深圳市英佳创电子科技有限公司
Shenzhen Yingjiachuang Electronic Technology Co.,Ltd
http://www.szsyjc.com

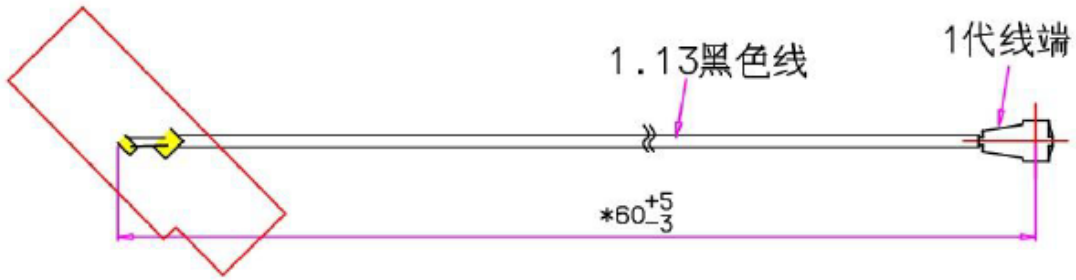
# ANT specification

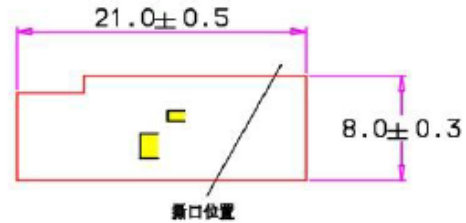
# For 2.4G/5.8G Black FPC built-in ANT  L=60mm (NT10)

Company address：
Building C, Hongyu Guangming valley， No.11 Youmagang Road, Matian street, Guangming district Area, Shenzhen, China

RoHS

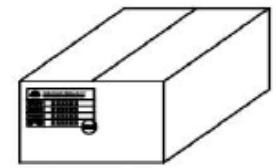
| REV | DATE | DESCRIPTION | NAME |
|---|---|---|---|
| A0 | 2024-01-09 | 新版发行 | 殷飞杰 |
| A1 | | | |




| | |
|---|---|
| 频率范围(Frequency Range) | 2400-2500/5150-5850MHz |
| 增益 (Gain) | 3.4dBi |
| 电压驻波比(VSWR) | <1.92 |
| 极化 ( Polarization) | Linear.Vertical |
| 最大功率(Max power rating) | 50W |
| 特性阻抗 (Impedance) | 50Ω |

要求: 1. 成品须100%测试导通OK
2. 成品须100%全检OK.
3. 采用环保制程.成品
4. 符合ROHS要求.
5. 未注公差请以一般公差为准.


外箱膜贴物料标示卡
与ROHS标签各1PCS

| | | | | | |
|---|---|---|---|---|---|
| 零件名称 (PART NAME) 组立图 | | 单位 (UNIT) mm | 比例 (SCALE) | 版本 (REV) A0 | 幅面 (SIZE) A4 |
| 产品名称 2.4G/5.8G 黑色FPC内置天线 | | 产品规格 XD 1.13黑色线(总长) L=60MM | | 产品料号 (PRODUCT NO.) YJC-6N060-B132 | |
| 设计 DS. | 殷飞杰 | 第1页,共1页 | | 第1版日期 (ORIGINAL DATE) 2024-01-09 | |
| 审核 CHK. | | 深圳市英佳创电子科技有限公司 SHENZHEN YINGJIACHUANG TECHNOLOGY ELECTRONIC CO.,LTD | | | |
| 核准 APPD. | | | | | |

一般公差 (GENERAL TOLERANCE)
线性尺寸 (DIMENSION) 角度 (ANGLES)

# ANT SPEC and testing data

| 电 性 能 指 标 | | Electrical Specifications | |
|---|---|---|---|
| 频率范围 | 2400-2500/5150-5850MHz | Frequency Range | 2400-2500/5150-5850MHz |
| 电压驻波比 | ＜1.92 | VSWR | ＜1.92 |
| 输入阻抗 | 50 Ω | Input Impedance | 50 Ω |
| 方向 | 全向 | Direction | All |
| 增益(WIFI2) | 3.4dBi | Gain(WIFI2) | 3.4dBi |
| 机 械 指 标 | | Mechanical Specifications | |
| 线材颜色 | 黑色 | Wire Color | Black |
| 接口形式 | XD | Input connector | XD |
| 线材长度 | 60MM | Wire Length | 60MM |
| 工作温度 | -20℃~+70℃ | Working Temperature | -20℃~+70℃ |
| 工作湿度 | 20%~80% | Working Humidity | 20%~80% |

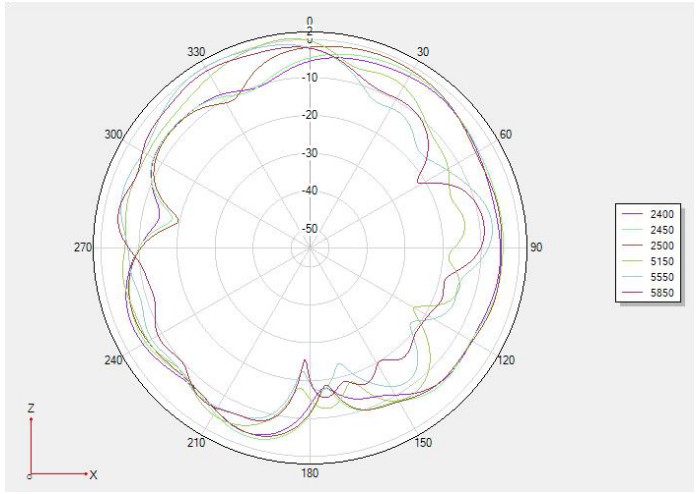
# ANT Performance test chart

# 2D、3D(2.4G/5.8G) Testing Data

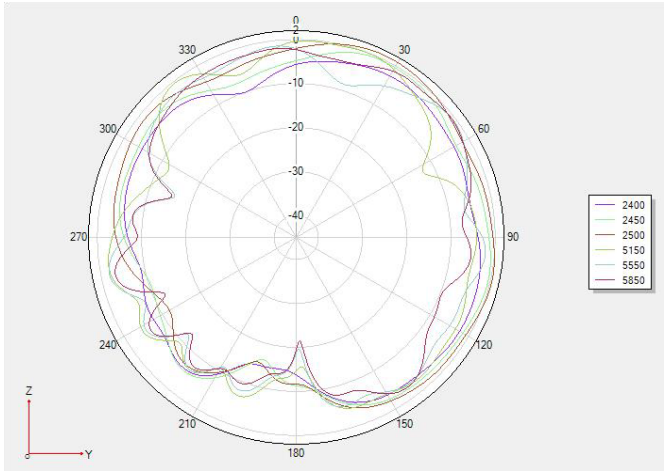
| Frequency(MHz) | Efficiency(%) | Gain.(dBi) |
|---|---|---|
| 2400MHz | 59.01 | 1.65 |
| 2410MHz | 57.02 | 1.51 |
| 2420MHz | 61.68 | 1.52 |
| 2430MHz | 57.46 | 1.34 |
| 2440MHz | 60.99 | 1.63 |
| 2450MHz | 58.79 | 1.71 |
| 2460MHz | 60.65 | 1.49 |
| 2470MHz | 57.86 | 1.82 |
| 2480MHz | 61.33 | 1.46 |
| 2490MHz | 59.19 | 1.68 |
| 2500MHz | 59.82 | 1.48 |
| 5150MHz | 46.49 | 2.81 |
| 5250MHz | 52.85 | 3.21 |
| 5350MHz | 44.74 | 2.94 |
| 5450MHz | 49.51 | 3.31 |
| 5550MHz | 51.48 | 3.02 |
| 5650MHz | 54.77 | **3.39** |
| 5750MHz | 46.42 | 2.7 |
| 5850MHz | 54.89 | 3.24 |

# 2D、3D(2.4G/5.8G) Testing Data

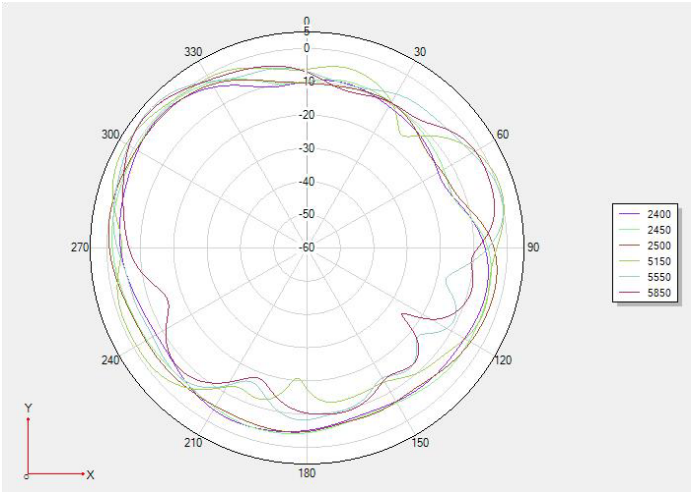
- Phi 0 2D 图:




Phi 90 2D 图

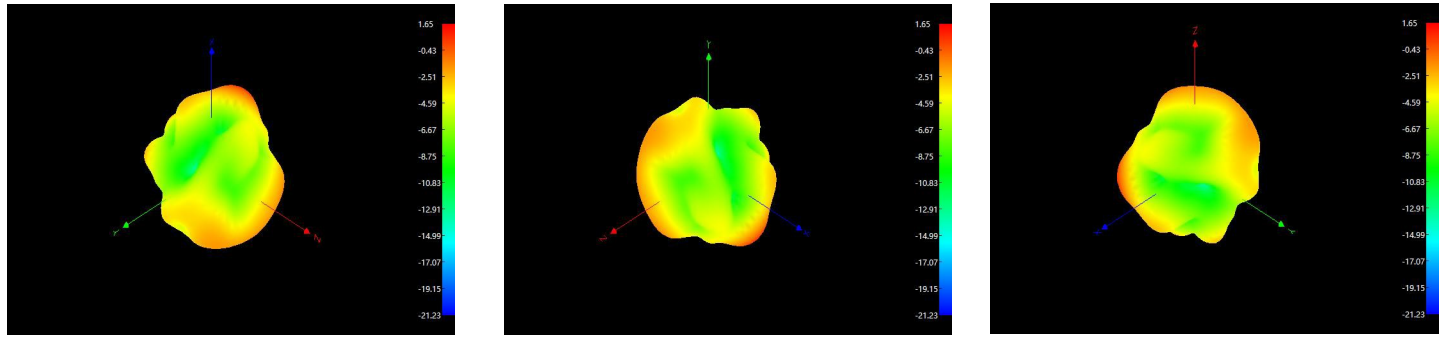



Theta 90 2D 图

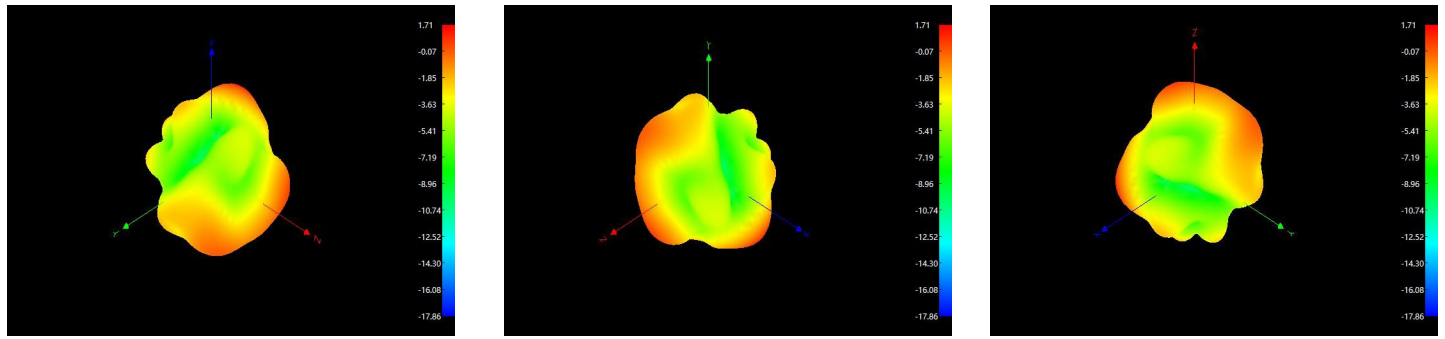


# 3D(2.4G) Testing Data

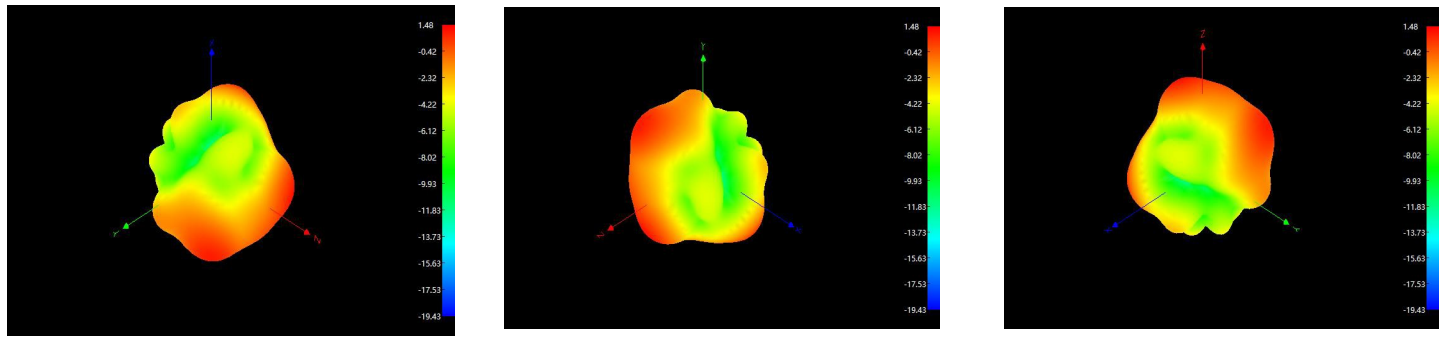
- 3D 2400：




- 3D 2450：

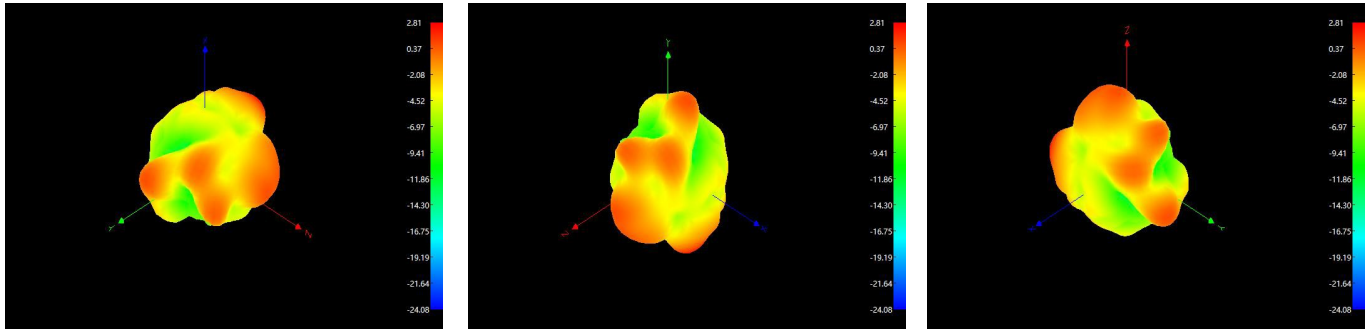



- 3D 2500：

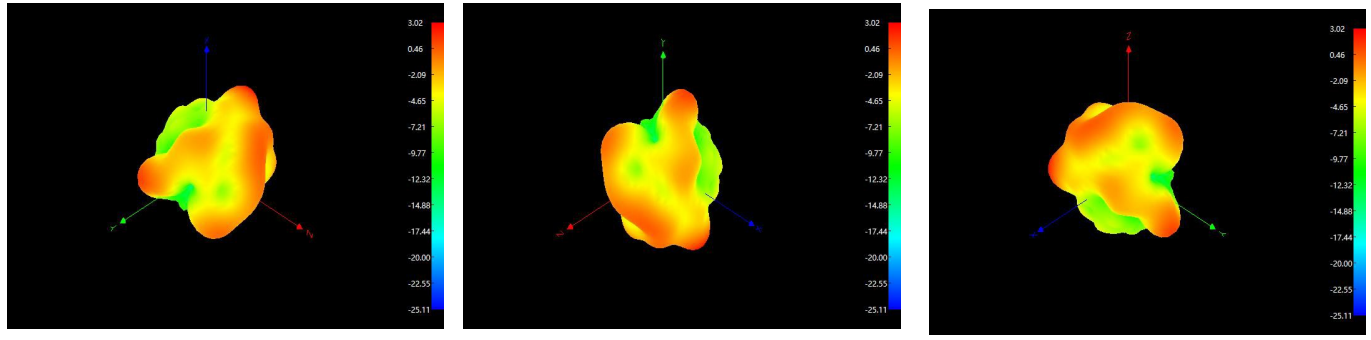


# 3D(2.4G/5.8G) Testing Data

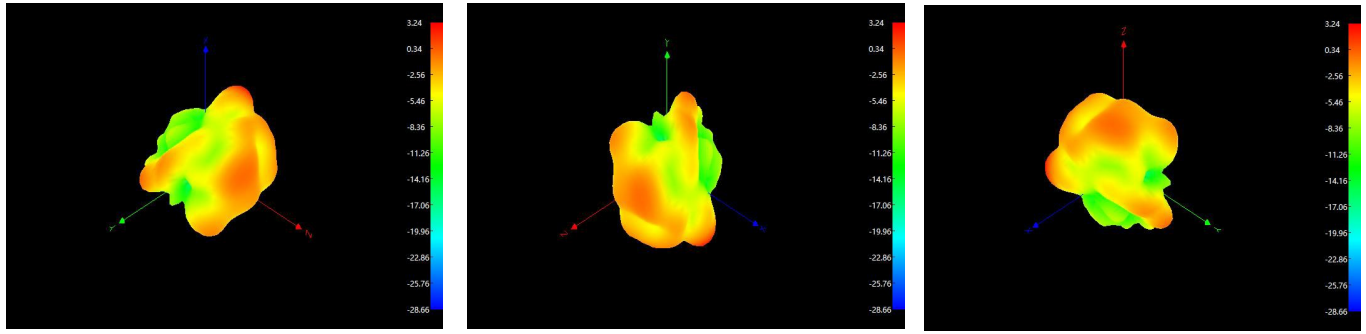
- 3D 5150:




- 3D 5550:




- 3D5850:



# OTA Active test data statistics

| Item | Measurement | Band | Channel | Frequency | Total |
|---|---|---|---|---|---|
| 1 | TRP | WIFI_B (11M) | 1 | 2412 | 10.59 |
| 2 | TRP | WIFI_B (11M) | 6 | 2437 | 9.84 |
| 3 | TRP | WIFI_B (11M) | 11 | 2462 | 8.5 |
| 4 | TIS(EIRP) | WIFI_B (11M) | 1 | 2412 | -80.45 |
| 5 | TIS(EIRP) | WIFI_B (11M) | 6 | 2437 | -80.37 |
| 6 | TIS(EIRP) | WIFI_B (11M) | 11 | 2462 | -78.29 |
| 7 | TRP | WIFI_G (54M) | 1 | 2412 | 8.06 |
| 8 | TRP | WIFI_G (54M) | 6 | 2437 | 6.62 |
| 9 | TRP | WIFI_G (54M) | 11 | 2462 | 5.83 |
| 10 | TIS(EIRP) | WIFI_G (54M) | 1 | 2412 | -65.24 |
| 11 | TIS(EIRP) | WIFI_G (54M) | 6 | 2437 | -63.82 |
| 12 | TIS(EIRP) | WIFI_G (54M) | 11 | 2462 | -64.41 |
| 13 | TRP | WIFI_A (54M) | 36 | 5180 | 13.28 |
| 14 | TRP | WIFI_A (54M) | 149 | 5745 | 9.69 |
| 15 | TRP | WIFI_A (54M) | 165 | 5825 | 14.3 |
| 16 | TIS(EIRP) | WIFI_A (54M) | 36 | 5180 | -70.06 |
| 17 | TIS(EIRP) | WIFI_A (54M) | 149 | 5745 | -69.71 |
| 18 | TIS(EIRP) | WIFI_A (54M) | 165 | 5825 | -69.23 |