

SPECIFICATION

ShenZhen TianDa Communication CO., LTD

IPC300H base station FPC Antenna Product Specifications

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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 3



Antenna 3

1.1、Electrical Specifications

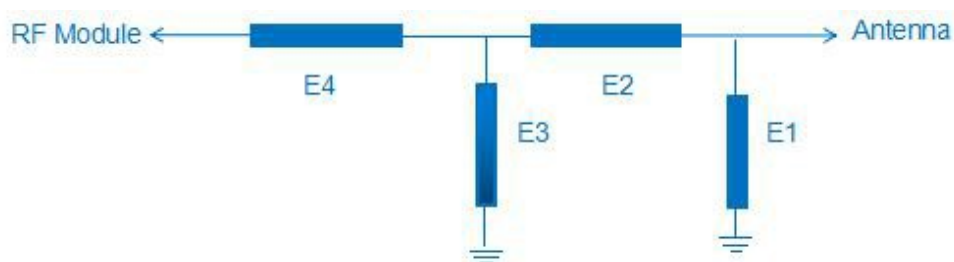
1.1.1、Electrical performance index

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 3 is a 0 ohm resistor in series.



1.2、Test

1.2.1、Passive testing

1.2.1.1、Antenna Standing Wave Test (VSWR)

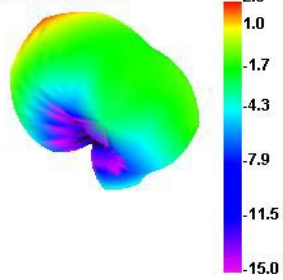


1.2.1.2、Antenna Gain, Efficiency

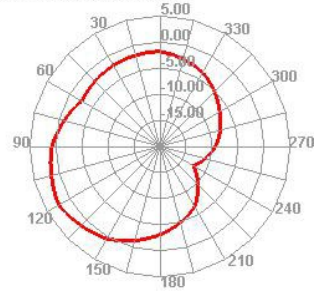
Passive Test For 2.4-2.5G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHIS (%)	Max (dB)	Min (dB)	Attenut Hor	Attenut Ver
2400	42.1	1.59	-0.56	21.171	20.933	1.59	-15.38	49.59	49.32
2410	42.38	1.7	-0.45	21.22	21.16	1.7	-13.29	49.53	49.31
2420	43.03	1.82	-0.33	21.691	21.339	1.82	-13.81	49.5	49.25
2430	42.43	1.84	-0.31	21.678	20.749	1.84	-12.92	49.38	49.27
2440	44.24	2.17	0.02	22.776	21.46	2.17	-13.1	49.49	49.33
2450	45.74	2.3	0.15	23.616	22.129	2.3	-12.72	49.7	49.52
2460	48.83	2.57	0.42	25.417	23.417	2.57	-12.93	49.78	49.55
2470	48.5	2.58	0.43	25.102	23.397	2.58	-12.25	49.87	49.8
2480	47.15	2.56	0.41	24.872	22.28	2.56	-11.4	49.88	49.72
2490	46.9	2.42	0.27	24.395	22.51	2.42	-11.98	49.91	49.78
2500	44.94	2.24	0.09	23.14	21.798	2.24	-13.86	49.7	49.51

1.2.1.3 、 Antenna passive pattern

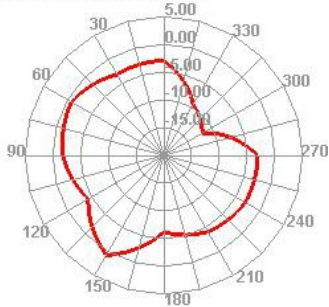
2400.000MHz



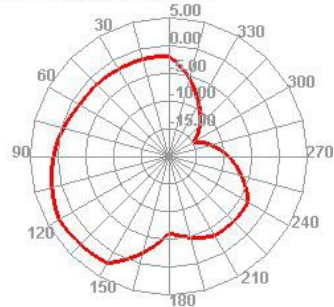
2400.000MHz H



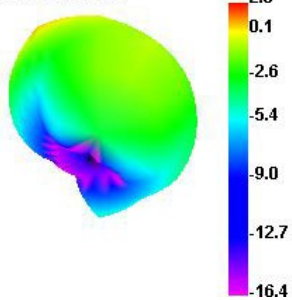
2400.000MHz E1



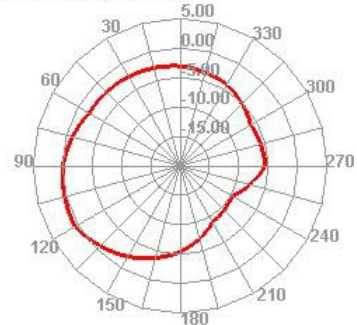
2400.000MHz E2



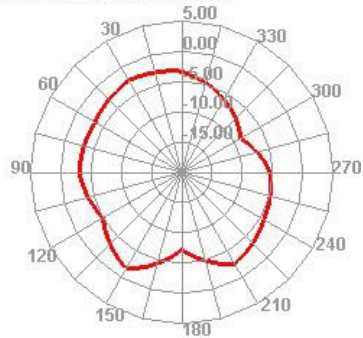
2450.000MHz



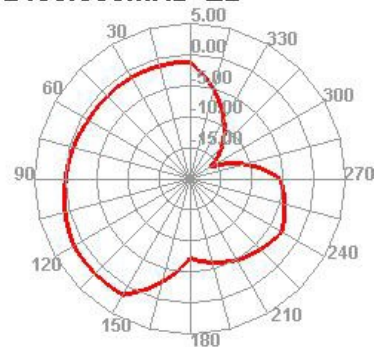
2450.000MHz H

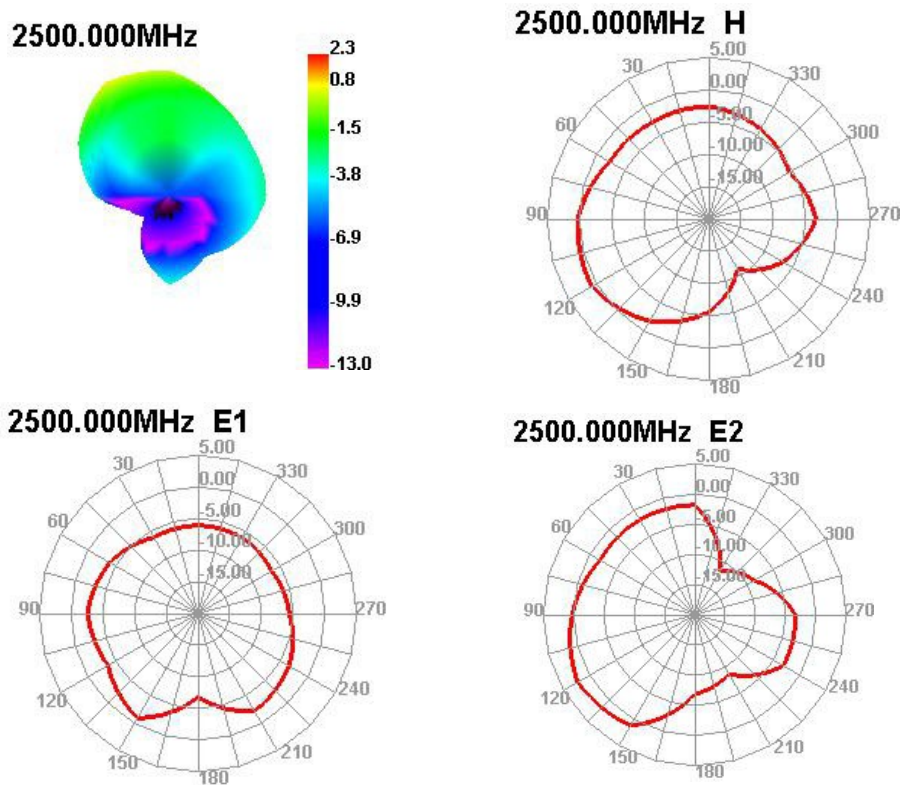


2450.000MHz E1



2450.000MHz E2



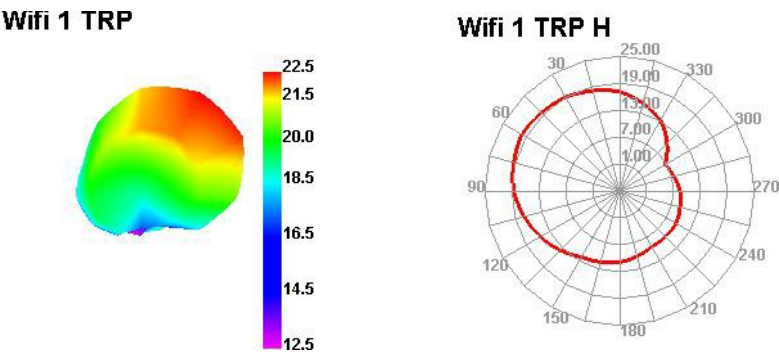


1.2.2、Whole machine active test data

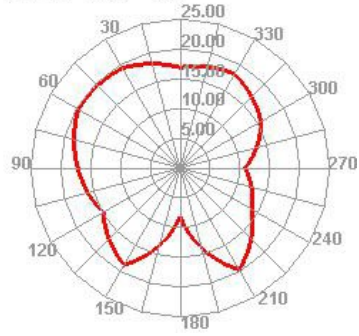
The above is the active test data of the 2.4GWIFI antenna of the whole machine

b模式	增益 ☒ 二角线 ☐ 屏蔽角 ☐		
Band	2.4G		
Channel	1	7	13
TRP	18.2	18.8	19.2
TIS	-80.5	-81.0	-81.7

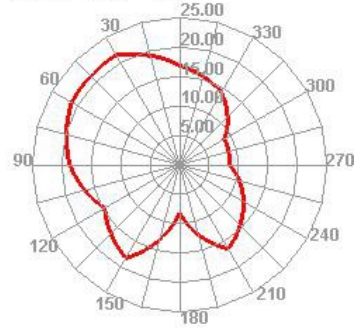
1.2.3、Antenna Pattern



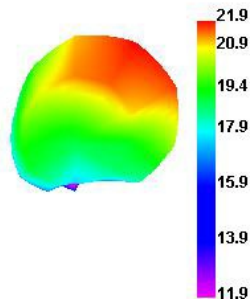
Wifi 1 TRP E1



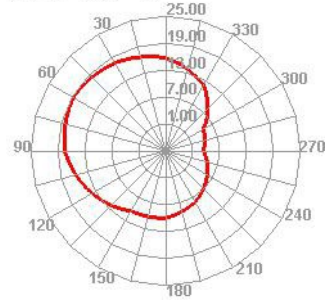
Wifi 1 TRP E2



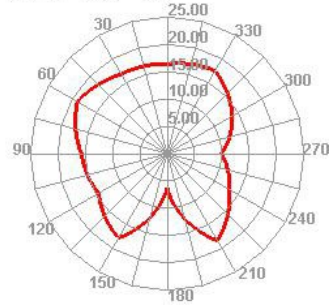
Wifi 7 TRP



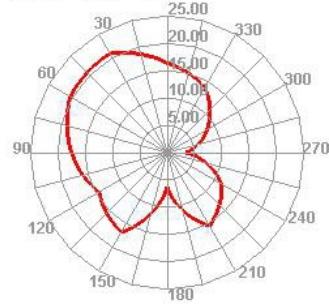
Wifi 7 TRP H



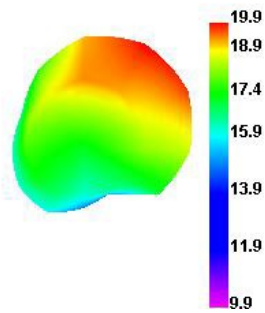
Wifi 7 TRP E1



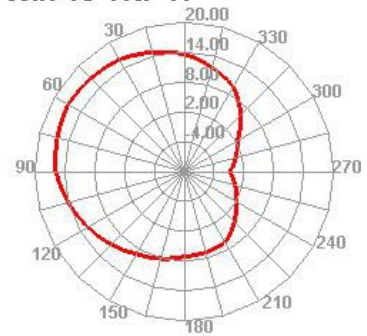
Wifi 7 TRP E2



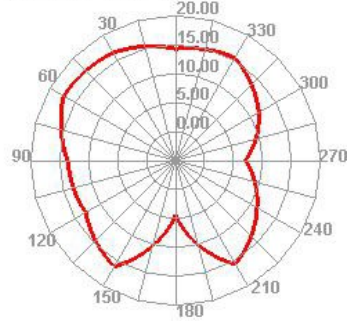
Wifi 13 TRP



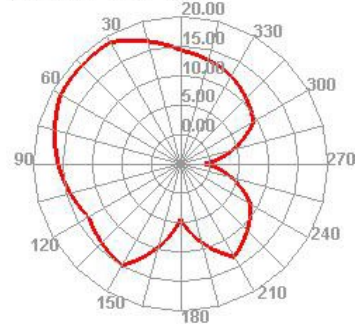
Wifi 13 TRP H



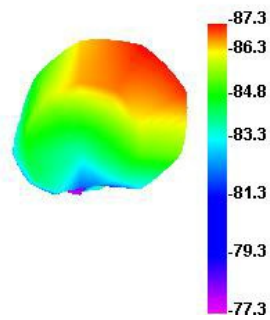
Wifi 13 TRP E1



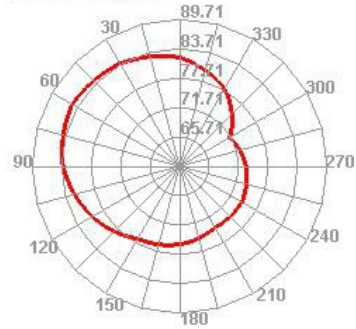
Wifi 13 TRP E2



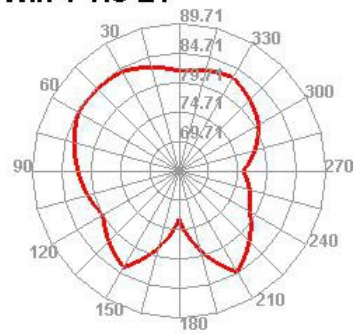
Wifi 1 TIS



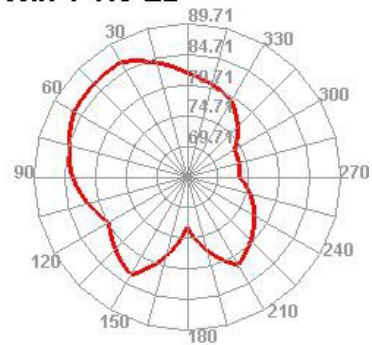
Wifi 1 TIS H



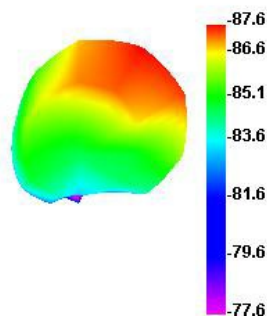
Wifi 1 TIS E1



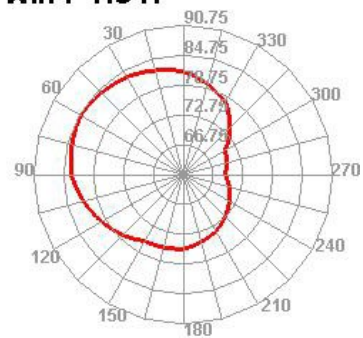
Wifi 1 TIS E2



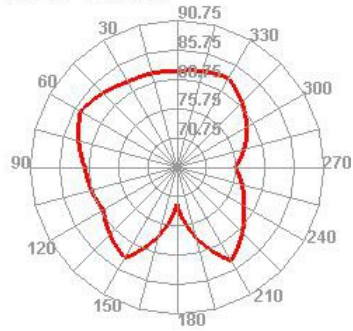
Wifi 7 TIS



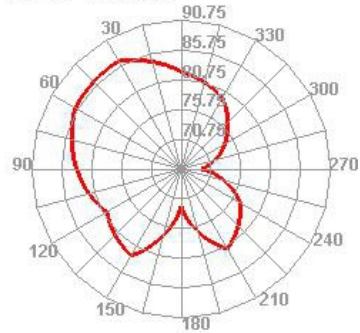
Wifi 7 TIS H



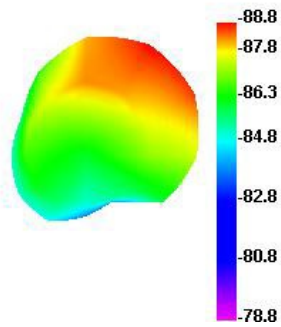
Wifi 7 TIS E1



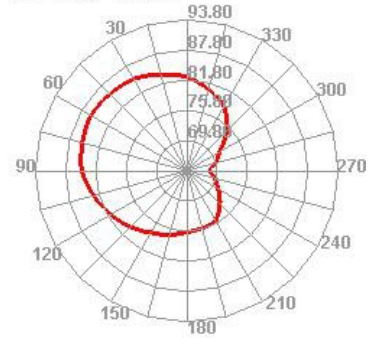
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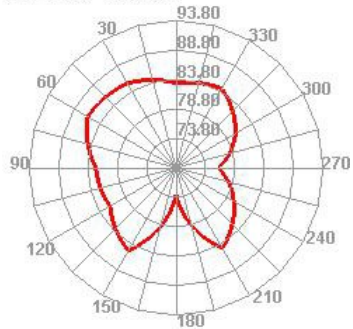
Wifi 13 TIS



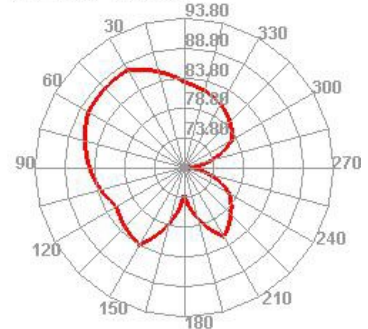
Wifi 13 TIS H



Wifi 13 TIS E1



Wifi 13 TIS E2



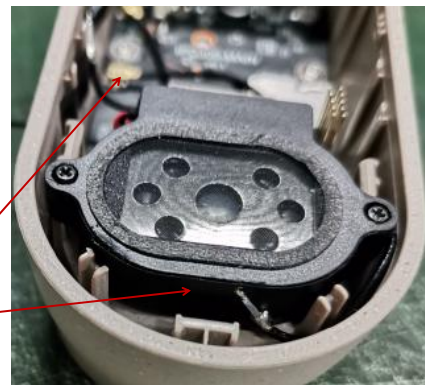
二、Structural Specifications

2.1、Antenna composition

WIFI antenna 3 is mainly composed of FPC+Cable line

WIFI 天线 3 主要是由 FPC+Cable 线组成

天线位置



2.2、 Drawings

