

# UN38.3 测试报告

## UN38.3 Test Report

报告编号  
Report No. RHDTL260401009

样品名称及型号  
分体式电源 HF310

Sample Name  
&Model Split-type power supply HF310

委托单位  
深圳市同创创精密电子有限公司

Consignor Shenzhen Topsharp Precision Electronics Co.,  
Ltd.

东莞市鸿鼎储能检测技术有限公司  
Dongguan HDTL Technology Co., Ltd.



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|  |  |                     |   |
|--|--|---------------------|---|
| 委托人<br>Applicant                       | 深圳市同创新精密电子有限公司 Shenzhen Topsharp Precision Electronics Co., Ltd.   |                     |   |
| 委托人地址<br>Applicant's address           | 深圳市宝安区西乡街道固戍社区西井路 21 号塘西第二工业区 A 区 D 栋 301/401/501/701/ 整层<br>301/401/501/701/F, Building D, Area A, Tangxi 2nd Industrial Zone, No. 21 Xijing Road, Gushu, Xixiang, Bao'an, Shenzhen, China  |                     |   |
| 制造商<br>Manufacturer                    | 深圳市同创新精密电子有限公司 Shenzhen Topsharp Precision Electronics Co., Ltd.   |                     |   |
| 制造商地址<br>Manufacturer's address        | 深圳市宝安区西乡街道固戍社区西井路 21 号塘西第二工业区 A 区 D 栋 301/401/501/701/ 整层<br>301/401/501/701/F, Building D, Area A, Tangxi 2nd Industrial Zone, No. 21 Xijing Road, Gushu, Xixiang, Bao'an, Shenzhen, China  |                     |   |
| 联系电话<br>Telephone Number               | 15919322639  |                     |   |
| 邮件地址<br>Email address                  | http://www.ihandfan.com  |                     |   |
| 网址<br>Website                          | /  |                     |   |
| 样品名称<br>Sample Name                    | 分体式电源<br>Split-type power supply   |                     |   |
| 样品型号<br>Sample Model                   | HF310  |                     |   |
| 样品外观<br>Appearance                     | 多种颜色长方体,尺寸:149.2*75.3*28.5mm<br>Multiple color cuboids, size:149.2*75.3*28.5mm)  |                     |   |
| 商标<br>Trademark                        | /  |                     |   |
| 测试方法和判定标准<br>Test method and criterion | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3  |                     |   |
| 样品接收日期<br>Accepted date                | 2026.04.01   | 测试起讫日期<br>Test date | 2026.04.01 ~ 2026.04.17   |
| 测试项目<br>Test items                     | 高度模拟、温度试验、振动、冲击、外部短路、撞击/挤压、过度充电、强制放电。<br>Altitude simulation, Thermal test, Vibration, Shock, External short circuit, Impact/Crush, Overcharge, Forced discharge.  |                     |   |
| 测试结论<br>Conclusion                     | 检验结论: Test conclusion:<br>由深圳市同创新精密电子有限公司送检的分体式电源, 根据联合国《试验和标准手册》第八修正版 38.3 章节进行检测。<br>The Split-type power supply submitted for inspection by Shenzhen Topsharp Precision Electronics Co., Ltd. are tested according to United Nations Manual of Tests and Criteria ST/SG/AC.10/11/Rev.8/Subsection 38.3.<br>检验结果: 通过 Test result: Pass<br>签发日期(Issue date): 2026.04.17 |                     |   |
| 主检<br>Tested by:                       |   | 审核<br>Checked by:   | 批准<br>Approved by: <br> |

| 参数信息<br>Parameter information        |   |                                     |              |
|--------------------------------------|---|-------------------------------------|--------------|
| 分体式电源 Power Bank                     |   |                                     |              |
| 型号<br>Model                          | HF310   | 电芯个数<br>Cells Number                | 2PCS(1S2P)   |
| 额定值<br>Ratings                       | 3.7V, 5200mAh, 19.24Wh  | 质量<br>Mass                          | 127.30g      |
| 技术参数<br>Technical specification      | Type-C Input: 5V $\overline{=}$ 2A<br>Type-C Output: 5V $\overline{=}$ 2A |                                     |              |
| 电芯 Cell                              |   |                                     |              |
| 型号<br>Model                          | 18650   | 单电芯额定值<br>Ratings of single cell    | 2600mAh      |
| 标称电压<br>Nominal Voltage              | 3.7V  | 电芯形状<br>Appearance                  | 方形<br>square |
| 标准充电电流<br>Standard Charge Current    | 520mA   | 最大充电电流<br>Max Charge Current        | 1300mA       |
| 标准放电电流<br>Standard Discharge Current | 1300mA  | 最大放电电流<br>Max Discharge Current     | 2600mA       |
| 充电限制电压<br>Limited Charge Voltage     | 4.2V  | 放电终止电压<br>Discharge Cut-off Voltage | 2.75V        |

| 序号<br>No.                            | 测试项目名称<br>Name of test         | 标准要求或标准条款号<br>Standard requirement or the clause number of standard   | 测试结果<br>Test result     | 本项结论<br>Test conclusion | 备注<br>Remarks |
|--------------------------------------|--------------------------------|---|-------------------------|-------------------------|---------------|
| 1                                    | 高度模拟<br>Altitude simulation    | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.1 Test T.1 | 见附表 1<br>See Appendix 1 | 合格<br>Passed            | /             |
| 2                                    | 温度试验<br>Thermal test           | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.2 Test T.2 | 见附表 2<br>See Appendix 2 | 合格<br>Passed            | /             |
| 3                                    | 振动<br>Vibration                | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.3 Test T.3 | 见附表 3<br>See Appendix 3 | 合格<br>Passed            | /             |
| 4                                    | 冲击<br>Shock                    | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.4 Test T.4 | 见附表 4<br>See Appendix 4 | 合格<br>Passed            | /             |
| 5                                    | 外部短路<br>External short circuit | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.5 Test T.5 | 见附表 5<br>See Appendix 5 | 合格<br>Passed            | /             |
| 6                                    | 撞击/挤压<br>Impact/Crush          | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.6 Test T.6 | 见附表 6<br>See Appendix 6 | 合格<br>Passed            | /             |
| 7                                    | 过度充电<br>Overcharge             | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.7 Test T.7 | 见附表 7<br>See Appendix 7 | 合格<br>Passed            | /             |
| 8                                    | 强制放电<br>Forced discharge       | 联合国《试验和标准手册》第八修正版 38.3 章节<br>United Nations Manual of Tests and Criteria<br>ST/SG/AC.10/11/Rev.8/Subsection 38.3<br>试验 T.8 Test T.8 | 见附表 8<br>See Appendix 8 | 合格<br>Passed            | /             |
| 测试环境条件<br>Test environment condition |                                | 环境温度: 20°C-25°C; 环境湿度: 45%-75%<br>Ambient temperature: 20°C-25°C; Ambient humidity: 45%-75%   |                         |                         |               |











附表 6  
 Appendix 6

| 序号<br>No.   | T.6                               | 测试项目名称<br>Name of Test Items               | 撞击<br>Impact        | 合格<br>PASS            |
|---|-----------------------------------|--|---------------------|-----------------------|
|   |                                   |  | 挤压<br>Crush         | 不适用<br>Not applicable |
| 样品编号<br>Sample No   | 样品状态<br>Sample status             | 样品表面最高温度<br>Max. External Temperature (°C) | 测试结果<br>Test result | 备注<br>Remark          |
| C1  | 首次 50%容量<br>1 CYC 50% Capacity    | 98.4                                       | O                   | /                     |
| C2  | 首次 50%容量<br>1 CYC 50% Capacity    | 98.6                                       | O                   | /                     |
| C3  | 首次 50%容量<br>1 CYC 50% Capacity    | 100.3                                      | O                   | /                     |
| C4  | 首次 50%容量<br>1 CYC 50% Capacity    | 98.1                                       | O                   | /                     |
| C5  | 首次 50%容量<br>1 CYC 50% Capacity    | 97.2                                       | O                   | /                     |
| C6  | 25 次 50%容量<br>25 CYC 50% Capacity | 100.1                                      | O                   | /                     |
| C7  | 25 次 50%容量<br>25 CYC 50% Capacity | 99.7                                       | O                   | /                     |
| C8  | 25 次 50%容量<br>25 CYC 50% Capacity | 100.8                                      | O                   | /                     |
| C9  | 25 次 50%容量<br>25 CYC 50% Capacity | 101.8                                      | O                   | /                     |
| C10   | 25 次 50%容量<br>25 CYC 50% Capacity | 101.4                                      | O                   | /                     |
| 以下空白  |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
|   |                                   |  |                     |                       |
| 注: D-解体; F-起火; O-无解体、无起火、外表温度不超过 170°C<br>Note: D-Disassembly, F-Fire, O- No disassembly, no fire, external temperature not exceed 170°C. |                                   |  |                     |                       |

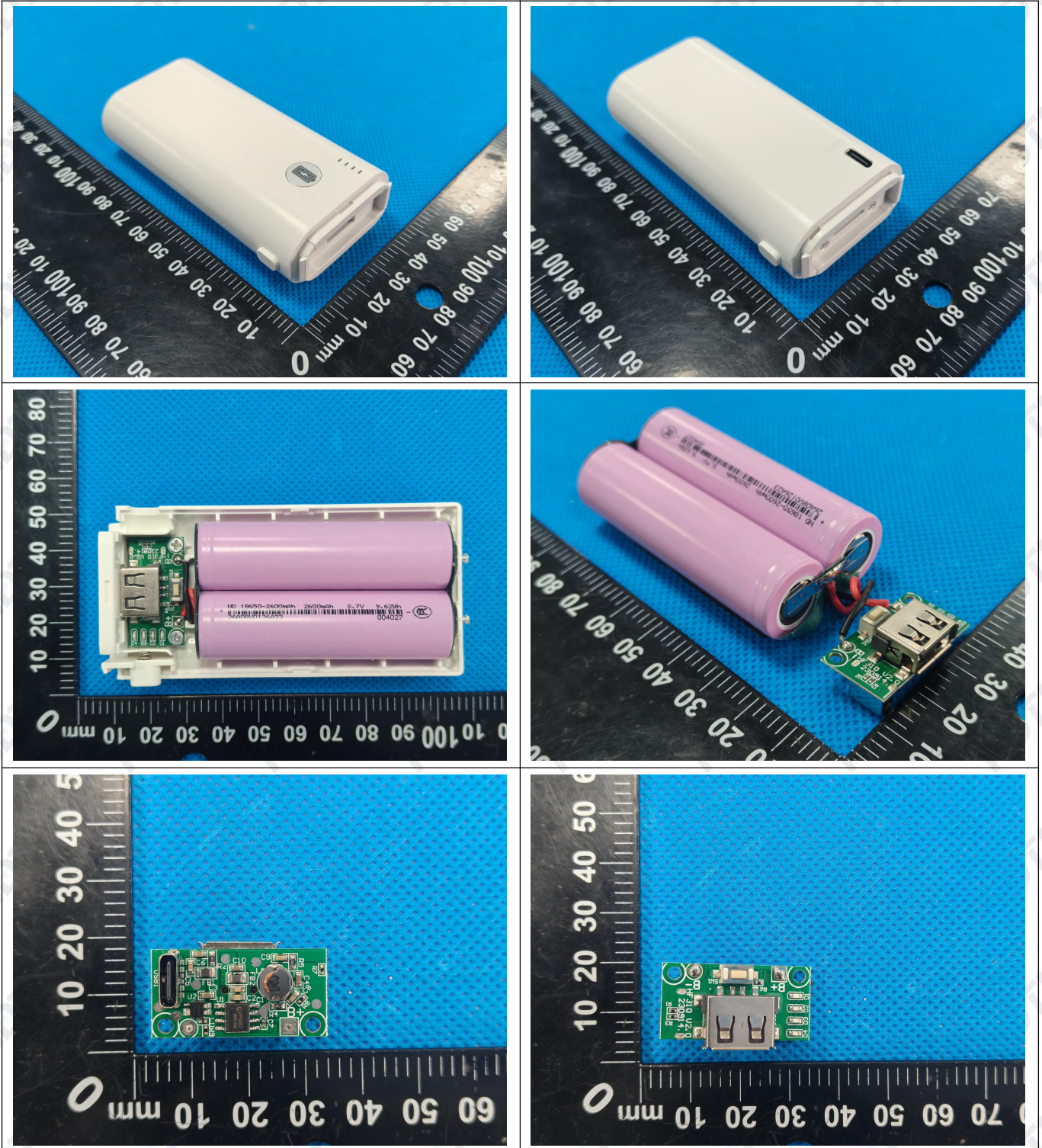


附表 8  
 Appendix 8

| 序号<br>No.         | T.8                                 | 测试项目名称<br>Name of Test Items | 强制放电<br>Forced discharge |
|-------------------|-------------------------------------|------------------------------|--------------------------|
| 样品编号<br>Sample No | 样品状态<br>Sample status               | 测试结果<br>Test result          | 备注<br>Remark             |
| C11               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C12               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C13               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C14               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C15               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C16               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C17               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C18               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C19               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C20               | 首次完全放电<br>1 CYC Fully Discharged    | O                            | /                        |
| C21               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C22               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C23               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C24               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C25               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C26               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C27               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C28               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C29               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |
| C30               | 25 次完全放电<br>25 CYC Fully Discharged | O                            | /                        |

注: D-解体; F-起火; O-无解体、无起火  
 Note: D-Disassembly, F-Fire, O- No disassembly, no fire.

### 样品图片 Sample Photo



Split-type power supply  
Model: HF310  
Input: 5V/2A  
Output: 5V/2A  
Shenzhen Topsharp Precision Electronics Co., LTD  
Battery capacity: 3.7V, 5200mAh, 19.24Wh

## 注意事项

### Important Notice

1. 本报告书无批准人、审核人、及主检人签名无效。  
The test report is invalid without the signatures of Ratifier, Reviewer and Testing engineer.
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Objections to the test report must be submitted to HDTL within 15 days.

\*\*\*报告结束\*\*\*

\*\*\*End of report\*\*\*