

# Antenna Report

Product Name: MS-528

Manufacture: Dingnan Jinpeng Electronic Co., LTD

Address: Jinpeng Industrial Park, Futian Industrial Park, Dingnan County,  
Ganzhou City, Jiangxi Province

Antenna Type: PCB antenna

Antenna Size:15mm\*3mm

Project Engineer: Issac

Test Standards: ANSI/IEEE Std 149-2021

Test software being used: Emquest

Software Version:1.13

Test Result: PASS

Issued Date: 2022-03-21

| Name                | Parameter            | Method                                     | Standard no.            |
|---------------------|----------------------|--|-------------------------|
| Antenna performance | Radiation efficiency | IEEE Standard Test Procedures for Antennas | ANSI/IEEE Std 149- 2021 |

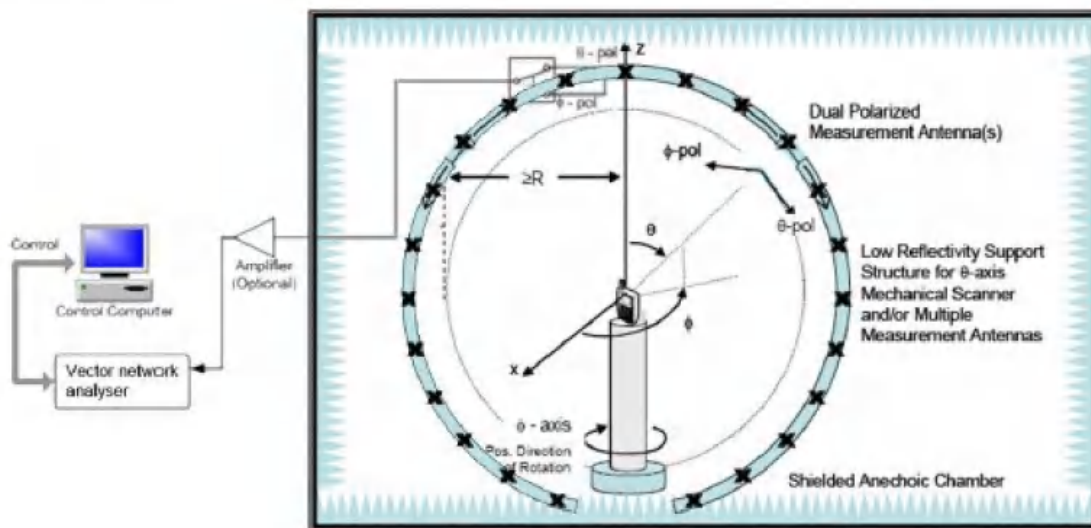
| Equipment                        | Manufacturer | Mode No | Serial No  | Cal date   | Cal Due    |
|----------------------------------|--------------|---------|------------|------------|------------|
| Network Analyzer                 | Agilent      | E5071B  | MY48360957 | 2021/5/20  | 2022/5/19  |
| Quad-Ridge Horn Antenna          | ETS          | Apr-64  | 62743      | 2021/5/20  | 2022/5/19  |
| 700 MHz-6 GHz<br>MAPS Controller | ETS          | 7006    | 59957      | 2021/12/17 | 2022/12/16 |
| Switch Control System            | ETS          | 7001    | MY42001152 | 2021/12/17 | 2022/12/16 |

2 Test Temperature and Humidity

Temperature: 23.2°C

Humidity: 65%

## Test Setup



|                |   |
|----------------|---|
| <b>Name</b>    | Shenzhen RFI-LAB Communication Technology Co.,Ltd.  |
| <b>Address</b> | 10/F A, Lingyun Bld, Liufang Rd, Baoan District, SZ |
| <b>Tel</b>     | 13682621346   |
| <b>E-mail</b>  | rfi-lab@tech-now.com                                |

# Antenna Report

## Specifications

Summary

ITEM

SPEC

Model Name : MS-528

Center Frequency 2400MHz 2.21dBi

2440MHz 1.85dBi

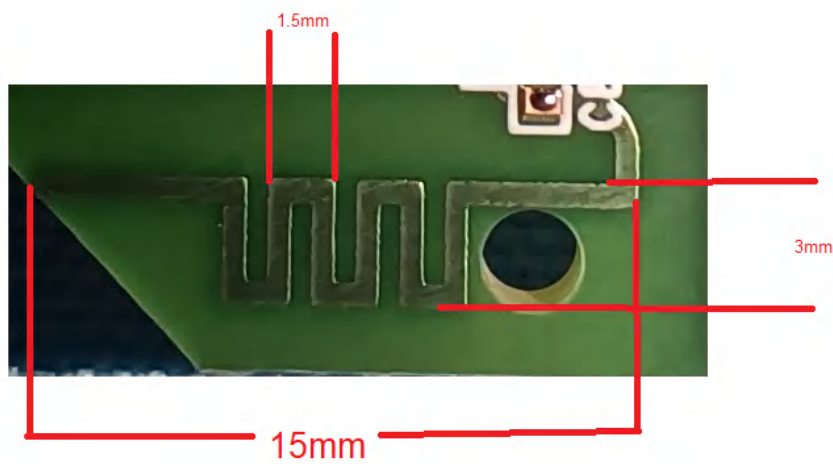
2500MHz 1.03dBi

MAX. GAIN 2.21 dBi

Polarization Horizontal

Azimuth Beam Pattern Omni directional

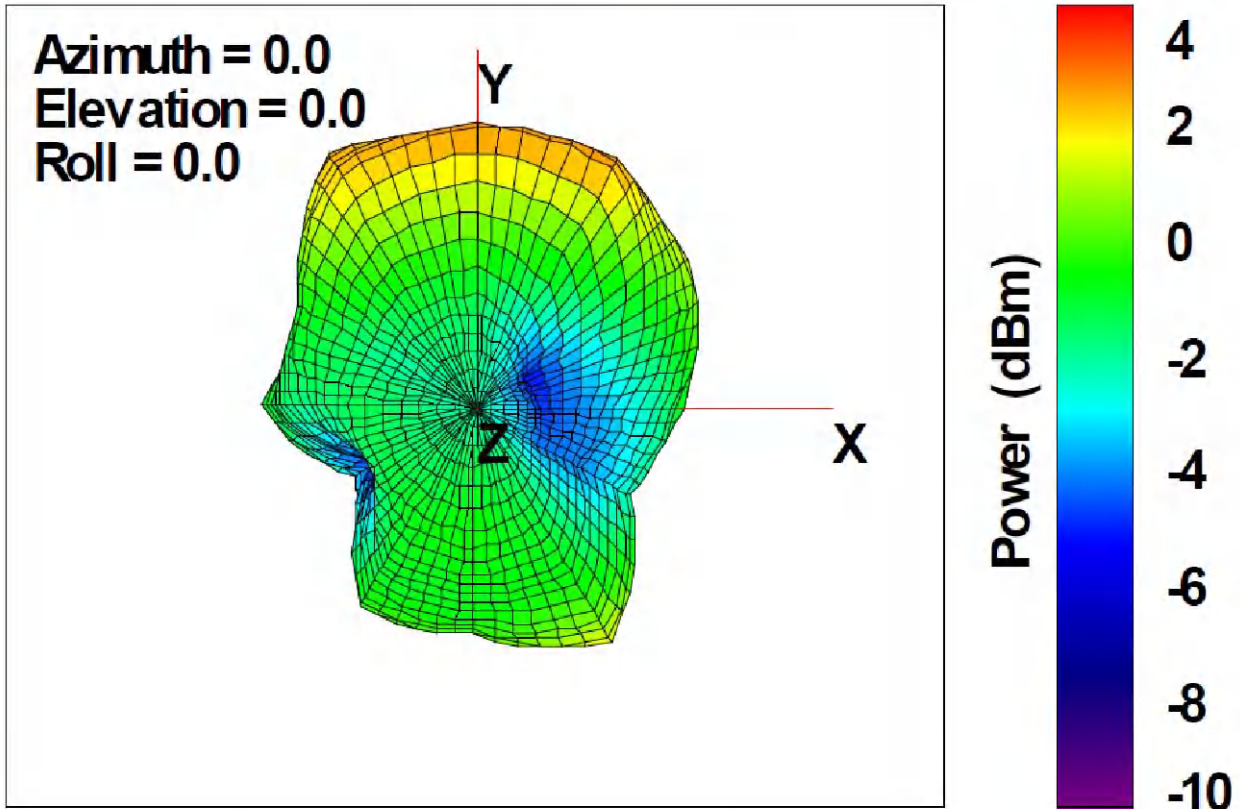
Impedance 50Ω



1. Main antenna : 2400MHz

1 . 1 H o r i z o n t a l

## Total EIRP, Top View



Frequency (MHZ): 2400 Antenna Polarity: Horizontal

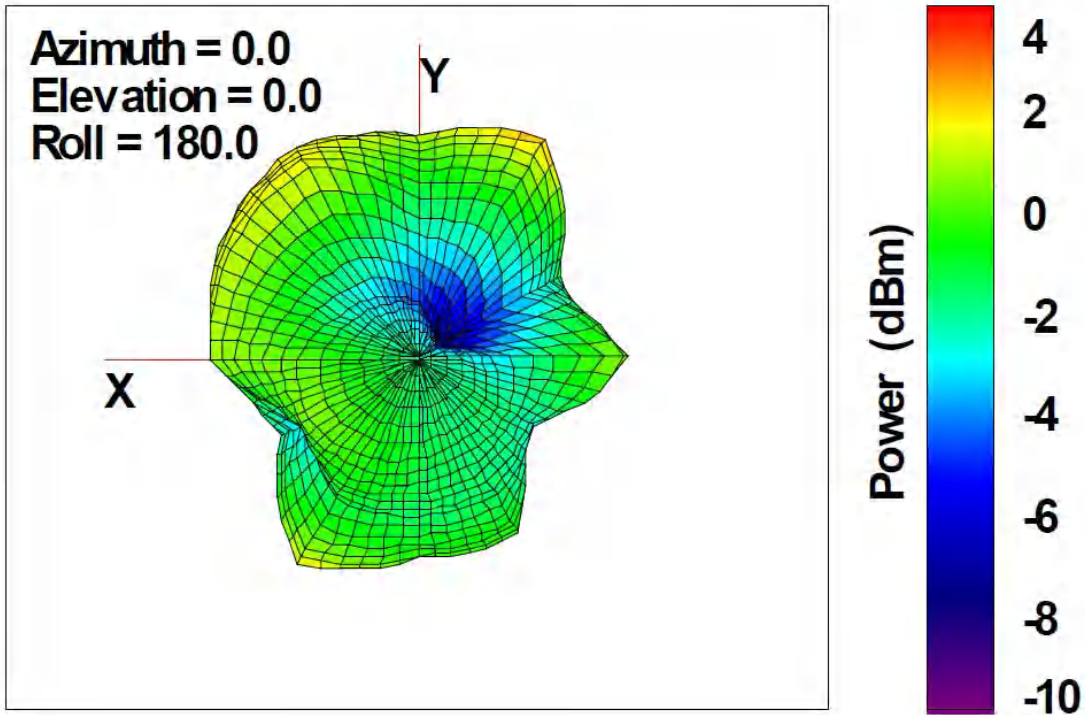
Maximum Value (dBi): 2.21

Average Gain (dBi) : - 1.4

Minimum Gain (dBi):-61.26

1.2.Vertical

### Total EIRP, Bottom View



Frequency (MHZ ): 2400 Antenna Polarity: Vertical

Maximum Value (dBi): -2.85

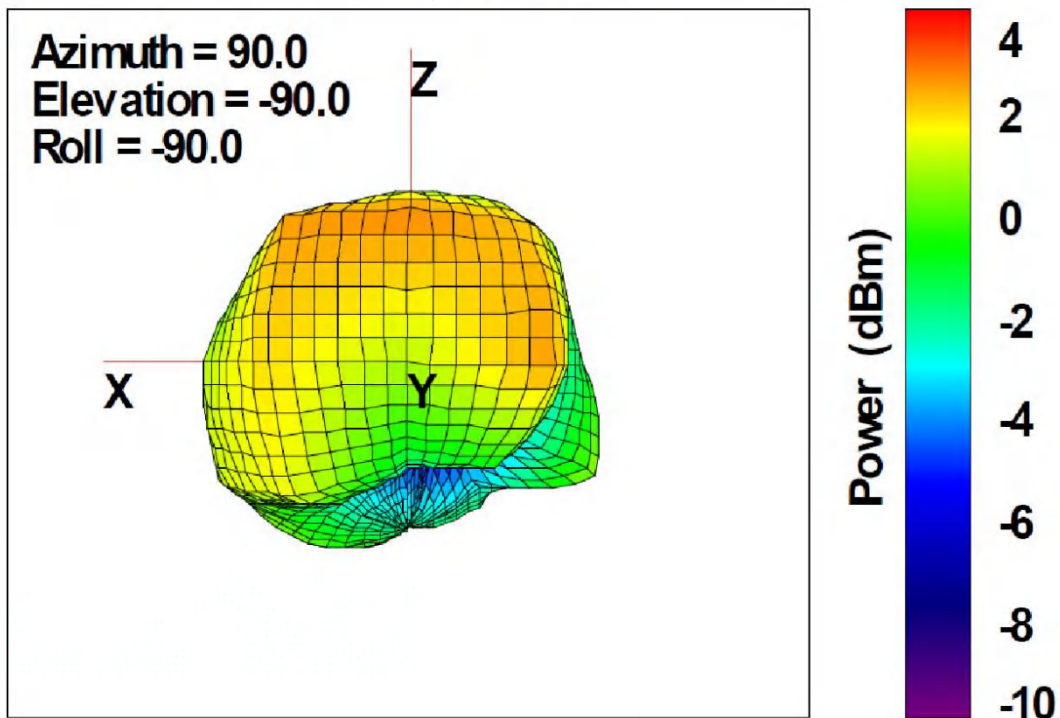
Average Gain (dBi): -12

Minimum Gain dBi: -64

2. Main antenna : 2440 MHz

2.1 Horizontal

## Total EIRP, Right Side View



Frequency (MHZ): 2440 Antenna Polarity:Horizontal

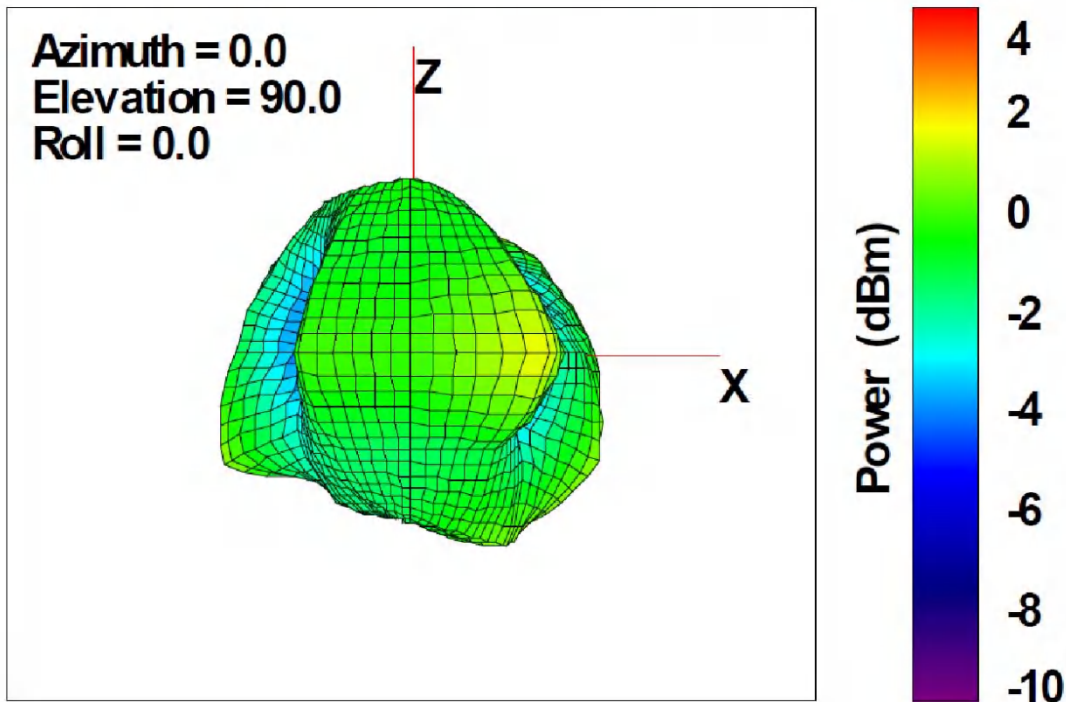
Maximum Value (dBi): 1.85

Average Gain (dBi): - 1.2

Minimum Gain( dBi):- 60

## 2.2 Vertical

### Total EIRP, Left Side View



Frequency (MHZ): 2440    Antenna Polarity: Vertical

Maximum Value (dBi): -3.0

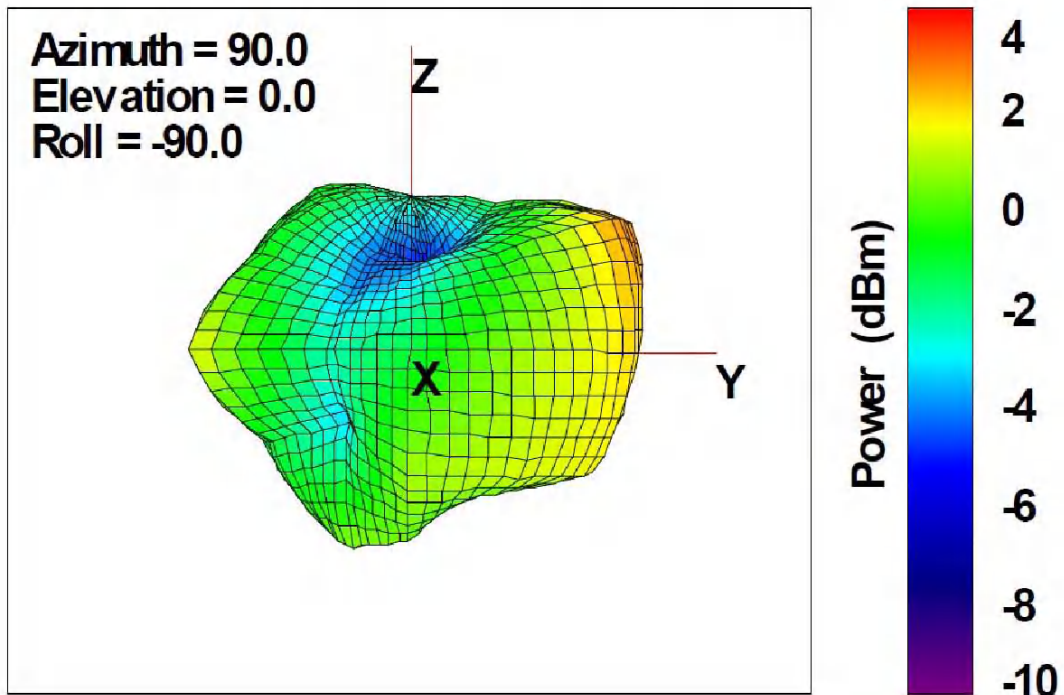
Average Gain( dBi): -12

Minimum Gain (dBi) : -54

3. Main antenna : 2500MHz

2.1 Horizontal

## Total EIRP, Front View



Frequency (MHZ): 2500 Antenna Polarity: Horizontal

Maximum Value (dBi) : 1.03

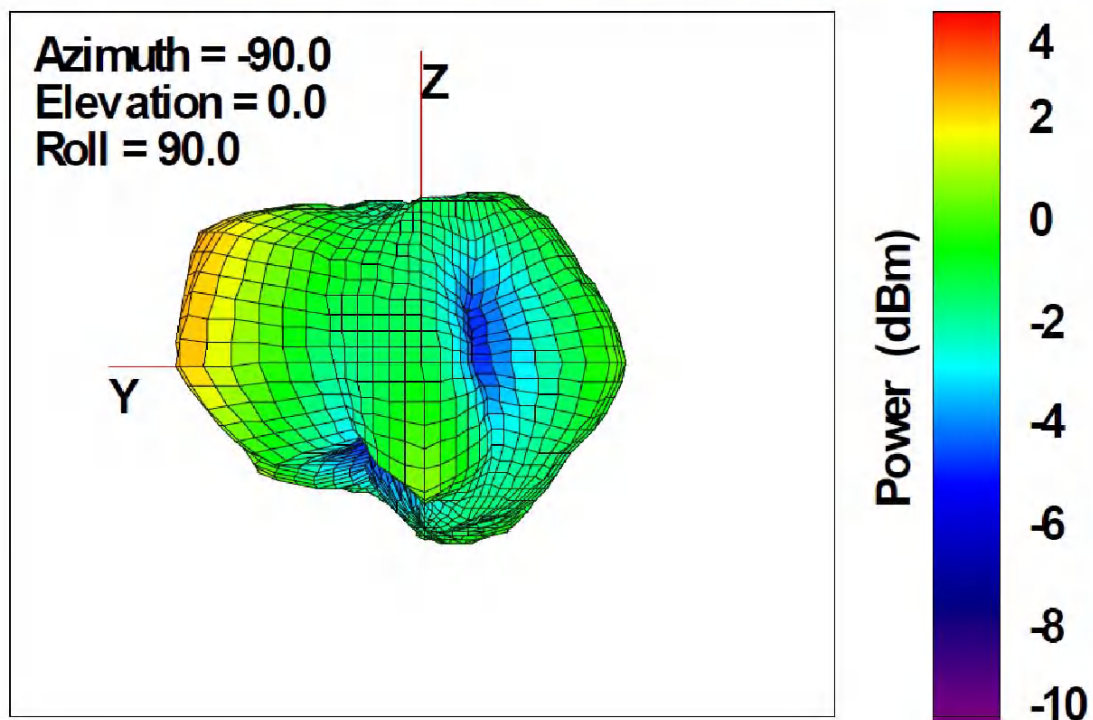
Average Gain (dBi) : - 2.5

Minimum Gain (dBi) : - 52



## 2.2 Vertical

### Total EIRP, Back View



Frequency (MHZ) : 2500 Antenna Polarity: Vertical

Maximum Value (dBi): - 4.5

Average Gain (dBi): - 11

Minimum Gain (dBi): - 50

## ANNEX C TEST SETUP PHOTO

