



UL LLC  
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## Photometric Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-2002, UL 1598-2008  
CIE 13.3-1995, CIE 15-2004, ANSI C78.377-2017  
IES TM-30-2015

Prepared For  
**ELEMENTAL LED INC, DBA DIODE LED**

Andrew Lassen  
885 Trademark Dr  
Reno, NV 89521  
United States

Catalog Number  
**Volante Canopy-200-T4-30x140 (4000K)**

Order Number  
12556990  
Test Number  
12556990.02

Test Date

2018-10-29 - 2018-11-02

Prepared By

William Escobar, Technician

Approved By

Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.  
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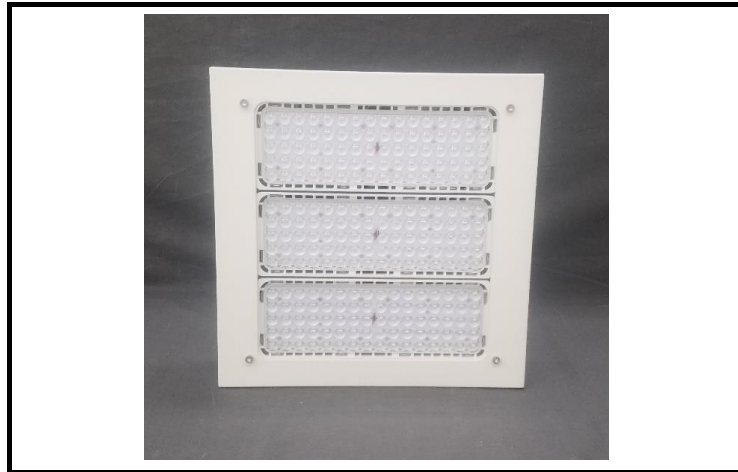
Laboratory results may not be representative of field performance  
Ballast factors have not been applied

Testing was performed in a 3-meter integrating sphere using the  $4\pi$  geometry method.  
Absorption correction was employed for Sphere measurement



**Luminaire Description:** Square white metal housing  
**Lamp:** 260 White LEDs with optics attached to each  
**Mounting:** Pendant  
**Ballast/Driver:** INVENTRONICS EUB-240S420DT

**Luminaire**



## Summary of Results

### Integrating Sphere

Luminous Flux: 26030 Lumens  
Efficacy: 114.8 lm/w  
CCT: 4067 K  
CRI (Ra): 82.5

### Electrical Data at 277 VAC

Test Temperature: 25.9 °C  
Voltage: 277.0 VAC  
Current: 0.8219 A  
Power: 219.5 W  
Power Factor: 0.964  
Frequency: 60 Hz  
Current THD: 7.51 %

### In-Situ

LED Temperature: 63.7 °C  
Driver Temperature: 67.2 °C  
Measured LED Current: 0.1424 A

Temperature is offset to an ambient temperature of 25°C as described in UL1598-2008.



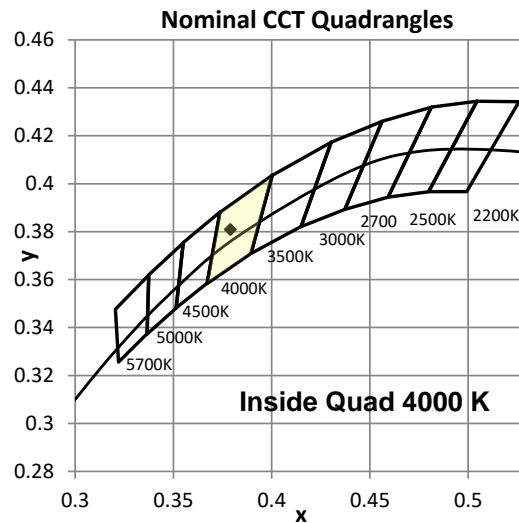
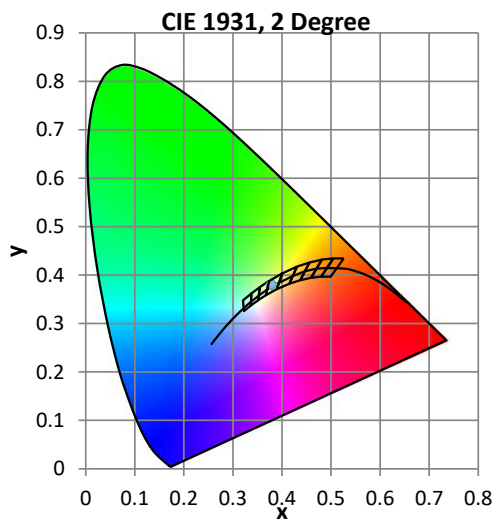
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.2 °C	120.0 VAC	1.898 A	226.8 W	0.996	60 Hz	6.60 %

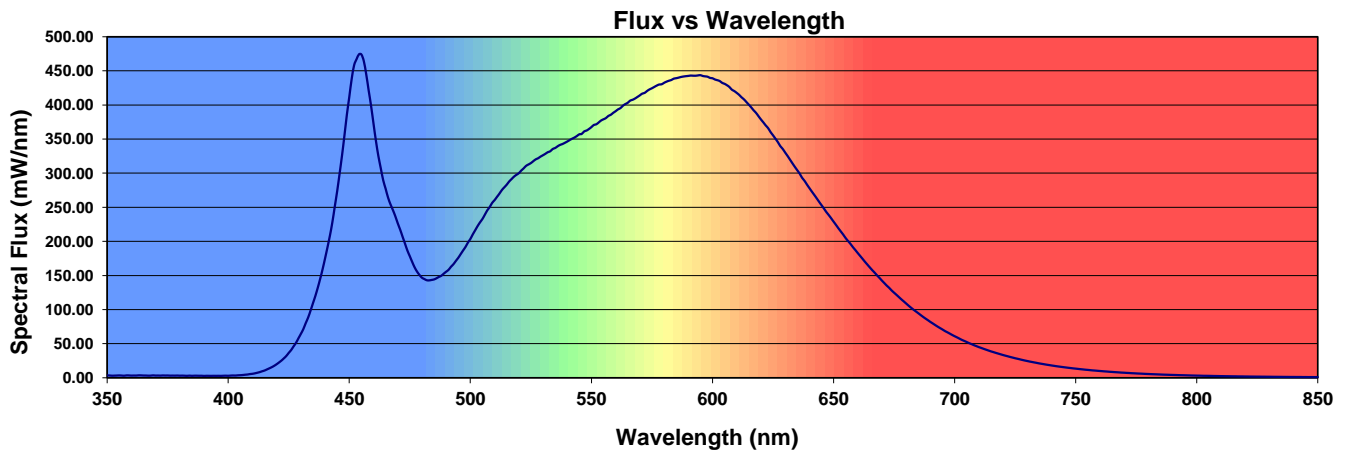
### Summary of Results

<b>Total Output:</b>	26030 Lumens	<b>Chromaticity (x):</b>	0.3790
<b>Efficacy:</b>	114.8 lm/w	<b>Chromaticity (y):</b>	0.3809
<b>CCT:</b>	4067 K	<b>Chromaticity (u'):</b>	0.2225
<b>CRI (Ra):</b>	82.5	<b>Chromaticity (v'):</b>	0.5032
<b>CRI (R9):</b>	6.9	<b>TM-30 Rf:</b>	81.5
<b>Peak Wavelength:</b>	454 nm	<b>TM-30 Rg:</b>	93.5
<b>Dominant Wavelength:</b>	578 nm	<b>Duv:</b>	0.0018
<b>S/P Ratio:</b>	1.71		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.5	80.4	89.2	95.2	80.1	80.0	84.6	86.2	64.0	6.9	73.8	78.2	58.9	82.7	97.5	74.0





## In-Situ Test

### In-Situ Test Conditions

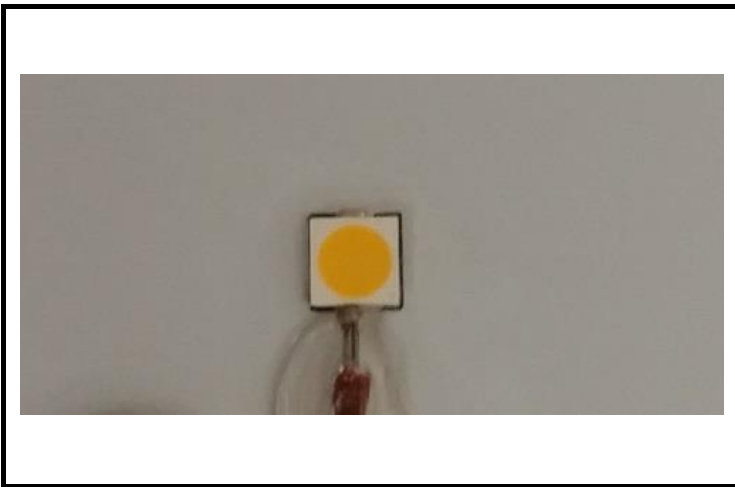
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.0 °C	120.1 VAC	N/A	N/A	N/A	60 Hz	N/A

### Summary of Results

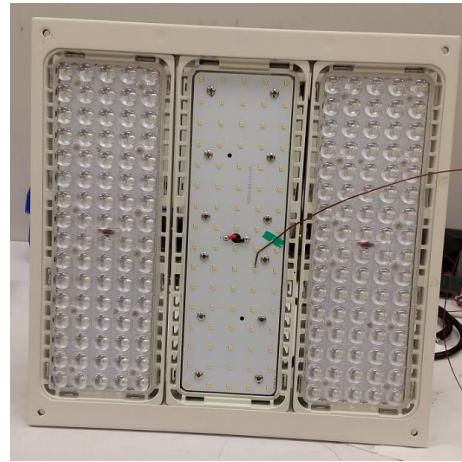
LED Temperature: 63.7 °C  
Driver Temperature: 67.2 °C  
Measured LED Current: 0.1424 A

Temperatures are offset to an ambient temperature of 25°C as described in UL1598-2008

### LED Temperature Location



### Thermocouple Reference



### Driver Temperature Location

