LightLab
INTERNATIONAL

LightLab International
Brisbane QLD 4019.

Report of Test

LL19333-R01

This test report supersedes LL19333

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Test Report Number LL19333-R01

Client	LSI Hamilton Lighting Systems.
Contact	Steve Rose.
Address	231 Holt St, Pinkenba. QLD. 4008.
Devices Tested	10 x 35 W (nom.) LED Bollards. Identified by LightLab as Sample A to J (also identified with test number). Cat No.: AUS XHYP3 360 LED 30 NW UE PLP DT. The device comprises: Cast aluminium body, two arrays of 15 LEDs, one LSI Industries 401611-350 (Set to 350 mA).
Nature of Tests	To determine the total circuit power, supply current and power factor of the supplied LED bollards while operating under standard laboratory conditions with the supply set to 250 V 50 Hz. Performance data in accordance with IESNA LM-79-08.
Sample Selection	This laboratory has not exercised control over the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent to which the test samples are representative of production units.
Procedure	The sample was tested in free air with body vertical and upright in a draft free room. The supply voltage and frequency to the control gear was set according to the values in Table 1 and the sample was operated for until electrical stability was achieved prior to recording measurements. The relevant measurements are recorded in Table 1. All measurements were performed in a controlled environment of 25 ± 1 ° Celsius.

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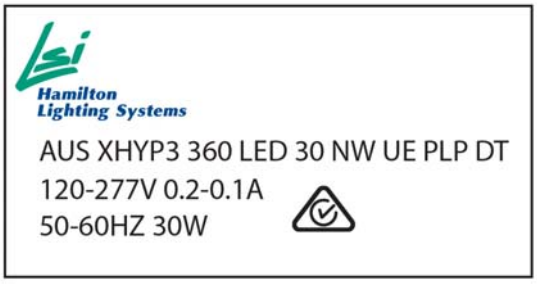
Photographs



Label image above supplied by client

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Test Results

Sample ID	Supply voltage (Vac)	Supply frequency (Hz)	Supply current (A)	Supply Power (W)	Power Factor
LL19333A	250	50	0.161	34.8	0.86
LL19333B	250	50	0.160	32.2	0.88
LL19333C	250	50	0.160	35.0	0.88
LL19333D	250	50	0.163	35.1	0.86
LL19333E	250	50	0.160	35.3	0.88
LL19333F	250	50	0.163	35.0	0.86
LL19333G	250	50	0.160	35.2	0.88
LL19333H	250	50	0.163	34.9	0.86
LL19333I	250	50	0.164	35.0	0.85
LL19333J	250	50	0.161	35.5	0.88

Table 1

Equipment Used	Asset #.	Calibration Due date
Extech Stabilised AC Source	B0277	Not required
Yew WT210 Power Meter (sn: 91L751825)	B0381	8th July 2016
Tsuruga 4 Channel K-type Thermometer	B0202	11th January 2017

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Uncertainties

When calculated at the 95% confidence interval with coverage factor k = 2, the estimated uncertainties are:

Temperature	± 1° Celsius
Electrical Power (ac)	± 0.5%
Electrical Voltage (ac)	± 0.5%
Electrical Current (ac)	± 0.5%
Frequency (Hz) *	± 0.2%
Power Factor	± 0.02

* NATA accreditation does not cover the performance of this service.

Laboratory

Measurements were performed at the LightLab International Brisbane Laboratory.

Date of Test 22/04/2016 to 26/04/2016
Date of Report 09/05/2016

Authorised Signatory

Kevin Monaghan

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