



Specification For Approval

Customer: Zhejiang Dahua Technology Co., Ltd.

Supplier: GaoKe Ant Co., Ltd

Customer P/N: 1. 2. 20. 01. 10300-001

Production Name: 2. 4&5. 8G Foldable Rubber Antenna

Production Number: GKZS-2. 4&5. 8G-SMAFJZG-195A

Supplier Signature		
Engineer	Checked by	Approved by
Nanhuo Liu	Xiaoxin Chao	Jingsong Yang
08-Mar-2022	08-Mar-2022	08-Mar-2022

Customer Signature		
Engineer	Checked by	Approved by

Note: After the customer confirms the seal, please send this acknowledgement back to our company.

GaoKe Ant Co., Ltd

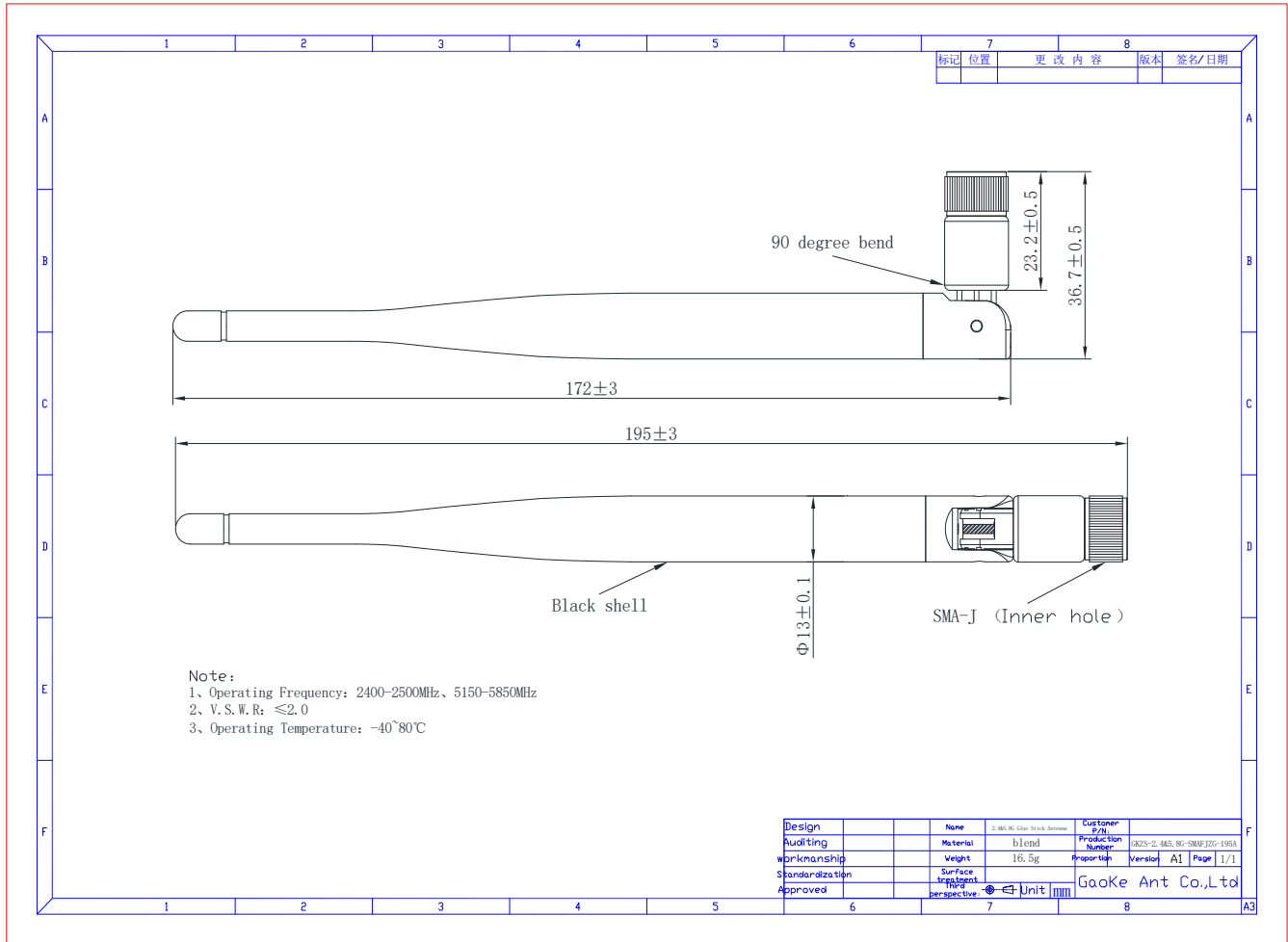
Address: No. 22, Guangcong South Road, Shengang, Conghua District, Guangzhou City, Guangdong Province, China

Tel: 020-87080630/87080639/87080632

Fax: 020-87080731

<http://www.gkzs.com.cn>

1、Product structure drawing (mm)



2、Product picture

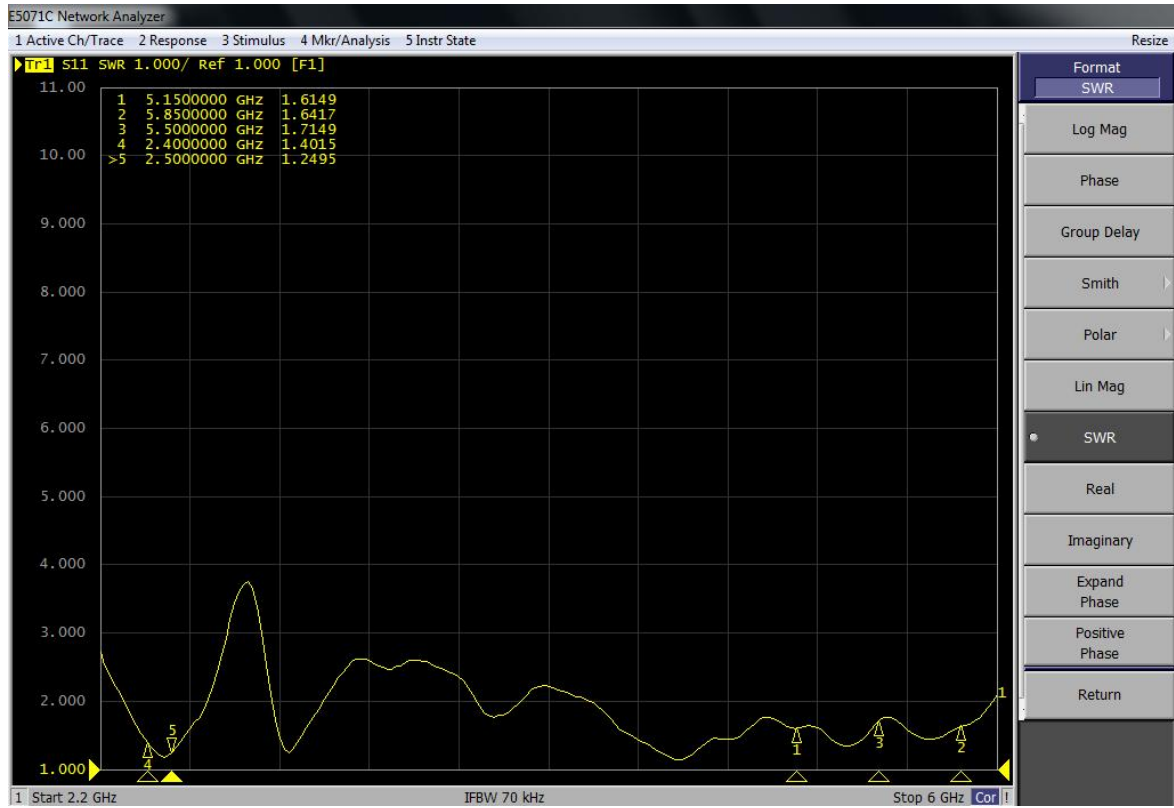


3、Antenna technical parameters

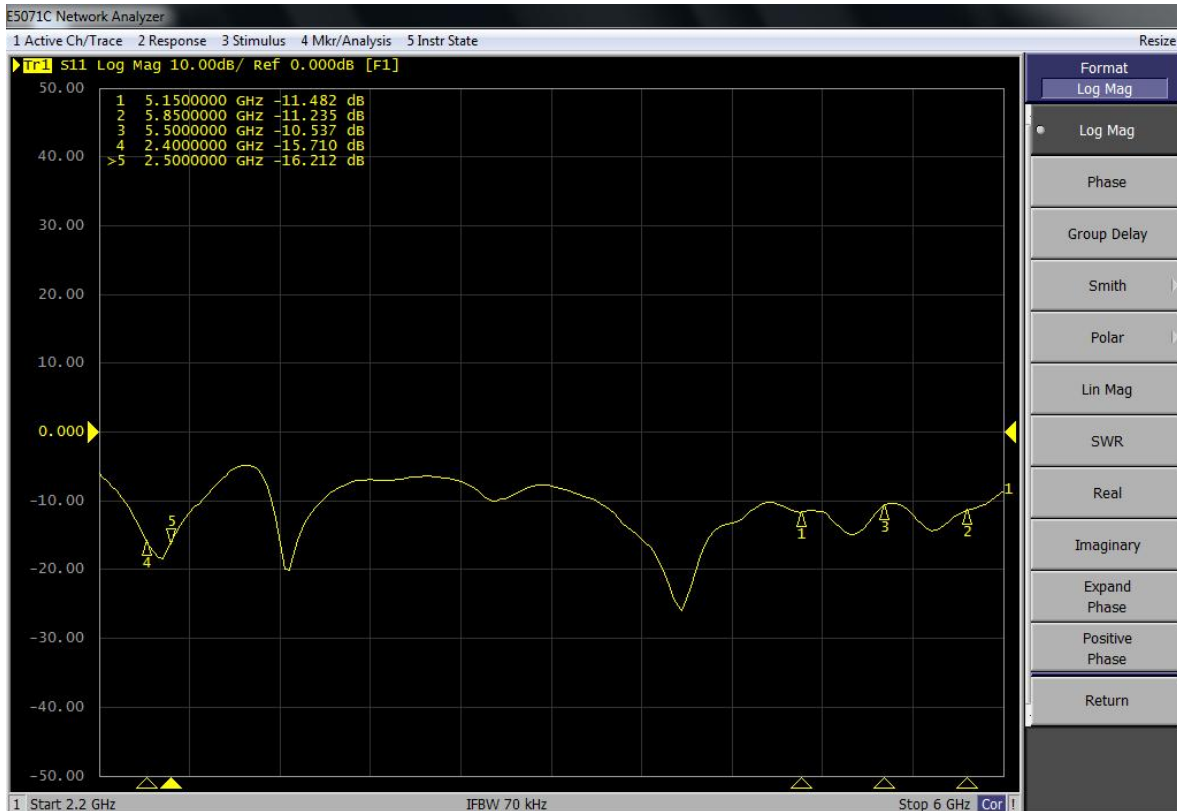
Type	2.4&5.8G
Frequency	2400-2500MHz、5150-5850MHz
Polarization	Linearly polarized
V.S.W.R	≤ 2.0
Efficiency	65.6%@2400-2500MHz 65.5%@5150-5850MHz (mean value) 68.13%@2400-2500MHz 76.6%@5150-5850MHz (Max)
Gain	4.0dBi@2400-2500MHz 4.3dBi@5150-5850MHz (mean value) 4.43dBi@2400-2500MHz 5.91dBi@5150-5850MHz (Max)
Feeder type and size	SMA-J(Inner hole)
The material	ABS(Black)
Antenna size	$\Phi 13 \times 195 \text{mm}$
Weight	16g
Operating temperature	$-40^{\circ}\text{C} \sim 80^{\circ}\text{C}$

4、Antenna performance test

4.1 V.S.W.R

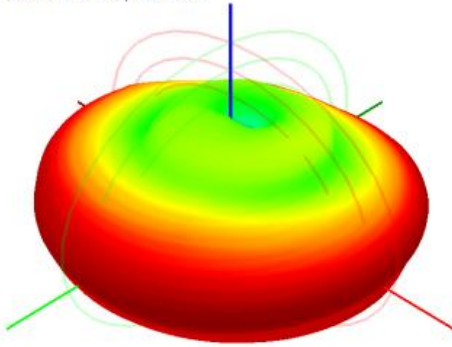


4.2 Return loss

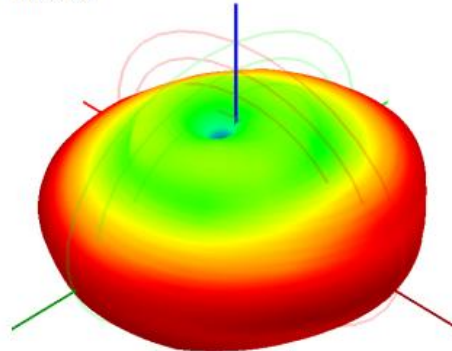


4.3 Direction map

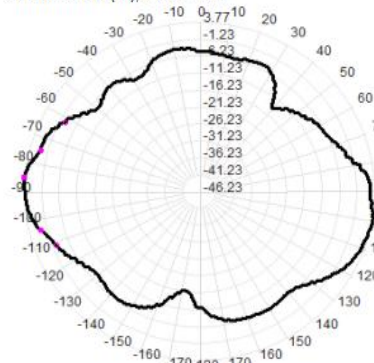
2400.0MHz H+V, Eff: 68.1%



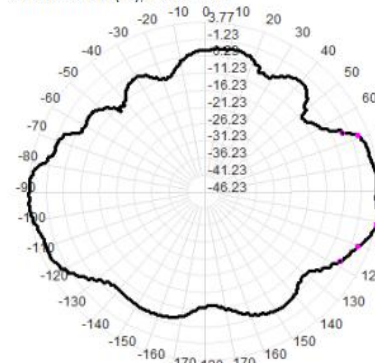
Back View



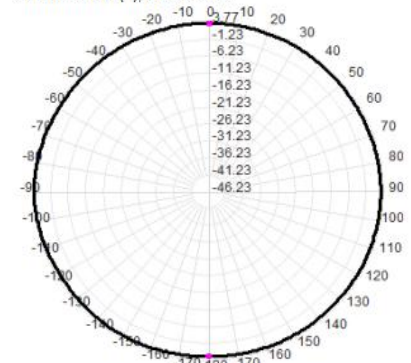
2400.0MHz Total(E1), Max= 3.77dBi



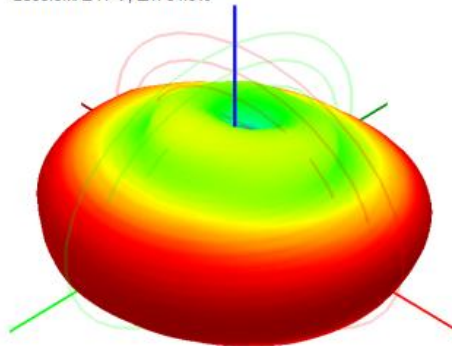
2400.0MHz Total(E2), Max= 3.76dBi



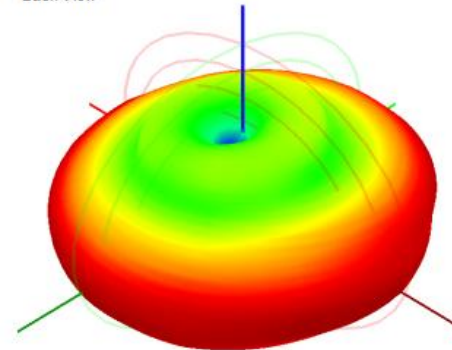
2400.0MHz Total(H), Max= 3.53dBi



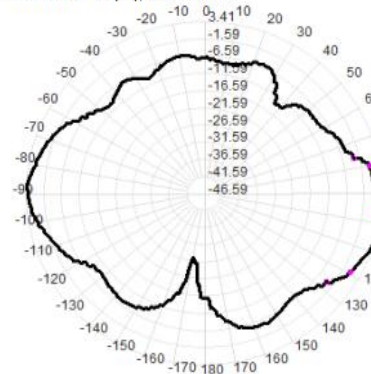
2500.0MHz H+V, Eff: 64.8%



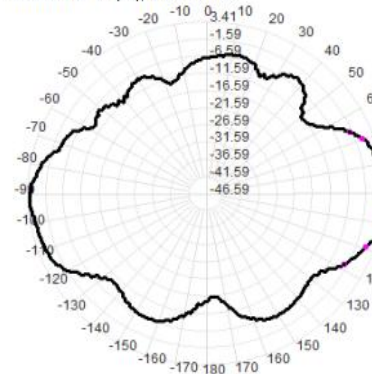
Back View



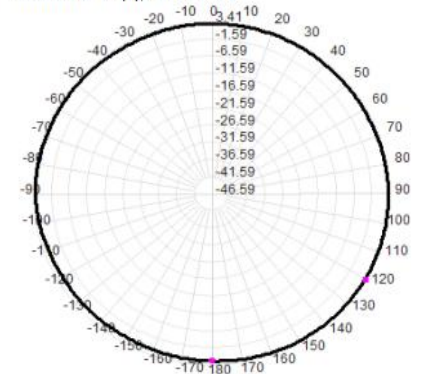
2500.0MHz Total(E1), Max= 3.12dBi



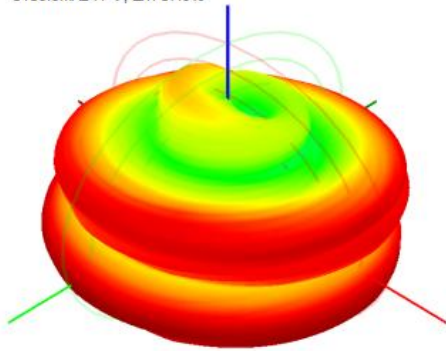
2500.0MHz Total(E2), Max= 3.41dBi



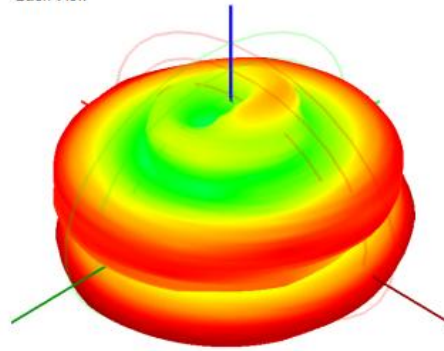
2500.0MHz Total(H), Max= 2.93dBi



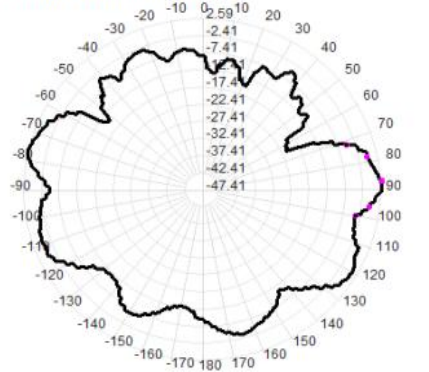
5150.0MHz H+V, Eff: 57.8%



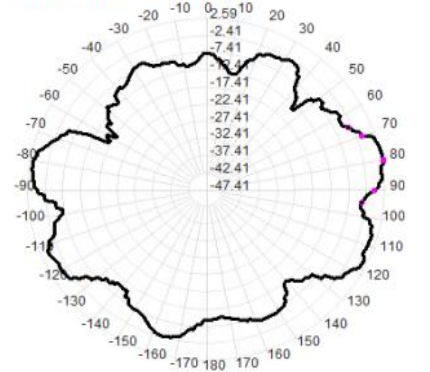
Back View



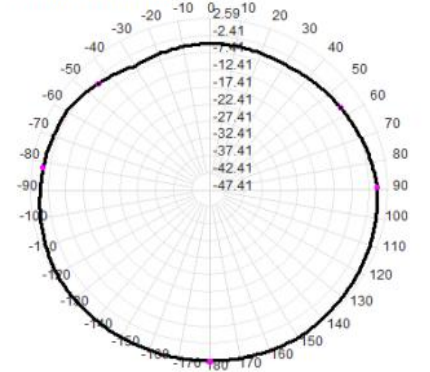
5150.0MHz Total(E1), Max=2.57dBi



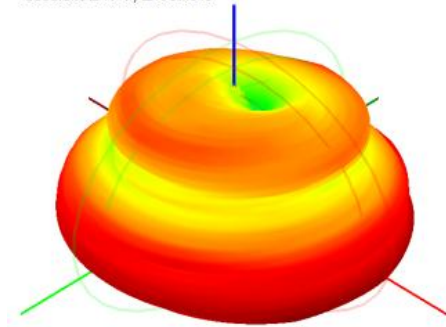
5150.0MHz Total(E2), Max=2.59dBi



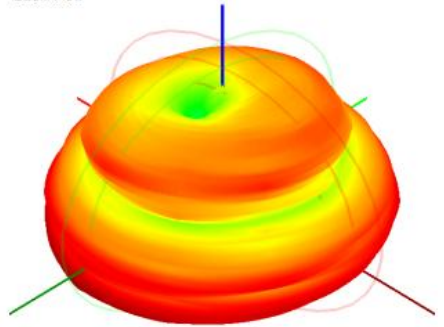
5150.0MHz Total(H), Max=2.36dBi



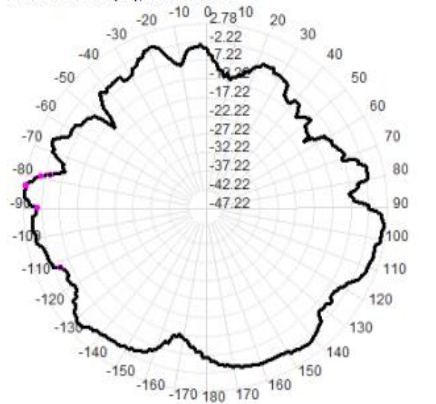
5850.0MHz H+V, Eff: 67.9%



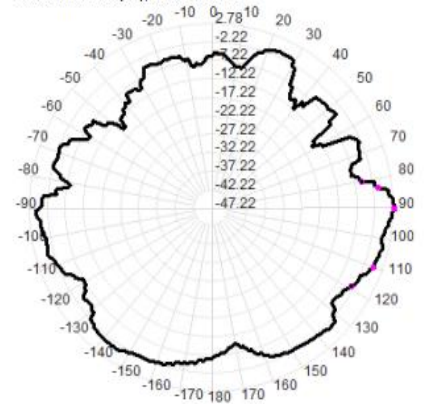
Back View



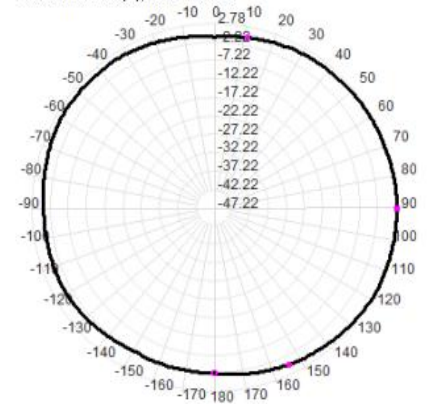
5850.0MHz Total(E1), Max=2.52dBi



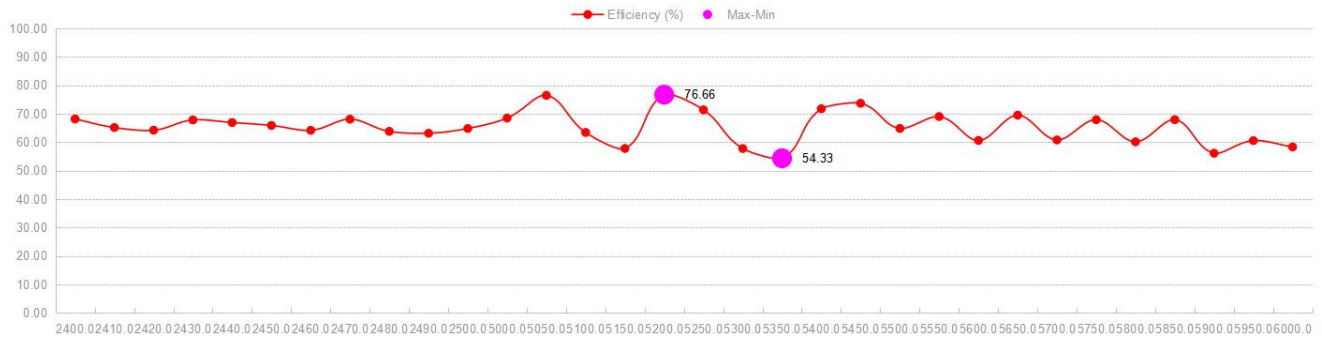
5850.0MHz Total(E2), Max=2.78dBi



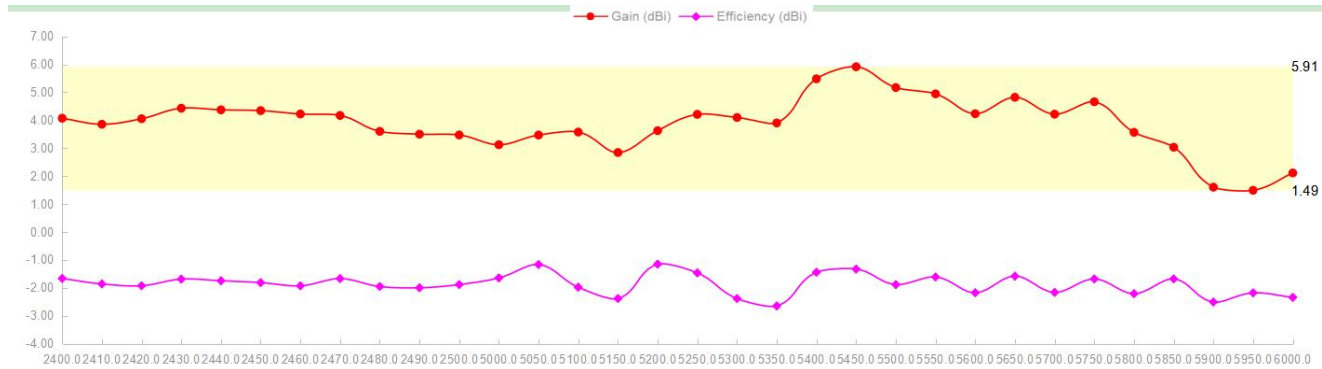
5850.0MHz Total(H), Max=2.78dBi



4.4 Efficiency graph



4.5 Gain curve graph



Reliability Test Report

client's name:	Zhejiang Dahua Technology Co., Ltd.	customer number:	/		
product name:	2.4&5.8G Foldable Rubber Antenna	Product number	GKZS-2.4&5.8G-SMAFJZG-195A		
Test items	Test Conditions	judgement standard		quantity	result
high temperature storage	12 hours in 80°C±2°C environment;	All sizes meet the requirements; the appearance is free from deformation, degumming, rust, watermarks, etc.; the wires are not damaged, melted, bubbles, etc.; the performance is normal		1PCS	qualified
low temperature storage	12 hours in -40°C±2°C environment;	All sizes meet the requirements; no deformation, degumming, rust, watermark, etc. in appearance; normal performance		1PCS	qualified
temperature cycle	1. Place in -20° C for 30 minutes, 25° C for 5 minutes, 70° C for 30 minutes, and 25° C for 5 minutes 2. Cycle times: 5 times;	All sizes meet the requirements; no deformation, degumming, rust, watermark, etc. in appearance; normal performance		1PCS	qualified
heat resistant	Place for 4 hours in a temperature of 40° C ±2° C and a humidity of 93±2%RH;	All sizes meet the requirements; no deformation, degumming, rust, watermark, etc. in appearance; normal performance		1PCS	qualified
Salt spray test	Place in a closed environment with sodium chloride solution concentration of 5% (m ²), PH value of 6.5-7.2, temperature of 35°C±2°C, humidity >85%RH for 24 hours	The connector head has no oxidation, yellowing, greening, red rust, white rust, etc.; the performance is normal		1PCS	qualified

Gaoke Ant Co., Ltd.

Product pictures before testing:



Product pictures after testing:



Test equipment:



Compilation/Date:	Jiayao Shieh/09-Oct-2021	Review/Date:	Jun Quan/09-Oct-2021
Note:			