



Appendix A

RF Test Data for 2.4G WIFI (Conducted Measurement)

Product Name: LED LAMP

Test Model: QPA19-PA-WIFILIC-TY-RGBCWKIT 9W

Environmental Conditions

Temperature:	23.8℃
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Li Huan

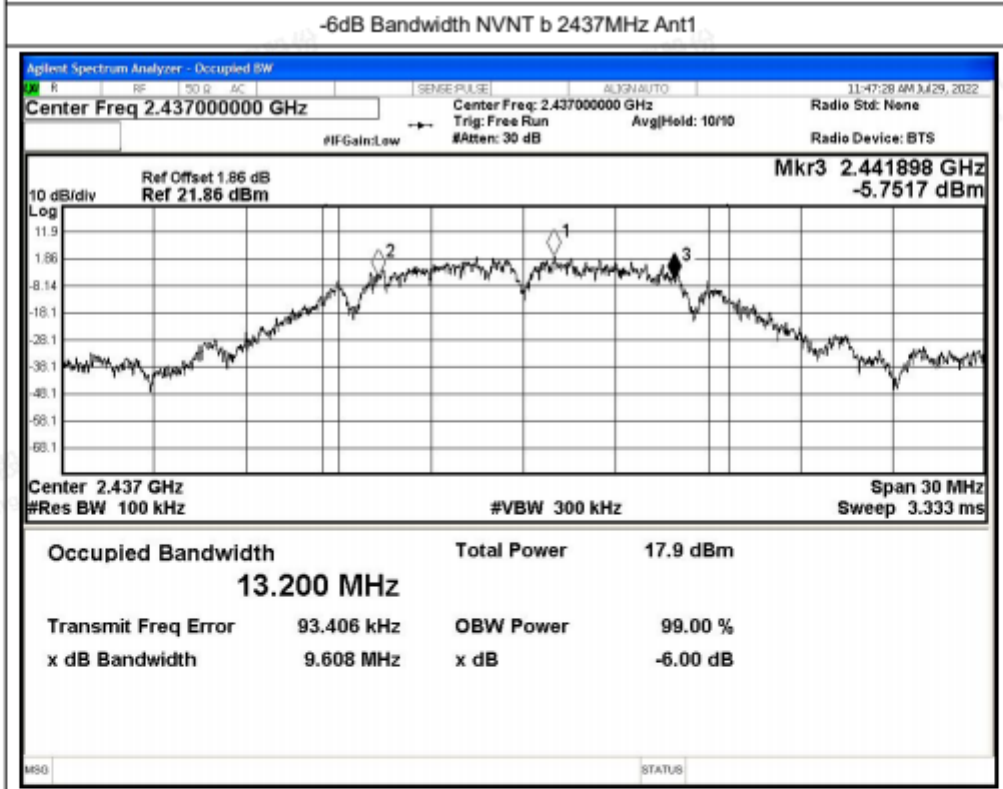
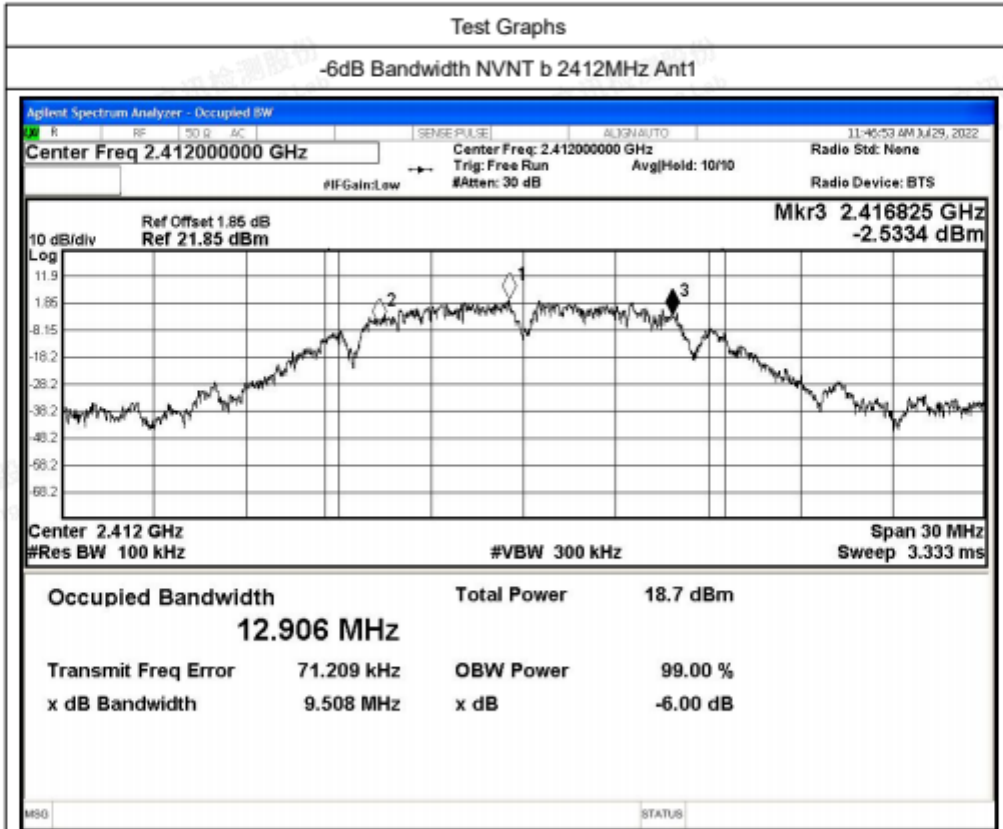


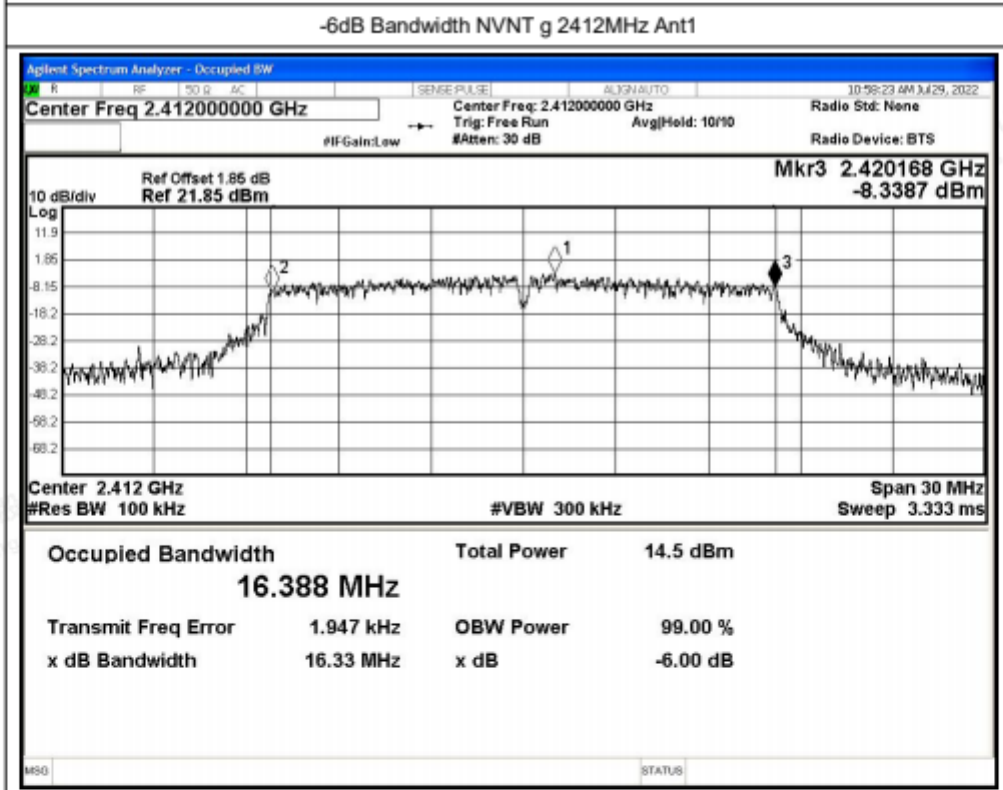
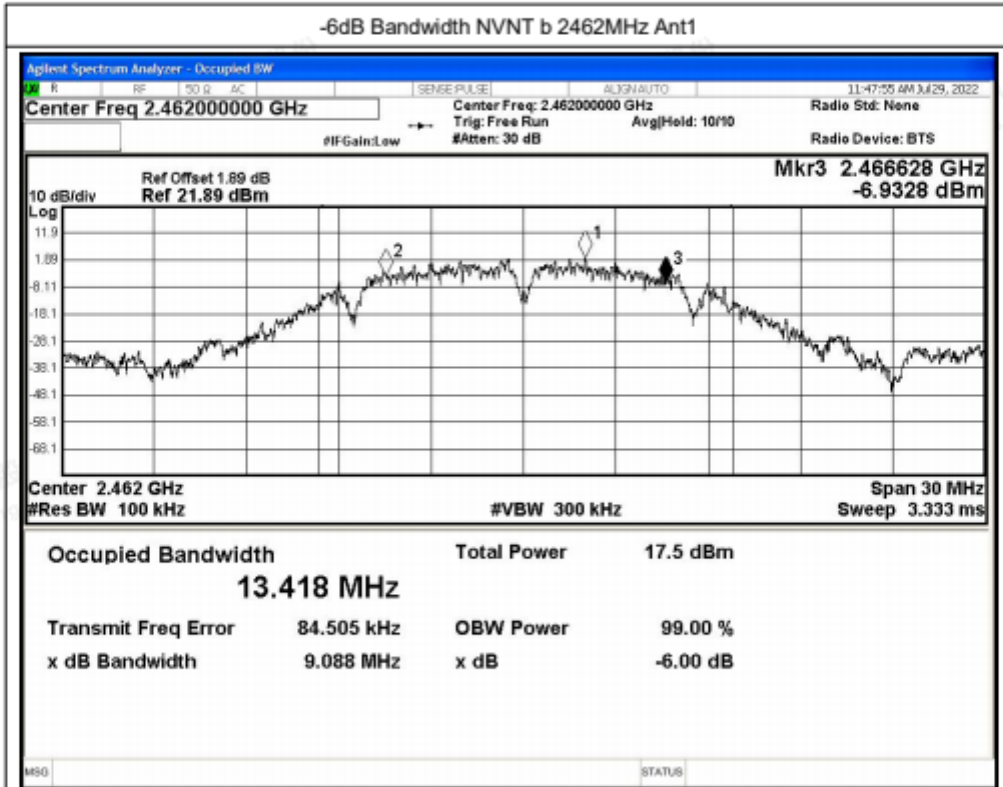


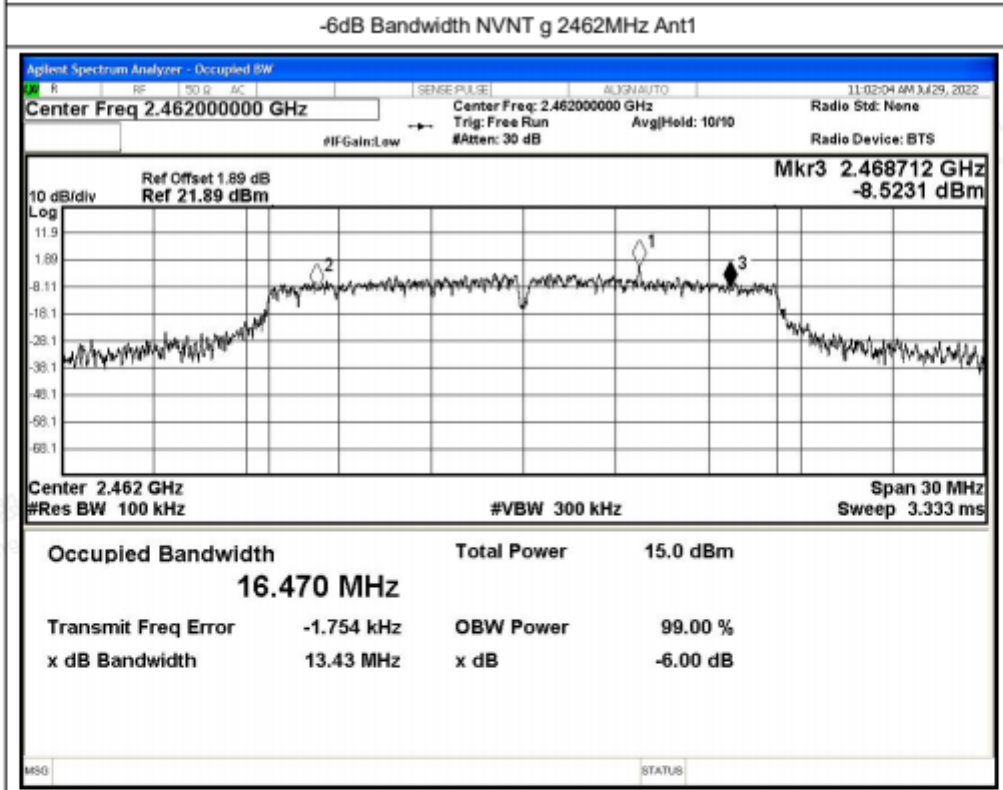
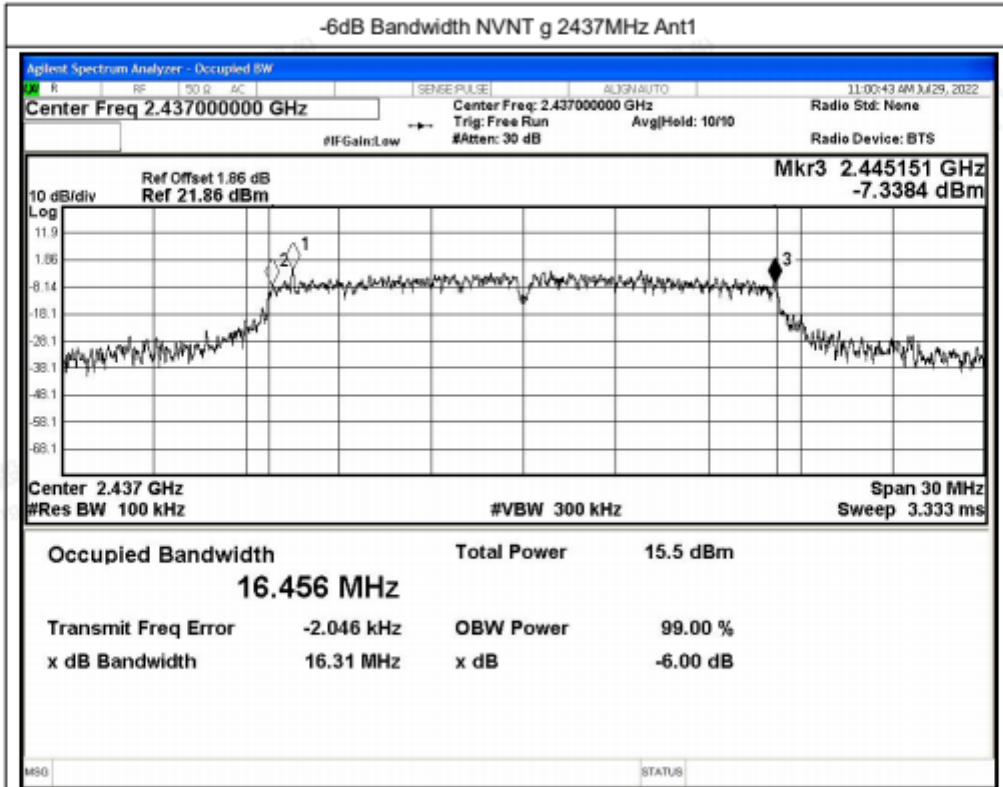
A.1 -6dB Bandwidth

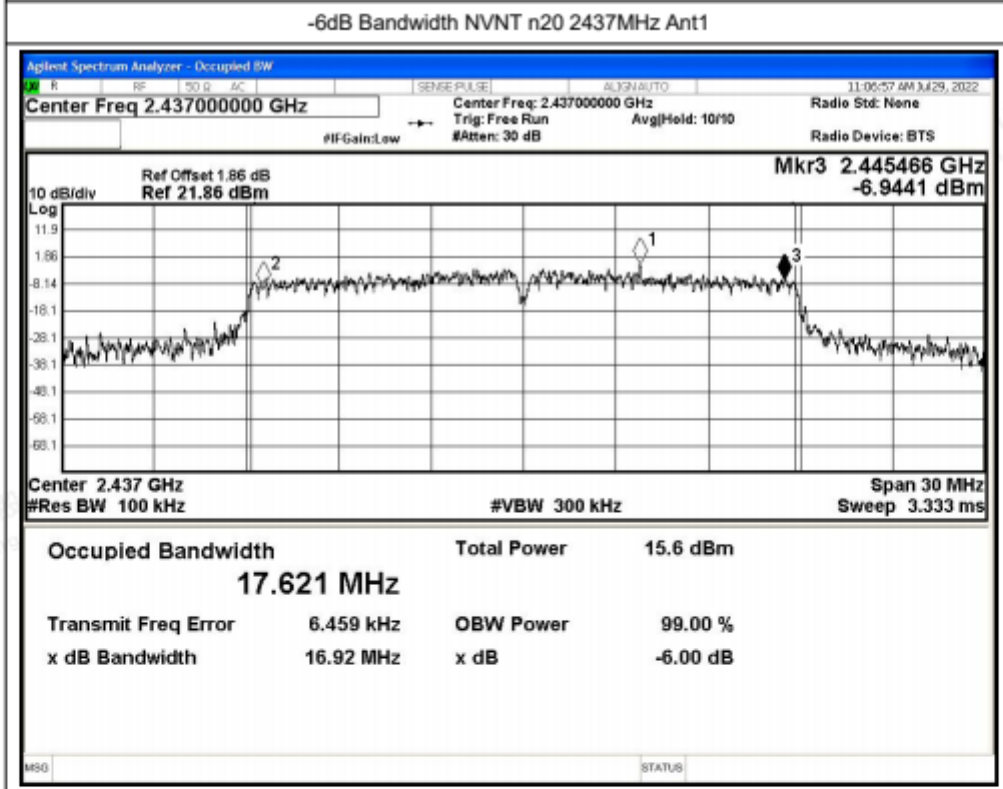
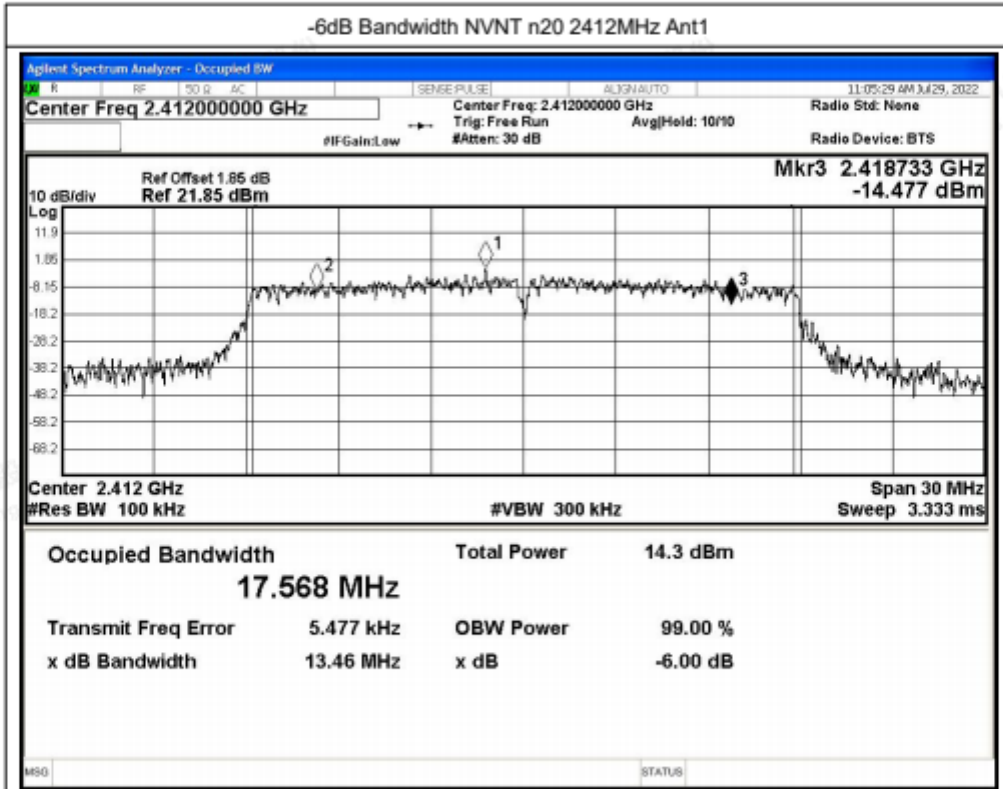
Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.508	≥ 0.5	Pass
NVNT	b	2437	Ant1	9.608	≥ 0.5	Pass
NVNT	b	2462	Ant1	9.088	≥ 0.5	Pass
NVNT	g	2412	Ant1	16.333	≥ 0.5	Pass
NVNT	g	2437	Ant1	16.305	≥ 0.5	Pass
NVNT	g	2462	Ant1	13.427	≥ 0.5	Pass
NVNT	n20	2412	Ant1	13.455	≥ 0.5	Pass
NVNT	n20	2437	Ant1	16.919	≥ 0.5	Pass
NVNT	n20	2462	Ant1	17.526	≥ 0.5	Pass

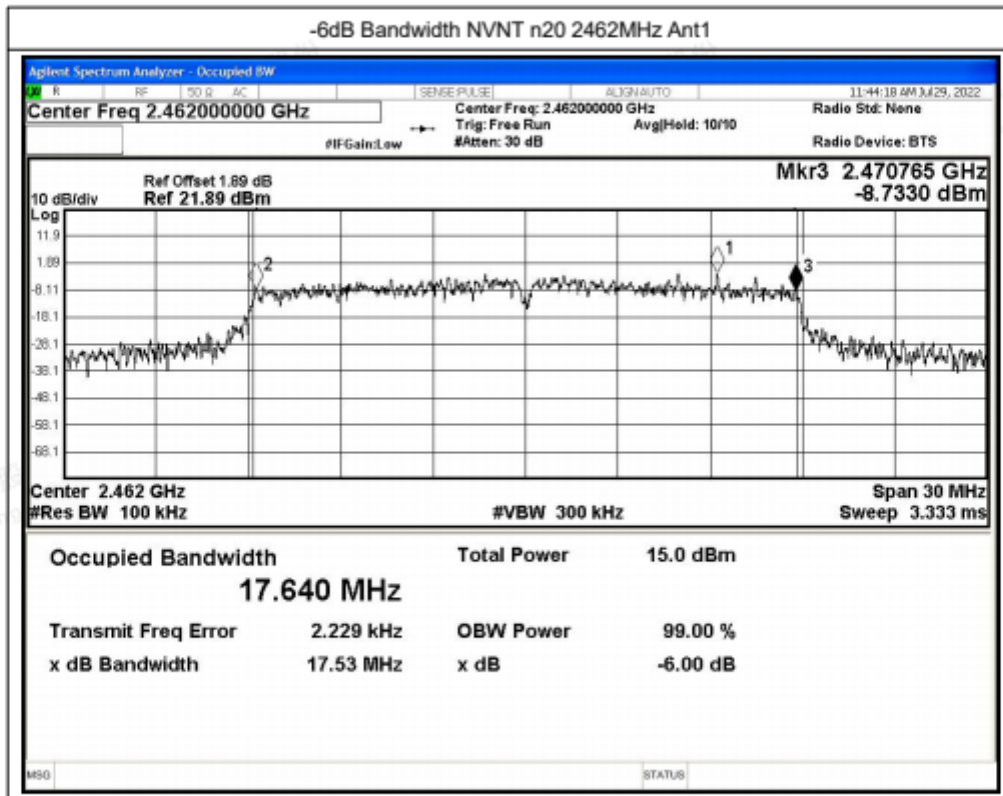








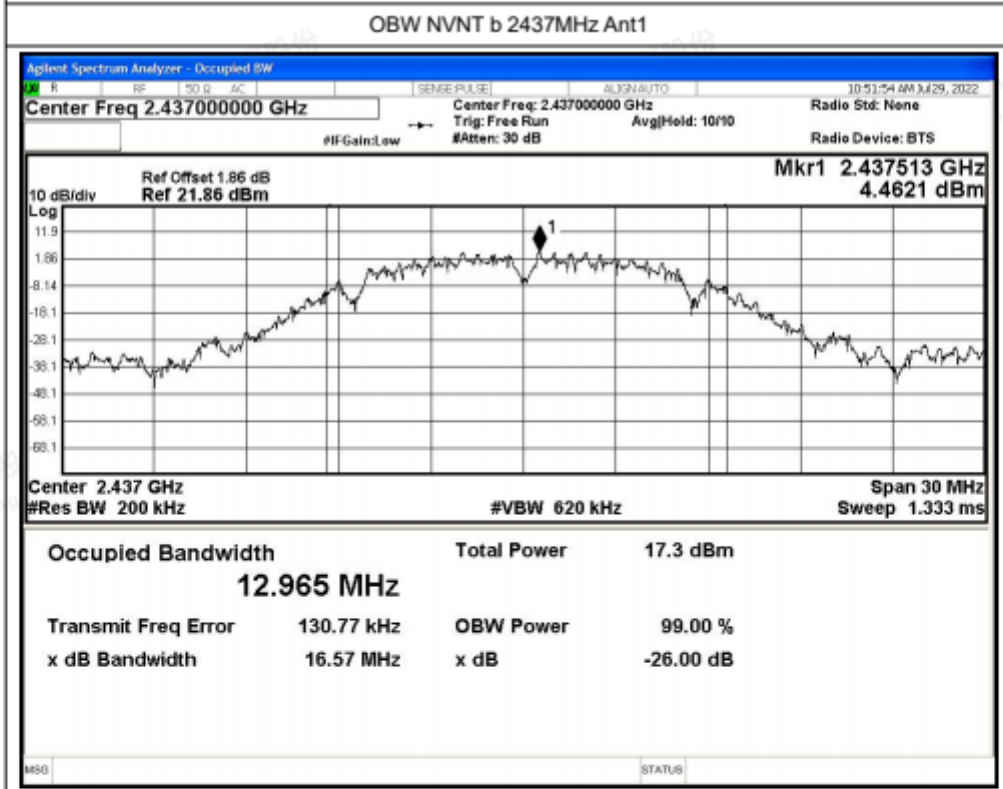
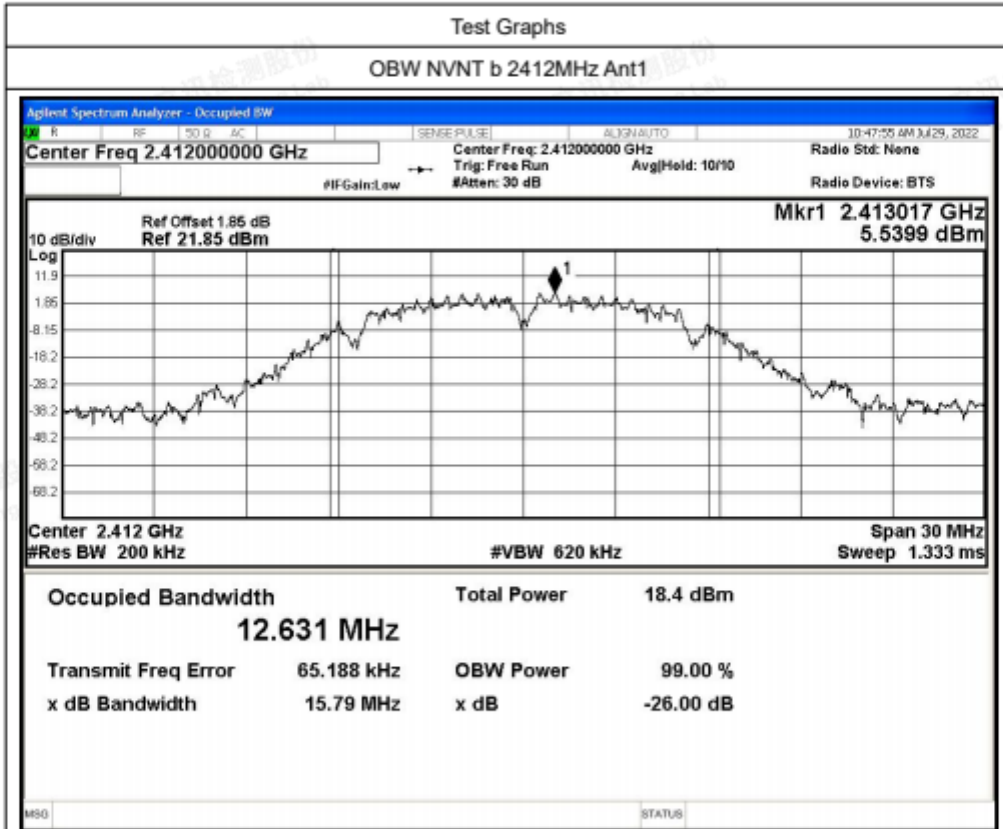


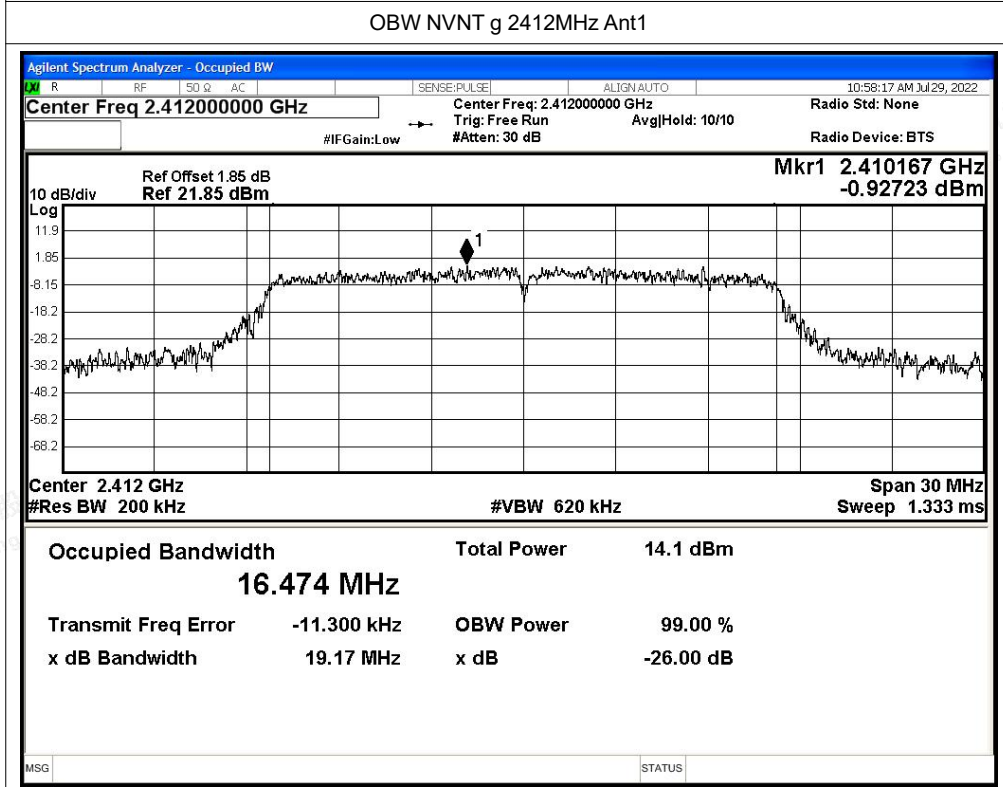
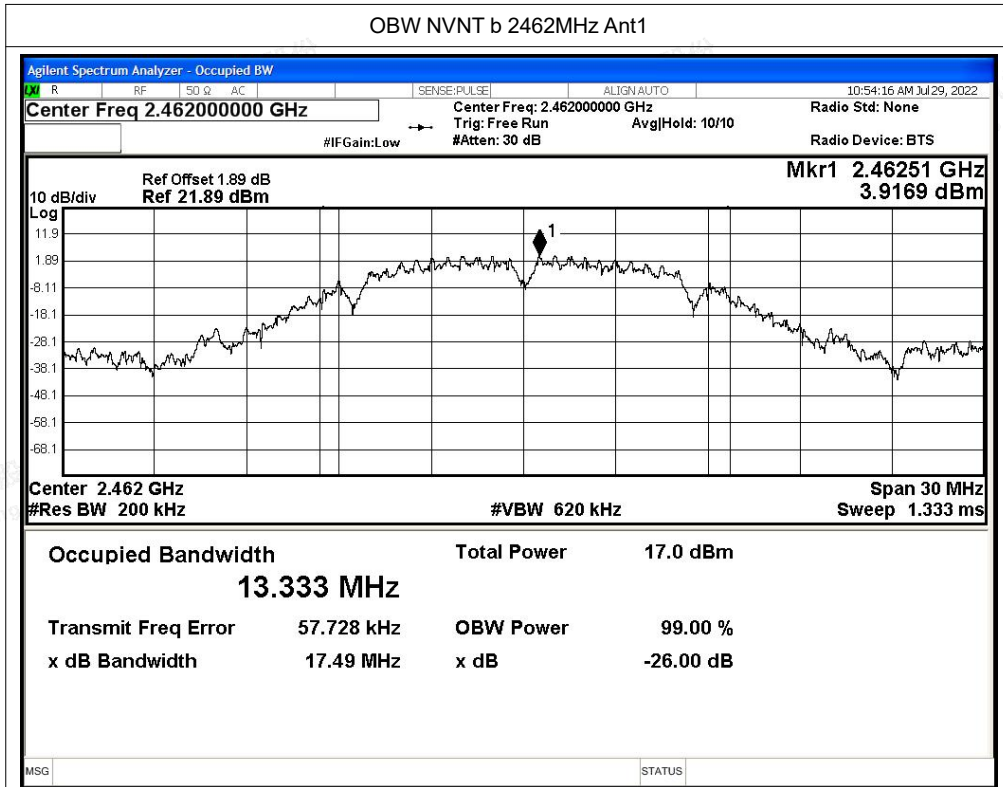


A.2 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	12.631
NVNT	b	2437	Ant1	12.965
NVNT	b	2462	Ant1	13.333
NVNT	g	2412	Ant1	16.474
NVNT	g	2437	Ant1	16.491
NVNT	g	2462	Ant1	16.592
NVNT	n20	2412	Ant1	17.575
NVNT	n20	2437	Ant1	17.687
NVNT	n20	2462	Ant1	17.726

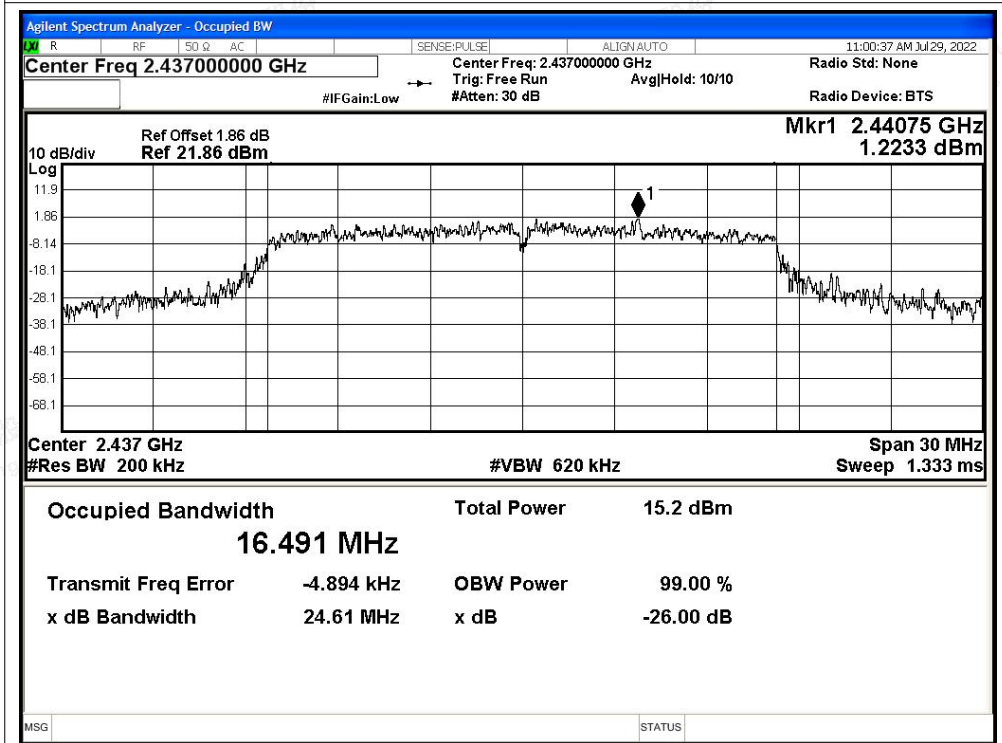




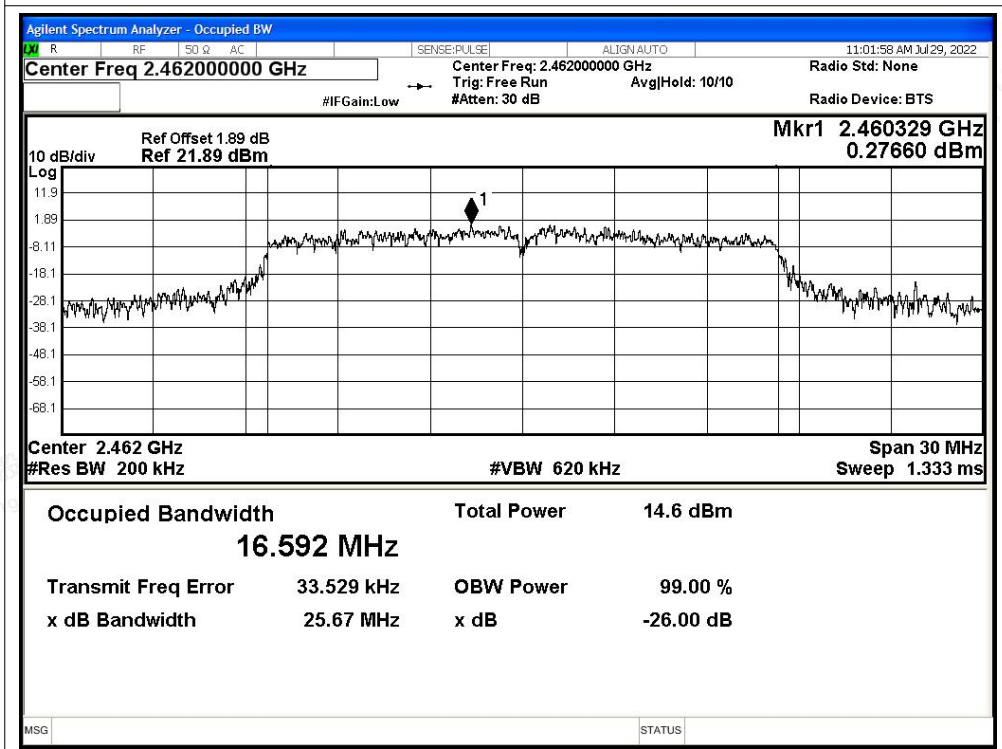




OBW NVNT g 2437MHz Ant1

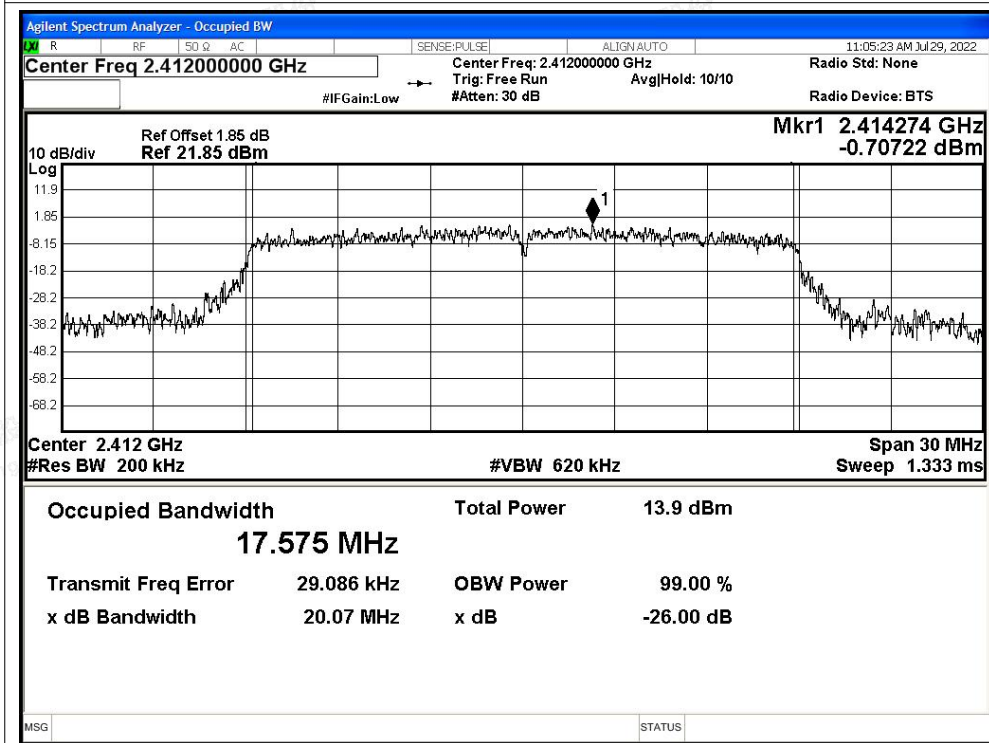


OBW NVNT g 2462MHz Ant1

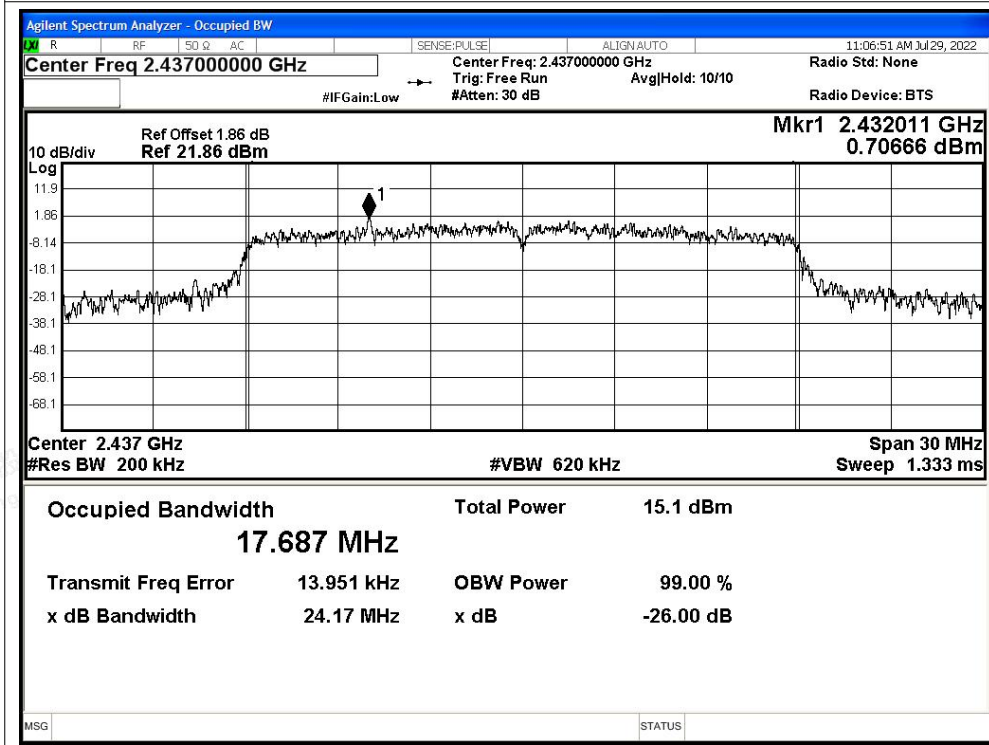


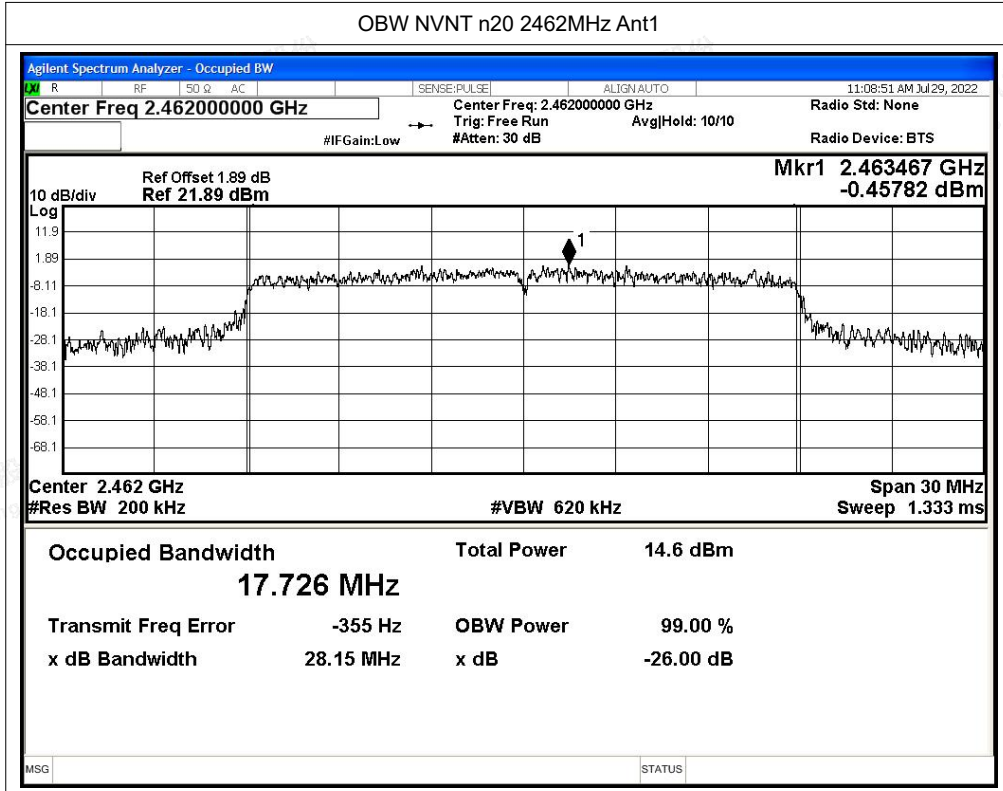


OBW NVNT n20 2412MHz Ant1



OBW NVNT n20 2437MHz Ant1







A.3 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	15.67	0	15.67	30	Pass
NVNT	b	2437	Ant1	15.25	0	15.25	30	Pass
NVNT	b	2462	Ant1	14.76	0	14.76	30	Pass
NVNT	g	2412	Ant1	15.33	0	15.33	30	Pass
NVNT	g	2437	Ant1	14.98	0	14.98	30	Pass
NVNT	g	2462	Ant1	14.39	0	14.39	30	Pass
NVNT	n20	2412	Ant1	14.24	0	14.24	30	Pass
NVNT	n20	2437	Ant1	14.24	0	14.24	30	Pass
NVNT	n20	2462	Ant1	13.63	0	13.63	30	Pass





A.4 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-8.04	0	-8.04	8	Pass
NVNT	b	2437	Ant1	-10.09	0	-10.09	8	Pass
NVNT	b	2462	Ant1	-10.3	0	-10.3	8	Pass
NVNT	g	2412	Ant1	-12.75	0	-12.75	8	Pass
NVNT	g	2437	Ant1	-13.84	0	-13.84	8	Pass
NVNT	g	2462	Ant1	-13.3	0	-13.3	8	Pass
NVNT	n20	2412	Ant1	-14.04	0	-14.04	8	Pass
NVNT	n20	2437	Ant1	-12.96	0	-12.96	8	Pass
NVNT	n20	2462	Ant1	-14.61	0	-14.61	8	Pass

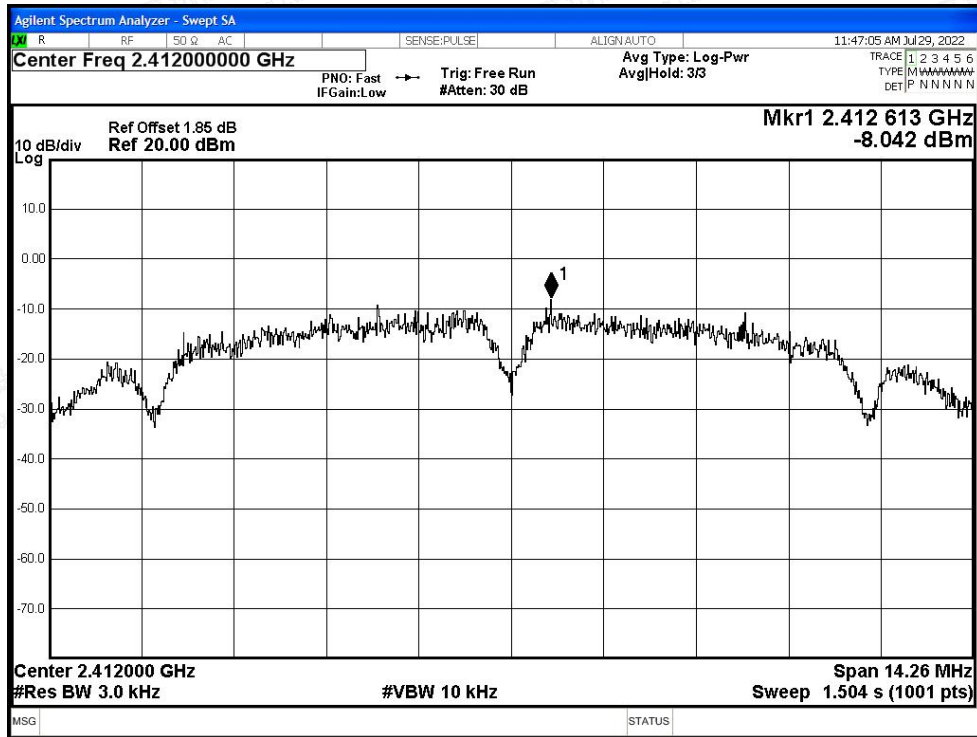


Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com
Scan code to check authenticity

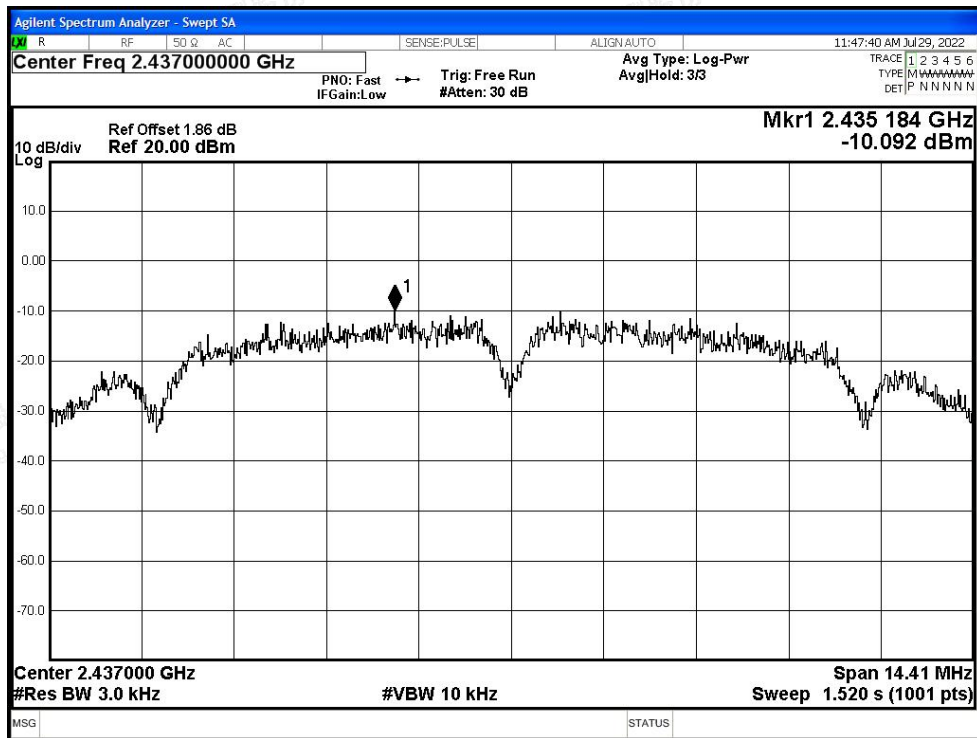


Test Graphs

PSD NVNT b 2412MHz Ant1

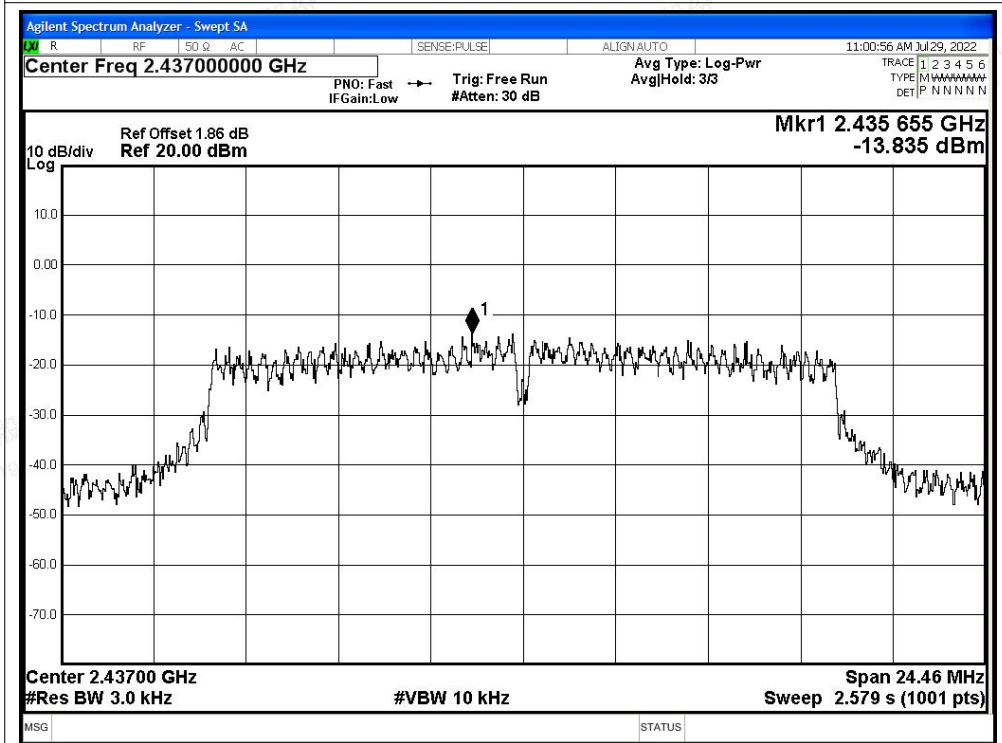


PSD NVNT b 2437MHz Ant1

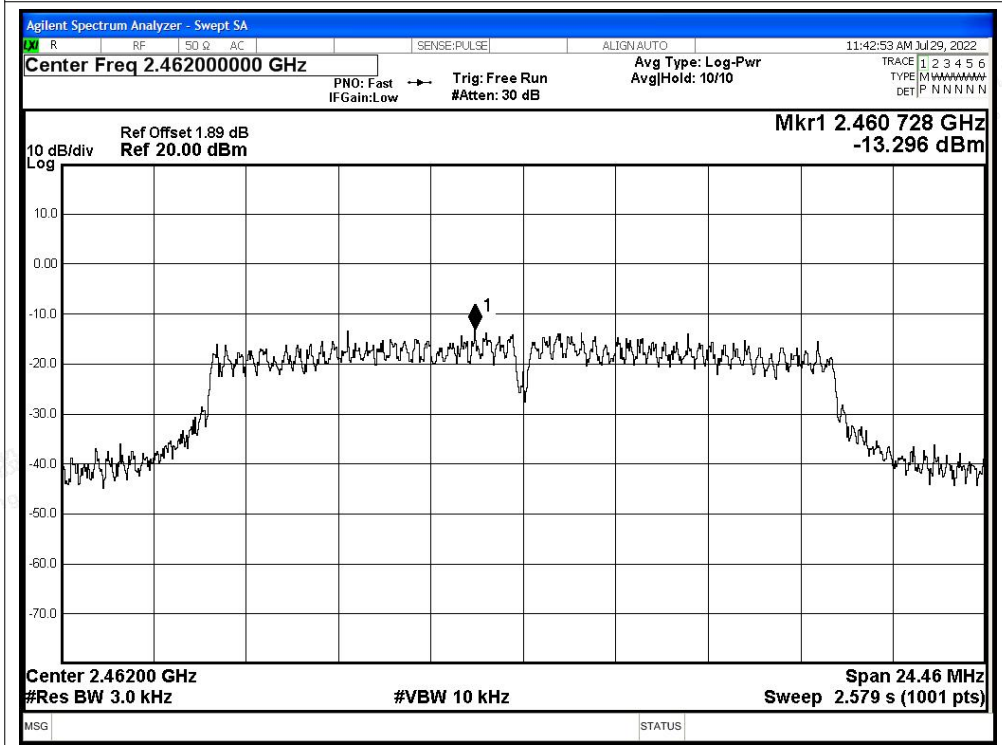


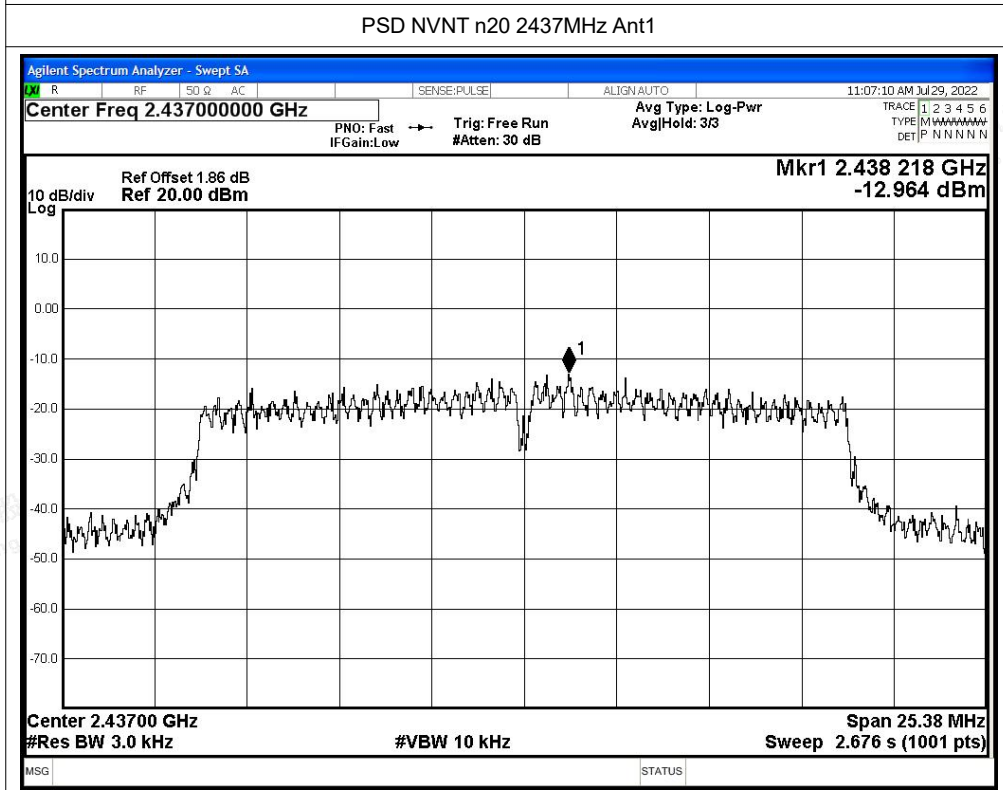
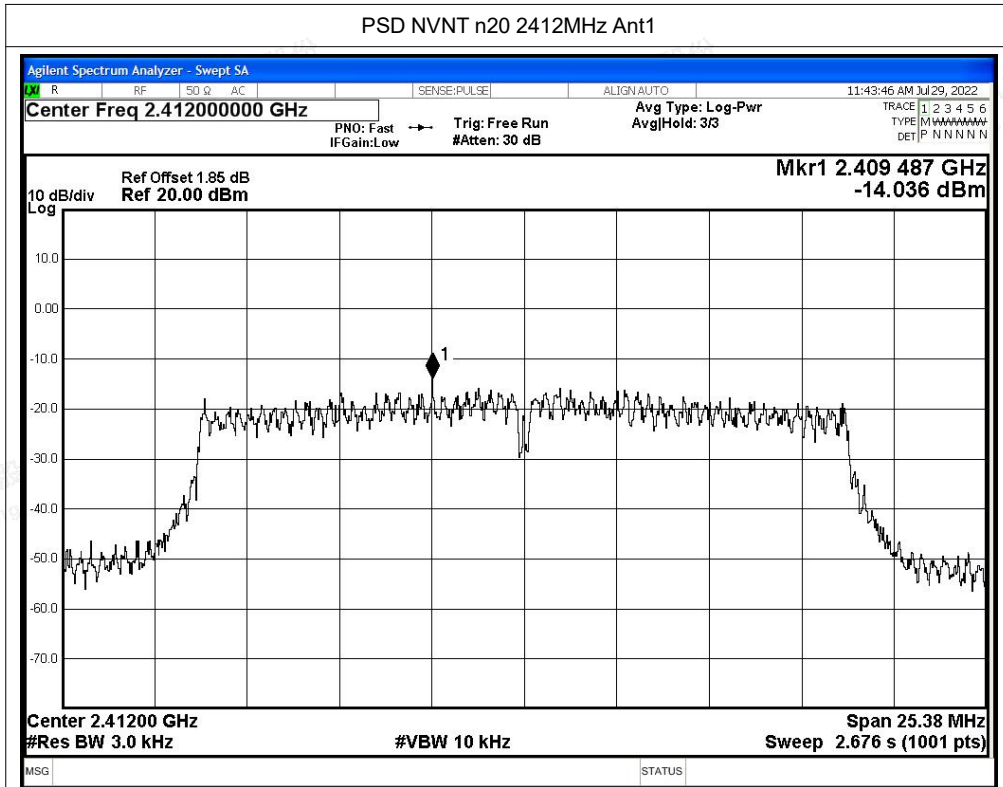


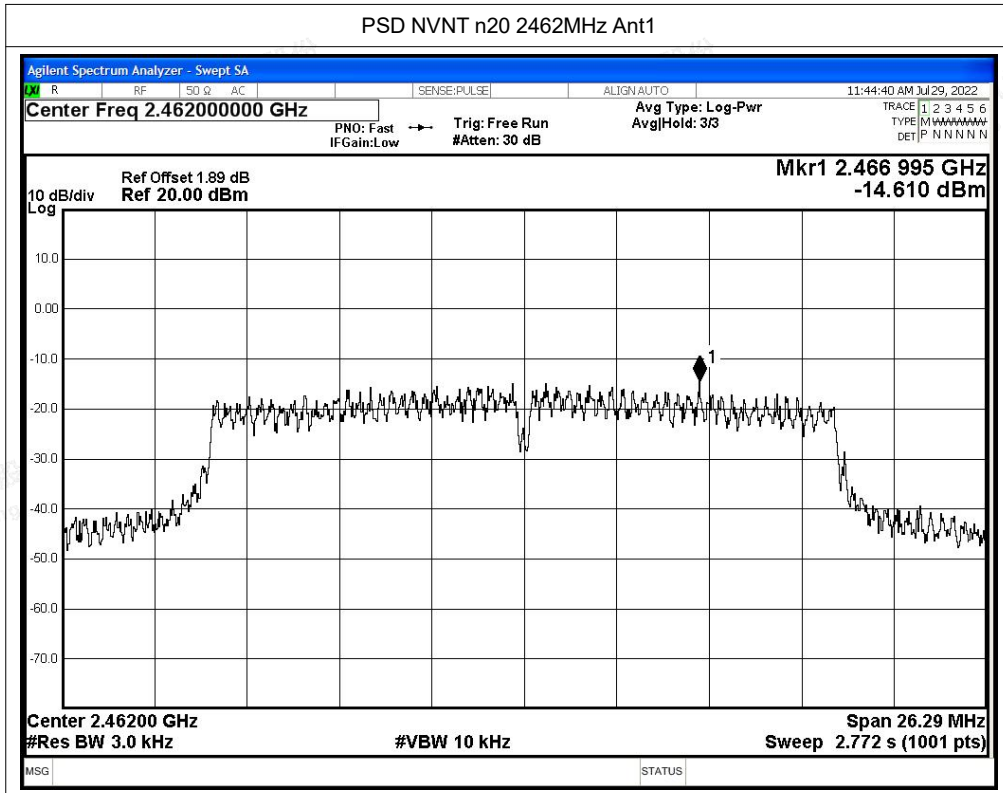
PSD NVNT g 2437MHz Ant1



PSD NVNT g 2462MHz Ant1









A.5 Band Edge

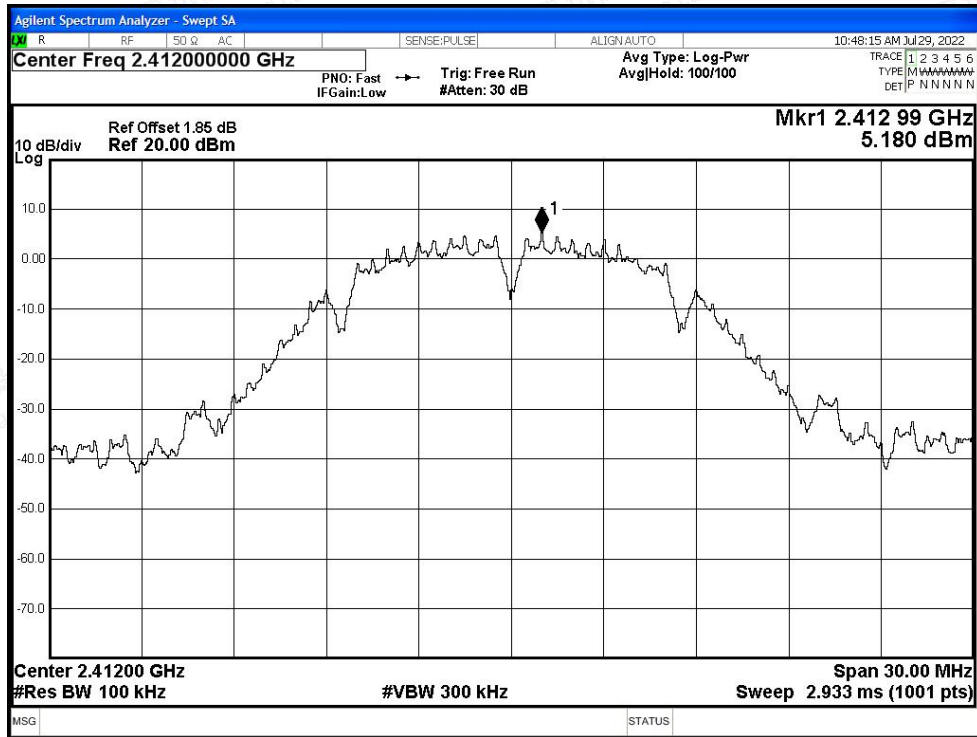
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-41.33	-20	Pass
NVNT	b	2462	Ant1	-52.83	-20	Pass
NVNT	g	2412	Ant1	-34.05	-20	Pass
NVNT	g	2462	Ant1	-41.2	-20	Pass
NVNT	n20	2412	Ant1	-31.65	-20	Pass
NVNT	n20	2462	Ant1	-37.87	-20	Pass



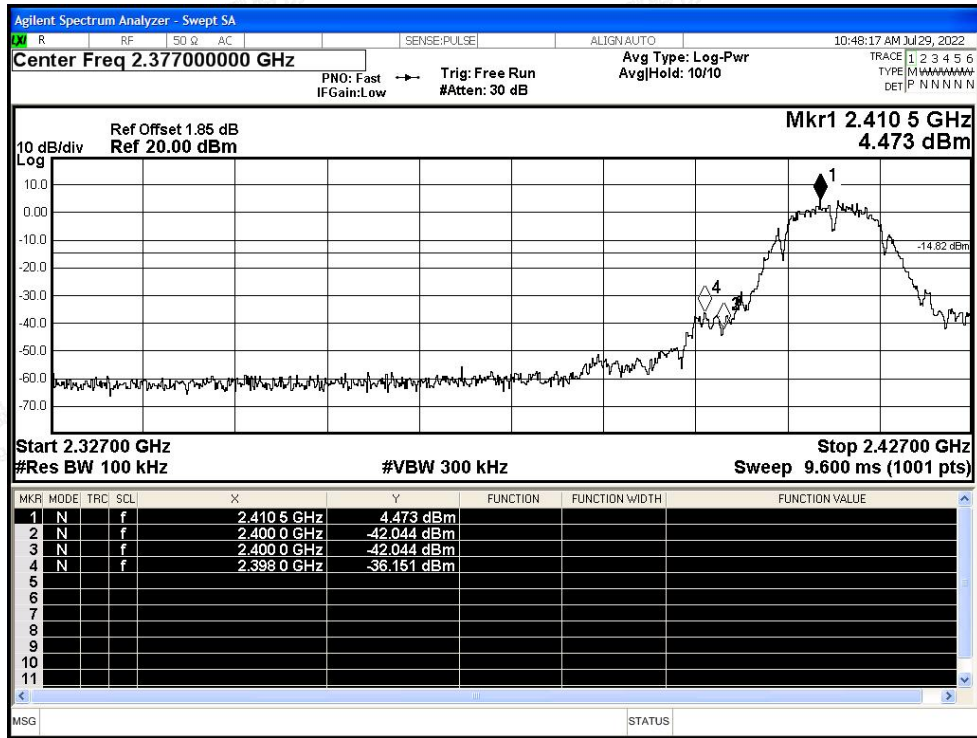


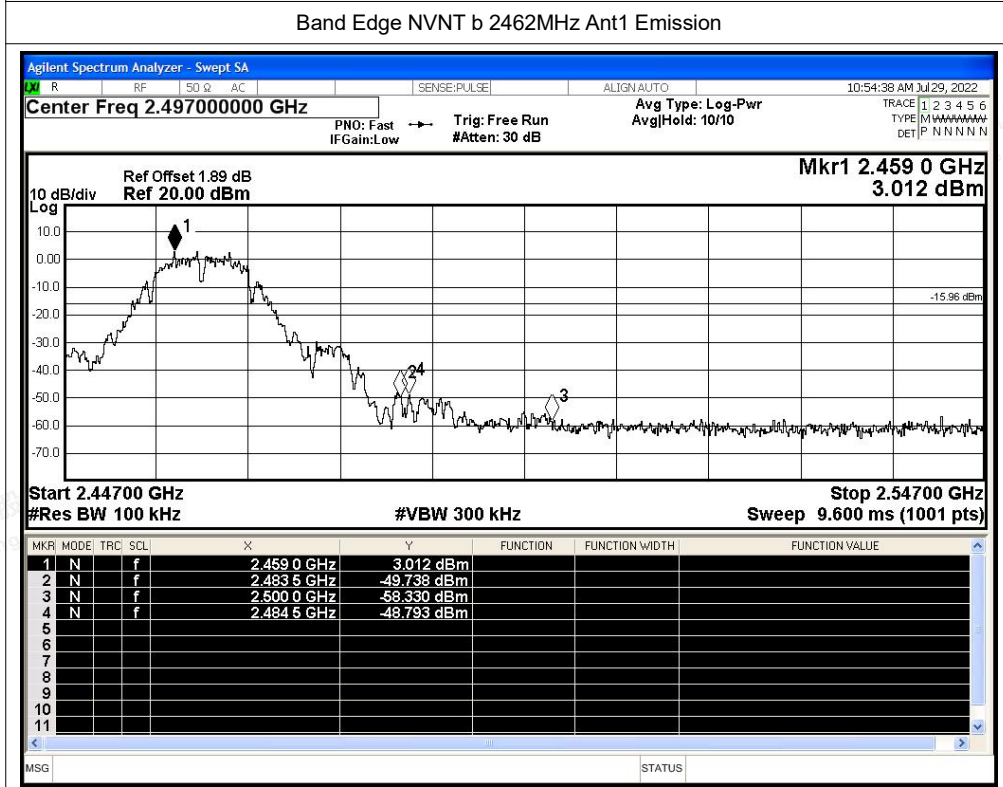
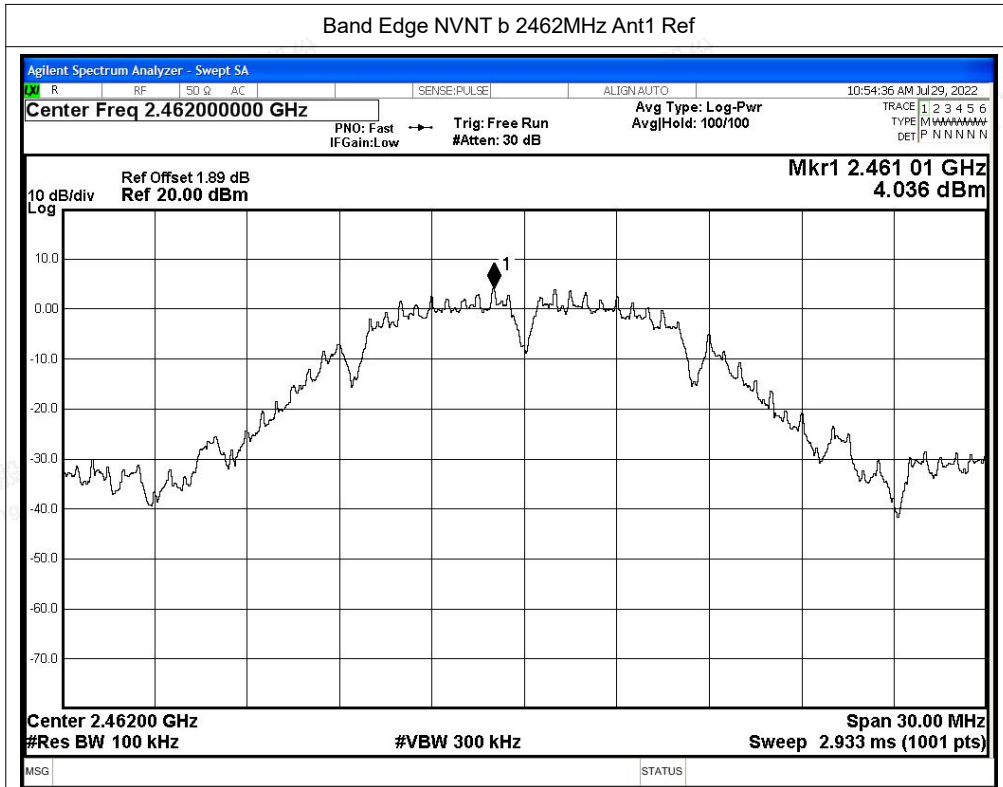
Test Graphs

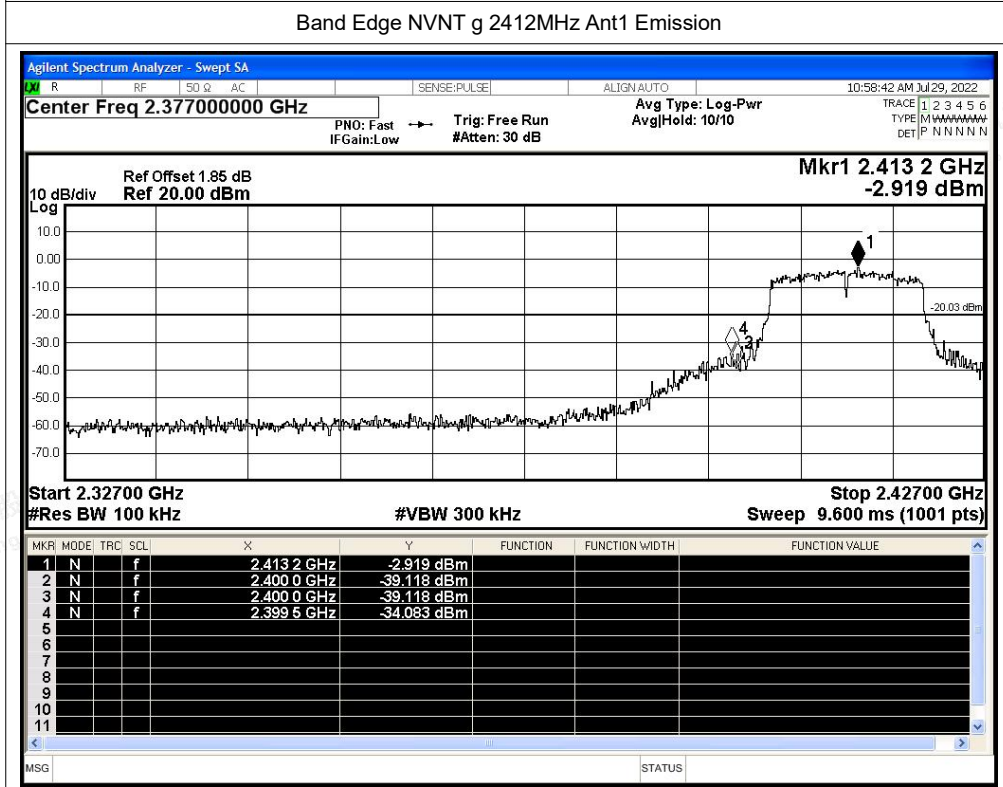
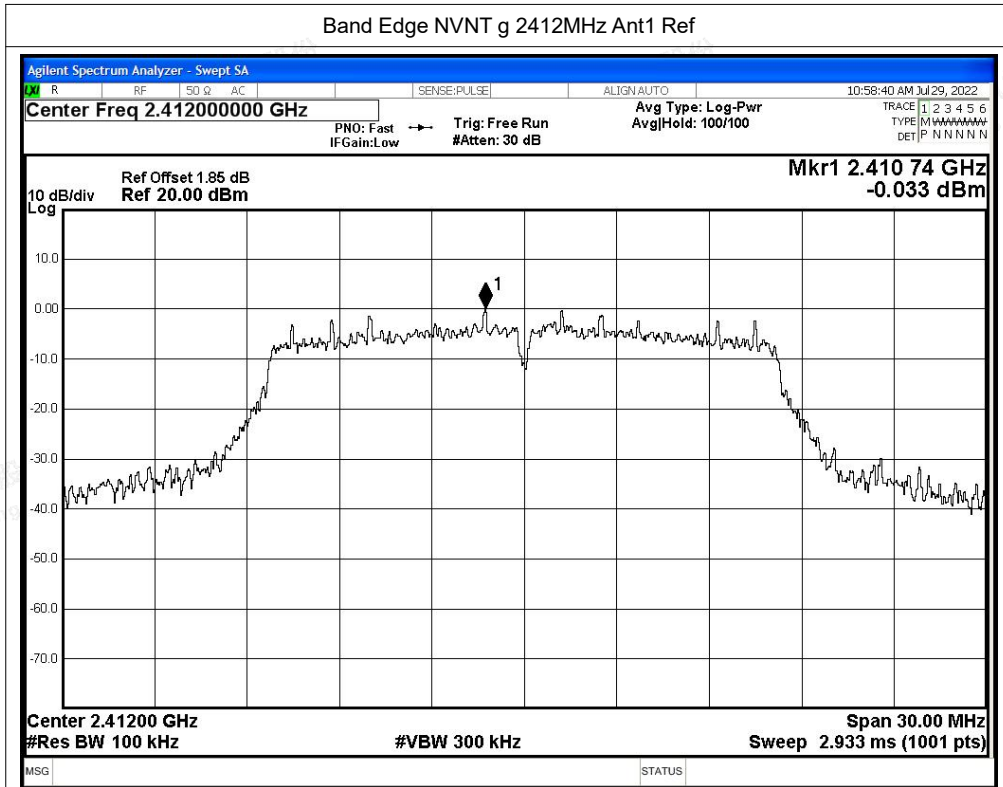
Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission

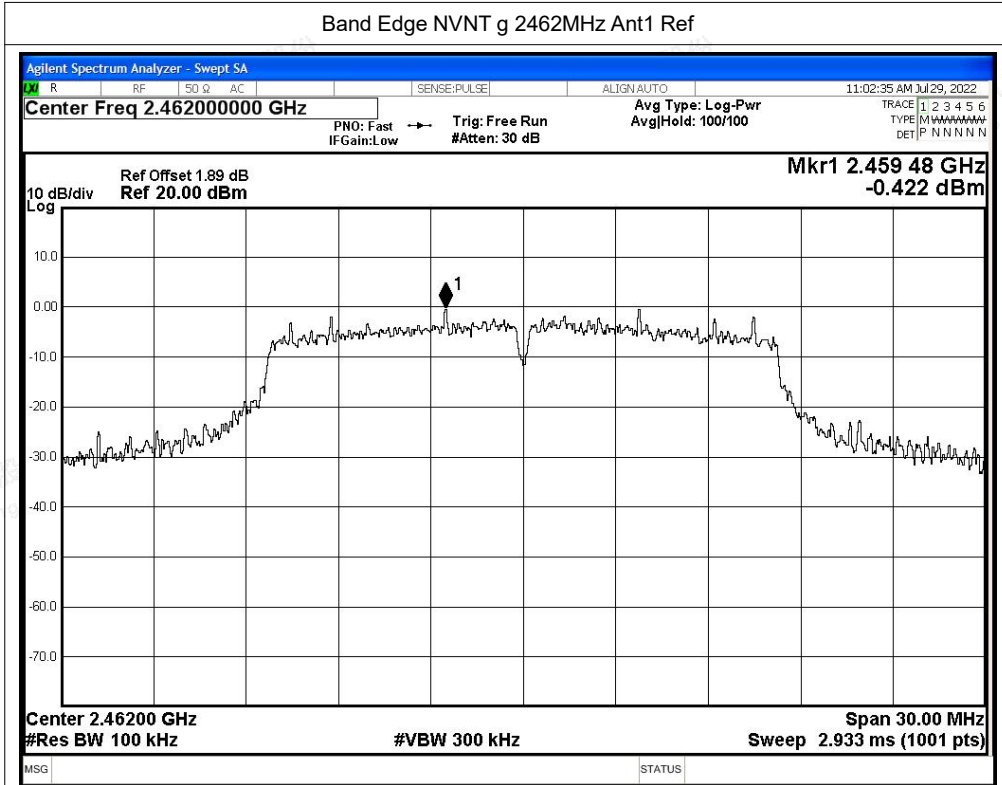




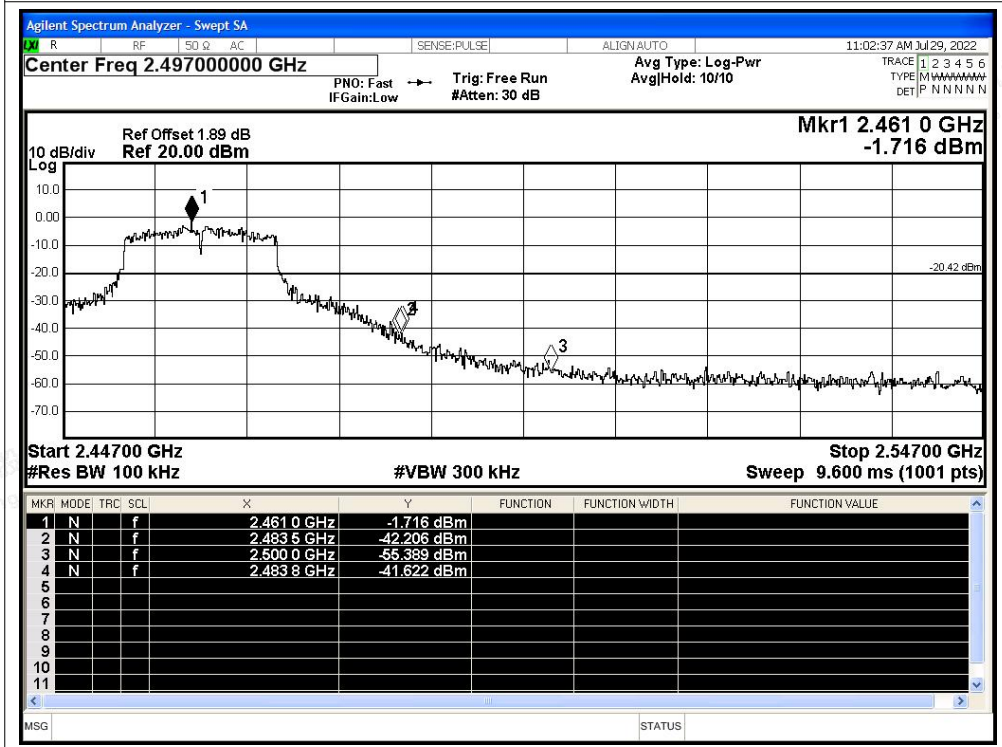


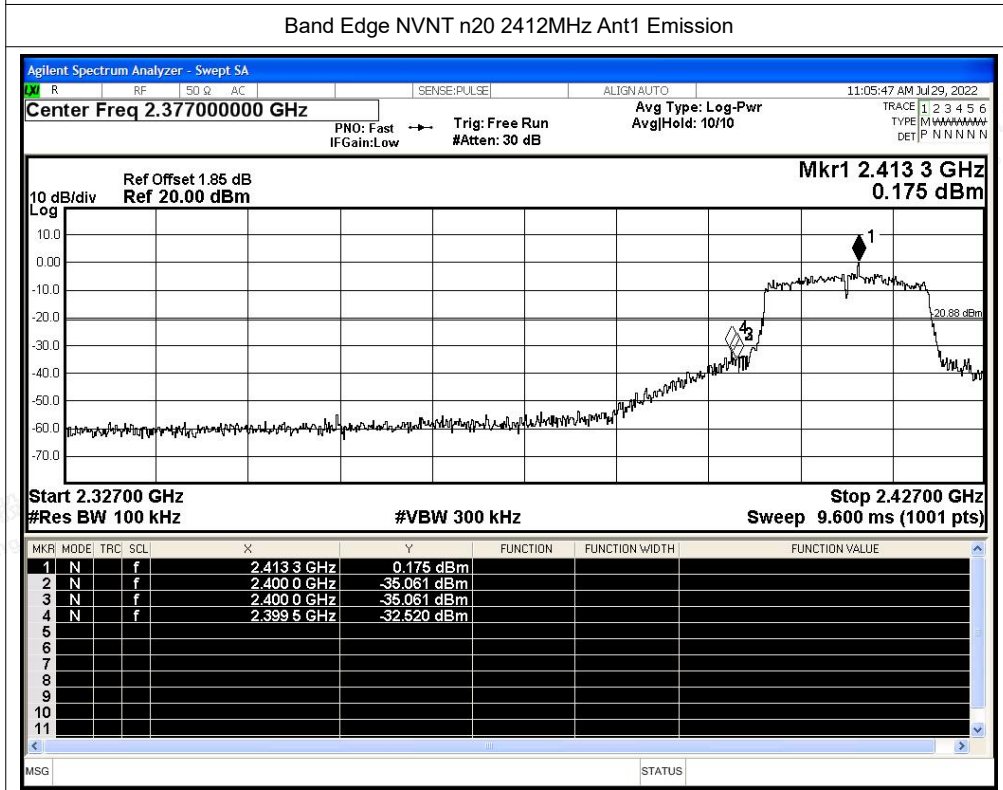
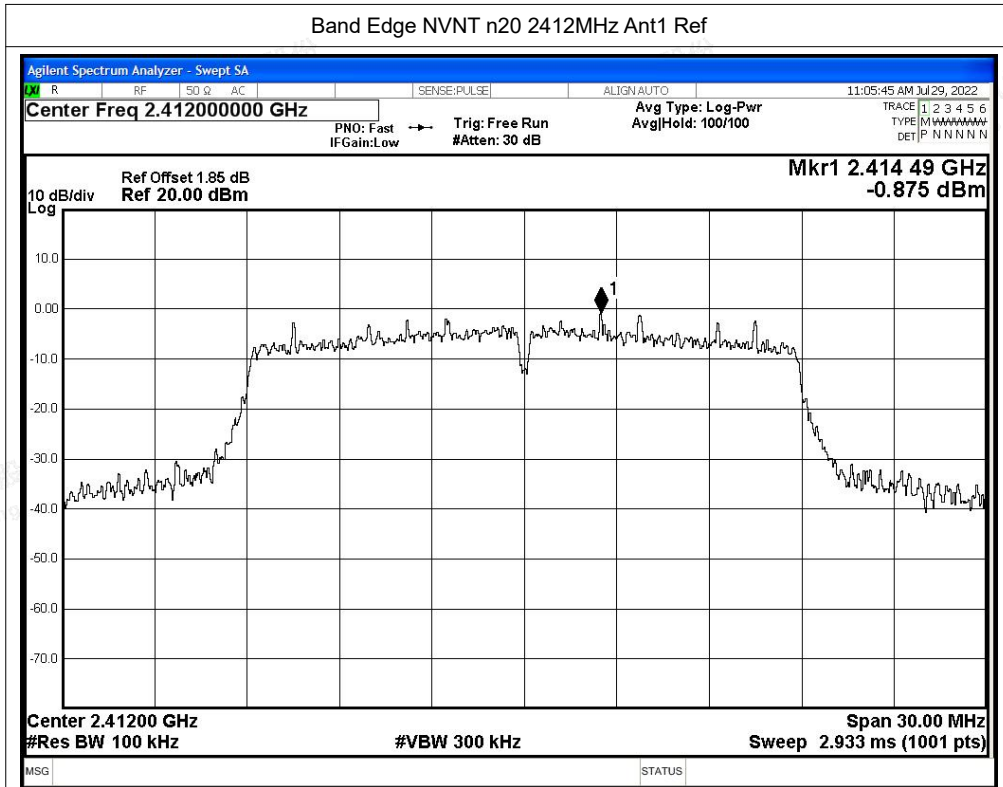


Band Edge NVNT g 2462MHz Ant1 Ref



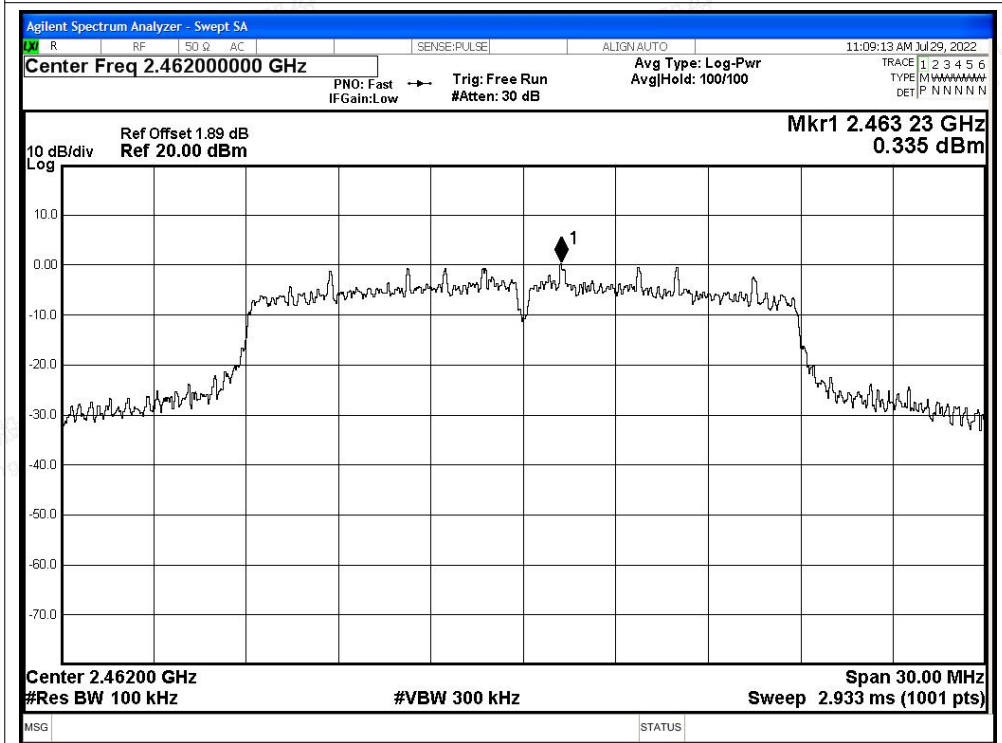
Band Edge NVNT g 2462MHz Ant1 Emission



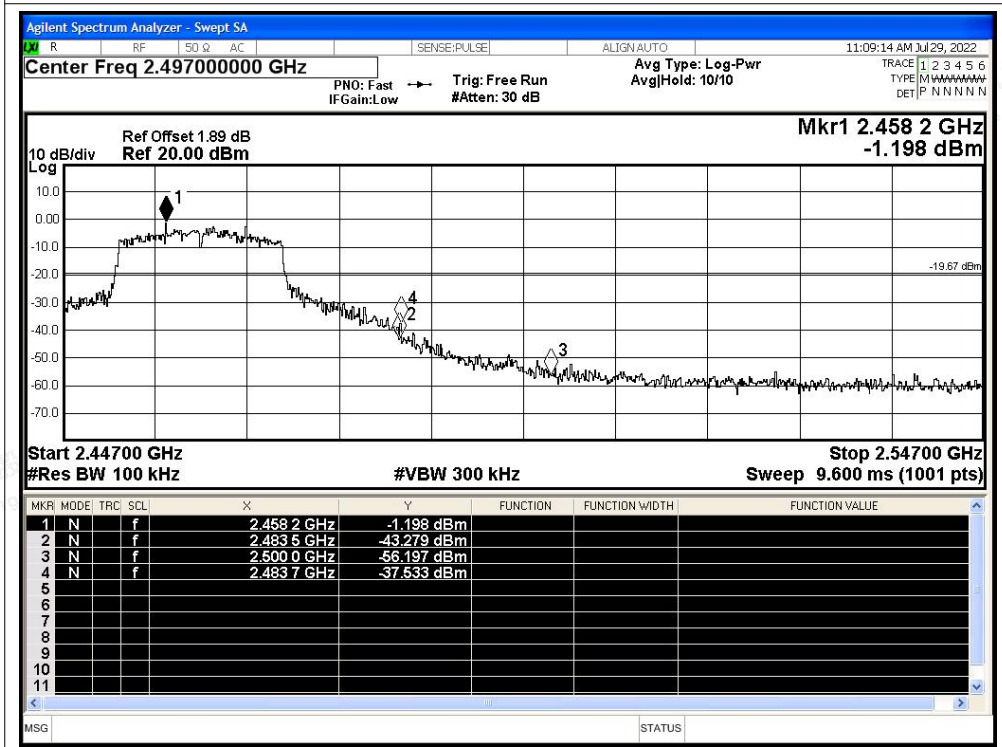




Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission





A.6 Conducted RF Spurious Emission

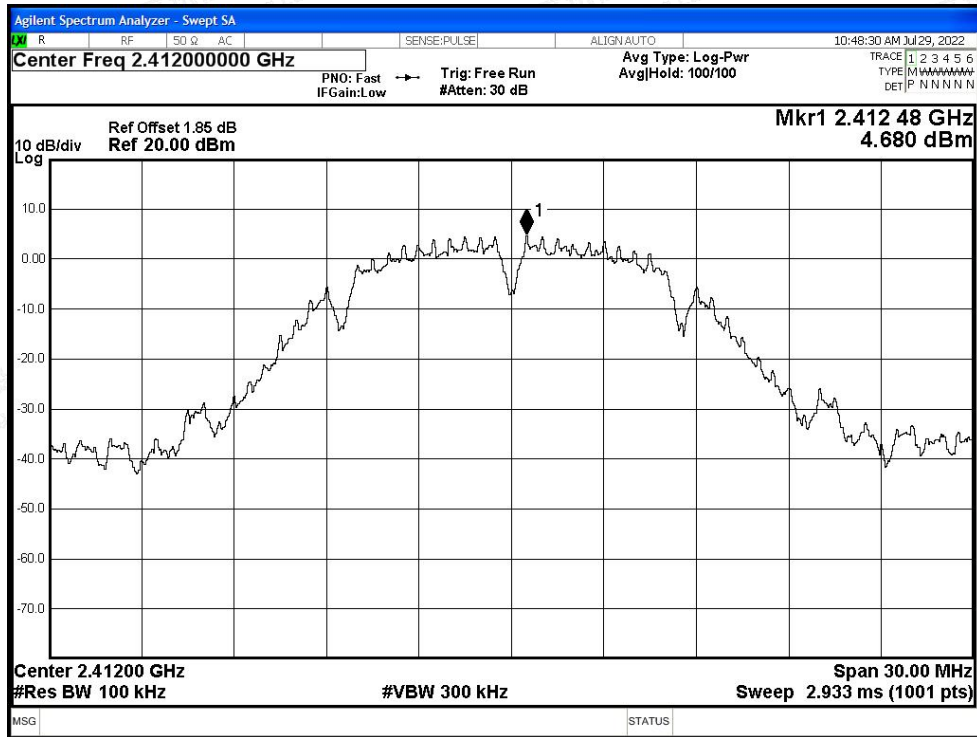
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.71	-20	Pass
NVNT	b	2437	Ant1	-49.91	-20	Pass
NVNT	b	2462	Ant1	-50.06	-20	Pass
NVNT	g	2412	Ant1	-45.93	-20	Pass
NVNT	g	2437	Ant1	-47.28	-20	Pass
NVNT	g	2462	Ant1	-46.35	-20	Pass
NVNT	n20	2412	Ant1	-46.69	-20	Pass
NVNT	n20	2437	Ant1	-47.38	-20	Pass
NVNT	n20	2462	Ant1	-46.42	-20	Pass



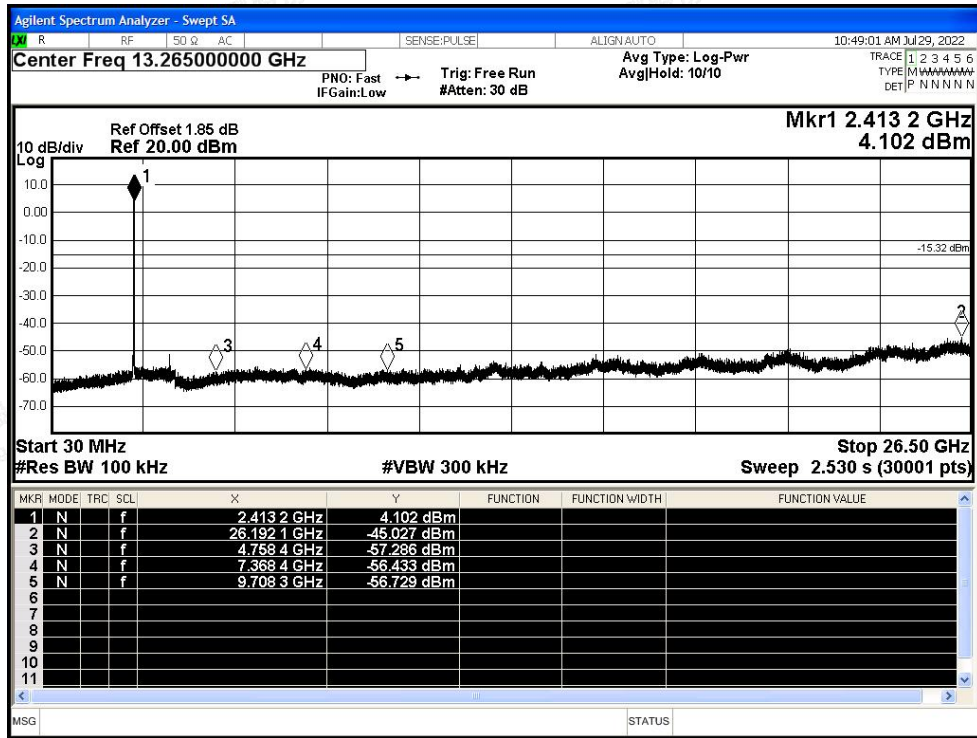


Test Graphs

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

