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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-H-12-35-MULT-9**

Order Number  
12516650  
Test Number  
12516650.06

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:	2160 mW
Luminous Flux:	620.8 lm
Luminaire Efficacy:	80.1 lm/W
CCT:	3505 K
CRI (Ra):	93.7
Chromaticity (x):	0.4048
Chromaticity (y):	0.3902
Chromaticity (u):	0.2356
Chromaticity (v):	0.3406
Duv:	0.0003

**Test Conditions**

Test Temperature:	25.9 °C
Voltage:	120.1 VAC
Current:	0.07355 A
Power:	7.748 W
Power Factor:	0.877
Frequency:	60 Hz
Current THD:	54.0 %

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



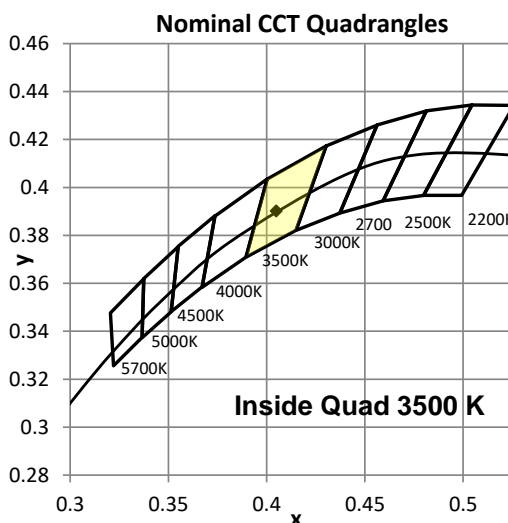
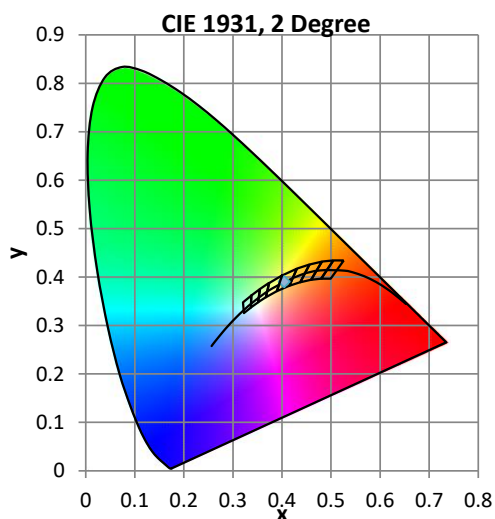
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.9 °C	120.1 VAC	0.07355 A	7.748 W	0.877	60 Hz	54.0 %

### Summary of Results

<b>Total Output:</b>	621 Lumens	<b>Chromaticity (x):</b>	0.4048
<b>Efficacy:</b>	80.1 lm/w	<b>Chromaticity (y):</b>	0.3902
<b>CCT:</b>	3505 K	<b>Chromaticity (u'):</b>	0.2356
<b>CRI (Ra):</b>	93.7	<b>Chromaticity (v'):</b>	0.5110
<b>CRI (R9):</b>	68.2	<b>TM-30 Rf:</b>	89.3
<b>Peak Wavelength:</b>	618 nm	<b>TM-30 Rg:</b>	97.3
<b>Dominant Wavelength:</b>	581 nm	<b>Duv:</b>	0.0003
<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
93.7	94.3	97.6	98.1	92.2	93.0	95.1	93.3	86.0	68.2	92.2	92.2	75.4	95.5	98.5	91.7

