



**Bondale Electronics Ltd.**

**博钜电子有限公司**

Unit11, 12/F, BLK B Veristrong ind. Ctr, 34-36 Au Pui Wan Street, Fo Tan Shatin, N.T. HK

Tel: 852 2345 0215 Fax: 852 27978191

Email: antenna@bondale.com

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## SPECIFICATION 规格书

No.: AN04453

**CUSTOMER'S NAME :**

客户名称

QVS CHINA

**CUSTOMER'S MODEL NO. :**

客户型号

**CUSTOMER'S PART NO. :**

客户料号

**PRODUCT NAME :**

产品名称

Rubber Antenna

**OUR MODEL NO. :**

本公司型号

G-RAOK94068083-Q0011

This product is a NON-STANDARD product and is customized and processed according to customer drawings

This Specification is Composed of Under Listed (Samples be attached)

本规格书由以下内容组成(样品另附):

| NO.               | Items(项目)                              | Pages(页码) |
|-------------------|----------------------------------------|-----------|
| 1                 | Certificate Of Conformance ROHS(环保证明书) | 1         |
| 2                 | Product Drawing (产品图)                  | 1         |
| 3                 | Specification of Product(产品规格书)        | 1         |
| 4                 | Capability Test Report (性能测试报告)        | 3         |
| Total pages(包含本页) |                                        | 共 7 页     |

This Specification, together with the Customers' Purchase Order ("PO") constitutes the Contract between Bondale Electronics Ltd. and the Customer. In the event of any discrepancy between the Specification and the PO, this Specification shall prevail. All the details stated in this Specification shall be final

By signing and stamping on this page, you confirm your full acceptance of all the terms and provisions stated in this Specification.

Please fax back this page with authorized signature and company chop as customer's approval on samples, thanks! (如果此产品得到您的确认,请传回本页给我们.)

|                       |  |                                  |  |
|-----------------------|--|----------------------------------|--|
| Customer Sign<br>客户签名 |  | Customer<br>Company Chop<br>客户公章 |  |
|-----------------------|--|----------------------------------|--|



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**TO:** QVS CHINA

**DATE:** 2024-12-31

**File NO.:** AN04453

## CERTIFICATE OF CONFORMANCE ROHS

**Customer Part No. :** \_\_\_\_\_

**Bondale Part No. :** G-RA0K94068083-Q0011

**Description :** Rubber Antenna

We, Bondale Electronics Ltd. assured that the above mentioned item: G-RA0K94068083-Q0011 is fully comply with the EU directive 2011/65/EU, (EU)2015/863 and packaging directive 94/62/EC and that its content of hazardous substances is below the values as listed:

### ROHS critical values:

|                             |             |                                                |                  |
|-----------------------------|-------------|------------------------------------------------|------------------|
| *Cadmium(Cd)                |             |                                                | under 100 ppm    |
| *Lead (Pb)                  | Generally   |                                                | under 1,000 ppm  |
|                             | Be Exempted | Products that contain Copper alloy components  | under 40,000 ppm |
|                             |             | Product that contain Steel alloy components    | under 3,500 ppm  |
|                             |             | Product that contain aluminum alloy components | under 4,000 ppm  |
| *Mercury (Hg)               |             |                                                | under 1,000 ppm  |
| *Hexavalent Chormium (Cr6+) |             |                                                | under 1,000 ppm  |
| *PBBs                       |             |                                                | under 1,000 ppm  |
| *PBDEs                      |             |                                                | under 1,000 ppm  |
| *DEHP                       |             |                                                | under 1,000 ppm  |
| *BBP                        |             |                                                | under 1,000 ppm  |
| *DBP                        |             |                                                | under 1,000 ppm  |
| *DIBP                       |             |                                                | under 1,000 ppm  |

### Packaging directive 94/62/EC critical values:

\*Packaging (Pb + Cd +Hg +Cr6+ ) under 100 ppm

Exempted below:

If the above mentioned item is reprocessed by customer, we wouldn't promise and assure the content of hazardous substances of the product item. The terms of this specification shall supersede the customer's purchase order in the event of any inconsistency.

On behalf of

Bondale Electronics Ltd.

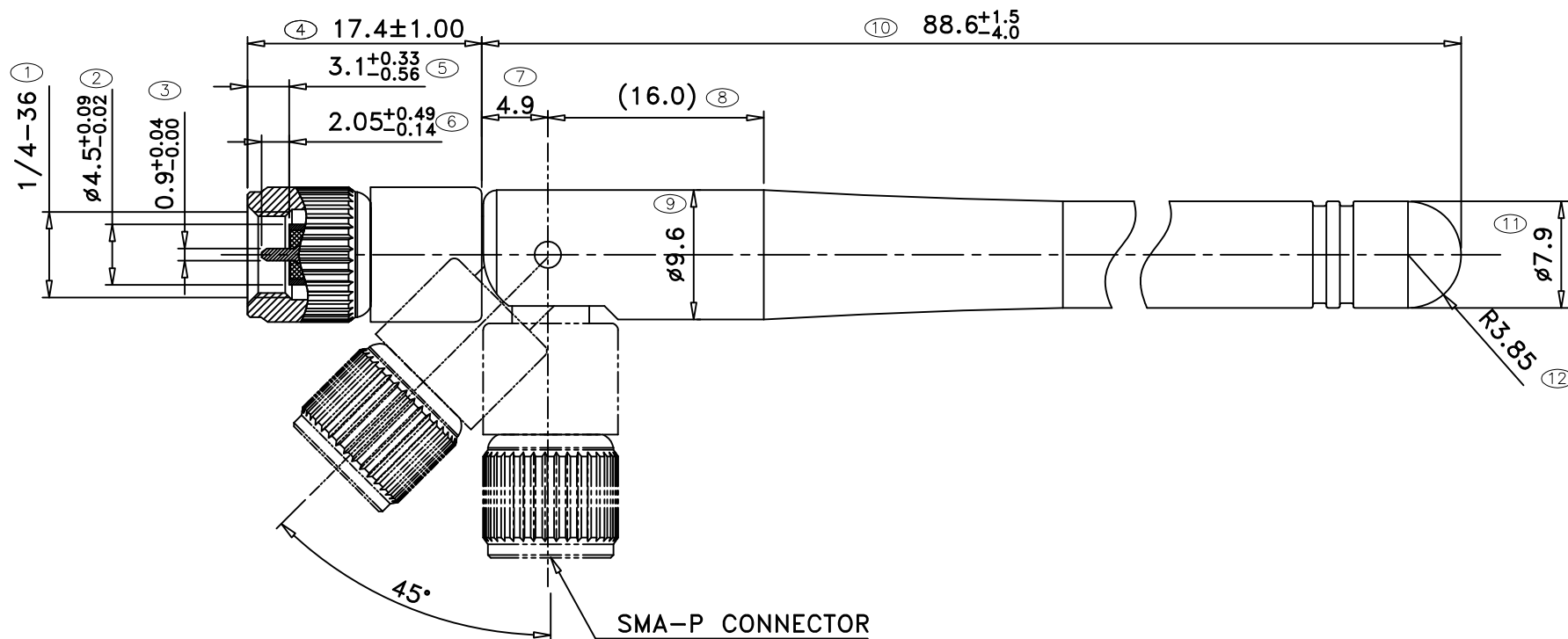
ROHS green chop and GPMS spokesman sign(Rohs綠色印章 + GPMS負責人簽名):

Yours sincerely,

---GREEN PRODUCT MANAGEMENT SYSTEM (GPMS)---

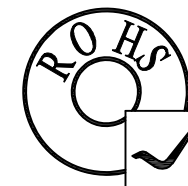
---綠色產品管理系統---

|  |  |                 |          |           |        |
|--|--|-----------------|----------|-----------|--------|
|  |  | OLD DRAWING NO. | APPROVED | 80<L<=250 | ±0.50  |
|  |  |                 |          | 25<L<=80  | ±0.40  |
|  |  |                 |          | 8<L<=25   | ±0.30  |
|  |  |                 |          | L<=8      | ±0.20  |
|  |  |                 |          | 線性尺寸L     | 未注尺寸偏差 |
|  |  |                 |          | 未注明公差     |        |



Note:

- 1.Connector :SMA-P, shell plated with nickel.
- 2.The hose color is white.
- 3.Antenna operating frequency: 2.4~2.5GHz.
- 4.Antenna impedance :50 Ω.
- 5.Antenna VSWR:≤2.0.
- 6.Antenna radiation direction: omnidirectional.
- 7.Polarization mode: vertical polarization.
- 8.▲ Focus on size control.
- 9.(\*\*) For making FAI size.



|                          |                      |    |                    |       |           |     |          |
|--------------------------|----------------------|----|--------------------|-------|-----------|-----|----------|
| TITLE                    | Rubber Antenna       | 版次 | SCALE              | 2 : 1 | DRAWN     | 陆 东 | 08/08-25 |
| PART NAME                | G-RA0K94068083-Q0011 | A  | MATERIAL           |       | INSPECTED |     |          |
| BONDALE ELECTRONICS LTD. |                      |    | HANDLING           |       | APPROVED  |     |          |
|                          |                      |    | PROJECTION<br>(视角) |       | SHEET     |     |          |

# RUBBER ANTENNA SPECIFICATION

**Customer :** QVS CHINA  
**Specification No.:** AN04453  
**Model No.:** G-RA0K94068083-Q0011

## 1, Application

The antenna specified in this specification is applicable for the radio-communication

## 2, Dimensions

As per Drawing No. G-RA0K94068083-Q0011 attached.

## 3, Materials

As specified in drawing No. G-RA0K94068083-Q0011

## 4, Electrical Characteristics

- i) Resonate Frequency : 2.4~2.5 GHz
- ii) Impedance : 50 ohm Nominal
- iii) Radiation Pattern : Omni Directional
- iv) Polarization : Vertical
- v) Standing Wave Ratio (S.W.R): 2.0 or less
- vi) Insulation resistance : 500 M ohm at DC 500V

## 5, Mechanical characteristics:

The strength of fixing between sleeve and stud shall withstand the following stresses

Vertical Direction: 2.0 kg

Rotating Direction: 2.0 kgf.cm

## 6, Others:

Any modification of this specification has to be agreed by us

Prepared By:

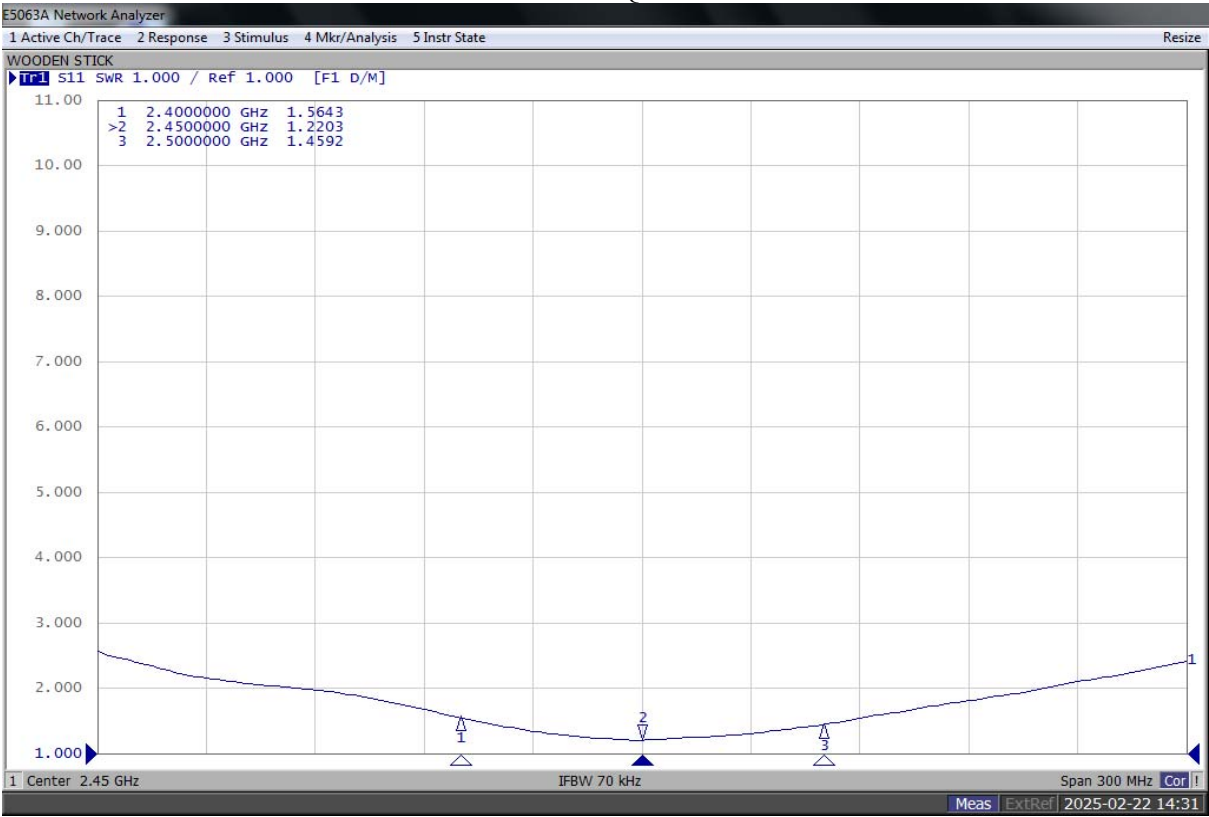
Checked By:

Approval:

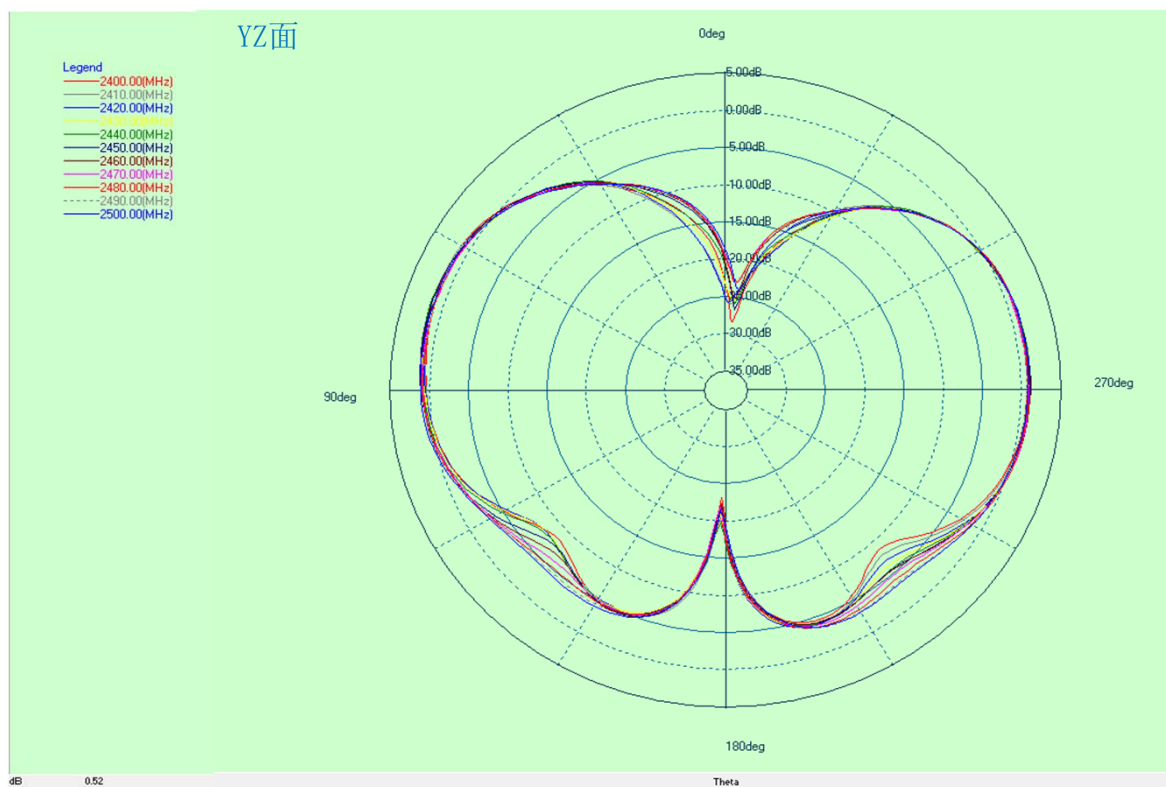
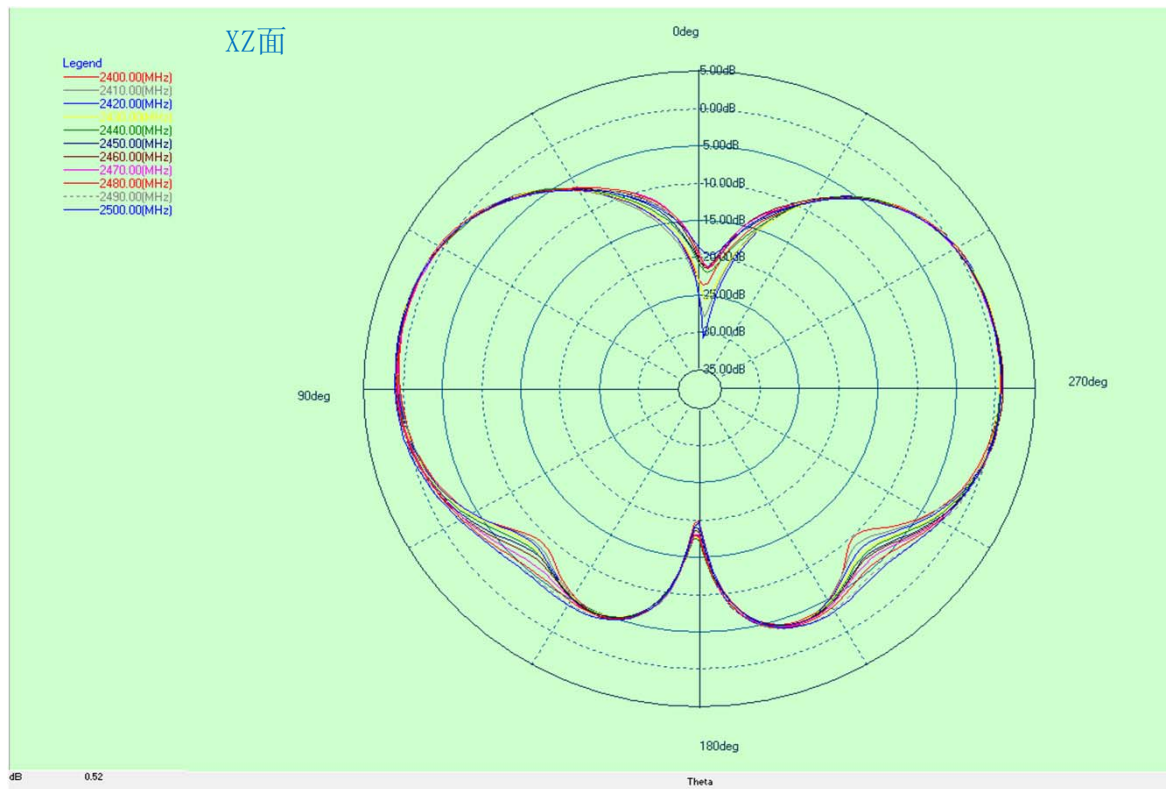
# Capability Test Report

Specification NO.:AN04453

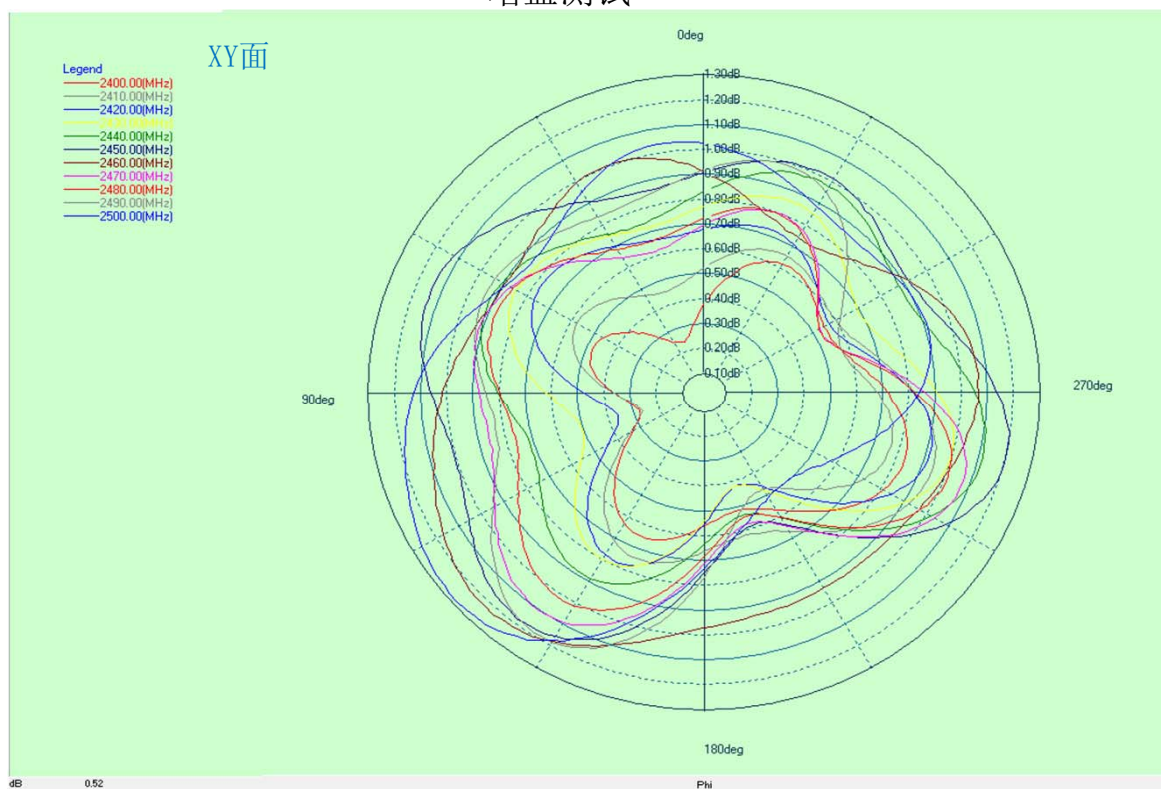
Model NO.:G-RA0K94068083-Q0011



## 增益测试



## 增益测试



## 增益测试数据

| G-RA0K94068083-Q0011 |          |        |
|----------------------|----------|--------|
| 频率                   | 增益 (dBi) | 效率     |
| 2400MHz              | 1.46     | 68.90% |
| 2410MHz              | 1.66     | 70.54% |
| 2420MHz              | 1.71     | 71.30% |
| 2430MHz              | 1.75     | 71.93% |
| 2440MHz              | 1.80     | 72.98% |
| 2450MHz              | 1.57     | 74.33% |
| 2460MHz              | 1.42     | 74.67% |
| 2470MHz              | 1.25     | 73.46% |
| 2480MHz              | 1.20     | 74.60% |
| 2490MHz              | 1.26     | 76.09% |
| 2500MHz              | 1.29     | 77.10% |