



## Appendix B

### RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: LED Down Light

Test Model: US-DL6A-1

#### Environmental Conditions

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



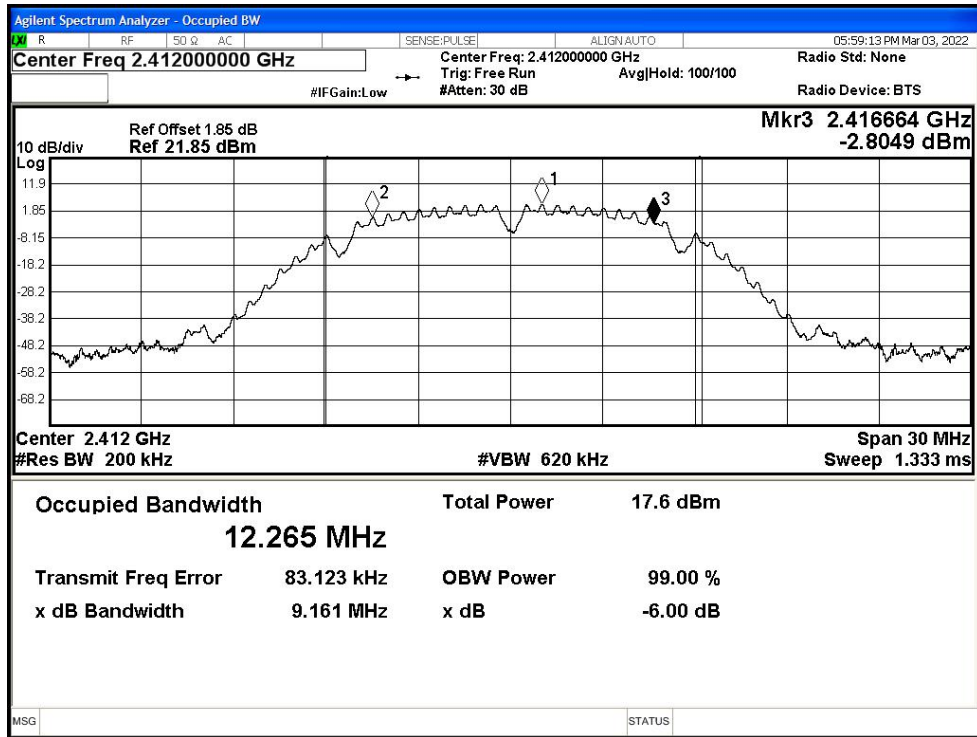
## B.1 6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.161	0.5	Pass
NVNT	b	2437	Ant1	9.581	0.5	Pass
NVNT	b	2462	Ant1	9.615	0.5	Pass
NVNT	g	2412	Ant1	16.418	0.5	Pass
NVNT	g	2437	Ant1	16.342	0.5	Pass
NVNT	g	2462	Ant1	16.347	0.5	Pass
NVNT	n20	2412	Ant1	17.659	0.5	Pass
NVNT	n20	2437	Ant1	17.596	0.5	Pass
NVNT	n20	2462	Ant1	17.585	0.5	Pass



Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

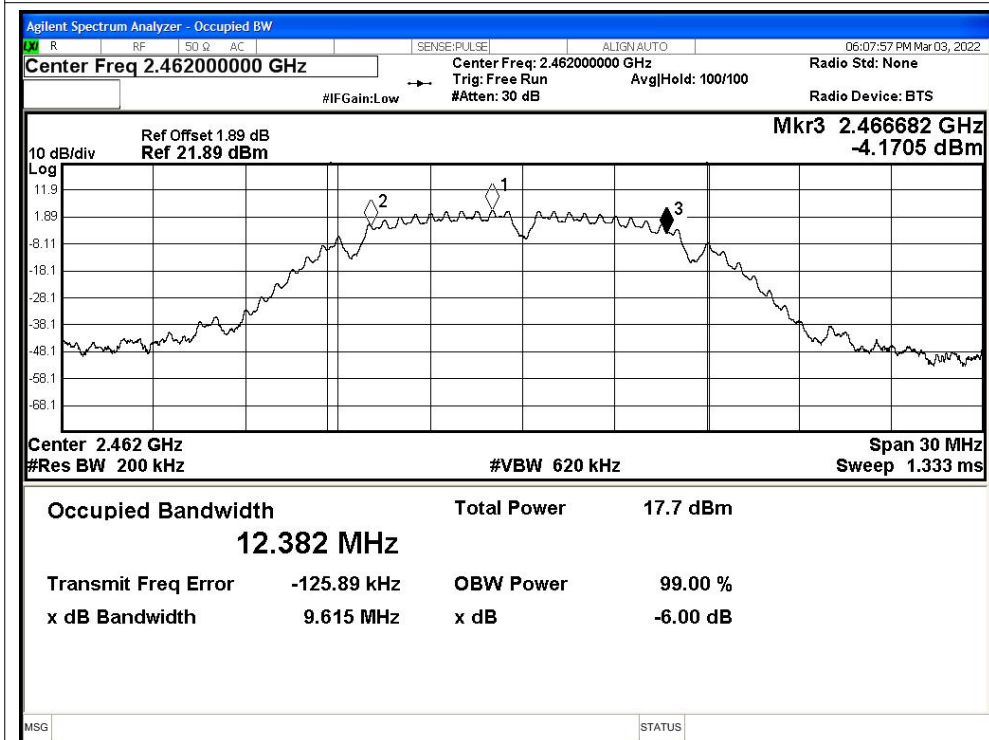


-6dB Bandwidth NVNT b 2437MHz Ant1

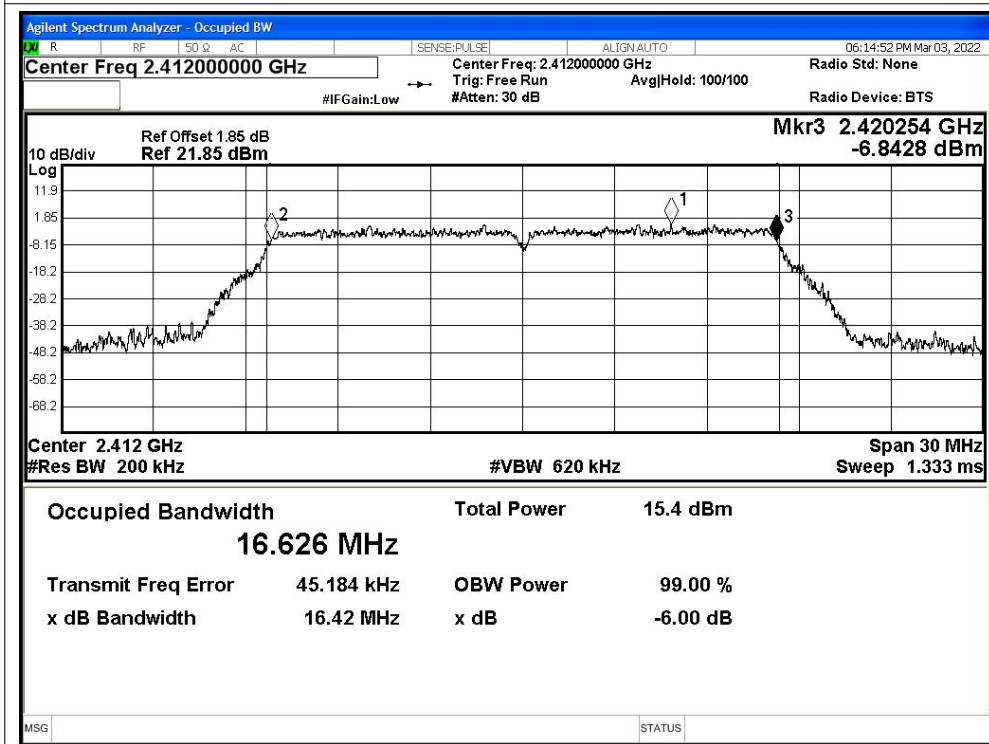




-6dB Bandwidth NVNT b 2462MHz Ant1

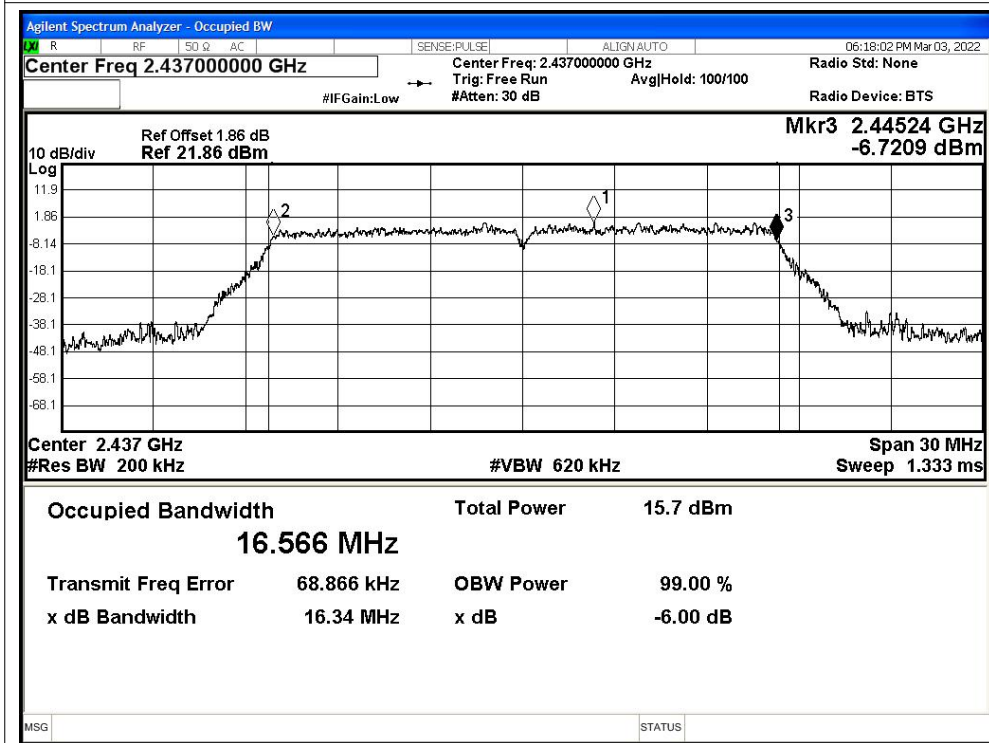


-6dB Bandwidth NVNT g 2412MHz Ant1

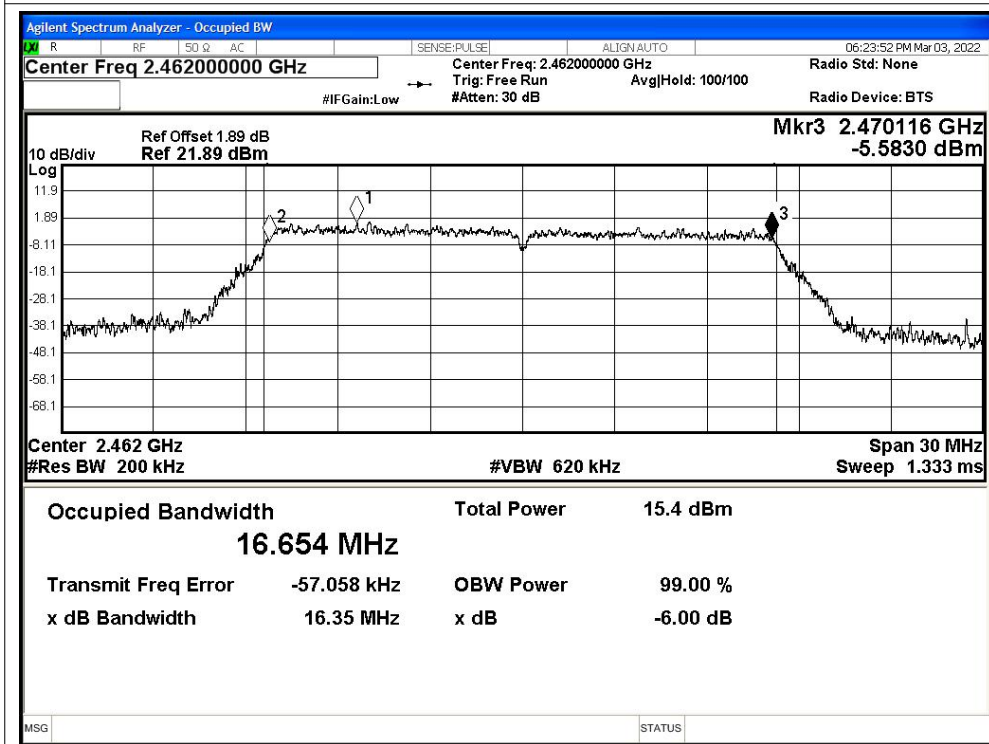




-6dB Bandwidth NVNT g 2437MHz Ant1

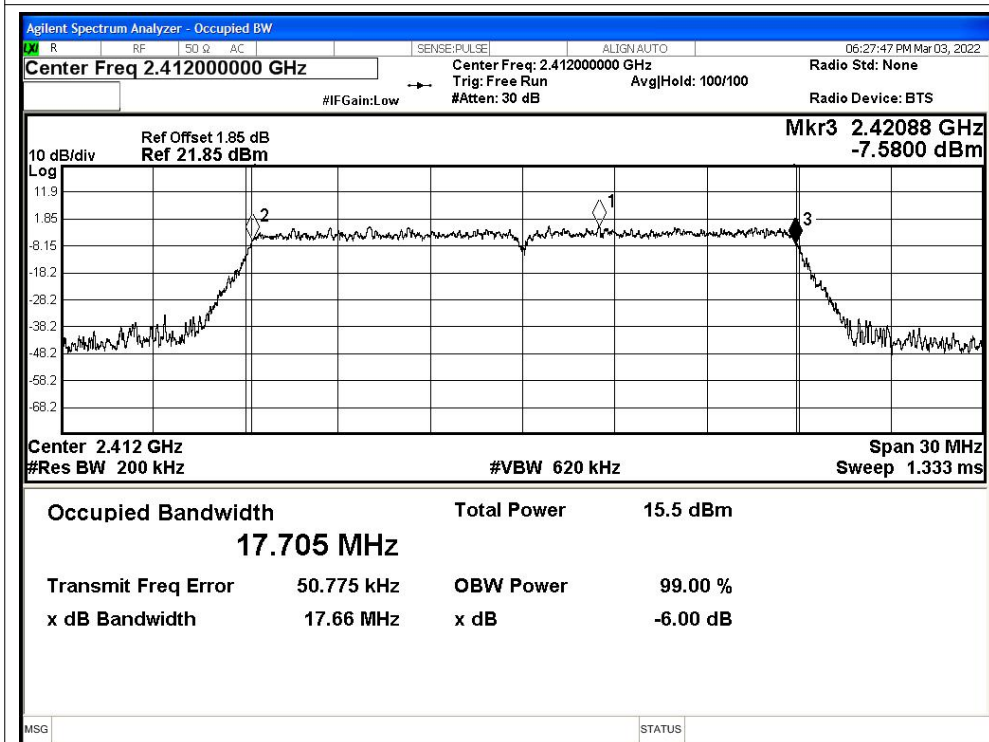


-6dB Bandwidth NVNT g 2462MHz Ant1

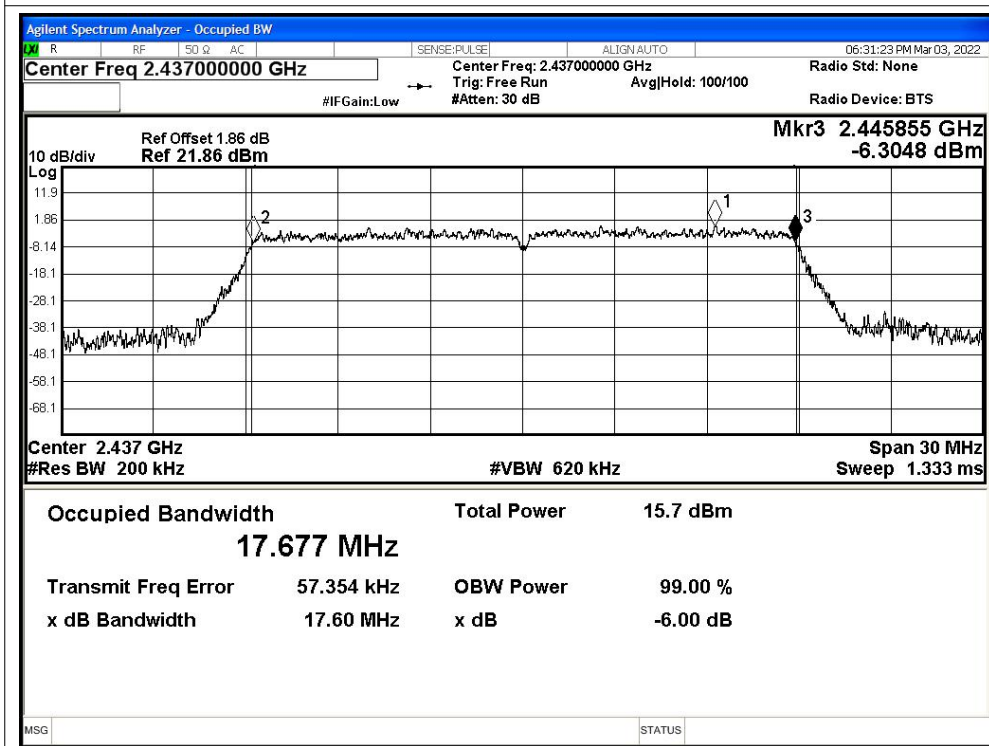


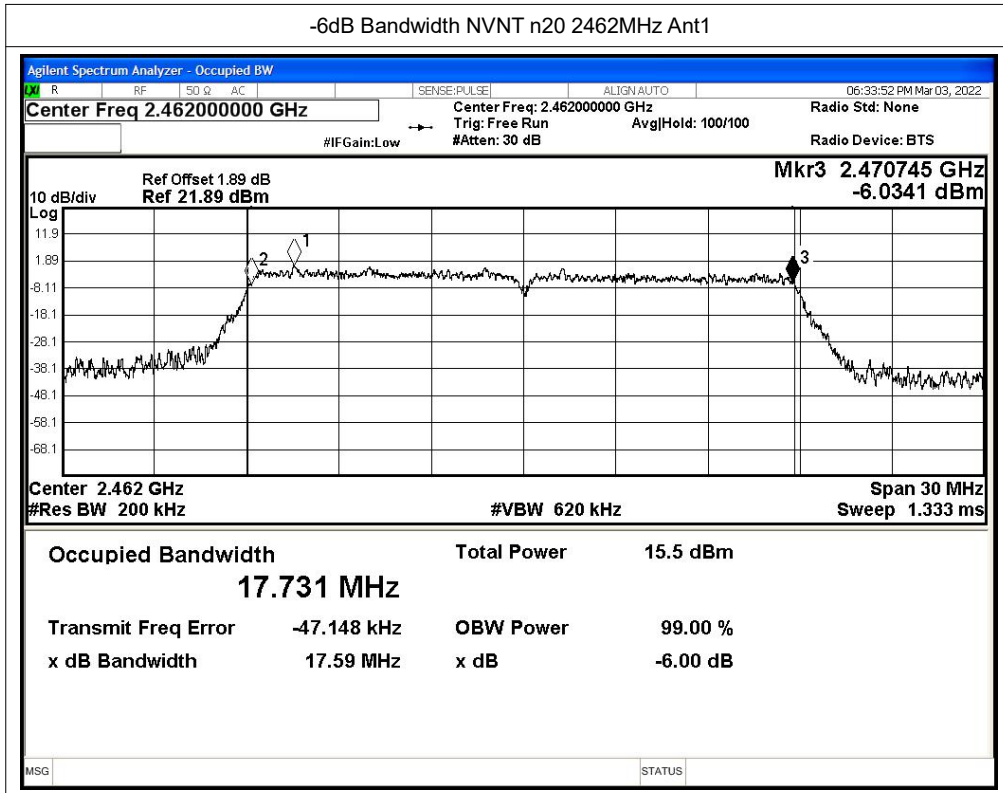


-6dB Bandwidth NVNT n20 2412MHz Ant1



-6dB Bandwidth NVNT n20 2437MHz Ant1







## B.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	14.03	0	14.03	30	Pass
NVNT	b	2437	Ant1	14.12	0	14.12	30	Pass
NVNT	b	2462	Ant1	14.27	0	14.27	30	Pass
NVNT	g	2412	Ant1	14.44	0	14.44	30	Pass
NVNT	g	2437	Ant1	14.64	0	14.64	30	Pass
NVNT	g	2462	Ant1	14.35	0	14.35	30	Pass
NVNT	n20	2412	Ant1	14.48	0	14.48	30	Pass
NVNT	n20	2437	Ant1	14.6	0	14.6	30	Pass
NVNT	n20	2462	Ant1	14.46	0	14.46	30	Pass





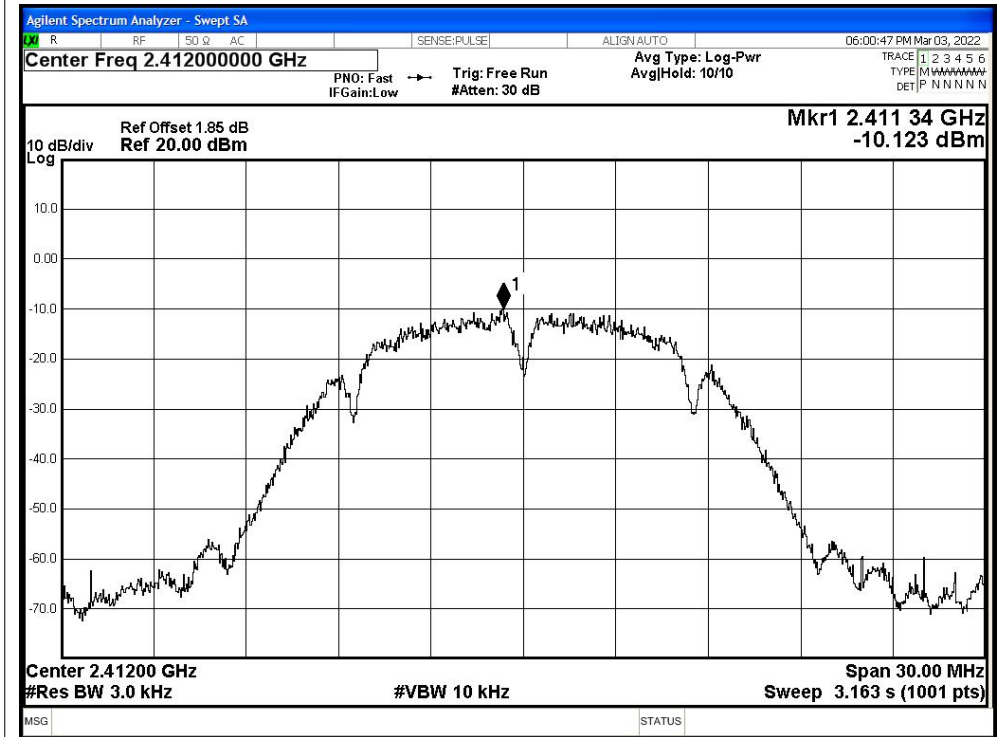
## B.3 Power Spectral Density

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-10.12	0	-10.12	8	Pass
NVNT	b	2437	Ant1	-9.49	0	-9.49	8	Pass
NVNT	b	2462	Ant1	-9.9	0	-9.9	8	Pass
NVNT	g	2412	Ant1	-15.3	0	-15.3	8	Pass
NVNT	g	2437	Ant1	-14.93	0	-14.93	8	Pass
NVNT	g	2462	Ant1	-14.88	0	-14.88	8	Pass
NVNT	n20	2412	Ant1	-15.47	0	-15.47	8	Pass
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NVNT	n20	2462	Ant1	-15.15	0	-15.15	8	Pass

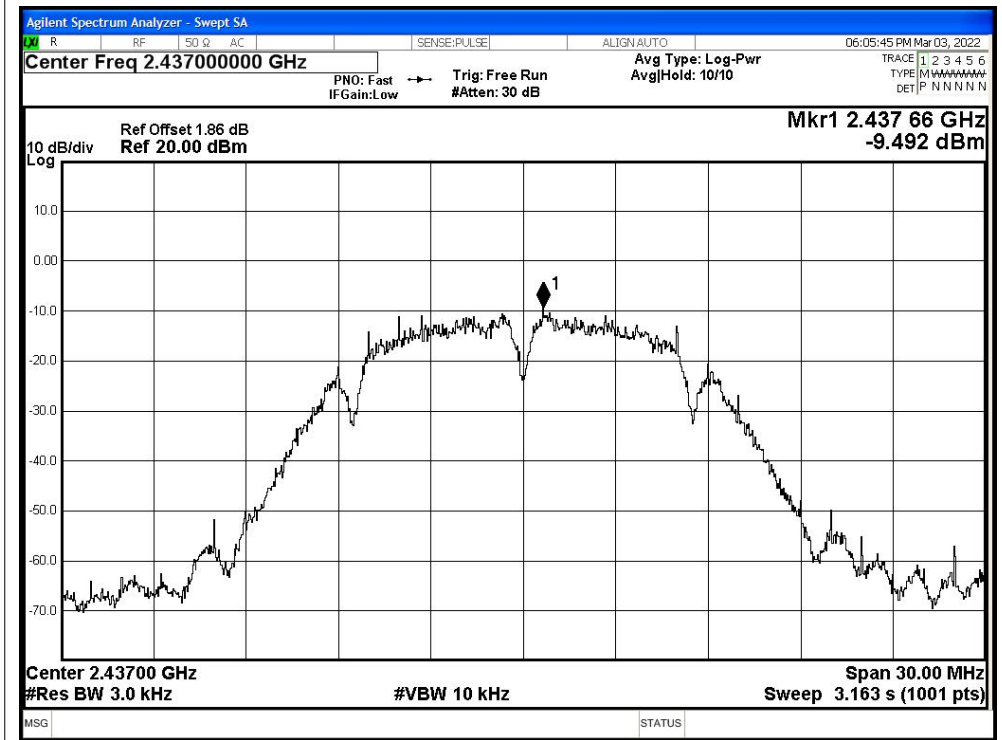


Test Graphs

PSD NVNT b 2412MHz Ant1

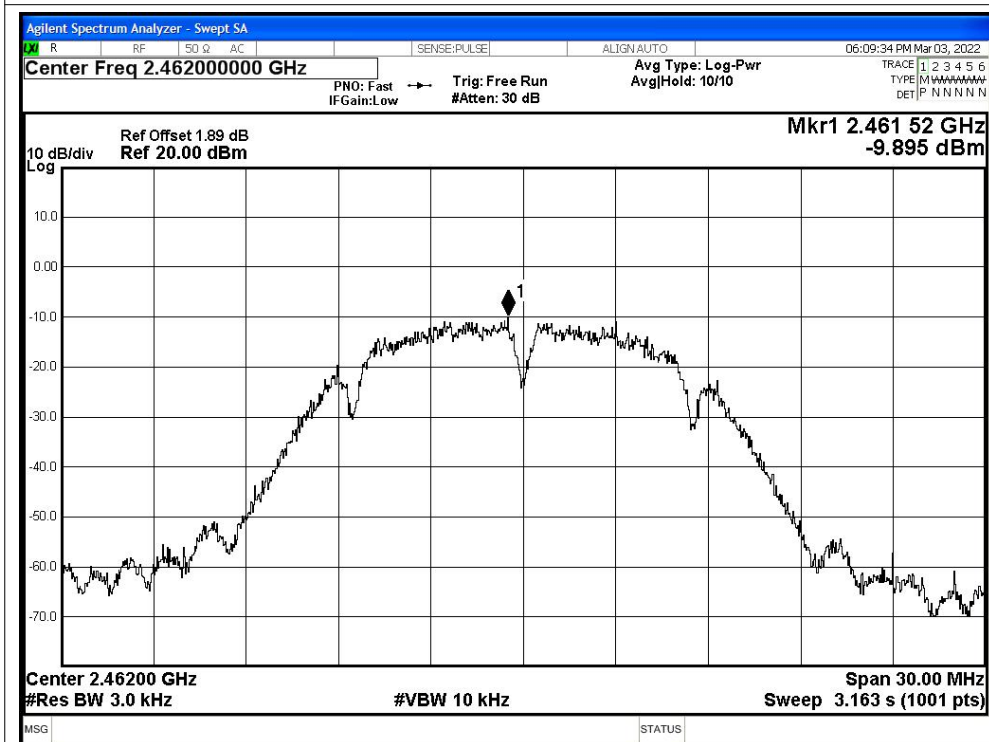


PSD NVNT b 2437MHz Ant1

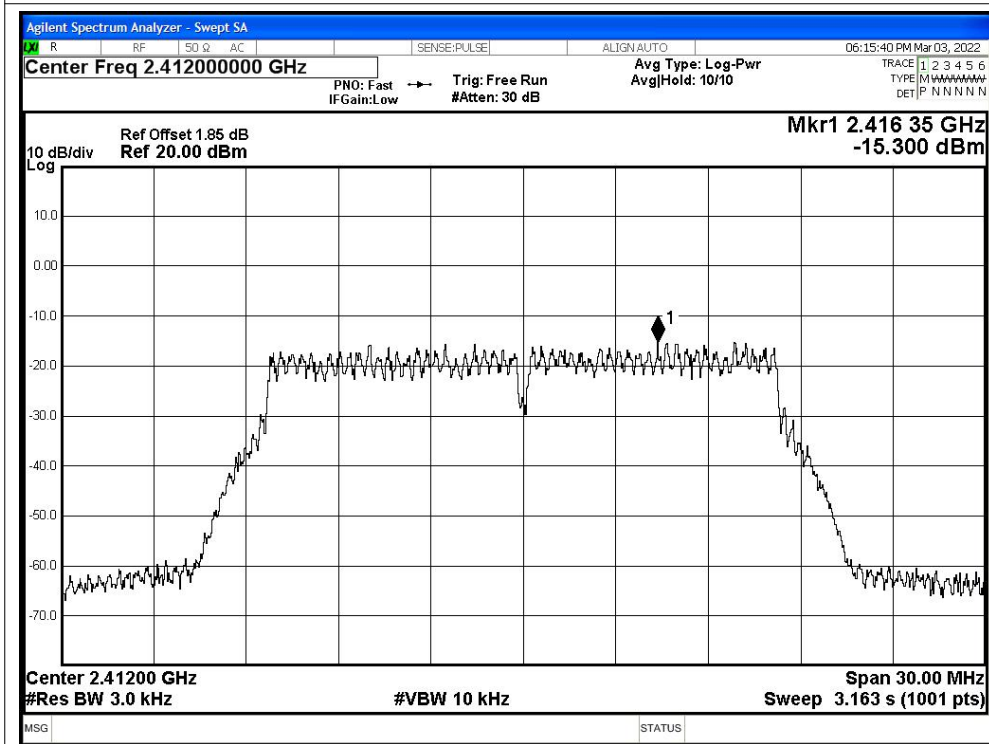




PSD NVNT b 2462MHz Ant1

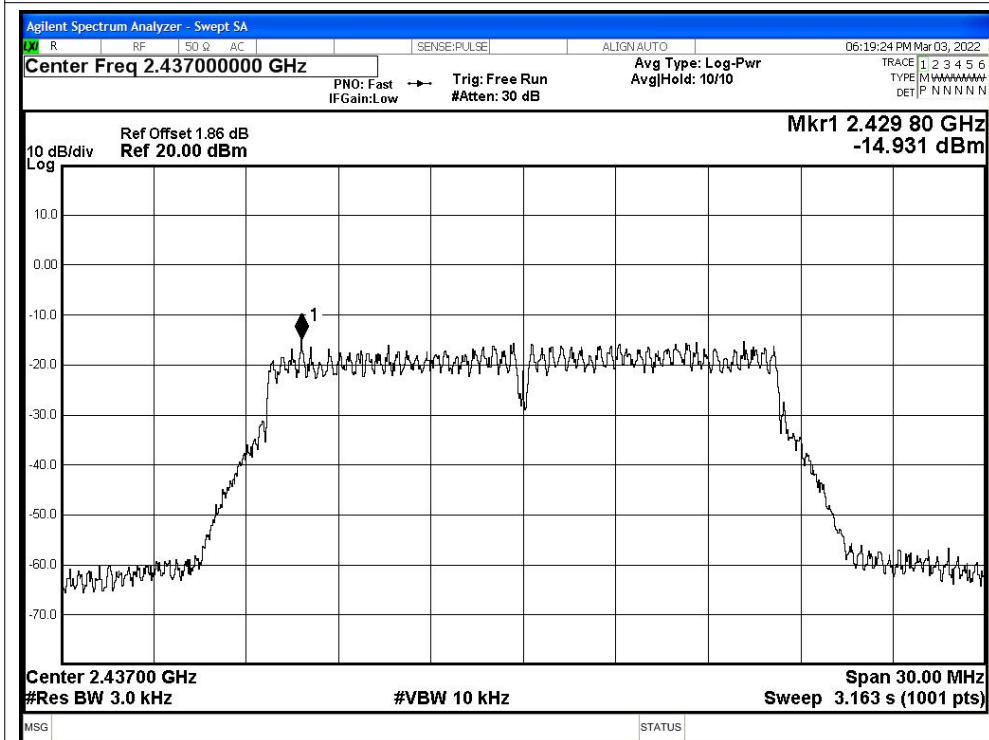


PSD NVNT g 2412MHz Ant1

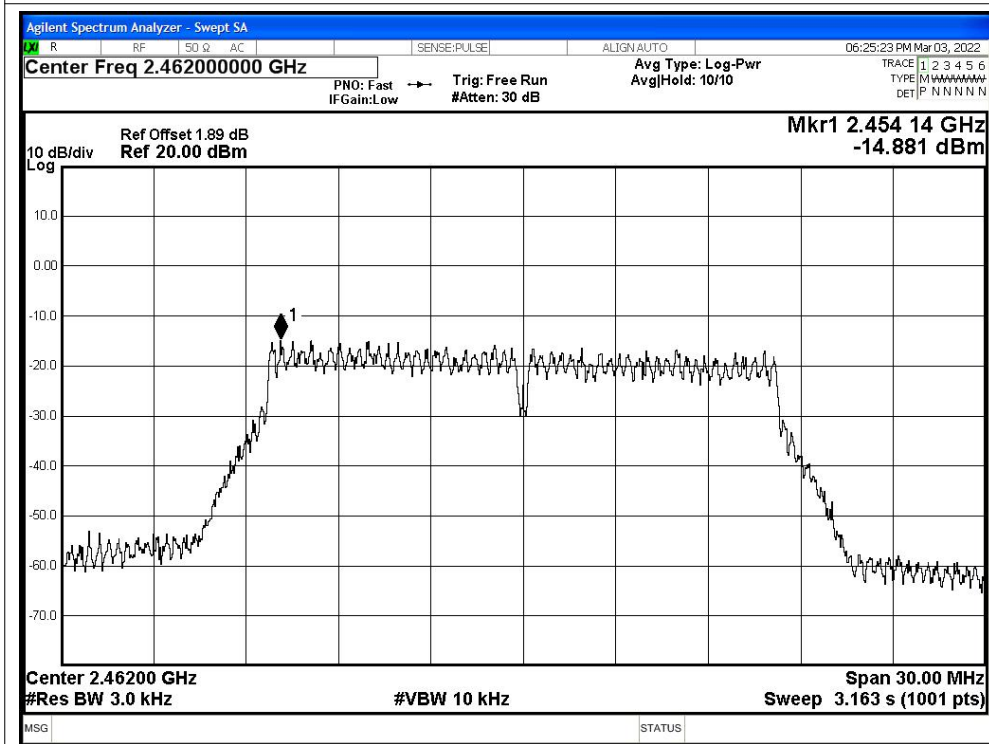


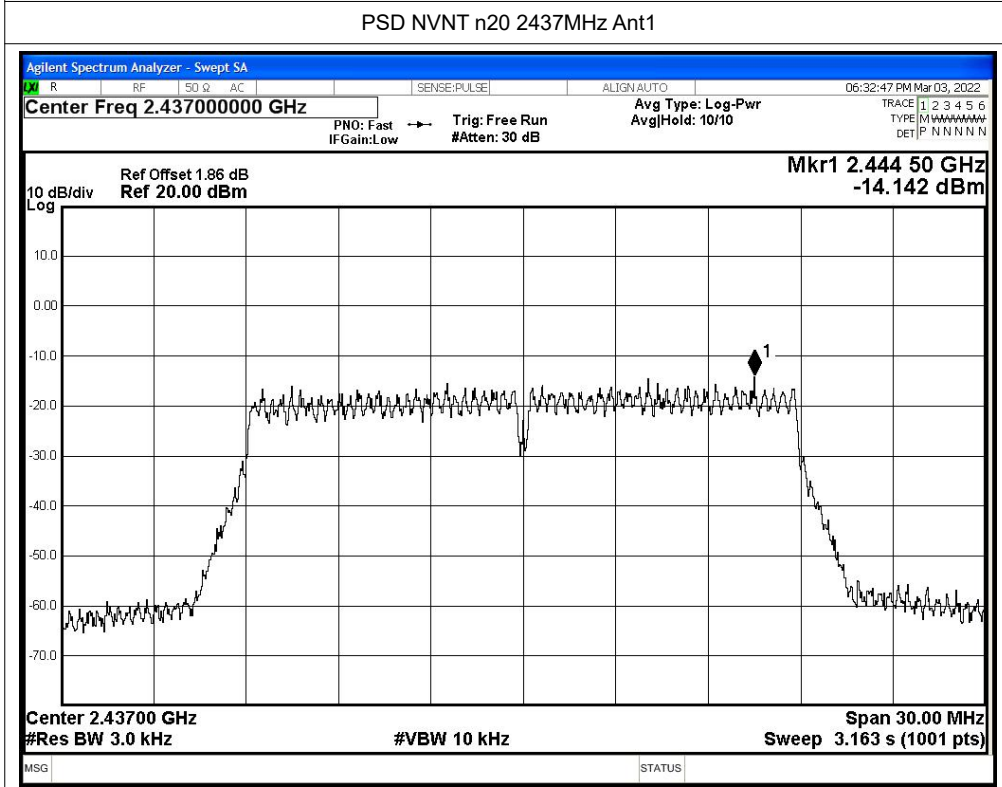
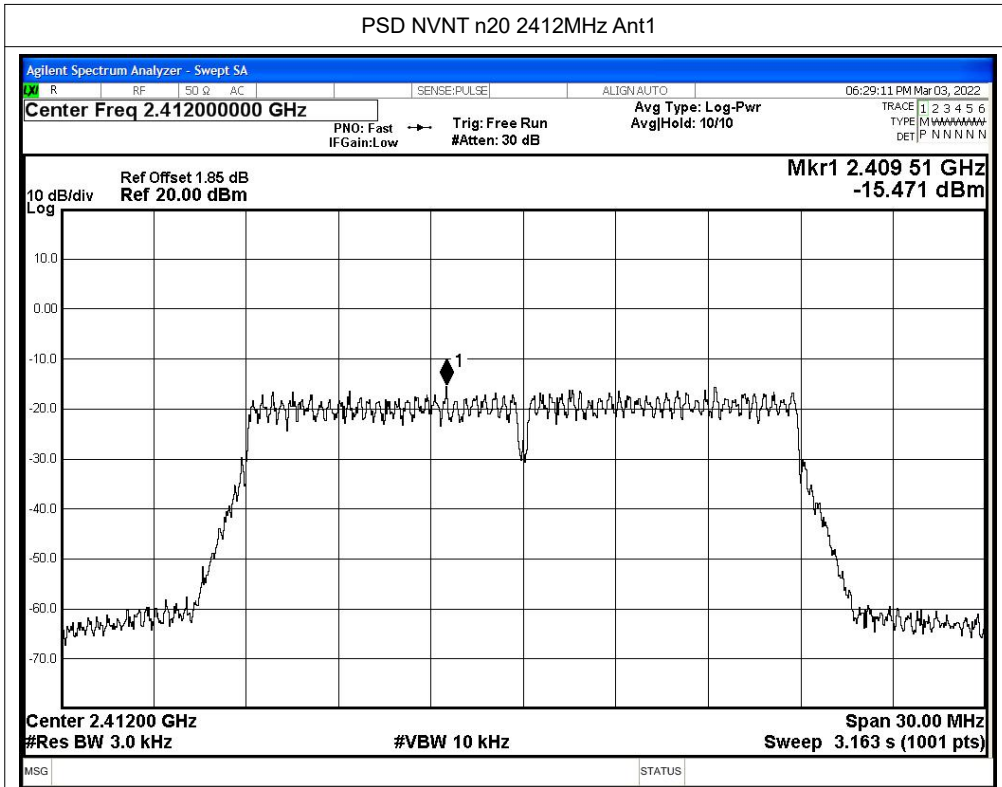


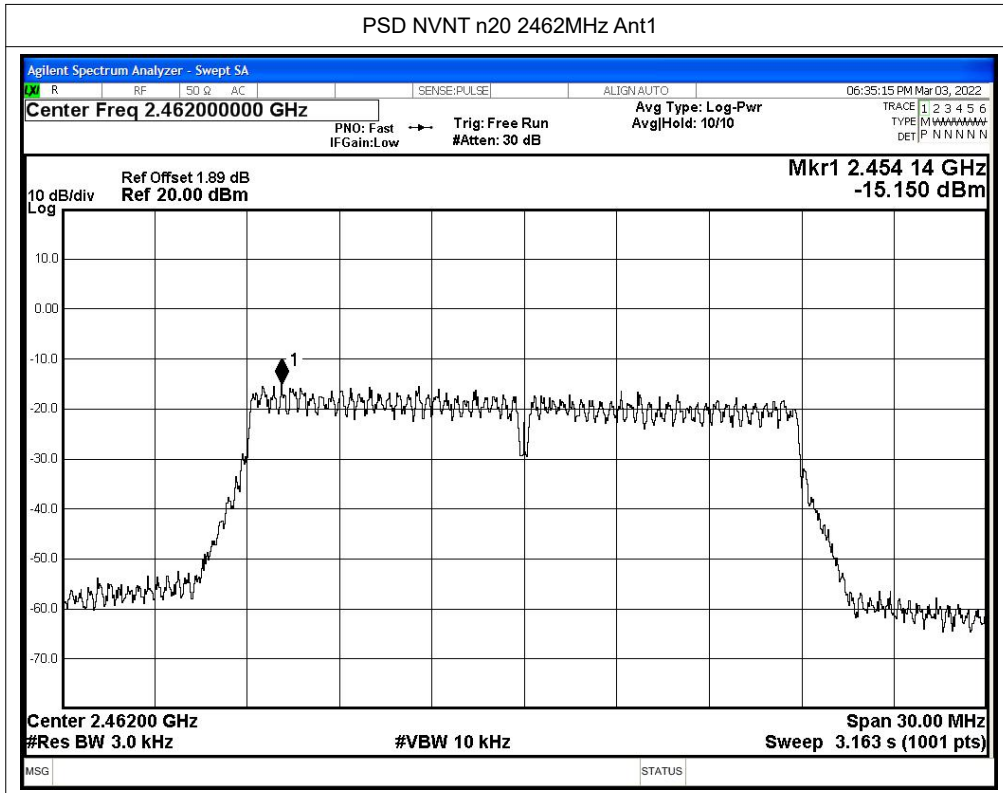
PSD NVNT g 2437MHz Ant1



PSD NVNT g 2462MHz Ant1









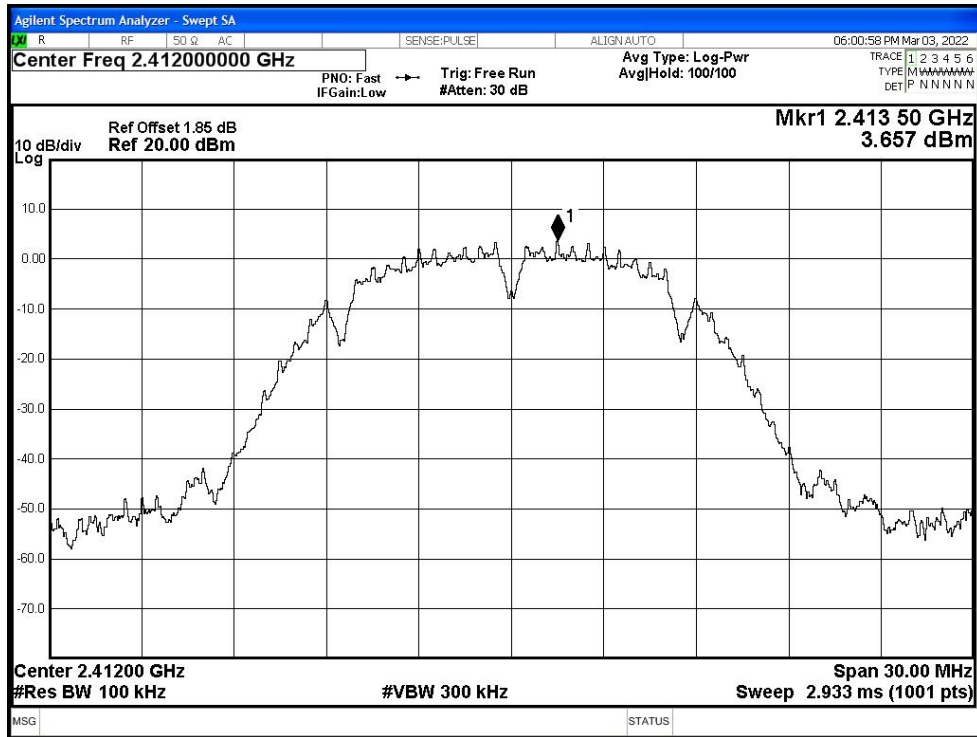
## B.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-52.21	-20	Pass
NVNT	b	2462	Ant1	-53.9	-20	Pass
NVNT	g	2412	Ant1	-41.79	-20	Pass
NVNT	g	2462	Ant1	-46.35	-20	Pass
NVNT	n20	2412	Ant1	-40.93	-20	Pass
NVNT	n20	2462	Ant1	-45.99	-20	Pass

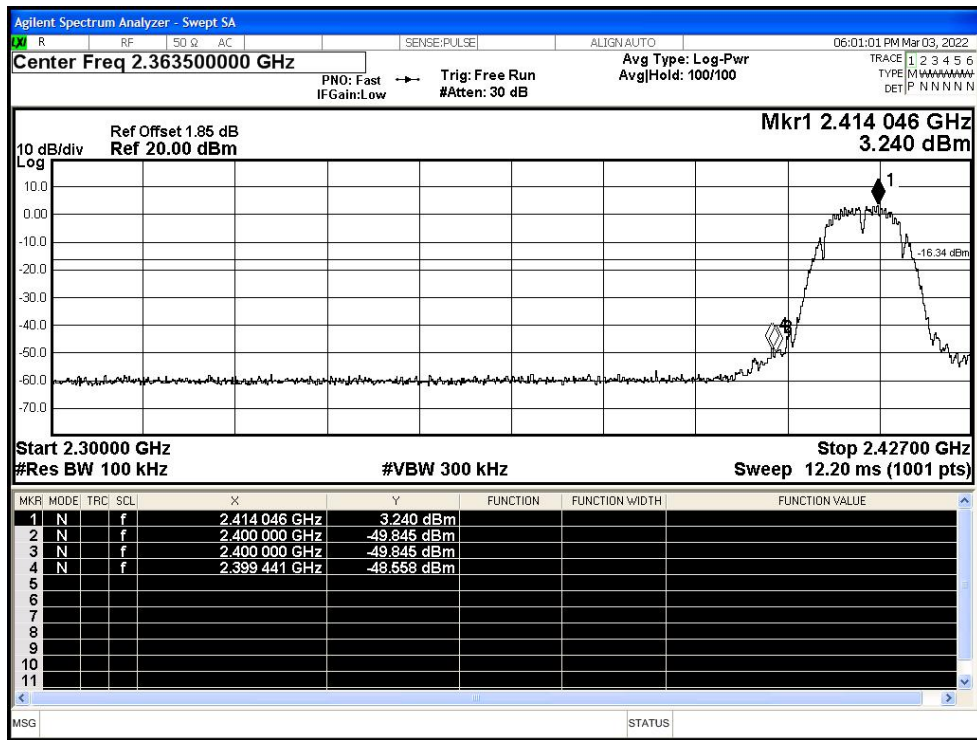


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



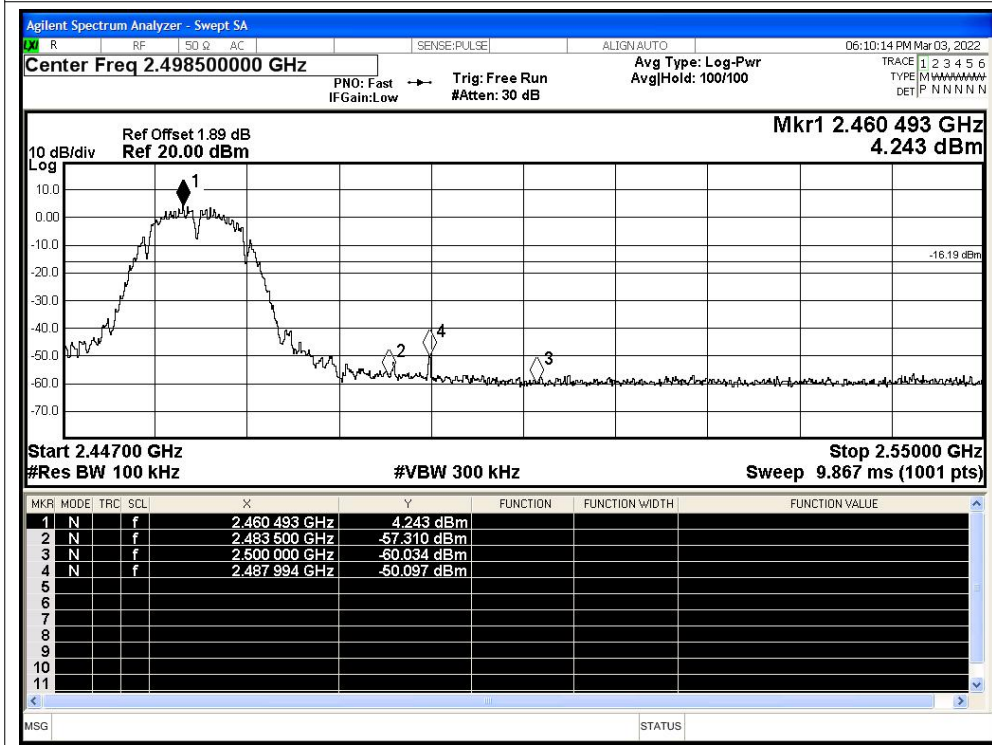




Band Edge NVNT b 2462MHz Ant1 Ref

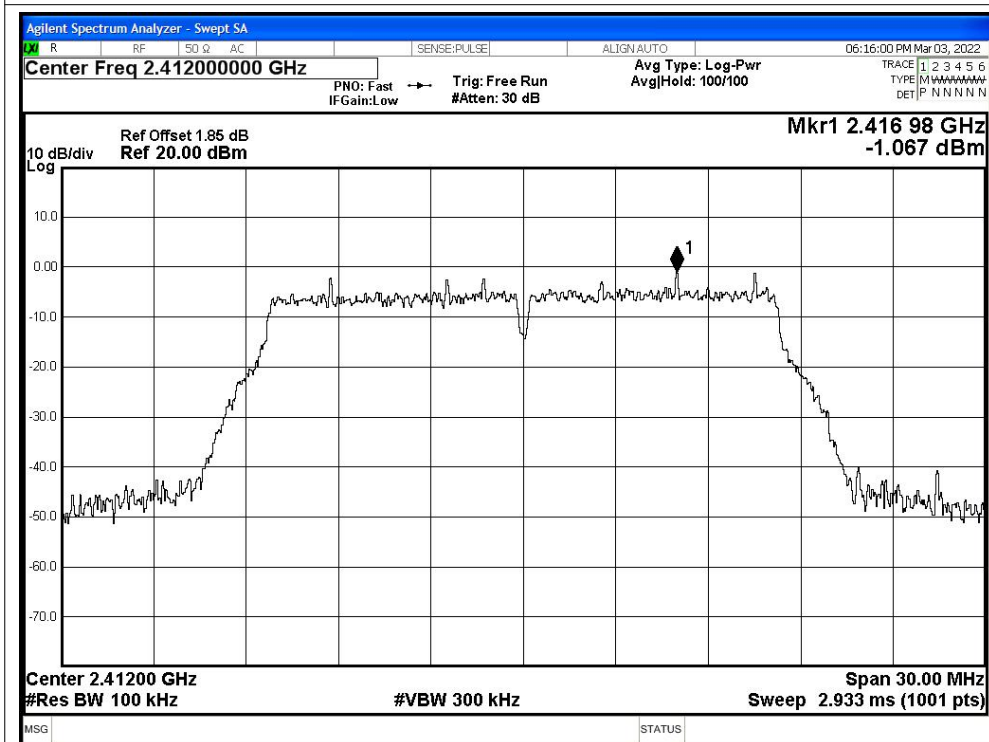


Band Edge NVNT b 2462MHz Ant1 Emission

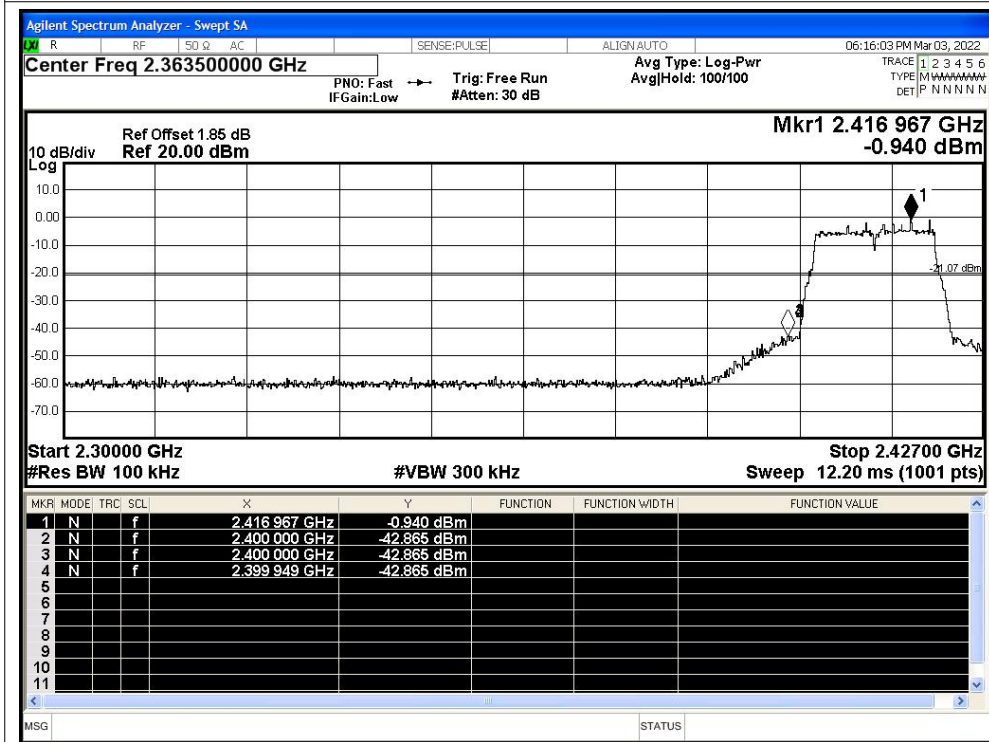




Band Edge NVNT g 2412MHz Ant1 Ref

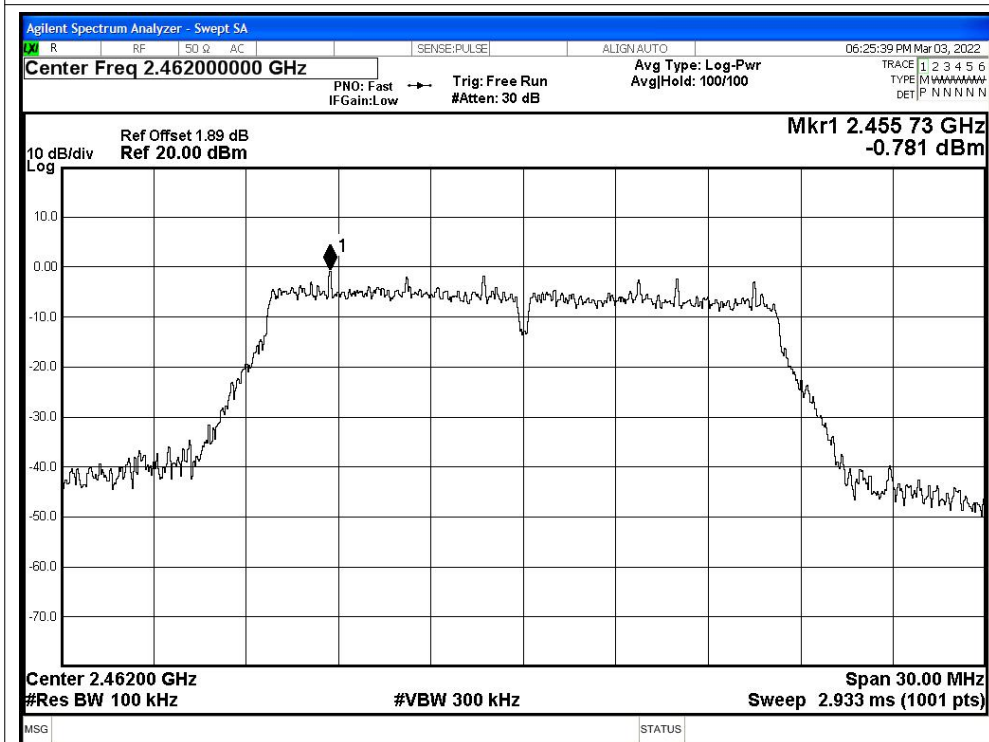


Band Edge NVNT g 2412MHz Ant1 Emission

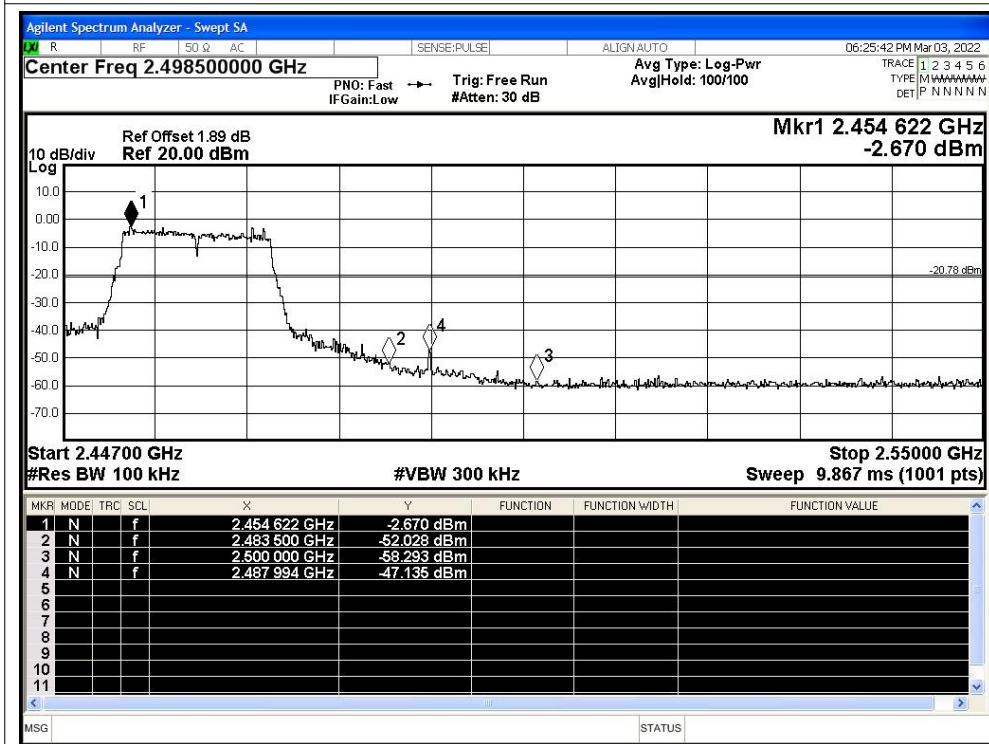




Band Edge NVNT g 2462MHz Ant1 Ref

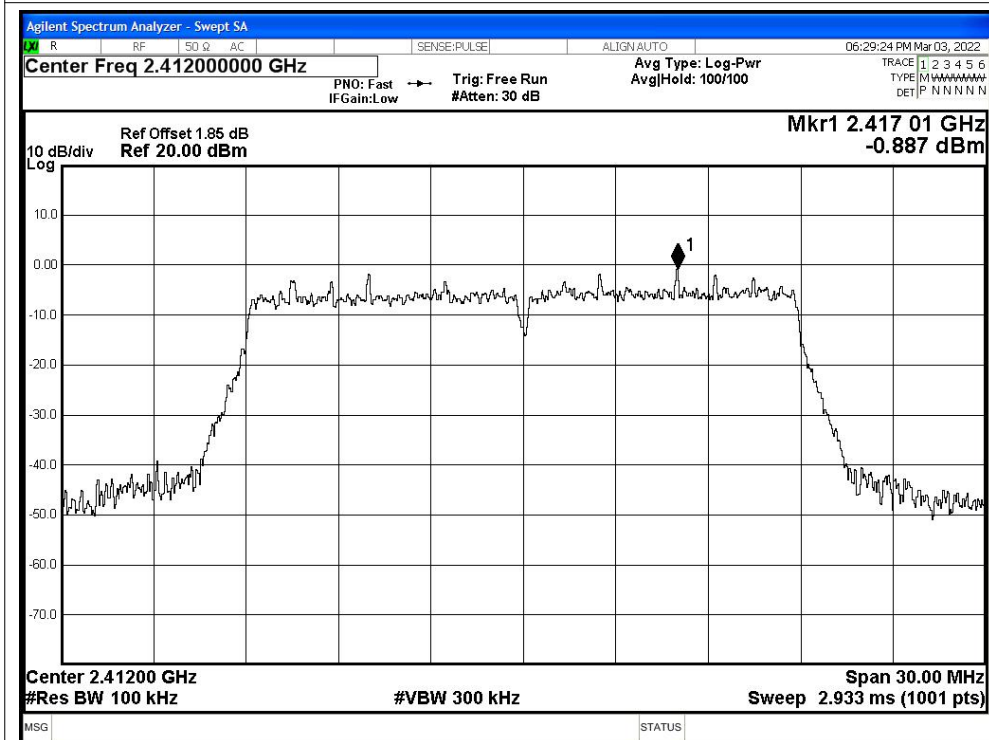


Band Edge NVNT g 2462MHz Ant1 Emission

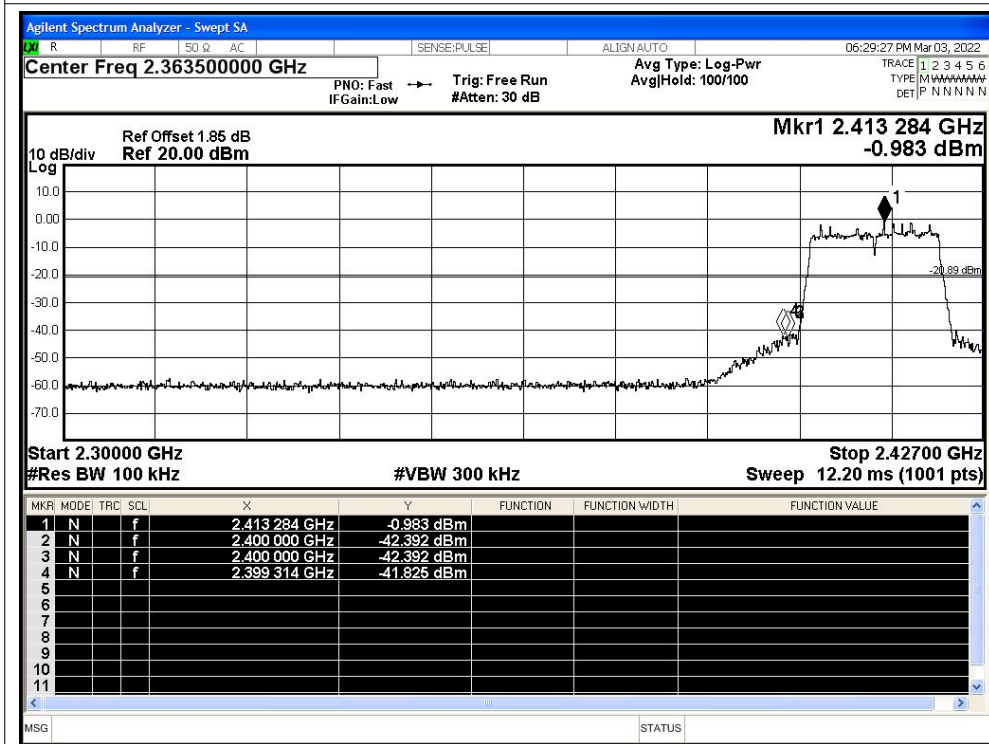




Band Edge NVNT n20 2412MHz Ant1 Ref

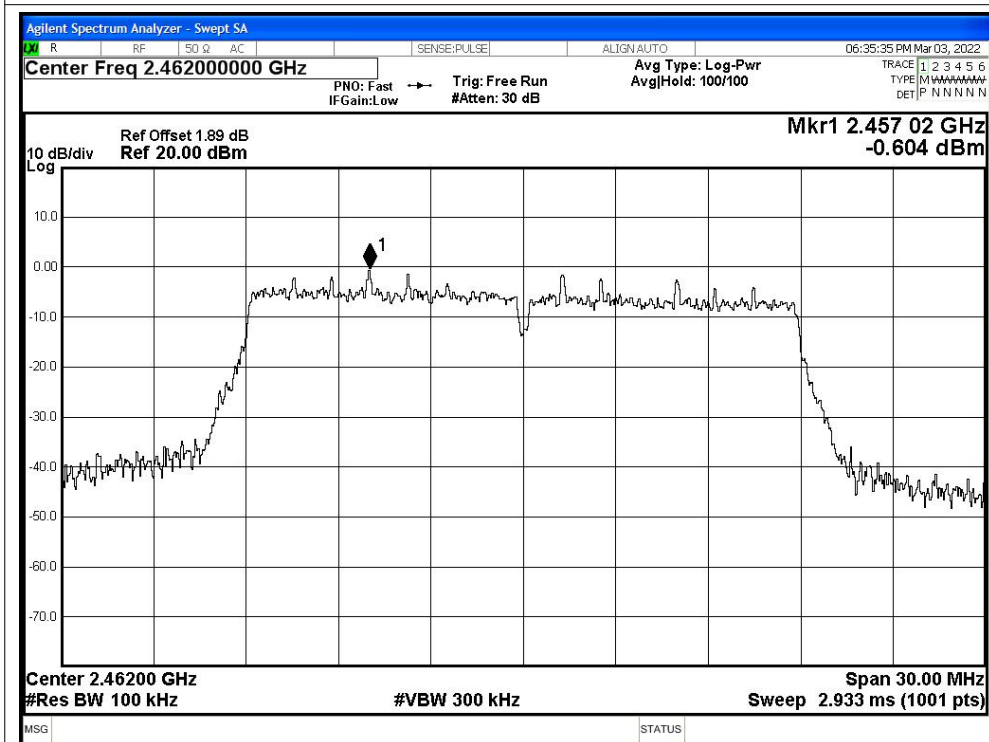


Band Edge NVNT n20 2412MHz Ant1 Emission

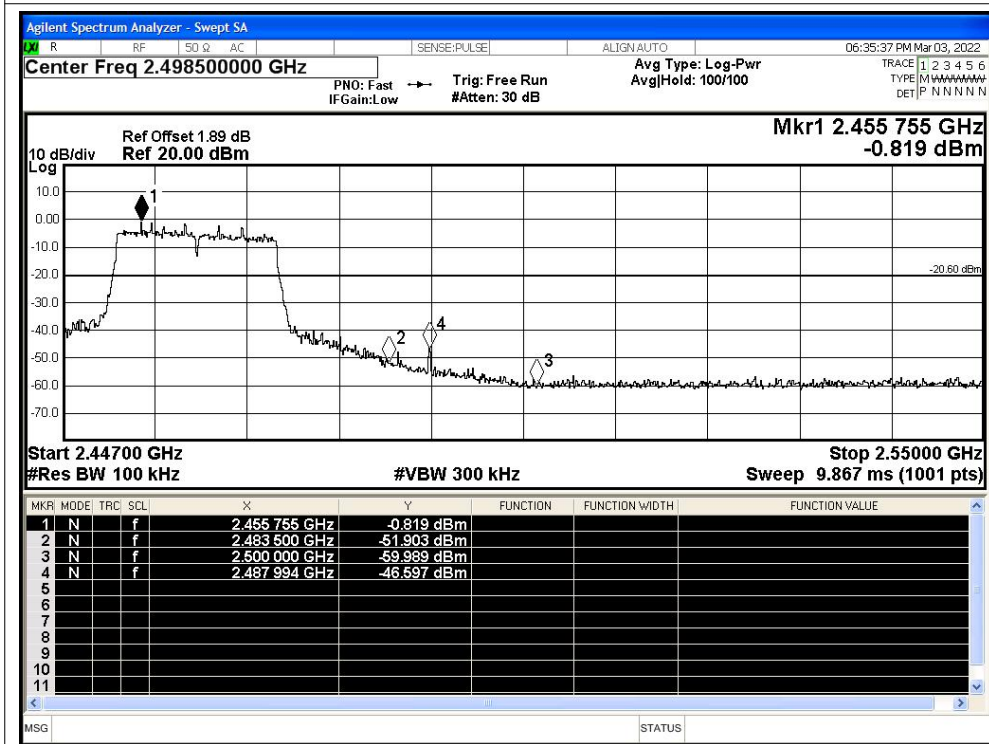




Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission





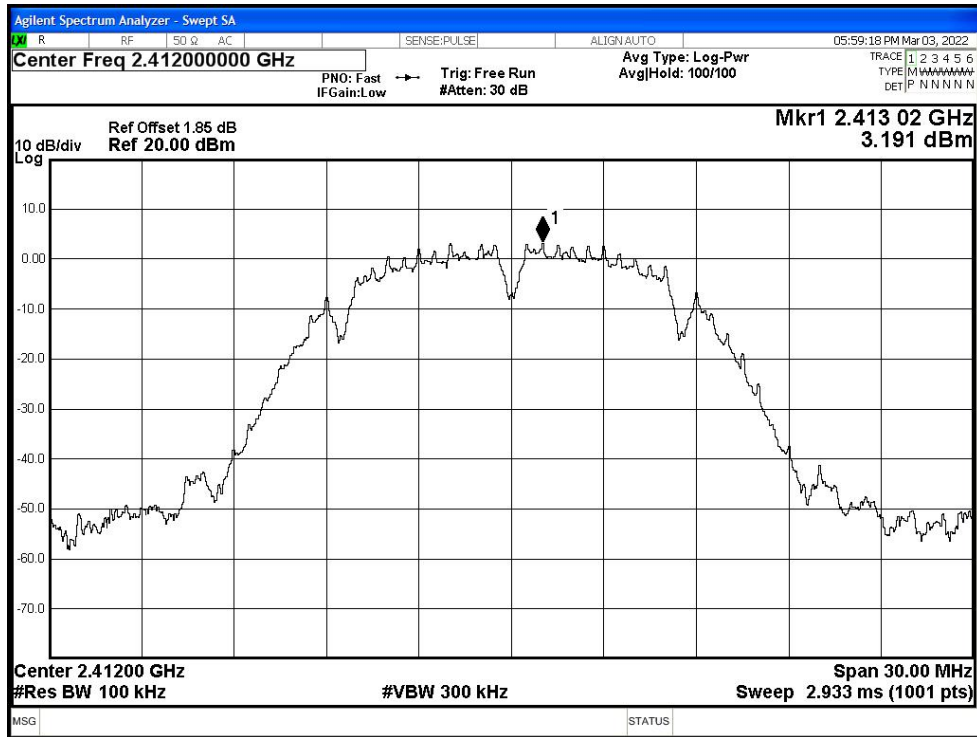
## B.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.2	-20	Pass
NVNT	b	2437	Ant1	-49.16	-20	Pass
NVNT	b	2462	Ant1	-48.84	-20	Pass
NVNT	g	2412	Ant1	-44.16	-20	Pass
NVNT	g	2437	Ant1	-44.8	-20	Pass
NVNT	g	2462	Ant1	-43.15	-20	Pass
NVNT	n20	2412	Ant1	-43.93	-20	Pass
NVNT	n20	2437	Ant1	-44.34	-20	Pass
NVNT	n20	2462	Ant1	-45.41	-20	Pass

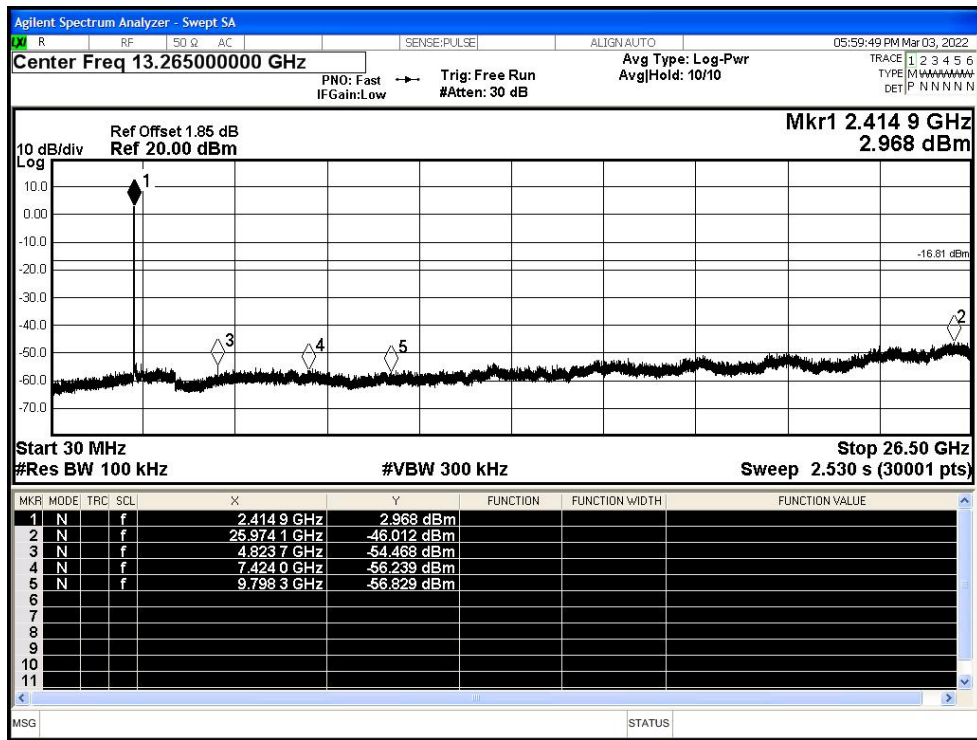


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



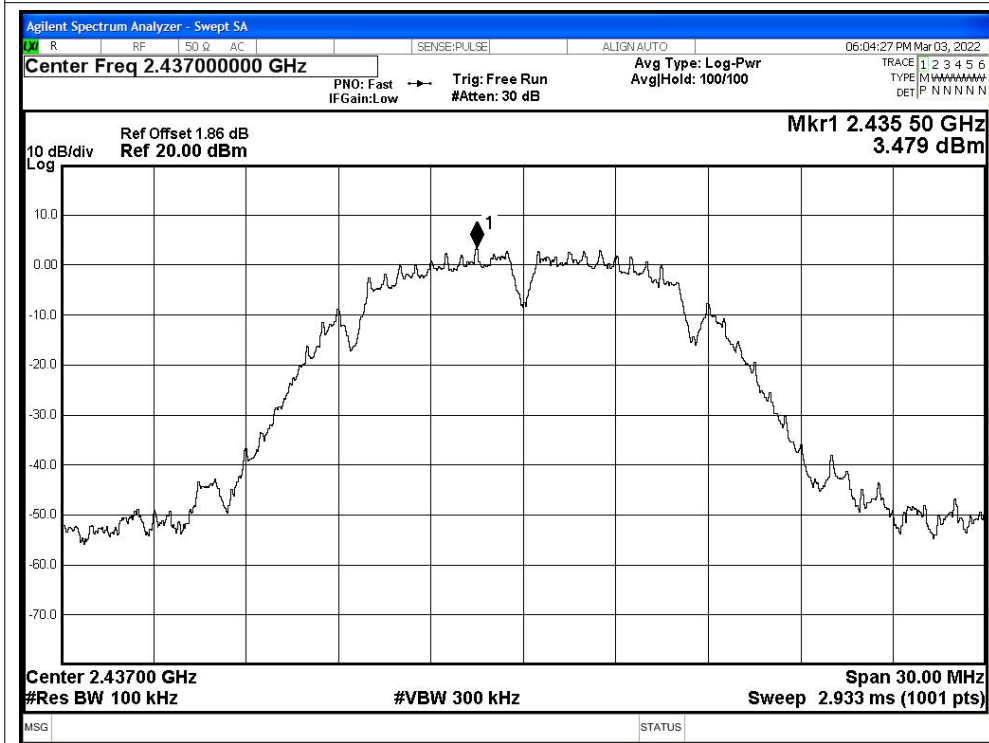
Tx. Spurious NVNT b 2412MHz Ant1 Emission



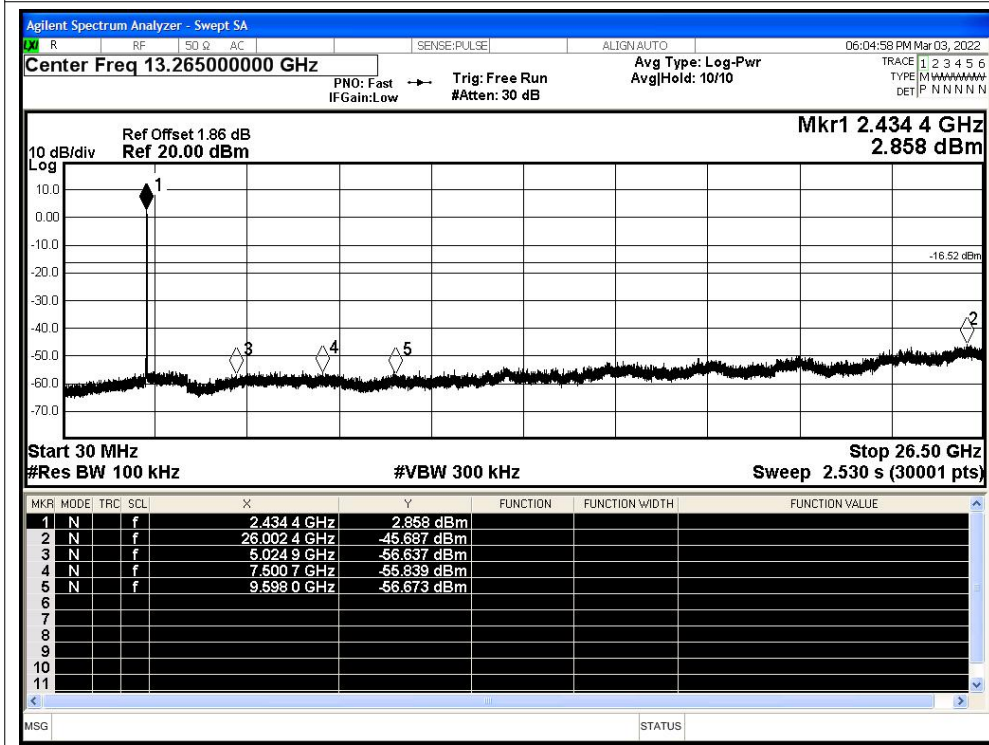




Tx. Spurious NVNT b 2437MHz Ant1 Ref



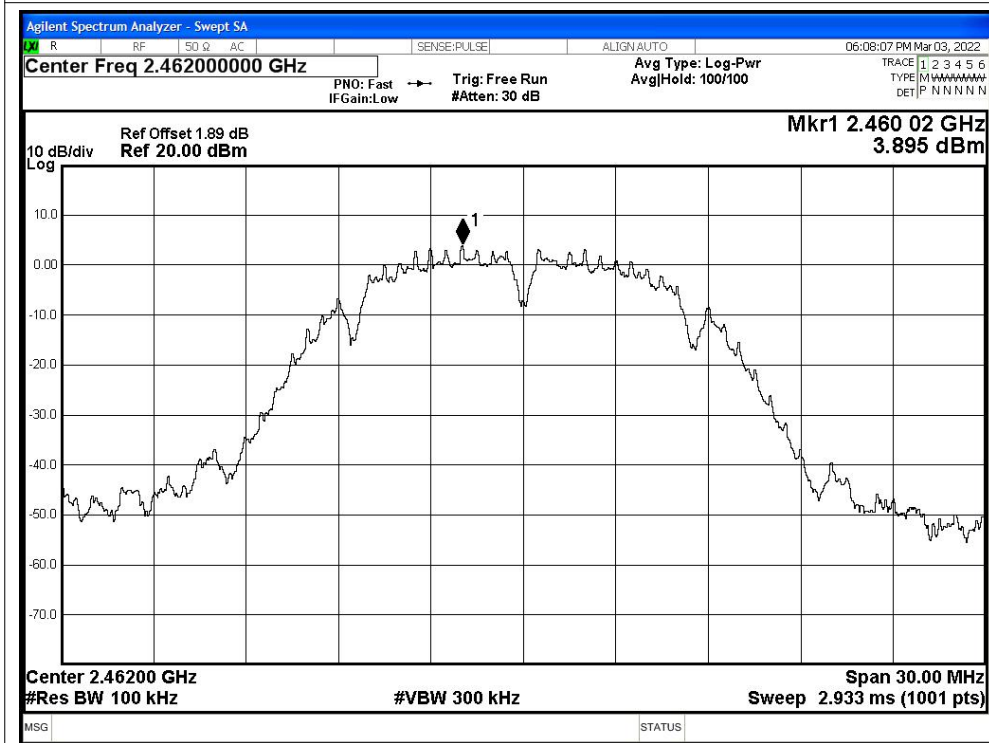
Tx. Spurious NVNT b 2437MHz Ant1 Emission



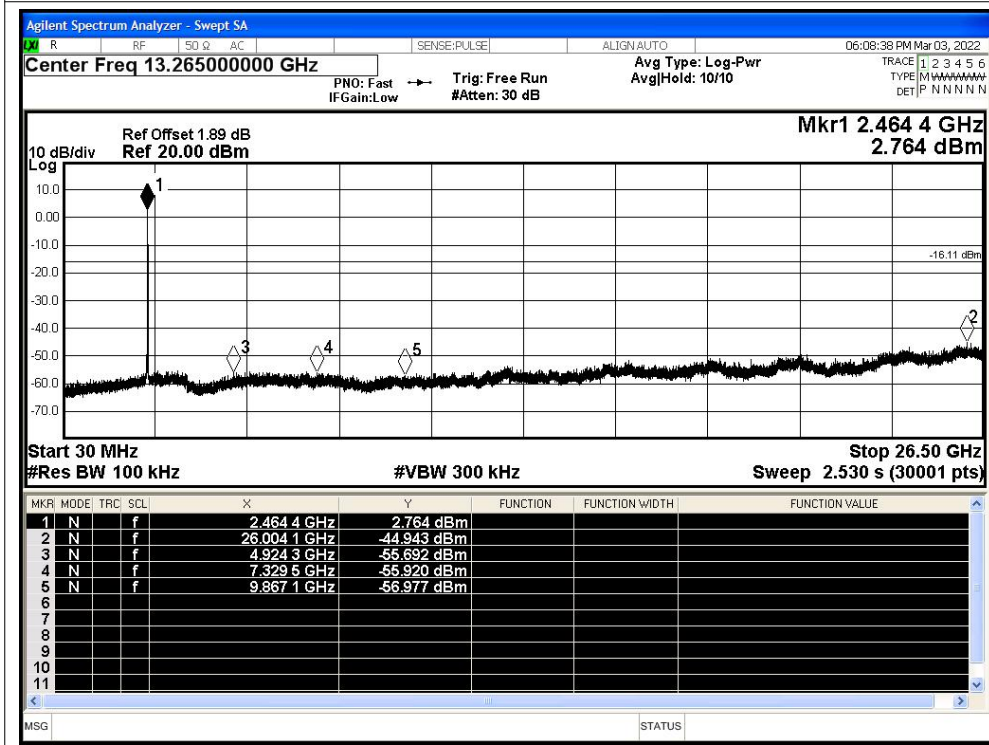




Tx. Spurious NVNT b 2462MHz Ant1 Ref

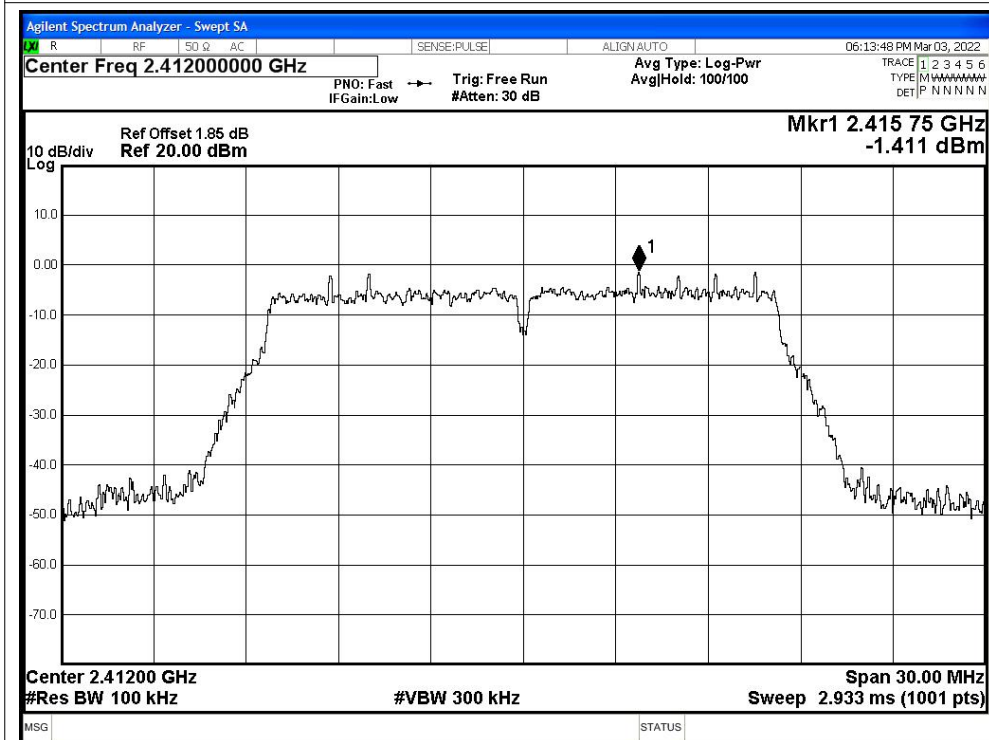


Tx. Spurious NVNT b 2462MHz Ant1 Emission





Tx. Spurious NVNT g 2412MHz Ant1 Ref



Tx. Spurious NVNT g 2412MHz Ant1 Emission

