

深圳丰瑞祥智能科技有限公司

承认书

Sampe Approval Drawing

客户			
CUSTOMER			
日期	2021. 08. 01		
Date			
产品型号	2. 4G+5. 8G PCB Board Exposed Cable Length 280mm 5dBi Antenna (with First generation IPEX Head)		
Product Type			
料号			
Part No			
供应商承认栏			
工程 ENGINEER	品保 QC	业务 SALES	
客户承认栏			
工程 ENGINEER	品保 QC	生产 MANUFACTORY	采购 PURCHASING

1. 产品简介 Product Profile

2.4G+5.8G PCB 板外露线长 1000mm 5dBi 天线（带第一代 IPEX 头）是一款 2.4GHz+5.8G 双频 PCB 板天线，此天线应用 dipole 天线原理设计而成，具有较高增益，较高效率，全向性，良好端口匹配等特点。其用于无线终端产品可以有较大的覆盖区域与很好的联通速率。

2.4 GHz+5.8 GHz PCB board 280 MM 5dBi antenna (with First generation IPEX head) is a 2.4 GHz+5.8 GHz dual-band PCB board antenna. This antenna is designed based on dipole antenna principle. It has high gain, high efficiency, omnidirectionality, good port matching and so on. Characteristic. It can be used in wireless terminal products with large coverage area and good connection rate.

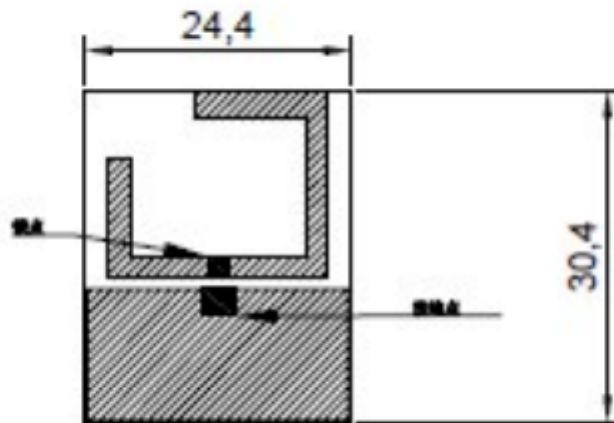
2. 应用领域 Applications

- ◆ 车载 DVD、遥控智能玩具车等 Vehicle DVD, remote intelligent toy car, etc.;
- ◆ 网络摄像机, 机顶盒等 Network cameras, set-top boxes, etc.;
- ◆ 消费电子设备或智能家电（电视, DVD 播放机, 蓝光播放器等）Consumer electronic devices or smart appliances (TV, DVD player, Blu-ray player, etc.);

3. 主要特性 Main characteristics

- ◆ 符合常规天线性能要求实现近全向覆盖 Accord with the performance requirements of conventional antennas to achieve near omnidirectional coverage;
- ◆ 平均增益较为饱满减少覆盖盲区 Average gain is more full to reduce coverage blind area;
- ◆ 端口匹配良好提高了发射接收的效率 white matching is good to improve the efficiency of transmission and reception;

4、结构尺寸图和实物图、装配图 Structure size diagram and physical diagram, assembly diagram:



5. 产品主要技术参数 Main Technical Parameters of Products

5.1：电气参数 Electrical parameters

频率范围 Frequency range	2400-2500MHz / 5150-5850MHz
带宽范围 Bandwidth range	700-960MHz / 1710-2700MHz
特性阻抗 Characteristic impedance	50 Ω
电压驻波比 VSWR	≤2:1
增益 Gain	2.4G/5.8G:5.0±1dBi
最大功率 Maximun power	2W
极化形式 Polarized form	Level
辐射方向 Radiation direction	Omnidirectional

5.2：机械参数

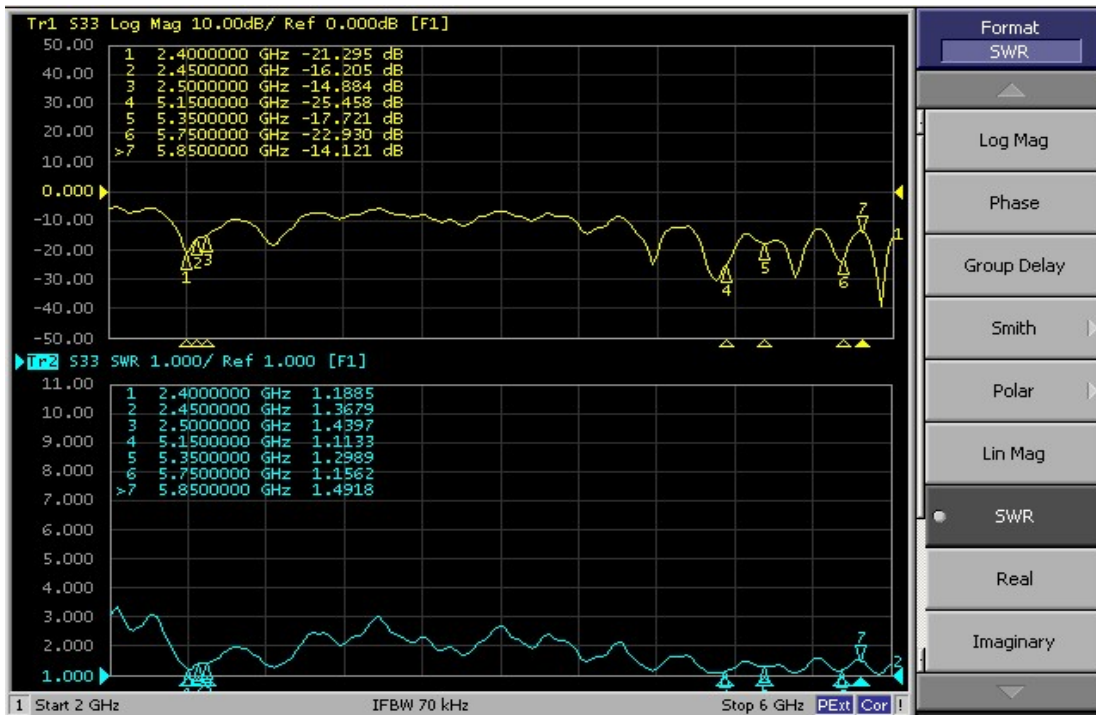
长度 Length	280MM +IPEX(±3mm)
同车电缆 Cables in the same car	1.13 gray, black line

5.3：工作/储存温度

工作温度 Operating temperature	-20℃～60℃
储存温度 Storage temperature	-30℃～80℃

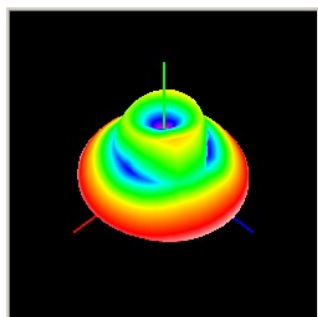
6. 产品性能测试 Product Performance Testing

6.1: 网络分析仪测试报告 Network analyzer test report:

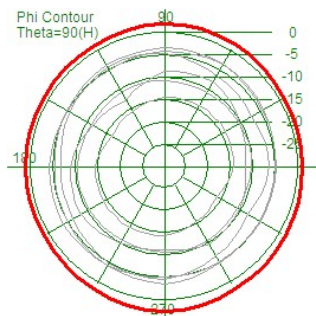


6.2: 暗室 2D、3DRaditation Pattern

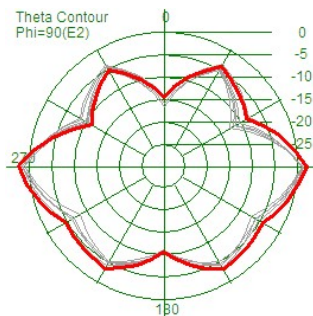
Frequency (MHz)	X-Y plane theta=90		Y-Z plane Phi=90		E-total (dBi)	Efficiency (%)
	Peak Gain	Average Gain	Peak Gain	Average Gain		
2400	4.89	-4.54	4.92	-5.05	4.82	70.15%
2450	4.85	-4.21	4.94	-5.19	4.84	73.23%
2500	5.19	-4.91	5.29	-4.88	5.29	74.09%
5150	4.98	-4.57	5.18	-5.05	5.08	70.86%
5350	4.95	-4.21	5.05	-5.19	4.95	70.49%
5750	4.97	-4.91	4.91	-4.88	4.93	71.61%
5825	4.93	-4.91	5.08	-4.88	5.08	72.37%



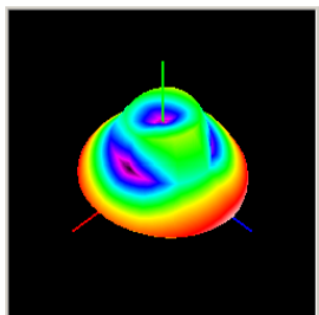
2.4GHz



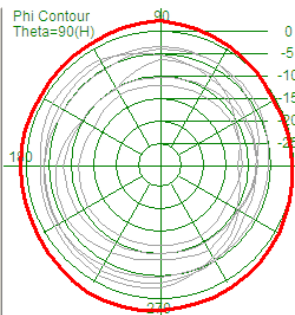
Gain: 4.82dBi



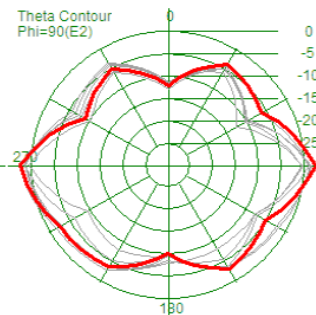
Efficiency:70.15%



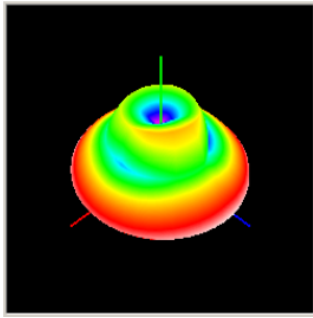
2.45GHz



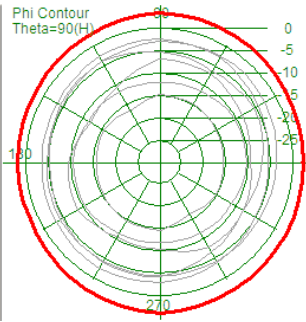
Gain: 4.84dBi



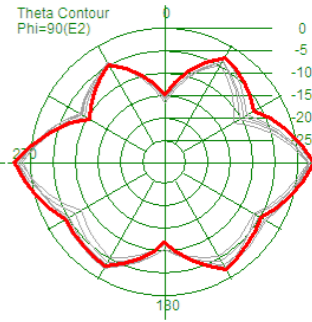
Efficiency: 73.23%



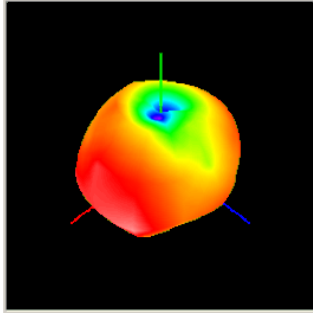
2.5GHz



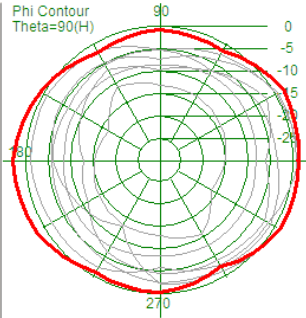
Gain: 5.29dBi



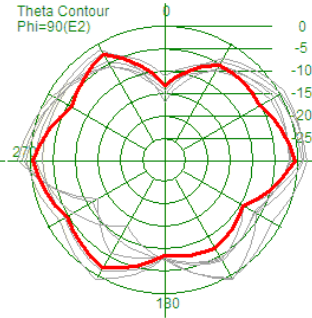
Efficiency: 74.09%



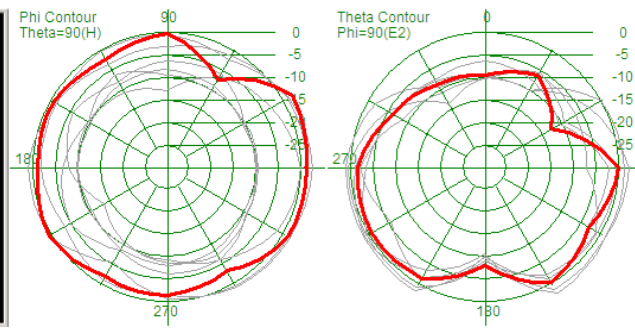
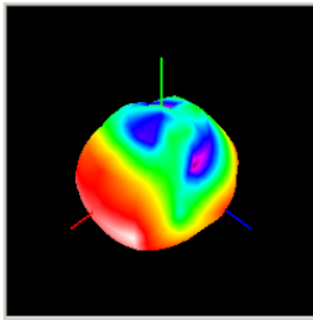
5.15GHz



Gain: 5.08dBi



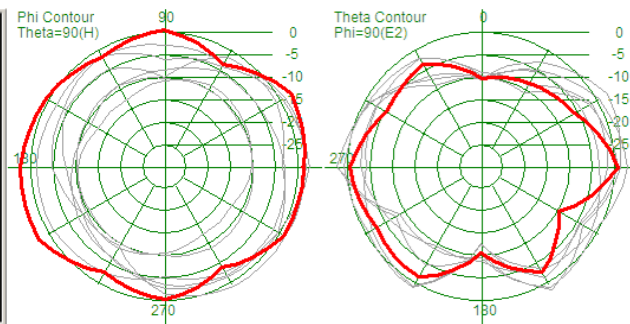
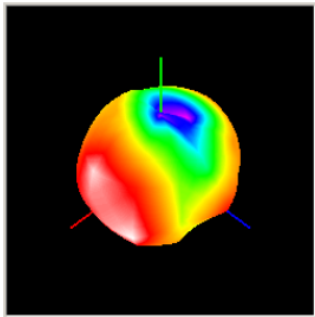
Efficiency: 70.86%



5.35GHz

Gain: 4.95dBi

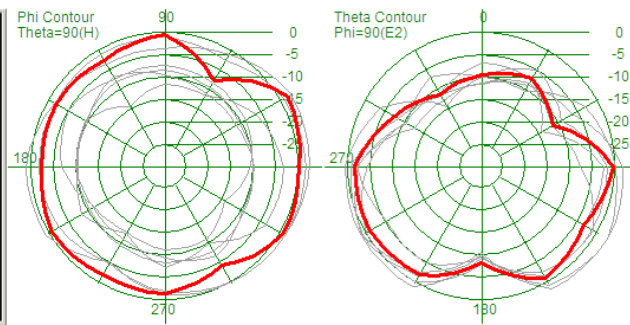
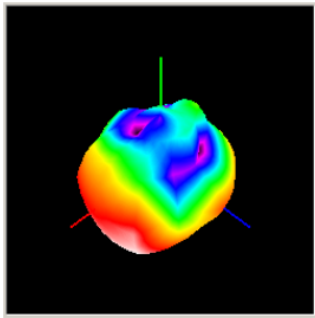
Efficiency: 70.49%



5.75GHz

Gain: 4.93dBi

Efficiency: 71.61%



5.825GHz

Gain: 5.08dBi

Efficiency: 72.37%