

No.:
GJWSZ2022-0288

TEST REPORT

NAME OF SAMPLE : PCB Antenna

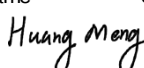
CLIENT : Shenzhen Super Global Electronics
Co.,Ltd

CLASSIFICATION OF TEST : N/A

CVC Testing Technology (Shenzhen) Co., Ltd.





Client		Name : Shenzhen Super Global Electronics Co.,Ltd	
		Address : 2F Building 4 BaiHuaYuan Road 11#, GuangMing New District, Shenzhen, China	
Manufacturer		Name : Shenzhen Super Global Electronics Co.,Ltd	
		Address : 2F Building 4 BaiHuaYuan Road 11#, GuangMing New District, Shenzhen, China	
Equipment Under Test		Name : PCB Antenna Model/Type: WCSP961 Additional Model: / Trade mark : / SerialNO.:N/A Sampe NO.: 2-1	
Date of Receipt.	2022.09.22	Date of Testing	2022.09.22~2022.09.23
Test Specification		Test Result	
IEEE149-1979 IEEE Standard Test Procedures for Antennas		N/A	
Evaluation of Test Result	N/A 		
Tested by: <u>Huang Meng</u> Name Signature 	Reviewed by: <u>Liu Yonghai</u> Name Signature 	Approved by: <u>Dong Sanbi</u> Name Signature 	
Other Aspects: NONE.			
Abbreviations:OK, Pass=passed Fail = failed N/A= not applicable EUT= equipment, sample(s) under tested			

This test report relates only to the EUT, and shall not be reproduced except in full, without written approval of CVC.



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
GJWSZ2022-0288	Original release	2022.09.23



1. GENERAL INFORMATION

1.1 General Product Information

PRODUCT	PCB Antenna
BRAND	/
TEST MODEL	CSP961
ADDITIONAL MODEL	/
ANTENNA TYPE (Remark 4)	PCB Antenna
DIMENSIONS	15.5mm x 6mm
Remark: 1. For more detailed features description, please refer to the manufacturer's specifications or the User's Manual.	

1.2 Technical Information

FREQUENCY RANGE	2400MHz-2500MHz
TEST FREQUENCY	2400MHz-2500MHz

1.3 Test Condition

ENVIRONMENT PARAMETER	Ambient Pressure(KPa)	Temperature(℃)	Voltage	Relative Humidity(%)
NORMAL TEMPERATURE,NORMAL VOLTAGE	101	23	N/A	52



1.4 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT:

Item	Uncertainty
Gain	$\pm 0.8\text{dB}$

1.5 Test Location

The tests and measurements refer to this report were performed by EMC testing Lab. of CVC Testing Technology (Shenzhen) Co., Ltd.

Lab Address: No. 1301, Guanguang Road, Xinlan Community, Guanlan Street, Longhua District, Shenzhen City, Guangdong Province 518110 P.R.China

Post Code: 518110 Tel: 0755-23763060-8805
Fax: 0755-23763060 E-mail: sz-kf@cvc.org.cn
<http://www.cvc.org.cn>

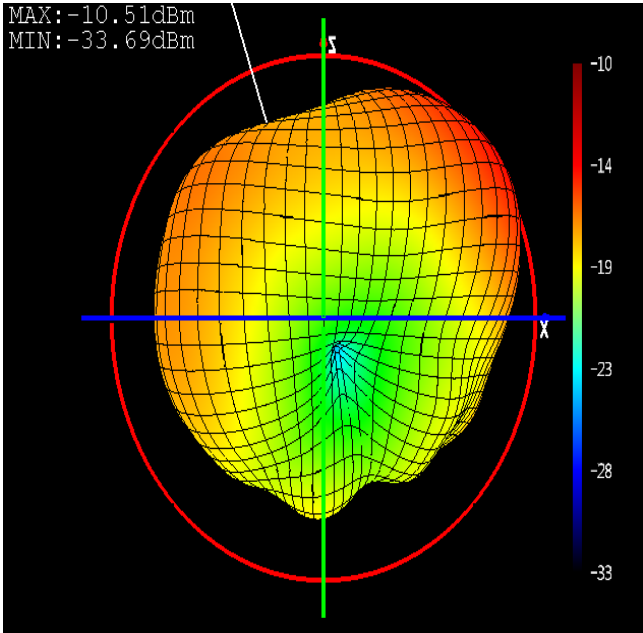
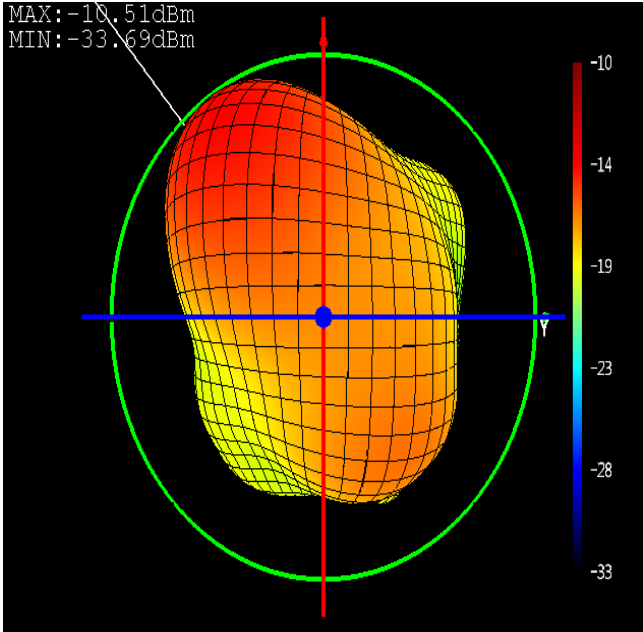


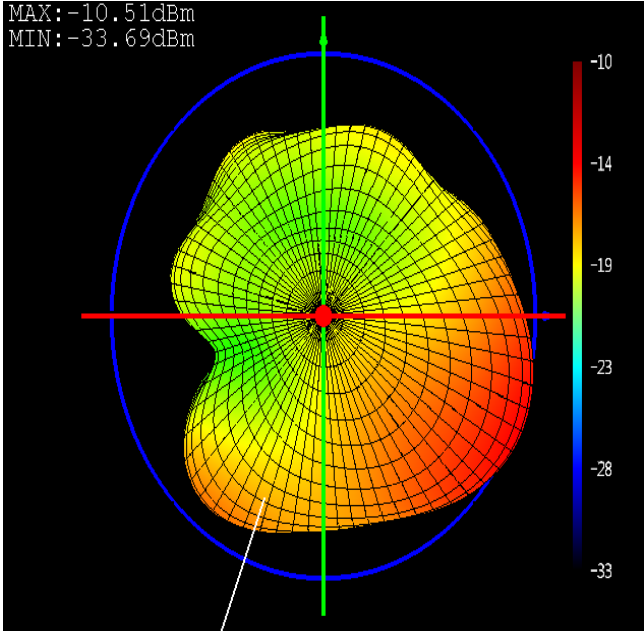
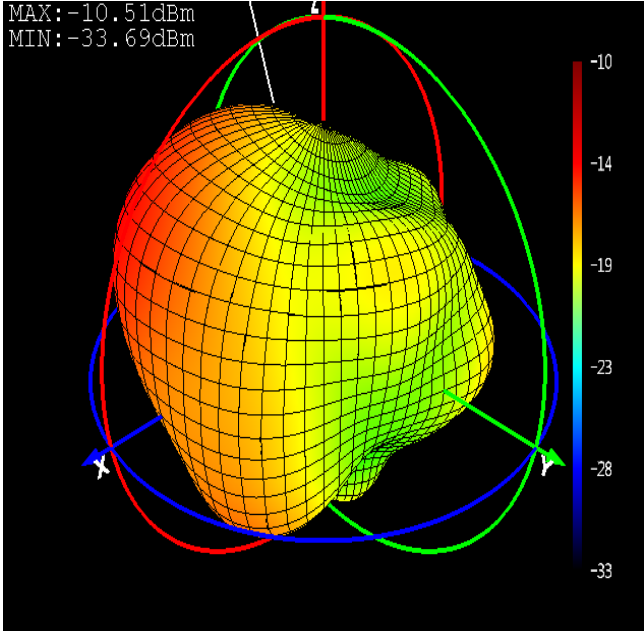
2. GAIN AND EFFICIENCY

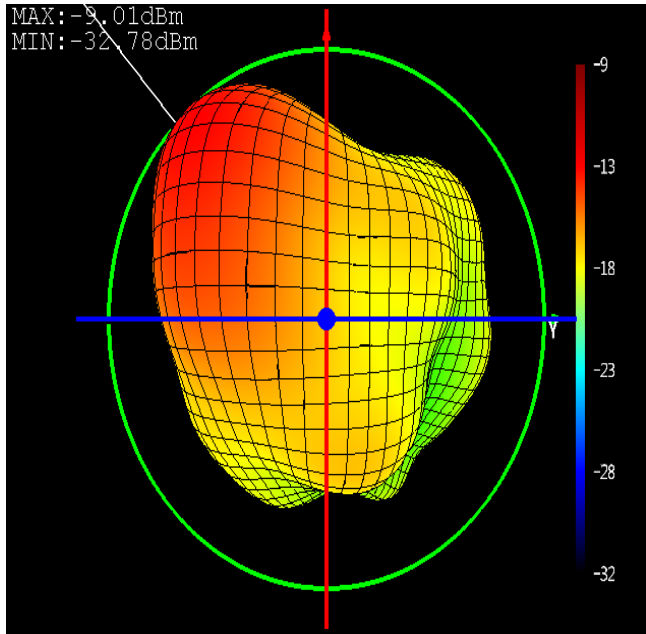
2.1 Test Results

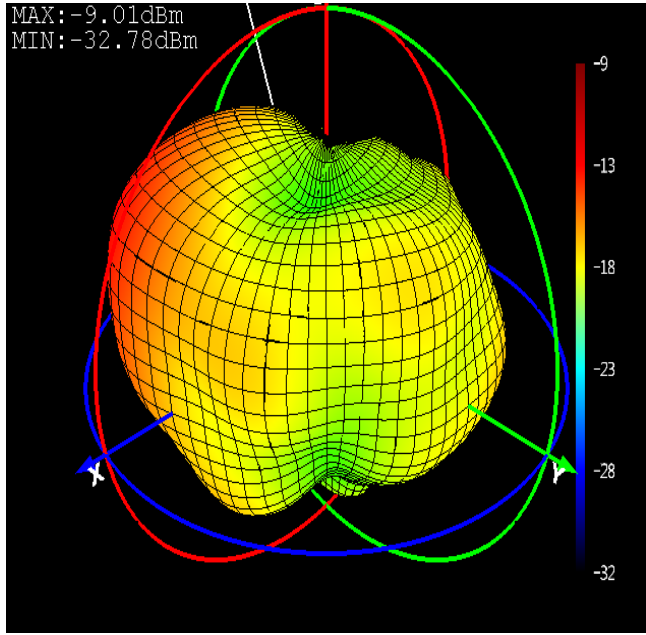
Frequency (MHz)	Peak Gain(dBi)	Efficiency(%)
2400	-11.54	2.18
2410	-10.64	2.40
2420	-10.09	2.56
2430	-9.58	2.75
2440	-9.28	2.91
2450	-9.21	3.02
2460	<u>-9.19</u>	3.12
2470	-9.32	3.13
2480	-9.49	3.11
2490	-9.64	3.07
2500	-9.84	3.00

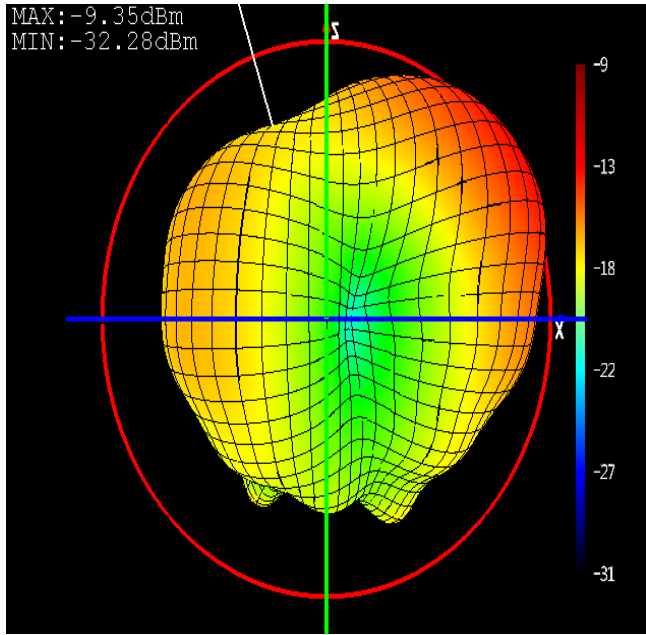
2.2 3D Patterns

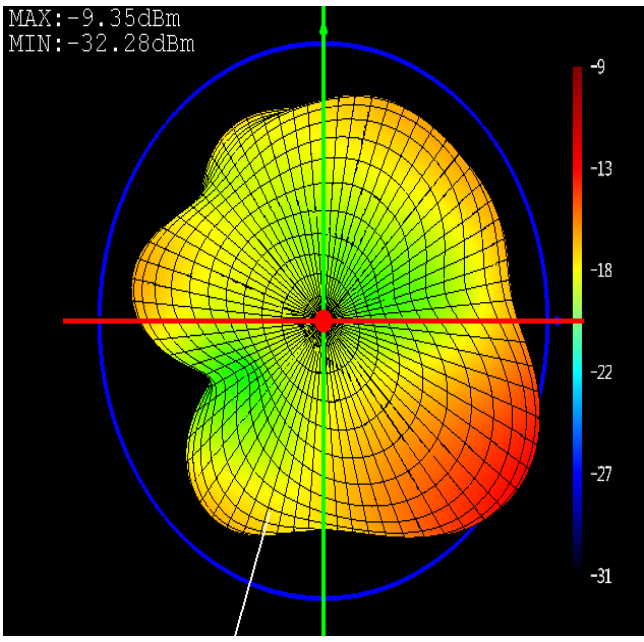
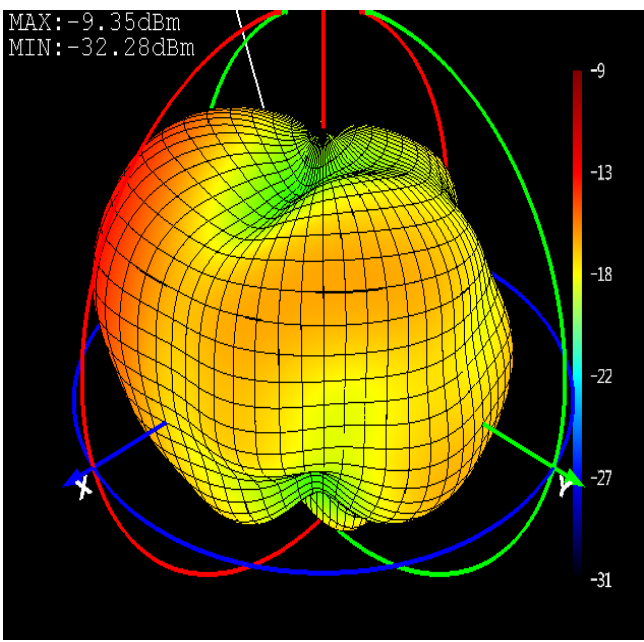
2410MHz	
2410MHz	

2410MHz	
2410MHz	

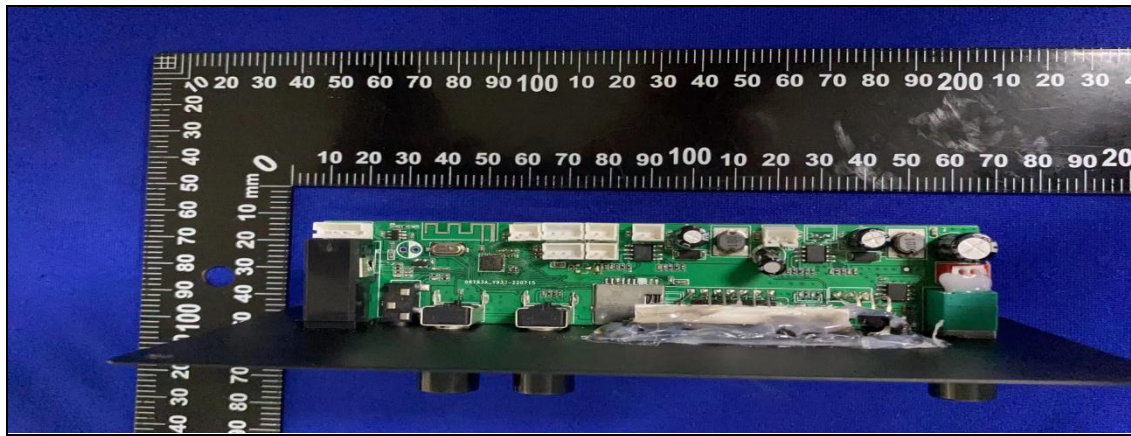
2450MHz	
2450MHz	

2450MHz	
2450MHz	

2480MHz	 MAX: -9.35dBm MIN: -32.28dBm
2480MHz	 MAX: -9.35dBm MIN: -32.28dBm

2480MHz	
2480MHz	

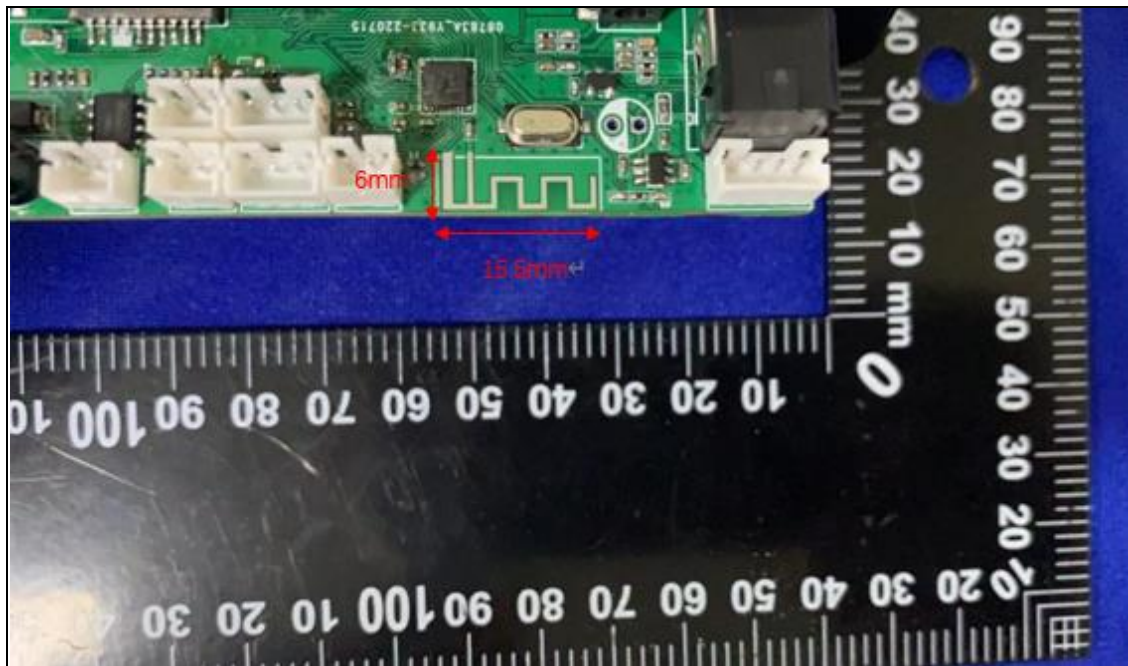
3. PHOTOGRAPH OF EUT



4. PHOTOGRAPH OF TEST SET UP



5. ANTENNA DIMENSIONS

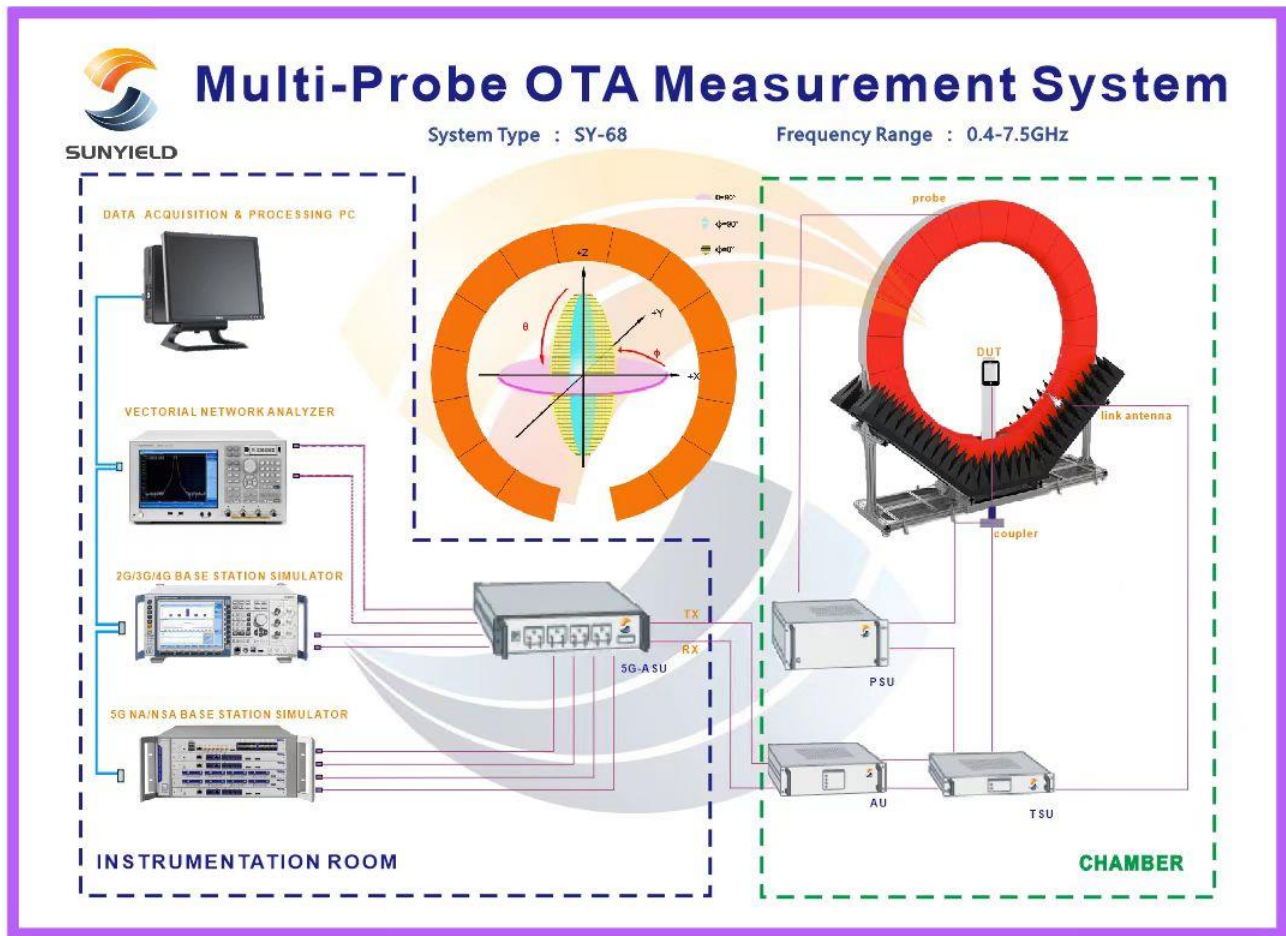




APPENDIX A

Test Equipment	Equipment No.	Serial No.	Manufacturer	Type/Model	Cal.Due	Using
Shielded Room	CS0300038	20211221	MORI	6m*6m*6m	2022/12/20	√
Wideband Radio Communication Tester	CS0300068	102635	R&S	CMW270	2023/7/5	×
Vector Network Analyzer	CS0300067	101544	R&S	ZNB40	2023/6/27	√
Automatic switching unit	CS0300039	81612472	/	5G ACTIVE SWITCHING UNIT	/	√

APPENDIX B



Important

- (1) The test report is valid without the official stamp of CVC;
- (2) Any part photocopies of the test report are forbidden without the written permission from CVC;
- (3) The test report is invalid without the signatures of Approval and Reviewer;
- (4) The test report is invalid if altered;
- (5) Objections to the test report must be submitted to CVC within 15 days.
- (6) Generally, commission test is responsible for the tested samples only.
- (7) As for the test result “-” or “N” means “not applicable”, “/” means “not test”, “P” means “pass” and “F” means “fail”

Address of the laboratory:

CVC Testing Technology (Shenzhen) Co., Ltd.

Address: No. 1301, Guanguang Road, Xinlan Community, Guanlan Street,
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