# TEST REPORT

**LAB NO. : (6623)312-0134**
**DATE : January 11, 2024**
**PAGE : 1 OF 16**

Applicant 申请人公司名称:
**ZHEJIANG GEYA ELECTRICAL CO., LTD.**
**浙江格亚电气有限公司**
WENZHOU BRIDGE INDUSTRAL ZONE, BEIBAIXIANG TWON, YUEQING CITY, ZHEJIANG PROVINCE, CHINA
浙江省温州市乐清市北白象镇温州大桥工业区

Date of Submission 样品收取日期: 2023-11-8/2024-1-10
Test Period 所需工作周期: 2023-11-8 to 2024-1-11
Sample Mode 来样方式: Sample Presentation 委托单位送样
BV EE Ref. No. BV 参考编号: GYB-ESH-Q23110701-A0

| | | | |
|---|---|---|---|
| Sample Description 样品描述: | Sample(s) received is(are) stated to be 收到的送测样品为:<br>GR8 series GRV8 series<br>GRL8 series GRI8 series | | |
| Manufacturer 制造商: | ZHEJIANG GEYA ELECTRICAL CO.,LTD. | Buyer 买家: | / |
| Style No(s) 款号: | / | PO No. 采购订单号: | / |
| Country of Origin 原产地: | China | Country of Destination 目的地: | Oversea Country |

**SUMMARY OF TEST RESULTS 测试结果摘要**

| **TEST REQUESTED**<br>**测试要求** | **CONCLUSION**<br>**结论** |
|---|---|
| Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863<br>合规测试 –有关欧盟委员会针对电子产品的指令(电子电器禁用某些有害物质指令)，2011/65/EU 及其修订条款 (EU) 2015/863 | PASS<br>通过 |

Note 注释: Chinese translation of report just for reference only, English report shall prevail if you have any objection.
报告中文翻译仅供参考，如有异议以英文报告内容为准

**REMARK/备注**
If there are questions or concerns on this report, please contact the following persons:
若有任何疑问或咨询，可通过下述联络方式与我们联络

General enquiry and invoicing
其他问题

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**BUREAU VERITAS**
**CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)**
**必维国际检验集团 –必维申美商品检测(上海)有限公司**

Laboratory Test Location 实验室检测地址:
No.368,Guangzhong Road, Zhuanqiao Town, Minhang, Shanghai 上海市闵行区光中路 368 号
No.168,Guanghua Road, Zhuanqiao Town, Minhang, Shanghai 上海市闵行区光华路 168 号

PREPARED BY : Ann
制定:

吕晓光 Lynd Lv
技术专员 Technical Specialist

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This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/ and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

# Photo of the Submitted Sample
# 递交样品照片

# Photo of the Submitted Sample
# 递交样品照片

## TEST RESULT 测试结果

**Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863**
**合规测试 –有关欧盟委员会针对电子产品的指令(电子电器禁用某些有害物质指令)，2011/65/EU 及其修订条款 (EU) 2015/863**

Test Method / 测试方法 : See Appendix. / 见附录

**See Analytes and their corresponding Maximum Allowable Limit in Appendix**
**分析物及其对应的最大允许限 – 见附录**

| - | | | Result | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Parameter** | | | **Lead (Pb)** | **Cadmium (Cd)** | **Mercury (Hg)** | **Chromium VI (Cr VI)** | **PBBs & PBDEs** | **DBP** | **BBP** | **DEHP** | **DIBP** | **Conclusion** |
| **Unit** | | | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **mg/kg** | **-** |
| **Test Item** | **Description** | **Location** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** | **-** |
| 1 | White plastic | Housing | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 2 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 3 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 4 | Red plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 5 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 6 | Red plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 7 | Golden metal with silvery plating | PCB | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 8 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 9 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 10 | Silvery metal screw | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 11 | Black plastic | | ND | ND | ND | <500 | ND | ND* | ND* | ND* | ND* | PASS |
| 12 | Green LED | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 13 | Red LED | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 14 | Blue capacitor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 15 | Grey resistor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 16 | Black plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 17 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 18 | Black magnet | | ND | ND | ND | <500 | NA | NA | NA | NA | NA | PASS |
| 19 | Blue plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 20 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 21 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 22 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 23 | White plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 24 | Black plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 25 | Black plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 26 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 27 | Black plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 28 | Brown paper | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |

| - | | | Result | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | | | Lead (Pb) | Cadmium (Cd) | Mercury (Hg) | Chromium VI (Cr VI) | PBBs & PBDEs | DBP | BBP | DEHP | DIBP | Conclusion |
| Unit | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | - |
| Test Item | Description | Location | - | - | - | - | - | - | - | - | - | - |
| 29 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 30 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 31 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 32 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 33 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 34 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 35 | Coppery metal | PCB | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 36 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 37 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 38 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 39 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 40 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 41 | Black plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 42 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 43 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 44 | Coppery metal contact point with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 45 | Black plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 46 | Black glue | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 47 | Blue plastic wire jacket | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 48 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 49 | Coppery metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 50 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 51 | Green plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 52 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 53 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 54 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 55 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 56 | Green PCB | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 57 | Black chip resistor | | $1.63 \times 10^3$ | ND | ND | ND | NA | NA | NA | NA | NA | EX# |
| 58 | Brown chip capacitor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 59 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 60 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 61 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 62 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 63 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 64 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |

| - | | | Result | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | | | Lead (Pb) | Cadmium (Cd) | Mercury (Hg) | Chromium VI (Cr VI) | PBBs & PBDEs | DBP | BBP | DEHP | DIBP | Conclusion |
| Unit | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | - |
| Test Item | Description | Location | - | - | - | - | - | - | - | - | - | - |
| 65 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 66 | Grey plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 67 | Grey plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 68 | Brown capacitor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 69 | Green resistor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 70 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 71 | Colorful resistor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 72 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 73 | Black plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 74 | Yellow plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 75 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 76 | Black magnet | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 77 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 78 | Silvery metal solder[R1] | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 79 | Yellow plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 80 | Yellow glue | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 81 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 82 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 83 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 84 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 85 | Transparent glass diode | | $6.43 \times 10^3$ | ND | ND | ND | NA | NA | NA | NA | NA | EX[#] |
| 86 | White plastic wire jacket | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 87 | Grey plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 88 | Red plastic wire jacket | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 89 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 90 | Silvery metal screw | PCB | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 91 | Golden metal with silvery plating | | $2.17 \times 10^4$ | ND | ND | ND | NA | NA | NA | NA | NA | EX[#] |
| 92 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 93 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 94 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 95 | Black plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 96 | Black plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 97 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 98 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 99 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 100 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 101 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |

| - | | | Result | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Parameter | | | Lead (Pb) | Cadmium (Cd) | Mercury (Hg) | Chromium VI (Cr VI) | PBBs & PBDEs | DBP | BBP | DEHP | DIBP | Conclusion |
| Unit | | | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | - |
| Test Item | Description | Location | - | - | - | - | - | - | - | - | - | - |
| 102 | Coppery metal | Housing | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 103 | Coppery metal contact point with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 104 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 105 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 106 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 107 | Coppery metal contact point with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 108 | Grey plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 109 | Coppery metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 110 | Black EC | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 111 | Red plastic wire jacket | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 112 | Yellow plastic wire jacket [R1] | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 113 | Black plastic wire jacket | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 114 | Transparent plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 115 | Blue resistor | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 116 | Red plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 117 | Transparent plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 118 | White plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 119 | Silvery metal solder | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 120 | Grey plastic | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 121 | Transparent glass | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 122 | Golden metal with silvery plating | Housing | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 123 | Red plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 124 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 125 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 126 | Black plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 127 | Grey plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 128 | Black glue | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 129 | Golden metal with silvery plating | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 130 | Silvery metal solder [R1] | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 131 | Green PCB | | ND | ND | ND | ND | ND | ND* | ND* | ND* | ND* | PASS |
| 132 | Blue plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 133 | Coppery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 134 | White plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |
| 135 | Silvery metal | | ND | ND | ND | ND | NA | NA | NA | NA | NA | PASS |
| 136 | Yellow plastic | | ND | ND | ND | ND | ND* | ND* | ND* | ND* | ND* | PASS |

Note / Key :

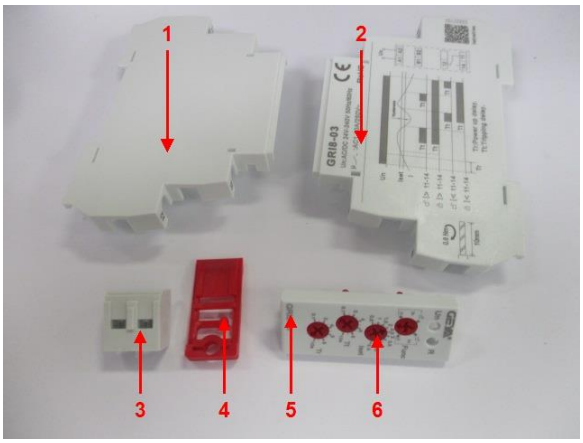
| | | |
|---|---|---|
| ND = Not detected | “>” = Greater than | “<” = Less than |
| NR = Not requested | mg/kg = milligram(s) per kilogram = ppm = part(s) per million | |
| Detection Limit: See Appendix. | NA = Not applicable | EX= Exempted |

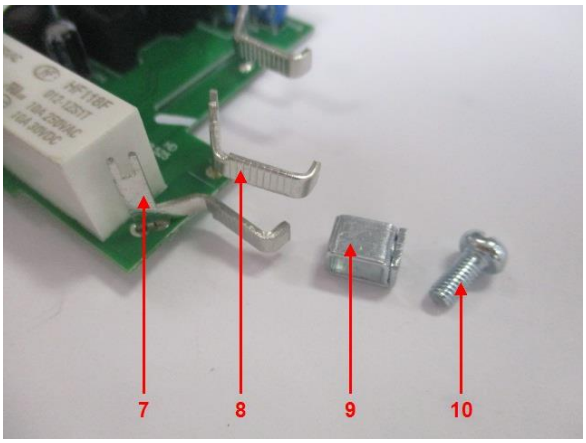
Remark :

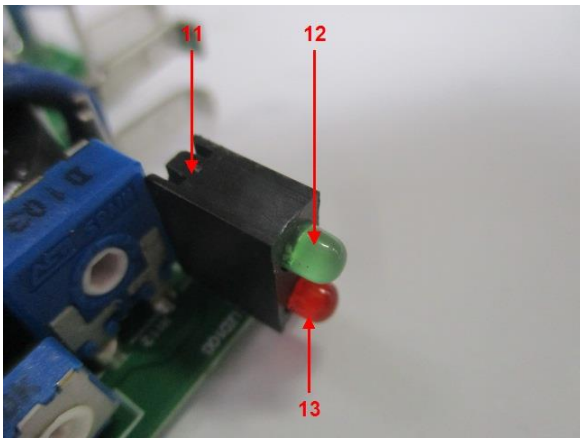
- The testing approach is listed in table of Appendix.
- * denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
- Only selected example(s) is (are) indicated on the photograph(s) in Comment.
- According to European Parliament and Council Directive 2011/65/EU, Article 5 “Adaptation of the Annexes to scientific and technical progress”, exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.
  For item 91:
  #According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 6(c) is reiterated here “Copper alloy containing up to 4 % lead by weight.”. Test Item(s) was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.
  For item 57,85:
  #According to Annex III of European Council Directive 2011/65/EU, exemptions were granted a few materials and Clause 7(c)-I is reiterated here “Electrical and electronic components containing lead in a glass or ceramic other than dielectric ceramic in capacitors, e.g. piezoelectronic devices, or in a glass or ceramic matrix compound.”. Test Item(s) was (were) claimed as is by client (received as is). Therefore, this (these) Test Item(s) containing the found lead level should be exempted.
  R1=2024-1-10 Second Submission

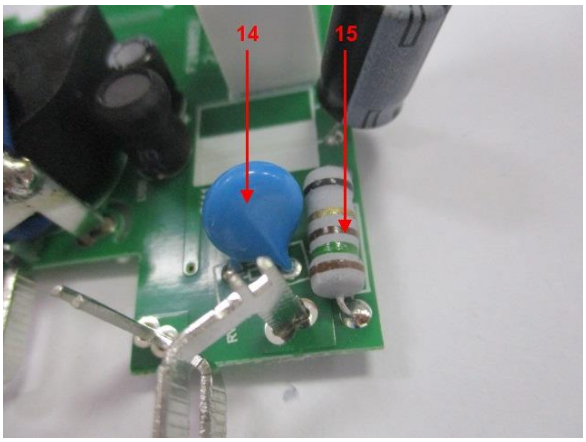
Comment :

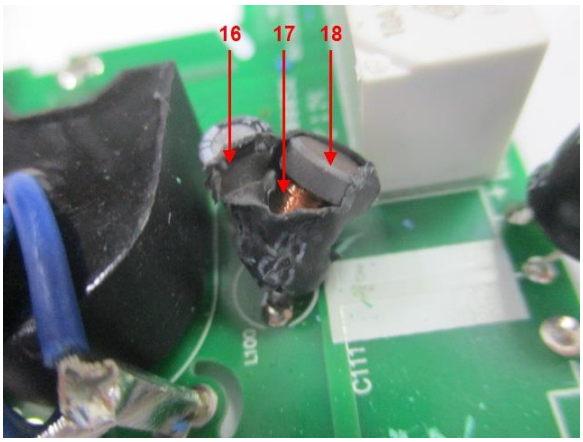
**Photograph depicting Test Item(s)**

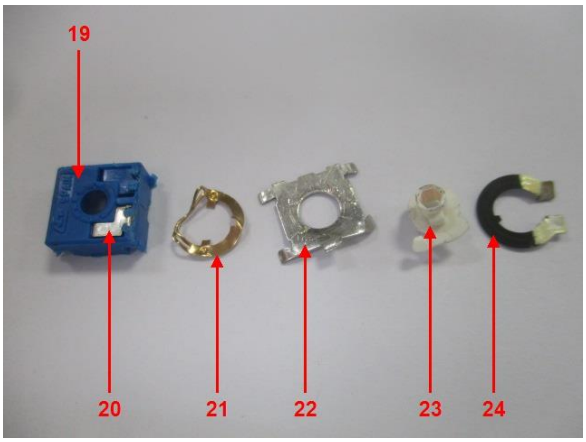


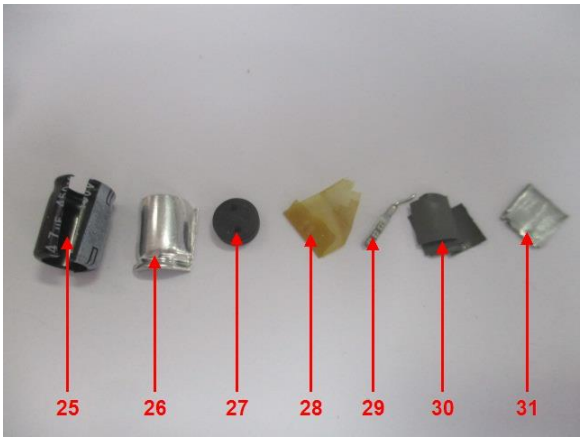

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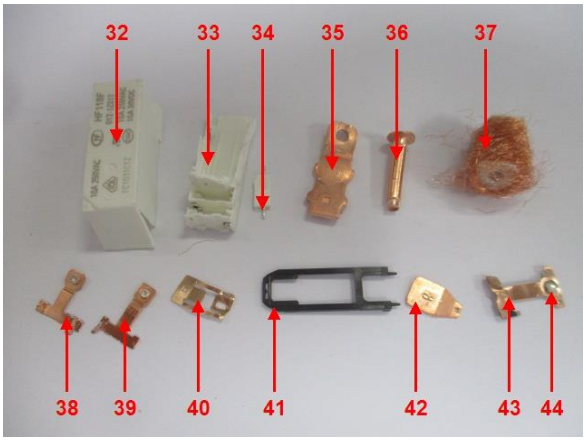
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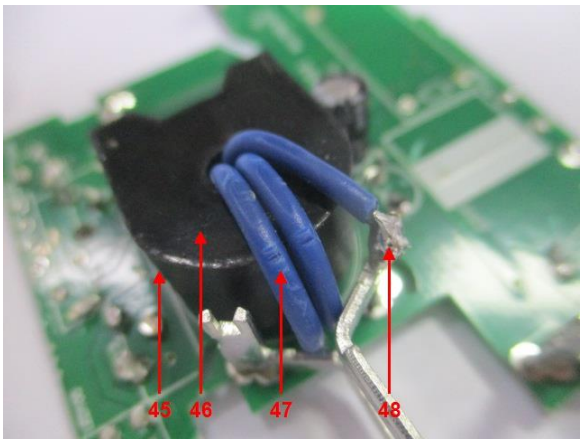
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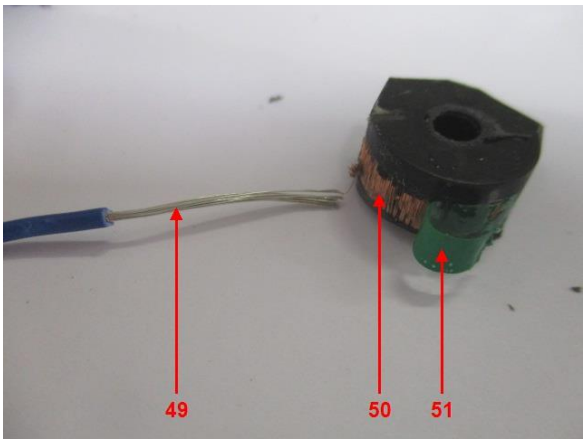
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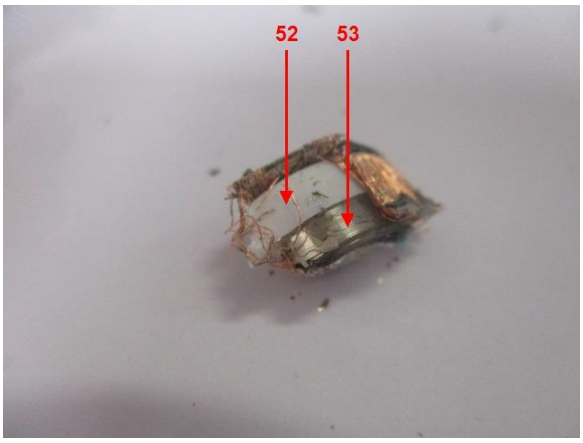
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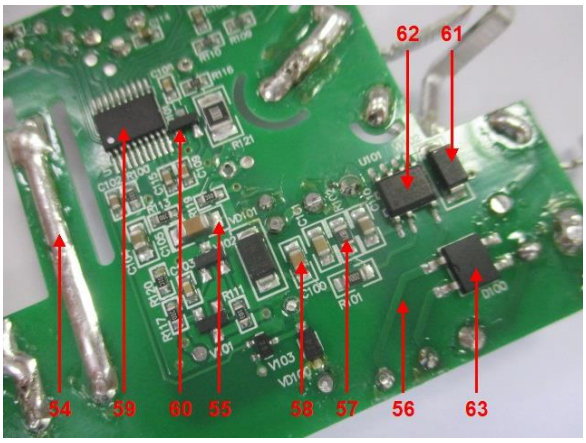
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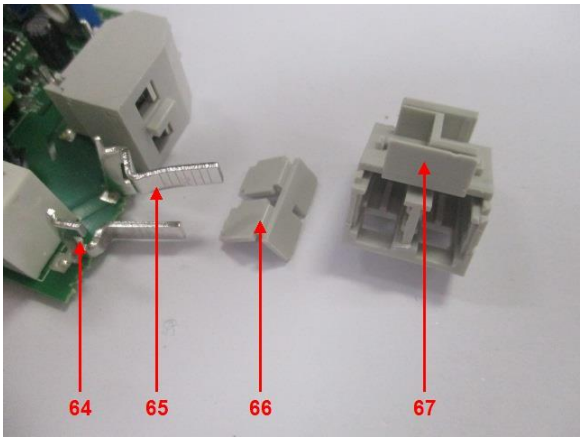
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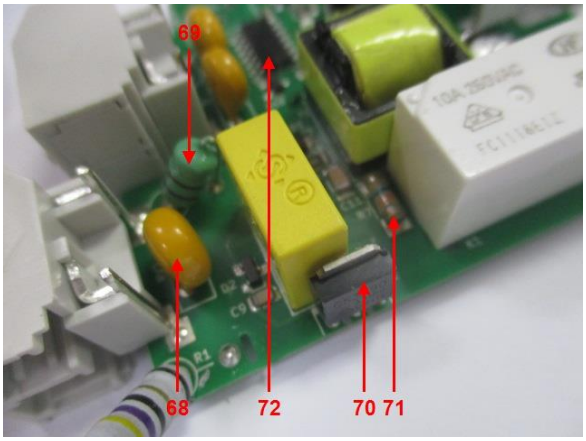
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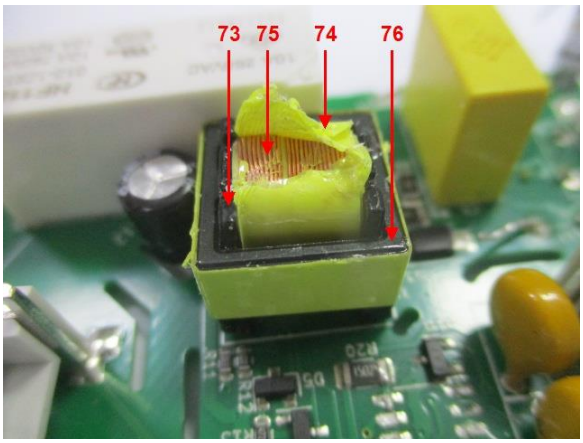
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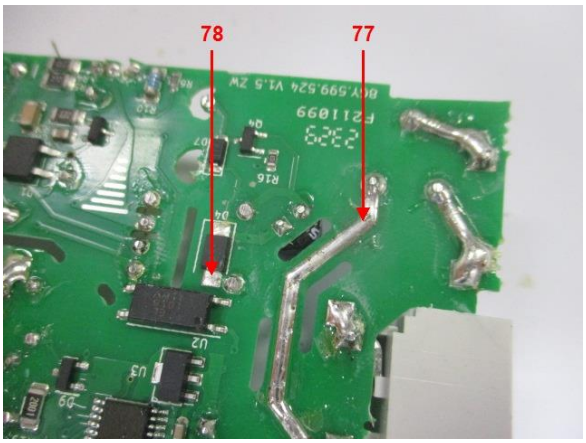
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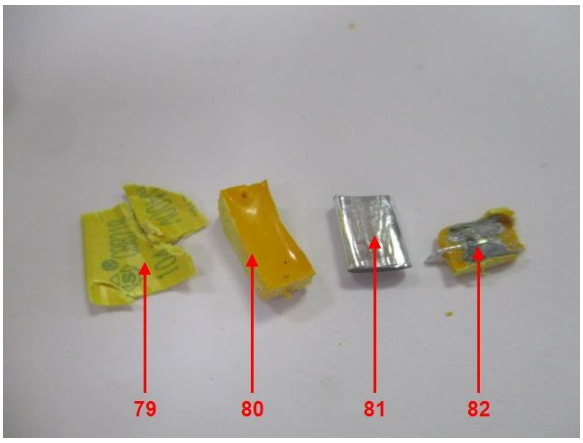
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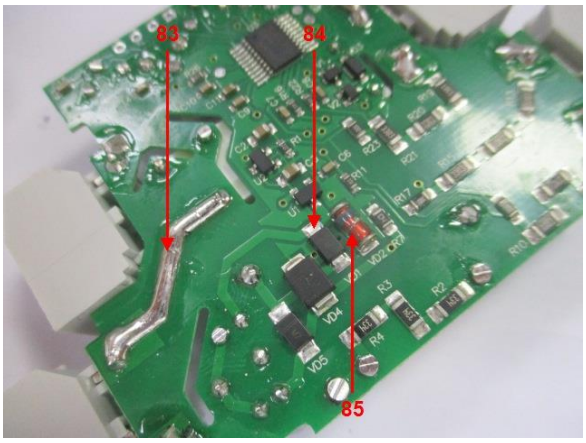
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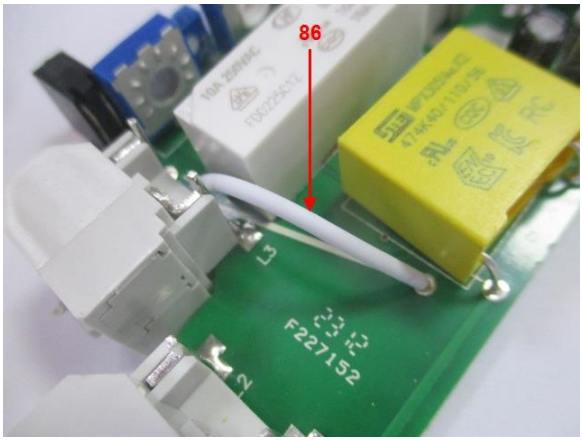
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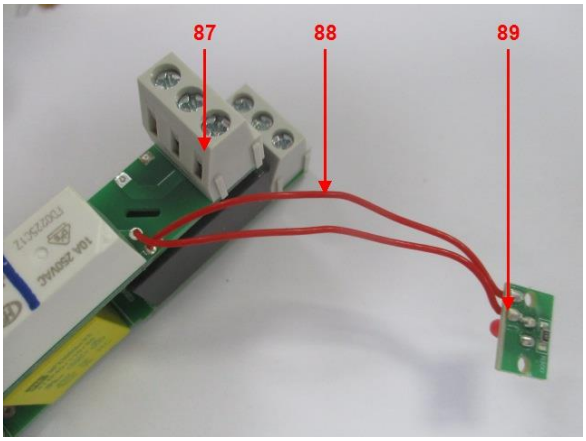
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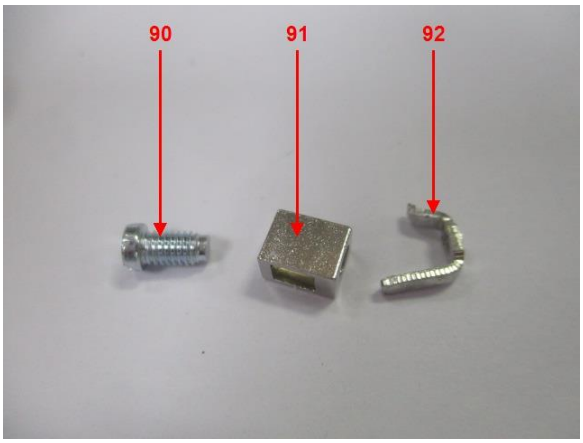
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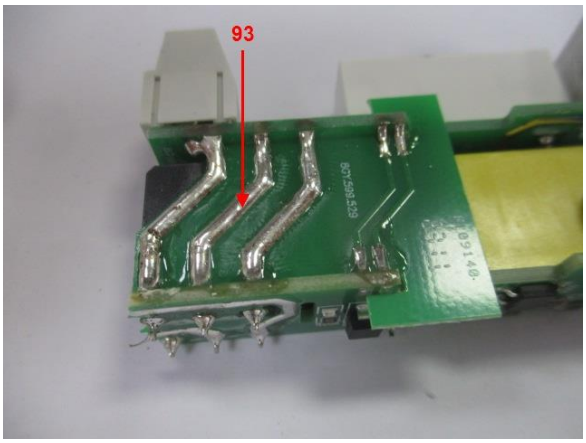
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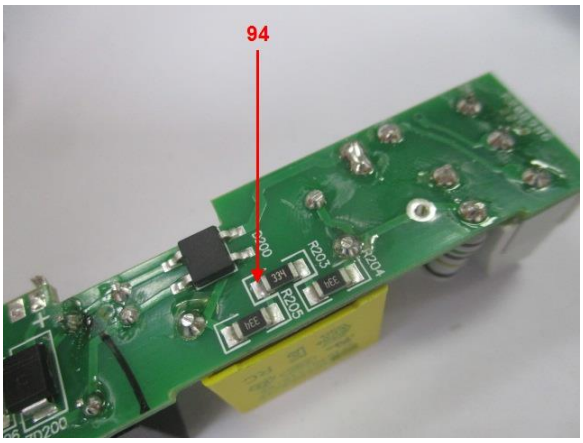
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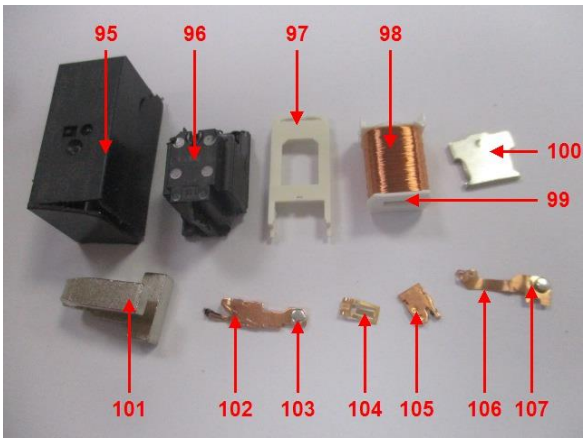
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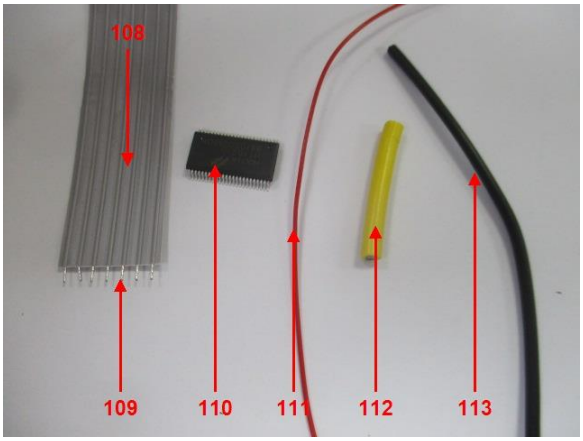
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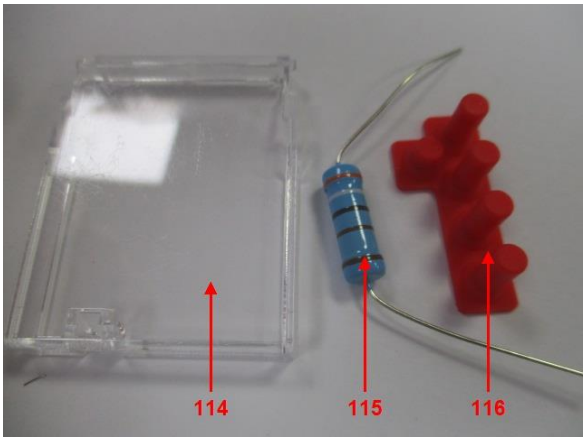
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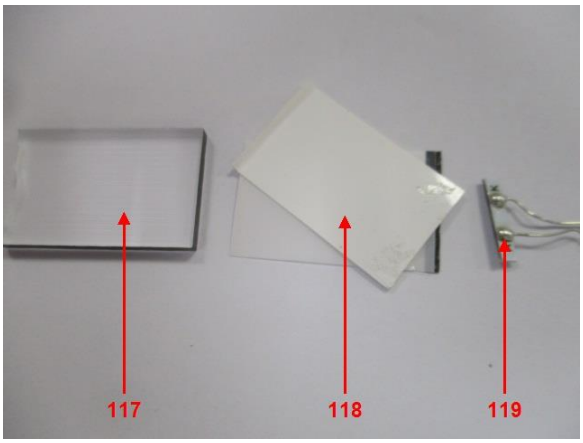
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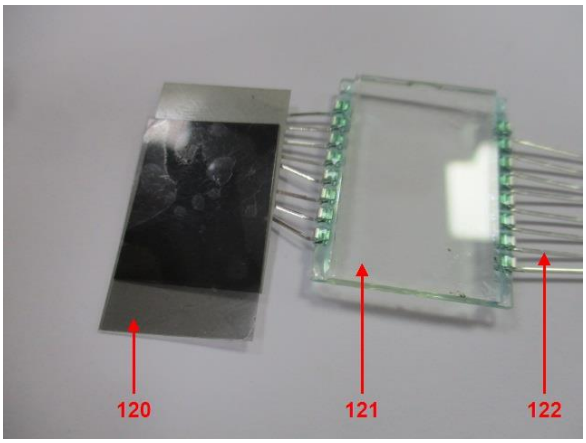
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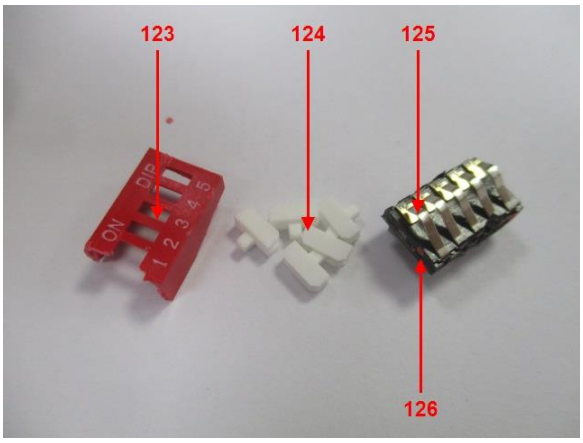
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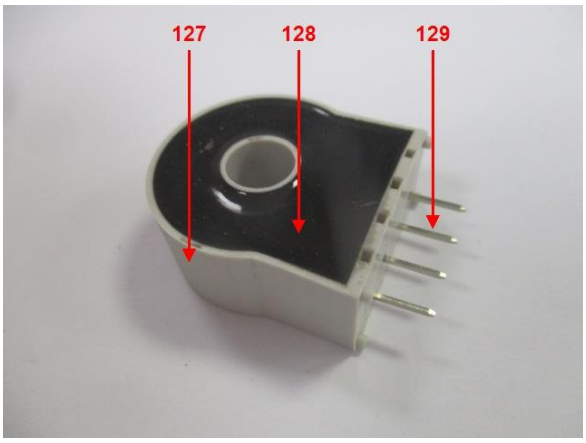
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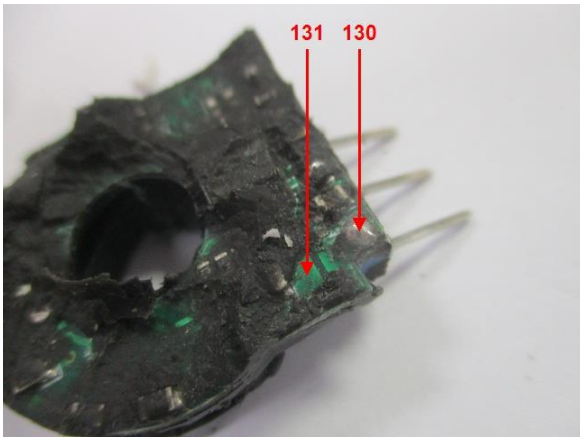


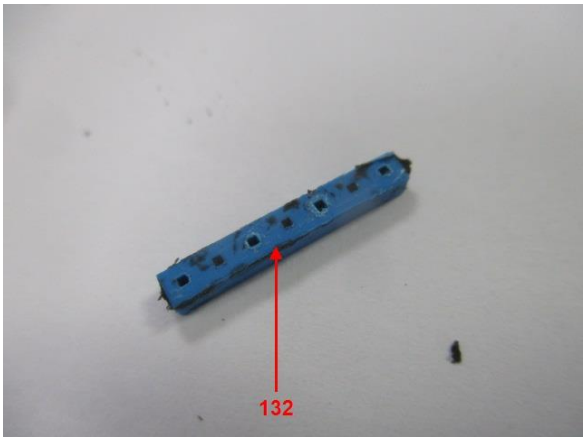


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END

## APPENDIX 附录

**List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit [ Compliance Test for European Parliament and Council Directive 2011/65/EU ] :**
**分析物名单、其相应的测试方法、检出限及最大允许限 [ 合规测试 – 欧盟委员会指令 2011/65/EU ]:**

| No. | Name of Analytes 分析物名称 | Detection Limit 检出限 (mg/kg) | | | | Maximum Allowable Limit 最大允许限 (mg/kg) |
|---|---|---|---|---|---|---|
| | | X-ray fluorescence (XRF)[a] X 射线荧光 | | | Wet Chemistry 湿化学 | |
| | | Plastic 塑料 | Metallic 金属/ glass 玻璃/ ceramic 陶瓷 | Others 其他材料 | | |
| 1 | Lead (Pb) 铅 | 100 | 200 | 200 | 10[b] | 1000 |
| 2 | Cadmium (Cd) 镉 | 50 | 50 | 50 | 10[b] | 100 |
| 3 | Mercury (Hg) 汞 | 100 | 200 | 200 | 10[c] | 1000 |
| 4 | Chromium (Cr) 铬 | 100 | 200 | 200 | NA | NA |
| 5 | Chromium VI (Cr VI) 六价铬 | NA | NA | NA | 3[g, h] / 10[d] / See 见 [e, i] | 1000 / Negative 阴性[i] |
| 6 | Bromine (Br) 溴 | 200 | NA | 200 | NA | NA |
| 7 | Polybromobiphenyls (PBBs) 多溴联苯<br>- Bromobiphenyl (MonoBB) 一溴联苯<br>- Dibromobiphenyl (DiBB) 二溴联苯<br>- Tribromobiphenyl (TriBB) 三溴联苯<br>- Tetrabromobiphenyl (TetraBB) 四溴联苯<br>- Pentabromobiphenyl (PentaBB) 五溴联苯<br>- Hexabromobiphenyl (HexaBB) 六溴联苯<br>- Heptabromobiphenyl (HeptaBB) 七溴联苯<br>- Octabromobiphenyl (OctaBB) 八溴联苯<br>- Nonabromobiphenyl (NonaBB) 九溴联苯<br>- Decabromobiphenyl (DecaBB) 十溴联苯 | NA | NA | NA | Each 各 50[f] | Sum 总 1000 |
| 8 | Polybromodiphenyl ethers (PBDEs) 多溴二苯醚<br>- Bromodiphenyl ether (MonoBDE) 一溴二苯醚<br>- Dibromodiphenyl ether (DiBDE) 二溴二苯醚<br>- Tribromodiphenyl ether (TriBDE) 三溴二苯醚<br>- Tetrabromodiphenyl ether (TetraBDE) 四溴二苯醚<br>- Pentabromodiphenyl ether (PentaBDE) 五溴二苯醚<br>- Hexabromodiphenyl ether (HexaBDE) 六溴二苯醚<br>- Heptabromodiphenyl ether (HeptaBDE) 七溴二苯醚<br>- Octabromodiphenyl ether (OctaBDE) 八溴二苯醚<br>- Nonabromodiphenyl ether (NonaBDE) 九溴二苯醚<br>- Decabromodiphenyl ether (DecaBDE) 十溴二苯醚 | NA | NA | NA | Each 各 50[f] | Sum 总 1000 |
| 9 | Dibutyl phthalate (DBP)<br>邻苯二甲酸二丁酯<br>Butyl benzyl phthalate (BBP)<br>邻苯二甲酸丁基苄基酯<br>Di-2-ethylhexyl phthalate (DEHP)<br>邻苯二甲酸二(2-乙基己基)酯<br>Diisobutyl phthalate (DIBP)<br>邻苯二甲酸二异丁酯 | NA | NA | NA | Each 各 500[j] | Each 各 1000 |

| | |
|---|---|
| | NA = Not applicable 不适用 |
| [a] | Test method with reference to International Standard IEC 62321-3-1: 2013.<br>测试方法参照国际标准 IEC 62321-3-1: 2013. |
| [b] | Test method with reference to International Standard IEC 62321-5: 2013.<br>测试方法参照国际标准 IEC 62321-5: 2013. |
| [c] | Test method with reference to International Standard IEC 62321-4: 2013+AMD1: 2017.<br>测试方法参照国际标准 IEC 62321-4: 2013+AMD1: 2017. |
| [d] | Polymers and Electronics - Test method with reference to International Standard IEC 62321-7-2: 2017.<br>聚合物及电子 - 测试方法参照国际标准 IEC 62321-7-2: 2017. |
| [e] | Metal - Test method with reference to International Standard IEC 62321-7-1: 2015 [i].<br>金属 - 测试方法参照国际标准 IEC 62321-7-1: 2015 [i]. |
| [f] | Test method with reference to International Standard IEC 62321-6: 2015.<br>测试方法参照国际标准 IEC 62321-6: 2015. |
| [g] | Leather - Test method International Standard ISO 17075: 2017.<br>皮革 - 测试方法国际标准 ISO 17075 : 2017. |
| [h] | Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075: 2017.<br>非金属, 皮革, 聚合物及电子 - 测试方法参照国际标准 ISO 17075 : 2017. |
| [i] | Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).<br>金属材料的六价铬结果以阴性和阳性表示。阴性表示六价铬未被检出在测试表面，即结果被认为符合 2011/65/EU 指令中，条款 4(1) 的要求。而阳性则表示六价铬存在在测试表面，即不符合 2011/65/EU 指令中，条款 4(1)的要求。 |
| [j] | Test method with reference to International Standard IEC 62321-8: 2017.<br>测试方法参照国际标准 IEC 62321-8: 2017. |

**Testing Approach [ Compliance Test for European Parliament and Council Directive 2011/65/EU ] :**
**测试方法[ 合规测试 – 欧盟委员会指令 2011/65/EU ]:**

The testing approach was with reference to the following document(s).
测试方法参考下列文件。

| | |
|---|---|
| 1 | International Standards IEC 62321-1: 2013 and IEC 62321-2: 2021<br>国际标准 IEC 62321-1: 2013 and IEC 62321-2: 2021 |
| 2 | “RoHS Enforcement Guidance Document Version 1” by EU RoHS Enforcement Authorities Informal Network. (May 2006)<br>“RoHS 强制指导文件版本 1”EU RoHS 强制委员会非正式网络 (2006，5 月) |
| 3 | “RoHS Regulations - Government Guidance Notes” by United Kingdom Department for Business Innovation & Skills. (February 2011)<br>“RoHS 章程 - 政府指导注释”英国贸易和工业局 (2007，2 月) |
| 4 | “Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium” by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005)<br>“比利时关于电子电气类产品 RoHS 受限物质 (汞，铅，六价铬，镉，多溴联苯和多溴二苯醚)”比利时公共服务，健康，食品链和环境安全联盟 (2005，11 月) |