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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
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United States

Catalog Number
SA-LED-X53-WW-9-3000K
Order Number
12406698
Test Number
12406698.02

Test Date

2018-08-28

Prepared By

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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 metal cylindrical housing with clear outer glass lens and inner plastic diffuse lens.

Lamp: One (1) white LED with optic attached

Mounting: Surface - Ground

Ballast/Driver: ERP ESS015W-0350-42

Luminaire



Summary of Results

| | |
|---------------------|-----------|
| Radiant Flux: | 1507 mW |
| Luminous Flux: | 499.1 lm |
| Luminaire Efficacy: | 47.0 lm/W |
| CCT: | 3174 K |
| CRI (Ra): | 82.3 |
| Chromaticity (x): | 0.4250 |
| Chromaticity (y): | 0.3997 |
| Chromaticity (u): | 0.2447 |
| Chromaticity (v): | 0.3452 |
| Duv: | 0.0002 |

Test Conditions

| | |
|-------------------|-----------|
| Test Temperature: | 25.0 °C |
| Voltage: | 120.0 VAC |
| Current: | 0.09036 A |
| Power: | 10.63 W |
| Power Factor: | 0.980 |
| Frequency: | 60 Hz |
| Current THD: | 17.7 % |

Testing was performed in a 2-meter integrating sphere using the 4 π geometry method.
Absorption correction was employed for this measurement.



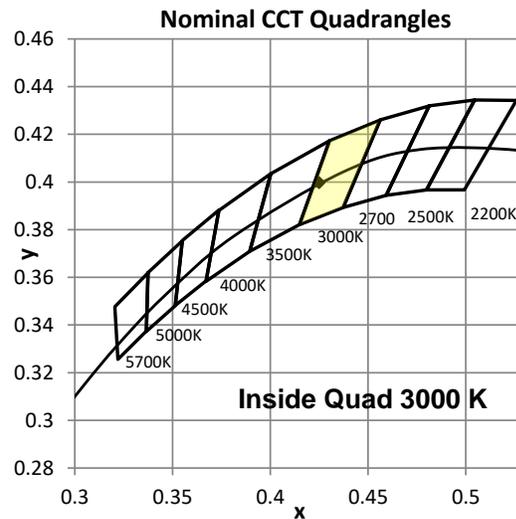
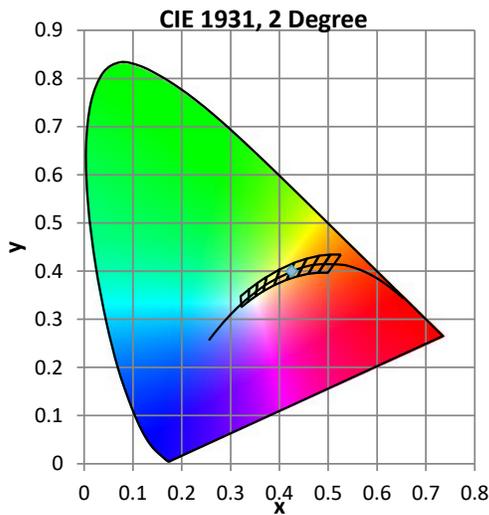
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

| Temperature | Voltage | Current | Power | Power Factor | Frequency | Current THD |
|-------------|-----------|-----------|---------|--------------|-----------|-------------|
| 25.0 °C | 120.0 VAC | 0.09036 A | 10.63 W | 0.980 | 60 Hz | 17.7 % |

Summary of Results

| | | | |
|-----------------------------|------------|---------------------------|--------|
| Total Output: | 499 Lumens | Chromaticity (x): | 0.4250 |
| Efficacy: | 47.0 lm/w | Chromaticity (y): | 0.3997 |
| CCT: | 3174 K | Chromaticity (u'): | 0.2447 |
| CRI (Ra): | 82.3 | Chromaticity (v'): | 0.5179 |
| CRI (R9): | 4.2 | TM-30 Rf: | 83 |
| Peak Wavelength: | 602 nm | TM-30 Rg: | 96 |
| Dominant Wavelength: | 582 nm | Duv: | 0.0002 |
| S/P Ratio: | 1.41 | | |



Color Rendering Index Detail

| Ra (CRI) | R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|----------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 82.3 | 80.4 | 90.5 | 96.3 | 80.4 | 80.9 | 88.2 | 82.9 | 58.7 | 4.2 | 78.4 | 79.6 | 71.5 | 82.7 | 98.5 | 73.0 |

