

东莞市众驰电子有限公司  
Dongguan Zhongchi Electronics Co.Ltd.

承认书  
acknowledgment

Customer: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Zhongchi P/N:           ZCA2400-55B01-00X  
\_\_\_\_\_

Description :           2.4GAntenna L=50.0MM+  
\_\_\_\_\_

| Zhongchi Checked By: | Customer Approved By: |
|----------------------|-----------------------|
|                      |                       |

东莞市众驰电子有限公司  
Dongguan Zhongchi Electronics Co.Ltd.

## Contents

|                                    |   |
|------------------------------------|---|
| 1、revision record.....             | 2 |
| 2、specification.....               | 3 |
| 3、reliability experiment.....      | 4 |
| 4、Antenna radiation parameter..... | 5 |
| 5、organization diagram.....        | 6 |

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revision record

| Revision | Date       | Change Notification | Description |
|----------|------------|---------------------|-------------|
| 1.0      | 2023-07-31 |                     |             |
|          |            |                     |             |
|          |            |                     |             |
|          |            |                     |             |
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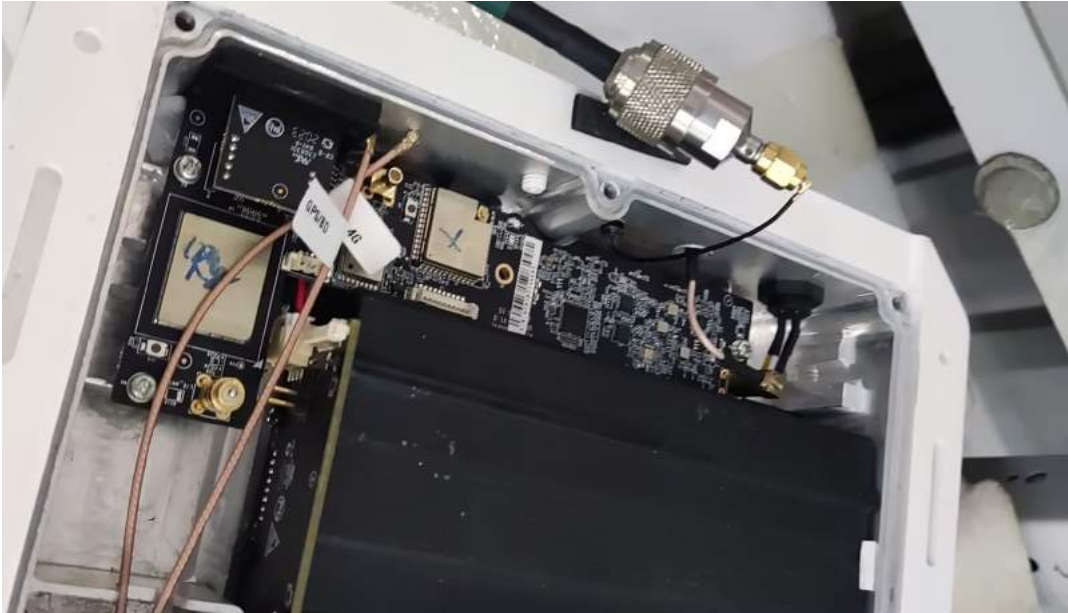
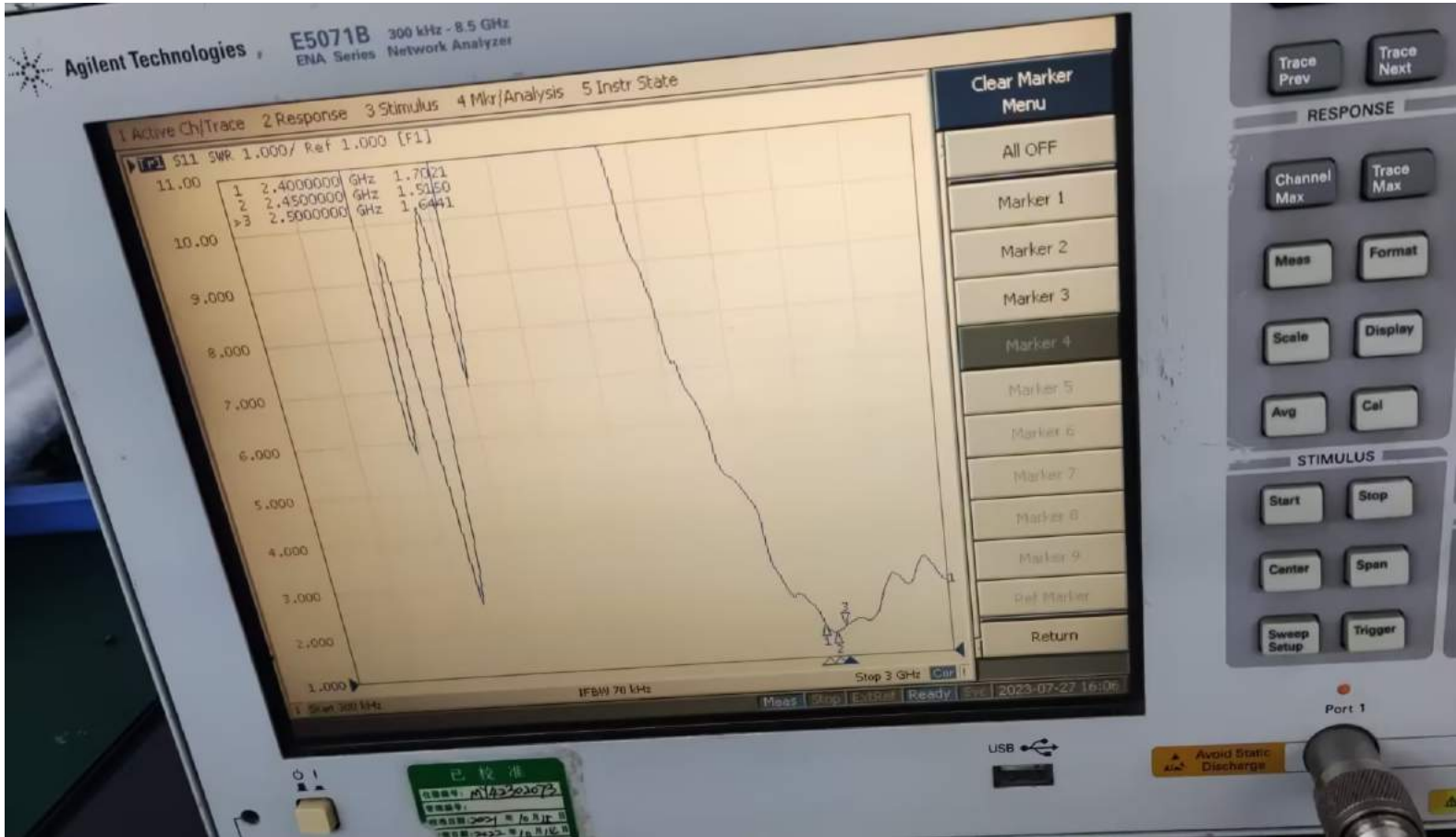
# 东莞市众驰电子有限公司

## Dongguan Zhongchi Electronics Co.Ltd.

specification

| <b>Sample Photo</b>                                 |                                       |
|---|---------------------------------------|
| <b>A. Electrical Characteristics</b>                |                                       |
| Frequency   | 2400-2500MHz                          |
| S.W.R.  | ≤2.0                                  |
| Antenna Gain  | 2.21dBi                               |
| Polarization  | Linear                                |
| Impedance   | 50 Ohm                                |
| <b>B. Material &amp; Mechanical Characteristics</b> |                                       |
| Material of Radiator                                | Spring Line                           |
| Material of Plastic                                 | Body: ABS                             |
| Connector Type                                      | Mini Connector Au Plated 1 generation |
| Cable Type  | O.D. 1.13mm                           |
| Connector Pull Test                                 | ≥ 3 Kg                                |
| <b>C. Environmental</b>                             |                                       |
| Operation Temperature                               | - 40 °C ~ + 80 °C                     |
| Storage Temperature                                 | - 40 °C ~ + 80 °C                     |

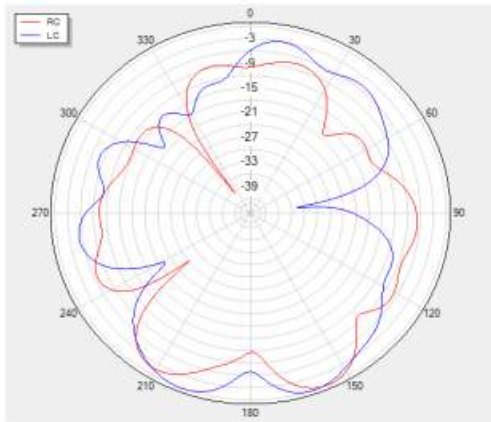
# Antenna radiation parameter test data diagram



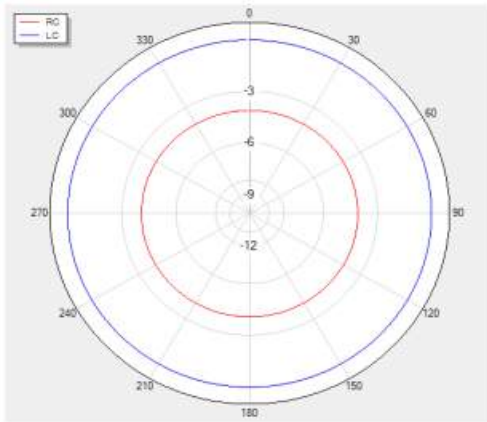
## 增益对应角度 Gain corresponding Angle

| Gain&Efficiency&PhaseCenter<br>增益、效率和相位中心 |                 |                       |             |              |                      |                     |
|---|-----------------|-----------------------|-------------|--------------|----------------------|---------------------|
| frequency<br>频率(MHz)                      | gain<br>增益(dBi) | 增益对应角度<br>(°)         | 主极化最<br>大增益 | 交叉极化<br>最大增益 | efficiency<br>效率(dB) | efficiency<br>效率(%) |
| 2400                                      | 1.31            | $\psi=74,\theta=157$  | 0           | 0            | -6.01                | 25.07               |
| 2410                                      | 0.73            | $\psi=75,\theta=157$  | 0           | 0            | -6.22                | 23.87               |
| 2420                                      | 1.3             | $\psi=75,\theta=157$  | 0           | 0            | -5.81                | 26.26               |
| 2430                                      | 1.18            | $\psi=76,\theta=157$  | 0           | 0            | -5.88                | 25.84               |
| 2440                                      | 0.74            | $\psi=152,\theta=147$ | 0           | 0            | -5.71                | 26.88               |
| 2450                                      | 1.41            | $\psi=152,\theta=147$ | 0           | 0            | -5.39                | 28.91               |
| 2460                                      | 1.58            | $\psi=150,\theta=146$ | 0           | 0            | -5.41                | 28.79               |
| 2470                                      | 1.56            | $\psi=150,\theta=146$ | 0           | 0            | -5.13                | 30.72               |
| 2480                                      | 2.21            | $\psi=148,\theta=145$ | 0           | 0            | -4.77                | 33.33               |
| 2490                                      | 1.77            | $\psi=148,\theta=145$ | 0           | 0            | -5.17                | 30.41               |
| 2500                                      | 2.25            | $\psi=146,\theta=144$ | 0           | 0            | -4.76                | 33.43               |
| 2510                                      | 2.73            | $\psi=146,\theta=144$ | 0           | 0            | -4.68                | 34.02               |
| 2520                                      | 2.53            | $\psi=144,\theta=143$ | 0           | 0            | -4.64                | 34.34               |
| 2530                                      | 3.14            | $\psi=143,\theta=142$ | 0           | 0            | -4.2                 | 38.03               |
| 2540                                      | 3.43            | $\psi=140,\theta=140$ | 0           | 0            | -4.01                | 39.75               |
| 2550                                      | 3.13            | $\psi=139,\theta=139$ | 0           | 0            | -3.89                | 40.8                |
| 2560                                      | 3.55            | $\psi=139,\theta=139$ | 0           | 0            | -3.52                | 44.47               |
| 2570                                      | 3.74            | $\psi=138,\theta=138$ | 0           | 0            | -3.41                | 45.58               |
| 2580                                      | 3.05            | $\psi=138,\theta=138$ | 0           | 0            | -3.59                | 43.74               |
| 2590                                      | 3.79            | $\psi=139,\theta=138$ | 0           | 0            | -3.08                | 49.24               |
| 2600                                      | 3.38            | $\psi=140,\theta=138$ | 0           | 0            | -3.29                | 46.93               |

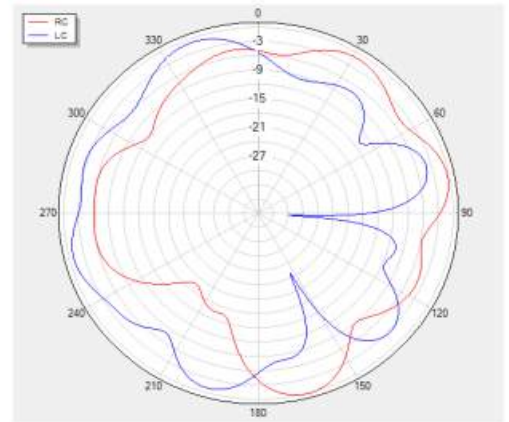
**Phi=90 freq=2400MHz**



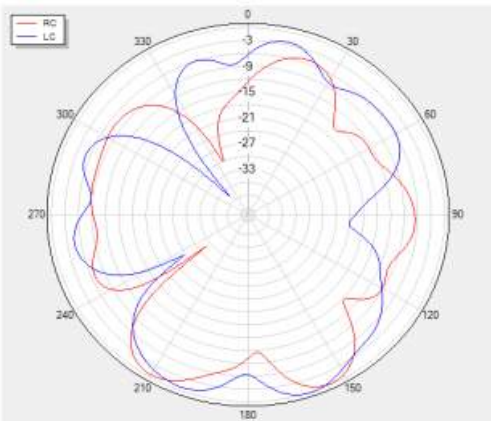
**Theta=0 freq=2400MHz**



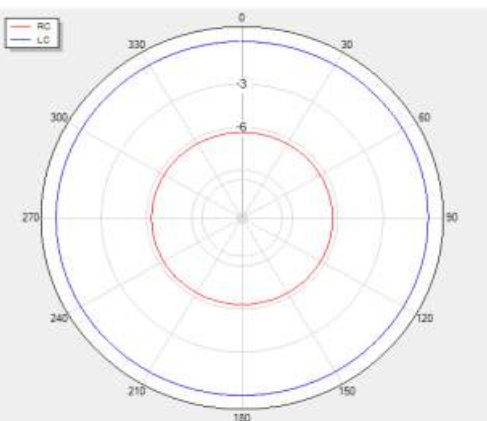
**Theta=90 freq=2400MHz**



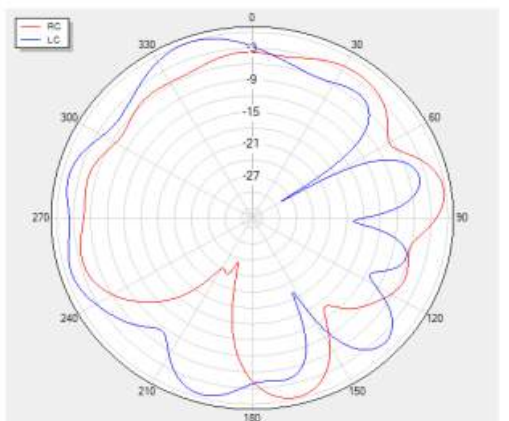
**Phi=90 freq=2450MHz**



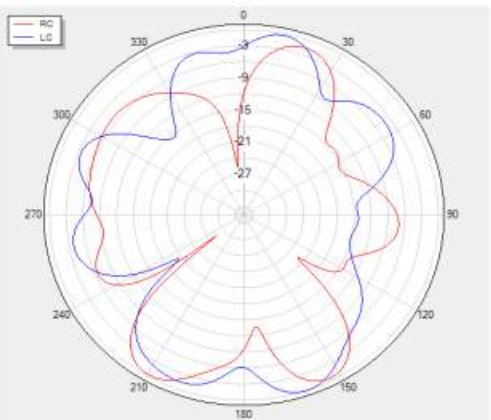
**Theta=0 freq=2450MHz**



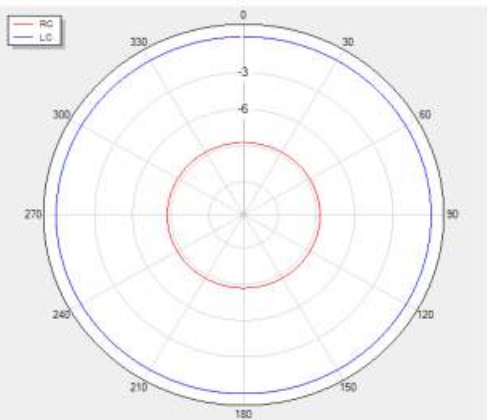
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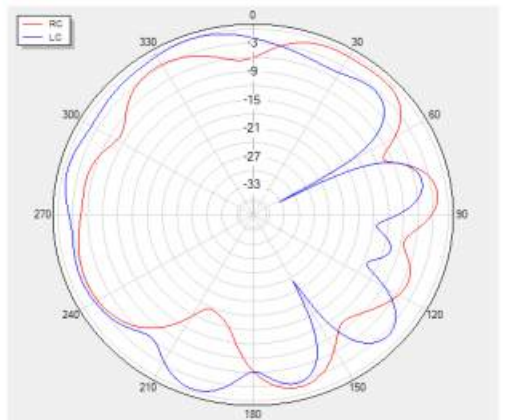
**Phi=90 freq=2500MHz**



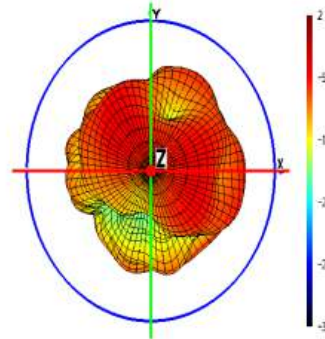
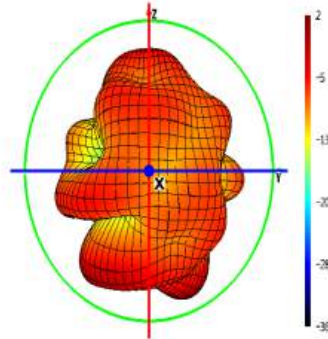
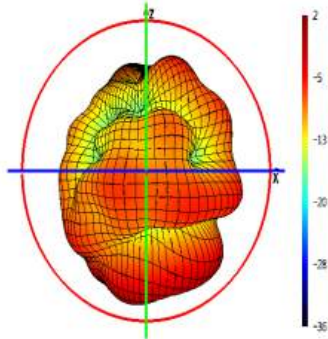
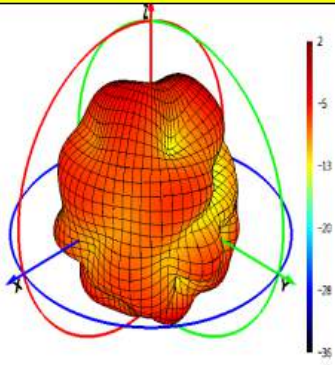
**Theta=0 freq=2500MHz**



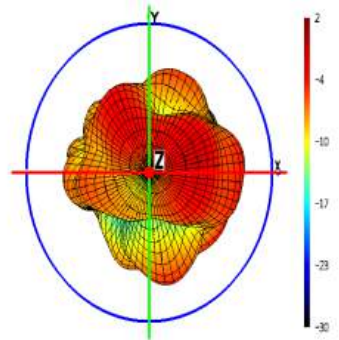
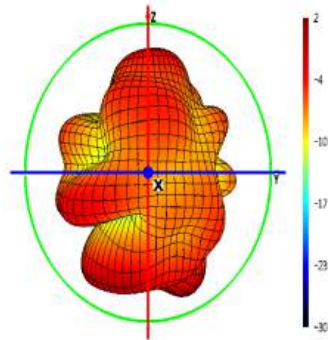
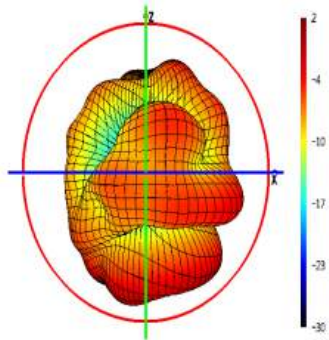
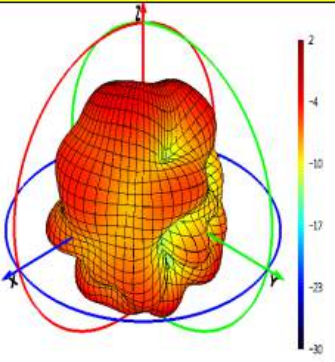
**Theta=90 freq=2500MHz**



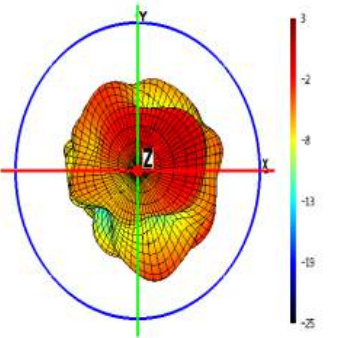
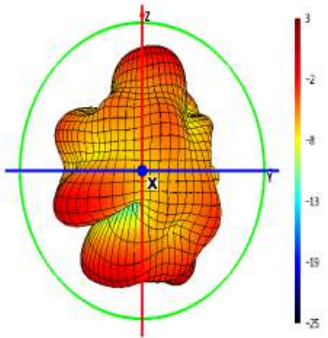
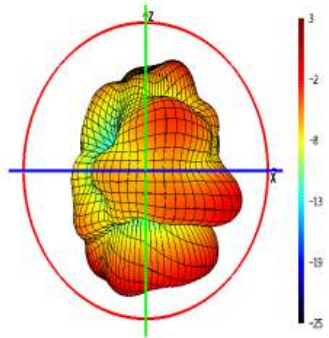
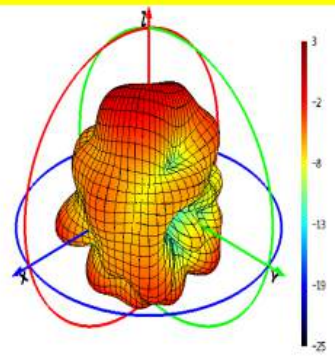
2400MHz



2450MHz



2500MHz

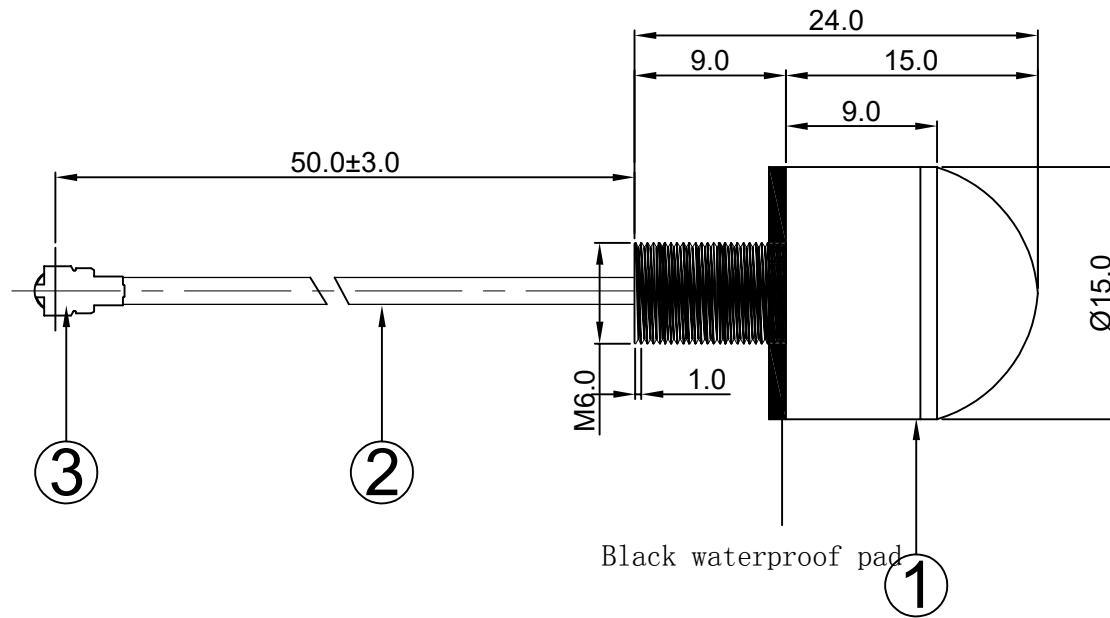




**RoHS**  
Compatible

|          |  |
|----------|--|
| CUSTOMER |  |
| PART NO  |  |

|      |                 |            |
|------|-----------------|------------|
| REV. | DESCRIPTION     | DATE       |
| △    | Initial release | 2023-06-15 |



size: M6\*1.0



Dongguan Zhongchi Electronic Technology Co., Ltd Tel:0769-81238620 Fax:0769-81238620

|  |            |                 |   |
|--|------------|-----------------|---|
| PART NAME: 2.4G Antenna L=50.0mm       |            |                 |   |
| PART NO.:ZCA2400-55B01-00X             |            | DATE:2023-06-15 |   |
| APPROVED BY                            | CHECKED BY | DESIGNED BY     | <br>Tolerance<br>X.X ±0.50<br>X.XX±0.15<br>X° ±3° |
|  |            | Huang Wang Chun |   |
| UNITS: mm<br>SCALE: 1/1<br>REVISION: A |            |                 |   |

|    |                |                    |      |
|----|----------------|--------------------|------|
| 4  | Mini Connector | Cu Au Plated 10.D. | 1    |
| 3  | Coaxial Cable  | 1.13 mm Gray       | 1    |
| 2  | EVA            | 15.0*1.0MM         | 1    |
| 1  | Antenna Cap    | TPE,Color:Black    | 1    |
| NO | PART NAME      | DESCRIPTION        | Q.TY |

E  
D  
C  
B  
A

1 2 3 4 5 6 7 8