SPECIFICATION

Shenzhen Tianda Communications Co., Ltd.

ShenZhen TianDa Communication CO., LTD

LSC02 antenna

product specifications

Customer zero	Shenzhen Lindo Technology Co.,Ltd	frequency band	2400-2500MHz
Project Name	LSC02	Version	A
Project Material Number	XM-LS-02-WI-A	Color	black
RF Design	Wang Xinchang	Structural Design	Zhou Luhong
Date	2023.10.20		

Shenzhen TianDa Communication CO., LTD. Shenzhen TianDa Communication CO., LTD.

302 Building A, JinGang science and Technology, JinGang Science and Technology Park, Qiaotou Community, Fuhai Street, Baoan District, Shenzhen City

Park, Qiaotou community, Fuhai Street, Bao'an District, Shenzhen

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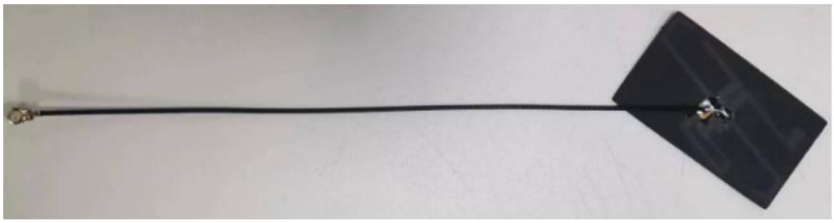
1. WIFI antenna

1. Specifications

This acknowledgment mainly provides the testing status of the electrical and structural performance parameters of the WIFI antenna of the LSC02 project. Down

The picture is a picture of the WIFI antenna designed by Tianda.



1.1. Electrical specifications

1.1.1. Electrical performance indicators

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

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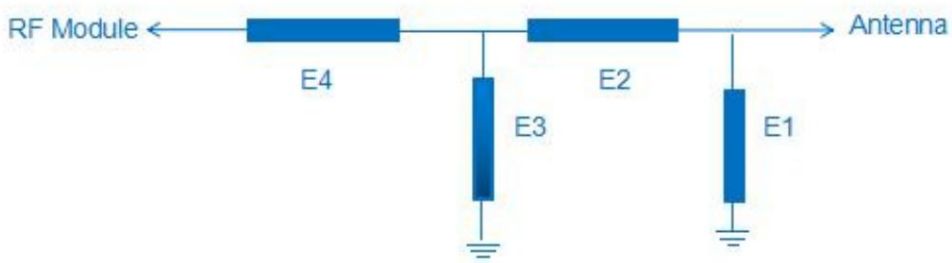
WIFI		
frequency band	frequency (MHz)	VSWR
WIFI	2400~2500	ÿ2.0

1.1.2. Matching circuit diagram

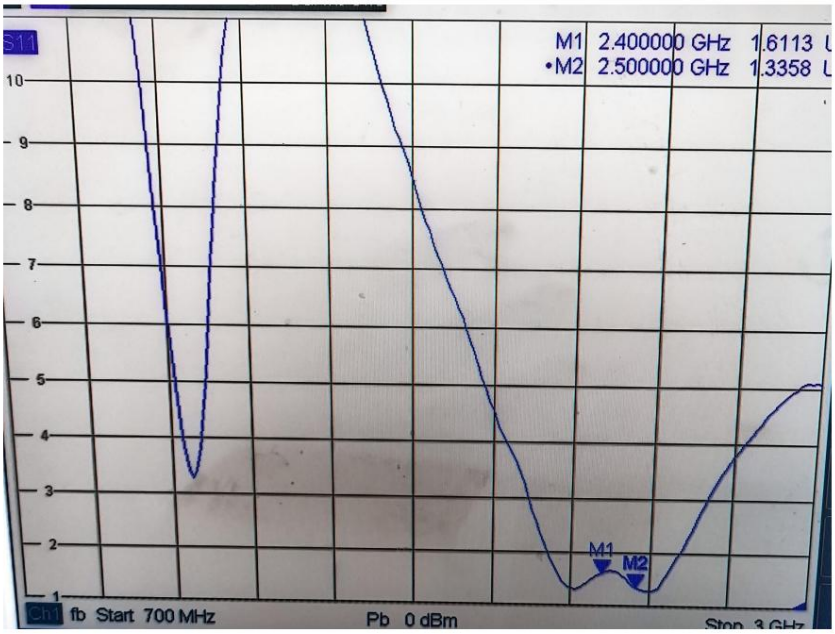


The matching circuit of the WIFI antenna is the original matching of the motherboard (0 ohm resistor in series) and has not been changed.

1.2. Testing

1.2.1. Passive test

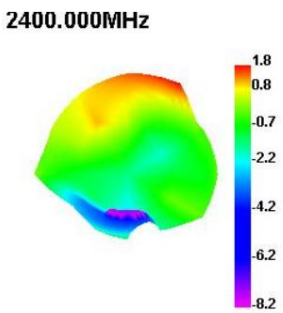
1.2.1.1. Antenna standing wave test (VSWR)

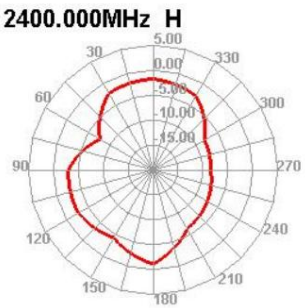


1.2.1.2. Antenna gain and efficiency

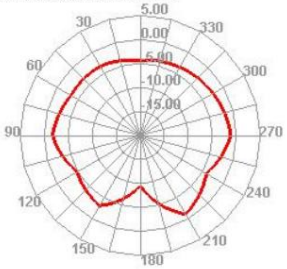
Passive Test For WIFI2.4G									
Freq (MHz)	Effi (%)	Gain (dBi)	Gain (dBd)	UHIS (%)	DHIS (%)	Max (dB)	Min (dB)	AttH (dB)	AttV (dB)
2400	50.18	1.76	-0.39	28.43	21.751	1.76	-17.07	44.84	44.84
2410	50.41	2.21	0.06	28.705	21.709	2.21	-17.75	44.66	44.69
2420	54.23	2.28	0.13	31.092	23.136	2.28	-18.13	44.72	44.78
2430	55.35	2.35	0.2	31.935	23.416	2.35	-18.55	44.84	44.86
2440	58.83	2.87	0.72	34.468	24.362	2.87	-18.57	45.45	45.45
2450	63.99	3.24	1.09	37.837	26.156	3.24	-19.08	46.03	46.01
2460	58.5	2.9	0.75	34.236	24.262	2.9	-20.92	45.82	45.88
2470	61.76	2.86	0.71	36.666	25.091	2.86	-21.02	45.5	45.57
2480	62.69	2.83	0.68	37.298	25.388	2.83	-19.72	45.36	45.41
2490	63.37	2.99	0.84	38.015	25.351	2.99	-17.3	45.44	45.48
2500	60.92	2.68	0.53	36.657	24.263	2.68	-15.56	45.28	45.34

1.2.2. Direction diagram

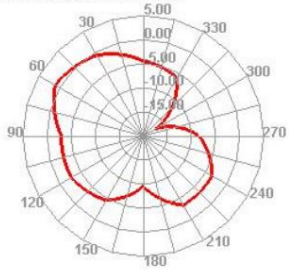




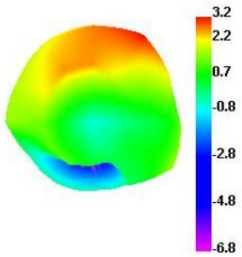
2400.000MHz E1



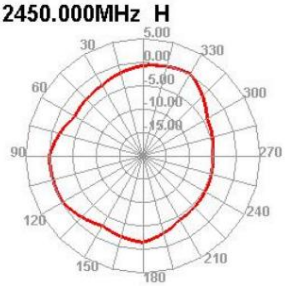
2400.000MHz E2



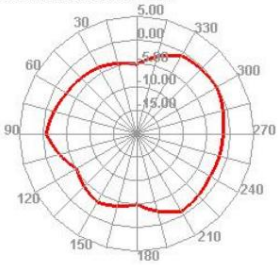
2450.000MHz



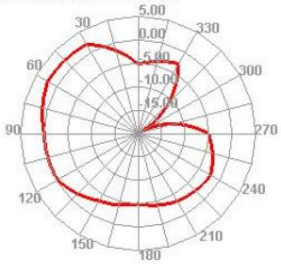
2450.000MHz H



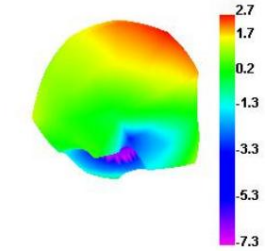
2450.000MHz E1



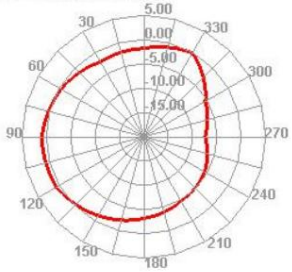
2450.000MHz E2



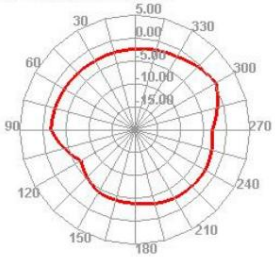
2500.000MHz



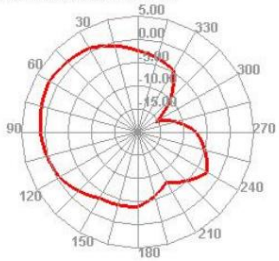
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



1.2.3. Active test data of the whole machine

b模式（11M）	暗室 ■ 三角锥 □ 屏蔽箱 □		
Band	2. 4G		
Channel	1	6	13
TRP	18.1	18.0	17.8
TIS	-87.0	-87.5	-87.9

The above is the WIFI antenna active test data of the whole machine.

2. Structural specifications

2.1. Antenna composition

The WIFI antenna is mainly composed of FPC+cable+bracket.

2.2. Engineering drawings