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Report No: L061507804

Date: 7/21/2015



NVLAP LAB CODE 200927-0

**Report No:** L061507804

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

**Model Number:** E17-5W-A

**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 E17-5W-A . Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** DAUER LED LED-MR14-5XPE-A-25° lamp was used for testing.

**Sample Arrival Date:** 7/14/15

**Date of Tests:** 7/17/15 - 7/20/15

**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	11/10/15
Xitron Power Analysis System	2503AH	MT-EL01	10/20/15
BK Precision DC Power Supply	1747	PSDC-04	01/08/16
Fluke Digital Thermometer	52k/J	MT-TP02-GC	01/05/16
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**

<b>Manufacturer:</b>	Beachside Lighting
<b>Model Number:</b>	E17-5W-A
<b>Driver Model Number:</b>	HATCH RS12-30M-LED
<b>Total Lumens:</b>	25.20
<b>Input Voltage (VAC/60Hz):</b>	120.00
<b>Input Current (Amp):</b>	0.06
<b>Input Power (W):</b>	4.64
<b>Input Power Factor:</b>	0.70
<b>Current ATHD @ 120V(%):</b>	79%
<b>Current ATHD @ 277V(%):</b>	N/A
<b>Efficacy:</b>	5
<b>Color Rendering Index (CRI):</b>	-10
<b>Correlated Color Temperature (K):</b>	1279
<b>Chromaticity Coordinate x:</b>	0.6193
<b>Chromaticity Coordinate y:</b>	0.3801
<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	1:30
<b>Total Operating Time (Hours):</b>	3:00
<b>Off State Power(W):</b>	0.00

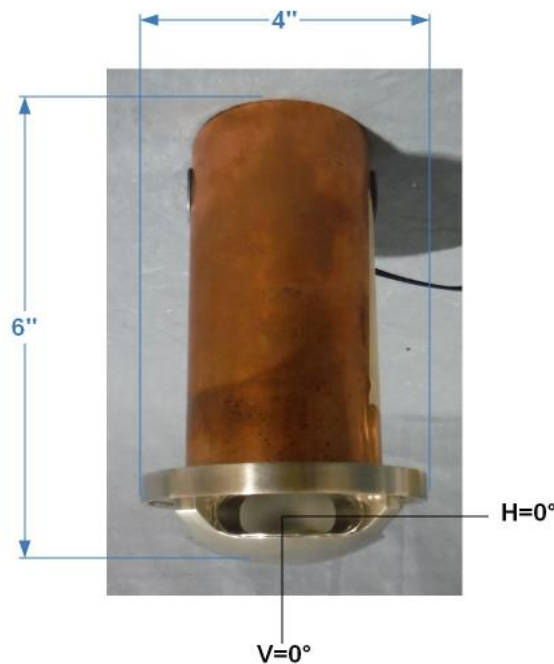
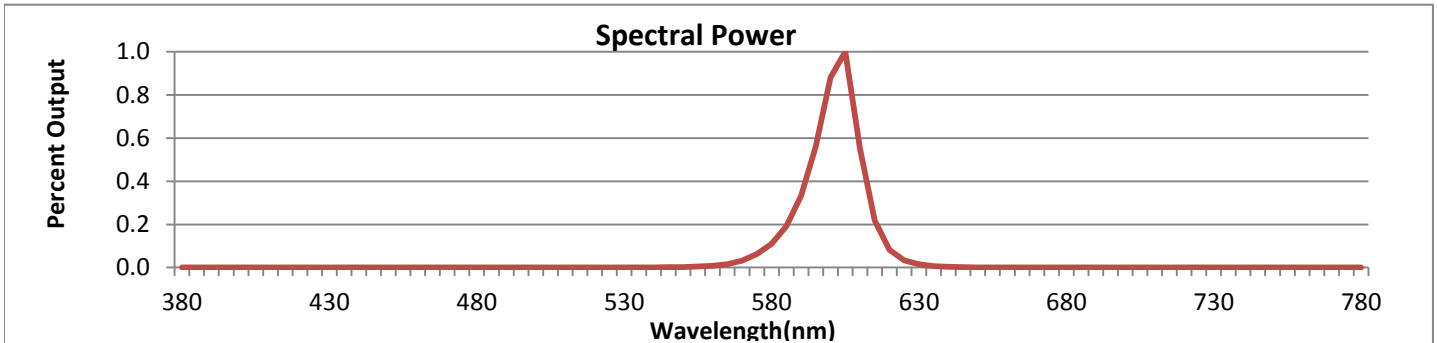


FIG. 1 LUMINAIRE

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



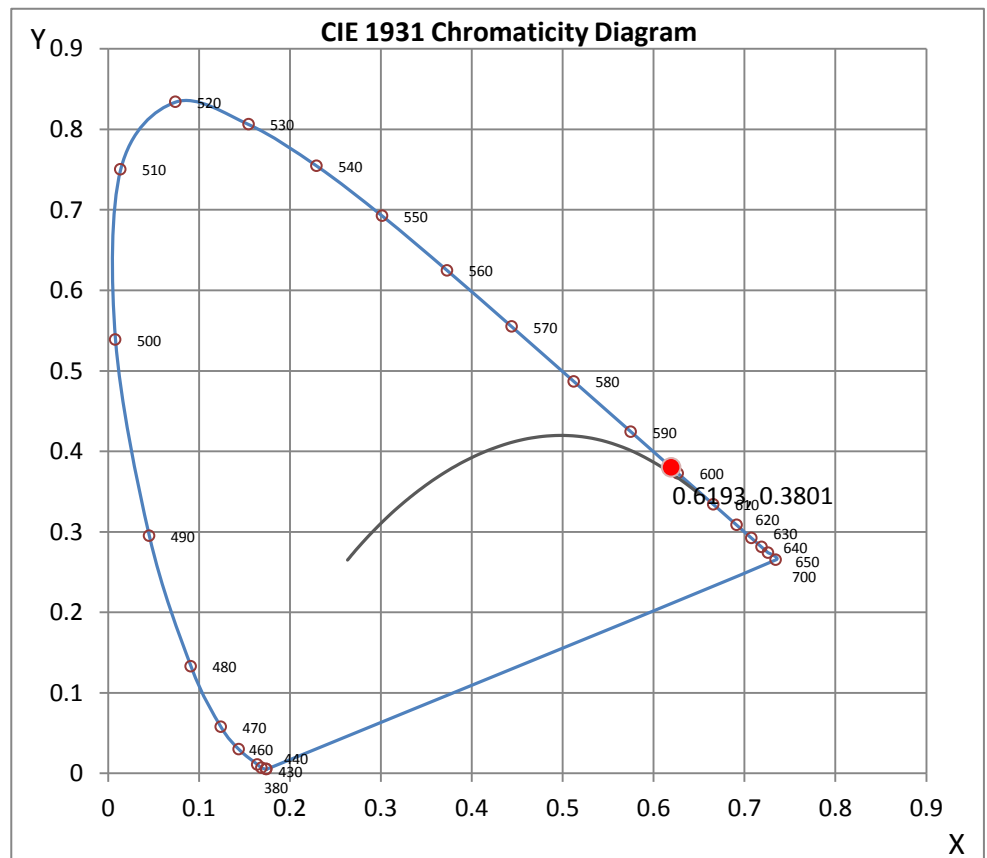
Wavelength	W/m <sup>2</sup> nm	440	0.0000	510	0.0001	580	0.1101	650	0.0012	720	0.0001
380	0.0000	450	0.0000	520	0.0001	590	0.3327	660	0.0005	730	0.0001
390	0.0001	460	0.0001	530	0.0003	600	0.8815	670	0.0004	740	0.0001
400	0.0000	470	0.0001	540	0.0009	610	0.5508	680	0.0002	750	0.0001
410	0.0000	480	0.0001	550	0.0026	620	0.0828	690	0.0002	760	0.0001
420	0.0001	490	0.0000	560	0.0076	630	0.0153	700	0.0001	770	0.0001
430	0.0000	500	0.0001	570	0.0319	640	0.0034	710	0.0001	780	0.0001

**CRI & CCT**

x	0.6193
y	0.3801
u'	0.3918
v'	0.5411
CRI	-10.20
CCT	1279
Duv	0.02057

**R Values**

R1	-16.76
R2	63.95
R3	15.36
R4	-54.86
R5	-26.15
R6	65.95
R7	-7.45
R8	-121.63
R9	-329.62
R10	49.51
R11	-69.24
R12	34.18
R13	3.05
R14	47.42



\*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: 14*



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# Photometric Test Report

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.IES**

## DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] L061507804  
 [TESTLAB] LIGHT LABORATORY, INC.  
 [ISSUEDATE] 7/20/2015  
 [MANUFAC] BEACHSIDE LIGHTING  
 [LUMCAT] E17-5W-A  
 [LUMINAIRE] 4"DIA. X 6"H. MARKER LIGHT  
 [MORE] DIFFUSED LENS  
 [BALLASTCAT] HATCH RS12-30M-LED  
 [BALLAST] INPUT: 120V, 0.3A, 50/60Hz OUTPUT: 12V, 30W  
 [LAMPPOSITION] 0,0  
 [LAMPCAT] N/A  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [INPUT] 120VAC, 4.64W  
 [TEST PROCEDURE] IESNA:LM-79-08

## CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Very Long
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	25
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	5
Total Luminaire Watts	4.64
Ballast Factor	1.00
Upward Waste Light Ratio	0.35
Maximum Candela	7.27
Maximum Candela Angle	40H 95V
Maximum Candela (<90 Degrees Vertical)	5.96
Maximum Candela Angle (<90 Degrees Vertical)	40H 87.5V
Maximum Candela At 90 Degrees Vertical	6.69 (26.8% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	5.96 (23.8% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	0.4	N.A.	1.7
FM - Front-Medium (30-60)	1.9	N.A.	7.6
FH - Front-High (60-80)	3.5	N.A.	14.1
FVH - Front-Very High (80-90)	2.3	N.A.	9.4
BL - Back-Low (0-30)	0.4	N.A.	1.7
BM - Back-Medium (30-60)	1.9	N.A.	7.6
BH - Back-High (60-80)	3.5	N.A.	14.1
BVH - Back-Very High (80-90)	2.3	N.A.	9.4
UL - Uplight-Low (90-100)	5.9	N.A.	23.5
UH - Uplight-High (100-180)	2.9	N.A.	11.8
Total	25.0	N.A.	100.0
BUG Rating	B0-U1-G0		

**ZONAL LUMEN SUMMARY**

Zone	%
0-20	1.6
0-30	3.3
0-40	6.2
0-60	18.4
0-80	46.3
0-90	65
10-90	64.5
20-40	4.6
20-50	9.2
40-70	24.3
60-80	28
70-80	15.9
80-90	18.6
90-110	33
90-120	34.8
90-130	35
90-150	35
90-180	35
110-180	2
0-180	100

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.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>
<b>0.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>5.0</b>	1.53	1.53	1.53	1.54	1.54	1.55	1.53	1.53	1.54	1.54
<b>10.0</b>	1.14	1.15	1.16	1.18	1.19	1.21	1.22	1.23	1.24	1.24
<b>15.0</b>	0.90	0.90	0.93	0.97	1.01	1.02	1.04	1.04	1.05	1.06
<b>20.0</b>	0.76	0.77	0.82	0.86	0.91	0.94	0.96	0.99	0.99	1.00
<b>25.0</b>	0.75	0.77	0.82	0.87	0.93	0.96	1.00	1.03	1.04	1.04
<b>30.0</b>	0.78	0.81	0.86	0.93	0.99	1.04	1.09	1.11	1.13	1.13
<b>35.0</b>	0.85	0.88	0.95	1.03	1.10	1.16	1.21	1.27	1.29	1.31
<b>40.0</b>	0.99	1.01	1.06	1.15	1.21	1.31	1.38	1.45	1.49	1.50
<b>45.0</b>	1.12	1.15	1.21	1.31	1.41	1.54	1.65	1.73	1.78	1.81
<b>50.0</b>	1.26	1.29	1.39	1.52	1.70	1.85	2.00	2.08	2.15	2.17
<b>55.0</b>	1.39	1.45	1.61	1.82	2.05	2.25	2.45	2.56	2.62	2.63
<b>60.0</b>	1.58	1.66	1.85	2.18	2.51	2.82	3.02	3.15	3.20	3.21
<b>65.0</b>	1.73	1.83	2.12	2.59	3.12	3.55	3.81	3.94	3.97	3.94
<b>70.0</b>	1.85	1.94	2.31	2.99	3.74	4.30	4.62	4.76	4.75	4.67
<b>75.0</b>	1.92	2.04	2.43	3.16	3.93	4.58	4.93	5.08	5.07	4.98
<b>77.5</b>	1.95	2.08	2.49	3.16	3.87	4.49	4.83	4.99	4.98	4.93
<b>80.0</b>	2.00	2.16	2.56	3.18	3.86	4.35	4.72	4.89	4.91	4.88
<b>82.5</b>	2.06	2.24	2.74	3.33	3.90	4.38	4.77	4.96	4.99	4.95
<b>85.0</b>	2.14	2.35	2.98	3.69	4.22	4.66	5.04	5.29	5.32	5.27
<b>87.5</b>	2.16	2.51	3.34	4.26	4.83	5.26	5.66	5.94	5.96	5.94
<b>90.0</b>	2.12	2.59	3.77	4.85	5.53	5.96	6.36	6.63	6.69	6.65
<b>92.5</b>	2.11	2.67	4.02	5.38	6.09	6.50	6.89	7.15	7.20	7.16
<b>95.0</b>	1.99	2.63	4.17	5.60	6.29	6.73	7.06	7.24	7.27	7.23
<b>97.5</b>	1.87	2.42	3.91	5.32	5.99	6.38	6.61	6.73	6.70	6.67
<b>100.0</b>	1.58	2.11	3.32	4.51	5.04	5.33	5.50	5.51	5.45	5.41
<b>102.5</b>	1.26	1.62	2.50	3.29	3.70	3.91	3.99	3.93	3.86	3.82
<b>105.0</b>	0.95	1.15	1.63	2.13	2.41	2.55	2.56	2.47	2.41	2.40
<b>107.5</b>	0.66	0.77	1.00	1.26	1.45	1.52	1.50	1.46	1.44	1.44
<b>110.0</b>	0.48	0.51	0.59	0.71	0.81	0.88	0.89	0.88	0.88	0.88
<b>115.0</b>	0.31	0.31	0.32	0.36	0.39	0.42	0.44	0.48	0.49	0.48
<b>120.0</b>	0.17	0.17	0.19	0.20	0.21	0.22	0.25	0.26	0.27	0.27
<b>125.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>130.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>135.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>140.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>145.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>150.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>155.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>160.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>165.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>170.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>175.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>180.0</b>	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>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>
<b>0.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>5.0</b>	1.54	1.53	1.55	1.54	1.54	1.54	1.53	1.54	1.53	1.54
<b>10.0</b>	1.23	1.24	1.22	1.22	1.20	1.18	1.17	1.16	1.16	1.16
<b>15.0</b>	1.05	1.05	1.04	1.04	1.01	0.98	0.94	0.93	0.90	0.93
<b>20.0</b>	0.99	0.98	0.97	0.95	0.93	0.88	0.84	0.81	0.78	0.81

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.IES**

**CANDELA TABULATION - (Cont.)**

<b>25.0</b>	1.04	1.03	1.00	0.99	0.93	0.89	0.84	0.81	0.78	0.81
<b>30.0</b>	1.14	1.11	1.10	1.06	1.02	0.96	0.89	0.85	0.83	0.85
<b>35.0</b>	1.30	1.28	1.24	1.20	1.13	1.07	1.00	0.95	0.92	0.95
<b>40.0</b>	1.49	1.45	1.41	1.34	1.27	1.18	1.10	1.05	1.04	1.05
<b>45.0</b>	1.79	1.74	1.66	1.57	1.46	1.34	1.24	1.18	1.17	1.18
<b>50.0</b>	2.15	2.10	2.01	1.88	1.73	1.56	1.42	1.33	1.29	1.33
<b>55.0</b>	2.62	2.54	2.43	2.26	2.06	1.84	1.63	1.50	1.46	1.50
<b>60.0</b>	3.18	3.10	2.98	2.79	2.48	2.17	1.89	1.68	1.61	1.68
<b>65.0</b>	3.90	3.85	3.74	3.48	3.09	2.56	2.11	1.86	1.77	1.86
<b>70.0</b>	4.65	4.68	4.60	4.31	3.69	2.96	2.34	1.98	1.85	1.98
<b>75.0</b>	4.97	5.03	4.95	4.64	3.98	3.16	2.45	2.04	1.92	2.04
<b>77.5</b>	4.92	4.95	4.86	4.52	3.95	3.15	2.49	2.11	1.95	2.11
<b>80.0</b>	4.87	4.87	4.74	4.40	3.85	3.20	2.62	2.17	2.02	2.17
<b>82.5</b>	4.96	4.93	4.76	4.40	3.97	3.41	2.76	2.26	2.09	2.26
<b>85.0</b>	5.28	5.26	5.04	4.70	4.26	3.75	3.07	2.41	2.16	2.41
<b>87.5</b>	5.94	5.89	5.66	5.30	4.90	4.34	3.44	2.52	2.19	2.52
<b>90.0</b>	6.66	6.61	6.36	5.98	5.60	4.93	3.78	2.68	2.19	2.68
<b>92.5</b>	7.16	7.09	6.88	6.52	6.09	5.38	4.10	2.71	2.12	2.71
<b>95.0</b>	7.23	7.20	7.01	6.67	6.27	5.54	4.14	2.63	2.07	2.63
<b>97.5</b>	6.67	6.68	6.56	6.28	5.88	5.20	3.87	2.51	1.87	2.51
<b>100.0</b>	5.44	5.49	5.43	5.24	4.91	4.33	3.30	2.09	1.61	2.09
<b>102.5</b>	3.85	3.91	3.92	3.82	3.59	3.13	2.40	1.66	1.29	1.66
<b>105.0</b>	2.43	2.49	2.52	2.48	2.30	2.00	1.58	1.14	0.95	1.14
<b>107.5</b>	1.47	1.49	1.53	1.50	1.40	1.21	0.96	0.76	0.70	0.76
<b>110.0</b>	0.89	0.91	0.92	0.89	0.82	0.70	0.59	0.51	0.48	0.51
<b>115.0</b>	0.49	0.48	0.47	0.43	0.40	0.37	0.33	0.31	0.31	0.31
<b>120.0</b>	0.27	0.26	0.26	0.24	0.22	0.20	0.19	0.18	0.19	0.18
<b>125.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>130.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>135.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>140.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>145.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>150.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>155.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>160.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>165.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>170.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>175.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>180.0</b>	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>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>
<b>0.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>5.0</b>	1.53	1.54	1.54	1.54	1.55	1.53	1.54	1.54	1.54	1.53
<b>10.0</b>	1.17	1.18	1.20	1.22	1.22	1.24	1.23	1.24	1.24	1.23
<b>15.0</b>	0.94	0.98	1.01	1.04	1.04	1.05	1.05	1.06	1.05	1.04
<b>20.0</b>	0.84	0.88	0.93	0.95	0.97	0.98	0.99	1.00	0.99	0.99
<b>25.0</b>	0.84	0.89	0.93	0.99	1.00	1.03	1.04	1.04	1.04	1.03
<b>30.0</b>	0.89	0.96	1.02	1.06	1.10	1.11	1.14	1.13	1.13	1.11
<b>35.0</b>	1.00	1.07	1.13	1.20	1.24	1.28	1.30	1.31	1.29	1.27
<b>40.0</b>	1.10	1.18	1.27	1.34	1.41	1.45	1.49	1.50	1.49	1.45
<b>45.0</b>	1.24	1.34	1.46	1.57	1.66	1.74	1.79	1.81	1.78	1.73
<b>50.0</b>	1.42	1.56	1.73	1.88	2.01	2.10	2.15	2.17	2.15	2.08
<b>55.0</b>	1.63	1.84	2.06	2.26	2.43	2.54	2.62	2.63	2.62	2.56
<b>60.0</b>	1.89	2.17	2.48	2.79	2.98	3.10	3.18	3.21	3.20	3.15



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.IES**

**CANDELA TABULATION - (Cont.)**

<b>65.0</b>	2.11	2.56	3.09	3.48	3.74	3.85	3.90	3.94	3.97	3.94
<b>70.0</b>	2.34	2.96	3.69	4.31	4.60	4.68	4.65	4.67	4.75	4.76
<b>75.0</b>	2.45	3.16	3.98	4.64	4.95	5.03	4.97	4.98	5.07	5.08
<b>77.5</b>	2.49	3.15	3.95	4.52	4.86	4.95	4.92	4.93	4.98	4.99
<b>80.0</b>	2.62	3.20	3.85	4.40	4.74	4.87	4.87	4.88	4.91	4.89
<b>82.5</b>	2.76	3.41	3.97	4.40	4.76	4.93	4.96	4.95	4.99	4.96
<b>85.0</b>	3.07	3.75	4.26	4.70	5.04	5.26	5.28	5.27	5.32	5.29
<b>87.5</b>	3.44	4.34	4.90	5.30	5.66	5.89	5.94	5.94	5.96	5.94
<b>90.0</b>	3.78	4.93	5.60	5.98	6.36	6.61	6.66	6.65	6.69	6.63
<b>92.5</b>	4.10	5.38	6.09	6.52	6.88	7.09	7.16	7.16	7.20	7.15
<b>95.0</b>	4.14	5.54	6.27	6.67	7.01	7.20	7.23	7.23	7.27	7.24
<b>97.5</b>	3.87	5.20	5.88	6.28	6.56	6.68	6.67	6.67	6.70	6.73
<b>100.0</b>	3.30	4.33	4.91	5.24	5.43	5.49	5.44	5.41	5.45	5.51
<b>102.5</b>	2.40	3.13	3.59	3.82	3.92	3.91	3.85	3.82	3.86	3.93
<b>105.0</b>	1.58	2.00	2.30	2.48	2.52	2.49	2.43	2.40	2.41	2.47
<b>107.5</b>	0.96	1.21	1.40	1.50	1.53	1.49	1.47	1.44	1.44	1.46
<b>110.0</b>	0.59	0.70	0.82	0.89	0.92	0.91	0.89	0.88	0.88	0.88
<b>115.0</b>	0.33	0.37	0.40	0.43	0.47	0.48	0.49	0.48	0.49	0.48
<b>120.0</b>	0.19	0.20	0.22	0.24	0.26	0.26	0.27	0.27	0.27	0.26
<b>125.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>130.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>135.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>140.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>145.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>150.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>155.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>160.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>165.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>170.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>175.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>180.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Vert. Horizontal Angles**

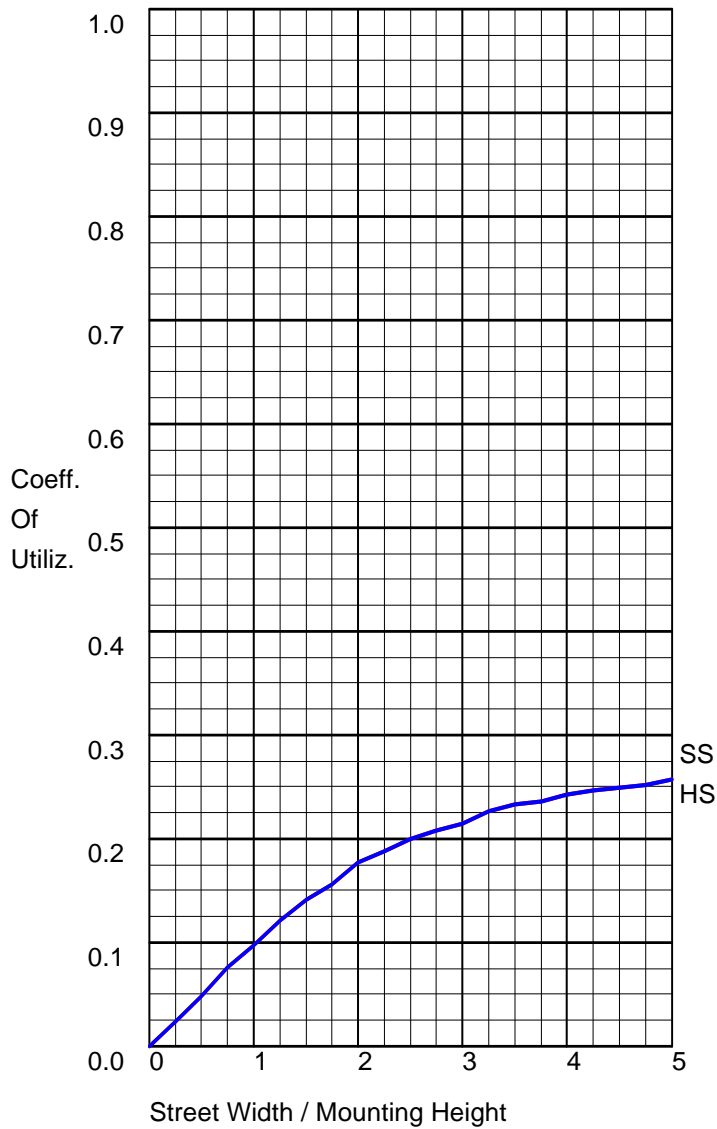
	<u>150</u>	<u>155</u>	<u>160</u>	<u>165</u>	<u>170</u>	<u>175</u>	<u>180</u>
<b>0.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>5.0</b>	1.53	1.55	1.54	1.54	1.53	1.53	1.53
<b>10.0</b>	1.22	1.21	1.19	1.18	1.16	1.15	1.14
<b>15.0</b>	1.04	1.02	1.01	0.97	0.93	0.90	0.90
<b>20.0</b>	0.96	0.94	0.91	0.86	0.82	0.77	0.76
<b>25.0</b>	1.00	0.96	0.93	0.87	0.82	0.77	0.75
<b>30.0</b>	1.09	1.04	0.99	0.93	0.86	0.81	0.78
<b>35.0</b>	1.21	1.16	1.10	1.03	0.95	0.88	0.85
<b>40.0</b>	1.38	1.31	1.21	1.15	1.06	1.01	0.99
<b>45.0</b>	1.65	1.54	1.41	1.31	1.21	1.15	1.12
<b>50.0</b>	2.00	1.85	1.70	1.52	1.39	1.29	1.26
<b>55.0</b>	2.45	2.25	2.05	1.82	1.61	1.45	1.39
<b>60.0</b>	3.02	2.82	2.51	2.18	1.85	1.66	1.58
<b>65.0</b>	3.81	3.55	3.12	2.59	2.12	1.83	1.73
<b>70.0</b>	4.62	4.30	3.74	2.99	2.31	1.94	1.85
<b>75.0</b>	4.93	4.58	3.93	3.16	2.43	2.04	1.92
<b>77.5</b>	4.83	4.49	3.87	3.16	2.49	2.08	1.95
<b>80.0</b>	4.72	4.35	3.86	3.18	2.56	2.16	2.00
<b>82.5</b>	4.77	4.38	3.90	3.33	2.74	2.24	2.06
<b>85.0</b>	5.04	4.66	4.22	3.69	2.98	2.35	2.14
<b>87.5</b>	5.66	5.26	4.83	4.26	3.34	2.51	2.16

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L061507804.IES**

**CANDELA TABULATION - (Cont.)**

<b>90.0</b>	6.36	5.96	5.53	4.85	3.77	2.59	2.12
<b>92.5</b>	6.89	6.50	6.09	5.38	4.02	2.67	2.11
<b>95.0</b>	7.06	6.73	6.29	5.60	4.17	2.63	1.99
<b>97.5</b>	6.61	6.38	5.99	5.32	3.91	2.42	1.87
<b>100.0</b>	5.50	5.33	5.04	4.51	3.32	2.11	1.58
<b>102.5</b>	3.99	3.91	3.70	3.29	2.50	1.62	1.26
<b>105.0</b>	2.56	2.55	2.41	2.13	1.63	1.15	0.95
<b>107.5</b>	1.50	1.52	1.45	1.26	1.00	0.77	0.66
<b>110.0</b>	0.89	0.88	0.81	0.71	0.59	0.51	0.48
<b>115.0</b>	0.44	0.42	0.39	0.36	0.32	0.31	0.31
<b>120.0</b>	0.25	0.22	0.21	0.20	0.19	0.17	0.17
<b>125.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>130.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>135.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>140.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>145.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>150.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>155.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>160.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>165.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>170.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>175.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>180.0</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00

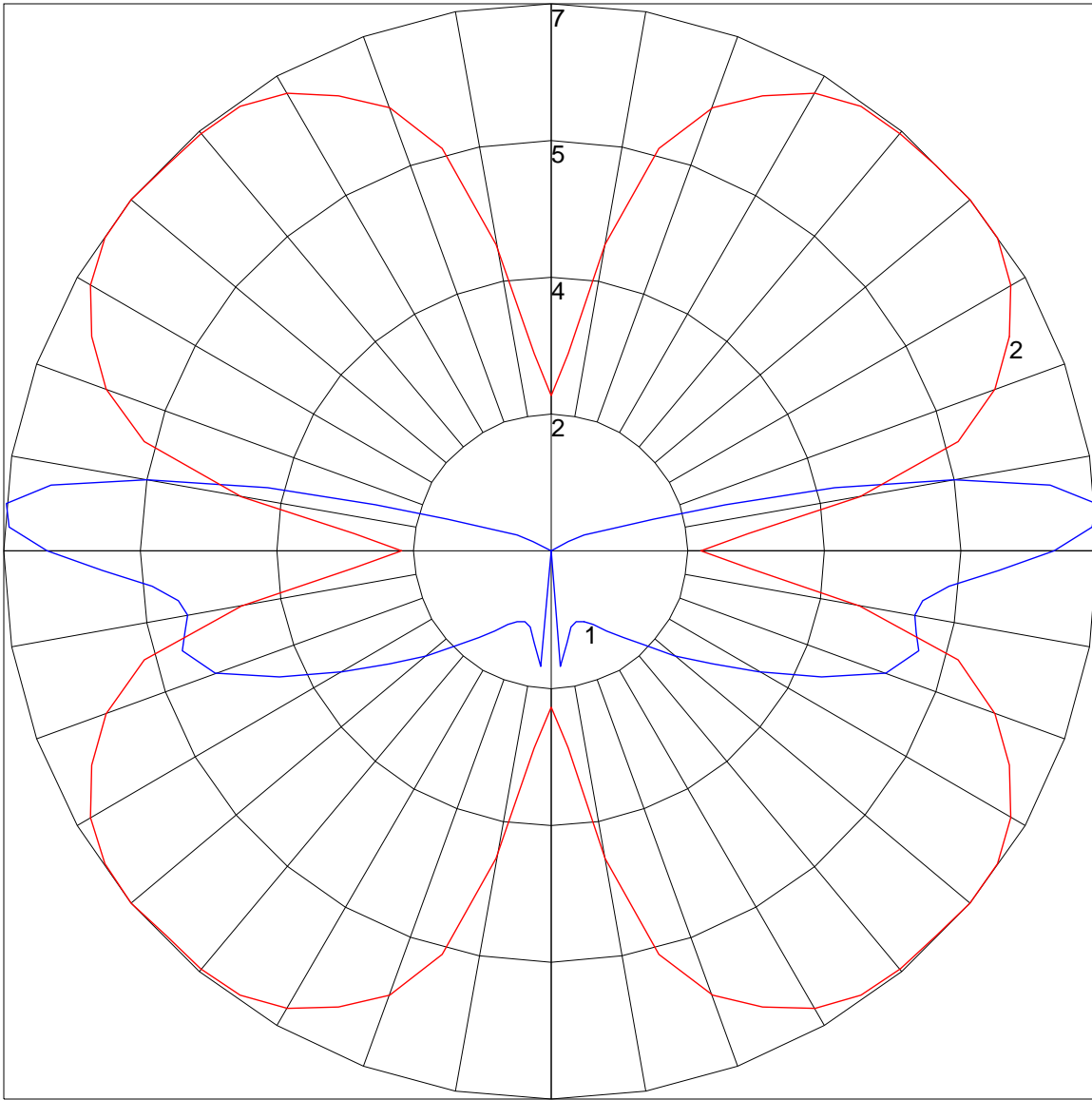
**COEFFICIENTS OF UTILIZATION**



**FLUX DISTRIBUTION**

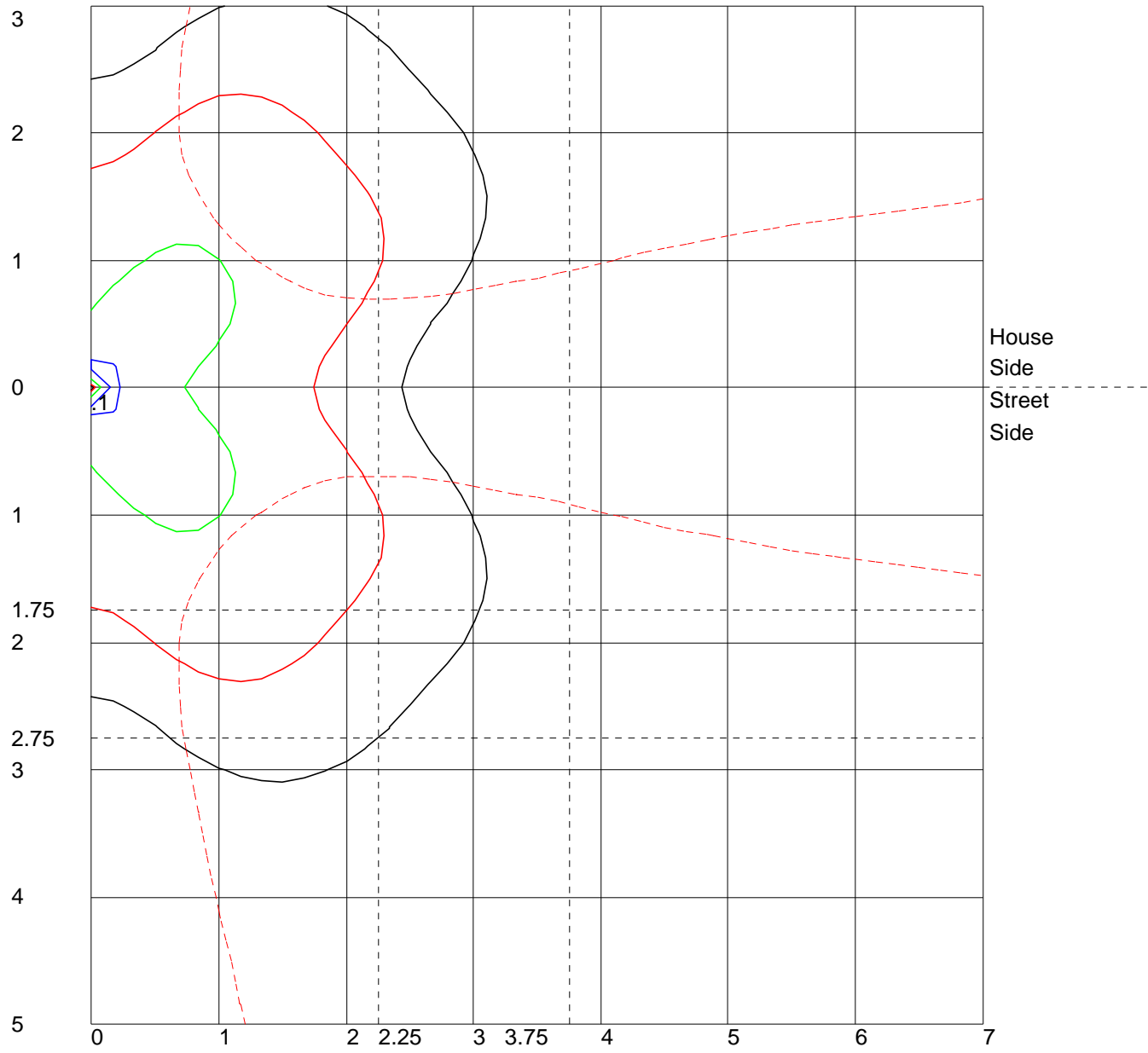
	Lumens	Percent Of Luminaire
Downward Street Side	8.2	32.5
Downward House Side	8.2	32.5
Downward Total	16.4	65.1
Upward Street Side	4.4	17.5
Upward House Side	4.4	17.5
Upward Total	8.8	34.9
Total Flux	25.2	100.1

POLAR GRAPH



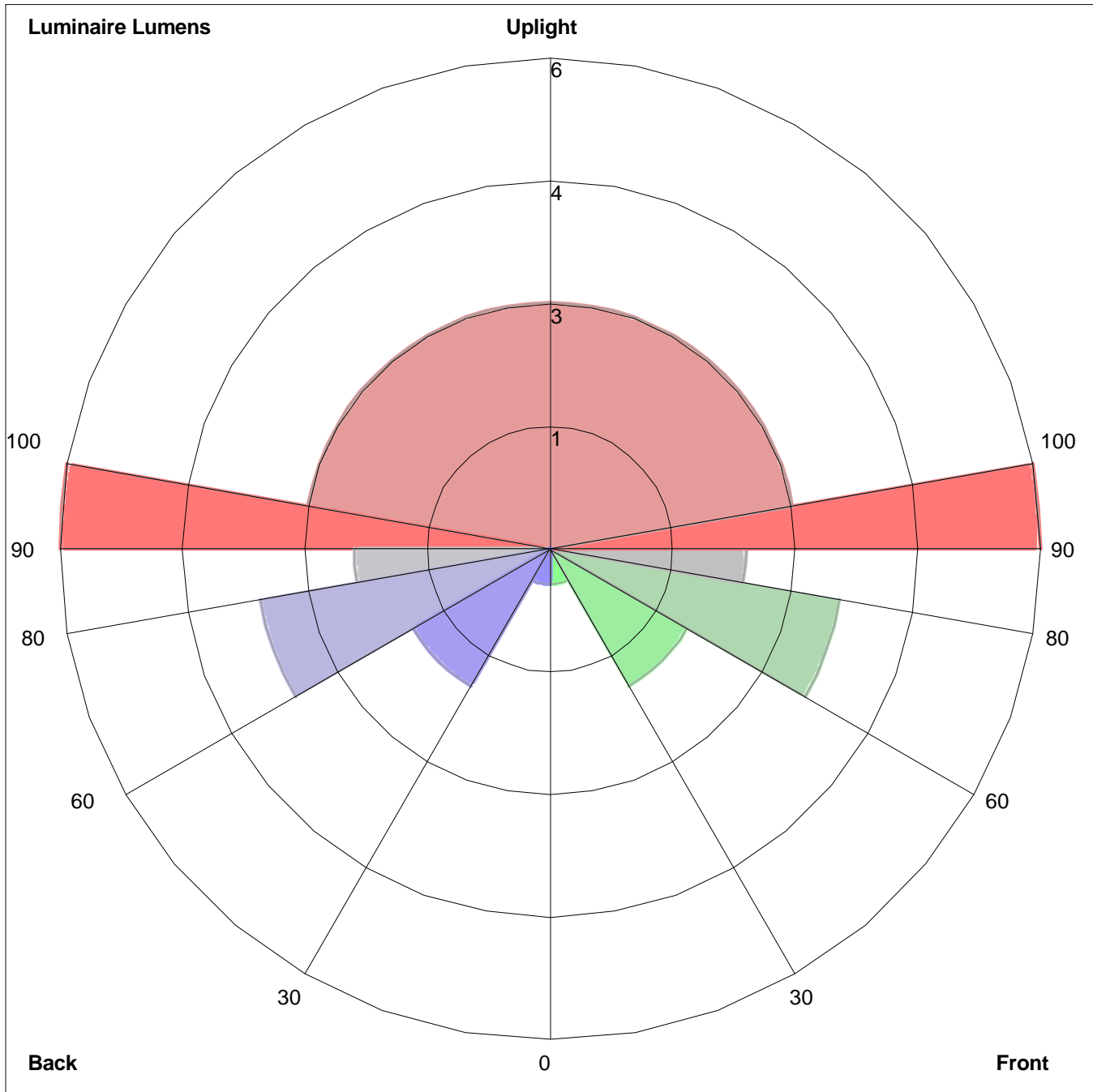
Maximum Candela = 7.27 Located At Horizontal Angle = 40, Vertical Angle = 95  
# 1 - Vertical Plane Through Horizontal Angles (40 - 220) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (95) (Through Max. Cd.)

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=0.4, Medium=1.9, High=3.5, Very High=2.3  
Back: Low=0.4, Medium=1.9, High=3.5, Very High=2.3  
Uplight: Low=5.9, High=2.9

BUG Rating : B0-U1-G0