



SPECIFICATION

APPLICATION FOR APPROVAL

客户名称 CUSTOMER : 上海英众信息科技有限公司
客户案号 CS P/N : XB22-Main
零件名称 PART NAME : AUK02130B-MAIN
耀登案号 DEVE NO. : B52461-00

承认日期 DATE : Jul. 8, 2021

| | | | |
|----------------|-------|------|------|
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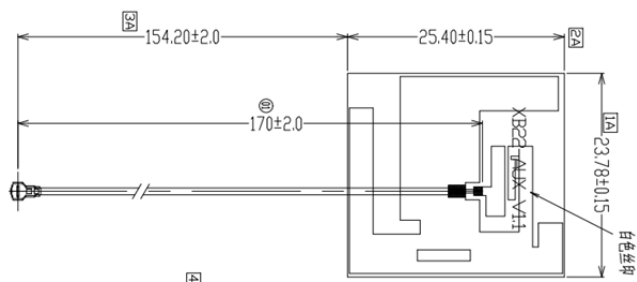
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天线基本参数 (The Basic Parameters)

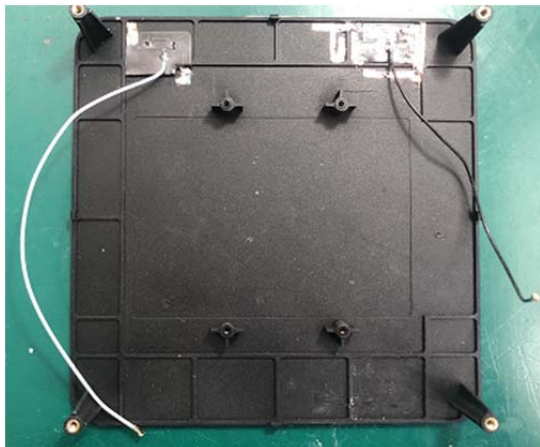
| 项目 (Item) | 特性 (Specifications) |
|------------------------------|---|
| 天线结构组成 | FPC+CABLE |
| 频率 (Frequency) | 2.4g~5.8g |
| 驻波比 (V. S. W. R) | ≤ 3 |
| 增益 (Gain) | ≤ 5 |
| 极化方式 (Polarization) | 线极化 |
| 特性阻抗 (Impedance) | 50 Ω |
| 塑胶材质 (Plastic material) | 无 |
| 接头形式 (joint type) | 4 代端子+Cable |
| 工作温度 (Operation temperature) | -40°C to 85°C |
| 储存温度 (Storage temperature) | -40°C to 85°C |
| 湿度 (humidity) | Non-condensing 65°C 95% RH |
| 天线图片 |  <p>Technical drawing of the antenna assembly showing dimensions and components. The drawing includes a cable with a connector, a printed circuit board (PCB) with a microstrip antenna, and a component labeled X822 (AUX V1.1). Dimensions are provided in millimeters: 154.20±2.0, 25.40±0.15, 170±2.0, and 23.78±0.15. A note indicates '白色丝印' (White silk print) for the component label.</p> |

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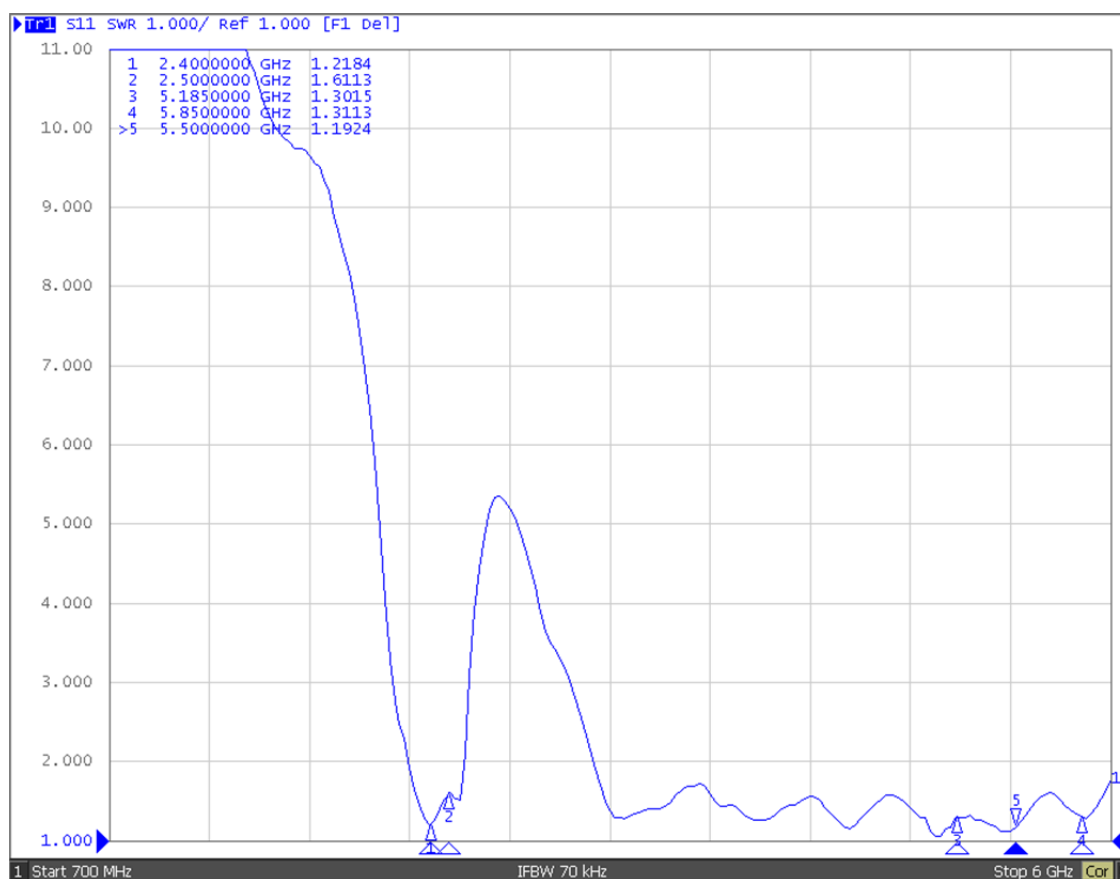
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电气测试报告（RF Performance Test Report）

组装位置



V.S.W.R



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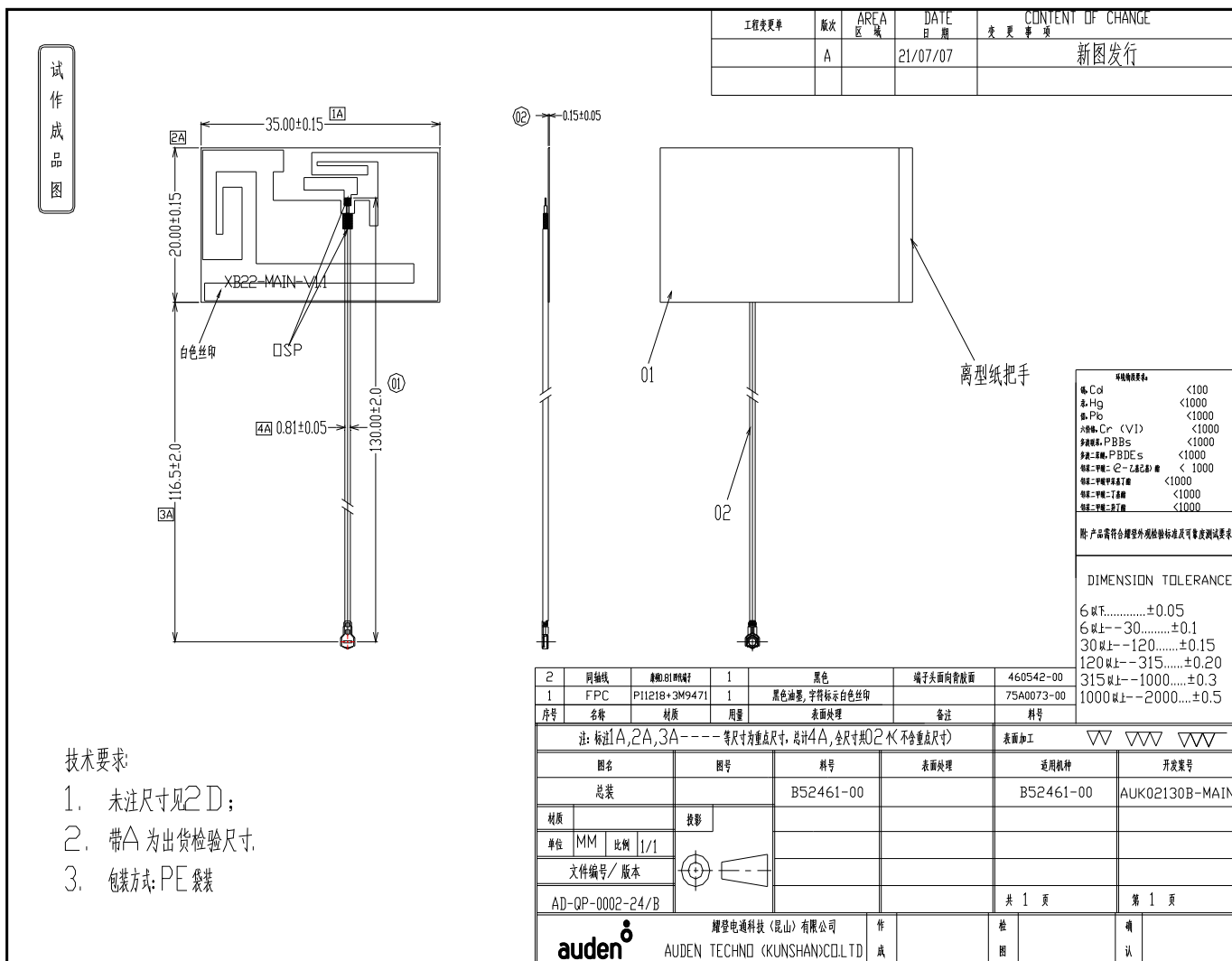
Main-无源测试数据

| Frequency | Efficiency(%) | Gain(dBi) | Frequency | Efficiency(%) | Gain(dBi) |
|-----------|---------------|-----------|-----------|---------------|-----------|
| 2.4G | 49.09 | 2.25 | 5.15G | 69.18 | 4.32 |
| 2.41G | 47.42 | 2.35 | 5.2G | 68.39 | 4.35 |
| 2.42G | 48.53 | 2.58 | 5.25G | 65.77 | 4.23 |
| 2.43G | 48.08 | 2.76 | 5.3G | 73.45 | 4.71 |
| 2.44G | 44.98 | 2.55 | 5.35G | 69.18 | 4.34 |
| 2.45G | 50.23 | 3.22 | 5.4G | 73.96 | 4.49 |
| 2.46G | 50.12 | 3.37 | 5.45G | 69.5 | 3.87 |
| 2.47G | 50.93 | 3.62 | 5.5G | 66.68 | 3.42 |
| 2.48G | 52.97 | 3.86 | 5.55G | 52.6 | 2 |
| 2.49G | 50.93 | 3.77 | 5.6G | 48.31 | 1.5 |
| 2.5G | 49.09 | 3.67 | 5.65G | 50.58 | 1.71 |
| | | | 5.7G | 65.61 | 3.02 |
| | | | 5.75G | 60.67 | 2.91 |
| | | | 5.8G | 74.13 | 3.8 |
| | | | 5.85G | 77.62 | 4.1 |

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工程图纸 (Product Drawing)



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尺寸报告 (Dimensional check reports)

| 全尺寸测量报告 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|-----------|--------------|--------|--------------------------|------|---------------------|----------|-----------|----------|----------|----------|----------|----------|----------|-----------|---------------------------|-------|-----------------|-----------|----------------------|------------|---------------------|------------|-----------------|----------|--------|---------------|-----------|--------|--------|
| Vendor(供应商) | | 材质名称 | | 天线 | | Part NO(料号) | | B52461-00 | | | | | | | | Tool Number(模号) | | Cav. Number(穴数) | | Unit(单位) | | | | Comments(设计者签字) | | | | | | |
| 耀登 | | | | | | Part Name (零件名称) | | 总装 | | | | | | | | | | | | INCHES ■ MILLIMETERS | | | | | | | | | | |
| 日期 | | 2021/7/7 | | MEASURED DIMENSION(实测尺寸) | | | | | | | | | | | | % TOLERANCE USED(公差使用百分比) | | DISPOSITION | | | | ACCEPTABLE VARIANCE | | | | | | | | |
| DIM. # | DIMENSION | DRAWING ZONE | + TOL. | - TOL. | NOTE | SAMPLE 1 | SAMPLE 2 | SAMPLE 3 | SAMPLE 4 | SAMPLE 5 | SAMPLE 6 | SAMPLE 7 | SAMPLE 8 | SAMPLE 9 | SAMPLE 10 | UPPER | LOWER | 0% - 25% | 25% - 50% | 50% - 75% | 75% - 100% | 100% + | Re-Measure | Accept | Fix Tool | Accept | With Variance | DIMENSION | + TOL. | - TOL. |
| 1 | 35.00 | 1A | 0.15 | 0.15 | | 35.00 | 35.01 | 35.00 | 35.02 | 35.00 | 35.01 | 35.00 | 35.02 | 35.00 | 35.02 | 13% | 0% | X | | | | | | | | | | | | |
| 2 | 20.00 | 2A | 0.15 | 0.15 | | 20.00 | 20.01 | 20.02 | 20.01 | 20.00 | 20.01 | 20.02 | 20.01 | 20.00 | 20.01 | 13% | 0% | X | | | | | | | | | | | | |
| 3 | 116.50 | 3A | 2.00 | 2.00 | | 116.50 | 116.70 | 116.80 | 116.90 | 116.60 | 116.70 | 116.80 | 116.90 | 116.60 | 116.90 | 20% | 0% | X | | | | | | | | | | | | |
| 4 | 0.81 | 4A | 0.05 | 0.05 | | 0.81 | 0.80 | 0.81 | 0.81 | 0.80 | 0.80 | 0.81 | 0.81 | 0.80 | 0.81 | 0% | 20% | X | | | | | | | | | | | | |
| 5 | 130.00 | 1 | 2.00 | 2.00 | | 130.00 | 130.10 | 130.20 | 130.30 | 130.10 | 130.10 | 130.20 | 130.30 | 130.10 | 130.30 | 15% | 0% | X | | | | | | | | | | | | |
| 6 | 0.15 | 2 | 0.05 | 0.05 | | 0.15 | 0.16 | 0.15 | 0.14 | 0.15 | 0.16 | 0.15 | 0.14 | 0.15 | 0.14 | 20% | 20% | X | | | | | | | | | | | | |
| 核准: 李金 审核: 麦建国 制表: 孙贊贊 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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可靠性测试报告(Reliability test report)

| NO. | ITEM | TEST CONDITION | SPECIFICATION |
|-----|---|---|---|
| 1 | Low Temperature Test | 1.Temperature: $-40\pm 2^{\circ}\text{C}$ 2.Time: 48hrs | No material deformation is allowed. |
| 2 | High Temperature Test | 1.Temperature: $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 2.Time: 48hrs | |
| 3 | High Temperature/Humidity Storage Test(non operating) | 1.Temperature: $+60 \pm 2^{\circ}\text{C}$ 2.Humidity: $93\%\pm 2\%\text{RH}$ 3.Time: 48hrs | |
| 4 | Salt-Spray Test | 35°C , 85%RH, 48Hours(According to MIL-STD-810E) The salt-spray is generated from a 5% salt(NaCl) solution., | NO appear rusting phenomenon is allowed |

耀登电通科技（昆山）有限公司

可靠性测试汇总报告

| | | | | | | | | | | | |
|------------|--------|-----------|-------|---|-------------------------------|------|----|----|----|----|---|
| 客户 | | 客户机种 | | 耀登机种 | AUK02130B-MAIN | | | | | | |
| 可靠性测试项目及要求 | | | | | | 测试结果 | | | | | 备注 |
| 序号 | 测试项目 | 测试时间 | 测试仪器 | 测试条件 | 判定标准 | 1 | 2 | 3 | 4 | 5 | |
| 1 | 盐雾试验 | 2021/6/30 | 盐雾测试机 | 将产品放于盐雾试验机中，在35℃±2℃的密闭环境中，PH值在6.5-7.2范围内，用5%±1%的NaCl溶液连续48h盐水喷雾后，将样品用清水冲洗干净后检查天线外观； | 表面无锈蚀、镀层剥落、起泡等不良现象，RF测试通过为合格。 | OK | OK | OK | OK | OK |  盐雾试验.doc |
| 2 | 低温试验 | 2021/6/30 | 恒温恒湿机 | 将产品放置在温度为-40℃±2℃的低温环境存储48h，试验完成后在常温环境下放置2小时后检查产品外观。 | 部件无裂痕、明显的变形、脱落，RF测试通过为合格。 | OK | OK | OK | OK | OK |  低温试验.doc |
| 3 | 高温试验 | 2021/7/2 | 恒温恒湿机 | 将产品放置在温度为85℃±2℃的高温环境存储48h，试验完成后在常温环境下放置2 h后检查产品外观。 | 部件无裂痕、明显的变形、脱落，RF测试通过为合格。 | OK | OK | OK | OK | OK |  高温试验.doc |
| 4 | 高温高湿试验 | 2021/7/4 | 恒温恒湿机 | 将产品放置在温度为60℃±2℃；湿度：93%±2%RH环境存储48h，试验完成后在常温环境下放置2小时后检查产品外观。 | 部件无裂痕、明显的变形、脱落，RF测试通过为合格。 | OK | OK | OK | OK | OK |  高温高湿试验.doc |
| 试验结果判定 | | | | 可靠性试验合格 | | | | | | | |
| 核准：李金 | | | | | | | | | | | |

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