

# Antenna Report

Product Name: MS-631

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: 13mm\*6mm

Project Engineer: Issac

Test Standards: ANSI/IEEE Std 149-2021

Test software being used: Emquest

Software Version: 1.13

Test Result: PASS

Issued Date: 2024-09-30

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

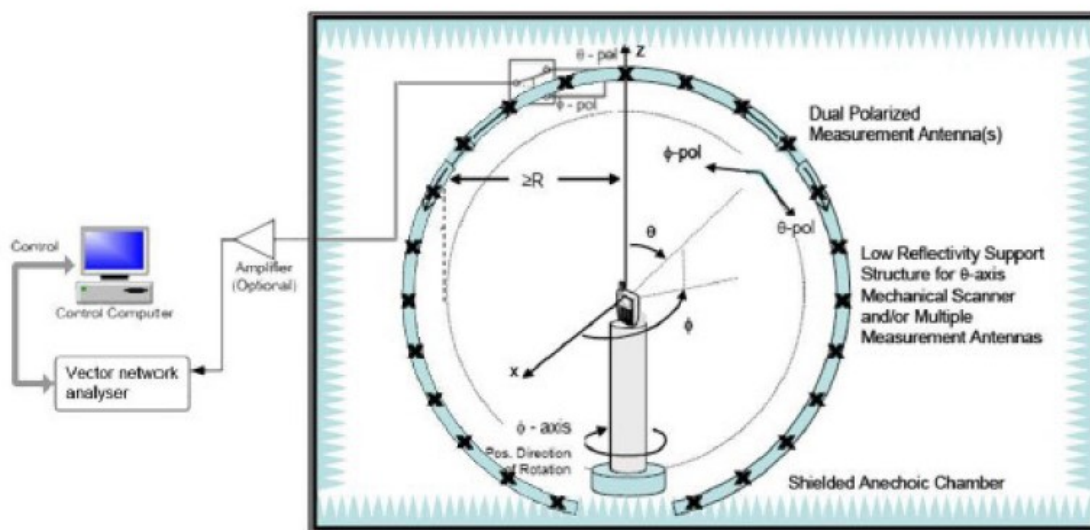
| Equipment               | Manufacturer | Mode No | Serial No  | Cal date   | Cal Due    |
|-------------------------|--------------|---------|------------|------------|------------|
| Network Analyzer        | Agilent      | E5071B  | MY48360957 | 2021/5/20  | 2022/5/19  |
| Quad-Ridge Horn Antenna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



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

# Antenna Report

## Specifications

Summary

ITEM

SPEC

Model Name : MS-631

Center Frequency 2402MHz -2.64dBi

2440MHz -1.89dBi

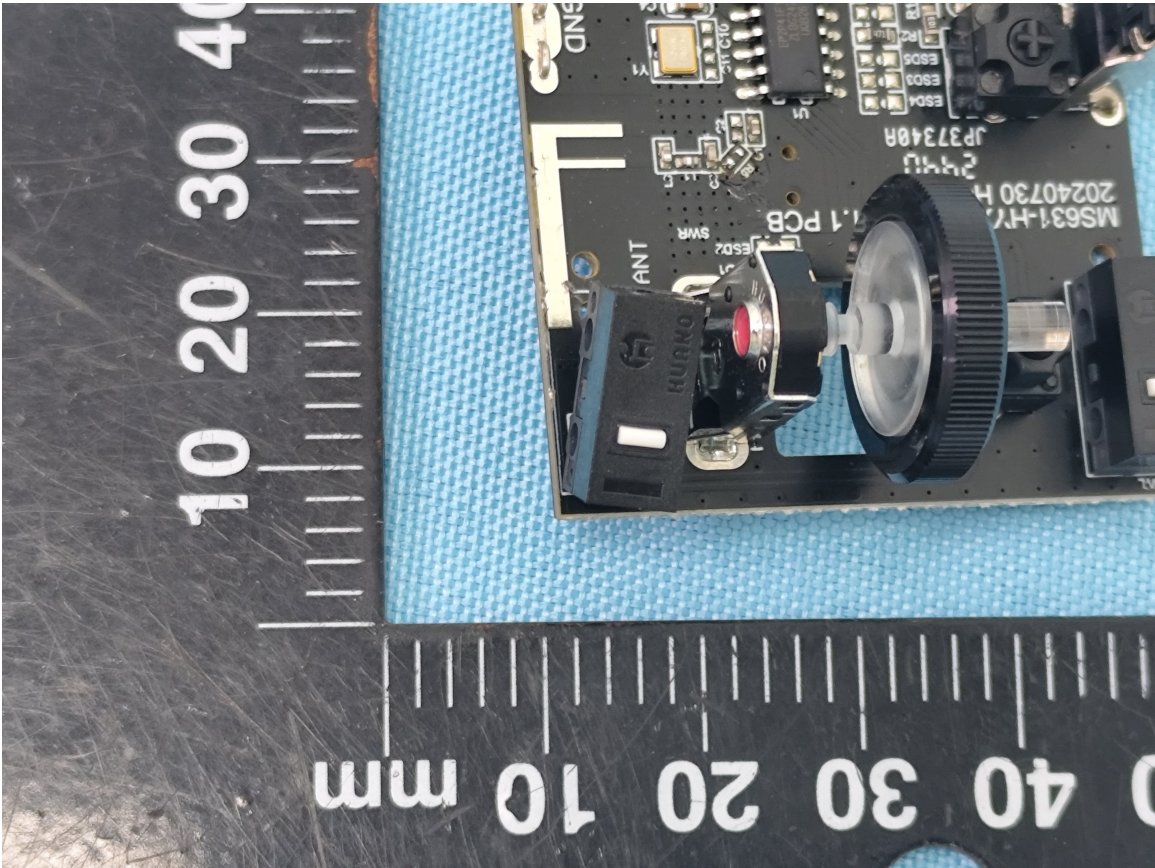
2480MHz -1.66dBi

MAX. GAIN -1.66 dBi

Polarization Horizontal

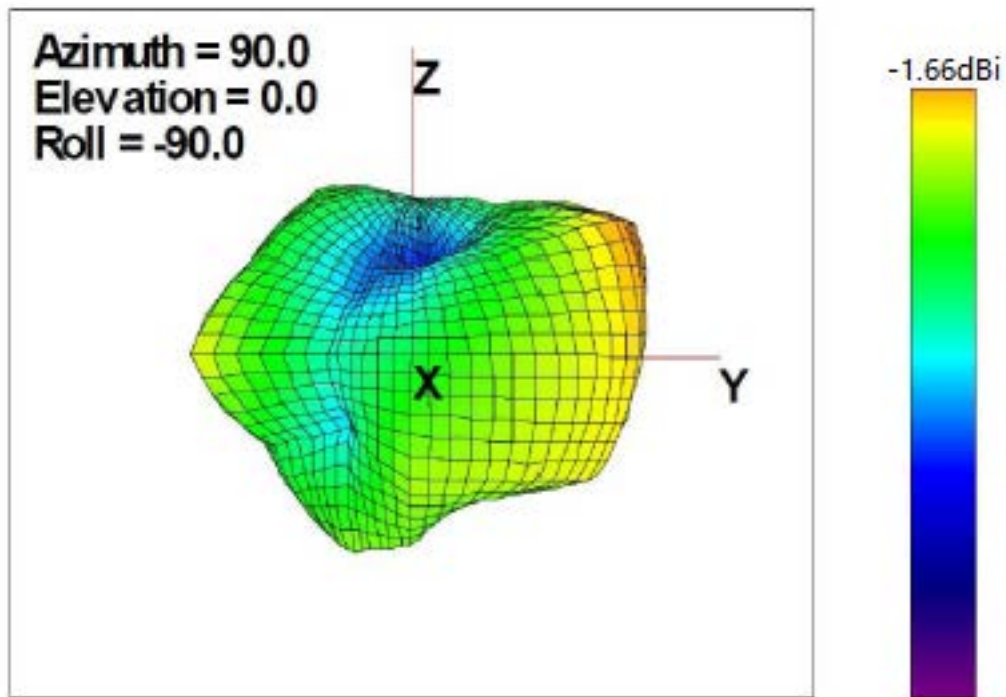
Azimuth Beam Pattern Omni directional

Impedance 50Ω



3. Main antenna : 2480MHz

2.1 Horizontal



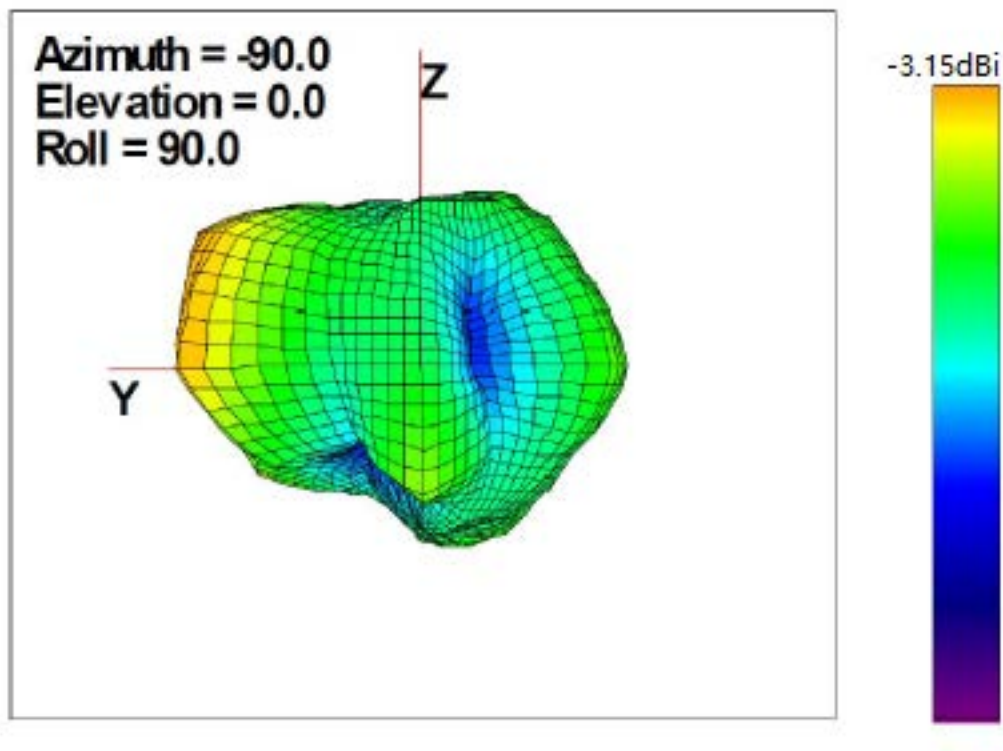
Frequency (MHz): 2480 Antenna Polarity: Horizontal

Maximum Value (dBi) : -1.66

Average Gain (dBi) : - 7.99

Minimum Gain (dBi) : - 24.74

## 2.2 Vertical



Frequency (MHz) : 2480 Antenna Polarity: Vertical

Maximum Value (dBi): -3.15

Average Gain (dBi): - 10.56

Minimum Gain (dBi): - 29.48

## ANNEX C TEST SETUP PHOTO

