# SPECIFICATION

## APPLICATION FOR APPROVAL

| | |
|---|---|
| CUSTOMER : | SUNSEA IOT |
| CS P/N : | SX0272000053 |
| PART NAME : | WiFi Antenna 2.4G&5.8G |
| DEVE NO. : | AUK02016B-2.4G&5.8G |
| PART NO. : | B92240-90 |
| DATE : | Sep 7, 2021 |

| Customer Approval | | | |
|---|---|---|---|
| RF Engineer | ME Engineer | R&D Manger | PRODUCT Manger |
| | | | |
| AUDEN COMMUNICATIONS&MULTIMEDIA TECHNO (KUNSHAN) CO.LTD | | | |
| RF Engineer | ME Engineer | R&D Manger | PRODUCT Manger |
| Jie.lv | Hongxue.che | Weifan.fan | Jianjun.mao |

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Branch Office
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## The Basic Parameters

| Item | Specifications |
|---|---|
| Structure | Rubber Stick-SMA-J |
| Frequency | 2400-2500MHz & 5000-5865MHz |
| V.S.W.R | ≤2.0 |
| Gain | ≤5.0 |
| Size | 207±3mm*13.5mm |
| Impedance | 50Ω |
| connector | SMA-J |
| Operation temperature | -40°C to 85°C |
| Storage temperature | -40°C to 85°C |
| Humidity | Non-condensing 65°C 95% RH |
| Product picture | |

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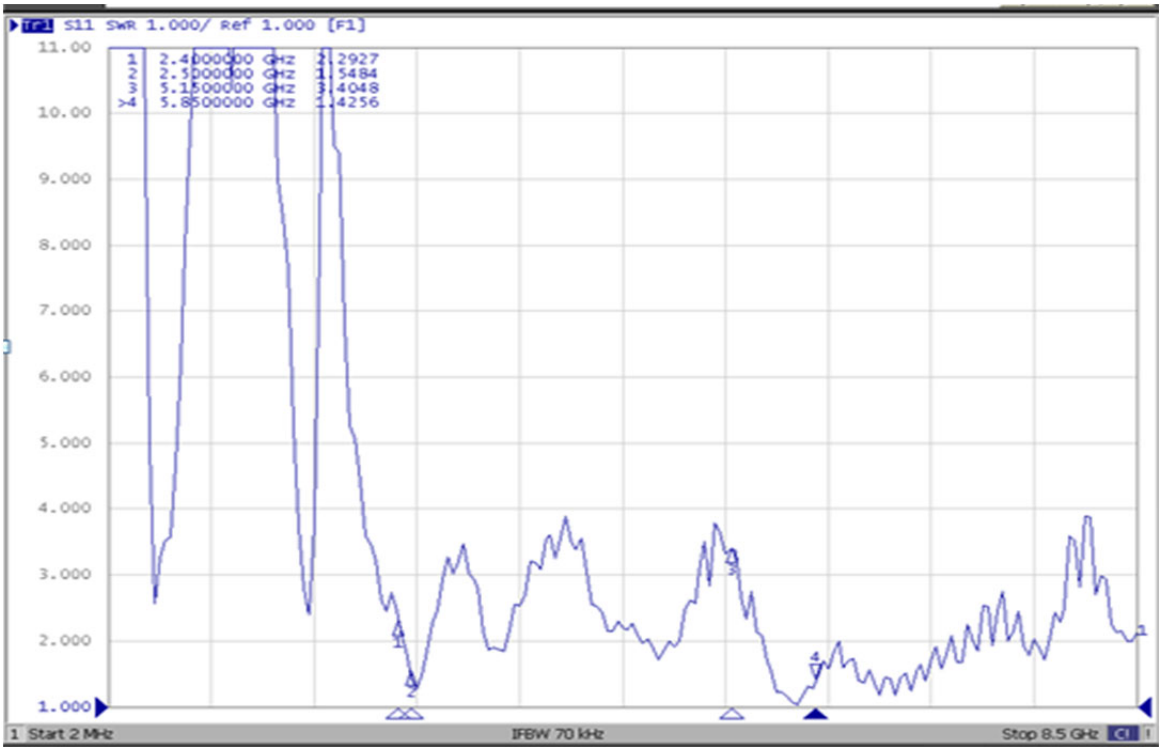
# RF Performance Test Report

| Frequency | Efficiency Total (%) | Gain Total (dBi) | Frequency | Efficiency Total (%) | Gain Total (dBi) |
|---|---|---|---|---|---|
| 2.4G | 56.62 | 3.11 | 5.15G | 61.09 | 1.65 |
| 2.41G | 58.88 | 3.35 | 5.2G | 55.98 | 1.45 |
| 2.42G | 61.38 | 3.57 | 5.25G | 54.2 | 1.33 |
| 2.43G | 60.53 | 3.53 | 5.3G | 61.8 | 1.78 |
| 2.44G | 62.37 | 3.58 | 5.35G | 57.41 | 1.39 |
| 2.45G | 69.34 | 4.01 | 5.4G | 62.37 | 2.15 |
| 2.46G | 68.87 | 3.82 | 5.45G | 66.07 | 2.84 |
| 2.47G | 69.66 | 3.73 | 5.5G | 61.38 | 2.77 |
| 2.48G | 72.95 | 3.82 | 5.55G | 52.72 | 2.01 |
| 2.49G | 72.44 | 3.73 | 5.6G | 50.58 | 1.23 |
| 2.5G | 72.28 | 3.68 | 5.65G | 50.47 | 1.9 |
| | | | 5.7G | 64.42 | 3.2 |
| | | | 5.75G | 62.66 | 3.1 |
| | | | 5.8G | 73.62 | 3.57 |
| | | | 5.85G | 91.83 | 4.32 |

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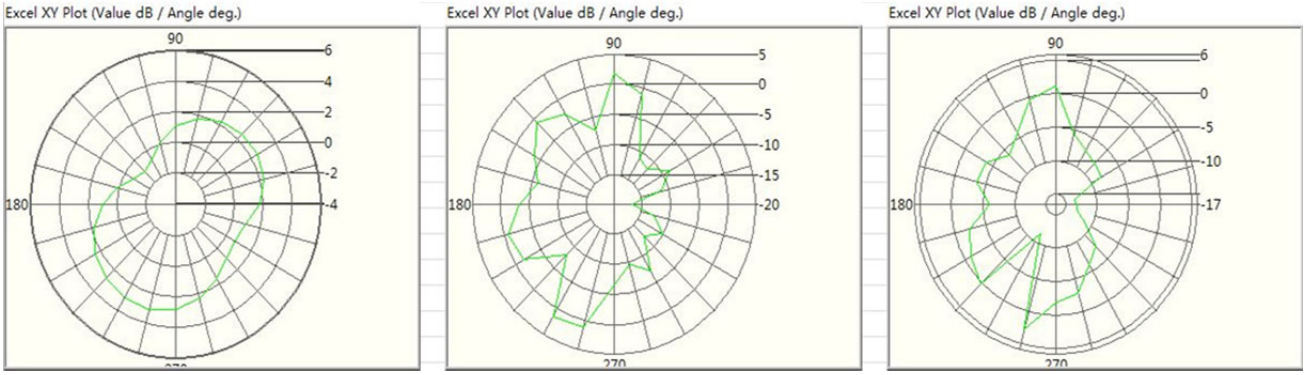
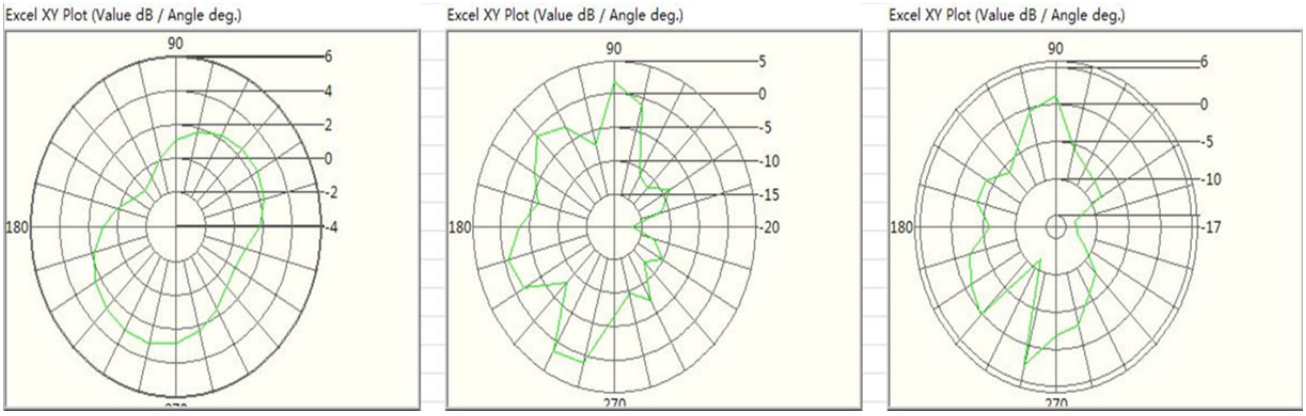
# 2D report

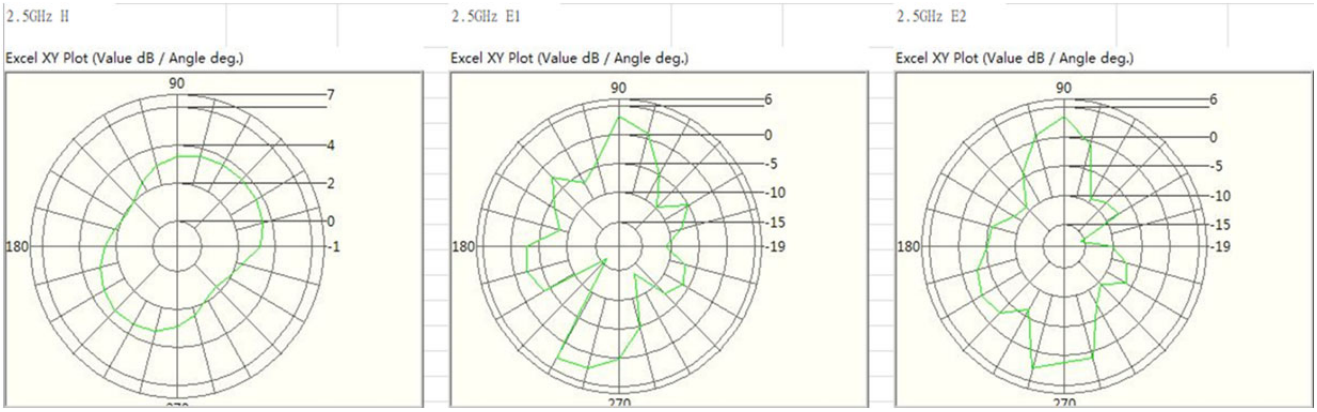
## 2.4G




## 2.45G




## 2.5G

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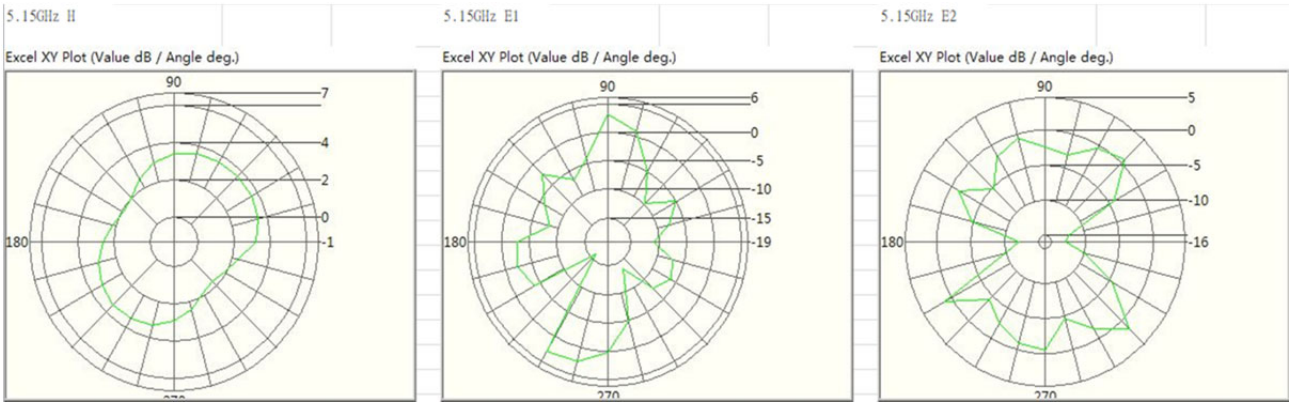
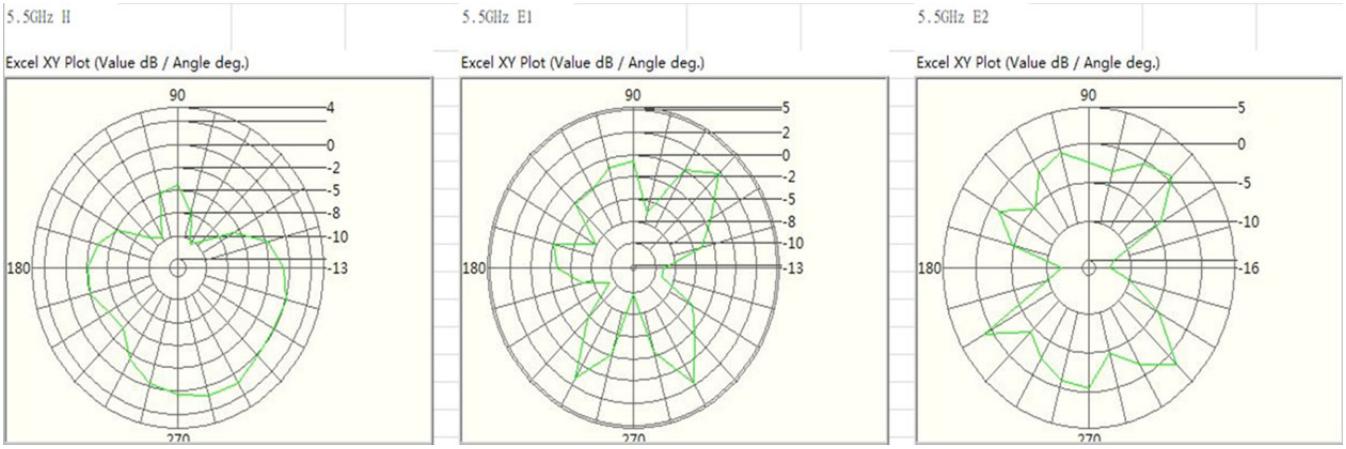
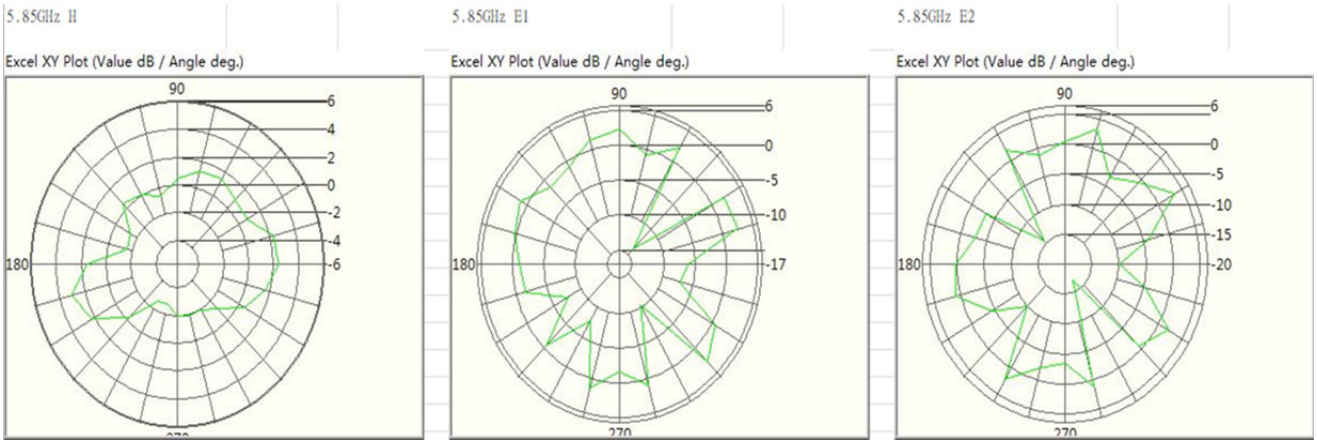
## 5.15G




## 5.5G




## 5.85G

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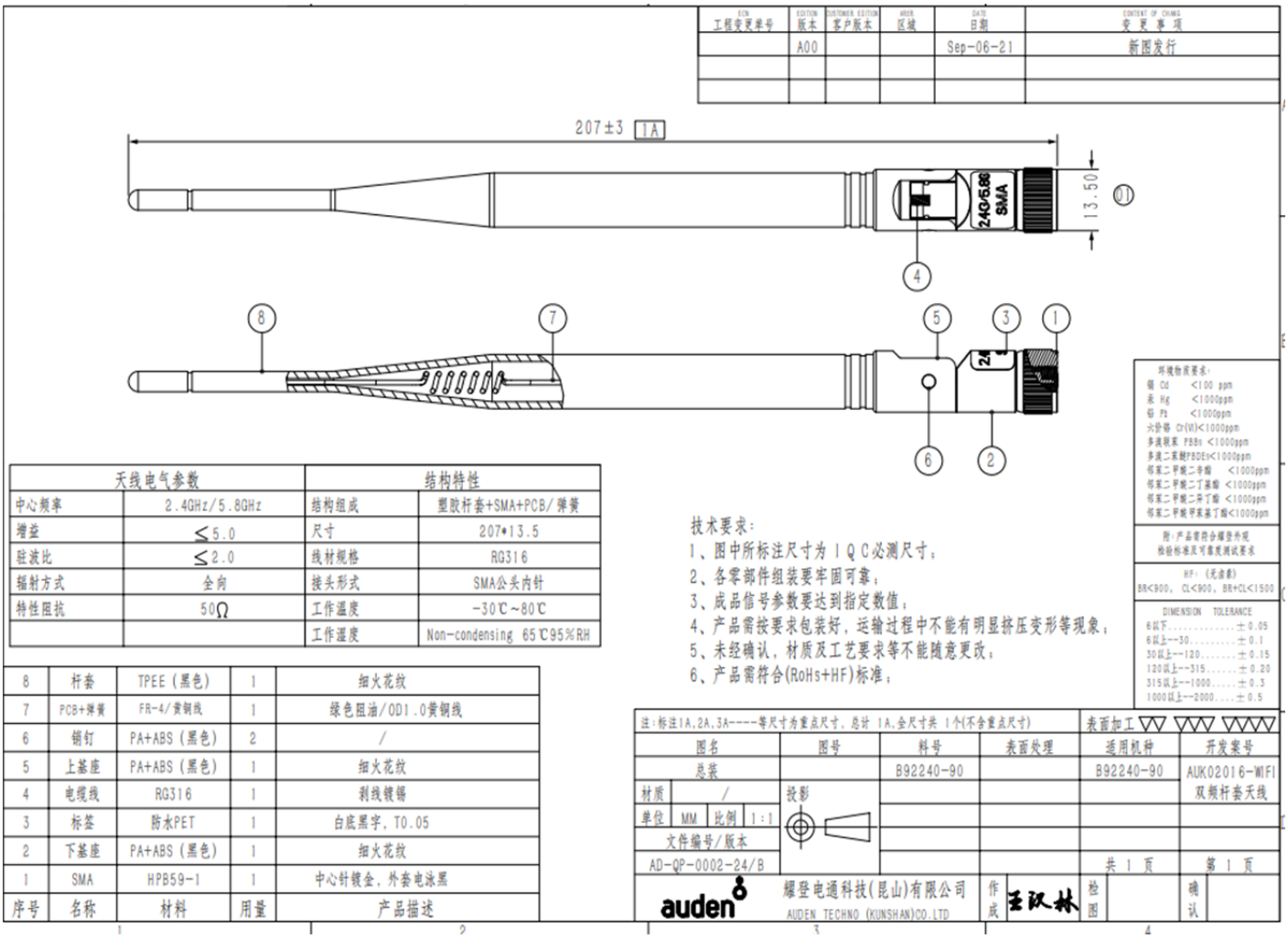
# Product Drawing




| 工程变更单号 | 版本 | 客户版本 | 区域 | 日期 | 变更事项 |
|---|---|---|---|---|---|
| | A00 | | | Sep-06-21 | 新图发行 |

| 天线电气参数 | | 结构特性 | |
|---|---|---|---|
| 中心频率 | 2.4GHz/5.8GHz | 结构组成 | 塑胶杆套+SMA+PCB/弹簧 |
| 增益 | ≤5.0 | 尺寸 | 207*13.5 |
| 驻波比 | ≤2.0 | 线材规格 | RG316 |
| 辐射方式 | 全向 | 接头形式 | SMA公头内针 |
| 特性阻抗 | 50Ω | 工作温度 | -30℃~80℃ |
| | | 工作湿度 | Non-condensing 65℃95%RH |

技术要求：
1、图中所标注尺寸为 I Q C必测尺寸；
2、各零部件组装要牢固可靠；
3、成品信号参数要达到指定数值；
4、产品需按要求包装好，运输过程中不能有明显挤压变形等现象；
5、未经确认，材质及工艺要求等不能随意更改；
6、产品需符合(RoHs+HF)标准；

| 序号 | 名称 | 材料 | 用量 | 产品描述 |
|---|---|---|---|---|
| 8 | 杆套 | TPEE（黑色） | 1 | 细火花纹 |
| 7 | PCB+弹簧 | FR-4/黄铜线 | 1 | 绿色阻油/OD1.0黄铜线 |
| 6 | 销钉 | PA+ABS（黑色） | 2 | / |
| 5 | 上基座 | PA+ABS（黑色） | 1 | 细火花纹 |
| 4 | 电缆线 | RG316 | 1 | 剥线镀锡 |
| 3 | 标签 | 防水PET | 1 | 白底黑字，T0.05 |
| 2 | 下基座 | PA+ABS（黑色） | 1 | 细火花纹 |
| 1 | SMA | HPB59-1 | 1 | 中心针镀金，外套电泳黑 |

环境物质要求：
镉 Cd <100 ppm
汞 Hg <1000ppm
铅 Pb <1000ppm
六价铬 Cr(VI)<1000ppm
多溴联苯 PBBs <1000ppm
多溴二苯醚PBDEs<1000ppm
邻苯二甲酸二辛酯 <1000ppm
邻苯二甲酸二丁基酯 <1000ppm
邻苯二甲酸二异丁酯 <1000ppm
邻苯二甲酸甲苯基丁酯<1000ppm

附：产品需符合螺登外观检验标准及可靠度测试要求

HF：（无卤素）
BR<900，CL<900，BR+CL<1500

DIMENSION TOLERANCE
6以下.....±0.05
6以上--30.....±0.1
30以上--120.....±0.15
120以上--315.....±0.20
315以上--1000.....±0.3
1000以上--2000.....±0.5

注：标注1A,2A,3A----等尺寸为重点尺寸，总计 1A,全尺寸共 1 个(不含重点尺寸)

表面加工

| 图名 | 图号 | 料号 | 表面处理 | 适用机种 | 开发案号 |
|---|---|---|---|---|---|
| 总装 | | B92240-90 | | B92240-90 | AUK02016-WIFI |
| 材质 / | 投影 | | | | 双频杆套天线 |
| 单位 MM 比例 1:1 | | | | | |
| 文件编号/版本 | | | | | |
| AD-QP-0002-24/B | | | | 共 1 页 | 第 1 页 |

auden 螺登电通科技(昆山)有限公司 AUDEN TECHNO (KUNSHAN)CO.LTD 作成 王汉林 检图 确认

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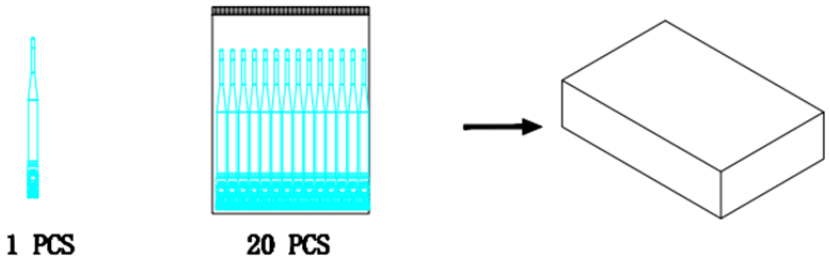
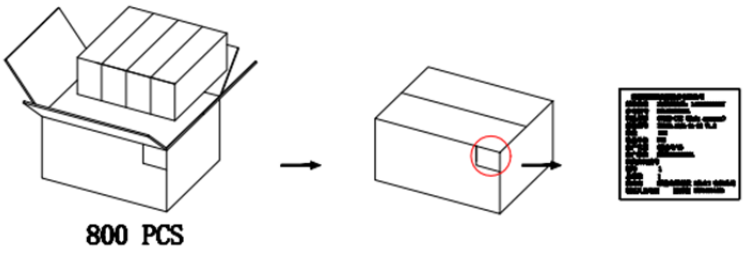
# Packing

| | |
|---|---|
| Inner Bag Packaging |  <br>20pcs in 1Pe bag, 5 bags in 1 inner box |
| Outside Carton Box |  <br>8 inner boxes and 1 outer box (1 box of 800pcs products) |

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