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Test Report Number: TRN-15176
Test Item: TI-10074

Report Number	TRN-15176
Customer	G.E.M UK LTD
Contact	Gavin MacGregor
Product Type	LED Streetlight
Test Purpose	Generation of Photometric Data
Sales Order Ref	Q-LUX2014-20058
Works Order Number	WO-5520
Test Item Reference	TI-10074
LAB Test Method Reference	TES-6000
Test Standards	LM-79-08
Lab Location Reference	Photometric
Tested by	Steve Hunt
Date of Test	09/10/2014
Analysed by	Andrew Thomas
Number of products tested	1

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Date: 03/07/2015

LUMINAIRE SPOTLGHT LED (SealSafe ARC80 PC Bowl with G.E.M. LED Lamp - GEM)

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Nomenclature

Lamp Orientation described below relates to the position in which a lamp is designed to operate for maximum performance and safety, these include:
BD - Base Down (bulb is vertically positioned with the metal base at the bottom, glass up)
BU - Base Up (bulb is vertically positioned with the metal base at the top, glass hanging down)
HBD - Horizontal +15º to Base Down
H45 - Horizontal to -45º only
VBU - Vertical Base Up ±15º
VBD - Vertical Base Down ±15º
HBU - Base Up +/- 90º (bulb can be operated in a base up or horizontal position)
HOR - Horizontal Burn (bulb is positioned with the metal base parallel to the ground)
H75 - Horizontal +/- 75º (bulb should not be operated within 15º of vertical)
U - Universal Burn (burn can be operated in any position)

Test Conditions

Measurements were made with an ambient temperature of 30°C, 25°C, 20°C, 10°C and 0°C, +/- 1°C. Measurements were taken only after sufficient time for thermal stabilisation has been allowed. Thermal stabilisation according to LM-79-08 was achieved before measurements are measured and reported.

Calibrations

The Knoica Minolta illuminance meter is calibrated and traceable to UKAS.

Test Equipment

Konica Minolta CL-200 Illuminance meter.

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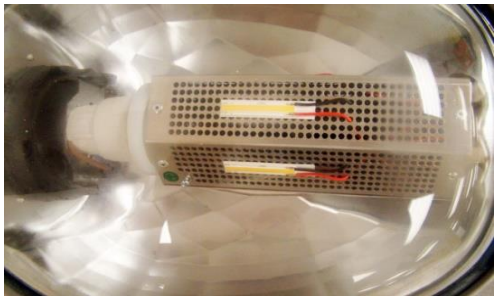
Product Name	LUMINAIRE SPOTLGHT LED (SealSafe ARC80 PC Bowl with G.E.M. LED Lamp - GEM)
Part/Serial Number	N/A
Type of Product	LED Streetlight
Base Type	Not Applicable - Luminaire
Driver Type	Mains
Test Time	120 mins
Operating Orientation	Base Up
Test Orientation	Horizontal
Manufacturer	G.E.M UK LTD
Date of Manufacture	Not Available
Thermal Management	Passive
Dimmable	No
Pre-Burning Time	0 hours
Stabilisation Time	105 mins



Dimension	Sample	Luminous Opening
Diameter/Width	305 mm	235 mm
Length	660 mm	320 mm
Height/Depth	270 mm	80 mm

On-Axis Measurements

On-axis measurements of illuminance were carried out on the test item while operating under various ambient temperatures.

An illuminance meter was used to record the illuminance of the item 1440mm away from the item's luminous centre. The total luminous flux was scaled for the different temperatures using the luminous flux stated in TRN-14248 as a reference for the item's on-axis illuminance at 25 °C.

Ambient Temperature (°C)	Illuminance (lux)	Ratio of 25 °C measurement	Total Luminous Flux (lm)
30	212.5	0.96	1623.20
25	221.9	1.00	1695.00
20	229.7	1.04	1754.58
10	242.9	1.09	1855.41
0	257.2	1.16	1964.64

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