

# 产品规格书

## PRODUCT SPECIFICATION SHEET

客户名称：\_\_\_\_\_

产品名称： WIFI Antenna L=75mm IPEX

产品料号： HSA-2400ITFB

客户料号：\_\_\_\_\_

送样日期： 2022-10-26

工程确认：

核准	工程	制作	签章
Approval	Quality	Engineer	

客户确认：

核准	研发	品质	签章

确认结果： 合格  不合格  其它

# RF Antenna Cable Assembly Specification

## 1. Electrical Properties

1.1 Frequency Range.....2.4GHz-2.5GHz

1.2 Impedance.....50 Nominal

1.3 VSWR.....1.92:1MAX

1.4 Return Loss.....-10dB Max

1.5 Gain(peak).....2dBi

1.6 Cable loss.....0.3dBi Max

1.7 Polarization.....Linear Vertical

1.8 Admitted Power.....2W

1.9 Cable.....RG178

1.10 Conn.....IPEX

## 2. Physical Properties:

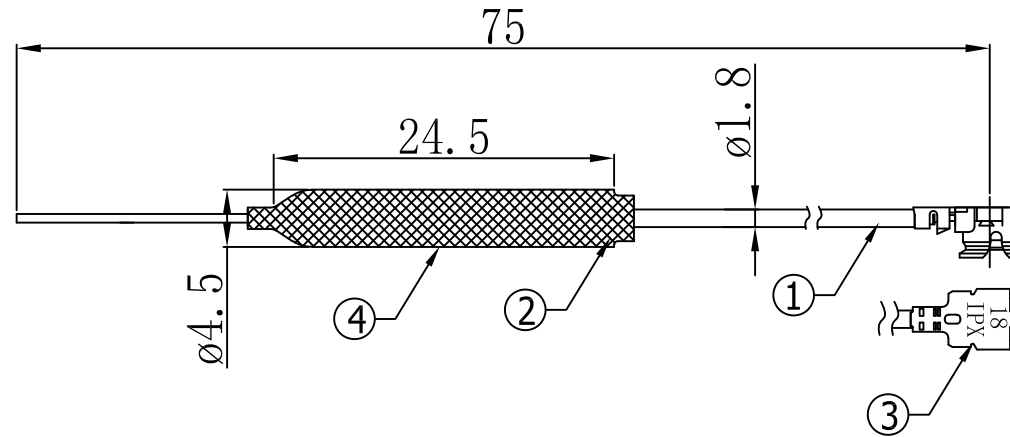
2.1 Antenna Material.....Cu

2.4 Operating Temp.....-20 - +65°C

2.5 Storage Temp.....-30°C- +75°C

2.6 Color.....Brown

RoHS Compliant




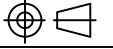
Specification:

Frequency Rang:2.4~2.5GHz

Return Loss:-10dB or less

Gain:2.0 dBi

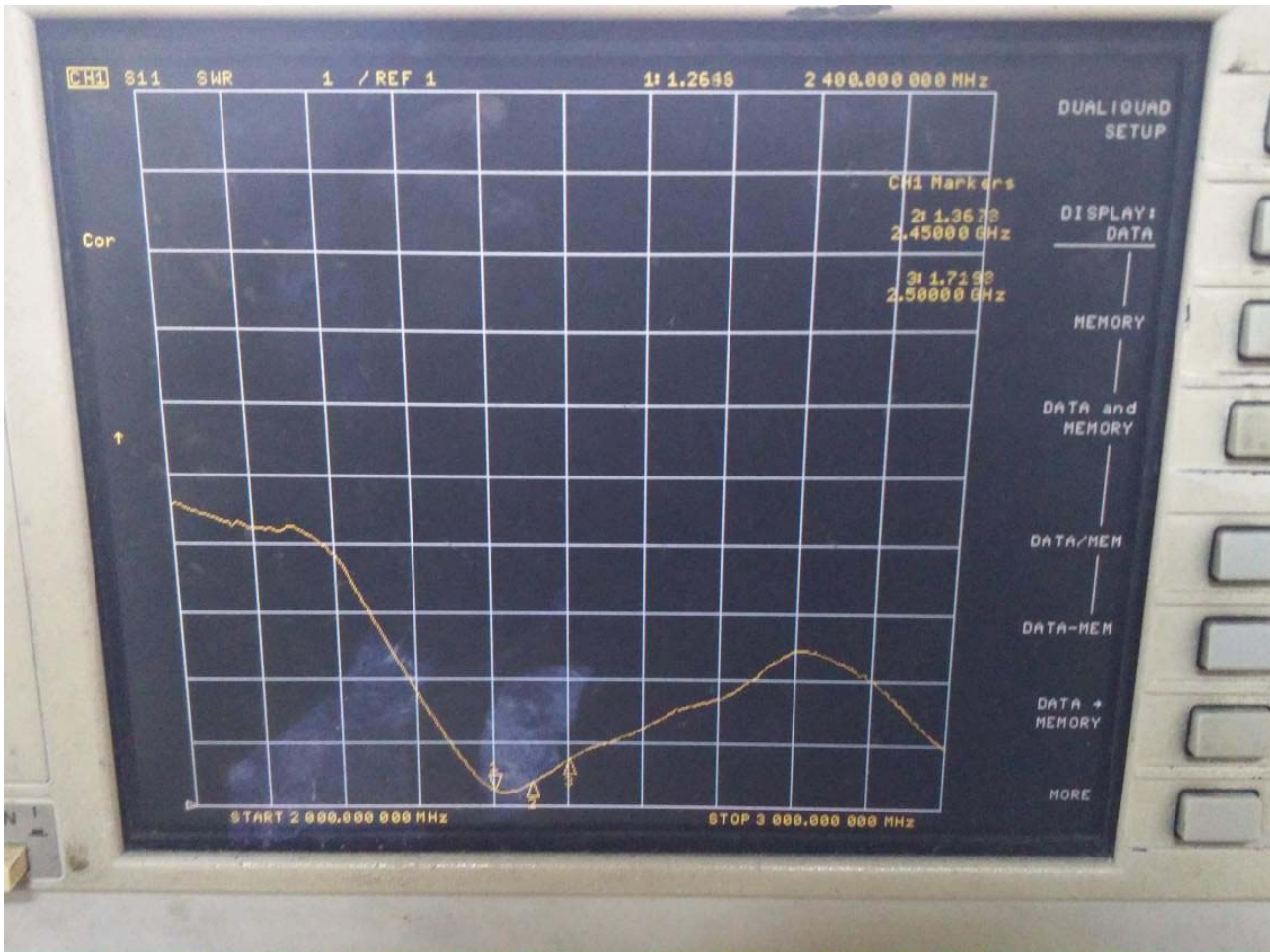
4	HSTUBE		∅4.0*32mm	1
3	Connector	CONN	U.FL Au Plated	1
2	Tube	Cu	∅4.4*24.5mm	1
1	Cable	RG178	L=75MM	1
No.	Description	Material	Finished	Q'ty

		Shenzhen Hongsense Technology Co.,Ltd		
TITLE: WIFI 2400~2500MHz				
PART NO.: HSA-2400ITFB			DWG NAME: Internal Antenna	
APPROVED BY	CHECKED BY	DESIDNED BY		Tolerance
Steven.Sun	Mr.Huang	Mr.Ye		X. ±1.0
				X.X ±0.5
			REVISION: A	X.XX ±0.2

产品规格 Product Type		RG178/F/50 Cable		
结构图 Structure Drawing				
结构特性 Structure Characteristics				
结构 Structure	项目 Item	标准值 Standard Value		
内导体 Inner Conductor	材质 Material	镀银铜线 Silverplated Copper Wire		
	结构 Construction(mm)	7/0.102		
	标称外径 Nom.Dia(mm)	0.306±0.02		
绝缘层 Insulation	材质 Material	聚全氟乙丙烯 FEP		
	标称外径 Nom.Dia(mm)	0.88±0.05		
外导体 Outer Conductor	材质 Material	镀银铜线 Silverplated Copper Wire 16*3/0.10		
	标称外径 Nom.Dia(mm)	1.30±0.05		
	编织覆盖率 Coverage Ratio(%)	90±5		
护套 Jacket	材质 Material	聚全氟乙丙烯 FEP		
	标称外径 Nom.Dia(mm)	1.80±0.05		
电气性能 Electrical Characteristics				
项目 Item	标准值 Standard Value	项目 Item	频率 Frequency	标准值 Standard Value
阻抗 Impedanc (Ω)	50±2	衰减 Attenuation@20°C (dB/m)	0.1GHz	0.70
电容 Capacitance(pF/m)	96		0.4GHz	1.50
速率 Velocity(%)	70		1GHz	1.90
驻波比 VSWR	≤1.30@DC-6GHz		2GHz	2.80
最大工作电压 Max.Operating Voltage(V)	1500		3GHz	3.70
最大工作频率 Max.Operating Frequency(GHz)	3			
可靠性 Dependability				
最小弯曲半径(单次)Min.Bending Radius/Single	mm	10		
最小弯曲半径(重复) Min.Bending Radius/Repeated	mm	40		
工作温度范围 Operating Temperature	°C	-55-+200		
包装 Packing				
包装方式 Packing Mode	纸盘 Papery Reel			
包装长度 The Length of Each Reel(m)	500			
每盘段数 The Joints of Each Reel	≤3			
最小段长 Min. Segment Length(m)	≥10			
使用提示 Trips for Use				
存储环境 Storage Environment	Temperature: 30°C以下, Humidity: 20-65%			
最佳保存周期 The Best Save Cycle	3months,			
加工温度 Processing Temperature	Short time withstand 260°C,up 260°C don't try			
铁氟龙收缩 Teflon Shrink	Insulation < 0.2mm , Jacket < 0.3mm			
护套窜动 Jacket Taaverse	If Jacket length below 5CM ,Then May Happen			

# RF Antenna Assembly

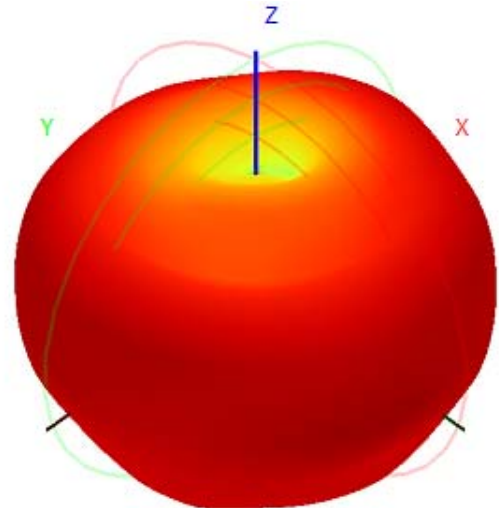
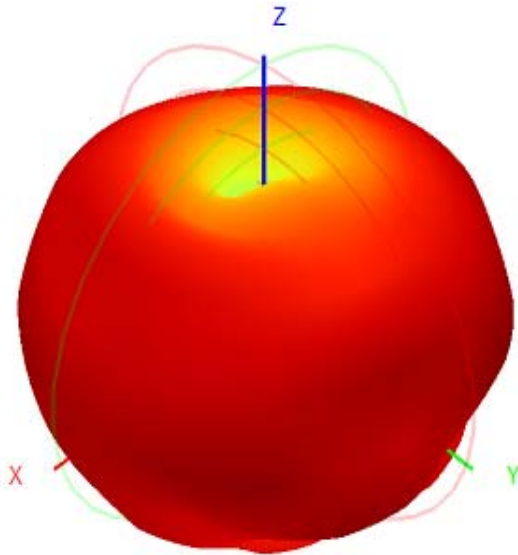
## S11 Parameter



# Antenna Radiation Pattern

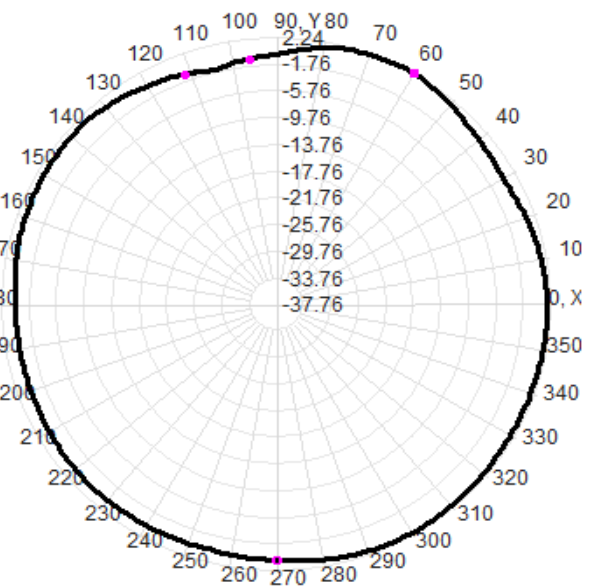
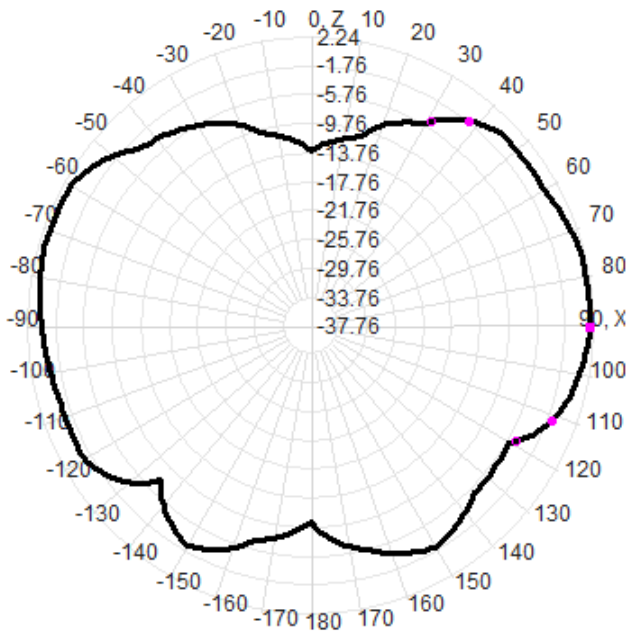
2400.0MHz H+V, Eff: 80.6%

Back View

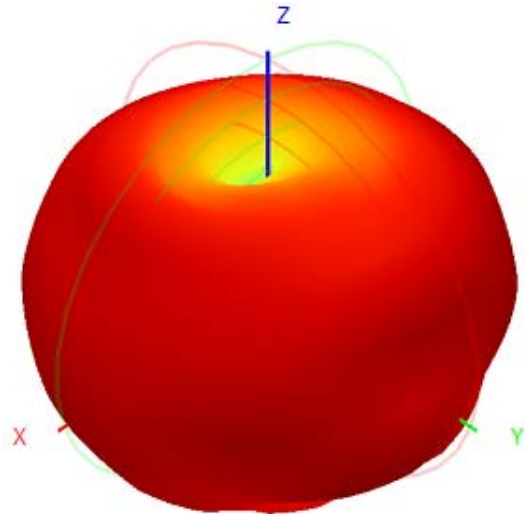


2400.0MHz Total(E1-XZ), Max= 1.52dBi

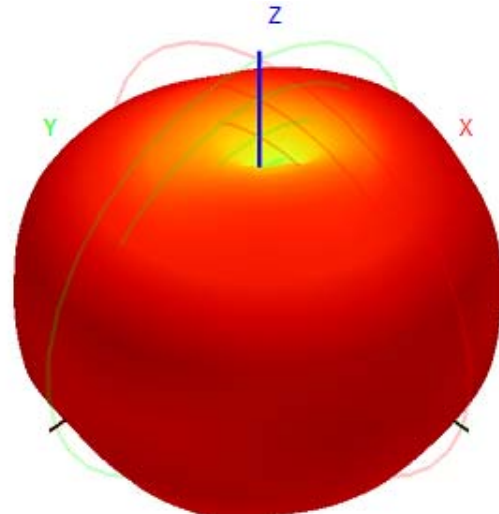
Total(H-XY), Max= 2.24dBi, CirD=3.77



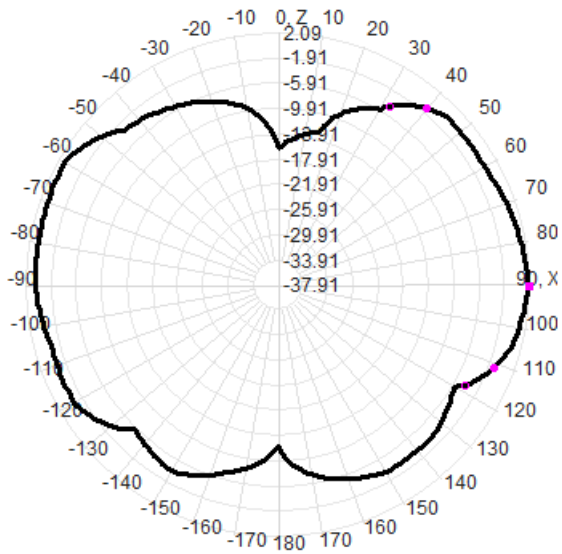
2450.0MHz H+V, Eff: 80.3%



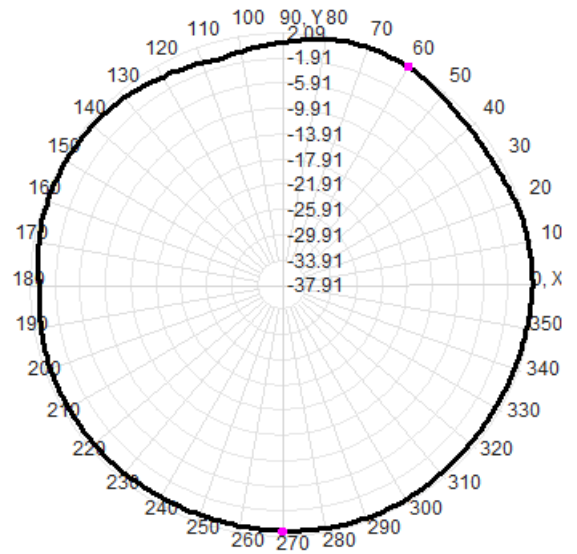
Back View



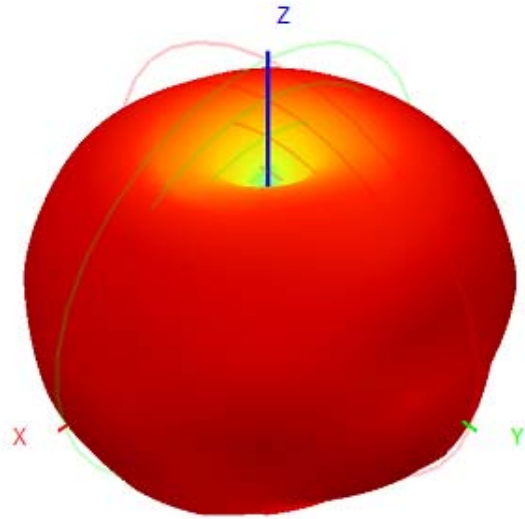
2450.0MHz Total(E1-XZ), Max= 1.68dBi



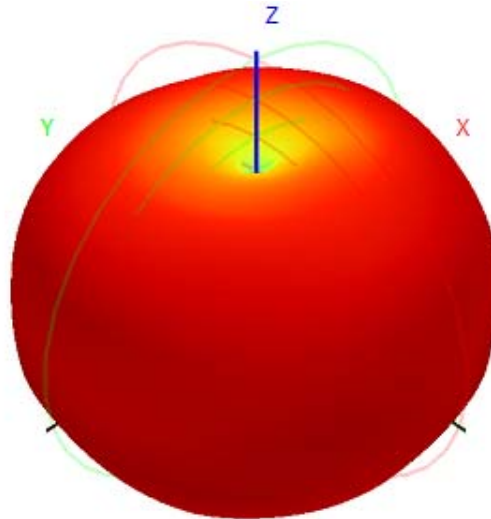
Total(H-XY), Max= 2.09dBi, CirD=2.88



2500.0MHz H+V, Eff: 78.4%



Back View



2500.0MHz Total(E1-XZ), Max= 1.51dBi

