

## TEST REPORT

### Lamp Circuit Power for Luminaire According to methods stated in IES LM-79

Report Number: LSLCP-210127

Tested & Issue By: LIGHT SCIENCE PTY LTD  
Suite 3, 82 Bathurst Street,  
Liverpool NSW 2170 Australia  
Ph: 02 8107 8811 Email: lab@lightscience.com.au

Test Performed at: LIGHT SCIENCE PTY LTD Photometric, Electrical and Thermal Testing Laboratory

Date Received: 12/05/2021

Date Tested: 17/05/2021

Date Issued: 18/05/2021

Client: Connected Light Solutions

Address: 34- 36 Adderley Street East, Lidcombe, NSW, 2141

Contact Ph: 1300 497 221

Email: remkov@connectedlightsolutions.com.au

Test Item: GE LED 21W HID Lamp - S27729

Description: GE 'LED 21W HID Lamp E27 4000K' 64(D)x138(H)mm. Lamp body constructed in plastic enclosure with ceramic cap. Lamp sides energized with Eight 'LDB-10 E347474 94V-0' SMD LED boards consisting of 9 LEDs on each board covered by clear diffuser and LED bottom part consisting of 9 LEDs covered by opal diffuser. Lamp equipped with E27 Edison screw lamp thread and operates on 120-277 Vac input supply. Lamp features active cooling technology using an integral cooling fan.

Report Prepared By:



Geoff Haines  
Laboratory Manager

Report Approved By:



Vipul Gajjar  
Laboratory Director

**Luminaire Information:**

Manufacturer:	GE Lighting
Luminaire Name/Number:	GE LED 21W HID Lamp - S27729
Nominal Operating Voltage:	120-277 Vac
Nominal Power:	21W
Nominal CCT:	4000K

**Test Summary:**

Average of Twenty measurement readings of each lamp.

Lamp No.	Input Voltage (Vac)	Input Current (A)	Input Power (W)	Power Factor <sup>1</sup>	Frequency (Hz) <sup>1</sup>
1	250.01	0.0896	21.60	0.964	49.99
2	250.02	0.0853	20.65	0.969	49.99
3	250.03	0.0899	21.66	0.921	49.99
4	250.04	0.0854	20.62	0.966	49.99
5	250.03	0.0852	20.62	0.969	49.99
6	250.03	0.0849	20.49	0.965	49.99
7	250.04	0.0898	21.64	0.964	49.99
8	250.03	0.0896	21.62	0.965	49.99
9	250.04	0.0857	20.71	0.923	49.99
10	250.04	0.0864	20.88	0.967	49.99
<b>Average:</b>	<b>250.03</b>	<b>0.0872</b>	<b>21.05</b>	<b>0.957</b>	<b>49.99</b>

**Test Method:**

Testing was conducted in an ambient maintained temperature of 25°C ±1°C. Ambient conditions were in accordance with IES LM-79-19. The voltage of an AC/DC power supply applied was regulated to ±0.2 percent under load. Power supply characteristics were in accordance with IES LM79-19.

No Seasoning was performed and LED Luminaire was allowed to stabilize before electrical measurements were made in accordance with IES LM-79-19.

Electrical settings were in accordance with AEMO UNMETERED LOAD GUIDELINE Version 1.0.

The uncertainties are calculated at the 95% confidence interval with a coverage factor k=2.

All luminaires were operated for a similar time period and are switched ON individually to the Power Meter for their twenty measurement readings. The twenty measurement readings were taken ten seconds apart and the averages calculated.

The luminaire was tested in accordance with the applicable procedures given in IES LM-79-19, "Electrical and Photometric Measurements of Solid-State Lighting Products".

<sup>1</sup> The power factor and frequency were measured with a calibrated power meter. Determination of power factor and frequency are not currently within the Light Science Pty Ltd NATA Scope of Accreditation.

**Photos of Luminaire under test:**

Test Samples



Single Lamp – Top and Bottom view



Lamp and LED labels



Lamp Dimensions



Accredited for compliance with ISO/IEC 17025:2017. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian / National standards.

**Measurement Uncertainties:**

The uncertainties are expressed using the coverage factor  $K=2$ , at the 95% level of confidence. Below MUs are listed in "Summary of LS Measurement Uncertainties Rev5".

Voltage (AC) =  $\pm 0.02\%$ Current (AC) =  $\pm 0.11\%$ Power =  $\pm 0.07\%$ Power Factor =  $\pm 0.11\%$ Frequency =  $\pm 0.004\%$ Temperature =  $\pm 0.56^\circ\text{C}$ **Equipment List:**

Item	Item Number	Manufacturer	Model
Power Meter #B	LSEQ007	YOKOGAWA	WT210 - 760401
Digital Thermometer	LSEQ008	DIGITRON	2000T

The data specified in this report apply to the luminaire with the components nominated, and will not necessarily be applicable to the use of other lamp sizes or ratings, nor to any other luminaire of similar design. The data are based on operation of the luminaire under laboratory conditions. Multiplying factors to correct the data for actual working conditions should be used when applicable.

*Any part of this report or the content on it may not be reproduced unless approved in writing. This report is for the exclusive use of Client and only the client is authorized to copy or distribute this report and then only in its entirety.*

**\*\* End of Report \*\***