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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 C78.377-2015, IES TM-30-2015

Prepared For
B-K LIGHTING INC

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Catalog Number
SM-APII-LED-x51-BW-12-C

Order Number
12106194
Test Number
12106194.02

Test Date

2017-12-27

Prepared By

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Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Circular white metal housing and outer patterned glass lens
Lamp: One (1) White LED with optic attached
Mounting: VBU
Ballast/Driver: One (1) Thomas Research PLED75W-054-C1400-D

Luminaire



Summary of Results

Radiant Flux:	11850 mW
Luminous Flux:	3910 lm
Luminaire Efficacy:	69.4 lm/W
CCT:	3925 K
CRI (Ra):	82.5
Chromaticity (x):	0.3851
Chromaticity (y):	0.3837
Chromaticity (u):	0.2254
Chromaticity (v):	0.3369
Duv:	0.0018

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.1 VAC
Current:	0.4721 A
Power:	56.36 W
Power Factor:	0.994
Frequency:	60 Hz
Current THD:	6.43 %

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



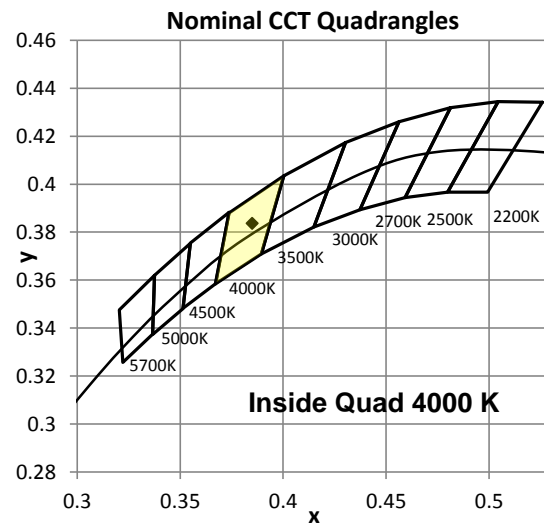
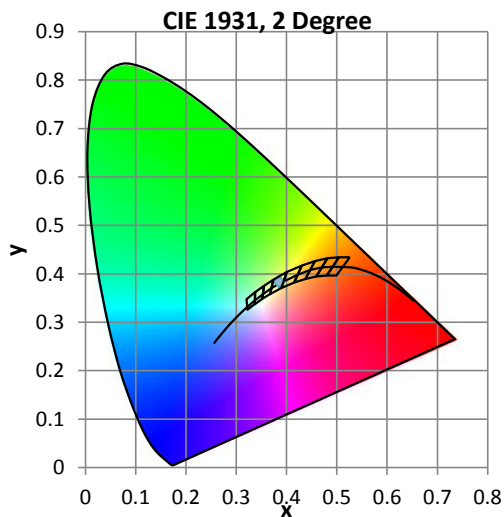
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.1 VAC	0.4721 A	56.36 W	0.994	60 Hz	6.43 %

Summary of Results

Total Output:	3910 Lumens	Chromaticity (x):	0.3851
Efficacy:	69.4 lm/w	Chromaticity (y):	0.3837
CCT:	3925 K	Chromaticity (u'):	0.2254
CRI (Ra):	82.5	Chromaticity (v'):	0.5053
CRI (R9):	8.6	TM-30 Rf:	82
Peak Wavelength:	451.1 nm	TM-30 Rg:	95.1
Dominant Wavelength:	578.4 nm	Duv:	0.0018
S/P Ratio:	1.656		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.5	80.5	88.6	94.7	81.0	80.3	84.0	86.5	64.6	8.6	72.8	79.3	60.0	82.4	97.1	74.3

