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Photometric Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002
UL1598-2008

Prepared For
Eye Lighting International of North America

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Mentor, OH 44060
United States

Catalog Number
LES-50-730-HWD-XXXX-UNV-XXXXX

Order Number
11150987
Test Number
1205435

Test Date

2016-02-04 - 2016-02-09

Prepared By

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Approved By

Kyle Spaziani, Project Handler

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 3-meter integrating sphere using the 4 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: LED retrofit kit installed in LexaLite 424 Type V reference housing
Lamp: 126 white LEDs, three boards with 42 LEDs
Mounting: Post Top
Ballast/Driver: One Osram OT50W/UNV/1250C/2DIMLT2/P6



Luminaire Characteristics
Luminous Diameter: 16.00 in.
Luminous Height: 12.50 in.

Summary of Results

Integrating Sphere

Luminous Flux: 5248 Lumens
Efficacy: 100.4 lm/w
CCT: 3100 K
CRI (Ra): 74.4

Distribution

Roadway Classification: Type IV, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B3 U3 G3

Electrical Data at 277 VAC

Test Temperature: 25.9 °C
Voltage: 277.0 VAC
Current: 0.1956 A
Power: 52.22 W
Power Factor: 0.963
Frequency: 60 Hz
Current THD: 8.59 %

In-Situ

LED Temperature: 80.1 °C
Driver Temperature: 64.5 °C
Measured LED Current: 0.06170 A

Temperature is offset to an ambient temperature of 25°C as described in UL1598-2008.



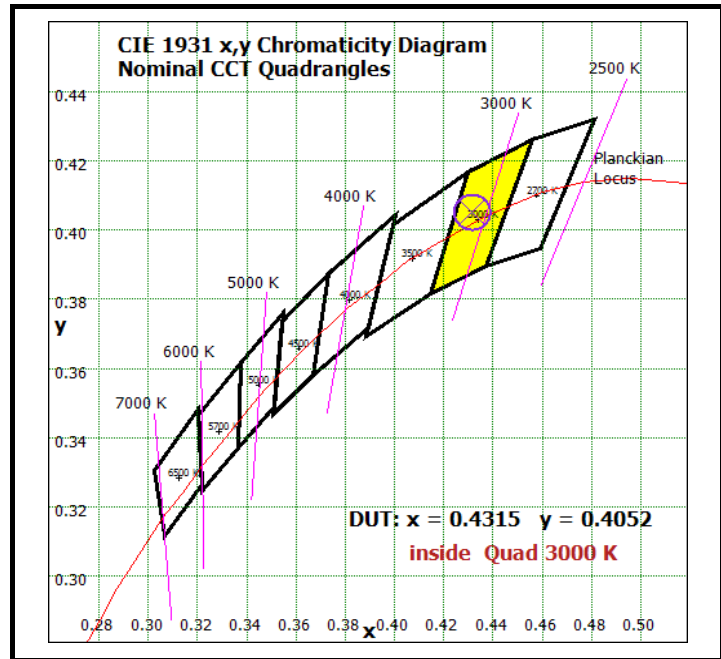
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.4366 A	52.26 W	0.997	60 Hz	4.80 %

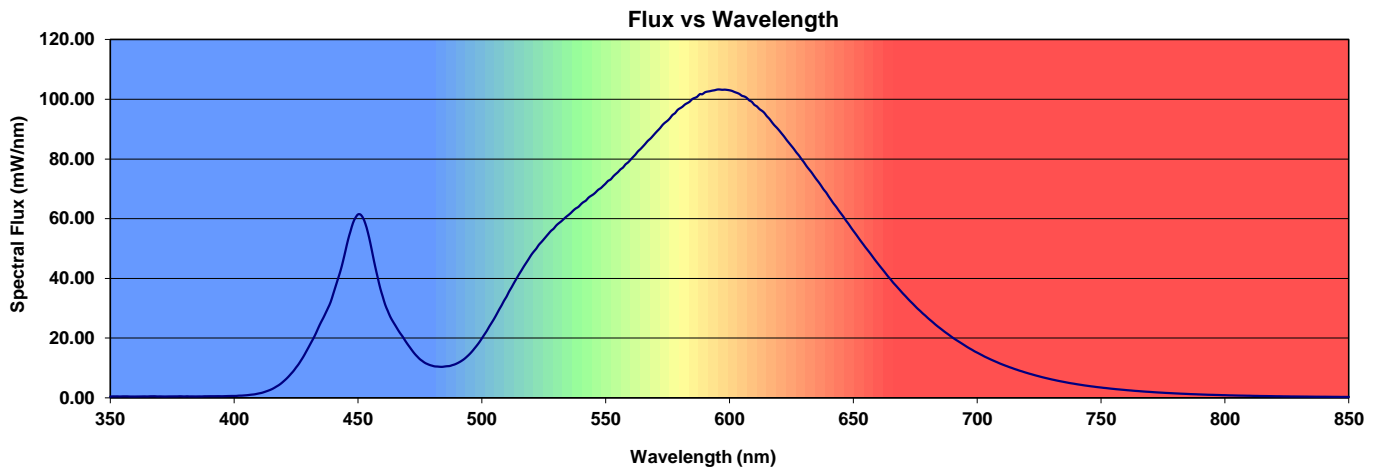
Summary of Results

Total Output:	5248 Lumens
Efficacy:	100.4 lm/w
CCT:	3100 K
CRI (Ra):	74.4
CRI (R9):	-15.8
Chromaticity (x):	0.4315
Chromaticity (y):	0.4052
Chromaticity (u):	0.2466
Chromaticity (v):	0.3473
Chromaticity (u'):	0.2466
Chromaticity (v'):	0.5210
Duv:	0.0007



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
74.4	71.7	82.2	90.9	72.1	70.2	74.6	81.5	52.2	-15.8	57.8	67.3	48.1	73.4	94.5





Distribution - Goniophotometer

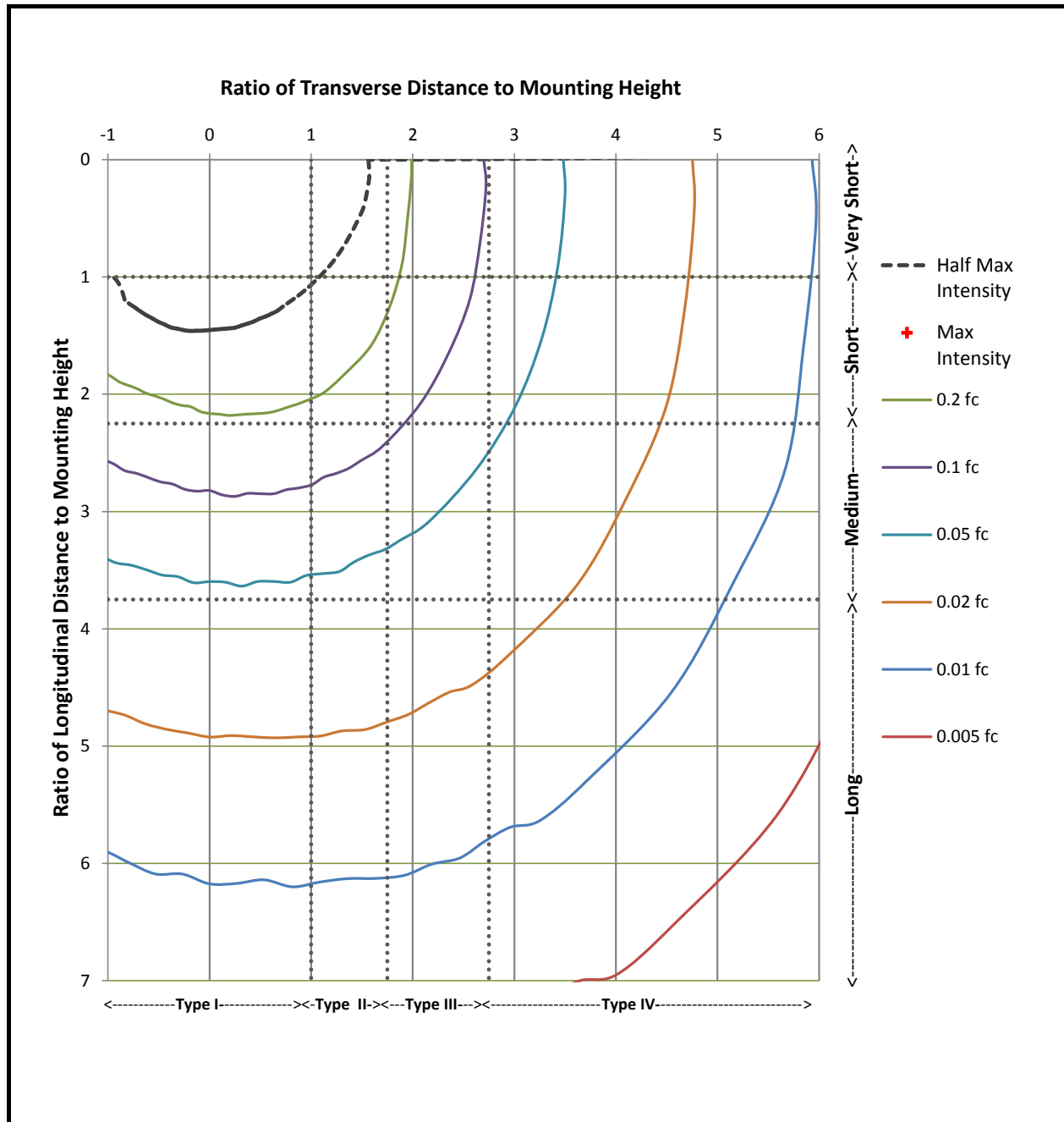
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.0 VAC	0.4372 A	52.33 W	0.997	60 Hz	4.74 %

Summary of Results

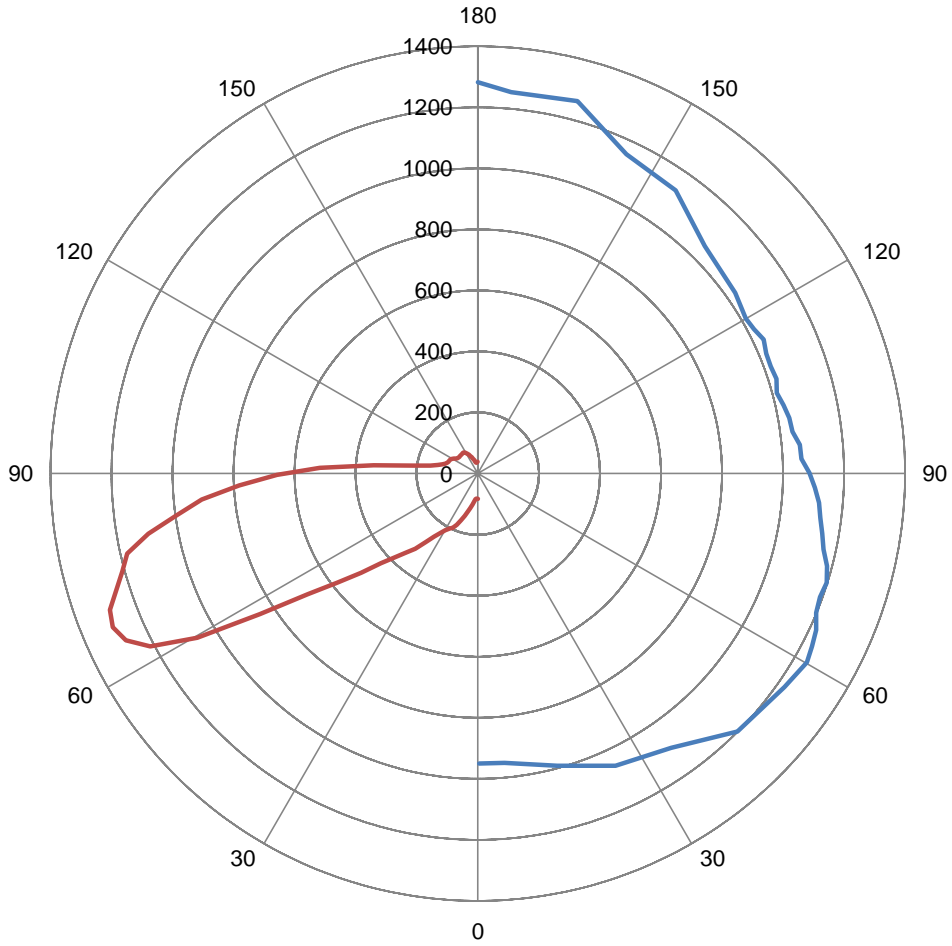
IES Roadway Classification:	Type IV, Very Short	Total Lumen Output:	5119 Lumens
Cutoff Classification	Noncutoff	Luminaire Efficacy:	97.8 lm/w
BUG Rating:	B3 U3 G3	Maximum Candela:	1283 Candela

ISO FootCandle Plot at 20 Feet





Maximum Plane and Cone Plots of Candela



Vertical Plane Through

305 ° Lateral

Lateral Cone Through

67.5 ° Vertical

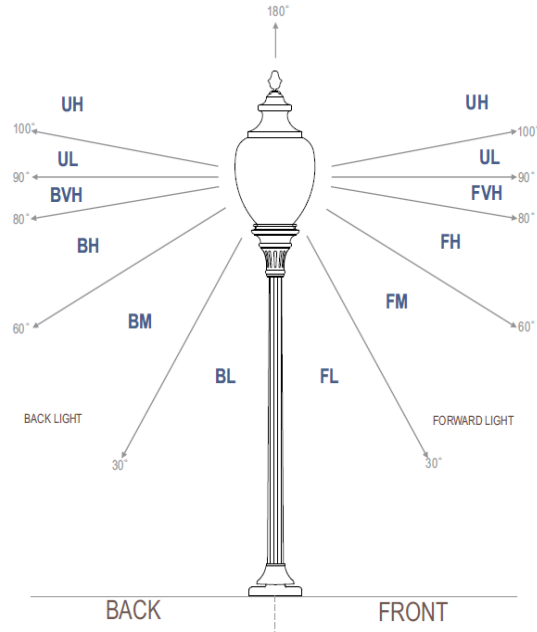
Maximum Intensity (Candlepower): 1297.6 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	2.1	0.0%	60-65	518.6	10.1%	120-125	42.3	0.8%
5-10	6.7	0.1%	65-70	575.6	11.2%	125-130	36.7	0.7%
10-15	13.8	0.3%	70-75	580.5	11.3%	130-135	32.9	0.6%
15-20	24.2	0.5%	75-80	552.2	10.8%	135-140	30.5	0.6%
20-25	36.7	0.7%	80-85	479.2	9.4%	140-145	28.2	0.6%
25-30	48.9	1.0%	85-90	373.2	7.3%	145-150	24.8	0.5%
30-35	66.1	1.3%	90-95	249.0	4.9%	150-155	19.5	0.4%
35-40	91.4	1.8%	95-100	130.4	2.5%	155-160	13.6	0.3%
40-45	120.3	2.3%	100-105	72.5	1.4%	160-165	8.8	0.2%
45-50	162.0	3.2%	105-110	56.7	1.1%	165-170	5.1	0.1%
50-55	236.5	4.6%	110-115	51.2	1.0%	170-175	2.7	0.1%
55-60	377.7	7.4%	115-120	47.5	0.9%	175-180	1.0	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)	64.6	1.3%
FM	(30-60)	506.7	9.9%
FH	(60-80)	1120.0	21.9%
FVH	(80-90)	453.3	8.9%
BL	(0-30)	67.8	1.3%
BM	(30-60)	547.3	10.7%
BH	(60-80)	1106.9	21.6%
BVH	(80-90)	399.0	7.8%
UL	(90-100)	379.4	7.4%
UH	(100-180)	474.1	9.3%
Total		5119.0	100.0%
BUG Rating	B3 U3 G3		



In-Situ Test

In-Situ Test Conditions

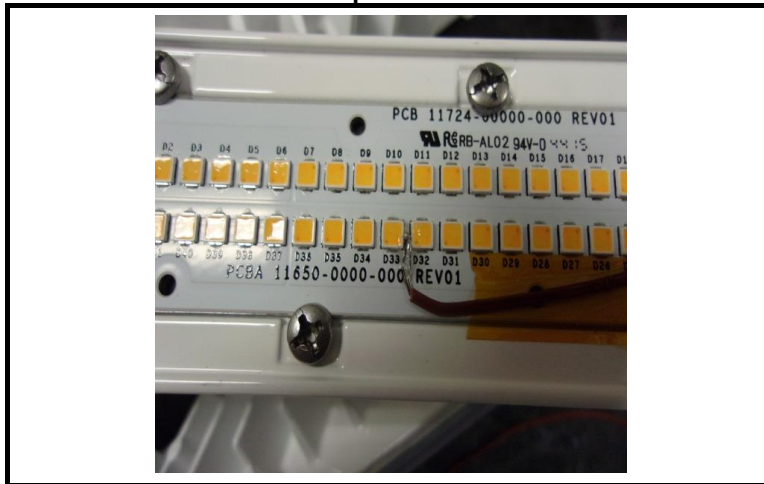
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.5 °C	120.0 VAC	N/A	N/A	N/A	60 Hz	N/A

Summary of Results

LED Temperature: 80.1 °C
Driver Temperature: 64.5 °C
Measured LED Current: 0.06170 A

Temperatures are offset to an ambient temperature of 25°C as described in UL1598-2008

LED Temperature Location



Driver Temperature Location

