

深圳市酷影派科技有限公司

Shenzhen KuYingPai Technology Co.,Ltd

天线规格承认书

Antenna Specification for Approval

客户名称

Customer Name:

项目名称:

Product Name: 运动相机 SJ4000

产品名称:

Product Name: WIFI 天线

产品料号:

Part NO.: SJ4000

制 表:

Write By:

日 期:

Issued Date: 2023-08-28

客户 (Customer)

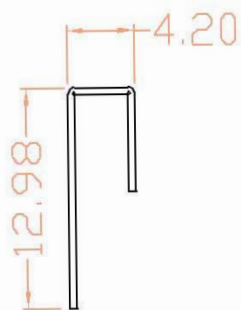
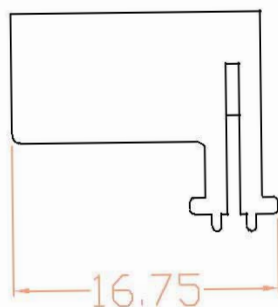
工程 R&D Dept	采购 Business Dept	承认 Approved By

酷影派

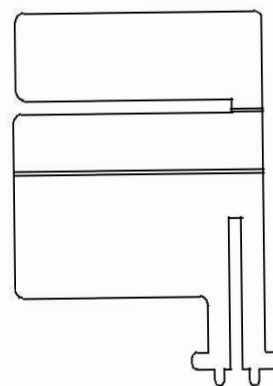
研发 R&D Dept	工程 Engineer Dept	审核 Approval

Product Specification

A. Electrical Characteristics	
Frequency	2400 MHz ~2500 MHz
VSWR	<3.0 @ 2400 MHz ~ 2500 MHz
Efficiency	>30%
Impedance	50 Ohm
Polarization	Linear
Gain	-0.42DB
B. Material & Mechanical Characteristics	
Material of Radiator	Cu
Cable Type	
Connector Type	
Dimension	
C. Environmental	
Operation Temperature	- 30 °C ~ + 80 °C
Storage Temperature	- 30 °C ~ + 85 °C



展开图



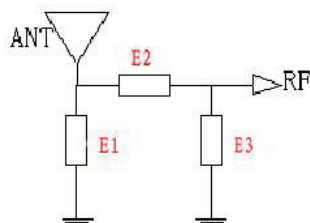
洋白铜 1/2H T=0.4

Rev	Description	Date	Remark
A	New drawing		

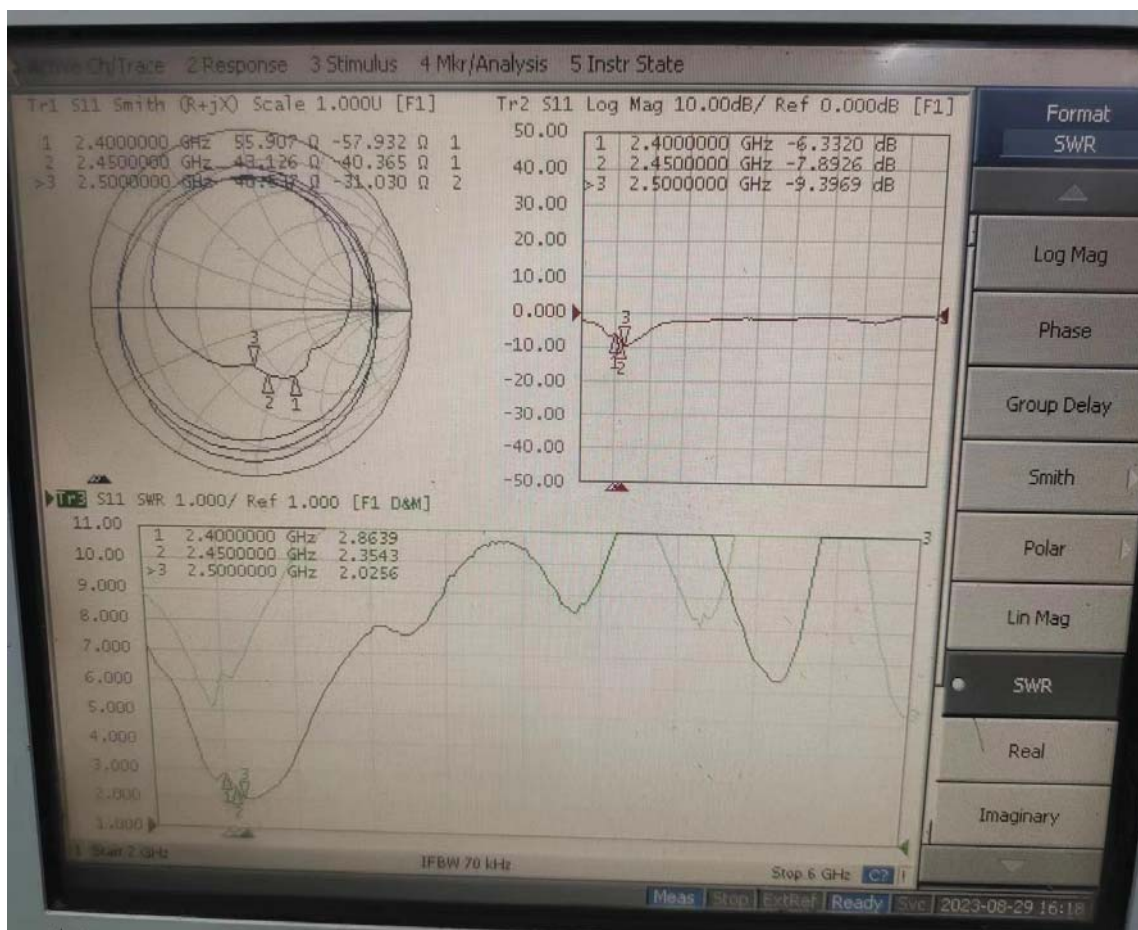
Third Angle		Project	SJ4000	Date			
0~10±0.05	○ 0.02	Part Name			Designed by		
10~18±0.10	◎ 0.03	Part No.			Checked by	MD	
18~30±0.12	⊥ 0.02	Material				RF	
30~40±0.15	∇ 0.04	DWG No.			Approved by		
40~	±0.20	Angle	±0.5°	Unit	mm	Scale	1:1
Location		Rev	A				

1. 天线匹配(原天线匹配)

	E1	E2	E3
WIFI	N/A	0 欧姆	N/A



2、天线无源 S11 参数





深圳众城无线技术有限公司

Shenzhen unity wireless technology co., ltd

地址: 深圳市宝安区西乡东方建富愉盛工业区 A6 栋 4 楼

电话: 0755-23285621

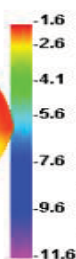
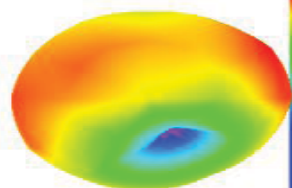
传真: 0755-23285621

天线无源测试数据:

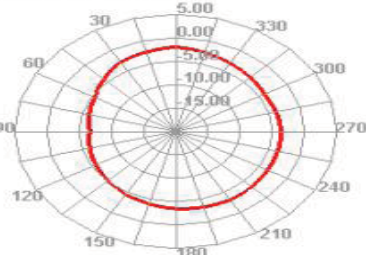
Freq (MHz)	Effi (%)	Gain (dBi)
2400	34	-1.65
2410	30.8	-2.09
2420	32.97	-1.9
2430	33.79	-1.78
2440	37.77	-1.28
2450	32.95	-0.74
2460	31.65	-0.83
2470	31.54	-0.89
2480	30.96	-0.7
2490	33.48	-0.42
2500	31.35	-0.58

天线方向图:

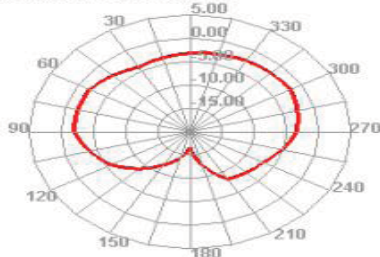
2400.000MHz



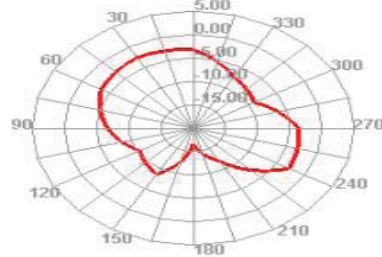
2400.000MHz H



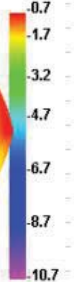
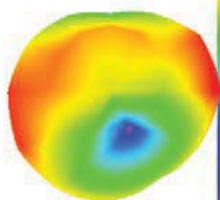
2400.000MHz E1



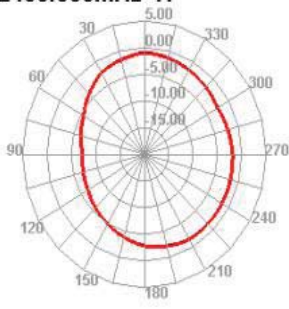
2400.000MHz E2



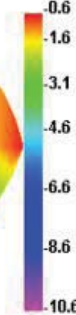
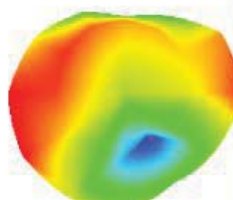
2450.000MHz



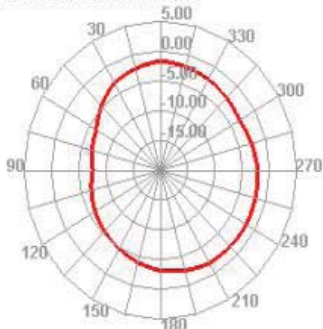
2450.000MHz H



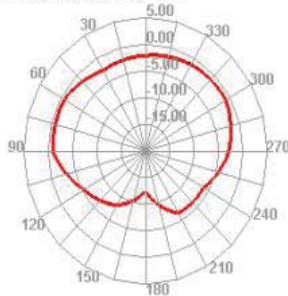
2500.000MHz



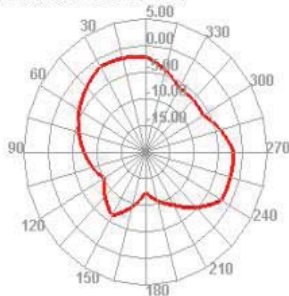
2500.000MHz H



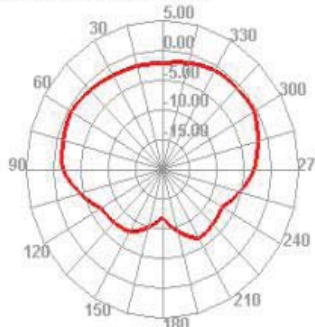
2450.000MHz E1



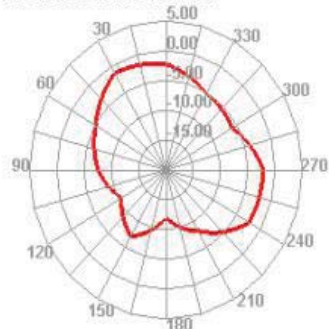
2450.000MHz E2



2500.000MHz E1



2500.000MHz E2



测试设备

■ 量测仪器: 微波暗室, 网络分析仪, 标准天线.

■ 微波暗室说明:

这是本公司设置在深圳的微波暗室, 本微波暗室是属于一套远场量测系统, 暗室的大小为 7.0 米 x 4.0 米 x 3.0 米, 静区尺寸(Quiet zone)大小为 15 厘米 x 15 厘米 x 15 厘米。

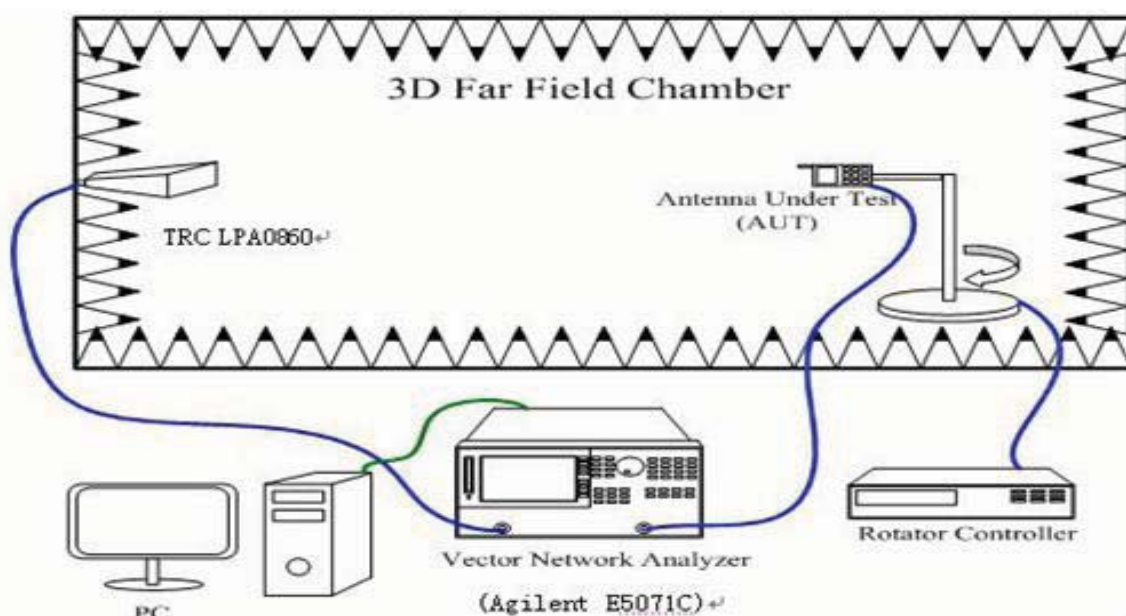


图. 1. 微波暗室内仪器设置图

图. 1 为微波暗室内的仪器设置及网络分析仪的联接图, 发射天线(本暗室所使用发射天线的型号为 TRC LPA0860 800MHZ-6GHZ)到待测天线(AUT)的距离为 1.35 米, 待测天线放置在旋转平台上, 藉由控制转台旋转的角度可对待测天线做概略性及较为准确的量测。

将待测天线放置于旋转台上, 并测得其各个平面(ZY 平面及 ZX 平面)的 360 度场强数据。再将待测天线换置成标准偶极天线(本暗室所使用的标准偶极天线型号为 TRC AD series dipole antenna 800MHz~2500MHz)将其 360 度的场强数据测出, 以作换算增益标准值, 经由式 1 的换算即可获得待测天线的增益值及方向图。

$$G_{AUT} = G_{stand} + P_{AUT} - P_{stand}$$

G_{AUT} : Gain of AUT

G_{stand} : Gain of Standard Gain Antenna

P_{AUT} : Measured Power of AUT

P_{stand} : Measured Power of Standard Gain Antenna