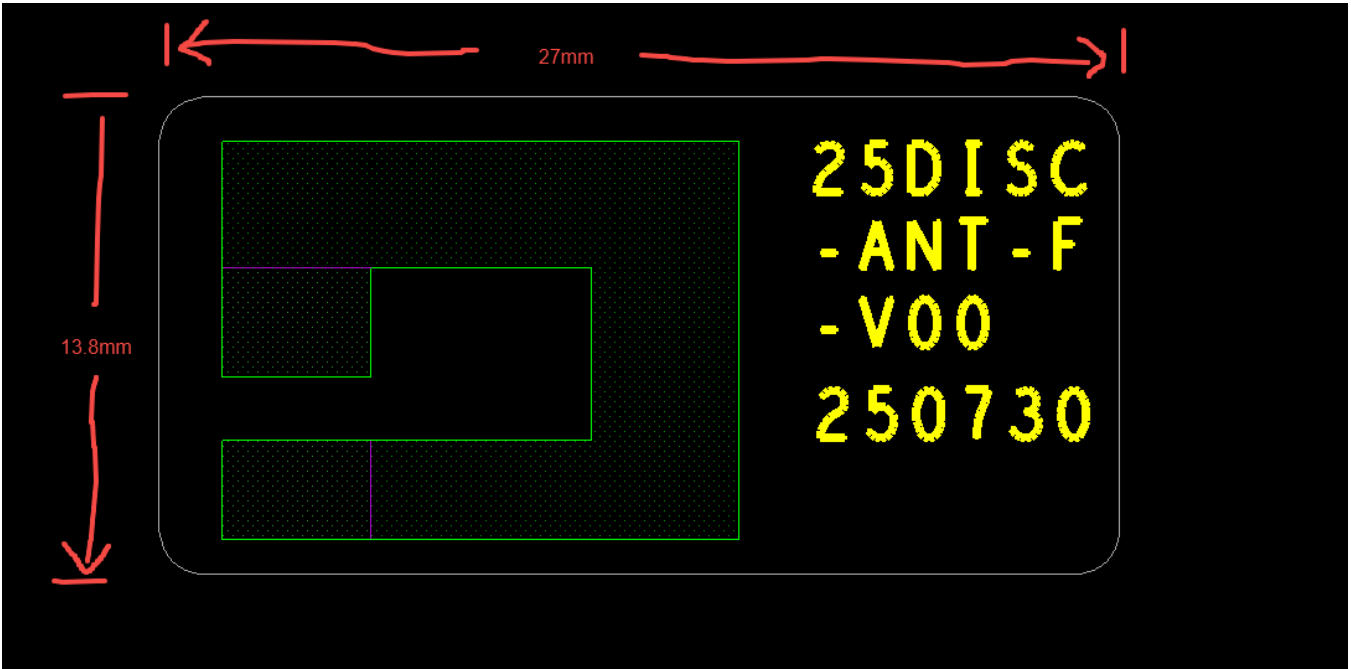


# F5381D antenna specification

| Description                                                                                                                                                                                  |                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Project Name                                                                                                                                                                                 | F5381D                    |
| Operation Band                                                                                                                                                                               | Bluetooth / Wifi2.4G      |
| Frequency                                                                                                                                                                                    | 2400MHz-2500MHz           |
| Antenna Type                                                                                                                                                                                 | Internal antenna with FPC |
| Testing Equipment                                                                                                                                                                            |                           |
| VNA                                                                                                                                                                                          | E5071C                    |
| Chamber                                                                                                                                                                                      | Guangping Chamber system  |
| Manufacturer                                                                                                                                                                                 |                           |
| SHENZHEN HENGXIANGTONG ANTENNA TECHNOLOGY CO., LTD.                                                                                                                                          |                           |
| Add:606, Building E, Enterprise Aviation Technology Innovation Research and Development Industrial Park, No. 1008, Songbai Road, Sunshine Community, Xili Street, Nanshan District, Shenzhen |                           |

1
Antenna pattern



2
Passive data

2.1
S11

|            |      |      |      |
|------------|------|------|------|
| Fre(MHz)   | 2400 | 2450 | 2500 |
| Result(dB) | -12  | -15  | -10  |

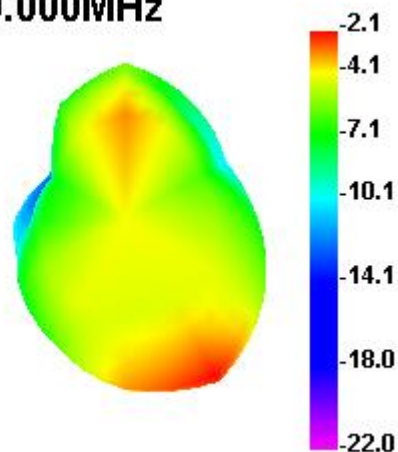
2.2
Efficiency & Gain

|           |         |          |            |
|-----------|---------|----------|------------|
| Fre (MHz) | Eff (%) | Eff (dB) | Gain (dBi) |
| 2400      | 19.58   | -7.08    | -2.21      |
| 2410      | 18.41   | -7.35    | -2.36      |
| 2420      | 18.27   | -7.38    | -2.31      |
| 2430      | 18.02   | -7.44    | -2.22      |
| 2440      | 18.42   | -7.35    | -2.1       |
| 2450      | 18.12   | -7.42    | -2.15      |
| 2460      | 17.48   | -7.57    | -2.27      |
| 2470      | 17.65   | -7.53    | -2.35      |
| 2480      | 17.79   | -7.5     | -2.35      |
| 2490      | 17.99   | -7.45    | -2.26      |
| 2500      | 18.12   | -7.42    | -2.22      |

## 2.3 Radiation Pattern

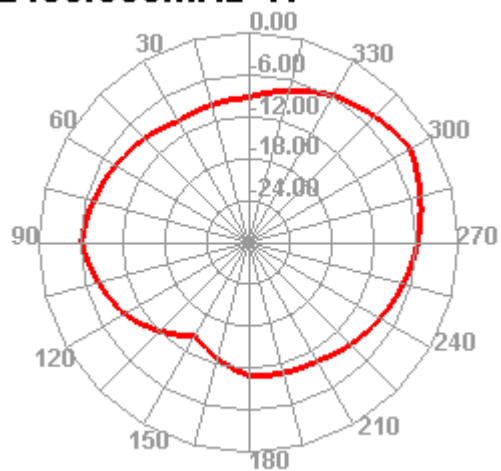
### 3D pattern

2450.000MHz



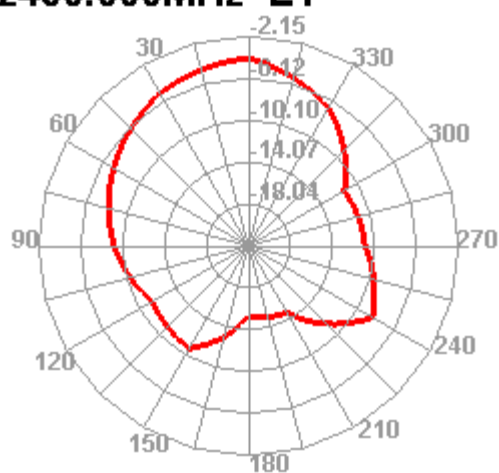
### H-plane

2450.000MHz H



### E1-plane

### 2450.000MHz E1



### E2-plane

### 2450.000MHz E2

