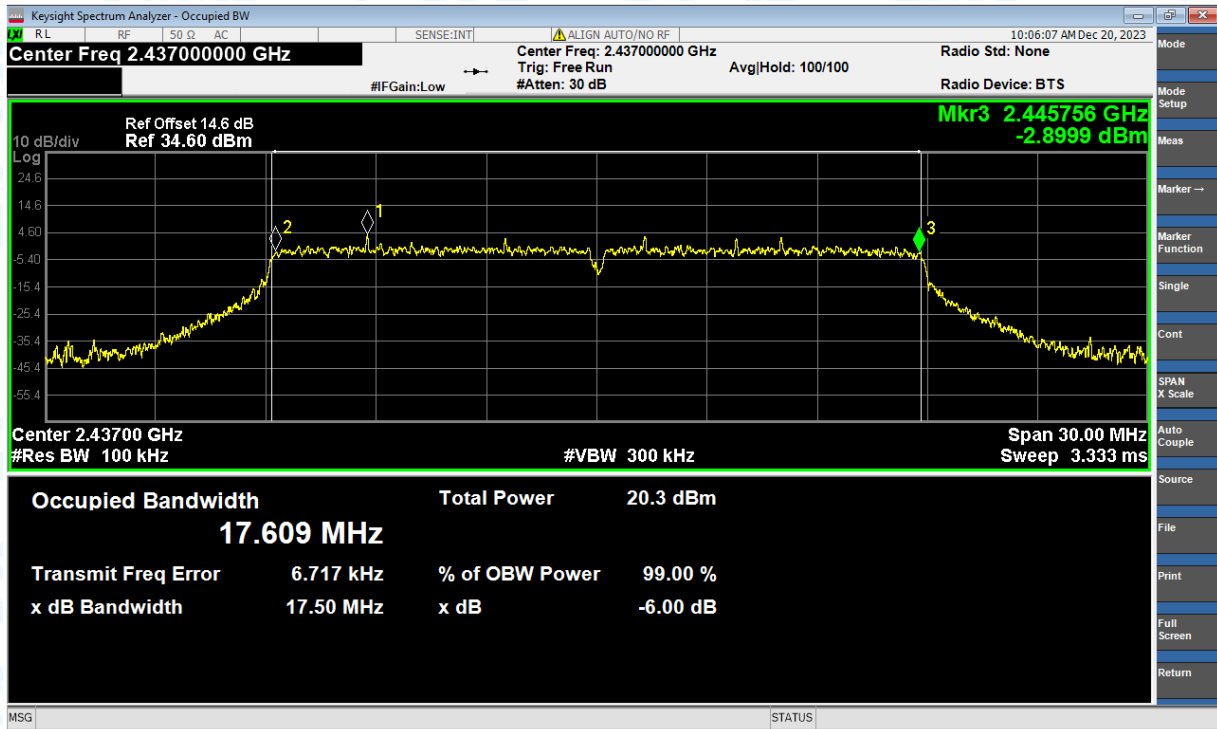
-6dB Bandwidth NVNT g 2462MHz Ant1



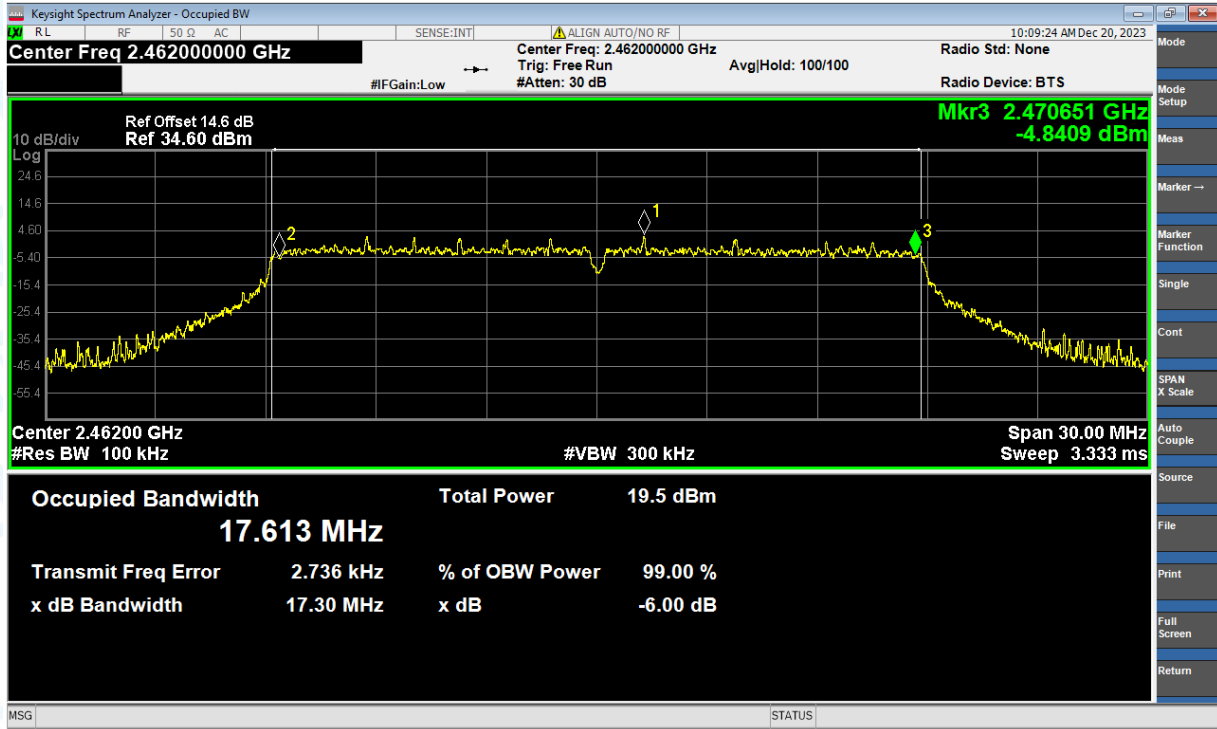
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



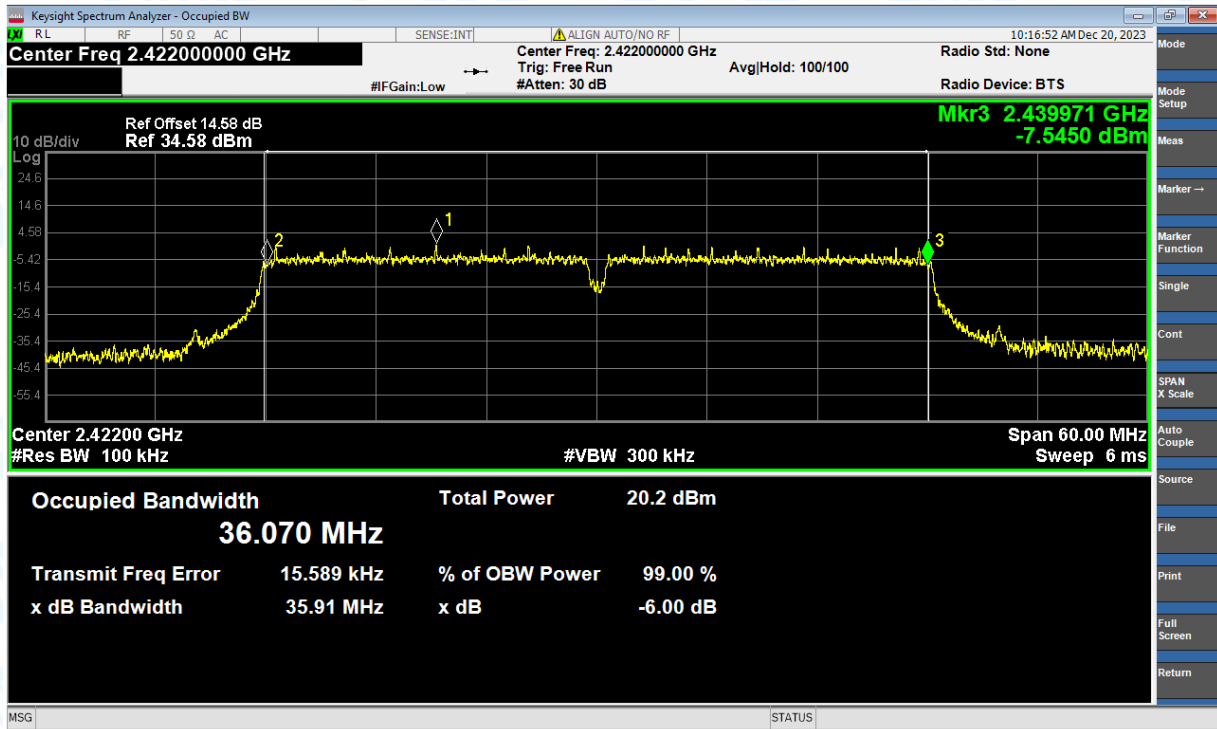
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



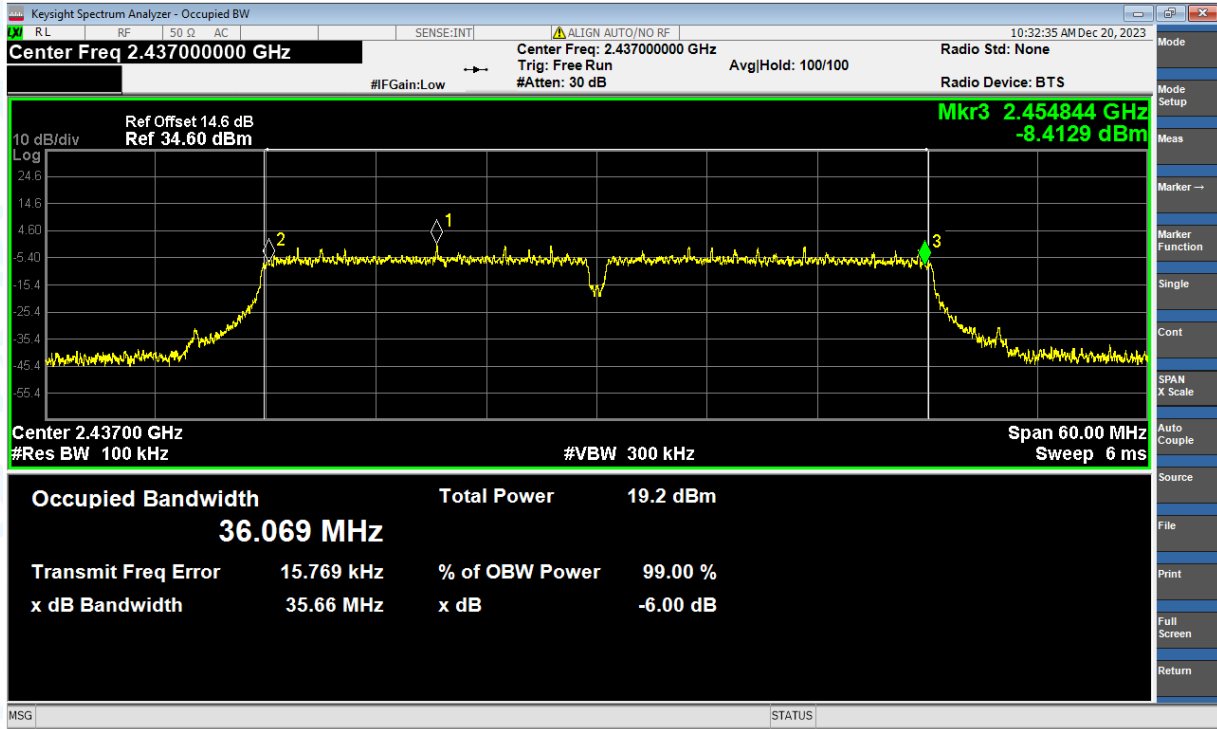
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



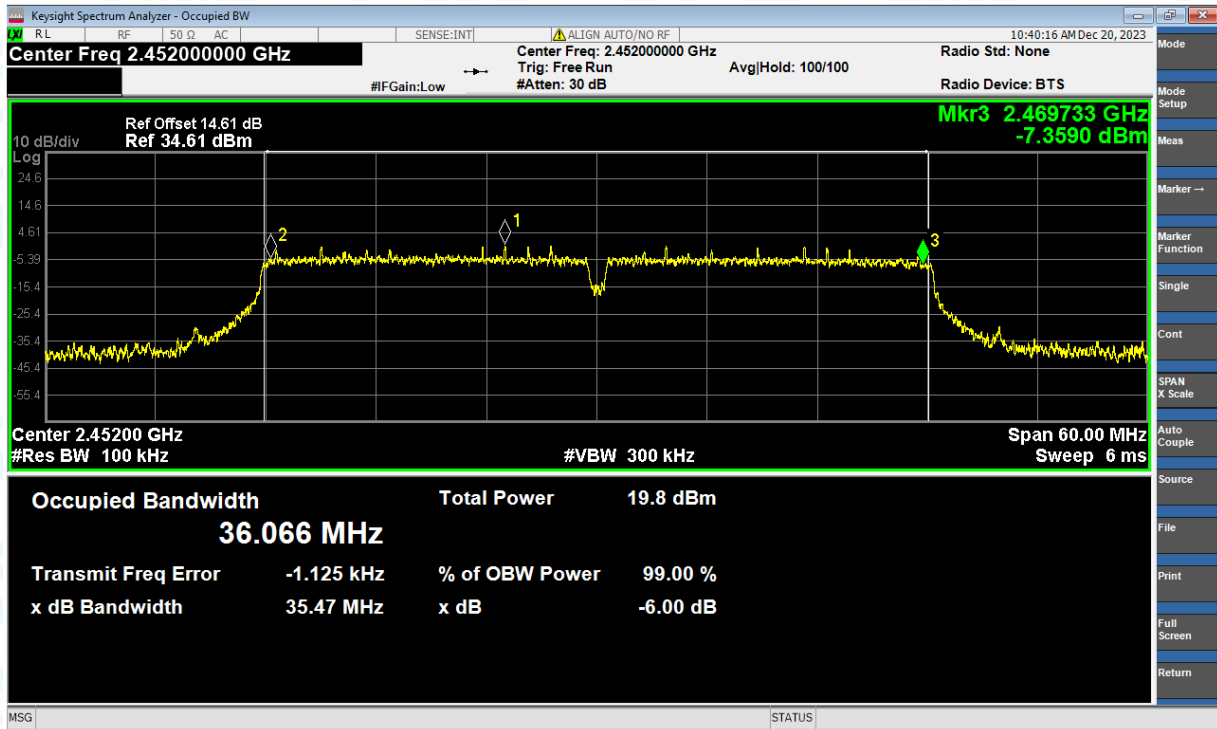
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



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



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

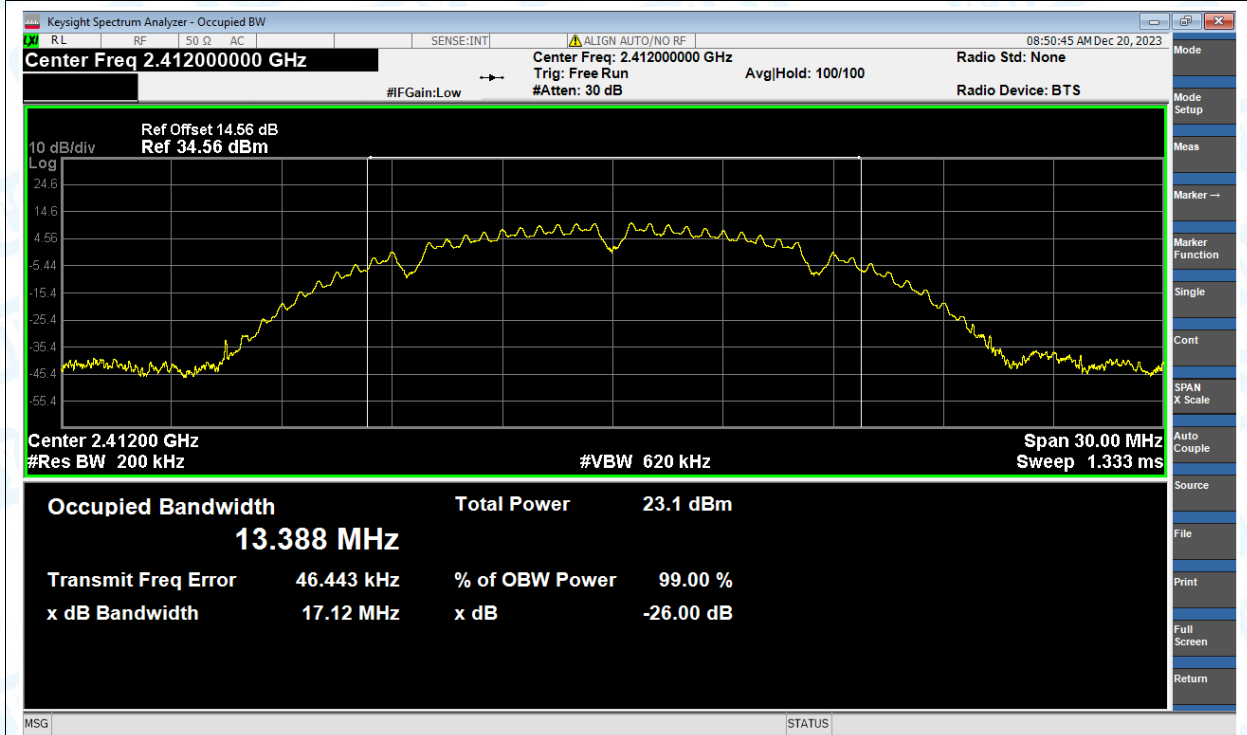


Occupied Channel Bandwidth

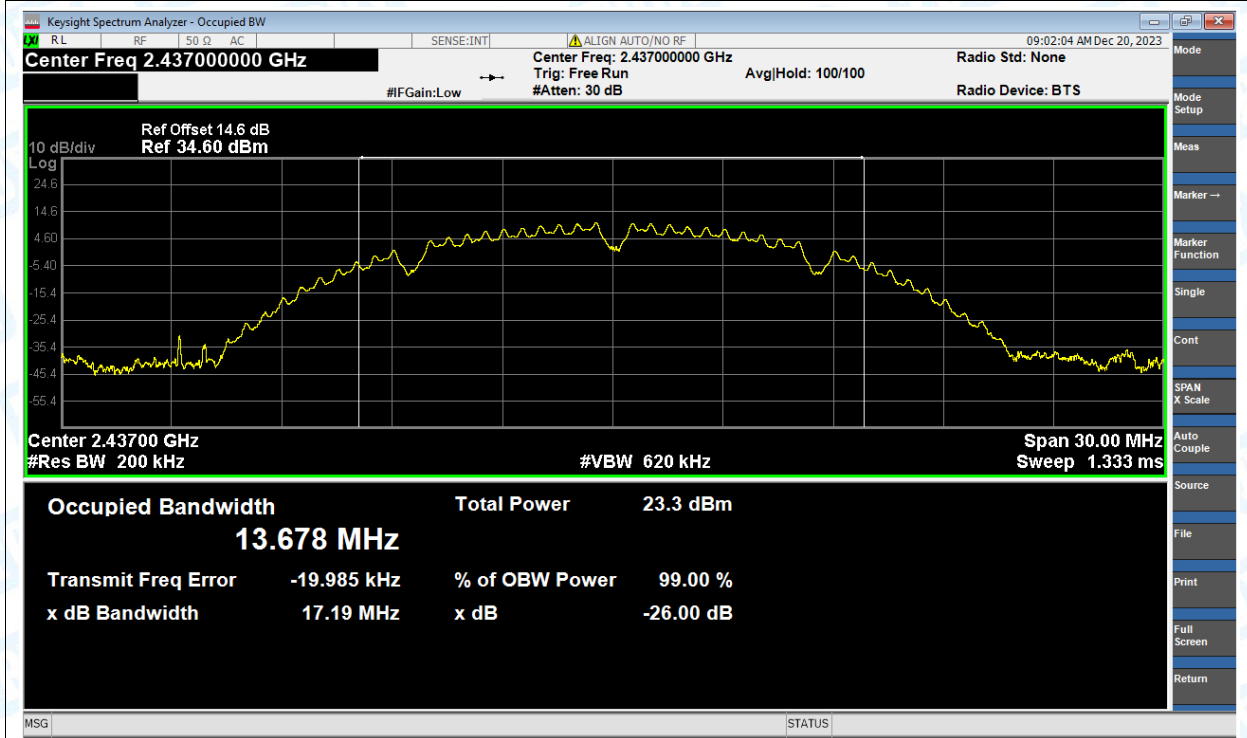
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	13.388
NVNT	b	2437	Ant1	13.678
NVNT	b	2462	Ant1	13.294
NVNT	g	2412	Ant1	16.559
NVNT	g	2437	Ant1	16.57
NVNT	g	2462	Ant1	16.613
NVNT	n(HT20)	2412	Ant1	17.693
NVNT	n(HT20)	2437	Ant1	17.664
NVNT	n(HT20)	2462	Ant1	17.652
NVNT	n(HT40)	2422	Ant1	36.181
NVNT	n(HT40)	2437	Ant1	36.188
NVNT	n(HT40)	2452	Ant1	36.186

Test Graphs

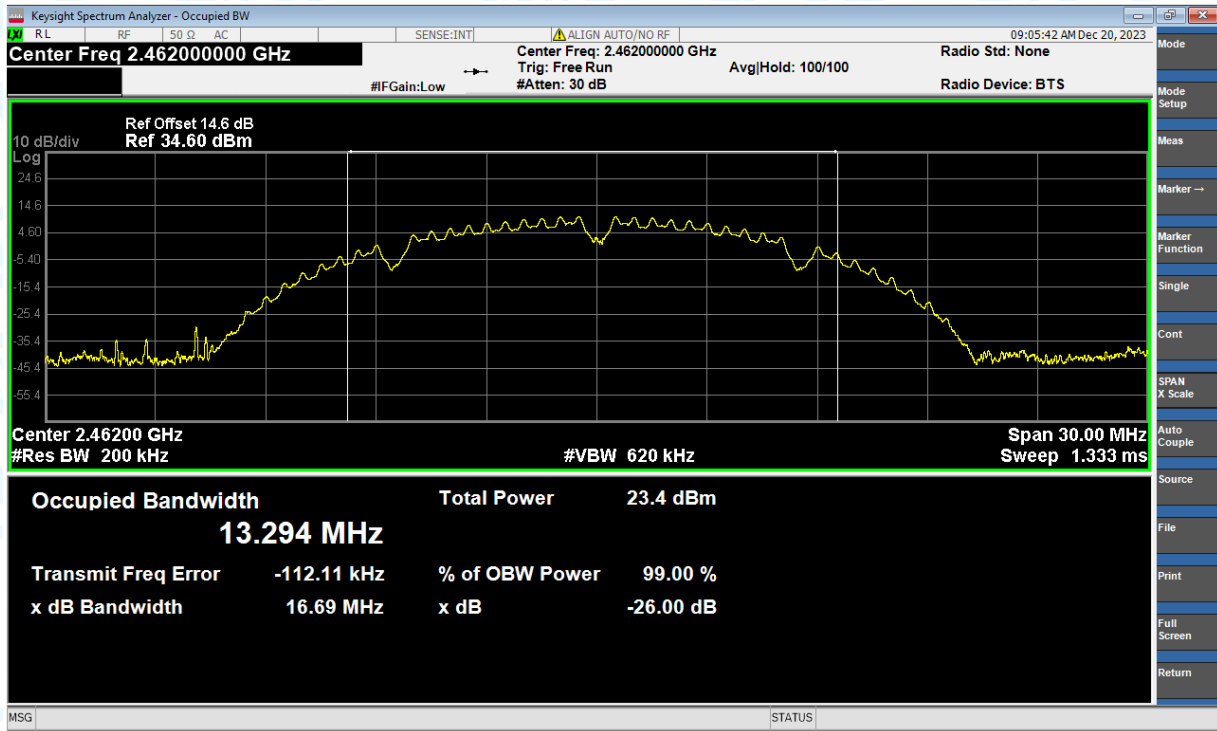
OBW NVNT b 2412MHz Ant1



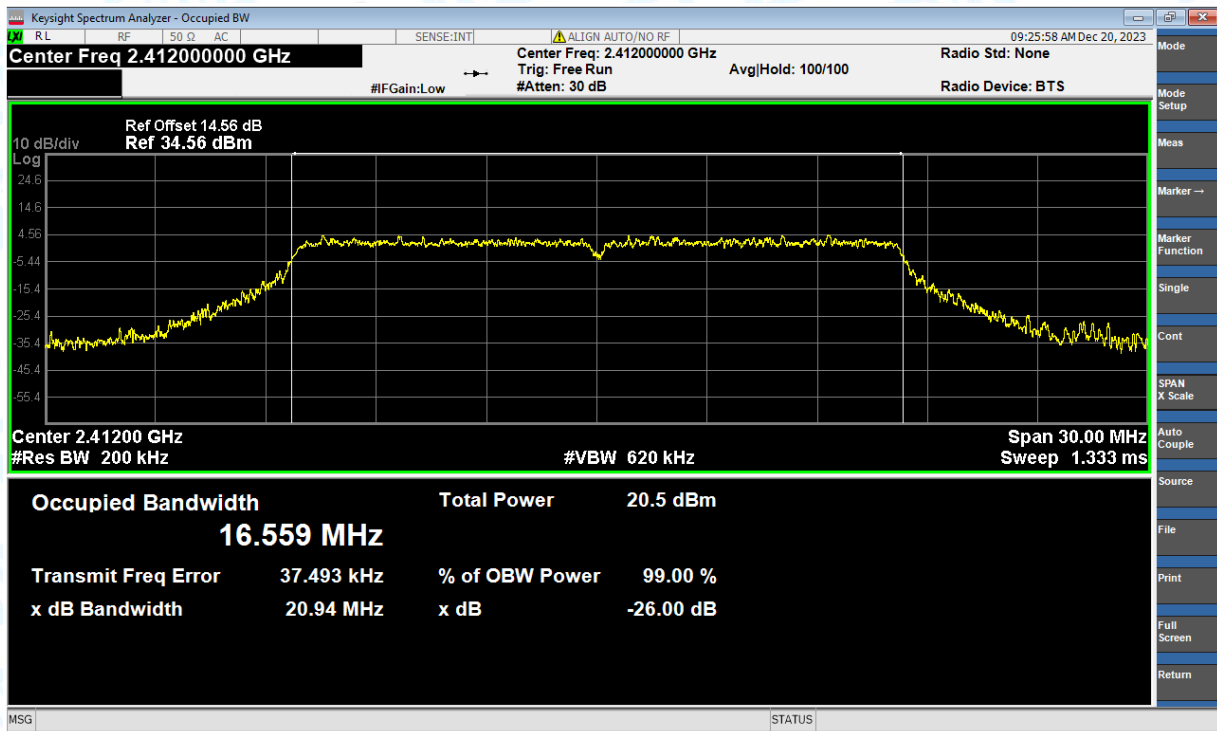
OBW NVNT b 2437MHz Ant1



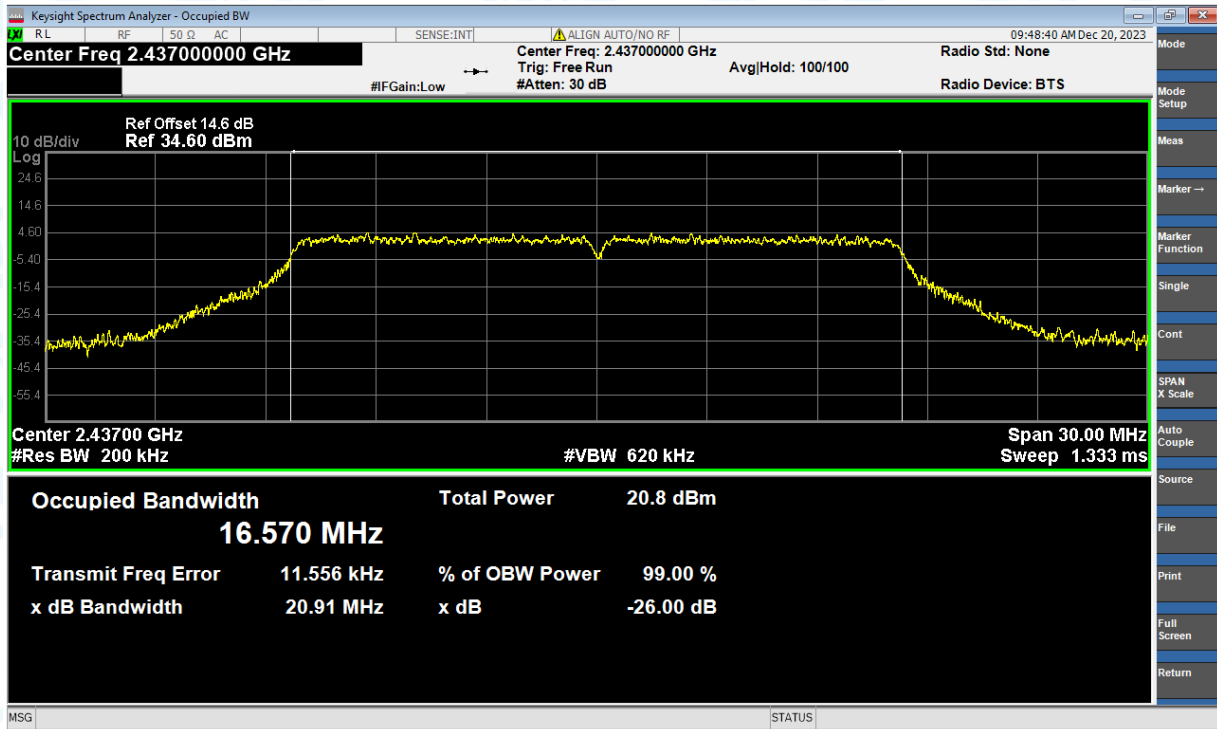
OBW NVNT b 2462MHz Ant1



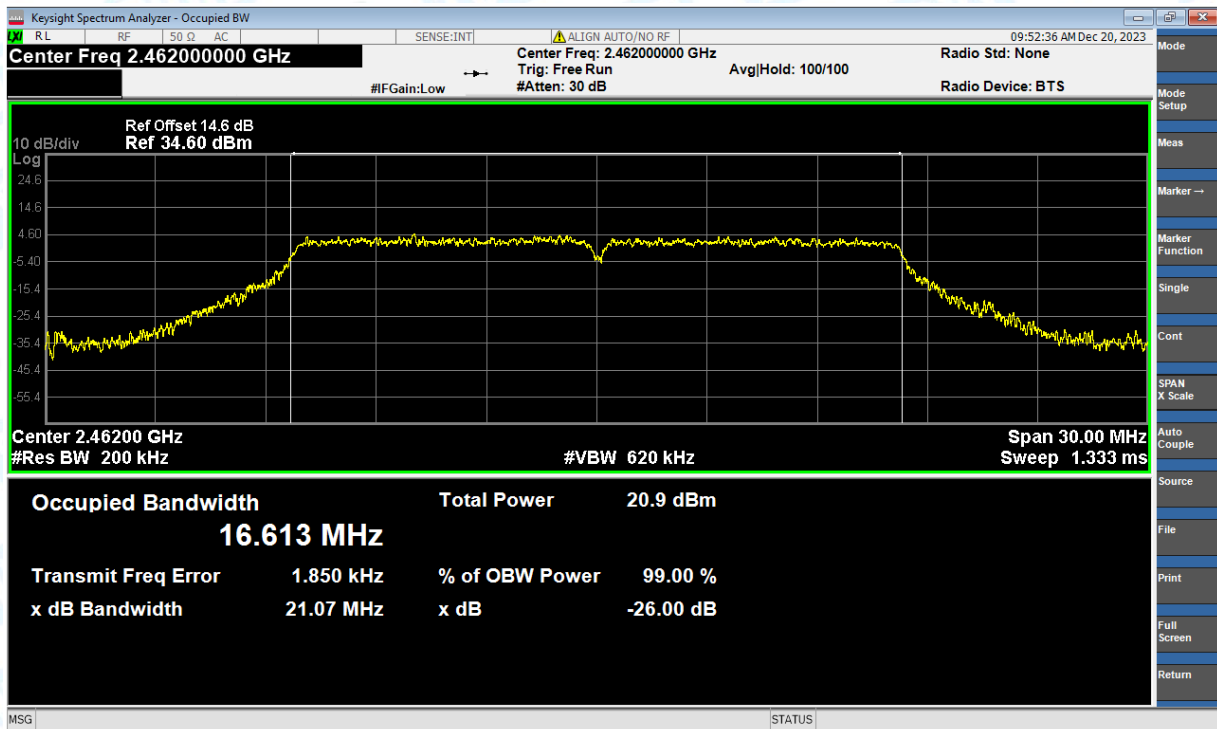
OBW NVNT g 2412MHz Ant1



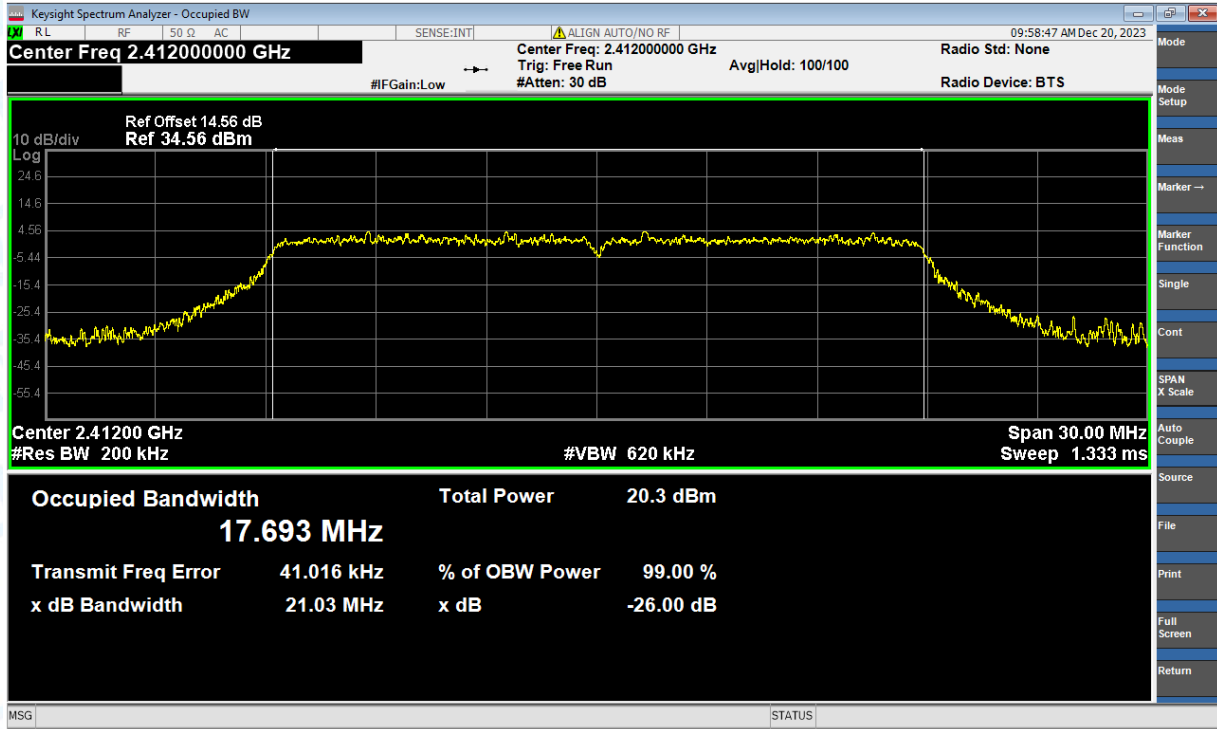
OBW NVNT g 2437MHz Ant1



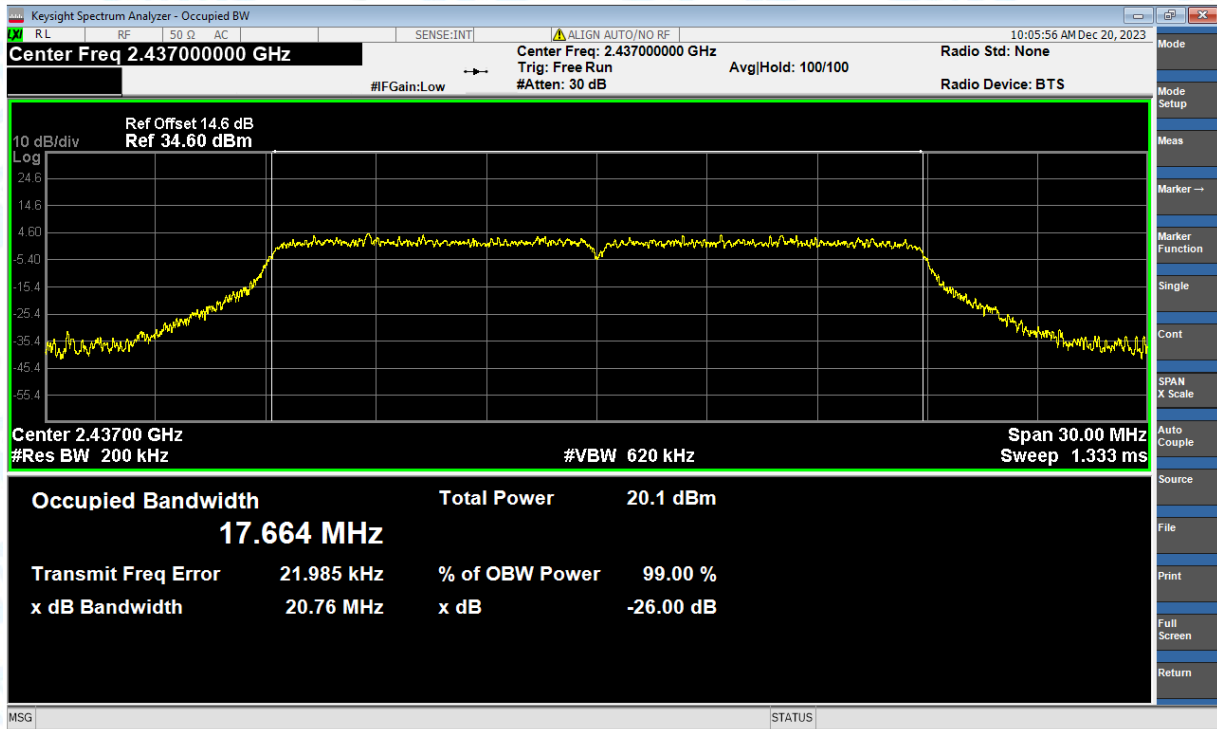
OBW NVNT g 2462MHz Ant1



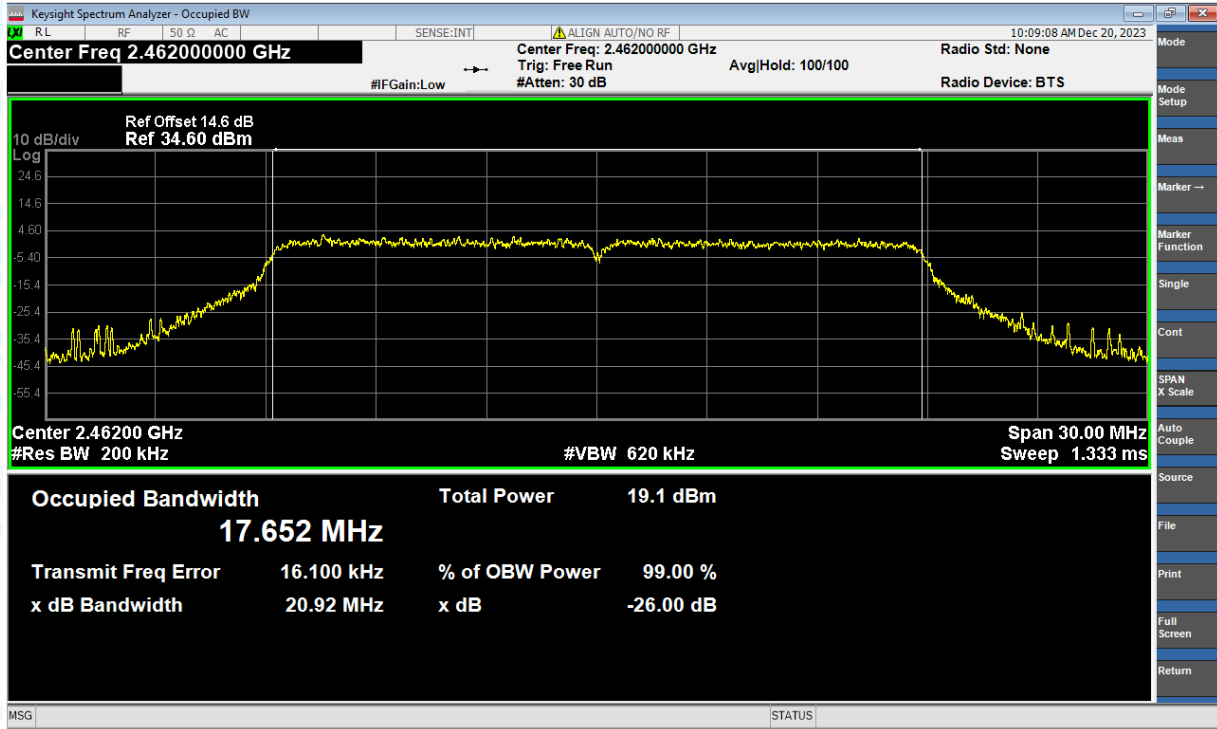
OBW NVNT n(HT20) 2412MHz Ant1



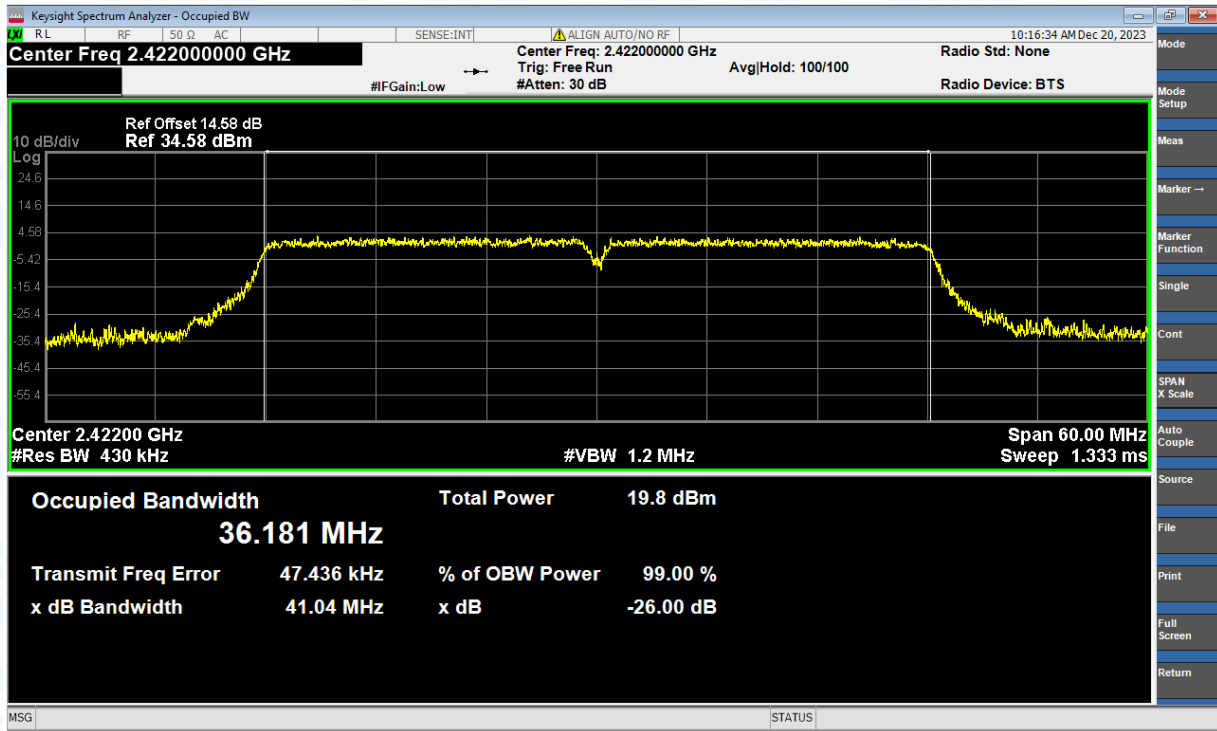
OBW NVNT n(HT20) 2437MHz Ant1



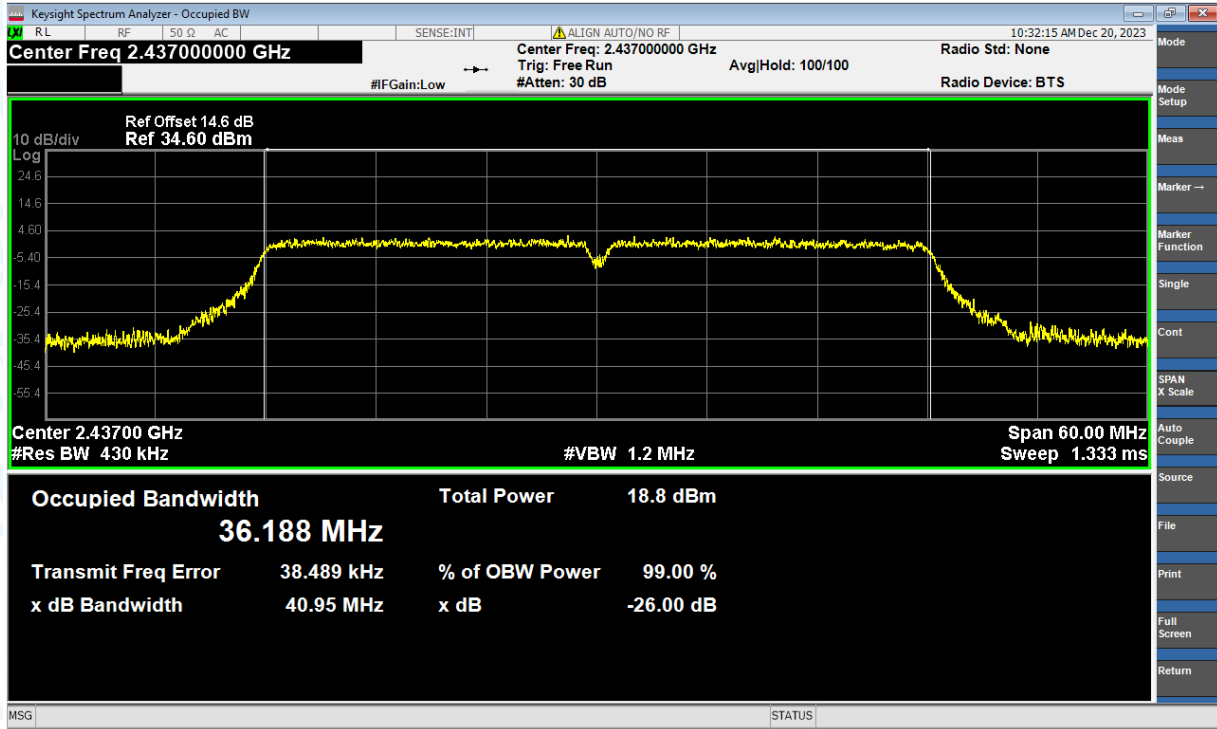
OBW NVNT n(HT20) 2462MHz Ant1



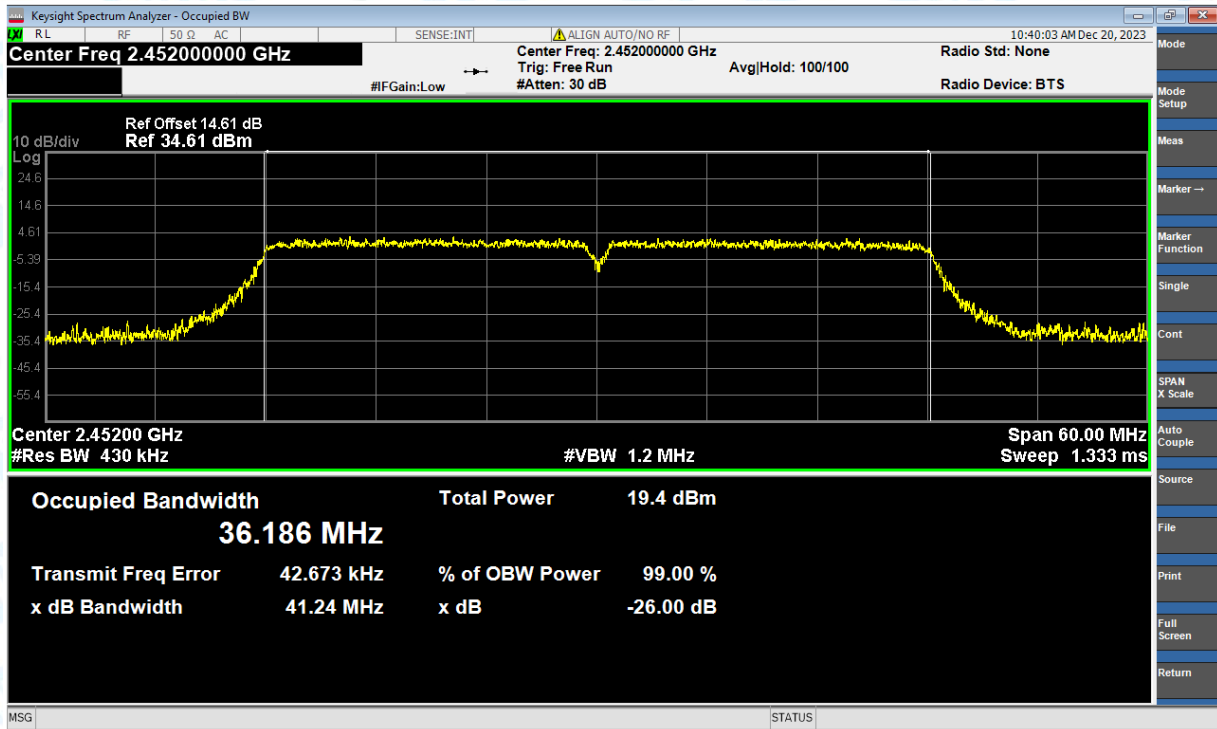
OBW NVNT n(HT40) 2422MHz Ant1



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	-13.968	8	Pass
NVNT	b	2437	Ant1	-13.314	8	Pass
NVNT	b	2462	Ant1	-13.427	8	Pass
NVNT	g	2412	Ant1	-19.349	8	Pass
NVNT	g	2437	Ant1	-19.189	8	Pass
NVNT	g	2462	Ant1	-19.125	8	Pass
NVNT	n(HT20)	2412	Ant1	-19.91	8	Pass
NVNT	n(HT20)	2437	Ant1	-20.15	8	Pass
NVNT	n(HT20)	2462	Ant1	-19.753	8	Pass
NVNT	n(HT40)	2422	Ant1	-25.395	8	Pass
NVNT	n(HT40)	2437	Ant1	-24.931	8	Pass
NVNT	n(HT40)	2452	Ant1	-26.047	8	Pass

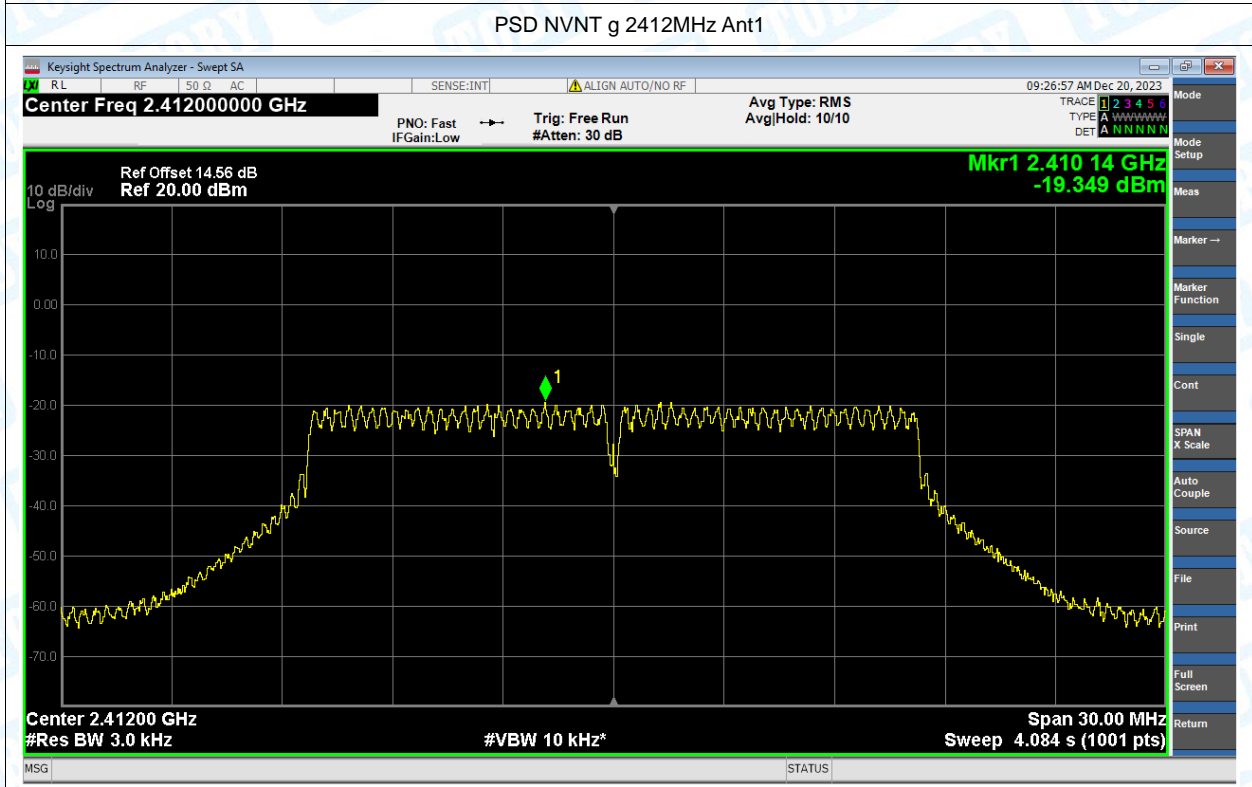
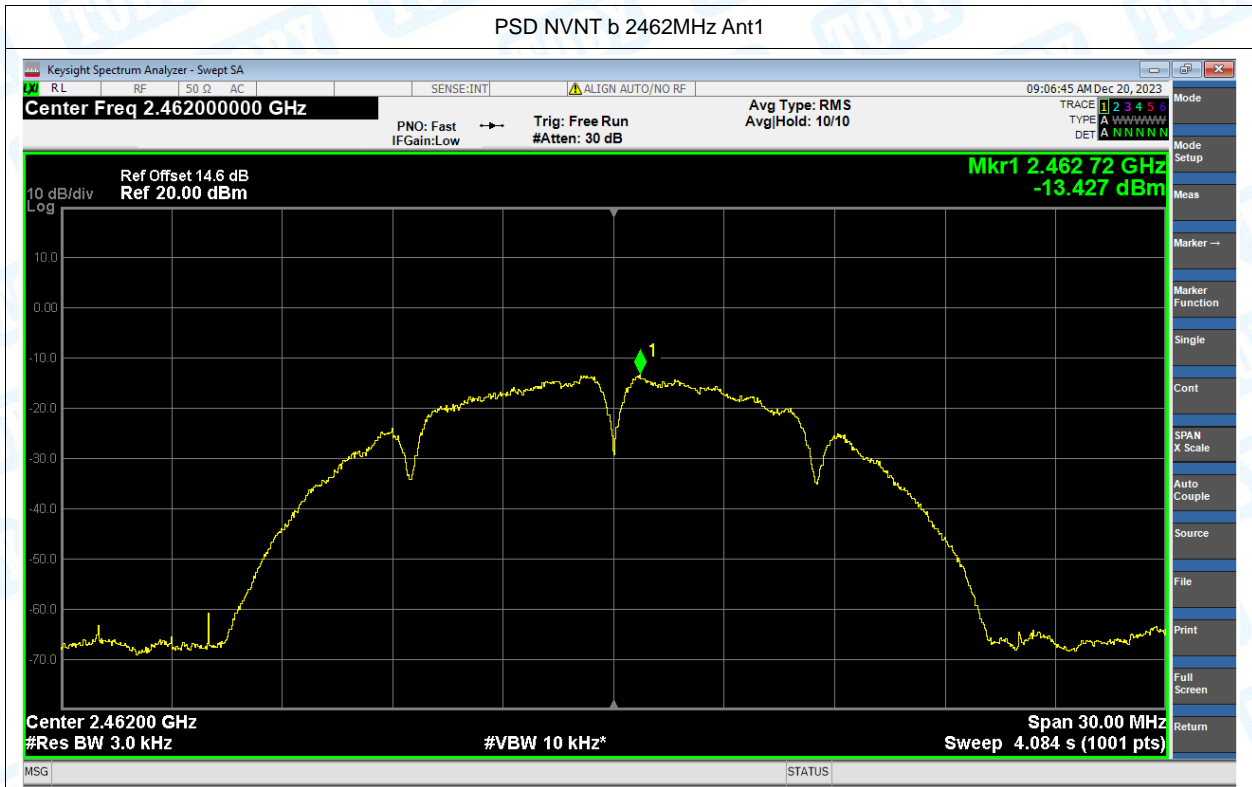
Test Graphs

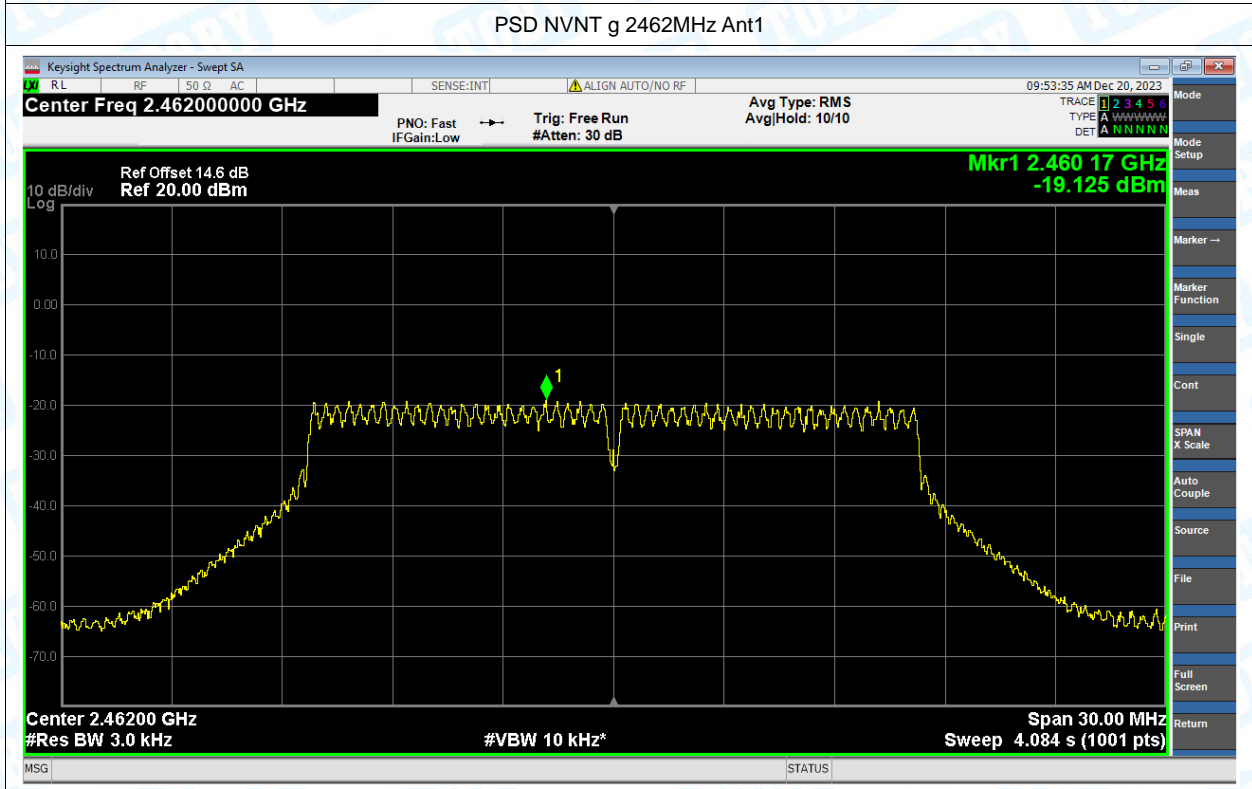
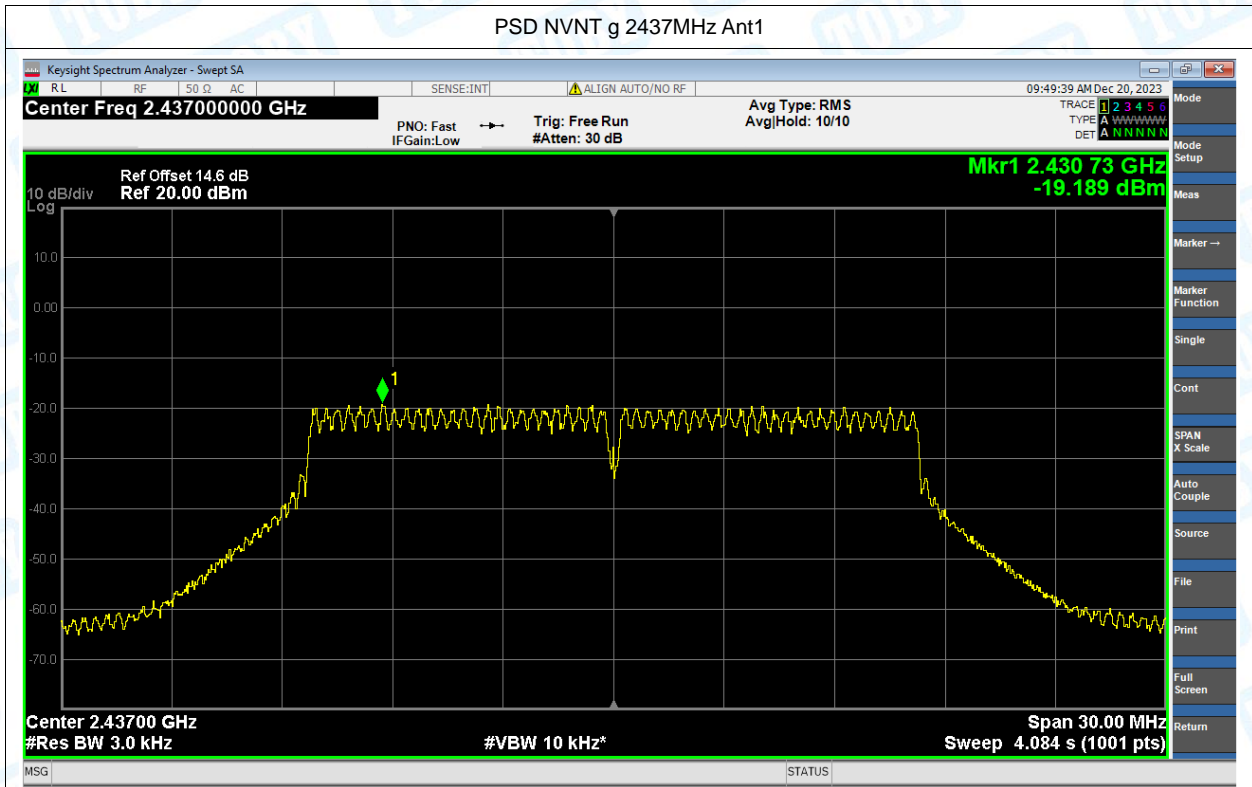
PSD NVNT b 2412MHz Ant1



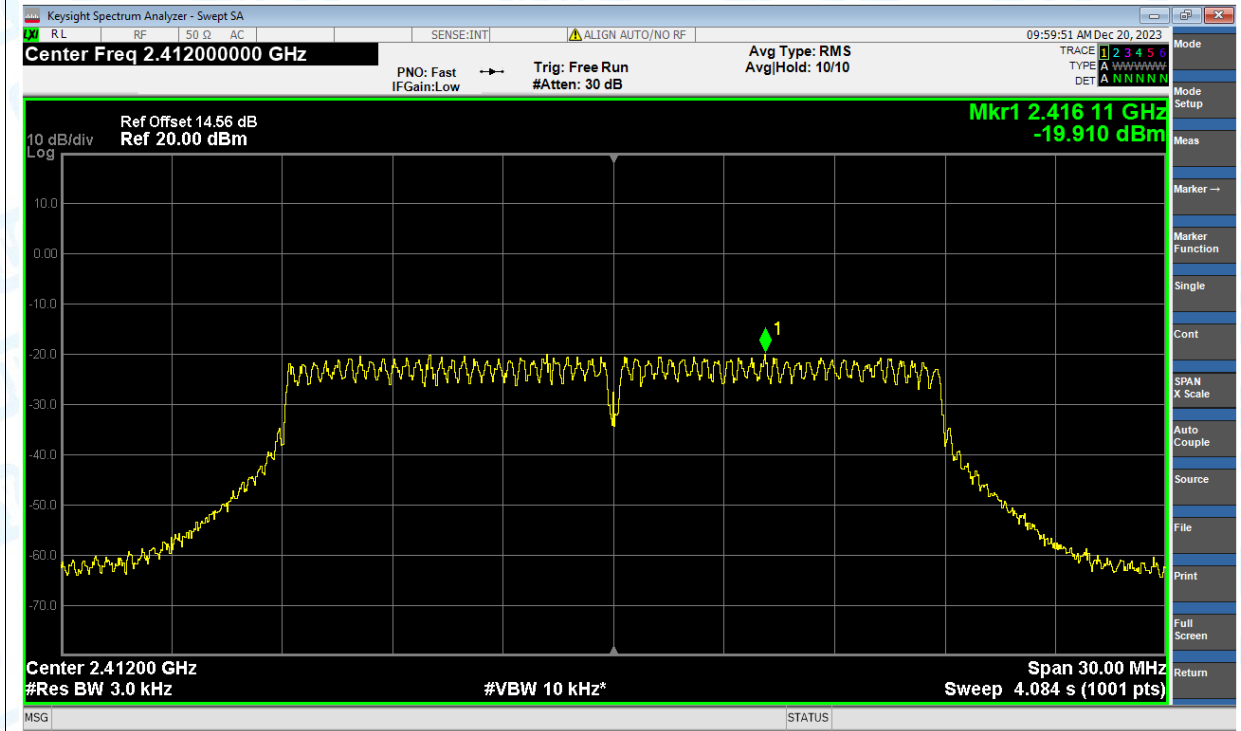
PSD NVNT b 2437MHz Ant1



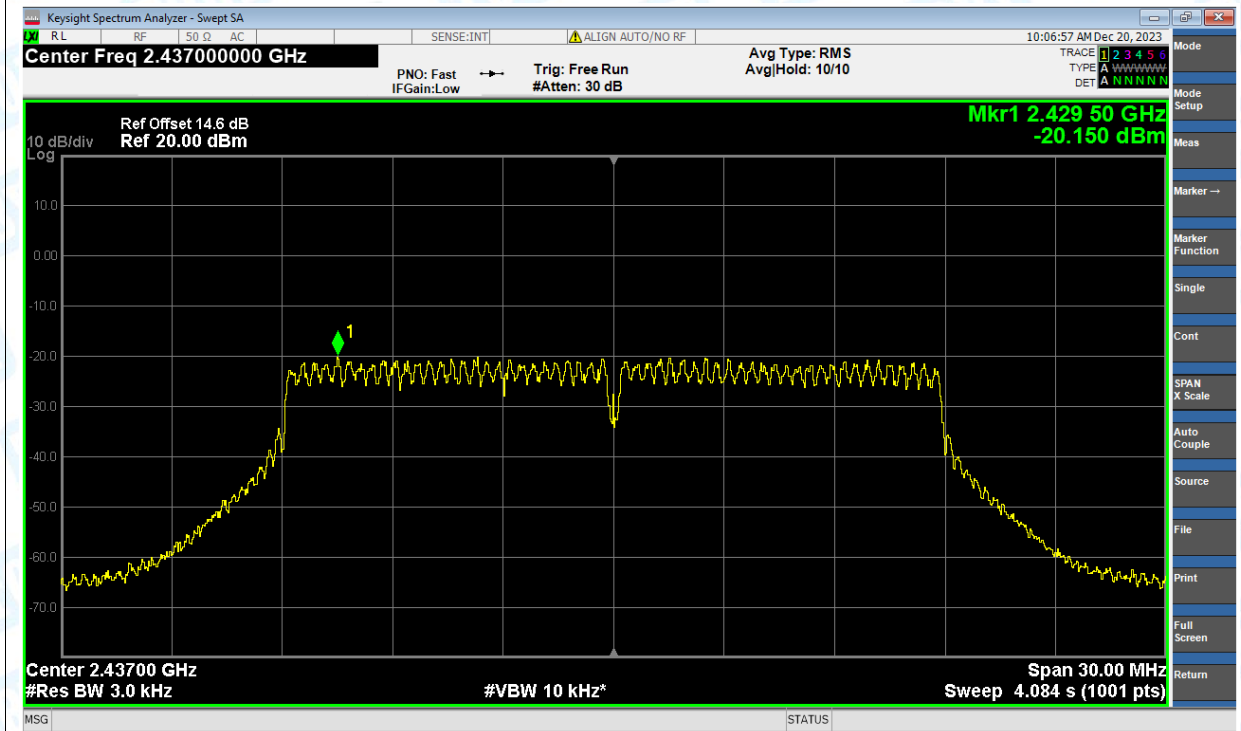




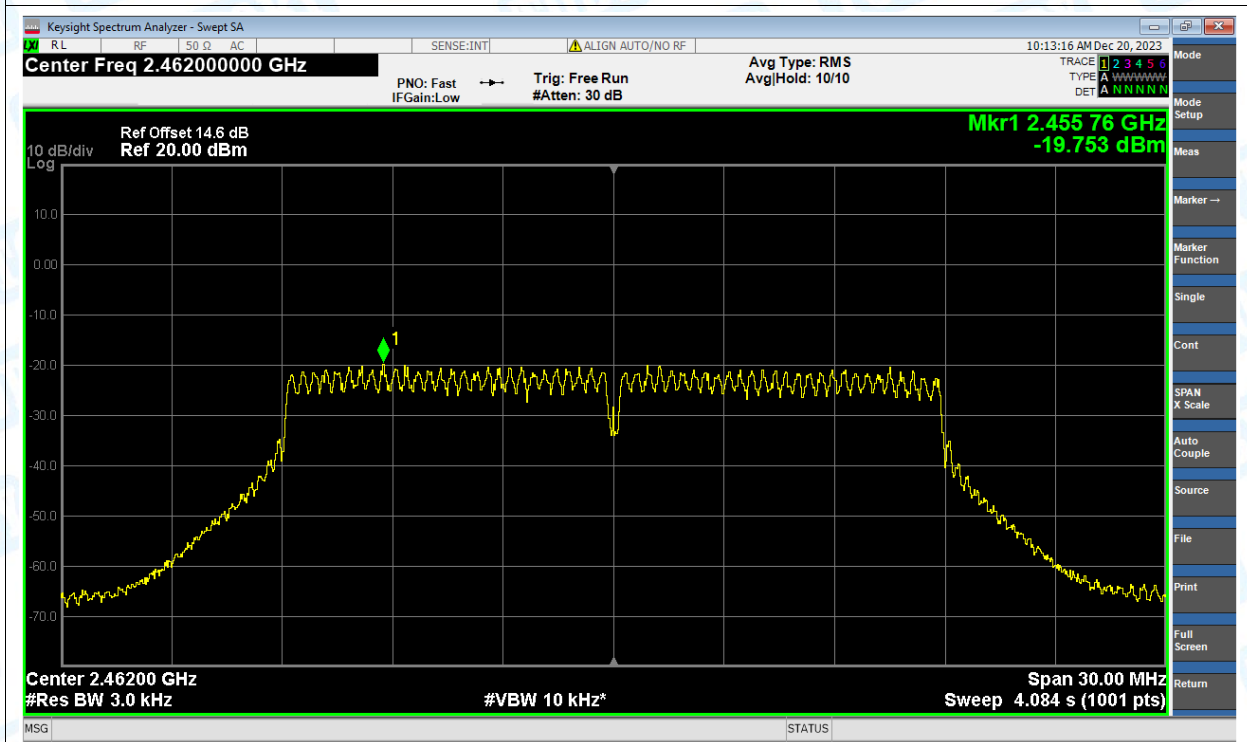
PSD NVNT n(HT20) 2412MHz Ant1



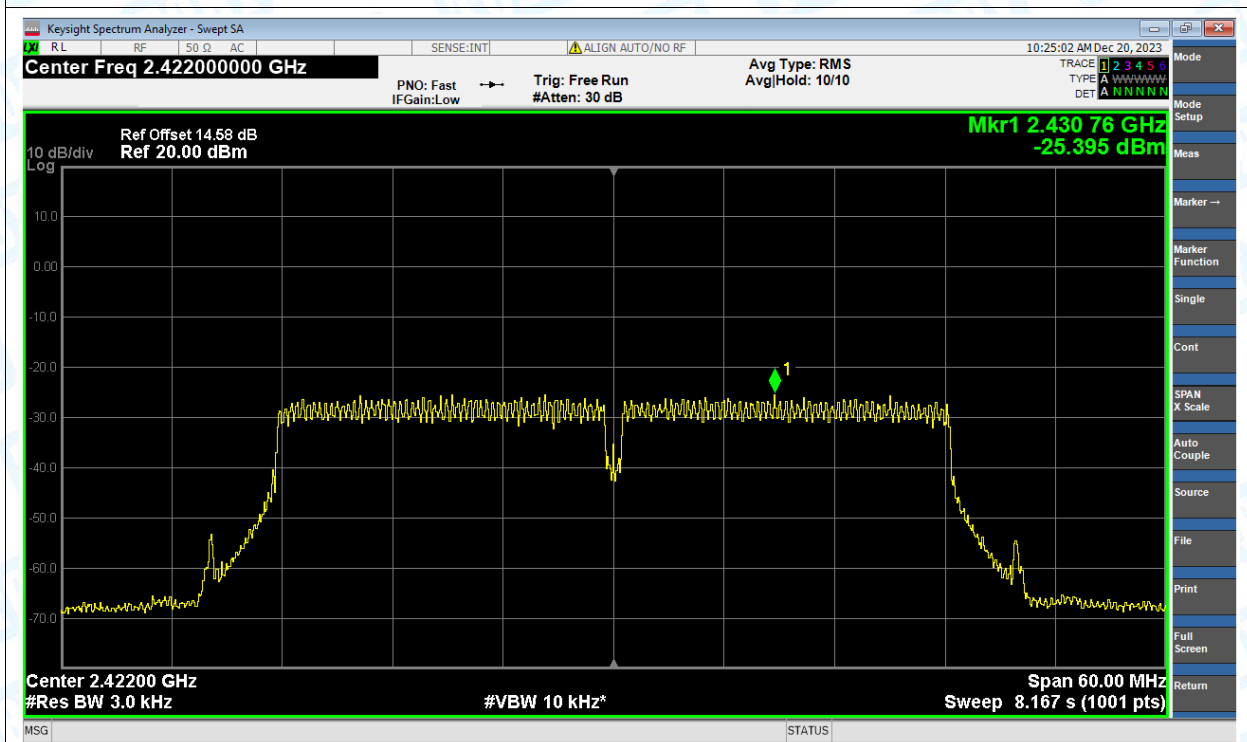
PSD NVNT n(HT20) 2437MHz Ant1



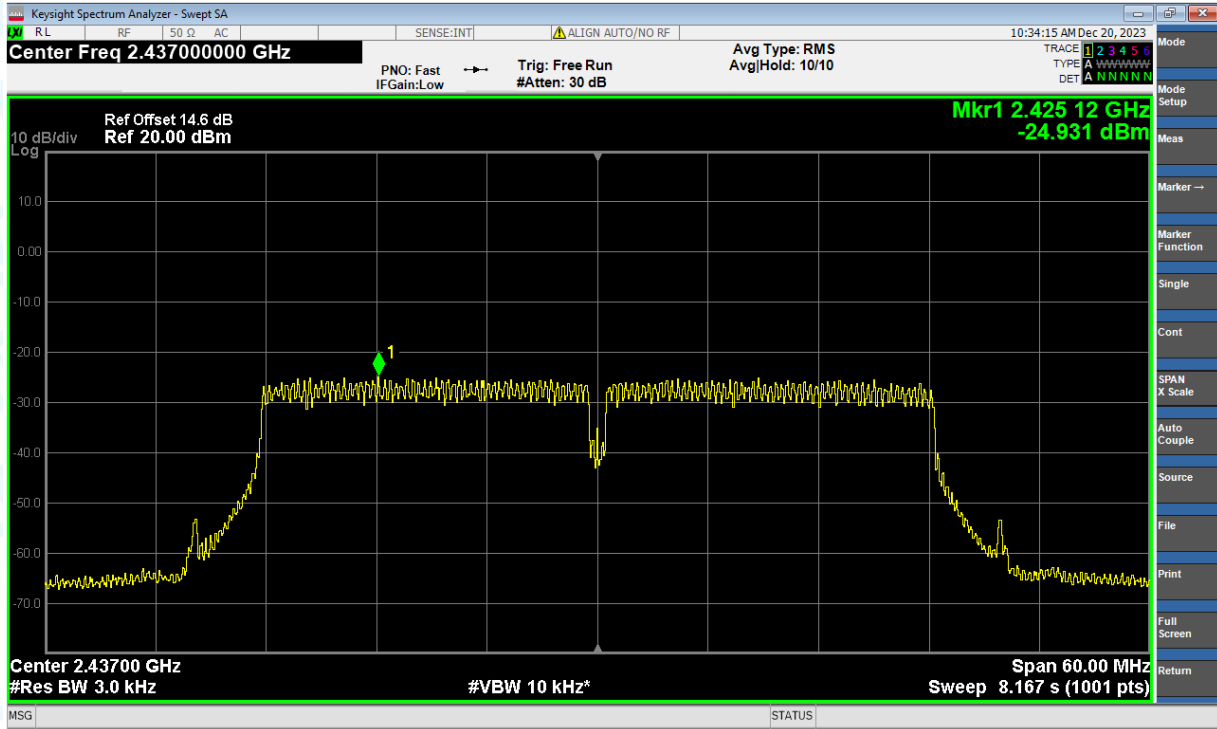
PSD NVNT n(HT20) 2462MHz Ant1



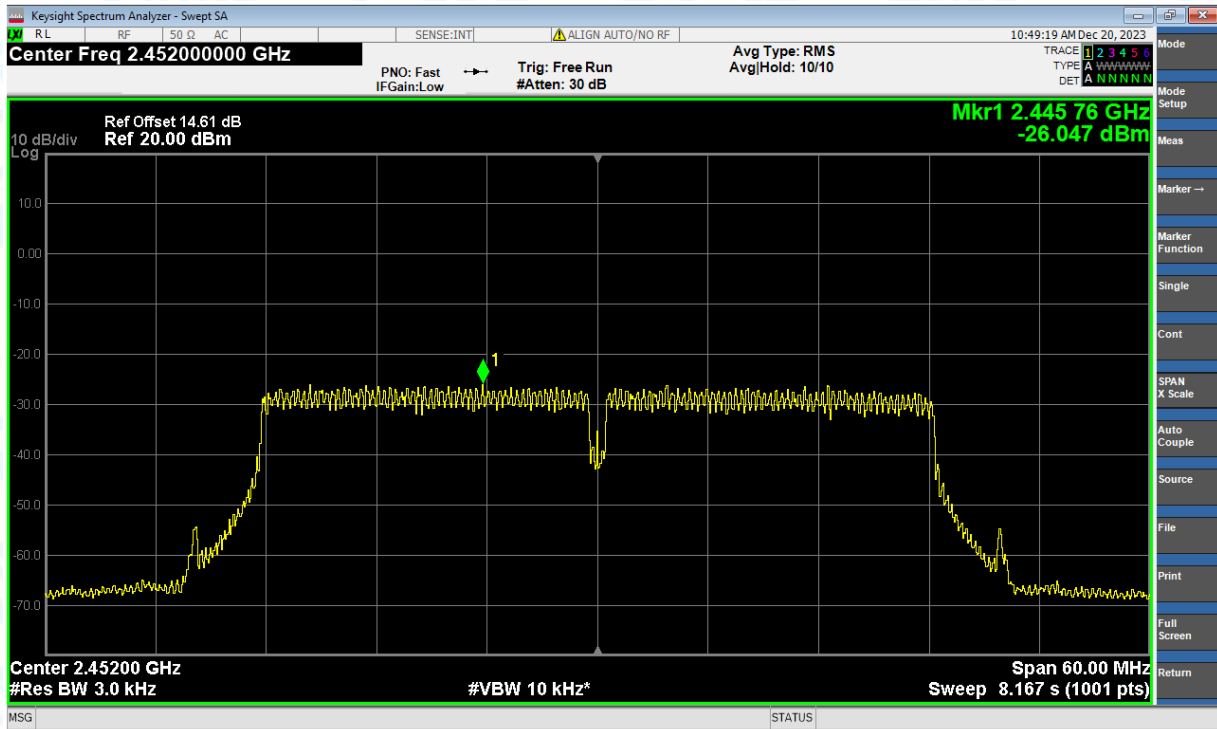
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

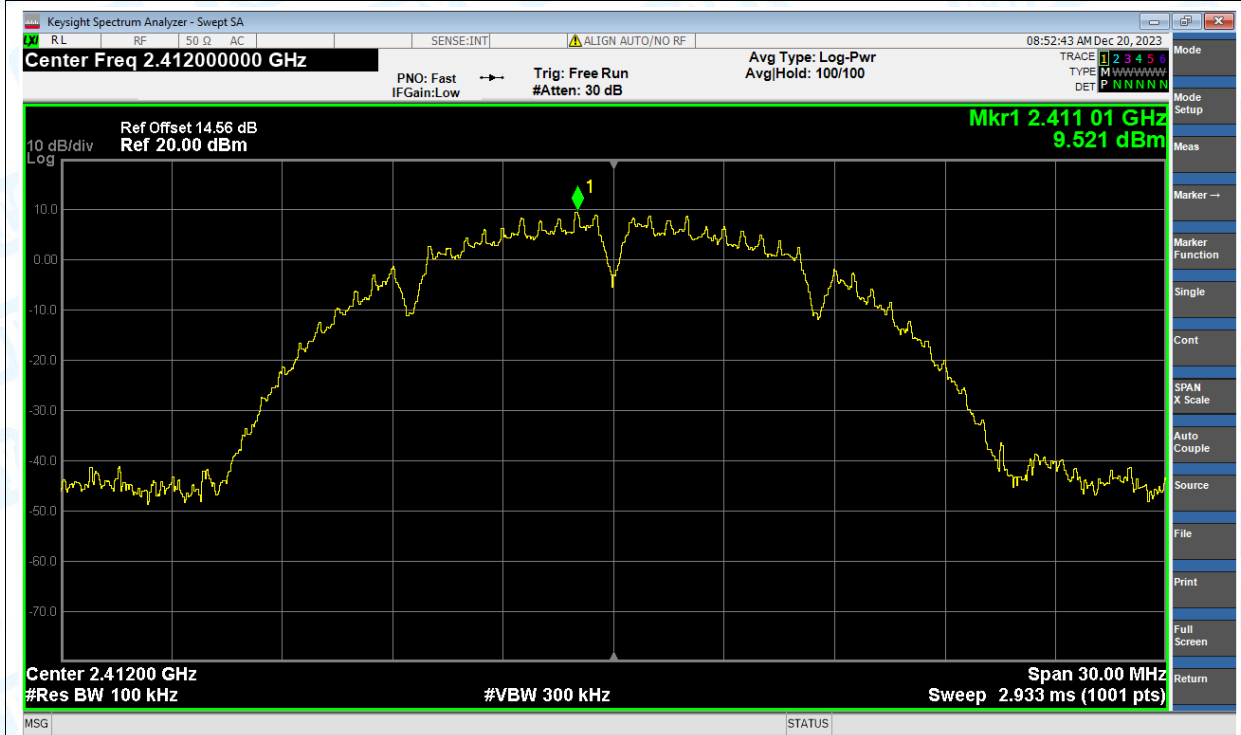


Band Edge

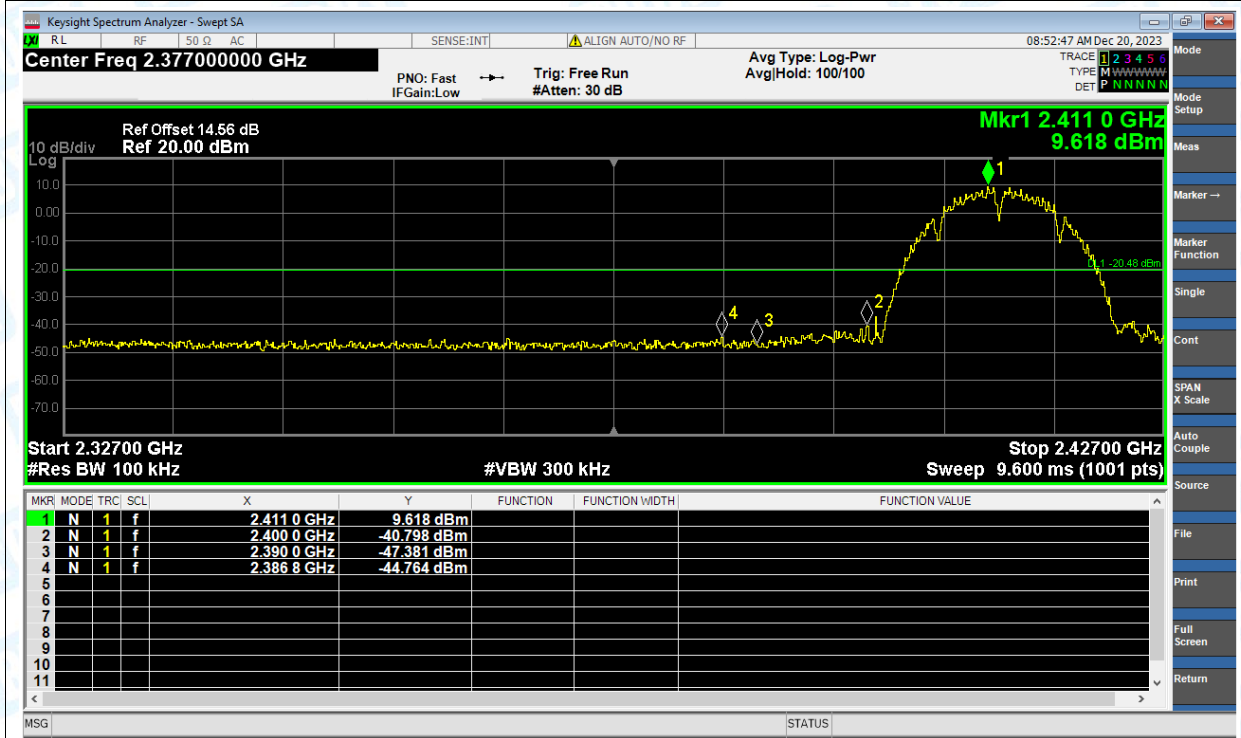
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-54.28	-30	Pass
NVNT	b	2462	Ant1	-54.31	-30	Pass
NVNT	g	2412	Ant1	-44.6	-30	Pass
NVNT	g	2462	Ant1	-44.76	-30	Pass
NVNT	n(HT20)	2412	Ant1	-43.1	-30	Pass
NVNT	n(HT20)	2462	Ant1	-44.77	-30	Pass
NVNT	n(HT40)	2422	Ant1	-41.98	-30	Pass
NVNT	n(HT40)	2452	Ant1	-40.3	-30	Pass

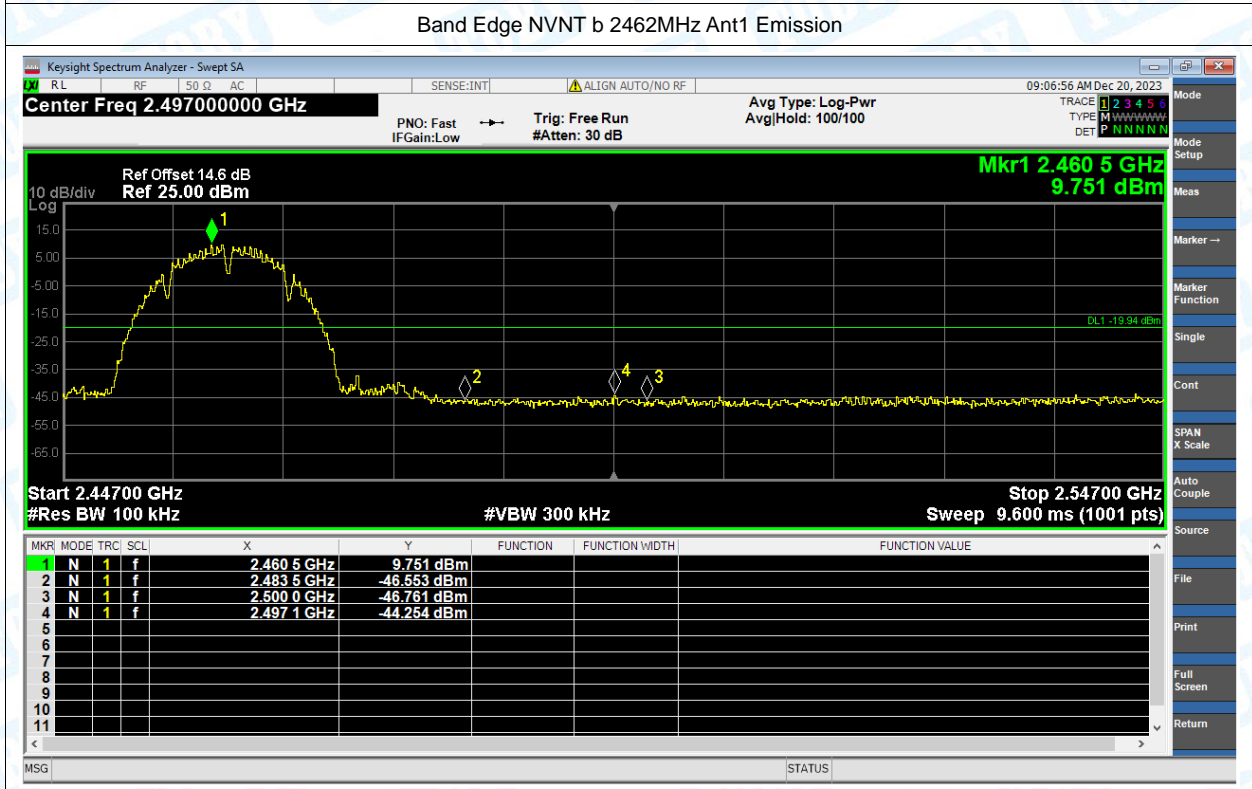
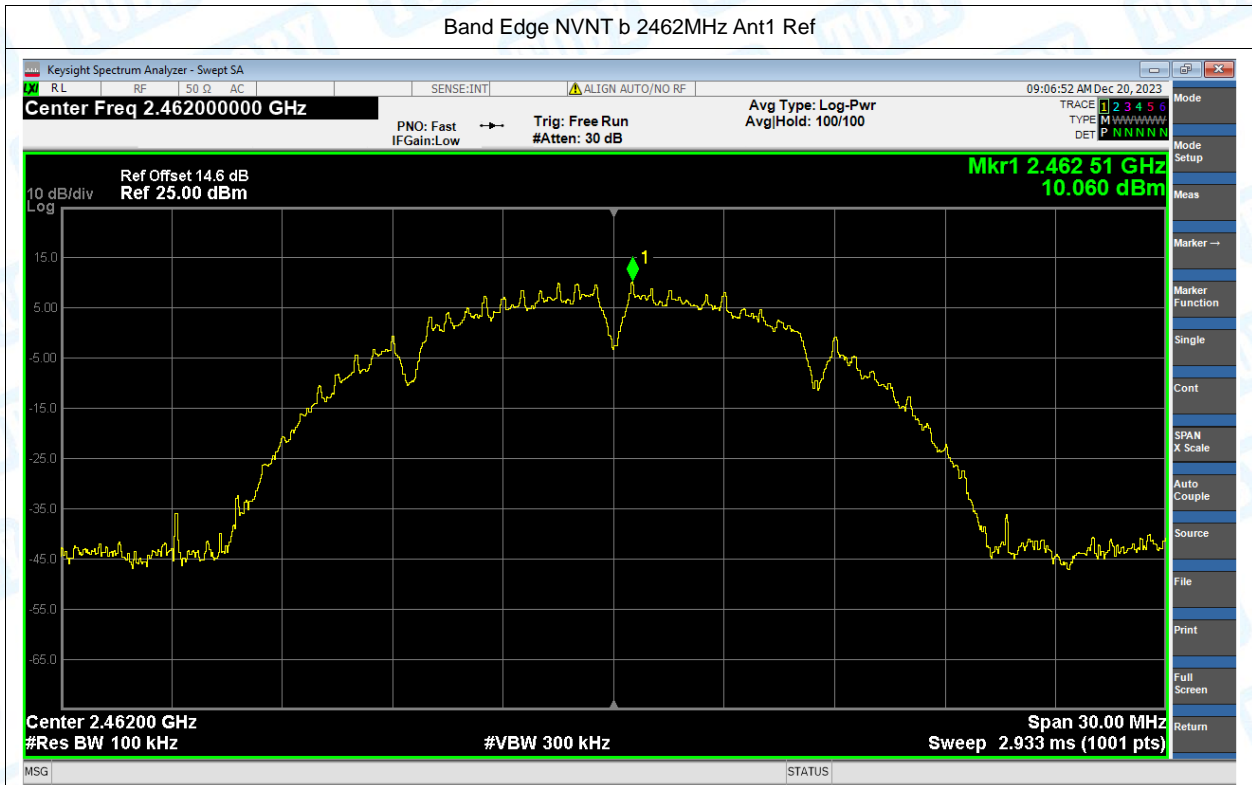
Test Graphs

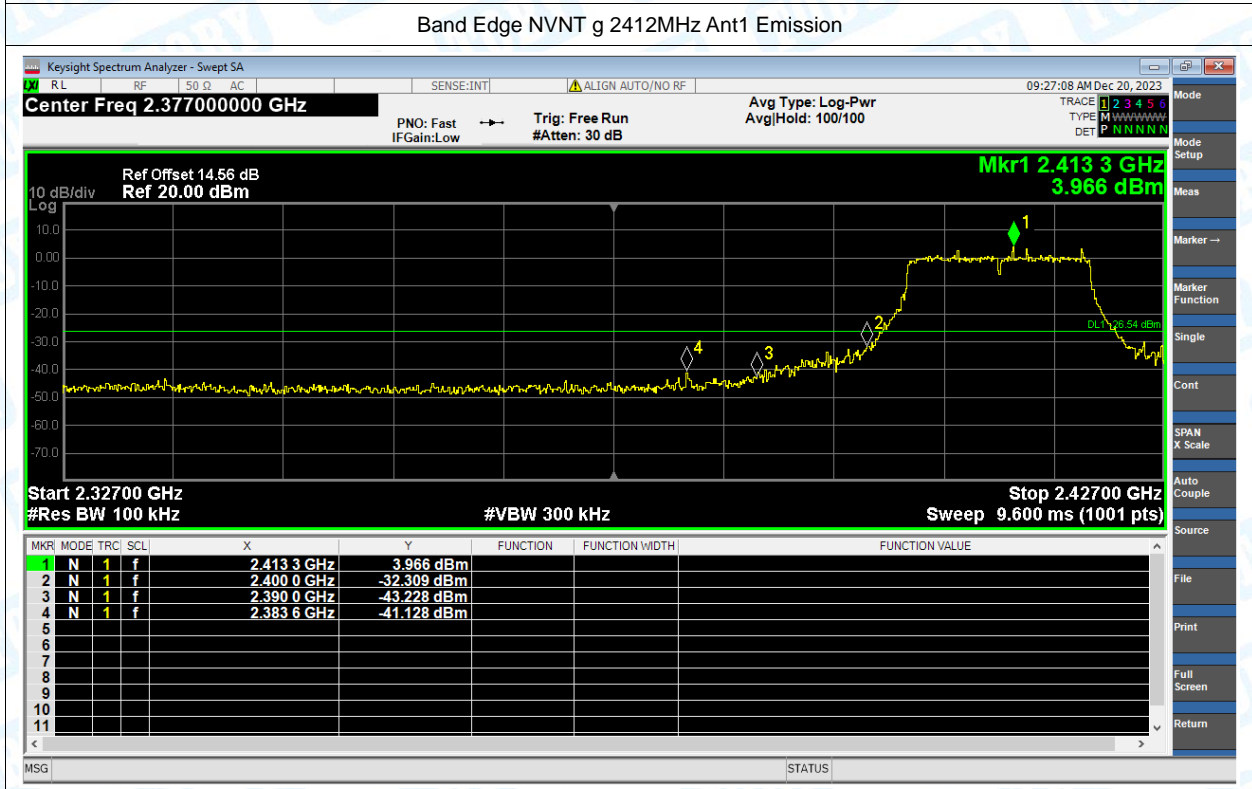
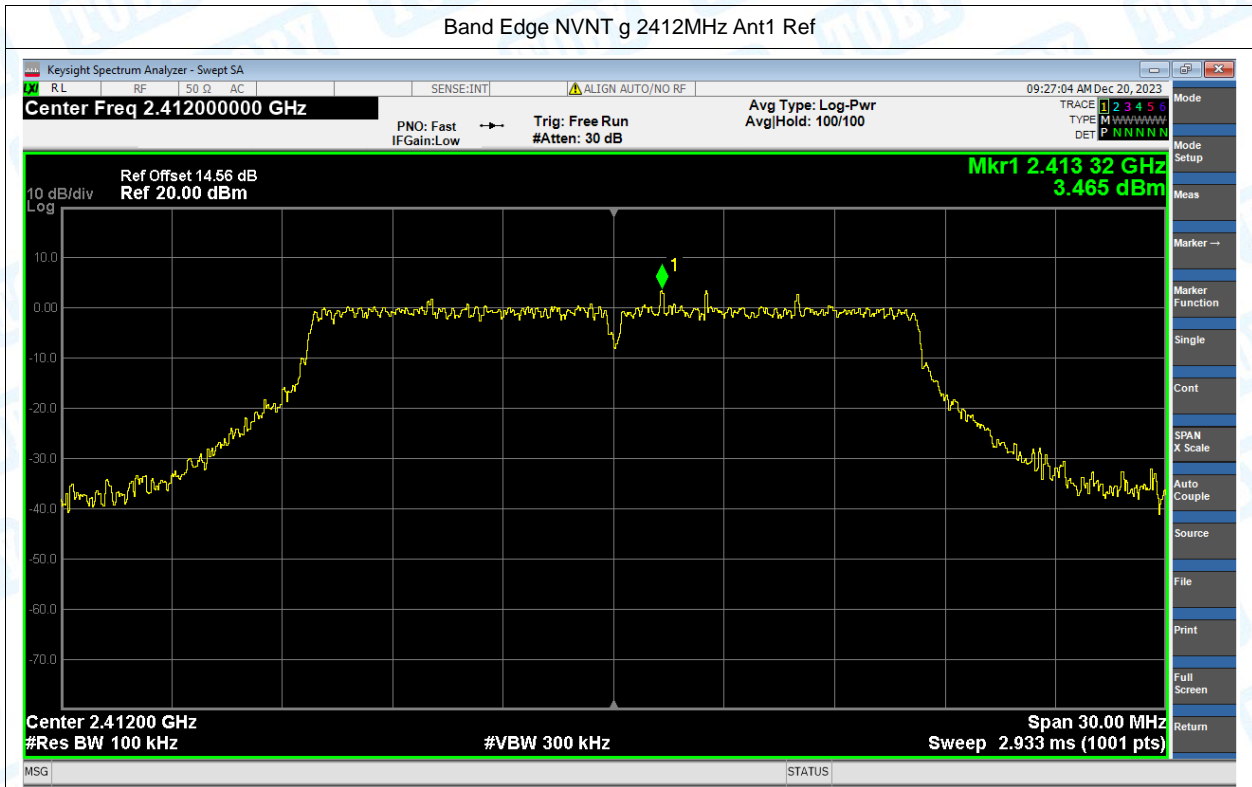
Band Edge NVNT b 2412MHz Ant1 Ref

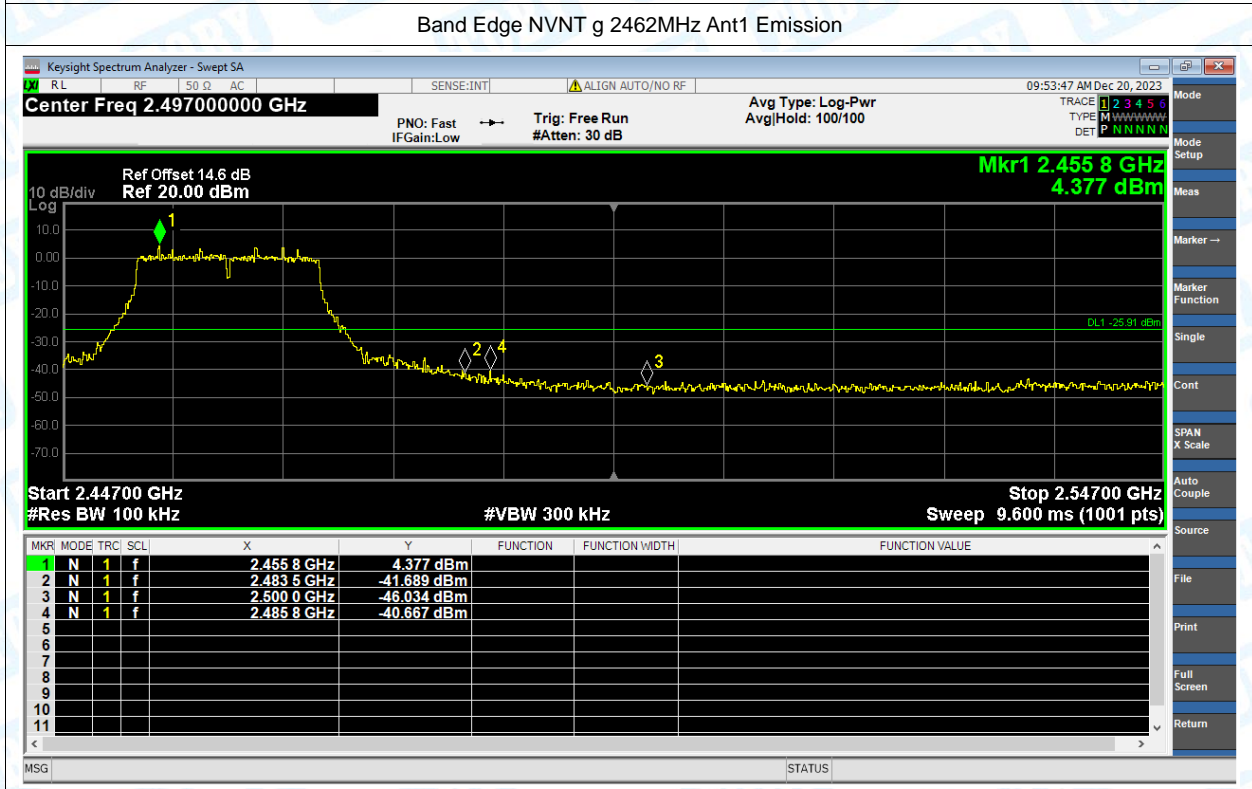
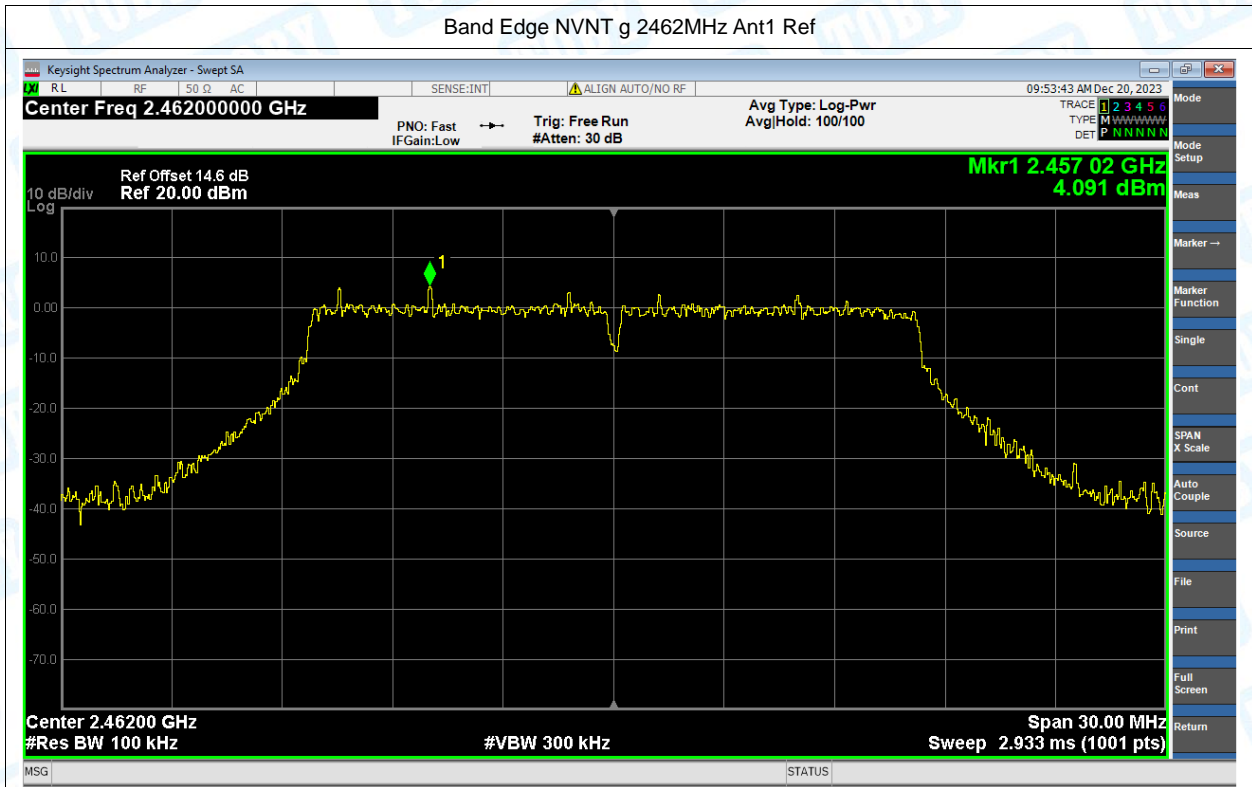


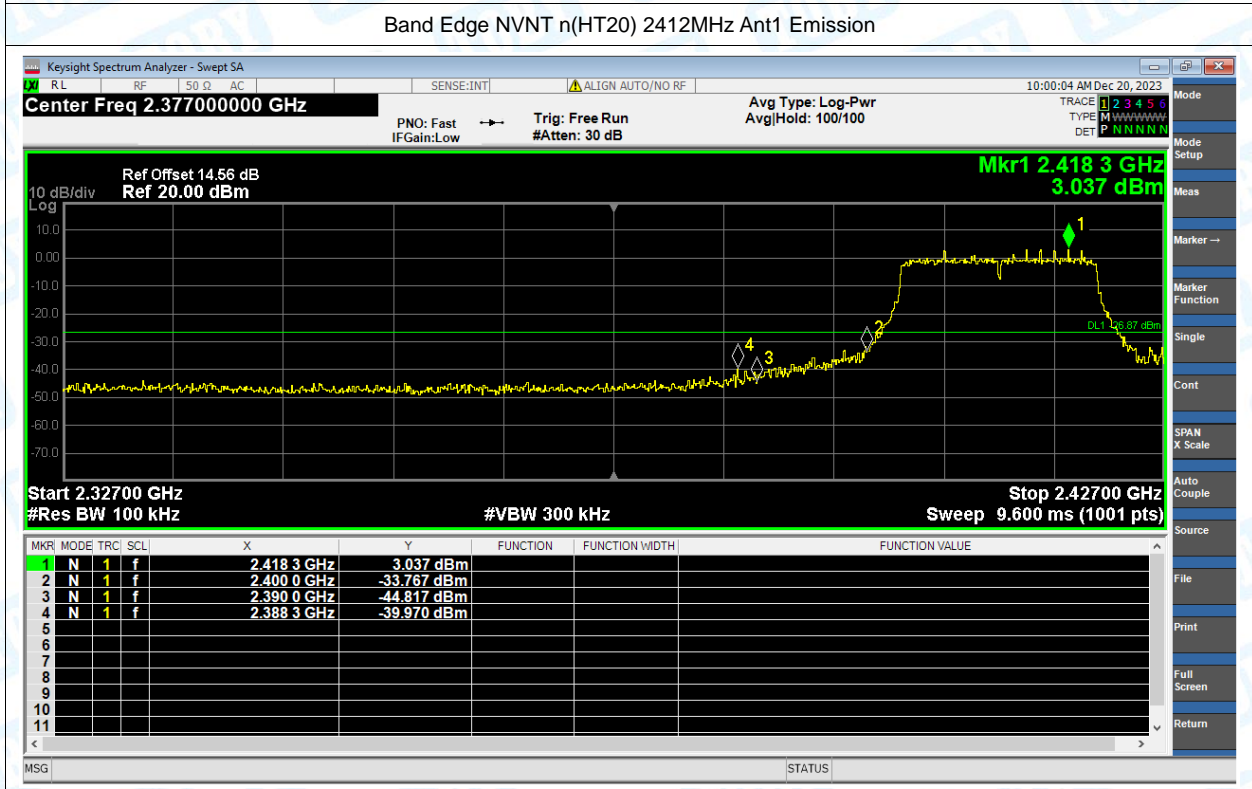
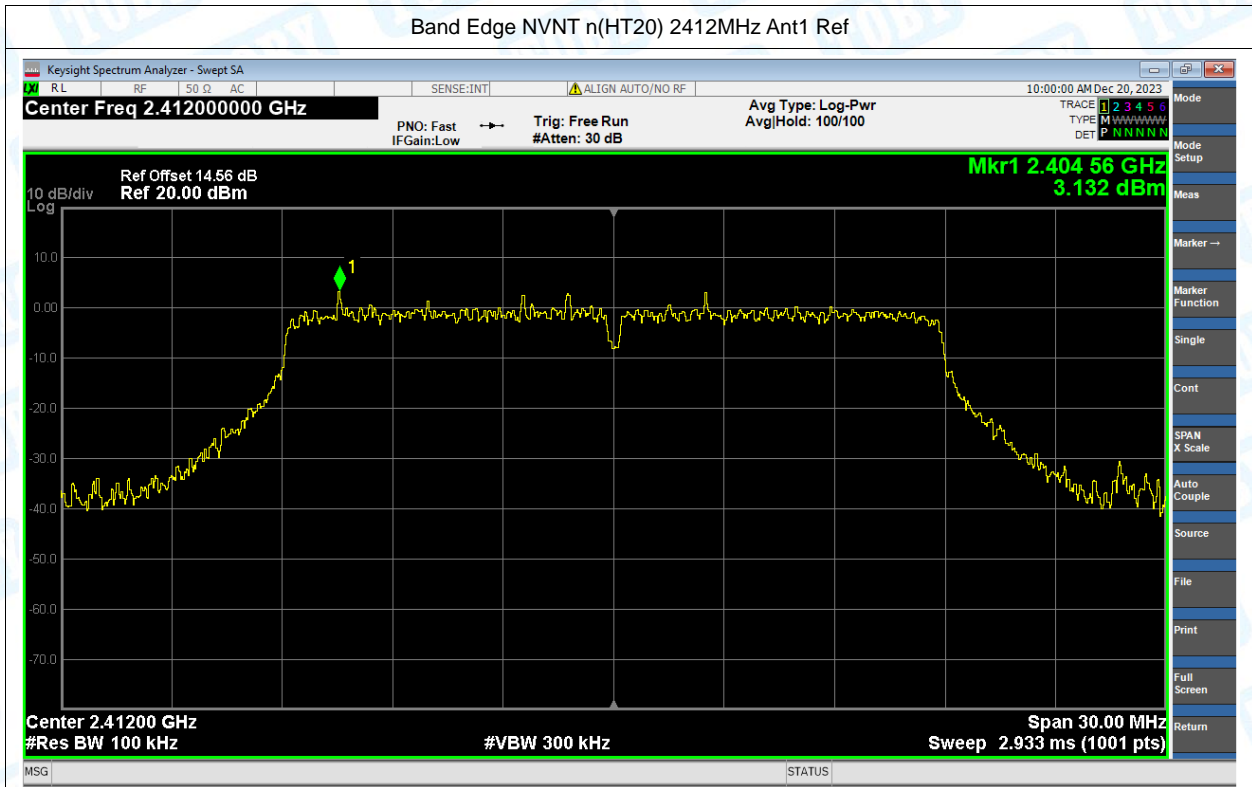
Band Edge NVNT b 2412MHz Ant1 Emission

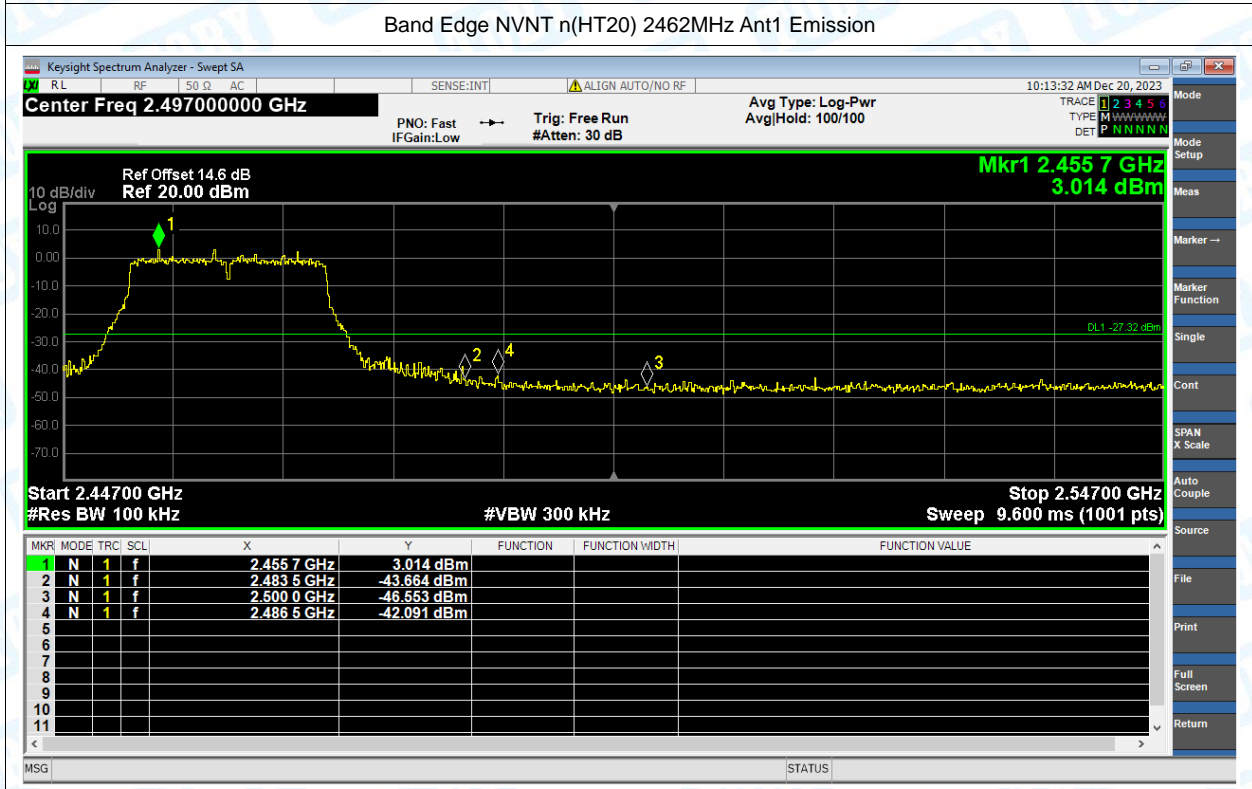
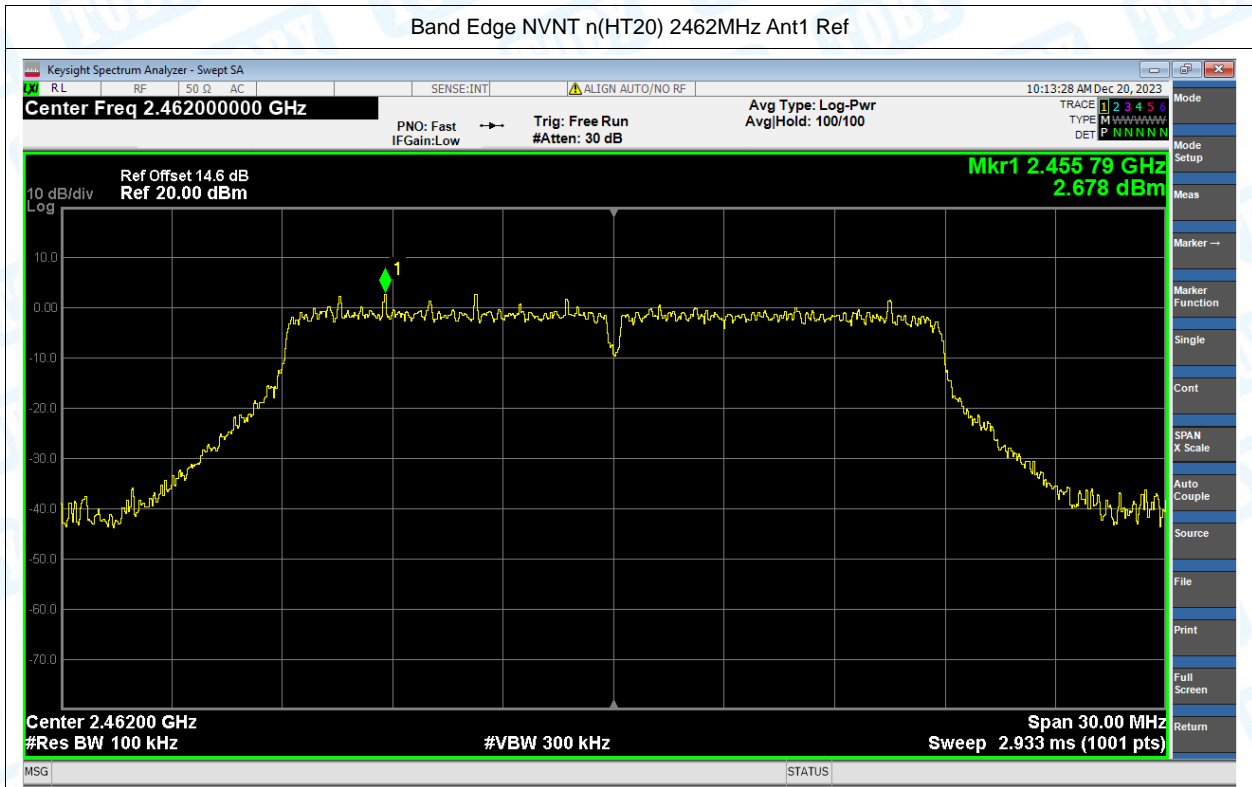




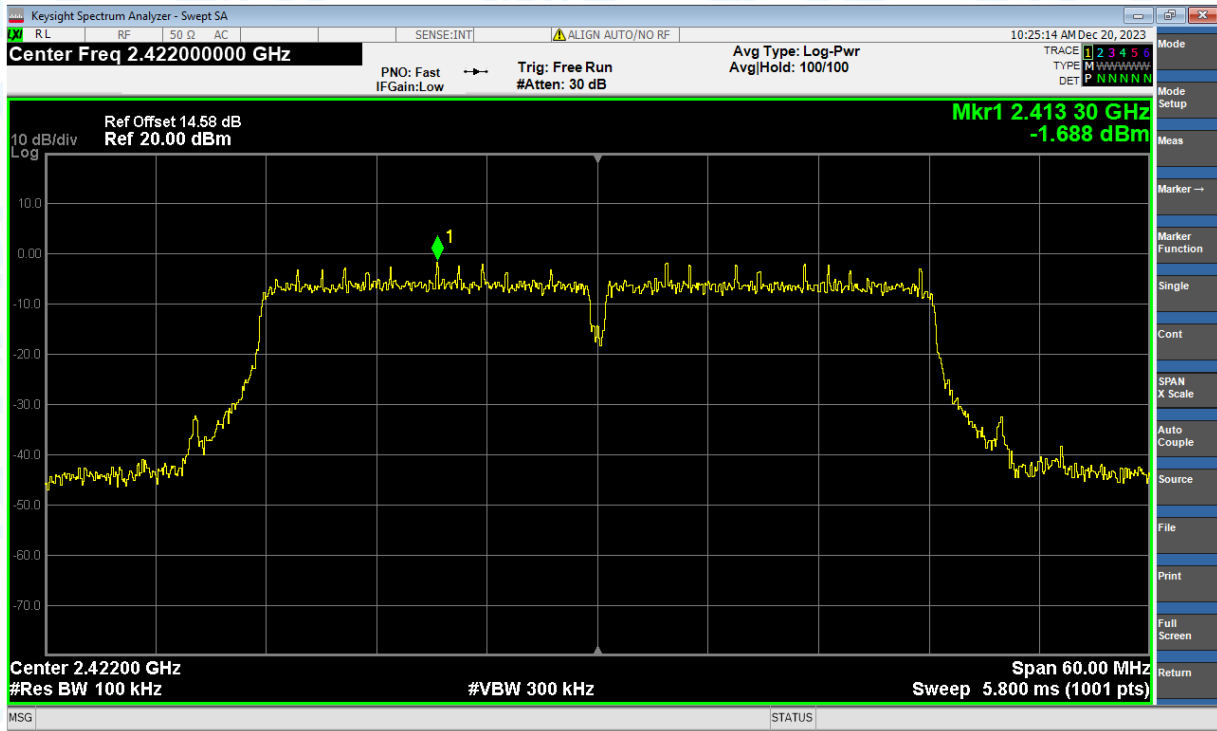




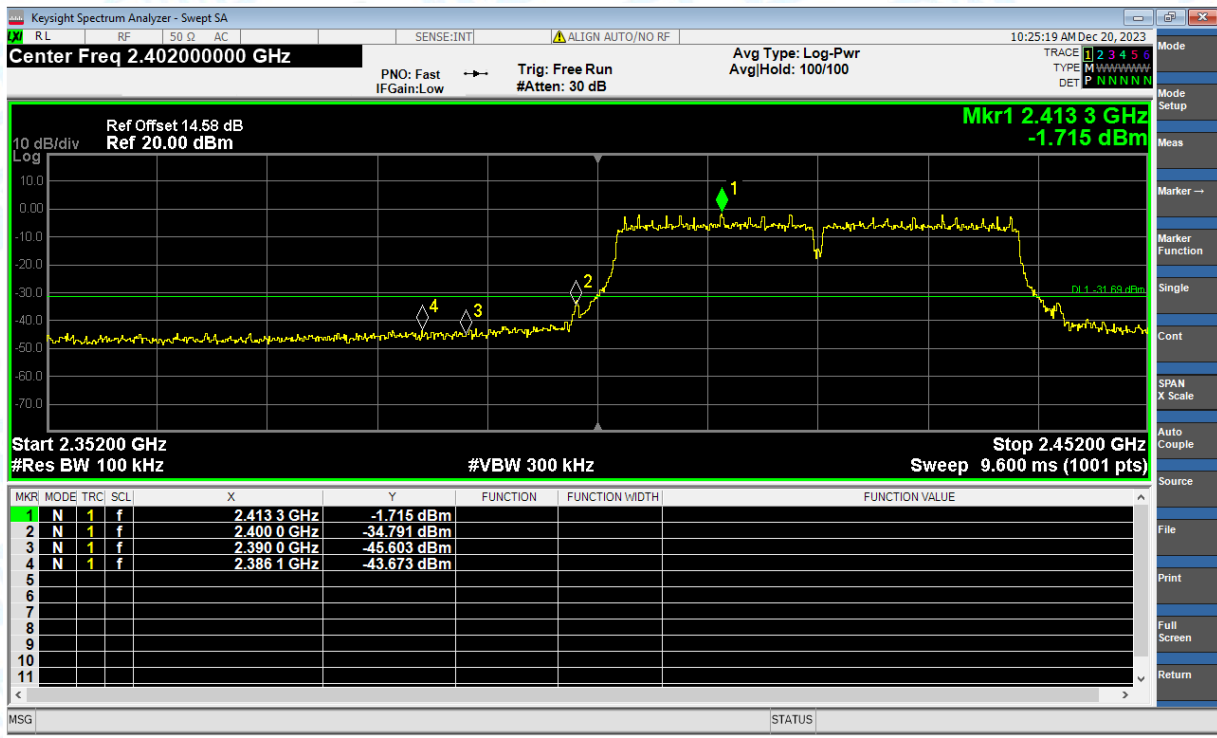


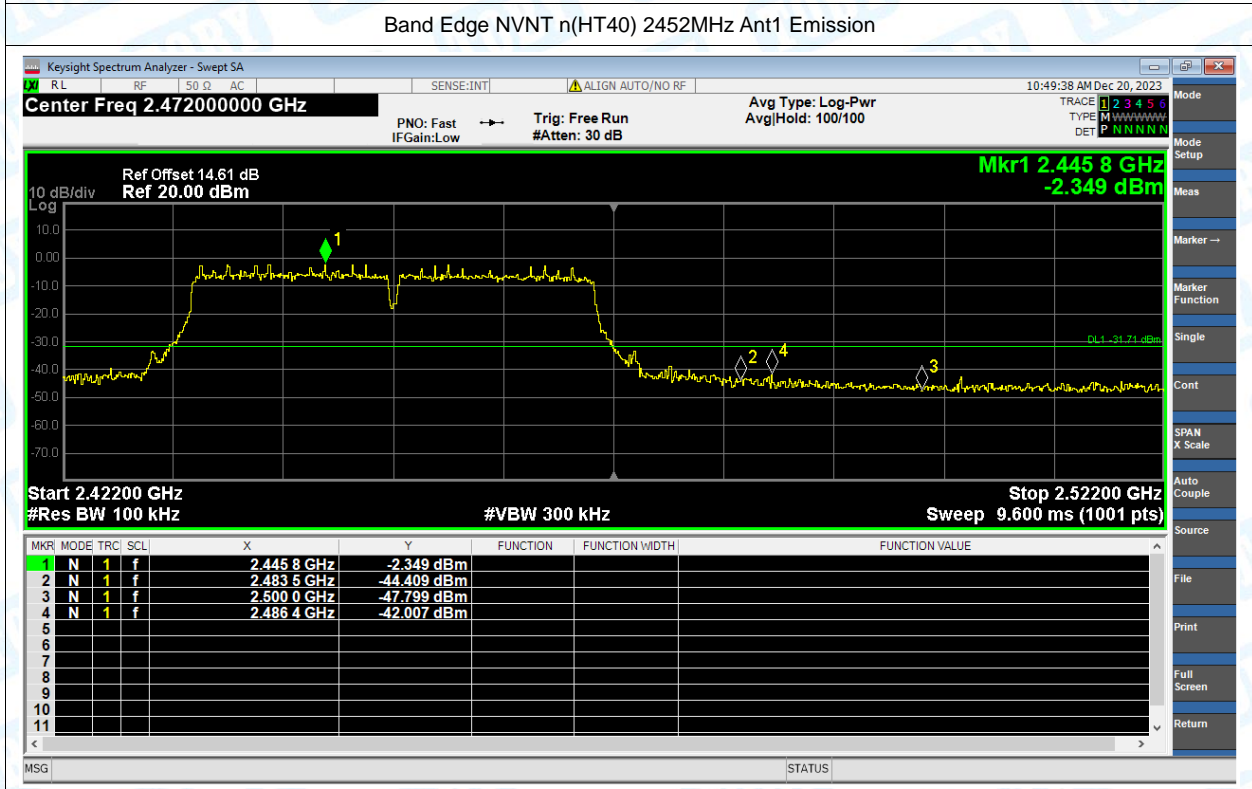
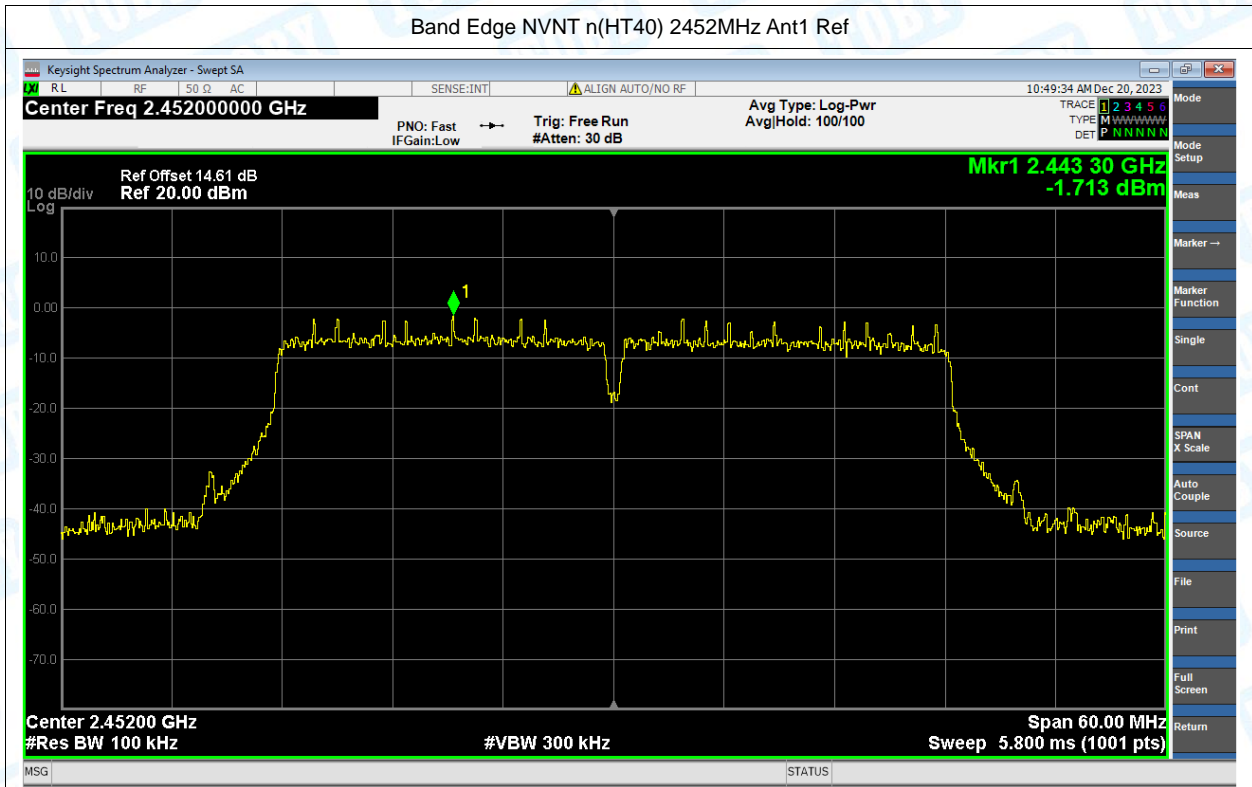


Band Edge NVNT n(HT40) 2422MHz Ant1 Ref



Band Edge NVNT n(HT40) 2422MHz Ant1 Emission



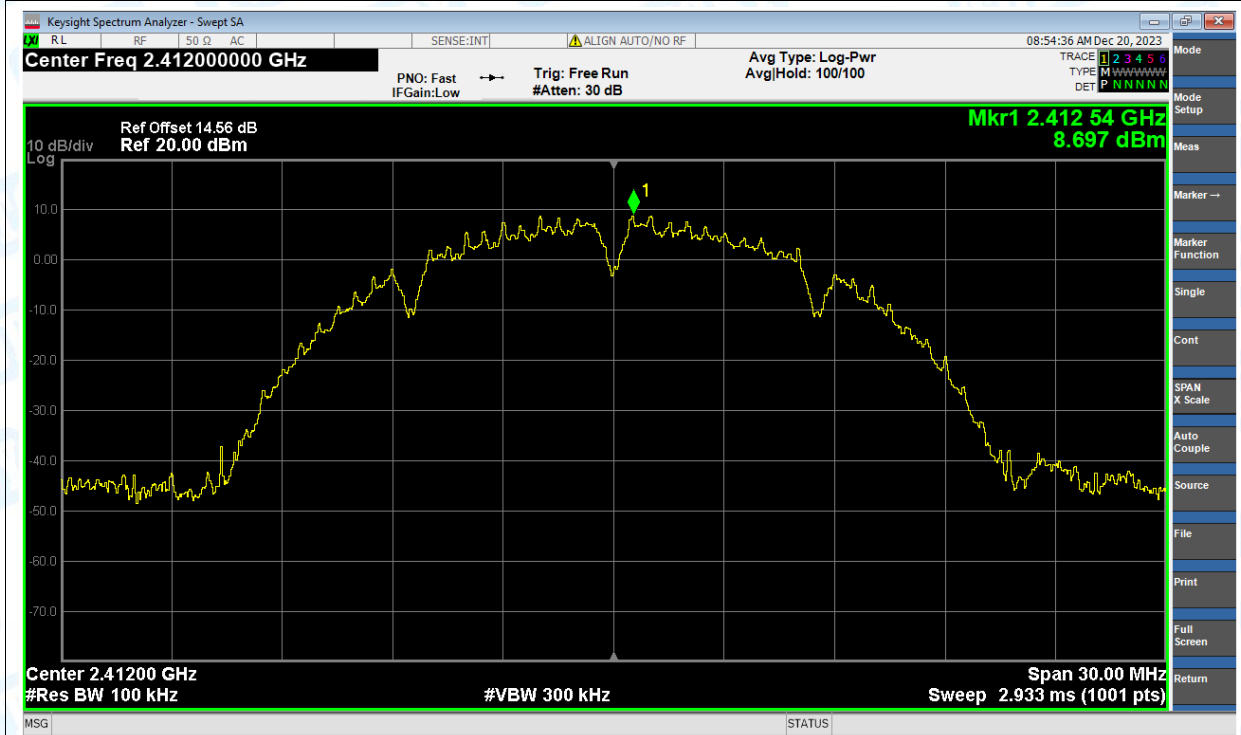


Conducted RF Spurious Emission

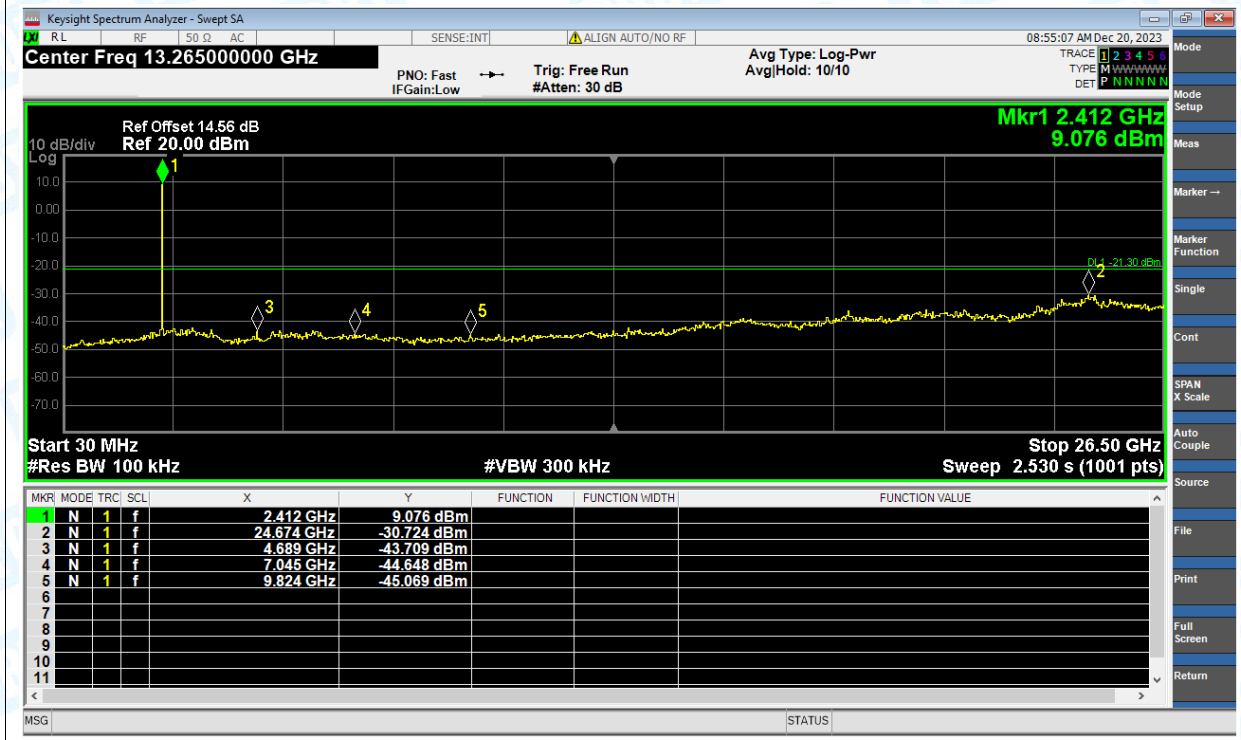
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-39.42	-30	Pass
NVNT	b	2437	Ant1	-39.8	-30	Pass
NVNT	b	2462	Ant1	-40.39	-30	Pass
NVNT	g	2412	Ant1	-33.65	-30	Pass
NVNT	g	2437	Ant1	-33.67	-30	Pass
NVNT	g	2462	Ant1	-33.67	-30	Pass
NVNT	n(HT20)	2412	Ant1	-33.38	-30	Pass
NVNT	n(HT20)	2437	Ant1	-33.07	-30	Pass
NVNT	n(HT20)	2462	Ant1	-33.13	-30	Pass
NVNT	n(HT40)	2422	Ant1	-37.84	-30	Pass
NVNT	n(HT40)	2437	Ant1	-39.18	-30	Pass
NVNT	n(HT40)	2452	Ant1	-38.95	-30	Pass

Test Graphs

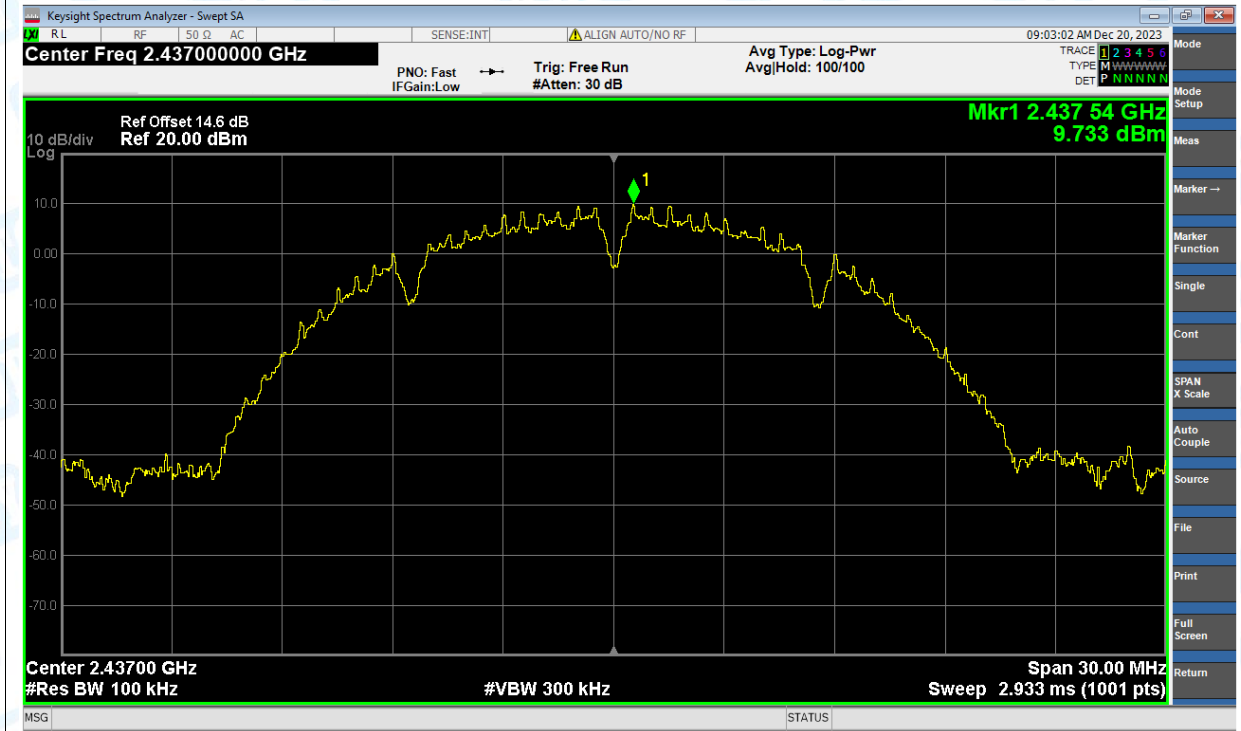
Tx. Spurious NVNT b 2412MHz Ant1 Ref



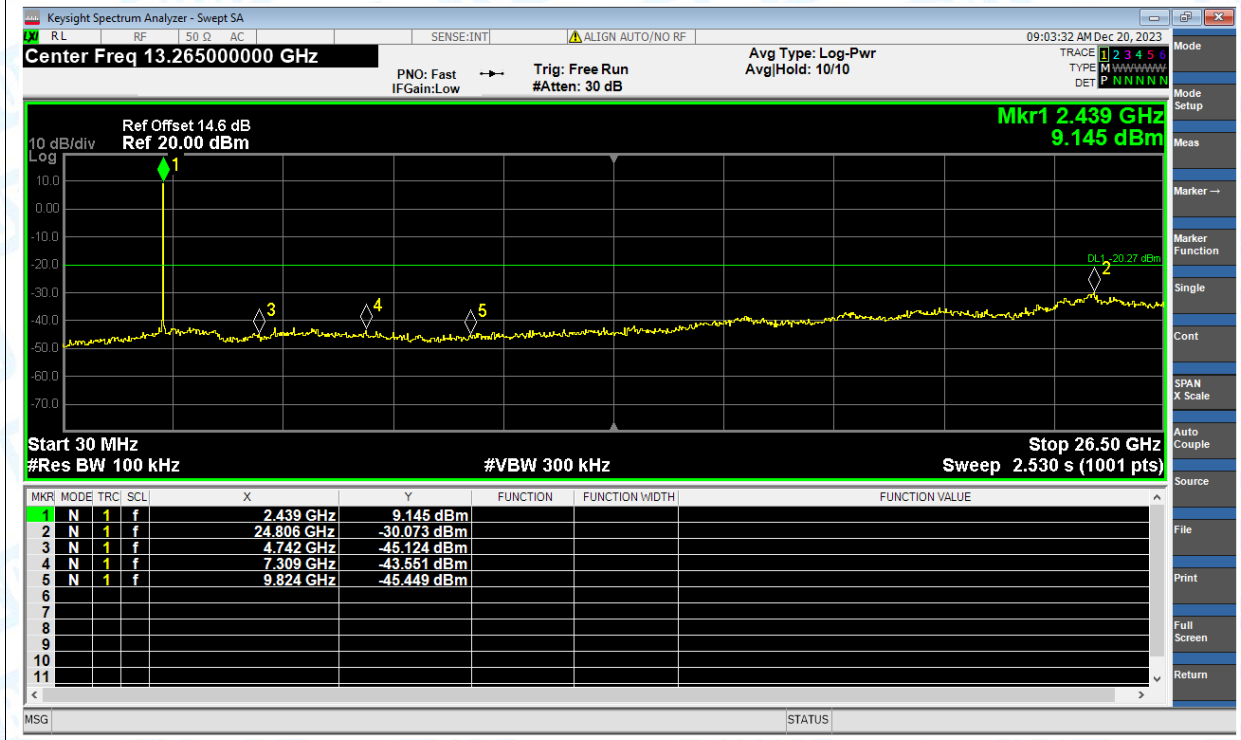
Tx. Spurious NVNT b 2412MHz Ant1 Emission



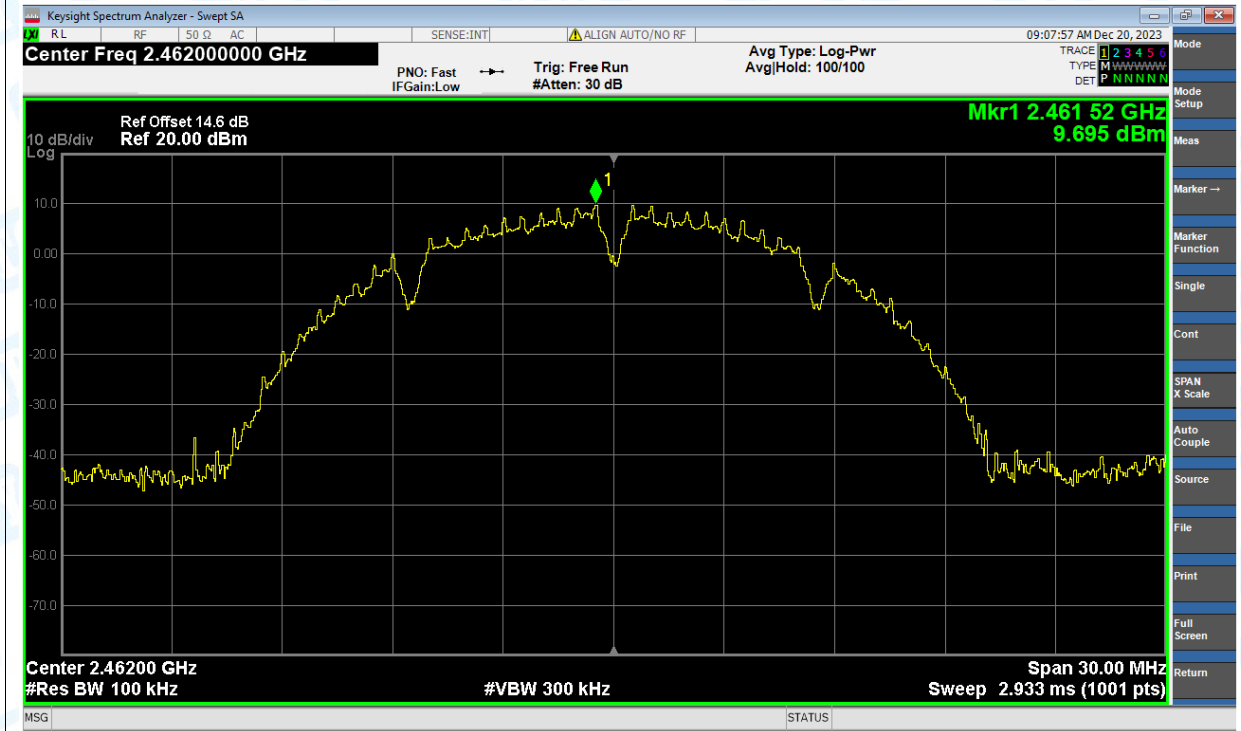
Tx. Spurious NVNT b 2437MHz Ant1 Ref



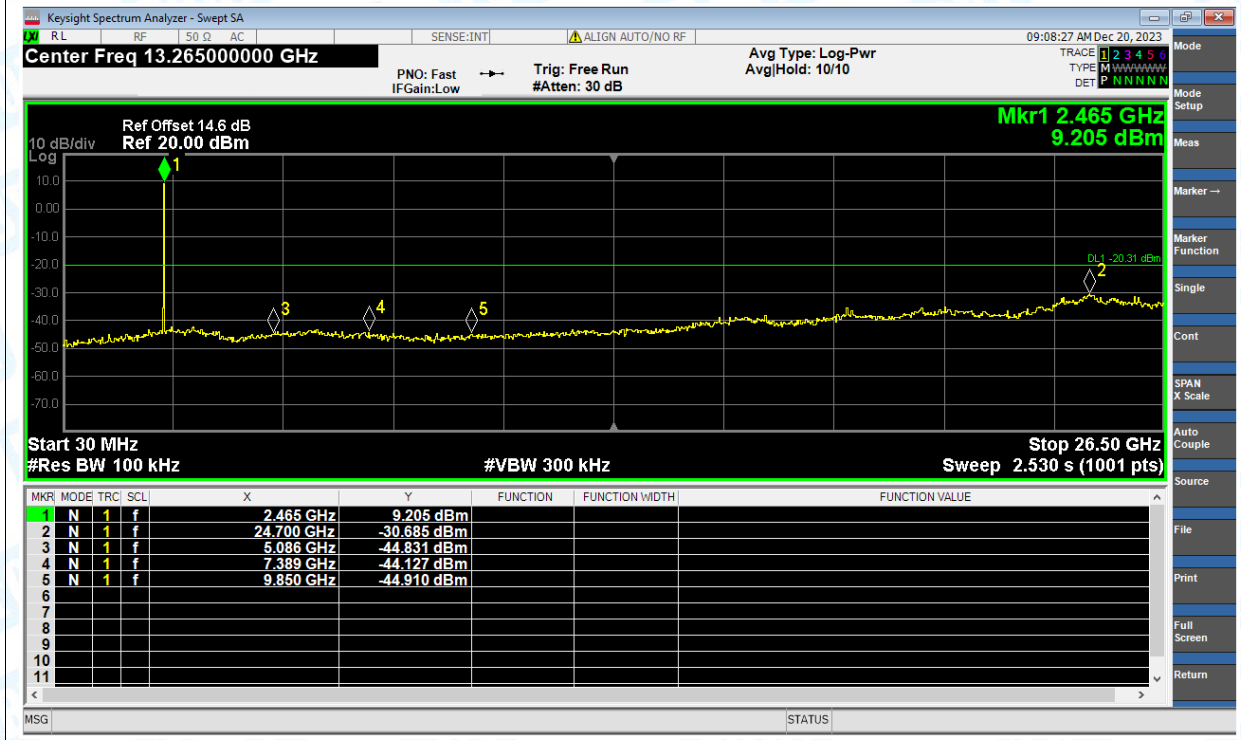
Tx. Spurious NVNT b 2437MHz Ant1 Emission



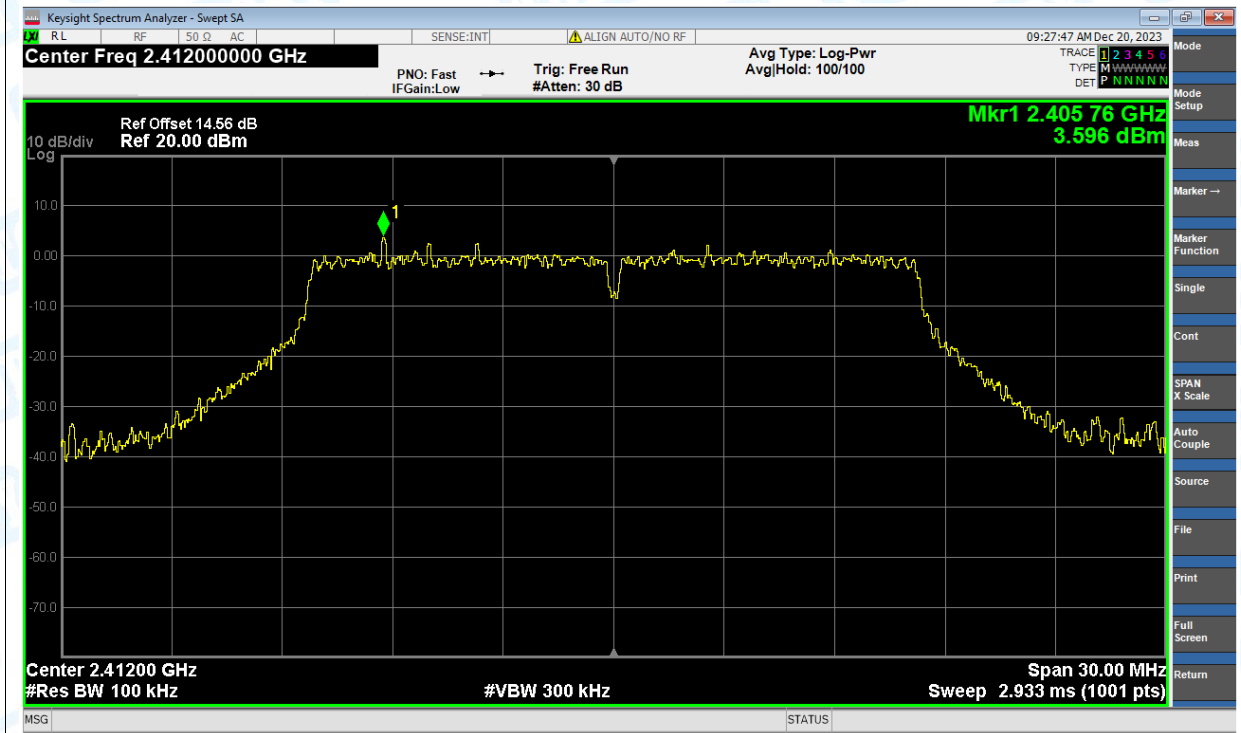
Tx. Spurious NVNT b 2462MHz Ant1 Ref



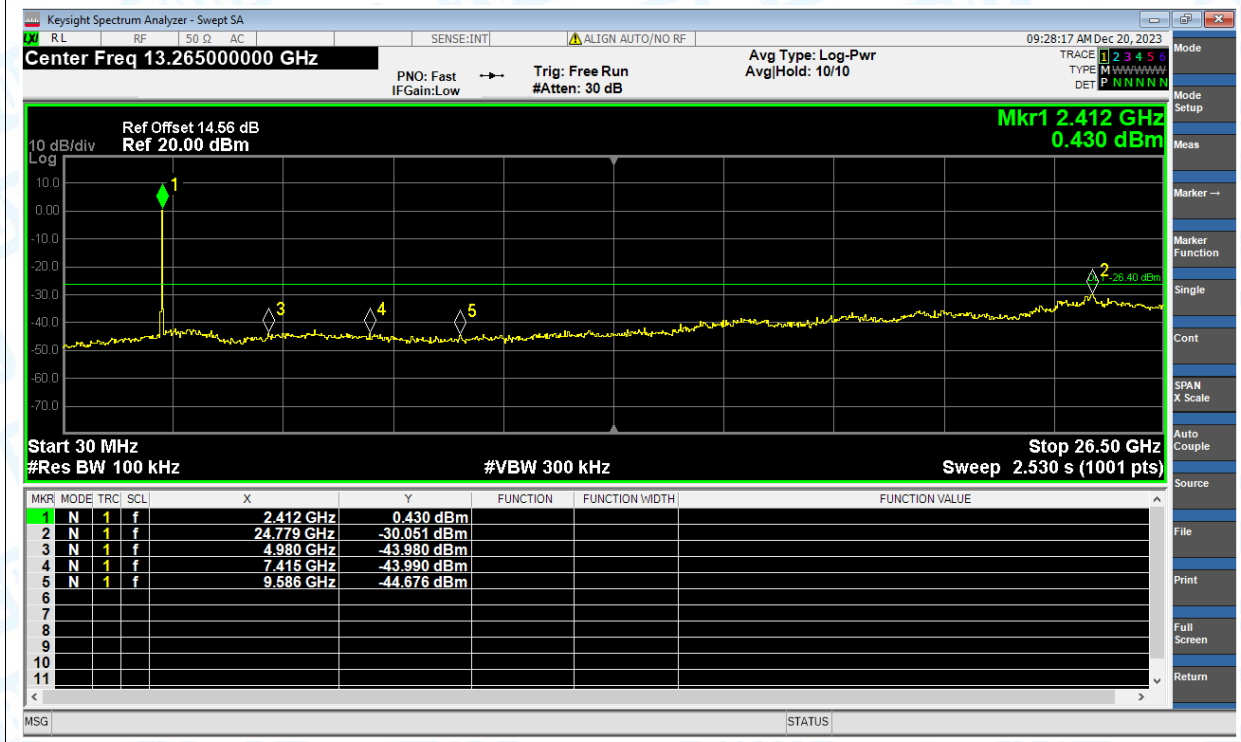
Tx. Spurious NVNT b 2462MHz Ant1 Emission



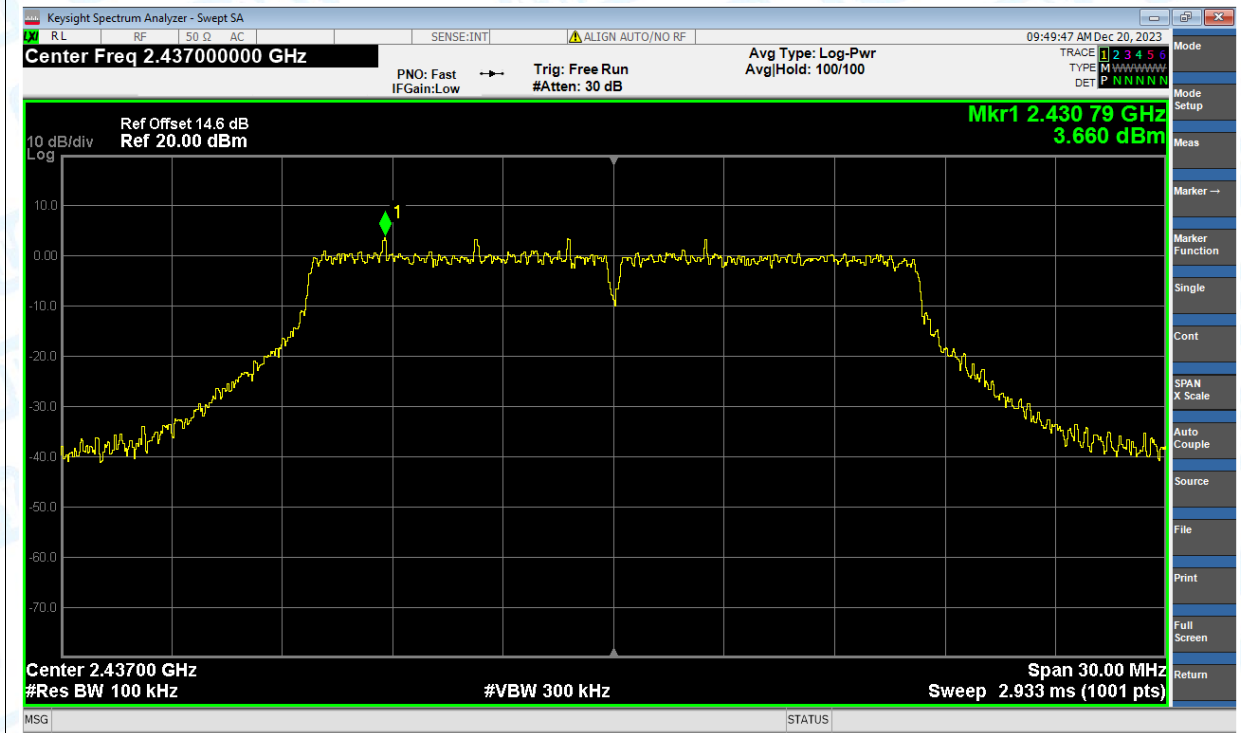
Tx. Spurious NVNT g 2412MHz Ant1 Ref



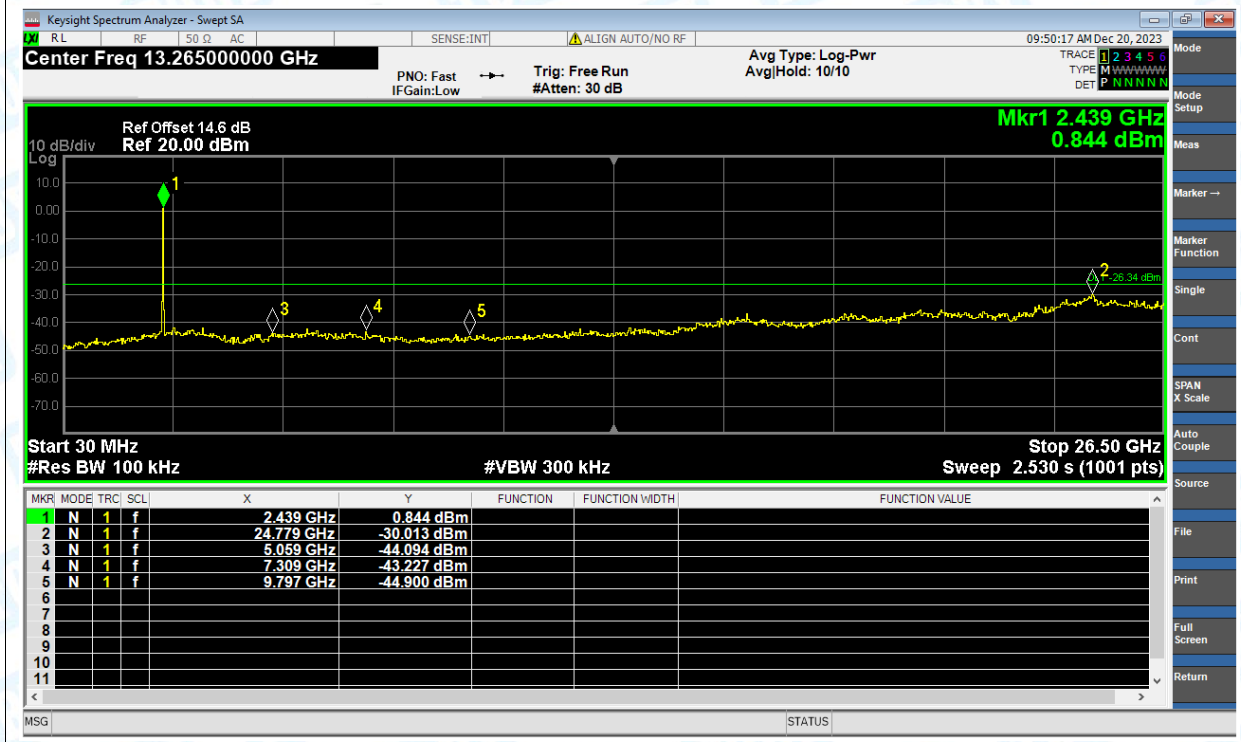
Tx. Spurious NVNT g 2412MHz Ant1 Emission



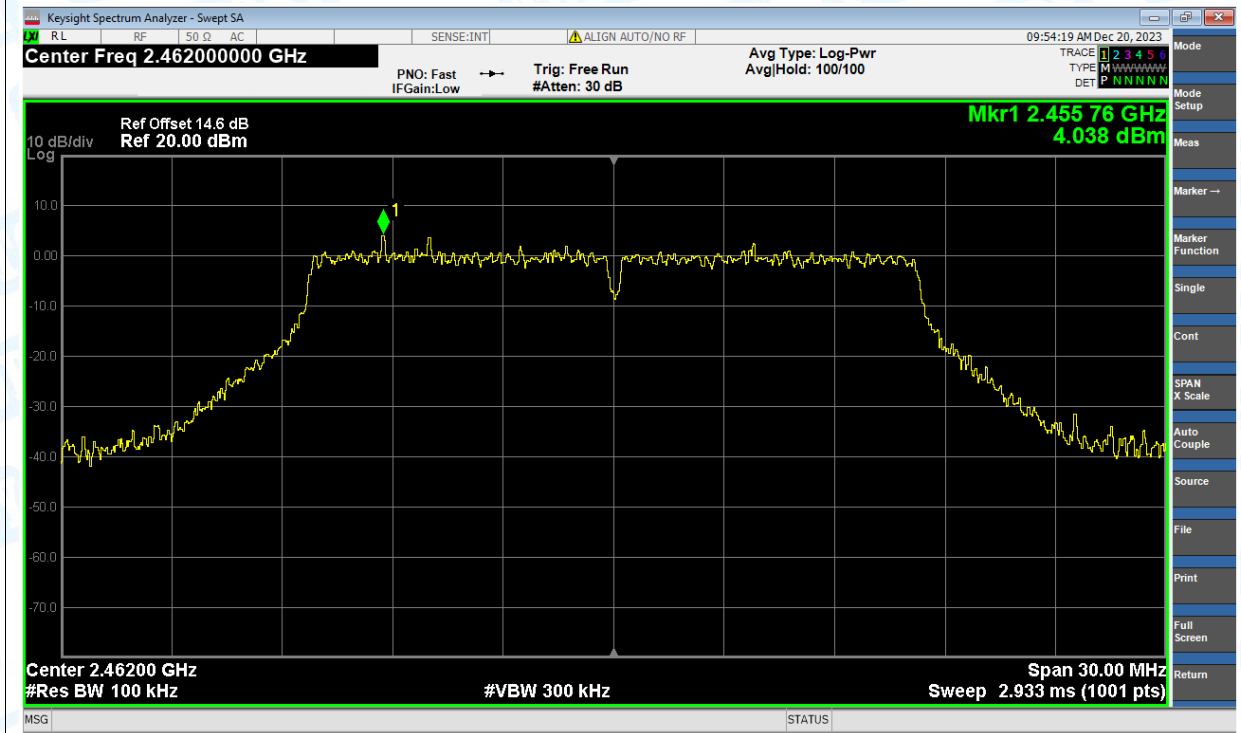
Tx. Spurious NVNT g 2437MHz Ant1 Ref



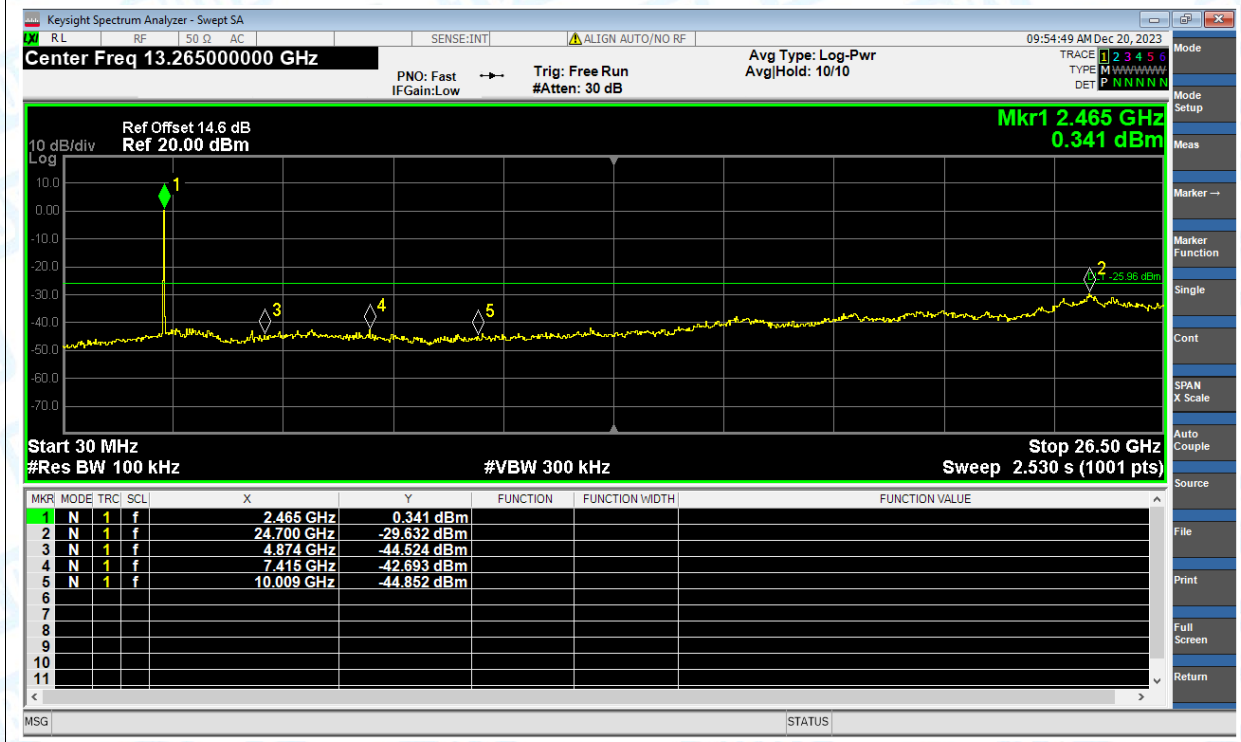
Tx. Spurious NVNT g 2437MHz Ant1 Emission



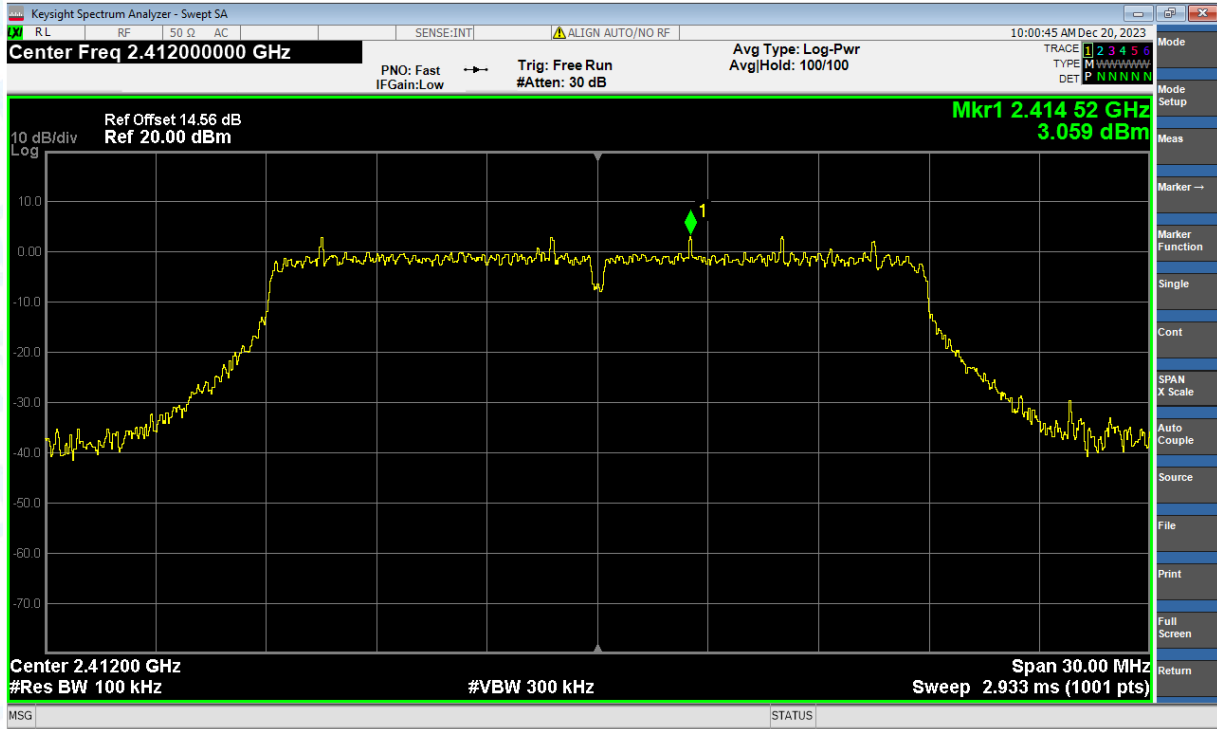
Tx. Spurious NVNT g 2462MHz Ant1 Ref



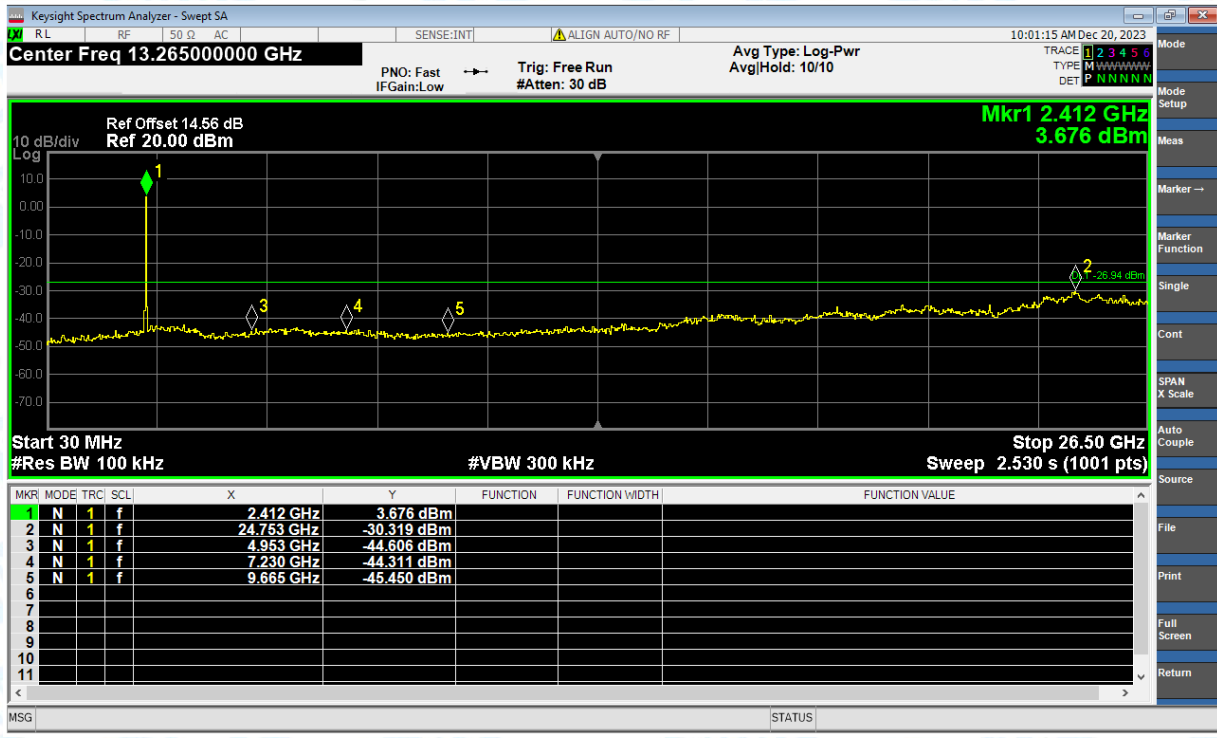
Tx. Spurious NVNT g 2462MHz Ant1 Emission



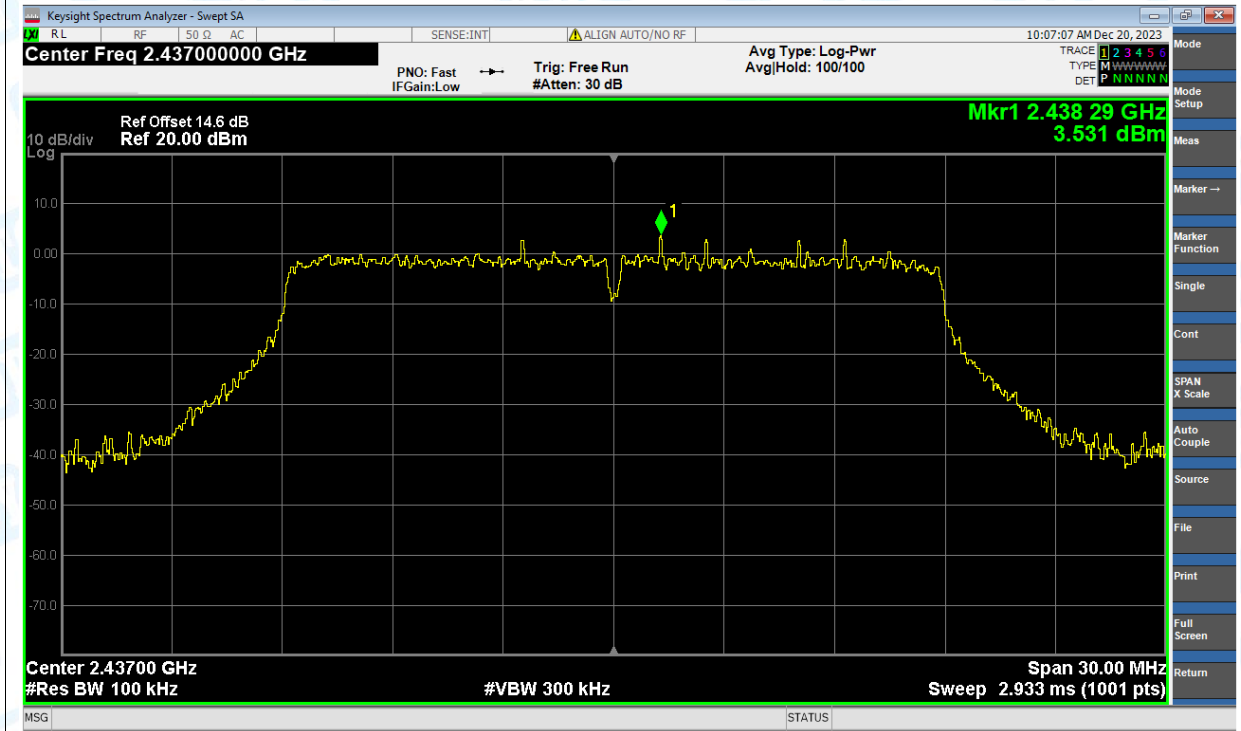
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



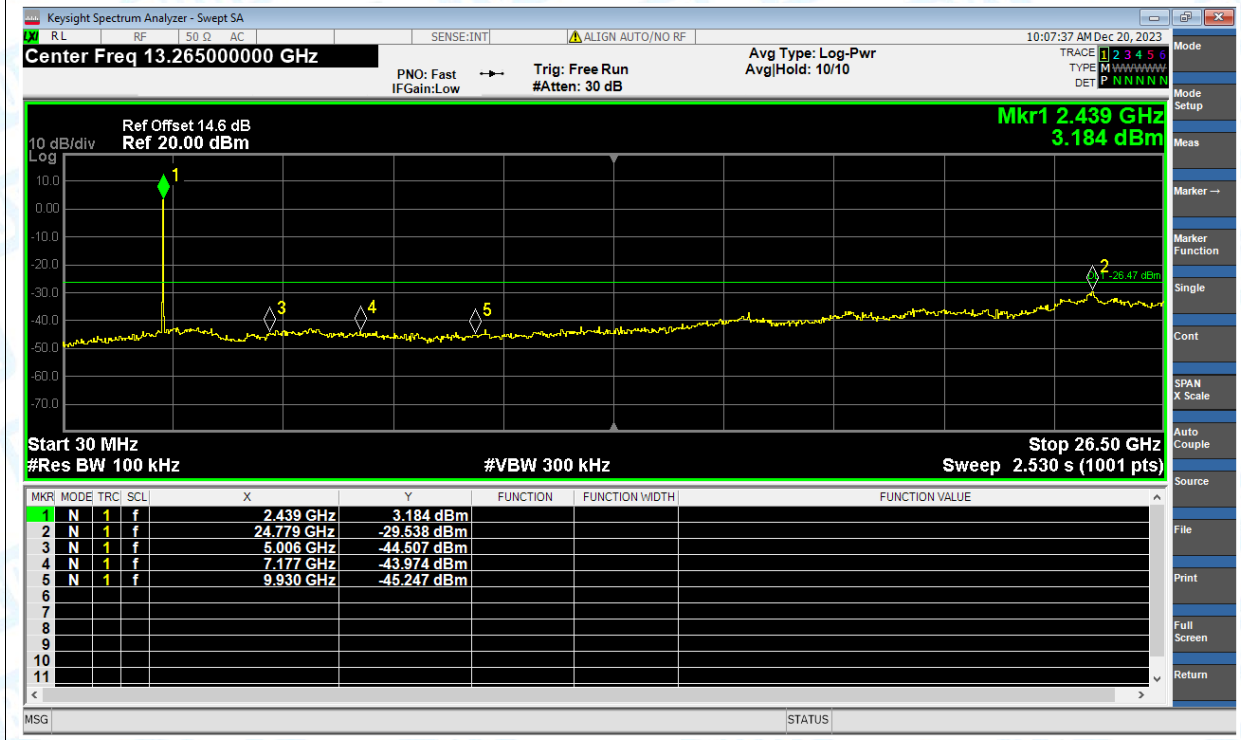
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



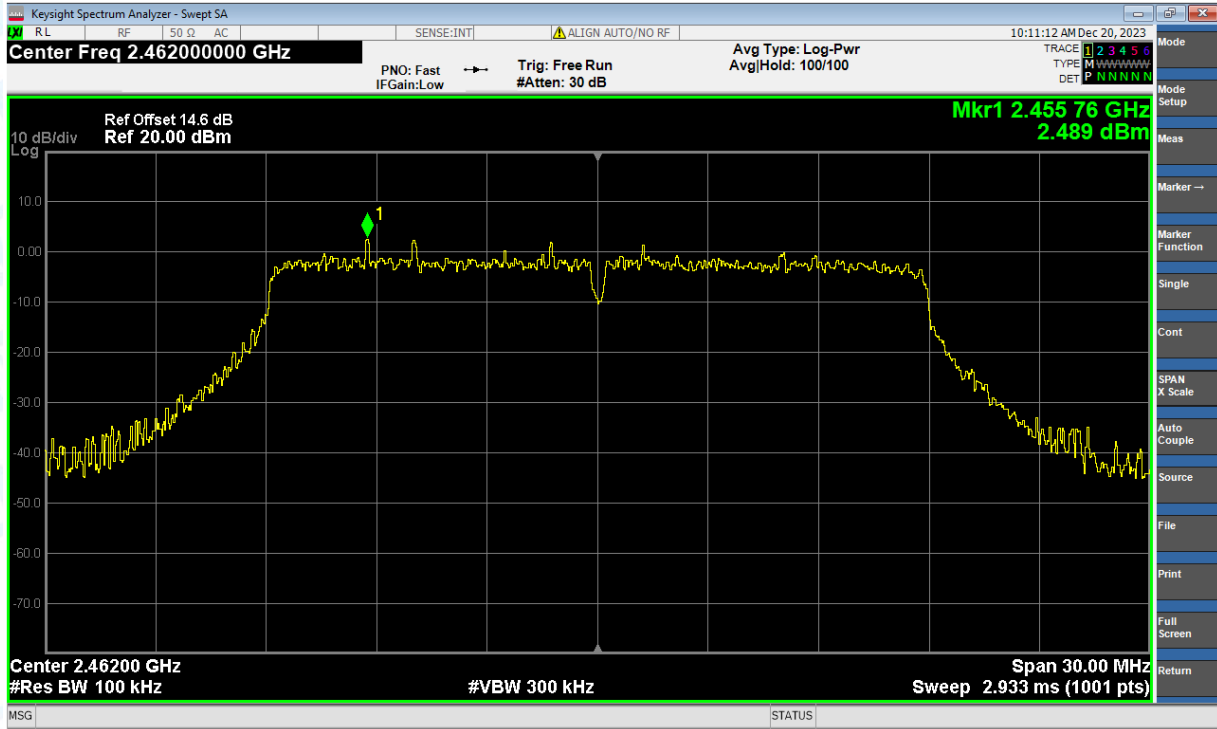
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



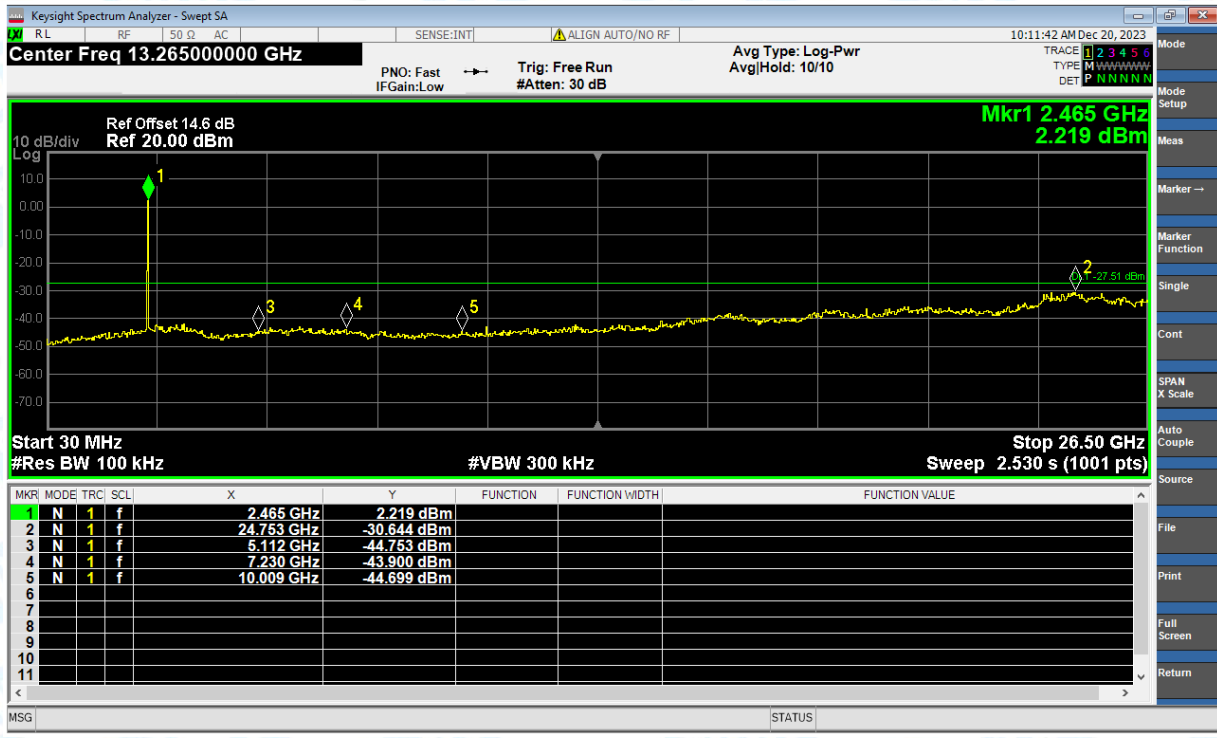
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



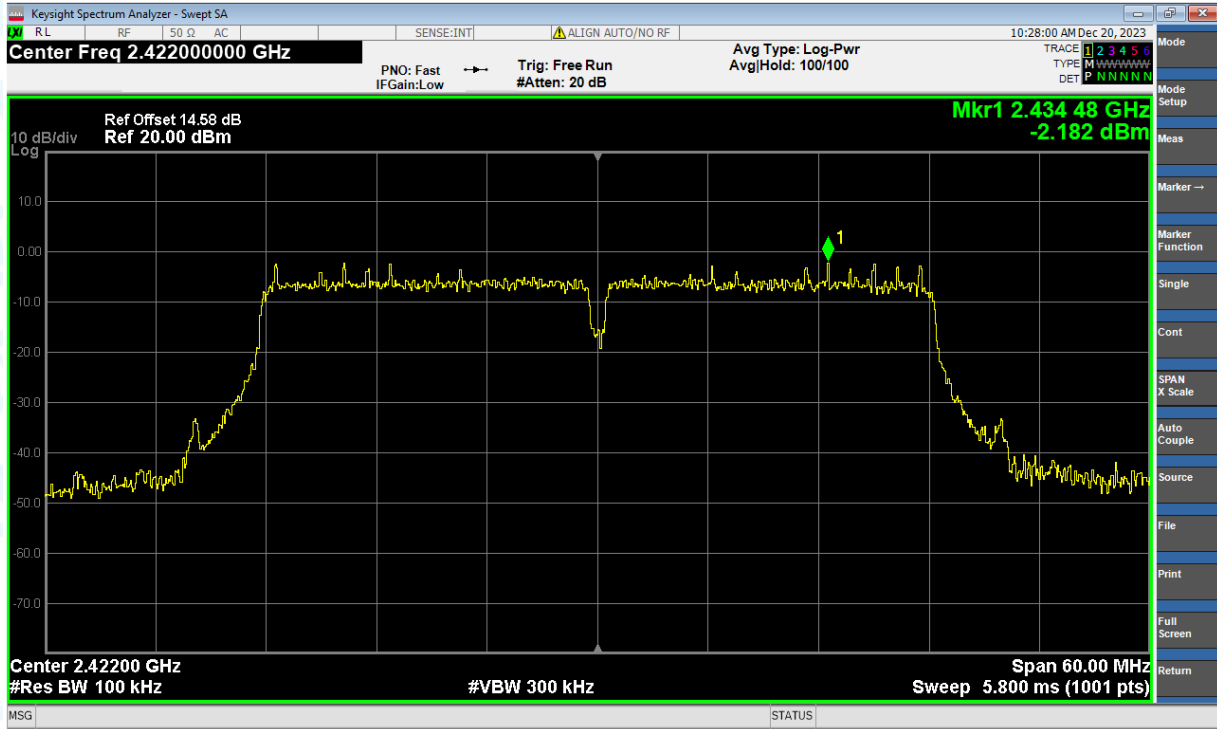
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



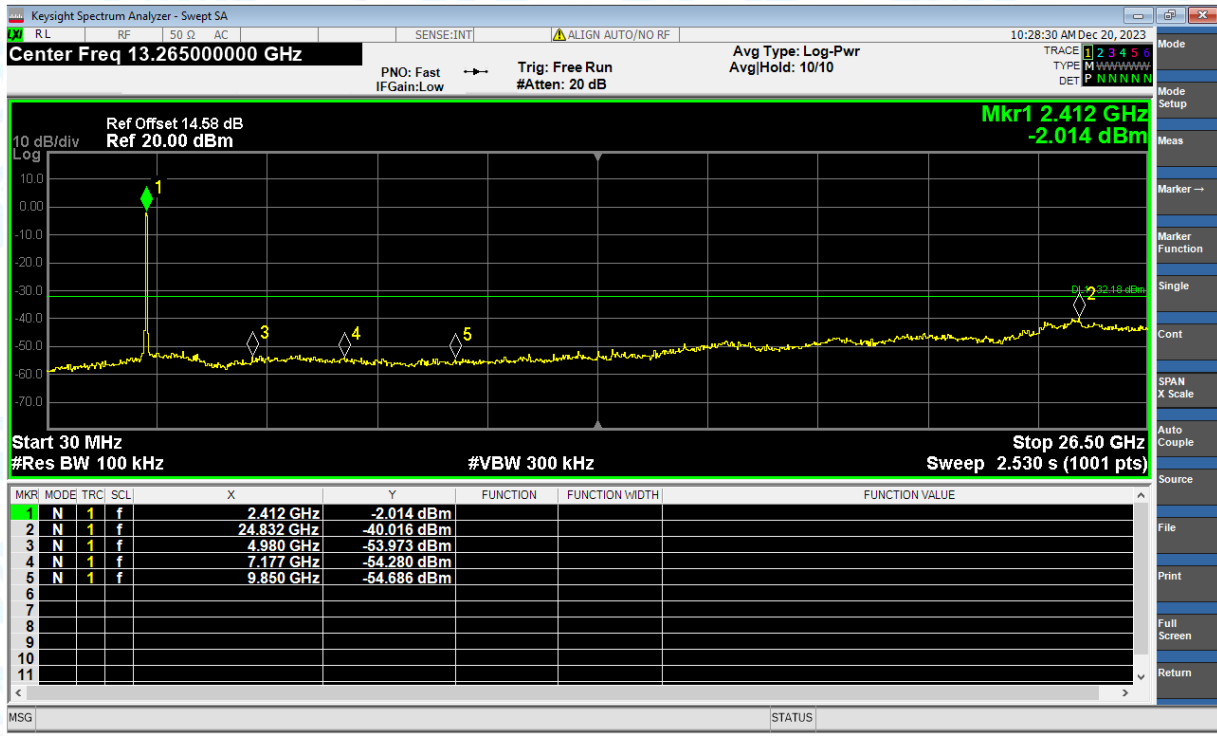
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission

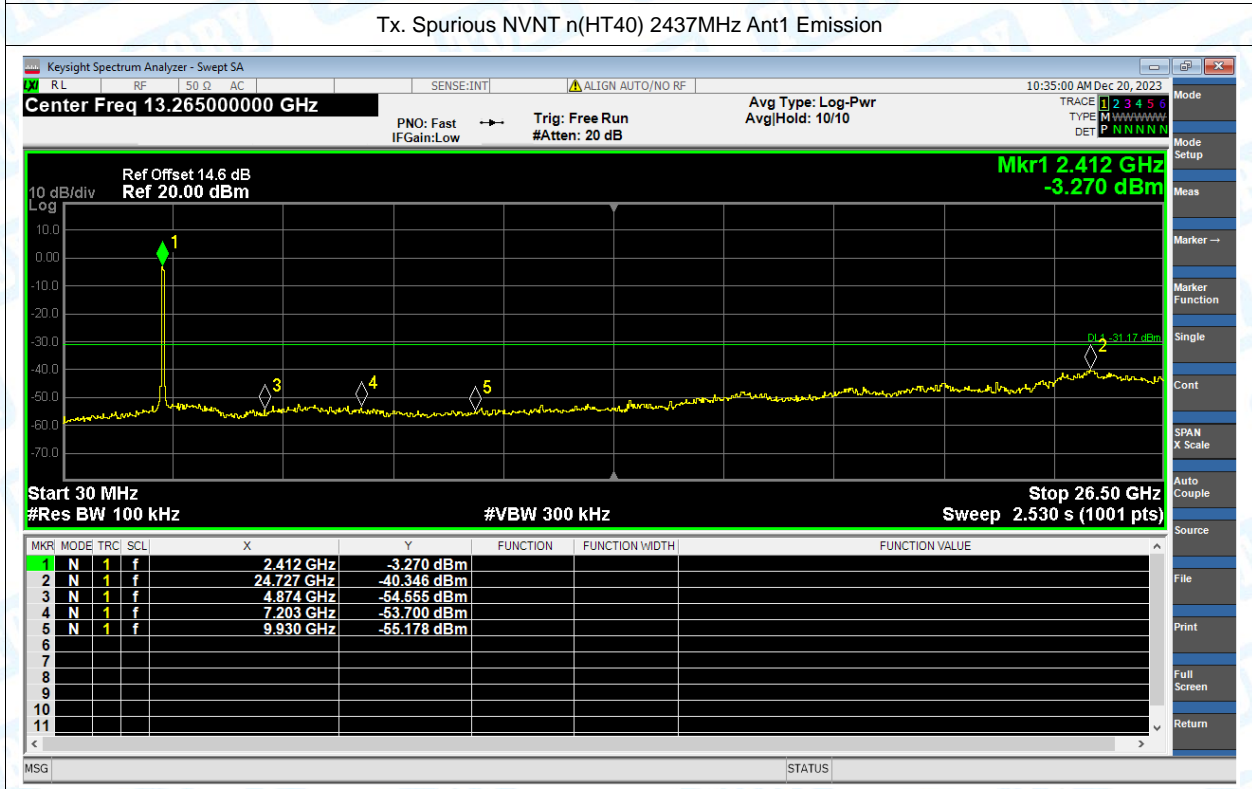
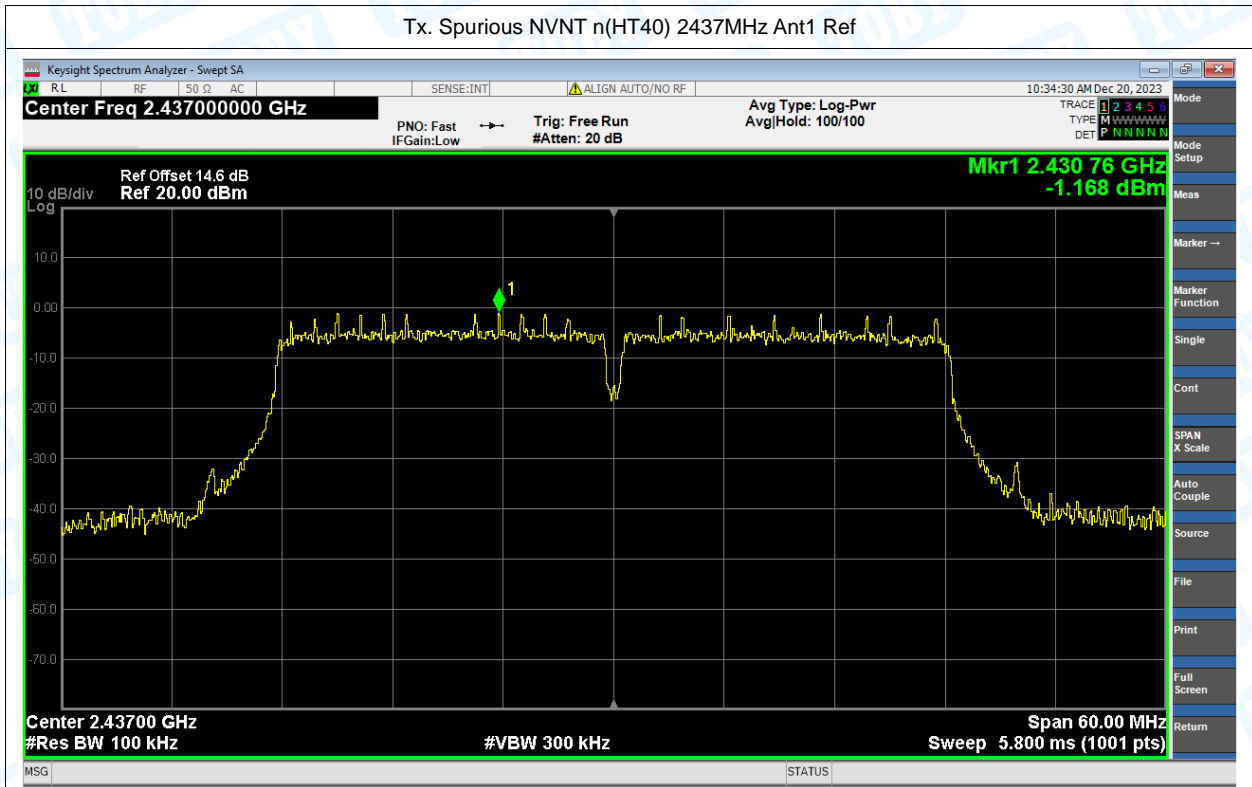


Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Ref

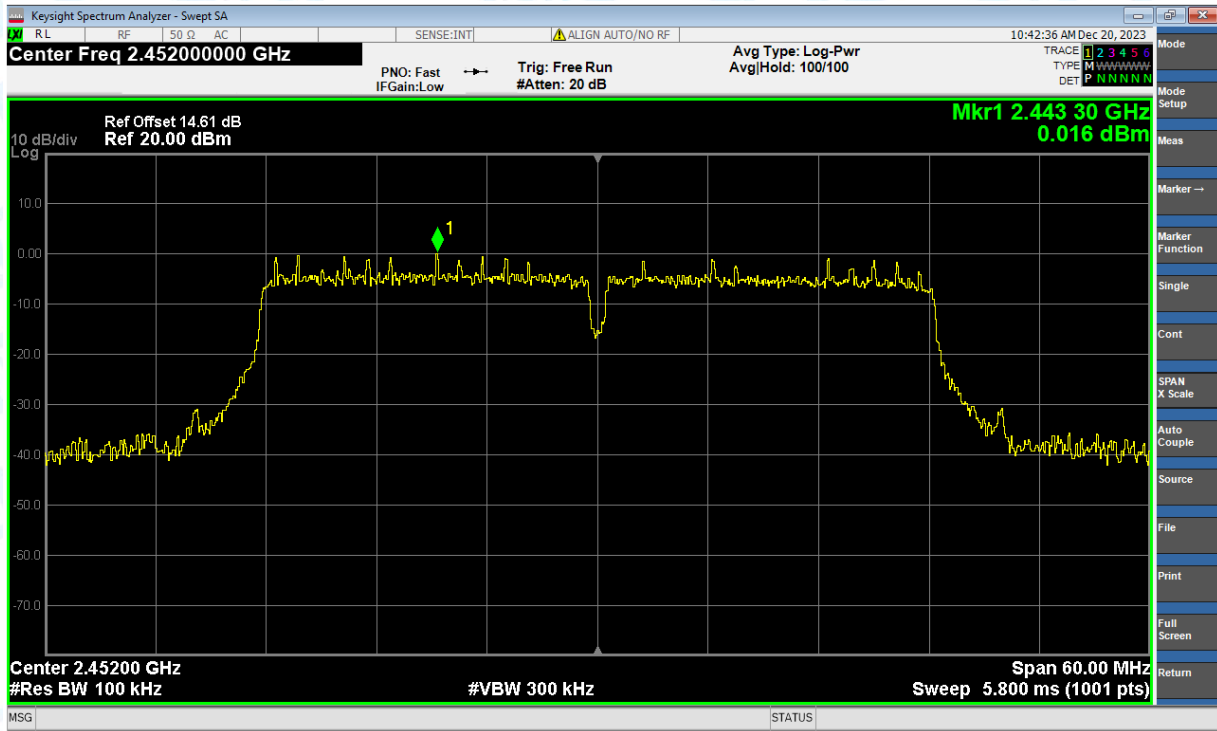


Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Emission

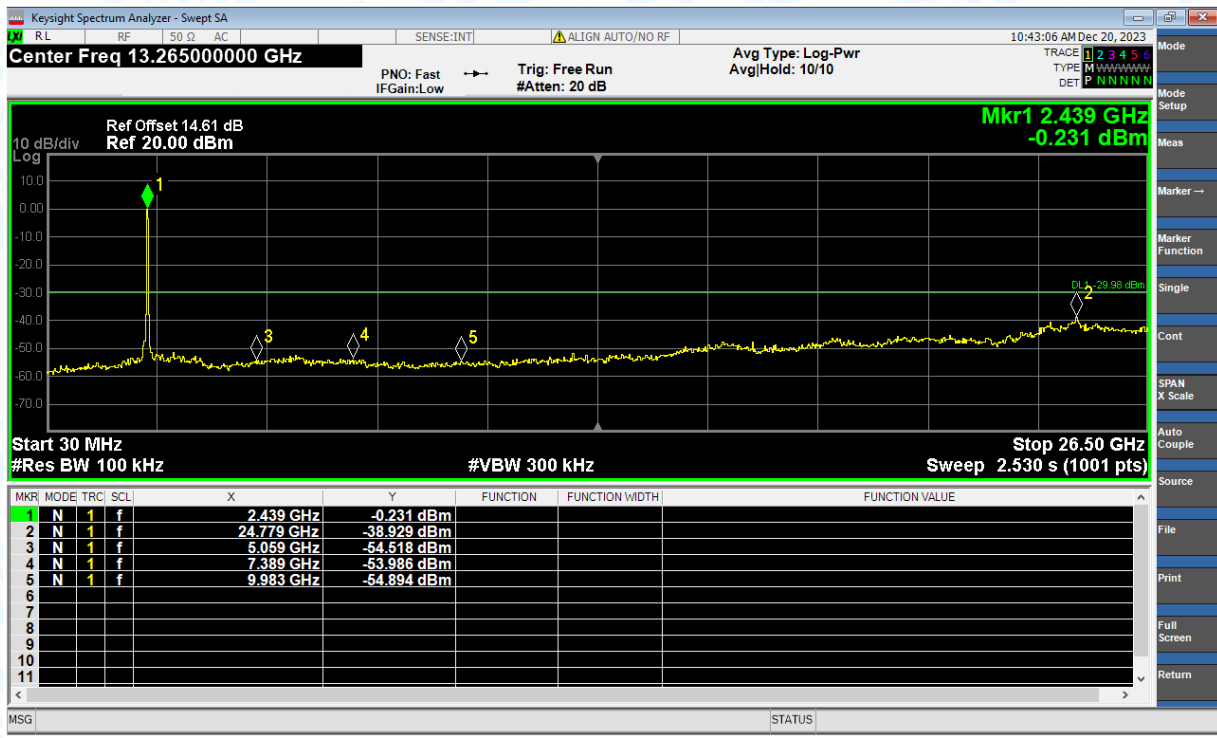




Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Ref



Tx. Spurious NVNT n(HT40) 2452MHz Ant1 Emission



Restrict Band

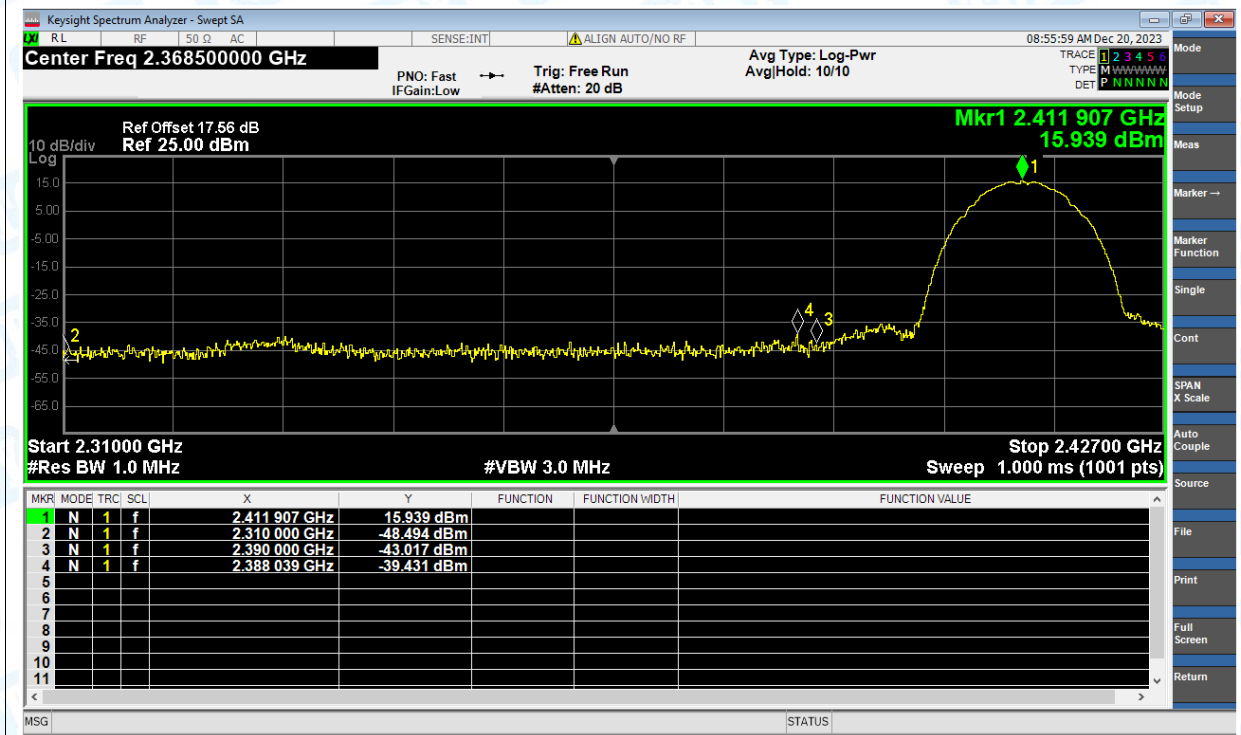
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-48.49	3.63	50.40	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-54.03	3.63	44.86	Average	54	Pass
NVNT	b	2412	Ant1	2388.039	-39.43	3.63	59.46	Peak	74	Pass
NVNT	b	2412	Ant1	2331.06	-48.86	3.63	50.03	Average	54	Pass
NVNT	b	2412	Ant1	2390	-43.02	3.63	55.87	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-52.07	3.63	46.82	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-41.49	3.63	57.40	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-50.08	3.63	48.81	Average	54	Pass
NVNT	b	2462	Ant1	2483.888	-39.22	3.63	59.67	Peak	74	Pass
NVNT	b	2462	Ant1	2483.517	-50.08	3.63	48.81	Average	54	Pass
NVNT	b	2462	Ant1	2500	-42.78	3.63	56.11	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-52.28	3.63	46.61	Average	54	Pass
NVNT	g	2412	Ant1	2310	-45.87	3.63	53.02	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-53.52	3.63	45.37	Average	54	Pass
NVNT	g	2412	Ant1	2386.986	-33.76	3.63	65.13	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-45.41	3.63	53.48	Average	54	Pass
NVNT	g	2412	Ant1	2390	-34.72	3.63	64.17	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-45.36	3.63	53.53	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-31.05	3.63	67.84	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-45.77	3.63	53.12	Average	54	Pass
NVNT	g	2462	Ant1	2485.425	-28.13	3.63	70.76	Peak	74	Pass
NVNT	g	2462	Ant1	2483.676	-45.67	3.63	53.22	Average	54	Pass
NVNT	g	2462	Ant1	2500	-42.32	3.63	56.57	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-51.68	3.63	47.21	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-44.8	3.63	54.09	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-53.74	3.63	45.15	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.794	-28.51	3.63	70.38	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-45.8	3.63	53.09	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-32.28	3.63	66.61	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-45.66	3.63	53.23	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-30.88	3.63	68.01	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-46.42	3.63	52.47	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2486.538	-26.99	3.63	71.90	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.623	-46.34	3.63	52.55	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-36.38	3.63	62.51	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-51.83	3.63	47.06	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2310	-46.67	3.63	52.22	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2310	-53.17	3.63	45.72	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2385.544	-34.33	3.63	64.56	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2389.946	-45.46	3.63	53.43	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2390	-32.35	3.63	66.54	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2390	-45.58	3.63	53.31	Average	54	Pass

NVNT	n(HT40)	2452	Ant1	2483.5	-37.1	3.63	61.79	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.5	-46.58	3.63	52.31	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2491.966	-29.69	3.63	69.20	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.542	-46.58	3.63	52.31	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2500	-40.21	3.63	58.68	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2500	-50.82	3.63	48.07	Average	54	Pass

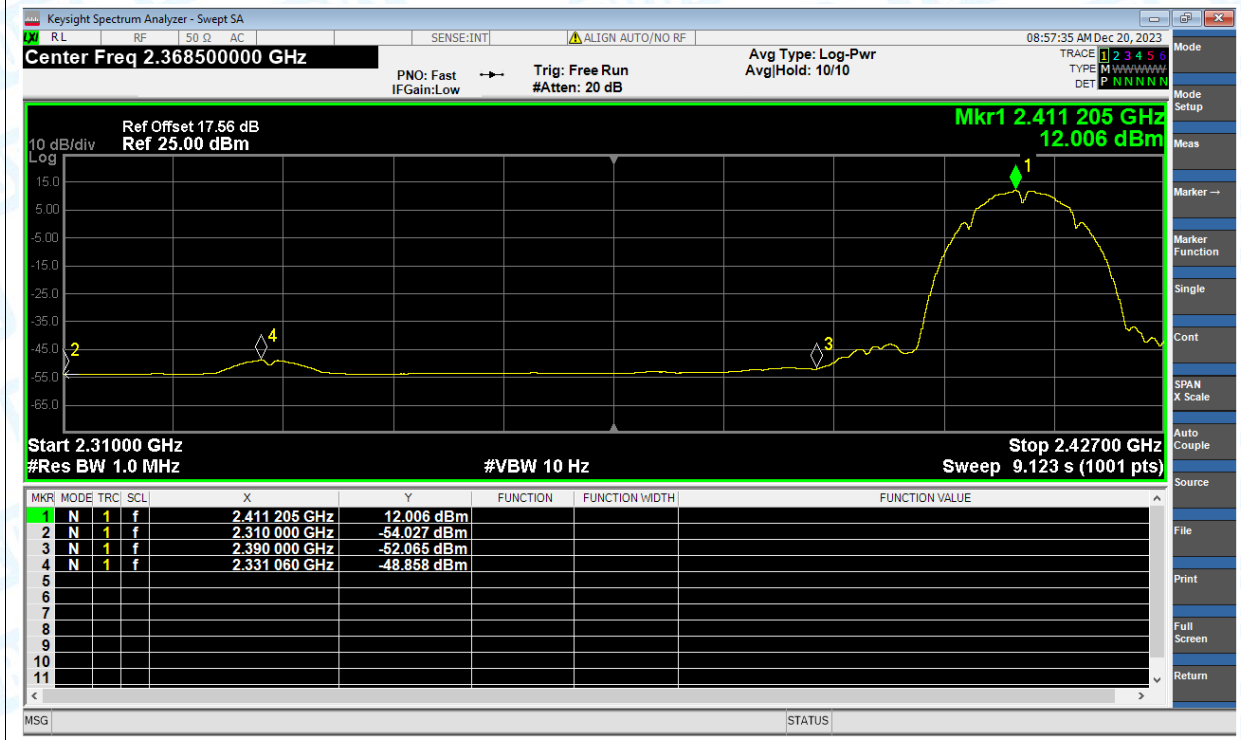
Note: The Duty Cycle Factor is compensated in the graph.

Test Graphs

Restrict Band NVNT b 2412MHz Ant1 Peak



Restrict Band NVNT b 2412MHz Ant1 Average



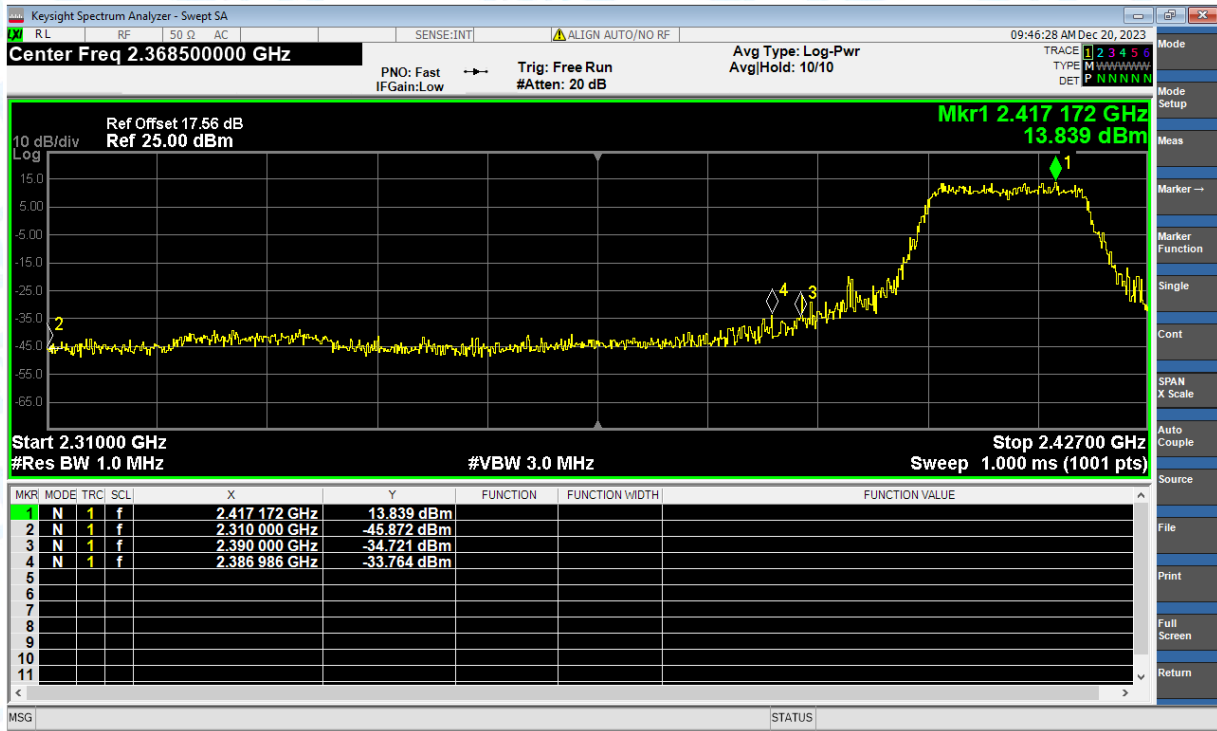
Restrict Band NVNT b 2462MHz Ant1 Peak



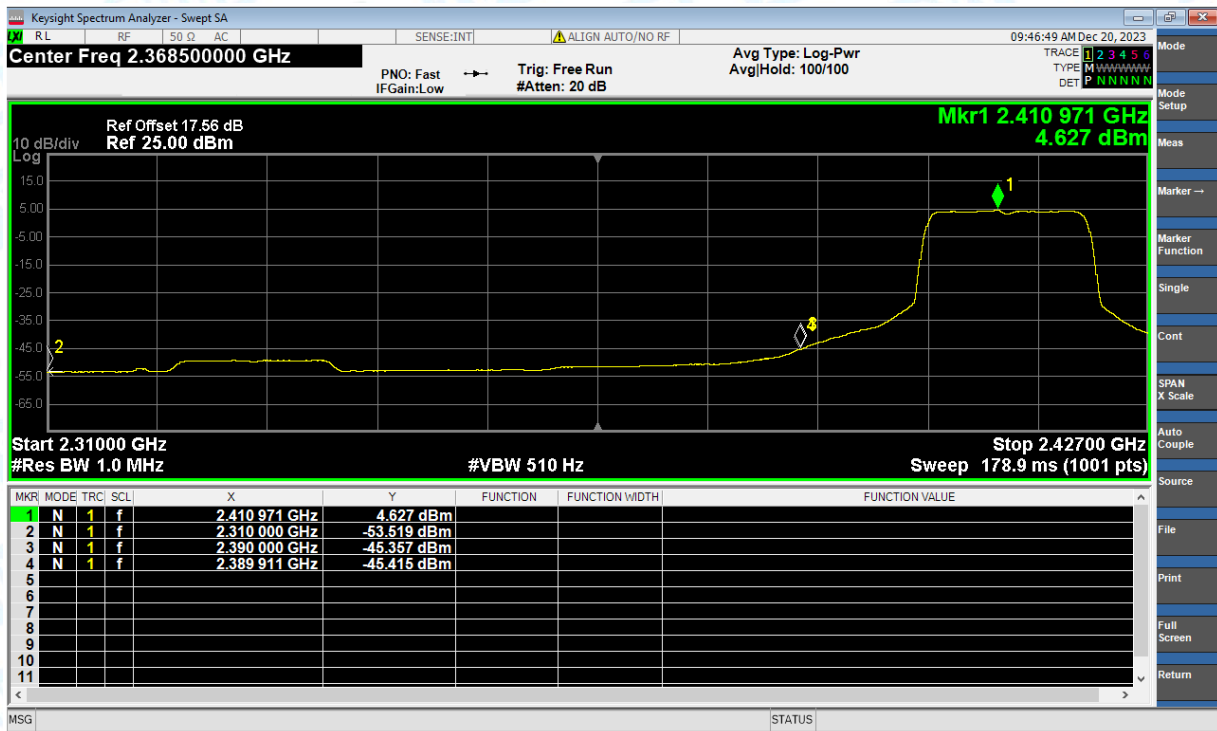
Restrict Band NVNT b 2462MHz Ant1 Average



Restrict Band NVNT g 2412MHz Ant1 Peak



Restrict Band NVNT g 2412MHz Ant1 Average



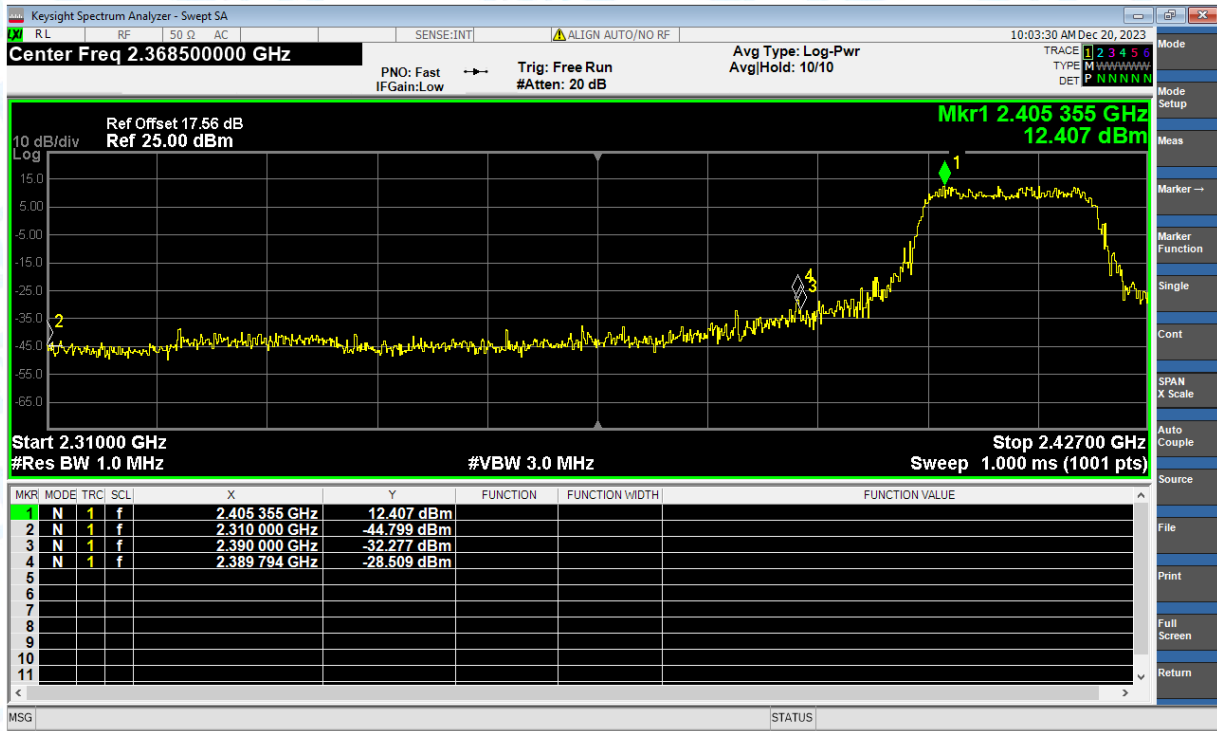
Restrict Band NVNT g 2462MHz Ant1 Peak



Restrict Band NVNT g 2462MHz Ant1 Average



Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



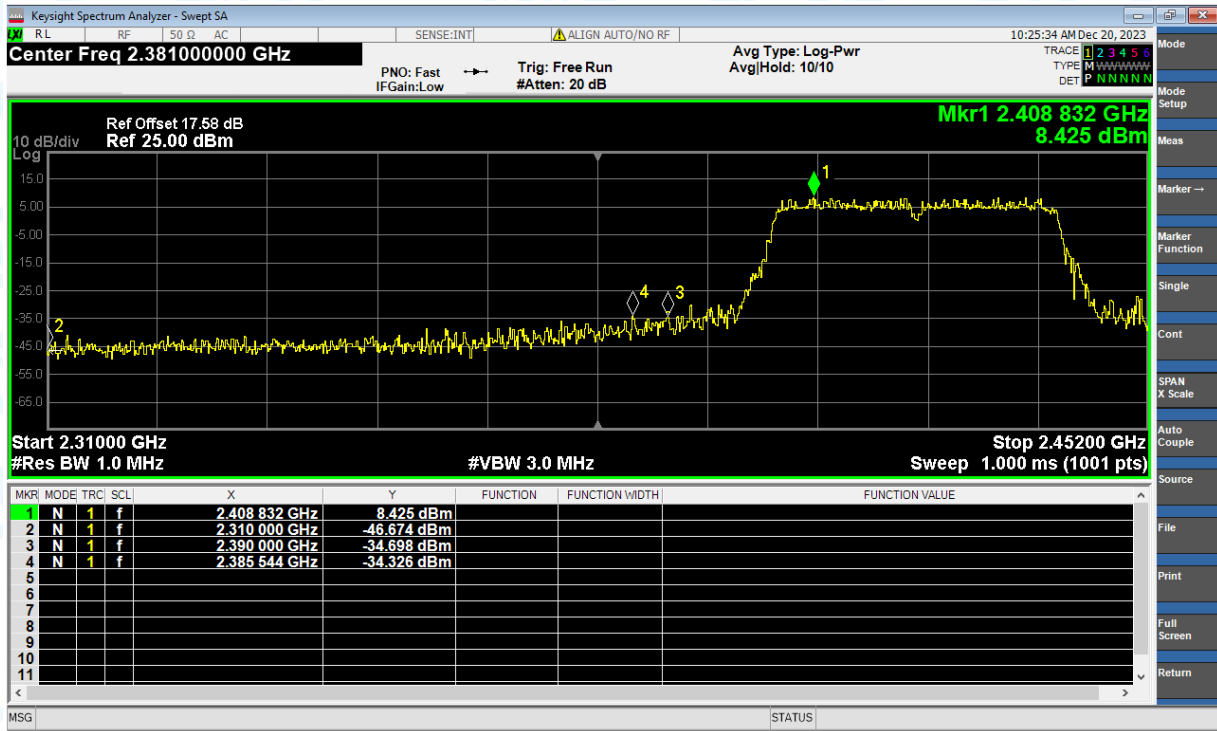
Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



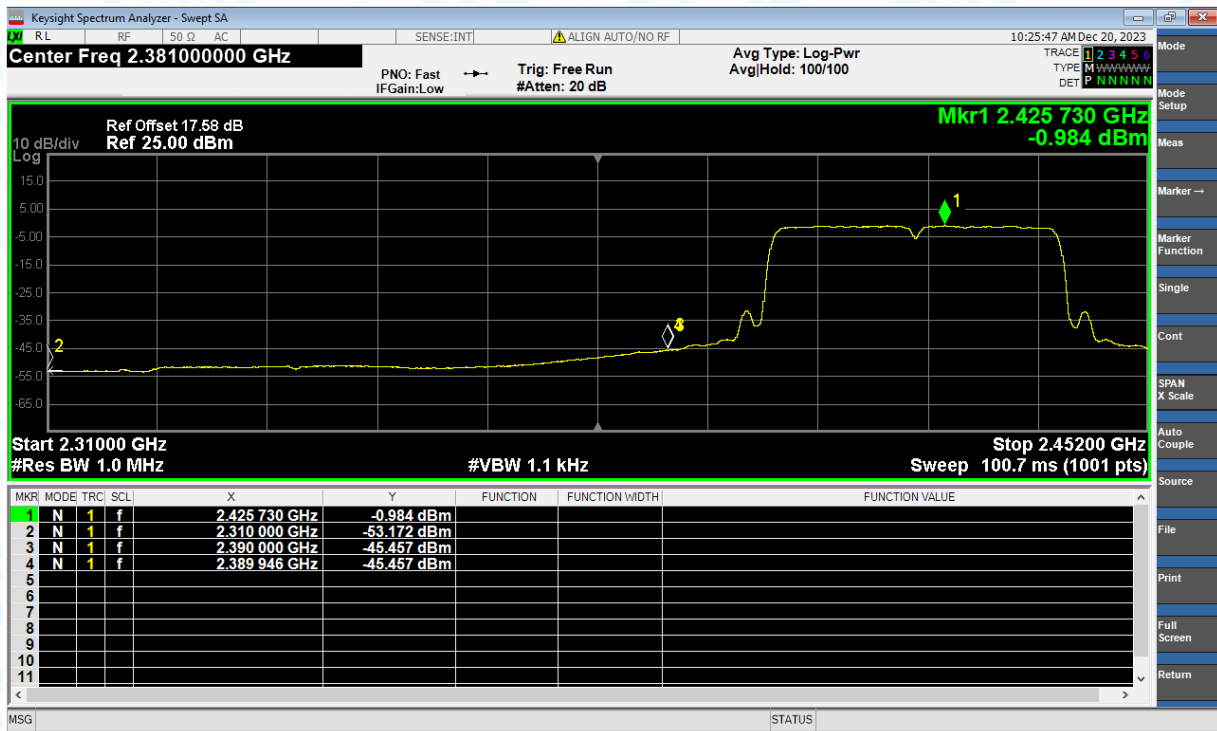
Restrict Band NVNT n(HT20) 2462MHz Ant1 Average



Restrict Band NVNT n(HT40) 2422MHz Ant1 Peak



Restrict Band NVNT n(HT40) 2422MHz Ant1 Average



Restrict Band NVNT n(HT40) 2452MHz Ant1 Peak



Restrict Band NVNT n(HT40) 2452MHz Ant1 Average

