



規格承認書

Specification for Approval

客 戶 : 威強電
Customer
品 名 : RF ANTENNA
Part name
料 號 : ARY121-0277-005-00
Part No.

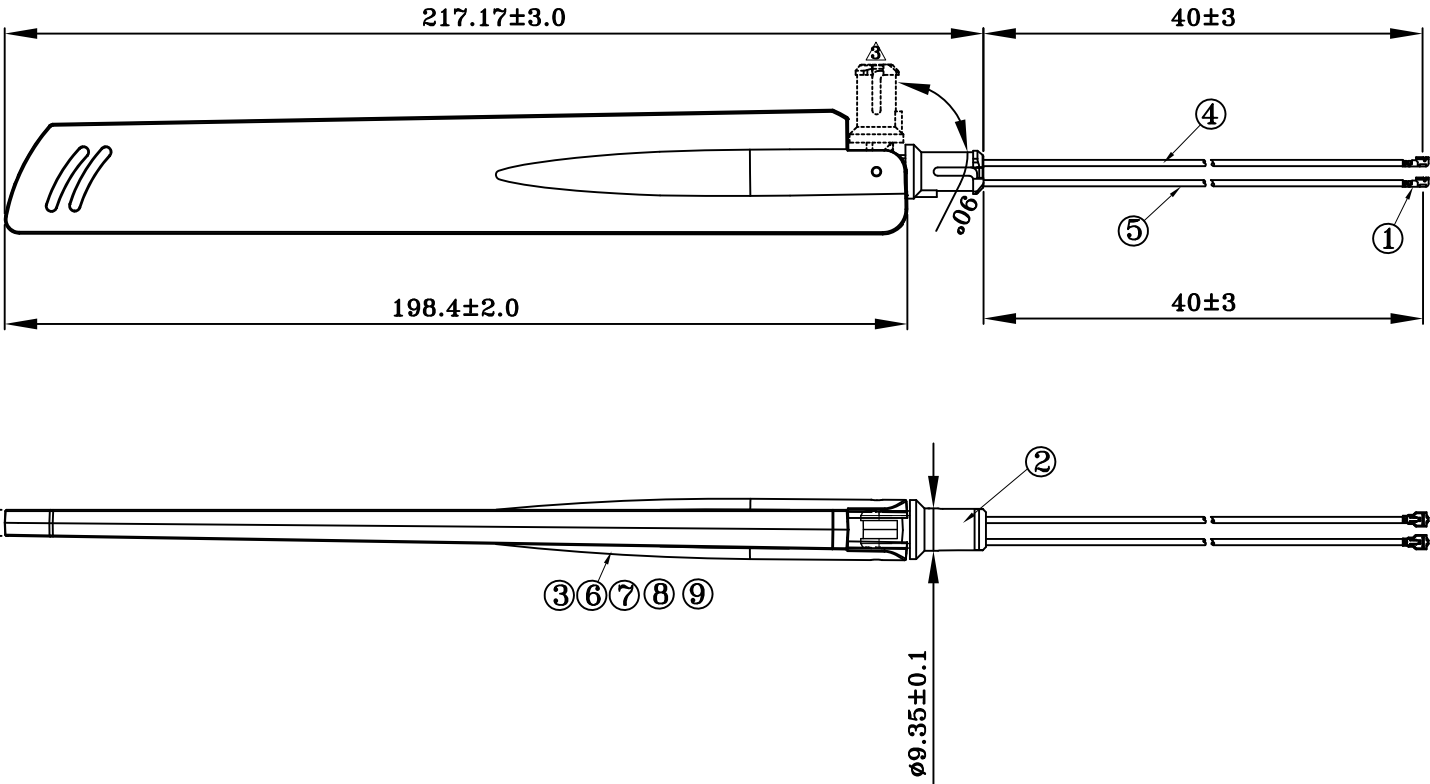
客戶承認印 CUSTOMER APPROVED BY		
APPROVAL	CHIEF	SUPERVISOR
Approval No.		
Model		
Part No.		

CHIEF	SALES	CHIEF	ENGINEER
ROX	Claire	FOUNTAIN	REASON
Date: 2024/06/24		Date: 2024/06/24	
聯 陸 科 技 股 份 有 限 公 司 WIESON TECHNOLOGIES CO., LTD.			

(SR-83-16)

RoHS Compliant

REV	DATE	DESCRIPTION	ECN NO.	NAME
A1	24.06.05	NEW RELEASE		DAVID
A2	24.06.06	CABLE	⚠	DAVID
A3	24.06.17	ADD NOTE	⚠	DAVID
A4	24.06.19	MODIFY BASE SPEC	⚠	DAVID



Note :
1.USE ENVIRONMENTAL PROTECT MATERIAL(ROHS COMPLIANT)
2.ACCORD WITH UL94HB ⚠

⑨	Tape+EVA	Size:18 x 15 x 1mm	2
⑧	Acetate Tape	Size:18 x 10 mm	1
⑦	Cover	Cover , Black	1
⑥	PCB	PCB FR-4	1
⑤	Cable	1.37 Low Loss Cable, FEP Gray JACKET(5G) ⚠	1
④	Cable	1.37 Low Loss Cable, FEP White JACKET(2.4G+6G) ⚠	1
③	Fixed Pin	Fixed Pin , Black Coating	1
②	Base	Base Black ⚠	1
①	Connector	MHF I Plug For 1.37mm Cable , Gold Plated	2
NO.	ITEM	DESCRIPTION	QTY

CUST NO.:			
PART NO.:		ARY121-0277-005-00	
WIESON TECHNOLOGIES CO., LTD		TITLE: WiFi Antenna 1	
DRAWN BY	DAVID	DRAWING NO.	ARY121-0277-005-00
CHECKED BY		DRAWING SIZE	A4
APPROVED BY		UNIT	mm
SORTING NO.	WSC	PAGE	1 OF 1

 WIESON TECHNOLOGIES CO., LTD.	SPECIFICATION LIST	TYPE OF PRODUCT
		RF ANTENNA

ITEM	INDEX	PAGE
1.	THE SPECIFICATION LIST	1
2.	BOM.....	2
3.	TEST REPORT.....	3-14
4.	WIESON ISO APPROVAL.....	15

				Approvals	
Rev	Date	Description	Edited by	Prepared :	REASON
01	2024/06/24	ISSUE	REASON	Checked :	JOSN
				Approved :	ROX
				Issued No :	01
				Sheet :	1 OF 15

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WIESON TECHNOLOGIES CO., LTD.



WIESON TECHNOLOGIES CO.,LTD

BILL OF MATERIAL

Cust.	威強電	TITLE	RF ANTENNA				
Cust.P/N		WIESON P/N	ARY121-0277-005-00				
NO.	DESCRIPTION	SUPPLIER	SUPPLIER PART NO.	UL NO.	AVL	QUANTITY	REMARK
1	MHF I Plug For 1.37mm Cable , Gold Plated	/	Connector	/		2PCS	
2	Base Black	/	BASE	/		1PCS	
3	Fixed Pin , Black Coating	/	FIXED PIN	/		1PCS	
4	1.37 Low Loss Cable, FEP White JACKET(2.4G+6G)	/	CABLE			MM	
5	1.37 Low Loss Cable, FEP Gray JACKET(5G)		CABLE			MM	
6	PCB FR-4		PCB			1PCS	
7	Cover , Black		COVER			1PCS	
8	Acetate Tape Size:18 x 10 mm		Acetate Tape			1PCS	
9	EVA+TAPE Size:18 x 15 x 1mm		TAPE+EVA			2PCS	

APPROVED BY: ROX

CHECKD BY: JOSN

DESIGNED BY: REASON



IEI T1

ARY121-0277-005-00

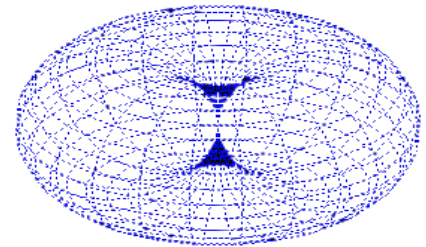
Engineer : Ben

Report date : 2024/06/18



Executive Summary

- **Revision History**
- **Antenna Specification**
- **Antenna Placement**
- **Antenna Solution**
- **The Antenna Anechoic Chamber Measurement**
 - **Antenna Measurement Photo**
 - **Antenna Measurement**
 - **Peak Gain 、 3D Gain 、 Efficiency Result**
 - **2D Antenna Radiation Pattern Result**



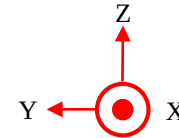
Revision History

Revision	Date	Engineer	Description
01	2024/03/18	Aiden	New Release
02	2024/06/05	Ben	Add Antenna
03	2024/06/07	Ben	Update Data
04	2024/06/18	Ben	Only ARY121-0277-005-00

Antenna Specification

Operating Frequency	2400-2500 MHz	5925-7125 MHz	5150-5850 MHz
Return Loss	10 dB		
Peak Gain	1.27 dBi(Max.)	3.62 dBi(Max.)	3.68 dBi(Max.)
Antenna Type	Dipole		
Material	PCB		
V.S.W.R	2 : 1		
Efficiency	56 %(Max.)	72 %(Max.)	79 %(Max.)

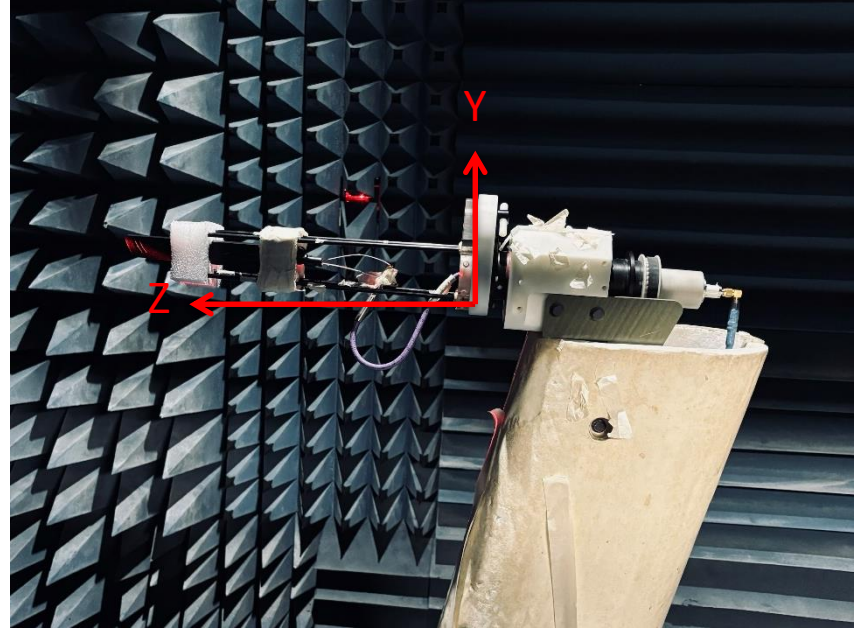
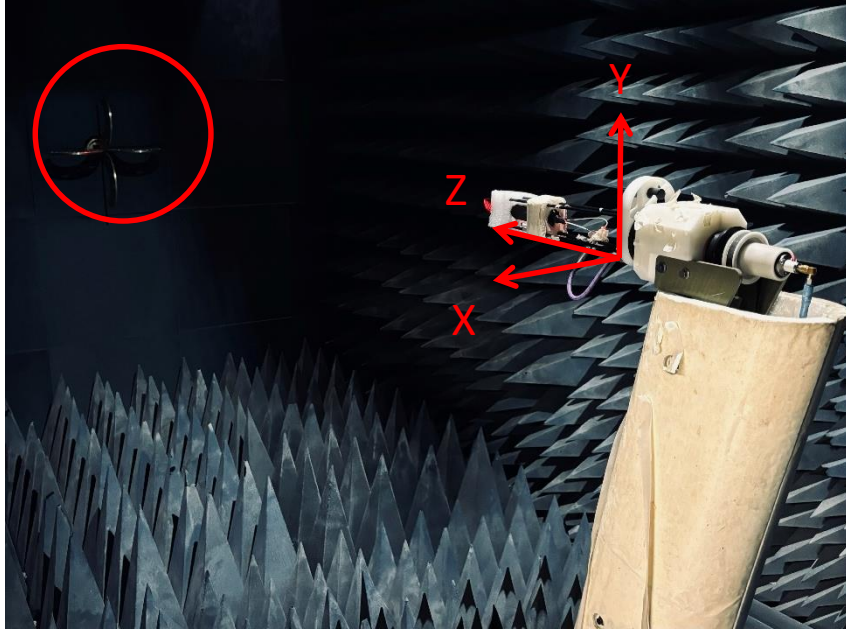
Antenna Placement



Antenna Solution

ANT	Cable Type	Connector	Cable Loss(dB)							
			0.7 G	1.71G	2.45G	3.3G	4.2G	5.5G	6.5G	7G
Wi-Fi 1-1	180 mm/1.37 Low Loss	MHF I	-	-	0.57	-	-	0.82	0.90	0.96
Wi-Fi 1-2	80 mm/1.37 Low Loss	MHF I	-	-	0.38	-	-	0.53	0.62	0.73

Chamber Measurement Photo



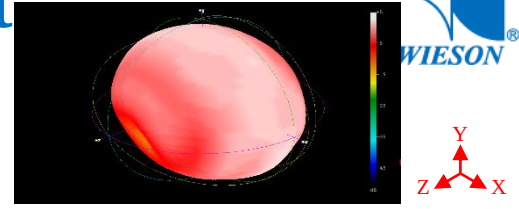
Peak Gain 、 Efficiency Result

Frequency (MHz)	Peak Gain (dBi)	3D Gain (dBi)	3D Radiation Efficiency (%)
2400	1.26	-2.70	54
2450	1.03	-2.55	56
2500	1.27	-2.71	54
5925	2.95	-2.10	62
6000	3.62	-1.75	67
6125	3.50	-1.94	64
6225	3.41	-1.84	65
6325	3.57	-1.56	70
6425	3.44	-1.42	72
6525	3.50	-1.49	71
6625	3.56	-1.82	66
6725	3.50	-1.66	68
6875	2.73	-1.80	66
6925	2.90	-1.96	64
7000	2.95	-1.97	64
7125	3.01	-1.71	67

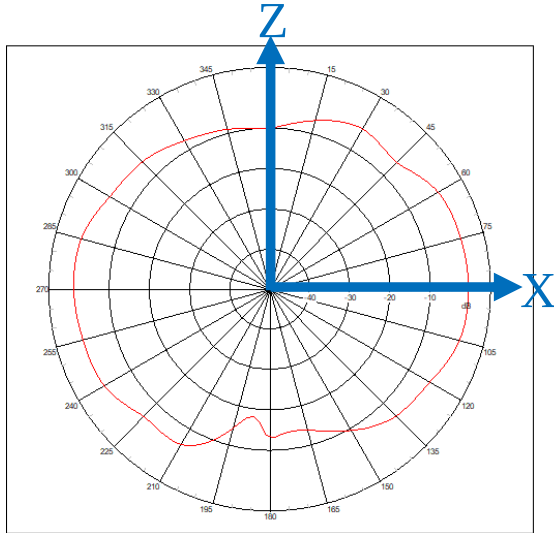
Frequency (MHz)	Peak Gain (dBi)	3D Gain (dBi)	3D Radiation Efficiency (%)
5150	3.15	-1.69	68
5250	3.27	-1.51	71
5350	2.95	-1.76	67
5470	3.58	-2.05	62
5600	3.02	-1.89	65
5725	3.68	-1.39	73
5785	3.43	-1.16	77
5850	3.44	-1.03	79

Frequency : 2450 MHz

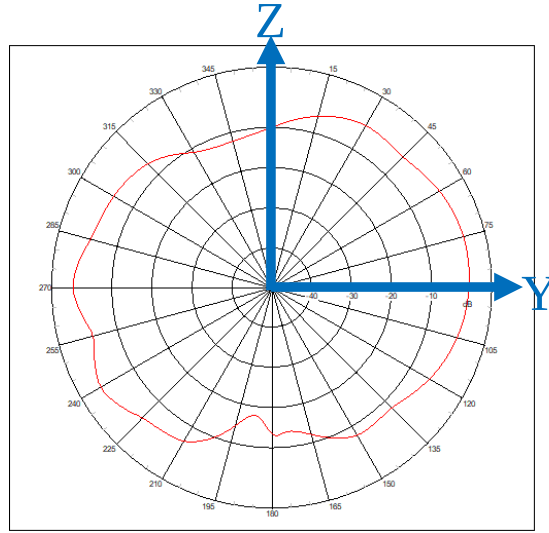
2D Antenna Pattern Result



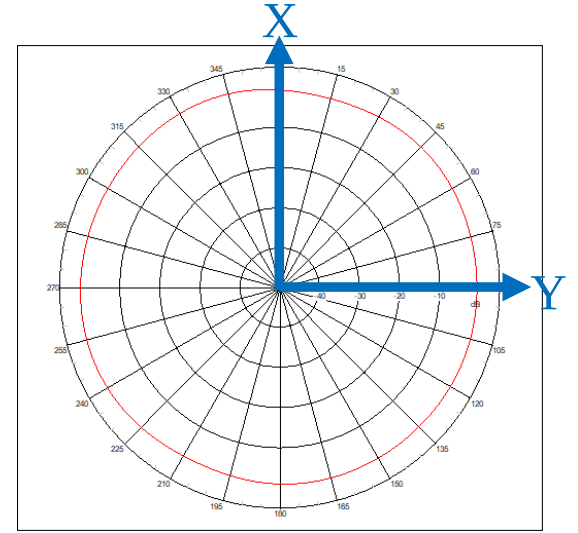
XZ-plane



YZ-plane



XY-plane



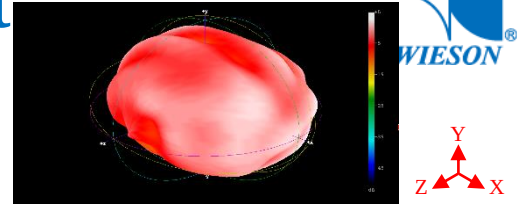
Far-field amplitude limits:

Max: 5dB

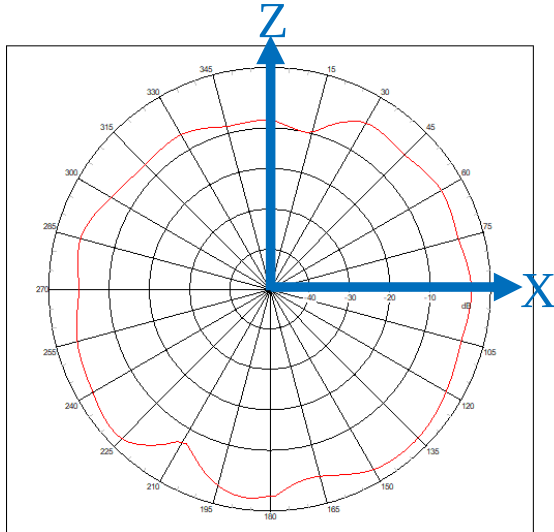
min: -50dB

Frequency : 6525 MHz

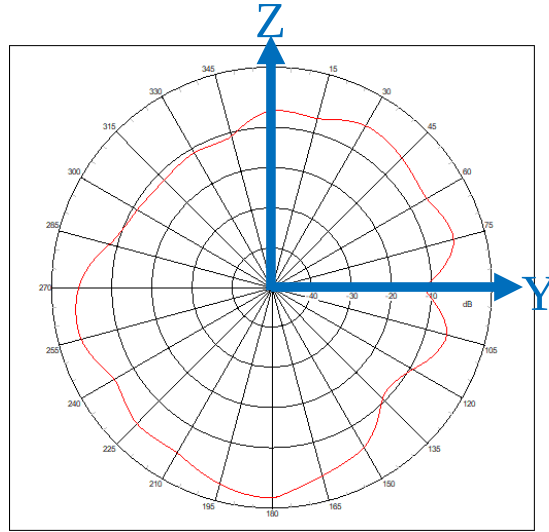
2D Antenna Pattern Result



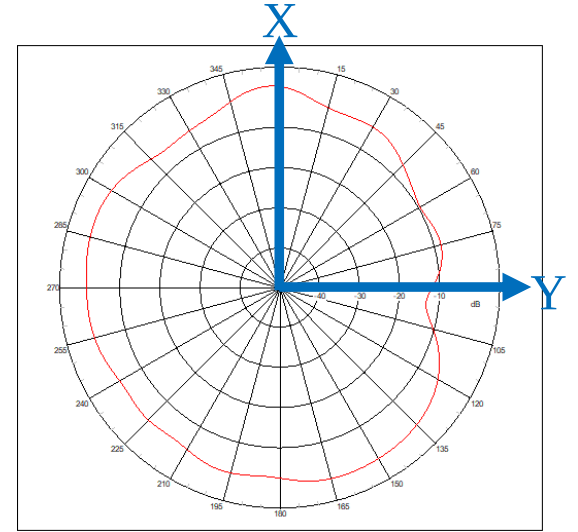
XZ-plane



YZ-plane



XY-plane



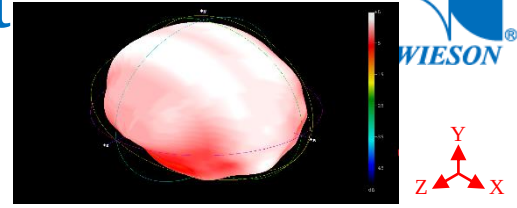
Far-field amplitude limits:

Max: 5dB

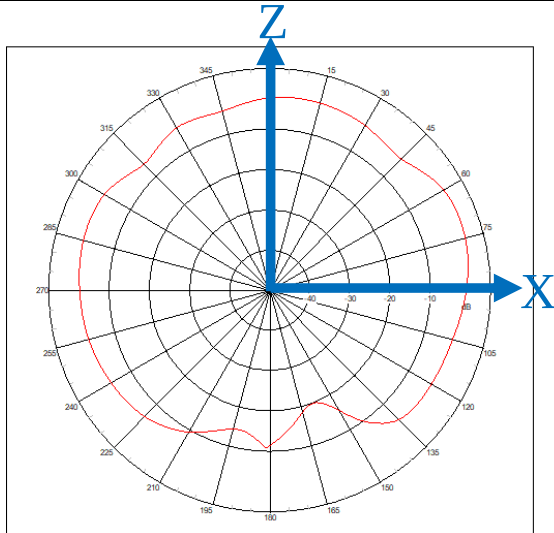
min: -50dB

Frequency : 5600 MHz

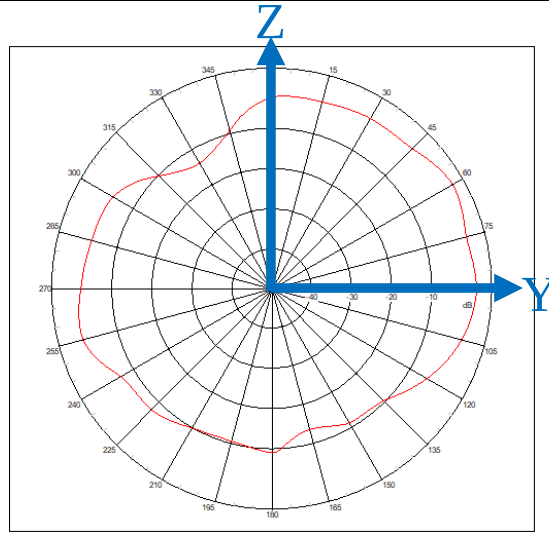
2D Antenna Pattern Result



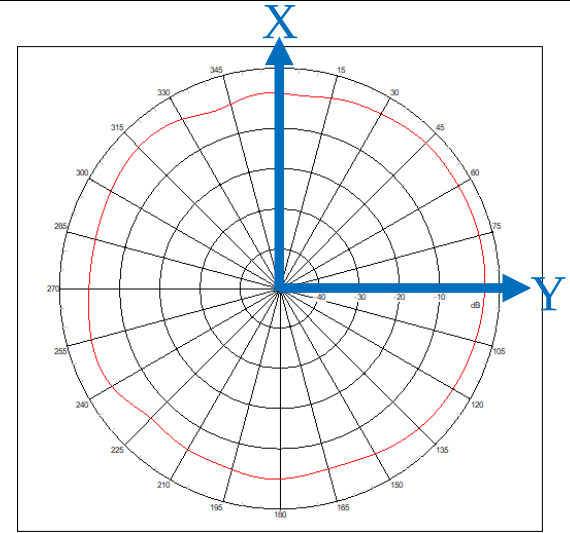
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB



創造完美連結

MAKING THE PERFECT CONNECTION

www.wieson.com

CERTIFICATE

The quality management system of

Unified Social Credit Code: 914419006181620014

WIESON Technologies (Dongguan) Co., Ltd.

Registered Address: Xinbaowei Industrial Building, Huangang Industrial Zone, Houjie Town, Dongguan City | 523946 Guangdong | China

Operation Address: Xinbaowei Industrial Building, Huangang Industrial Zone, Houjie Town (Exclusion of A Building and 4F, B Building), Dongguan City | 523946 Guangdong | China

has been assessed and certified as meeting the requirements of:

ISO 9001:2015

for the following activities:

Design, Manufacture and Sales of Electronic and Automotive Connectors, Cables, Wire Harnesses, RF (Radio Frequency) and Antenna Products, Plastic Injection Parts, Stamping Parts, Plastic & Hardware Molds

This certificate is valid from 26/01/2024 until 25/01/2027

Issued: 26/01/2024

Certificate № CA00525-EN

This registration is subject to the company maintaining a Quality Management System to the above standard, which will be monitored by TÜV Saarland Certification.
The validity of this certificate may be verified on both CNCA's website (www.cnca.gov.cn) and the website of TÜV Saarland Certification (www.tuv-saar.cn).

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