



UL LLC  
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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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Madera, CA 93636-9515  
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Catalog Number  
**APL-LED-L12-4000K**  
Order Number  
11609603  
Test Number  
11609603.05

Test Date

2017-05-18

Prepared By

Khang Nguyen, Technician

Approved By

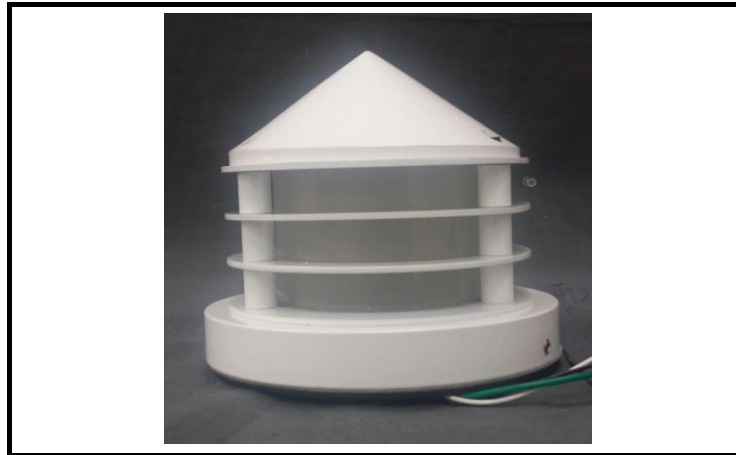
Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Decorative white metal housing, reflector and diffuse lens.  
**Lamp:** 22 White LEDs  
**Mounting:** Base Down

**Luminaire**



**Summary of Results**

Radiant Flux:	1061 mW
Luminous Flux:	299.2 lm
Luminaire Efficacy:	30.3 lm/W
CCT:	4034 K
CRI (Ra):	95.1
Chromaticity (x):	0.3807
Chromaticity (y):	0.3827
Chromaticity (u):	0.2229
Chromaticity (v):	0.3361
Duv:	0.0020

**Test Conditions**

Test Temperature:	25.0 °C
Voltage:	120.0 VAC
Current:	0.08461 A
Power:	9.876 W
Power Factor:	0.972
Frequency:	60 Hz
Current THD:	19.7 %

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



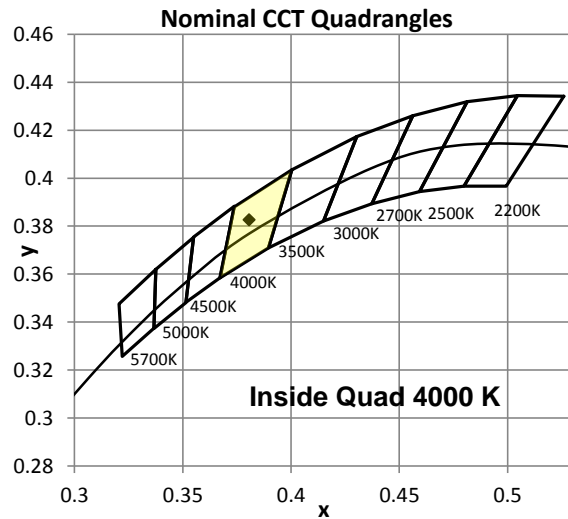
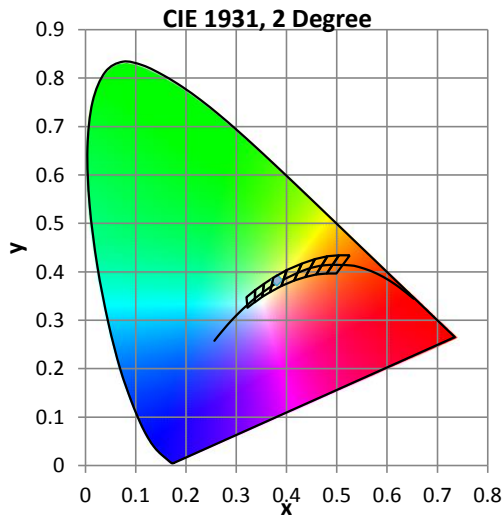
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.0 VAC	0.08461 A	9.876 W	0.972	60 Hz	19.7 %

### Summary of Results

Total Output:	299 Lumens	Chromaticity (x):	0.3807
Efficacy:	30.3 lm/w	Chromaticity (y):	0.3827
CCT:	4034 K	Chromaticity (u'):	0.2229
CRI (Ra):	95.1	Chromaticity (v'):	0.5042
CRI (R9):	85.5	TM-30 Rf:	92.5
Peak Wavelength:	630.5 nm	TM-30 Rg:	99.8
Dominant Wavelength:	577.6 nm	Duv:	0.0020
S/P Ratio:	1.798		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
95.1	95.7	95.4	93.4	96.1	94.3	92.5	98.3	95.4	85.5	87.9	95.2	74.9	95.4	95.9

