

SPECIFICATION



ShenZhen TianDa Communication Co,LTD

C6L Antenna

Product Specification

Customer	XunMeiZhiLian	Frequency band	2400-2500MHz
Project name	C6L	Edition	A
Item number	ZL-C6-L0-WI-A	Colour	Original color
R Fdesign	Wangxinchuang	Structural design	Hesenlin
Date	2022.10.22		

Customer confirmation:

Whether the assembly meets your requirements: ☐OK ☐NG

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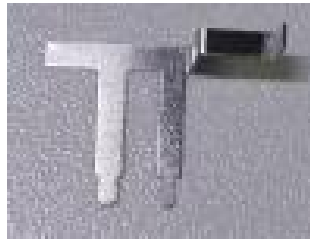
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一、WIFI Antenna

1、Specifications

The specification mainly provides the test status of electrical and structural performance parameters of WIFI antenna in C6L cameras project。The picture below shows the WIFI antenna designed by Tianda.



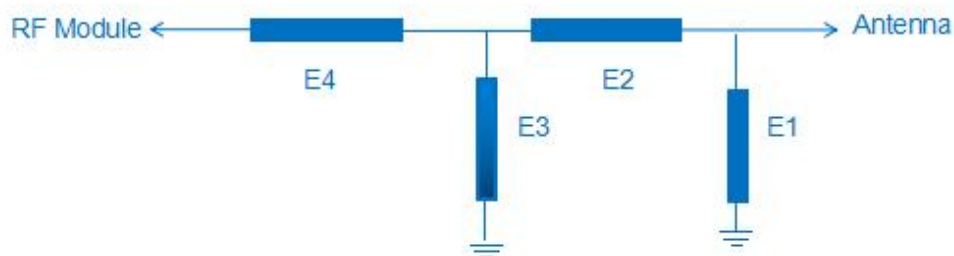
1.1、Electrical specifications

1.1.1、Electrical performance index

The operating frequency band of the antenna 2400MHz—2500MHz, The following is the electrical performance index of the antenna designed and produced by Tianda.

WIFI		
频段	频率（MHz）	VSWR
2.4G	2400~2500	≤ 2.0

1.1.2、Matching circuit diagram

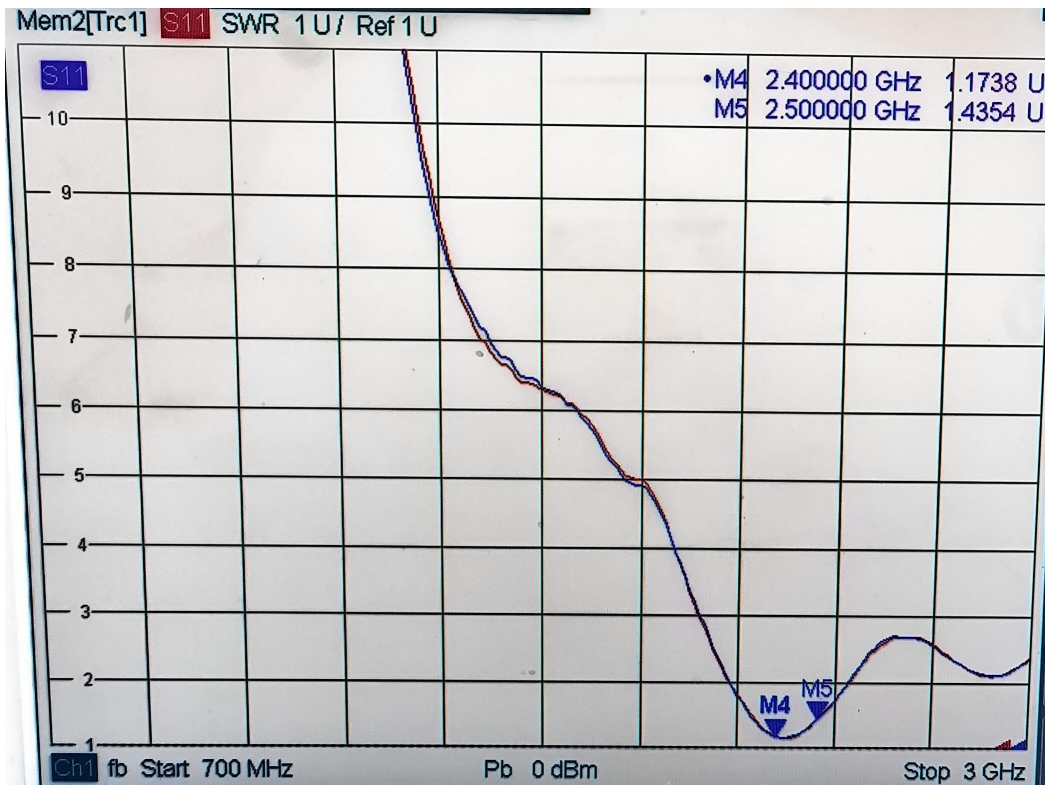


The matching circuit of the WIFI antenna is 2.7 nH inductor in series (at E4).

1.2、Testing

1.2.1、Passive test

1.2.1.1、VSWR

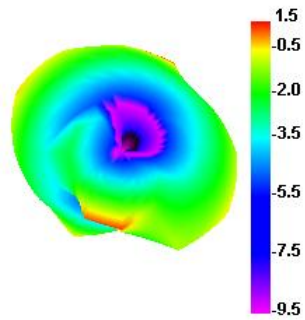


1.2.1.2、Antenna Gain and Efficiency

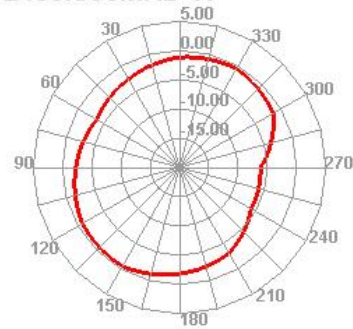
Passive Test For 2400-2500									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHS (%)	DHS (%)	Max (dB)	Min (dB)	AttH (dB)	AttV (dB)
2400	55.64	1.53	-0.62	22.154	33.485	1.53	-11.48	49.56	50.15
2410	60.37	1.74	-0.41	24.071	36.301	1.74	-10.84	49.79	50.51
2420	59.04	1.88	-0.27	23.515	35.522	1.88	-10.49	49.81	50.44
2430	61.71	1.97	-0.18	24.777	36.934	1.97	-10.02	49.9	50.67
2440	64.83	2.18	0.03	26.387	38.442	2.18	-11.01	50.01	50.88
2450	67.95	2.28	0.13	28.04	39.907	2.28	-12.02	50.17	50.97
2460	66.54	2.03	-0.12	27.538	39.005	2.03	-12.76	50.3	51.18
2470	66.37	2.29	0.14	27.581	38.791	2.29	-13.41	50.29	51.14
2480	65.94	2.41	0.26	27.74	38.203	2.41	-13.75	50.15	50.99
2490	65.27	2.5	0.35	27.796	37.476	2.5	-13.45	50.02	50.92
2500	65.65	2.58	0.43	28.211	37.438	2.58	-12.86	50.06	50.9

1.2.1.3、Antenna pattern

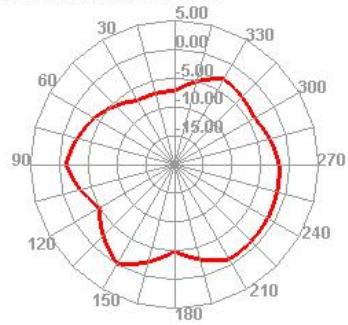
2400.000MHz



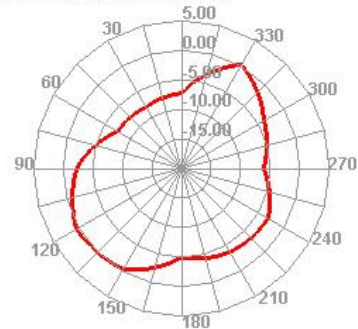
2400.000MHz H



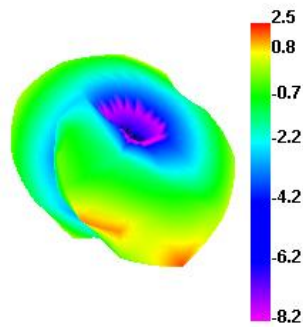
2400.000MHz E1



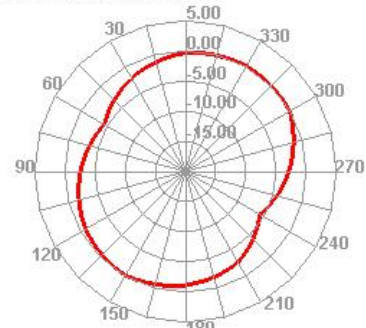
2400.000MHz E2



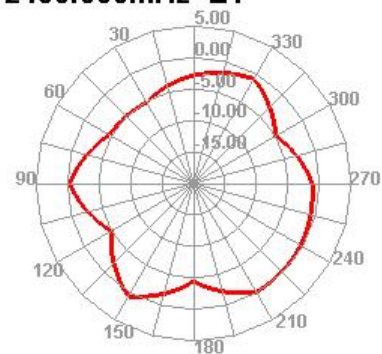
2450.000MHz



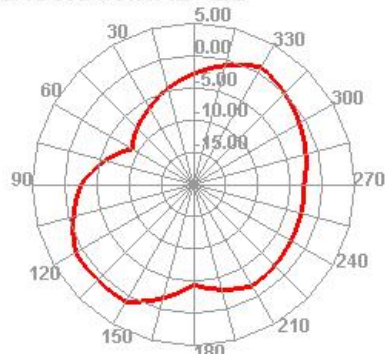
2450.000MHz H



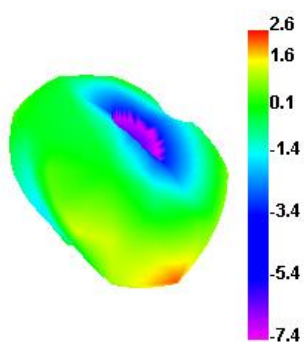
2450.000MHz E1



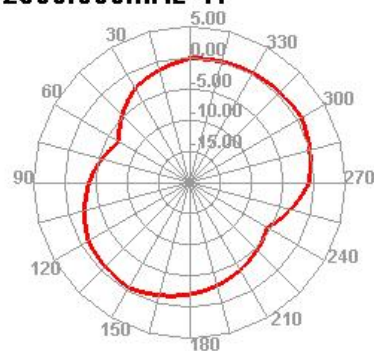
2450.000MHz E2



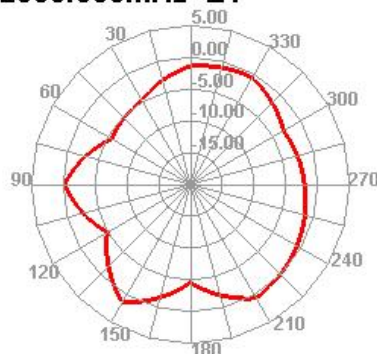
2500.000MHz



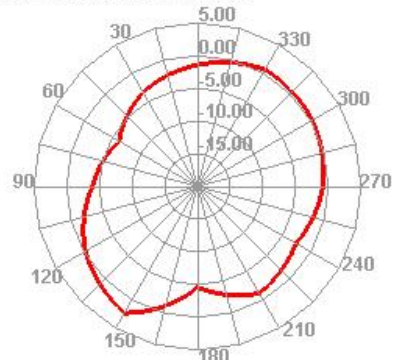
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



1.2.2、Active test

b模式 (11M)	频率 ■ 三角塔 □ 屏蔽箱 □		
Band	2.4G		
Channel	1	6	13
TRP	19.0	18.8	19.7
TIS	-86.7	-86.6	-85.7

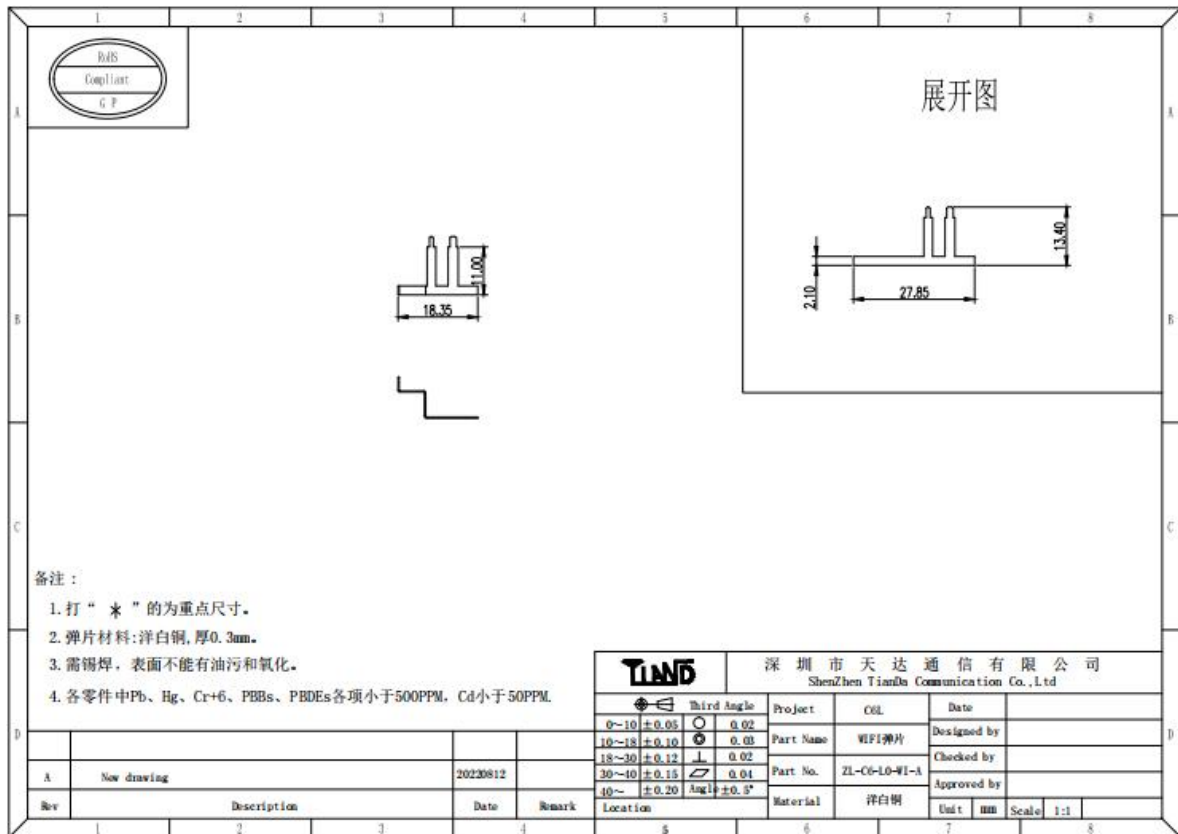
Above is the whole machine's active test data.

二、Structural specifications

2.1、Antenna composition

The WIFI antenna is mainly made of copperware.

2.2、Drawings



2.3、Dimensional measurement

数量 重点尺寸	1	2	3	4
18.35±1.00	19.28	18.86	19.31	19.20
13.40±0.15	13.41	13.42	13.40	13.39
2.10±0.15	2.10	2.11	2.09	2.23

三、Conclusion

This antenna is designed on the prototype provided by the customer at present. The electrical parameters and the structure size have reached the technical requirements, please confirm!

四、Packaging

Pack in plastic boxes.