



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

Photometric Test Report

Relevant Standards
IES LM-79-2008, IES LM-31-1995 (Withdrawn)
ANSI C78.377-2011, ANSI C82.77-2002
CIE 13.3-1995, CIE 15-2004, IES TM-30-15

Prepared For
B-K LIGHTING INC

Chris McCarthy
40429 Brickyard Dr
Madera, CA 93636-9515
United States

Catalog Number
AR-LS-20-LED-4000K

Order Number
11609579
Test Number
11609579.09

Test Date

2016-01-19 - 2017-01-24

Prepared By

Austin Duff, Technician

Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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Laboratory results may not be representative of field performance
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the 4π geometry method.

Absorption correction was employed for Sphere measurement

Tested in 30 planes left side, 30 planes right side, left and right averaged

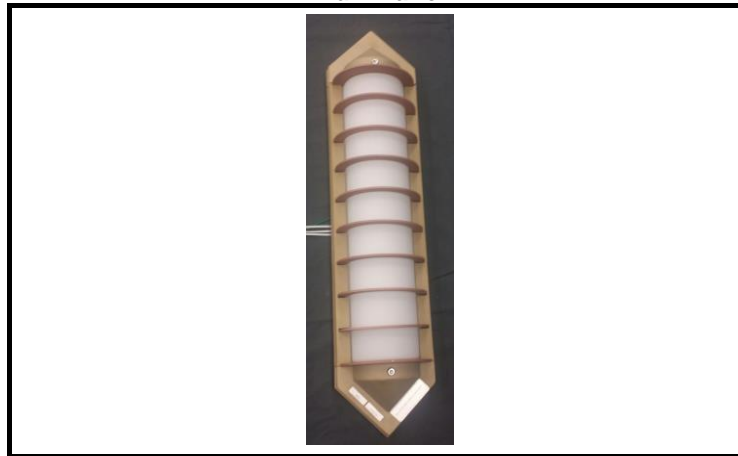
Vertical test increments are 2.5 degrees

Test distance exceeds five times the greatest luminous opening of luminaire



Luminaire Description: Formed aluminum housing, 10 louvers, white plastic diffuse lens
Lamp: 24 White LEDs
Mounting: Surface – Wall
Ballast/Driver: FX95100

Luminaire



Luminaire Characteristics

Luminous Length: 2.00 in.
Luminous Width: 3.750 in.
Luminous Height: 18.00 in.

Summary of Results

Integrating Sphere

Luminous Flux: 260 Lumens
Efficacy: 26.8 lm/w
CCT: 3731 K
CRI (Ra): 96.6

Distribution

Roadway Classification: Type II, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B0 U3 G1

Electrical Data at 120 VAC

Test Temperature: 25.7 °C
Voltage: 120.0 VAC
Current: 0.08812 A
Power: 9.701 W
Power Factor: 0.918
Frequency: 60 Hz
Current THD: 41.7 %



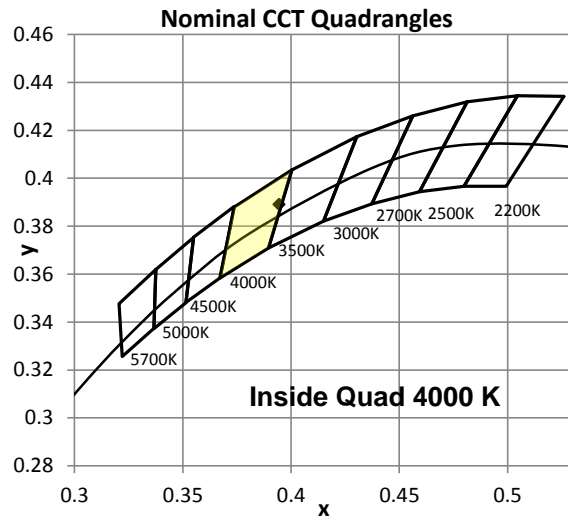
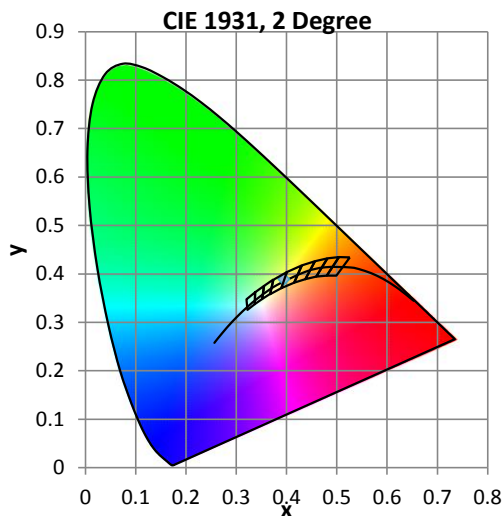
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.7 °C	120.0 VAC	0.08812 A	9.701 W	0.918	60 Hz	41.7 %

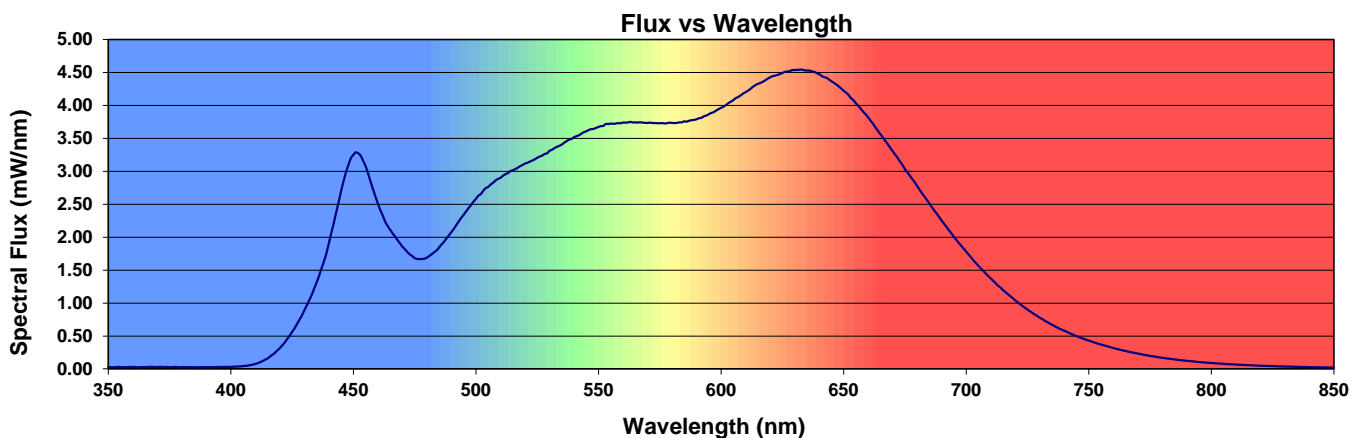
Summary of Results

Total Output:	260 Lumens	Chromaticity (x):	0.3945
Efficacy:	26.8 lm/w	Chromaticity (y):	0.3890
CCT:	3731 K	Chromaticity (u'):	0.2294
CRI (Ra):	96.6	Chromaticity (v'):	0.5090
CRI (R9):	89.4	TM-30 R _f :	94.1
Peak Wavelength:	632.3 nm	TM-30 R _g :	100.2
Dominant Wavelength:	579.2 nm	Duv:	0.0013
S/P Ratio:	1.716		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
96.6	97.3	96.8	94.6	97.6	96.2	94.8	98.7	96.6	89.4	91.3	97.1	81.1	97.0	96.5





Distribution - Goniophotometer

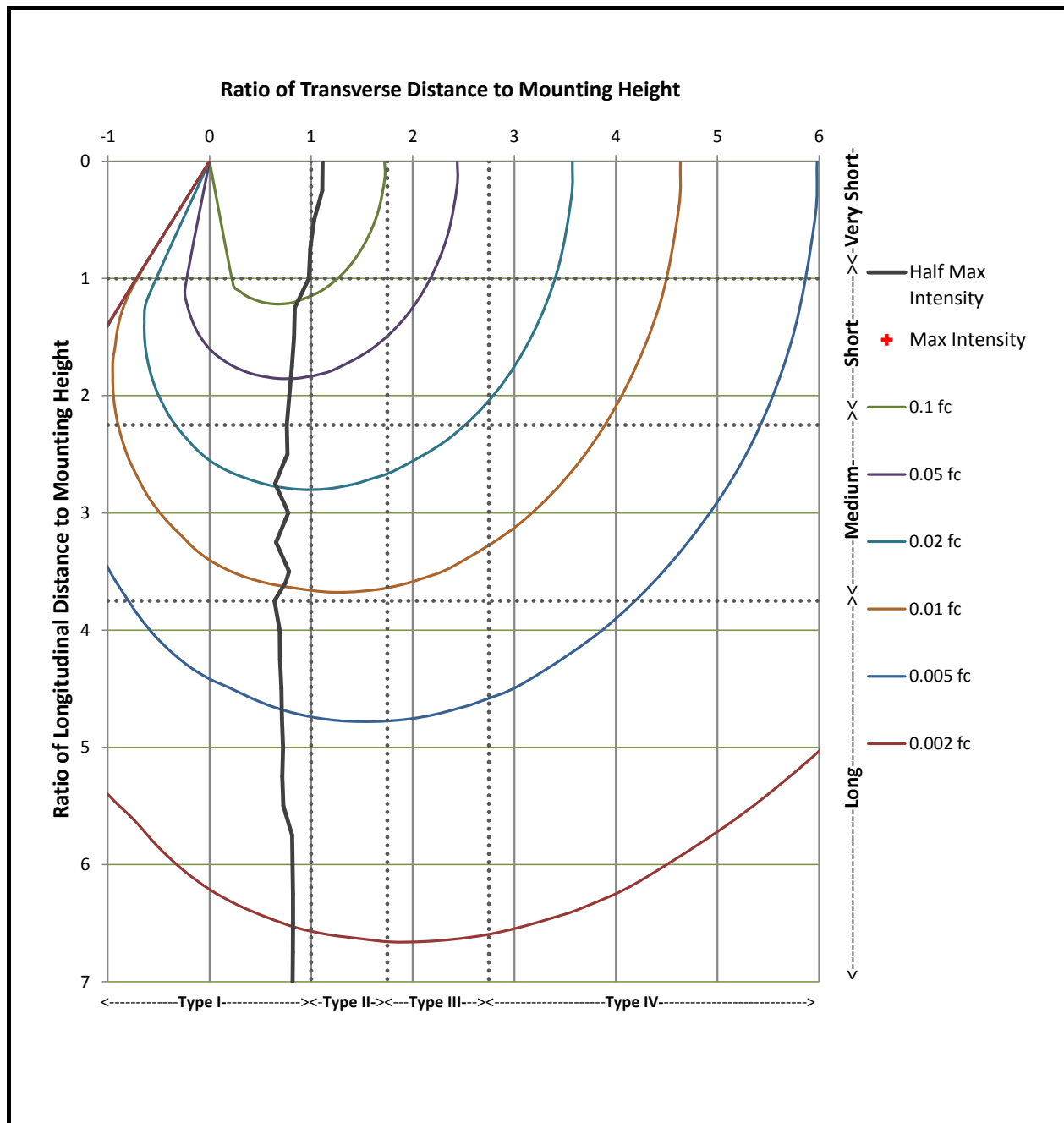
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.08740 A	9.645 W	0.920	60 Hz	41.8 %

Summary of Results

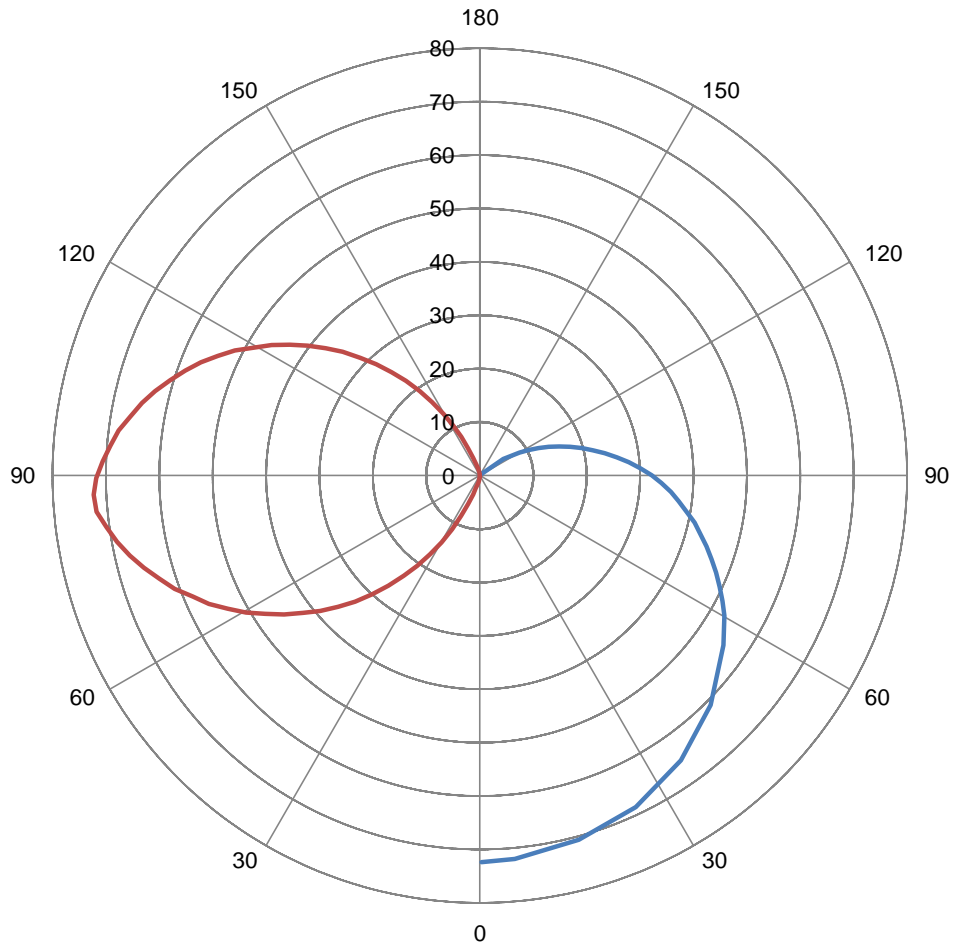
IES Roadway Classification:	Type II, Very Short	Total Lumen Output:	254 Lumens
Cutoff Classification:	Noncutoff	Luminaire Efficacy:	26.4 lm/w
BUG Rating:	B0 U3 G1	Maximum Candela:	72 Candela

ISO FootCandle Plot at 8 Feet





Maximum Plane and Cone Plots of Candela



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

87.5 ° Vertical

Maximum Intensity (Candlepower):

72 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.0	0.0%	60-65	11.8	4.6%	120-125	9.7	3.8%
5-10	0.0	0.0%	65-70	13.4	5.3%	125-130	8.0	3.2%
10-15	0.1	0.0%	70-75	14.8	5.8%	130-135	6.3	2.5%
15-20	0.2	0.1%	75-80	16.1	6.4%	135-140	4.8	1.9%
20-25	0.6	0.2%	80-85	17.2	6.8%	140-145	3.4	1.3%
25-30	1.3	0.5%	85-90	17.8	7.0%	145-150	2.1	0.8%
30-35	2.3	0.9%	90-95	17.5	6.9%	150-155	1.2	0.5%
35-40	3.6	1.4%	95-100	16.7	6.6%	155-160	0.5	0.2%
40-45	5.1	2.0%	100-105	15.7	6.2%	160-165	0.1	0.1%
45-50	6.7	2.6%	105-110	14.4	5.7%	165-170	0.0	0.0%
50-55	8.4	3.3%	110-115	13.0	5.1%	170-175	0.0	0.0%
55-60	10.1	4.0%	115-120	11.4	4.5%	175-180	0.0	0.0%



IES "BUG" Rating
(Back Light, Uplight, Glare)
Per IES TM-15-11



Luminaire Classification System (LCS)

LCS	Zone	Lumens	Luminaire %
FL	(0-30)	1.9	0.8%
FM	(30-60)	32.2	12.7%
FH	(60-80)	49.8	19.6%
FVH	(80-90)	31.0	12.2%
BL	(0-30)	0.2	0.1%
BM	(30-60)	3.9	1.5%
BH	(60-80)	6.3	2.5%
BVH	(80-90)	3.9	1.5%
UL	(90-100)	34.2	13.5%
UH	(100-180)	90.7	35.7%
Total		254.2	100.0%
BUG Rating	B0 U3 G1		