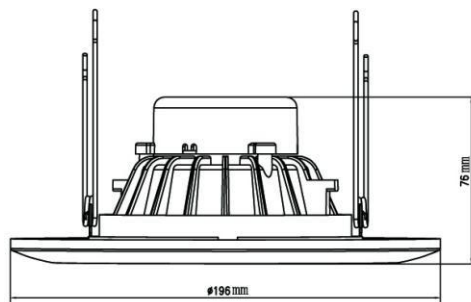


## LED DOWN LIGHT



**72624**



**Size :  $\Phi 196 \times 76 \text{mm}$  (7.72 x 2.99")**

### Characteristics

|             |                                                   |
|-------------|---------------------------------------------------|
| Item Number | 72624                                             |
| Description | 5/6" LED Gimbal Down Light                        |
| Voltage     | 120V AC                                           |
| Power       | 15W                                               |
| Dimmable    | Yes                                               |
| LED Type    | SMD                                               |
| CRI         | 90                                                |
| Lumens      | 1040 lms                                          |
| Color       | 4000K                                             |
| Life time   | 50,000 hours                                      |
| Certificate | ETL, Energy Star, FCC, Lighting Facts, LM79, LM80 |

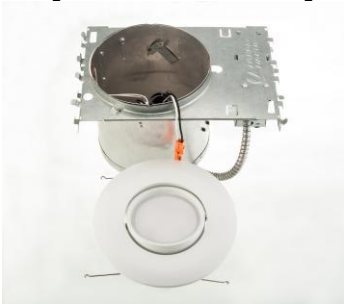
### Features

- Energy efficient: save up to 80% in energy costs
- High lumen output
- Mercury-free
- Instant-on light
- For dry, damp, wet location
- 50,000 hours lifetime
- CCT: 4000K
- 5 years manufacturer warranty
- Compatible with most Lutron and Leviton dimmers

### Application



Easy to Install in 3 Easy Steps:



Step1: Twist adaptor into socket.



Step2: Insert male connector into female one.



Step3: Insert LED trim.

Packaging

| Size | Carton Size                  | Pcs/CTN | N.W.           | G.W.           |
|------|------------------------------|---------|----------------|----------------|
| 5/6" | 56x41x22cm/22.05x16.14x8.66" | 12      | 6kgs/13.23 lbs | 7kgs/15.43 lbs |

Production & Facilities



Ref. No.: LCSP15110101

Version: 1.0

Date of Issue: Nov. 30, 2015

Total pages: 8



## Test report of IES LM-79-08

### Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Rendered to:

Morris Products inc.

53 Carey Rd Queensbury, NY 12804

For products:

SSL Downlight Retrofit

Models No.:

72624

**Test Date:** Nov. 19, 2015 to Nov. 19, 2015

**Test Lab.:** LCTECH (Zhongshan) Testing Service Co.,Ltd

2/F., Technology and Enterprise Development Center, Guangyuan Road, Xiaolan,  
Zhongshan, Guangdong, China

**Test Note:**

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**Complied by:**

Thomas Liu

Project Engineer

Nov. 30, 2015

**Reviewed by:**

Richard Li

Technical Manager

Nov. 30, 2015

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## 1. General

### 1.1 Product Information

|                              |                                                                                         |
|------------------------------|-----------------------------------------------------------------------------------------|
| Brand Name                   | Morris                                                                                  |
| Trade Mark                   | -                                                                                       |
| Category Type                | SSL Downlight Retrofits                                                                 |
| Model Number                 | 72624                                                                                   |
| Rated Inputs                 | AC120V 60Hz                                                                             |
| Rated Power                  | 15W                                                                                     |
| Rated Light Output           | 1040 lm                                                                                 |
| Declared CCT                 | 4000K                                                                                   |
| Power Supply                 | LED driver, Model: Not provided                                                         |
| LED Package, Array or Module | Model:HL-A-2835DW-S1-08-HR3, manufactured by Guangzhou Hongli Opto-Electronic Co., Ltd. |
| Receipt Samples number       | 1 unit                                                                                  |
| Date of Receipt Samples      | Nov. 17, 2015                                                                           |
| Note                         | -                                                                                       |

## 1.2 Standards or methods

The following standards are partly or totally used or referenced for test:

| No.                              | Name                                                                               |
|----------------------------------|------------------------------------------------------------------------------------|
| ANSI/NEMA/ ANSLG<br>C78.377-2011 | Specifications for the Chromaticity of Solid State Lighting Products               |
| ANSI C82.77-2002                 | Harmonic Emission Limits—Related Power Quality Requirements for Lighting Equipment |
| CIE Pub. No. 13.3-1995           | Method of Measuring and Specifying Color Rendering of Light Sources                |
| CIE Pub. No. 15:2004             | Colorimetry                                                                        |
| IES LM-79-08                     | Electrical and Photometric Measurements of Solid-State Lighting Products           |

## 1.3 Equipment list

| Instrument                                                      | ID       | Model name | Cal. date  | Next cal. Date |
|-----------------------------------------------------------------|----------|------------|------------|----------------|
| AC Power supply                                                 | LC-I-923 | CHP-500    | 2015-02-05 | 2016-02-04     |
| AC Power supply                                                 | LC-I-987 | APW-110N   | 2015-02-05 | 2016-02-04     |
| Power analyzer                                                  | LC-I-928 | WT210      | 2015-02-09 | 2016-02-08     |
| Power analyzer                                                  | LC-I-954 | WT210      | 2015-03-04 | 2016-03-03     |
| Multimeter                                                      | LC-I-972 | Fluke 17B  | 2015-08-17 | 2016-08-16     |
| Photometric colorimetric<br>electric system<br>(2 meter sphere) | LC-I-900 | SPR3000    | Before use | Before use     |
| Standard lamp                                                   | LC-I-917 | 24V100W    | 2015-10-09 | 2016-10-08     |
| Luminous Flux Standard<br>Lamp                                  | LC-I-946 | 110V/200W  | 2015-10-09 | 2016-10-08     |
| Goniophotometer(with<br>mirror)                                 | LC-I-902 | GMS2000    | 2012-05-10 | 2016-05-09     |
| Wireless temperature<br>transmitter                             | LC-I-978 | DWRF-B     | 2015-02-11 | 2016-02-10     |
| Wireless temperature<br>transmitter                             | LC-I-979 | DWRF-B     | 2015-02-11 | 2016-02-10     |

## 2. Test conducted and method

### 2.1 Ambient Condition

The ambient temperature in which measurements are being taken was maintained at  $25\text{ }^{\circ}\text{C} \pm 1^{\circ}\text{C}$ ; the air flow around the sample(s) being tested did not affect the performance.

### 2.2 Power Supply Characteristics

The AC power supply had a sinusoidal voltage wave shape at the prescribed frequency (60 Hz) such that the RMS summation of the harmonic components does not exceed 3 percent of the fundamental during operation of the test item.

The voltage of AC power supply (RMS voltage) applied to the device under test was regulated to within  $\pm 0.2$  percent under load.

### 2.3 Seasoning and Stabilization

No seasoning was performed in accordance with IESNA LM-79-08. And before the measurement, the sample was stabilized until the light output and power variations were less than 0.5% in 30 minutes intervals (3 readings, 15 minutes apart).

### 2.4 Electrical Instrumentation

The calibration uncertainties of the instruments for AC voltage and current were less than 0.2 percent, and the calibration uncertainty of the AC power meter was less than 0.5 percent (95 % confidence interval,  $k=2$ ).

### 2.5 Color Measurement Method

Spectral radiant flux was measured by a sphere (2 meter)-spectroradiometer system, and the color characteristics (Color rendering index, correlated color temperature, chromaticity coordinate) were calculated from these by software automatically.

### 2.6 Total Luminous Flux Measurement Method

Total luminous flux was measured by sphere-spectroradiometer system.

Spectral radiant flux was measured by a sphere (2 meter)-spectroradiometer system, and the total luminous flux was calculated from these by software automatically.

### 2.7 Luminous Intensity Distribution Measurement Method

The customer did not require this measurement.

### 2.8 Spatial Non-uniformity of Chromaticity

The customer did not require this measurement.

### 3. Test Result Summary

#### 3.1 Electrical data

| Criteria Item             | Result(Sphere) | Result(Goniophotometer) |
|---------------------------|----------------|-------------------------|
| Input Voltage & Frequency | 120.00V~60Hz   | -                       |
| Input Current(A)          | 0.128          | -                       |
| Total Power(W)            | 14.99          | -                       |
| Power Factor              | 0.973          | -                       |
| Off-state Power(W)        | -              | -                       |

#### 3.2 Photometric data

| Criteria Item                         | Result(Sphere)      | Result(Goniophotometer) |
|---------------------------------------|---------------------|-------------------------|
| Total Lumens(lm)                      | 1048.10             | -                       |
| Luminaire Efficacy(lm/W)              | 69.92               | -                       |
| Correlated Color Temperature (CCT)(K) | 4109                | -                       |
| Color Rendering Index (CRI)           | 94                  | -                       |
| R9                                    | 60                  | -                       |
| Chromaticity Coordinate (x,y)         | x=0.3728,y=0.3621   | -                       |
| Chromaticity Coordinate (u,v)         | u=0.2259,v=0.3292   | -                       |
| Chromaticity Coordinate (u',v')       | u'=0.2259,v'=0.4938 | -                       |
| Duv                                   | -0.0047             | -                       |
| Spacing Criteria(0-180°)              | -                   | -                       |
| Spacing Criteria(90-270°)             | -                   | -                       |
| Beam angel                            | -                   | -                       |
| Zone Lumens between 0-60 °            | -                   | -                       |

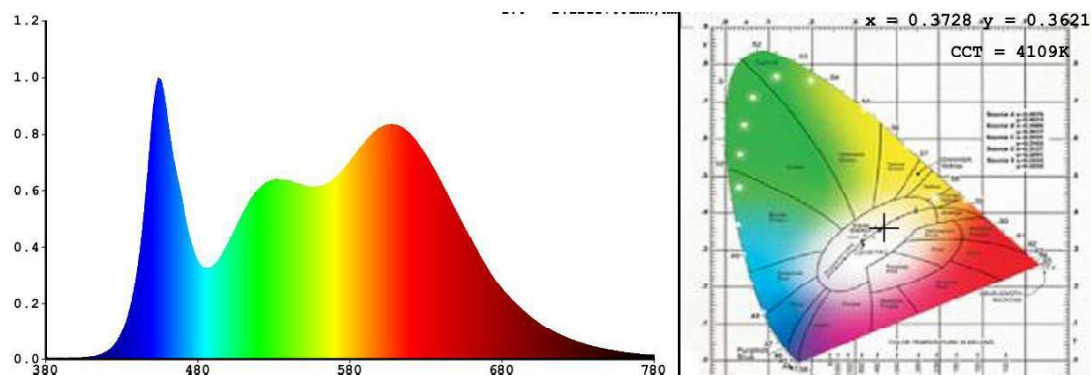
#### 3.3 Color Rendering Details

| R1 | R2  | R3  | R4  | R5  | R6  | R7  | R8 |
|----|-----|-----|-----|-----|-----|-----|----|
| 96 | 98  | 98  | 95  | 95  | 94  | 91  | 83 |
| R9 | R10 | R11 | R12 | R13 | R14 | R15 | -  |
| 60 | 96  | 96  | 73  | 99  | 99  | 93  | -  |

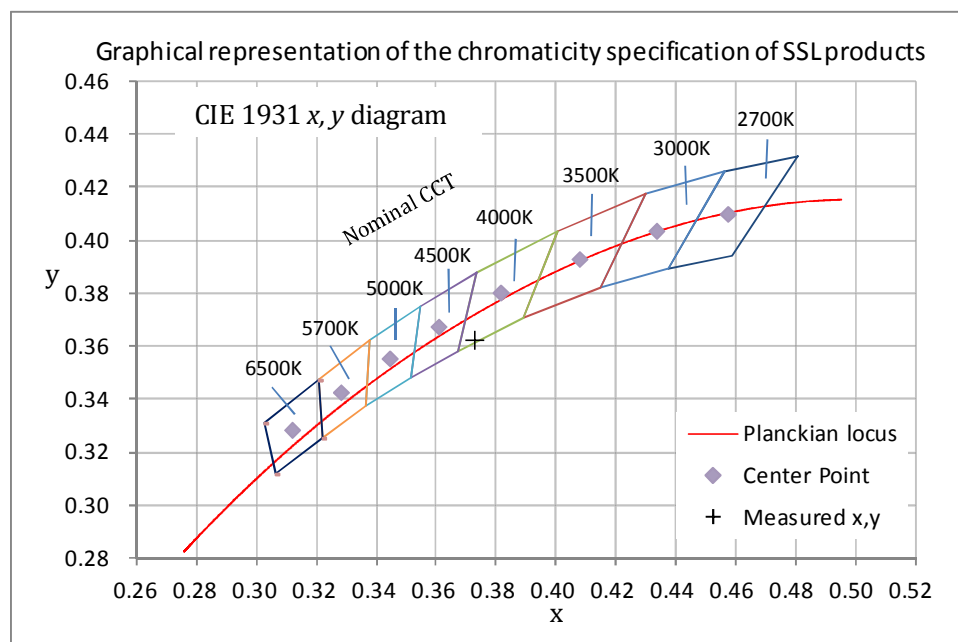
Note: N.A.

## 4. Test Data

### 4.1 Spectral Distribution



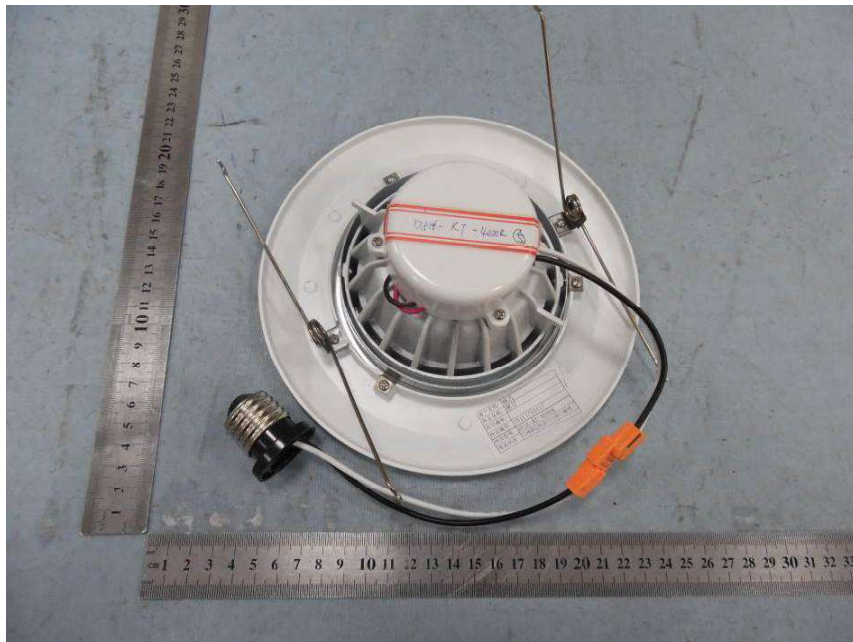
### 4.2 ANSI Chromaticity Quadrangles Diagram



## Appendix 1 Product Photo



Picture 1



Picture 2

\*\*\*\*End of test report\*\*\*\*