# Test Report

for

## Felicity Smart Infrastructure Pty Ltd

166 Plateau Rd, Bilgola, NSW, 2107Australia

## LED Street Light

## Model: GYRO-P-20-350

## Laboratory: Leading Testing Laboratories

**NVLAP CODE: 200960-0**

3rd Floor, Bld. 2, NO. 96 Longchuanwu Rd Qianjiang Economy Dev. Zone, YuhangDist,
Hangzhou, Zhejiang Province, China 311100
Tel: +86571 86376106
www.ledtestlab.com

Report No.: HZ20020023h

The laboratory that conducted the testing detailed in this report has been accredited for SSL by NVLAP.

| **Test specifications:** | |
|---|---|
| **Date of Receipt** | : Feb. 29, 2020 |
| **Date of Test** | : Mar. 14, 2020 |
| **Test item** | : Input Voltage, Running Current, Power Factor, Load (watts) |
| **Reference Standard** | : IESNA LM-79-2008 - Approved Method for the Electrical and Photometric Measurements of Solid-State Lighting Products<br>Unmetered Load Guideline - Determination of Device Load and Annual Energy Consumption for Unmetered Device Types_V1.0 |

**Review by:** April Zou

Engineer: April Zou
Mar. 24, 2020

**Approved by:** Jim Zhang

Manager: Jim Zhang
Mar. 24, 2020

Note: This report does not imply product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

## Test Results

Test ambient temperature was 25.0 ℃.

There are 10 pcs samples provided by manufacturer and no seasoning to them.

The samples are installed straight down, no dimmer in the test circuit.

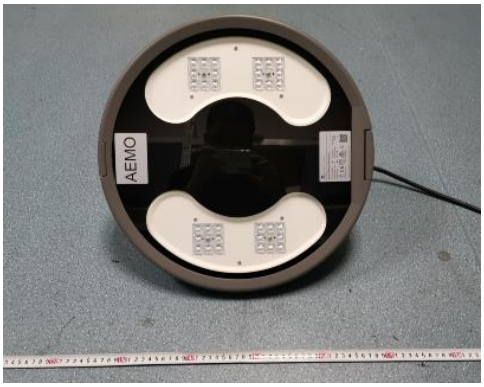
The parameters are read by YOKOGAWA Digital Power Meter WT210, the accuracy of power is ±0.1W .

The stabilization time of the each sample was 120 minutes, and the total operating time including stabilization was 121 minutes.

| Sample No. | Input Voltage (V) | Input Frequency (Hz) | Input Current (A) | Input Power (W) | Power Factor | THD A% |
|---|---|---|---|---|---|---|
| 1 | 250.01 | 50 | 0.0937 | 21.93 | 0.9374 | 6.47 |
| 2 | 250.00 | 50 | 0.0960 | 22.64 | 0.9435 | 11.73 |
| 3 | 249.99 | 50 | 0.0962 | 22.57 | 0.9393 | 10.99 |
| 4 | 250.00 | 50 | 0.0970 | 22.81 | 0.9405 | 11.04 |
| 5 | 250.03 | 50 | 0.0966 | 22.87 | 0.9459 | 10.64 |
| 6 | 250.01 | 50 | 0.0967 | 22.85 | 0.9445 | 10.32 |
| 7 | 250.00 | 50 | 0.0963 | 22.71 | 0.9426 | 10.89 |
| 8 | 250.07 | 50 | 0.0977 | 23.01 | 0.9432 | 11.32 |
| 9 | 250.11 | 50 | 0.0979 | 23.10 | 0.9434 | 11.09 |
| 10 | 250.10 | 50 | 0.0970 | 22.95 | 0.9461 | 11.63 |
| Average | 250.03 | 50 | 0.0965 | 22.74 | 0.9426 | 10.94 |

Table 1: Electrical Parameters Results

## Sample Photo




| Equipment Under Test(EUT) | |
|---|---|
| **Name** | : LED Street Light |
| **Model** | : GYRO-P-20-350 |
| **Electrical Ratings** | : 220-240V, 50/60Hz, 23W |
| **Manufacturer** | : Felicity Smart Infrastructure Pty Ltd |
| **Address** | : 166 Plateau Rd, Bilgola, NSW, 2107Australia |

## Equipment List

| Test Equipment | Model | Equipment No. | Calibration Date | Calibration Due date |
|---|---|---|---|---|
| Digital Power Meter | WT210 | HZTE008-01 | Aug. 02, 2019 | Aug. 01, 2020 |
| AC Power Supply | PCR 500L | HZTE001-07 | Aug. 02, 2019 | Aug. 01, 2020 |
| Temperature and humidity recorder | JR900 | HZTE018-02 | Aug. 02, 2019 | Aug. 01, 2020 |

Table 2: Test Equipment List

## Test Methods

### Seasoning of SSL Product

For the purpose of rating new SSL products, SSL products shall be tested with no seasoning.
Therefore, no seasoning was performed.

### Ambient Conditions

The ambient temperature in which measurements are being taken shall be maintained at 25 ℃ ± 1 ℃, measured at a point not more than 1 m from the SSL product and at the same height as the SSL product. The temperature sensor shall be shielded from direct optical radiation from the SSL product and optical radiation from any other source.

### Stabilization of SSL Product

Before measurements are taken, the SSL product under test shall be operated long enough to reach stabilization and temperature equilibrium. The time required for stabilization depends on the type of SSL products under test. The stabilization time typically ranges from 30 min (small integrated LED lamps) to 2 or more hours for large SSL luminaires). It can be judged that stability is reached when the variation (maximum – minimum) of at least 3 readings of the light output and electrical power over a period of 30 min, taken 15 minutes apart, is less than 0.5 %.

*** End of Report ***