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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-30-2015

Prepared For
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Catalog Number
AX-100-50-5-D-BH

Order Number
12474666
Test Number
12474666.03

Test Date

2018-08-24

Prepared By

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Approved By

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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

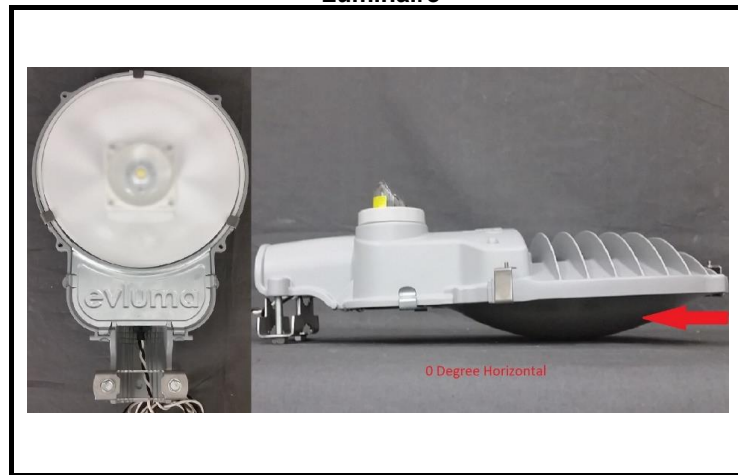
Vertical test increments are 2.5 degrees

Test distance exceeds five times the greatest luminous opening of luminaire



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

Luminaire



Luminaire Characteristics

Luminous Diameter: 11.00 in.
Luminous Height: 1.25 in.

Summary of Results

Integrating Sphere

Luminous Flux: 13260 Lumens
Efficacy: 127.7 lm/w
CCT: 4927 K
CRI (Ra): 71.6

Distribution

Roadway Classification: Type V, Short
Cutoff Classification: Cutoff
BUG Rating: B3 U3 G2

Electrical Data at 120 VAC

Test Temperature: 24.1 °C
Voltage: 120.1 VAC
Current: 0.8689 A
Power: 103.8 W
Power Factor: 0.994
Frequency: 60 Hz
Current THD: 10.2 %



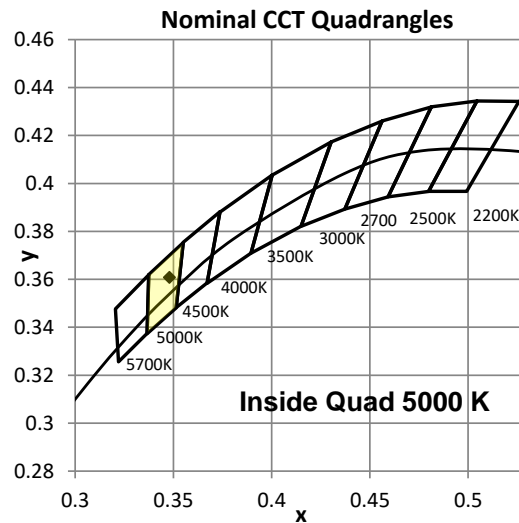
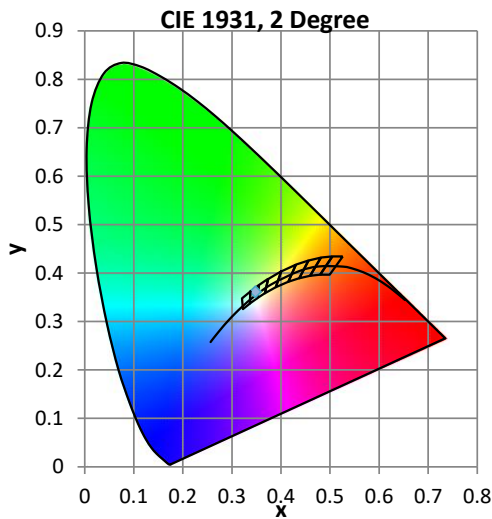
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.1 °C	120.1 VAC	0.8689 A	103.8 W	0.994	60 Hz	10.2 %

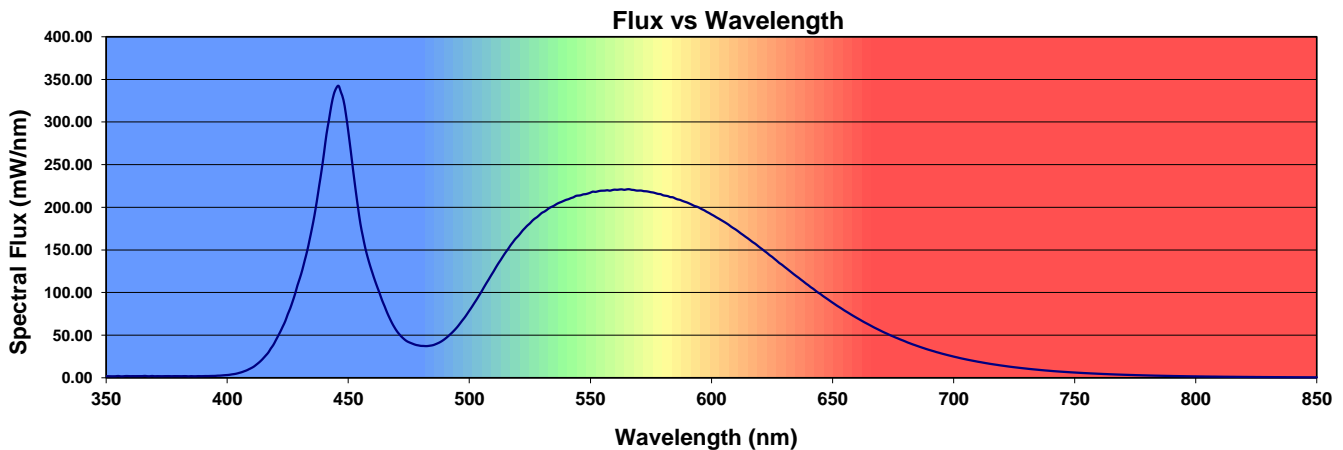
Summary of Results

Total Output:	13260 Lumens	Chromaticity (x):	0.3479
Efficacy:	127.7 lm/w	Chromaticity (y):	0.3608
CCT:	4927 K	Chromaticity (u'):	0.2097
CRI (Ra):	71.6	Chromaticity (v'):	0.4895
CRI (R9):	-22.8	TM-30 Rf:	69.9
Peak Wavelength:	446 nm	TM-30 Rg:	95.5
Dominant Wavelength:	571 nm	Duv:	0.0034
S/P Ratio:	1.73		



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
71.6	69.4	75.4	79.3	72.8	69.7	66.1	81.0	59.4	-22.8	41.1	69.4	41.2	69.6	88.2	63.6





Distribution - Goniophotometer

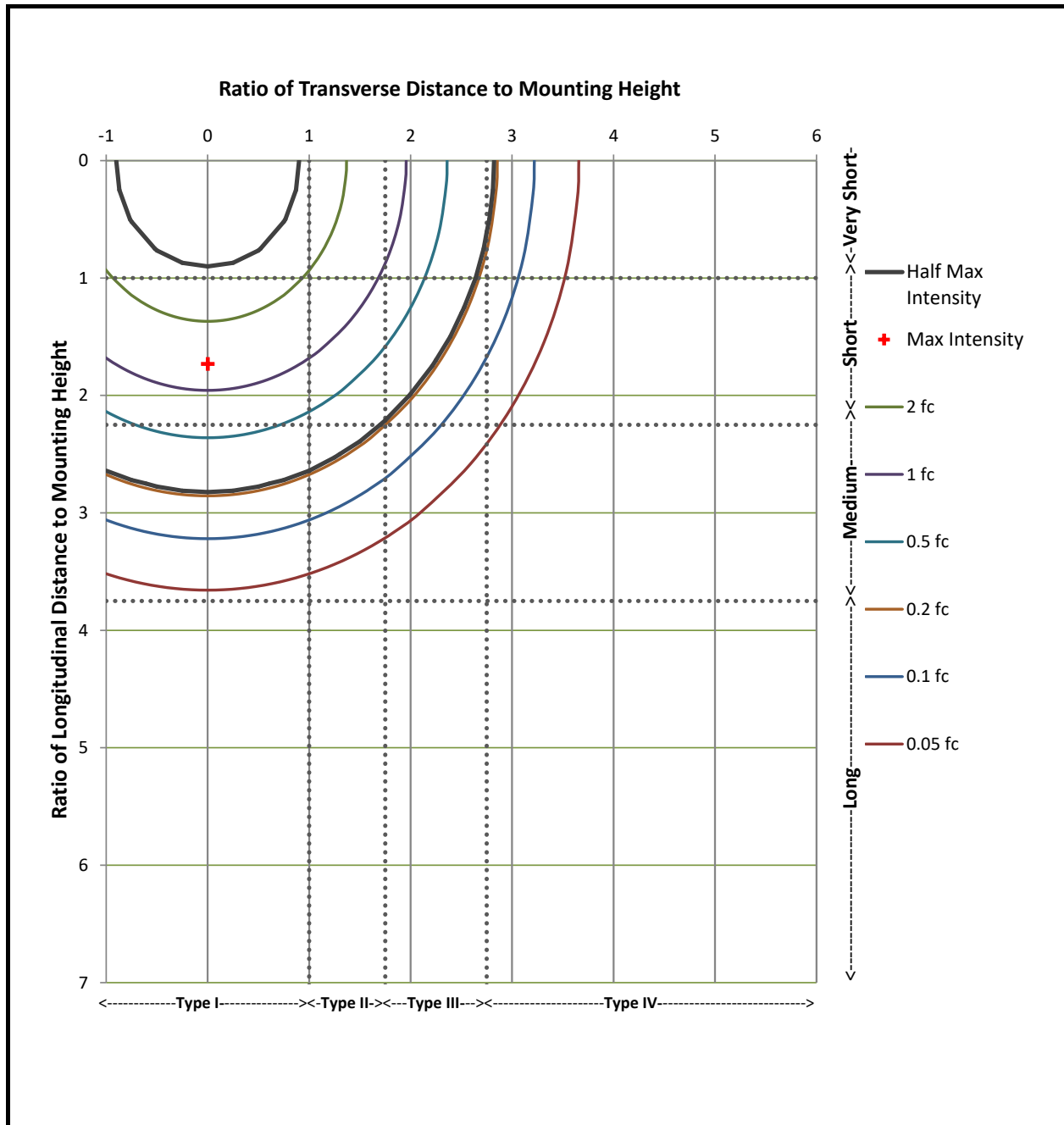
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	119.9 VAC	0.8672 A	103.4 W	0.994	60 Hz	10.2 %

Summary of Results

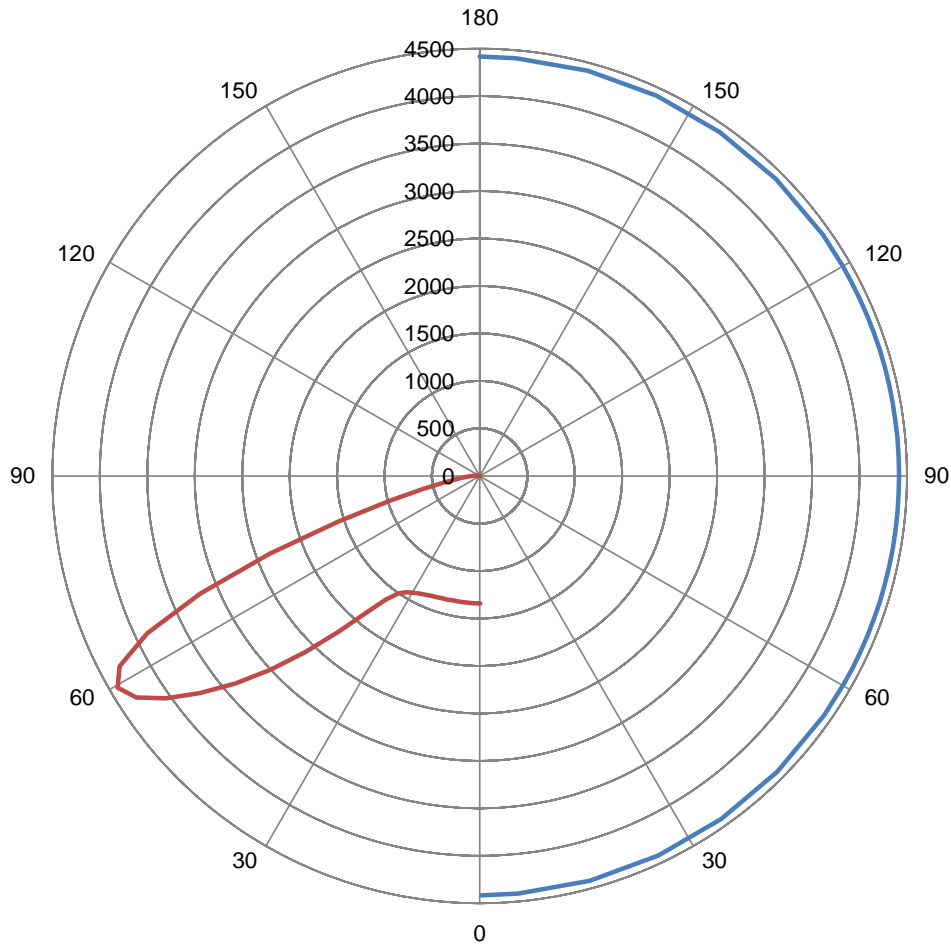
IES Roadway Classification:	Type V, Short	Total Lumen Output:	12882 Lumens
Cutoff Classification	Cutoff	Luminaire Efficacy:	124.5 lm/w
BUG Rating:	B3 U3 G2	Maximum Candela:	4417 Candela

ISO FootCandle Plot at 20 Feet





Maximum Plane and Cone Plots of Candela



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

60 ° Vertical

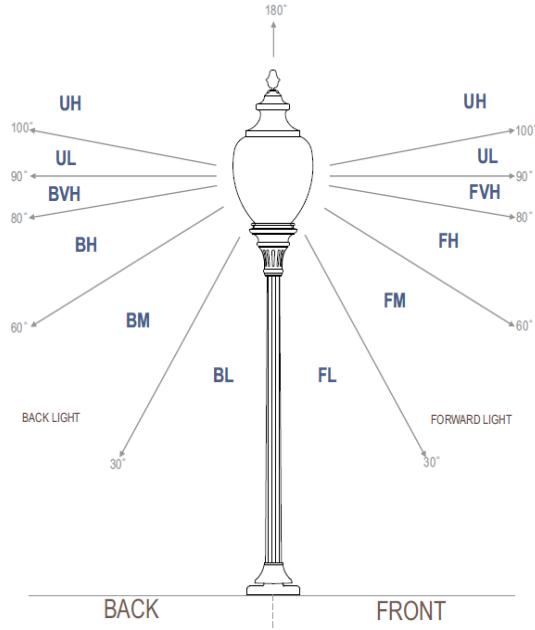
Maximum Intensity (Candlepower): 4417 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	34.1	0.3%	60-65	2048.1	15.9%	120-125	1.2	0.0%
5-10	95.9	0.7%	65-70	1593.4	12.4%	125-130	1.0	0.0%
10-15	159.2	1.2%	70-75	842.5	6.5%	130-135	0.7	0.0%
15-20	222.3	1.7%	75-80	344.6	2.7%	135-140	0.4	0.0%
20-25	286.0	2.2%	80-85	143.5	1.1%	140-145	0.2	0.0%
25-30	352.7	2.7%	85-90	69.1	0.5%	145-150	0.1	0.0%
30-35	428.5	3.3%	90-95	34.8	0.3%	150-155	0.0	0.0%
35-40	556.0	4.3%	95-100	17.1	0.1%	155-160	0.0	0.0%
40-45	828.2	6.4%	100-105	7.6	0.1%	160-165	0.0	0.0%
45-50	1214.5	9.4%	105-110	2.4	0.0%	165-170	0.0	0.0%
50-55	1620.7	12.6%	110-115	1.4	0.0%	170-175	0.0	0.0%
55-60	1974.2	15.3%	115-120	1.4	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)	575.1	4.5%
FM	(30-60)	3311.0	25.7%
FH	(60-80)	2414.3	18.7%
FVH	(80-90)	106.3	0.8%
BL	(0-30)	575.1	4.5%
BM	(30-60)	3311.0	25.7%
BH	(60-80)	2414.3	18.7%
BVH	(80-90)	106.3	0.8%
UL	(90-100)	51.9	0.4%
UH	(100-180)	16.5	0.1%
Total		12881.7	100.0%
BUG Rating		B3 U3 G2	