



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

Report No: L071605504

Date: 8/25/2016



NVLAP LAB CODE 200927-0

Report No: L071605504

Report Prepared For: Beachside Lighting
 905 Kalaniana'ole Hwy # 29A Kailua, HI. 96734

Model Number: E3-RL-2W-A-NFL

Test: Electrical and Photometric tests

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 NEMA ANSLG C78.377: 2008 Specification of the Chromaticity 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. Catalog number is E3-RL-2W-A-NFL . Received in working and undamaged condition. No modifications were necessary.

Testing Condition: Fixture is tested with no special conditions.

Sample Arrival Date: 8/22/16

Date of Tests: 8/22/16 - 8/25/16

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.

Test Summary

Manufacturer:	Beachside Lighting
Model Number:	E3-RL-2W-A-NFL
Driver Model Number:	N/A
Total Lumens:	4.00
Input Voltage (VAC/60Hz):	12.00
Input Current (Amp):	0.26
Input Power (W):	2.24
Input Power Factor:	0.71
Current ATHD @ 12V(%):	90%
Current ATHD @ 277V(%):	N/A
Efficacy:	2
Color Rendering Index (CRI):	-23
Correlated Color Temperature (K):	1510
Chromaticity Coordinate x:	0.5945
Chromaticity Coordinate y:	0.4046
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:45
Total Operating Time (Hours):	1:30
Off State Power(W):	0.00

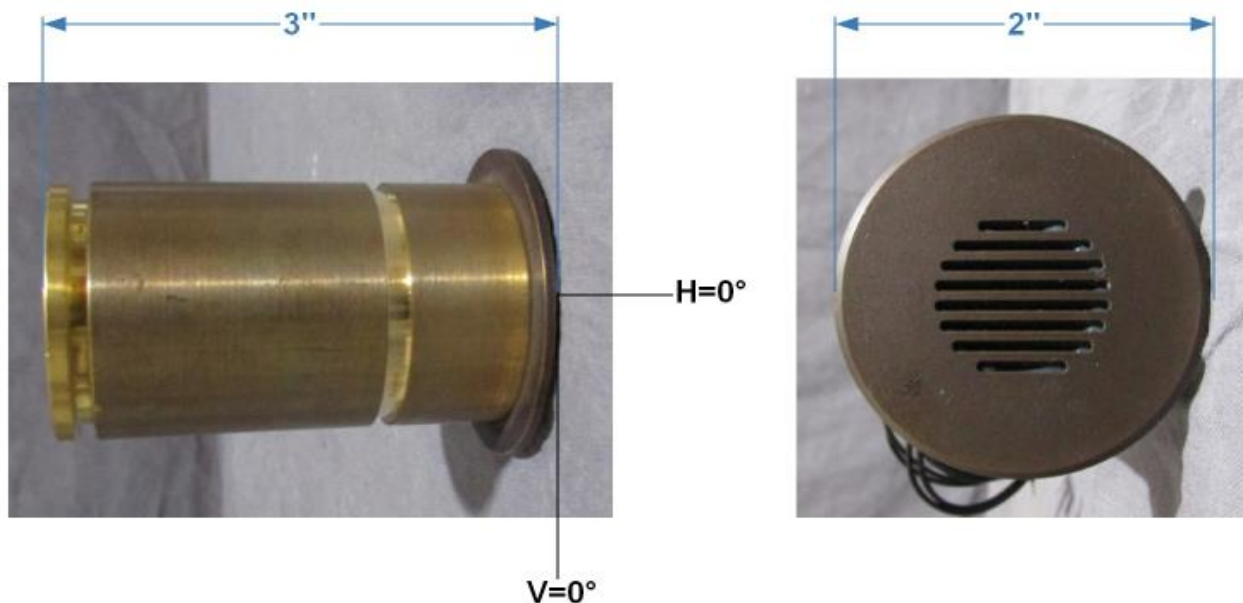
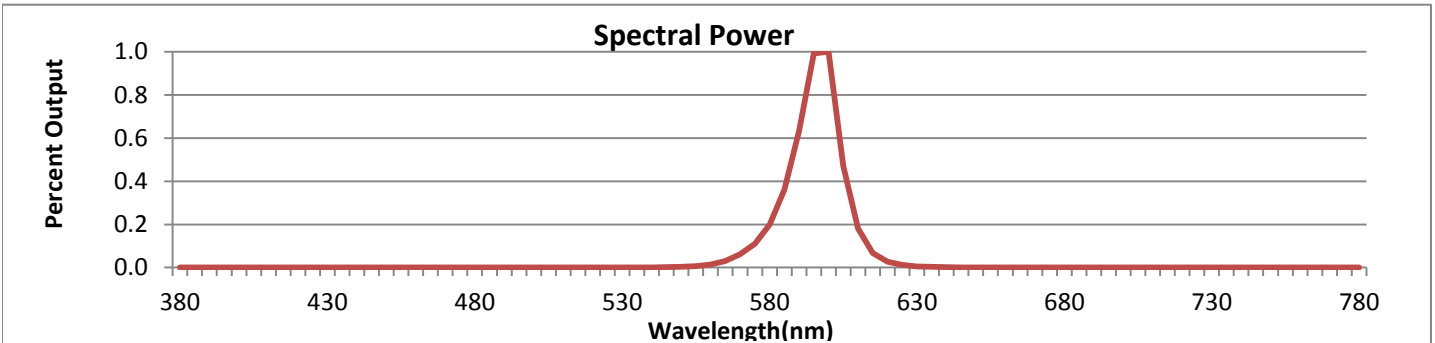


FIG. 1 LUMINAIRE

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



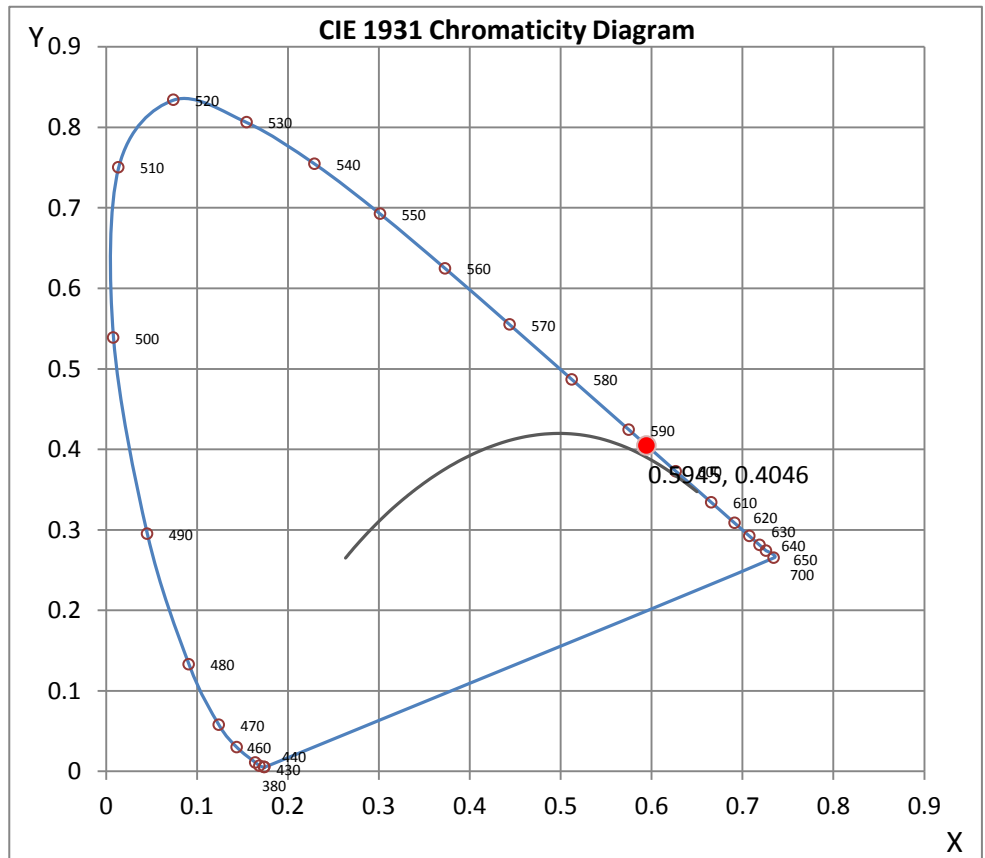
Wavelength	W/m ² nm	440	0.0000	510	0.0005	580	0.1994	650	0.0007	720	0.0003
380	0.0001	450	0.0000	520	0.0005	590	0.6336	660	0.0005	730	0.0000
390	0.0004	460	0.0000	530	0.0004	600	1.0000	670	0.0004	740	0.0001
400	0.0009	470	0.0000	540	0.0009	610	0.1817	680	0.0006	750	0.0003
410	0.0000	480	0.0003	550	0.0038	620	0.0278	690	0.0004	760	0.0003
420	0.0003	490	0.0000	560	0.0134	630	0.0057	700	0.0004	770	0.0000
430	0.0004	500	0.0005	570	0.0614	640	0.0019	710	0.0007	780	0.0000

CRI & CCT

x	0.5945
y	0.4046
u'	0.3567
v'	0.5462
CRI	-22.60
CCT	1510
Duv	0.00872

R Values

R1	-34.66
R2	53.57
R3	14.08
R4	-70.08
R5	-41.82
R6	44.84
R7	-9.58
R8	-137.32
R9	-388.78
R10	32.58
R11	-95.67
R12	-3.12
R13	-14.98
R14	44.05



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

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.

Spectral Measurements - Integrating Sphere

A Sensing Spectroradiometer SPR-3000, in conjunction with Light Laboratory 2 meter integrating sphere was used to measure chromaticity coordinates, correlated color temperature(CCT) and the color rendering index(CRI) for each sample.

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: 16*



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

Photometric Test Report

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L071605504
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUEDATE] 8/25/2016
 [MANUFAC] BEACHSIDE LIGHTING
 [LUMCAT] E3-RL-2W-A-NFL
 [LUMINAIRE] LED STEPLIGHT
 [BALLASTCAT] N/A
 [LAMPPOSITION] 0,0
 [LAMPCAT] N/A
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.
 [INPUT] 12VAC, 2.24W
 [TEST PROCEDURE] IESNA:LM-79-08

CHARACTERISTICS

IES Classification	Type IV
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	2
Total Luminaire Watts	2.24
Ballast Factor	1.00
Upward Waste Light Ratio	0.02
Maximum Candela	11.51
Maximum Candela Angle	0H 80V
Maximum Candela (<90 Degrees Vertical)	11.51
Maximum Candela Angle (<90 Degrees Vertical)	0H 80V
Maximum Candela At 90 Degrees Vertical	.59 (14.8% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	11.51 (287.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

ZONAL LUMEN SUMMARY

	Lumens	% Lamp	% Luminaire	Zone	%
FL - Front-Low (0-30)	< 0.05	N.A.	0.7		
FM - Front-Medium (30-60)	0.8	N.A.	20.1	0-20	0.3
FH - Front-High (60-80)	2.3	N.A.	58.8	0-30	0.8
FVH - Front-Very High (80-90)	0.8	N.A.	20.2	0-40	2.3
BL - Back-Low (0-30)	0.0	N.A.	0.0	0-60	20.4
BM - Back-Medium (30-60)	0.0	N.A.	0.0	0-80	78.2
BH - Back-High (60-80)	0.0	N.A.	0.0	0-90	98.2
BVH - Back-Very High (80-90)	0.0	N.A.	0.0	10-90	98.2
UL - Uplight-Low (90-100)	< 0.05	N.A.	1.1	20-40	2.3
UH - Uplight-High (100-180)	< 0.05	N.A.	0.7	20-50	7.3
				40-70	42.9
Total	3.9	N.A.	100.0	60-80	57.8
				70-80	33.1
BUG Rating	B0-U1-G0			80-90	19.9
				90-110	1.5
				90-120	1.8
				90-130	1.8
				90-150	1.8
				90-180	1.8
				110-180	0.3
				0-180	100

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
7.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
10.0	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
12.5	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.03	0.03
15.0	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04
17.5	0.09	0.09	0.09	0.08	0.08	0.08	0.07	0.07	0.06	0.05
20.0	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.08	0.07	0.06
22.5	0.14	0.14	0.13	0.13	0.12	0.11	0.10	0.09	0.08	0.08
25.0	0.17	0.17	0.17	0.16	0.15	0.14	0.13	0.11	0.10	0.09
27.5	0.24	0.24	0.22	0.21	0.19	0.17	0.15	0.13	0.11	0.10
30.0	0.31	0.30	0.28	0.27	0.25	0.22	0.18	0.15	0.13	0.11
32.5	0.42	0.40	0.38	0.35	0.30	0.26	0.22	0.18	0.15	0.13
35.0	0.52	0.50	0.48	0.45	0.39	0.33	0.26	0.22	0.18	0.14
37.5	0.71	0.69	0.65	0.58	0.47	0.41	0.34	0.26	0.21	0.16
40.0	0.90	0.88	0.83	0.75	0.64	0.52	0.42	0.33	0.24	0.18
42.5	1.17	1.13	1.07	0.95	0.82	0.68	0.53	0.41	0.30	0.21
45.0	1.43	1.39	1.32	1.19	1.03	0.85	0.69	0.50	0.38	0.24
47.5	1.77	1.73	1.63	1.45	1.26	1.07	0.86	0.67	0.47	0.33
50.0	2.12	2.09	1.98	1.80	1.55	1.30	1.06	0.83	0.61	0.43
52.5	2.70	2.63	2.45	2.15	1.89	1.58	1.29	1.02	0.78	0.55
55.0	3.27	3.21	3.01	2.70	2.26	1.92	1.52	1.24	0.95	0.69
57.5	4.04	3.92	3.62	3.23	2.74	2.26	1.83	1.45	1.13	0.84
60.0	4.80	4.65	4.24	3.73	3.15	2.58	2.10	1.66	1.30	0.99
62.5	5.50	5.32	4.83	4.16	3.48	2.81	2.28	1.82	1.45	1.13
65.0	6.33	6.09	5.44	4.57	3.74	2.95	2.37	1.90	1.54	1.22
67.5	7.31	6.97	6.10	4.99	3.94	3.07	2.39	1.90	1.55	1.26
70.0	8.45	8.00	6.79	5.39	4.11	3.11	2.34	1.83	1.49	1.22
72.5	9.67	9.05	7.57	5.78	4.24	3.09	2.28	1.75	1.38	1.14
75.0	10.75	9.95	8.11	6.03	4.25	3.00	2.17	1.61	1.25	1.03
77.5	11.44	10.48	8.36	6.03	4.11	2.79	1.98	1.44	1.11	0.90
80.0	11.51	10.38	8.10	5.68	3.74	2.49	1.71	1.22	0.93	0.75
82.5	10.33	9.28	7.16	4.86	3.13	2.05	1.39	0.98	0.74	0.58
85.0	7.79	7.05	5.34	3.60	2.30	1.46	0.99	0.70	0.53	0.42
87.5	4.04	3.71	2.82	1.90	1.25	0.80	0.57	0.43	0.33	0.29
90.0	0.28	0.40	0.56	0.59	0.49	0.40	0.31	0.26	0.21	0.19
92.5	0.19	0.10	0.11	0.11	0.10	0.08	0.09	0.10	0.10	0.09
95.0	0.10	0.10	0.09	0.08	0.07	0.07	0.07	0.06	0.06	0.05
97.5	0.10	0.08	0.07	0.07	0.07	0.07	0.07	0.06	0.05	0.04
100.0	0.07	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.04	0.04
102.5	0.07	0.07	0.07	0.06	0.07	0.06	0.04	0.04	0.04	0.04
105.0	0.07	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.03
107.5	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
110.0	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02
112.5	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.02
115.0	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
117.5	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.01	0.01
120.0	0.04	0.03	0.04	0.03	0.00	0.02	0.02	0.00	0.00	0.00
122.5	0.04	0.02	0.04	0.03	0.01	0.00	0.01	0.01	0.00	0.00
125.0	0.04	0.02	0.03	0.02	0.01	0.01	0.00	0.01	0.00	0.00
127.5	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.00	0.00
130.0	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION - (Cont.)

132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Horizontal Angles
Angles

	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
7.5	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
10.0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00
12.5	0.03	0.03	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00
15.0	0.03	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17.5	0.04	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00
20.0	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00	0.00
22.5	0.07	0.05	0.04	0.03	0.02	0.01	0.00	0.00	0.00	0.00
25.0	0.08	0.06	0.05	0.04	0.02	0.01	0.00	0.00	0.00	0.00
27.5	0.09	0.07	0.06	0.04	0.03	0.01	0.00	0.00	0.00	0.00
30.0	0.10	0.08	0.06	0.04	0.03	0.02	0.00	0.00	0.00	0.00
32.5	0.10	0.08	0.05	0.04	0.04	0.02	0.00	0.00	0.00	0.00
35.0	0.11	0.08	0.05	0.04	0.04	0.03	0.01	0.00	0.00	0.00
37.5	0.12	0.09	0.06	0.04	0.04	0.03	0.01	0.01	0.00	0.00
40.0	0.13	0.09	0.06	0.05	0.04	0.03	0.02	0.01	0.00	0.00
42.5	0.15	0.11	0.07	0.06	0.05	0.03	0.02	0.01	0.00	0.00
45.0	0.19	0.12	0.08	0.07	0.05	0.03	0.02	0.01	0.00	0.00
47.5	0.22	0.14	0.10	0.07	0.05	0.03	0.02	0.01	0.00	0.00
50.0	0.28	0.18	0.12	0.08	0.04	0.03	0.02	0.00	0.00	0.00
52.5	0.37	0.23	0.14	0.08	0.05	0.04	0.02	0.01	0.00	0.00
55.0	0.48	0.30	0.17	0.09	0.06	0.04	0.03	0.01	0.00	0.00
57.5	0.59	0.38	0.21	0.11	0.07	0.04	0.02	0.01	0.00	0.00
60.0	0.72	0.47	0.29	0.16	0.08	0.04	0.01	0.00	0.00	0.00
62.5	0.85	0.60	0.38	0.21	0.11	0.05	0.02	0.00	0.00	0.00
65.0	0.97	0.72	0.48	0.28	0.13	0.06	0.03	0.00	0.00	0.00
67.5	1.02	0.79	0.58	0.35	0.17	0.08	0.02	0.00	0.00	0.00
70.0	1.02	0.82	0.62	0.42	0.22	0.10	0.02	0.00	0.00	0.00
72.5	0.97	0.81	0.64	0.46	0.26	0.12	0.03	0.00	0.00	0.00
75.0	0.88	0.75	0.61	0.45	0.29	0.14	0.05	0.00	0.00	0.00
77.5	0.77	0.67	0.57	0.43	0.29	0.14	0.05	0.00	0.00	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION - (Cont.)

80.0	0.63	0.55	0.48	0.40	0.27	0.14	0.05	0.00	0.00	0.00
82.5	0.49	0.43	0.38	0.34	0.24	0.13	0.04	0.00	0.00	0.00
85.0	0.36	0.32	0.27	0.24	0.20	0.12	0.02	0.00	0.00	0.00
87.5	0.25	0.22	0.20	0.18	0.15	0.10	0.02	0.00	0.00	0.00
90.0	0.17	0.14	0.14	0.12	0.11	0.07	0.02	0.00	0.00	0.00
92.5	0.10	0.08	0.08	0.07	0.06	0.05	0.01	0.00	0.00	0.00
95.0	0.05	0.04	0.03	0.03	0.02	0.03	0.00	0.00	0.00	0.00
97.5	0.04	0.03	0.02	0.01	0.02	0.02	0.00	0.00	0.00	0.00
100.0	0.04	0.03	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00
102.5	0.03	0.04	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00
105.0	0.03	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.02	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Horizontal Angles

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION - (Cont.)

27.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION - (Cont.)

167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Horizontal Angles
Angles

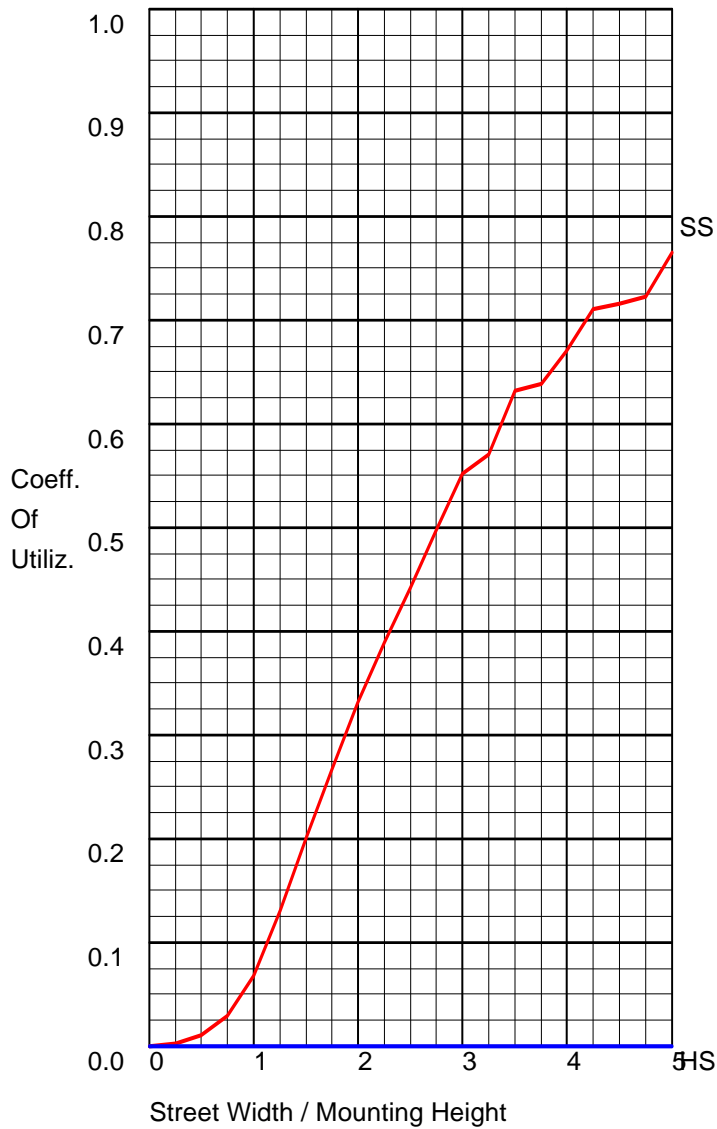
	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
35.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
45.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
50.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
52.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
55.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
62.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
67.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
70.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
72.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
75.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
77.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
80.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
82.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605504.IES

CANDELA TABULATION - (Cont.)

115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00

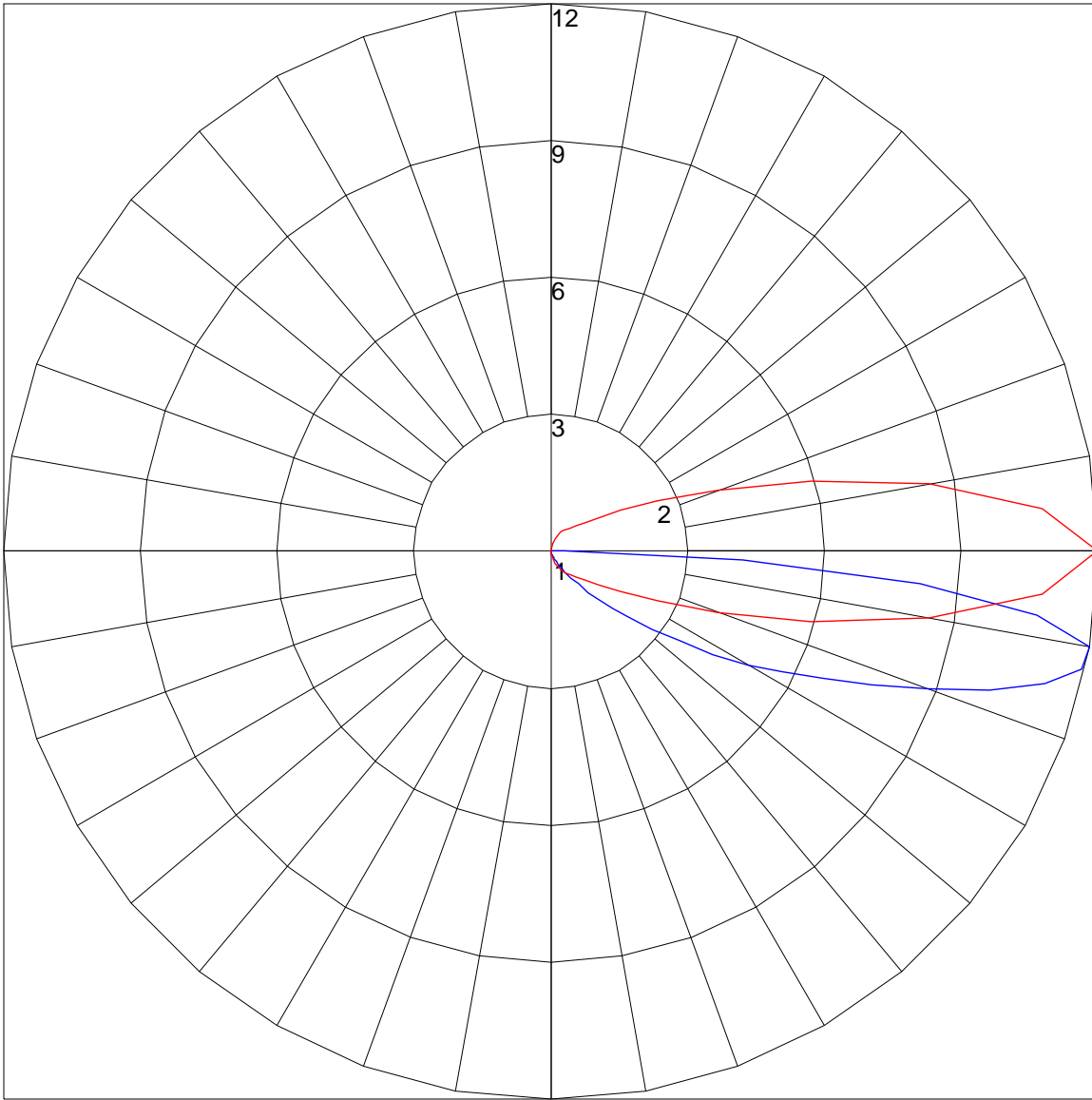
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

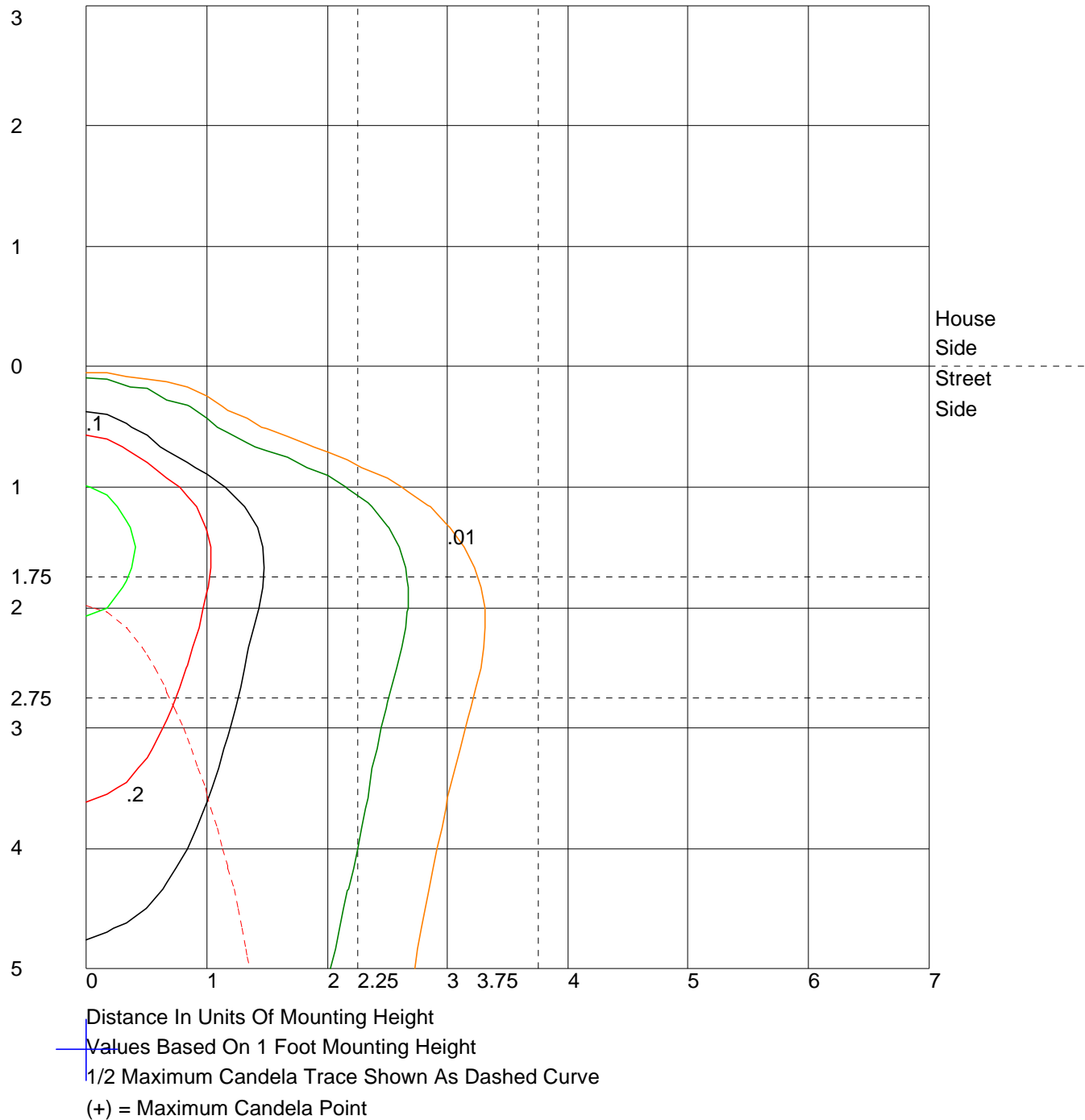
	Lumens	Percent Of Luminaire
Downward Street Side	3.9	98.2
Downward House Side	0.0	0.0
Downward Total	3.9	98.4
Upward Street Side	0.1	1.8
Upward House Side	0.0	0.0
Upward Total	0.1	2.5
Total Flux	4.0	101.0

POLAR GRAPH

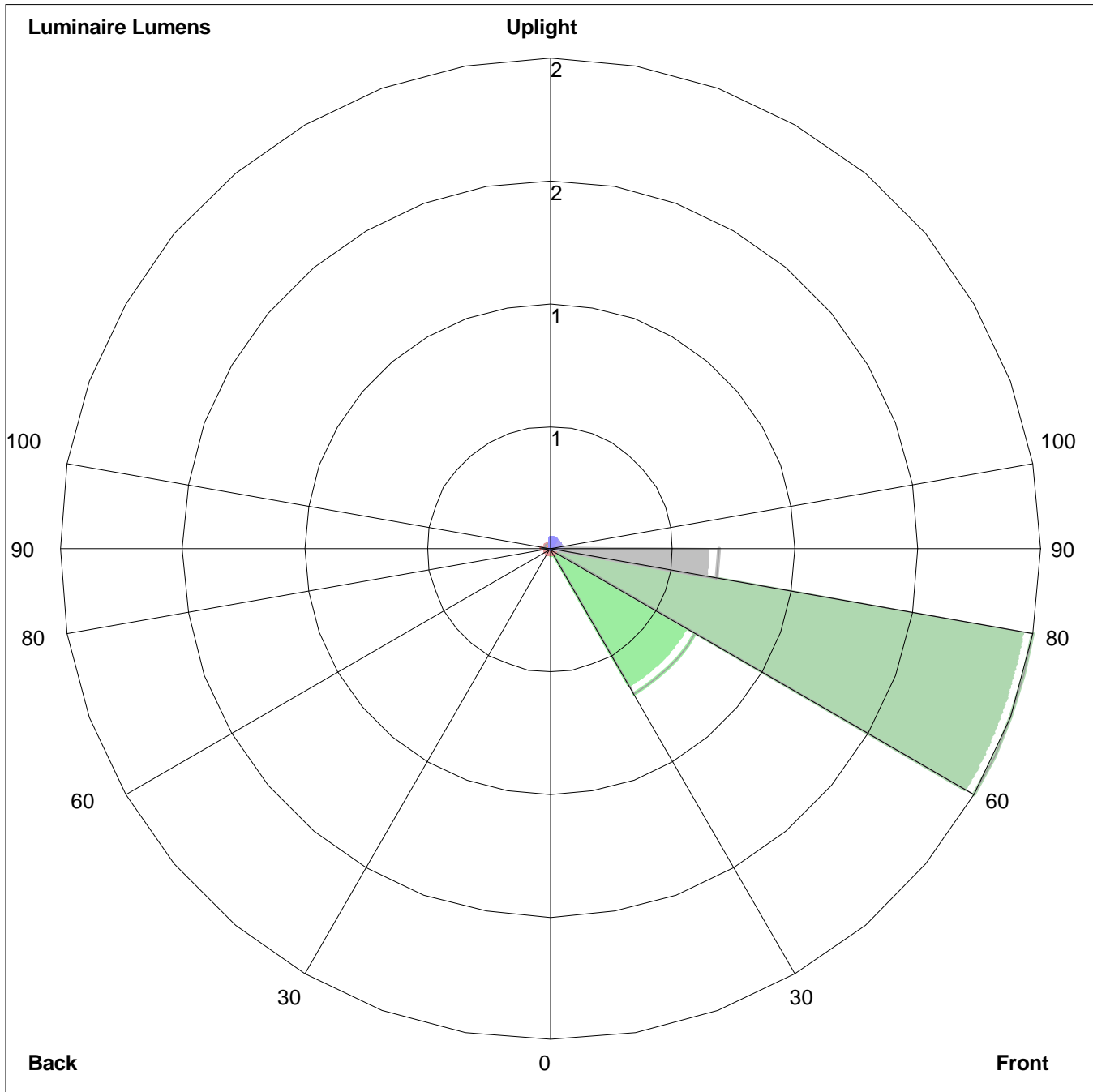


Maximum Candela = 11.51 Located At Horizontal Angle = 0, Vertical Angle = 80
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (80) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
 Front: Low=0.0, Medium=0.8, High=2.3, Very High=0.8
 Back: Low=0.0, Medium=0.0, High=0.0, Very High=0.0
 Uplight: Low=0.0, High=0.0

BUG Rating : B0-U1-G0