

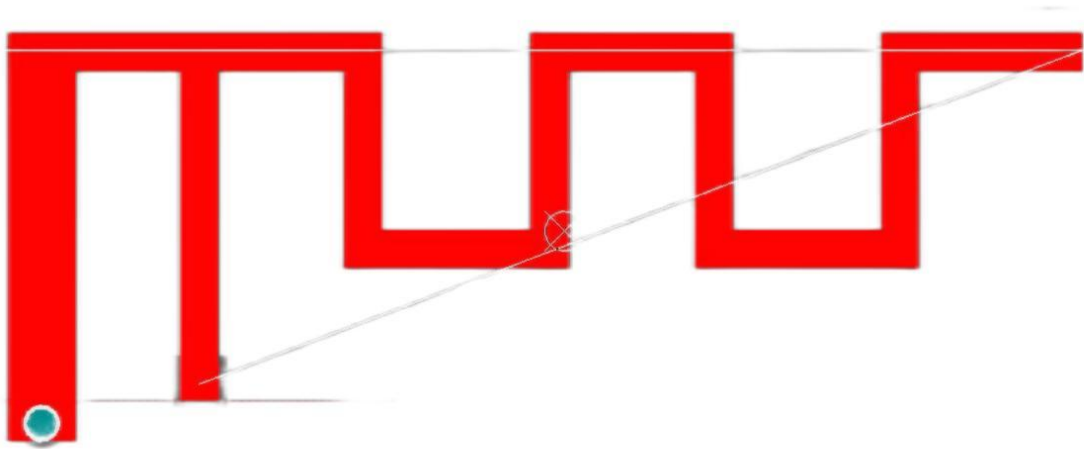
Product specification

Quick Reference Date

|                            |                                  |  |
|----------------------------|----------------------------------|--|
| Model                      | BLBSA                            |  |
| Antenna type               | PCB                              |  |
| Frequency                  | 2.44GHz*1                        |  |
| Ant. Port Input Pwr. (dBm) | 0 (Typ. BT class 2 output power) |  |
| Tot. Rad. Pwr. (dBm)       | -2.3 (Input pwr – loss pwr)      |  |
| Peak EIRP(dBm)             | 1.3                              |  |
| Directivity (dBi)          | 1 (all direction antenna)        |  |
| Efficiency (dB)            | -2.3 (58.5%)                     |  |
| Gain (dBi)                 | 1.7(Peak Gain XY-plane)          |  |
| Maximum Power (dBm)        | 1.3 (XY-plane)                   |  |
| Minimum Power (dBm)        | -4.5(XY-plane)                   |  |
| Avg. Power (dBm)           | -0.5(XY-plane)                   |  |
| Max/Min Ratio (dB)         | 5.3(XY-plane)                    |  |
| Max/Avg Ratio (dB)         | 1.8(XY-plane)                    |  |
| Min/Avg Ratio (dB)         | -3.5(XY-plane)                   |  |
| Average Gain (dB)          | -0.5 (Avg Gain XY-plane)         |  |

All the technical data and information contained herein are subject to change without prior notice

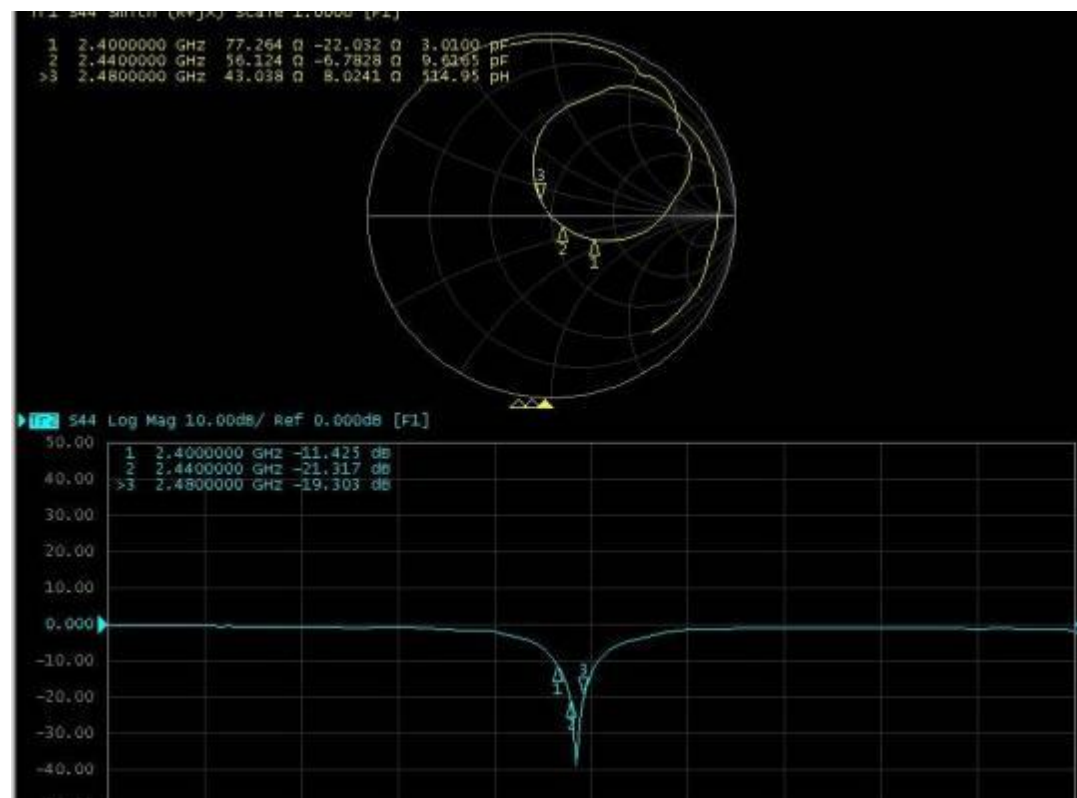
Antenna Layout & module on the system board



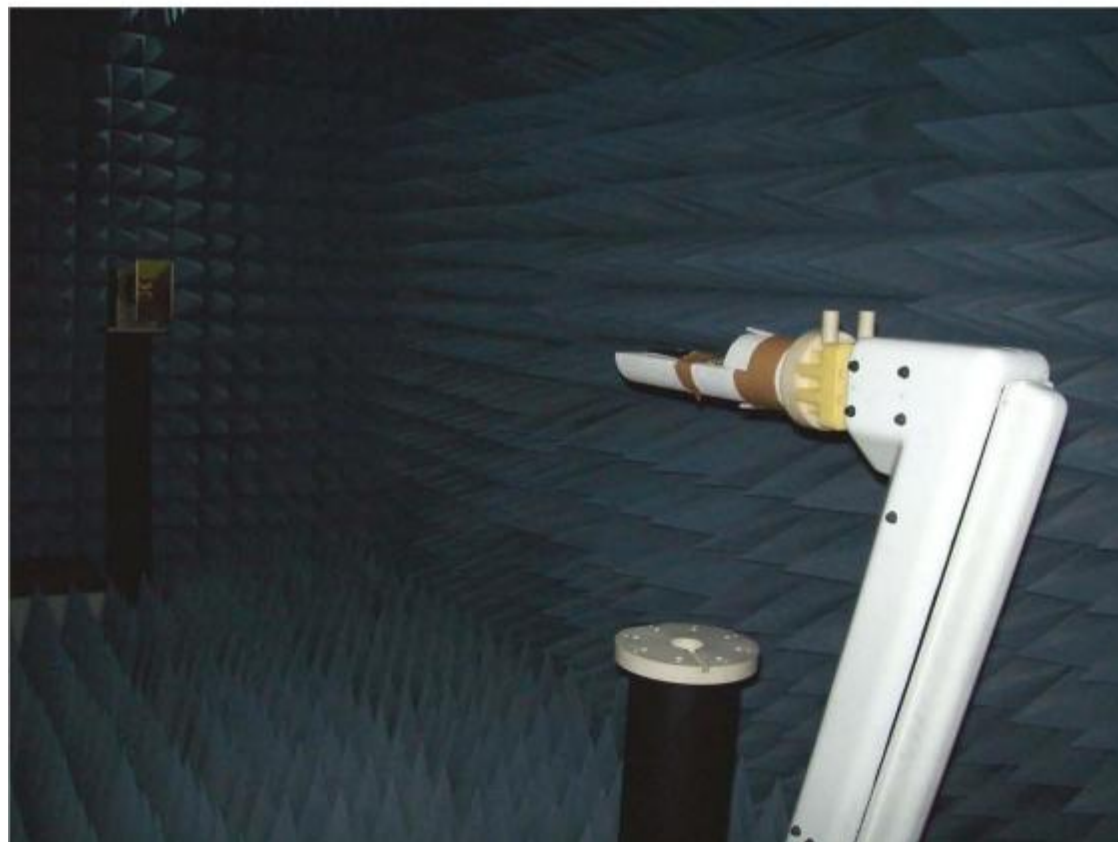
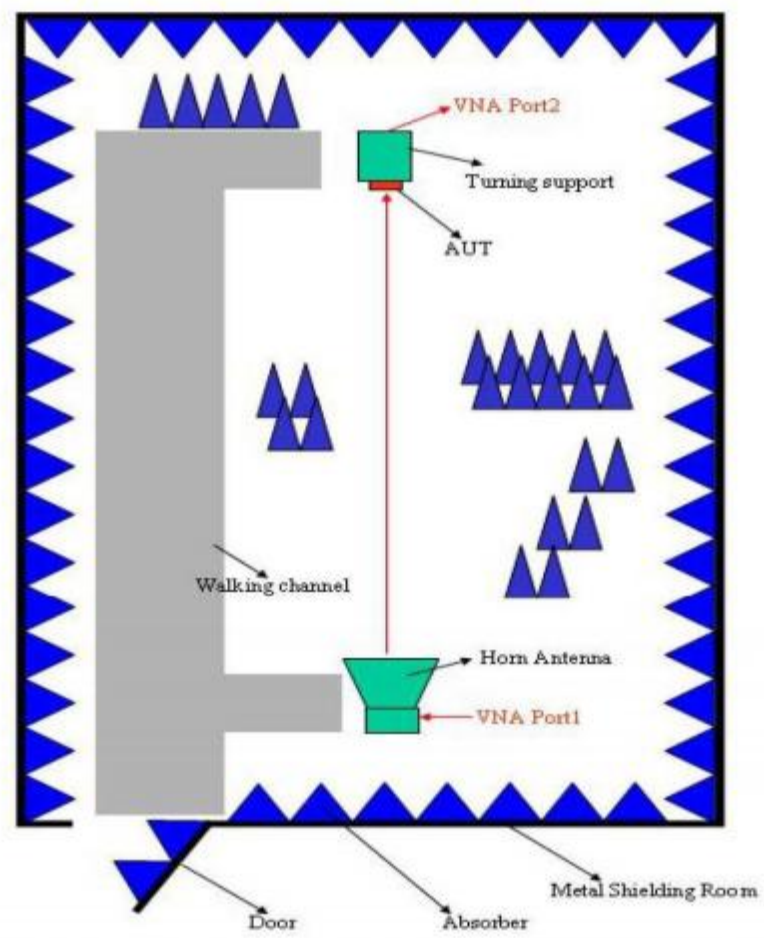
Antenna Gain

| Unit in dBi<br>@2.44GHz | XY-plane |      | XZ-plane |      | YZ-plane |      | Efficiency |
|-------------------------|----------|------|----------|------|----------|------|------------|
|                         | Peak     | Avg. | Peak     | Avg. | Peak     | Avg. |            |
| Module Board            | 1.3      | -0.4 | 1.7      | -3.7 | 1.1      | -3.0 | 58.5%      |

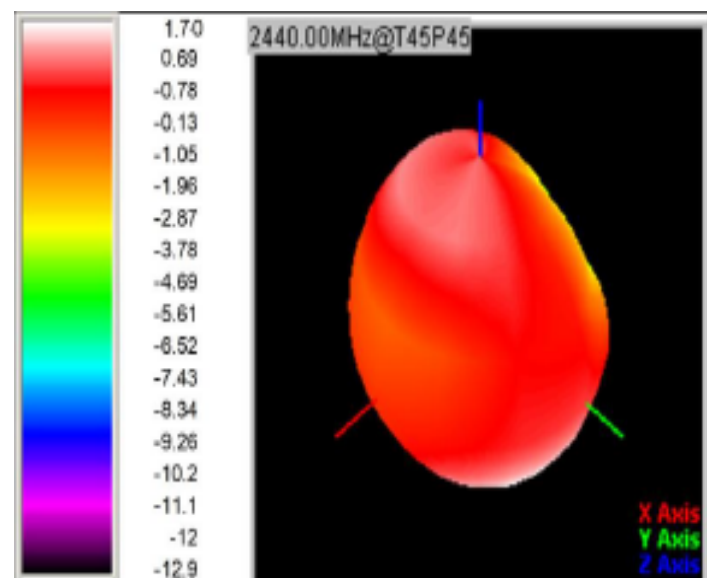
Manufacturer: Shenzhen Pinsheng Industrial Co., Ltd  
Address: 5 / F, Pengzhou Industrial Park Office Building, No. 158, Fuyuan Road, Tangwei Community, Fuhai Street, Baoan District, Shenzhen



Return Loss

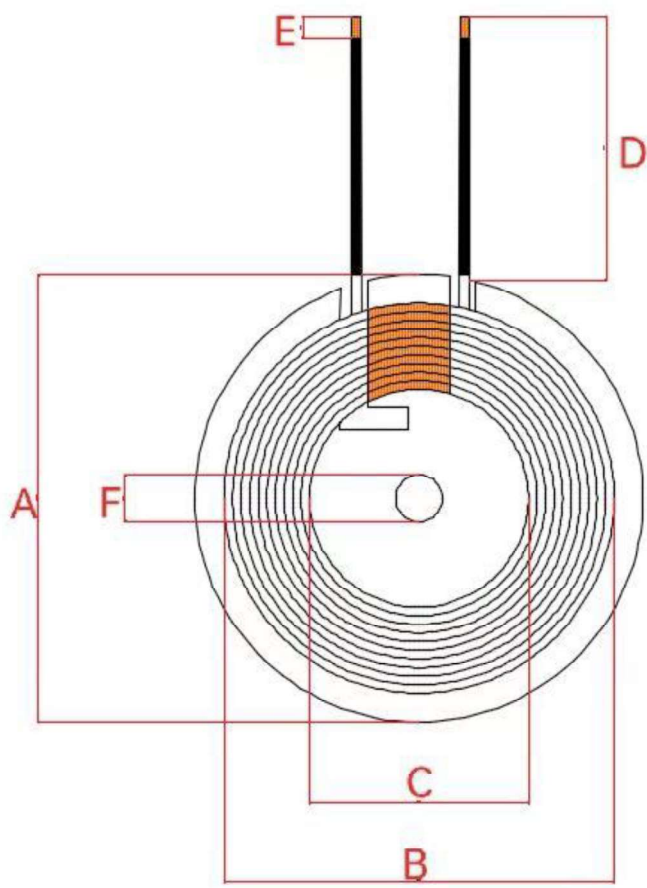


The Environment of Antenna Radiation Pattern



**3D radiation pattern diagram**

DIMENSION:(mm)  
Wireless Charging: A11



|   |          |
|---|----------|
| A | 49.5±0.5 |
| B | 42±0.5   |
| C | 20.5±0.5 |
| D | 30±2     |
| E | 3±2      |
| F | 5.3±0.2  |
| G |          |
| H |          |
| I |          |
| K |          |
|   |          |
|   |          |
|   |          |
|   |          |
|   |          |

三、绕线参数 Winding Specification:

| 序号<br>NO. | 端子<br>TERMINAL |   | 线径<br>WIRE    | 圈数<br>Turns | 绕线方向<br>Winding Direction |
|-----------|----------------|---|---------------|-------------|---------------------------|
| 1         | S              | F | 丝包线 0.08*105P | 10Ts        | CCW                       |

四、电气特性 ELECTRICAL CHARACTERISTICS:

温度 TEMPERATURE:25±10℃, 湿度 RELATIVE HUMIDITY:65±20%

| 序号<br>NO. | 项目<br>ITEM | 端子<br>TERMINAL | 标准<br>SPECIFICATION | 测试条件<br>TEST FREQUENCY | 测试仪器<br>TEST EQUIPMENTS |
|-----------|------------|----------------|---------------------|------------------------|-------------------------|
| 1         | IND.       | S-F            | 3.7uH ±10%单独线圈      | 100KHz/1.0V            | LCZ METER 1062B         |
| 2         | IND.       | S-F            | 6.4H ±10%加磁片        | 100KHz/1.0V            | LCZ METER 1062B         |
| 3         | DCR        | S-F            | ≤55m Ω              |                        | LCZ METER 502B          |

|                        |                       |
|------------------------|-----------------------|
| 拟制/日期 PREPARED BY/DATE | 审核/日期 CHECKED BY/DATE |
| 何立成 2023.09.26         |                       |