



上海杰盛康通信工程有限公司

Shanghai Jesoncom Communication Engineering Co., Ltd

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## SPECIFICATION FOR APPROVAL

CUSTOMER/PROJECT: Centerm MINI PC

CUSTOMER P.N. : \_\_\_\_\_

PRODUCT NAME. : WIFI Antenna

MODEL NO. : 3V138B

SPECIFICATION : \_\_\_\_\_

| VERSION | DATE       | REVISION DESCRIPTION                |
|---------|------------|-------------------------------------|
| T:A     | 2025-03-25 | newly added                         |
| T:B     | 2025-07-10 | Update Chinese and English versions |
|         |            |                                     |
|         |            |                                     |

| SUPPLIER AUTHORIZED SIGNATURE |         |          |
|-------------------------------|---------|----------|
| PREPARED                      | CHECKED | APPROVED |
| XUHAIJUN                      |         |          |

| CUSTOMER AUTHORIZED SIGNATURE |  |         |  |
|-------------------------------|--|---------|--|
| Project                       |  | Quality |  |

Please return to us one copy of "SPECIFICATION FOR APPROVAL" with your approved signature. // 客户确认签字，盖章后请回传一份承认书给我司。

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### 1 DEFINITION

|       |                                         |
|-------|-----------------------------------------|
| dBi   | Decibel relative isotropic antenna      |
| Tx    | Transmit frequency                      |
| Rx    | Receive frequency                       |
| TRP   | Total Radiated Power                    |
| TIS   | Total Isotropic Sensitivity             |
| VSWR  | Voltage Standing Wave Ratio             |
| GSM   | Global Service for Mobile communication |
| DCS   | Digital Communication System            |
| CDMA  | Code Division Multiple Access           |
| WCDMA | Wideband Code Division Multiple Access  |

### 2 Test equipment

*Can be increased or decreased according to actual situation*

vector network analyzer

Comprehensive test instrument

GTS darkroom

### 3 Applicable frequency band

*Mark the applicable frequency bands with other colors.*

| Standard format | Frequency band  |
|-----------------|-----------------|
| WIFI (2.4G)/BT  | 2402MHz~2480MHz |
| WIFI (5G)       | 5150MHz~5850MHz |

### 4 Basic testing items

4.1 Standing wave ratio diagram

4.2 Smith impedance diagram

### 4.3 Radiation pattern

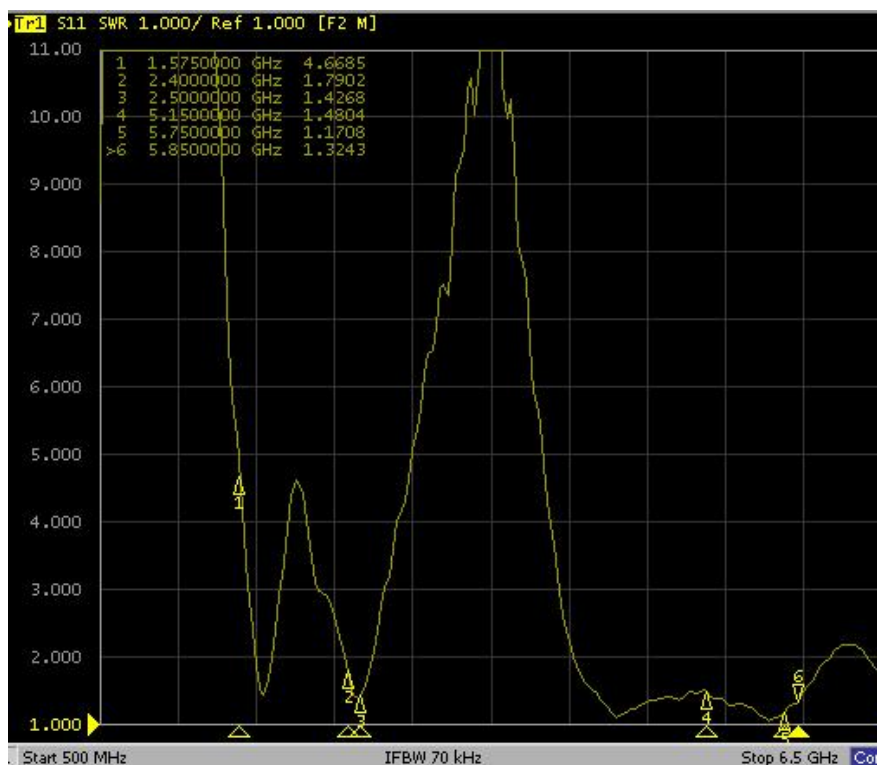
### 4.4 Gain and efficiency

## 5 Test indicators and data charts

### 5.1 standing-wave ratio

#### 5.1.1 Standing wave ratio diagram

#### 5.1.2

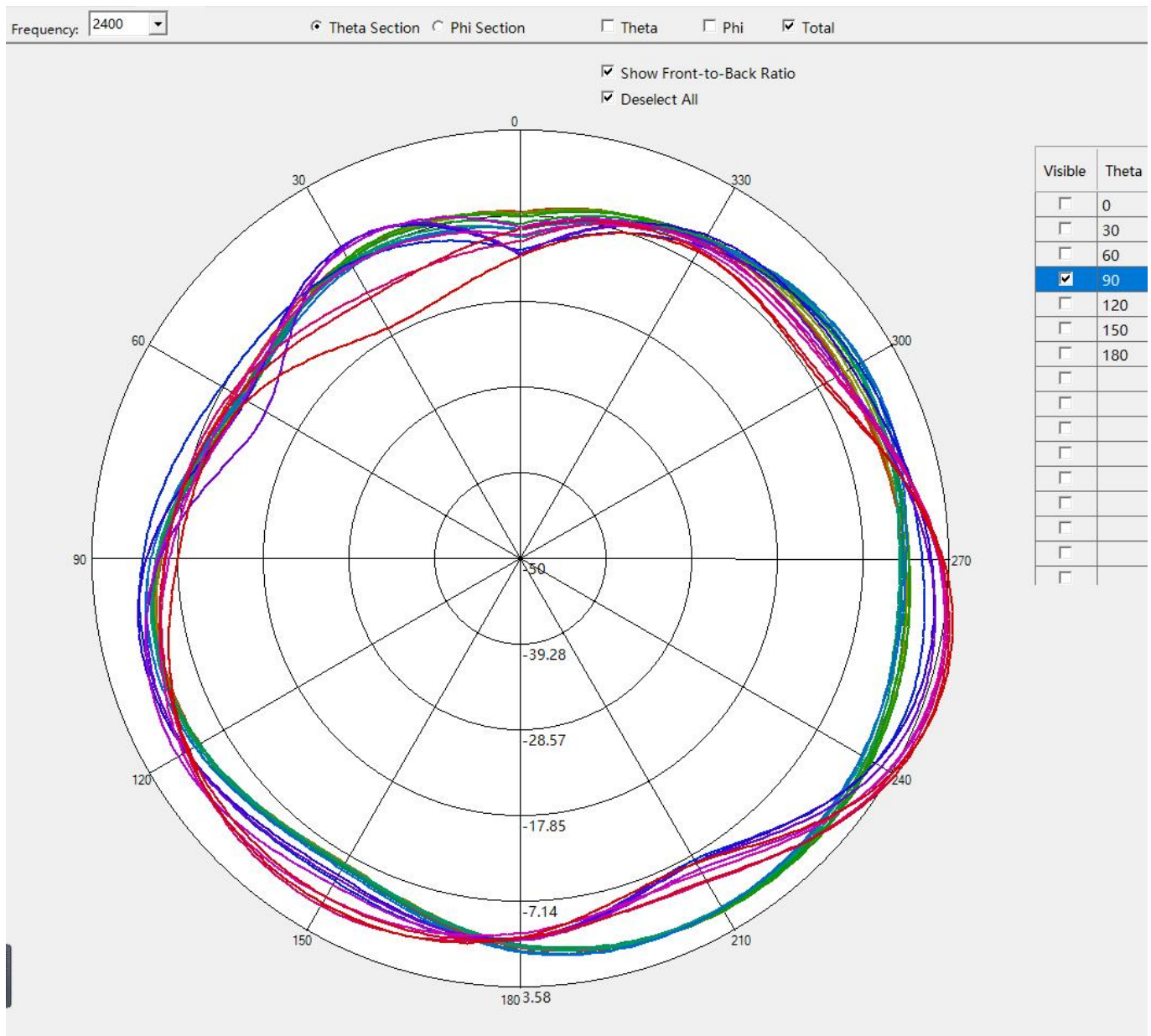


#### 5.1.3 Standing wave ratio data

|          |      |      |      |      |      |
|----------|------|------|------|------|------|
| Freq/MHz | 2400 | 2500 | 5150 | 5750 | 5850 |
| VSWR     | 1.7  | 1.4  | 1.4  | 1.1  | 1.3  |

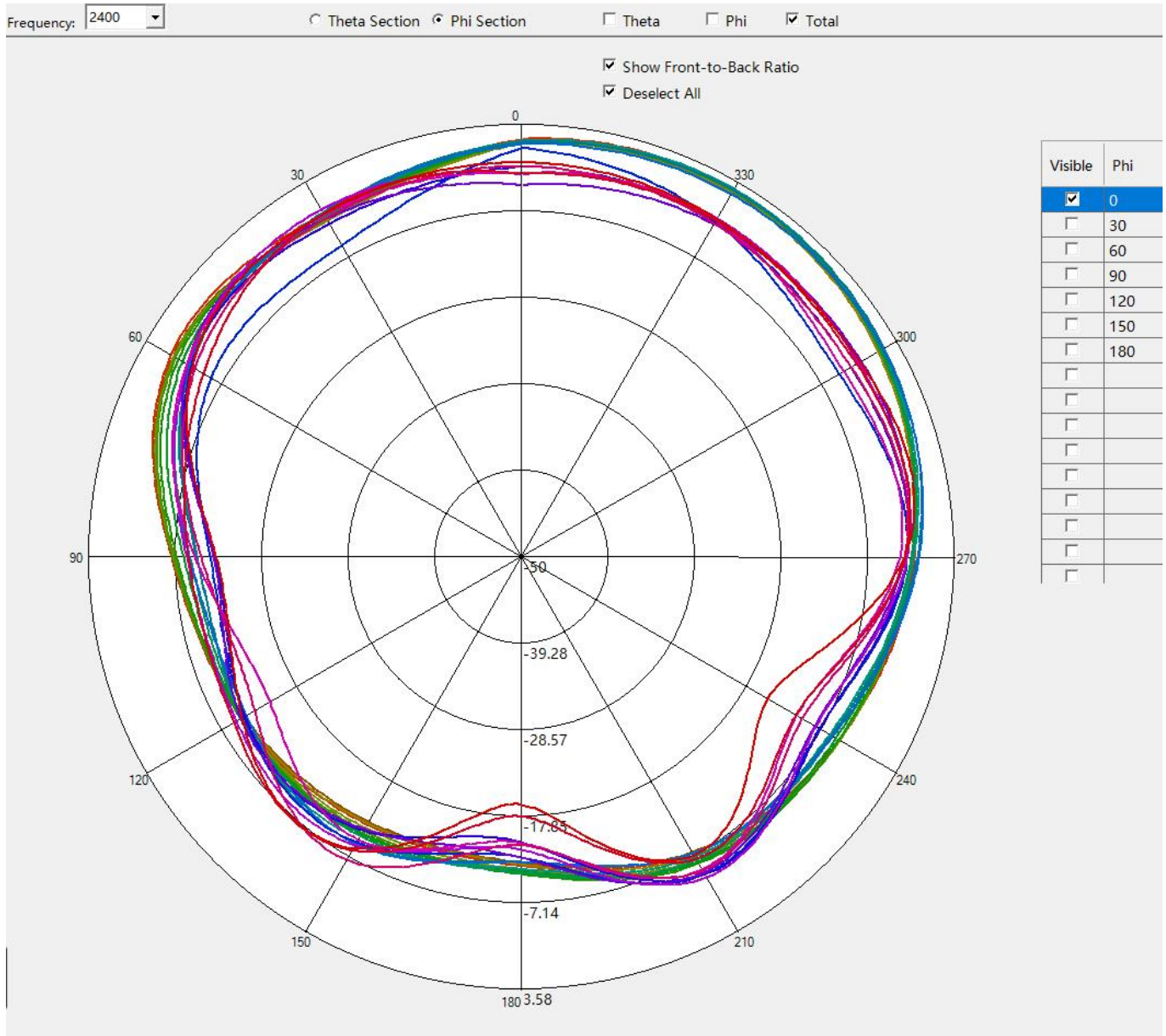
## 5.2 Smith impedance circle diagram

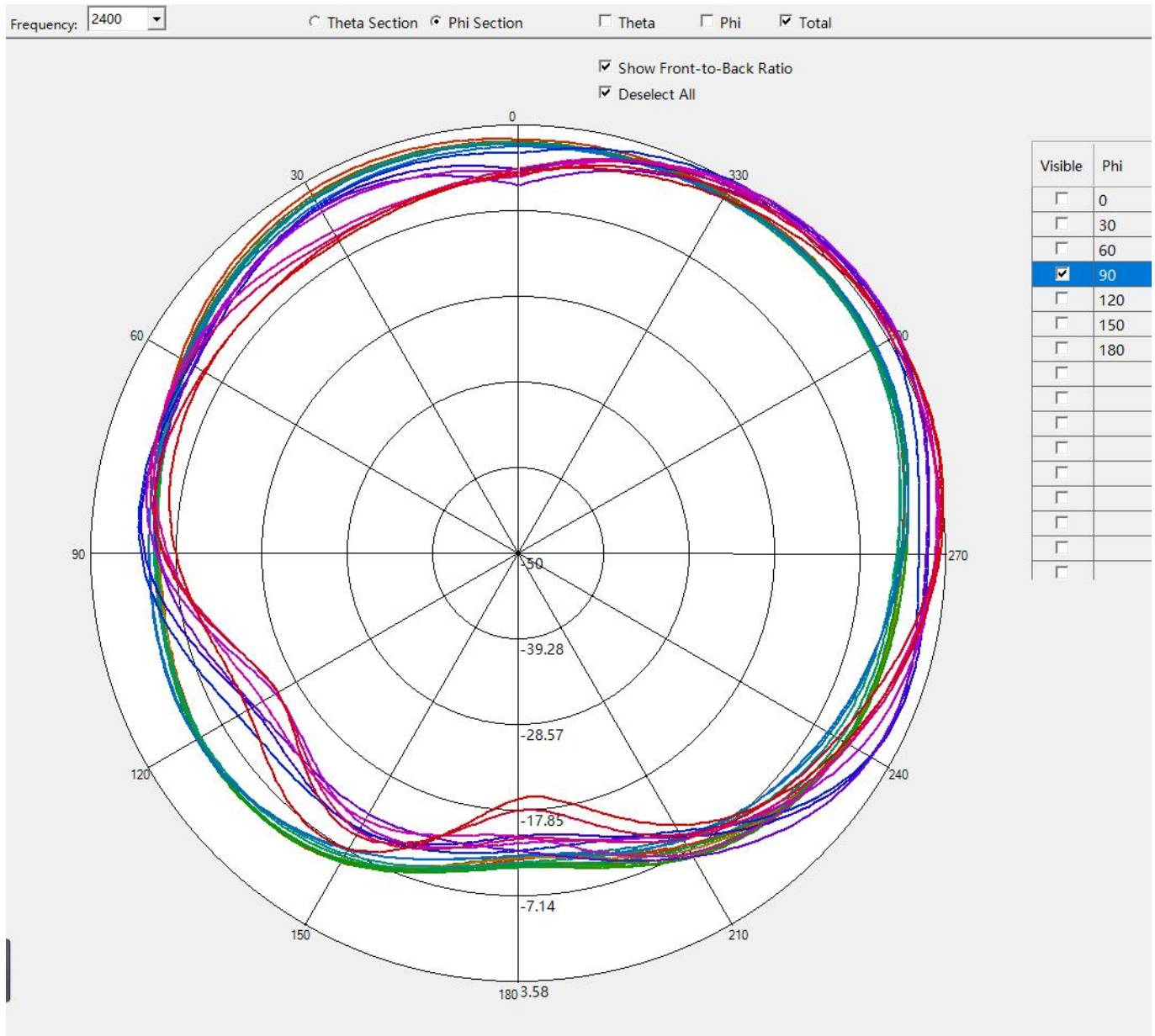




### 5.3.2E-plane

## E1

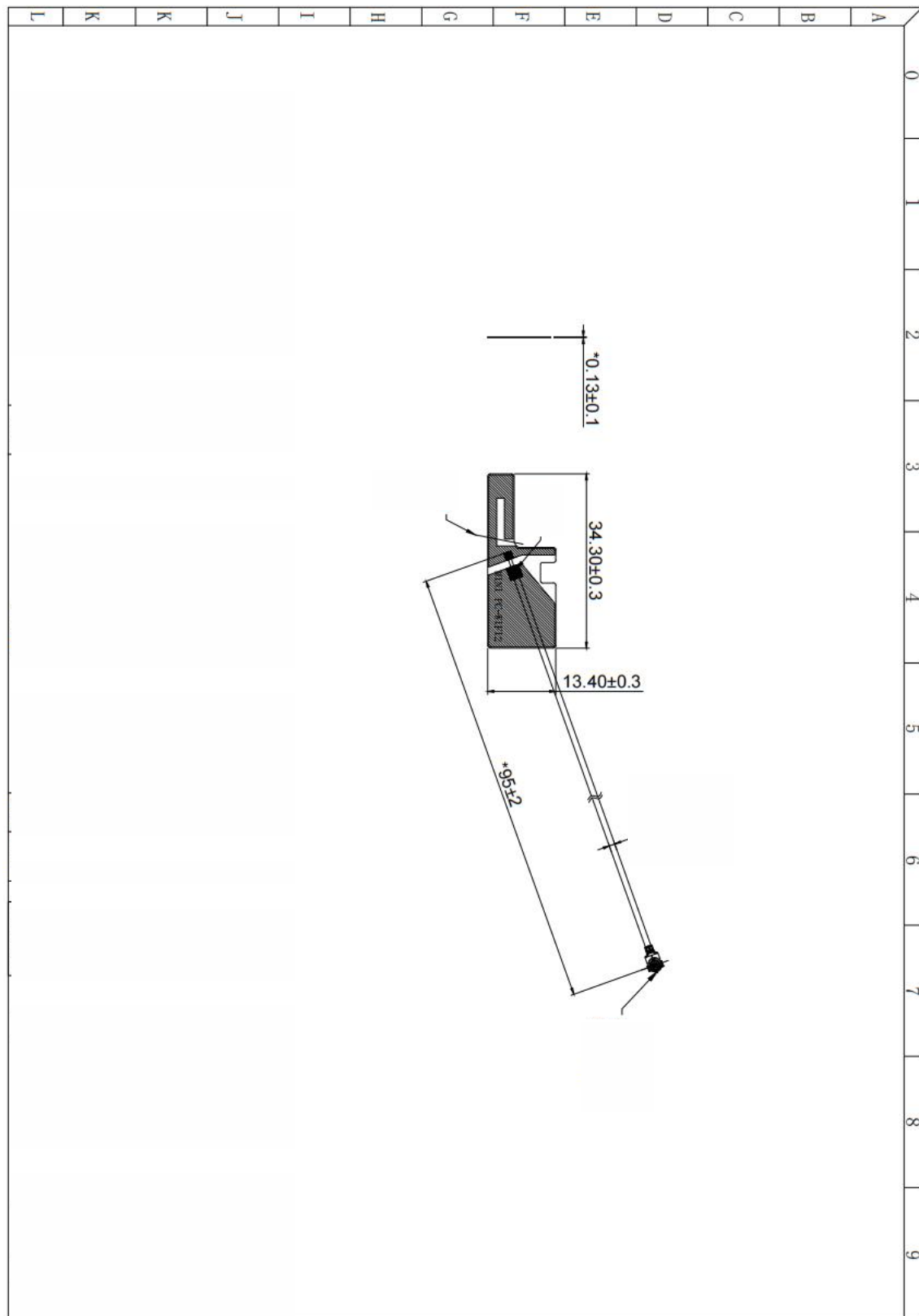




## 5.4 Gain and efficiency

| Freq<br>(MHZ) | Eff (%) | GAIN(dBi) |  | Freq<br>(MHZ) | Eff (%) | GAIN(dBi) |
|---------------|---------|-----------|--|---------------|---------|-----------|
| 2402          | 56.14   | 3.12      |  | 5150          | 50.48   | 5.13      |
| 2410          | 53.70   | 2.75      |  | 5250          | 53.41   | 6.30      |
| 2420          | 52.90   | 2.34      |  | 5350          | 51.28   | 4.81      |
| 2430          | 54.92   | 1.91      |  | 5450          | 52.64   | 5.01      |
| 2440          | 55.28   | 1.40      |  | 5550          | 48.93   | 4.22      |
| 2450          | 55.02   | 1.13      |  | 5650          | 51.00   | 3.44      |
| 2460          | 53.29   | 0.96      |  | 5750          | 51.56   | 4.26      |
| 2470          | 52.26   | 1.03      |  | 5850          | 52.73   | 4.42      |
| 2480          | 54.86   | 1.41      |  |               |         |           |

## 6 Antenna Outline Drawing



## 7 Antenna Installation Guide

### 7.1 Antenna installation and feeder routing instructions

