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Test Report: 215213A

This report replaces and supersedes TR 215213 and differs only in editorial changes.

Testing of LED Pole Top Luminaire Power for AEMO's NEM Load Table and other tests on optical systems

for Pole Top Luminaire BEGA Model No. 9596S

Type of product: LED Pole Top luminaire

Model: 9596S

Prepared for: Zumtobel Group (Australia)

Description: 115W IP66 4000K LED Pole Top luminaire. Features 4x LED-0282/840 COB, body made of aluminium alloy and stainless steel.

Test objective and Method

Determination of the luminaire supply operating parameters Voltage, Current, Power and Power Factor when tested at nominal test voltage of 240V in accordance with Test Specification IES LM79.

Test configuration

Ten luminaires samples were tested. The luminaires were operated at 25°C ambient temperature until the luminaire parameters stabilised, in this case 1.5 hours. Twenty readings were taken ten seconds apart and the average found. The average value is multiplied by the Calibration Correction given in the latest NATA calibration report then has Voltmeter losses subtracted based on Watt meter impedance and test voltage.

Client:

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The data specified in this report relates to the sample measured under standard conditions specified in the Test Specification, and may not necessarily relate to other similar luminaires or other operating conditions. The tests and measurements covered by this document are traceable to Australian national standards of measurement. This report shall only be reproduced in full unless approved in writing by Light Emission Distribution Laboratory (LEDLab).

Uncertainties

At a Confidence Level of 95% with a Coverage Factor of 2 Supply Voltage: ± 0.07% Supply Current: ± 0.14% Supply Power: ± 0.19% **Power Factor:**± 0.05 Ambient Temperature: ± 1°C

Test Equipment Used

Power meter: Clark Hess Model 2335 SN 52164 *Power meter integration time (s):* 5 Calibration Report: Ausgrid 220537 Luminaire thermometer: AMA S No. 1086110-0.1deg

Photographs

The general construction of the luminaire is shown in the photographs.



Illustration 1: Luminaire sample



Illustration 2: LED dimmable power supply

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Illustration 4: LED module



Illustration 3: Luminaire marking



Illustration 5: Geartray Results

Full details are given in Illustration 6.

Electrical operating parameters of LED Pole Top luminaire BEGA 9596S

Sample No.	Supply Voltage (Vrms)	Input Current (mArms)	Input Power (W)	Power Factor
Sample 1	239.914	489.253	113.12	0.964
Sample 2	239.938	483.071	111.82	0.965
Sample 3	240.014	477.995	110.473	0.963
Sample 4	239.965	474.195	109.630	0.964
Sample 5	240.007	472.741	109.243	0.963
Sample 6	240.117	473.441	109.527	0.964
Sample 7	240.035	475.792	110.095	0.964
Sample 8	240.151	485.611	112.224	0.963
Sample 9	240.082	481.096	111.223	0.963
Sample 10	239.966	483.079	111.730	0.964
Average	239.93	486.16	112.47	0.96

Illustration 6: Electrical operating parameters of LED Pole Top Luminaire BEGA 9596S



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Exterior labelling by manufacturer

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