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## 产品规格书

### PRODUCT SPECIFICATION

Customer:

Customer's part number:

Product description: Internal 2.4G wifi Antenna

Uni Link's part number: MS-2400-001

Issue Date: 2022-11-18

Note: 2400-2500 MHz

### **Application and Features**

#### Applications :

- 1: 2.4G , WIFI
- 2: Public wireless hot spot
- 3: Wireless wifi system

#### Features :

- 1: Weight is light
- 2: Installed for vertical or horizontal polarization
- 3: RoHS compliant

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## II、概述 (OVERVIEW)

This internal 2.4GHz Antenna works on WiFi, ZigBee, Bluetooth and ISM band. This antenna has been designed with a specific characteristic of having a ground coupling effect in between the antenna and the device's board, suitable for those devices where there is no clearance in between the enclosure and the board, keeping the antenna performance. The Antenna can be placed above or below of the device's board, but leaving the radiated elements of the antenna free of metal. This design can work on different thickness and plastic materials. We have selected a piece of ABS plastic with 1.5 mm of thickness for testing.

## II、天线特性 (ANTENNA CHARACTERISTICS)

电性能指标 Electrical Specifications	
频率范围 Frequency Range (MHz)	<b>Bluetooth :2401-2480</b> <b>WIFI : 2412-2462</b> <b>Zigbee: 2410-2480</b> <b>2.4Ghz ISM :2400-2483.5</b>
频带宽度 Bandwidth (MHz)	83
输入阻抗 Input Impedence ( $\Omega$ )	50
电压驻波比 V.S.W.R	$\leq 1.5$
增益 Gain (dBi)	2.3
最大输入功率 Max Input Power (W)	3
机械指标 Mechanical Specifications	
天线长度 Antenna Length (mm)	24*8
电缆长度 Cable (mm)	60
连接器型号 Connect Type	
固定方式 Mounting	<b>3M STICKER</b>
外壳颜色 Radome Color	Red
重量 Weight (g)	2

### III、测试 (TEST)

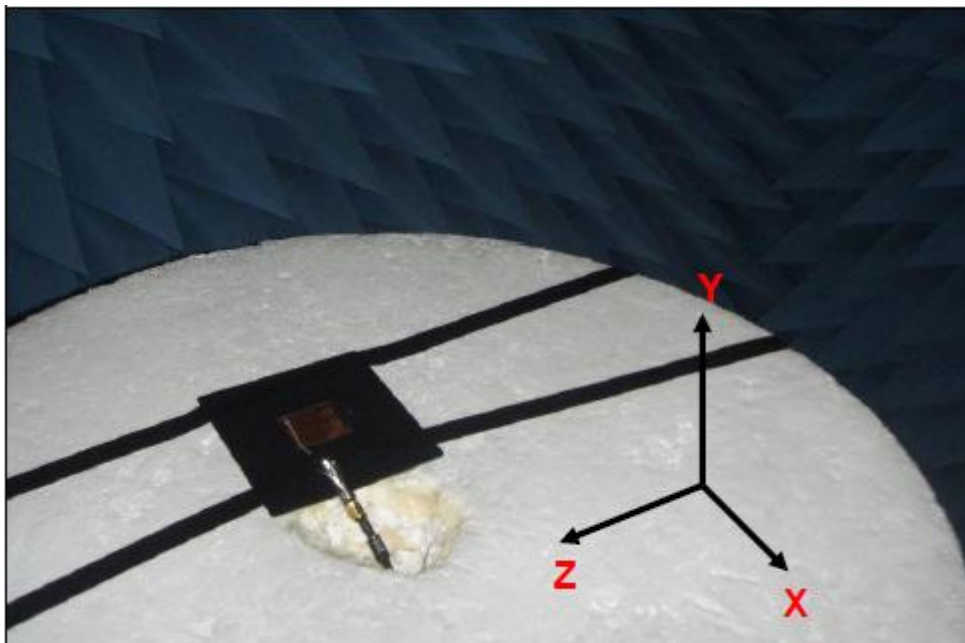


Figure 1 : TEST SYSTEM



### E. 效率数据 (EFFICIENCY DATA)

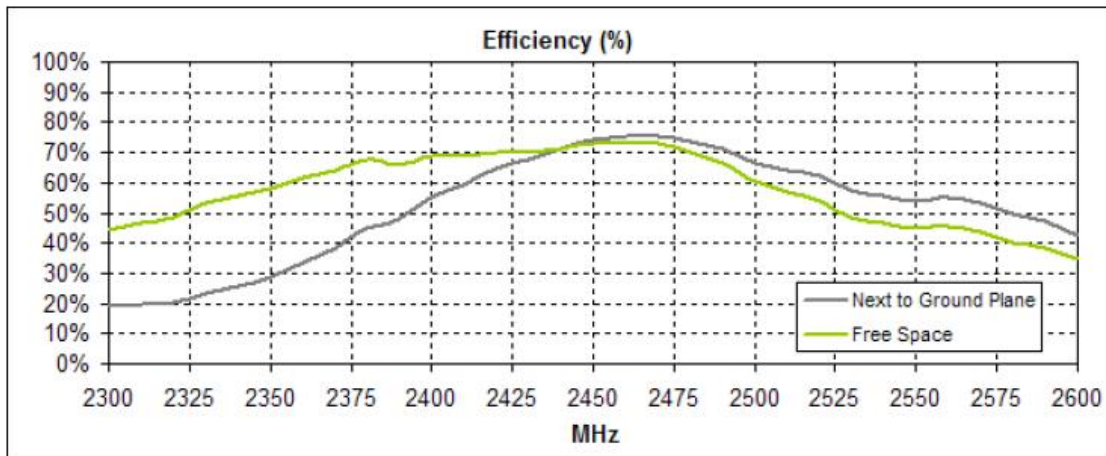


Figure 7. Efficiency data for Antenna

### F. 辐射方向数据 (RADIATION PATTERN DATA)

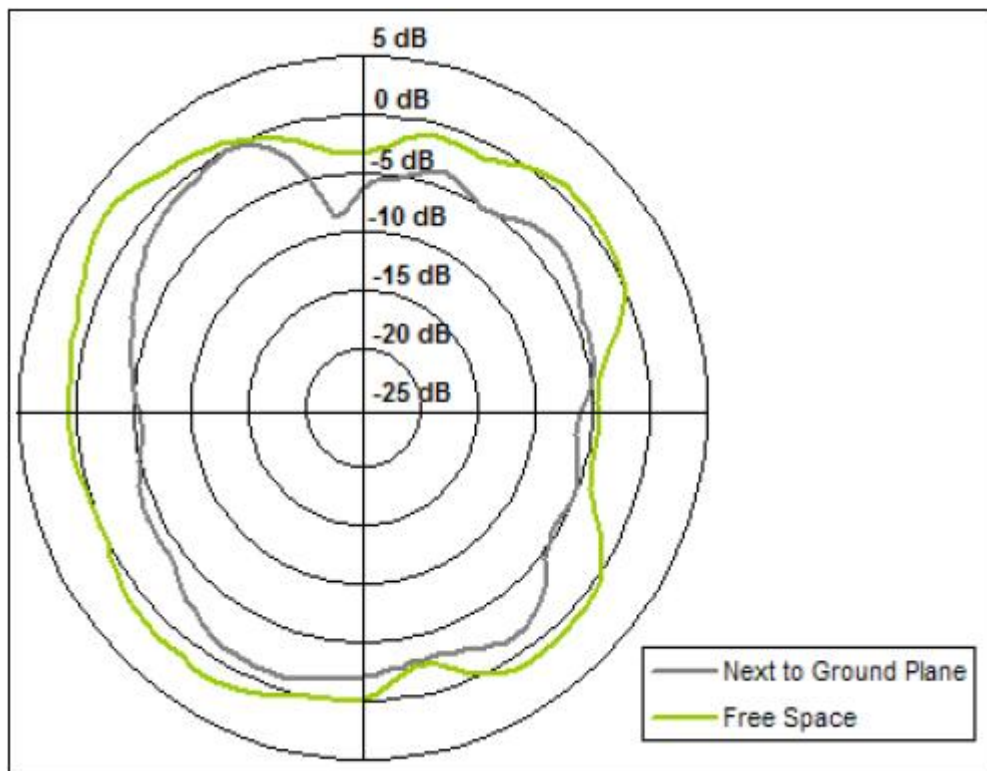


Figure 8. Radiation pattern data XZ for Antenna

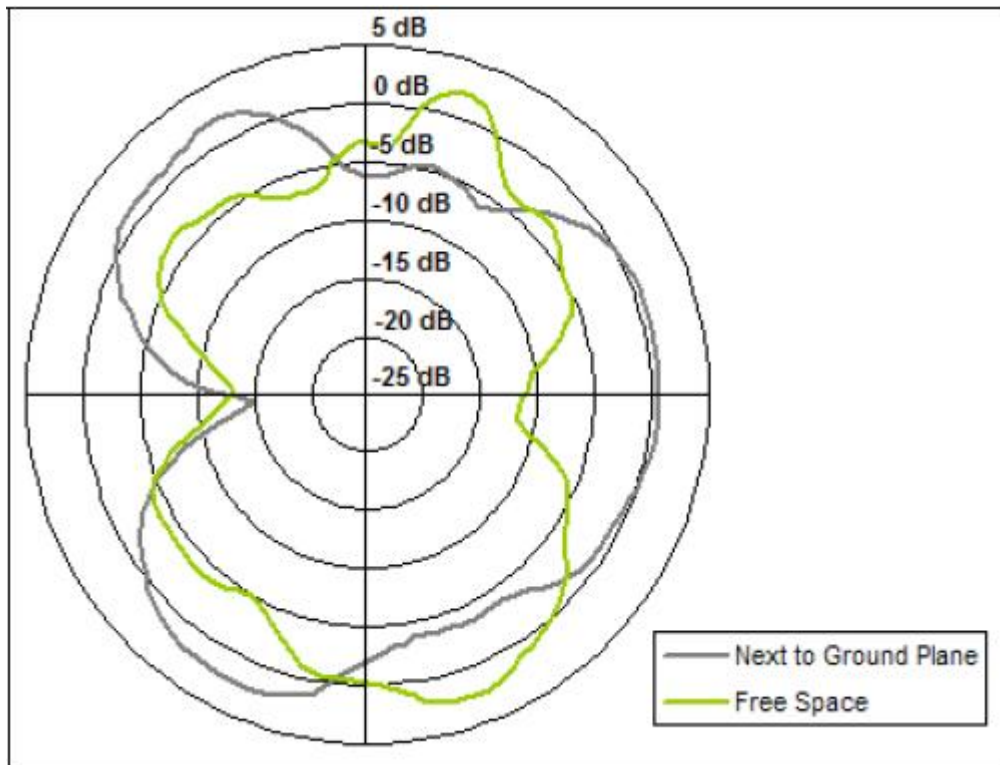


Figure 9. Radiation pattern data XY for Antenna

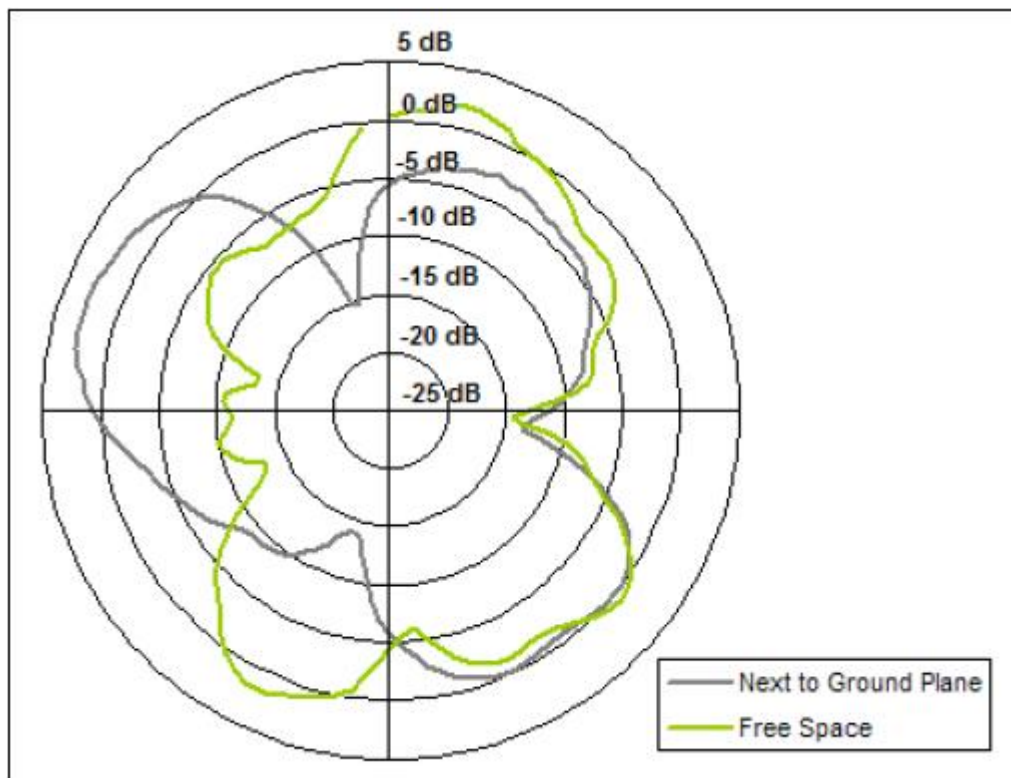
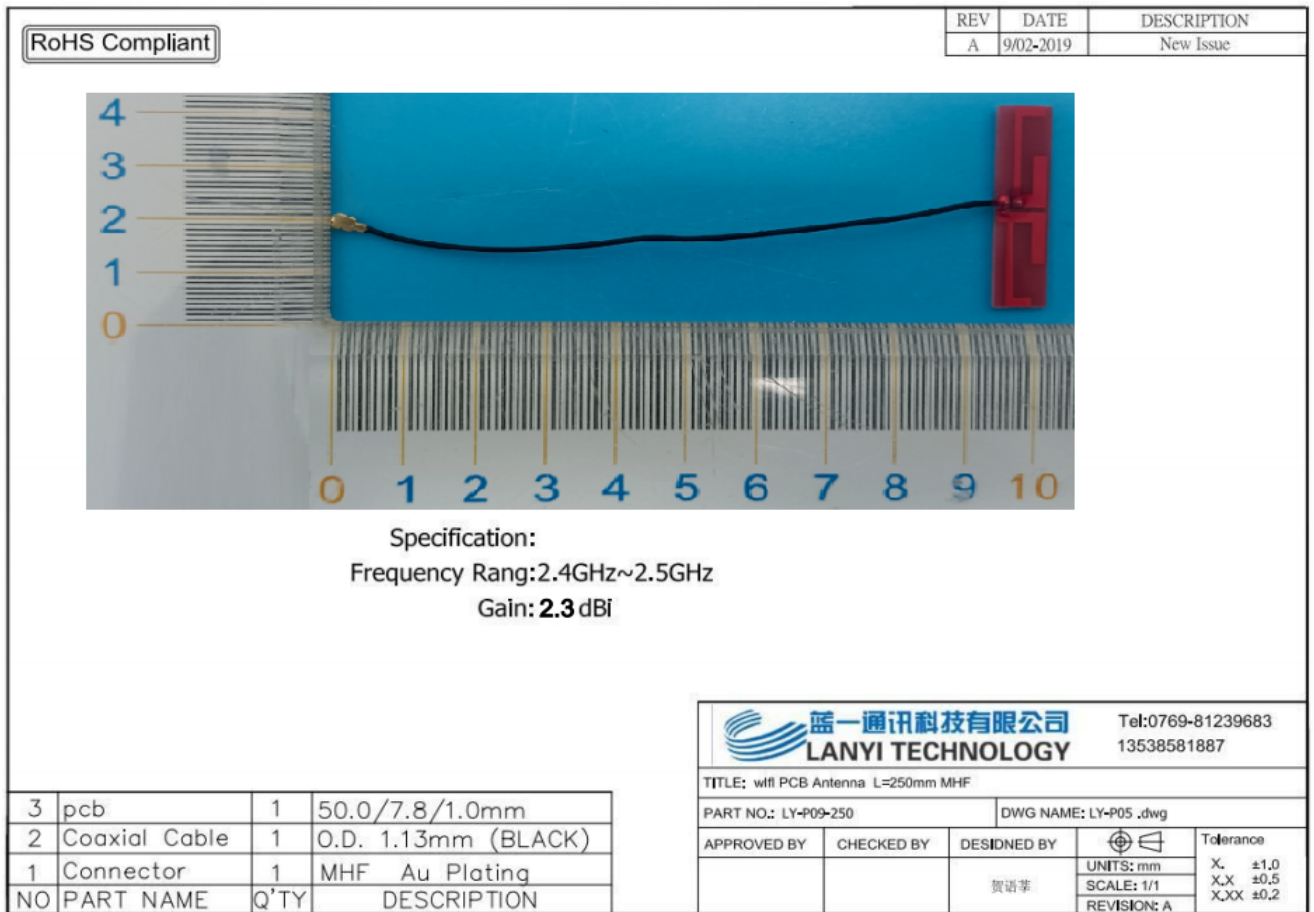


Figure 10. Radiation pattern data YZ for Antenna

Frequency	2400MHz	2450MHz	2500MHz
增益 Gain (dBi)	1.8	2.3	2.0

# V、工程图 (DRAWING)



**Figure 11.** Drawing for Antenna