

做受人尊敬的企业与人



Digital Photo Frame Antenna Test Report

Model: XHY-JD156H-B07.0092WIFI-V1.0

Antenna type: PCB ANT

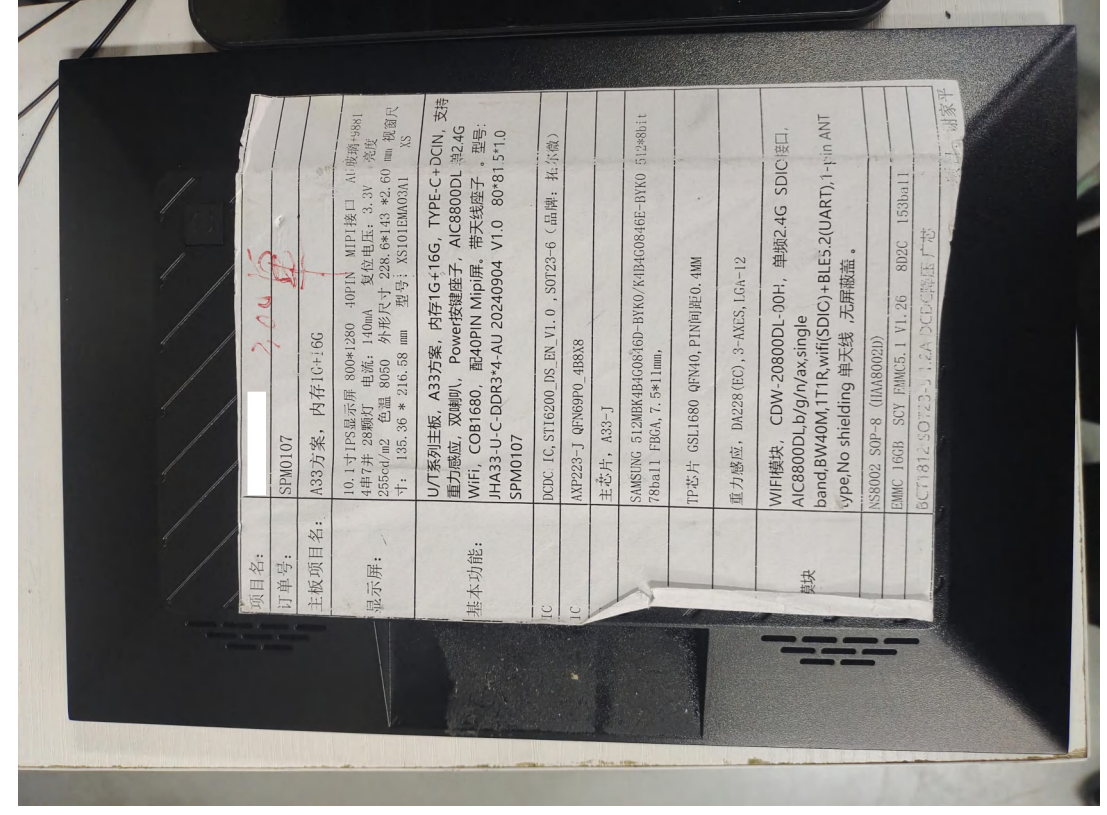
Company Name: Shenzhen XINHENGYANG Technology Co.,Ltd
address : 7A, Kanghesheng Building, No. 1 Chuisheng Road, Xili, Nanshan District, Shenzhen

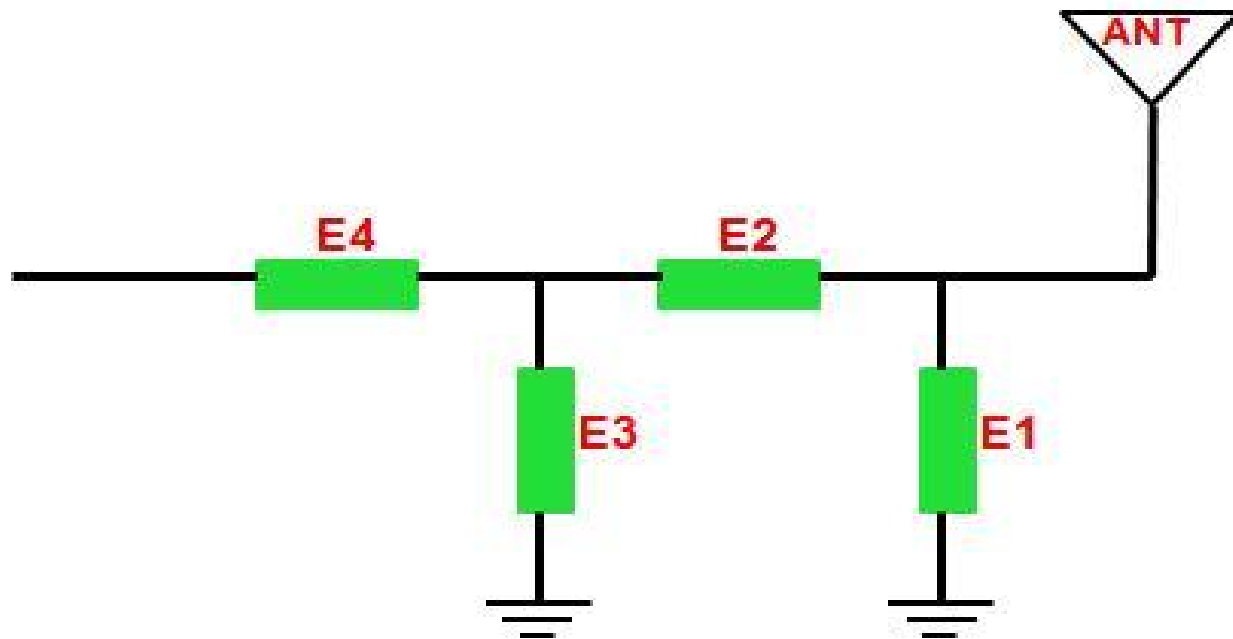
**Table of
contents**



- Debugging model
- Matching circuit test data
- Motherboard conduction data
- Darkroom active + passive test data
- WIFI measured image
- Sample placement

Debugging model: JT101M-I02:





The test antenna is a PCB sample

Main Antenna		GPS Antenna	
Element	Value	Element	Value
E1 (0402)		E1 (0402)	
E2 (0402)		E2 (0402)	
E3 (0402)		E3 (0402)	
E4 (0402)			
WIFI Antenna		AUX Antenna	
Element	Value	Element	Value
E1 (0402)		E1 (0402)	
E2 (0402)		E2 (0402)	
E3 (0402)		E3 (0402)	

WIFI	CH	TRP(54M)	TIS(54M)
802.11A	149	14.59	-77
	157	13.8	-76
	165	13.09	-76
WIFI	CH	TRP(11M)	TIS(11M)
802.11B	1	16.48	-84
	6	16.73	-84
	13	16.13	-84

WIFI	CH	TRP(54M)	TIS(54M)
802.11G	1	15.46	-75
	6	15.04	-75
	13	14.14	-75
WIFI	CH	TRP(MSC7)	TIS(MSC7)
802.11N	1	14.59	-71
	6	13.8	-71
	13	12.39	-72

WIFI	CH	TRP(40M,MCS7)	TIS(40M,MCS7)
802.11AC	36	12.04	-65
	149	13.08	-65
	157	12.16	-65
WIFI	CH	TRP(40M,MSC7)	TIS(40M,MCS7)
802.11AX	36	11.73	-64
	149	12.65	-63
	157	11.56	-63

WIFI	CH	TRP(54M)	TIS(54M)
802.11A	149	13.46	-73.46
	157	12.42	-74.21
	165	12.04	-73.78
WIFI	CH	TRP(11M)	TIS(11M)
802.11B	1	14.07	-80.96
	6	13.86	-81.64
	13	13.46	-81.26

WIFI	CH	TRP(54M)	TIS(54M)
802.11G	1	13.28	-70.02
	6	12.57	-70.81
	13	12.69	-70.61
WIFI	CH	TRP(MSC7)	TIS(MSC7)
802.11N	1	11.98	-65.04
	6	11.04	-67.35
	13	11.32	-67.23

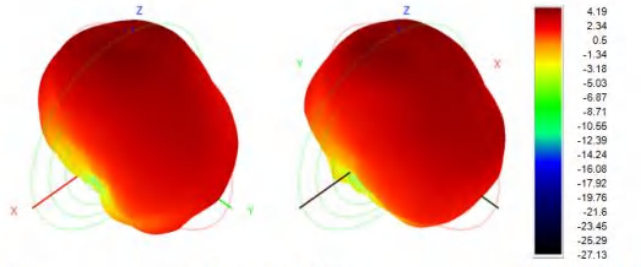
WIFI	CH	TRP(40M,MCS7)	TIS(40M,MCS7)
802.11AC	36	10.87	-62.24
	149	11.31	-62.31
	161	10.26	-61.26
WIFI	CH	TRP(40M,MSC7)	TIS(40M,MCS7)
802.11AX	36	10.11	-61.21
	149	10.21	-60.34
	161	10.04	-60.05

Passive Test For 2400-2500MHz		
Freq	Effi	Gain
(MHz)	(%)	(dBi)
2400	60.78	4.19
2410	61.12	4.29
2420	58.82	4.11
2430	61.30	4.22
2440	56.83	3.98
2450	58.39	4.14
2460	56.58	4.05
2470	52.33	3.83
2480	53.04	3.91
2490	53.58	3.80
2500	51.63	3.71

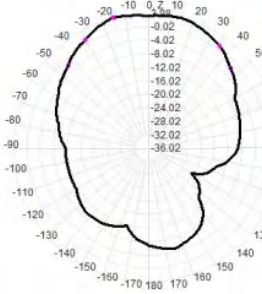
Radiation Patterns (2400MHz)

Radiation Patterns (2450MHz)

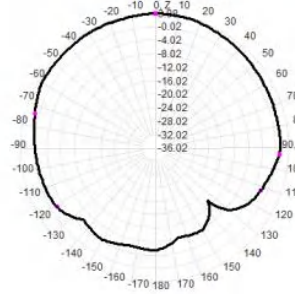
2400MHZ



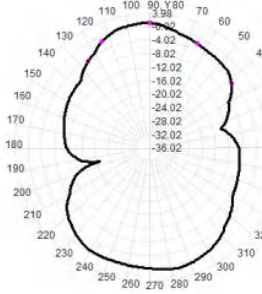
Total(E1-XZ)



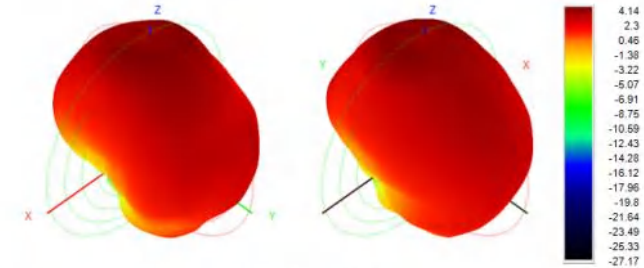
Total(E2-YZ)



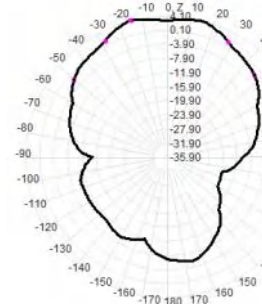
Total(H-XY)



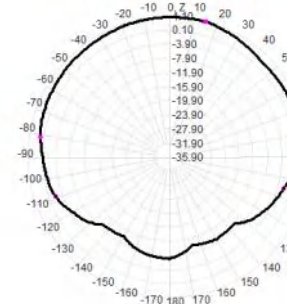
2450MHZ



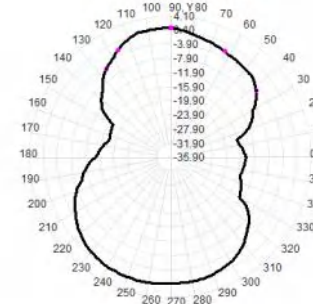
Total(E1-XZ)



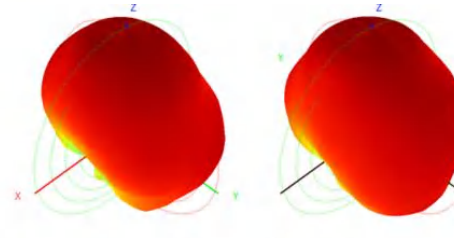
Total(E2-YZ)



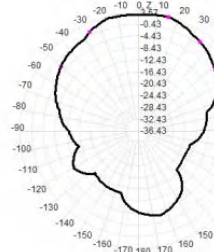
Total(H-XY)



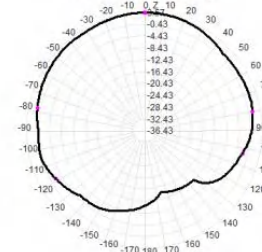
2500MHZ



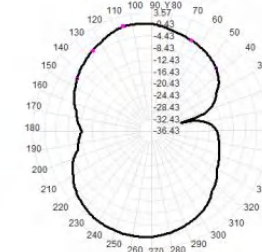
Total(E1-XZ)



Total(E2-YZ)



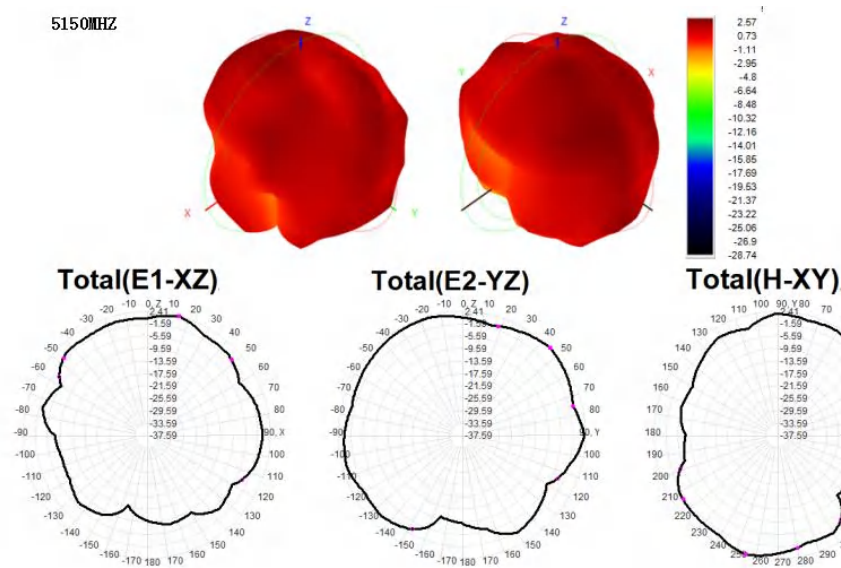
Total(H-XY)



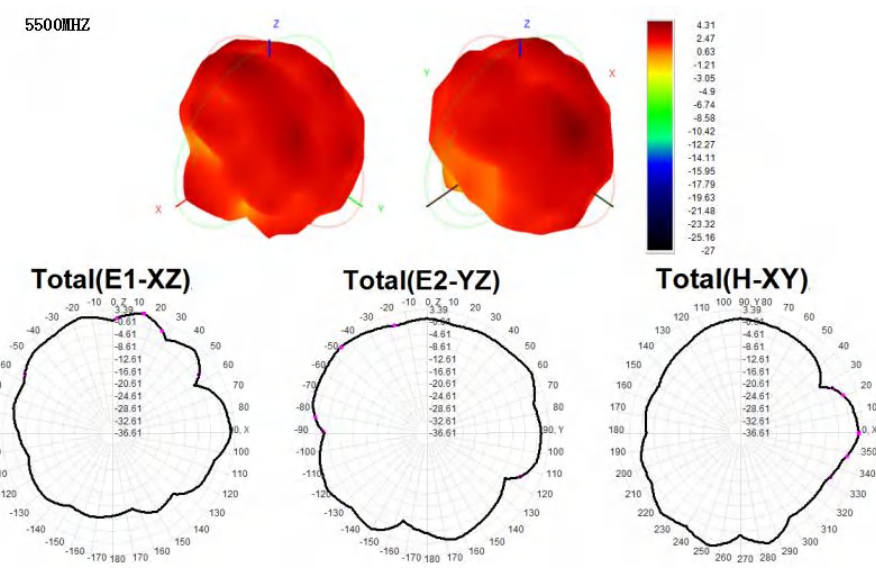
Radiation Patterns (2500MHz)

Passive Test For 5150-5850MHz					
Freq	Effi	Gain	Freq	Effi	Gain
(MHz)	(%)	(dBi)	(MHz)	(%)	(dBi)
5150.0	58.24	2.57	5535.0	56.54	3.58
5185.0	60.44	3.04	5570.0	59.14	2.93
5220.0	51.87	2.78	5605.0	62.09	3.04
5255.0	58.24	2.84	5640.0	55.04	3.39
5290.0	58.55	2.82	5675.0	55.42	2.96
5325.0	56.08	2.93	5710.0	55.32	2.75
5360.0	56.93	3.28	5745.0	56.26	2.50
5395.0	56.69	2.85	5780.0	55.36	2.30
5430.0	59.88	2.75	5815.0	50.09	2.36
5465.0	60.67	3.45	5850.0	53.10	2.75
5500.0	62.65	4.31			

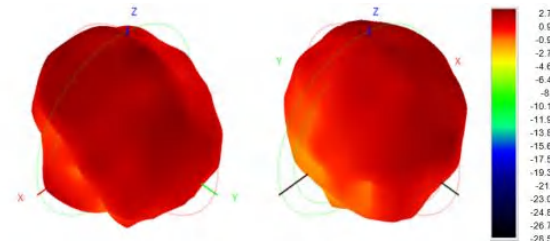
Radiation Patterns (5150MHz)



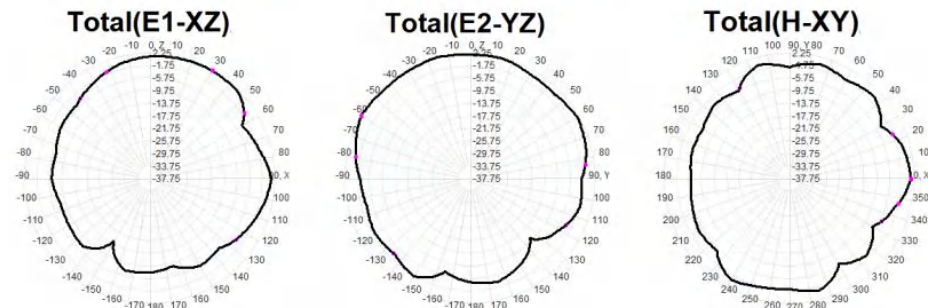
Radiation Patterns (5500MHz)



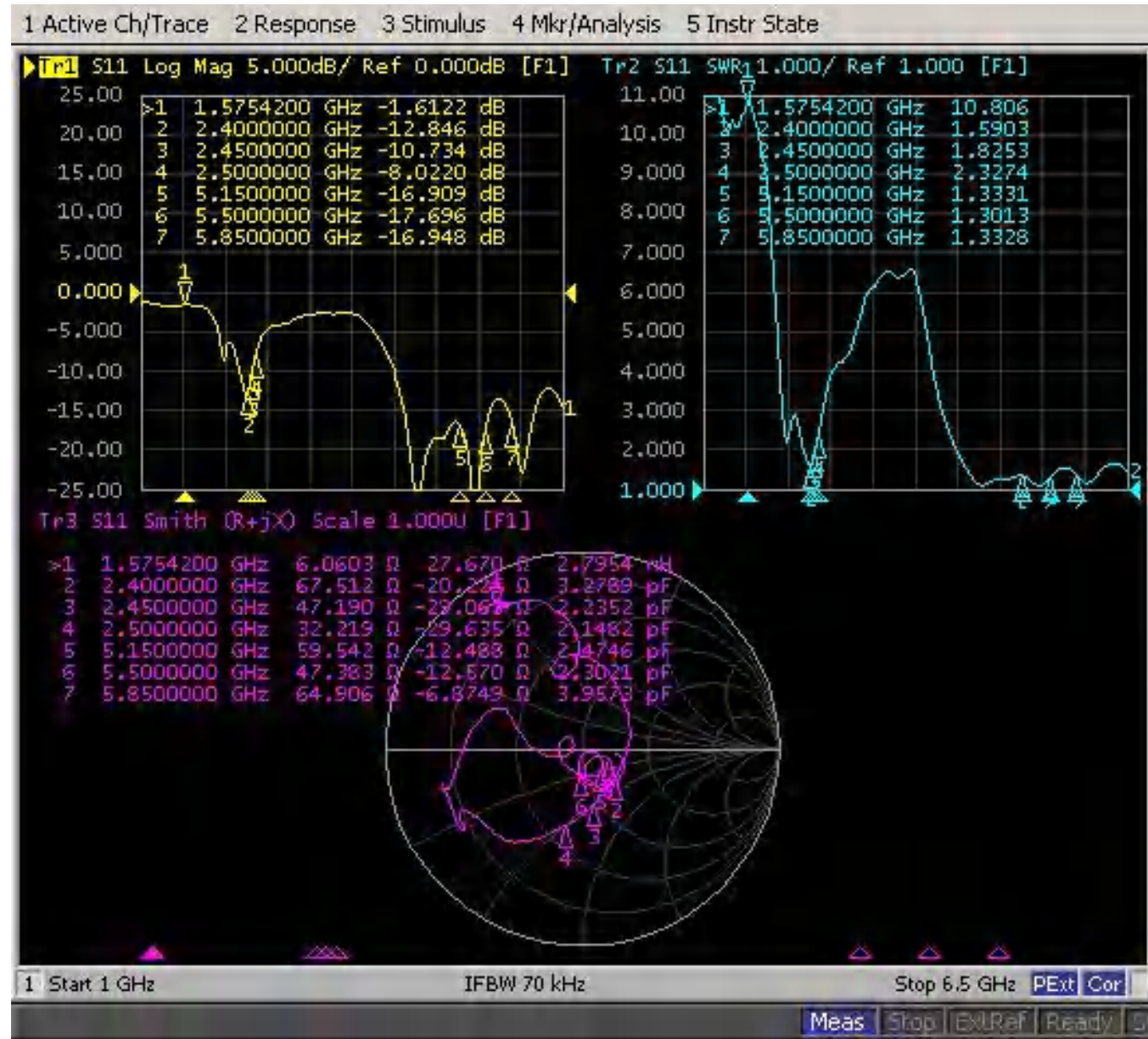
5850MHZ

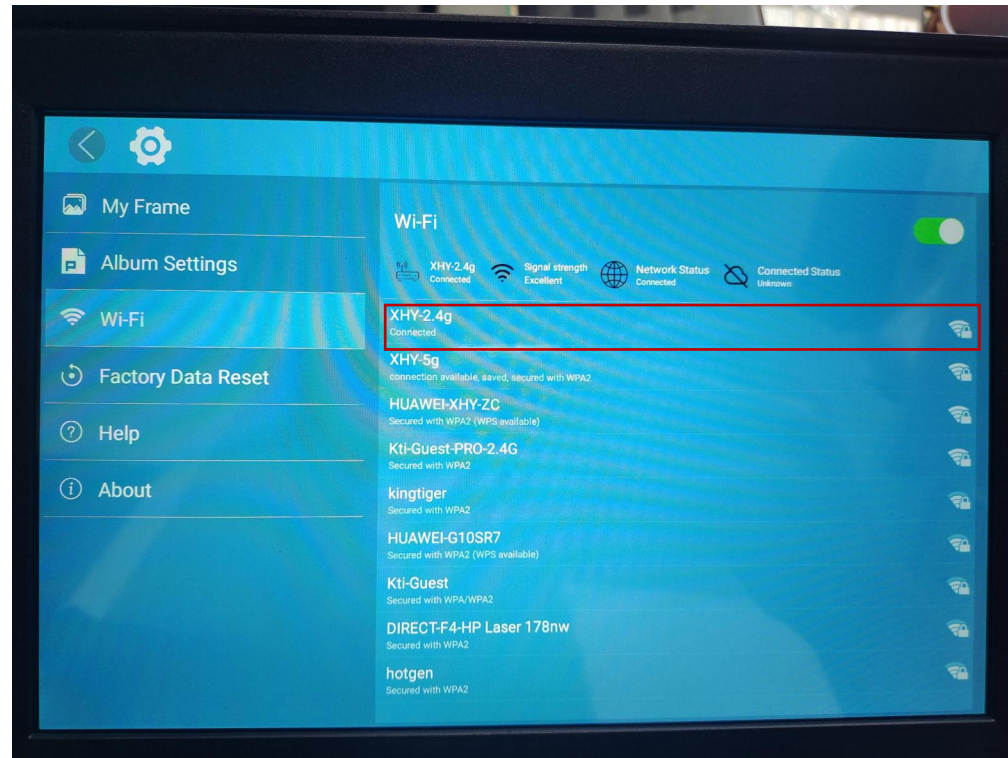


Radiation Patterns (5850MHz)



Passive test data standing wave diagram

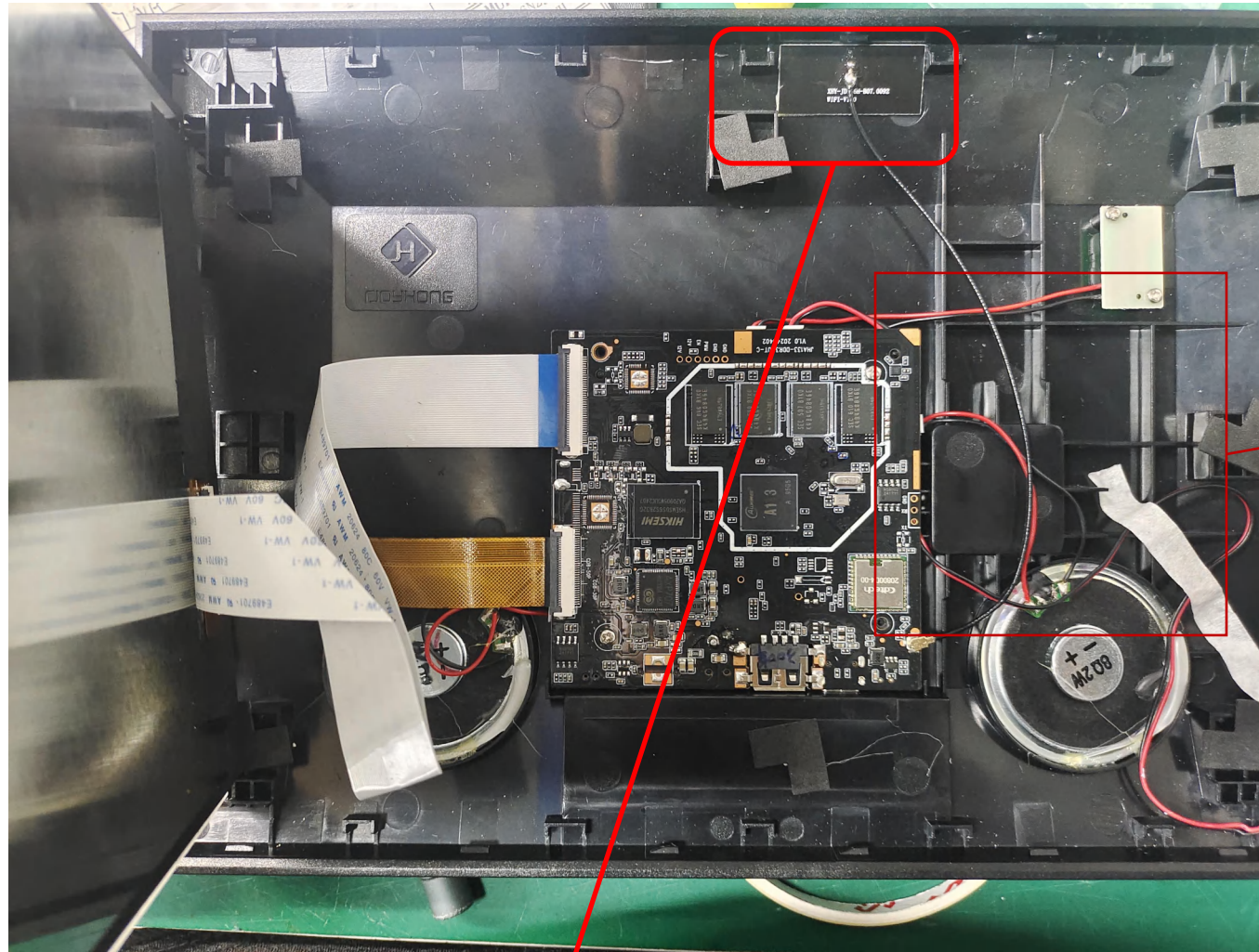




Wi-Fi 2.4G has a full signal at a distance of **15m** from the router in our company without any obstacles.



Wi-Fi 5.8G has a full signal at a distance of **15** meters from the router in our company under unobstructed conditions.



Keep speaker cables as far away from the antenna as possible

As shown in the picture, the WIFI antenna is attached to this area

XHY-JD156H-B07.0092
WIFI-V1.0

REV

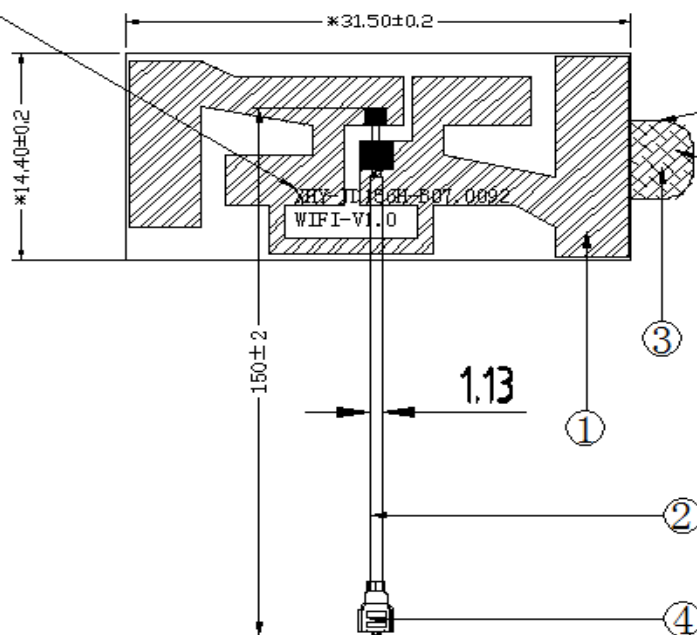
DATE

DESCRIPTION

A

2024-05-08

首次发行



背胶手撕

背胶与JT079H-A03P
项目供用

PCB板厚

0.60±0.05

0.80±0.15

总厚(含离型纸)

技术要求:

- 1:标“*”尺寸为重点管控尺寸;
- 2:没有标注尺寸参见CAD图纸;
- 3:无虚焊、假焊、连锡、断路等焊接不良现象;
- 4:所有部件符合ROHS要求;
- 5:成品需全检性能;

深圳市鑫恒阳科技有限公司

4	端子	一代端子	1
3	背胶	30.3*13.2	1
2	同轴线	Φ 1.13mm双锡线 黑色	1
1	PCB	RF-4单面板 黑色	1
No.	Name	Specification.	Amount

第三角法			
0~10	±0.10	○	0.02
10~20	±0.12	◎	0.03
20~40	±0.15	⊥	0.02
40~	±0.20	∠	0.04
		∠	0.02

机种

JD156H-B07

日期

2024-05-08

品名

天线

审核

料号

CP. 21. 0000037

设计

结构

李明

材料

/

射頻

夏逸

客户料号

确认

单位

mm

比例

1:1

版本

REV:A

请勿实测图纸 位置



JOYHONG, Our Shared career platform.
钜弘，我们一起共享的事业平台