

深圳市红心科技电子有限公司

Shenzhen HX Antenna Co., Ltd.

产品承认书

SPECIFICATION FOR APPROVAL

公司名称 (Company name): 深圳市红心科技电子有限公司Shenzhen HX Antenna Co., Ltd.品 名 (Product name): 25 双频 FPC 天线 (2.4G 5.8G antenna)料 号 (DWM P/N): HX-FPC25-259-120B1

客户料号 (Customer P/N): _____

规 格 (Specification): 详见规格书 (refer to specification)日 期 (Date): 2020-07-01

客户回签 (Customer signature):

工 程 部 Engineering Department	品 质 部 QA Department	批 准 Approval

深圳市红心科技电子有限公司 (Shenzhen HX Antenna Co., Ltd.):

工 程 部 Engineering Department	品 质 部 QA Department	批 准 Approval
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庄伟峰 Zhuang Weifeng	张欢 Zhang Huan	刘卢 Liu Lu

一：天线参数 (Antenna Parameters)

Design Specifications	Typical	Units
天线形式 (Antenna form)	FPC 天线 (2.4G 5.8G antenna)	
工作频率 (Working frequency)	2400-5800	MHz
增益(Gain)	2.40 (2.4G band) 2.62 (5G Band)	dBi
天线效率 (Antenna efficiency)	35~80	%
电压驻波比 (VSWR)	<1.8	
极化方式 (Polarization mode)	Vertical	
辐射方向 (Radiation pattern)	Omnidirectional	
馈电阻抗 (Feeding impedance)	50	ohm
功率容量 (Power handling)	33	dbm
天线接口 (Interface)	IPEX 1 代 (IPEX-1)	
天线尺寸 (Overall dimensions)	25*9	mm
重量 (Weight)	无要求 (Not required)	
工作温度 (Operating Temp)	-30-70	℃
储存温度 (Storing Temp)	-30-70	℃

二：天线实物图 (Antenna Picture)



注：1. 天线参数是根据模拟环境测试，针对不同的产品会有性能偏差

2. 天线功能较为敏感，主体周边结构有变更请通知我们评估

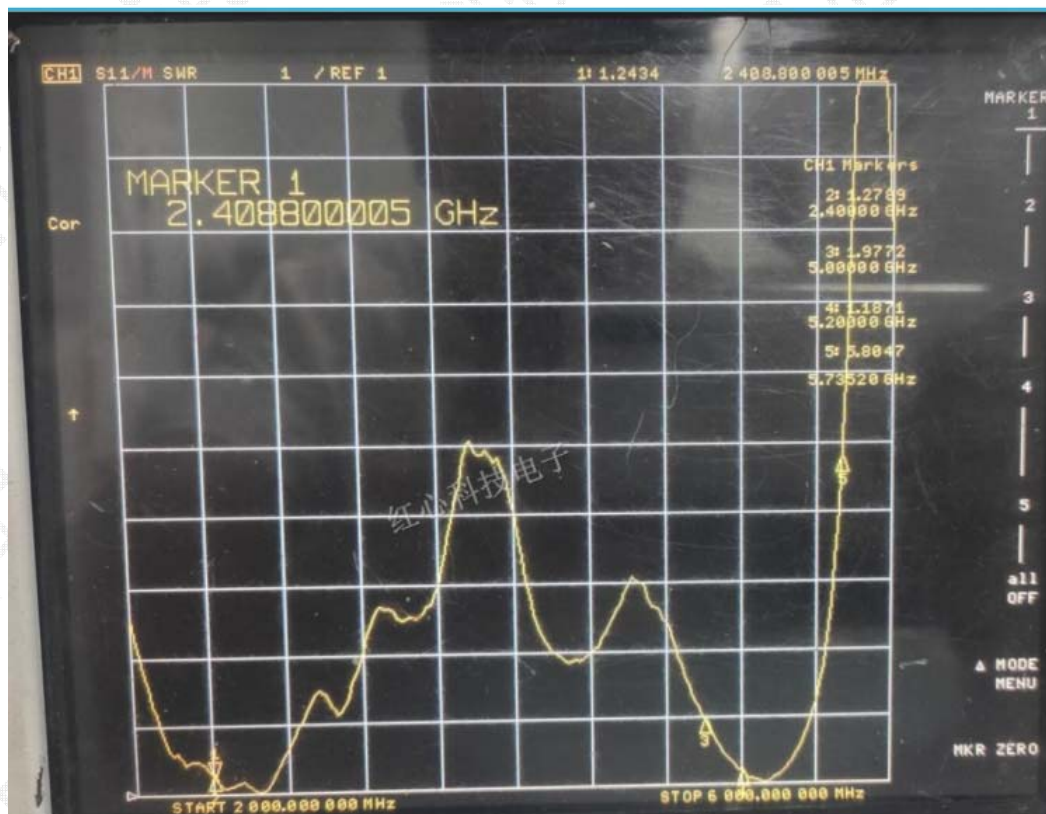
Note: 1. The antenna parameters are tested according to the simulated environment, and there will be performance deviations for different products.

2. The antenna function is relatively sensitive. If there is any change in the surrounding structure of the main body, please notify us for evaluation.

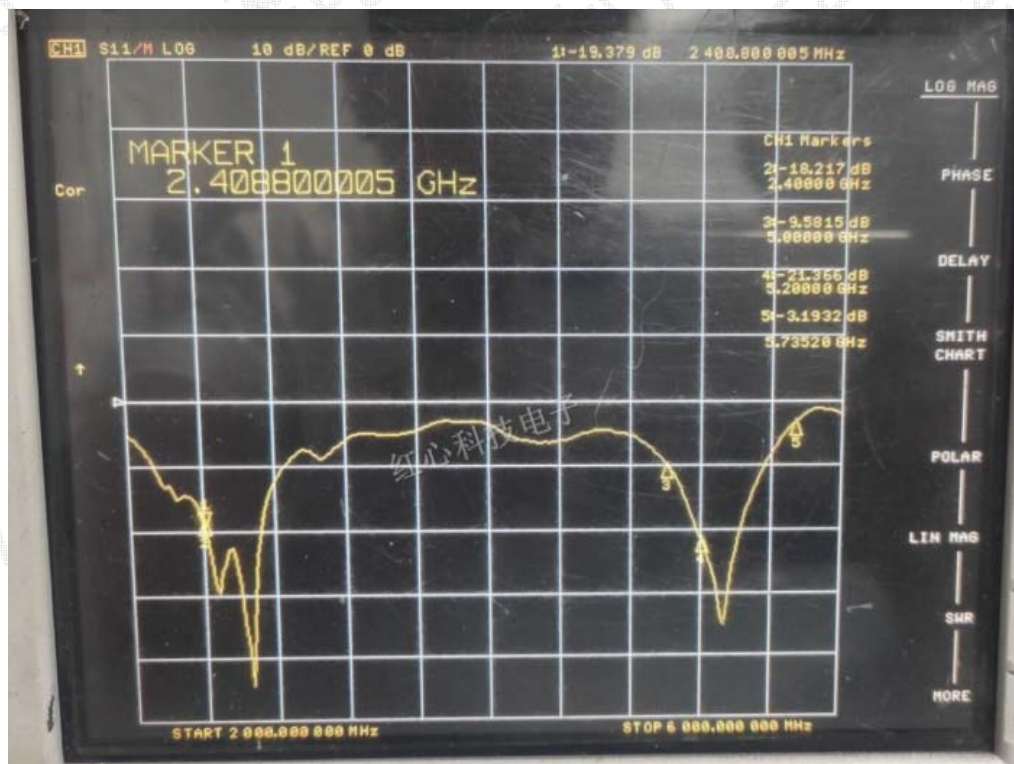
三、VSWR（电压驻波比）/Return Loss（回波损耗）/Smith Chart

（史密斯圆图）

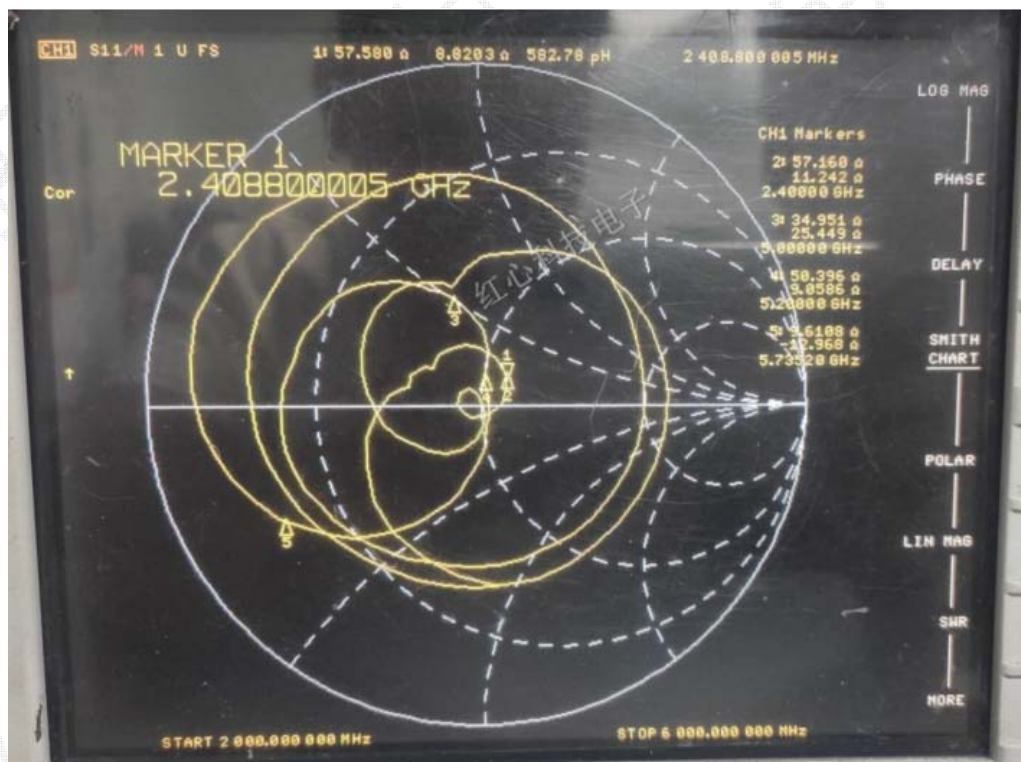
VSWR（电压驻波比）



Return Loss (回波损耗)



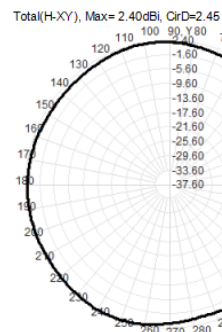
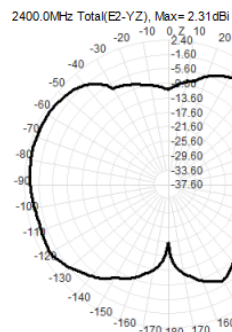
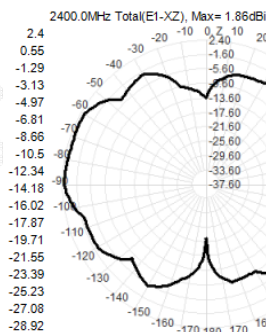
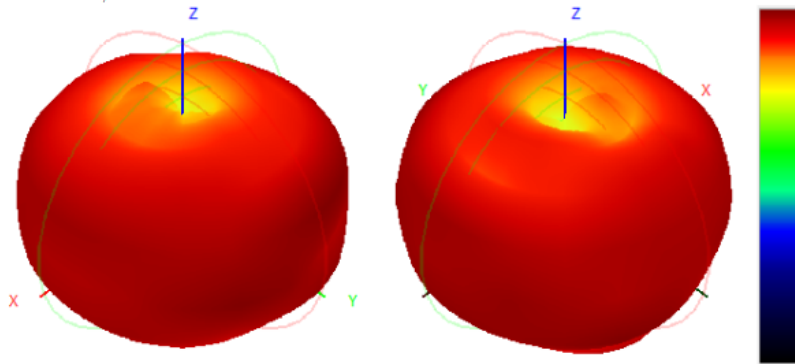
Smith Chart (史密斯圆图)



四：辐射矢量图(Radiation Pattern)

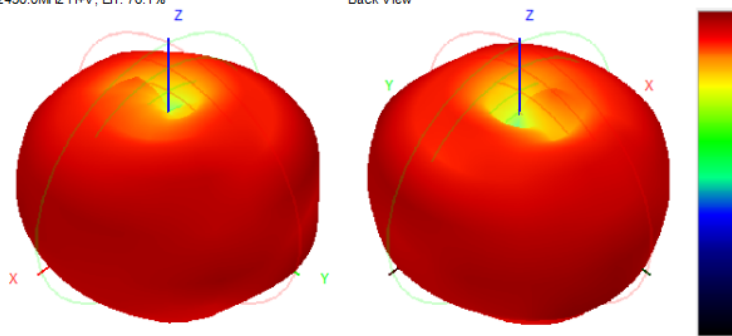
2400.0MHz H+V, Eff: 80.2%

Back View

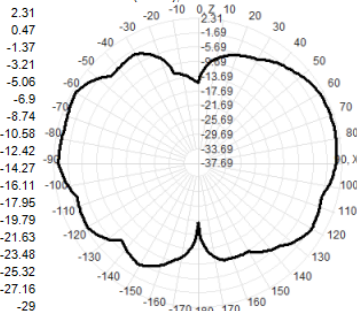


2450.0MHz H+V, Eff: 76.1%

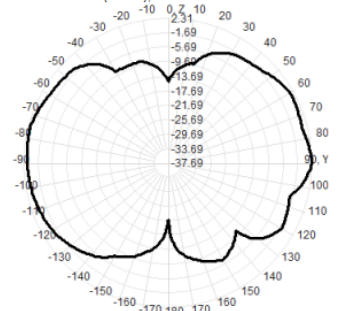
Back View



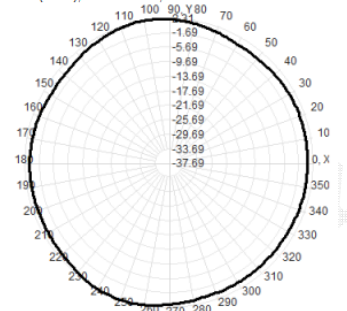
2450.0MHz Total(E1-XZ), Max= 1.28dBi



2450.0MHz Total(E2-YZ), Max= 2.07dBi

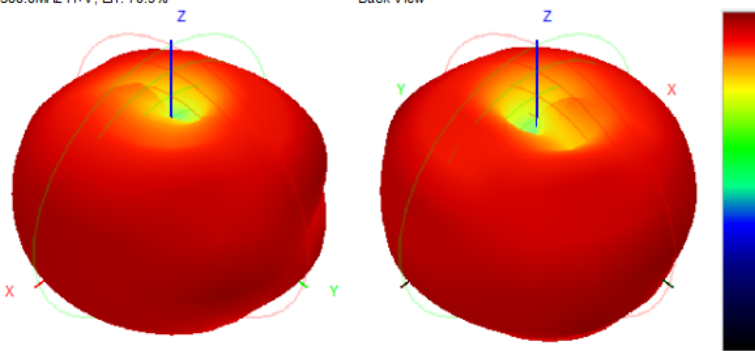


Total(H-XY), Max= 2.31dBi, CirD=2.26

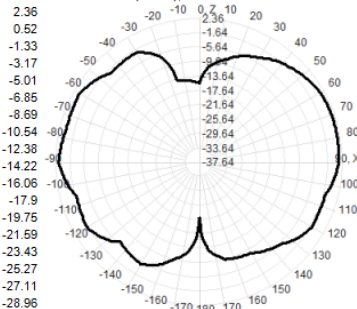


2500.0MHz H+V, Eff: 78.9%

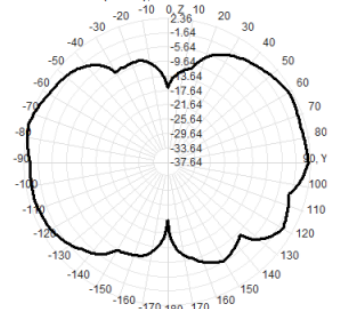
Back View



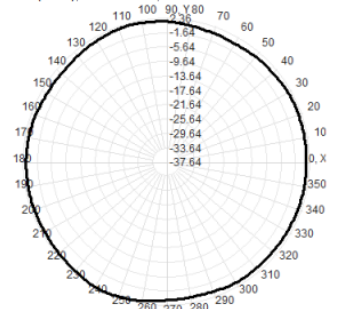
2500.0MHz Total(E1-XZ), Max= 1.45dBi



2500.0MHz Total(E2-YZ), Max= 2.36dBi

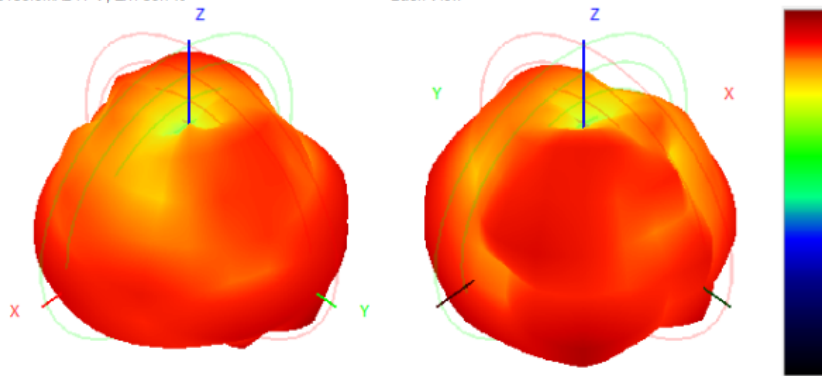


Total(H-XY), Max= 2.31dBi, CirD=2.05



5150.0MHz H+V, Eff: 50.7%

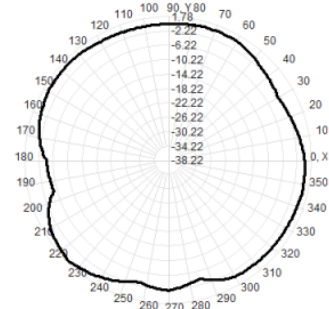
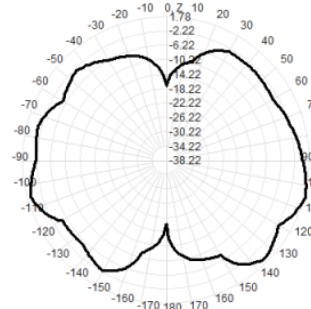
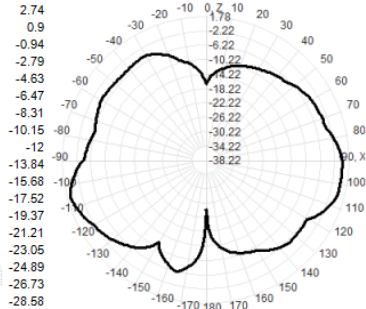
Back View



5150.0MHz Total(E1-XZ), Max= 0.83dBi

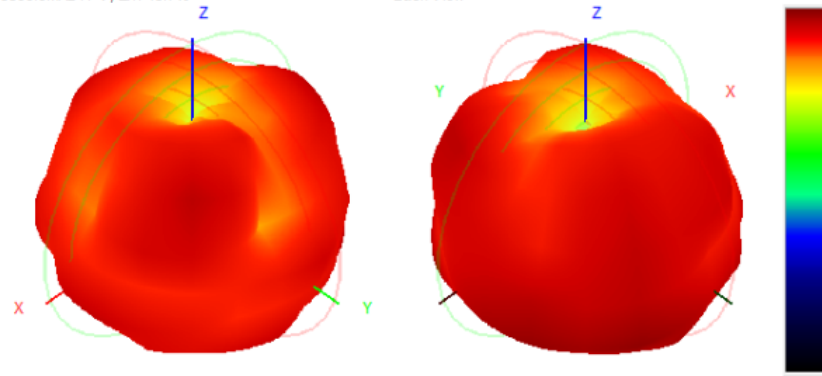
5150.0MHz Total(E2-YZ), Max= 1.78dBi

Total(H+V), Max= 1.03dBi, CirD=6.33



5500.0MHz H+V, Eff: 45.7%

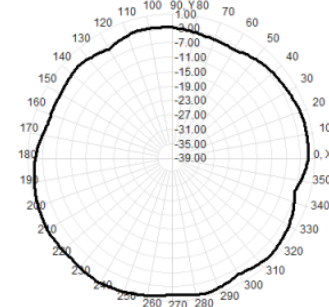
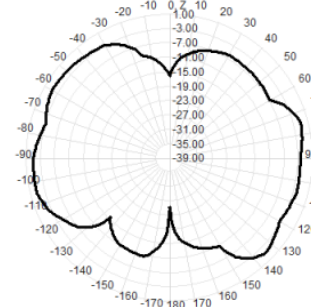
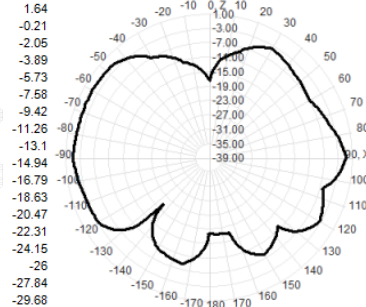
Back View



5500.0MHz Total(E1-XZ), Max= -1.04dBi

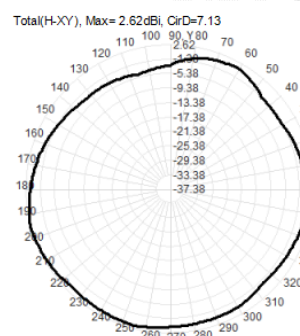
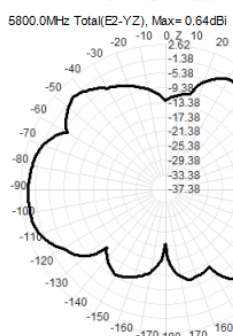
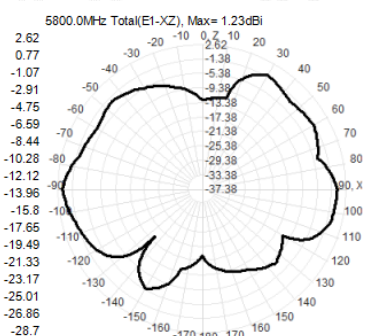
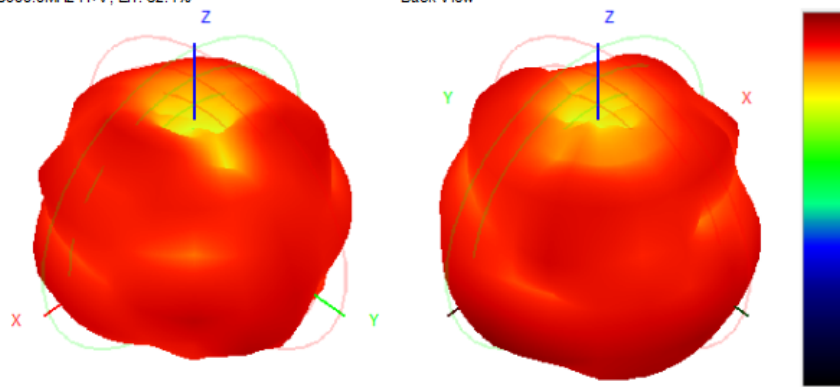
5500.0MHz Total(E2-YZ), Max= -0.84dBi

Total(H+V), Max= 1.00dBi, CirD=5.37



5800.0MHz H+V, Eff: 52.4%

Back View



测试场景 (Testing Scenario)



五：贮藏环境 (Storage Environment)

工作温度 (Working temperature): -30 to 70° C

贮藏温度 (Storage temperature): -30 to 70° C

六: 尺寸规格(Dimensions)

