

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L20-827-XXX-DIM-UNV-M-XXX\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] W4CR\_BARBARA-MEDIUM DIST  
[TESTLAB] LEDIL Inc  
[TESTDATE] 07/03/2025  
[ISSUEDATE] 2025-07-15  
[MANUFAC] H.E. WILLIAMS, INC. - CARTHAGE, MO  
[LUMCAT] W4CR-xx-L20-827-xxx-DIM-UNV-M-xxx  
[LUMINAIRE] 4 INCH ROUND OUTDOOR LED CYLINDER  
[MORE] MEDIUM DISTRIBUTION WITH MICROPRISM LENS  
[MORE] 0-10V LED DRIVER

### CHARACTERISTICS

IES Classification	Type VS
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2010
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	18.1
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3824.637
Maximum Candela Angle	90H 0V
Maximum Candela (<90 Degrees Vertical)	3824.637
Maximum Candela Angle (<90 Degrees Vertical)	90H 0V
Maximum Candela At 90 Degrees Vertical	.285 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1.337 (0.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-827-XXX-DIM-UNV-M-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	836.0	N.A.	41.6
FM - Front-Medium (30-60)	159.4	N.A.	7.9
FH - Front-High (60-80)	9.0	N.A.	0.4
FVH - Front-Very High (80-90)	0.5	N.A.	0.0
BL - Back-Low (0-30)	836.0	N.A.	41.6
BM - Back-Medium (30-60)	159.4	N.A.	7.9
BH - Back-High (60-80)	9.0	N.A.	0.4
BVH - Back-Very High (80-90)	0.5	N.A.	0.0
UL - Uplight-Low (90-100)	0.3	N.A.	0.0
UH - Uplight-High (100-180)	< 0.05	N.A.	0.0
Total	2010.1	N.A.	100.0
BUG Rating	B2-U1-G0		

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**CANDELA TABULATION**

Vert. Angles	Horizontal Angles				
	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0	3824.637	3824.637	3824.637	3824.637	3824.637
1	3818.735	3819.641	3817.099	3816.230	3816.573
2	3802.674	3808.028	3803.989	3802.601	3797.854
3	3774.745	3777.696	3773.489	3774.570	3773.014
4	3735.926	3743.938	3736.671	3737.073	3735.575
5	3696.595	3693.228	3687.561	3686.261	3683.945
6	3635.339	3637.099	3629.657	3625.560	3624.997
7	3568.050	3565.779	3562.251	3554.765	3548.652
8	3482.590	3486.380	3477.375	3469.779	3467.836
9	3385.282	3388.620	3383.303	3377.650	3375.042
10	3275.902	3277.421	3274.945	3272.864	3267.576
11	3157.648	3157.253	3155.741	3152.199	3147.992
12	3027.189	3030.278	3021.835	3023.668	3024.428
13	2891.084	2891.303	2882.955	2891.734	2894.086
14	2745.558	2749.064	2745.982	2753.548	2756.302
15	2596.299	2600.455	2599.433	2609.789	2612.448
16	2450.247	2452.278	2452.292	2463.898	2471.939
17	2306.985	2309.308	2310.301	2319.825	2329.670
18	2160.349	2167.126	2168.573	2178.184	2191.141
19	2026.618	2028.809	2035.105	2044.497	2054.116
20	1893.705	1901.206	1905.946	1915.141	1927.441
21	1770.681	1776.006	1783.141	1791.636	1802.920
22	1654.443	1660.746	1665.581	1676.427	1686.579
23	1544.442	1548.108	1553.659	1565.323	1576.176
24	1441.153	1442.840	1449.800	1460.756	1467.388
25	1341.092	1343.305	1351.134	1361.382	1366.231
26	1243.332	1248.766	1255.777	1264.943	1268.829
27	1147.346	1150.969	1162.750	1171.712	1171.251
28	1051.047	1055.057	1068.554	1074.185	1073.952
29	953.813	963.322	970.283	976.126	976.257
30	854.585	861.947	870.361	875.919	874.451
31	754.619	759.673	766.356	771.096	770.103
32	655.172	659.795	664.864	668.669	667.895
33	555.819	560.099	564.430	567.476	569.141
34	460.338	465.911	468.452	471.907	474.011
35	373.270	378.376	379.866	382.086	385.621
36	304.389	301.219	303.031	303.907	308.603
37	238.152	234.602	236.143	234.778	241.665
38	178.356	181.176	179.452	180.869	186.464
39	137.018	139.713	137.733	142.430	150.208
40	105.137	106.714	108.277	109.475	114.077
41	84.913	83.569	85.242	88.170	92.246
42	66.844	67.939	70.941	73.746	76.579
43	56.187	57.341	59.554	62.301	65.164
44	49.161	50.082	52.032	54.566	56.794
45	44.202	44.962	46.758	48.760	50.505
46	40.718	41.383	42.931	44.487	45.802
47	38.184	38.783	40.054	41.273	42.361
48	36.256	36.796	37.848	38.841	39.761
49	34.766	35.211	36.080	36.869	37.716
50	33.473	33.816	34.583	35.240	35.985
51	32.246	32.531	33.225	33.780	34.452
52	30.960	31.209	31.778	32.231	32.779

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-827-XXX-DIM-UNV-M-XXX\_.IES****CANDELA TABULATION - (Cont.)**

53	29.595	29.821	30.288	30.632	31.085
54	28.178	28.368	28.762	29.040	29.397
55	26.710	26.885	27.221	27.425	27.718
56	25.169	25.329	25.599	25.804	26.016
57	23.598	23.715	23.927	24.131	24.299
58	22.006	22.108	22.276	22.474	22.641
59	20.421	20.502	20.633	20.823	20.976
60	18.858	18.939	19.048	19.209	19.362
61	17.390	17.470	17.522	17.682	17.814
62	16.024	16.083	16.127	16.251	16.382
63	14.761	14.812	14.834	14.936	15.053
64	13.614	13.651	13.665	13.738	13.862
65	12.592	12.621	12.606	12.672	12.803
66	11.620	11.664	11.627	11.701	11.817
67	10.773	10.802	10.766	10.824	10.926
68	9.991	9.999	9.962	10.006	10.108
69	9.261	9.246	9.217	9.232	9.334
70	8.567	8.531	8.494	8.502	8.582
71	7.888	7.844	7.793	7.778	7.859
72	7.216	7.180	7.107	7.077	7.165
73	6.544	6.500	6.420	6.376	6.478
74	5.850	5.806	5.711	5.668	5.763
75	5.098	5.076	4.967	4.930	5.010
76	4.243	4.229	4.119	4.112	4.170
77	3.294	3.279	3.155	3.148	3.199
78	2.198	2.198	2.089	2.030	2.067
79	1.475	1.497	1.453	1.446	1.439
80	1.337	1.329	1.322	1.307	1.307
81	1.249	1.249	1.242	1.234	1.234
82	1.176	1.169	1.176	1.169	1.169
83	1.096	1.088	1.096	1.088	1.096
84	1.008	1.001	1.008	1.001	1.008
85	0.906	0.906	0.906	0.906	0.906
86	0.789	0.789	0.796	0.789	0.796
87	0.672	0.665	0.672	0.657	0.657
88	0.526	0.526	0.526	0.519	0.526
89	0.380	0.372	0.380	0.365	0.365
90	0.285	0.278	0.278	0.256	0.241
91	0.263	0.263	0.263	0.241	0.241
92	0.263	0.263	0.263	0.241	0.241
93	0.270	0.263	0.263	0.248	0.241
94	0.270	0.263	0.270	0.248	0.248
95	0.270	0.263	0.270	0.248	0.256
96	0.270	0.263	0.270	0.256	0.256
97	0.278	0.263	0.270	0.256	0.256
98	0.278	0.270	0.270	0.256	0.263
99	0.285	0.278	0.278	0.263	0.270
100	0.285	0.285	0.278	0.270	0.270
101	0.000	0.000	0.000	0.000	0.000
102	0.000	0.000	0.000	0.000	0.000
103	0.000	0.000	0.000	0.000	0.000
104	0.000	0.000	0.000	0.000	0.000
105	0.000	0.000	0.000	0.000	0.000
106	0.000	0.000	0.000	0.000	0.000
107	0.000	0.000	0.000	0.000	0.000
108	0.000	0.000	0.000	0.000	0.000

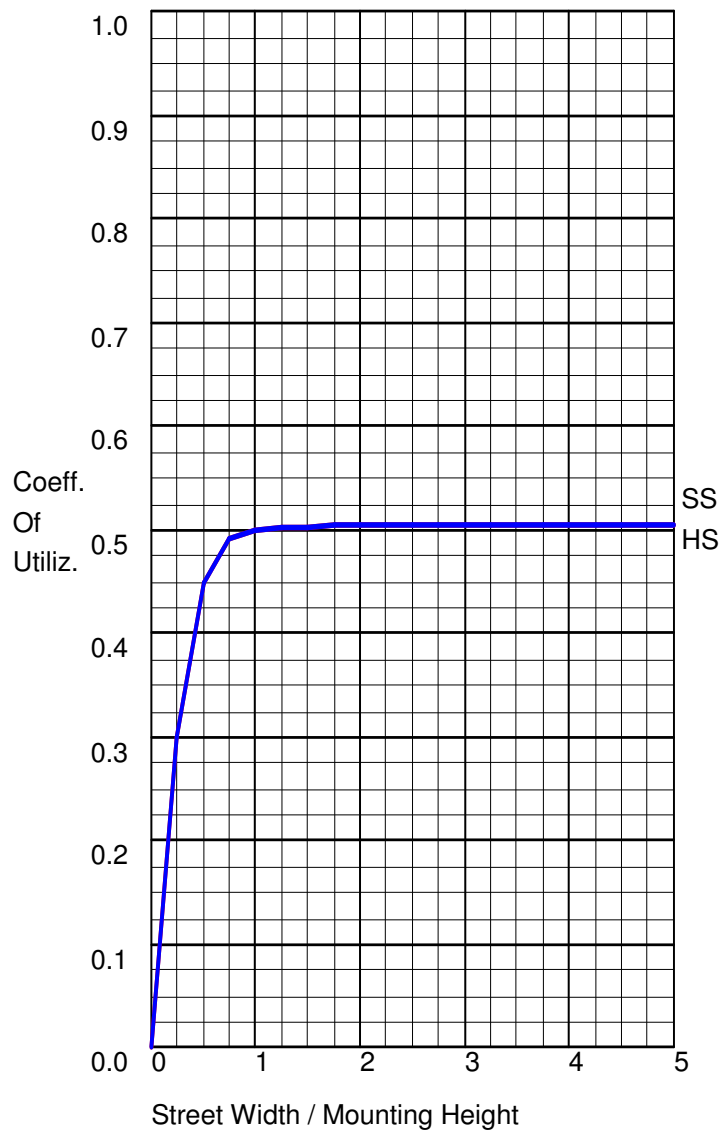
**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-827-XXX-DIM-UNV-M-XXX\_.IES****CANDELA TABULATION - (Cont.)**

109	0.000	0.000	0.000	0.000	0.000
110	0.000	0.000	0.000	0.000	0.000
111	0.000	0.000	0.000	0.000	0.000
112	0.000	0.000	0.000	0.000	0.000
113	0.000	0.000	0.000	0.000	0.000
114	0.000	0.000	0.000	0.000	0.000
115	0.000	0.000	0.000	0.000	0.000
116	0.000	0.000	0.000	0.000	0.000
117	0.000	0.000	0.000	0.000	0.000
118	0.000	0.000	0.000	0.000	0.000
119	0.000	0.000	0.000	0.000	0.000
120	0.000	0.000	0.000	0.000	0.000
121	0.000	0.000	0.000	0.000	0.000
122	0.000	0.000	0.000	0.000	0.000
123	0.000	0.000	0.000	0.000	0.000
124	0.000	0.000	0.000	0.000	0.000
125	0.000	0.000	0.000	0.000	0.000
126	0.000	0.000	0.000	0.000	0.000
127	0.000	0.000	0.000	0.000	0.000
128	0.000	0.000	0.000	0.000	0.000
129	0.000	0.000	0.000	0.000	0.000
130	0.000	0.000	0.000	0.000	0.000
131	0.000	0.000	0.000	0.000	0.000
132	0.000	0.000	0.000	0.000	0.000
133	0.000	0.000	0.000	0.000	0.000
134	0.000	0.000	0.000	0.000	0.000
135	0.000	0.000	0.000	0.000	0.000
136	0.000	0.000	0.000	0.000	0.000
137	0.000	0.000	0.000	0.000	0.000
138	0.000	0.000	0.000	0.000	0.000
139	0.000	0.000	0.000	0.000	0.000
140	0.000	0.000	0.000	0.000	0.000
141	0.000	0.000	0.000	0.000	0.000
142	0.000	0.000	0.000	0.000	0.000
143	0.000	0.000	0.000	0.000	0.000
144	0.000	0.000	0.000	0.000	0.000
145	0.000	0.000	0.000	0.000	0.000
146	0.000	0.000	0.000	0.000	0.000
147	0.000	0.000	0.000	0.000	0.000
148	0.000	0.000	0.000	0.000	0.000
149	0.000	0.000	0.000	0.000	0.000
150	0.000	0.000	0.000	0.000	0.000
151	0.000	0.000	0.000	0.000	0.000
152	0.000	0.000	0.000	0.000	0.000
153	0.000	0.000	0.000	0.000	0.000
154	0.000	0.000	0.000	0.000	0.000
155	0.000	0.000	0.000	0.000	0.000
156	0.000	0.000	0.000	0.000	0.000
157	0.000	0.000	0.000	0.000	0.000
158	0.000	0.000	0.000	0.000	0.000
159	0.000	0.000	0.000	0.000	0.000
160	0.000	0.000	0.000	0.000	0.000
161	0.000	0.000	0.000	0.000	0.000
162	0.000	0.000	0.000	0.000	0.000
163	0.000	0.000	0.000	0.000	0.000
164	0.000	0.000	0.000	0.000	0.000

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-827-XXX-DIM-UNV-M-XXX\_.IES****CANDELA TABULATION - (Cont.)**

165	0.000	0.000	0.000	0.000	0.000
166	0.000	0.000	0.000	0.000	0.000
167	0.000	0.000	0.000	0.000	0.000
168	0.000	0.000	0.000	0.000	0.000
169	0.000	0.000	0.000	0.000	0.000
170	0.000	0.000	0.000	0.000	0.000
171	0.000	0.000	0.000	0.000	0.000
172	0.000	0.000	0.000	0.000	0.000
173	0.000	0.000	0.000	0.000	0.000
174	0.000	0.000	0.000	0.000	0.000
175	0.000	0.000	0.000	0.000	0.000
176	0.000	0.000	0.000	0.000	0.000
177	0.000	0.000	0.000	0.000	0.000
178	0.000	0.000	0.000	0.000	0.000
179	0.000	0.000	0.000	0.000	0.000
180	0.000	0.000	0.000	0.000	0.000

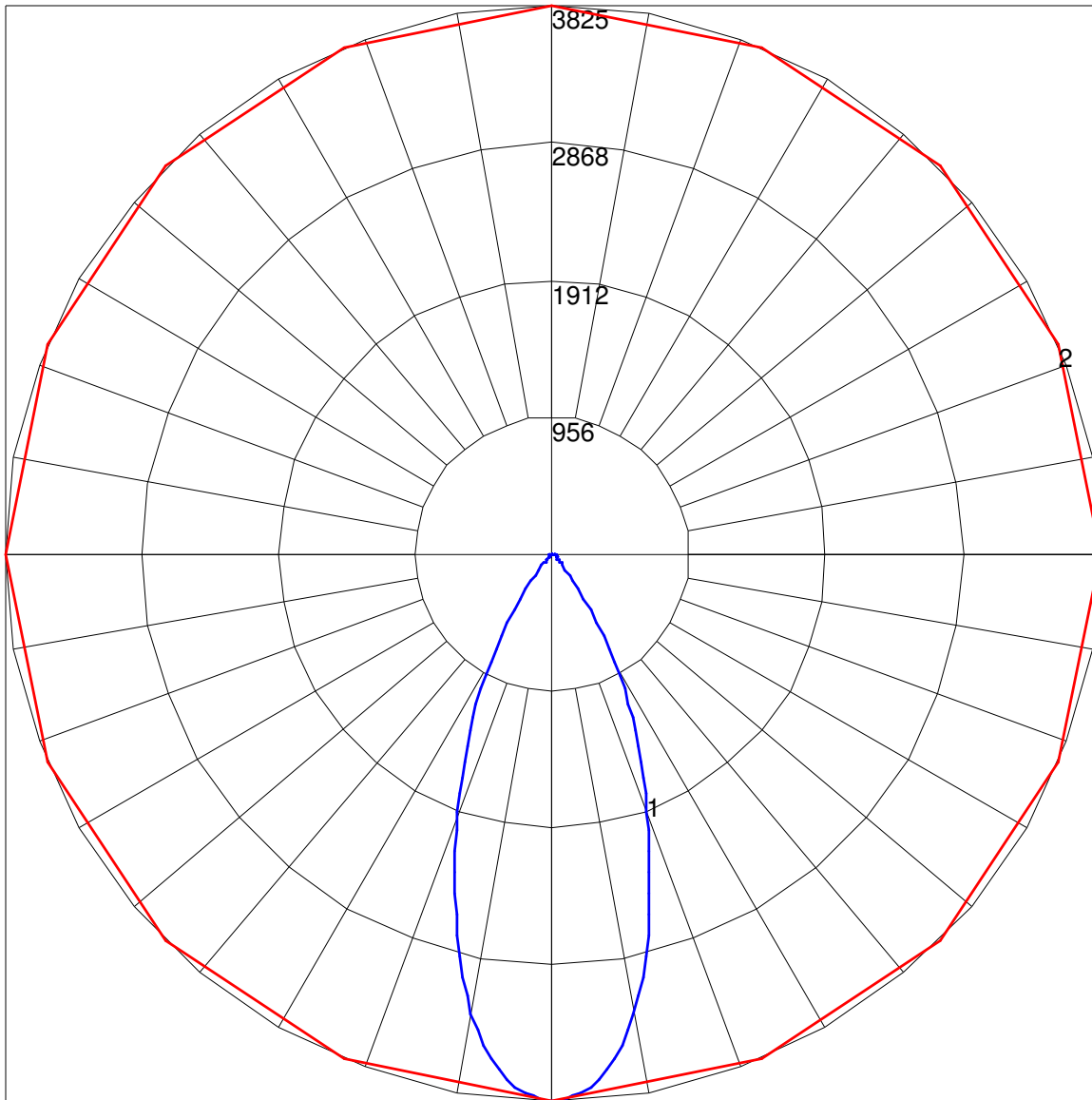
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

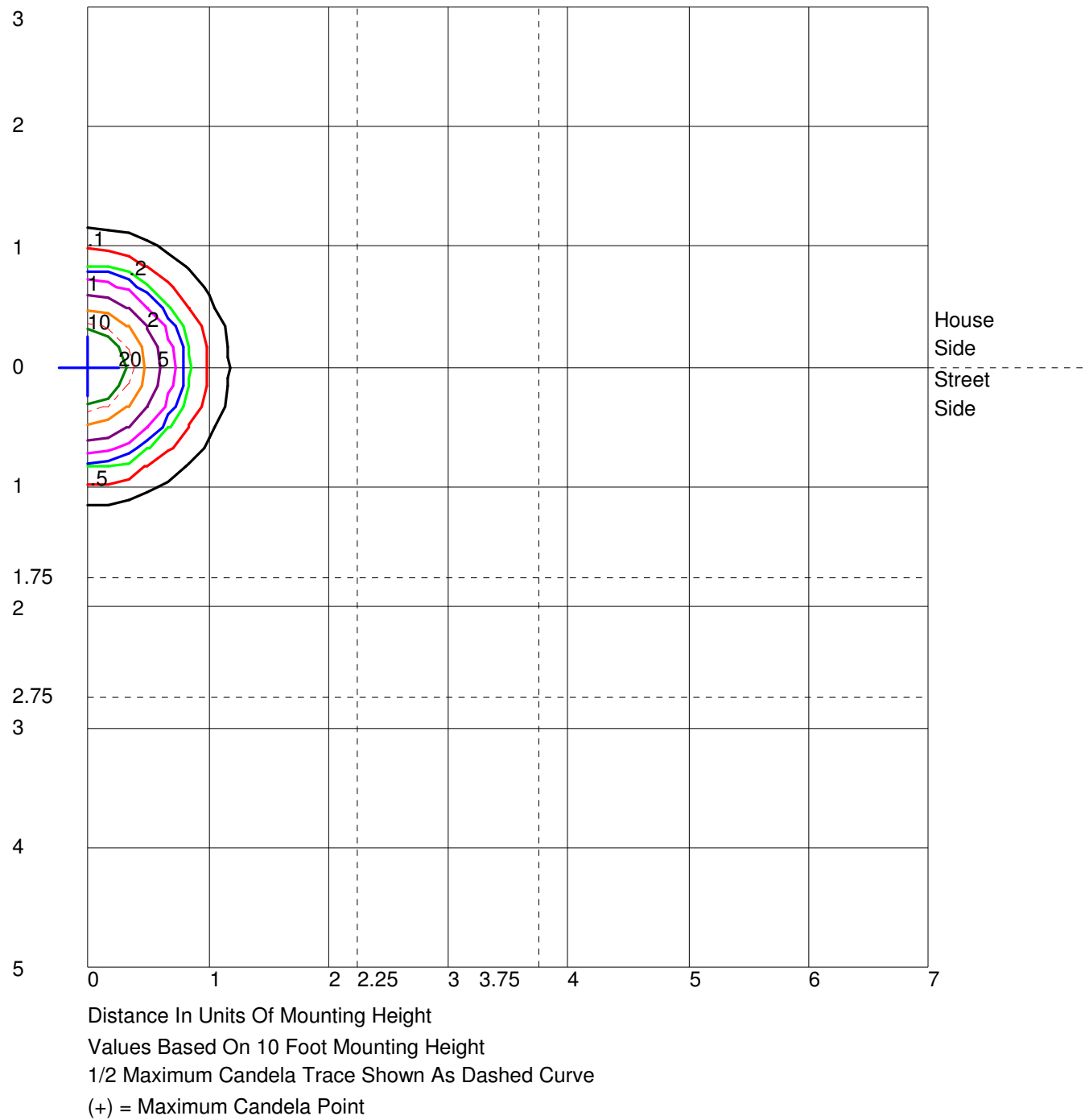
	Lumens	Percent Of Luminaire
Downward Street Side	1004.9	50.0
Downward House Side	1004.9	50.0
Downward Total	2009.8	100.0
Upward Street Side	0.2	0.0
Upward House Side	0.2	0.0
Upward Total	0.4	0.0
Total Flux	2010.2	100.0

POLAR GRAPH

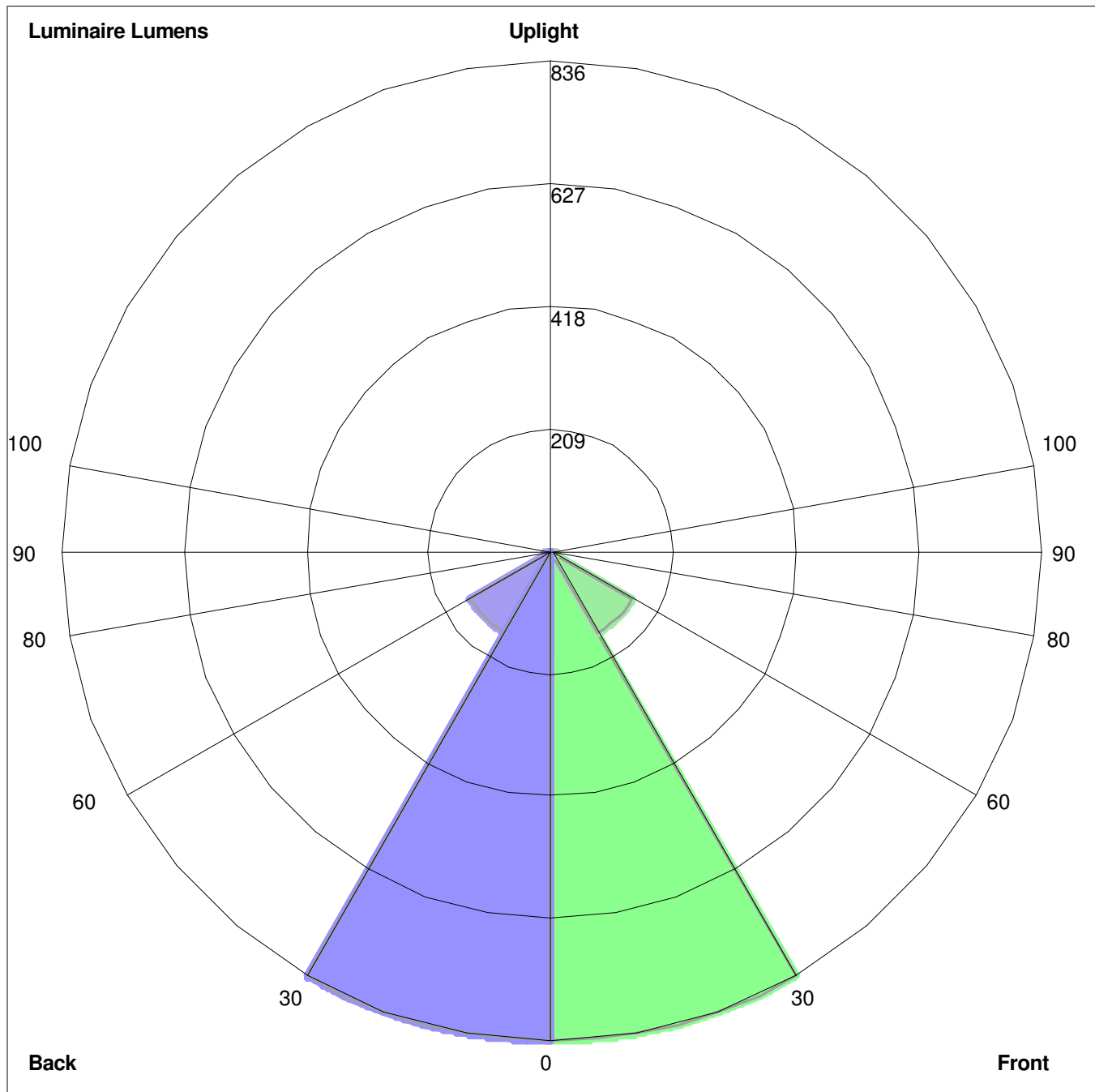


Maximum Candela = 3824.637 Located At Horizontal Angle = 90, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=836.0, Medium=159.4, High=9.0, Very High=0.5  
Back: Low=836.0, Medium=159.4, High=9.0, Very High=0.5  
Uplight: Low=0.3, High=0.0

BUG Rating : B2-U1-G0