



UL LLC  
1075 W Lambert Rd Suite B  
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## 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-X113-FL-WHP-9-C-1-INC-120-PROTOTYPE(2700K)**

Order Number  
13244408  
Test Number  
13244408.18

Test Date

2020-03-24

Prepared By

Austin Duff, Technician

Approved By

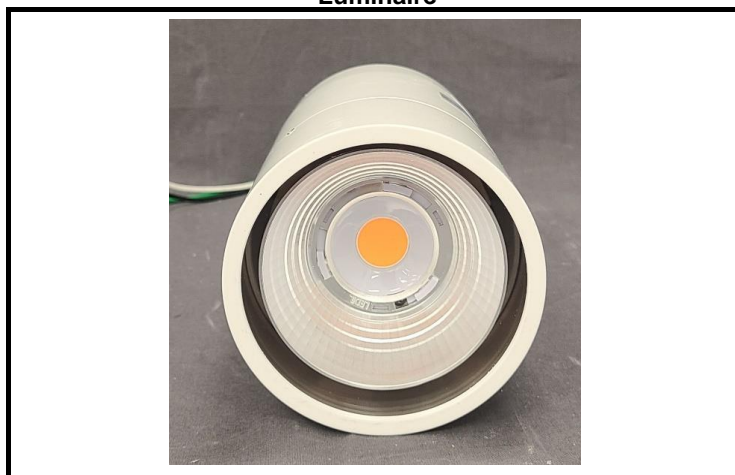
Eric Gaudreau, Engineering Leader

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:	10440 mW
Luminous Flux:	3328 lm
Luminaire Efficacy:	97.7 lm/W
CCT:	2798 K
CRI (Ra):	82.8
Chromaticity (x):	0.4472
Chromaticity (y):	0.3998
Chromaticity (u):	0.2591
Chromaticity (v):	0.3475
Duv:	-0.0030

**Test Conditions**

Test Temperature:	25.1 °C
Voltage:	120.1 VAC
Current:	0.2884 A
Power:	34.06 W
Power Factor:	0.983
Frequency:	60 Hz
Current THD:	12.9 %

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



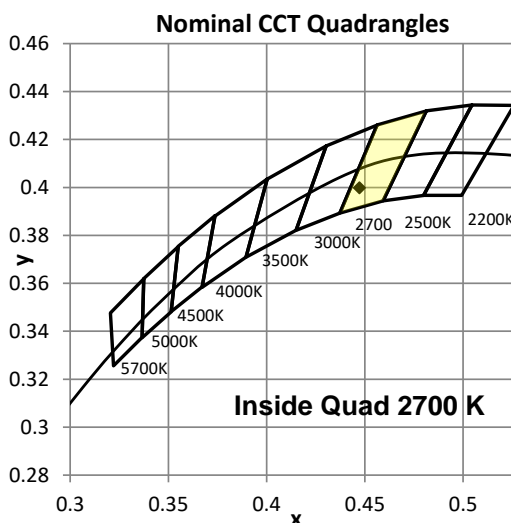
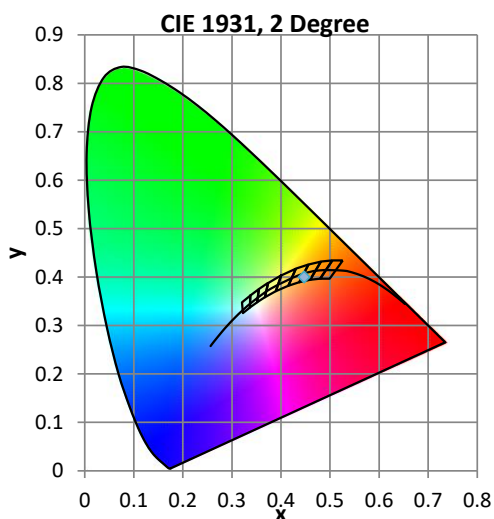
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.1 VAC	0.2884 A	34.06 W	0.983	60 Hz	12.9 %

### Summary of Results

<b>Total Output:</b>	3328 Lumens	<b>Chromaticity (x):</b>	0.4472
<b>Efficacy:</b>	97.7 lm/w	<b>Chromaticity (y):</b>	0.3998
<b>CCT:</b>	2798 K	<b>Chromaticity (u'):</b>	0.2591
<b>CRI (Ra):</b>	82.8	<b>Chromaticity (v'):</b>	0.5212
<b>CRI (R9):</b>	10.2	<b>TM-30 Rf:</b>	84.8
<b>Peak Wavelength:</b>	606 nm	<b>TM-30 Rg:</b>	96.7
<b>Dominant Wavelength:</b>	585 nm	<b>Duv:</b>	-0.0030
<b>S/P Ratio:</b>	1.29		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.8	82.0	93.1	93.9	79.9	82.6	92.0	80.6	58.0	10.2	84.5	79.5	78.3	84.8	97.5	75.0

