

SPECIFICATION



ShenZhen TianDa Communication CO., LTD

T8 detector antenna Product Acknowledgement Letter

client	Shen Nuohua	Frequence	2400-2500MHz
project name	detector	Version	A
Project P.N.	SN-T8-TC-LG-A	Colour	natural color
R F Desigen	Huang zhilin	architectonics	Zhou luhong
Date	2023.12.29		

302 Building A, JinGang science and Technology Park, Qiaotou community, Fuhai Street, Bao'an District, Shenzhen

一、Detector antenna

1、specification

This acknowledgement document mainly provides the test results of the electrical and structural performance parameters of the 2.4G antenna for the T8 detector project. The following picture is of the 2.4G antenna designed by Tianda.



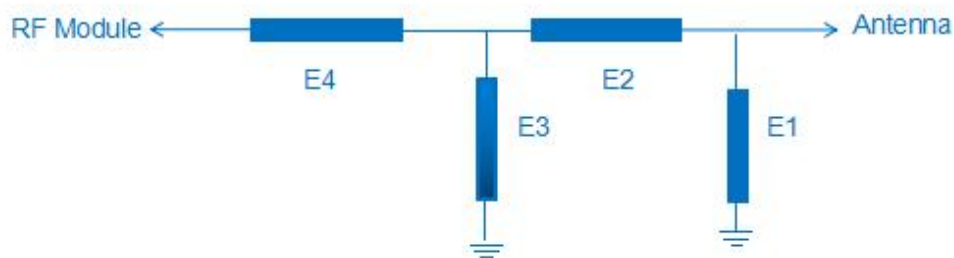
1.1、Electrical specifications

1.1.1、Electrical performance indicators

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

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

1.1.2、Matching circuit diagram

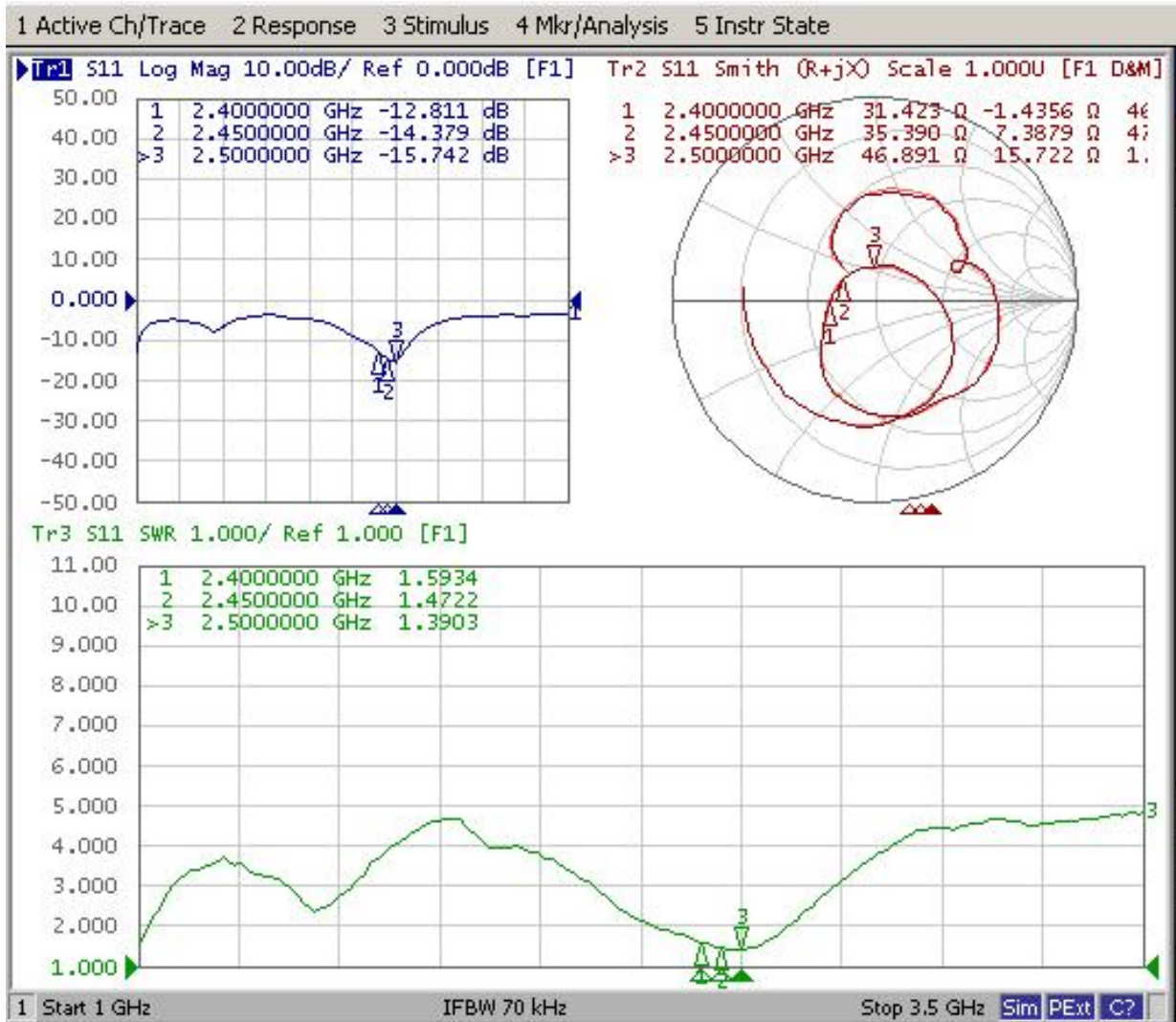


The matching circuit of the detector antenna consists of a 2.7nH inductor connected in series from the antenna end.

1.2、test

1.2.1、Passive testing

1.2.1.1、Antenna standing wave test (VSWR)



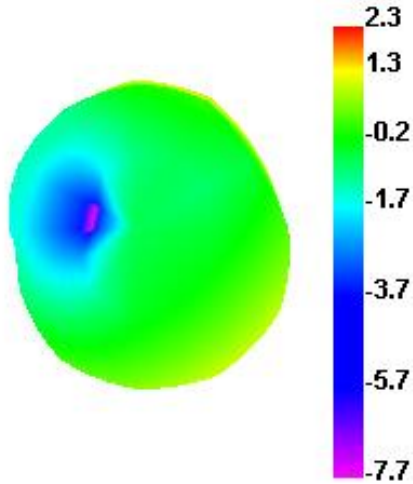
1.2.1.2、Antenna gain, efficiency

Passive Test For WiFi Antenna(2.4G)			
Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	57.59	-2.4	2.3
2410	53.15	-2.74	2.05
2420	54.61	-2.63	2.2
2430	56.29	-2.5	2.33
2440	58.21	-2.35	2.44
2450	63.8	-1.95	2.86
2460	63.99	-1.94	2.95
2470	63.19	-1.99	2.95
2480	65	-1.87	3.19
2490	69.82	-1.56	3.61
2500	64.92	-1.88	3.37

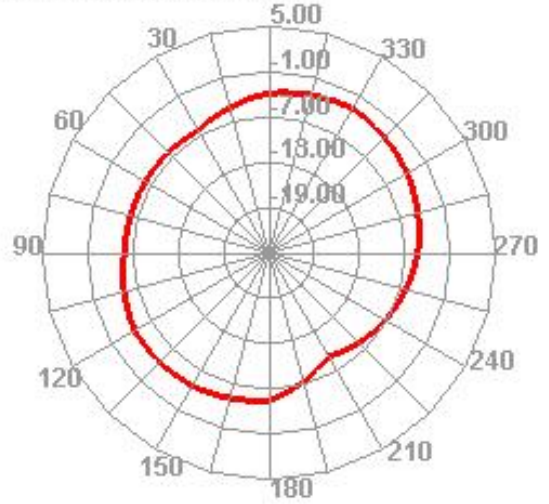
1.2.1.3、 antenna pattern

Radiation Pattern For WiFi Antenna(2400MHz)

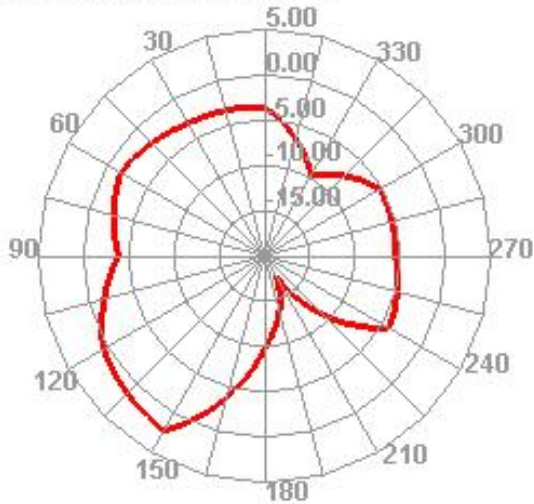
2400.000MHz



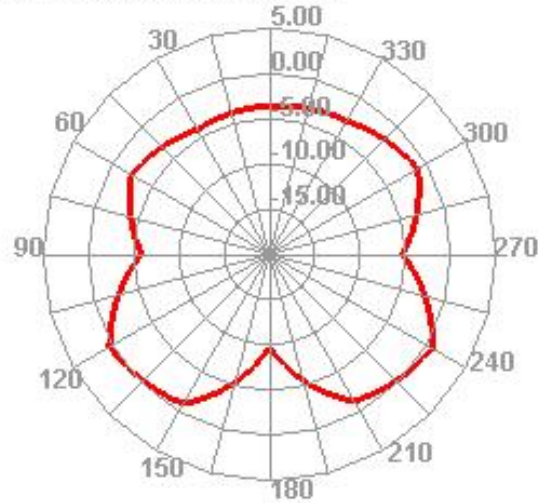
2400.000MHz H



2400.000MHz E1

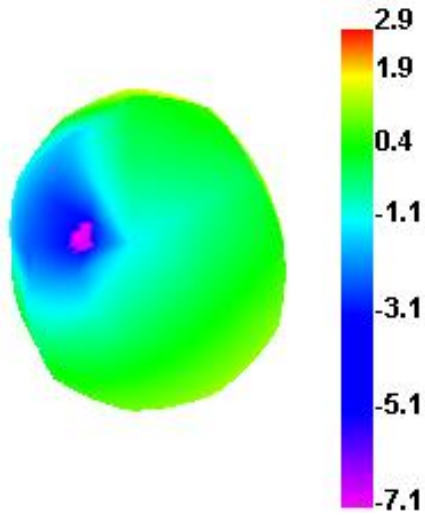


2400.000MHz E2

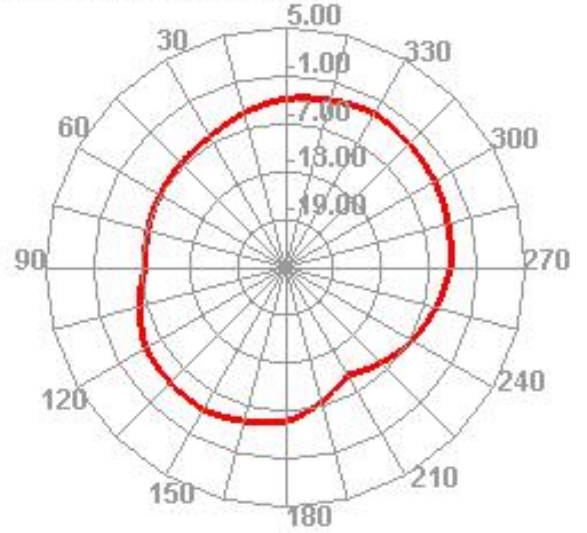


Radiation Pattern For WiFi Antenna(2450MHz)

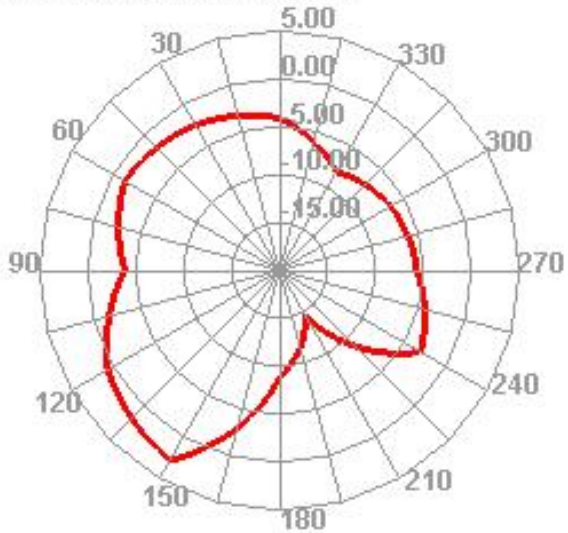
2450.000MHz



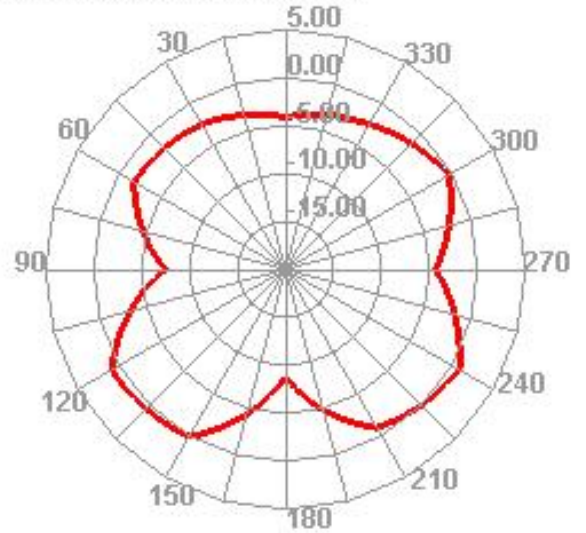
2450.000MHz H



2450.000MHz E1

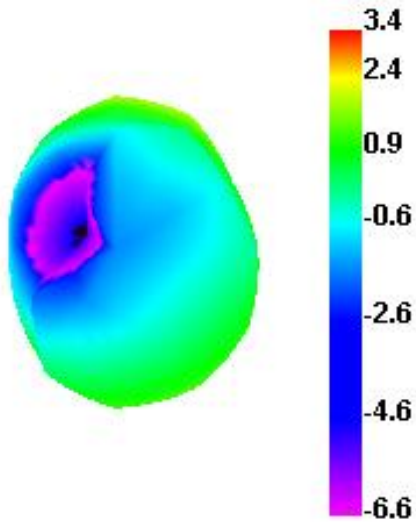


2450.000MHz E2

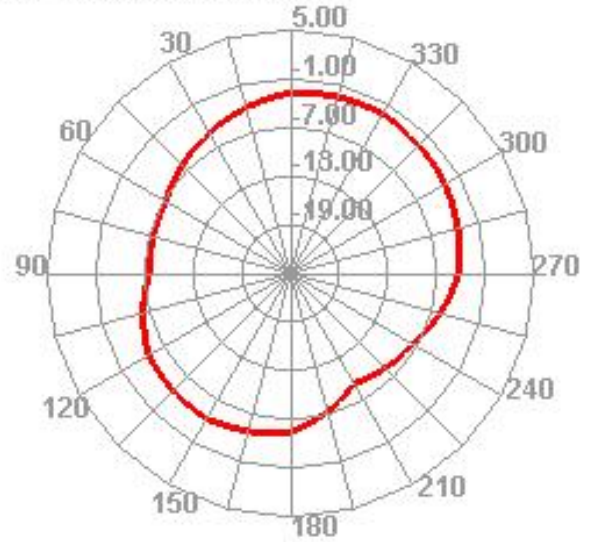


Radiation Pattern For WiFi Antenna(2500MHz)

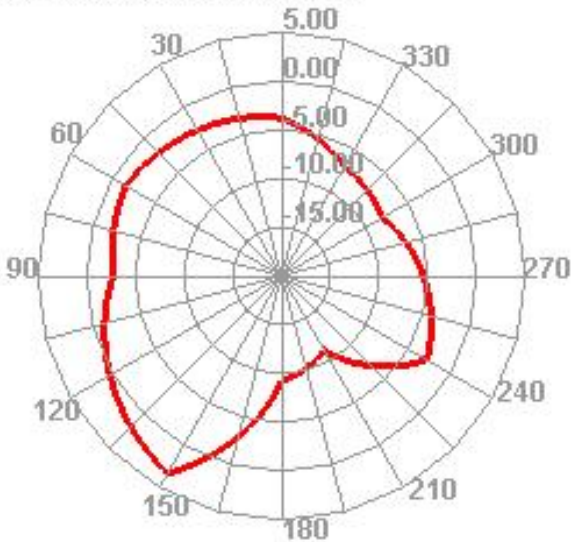
2500.000MHz



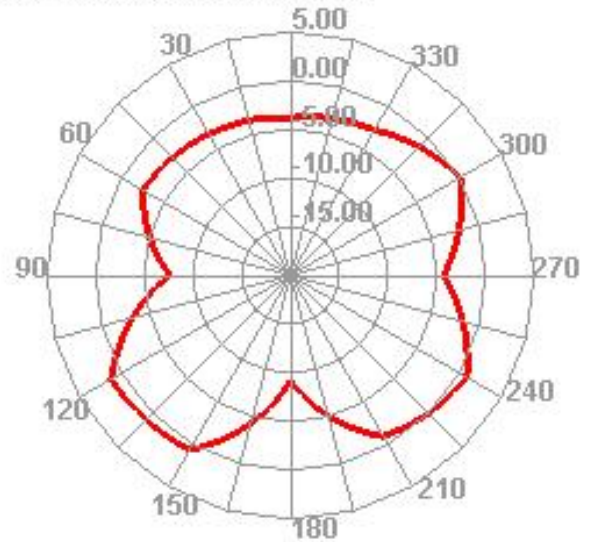
2500.000MHz H



2500.000MHz E1



2500.000MHz E2

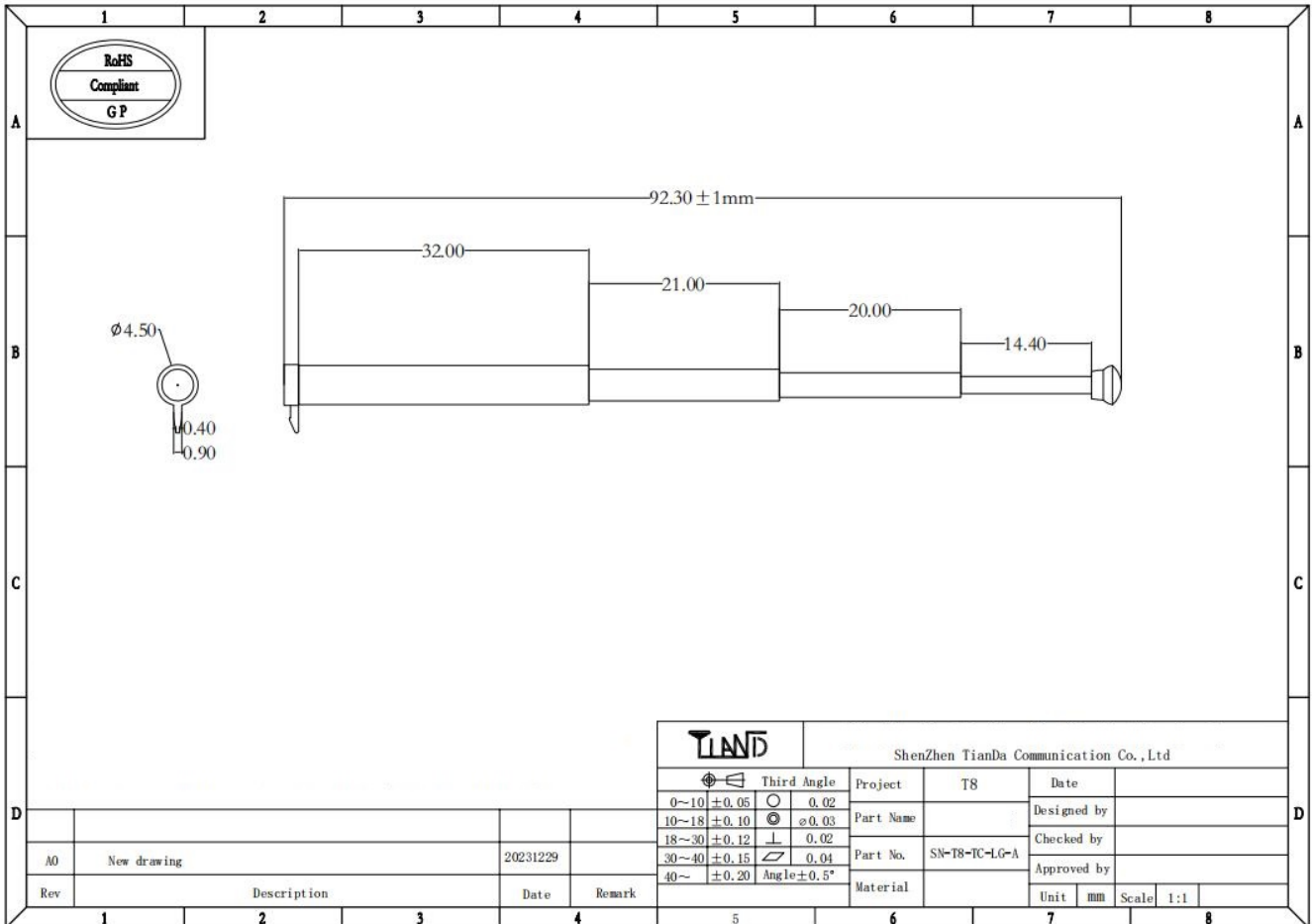


二、 Structural Specifications

2.1、 Antenna composition

The 2.4G antenna is mainly composed of rods.

2.2、 engineering drawing



三、 conclusion

This antenna has been designed on the sample provided by the customer at present. The electrical parameters and structural dimensions have met the technical requirements. Please confirm!