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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**  
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UNITED STATES

Catalog Number  
**YK-I-LED-A2780-WHP-SD-B1-010-MT-PROTOTYPE(2700K w/ Steps)**  
Order Number  
13280094  
Test Number  
13280094.01

Test Date

2020-04-16

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:** Black rectangular plastic housing with white metal step reflector, clear glass lens, and diffuse plastic film  
**Lamp:** 24 White LEDs  
**Mounting:** Recessed  
**Ballast/Driver:** ERP ESS015W-0440-25

**Luminaire**



**Summary of Results**

Radiant Flux:	1181 mW
Luminous Flux:	382.2 lm
Luminaire Efficacy:	31.7 lm/W
CCT:	2791 K
CRI (Ra):	80.2
Chromaticity (x):	0.4515
Chromaticity (y):	0.4069
Chromaticity (u):	0.2587
Chromaticity (v):	0.3498
Duv:	-0.0007

**Test Conditions**

Test Temperature:	25.4 °C
Voltage:	120.0 VAC
Current:	0.1020 A
Power:	12.06 W
Power Factor:	0.985
Frequency:	60 Hz
Current THD:	14.3 %

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



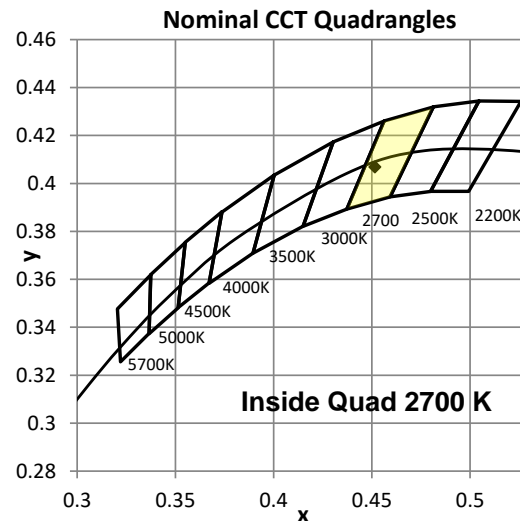
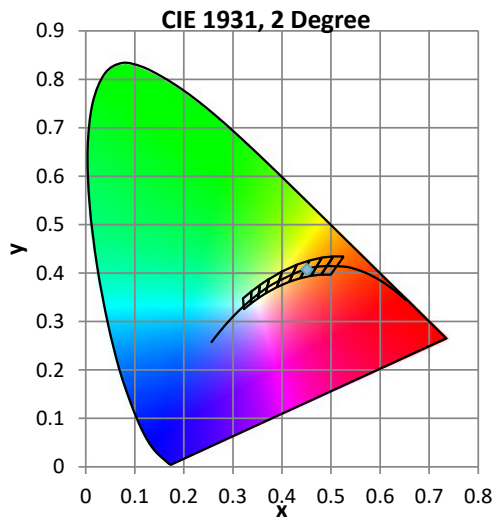
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	120.0 VAC	0.1020 A	12.06 W	0.985	60 Hz	14.3 %

### Summary of Results

<b>Total Output:</b>	382 Lumens	<b>Chromaticity (x):</b>	0.4515
<b>Efficacy:</b>	31.7 lm/w	<b>Chromaticity (y):</b>	0.4069
<b>CCT:</b>	2791 K	<b>Chromaticity (u'):</b>	0.2587
<b>CRI (Ra):</b>	80.2	<b>Chromaticity (v'):</b>	0.5247
<b>CRI (R9):</b>	1.1	<b>TM-30 Rf:</b>	82.3
<b>Peak Wavelength:</b>	604 nm	<b>TM-30 Rg:</b>	97.1
<b>Dominant Wavelength:</b>	584 nm	<b>Duv:</b>	-0.0007
<b>S/P Ratio:</b>	1.22		



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80.2	78.0	88.7	96.4	77.7	77.9	86.1	81.4	55.5	1.1	74.7	76.1	70.3	80.2	98.4	70.7

