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Photometric Test Report

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

Prepared For
LED Waves, LLC

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United States

Catalog Number
LW30-EZ40-W5000K-hood

Order Number
10983462
Test Number
1165424

Test Date

2015-10-06

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 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: Black cast aluminum housing, prismatic glass enclosure
Lamp: 1 white LED
Mounting: Wall Pack
Ballast/Driver: One FSP Group FSP60-ZZAE (110)U

Luminaire



Luminaire Characteristics

Luminous Length: 12.00 in.
Luminous Width: 12.75 in.
Luminous Height: 3.50 in.

Summary of Results

Integrating Sphere

Luminous Flux: 3364 Lumens
Efficacy: 77.8 lm/w
CCT: 5045 K
CRI (Ra): 76.2

Distribution

Roadway Classification: Type IV, Very Short
Cutoff Classification: Noncutoff
BUG Rating: B1 U1 G2

Electrical Data at 120 VAC

Test Temperature: 24.9 °C
Voltage: 120.0 VAC
Current: 0.3661 A
Power: 43.22 W
Power Factor: 0.984
Frequency: 60 Hz
Current THD: 5.97 %



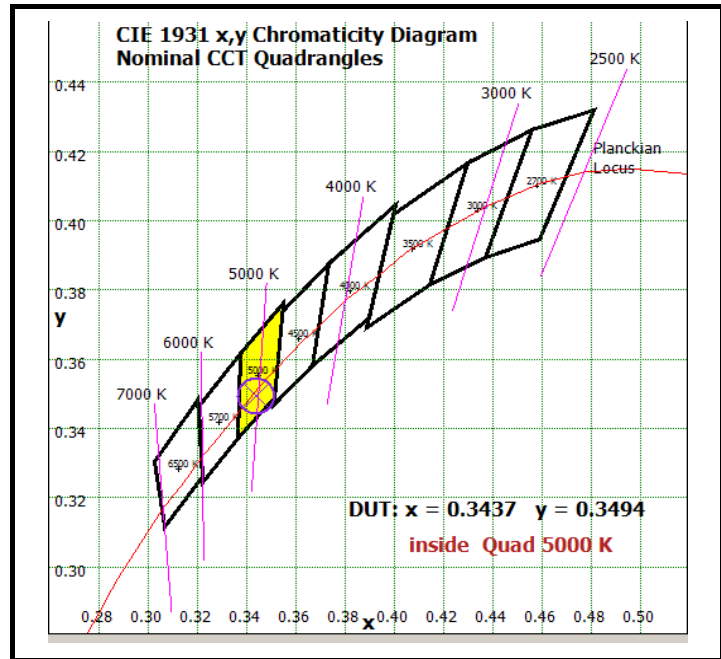
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	0.3661 A	43.22 W	0.984	60 Hz	5.97 %

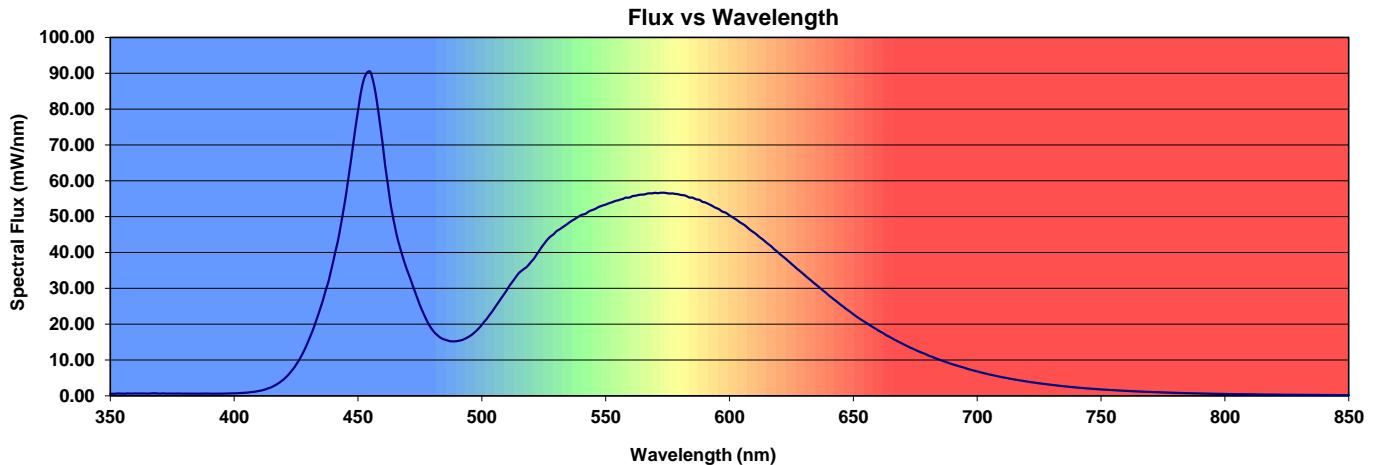
Summary of Results

Total Output:	3364 Lumens
Efficacy:	77.8 lm/w
CCT:	5045 K
CRI (Ra):	76.2
CRI (R9):	-12.9
Chromaticity (x):	0.3437
Chromaticity (y):	0.3494
Chromaticity (u):	0.2113
Chromaticity (v):	0.3223
Chromaticity (u')	0.2113
Chromaticity (v')	0.4834
Duv:	-0.0013



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
76.2	74.0	82.9	86.6	74.1	73.8	74.0	83.8	60.6	-12.9	56.6	69.0	48.0	76.0	92.3





Distribution - Goniophotometer

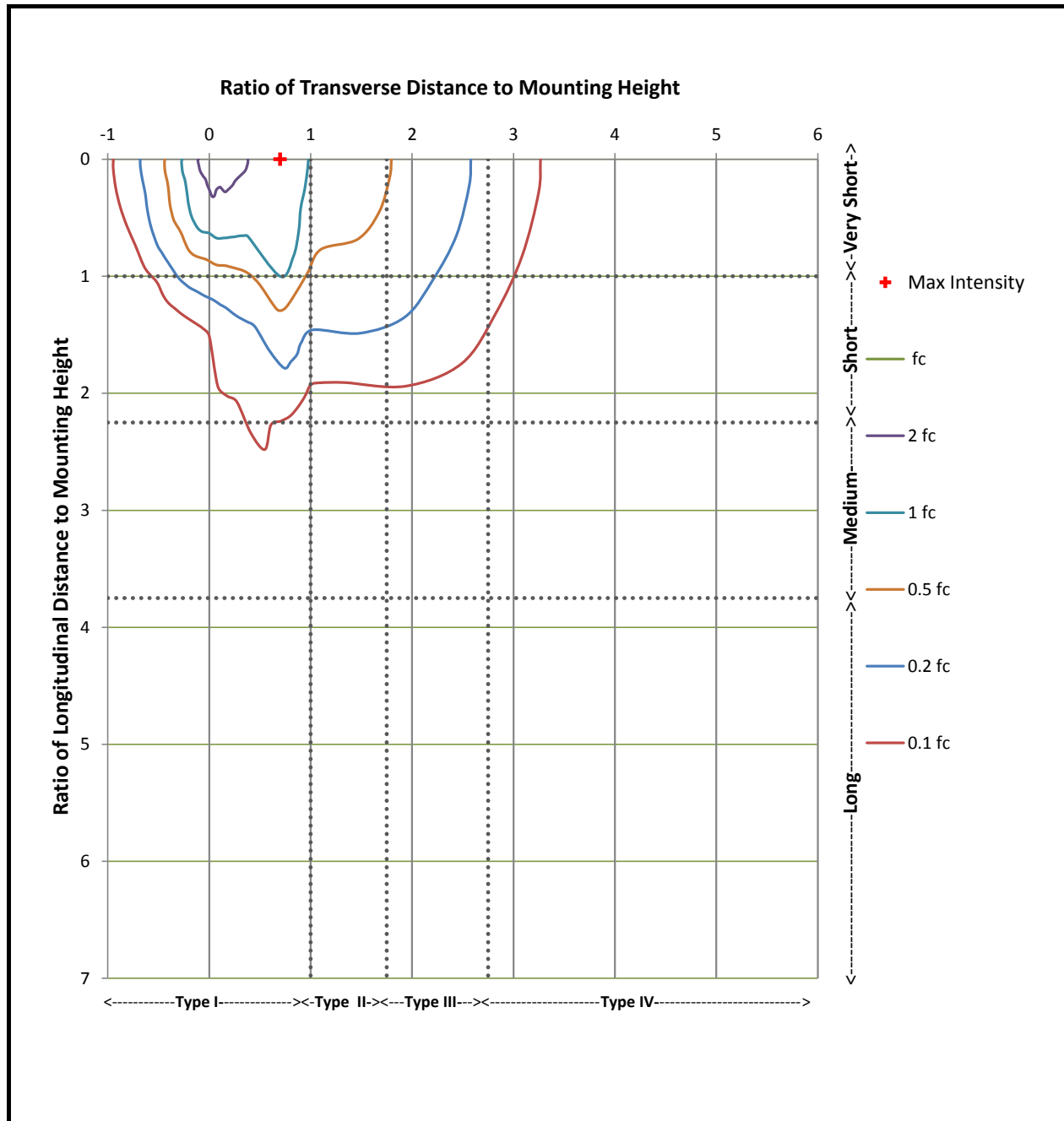
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	0.3663 A	43.26 W	0.984	60 Hz	5.87 %

Summary of Results

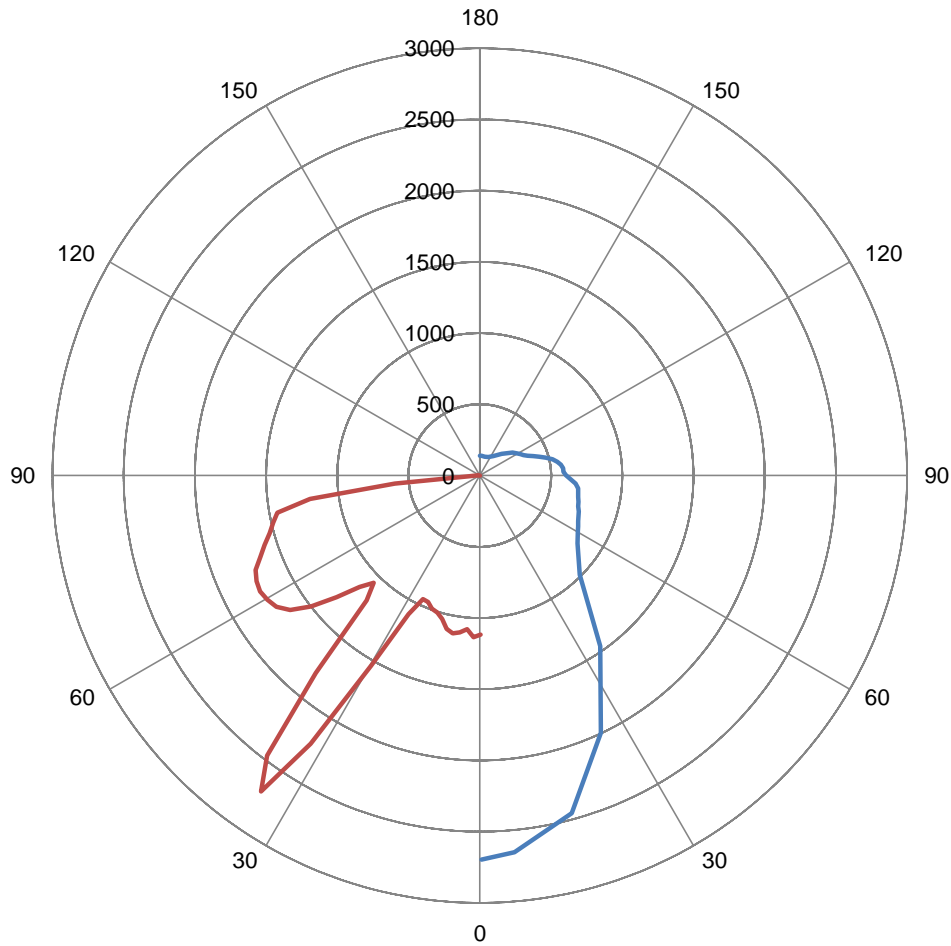
IES Roadway Classification:	Type IV, Very Short	Total Lumen Output:	3335 Lumens
Cutoff Classification	Noncutoff	Luminaire Efficacy:	77.1 lm/w
BUG Rating:	B1 U1 G2	Maximum Candela:	2697 Candela

ISO FootCandle Plot at 20 Feet





Maximum Plane and Cone Plots of Candela



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

35 ° Vertical

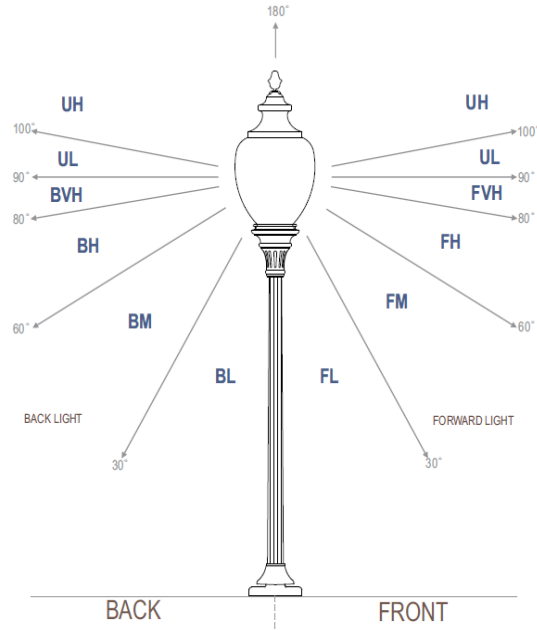
Maximum Intensity (Candlepower): 2696.7 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	26.4	0.8%	60-65	273.8	8.2%	120-125	0.1	0.0%
5-10	66.7	2.0%	65-70	279.0	8.4%	125-130	0.0	0.0%
10-15	98.0	2.9%	70-75	257.4	7.7%	130-135	0.0	0.0%
15-20	122.2	3.7%	75-80	220.3	6.6%	135-140	0.0	0.0%
20-25	143.7	4.3%	80-85	146.5	4.4%	140-145	0.0	0.0%
25-30	166.5	5.0%	85-90	28.1	0.8%	145-150	0.0	0.0%
30-35	223.3	6.7%	90-95	5.9	0.2%	150-155	0.0	0.0%
35-40	277.7	8.3%	95-100	3.7	0.1%	155-160	0.0	0.0%
40-45	260.1	7.8%	100-105	2.4	0.1%	160-165	0.0	0.0%
45-50	237.1	7.1%	105-110	1.4	0.0%	165-170	0.0	0.0%
50-55	239.9	7.2%	110-115	0.7	0.0%	170-175	0.0	0.0%
55-60	253.9	7.6%	115-120	0.3	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)	401.4	12.0%
FM	(30-60)	1293.5	38.8%
FH	(60-80)	978.8	29.3%
FVH	(80-90)	169.8	5.1%
BL	(0-30)	222.2	6.7%
BM	(30-60)	198.5	6.0%
BH	(60-80)	51.7	1.6%
BVH	(80-90)	4.8	0.1%
UL	(90-100)	9.7	0.3%
UH	(100-180)	4.9	0.1%
Total		3335.2	100.0%
BUG Rating	B1 U1 G2		