



Shenzhen Shuodian Electronic Technology Co.,Ltd
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DATASHEET

for

2.4G External antenna

Customer No.

2070100020000

Product No.

SD-0605-2.4G External antenna

Author: XiaofengZeng

Review: Liming

Release Date: 2024.05.10

ShenZhen Shuodian Electronic Technology Co., Ltd

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Shenzhen Shuodian Electronic Technology Co.,Ltd



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1. Bilateral Confirmation page

1.1 Customer signature

Customer:

Seapartment/post	Sign	Date
Hardware Engineer/RD		
Mechanical/MD		
Project Manager/PM		
Commercial/Puchasing		
Checker		

1.2 Signature of ShuoDian Technology company

Seapartment/post	Sign	Date
Antenna Engineer/RD		
Mechanical/MD		
Project Manager/PM		
QA		
Checker		



2. General

2.1 Scope of application

2.4G WiFi buletooth antenna.

2.2 Operating temperature range

Temperature range of this product: -20 ~ +65 °C

2.3 Storage temperature range:

This product is stored at - 30 ~ + 75 °C

3. General product specifications

NO.	ITEMS	DETAILS
1	Type	
2	Operating Frequency Band	2400-2500MHz
3	VSWR	≤ 2.0
4	Gain	4.11dBi
5	Radiation Efficiency	$\geq 50\%$
6	Impedance	50 Ω
7	Antenna Type	Glue rod antenna
8	Entity Picture	



4. Specification Detials

4.1 Mechanical Properties

4.11 Product Composition:

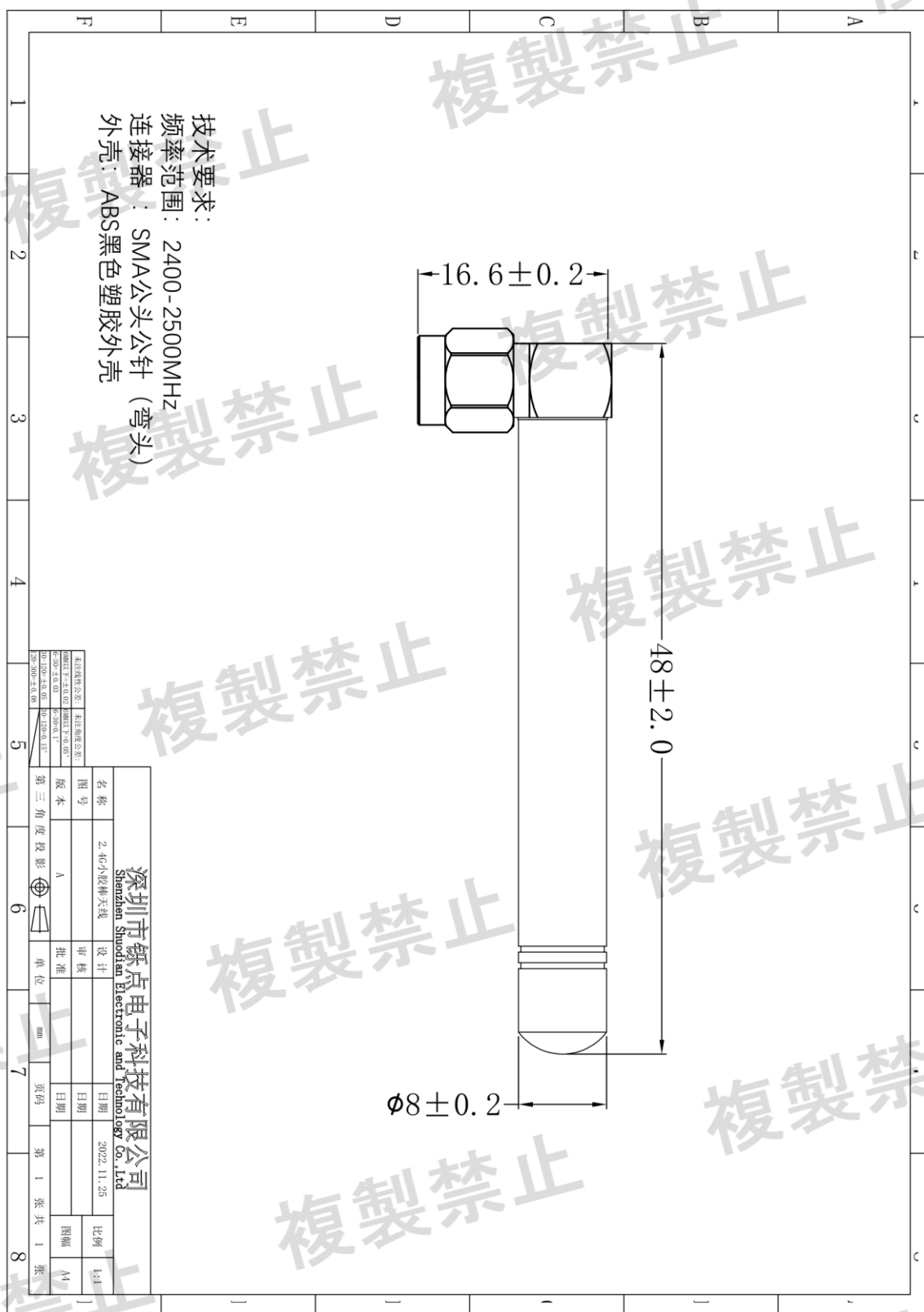
No.	Material	Size (MM)
1	Black rubber shell	40* ϕ 8.0mm
	SMA-J	SMA-J

4.12 Apperance

Good appearance without scars 、dirts、protuberances, etc.

4.13 Antenna Picture and Structure Dimension

Product drawings:





4.2 Electric Performance

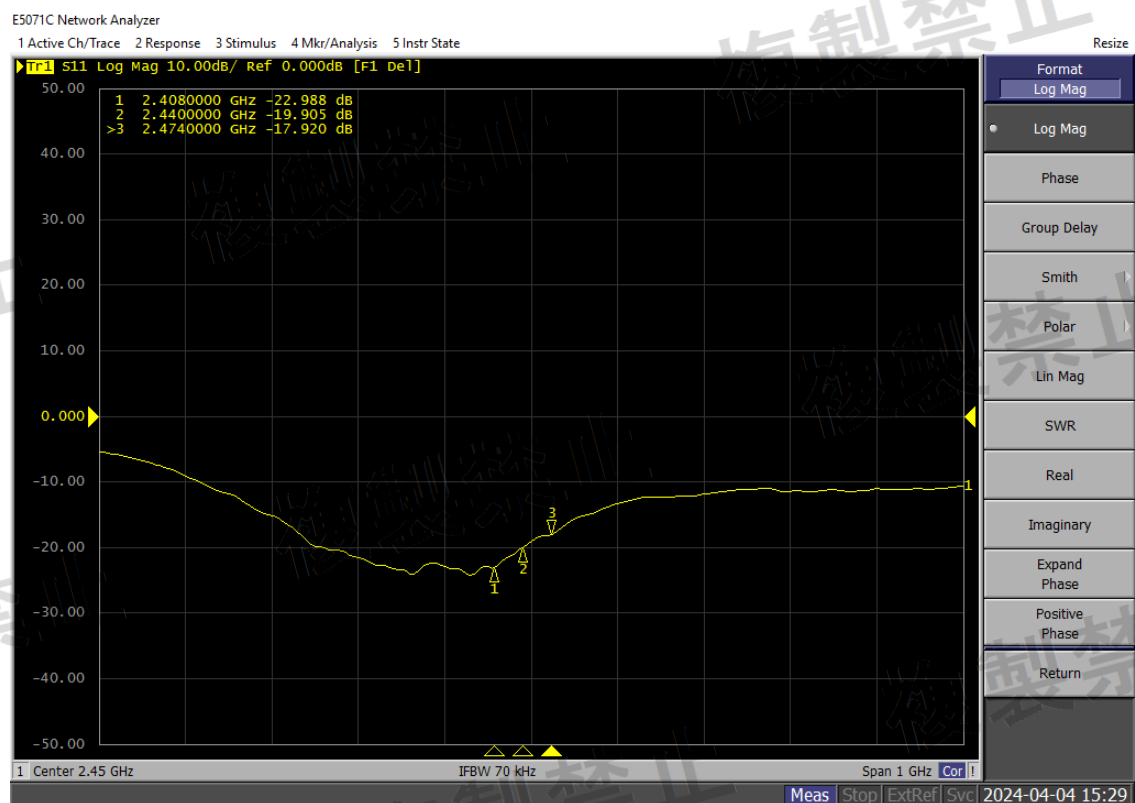
4.21 Test condition

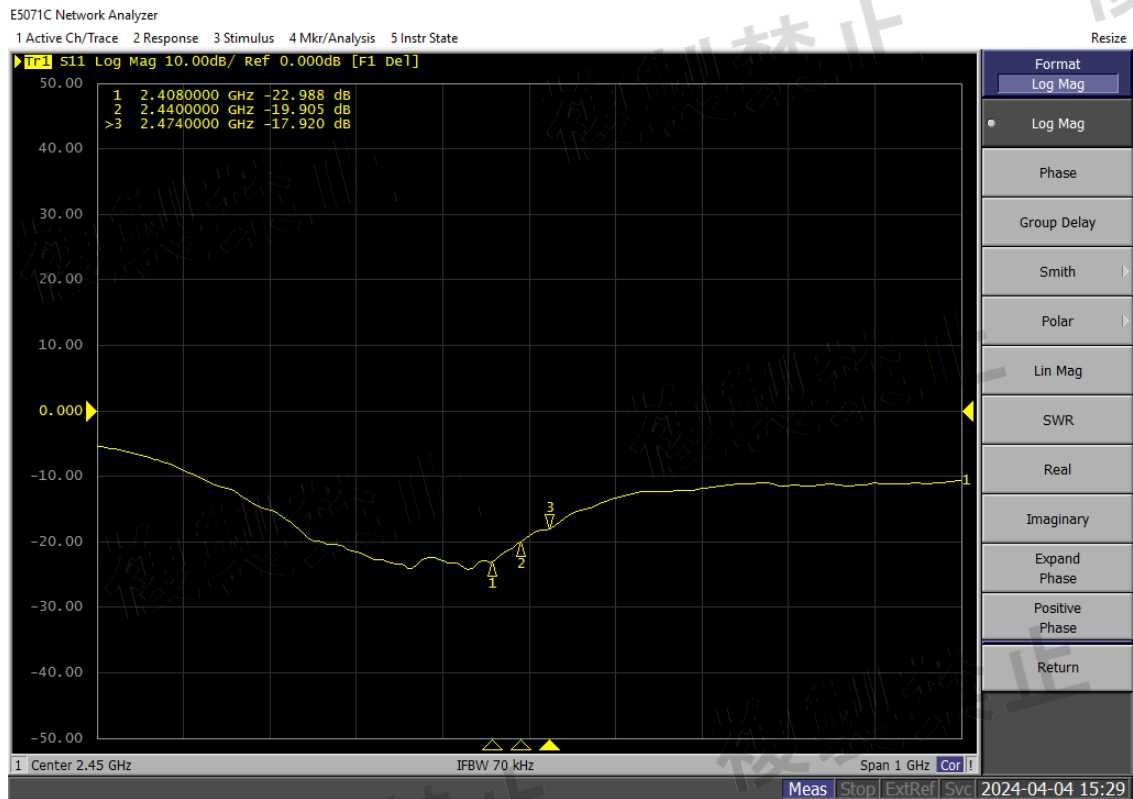
Environment:	Equipment:
Temperature: 10℃——+30℃	Network Analyzer:
Humidity: ≤80%（+40℃）	KEYSIGHT E5071C
Atmospher: 750mmkg±30mmkg	Multi Probe full Anechior Chamber

4.22 Test Data for Electrical Performance:

4.22.1 S11 of the Antenna:

Marker (MHz)	2408	2440	2474
Returnloss	-22.9	-19.9	-17.9
VSWR	1.1	1.2	1.2





4.22.2 Passive gain、 efficiency and Radiation Pattern:

FreQ. (MHz)	Gain (dBi)	Efficiency (%)
2408	3.53	45.73
2440	3.85	45.9
2474	4.11	47.2

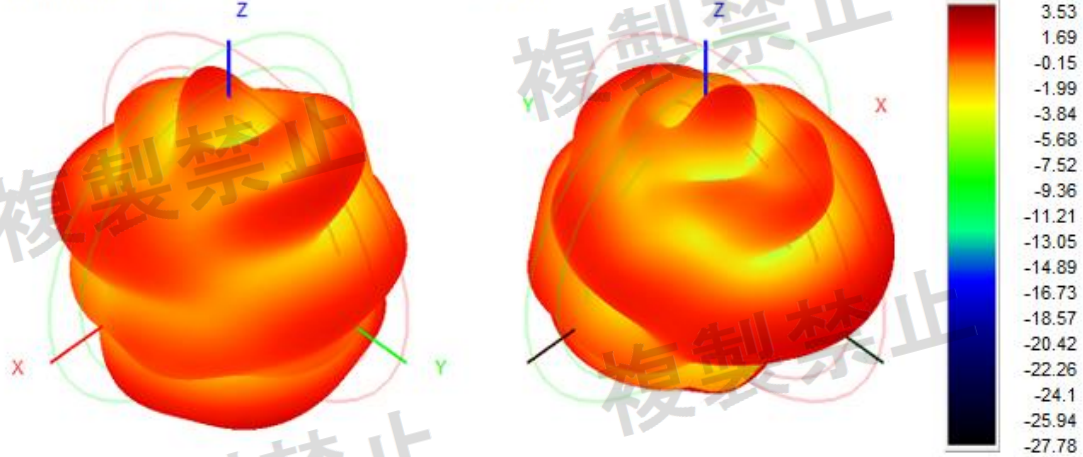
4.22.3

Radiation Pattern 2408MHz



2408.0MHz H+V, Eff: 45.7%

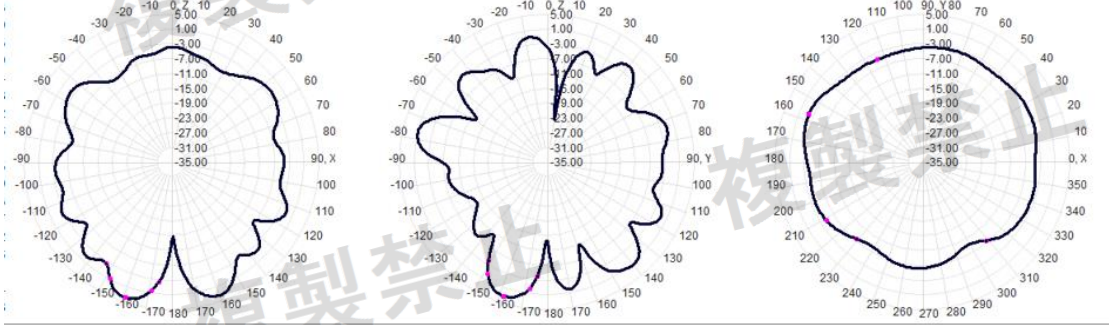
Back View



2408.0MHz Total(E1-XZ), Max= 3.53dBi

2408.0MHz Total(E2-YZ), Max= 2.88dBi

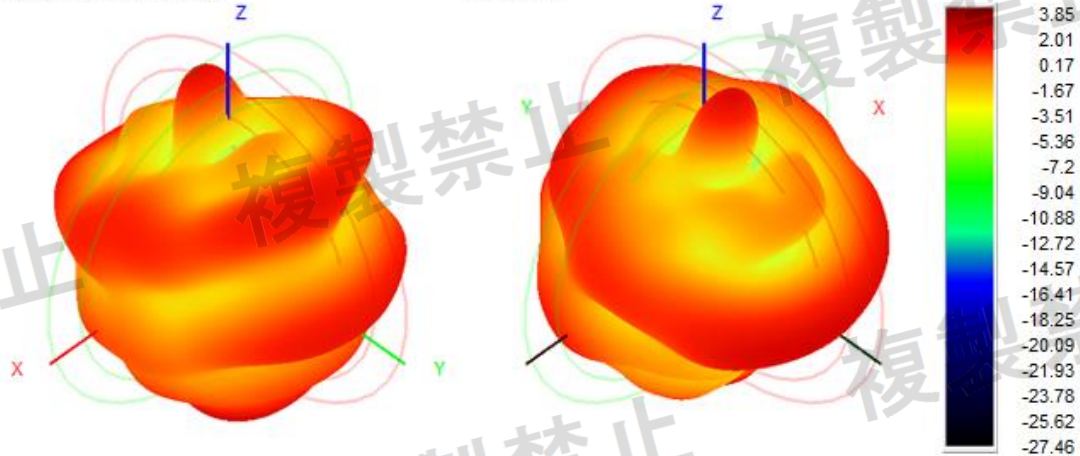
Total(H-XY), Max= -1.63dBi, CirD=7.96

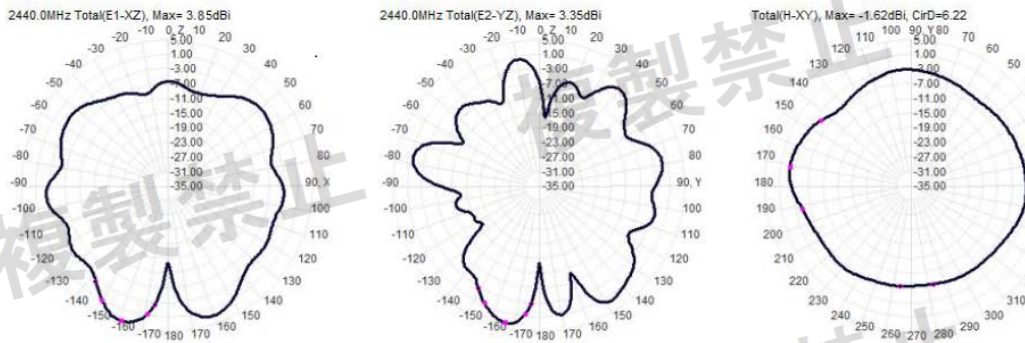


Radiation Pattern: 2440MHz

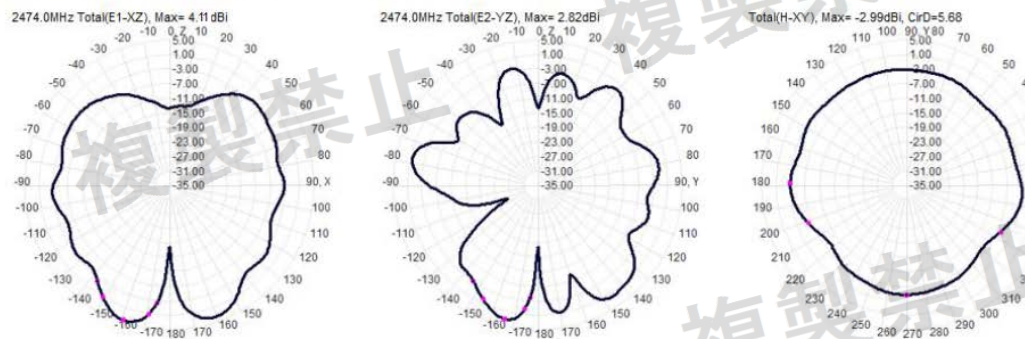
2440.0MHz H+V, Eff: 45.9%

Back View



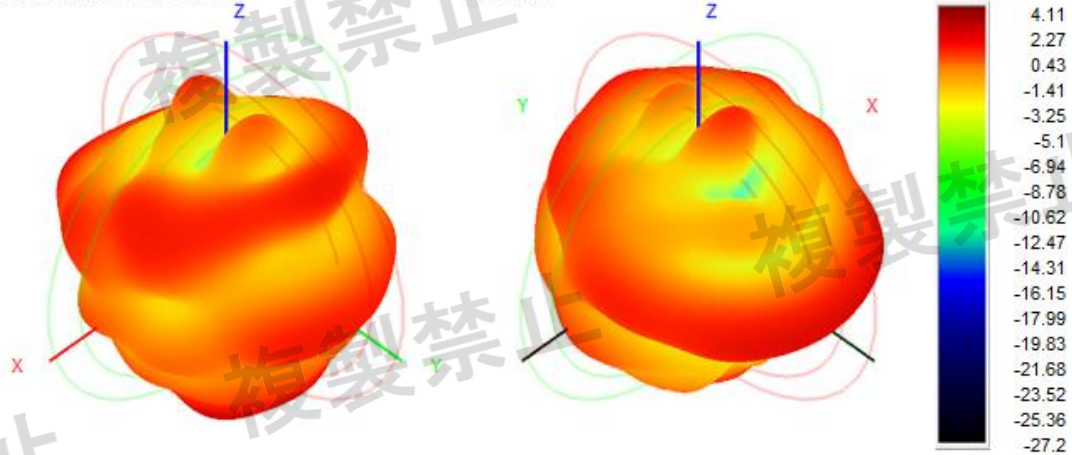


Radiation Pattern: 2474MHz



2474.0MHz H+V, Eff. 47.2%

Back View



5. Product Packaging

Manner of packing:Packed in self sealed bags, 100 pcs each.



6. Document Resume

Document No.	
Release Date	2024/05/10
Author	XiofengZeng
Review	LiMing

Revised History

Date	Version	Revised Record
2024/05/10	1.00	New Project