

# Battery Declaration of Design: NiCd 4Ah



## Declaration of design for NiCd cells and batteries for use in Emergency Lighting Luminaires

|                           | Technical Data | International Standards & Clauses |
|---------------------------|----------------|-----------------------------------|
| Producer's Range          | One Lux D4     | -                                 |
| International Designation | KRMU 33/62     | IEC 61951-1:2014 (5.1.1.3)        |
| Cell Chemistry            | NiCd           | -                                 |
| Format                    | D              | IEC 61951-1:2014 (5.1.1.3)        |
| Rated capacity at C/5     | 4.0Ah          | IEC 61951-1:2014 (3.2)            |

|   |                  |  |
|---|------------------|--|
| Expected operating life under following conditions:             | >4 years         | BS EN 60598.2.22:2014 (22.7.8)   |
| - Maximum continuous temperature                                | +55°C            | IEC 61951-1:2014 (7.5.2.5)<br>Tested simulating 4 years of permanent charge at +50°C |
| - Maximum temperature (occasional)                              | Up to +70°C      | <1 month   |
| - Minimum continuous temperature                                | +5°C             |  |
| - Preconditioning 20hr Charge                                   | 300mA            |  |
| - Fast 15hr Charge  | 400mA            | Ta = +5~50°C   |
| - Permanent charging current                                    | 120 - 200mA      | Ta = +5~55°C   |
| - Maximum recharge time at 200mA                                | 24 Hours         |  |
| - Maximum charging voltage                                      | 1.7V             |  |
| - Minimum charge/ discharge cycles                              | 50               |  |
| - Maximum discharge frequency                                   | Once per month   |  |
| - Minimum discharge duration at the maximum continuous rate of: | 3 Hours = 1.125A | According to BS EN 60598-2-22:2014 (Annex A - A.4.2)                                 |
| - Low Cut off Voltage   | 1V/Cell          |  |

Nick Levesley  
Technical Director

| ISSUE | DATE       | DETAILS OF REVISION |
|-------|------------|---------------------|
| 1a    | 05/06/2019 | Signed copy         |