



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## 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**  
Chris McCarthy  
40429 Brickyard Dr  
Madera, CA 93636-9515  
United States

Catalog Number  
**LBF-LED-X65-SP-9-C**  
Order Number  
11913931  
Test Number  
11913931.13

Test Date

2017-08-16

Prepared By

Tony Rubio, Technician

Approved By

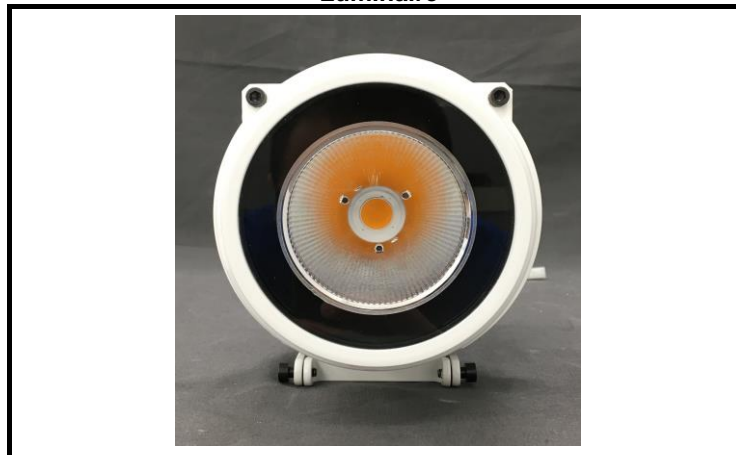
Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Formed white metal housing with patterned reflector and clear lens  
**Lamp:** One (1) white LED  
**Mounting:** Pole/Arm  
**Ballast/Driver:** Thomas Research Products LED25W-36-C0700-LE

**Luminaire**



**Summary of Results**

|                     |           |
|---------------------|-----------|
| Radiant Flux:       | 7498 mW   |
| Luminous Flux:      | 2457 lm   |
| Luminaire Efficacy: | 93.3 lm/W |
| CCT:                | 3135 K    |
| CRI (Ra):           | 83.1      |
| Chromaticity (x):   | 0.4271    |
| Chromaticity (y):   | 0.3997    |
| Chromaticity (u):   | 0.2461    |
| Chromaticity (v):   | 0.3455    |
| Duv:                | 0.0007    |

**Test Conditions**

|                   |           |
|-------------------|-----------|
| Test Temperature: | 25.7 °C   |
| Voltage:          | 120.1 VAC |
| Current:          | 0.2223 A  |
| Power:            | 26.34 W   |
| Power Factor:     | 0.987     |
| Frequency:        | 60 Hz     |
| Current THD:      | 12.7 %    |

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



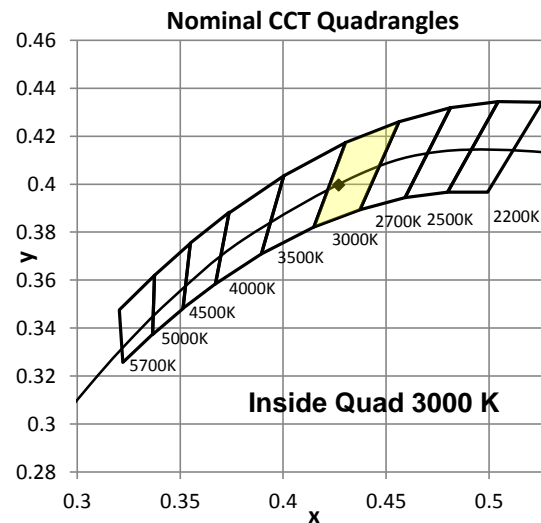
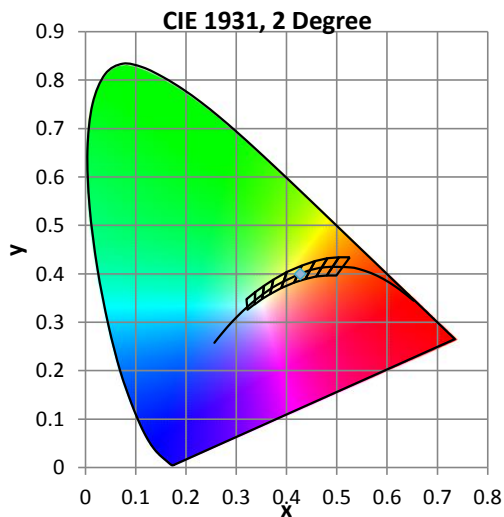
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

| Temperature | Voltage   | Current  | Power   | Power Factor | Frequency | Current THD |
|-------------|-----------|----------|---------|--------------|-----------|-------------|
| 25.7 °C     | 120.1 VAC | 0.2223 A | 26.34 W | 0.987        | 60 Hz     | 12.7 %      |

### Summary of Results

|                             |             |                           |        |
|-----------------------------|-------------|---------------------------|--------|
| <b>Total Output:</b>        | 2457 Lumens | <b>Chromaticity (x):</b>  | 0.4271 |
| <b>Efficacy:</b>            | 93.3 lm/w   | <b>Chromaticity (y):</b>  | 0.3997 |
| <b>CCT:</b>                 | 3135 K      | <b>Chromaticity (u'):</b> | 0.2461 |
| <b>CRI (Ra):</b>            | 83.1        | <b>Chromaticity (v'):</b> | 0.5182 |
| <b>CRI (R9):</b>            | 9.2         | <b>TM-30 Rf:</b>          | 83.5   |
| <b>Peak Wavelength:</b>     | 602.9 nm    | <b>TM-30 Rg:</b>          | 96     |
| <b>Dominant Wavelength:</b> | 582.4 nm    | <b>Duv:</b>               | 0.0007 |
| <b>S/P Ratio:</b>           | 1.408       |                           |        |



### Color Rendering Index Detail

| Ra (CRI) | R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9  | R10  | R11  | R12  | R13  | R14  |
|----------|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|
| 83.1     | 81.5 | 91.3 | 96.3 | 81.0 | 81.8 | 89.3 | 83.3 | 60.3 | 9.2 | 80.2 | 80.2 | 72.1 | 83.8 | 98.6 |

