

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L20-830-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-L20-830-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	2051
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	18.1
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	3902.691
Maximum Candela Angle	90H 0V
Maximum Candela (<90 Degrees Vertical)	3902.691
Maximum Candela Angle (<90 Degrees Vertical)	90H 0V
Maximum Candela At 90 Degrees Vertical	.291 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1.364 (0.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-830-XXX-DIM-UNV-M-XXX\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	853.1	N.A.	41.6
FM - Front-Medium (30-60)	162.6	N.A.	7.9
FH - Front-High (60-80)	9.1	N.A.	0.4
FVH - Front-Very High (80-90)	0.5	N.A.	0.0
BL - Back-Low (0-30)	853.1	N.A.	41.6
BM - Back-Medium (30-60)	162.6	N.A.	7.9
BH - Back-High (60-80)	9.1	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	2050.9	N.A.	100.0
BUG Rating	B2-U1-G0		

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-830-XXX-DIM-UNV-M-XXX\_.IES****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	3902.691	3902.691	3902.691	3902.691	3902.691
1	3896.669	3897.593	3895.000	3894.113	3894.463
2	3880.281	3885.743	3881.622	3880.206	3875.362
3	3851.781	3854.792	3850.499	3851.602	3850.015
4	3812.170	3820.345	3812.930	3813.340	3811.812
5	3772.037	3768.601	3762.818	3761.491	3759.129
6	3709.530	3711.326	3703.732	3699.551	3698.977
7	3640.868	3638.550	3634.951	3627.311	3621.074
8	3553.663	3557.531	3548.342	3540.591	3538.609
9	3454.370	3457.776	3452.350	3446.582	3443.921
10	3342.758	3344.308	3341.781	3339.657	3334.261
11	3222.090	3221.687	3220.145	3216.530	3212.237
12	3088.969	3092.121	3083.506	3085.376	3086.152
13	2950.086	2950.310	2941.792	2950.750	2953.150
14	2801.590	2805.167	2802.022	2809.743	2812.553
15	2649.286	2653.526	2652.483	2663.051	2665.764
16	2500.253	2502.325	2502.339	2514.182	2522.387
17	2354.067	2356.437	2357.450	2367.169	2377.215
18	2204.438	2211.354	2212.829	2222.637	2235.858
19	2067.978	2070.213	2076.638	2086.222	2096.037
20	1932.352	1940.006	1944.843	1954.226	1966.776
21	1806.818	1812.251	1819.532	1828.200	1839.714
22	1688.207	1694.639	1699.573	1710.640	1720.999
23	1575.961	1579.702	1585.366	1597.269	1608.343
24	1470.564	1472.286	1479.388	1490.567	1497.334
25	1368.461	1370.719	1378.709	1389.165	1394.114
26	1268.706	1274.251	1281.406	1290.759	1294.724
27	1170.762	1174.458	1186.480	1195.624	1195.155
28	1072.497	1076.589	1090.361	1096.108	1095.869
29	973.279	982.982	990.085	996.047	996.181
30	872.025	879.538	888.123	893.795	892.297
31	770.019	775.177	781.996	786.833	785.819
32	668.543	673.260	678.432	682.315	681.525
33	567.163	571.530	575.949	579.057	580.756
34	469.733	475.419	478.013	481.538	483.684
35	380.888	386.098	387.618	389.884	393.491
36	310.601	307.367	309.215	310.109	314.902
37	243.012	239.390	240.963	239.569	246.597
38	181.996	184.873	183.114	184.560	190.269
39	139.814	142.564	140.544	145.336	153.274
40	107.283	108.892	110.487	111.709	116.405
41	86.646	85.275	86.981	89.970	94.128
42	68.208	69.326	72.389	75.251	78.142
43	57.334	58.512	60.770	63.572	66.494
44	50.165	51.104	53.093	55.680	57.953
45	45.104	45.879	47.713	49.755	51.536
46	41.549	42.227	43.807	45.395	46.736
47	38.963	39.574	40.871	42.116	43.226
48	36.996	37.547	38.620	39.634	40.573
49	35.475	35.930	36.817	37.622	38.486
50	34.156	34.506	35.289	35.960	36.720
51	32.904	33.195	33.903	34.469	35.155
52	31.592	31.846	32.427	32.889	33.448

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-830-XXX-DIM-UNV-M-XXX\_.IES****CANDELA TABULATION - (Cont.)**

53	30.199	30.430	30.907	31.257	31.719
54	28.753	28.947	29.349	29.632	29.997
55	27.255	27.434	27.776	27.985	28.283
56	25.682	25.846	26.122	26.331	26.547
57	24.080	24.199	24.415	24.624	24.795
58	22.455	22.560	22.731	22.932	23.104
59	20.838	20.920	21.054	21.248	21.404
60	19.243	19.325	19.437	19.601	19.757
61	17.745	17.827	17.879	18.043	18.177
62	16.351	16.411	16.456	16.582	16.717
63	15.062	15.114	15.137	15.241	15.360
64	13.892	13.929	13.944	14.019	14.145
65	12.849	12.878	12.863	12.931	13.065
66	11.857	11.902	11.865	11.939	12.059
67	10.993	11.023	10.985	11.045	11.149
68	10.195	10.203	10.166	10.210	10.315
69	9.450	9.435	9.405	9.420	9.525
70	8.742	8.705	8.668	8.675	8.757
71	8.049	8.004	7.952	7.937	8.019
72	7.363	7.326	7.252	7.222	7.311
73	6.678	6.633	6.551	6.506	6.611
74	5.970	5.925	5.828	5.783	5.880
75	5.202	5.180	5.068	5.031	5.113
76	4.330	4.315	4.203	4.196	4.256
77	3.361	3.346	3.220	3.212	3.264
78	2.243	2.243	2.131	2.072	2.109
79	1.505	1.528	1.483	1.476	1.468
80	1.364	1.356	1.349	1.334	1.334
81	1.274	1.274	1.267	1.260	1.260
82	1.200	1.192	1.200	1.192	1.192
83	1.118	1.110	1.118	1.110	1.118
84	1.028	1.021	1.028	1.021	1.028
85	0.924	0.924	0.924	0.924	0.924
86	0.805	0.805	0.812	0.805	0.812
87	0.686	0.678	0.686	0.671	0.671
88	0.537	0.537	0.537	0.529	0.537
89	0.388	0.380	0.388	0.373	0.373
90	0.291	0.283	0.283	0.261	0.246
91	0.268	0.268	0.268	0.246	0.246
92	0.268	0.268	0.268	0.246	0.246
93	0.276	0.268	0.268	0.253	0.246
94	0.276	0.268	0.276	0.253	0.253
95	0.276	0.268	0.276	0.253	0.261
96	0.276	0.268	0.276	0.261	0.261
97	0.283	0.268	0.276	0.261	0.261
98	0.283	0.276	0.276	0.261	0.268
99	0.291	0.283	0.283	0.268	0.276
100	0.291	0.291	0.283	0.276	0.276
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

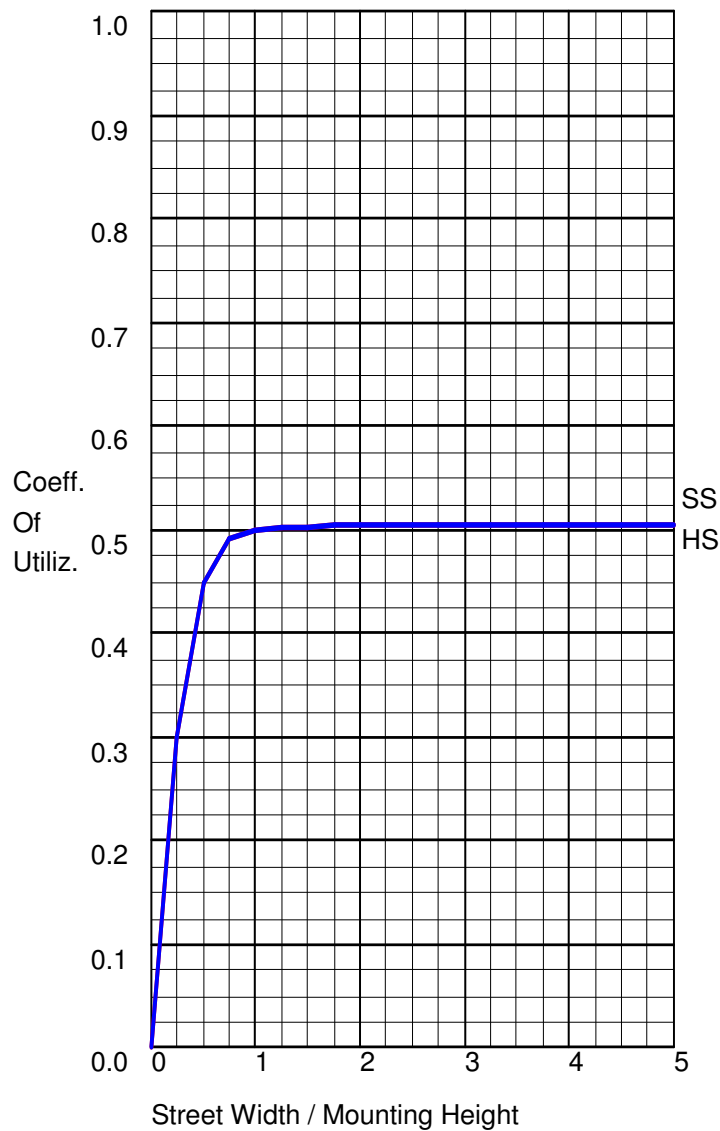
**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-830-XXX-DIM-UNV-M-XXX\_.IES****CANDELA TABULATION - (Cont.)**

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-L20-830-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

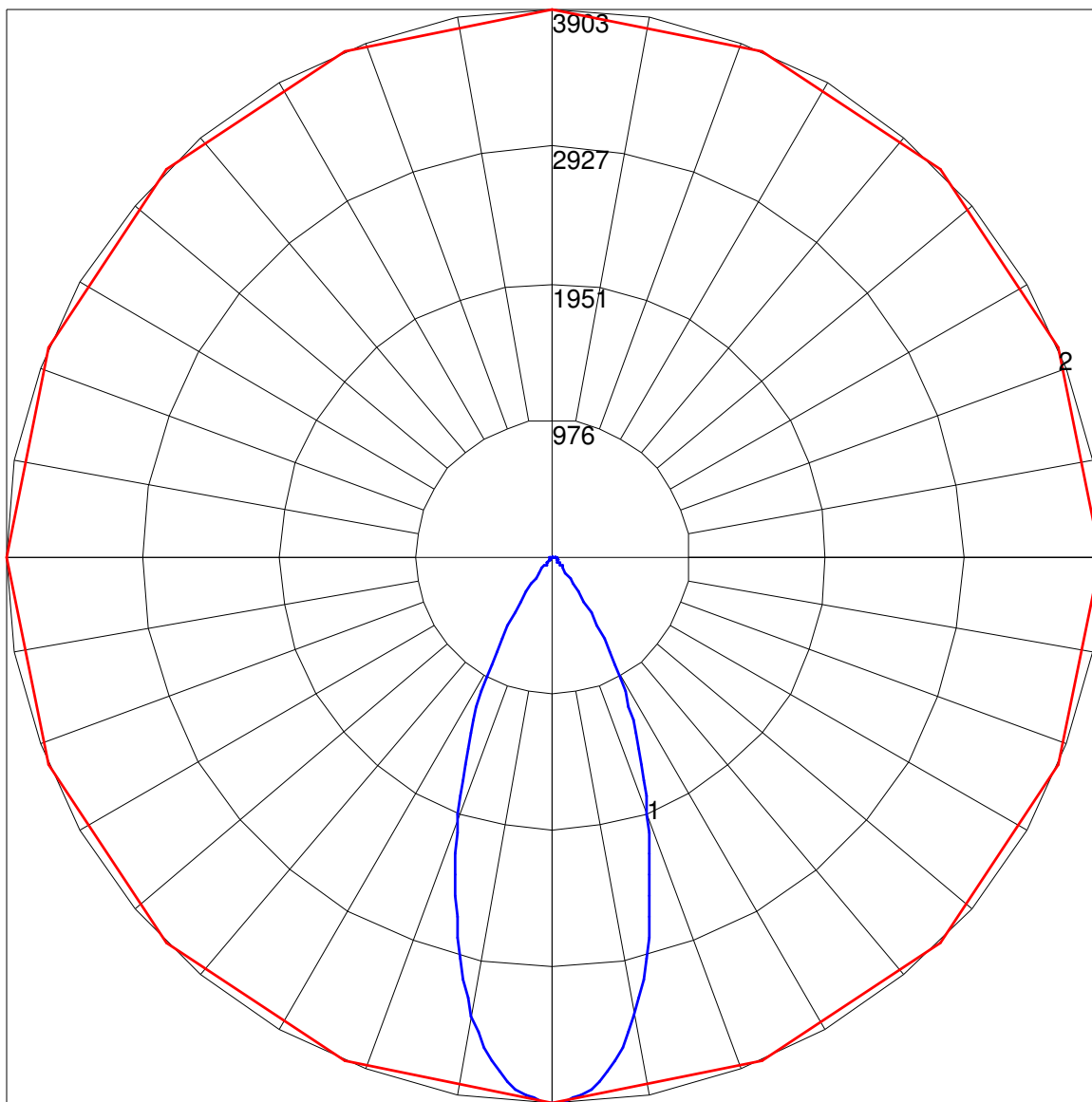
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	1025.4	50.0
Downward House Side	1025.4	50.0
Downward Total	2050.8	100.0
Upward Street Side	0.2	0.0
Upward House Side	0.2	0.0
Upward Total	0.4	0.0
Total Flux	2051.2	100.0

POLAR GRAPH

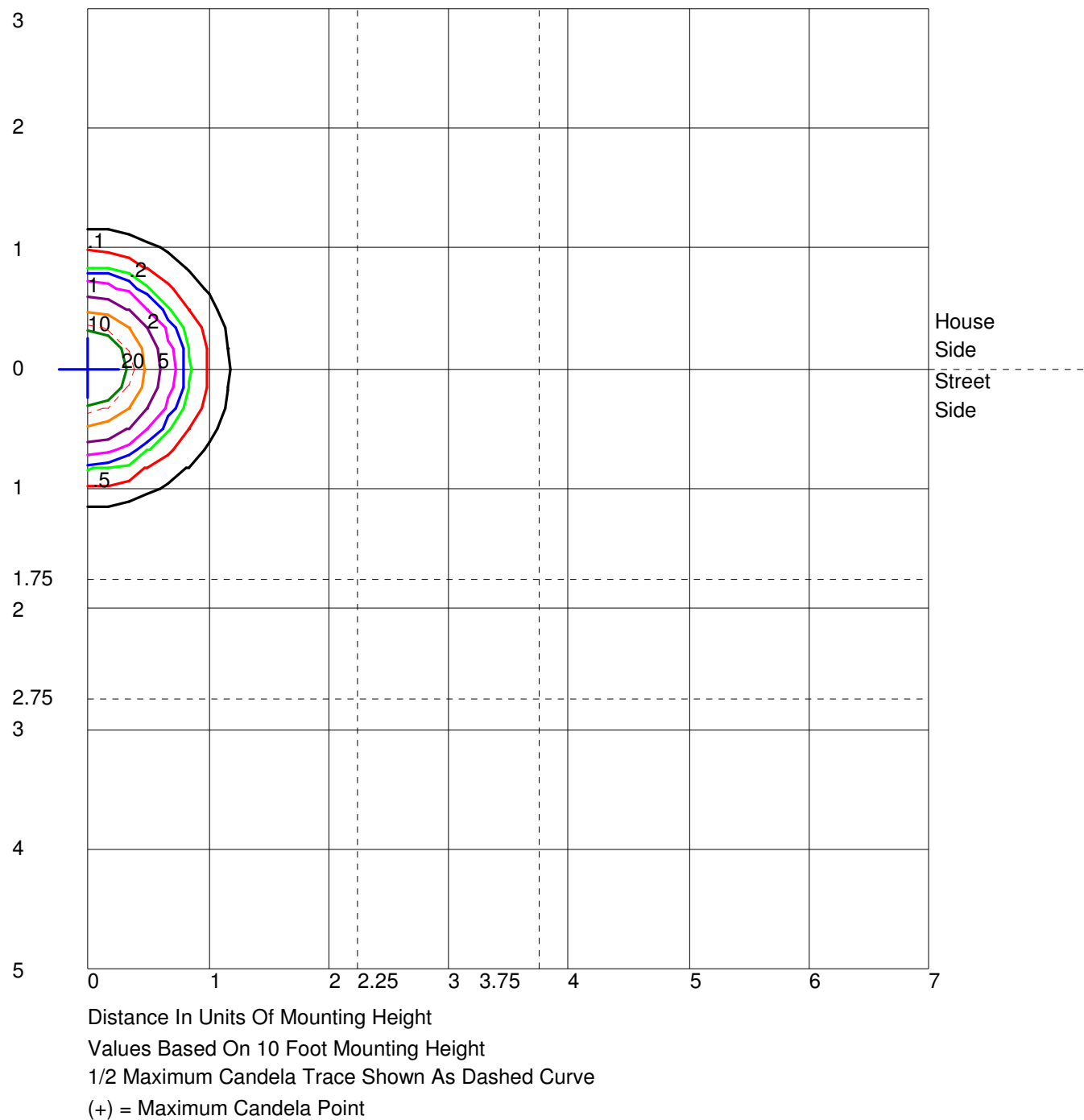


Maximum Candela = 3902.691 Located At Horizontal Angle = 90, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)

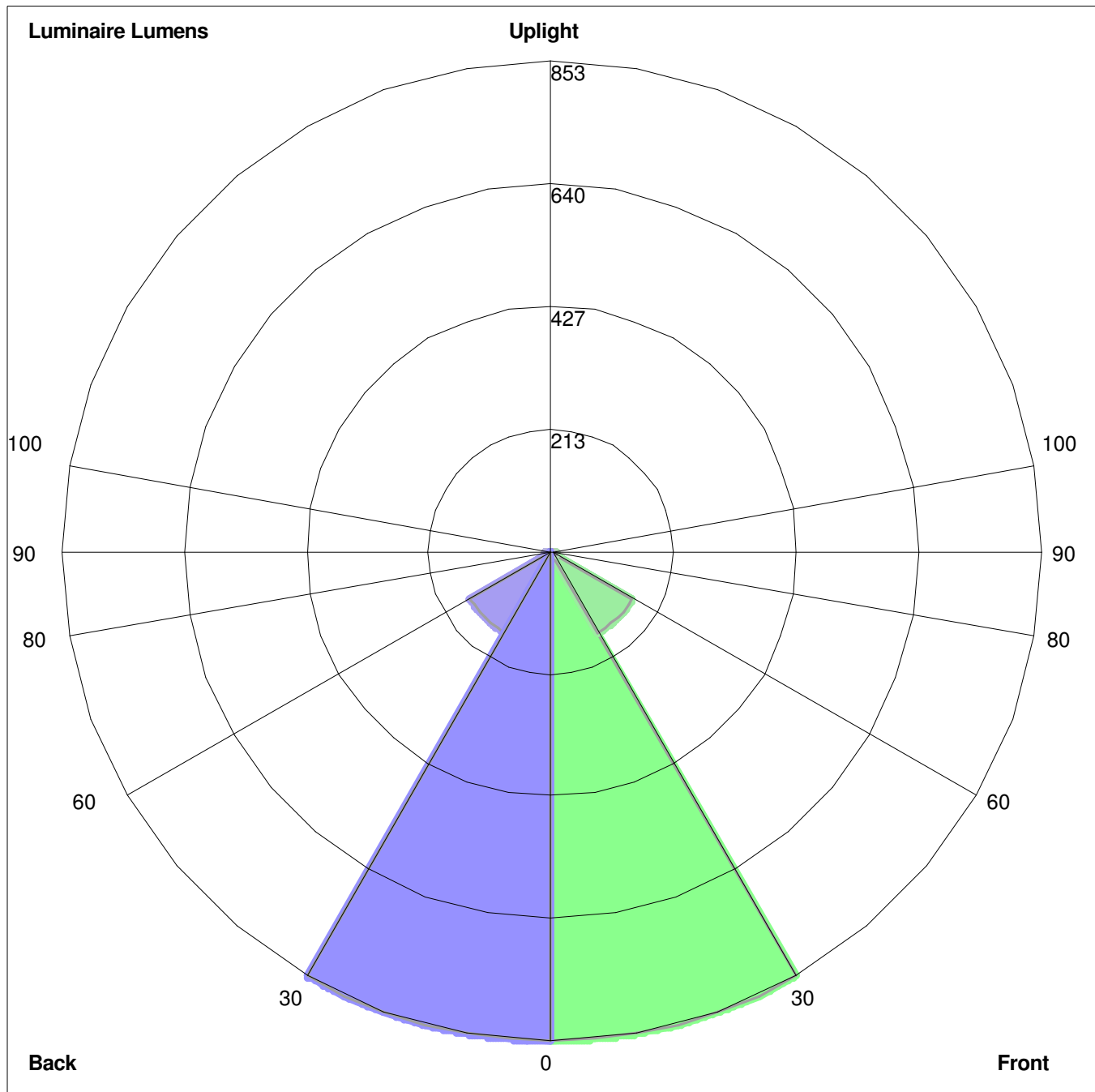


PHOTOMETRIC FILENAME : W4CR-XX-L20-830-XXX-DIM-UNV-M-XXX\_.IES

## ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=853.1, Medium=162.6, High=9.1, Very High=0.5  
Back: Low=853.1, Medium=162.6, High=9.1, Very High=0.5  
Uplight: Low=0.3, High=0.0

BUG Rating : B2-U1-G0