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Report No: L071605503

Date: 8/25/2016



NVLAP LAB CODE 200927-0

Report No: L071605503

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

Model Number: E3-RL-3W-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-3W-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-3W-NFL
Driver Model Number:	N/A
Total Lumens:	10.70
Input Voltage (VAC/60Hz):	12.00
Input Current (Amp):	0.33
Input Power (W):	2.87
Input Power Factor:	0.72
Current ATHD @ 12V(%):	83%
Current ATHD @ 277V(%):	N/A
Efficacy:	4
Color Rendering Index (CRI):	83
Correlated Color Temperature (K):	3079
Chromaticity Coordinate x:	0.4320
Chromaticity Coordinate y:	0.4033
Ambient Temperature (°C):	25.0
Stabilization Time (Hours):	0:50
Total Operating Time (Hours):	1:30
Off State Power(W):	0.00

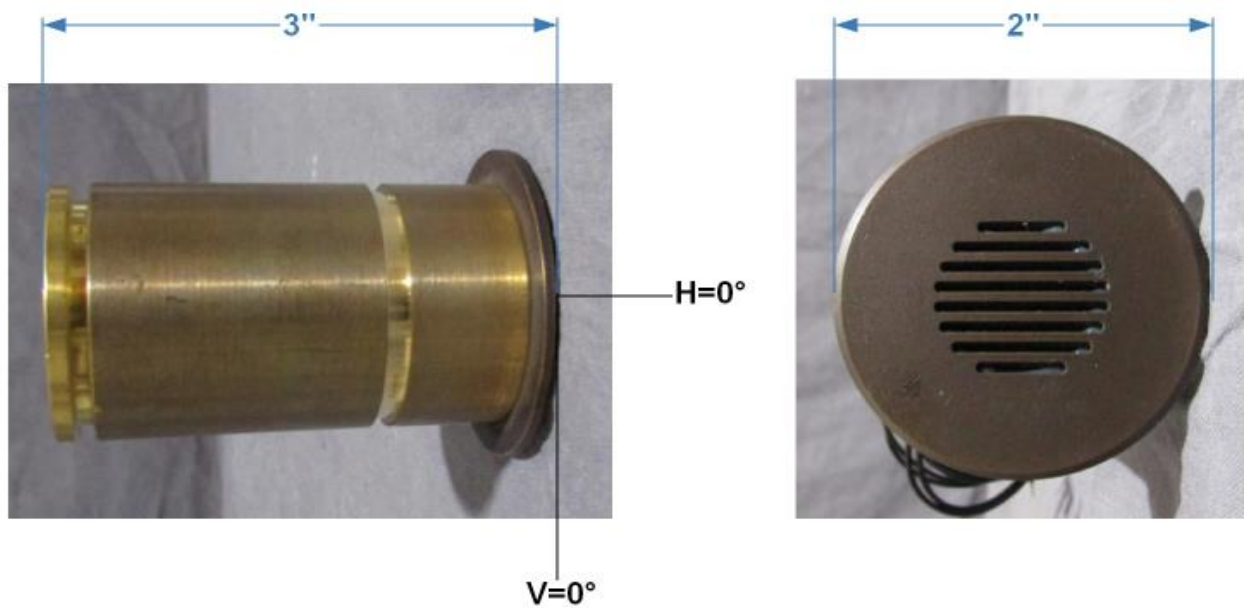
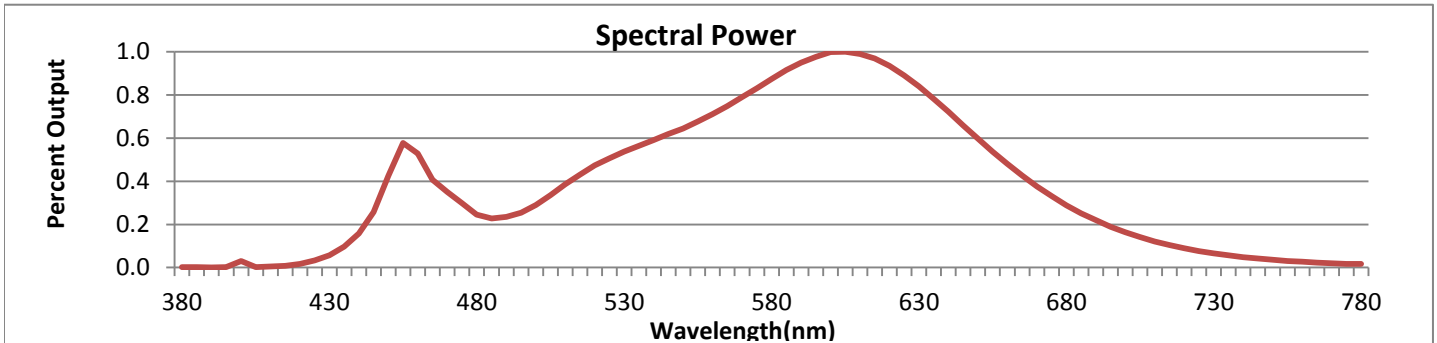


FIG. 1 LUMINAIRE

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



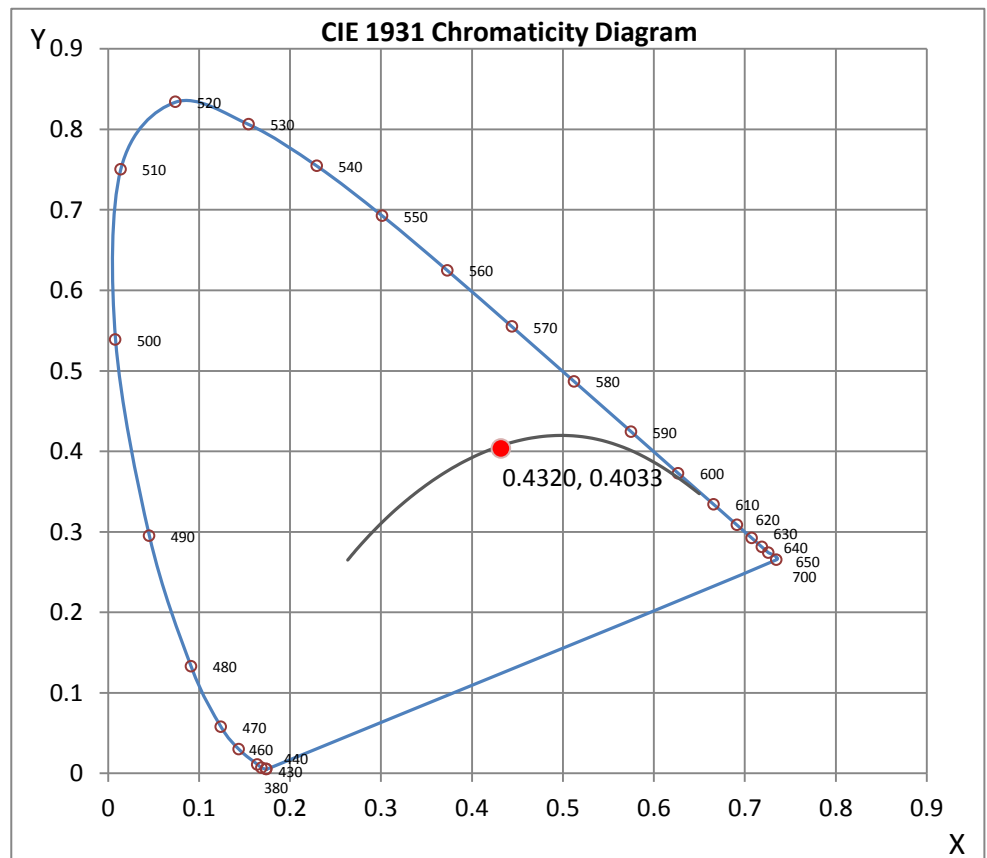
Wavelength	W/m ² nm	440	0.1578	510	0.3857	580	0.8751	650	0.5989	720	0.0896
380	0.0022	450	0.4245	520	0.4741	590	0.9500	660	0.4808	730	0.0665
390	0.0011	460	0.5294	530	0.5380	600	0.9988	670	0.3766	740	0.0480
400	0.0308	470	0.3501	540	0.5917	610	0.9908	680	0.2890	750	0.0367
410	0.0043	480	0.2459	550	0.6444	620	0.9350	690	0.2199	760	0.0269
420	0.0162	490	0.2345	560	0.7112	630	0.8408	700	0.1637	770	0.0195
430	0.0574	500	0.2892	570	0.7901	640	0.7229	710	0.1214	780	0.0174

CRI & CCT

x	0.4320
y	0.4033
u'	0.2477
v'	0.5203
CRI	83.10
CCT	3079
Duv	0.00039

R Values

R1	81.95
R2	91.71
R3	96.71
R4	79.89
R5	81.06
R6	88.96
R7	83.61
R8	61.20
R9	12.03
R10	79.50
R11	77.91
R12	66.86
R13	84.42
R14	98.72



*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*



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Photometric Test Report

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605503.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] L071605503
 [TESTLAB] LIGHT LABORATORY, INC.
 [ISSUEDATE] 8/25/2016
 [MANUFAC] BEACHSIDE LIGHTING
 [LUMCAT] E3-RL-3W-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, 2.87W
 [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	11
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	4
Total Luminaire Watts	2.87
Ballast Factor	1.00
Upward Waste Light Ratio	0.02
Maximum Candela	30.65
Maximum Candela Angle	0H 77.5V
Maximum Candela (<90 Degrees Vertical)	30.65
Maximum Candela Angle (<90 Degrees Vertical)	0H 77.5V
Maximum Candela At 90 Degrees Vertical	1.41 (12.8% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	30.33 (275.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605503.IES

LUMINAIRE CLASSIFICATION SYSTEM (LCS)

ZONAL LUMEN SUMMARY

	Lumens	% Lamp	% Luminaire	Zone	%
FL - Front-Low (0-30)	0.1	N.A.	0.7		
FM - Front-Medium (30-60)	2.1	N.A.	20.0	0-20	0.2
FH - Front-High (60-80)	6.2	N.A.	58.8	0-30	0.7
FVH - Front-Very High (80-90)	2.0	N.A.	19.3	0-40	2.4
BL - Back-Low (0-30)	< 0.05	N.A.	0.0	0-60	20.5
BM - Back-Medium (30-60)	< 0.05	N.A.	0.0	0-80	78.7
BH - Back-High (60-80)	< 0.05	N.A.	0.0	0-90	97.8
BVH - Back-Very High (80-90)	< 0.05	N.A.	0.0	10-90	97.8
UL - Uplight-Low (90-100)	0.1	N.A.	1.1	20-40	2.2
UH - Uplight-High (100-180)	0.1	N.A.	1.1	20-50	7.3
				40-70	43.2
Total	10.6	N.A.	100.0	60-80	58.2
				70-80	33.1
BUG Rating	B0-U1-G0			80-90	19.1
				90-110	1.5
				90-120	1.8
				90-130	2
				90-150	2.1
				90-180	2.1
				110-180	0.7
				0-180	100

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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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01
5.0	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03
7.5	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.05	0.05	0.04
10.0	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.08	0.07	0.06
12.5	0.16	0.16	0.15	0.15	0.14	0.13	0.12	0.11	0.10	0.09
15.0	0.21	0.21	0.20	0.20	0.19	0.18	0.17	0.15	0.13	0.12
17.5	0.26	0.26	0.26	0.25	0.24	0.23	0.21	0.19	0.17	0.15
20.0	0.31	0.31	0.31	0.30	0.28	0.27	0.25	0.23	0.20	0.18
22.5	0.42	0.41	0.40	0.37	0.34	0.31	0.28	0.25	0.23	0.20
25.0	0.52	0.51	0.49	0.46	0.42	0.38	0.34	0.29	0.26	0.23
27.5	0.66	0.65	0.62	0.58	0.52	0.46	0.42	0.36	0.30	0.26
30.0	0.80	0.78	0.76	0.72	0.65	0.58	0.50	0.42	0.36	0.29
32.5	1.08	1.05	1.00	0.92	0.80	0.70	0.60	0.50	0.40	0.33
35.0	1.36	1.33	1.27	1.19	1.04	0.88	0.71	0.60	0.48	0.37
37.5	1.88	1.83	1.72	1.54	1.28	1.11	0.91	0.70	0.57	0.42
40.0	2.40	2.35	2.22	2.02	1.74	1.40	1.12	0.89	0.66	0.50
42.5	3.13	3.06	2.86	2.56	2.21	1.84	1.41	1.10	0.82	0.59
45.0	3.86	3.78	3.55	3.23	2.79	2.29	1.86	1.36	1.03	0.68
47.5	4.78	4.69	4.40	3.93	3.41	2.87	2.31	1.79	1.26	0.90
50.0	5.71	5.63	5.34	4.86	4.18	3.48	2.87	2.22	1.63	1.16
52.5	7.34	7.16	6.66	5.81	5.12	4.25	3.46	2.72	2.07	1.47
55.0	8.98	8.77	8.24	7.34	6.15	5.19	4.09	3.30	2.53	1.83
57.5	11.11	10.78	9.94	8.82	7.46	6.14	4.94	3.90	3.01	2.26
60.0	13.25	12.81	11.67	10.22	8.60	7.03	5.67	4.49	3.50	2.67
62.5	15.24	14.73	13.31	11.42	9.50	7.66	6.22	4.91	3.89	3.05
65.0	17.53	16.87	14.98	12.56	10.21	8.04	6.45	5.14	4.13	3.30
67.5	20.25	19.27	16.80	13.72	10.76	8.37	6.50	5.14	4.15	3.38
70.0	23.27	21.98	18.69	14.80	11.29	8.51	6.37	4.97	4.02	3.28
72.5	26.30	24.67	20.69	15.80	11.62	8.43	6.20	4.73	3.74	3.08
75.0	29.05	26.92	22.03	16.41	11.58	8.18	5.89	4.38	3.40	2.78
77.5	30.65	28.09	22.52	16.32	11.15	7.59	5.36	3.87	2.98	2.40
80.0	30.33	27.46	21.59	15.26	10.04	6.69	4.62	3.26	2.49	1.98
82.5	26.72	24.12	18.81	12.88	8.35	5.40	3.63	2.57	1.95	1.57
85.0	19.58	17.79	13.71	9.31	5.96	3.79	2.56	1.83	1.39	1.13
87.5	10.13	8.95	6.91	4.69	3.13	2.10	1.48	1.12	0.90	0.76
90.0	0.69	0.92	1.27	1.41	1.15	0.97	0.84	0.66	0.56	0.49
92.5	0.48	0.31	0.28	0.29	0.29	0.27	0.24	0.27	0.27	0.25
95.0	0.28	0.25	0.25	0.25	0.23	0.22	0.19	0.18	0.16	0.14
97.5	0.24	0.25	0.24	0.22	0.21	0.19	0.17	0.16	0.14	0.12
100.0	0.21	0.22	0.20	0.20	0.19	0.17	0.17	0.15	0.13	0.11
102.5	0.21	0.20	0.19	0.18	0.17	0.15	0.13	0.13	0.12	0.10
105.0	0.17	0.16	0.17	0.16	0.14	0.14	0.12	0.10	0.10	0.09
107.5	0.14	0.14	0.14	0.13	0.13	0.12	0.11	0.09	0.08	0.07
110.0	0.14	0.13	0.11	0.11	0.10	0.10	0.10	0.07	0.07	0.07
112.5	0.10	0.10	0.11	0.10	0.09	0.08	0.08	0.07	0.07	0.06
115.0	0.10	0.10	0.10	0.09	0.08	0.07	0.07	0.06	0.06	0.04
117.5	0.10	0.08	0.09	0.07	0.07	0.07	0.07	0.06	0.05	0.04
120.0	0.07	0.07	0.07	0.07	0.07	0.06	0.07	0.05	0.04	0.04
122.5	0.07	0.07	0.07	0.07	0.06	0.05	0.05	0.05	0.04	0.04
125.0	0.07	0.06	0.06	0.06	0.05	0.05	0.04	0.04	0.04	0.04
127.5	0.05	0.06	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.03
130.0	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605503.IES

CANDELA TABULATION - (Cont.)

132.5	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.04	0.03
135.0	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.03	0.03
137.5	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.03
140.0	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
142.5	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
145.0	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.02	0.02	0.02
147.5	0.02	0.03	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.02
150.0	0.00	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
152.5	0.00	0.01	0.03	0.03	0.04	0.03	0.02	0.02	0.02	0.02
155.0	0.00	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02
157.5	0.00	0.00	0.01	0.01	0.02	0.04	0.03	0.02	0.01	0.01
160.0	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.02	0.01	0.01
162.5	0.00	0.00	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01
165.0	0.00	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.00
167.5	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00
170.0	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01
172.5	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02
175.0	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
177.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
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>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	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
5.0	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00
7.5	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.00	0.00
10.0	0.05	0.05	0.04	0.03	0.02	0.02	0.01	0.01	0.00	0.00
12.5	0.08	0.06	0.05	0.04	0.03	0.02	0.02	0.01	0.00	0.00
15.0	0.10	0.08	0.07	0.05	0.04	0.03	0.02	0.01	0.00	0.00
17.5	0.13	0.10	0.09	0.07	0.05	0.03	0.02	0.01	0.00	0.00
20.0	0.15	0.13	0.10	0.08	0.06	0.04	0.02	0.01	0.00	0.00
22.5	0.17	0.14	0.12	0.09	0.07	0.04	0.03	0.01	0.00	0.00
25.0	0.19	0.16	0.13	0.10	0.07	0.05	0.03	0.02	0.00	0.00
27.5	0.22	0.18	0.15	0.11	0.08	0.06	0.03	0.02	0.01	0.00
30.0	0.23	0.20	0.16	0.12	0.09	0.06	0.04	0.03	0.02	0.00
32.5	0.25	0.21	0.16	0.12	0.09	0.06	0.03	0.02	0.02	0.00
35.0	0.29	0.23	0.17	0.13	0.10	0.07	0.03	0.02	0.02	0.00
37.5	0.33	0.26	0.20	0.14	0.11	0.07	0.03	0.02	0.02	0.00
40.0	0.37	0.29	0.21	0.15	0.10	0.07	0.03	0.02	0.02	0.00
42.5	0.43	0.32	0.23	0.16	0.11	0.07	0.04	0.02	0.02	0.00
45.0	0.51	0.35	0.25	0.17	0.11	0.08	0.05	0.03	0.02	0.00
47.5	0.60	0.39	0.28	0.19	0.12	0.09	0.06	0.03	0.02	0.00
50.0	0.75	0.49	0.32	0.21	0.13	0.10	0.06	0.03	0.02	0.00
52.5	0.98	0.63	0.37	0.23	0.14	0.10	0.07	0.04	0.02	0.00
55.0	1.27	0.79	0.45	0.27	0.16	0.11	0.07	0.05	0.02	0.00
57.5	1.58	1.01	0.58	0.33	0.19	0.12	0.08	0.05	0.02	0.00
60.0	1.93	1.27	0.77	0.43	0.22	0.12	0.08	0.05	0.02	0.00
62.5	2.28	1.60	1.00	0.54	0.27	0.13	0.08	0.05	0.02	0.00
65.0	2.57	1.91	1.25	0.73	0.36	0.16	0.08	0.05	0.02	0.00
67.5	2.71	2.09	1.50	0.91	0.46	0.19	0.09	0.05	0.02	0.00
70.0	2.71	2.18	1.62	1.08	0.59	0.24	0.10	0.05	0.02	0.00
72.5	2.58	2.15	1.68	1.20	0.68	0.30	0.11	0.05	0.02	0.00
75.0	2.37	2.02	1.65	1.21	0.75	0.37	0.12	0.05	0.02	0.00
77.5	2.04	1.79	1.56	1.16	0.76	0.38	0.12	0.04	0.02	0.00

IES ROAD REPORT
PHOTOMETRIC FILENAME : L071605503.IES

CANDELA TABULATION - (Cont.)

80.0	1.69	1.47	1.30	1.06	0.73	0.37	0.12	0.04	0.02	0.00
82.5	1.32	1.15	1.02	0.88	0.65	0.36	0.11	0.04	0.01	0.00
85.0	0.95	0.83	0.74	0.64	0.54	0.35	0.09	0.04	0.00	0.00
87.5	0.66	0.59	0.54	0.48	0.42	0.28	0.10	0.03	0.01	0.00
90.0	0.44	0.40	0.38	0.35	0.30	0.21	0.11	0.02	0.02	0.00
92.5	0.24	0.23	0.21	0.20	0.19	0.13	0.07	0.02	0.02	0.00
95.0	0.13	0.11	0.09	0.09	0.08	0.05	0.04	0.02	0.02	0.00
97.5	0.10	0.08	0.08	0.08	0.06	0.03	0.03	0.02	0.02	0.00
100.0	0.10	0.07	0.07	0.06	0.03	0.02	0.02	0.02	0.02	0.00
102.5	0.09	0.07	0.06	0.06	0.03	0.02	0.02	0.02	0.02	0.00
105.0	0.07	0.07	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.00
107.5	0.07	0.06	0.05	0.03	0.02	0.02	0.02	0.01	0.02	0.00
110.0	0.06	0.05	0.04	0.03	0.02	0.02	0.02	0.00	0.02	0.00
112.5	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.01	0.02	0.00
115.0	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
117.5	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
120.0	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
122.5	0.04	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
125.0	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
127.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
130.0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
132.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
135.0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
137.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
140.0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
142.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
145.0	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
147.5	0.02	0.01	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.00
150.0	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.00	0.00
152.5	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.00
155.0	0.02	0.02	0.02	0.02	0.01	0.01	0.00	0.01	0.02	0.00
157.5	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.00
160.0	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.00
162.5	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.00
165.0	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.02	0.00
167.5	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00
170.0	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00
172.5	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00
175.0	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00
177.5	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	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. Angles **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 : L071605503.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 : L071605503.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

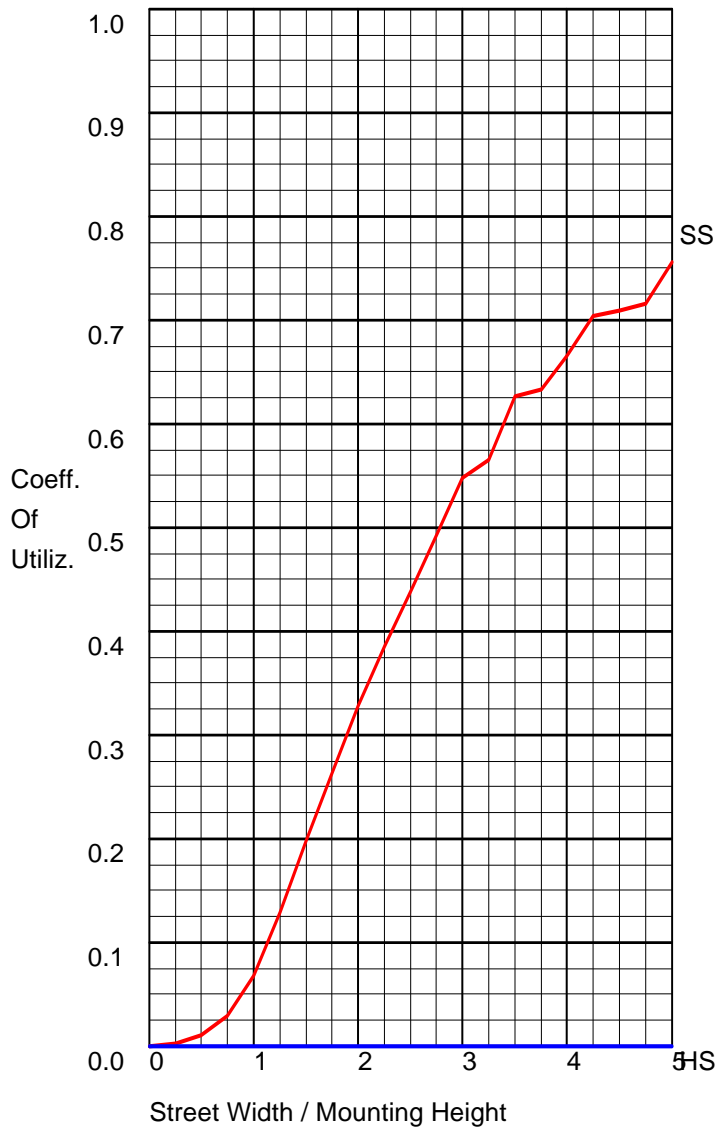
	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
0.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12.5	0.00	0.00	0.00	0.00	0.00	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 : L071605503.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

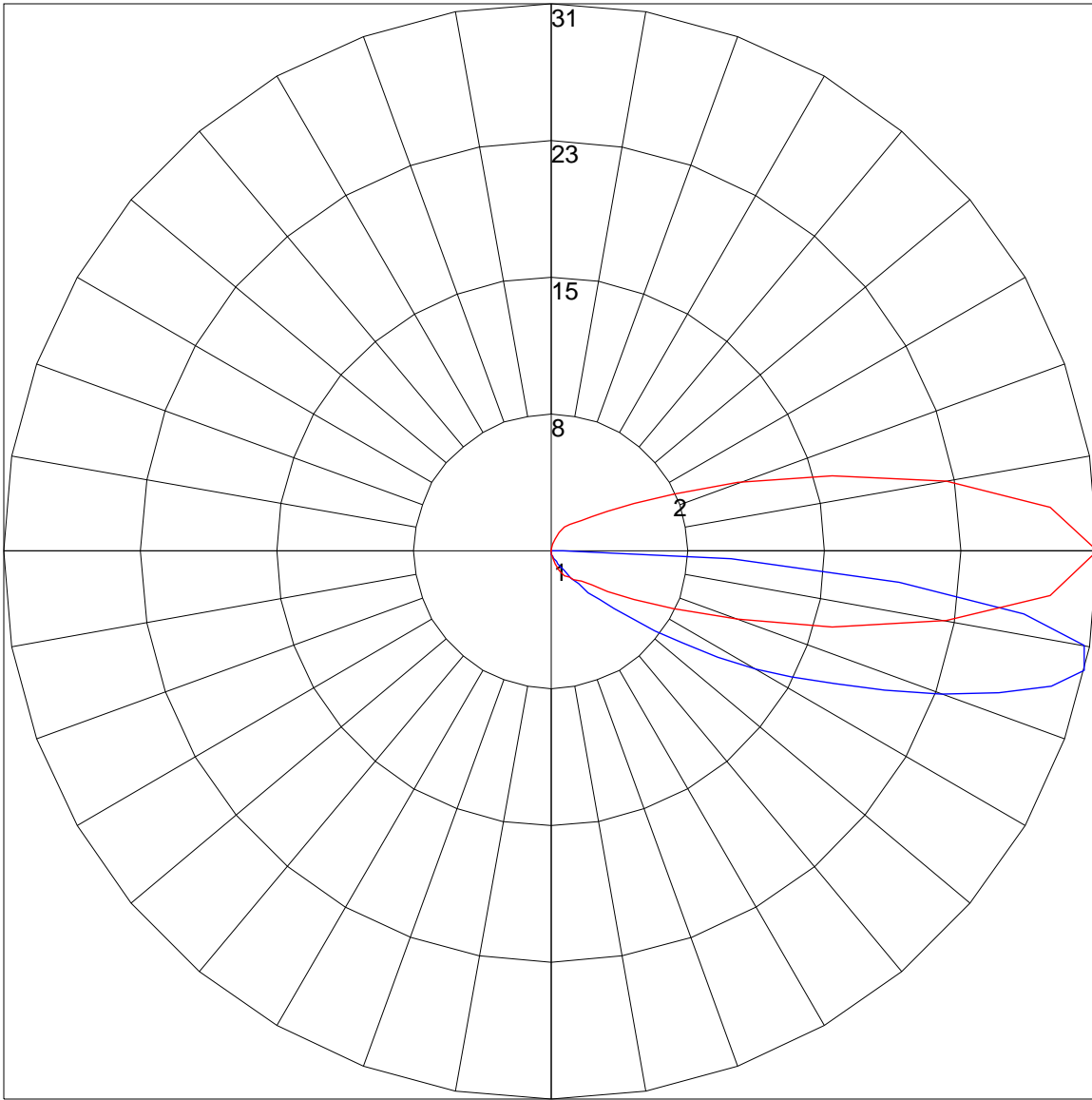
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

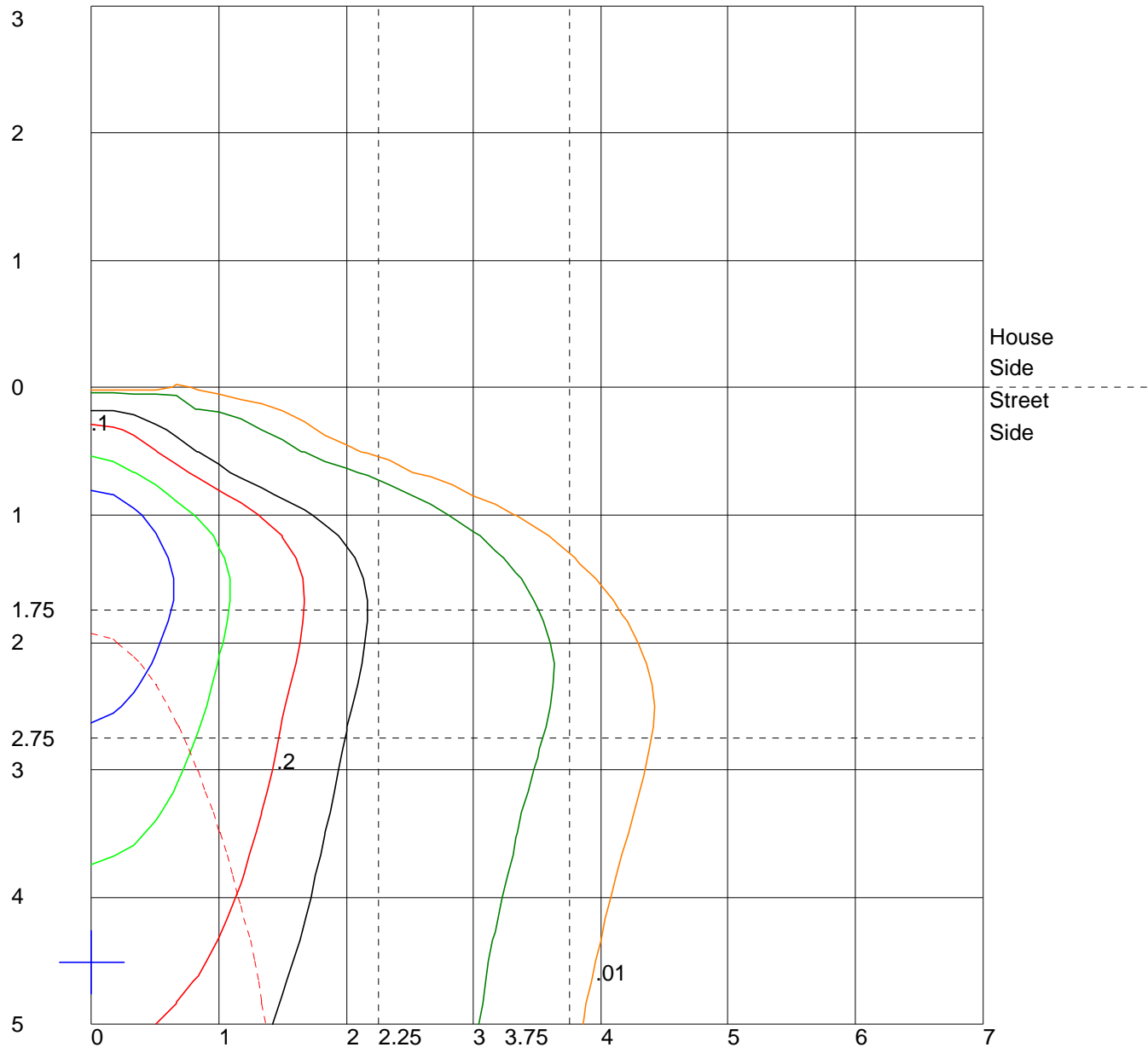
	Lumens	Percent Of Luminaire
Downward Street Side	10.5	97.8
Downward House Side	0.0	0.0
Downward Total	10.5	97.9
Upward Street Side	0.2	2.2
Upward House Side	0.0	0.0
Upward Total	0.2	1.9
Total Flux	10.7	99.8

POLAR GRAPH



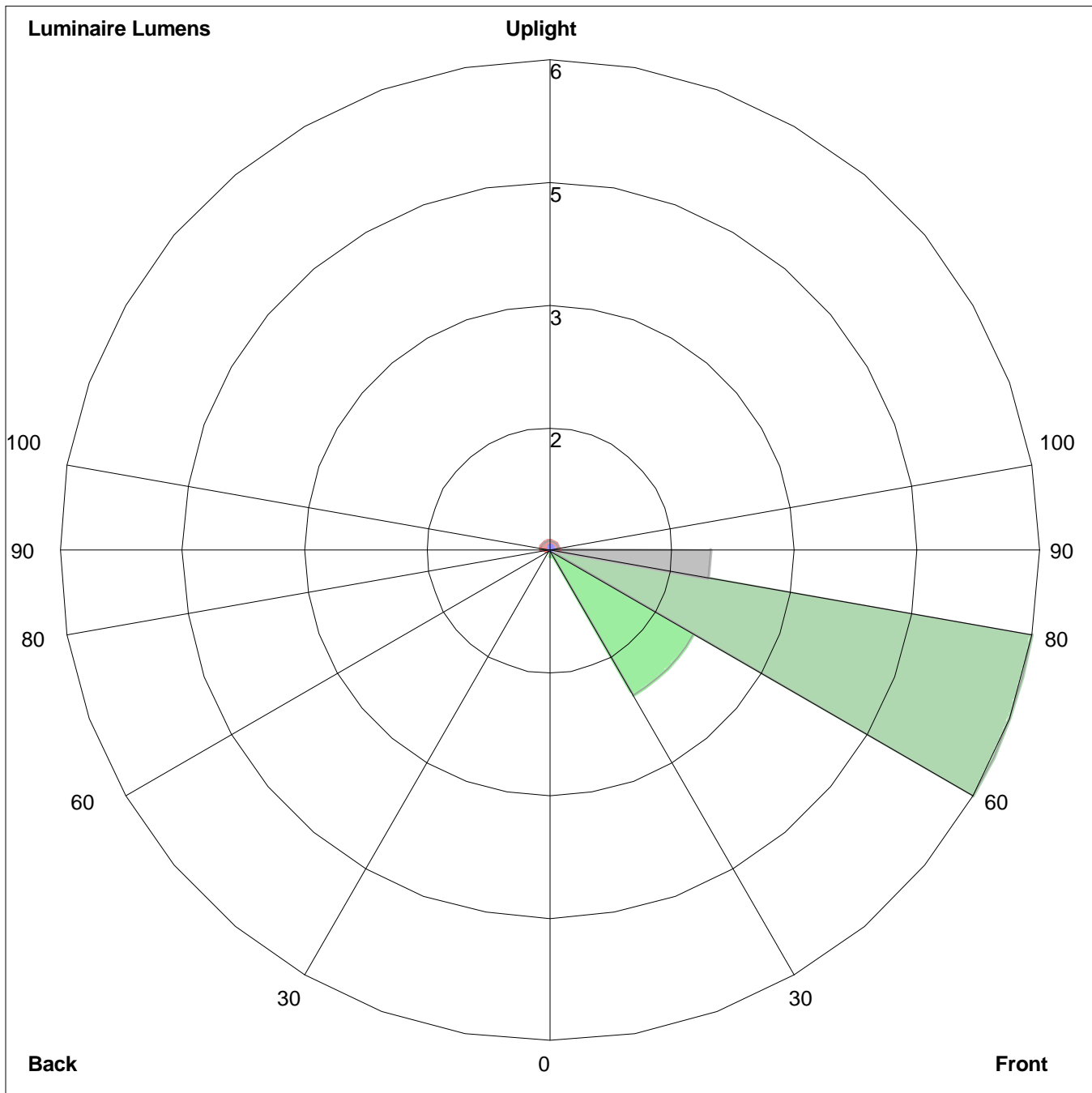
Maximum Candela = 30.65 Located At Horizontal Angle = 0, Vertical Angle = 77.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (77.5) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=0.1, Medium=2.1, High=6.2, Very High=2.0
Back: Low=0.0, Medium=0.0, High=0.0, Very High=0.0
Uplight: Low=0.1, High=0.1

BUG Rating : B0-U1-G0