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ACCREDITED

NVLAP LAB CODE 201042-0

Photometric Test Report

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

Prepared For

Simkar Corporation

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Philadelphia, PA 19120
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Catalog Number

DTDLED25

Order Number
10882255
Test Number
1128792

Test Date

2015-06-17 - 2015-07-20

Prepared By

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Approved By

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

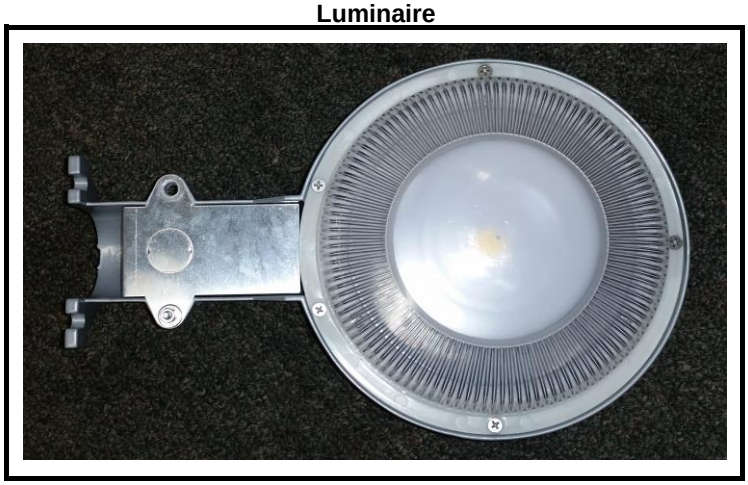
Testing was performed in a 2-meter integrating sphere using the 4π geometry method.

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: Gray aluminum housing, white reflector, circular plastic prismatic enclosure
Lamp: 1 white LED
Mounting: Pendant
Ballast/Driver: One Caster LD25W-43-C0580 Driver

Luminaire



Luminaire Characteristics

Luminous Diameter:	7.00	in.
Luminous Height:	1.250	in.

Summary of Results

Integrating Sphere

Luminous Flux:	2037	Lumens
Efficacy:	85.9	lm/w
CCT:	3931	K
CRI (Ra):	84.5	

Distribution

Roadway Classification:	Type II, Very Short
Cutoff Classification:	Cutoff
BUG Rating:	B1 U1 G1

Electrical Data at 277 VAC

Test Temperature:	25.3	°C
Voltage:	277.0	VAC
Current:	0.09534	A
Power:	24.15	W
Power Factor:	0.915	
Frequency:	60	Hz
Current THD:	16.9	%

In-Situ

LED Temperature:	59.8	°C
Driver Temperature:	66.1	°C
Maximum LED Current:	0.5840	A

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

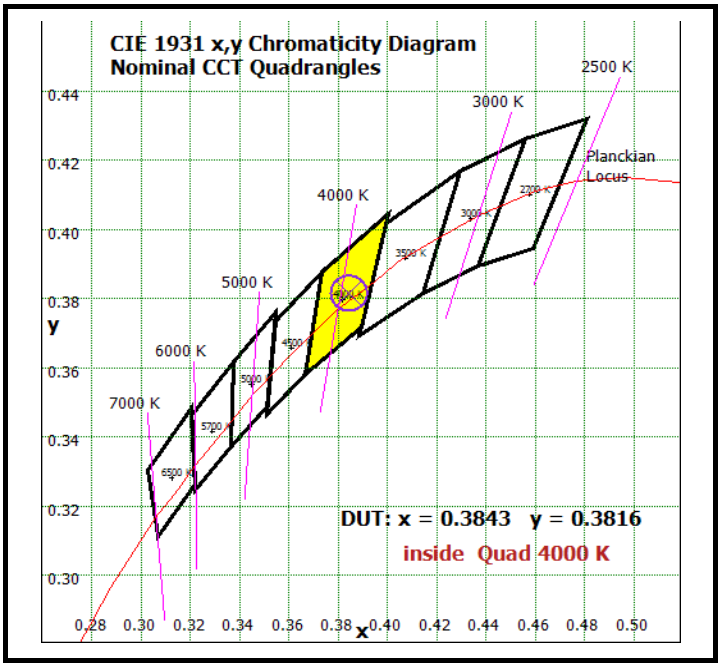
Color Quality - Integrating Sphere

Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.0 VAC	0.2002 A	23.70 W	0.987	60 Hz	14.2 %

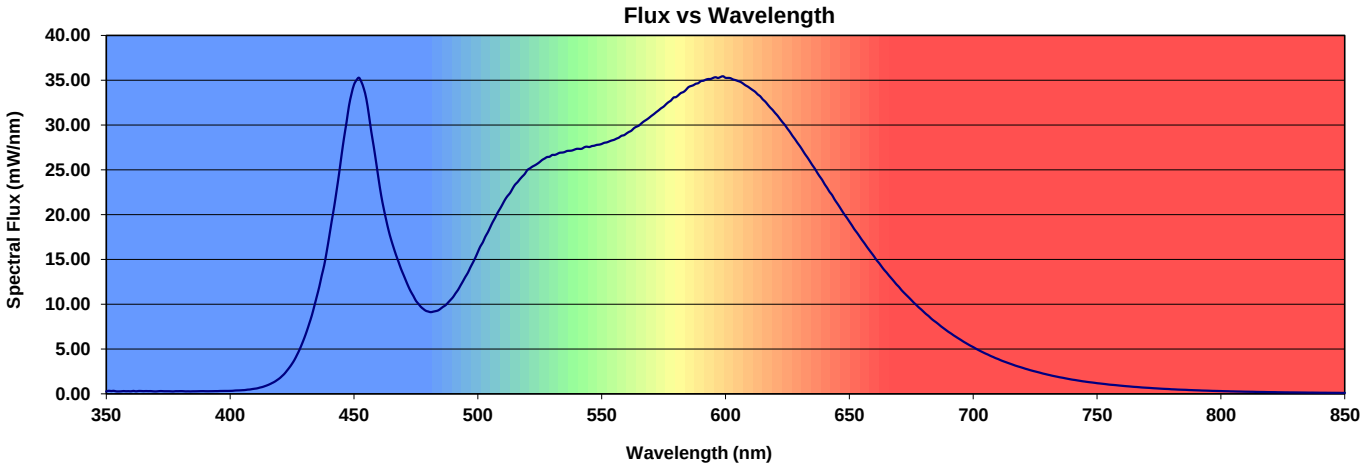
Summary of Results

Total Output:	2037	Lumens
Efficacy:	85.9	lm/w
CCT:	3931	K
CRI (Ra):	84.5	
CRI (R9):	16.0	
Chromaticity (x):	0.3843	
Chromaticity (y):	0.3816	
Chromaticity (u):	0.2257	
Chromaticity (v):	0.3362	
Chromaticity (u'):	0.2257	
Chromaticity (v'):	0.5043	
Duv:	0.0011	



Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
84.5	83.5	89.4	94.0	84.9	83.3	85.6	87.7	67.9	16.0	74.5	84.6	63.1	85.0	96.6



Distribution - Goniophotometer

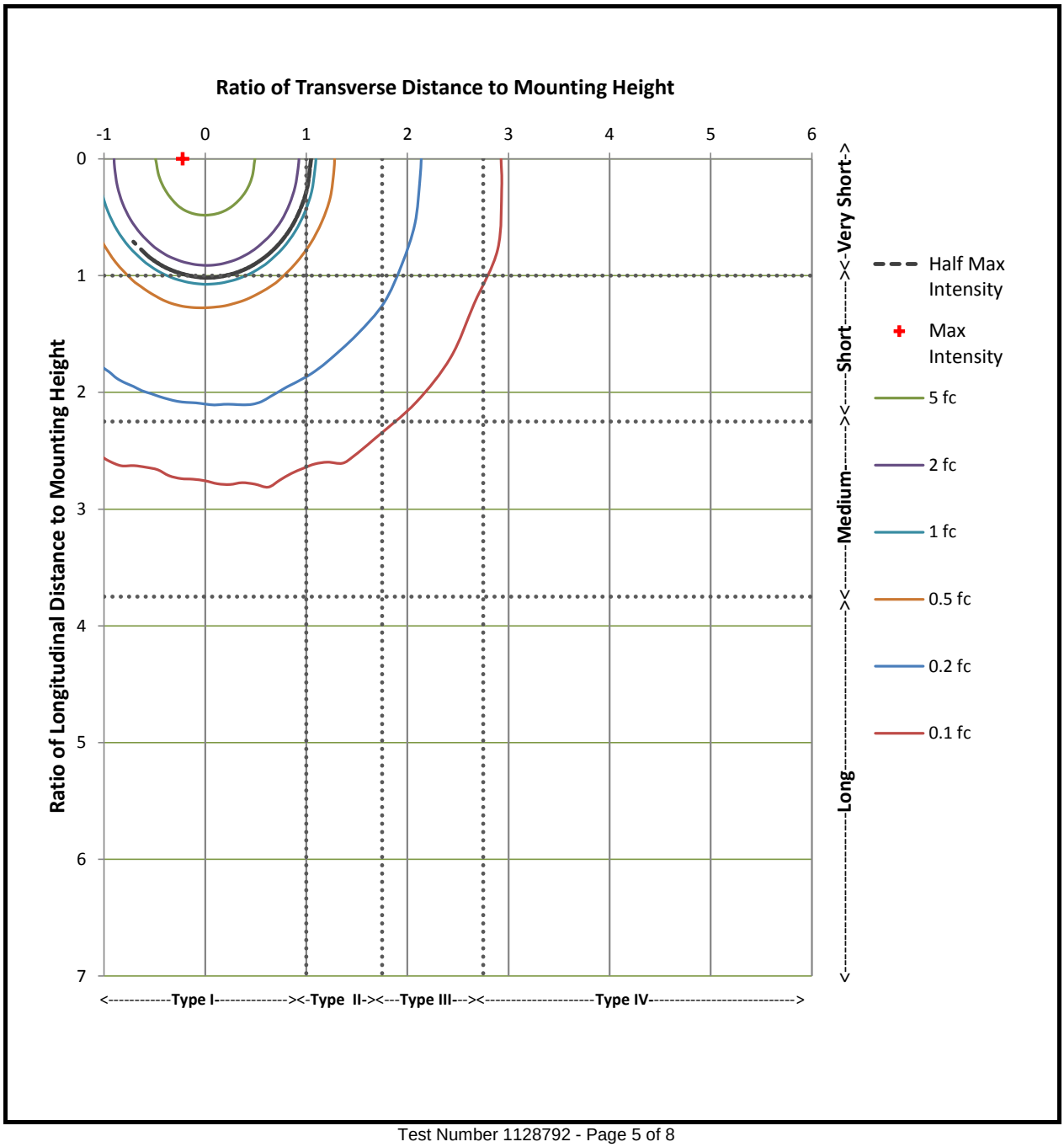
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.0 VAC	0.2001 A	23.71 W	0.987	60 Hz	14.2 %

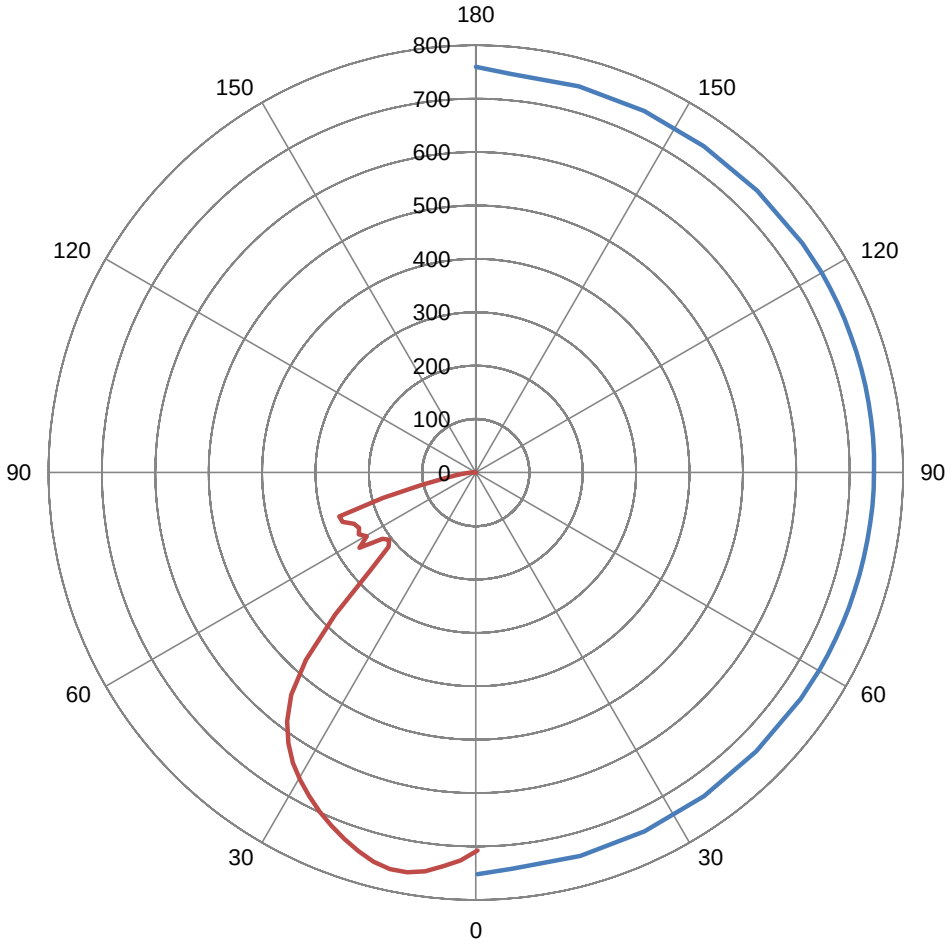
Summary of Results

IES Roadway Classification:	Type II, Very Short	**Total Lumen Output:**	2007 Lumens
Cutoff Classification	Cutoff	**Luminaire Efficacy:**	84.6 lm/w
BUG Rating:	B1 U1 G1	**Maximum Candela:**	760 Candela

ISO FootCandle Plot at 10 Feet



Maximum Plane and Cone Plots of Candela



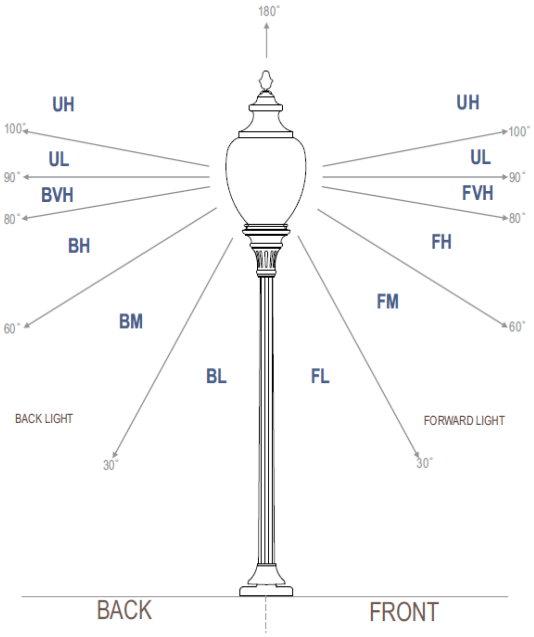
Vertical Plane Through 180 ° Lateral **Lateral Cone Through** 12.5 ° Vertical

Maximum Intensity (Candlepower): 759.8 Candela

Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	18.2	0.9%	60-65	120.3	6.0%	120-125	0.8	0.0%
5-10	52.5	2.6%	65-70	127.8	6.4%	125-130	0.5	0.0%
10-15	88.2	4.4%	70-75	139.0	6.9%	130-135	0.1	0.0%
15-20	120.4	6.0%	75-80	83.6	4.2%	135-140	0.0	0.0%
20-25	148.0	7.4%	80-85	29.0	1.4%	140-145	0.0	0.0%
25-30	170.2	8.5%	85-90	10.7	0.5%	145-150	0.0	0.0%
30-35	186.9	9.3%	90-95	4.2	0.2%	150-155	0.0	0.0%
35-40	195.0	9.7%	95-100	2.2	0.1%	155-160	0.0	0.0%
40-45	178.3	8.9%	100-105	1.7	0.1%	160-165	0.0	0.0%
45-50	121.8	6.1%	105-110	1.4	0.1%	165-170	0.0	0.0%
50-55	91.6	4.6%	110-115	1.2	0.1%	170-175	0.0	0.0%
55-60	112.1	5.6%	115-120	1.0	0.1%	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)	299.1	14.9%
FM	(30-60)	449.5	22.4%
FH	(60-80)	254.1	12.7%
FVH	(80-90)	22.0	1.1%
BL	(0-30)	298.4	14.9%
BM	(30-60)	436.2	21.7%
BH	(60-80)	216.5	10.8%
BVH	(80-90)	17.7	0.9%
UL	(90-100)	6.5	0.3%
UH	(100-180)	6.7	0.3%
Total		2006.8	100.0%
BUG Rating	**B1 U1 G1**		

In-Situ Test

In-Situ Test Conditions

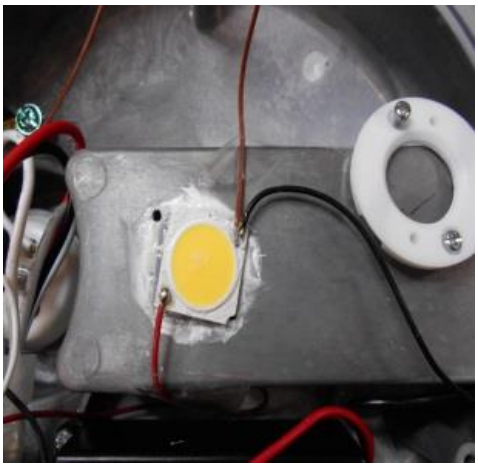
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
21.4 °C	120.0 VAC	N/A	N/A	N/A	60 Hz	N/A

Summary of Results

LED Temperature:	59.8	°C
Driver Temperature:	66.1	°C
Maximum LED Current:	0.5840	A

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

LED Temperature Location



Driver Temperature Location