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Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002, CIE 13.3-1995
CIE 15-2004, ANSI C78.377-2017, IES TM-30-2018

Prepared For
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Catalog Number
AX-70-30-5-D

Order Number
12698741
Test Number
12698741.02

Test Date

2019-02-22 - 2019-02-25

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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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 4π geometry method.

Absorption correction was employed for Sphere measurement

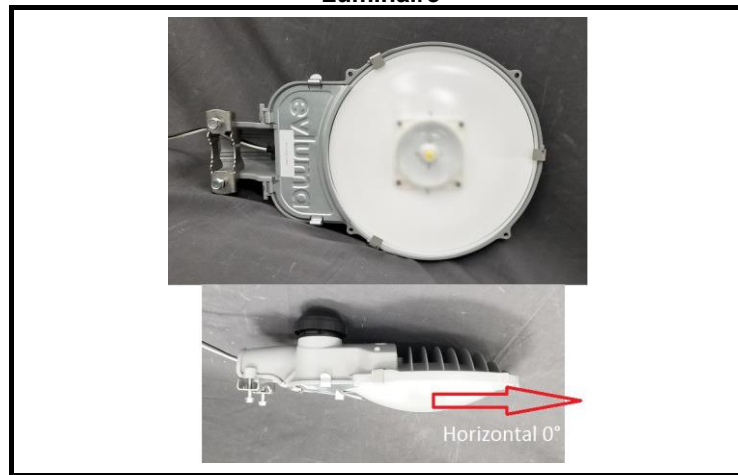
Tested in 30 planes left side, 30 planes right side, left and right averaged
Vertical test increments are 2.5 degrees

Test distance exceeds five times the greatest luminous opening of luminaire



Luminaire Description: Gray metal housing, white plastic reflector and prismatic dome glass lens
Lamp: One (1) white LED with optic below
Mounting: Pole/Arm

Luminaire



Luminaire Characteristics

Luminous Diameter: 11.00 in.
Luminous Height: 1.50 in.

Summary of Results

Integrating Sphere

Luminous Flux: 9840 Lumens
Efficacy: 139.75 lm/w
CCT: 3086 K
CRI (Ra): 69.7

Distribution

Roadway Classification: Type V, Short
Cutoff Classification: Cutoff
BUG Rating: B3 U2 G1

Electrical Data at 120 VAC

Test Temperature: 25.4 °C
Voltage: 120.0 VAC
Current: 0.5882 A
Power: 70.41 W
Power Factor: 0.998
Frequency: 60 Hz
Current THD: 6.76 %



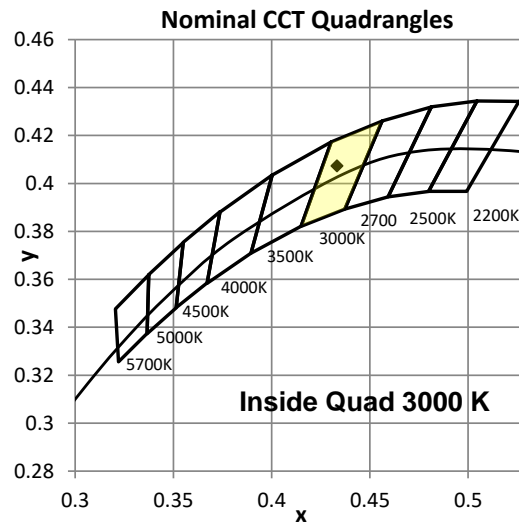
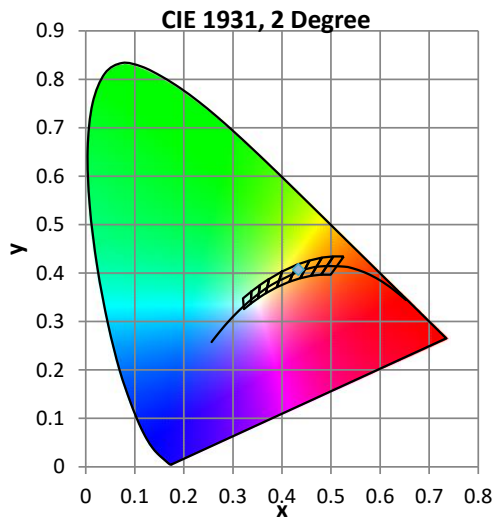
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	120.0 VAC	0.5882 A	70.41 W	0.998	60 Hz	6.76 %

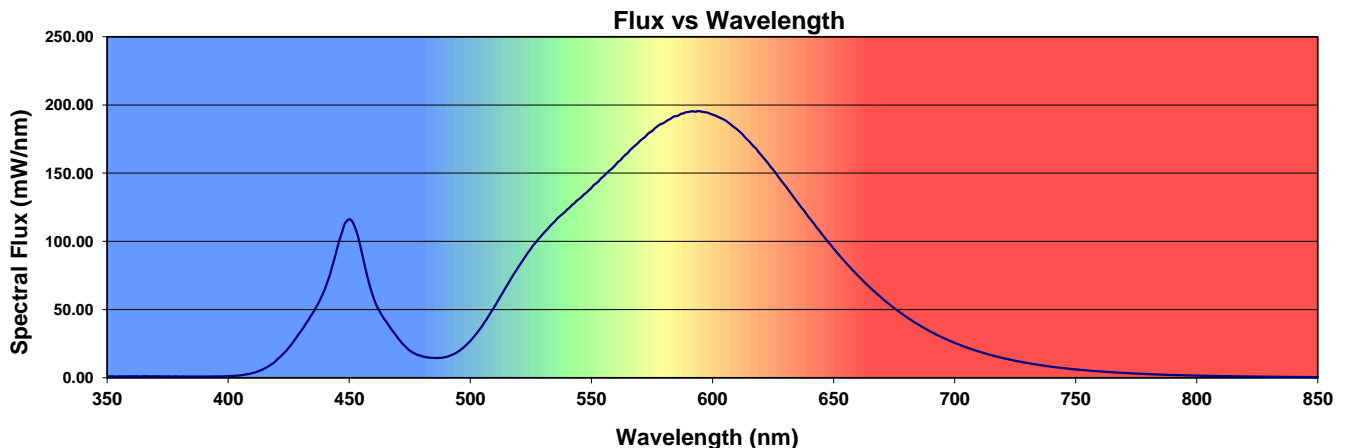
Summary of Results

Total Output:	9840 Lumens	Chromaticity (x):	0.4333
Efficacy:	139.7 lm/w	Chromaticity (y):	0.4073
CCT:	3086 K	Chromaticity (u'):	0.2469
CRI (Ra):	69.7	Chromaticity (v'):	0.5221
CRI (R9):	-32.0	TM-30 Rf:	72.5
Peak Wavelength:	593 nm	TM-30 Rg:	94.6
Dominant Wavelength:	582 nm	Duv:	0.0012
S/P Ratio:	1.18		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
69.7	66.3	78.6	88.6	66.4	64.2	68.5	79.3	45.9	-32.0	49.1	58.9	38.0	68.1	93.1	59.5





Distribution - Goniophotometer

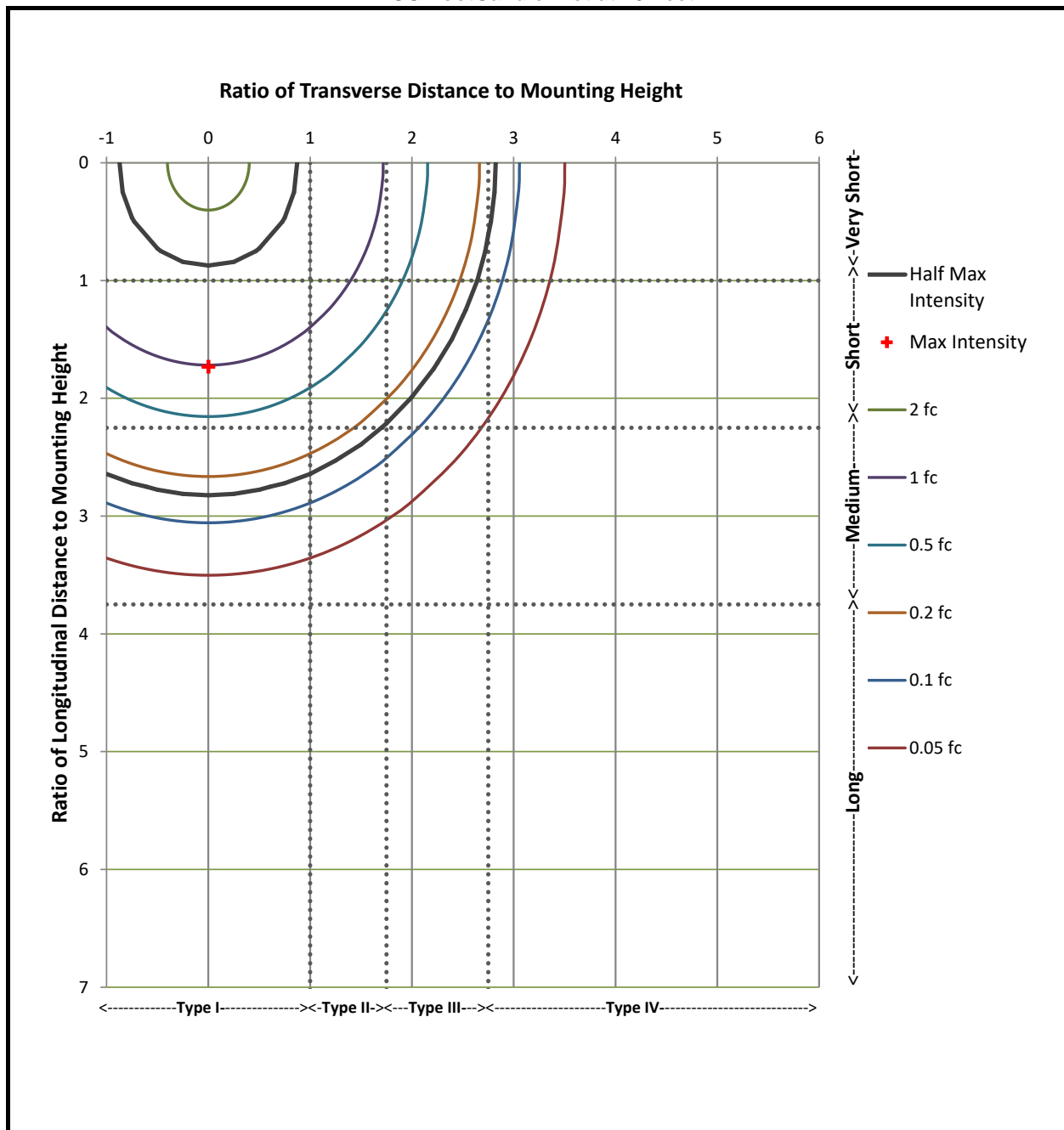
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.5892 A	70.52 W	0.998	60 Hz	6.66 %

Summary of Results

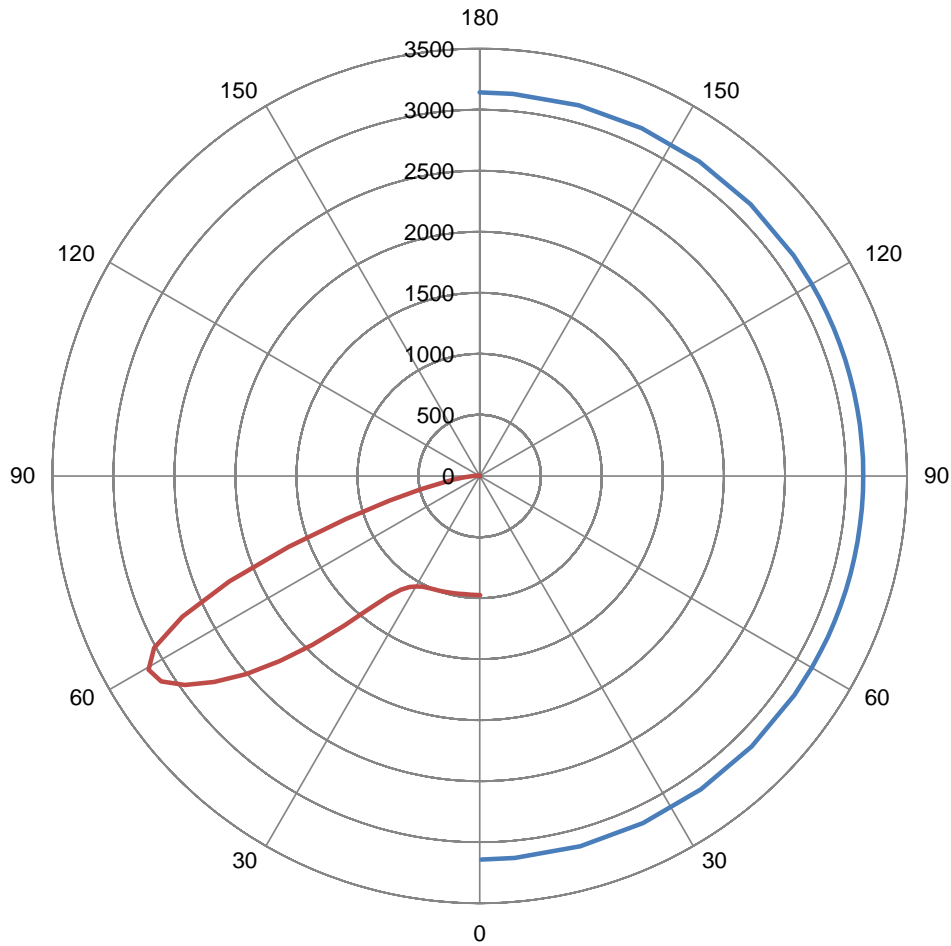
IES Roadway Classification:	Type V, Short	Total Lumen Output:	9379 Lumens
Cutoff Classification	Cutoff	Luminaire Efficacy:	133.0 lm/w
BUG Rating:	B3 U2 G1	Maximum Candela:	3142 Candela

ISO FootCandle Plot at 20 Feet





Maximum Plane and Cone Plots of Candela



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

60 ° Vertical

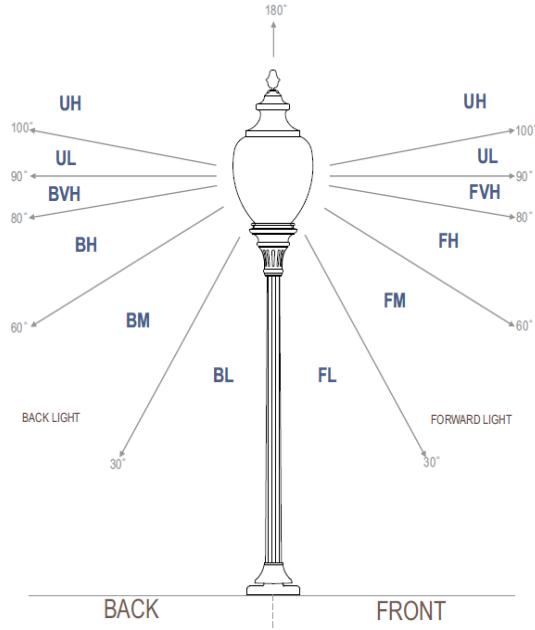
Maximum Intensity (Candlepower): 3142 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	24.8	0.3%	60-65	1440.5	15.4%	120-125	0.7	0.0%
5-10	69.9	0.7%	65-70	1112.1	11.9%	125-130	0.5	0.0%
10-15	116.7	1.2%	70-75	616.5	6.6%	130-135	0.4	0.0%
15-20	163.7	1.7%	75-80	277.5	3.0%	135-140	0.2	0.0%
20-25	210.4	2.2%	80-85	116.9	1.2%	140-145	0.0	0.0%
25-30	259.2	2.8%	85-90	49.4	0.5%	145-150	0.0	0.0%
30-35	319.0	3.4%	90-95	22.8	0.2%	150-155	0.0	0.0%
35-40	420.1	4.5%	95-100	10.5	0.1%	155-160	0.0	0.0%
40-45	619.7	6.6%	100-105	4.5	0.0%	160-165	0.0	0.0%
45-50	902.5	9.6%	105-110	1.5	0.0%	165-170	0.0	0.0%
50-55	1194.2	12.7%	110-115	0.8	0.0%	170-175	0.0	0.0%
55-60	1423.4	15.2%	115-120	0.8	0.0%	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)	422.3	4.5%
FM	(30-60)	2439.4	26.0%
FH	(60-80)	1723.3	18.4%
FVH	(80-90)	83.2	0.9%
BL	(0-30)	422.3	4.5%
BM	(30-60)	2439.4	26.0%
BH	(60-80)	1723.3	18.4%
BVH	(80-90)	83.2	0.9%
UL	(90-100)	33.3	0.4%
UH	(100-180)	9.3	0.1%
Total		9379.0	100.0%
BUG Rating		B3 U2 G1	