

# Antenna Specifications

At Wavelink, our aim is to provide timely and comprehensive services to our customers. If you require any assistance, please contact our headquarters:

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Wavelink Certifications:



Wavelink Partners:

**Skyworth** **NARI**

**flex**

 **HUAWEI**

 **VVDN**  
TECHNOLOGIES

**Tenda** **Infinova**

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**JABIL**

# Catalogue

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Wavelink

## 1 Product Description

This wavelink antenna covers WIFI2.4.

## 2 Product Features

Easy to install  
High efficiency  
Removable



## 3 Product Specifications

### Passive Electrical Specifications

|                 |              |
|-----------------|--------------|
| Frequency Range | 2400-2500MHz |
| Input Impedance | 50 $\Omega$  |
| VSWR            | <2           |
| Gain            | $\leq 2$ dBi |

Polarization Type Linear

## Mechanical Specifications

Antenna Size 108mm ×9.5mm

Connector Type RP-SMA

Working Temperature -40 °C to +85 °C

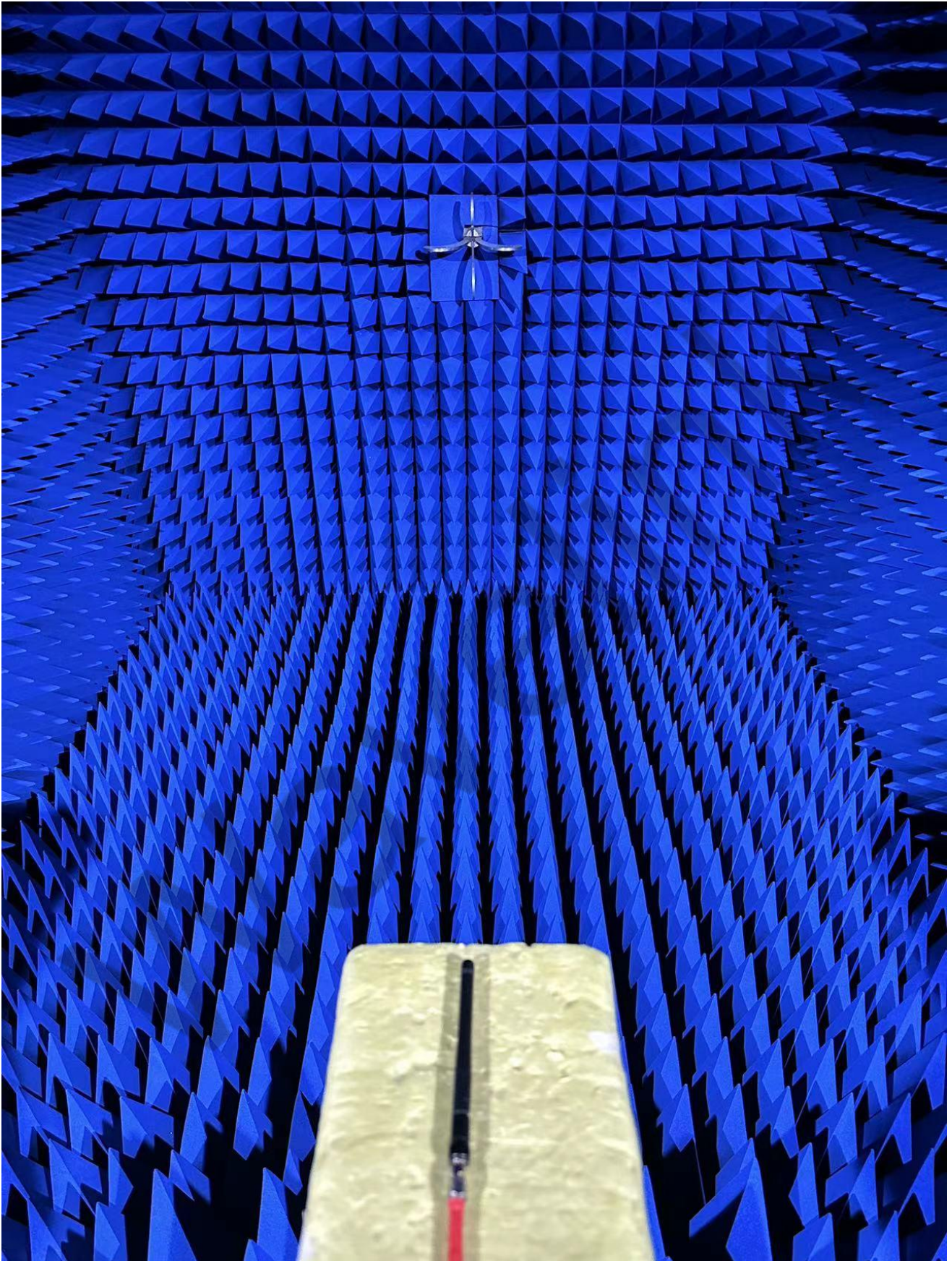
Radome Color Black

## 4 Overall Performance

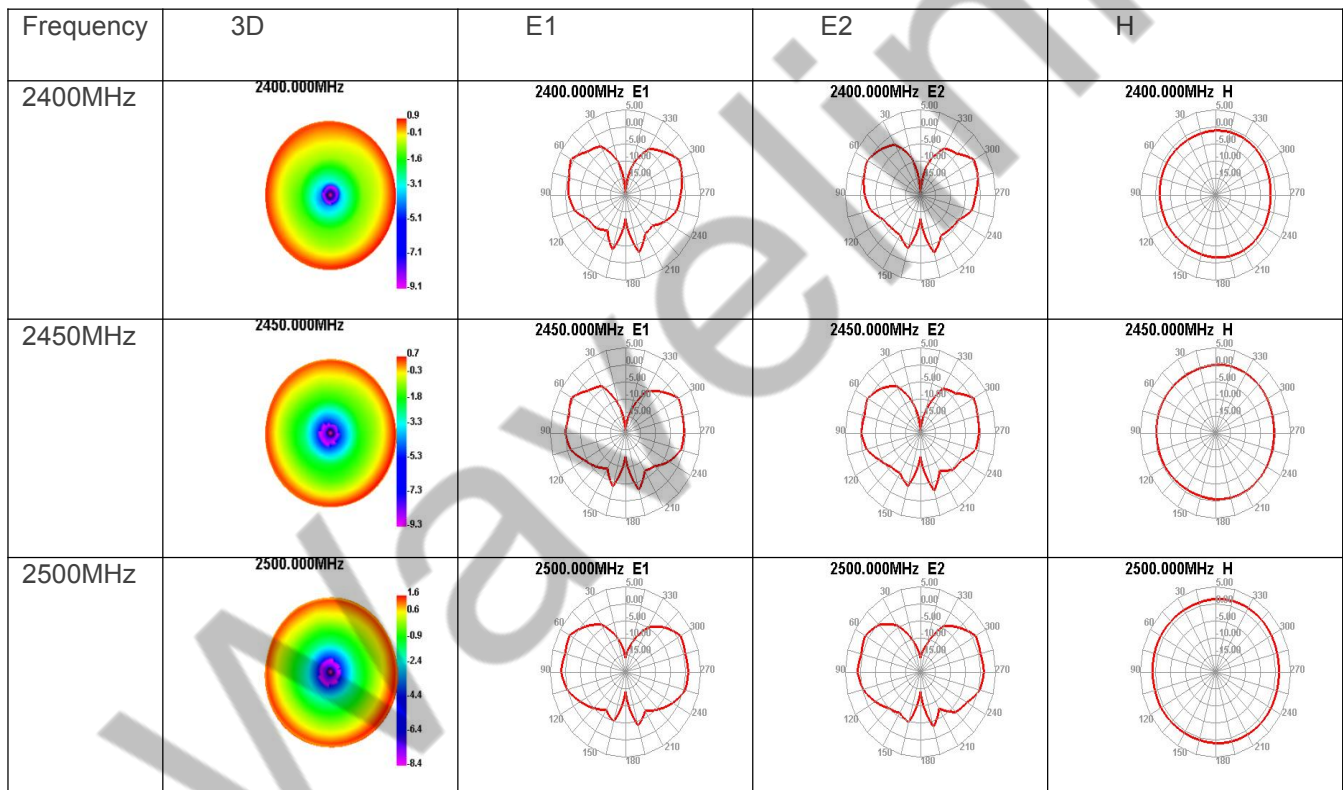
KEYSIGHT VNA Network Analyzer E5071C 100 kHz – 8.5 GHz





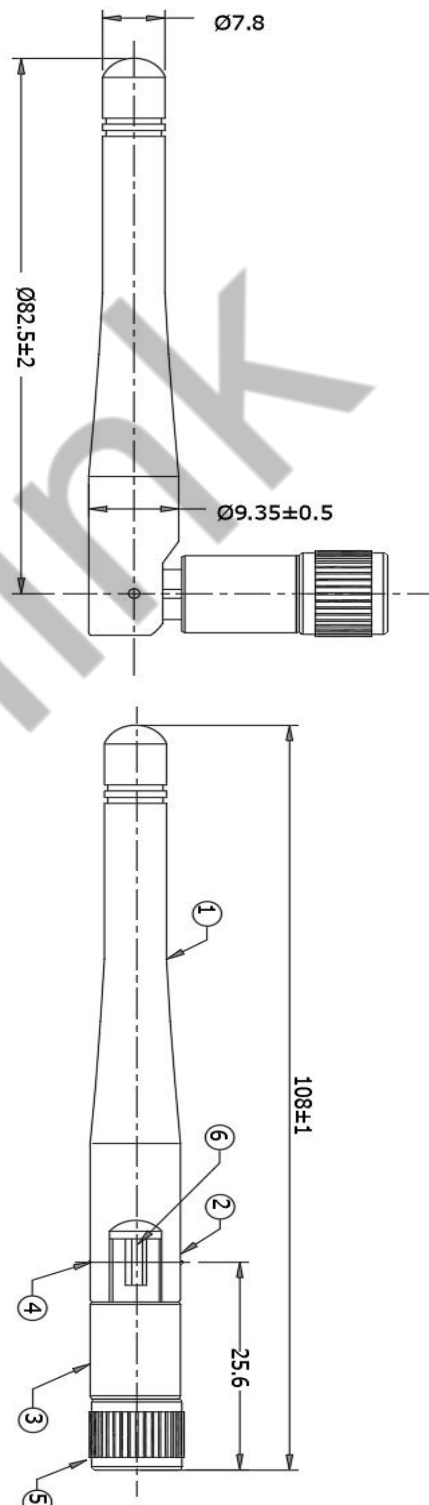


| Freq (MHz) | Effi (%) | Effi (dB) | Gain (dBi) | Gain (dBd) | Max (dB) | Min (dB) | Directivity (dBi) | Beamwidth (3dB) | AttH (dB) | AttV (dB) |
|------------|----------|-----------|------------|------------|----------|----------|-------------------|-----------------|-----------|-----------|
| 2400       | 58.06    | -2.36     | 0.85       | -1.3       | 0.85     | -23.75   | 3.21              | 45              | 46.28     | 46.42     |
| 2410       | 61.56    | -2.11     | 0.97       | -1.18      | 0.97     | -24.95   | 3.08              | 30              | 46.35     | 46.54     |
| 2420       | 53.76    | -2.7      | 0.22       | -1.93      | 0.22     | -27.62   | 2.92              | 45              | 46.02     | 46.19     |
| 2430       | 60.86    | -2.16     | 0.62       | -1.53      | 0.62     | -24.08   | 2.78              | 45              | 46.4      | 46.53     |
| 2440       | 57.85    | -2.38     | 0.36       | -1.79      | 0.36     | -22.94   | 2.74              | 45              | 46.55     | 46.59     |
| 2450       | 63.11    | -2        | 0.75       | -1.4       | 0.75     | -19.94   | 2.75              | 45              | 46.74     | 46.9      |
| 2460       | 65.69    | -1.82     | 0.95       | -1.2       | 0.95     | -19.29   | 2.78              | 60              | 47.01     | 47.08     |
| 2470       | 68.9     | -1.62     | 1.15       | -1         | 1.15     | -17.96   | 2.77              | 60              | 46.63     | 46.74     |
| 2480       | 75.91    | -1.2      | 1.49       | -0.66      | 1.49     | -17.4    | 2.69              | 60              | 47.19     | 47.37     |
| 2490       | 77.98    | -1.08     | 1.48       | -0.67      | 1.48     | -16.29   | 2.56              | 60              | 46.86     | 46.93     |
| 2500       | 82.35    | -0.84     | 1.63       | -0.52      | 1.63     | -15.98   | 2.48              | 60              | 47        | 47.17     |





## 5 Product Size

| A                                                                                                                        |  | B |  | C |  | D |  | E |  | F                      |  | G                                   |  |
|--------------------------------------------------------------------------------------------------------------------------|--|---|--|---|--|---|--|---|--|------------------------|--|-------------------------------------|--|
|                                                                                                                          |  |   |  |   |  |   |  |   |  | REV DATE               |  | DESCRIPTION                         |  |
|                                       |  |   |  |   |  |   |  |   |  |                        |  |                                     |  |
| <p>Specification:</p> <p>Frequency Range: 2400~2500MHz</p> <p>Impedance: 50Ω</p> <p>VSWR: 2.0 max</p> <p>Gain: 2 dBi</p> |  |   |  |   |  |   |  |   |  |                        |  |                                     |  |
| <p>CUSTOMER'S SIGNATURE</p>                                                                                              |  |   |  |   |  |   |  |   |  | <p>APPROVED</p>        |  | <p>CHECKED</p>                      |  |
| <p>XX. ±5.0</p>                                                                                                          |  |   |  |   |  |   |  |   |  | <p>X. ±3.0</p>         |  | <p>XX. ±1.0</p>                     |  |
| <p>XXX ±0.1</p>                                                                                                          |  |   |  |   |  |   |  |   |  | <p>XX ±0.5</p>         |  | <p>XXX ±0.1</p>                     |  |
| <p>DRAWING</p>                                                                                                           |  |   |  |   |  |   |  |   |  | <p>CUSTOMER:</p>       |  | <p>WAVE/INQ P/NO : WL-2400E108B</p> |  |
| <p>PART NO :</p>                                                                                                         |  |   |  |   |  |   |  |   |  | <p>PART NAME: 2.4G</p> |  | <p>昆山市海宣电子有限公司</p>                  |  |
| <p>NO</p>                                                                                                                |  |   |  |   |  |   |  |   |  | <p>DESCRIPTION</p>     |  | <p>QTY</p>                          |  |
| <p>6 Cable</p>                                                                                                           |  |   |  |   |  |   |  |   |  | <p>RG-178</p>          |  | <p>1</p>                            |  |
| <p>5 Connector</p>                                                                                                       |  |   |  |   |  |   |  |   |  | <p>SMA Male(内螺纹内孔)</p> |  | <p>1</p>                            |  |
| <p>4 Rivet</p>                                                                                                           |  |   |  |   |  |   |  |   |  | <p>POM,Color:Black</p> |  | <p>2</p>                            |  |
| <p>3 Antenna Base</p>                                                                                                    |  |   |  |   |  |   |  |   |  | <p>PBT,Color:Black</p> |  | <p>1</p>                            |  |
| <p>2 Antenna Base</p>                                                                                                    |  |   |  |   |  |   |  |   |  | <p>PC,Color:Black</p>  |  | <p>1</p>                            |  |
| <p>1 Antenna Body</p>                                                                                                    |  |   |  |   |  |   |  |   |  | <p>TPE,Color:Black</p> |  | <p>1</p>                            |  |
| <p>REMARK</p>                                                                                                            |  |   |  |   |  |   |  |   |  | <p>REMARK</p>          |  | <p>REMARK</p>                       |  |

## 6 Others

| DESCRIPTION                   | SPECIFICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Temperature /Humidity cycling | <p>1, The device under test is kept for 30 mins in an environment with a temperature of -40 °C.</p> <p>2, Kept for 4 Hours in an environment with a temperature of 8cthe conditions are stabilized at room temperature.</p> <p>3, Parts should meet RF spec before and after test.</p> <p>4, No cosmetic problem(No soldering problem;No adhesion problem of glue).</p>                                                                                                       |
| Temperature Shock             | <p>1, The device under test at -40 °C ⇌125 °C by 100 cycles, Dwell of 30 mins, transition time between Dwell 30 secs (~ 61 mins / cycle) and each item should be measured after exposing them in normal temperature and humidity for 24 h.</p> <p>2, Parts should meet RF spec before and after test.</p> <p>3, No cosmetic problem(No soldering problem; No adhesion problem of glue).</p>                                                                                   |
| High Temperature              | <p>1, Temperature:125°C, time:1008 hours</p> <p>2, There is no substantial obstruction to air flow across and around the samples, and the samples are not touching each other</p> <p>3, Parts should meet RF spec before and after test.</p> <p>4, No cosmetic problem(No soldering problem; No adhesion problem of glue).</p>                                                                                                                                                |
| Salt mist test                | <p>1, The device under test is exposed to a spray of a 5% (by volume) resolution of NACL in water for 2 hours. Thereafter the device under test is left for 1 week in room temperature at a relative humidity of 95%. The cycle is repeated until a total of 2 cycles have been completed. Here after the conditions are stabilized at room temperature.</p> <p>2, Parts should meet RF spec before and after test.</p> <p>3, No visible corrosion. Discoloration accept.</p> |