

APPROVAL SHEET

樣品承認書

Zylux Part Number : 1029-0A00206

Part Description : Antenna

Manufactuer Part No. : LDTC114EET1G

Firmware version : NA

Approved date : 2024/1/24

Approval Condition

Conditional Approval 限量承認		Formal Approval 正式承認	✓
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料件之所有組成物質，必須遵守有害物質要求(如符合請勾選V)

All components of the material must comply with the hazardous material requirments (comply please tick V)

HALOGEN FREE(無鹵)		RoHS2.0	✓	REACH	✓	PRO65		CARB2	
詳細的有害物質管控限制 Detailed Harzardous substances Restriction									
Zylux QMI-P40-01	✓	Samsung 0QA-2049		✓		Sony SS-00259			

抗靜電電壓

Antistatic Voltage

NA

器件耐熱等級

Device Heat Resistance Level

NA

SUPPLIER(供應商)

REPORTED 製作	CHECKED 核對	APPROVED 批准
WAH	FOUNTAIN	ROX

AUTHORIZED SIGNATURE

ZYLUX(朝陽)

REPORTED 製作	QC CHECKED 核對	APPROVED 批准

Supplier Contact point

Company Address : (地址)	东莞市厚街镇环岗工业区新保威工业城
TEL : (電話)	0769-38858188

變更履歷表

Change the resume

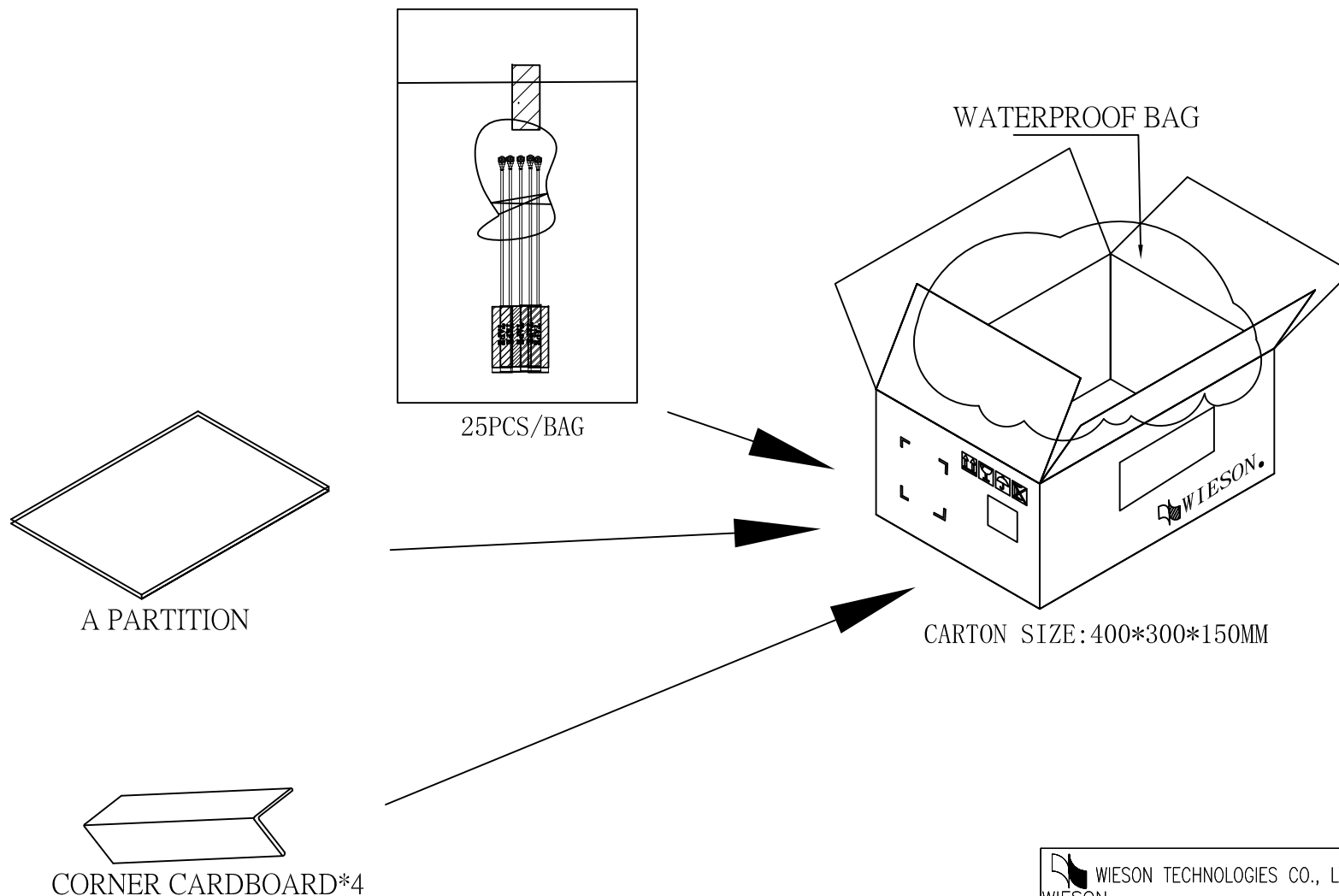
料号(Part Number) : 1029-0A00206

品名 (Name): ANTENNA

[illegible]

RoHS Compliant

REV	DATE	DESCRIPTION	ECN NO.	NAME
A	24.01.31	PROPOSAL		JINGYI



		CUST NO.:	
WIESON TECHNOLOGIES CO., LTD		PART NO.:	
WIESON		ARY196-4044-002-00	
TITLE:		Antenna PACKING	
DRAWN BY	JINGYI	DRAWING NO.	ARY196-4044-002-00
CHECKED BY	YHUA	DRAWING SIZE	A4
APPROVED BY	ROX	UNIT	mm
SORTING NO.	WSC	PAGE	1 OF 1



Zhao Yang Elec. (Shenzhen) Co., Ltd
Material Composition Declaration
物料成份清單

一 供應商基本信息(Supplier Basic Information)								
供應商名稱 (Supplier Name)	WIESON					填寫部門 (Fill in the	無線工程	
填寫人員 (Fill in the personnel)	WAH					填寫日期 (Fill in the date)	2023/12/29	
公司電話(The phone company							公司傳真(fax)	
E-MALL		產品圖樣	請將圖樣放於指定表格中					
二 料件成份信息表(ingredient information table)								
料號 (P/N(Part Number))	ARY196-4044-002-00		產品名稱 (The name of the Product)	Antenna		產品重量(g) (Product weight (g))	0.62	
零件名稱 Part name	Part mass (mg) 零件重量	(組成零件的 均一材料名稱)Homogeneous Material Name	均一材料廠商名稱/生產國 Homogeneous material manufacturer name/country of origin	材質重量 Material mass (mg)	構成之化學成份名稱 substance name	CAS 號 (Chemical Abstract System Number)	化學成份 重量百分比 weight% of substance	備註(Note)
MHF	80	CS210	Zijin	60	Cu	7440-50-8	91.80%	
					Sn	7440-31-5	8%	
					P	7723-14-0	0.20%	
		PBT	Shinkong	15	PBT	30965-26-5	71%	
					Flame retardants	NA	15%	
					Glass Fiber	65997-17-3	14%	
		Plating Au	Yongyifa	5	Au	7440-57-5	99%	
					Co	7440-48-4	1%	
PCB	240	KB-6160	建滔橫層板	230	GLASS FABRIC	65997-17-3	43%	
					EPOXY RESIN	26265-08-7	41%	
					COPPER FOIL	7440-50-8	16%	
		KSM-S6189	廣信感光新材料	10	半酯化丙烯酸改性環氧	N/E	48%	
					光引發劑ITX	5495-84-1	1%	
					高沸點溶劑（DBE）	95481-62-2	5%	
					碳黑	1333-86-4	1%	
					硫酸銅	7727-43-7	31%	
					聚二甲基硅氧烷	9016-00-6	1.60%	
					二氧化硅	14464-46-1	1.30%	
					三聚氰胺	108-78-1	1.80%	
					DPM	34590-94-8	2%	
					四甲苯	64742-94-5	3.30%	
					光引發劑907	71868-10-5	4%	
					丙烯酸樹脂	商業機密	91%	
丙烯酸單體	商業機密	1%						
粘著給予劑	商業機密	8%						
CABLE	230	鍍錫銅線	明星精密線材	140	Cu	7440-50-8	99%	
		NEOFIL FEP	DAIKIN FLUORO CHEMICALS	70	Sn	7440-31-5	1%	
		FEP Colormasterbatch	OLORANT CHROMATICS TRADIN	20	FEP	25067-11-2	100%	
					Carbon black	1333-86-4	5%	
					FEP	25067-11-2	95%	
三 聲明								
供應商必須保證上述数据真实有效，如果发生变更会将变更后数据及时通知朝陽公司。 he supplier shall ensure that the above data is true and valid and, if any changes are made, notify the Zhaoyang company of the changed data in time.								
四、說明： 1.該表一個表格對應一個料號，請不要多個料號填寫進一個表格。行數不夠的情況下，請自行添加足夠的行數。 1.The table corresponds to a material number. Please don't fill in a form with the numbers.If the number of rows is not enough, please add enough lines yourself. 2.該表填寫的時機為：在我司承認之前，作為承認資料之一進行提供。 2.The timing of the form is as follows: prior to our company's recognition, it is provided as one of the acknowledged data. 3.該表從2017年8月9日開始填寫電子檔即可，不用填好后打印簽字蓋章。但是必須得到貴司主管人員確認該表的正確性。 3.The table from August 9, 2017 began to fill in the electronic file, you can not fill it, print, signature, seal. However, you must have your supervisor confirm the validity of the statement.								
審核人員： 職位： 審核人員聯繫電話： E-Mail：								

朝陽電子(深圳)有限公司/Zhaoyang Elec.(Shen Zhen)Co.,Ltd.
原材(物)料檢驗表/Material Inspect Sheet

品名/Part Name		Antenna		料號/Part NO.		1029-0A00206		*第 / 次試模/T__		*模號/Mold NO.		/		*生產設備/Machine		/					
規格/Description		MINI COAXIAL1.13 黑色L55mm 環保										溫/濕度/Temperature/Humidity			/						
廠商 Vendor		WIESON		*模具廠商 Mold Maker		/		檢驗日期 Check Date		2023/10/27		*模穴號 Cav.NO.		/		重量 Weight		生產產地 Produce place		東莞	
檢查項目/Ins.Item		出線長	PCB板長	PCB板寬									单重/g								
規格/Specification		55	30	10									0.62								
公差/Tolerance		±3	±0.3	±0.3									±5%								
測 定 值 Data	1	55	30.03	10.11									0.62								
	2	56	30.11	10.10									0.62								
	3	55	30.09	10.00									0.62								
	4	55	29.98	10.01									0.62								
	5	55	29.98	10.10									0.62								
	6																				
	7																				
	8																				
	9																				
	10																				
判定欄/Judgement																					
外觀記錄/Appearance Record		OK							☒ 合格/OK ☐ 不合格/NG					主管/Approval			檢驗者/Inspector				
裝配記錄/Assembly Record		OK							備注 Remark							xlin			LYQING		

* __僅對屬於本廠模具或有指定時方填寫/* __Only for Zylux'mold need

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

ITEM	INDEX	PAGE
1.	THE SPECIFICATION LIST	1
2.	BOM.....	2
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				Approvals	
Rev	Date	Description	Edited by	Prepared :	WAH
01	2024/01/24	ISSUE	WAH	Checked :	FOUNTAIN
				Approved :	ROX
				Issued No :	01
				Sheet :	1 OF 16

No part of the information shown of this document may be used in any way without office stamp or written consent of
 WIESON TECHNOLOGIES CO., LTD.



WIESON TECHNOLOGIES CO.,LTD

BILL OF MATERIAL

Cust.		TITLE	Antenna				
Cust.P/N	1029-0A00206	WIESON P/N	ARY196-4044-002-00				
NO.	DESCRIPTION	SUPPLIER	SUPPLIER PART NO.	UL NO.	AVL	QUANTITY	REMARK
1	FR-4 , Size: 30 x 10 x 0.4mm					PCS	
2	1.13mm Normal Coaxial Cable , FEP Black Jacket					MM	
3	MHF I Plug For 1.13mm Cable , Gold Plated					PCS	
4	G9000 , Size: 29.2 x 9.2mm					PCS	
5							
6							
7							
8							

APPROVED BY: ROX

CHECKD BY: FOUNTAIN

DESIGNED BY: WAH



喬暘 SL512x-86

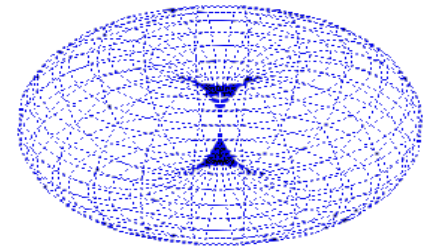
Engineer : BZ

Report date : 2023/12/05 REV.06



Executive Summary

- **Revision History**
- **Antenna specification**
- **Antenna photo**
- **Antenna S-Parameter Measurement**
 - **VSWR**
- **The antenna anechoic chamber measurement**
 - **Antenna Measurement Photo**
 - **Antenna Measurement**
 - **Peak Gain 、Avg-Gain 、 Radiation Efficiency**
 - **2D Antenna Radiation pattern**
 - **3D Antenna Radiation pattern**
- **Conclusion & Recommendations**



Revision History

Revision	Date	Engineer	Description
01	2023/05/29	Ting	New Release.
02	2023/05/31	Jane	Change the placement of the antenna
03	2023/07/12	Jane	Change the placement of the antenna
04	2023/08/25	BZ	Change the antenna form
05	2023/10/04	BZ	Change the antenna form
06	2023/12/04	BZ	Confirm Antenna Performance

Antenna specification

Main Antenna
Cable Type
Normal 1.13
Cable:71mm

Item	Specification
Operating Frequency(MHz)	2400-2480
Bandwidth	80 MHz (Min.)
Return Loss	10 dB (Min.)
Polarization	Linear
Azimuth Bandwidth	Omni-directional
Peak Gain	3.61dBi (Max.)
Impedance	50Ω
Material	PCB
Connector	MHF 1
Cable Type	O.D. 1.13
Maximum Power	1W
V.S.W.R	2 : 1
Radiation	Omni directional
Efficiency	44%(Max.)
Operating Temperature	-10~60℃
Storage temp	-10~70℃

Antenna photo

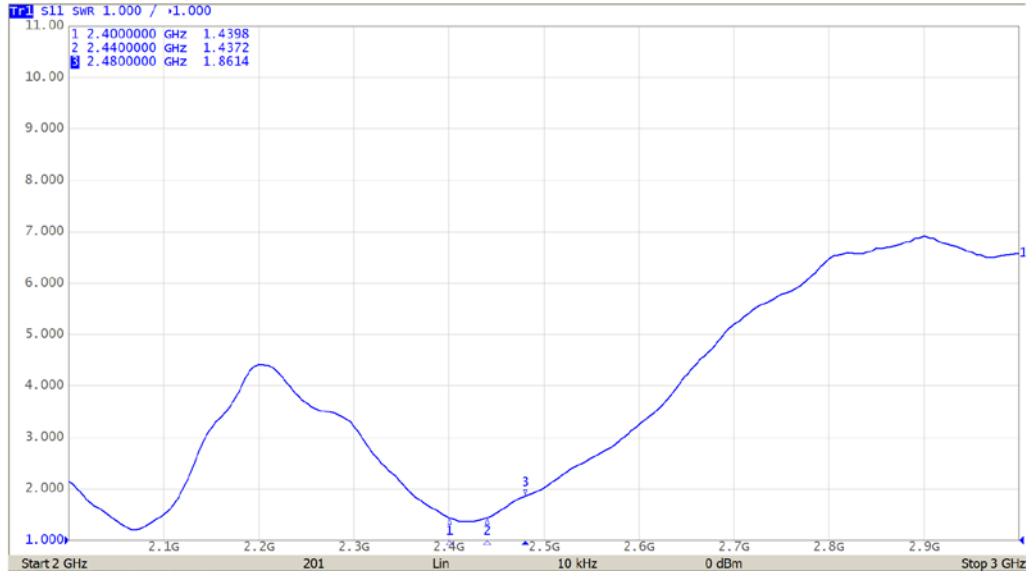


Antenna S-Parameter Measurement

(VSWR 、 Return loss)

Vector Network Analyzer

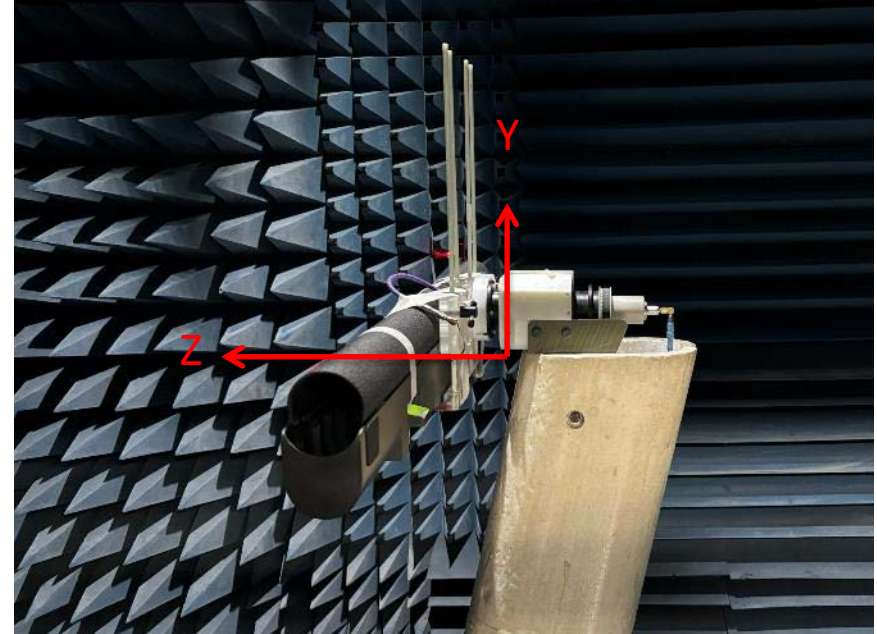
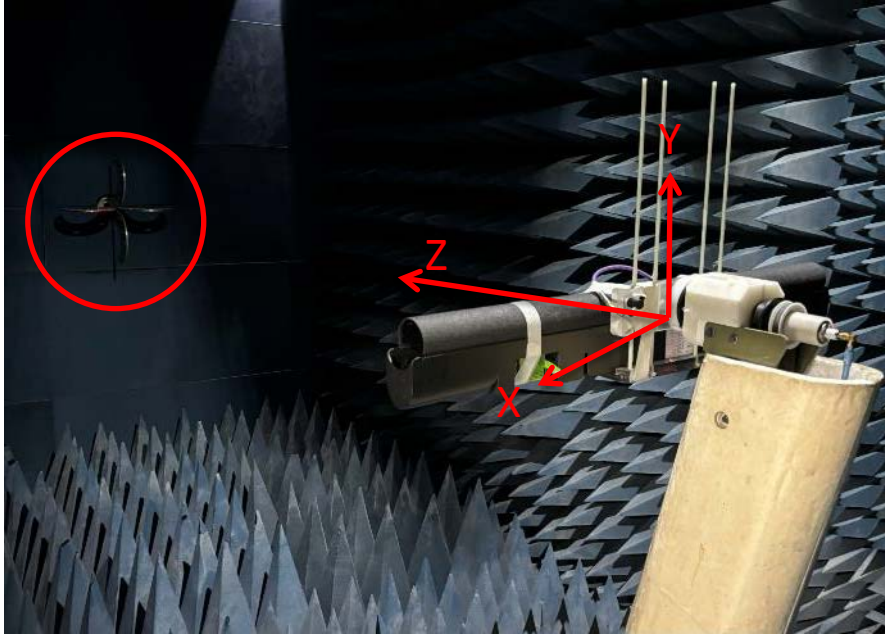
VSWR



Freq.(MHz)	2400	2440	2480
	1.43	1.43	1.86

The antenna anechoic chamber measurement

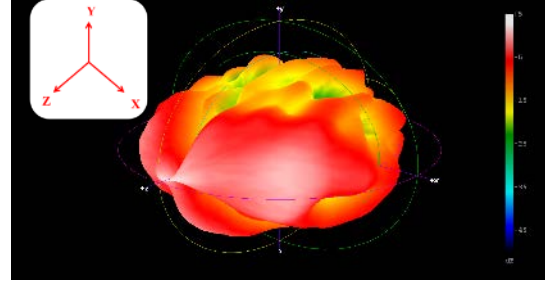
Chamber Measurement Photo



3D Gain Total

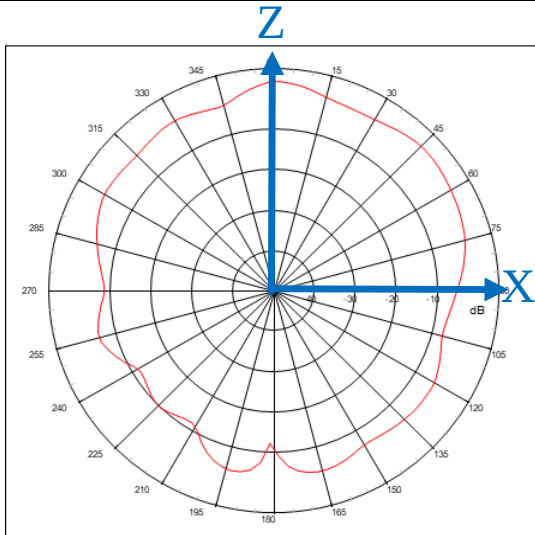
Frequency (GHz)	Gain(dBi)	3D-avgGain (dBi)	Efficiency(%)
2.4	3.01	-4.73	34
2.41	3.14	-4.14	39
2.42	3.22	-3.83	41
2.43	3.39	-3.69	43
2.44	3.54	-3.63	43
2.45	3.61	-3.61	44
2.46	3.59	-3.59	44
2.47	3.57	-3.57	44
2.48	3.22	-3.9	41

2D/3D Antenna Pattern

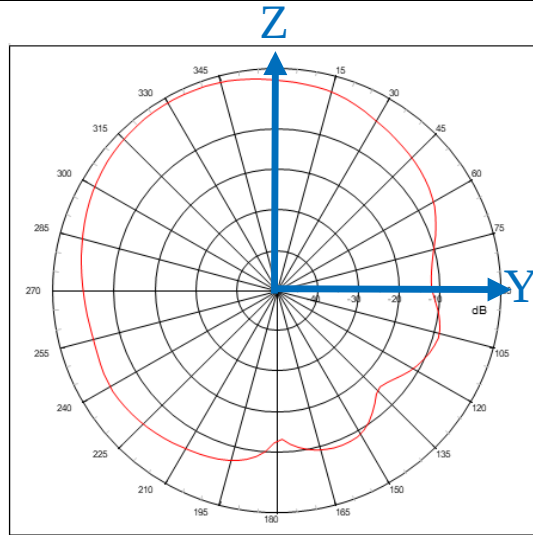


Frequency : 2440MHz

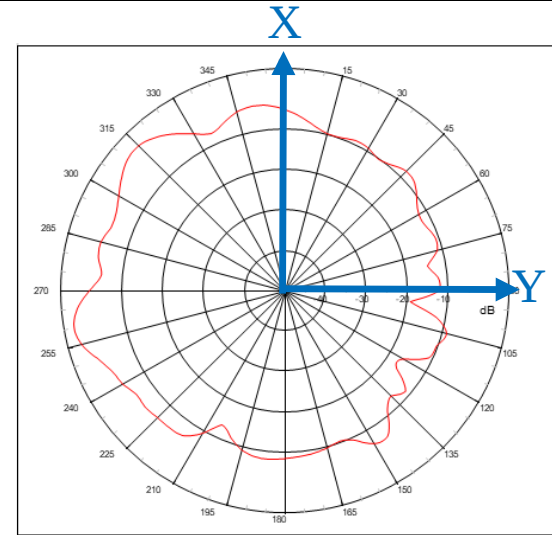
XZ-plane



YZ-plane



XY-plane



Far-field amplitude limits:

Max: 5dB

min: -50dB

Antenna Model:ARY196-4044-002-00

Antenna manufacture name: WIESON TECHNOLOGIES (DONG GUAN) CO.,LTD.

Antenna manufacture address:XINBAOWEI INDUSTRIAL BUILDING, HUANGANG INDUSTRIAL ZONE, HOUJIE TOWN, DONGGUAN CITY, GUANGDONG PROVINCE, CHINA



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 No 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).

Dipl. Wirtsch.-Ing. (FH) Thorsten Greiner, Managing Director
TÜV® Saarland Certification GmbH
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