

RF Test Data for 2.4G WiFi (Conducted Measurements)

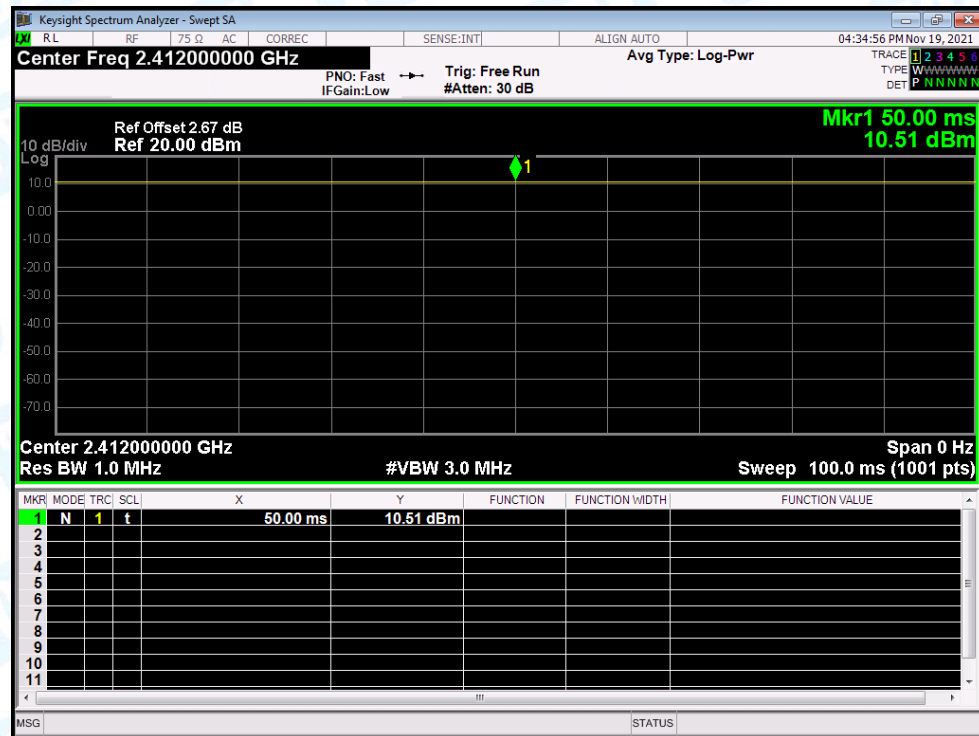
General Description of EUT	
Product Name:	Wireless Repeater
Test Model:	RE5
Sample ID:	20211014-10-2#
Environmental Conditions	
Temperature:	24°C
Relative Humidity:	50%
Test Voltage:	DC 5V
Test Engineer:	Hejingchang
Note: For a more detailed features description, please refer to the report TB-FCC184784	

1.Duty Cycle

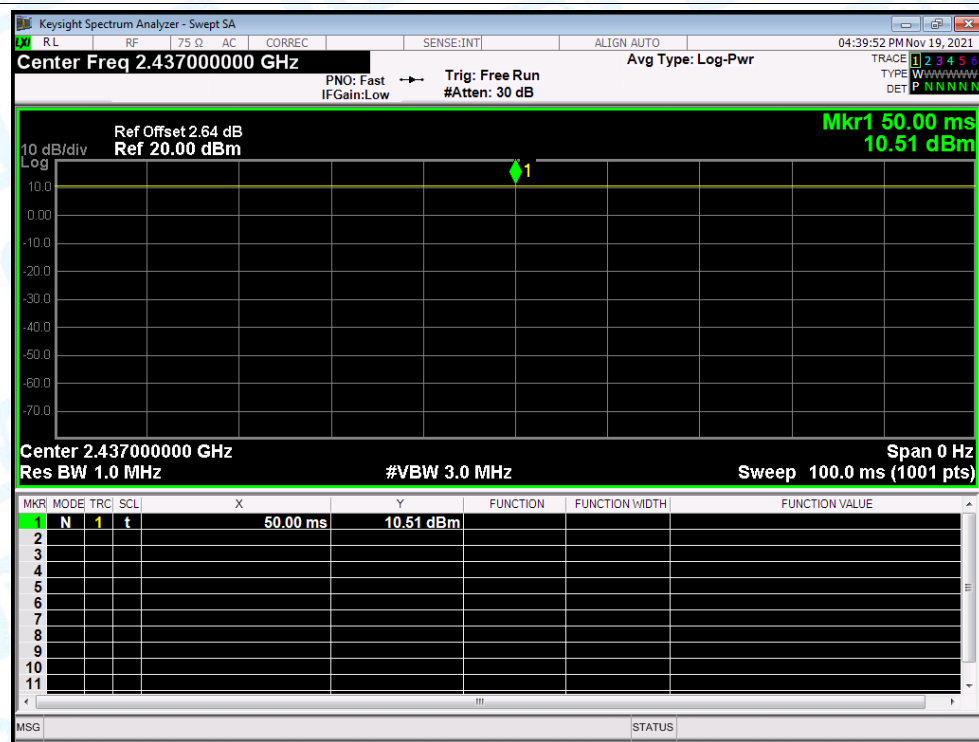
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	100	0	0
NVNT	b	2437	Ant1	100	0	0
NVNT	b	2462	Ant1	100	0	0
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0

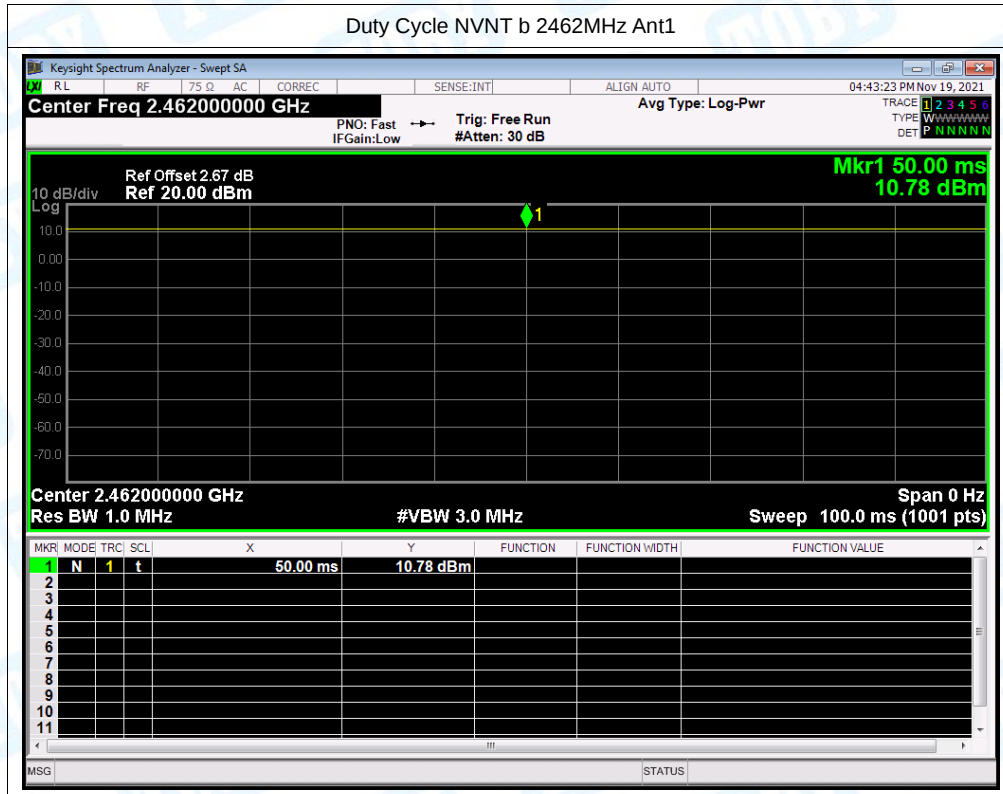
Test Graphs

Duty Cycle NVNT b 2412MHz Ant1

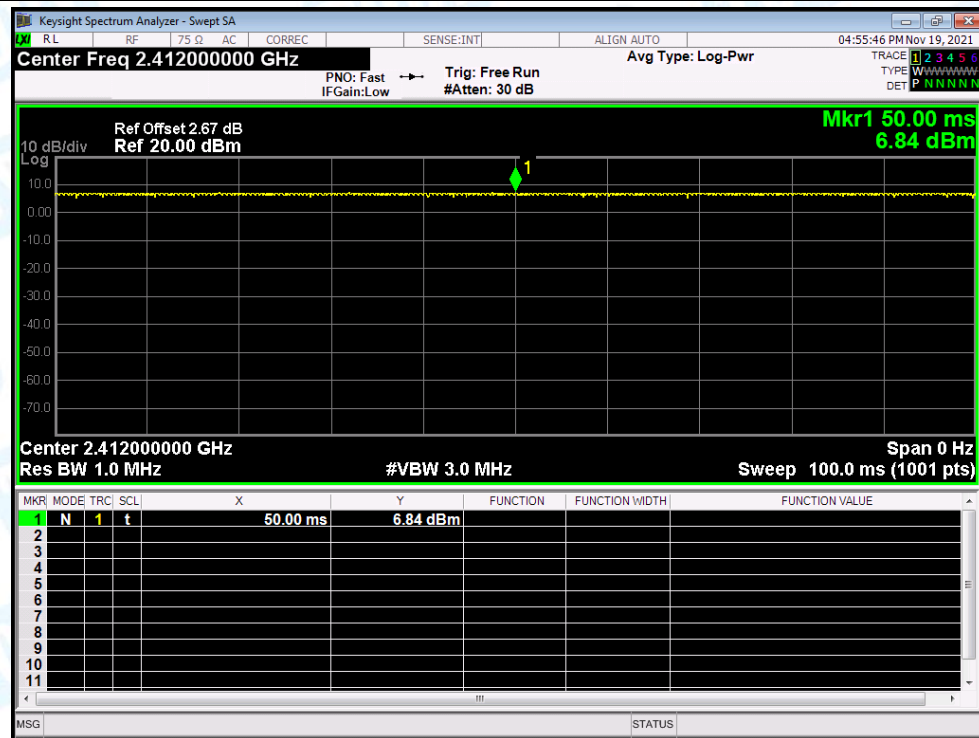


Duty Cycle NVNT b 2437MHz Ant1

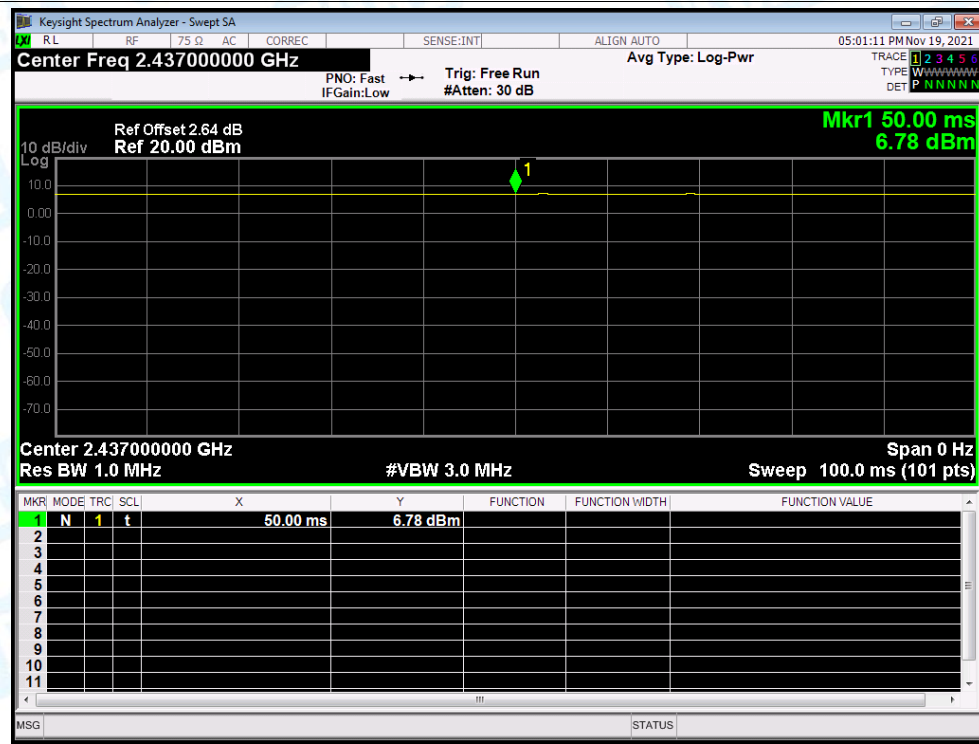


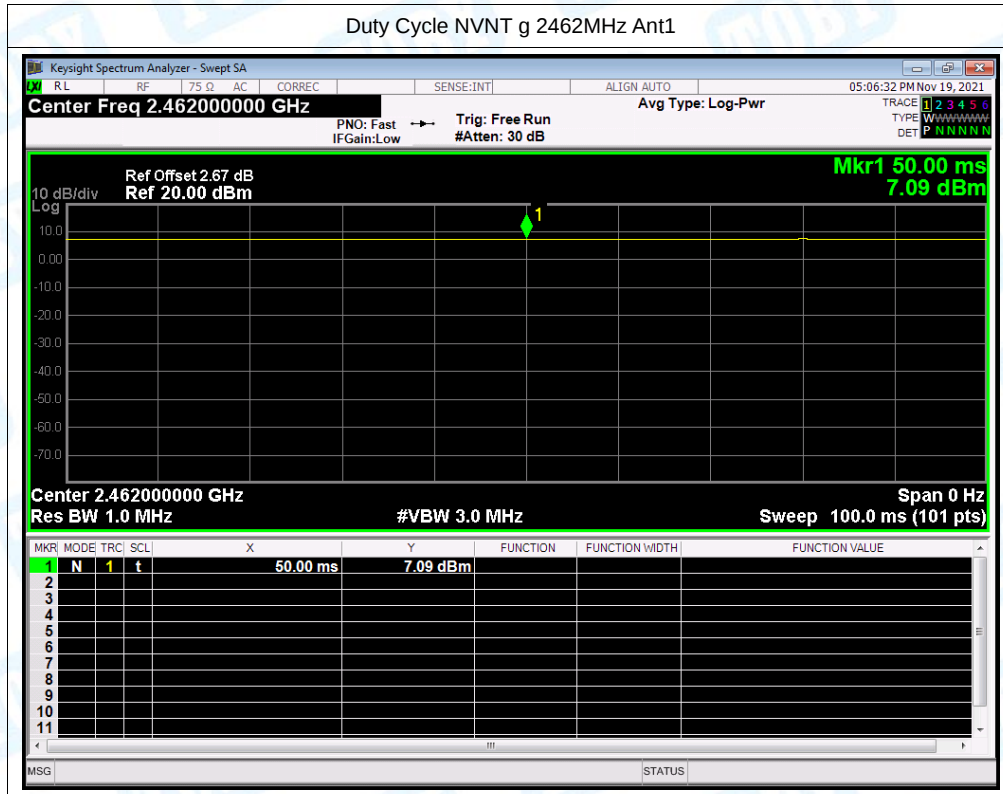


Duty Cycle NVNT g 2412MHz Ant1



Duty Cycle NVNT g 2437MHz Ant1





2.Maximum Conducted Output Power

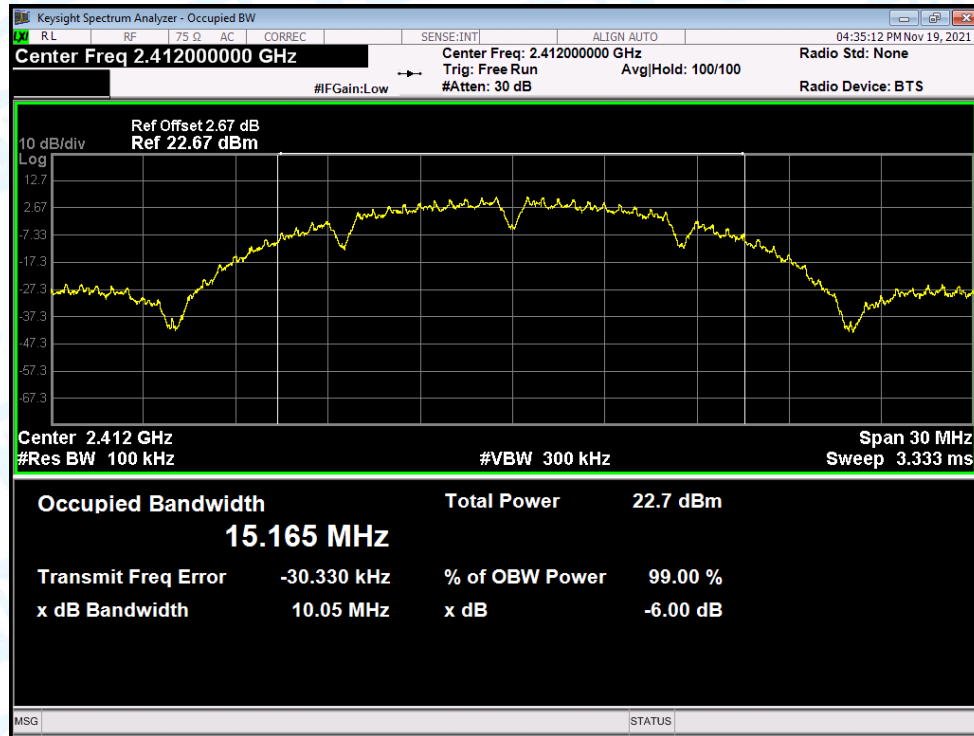
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.835	0	17.835	30	Pass
NVNT	b	2437	Ant1	17.848	0	17.848	30	Pass
NVNT	b	2462	Ant1	18.059	0	18.059	30	Pass
NVNT	g	2412	Ant1	17.368	0	17.368	30	Pass
NVNT	g	2437	Ant1	17.314	0	17.314	30	Pass
NVNT	g	2462	Ant1	17.598	0	17.598	30	Pass

3.-6dB Bandwidth

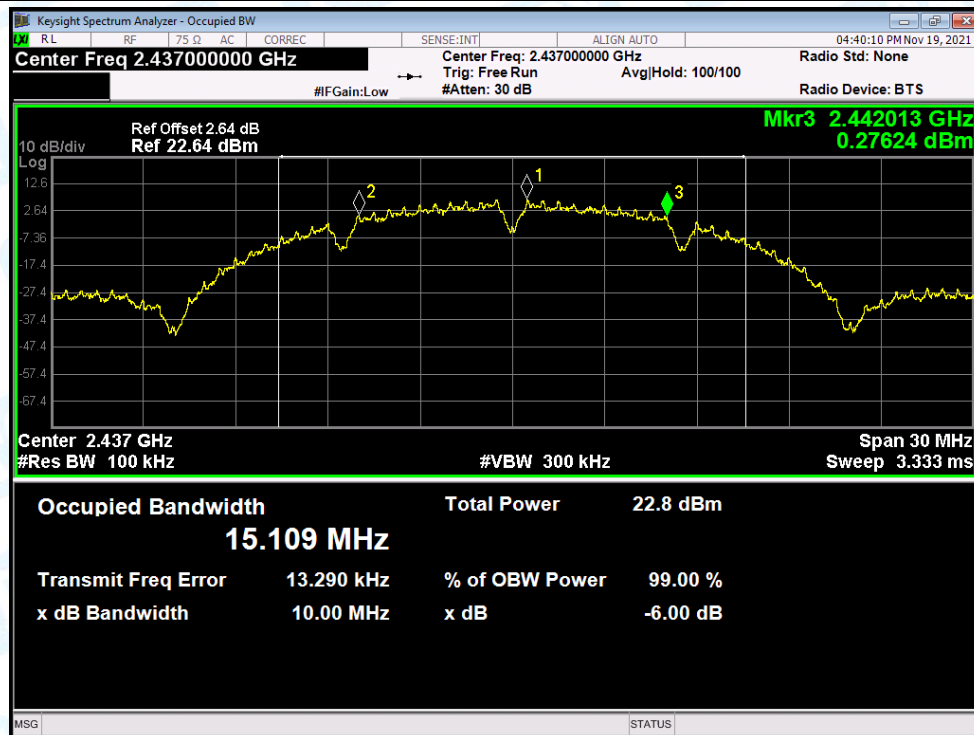
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.05	0.5	Pass
NVNT	b	2437	Ant1	10.00	0.5	Pass
NVNT	b	2462	Ant1	10.03	0.5	Pass
NVNT	g	2412	Ant1	16.34	0.5	Pass
NVNT	g	2437	Ant1	16.35	0.5	Pass
NVNT	g	2462	Ant1	16.36	0.5	Pass

Test Graphs

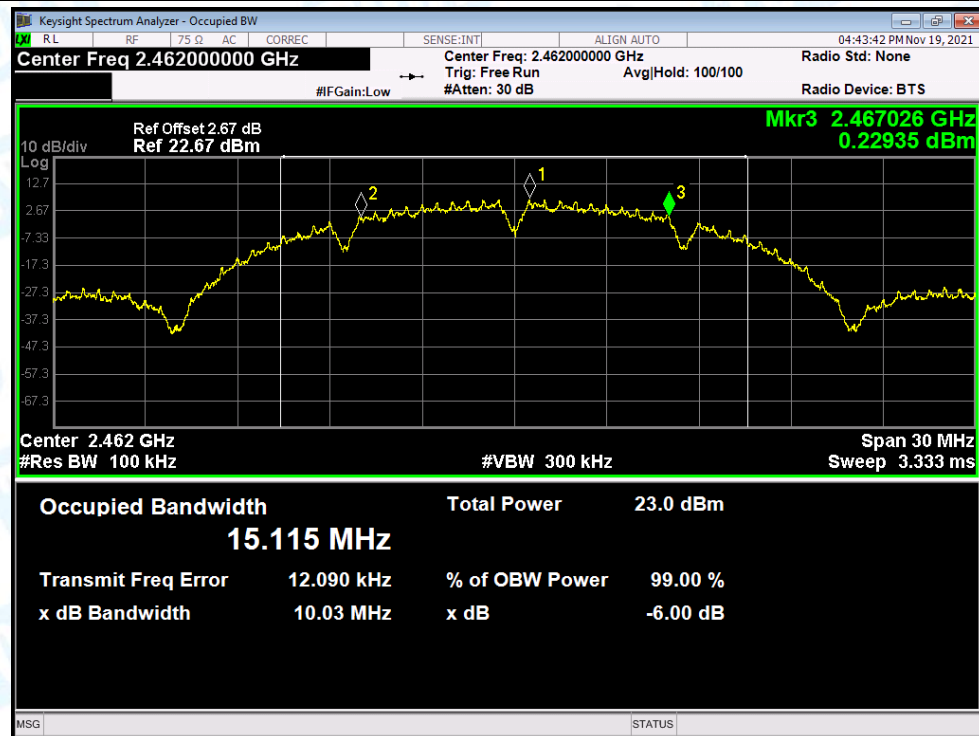
-6dB Bandwidth NVNT b 2412MHz Ant1



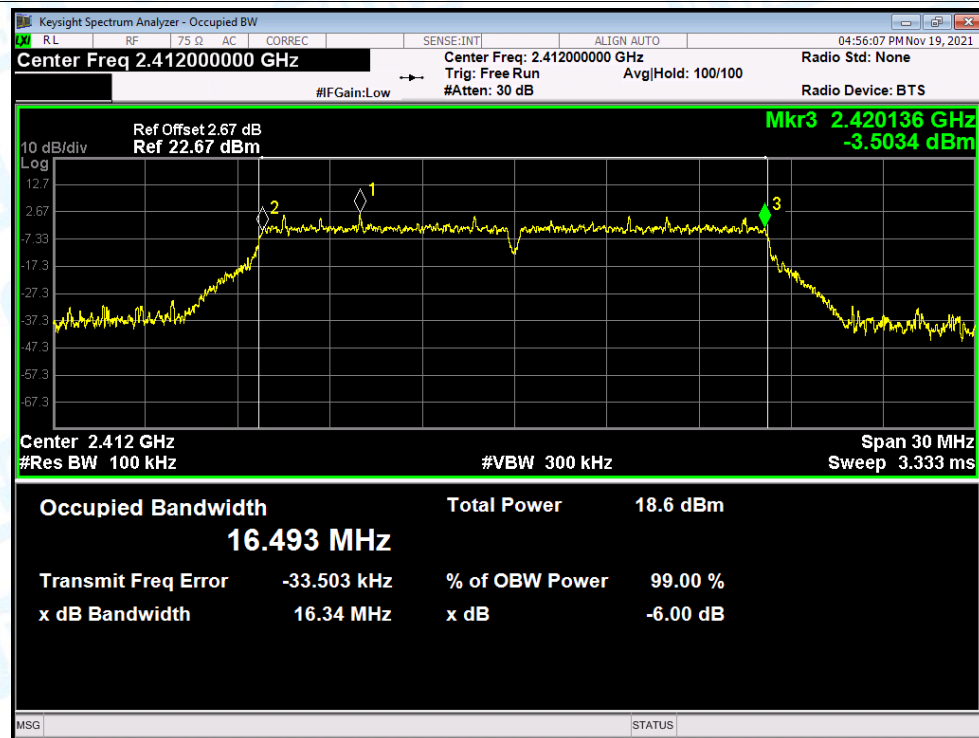
-6dB Bandwidth NVNT b 2437MHz Ant1



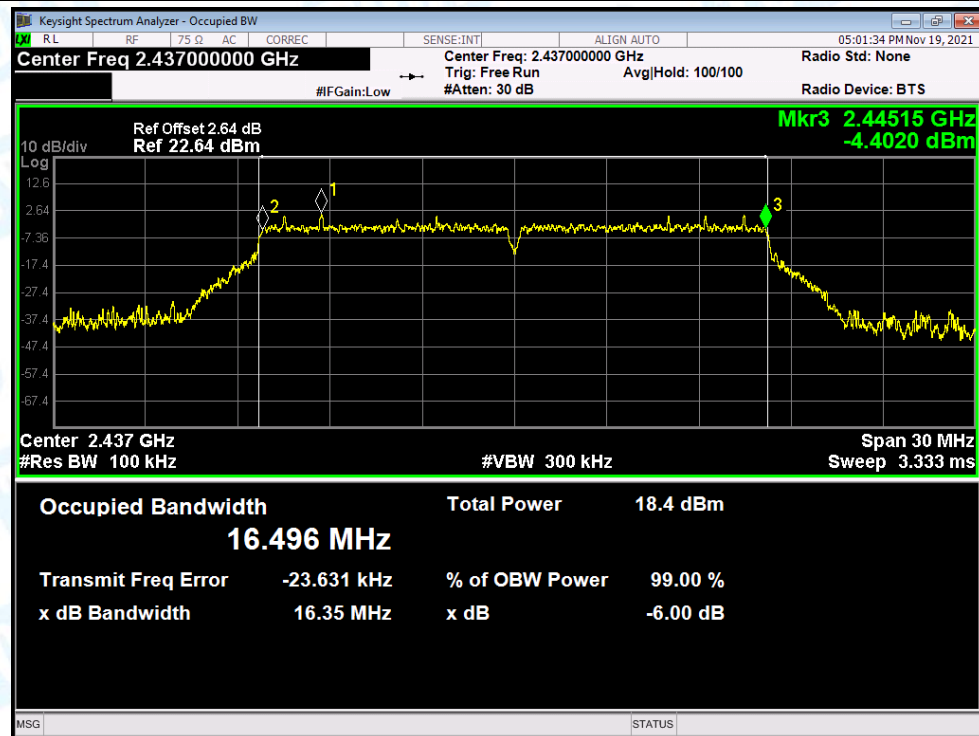
-6dB Bandwidth NVNT b 2462MHz Ant1



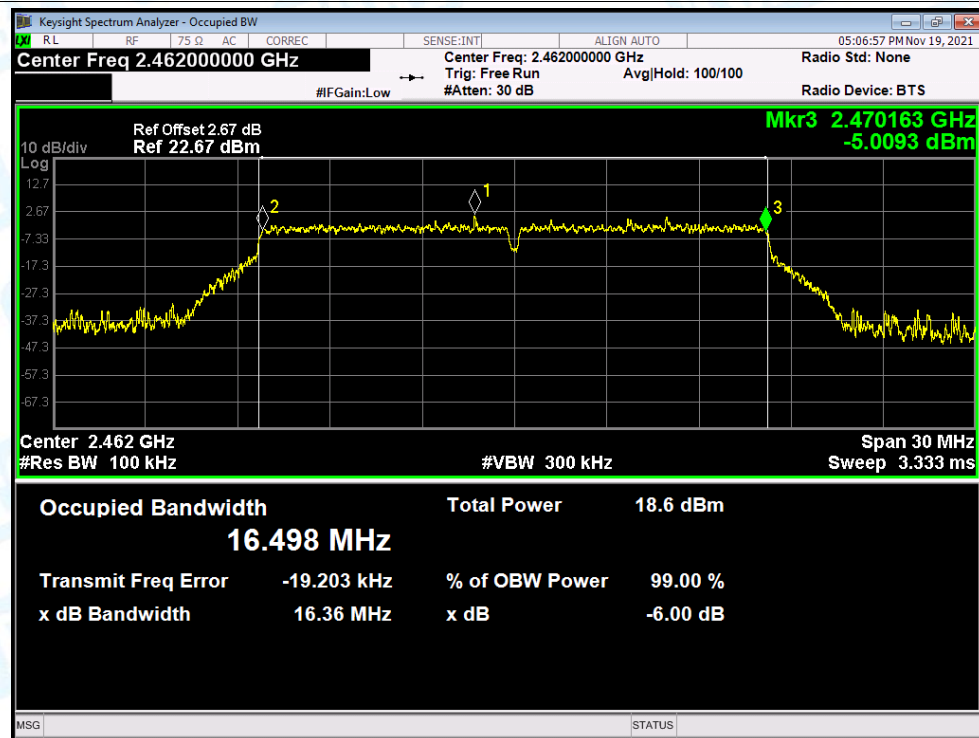
-6dB Bandwidth NVNT g 2412MHz Ant1



-6dB Bandwidth NVNT g 2437MHz Ant1



-6dB Bandwidth NVNT g 2462MHz Ant1

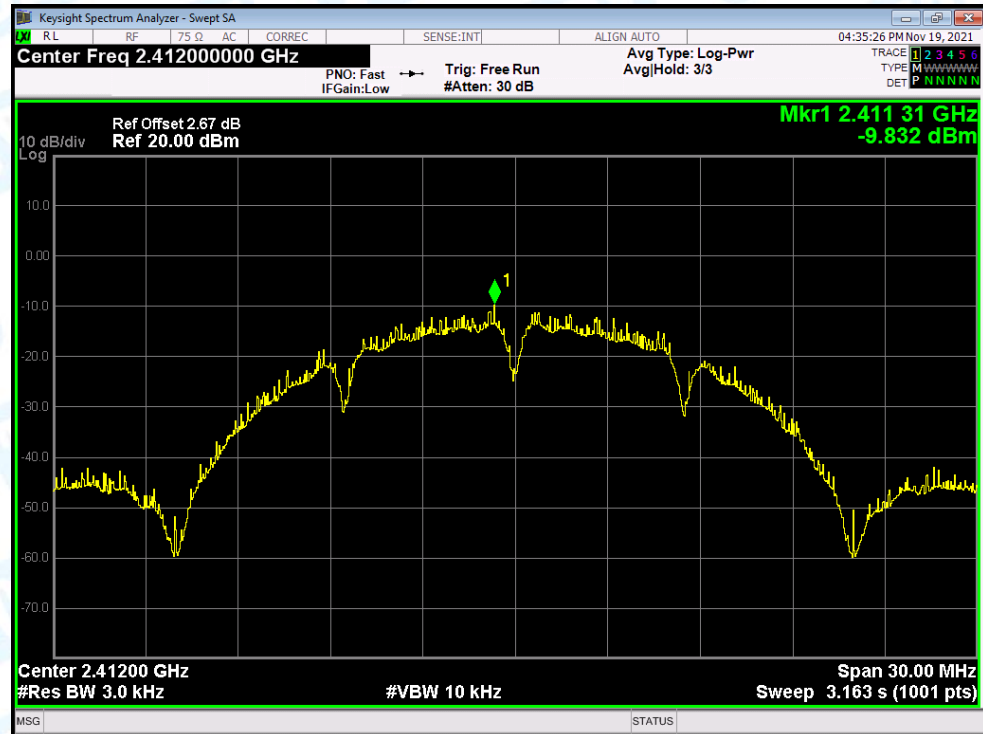


4. Maximum Power Spectral Density Level

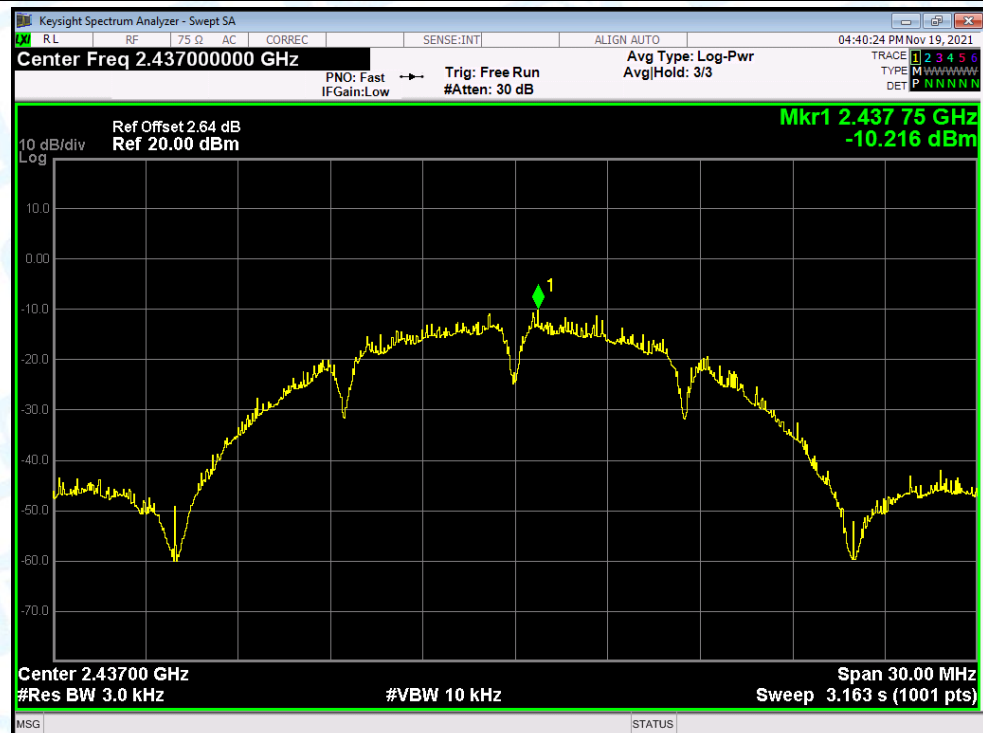
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-9.832	8	Pass
NVNT	b	2437	Ant1	-10.216	8	Pass
NVNT	b	2462	Ant1	-9.879	8	Pass
NVNT	g	2412	Ant1	-14.648	8	Pass
NVNT	g	2437	Ant1	-14.429	8	Pass
NVNT	g	2462	Ant1	-14.251	8	Pass

Test Graphs

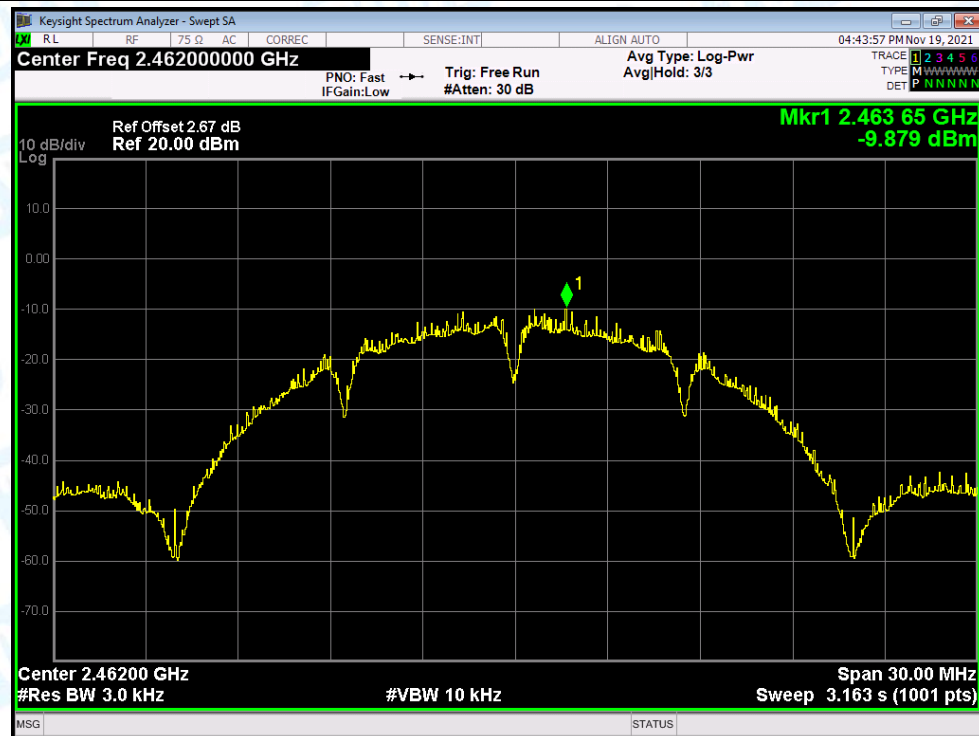
PSD NVNT b 2412MHz Ant1



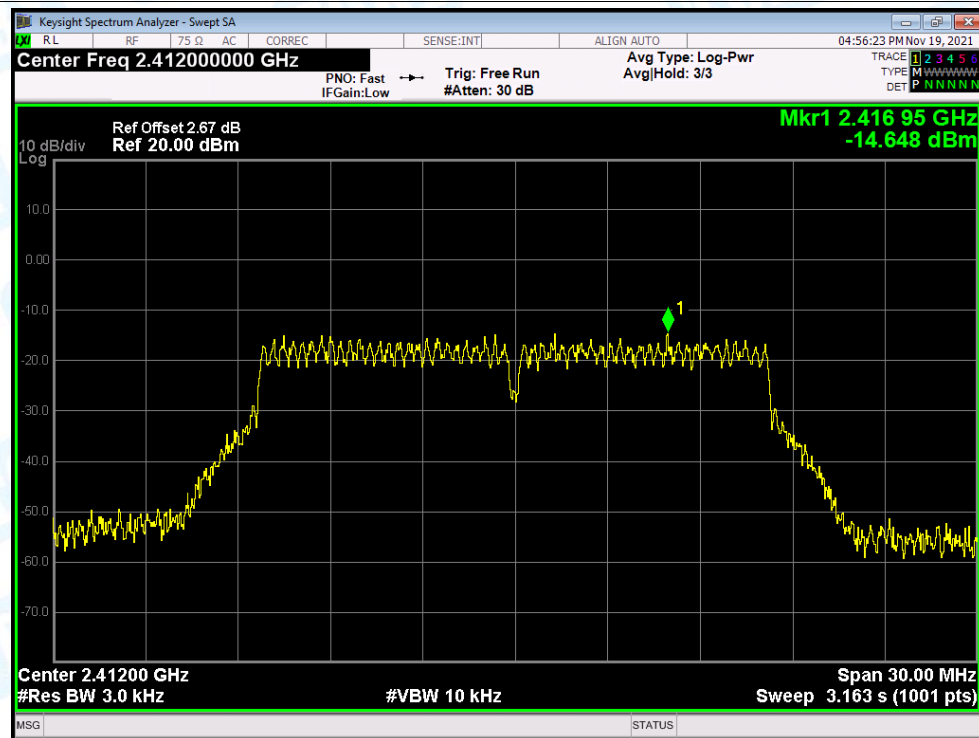
PSD NVNT b 2437MHz Ant1

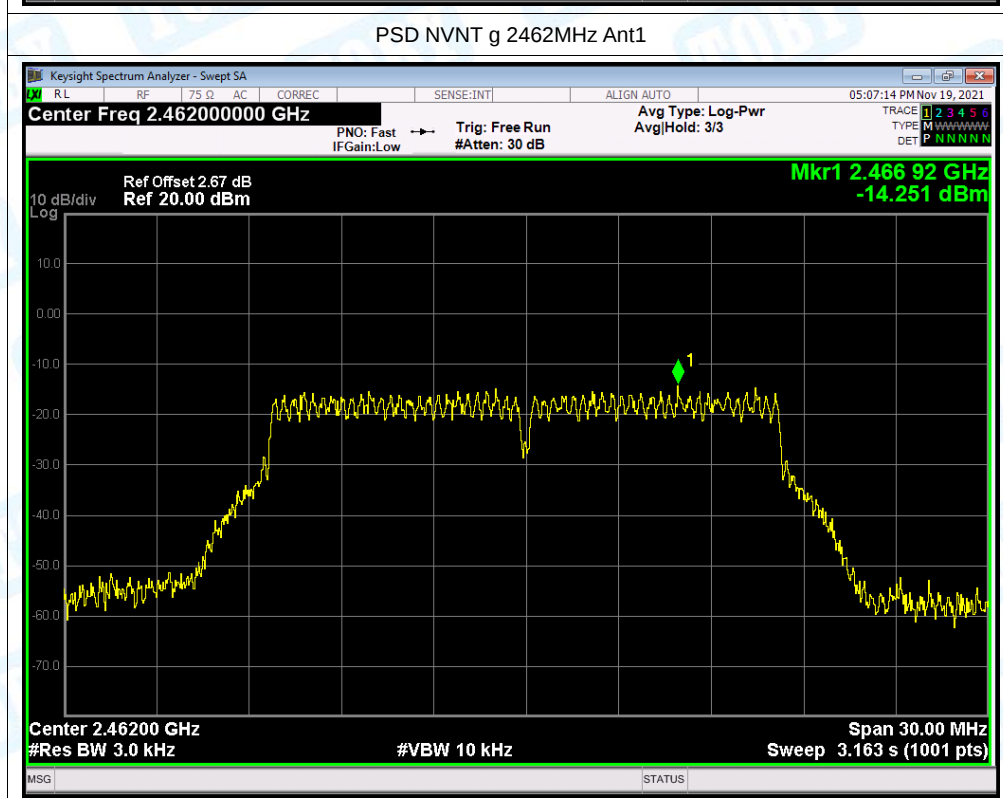
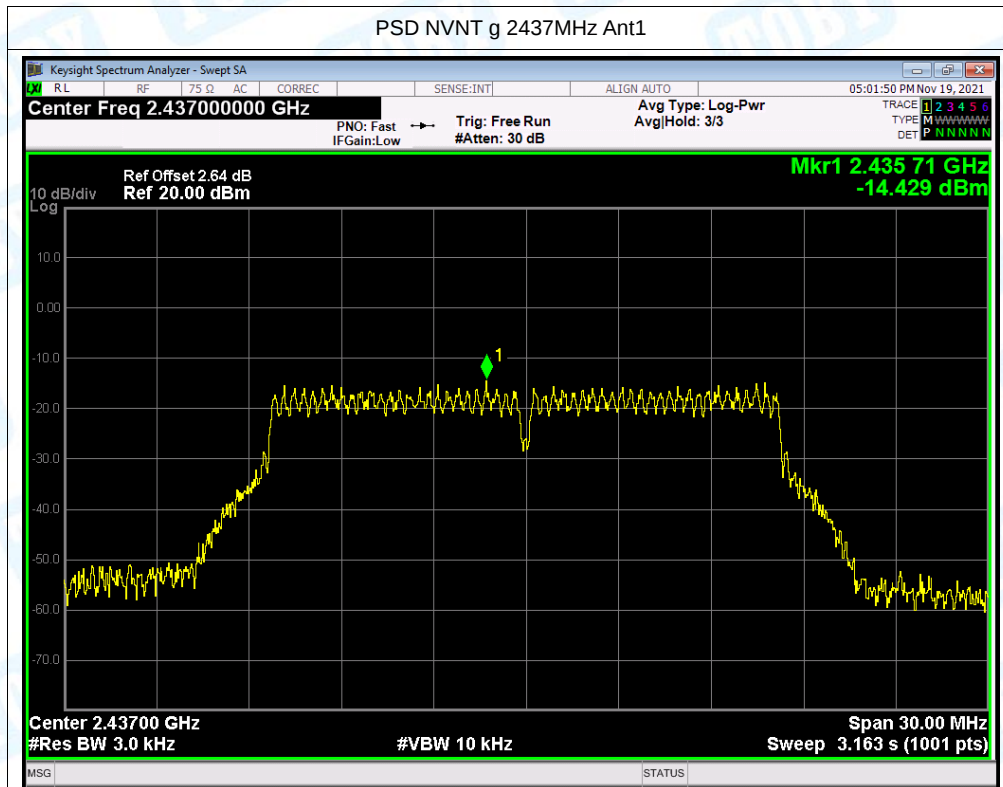


PSD NVNT b 2462MHz Ant1



PSD NVNT g 2412MHz Ant1



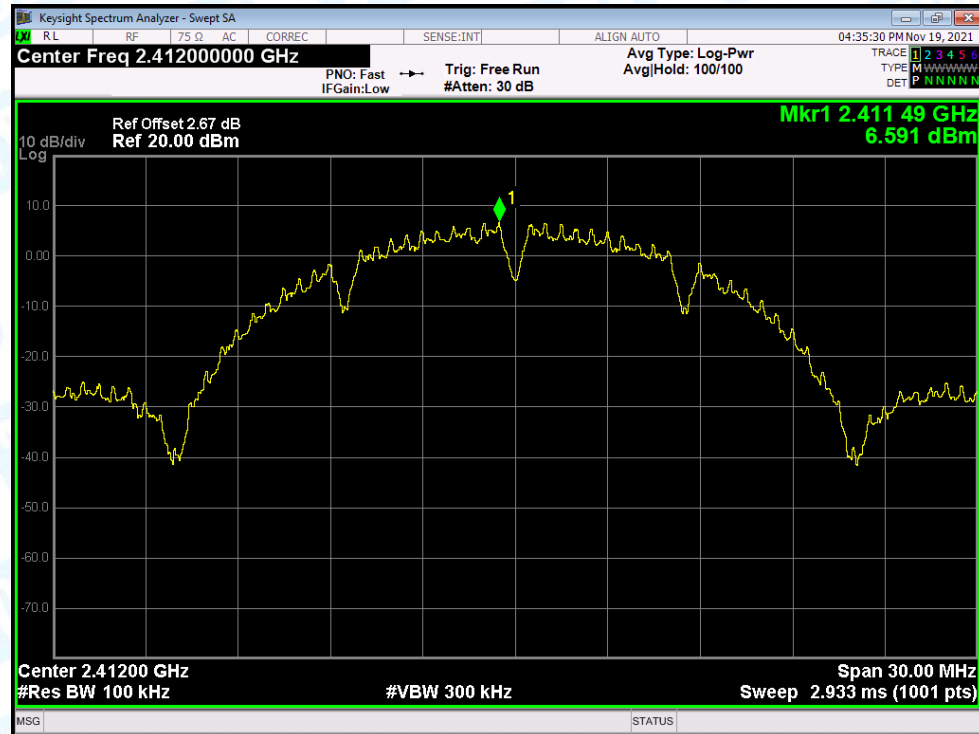


5.Band Edge

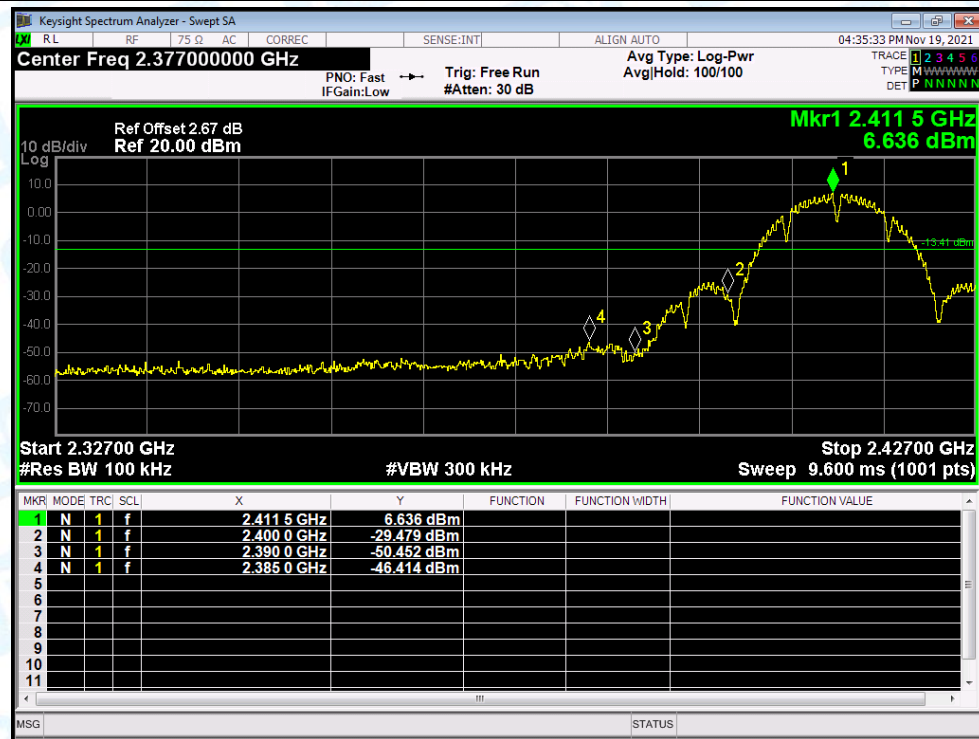
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-53	-20	Pass
NVNT	b	2462	Ant1	-55.43	-20	Pass
NVNT	g	2412	Ant1	-47.01	-20	Pass
NVNT	g	2462	Ant1	-48.52	-20	Pass

Test Graphs

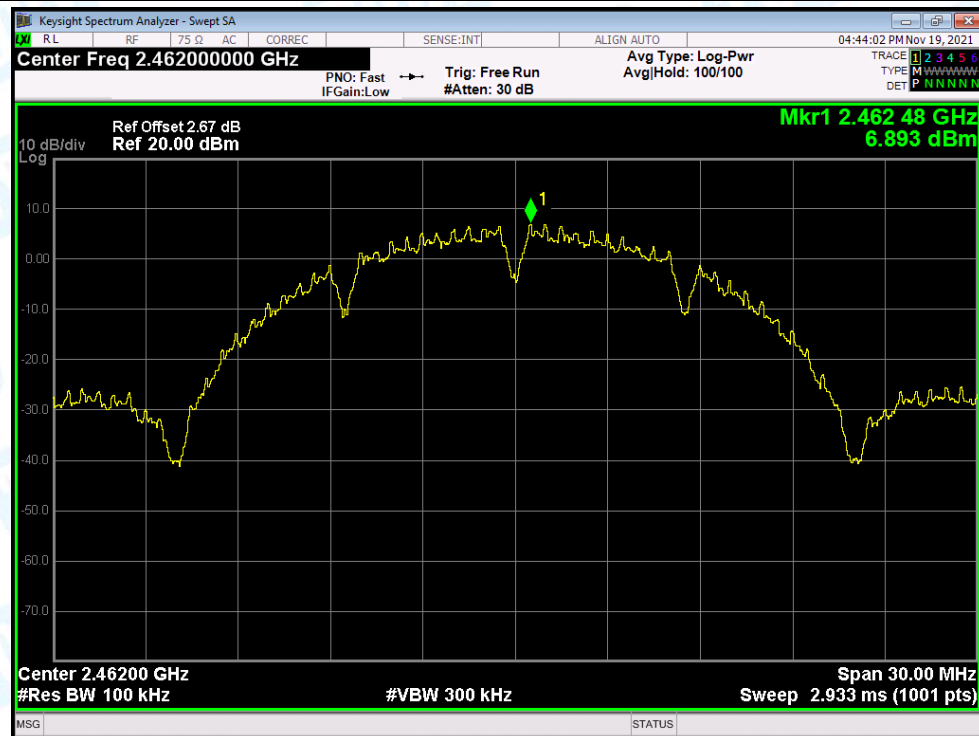
Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



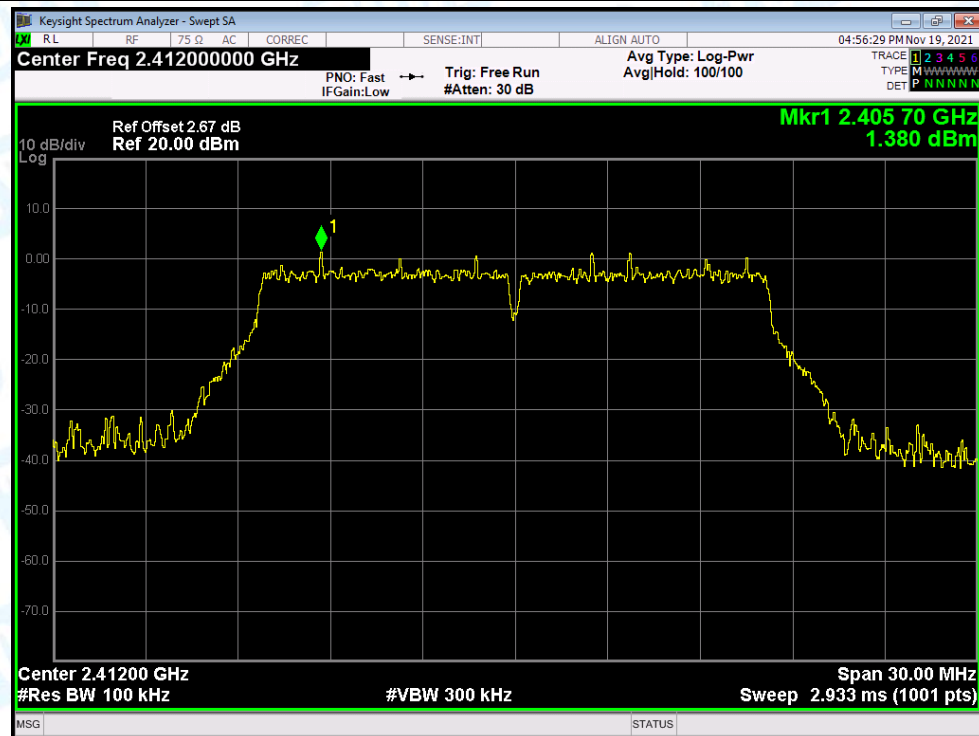
Band Edge NVNT b 2462MHz Ant1 Ref



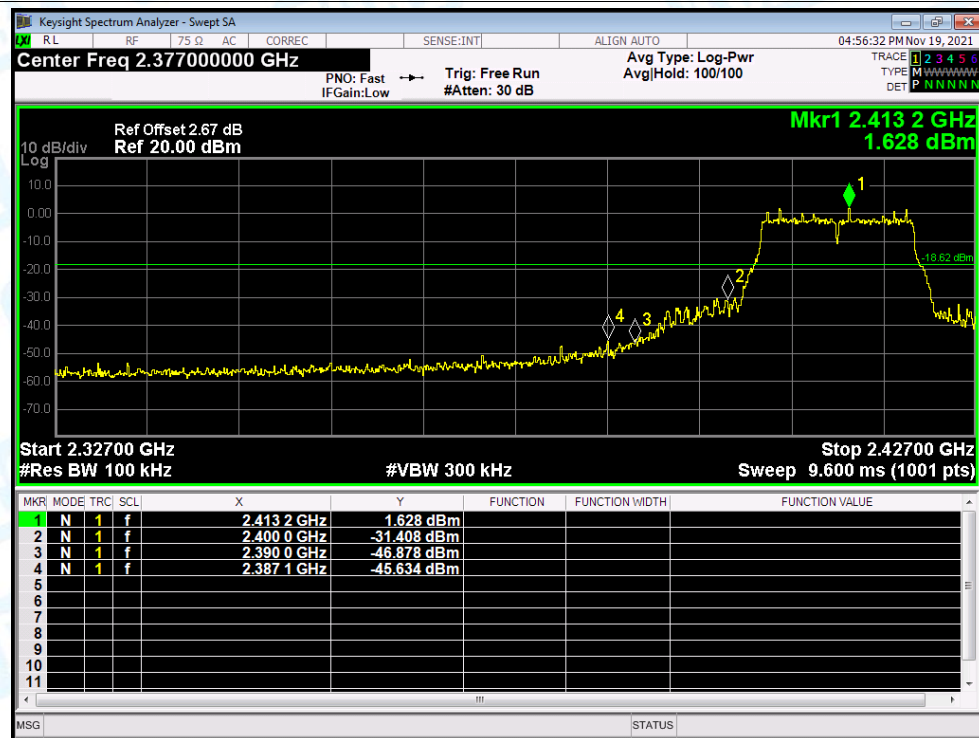
Band Edge NVNT b 2462MHz Ant1 Emission



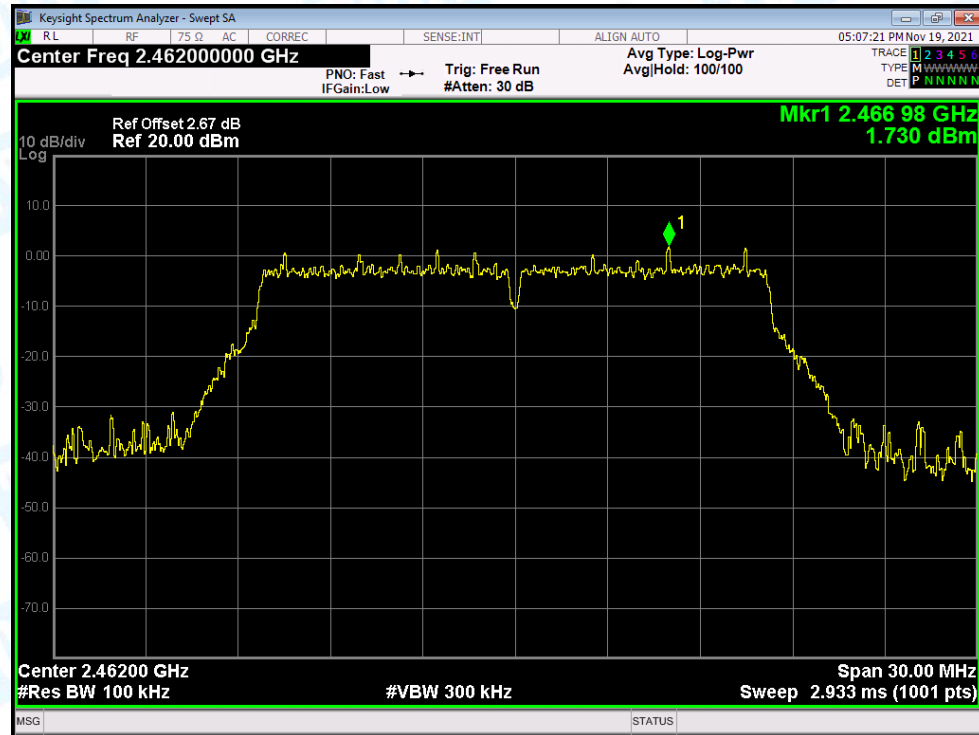
Band Edge NVNT g 2412MHz Ant1 Ref



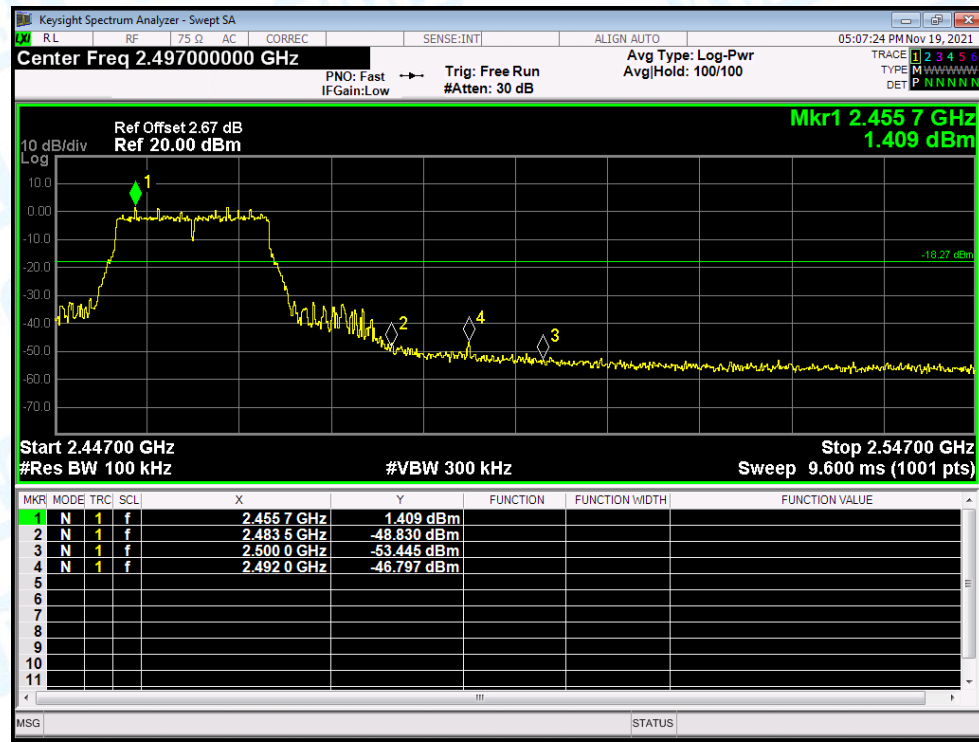
Band Edge NVNT g 2412MHz Ant1 Emission



Band Edge NVNT g 2462MHz Ant1 Ref



Band Edge NVNT g 2462MHz Ant1 Emission

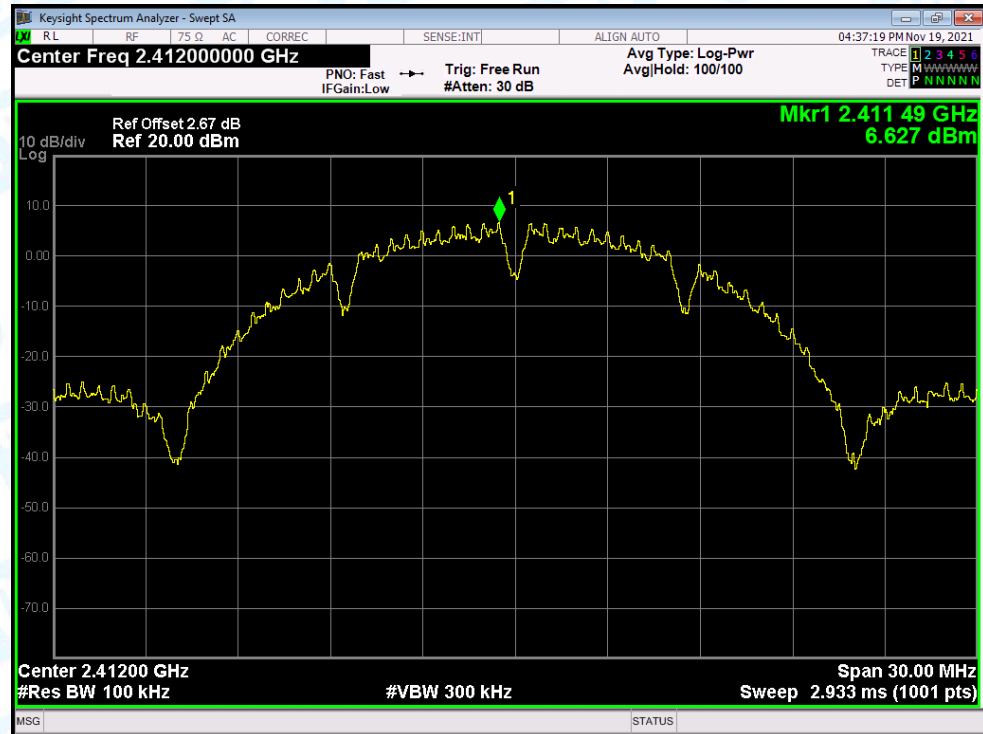


6. Conducted RF Spurious Emission

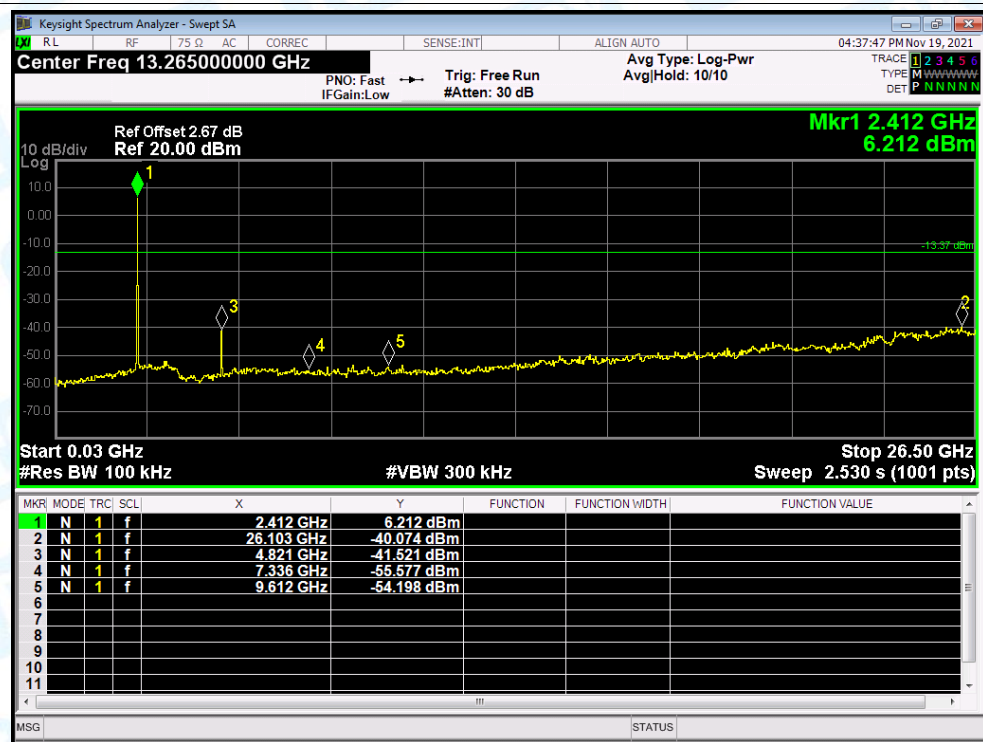
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-46.7	-20	Pass
NVNT	b	2437	Ant1	-46.79	-20	Pass
NVNT	b	2462	Ant1	-46.93	-20	Pass
NVNT	g	2412	Ant1	-41.13	-20	Pass
NVNT	g	2437	Ant1	-41.74	-20	Pass
NVNT	g	2462	Ant1	-41.98	-20	Pass

Test Graphs

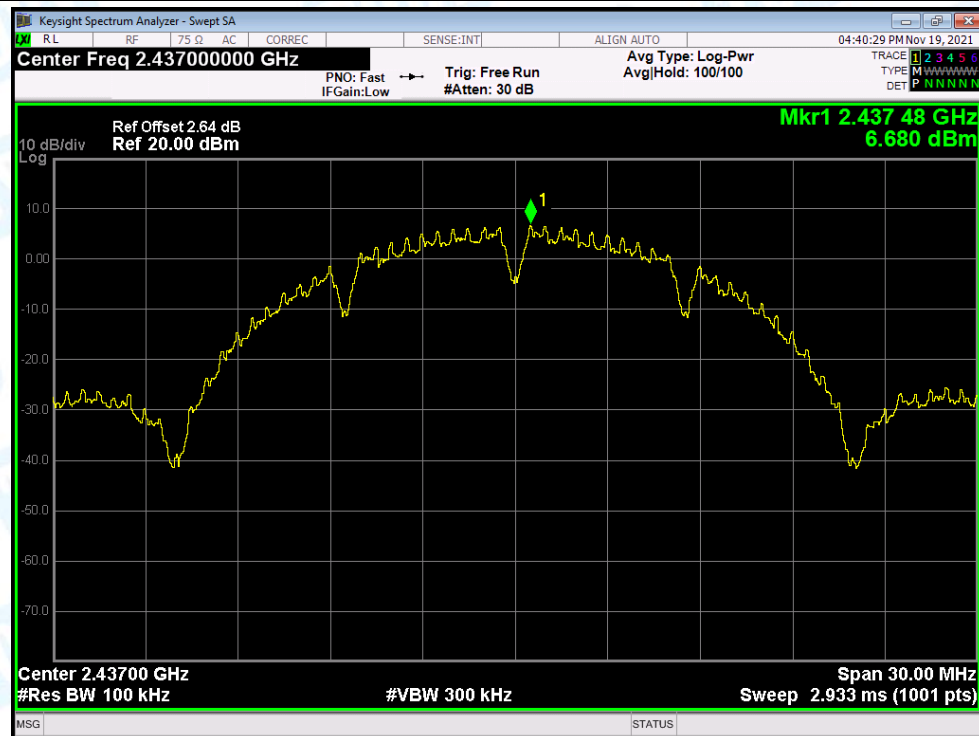
Tx. Spurious NVNT b 2412MHz Ant1 Ref



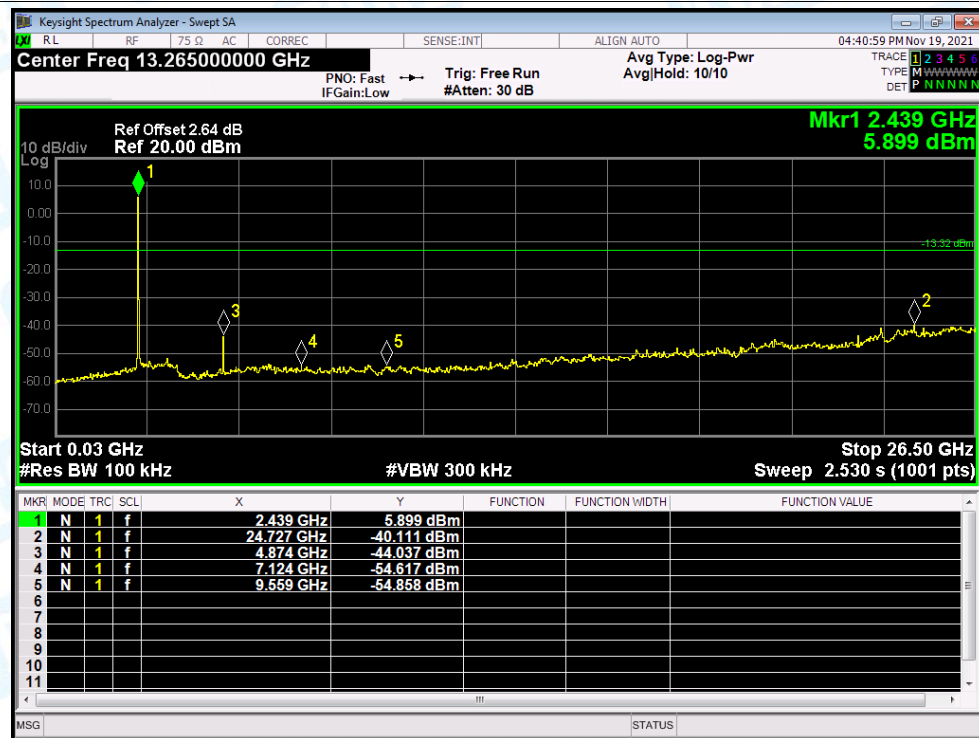
Tx. Spurious NVNT b 2412MHz Ant1 Emission



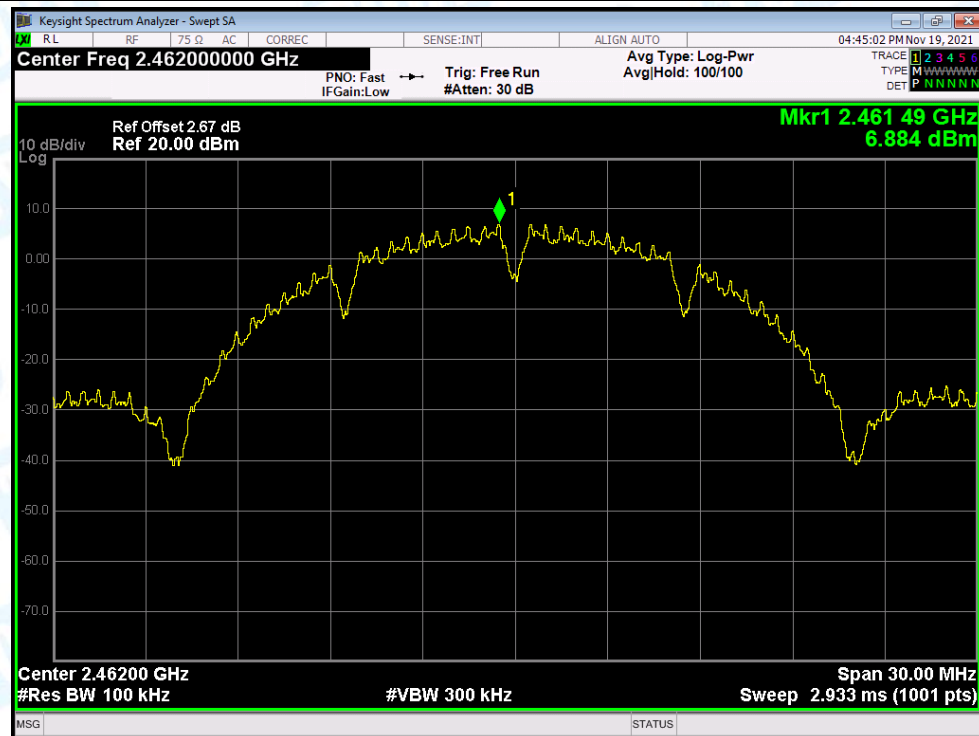
Tx. Spurious NVNT b 2437MHz Ant1 Ref



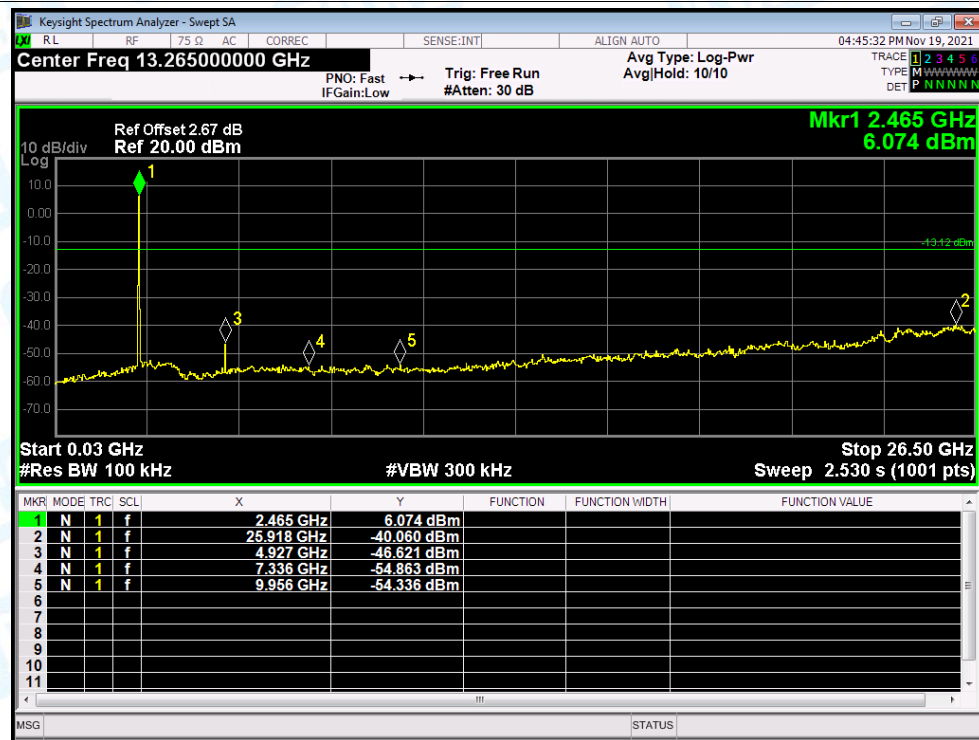
Tx. Spurious NVNT b 2437MHz Ant1 Emission



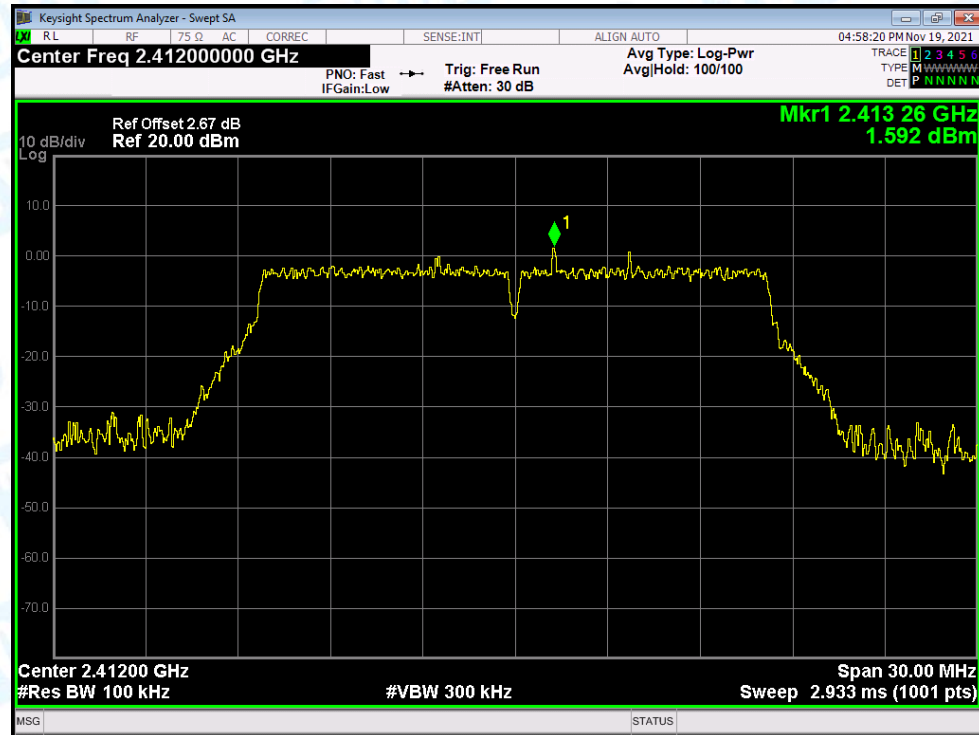
Tx. Spurious NVNT b 2462MHz Ant1 Ref



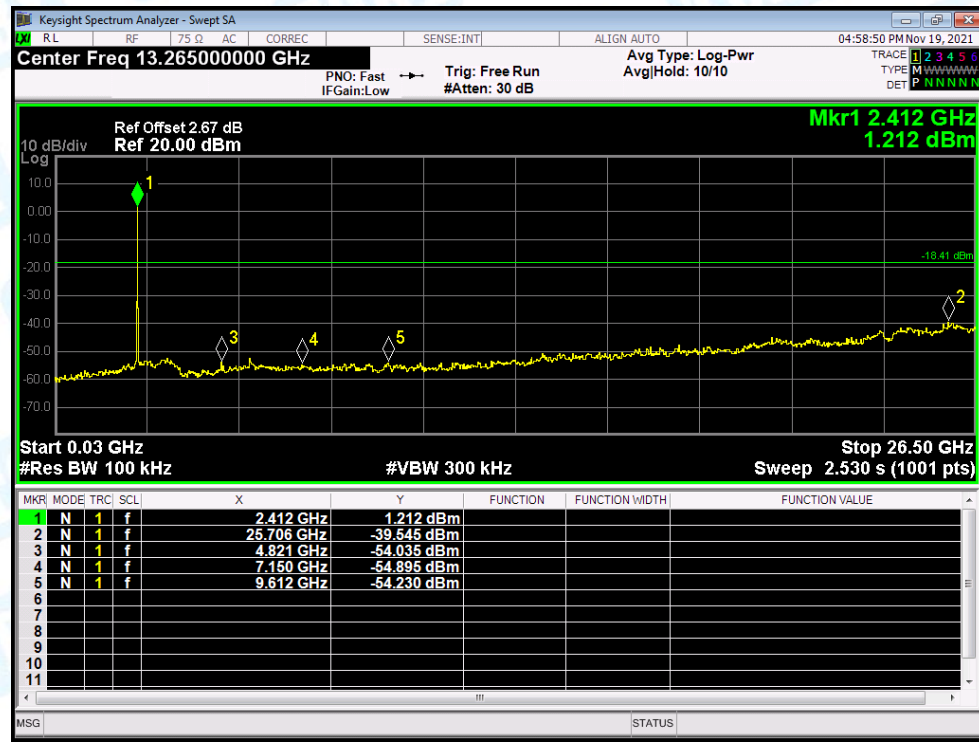
Tx. Spurious NVNT b 2462MHz Ant1 Emission



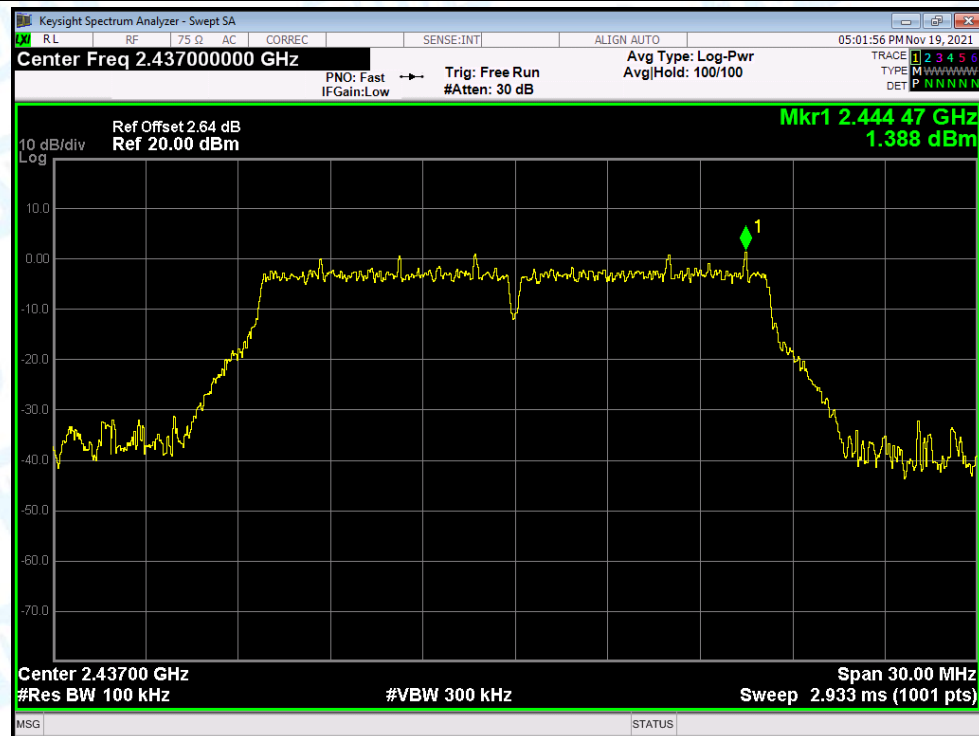
Tx. Spurious NVNT g 2412MHz Ant1 Ref



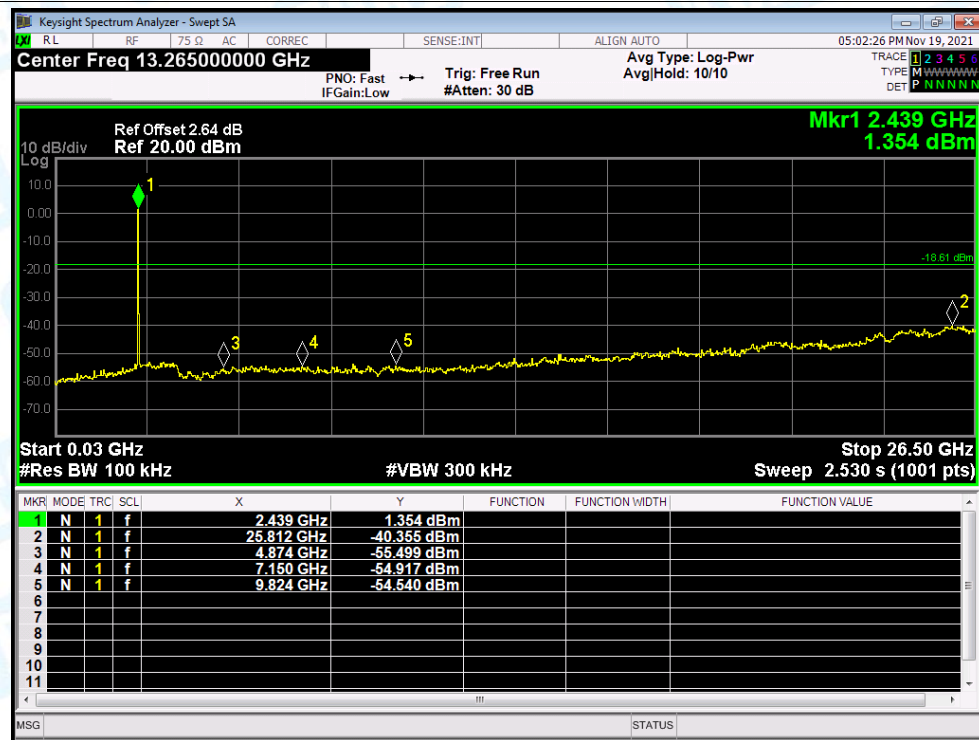
Tx. Spurious NVNT g 2412MHz Ant1 Emission



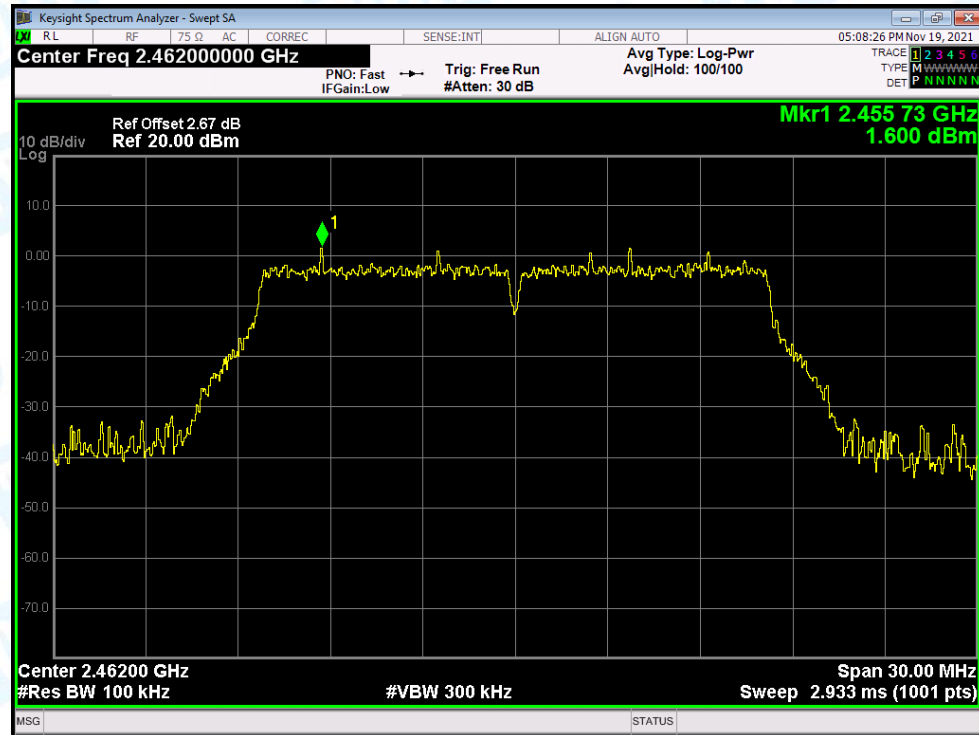
Tx. Spurious NVNT g 2437MHz Ant1 Ref



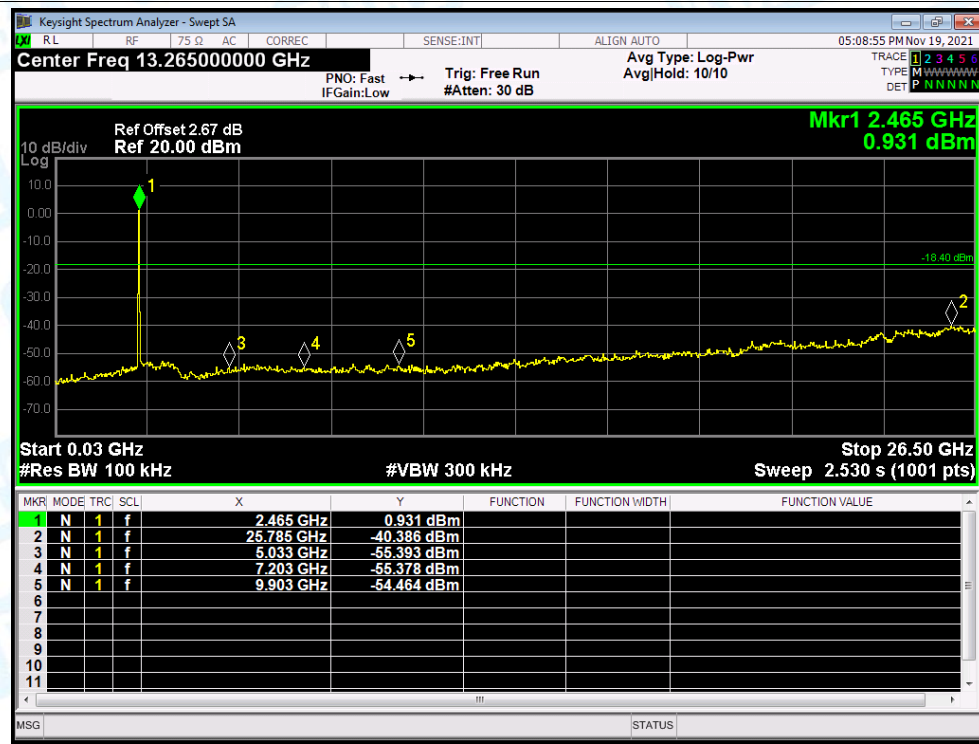
Tx. Spurious NVNT g 2437MHz Ant1 Emission



Tx. Spurious NVNT g 2462MHz Ant1 Ref



Tx. Spurious NVNT g 2462MHz Ant1 Emission

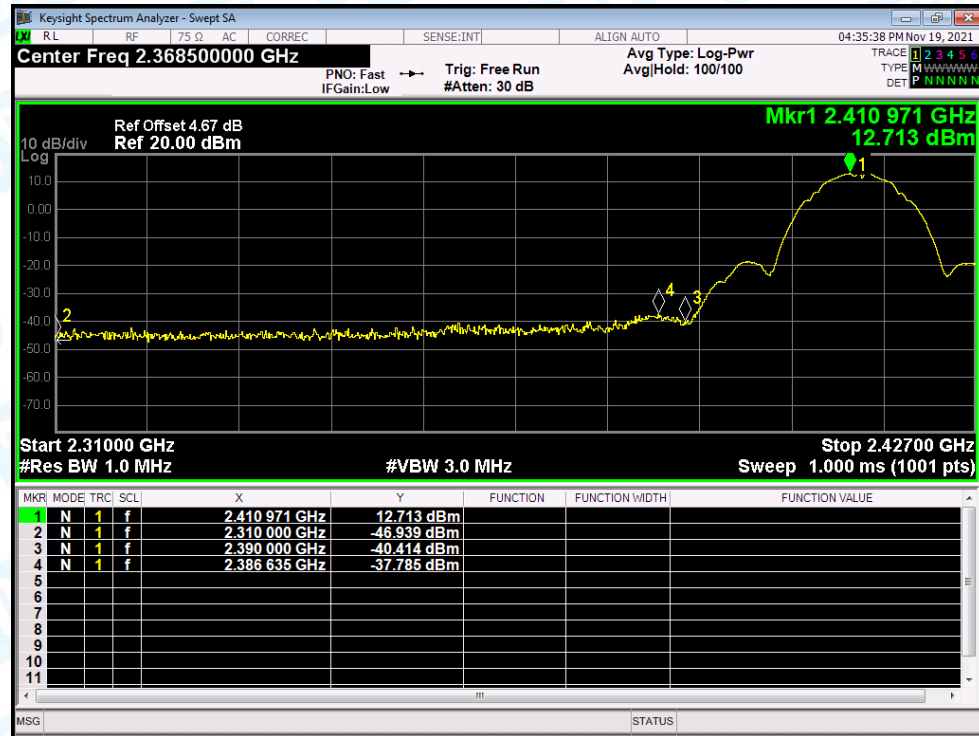


7.Restrict Band

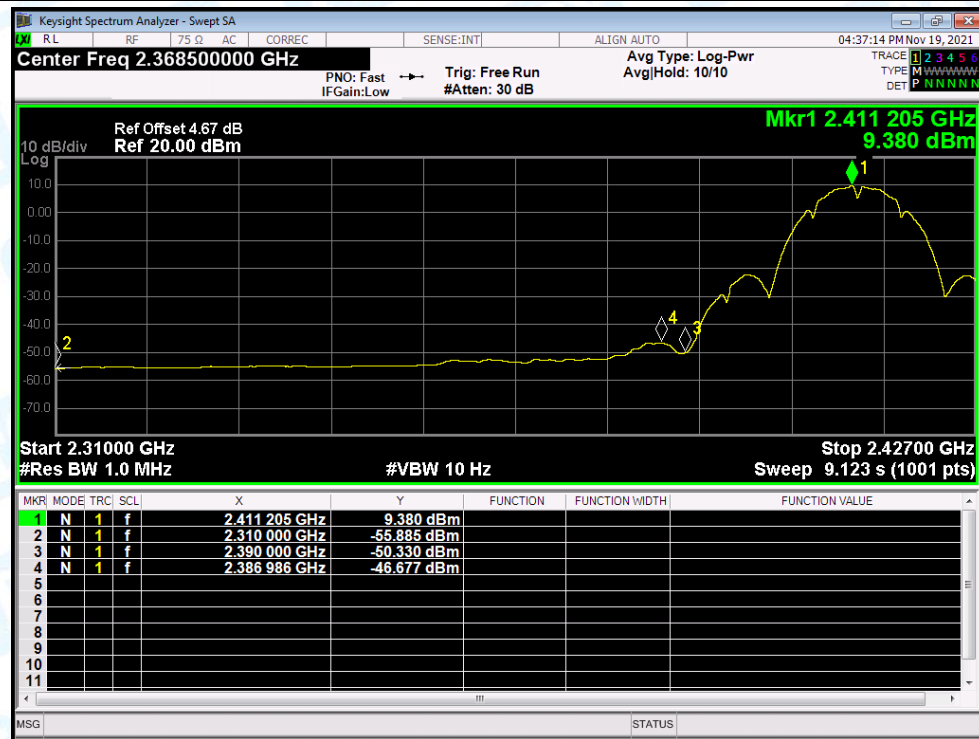
Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	Ant1	2310	-45.25	2	52.01	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-55.88	2	41.38	Average	54	Pass
NVNT	b	2412	Ant1	2386.635	-37.78	2	59.48	Peak	74	Pass
NVNT	b	2412	Ant1	2386.986	-46.67	2	50.59	Average	54	Pass
NVNT	b	2412	Ant1	2390	-40.41	2	56.85	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-50.32	2	46.94	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-40.1	2	57.16	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-49.94	2	47.32	Average	54	Pass
NVNT	b	2462	Ant1	2489.93	-37.78	2	59.48	Peak	74	Pass
NVNT	b	2462	Ant1	2488.552	-48.6	2	48.66	Average	54	Pass
NVNT	b	2462	Ant1	2500	-43.76	2	53.5	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-52.37	2	44.89	Average	54	Pass
NVNT	g	2412	Ant1	2310	-46.15	2	51.11	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-55.7	2	41.56	Average	54	Pass
NVNT	g	2412	Ant1	2388.156	-29.97	2	67.29	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-46.06	2	51.2	Average	54	Pass
NVNT	g	2412	Ant1	2390	-34.96	2	62.3	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-45.86	2	51.4	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-36.64	2	60.62	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-47.91	2	49.35	Average	54	Pass
NVNT	g	2462	Ant1	2483.835	-34.22	2	63.04	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-47.91	2	49.35	Average	54	Pass
NVNT	g	2462	Ant1	2500	-43.01	2	54.25	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-52.46	2	44.8	Average	54	Pass

Test Graphs

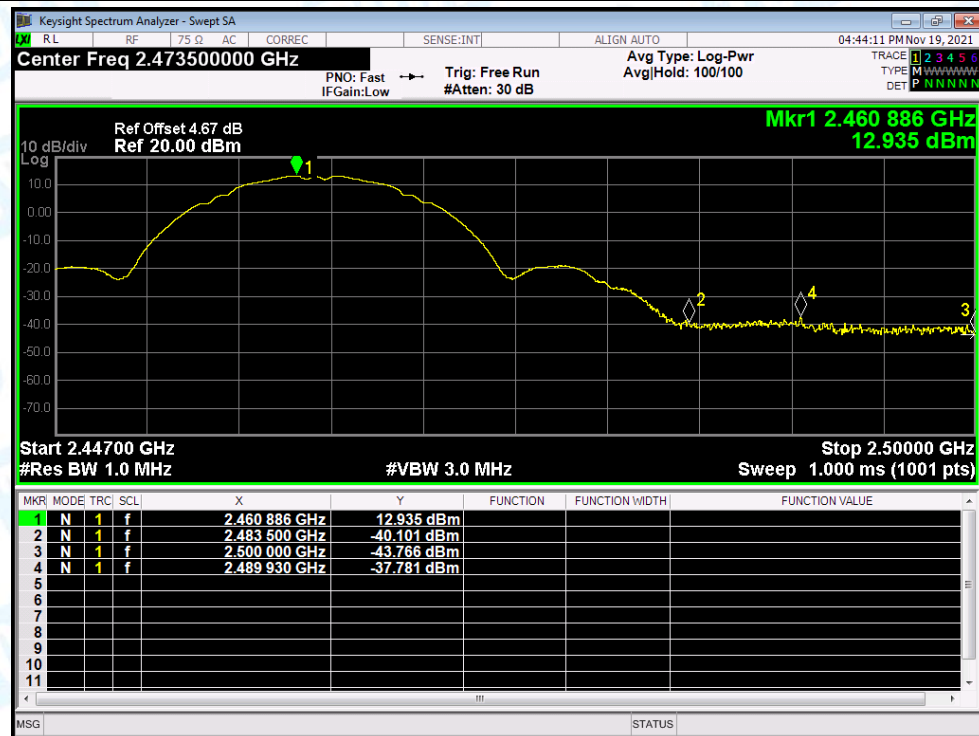
Restrict Band NVNT b 2412MHz Ant1 Peak



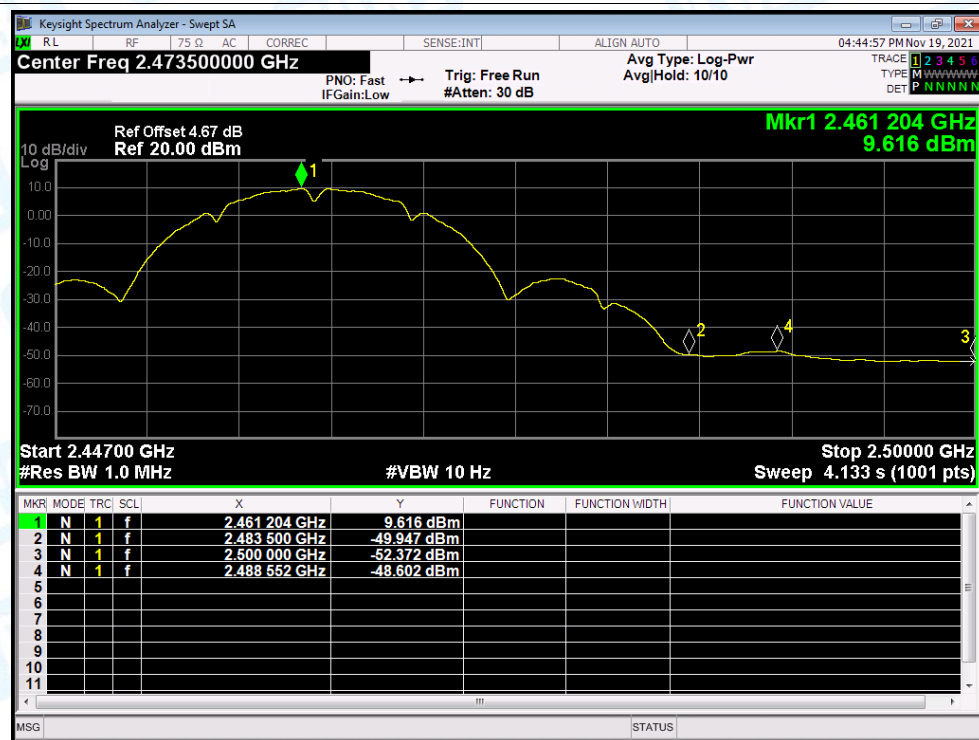
Restrict Band NVNT b 2412MHz Ant1 Average



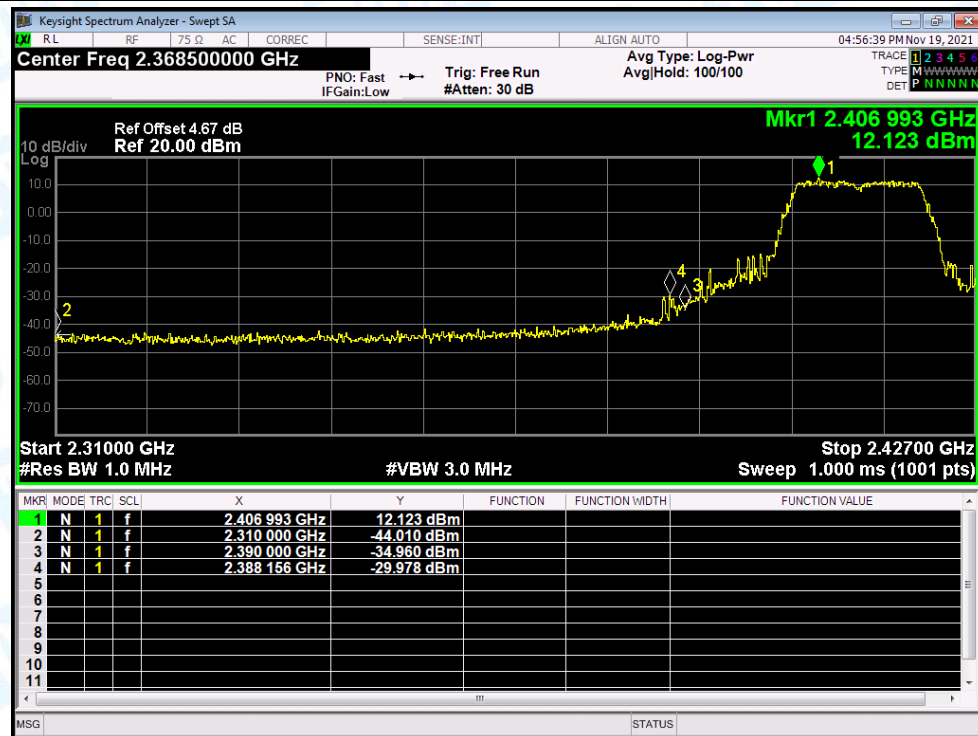
Restrict Band NVNT b 2462MHz Ant1 Peak



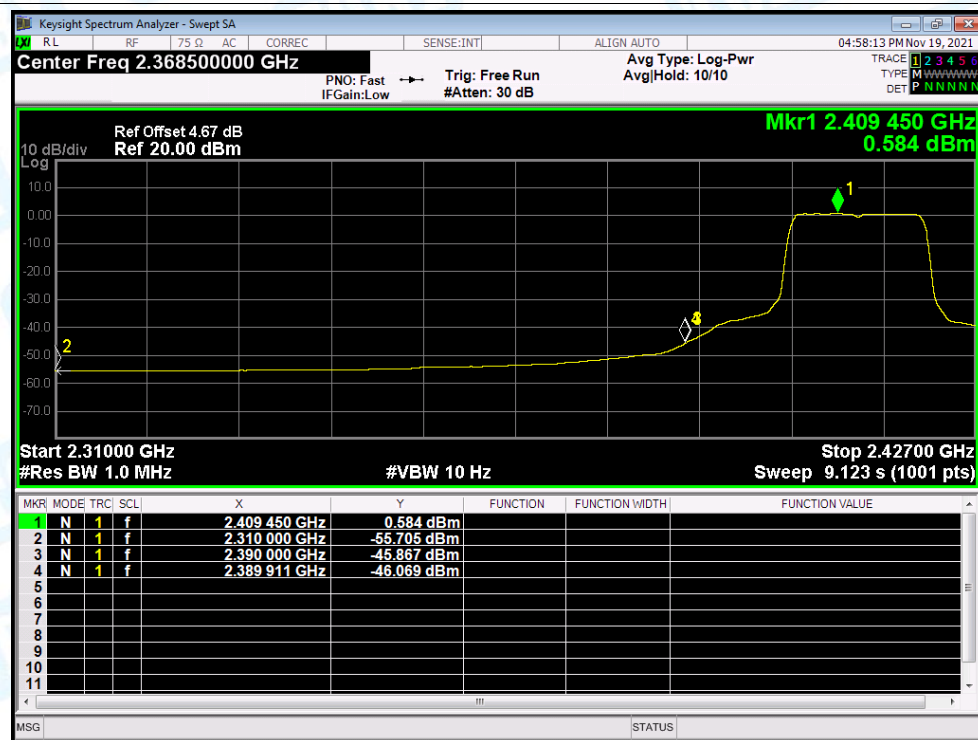
Restrict Band NVNT b 2462MHz Ant1 Average



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

