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## 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**

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Catalog Number  
**SDC-M-12-35-MULT-9**

Order Number  
12516650  
Test Number  
12516650.02

Test Date

2018-09-20

Prepared By

Luis Torres, Technician

Approved By

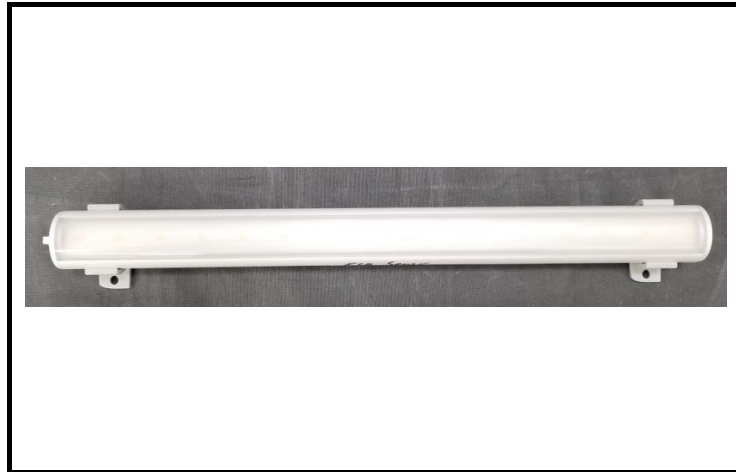
Eric Gaudreau, Engineering Leader

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:	1236 mW
Luminous Flux:	350 lm
Luminaire Efficacy:	95.9 lm/W
CCT:	3466 K
CRI (Ra):	95.2
Chromaticity (x):	0.4073
Chromaticity (y):	0.3921
Chromaticity (u):	0.2364
Chromaticity (v):	0.3414
Duv:	0.0001

**Test Conditions**

Test Temperature:	25.0 °C
Voltage:	120.1 VAC
Current:	0.03469 A
Power:	3.651 W
Power Factor:	0.876
Frequency:	60 Hz
Current THD:	53.8 %

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



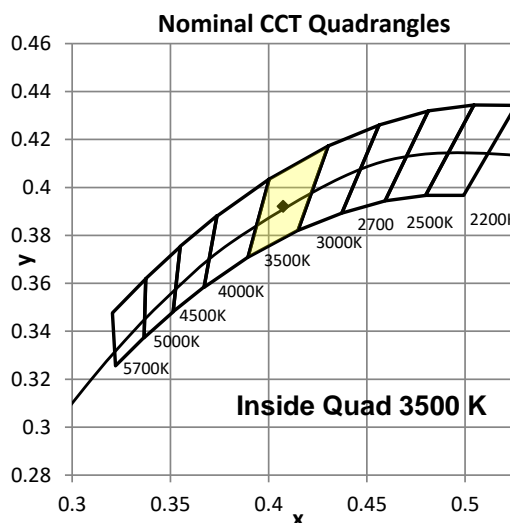
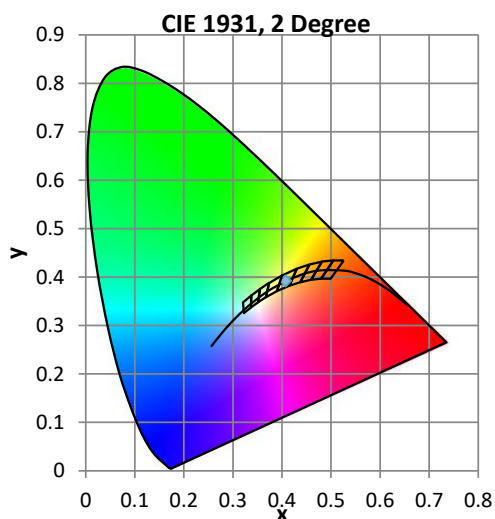
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.1 VAC	0.03469 A	3.651 W	0.876	60 Hz	53.8 %

### Summary of Results

<b>Total Output:</b>	350 Lumens	<b>Chromaticity (x):</b>	0.4073
<b>Efficacy:</b>	95.9 lm/w	<b>Chromaticity (y):</b>	0.3921
<b>CCT:</b>	3466 K	<b>Chromaticity (u'):</b>	0.2364
<b>CRI (Ra):</b>	95.2	<b>Chromaticity (v'):</b>	0.5121
<b>CRI (R9):</b>	77.7	<b>TM-30 Rf:</b>	89.1
<b>Peak Wavelength:</b>	624 nm	<b>TM-30 Rg:</b>	97
<b>Dominant Wavelength:</b>	581 nm	<b>Duv:</b>	0.0001
<b>S/P Ratio:</b>	1.64		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
95.2	96.4	99.0	98.7	93.5	94.5	96.3	94.0	89.5	77.7	95.3	94.2	74.6	97.6	98.7	94.2

