



## Approval Sheet

### B881 Antenna

| Customer function: | Name: | Sign: | Date |
|--------------------|-------|-------|------|
|                    |       |       |      |
|                    |       |       |      |
|                    |       |       |      |
|                    |       |       |      |

| SAA function: | Name:        | Sign: | Date       |
|---------------|--------------|-------|------------|
| PM            | Minghui.song |       | 2024-01-11 |
| RF            | Zhenyi.Li    |       | 2024-01-11 |

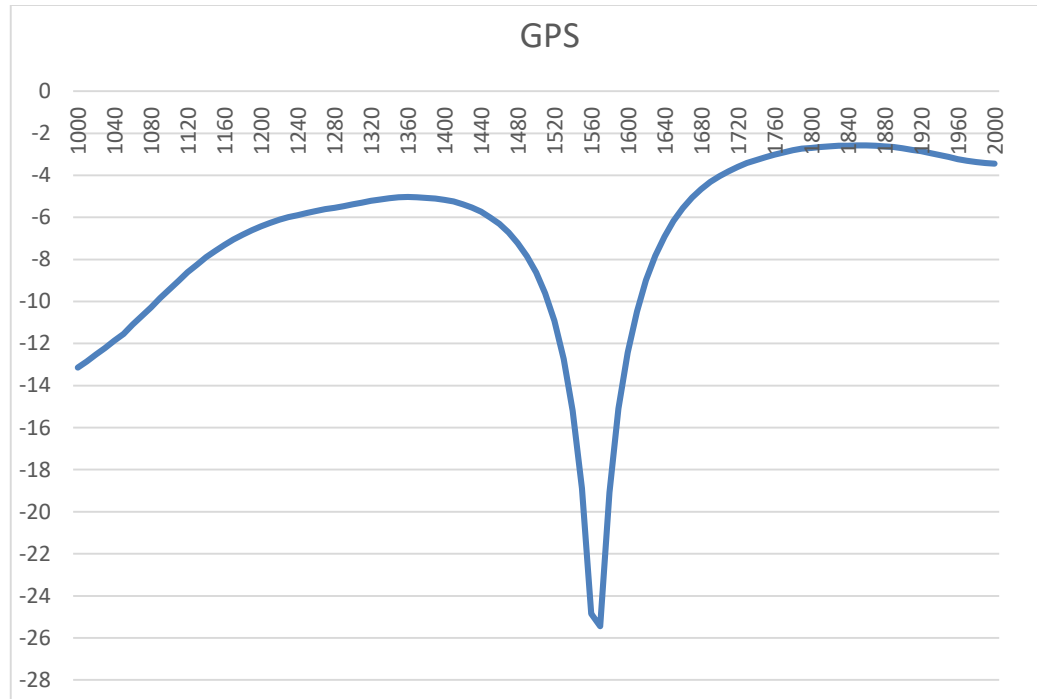
|                                                                           |   |                      |            |
|---------------------------------------------------------------------------|---|----------------------|------------|
| Project:B881 antenna                                                      |   | Author:<br>Zhenyi.li | File Name: |
| Date: 2024-01-11                                                          |   |                      |            |
| Revision:                                                                 | A |                      |            |
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## 2. Electrical Performance

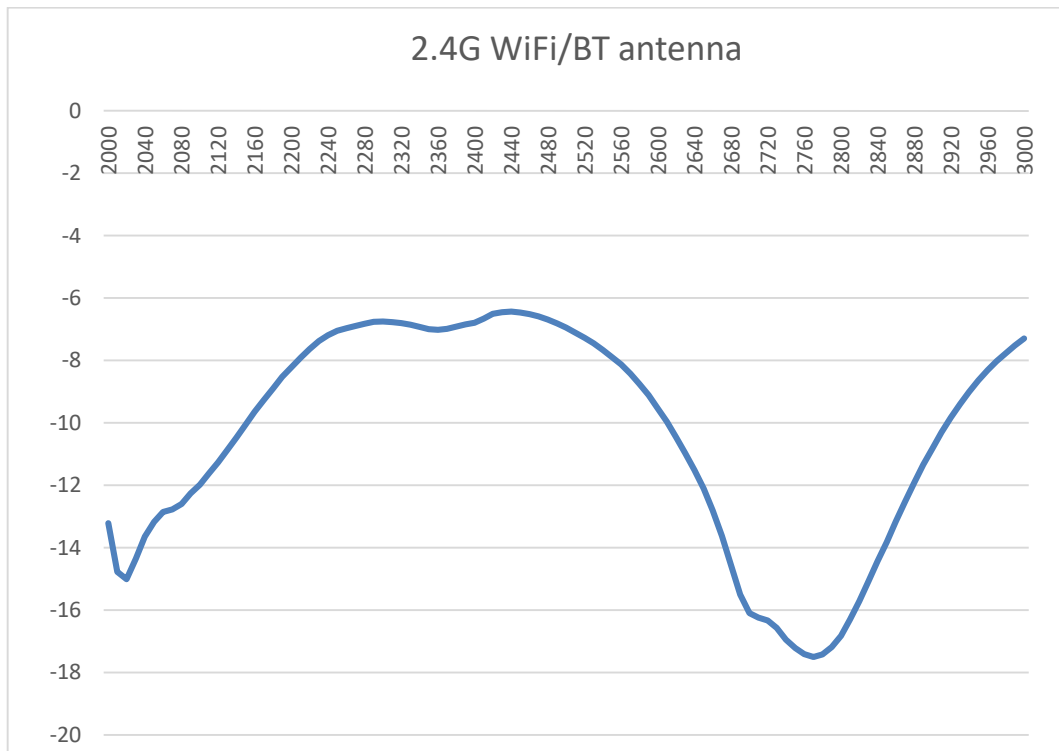
### 2.1. Measurement Set-up

Return Loss measurements ( $S_{11}$ ) were performed using an Agilent ENA series Network Analyzer and the previously described test fixture. Coaxial chokes were used to mitigate surface currents on the outside of the cabling. The testing was performed in free space.

#### 2.1.1. Return Loss



GPS antenna S11



2.4G WiFi/BT antenna S11

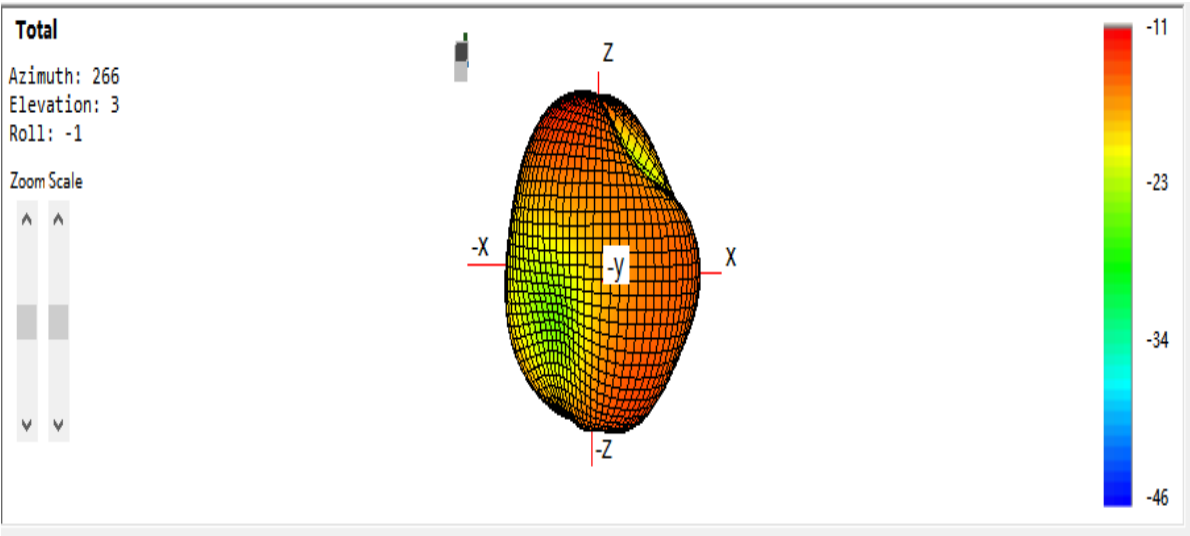
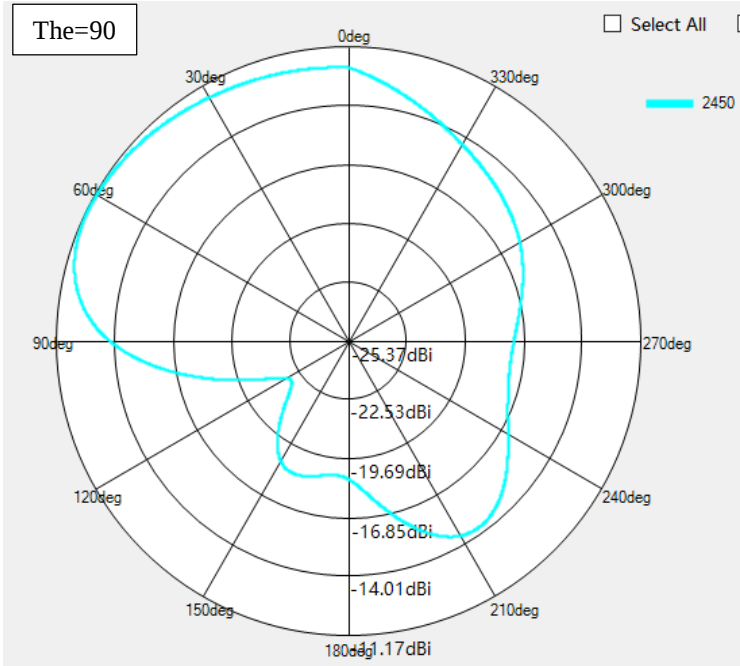
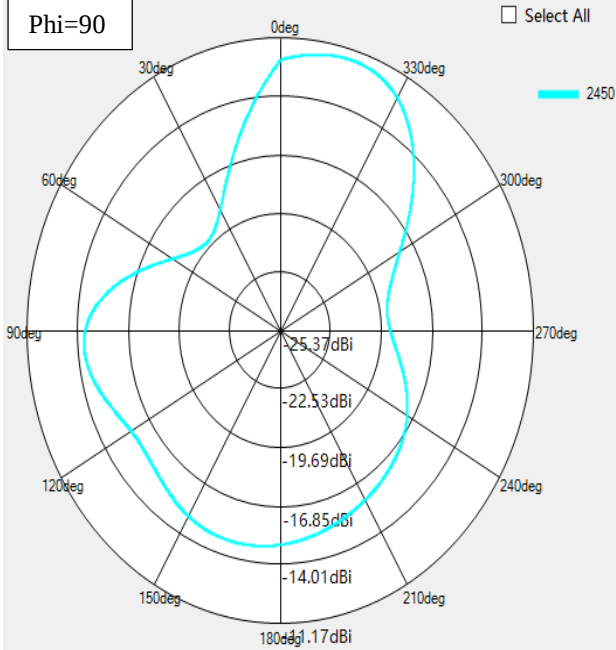
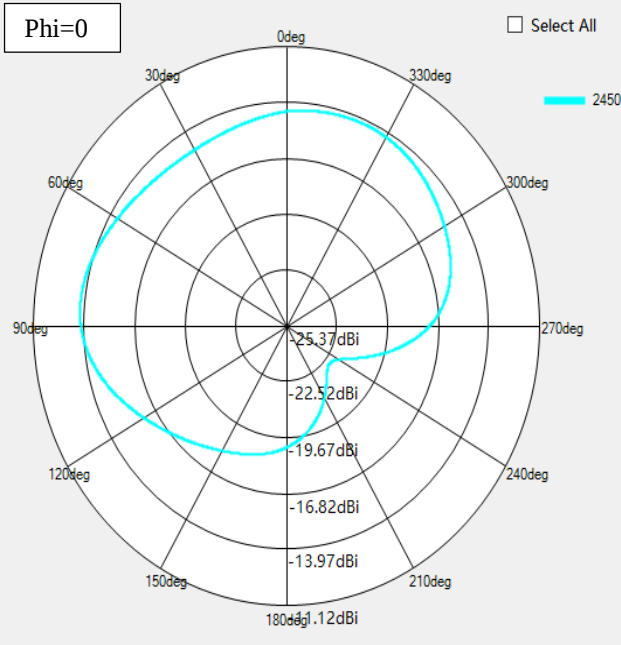
|                                                                           |   |                      |            |
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## 2.4G WIFI/BT Total Efficiency

| 2. 4G WiFi/BT Antenna |          |            |         |
|-----------------------|----------|------------|---------|
| Fre (Mhz)             | Eff (db) | Gain (dbi) | Eff (%) |
| 2300                  | -16.2    | -10.2      | 2.4     |
| 2310                  | -16.2    | -10.1      | 2.4     |
| 2320                  | -16.3    | -10.4      | 2.3     |
| 2330                  | -16.3    | -10.5      | 2.3     |
| 2340                  | -16.3    | -10.6      | 2.3     |
| 2350                  | -16.3    | -10.8      | 2.3     |
| 2360                  | -16.2    | -10.9      | 2.4     |
| 2370                  | -16.1    | -11.0      | 2.5     |
| 2380                  | -16.0    | -11.0      | 2.5     |
| 2390                  | -16.1    | -11.1      | 2.5     |
| 2400                  | -16.2    | -11.1      | 2.4     |
| 2410                  | -16.1    | -11.2      | 2.4     |
| 2420                  | -16.1    | -11.2      | 2.5     |
| 2430                  | -16.0    | -11.2      | 2.5     |
| 2440                  | -15.8    | -11.1      | 2.7     |
| 2450                  | -15.7    | -11.0      | 2.7     |
| 2460                  | -15.7    | -11.0      | 2.7     |
| 2470                  | -15.7    | -11.1      | 2.7     |
| 2480                  | -15.6    | -11.1      | 2.8     |
| 2490                  | -15.6    | -11.1      | 2.8     |
| 2500                  | -15.6    | -11.2      | 2.8     |
| 2510                  | -15.5    | -11.0      | 2.8     |
| 2520                  | -15.4    | -10.8      | 2.9     |
| 2530                  | -15.4    | -10.8      | 2.9     |
| 2540                  | -15.3    | -10.4      | 3.0     |
| 2550                  | -15.2    | -10.2      | 3.0     |
| 2560                  | -15.3    | -10.1      | 3.0     |
| 2570                  | -15.2    | -10.1      | 3.0     |
| 2580                  | -15.2    | -9.9       | 3.0     |
| 2590                  | -15.2    | -9.9       | 3.0     |
| 2600                  | -15.2    | -9.9       | 3.0     |

|                                                                           |   |                      |            |
|---------------------------------------------------------------------------|---|----------------------|------------|
| Project:B881 antenna                                                      |   | Author:<br>Zhenyi.li | File Name: |
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| Revision:                                                                 | A |                      |            |
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2.4G WIFI/BT



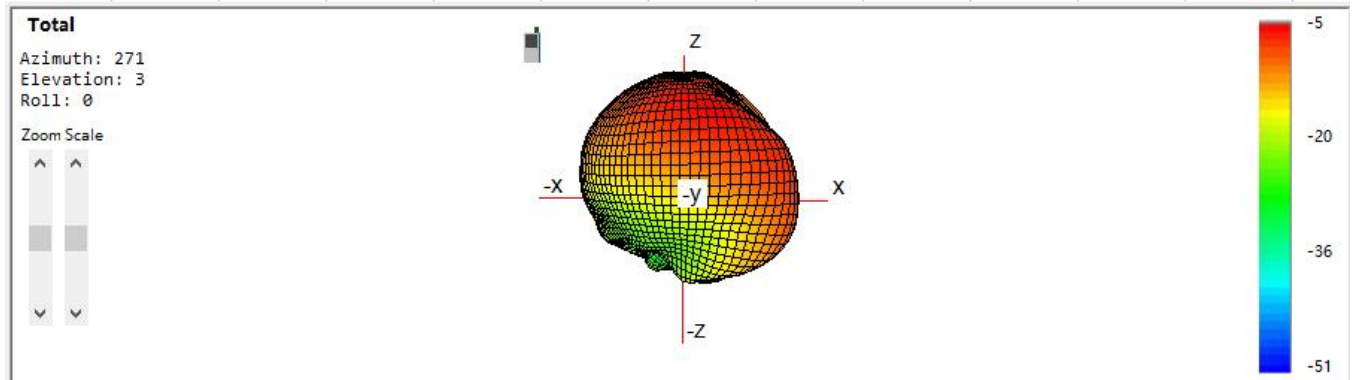
|                                                                           |   |                      |            |
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# Approval sheet of

## B881-5G- antenna

|                  |    |                                                                                                                   |                |    |                |
|------------------|----|-------------------------------------------------------------------------------------------------------------------|----------------|----|----------------|
| Customer/Project |    | B881-5G                                                                                                           | Frequency Band |    |                |
| Model antenna    |    | B881-5G                                                                                                           |                |    |                |
| SCT P/N          |    |                                                                                                                   | Version        |    | A              |
| Date             |    | 2024-1-8                                                                                                          |                |    |                |
| supplier         |    | Huizhou speed wireless technology co.,ltd                                                                         |                |    |                |
| Supplier Address |    | SX-01-02, Shangxia District, Shuikou Dongjiang Science and Technology Park, Zhongkai High tech Zone, Huizhou City |                |    |                |
| Checked by       | RF |                                                                                                                   | Designed by    | RF | Nina           |
|                  | ME |                                                                                                                   |                | ME | Yongbing. xiao |
|                  | QC |                                                                                                                   | Remark         |    |                |
| Customer         |    |                                                                                                                   |                |    |                |
| Date             |    |                                                                                                                   |                |    |                |
| Confirmed by     | RF |                                                                                                                   |                |    |                |
|                  | ME |                                                                                                                   |                |    |                |
| Remark           |    |                                                                                                                   |                |    |                |

## 1. Measurement Data



| frequency | efficie<br>ncy/db | gain  | efficie<br>ncy/% |
|-----------|-------------------|-------|------------------|
| 5000      | -14.09            | -5.98 | 3.9              |
| 5050      | -13.82            | -6.28 | 4.15             |
| 5100      | -13.48            | -6.12 | 4.48             |
| 5150      | -13.53            | -6.26 | 4.44             |
| 5200      | -13.34            | -6.19 | 4.64             |
| 5250      | -13.1             | -5.87 | 4.9              |
| 5300      | -12.69            | -5.47 | 5.38             |
| 5350      | -12.26            | -5.06 | 5.95             |
| 5400      | -12.08            | -4.71 | 6.2              |
| 5450      | -11.88            | -4.53 | 6.48             |
| 5500      | -12.05            | -4.67 | 6.23             |
| 5550      | -12.4             | -5.2  | 5.75             |
| 5600      | -12.62            | -5.36 | 5.47             |
| 5650      | -12.92            | -5.65 | 5.1              |
| 5700      | -13.16            | -5.83 | 4.83             |
| 5750      | -13.43            | -5.93 | 4.54             |
| 5800      | -13.56            | -6.17 | 4.41             |
| 5850      | -13.49            | -5.77 | 4.47             |
| 5900      | -13.81            | -5.99 | 4.16             |
| 5950      | -13.99            | -6.04 | 3.99             |
| 6000      | -14.21            | -6.37 | 3.8              |

