



Appendix F

RF Test Data for 5.5GWIFI(Conducted Measurement)

Product Name: Mobile phone

Test Model: F31tx

Environmental Conditions

Temperature:	23.9° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Luo
Supervised by:	Nick Peng



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



F.1 -26dB Bandwidth

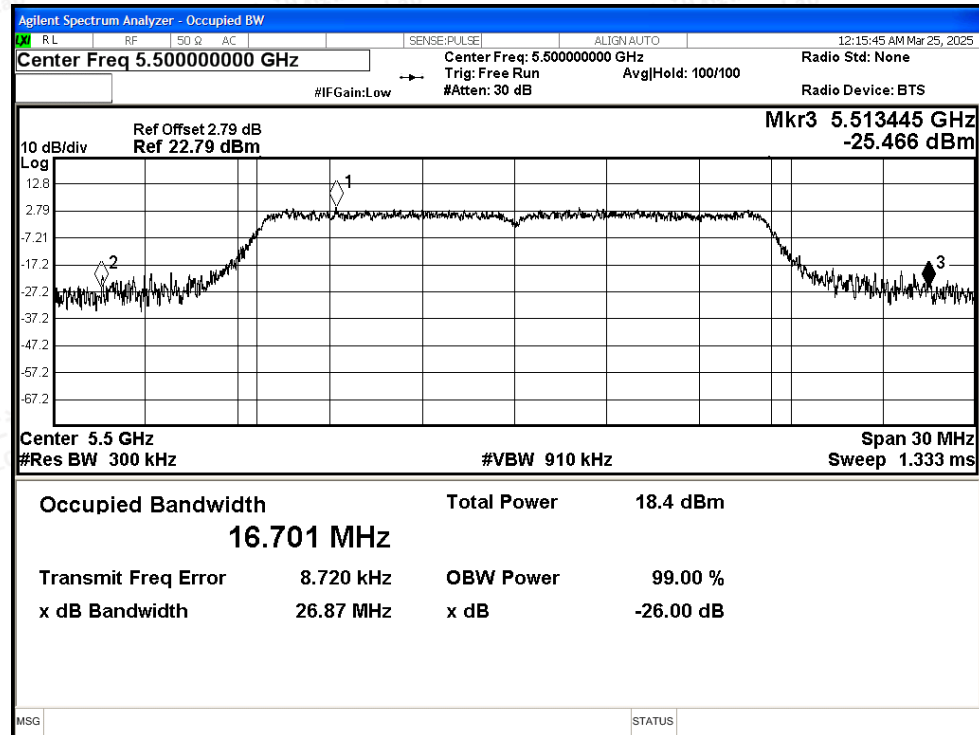
Condition	Mode	Frequency (MHz)	Antenna	-26 dB Bandwidth (MHz)	Limit -26 dB Bandwidth (MHz)	Verdict
NVNT	a	5500	Ant	26.873	---	Pass
NVNT	a	5580	Ant	28.174	---	Pass
NVNT	a	5700	Ant	27.794	---	Pass
NVNT	n20	5500	Ant	28.252	---	Pass
NVNT	n20	5580	Ant	28.898	---	Pass
NVNT	n20	5700	Ant	26.731	---	Pass
NVNT	n40	5510	Ant	51.537	---	Pass
NVNT	n40	5550	Ant	51.863	---	Pass
NVNT	n40	5670	Ant	41.795	---	Pass



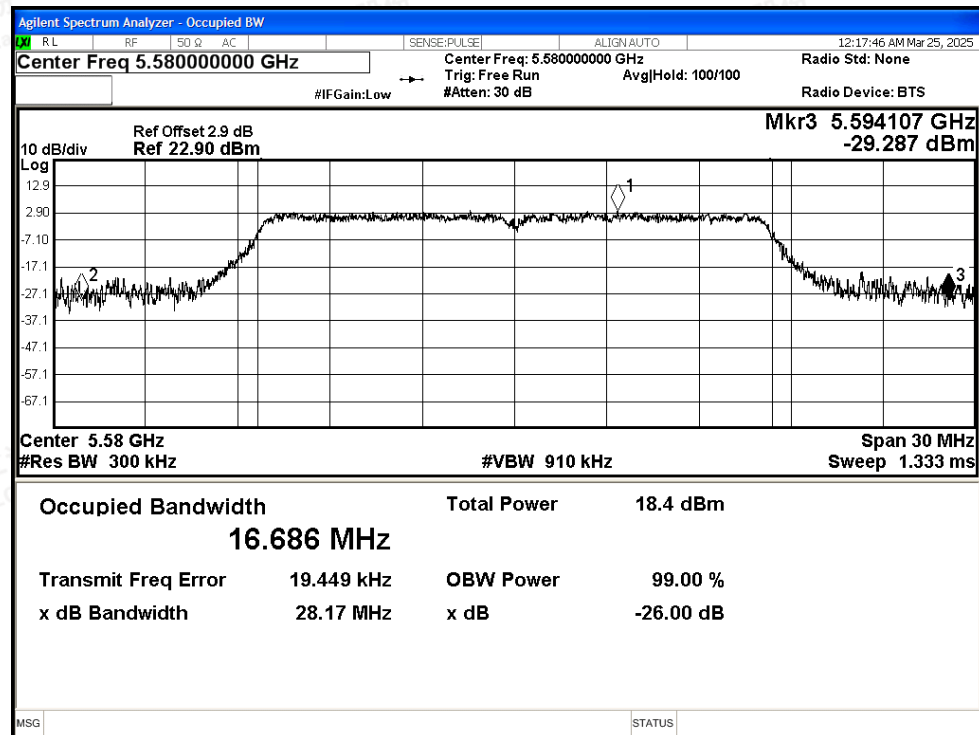


Test Graphs

-26dB Bandwidth NVNT a 5500MHz Ant



-26dB Bandwidth NVNT a 5580MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

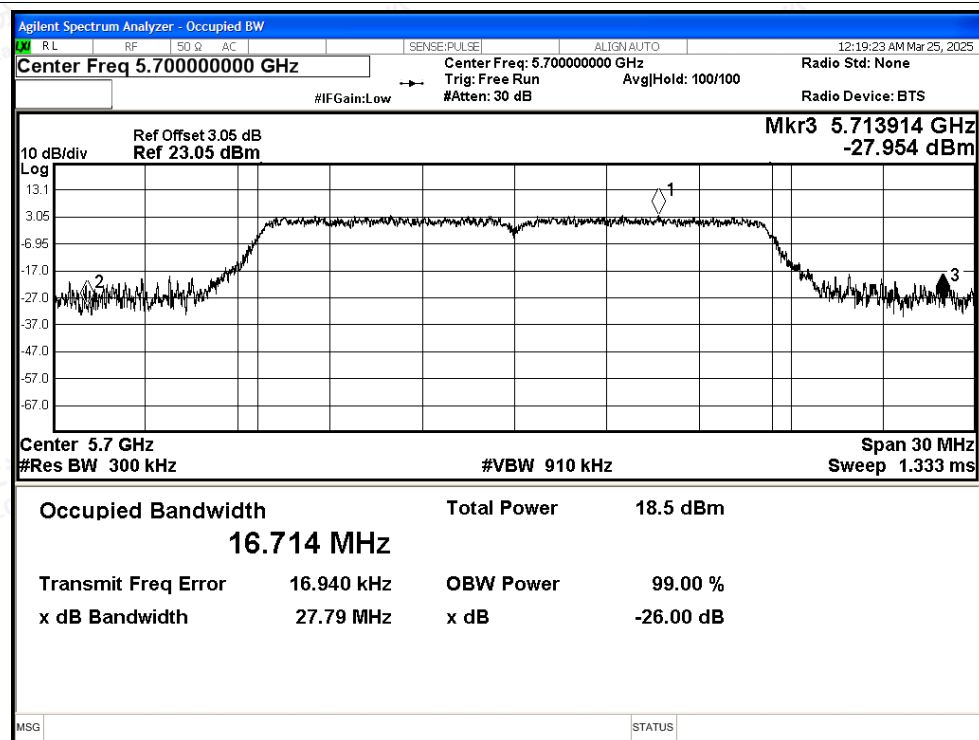
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

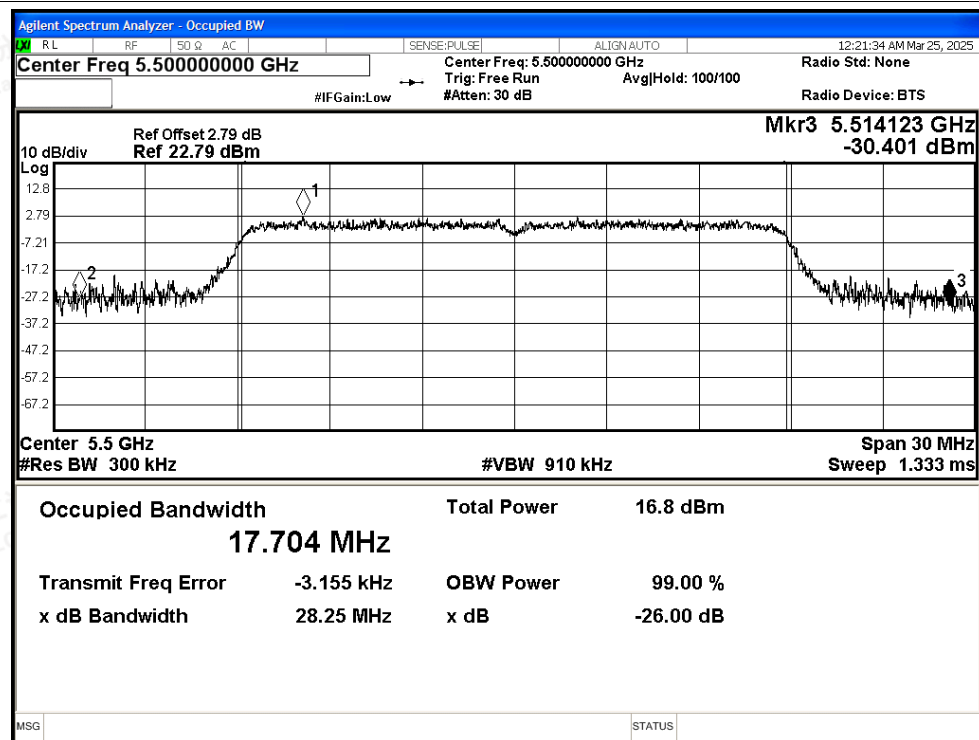
Scan code to check authenticity



-26dB Bandwidth NVNT a 5700MHz Ant



-26dB Bandwidth NVNT n20 5500MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

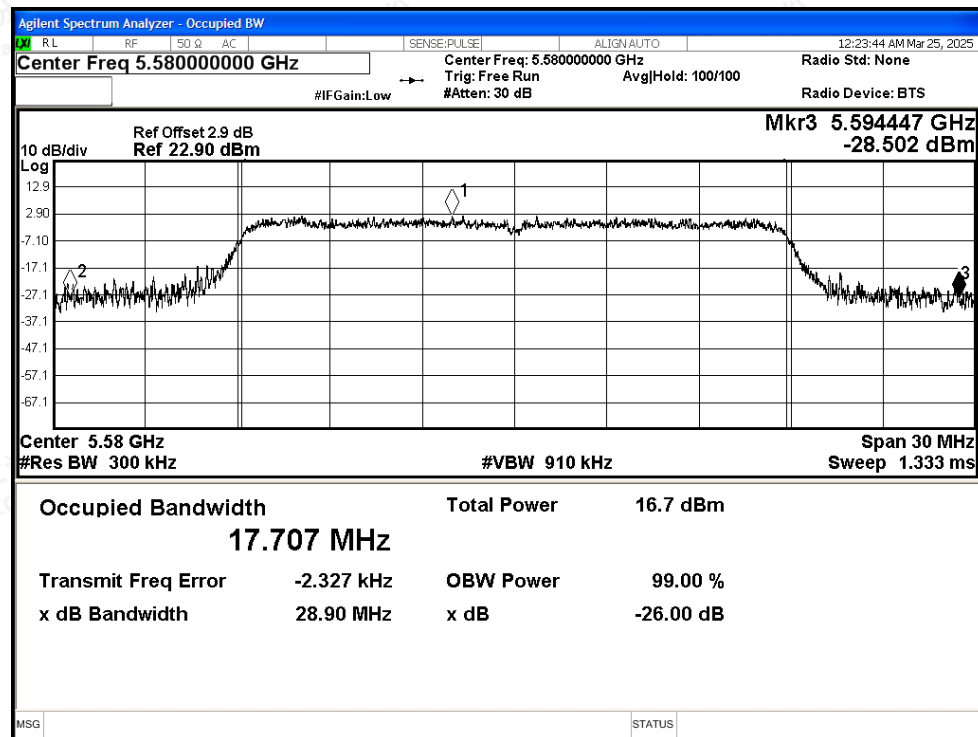
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

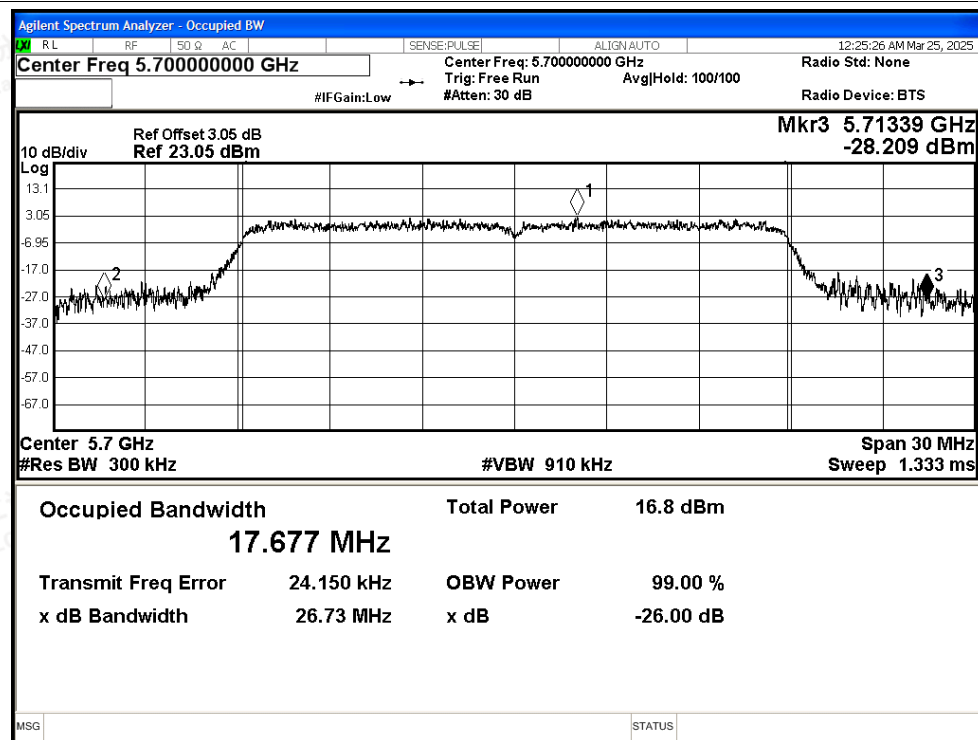
Scan code to check authenticity



-26dB Bandwidth NVNT n20 5580MHz Ant



-26dB Bandwidth NVNT n20 5700MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

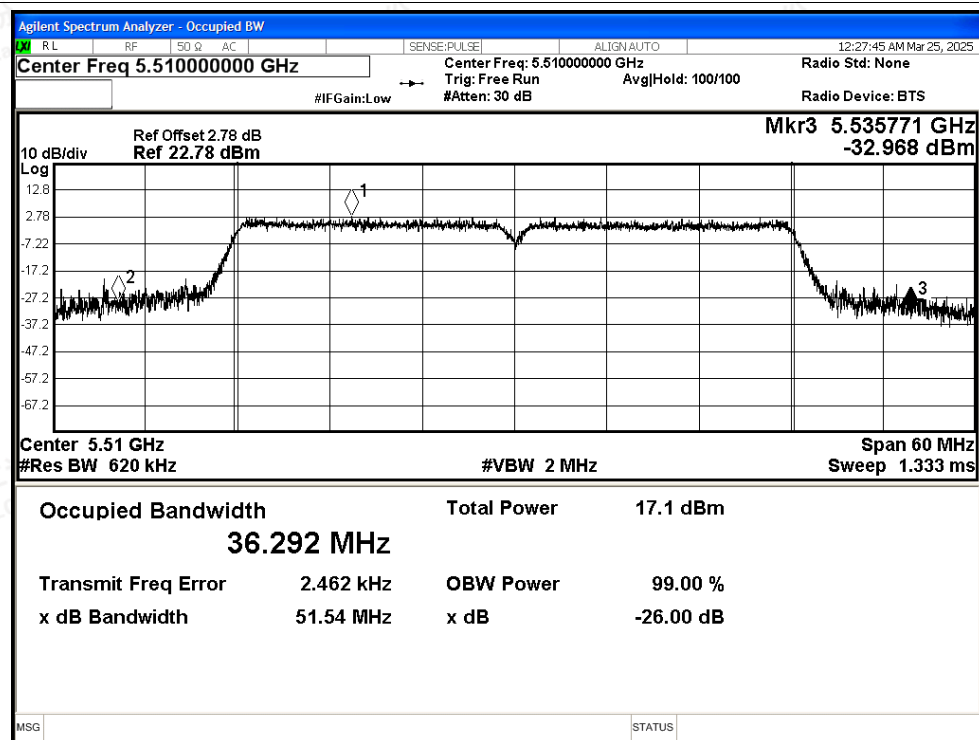
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

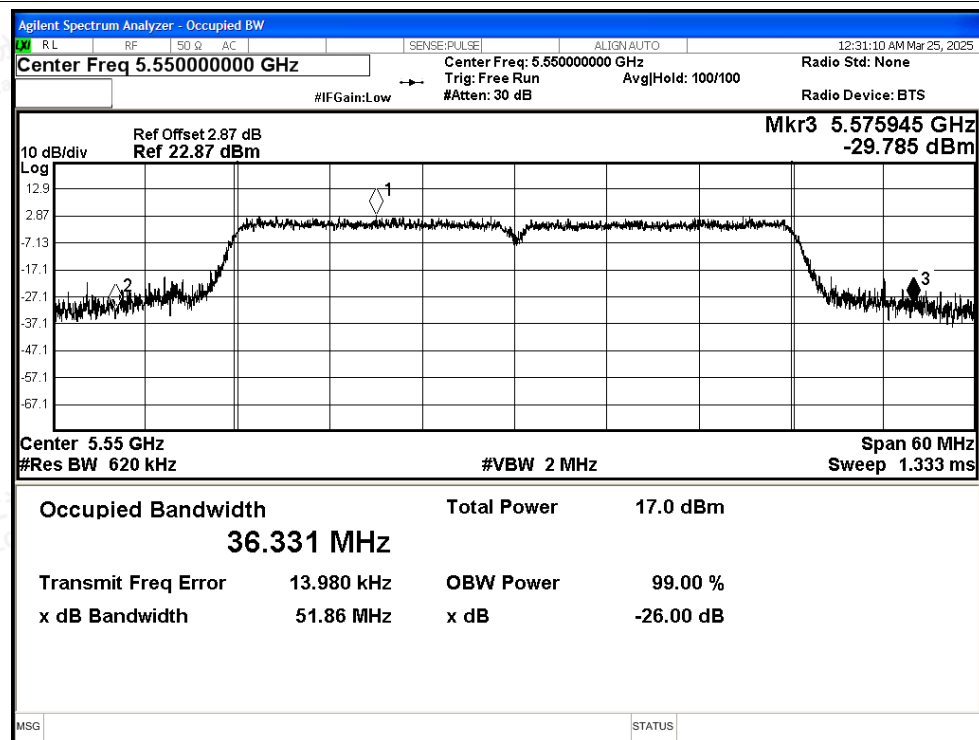
Scan code to check authenticity



-26dB Bandwidth NVNT n40 5510MHz Ant



-26dB Bandwidth NVNT n40 5550MHz Ant

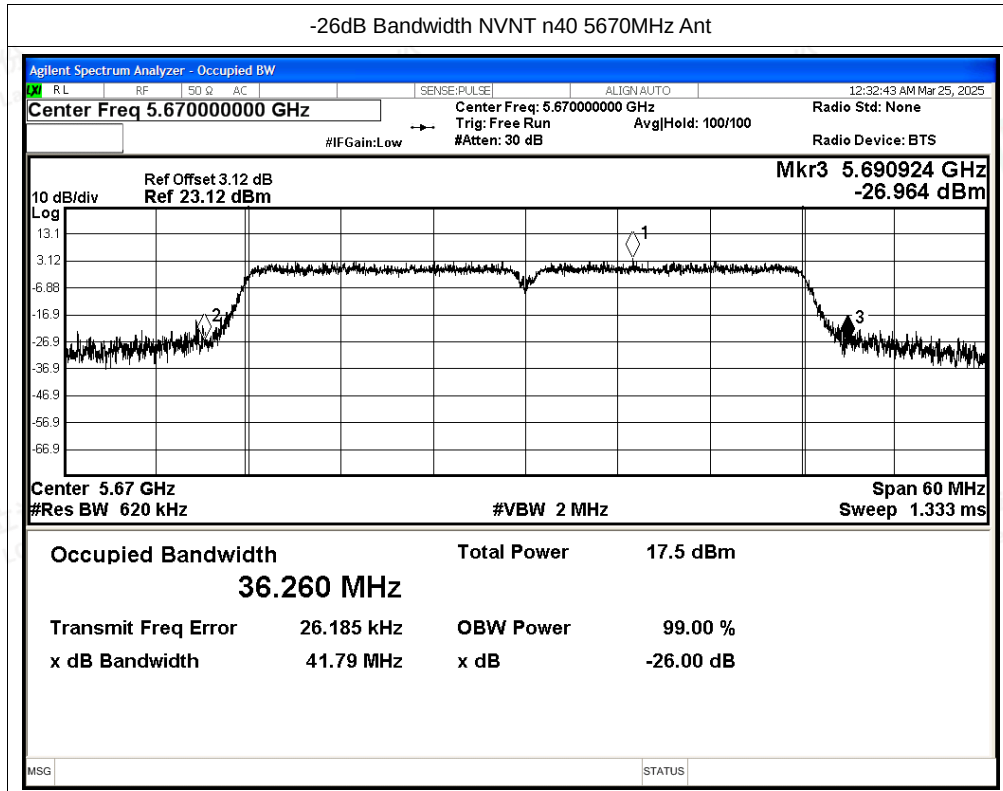


Shenzhen LCS Compliance Testing Laboratory Ltd.

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



F.2 Maximum Conducted Output Power

Condition	Mode	Frequency (MHz)	Antenna	Conducted Power (dBm)	Duty Factor (dB)	Total Power (dBm)	Limit (dBm)	Verdict
NVNT	a	5500	Ant	12.71	0.24	12.95	24	Pass
NVNT	a	5580	Ant	12.72	0.24	12.96	24	Pass
NVNT	a	5700	Ant	12.78	0.24	13.02	24	Pass
NVNT	n20	5500	Ant	11.26	0.12	11.38	24	Pass
NVNT	n20	5580	Ant	11.28	0.12	11.4	24	Pass
NVNT	n20	5700	Ant	11.39	0.12	11.51	24	Pass
NVNT	n40	5510	Ant	10.82	0.23	11.05	24	Pass
NVNT	n40	5550	Ant	10.71	0.24	10.95	24	Pass
NVNT	n40	5670	Ant	11.22	0.24	11.46	24	Pass





F.3 Maximum Power Spectral Density Level

Condition	Mode	Frequency (MHz)	Antenna	Conducted PSD (dBm/MHz)	Duty Factor (dB)	Total PSD (dBm/MHz)	Limit (dBm/MHz)	Verdict
NVNT	a	5500	Ant	2.19	0.24	2.43	11	Pass
NVNT	a	5580	Ant	1.97	0.24	2.21	11	Pass
NVNT	a	5700	Ant	2.05	0.24	2.29	11	Pass
NVNT	n20	5500	Ant	0.39	0.12	0.51	11	Pass
NVNT	n20	5580	Ant	0.45	0.12	0.57	11	Pass
NVNT	n20	5700	Ant	0.57	0.12	0.69	11	Pass
NVNT	n40	5510	Ant	-2.52	0.23	-2.29	11	Pass
NVNT	n40	5550	Ant	-3.16	0.24	-2.92	11	Pass
NVNT	n40	5670	Ant	-2.56	0.24	-2.32	11	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

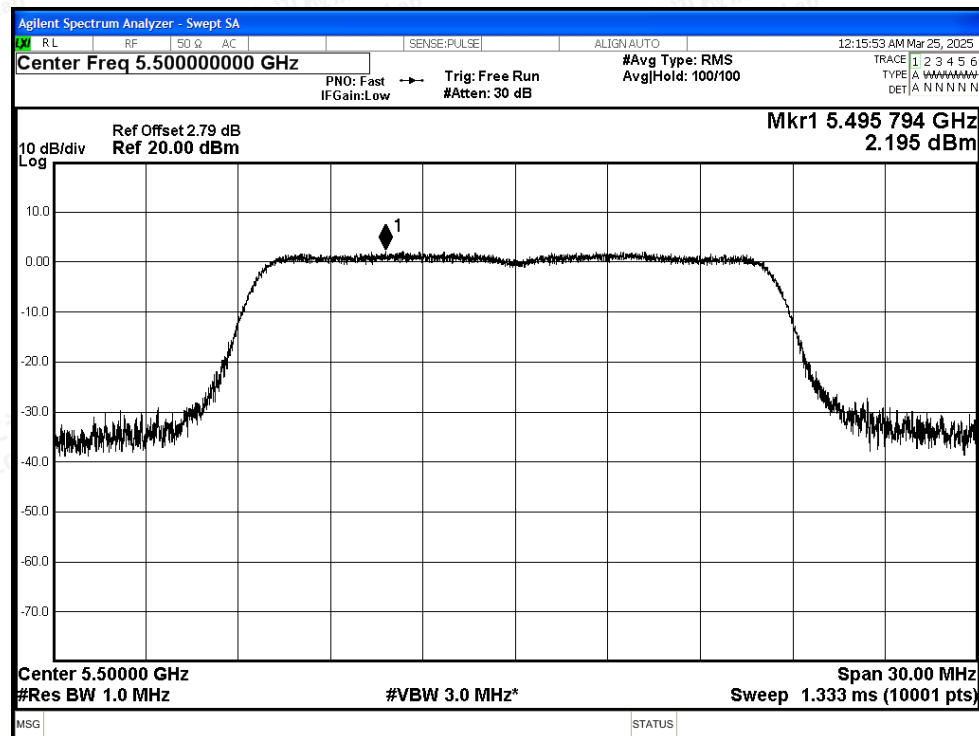
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

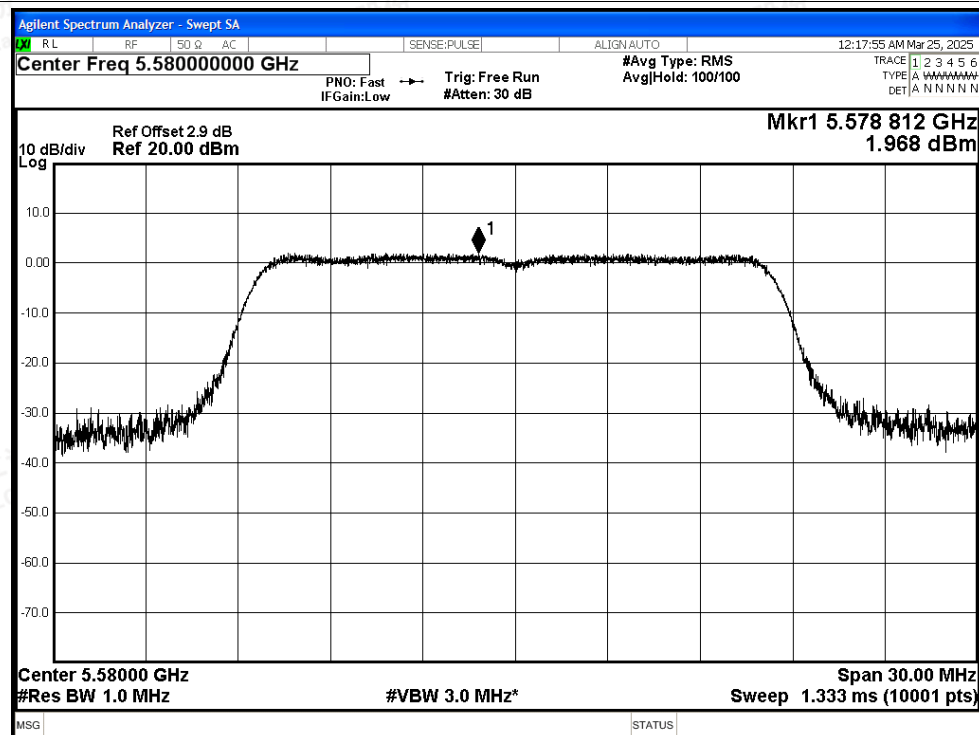


Test Graphs

PSD NVNT a 5500MHz Ant



PSD NVNT a 5580MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

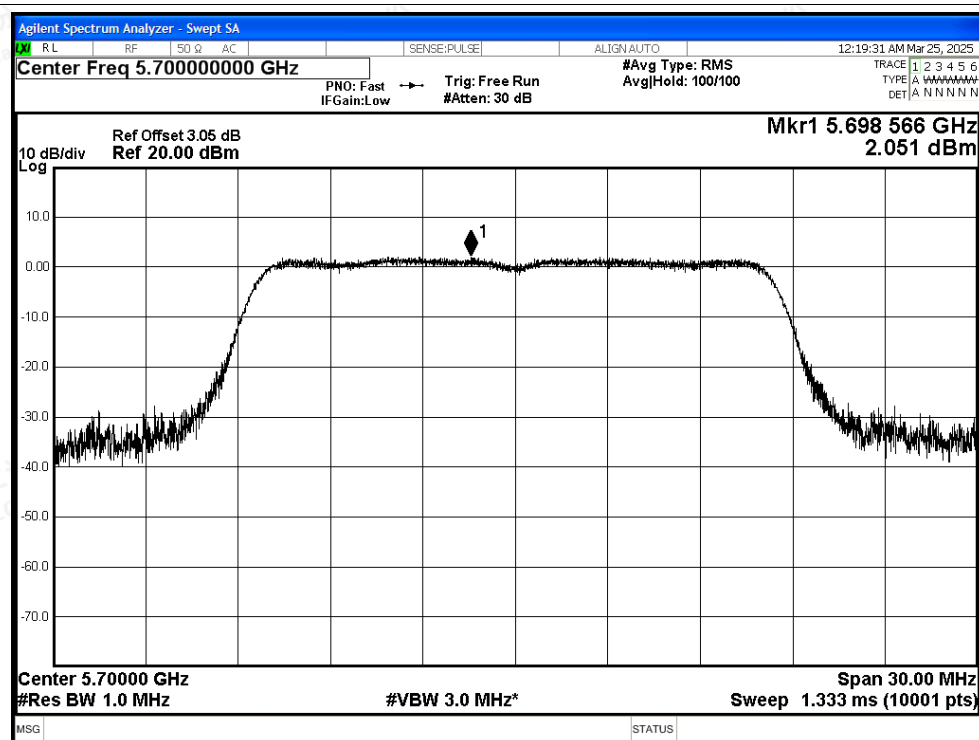
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

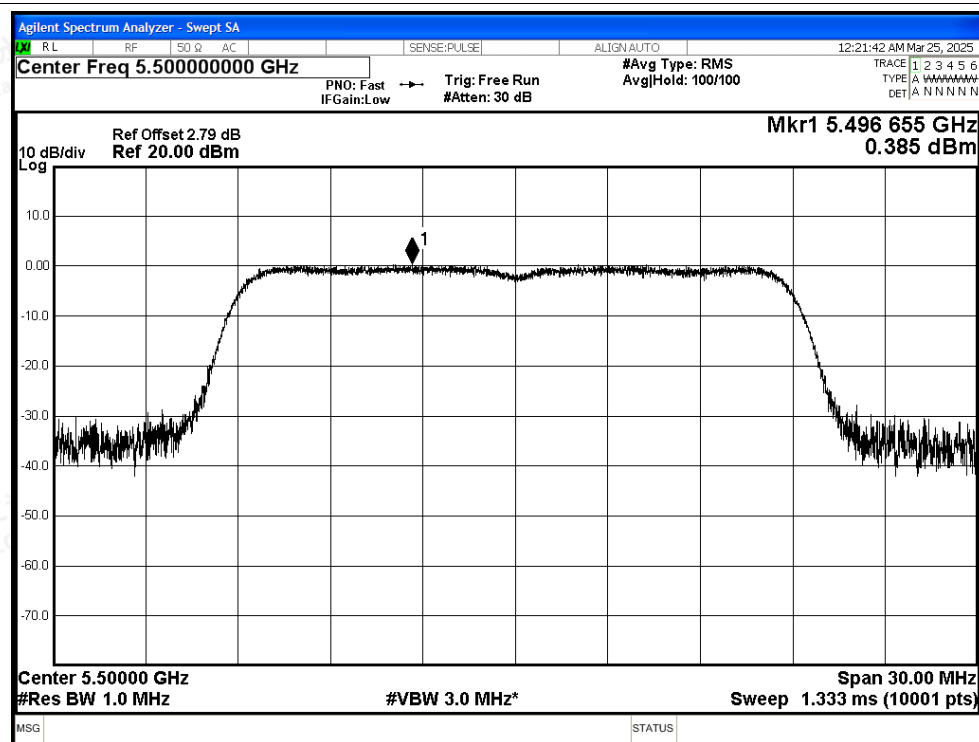
Scan code to check authenticity



PSD NVNT a 5700MHz Ant



PSD NVNT n20 5500MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

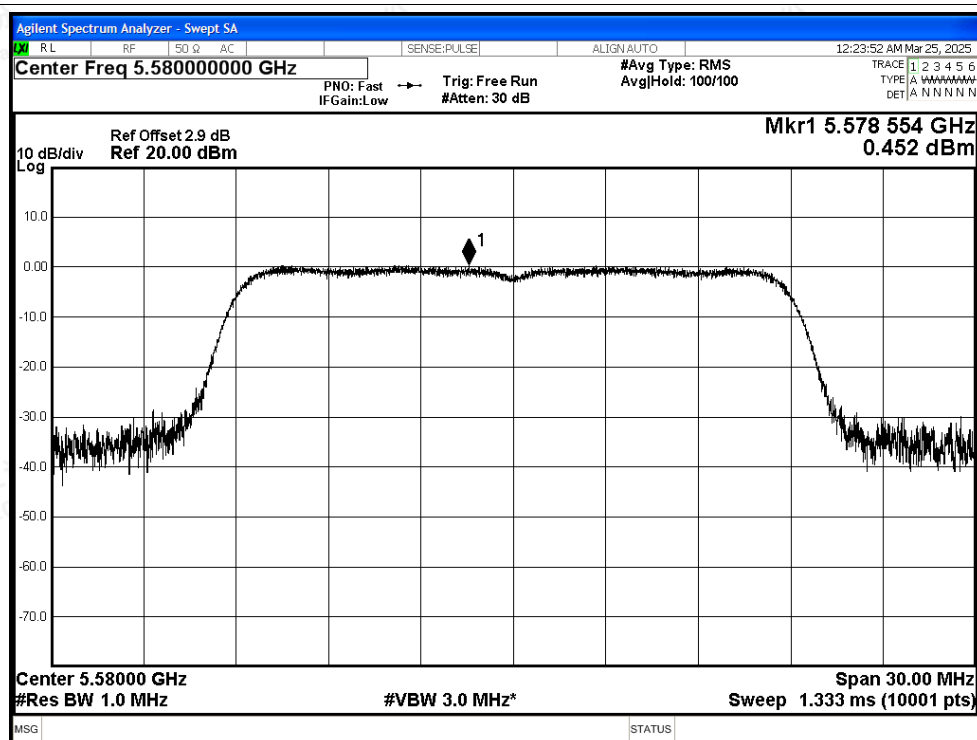
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

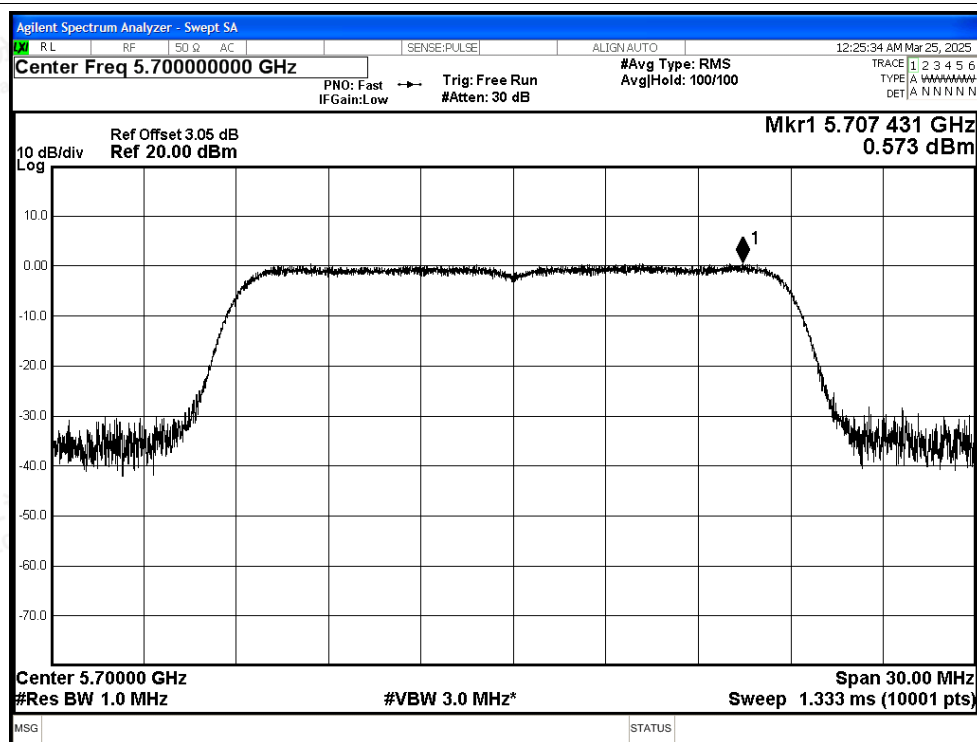
Scan code to check authenticity



PSD NVNT n20 5580MHz Ant



PSD NVNT n20 5700MHz Ant

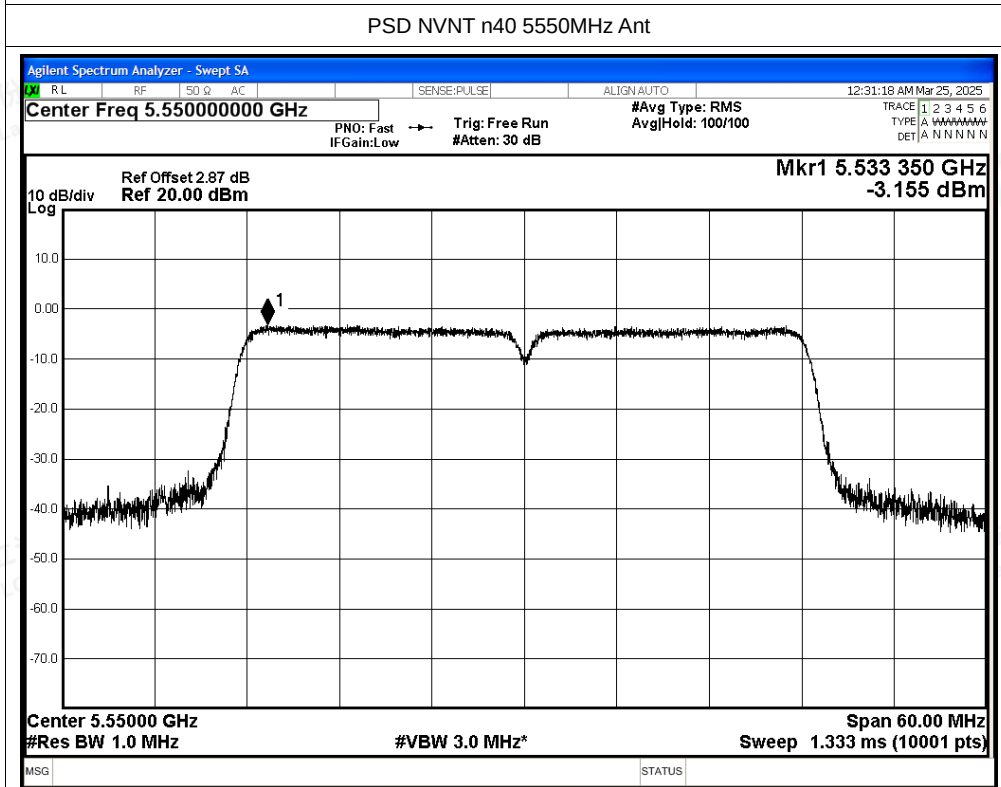
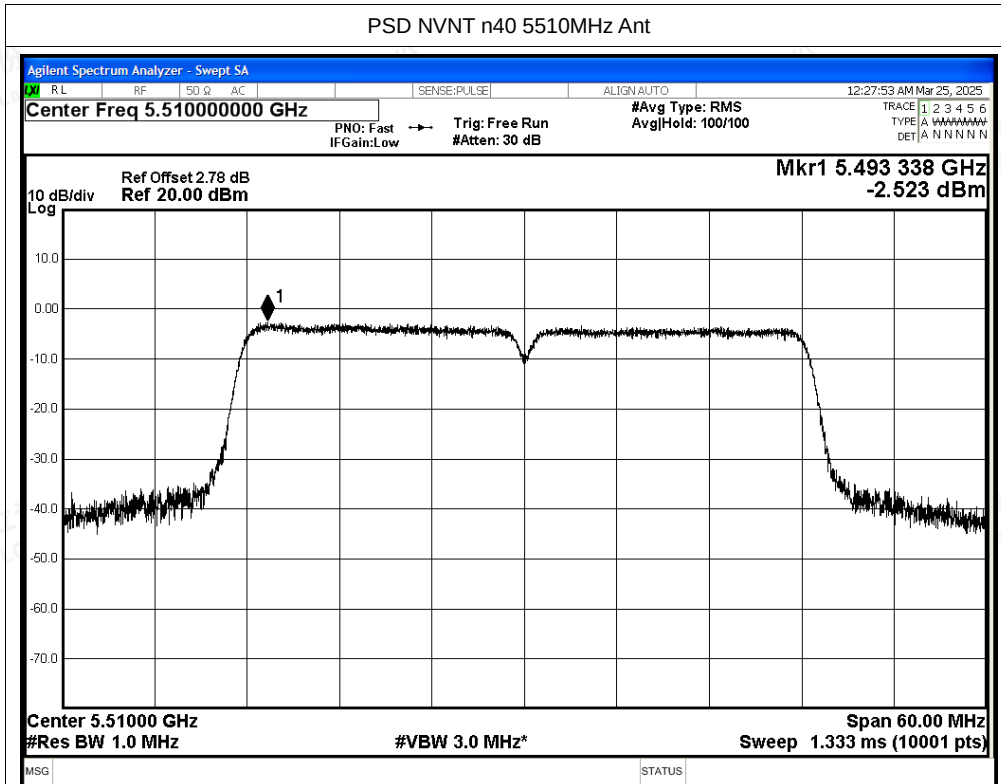


Shenzhen LCS Compliance Testing Laboratory Ltd.

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

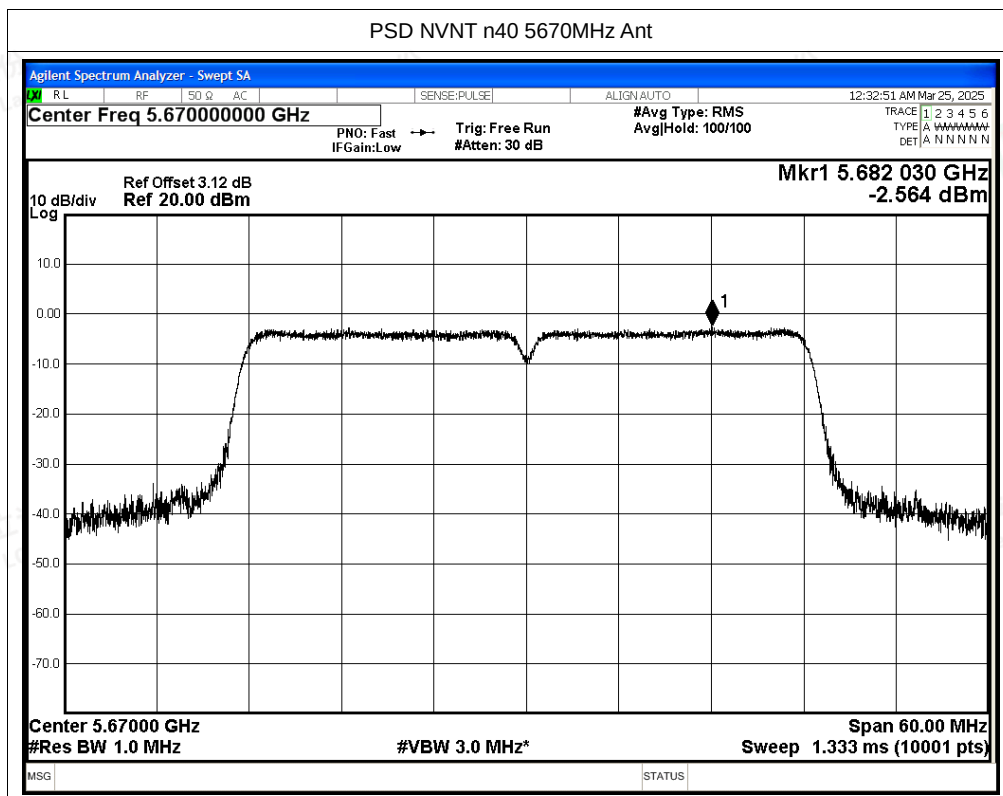


Shenzhen LCS Compliance Testing Laboratory Ltd.

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



F.4 Restrict Band

Condition	Mode	Frequency (MHz)	Antenna	Spur Freq (MHz)	Power (dBm)	Gain (dBi)	Duty Factor (dB)	E (dBuV/m)	Detector	Limit (dBuV/m)	Verdict
NVNT	a	5500	Ant	5460	-49.57	2	-	47.66	Peak	68.2	Pass
NVNT	a	5500	Ant	5460	-58.4	2	0.24	39.07	Average	54	Pass
NVNT	a	5500	Ant	5468.2	-46.01	2	-	51.22	Peak	68.2	Pass
NVNT	a	5500	Ant	5468.6	-56.86	2	0.24	40.61	Average	54	Pass
NVNT	a	5500	Ant	5470	-49.23	2	-	48	Peak	68.2	Pass
NVNT	a	5500	Ant	5470	-57.42	2	0.24	40.05	Average	54	Pass
NVNT	a	5700	Ant	5725	-41.72	2	-	55.51	Peak	68.2	Pass
NVNT	a	5700	Ant	5725	-54.59	2	0.24	42.88	Average	54	Pass
NVNT	a	5700	Ant	5735	-49.15	2	-	48.08	Peak	68.2	Pass
NVNT	a	5700	Ant	5735	-57.52	2	0.24	39.95	Average	54	Pass
NVNT	n20	5500	Ant	5460	-50.24	2	-	46.99	Peak	68.2	Pass
NVNT	n20	5500	Ant	5460	-58.51	2	0.12	38.84	Average	54	Pass
NVNT	n20	5500	Ant	5467.4	-43.34	2	-	53.89	Peak	68.2	Pass
NVNT	n20	5500	Ant	5470	-56.04	2	0.12	41.31	Average	54	Pass
NVNT	n20	5500	Ant	5470	-46.22	2	-	51.01	Peak	68.2	Pass
NVNT	n20	5700	Ant	5725	-42.98	2	-	54.25	Peak	68.2	Pass
NVNT	n20	5700	Ant	5725	-53.55	2	0.12	43.8	Average	54	Pass
NVNT	n20	5700	Ant	5726.4	-38.24	2	-	58.99	Peak	68.2	Pass
NVNT	n20	5700	Ant	5735	-49.45	2	-	47.78	Peak	68.2	Pass
NVNT	n20	5700	Ant	5735	-57.76	2	0.12	39.59	Average	54	Pass
NVNT	n40	5510	Ant	5460	-50.86	2	-	46.37	Peak	68.2	Pass
NVNT	n40	5510	Ant	5460	-58.15	2	0.23	39.31	Average	54	Pass
NVNT	n40	5510	Ant	5469.4	-41.25	2	-	55.98	Peak	68.2	Pass
NVNT	n40	5510	Ant	5469.2	-55.34	2	0.23	42.12	Average	54	Pass
NVNT	n40	5510	Ant	5470	-46.21	2	-	51.02	Peak	68.2	Pass
NVNT	n40	5510	Ant	5470	-55.78	2	0.23	41.68	Average	54	Pass
NVNT	n40	5670	Ant	5725	-49.02	2	-	48.21	Peak	68.2	Pass
NVNT	n40	5670	Ant	5725	-58.1	2	0.24	39.37	Average	54	Pass
NVNT	n40	5670	Ant	5733.8	-48.48	2	-	48.75	Peak	68.2	Pass
NVNT	n40	5670	Ant	5733.4	-57.38	2	0.24	40.09	Average	54	Pass
NVNT	n40	5670	Ant	5735	-49.09	2	-	48.14	Peak	68.2	Pass
NVNT	n40	5670	Ant	5735	-58.13	2	0.24	39.34	Average	54	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

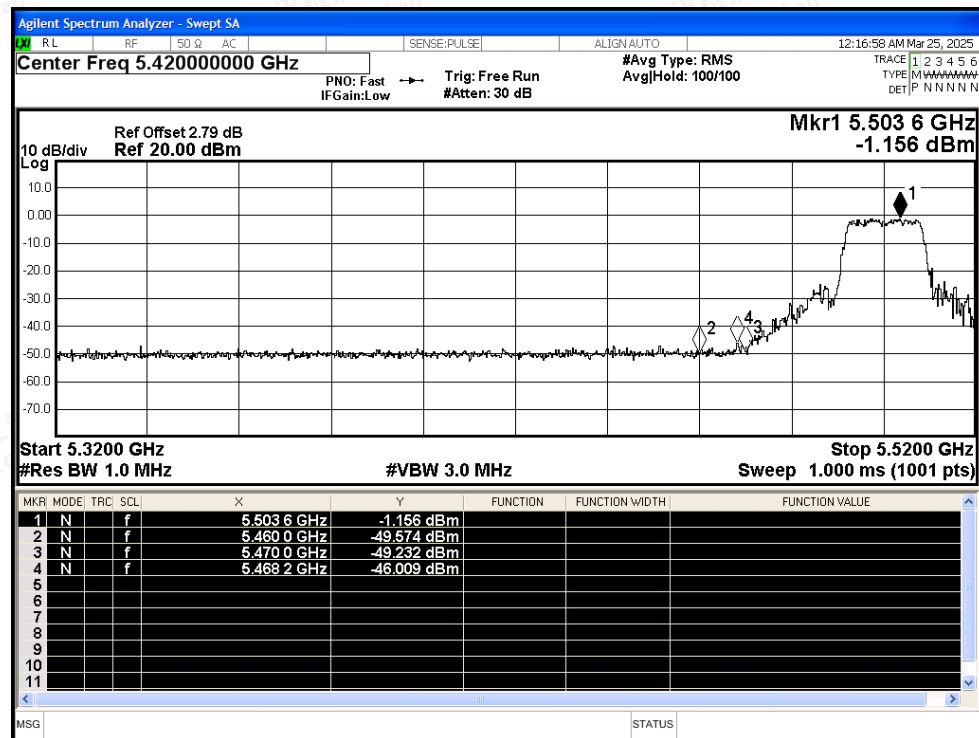
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

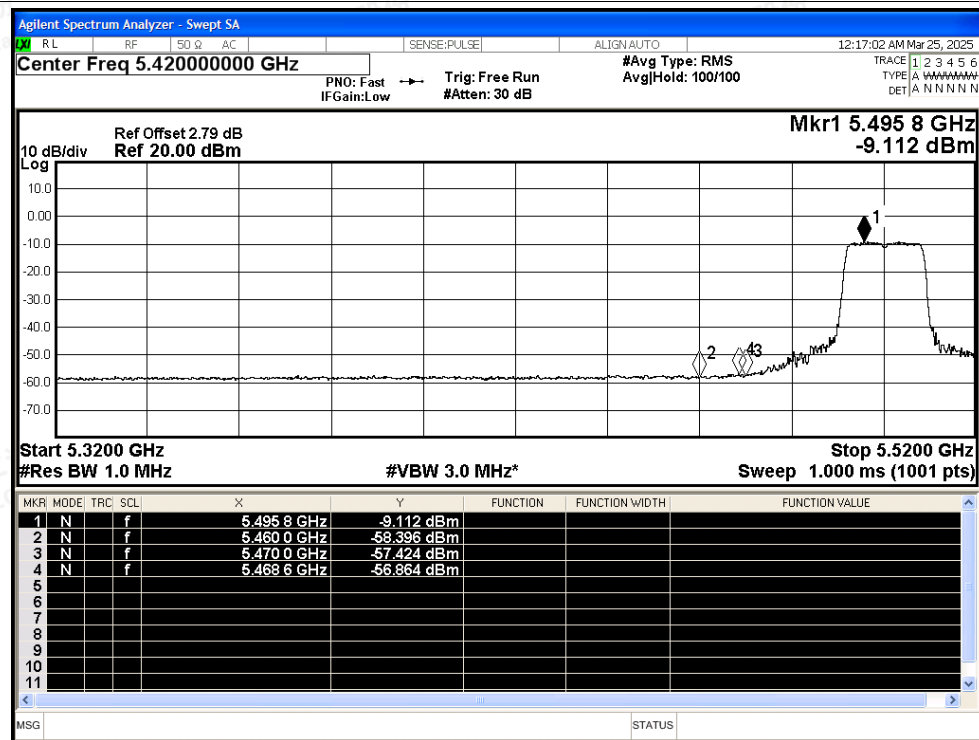


Test Graphs

Restrict Band NVNT a 5500MHz Ant Peak



Restrict Band NVNT a 5500MHz Ant Average



Shenzhen LCS Compliance Testing Laboratory Ltd.

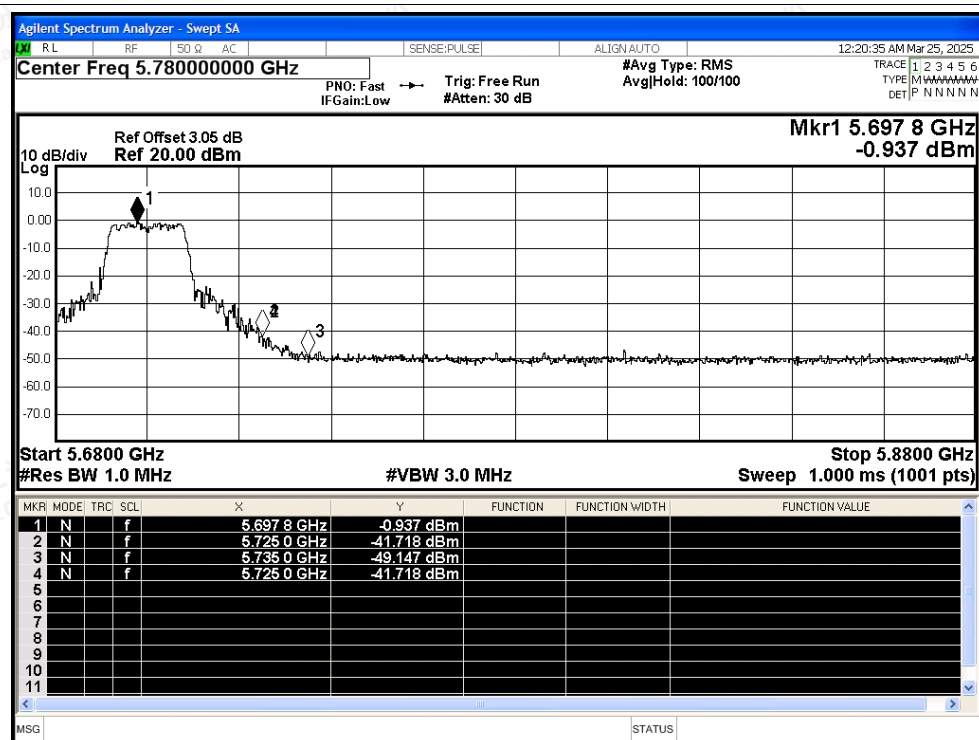
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

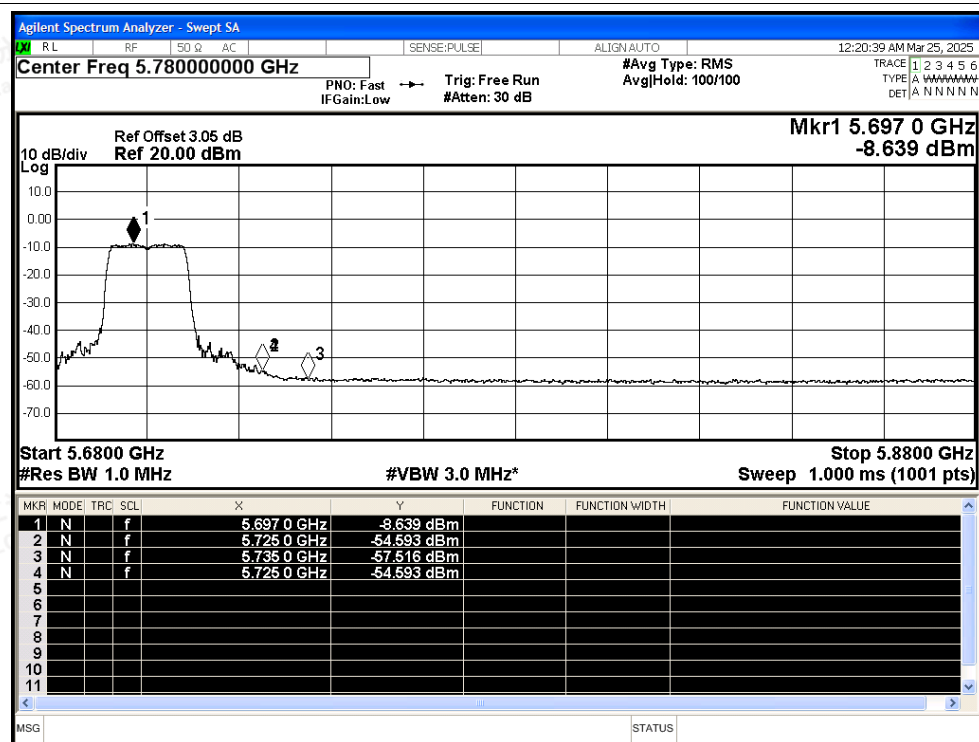
Scan code to check authenticity



Restrict Band NVNT a 5700MHz Ant Peak



Restrict Band NVNT a 5700MHz Ant Average



Shenzhen LCS Compliance Testing Laboratory Ltd.

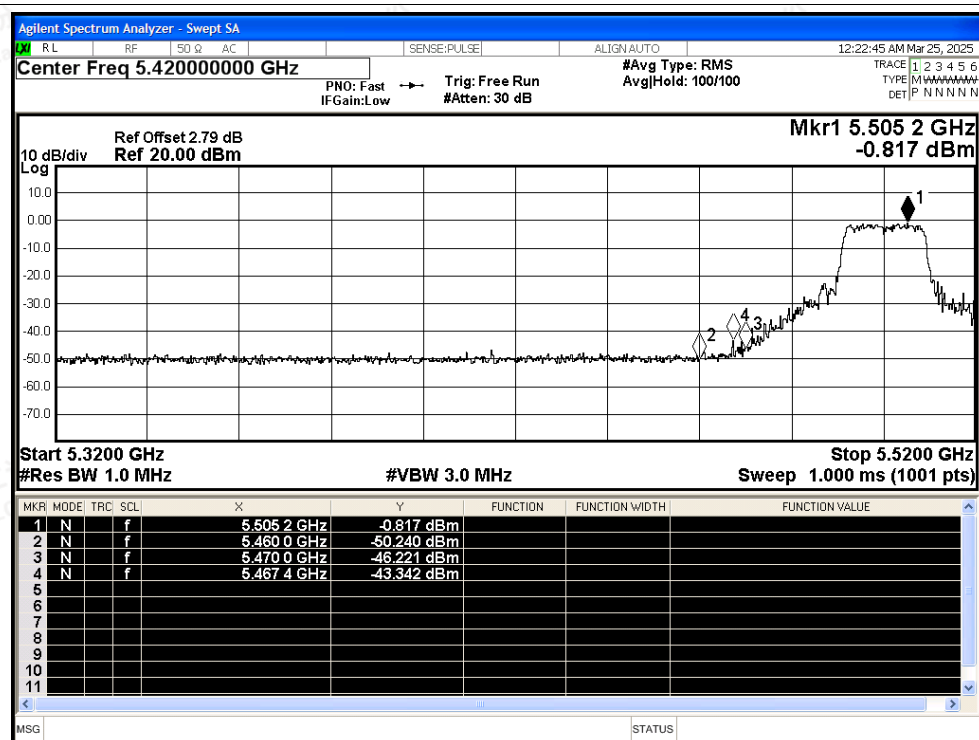
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

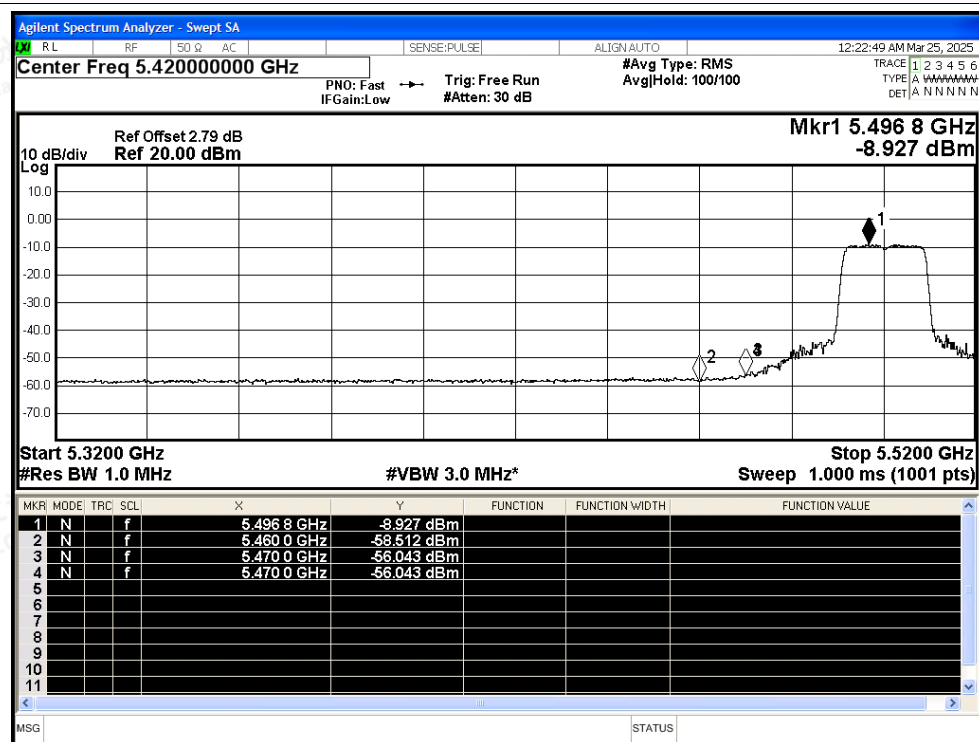
Scan code to check authenticity



Restrict Band NVNT n20 5500MHz Ant Peak



Restrict Band NVNT n20 5500MHz Ant Average



Shenzhen LCS Compliance Testing Laboratory Ltd.

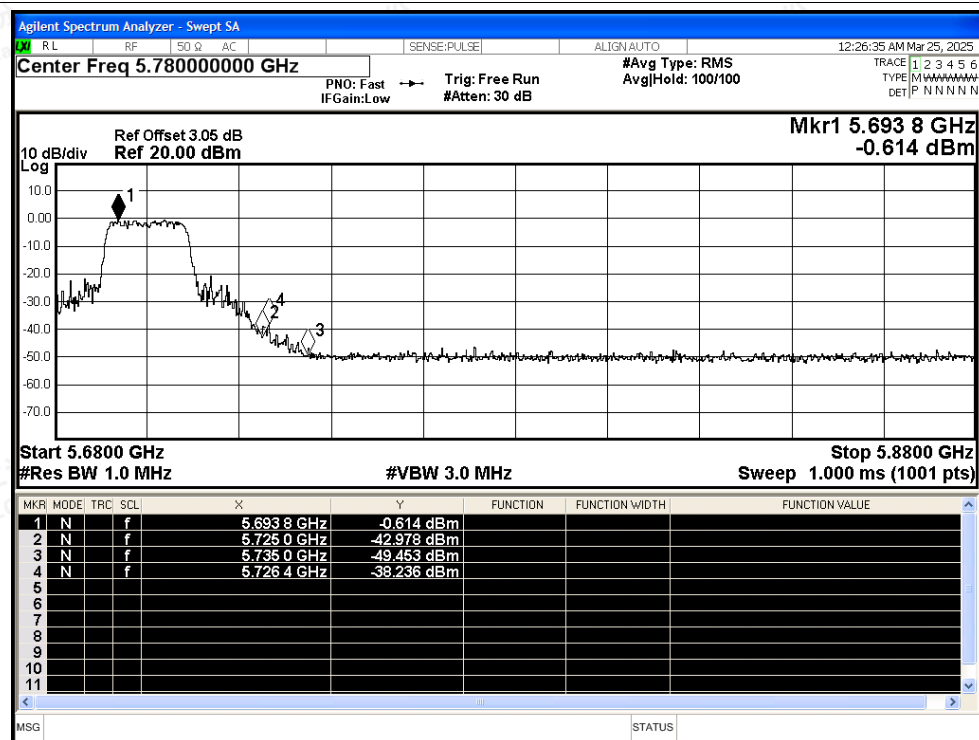
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

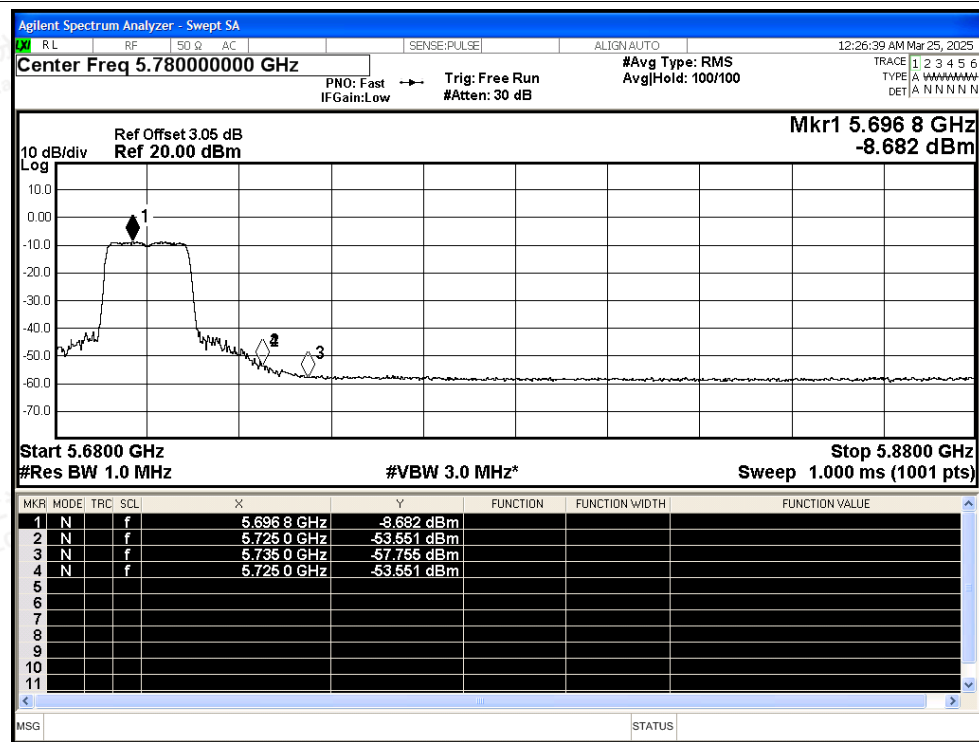
Scan code to check authenticity



Restrict Band NVNT n20 5700MHz Ant Peak



Restrict Band NVNT n20 5700MHz Ant Average

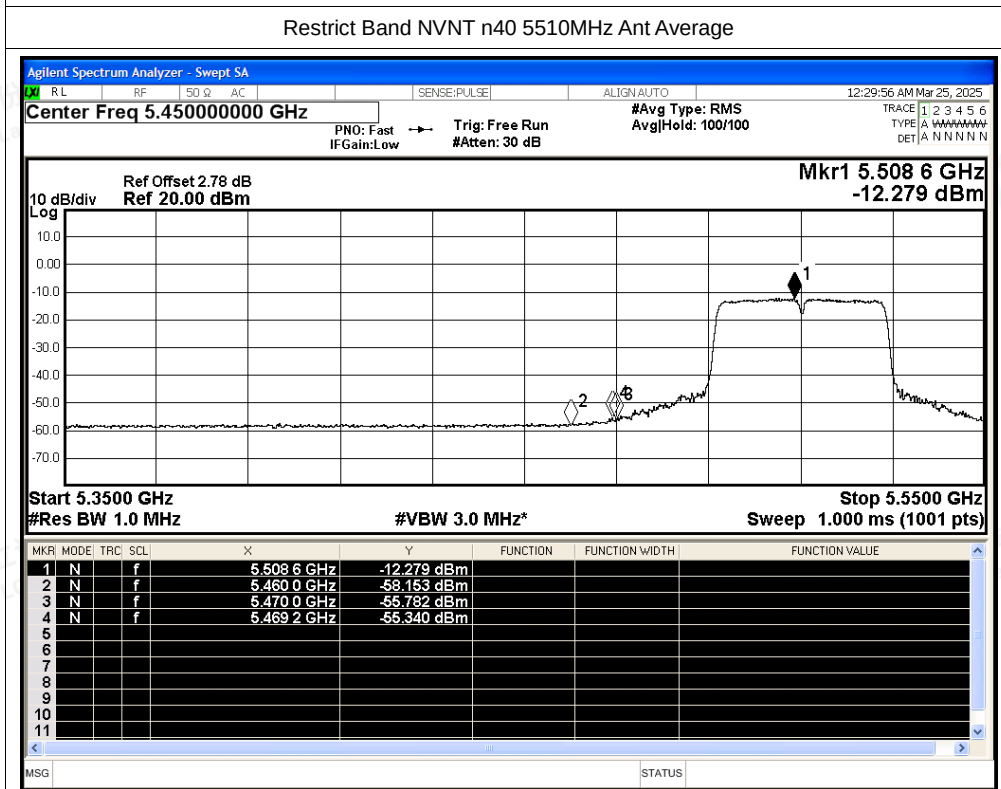
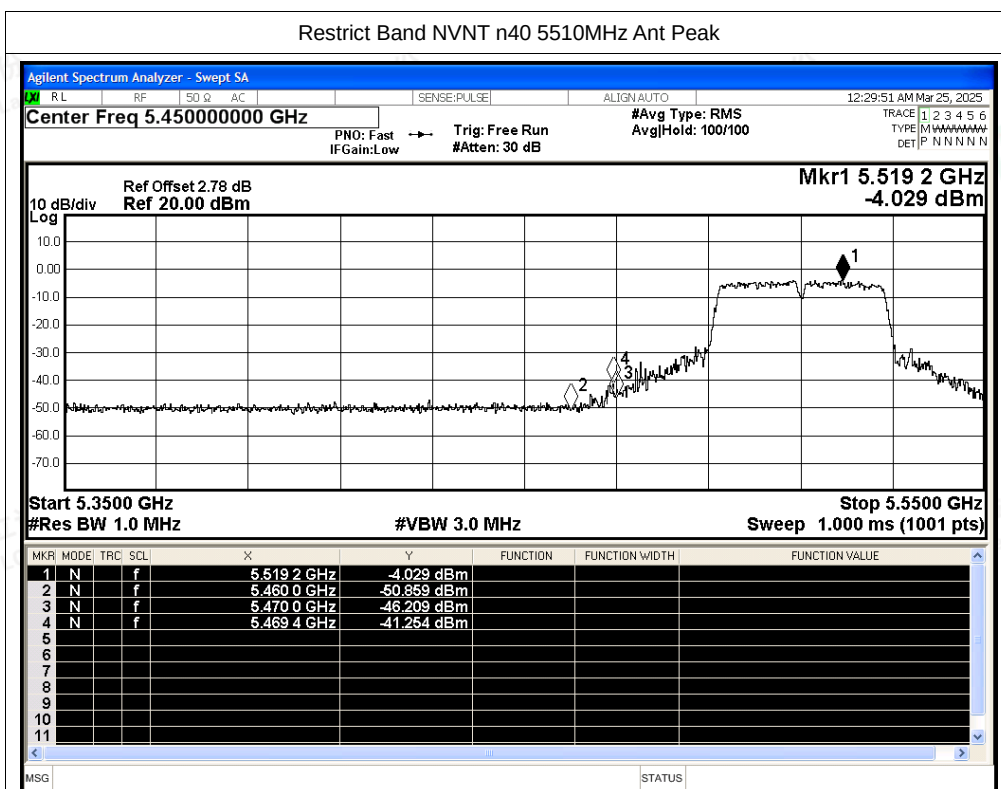


Shenzhen LCS Compliance Testing Laboratory Ltd.

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.

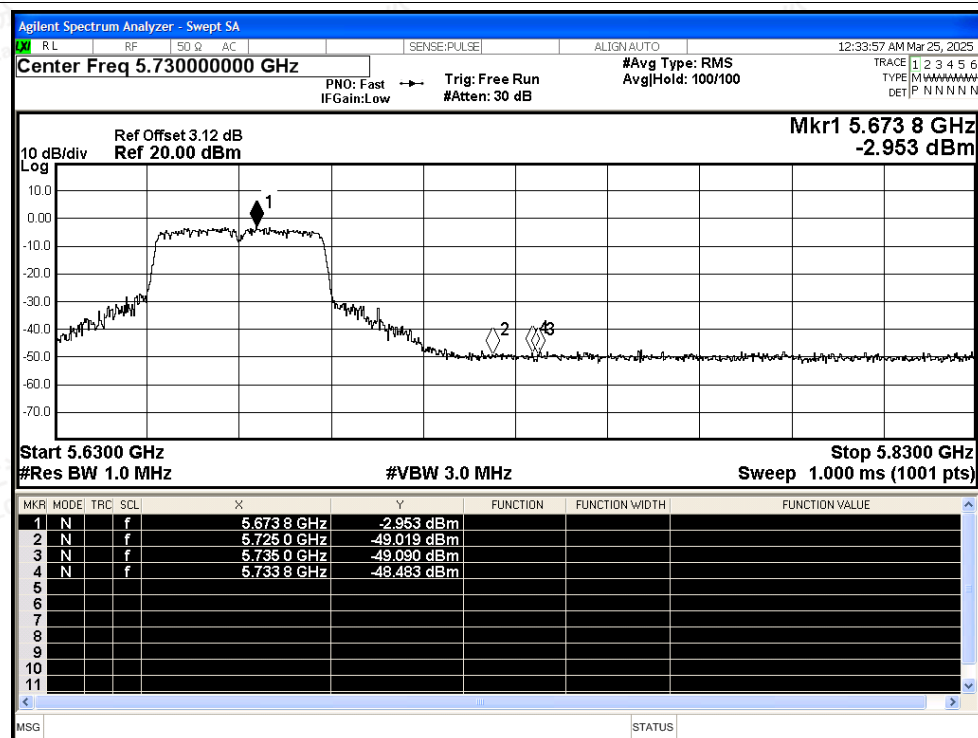
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

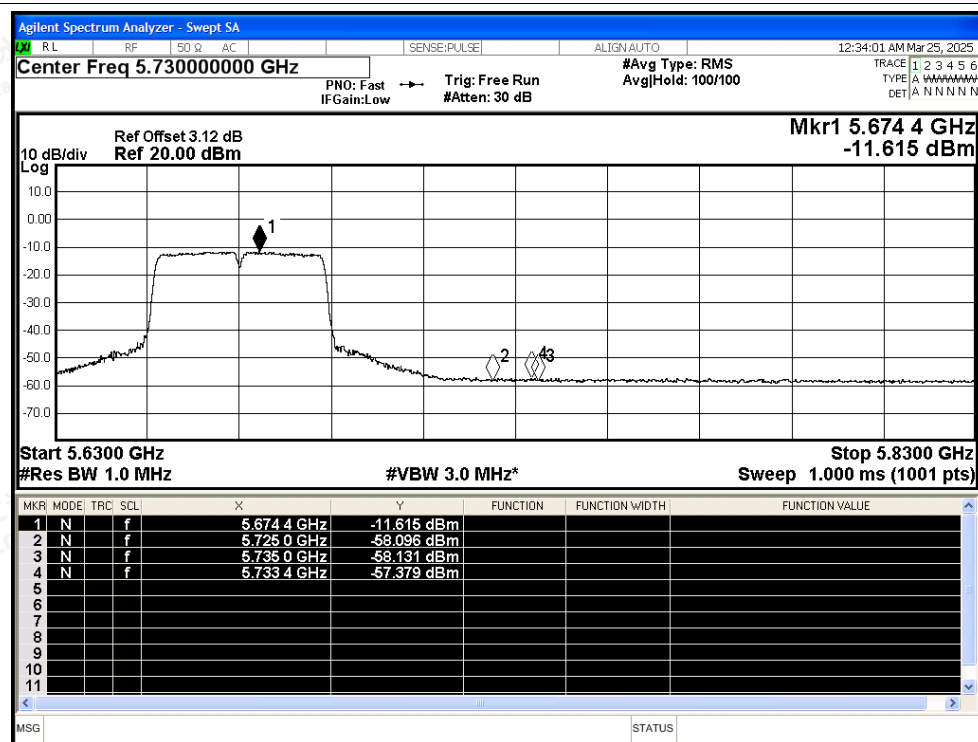
Scan code to check authenticity



Restrict Band NVNT n40 5670MHz Ant Peak



Restrict Band NVNT n40 5670MHz Ant Average



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



F.5 Frequency Stability

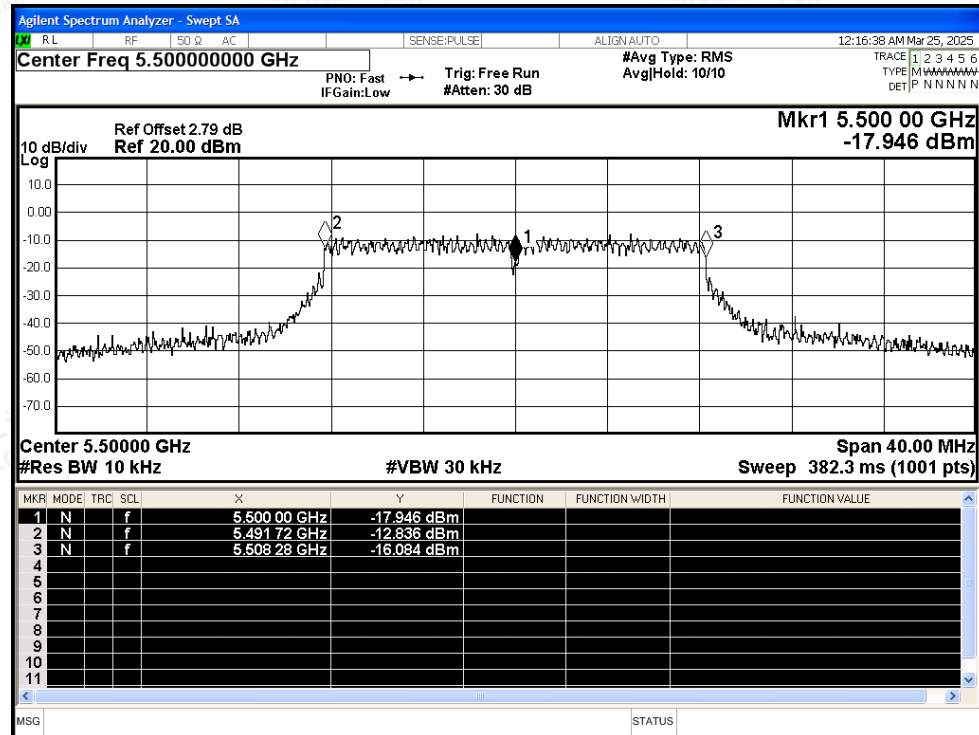
Condition	Mode	Frequency (MHz)	Antenna	Measured Frequency (MHz)	Frequency Error (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
NVNT	a	5500	Ant	5500	0	0	25	Pass
NVNT	a	5580	Ant	5579.98	-20000	-3.58	25	Pass
NVNT	a	5700	Ant	5699.98	-20000	-3.51	25	Pass
NVNT	n20	5500	Ant	5499.98	-20000	-3.64	25	Pass
NVNT	n20	5580	Ant	5579.96	-40000	-7.17	25	Pass
NVNT	n20	5700	Ant	5699.98	-20000	-3.51	25	Pass
NVNT	n40	5510	Ant	5509.96	-40000	-7.26	25	Pass
NVNT	n40	5550	Ant	5550	0	0	25	Pass
NVNT	n40	5670	Ant	5670	0	0	25	Pass



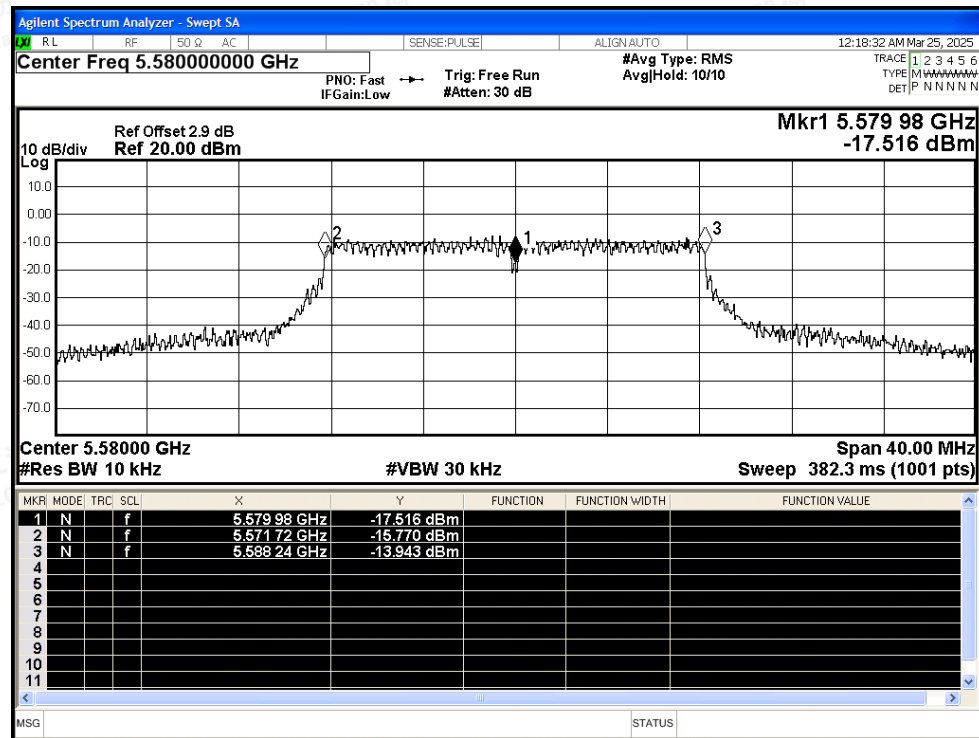


Test Graphs

Freq. Stability NVNT a 5500MHz Ant



Freq. Stability NVNT a 5580MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

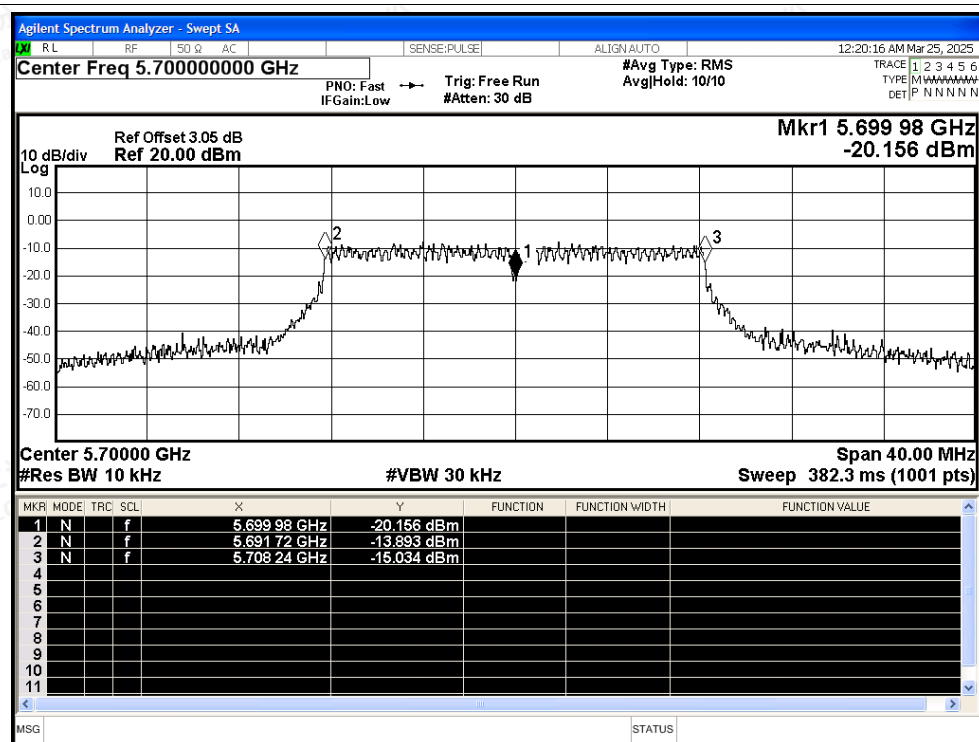
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

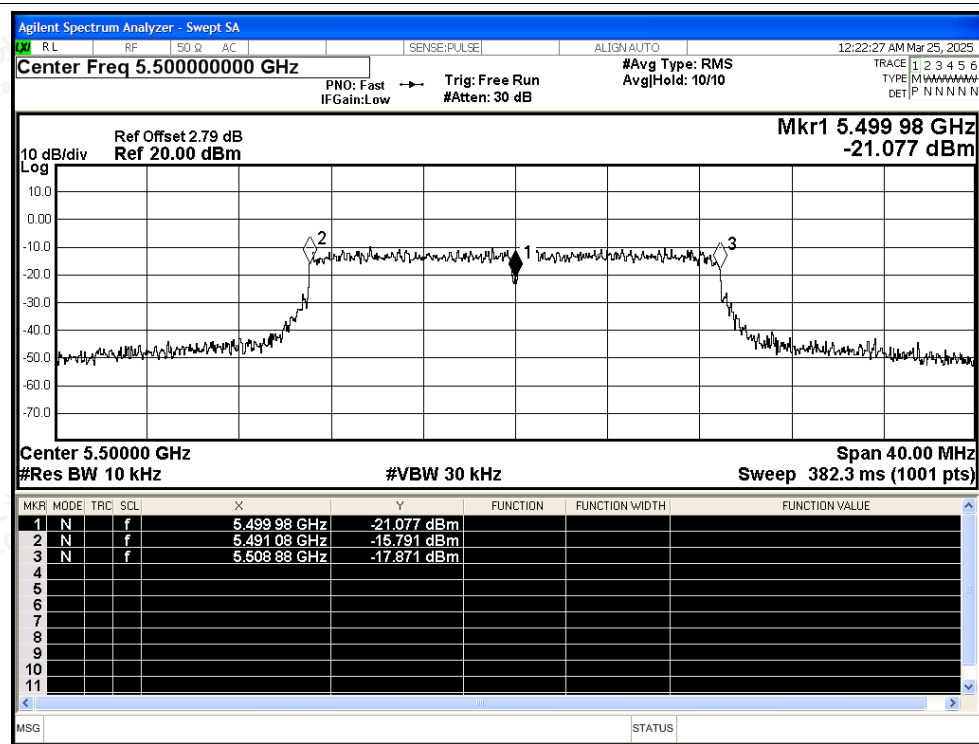
Scan code to check authenticity



Freq. Stability NVNT a 5700MHz Ant



Freq. Stability NVNT n20 5500MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

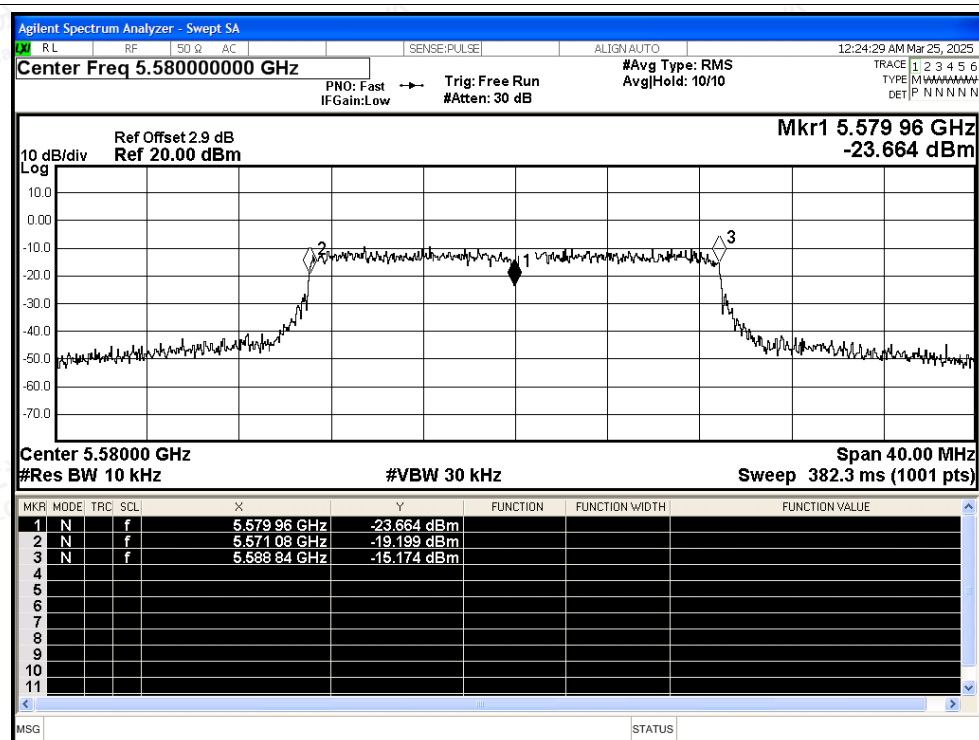
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

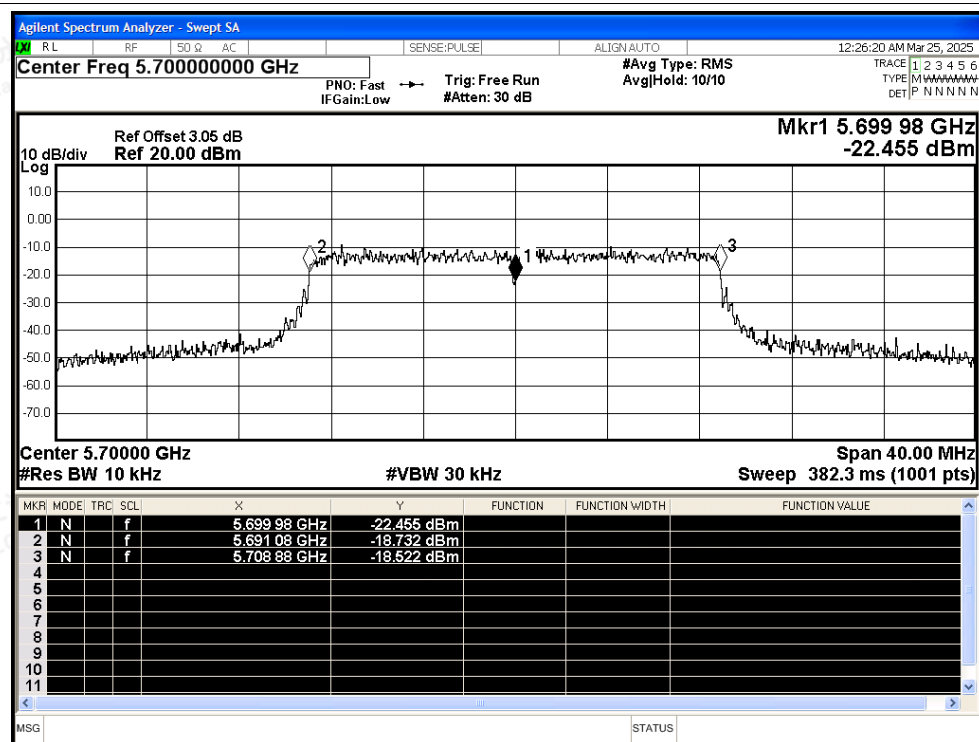
Scan code to check authenticity



Freq. Stability NVNT n20 5580MHz Ant



Freq. Stability NVNT n20 5700MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

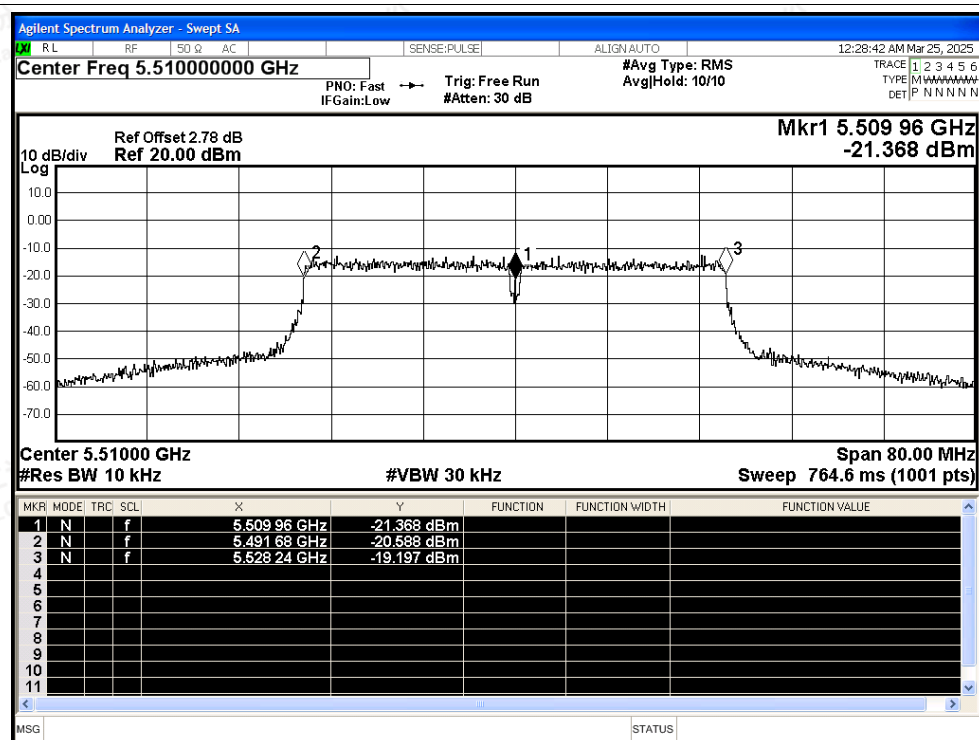
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

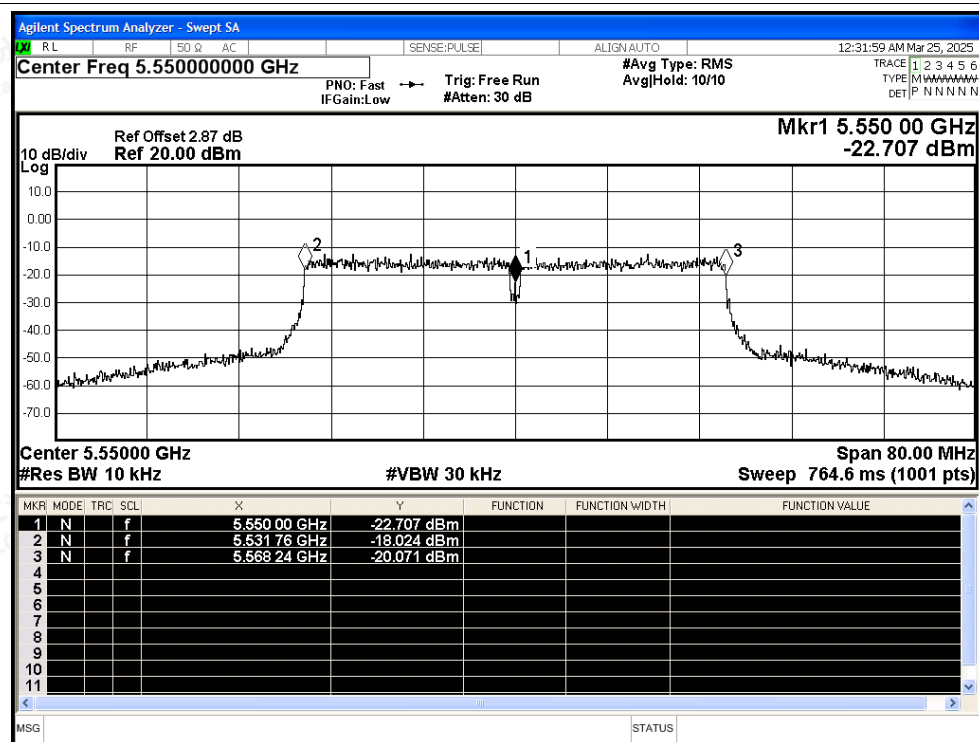
Scan code to check authenticity



Freq. Stability NVNT n40 5510MHz Ant



Freq. Stability NVNT n40 5550MHz Ant

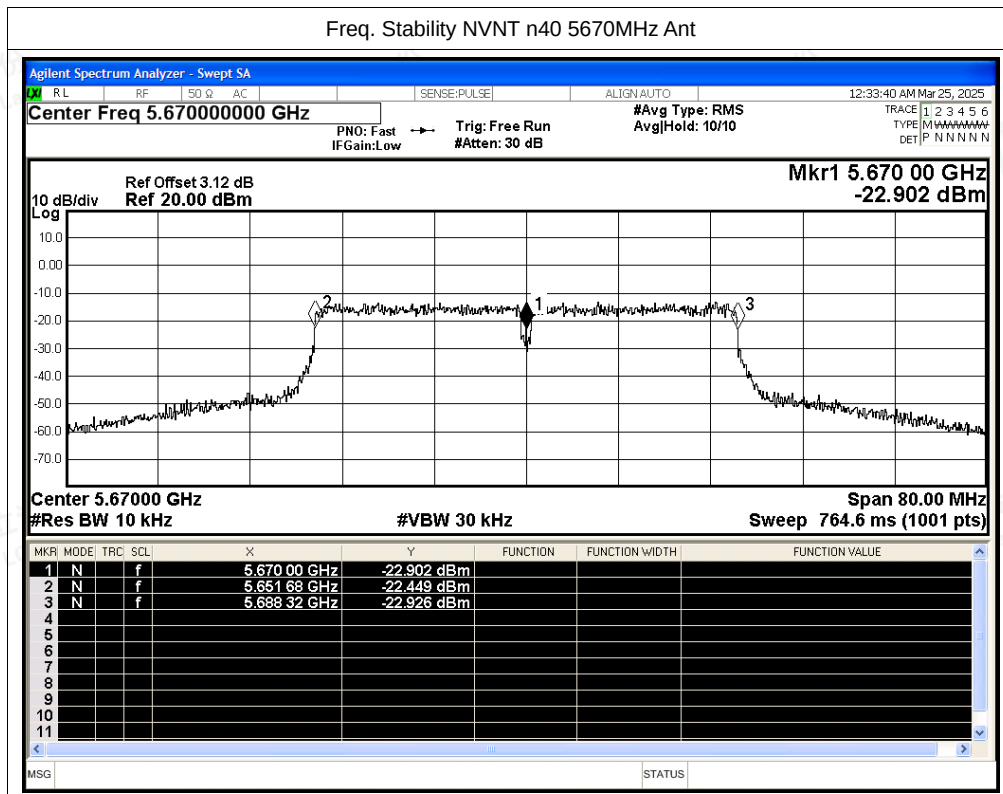


Shenzhen LCS Compliance Testing Laboratory Ltd.

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



F.6 Duty Cycle

Condition	Mode	Frequency (MHz)	Antenna	Duty Cycle (%)	Correction Factor (dB)	1/T (kHz)
NVNT	a	5500	Ant	94.56	0.24	0.91
NVNT	a	5580	Ant	94.56	0.24	0.91
NVNT	a	5700	Ant	94.56	0.24	0.91
NVNT	n20	5500	Ant	97.29	0.12	0.44
NVNT	n20	5580	Ant	97.29	0.12	0.44
NVNT	n20	5700	Ant	97.29	0.12	0.44
NVNT	n40	5510	Ant	94.79	0.23	0.9
NVNT	n40	5550	Ant	94.71	0.24	0.9
NVNT	n40	5670	Ant	94.71	0.24	0.9



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

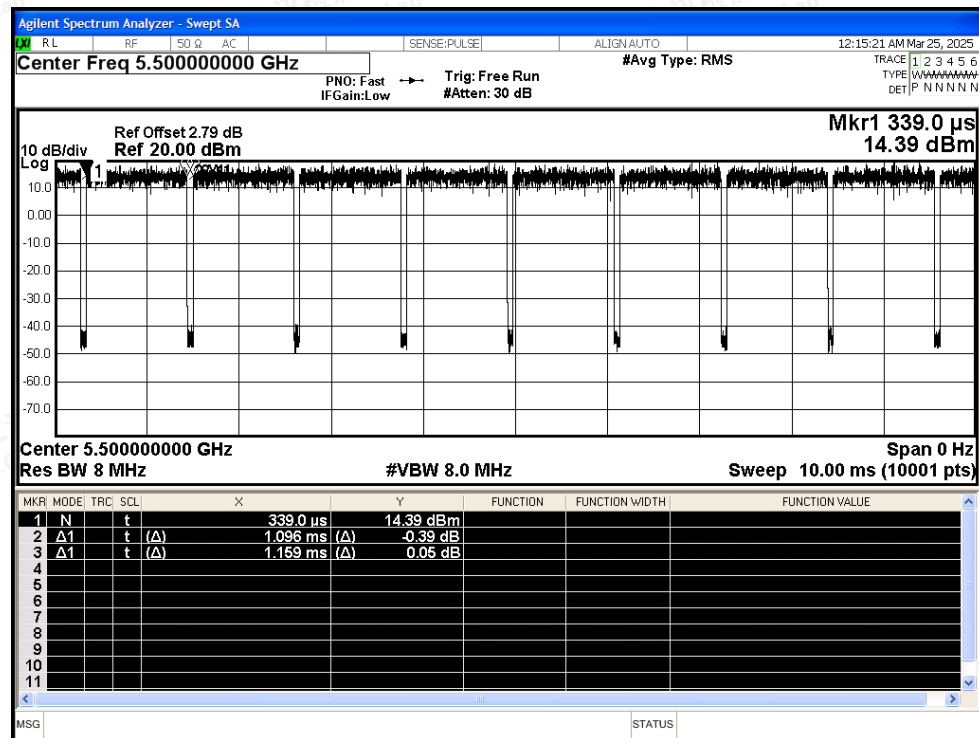
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

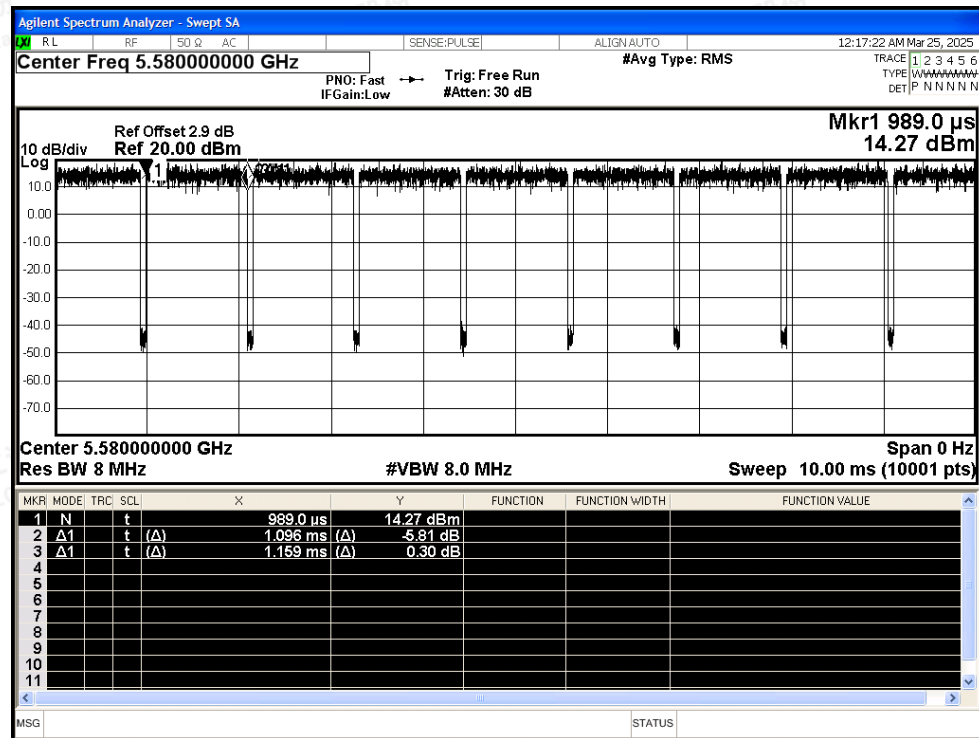


Test Graphs

Duty Cycle NVNT a 5500MHz Ant



Duty Cycle NVNT a 5580MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

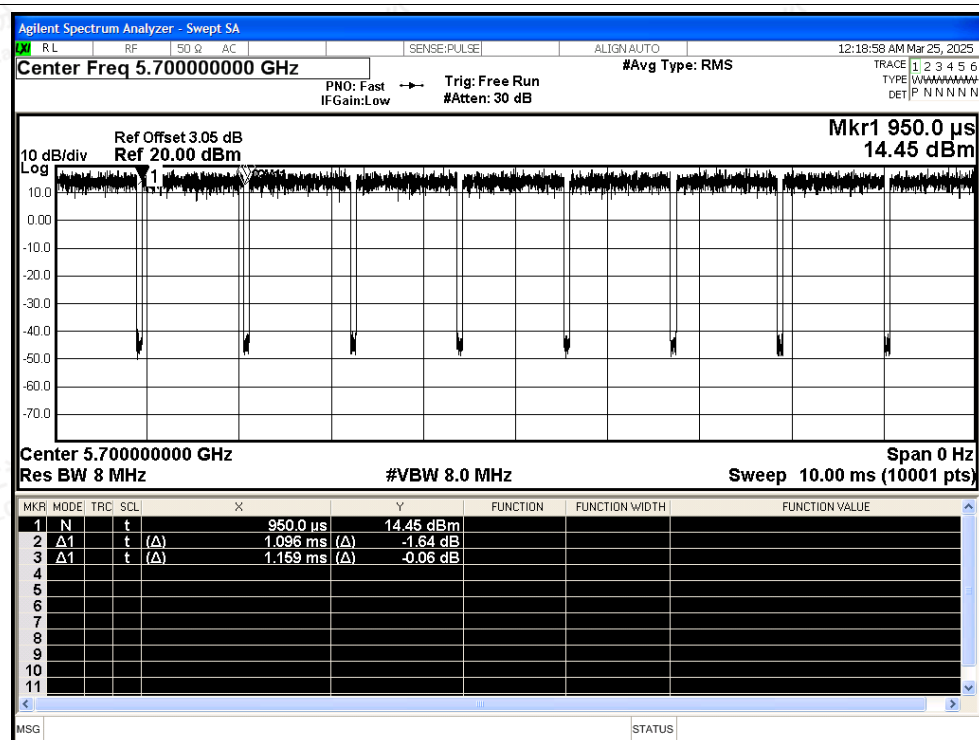
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

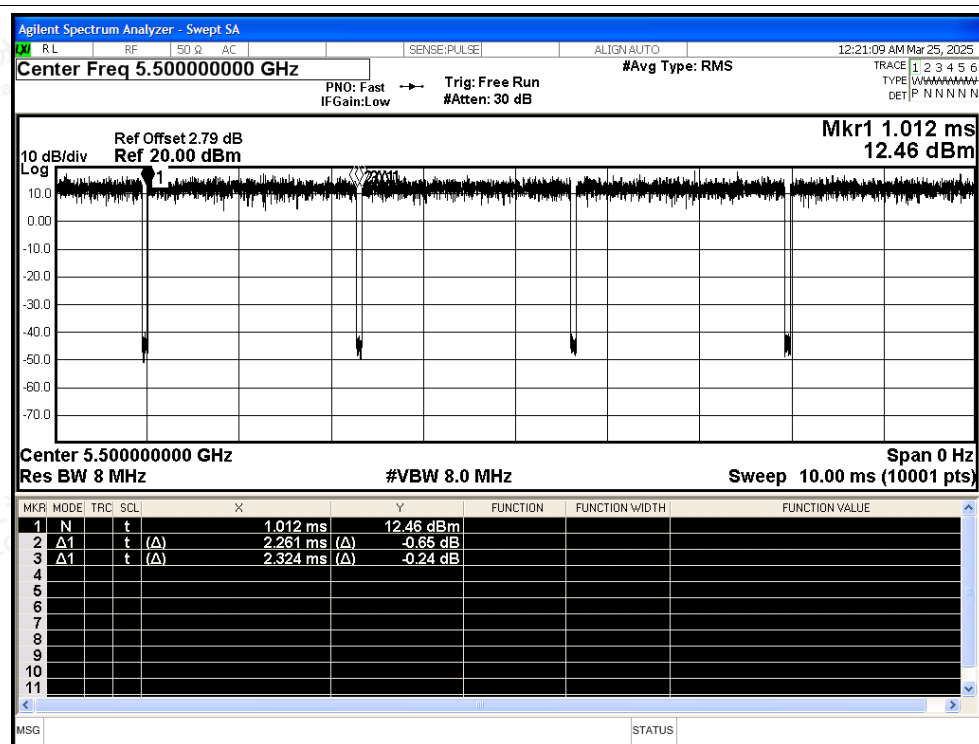
Scan code to check authenticity



Duty Cycle NVNT a 5700MHz Ant



Duty Cycle NVNT n20 5500MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

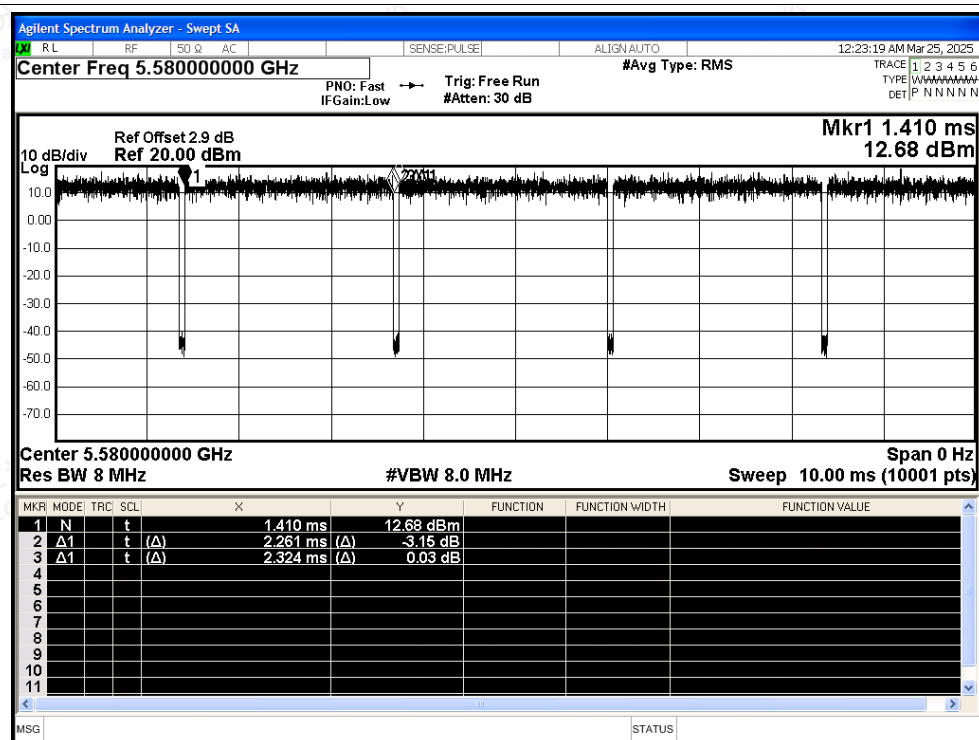
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

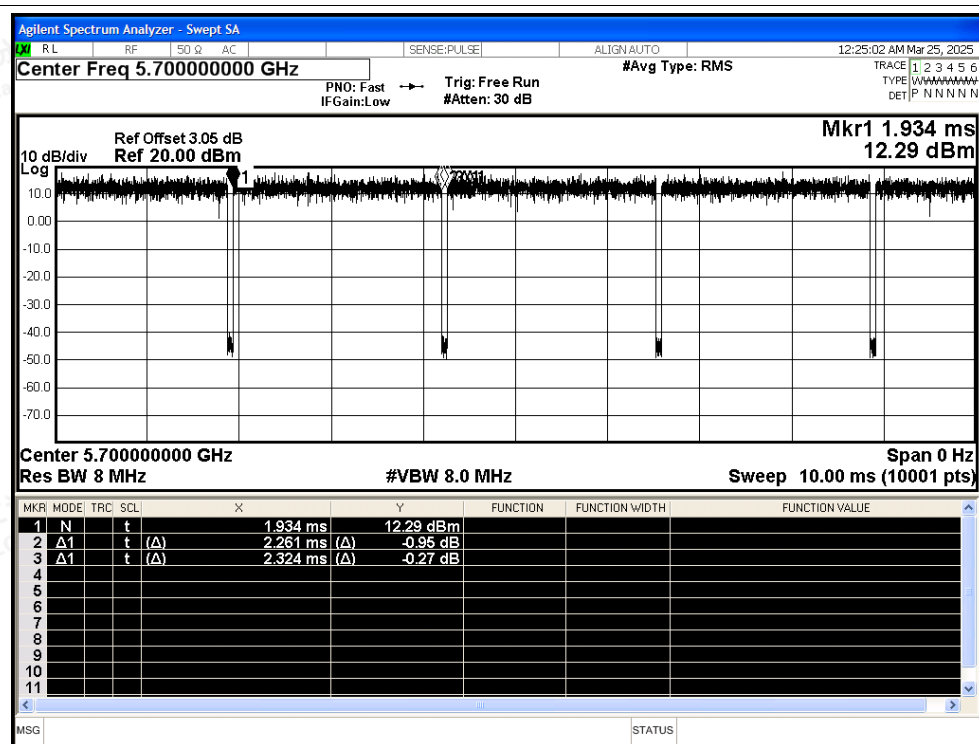
Scan code to check authenticity



Duty Cycle NVNT n20 5580MHz Ant



Duty Cycle NVNT n20 5700MHz Ant



Shenzhen LCS Compliance Testing Laboratory Ltd.

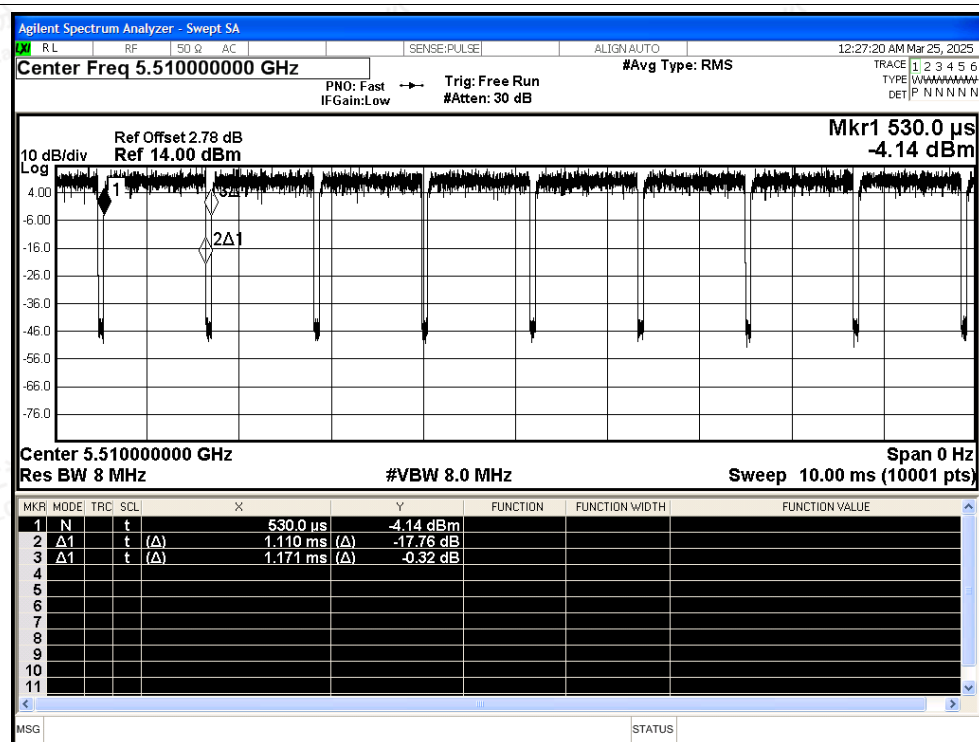
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

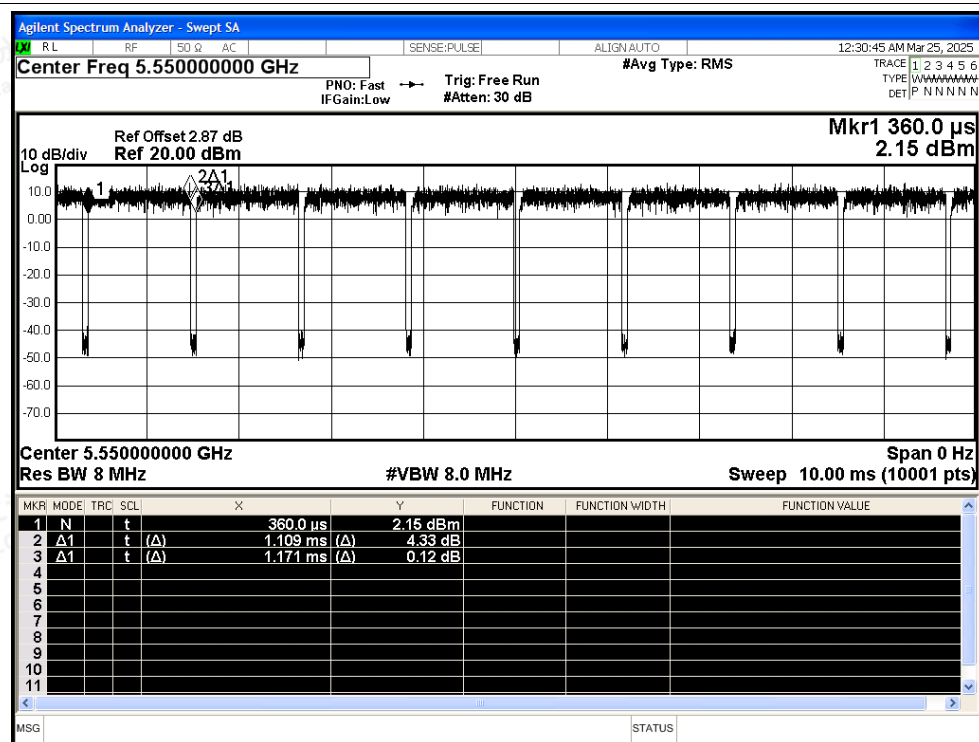
Scan code to check authenticity



Duty Cycle NVNT n40 5510MHz Ant



Duty Cycle NVNT n40 5550MHz Ant

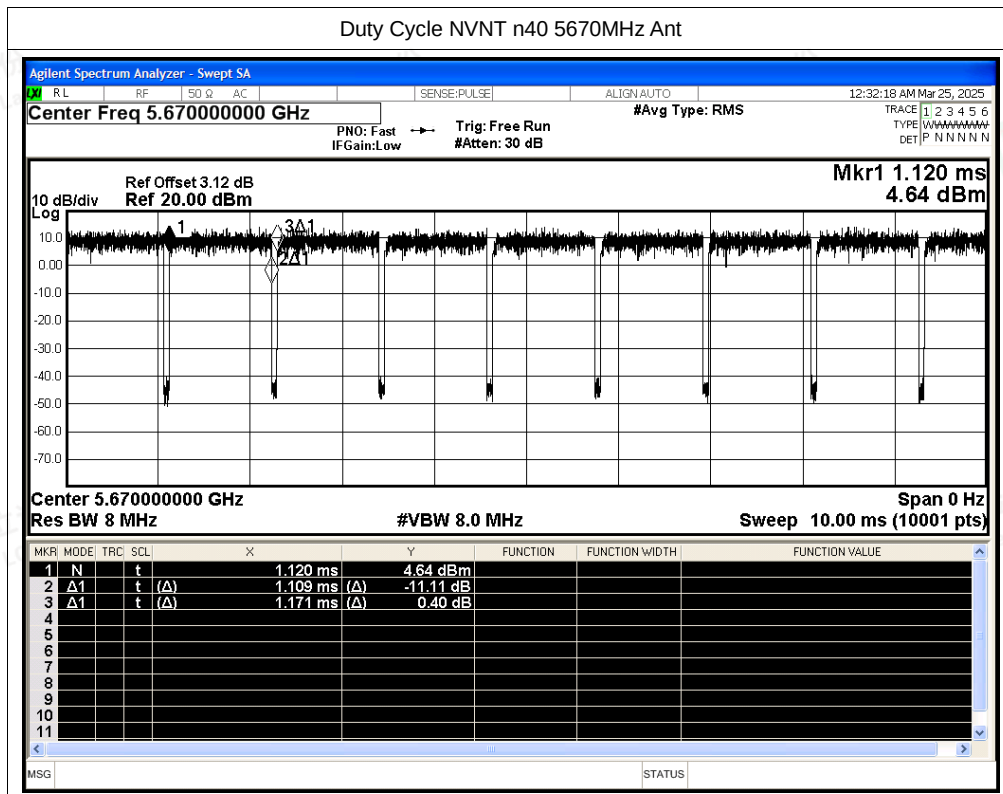


Shenzhen LCS Compliance Testing Laboratory Ltd.

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