

SPECIFICATION

ShenZhen TianDa Communication CO., LTD

IPC300H base station FPC Antenna Product Specifications

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Table of contents

一、WIFI antenna.....	3
1、Specification	3
1.1 、Electrical Specifications	3
1.1.1 、Electrical performance index.....	3
1.1.2 、Matching circuit diagram	3
1.2 、Test	4
1.2.1.2 、Antenna Gain, Efficiency	4
1.2.1.3 、Antenna passive pattern	5
1.2.2 、Whole machine active test data	6
1.2.3 、Antenna Pattern	6
二、Structural Specifications	10
2.1 、Antenna composition	10
2.2 、Drawings	10

一、WIFI antenna

1、Specification

This acknowledgment mainly provides the test status of the electrical and structural performance parameters of the IPC300 Base Station Antenna 2. The picture below is the picture of Tianda Design Antenna 2



Antenna 2

1.1、Electrical Specifications

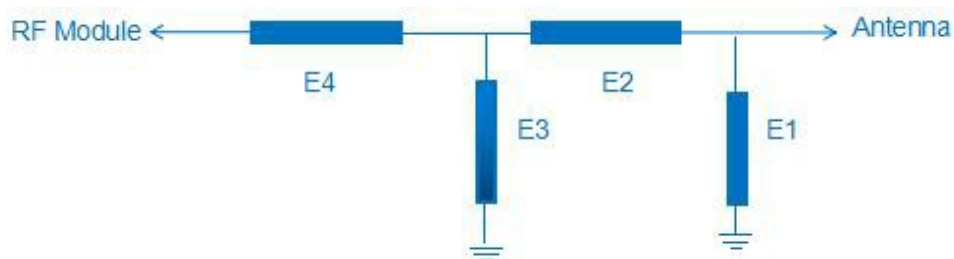
1.1.1、Electrical performance index

The working frequency band of the antenna of this project is 2400MHz-2500MHz. The following are the electrical performance indicators of the antenna designed and trial-produced by Tianda.

WIFI		
frequency band	frequency (MHz)	VSWR
2.4G	2400~2500	≤ 2.0

1.1.2、Matching circuit diagram

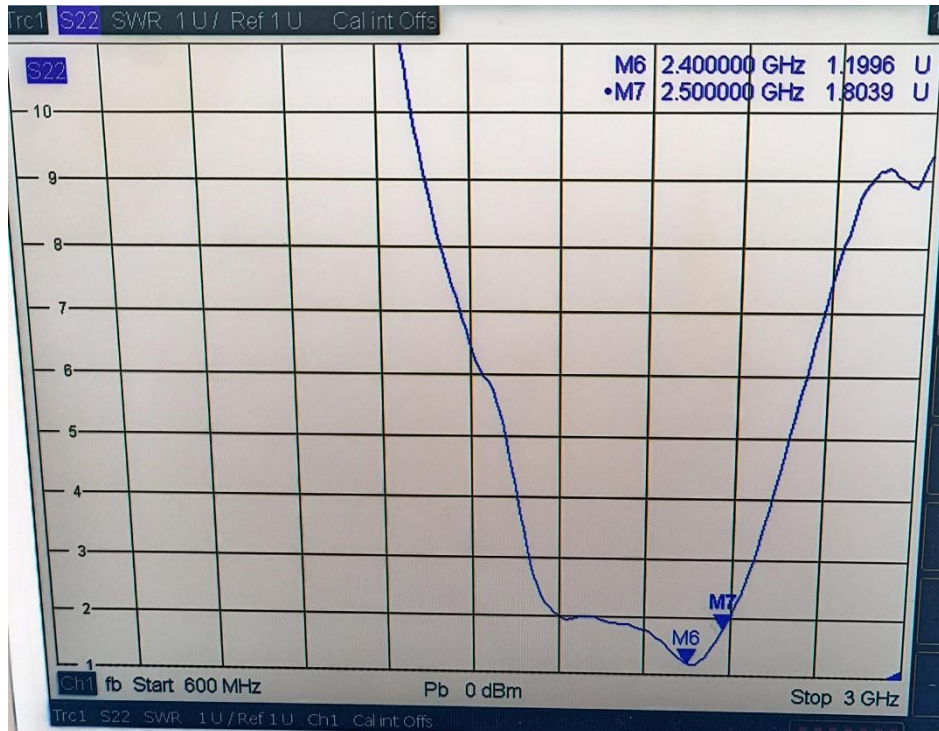
The matching circuit of WIFI antenna 2 is a 0 ohm resistor in series.



1.2、Test

1.2.1、Passive testing

1.2.1.1、Antenna Standing Wave Test (VSWR)

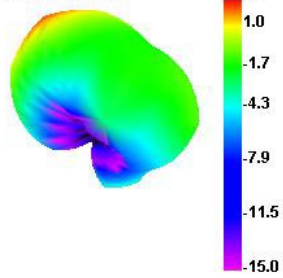


1.2.1.2、Antenna Gain, Efficiency

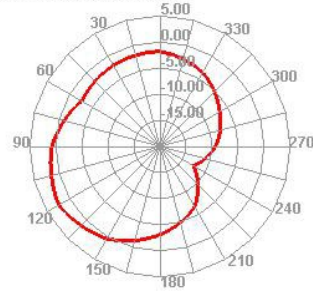
Passive Test For 2.4-2.5G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenuat Hor	Attenuat Ver
2400	58.38	2.76	0.61	22.161	36.22	2.76	-15.02	49.59	49.32
2410	56.16	2.45	0.3	21.805	34.352	2.45	-16.82	49.53	49.31
2420	54.45	2.35	0.2	21.092	33.358	2.35	-19.19	49.5	49.25
2430	49.24	2.03	-0.12	19.358	29.885	2.03	-17.85	49.38	49.27
2440	50.57	2.08	-0.07	20.09	30.481	2.08	-16.16	49.49	49.33
2450	49.54	1.96	-0.19	19.841	29.7	1.96	-16.36	49.7	49.52
2460	50.46	1.73	-0.42	20.002	29.459	1.73	-14.58	49.78	49.55
2470	50.01	2.07	-0.08	19.934	30.072	2.07	-13.96	49.87	49.8
2480	48.95	2.47	0.32	19.132	29.813	2.47	-13.23	49.88	49.72
2490	50.04	2.7	0.55	18.782	31.253	2.7	-13.48	49.91	49.78
2500	49.02	2.3	0.15	18.025	30.999	2.3	-12.96	49.7	49.51

1.2.1.3 、 Antenna passive pattern

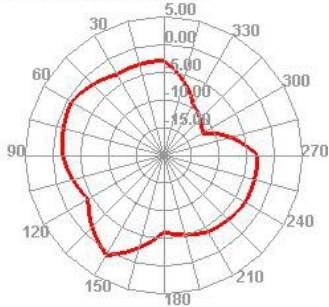
2400.000MHz



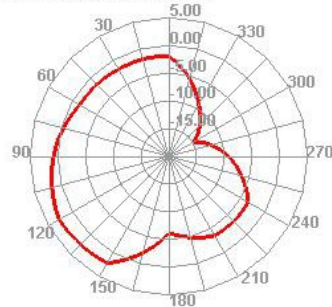
2400.000MHz H



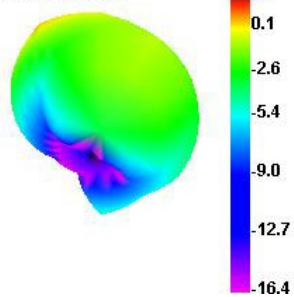
2400.000MHz E1



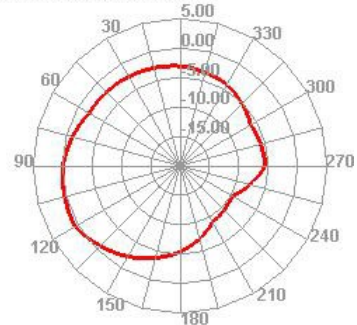
2400.000MHz E2



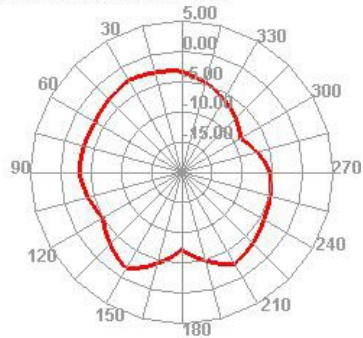
2450.000MHz



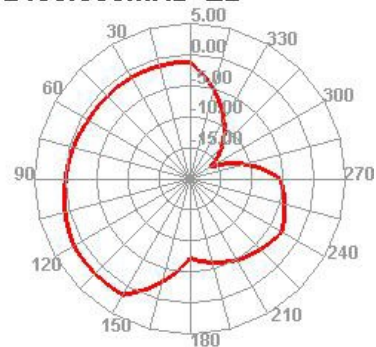
2450.000MHz H

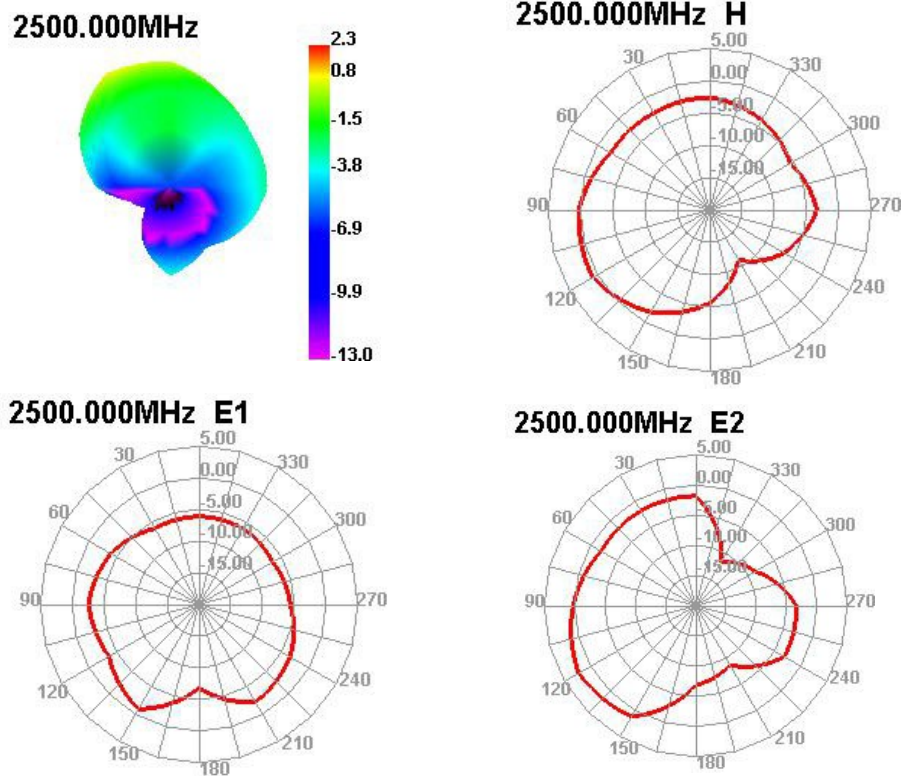


2450.000MHz E1



2450.000MHz E2





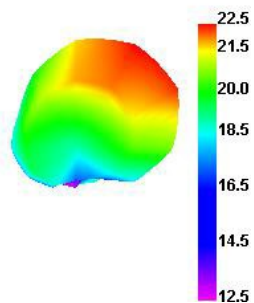
1.2.2、Whole machine active test data

The above is the active test data of the 2.4GWIFI antenna of the whole machine

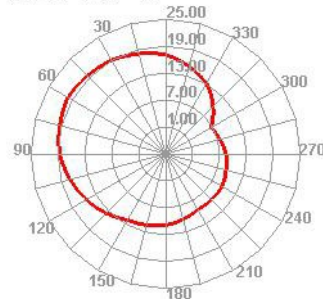
Band	2. 4G		
Channel	1	7	13
TRP	18.2	17.2	16.2
TIS	-82.3	-82.2	-83.0

1.2.3、Antenna Pattern

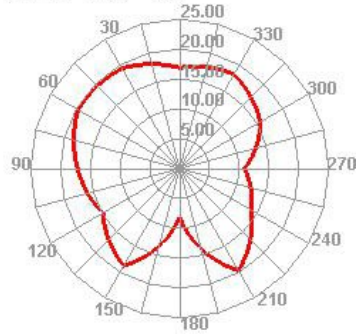
Wifi 1 TRP



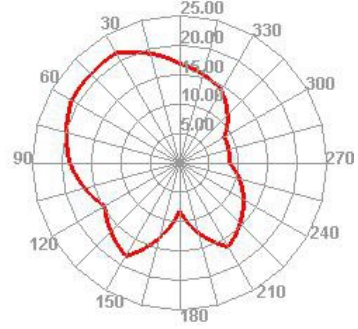
Wifi 1 TRP H



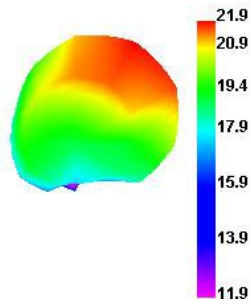
Wifi 1 TRP E1



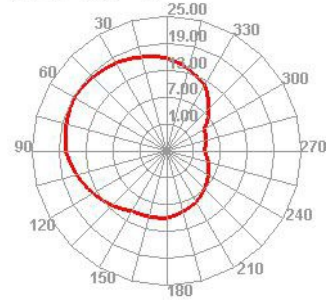
Wifi 1 TRP E2



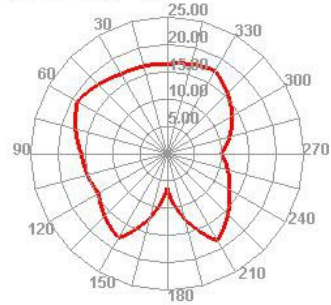
Wifi 7 TRP



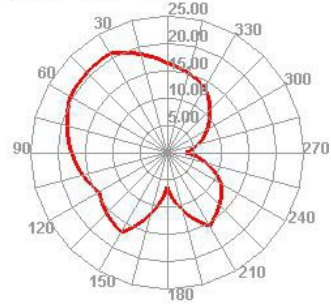
Wifi 7 TRP H



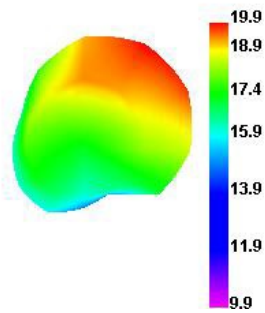
Wifi 7 TRP E1



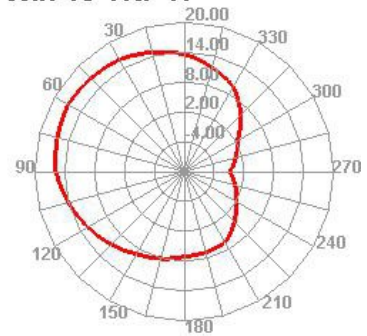
Wifi 7 TRP E2



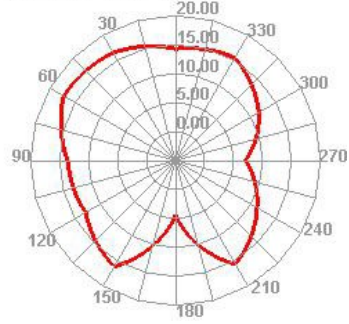
Wifi 13 TRP



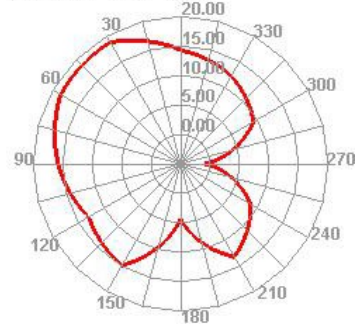
Wifi 13 TRP H



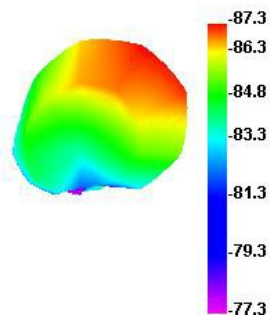
Wifi 13 TRP E1



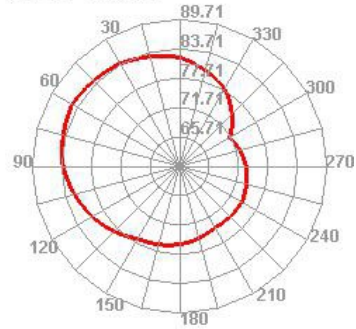
Wifi 13 TRP E2



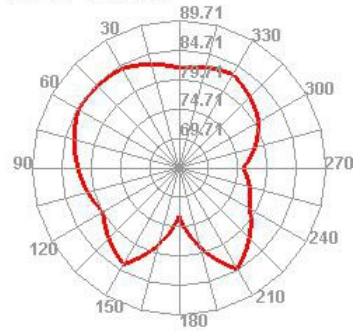
Wifi 1 TIS



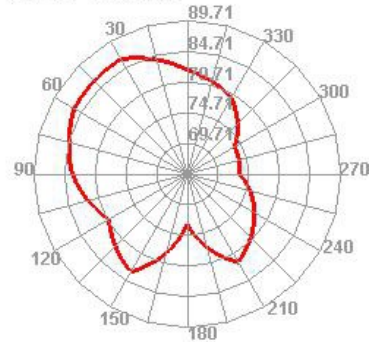
Wifi 1 TIS H



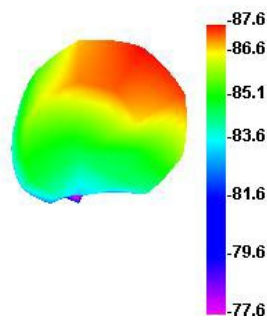
Wifi 1 TIS E1



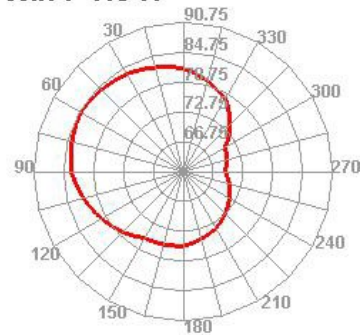
Wifi 1 TIS E2



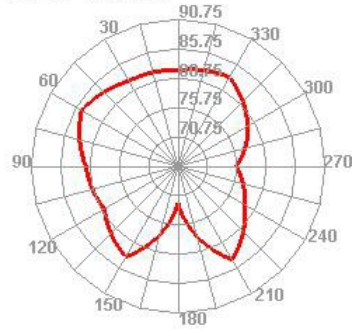
Wifi 7 TIS



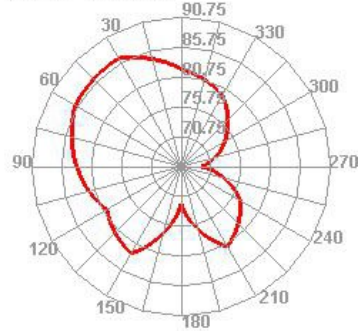
Wifi 7 TIS H



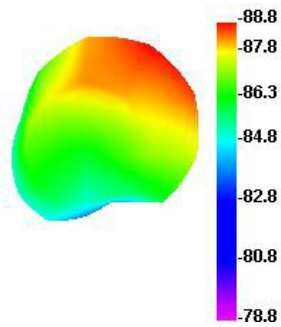
Wifi 7 TIS E1



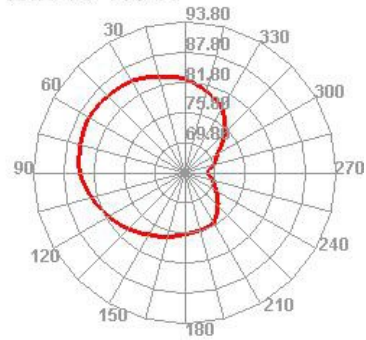
Wifi 7 TIS E2



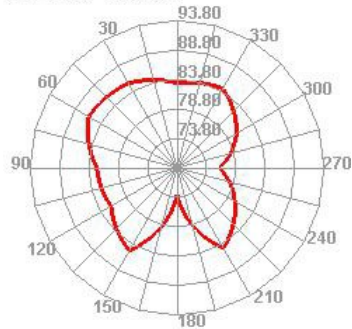
Wifi 13 TIS



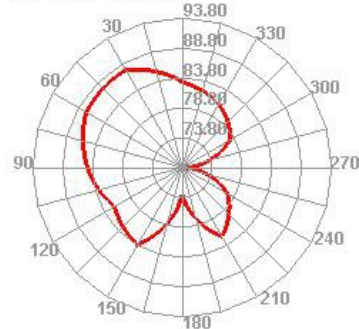
Wifi 13 TIS H



Wifi 13 TIS E1



Wifi 13 TIS E2

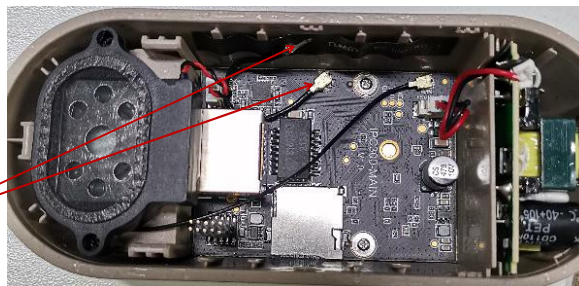


二、Structural Specifications

2.1、Antenna composition

WIFI antenna 2 is mainly composed of FPC+Cable line

Antenna location



2.2、 Drawings

