



## ENVIRONMENTAL PRODUCT DECLARATION

### BASIC DATA

|   |                                |   |
|---|--------------------------------|---|
| <b>Product family name</b><br>LumiOPTIMA  | <b>Product numbers</b><br>5324 | <b>Related numbers</b>  |
| <b>Contact</b><br>Alastair Froggett<br><a href="mailto:afrogget@lowenergydesigns.com">afrogget@lowenergydesigns.com</a> |                                | <b>Created date:</b><br>2016-03-17<br><b>Modified date:</b><br>2016-06-03 |

### SUPPLIER INFORMATION

|   |  |
|---|--|
| <b>Company name</b><br>Low Energy Designs Ltd.<br>9A Sunrise Business Park<br>Blandford Forum,<br>Dorset, DT11 8ST<br>England   | + Telephone +44 1258 858 171<br><a href="http://www.lowenergydesigns.com">www.lowenergydesigns.com</a> |
| <b>Company description</b><br>Low Energy Designs Ltd designs, manufactures and supplies LED lighting products to commercial markets. Products are typically used within industry in areas such as: Warehouses, Cold Stores, Storage Facilities, Retail and Office spaces, Schools and Hospitals. Products for external applications are found illuminating Major Roads, Streets, Car Parks, Parking Garages and Playing Fields and Public Spaces. |  |
| <b>Environmental certification</b><br>The company is registered under the UK WEEE directive and has appointed AVC Weeeco ( <a href="http://www.avcweeeco.com/">http://www.avcweeeco.com/</a> ) to oversee and ensure all legislative requirements are met.  |  |

### LEGAL REQUIREMENTS

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| The products are tested by independently recognised UKAS (17025) test houses such as Lighting Association to ensure compliance with UK and European safety requirements. Tests are carried out to BS 4533: section 102.1:1990 and BS En 60598-2-1:1989 with BS EN 60598-1:2008 incorporating CENELEC AMD 11. These products are CE, ROHS & EMC Compliant. |
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## PRODUCT INFORMATION

| Material/part          | Description                             | Weight (%) | Comment                    |
|------------------------|---|------------|----------------------------|
| Body: Aluminium        | Extrusion                               | < 67%      | Powder coated              |
| LED-strip Samsung      | Model: SMD2835                          | < 9%       | STK-5018 Alu substrate     |
| LED-strip Samsung      | Diode                                   | < 3%       | Indium gallium nitride     |
| LED-Strip Samsung      |   | <1.5%      | Aluminium (7429-90-5)      |
| LED-Strip Samsung      |   | <1.5%      | Copper (7440-50-8)         |
| LED-Strip Samsung      |   | <1.5%      | Fibrous Glass (65997-17-3) |
| LED-Strip Samsung      |   | <1.5%      | Epoxy Resin                |
| Acrylic diffuser       | ALP P12 prismatic                       | < 5%       | ALP Europe (PMMA)          |
| Cables, halogen free   | 2 x 7 x 0.032                           | < 1%       |                            |
| Power Supply           | Meanwell HLG-240H-36B                   | < 17%      | HLG 240 Watt               |
| Power supply analysis: | As percentage of overall product weight |            |                            |
| Power Supply           |   | < 7.4%     | Aluminium                  |
| Power Supply           |   | < 2.7%     | Copper                     |
| Power Supply           |   | < 6.8%     | Potting                    |
| Cable stay             | Nylon body steel terminals              | < 1 %      | Metway                     |

## TRANSPORT & PACKAGING

Transport within Europe is by road or rail. Products individual boxed in fully recyclable cardboard packaging (670g). Boxes grouped on reusable heat treated wooden or plastic pallets. Recyclable PE or nylon banding, non-recyclable outer PVC wrap.

## PRODUCT ENVIRONMENTAL IMPACT

### Production:

The body construction of the LumiOPTIMA series product is fully recyclable extruded aluminium. The lens is acrylic (PMMA) which is recyclable at certain locations. The electronic components (power supply and LED strip) are fully ROHS compliant and contain recyclable aluminium casings and copper wire. These component parts are manufactured outside the UK and contribute C02 in transit to the UK.

### Operation:

The conversion of power to useful light is more efficient in LED lighting than existing traditional sources. The LO5324 Watt will typically replace a <400 Watt variant of existing product with the LED output remaining above 70% of initial output after 10 years. This could lead to 50% savings of C02 emissions over time on a like for like usage basis.

The main impact on the environment during the products lifecycle is the energy used during the user phase.

### Product Technical Lifetime:

+15 years.