



# Appendix B

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

Product Name: FitBark GPS

Test Model: 7005

### 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



### B.1 -6dB Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	-6 dB Bandwidth (MHz)	Limit -6 dB Bandwidth (MHz)	Verdict
NVNT	b	2412	Ant1	9.53	0.5	Pass
NVNT	b	2437	Ant1	10.028	0.5	Pass
NVNT	b	2462	Ant1	9.624	0.5	Pass
NVNT	g	2412	Ant1	16.367	0.5	Pass
NVNT	g	2437	Ant1	16.421	0.5	Pass
NVNT	g	2462	Ant1	15.415	0.5	Pass
NVNT	n20	2412	Ant1	17.591	0.5	Pass
NVNT	n20	2437	Ant1	17.572	0.5	Pass
NVNT	n20	2462	Ant1	17.67	0.5	Pass

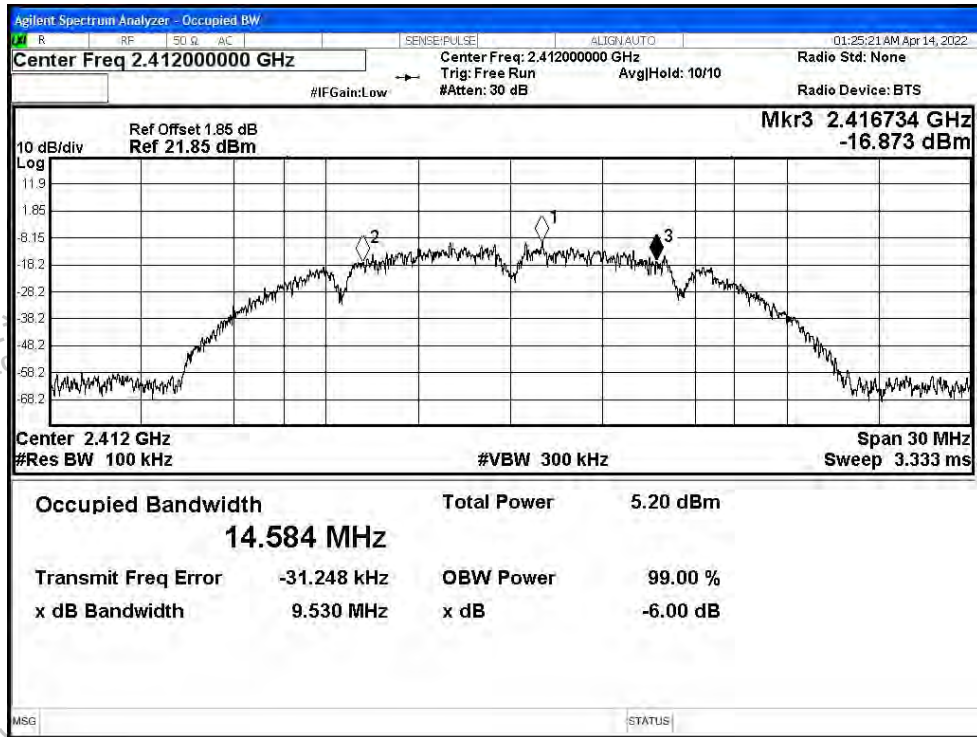


Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity

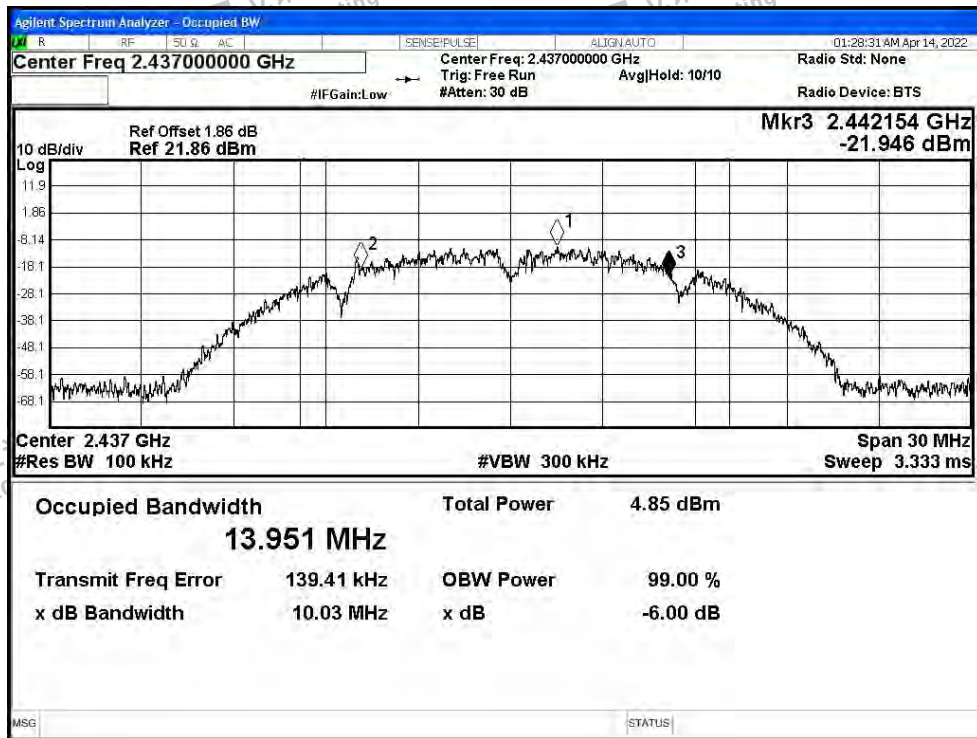


Test Graphs

-6dB Bandwidth NVNT b 2412MHz Ant1

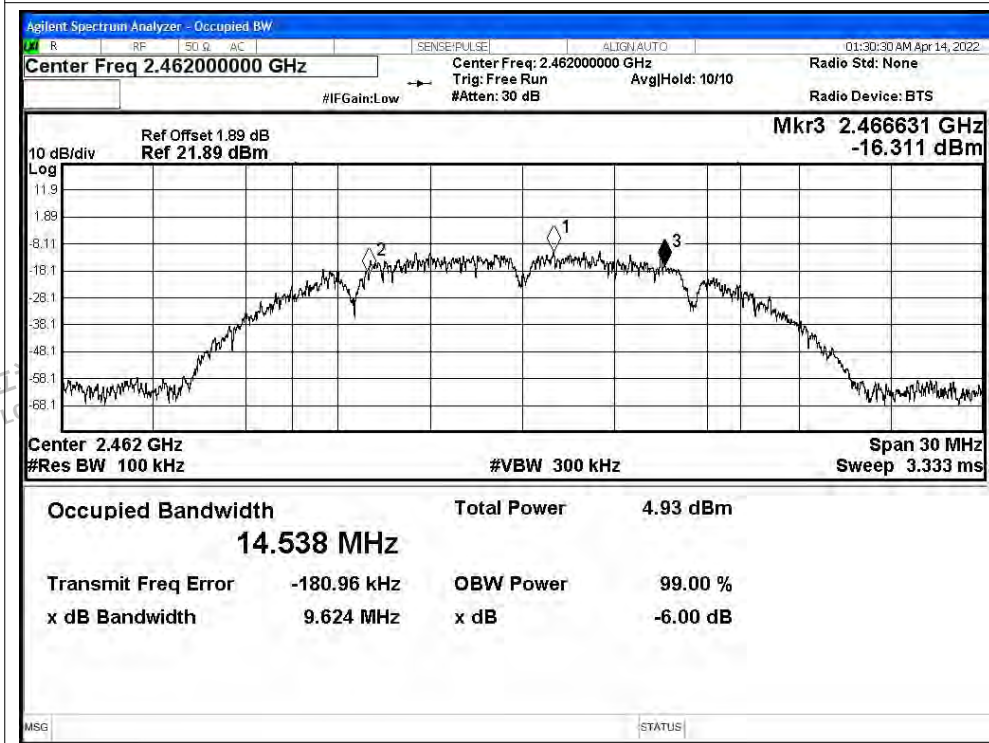


-6dB Bandwidth NVNT b 2437MHz Ant1

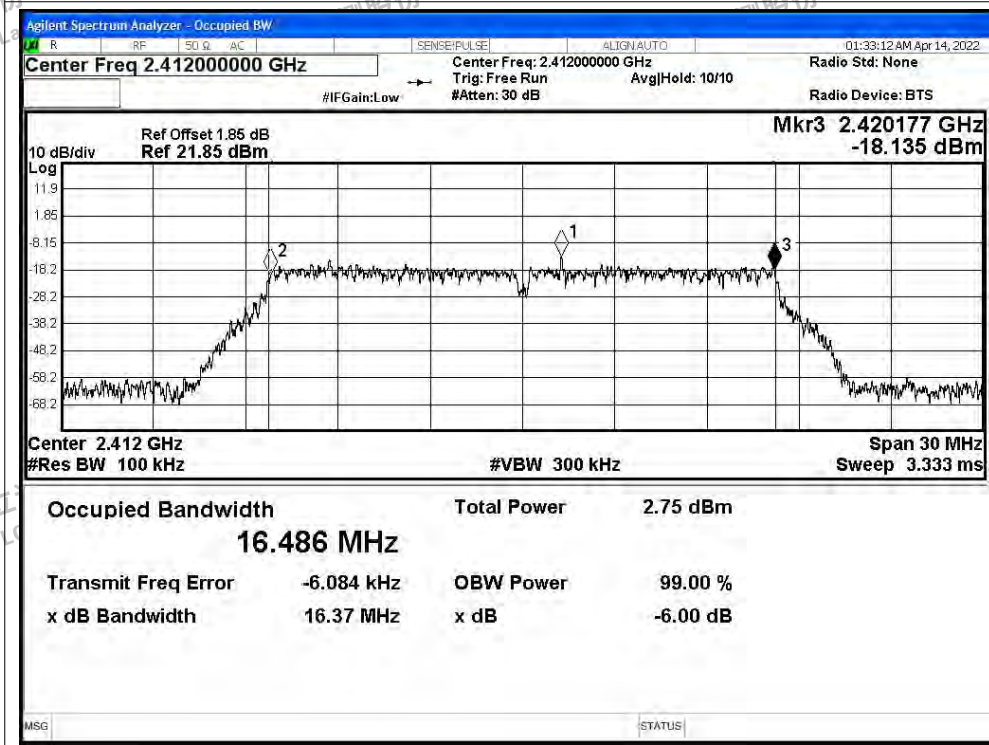




-6dB Bandwidth NVNT b 2462MHz Ant1



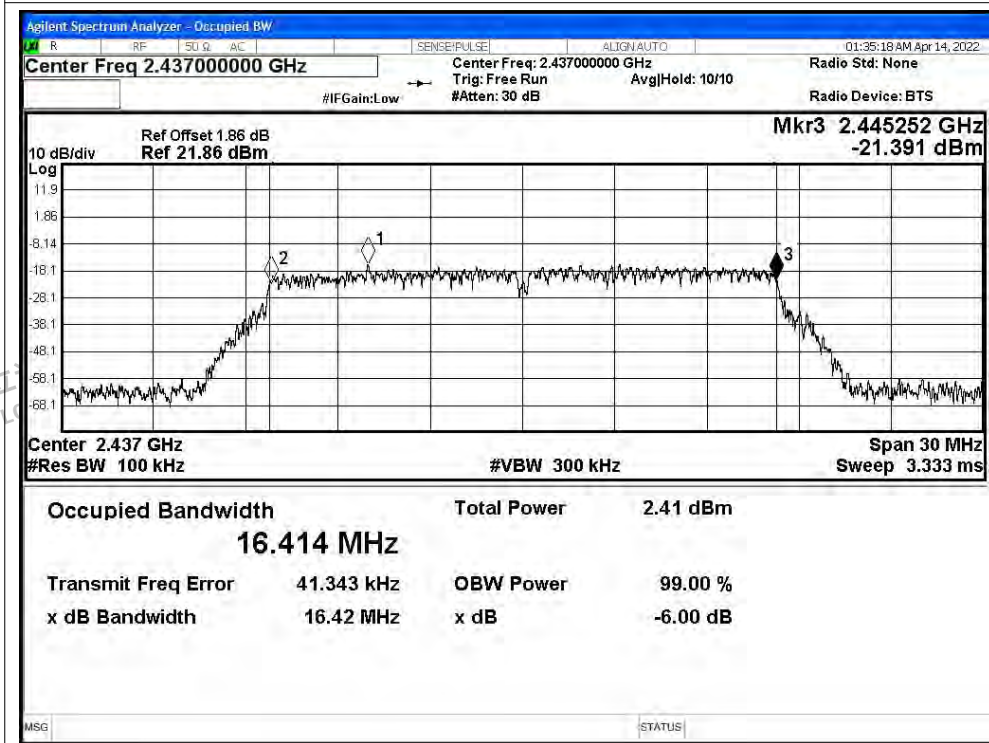
-6dB Bandwidth NVNT g 2412MHz Ant1



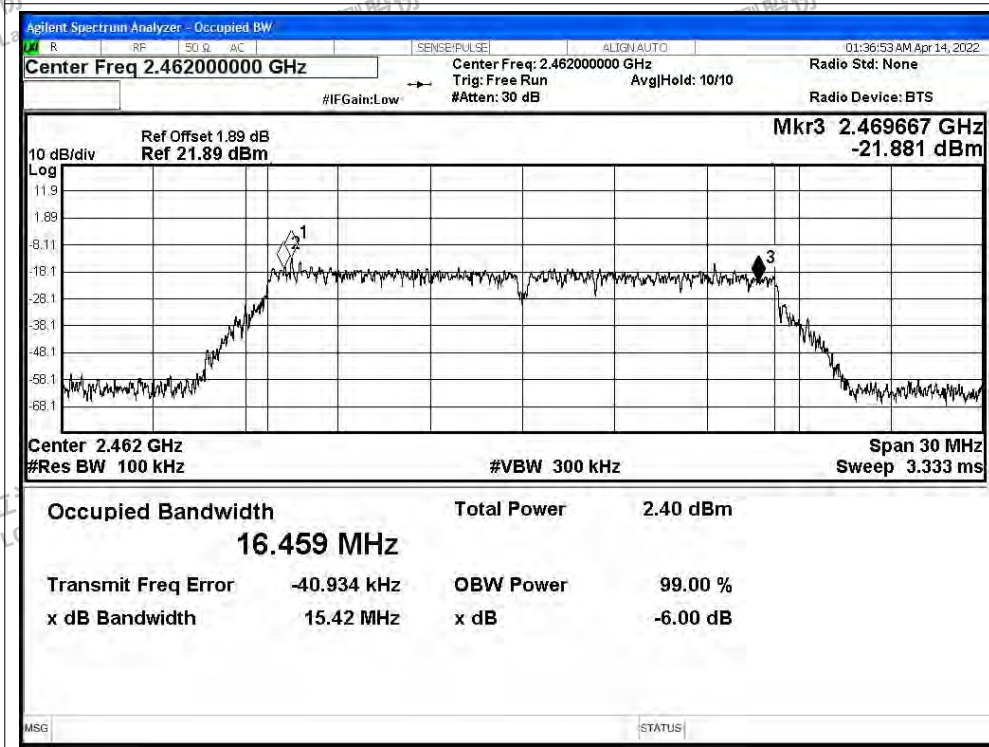




-6dB Bandwidth NVNT g 2437MHz Ant1

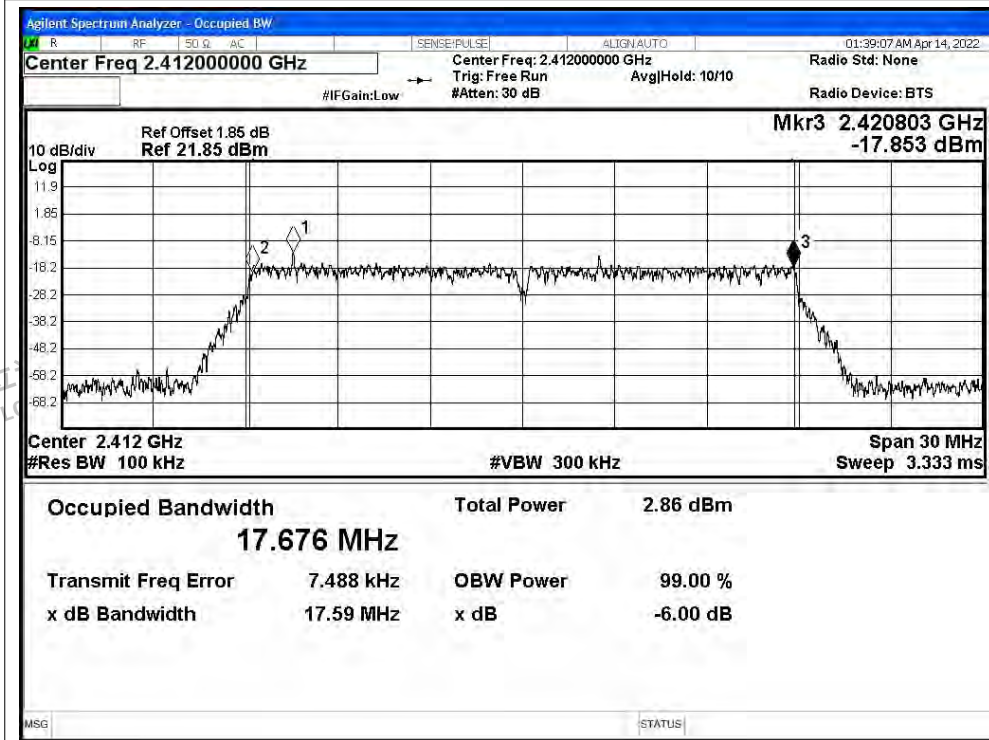


-6dB Bandwidth NVNT g 2462MHz Ant1

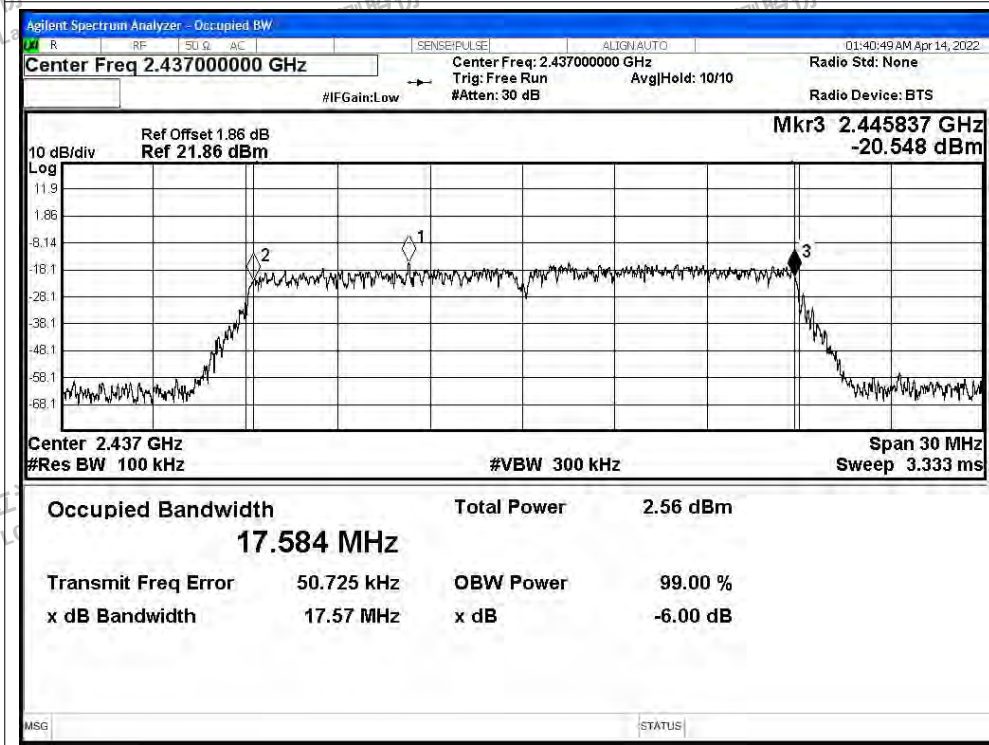




-6dB Bandwidth NVNT n20 2412MHz Ant1

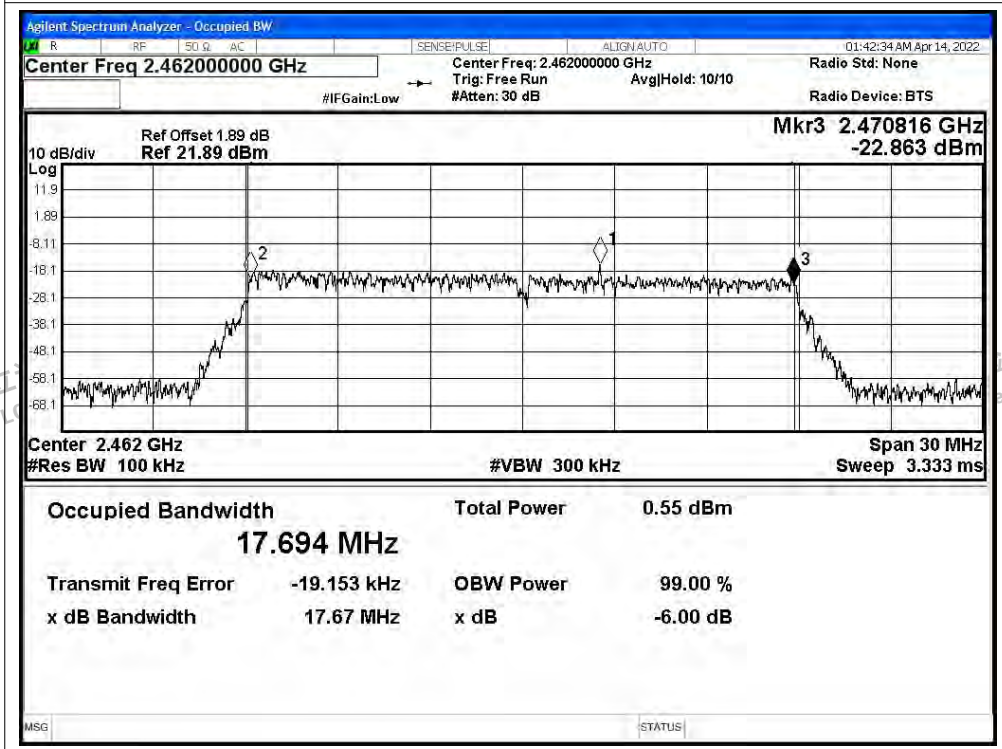


-6dB Bandwidth NVNT n20 2437MHz Ant1

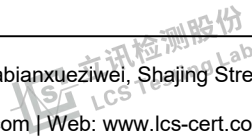
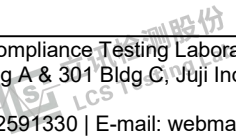




-6dB Bandwidth NVNT n20 2462MHz Ant1



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





## B.2 Occupied Channel Bandwidth

Condition	Mode	Frequency (MHz)	Antenna	99% OBW (MHz)
NVNT	b	2412	Ant1	14.469
NVNT	b	2437	Ant1	14.102
NVNT	b	2462	Ant1	14.399
NVNT	g	2412	Ant1	16.56
NVNT	g	2437	Ant1	16.466
NVNT	g	2462	Ant1	16.608
NVNT	n20	2412	Ant1	17.663
NVNT	n20	2437	Ant1	17.58
NVNT	n20	2462	Ant1	17.652

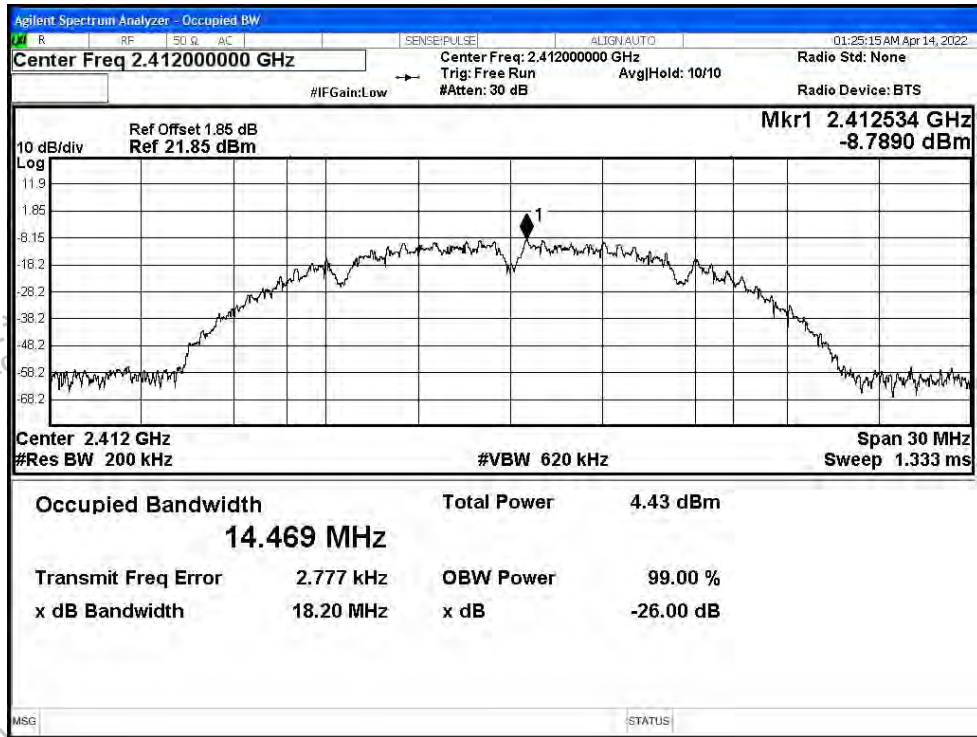




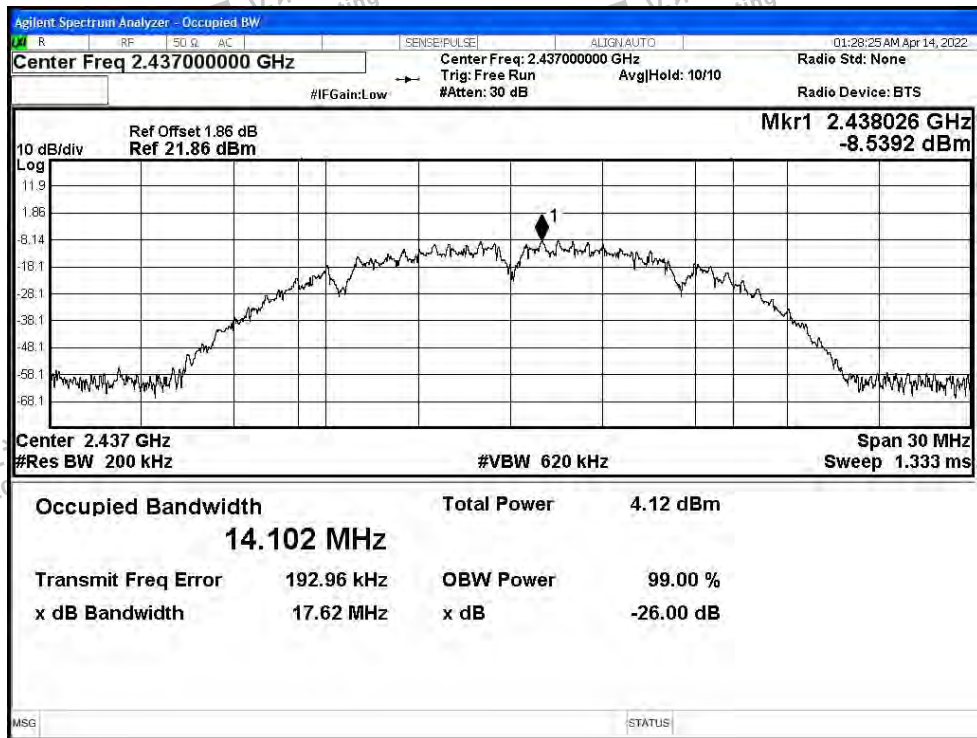


Test Graphs

OBW NVNT b 2412MHz Ant1

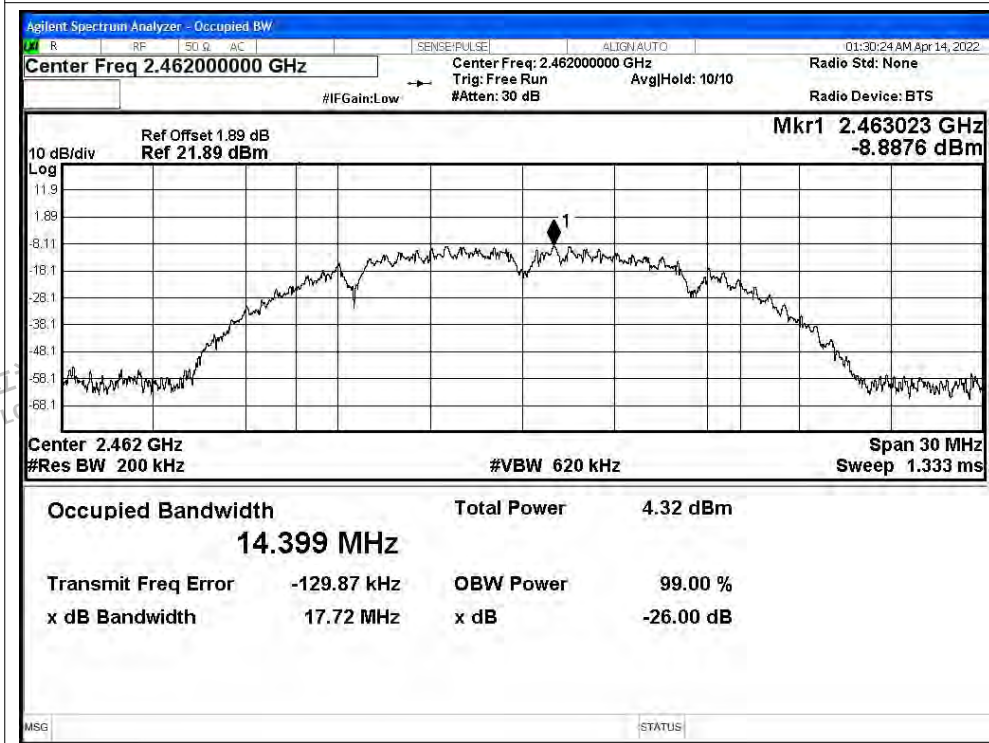


OBW NVNT b 2437MHz Ant1

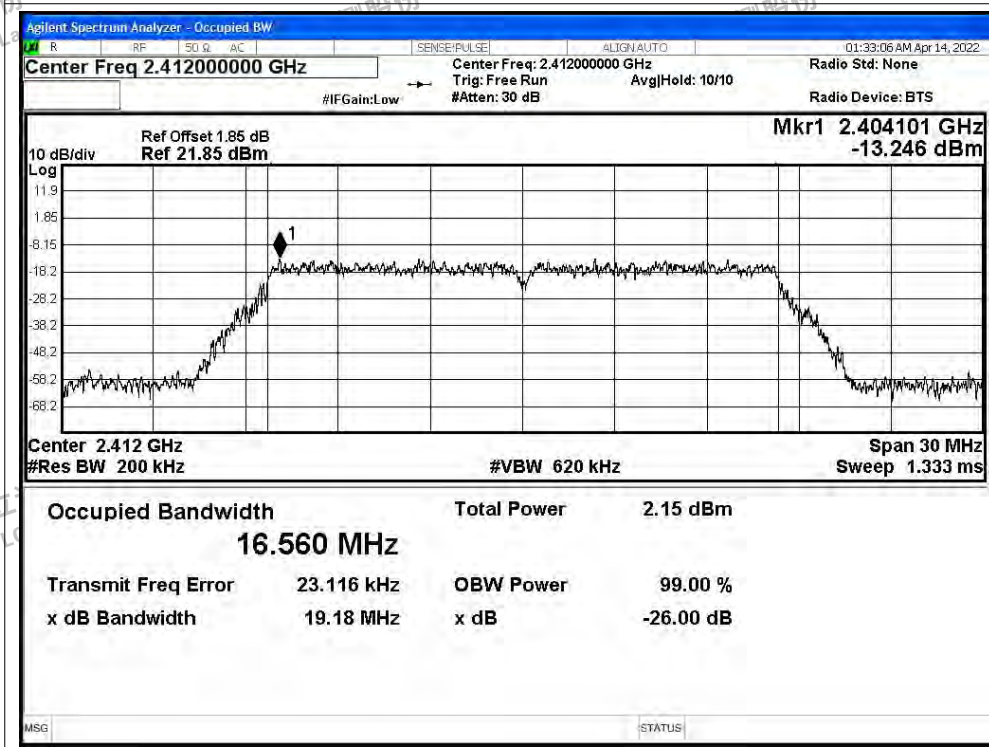




OBW NVNT b 2462MHz Ant1

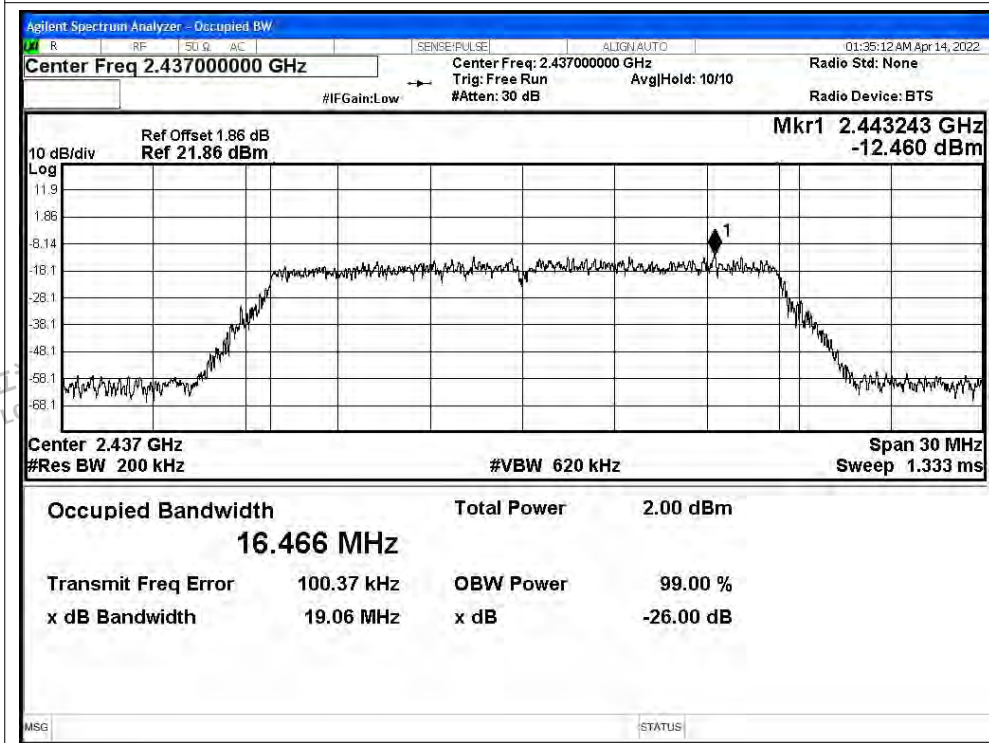


OBW NVNT g 2412MHz Ant1

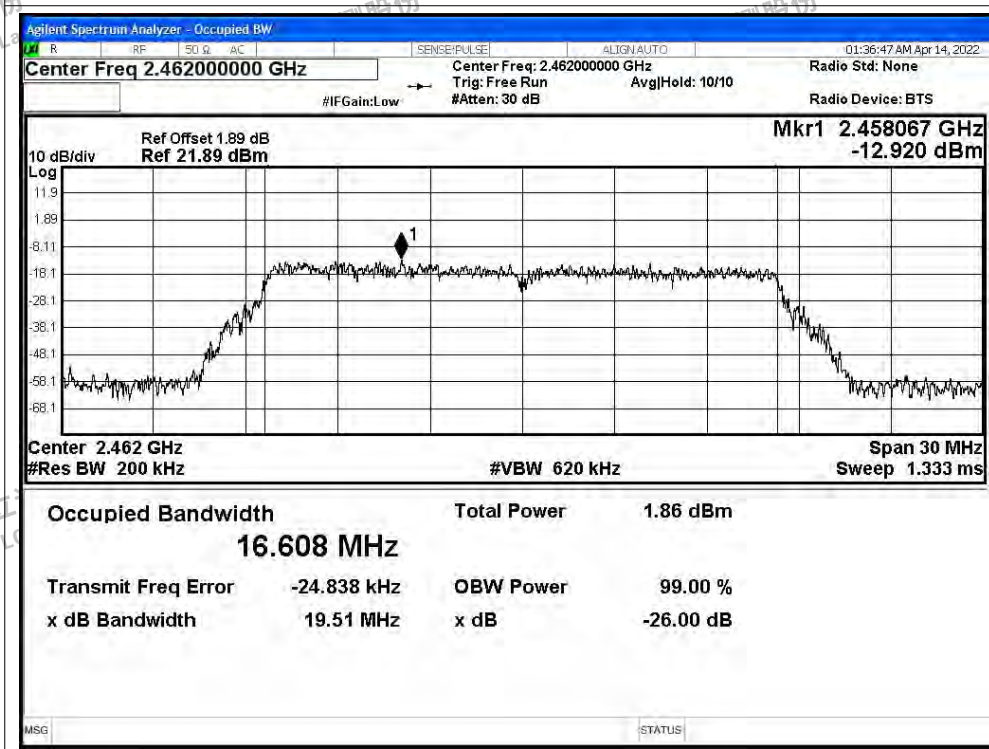




OBW NVNT g 2437MHz Ant1



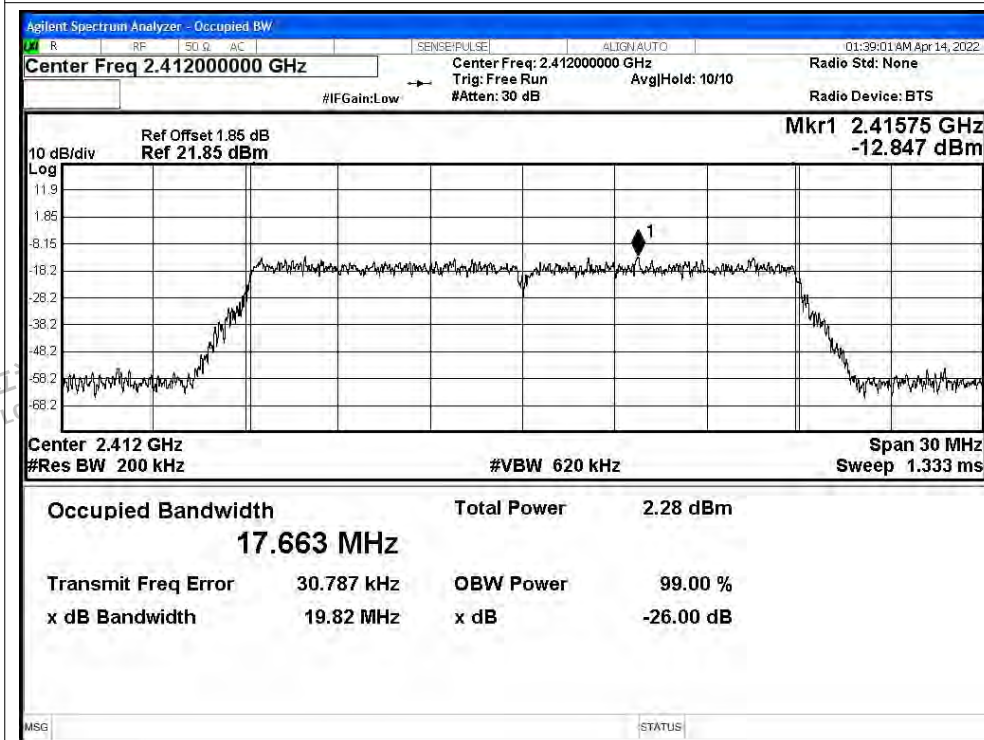
OBW NVNT g 2462MHz Ant1



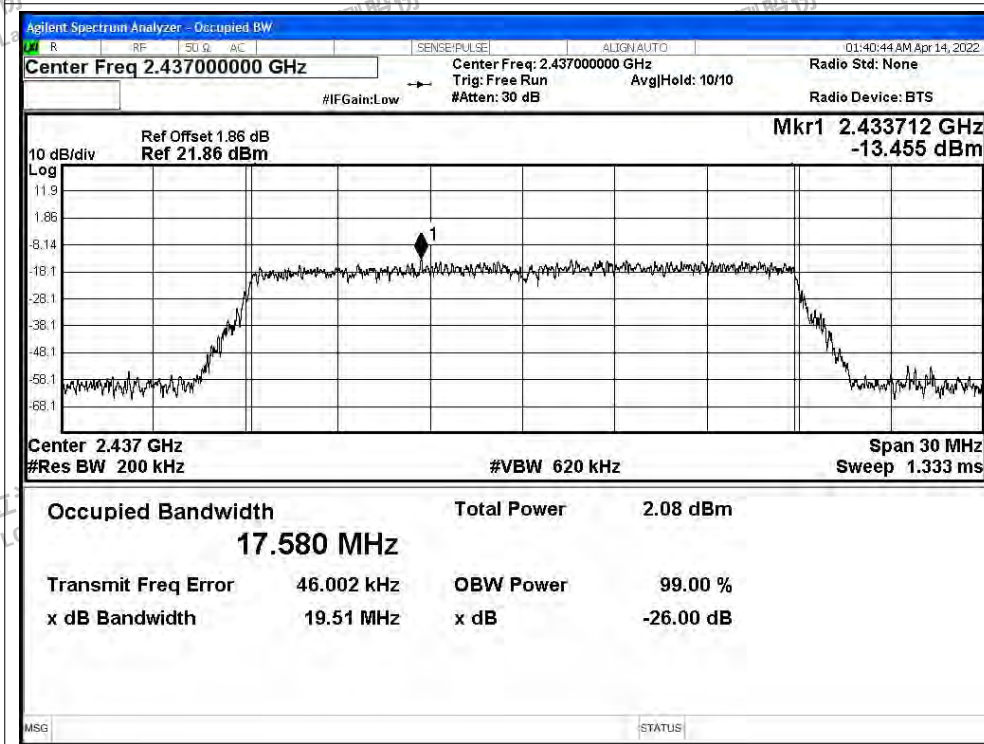




OBW NVNT n20 2412MHz Ant1



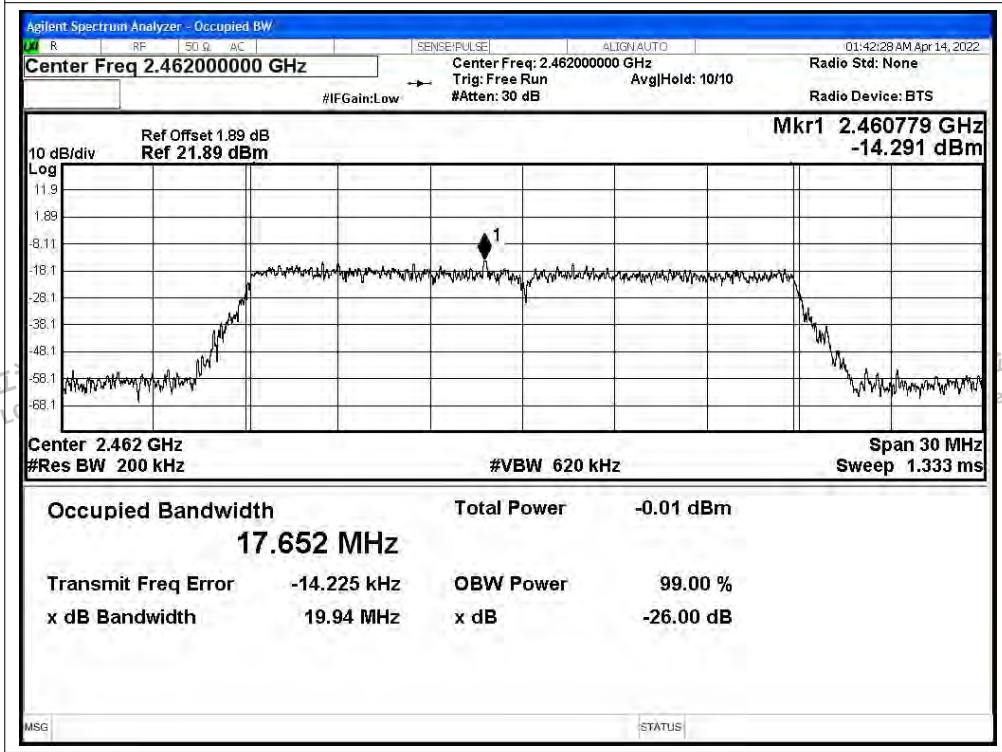
OBW NVNT n20 2437MHz Ant1



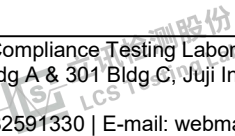




OBW NVNT n20 2462MHz Ant1



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





### B.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	1.72	0	1.72	30	Pass
NVNT	b	2437	Ant1	1.37	0	1.37	30	Pass
NVNT	b	2462	Ant1	1.55	0	1.55	30	Pass
NVNT	g	2412	Ant1	1.34	0	1.34	30	Pass
NVNT	g	2437	Ant1	1.26	0	1.26	30	Pass
NVNT	g	2462	Ant1	1.07	0	1.07	30	Pass
NVNT	n20	2412	Ant1	1.37	0	1.37	30	Pass
NVNT	n20	2437	Ant1	1.21	0	1.21	30	Pass
NVNT	n20	2462	Ant1	0.88	0	0.88	30	Pass

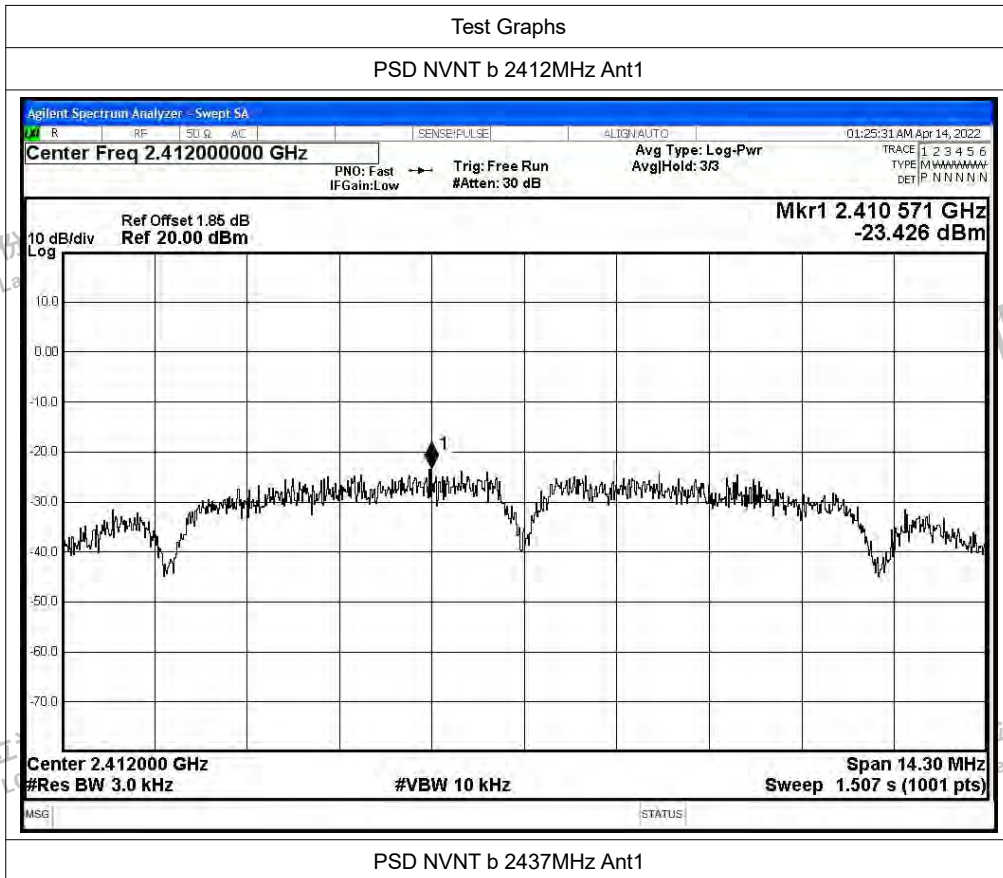


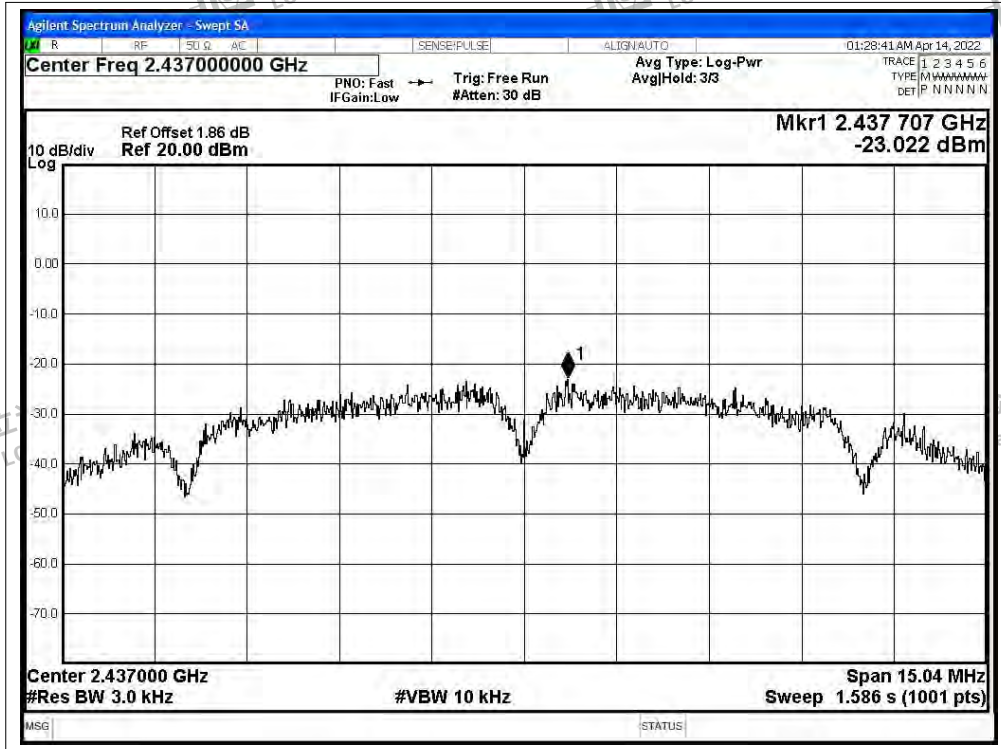
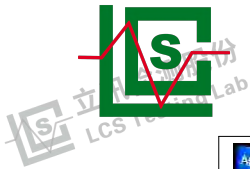
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



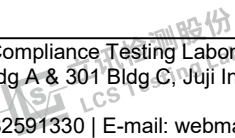
### B.4 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/3kHz)	Duty Factor (dB)	Total PSD (dBm/3kHz)	Limit (dBm/3kHz)	Verdict
NVNT	b	2412	Ant1	-23.43	0	-23.43	8	Pass
NVNT	b	2437	Ant1	-23.02	0	-23.02	8	Pass
NVNT	b	2462	Ant1	-20.58	0	-20.58	8	Pass
NVNT	g	2412	Ant1	-26.74	0	-26.74	8	Pass
NVNT	g	2437	Ant1	-26.18	0	-26.18	8	Pass
NVNT	g	2462	Ant1	-25.86	0	-25.86	8	Pass
NVNT	n20	2412	Ant1	-27.31	0	-27.31	8	Pass
NVNT	n20	2437	Ant1	-26.15	0	-26.15	8	Pass
NVNT	n20	2462	Ant1	-28.78	0	-28.78	8	Pass

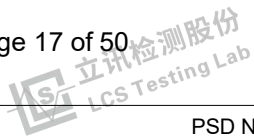




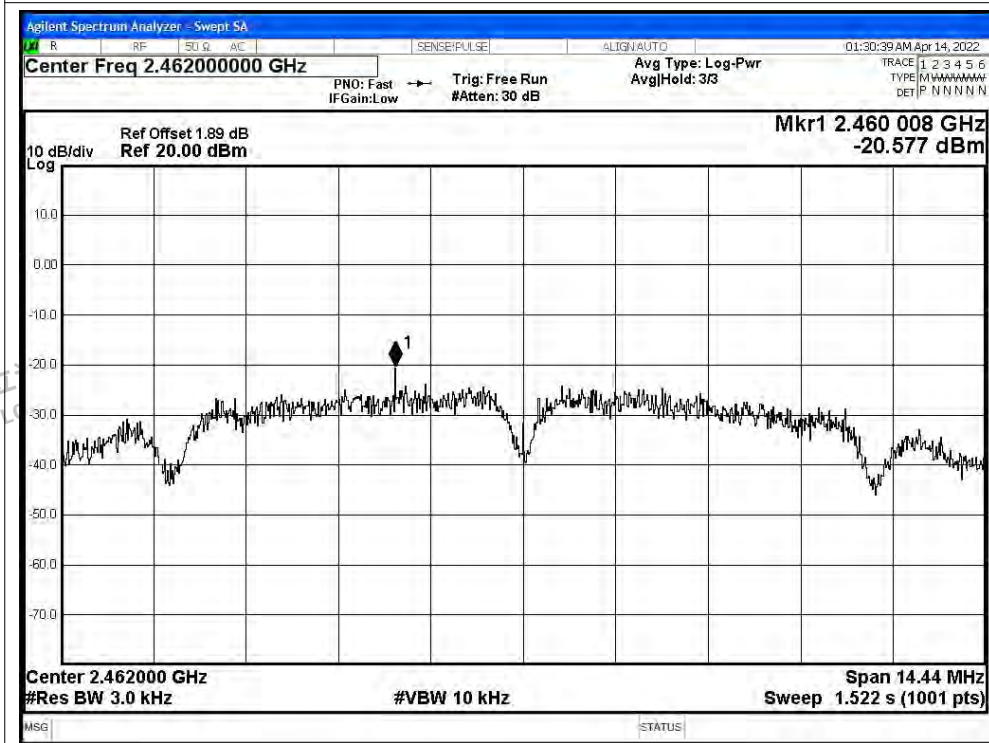
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen,  
 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



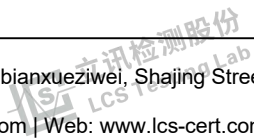
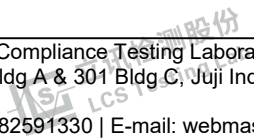
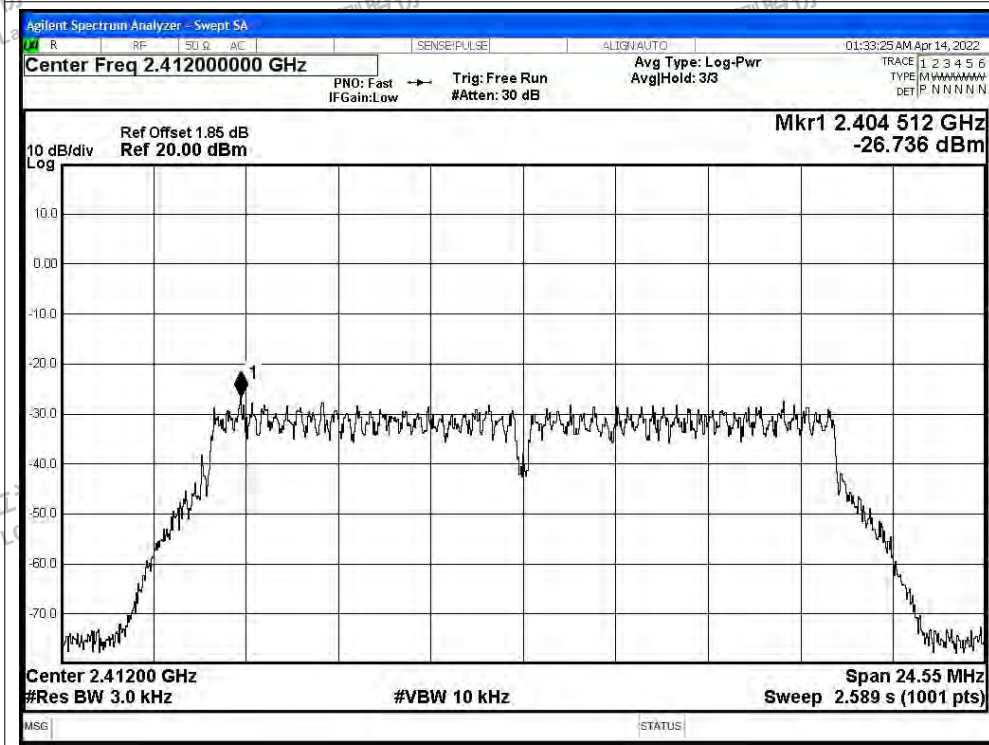




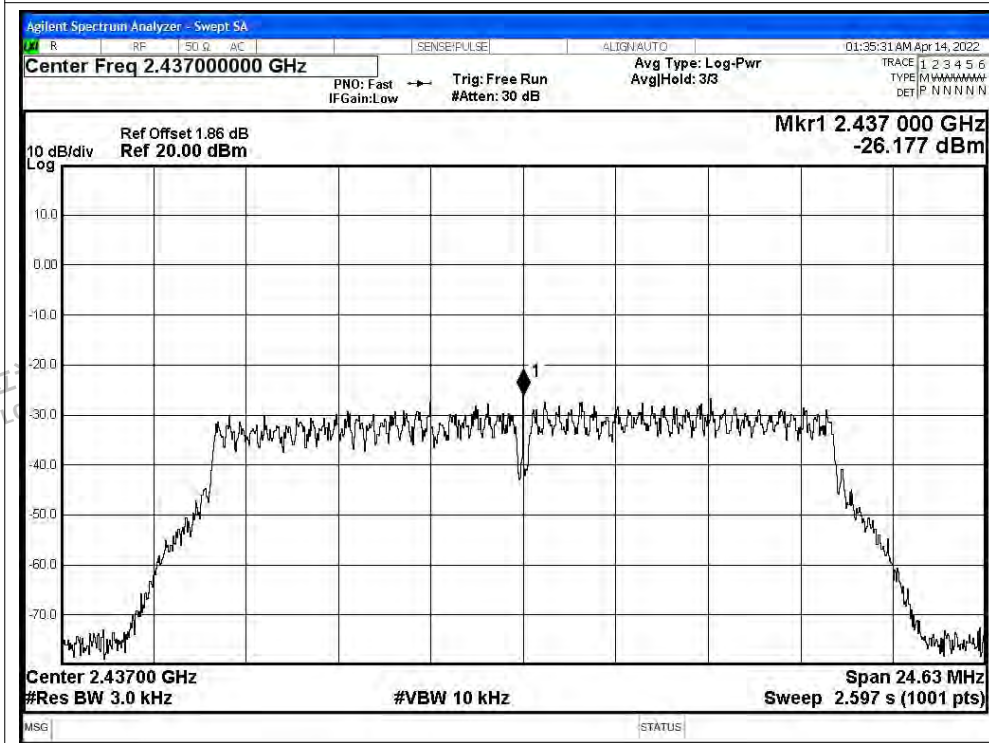
PSD NVNT b 2462MHz Ant1



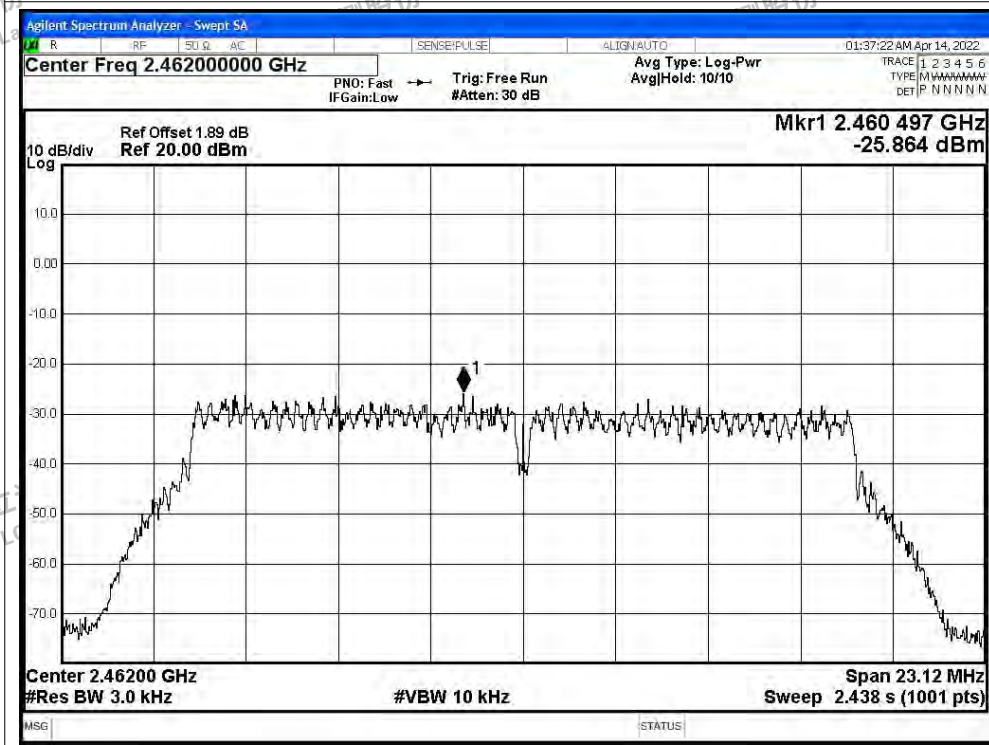
PSD NVNT g 2412MHz Ant1

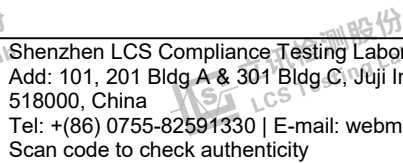
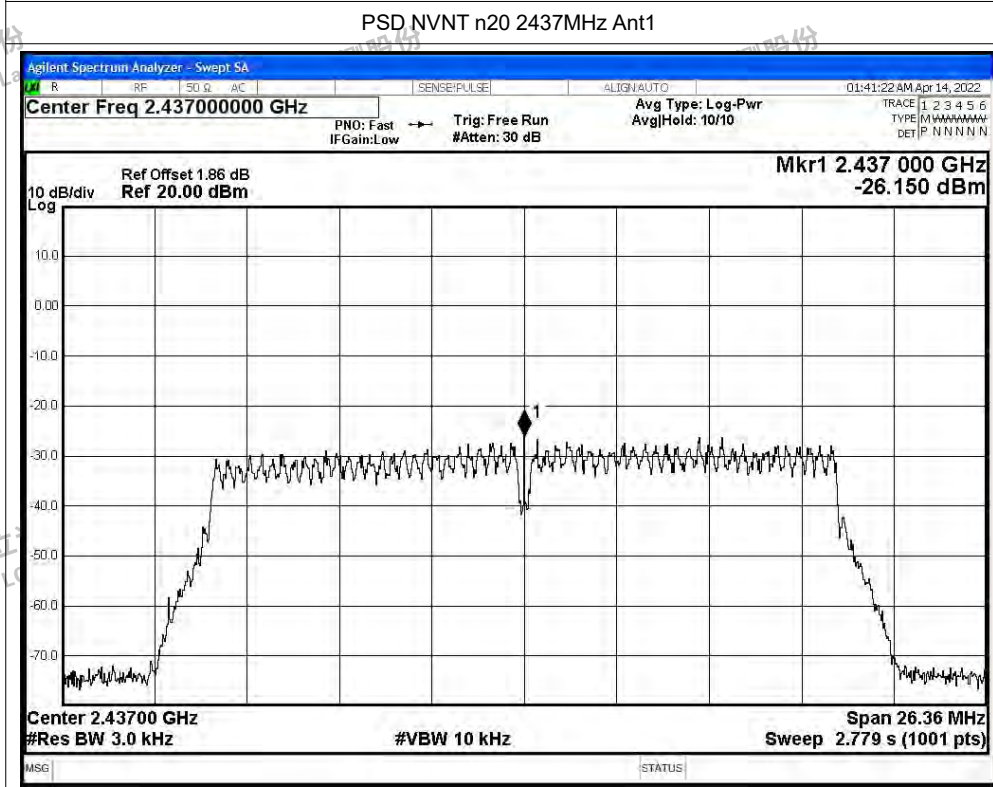
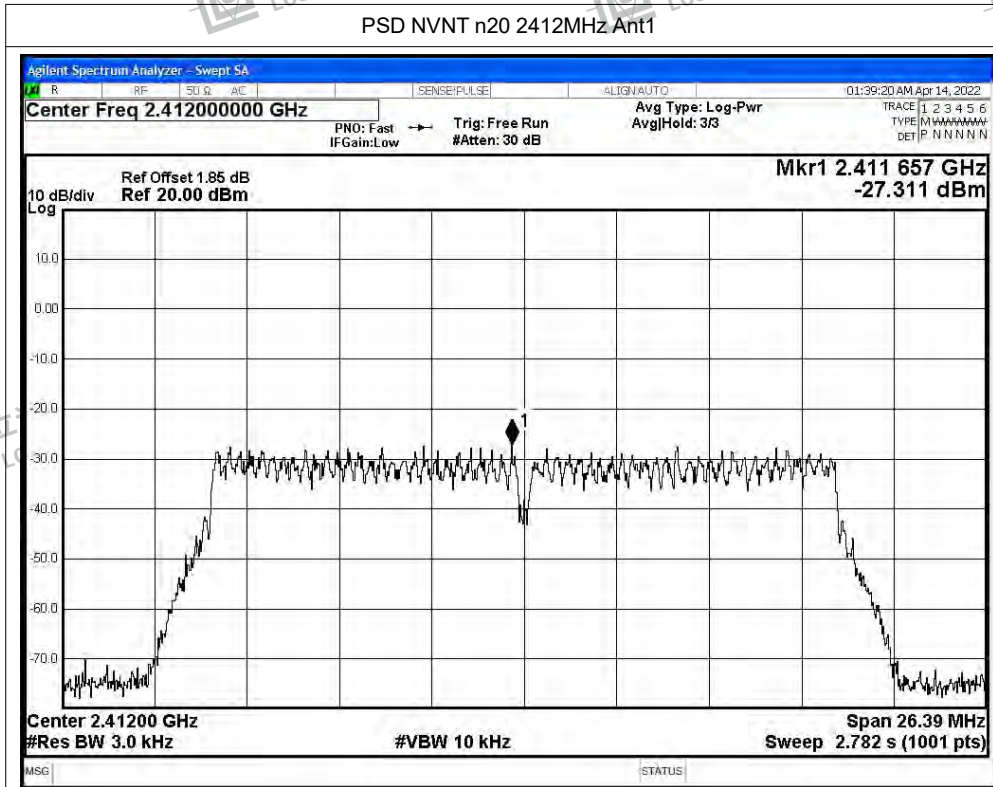
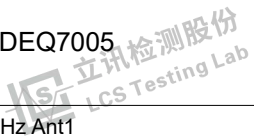
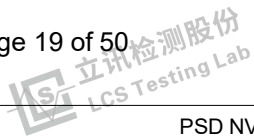


PSD NVNT g 2437MHz Ant1

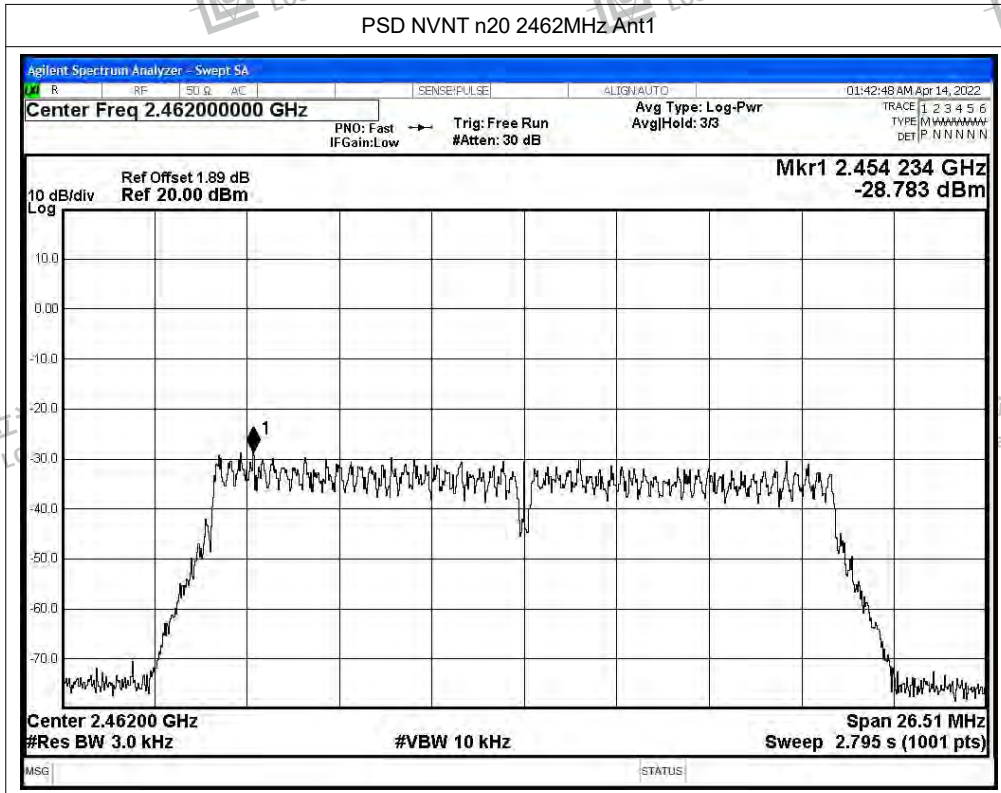


PSD NVNT g 2462MHz Ant1

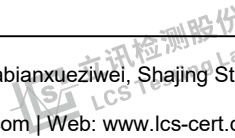
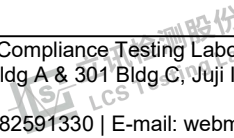








Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



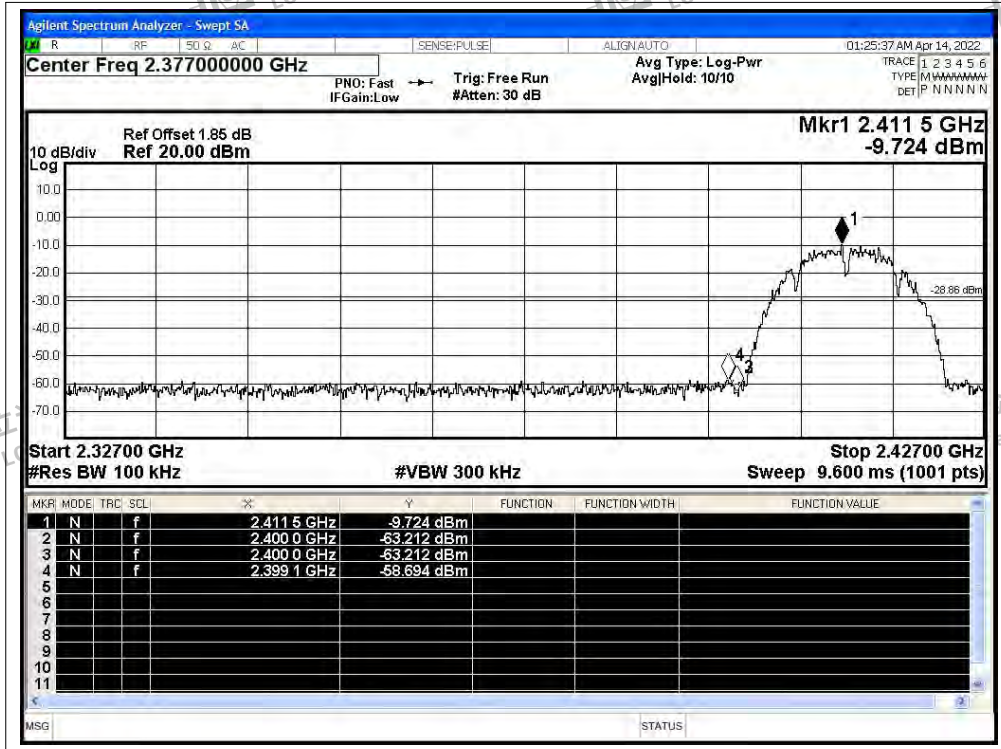




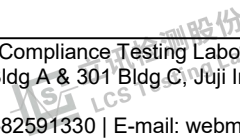
### B.5 Band Edge

Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-49.83	-20	Pass
NVNT	b	2462	Ant1	-49.58	-20	Pass
NVNT	g	2412	Ant1	-43.14	-20	Pass
NVNT	g	2462	Ant1	-44.72	-20	Pass
NVNT	n20	2412	Ant1	-44.95	-20	Pass
NVNT	n20	2462	Ant1	-43.17	-20	Pass

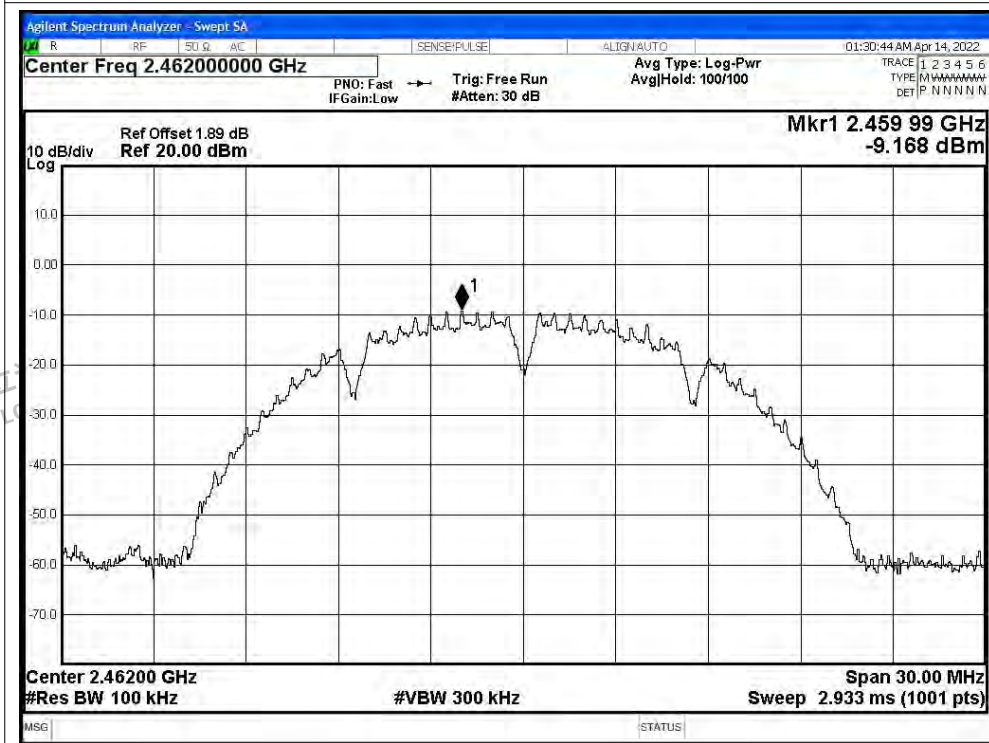




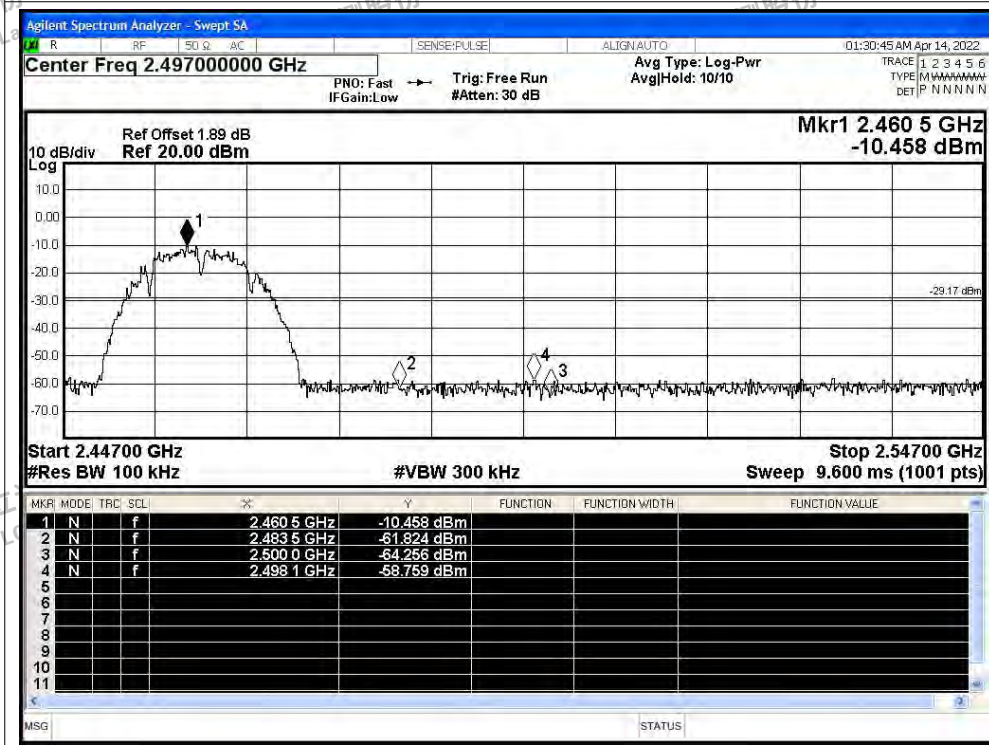
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



Band Edge NVNT b 2462MHz Ant1 Ref

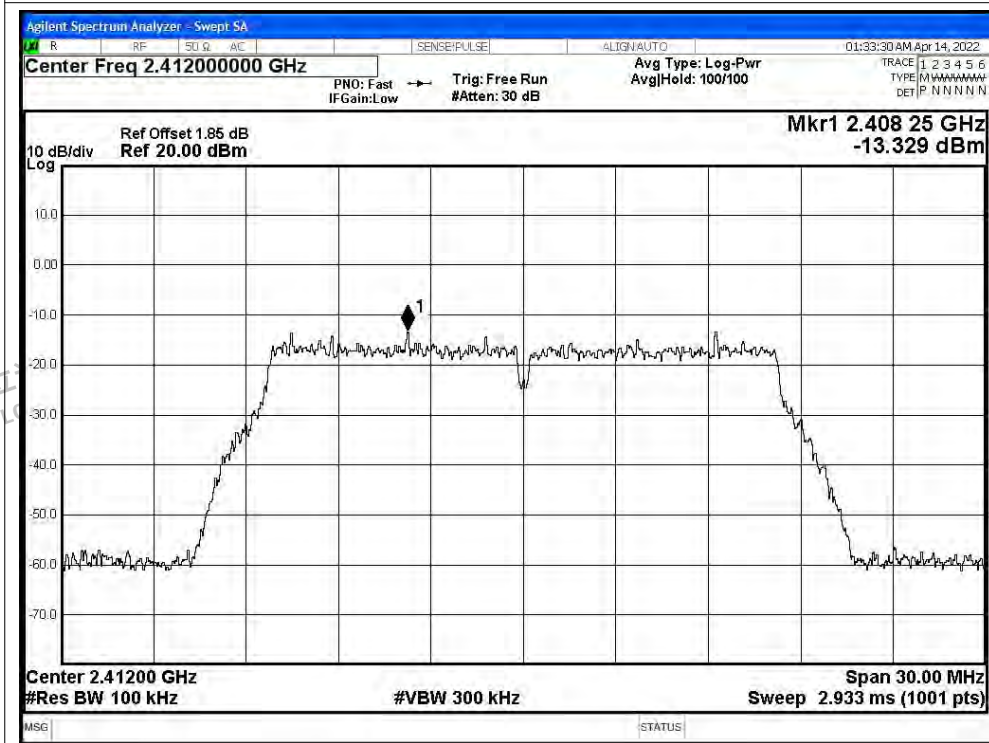


Band Edge NVNT b 2462MHz Ant1 Emission

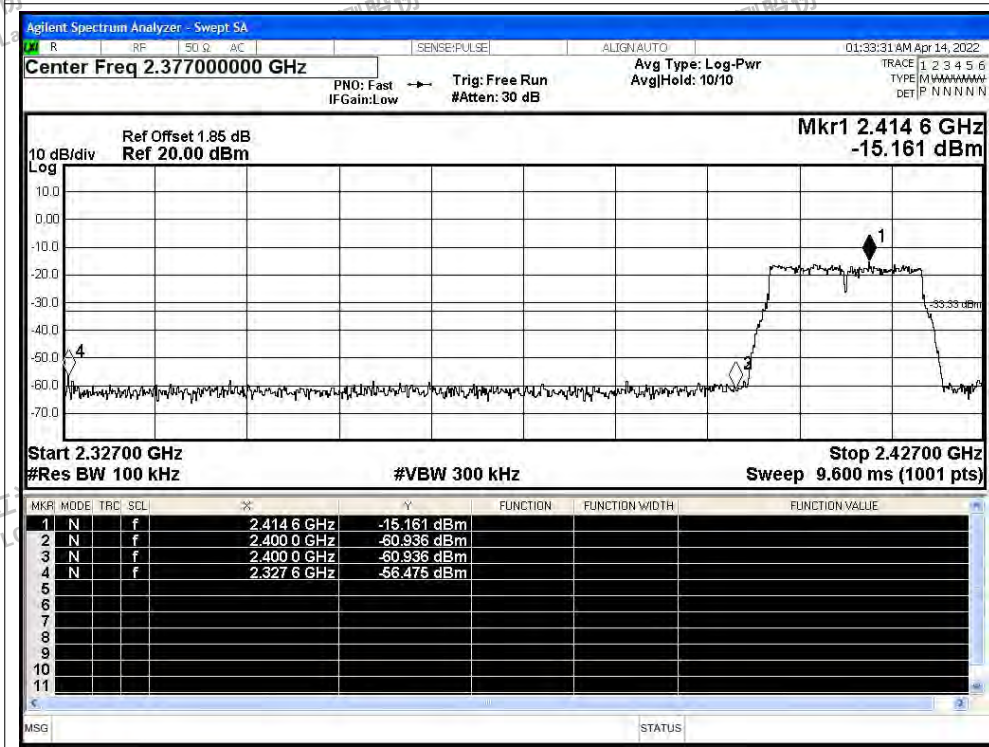




Band Edge NVNT g 2412MHz Ant1 Ref

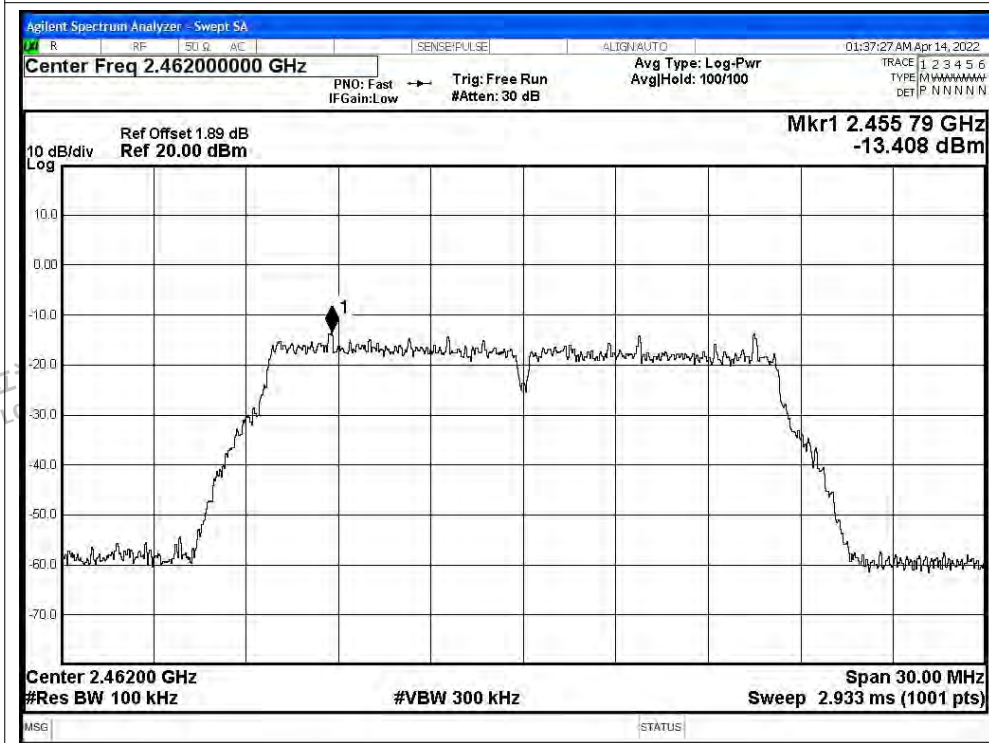


Band Edge NVNT g 2412MHz Ant1 Emission

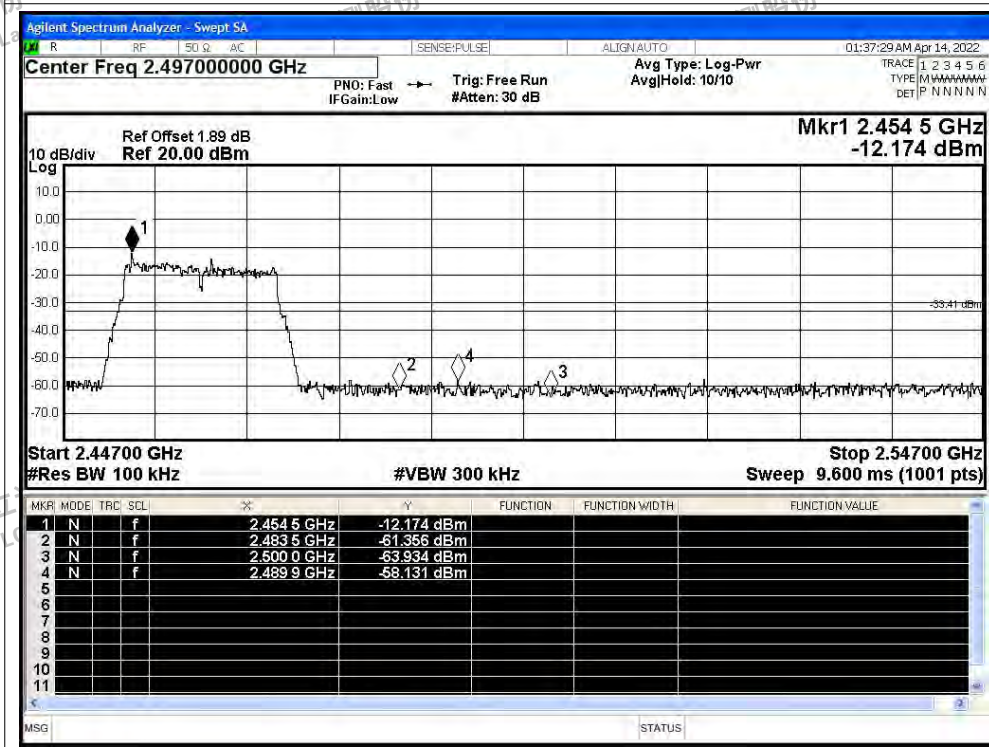




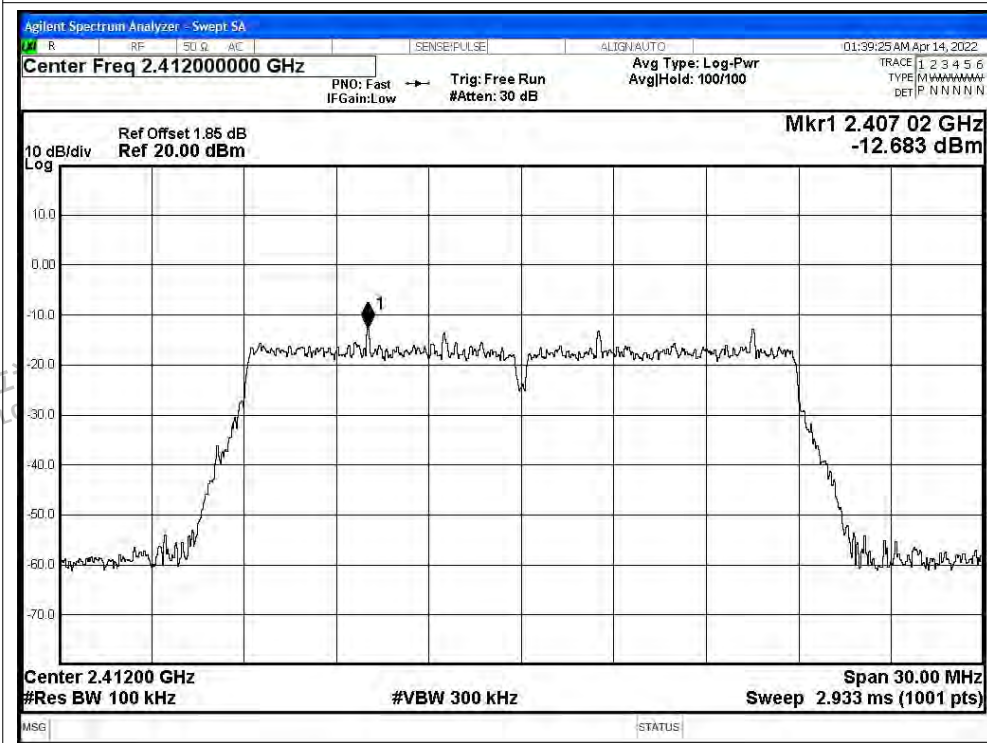
Band Edge NVNT g 2462MHz Ant1 Ref



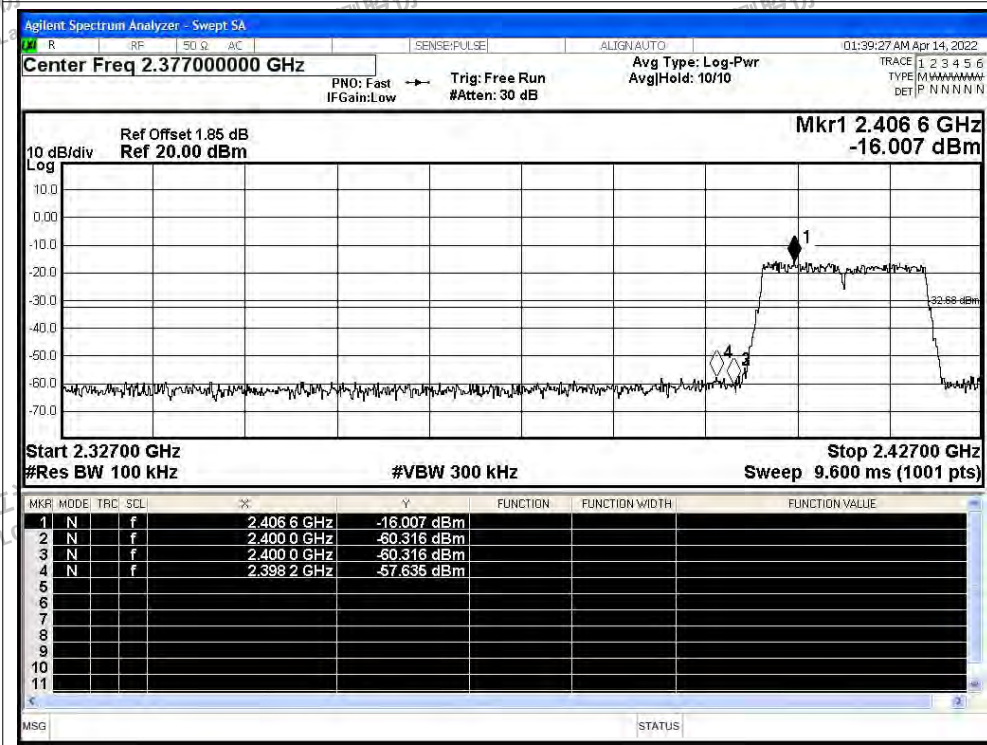
Band Edge NVNT g 2462MHz Ant1 Emission



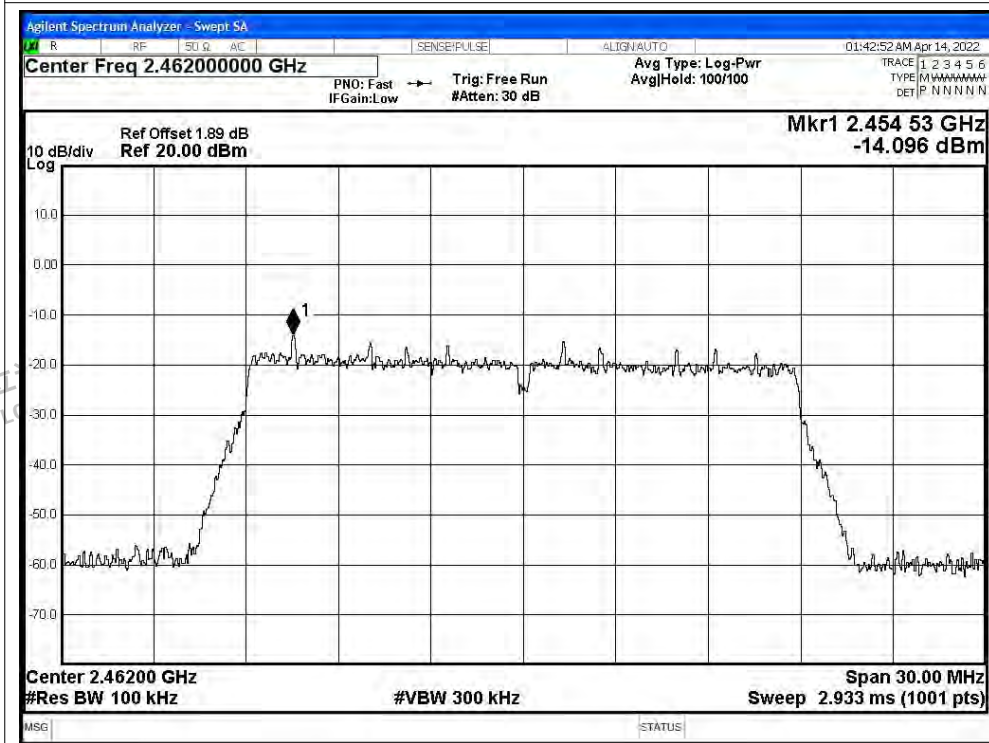
Band Edge NVNT n20 2412MHz Ant1 Ref



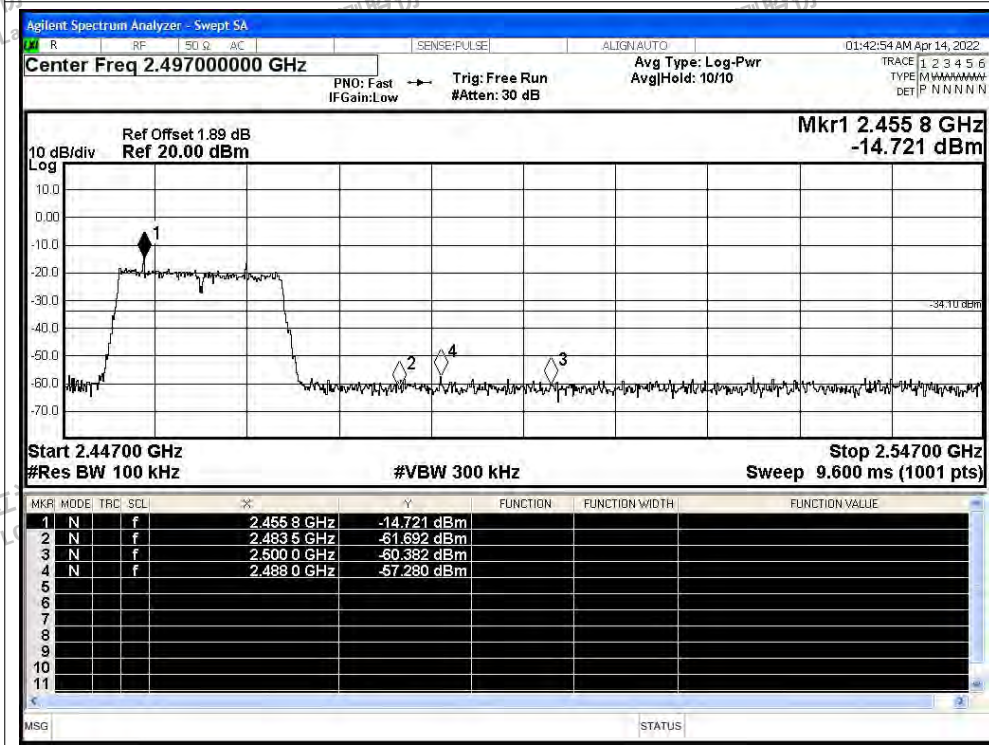
Band Edge NVNT n20 2412MHz Ant1 Emission



Band Edge NVNT n20 2462MHz Ant1 Ref



Band Edge NVNT n20 2462MHz Ant1 Emission

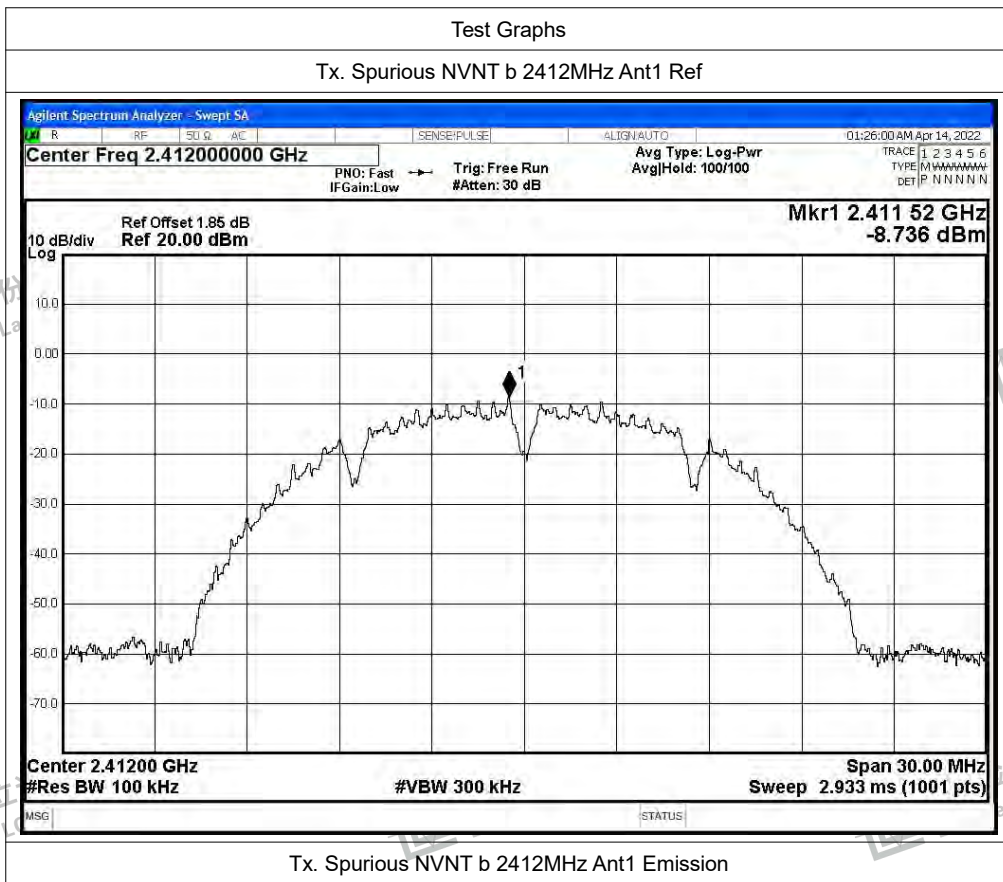




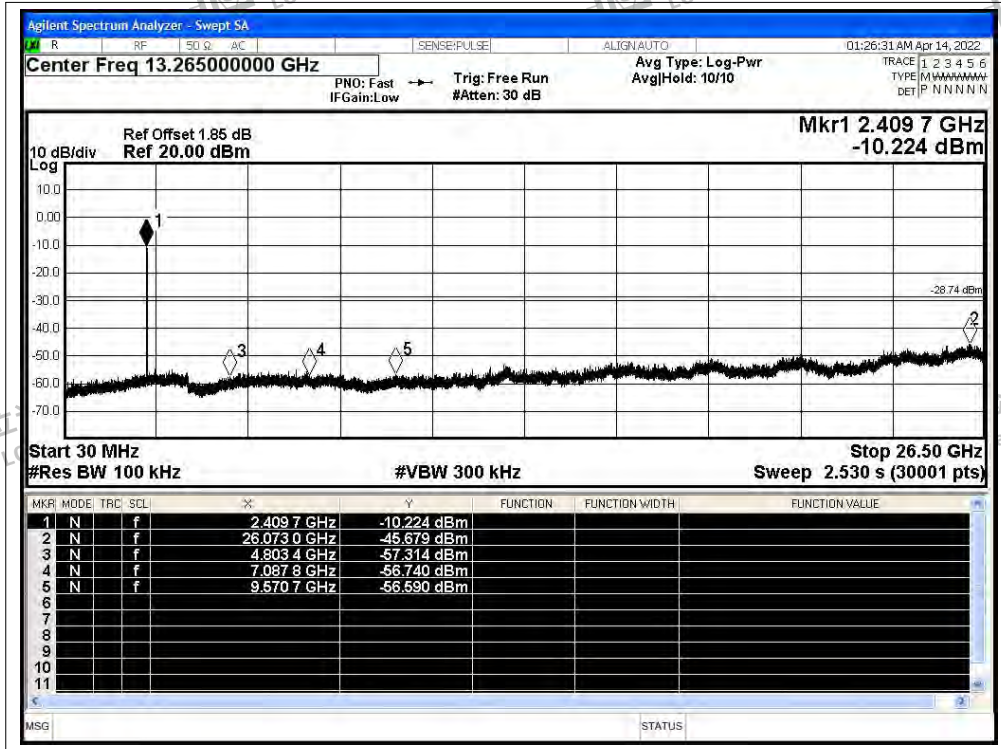


### B.6 Conducted RF Spurious Emission

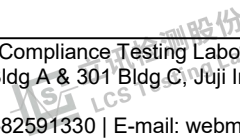
Condition	Mode	Frequency (MHz)	Antenna	Max Value (dBc)	Limit (dBc)	Verdict
NVNT	b	2412	Ant1	-36.93	-20	Pass
NVNT	b	2437	Ant1	-37.65	-20	Pass
NVNT	b	2462	Ant1	-36.78	-20	Pass
NVNT	g	2412	Ant1	-32.84	-20	Pass
NVNT	g	2437	Ant1	-33.04	-20	Pass
NVNT	g	2462	Ant1	-33.56	-20	Pass
NVNT	n20	2412	Ant1	-33.22	-20	Pass
NVNT	n20	2437	Ant1	-34.85	-20	Pass
NVNT	n20	2462	Ant1	-31.86	-20	Pass



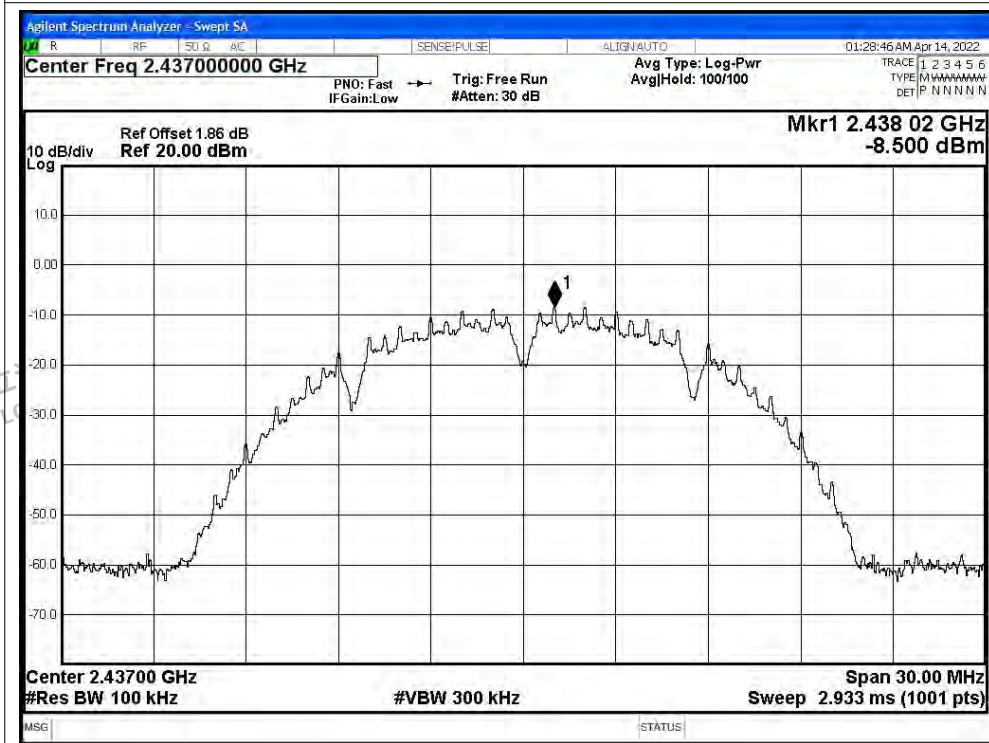




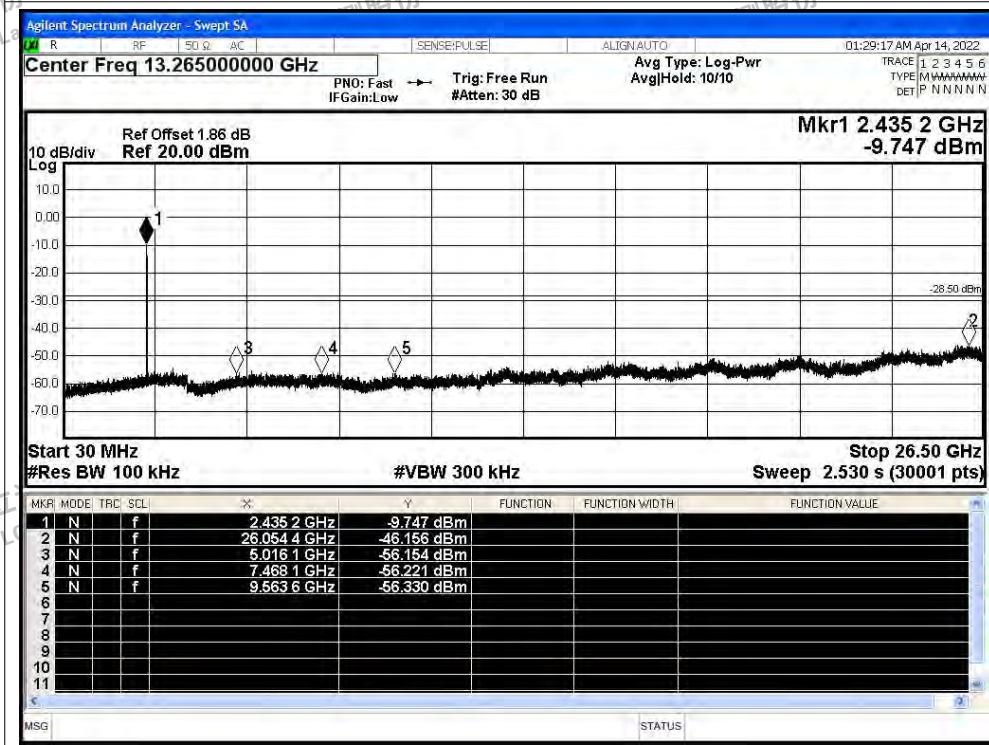
Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity



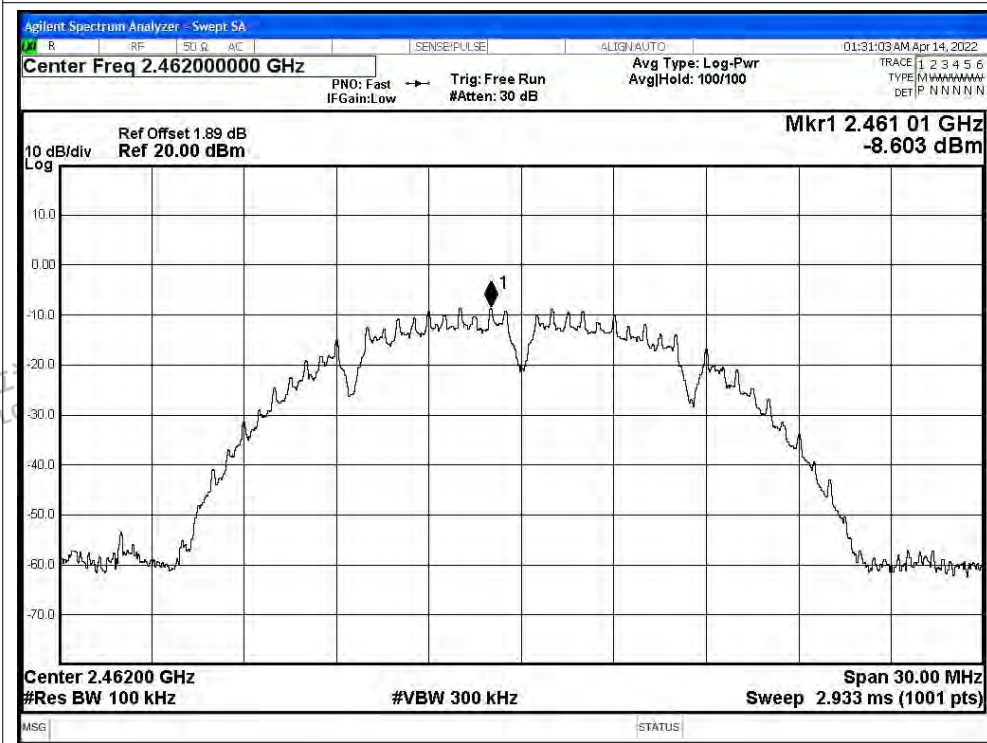
Tx. Spurious NVNT b 2437MHz Ant1 Ref



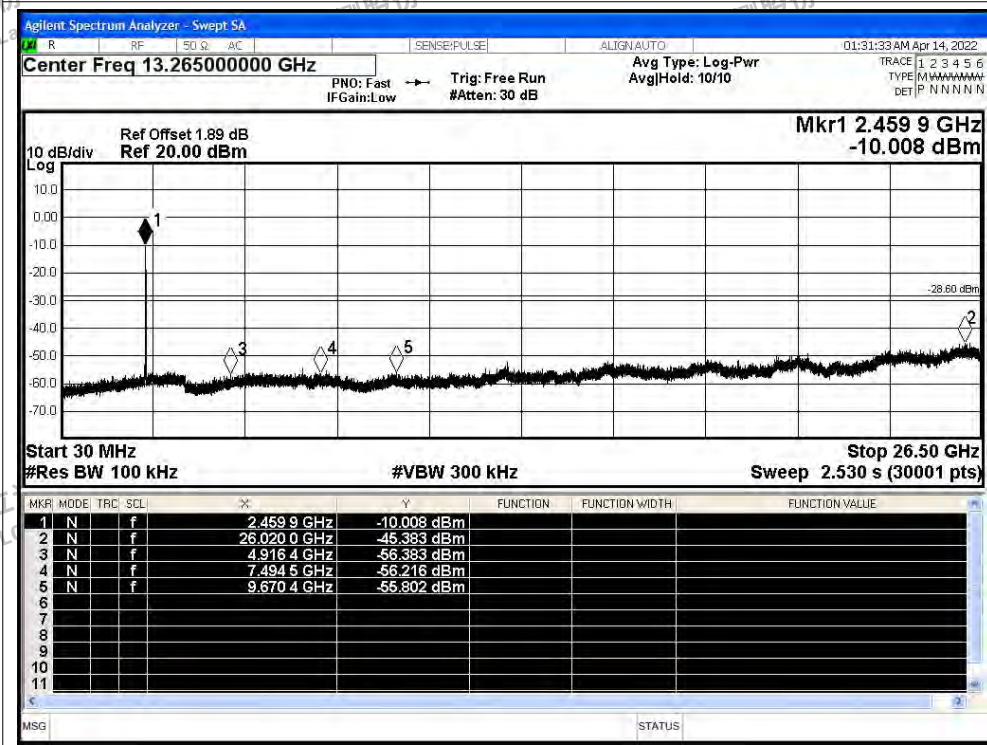
Tx. Spurious NVNT b 2437MHz Ant1 Emission



Tx. Spurious NVNT b 2462MHz Ant1 Ref

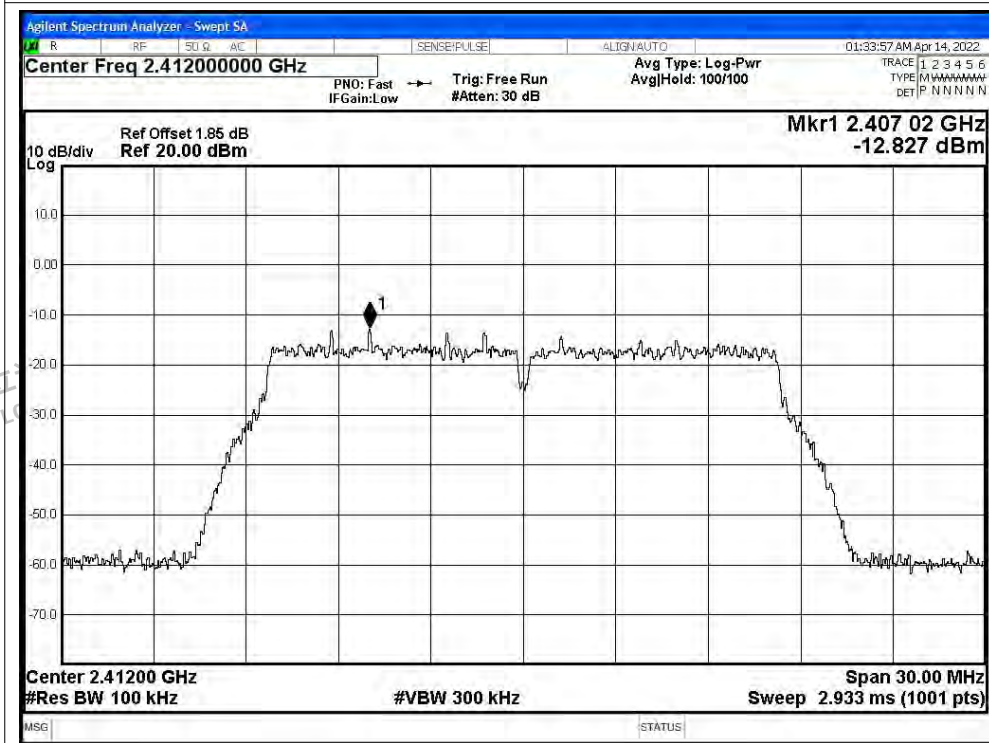


Tx. Spurious NVNT b 2462MHz Ant1 Emission

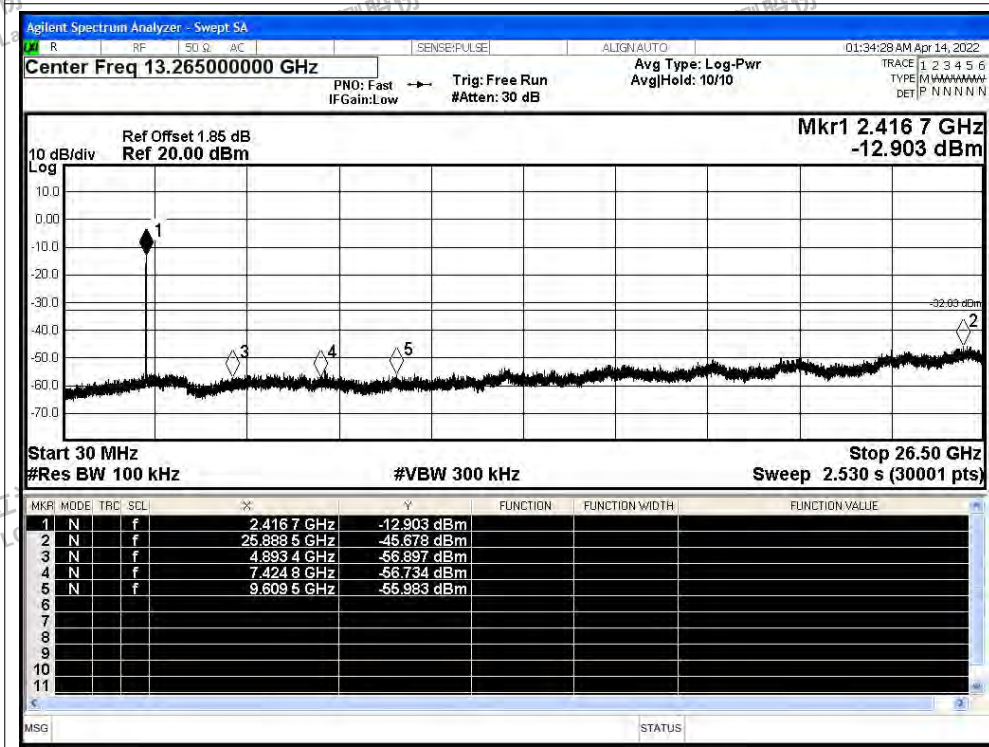




Tx. Spurious NVNT g 2412MHz Ant1 Ref

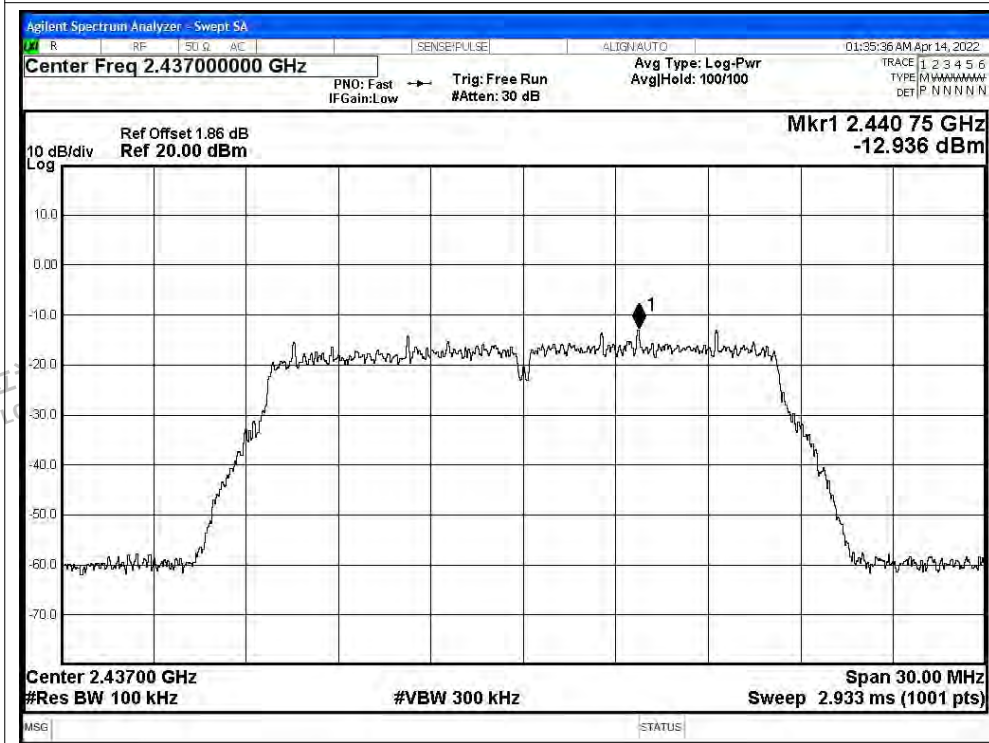


Tx. Spurious NVNT g 2412MHz Ant1 Emission

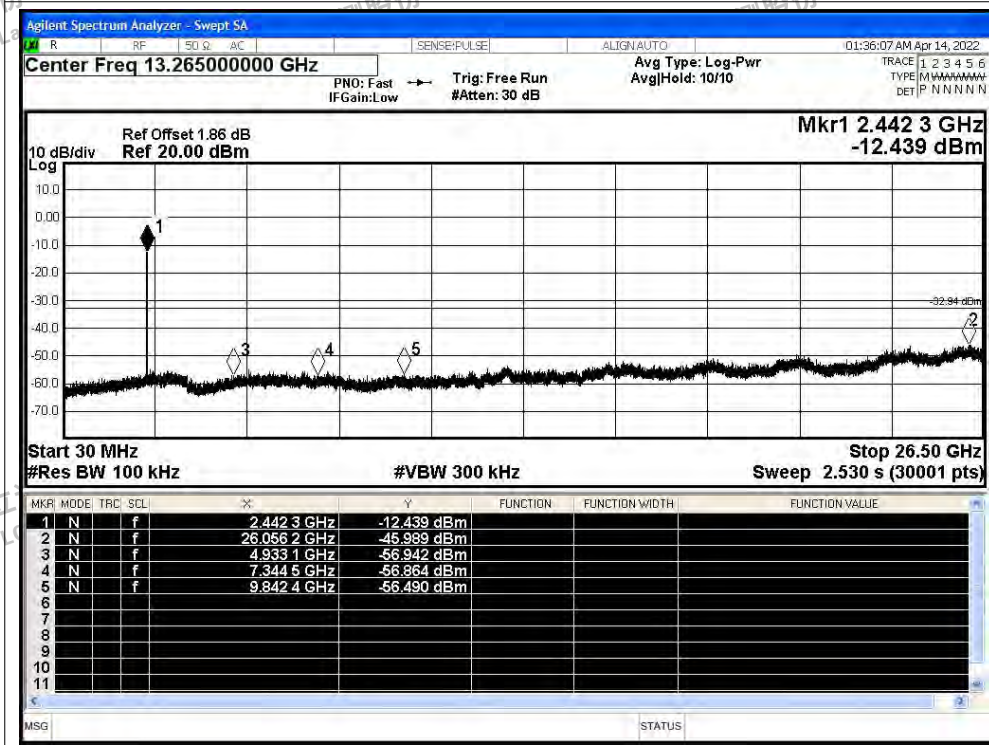




Tx. Spurious NVNT g 2437MHz Ant1 Ref

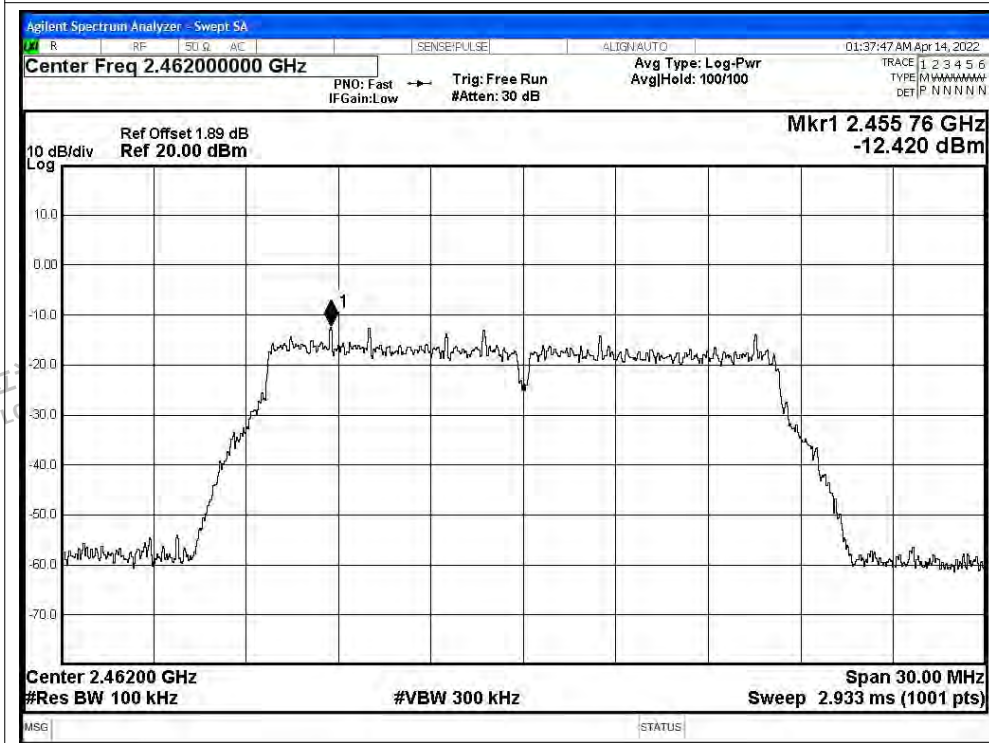


Tx. Spurious NVNT g 2437MHz Ant1 Emission

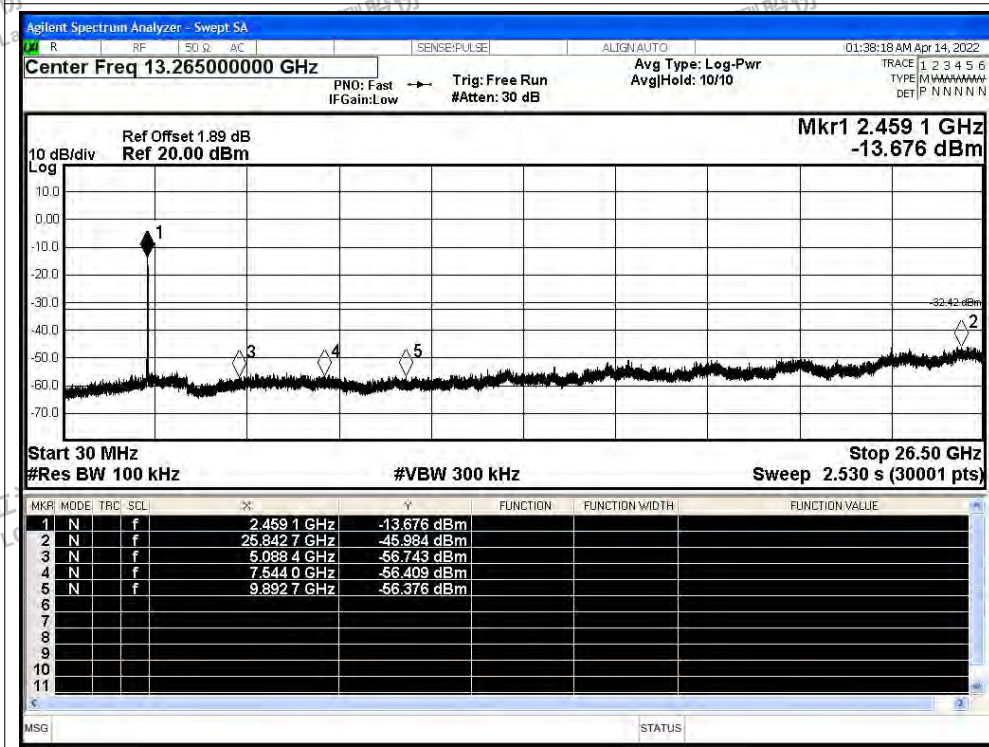




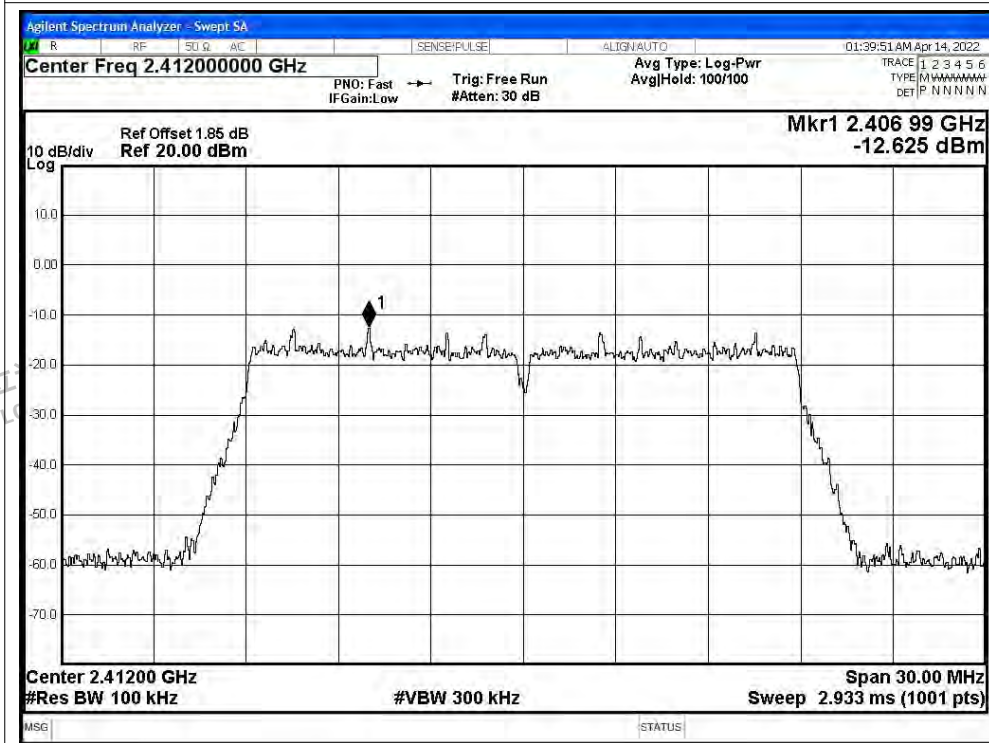
Tx. Spurious NVNT g 2462MHz Ant1 Ref



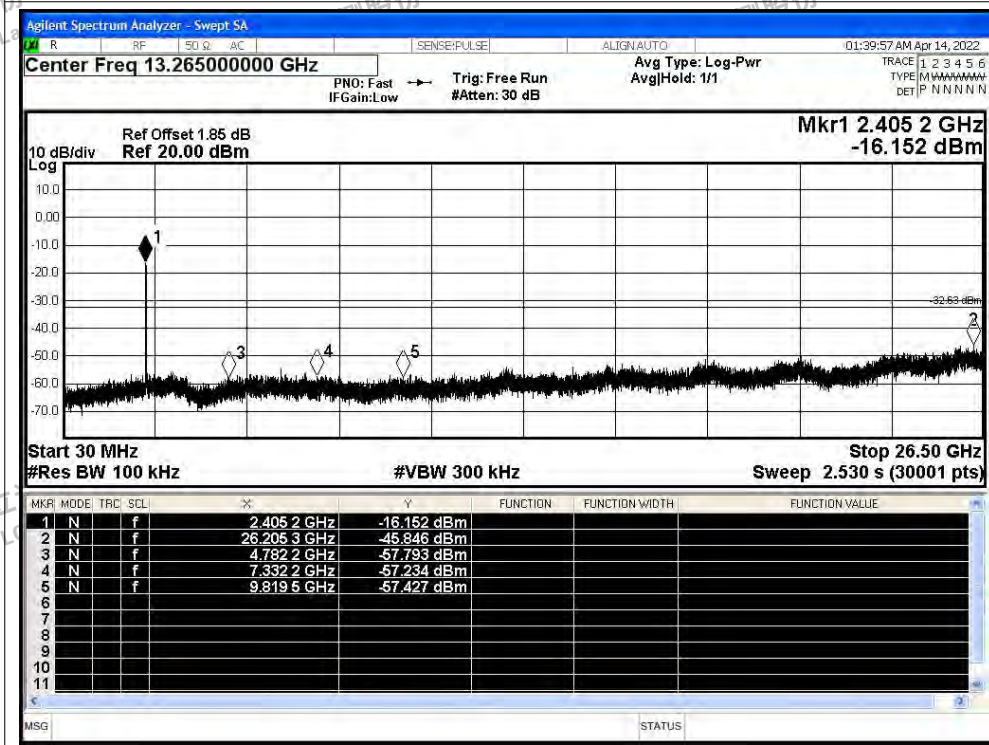
Tx. Spurious NVNT g 2462MHz Ant1 Emission



Tx. Spurious NVNT n20 2412MHz Ant1 Ref

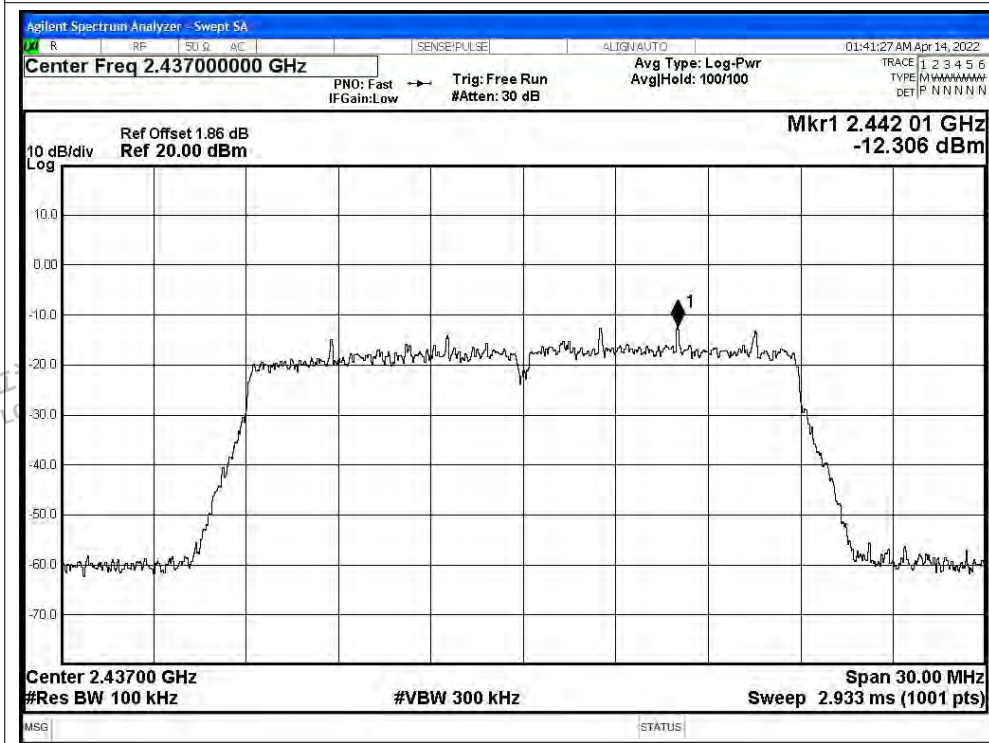


Tx. Spurious NVNT n20 2412MHz Ant1 Emission

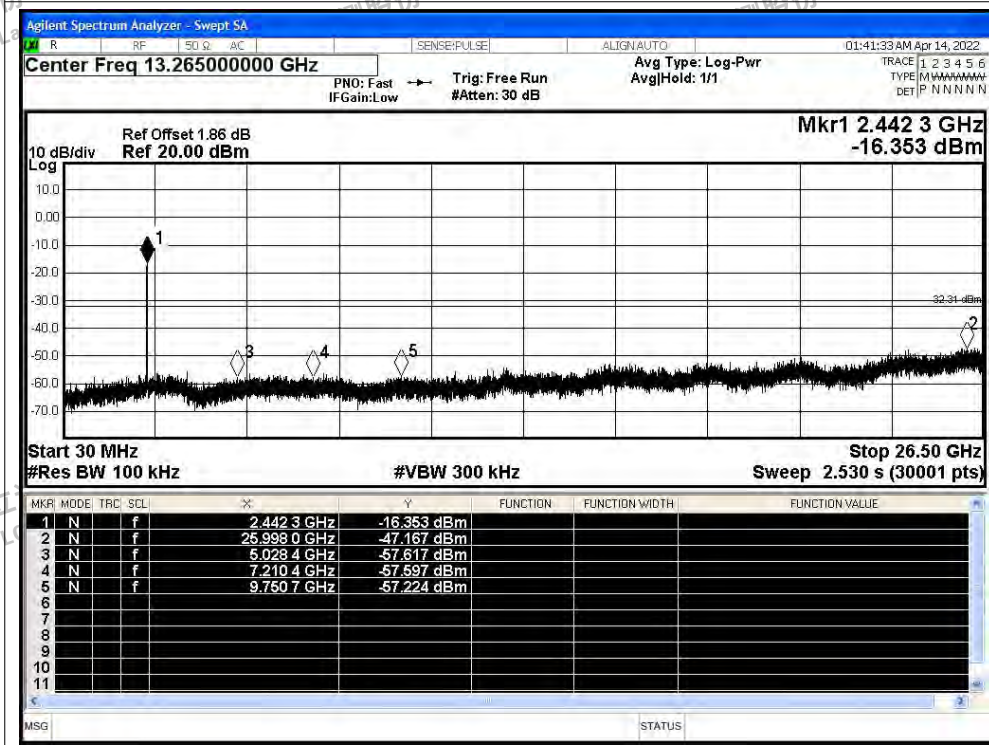




Tx. Spurious NVNT n20 2437MHz Ant1 Ref



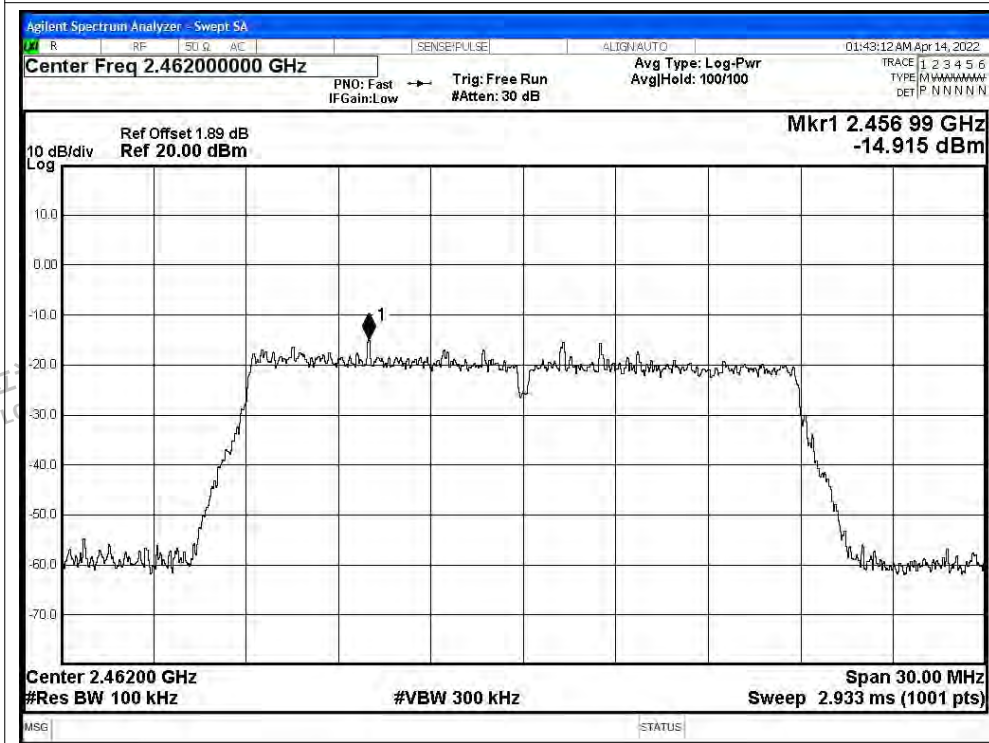
Tx. Spurious NVNT n20 2437MHz Ant1 Emission



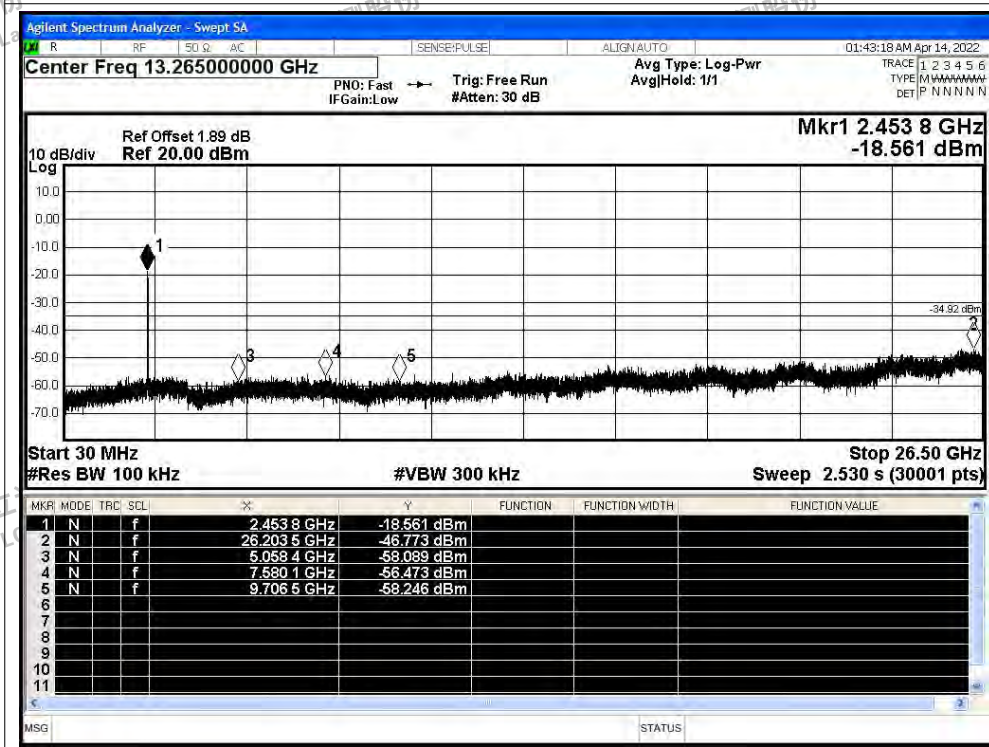




Tx. Spurious NVNT n20 2462MHz Ant1 Ref



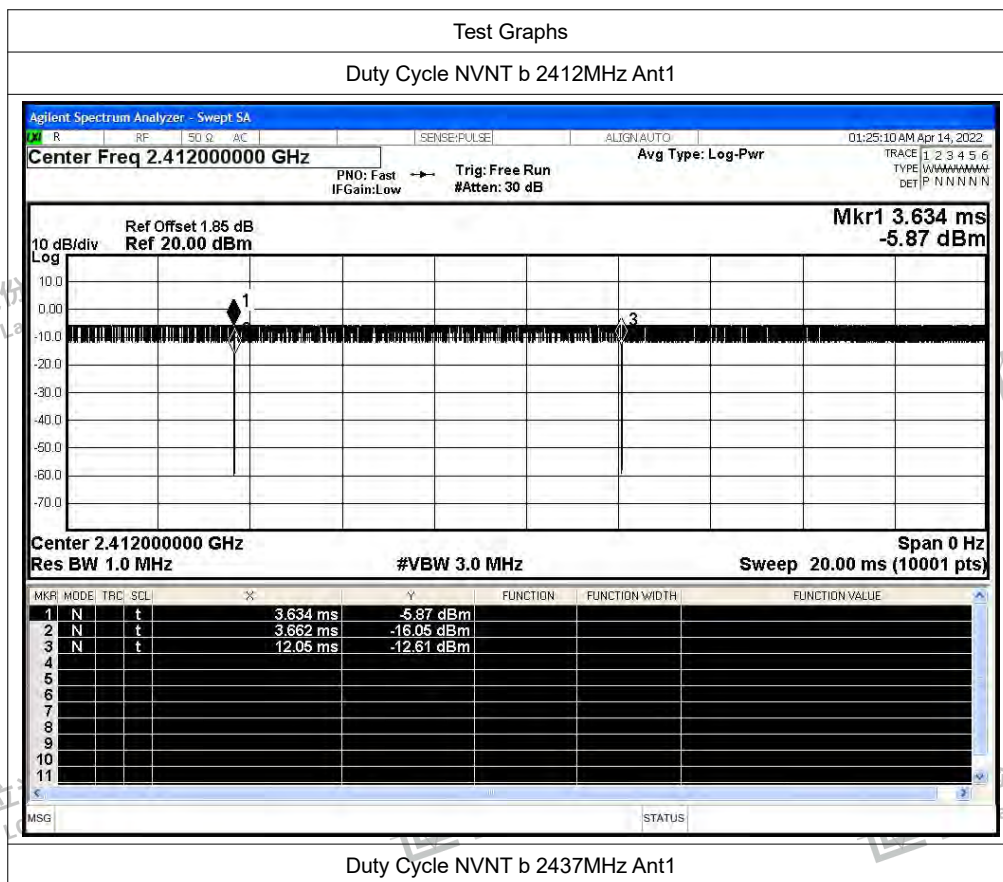
Tx. Spurious NVNT n20 2462MHz Ant1 Emission

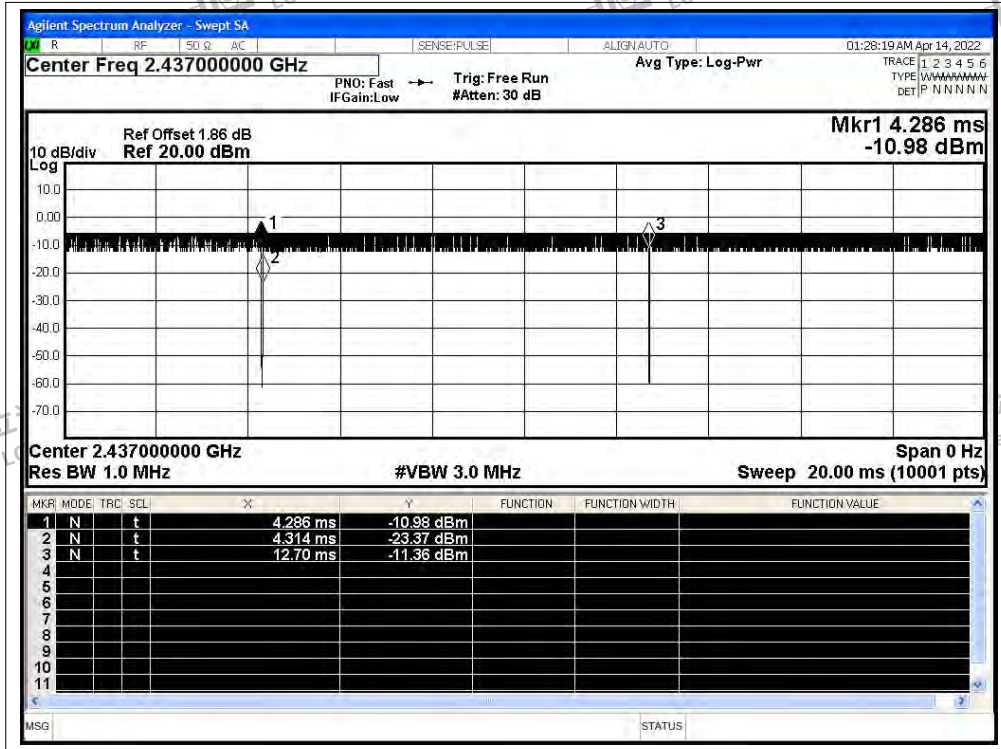




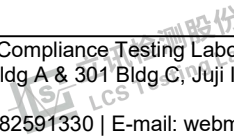
## B.7 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	b	2412	Ant1	99.67	0	0.12
NVNT	b	2437	Ant1	99.67	0	0.12
NVNT	b	2462	Ant1	99.67	0	0.12
NVNT	g	2412	Ant1	97.62	0.1	0.72
NVNT	g	2437	Ant1	97.62	0.1	0.72
NVNT	g	2462	Ant1	97.48	0.11	0.72
NVNT	n20	2412	Ant1	97.45	0.11	0.77
NVNT	n20	2437	Ant1	97.31	0.12	0.77
NVNT	n20	2462	Ant1	97.16	0.13	0.77



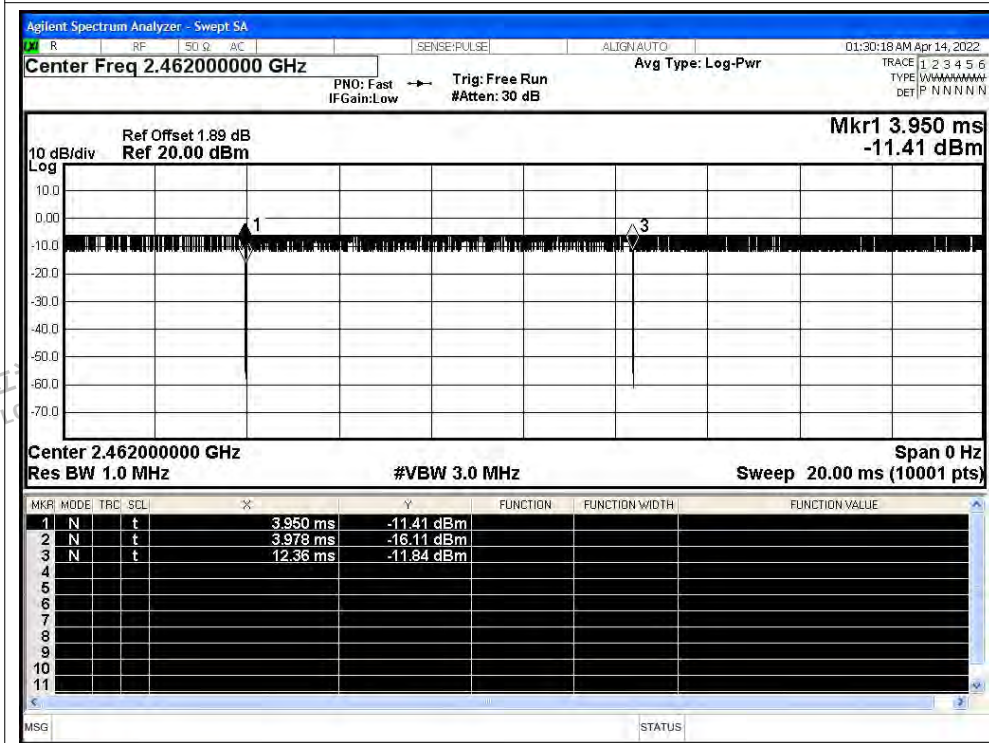


Shenzhen LCS Compliance Testing Laboratory Ltd.  
 Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China  
 Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com  
 Scan code to check authenticity

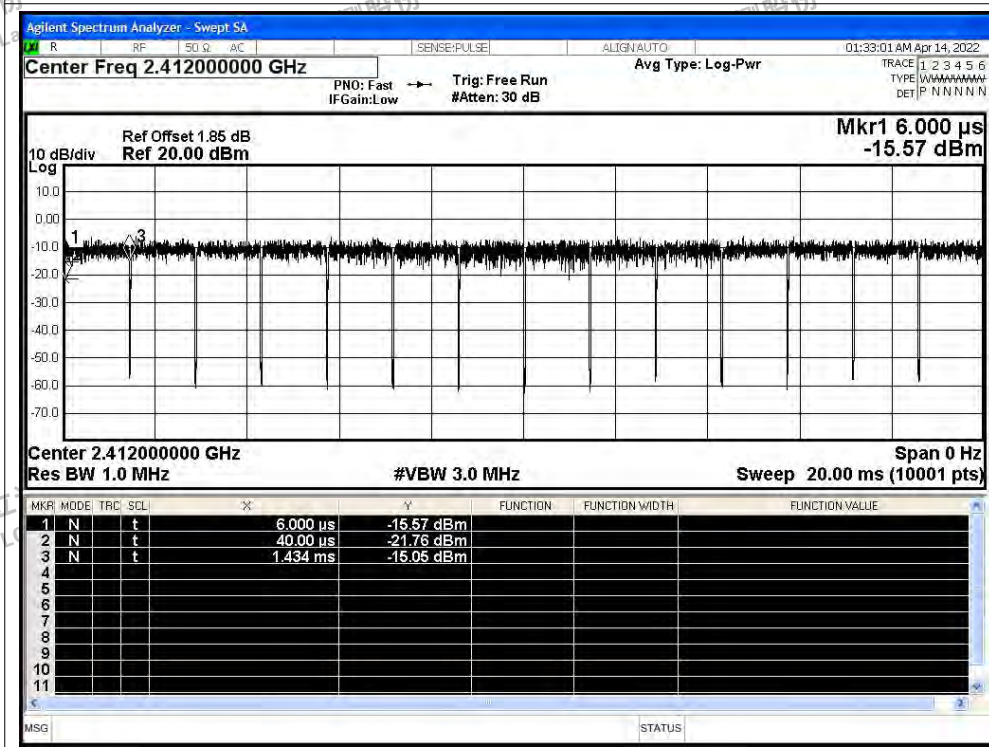




Duty Cycle NVNT b 2462MHz Ant1

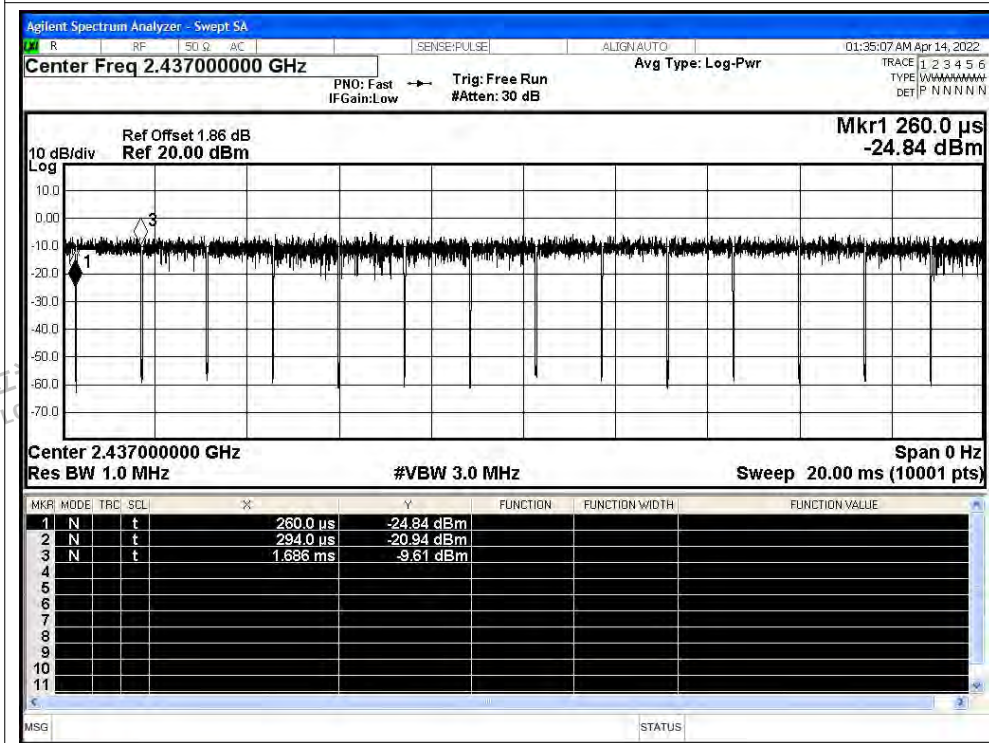


Duty Cycle NVNT g 2412MHz Ant1

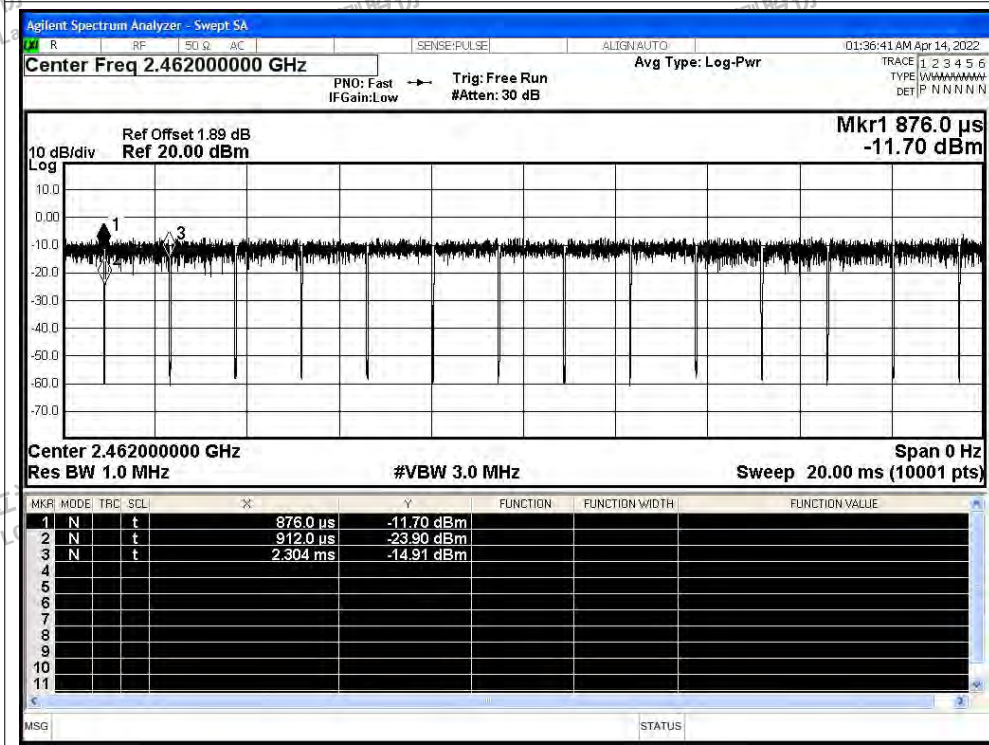




Duty Cycle NVNT g 2437MHz Ant1

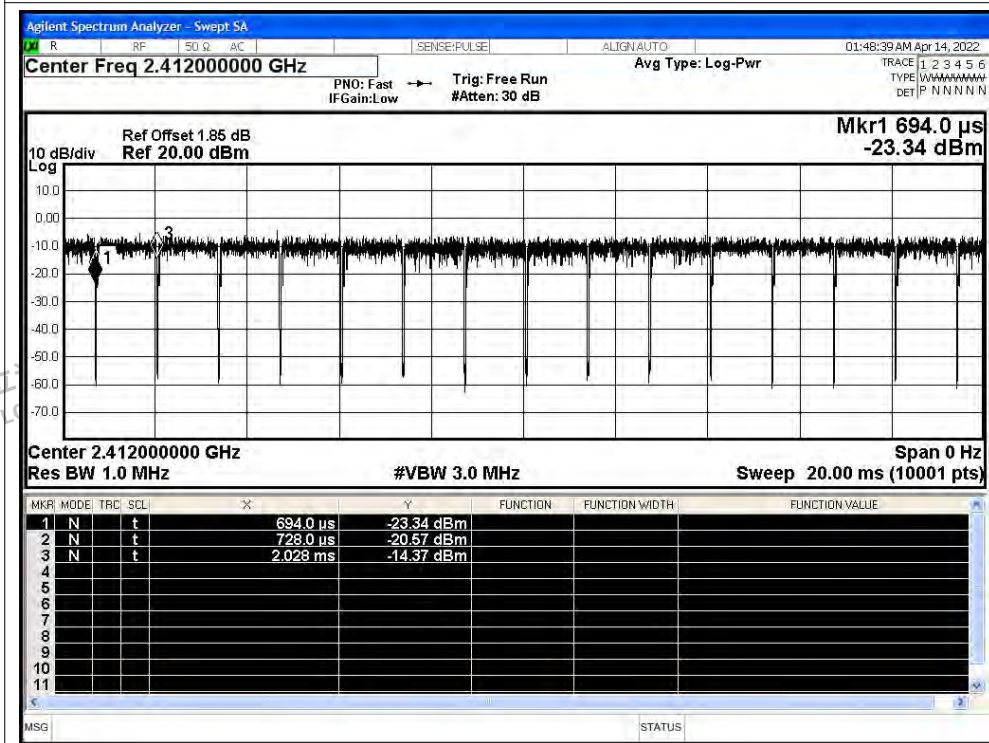


Duty Cycle NVNT g 2462MHz Ant1

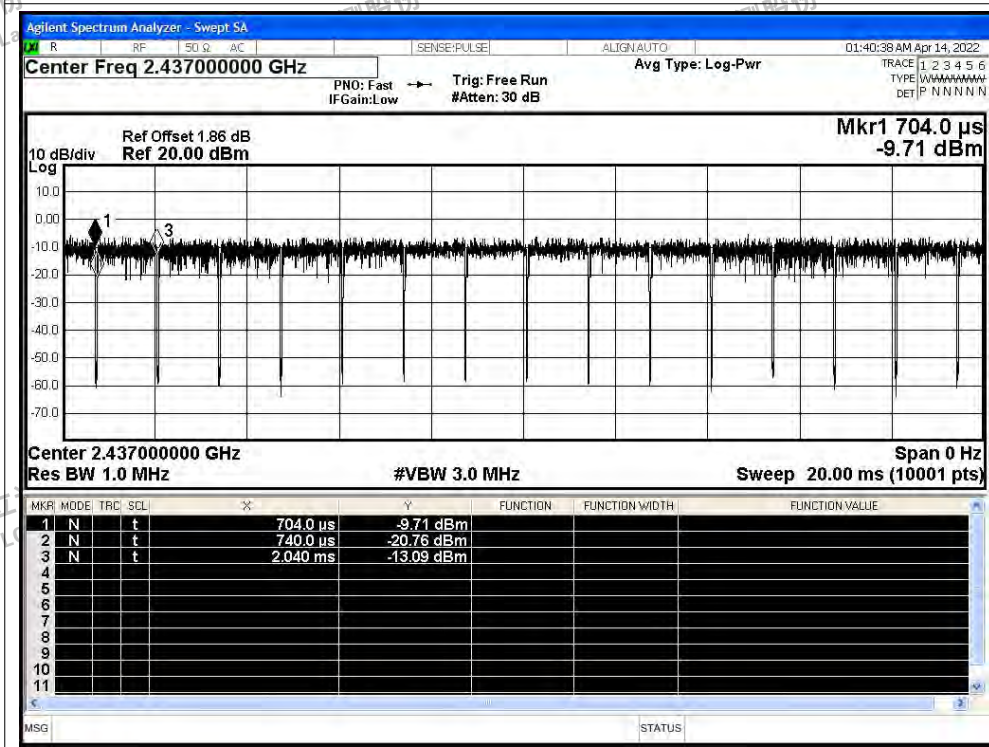




Duty Cycle NVNT n20 2412MHz Ant1

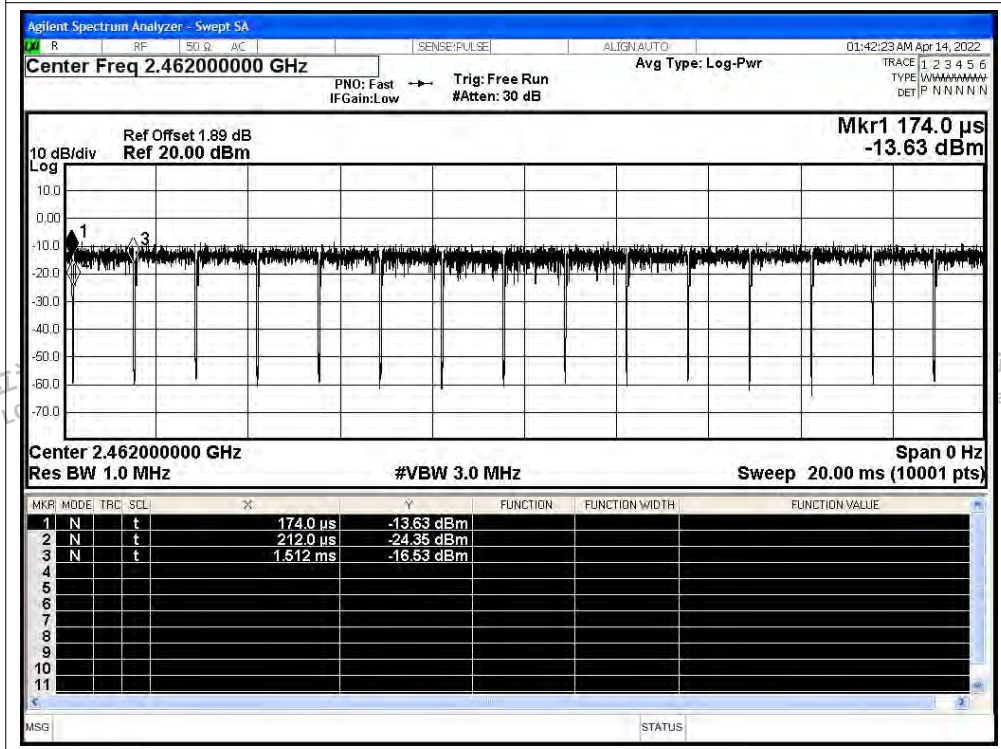


Duty Cycle NVNT n20 2437MHz Ant1

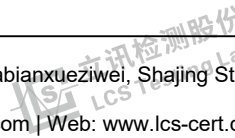
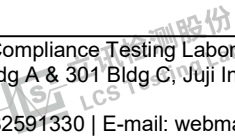




Duty Cycle NVNT n20 2462MHz Ant1



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







## B.8 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	-51.58	2	45.68	Peak	74	Pass
NVNT	b	2412	Ant1	2310	-60.8	2	36.46	Average	54	Pass
NVNT	b	2412	Ant1	2317.02	-47.9	2	49.36	Peak	74	Pass
NVNT	b	2412	Ant1	2386.167	-60.47	2	36.79	Average	54	Pass
NVNT	b	2412	Ant1	2390	-51.74	2	45.52	Peak	74	Pass
NVNT	b	2412	Ant1	2390	-60.49	2	36.77	Average	54	Pass
NVNT	b	2462	Ant1	2483.5	-49.62	2	47.64	Peak	74	Pass
NVNT	b	2462	Ant1	2483.5	-60.09	2	37.17	Average	54	Pass
NVNT	b	2462	Ant1	2487.545	-47.49	2	49.77	Peak	74	Pass
NVNT	b	2462	Ant1	2488.022	-59.81	2	37.45	Average	54	Pass
NVNT	b	2462	Ant1	2500	-50.09	2	47.17	Peak	74	Pass
NVNT	b	2462	Ant1	2500	-60.18	2	37.08	Average	54	Pass
NVNT	g	2412	Ant1	2310	-51.34	2	45.92	Peak	74	Pass
NVNT	g	2412	Ant1	2310	-60.46	2	36.8	Average	54	Pass
NVNT	g	2412	Ant1	2312.223	-46.37	2	50.89	Peak	74	Pass
NVNT	g	2412	Ant1	2389.092	-59.79	2	37.47	Average	54	Pass
NVNT	g	2412	Ant1	2390	-50.21	2	47.05	Peak	74	Pass
NVNT	g	2412	Ant1	2390	-59.85	2	37.41	Average	54	Pass
NVNT	g	2462	Ant1	2483.5	-49.78	2	47.48	Peak	74	Pass
NVNT	g	2462	Ant1	2483.5	-59.03	2	38.23	Average	54	Pass
NVNT	g	2462	Ant1	2485.266	-47.13	2	50.13	Peak	74	Pass
NVNT	g	2462	Ant1	2487.916	-58.16	2	39.1	Average	54	Pass
NVNT	g	2462	Ant1	2500	-48.39	2	48.87	Peak	74	Pass
NVNT	g	2462	Ant1	2500	-59.57	2	37.69	Average	54	Pass
NVNT	n20	2412	Ant1	2310	-50.38	2	46.88	Peak	74	Pass
NVNT	n20	2412	Ant1	2310	-60.41	2	36.85	Average	54	Pass
NVNT	n20	2412	Ant1	2381.955	-47.17	2	50.09	Peak	74	Pass
NVNT	n20	2412	Ant1	2389.911	-59.79	2	37.47	Average	54	Pass
NVNT	n20	2412	Ant1	2390	-50.31	2	46.95	Peak	74	Pass
NVNT	n20	2412	Ant1	2390	-59.81	2	37.45	Average	54	Pass
NVNT	n20	2462	Ant1	2483.5	-49.63	2	47.63	Peak	74	Pass
NVNT	n20	2462	Ant1	2483.5	-59.16	2	38.1	Average	54	Pass
NVNT	n20	2462	Ant1	2489.612	-47.52	2	49.74	Peak	74	Pass
NVNT	n20	2462	Ant1	2488.075	-58.73	2	38.53	Average	54	Pass
NVNT	n20	2462	Ant1	2500	-50.97	2	46.29	Peak	74	Pass
NVNT	n20	2462	Ant1	2500	-59.74	2	37.52	Average	54	Pass



Shenzhen LCS Compliance Testing Laboratory Ltd.

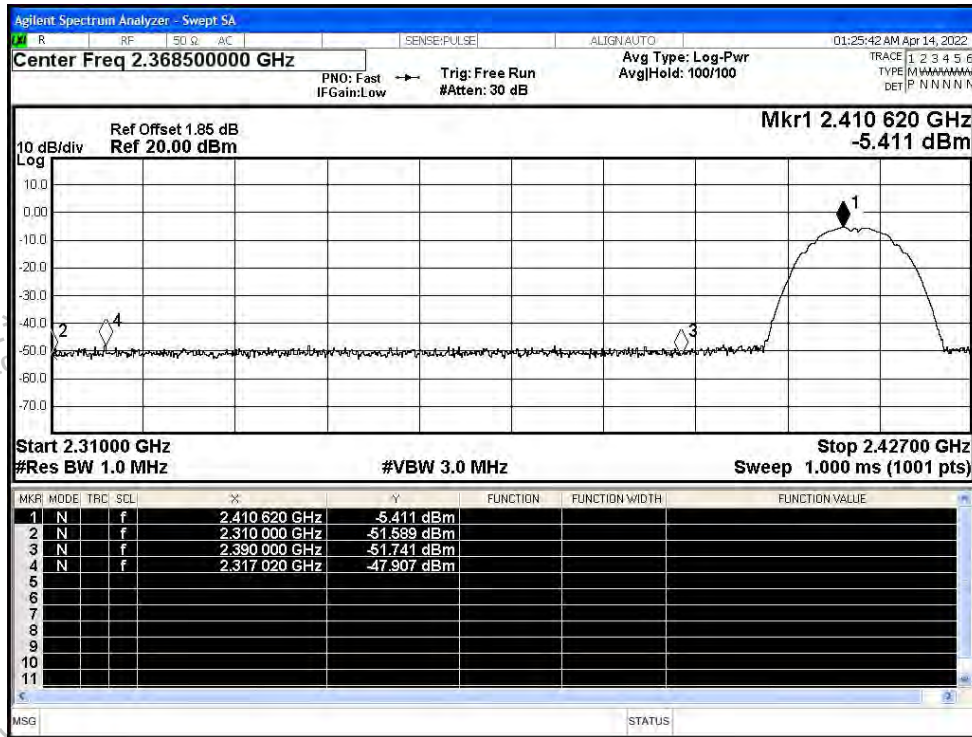
Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

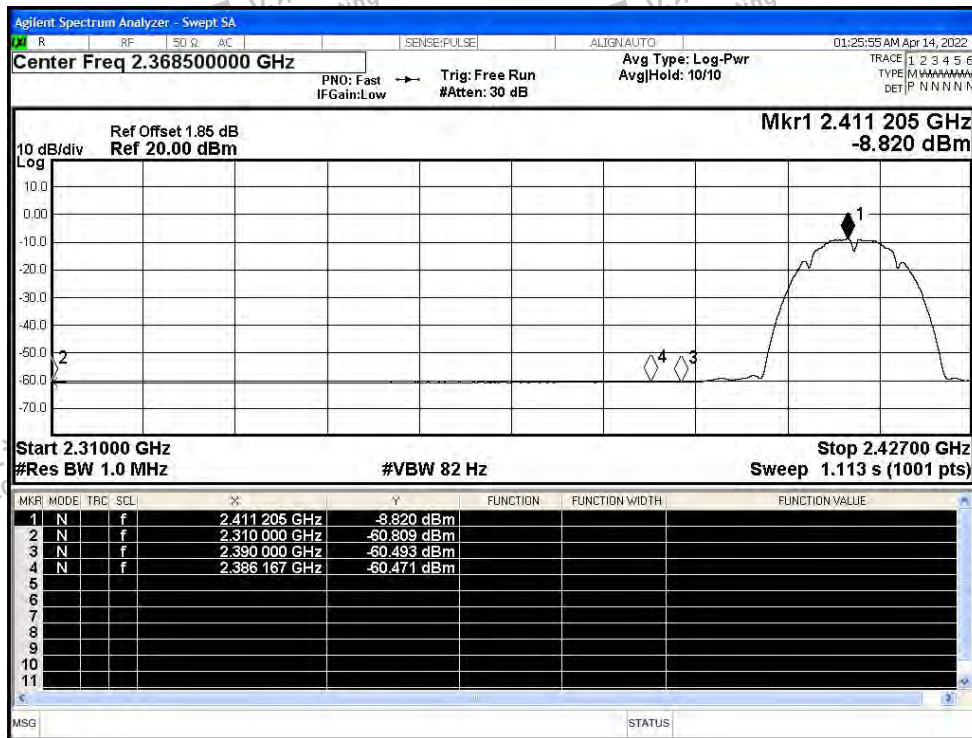
Scan code to check authenticity

Test Graphs

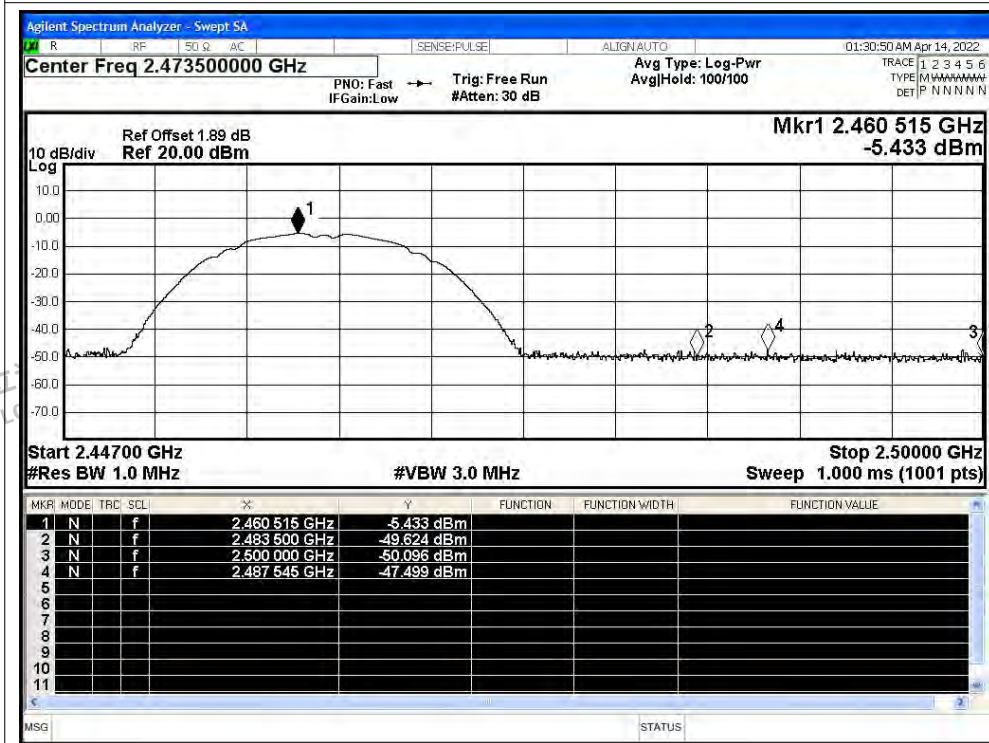
Restrict Band NVNT b 2412MHz Ant1 Peak



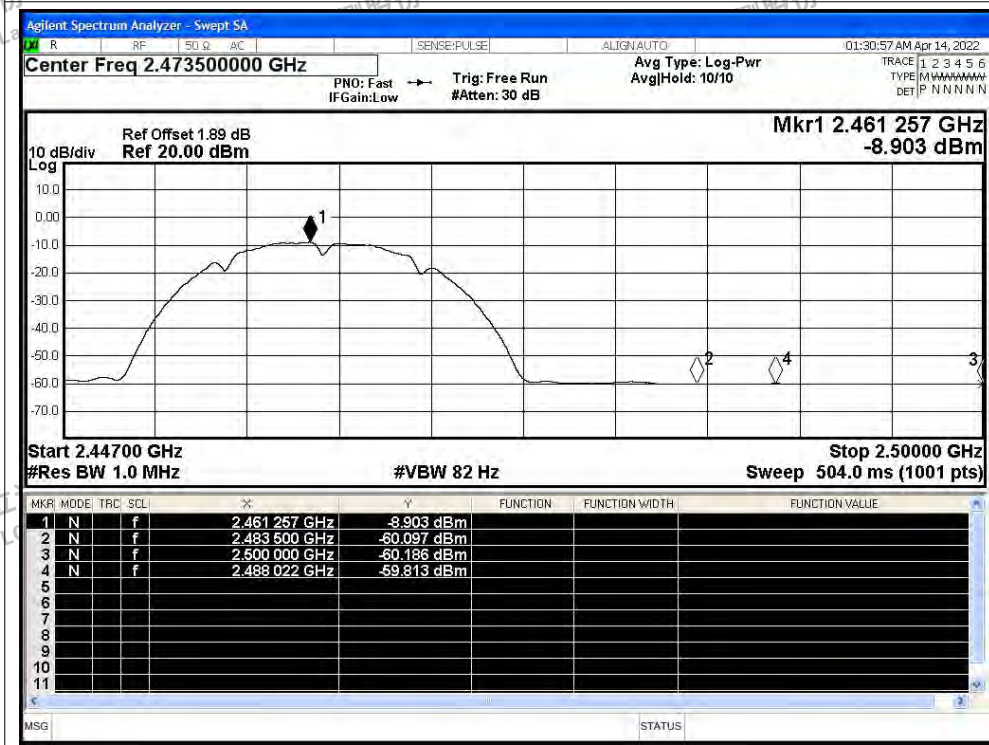
Restrict Band NVNT b 2412MHz Ant1 Average



Restrict Band NVNT b 2462MHz Ant1 Peak



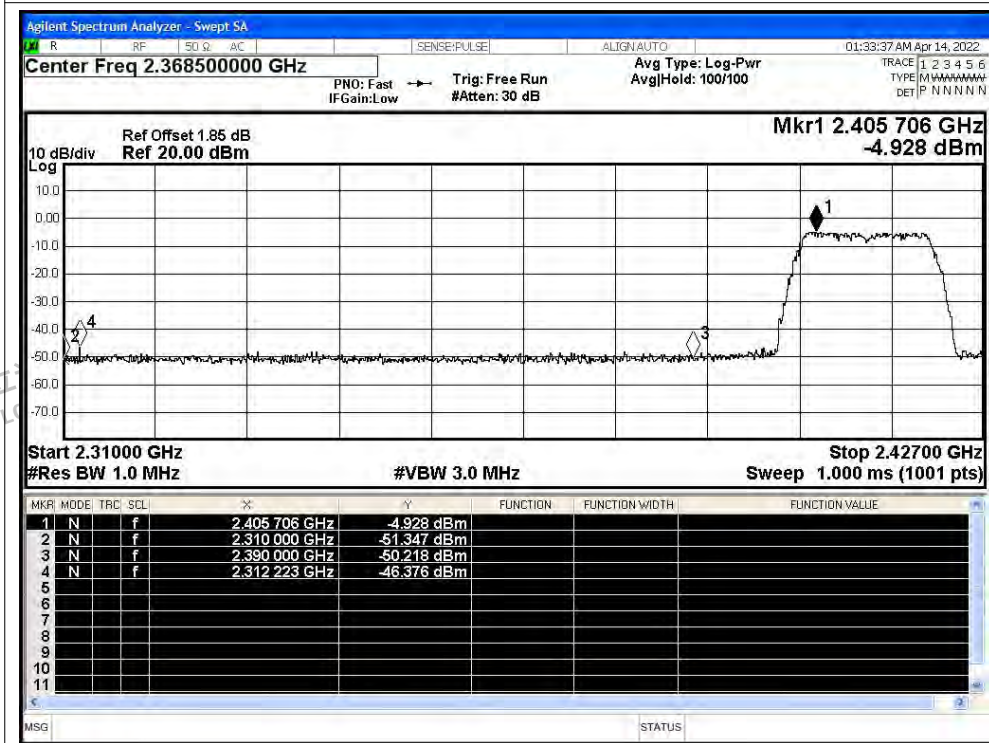
Restrict Band NVNT b 2462MHz Ant1 Average



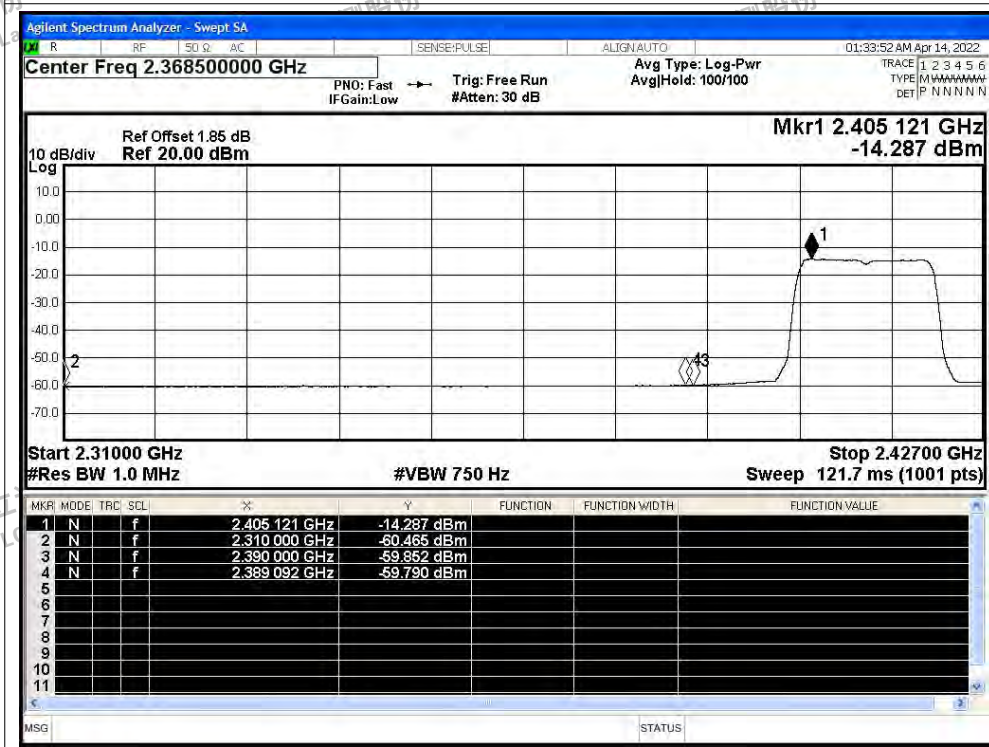




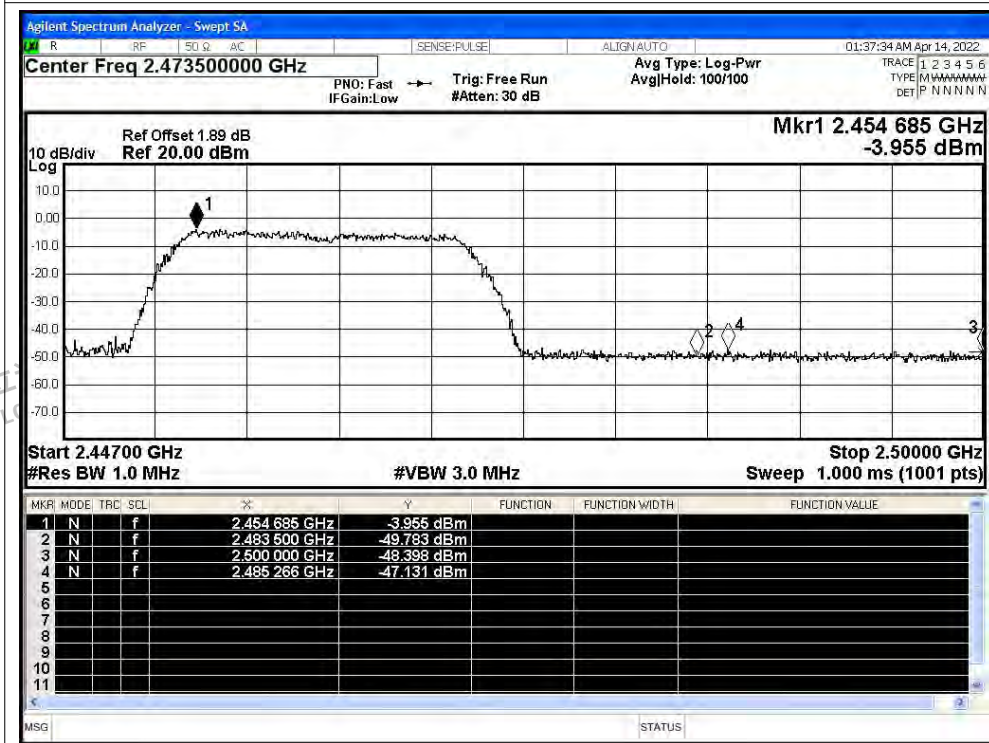
Restrict Band NVNT g 2412MHz Ant1 Peak



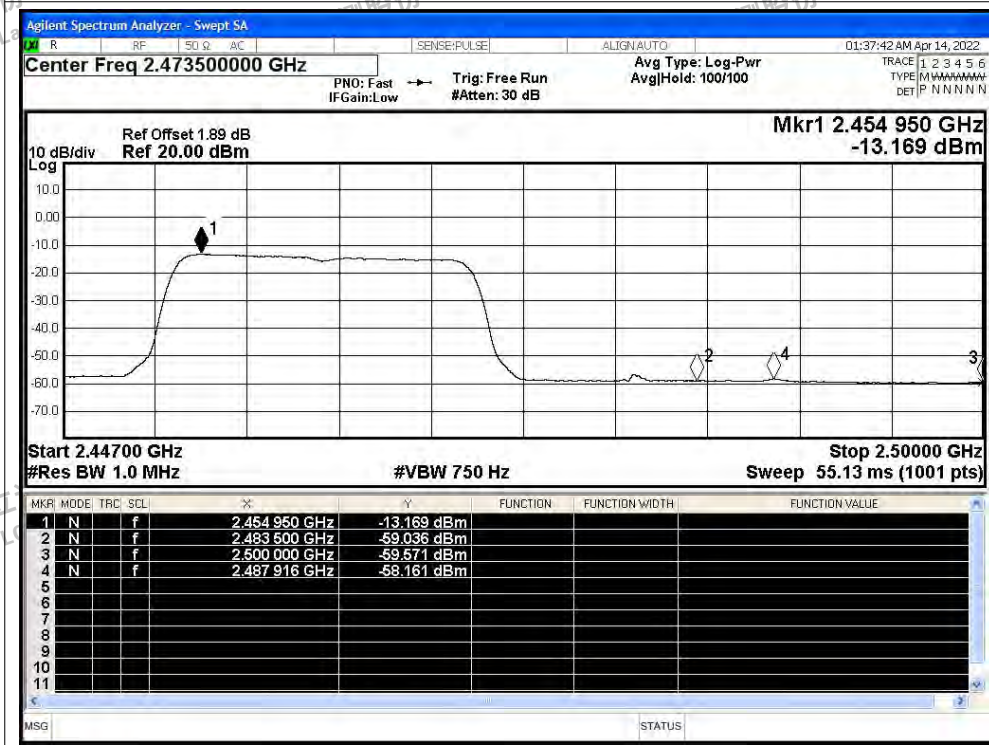
Restrict Band NVNT g 2412MHz Ant1 Average



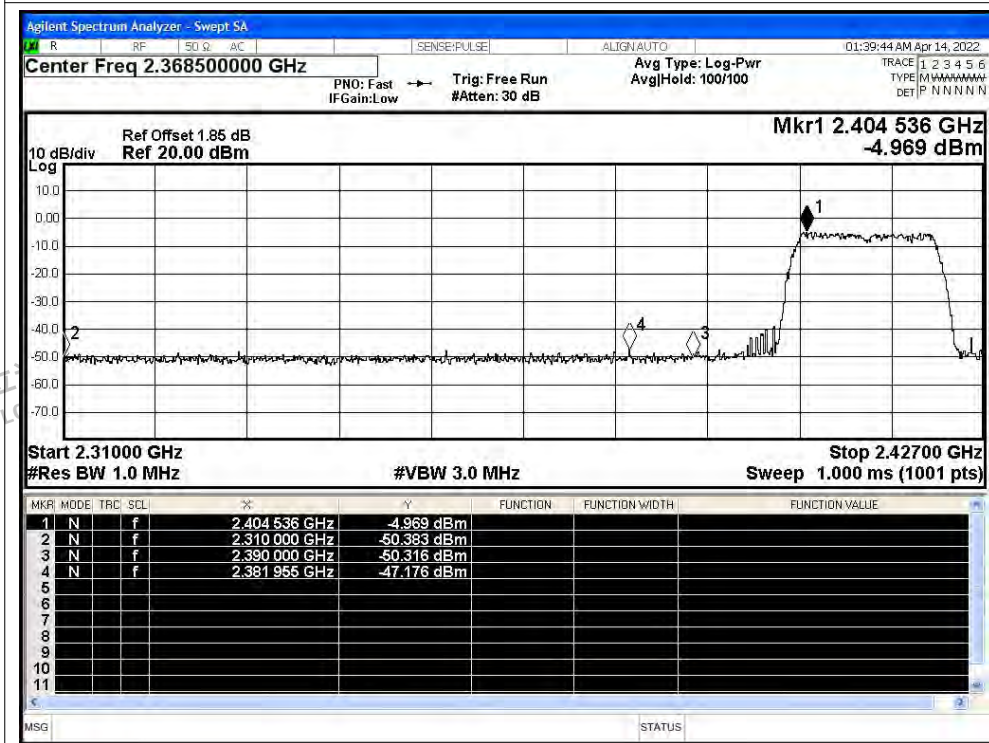
Restrict Band NVNT g 2462MHz Ant1 Peak



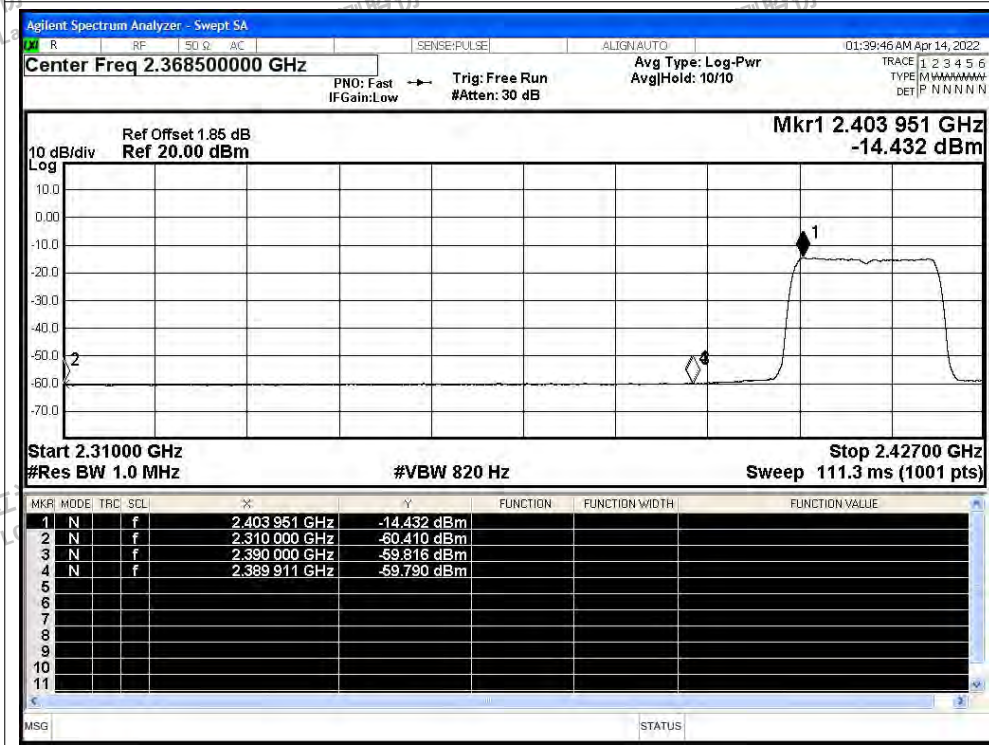
Restrict Band NVNT g 2462MHz Ant1 Average



Restrict Band NVNT n20 2412MHz Ant1 Peak

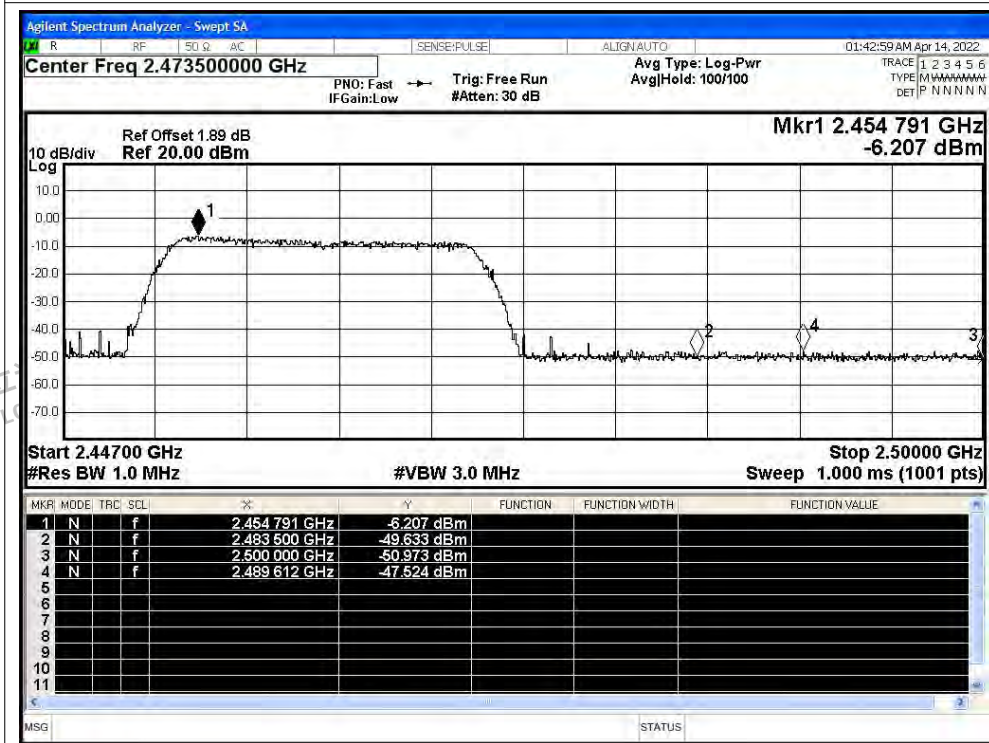


Restrict Band NVNT n20 2412MHz Ant1 Average





Restrict Band NVNT n20 2462MHz Ant1 Peak



Restrict Band NVNT n20 2462MHz Ant1 Average

