



## ENVIRONMENTAL PRODUCT DECLARATION

### BASIC DATA

<b>Product family name</b> LumiROD 5 Series	<b>Product numbers</b> 519	<b>Related numbers</b>
<b>Contact</b> Alastair Froggett afrogget@lowenergydesigns.com		<b>Created date:</b> 2016-03-11 <b>Modified date:</b> 2016-05-10

### SUPPLIER INFORMATION

<b>Company name</b> Low Energy Designs Ltd. 9A Sunrise Business Park Blandford Forum, Dorset, DT11 8ST England	Telephone +44 1258 858 171  <a href="http://www.lowenergydesigns.com">www.lowenergydesigns.com</a>
<b>Company description</b> 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> 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

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. Safety Test Cert: LA/14548. These products are CE, ROHS and EMC compliant.
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## PRODUCT INFORMATION

Material/part	Description	Weight (%)	Comment
Body: Zintec steel	Grade DC-01	< 72%	Powder coated
LED-strip Samsung	Model: SMD2835	< 6%	STK-5018 Alu substrate
LED-strip Samsung	Diode	< 2%	Indium gallium nitride
LED-strip Samsung		< 1%	Aluminium (7429-90-5)
LED-strip Samsung		< 1%	Copper (7440-50-8)
LED-strip Samsung		< 1%	Fibrous glass (65997-17-3)
LED-strip Samsung		< 1%	Epoxy resin
Acrylic diffuser	ALP P12 prismatic	< 5%	ALP Europe (PMMA)
Cables, halogen free	2 x 7 x 0.032	< 1%	
Cable stay	Nylon body steel terminals	< 1 %	Metway
Power Supply Analysis:	Meanwell LPF-90-36	< 15%	90 watts
Power Supply		< 0.5%	Aluminium
Power Supply		< 2.6%	Plastic
Power Supply		< 8.5%	Potting
Power Supply		< 3.3%	Copper

## TRANSPORT & PACKAGING

Transport within Europe is by road or rail. Products individual boxed in fully recyclable cardboard packaging (218g). 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 5 series product is fully recyclable steel. 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 CO<sub>2</sub> in transit to the UK.

### Operation:

The conversion of power to useful light is more efficient in LED lighting than existing traditional sources. The 519 will typically replace a 100 Watt variant of existing product with the LED output remaining above 70% of initial output after 10 years. This could lead to 33% savings of CO<sub>2</sub> 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.