



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## Integrating Sphere Test Report

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

Prepared For  
**EcoSense Lighting**

Elizabeth Rodgers  
837 N. Spring St., Suite 103  
Los Angeles, CA 90012  
United States

Catalog Number  
**SDC-M-12-30-MULT-9**

Order Number  
12516650  
Test Number  
12516650.03

Test Date

2018-09-21

Prepared By

Luis Torres, Technician

Approved By

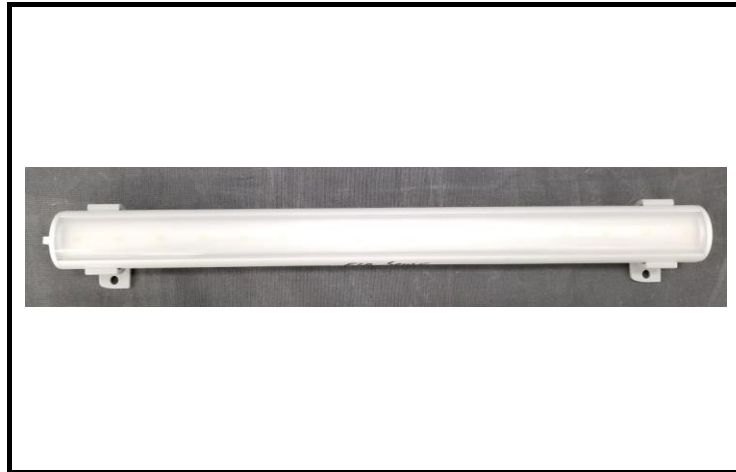
Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** White plastic cylindrical housing with diffuse lens  
**Lamp:** 16 White LEDs  
**Mounting:** Surface

**Luminaire**



**Summary of Results**

Radiant Flux:	1361 mW
Luminous Flux:	389.5 lm
Luminaire Efficacy:	105.7 lm/W
CCT:	3054 K
CRI (Ra):	92.4
Chromaticity (x):	0.4321
Chromaticity (y):	0.4007
Chromaticity (u):	0.2489
Chromaticity (v):	0.3462
Duv:	-0.0007

**Test Conditions**

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.03527 A
Power:	3.685 W
Power Factor:	0.871
Frequency:	60 Hz
Current THD:	53.6 %

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



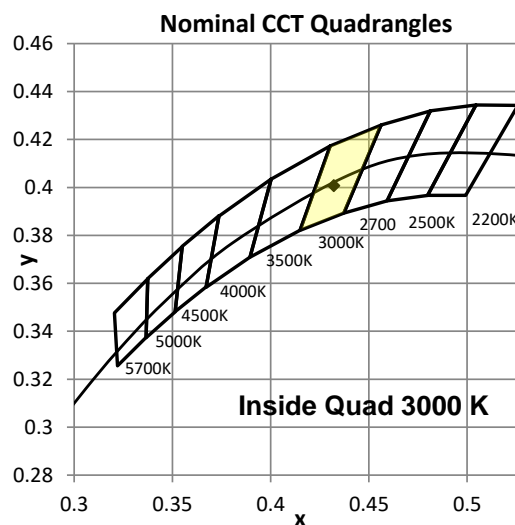
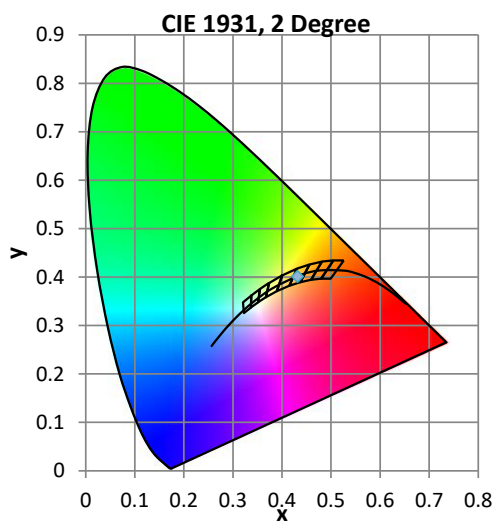
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	0.03527 A	3.685 W	0.871	60 Hz	53.6 %

### Summary of Results

<b>Total Output:</b>	390 Lumens	<b>Chromaticity (x):</b>	0.4321
<b>Efficacy:</b>	105.7 lm/w	<b>Chromaticity (y):</b>	0.4007
<b>CCT:</b>	3054 K	<b>Chromaticity (u'):</b>	0.2489
<b>CRI (Ra):</b>	92.4	<b>Chromaticity (v'):</b>	0.5193
<b>CRI (R9):</b>	63.5	<b>TM-30 Rf:</b>	90
<b>Peak Wavelength:</b>	623 nm	<b>TM-30 Rg:</b>	101.2
<b>Dominant Wavelength:</b>	583 nm	<b>Duv:</b>	-0.0007
<b>S/P Ratio:</b>	1.42		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92.4	93.0	94.9	95.1	93.0	92.2	93.0	93.3	84.5	63.5	86.8	93.3	78.8	93.4	96.5	90.0

