

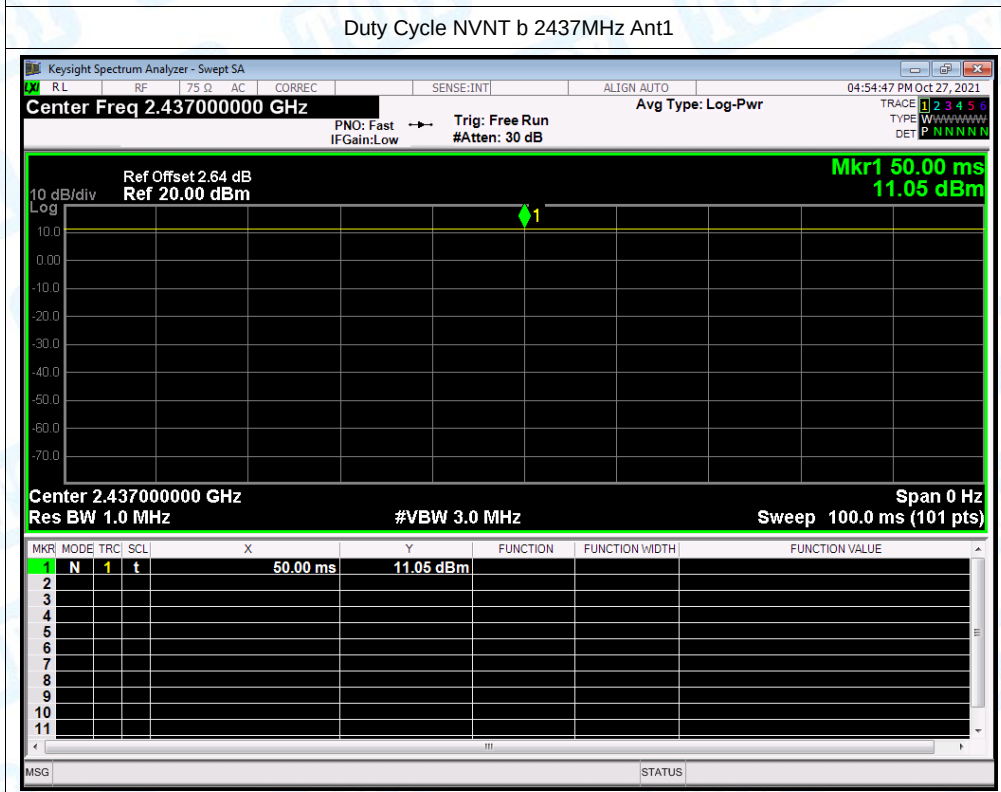
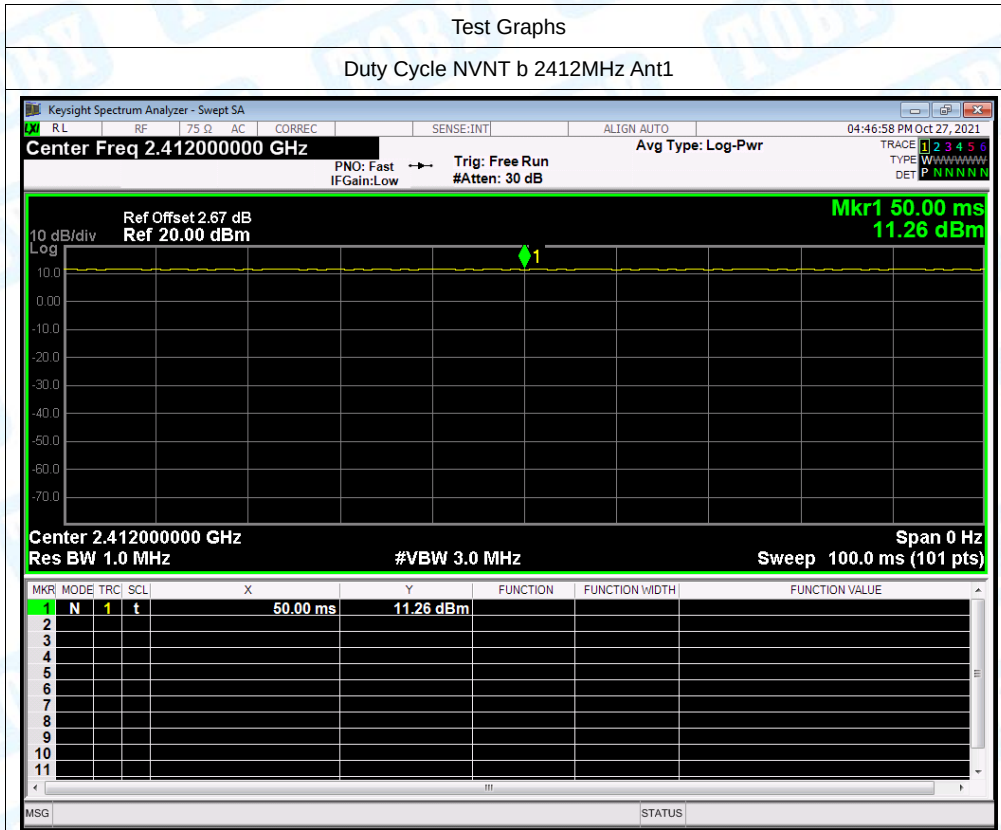
RF Test Data for 2.4G WiFi

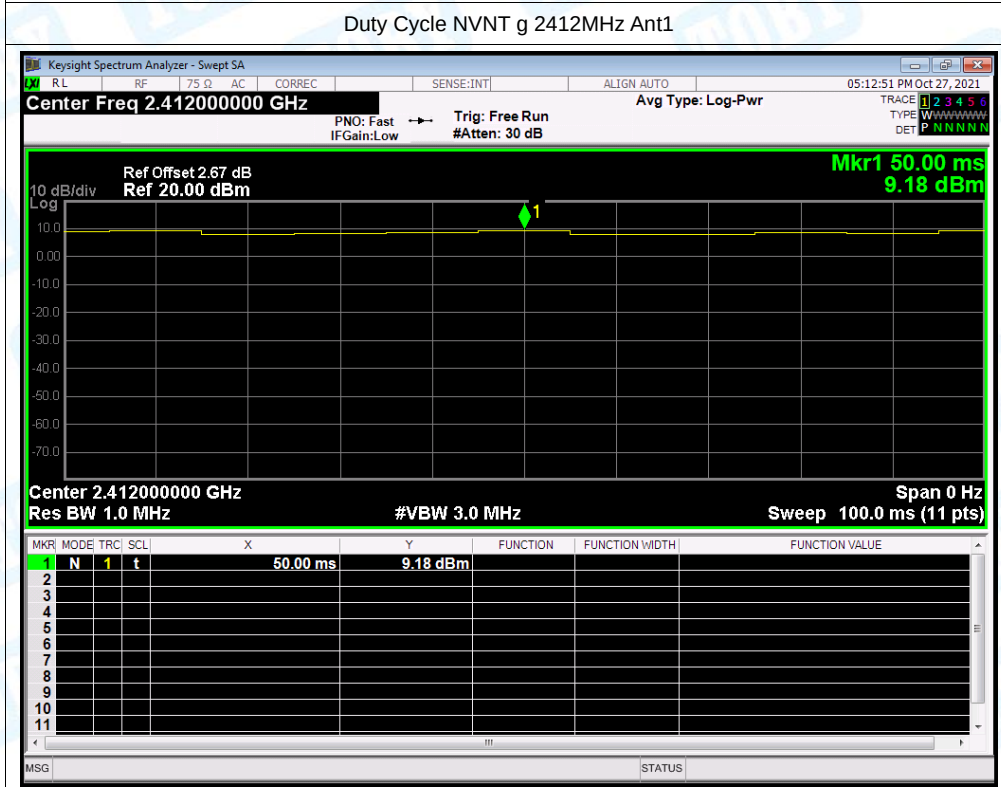
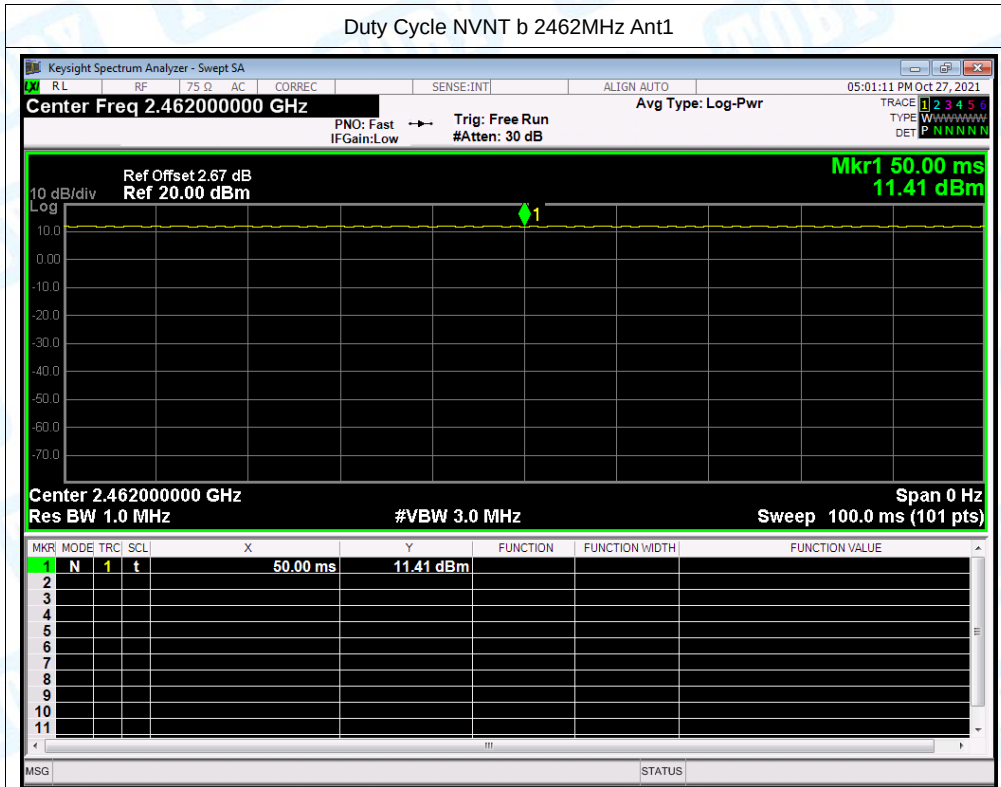
(Conducted Measurements)

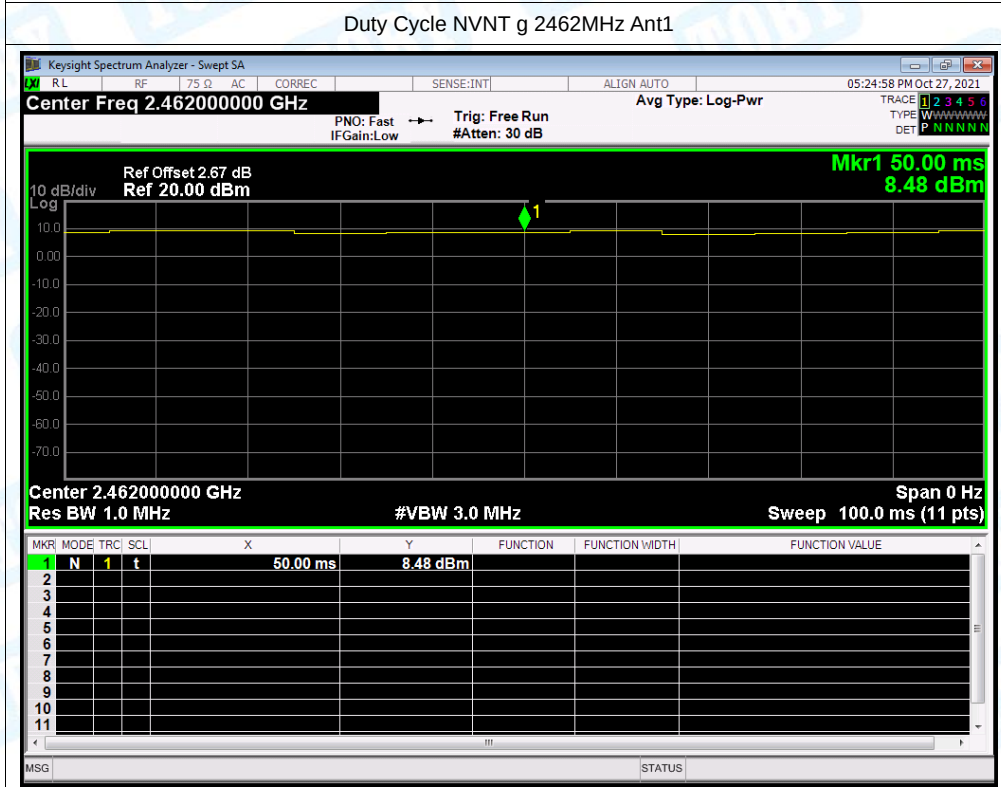
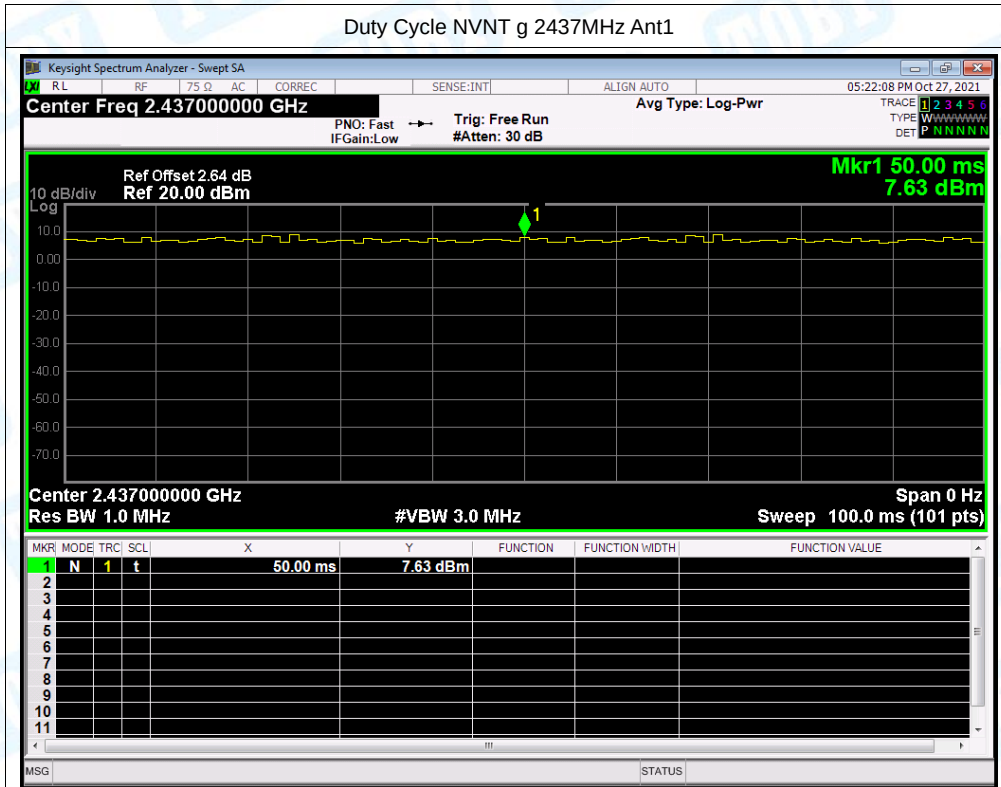
General Description of EUT	
Product Name:	Wireless Smart Battery Camera
Test Model:	X81
Sample ID:	20211020-10-2#
Environmental Conditions	
Temperature:	24℃
Relative Humidity:	50℃
Test Voltage:	DC3.7V
Test Engineer:	Heingchang
Note: For a more detailed features description, please refer to the report TB-FCC184330	

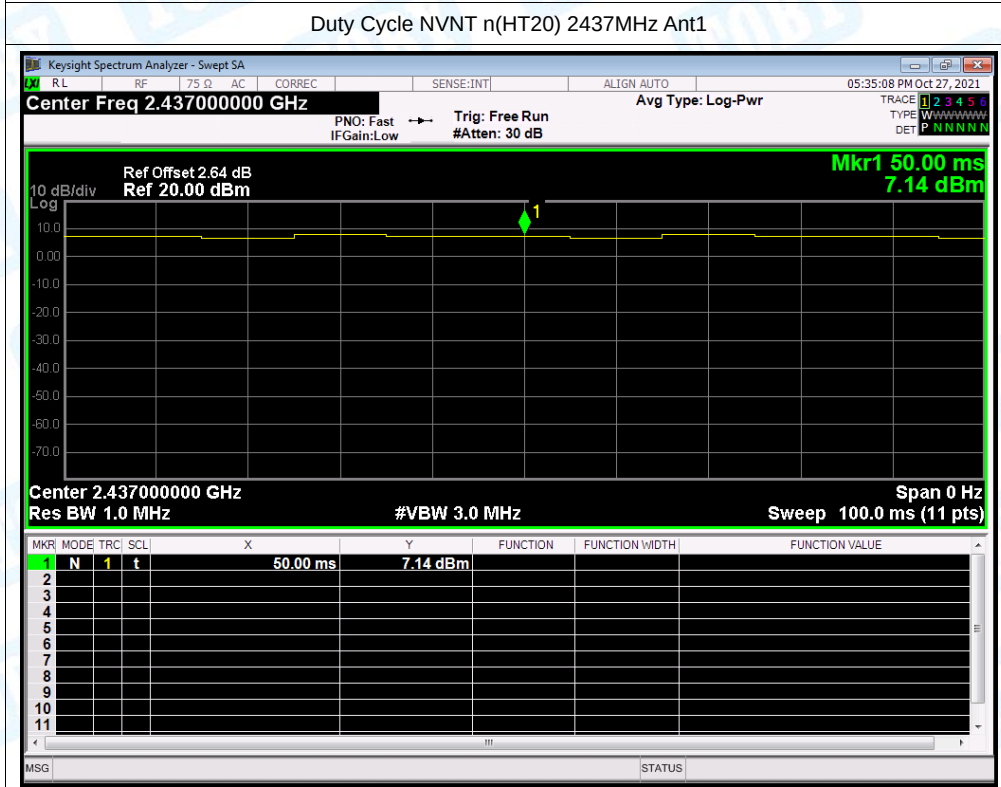
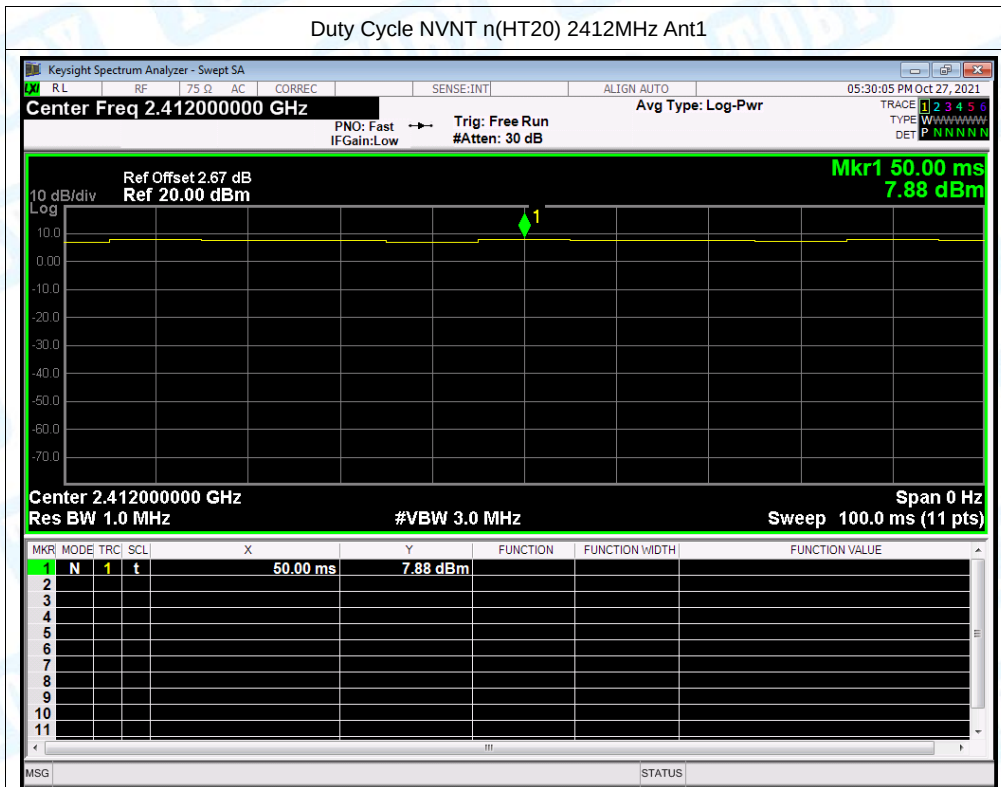
1.Duty Cycle

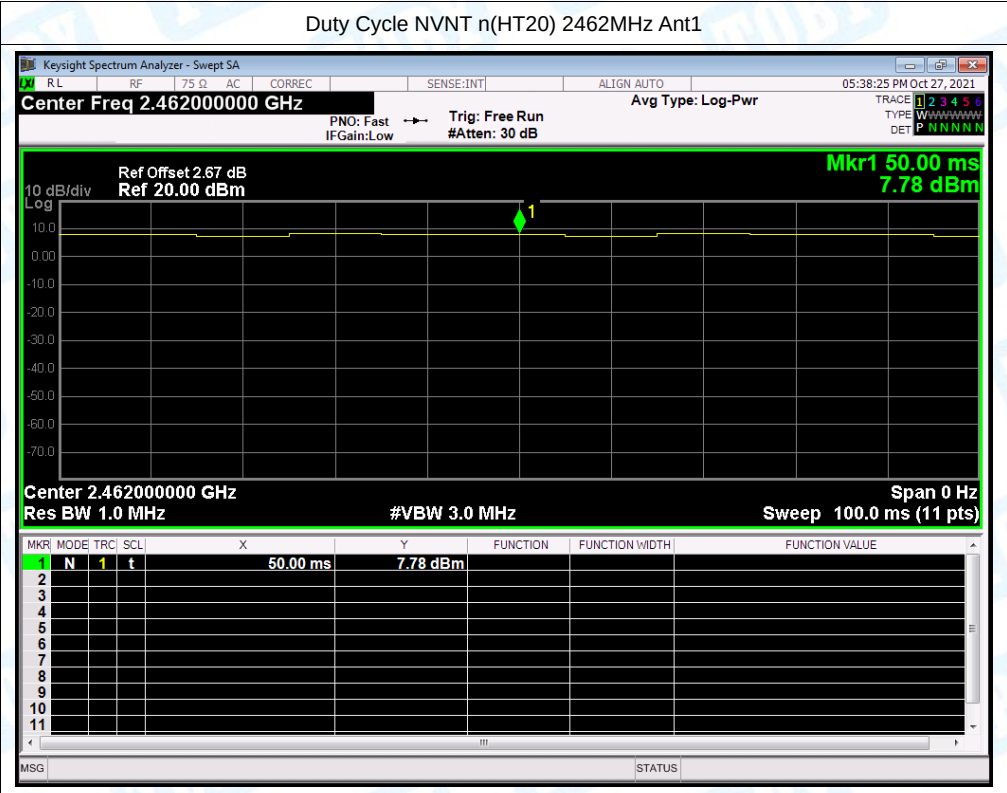
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	100	0	0
NVNT	b	2437	Ant1	100	0	0
NVNT	b	2462	Ant1	100	0	0
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0
NVNT	n(HT20)	2412	Ant1	100	0	0
NVNT	n(HT20)	2437	Ant1	100	0	0
NVNT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











2.Maximum Conducted Output Power

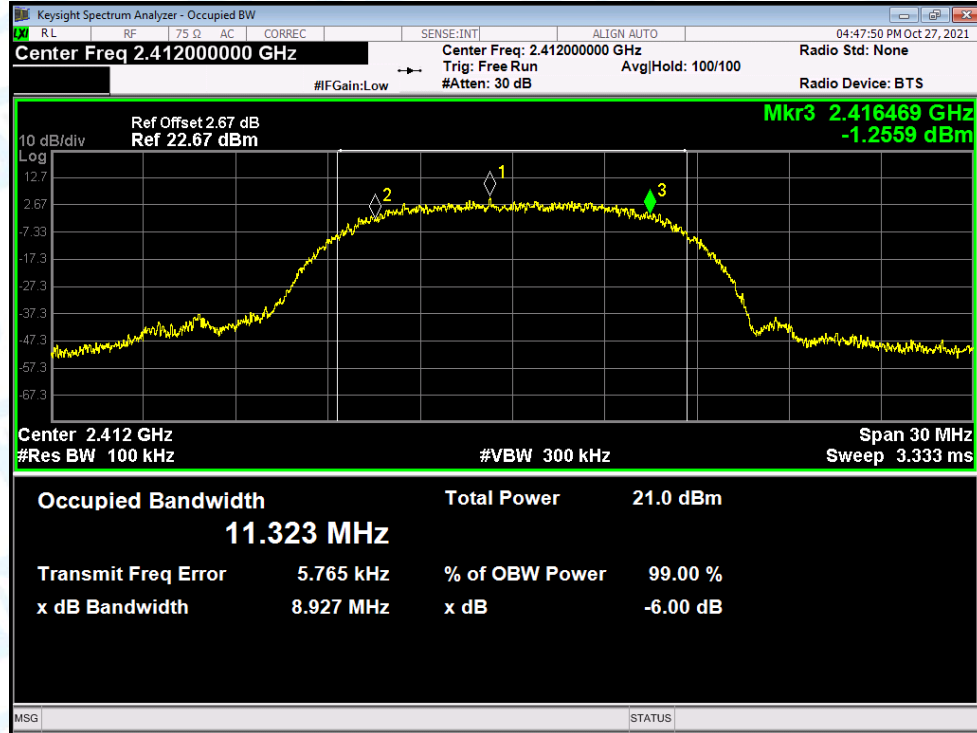
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.903	0	17.903	30	Pass
NVNT	b	2437	Ant1	17.48	0	17.480	30	Pass
NVNT	b	2462	Ant1	17.711	0	17.711	30	Pass
NVNT	g	2412	Ant1	16.642	0	16.642	30	Pass
NVNT	g	2437	Ant1	16.242	0	16.242	30	Pass
NVNT	g	2462	Ant1	16.847	0	16.847	30	Pass
NVNT	n(HT20)	2412	Ant1	16.372	0	16.372	30	Pass
NVNT	n(HT20)	2437	Ant1	16.205	0	16.205	30	Pass
NVNT	n(HT20)	2462	Ant1	16.485	0	16.485	30	Pass

3.-6dB Bandwidth

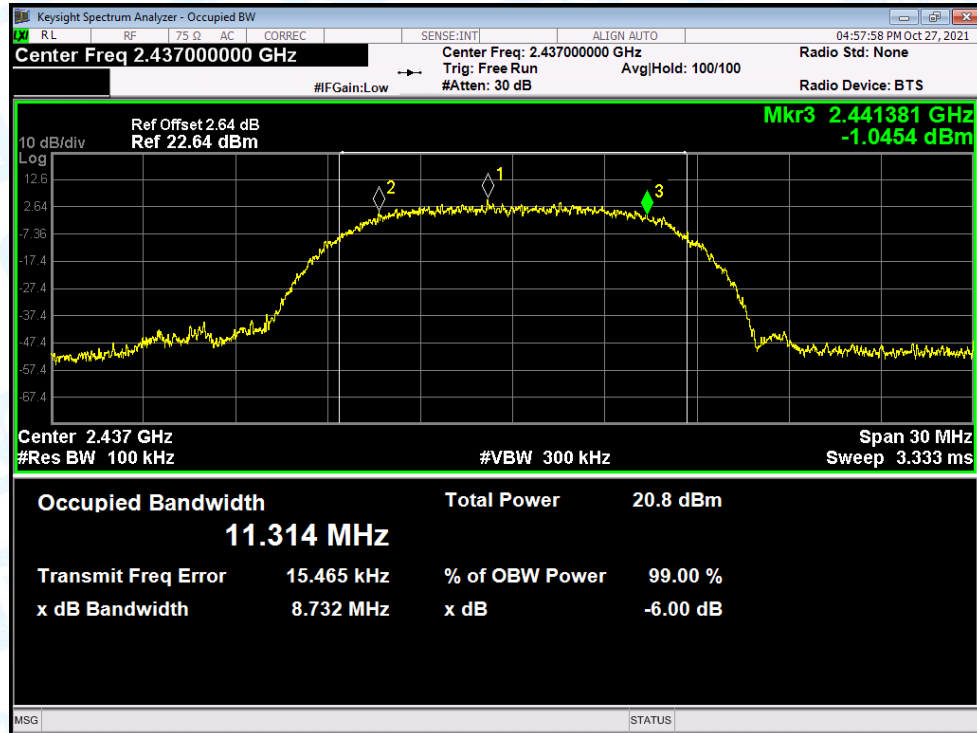
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.927	0.5	Pass
NVNT	b	2437	Ant1	8.732	0.5	Pass
NVNT	b	2462	Ant1	9.351	0.5	Pass
NVNT	g	2412	Ant1	16.46	0.5	Pass
NVNT	g	2437	Ant1	16.46	0.5	Pass
NVNT	g	2462	Ant1	16.48	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.70	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.68	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.65	0.5	Pass

Test Graphs

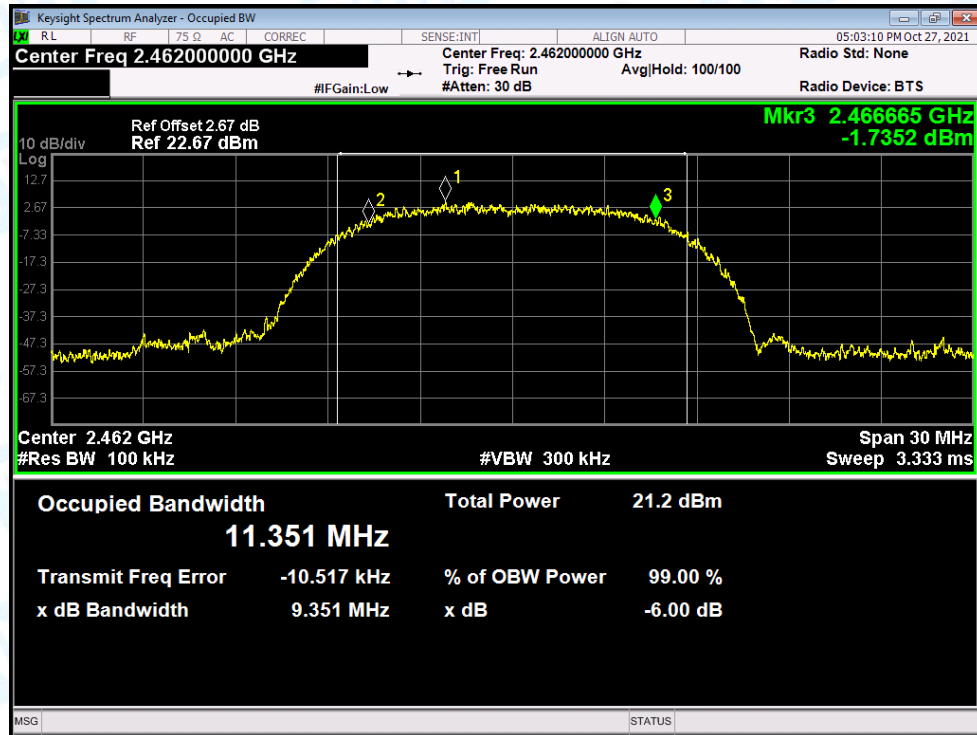
-6dB Bandwidth NVNT b 2412MHz Ant1



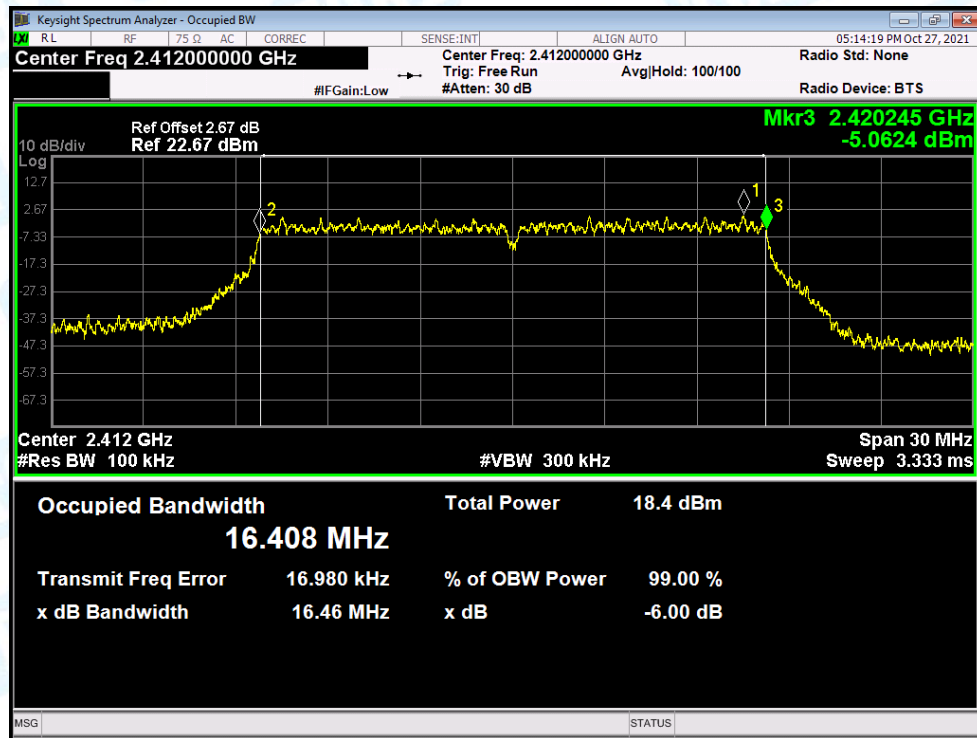
-6dB Bandwidth NVNT b 2437MHz Ant1

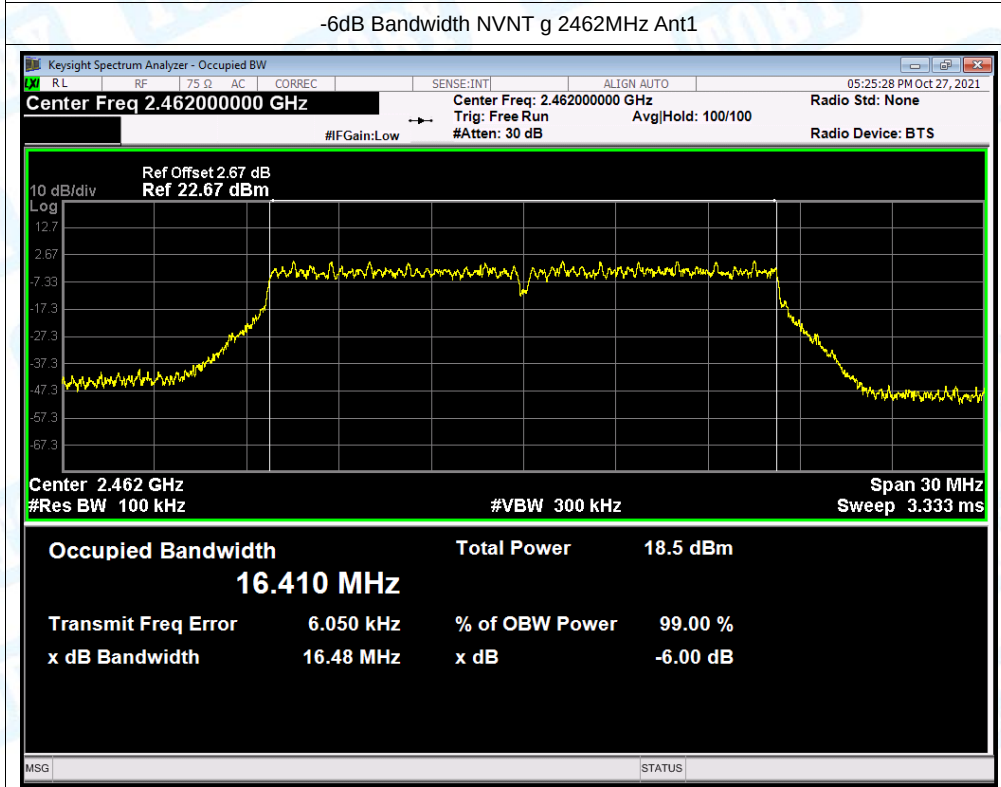
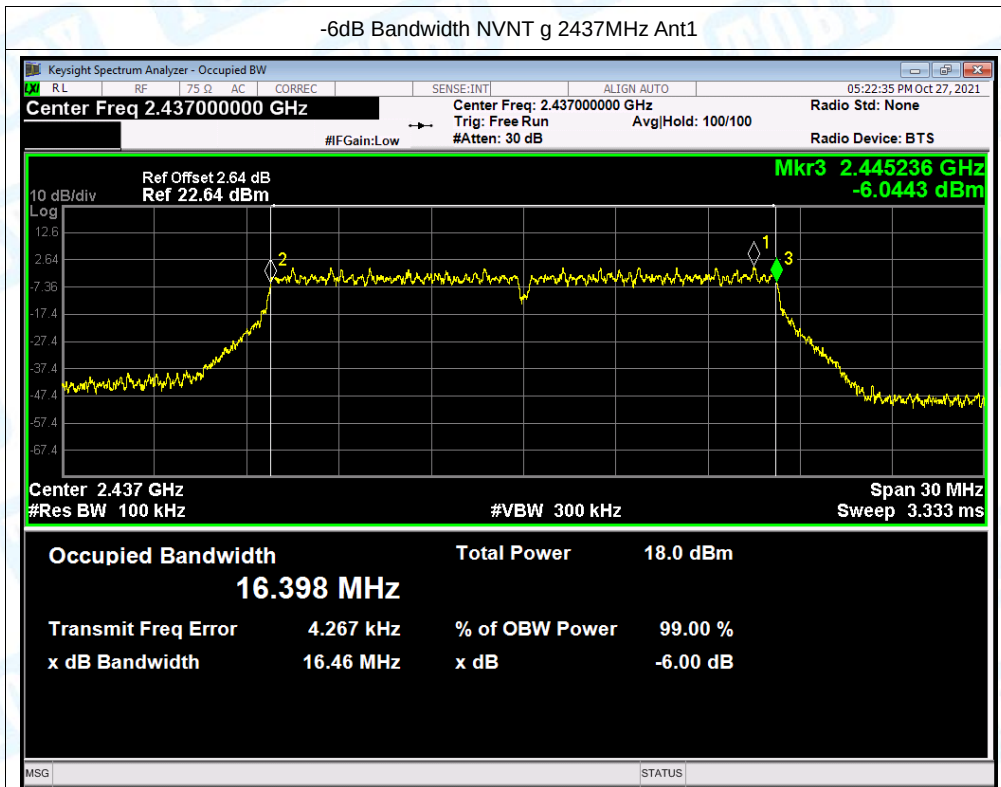


-6dB Bandwidth NVNT b 2462MHz Ant1

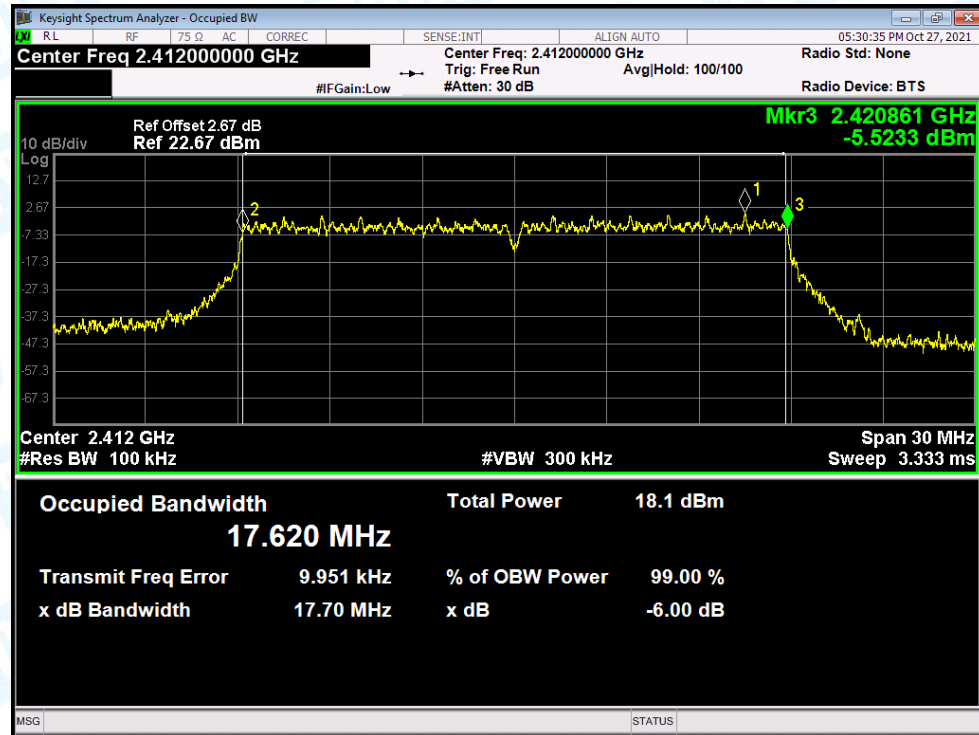


-6dB Bandwidth NVNT g 2412MHz Ant1

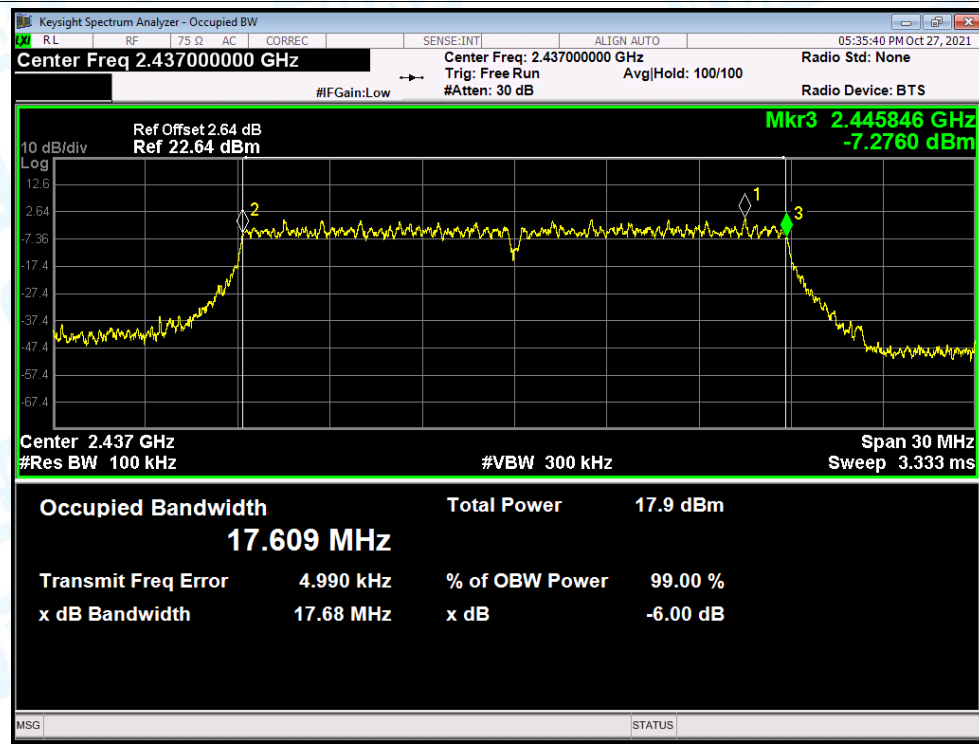


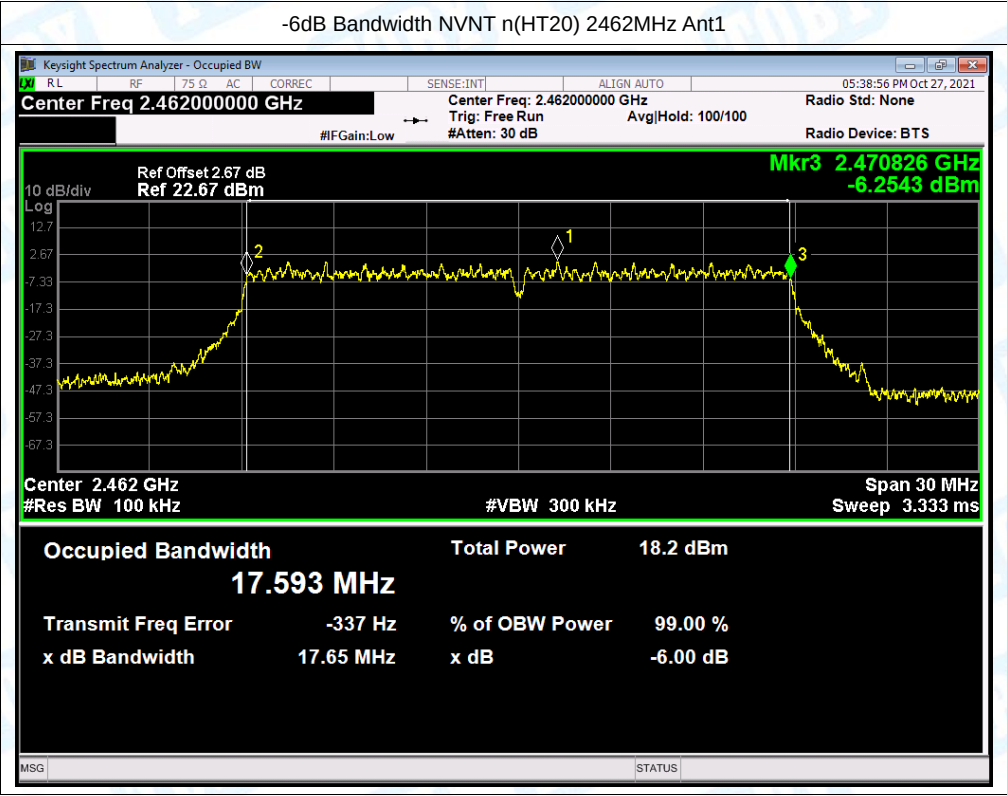


-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



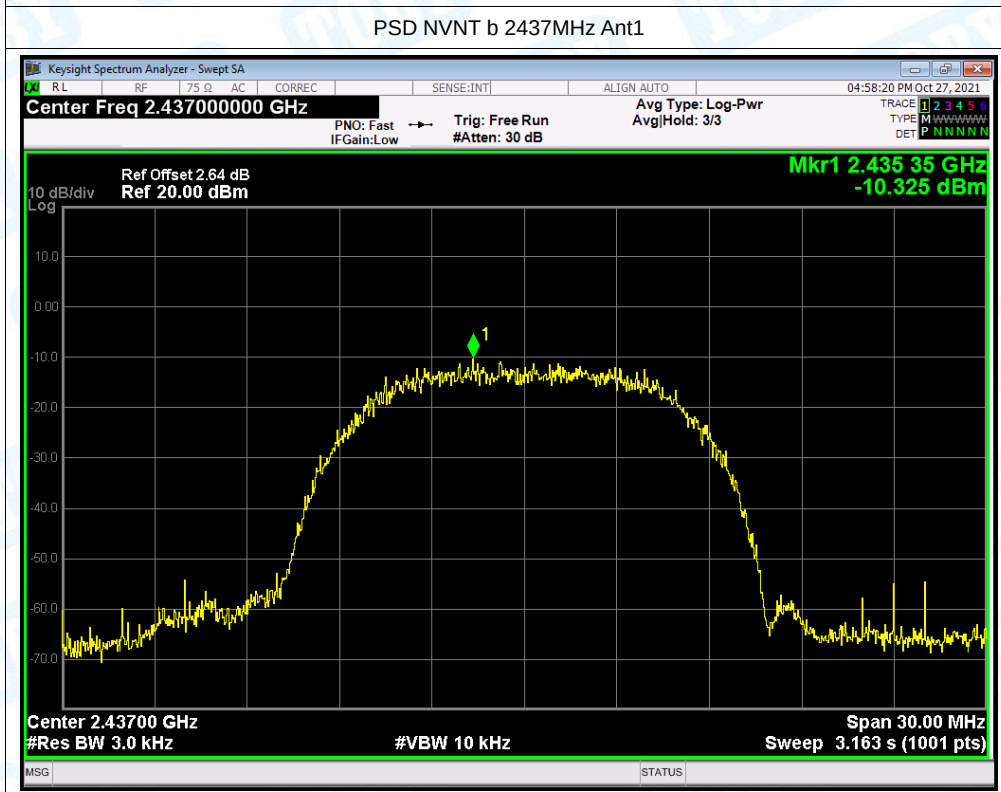
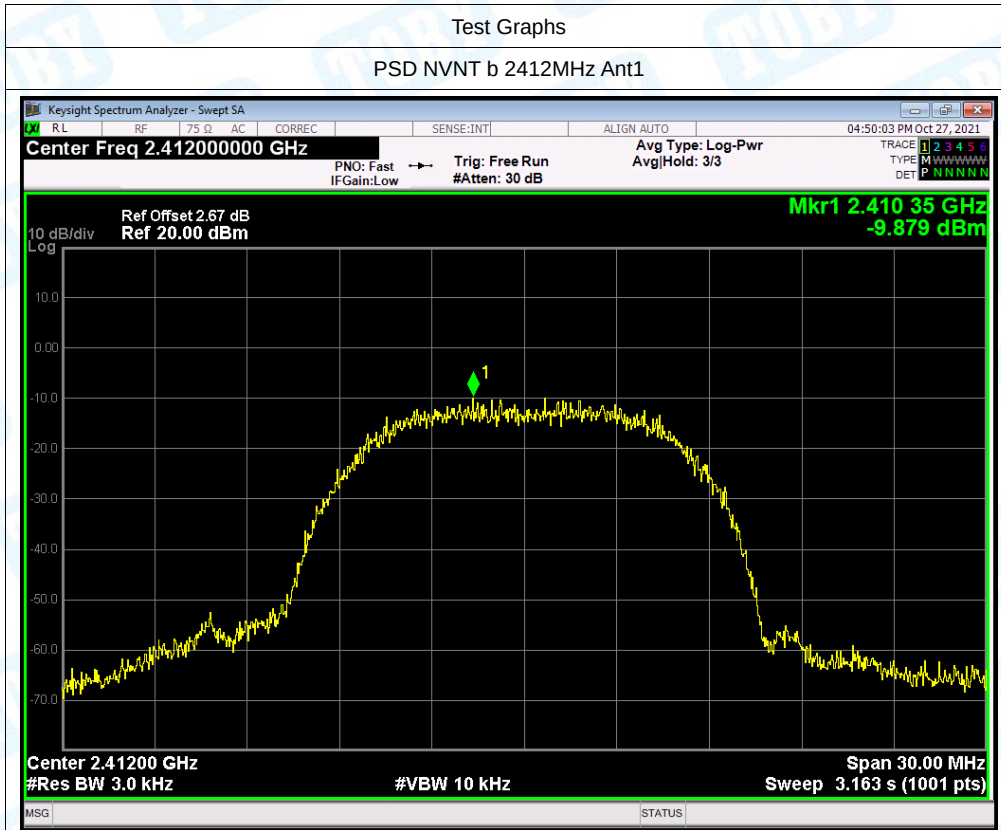
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1

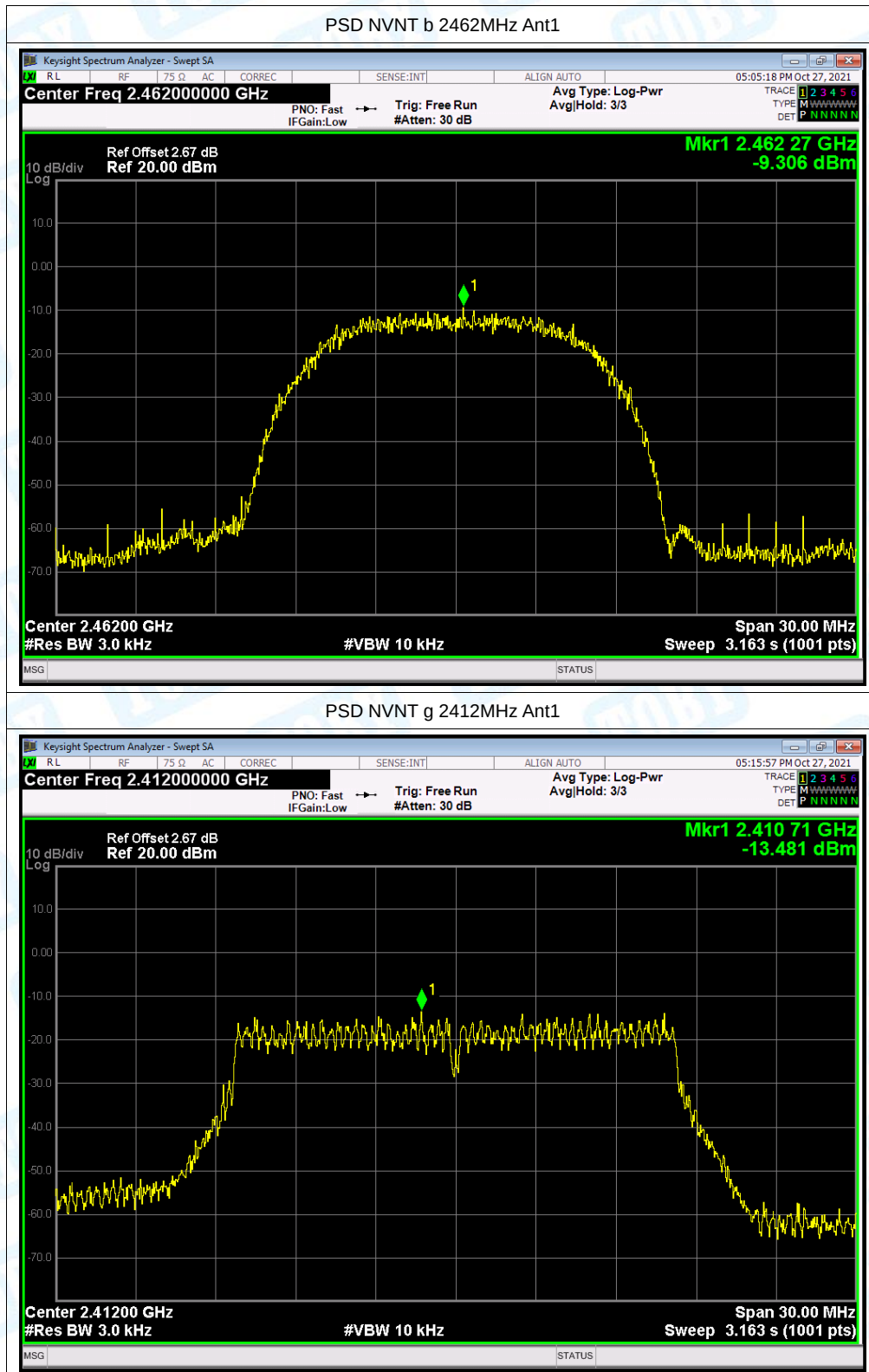




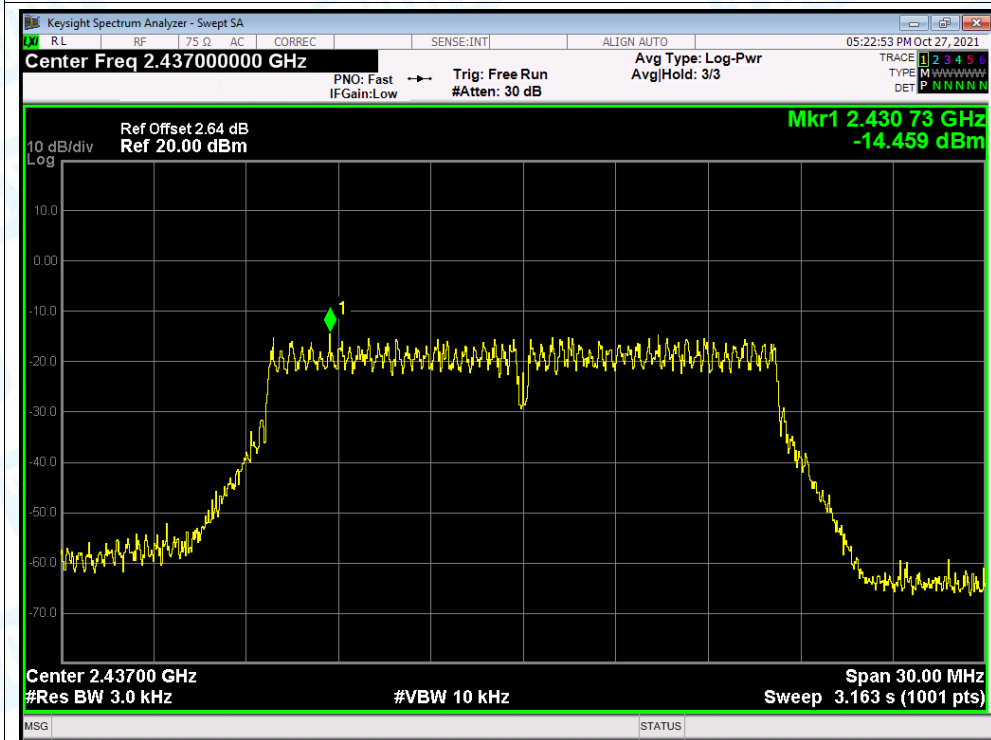
4.Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-9.879	8	Pass
NVNT	b	2437	Ant1	-10.325	8	Pass
NVNT	b	2462	Ant1	-9.306	8	Pass
NVNT	g	2412	Ant1	-13.481	8	Pass
NVNT	g	2437	Ant1	-14.459	8	Pass
NVNT	g	2462	Ant1	-13.527	8	Pass
NVNT	n(HT20)	2412	Ant1	-14.1	8	Pass
NVNT	n(HT20)	2437	Ant1	-13.513	8	Pass
NVNT	n(HT20)	2462	Ant1	-14.704	8	Pass

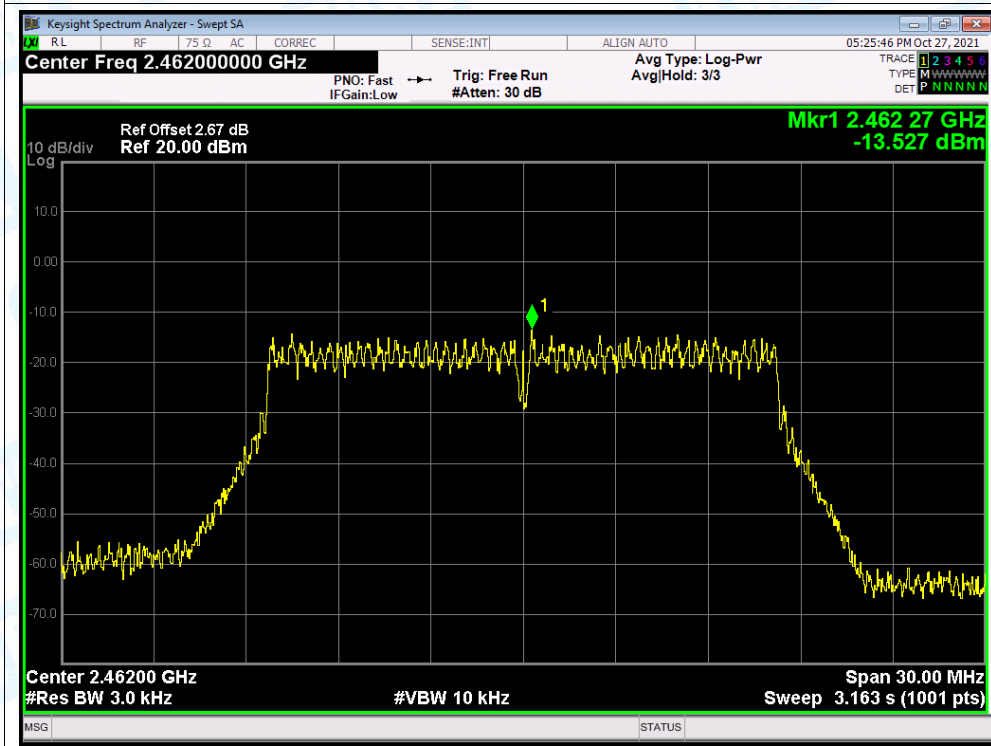




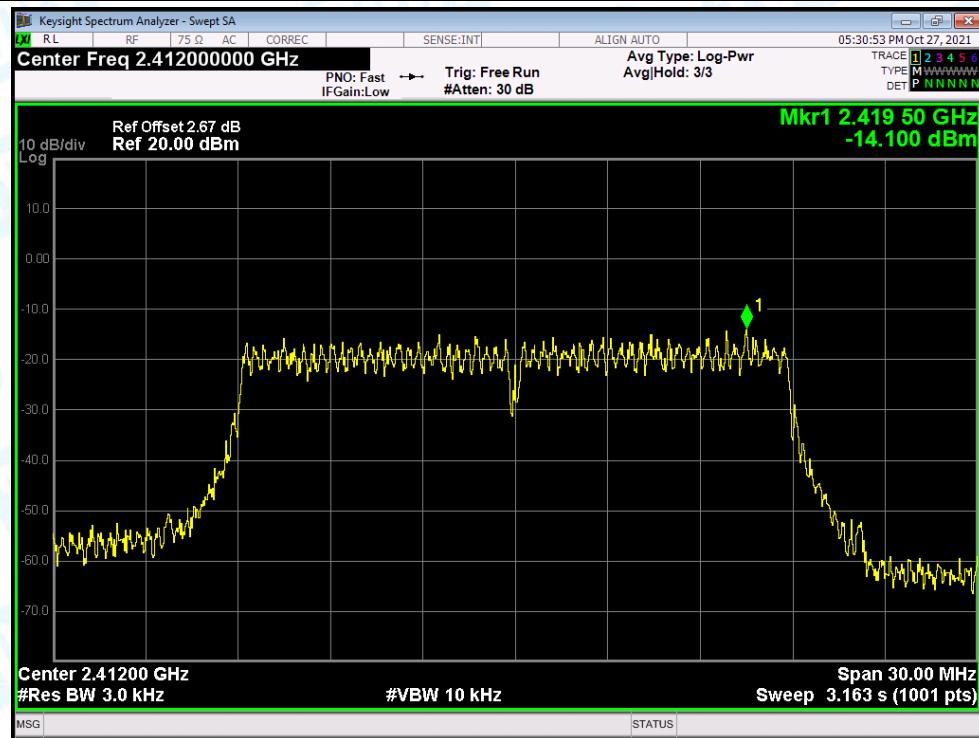
PSD NVNT g 2437MHz Ant1



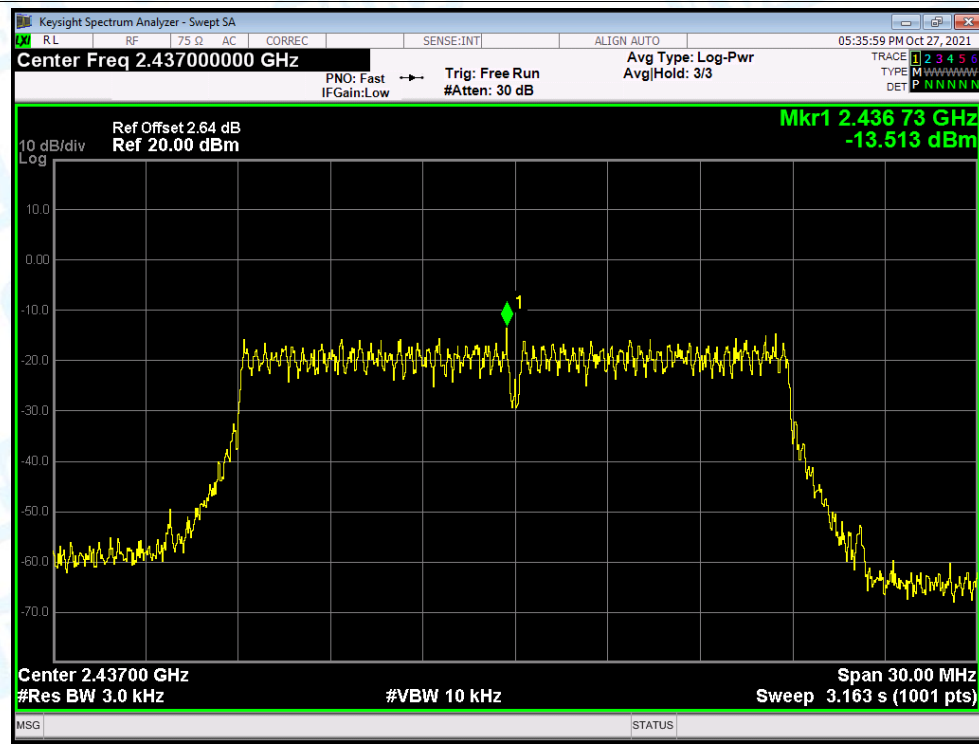
PSD NVNT g 2462MHz Ant1

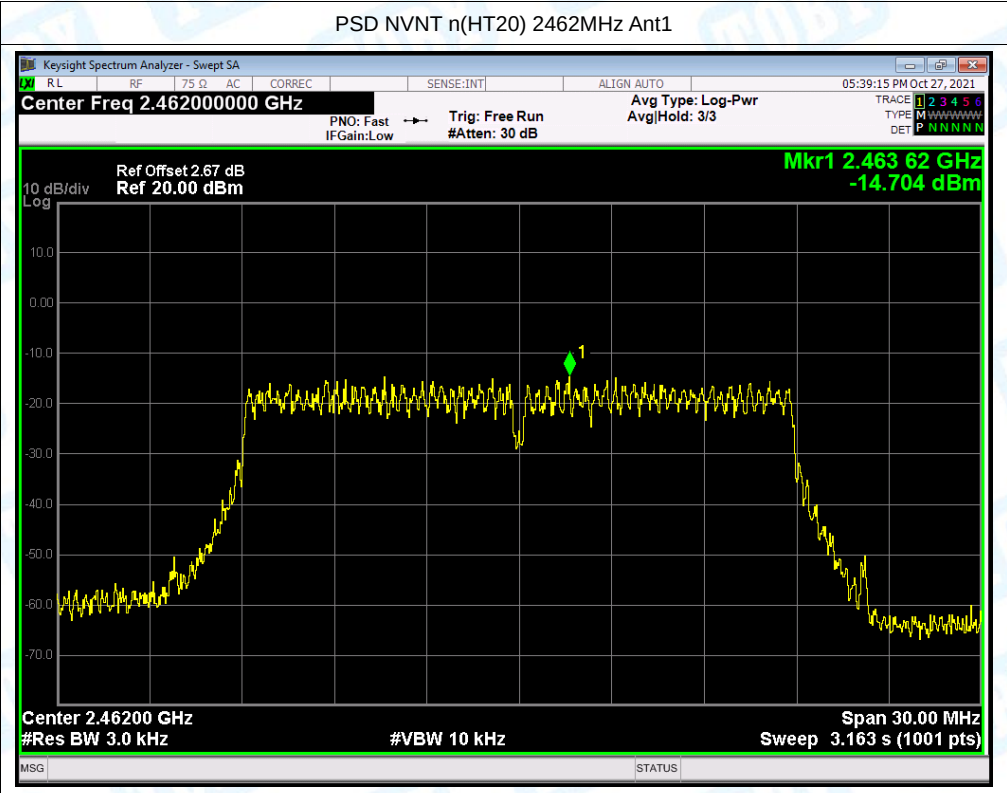


PSD NVNT n(HT20) 2412MHz Ant1



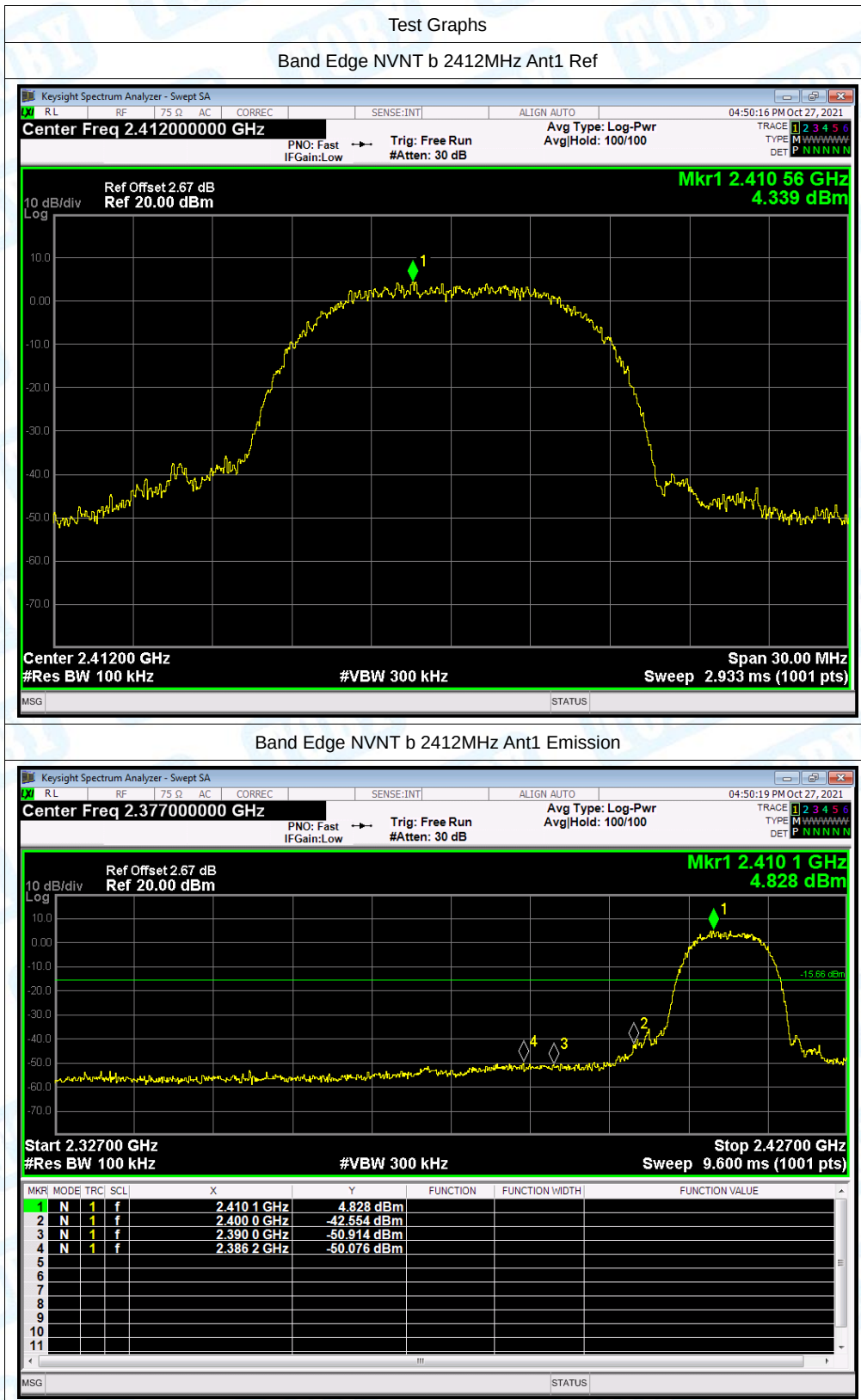
PSD NVNT n(HT20) 2437MHz Ant1



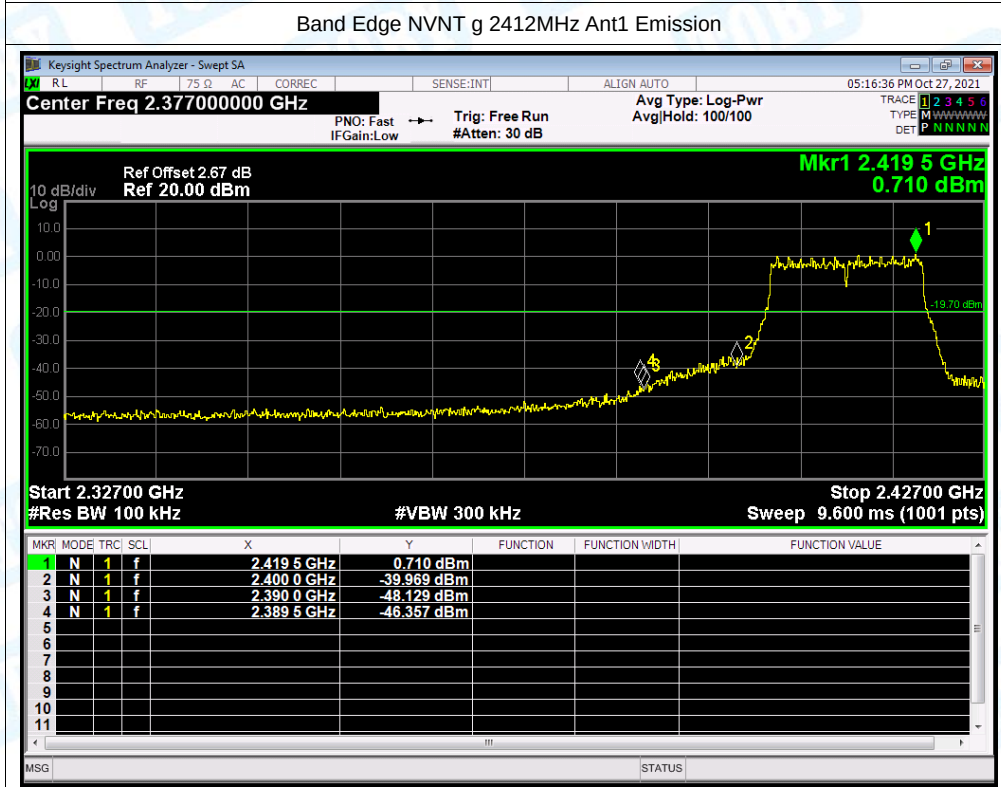
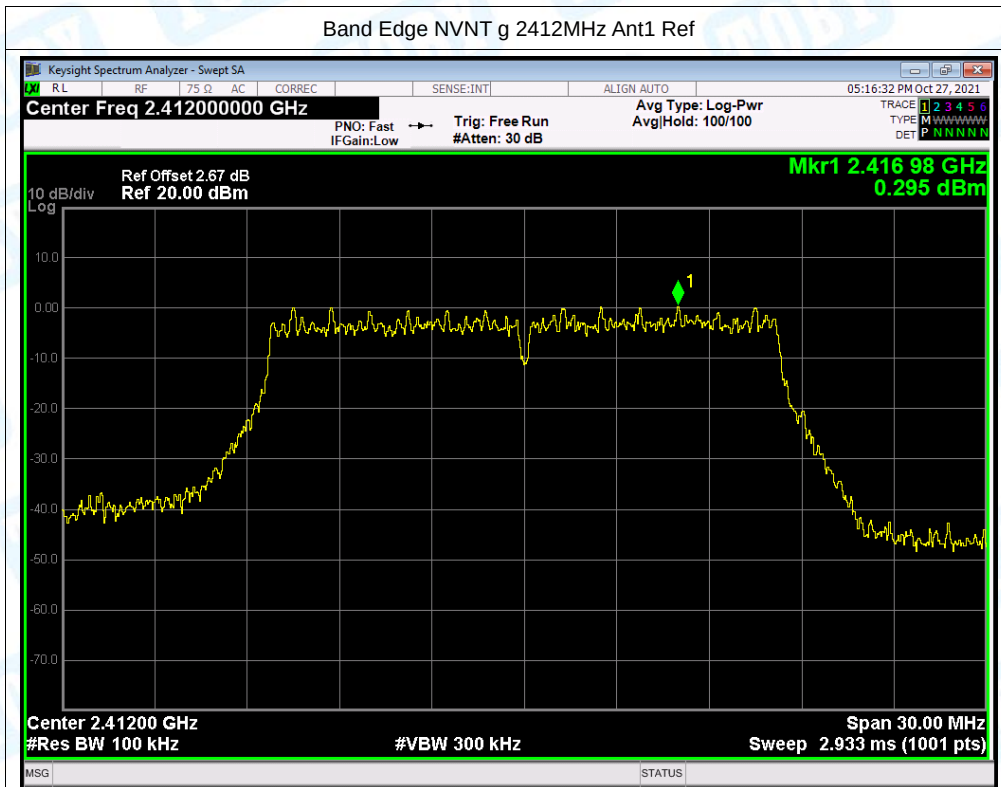


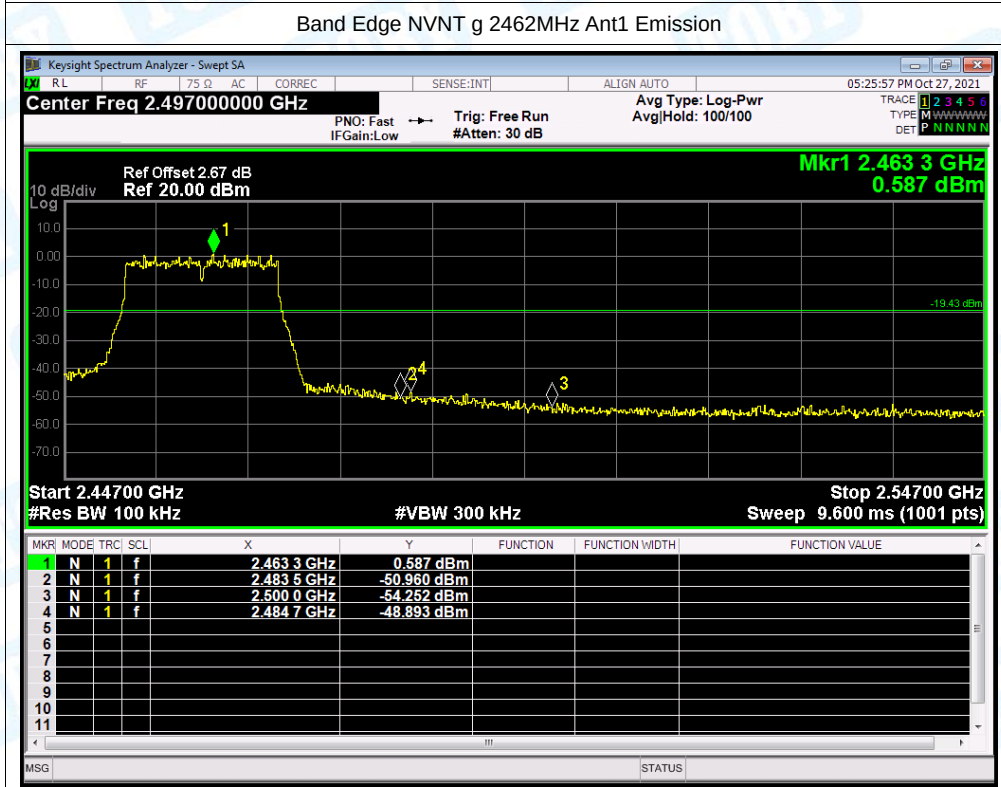
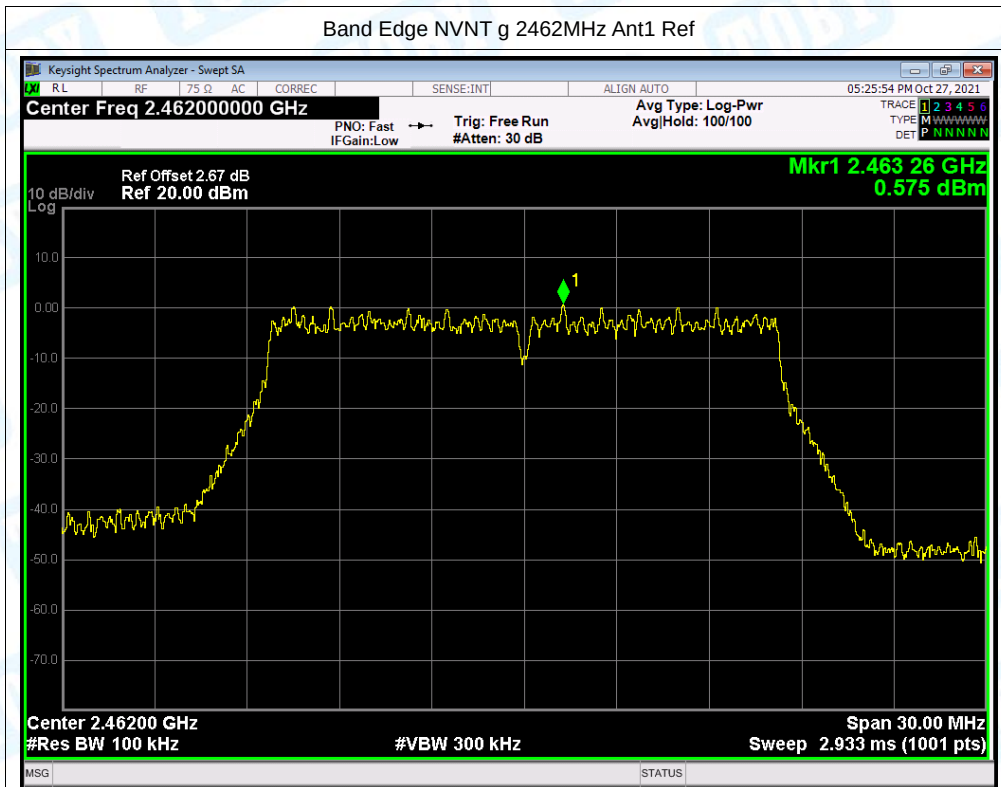
5.Band Edge

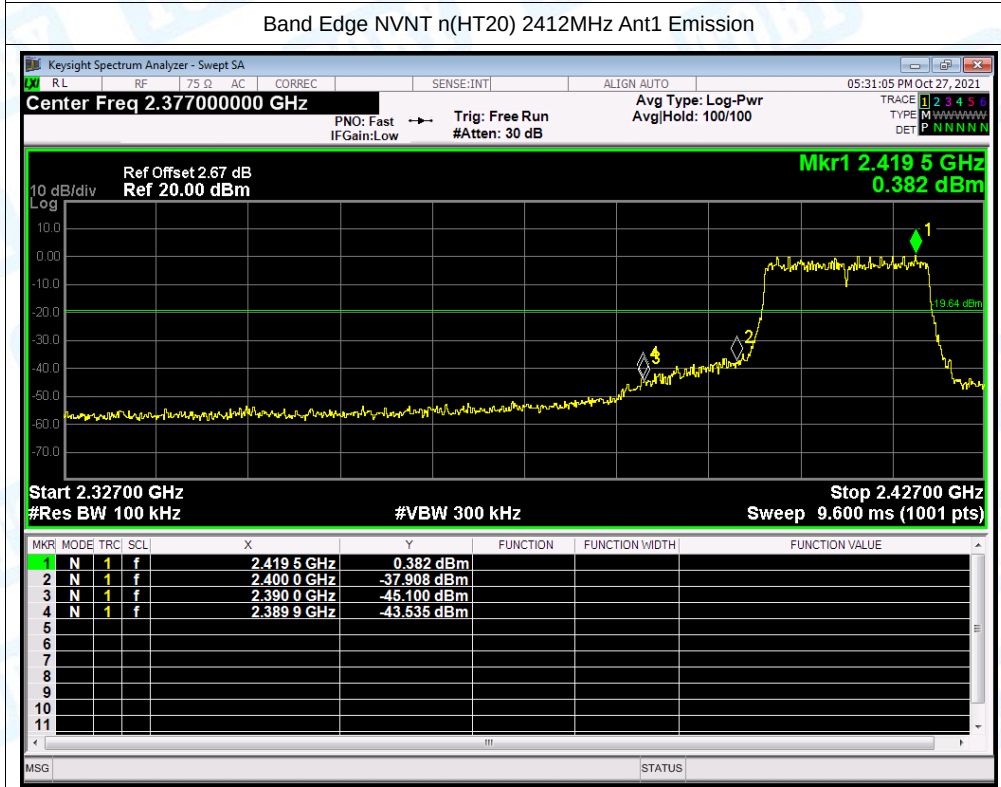
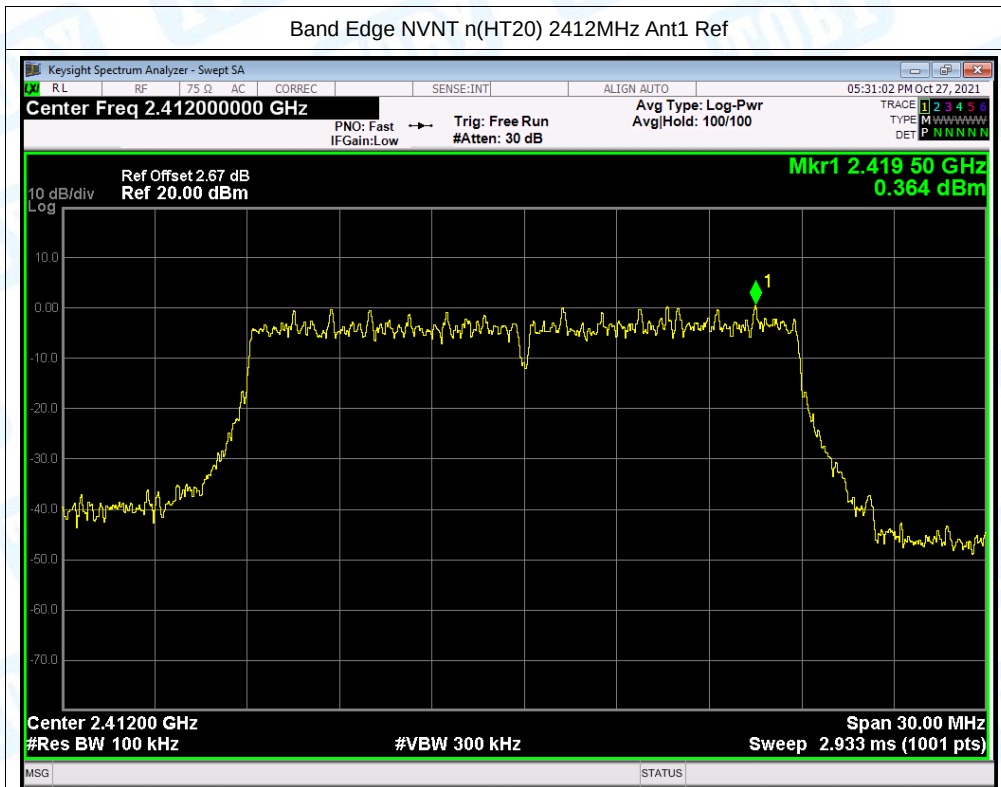
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-54.41	-20	Pass
NVNT	b	2462	Ant1	-53.96	-20	Pass
NVNT	g	2412	Ant1	-46.65	-20	Pass
NVNT	g	2462	Ant1	-49.47	-20	Pass
NVNT	n(HT20)	2412	Ant1	-43.89	-20	Pass
NVNT	n(HT20)	2462	Ant1	-49.34	-20	Pass

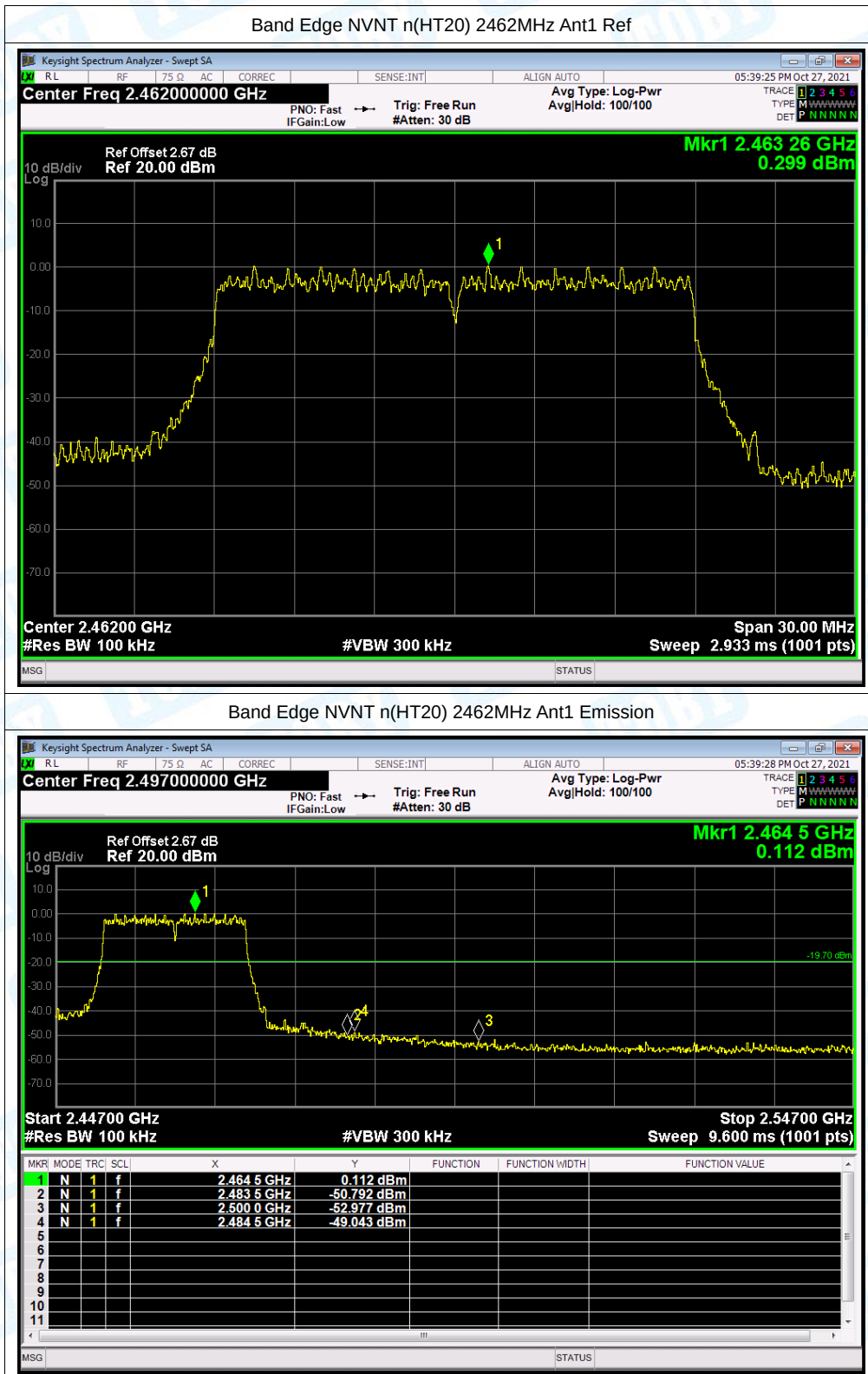






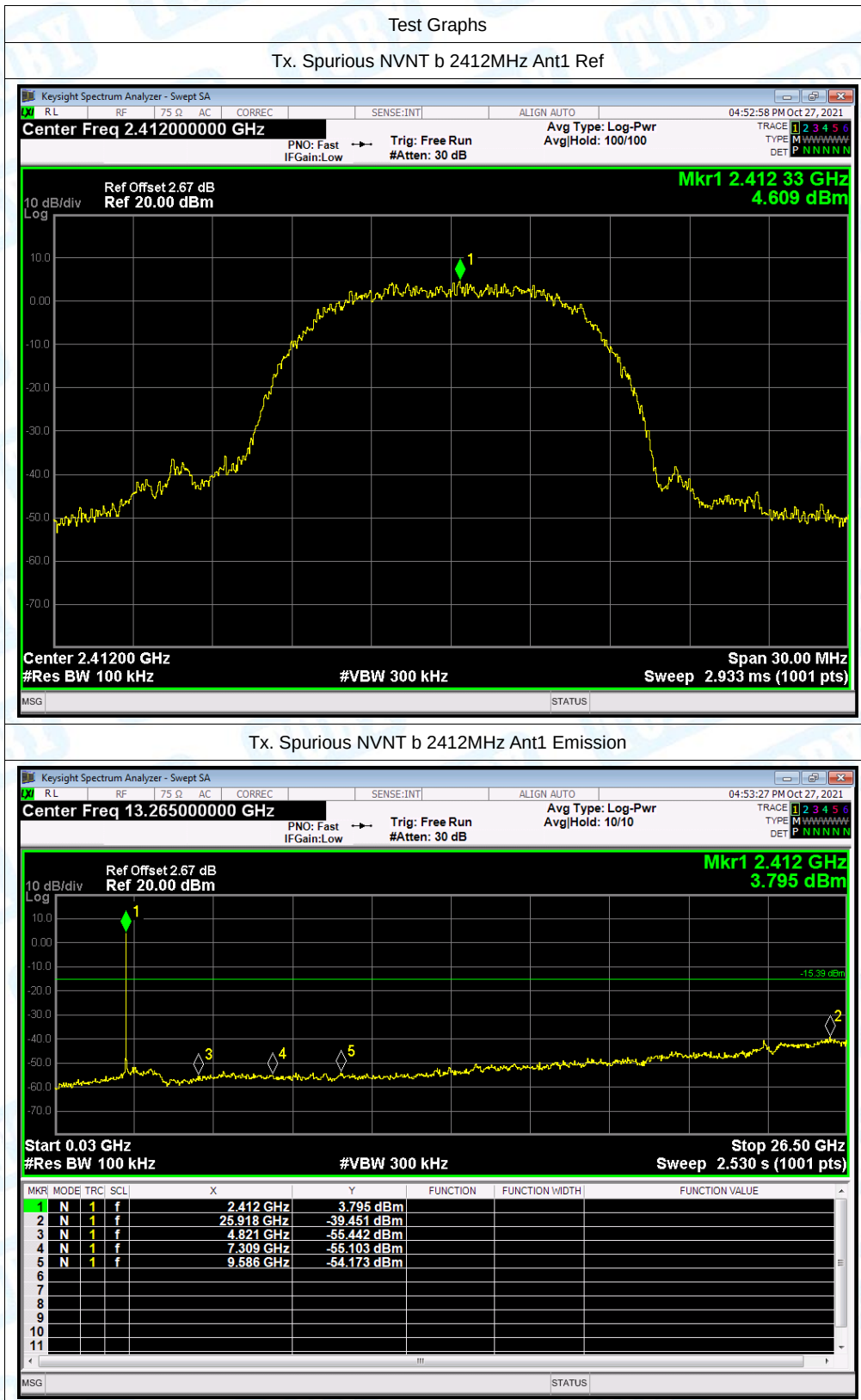




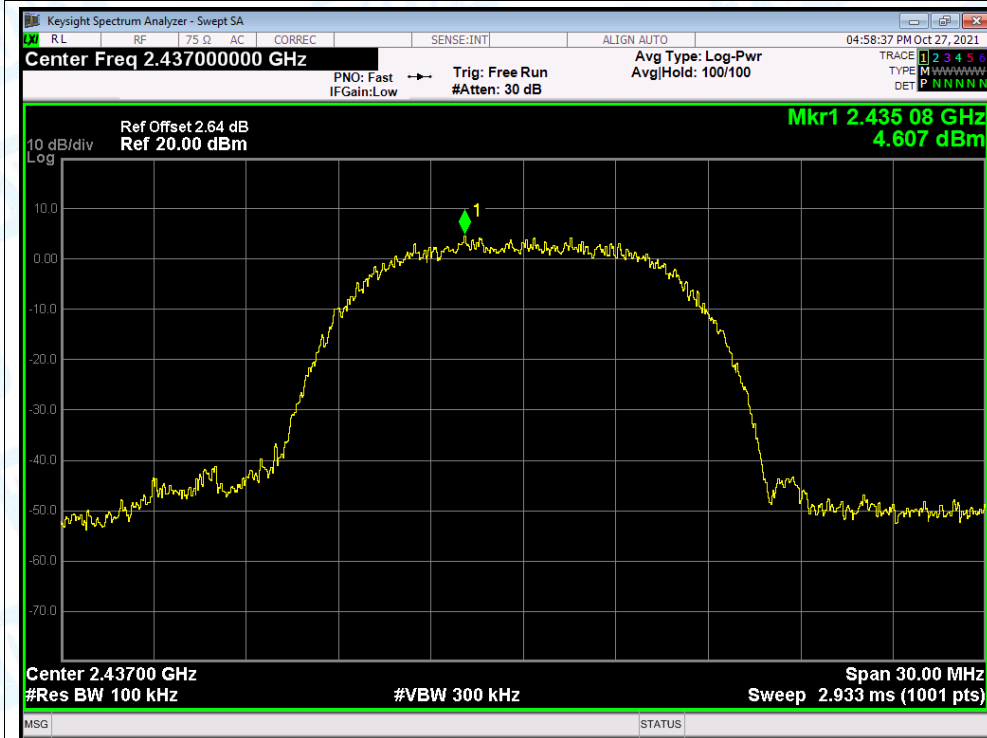


6. Conducted RF Spurious Emission

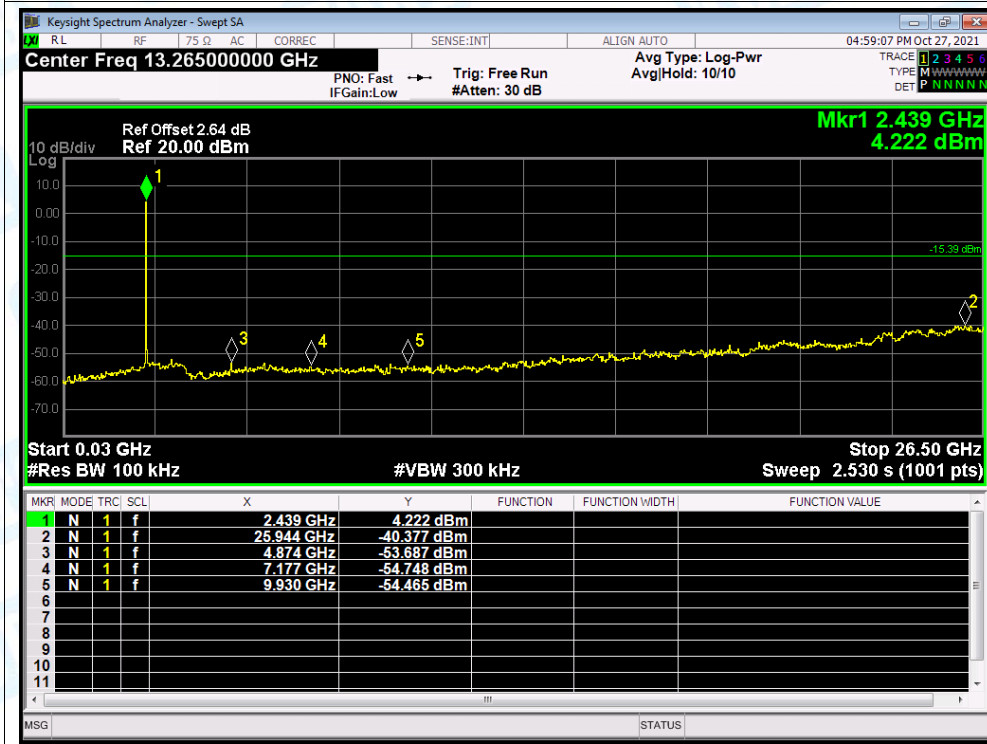
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.06	-20	Pass
NVNT	b	2437	Ant1	-44.98	-20	Pass
NVNT	b	2462	Ant1	-45.08	-20	Pass
NVNT	g	2412	Ant1	-40.19	-20	Pass
NVNT	g	2437	Ant1	-40.01	-20	Pass
NVNT	g	2462	Ant1	-41.24	-20	Pass
NVNT	n(HT20)	2412	Ant1	-39.3	-20	Pass
NVNT	n(HT20)	2437	Ant1	-40.33	-20	Pass
NVNT	n(HT20)	2462	Ant1	-39.85	-20	Pass



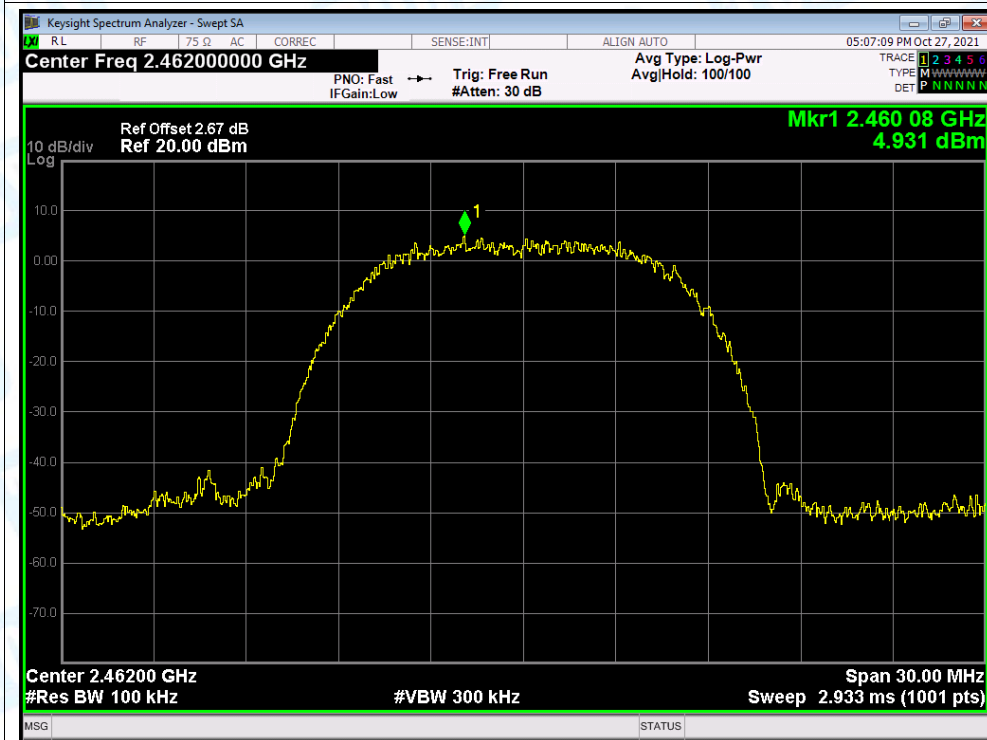
Tx. Spurious NVNT b 2437MHz Ant1 Ref



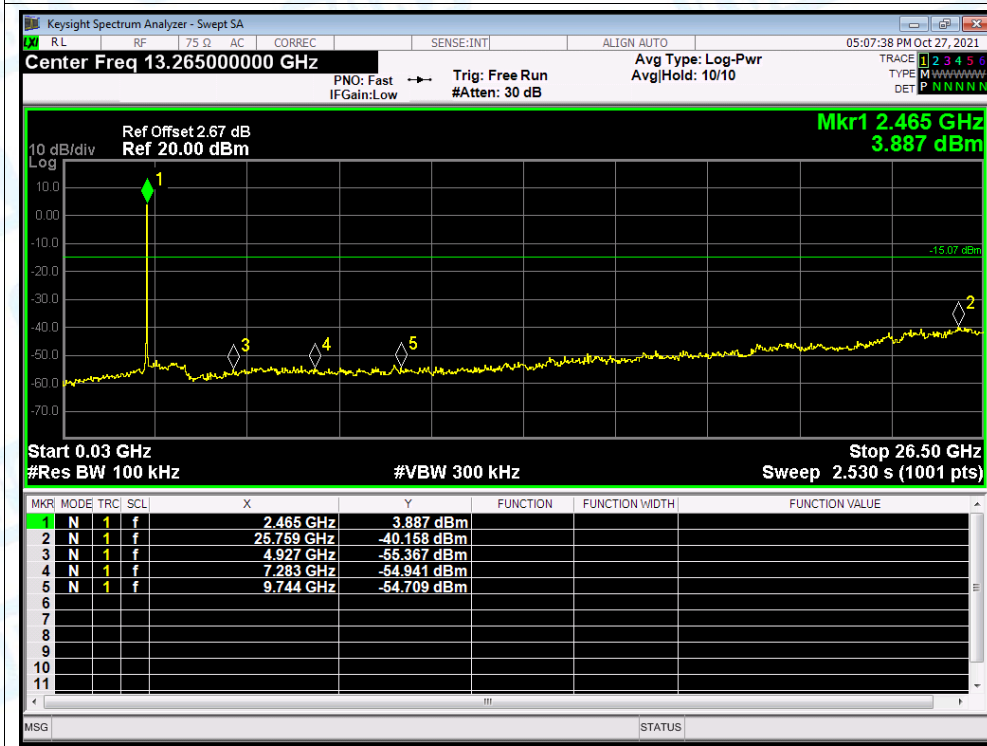
Tx. Spurious NVNT b 2437MHz Ant1 Emission



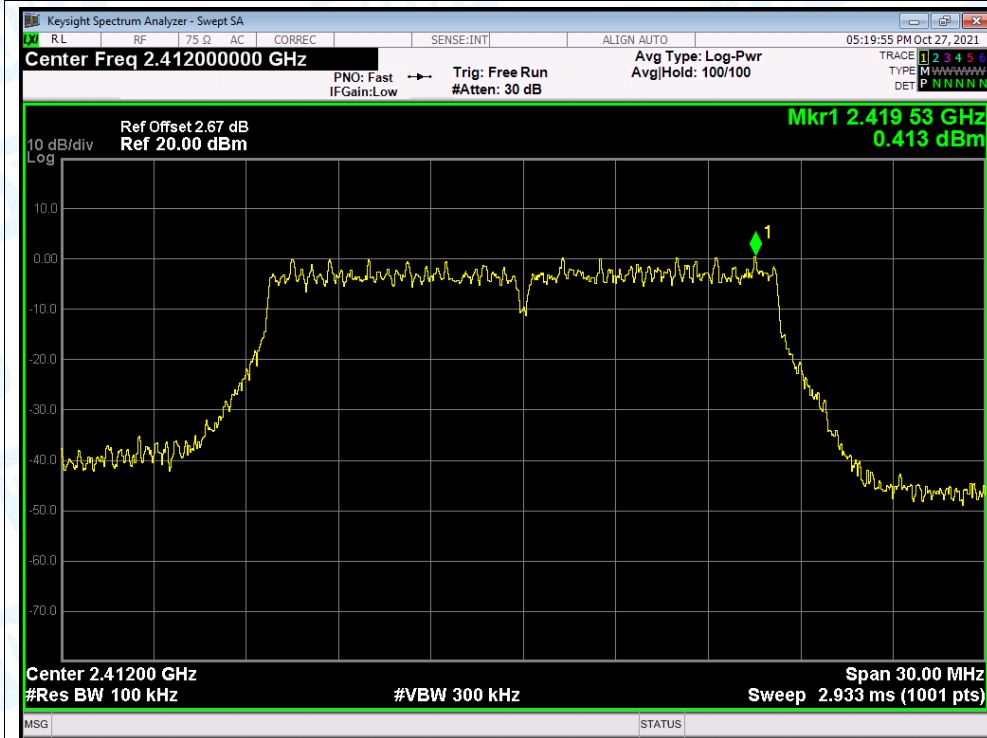
Tx. Spurious NVNT b 2462MHz Ant1 Ref



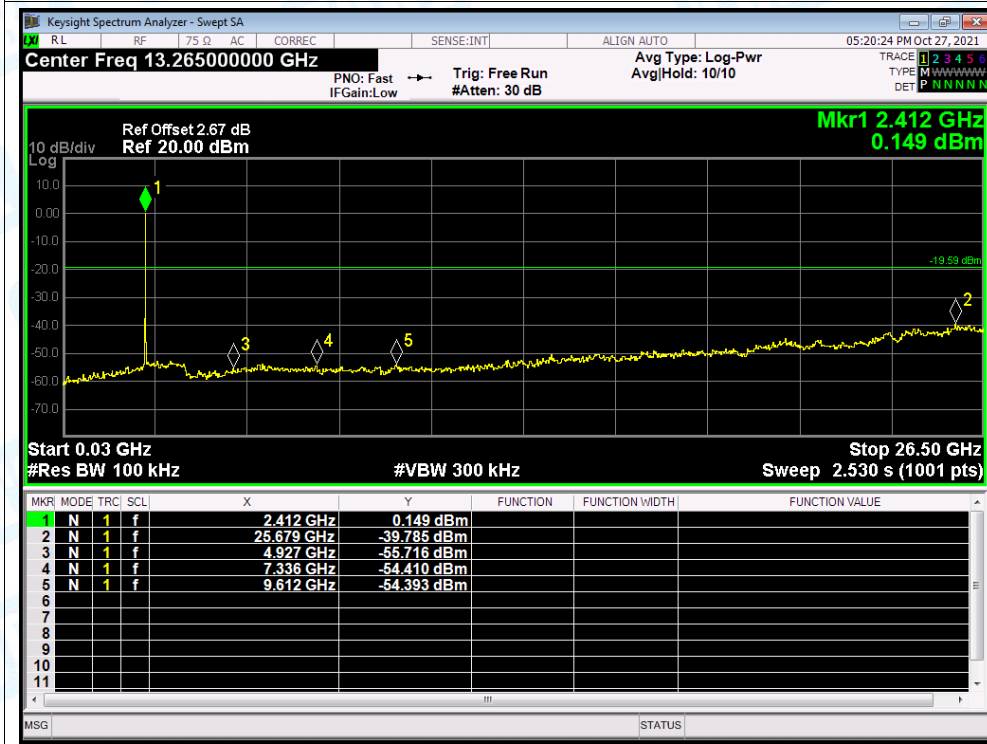
Tx. Spurious NVNT b 2462MHz Ant1 Emission



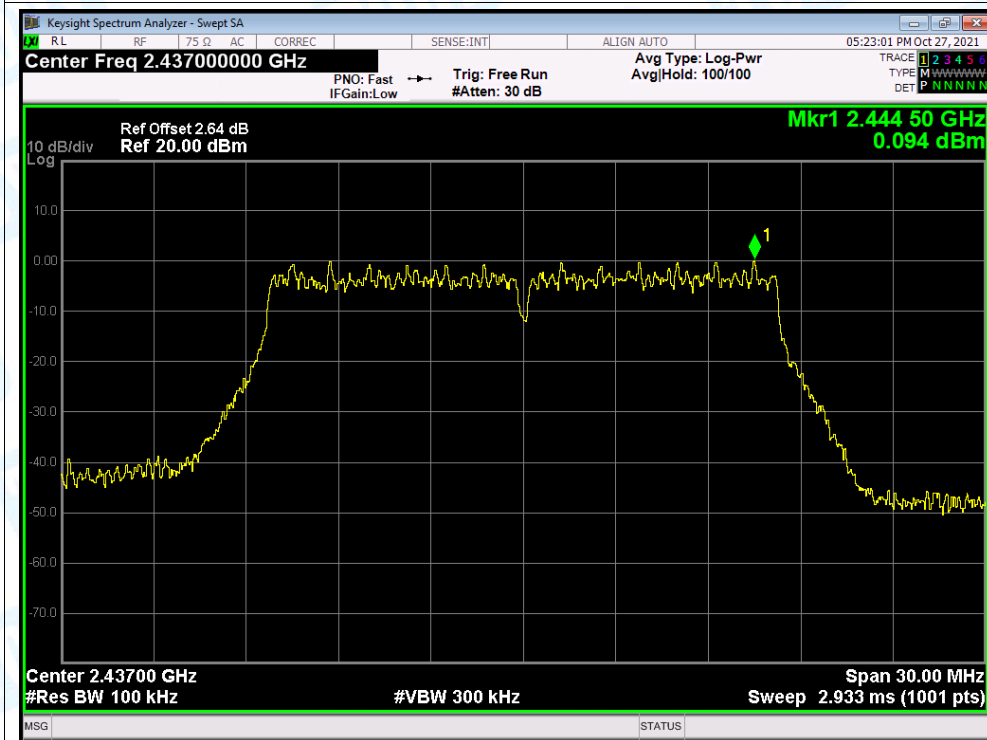
Tx. Spurious NVNT g 2412MHz Ant1 Ref



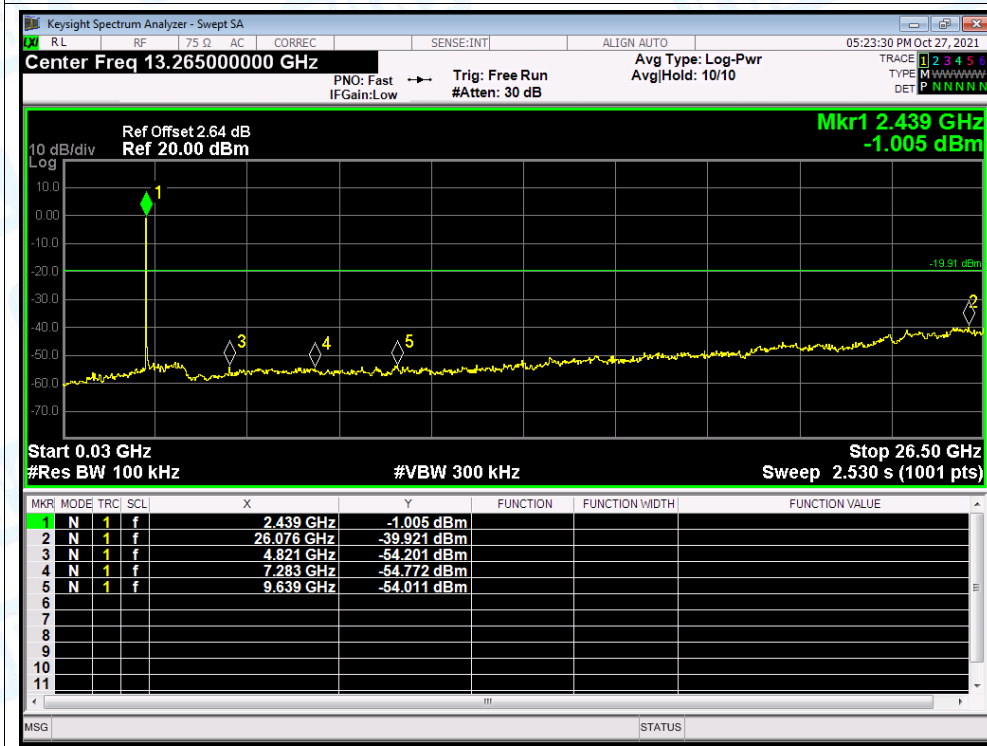
Tx. Spurious NVNT g 2412MHz Ant1 Emission



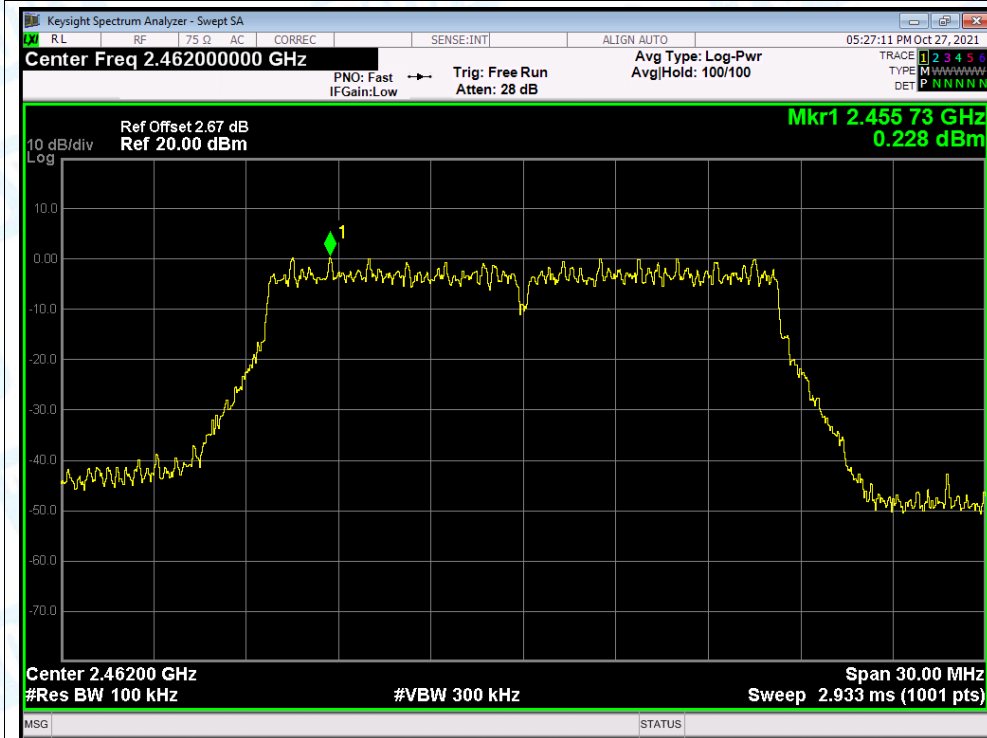
Tx. Spurious NVNT g 2437MHz Ant1 Ref



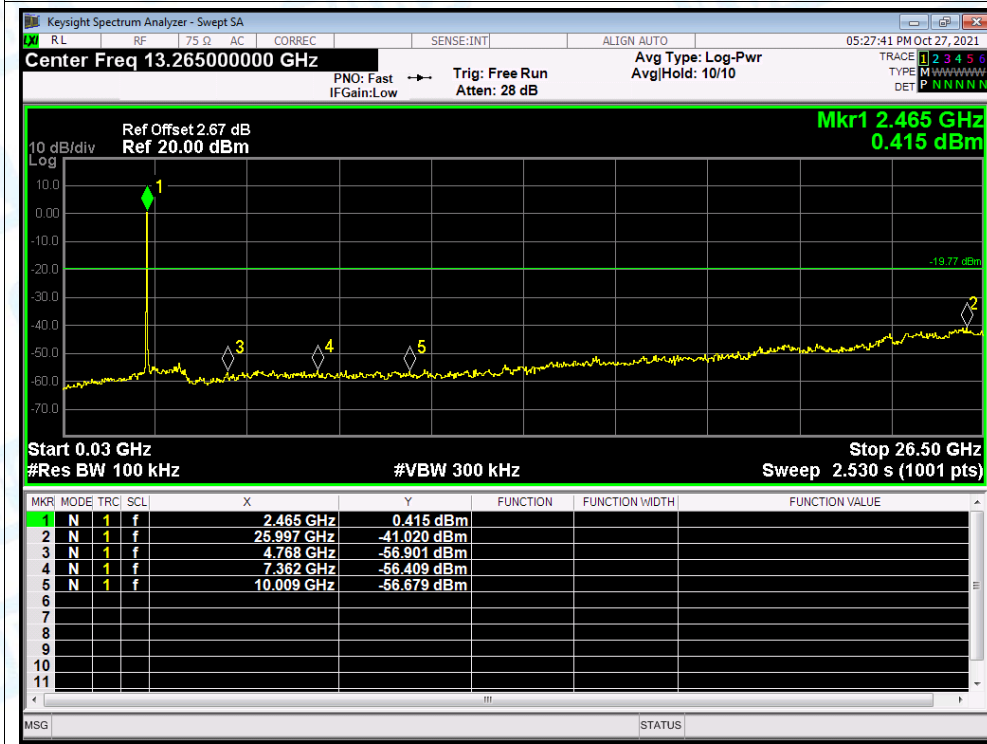
Tx. Spurious NVNT g 2437MHz Ant1 Emission



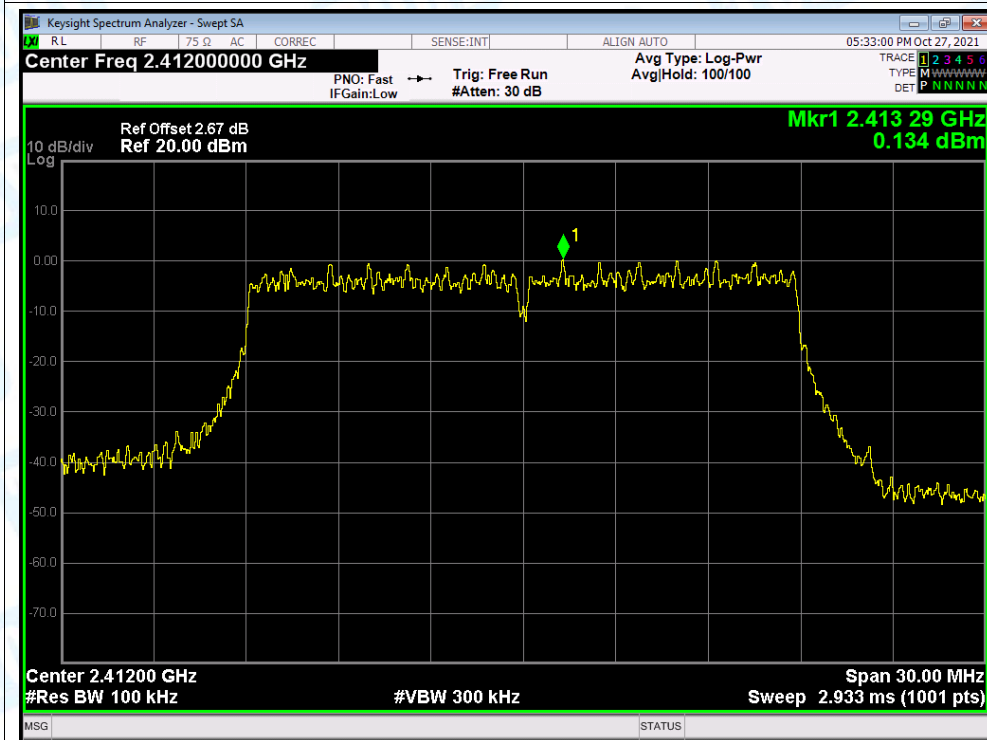
Tx. Spurious NVNT g 2462MHz Ant1 Ref



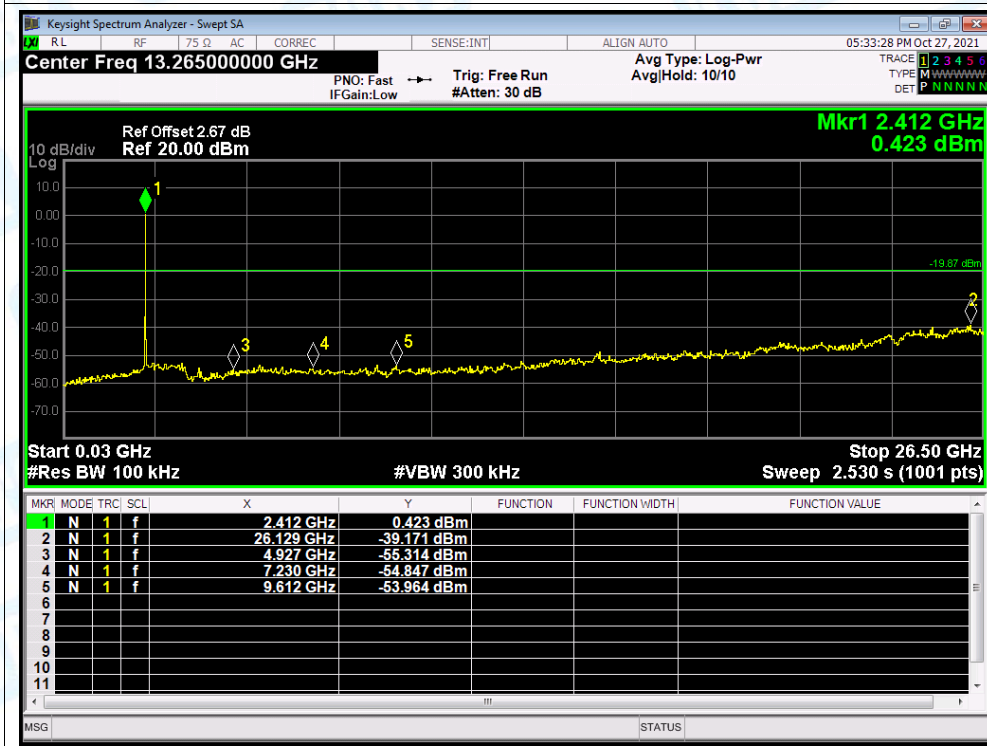
Tx. Spurious NVNT g 2462MHz Ant1 Emission



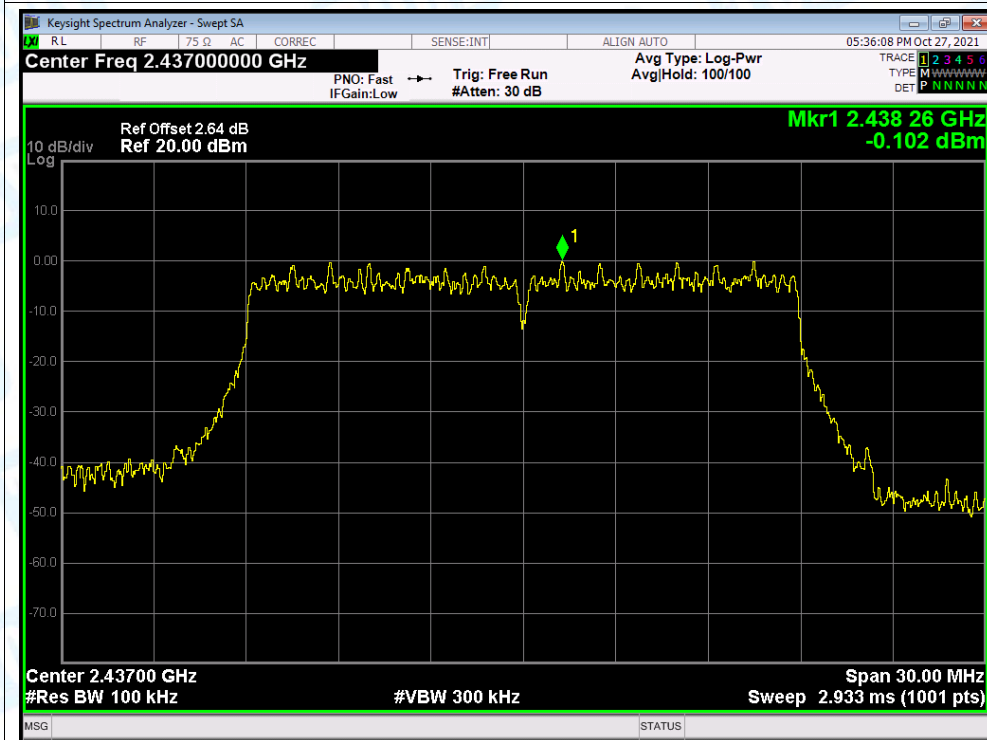
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



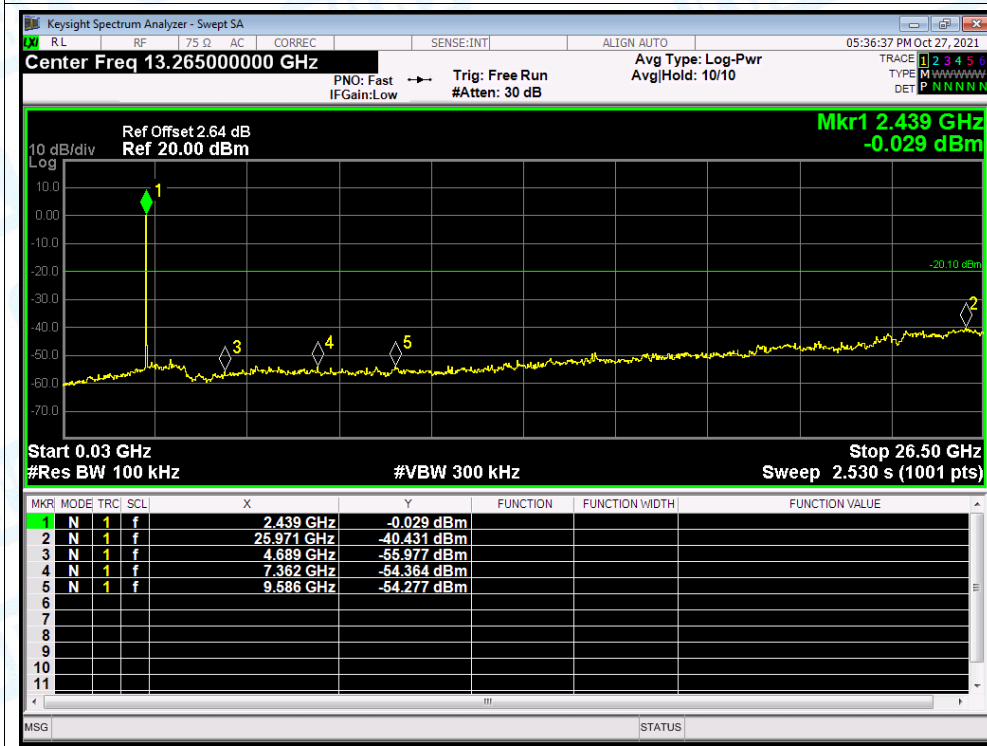
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



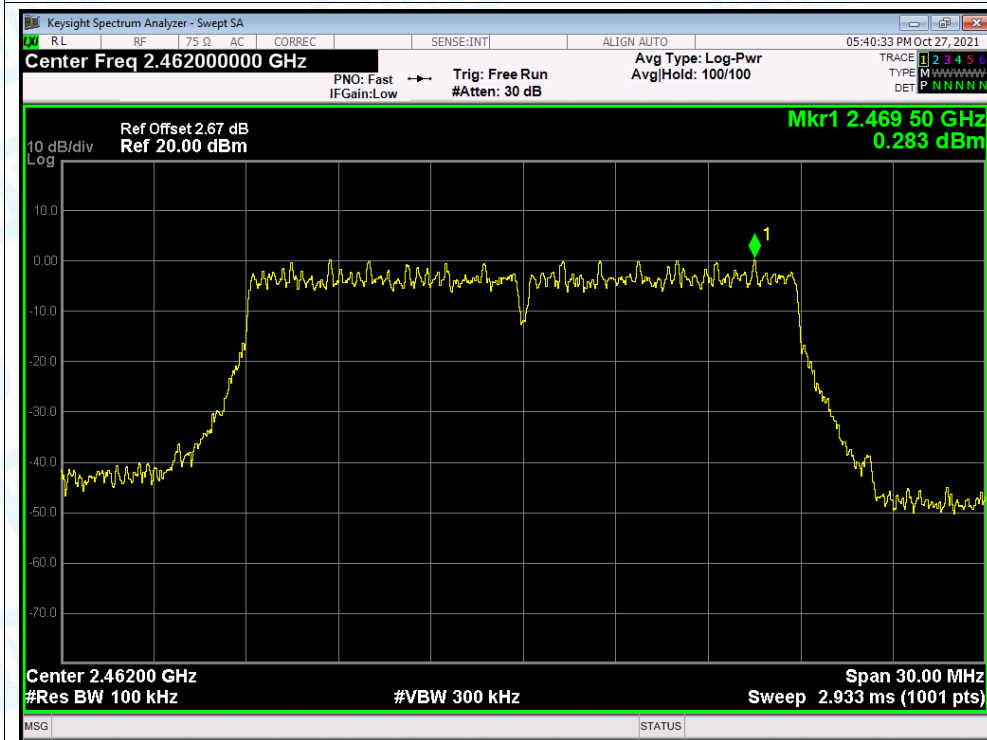
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



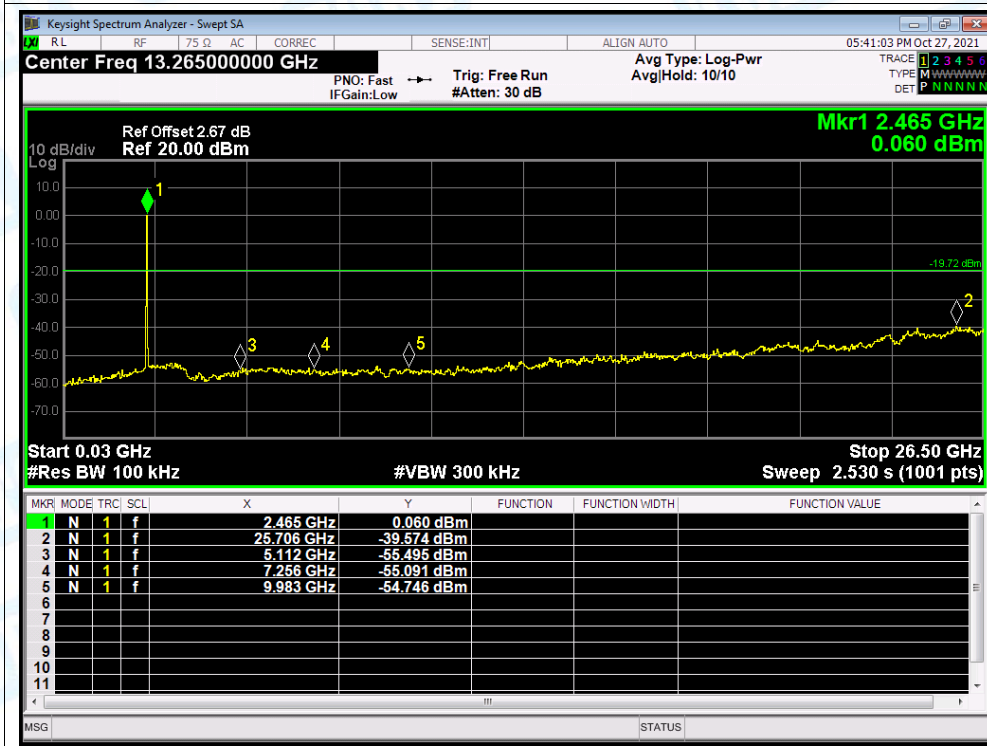
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



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



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

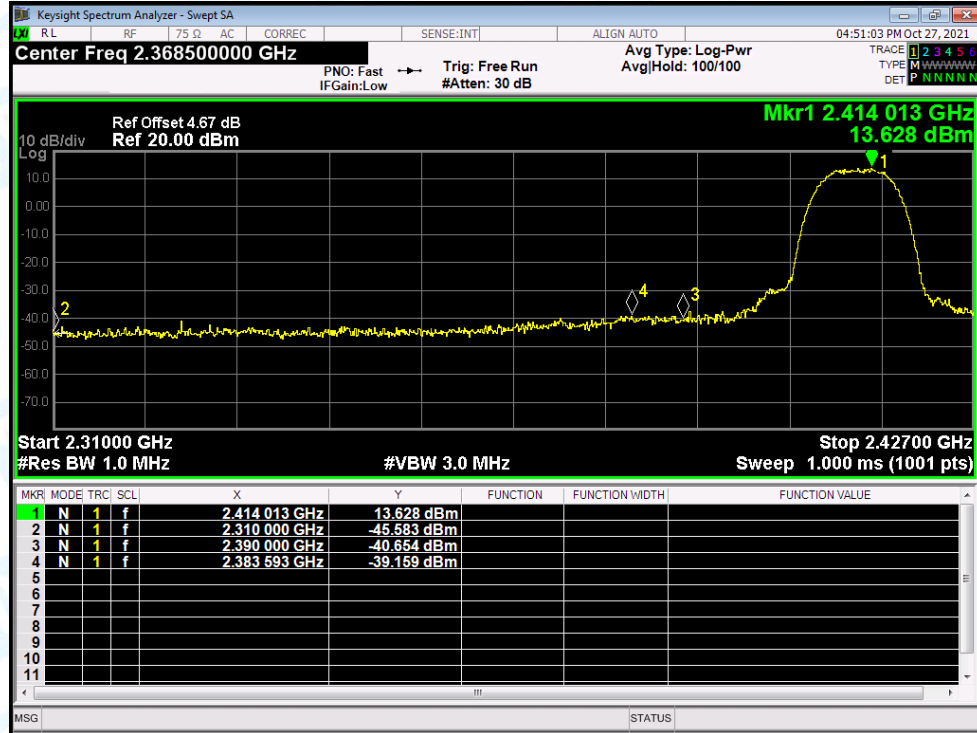


7.Restrict Band

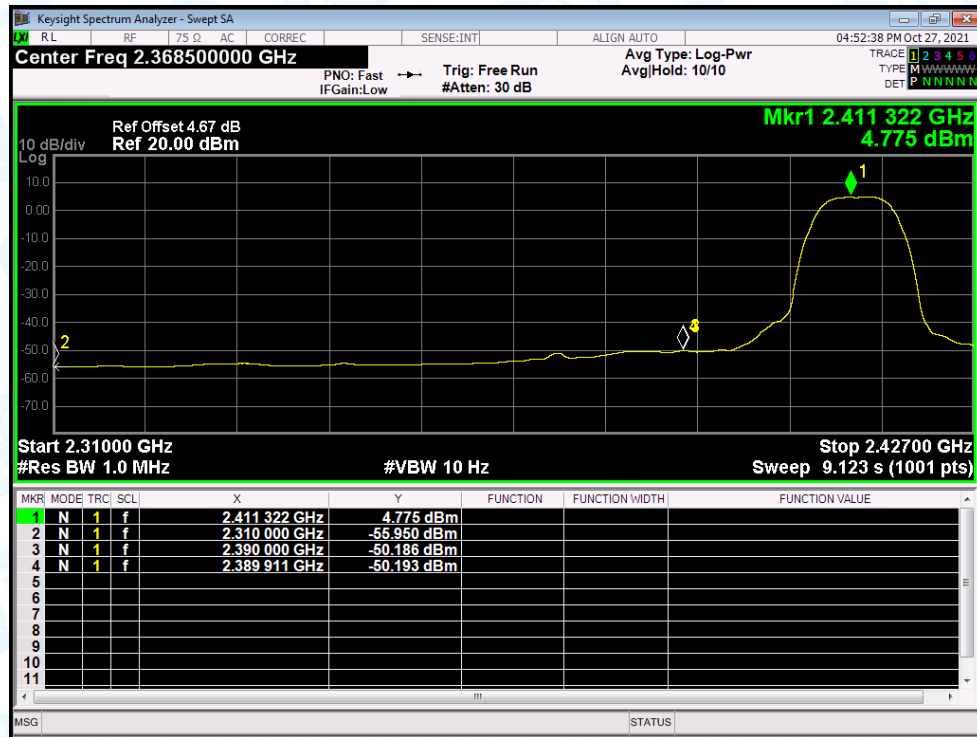
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-43.99	2.6	53.87	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-55.96	2.6	41.90	Average	54	Pass
NVNT	b	2412	Ant1	2383.593	-39.15	2.6	58.71	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-50.19	2.6	47.67	Average	54	Pass
NVNT	b	2412	Ant1	2390	-40.65	2.6	57.21	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-50.18	2.6	47.68	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-39.6	2.6	58.26	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-50.18	2.6	47.68	Average	54	Pass
NVNT	b	2462	Ant1	2490.248	-38.18	2.6	59.68	Peak	74	Pass
NVNT	b	2462	Ant1	2490.142	-50.07	2.6	47.79	Average	54	Pass
NVNT	b	2462	Ant1	2500	-42.06	2.6	55.62	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-50.66	2.6	46.66	Average	54	Pass
NVNT	g	2412	Ant1	2310	-46.45	2.6	51.41	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-55.98	2.6	41.88	Average	54	Pass
NVNT	g	2412	Ant1	2389.911	-31.59	2.6	66.27	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-47.96	2.6	49.63	Average	54	Pass
NVNT	g	2412	Ant1	2390	-31.66	2.6	65.66	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-47.81	2.6	50.05	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-38.21	2.6	59.65	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-49.75	2.6	48.11	Average	54	Pass
NVNT	g	2462	Ant1	2484.047	-37.44	2.6	60.42	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-49.75	2.6	48.11	Average	54	Pass
NVNT	g	2462	Ant1	2500	-43.35	2.6	54.51	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-53.05	2.6	44.81	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-45.44	2.6	52.42	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-55.99	2.6	41.87	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2386.869	-31.81	2.6	66.05	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-46.88	2.6	50.98	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-34.88	2.6	62.98	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-46.77	2.6	50.09	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-38.51	2.6	59.35	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-49.52	2.6	48.34	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2484.789	-36.31	2.6	61.55	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-49.52	2.6	48.34	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-42.66	2.6	55.20	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-53.1	2.6	44.76	Average	54	Pass

Test Graphs

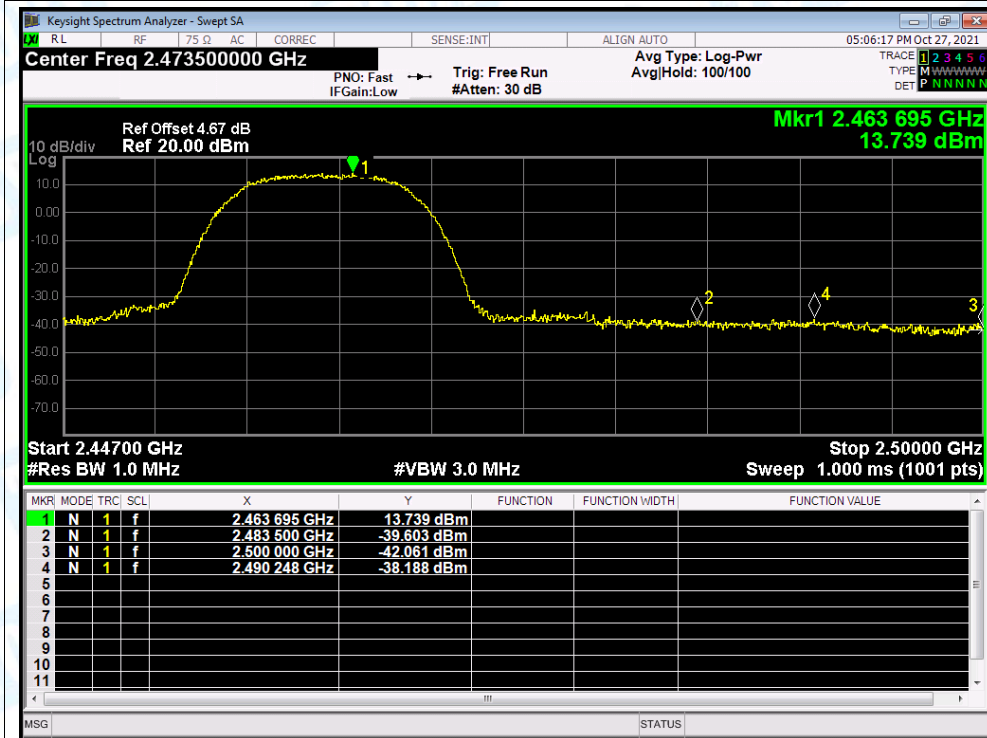
Restrict Band NVNT b 2412MHz Ant1 Peak



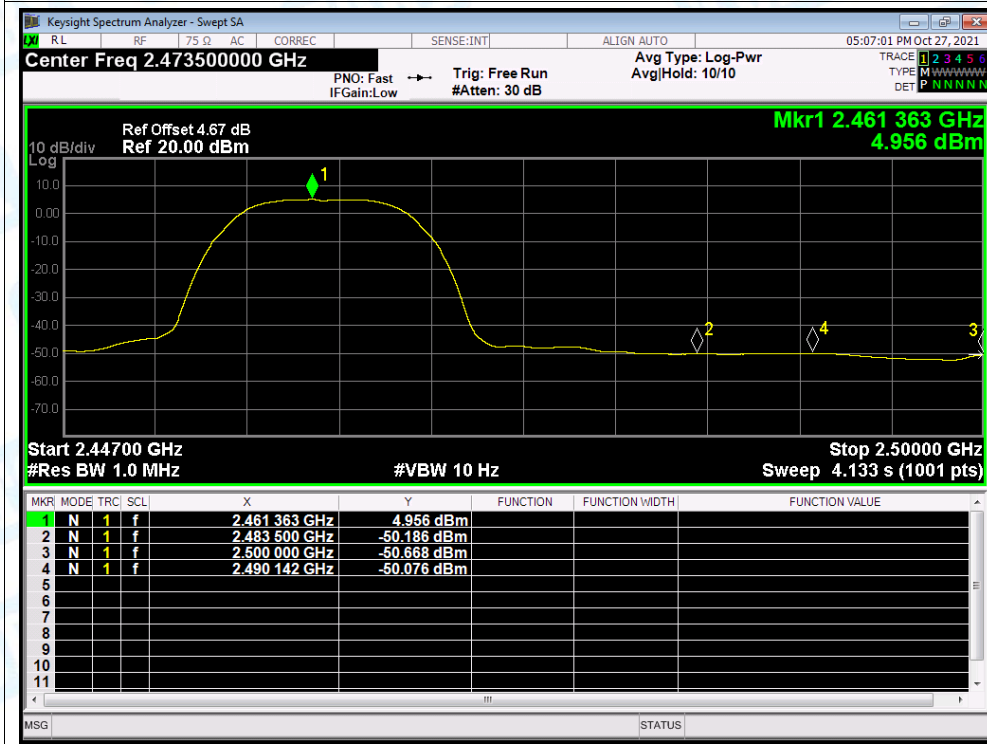
Restrict Band NVNT b 2412MHz Ant1 Average



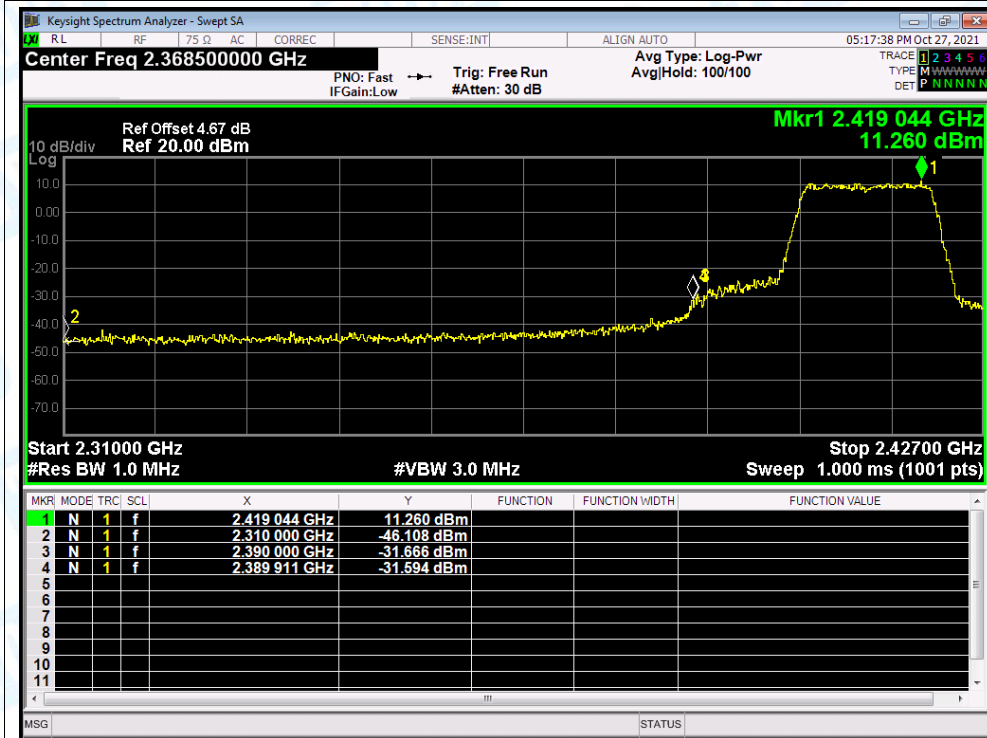
Restrict Band NVNT b 2462MHz Ant1 Peak



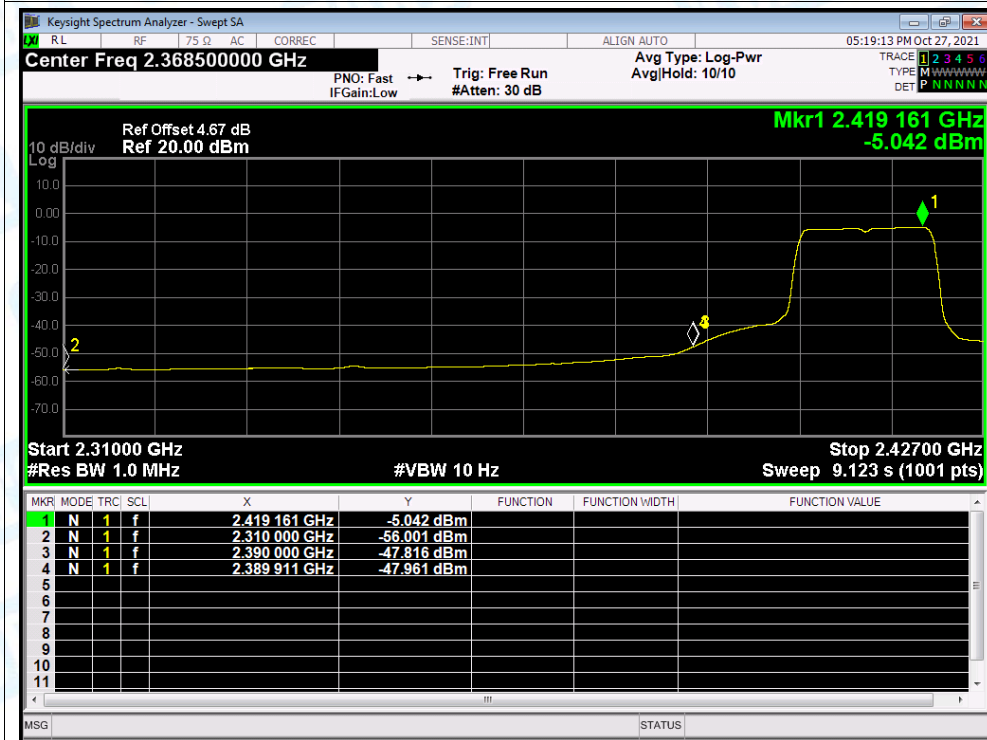
Restrict Band NVNT b 2462MHz Ant1 Average



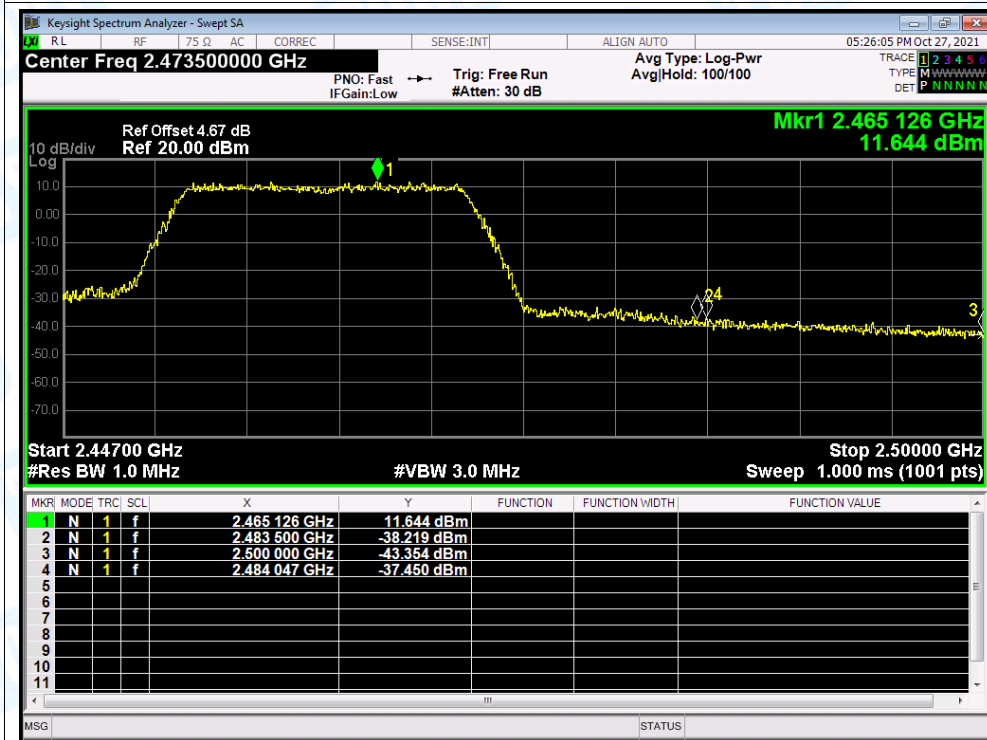
Restrict Band NVNT g 2412MHz Ant1 Peak



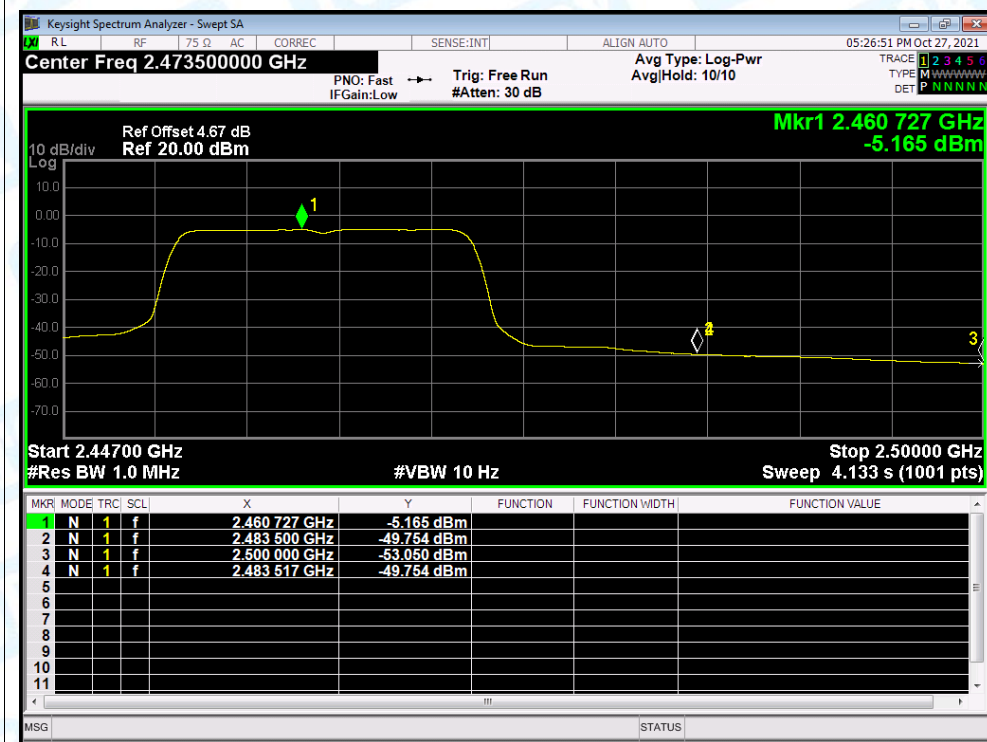
Restrict Band NVNT g 2412MHz Ant1 Average



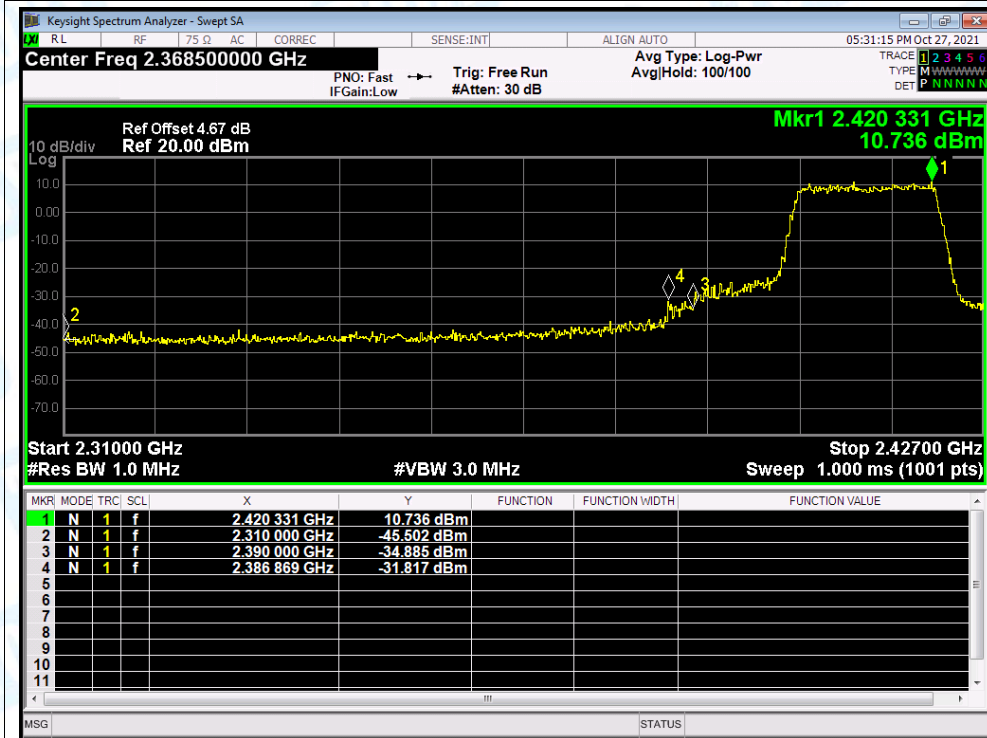
Restrict Band NVNT g 2462MHz Ant1 Peak



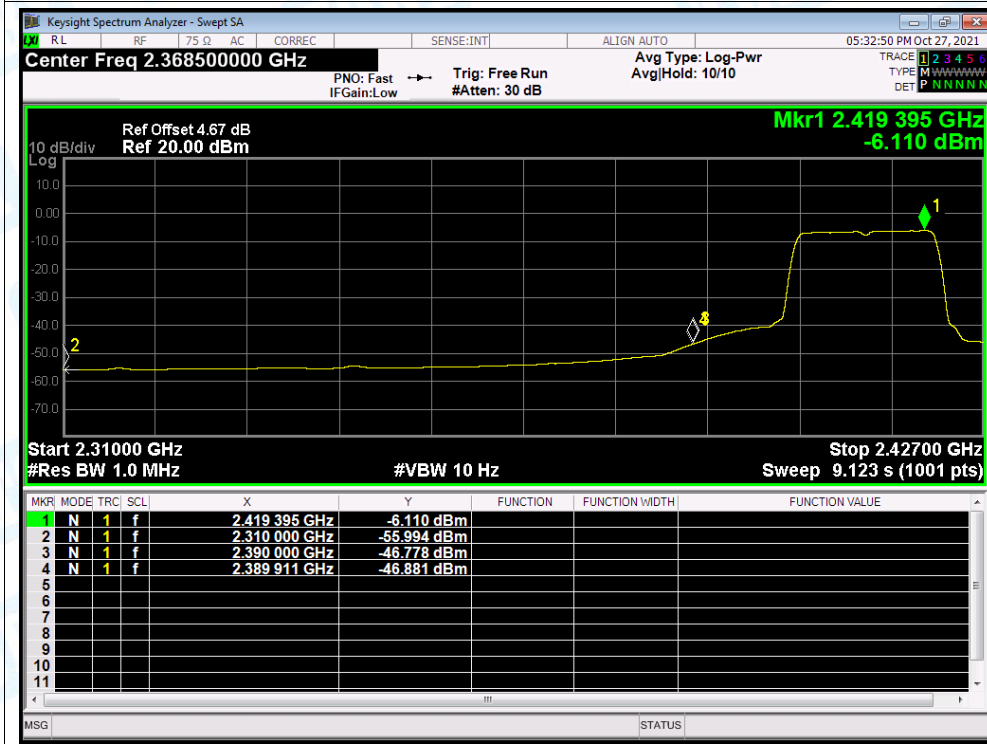
Restrict Band NVNT g 2462MHz Ant1 Average



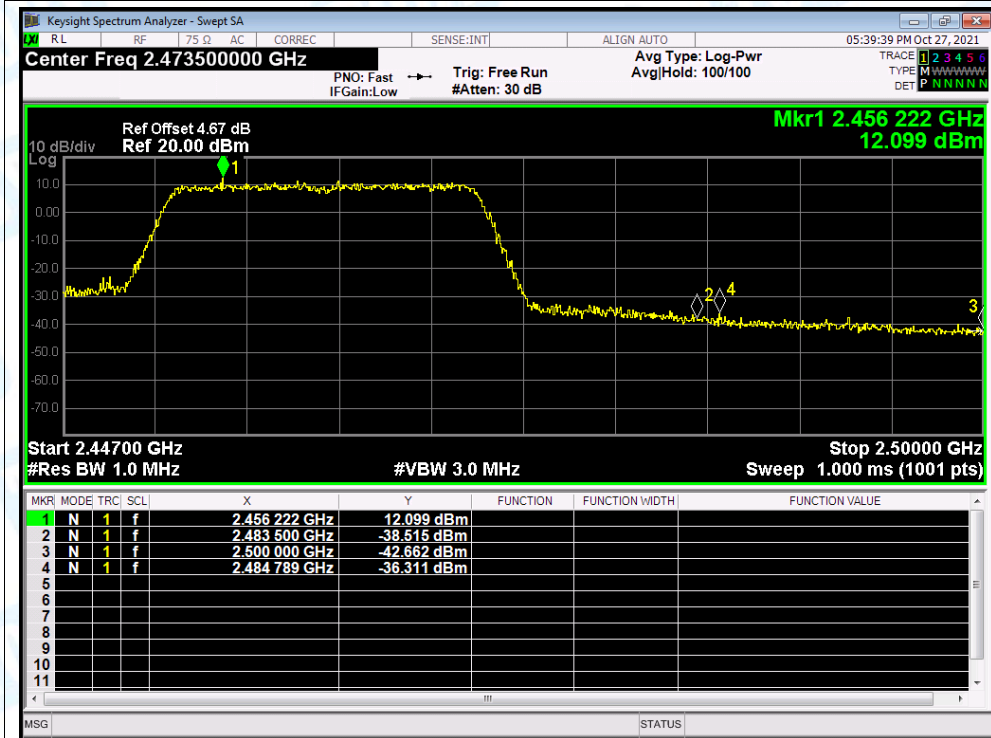
Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



Restrict Band NVNT n(HT20) 2462MHz Ant1 Average

