LIGHT LABORATORY INC.
8165 E Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Report No: L121503802
Date: 1/4/2016

NVLAP LAB CODE 200927-0

Report No: L121503802

Prepared For: Olympia Lighting, inc.
50 Delford Ave., Bergenfield NJ 07621

Retrofit Kit Model Number: CL-65W8-55K-E39
Retrofit Luminaire: Special Lite SHD1-PC1023CL

Test: Photometric/Electrical Test

Standards Used: Appropriate part or all test guidelines were used for test performed:
IESNA LM79: 2008 Approved Methods for Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI C82.77:2002: Harmonic Emission Limits-Related Quality Requirements for Lighting Equipment

Description of Sample: Client submitted the sample. Retrofit kit catalog number is CL-65W8-55K-E39. Received in working and undamaged condition. No modifications were necessary.

Testing Condition: CL-65W8-55K-E39 was installed in Special Lite SHD1-PC1023CL.

Sample Arrival Date: 12/21/15

Date of Tests: 12/22/15 - 1/4/16

Seasoning of Sample: No seasoning was performed in accordance with IESNA LM-79.

Equipment List

Equipment Used	Model No	Stock No	Calibration Due Date
Chroma Programmable AC Source	61604	PS-AC02	--
Yokogawa Digital Power Meter	WT210	MT-EL06-S1	11/18/16
Xitron Power Analyzer	2503AH	MT-EL01	11/30/16
ITECH DC Power Supply	IT6122	PSDC-03-S1	11/17/16
Fluke Digital Thermometer	52k/J	MT-TP02-GC	11/24/16
LLI Type C Goniophotometer System	RMG-C-MKII	CD-LL04-GC	--
LLI 2M Sphere	2MR97	CD-SN03-S2	--
LLI Spectroradiometer	SPR-3000	MT-SC01-S2	Before Use

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

LIGHT LABORATORY INC.
8165 E Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Report No: L121503802
Date: 1/4/2016

NVLAP LAB CODE 200927-0

Test Summary	
Retrofit Kit Manufacturer:	Olympia Lighting, inc.
Retrofit Kit Model Number:	CL-65W8-55K-E39
Retrofit Luminaire:	Special Lite SHD1-PC1023CL
Driver Model Number:	N/A
Total Lumens:	8942.00
Input Voltage (VAC/60Hz):	120.00
Input Current (Amp):	0.58
Input Power (W):	69.37
Input Power Factor:	0.99
Current ATHD @ 120V(%):	11%
Current ATHD @ 277V(%):	N/A
Efficacy:	129
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	1:45
Off State Power(W):	0.00

FIG.1 RETROFIT LUMINAIRE

FIG.2 RETROFIT KIT

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

LIGHT LABORATORY INC.
8165 E Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Report No: L121503802
Date: 1/4/2016

NVLAP LAB CODE 200927-0

Test Methods

Photometric Measurements - Goniophotometer

A Custom Light Laboratory Type C Rotating Mirror Goniophotometer was used to measure candelas(intensity) at each angle of distribution as defined by IESNA for the appropriate fixture type.

Ambient temperature is set to 25°C and is measured from the center of the fixture, within 1ft from the outside of the fixture. Temperature is maintained at 25°C throughout the testing process and the sample is stabilized for at least 30mins and longer as necessary for the sample to achieve stabilization.

Electrical measurements are measured using the listed equipment.

Disclaimers:

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST or any agency of Federal Government.

Report Prepared by : Keyur Patel

Test Report Released by:

Jeff Ahn
Engineering Manager

Test Report Reviewed by:

Steve Kang
Quality Assurance

**Attached are photometric data reports. Total number of pages: 10*

*All Results in accordance to IESNA LM-79-2008: Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.

LIGHT LABORATORY INC.
8165 E. Kaiser Blvd. Anaheim, CA 92808
p. 714.282.2270
f. 714.676.5558

Photometric Test Report

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L121503802
[TESTLAB] LIGHT LABORATORY, INC.
[ISSUEDATE] 1/4/2016
[MANUFAC] OLYMPIA LIGHTING, INC.
[LUMCAT] SPECIAL LITE SHD1-PC1023CL
[LUMINAIRE] 14"DIA. X 31"H. LED LUMINAIRE
[BALLASTCAT] N.A.
[LAMPPOSITION] 0,0
[RETROFIT KIT MODEL NUMBER] CL-65W8-55K-E39
[TEST CONDITION] CL-65W8-55K-E39 WAS INSTALLED IN SPECIAL LITE SHD1-PC1023CL
[OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
[MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
[_INPUT] 120VAC, 69.37W
[_TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

IES Classification	Type V
Longitudinal Classification	Very Long
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	8942
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	129
Total Luminaire Watts	69.37
Ballast Factor	1.00
Upward Waste Light Ratio	0.54
Maximum Candela	910.56
Maximum Candela Angle	0H 85V
Maximum Candela (<90 Degrees Vertical)	910.56
Maximum Candela Angle (<90 Degrees Vertical)	0H 85V
Maximum Candela At 90 Degrees Vertical	904.82 (10.1% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	910.56 (10.2% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	72.3	N.A.	0.8
FM - Front-Medium (30-60)	647.0	N.A.	7.2
FH - Front-High (60-80)	864.1	N.A.	9.7
FVH - Front-Very High (80-90)	495.5	N.A.	5.5
BL - Back-Low (0-30)	72.3	N.A.	0.8
BM - Back-Medium (30-60)	647.0	N.A.	7.2
BH - Back-High (60-80)	864.1	N.A.	9.7
BVH - Back-Very High (80-90)	495.5	N.A.	5.5
UL - Uplight-Low (90-100)	972.3	N.A.	10.9
UH - Uplight-High (100-180)	3811.7	N.A.	42.6
Total	8941.8	N.A.	100.0
BUG Rating	B2-U5-G3		

ZONAL LUMEN SUMMARY

Zone	%
0-20	0.4
0-30	1.6
0-40	4.4
0-60	16.1
0-80	35.4
0-90	46.5
10-90	46.4
20-40	3.9
20-50	8.7
40-70	20.6
60-80	19.3
70-80	10.4
80-90	11.1
90-110	21.2
90-120	30.5
90-130	38.7
90-150	49.5
90-180	53.5
110-180	32.3
0-180	100

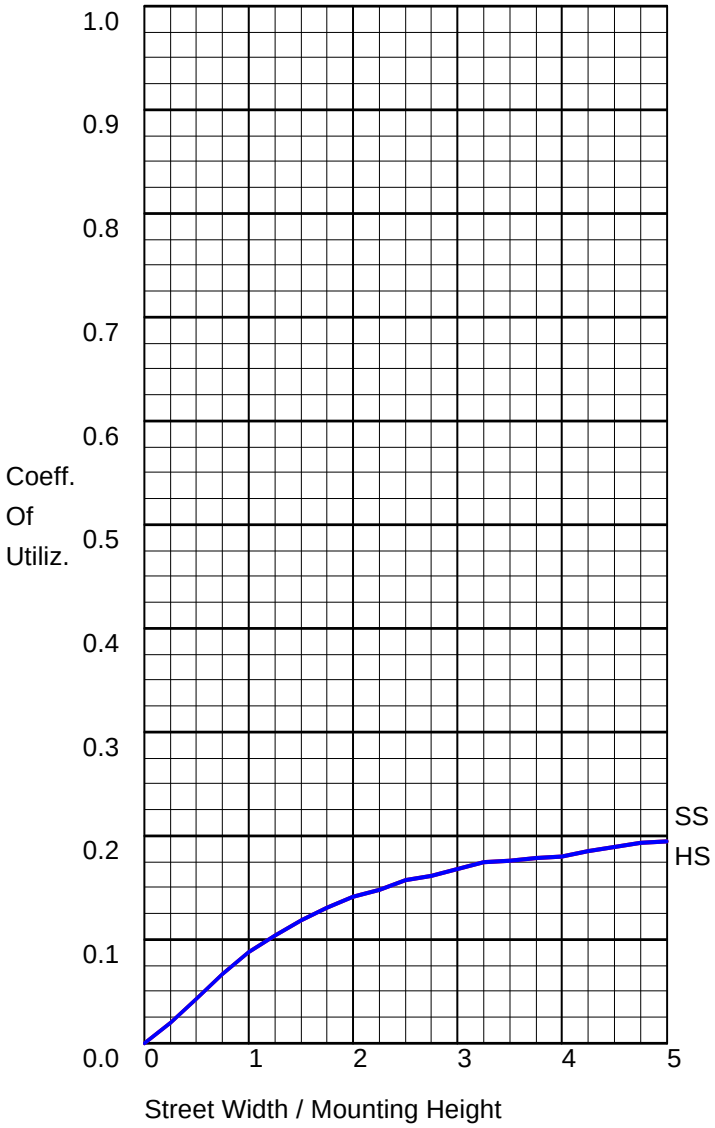
IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles
	0
0	0.00
5	69.69
10	83.98
15	109.27
20	157.02
25	218.38
30	298.44
35	393.20
40	477.41
45	550.38
50	622.88
55	692.48
60	750.79
65	802.57
70	848.25
75	884.96
80	907.56
85	910.56
90	904.82
95	890.47
100	878.77
105	871.16
110	855.54
115	841.08
120	836.77
125	822.24
130	785.41
135	739.84
140	687.91
145	626.61
150	558.44
155	497.28
160	429.63
165	344.73
170	271.59
175	241.35
180	231.32

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

COEFFICIENTS OF UTILIZATION

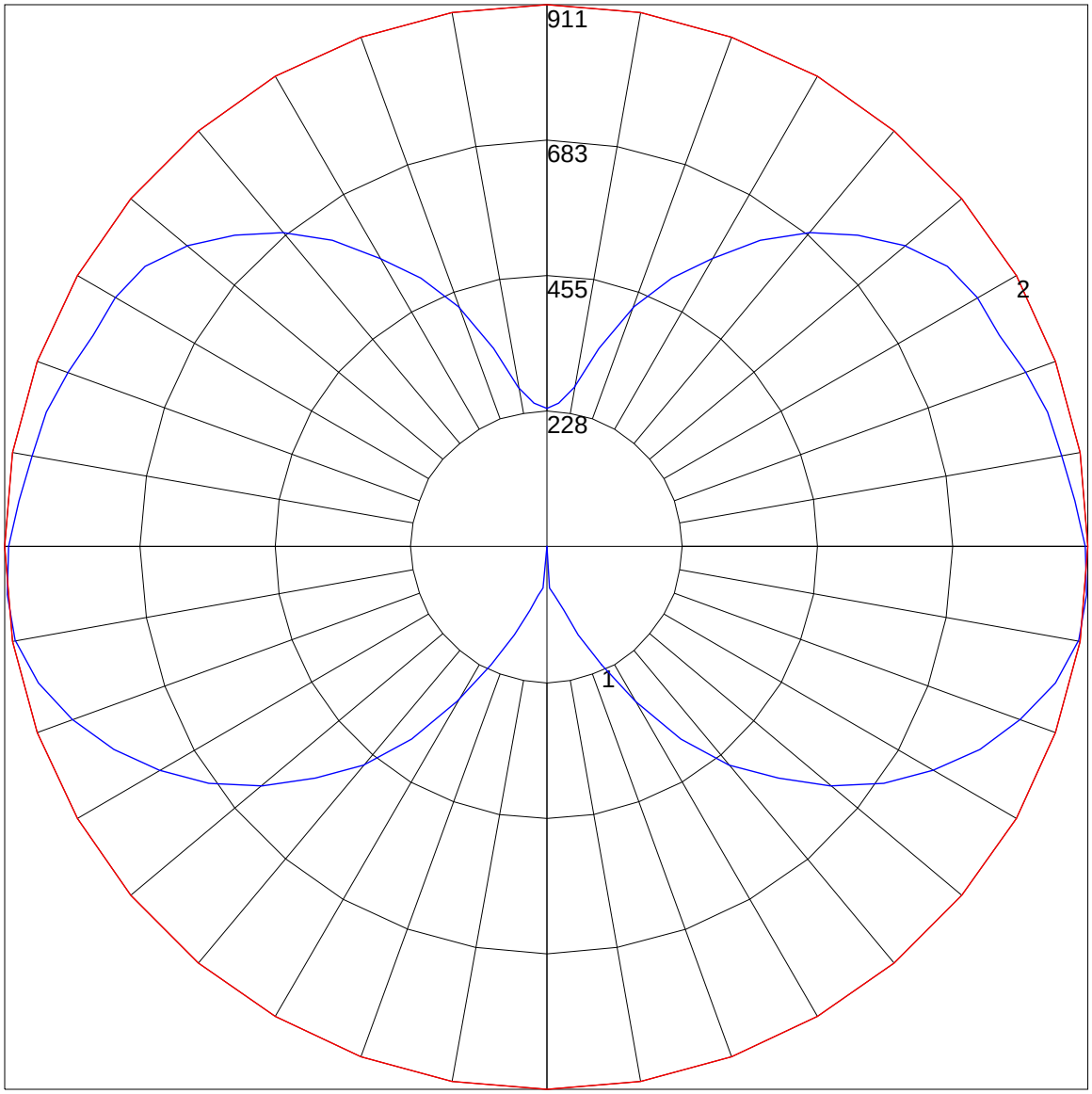


FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	2079.0	23.2
Downward House Side	2079.0	23.2
Downward Total	4158.0	46.5
Upward Street Side	2392.0	26.8
Upward House Side	2392.0	26.8
Upward Total	4784.0	53.5
Total Flux	8942.0	100.0

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

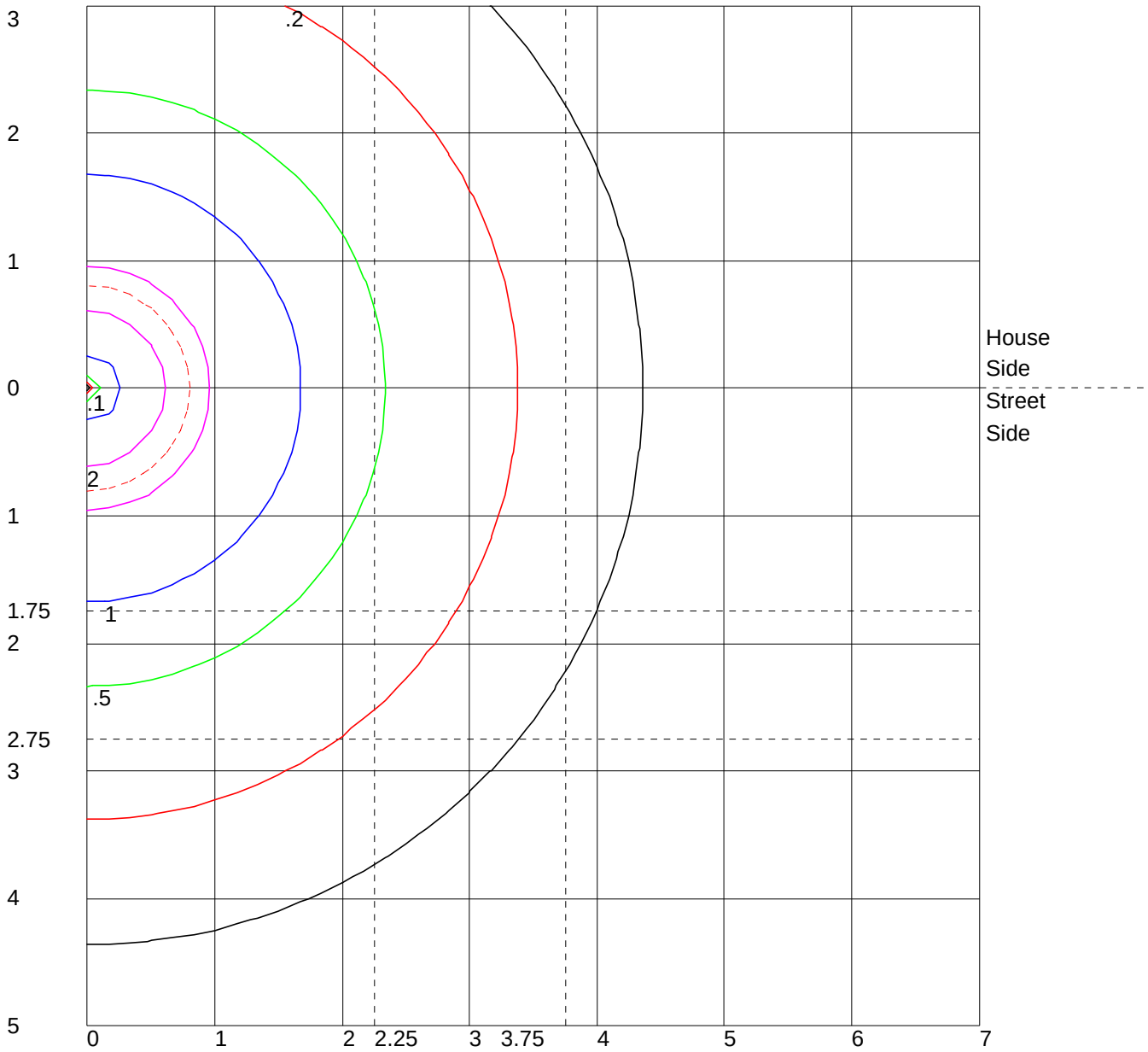
POLAR GRAPH



Maximum Candela = 910.56 Located At Horizontal Angle = 0, Vertical Angle = 85
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (85) (Through Max. Cd.)

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

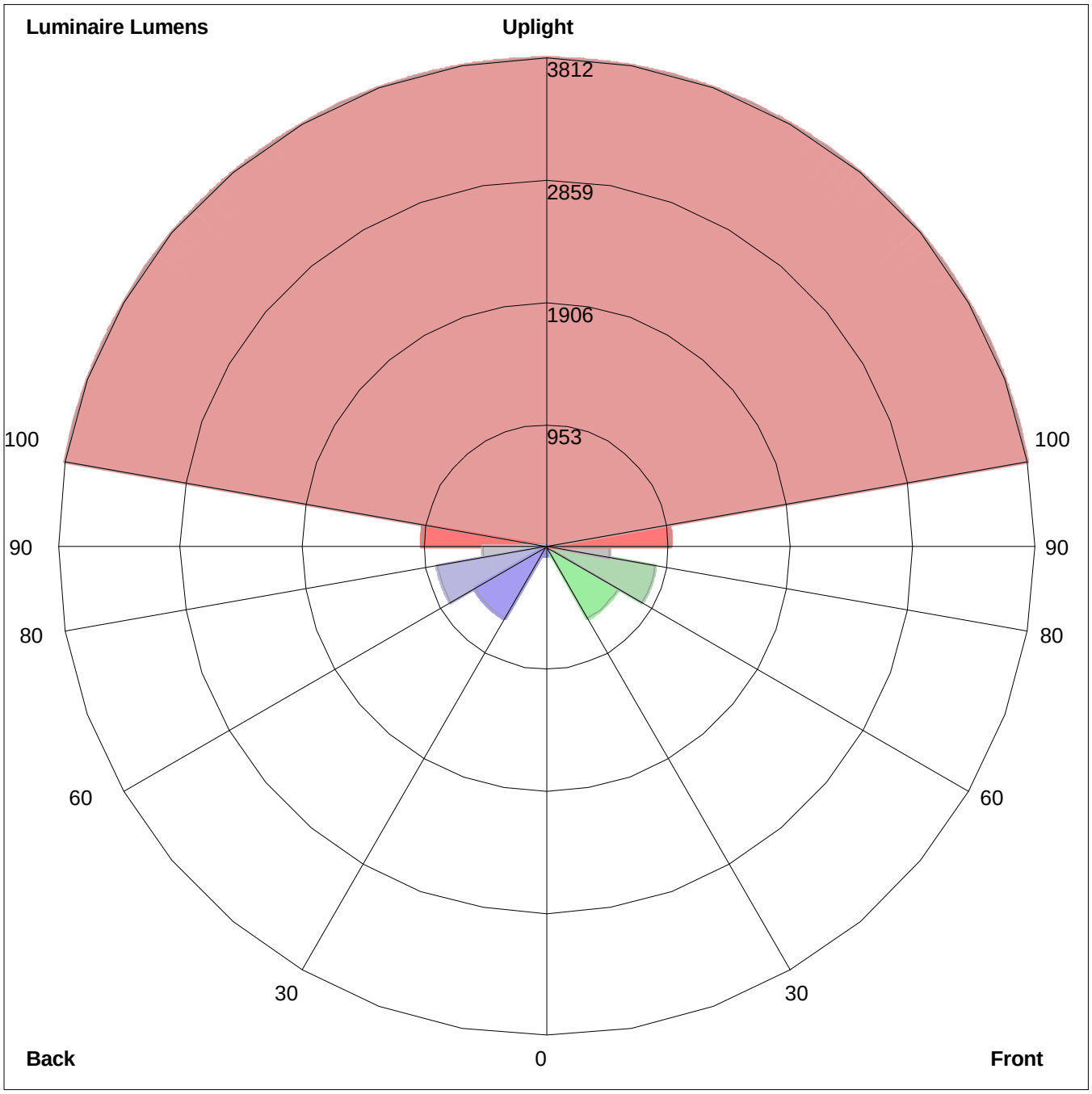
ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height
Values Based On 10 Foot Mounting Height
1/2 Maximum Candela Trace Shown As Dashed Curve
(+) = Maximum Candela Point

IES ROAD REPORT
PHOTOMETRIC FILENAME : L121503802.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=72.3, Medium=647.0, High=864.1, Very High=495.5
Back: Low=72.3, Medium=647.0, High=864.1, Very High=495.5
Uplight: Low=972.3, High=3811.7

BUG Rating : B2-U5-G3