

# Soward antenna test report

Customer name: Taihua Century

Project name: Liangcai H20 recorder

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## Project contact information

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# Project profile

## 1. Project brief

Number of project antennas	Machine type
1	grapher
Complete machine shell material: plastic shell	

## 2. Antenna brief

Antenna number	name	Working frequency band / MHZ	Material / structure
1	WIFI	2400MHz/2500MHz	The FPC + cable line

## Machine table pictures



## Antenna layout



## Antenna data

### 1. In Bobby



Frequency (MHz)	VSWR
2400	1.61
2450	1.26
2500	1.71

## Antenna data

### 2. Antenna efficiency

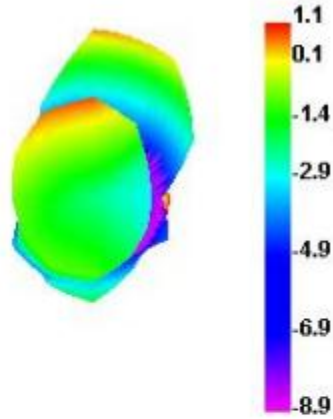
Passive Test For 2.4G				
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)	Gain (dBd)
2400	42.3	-3.74	1.11	-1.04
2410	39.77	-4	0.68	-1.47
2420	45.29	-3.44	1.02	-1.13
2430	49.47	-3.06	1.54	-0.61
2440	47.73	-3.21	1.57	-0.58
2450	46.15	-3.36	1.45	-0.7
2460	43.96	-3.57	1.15	-1
2470	42.97	-3.67	0.86	-1.29
2480	43.58	-3.61	0.68	-1.47
2490	39.83	-4	-0.08	-2.23
2500	35.38	-4.51	-0.82	-2.97



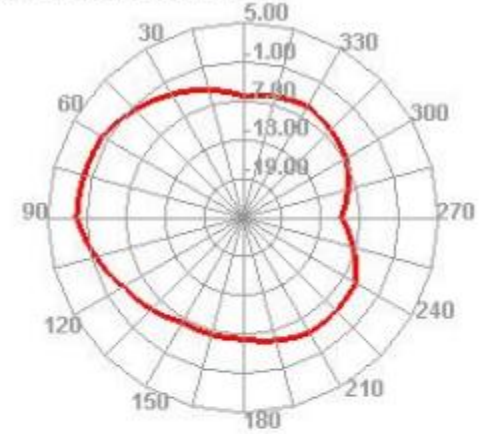
## Antenna data

3, and the 3D field-type Fig

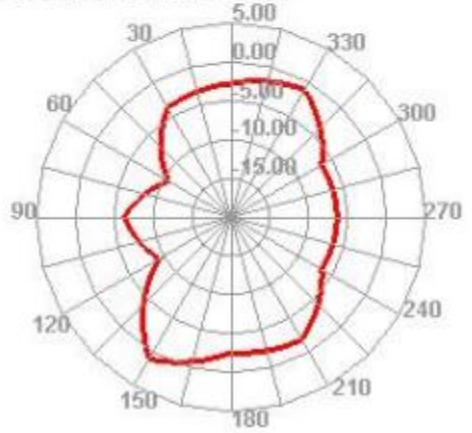
2400.000MHz



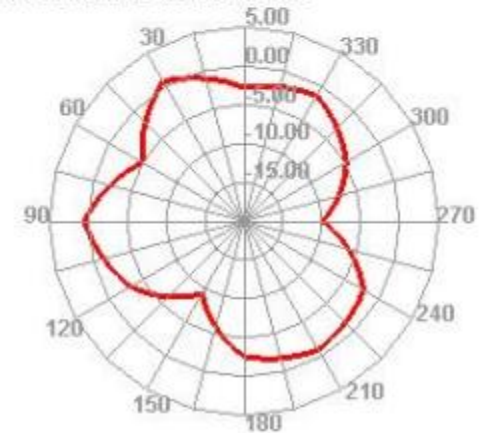
2400.000MHz H



2400.000MHz E1



2400.000MHz E2

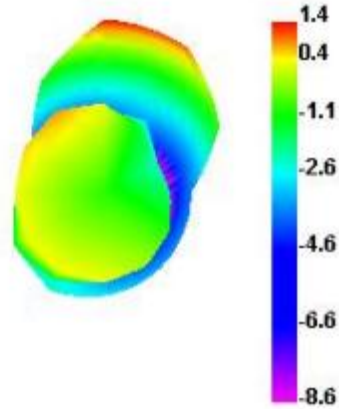




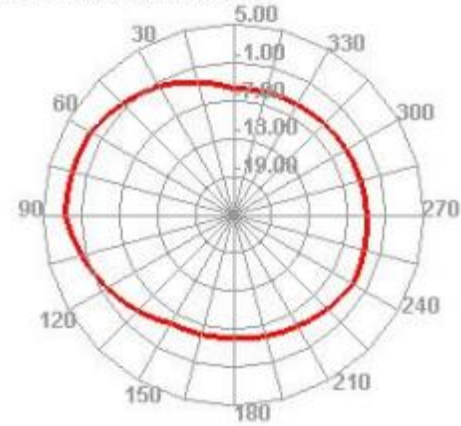
## Antenna data

3, and the 3D field-type Fig

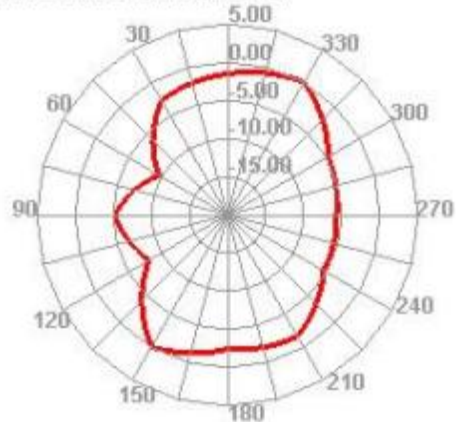
2450.000MHz



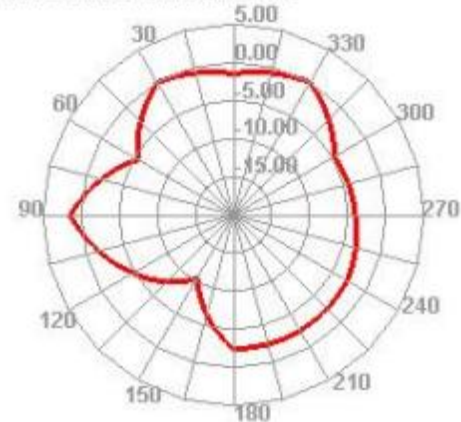
2450.000MHz H



2450.000MHz E1



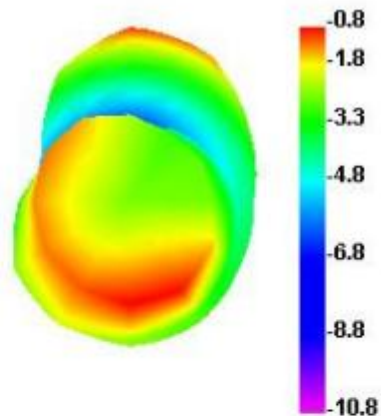
2450.000MHz E2



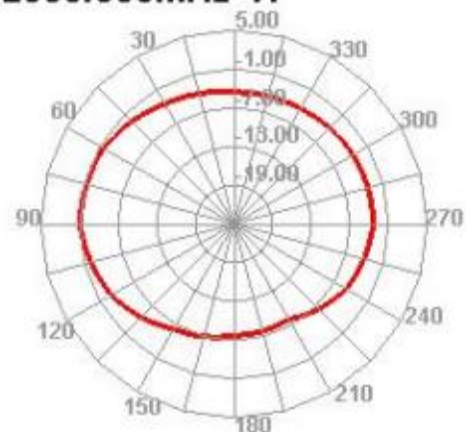
## Antenna data

3, and the 3D field-type Fig

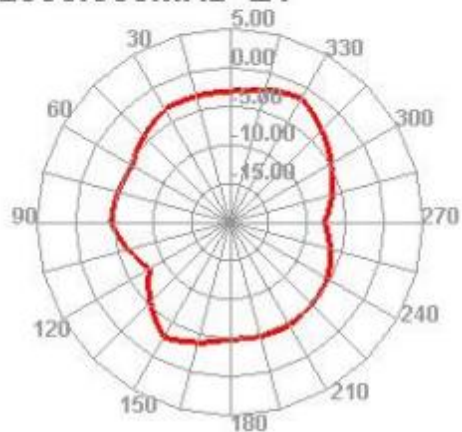
2500.000MHz



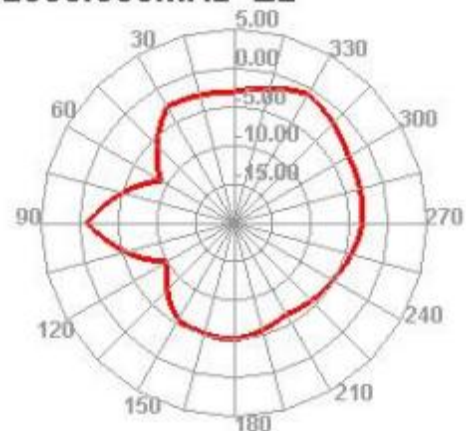
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



Note: 1. This report is based on the actual debugging and testing situation of the commissioning prototype, in which the environmental treatment, the antenna location and the assembly position of each device cannot be changed at will;

2. If there is any change in the materials used in the prototype, we should timely feedback to our company for reverification;

3. List of sensitive devices:

TP (material, coating, routing, etc.)

Screen (amplification circuit, LED, wiring design, etc.)

Shell material (antenna assembly mode, structural interference, shell material material, antenna position height and area, etc.)

Main board (main board conduction, RF circuit matching, PA, dual power device, filter, LNA, power supply circuit, etc.)

Camera, battery, motor, MIC, fingerprint identification module, etc

4. Due to the small number of debugging prototypes or only one, some probabilistic problems cannot be fully found. It is suggested to identify small batches of trial production problems before mass production (such as flash screen, horn noise, TP jump point, black screen crash, signal diving, etc.)