



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 93636-9515
UNITED STATES

Catalog Number
YK-D-LED-A2780-WHP-H-SD-010-MT-PROTOTYPE(2700K)
Order Number
13280109
Test Number
13280109.01

Test Date

2020-03-23

Prepared By

William Escobar, Technician

Approved By

Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Black plastic rectangular housing and white metal faceplate with clear glass lens
Lamp: 24 White LEDs with diffuse plastic film
Mounting: Recessed
Ballast/Driver: ESS015W-0350-42

Luminaire



Summary of Results

Radiant Flux:	983 mW
Luminous Flux:	315.5 lm
Luminaire Efficacy:	33.1 lm/W
CCT:	2753 K
CRI (Ra):	80.5
Chromaticity (x):	0.4525
Chromaticity (y):	0.4042
Chromaticity (u):	0.2606
Chromaticity (v):	0.3492
Duv:	-0.0019

Test Conditions

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.08073 A
Power:	9.523 W
Power Factor:	0.983
Frequency:	60 Hz
Current THD:	8.58 %

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



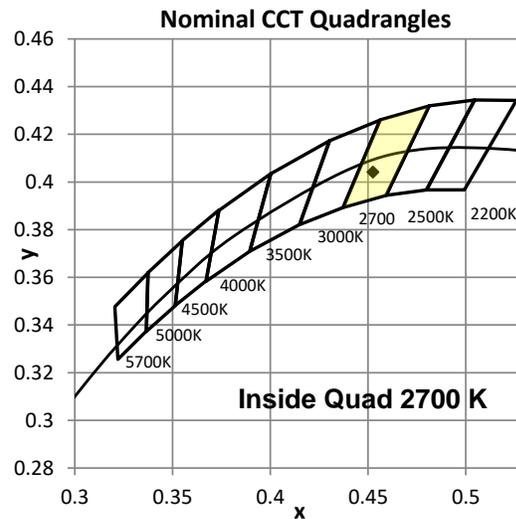
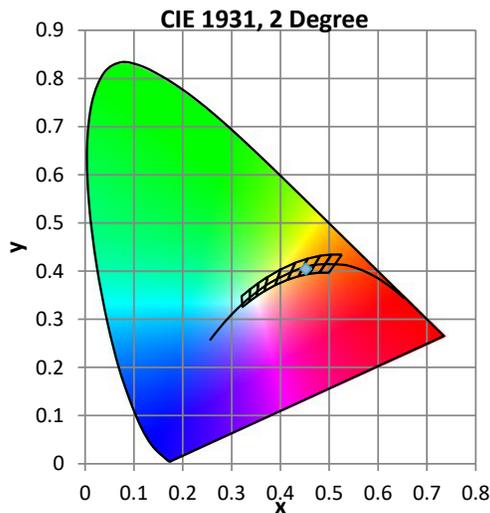
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.08073 A	9.523 W	0.983	60 Hz	8.58 %

Summary of Results

Total Output:	316 Lumens	Chromaticity (x):	0.4525
Efficacy:	33.1 lm/w	Chromaticity (y):	0.4042
CCT:	2753 K	Chromaticity (u'):	0.2606
CRI (Ra):	80.5	Chromaticity (v'):	0.5238
CRI (R9):	2.4	TM-30 Rf:	81.6
Peak Wavelength:	604 nm	TM-30 Rg:	98.3
Dominant Wavelength:	585 nm	Duv:	-0.0019
S/P Ratio:	1.21		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80.5	78.5	89.1	96.3	78.2	78.6	86.9	81.0	55.6	2.4	75.8	77.2	72.8	80.7	98.4	71.3

