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## Outdoor Distribution Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-10-2014

Prepared For  
**B-K LIGHTING INC**  
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40429 BRICKYARD DR.  
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UNITED STATES

Catalog Number  
**YK-D-LED-A4080-WHP-H-SD-90-010-MT-PROTOTYPE(Horizontal)**

Order Number

13280109

Test Number

13280109.09A

Revised Date:

2020-04-27

Test Date

2020-03-24

Prepared By

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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 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



### Luminaire Characteristics

Luminous Length: 0.00 in.  
5.750

### Summary of Results

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

### Test Conditions

Test Temperature: 24.6 °C  
Voltage: 120.0 VAC  
Current: 0.08160 A  
Power: 9.492 W  
Power Factor: 0.969  
Frequency: 60 Hz  
Current THD: 17.0 %

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

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

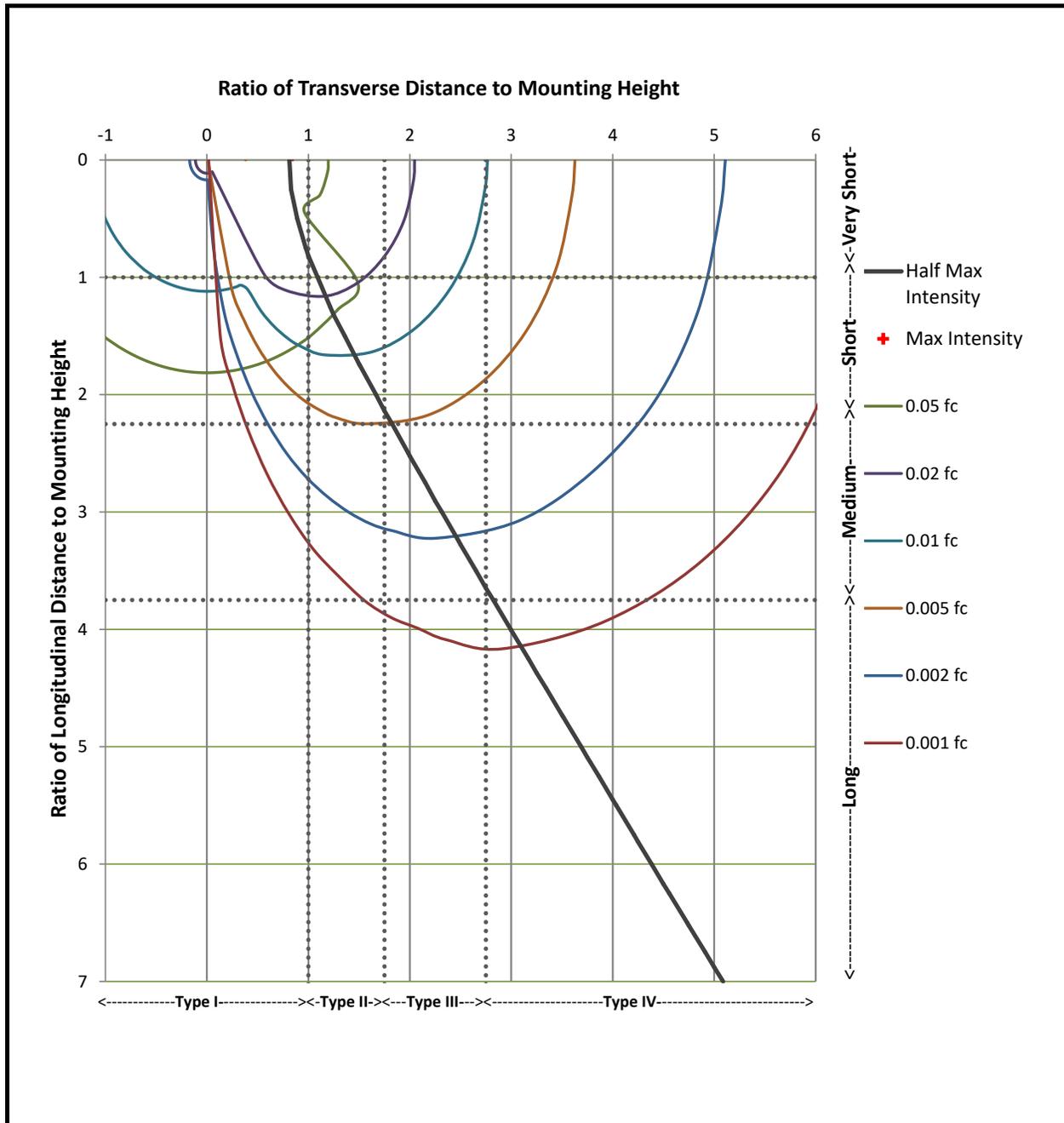
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.08160 A	9.492 W	0.969	60 Hz	17.0 %

### Summary of Results

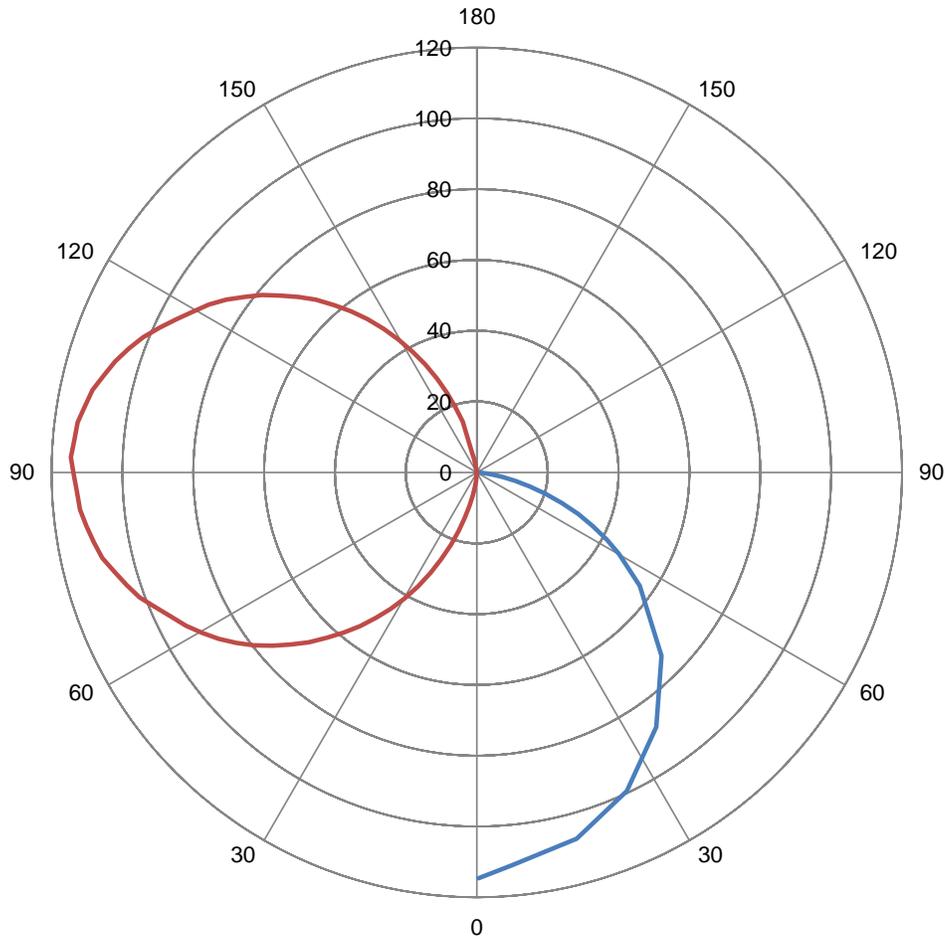
<b>IES Roadway Classification:</b>	Type II, Very Short	<b>Total Lumen Output:</b>	293 Lumens
<b>Cutoff Classification</b>	Noncutoff	<b>Luminaire Efficacy:</b>	30.8 lm/w
<b>BUG Rating:</b>	B0 U3 G1	<b>Maximum Candela:</b>	115 Candela

### ISO FootCandle Plot at 20 Feet





**Maximum Plane and Cone Plots of Candela**



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

92.5 ° Vertical

**Maximum Intensity (Candlepower):**

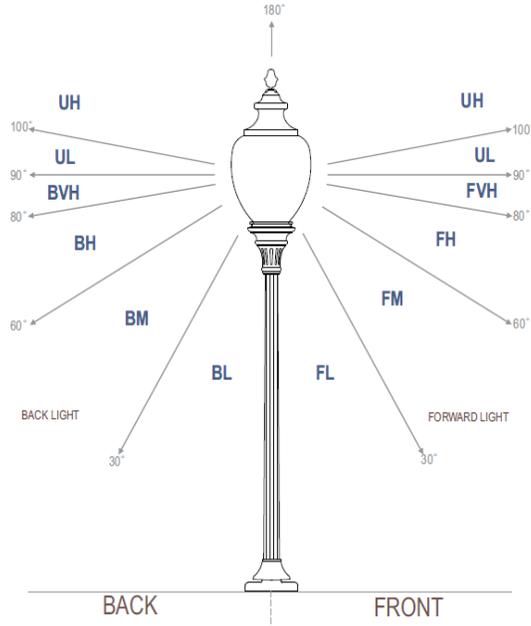
115 Candela

**Zonal Lumen Summary**

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.0	0.0%	60-65	13.1	4.5%	120-125	11.6	4.0%
5-10	0.1	0.0%	65-70	14.5	5.0%	125-130	10.0	3.4%
10-15	0.4	0.1%	70-75	15.7	5.4%	130-135	8.4	2.9%
15-20	0.8	0.3%	75-80	16.7	5.7%	135-140	6.8	2.3%
20-25	1.6	0.5%	80-85	17.4	6.0%	140-145	5.2	1.8%
25-30	2.6	0.9%	85-90	17.8	6.1%	145-150	3.8	1.3%
30-35	3.8	1.3%	90-95	17.9	6.1%	150-155	2.5	0.9%
35-40	5.1	1.8%	95-100	17.6	6.0%	155-160	1.5	0.5%
40-45	6.6	2.3%	100-105	16.9	5.8%	160-165	0.7	0.2%
45-50	8.3	2.8%	105-110	15.9	5.4%	165-170	0.2	0.1%
50-55	9.9	3.4%	110-115	14.6	5.0%	170-175	0.0	0.0%
55-60	11.5	3.9%	115-120	13.1	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)	5.4	1.9%
FM	(30-60)	45.1	15.4%
FH	(60-80)	59.9	20.5%
FVH	(80-90)	35.2	12.0%
BL	(0-30)	0.1	0.0%
BM	(30-60)	0.1	0.0%
BH	(60-80)	0.1	0.0%
BVH	(80-90)	0.0	0.0%
UL	(90-100)	35.5	12.1%
UH	(100-180)	111.1	38.0%
Total		292.6	100.0%
<b>BUG Rating</b>		<b>B0 U3 G1</b>	