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Report No: L091706907



**Report No:** L091706907

**Issue Date:** 10/16/2017

**Report Prepared For:** USTE, dba Vista Professional Outdoor Lighting  
1625 Surveyor Ave., Simi Valley CA 93063

**Model Number:** 1470/1471-3Q-B

**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. Received in working and undamaged condition. No modifications were necessary.

**Testing Condition:** Fixture is tested with no special conditions.

**Sample Arrival Date:** 10/12/17

**Date of Tests:** 10/13/17 - 10/16/17

**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	11/28/17
ITECH	IT6122	PS-DC03-S1	11/28/17
Fluke Digital Thermometer	52k/J	MT-TP02-GC	11/28/17
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.

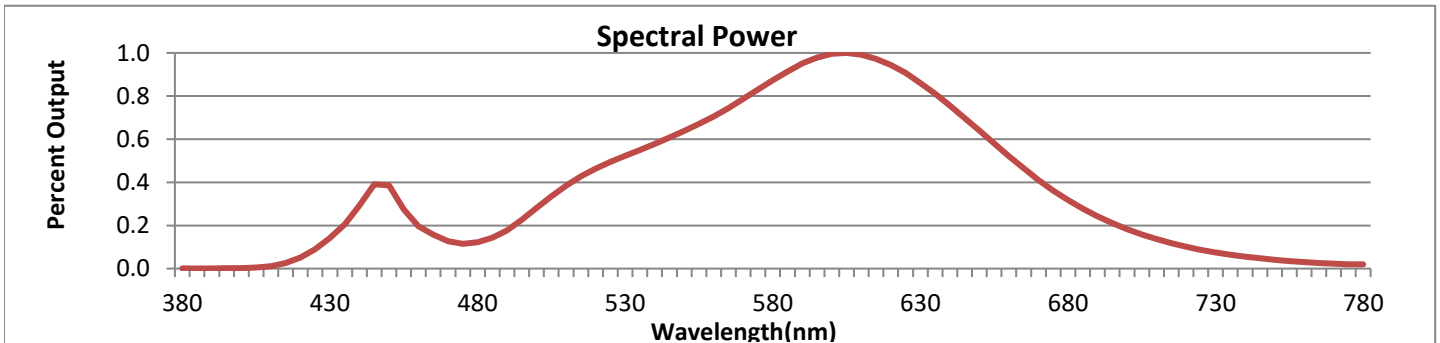
**Test Summary**

<b>Manufacturer:</b>	USTE, dba Vista Professional Outdoor Lighting
<b>Model Number:</b>	1470/1471-3Q-B
<b>Driver Model Number:</b>	ERP ESS030W-0500-56
<b>Total Lumens:</b>	1540.50
<b>Input Voltage (VAC/60Hz):</b>	120.00
<b>Input Current (Amp):</b>	0.22
<b>Input Power (W):</b>	26.34
<b>Input Power Factor:</b>	0.99
<b>Current ATHD @ 120V(%):</b>	12%
<b>Current ATHD @ 277V(%):</b>	N/A
<b>Efficacy:</b>	58
<b>Color Rendering Index (CRI):</b>	81
<b>Correlated Color Temperature (K):</b>	2900
<b>Chromaticity Coordinate x:</b>	0.4495
<b>Chromaticity Coordinate y:</b>	0.4170
<b>Ambient Temperature (°C):</b>	25.0
<b>Stabilization Time (Hours):</b>	1:40
<b>Total Operating Time (Hours):</b>	2:25



FIG. 1 LUMINAIRE

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



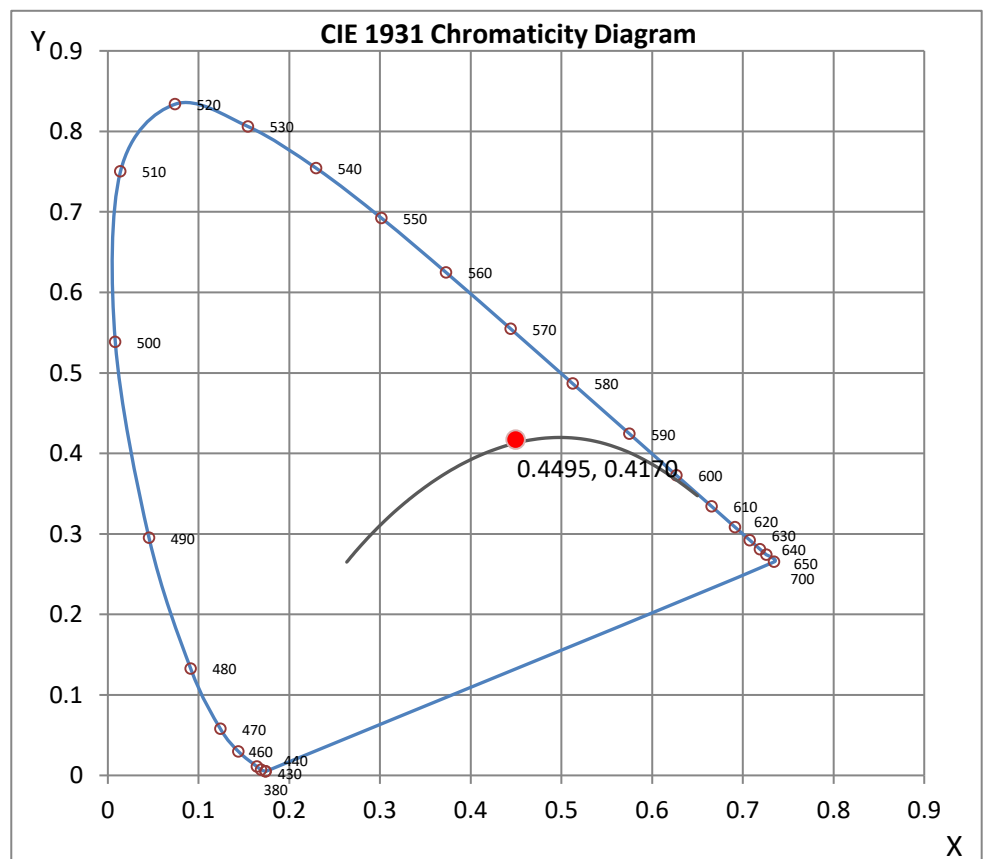
Wavelength	W/m <sup>2</sup> nm	440	0.2927	510	0.3845	580	0.8735	650	0.6396	720	0.1008
380	0.0007	450	0.3861	520	0.4628	590	0.9510	660	0.5220	730	0.0747
390	0.0010	460	0.1962	530	0.5233	600	0.9962	670	0.4103	740	0.0549
400	0.0025	470	0.1273	540	0.5781	610	0.9924	680	0.3176	750	0.0409
410	0.0116	480	0.1218	550	0.6390	620	0.9439	690	0.2425	760	0.0304
420	0.0512	490	0.1775	560	0.7060	630	0.8603	700	0.1827	770	0.0227
430	0.1411	500	0.2809	570	0.7863	640	0.7556	710	0.1363	780	0.0195

**CRI & CCT**

x	0.4495
y	0.4170
u'	0.2531
v'	0.5282
CRI	81.00
CCT	2900
Duv	0.00342

**R Values**

R1	78.82
R2	86.88
R3	94.97
R4	80.76
R5	78.03
R6	82.97
R7	85.19
R8	60.38
R9	7.04
R10	69.99
R11	79.37
R12	64.55
R13	80.12
R14	96.71



\*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 :                     Joseph Shin                    

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 : L091706907.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
 [TEST] L091706907  
 [TESTLAB] LIGHT LABORATORY, INC. (www.lightlaboratory.com)  
 [ISSUEDATE] 10/16/2017  
 [MANUFAC] USTE, DBA VISTA PROFESSIONAL OUTDOOR LIGHTING  
 [LUMCAT] 1470/1471-3Q-B  
 [LUMINAIRE] Bollard, 3 quadrant distribution, 500mA  
 [BALLASTCAT] ERP ESS030W-0500-56  
 [OTHER] INDICATING THE CANDELA VALUES ARE ABSOLUTE AND  
 [MORE] SHOULD NOT BE FACTORED FOR DIFFERENT LAMP RATINGS.  
 [INPUT] 120VAC, 26.34W  
 [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	1540
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	58
Total Luminaire Watts	26.34
Ballast Factor	1.00
Upward Waste Light Ratio	0.06
Maximum Candela	468.9
Maximum Candela Angle	45H 15V
Maximum Candela (<90 Degrees Vertical)	468.9
Maximum Candela Angle (<90 Degrees Vertical)	45H 15V
Maximum Candela At 90 Degrees Vertical	64 (4.2% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	149.8 (9.7% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L091706907.IES**

**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	168.9	N.A.	11.0
FM - Front-Medium (30-60)	422.9	N.A.	27.5
FH - Front-High (60-80)	290.4	N.A.	18.9
FVH - Front-Very High (80-90)	52.8	N.A.	3.4
BL - Back-Low (0-30)	94.5	N.A.	6.1
BM - Back-Medium (30-60)	238.5	N.A.	15.5
BH - Back-High (60-80)	154.1	N.A.	10.0
BVH - Back-Very High (80-90)	29.8	N.A.	1.9
UL - Uplight-Low (90-100)	37.7	N.A.	2.4
UH - Uplight-High (100-180)	50.8	N.A.	3.3
Total	1540.4	N.A.	100.0
BUG Rating	B1-U3-G1		

**ZONAL LUMEN SUMMARY**

Zone	%
0-20	7.3
0-30	17.1
0-40	29.7
0-60	60
0-80	88.9
0-90	94.3
10-90	93
20-40	22.4
20-50	35.9
40-70	48.6
60-80	28.9
70-80	10.7
80-90	5.4
90-110	3.9
90-120	4.7
90-130	5.3
90-150	5.6
90-180	5.7
110-180	1.9
0-180	100

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L091706907.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>	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
<b>5.0</b>	242.3	244.4	245.6	244.7	244.6	247.4	245.0	240.3	238.6	235.1
<b>10.0</b>	395.2	398.4	396.5	393.9	397.5	408.9	411.1	408.3	410.0	410.9
<b>15.0</b>	423.9	434.0	443.2	434.0	429.5	433.5	437.8	441.6	452.4	468.9
<b>20.0</b>	427.0	432.1	435.1	430.7	436.9	441.0	439.9	439.5	449.8	462.1
<b>25.0</b>	434.6	430.5	431.5	437.1	439.7	438.2	443.2	439.6	442.8	444.5
<b>30.0</b>	434.6	435.4	440.8	435.4	435.2	435.1	435.7	430.8	427.9	430.1
<b>35.0</b>	409.3	415.5	416.5	412.6	410.9	417.6	412.1	409.6	411.3	414.3
<b>37.5</b>	397.1	401.8	403.8	399.0	398.8	405.0	399.4	397.2	400.3	403.1
<b>40.0</b>	385.6	387.9	389.0	384.0	385.5	390.6	387.3	384.5	387.5	390.3
<b>42.5</b>	370.4	373.7	374.3	369.2	368.4	373.5	375.9	374.0	373.9	373.8
<b>45.0</b>	355.8	358.3	358.1	352.0	354.0	355.6	359.1	361.2	359.3	358.7
<b>47.5</b>	338.3	339.6	340.8	336.1	336.9	339.0	341.9	346.2	346.7	343.6
<b>50.0</b>	340.0	338.8	339.1	335.7	336.7	338.4	340.2	342.1	342.9	338.8
<b>52.5</b>	373.8	371.5	371.7	367.8	366.1	364.5	365.6	361.4	362.2	357.1
<b>55.0</b>	423.3	419.6	419.5	414.4	409.5	402.7	403.4	395.3	396.5	389.6
<b>57.5</b>	450.4	447.1	441.3	435.9	428.7	421.9	422.5	414.4	415.8	406.4
<b>60.0</b>	444.5	445.5	436.9	435.1	426.1	424.0	424.4	416.6	417.3	407.1
<b>62.5</b>	435.7	439.5	434.8	433.6	424.2	422.8	425.3	416.5	418.8	412.0
<b>65.0</b>	420.6	420.8	417.9	417.1	412.5	407.7	412.4	406.0	408.3	408.2
<b>67.5</b>	369.1	372.4	368.8	368.7	368.8	364.9	367.6	367.0	368.6	370.0
<b>70.0</b>	306.5	308.5	304.6	305.0	307.9	309.4	310.4	311.4	308.3	306.3
<b>72.5</b>	244.4	245.8	244.9	245.6	248.5	251.8	250.7	248.9	246.3	243.9
<b>75.0</b>	198.7	200.2	201.4	203.9	205.1	204.8	202.9	202.8	200.6	198.1
<b>77.5</b>	168.9	169.5	171.0	173.7	174.2	172.5	172.6	172.0	169.9	169.8
<b>80.0</b>	144.0	144.0	143.8	144.2	145.7	146.3	146.5	146.4	146.7	148.8
<b>85.0</b>	93.1	93.4	94.3	94.8	95.9	97.2	98.6	99.3	98.4	97.3
<b>90.0</b>	58.1	58.7	60.1	61.8	63.4	64.0	63.8	63.4	61.9	60.3
<b>95.0</b>	42.9	43.1	43.5	44.1	44.7	44.6	43.8	43.1	42.6	42.2
<b>100.0</b>	33.6	33.6	33.2	32.8	32.6	32.2	32.0	31.9	31.8	31.6
<b>105.0</b>	26.9	26.8	26.7	26.2	25.8	25.4	25.0	24.9	24.8	24.8
<b>110.0</b>	21.3	21.2	21.1	20.9	20.7	20.4	20.3	20.2	20.3	20.1
<b>115.0</b>	17.1	17.2	17.0	17.0	16.9	16.8	16.8	16.6	16.6	16.6
<b>120.0</b>	13.9	13.9	13.9	13.9	13.8	13.7	13.7	13.6	13.7	13.6
<b>125.0</b>	11.2	11.1	11.0	11.0	11.0	11.0	11.0	11.0	10.9	10.8
<b>130.0</b>	8.3	8.4	8.4	8.3	8.3	8.3	8.3	8.3	8.3	8.3
<b>135.0</b>	6.2	5.9	5.9	6.0	5.9	5.9	6.1	6.0	6.0	6.1
<b>140.0</b>	4.2	4.2	4.2	4.2	4.2	4.2	4.3	4.4	4.4	4.4
<b>145.0</b>	3.0	3.0	2.9	3.0	3.0	3.0	3.0	3.1	3.0	3.0
<b>150.0</b>	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.4	2.4
<b>155.0</b>	2.4	2.4	2.5	2.4	2.5	2.6	2.6	2.6	2.4	2.4
<b>160.0</b>	2.0	2.1	2.1	2.0	2.2	2.1	2.1	2.0	2.0	2.0
<b>165.0</b>	1.6	1.6	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5
<b>170.0</b>	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
<b>175.0</b>	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.3
<b>180.0</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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>	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
<b>5.0</b>	229.6	224.4	222.0	217.2	211.5	205.9	201.8	194.6	186.4	178.8
<b>10.0</b>	407.8	405.7	406.9	401.3	389.9	382.5	378.2	364.7	342.9	323.3

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L091706907.IES**

**CANDELA TABULATION - (Cont.)**

15.0	462.8	452.5	448.0	436.5	420.2	404.1	390.8	377.6	364.4	344.9
20.0	460.3	448.5	433.5	422.7	406.2	393.1	380.9	356.9	341.9	325.9
25.0	437.6	430.1	414.2	400.0	387.1	369.4	361.7	349.9	329.5	307.5
30.0	423.9	417.7	406.3	396.5	378.7	363.7	353.0	340.9	324.0	307.8
35.0	409.0	400.7	390.7	381.5	365.0	348.4	340.0	329.6	311.6	299.1
37.5	399.4	389.4	379.8	372.8	356.2	337.1	331.6	321.5	305.7	292.5
40.0	386.2	376.8	367.7	360.8	345.0	327.7	322.7	311.2	297.9	284.7
42.5	372.9	364.1	354.2	346.7	331.4	316.8	311.6	301.6	290.0	277.8
45.0	356.7	349.3	339.1	332.0	319.3	307.0	300.5	288.6	278.3	268.7
47.5	341.4	335.8	328.5	320.1	309.8	297.9	290.4	280.2	270.8	259.1
50.0	336.7	332.8	329.5	320.3	311.4	303.6	295.0	285.1	276.3	263.5
52.5	355.0	349.4	349.0	339.3	332.5	328.1	319.4	309.3	300.5	287.5
55.0	385.6	375.9	375.4	360.9	353.9	351.6	344.7	337.2	329.0	317.5
57.5	400.3	390.6	384.9	370.6	361.1	358.3	352.5	348.8	341.9	334.1
60.0	400.9	393.3	386.7	372.1	360.6	355.6	348.1	346.5	338.8	331.6
62.5	401.1	399.2	392.9	377.6	366.5	361.7	350.7	346.5	340.0	328.9
65.0	398.0	398.8	390.9	373.2	361.7	352.7	341.9	336.1	328.7	315.7
67.5	358.2	358.7	350.3	335.1	323.3	315.3	305.0	297.1	292.7	283.7
70.0	297.7	293.7	286.9	276.9	267.4	258.7	252.4	247.3	240.2	233.9
72.5	236.0	233.9	229.3	221.4	214.7	207.6	202.4	197.7	190.4	184.3
75.0	192.7	192.4	190.6	184.6	180.8	174.6	168.3	163.3	157.2	152.6
77.5	168.8	169.4	168.6	165.8	161.7	155.4	149.8	143.4	137.7	133.2
80.0	148.9	149.8	149.2	146.3	142.4	136.8	131.3	126.4	121.5	116.3
85.0	96.8	96.3	95.2	92.4	89.3	86.8	84.2	80.5	77.8	75.2
90.0	58.7	57.9	57.9	57.0	55.4	53.8	50.9	47.7	45.1	43.0
95.0	41.6	41.2	41.0	40.5	39.5	38.5	36.9	34.4	31.9	29.7
100.0	31.4	31.1	30.7	30.3	29.7	29.3	28.7	27.7	26.2	24.7
105.0	24.6	24.6	24.6	24.3	24.1	23.8	23.5	22.9	22.1	21.2
110.0	20.2	20.1	20.0	20.0	19.8	19.5	19.2	18.7	18.2	17.6
115.0	16.5	16.5	16.6	16.4	16.1	15.9	15.7	15.3	15.0	14.6
120.0	13.5	13.5	13.5	13.3	13.3	13.1	12.9	12.6	12.4	12.0
125.0	11.0	10.8	10.8	10.8	10.6	10.6	10.5	10.2	10.0	9.8
130.0	8.4	8.4	8.4	8.4	8.4	8.3	8.2	8.1	8.0	7.7
135.0	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	5.9	5.9
140.0	4.4	4.4	4.4	4.5	4.5	4.4	4.4	4.4	4.4	4.3
145.0	2.9	3.0	3.1	3.2	3.1	3.2	3.2	3.2	3.1	3.1
150.0	2.4	2.2	2.4	2.5	2.4	2.4	2.4	2.4	2.4	2.5
155.0	2.4	2.3	2.4	2.4	2.4	2.4	2.3	2.4	2.3	2.3
160.0	2.0	2.0	2.1	2.1	2.2	2.1	2.1	2.1	2.0	2.0
165.0	1.5	1.5	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
170.0	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.5
175.0	1.3	1.3	1.3	1.3	1.2	1.3	1.2	1.3	1.3	1.3
180.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**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>
0.0	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8	43.8
5.0	171.4	161.7	150.4	139.6	130.7	119.4	108.8	101.1	91.8	81.7
10.0	312.5	296.4	280.0	267.6	253.8	232.5	211.2	198.7	189.5	178.7
15.0	321.7	304.0	288.1	276.5	273.1	261.6	243.1	232.3	226.5	211.7
20.0	307.3	293.8	285.3	275.0	261.2	254.4	244.1	235.2	224.0	217.9
25.0	301.1	282.0	269.5	263.6	258.1	243.2	233.3	228.1	218.6	207.9
30.0	302.2	284.3	264.4	257.5	254.0	240.9	226.8	220.1	215.9	210.2
35.0	291.4	277.0	261.4	249.9	240.7	230.4	218.3	212.3	209.6	205.5
37.5	283.8	268.9	253.4	244.5	234.6	224.9	213.2	208.2	206.3	199.5



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L091706907.IES**

**CANDELA TABULATION - (Cont.)**

<b>40.0</b>	275.7	260.9	248.1	237.6	226.7	218.1	208.7	201.2	199.0	194.0
<b>42.5</b>	266.8	251.1	240.1	228.6	218.5	211.9	202.8	194.4	191.6	186.2
<b>45.0</b>	255.9	241.5	231.7	218.7	207.4	202.8	194.4	186.4	184.2	179.4
<b>47.5</b>	245.9	233.6	222.5	210.3	199.3	196.0	186.4	178.9	177.4	171.6
<b>50.0</b>	249.1	235.7	225.5	211.5	200.8	194.4	183.0	175.6	170.8	163.0
<b>52.5</b>	272.8	259.3	246.4	231.5	218.3	206.4	191.6	180.1	171.1	160.3
<b>55.0</b>	303.8	288.7	274.4	259.6	243.3	225.6	209.2	194.0	178.5	163.3
<b>57.5</b>	322.9	308.8	292.2	275.9	259.3	239.7	224.8	205.7	187.2	170.0
<b>60.0</b>	321.8	308.9	290.3	277.3	263.5	243.6	228.3	208.2	189.3	172.8
<b>62.5</b>	318.8	307.9	286.4	273.7	258.8	238.3	223.9	206.3	187.4	170.6
<b>65.0</b>	307.7	297.9	276.3	260.5	246.8	227.0	214.3	199.6	181.5	166.5
<b>67.5</b>	273.9	266.6	251.4	237.0	224.4	208.8	194.9	183.0	166.8	153.9
<b>70.0</b>	227.1	220.0	207.8	199.2	189.0	177.3	166.3	156.1	144.2	133.4
<b>72.5</b>	178.5	174.9	166.4	158.0	152.1	144.9	135.7	127.4	118.4	111.7
<b>75.0</b>	146.3	141.4	136.2	131.3	123.3	116.4	111.6	106.0	98.7	92.4
<b>77.5</b>	127.8	122.5	115.5	112.2	106.4	99.0	93.6	89.4	84.0	78.7
<b>80.0</b>	111.4	106.6	99.8	95.0	91.4	87.5	80.2	75.5	71.9	67.8
<b>85.0</b>	72.0	69.5	65.9	62.8	60.4	57.4	55.0	52.6	50.0	47.6
<b>90.0</b>	41.4	40.4	39.8	39.8	38.8	37.7	37.4	35.4	34.0	33.0
<b>95.0</b>	28.1	27.1	27.2	27.4	28.1	27.8	27.6	26.4	25.3	24.1
<b>100.0</b>	23.0	21.9	21.1	20.9	21.1	20.8	20.5	19.9	19.0	18.1
<b>105.0</b>	20.2	19.2	18.4	17.7	17.4	17.0	16.3	15.7	14.9	14.1
<b>110.0</b>	17.0	16.3	15.7	14.9	14.2	13.7	13.2	12.4	11.8	11.2
<b>115.0</b>	14.1	13.6	13.1	12.5	12.0	11.4	10.8	10.2	9.7	9.0
<b>120.0</b>	11.8	11.3	10.8	10.4	10.0	9.4	8.9	8.3	7.9	7.3
<b>125.0</b>	9.6	9.2	8.8	8.4	8.0	7.6	7.2	6.7	6.3	5.9
<b>130.0</b>	7.5	7.3	6.9	6.7	6.3	6.1	5.7	5.3	5.0	4.6
<b>135.0</b>	5.7	5.5	5.2	5.1	4.9	4.6	4.4	4.2	4.2	3.8
<b>140.0</b>	4.2	4.1	4.0	4.0	3.9	3.7	3.5	3.4	3.2	3.2
<b>145.0</b>	3.0	3.0	3.0	3.0	3.0	3.0	2.7	2.6	2.5	2.4
<b>150.0</b>	2.4	2.4	2.6	2.4	2.4	2.5	2.4	2.2	2.1	2.3
<b>155.0</b>	2.3	2.4	2.3	2.3	2.4	2.2	2.2	2.1	2.1	2.0
<b>160.0</b>	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	1.9	1.9
<b>165.0</b>	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.7	1.7
<b>170.0</b>	1.5	1.4	1.5	1.5	1.5	1.4	1.4	1.5	1.5	1.3
<b>175.0</b>	1.4	1.4	1.3	1.3	1.3	1.5	1.5	1.4	1.3	1.3
<b>180.0</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

**Vert. Horizontal Angles**

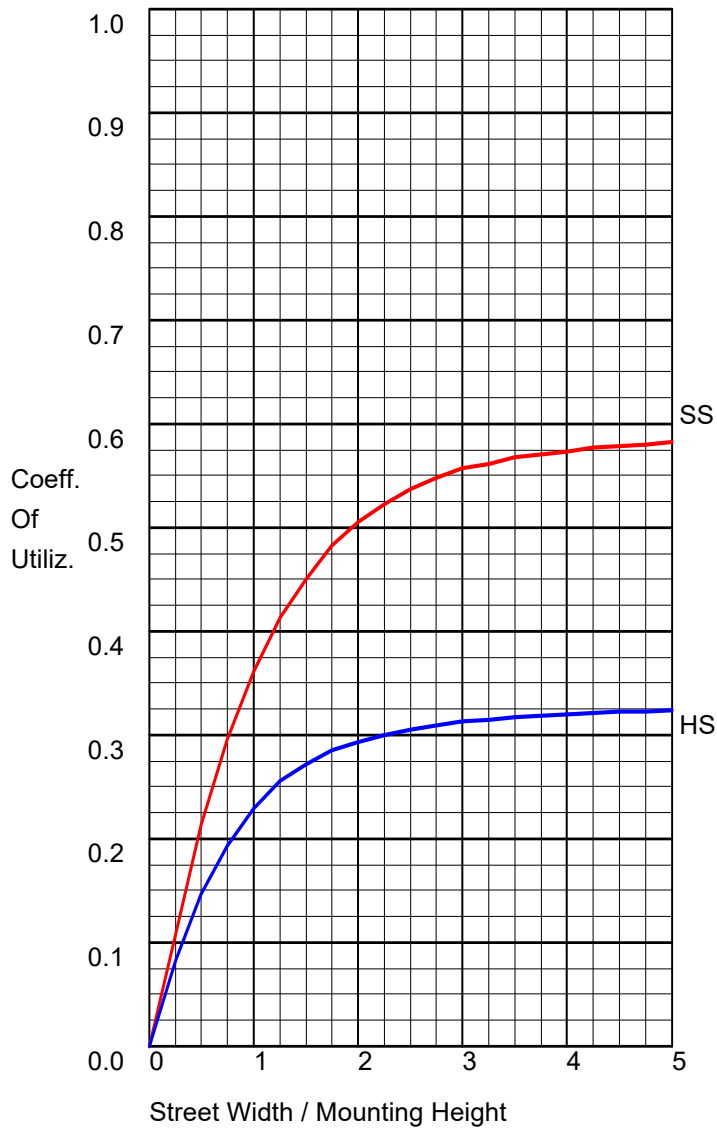
	<b>150</b>	<b>155</b>	<b>160</b>	<b>165</b>	<b>170</b>	<b>175</b>	<b>180</b>
<b>0.0</b>	43.8	43.8	43.8	43.8	43.8	43.8	43.8
<b>5.0</b>	72.0	64.6	57.6	52.8	48.8	46.6	45.5
<b>10.0</b>	164.8	156.1	143.6	134.2	130.8	127.4	125.0
<b>15.0</b>	195.8	193.2	183.1	171.6	167.1	163.7	166.9
<b>20.0</b>	204.1	188.9	183.7	188.4	186.4	177.6	181.1
<b>25.0</b>	202.2	193.5	185.6	189.6	199.6	195.0	197.1
<b>30.0</b>	202.4	203.5	200.4	196.7	196.9	196.1	194.0
<b>35.0</b>	198.5	194.9	193.2	191.7	185.2	191.1	192.6
<b>37.5</b>	192.7	187.8	186.9	185.0	180.0	183.2	186.4
<b>40.0</b>	186.5	181.1	179.9	176.2	172.9	176.3	179.4
<b>42.5</b>	178.4	174.1	173.3	167.6	164.4	167.7	170.4
<b>45.0</b>	170.8	166.3	164.6	159.4	157.6	158.6	160.0
<b>47.5</b>	163.0	159.0	155.8	150.4	148.8	148.7	149.4
<b>50.0</b>	156.2	150.5	144.5	140.1	139.5	138.3	139.4
<b>52.5</b>	151.8	142.6	135.6	131.9	129.5	128.9	130.7

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : L091706907.IES**

**CANDELA TABULATION - (Cont.)**

<b>55.0</b>	151.5	138.1	129.0	124.6	121.4	120.9	122.9
<b>57.5</b>	151.4	136.0	125.2	118.6	114.3	113.3	114.1
<b>60.0</b>	154.1	137.4	124.0	113.9	108.5	106.5	106.6
<b>62.5</b>	152.4	136.2	121.6	111.1	104.5	101.0	99.8
<b>65.0</b>	147.8	132.1	118.3	106.8	99.3	94.7	93.7
<b>67.5</b>	139.0	124.4	111.5	99.6	92.2	87.9	86.4
<b>70.0</b>	121.6	110.1	99.1	90.4	84.3	80.4	79.1
<b>72.5</b>	103.7	94.7	86.7	79.3	75.0	72.2	70.9
<b>75.0</b>	86.5	80.6	74.2	69.1	65.5	63.5	62.8
<b>77.5</b>	73.5	68.6	63.5	59.5	56.4	54.6	54.1
<b>80.0</b>	63.2	58.9	54.6	50.9	48.3	46.4	46.0
<b>85.0</b>	44.9	42.1	38.8	36.2	34.7	33.0	32.3
<b>90.0</b>	31.7	29.9	28.1	26.4	25.0	24.2	23.8
<b>95.0</b>	23.2	22.5	21.8	21.1	20.5	20.1	20.0
<b>100.0</b>	17.2	16.6	16.1	16.0	15.9	16.0	16.0
<b>105.0</b>	13.2	12.6	12.3	12.0	11.9	12.0	12.0
<b>110.0</b>	10.5	9.8	9.5	9.2	8.9	8.9	8.9
<b>115.0</b>	8.5	7.8	7.4	7.0	6.8	6.7	6.6
<b>120.0</b>	6.7	6.3	5.9	5.6	5.3	5.1	5.1
<b>125.0</b>	5.5	5.1	4.7	4.4	4.2	4.0	4.0
<b>130.0</b>	4.4	4.2	3.8	3.6	3.4	3.3	3.2
<b>135.0</b>	3.6	3.4	3.3	3.0	2.8	2.8	2.7
<b>140.0</b>	3.0	2.9	2.6	2.6	2.5	2.4	2.4
<b>145.0</b>	2.4	2.4	2.3	2.2	2.3	2.2	2.3
<b>150.0</b>	2.2	2.1	2.2	2.2	2.1	2.1	2.2
<b>155.0</b>	2.2	2.1	2.0	2.0	2.0	2.0	1.9
<b>160.0</b>	1.9	1.9	1.9	1.8	1.8	1.8	1.7
<b>165.0</b>	1.6	1.7	1.5	1.6	1.5	1.5	1.6
<b>170.0</b>	1.3	1.4	1.3	1.4	1.3	1.4	1.3
<b>175.0</b>	1.3	1.3	1.3	1.3	1.4	1.3	1.3
<b>180.0</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0

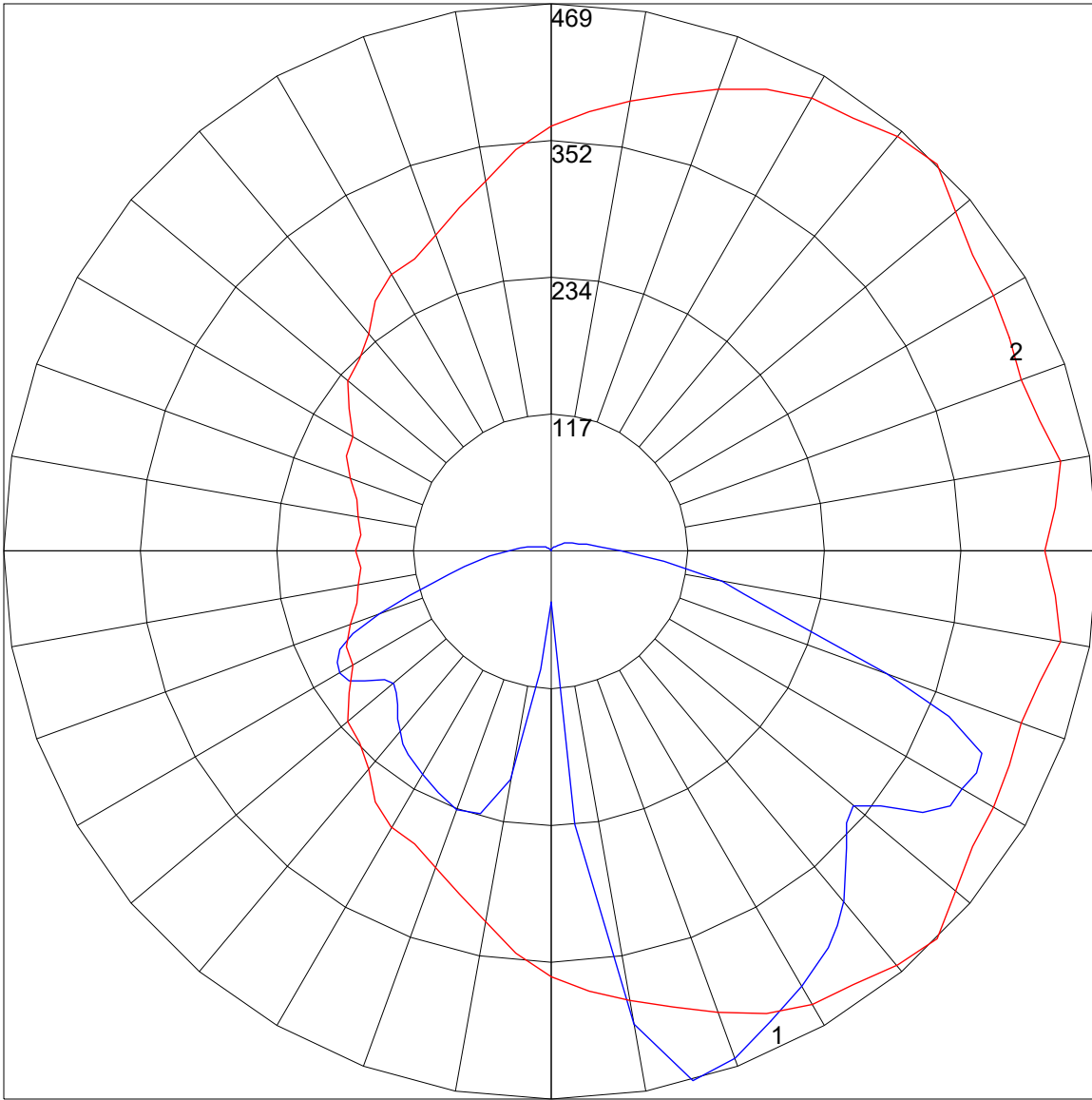
**COEFFICIENTS OF UTILIZATION**



**FLUX DISTRIBUTION**

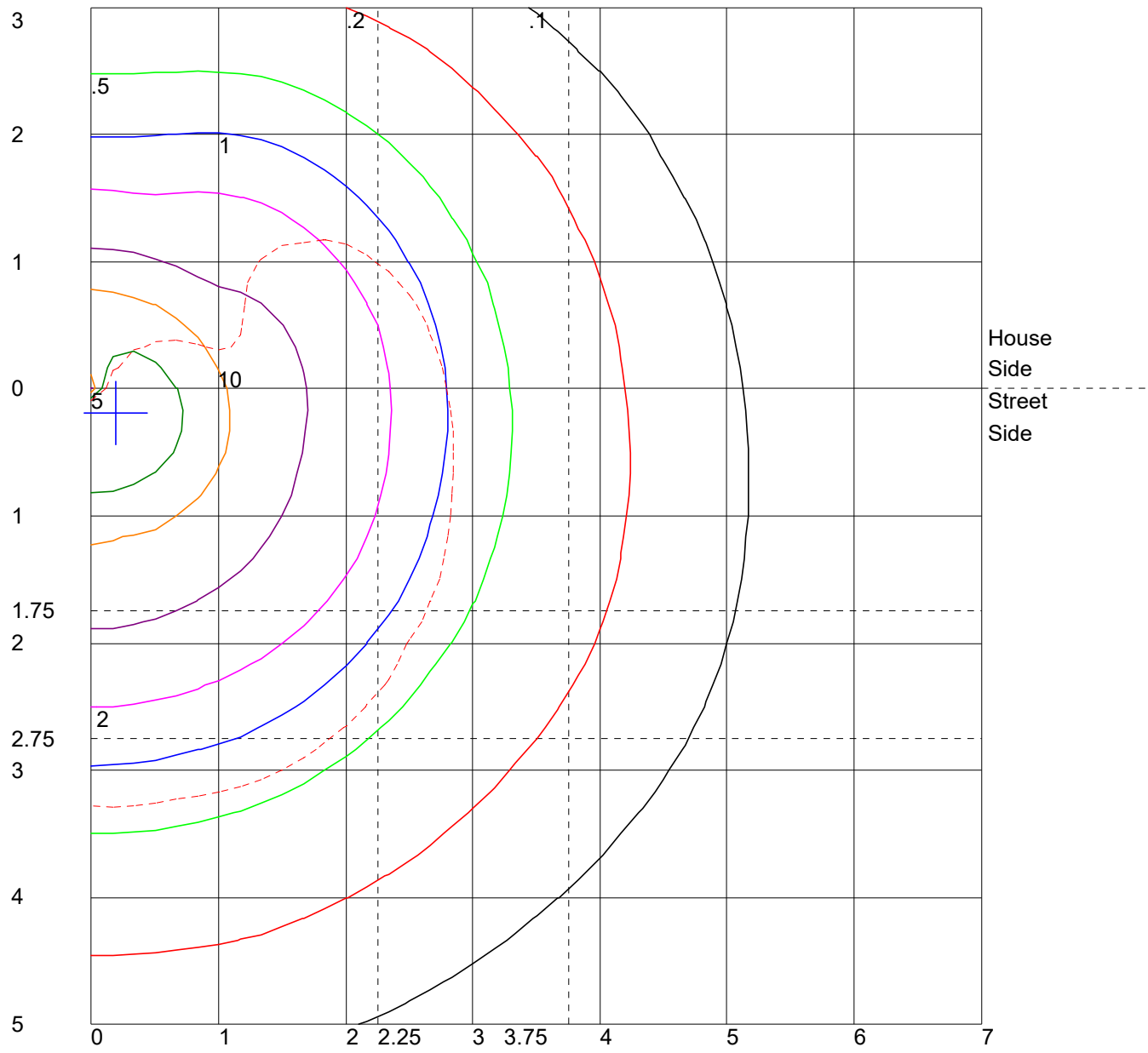
	Lumens	Percent Of Luminaire
Downward Street Side	935.0	60.7
Downward House Side	516.9	33.6
Downward Total	1451.9	94.2
Upward Street Side	54.3	3.5
Upward House Side	34.3	2.2
Upward Total	88.6	5.8
<b>Total Flux</b>	<b>1540.5</b>	<b>100.0</b>

POLAR GRAPH



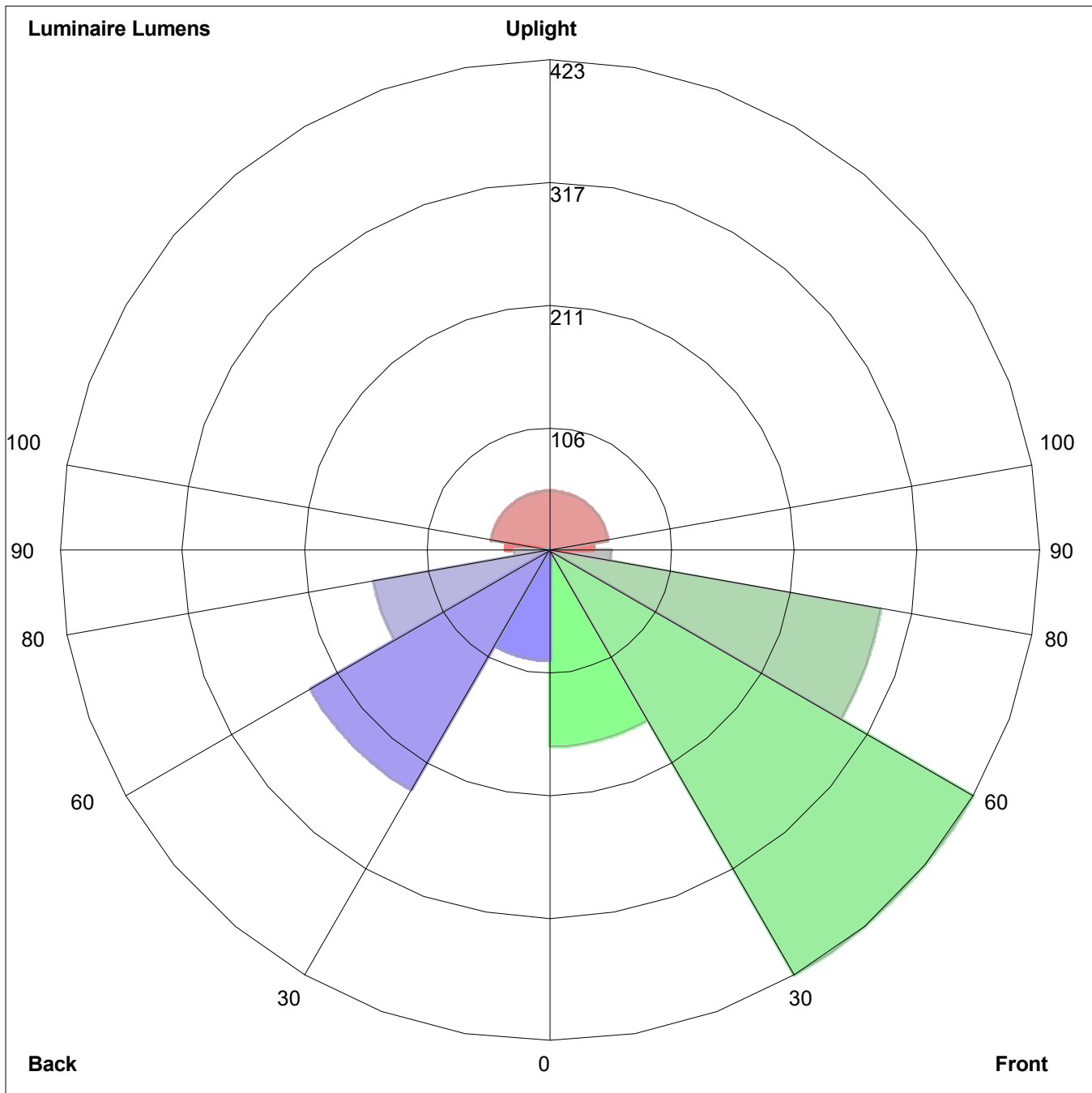
Maximum Candela = 468.9 Located At Horizontal Angle = 45, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height  
 Values Based On 3 Foot Mounting Height  
 1/2 Maximum Candela Trace Shown As Dashed Curve  
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
 Front: Low=168.9, Medium=422.9, High=290.4, Very High=52.8  
 Back: Low=94.5, Medium=238.5, High=154.1, Very High=29.8  
 Uplight: Low=37.7, High=50.8

BUG Rating : B1-U3-G1