

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.IES

### DESCRIPTIVE INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] W4CR\_BARBARA-WIDE DIST  
[TESTLAB] LEDIL Inc  
[TESTDATE] 07/03/2025  
[ISSUEDATE] 2025-07-15  
[MANUFAC] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] W4CR-xx-L20-940-xxx-DIM-UNV-W-xxx\_  
[LUMINAIRE] 4 INCH ROUND OUTDOOR LED CYLINDER  
[MORE] WIDE DIST. W/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	2024
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	18.1
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	2551.405
Maximum Candela Angle	90H 2V
Maximum Candela (<90 Degrees Vertical)	2551.405
Maximum Candela Angle (<90 Degrees Vertical)	90H 2V
Maximum Candela At 90 Degrees Vertical	.318 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	1.445 (0.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	783.4	N.A.	38.7
FM - Front-Medium (30-60)	218.7	N.A.	10.8
FH - Front-High (60-80)	9.4	N.A.	0.5
FVH - Front-Very High (80-90)	0.5	N.A.	0.0
BL - Back-Low (0-30)	783.4	N.A.	38.7
BM - Back-Medium (30-60)	218.7	N.A.	10.8
BH - Back-High (60-80)	9.4	N.A.	0.5
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	2024.3	N.A.	100.0
BUG Rating	B2-U1-G0		

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.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	2547.168	2547.168	2547.168	2547.168	2547.168
1	2543.098	2542.977	2543.378	2546.435	2549.339
2	2545.307	2544.551	2542.024	2546.987	2551.405
3	2542.917	2539.724	2542.070	2540.496	2545.958
4	2539.119	2536.555	2535.458	2538.401	2543.560
5	2535.692	2534.663	2532.371	2534.444	2537.531
6	2528.513	2529.852	2523.793	2528.445	2525.858
7	2518.391	2522.582	2517.831	2517.786	2514.926
8	2508.912	2508.050	2506.068	2506.438	2507.081
9	2496.763	2493.858	2491.498	2492.753	2491.800
10	2473.773	2474.507	2473.009	2471.526	2470.626
11	2445.465	2447.651	2444.633	2445.850	2442.817
12	2412.413	2410.227	2409.327	2412.988	2411.551
13	2369.353	2368.657	2370.662	2374.785	2374.535
14	2325.507	2321.876	2323.086	2324.773	2329.493
15	2270.857	2268.981	2266.038	2272.779	2270.237
16	2212.509	2207.031	2204.671	2209.513	2212.872
17	2147.684	2141.390	2141.799	2141.511	2149.084
18	2076.853	2073.608	2074.160	2069.856	2078.094
19	2002.149	1999.410	1999.108	1999.781	2004.487
20	1926.272	1925.962	1924.003	1925.024	1931.356
21	1852.960	1849.730	1848.882	1851.439	1853.527
22	1772.877	1776.168	1774.057	1776.183	1778.717
23	1699.262	1698.074	1697.961	1699.731	1705.760
24	1622.273	1620.821	1622.470	1626.154	1628.280
25	1544.528	1544.051	1545.474	1550.126	1550.890
26	1464.793	1465.179	1468.598	1472.381	1471.995
27	1377.107	1379.339	1387.055	1390.467	1387.048
28	1286.471	1286.955	1297.660	1301.185	1295.988
29	1188.732	1191.546	1200.987	1203.339	1199.860
30	1085.220	1087.504	1097.664	1100.002	1095.281
31	973.402	978.705	985.241	989.727	987.919
32	861.569	867.507	871.736	876.865	875.375
33	748.510	752.141	758.193	763.118	763.057
34	635.444	641.889	646.088	653.161	655.514
35	530.116	537.099	539.247	546.184	550.201
36	435.350	440.539	442.673	447.484	454.557
37	350.418	354.480	356.568	360.872	368.445
38	282.098	280.820	285.026	289.527	293.552
39	220.149	223.742	224.756	229.189	234.530
40	173.102	176.695	179.260	182.967	187.816
41	136.661	139.589	142.600	149.590	155.816
42	109.707	111.848	116.894	120.646	123.960
43	91.794	92.595	95.901	100.183	102.838
44	75.816	77.307	80.476	85.106	86.612
45	64.953	66.247	69.008	72.442	73.970
46	56.836	57.895	60.285	62.979	64.000
47	50.572	51.563	53.439	55.618	56.510
48	45.844	46.646	48.091	49.906	50.852
49	42.084	42.757	43.975	45.390	46.275
50	39.013	39.580	40.624	41.781	42.500
51	36.418	36.887	37.840	38.801	39.406
52	33.989	34.421	35.230	36.032	36.516

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

53	31.788	32.151	32.824	33.475	33.868
54	29.761	30.094	30.661	31.160	31.493
55	27.930	28.180	28.702	29.095	29.345
56	26.152	26.394	26.833	27.166	27.317
57	24.473	24.662	25.017	25.312	25.411
58	22.831	22.990	23.285	23.535	23.618
59	21.235	21.356	21.583	21.817	21.893
60	19.661	19.767	19.964	20.146	20.229
61	18.186	18.269	18.421	18.572	18.617
62	16.809	16.855	16.961	17.089	17.127
63	15.508	15.546	15.614	15.712	15.765
64	14.305	14.336	14.381	14.464	14.517
65	13.224	13.254	13.261	13.322	13.405
66	12.210	12.240	12.233	12.286	12.338
67	11.295	11.317	11.295	11.332	11.378
68	10.447	10.455	10.440	10.440	10.493
69	9.653	9.645	9.623	9.608	9.645
70	8.896	8.881	8.836	8.806	8.836
71	8.163	8.132	8.072	8.026	8.042
72	7.436	7.406	7.338	7.270	7.300
73	6.733	6.680	6.589	6.521	6.559
74	6.007	5.946	5.855	5.780	5.825
75	5.227	5.182	5.084	5.031	5.061
76	4.373	4.335	4.229	4.206	4.221
77	3.404	3.389	3.283	3.268	3.283
78	2.300	2.300	2.217	2.171	2.186
79	1.596	1.611	1.574	1.566	1.543
80	1.445	1.437	1.430	1.422	1.415
81	1.347	1.347	1.347	1.339	1.339
82	1.271	1.263	1.271	1.263	1.263
83	1.180	1.180	1.188	1.180	1.180
84	1.089	1.082	1.097	1.082	1.082
85	0.983	0.976	0.983	0.976	0.976
86	0.862	0.862	0.862	0.855	0.855
87	0.726	0.719	0.726	0.719	0.711
88	0.575	0.567	0.575	0.567	0.560
89	0.416	0.409	0.409	0.393	0.393
90	0.318	0.303	0.303	0.280	0.265
91	0.295	0.280	0.287	0.272	0.265
92	0.295	0.280	0.287	0.265	0.265
93	0.295	0.287	0.287	0.272	0.265
94	0.295	0.287	0.287	0.272	0.272
95	0.303	0.287	0.287	0.272	0.272
96	0.303	0.287	0.287	0.272	0.272
97	0.303	0.295	0.295	0.280	0.280
98	0.303	0.295	0.303	0.280	0.287
99	0.310	0.303	0.303	0.287	0.287
100	0.310	0.303	0.310	0.287	0.295
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

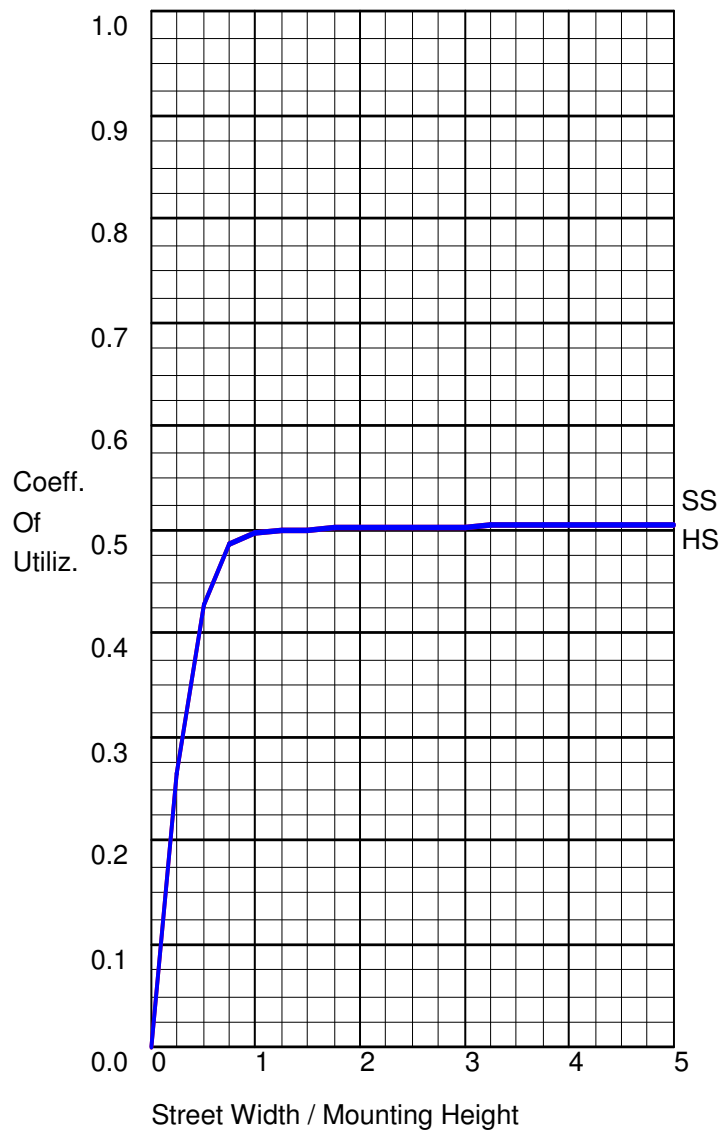
**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

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-L20-940-XXX-DIM-UNV-W-XXX\_.IES\_.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

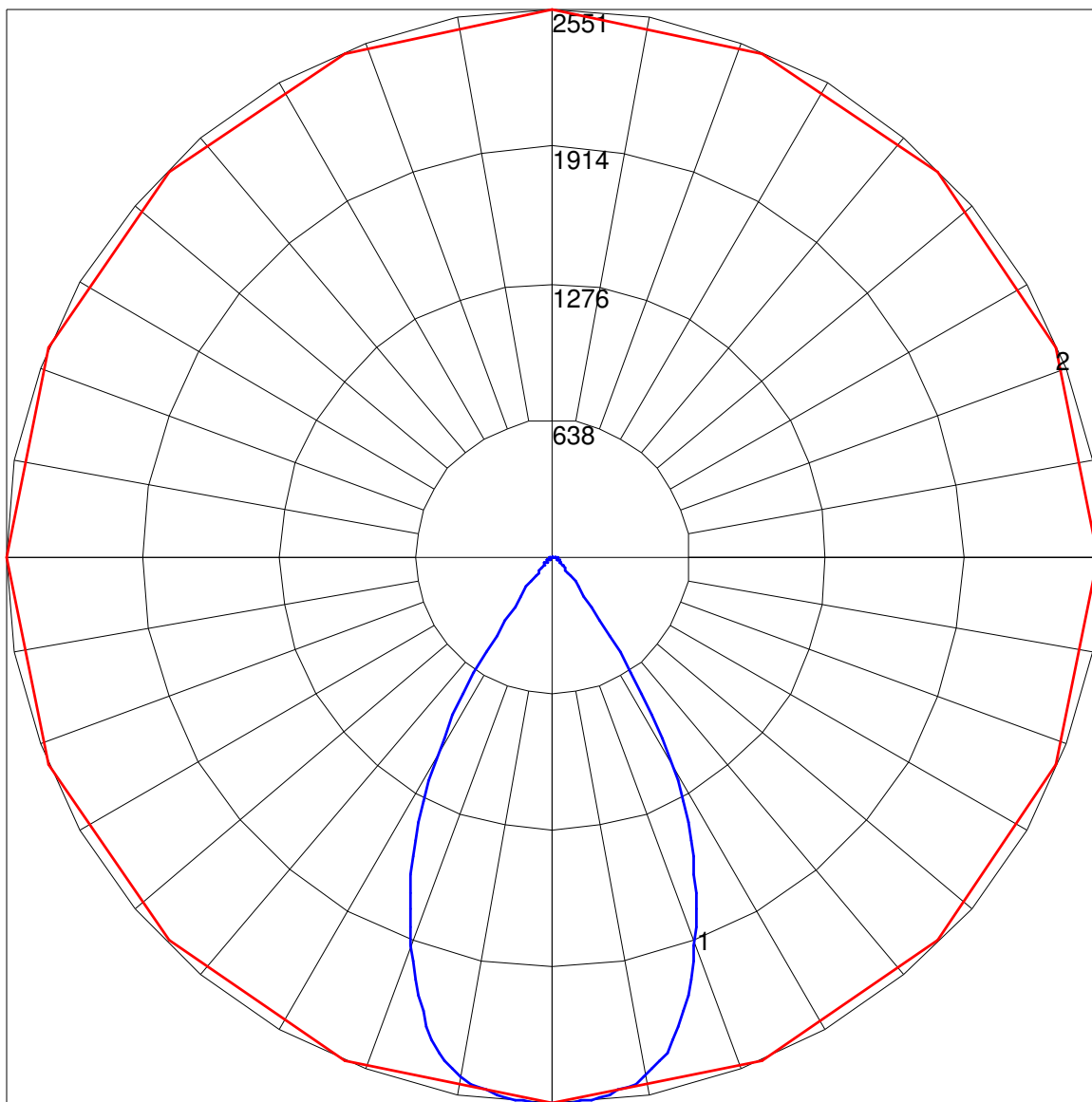
COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	1012.0	50.0
Downward House Side	1012.0	50.0
Downward Total	2024.0	100.0
Upward Street Side	0.2	0.0
Upward House Side	0.2	0.0
Upward Total	0.4	0.0
Total Flux	2024.4	100.0

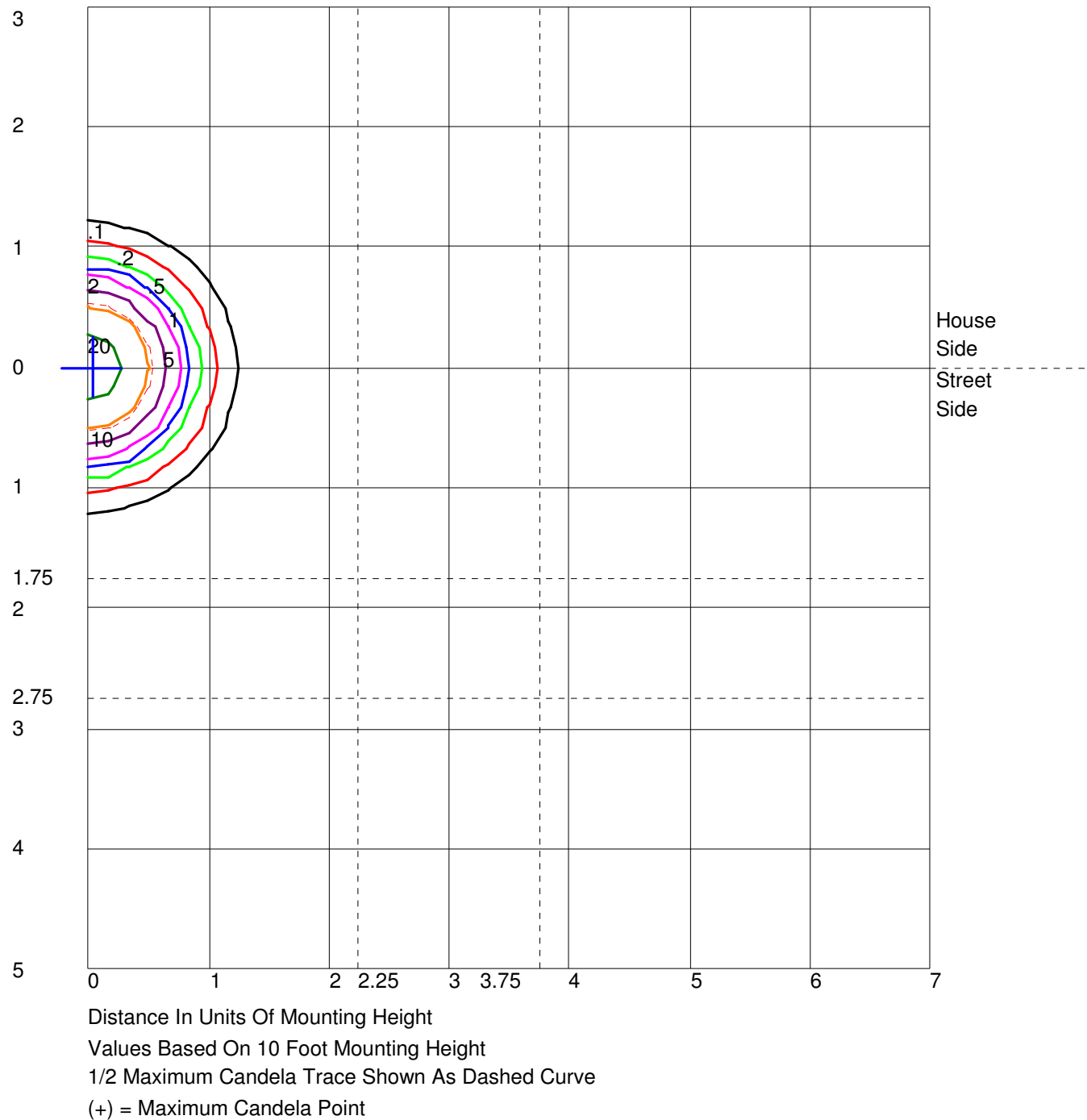
POLAR GRAPH



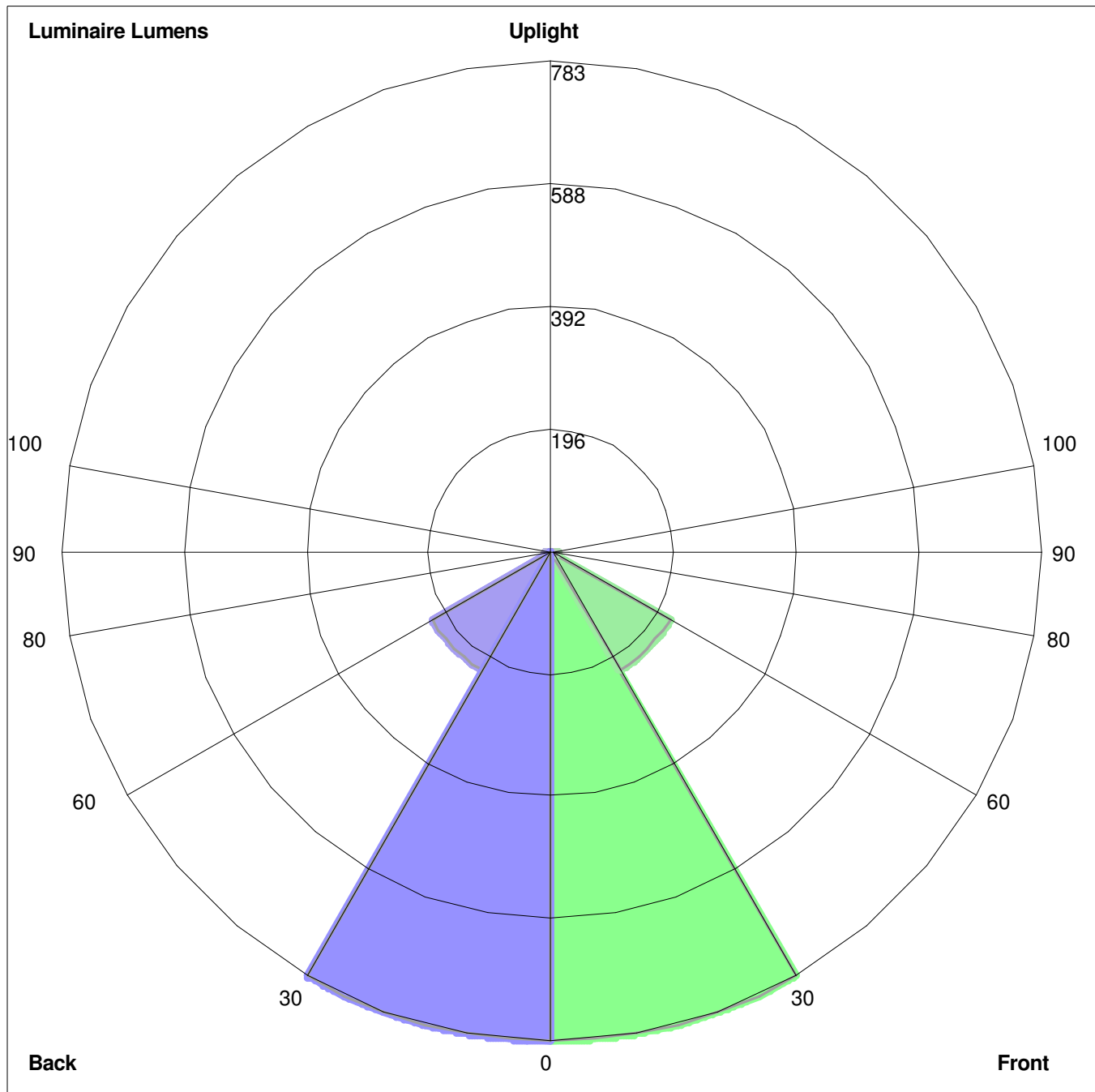
Maximum Candela = 2551.405 Located At Horizontal Angle = 90, Vertical Angle = 2  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2) (Through Max. Cd.)



ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=783.4, Medium=218.7, High=9.4, Very High=0.5  
Back: Low=783.4, Medium=218.7, High=9.4, Very High=0.5  
Uplight: Low=0.3, High=0.0

BUG Rating : B2-U1-G0