

承 认 书

SPECIFICATION FOR APPROVAL

客户 Customer:		
品牌 Brand:	<u>金航标KINGHELM</u>	
品名 Description:	<u>2.4G Antenna</u>	
规格/型号		
Specification /part no:		
	<u>Built-in antenna/50 Ω /2.4-2.5GHz/4.0dBi@</u>	
	<u>2.4-2.5GHz/RG113 White double tin wire</u>	
	<u>L=100mm /I-PEX First generation</u>	
	<u>terminal/2.4G FPC antenna</u>	
日期 Date:	<u>2025.10.15</u>	
备注 Remark:	承认签章后请回复一份（或复印件）给我司，其余由贵公司留作存档。如果在签章的承认书（或复印件）回复给我司之前，下了有关此规格产品的订单且又无特别说明，那么我司就确定贵司已完全承认了。Please return one specification or one copy of it with your chop and signature of approval and retain the others for your record. In the event of an order being placed for this part number before the chop and signed with specification (or copy) is returned and without special explanation, it will be assumed that full approval have been given.	
客户签字盖章:		
拟制/日期	审核/日期	批准/日期
CHECKED/DATE	AUDITOR/DATE	APPROVED/DATE

规格书

SPECIFICATION

客户料号

Customer P/N: KH-FPC2.4G-1.13IPEX-3M-WH100

规格描述

Specification: Built-in antenna/50 Ω /2.4-2.5GHz/4.0dBi@2.4-

2.5GHz/RG113 White double tin
wire L=100mm/I-P EX First generation
terminal/2.4G FPC antenna

品名 Description: 2.4G antenna

供应商 Supplier: 金航标KINGHELM

生产商 Producer: 金航标KINGHELM

备注 Remark:

规格书目录(Directory)

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版次号 Revision number	修改章节 Revise chapters	修改页码 modify pages	生效日期 effective date	变更内容 Changes	更改记录人 Change Recorder
V1.1					

电气参数 (Electrical parameters) :

Frequency 频率范围	2.4~2.5GHz
Impedance 特性阻抗	50Ω
S.W.R. 电压驻波比	≤2.0
Antenna Gain 增益	4.0dBi±0.5@2.4GHz
Admitted Power 功率	50W
Radiation 辐射方向	Omnidirectionality
Polarization 极化形式	Vertical polarization + horizontal polarization
Return Loss 回波损耗	-9.2dB MAX

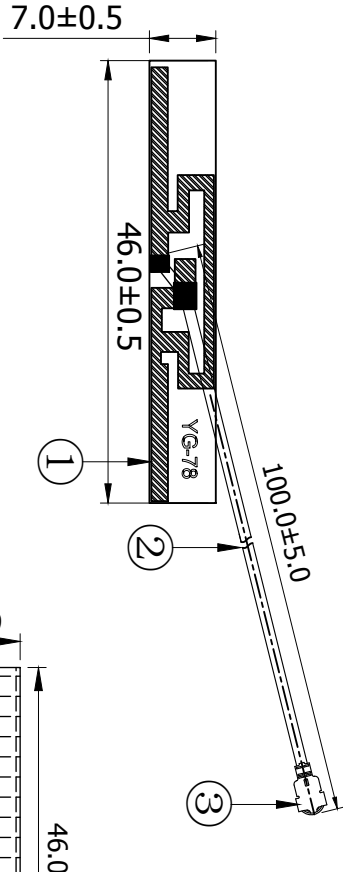
机械参数(Mechanical parameters):

Antenna Colour 天线颜色	white
RF Cable Model 射频线型号	RG113, white
Connect Type 接口方式	IPEX First generation terminal

工作/储存温度 (Operating/ Storage Temperature) :

Operating Temperature 工作温度	-40~85℃
Storage Temperature 储存温度	-40~85℃

F		G	
REV	DATE	DESCRIPTION	
A	2025.10.15	New Issue	



T=1.0

Specification:
Frequency Range : 2.4~2.5GHz
Return loss: -9.2dB or less
VSWR: 1.92:1max
Gain(Peak): 4.0dBi

XXX.	±5.0	APPROVED	CUSTOMER			
XX.	±2.0	CHECKED	PART NO	KH-FPC2.4G-1.13IPEX-WH100		
X.	±0.5		PART NAME	2.4G FPC antenna		
.X	±0.2		QY P/NO			
.XX	±0.1	DRAWING	REV	UNIT	SCALE	SHEET
⌀	↗		A	mm	1/1	1 OF 1

ENGINEERING DRAWING

SHENZHEN KINGHELM ELECTRON CO., LTD.

深圳市金航标电子有限公司

测试设备(Test equipment):



Agilent E5071C Network Analyzer

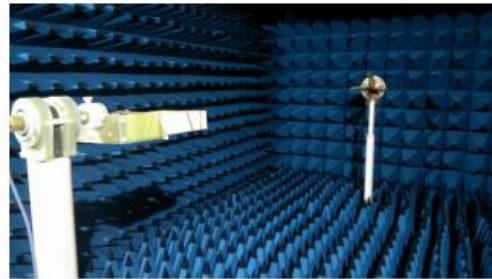
安捷伦 E5071C 网络分析仪



HP 8594E 频谱分析仪 HP 8594E Spectrum Analyzer



CMW-500

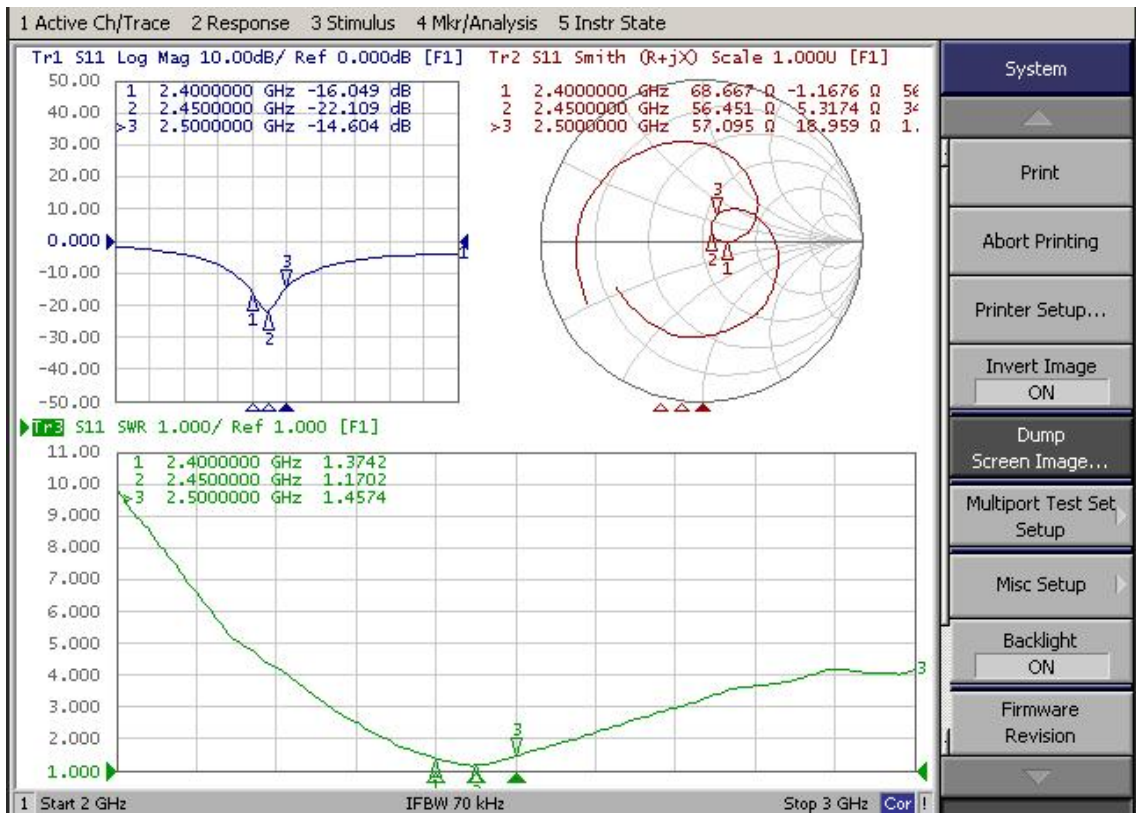


微波暗室

Microwave anechoic chamber

测试参数(Testing Parameters)

阻波比&回波损耗(V.S.W.R&Ruturn Loss)



增益&效率(Gain&Efficiency)

序号	1	2	3	4	5	6	7	8	9	10	11
频率(MHz)	2400.0	2410.0	2420.0	2430.0	2440.0	2450.0	2460.0	2470.0	2480.0	2490.0	2500.0
增益 (dBi)	3.96	3.93	3.83	4.01	3.85	3.85	3.83	3.59	3.93	3.83	3.68
效率 (%)	58.22	57.72	54.48	56.70	54.53	54.27	57.88	59.88	55.81	55.94	56.52

2D、3D 场型图(2D、3D Radiation Patter)

