



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: Smart Floor Lamp

Test Model: 25W-LDD-C

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Monkey Li
Supervised by:	Li Huan



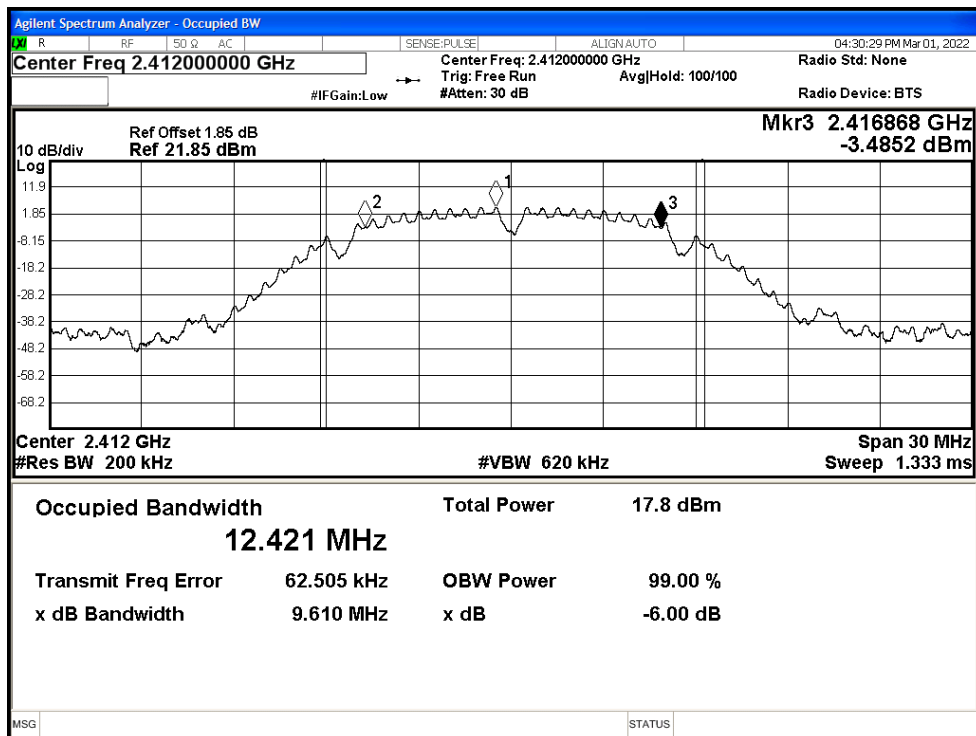
A.1 6dB Bandwidth

Condition	Mode	Frequency (MHz)	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	9.61	0.5	Pass
NVNT	b	2437	10.052	0.5	Pass
NVNT	b	2462	9.175	0.5	Pass
NVNT	g	2412	15.93	0.5	Pass
NVNT	g	2437	15.924	0.5	Pass
NVNT	g	2462	16.052	0.5	Pass
NVNT	n20	2412	17.281	0.5	Pass
NVNT	n20	2437	17.197	0.5	Pass
NVNT	n20	2462	17.18	0.5	Pass
NVNT	n40	2422	35.55	0.5	Pass
NVNT	n40	2437	35.642	0.5	Pass
NVNT	n40	2452	35.676	0.5	Pass

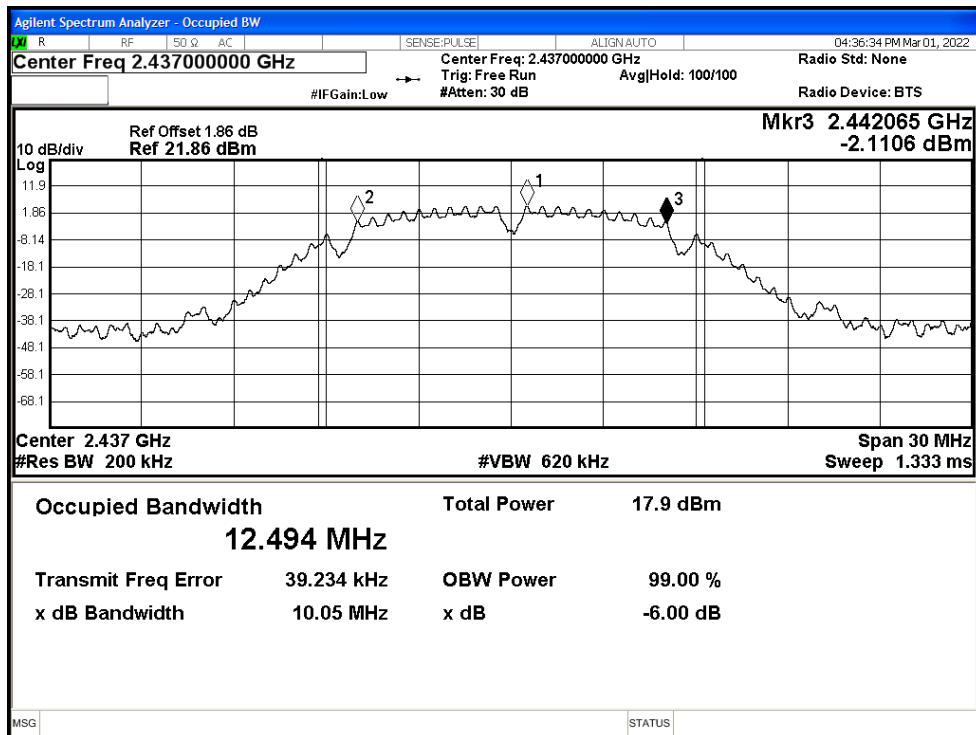


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1



-6dB Bandwidth NVNT b 2437MHz Ant1

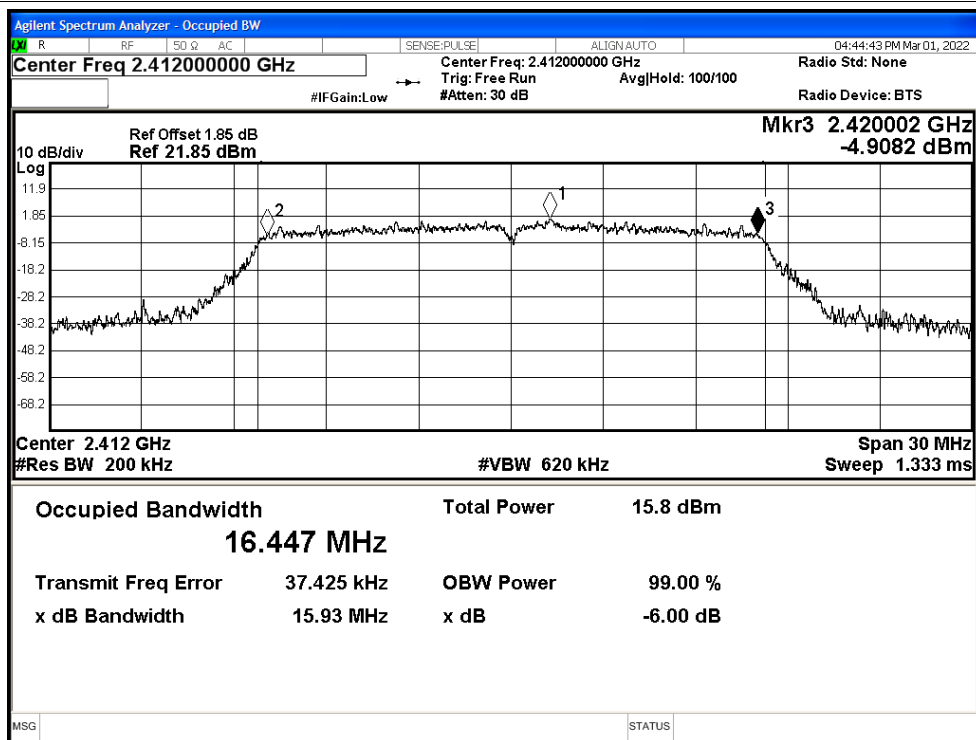




-6dB Bandwidth NVNT b 2462MHz Ant1

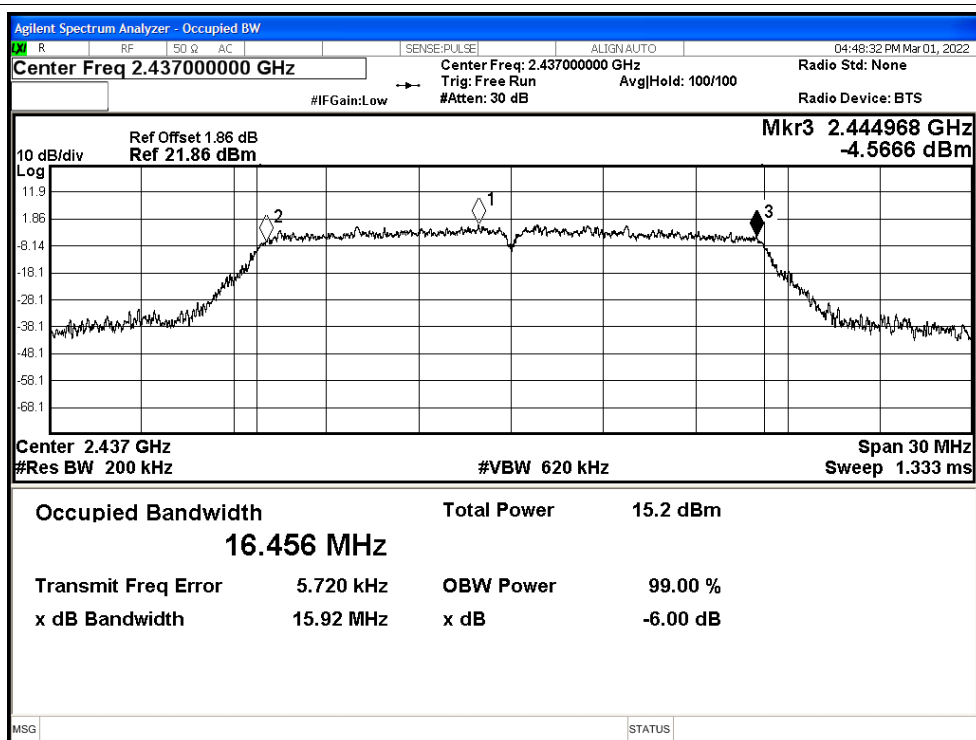


-6dB Bandwidth NVNT g 2412MHz Ant1

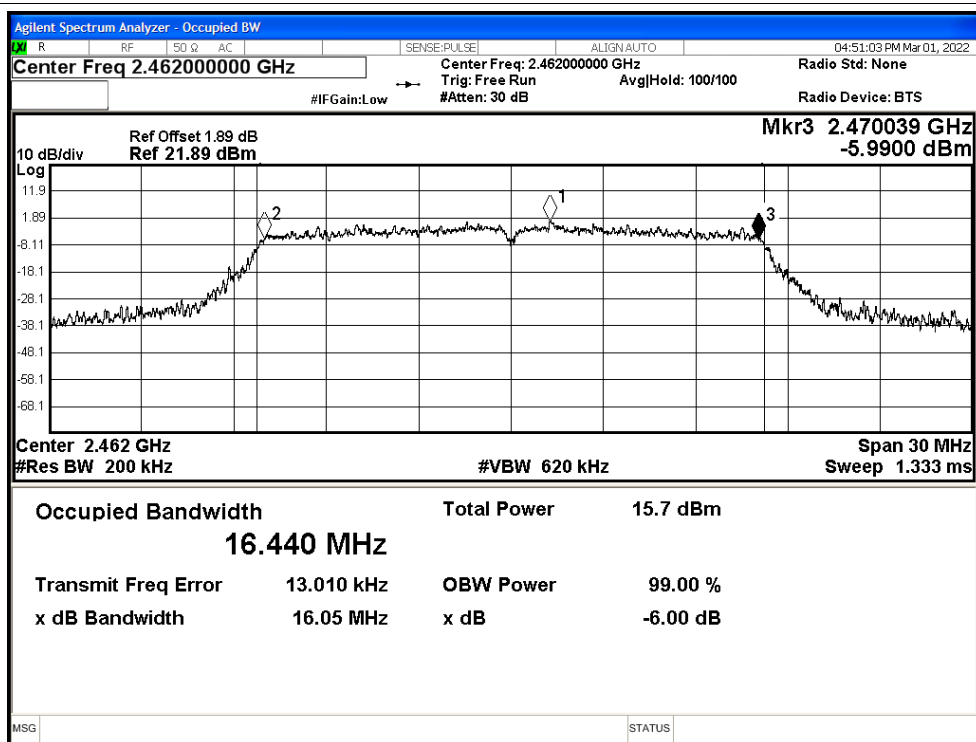




-6dB Bandwidth NVNT g 2437MHz Ant1

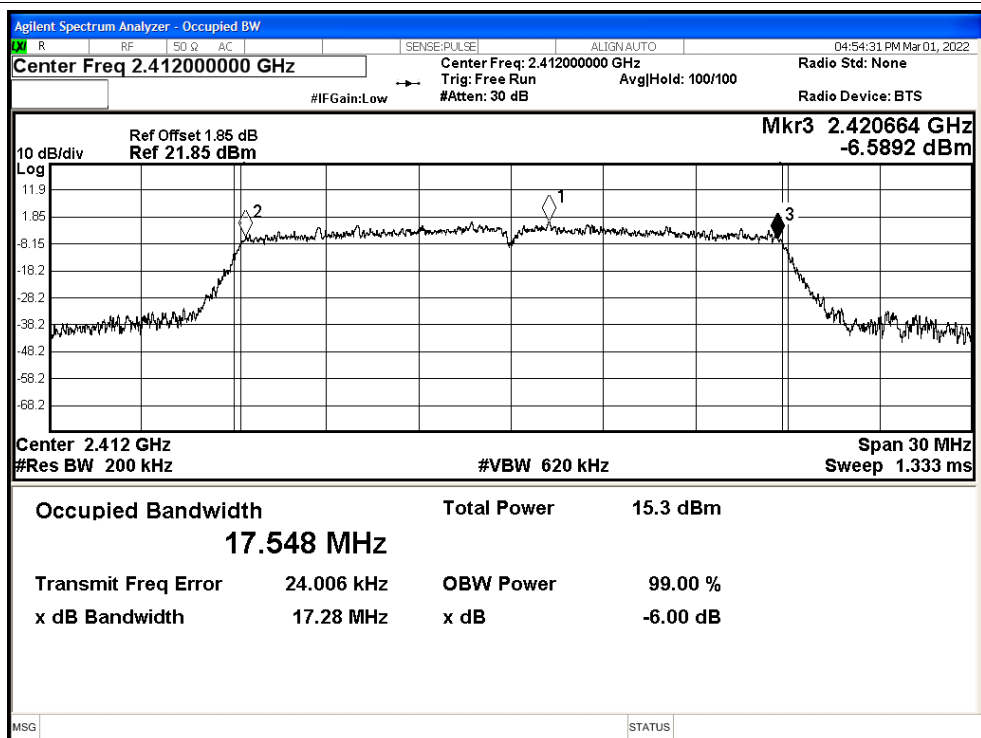


-6dB Bandwidth NVNT g 2462MHz Ant1

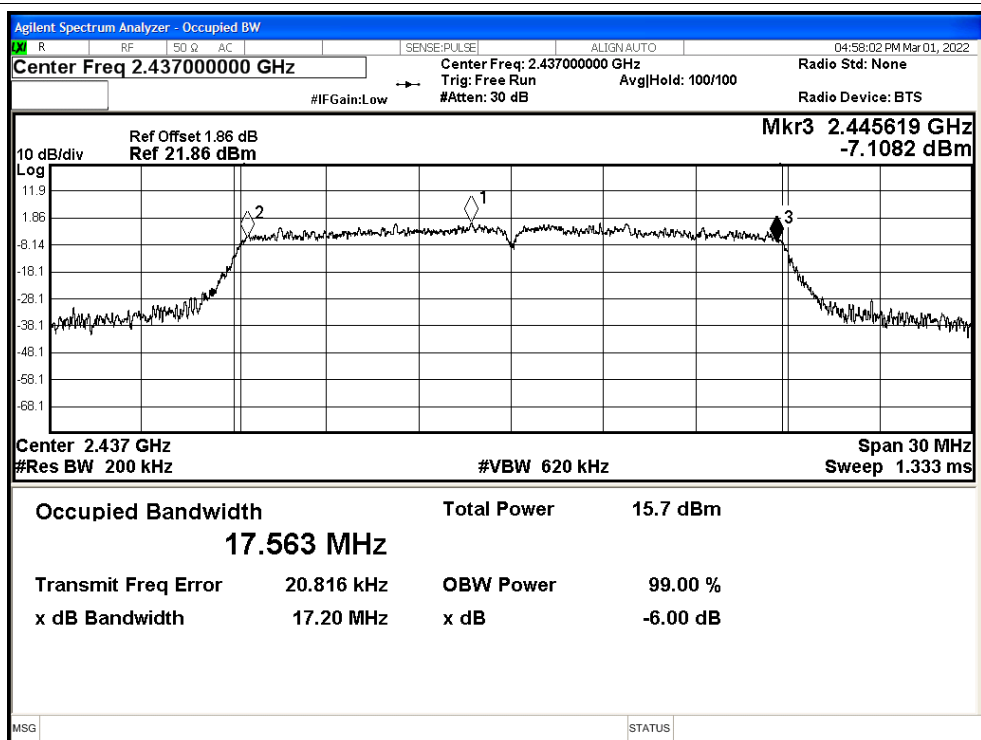




-6dB Bandwidth NVNT n20 2412MHz Ant1

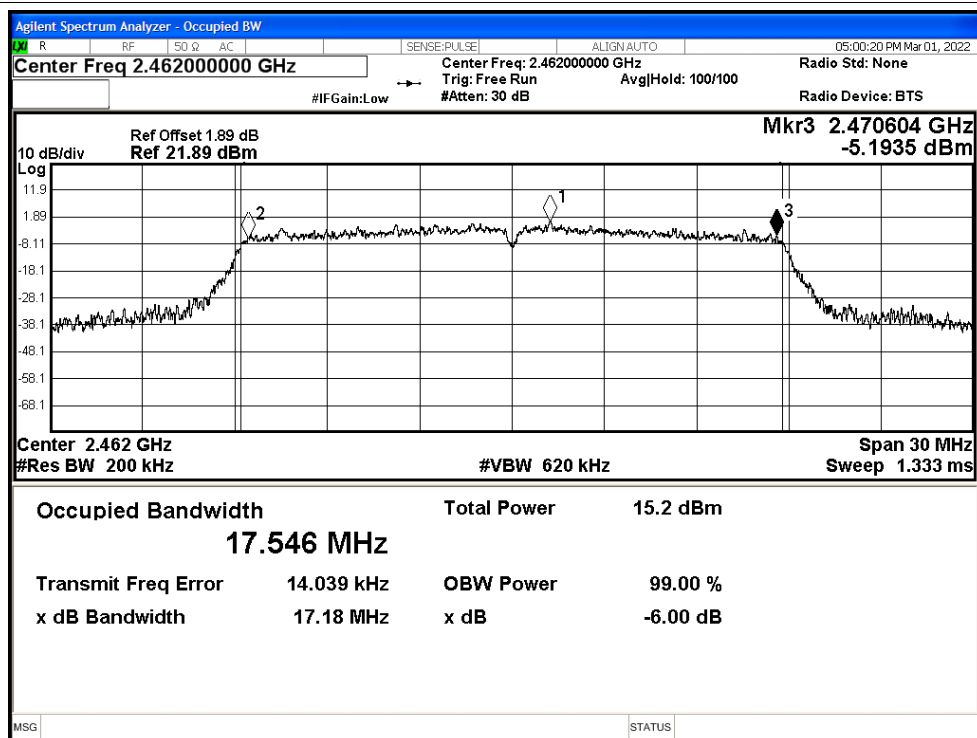


-6dB Bandwidth NVNT n20 2437MHz Ant1

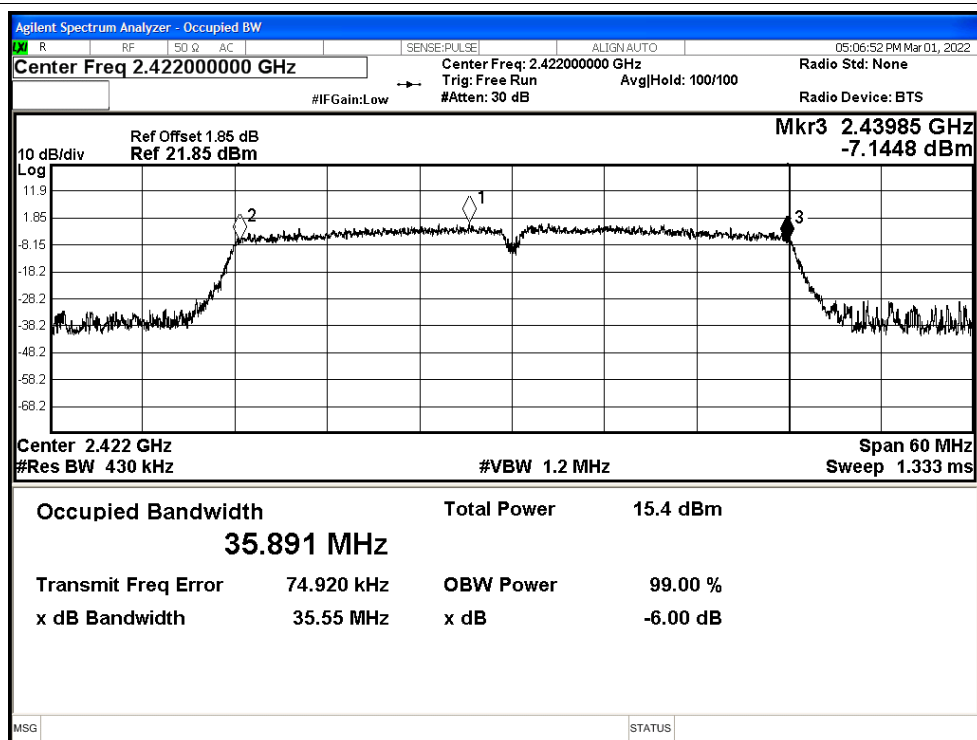




-6dB Bandwidth NVNT n20 2462MHz Ant1

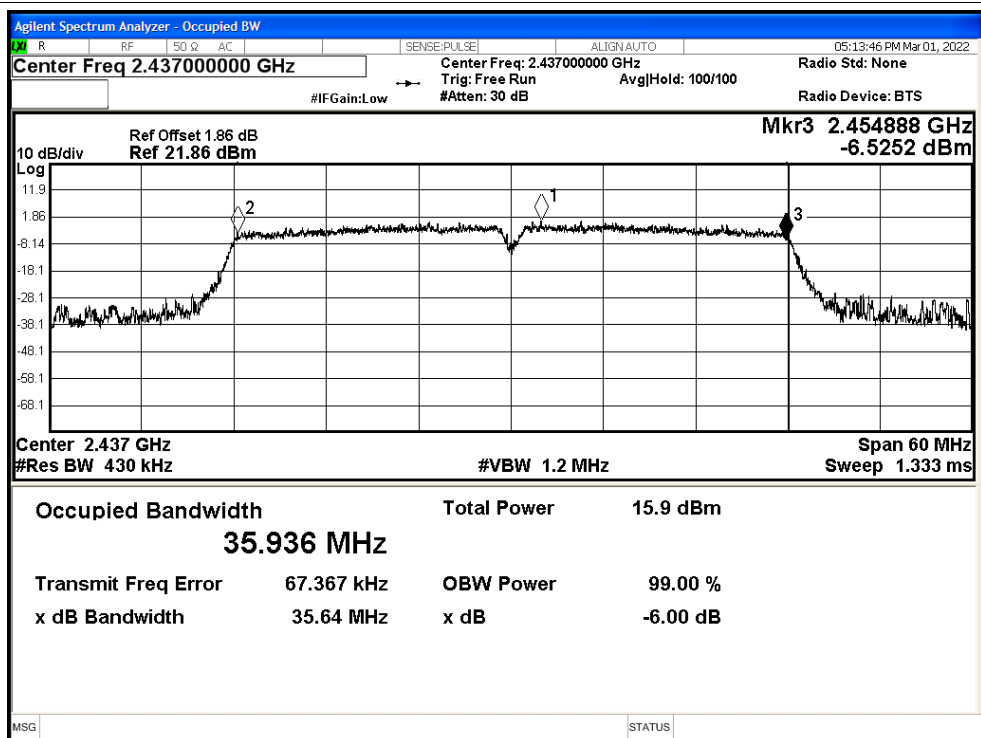


-6dB Bandwidth NVNT n40 2422MHz Ant1

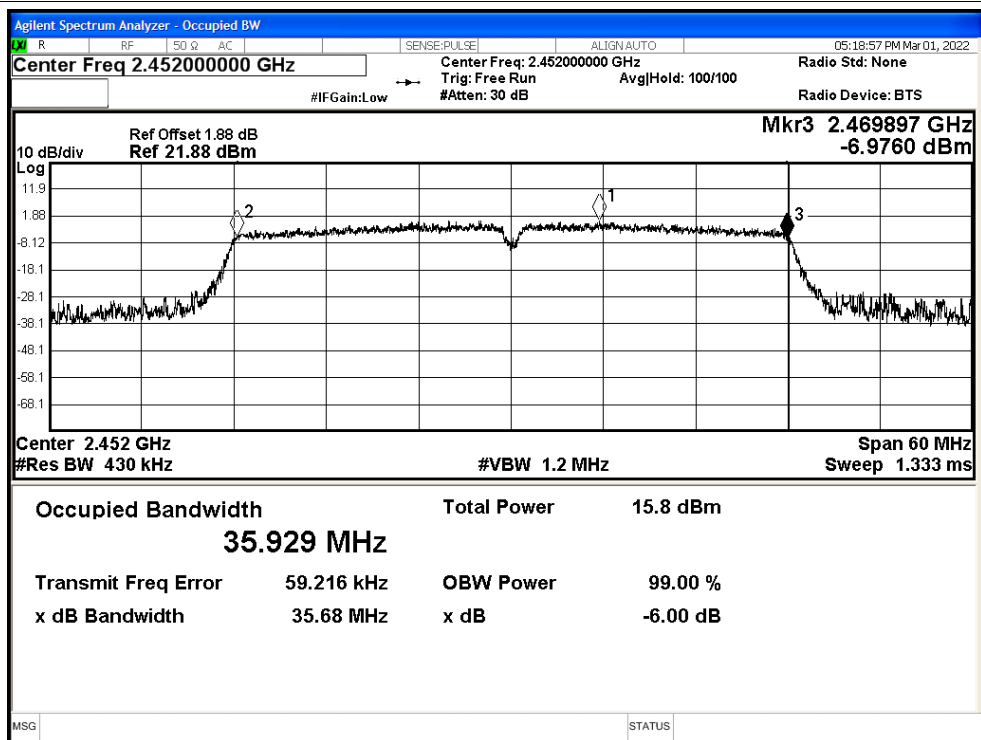




-6dB Bandwidth NVNT n40 2437MHz Ant1



-6dB Bandwidth NVNT n40 2452MHz Ant1





A.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	14.44	0	14.44	30	Pass
NVNT	b	2437	Ant1	14.51	0	14.51	30	Pass
NVNT	b	2462	Ant1	14.31	0	14.31	30	Pass
NVNT	g	2412	Ant1	14.69	0	14.69	30	Pass
NVNT	g	2437	Ant1	14.12	0	14.12	30	Pass
NVNT	g	2462	Ant1	14.61	0	14.61	30	Pass
NVNT	n20	2412	Ant1	14.22	0	14.22	30	Pass
NVNT	n20	2437	Ant1	14.68	0	14.68	30	Pass
NVNT	n20	2462	Ant1	14.13	0	14.13	30	Pass
NVNT	n40	2422	Ant1	14.28	0	14.28	30	Pass
NVNT	n40	2437	Ant1	14.78	0	14.78	30	Pass
NVNT	n40	2452	Ant1	14.67	0	14.67	30	Pass



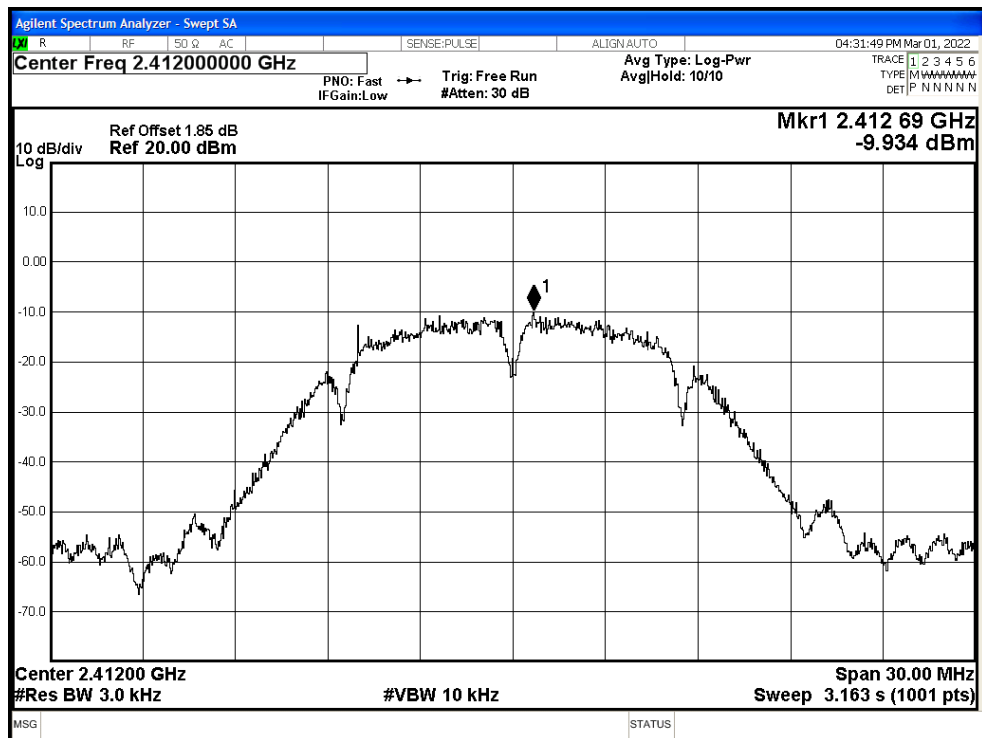
A.3 Power Spectral Density

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-9.93	0	-9.93	8	Pass
NVNT	b	2437	Ant1	-8.24	0	-8.24	8	Pass
NVNT	b	2462	Ant1	-9.59	0	-9.59	8	Pass
NVNT	g	2412	Ant1	-14.48	0	-14.48	8	Pass
NVNT	g	2437	Ant1	-14.35	0	-14.35	8	Pass
NVNT	g	2462	Ant1	-13.66	0	-13.66	8	Pass
NVNT	n20	2412	Ant1	-15.1	0	-15.1	8	Pass
NVNT	n20	2437	Ant1	-14.02	0	-14.02	8	Pass
NVNT	n20	2462	Ant1	-15.25	0	-15.25	8	Pass
NVNT	n40	2422	Ant1	-17.88	0	-17.88	8	Pass
NVNT	n40	2437	Ant1	-17.36	0	-17.36	8	Pass
NVNT	n40	2452	Ant1	-16.76	0	-16.76	8	Pass

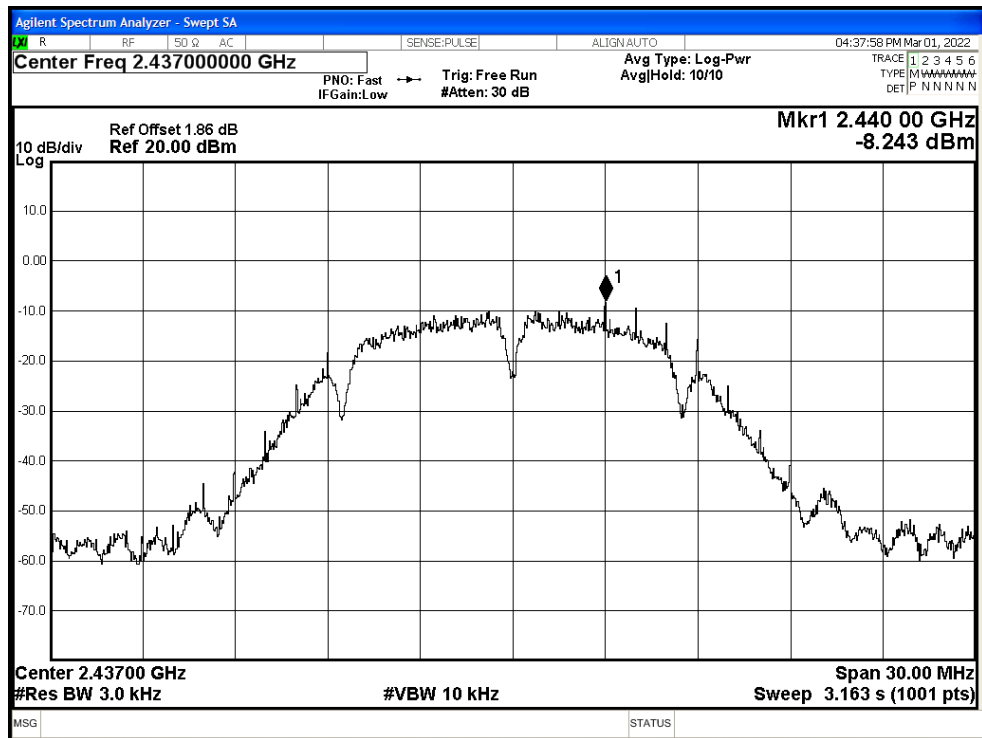


Test Graphs

PSD NVNT b 2412MHz Ant1

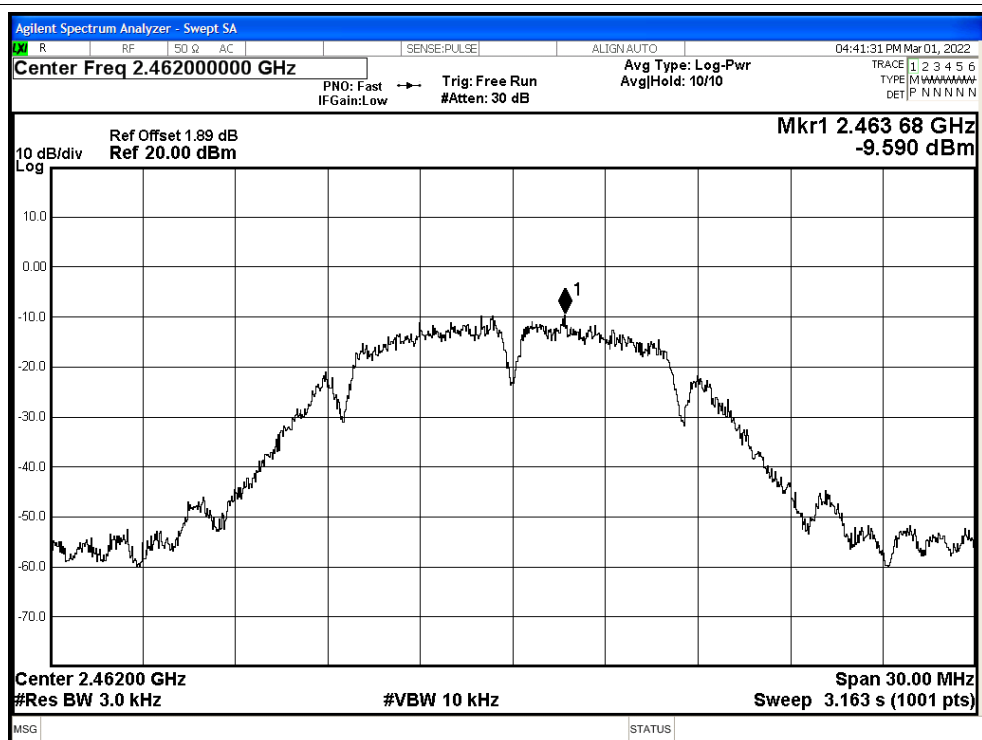


PSD NVNT b 2437MHz Ant1

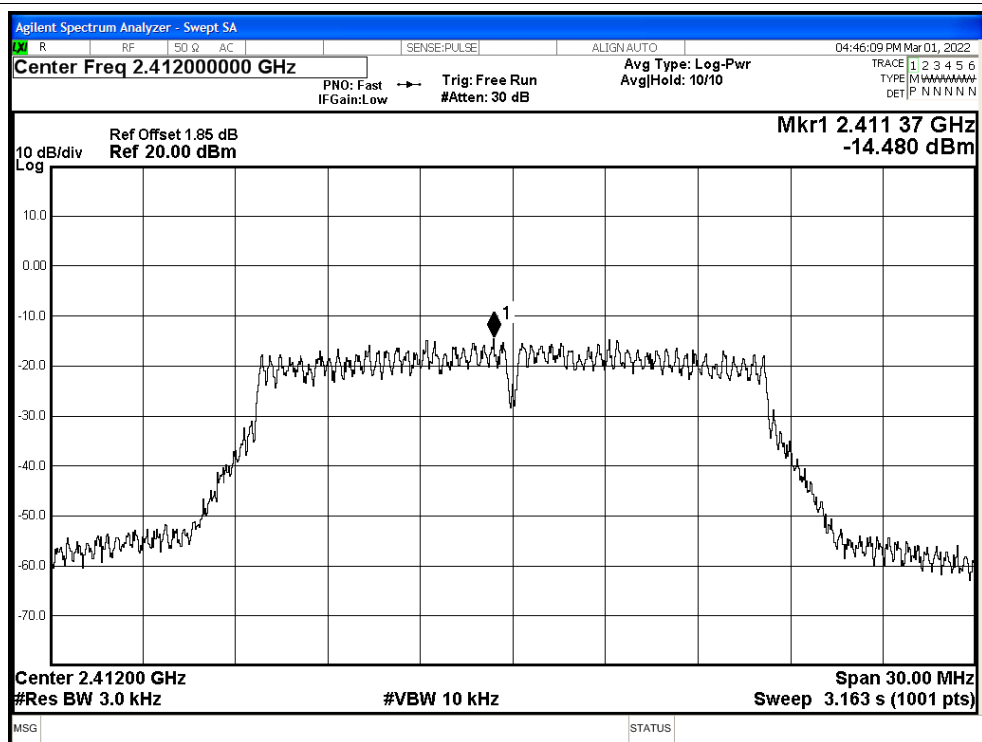




PSD NVNT b 2462MHz Ant1

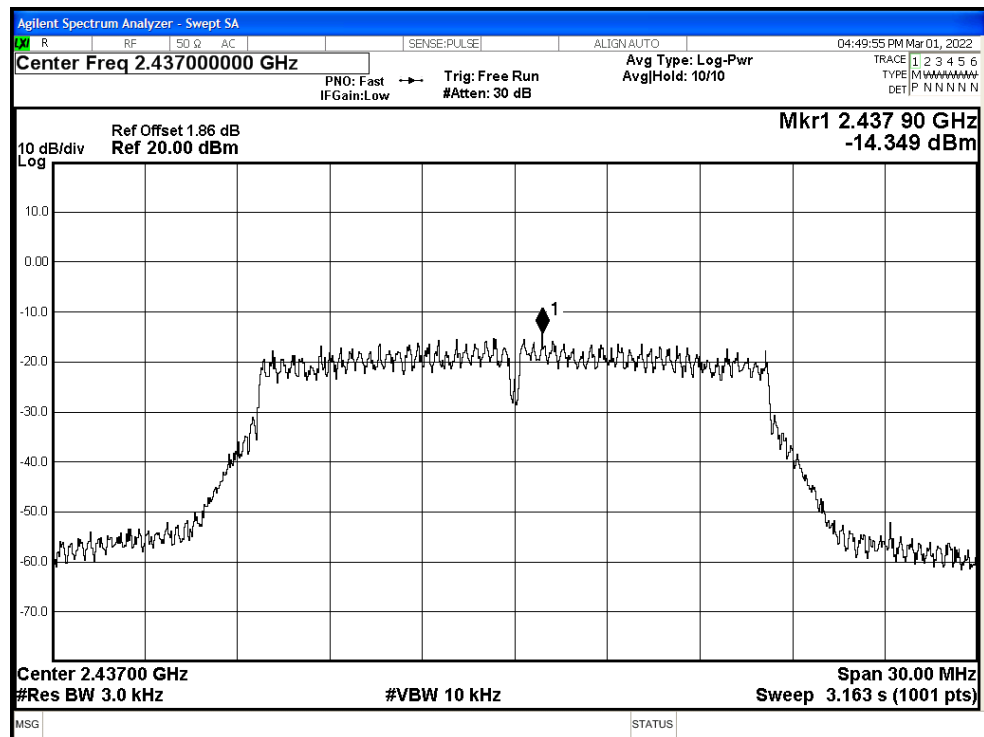


PSD NVNT g 2412MHz Ant1

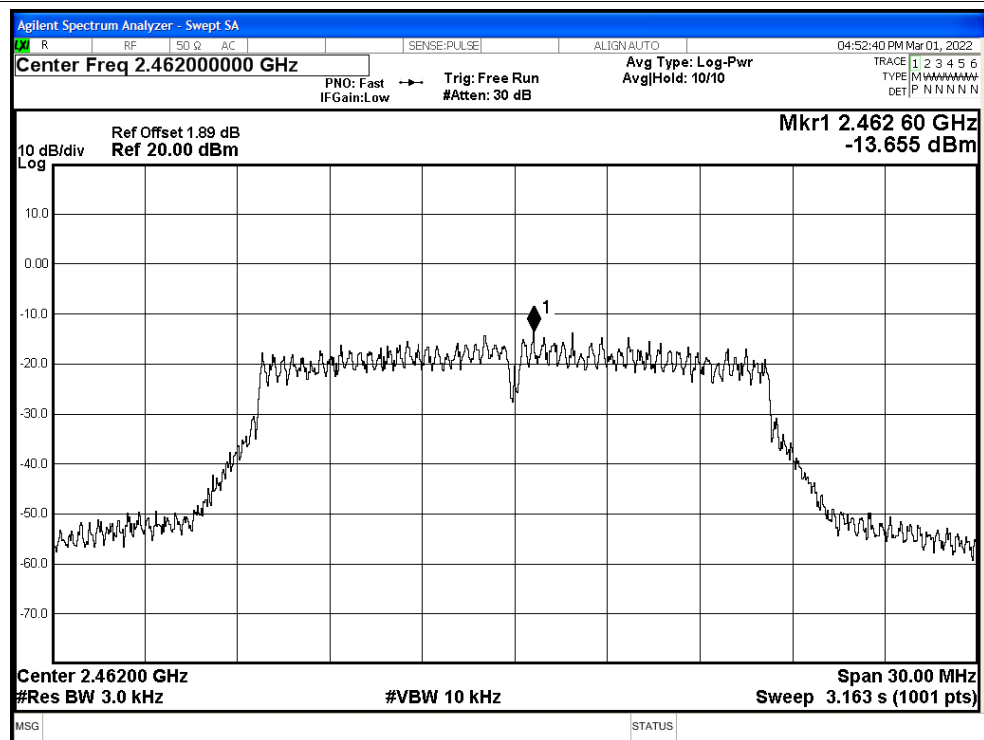




PSD NVNT g 2437MHz Ant1

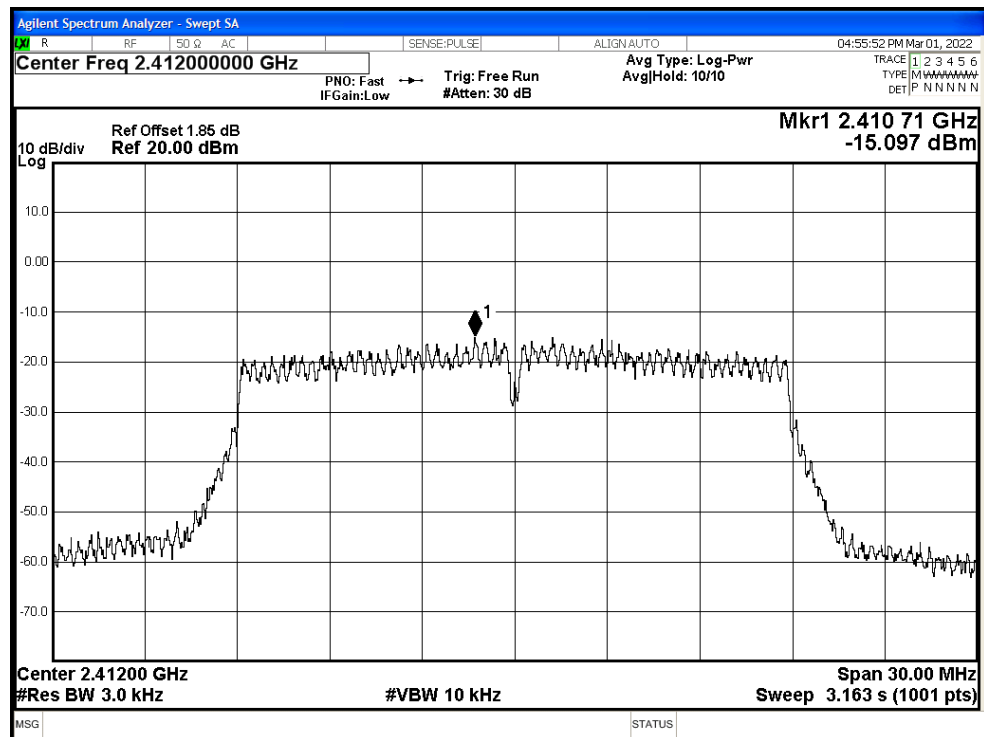


PSD NVNT g 2462MHz Ant1

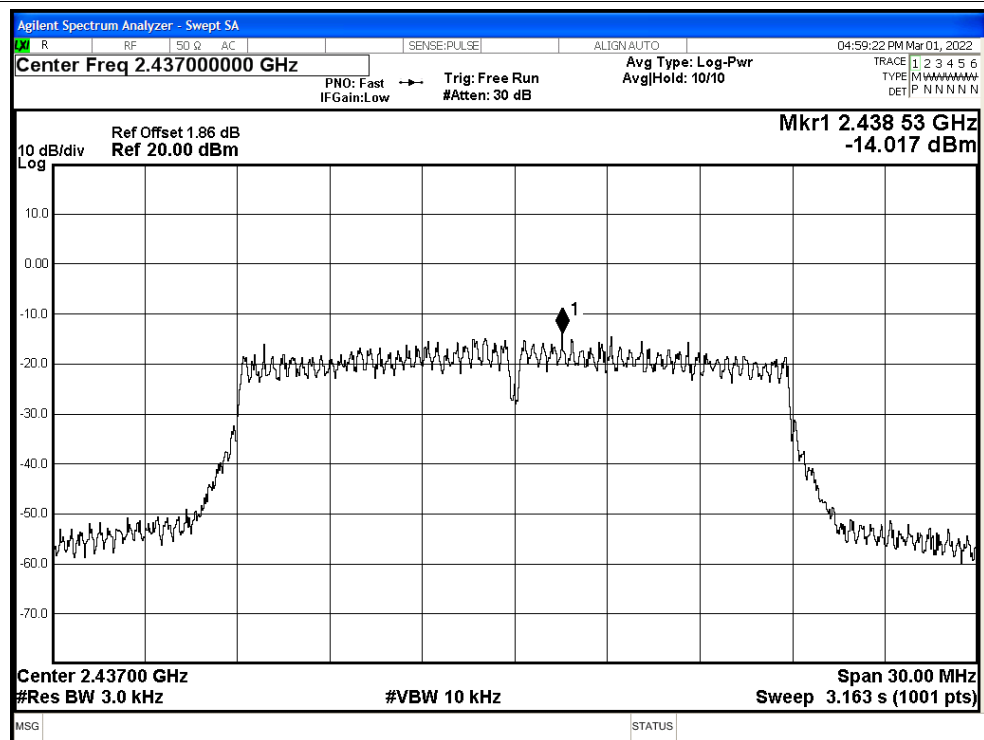




PSD NVNT n20 2412MHz Ant1

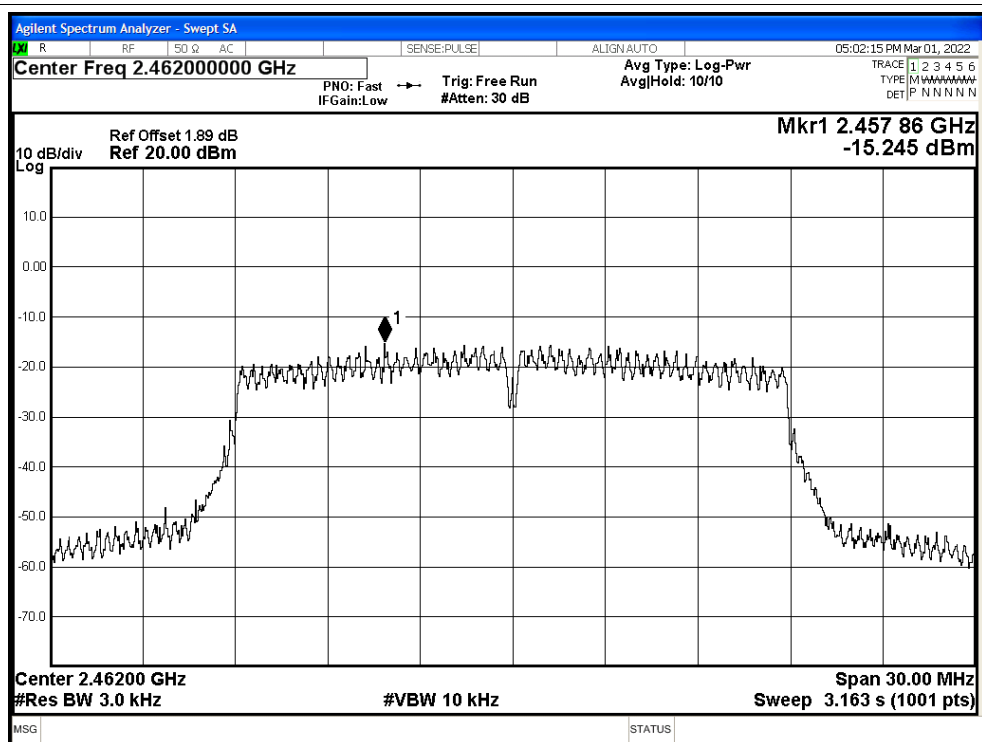


PSD NVNT n20 2437MHz Ant1

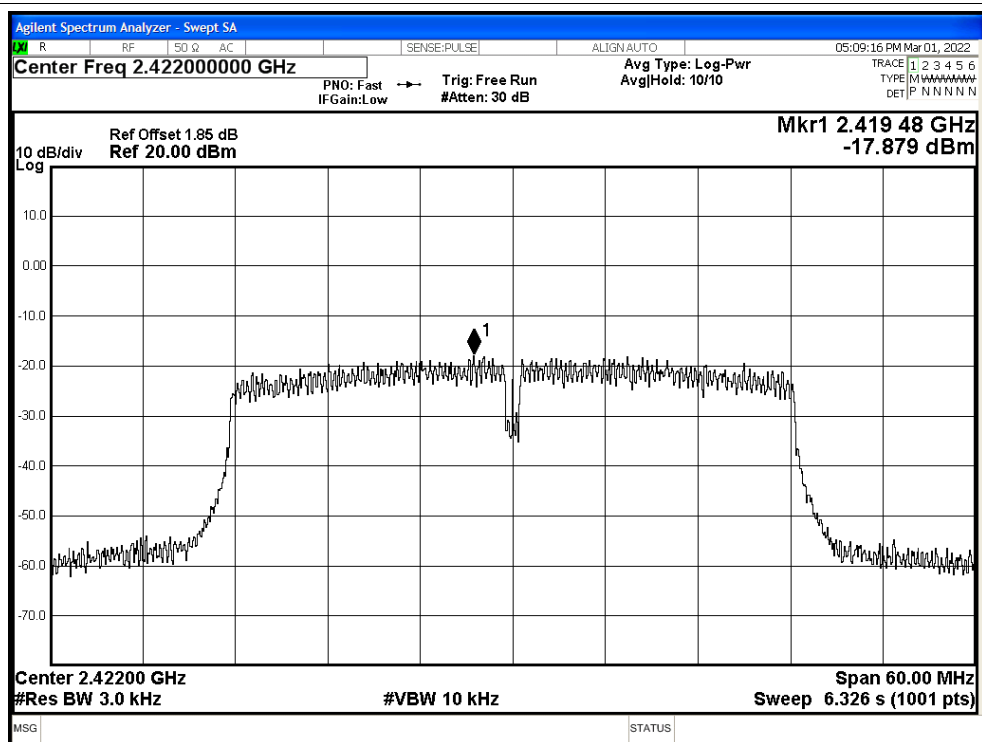




PSD NVNT n20 2462MHz Ant1

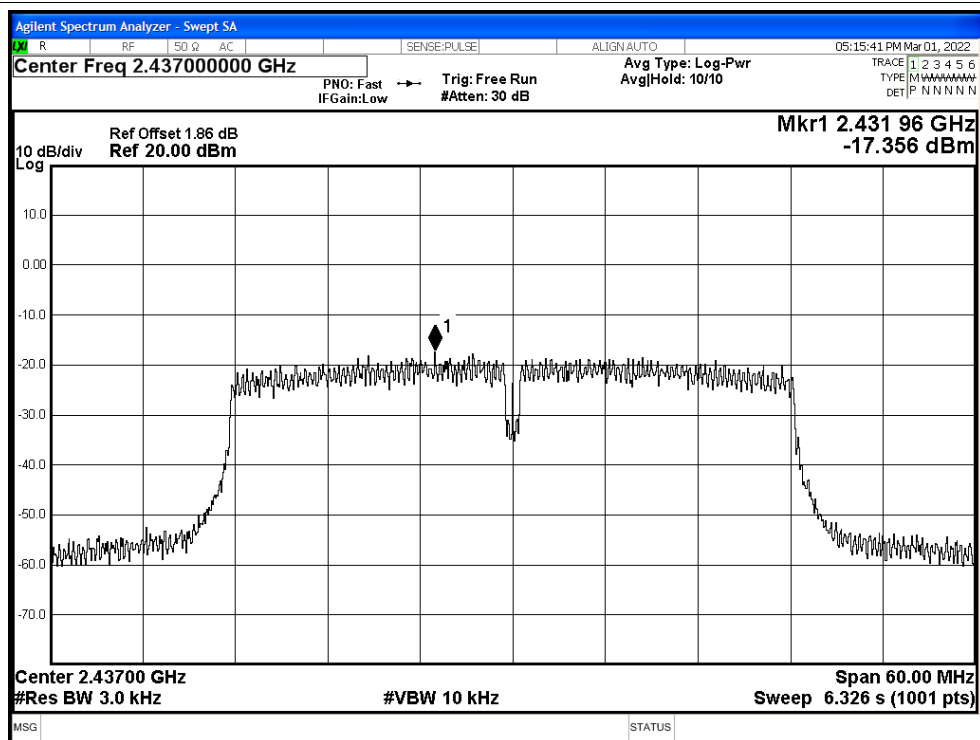


PSD NVNT n40 2422MHz Ant1

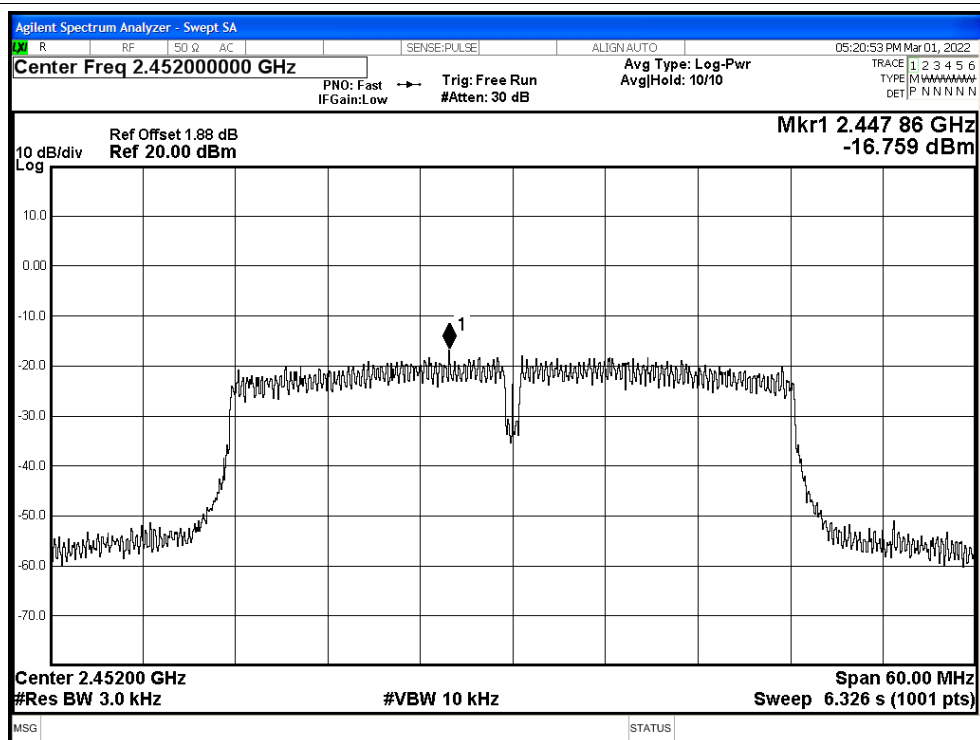




PSD NVNT n40 2437MHz Ant1



PSD NVNT n40 2452MHz Ant1





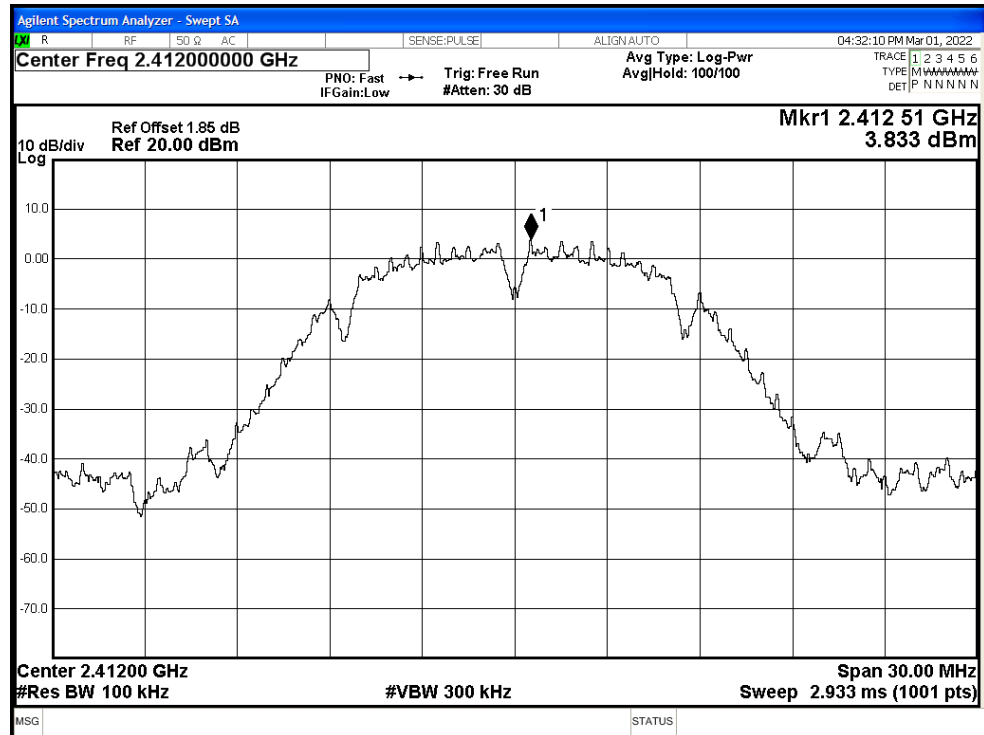
A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-44.19	-20	Pass
NVNT	b	2462	Ant1	-59.26	-20	Pass
NVNT	g	2412	Ant1	-35.44	-20	Pass
NVNT	g	2462	Ant1	-45.08	-20	Pass
NVNT	n20	2412	Ant1	-36.33	-20	Pass
NVNT	n20	2462	Ant1	-44.88	-20	Pass
NVNT	n40	2422	Ant1	-34.29	-20	Pass
NVNT	n40	2452	Ant1	-32.36	-20	Pass

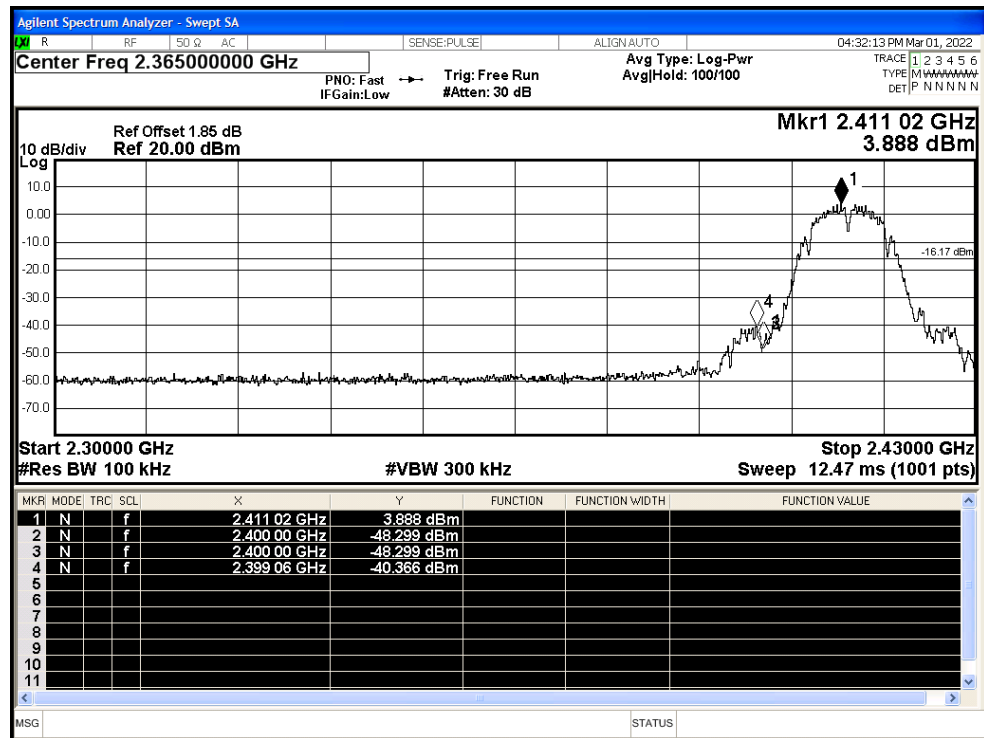


Test Graphs

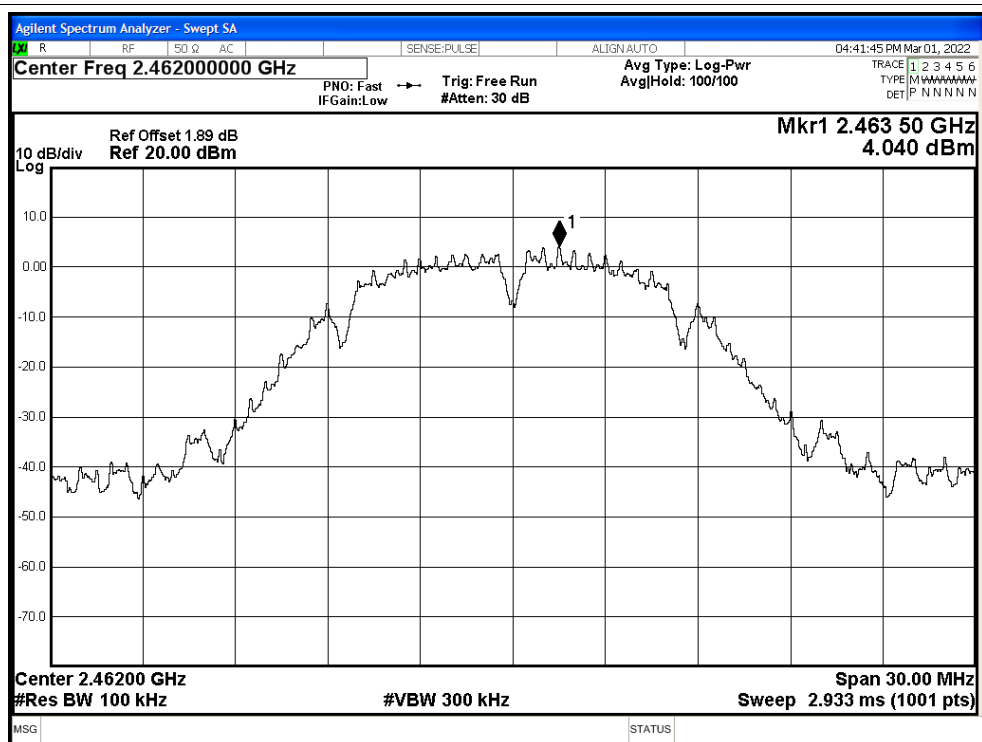
Band Edge NVNT b 2412MHz Ant1 Ref



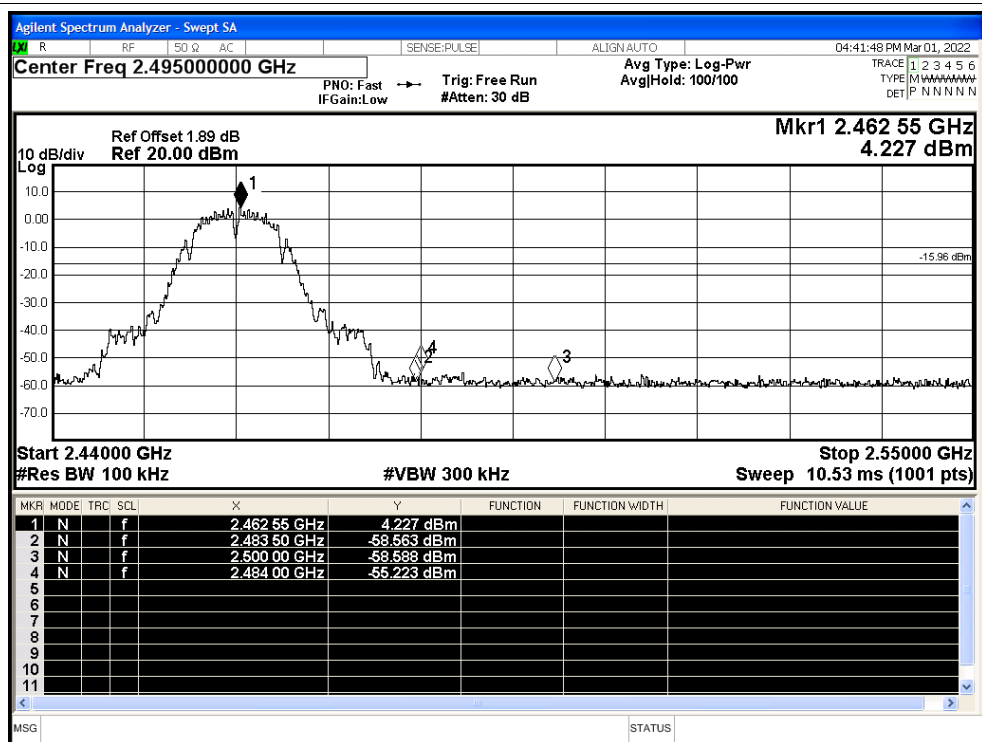
Band Edge NVNT b 2412MHz Ant1 Emission



Band Edge NVNT b 2462MHz Ant1 Ref

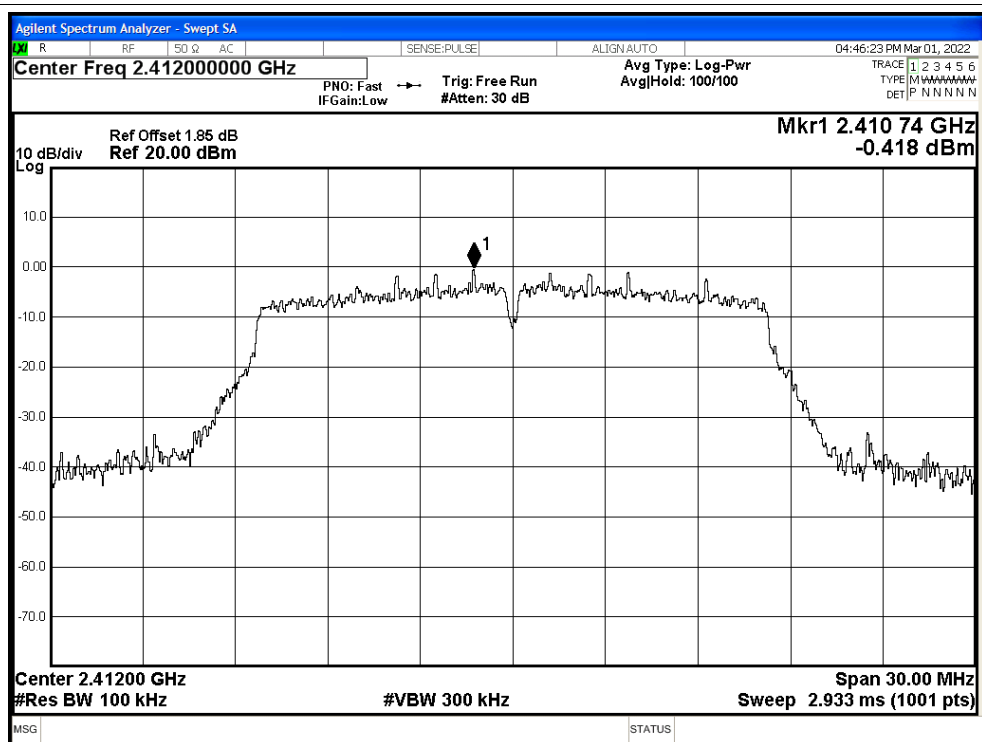


Band Edge NVNT b 2462MHz Ant1 Emission

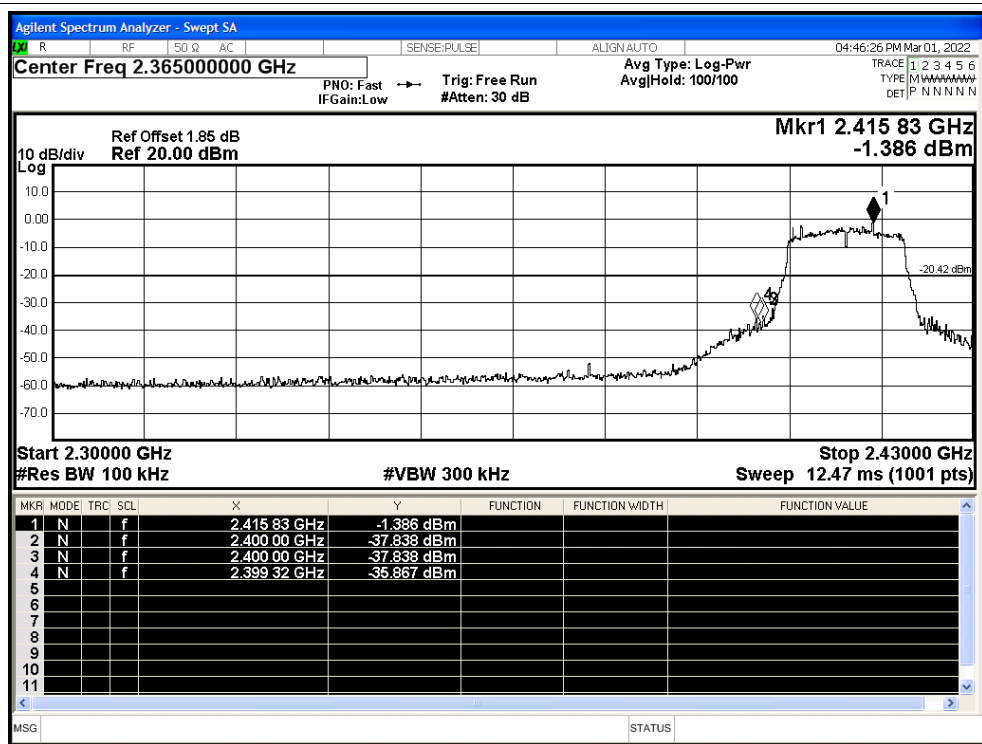




Band Edge NVNT g 2412MHz Ant1 Ref

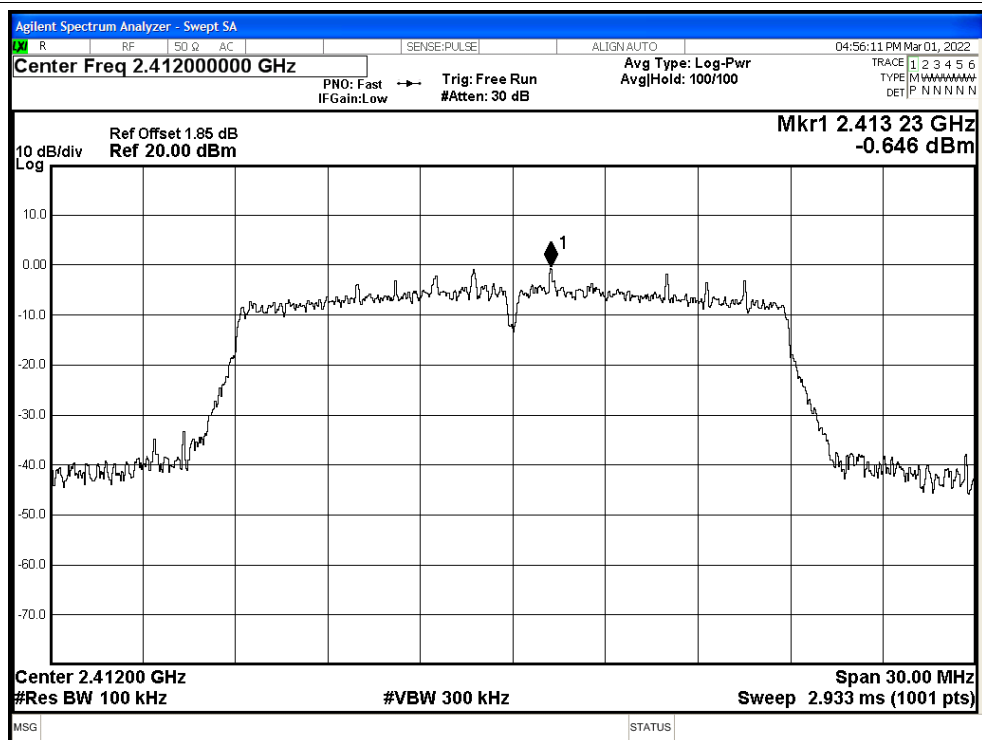


Band Edge NVNT g 2412MHz Ant1 Emission

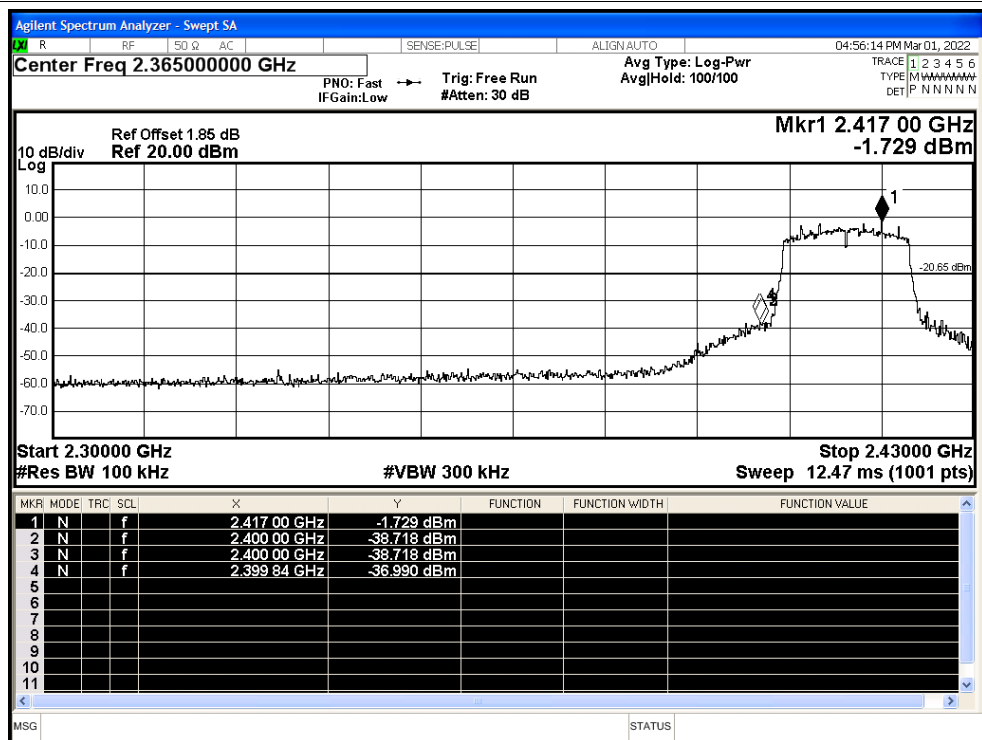




Band Edge NVNT n20 2412MHz Ant1 Ref

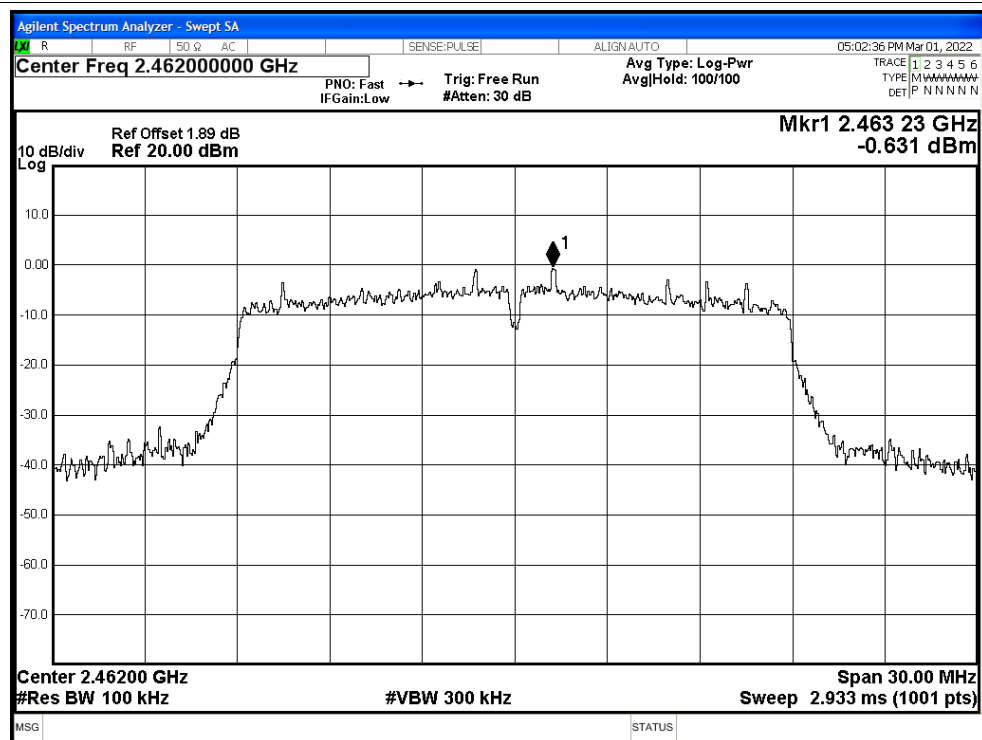


Band Edge NVNT n20 2412MHz Ant1 Emission

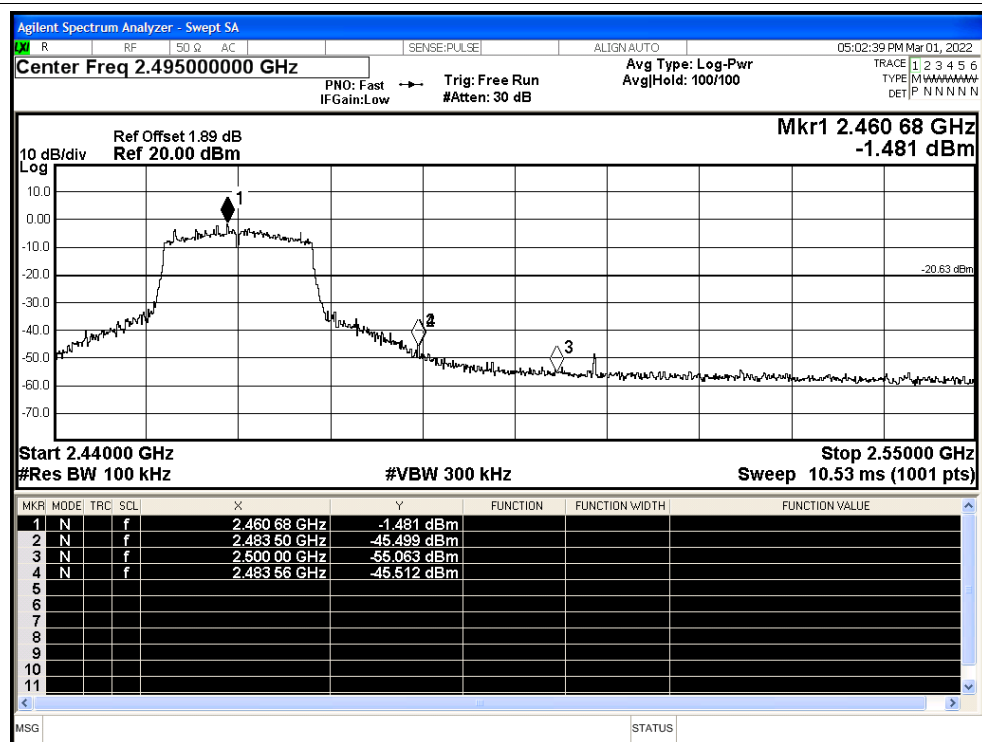




Band Edge NVNT n20 2462MHz Ant1 Ref

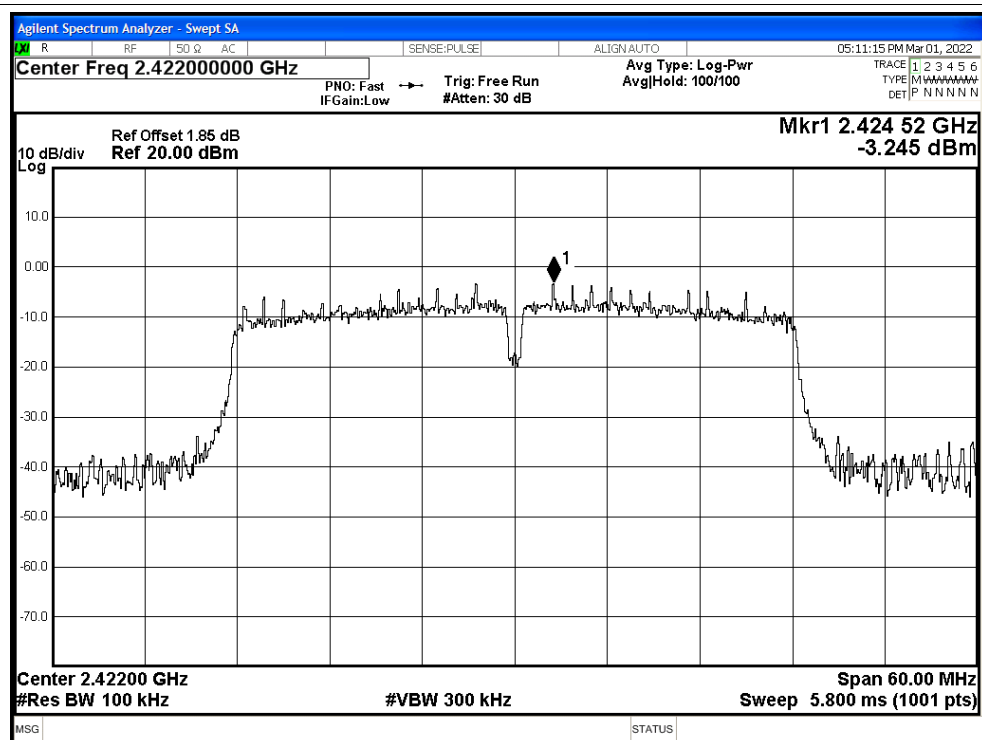


Band Edge NVNT n20 2462MHz Ant1 Emission

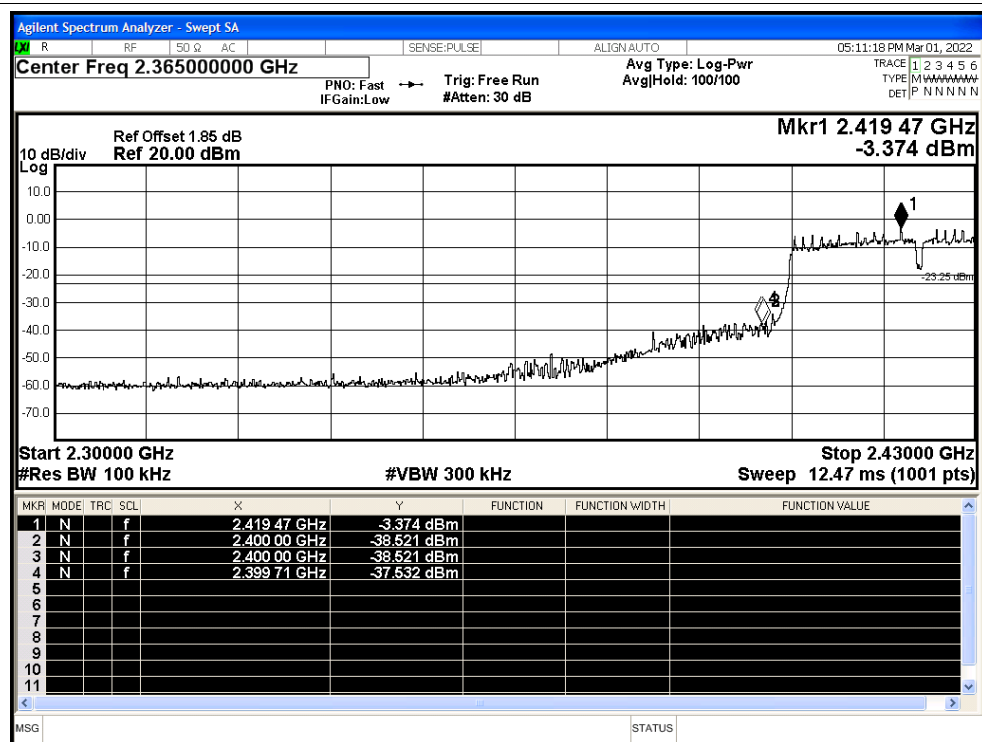




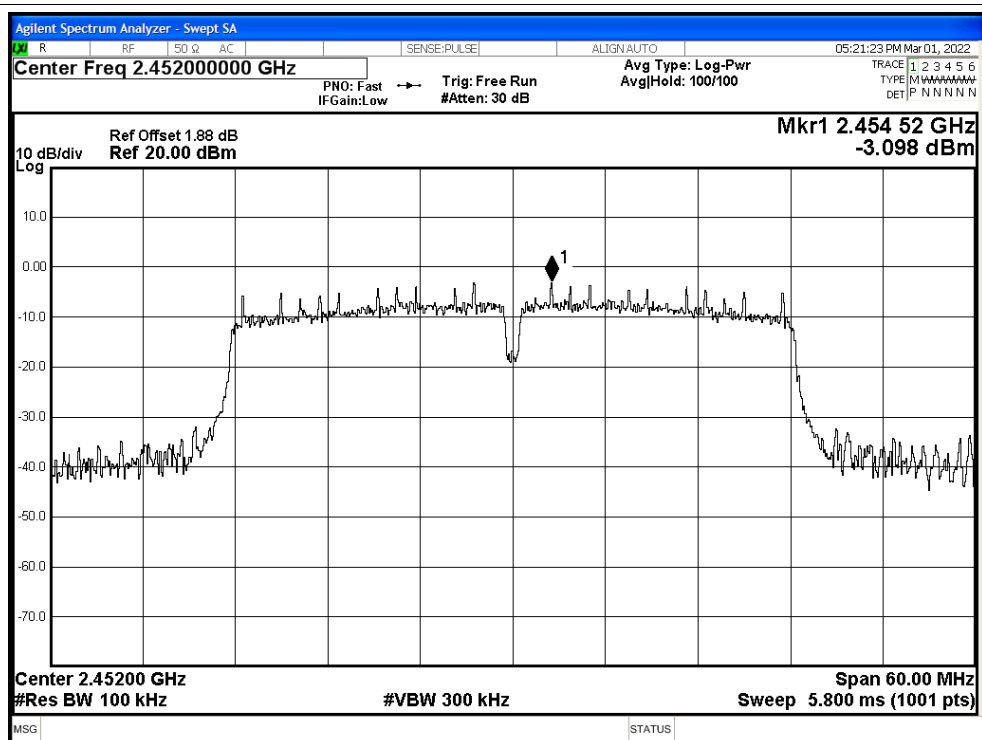
Band Edge NVNT n40 2422MHz Ant1 Ref



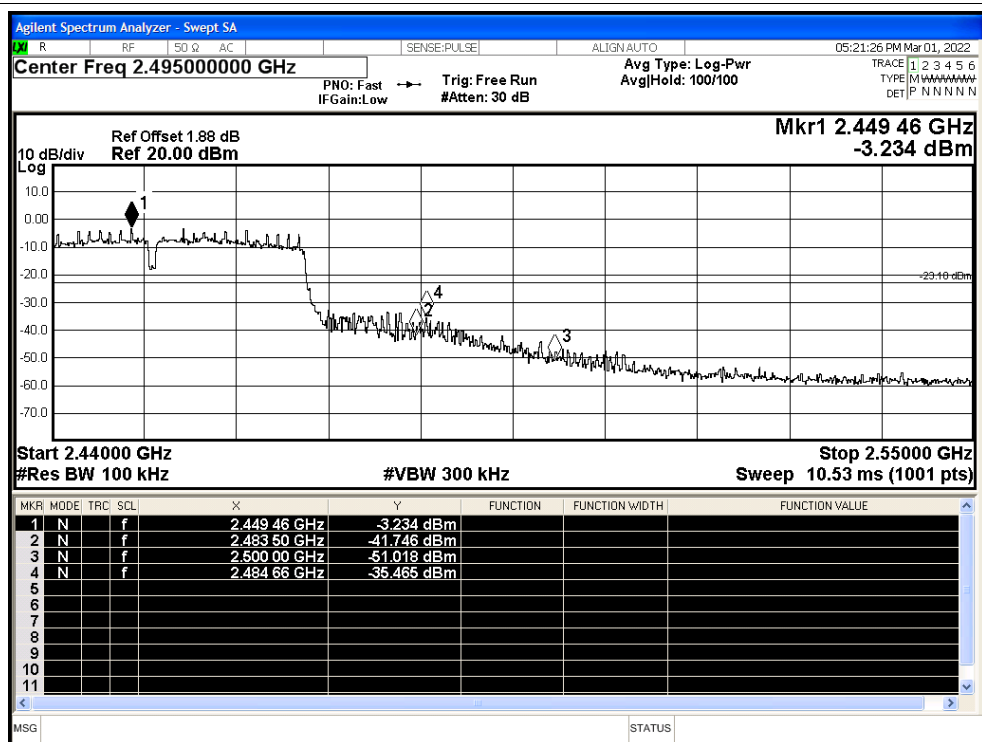
Band Edge NVNT n40 2422MHz Ant1 Emission



Band Edge NVNT n40 2452MHz Ant1 Ref



Band Edge NVNT n40 2452MHz Ant1 Emission





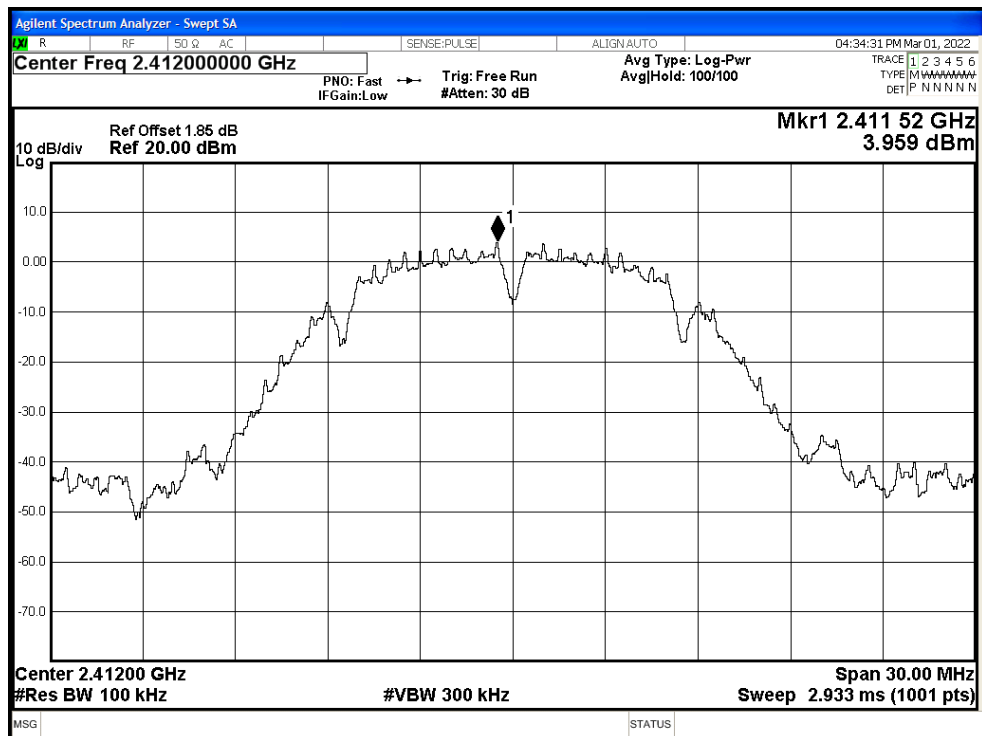
A.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-50.26	-20	Pass
NVNT	b	2437	Ant1	-49.71	-20	Pass
NVNT	b	2462	Ant1	-50.01	-20	Pass
NVNT	g	2412	Ant1	-46.23	-20	Pass
NVNT	g	2437	Ant1	-42.96	-20	Pass
NVNT	g	2462	Ant1	-45	-20	Pass
NVNT	n20	2412	Ant1	-46.06	-20	Pass
NVNT	n20	2437	Ant1	-45.29	-20	Pass
NVNT	n20	2462	Ant1	-45.37	-20	Pass
NVNT	n40	2422	Ant1	-41.5	-20	Pass
NVNT	n40	2437	Ant1	-42.59	-20	Pass
NVNT	n40	2452	Ant1	-41.68	-20	Pass

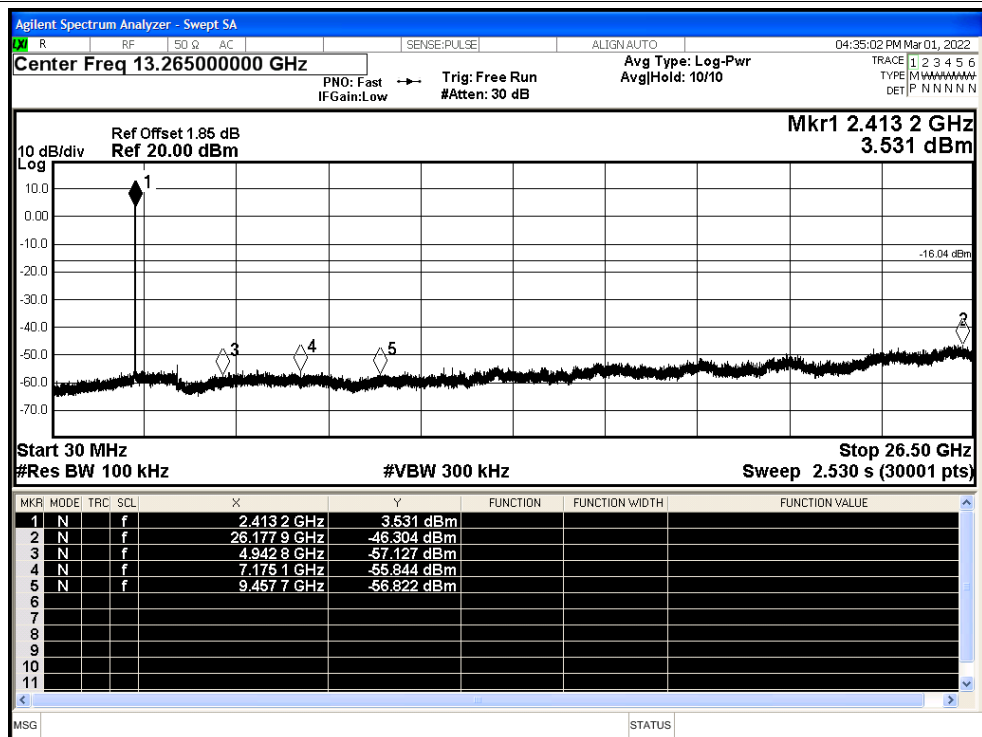


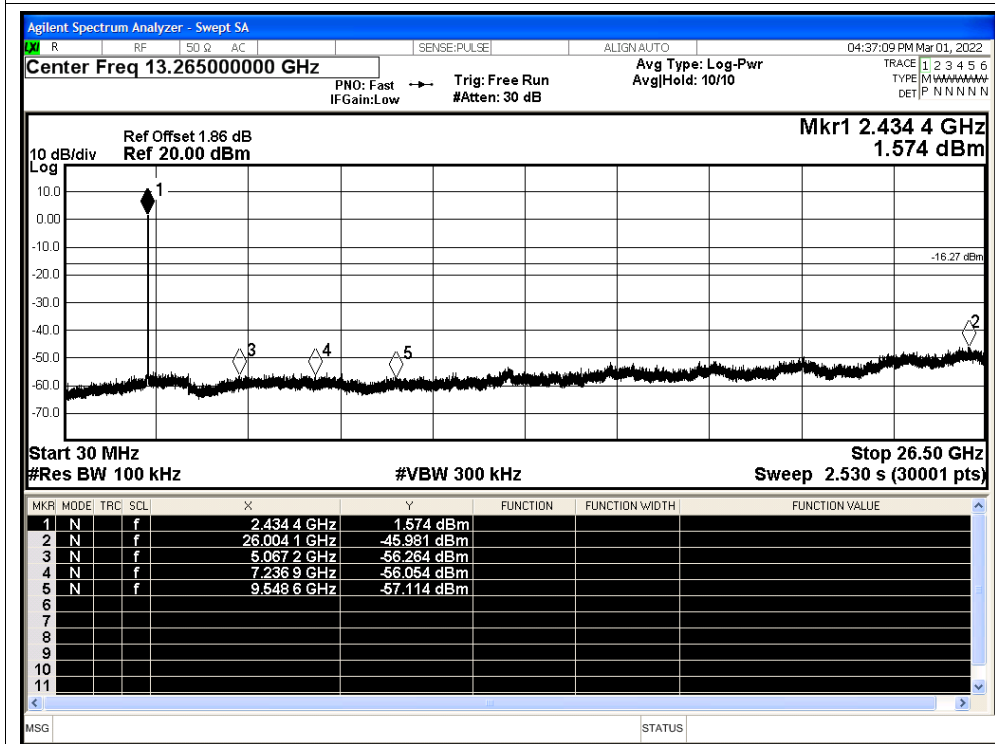
Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref

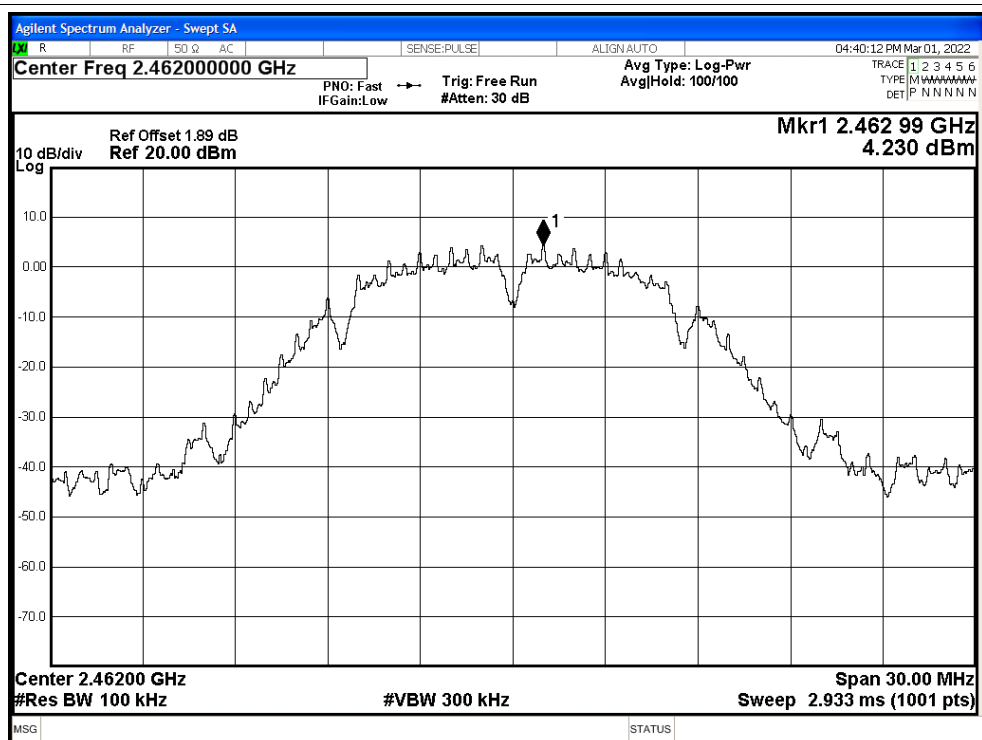


Tx. Spurious NVNT b 2412MHz Ant1 Emission

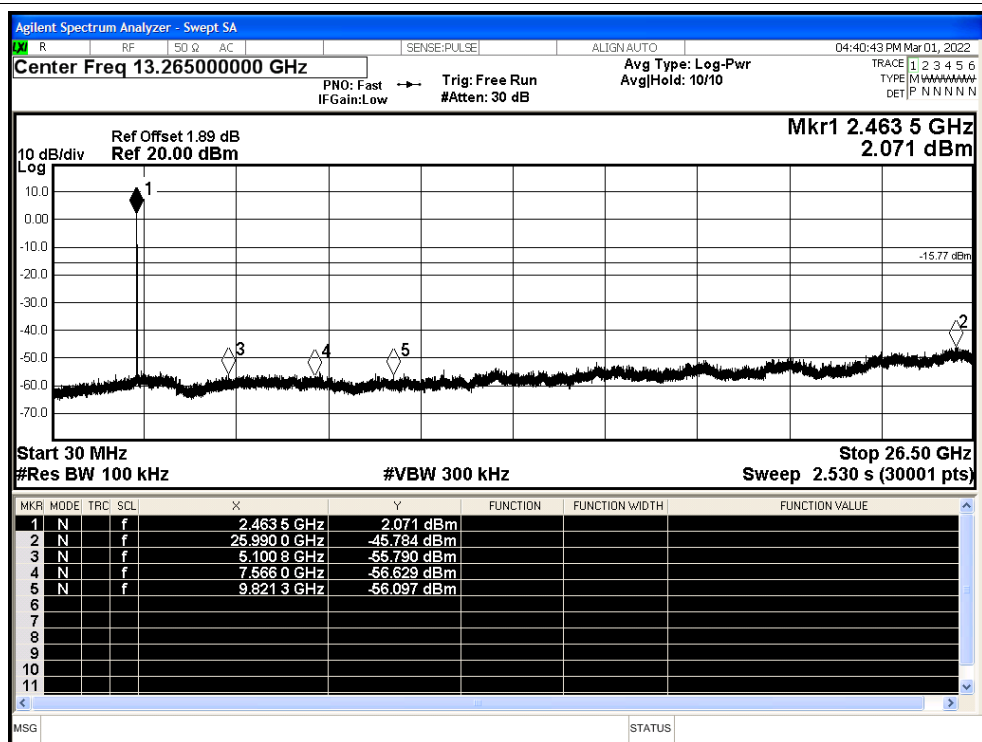




Tx. Spurious NVNT b 2462MHz Ant1 Ref

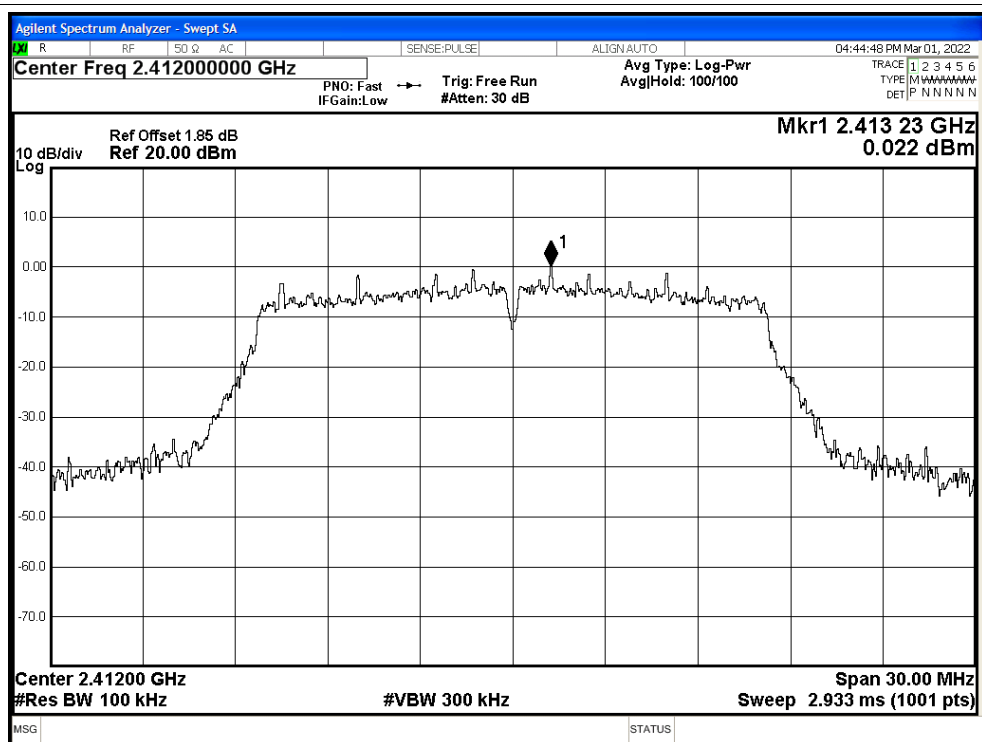


Tx. Spurious NVNT b 2462MHz Ant1 Emission

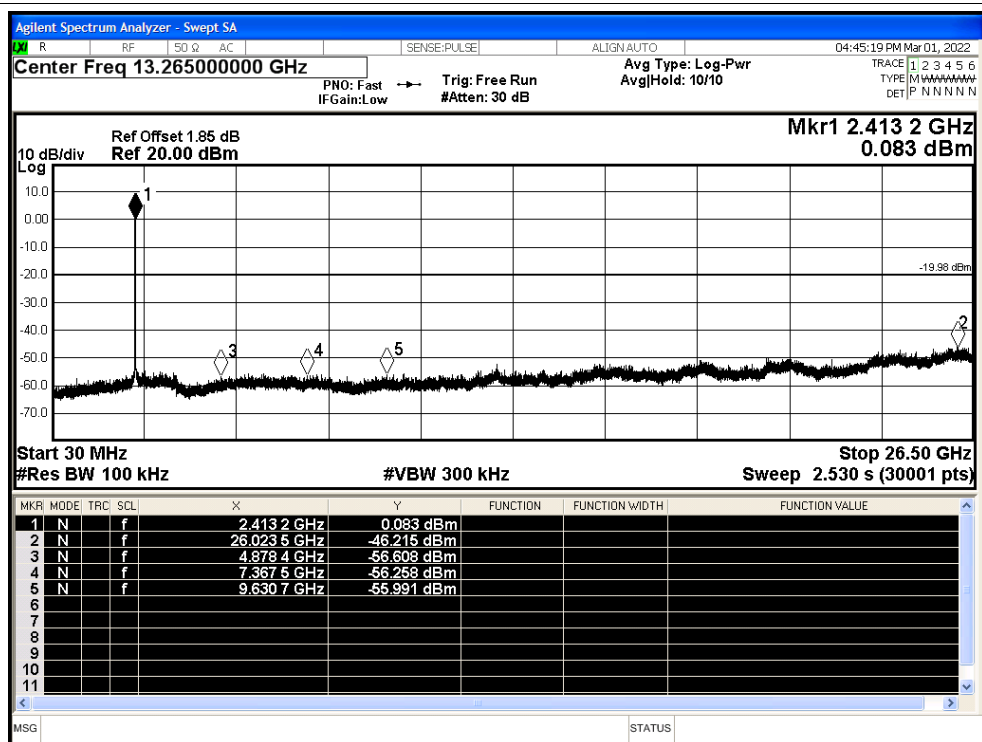


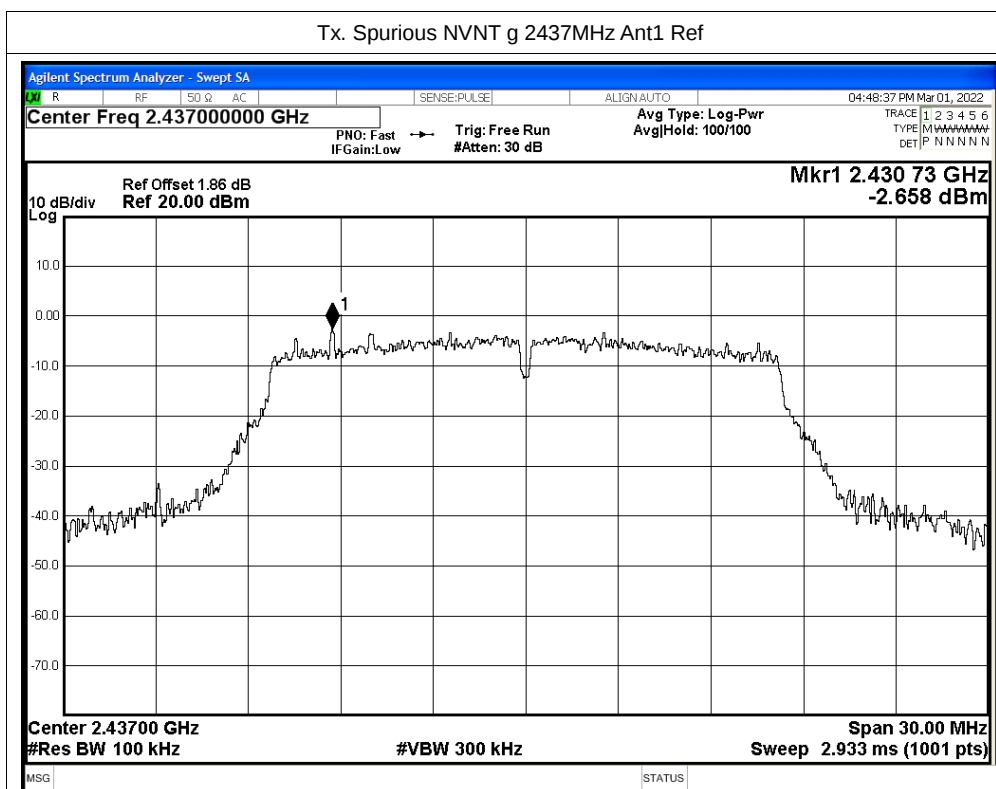


Tx. Spurious NVNT g 2412MHz Ant1 Ref

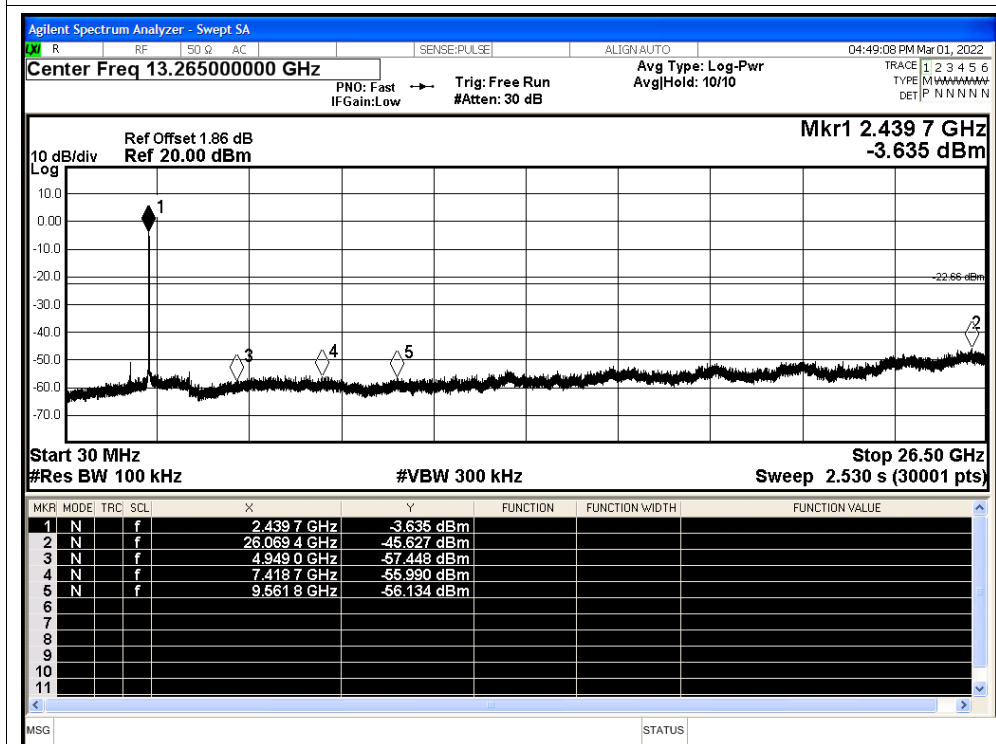


Tx. Spurious NVNT g 2412MHz Ant1 Emission



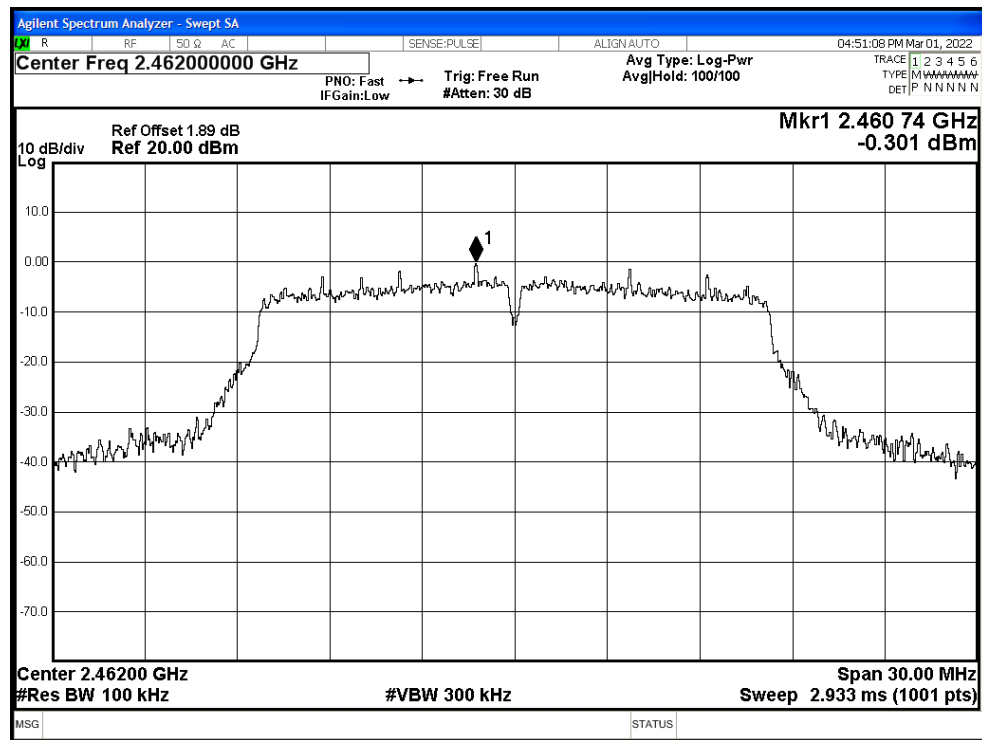


Tx. Spurious NVNT g 2437MHz Ant1 Emission

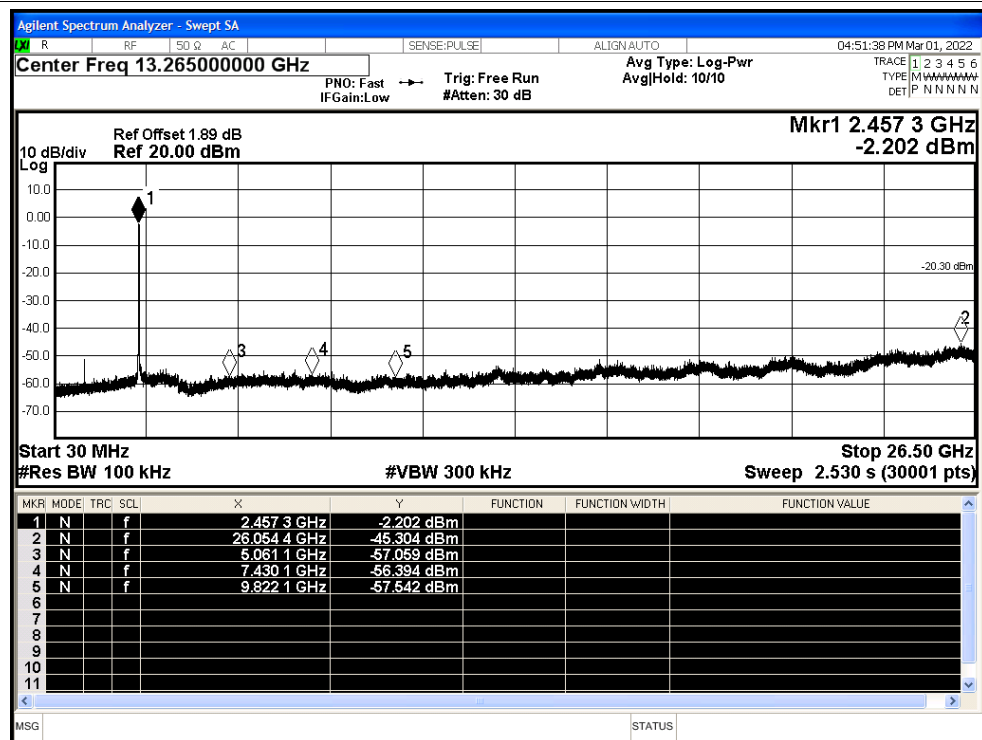




Tx. Spurious NVNT g 2462MHz Ant1 Ref

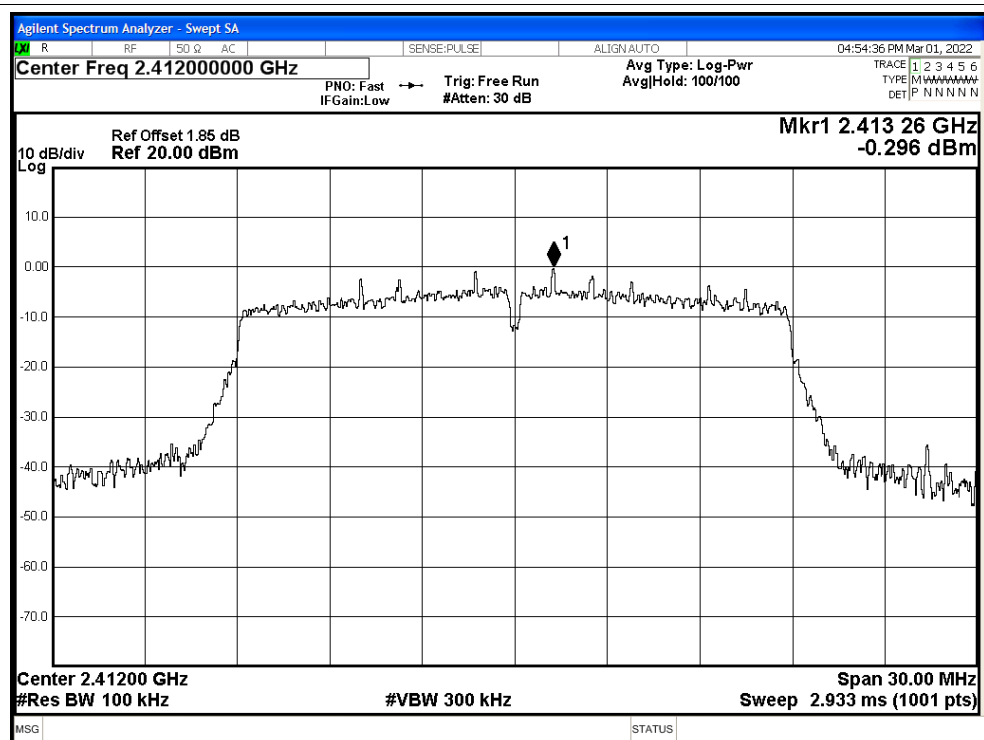


Tx. Spurious NVNT g 2462MHz Ant1 Emission

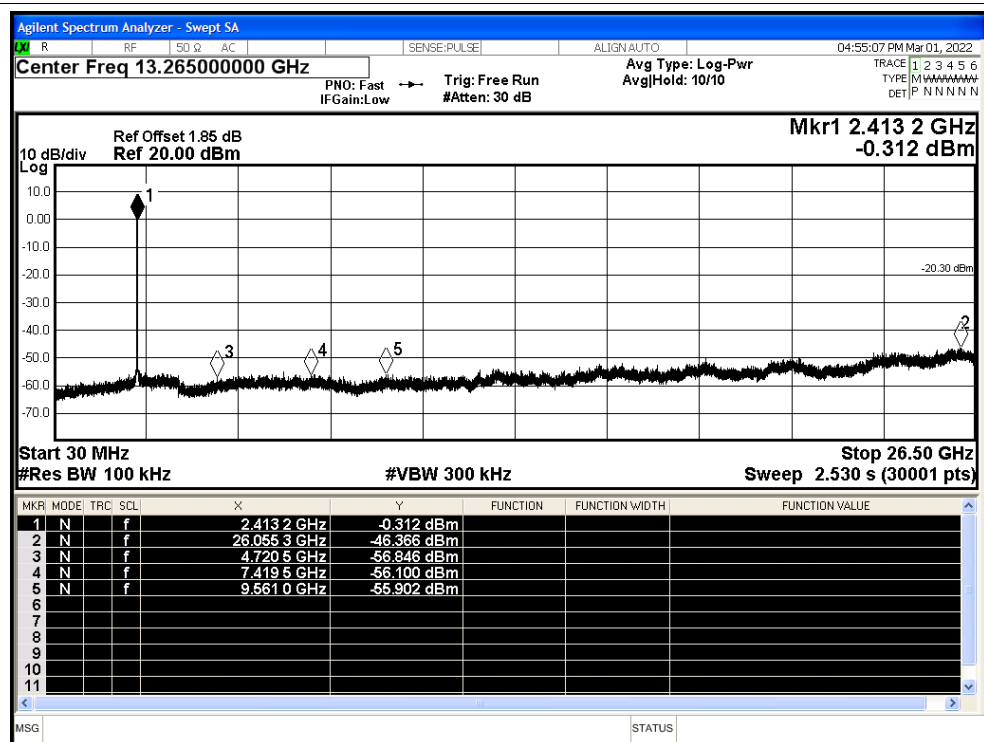




Tx. Spurious NVNT n20 2412MHz Ant1 Ref

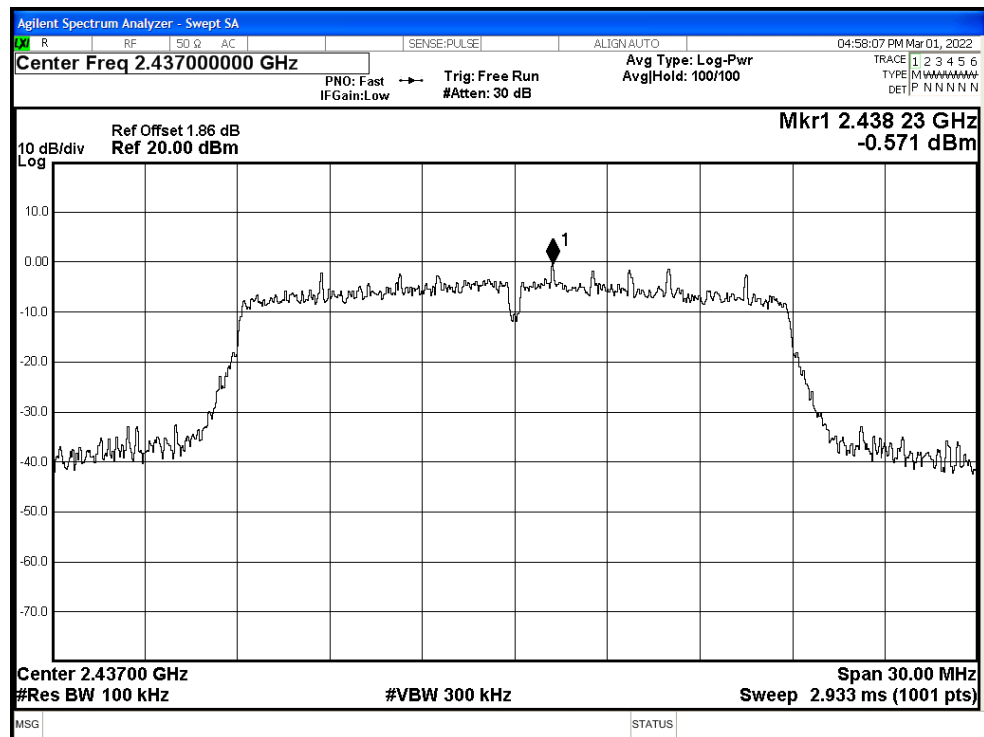


Tx. Spurious NVNT n20 2412MHz Ant1 Emission

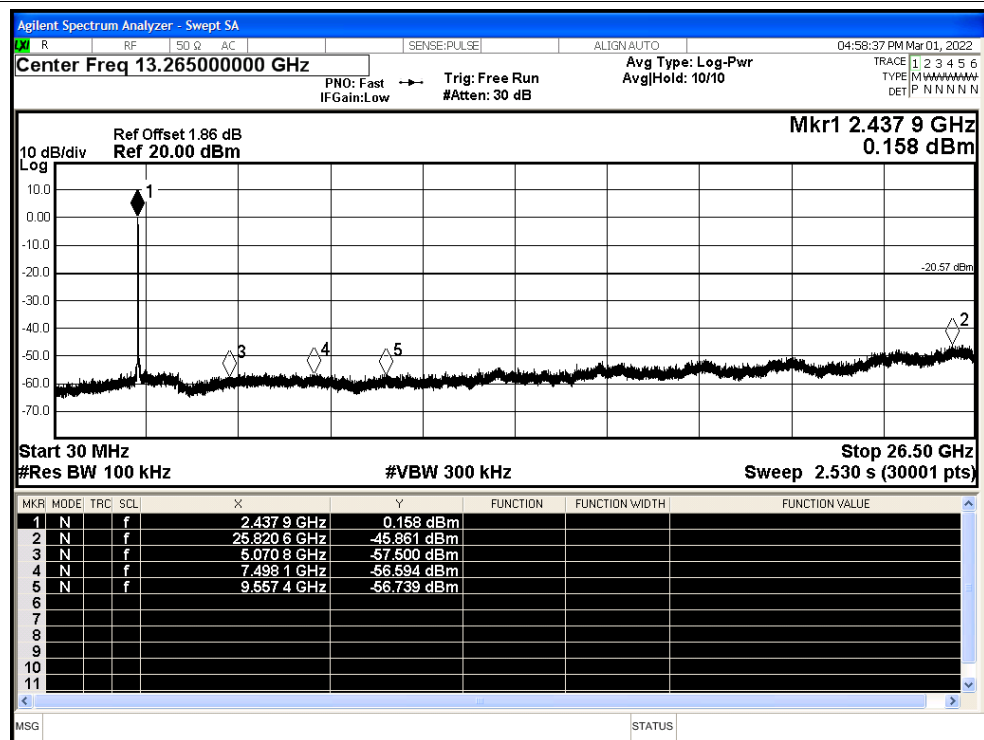




Tx. Spurious NVNT n20 2437MHz Ant1 Ref

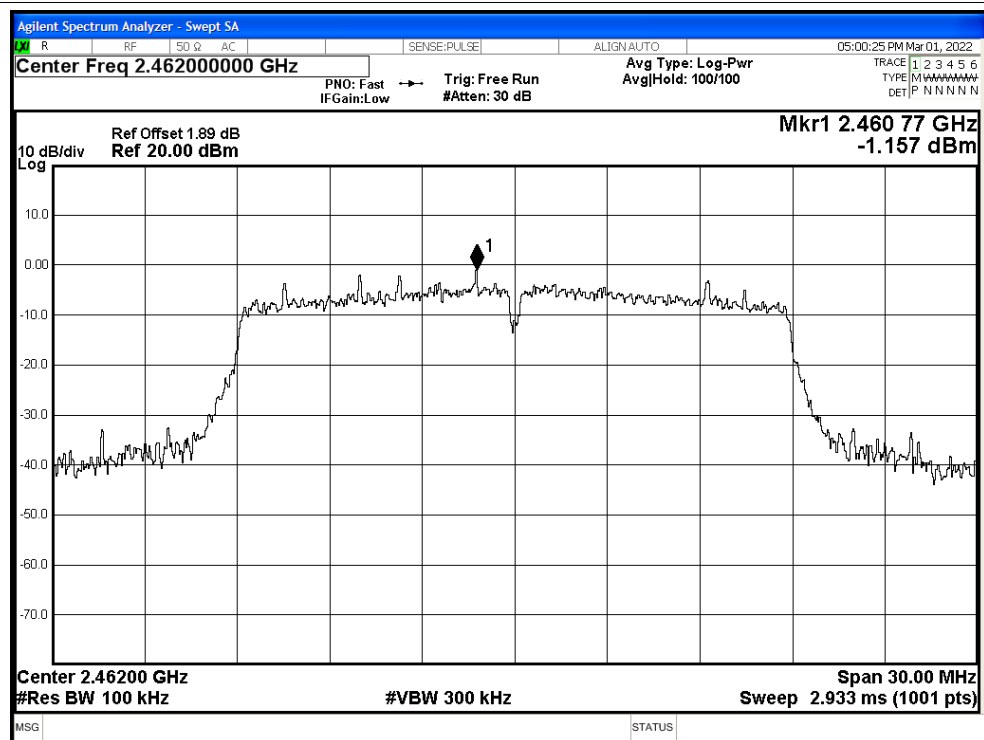


Tx. Spurious NVNT n20 2437MHz Ant1 Emission

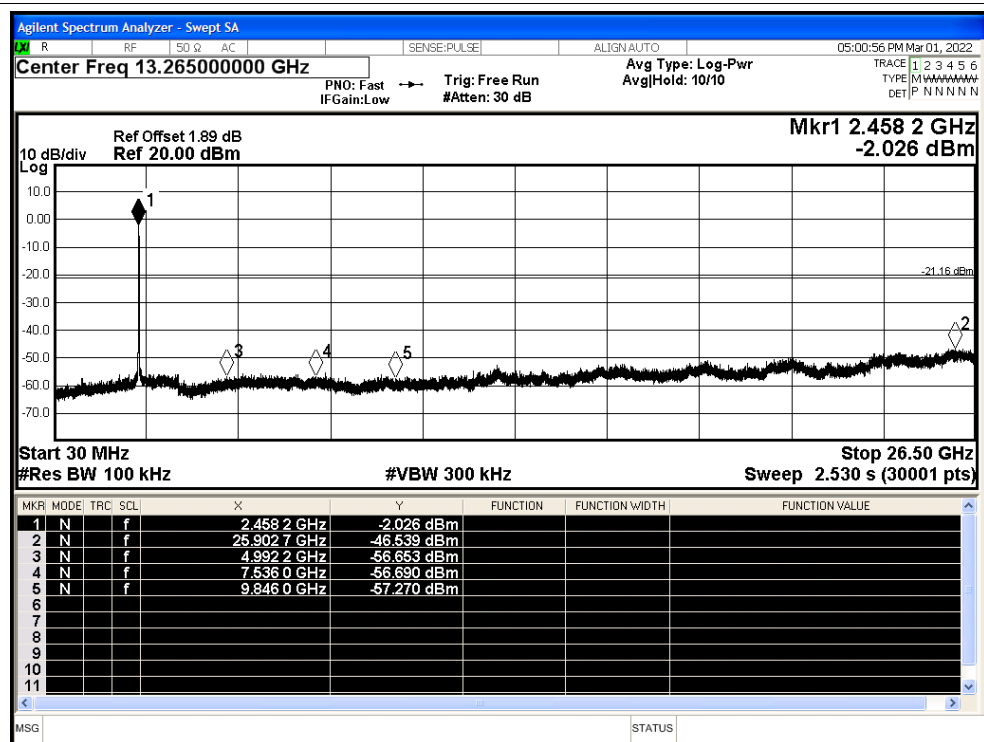




Tx. Spurious NVNT n20 2462MHz Ant1 Ref

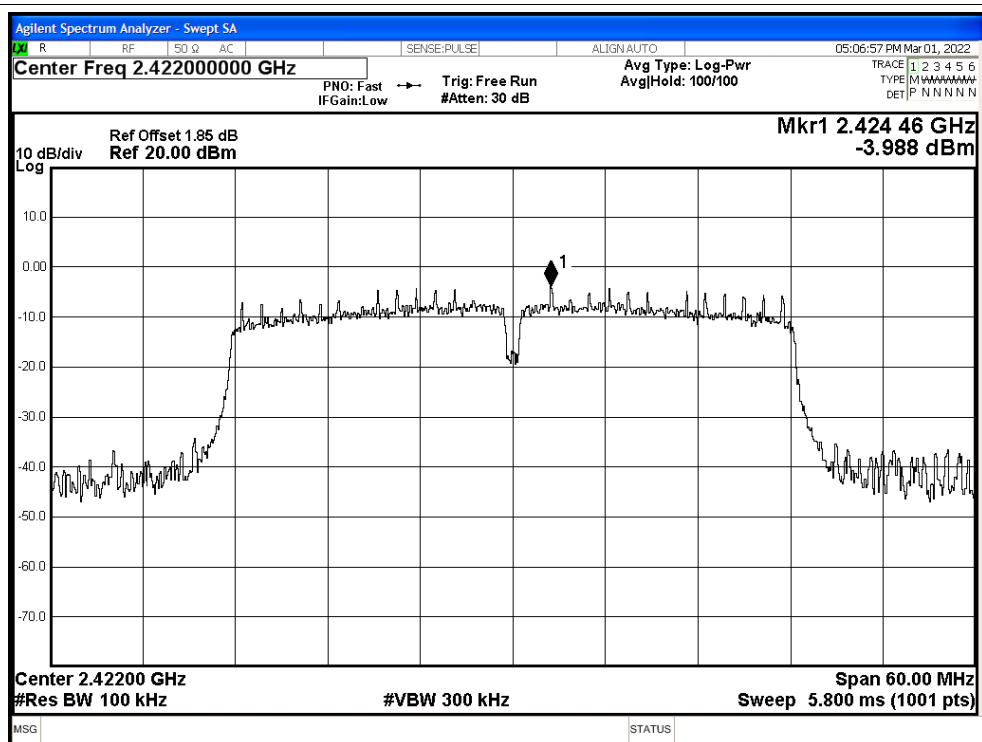


Tx. Spurious NVNT n20 2462MHz Ant1 Emission

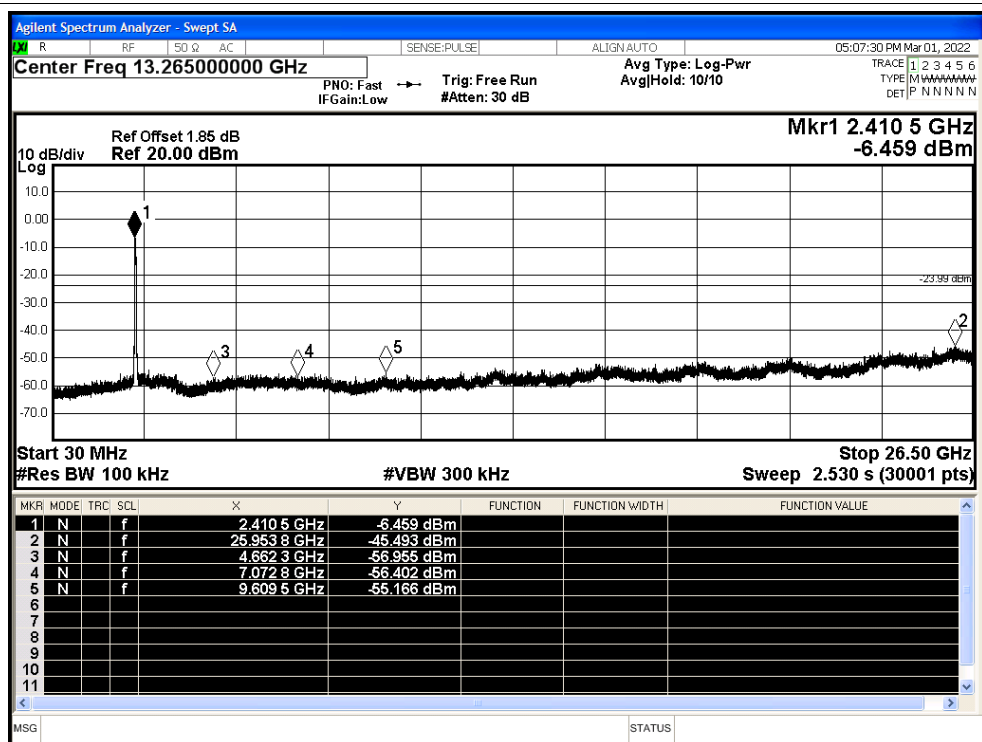


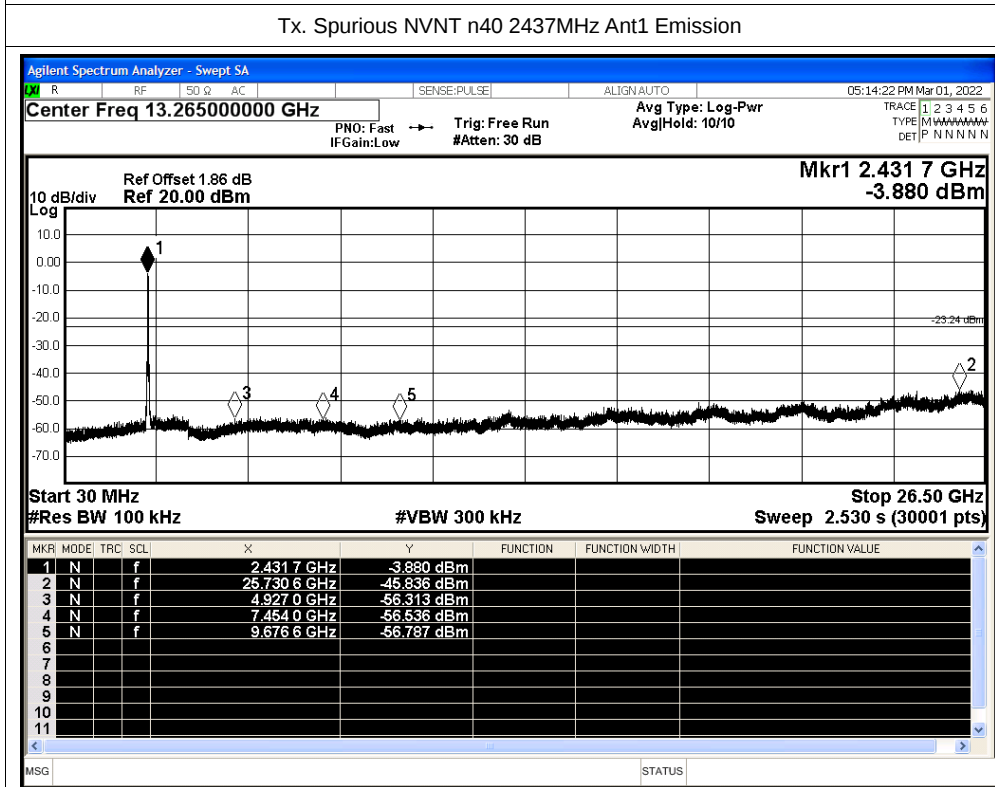


Tx. Spurious NVNT n40 2422MHz Ant1 Ref



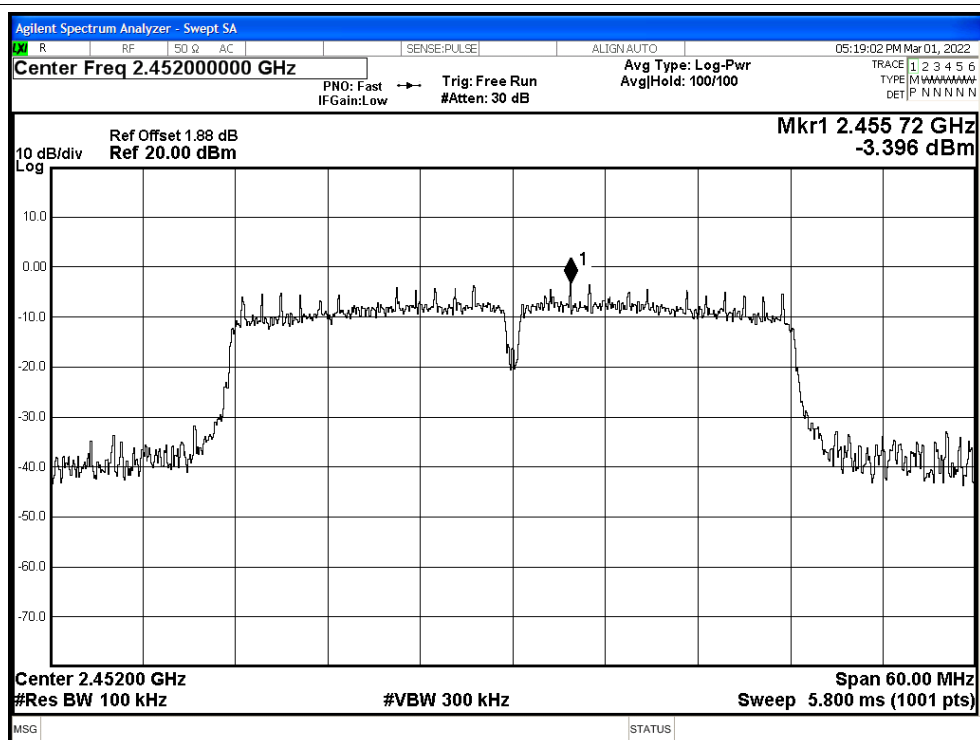
Tx. Spurious NVNT n40 2422MHz Ant1 Emission



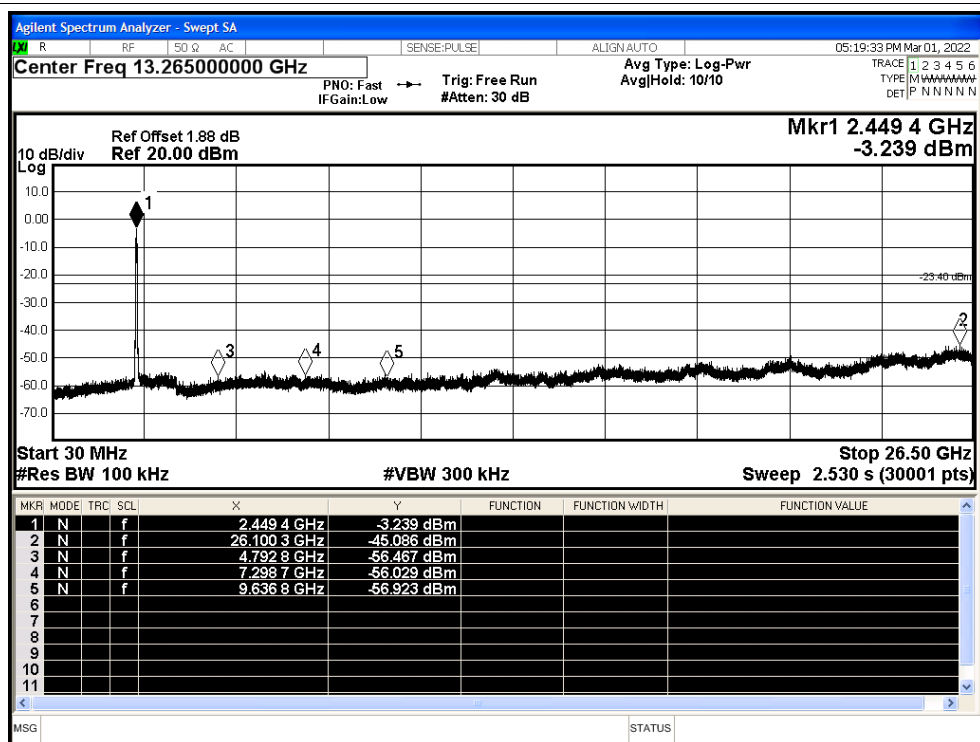




Tx. Spurious NVNT n40 2452MHz Ant1 Ref



Tx. Spurious NVNT n40 2452MHz Ant1 Emission



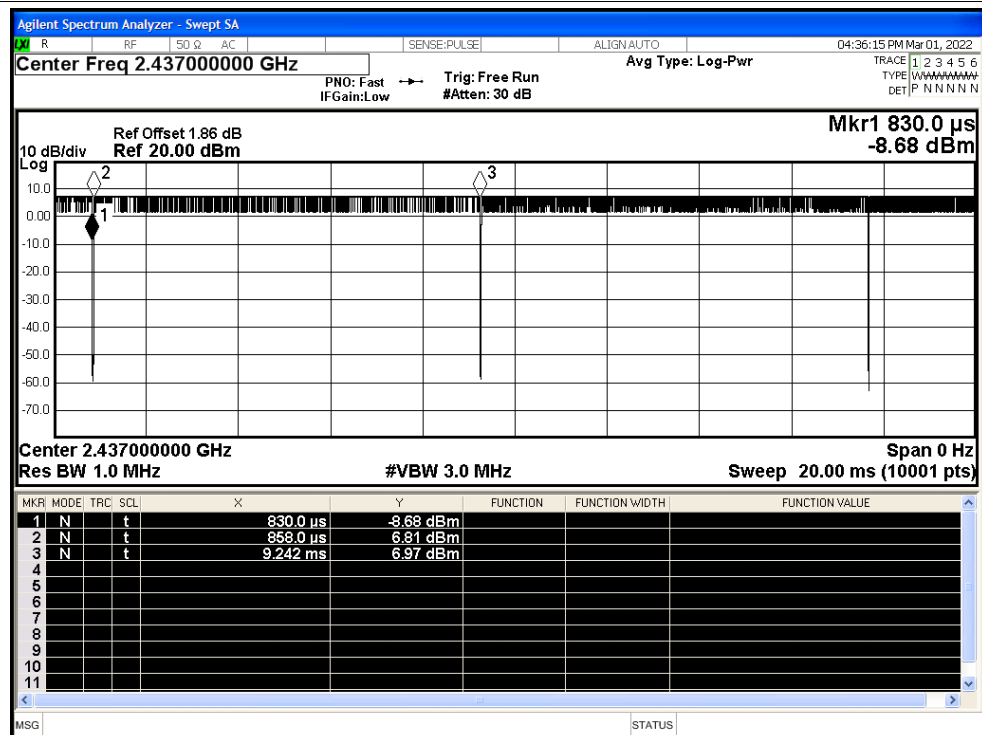


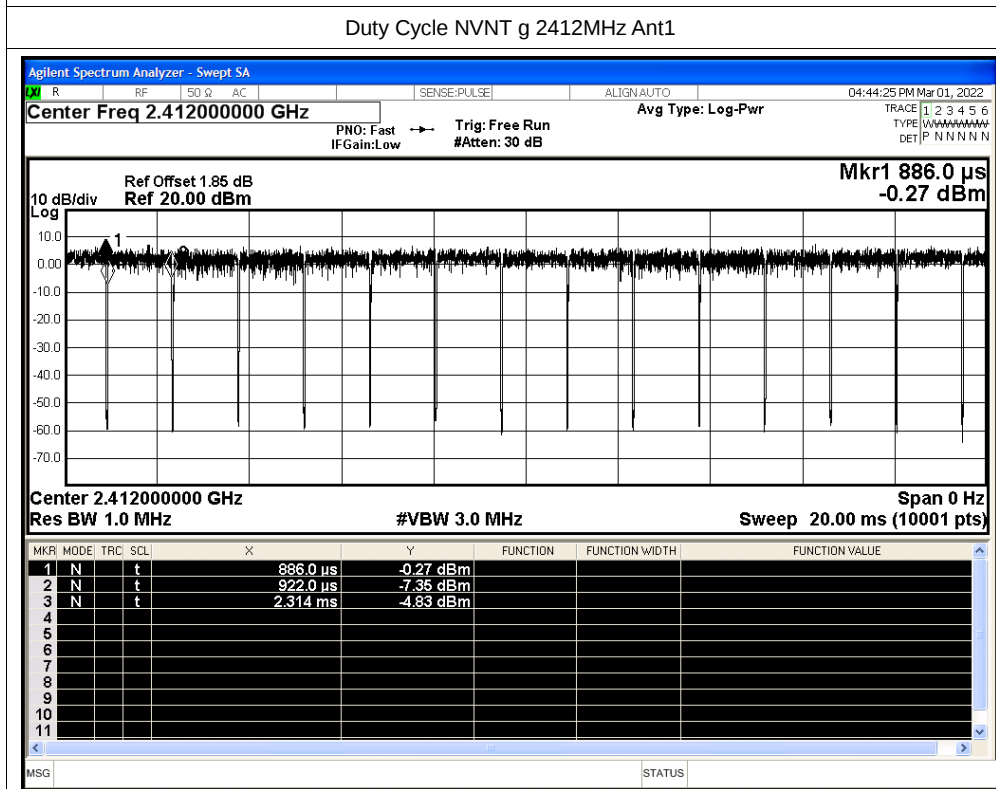
A.6 Duty Cycle

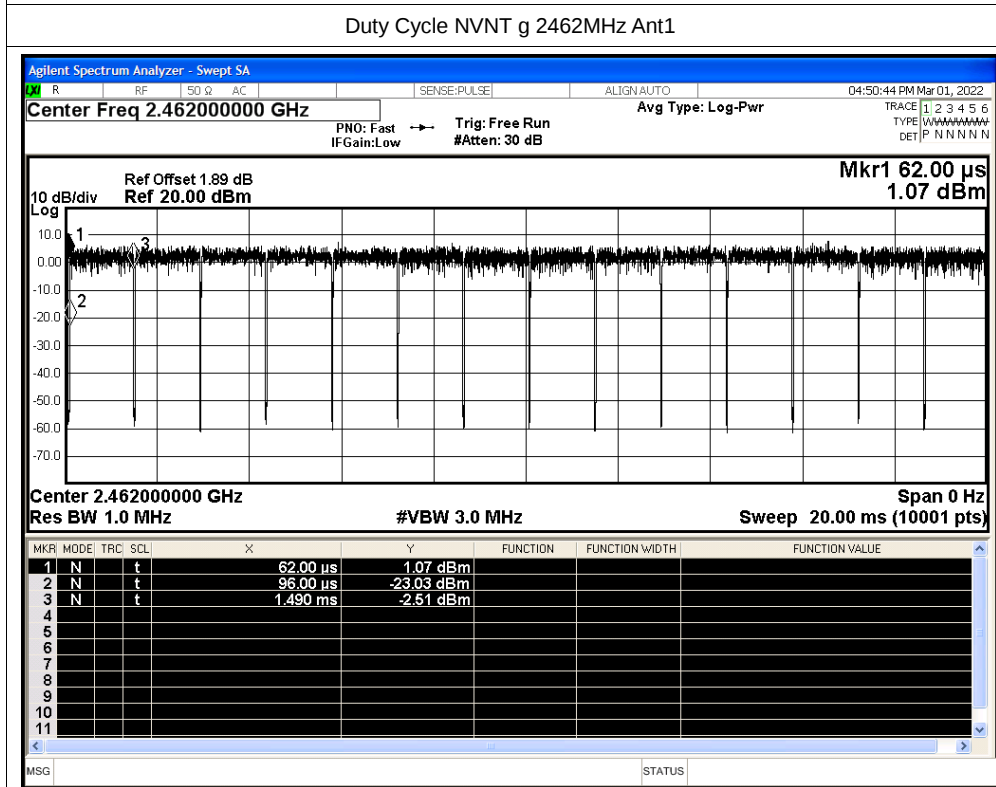
Condition	Mode	Frequency (MHz)	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	99.67	0	0.12
NVNT	b	2437	99.67	0	0.12
NVNT	b	2462	99.67	0	0.12
NVNT	g	2412	97.48	0.11	0.72
NVNT	g	2437	97.62	0.1	0.72
NVNT	g	2462	97.62	0.1	0.72
NVNT	n20	2412	97.46	0.11	0.77
NVNT	n20	2437	97.46	0.11	0.77
NVNT	n20	2462	97.46	0.11	0.77
NVNT	n40	2422	95.31	0.21	1.54
NVNT	n40	2437	95.01	0.22	1.54
NVNT	n40	2452	95.32	0.21	1.53

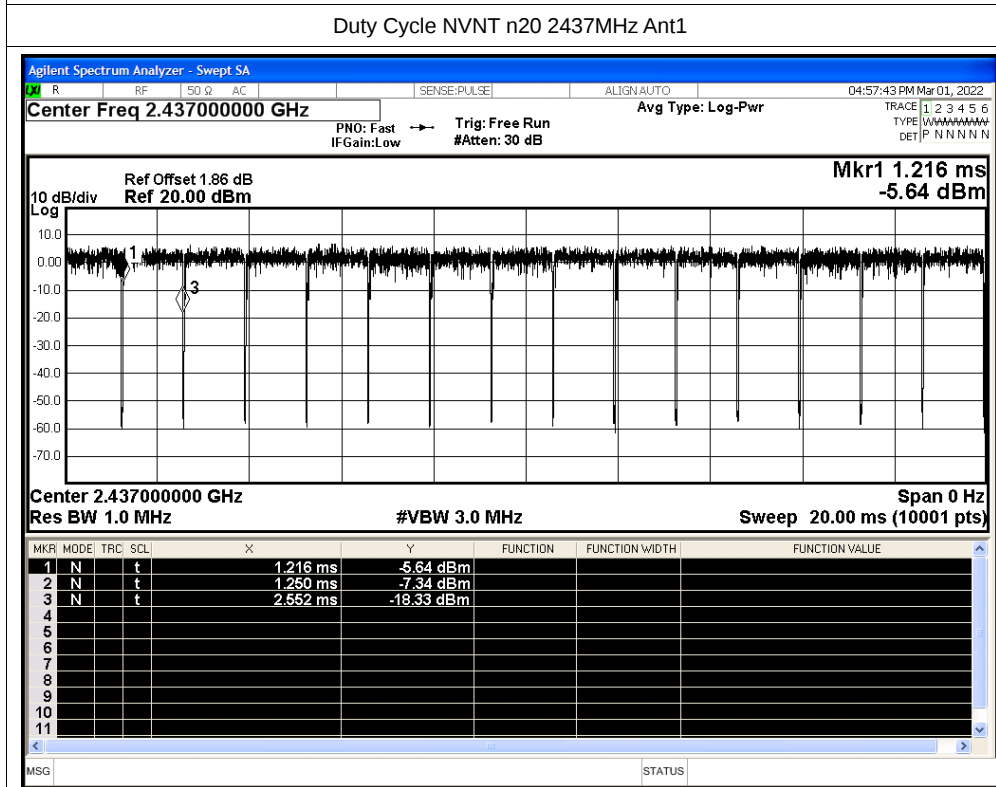


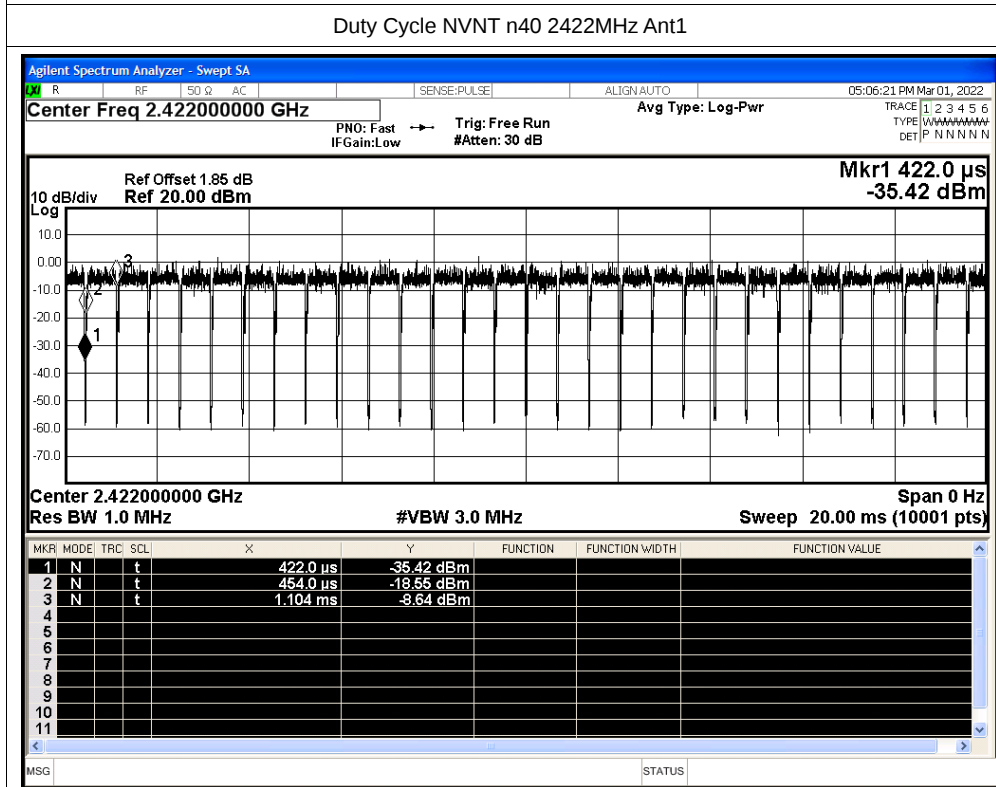
Duty Cycle NVNT b 2412MHz Ant1

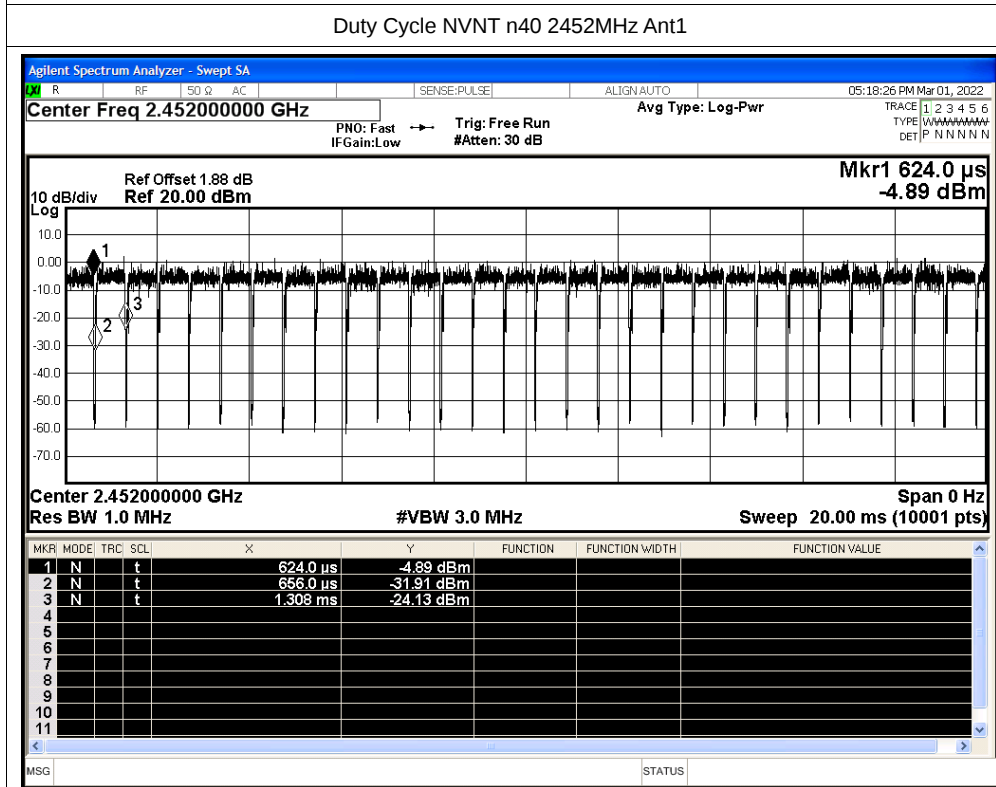














A.7 Emissions in Restricted Bands

Condition	Mode	Frequency (MHz)	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	b	2412	2310	-51.73	2	45.53	Peak	74	Pass
NVNT	b	2412	2310	-60.71	2	36.55	Average	54	Pass
NVNT	b	2412	2387.75	-46.44	2	50.82	Peak	74	Pass
NVNT	b	2412	2388.01	-56.56	2	40.7	Average	54	Pass
NVNT	b	2412	2390	-47.18	2	50.08	Peak	74	Pass
NVNT	b	2412	2390	-56.92	2	40.34	Average	54	Pass
NVNT	b	2462	2483.5	-48.09	2	49.17	Peak	74	Pass
NVNT	b	2462	2483.5	-58.26	2	39	Average	54	Pass
NVNT	b	2462	2488.07	-46.64	2	50.62	Peak	74	Pass
NVNT	b	2462	2486.75	-57.57	2	39.69	Average	54	Pass
NVNT	b	2462	2500	-48.69	2	48.57	Peak	74	Pass
NVNT	b	2462	2500	-59.14	2	38.12	Average	54	Pass
NVNT	g	2412	2310	-50.07	2	47.19	Peak	74	Pass
NVNT	g	2412	2310	-59.85	2	37.41	Average	54	Pass
NVNT	g	2412	2389.96	-39.58	2	57.68	Peak	74	Pass
NVNT	g	2412	2389.96	-53.11	2	44.15	Average	54	Pass
NVNT	g	2412	2390	-41.36	2	55.9	Peak	74	Pass
NVNT	g	2412	2390	-53.1	2	44.16	Average	54	Pass
NVNT	g	2462	2483.5	-38.02	2	59.24	Peak	74	Pass
NVNT	g	2462	2483.5	-50.19	2	47.07	Average	54	Pass
NVNT	g	2462	2483.89	-32.59	2	64.67	Peak	74	Pass
NVNT	g	2462	2483.56	-50.19	2	47.07	Average	54	Pass
NVNT	g	2462	2500	-45.87	2	51.39	Peak	74	Pass
NVNT	g	2462	2500	-55.73	2	41.53	Average	54	Pass
NVNT	n20	2412	2310	-48.62	2	48.64	Peak	74	Pass
NVNT	n20	2412	2310	-59.71	2	37.55	Average	54	Pass
NVNT	n20	2412	2389.44	-34.96	2	62.3	Peak	74	Pass
NVNT	n20	2412	2389.96	-52.21	2	45.05	Average	54	Pass
NVNT	n20	2412	2390	-39.8	2	57.46	Peak	74	Pass
NVNT	n20	2412	2390	-51.95	2	45.31	Average	54	Pass
NVNT	n20	2462	2483.5	-34.42	2	62.84	Peak	74	Pass
NVNT	n20	2462	2483.5	-49.86	2	47.4	Average	54	Pass
NVNT	n20	2462	2483.56	-34.42	2	62.84	Peak	74	Pass
NVNT	n20	2462	2483.56	-49.86	2	47.4	Average	54	Pass
NVNT	n20	2462	2500	-46.93	2	50.33	Peak	74	Pass
NVNT	n20	2462	2500	-55.56	2	41.7	Average	54	Pass
NVNT	n40	2422	2310	-51.14	2	46.12	Peak	74	Pass
NVNT	n40	2422	2310	-59.57	2	37.69	Average	54	Pass
NVNT	n40	2422	2388.01	-26.95	2	70.31	Peak	74	Pass
NVNT	n40	2422	2389.83	-45.77	2	51.49	Average	54	Pass

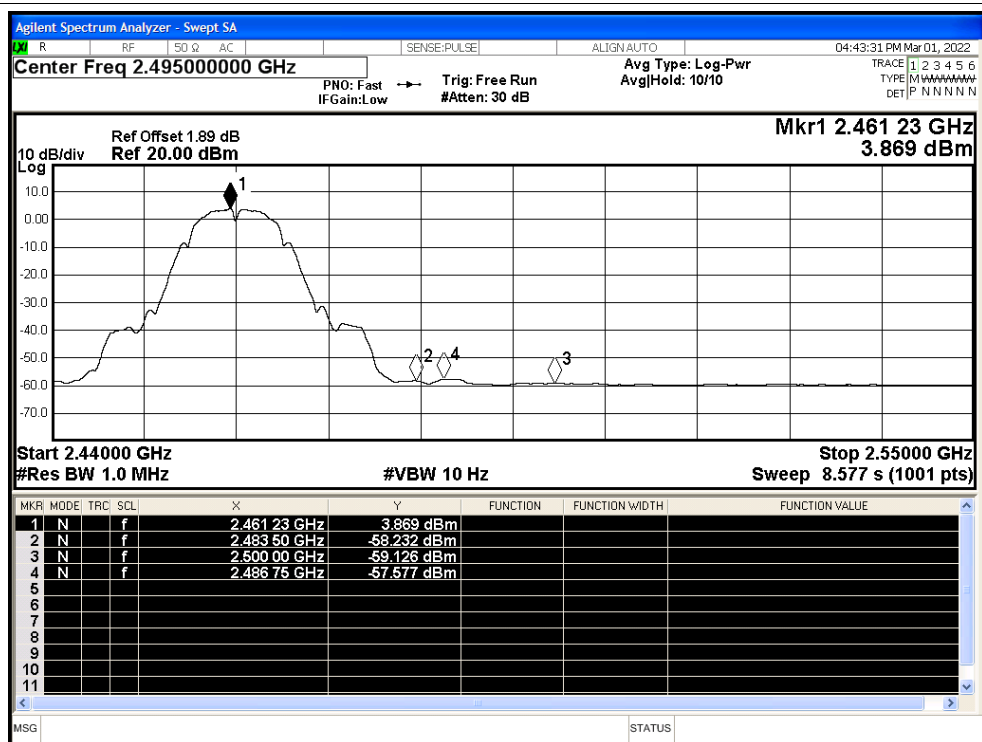


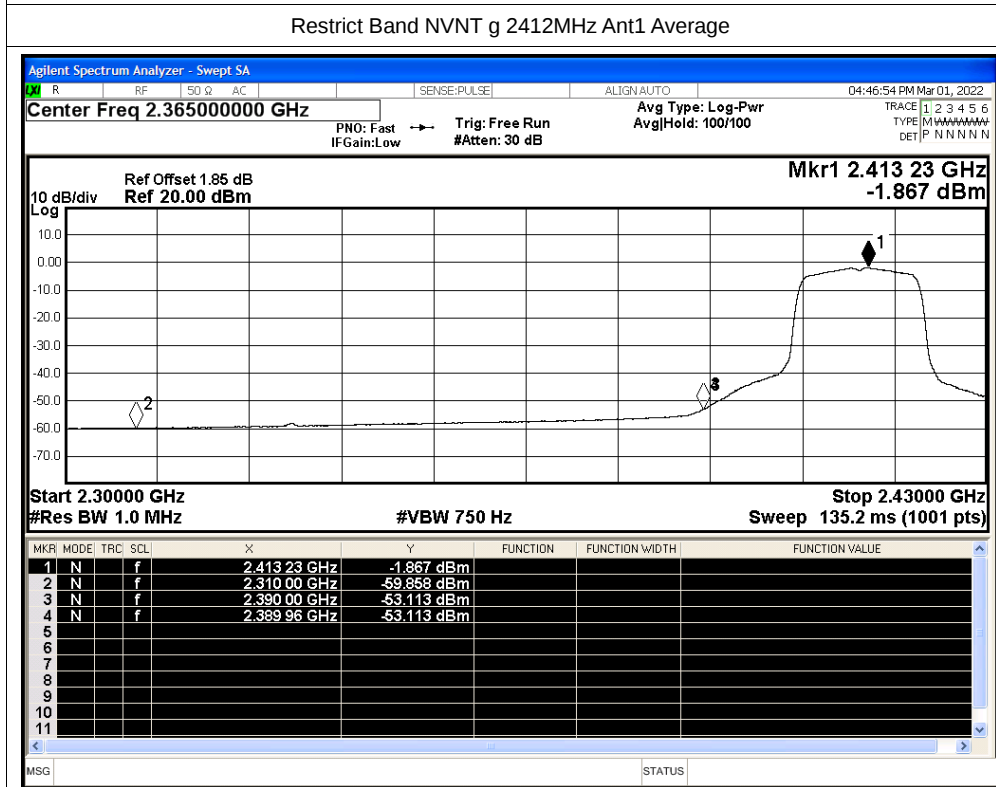
NVNT	n40	2422	2390	-33.77	2	63.49	Peak	74	Pass
NVNT	n40	2422	2390	-45.72	2	51.54	Average	54	Pass
NVNT	n40	2452	2483.5	-37.68	2	59.58	Peak	74	Pass
NVNT	n40	2452	2483.5	-47.99	2	49.27	Average	54	Pass
NVNT	n40	2452	2484	-25.87	2	71.39	Peak	74	Pass
NVNT	n40	2452	2483.67	-47.5	2	49.76	Average	54	Pass
NVNT	n40	2452	2500	-42.45	2	54.81	Peak	74	Pass
NVNT	n40	2452	2500	-53.67	2	43.59	Average	54	Pass

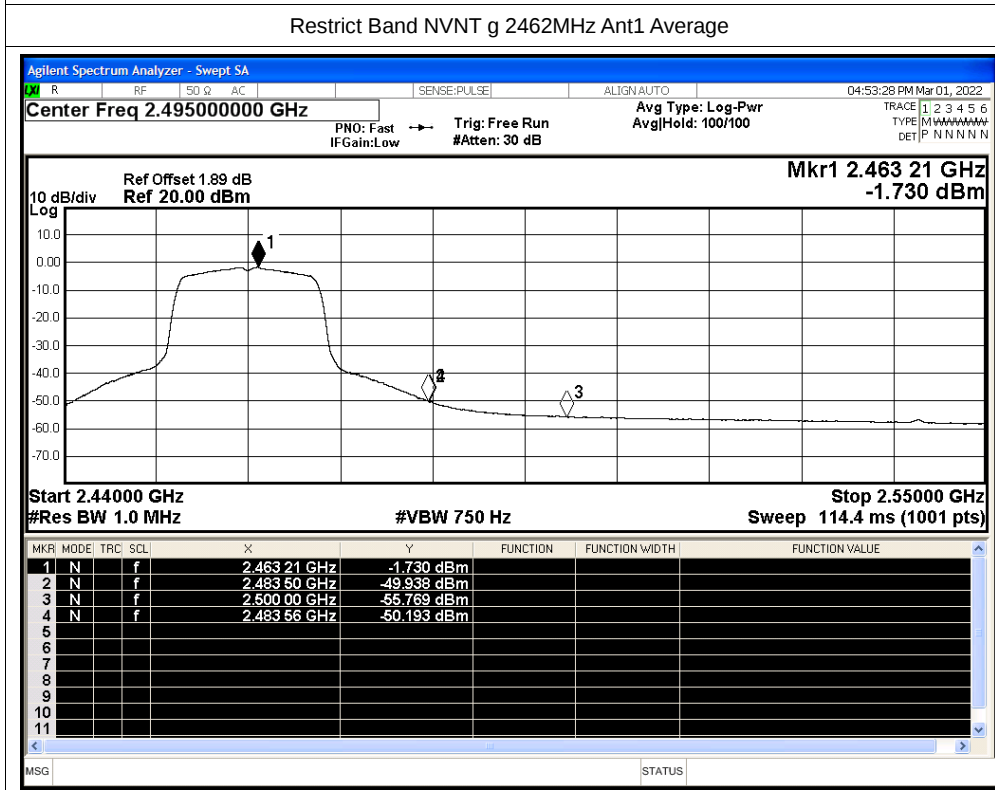


Restrict Band NVNT b 2412MHz Ant1 Peak

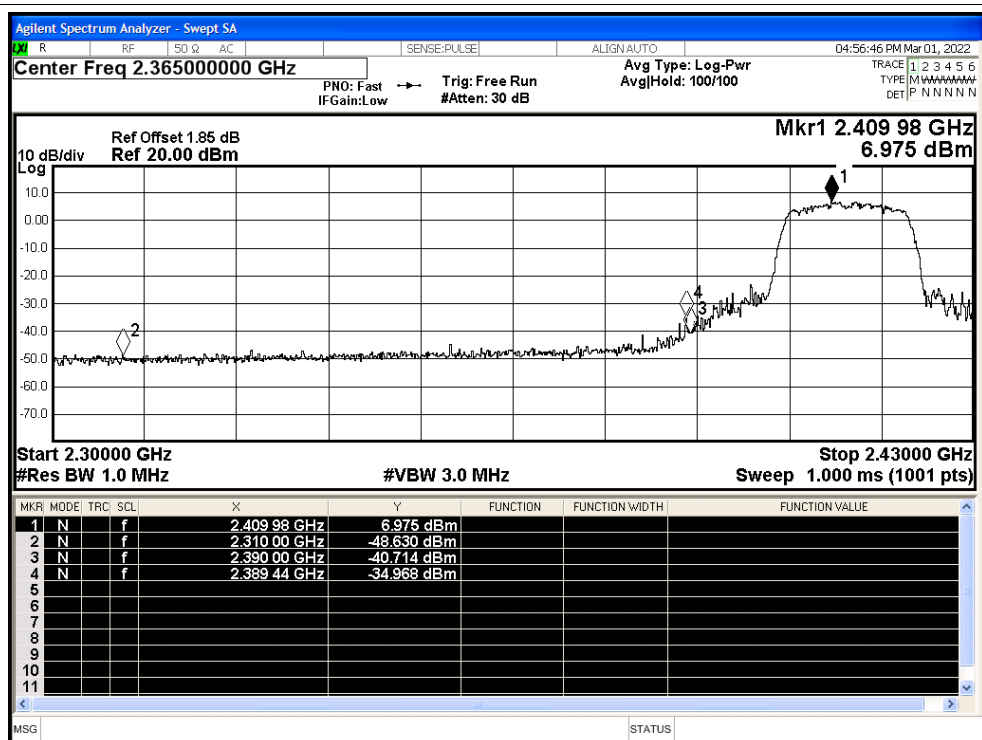




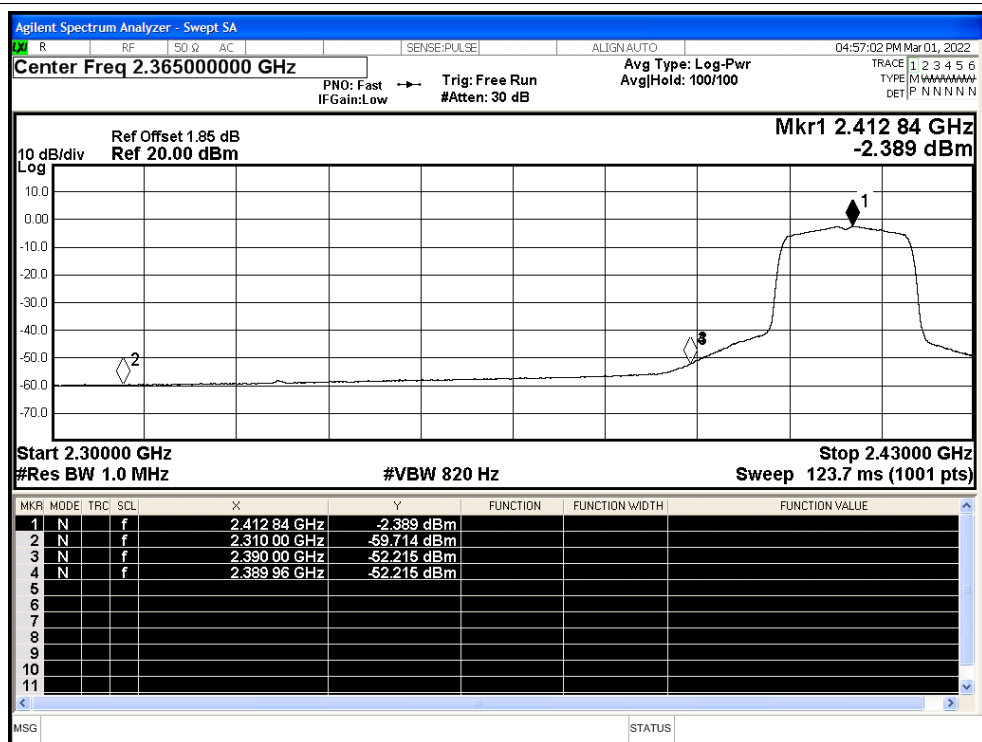




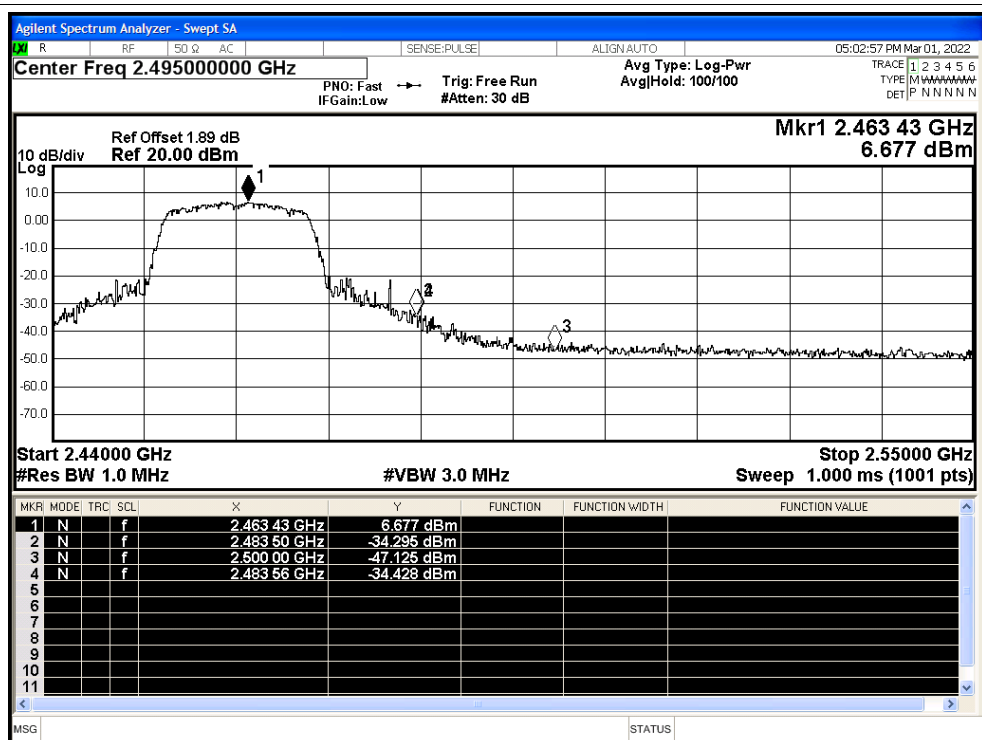
Restrict Band NVNT n20 2412MHz Ant1 Peak



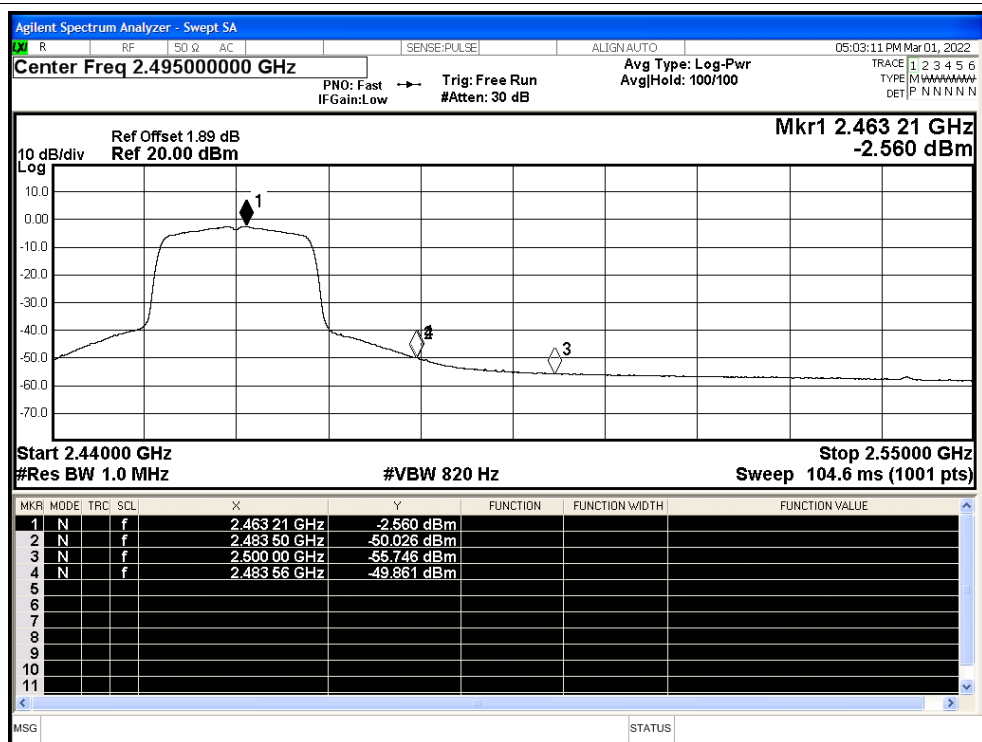
Restrict Band NVNT n20 2412MHz Ant1 Average



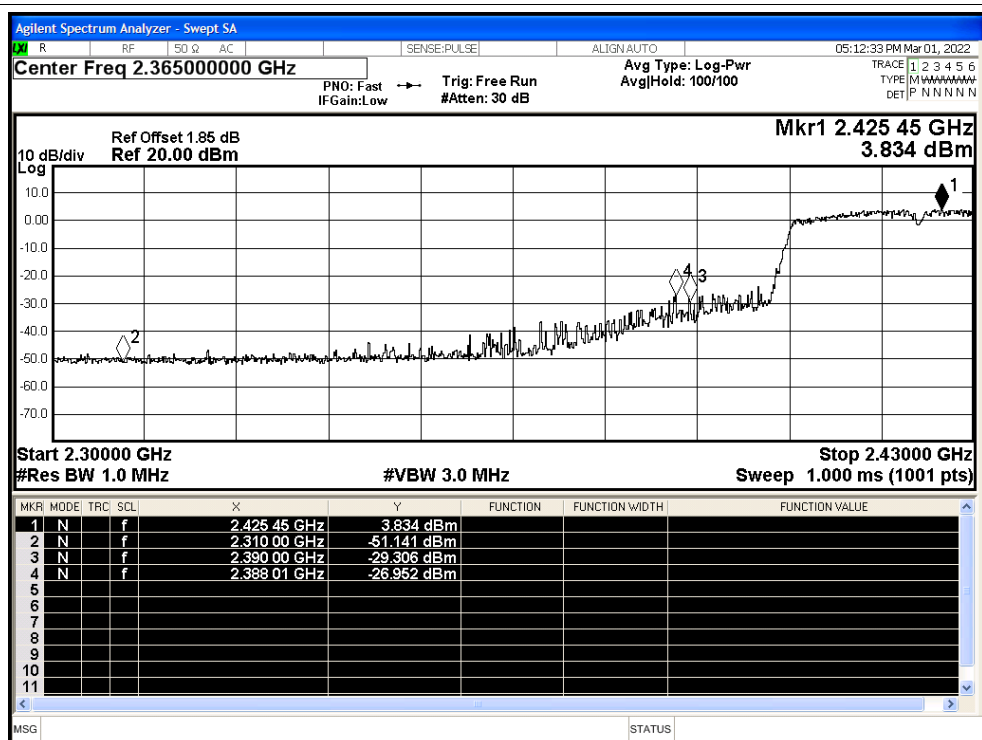
Restrict Band NVNT n20 2462MHz Ant1 Peak



Restrict Band NVNT n20 2462MHz Ant1 Average



Restrict Band NVNT n40 2422MHz Ant1 Peak



Restrict Band NVNT n40 2422MHz Ant1 Average

