



Appendix A

RF Test Data for 2.4GWIFI (Conducted Measurement)

Product Name: Smart Flood Sensor

Test Model: Shelly flood

Environmental Conditions

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



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



A.1 6dB Bandwidth

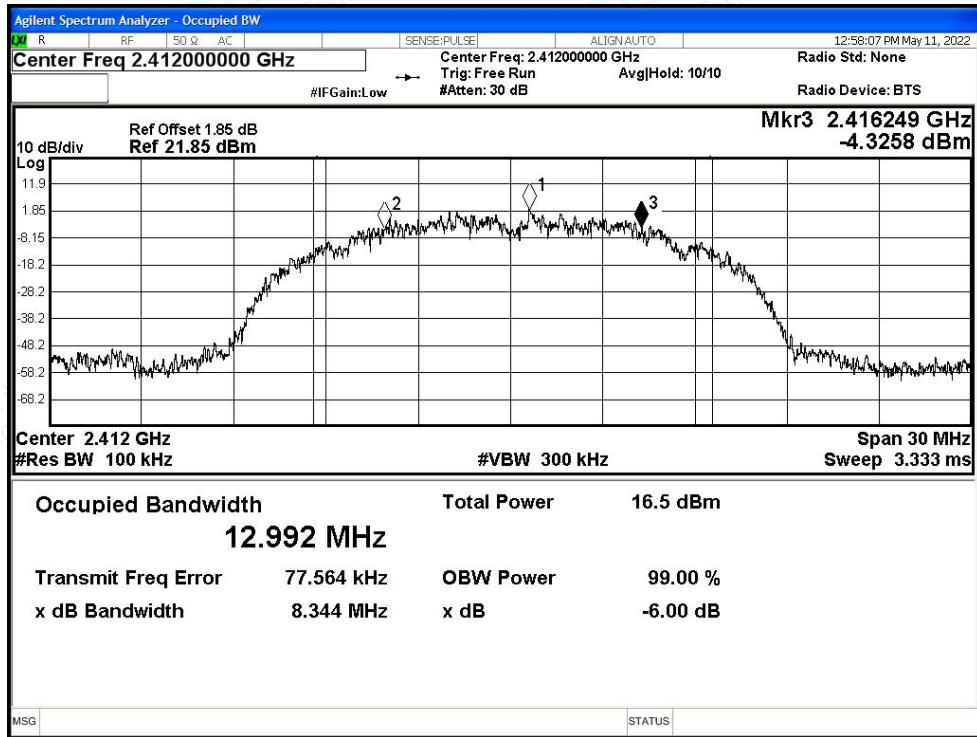
Condition	Mode	Frequency (MHz)	Antenna	6 dB Bandwidth (MHz)	Limit 6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	8.344	0.5	Pass
NVNT	b	2437	Ant1	9.372	0.5	Pass
NVNT	b	2462	Ant1	9.01	0.5	Pass
NVNT	g	2412	Ant1	16.354	0.5	Pass
NVNT	g	2437	Ant1	16.355	0.5	Pass
NVNT	g	2462	Ant1	16.376	0.5	Pass
NVNT	n20	2412	Ant1	16.702	0.5	Pass
NVNT	n20	2437	Ant1	17.074	0.5	Pass
NVNT	n20	2462	Ant1	17.256	0.5	Pass



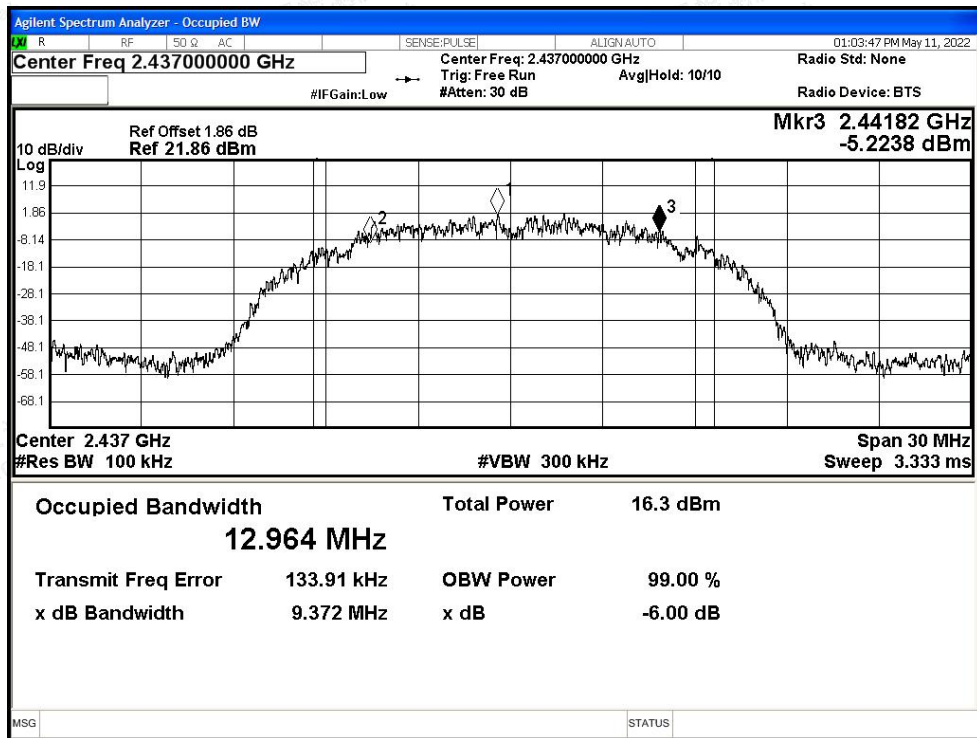


Test Graphs

6dB Bandwidth NVNT b 2412MHz Ant1



6dB Bandwidth NVNT b 2437MHz Ant1



Shenzhen LCS Compliance Testing Laboratory Ltd.

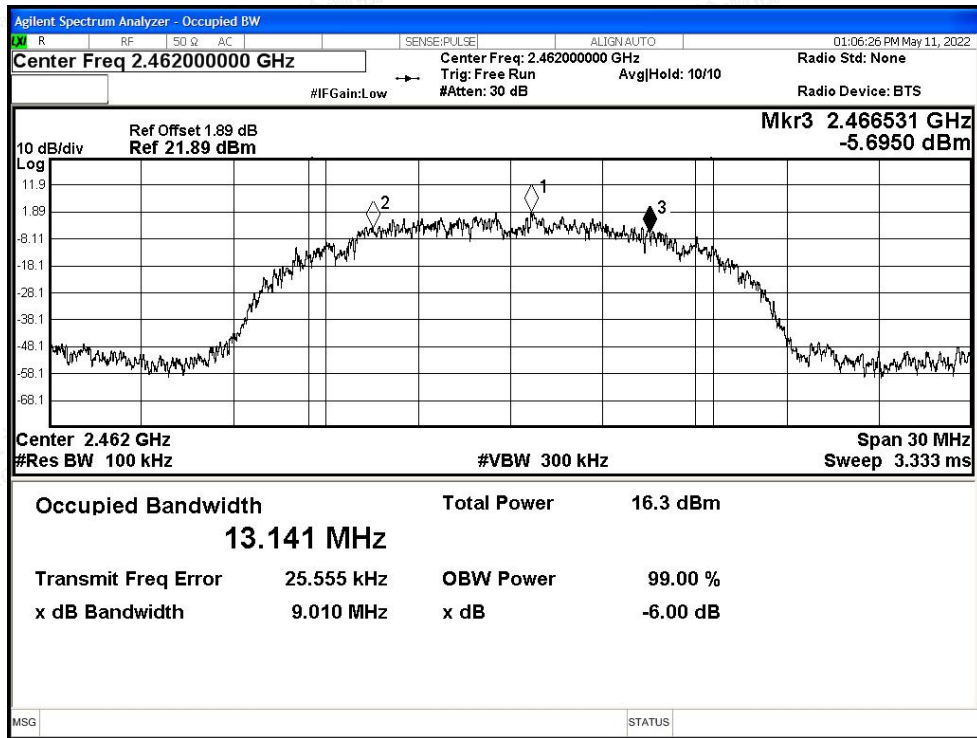
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

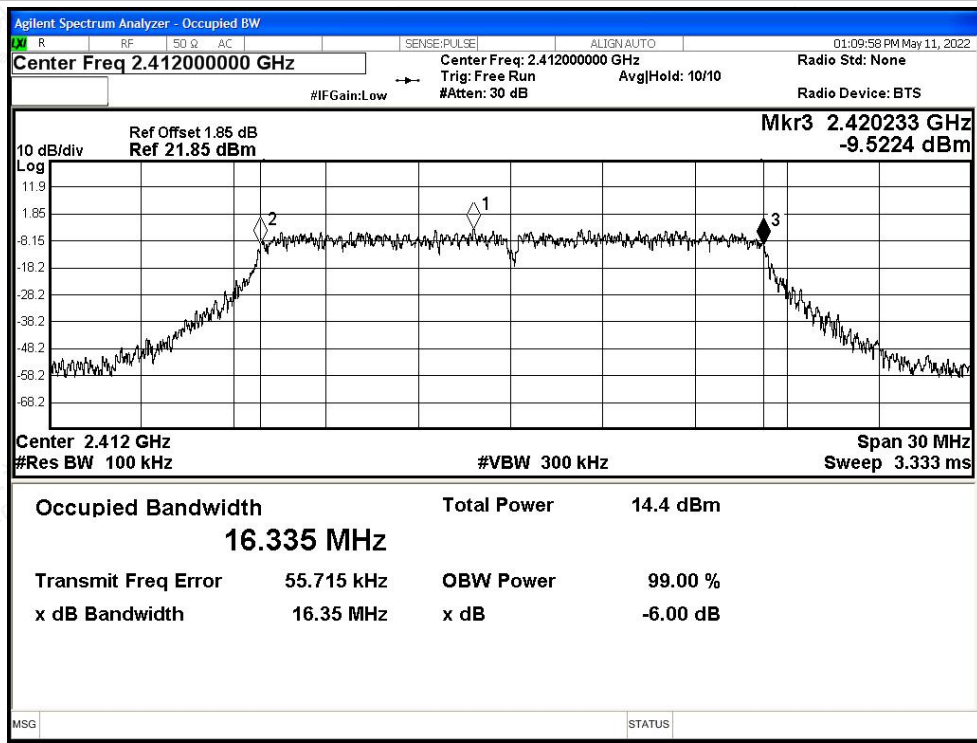
Scan code to check authenticity



6dB Bandwidth NVNT b 2462MHz Ant1

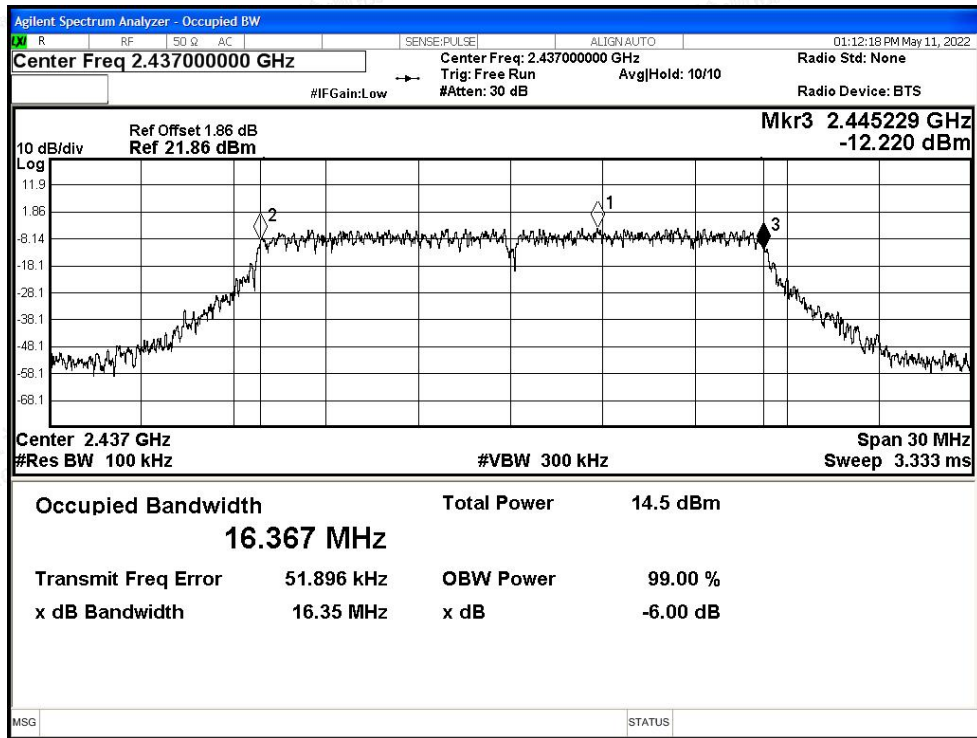


6dB Bandwidth NVNT g 2412MHz Ant1

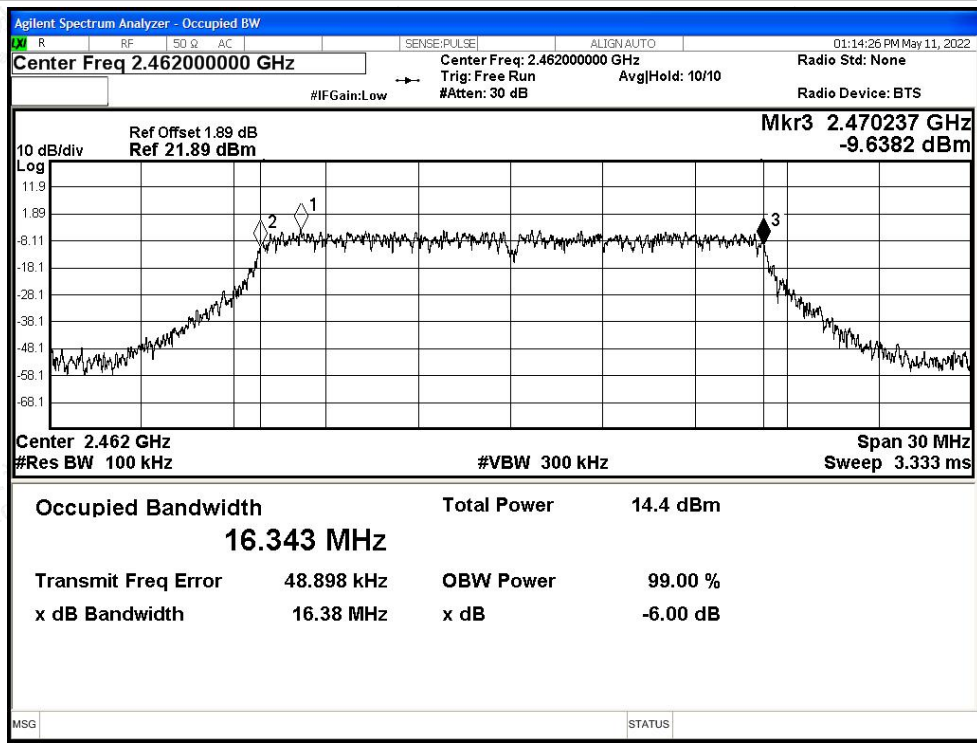




6dB Bandwidth NVNT g 2437MHz Ant1

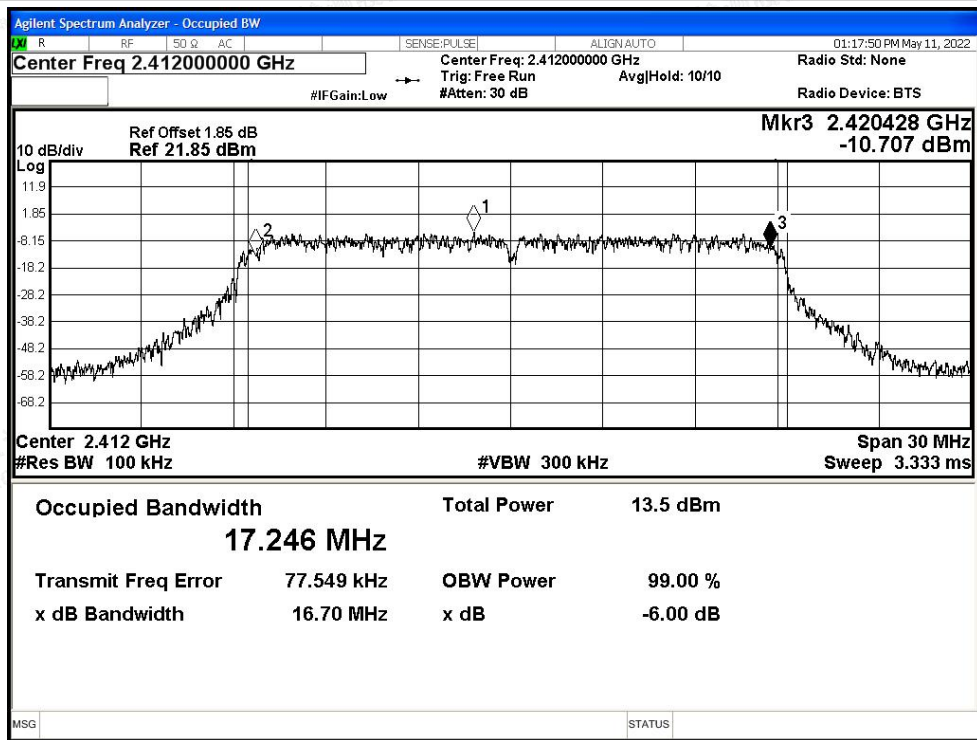


6dB Bandwidth NVNT g 2462MHz Ant1

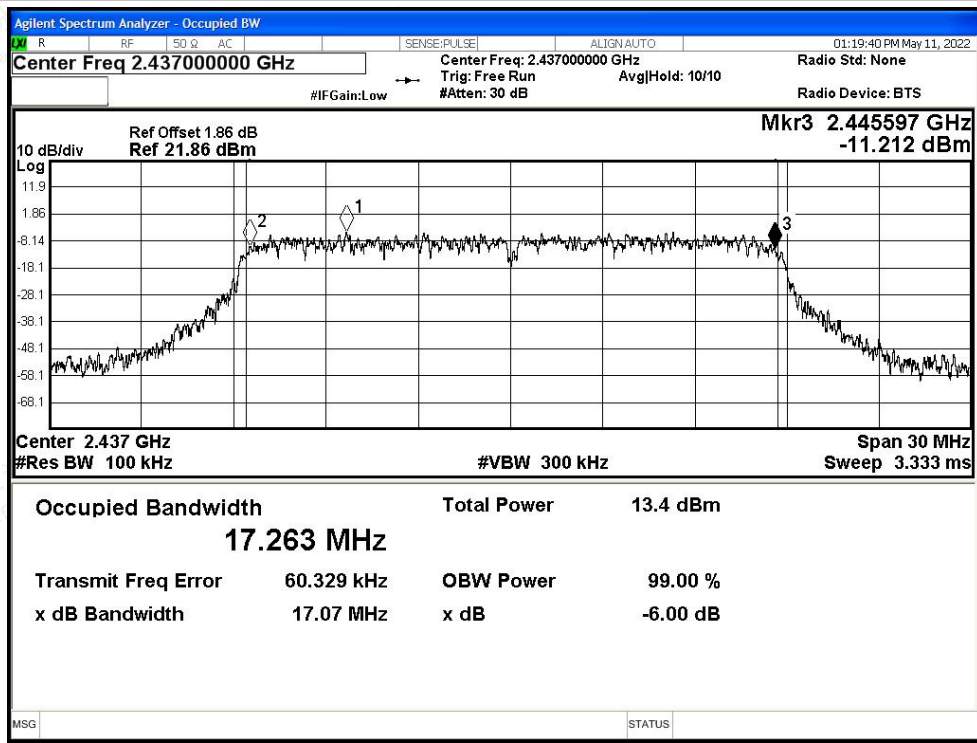




6dB Bandwidth NVNT n20 2412MHz Ant1



6dB Bandwidth NVNT n20 2437MHz Ant1

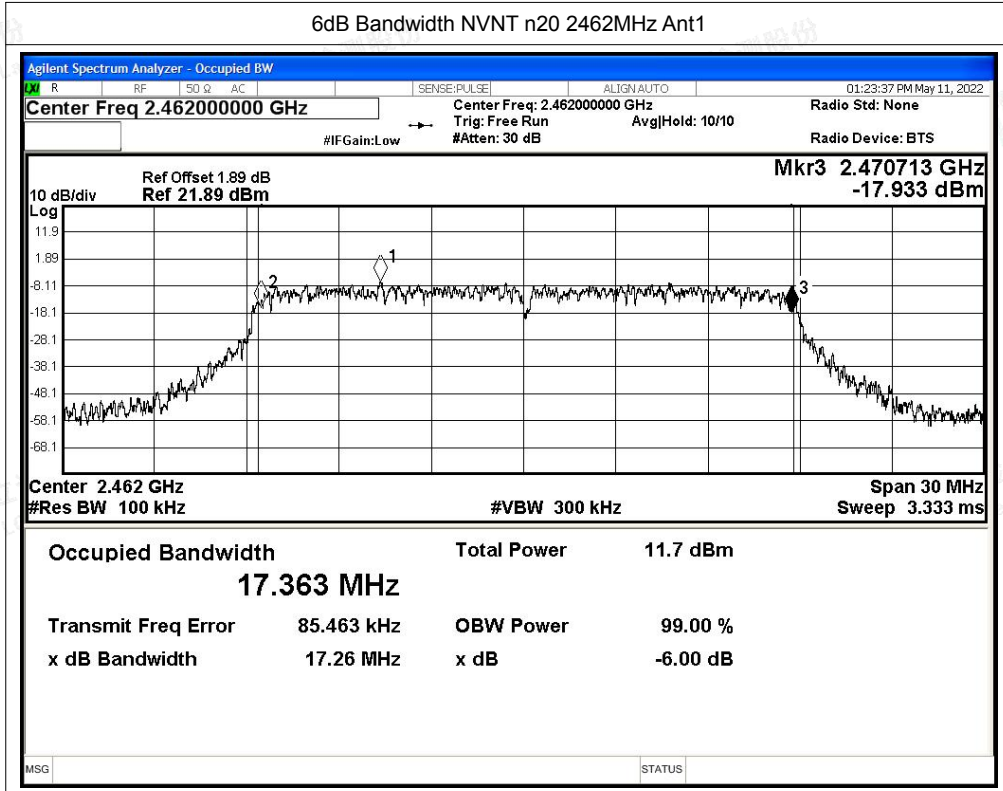


Shenzhen LCS Compliance Testing Laboratory Ltd.

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





A.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	b	2412	Ant1	14.42	30	Pass
NVNT	b	2437	Ant1	14.48	30	Pass
NVNT	b	2462	Ant1	14.36	30	Pass
NVNT	g	2412	Ant1	13.33	30	Pass
NVNT	g	2437	Ant1	13.22	30	Pass
NVNT	g	2462	Ant1	13.23	30	Pass
NVNT	n20	2412	Ant1	12.23	30	Pass
NVNT	n20	2437	Ant1	12.25	30	Pass
NVNT	n20	2462	Ant1	12.1	30	Pass





A.3 Maximum Power Spectral Density

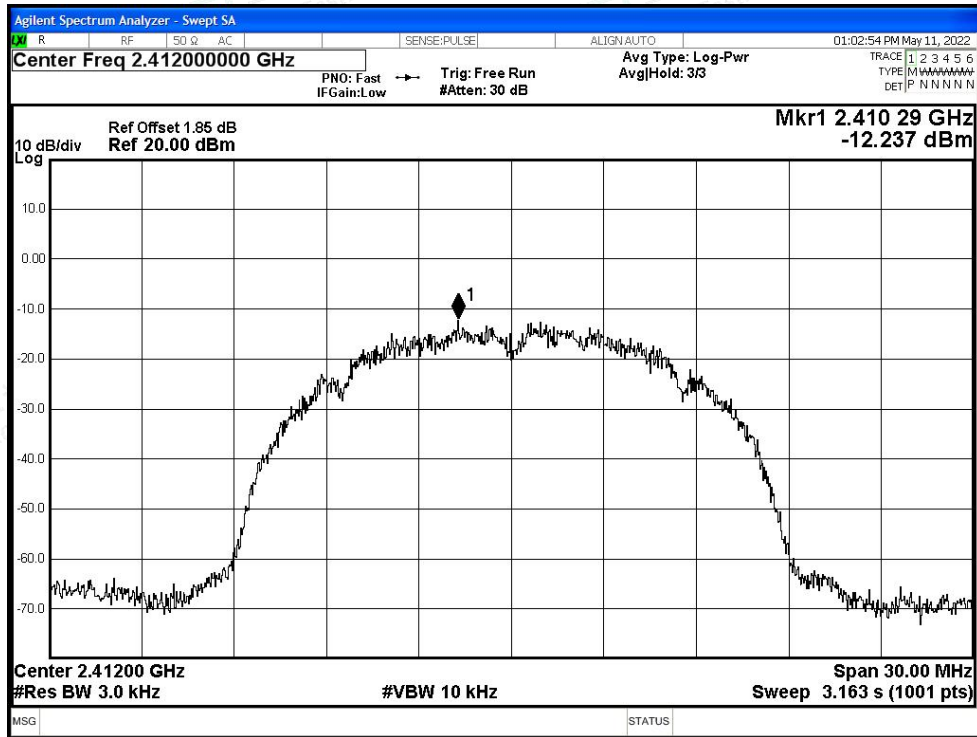
Condition	Mode	Frequency (MHz)	Antenna	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-12.24	8	Pass
NVNT	b	2437	Ant1	-12.61	8	Pass
NVNT	b	2462	Ant1	-12.87	8	Pass
NVNT	g	2412	Ant1	-18	8	Pass
NVNT	g	2437	Ant1	-17.51	8	Pass
NVNT	g	2462	Ant1	-17.36	8	Pass
NVNT	n20	2412	Ant1	-18.57	8	Pass
NVNT	n20	2437	Ant1	-18.56	8	Pass
NVNT	n20	2462	Ant1	-20.51	8	Pass



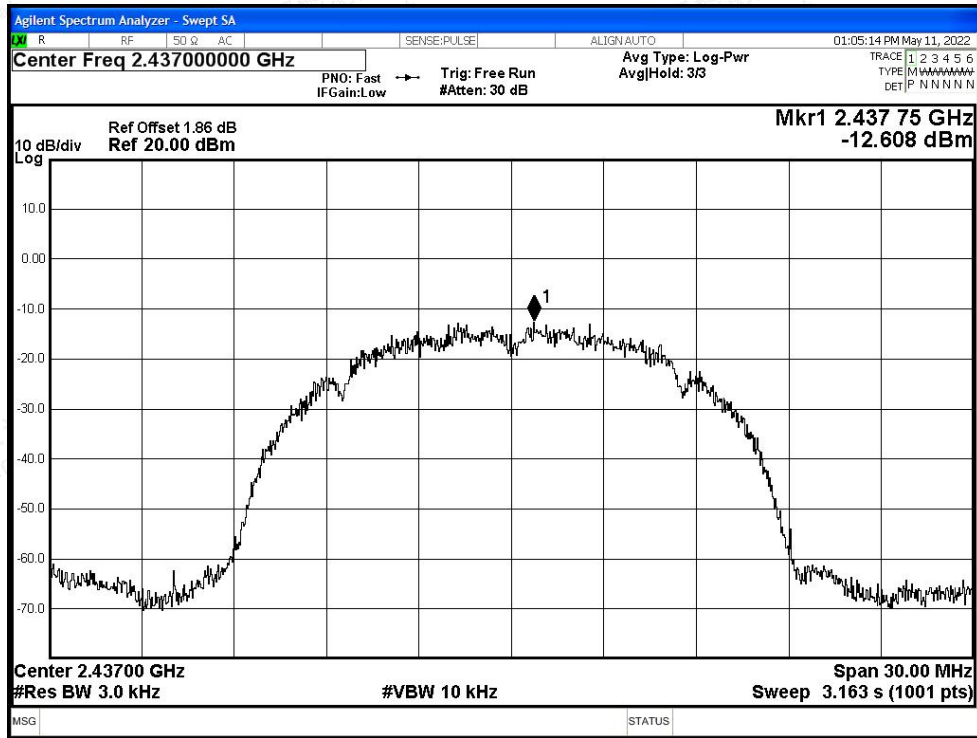


Test Graphs

PSD NVNT b 2412MHz Ant1



PSD NVNT b 2437MHz Ant1

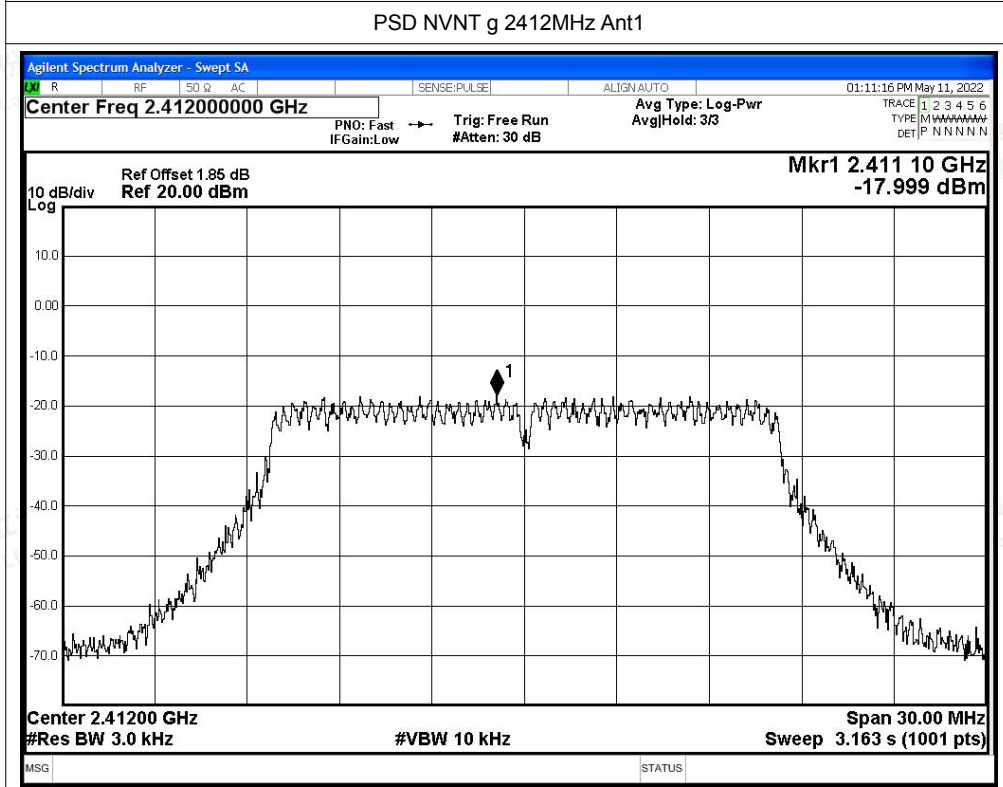
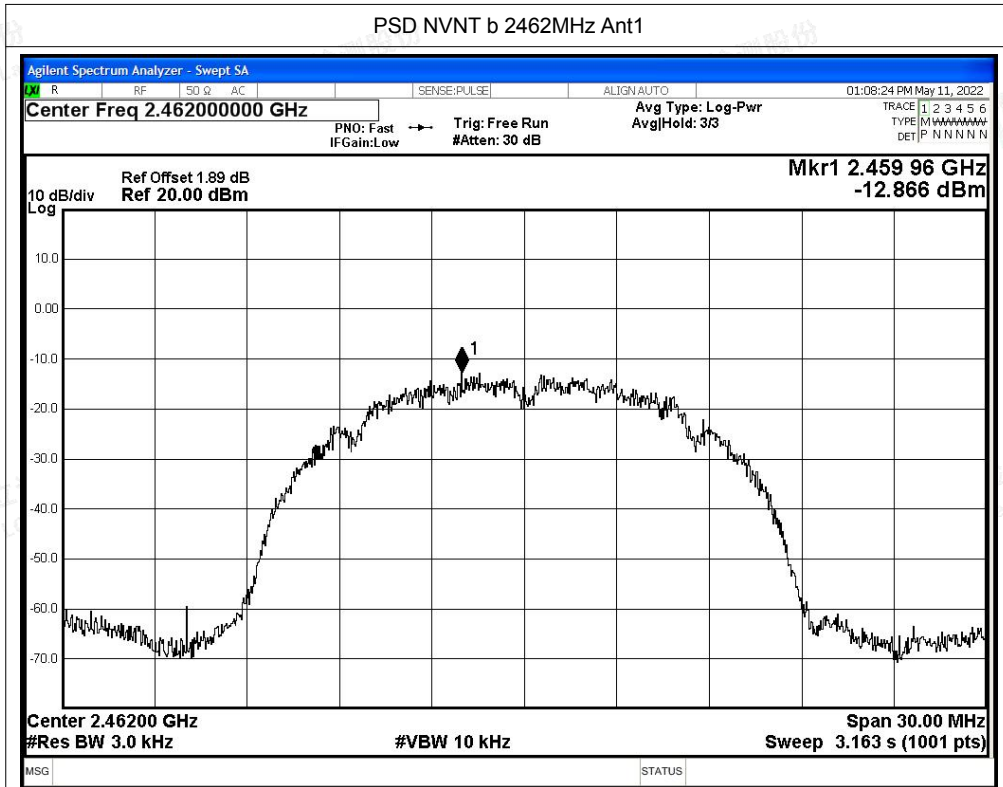


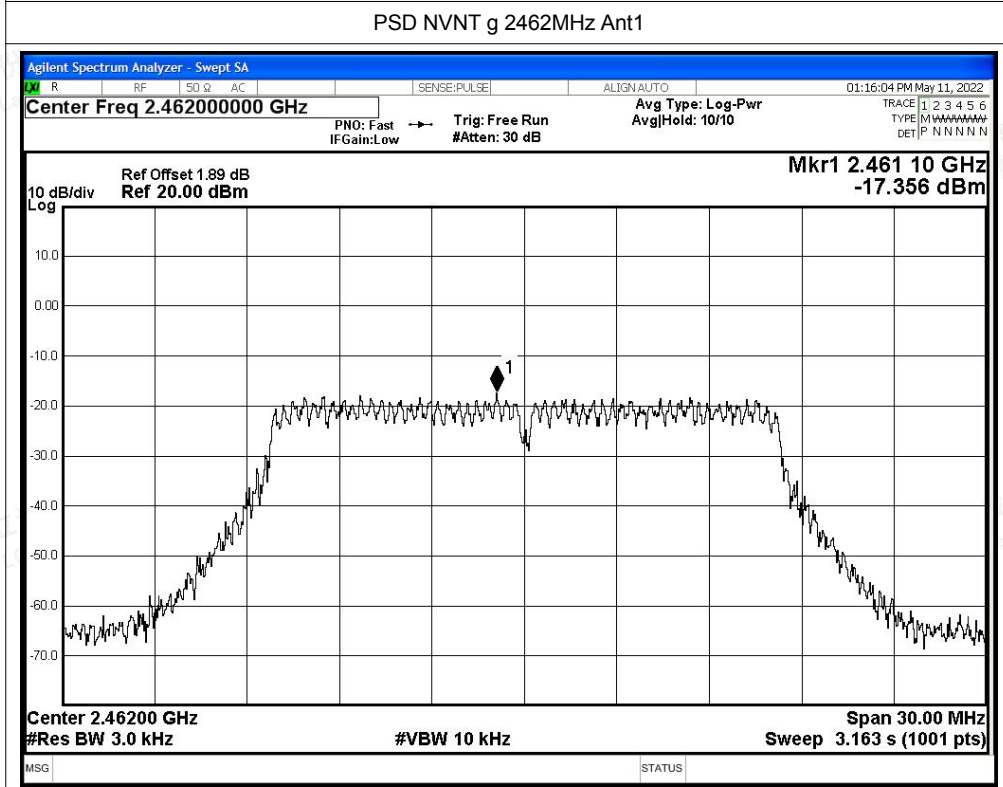
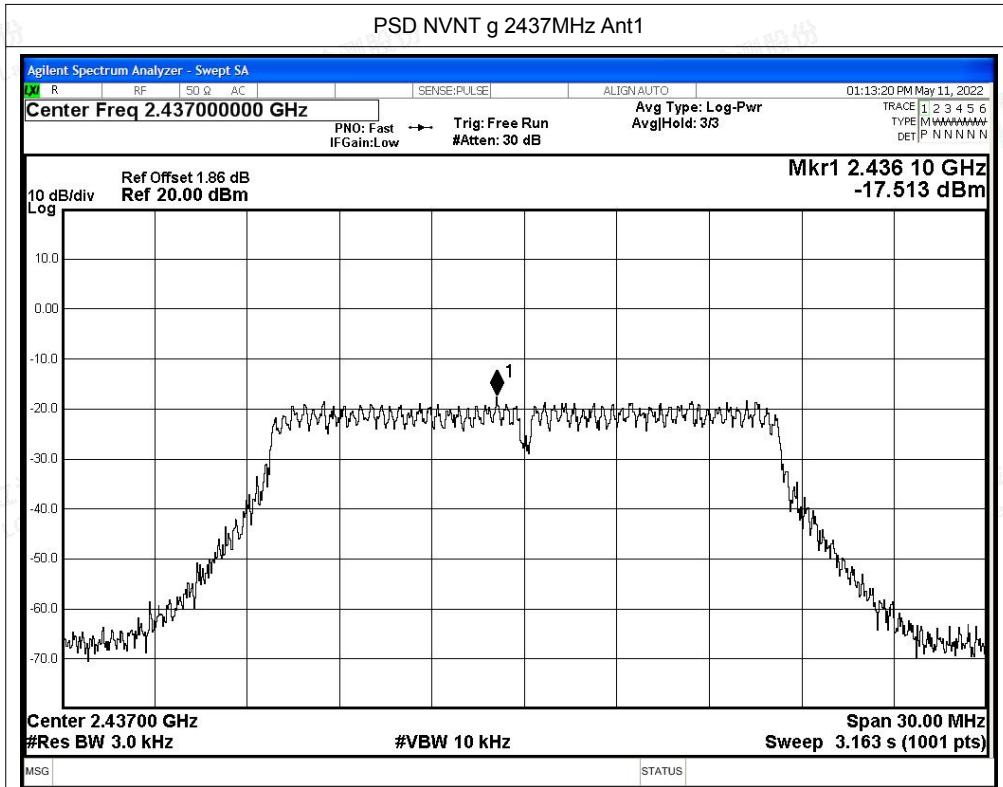
Shenzhen LCS Compliance Testing Laboratory Ltd.

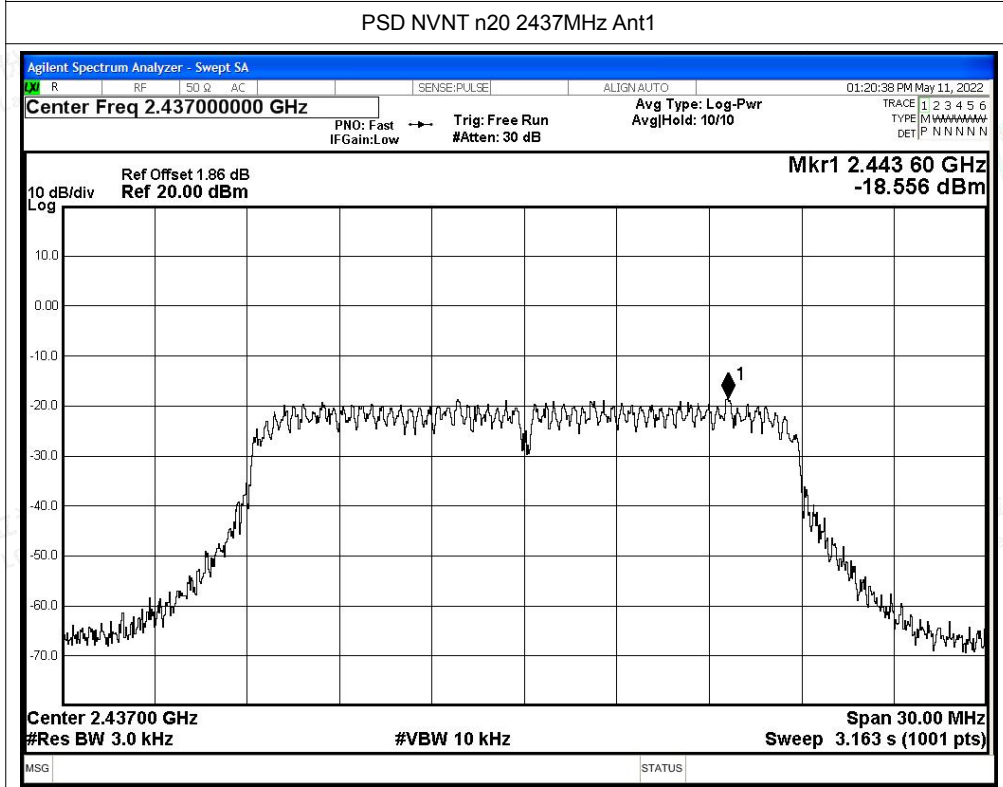
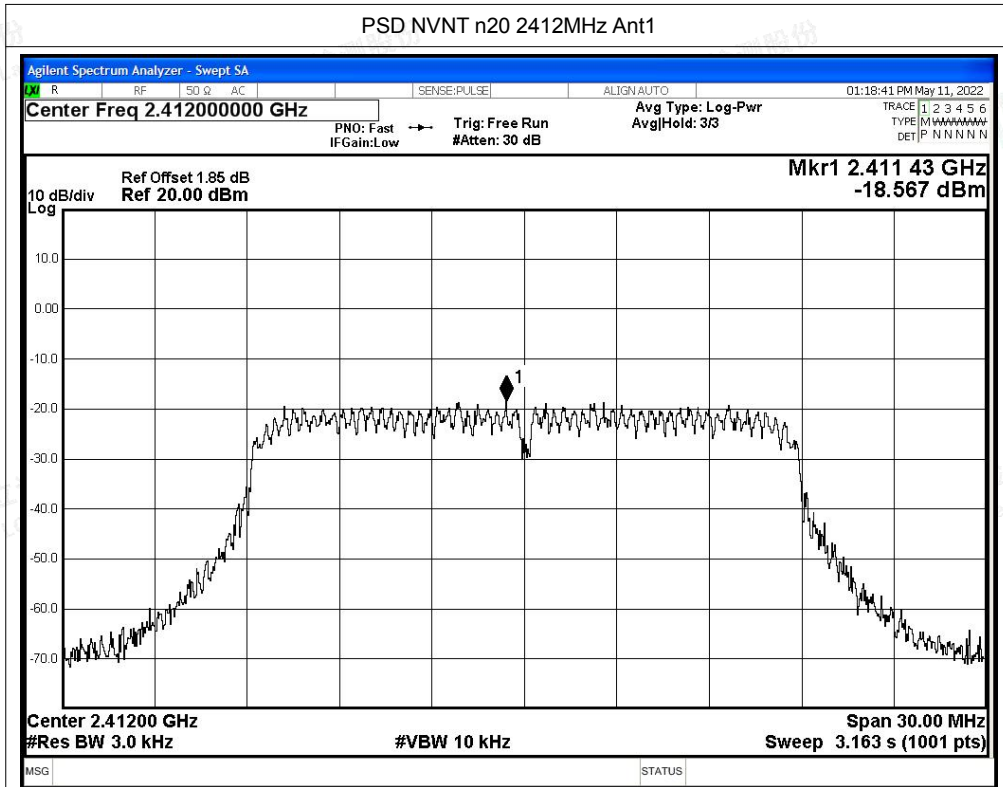
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

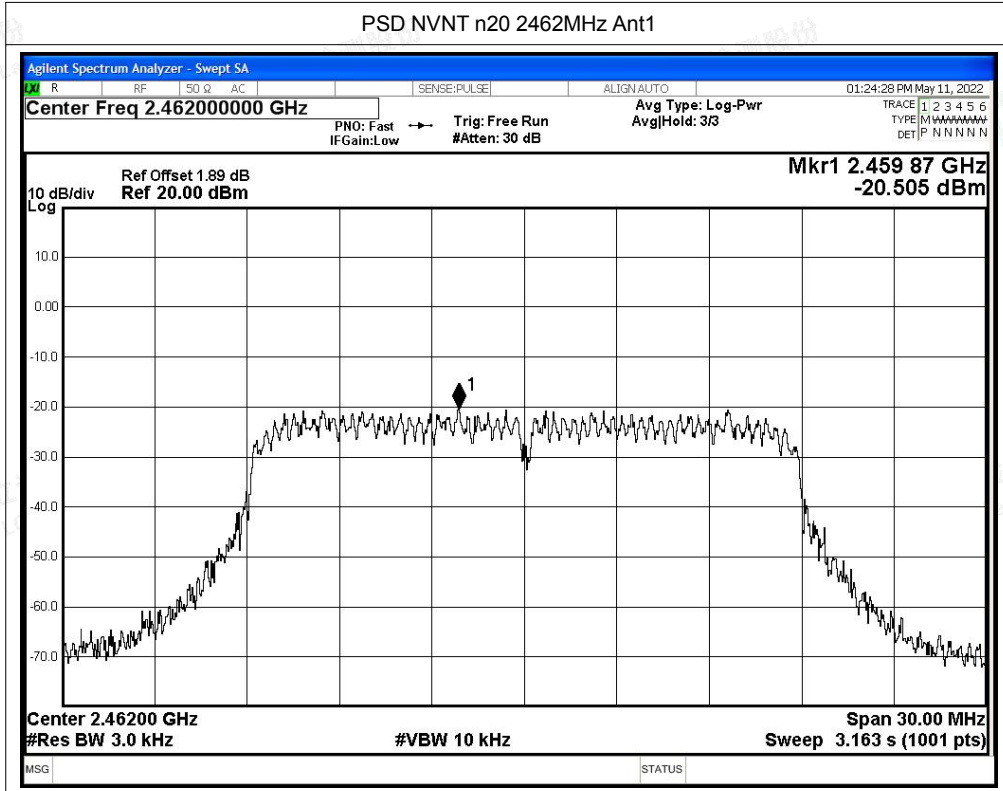
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity











A.4 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-52.33	-20	Pass
NVNT	b	2462	Ant1	-58.14	-20	Pass
NVNT	g	2412	Ant1	-45.62	-20	Pass
NVNT	g	2462	Ant1	-49.94	-20	Pass
NVNT	n20	2412	Ant1	-43.98	-20	Pass
NVNT	n20	2462	Ant1	-49.34	-20	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

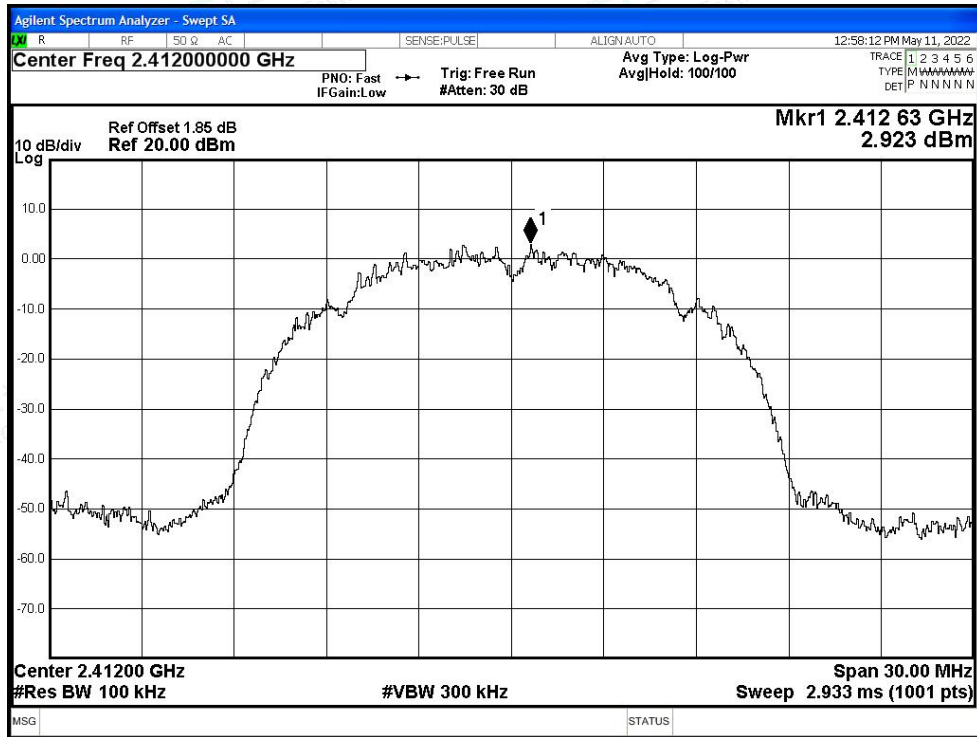
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

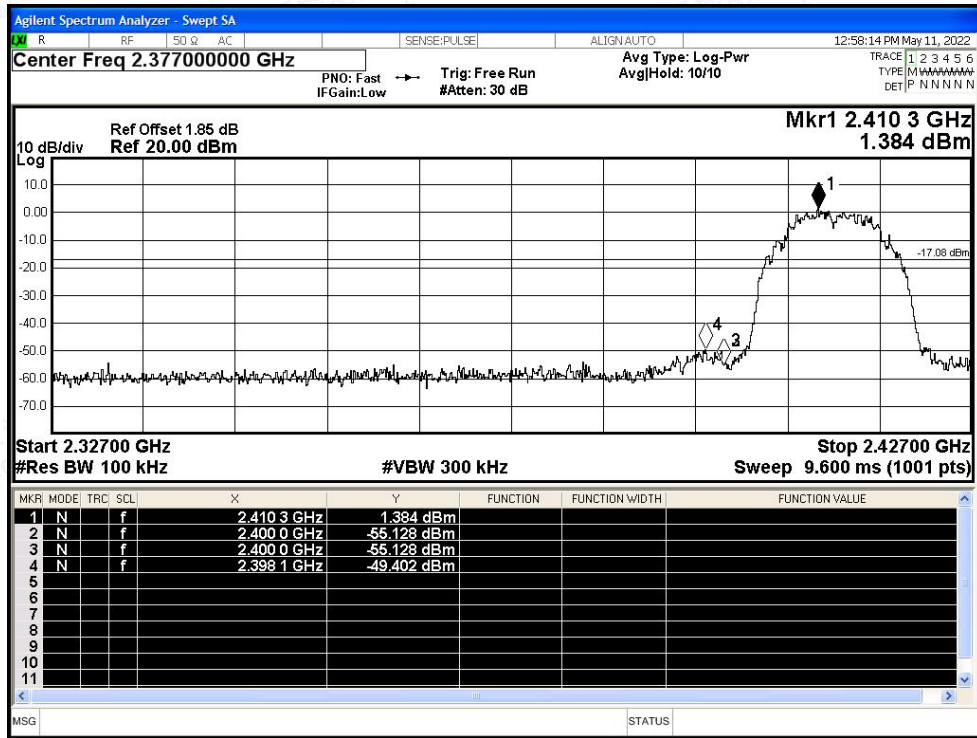


Test Graphs

Band Edge NVNT b 2412MHz Ant1 Ref



Band Edge NVNT b 2412MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

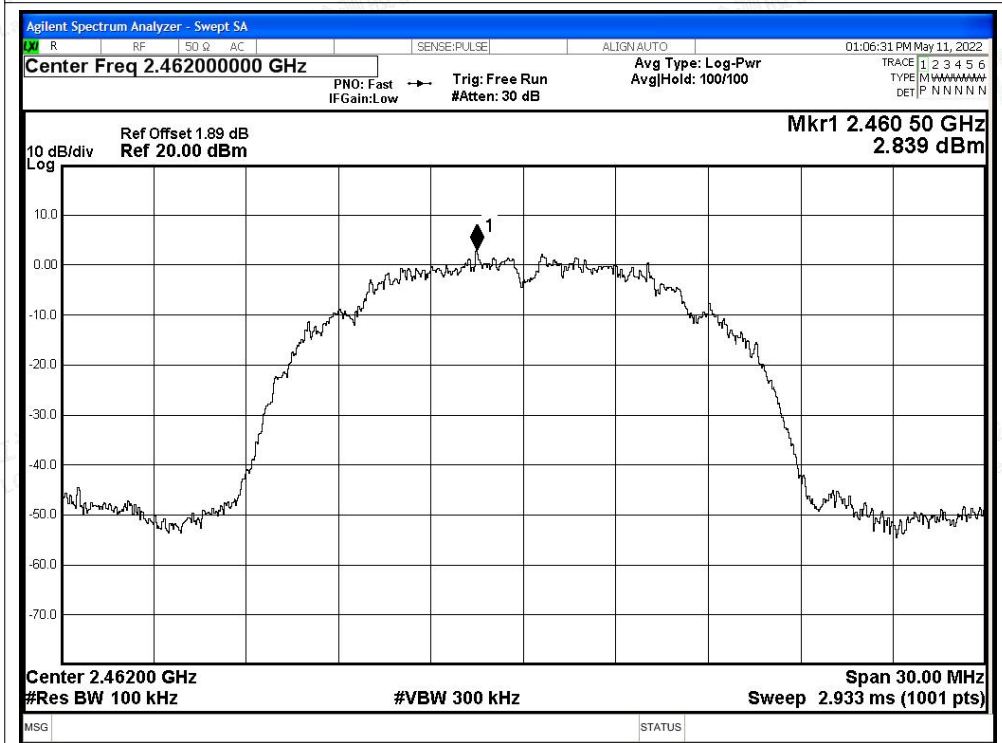
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

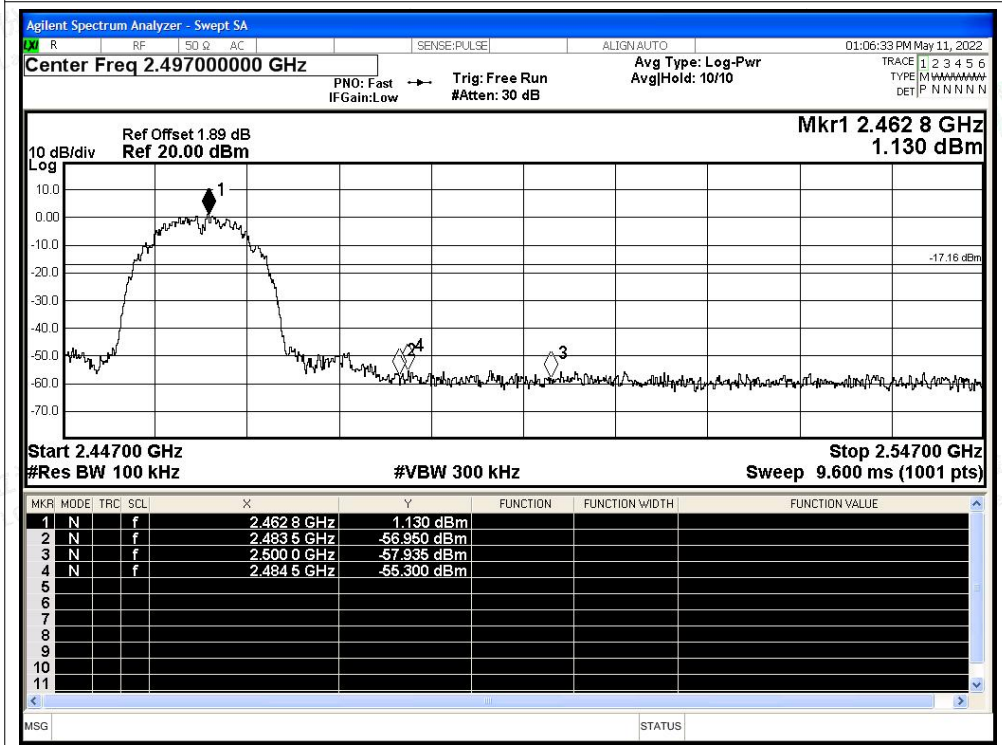
Scan code to check authenticity



Band Edge NVNT b 2462MHz Ant1 Ref



Band Edge NVNT b 2462MHz Ant1 Emission

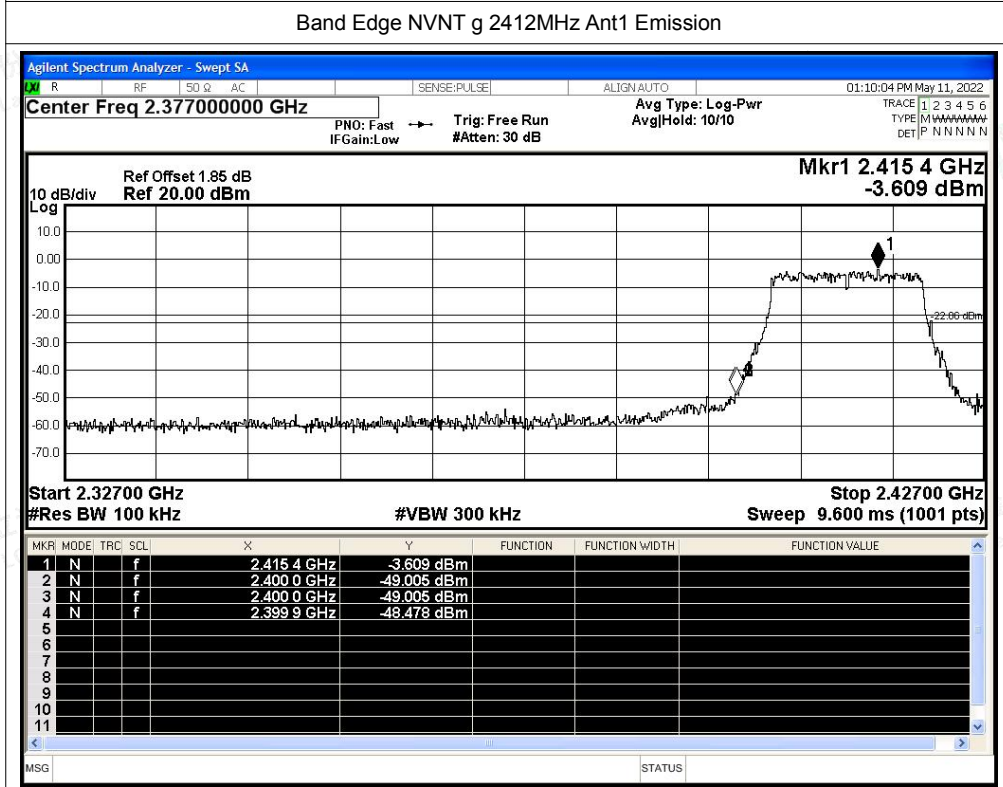
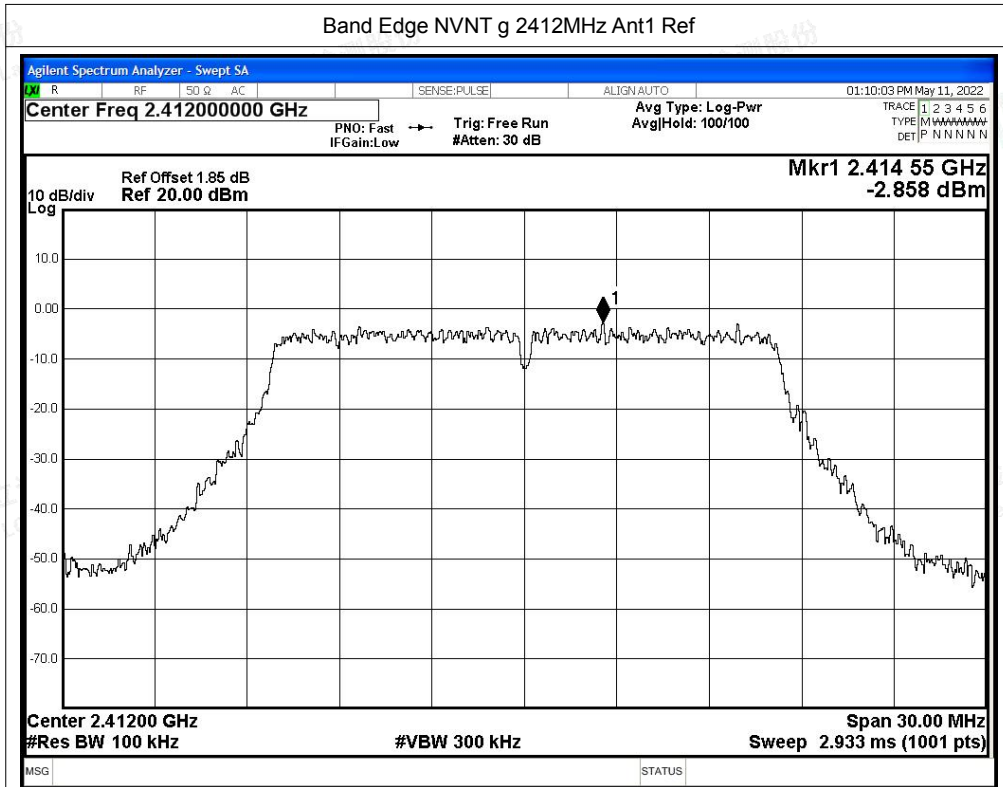


Shenzhen LCS Compliance Testing Laboratory Ltd.

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

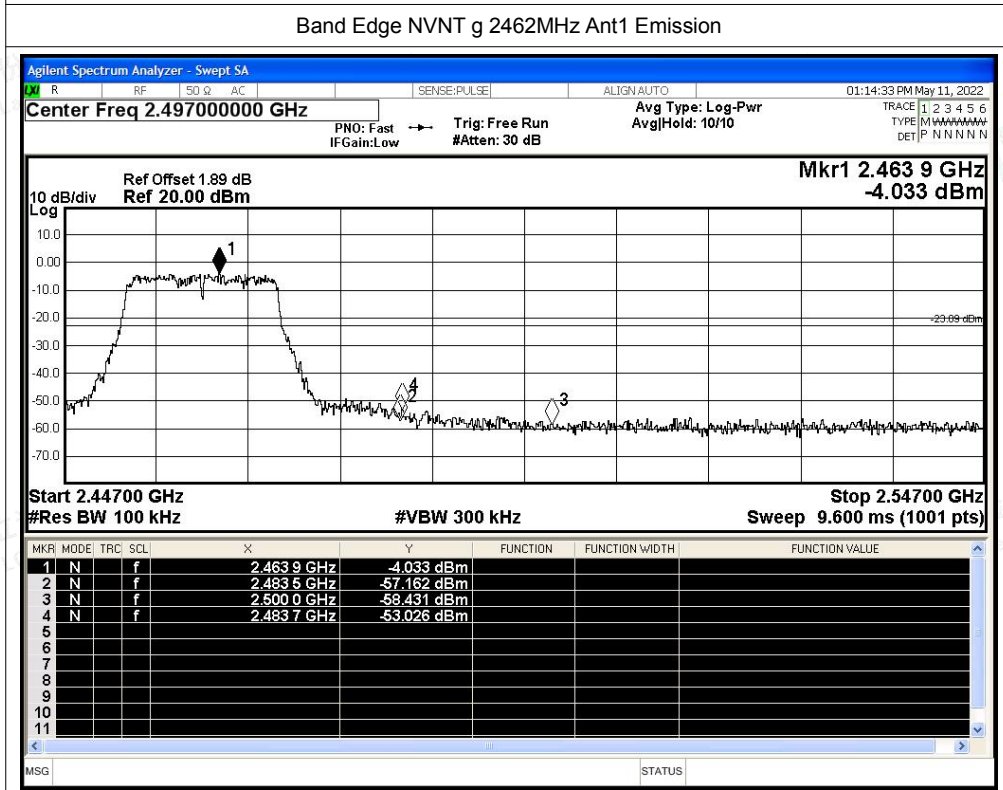
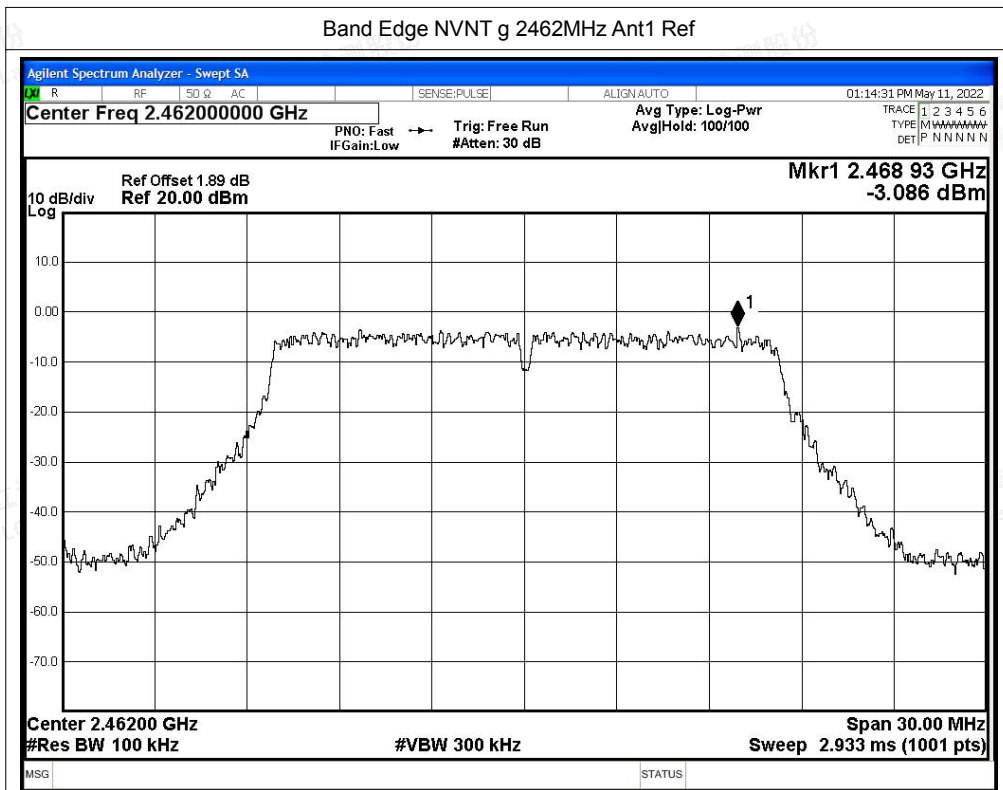


Shenzhen LCS Compliance Testing Laboratory Ltd.

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



Shenzhen LCS Compliance Testing Laboratory Ltd.

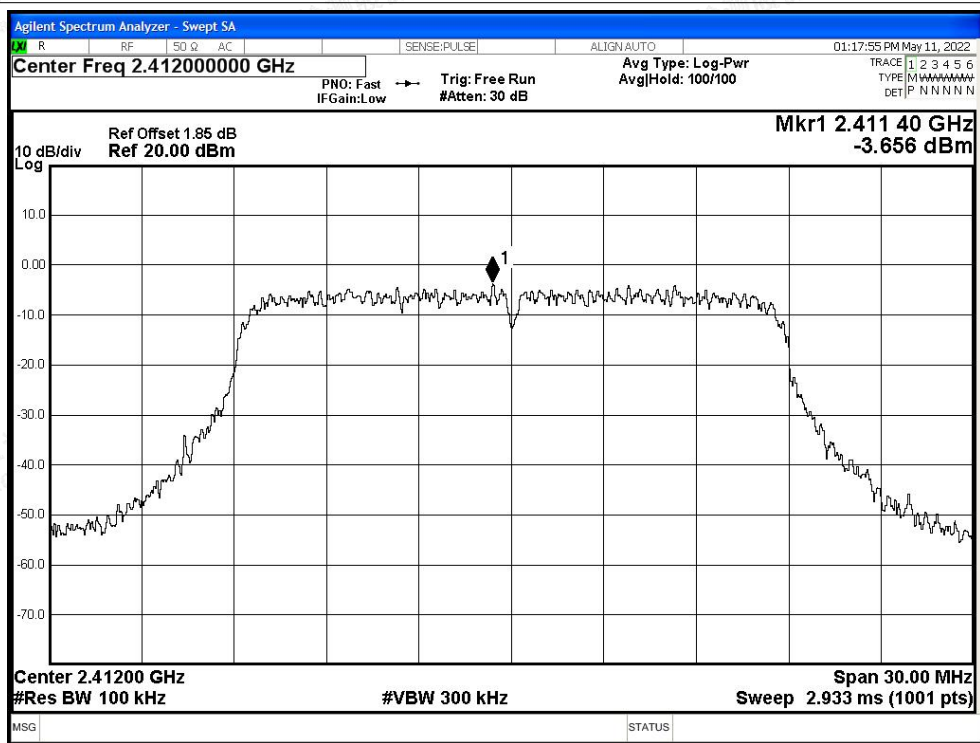
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

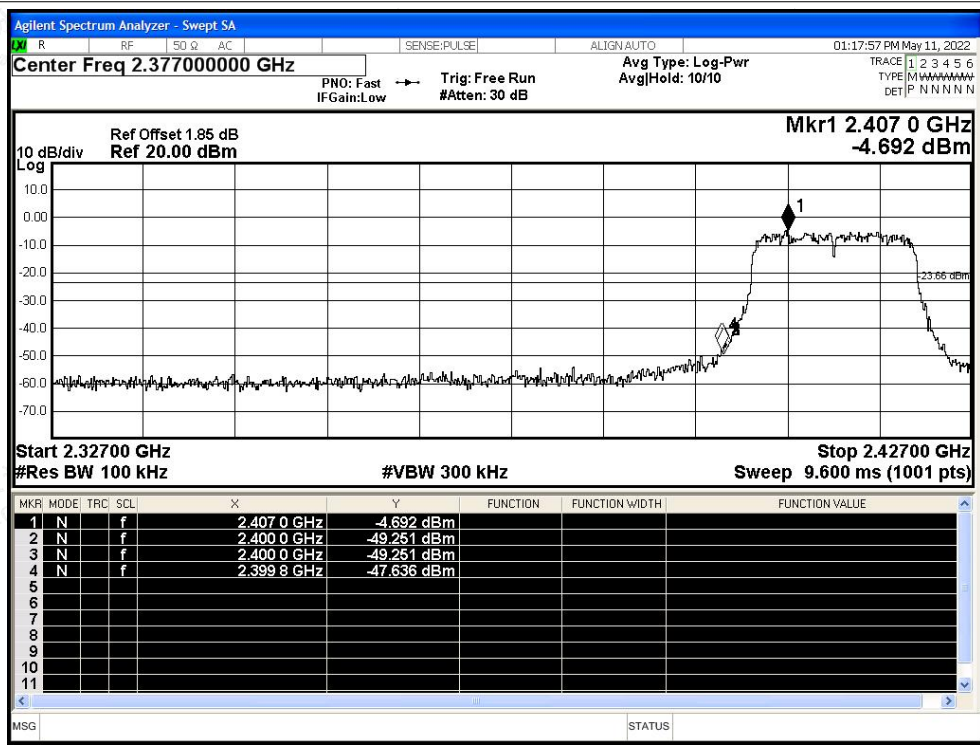
Scan code to check authenticity



Band Edge NVNT n20 2412MHz Ant1 Ref



Band Edge NVNT n20 2412MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

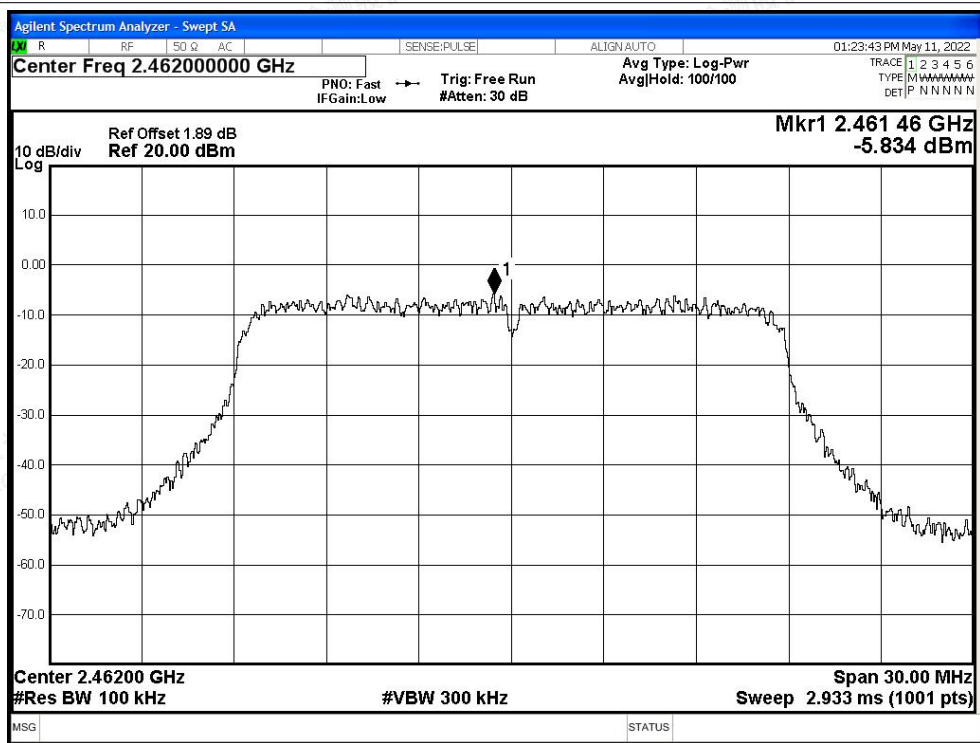
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

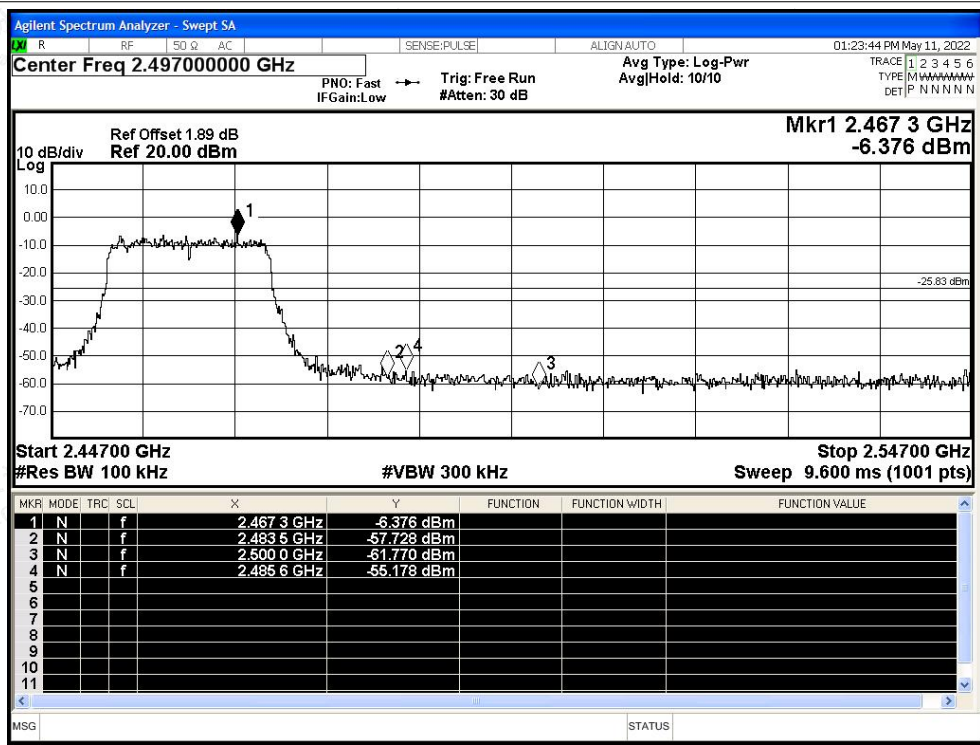
Scan code to check authenticity



Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission



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



A.5 Conducted RF Spurious Emission

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-48.57	-20	Pass
NVNT	b	2437	Ant1	-49.32	-20	Pass
NVNT	b	2462	Ant1	-49.37	-20	Pass
NVNT	g	2412	Ant1	-42.49	-20	Pass
NVNT	g	2437	Ant1	-42.53	-20	Pass
NVNT	g	2462	Ant1	-42.43	-20	Pass
NVNT	n20	2412	Ant1	-42.2	-20	Pass
NVNT	n20	2437	Ant1	-42.37	-20	Pass
NVNT	n20	2462	Ant1	-41	-20	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

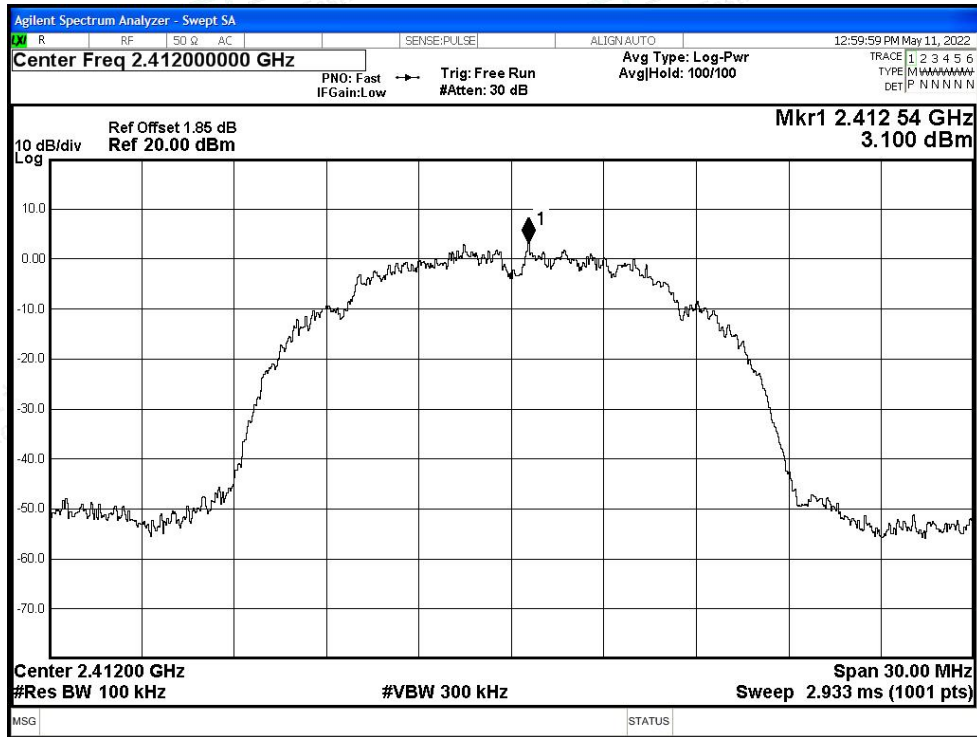
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

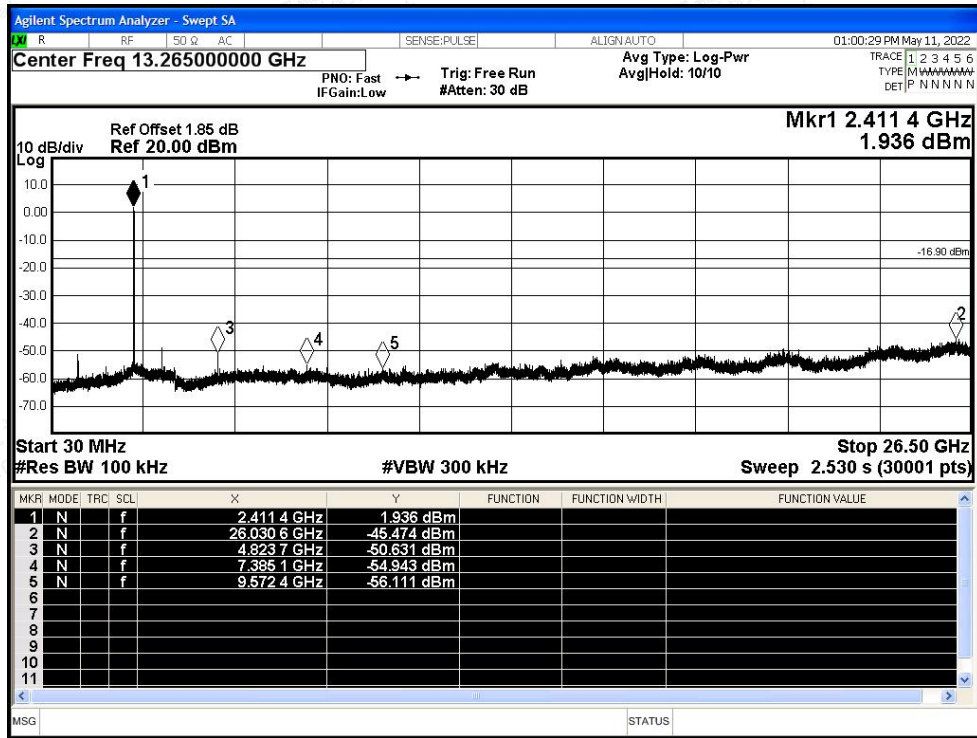


Test Graphs

Tx. Spurious NVNT b 2412MHz Ant1 Ref



Tx. Spurious NVNT b 2412MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

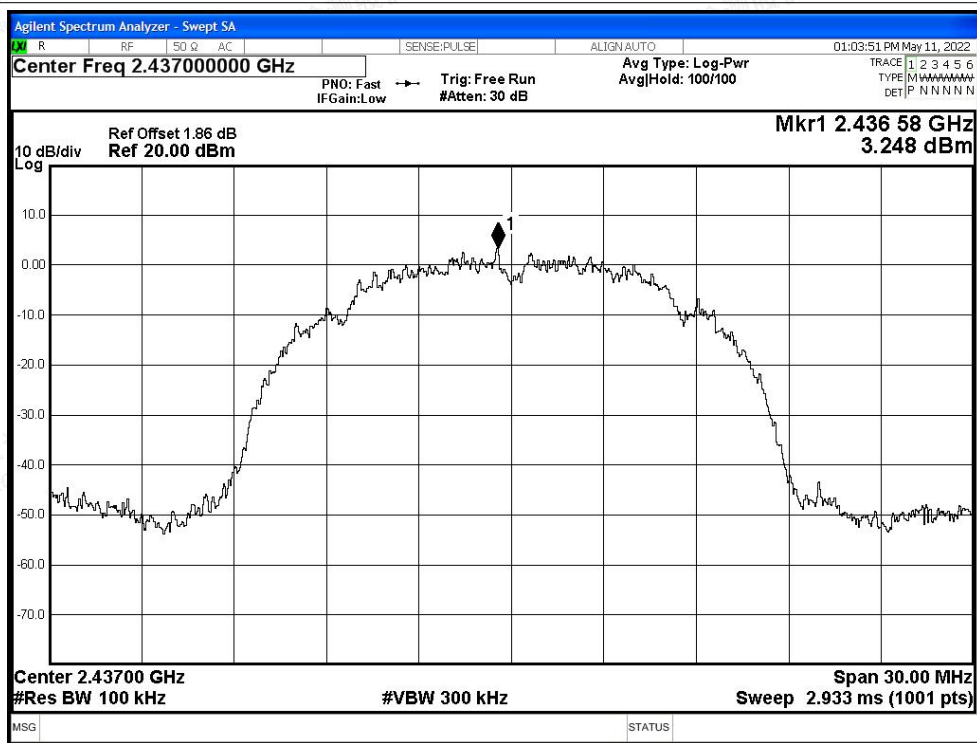
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

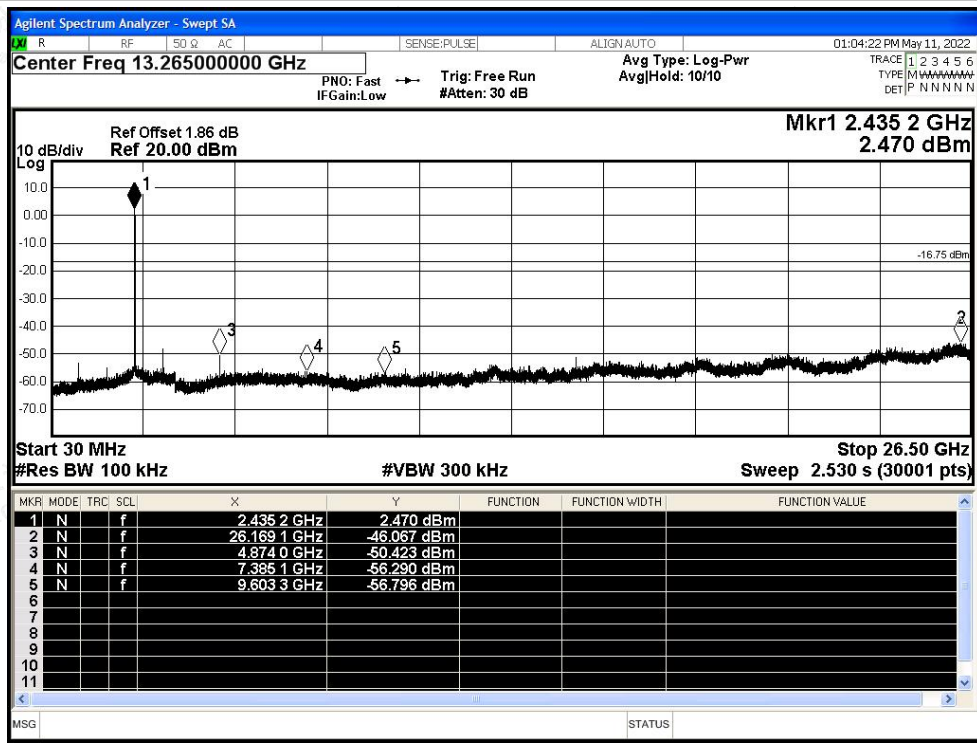
Scan code to check authenticity



Tx. Spurious NVNT b 2437MHz Ant1 Ref



Tx. Spurious NVNT b 2437MHz Ant1 Emission



Shenzhen LCS Compliance Testing Laboratory Ltd.

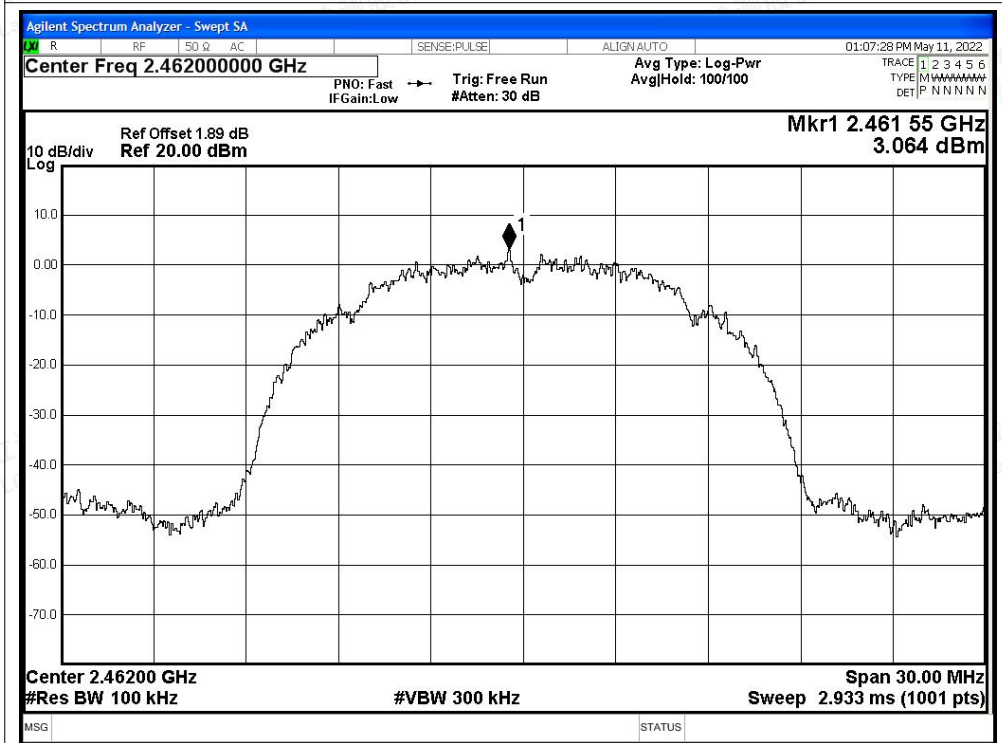
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

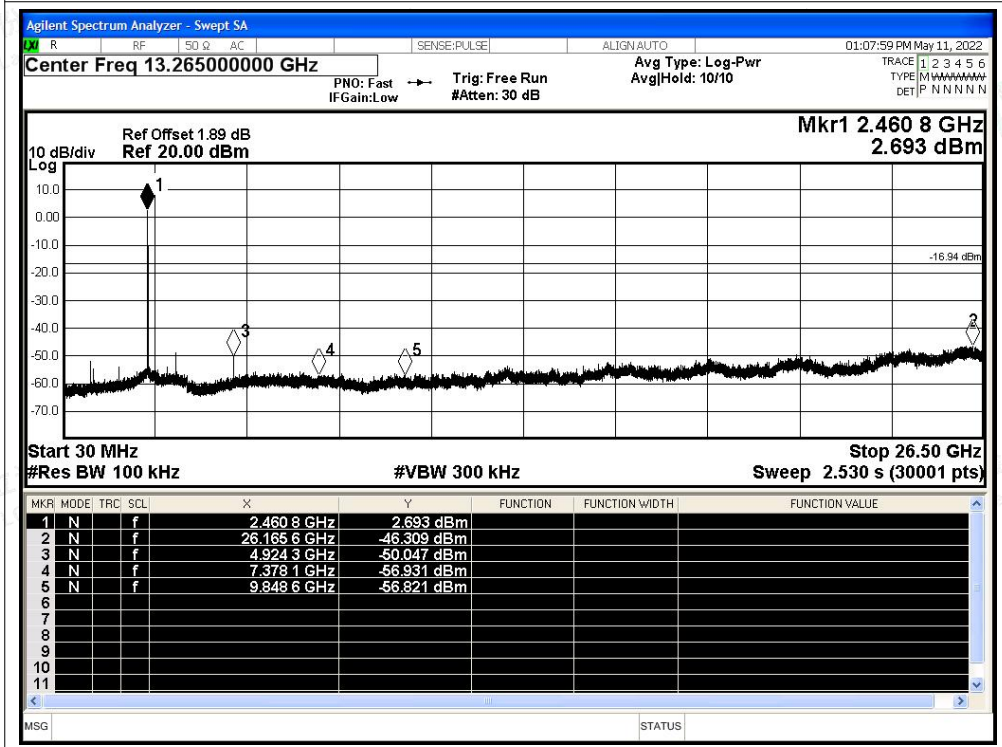
Scan code to check authenticity



Tx. Spurious NVNT b 2462MHz Ant1 Ref



Tx. Spurious NVNT b 2462MHz Ant1 Emission



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