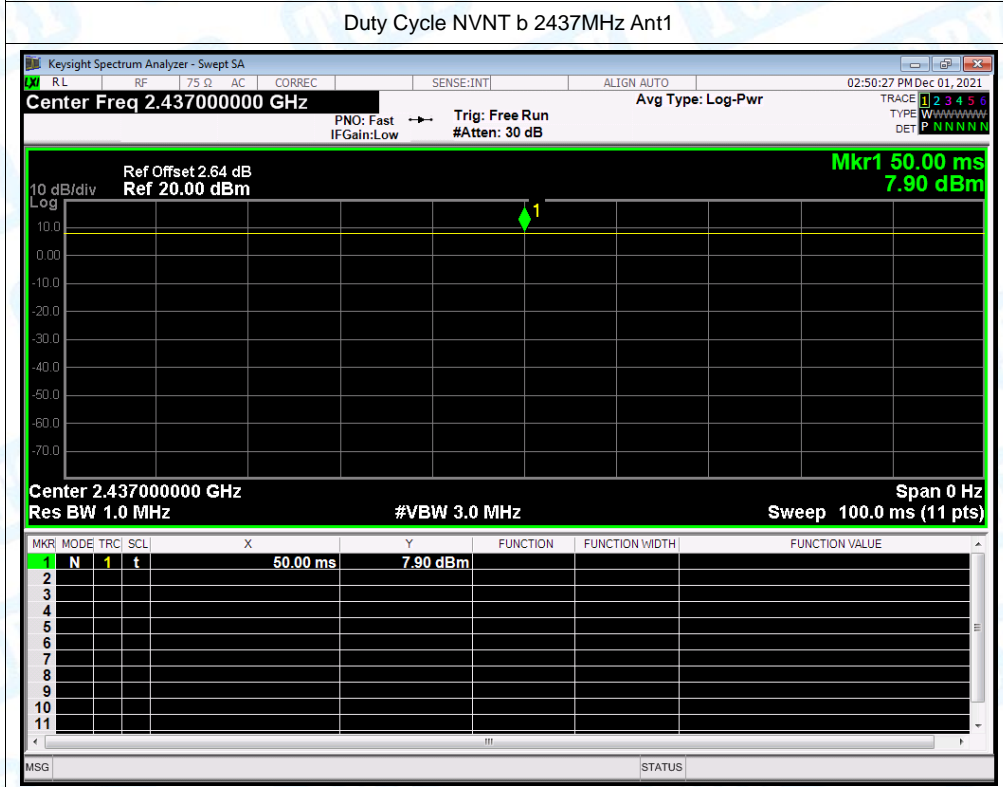
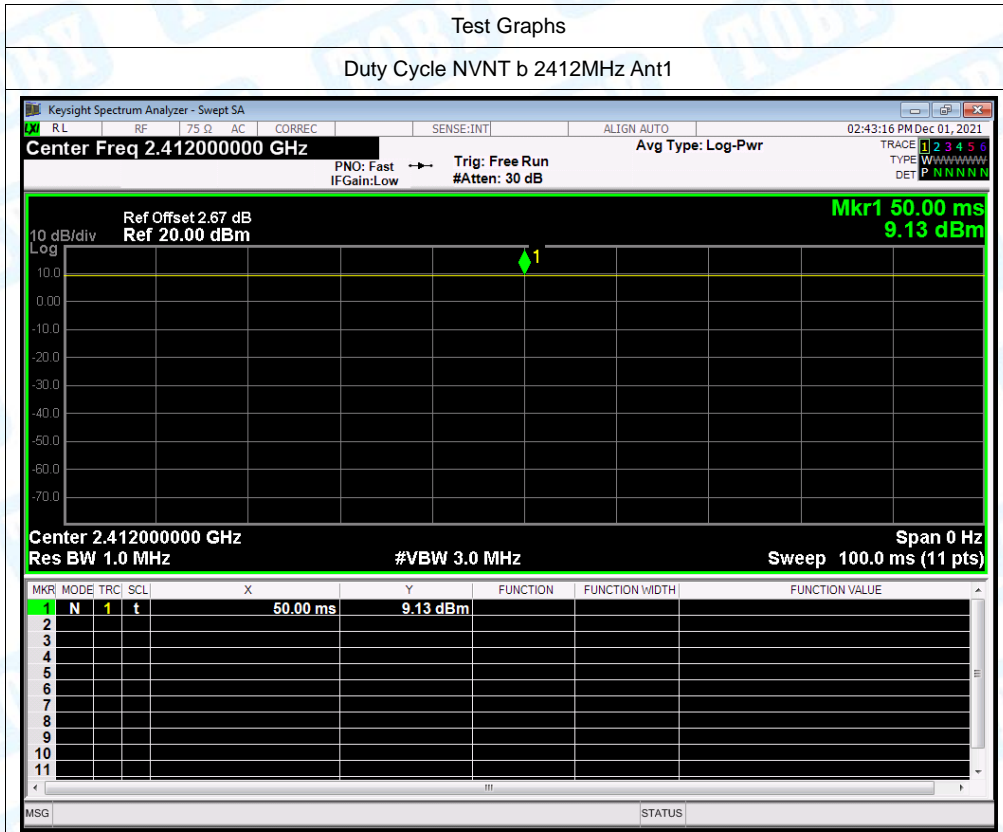


RF Test Data for 2.4G WiFi (Conducted Measurements)

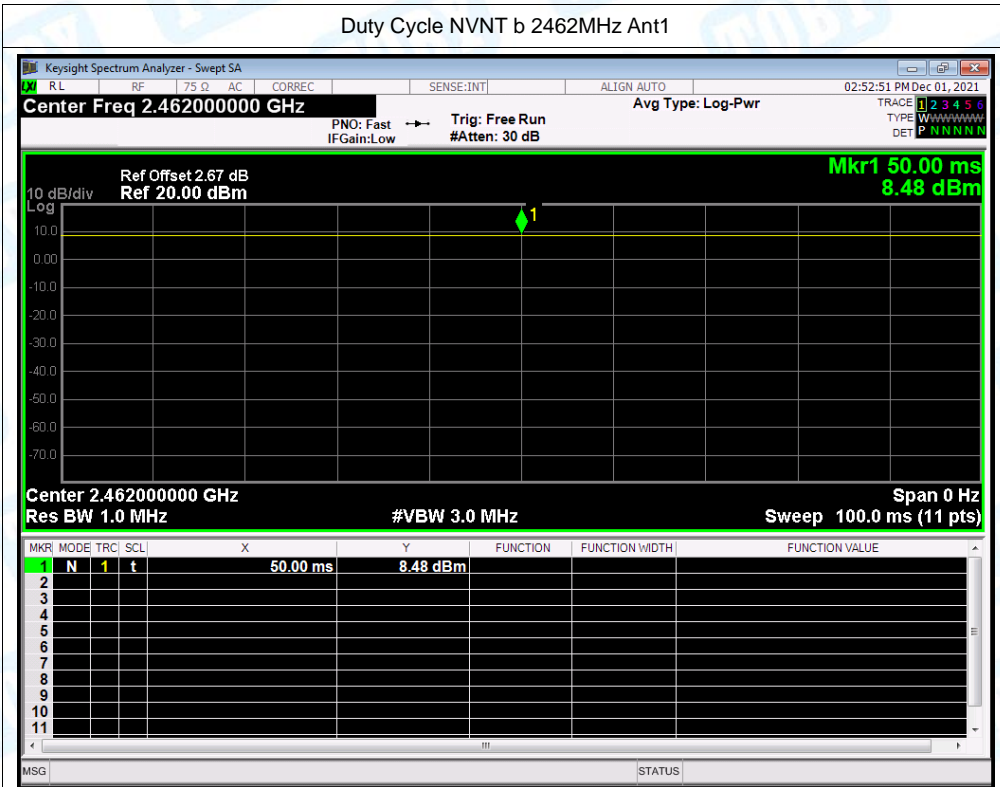
General Description of EUT	
Product Name:	Smart IP Camera with Battery
Test Model:	BWNIP-2TA-BS-V4
Sample ID:	20211124-05-2#
Environmental Conditions	
Temperature:	24°C
Relative Humidity:	50%
Test Voltage:	DC3.7V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC185107	

1. Duty Cycle

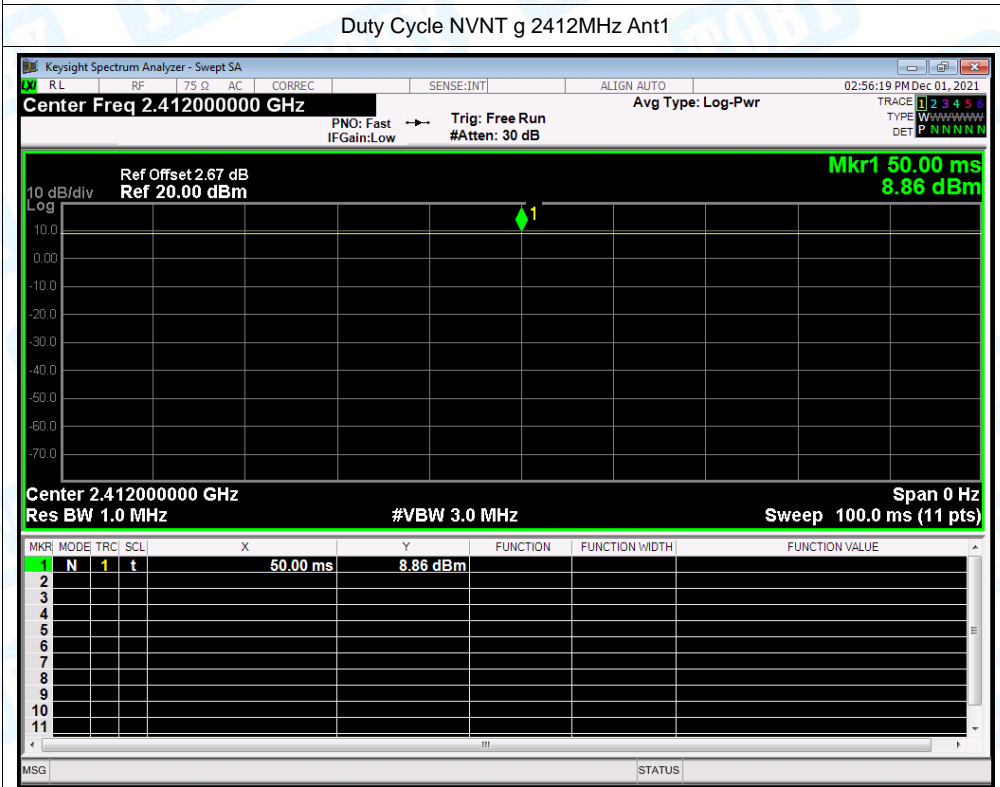
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	100	0	0
NVNT	b	2437	Ant1	100	0	0
NVNT	b	2462	Ant1	100	0	0
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0
NVNT	n(HT20)	2412	Ant1	100	0	0
NVNT	n(HT20)	2437	Ant1	100	0	0
NVNT	n(HT20)	2462	Ant1	100	0	0



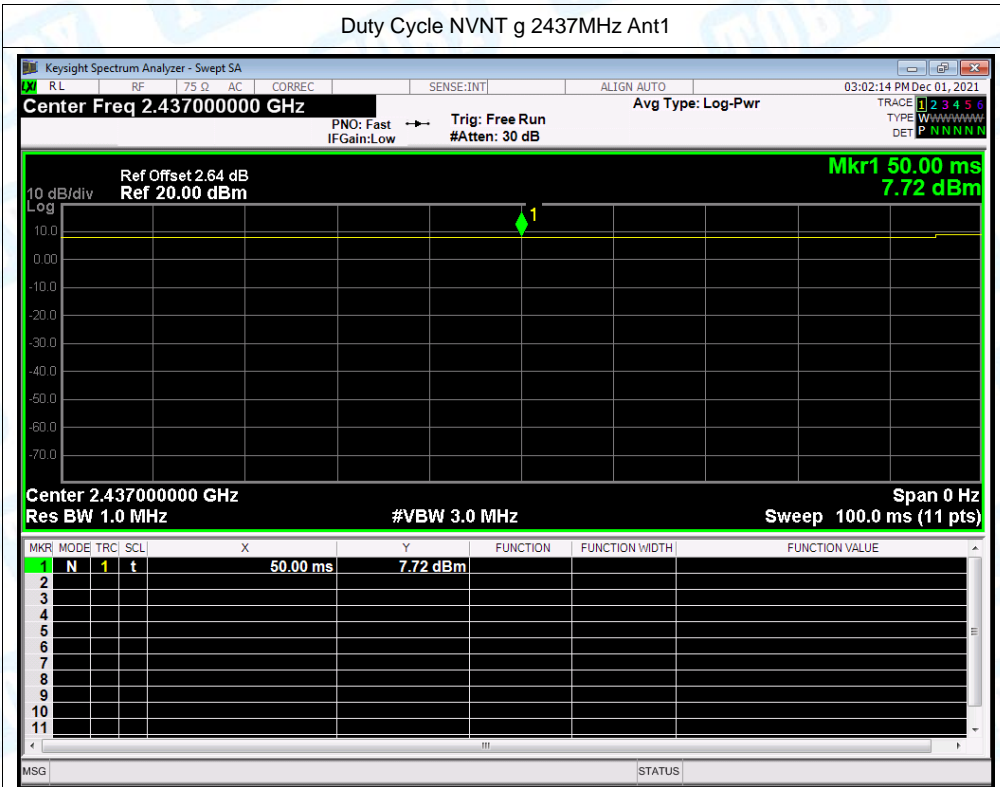
Duty Cycle NVNT b 2462MHz Ant1



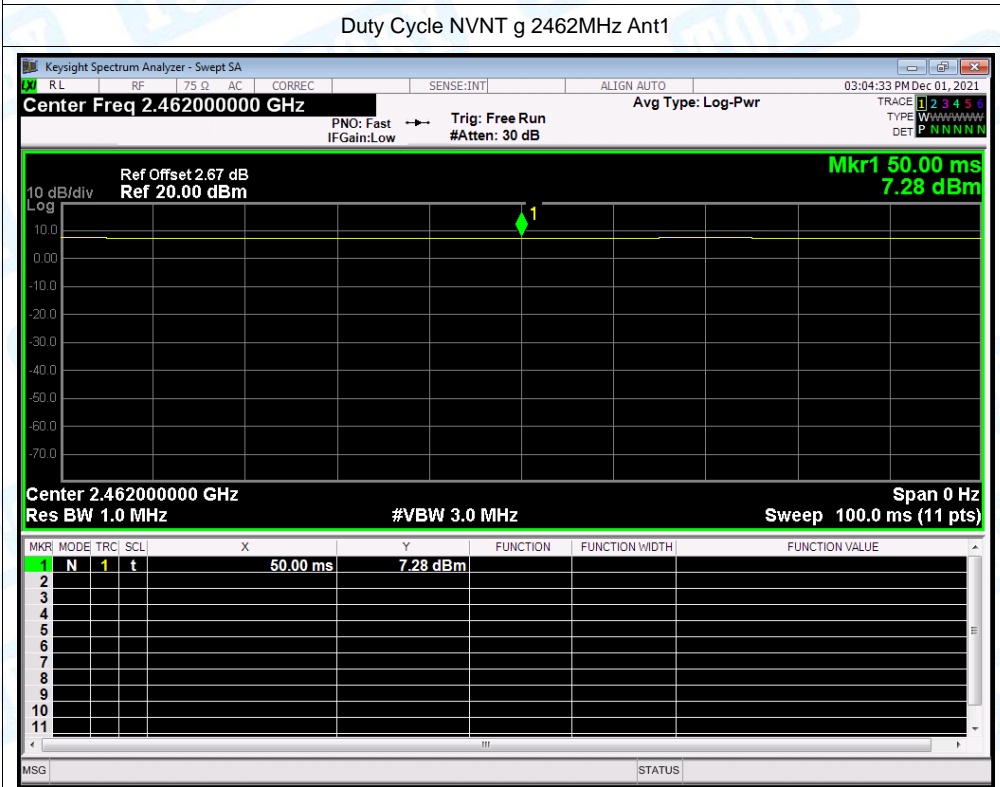
Duty Cycle NVNT g 2412MHz Ant1

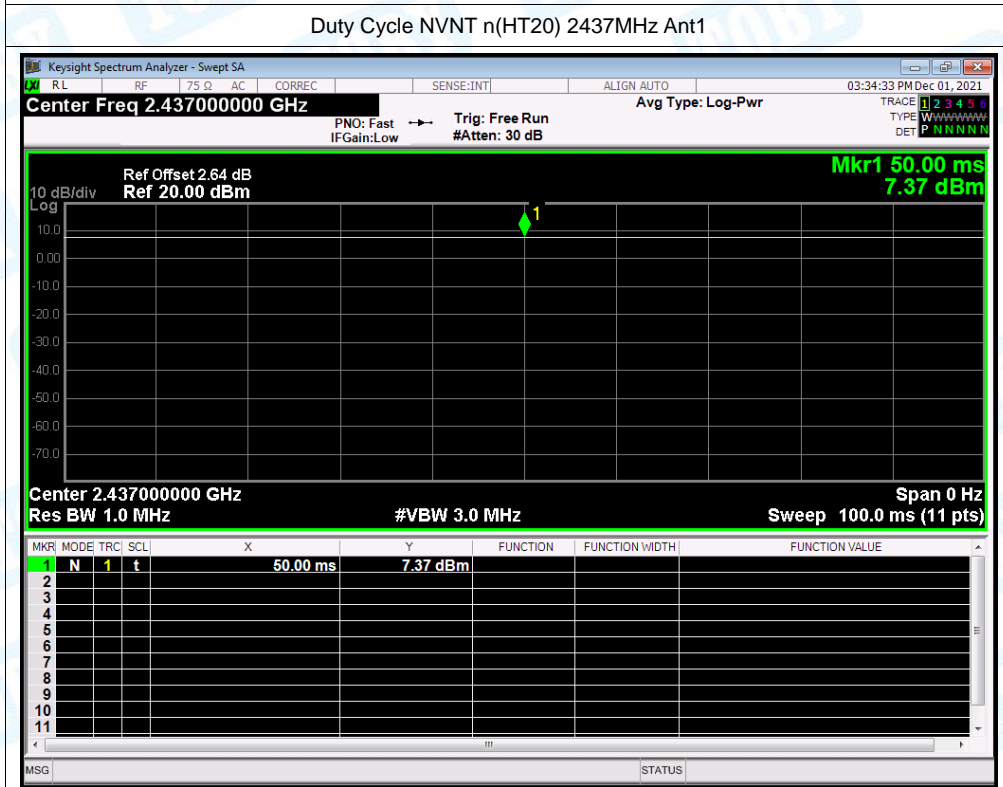
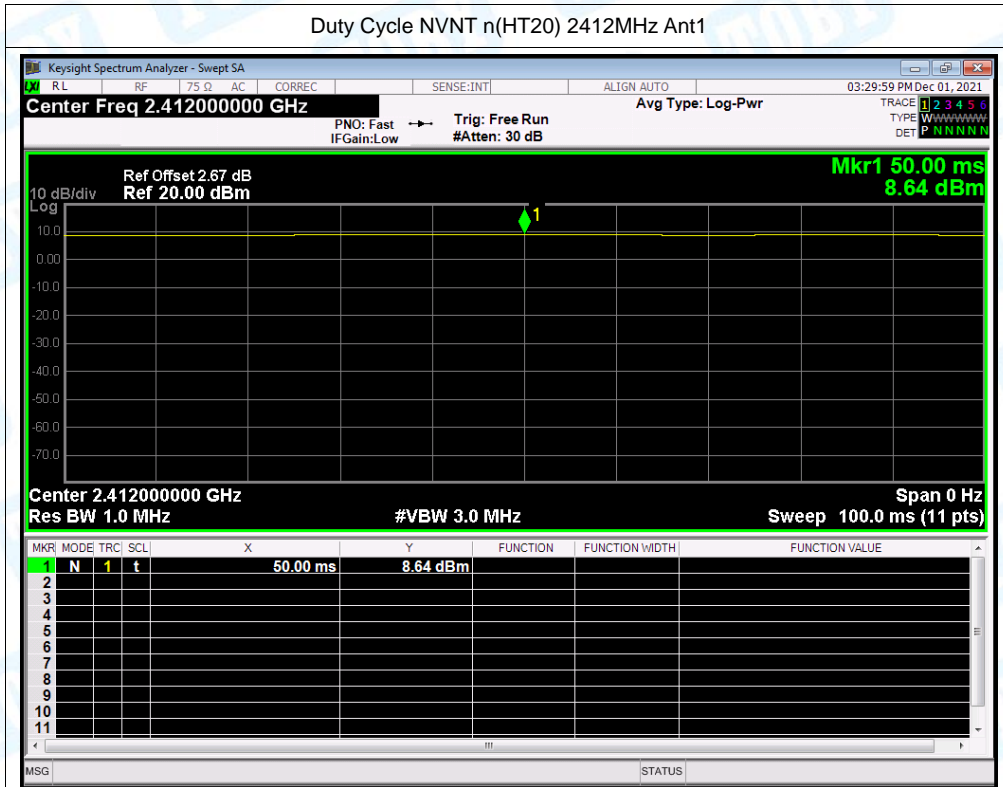


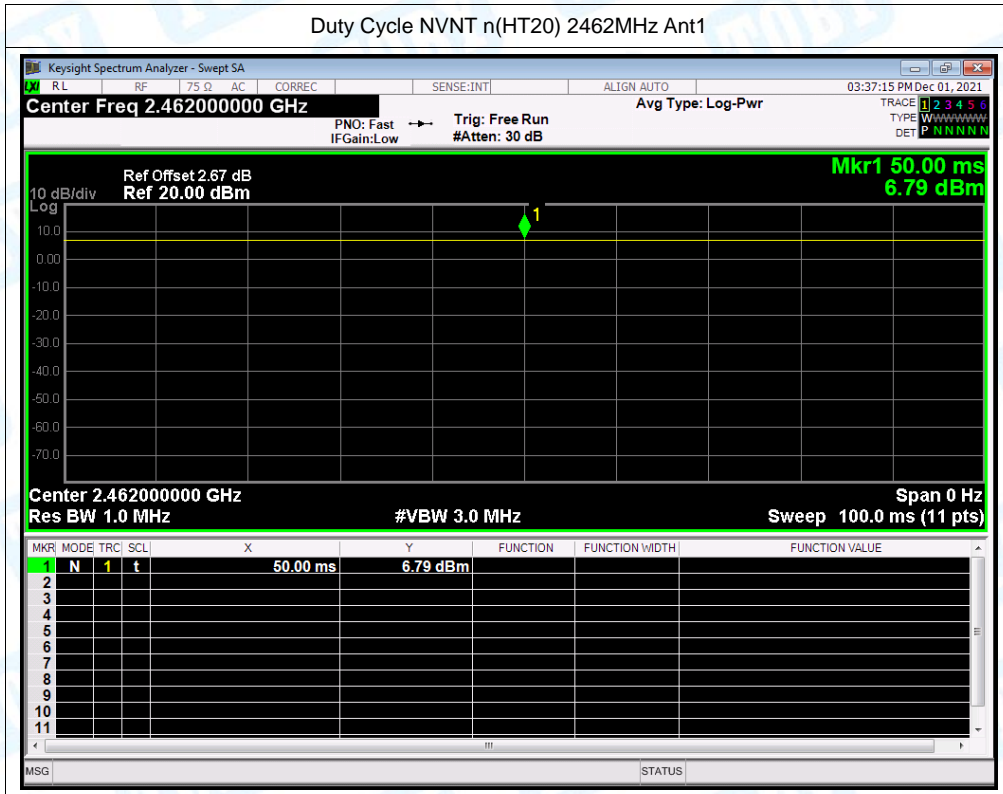
Duty Cycle NVNT g 2437MHz Ant1



Duty Cycle NVNT g 2462MHz Ant1





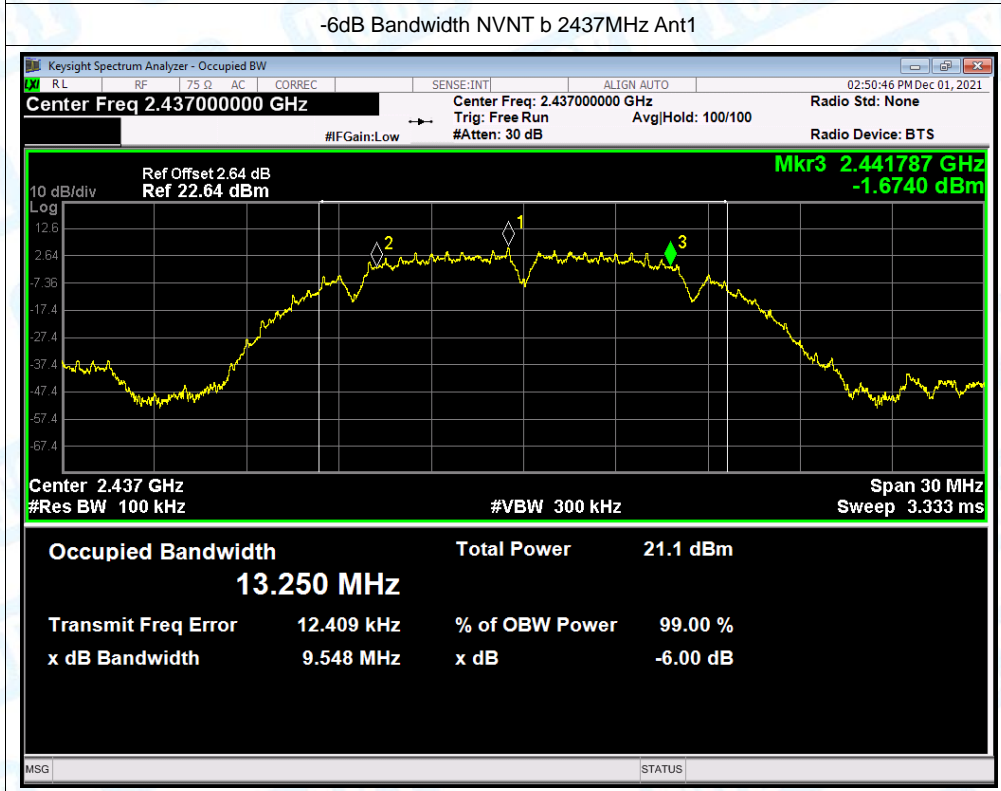
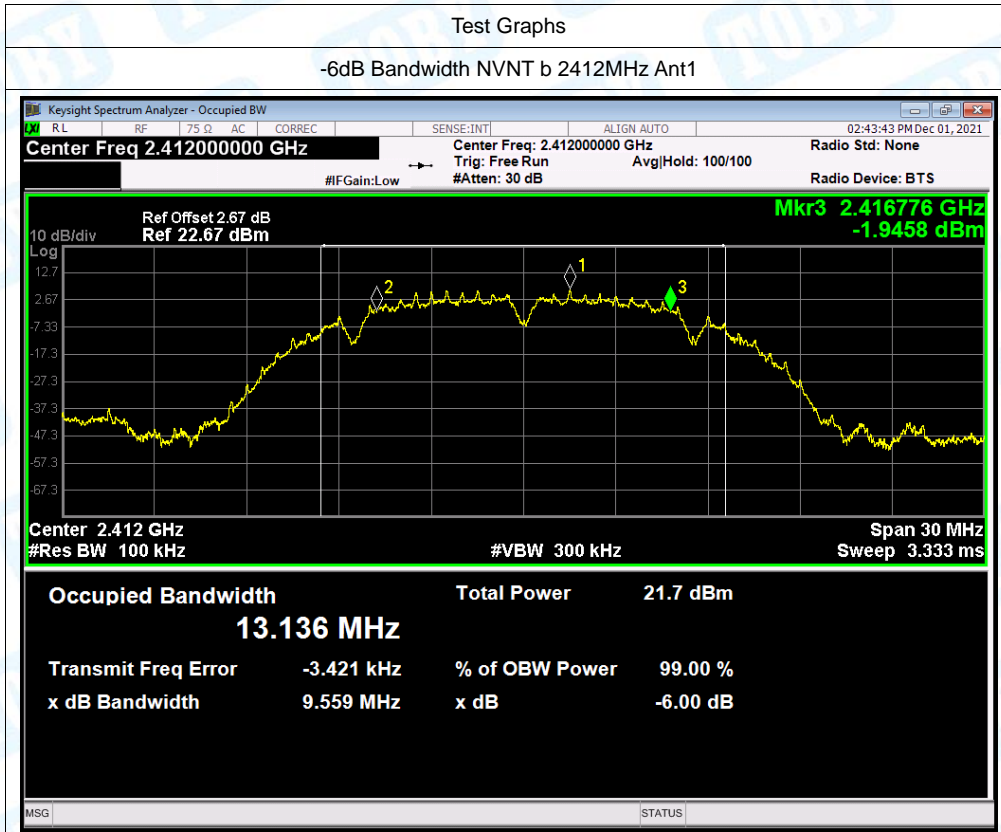


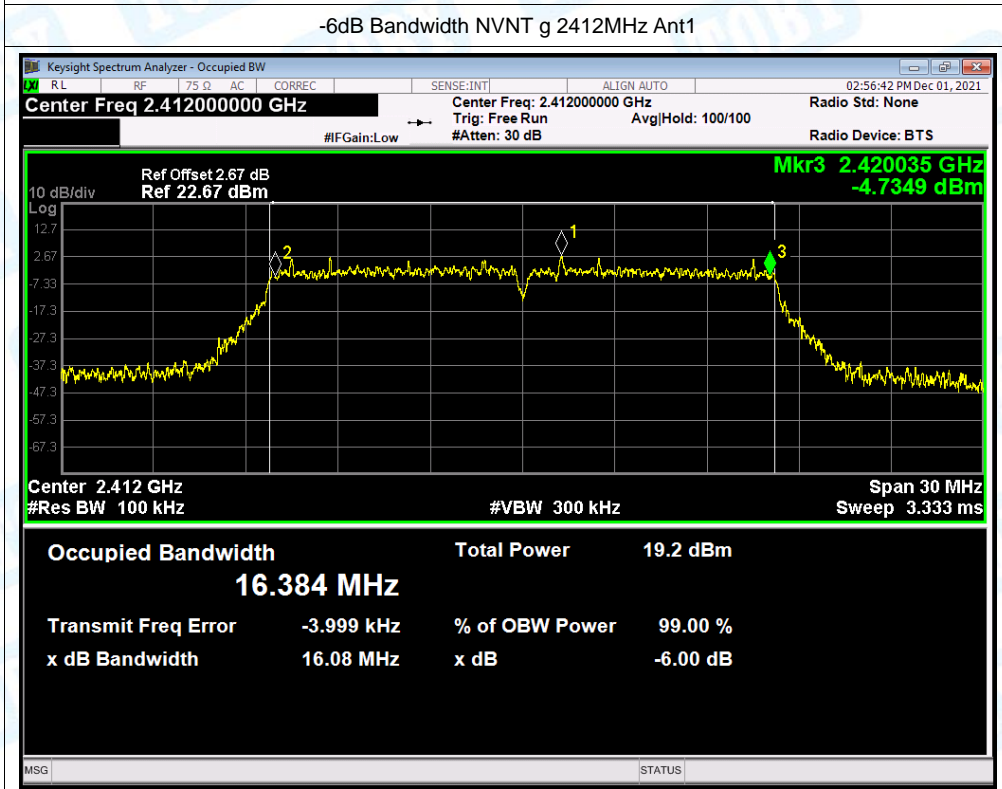
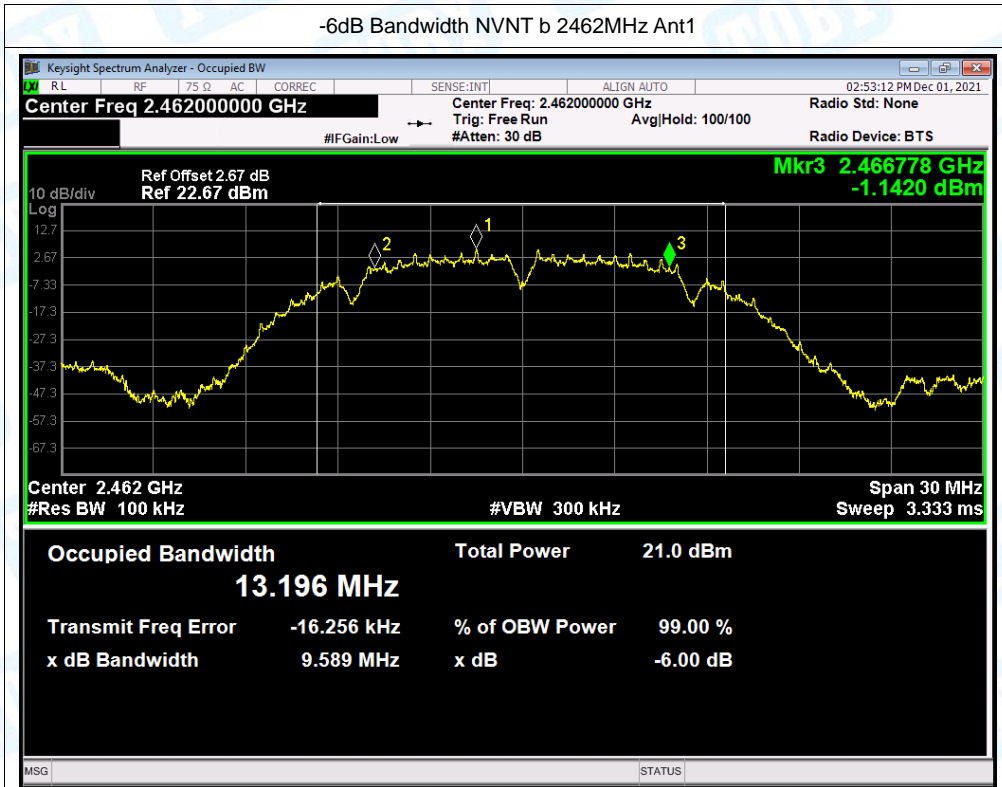
2.Maximum Conducted Output Power

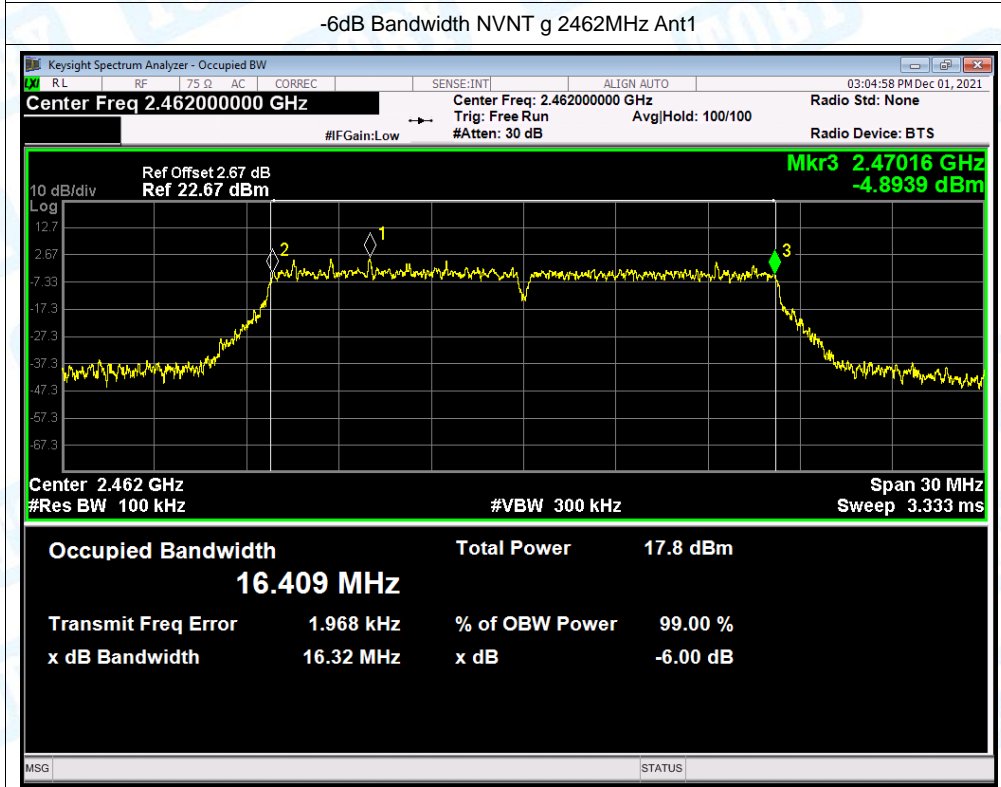
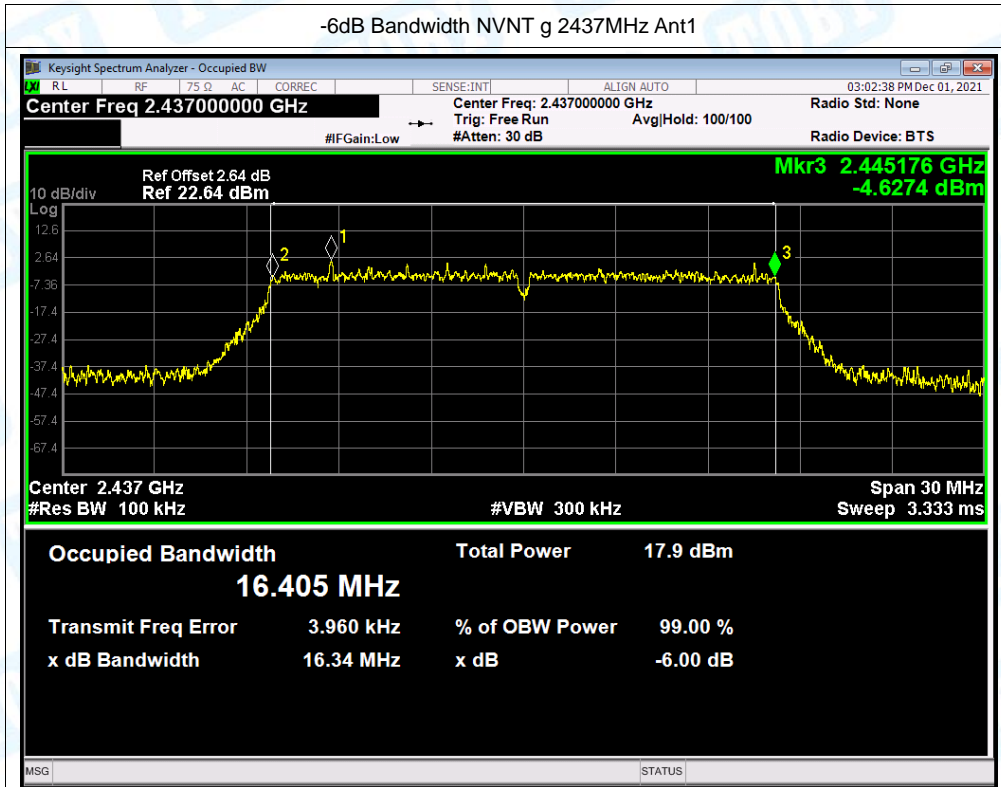
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	13.488	0	13.488	30	Pass
NVNT	b	2437	Ant1	13.114	0	13.114	30	Pass
NVNT	b	2462	Ant1	12.965	0	12.965	30	Pass
NVNT	g	2412	Ant1	13.84	0	13.84	30	Pass
NVNT	g	2437	Ant1	13.359	0	13.359	30	Pass
NVNT	g	2462	Ant1	13.092	0	13.092	30	Pass
NVNT	n(HT20)	2412	Ant1	13.84	0	13.84	30	Pass
NVNT	n(HT20)	2437	Ant1	13.586	0	13.586	30	Pass
NVNT	n(HT20)	2462	Ant1	13.269	0	13.269	30	Pass

3.-6dB Bandwidth

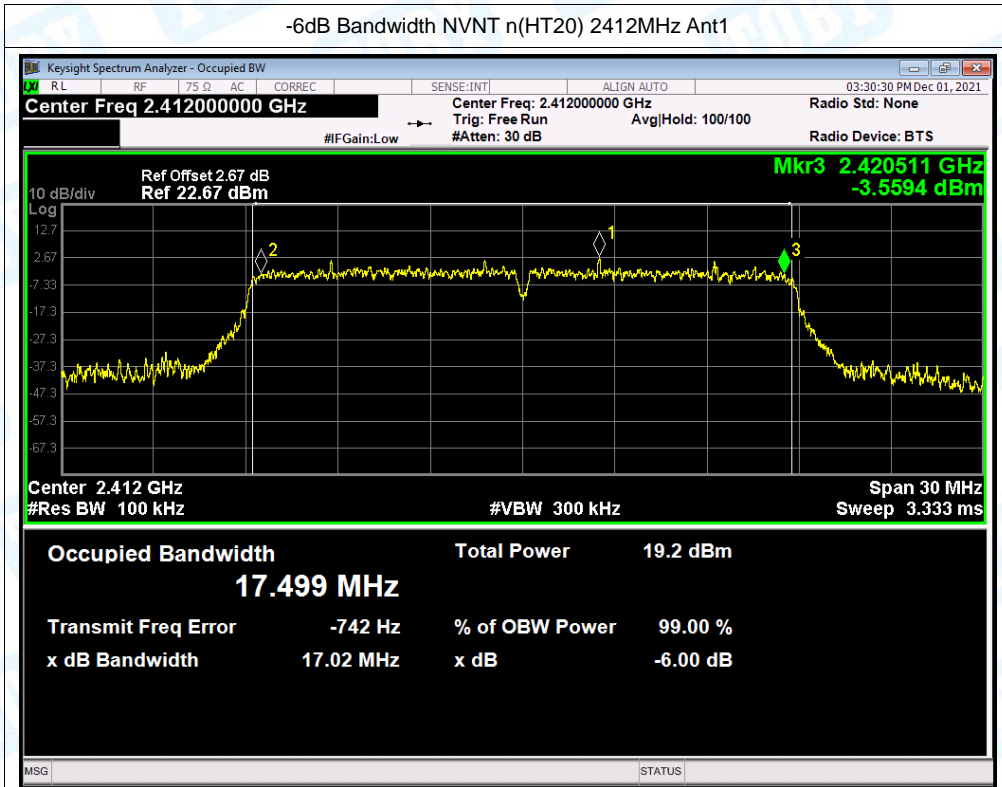
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.559	0.5	Pass
NVNT	b	2437	Ant1	9.548	0.5	Pass
NVNT	b	2462	Ant1	9.589	0.5	Pass
NVNT	g	2412	Ant1	16.08	0.5	Pass
NVNT	g	2437	Ant1	16.34	0.5	Pass
NVNT	g	2462	Ant1	16.32	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.02	0.5	Pass
NVNT	n(HT20)	2437	Ant1	16.67	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.29	0.5	Pass



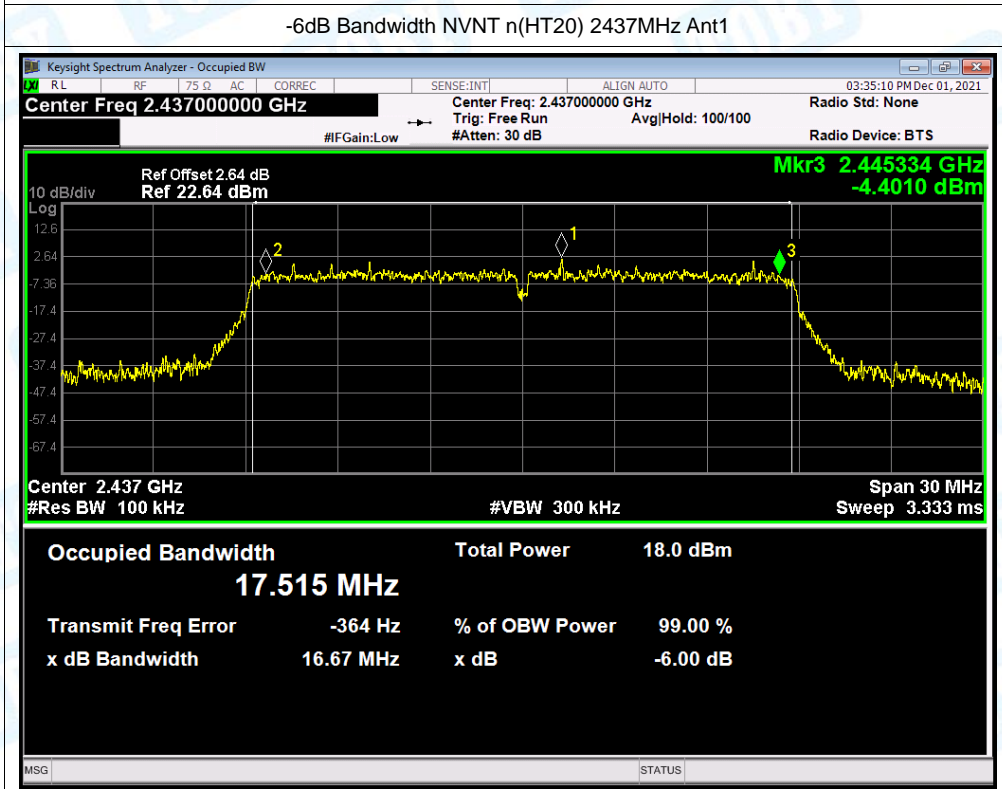


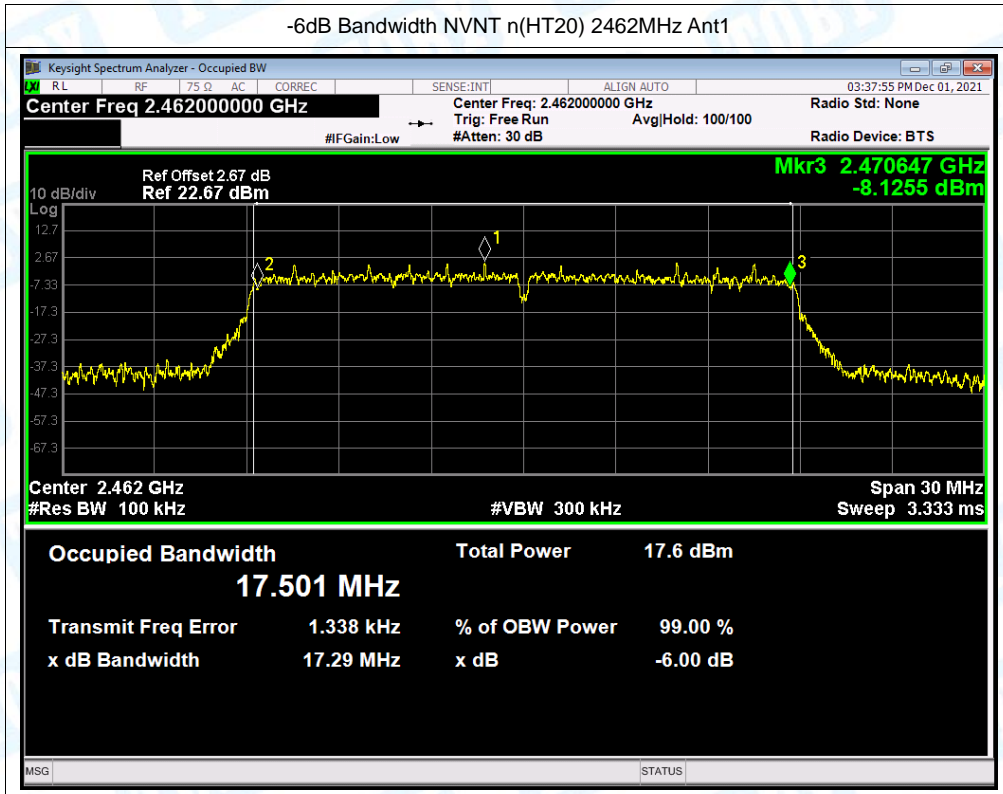


-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



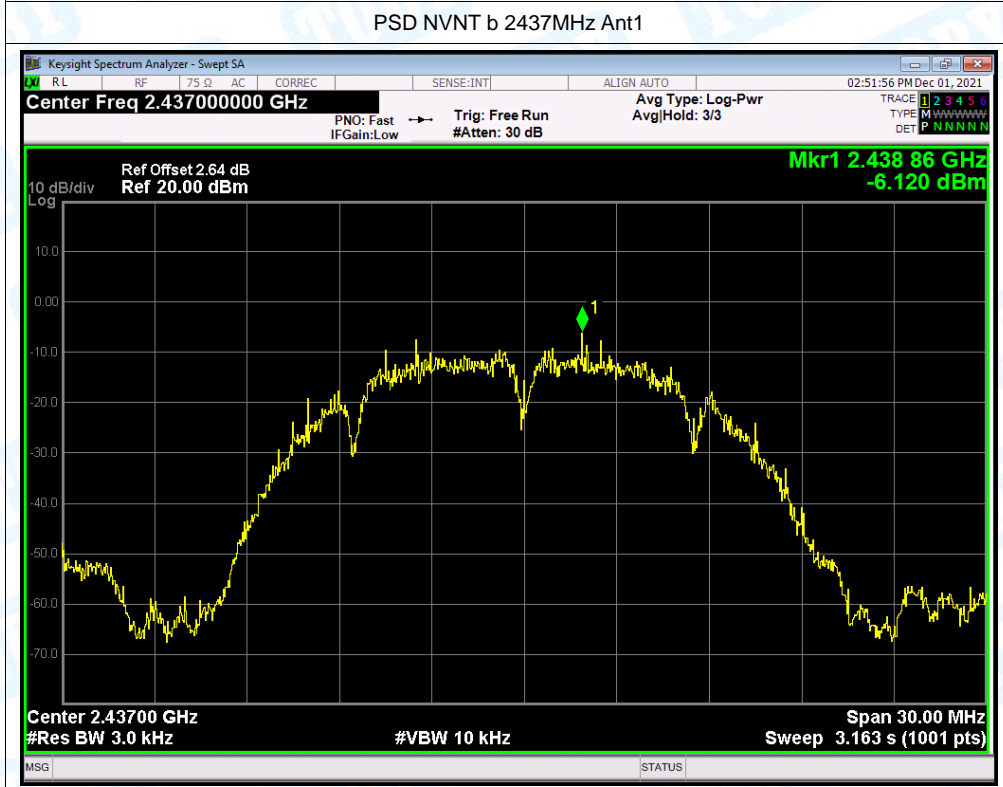
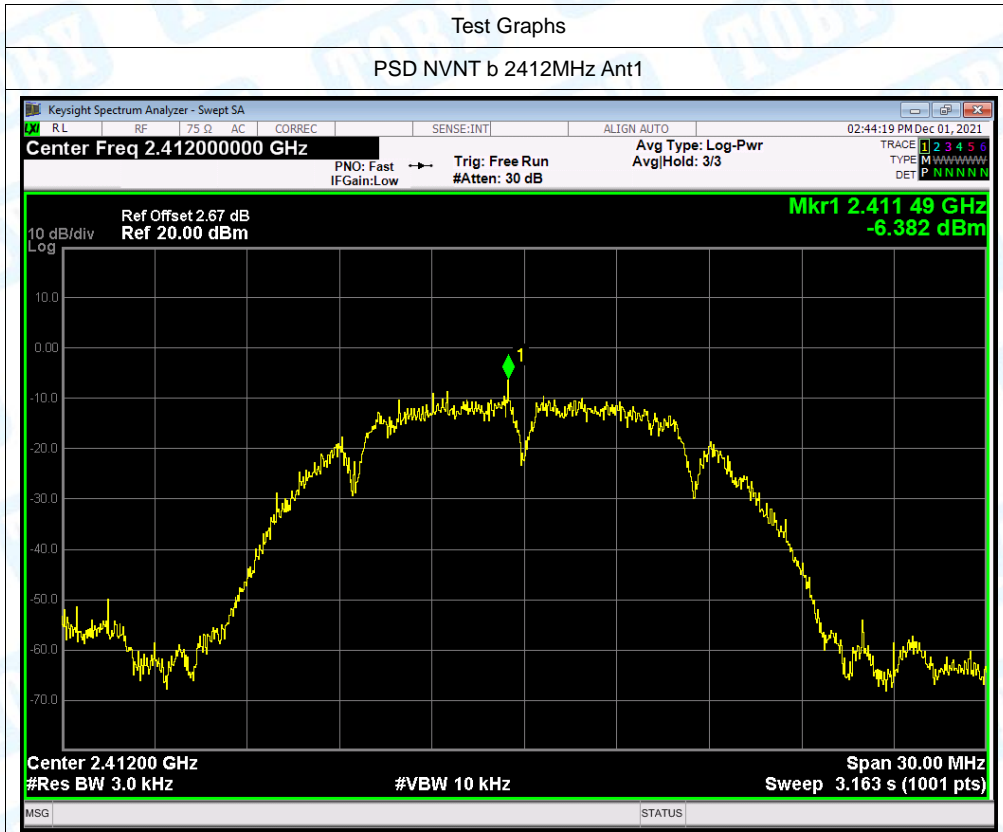
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1

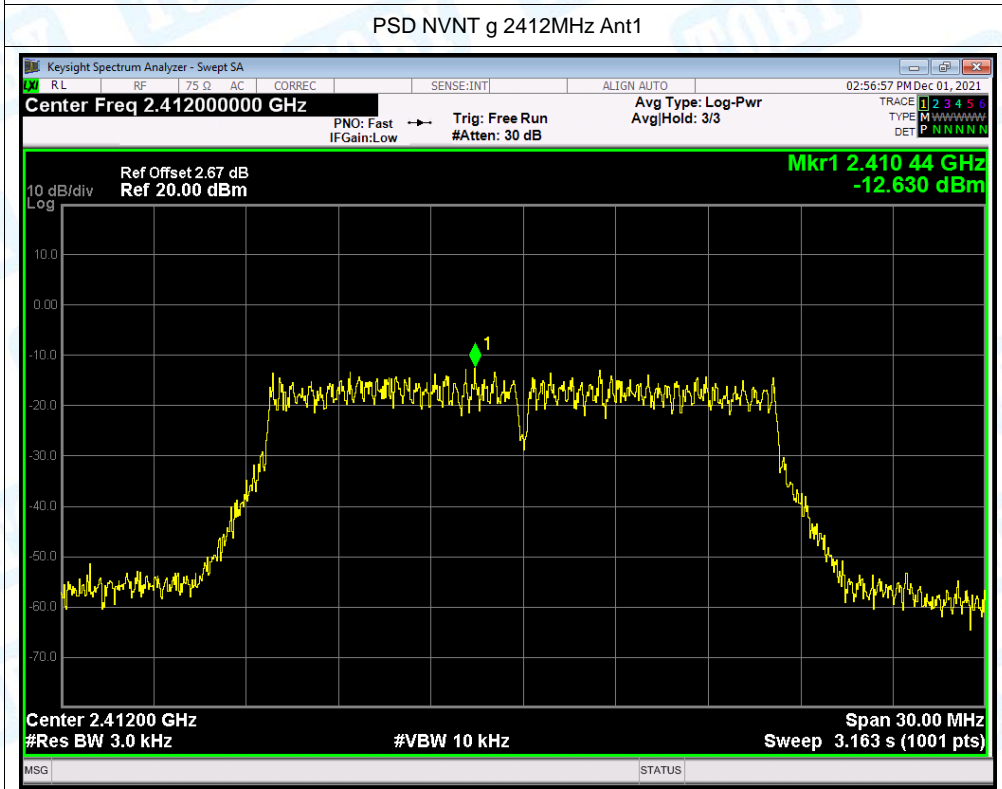
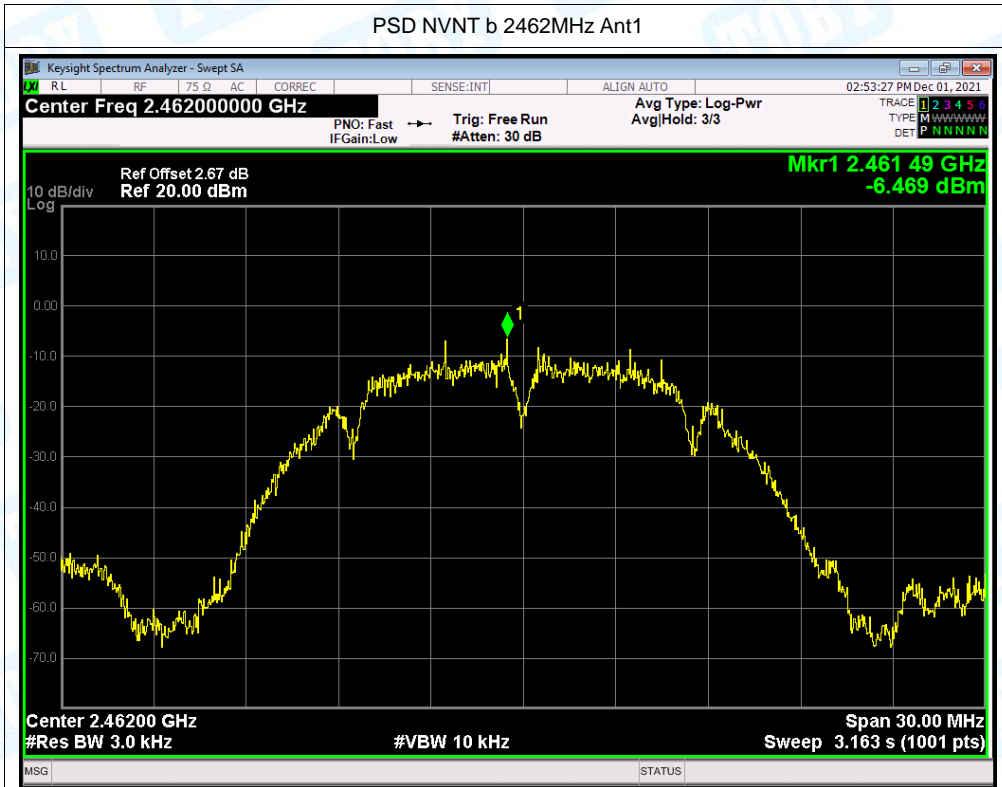


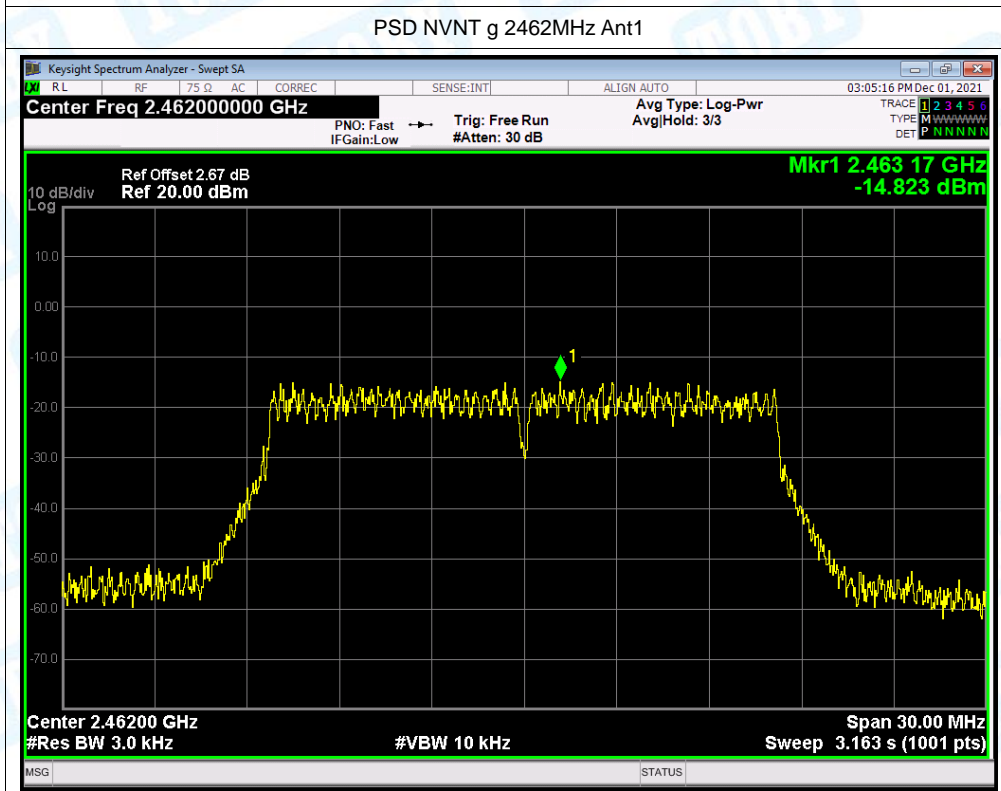
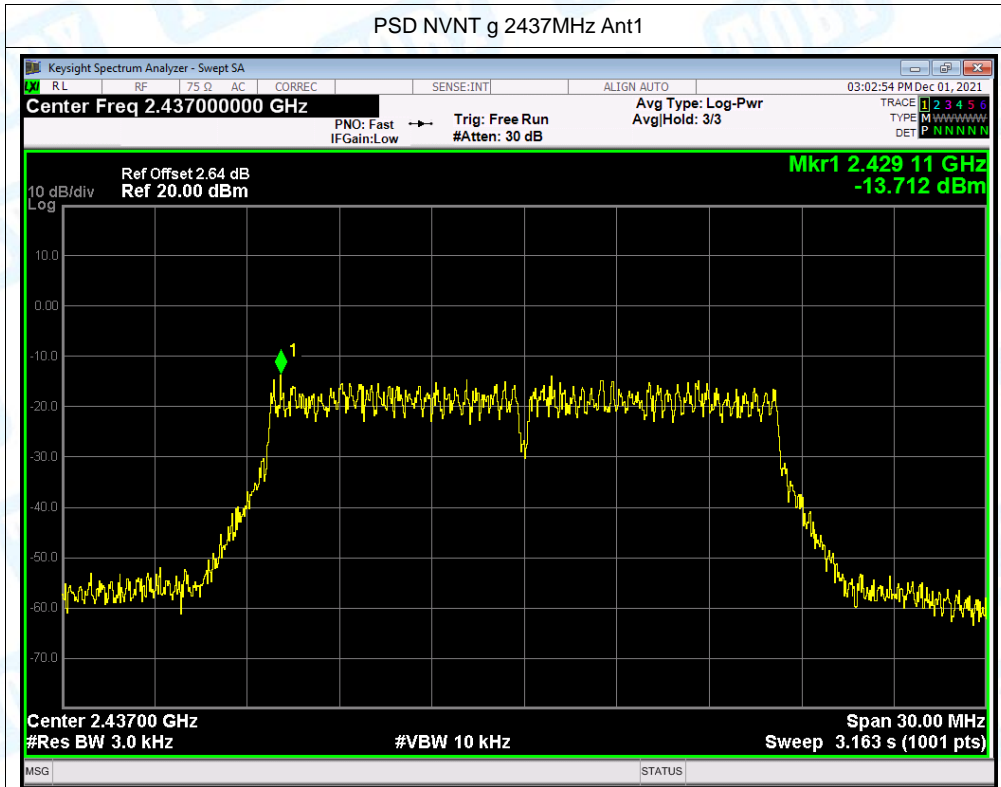


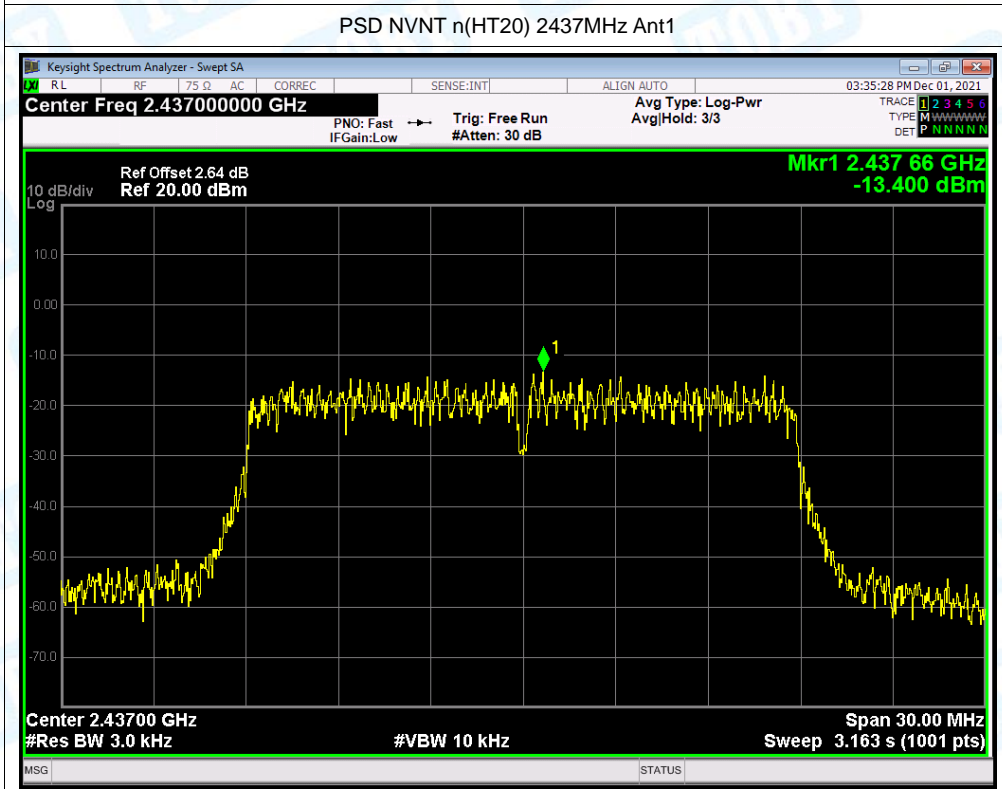
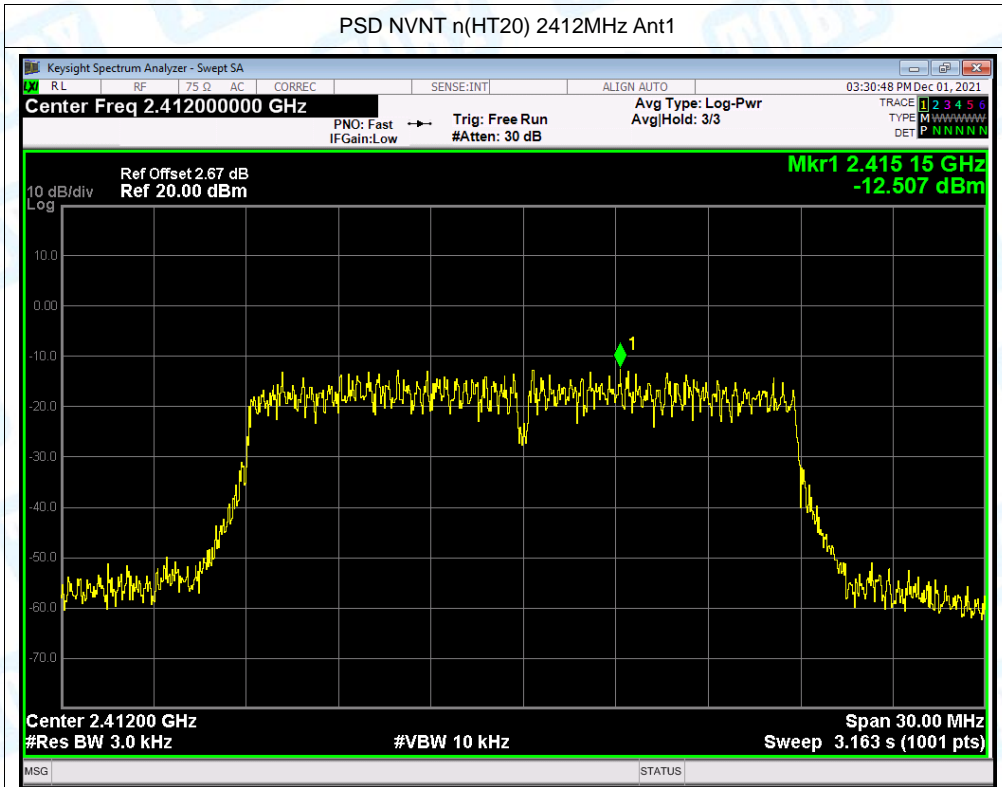
4. Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-6.382	8	Pass
NVNT	b	2437	Ant1	-6.12	8	Pass
NVNT	b	2462	Ant1	-6.469	8	Pass
NVNT	g	2412	Ant1	-12.63	8	Pass
NVNT	g	2437	Ant1	-13.712	8	Pass
NVNT	g	2462	Ant1	-14.823	8	Pass
NVNT	n(HT20)	2412	Ant1	-12.507	8	Pass
NVNT	n(HT20)	2437	Ant1	-13.4	8	Pass
NVNT	n(HT20)	2462	Ant1	-14.842	8	Pass



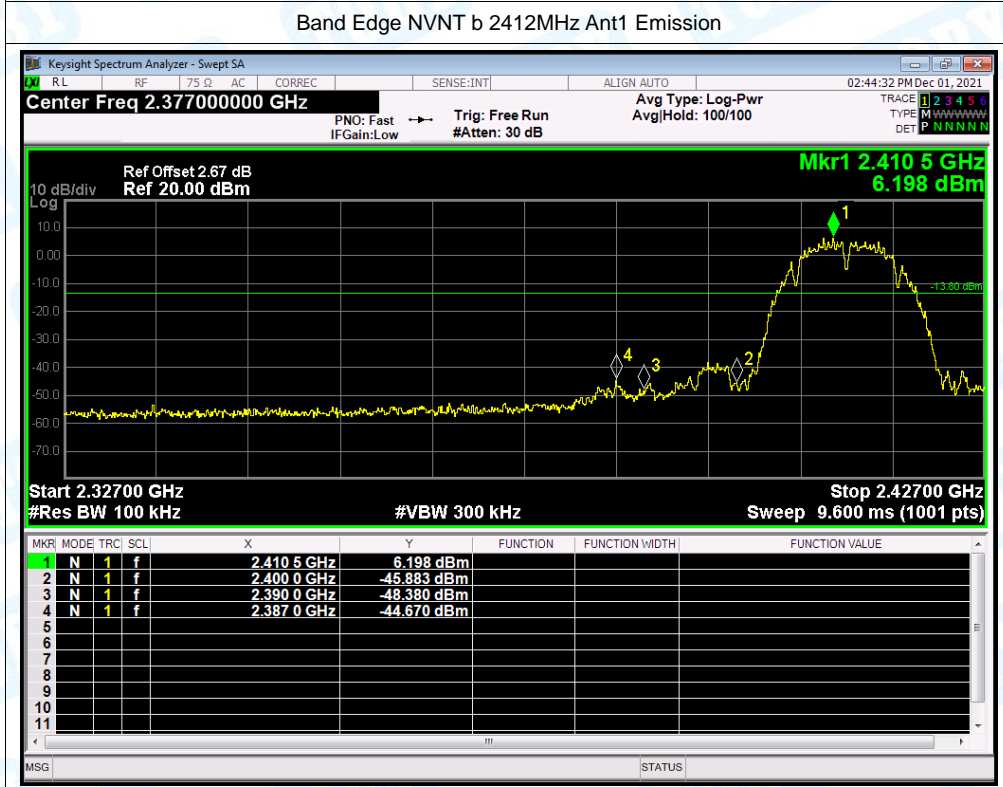


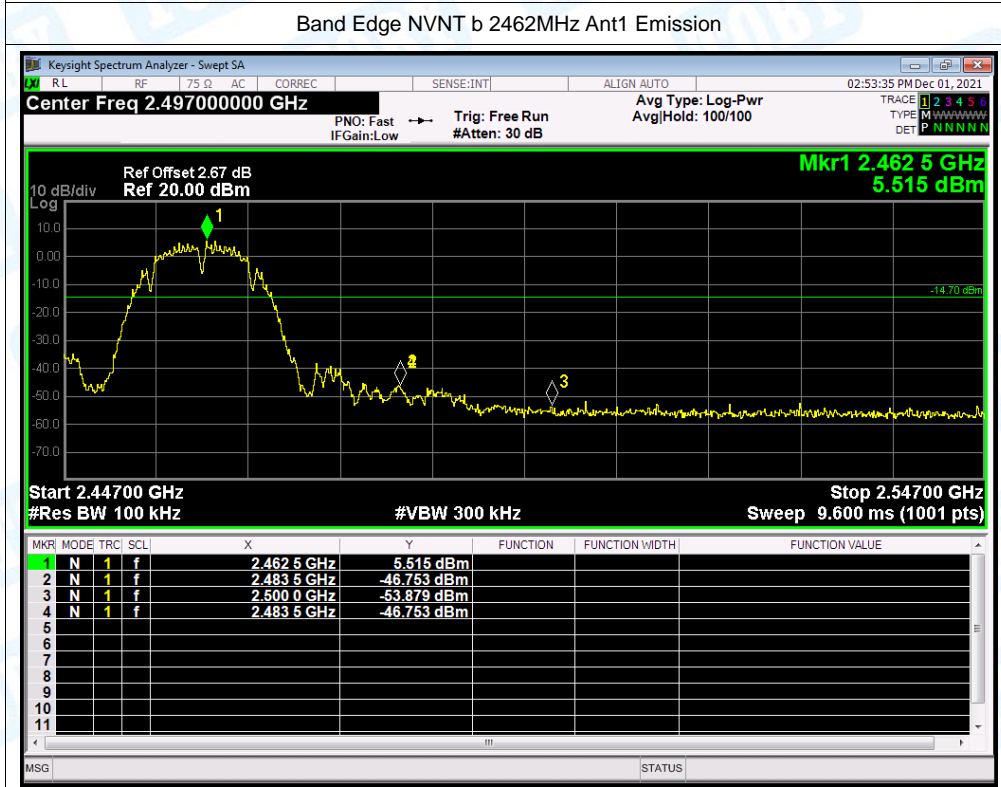
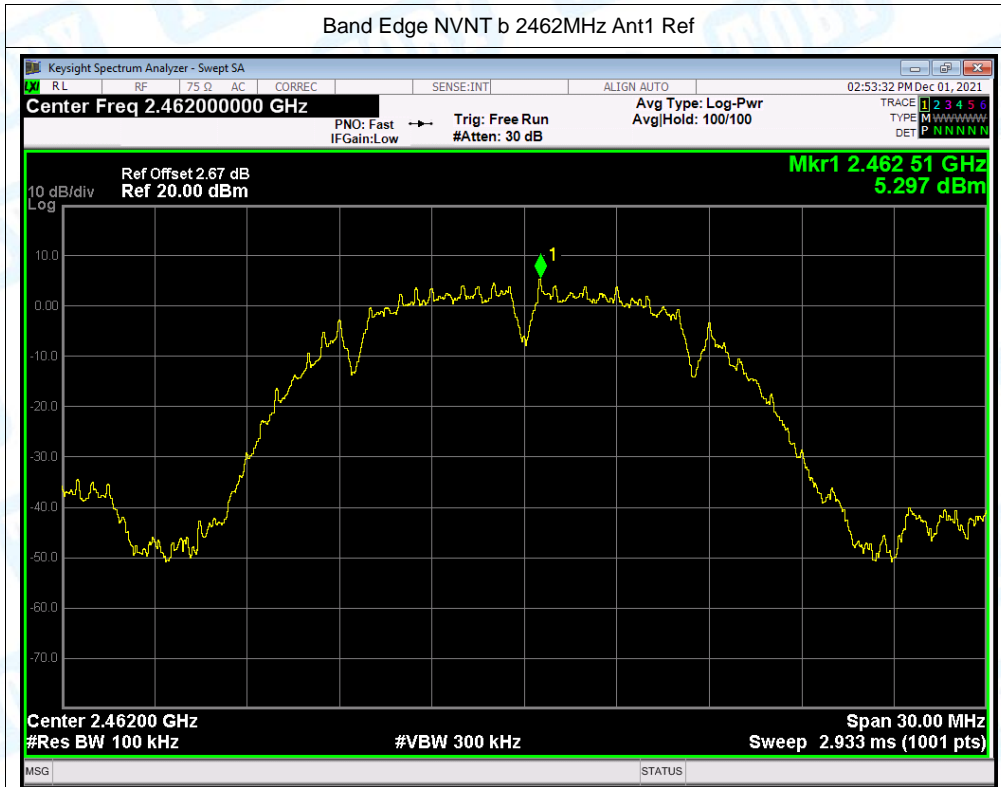


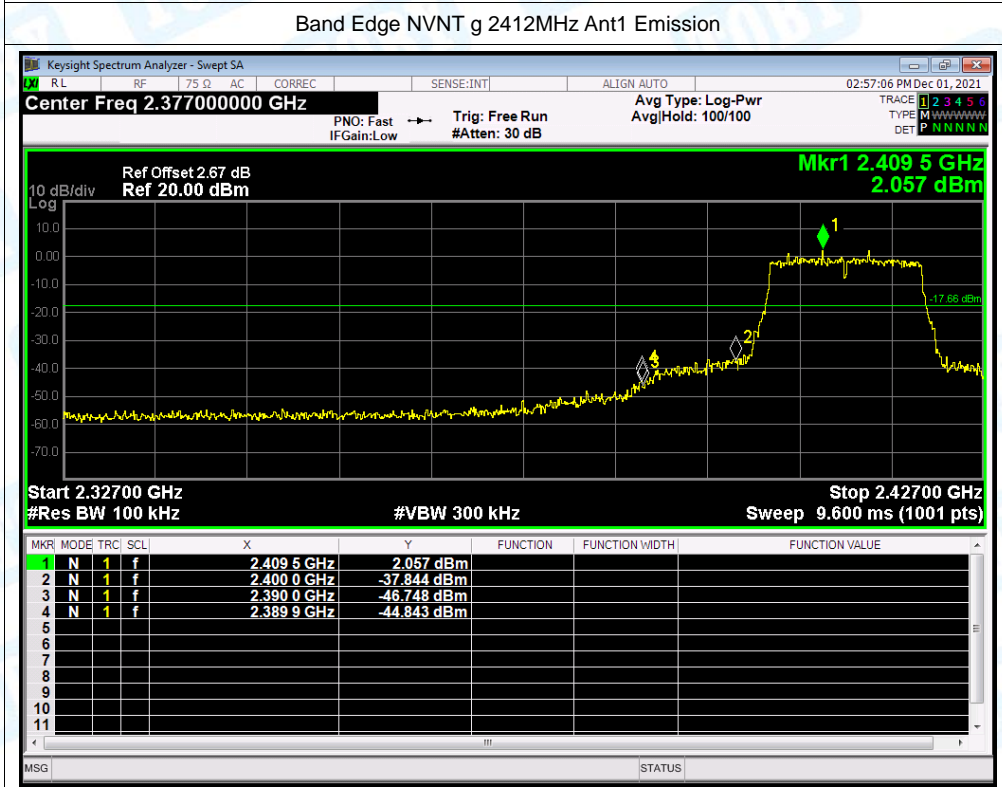
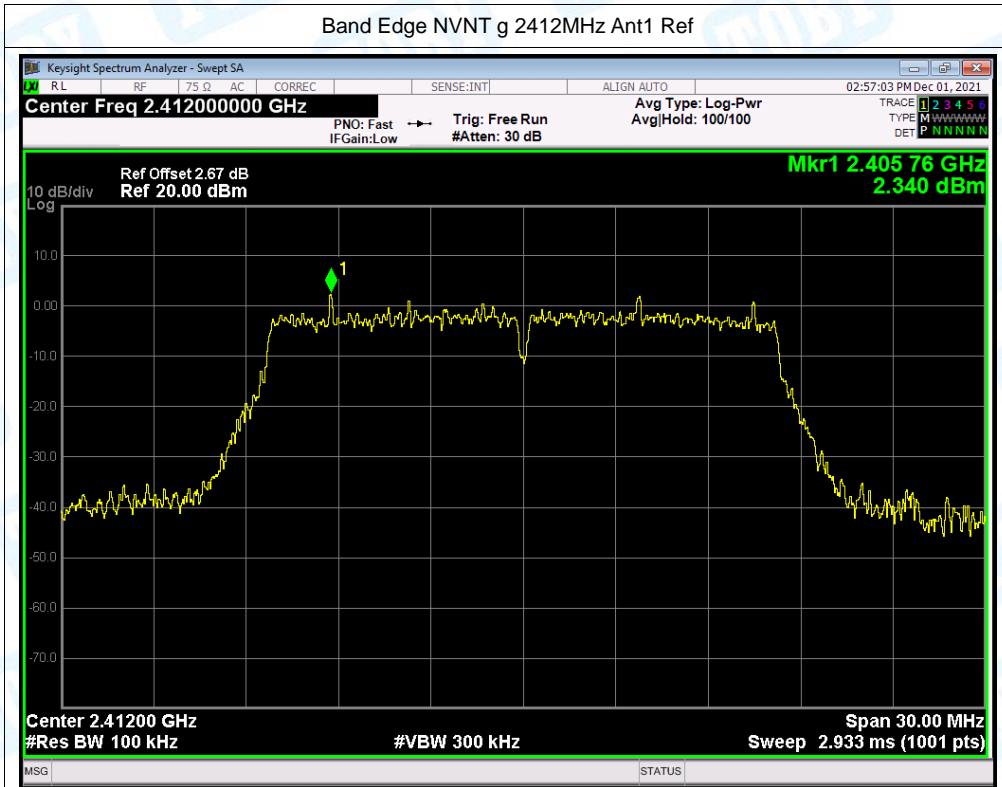


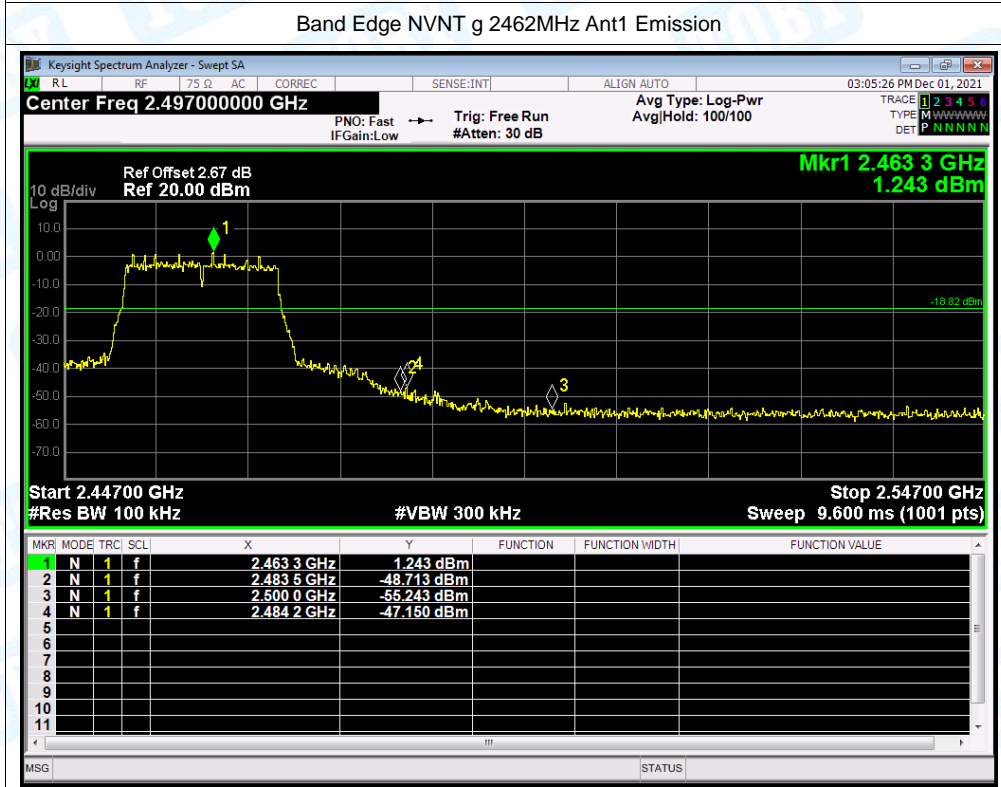
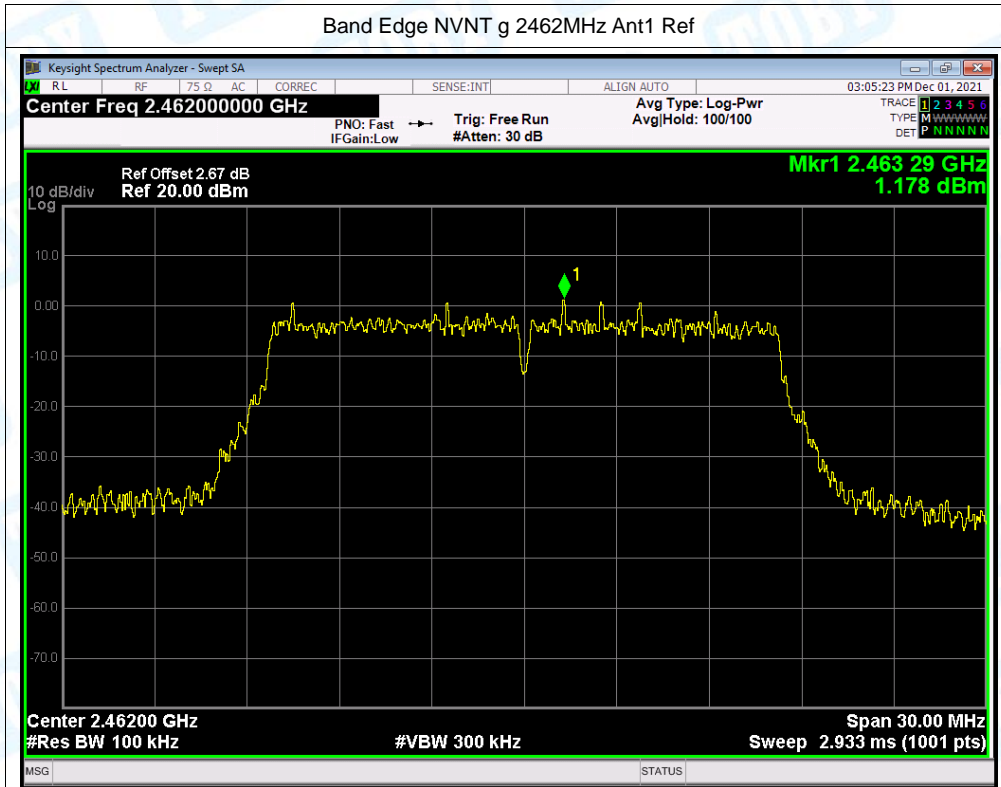
5.Band Edge

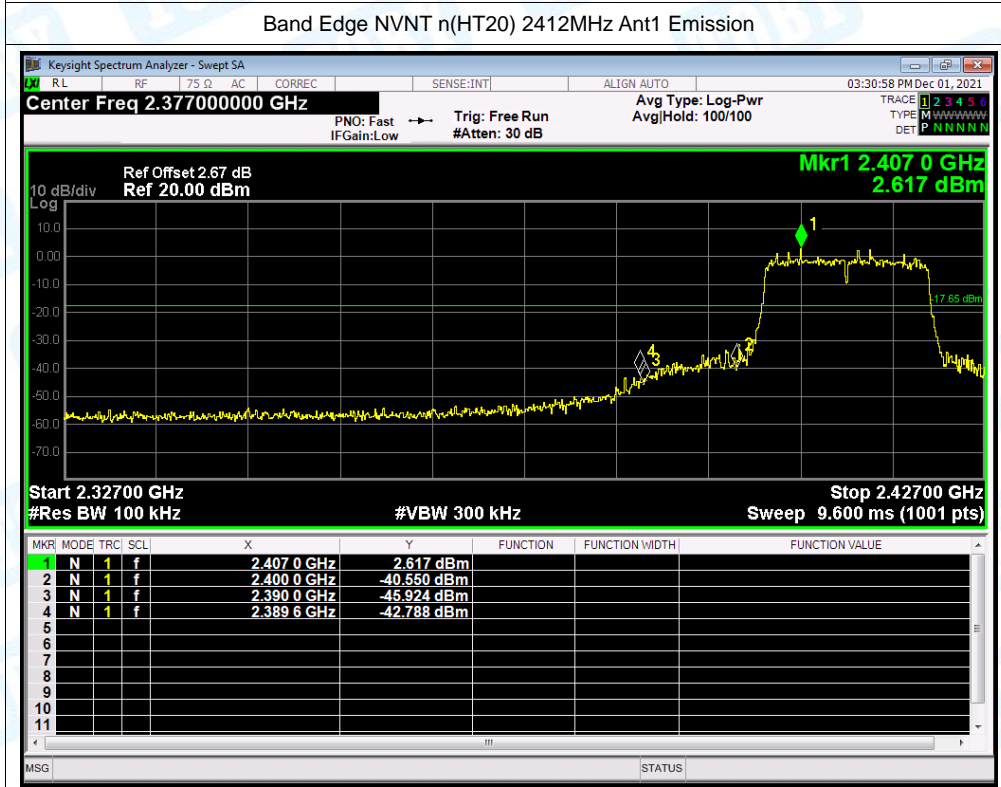
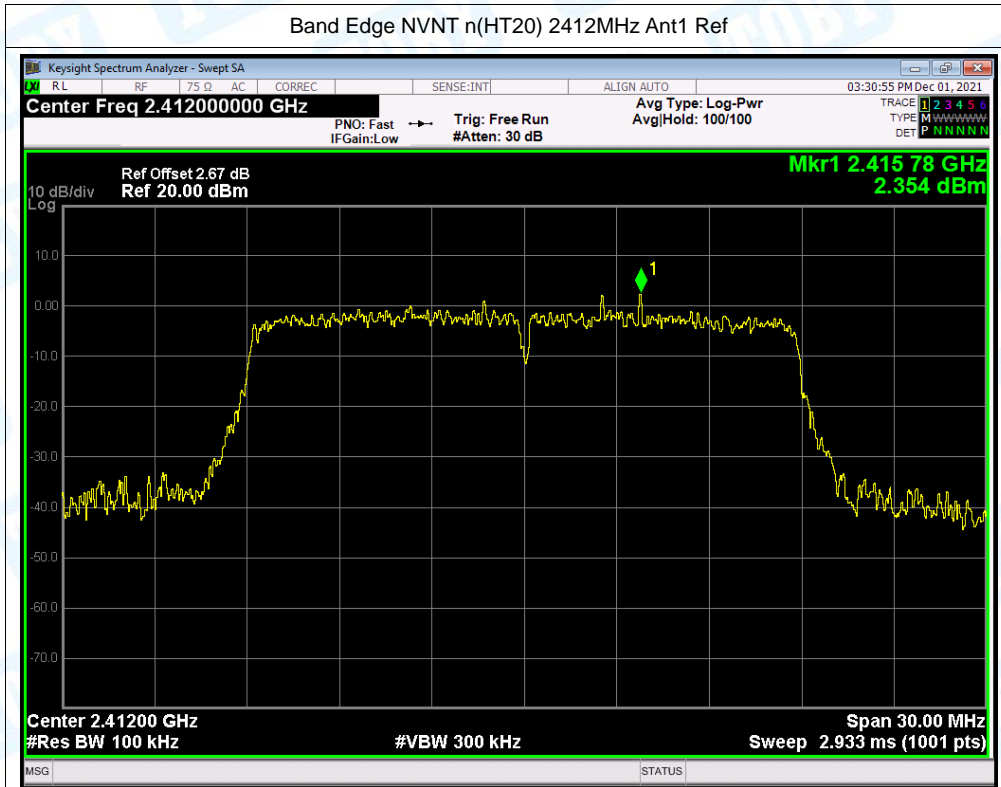
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.86	-20	Pass
NVNT	b	2462	Ant1	-52.05	-20	Pass
NVNT	g	2412	Ant1	-47.18	-20	Pass
NVNT	g	2462	Ant1	-48.33	-20	Pass
NVNT	n(HT20)	2412	Ant1	-45.13	-20	Pass
NVNT	n(HT20)	2462	Ant1	-48.28	-20	Pass

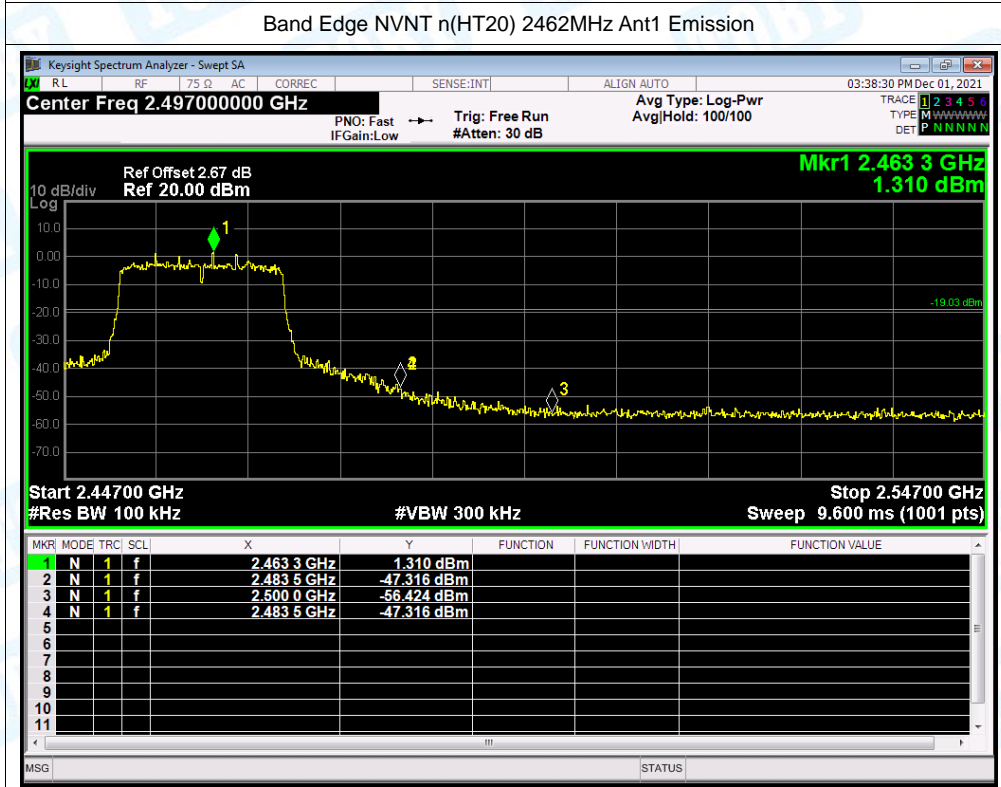
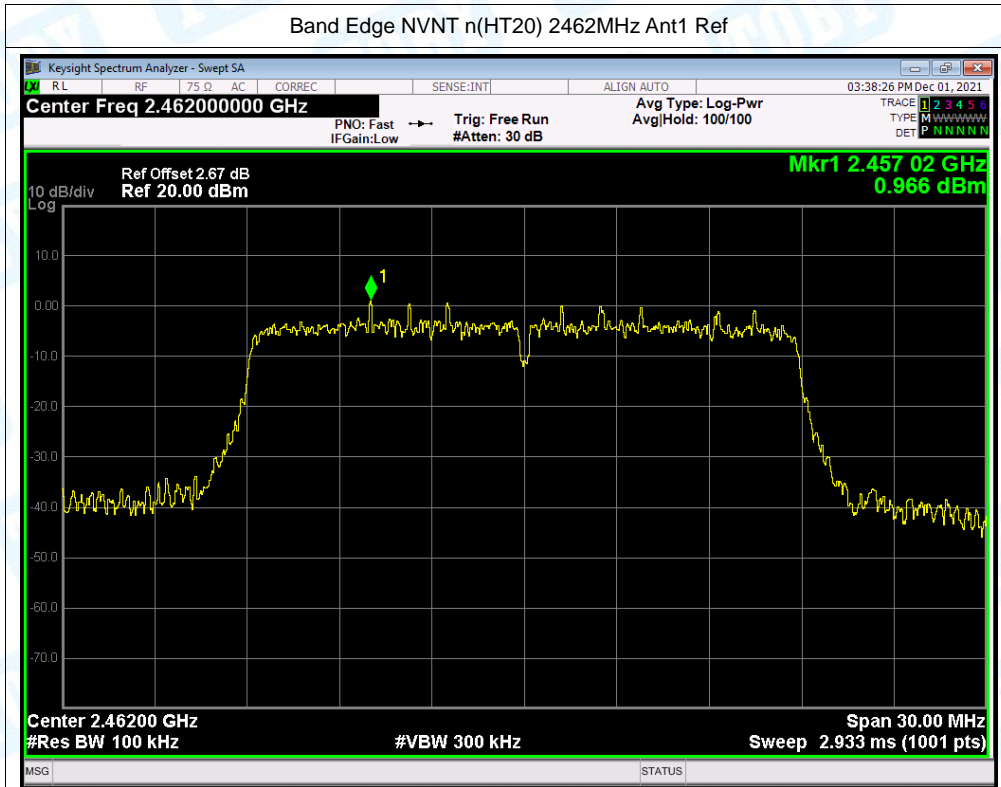






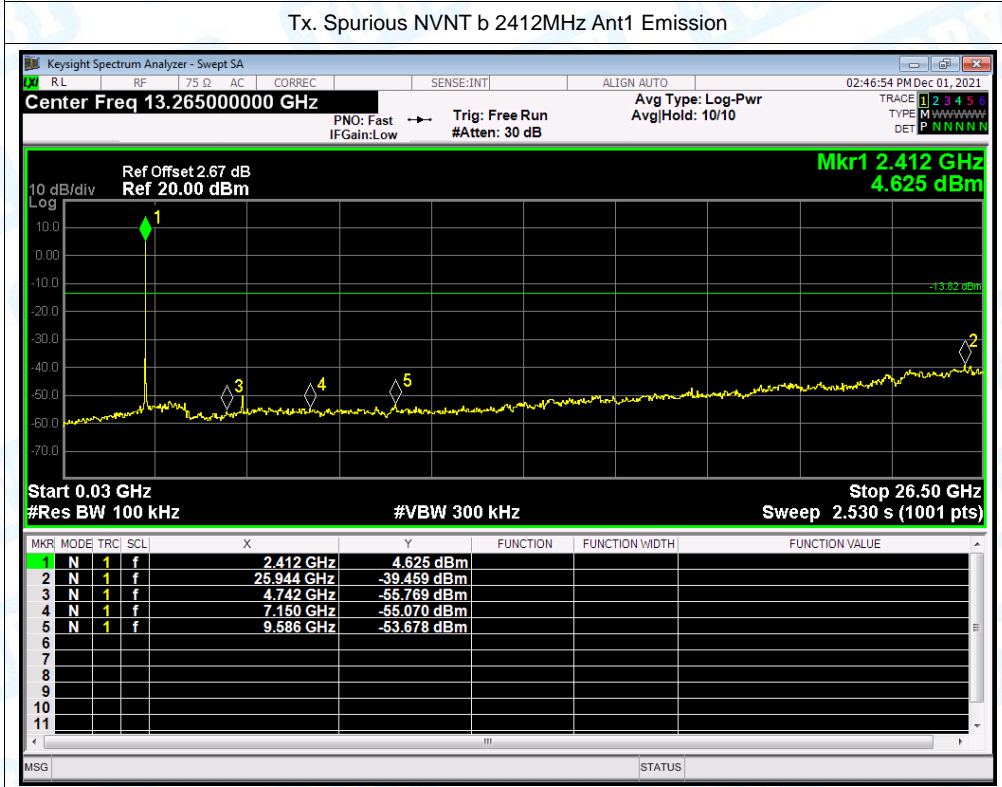
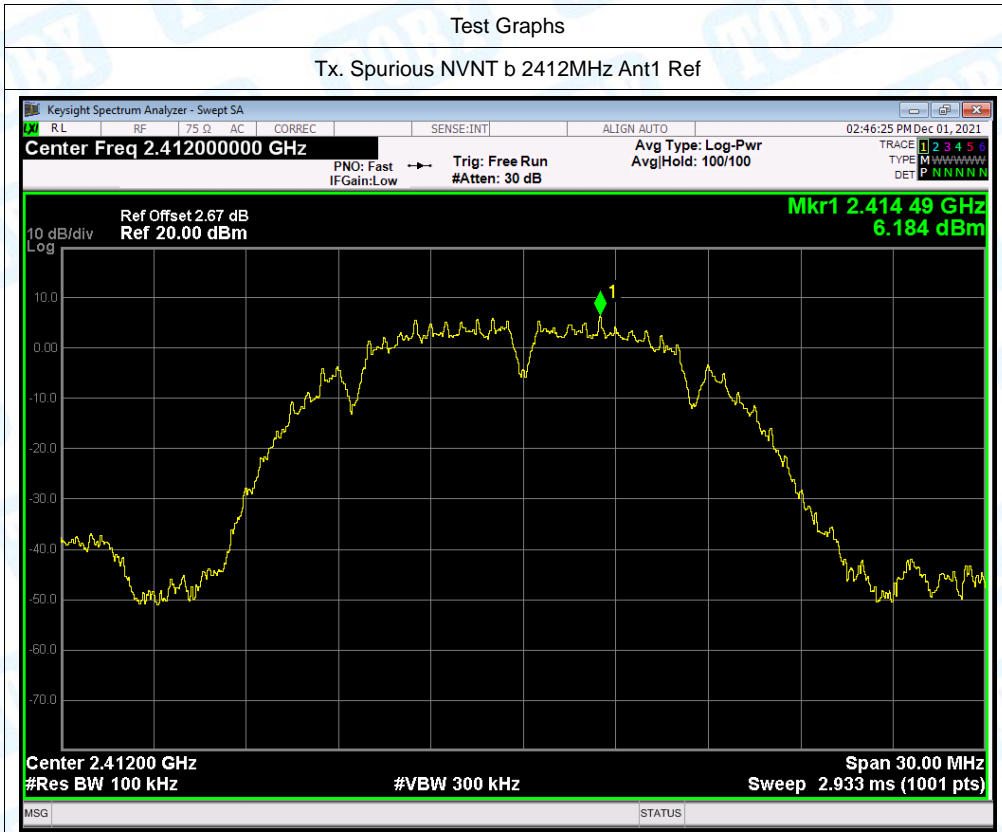




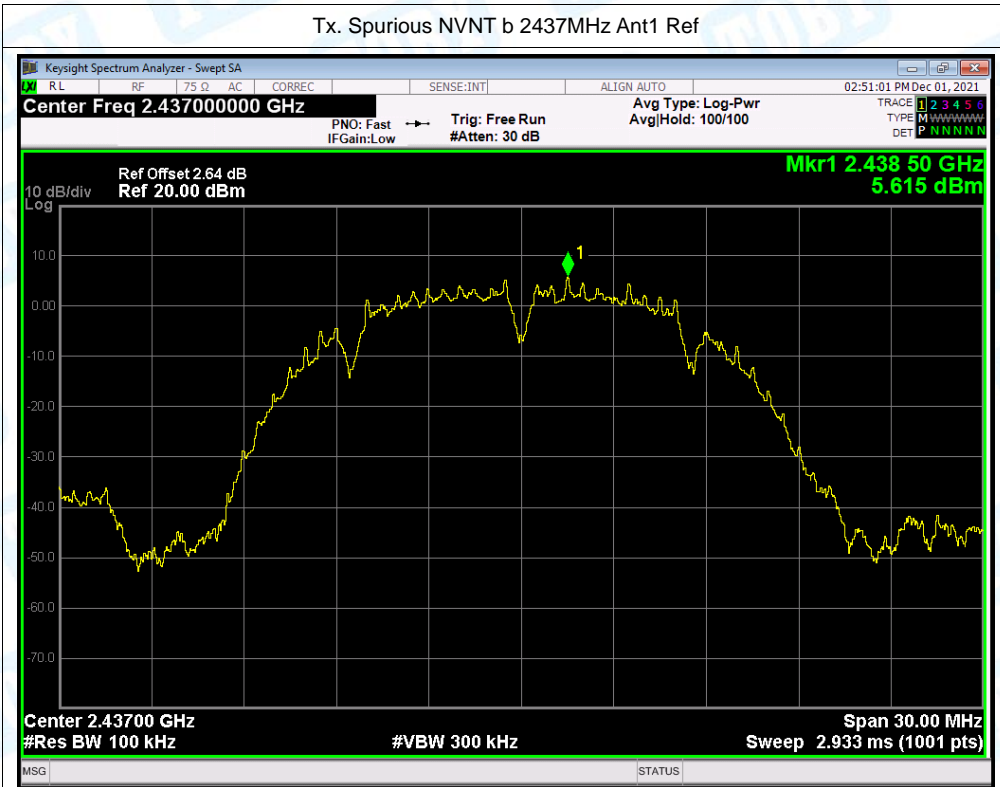


6. Conducted RF Spurious Emission

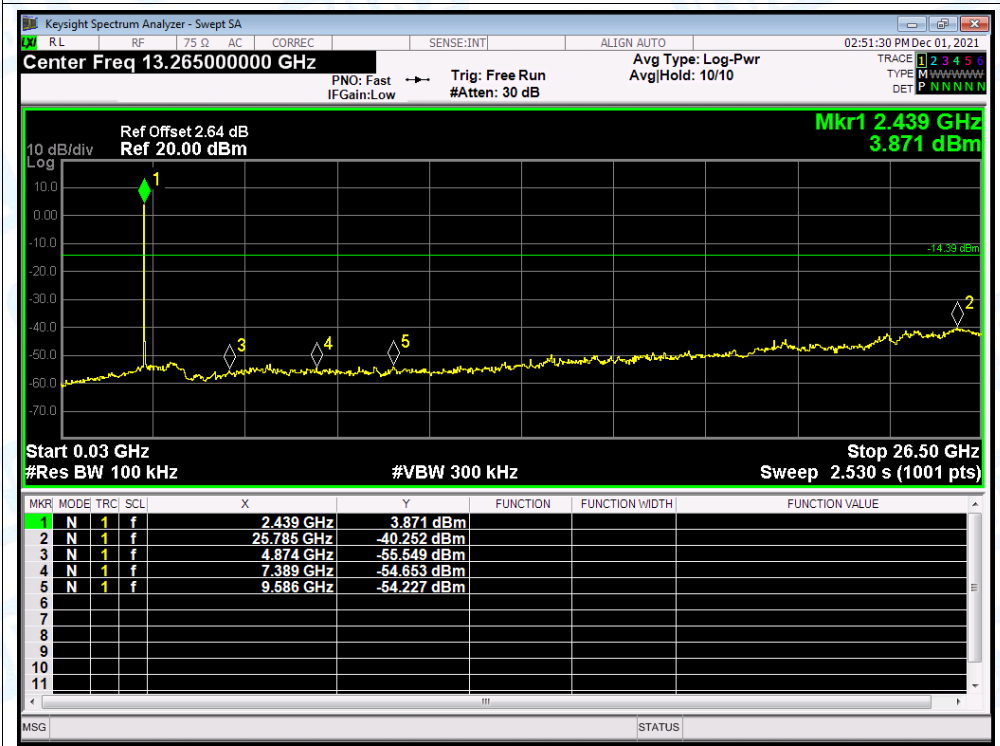
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-45.63	-20	Pass
NVNT	b	2437	Ant1	-45.87	-20	Pass
NVNT	b	2462	Ant1	-44.32	-20	Pass
NVNT	g	2412	Ant1	-42.83	-20	Pass
NVNT	g	2437	Ant1	-41.83	-20	Pass
NVNT	g	2462	Ant1	-40.74	-20	Pass
NVNT	n(HT20)	2412	Ant1	-42.83	-20	Pass
NVNT	n(HT20)	2437	Ant1	-41.22	-20	Pass
NVNT	n(HT20)	2462	Ant1	-40.04	-20	Pass



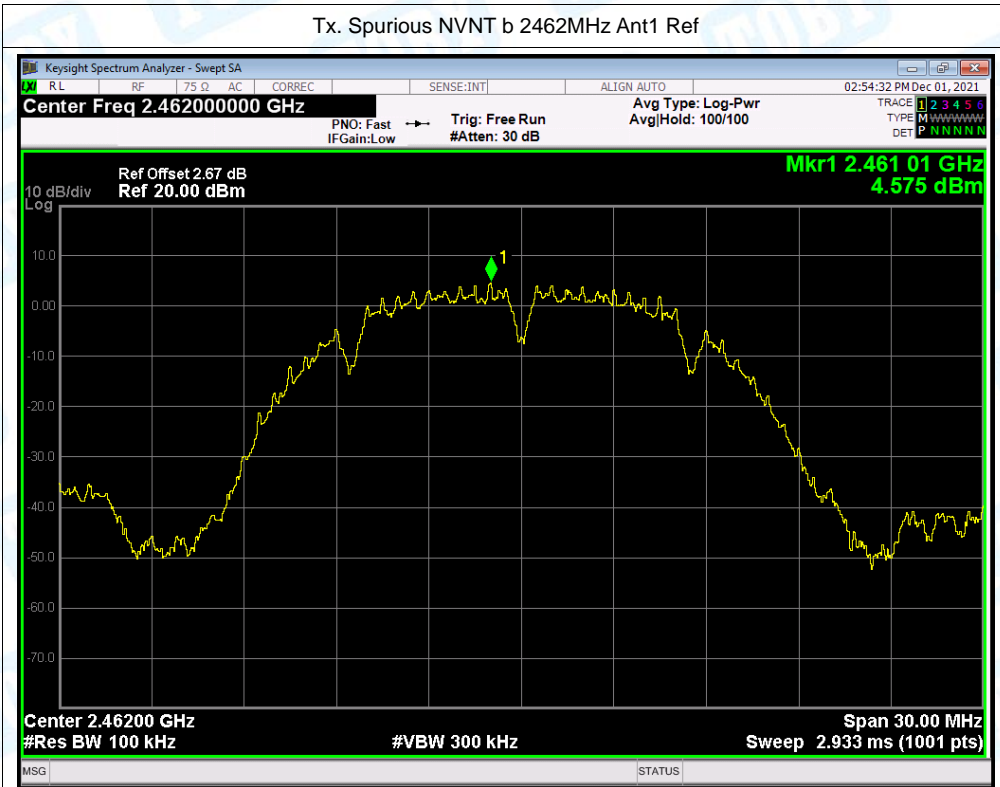
Tx. Spurious NVNT b 2437MHz Ant1 Ref



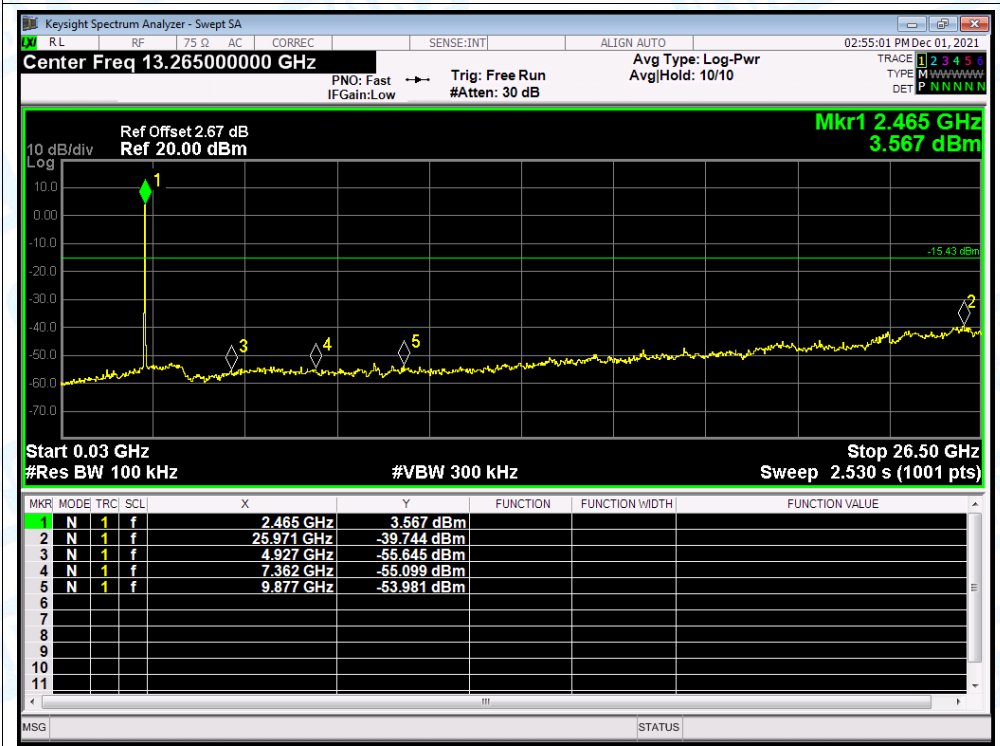
Tx. Spurious NVNT b 2437MHz Ant1 Emission



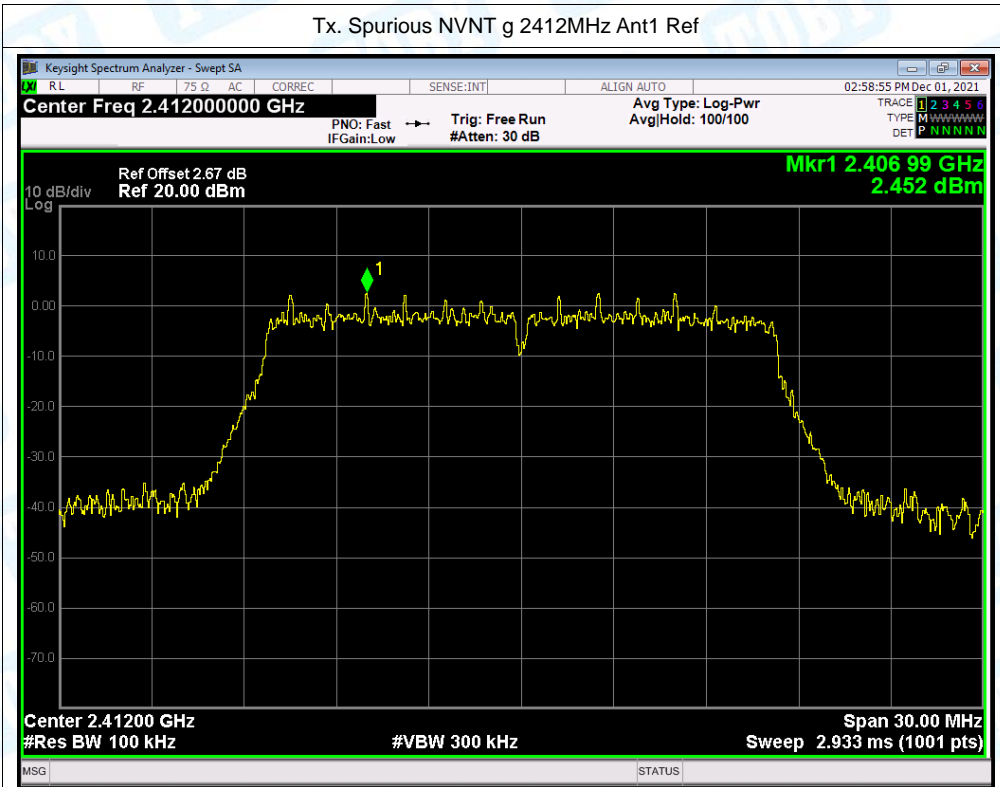
Tx. Spurious NVNT b 2462MHz Ant1 Ref



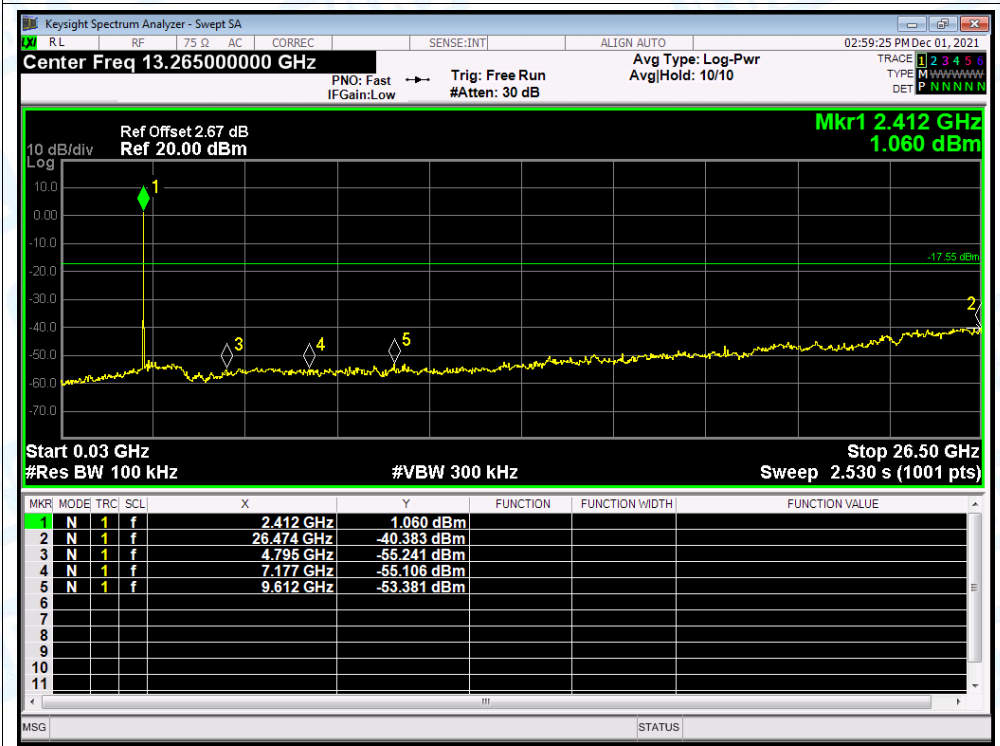
Tx. Spurious NVNT b 2462MHz Ant1 Emission



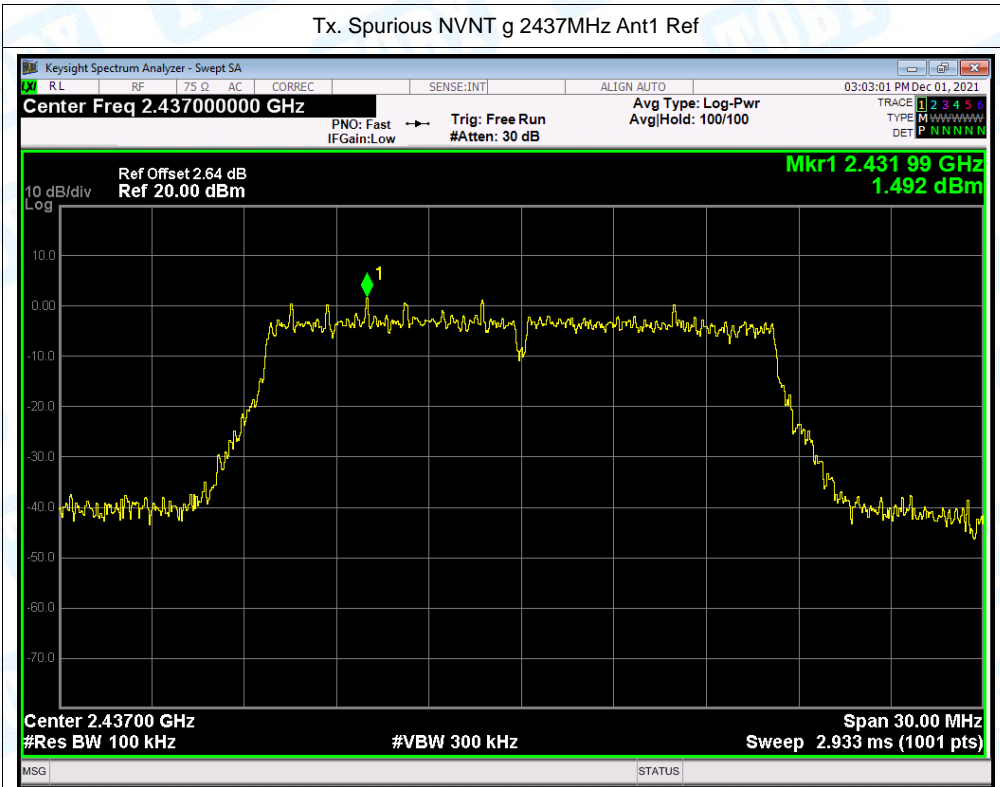
Tx. Spurious NVNT g 2412MHz Ant1 Ref



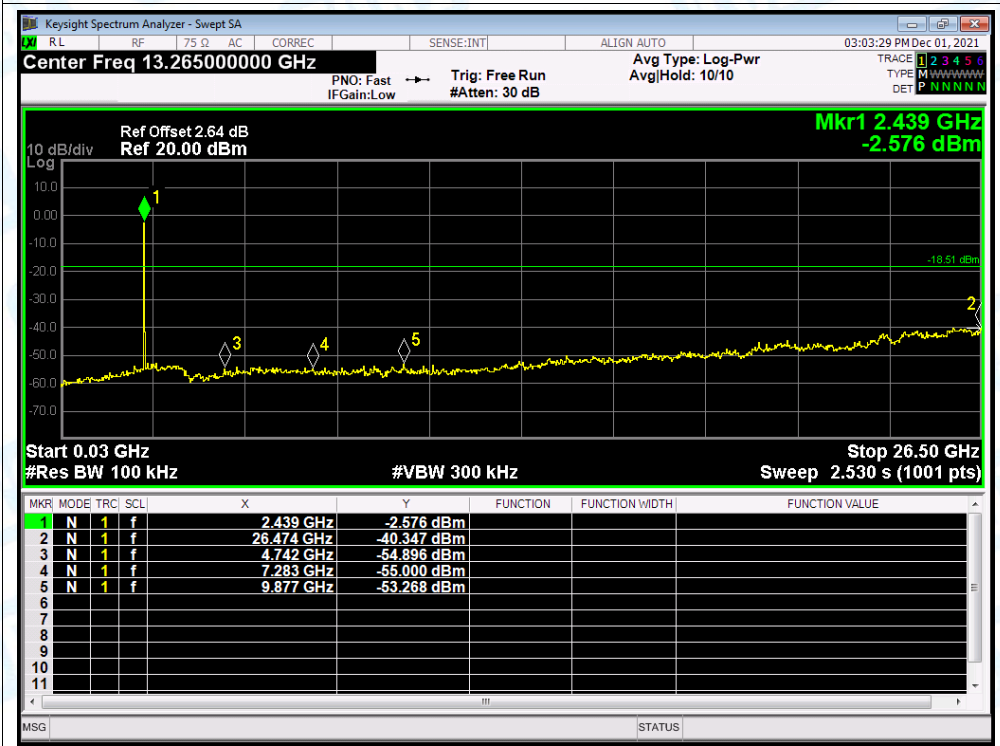
Tx. Spurious NVNT g 2412MHz Ant1 Emission



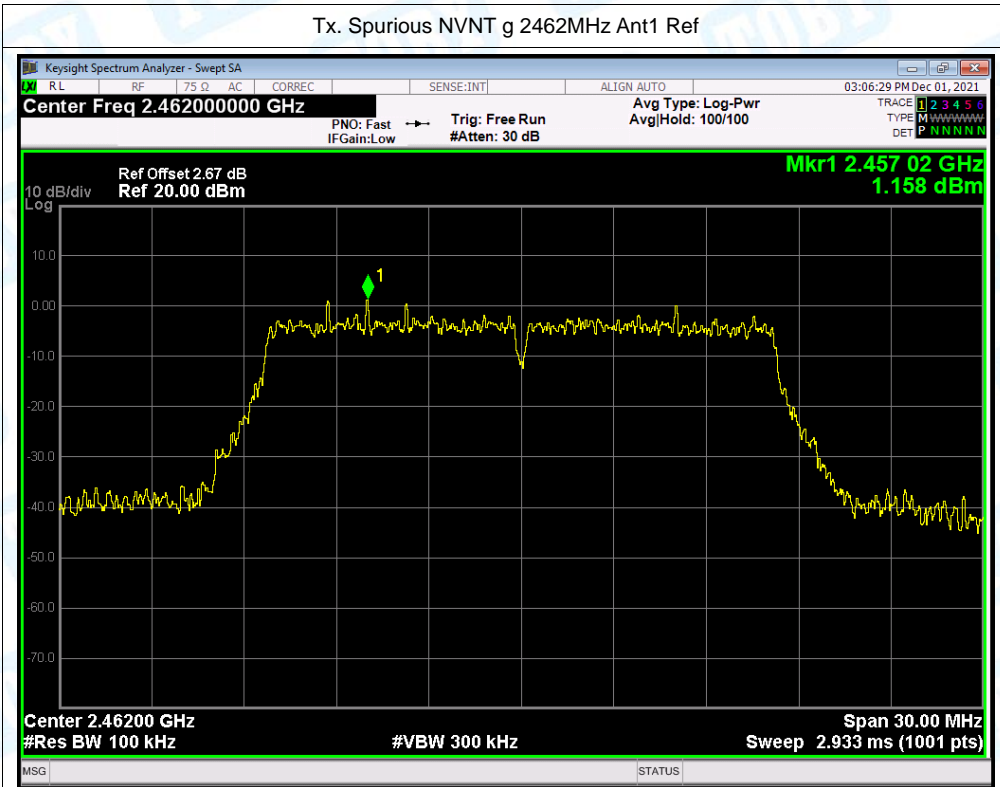
Tx. Spurious NVNT g 2437MHz Ant1 Ref



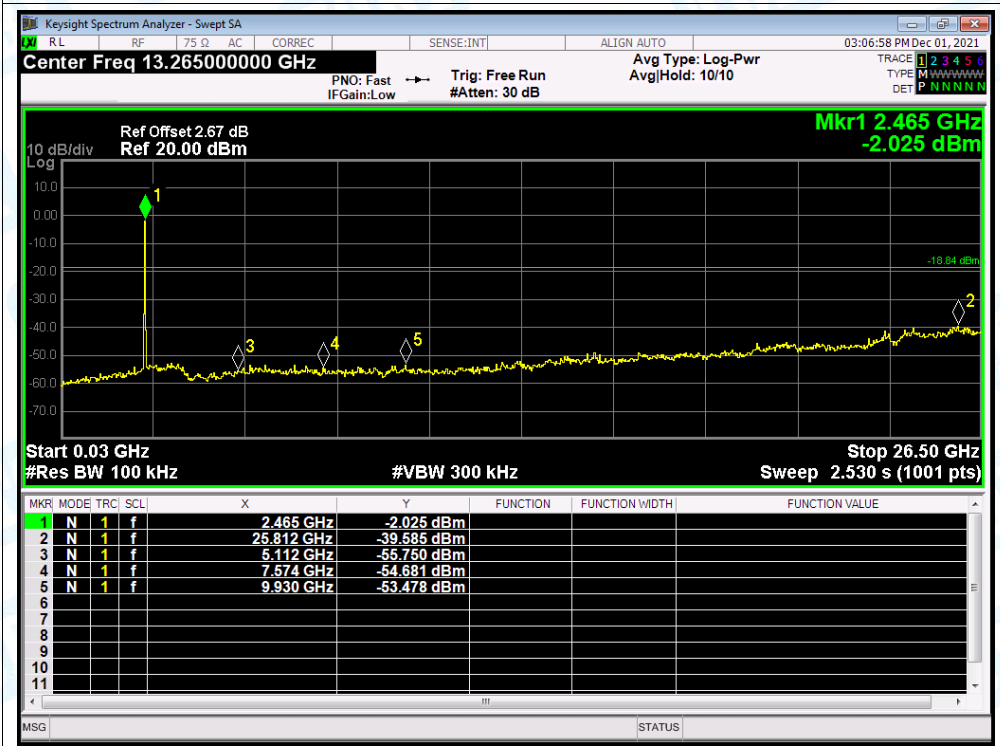
Tx. Spurious NVNT g 2437MHz Ant1 Emission

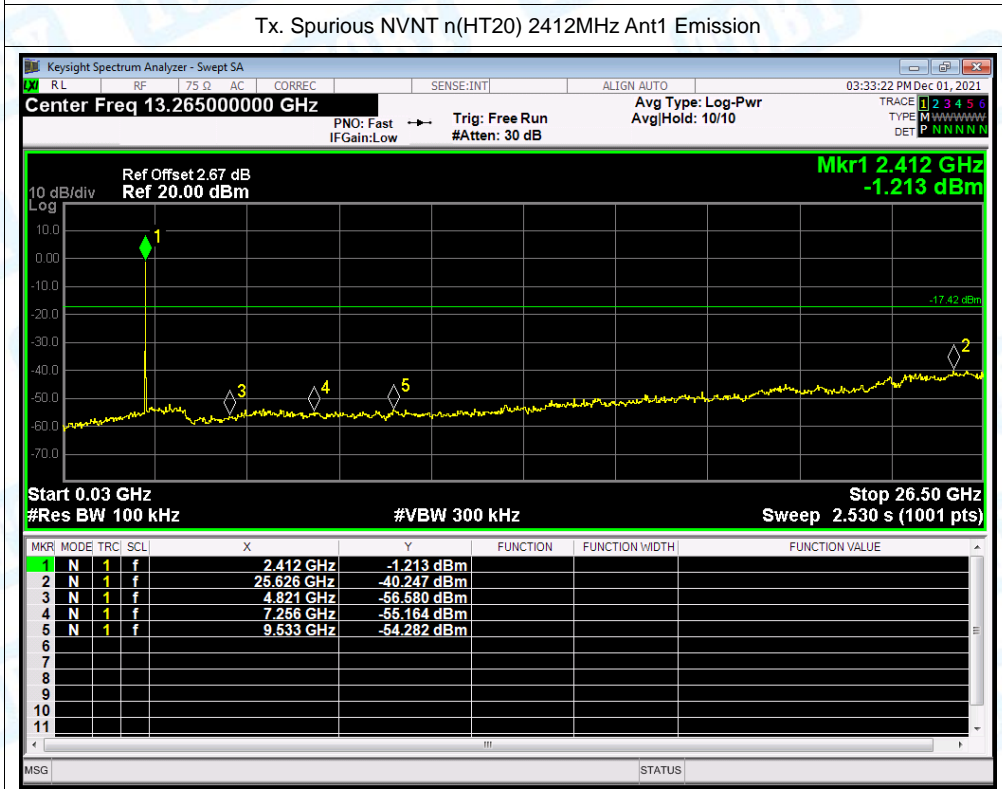
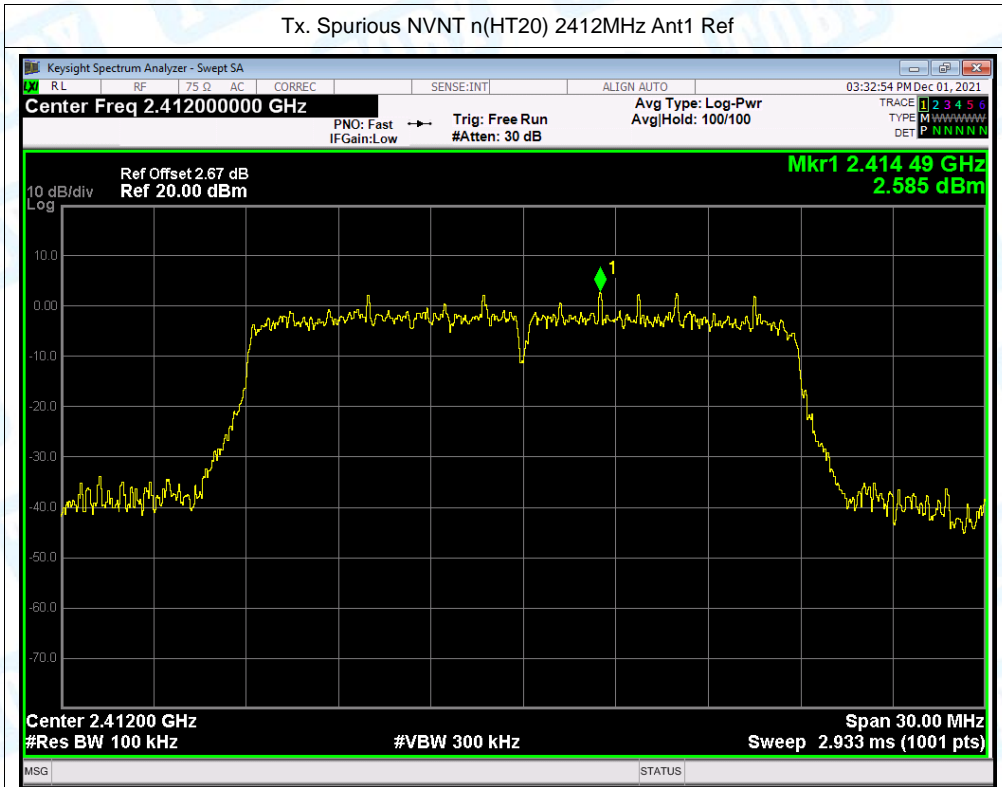


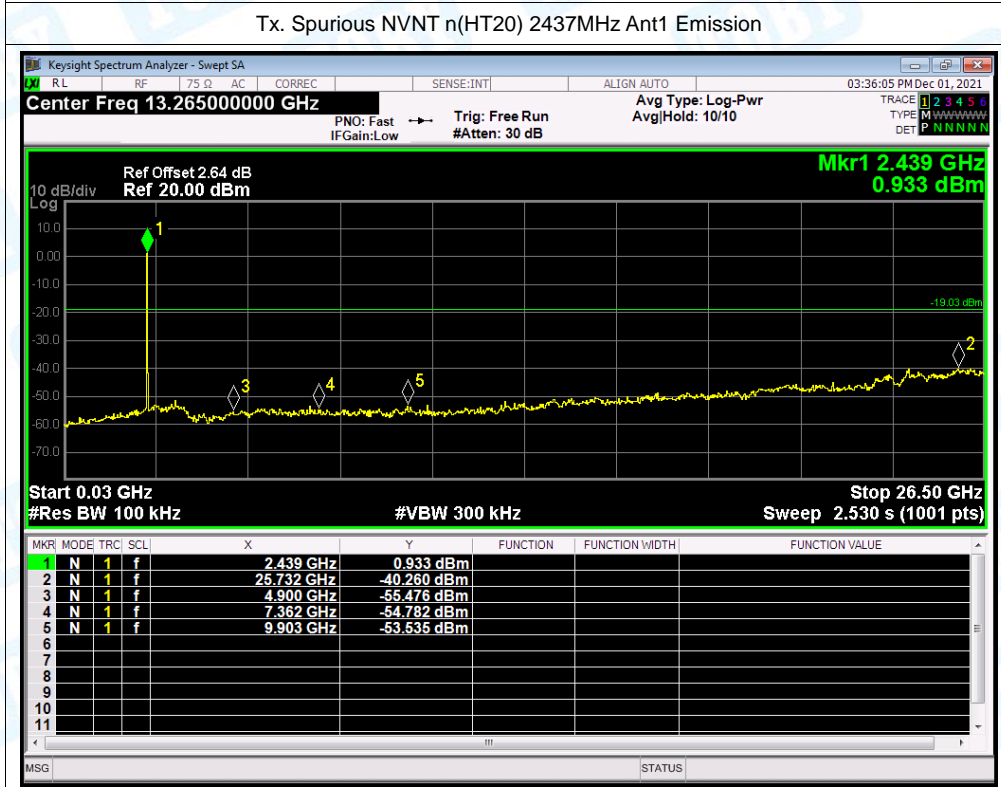
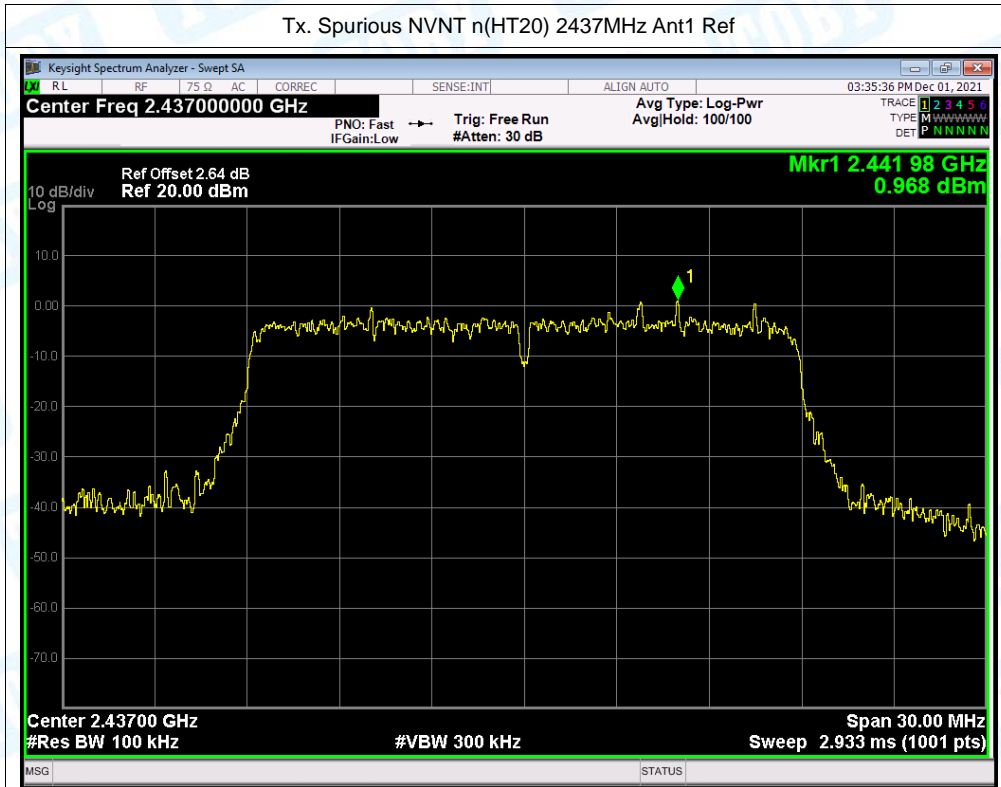
Tx. Spurious NVNT g 2462MHz Ant1 Ref

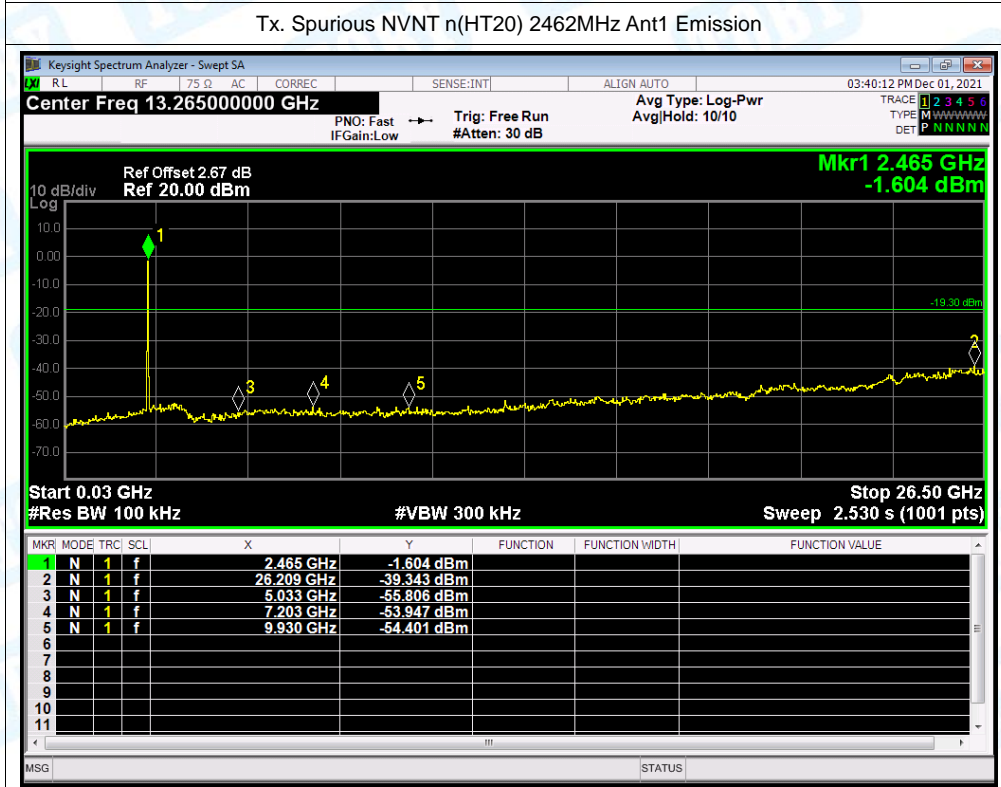
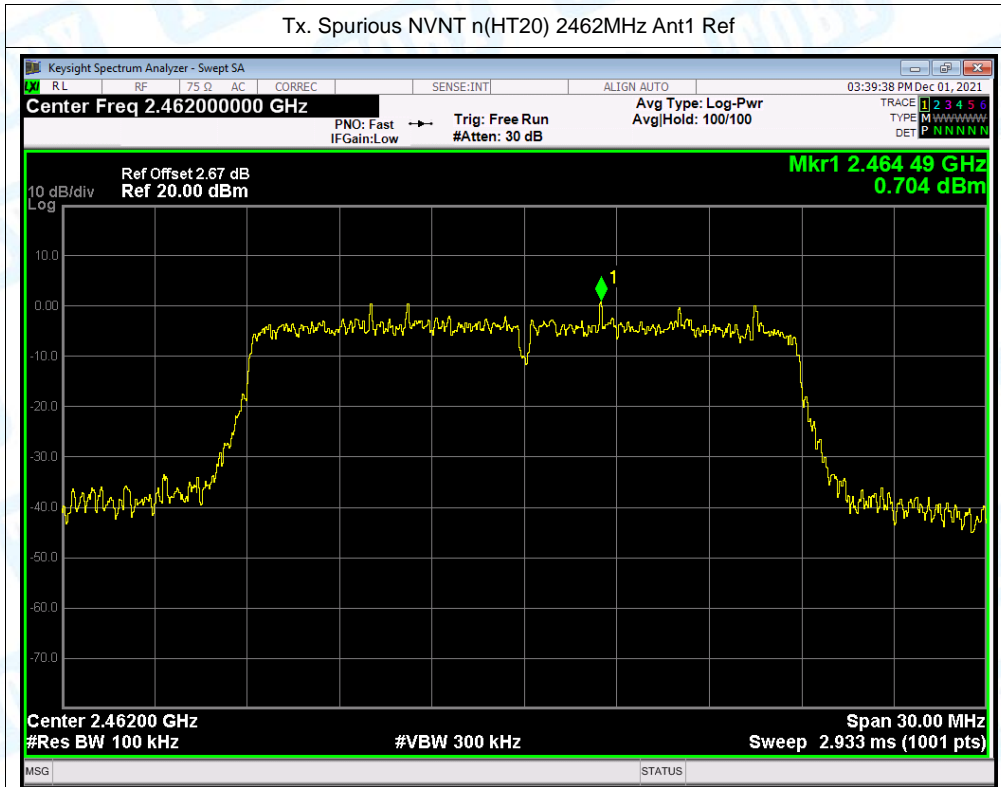


Tx. Spurious NVNT g 2462MHz Ant1 Emission









7.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	-43.68	3	54.58	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-54.91	3	43.35	Average	54	Pass
NVNT	b	2412	Ant1	2389.56	-37.54	3	60.72	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-48.8	3	49.46	Average	54	Pass
NVNT	b	2412	Ant1	2390	-37.41	3	60.85	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-48.7	3	49.56	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-39.71	3	58.55	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-49.65	3	48.61	Average	54	Pass
NVNT	b	2462	Ant1	2485.902	-37.57	3	60.69	Peak	74	Pass
NVNT	b	2462	Ant1	2483.57	-49.5	3	48.76	Average	54	Pass
NVNT	b	2462	Ant1	2500	-40.46	3	57.8	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-53.08	3	45.18	Average	54	Pass
NVNT	g	2412	Ant1	2310	-43.29	3	54.97	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-55.23	3	43.03	Average	54	Pass
NVNT	g	2412	Ant1	2389.092	-35.34	3	62.92	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-52.47	3	45.79	Average	54	Pass
NVNT	g	2412	Ant1	2390	-36.39	3	61.87	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-52.44	3	45.82	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-41.49	3	56.77	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-52.56	3	45.7	Average	54	Pass
NVNT	g	2462	Ant1	2483.57	-38.64	3	59.62	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-52.56	3	45.7	Average	54	Pass
NVNT	g	2462	Ant1	2500	-44.38	3	53.88	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-53.89	3	44.37	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-44.55	3	53.71	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-55.22	3	43.04	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2388.507	-36.51	3	61.75	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-52.57	3	45.69	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-39.43	3	58.83	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-52.51	3	45.75	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-41.32	3	56.94	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-52.58	3	45.68	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2485.001	-39.24	3	59.02	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-52.58	3	45.68	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-43.11	3	55.15	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-53.89	3	44.37	Average	54	Pass

