

# Antenna test report

Product name:Dome Camera

Product model:TP1

Evaluation date:February 27, 2024

SHENZHEN YINGJIACHUANG TECHNOLOGY ELECTRONIC CO., LTD

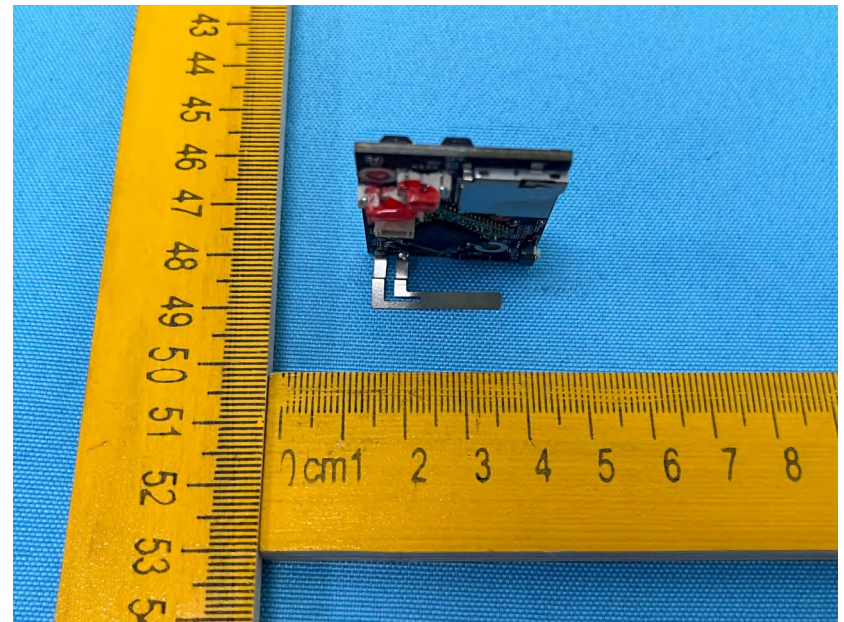
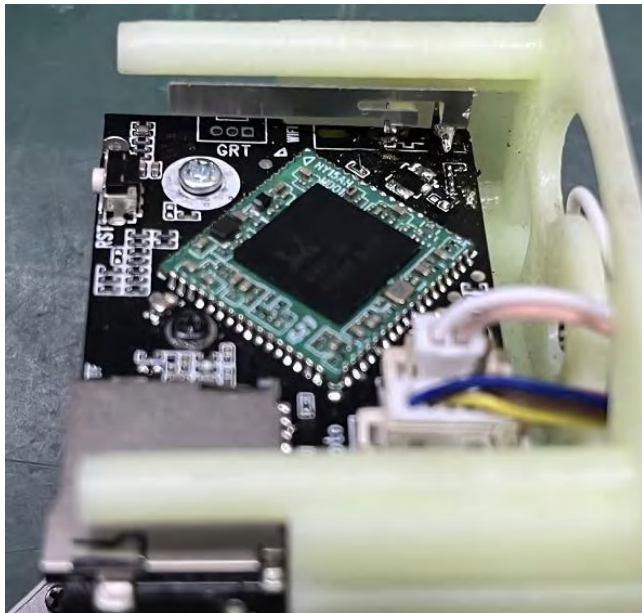
# Edition record

| Edition | Content      | Update reason | Date              |
|---------|--------------|---------------|-------------------|
| 1.0     | Antenna test | Initial issue | February 27, 2024 |
|         |              |               |                   |
|         |              |               |                   |
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|         |              |               |                   |
|         |              |               |                   |
|         |              |               |                   |

|    |                                                     |       |
|----|-----------------------------------------------------|-------|
| 1. | E d i t i o n   r e c o r d                         | ····· |
| 2. | P r o j e c t   s i t u a t i o n                   | ····· |
| 3. | A n t e n n a   a n d   s t r u c t u r e   f o r m | ····· |
| 4. | A n t e n n a   m e s h   t e s t   d i a g r a m   | ····· |
| 5. | A n t e n n a   p a s s i v e   t e s t   d a t a   | ····· |
| 6. | A n t e n n a   t e s t   2 D 3 D   d i a g r a m   | ····· |
| 7. | O T A   t e s t   d a t a                           | ····· |

|                    |                  |
|--------------------|------------------|
| Product name       | PTZ Dome Camera  |
| Product model      | TP1              |
| Number of antennas | 1                |
| Antenna band       | 2400-2500 MHz    |
| Structural form    | Shrapnel Antenna |

# Antenna and structure form



# Antenna mesh test diagram



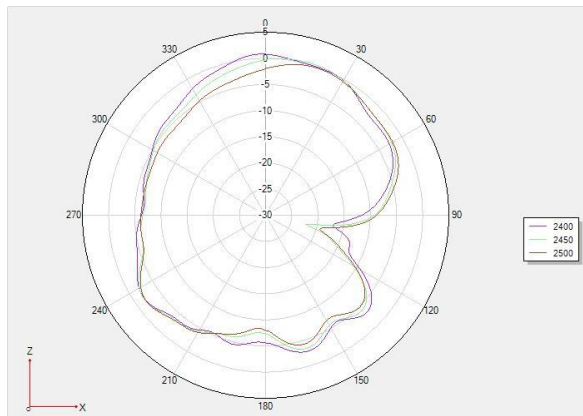
## Antenna passive test data

| Frequency/Mhz | Efficiency / % | MaxGain/dBi |
|---------------|----------------|-------------|
| 2400          | 53.55          | 1.32        |
| 2410          | 53.64          | 1.3         |
| 2420          | 52.42          | 1.63        |
| 2430          | 51.88          | 1.54        |
| 2440          | 51.45          | 1.38        |
| 2450          | 51.34          | 1.59        |
| 2460          | 50.81          | 1.56        |
| 2470          | 51.24          | 1.44        |
| 2480          | 51.13          | 1.47        |
| 2490          | 51.67          | 1.4         |
| 2500          | 50.92          | 1.39        |

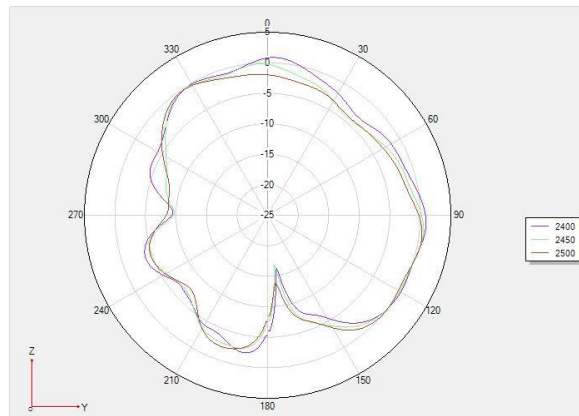
Gain=1.63dBi

# Antenna test 2/3D diagram

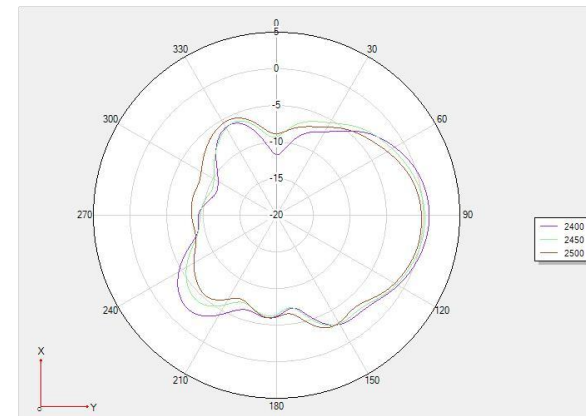
Phi 0 2D



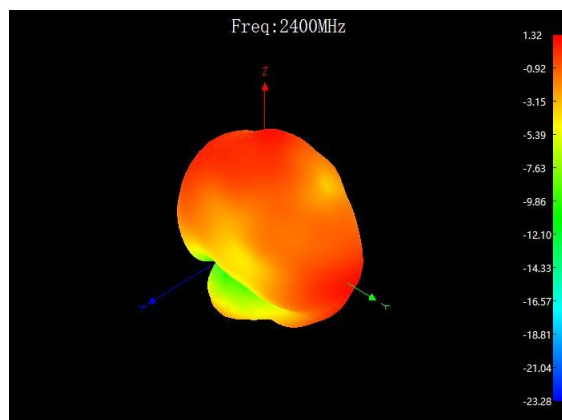
Phi 90 2D



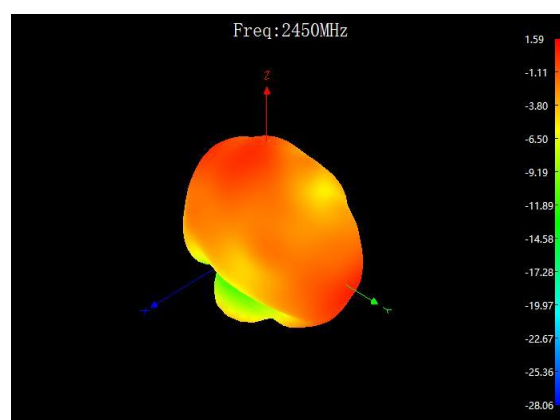
Theta 90 2D



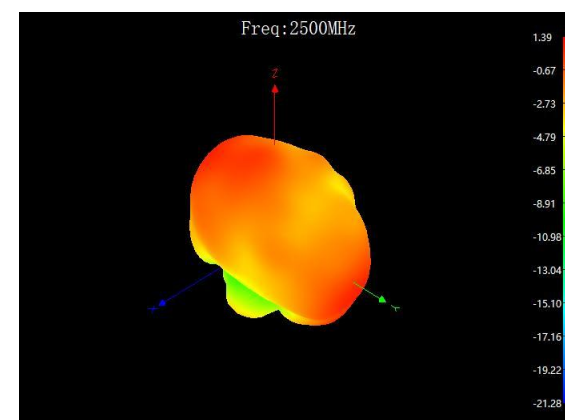
2400



2450



2500



| Item | Measurement | Azimuths | Elevations | Standard  | Band             | Channel | Frequency | Max    | Min    | Total  |
|------|-------------|----------|------------|-----------|------------------|---------|-----------|--------|--------|--------|
| 1    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 1       | 2412      | 19.93  | 1.27   | 15.93  |
| 2    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 6       | 2437      | 20.62  | 4.48   | 16.53  |
| 3    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 11      | 2462      | 20.26  | 2.93   | 16.21  |
| 4    | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 1       | 2412      | -66.85 | -84.22 | -80.14 |
| 5    | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 6       | 2437      | -66.77 | -84.37 | -80.16 |
| 6    | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_B (11M)     | 11      | 2462      | -67.64 | -84.86 | -80.81 |
| 7    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 1       | 2412      | 17.66  | 0.58   | 13.65  |
| 8    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 6       | 2437      | 18.93  | 1.76   | 14.74  |
| 9    | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 11      | 2462      | 19.08  | 1.84   | 14.92  |
| 10   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 1       | 2412      | -55.26 | -72.13 | -67.12 |
| 11   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 6       | 2437      | -50.25 | -71    | -66.05 |
| 12   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_G (54M)     | 11      | 2462      | -48.89 | -70.07 | -65.91 |
| 13   | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 1       | 2412      | 17.55  | 2.29   | 13.47  |
| 14   | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 6       | 2437      | 18.12  | -0.47  | 14.12  |
| 15   | TRP         | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 11      | 2462      | 18.43  | 0.3    | 14.27  |
| 16   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 1       | 2412      | -45.86 | -66.25 | -62.18 |
| 17   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 6       | 2437      | -40.81 | -64.31 | -61.28 |
| 18   | TIS(EIRP)   | Every30  | Every30    | WIFI (AP) | WIFI_N_ISM (65M) | 11      | 2462      | -47.73 | -63.6  | -60.22 |

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