



Appendix A

RF Test Data for LORA (Conducted Measurement)

Product Name: Kaiterra Sensedge Go Air Quality Monitor

Test Model: SE-300

Environmental Conditions

Temperature:	23.8°C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Paddi Chen
Supervised by:	Nick Peng





A.1 20dB Emission Bandwidth

Test Result

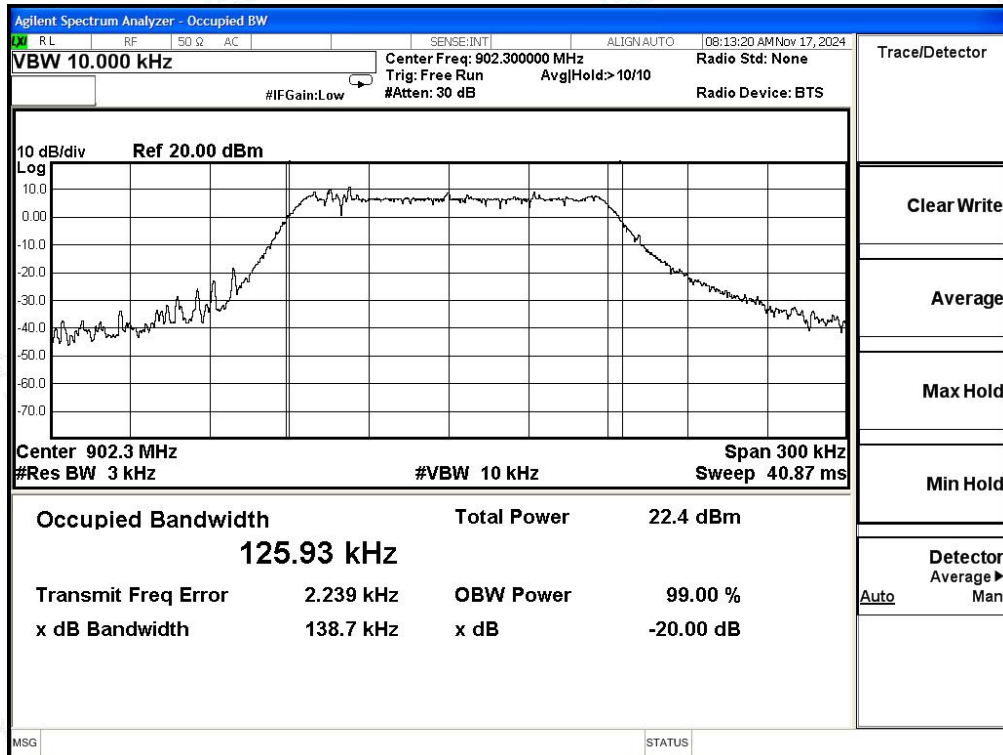
Antenna	Channel[MHz]	20db EBW[kHz]	Limit[MHz]	Verdict
Ant1	902.3	138.7	---	PASS
	908.5	137.6	---	PASS
	914.9	138.4	---	PASS
Ant2	902.3	138.2	---	PASS
	908.5	139.5	---	PASS
	914.9	138.5	---	PASS



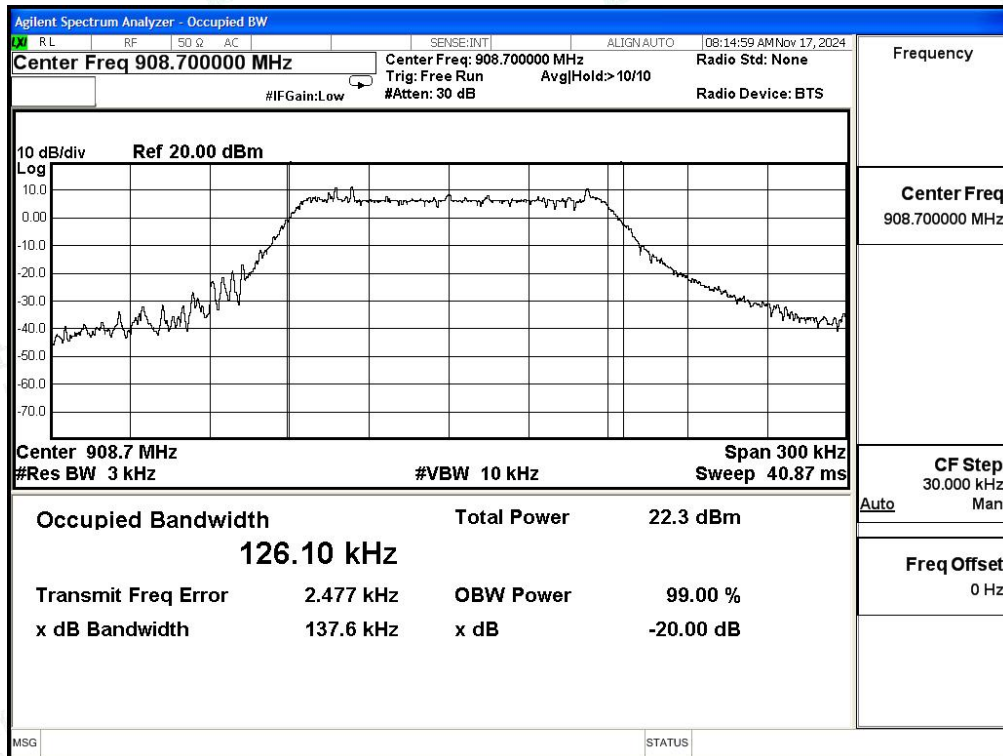


Test Graphs

Ant1_902.3



Ant1_908.5



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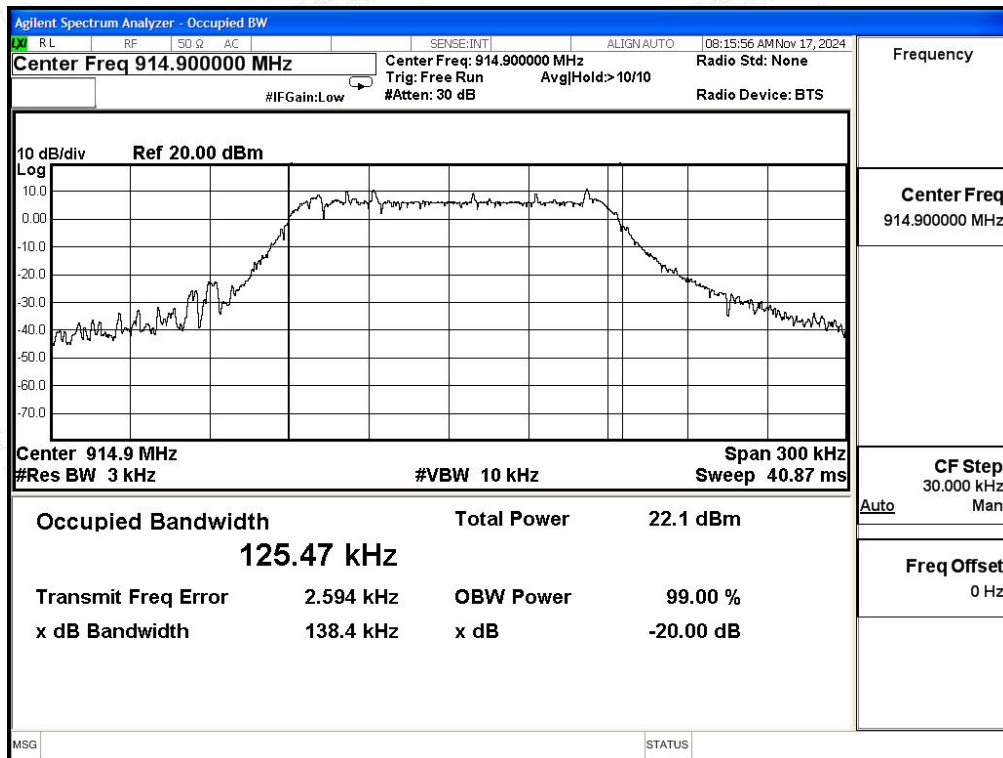
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

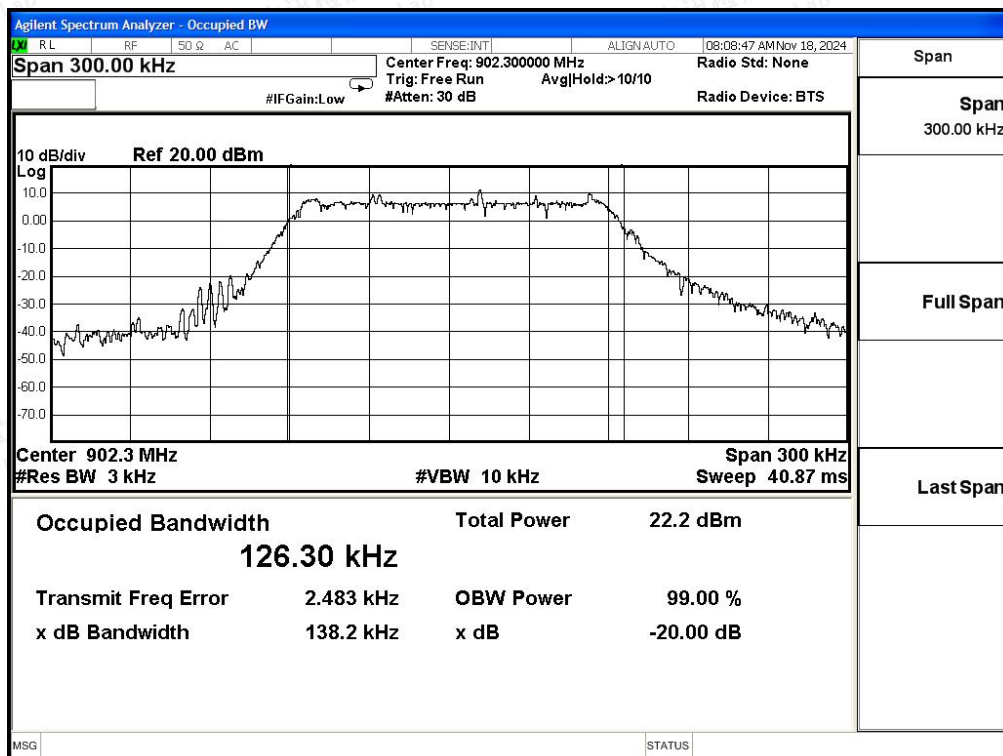
Scan code to check authenticity



Ant1_914.9



Ant2_902.3



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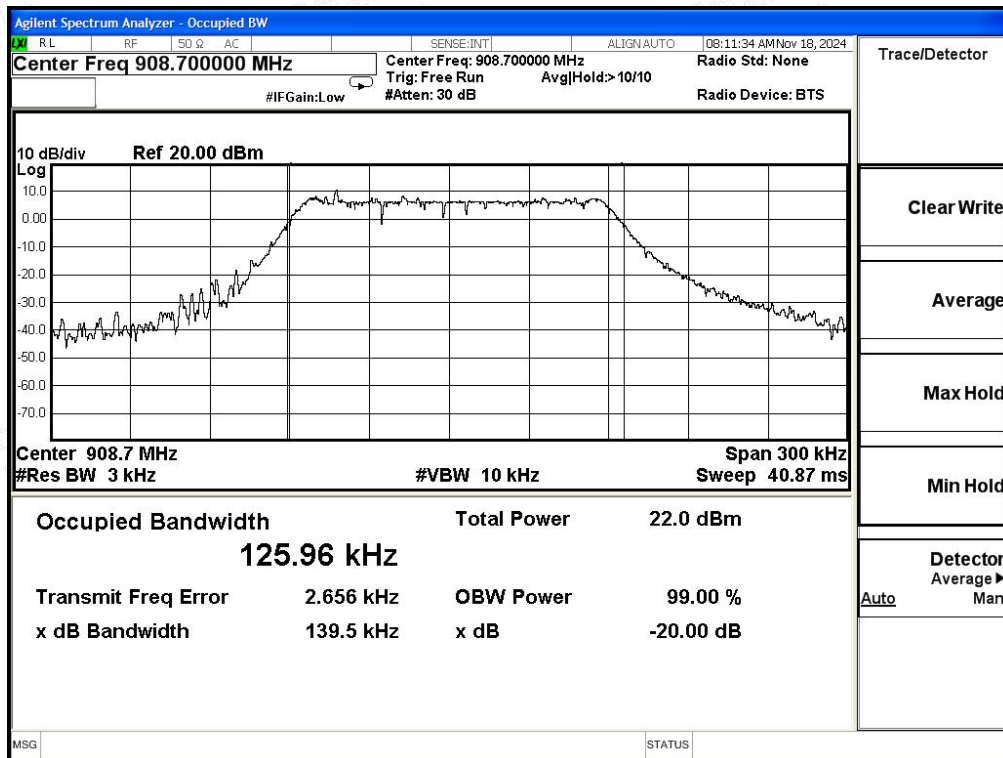
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

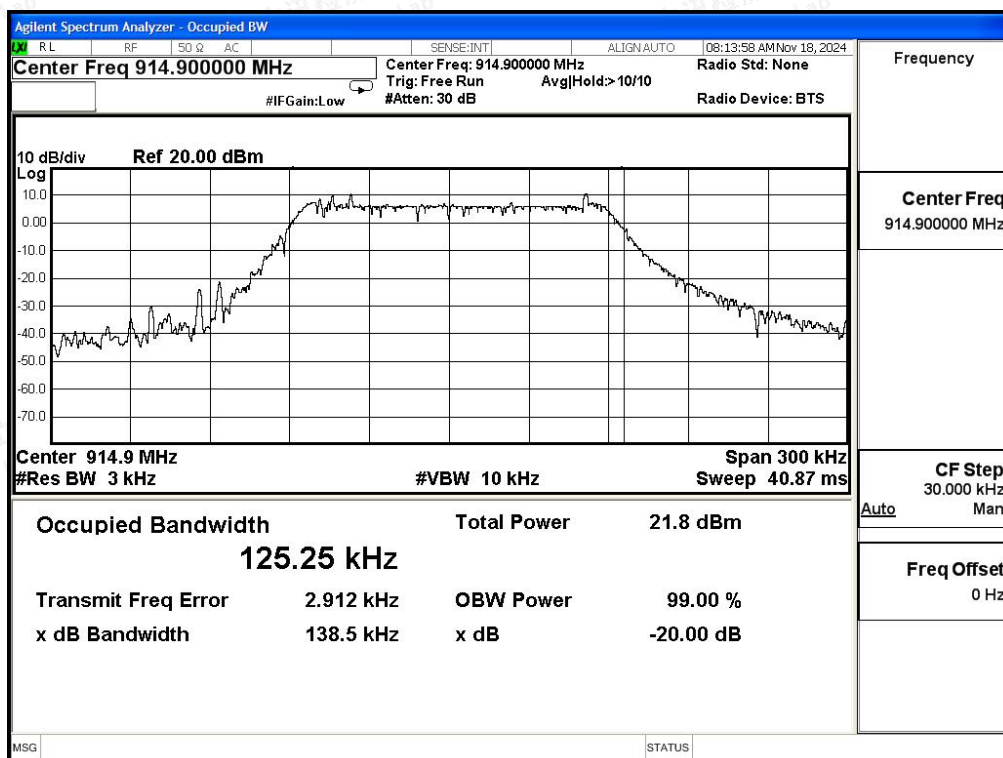
Scan code to check authenticity



Ant2_908.5



Ant2_914.9



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A.2 Maximum Peak Conducted Output Power

Test Result Peak

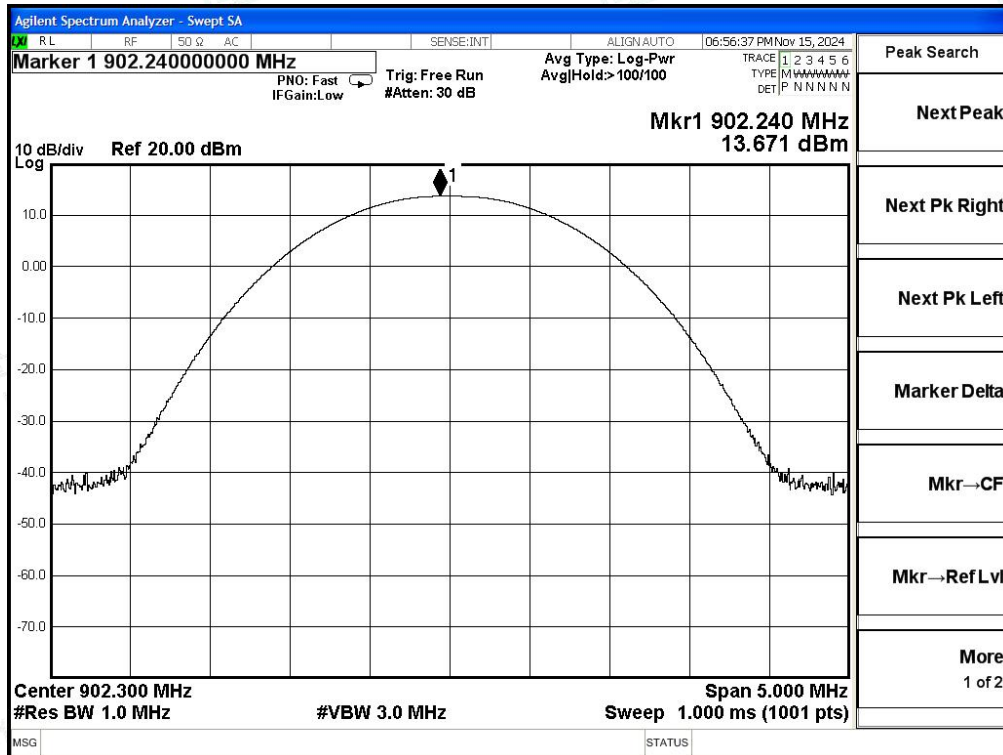
Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
Ant1	902.3	13.67	≤30	PASS
	908.5	13.44	≤30	PASS
	914.9	14.02	≤30	PASS
Ant2	902.3	13.52	≤30	PASS
	908.5	13.08	≤30	PASS
	914.9	12.89	≤30	PASS



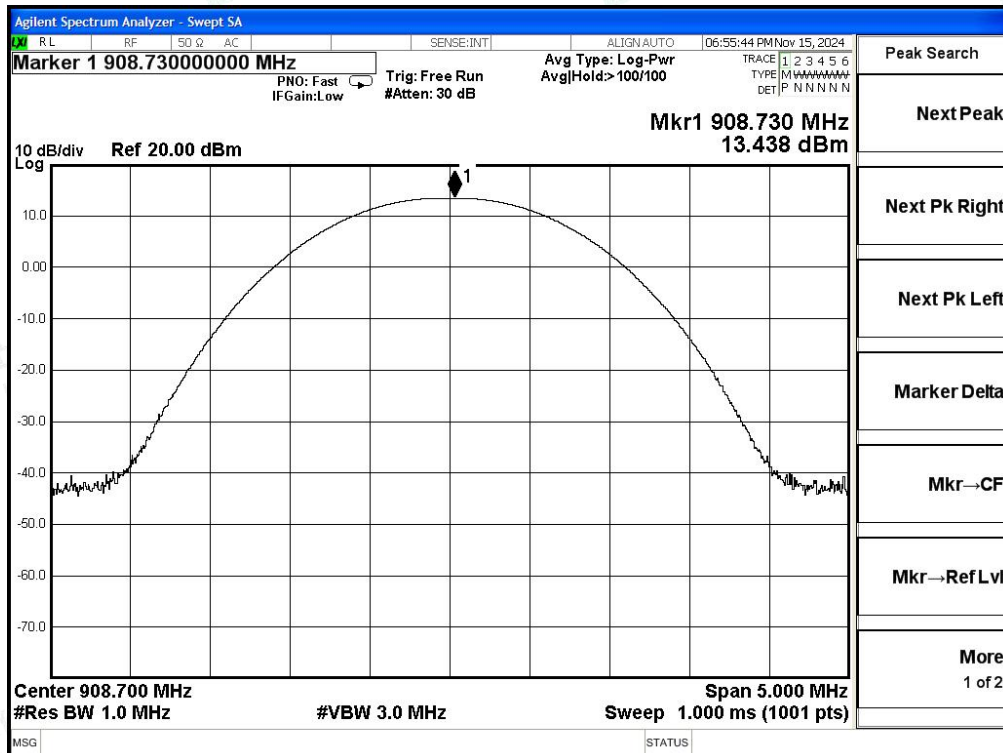


Test Graphs

Ant1_902.3



Ant1_908.5



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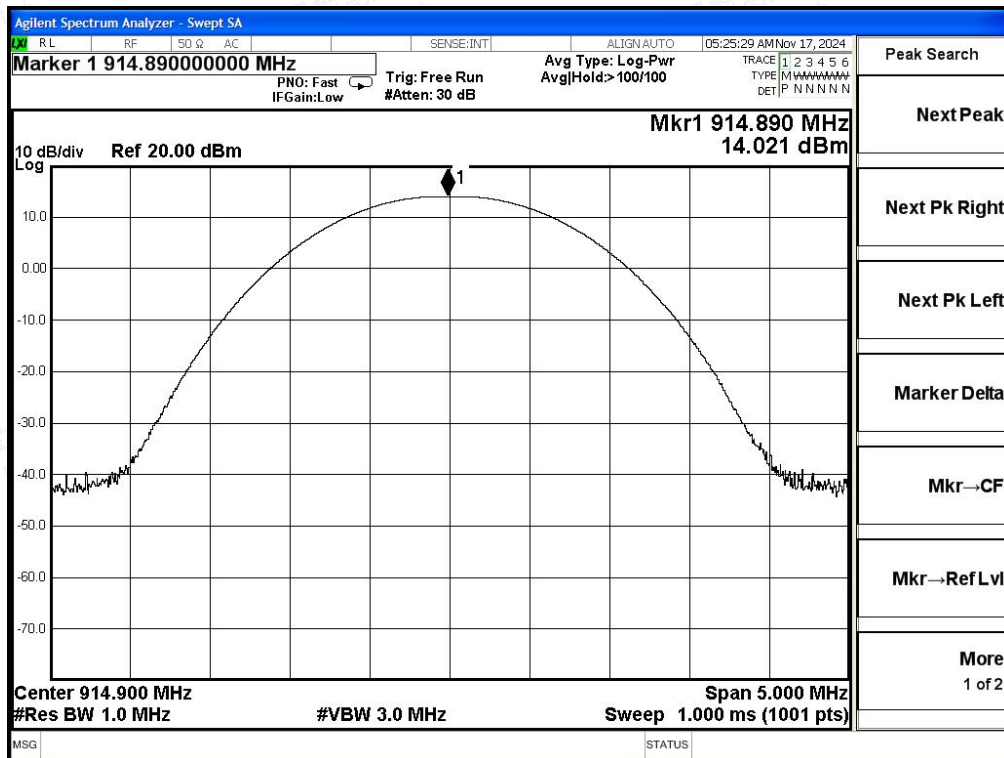
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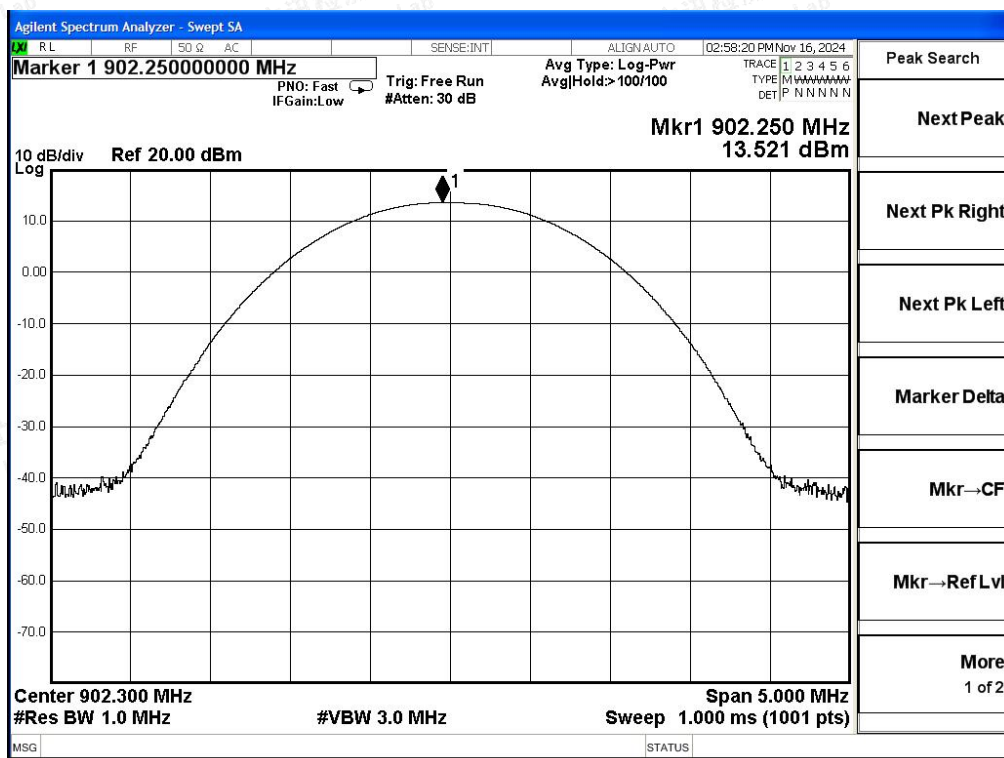
Scan code to check authenticity



Ant1_914.9



Ant2_902.3



Shenzhen LCS Compliance Testing Laboratory Ltd.

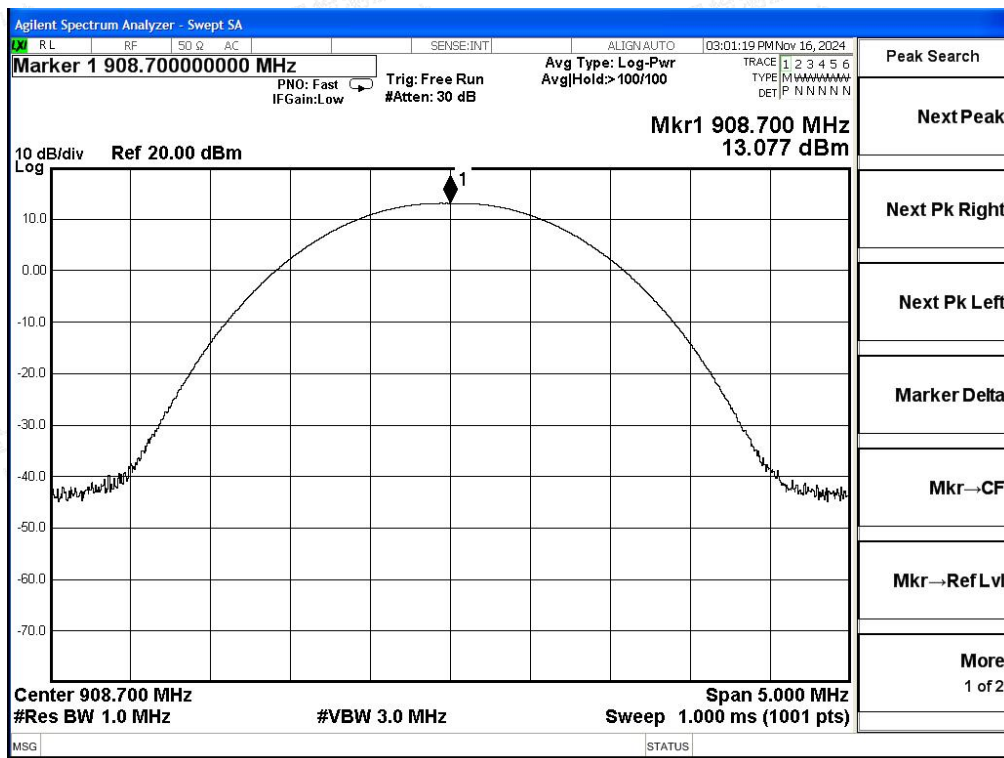
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

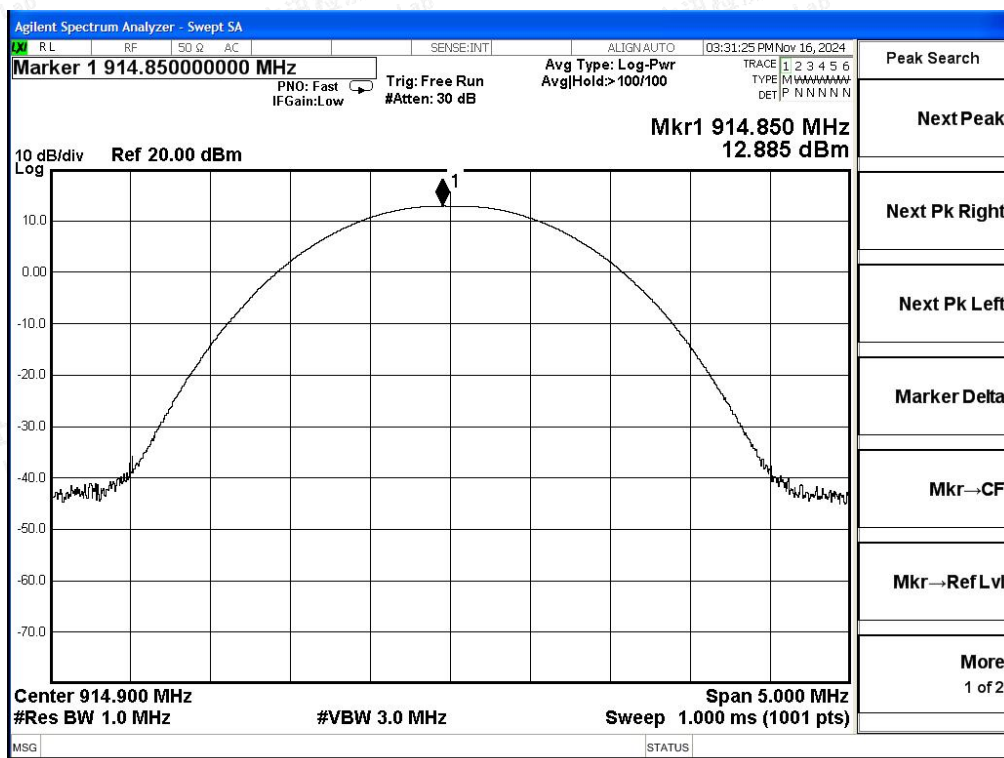
Scan code to check authenticity



Ant2_908.5



Ant2_914.9





A.3 Carrier frequency separation

Test Result

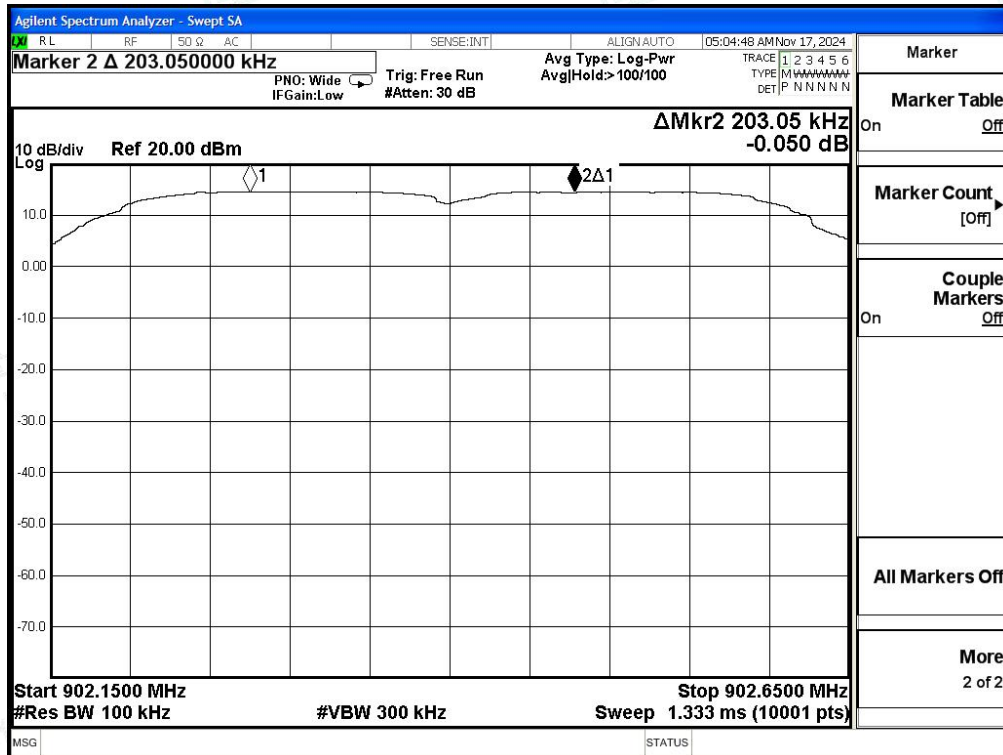
Antenna	Channel[MHz]	Result[kHz]	Limit[kHz]	Verdict
Ant1	Hop	203.05	≥ 138.7	PASS
Ant2	Hop	207.42	≥ 139.5	PASS



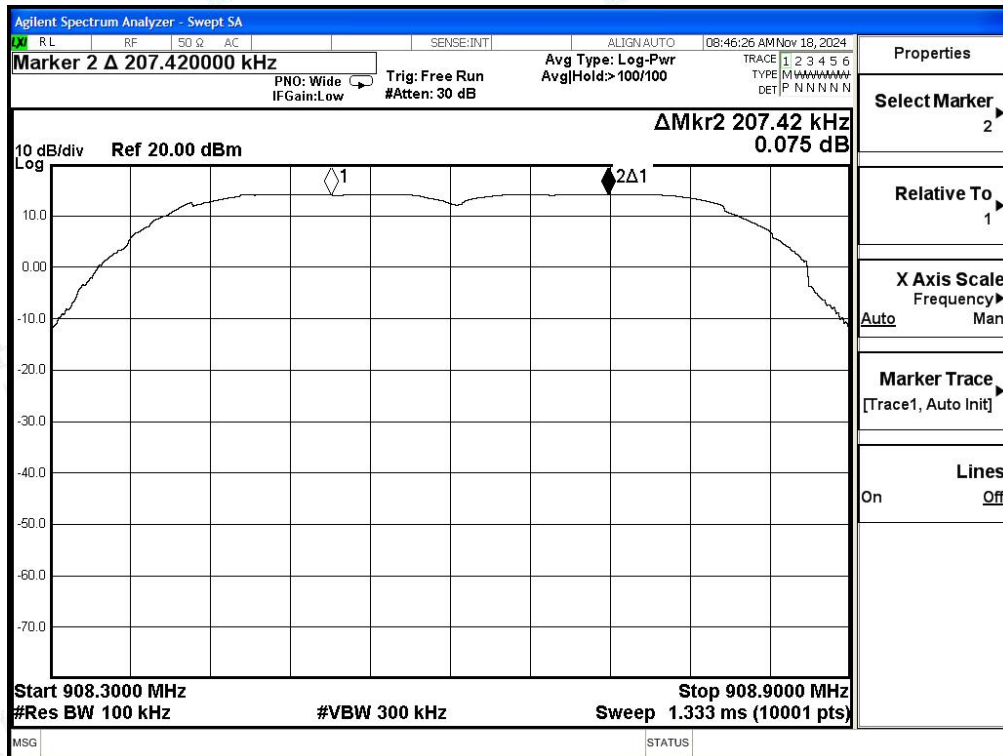


Test Graphs

Ant1_Hop



Ant2_Hop



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A.4 Time of occupancy

Test Result

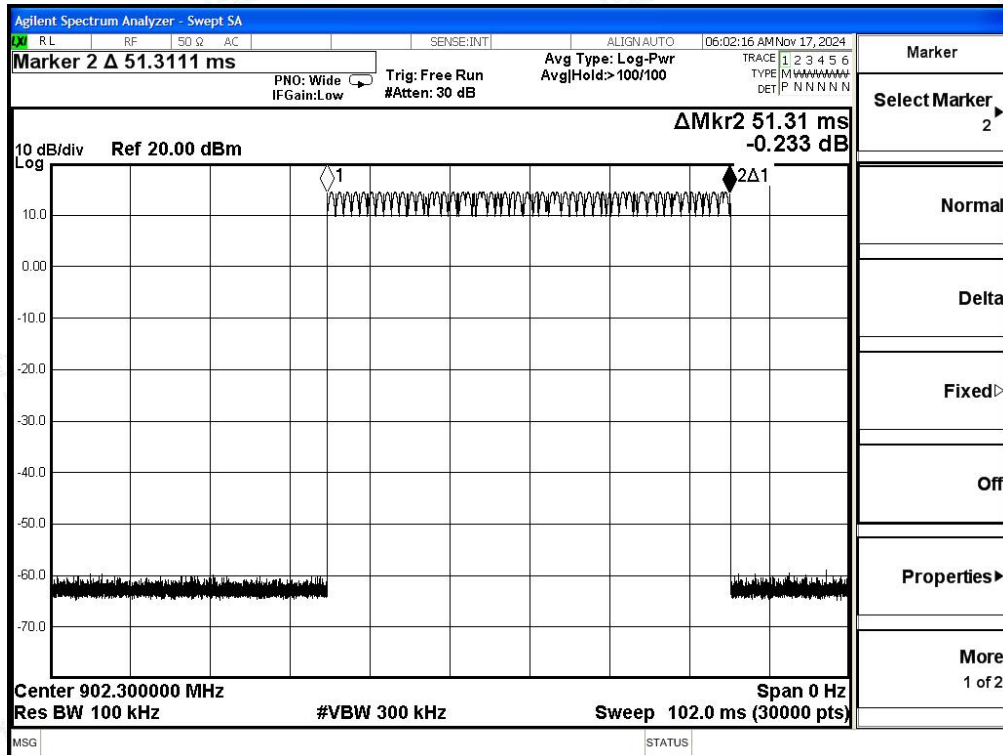
Antenna	Channel[MHz]	Burst Width[ms]	Total Hops[Num]	Result[ms]	Limit[ms]	Verdict
Ant1	Hop	51.31	7	359.17	<=400	PASS
Ant2	Hop	51.34	7	359.38	<=400	PASS



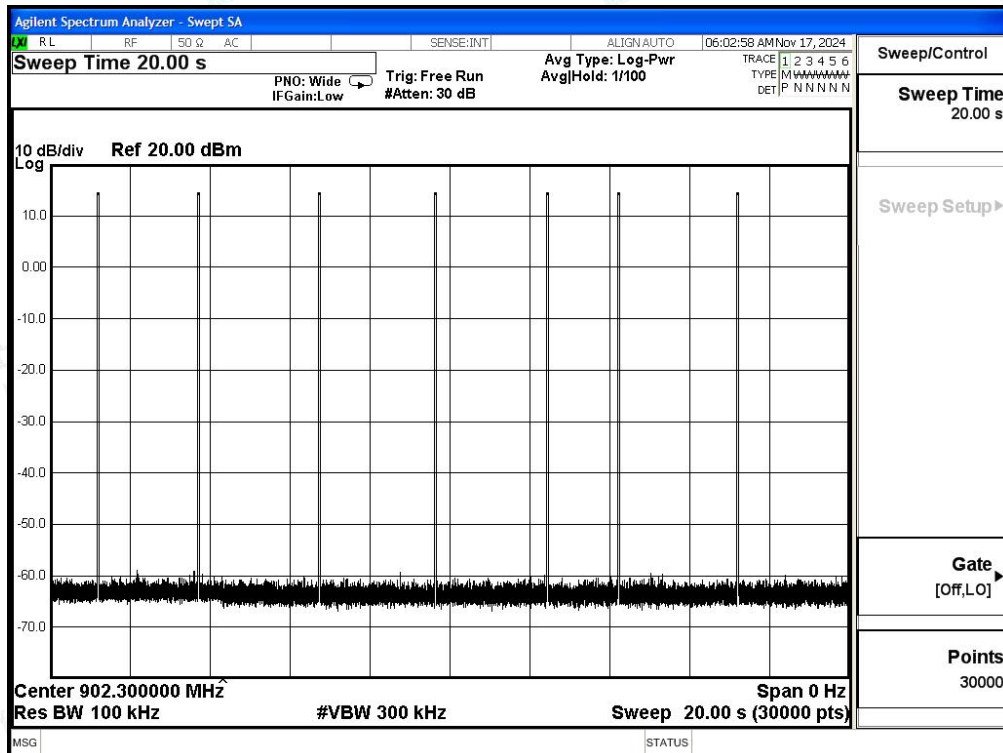


Test Graphs

Ant1_Hop



Ant1_Hop



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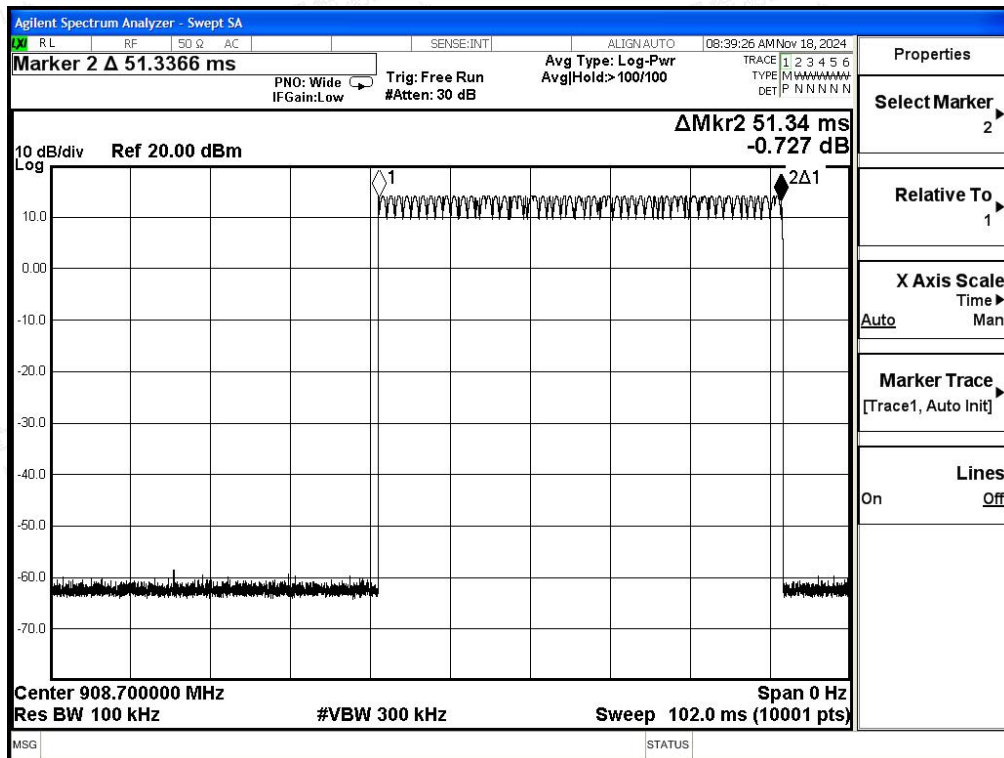
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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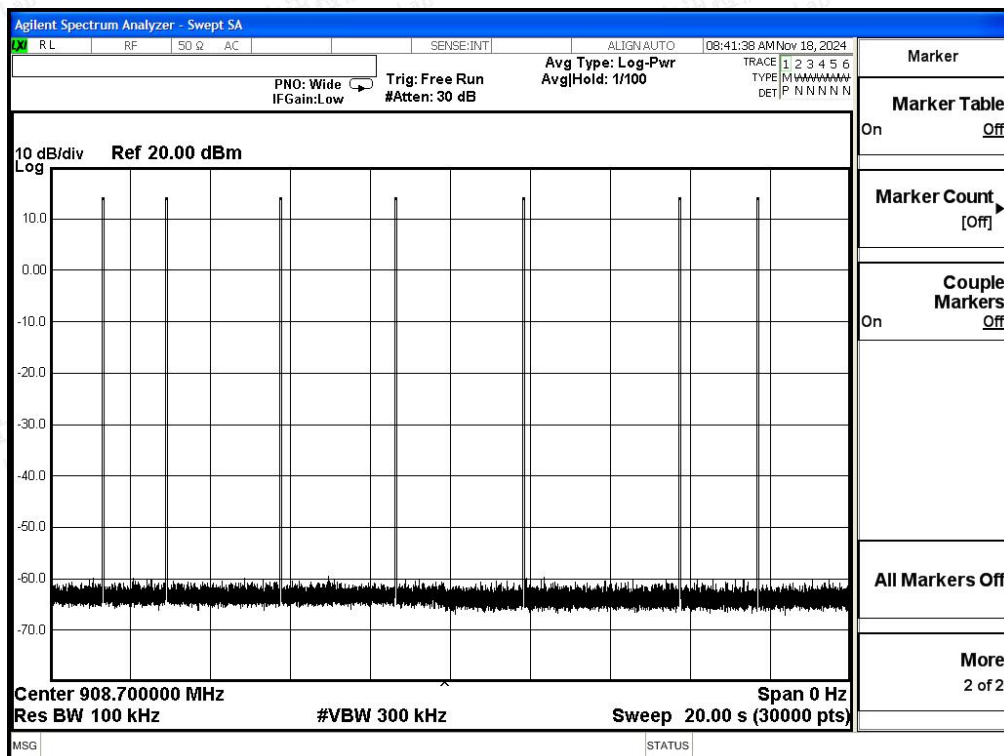
Scan code to check authenticity



Ant2_Hop



Ant2_Hop



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A.5 Number of hopping channels

Test Result

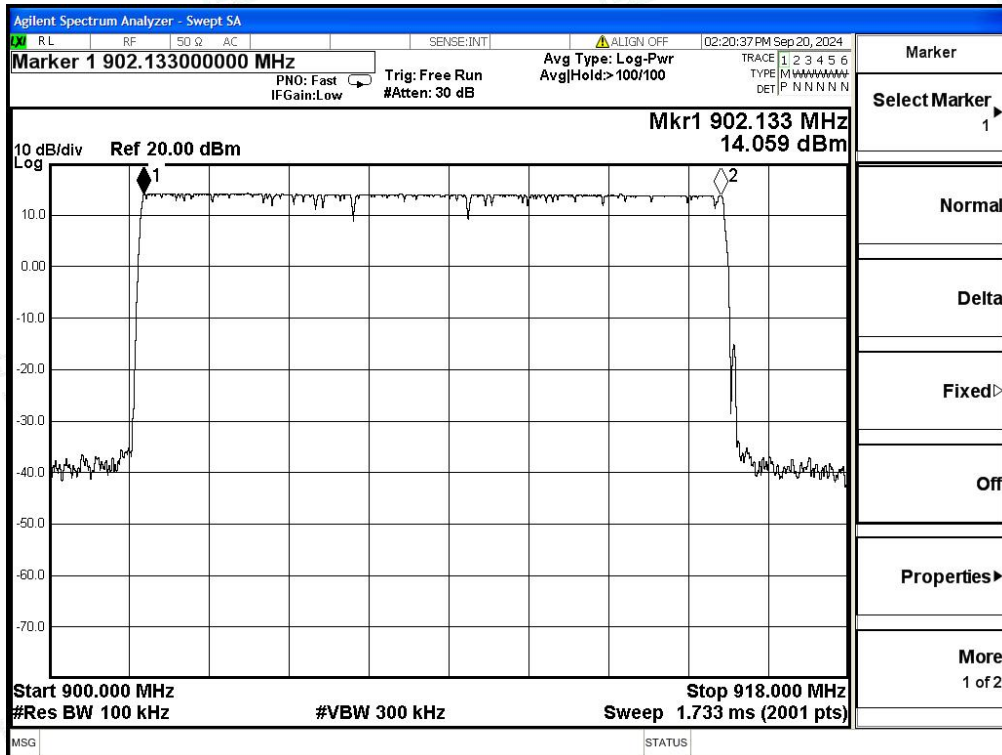
Antenna	Channel	Result[Num]	Limit[Num]	Verdict
Ant1	Hop	64	>=50	PASS
Ant2	Hop	64	>=50	PASS



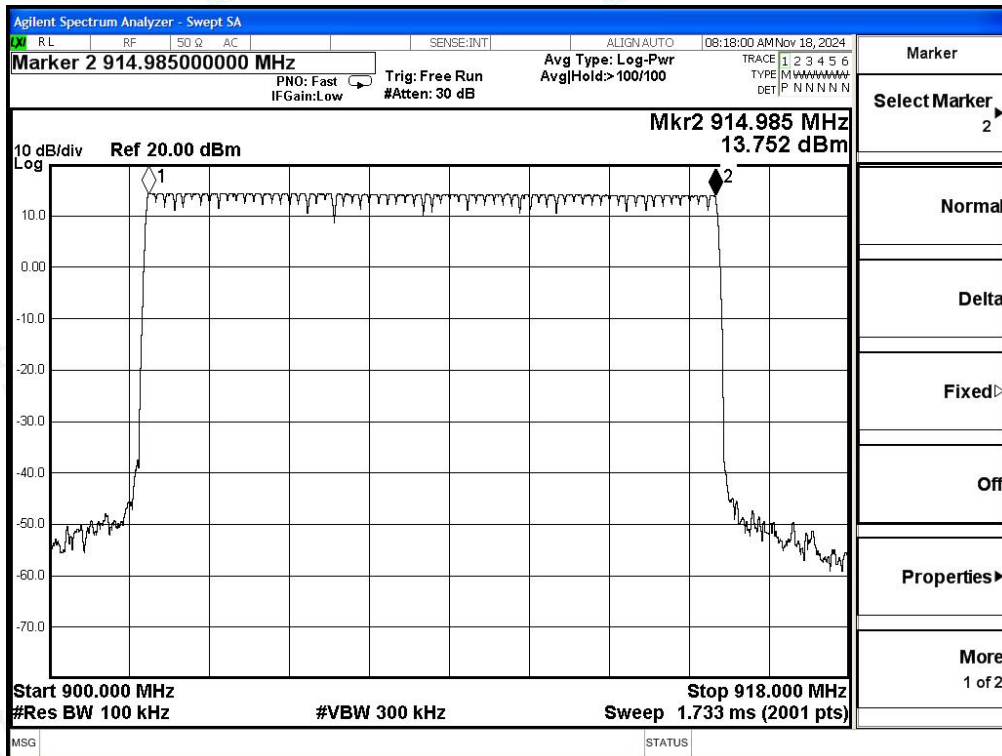


Test Graphs

Ant1_Hop



Ant2_Hop



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A.6 Band edge measurements

Test Result

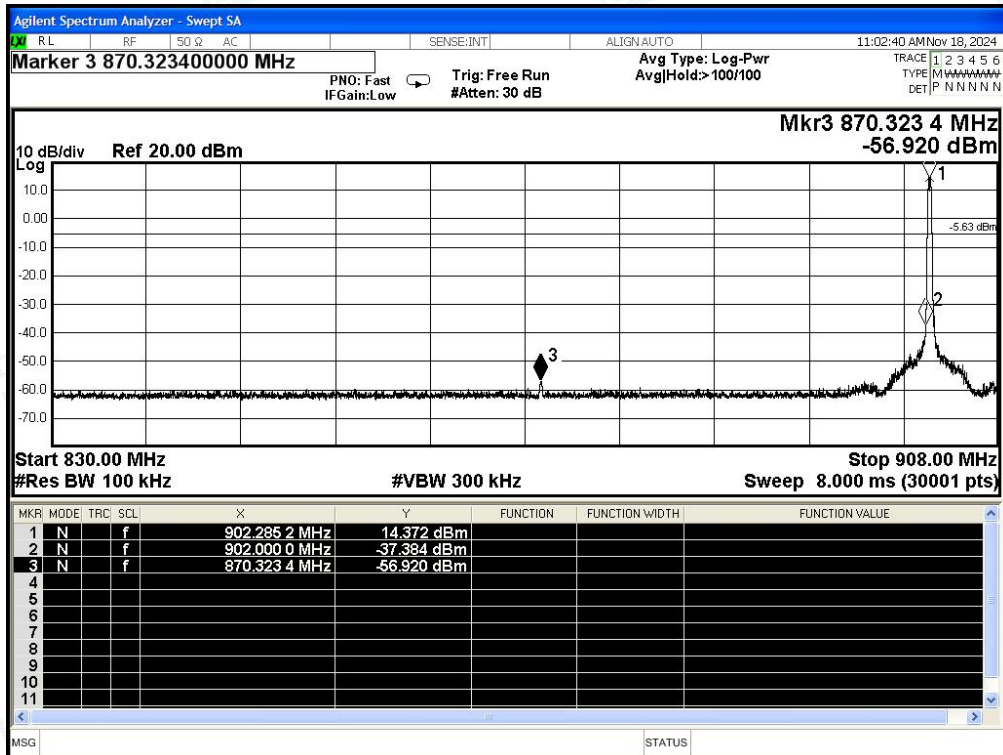
Antenna	Ch Name	Channel[MHz]	Max Value (dBc)	Limit (dBc)	Verdict
Ant1	Low	902.3	-51.76	-20	PASS
	High	914.9	-76.08	-20	PASS
	Low	Hop_902.3	-34.02	-20	PASS
	High	Hop_914.9	-74.86	-20	PASS
Ant2	Low	902.3	-52.40	-20	PASS
	High	914.9	-76.52	-20	PASS
	Low	Hop_902.3	-52.55	-20	PASS
	High	Hop_914.9	-75.11	-20	PASS



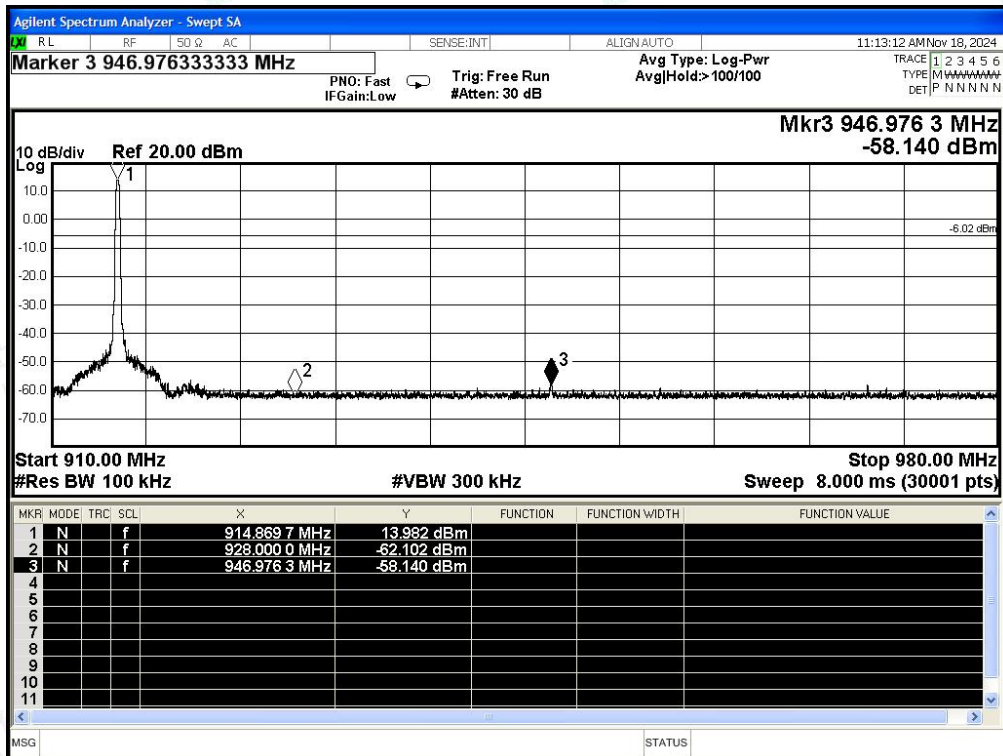


Test Graphs

Ant1_Low_902.3



Ant1_High_914.9



Shenzhen LCS Compliance Testing Laboratory Ltd.

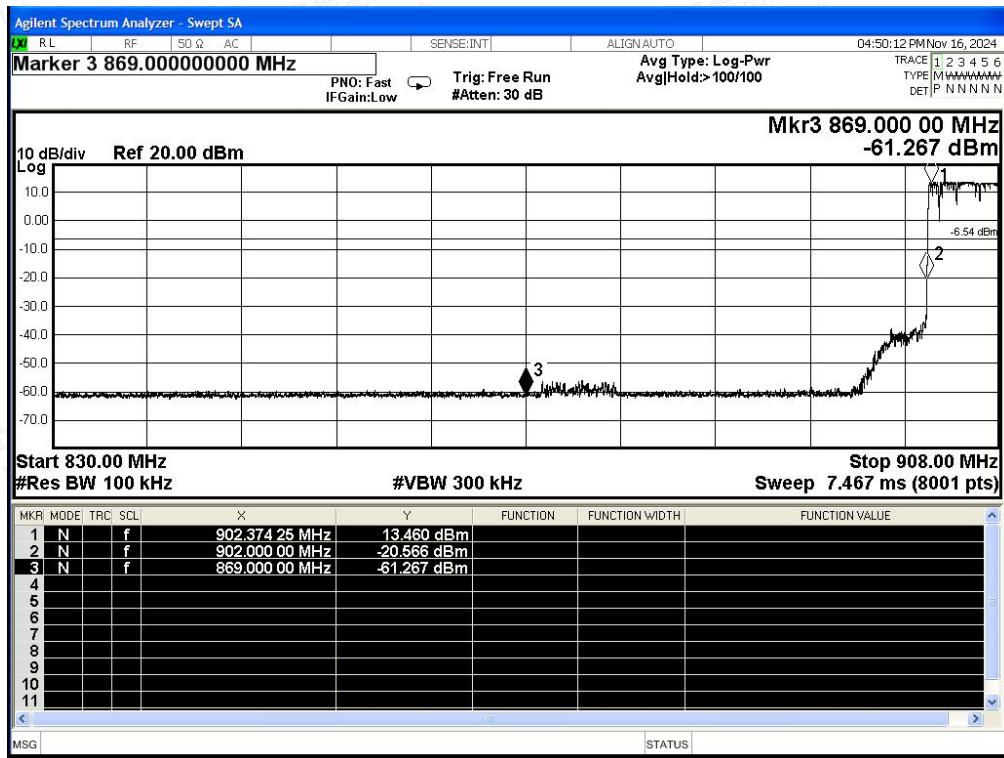
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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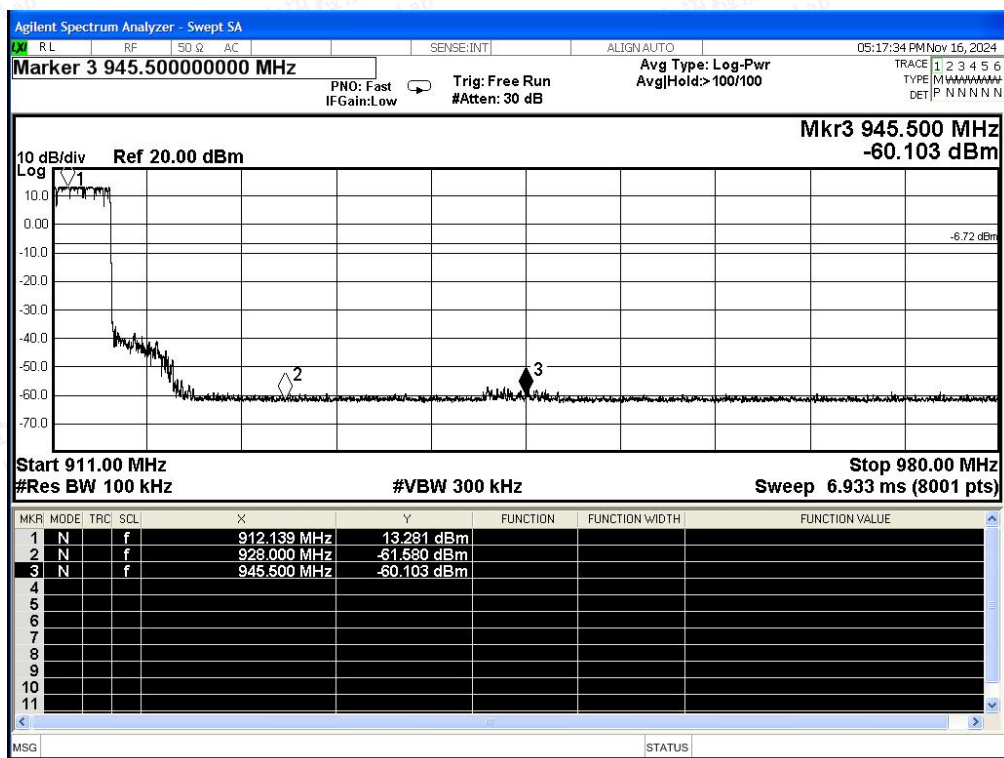
Scan code to check authenticity



Ant1_Low_Hop_902.3



Ant1_High_Hop_914.9



Shenzhen LCS Compliance Testing Laboratory Ltd.

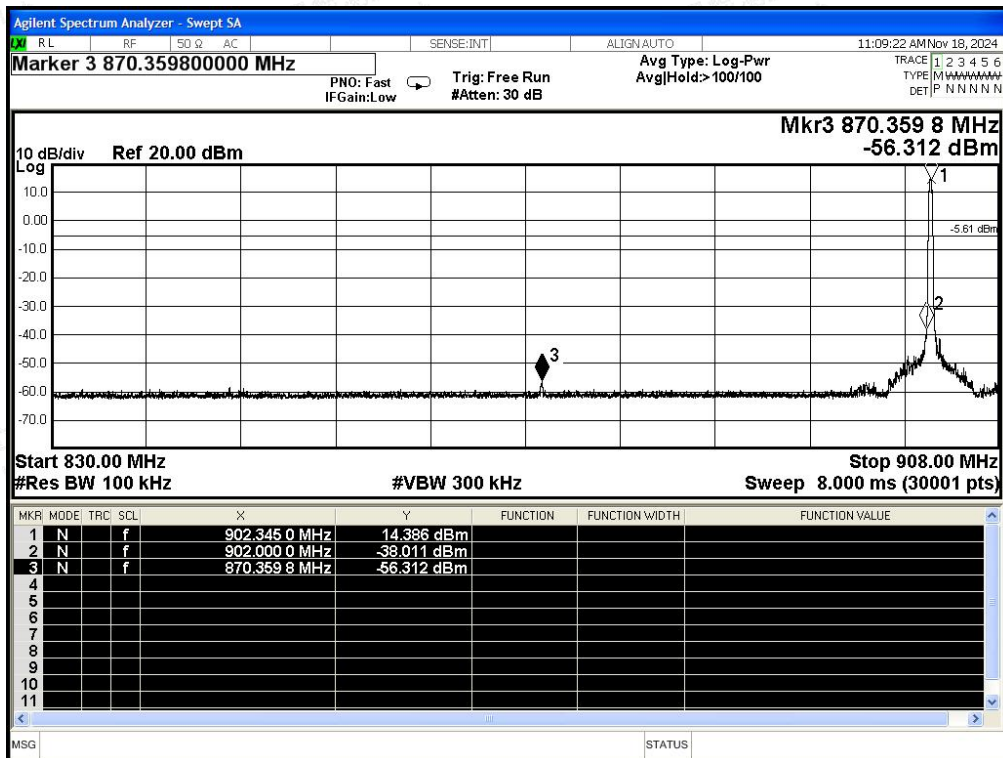
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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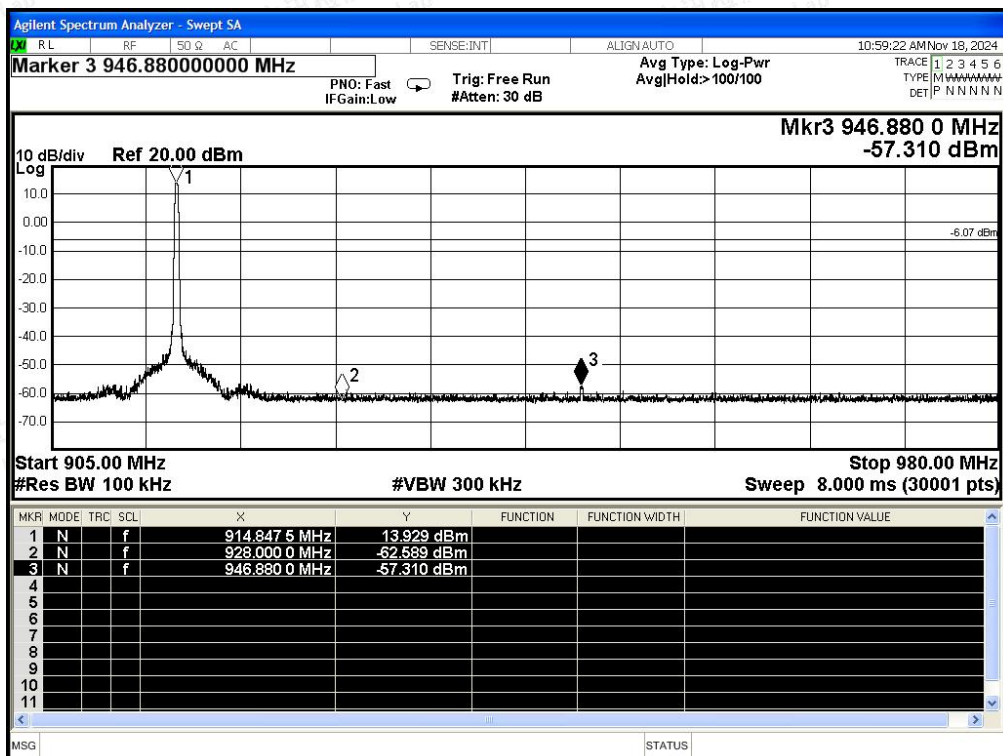
Scan code to check authenticity



Ant2_Low_902.3



Ant2_High_914.9



Shenzhen LCS Compliance Testing Laboratory Ltd.

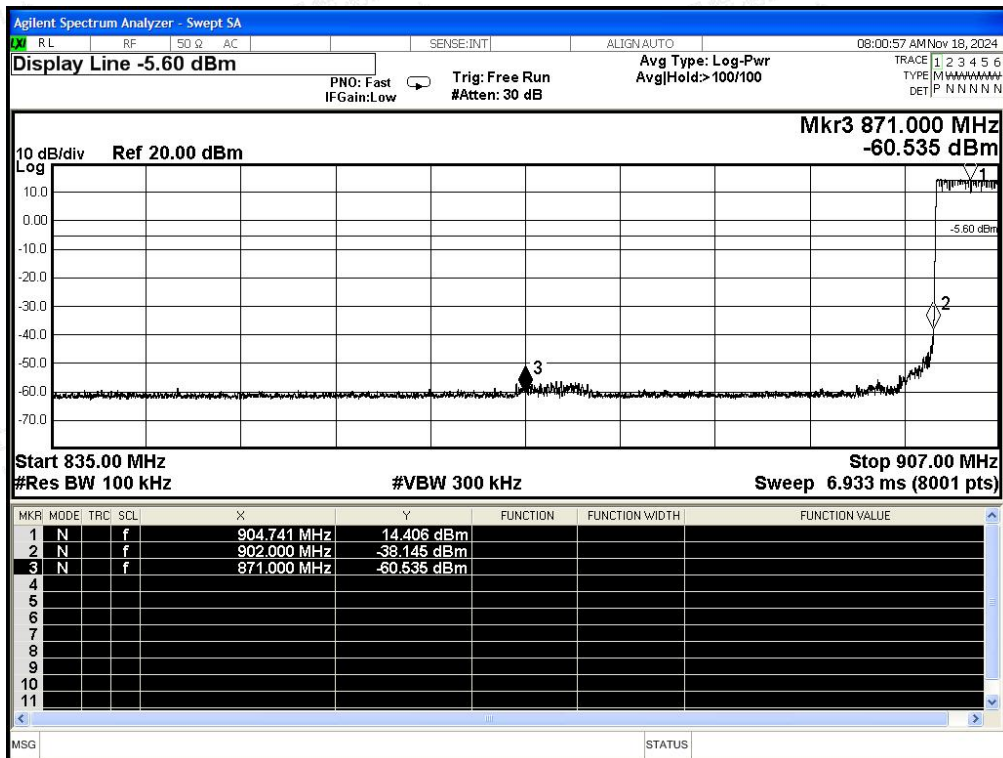
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

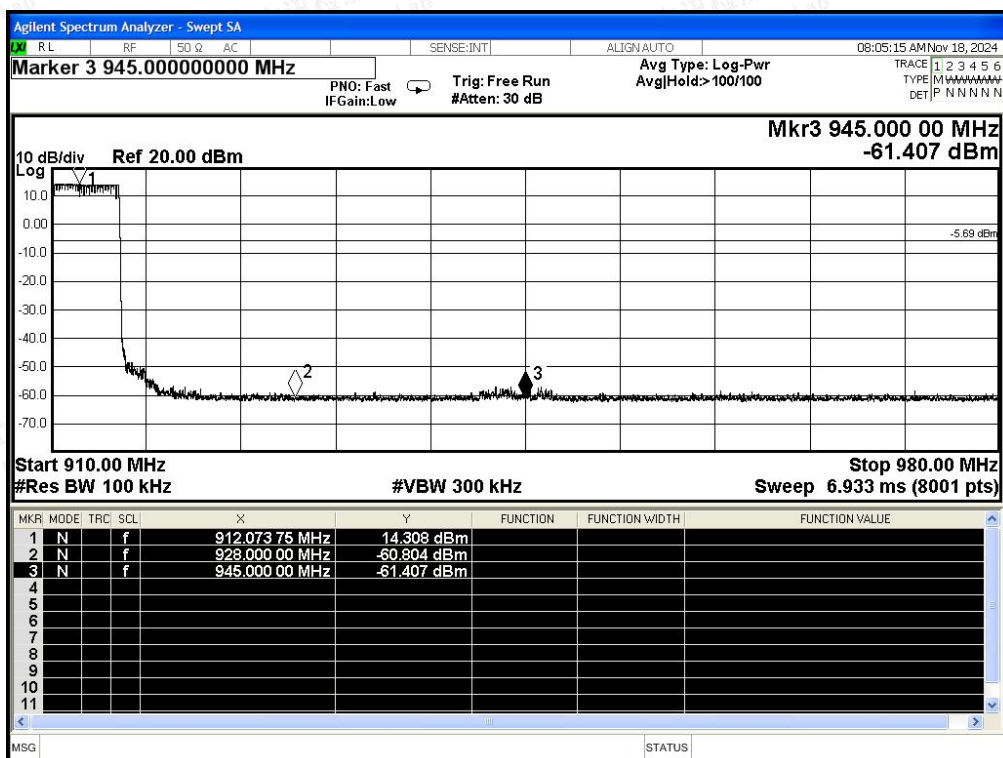
Scan code to check authenticity



Ant2_Low_Hop_902.3



Ant2_High_Hop_914.9





A.7 Conducted Spurious Emission

Test Result

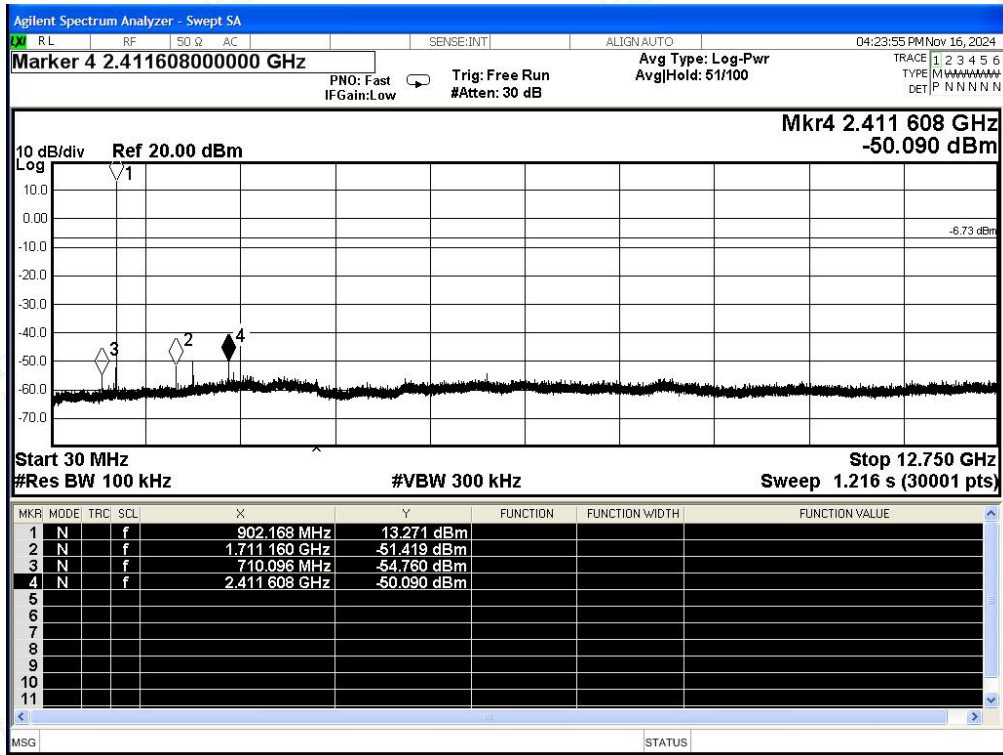
Antenna	Channel[MHz]	Max Value (dBc)	Limit (dBc)	Verdict
Ant1	902.3	-64.03	-20	PASS
	908.5	-57.73	-20	PASS
	914.9	-58.15	-20	PASS
Ant2	902.3	-59.00	-20	PASS
	908.5	-58.10	-20	PASS
	914.9	-57.45	-20	PASS



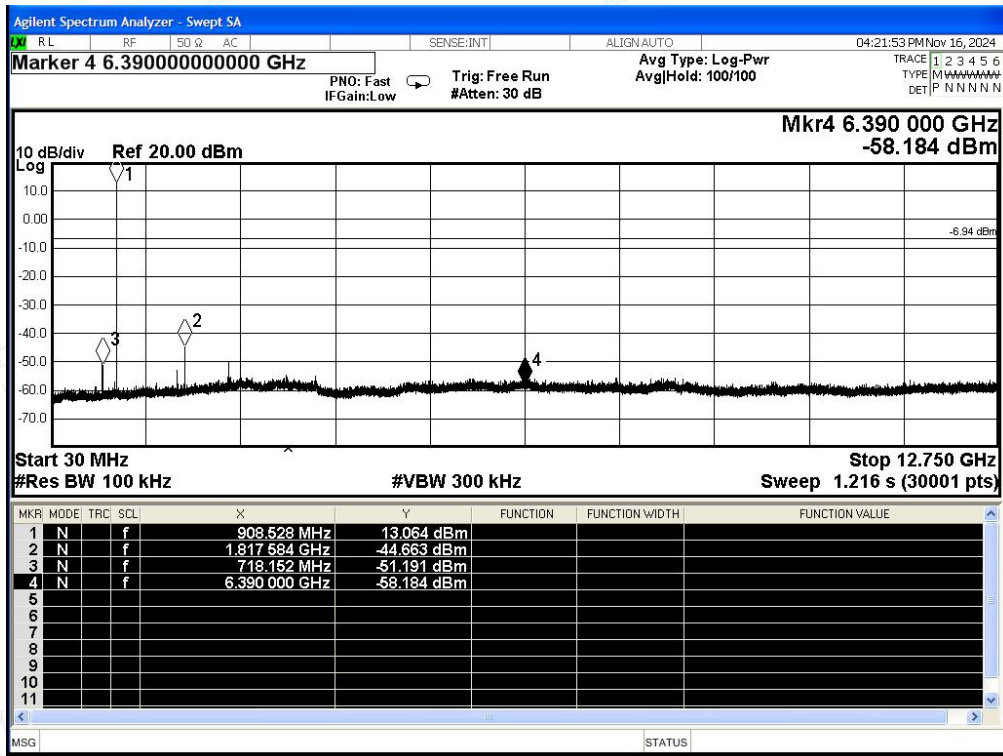


Test Graphs

Ant1_902.3



Ant1_908.5



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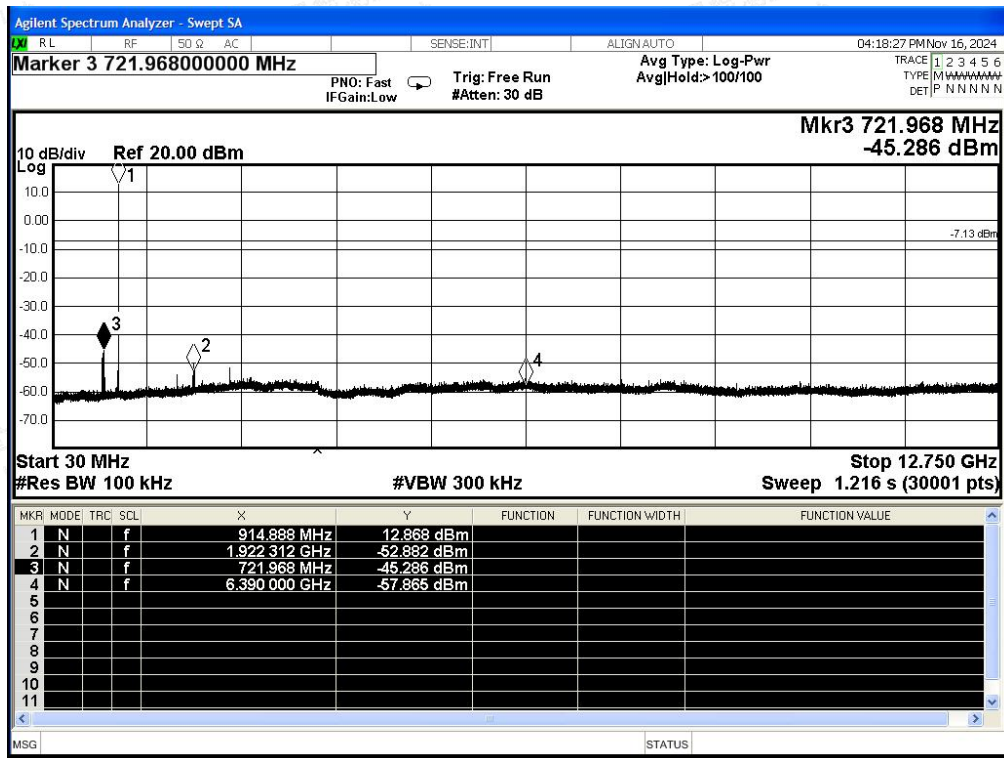
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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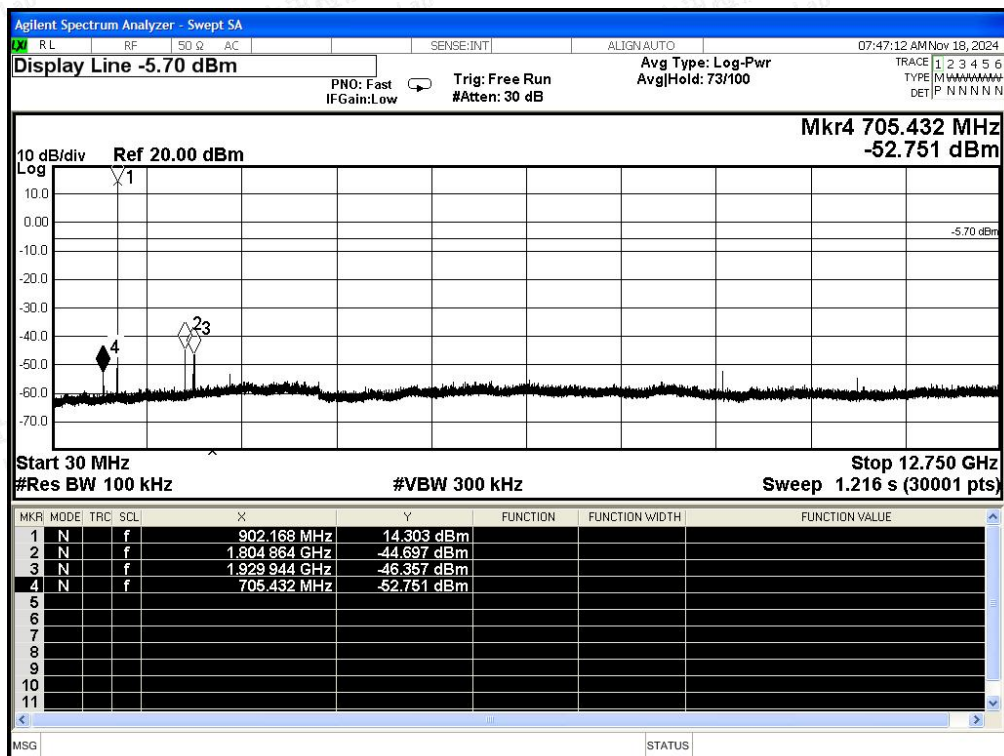
Scan code to check authenticity



Ant1_914.9

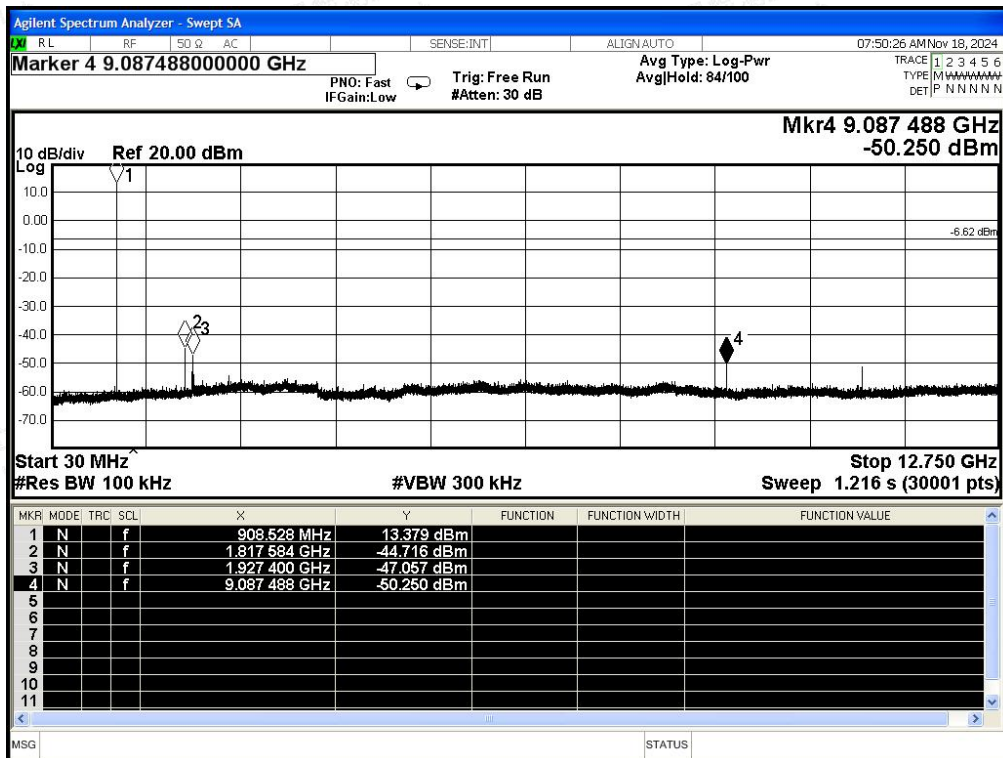


Ant2_902.3

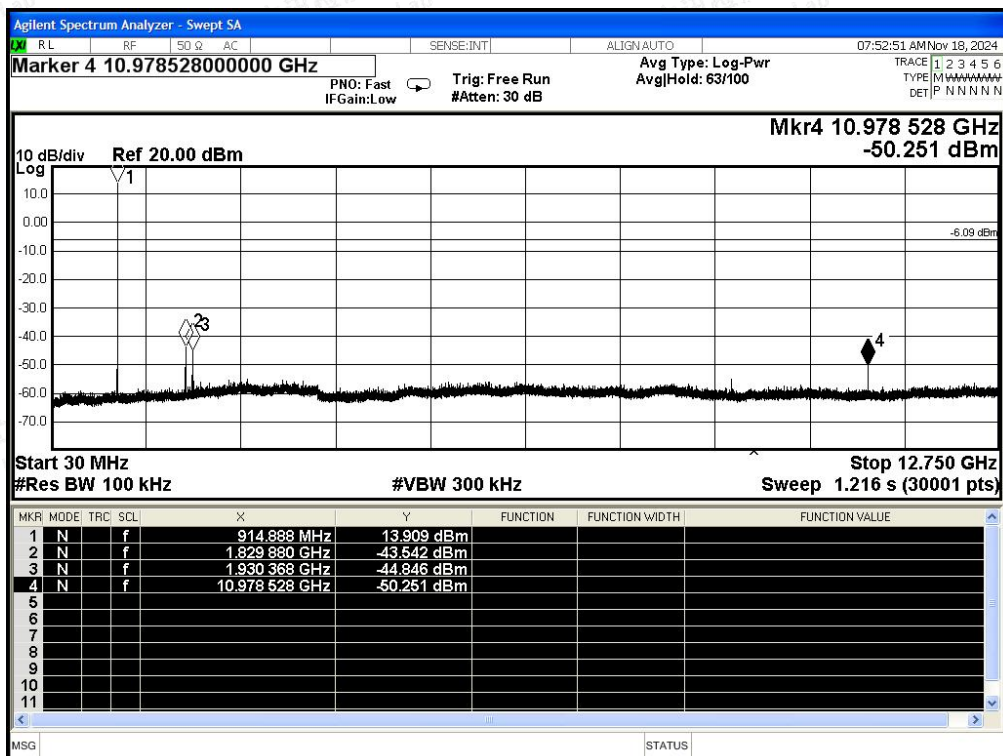




Ant2_908.5



Ant2_914.9





A.8 Duty Cycle

Test Result

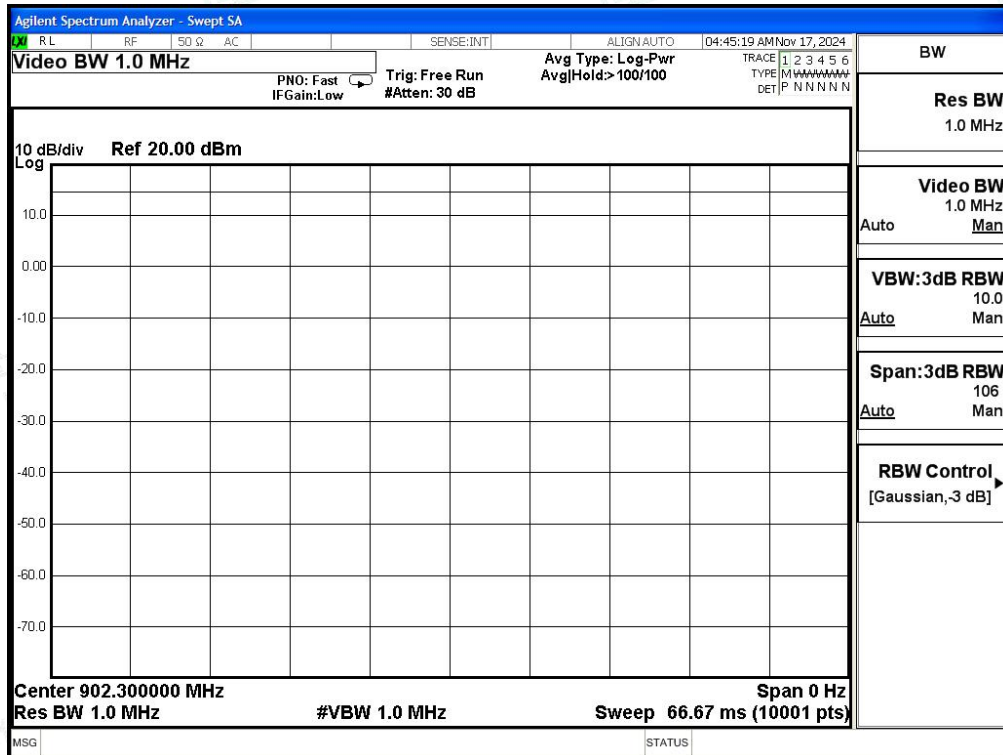
Antenna	Channel[MHz]	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
Ant1	902.3	100.00	100.00	100.00	---	PASS
	908.5	100.00	100.00	100.00	---	PASS
	914.9	100.00	100.00	100.00	---	PASS
Ant2	902.3	100.00	100.00	100.00	---	PASS
	908.5	100.00	100.00	100.00	---	PASS
	914.9	100.00	100.00	100.00	---	PASS



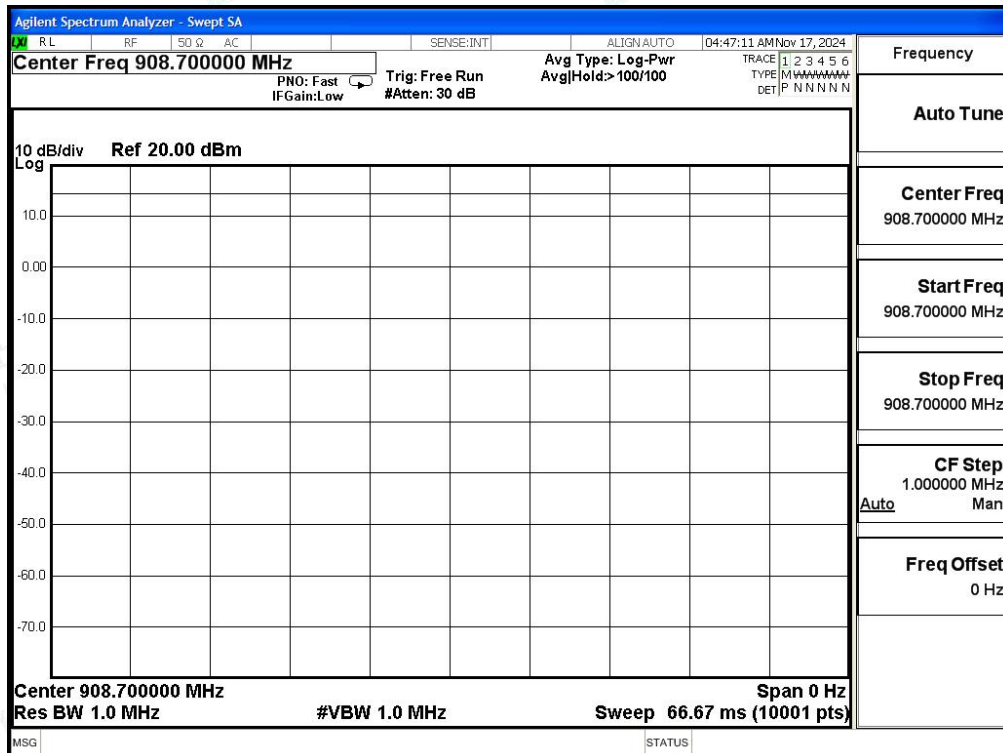


Test Graphs

Ant1_902.3



Ant1_908.5



Shenzhen LCS Compliance Testing Laboratory Ltd.

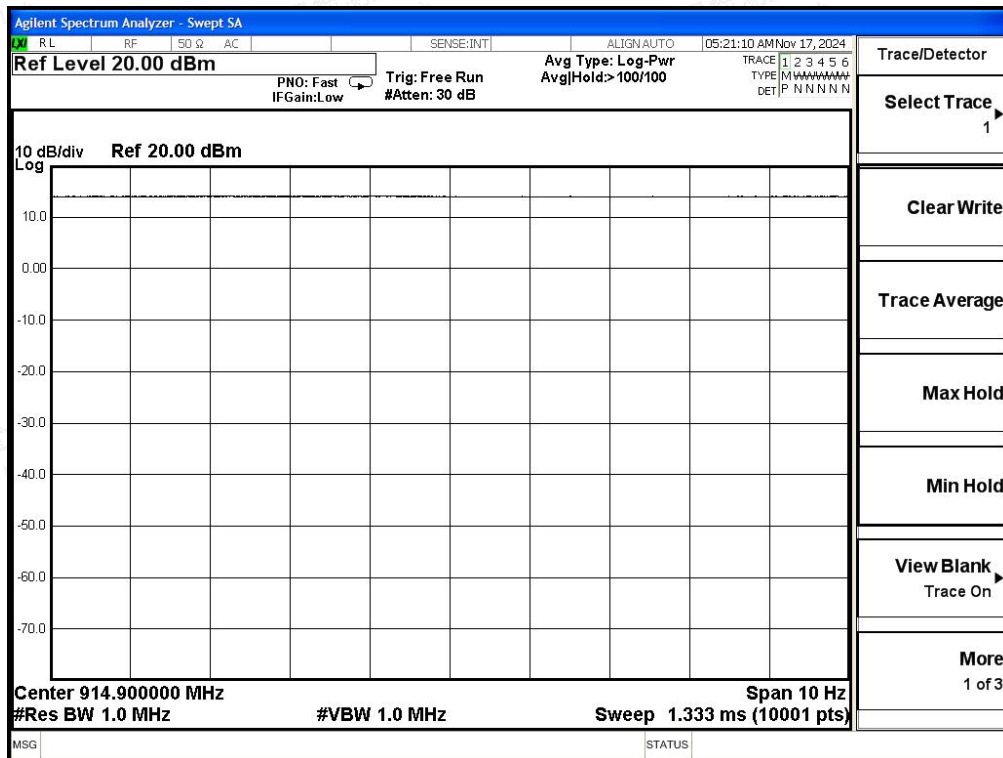
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

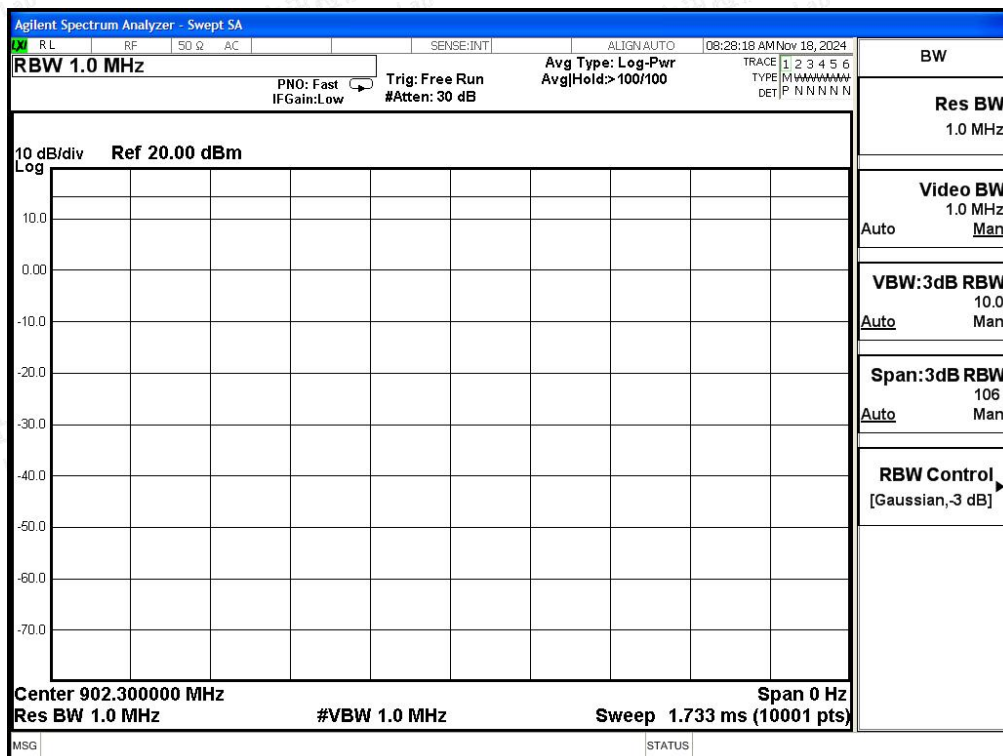
Scan code to check authenticity



Ant1_914.9



Ant2_902.3



Shenzhen LCS Compliance Testing Laboratory Ltd.

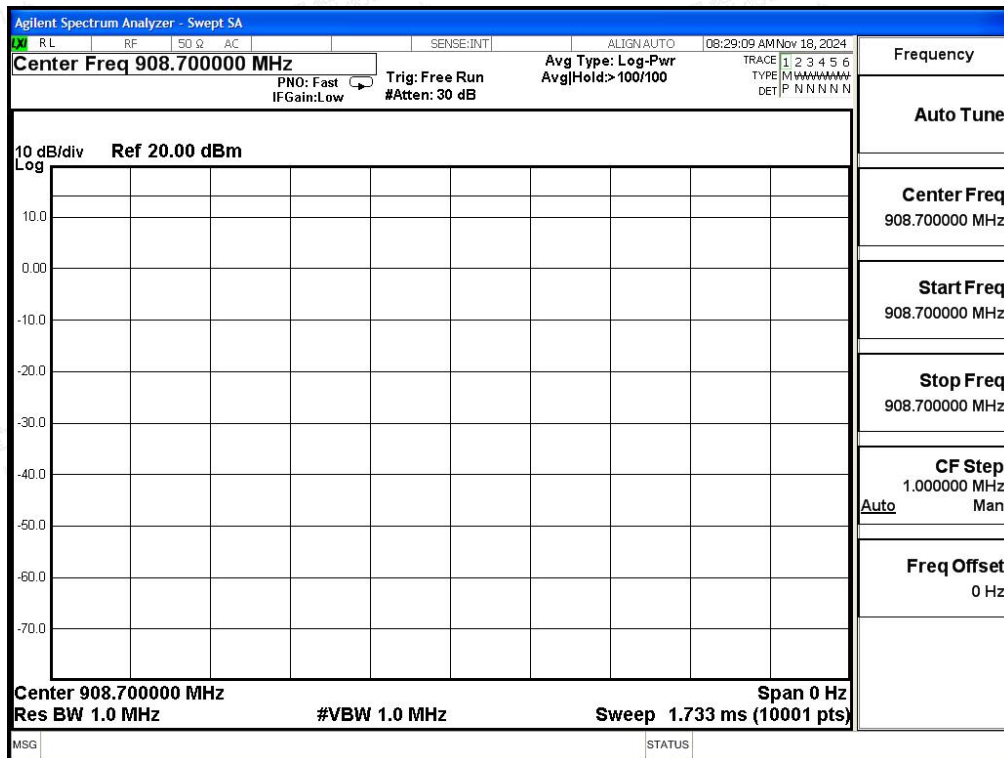
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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Ant2_908.5



Ant2_914.9

