

SPECIFICATION

ShenZhen TianDa Communication CO., LTD

IPC300H base station FPC Antenna Product Specifications

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一、5G 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

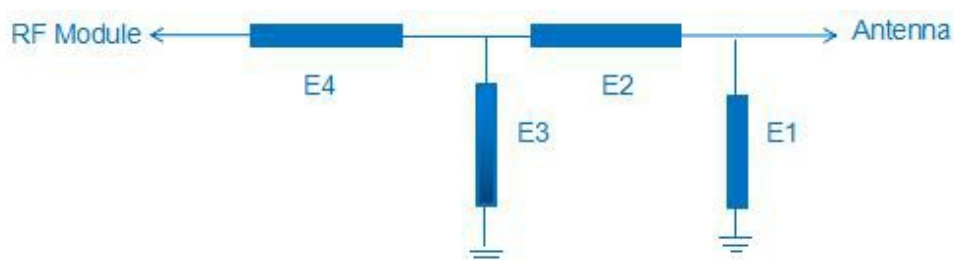
1.1.1、Electrical performance index

The working frequency band of the antenna of this project is 5150MHz-5850MHz. The following are the electrical performance indicators of the antenna designed and trial-produced by Tianda.

WIFI		
frequency band	frequency (MHz)	VSWR
5.8G	5150~5850	≤ 2.0

1.1.2、Matching circuit diagram

The matching circuit of WIFI antenna 4 is a 0 ohm resistor in series.



1.2、Test

1.2.1、Passive testing

1.2.1.1、Antenna Standing Wave Test (VSWR)

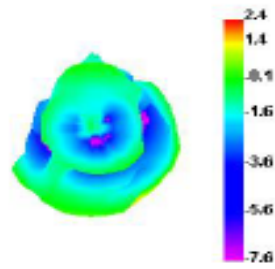


1.2.1.2、Antenna Gain, Efficiency

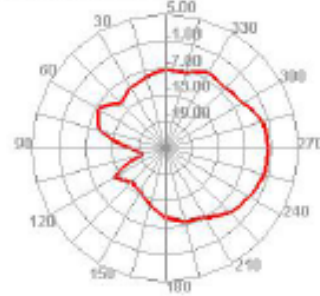
Passive Test For 5150--5850MHz									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	Max (dB)	Min (dB)	irectivity (dBi)	Beamwidth (3dB)	AttH (dB)	AttV (dB)
5150	45.82	2.37	0.22	2.37	-19.85	5.11	45	55.21	54.71
5200	42.33	1.87	-0.28	1.87	-18.77	5.63	30	54.99	54.5
5250	45	2.14	-0.01	2.14	-15.95	5.23	30	54.91	54.49
5300	46.47	2.11	-0.04	2.11	-17.37	5.02	30	55.51	55.09
5350	49.01	2.37	0.22	2.37	-17.38	4.68	30	55.9	55.37
5400	49.14	2.39	0.24	2.39	-19.09	4.67	30	55.89	55.3
5450	51.93	1.83	-0.32	1.83	-22.88	4.96	30	55.86	55.22
5500	51.47	1.6	-0.55	1.6	-21.58	5.02	30	56.03	55.32
5550	52.7	2.16	0.01	2.16	-22.73	4.24	30	55.93	55.34
5600	53	2.42	0.27	2.42	-16.99	4.2	30	55.97	55.2
5650	54.45	2.69	0.54	2.69	-19.04	4.04	30	55.99	55.46
5700	55.62	3.06	0.91	3.06	-20.33	3.81	30	56.06	55.42
5750	56.14	3.76	1.61	3.76	-15.45	3.75	15	56.26	55.69
5800	55.88	4.23	2.08	4.23	-15.03	3.89	30	56.6	55.66
5850	57.05	4.81	2.66	4.81	-17.55	3.76	15	57.17	56.29

1.2.1.3 、 Antenna passive pattern

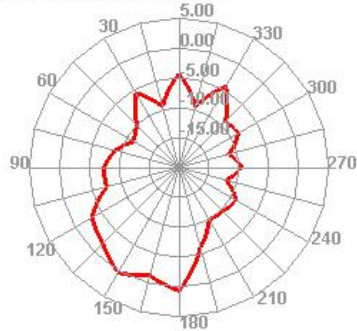
5150.000MHz



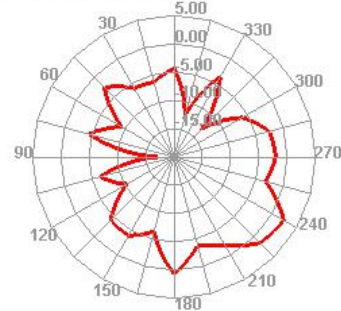
5150.000MHz H



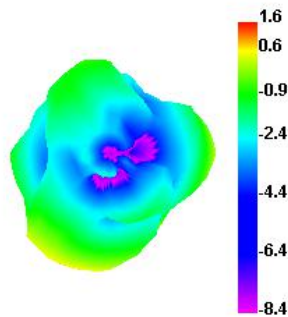
5150.000MHz E1



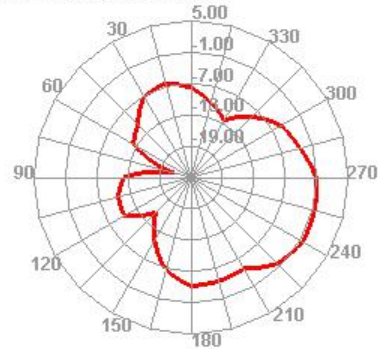
5150.000MHz E2



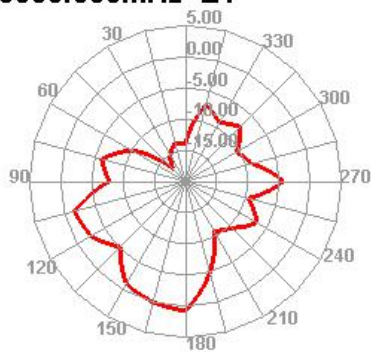
5500.000MHz



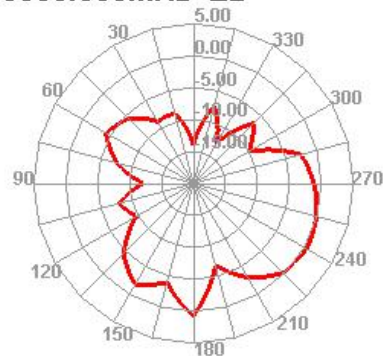
5500.000MHz H



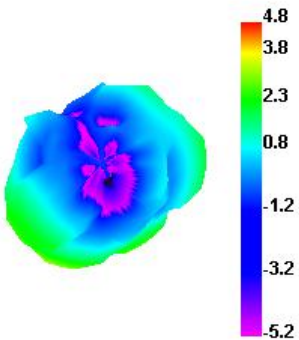
5500.000MHz E1



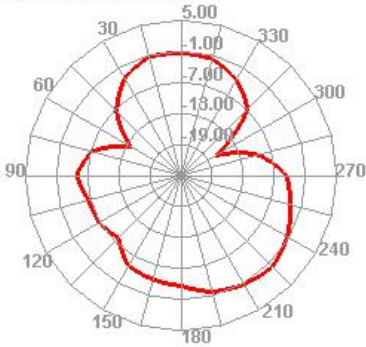
5500.000MHz E2



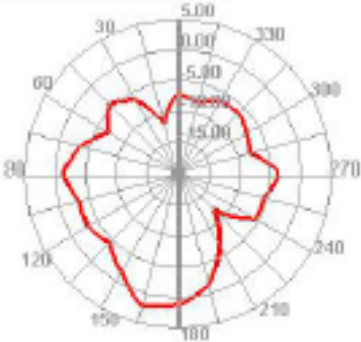
5850.000MHz



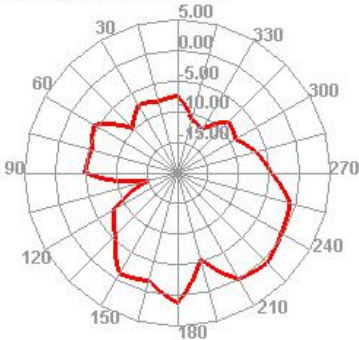
5850.000MHz H



5850.000MHz E1



5850.000MHz E2

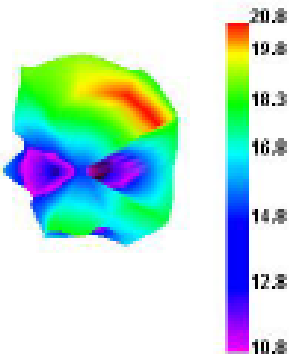


1.2.2、Whole machine active test data

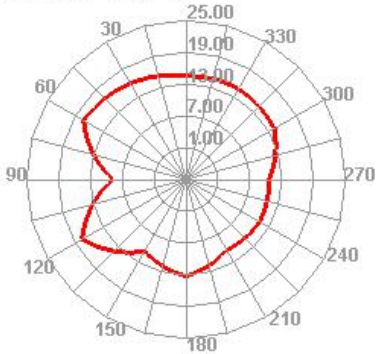
a模式（54M）	略寬 ■ 三角幅 □ 屏蔽裕 □		
Band	5. 8G		
Channel	36	149	165
TRP	14.9	15.6	14.9
TIS	-72.5	-57.5	-72.2

1.2.3、Antenna Pattern

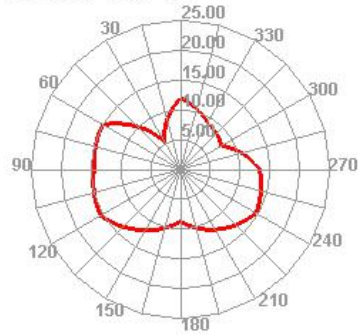
Wifi 36 TRP



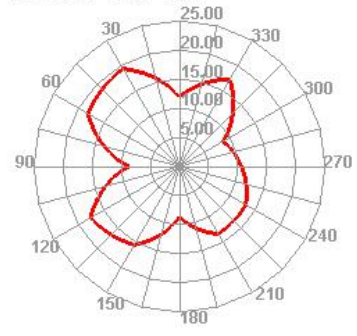
Wifi 36 TRP H



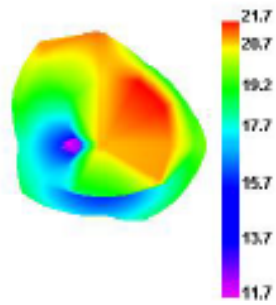
Wifi 36 TRP E1



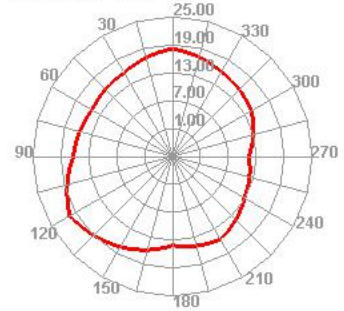
Wifi 36 TRP E2



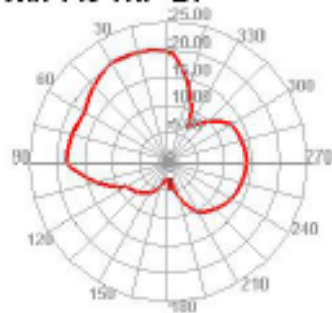
Wifi 149 TRP



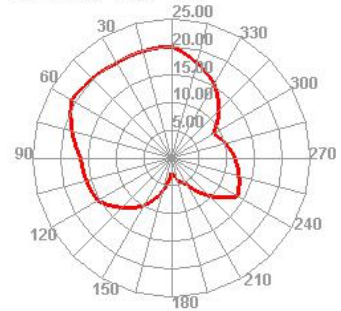
Wifi 149 TRP H



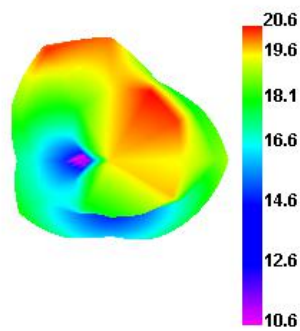
Wifi 149 TRP E1



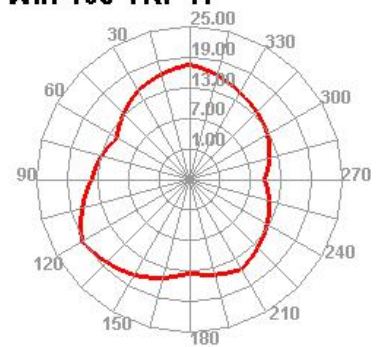
Wifi 149 TRP E2



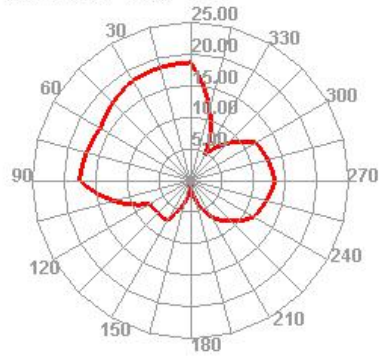
Wifi 165 TRP



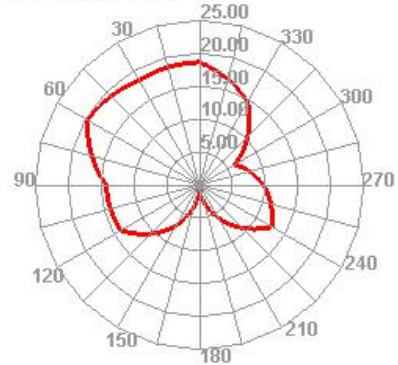
Wifi 165 TRP H



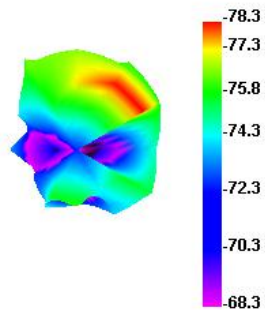
Wifi 165 TRP E1



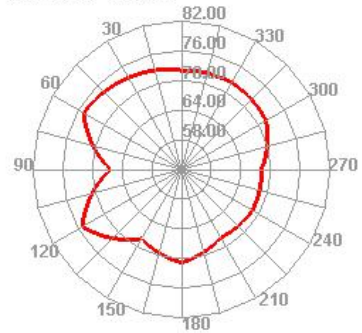
Wifi 165 TRP E2



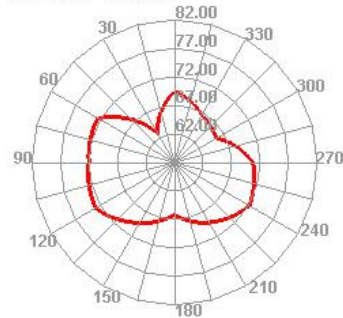
Wifi 36 TIS



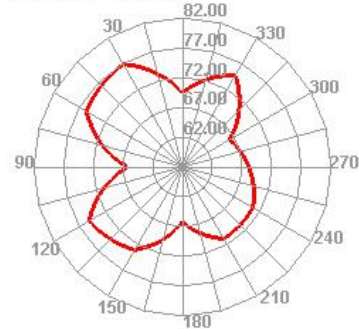
Wifi 36 TIS H



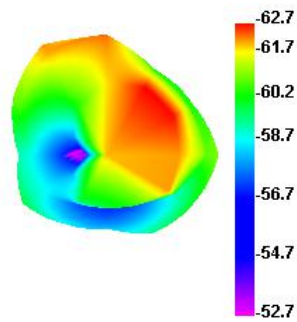
Wifi 36 TIS E1



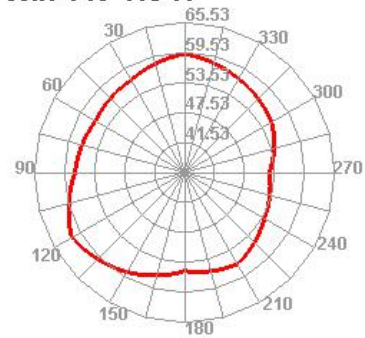
Wifi 36 TIS E2



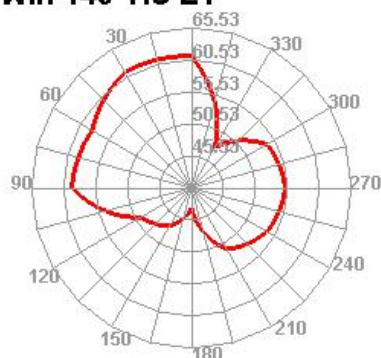
Wifi 149 TIS



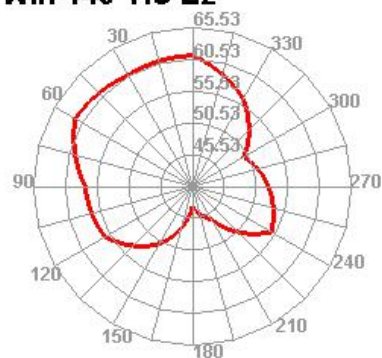
Wifi 149 TIS H



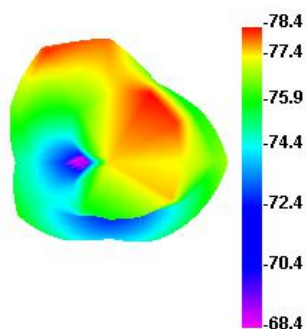
Wifi 149 TIS E1



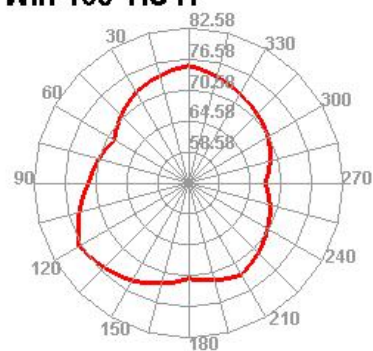
Wifi 149 TIS E2



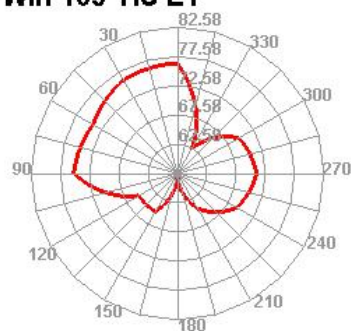
Wifi 165 TIS



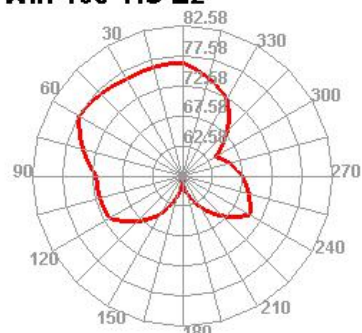
Wifi 165 TIS H



Wifi 165 TIS E1



Wifi 165 TIS E2

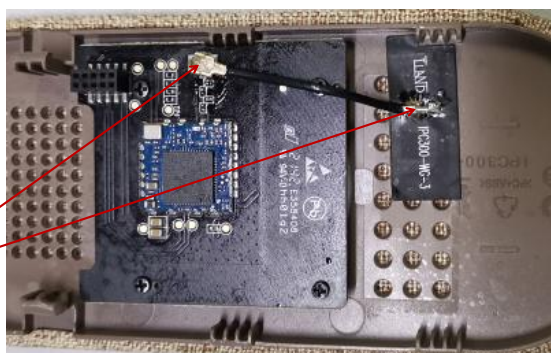


二、Structural Specifications

2.1、Antenna composition

WIFI antenna 4 is mainly composed of FPC+Cable line

天线位置



2.2、Drawings

