

样品承认规格书

PART SHEET FOR APPROVAL

制造商名称: Manufacturer:	东莞市信博联电子科技有限公司 Dongguan Sinbolin Electronic Technology Co.,Ltd.
供应商名称 Supplier::	东莞市信博联电子科技有限公司 Dongguan Sinbolin Electronic Technology Co.,Ltd.
产品名称: Part Description:	WIFI金属片天线 WIFI Metal Antenna
规格型号: Model No:	JSP-20049-07YM
物料编码: Cust P/N:	360100312
日期: Issued Date:	2022.04.26

供应商确认 Supplier confirmation

承办 Made By	审核 Engineer	批准 Approver
曹涌	向瑞盛	程志超

华曦达确认 SDMC confirmation

承认原因: Approval Reason:	☐ 新物料 New Part ☐ 替代料 Substitute Part			
承办 Made By	审核 Engineer			批准 Approver
	品质 Quality	研发 R&D	业务 Sales	

备注: 签名表明提交样品获得承认, 图纸规格已经受控。Note: Signature indicates that the submitted sample is approved and the drawing/specification is now the controlling document.

地址: 深圳市南山区高新科技园科技南十二路 18 号长虹科技大厦 19 层
Address: 19/F, Changhong Science & Technology Mansion, No.18, Keji South 12th Road, High-tech Industrial Park, Nanshan District, Shenzhen, China

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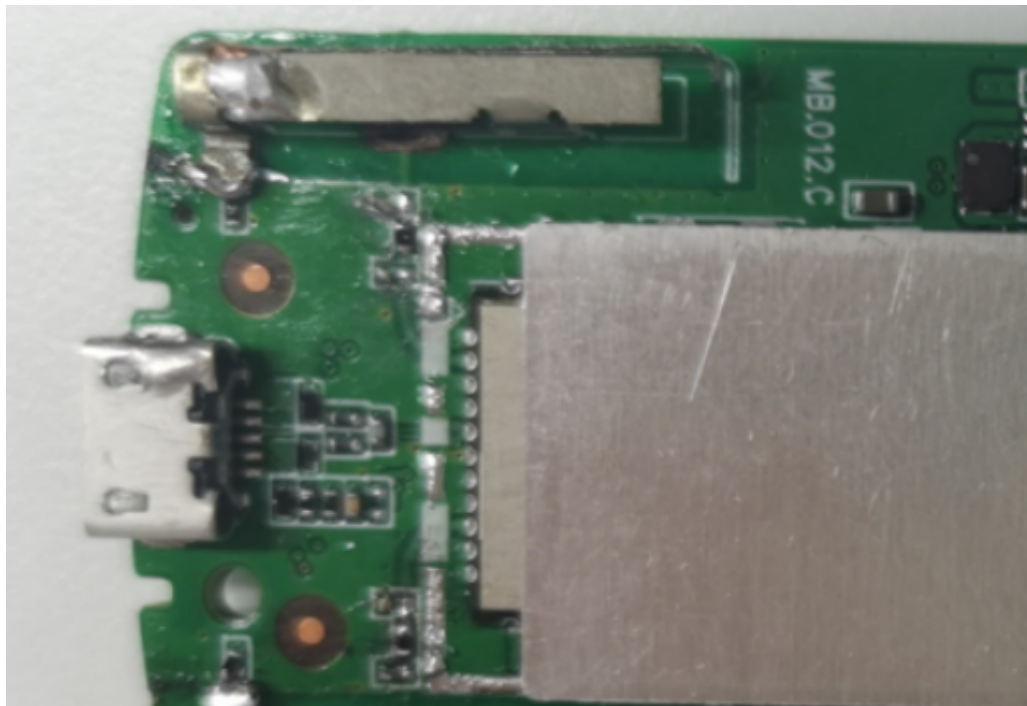
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1. 产品规格 (Product Specification)

产品图片 (Product Photo)



A. 电性参数 (Electrical Characteristics)

频率 (Frequency)	2400 ~ 2500 MHz & 5150 ~ 5850 MHz
电压驻波比 (V.S.W.R)	≤ 2.0 @ 2400 ~ 2500 MHz & 5150 ~ 5850 MHz
返回损失 (Return Loss)	$\leq -10\text{dB}$ @ 2400 ~ 2500 MHz & 5150 ~ 5850 MHz
天线增益 (Antenna Gain)	1.0 ~ 2.5 dBi @ 2400 ~ 2500 MHz 2.5 ~ 4.5 dBi @ 5150 ~ 5850 MHz
辐射效率 (Radiation Efficiency)	45 ~ 60 % @ 2400 ~ 2500 MHz 60 ~ 85 % @ 5150 ~ 5850 MHz
阻抗 (Impedance)	50 Ohm
极化方式 (Polarization)	线性 (Linear)
天线类型 (Antenna Type)	PIFA

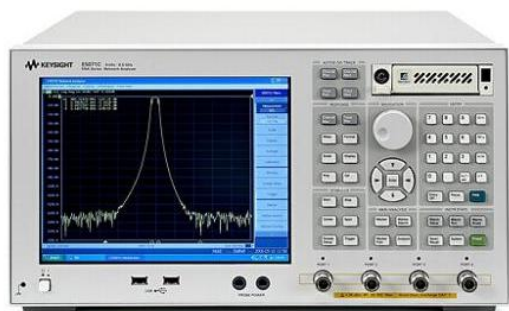
B. 材质及机械特性 (Material & Mechanical Characteristics)

辐射材质 (Material of Radiator)	不锈钢 (SUS430)
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C. 环境因素 (Environmental)

工作温度 (Operation Temperature)	- 40 °C ~ + 75 °C
储存温度 (Storage Temperature)	- 40 °C ~ + 85 °C

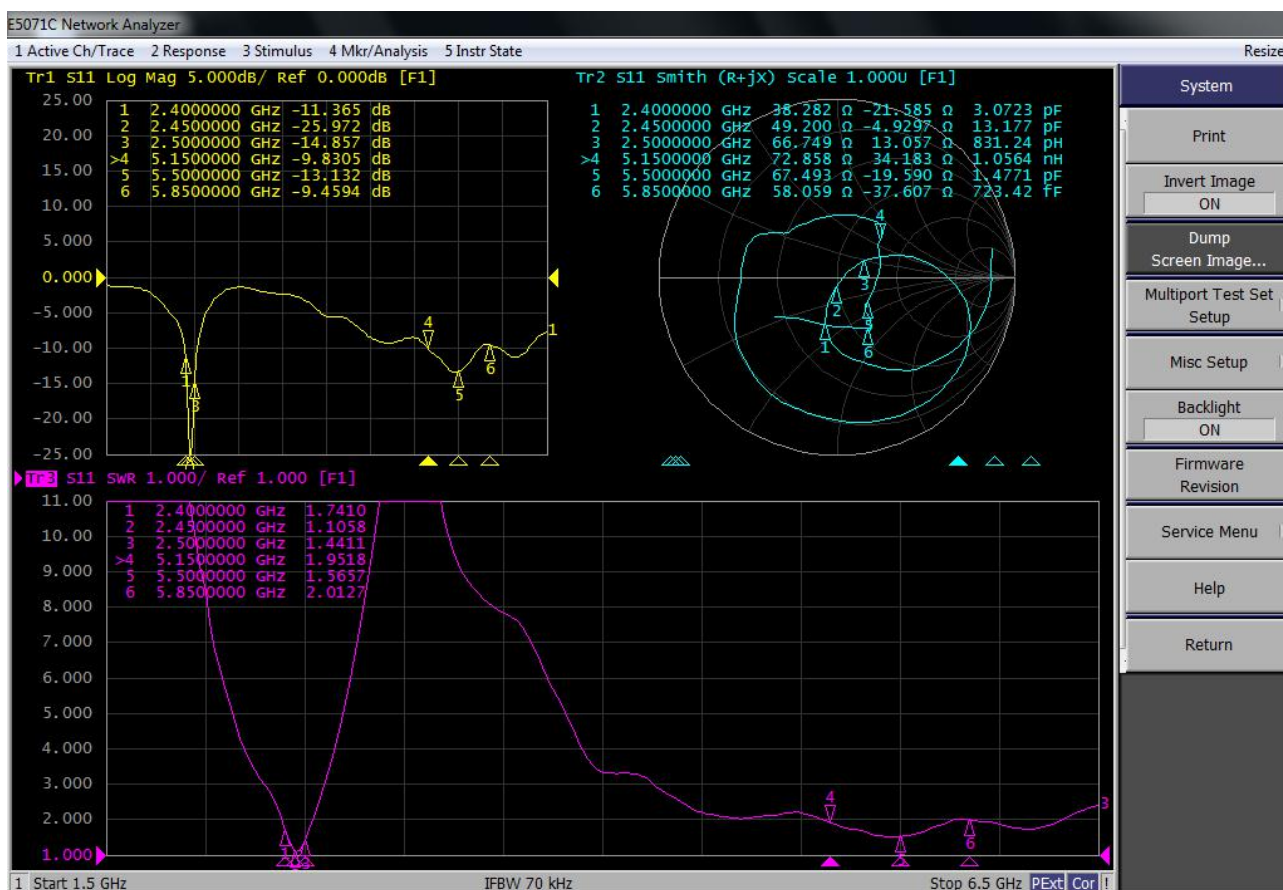
2. 网络参数测试数据 (S Parameter Test Data)



(Agilent Technologies) 安捷伦E5071C网络分析仪

测试频率范围: 300KHz-8.5GHz

测试能力: V. S. W. R、Return Loss、Smith等



3. 天线辐射场型测试 (Antenna - Radiation Pattern Test)

测试设备规格 (Testing Equipment Specification) :

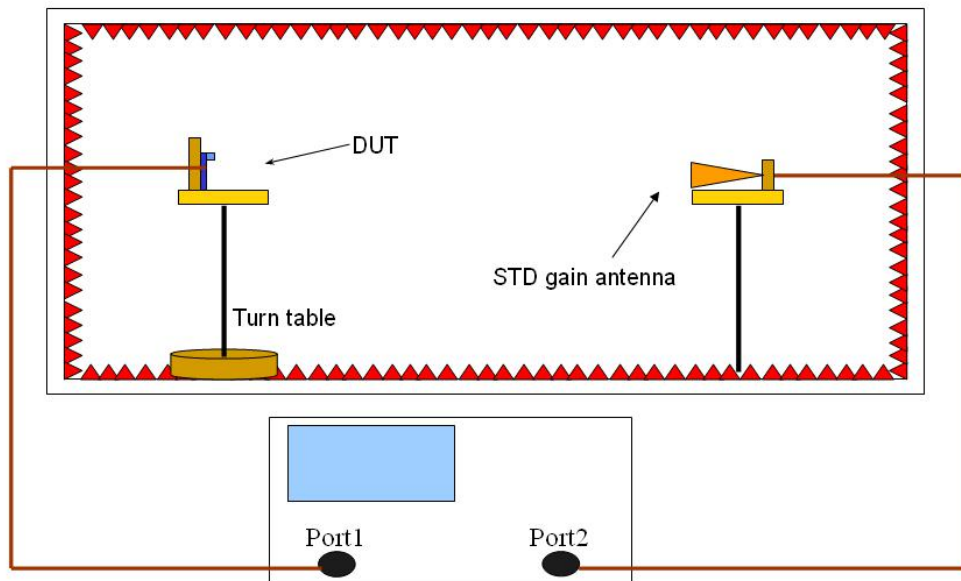
天线微波暗室尺寸 (Antenna Anechoic Chamber Dimension) : 6 x 3 x 3 米 (m)

屏蔽性能 (Isolation) : >100dB @ 1 MHz ~ 10 GHz

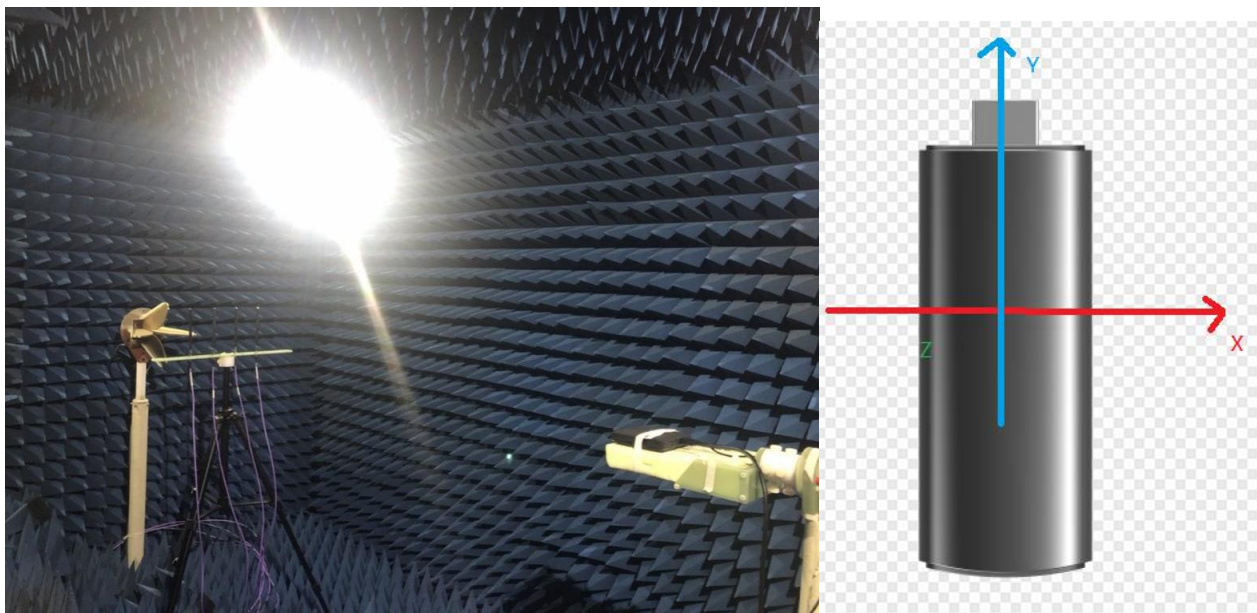
测试设备 (Testing Equipment) : (ROHDE&SCHWARZ) ZVL 矢量网络分析仪

接收天线 (Received Antenna) : 0.7 ~ 6.0 GHz 双极喇叭校准天线

(0.7 ~ 6.0 GHz for Gain Calibration Double Ridged Horn Antenna)

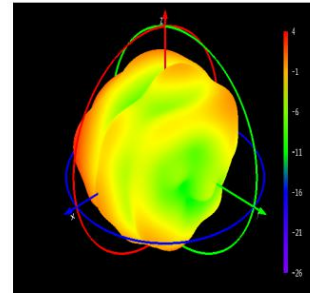
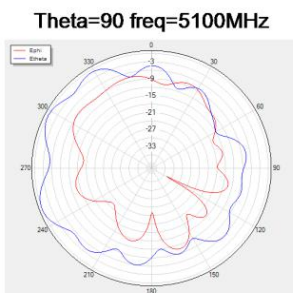
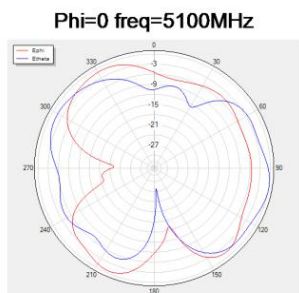
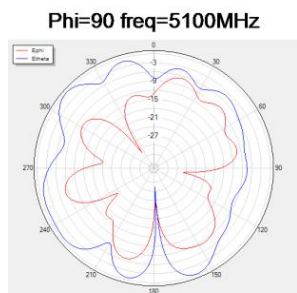
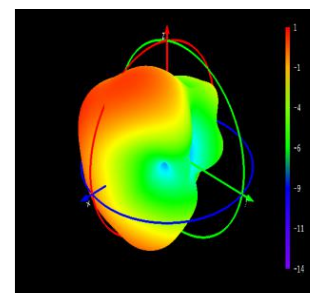
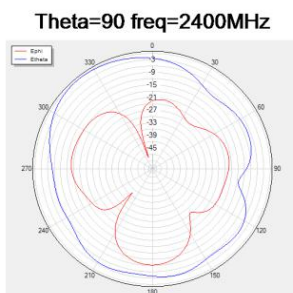
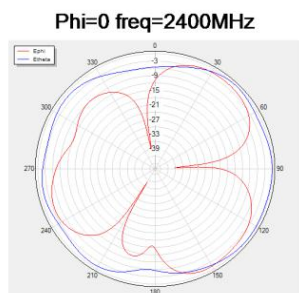
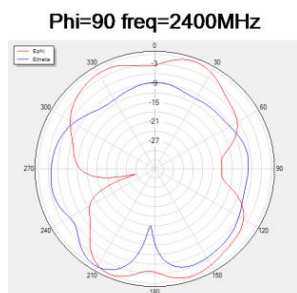


测试原理图

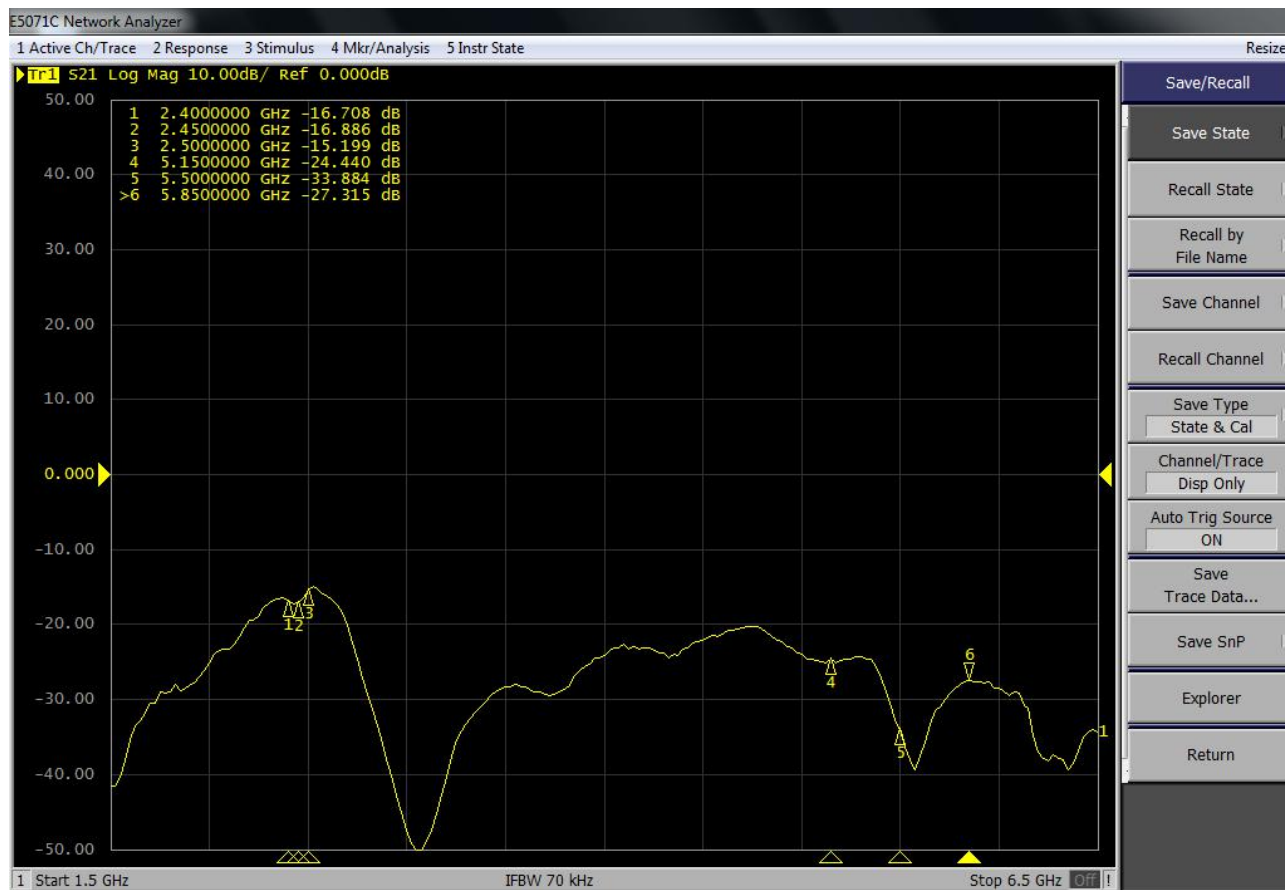


4. 效率及增益测试数据 (Efficiency and Gain Test Data)

WIFI-JSP-20049-07YM					
2.4G			5G		
Frequency / MHz	Gain/ dBi	Efficiency / %	Frequency / MHz	Gain/ dBi	Efficiency / %
2400	0.97	45.06	5160	2.97	68.45
2410	1.02	45.56	5200	3.02	67.15
2420	1.24	47.71	5260	2.92	63.88
2430	1.52	49.98	5300	2.97	63.88
2440	1.84	52.64	5360	3.36	68.69
2450	2.12	55.1	5400	3.82	75.79
2460	2.38	57.1	5460	4.47	84.59
2470	2.59	58.55	5500	4.1	78.95
2480	2.57	58.35	5560	3.43	71.32
2490	2.58	58.26	5600	3.41	70.71
2500	2.24	55.87	5660	3.14	66.49
			5700	3.1	65.16
			5760	3.05	61.75
			5800	3.03	60.79
			5860	2.68	54.58



5. 隔离度测试数据 (Isolation Test Data)



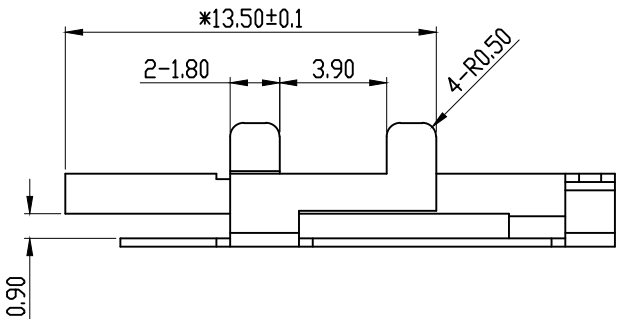
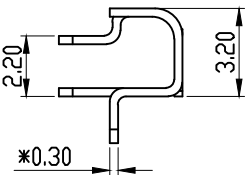
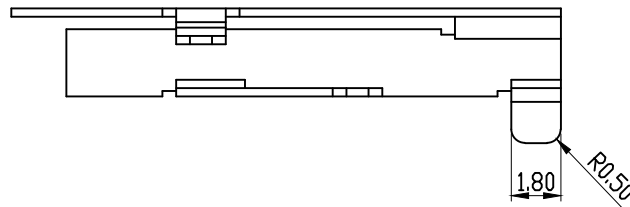
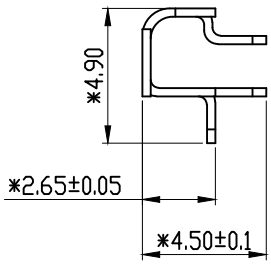
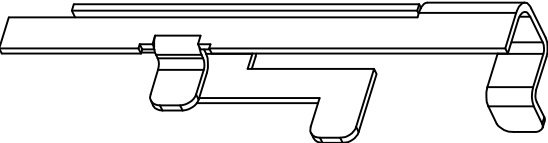
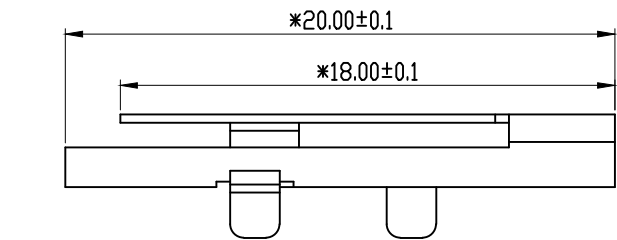
HF☐

RoHS☒

REACH☐

CONFIDENTIAL

SIGN	DATE	DESCRIPTION	APPROVER



备注:
1. 材质为洋白铜.
2. 颜色为本色.
3. 带*为重点检验尺寸, 产品尺寸需在公差范围内.

东莞市信博联电子科技有限公司			
TITLE: 金属片 6075 WIFI L		CUSTOMER P/N: /	
PART NO.: JSP-20049-07YM			Standard Tolerance
APP BY	CHK BY		X.X ±0.2 ○ 0.02
City 2022/04/26	Yixin 2022/04/26	RF BY	X.XX ±0.1 ◎ 0.03
		DES BY	X° ±1 ▱ 0.05
		YJH 2022/04/26	UNITS: mm // 0.03
			SCALE: 1/1 ⊥ 0.05
			REVISION: A ≡ 0.05

產品包裝規範

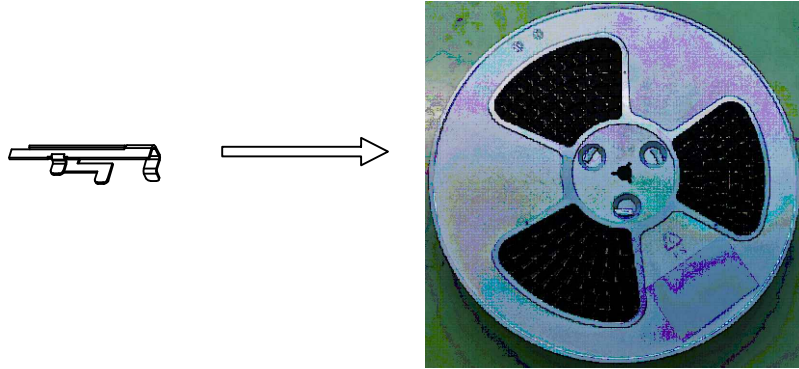
PACKING CRITERION

Date: 2022/04/26

Page: 1 of 1

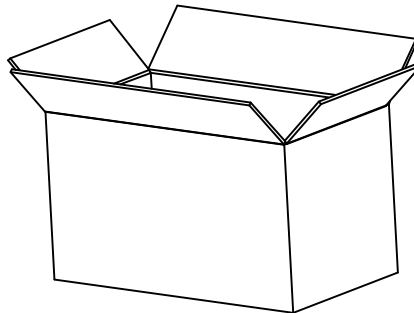
Part Number : JSP-20049-07YM	Revision : A
Name: 金属片 6075 WIFI L	Customer :

一. WITH THE ANT INTO THE PE BAG



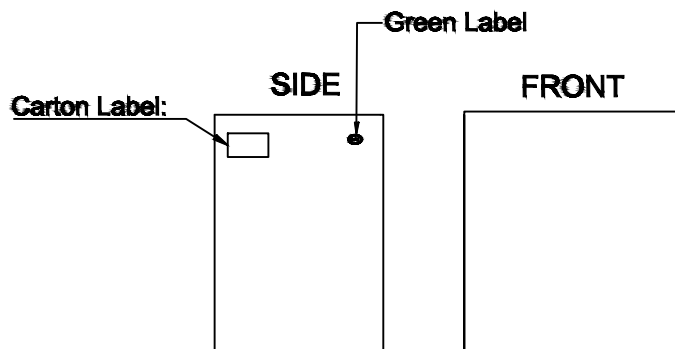
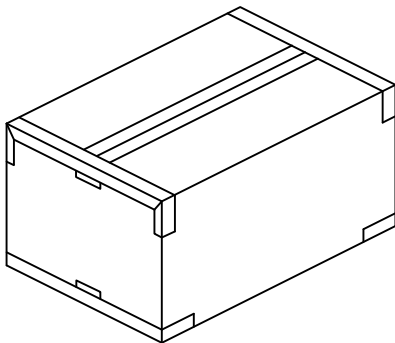
一盒1000PCS

二. PACKING



8000PCS/CARTON
以客人实际下单数量为准

三. SEALING



APPROVED BY : City

CHECKED BY : Yixin

DESIGNED BY : YJH



检测报告

编号: CANEC2204250302

日期: 2022年03月22日 第1页,共4页

客户名称: 永州市合创力金属材料有限公司 / 东莞市全辉金属材料有限公司

客户地址: 湖南省祁阳县长虹街道办事处永安路23号二楼 / 东莞市长安镇涌头村宏丰路16号一楼厂房

样品名称: 洋白铜

型号: C7521

以上样品及信息由客户提供。

SGS工作编号: CP22-012360 - GZ

样品接收日期: 2022年03月16日

检测周期: 2022年03月16日 - 2022年03月22日

检测要求: 根据客户要求检测

检测方法: 请参见下一页

检测结果: 请参见下一页

结论: 基于所送样品进行的检测, 镉、铅、汞、六价铬的检测结果显示符合欧盟RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863的限值要求。

通标标准技术服务有限公司广州分公司
授权签名

谢冬育

Dongyu Xie 谢冬育
批准签署人

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SGS-CSTC Standards Technical Services Co., Ltd.
Guangzhou Branch Testing Center Chemical Laboratory

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Member of the SGS Group (SGS SA)

检测报告

编号: CANEC2204250302

日期: 2022年03月22日 第2页,共4页

检测结果:

检测样品描述:

样品编号	SGS样品ID	描述
SN1	CAN22-042503.001	银色金属片

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2011/65/EU附录II的修正指令(EU) 2015/863

检测方法: 参考IEC 62321-4:2013+A1:2017, IEC62321-5:2013, IEC 62321-7-1:2015, 采用 ICP-OES 和 UV-Vis 进行分析.

检测项目	限值	单位	MDL	001
镉 (Cd)	100	mg/kg	2	ND
铅 (Pb)	1,000	mg/kg	2	ND
汞 (Hg)	1,000	mg/kg	2	ND
六价铬(Cr(VI))▼	-	µg/cm²	0.10	ND

备注:

- (1) 最大允许极限值引用自RoHS指令(EU) 2015/863。
- (2) IEC 62321 系列等同于 EN 62321 系列
https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25
- (3) ▼=a. 当六价铬的浓度高于0.13 µg/cm²时, 样品为阳性, 即含有六价铬;
b. 当六价铬的浓度为ND(低于0.10 µg/cm²)时, 样品为阴性, 即未检测到六价铬;
c. 当六价铬的浓度介于0.10 µg/cm²与0.13 µg/cm²之间时, 无法直接判定是否检测到六价铬, 因不同个体的样品表面差异可能会影响测定结果;
由于未获知样品的存储条件和生产日期, 样品的六价铬检测结果仅能代表检测时样品含六价铬的状态。

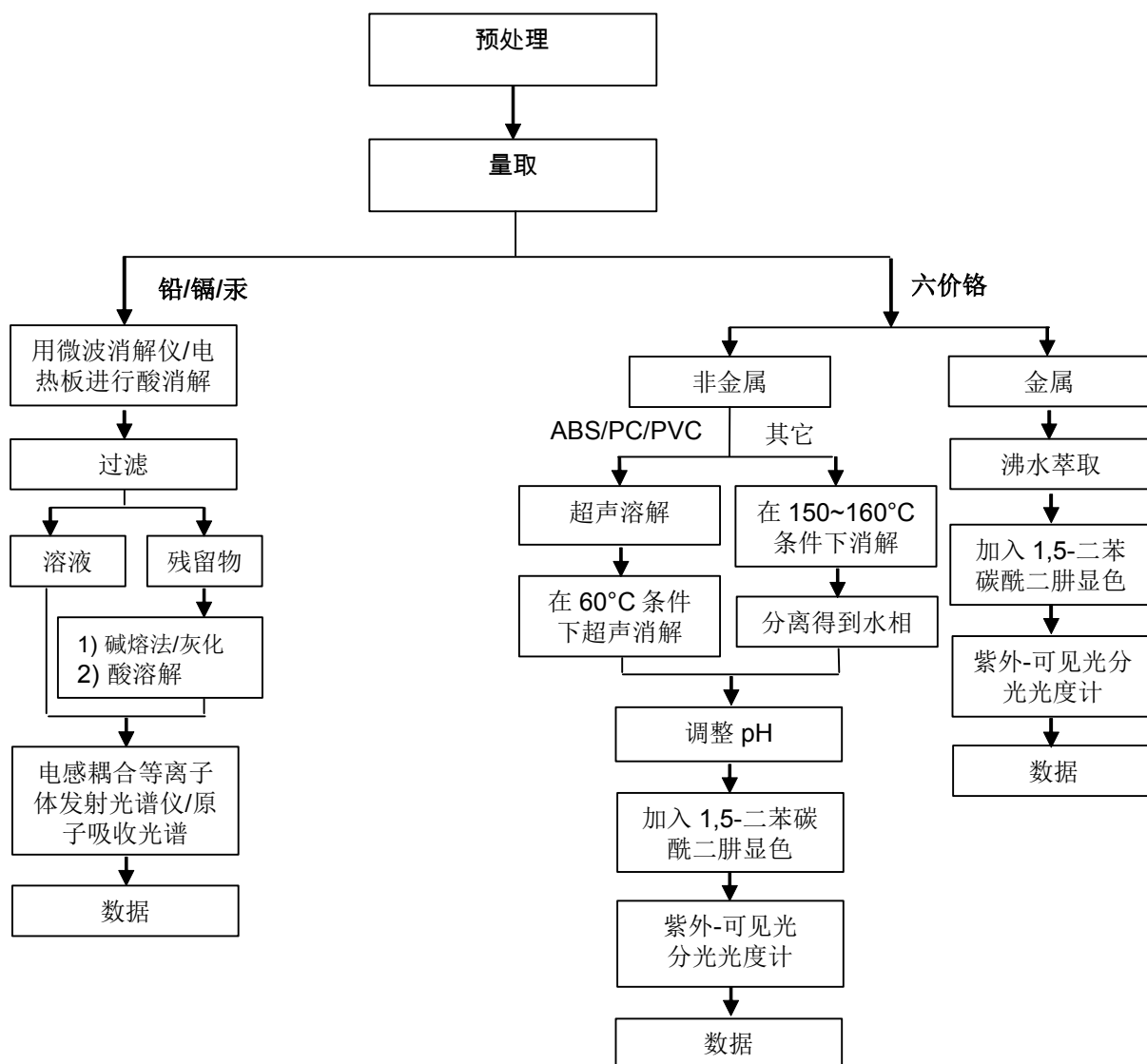
除非另有说明, 此报告结果仅对检测的样品负责。本报告未经本公司书面许可, 不可部分复制。检测报告仅用于客户科研、教学、内部质量控制、产品研发等目的, 仅供内部参考。



附件

Pb/Cd/Hg/Cr⁶⁺ 检测流程图

1) 样品按照下述流程被完全消解(六价铬检测除外)。

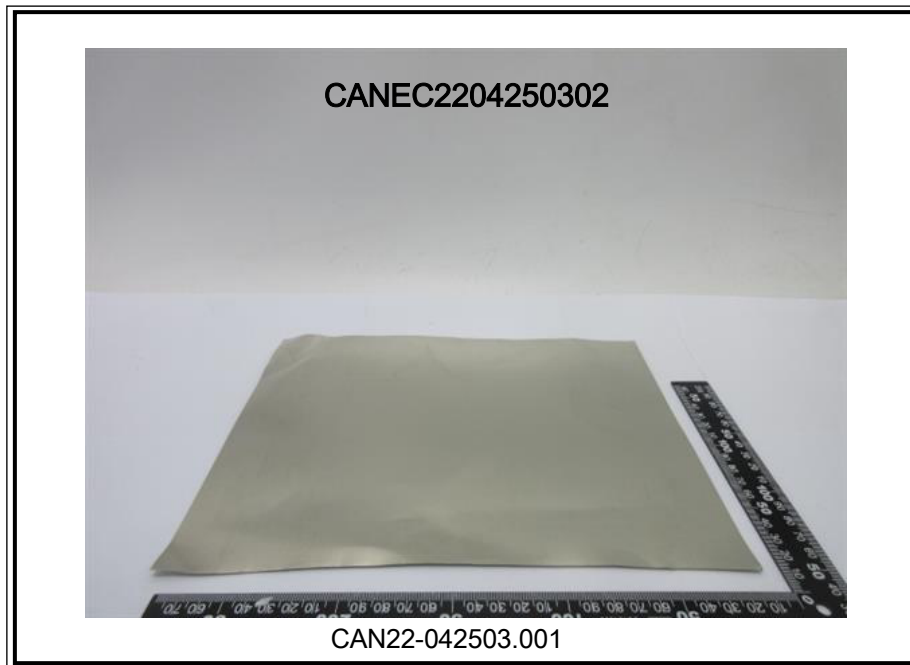


检测报告

编号: CANEC2204250302

日期: 2022年03月22日 第4页,共4页

样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***



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Guangzhou Branch Testing Center Chemical Laboratory.

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