

RF Test Data for 2.4G WiFi (Conducted Measurements)

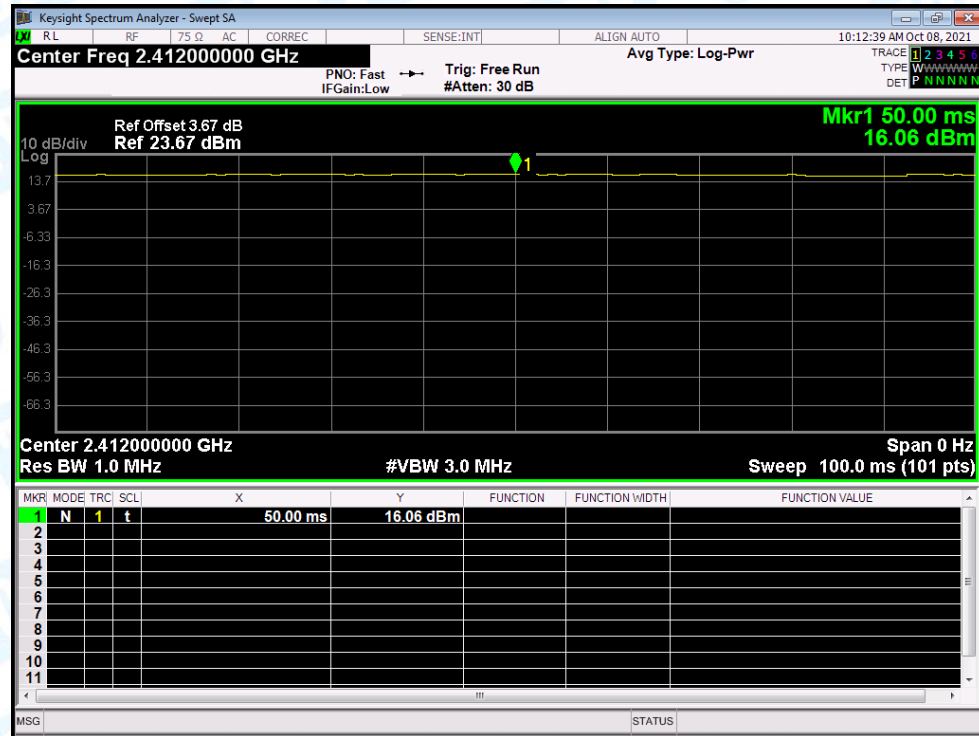
General Description of EUT	
Product Name:	AirBox
Test Model:	NBD-AS60
Sample ID:	20210915-18_01-2
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 5V
Test Engineer:	HeJingchang
Note: For a more detailed features description, please refer to the report TB-FCC183989	

Duty Cycle

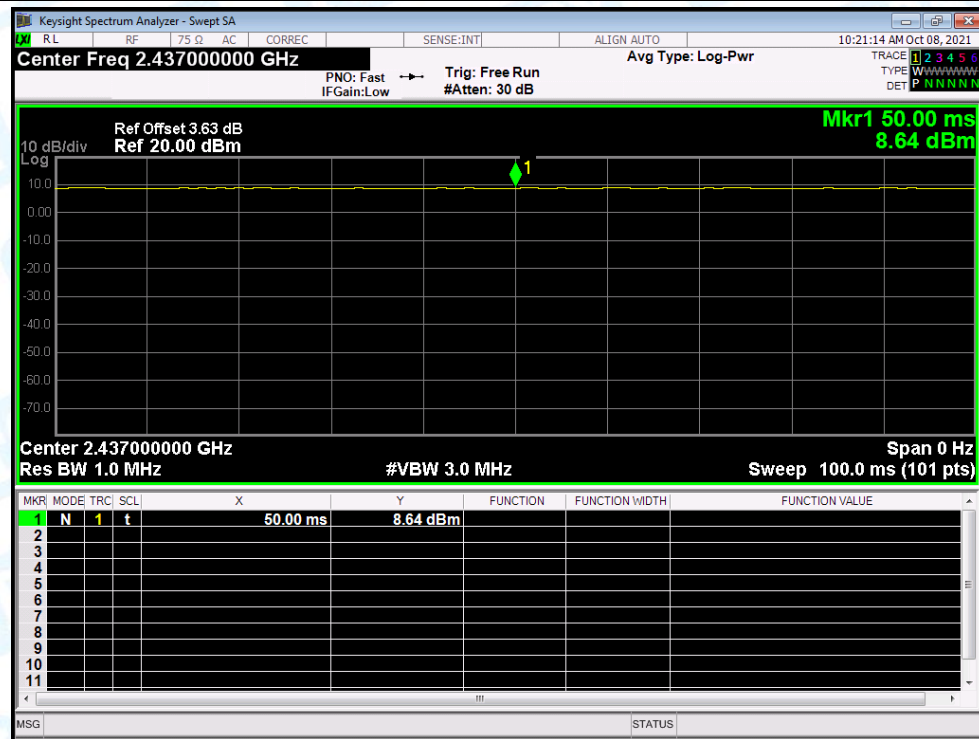
Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	100	0	0
NVNT	b	2437	Ant1	100	0	0
NVNT	b	2462	Ant1	100	0	0
NVNT	g	2412	Ant1	100	0	0
NVNT	g	2437	Ant1	100	0	0
NVNT	g	2462	Ant1	100	0	0
NVNT	n(HT20)	2412	Ant1	100	0	0
NVNT	n(HT20)	2437	Ant1	100	0	0
NVNT	n(HT20)	2462	Ant1	100	0	0
NVNT	n(HT40)	2422	Ant1	100	0	0
NVNT	n(HT40)	2437	Ant1	100	0	0
NVNT	n(HT40)	2452	Ant1	100	0	0

Test Graphs

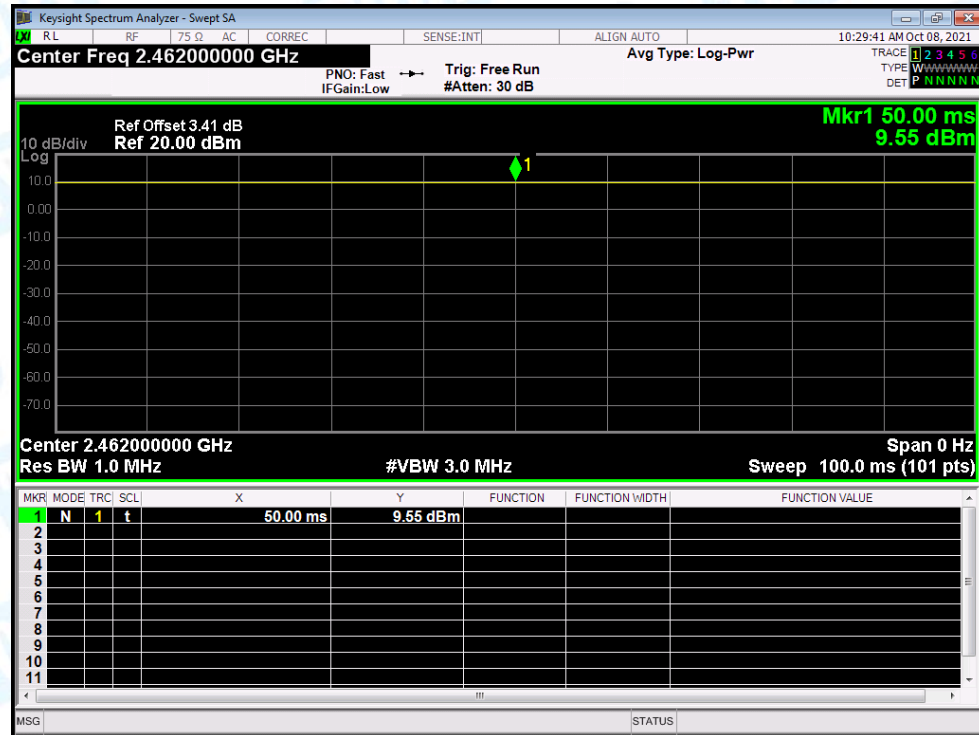
Duty Cycle NVNT b 2412MHz Ant1



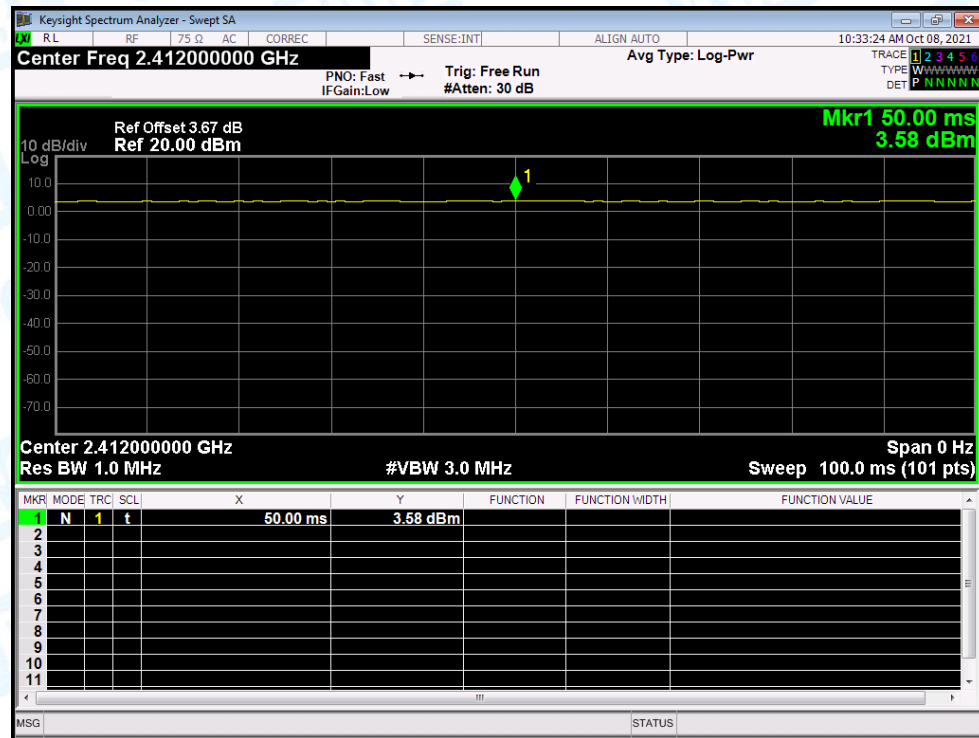
Duty Cycle NVNT b 2437MHz Ant1



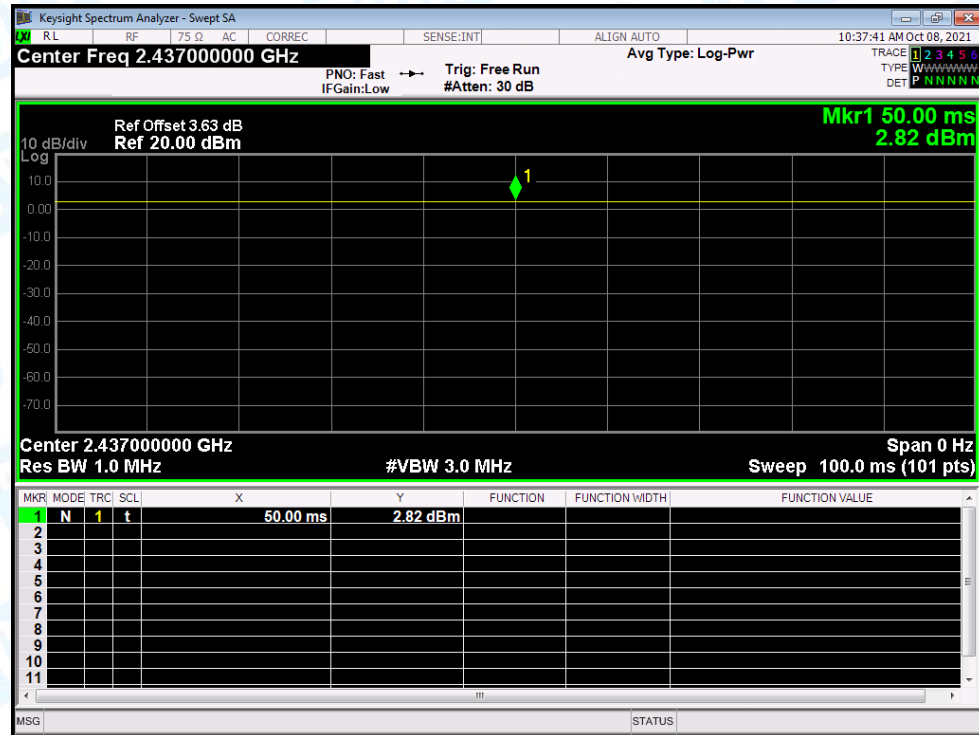
Duty Cycle NVNT b 2462MHz Ant1



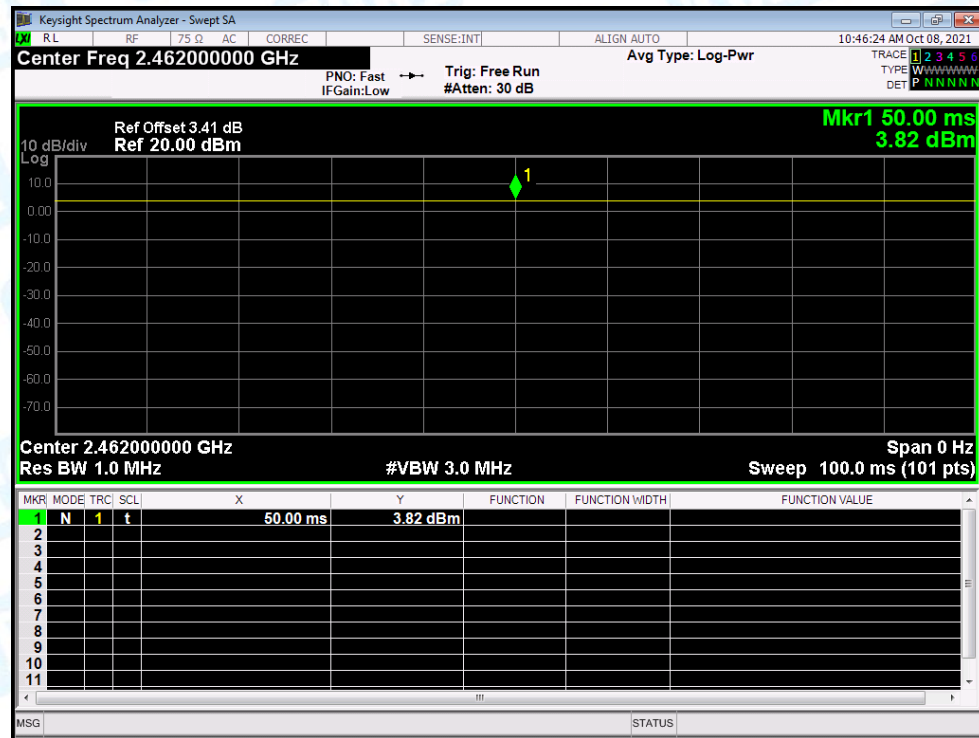
Duty Cycle NVNT g 2412MHz Ant1



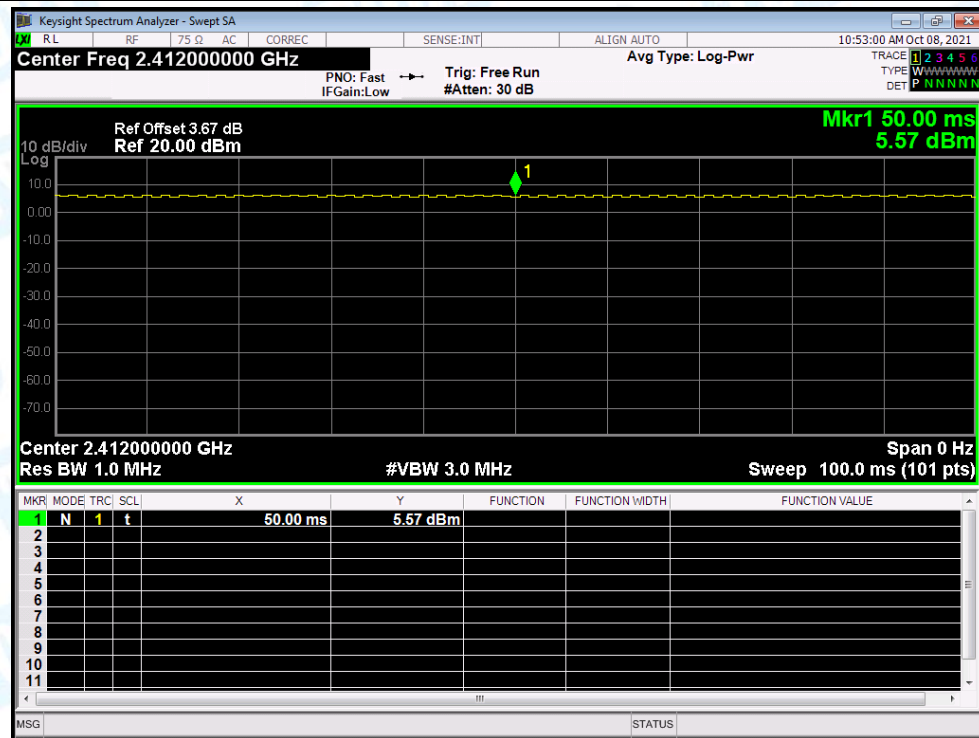
Duty Cycle NVNT g 2437MHz Ant1



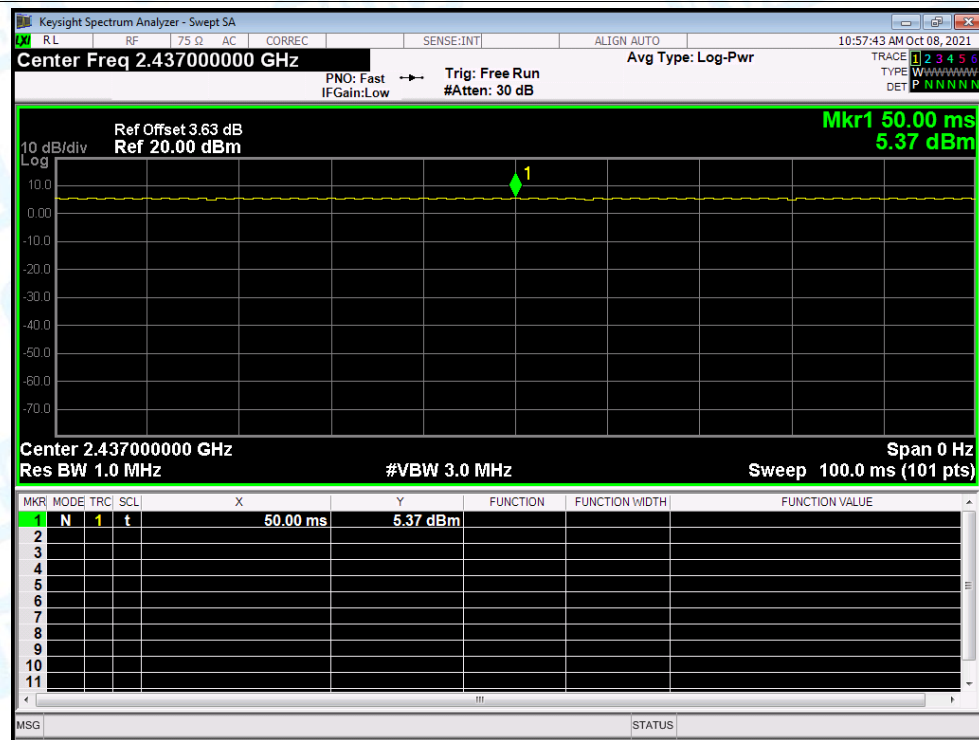
Duty Cycle NVNT g 2462MHz Ant1



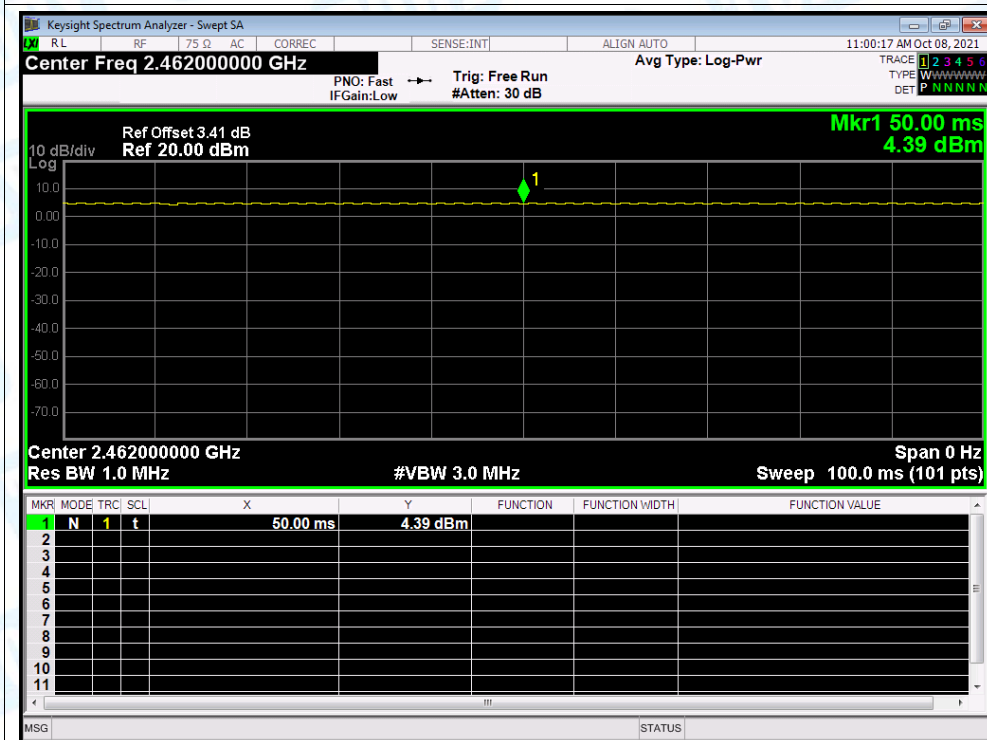
Duty Cycle NVNT n(HT20) 2412MHz Ant1



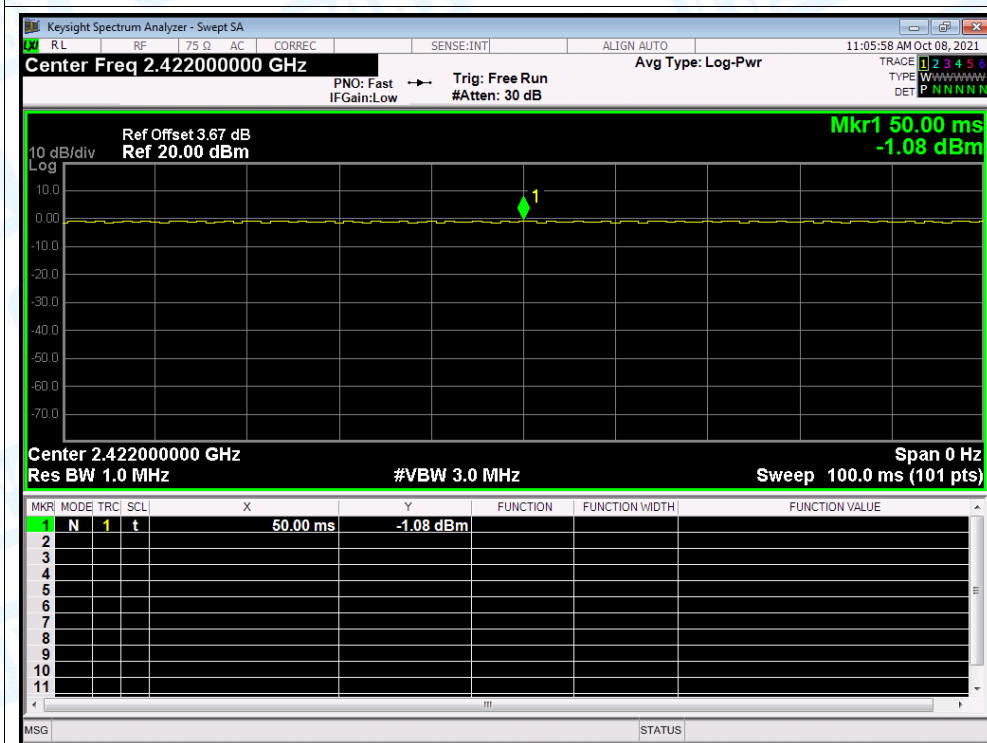
Duty Cycle NVNT n(HT20) 2437MHz Ant1



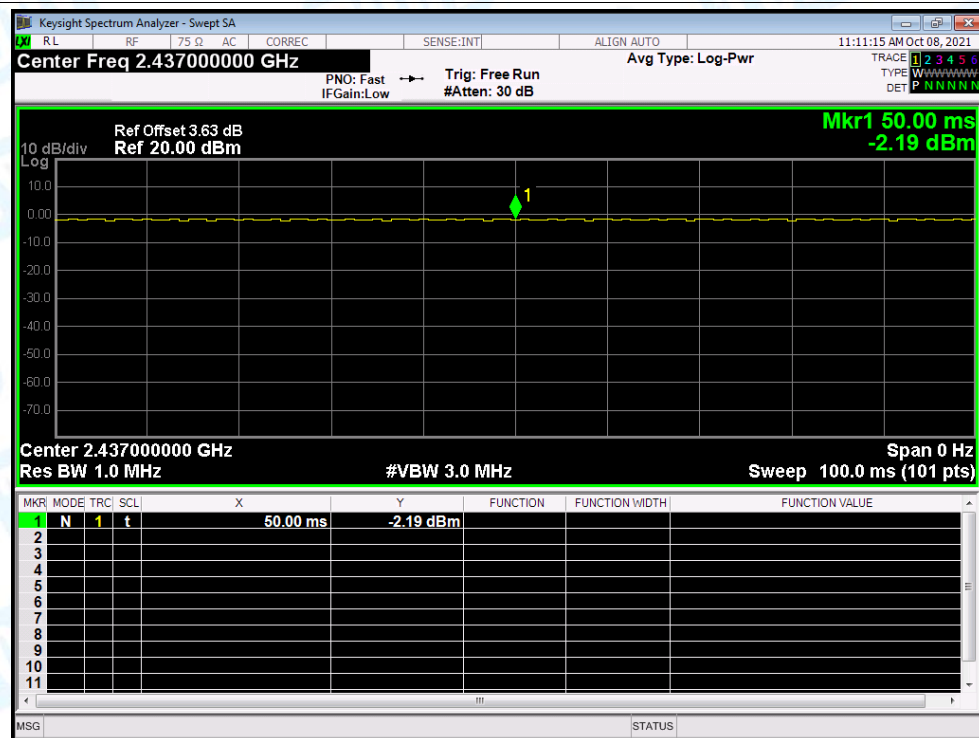
Duty Cycle NVNT n(HT20) 2462MHz Ant1



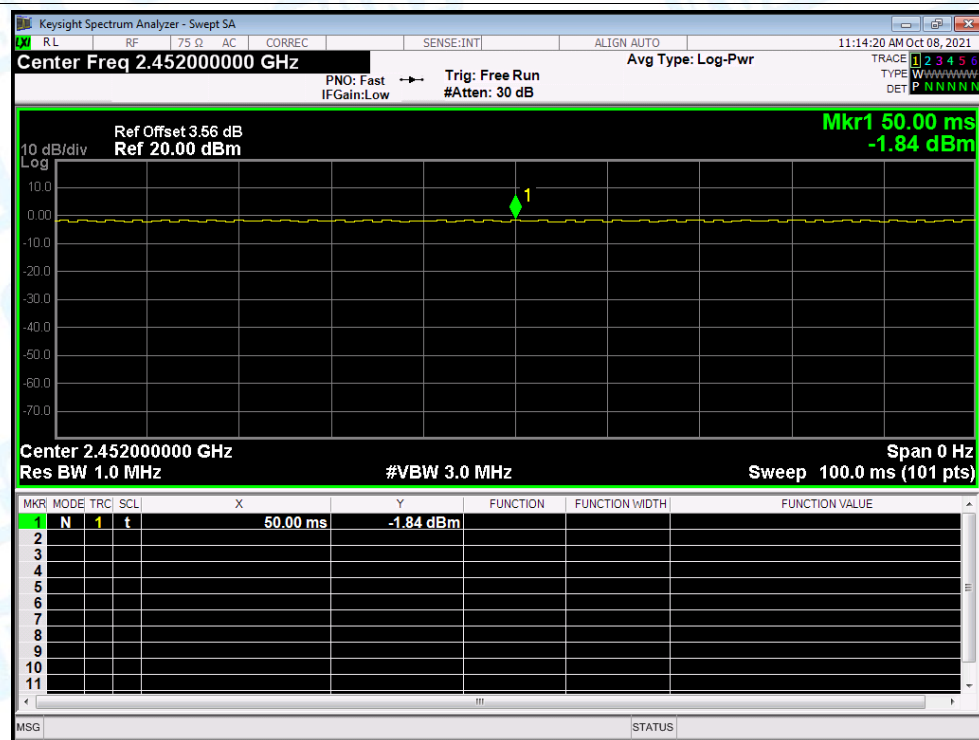
Duty Cycle NVNT n(HT40) 2422MHz Ant1



Duty Cycle NVNT n(HT40) 2437MHz Ant1



Duty Cycle NVNT n(HT40) 2452MHz Ant1



Maximum Conducted Output Power

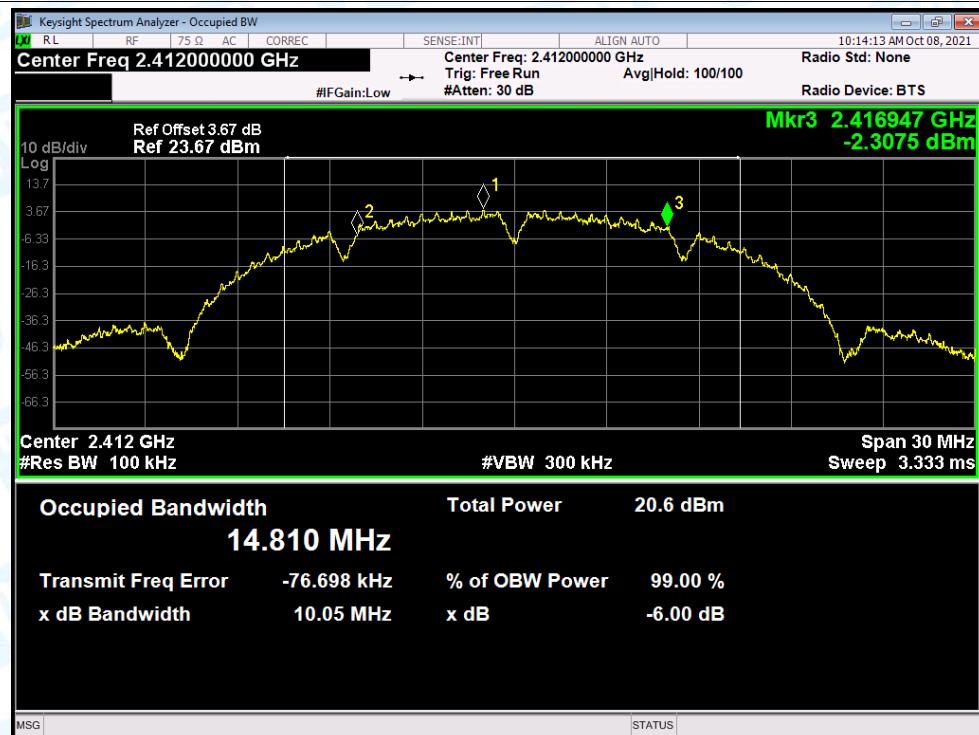
Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	17.284	0	17.284	30	Pass
NVNT	b	2437	Ant1	16.609	0	16.609	30	Pass
NVNT	b	2462	Ant1	16.116	0	16.116	30	Pass
NVNT	g	2412	Ant1	15.678	0	15.678	30	Pass
NVNT	g	2437	Ant1	15.235	0	15.235	30	Pass
NVNT	g	2462	Ant1	14.526	0	14.526	30	Pass
NVNT	n(HT20)	2412	Ant1	15.643	0	15.643	30	Pass
NVNT	n(HT20)	2437	Ant1	15.007	0	15.007	30	Pass
NVNT	n(HT20)	2462	Ant1	14.469	0	14.469	30	Pass
NVNT	n(HT40)	2422	Ant1	14.233	0	14.233	30	Pass
NVNT	n(HT40)	2437	Ant1	13.604	0	13.604	30	Pass
NVNT	n(HT40)	2452	Ant1	13.387	0	13.387	30	Pass

-6dB Bandwidth

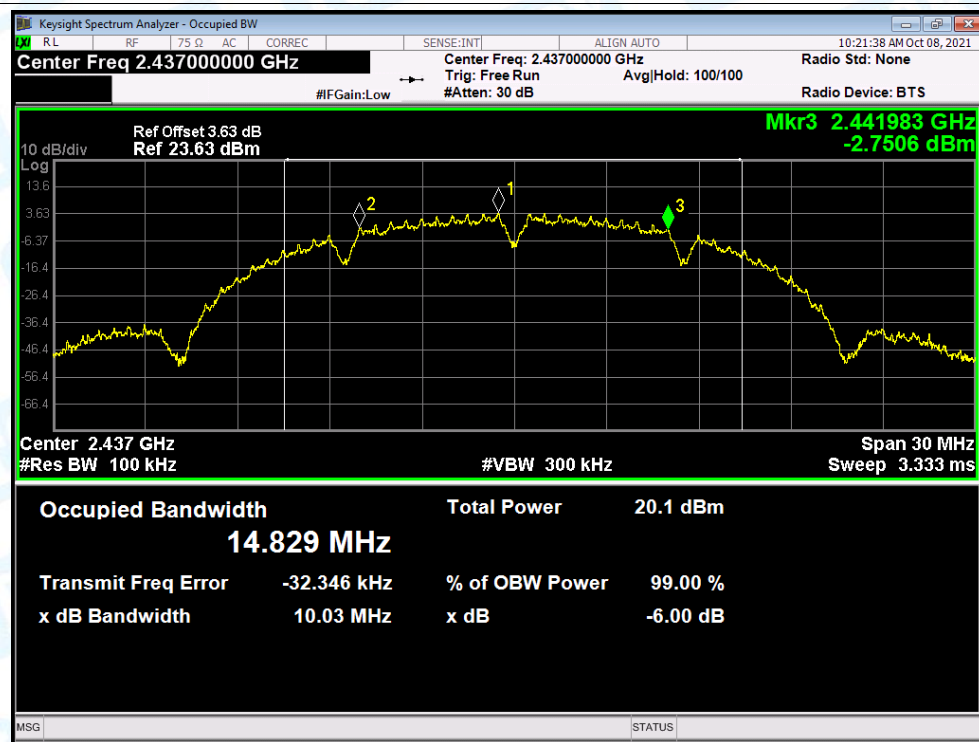
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	10.05	0.5	Pass
NVNT	b	2437	Ant1	10.03	0.5	Pass
NVNT	b	2462	Ant1	10.08	0.5	Pass
NVNT	g	2412	Ant1	16.50	0.5	Pass
NVNT	g	2437	Ant1	16.51	0.5	Pass
NVNT	g	2462	Ant1	16.54	0.5	Pass
NVNT	n(HT20)	2412	Ant1	17.64	0.5	Pass
NVNT	n(HT20)	2437	Ant1	17.78	0.5	Pass
NVNT	n(HT20)	2462	Ant1	17.63	0.5	Pass
NVNT	n(HT40)	2422	Ant1	36.28	0.5	Pass
NVNT	n(HT40)	2437	Ant1	36.19	0.5	Pass
NVNT	n(HT40)	2452	Ant1	36.28	0.5	Pass

Test Graphs

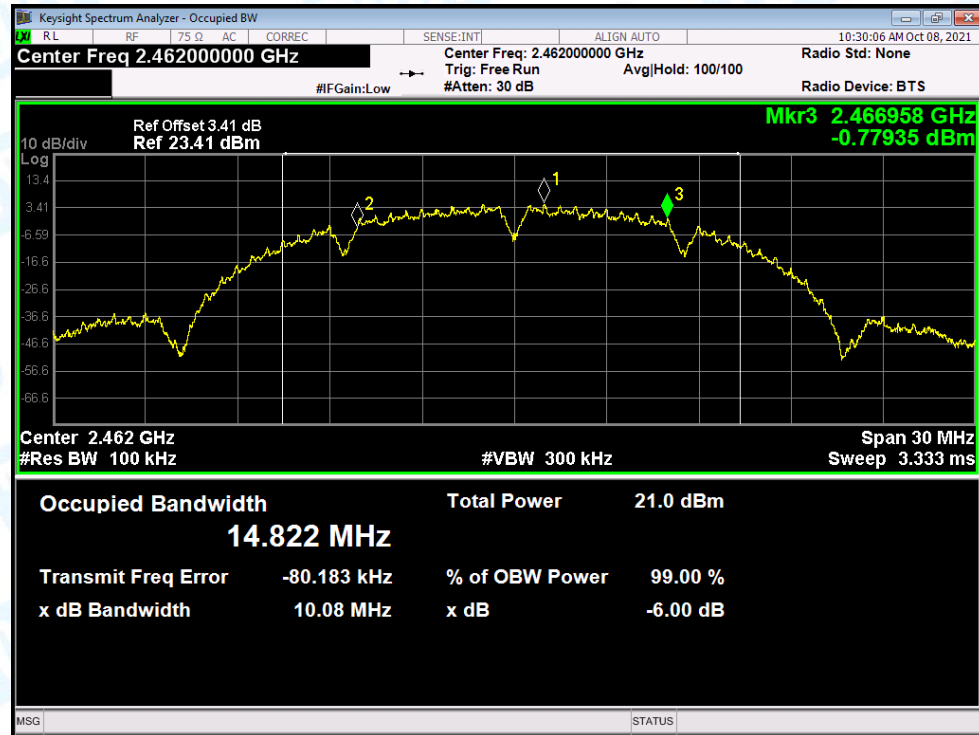
-6dB Bandwidth NVNT b 2412MHz Ant1



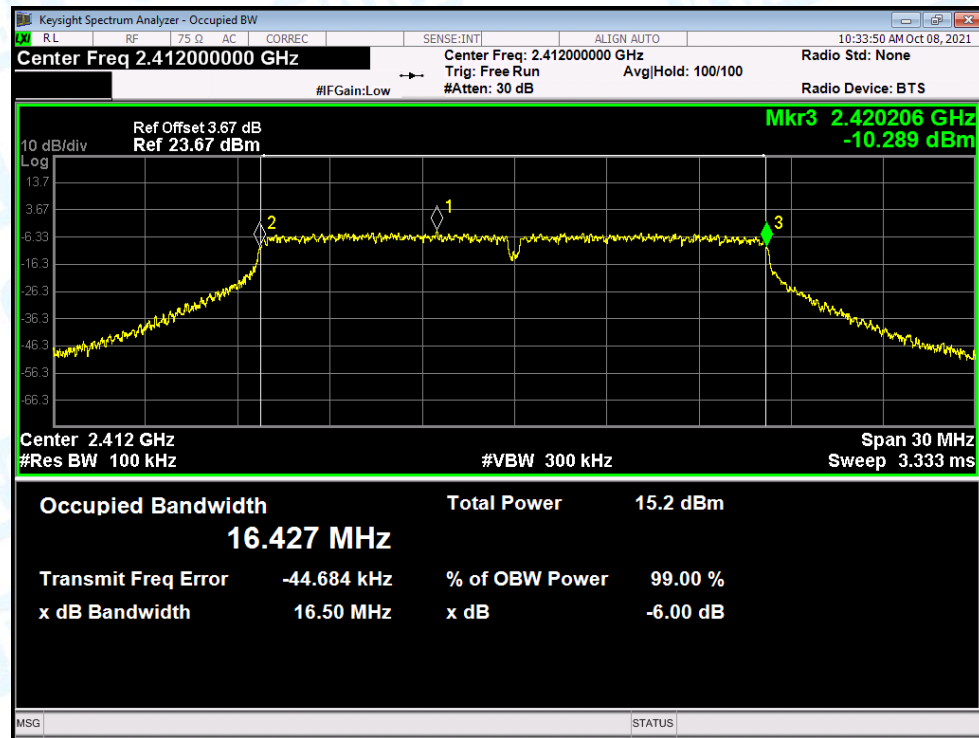
-6dB Bandwidth NVNT b 2437MHz Ant1



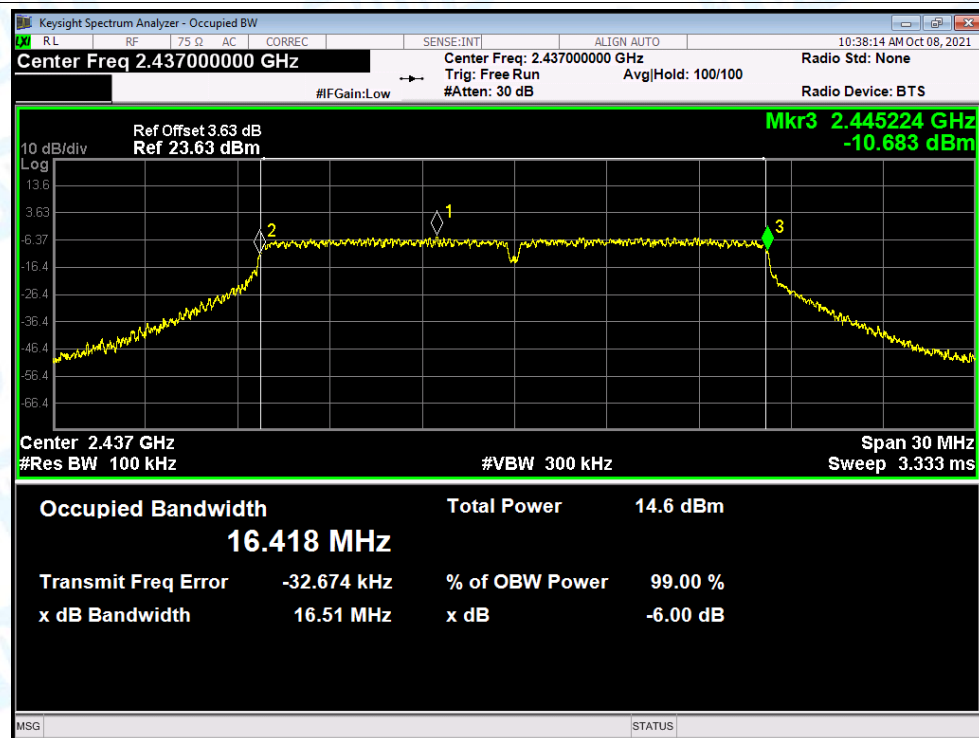
-6dB Bandwidth NVNT b 2462MHz Ant1



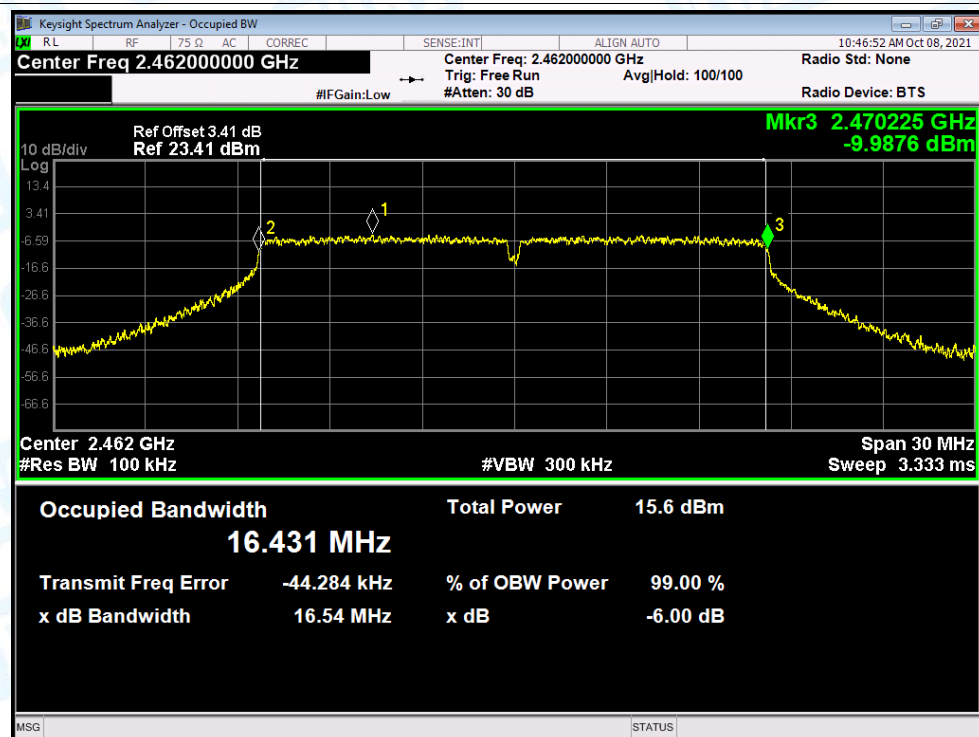
-6dB Bandwidth NVNT g 2412MHz Ant1



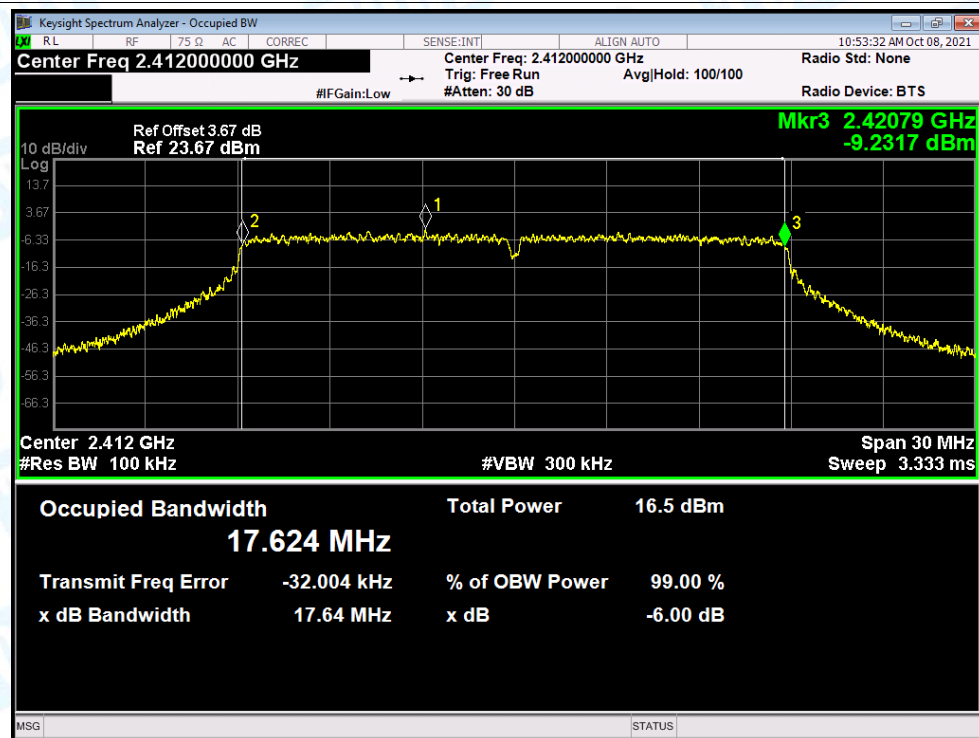
-6dB Bandwidth NVNT g 2437MHz Ant1



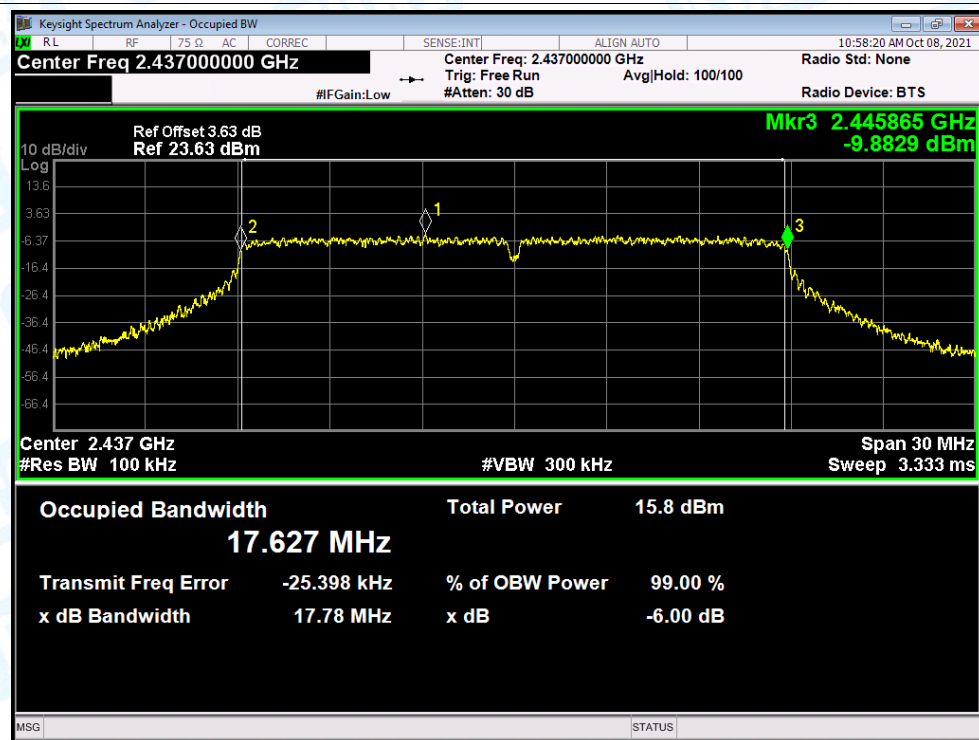
-6dB Bandwidth NVNT g 2462MHz Ant1



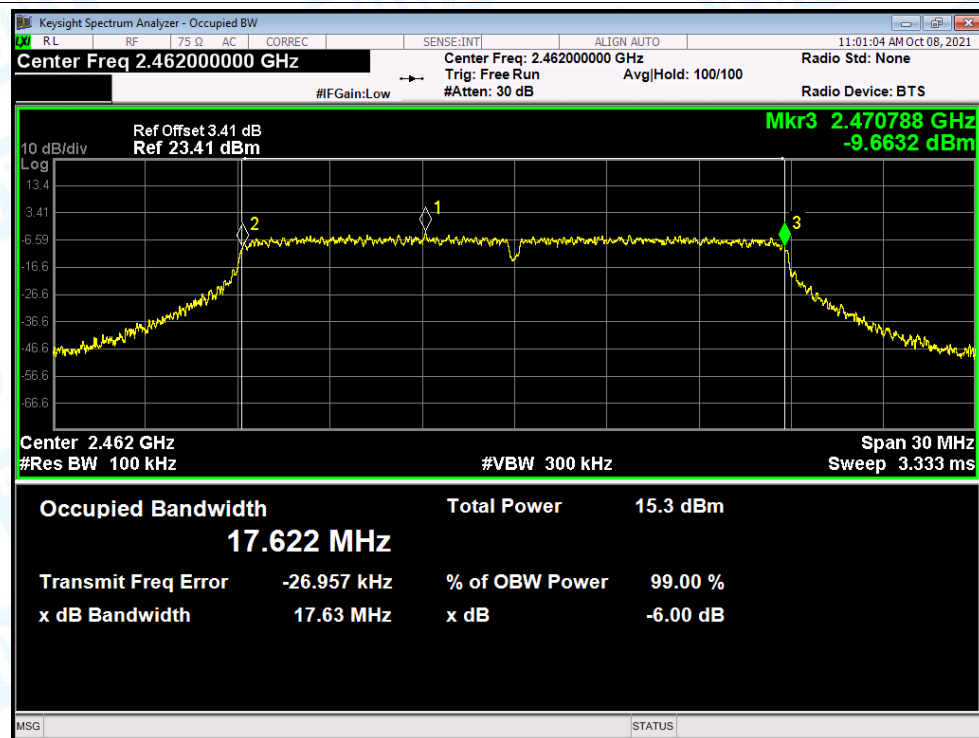
-6dB Bandwidth NVNT n(HT20) 2412MHz Ant1



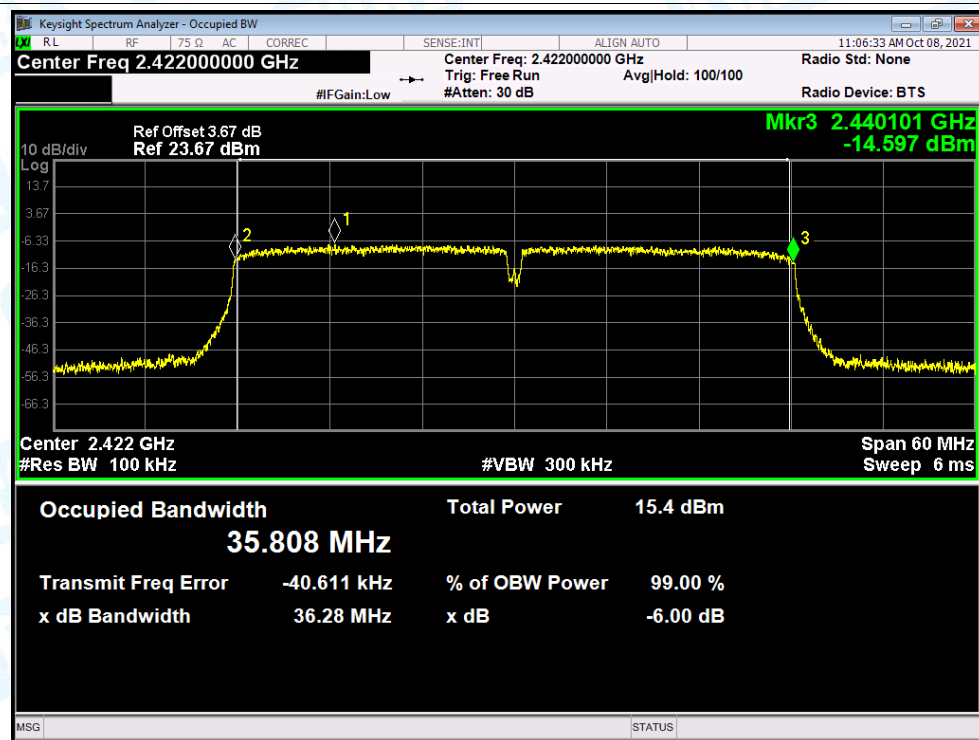
-6dB Bandwidth NVNT n(HT20) 2437MHz Ant1



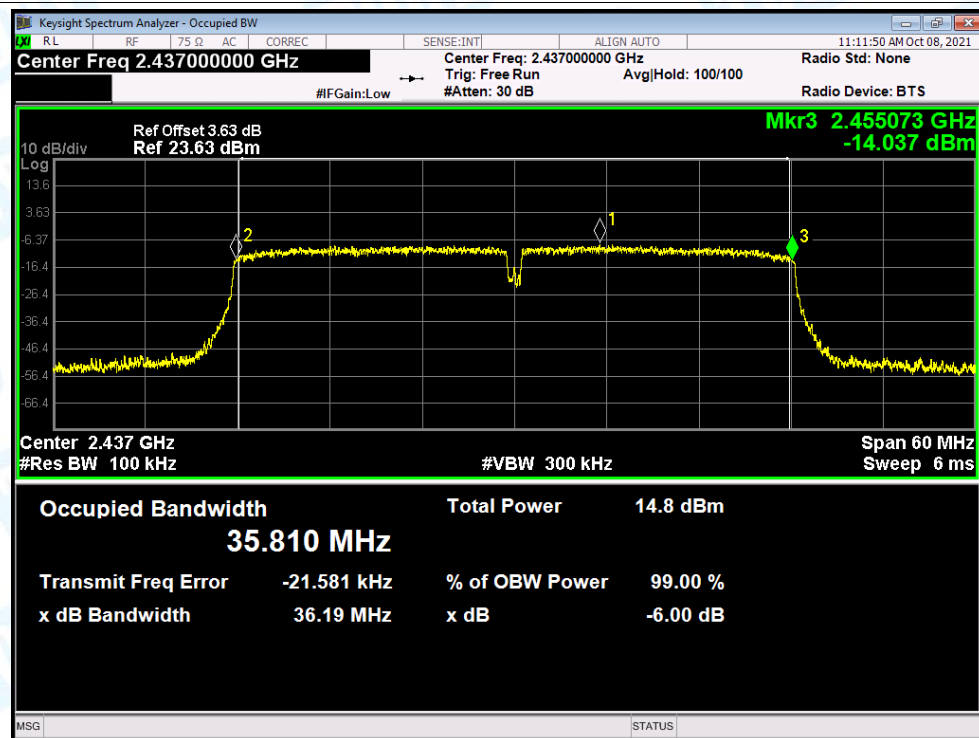
-6dB Bandwidth NVNT n(HT20) 2462MHz Ant1



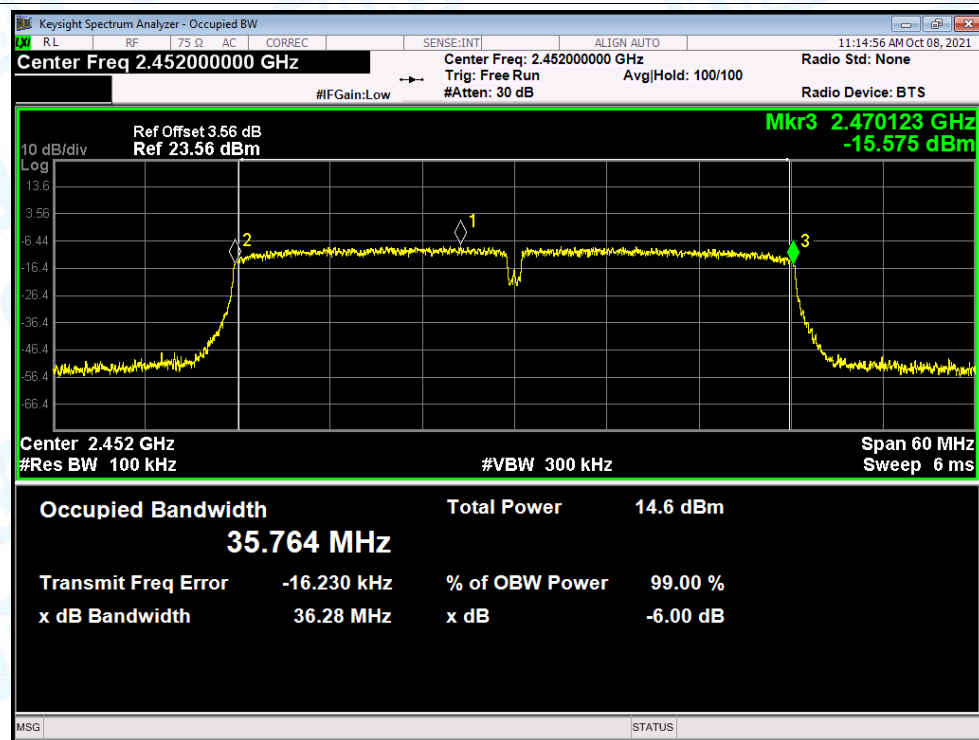
-6dB Bandwidth NVNT n(HT40) 2422MHz Ant1



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



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

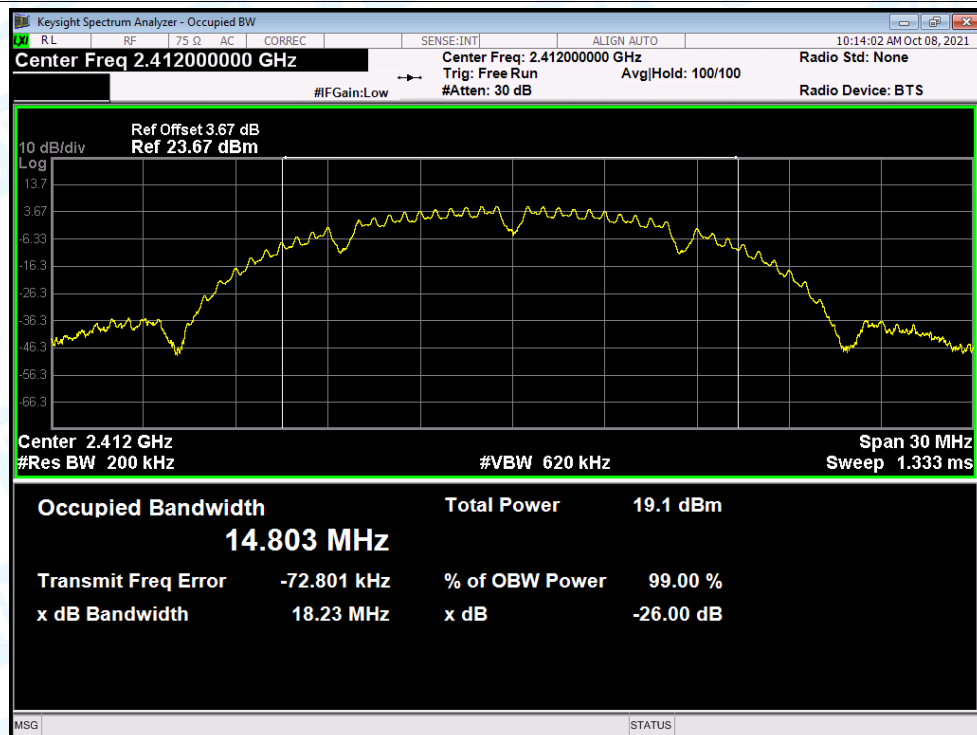


Occupied Channel Bandwidth

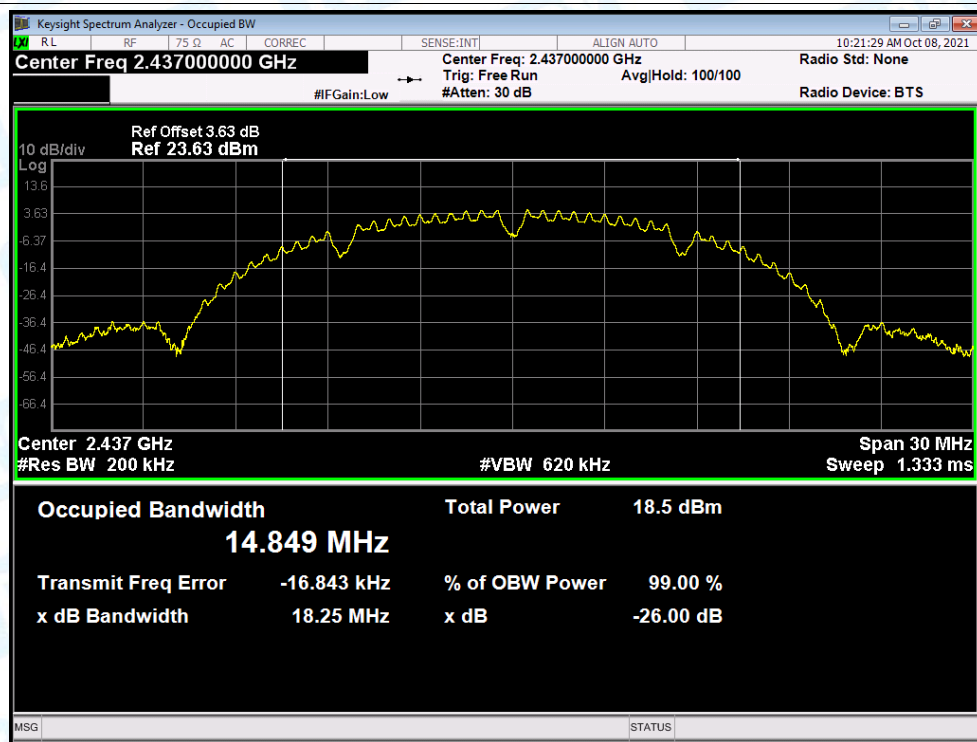
Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.803
NVNT	b	2437	Ant1	14.849
NVNT	b	2462	Ant1	14.853
NVNT	g	2412	Ant1	16.519
NVNT	g	2437	Ant1	16.536
NVNT	g	2462	Ant1	16.541
NVNT	n(HT20)	2412	Ant1	17.686
NVNT	n(HT20)	2437	Ant1	17.691
NVNT	n(HT20)	2462	Ant1	17.700
NVNT	n(HT40)	2422	Ant1	35.751
NVNT	n(HT40)	2437	Ant1	35.755
NVNT	n(HT40)	2452	Ant1	35.713

Test Graphs

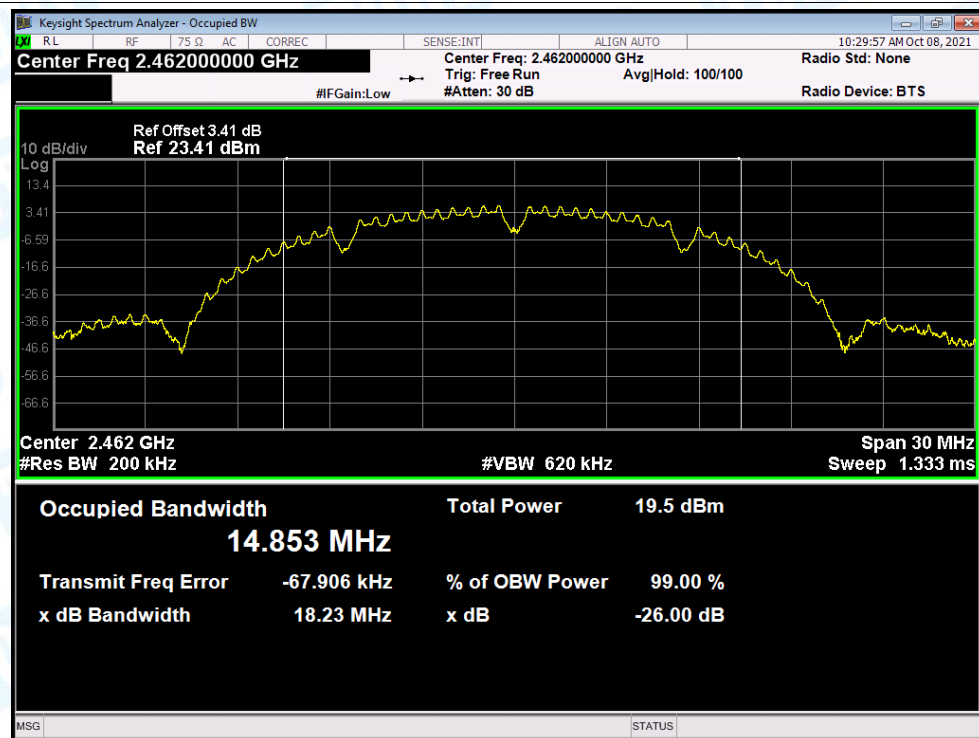
OBW NVNT b 2412MHz Ant1



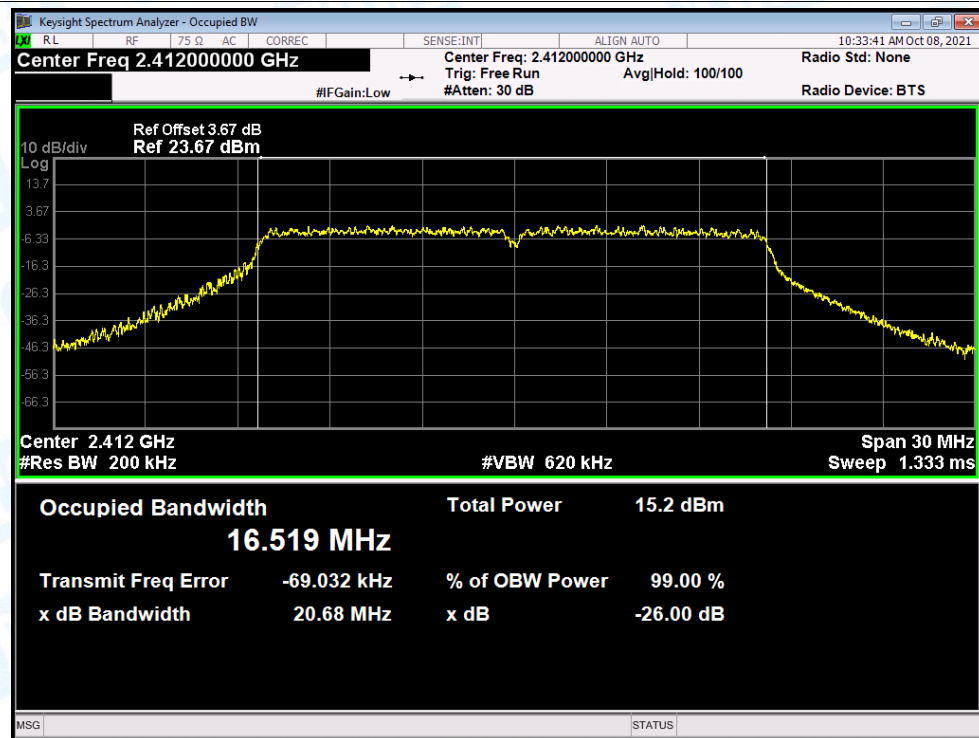
OBW NVNT b 2437MHz Ant1



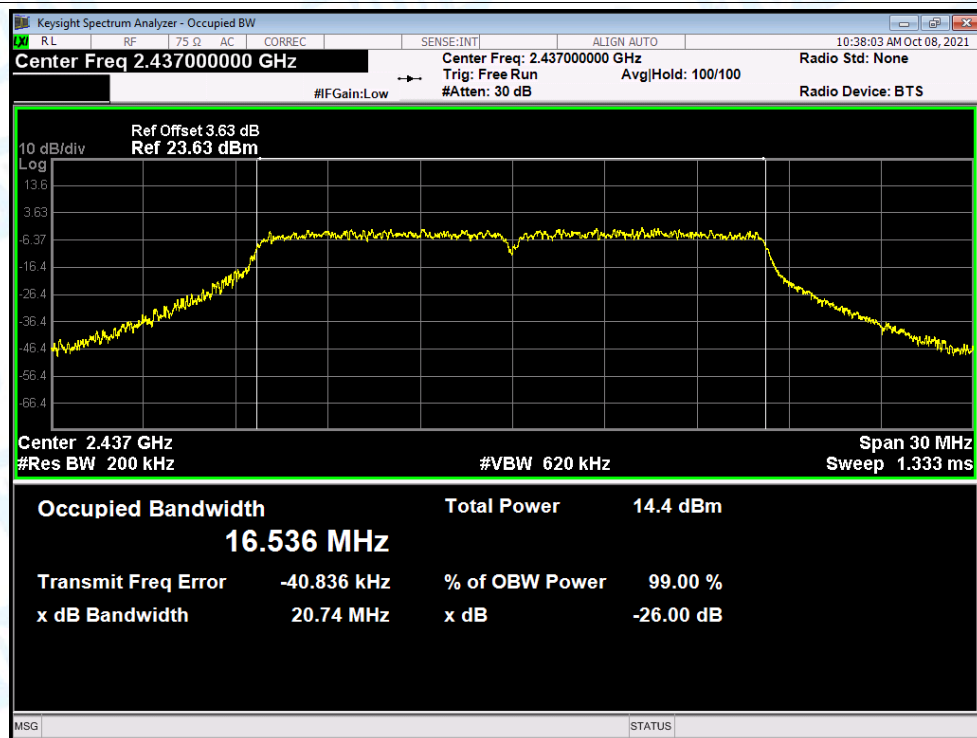
OBW NVNT b 2462MHz Ant1



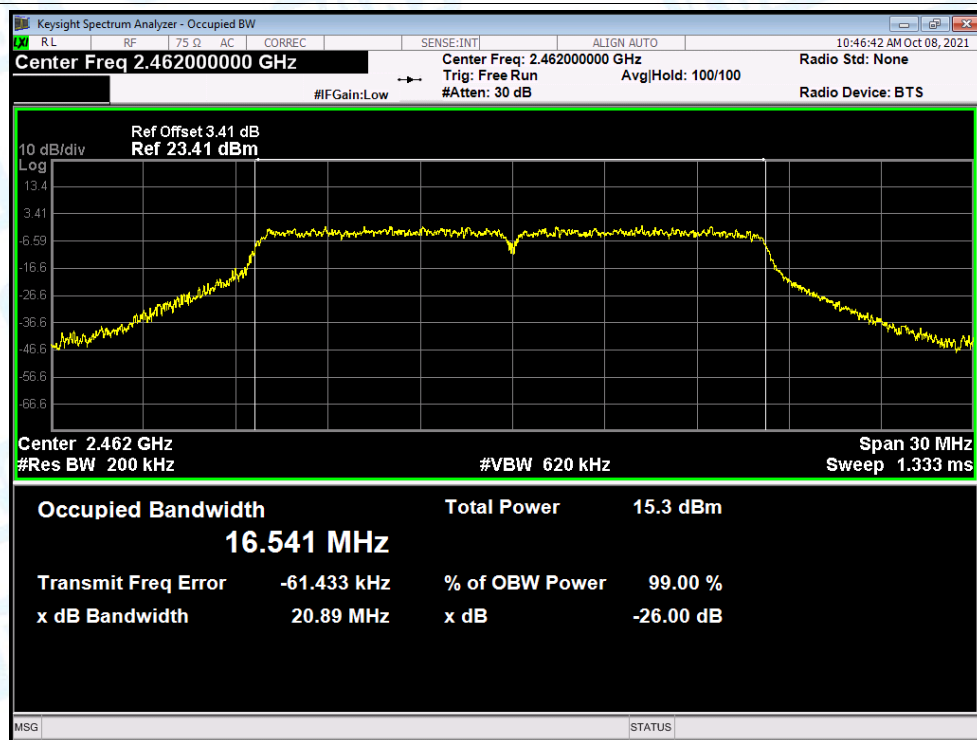
OBW NVNT g 2412MHz Ant1



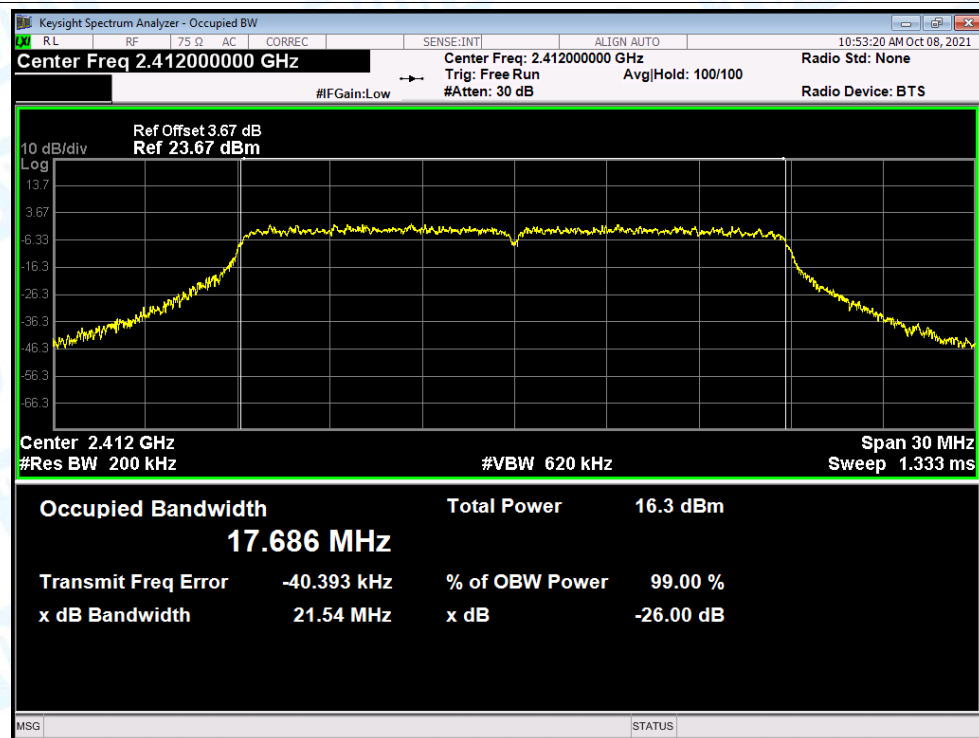
OBW NVNT g 2437MHz Ant1



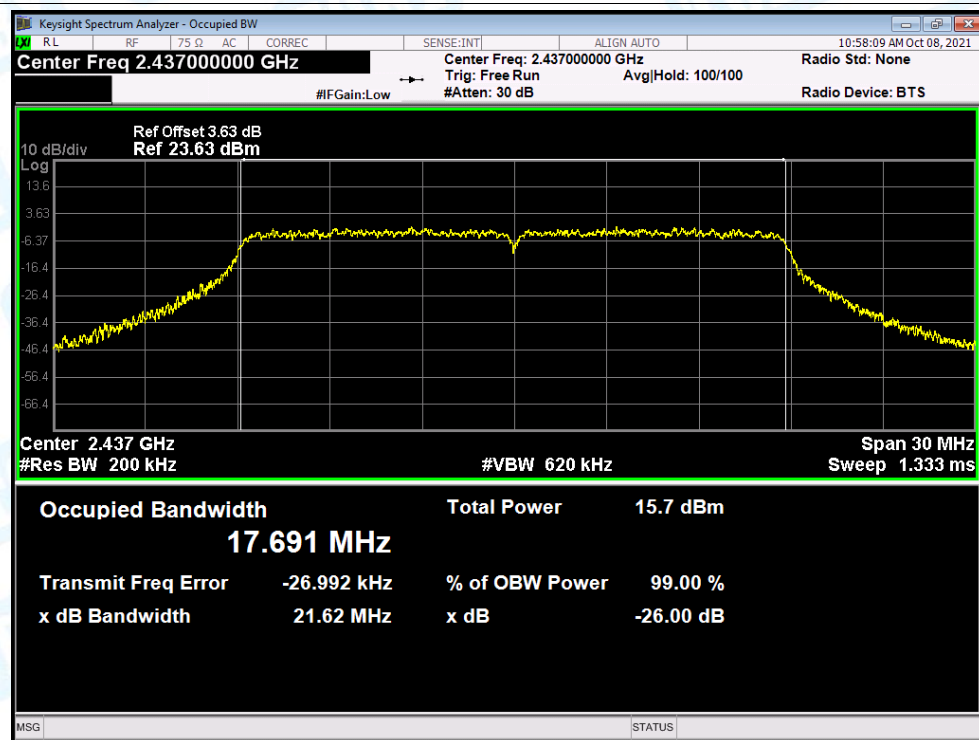
OBW NVNT g 2462MHz Ant1



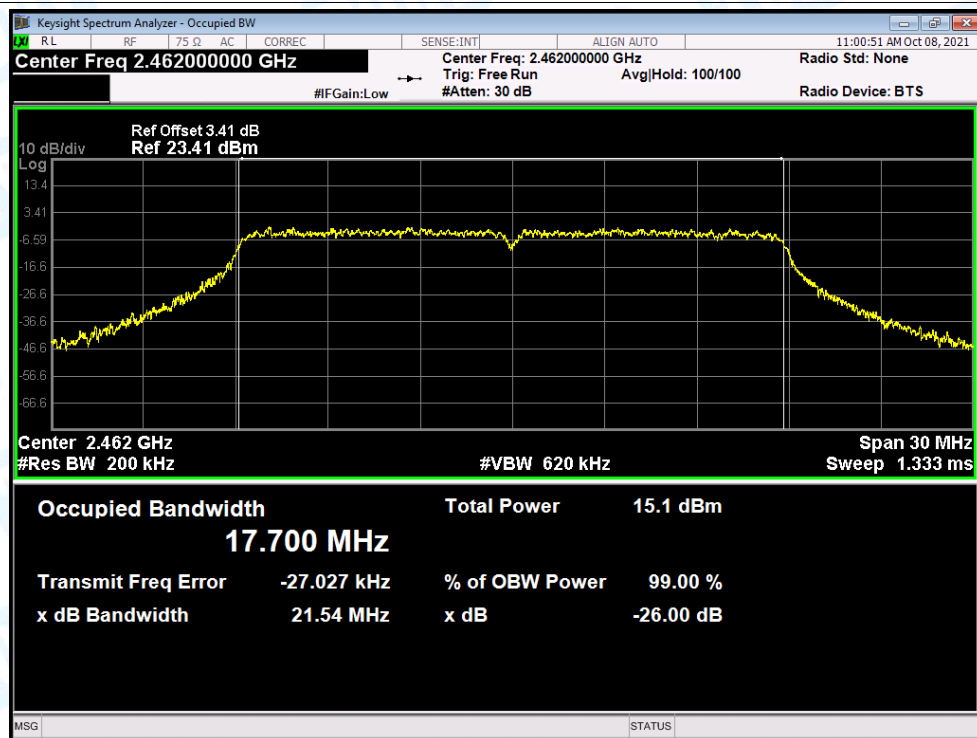
OBW NVNT n(HT20) 2412MHz Ant1



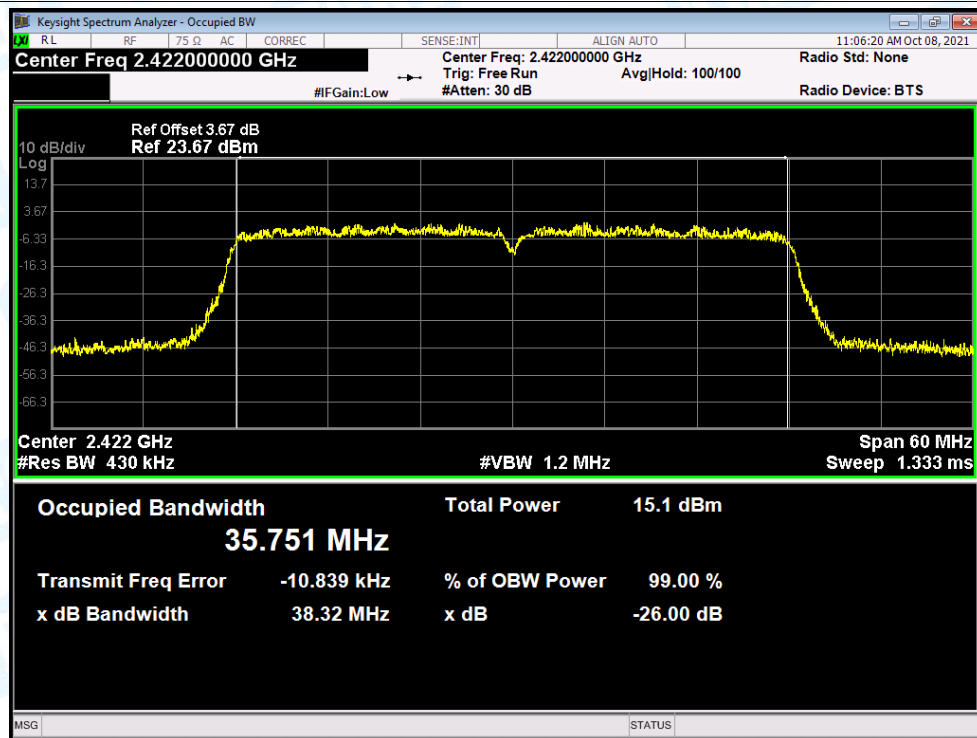
OBW NVNT n(HT20) 2437MHz Ant1



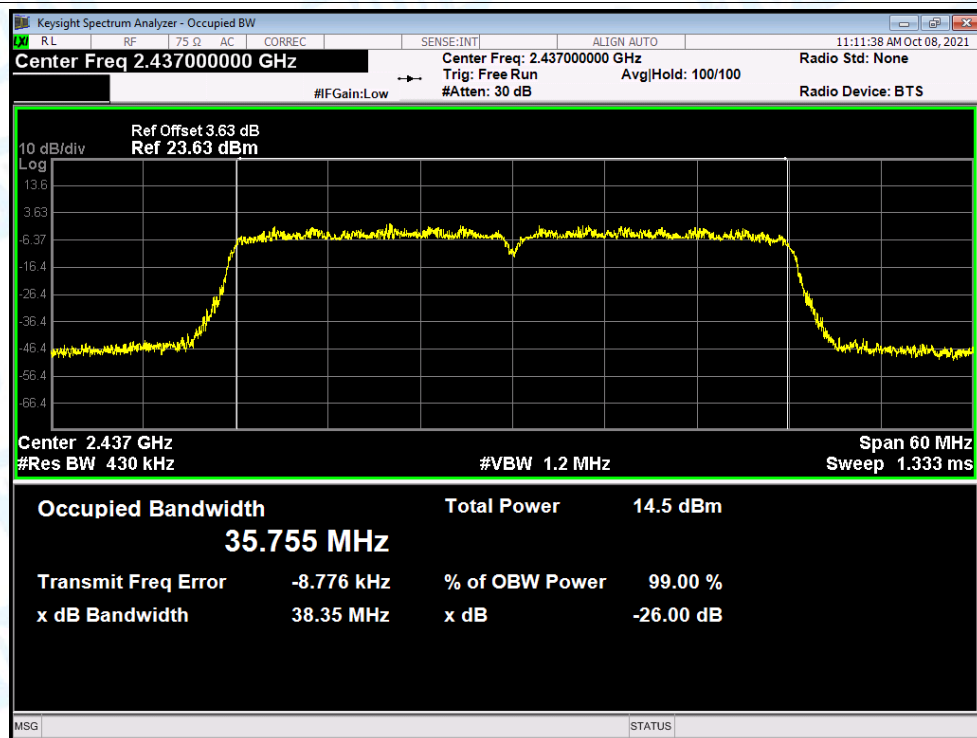
OBW NVNT n(HT20) 2462MHz Ant1



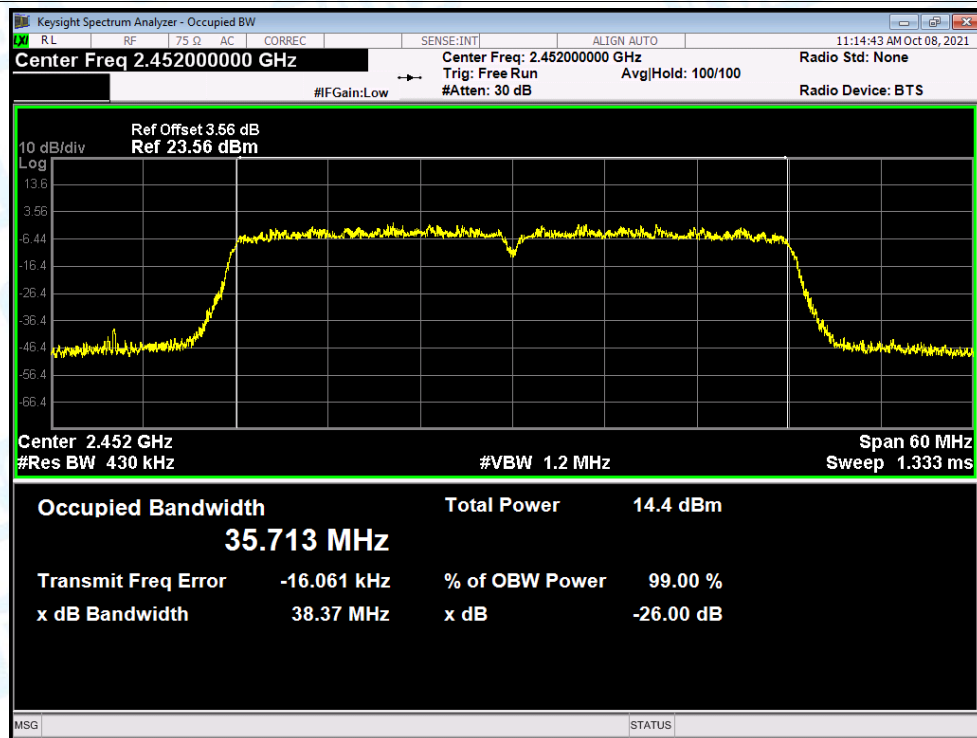
OBW NVNT n(HT40) 2422MHz Ant1



OBW NVNT n(HT40) 2437MHz Ant1



OBW NVNT n(HT40) 2452MHz Ant1

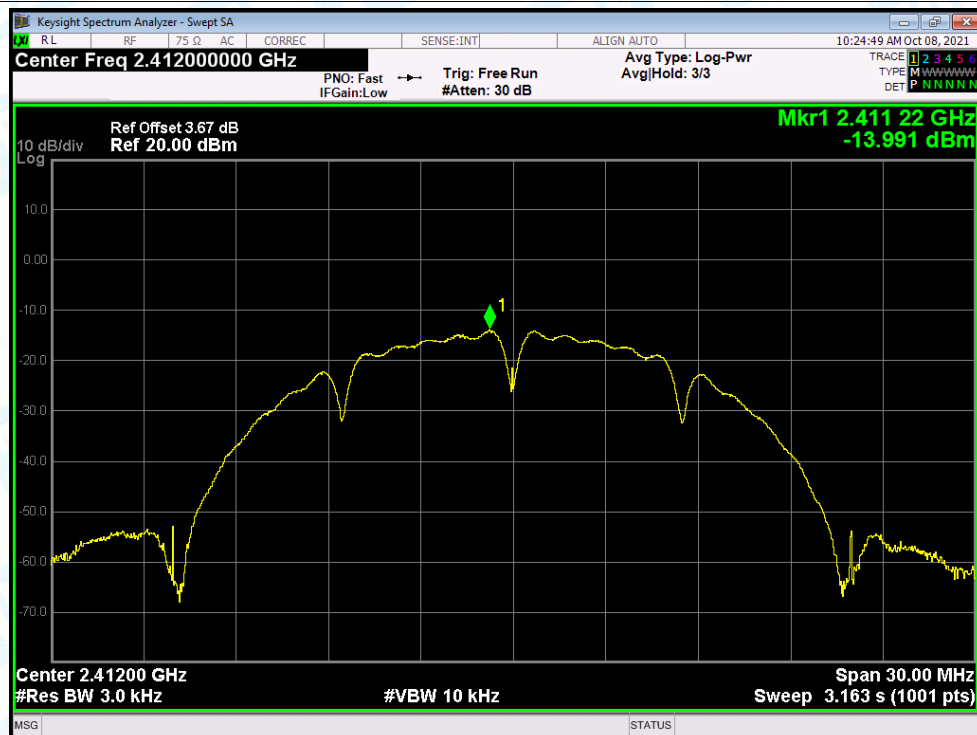


Maximum Power Spectral Density Level

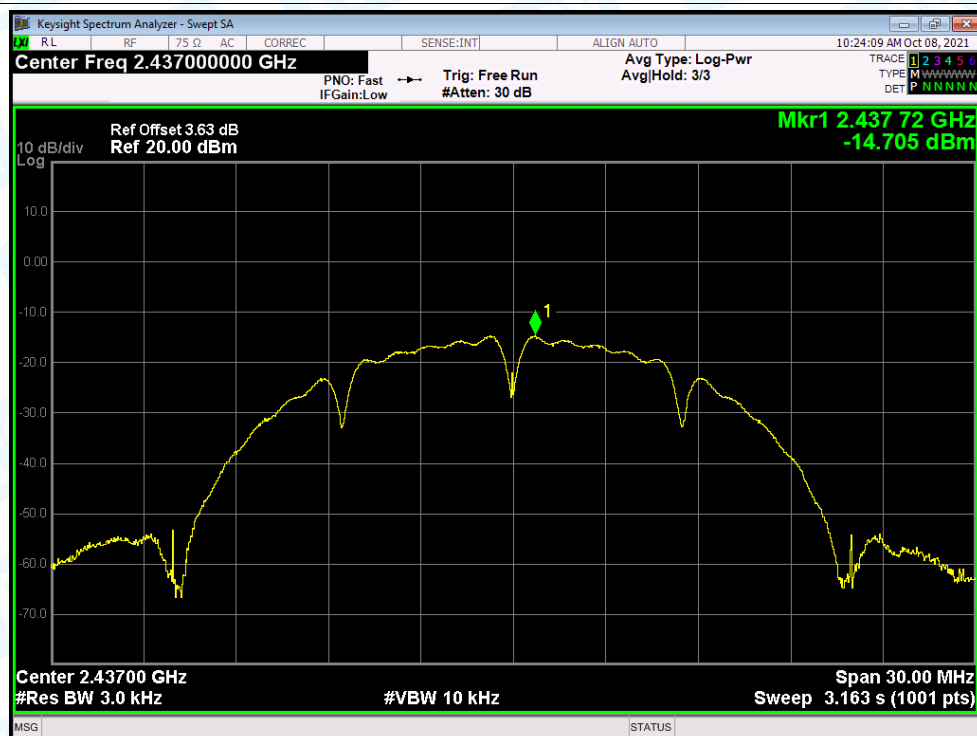
Condition	Mode	Frequency (MHz)	Antenna	Max PSD (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	-13.991	8	Pass
NVNT	b	2437	Ant1	-14.705	8	Pass
NVNT	b	2462	Ant1	-15.294	8	Pass
NVNT	g	2412	Ant1	-17.53	8	Pass
NVNT	g	2437	Ant1	-17.856	8	Pass
NVNT	g	2462	Ant1	-18.458	8	Pass
NVNT	n(HT20)	2412	Ant1	-16.969	8	Pass
NVNT	n(HT20)	2437	Ant1	-17.622	8	Pass
NVNT	n(HT20)	2462	Ant1	-17.965	8	Pass
NVNT	n(HT40)	2422	Ant1	-20.465	8	Pass
NVNT	n(HT40)	2437	Ant1	-21.23	8	Pass
NVNT	n(HT40)	2452	Ant1	-21.274	8	Pass

Test Graphs

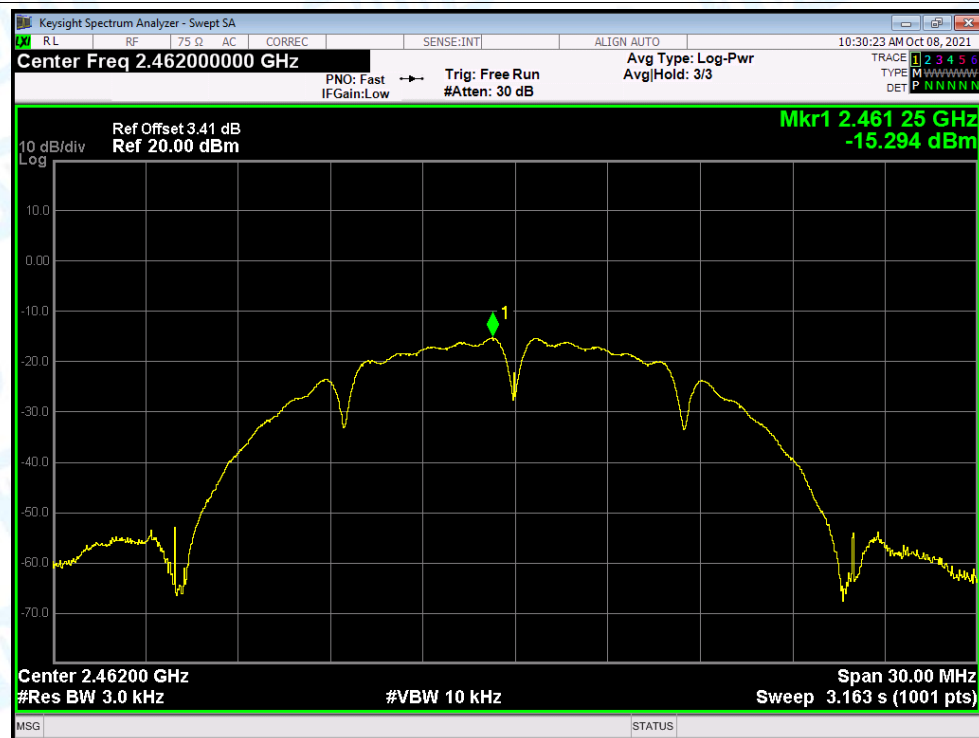
PSD NVNT b 2412MHz Ant1



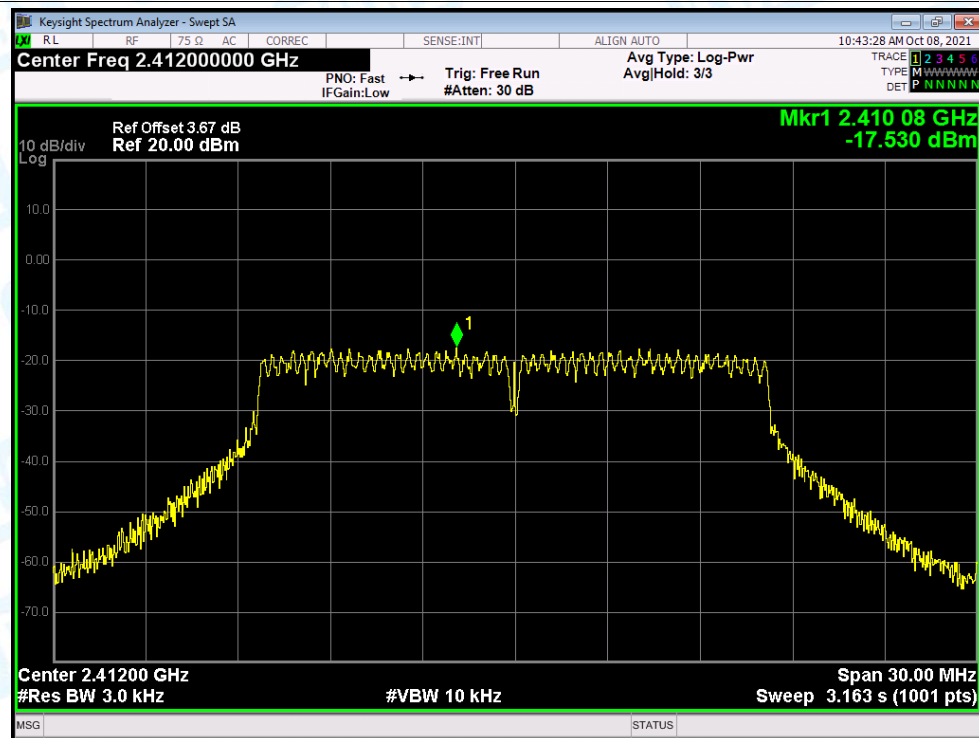
PSD NVNT b 2437MHz Ant1



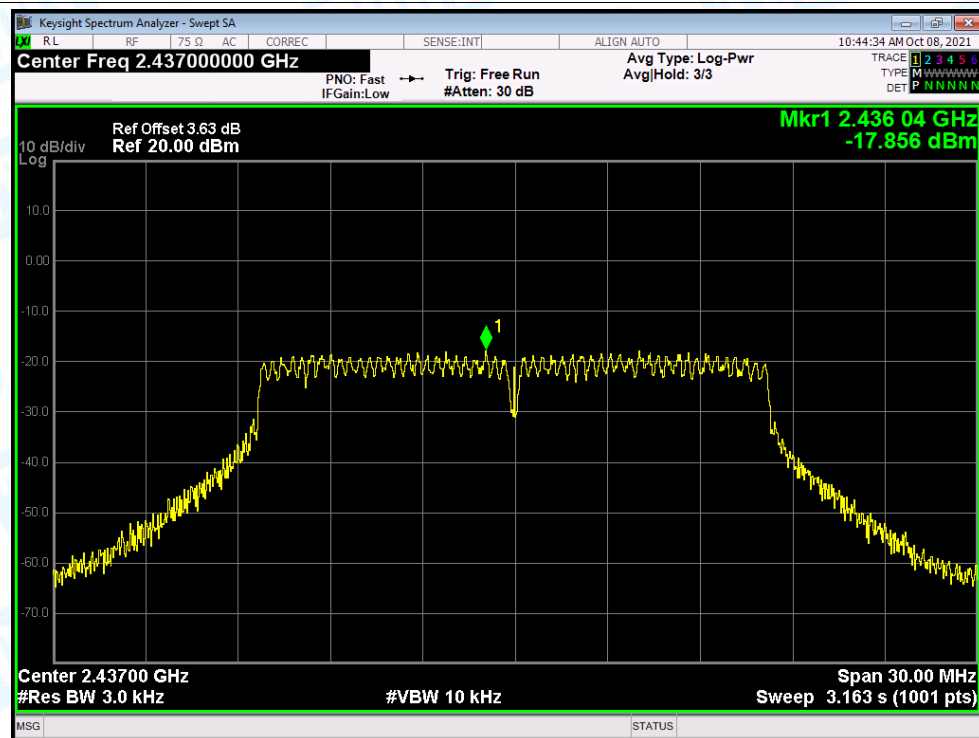
PSD NVNT b 2462MHz Ant1



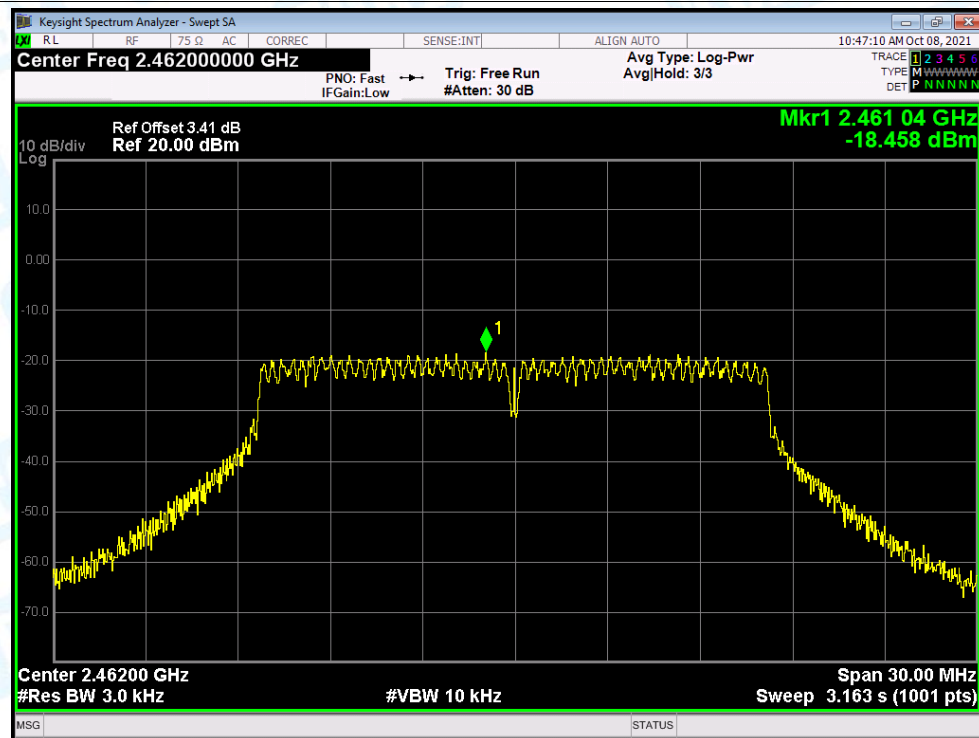
PSD NVNT g 2412MHz Ant1



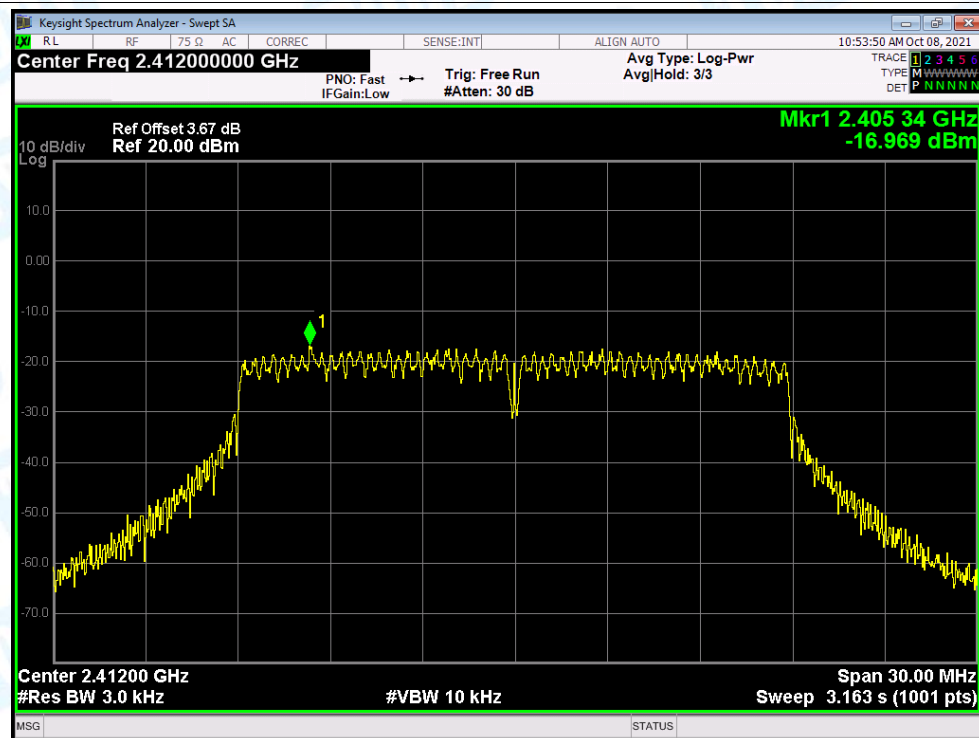
PSD NVNT g 2437MHz Ant1



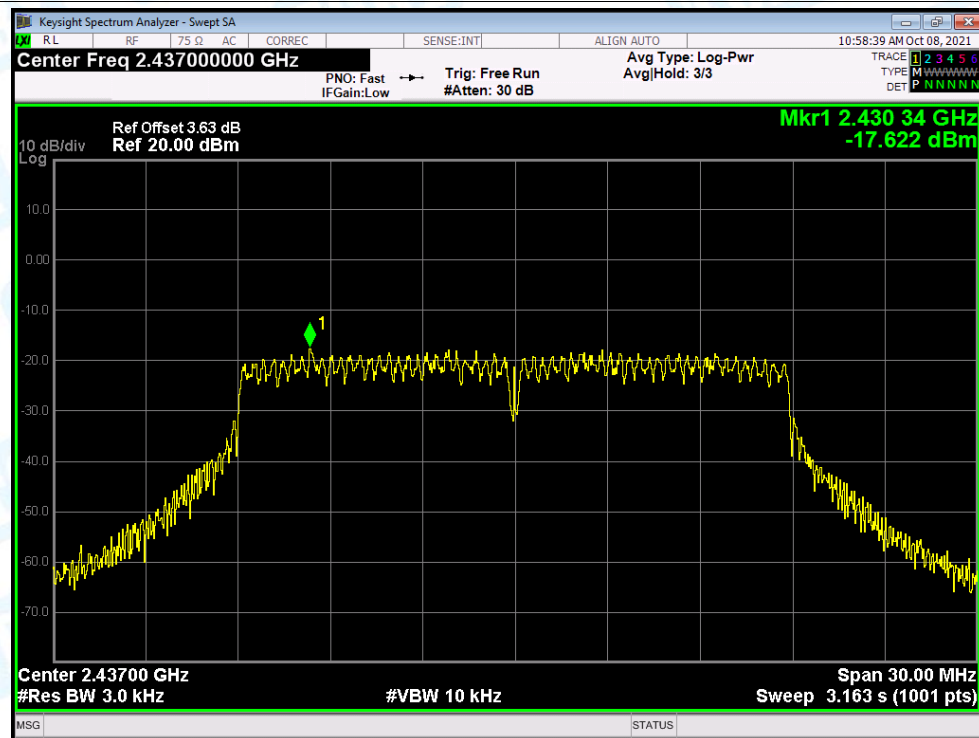
PSD NVNT g 2462MHz Ant1



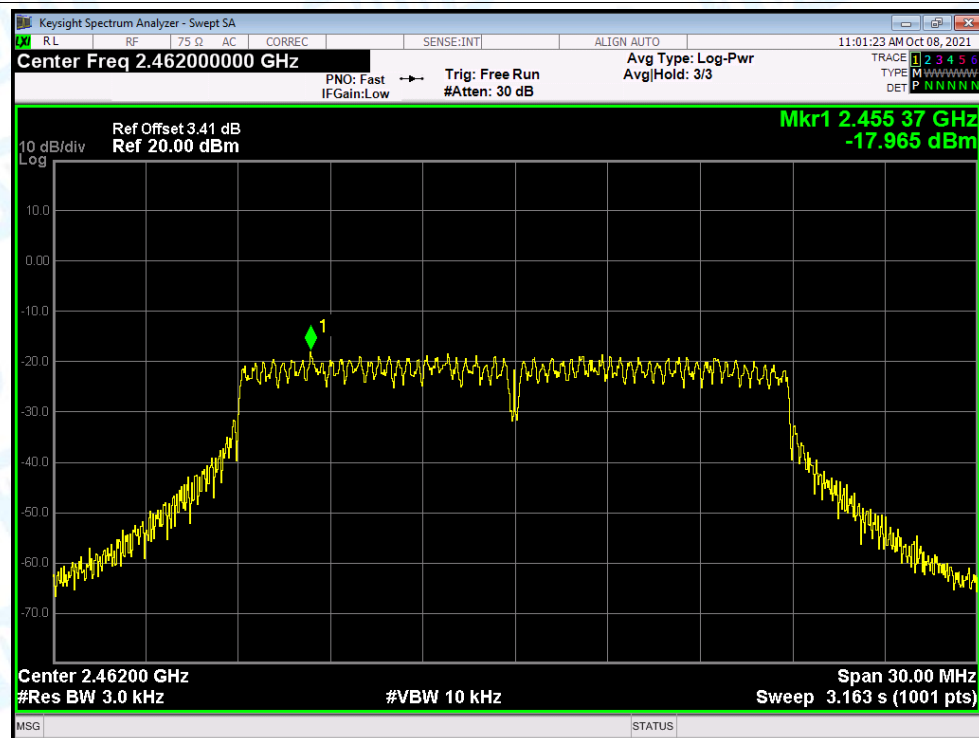
PSD NVNT n(HT20) 2412MHz Ant1



PSD NVNT n(HT20) 2437MHz Ant1



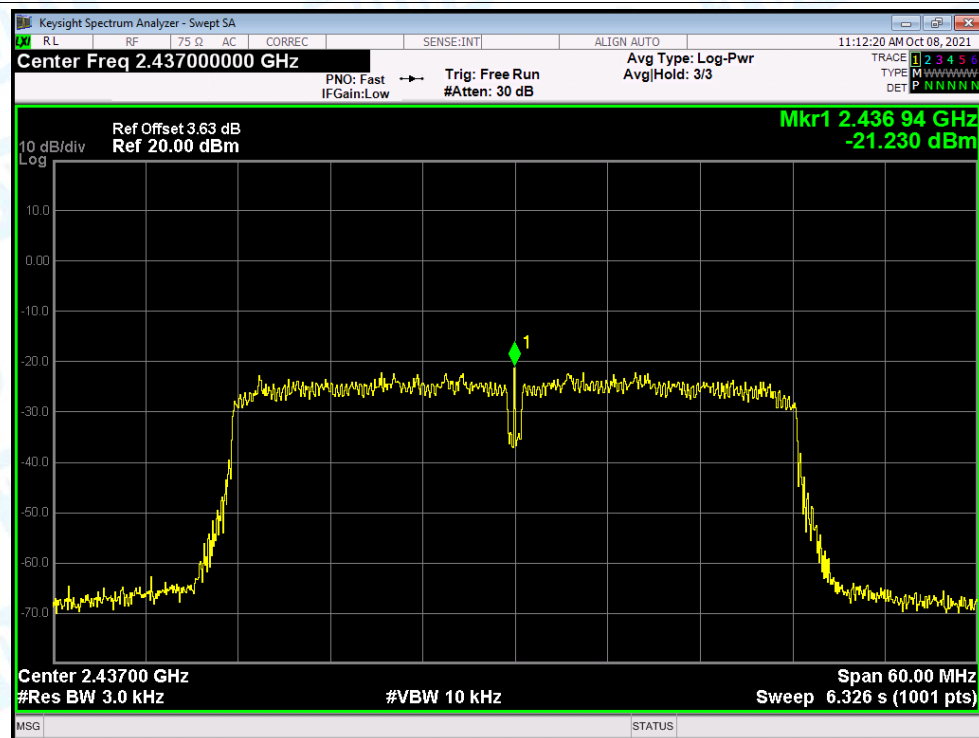
PSD NVNT n(HT20) 2462MHz Ant1



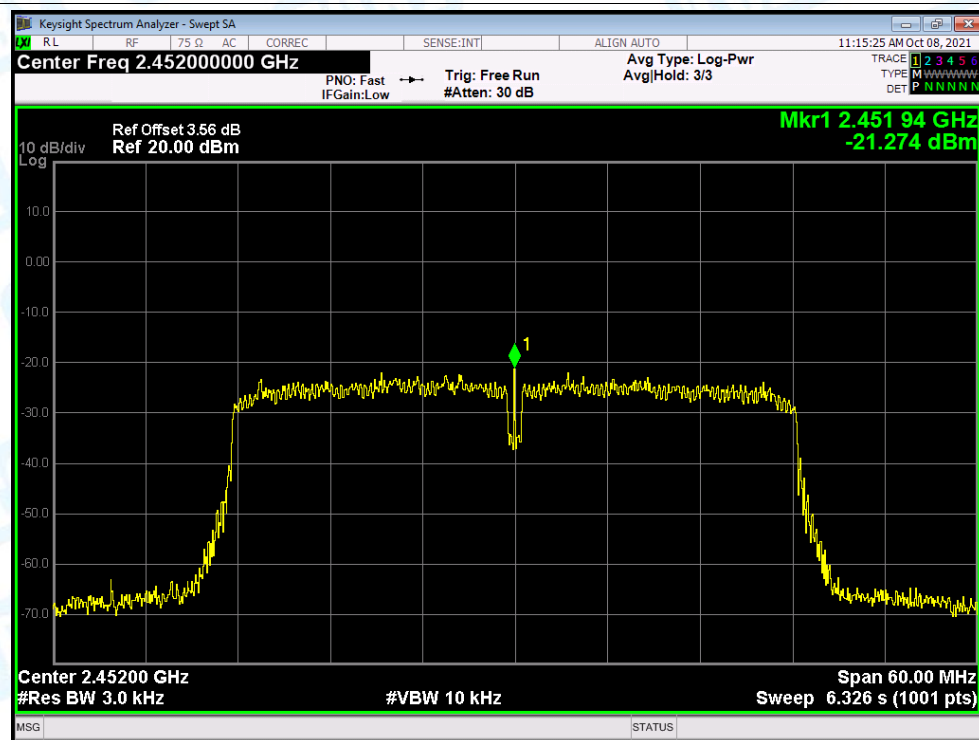
PSD NVNT n(HT40) 2422MHz Ant1



PSD NVNT n(HT40) 2437MHz Ant1



PSD NVNT n(HT40) 2452MHz Ant1

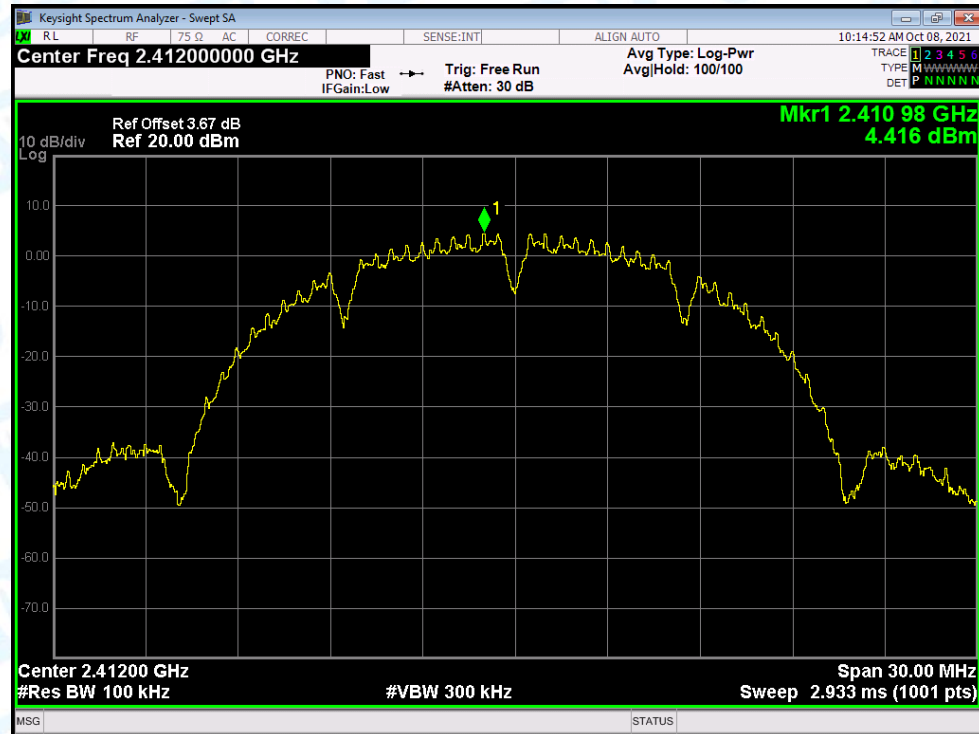


Band Edge

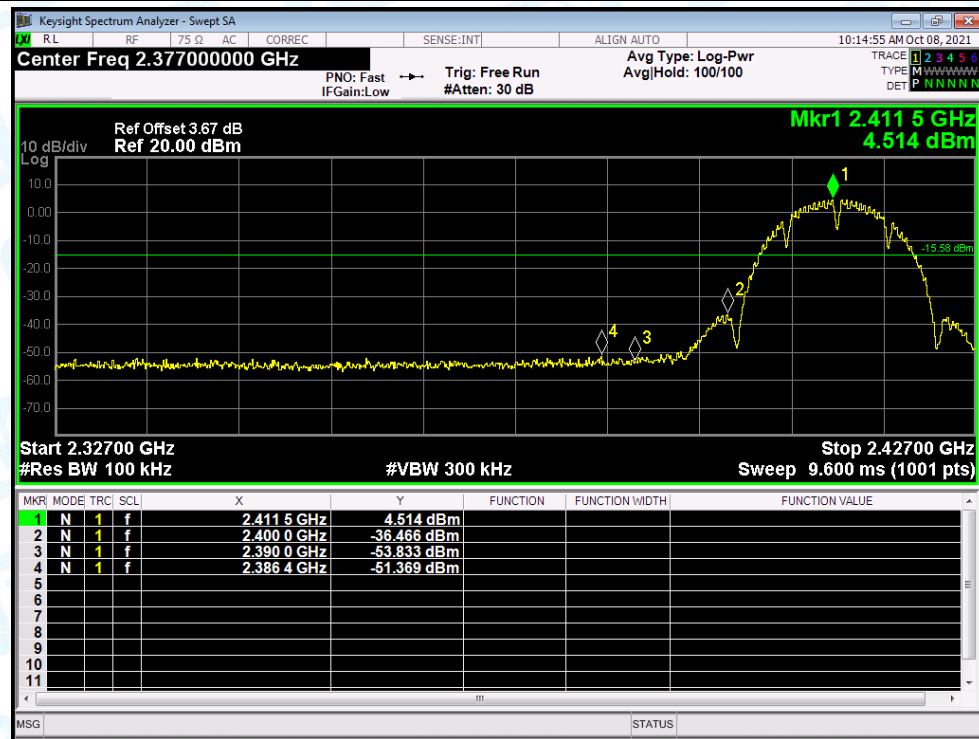
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-55.78	-20	Pass
NVNT	b	2462	Ant1	-55.86	-20	Pass
NVNT	g	2412	Ant1	-47.65	-20	Pass
NVNT	g	2462	Ant1	-48	-20	Pass
NVNT	n(HT20)	2412	Ant1	-47.97	-20	Pass
NVNT	n(HT20)	2462	Ant1	-47.76	-20	Pass
NVNT	n(HT40)	2422	Ant1	-42.3	-20	Pass
NVNT	n(HT40)	2452	Ant1	-41.8	-20	Pass

Test Graphs

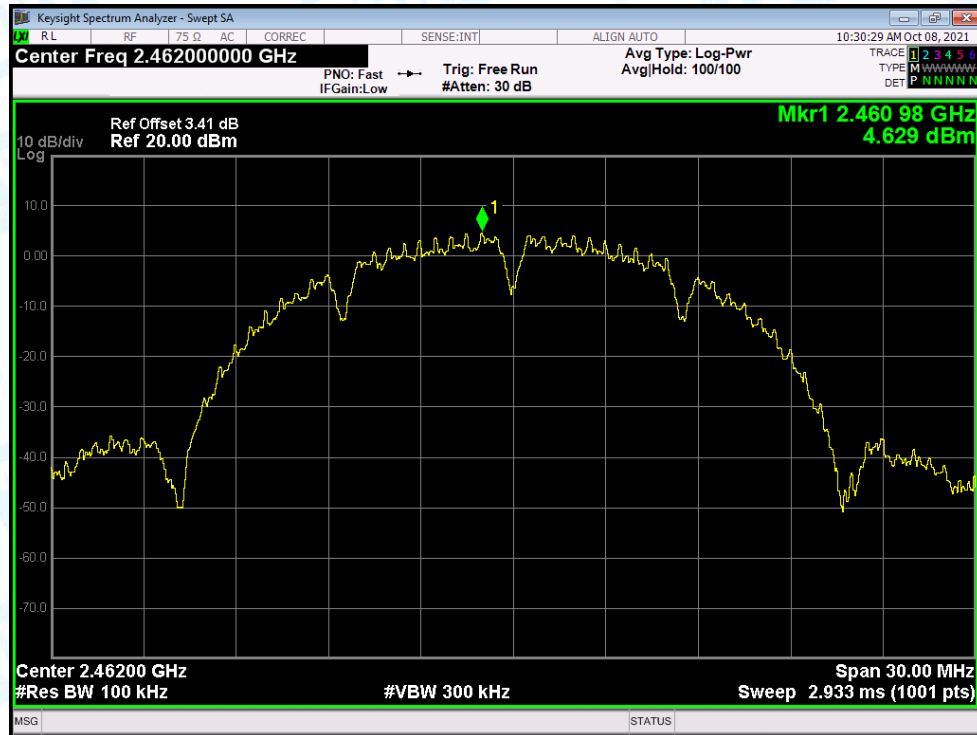
Band Edge NVNT b 2412MHz Ant1 Ref



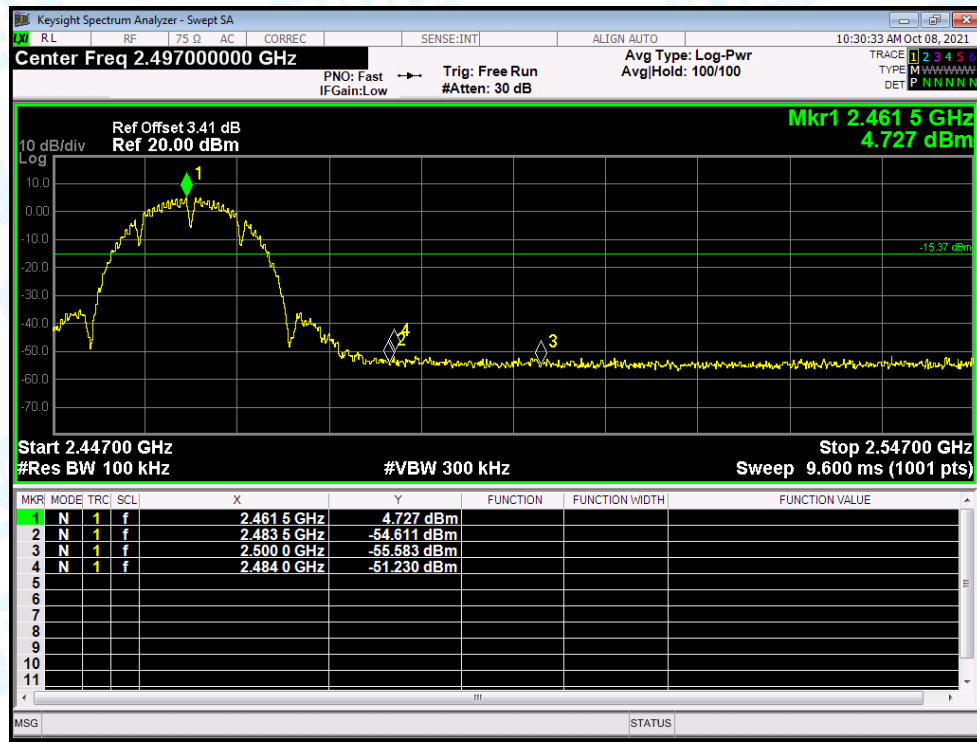
Band Edge NVNT b 2412MHz Ant1 Emission



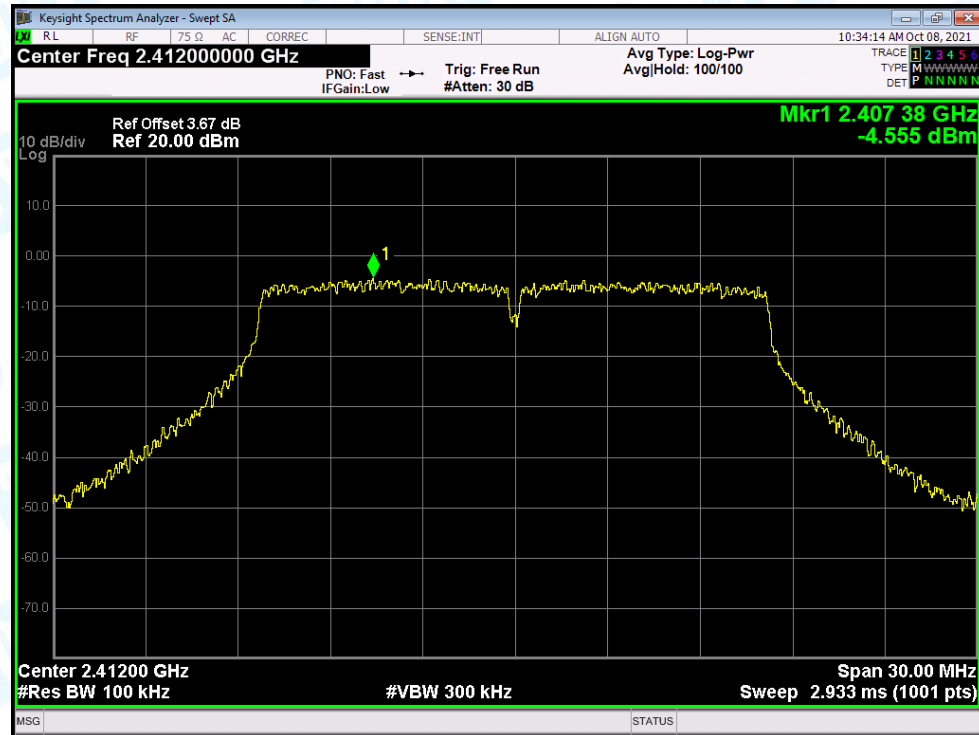
Band Edge NVNT b 2462MHz Ant1 Ref



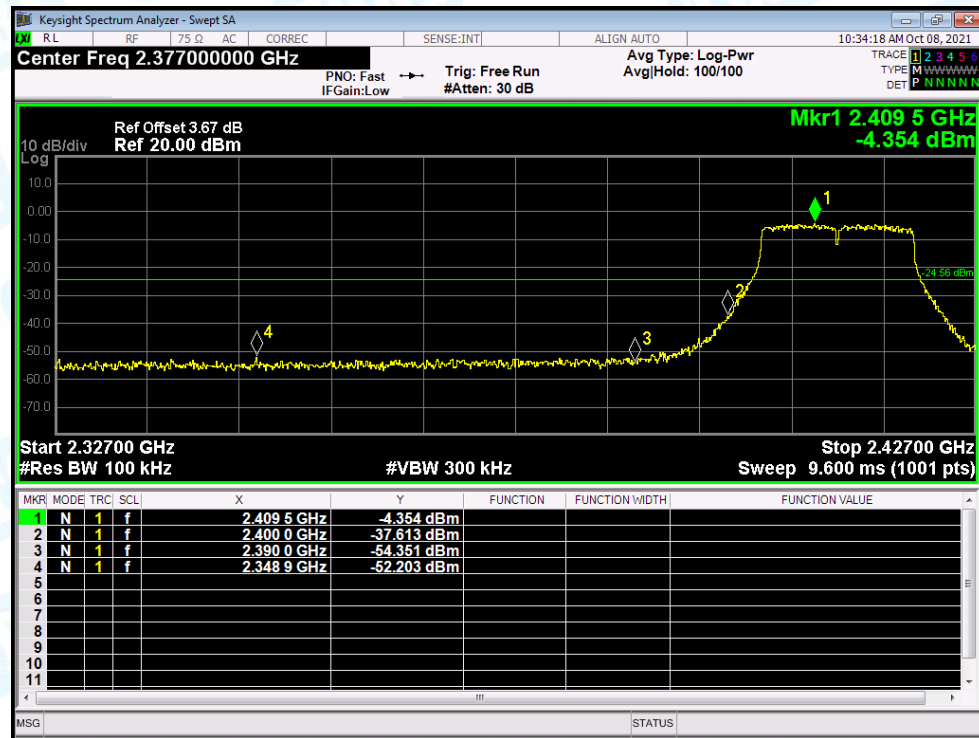
Band Edge NVNT b 2462MHz Ant1 Emission

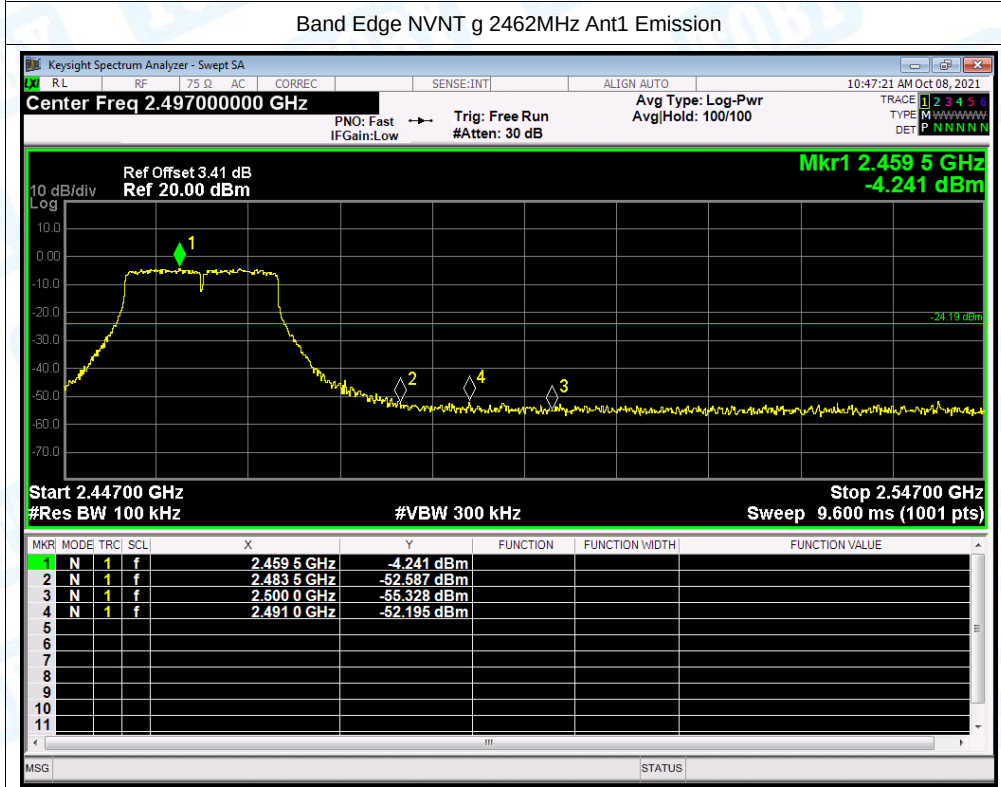
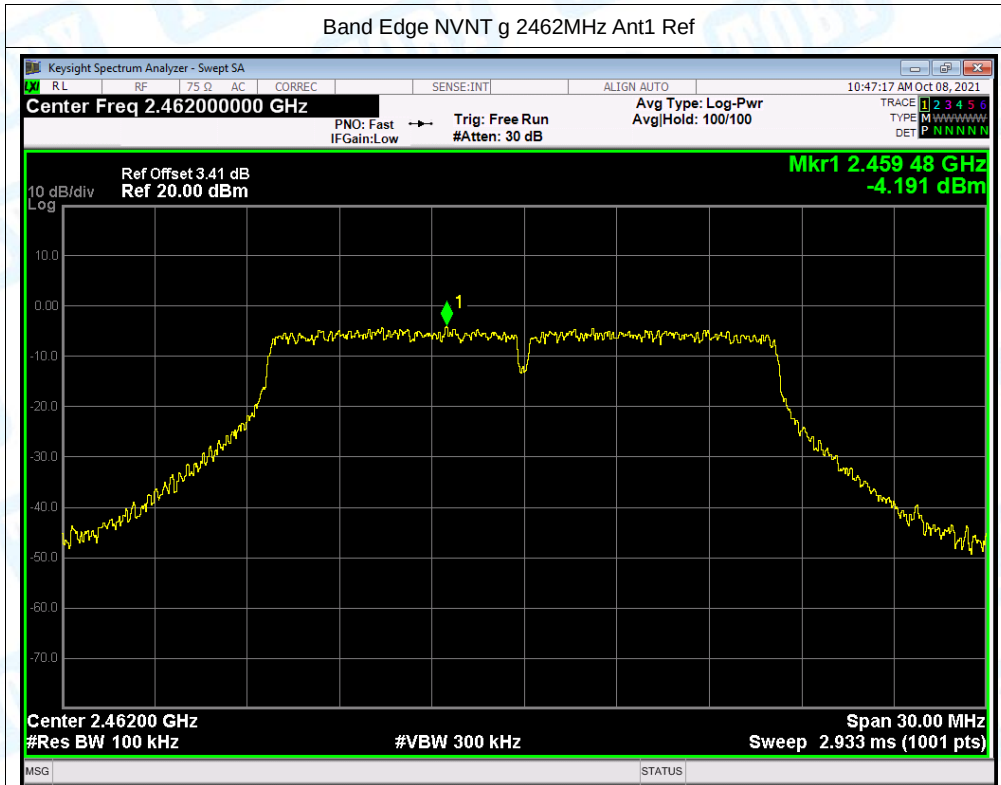


Band Edge NVNT g 2412MHz Ant1 Ref

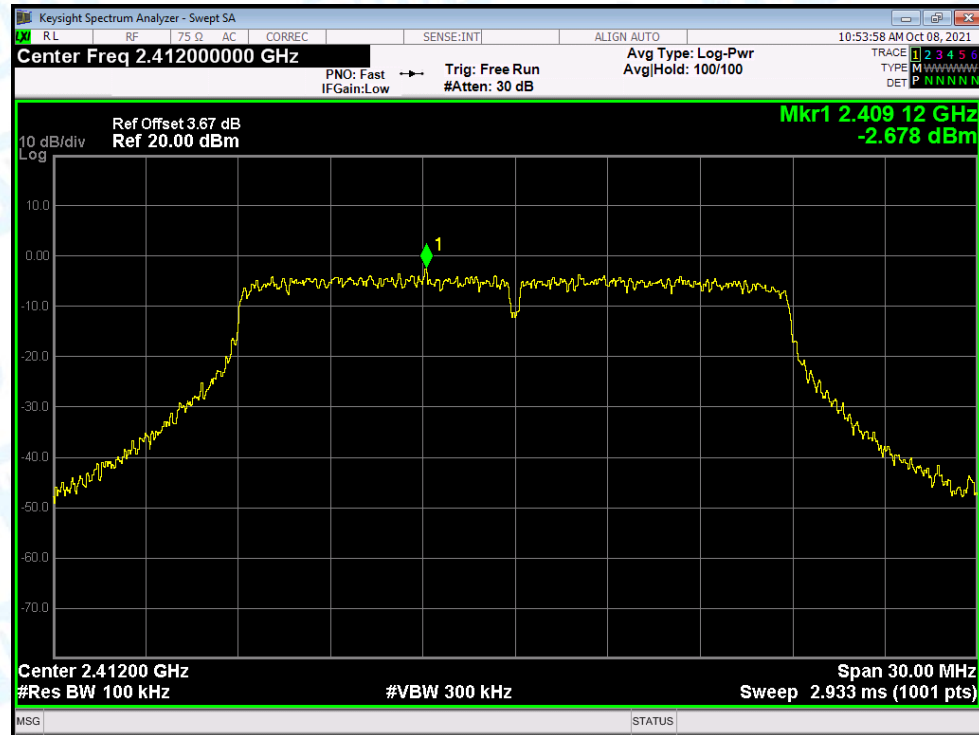


Band Edge NVNT g 2412MHz Ant1 Emission

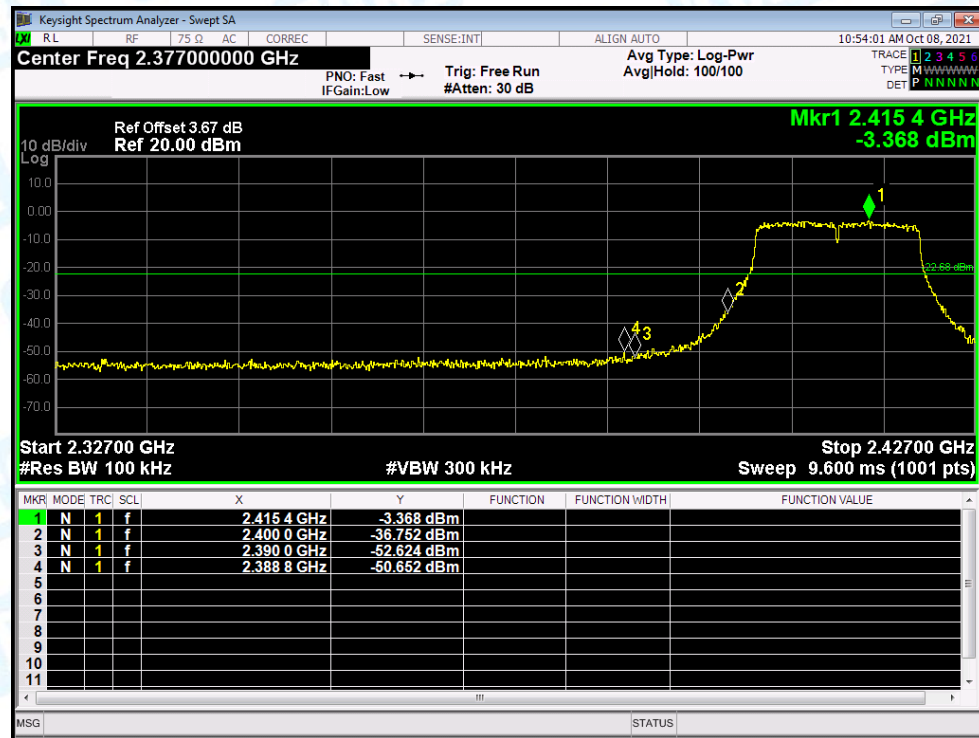




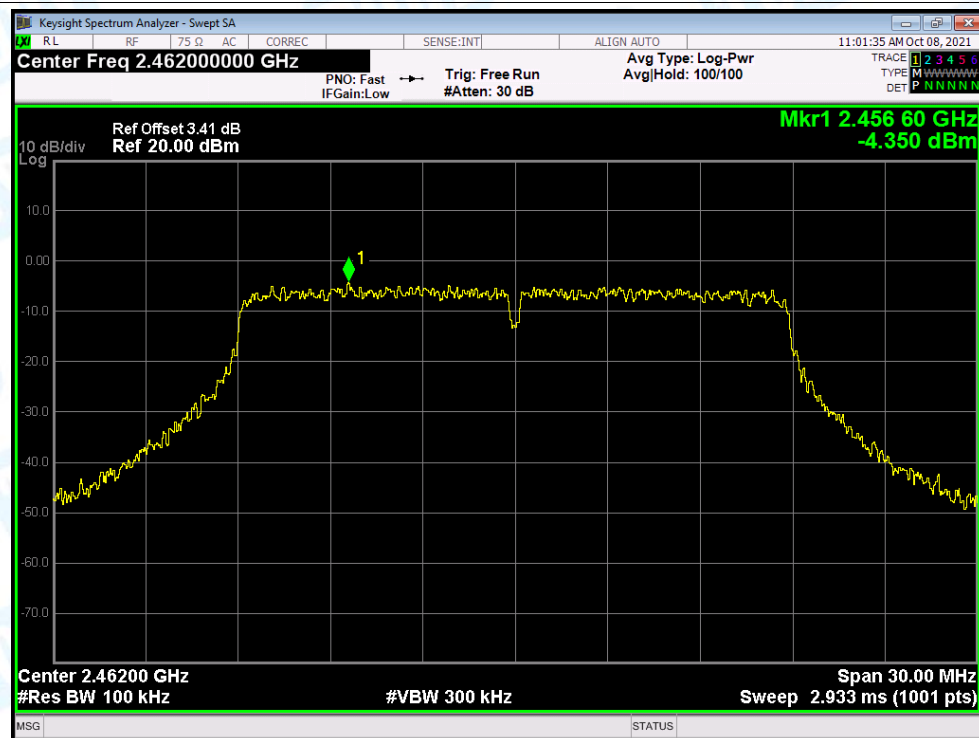
Band Edge NVNT n(HT20) 2412MHz Ant1 Ref



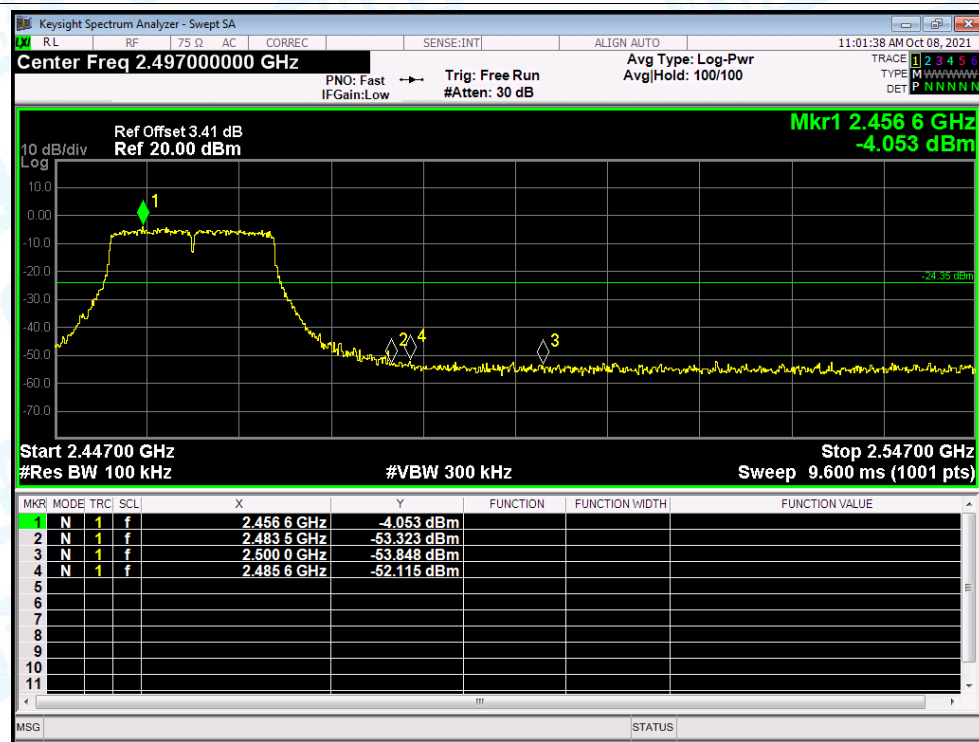
Band Edge NVNT n(HT20) 2412MHz Ant1 Emission

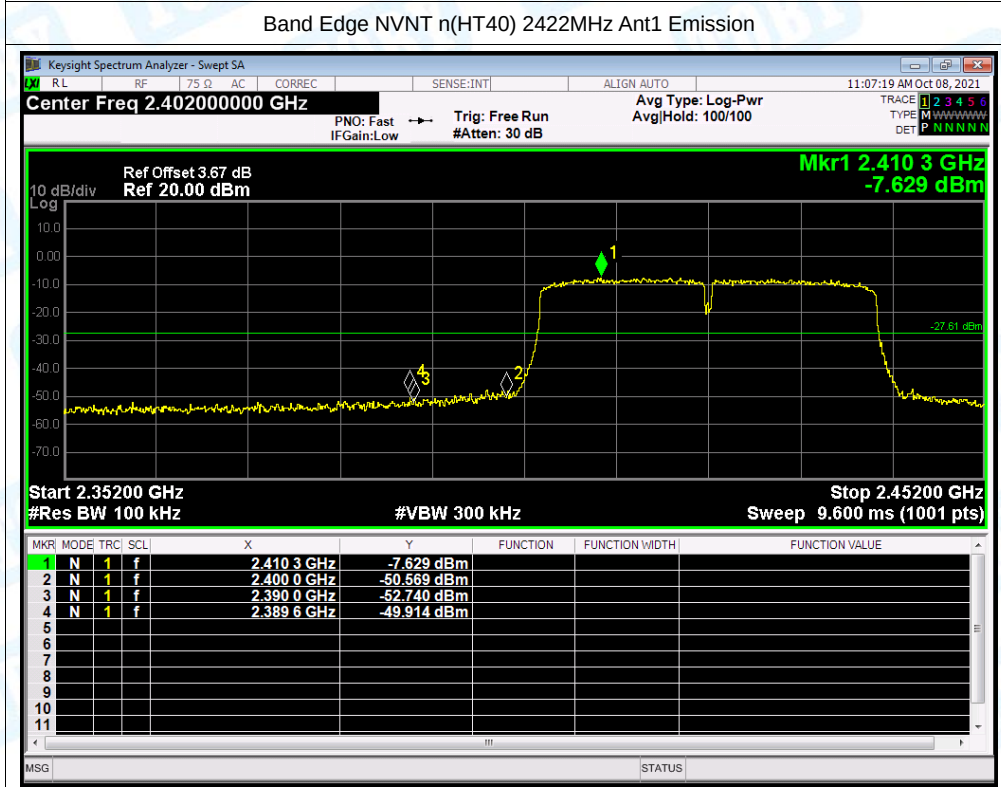
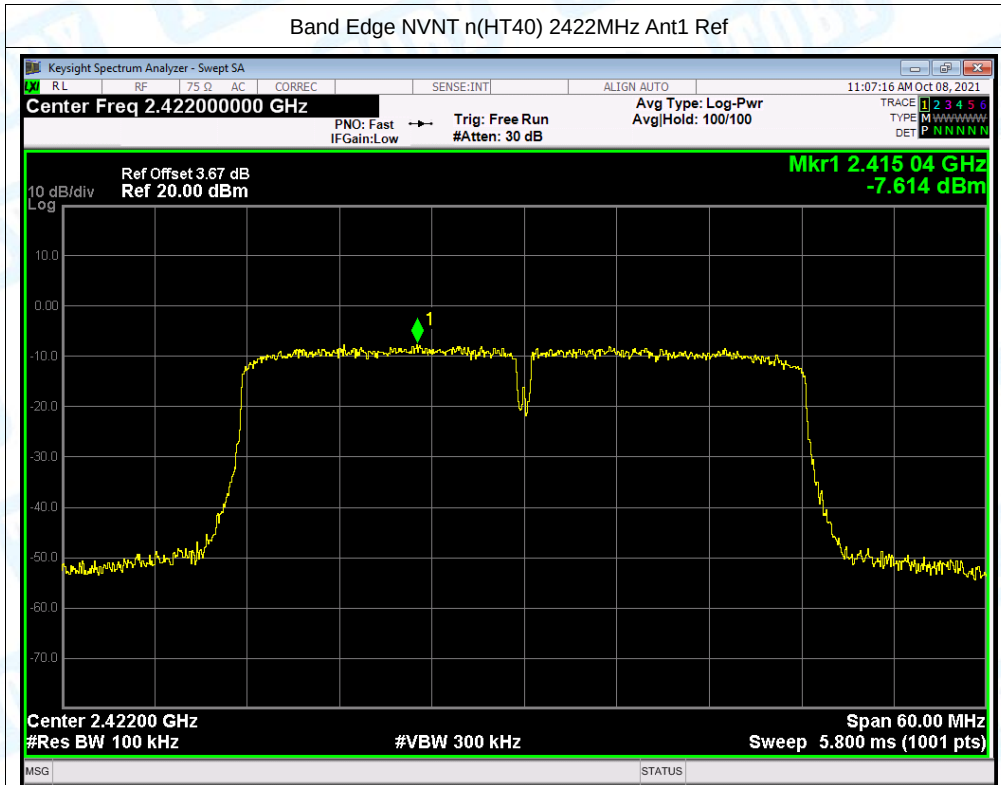


Band Edge NVNT n(HT20) 2462MHz Ant1 Ref

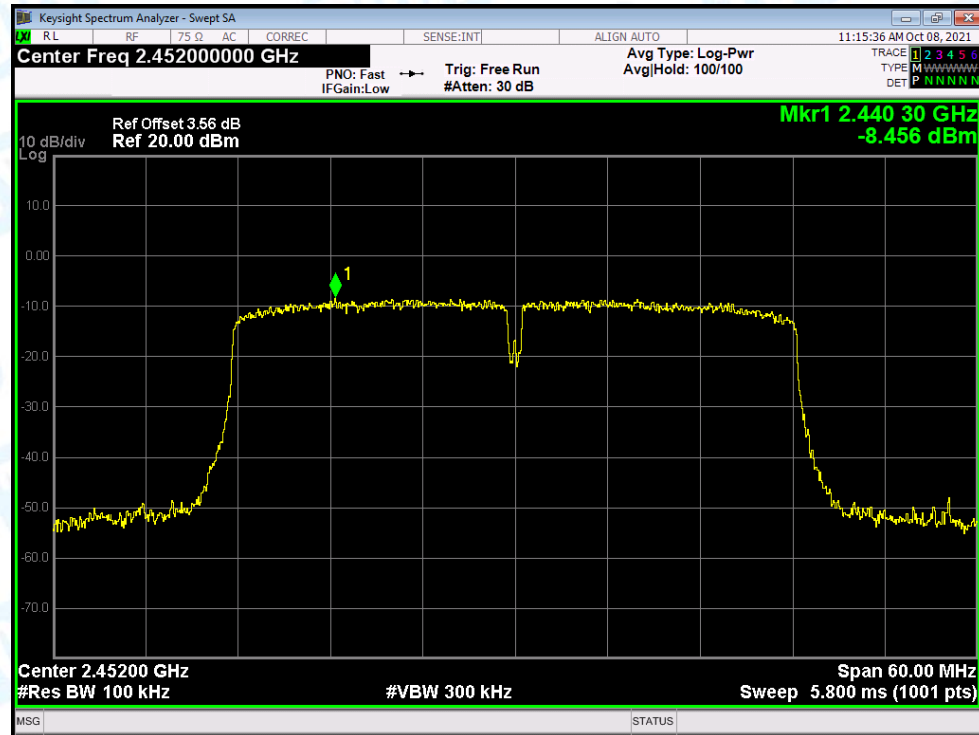


Band Edge NVNT n(HT20) 2462MHz Ant1 Emission

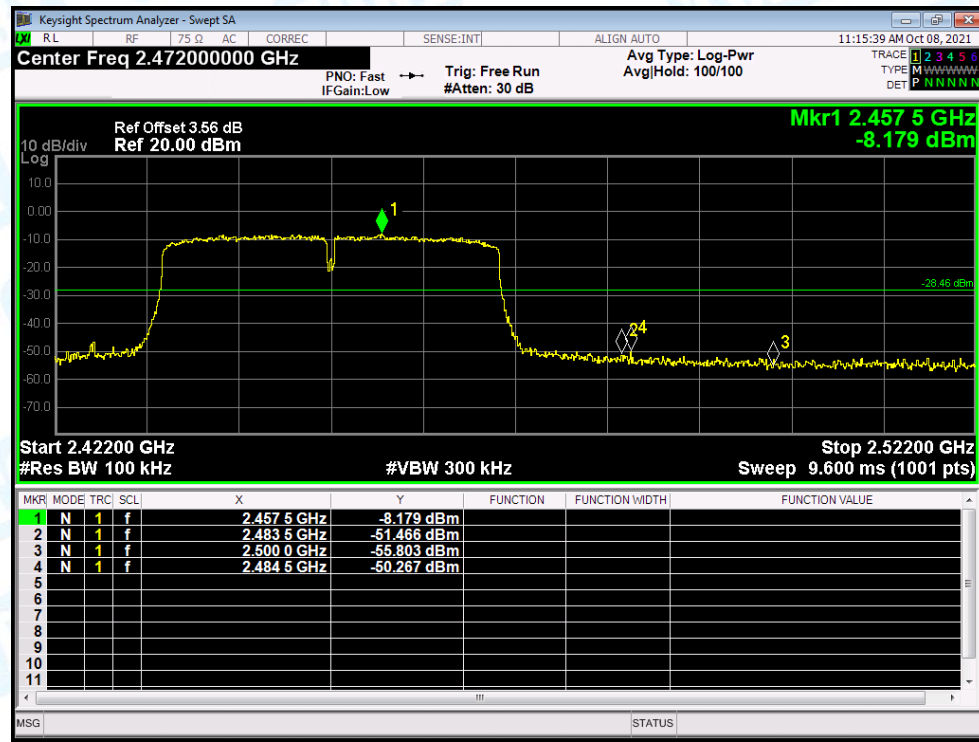




Band Edge NVNT n(HT40) 2452MHz Ant1 Ref



Band Edge NVNT n(HT40) 2452MHz Ant1 Emission

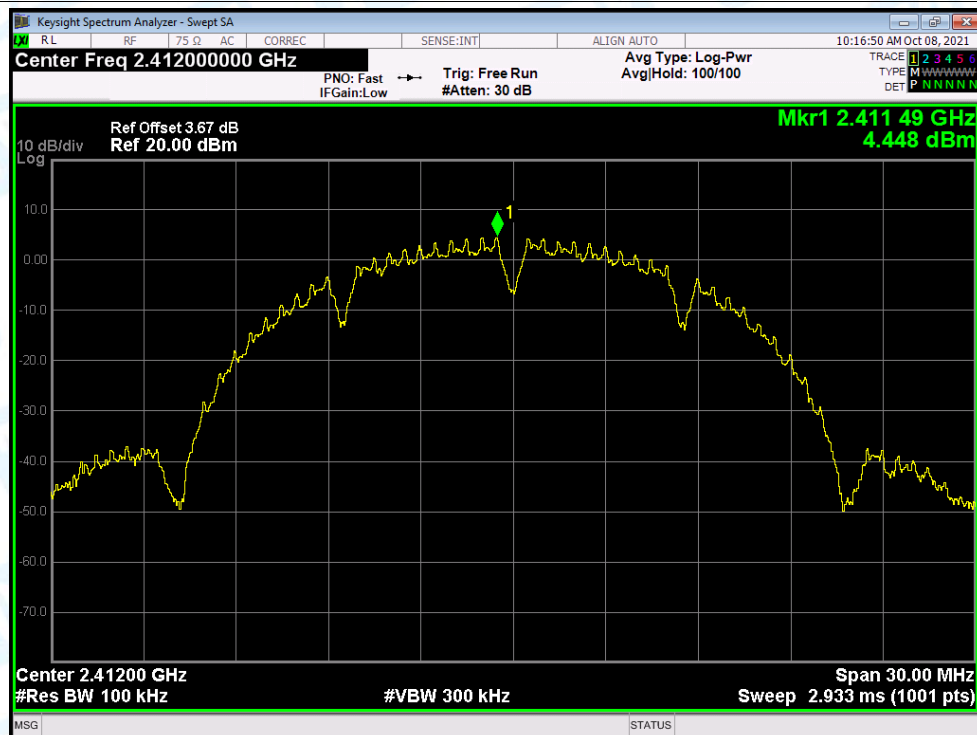


Conducted RF Spurious Emission

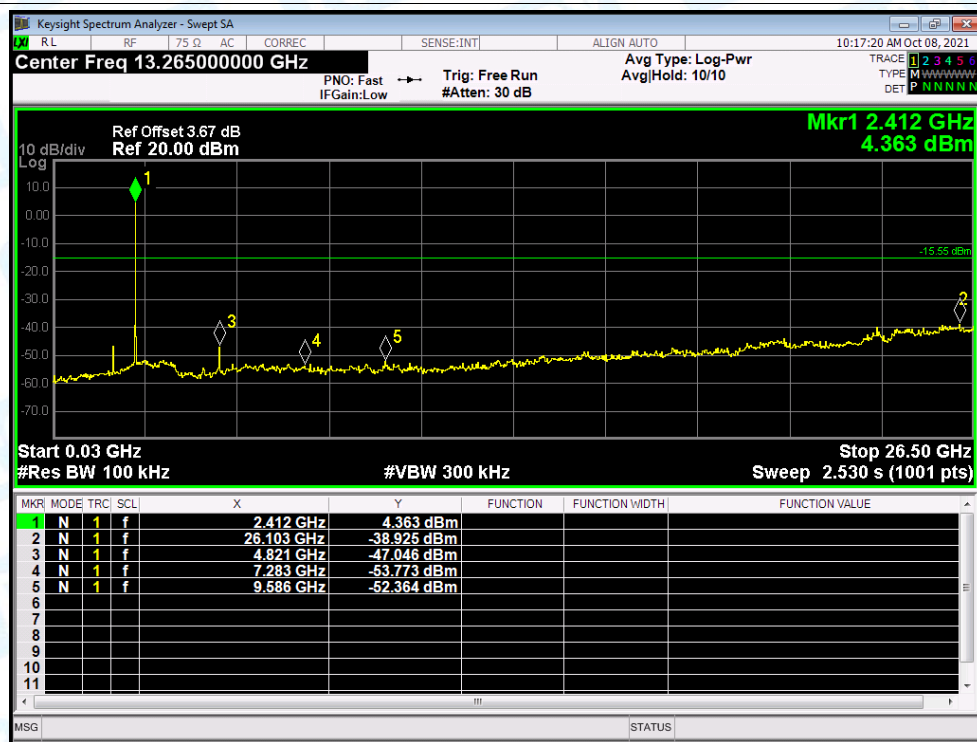
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-43.37	-20	Pass
NVNT	b	2437	Ant1	-42.74	-20	Pass
NVNT	b	2462	Ant1	-42.51	-20	Pass
NVNT	g	2412	Ant1	-33.38	-20	Pass
NVNT	g	2437	Ant1	-34.08	-20	Pass
NVNT	g	2462	Ant1	-34.41	-20	Pass
NVNT	n(HT20)	2412	Ant1	-35.67	-20	Pass
NVNT	n(HT20)	2437	Ant1	-35.07	-20	Pass
NVNT	n(HT20)	2462	Ant1	-35.41	-20	Pass
NVNT	n(HT40)	2422	Ant1	-31.05	-20	Pass
NVNT	n(HT40)	2437	Ant1	-31.39	-20	Pass
NVNT	n(HT40)	2452	Ant1	-30.7	-20	Pass

Test Graphs

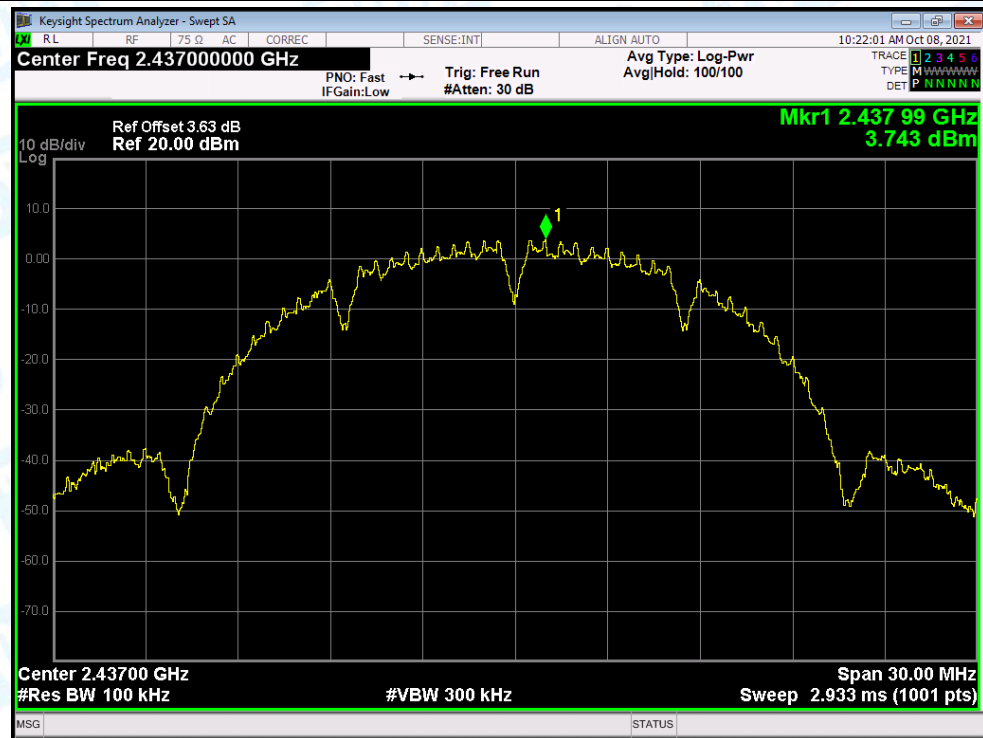
Tx. Spurious NVNT b 2412MHz Ant1 Ref



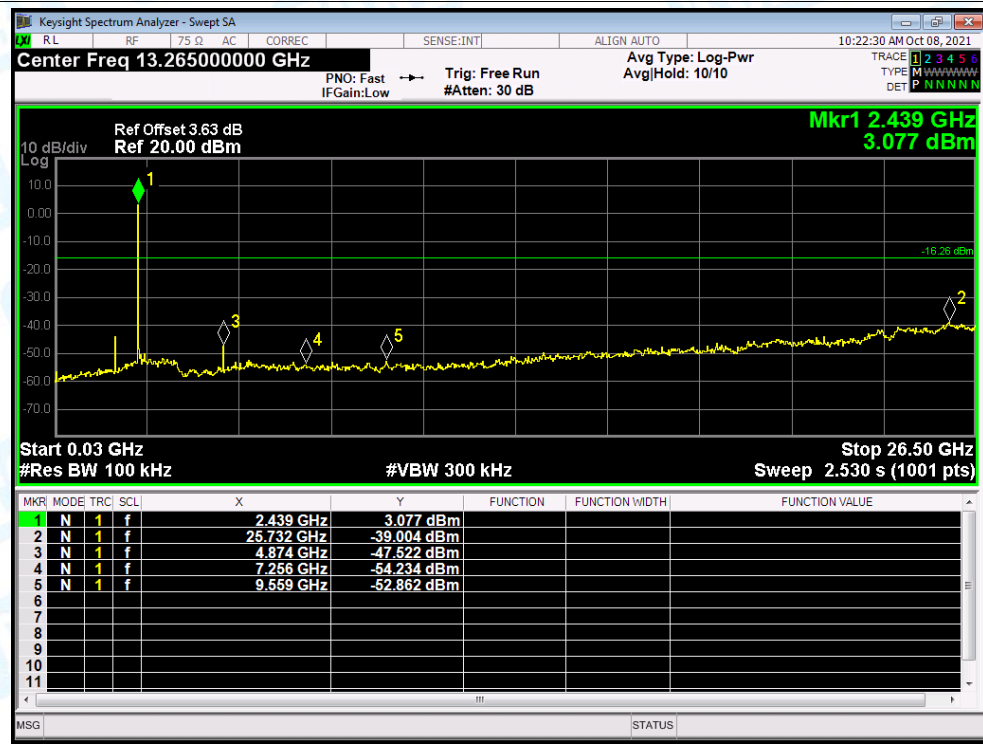
Tx. Spurious NVNT b 2412MHz Ant1 Emission



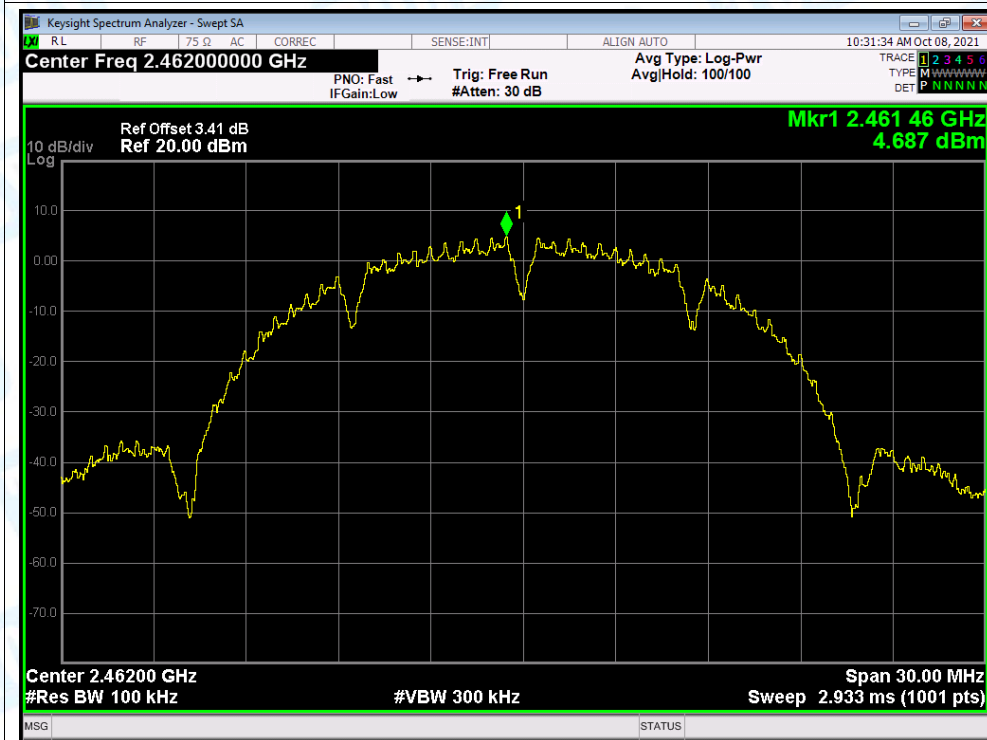
Tx. Spurious NVNT b 2437MHz Ant1 Ref



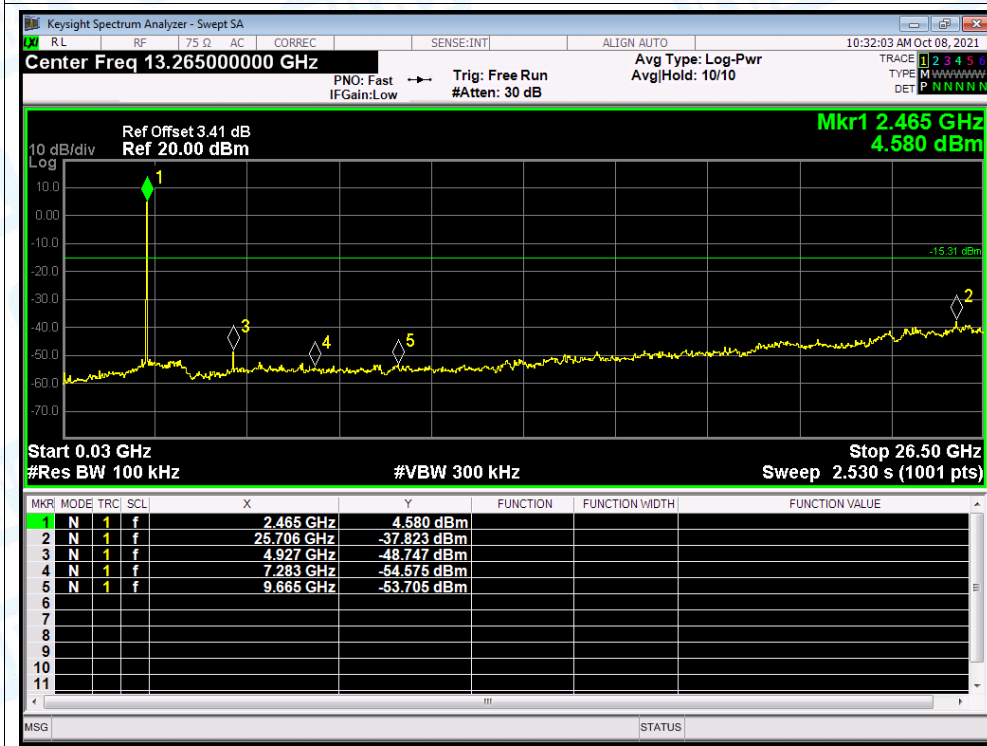
Tx. Spurious NVNT b 2437MHz Ant1 Emission



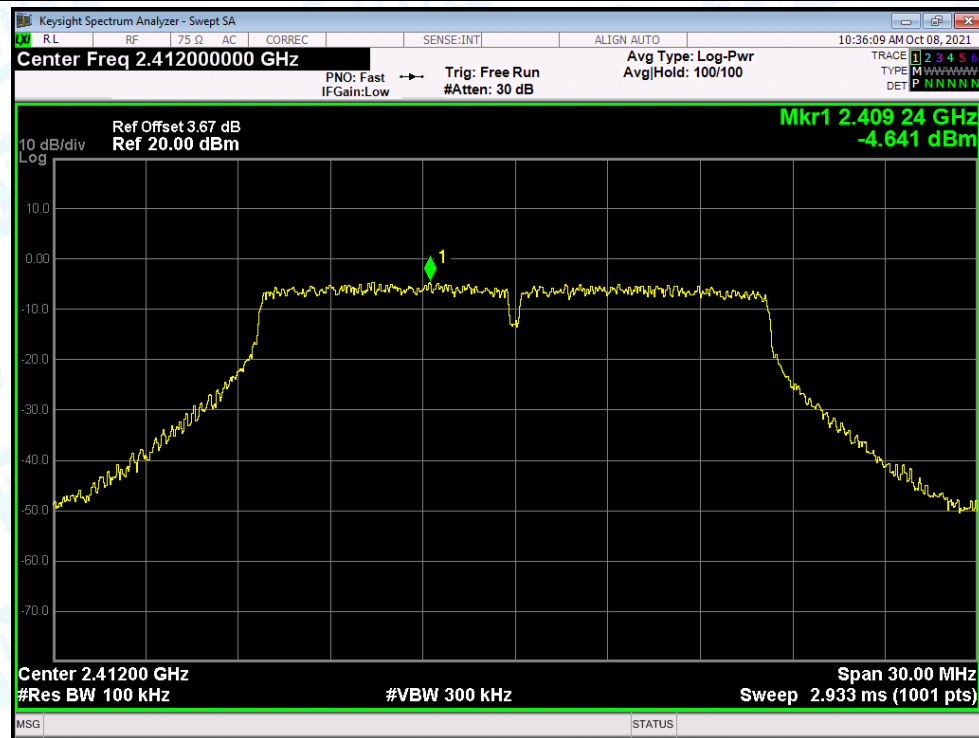
Tx. Spurious NVNT b 2462MHz Ant1 Ref



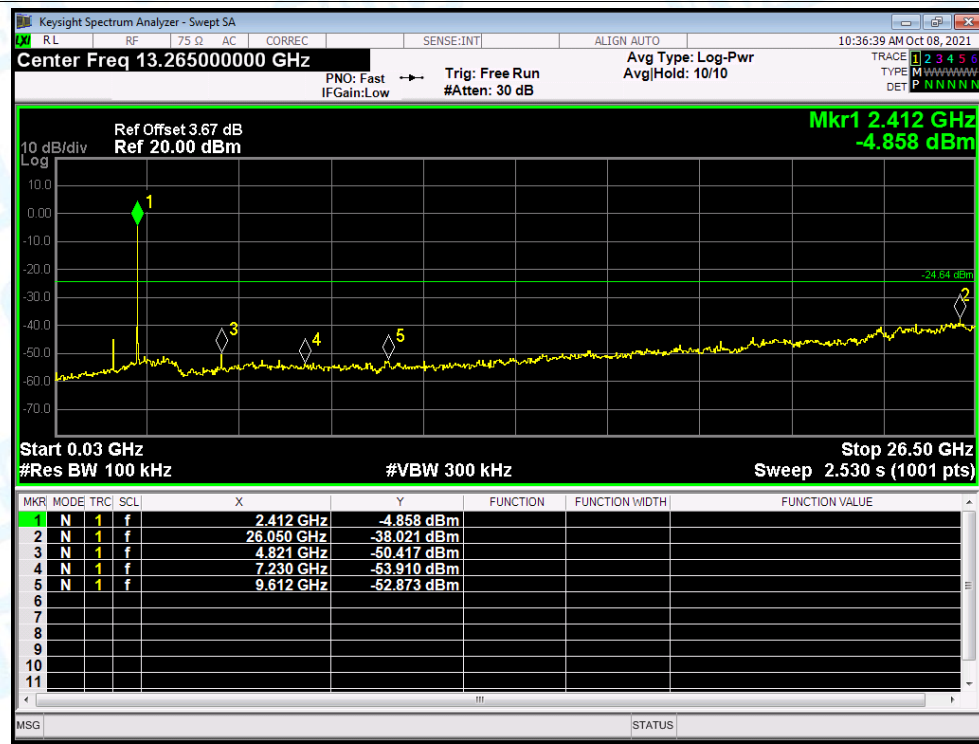
Tx. Spurious NVNT b 2462MHz Ant1 Emission



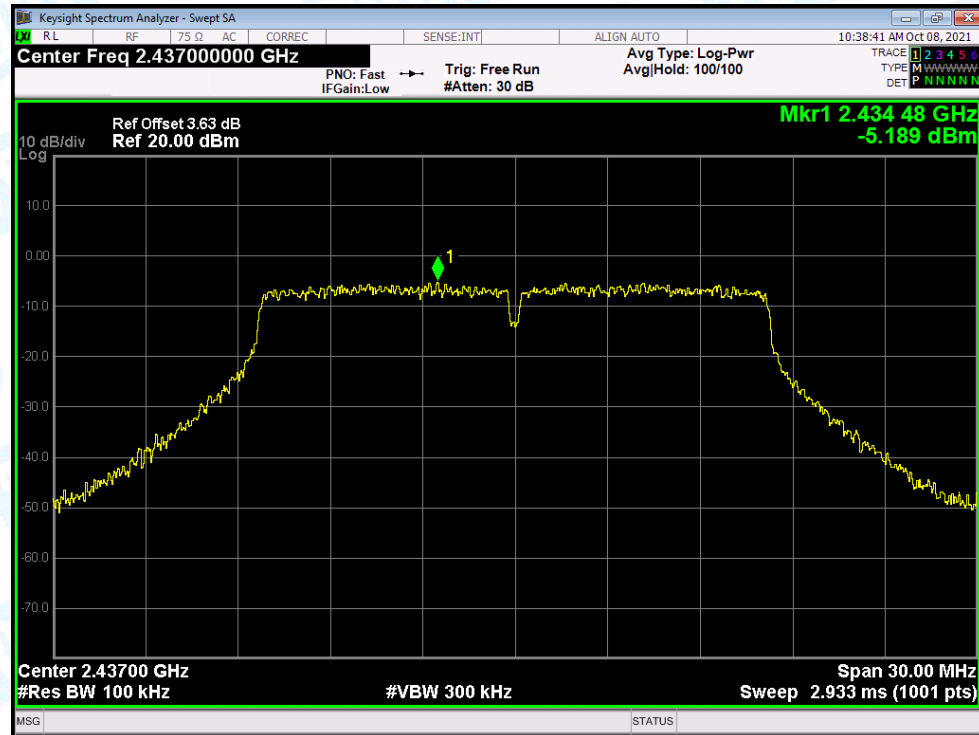
Tx. Spurious NVNT g 2412MHz Ant1 Ref



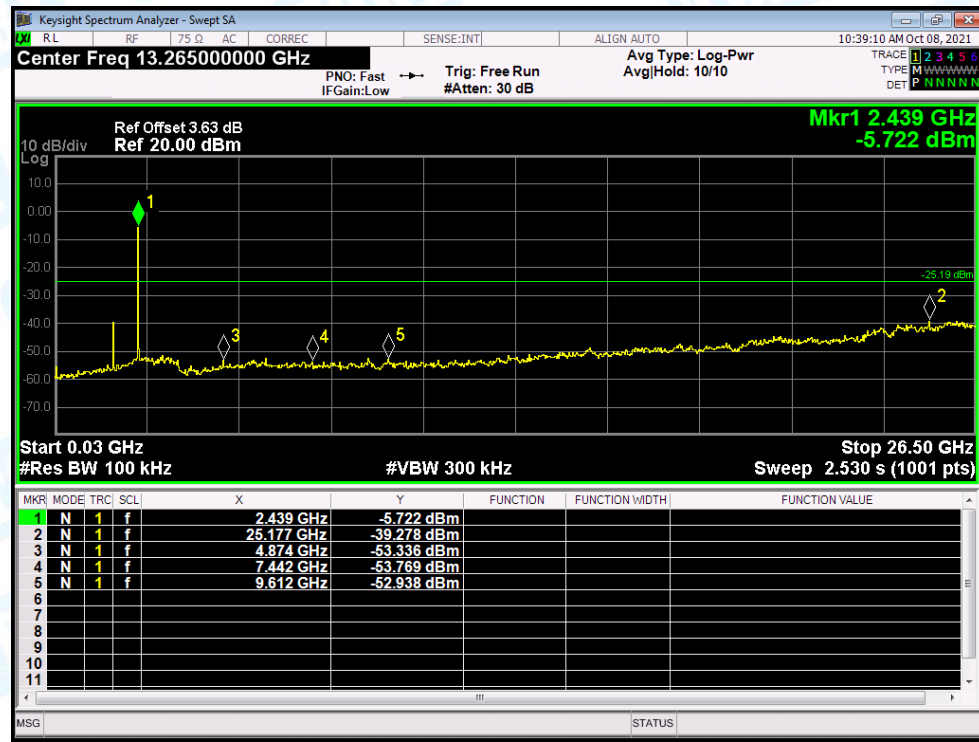
Tx. Spurious NVNT g 2412MHz Ant1 Emission



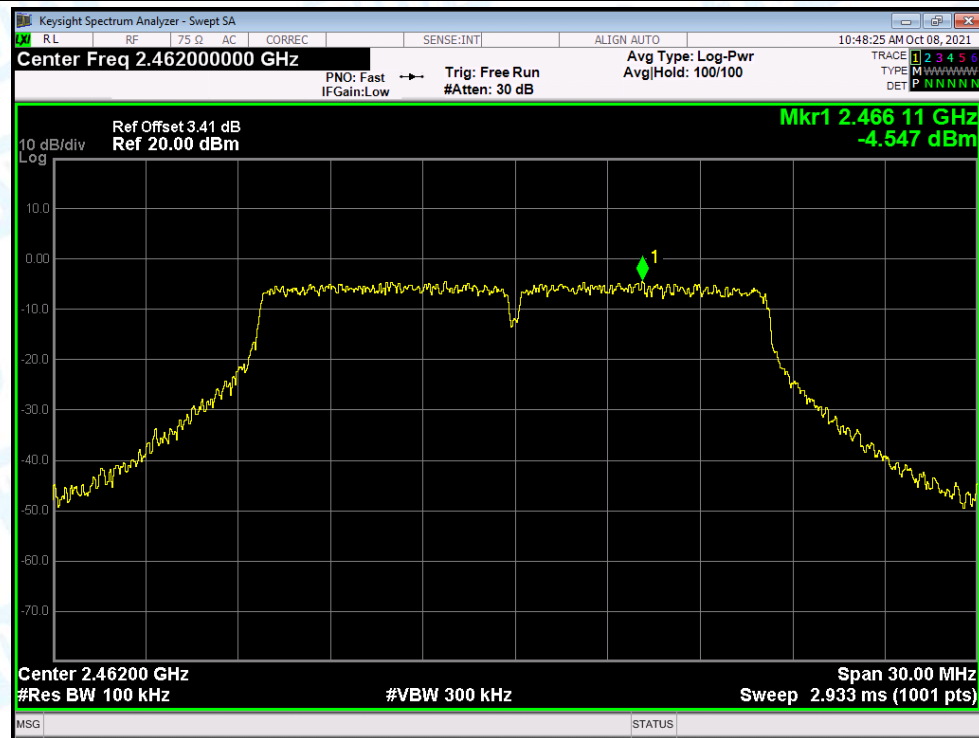
Tx. Spurious NVNT g 2437MHz Ant1 Ref



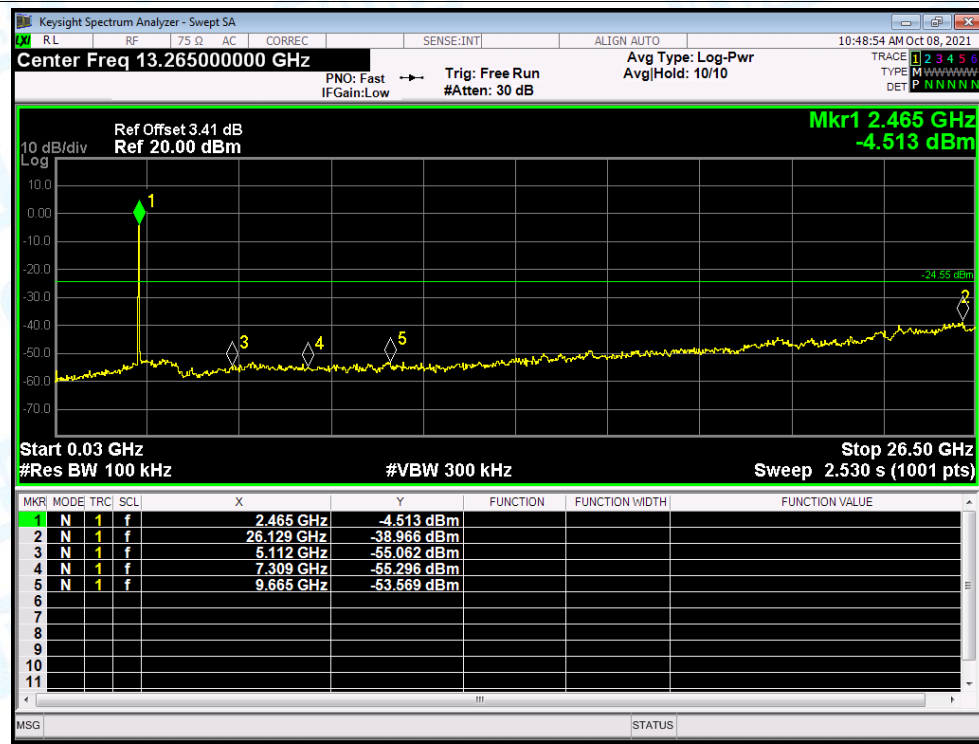
Tx. Spurious NVNT g 2437MHz Ant1 Emission



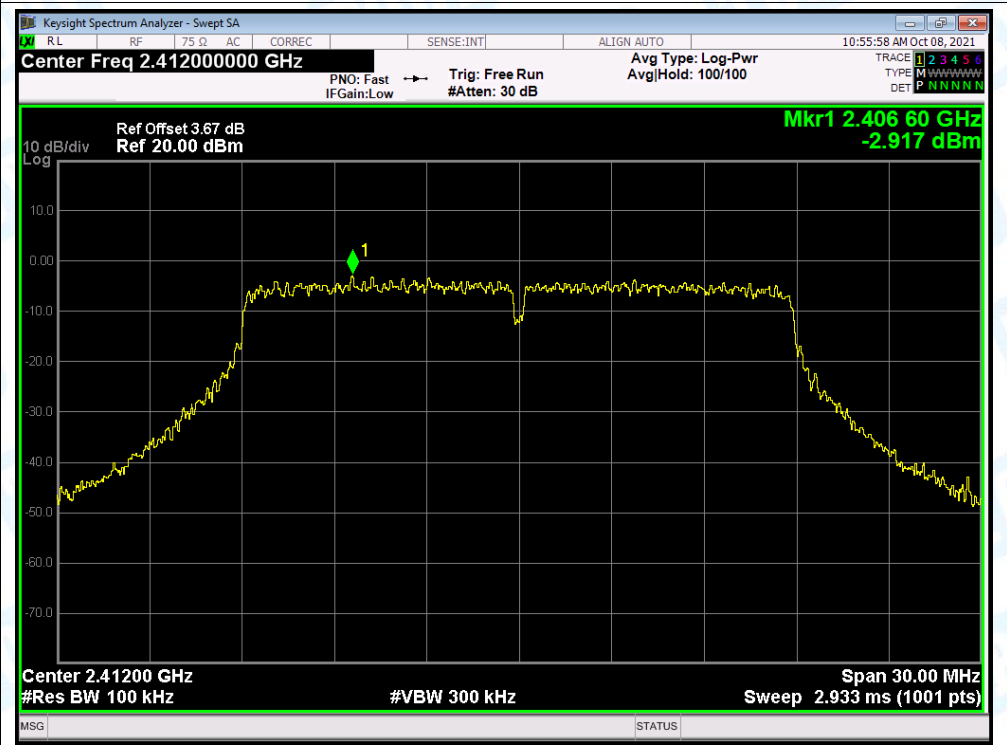
Tx. Spurious NVNT g 2462MHz Ant1 Ref



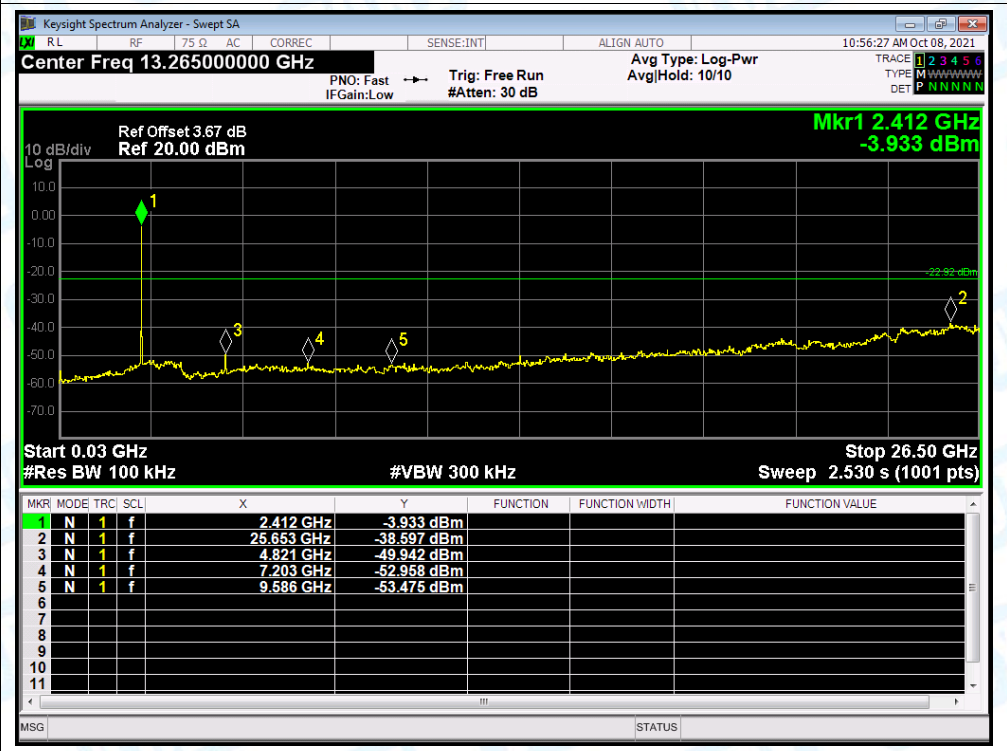
Tx. Spurious NVNT g 2462MHz Ant1 Emission



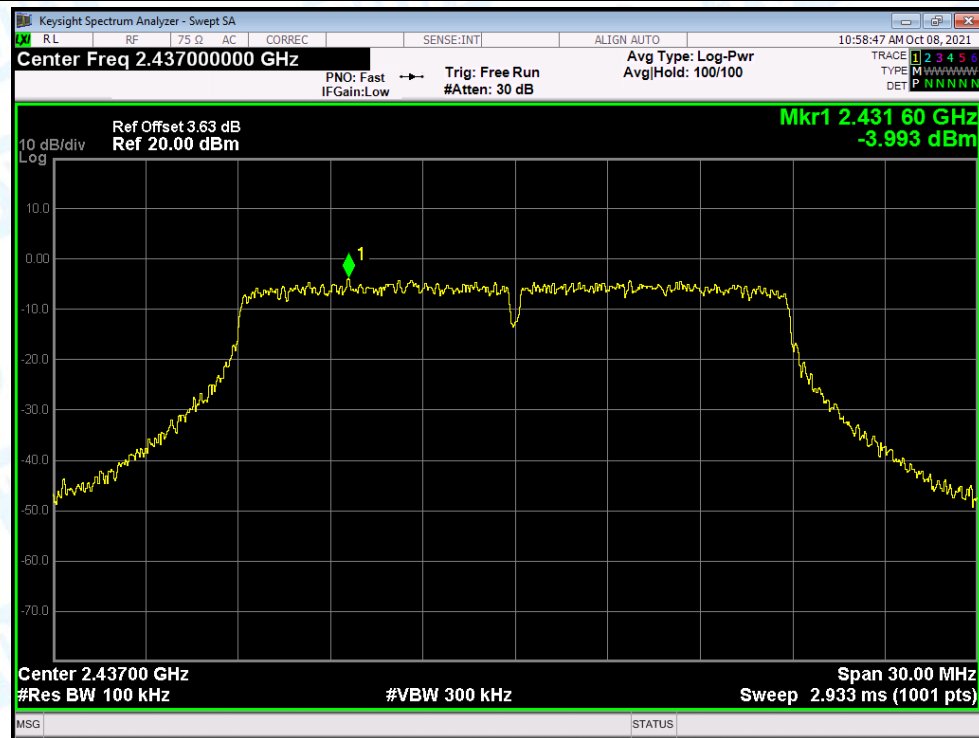
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Ref



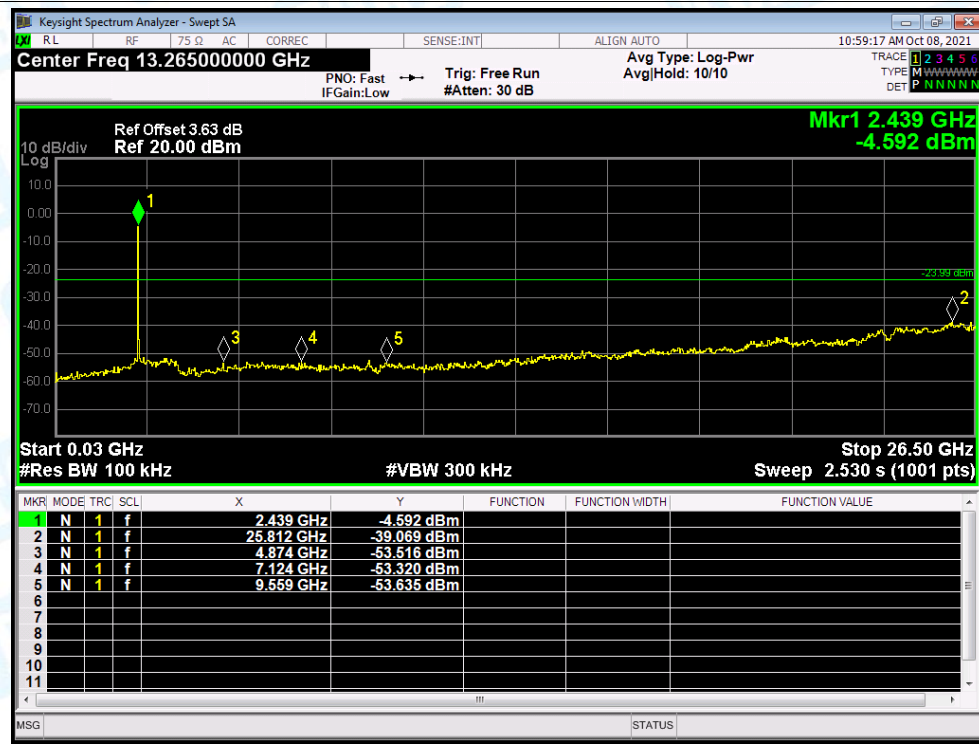
Tx. Spurious NVNT n(HT20) 2412MHz Ant1 Emission



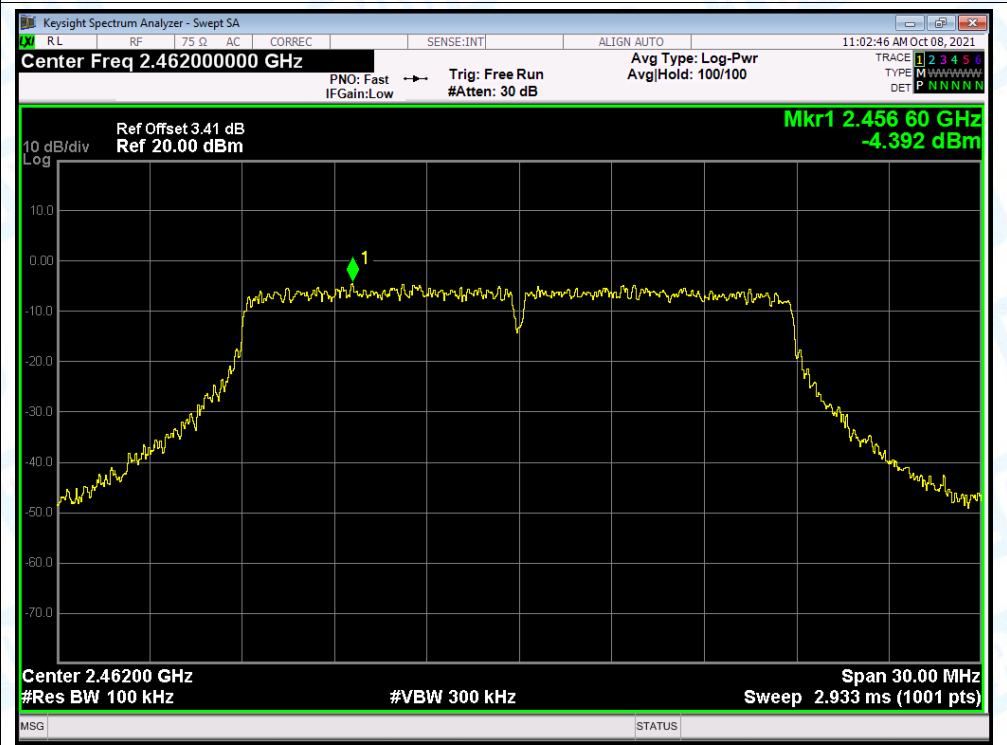
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Ref



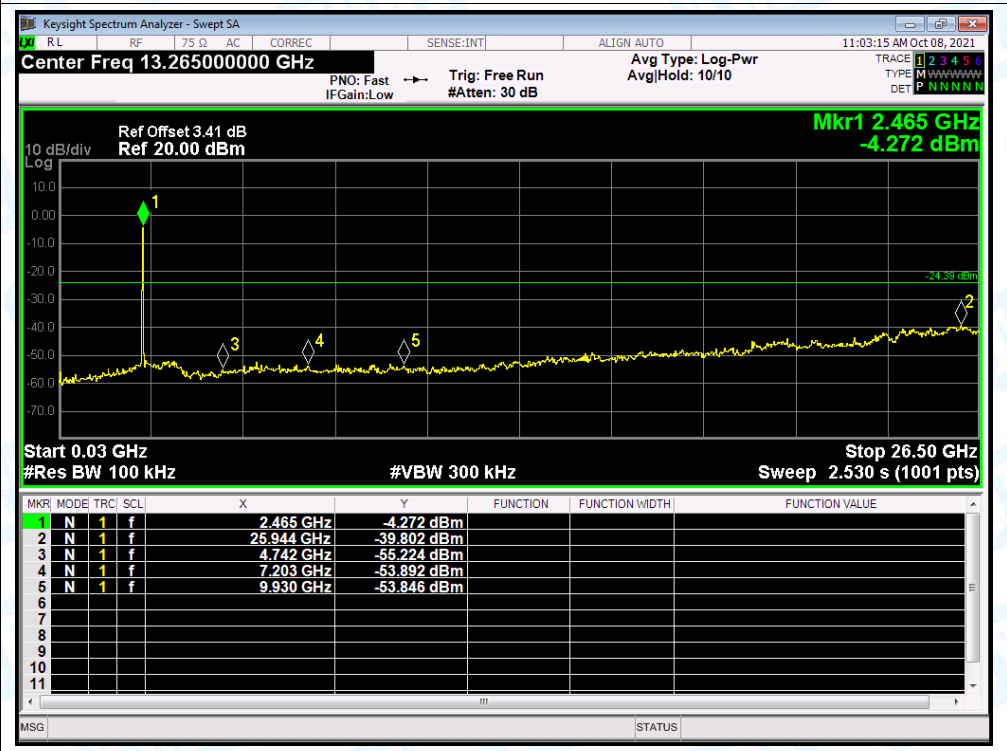
Tx. Spurious NVNT n(HT20) 2437MHz Ant1 Emission



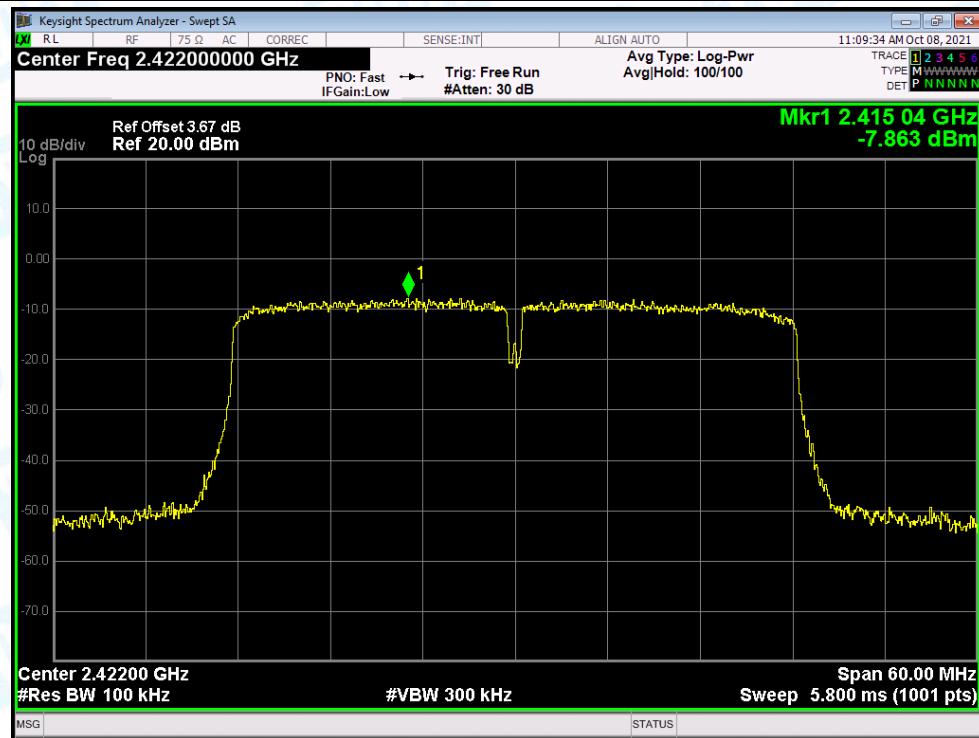
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Ref



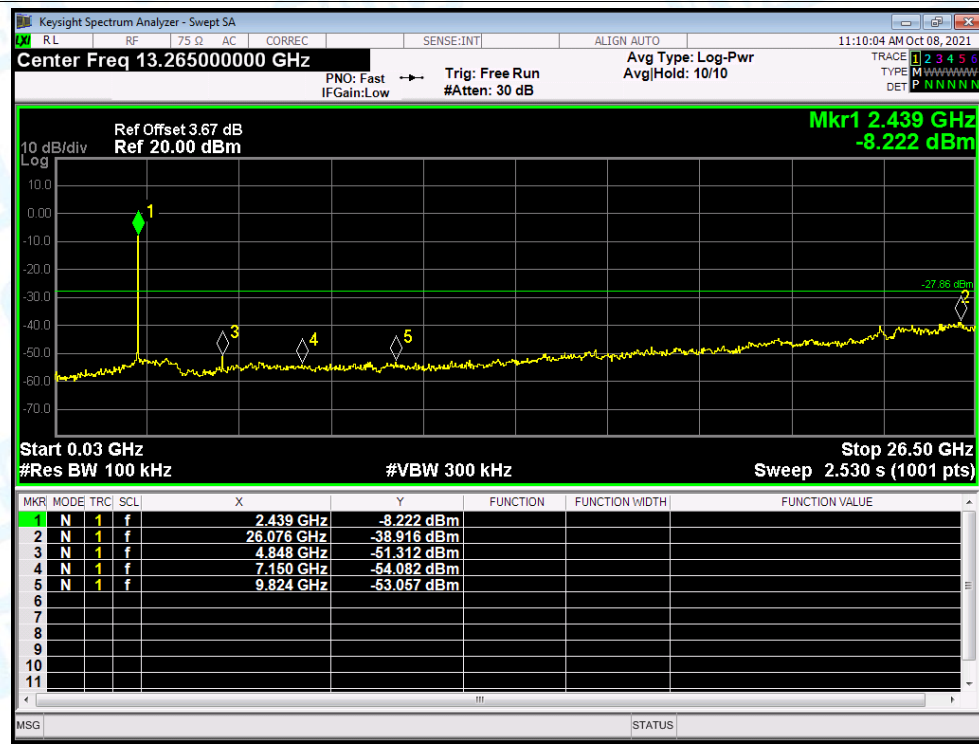
Tx. Spurious NVNT n(HT20) 2462MHz Ant1 Emission



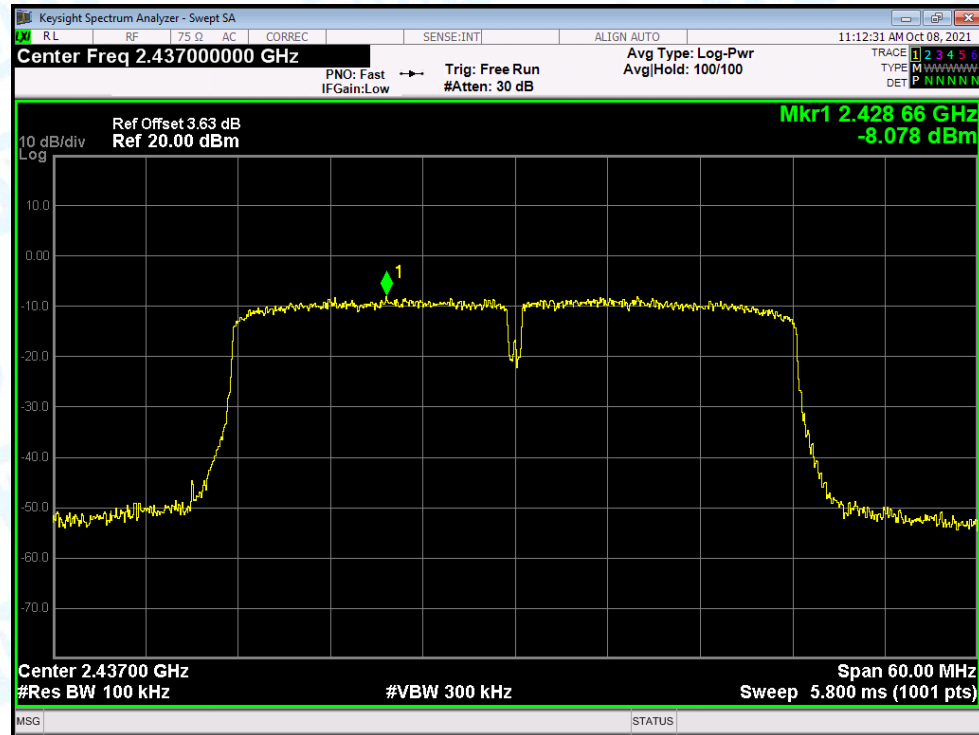
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Ref



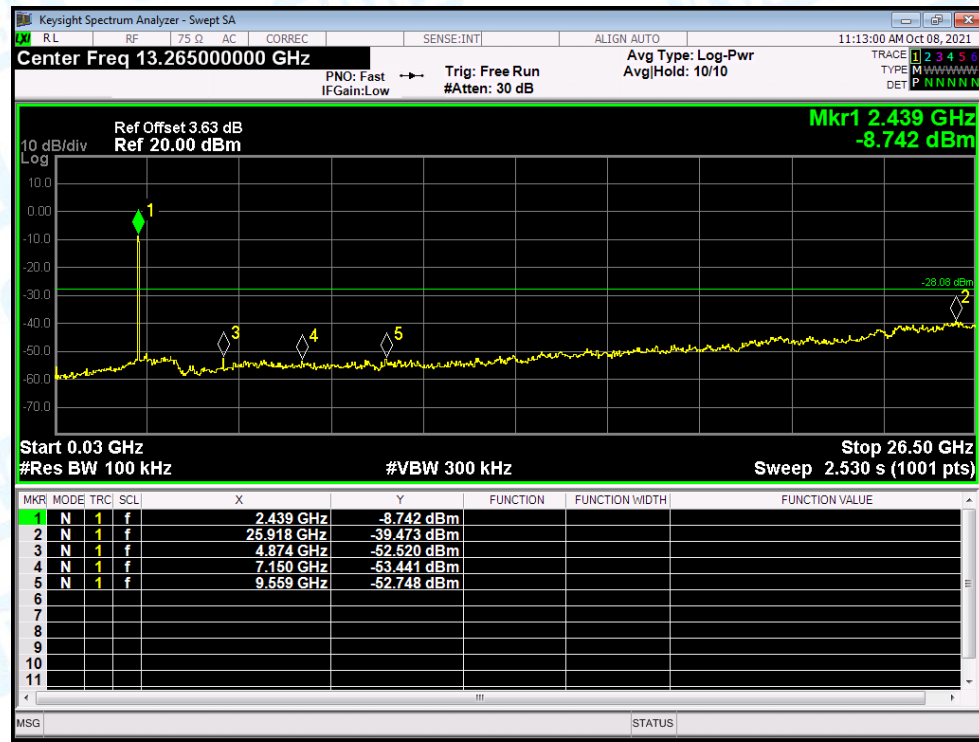
Tx. Spurious NVNT n(HT40) 2422MHz Ant1 Emission



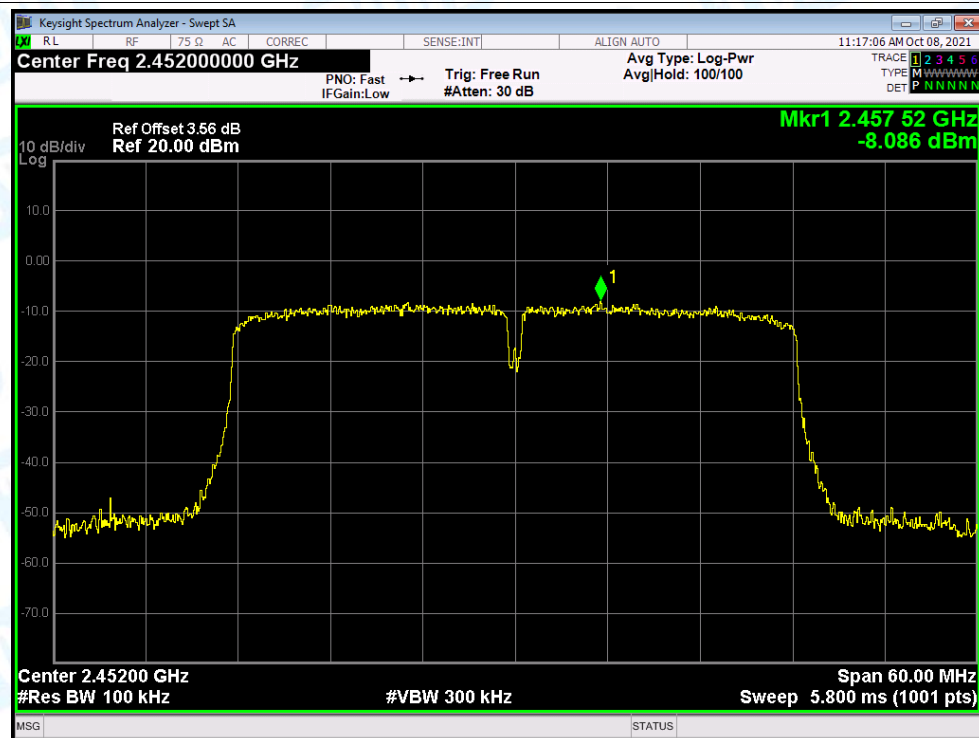
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Ref



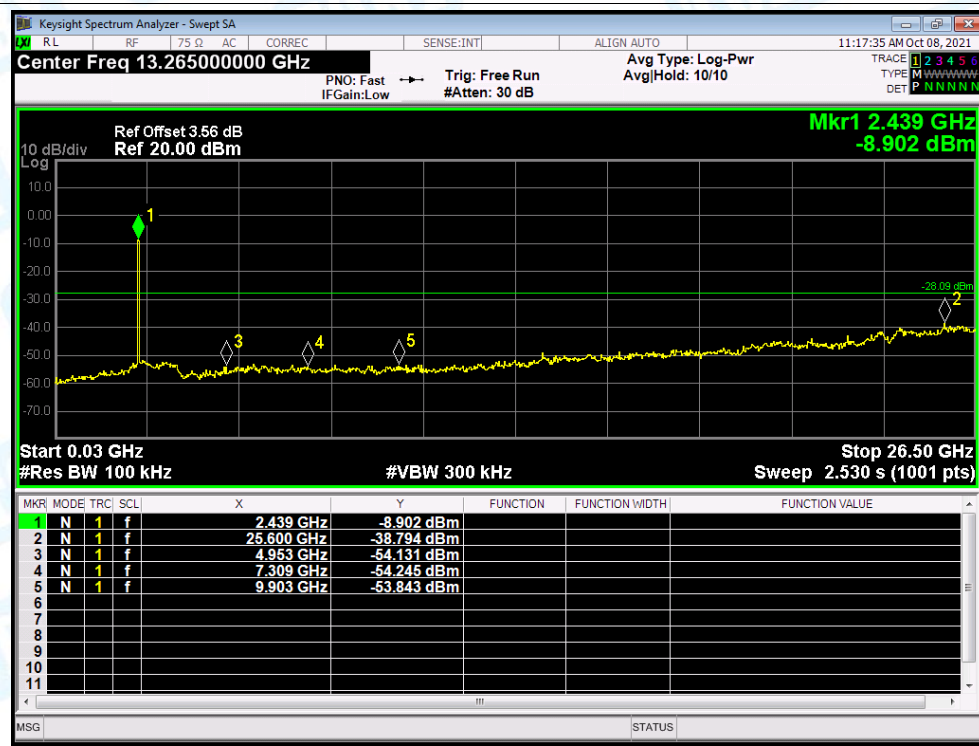
Tx. Spurious NVNT n(HT40) 2437MHz Ant1 Emission



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



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



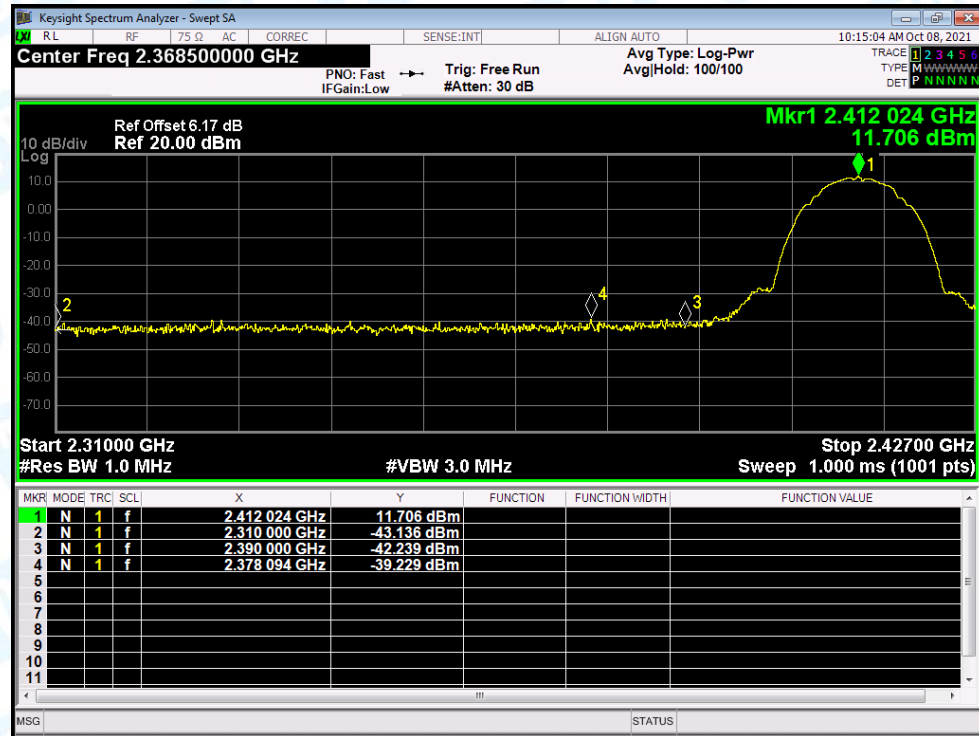
Restrict Band

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	-43.14	2.5	54.61	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-53.07	2.5	44.68	Average	54	Pass
NVNT	b	2412	Ant1	2378.094	-39.23	2.5	58.52	Peak	74	Pass
NVNT	b	2412	Ant1	2389.911	-51.38	2.5	46.37	Average	54	Pass
NVNT	b	2412	Ant1	2390	-42.24	2.5	55.51	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-51.35	2.5	46.40	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-41.97	2.5	55.78	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-51.32	2.5	46.43	Average	54	Pass
NVNT	b	2462	Ant1	2485.955	-39.25	2.5	58.50	Peak	74	Pass
NVNT	b	2462	Ant1	2483.517	-51.32	2.5	46.43	Average	54	Pass
NVNT	b	2462	Ant1	2500	-42	2.5	55.75	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-52.49	2.5	45.26	Average	54	Pass
NVNT	g	2412	Ant1	2310	-42.68	2.5	55.07	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-53.50	2.5	44.25	Average	54	Pass
NVNT	g	2412	Ant1	2387.688	-39.09	2.5	58.66	Peak	74	Pass
NVNT	g	2412	Ant1	2389.911	-51.41	2.5	46.34	Average	54	Pass
NVNT	g	2412	Ant1	2390	-41.45	2.5	56.30	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-51.39	2.5	46.36	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-40.7	2.5	57.05	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-51.22	2.5	46.53	Average	54	Pass
NVNT	g	2462	Ant1	2485.372	-38.31	2.5	59.44	Peak	74	Pass
NVNT	g	2462	Ant1	2483.517	-51.29	2.5	46.46	Average	54	Pass
NVNT	g	2462	Ant1	2500	-41.71	2.5	56.04	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-52.74	2.5	45.01	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2310	-43.20	2.5	54.55	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2310	-53.54	2.5	44.21	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2389.794	-38.29	2.5	59.46	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2389.911	-50.80	2.5	46.95	Average	54	Pass
NVNT	n(HT20)	2412	Ant1	2390	-37.51	2.5	60.24	Peak	74	Pass
NVNT	n(HT20)	2412	Ant1	2390	-50.73	2.5	47.02	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-39.89	2.5	57.86	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.5	-51.02	2.5	46.73	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2484.153	-35.39	2.5	62.36	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2483.517	-51.02	2.5	46.73	Average	54	Pass
NVNT	n(HT20)	2462	Ant1	2500	-44.55	2.5	53.20	Peak	74	Pass
NVNT	n(HT20)	2462	Ant1	2500	-52.76	2.5	44.99	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2310	-43.40	2.5	54.35	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2310	-53.59	2.5	44.16	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2386.822	-37.82	2.5	59.93	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2389.946	-50.81	2.5	46.94	Average	54	Pass
NVNT	n(HT40)	2422	Ant1	2390	-40.34	2.5	57.41	Peak	74	Pass
NVNT	n(HT40)	2422	Ant1	2390	-50.81	2.5	46.94	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2483.5	-42.40	2.5	55.35	Peak	74	Pass

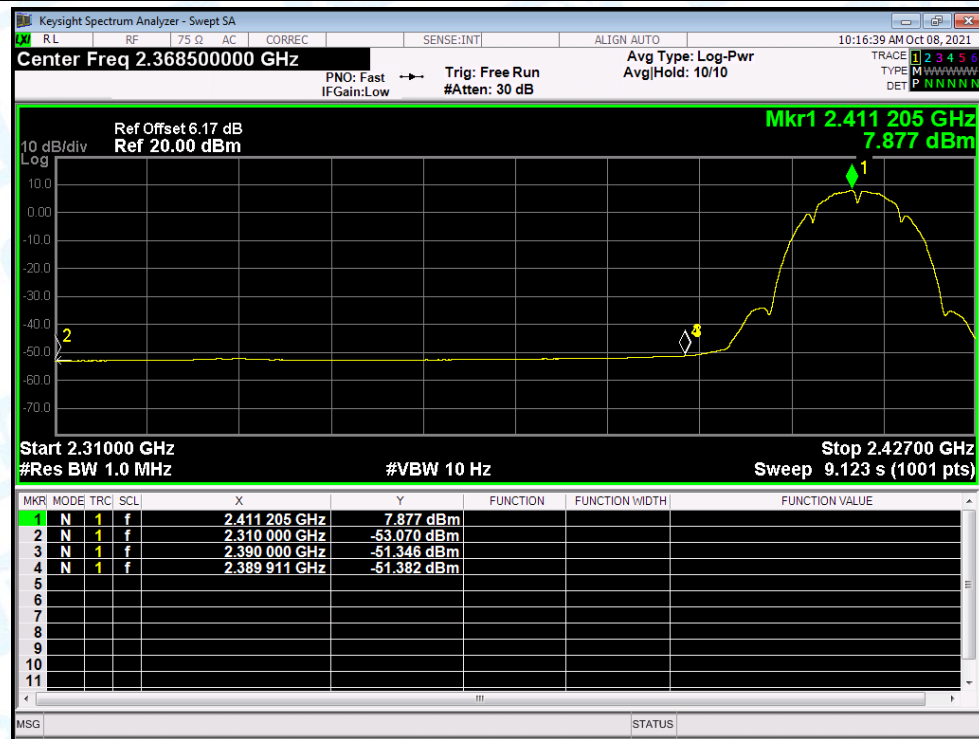
NVNT	n(HT40)	2452	Ant1	2483.5	-51.15	2.5	46.60	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2484.868	-38.02	2.5	59.73	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2483.62	-51.15	2.5	46.60	Average	54	Pass
NVNT	n(HT40)	2452	Ant1	2500	-41.35	2.5	56.40	Peak	74	Pass
NVNT	n(HT40)	2452	Ant1	2500	-52.50	2.5	45.25	Average	54	Pass

Test Graphs

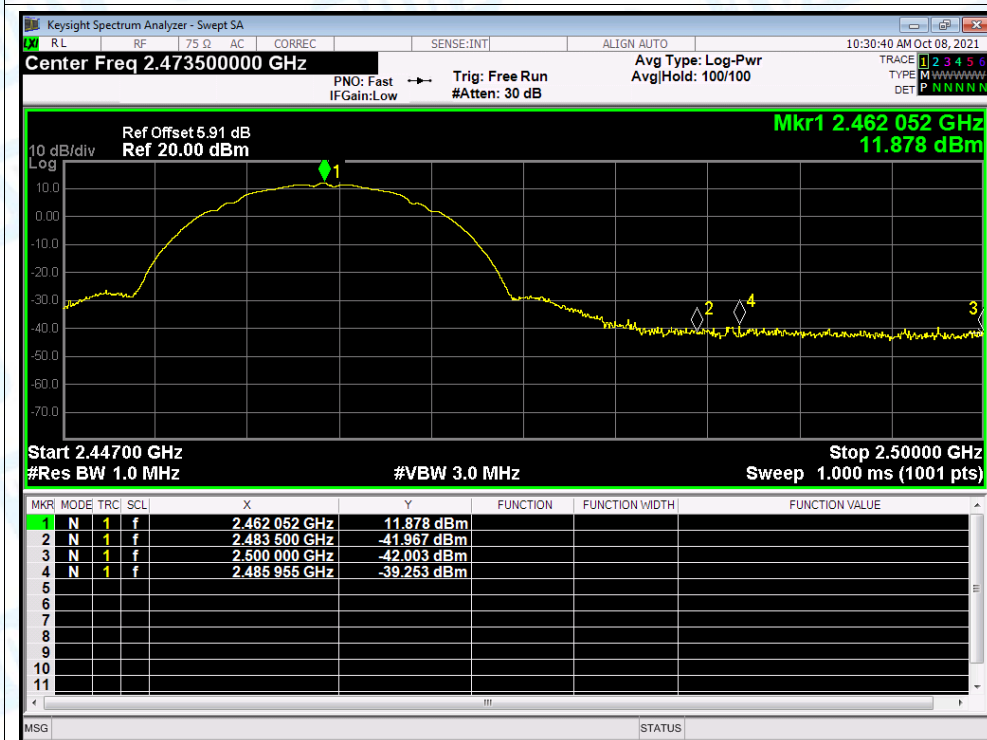
Restrict Band NVNT b 2412MHz Ant1 Peak



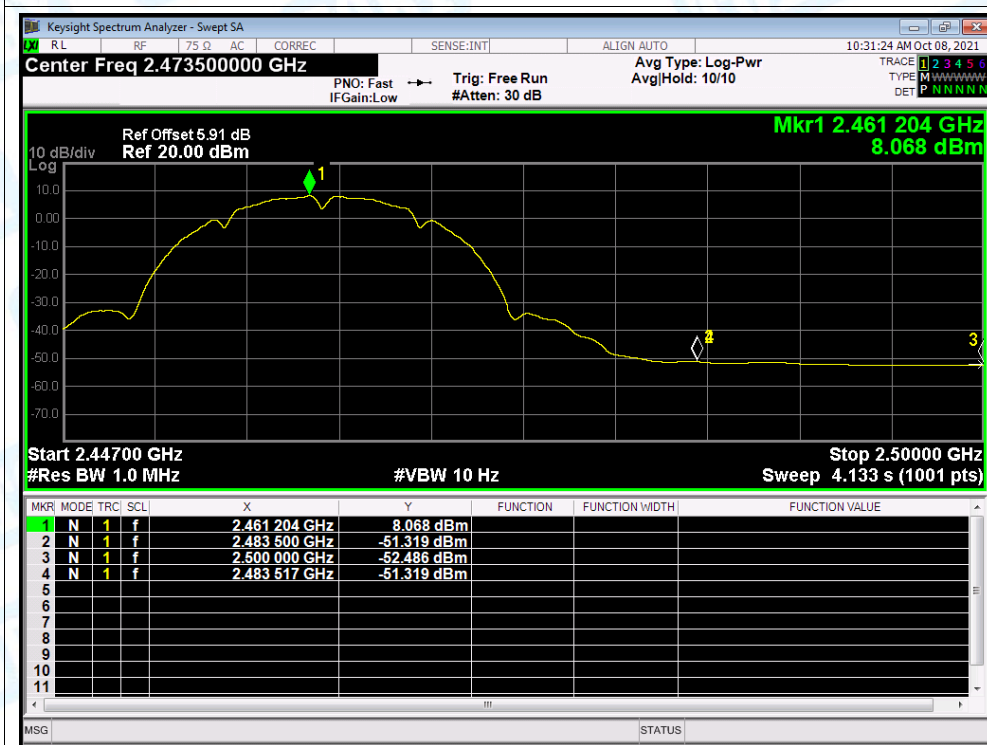
Restrict Band NVNT b 2412MHz Ant1 Average



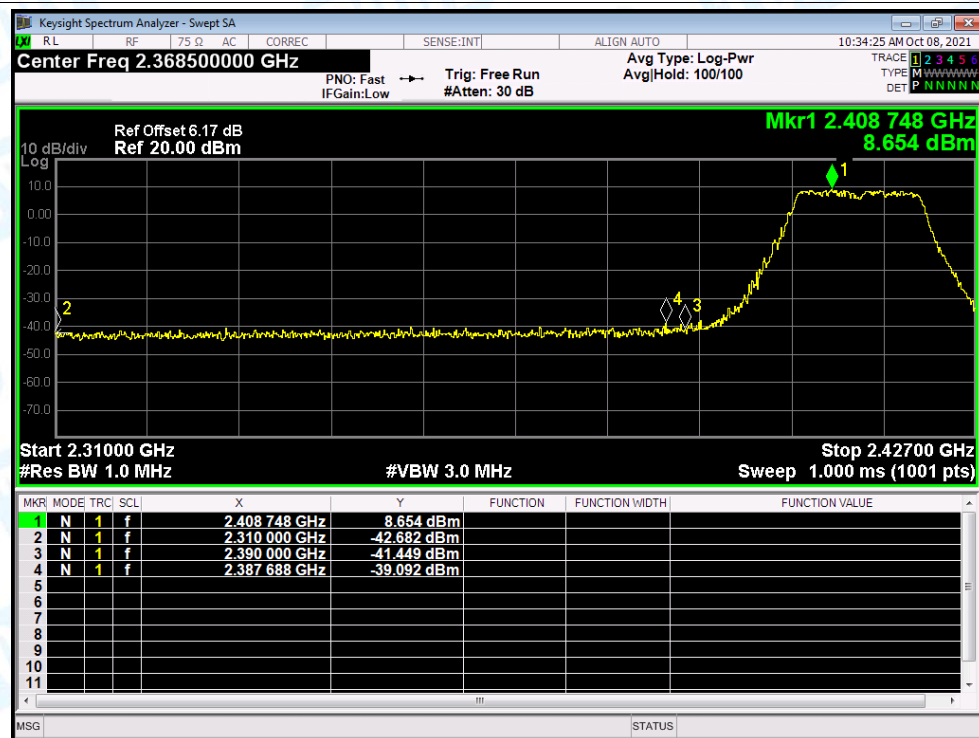
Restrict Band NVNT b 2462MHz Ant1 Peak



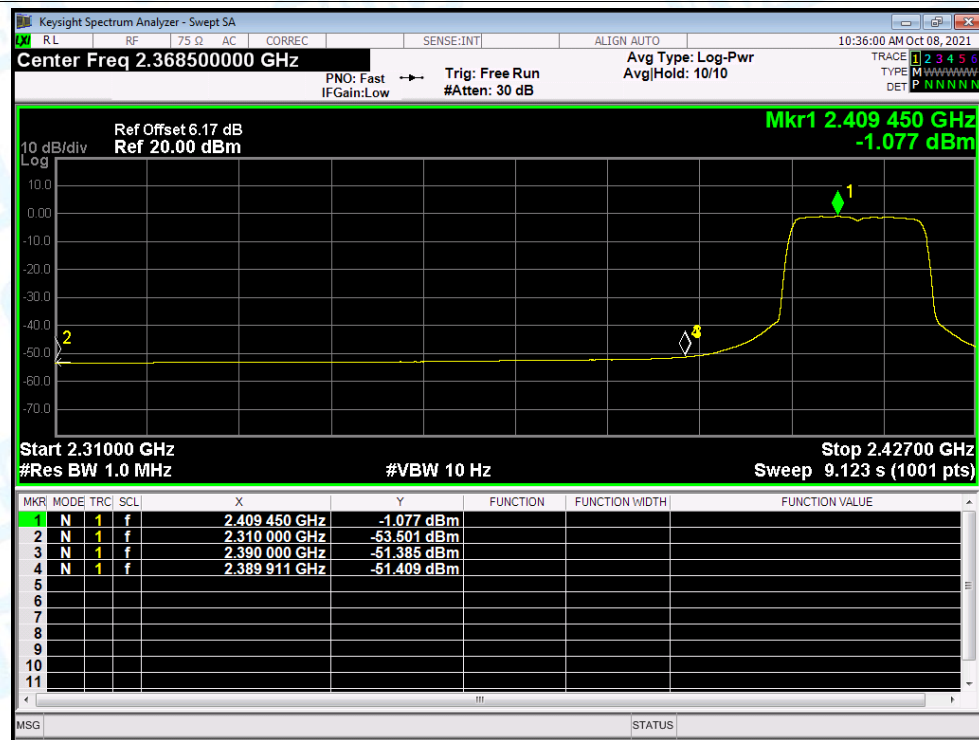
Restrict Band NVNT b 2462MHz Ant1 Average



Restrict Band NVNT g 2412MHz Ant1 Peak



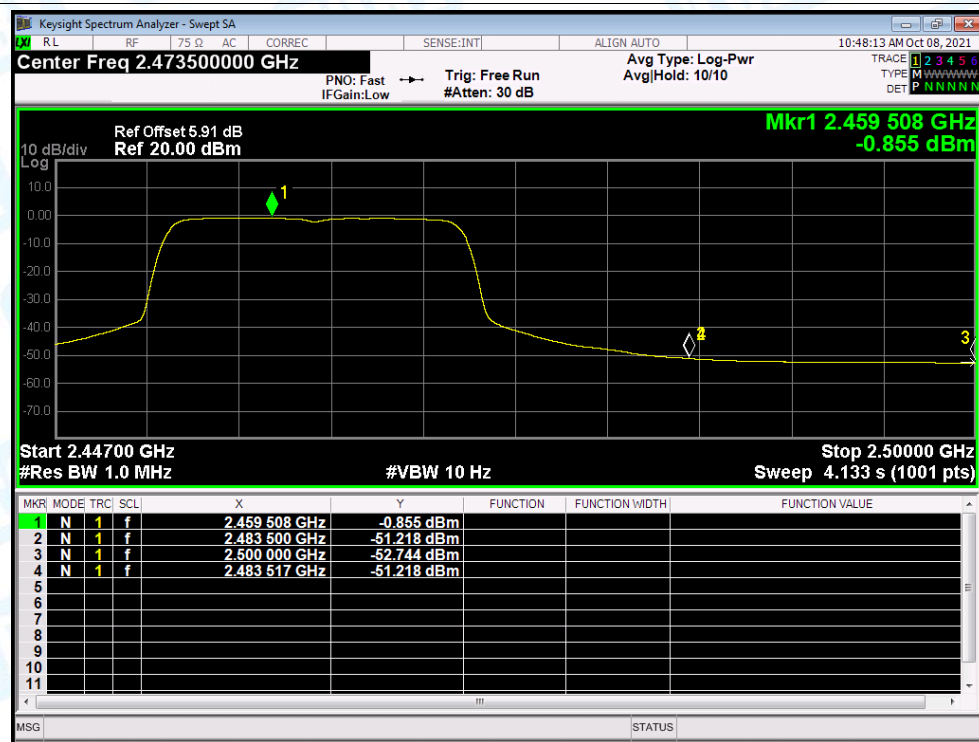
Restrict Band NVNT g 2412MHz Ant1 Average



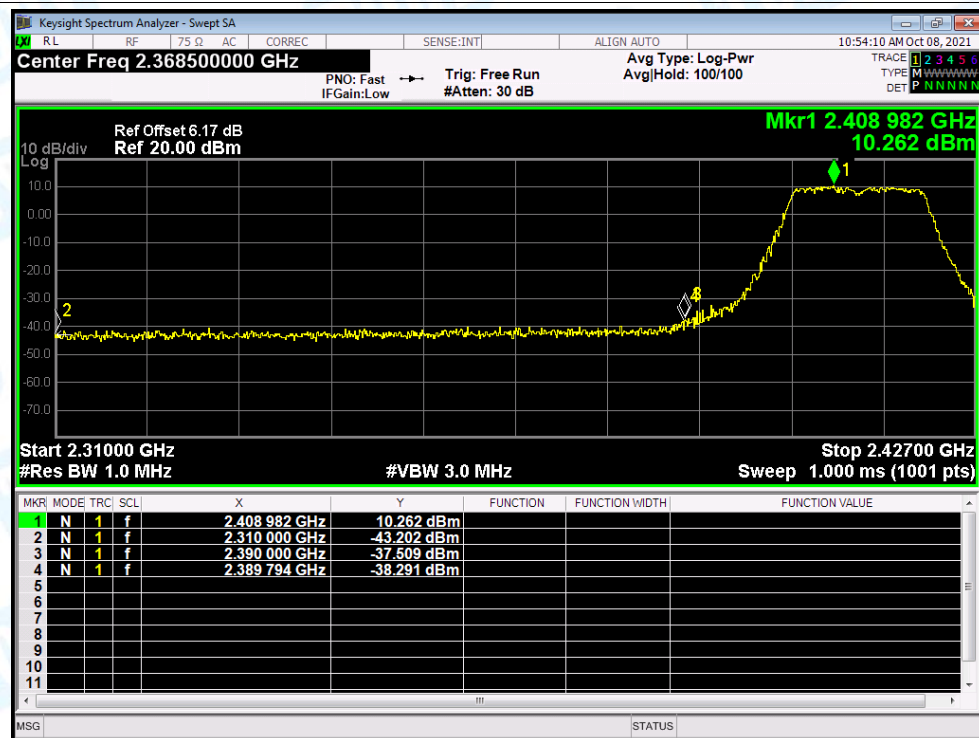
Restrict Band NVNT g 2462MHz Ant1 Peak



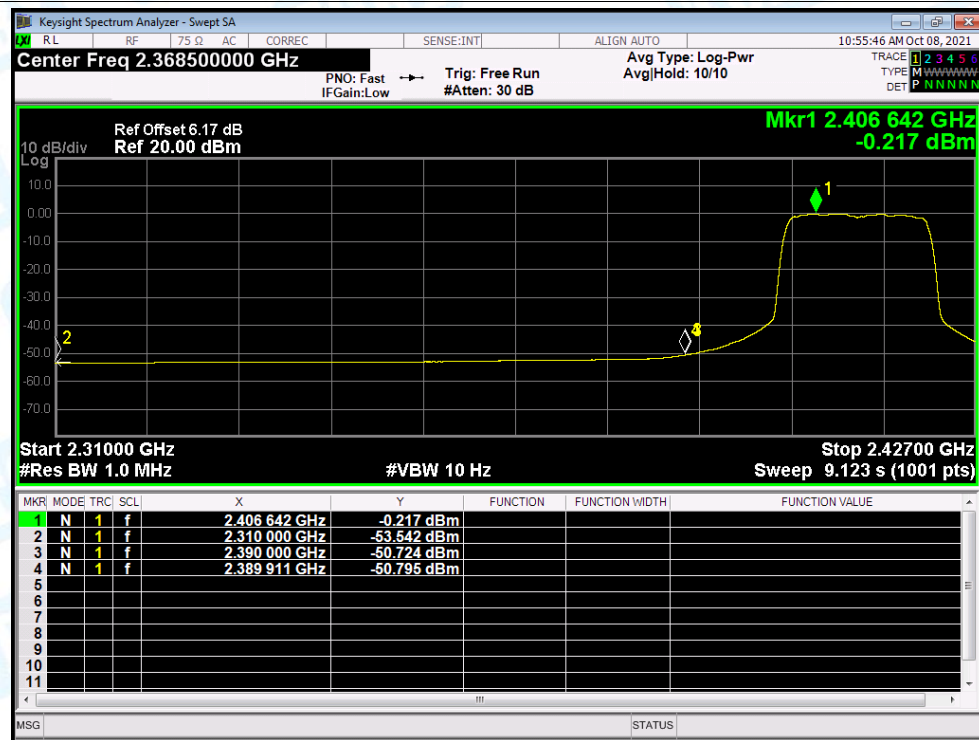
Restrict Band NVNT g 2462MHz Ant1 Average



Restrict Band NVNT n(HT20) 2412MHz Ant1 Peak



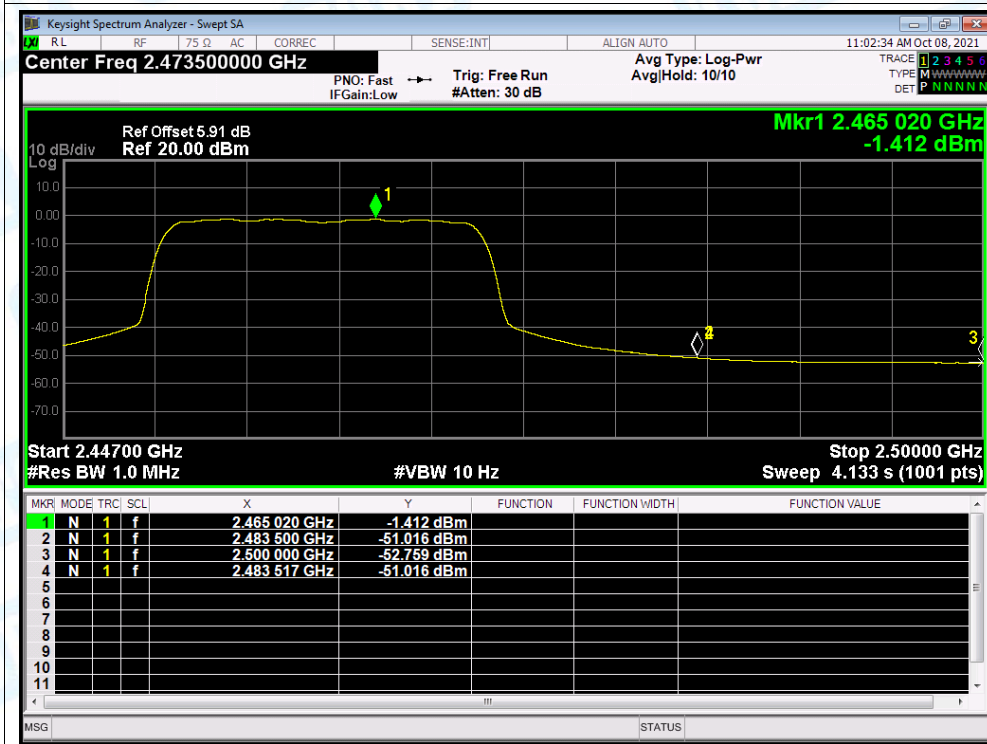
Restrict Band NVNT n(HT20) 2412MHz Ant1 Average



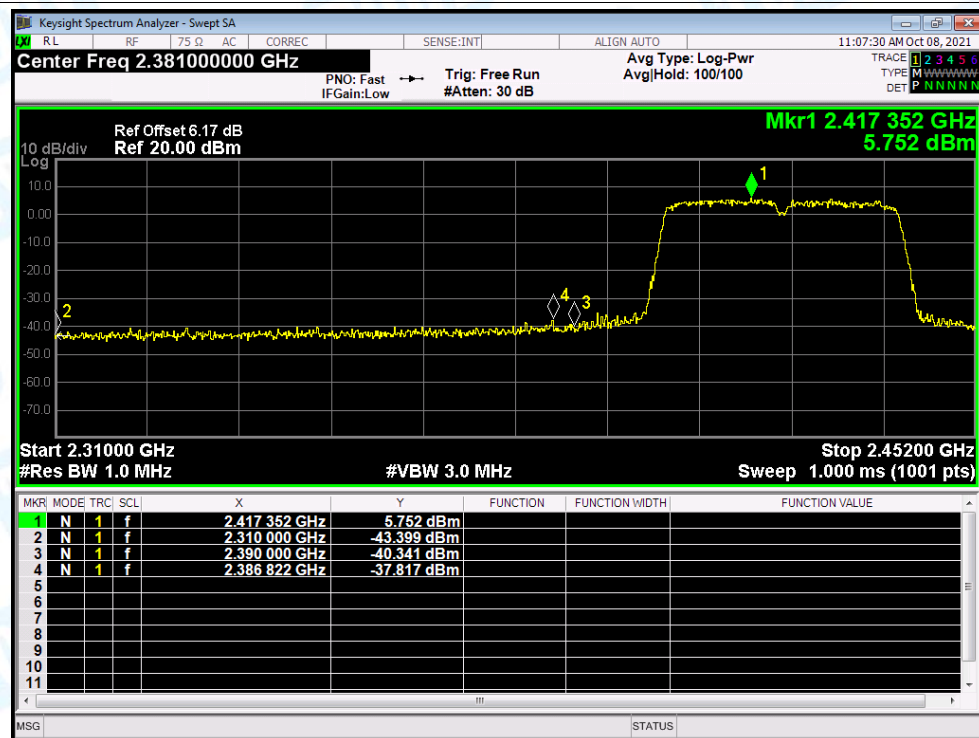
Restrict Band NVNT n(HT20) 2462MHz Ant1 Peak



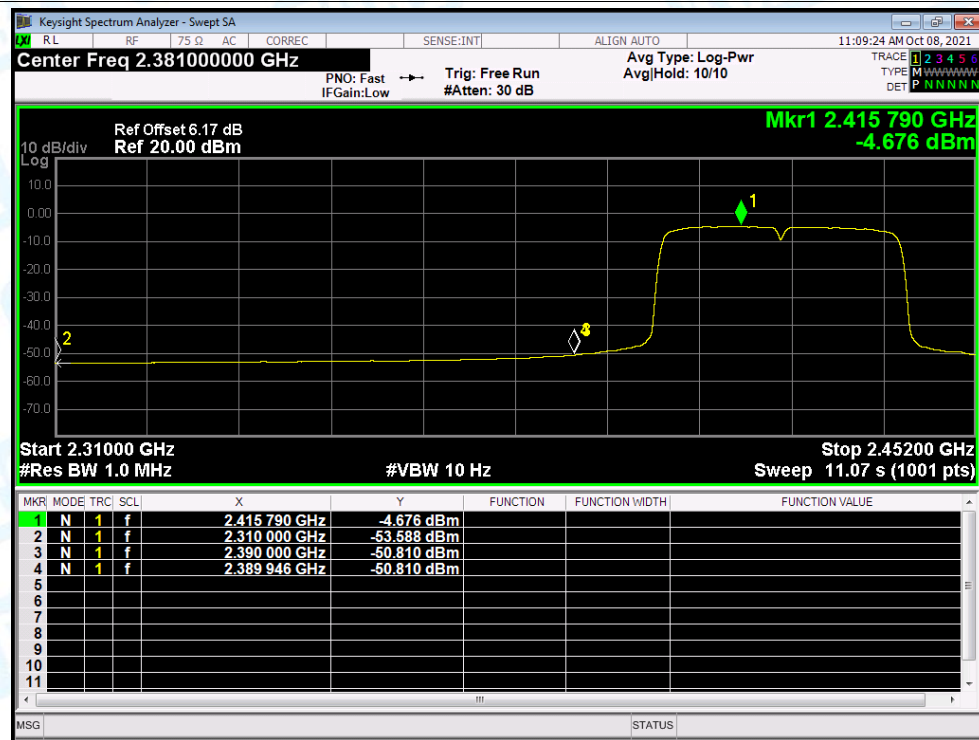
Restrict Band NVNT n(HT20) 2462MHz Ant1 Average



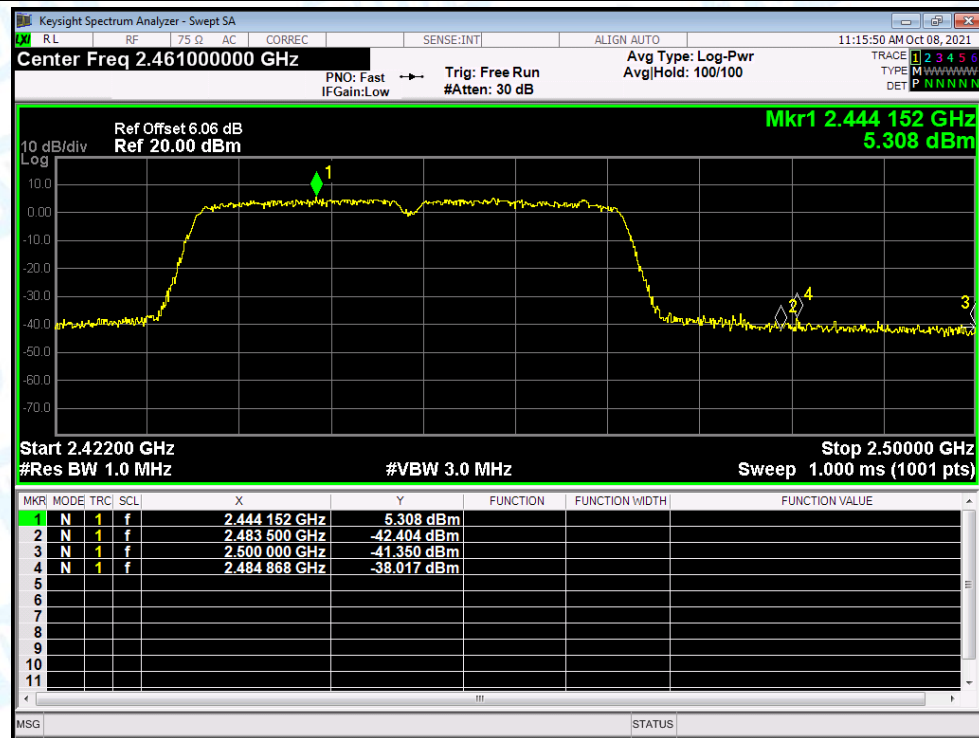
Restrict Band NVNT n(HT40) 2422MHz Ant1 Peak



Restrict Band NVNT n(HT40) 2422MHz Ant1 Average



Restrict Band NVNT n(HT40) 2452MHz Ant1 Peak



Restrict Band NVNT n(HT40) 2452MHz Ant1 Average

