



UL LLC  
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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-X105-NSP-WHP-9-C-1-INC-120-PROTOTYPE(2700K)**

Order Number  
13318635  
Test Number  
13318635.01

Test Date

2020-05-14

Prepared By

Austin Duff, Technician

Approved By

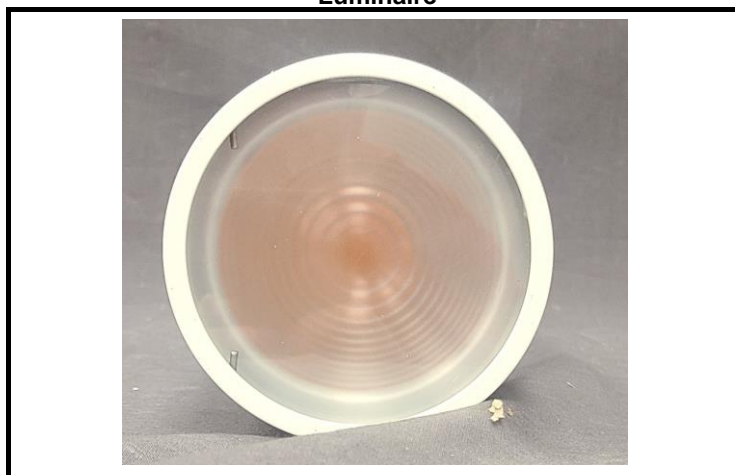
Eric Gaudreau, Engineering Leader

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 ESST040W-0900-42

**Luminaire**



**Summary of Results**

Radiant Flux:	4630 mW
Luminous Flux:	1500 lm
Luminaire Efficacy:	42.2 lm/W
CCT:	2799 K
CRI (Ra):	82.1
Chromaticity (x):	0.4526
Chromaticity (y):	0.4100
Chromaticity (u):	0.2580
Chromaticity (v):	0.3507
Duv:	0.0004

**Test Conditions**

Test Temperature:	24.9 °C
Voltage:	120.1 VAC
Current:	0.2993 A
Power:	35.51 W
Power Factor:	0.988
Frequency:	60 Hz
Current THD:	11.5 %

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



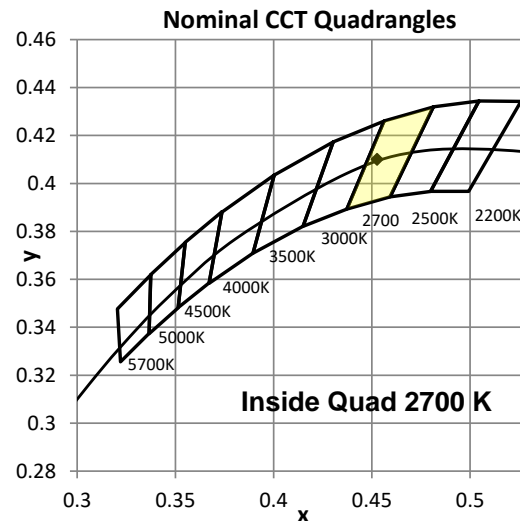
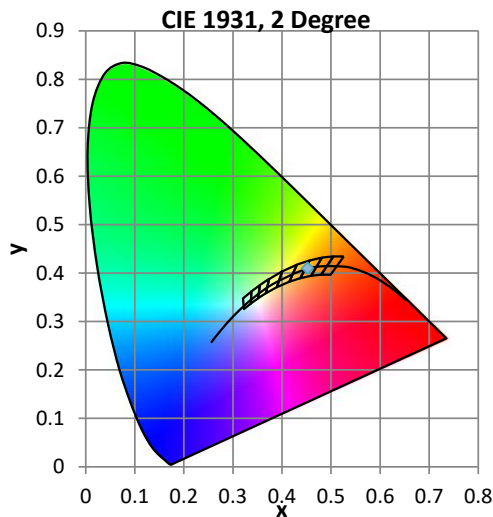
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.1 VAC	0.2993 A	35.51 W	0.988	60 Hz	11.5 %

### Summary of Results

<b>Total Output:</b>	1500 Lumens	<b>Chromaticity (x):</b>	0.4526
<b>Efficacy:</b>	42.2 lm/w	<b>Chromaticity (y):</b>	0.4100
<b>CCT:</b>	2799 K	<b>Chromaticity (u'):</b>	0.2580
<b>CRI (Ra):</b>	82.1	<b>Chromaticity (v'):</b>	0.5260
<b>CRI (R9):</b>	6.5	<b>TM-30 Rf:</b>	85.4
<b>Peak Wavelength:</b>	606 nm	<b>TM-30 Rg:</b>	94.3
<b>Dominant Wavelength:</b>	584 nm	<b>Duv:</b>	0.0004
<b>S/P Ratio:</b>	1.27		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
82.1	80.6	92.0	94.8	79.3	81.0	91.1	81.4	57.0	6.5	82.1	78.4	76.4	83.3	97.7	73.0

