



IES ROAD REPORT
PHOTOMETRIC FILENAME : SUH-B-45-48W.IES

DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST]
 [TESTLAB] Photopia 2014.1.2 see: www.ltioptics.com/ies
 [ISSUE DATE] 9.15.2015
 [TEST DATE] Tue Jun 23 08:58:18 2015
 [MANUFAC] Evergreen Lighting
 [LUMCAT] SUH-B-45-48W
 [LUMINAIRE] Light Column Bollard, SULLY Series, 180 Degree
 [_SHIELD] Perforated Shield, 180
 [LAMP] 24W LED, Alta AL-R-1W-35K

CHARACTERISTICS

IES Classification	N.A.
Longitudinal Classification	N.A.
Lumens Per Lamp	4800 (1 lamp)
Total Lamp Lumens	4800
Luminaire Lumens	2107
Downward Total Efficiency	22 %
Total Luminaire Efficiency	44 %
Luminaire Efficacy Rating (LER)	44
Total Luminaire Watts	48
Ballast Factor	1.00
Upward Waste Light Ratio	0.50
Maximum Candela	361.05
Maximum Candela Angle	165H 100V
Maximum Candela (<90 Degrees Vertical)	360.58
Maximum Candela Angle (<90 Degrees Vertical)	165H 85V
Maximum Candela At 90 Degrees Vertical	359.688 (7.5% Lamp Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	360.58 (7.5% Lamp Lumens)
Cutoff Classification (deprecated)	Non-Cutoff



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LUMINAIRE CLASSIFICATION SYSTEM (LCS)

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	8.8	0.2	0.4
FM - Front-Medium (30-60)	91.8	1.9	4.4
FH - Front-High (60-80)	123.9	2.6	5.9
FVH - Front-Very High (80-90)	72.8	1.5	3.5
BL - Back-Low (0-30)	31.1	0.6	1.5
BM - Back-Medium (30-60)	245.0	5.1	11.6
BH - Back-High (60-80)	301.1	6.3	14.3
BVH - Back-Very High (80-90)	172.5	3.6	8.2
UL - Uplight-Low (90-100)	246.5	5.1	11.7
UH - Uplight-High (100-180)	813.2	16.9	38.6
Total	2106.7	43.8	100.0
BUG Rating	B1-U4-G2		

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CANDELA TABULATION

Vert. Angles	Horizontal Angles									
	<u>0</u>	<u>15</u>	<u>30</u>	<u>45</u>	<u>60</u>	<u>75</u>	<u>90</u>	<u>105</u>	<u>120</u>	<u>135</u>
0	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634
5	0.112	0.200	0.290	0.178	1.116	1.718	9.866	6.050	7.992	5.892
10	0.290	0.402	0.916	2.076	5.312	11.742	15.112	12.812	22.276	15.224
15	0.736	0.446	3.750	6.050	9.376	20.312	25.312	33.660	39.576	49.620
20	5.982	6.786	8.126	11.808	22.300	35.312	43.616	54.710	70.112	74.508
25	15.514	17.410	14.710	23.772	33.816	49.910	65.714	82.946	86.964	106.764
30	25.536	25.826	29.084	32.210	49.376	63.014	82.388	106.450	124.508	141.652
35	38.170	40.134	34.084	43.816	62.992	85.312	102.768	131.272	154.576	165.648
40	46.808	47.946	51.852	54.956	66.964	98.170	122.188	152.388	182.388	190.736
45	51.898	60.736	58.438	63.974	90.000	107.768	143.460	181.160	211.340	225.602
50	68.036	66.026	69.018	75.492	93.594	111.406	164.130	191.808	230.960	246.160
55	73.126	77.500	71.160	84.776	99.108	131.316	171.072	206.674	248.706	269.532
60	81.786	83.906	83.438	89.710	107.968	143.572	178.862	219.442	262.768	280.758
65	87.634	90.892	89.910	98.728	121.608	141.340	198.192	235.022	272.300	293.594
70	95.066	96.898	97.344	113.416	124.398	159.576	192.700	248.794	286.160	315.178
75	97.902	100.782	102.098	107.768	128.058	161.696	209.978	249.196	296.094	317.434
80	102.724	101.184	102.232	118.460	131.876	165.580	217.656	256.072	306.898	326.986
85	106.808	106.428	116.830	122.120	138.772	165.916	213.036	269.376	303.236	331.718
90	105.692	102.076	111.228	123.126	139.040	174.308	214.844	263.728	311.876	333.572
95	109.508	103.304	112.098	121.340	135.514	172.746	214.866	268.236	318.550	337.968
100	105.492	100.156	103.236	117.522	142.724	165.112	214.264	274.442	303.148	335.758
105	99.934	100.200	108.594	113.438	140.224	164.956	200.982	260.402	295.224	330.178
110	91.876	100.268	98.258	111.272	136.138	167.834	206.496	240.938	285.178	317.032
115	94.242	92.120	87.544	97.166	121.920	151.830	198.170	233.148	276.138	295.536
120	83.416	81.876	83.794	96.830	112.634	138.326	178.258	230.424	263.684	286.496
125	76.540	75.960	78.392	85.224	109.532	129.352	178.236	216.986	244.218	271.696
130	68.392	68.996	72.590	81.004	96.986	123.906	152.410	199.642	227.188	243.906
135	59.732	59.242	56.852	69.084	87.500	109.554	155.044	178.392	199.376	224.376
140	45.090	49.710	48.660	56.362	75.626	90.290	121.786	148.170	178.014	202.590
145	35.246	34.598	33.348	49.330	63.460	76.964	105.402	129.152	152.768	162.366
150	26.674	25.380	25.626	33.906	47.566	63.214	92.166	114.330	120.134	143.550
155	19.218	14.822	20.626	22.700	32.724	51.072	66.272	88.526	95.178	110.870
160	9.508	8.794	8.304	12.322	25.178	35.648	51.876	62.434	62.434	80.358
165	1.652	2.008	4.018	7.566	11.362	18.058	31.920	41.630	40.648	47.858
170	0.200	0.446	0.848	1.630	3.214	10.424	15.246	24.040	18.572	32.300
175	0.268	0.066	0.000	3.572	2.434	2.344	8.326	11.808	10.044	14.532
180	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050

Vert. Angles	Horizontal Angles									
	<u>150</u>	<u>165</u>	<u>180</u>	<u>195</u>	<u>210</u>	<u>225</u>	<u>240</u>	<u>255</u>	<u>270</u>	<u>285</u>
0	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634	2.634
5	9.598	5.602	9.108	9.018	7.700	9.376	5.112	8.214	8.348	7.812
10	29.866	26.986	29.620	32.008	24.800	27.768	24.486	20.268	10.626	3.862
15	48.214	52.746	55.536	46.138	47.812	51.496	45.156	29.888	28.974	21.004
20	80.358	83.326	88.862	83.950	88.214	79.264	67.834	55.514	45.982	35.134
25	109.376	109.732	118.638	124.598	111.496	112.344	94.152	75.200	64.218	50.626
30	149.084	153.080	159.040	156.206	147.812	138.884	121.986	102.522	81.718	61.742
35	181.718	178.348	177.500	188.282	173.950	173.840	153.638	128.304	106.406	74.642
40	213.884	205.758	215.022	207.634	195.938	193.504	176.160	160.870	127.634	95.670
45	232.634	243.348	239.464	241.764	244.910	216.250	199.442	171.742	147.544	111.184
50	264.130	267.724	261.876	265.066	257.880	243.728	221.920	187.166	164.776	116.206
55	278.728	290.044	289.376	288.014	274.822	275.714	246.986	208.794	166.540	124.888

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CANDELA TABULATION - (Cont.)

60	288.058	305.602	299.084	292.834	291.830	282.120	247.700	227.478	178.036	146.450
65	310.848	315.334	322.410	320.134	312.902	302.232	268.370	242.232	198.126	152.700
70	332.388	335.112	329.330	327.008	335.580	318.460	287.880	244.598	201.652	164.084
75	337.768	350.178	345.938	338.148	333.348	328.416	291.004	258.192	211.362	159.776
80	347.746	345.848	360.200	346.428	342.612	335.514	298.862	272.008	218.080	170.268
85	344.776	360.580	357.188	350.424	352.812	337.656	309.754	268.884	223.974	167.388
90	340.066	358.438	352.076	355.714	359.688	337.924	310.938	272.388	221.674	172.388
95	350.892	360.848	356.072	350.536	353.214	333.840	311.942	268.504	217.880	169.486
100	346.362	361.050	347.746	354.040	337.322	329.576	308.816	272.344	222.434	175.380
105	329.554	338.326	339.196	345.892	338.728	325.848	298.370	255.782	212.634	168.684
110	316.608	337.434	338.660	335.178	342.634	306.206	287.858	254.776	211.316	163.438
115	310.224	317.142	331.116	330.558	324.398	310.268	273.928	235.402	187.924	157.276
120	302.858	294.754	314.642	302.166	305.044	292.812	259.710	228.214	185.982	146.630
125	283.304	283.126	288.192	301.876	287.590	266.228	256.608	209.152	170.626	136.920
130	257.410	253.750	263.014	272.790	273.906	241.518	231.004	189.710	158.572	125.514
135	242.500	237.388	246.116	249.910	236.184	220.826	203.884	176.630	140.134	112.566
140	215.714	222.254	211.406	204.598	211.184	202.300	180.358	157.880	128.906	95.312
145	181.718	187.566	182.076	187.210	181.786	179.464	154.420	125.090	103.438	82.434
150	152.880	154.888	151.562	147.812	159.352	138.126	134.018	103.236	88.684	65.558
155	119.910	115.424	121.584	125.982	117.120	120.424	97.008	84.062	70.938	52.008
160	78.416	95.334	88.304	87.678	81.138	87.746	72.322	58.036	40.626	32.590
165	67.008	53.348	54.242	54.264	68.460	56.072	51.184	46.652	28.170	20.916
170	32.790	33.326	35.848	23.192	31.630	20.648	29.018	23.148	12.344	13.750
175	15.536	9.554	8.526	9.398	11.742	5.782	6.294	8.326	3.348	2.790
180	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050	1.050

Vert. Horizontal Angles

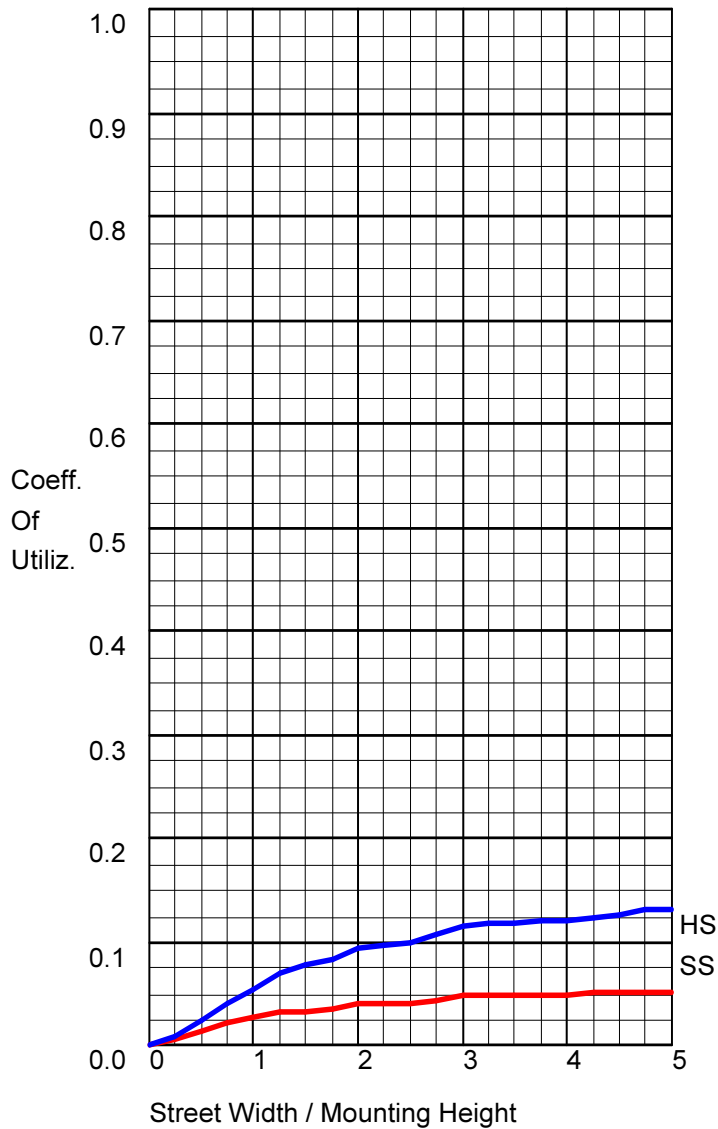
	<u>300</u>	<u>315</u>	<u>330</u>	<u>345</u>	<u>360</u>
0	2.634	2.634	2.634	2.634	2.634
5	2.120	3.550	0.446	1.160	0.112
10	4.598	2.120	0.290	0.290	0.290
15	9.822	4.554	3.572	3.148	0.736
20	20.670	14.910	11.674	8.236	5.982
25	37.276	23.816	16.050	16.518	15.514
30	47.724	29.062	24.376	25.960	25.536
35	54.084	44.398	38.236	38.460	38.170
40	69.242	57.434	49.666	45.134	46.808
45	83.080	69.018	51.272	59.196	51.898
50	99.822	78.928	69.218	62.076	68.036
55	106.294	78.148	76.406	71.250	73.126
60	110.112	96.026	84.152	82.166	81.786
65	116.942	98.348	90.312	84.286	87.634
70	124.666	109.732	94.196	98.126	95.066
75	129.888	111.496	98.974	104.018	97.902
80	132.008	117.858	104.598	108.706	102.724
85	135.044	120.334	100.022	106.964	106.808
90	141.652	121.630	109.866	105.848	105.692
95	135.492	118.794	104.018	109.084	109.508
100	132.434	121.608	106.696	103.282	105.492
105	133.416	112.724	95.804	101.406	99.934
110	122.322	103.080	98.282	95.066	91.876
115	119.956	101.584	92.254	87.566	94.242
120	113.660	96.986	86.674	84.464	83.416
125	112.946	90.670	78.058	75.892	76.540
130	92.032	77.746	69.398	65.000	68.392

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CANDELA TABULATION - (Cont.)

135	79.800	69.642	60.402	54.710	59.732
140	70.982	58.348	48.928	50.960	45.090
145	60.424	47.054	37.098	32.968	35.246
150	46.808	36.608	27.410	26.206	26.674
155	26.138	24.754	20.090	16.652	19.218
160	23.392	11.630	7.790	8.772	9.508
165	11.072	6.584	3.348	2.166	1.652
170	3.772	5.290	0.714	0.246	0.200
175	3.526	1.050	0.156	0.000	0.268
180	1.050	1.050	1.050	1.050	1.050

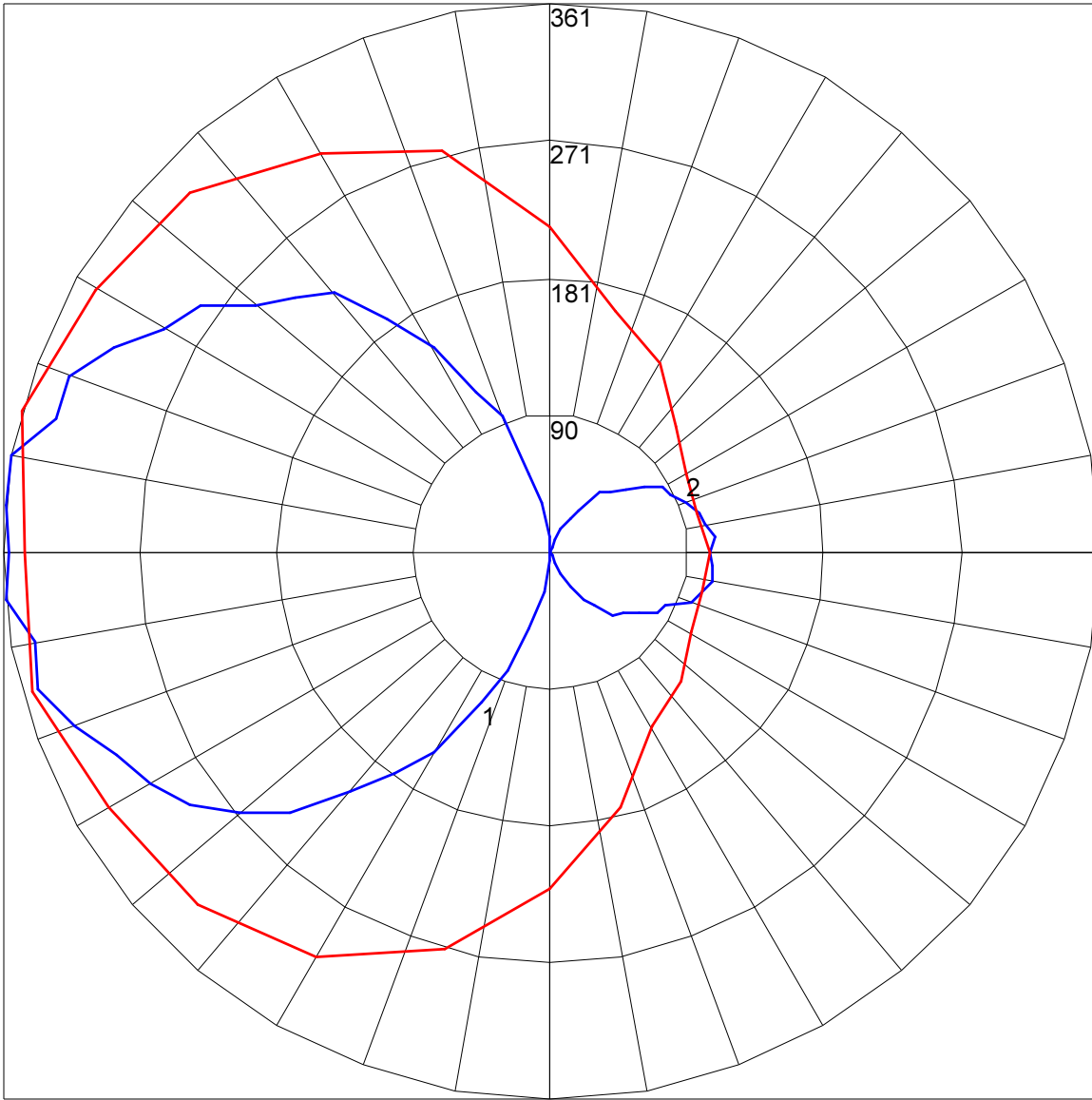
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

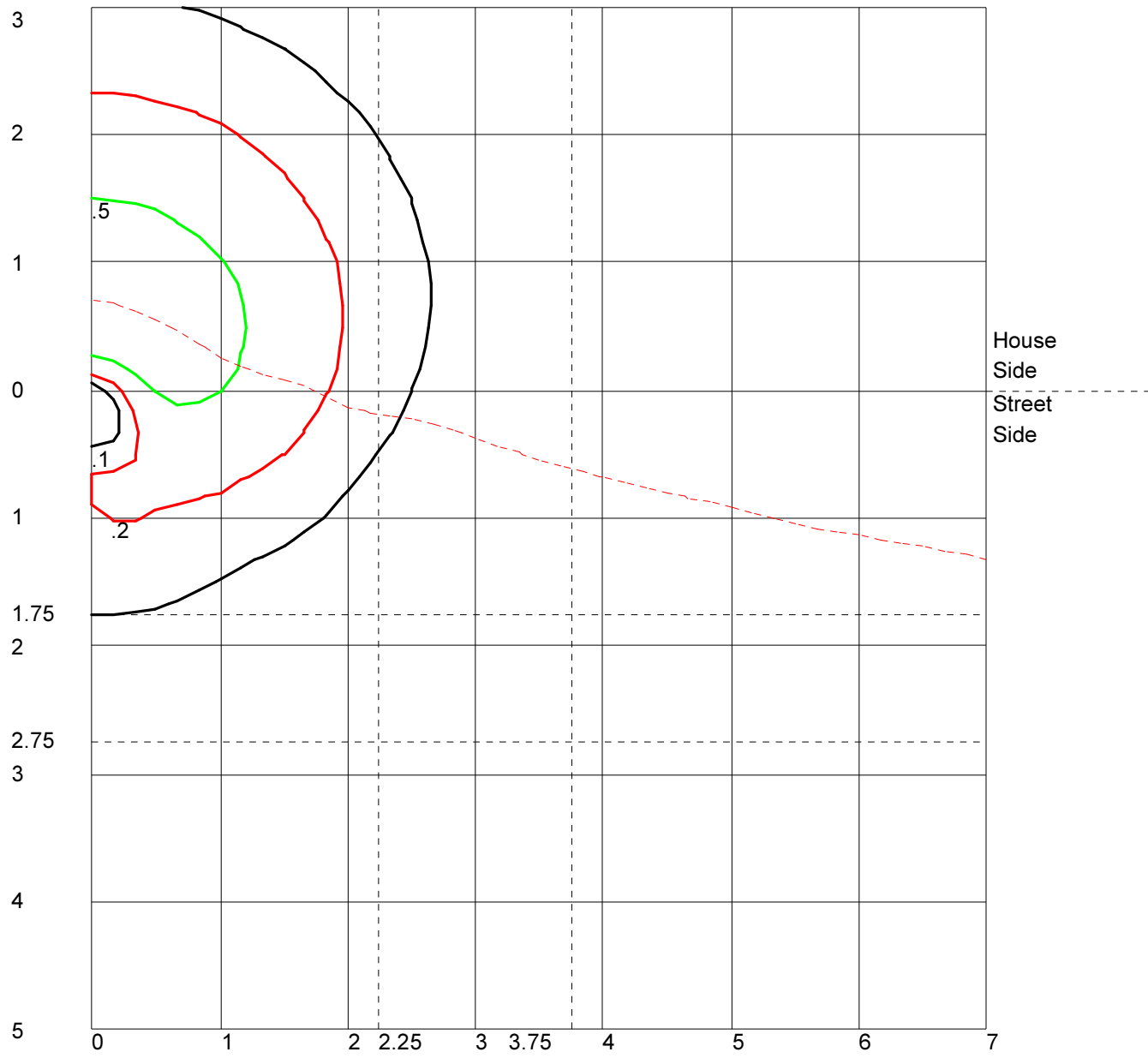
	Lumens	Percent Of Lamp
Downward Street Side	297.3	6.2
Downward House Side	749.8	15.6
Downward Total	1047.1	21.8
Upward Street Side	302.2	6.3
Upward House Side	757.6	15.8
Upward Total	1059.8	22.1
Total Flux	2106.9	43.9

POLAR GRAPH



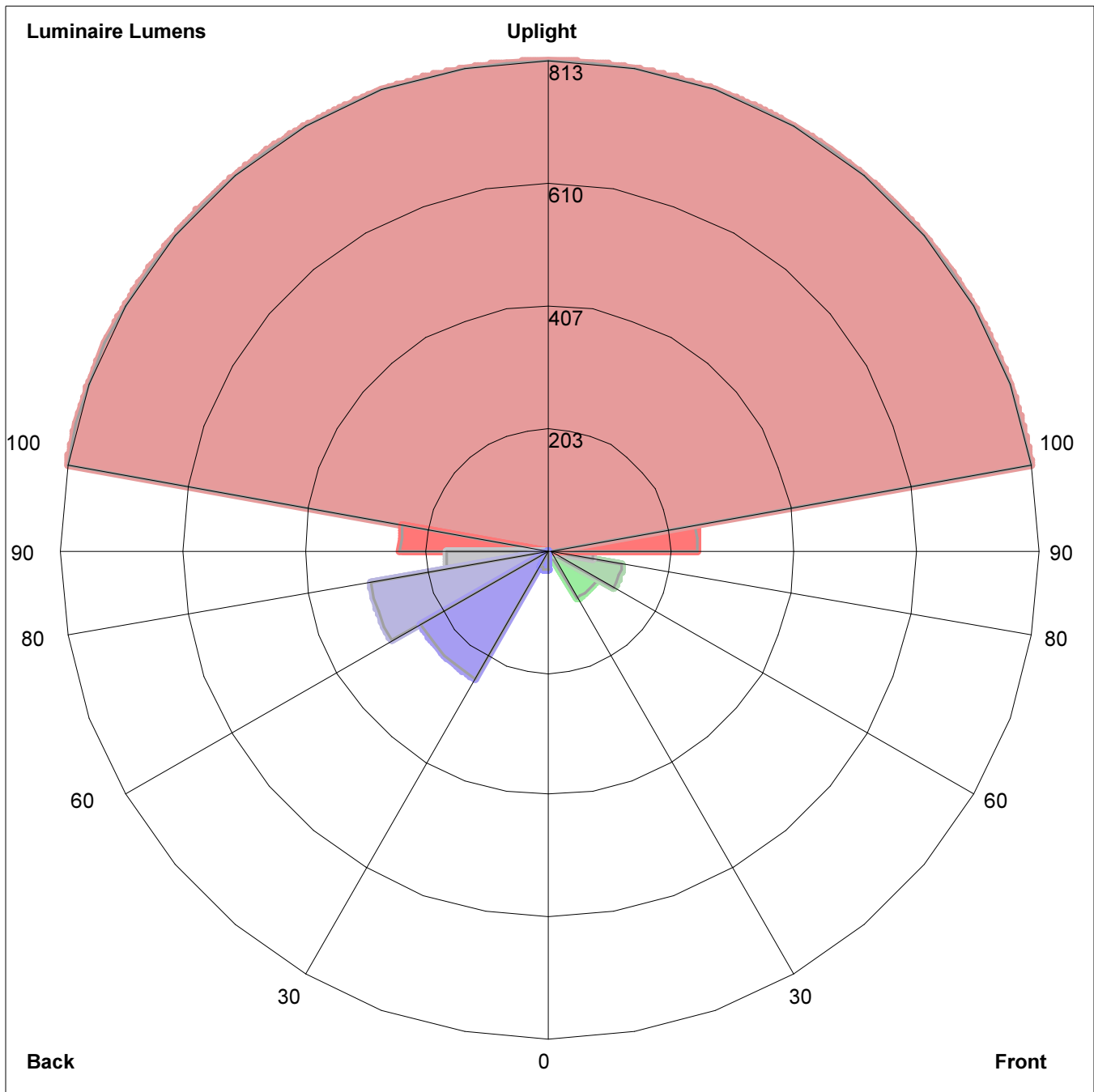
Maximum Candela = 361.05 Located At Horizontal Angle = 165, Vertical Angle = 100
1 - Vertical Plane Through Horizontal Angles (165 - 345) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (100) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



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

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:
Front: Low=8.8, Medium=91.8, High=123.9, Very High=72.8
Back: Low=31.1, Medium=245.0, High=301.1, Very High=172.5
Uplight: Low=246.5, High=813.2

BUG Rating : B1-U4-G2