

## 东莞市颖科达电子科技有限公司送样天线

Customer name: 2.4G copper tube antenna

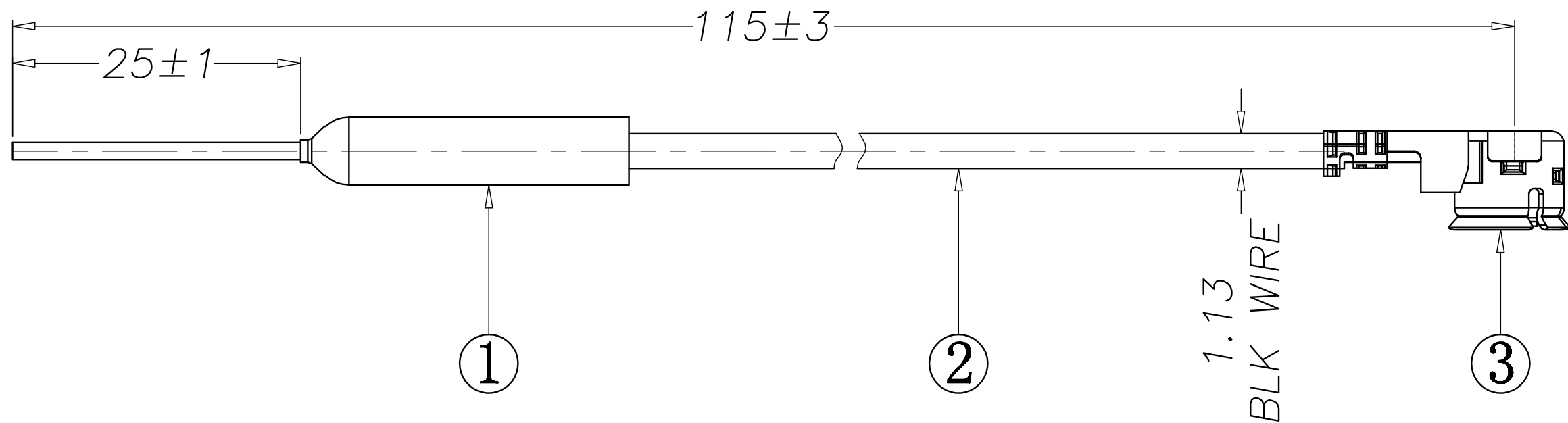
Manufacturer's part number: YKD00G115

Specification description: 2.4G, copper tube  
antenna, line length  $L=115\text{mm}$

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REV.	ECN NUMBER	DESCRIPTION	DATE	DRAWN	CHECKED	APPROVED
X1	ECNXX XXXX	初版发行				



**NOTES:**

1. Freq. Range: 2400-2500MHz
2. VSWR:  $\leq 2.0$
3. Gain: 2.0DBi

ITEM	PART NAME	Q'TY	MATERIAL/FINISH
3	Terminal	1	GOLD PLATING
2	Coaxial line	1	$\phi 1.13$ mm TOW SOLDER
1	Copper pipe	1	$\phi 5*23$ mm BRASS

GENERAL TOLERANCE		SCALE: 1:1	DRAWN: Keming WAN	DATE: 2022.06.18	DWG. NO: 618-20011	REV. X1	Dongguan Yingkeda electronic Technology Co.,LTD
XX. $\pm 2.00$	XX. $^{\circ} \pm 3^{\circ}$	UNIT: mm	CHECK:	DATE:	PARTS NO. YKDOOG115	SHEET: 1/1	
X. $\pm 1.00$	X. $^{\circ} \pm 2^{\circ}$	SIZE: A4	APPROVE:	DATE:			
.X $\pm 0.50$	.X $^{\circ} \pm 1^{\circ}$						

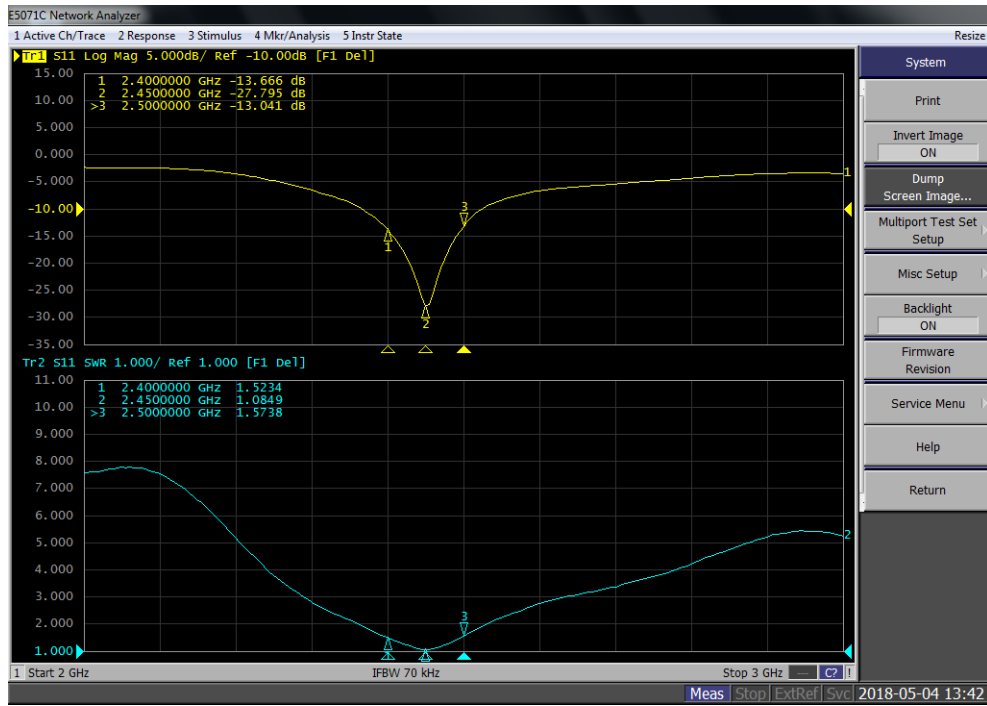
TITLE:  
2.4G copper tube antenna  
L=115mm

4、性能参数(Specification)

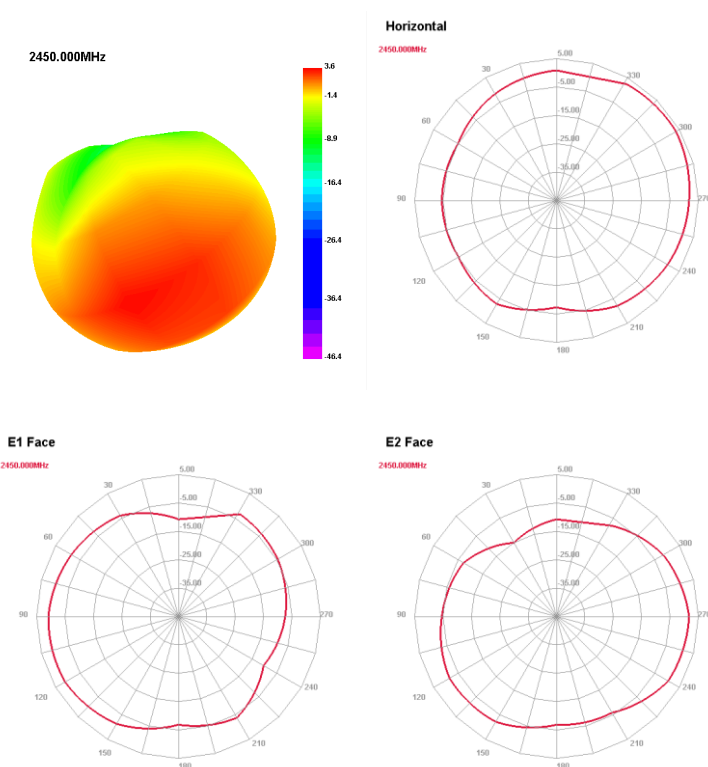
电气参数(Parameter)	
频率范围(Frequency)	2400~2500MHz
输入阻抗(Impedance)	50 Ω
驻波比(VSWR)	≤2.0
转接型号(Connector)	一代端子
机械参数(Mechanical Parameter)	
总长(Length)	110±3mm
同轴电缆(Cable)	/
盐雾测试(Salt Spray Test)	24H
环境参数(Environment Parameter)	
工作温度 (Operation Temperature)	-20℃~65℃
储藏温度 (Storage Temperature)	-30℃~75℃

## 5、电气性能测试报告 (Radiation Report)

### 5.1: 网络分析仪测试报告



## 5.2: 暗室 2D、3DRaditation Pattern



Freq (MHz)	Effi (%)	Gain (dBi)
2400	67.82	3.41
2410	68.34	2.74
2420	66.5	3.18
2430	68.64	3.12
2440	67.17	3.42
2450	67.74	3.59
2460	69.34	3.13
2470	66.83	3.35
2480	67.62	3.25
2490	67.93	3.28
2500	68.32	3.52

**6.可靠性试验报告(Reliability Report)**

**6. 1. 恒温恒湿试验(Constant Temperature and Humidity Test)**

试验/试验项目 (Project)	恒温恒湿试验 (Constant Temperature and Humidity Test)		检验单号 (Check ID)	
产品名称/规格 (Product Name)	2.4G 铜管天线		试验数量: 5PCS (quantity:5PCS)	
送检日期: 2022-09-18 (Date Of Test)			完成日期: 2022-09-20 (Date of Complete)	
试验/检验设备(Equipment For Test) 1. 程式恒温恒湿试验箱(Programmable Constant Temperature And Humidity Test Box) 2. 8753ES 网络分析仪(8753ES Network Analyser)				
试验/检验条件: (Condition For Test) 1. 常温 25° C ,湿度 65%下试验 (Under room temperature,65% humidity) 2. +80° 85~90%RH 2 小时一个循环, 共 24 小时 (Under 80° ,85%~90% humidity ,2 hour per circulation, total 24 hours)				
试 验 结 果 (Test Result)				
判定标准(Standard) 1、金属表面镀层应无剥落, 裂痕起皱, 分离等; 非金属部分不应发生变色, 开裂, 变形, 脱胶等不良 (Shedding-free, Non-cracking, No separation on the surface of metal ;Non-fading, Non-cracking, Non-deforming on the surface of nonmetal) 2、电气测试符合标准要求: 电压驻波比测试合格 (Test result meet the technical requirements)				
检验项目 (Project)	恒温恒湿试验前 (Before Test)	恒温恒湿试验后 (After Test)	缺陷描述 (Problem)	判定结果 (Result)
外观 (Appearance)	外观无变色开裂、 变形、脱胶 (shedding-free, Non-cracking, No separation)	外观无变色开裂、 变形、脱胶 (Non-fading, Non-cracking, Non-deforming)	无 (Void)	合格 (Pass)
电性能 performance	天线电压驻波比 测试合格 (VSWR Pass)	天线电压驻波比测 试合格 (VSWR Pass)	无 (Void)	合格 (Pass)
试验/检验判定: <input checked="" type="checkbox"/> 合格 <input type="checkbox"/> 不合格 <input type="checkbox"/> 不作判定 Result: PASS FAIL Unable to judge				

6. 2. 盐雾测试(Salt Spray Test)

试验/试验项目 (Project)	盐雾测试(Salt Spray Test)		检验单号 (Test ID)																		
产品名称/规格 (Product Name)	2.4G 铜管天线		试验数量: 5PCS (quantity:5PCS)																		
送检日期: 2022-09-18 (Date Of Test)		完成日期: 2022-09-20 (Date of Complete)																			
试验/检验设备: (Test equipment) 1. HL-60-SS 盐雾测试仪 (HL-60-SS Salt Spray Test Tester )																					
试验/检验条件: (Test Condition) 1. 盐雾箱内温度为 $35\pm 2^{\circ}\text{C}$ ; 试验室温度 $22\sim 30^{\circ}\text{C}$ ( $35\pm 2^{\circ}\text{C}$ in the salt spray test box; $22\sim 30^{\circ}\text{C}$ in the laboratory) 2. 盐雾沉降速度经 24H 喷雾后每 80cm 面积上为 1-2ML/h 氯化钠浓度为 $50\pm 10\text{g/L}$ , PH 值为 6.5/7.2 (PH=6.5/7.2, the concentration of the sodium chloride decade to $50\pm 10\text{g/L}$ after 24 hours on per 80 square centimeter )																					
试验/检验结果: 合格 (Pass)																					
<table border="1"> <thead> <tr> <th>样品编号 (Number)</th> <th>评价等级 (Result)</th> <th>缺陷描述 (Problem)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>合格 (Pass)</td> <td>Void</td> </tr> <tr> <td>2</td> <td>合格 (Pass)</td> <td>Void</td> </tr> <tr> <td>3</td> <td>合格 (Pass)</td> <td>Void</td> </tr> <tr> <td>4</td> <td>合格 (Pass)</td> <td>Void</td> </tr> <tr> <td>5</td> <td>合格 (Pass)</td> <td>Void</td> </tr> </tbody> </table>				样品编号 (Number)	评价等级 (Result)	缺陷描述 (Problem)	1	合格 (Pass)	Void	2	合格 (Pass)	Void	3	合格 (Pass)	Void	4	合格 (Pass)	Void	5	合格 (Pass)	Void
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4	合格 (Pass)	Void																			
5	合格 (Pass)	Void																			
试验/检验判定: <input checked="" type="checkbox"/> 合格 <input type="checkbox"/> 不合格 <input type="checkbox"/> 不作判定 Result:                      PASS                      FAIL                      Unable to judge																					
测试: 刘杰                                      审核: 李飞                                      核准: 张云春																					