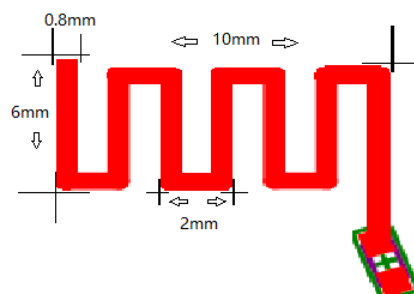
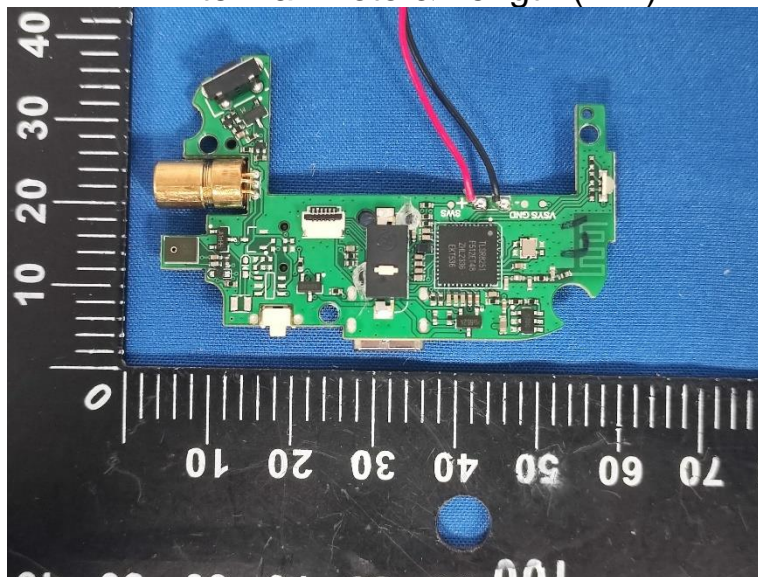


Inverted F Antenna Specification Summary

| | |
|----------------------|--|
| ITEM | ANT SPEC |
| Name | 2.4G ANT |
| Model | CHP04 |
| MAX. Gain | -4.91dBi |
| Azimuth Beam Pattern | Omni-directional |
| Impedance | 50 Ohm |
| Antenna Length | 10mm |
| | |
| Manufacturer | CheerDots Co., Ltd |
| Address | 4045, 4th Floor, No. 1, Haidian Street, Haidian District, Beijing |
| Test Laboratory | Shenzhen BALUN Technology Co., Ltd. |
| Address | Block B, 1/F, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China |

Antenna Photo & Length (mm)

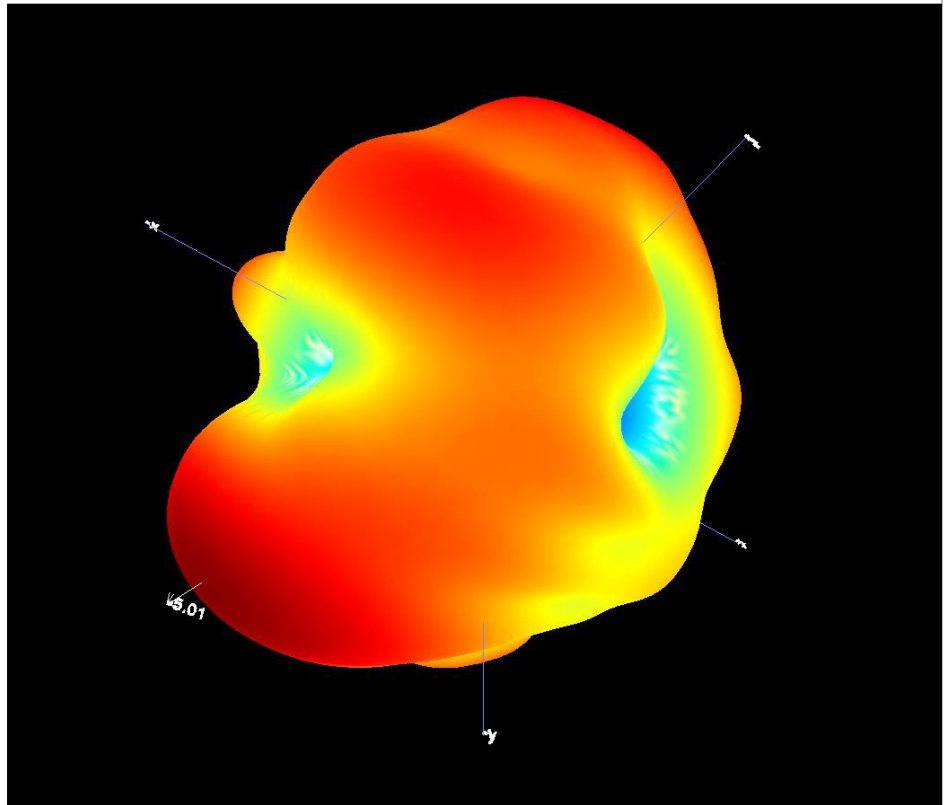


A.1 Gain and Efficiency

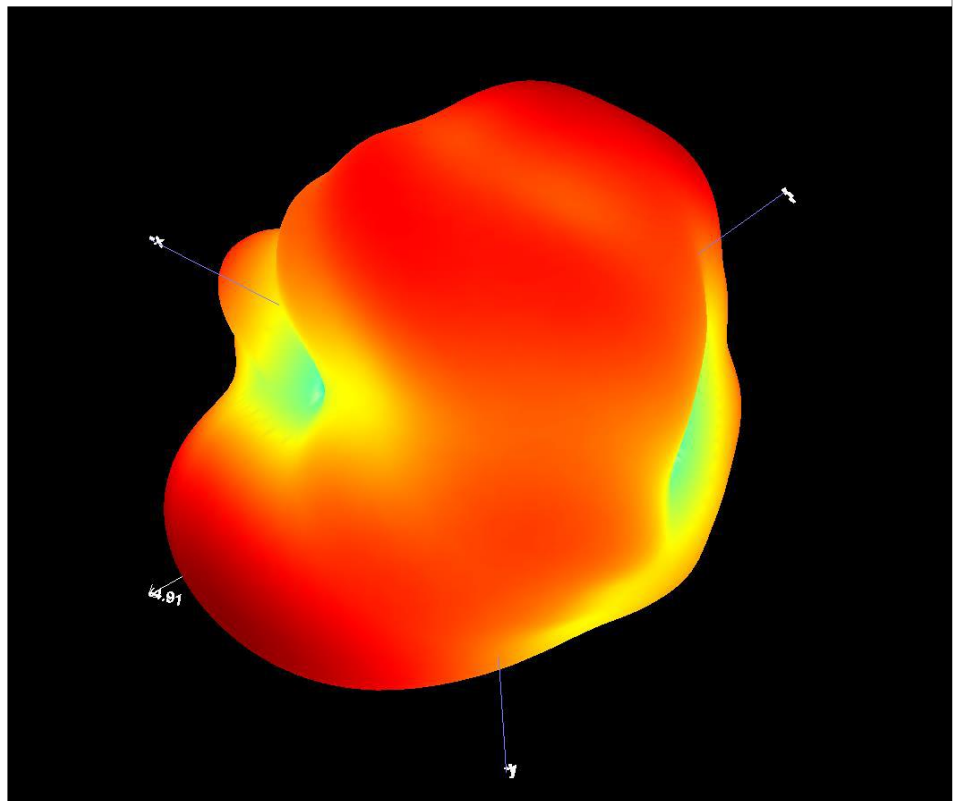
| Frequency | Gain (dBi) | Efficiency (%) |
|-----------|--------------|----------------|
| 2402MHz | -5.01 | 9 |
| 2404MHz | -5.01 | 9 |
| 2406MHz | -5.02 | 9 |
| 2408MHz | -5.02 | 9 |
| 2410MHz | -5.04 | 9 |
| 2412MHz | -5.07 | 9 |
| 2414MHz | -5.11 | 9 |
| 2416MHz | -5.25 | 9 |
| 2418MHz | -5.26 | 9 |
| 2420MHz | -5.30 | 9 |
| 2422MHz | -5.25 | 9 |
| 2424MHz | -5.18 | 10 |
| 2426MHz | -5.22 | 10 |
| 2428MHz | -5.17 | 10 |
| 2430MHz | -5.11 | 10 |
| 2432MHz | -5.05 | 10 |
| 2434MHz | -5.01 | 10 |
| 2436MHz | -4.97 | 10 |
| 2438MHz | -4.94 | 10 |
| 2440MHz | -4.91 | 10 |
| 2442MHz | -4.92 | 10 |
| 2444MHz | -4.96 | 10 |
| 2446MHz | -5.18 | 10 |
| 2448MHz | -5.23 | 10 |
| 2450MHz | -5.27 | 10 |
| 2452MHz | -5.33 | 9 |
| 2454MHz | -5.39 | 9 |
| 2456MHz | -5.34 | 9 |
| 2458MHz | -5.36 | 9 |
| 2460MHz | -5.42 | 9 |
| 2462MHz | -5.47 | 9 |
| 2464MHz | -5.49 | 9 |
| 2466MHz | -5.32 | 9 |
| 2468MHz | -5.32 | 9 |
| 2470MHz | -5.32 | 9 |
| 2472MHz | -5.32 | 9 |
| 2474MHz | -5.30 | 9 |
| 2476MHz | -5.42 | 9 |
| 2478MHz | -5.46 | 9 |
| 2480MHz | -5.53 | 9 |

A.2 3D Pattern

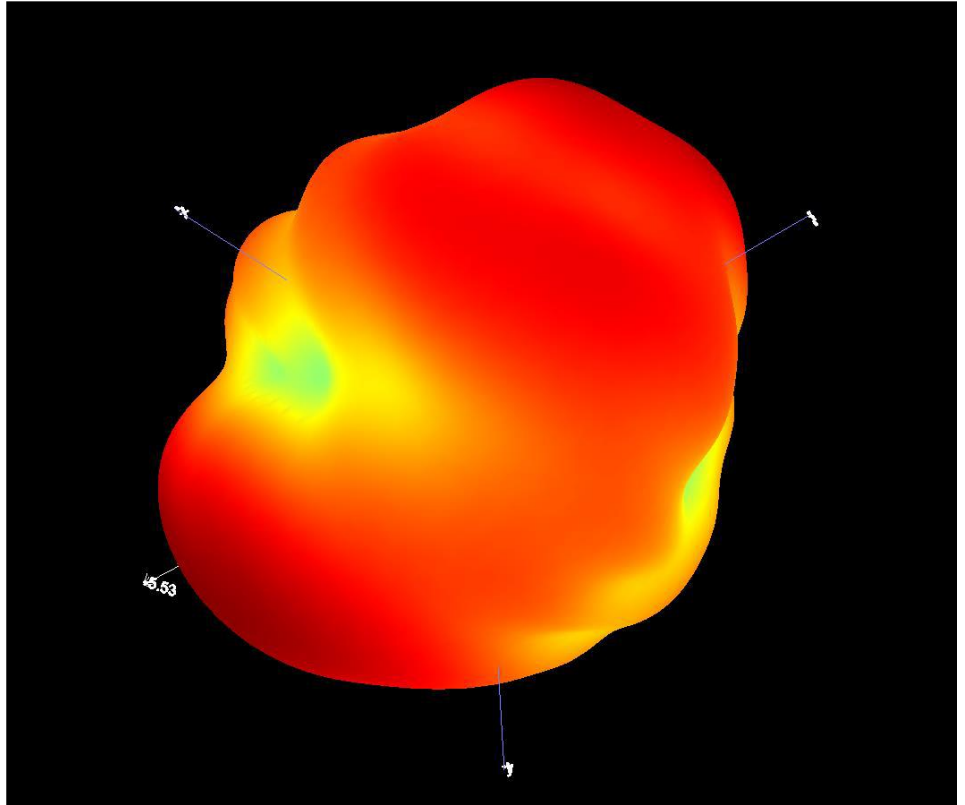
B1.1 3D Pattern for 2402MHz



B1.2 3D Pattern for 2440MHz



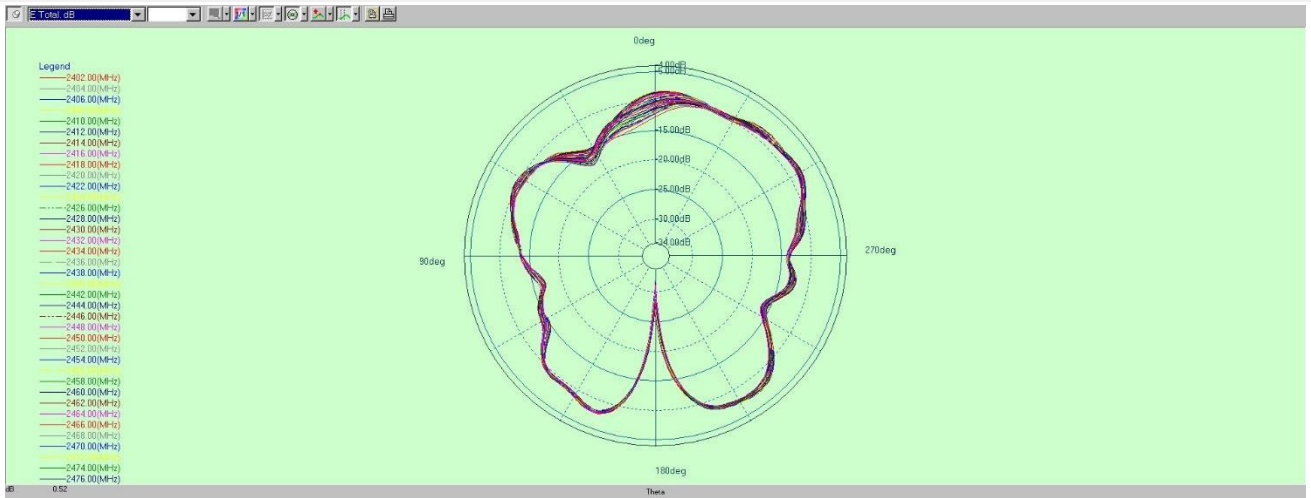
B1.3 3D Pattern for 2480MHz



A.3 1D Radiation Pattern

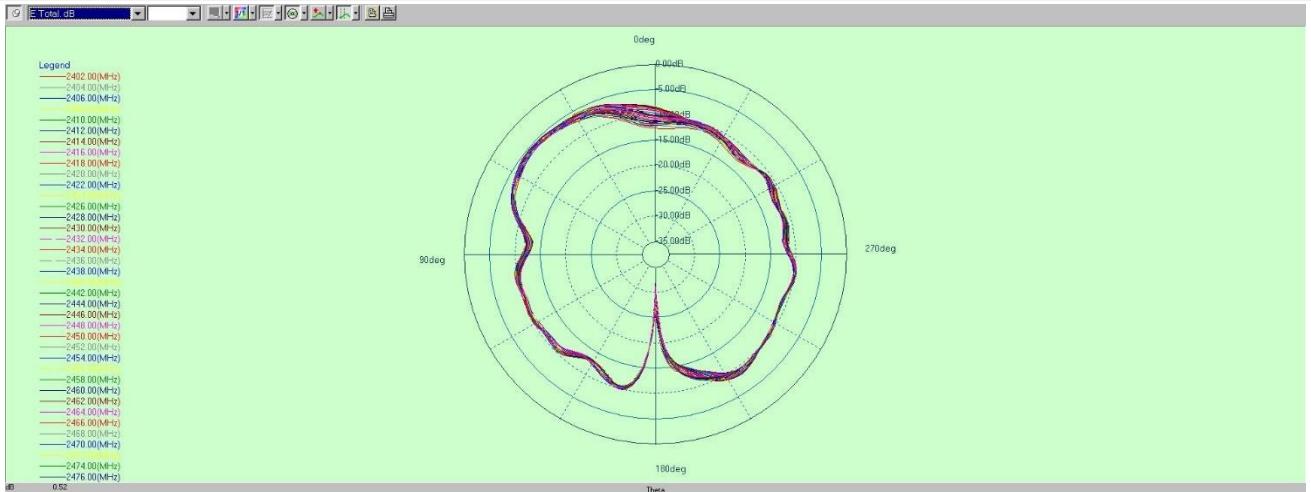
B2.1

PHI=0



B2.2

PHI=90



B2.3

THETA=90

