



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

## Integrating Sphere Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-10-2014, CIE 13.3-1995  
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

**Prepared For**  
**B-K Lighting INC**

Daniel Carrejo  
40429 Brickyard Dr.  
Madera, CA 93636  
United States

**Catalog Number**  
**HU-LED-TR-X114-NFL-WHP-9-C-1-INC-120-PROTOTYPE(3000K)**

Order Number

13244408

Test Number

13244408.08B

Revised Date:

2020-03-17

Test Date

2020-03-02

Prepared By

Khang Nguyen, Technician

Approved By

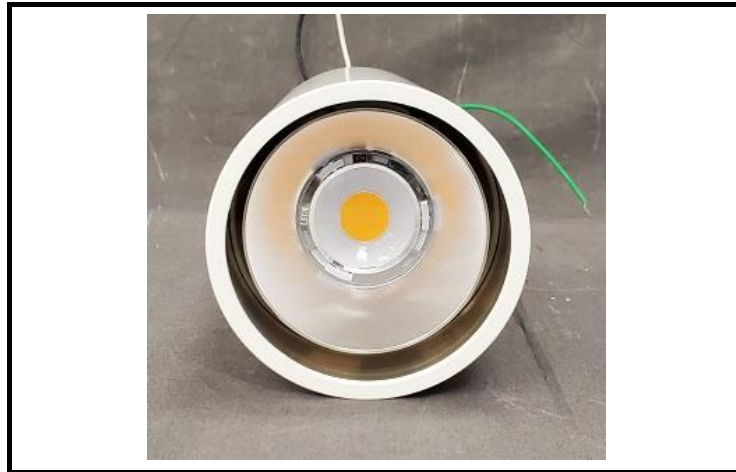
Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** White metal cylindrical housing and clear glass lens  
**Lamp:** One (1) White LED with optic below  
**Mounting:** Pendant  
**Ballast/Driver:** One (1) ERP ESS040W-0900-42

**Luminaire**



**Summary of Results**

Radiant Flux:	11900 mW
Luminous Flux:	3940 lm
Luminaire Efficacy:	116.4 lm/W
CCT:	3112 K
CRI (Ra):	81.9
Chromaticity (x):	0.4298
Chromaticity (y):	0.4030
Chromaticity (u):	0.2465
Chromaticity (v):	0.3466
Duv:	0.0001

**Test Conditions**

Test Temperature:	25.0 °C
Voltage:	120.0 VAC
Current:	0.2875 A
Power:	33.86 W
Power Factor:	0.981
Frequency:	60 Hz
Current THD:	13.3 %

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



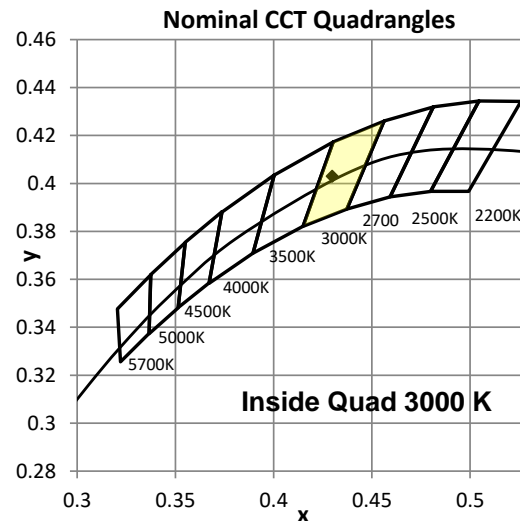
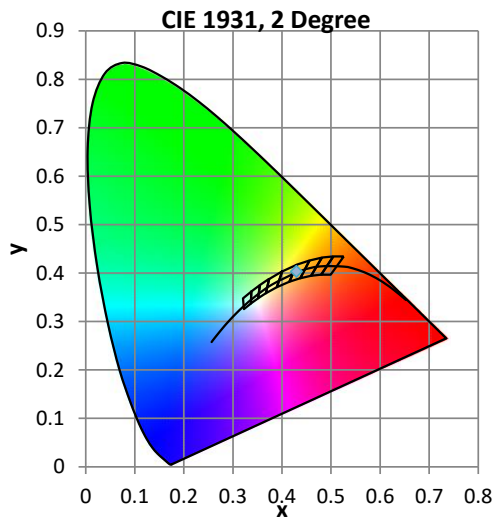
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.0 °C	120.0 VAC	0.2875 A	33.86 W	0.981	60 Hz	13.3 %

### Summary of Results

<b>Total Output:</b>	3940 Lumens	<b>Chromaticity (x):</b>	0.4298
<b>Efficacy:</b>	116.4 lm/w	<b>Chromaticity (y):</b>	0.4030
<b>CCT:</b>	3112 K	<b>Chromaticity (u'):</b>	0.2465
<b>CRI (Ra):</b>	81.9	<b>Chromaticity (v'):</b>	0.5199
<b>CRI (R9):</b>	5.6	<b>TM-30 Rf:</b>	84
<b>Peak Wavelength:</b>	604 nm	<b>TM-30 Rg:</b>	96.6
<b>Dominant Wavelength:</b>	582 nm	<b>Duv:</b>	0.0001
<b>S/P Ratio:</b>	1.36		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.9	80.2	89.2	96.3	80.4	79.9	86.1	83.8	59.7	5.6	74.7	79.2	66.0	82.2	98.0	72.9

