



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-H-12-27-MULT-9**

Order Number

12516650

Test Number

12516650.08

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:	2280 mW
Luminous Flux:	642.3 lm
Luminaire Efficacy:	82.4 lm/W
CCT:	2718 K
CRI (Ra):	92.0
Chromaticity (x):	0.4554
Chromaticity (y):	0.4052
Chromaticity (u):	0.2621
Chromaticity (v):	0.3497
Duv:	-0.0019

**Test Conditions**

Test Temperature:	25.6 °C
Voltage:	120.1 VAC
Current:	0.07366 A
Power:	7.790 W
Power Factor:	0.881
Frequency:	60 Hz
Current THD:	53.1 %

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



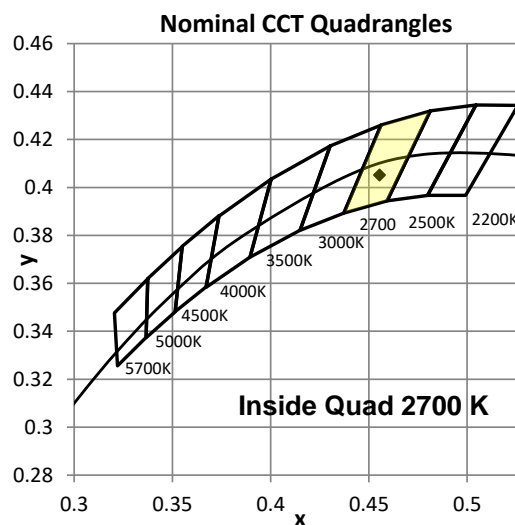
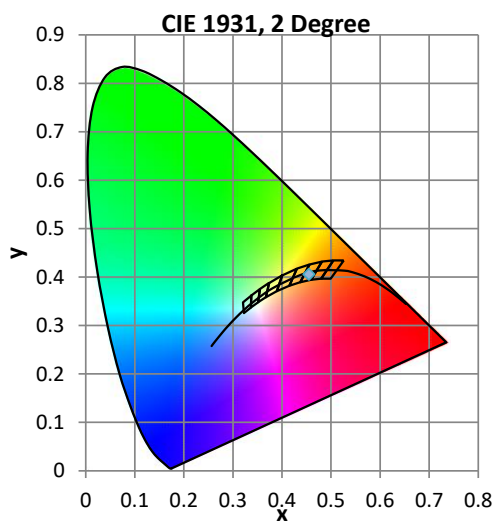
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.6 °C	120.1 VAC	0.07366 A	7.790 W	0.881	60 Hz	53.1 %

### Summary of Results

<b>Total Output:</b>	642 Lumens	<b>Chromaticity (x):</b>	0.4554
<b>Efficacy:</b>	82.4 lm/w	<b>Chromaticity (y):</b>	0.4052
<b>CCT:</b>	2718 K	<b>Chromaticity (u'):</b>	0.2621
<b>CRI (Ra):</b>	92.0	<b>Chromaticity (v'):</b>	0.5246
<b>CRI (R9):</b>	55.3	<b>TM-30 Rf:</b>	89.9
<b>Peak Wavelength:</b>	622 nm	<b>TM-30 Rg:</b>	99
<b>Dominant Wavelength:</b>	585 nm	<b>Duv:</b>	-0.0019
<b>S/P Ratio:</b>	1.3		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
92.0	92.4	97.2	98.1	91.2	92.3	96.4	89.6	78.7	55.3	92.4	91.9	84.1	93.9	99.3	88.2

