

## IES ROAD REPORT

PHOTOMETRIC FILENAME : W4CR-XX-L10-830-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-L10-830-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	1061
Downward Total Efficiency	N.A. (absolute)
Total Luminaire Efficiency	N.A. (absolute)
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	9.8
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Maximum Candela	1337.213
Maximum Candela Angle	90H 2V
Maximum Candela (<90 Degrees Vertical)	1337.213
Maximum Candela Angle (<90 Degrees Vertical)	90H 2V
Maximum Candela At 90 Degrees Vertical	.167 (0.0% Luminaire Lumens)
Maximum Candela from 80 to <90 Degrees Vertical	.757 (0.1% Luminaire Lumens)
Cutoff Classification (deprecated)	N.A. (absolute)

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L10-830-XXX-DIM-UNV-W-XXX\_.IES\_.IES****LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

	Lumens	% Lamp	% Luminaire
FL - Front-Low (0-30)	410.6	N.A.	38.7
FM - Front-Medium (30-60)	114.6	N.A.	10.8
FH - Front-High (60-80)	4.9	N.A.	0.5
FVH - Front-Very High (80-90)	0.3	N.A.	0.0
BL - Back-Low (0-30)	410.6	N.A.	38.7
BM - Back-Medium (30-60)	114.6	N.A.	10.8
BH - Back-High (60-80)	4.9	N.A.	0.5
BVH - Back-Very High (80-90)	0.3	N.A.	0.0
UL - Uplight-Low (90-100)	0.2	N.A.	0.0
UH - Uplight-High (100-180)	< 0.05	N.A.	0.0
Total	1061.0	N.A.	100.0
BUG Rating	B1-U1-G0		

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L10-830-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>
<b>0</b>	1334.993	1334.993	1334.993	1334.993	1334.993
<b>1</b>	1332.859	1332.796	1333.006	1334.608	1336.130
<b>2</b>	1334.017	1333.621	1332.296	1334.897	1337.213
<b>3</b>	1332.764	1331.091	1332.320	1331.496	1334.358
<b>4</b>	1330.774	1329.430	1328.855	1330.397	1333.101
<b>5</b>	1328.978	1328.439	1327.237	1328.324	1329.941
<b>6</b>	1325.215	1325.917	1322.741	1325.179	1323.824
<b>7</b>	1319.910	1322.107	1319.617	1319.593	1318.094
<b>8</b>	1314.942	1314.490	1313.451	1313.646	1313.983
<b>9</b>	1308.575	1307.052	1305.815	1306.473	1305.974
<b>10</b>	1296.525	1296.910	1296.125	1295.348	1294.876
<b>11</b>	1281.689	1282.835	1281.253	1281.891	1280.301
<b>12</b>	1264.366	1263.220	1262.749	1264.668	1263.914
<b>13</b>	1241.798	1241.433	1242.484	1244.645	1244.514
<b>14</b>	1218.818	1216.915	1217.549	1218.433	1220.907
<b>15</b>	1190.176	1189.192	1187.650	1191.183	1189.850
<b>16</b>	1159.594	1156.724	1155.487	1158.024	1159.785
<b>17</b>	1125.620	1122.321	1122.535	1122.384	1126.353
<b>18</b>	1088.496	1086.795	1087.085	1084.829	1089.147
<b>19</b>	1049.343	1047.908	1047.749	1048.102	1050.568
<b>20</b>	1009.576	1009.413	1008.386	1008.921	1012.240
<b>21</b>	971.152	969.459	969.015	970.355	971.449
<b>22</b>	929.180	930.905	929.798	930.913	932.241
<b>23</b>	890.598	889.975	889.916	890.844	894.004
<b>24</b>	850.247	849.486	850.350	852.281	853.395
<b>25</b>	809.500	809.250	809.996	812.434	812.835
<b>26</b>	767.710	767.913	769.705	771.687	771.485
<b>27</b>	721.754	722.923	726.967	728.756	726.963
<b>28</b>	674.250	674.504	680.114	681.962	679.238
<b>29</b>	623.024	624.499	629.447	630.680	628.857
<b>30</b>	568.773	569.970	575.295	576.520	574.046
<b>31</b>	510.168	512.948	516.373	518.724	517.777
<b>32</b>	451.555	454.668	456.884	459.572	458.791
<b>33</b>	392.300	394.204	397.375	399.957	399.925
<b>34</b>	333.041	336.419	338.620	342.327	343.560
<b>35</b>	277.838	281.498	282.624	286.260	288.365
<b>36</b>	228.171	230.890	232.009	234.530	238.237
<b>37</b>	183.657	185.786	186.880	189.136	193.105
<b>38</b>	147.850	147.180	149.385	151.744	153.853
<b>39</b>	115.382	117.265	117.796	120.120	122.919
<b>40</b>	90.724	92.608	93.952	95.894	98.436
<b>41</b>	71.625	73.160	74.738	78.401	81.664
<b>42</b>	57.499	58.621	61.265	63.232	64.968
<b>43</b>	48.110	48.530	50.263	52.507	53.898
<b>44</b>	39.736	40.517	42.178	44.605	45.394
<b>45</b>	34.042	34.720	36.168	37.968	38.769
<b>46</b>	29.788	30.343	31.596	33.008	33.543
<b>47</b>	26.505	27.025	28.008	29.150	29.618
<b>48</b>	24.027	24.447	25.205	26.156	26.652
<b>49</b>	22.057	22.409	23.048	23.789	24.253
<b>50</b>	20.447	20.744	21.291	21.898	22.275
<b>51</b>	19.087	19.333	19.832	20.336	20.653
<b>52</b>	17.814	18.040	18.464	18.885	19.138

**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L10-830-XXX-DIM-UNV-W-XXX\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

53	16.660	16.851	17.204	17.545	17.751
54	15.598	15.772	16.070	16.331	16.506
55	14.638	14.769	15.043	15.249	15.380
56	13.707	13.833	14.063	14.238	14.317
57	12.826	12.925	13.112	13.266	13.318
58	11.966	12.049	12.204	12.335	12.378
59	11.129	11.193	11.312	11.435	11.474
60	10.305	10.360	10.463	10.558	10.602
61	9.532	9.575	9.654	9.734	9.758
62	8.810	8.834	8.889	8.957	8.976
63	8.128	8.148	8.183	8.235	8.263
64	7.498	7.513	7.537	7.581	7.609
65	6.931	6.946	6.950	6.982	7.026
66	6.399	6.415	6.411	6.439	6.467
67	5.920	5.931	5.920	5.939	5.963
68	5.475	5.479	5.472	5.472	5.499
69	5.059	5.055	5.043	5.035	5.055
70	4.663	4.655	4.631	4.615	4.631
71	4.278	4.262	4.231	4.207	4.215
72	3.897	3.882	3.846	3.810	3.826
73	3.529	3.501	3.453	3.418	3.438
74	3.148	3.116	3.069	3.029	3.053
75	2.740	2.716	2.664	2.637	2.653
76	2.292	2.272	2.216	2.204	2.212
77	1.784	1.776	1.721	1.713	1.721
78	1.205	1.205	1.162	1.138	1.146
79	0.837	0.845	0.825	0.821	0.809
80	0.757	0.753	0.749	0.745	0.741
81	0.706	0.706	0.706	0.702	0.702
82	0.666	0.662	0.666	0.662	0.662
83	0.619	0.619	0.622	0.619	0.619
84	0.571	0.567	0.575	0.567	0.567
85	0.515	0.511	0.515	0.511	0.511
86	0.452	0.452	0.452	0.448	0.448
87	0.381	0.377	0.381	0.377	0.373
88	0.301	0.297	0.301	0.297	0.293
89	0.218	0.214	0.214	0.206	0.206
90	0.167	0.159	0.159	0.147	0.139
91	0.155	0.147	0.151	0.143	0.139
92	0.155	0.147	0.151	0.139	0.139
93	0.155	0.151	0.151	0.143	0.139
94	0.155	0.151	0.151	0.143	0.143
95	0.159	0.151	0.151	0.143	0.143
96	0.159	0.151	0.151	0.143	0.143
97	0.159	0.155	0.155	0.147	0.147
98	0.159	0.155	0.159	0.147	0.151
99	0.163	0.159	0.159	0.151	0.151
100	0.163	0.159	0.163	0.151	0.155
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

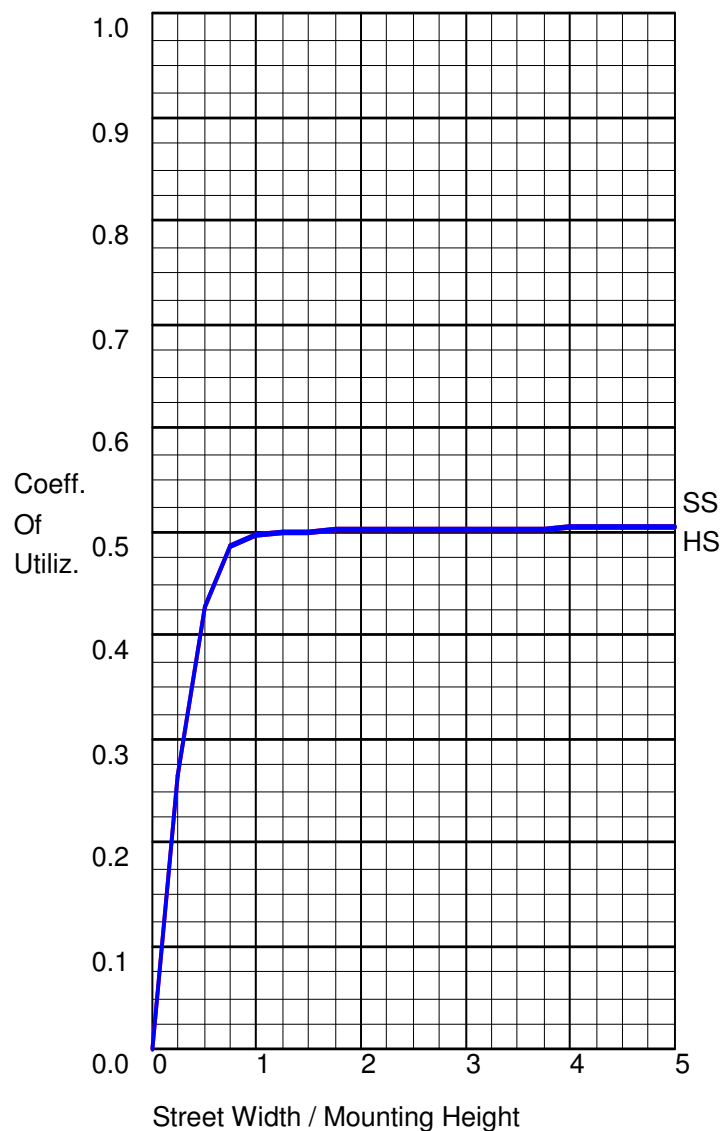
**IES ROAD REPORT****PHOTOMETRIC FILENAME : W4CR-XX-L10-830-XXX-DIM-UNV-W-XXX\_.IES\_.IES****CANDELA TABULATION - (Cont.)**

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-L10-830-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

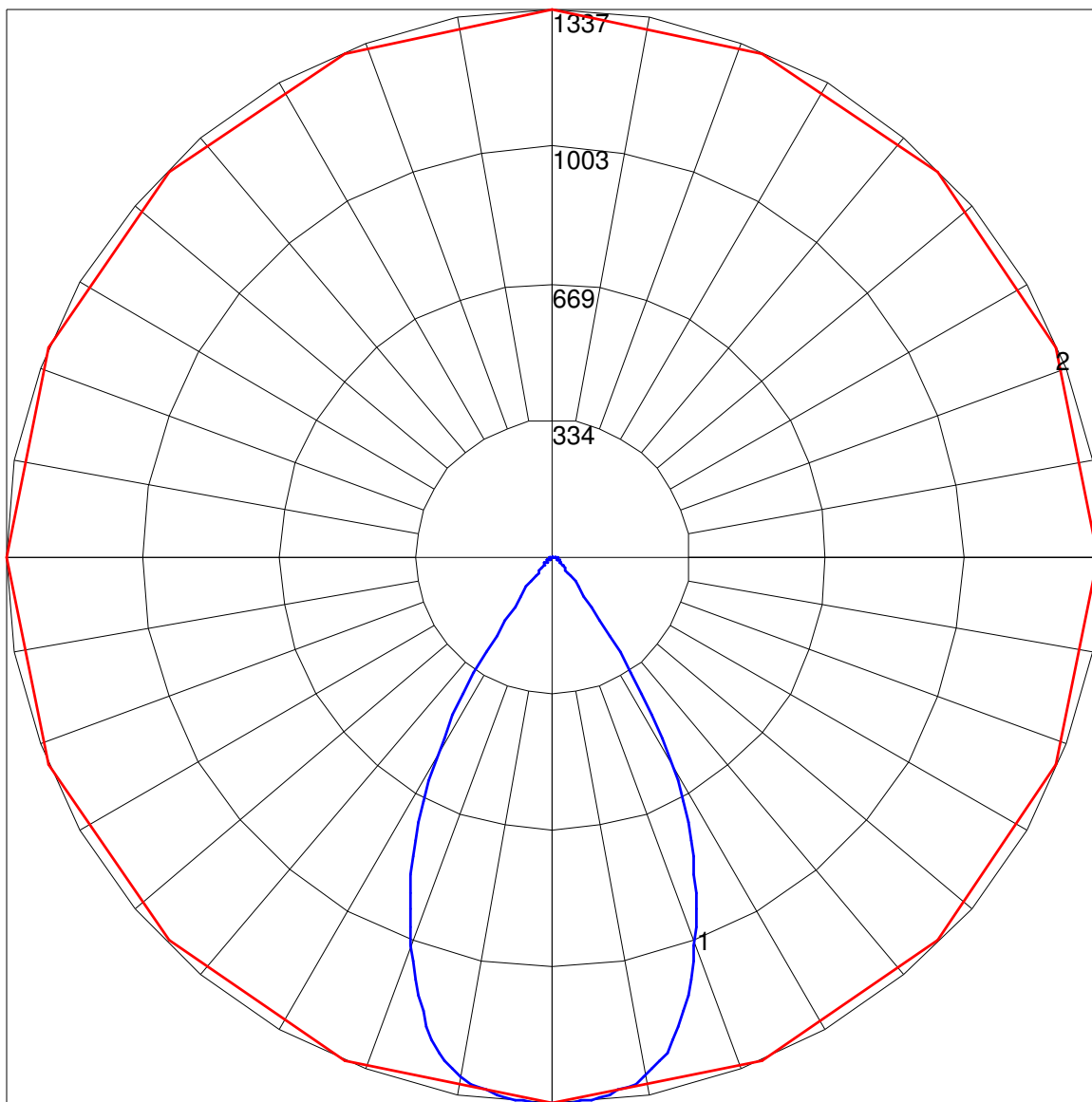
### COEFFICIENTS OF UTILIZATION



### FLUX DISTRIBUTION

	Lumens	Percent Of Luminaire
Downward Street Side	530.4	50.0
Downward House Side	530.4	50.0
Downward Total	1060.8	100.0
Upward Street Side	0.1	0.0
Upward House Side	0.1	0.0
Upward Total	0.2	0.0
Total Flux	1061.0	100.0

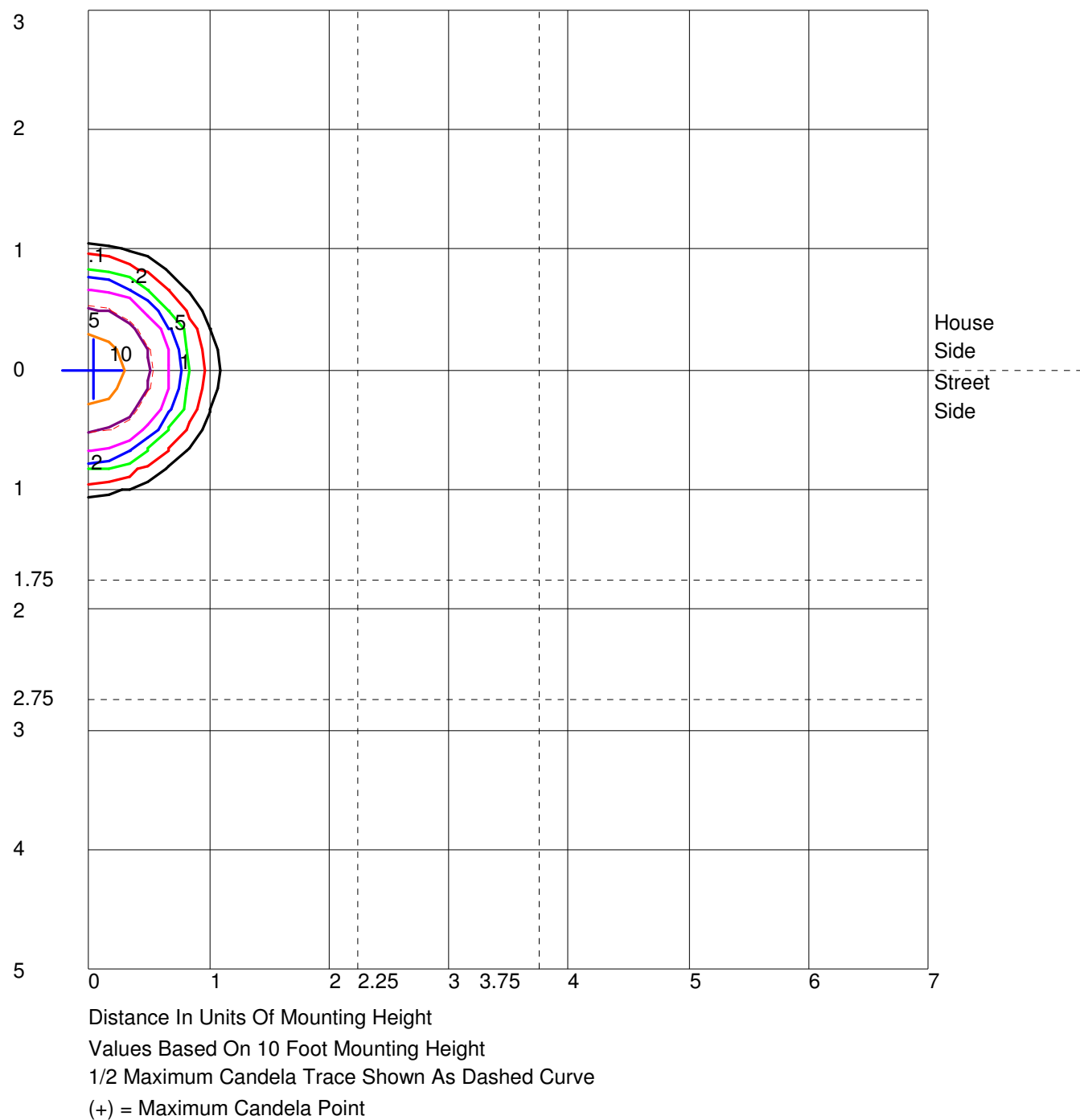
POLAR GRAPH



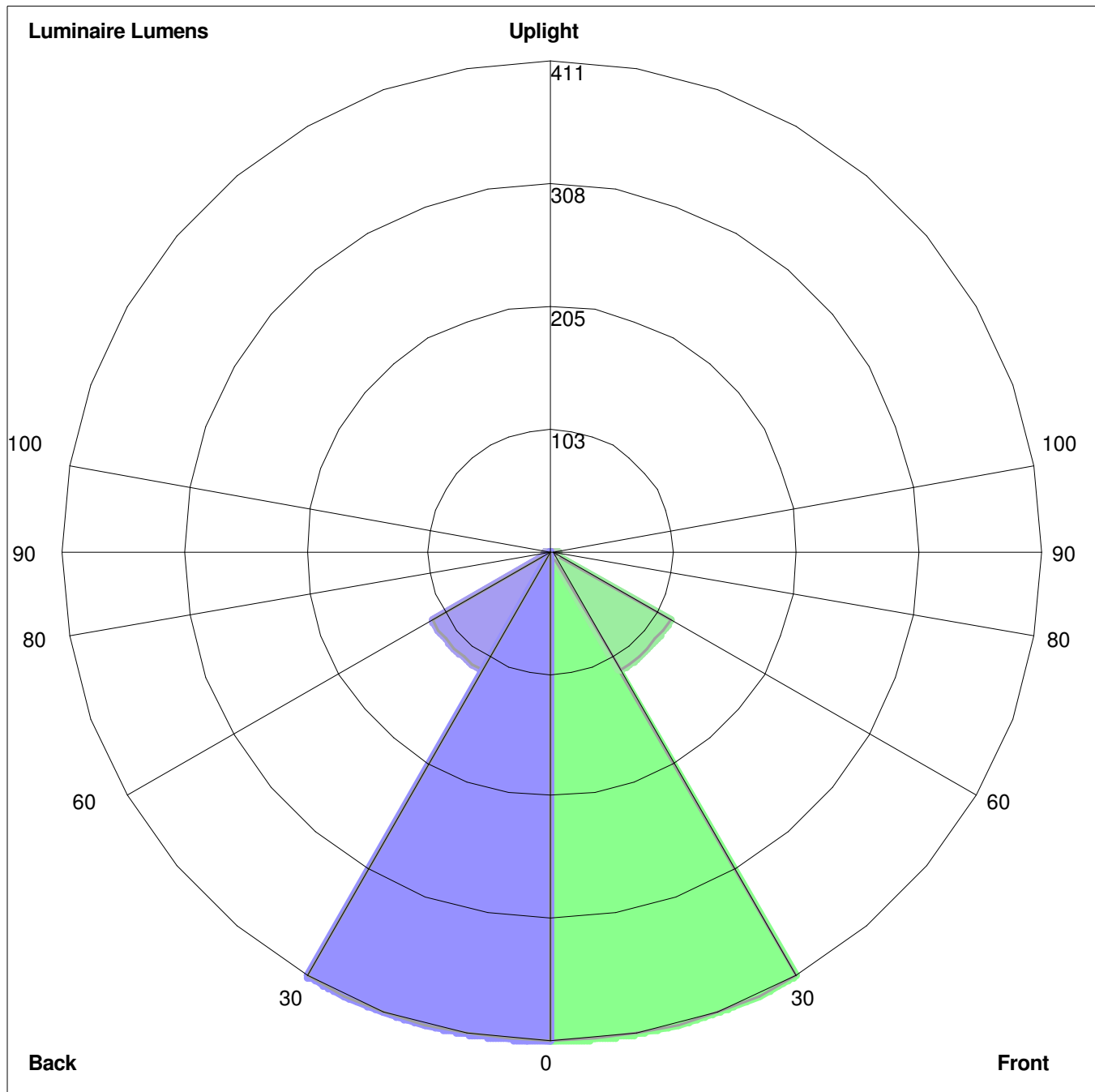
Maximum Candela = 1337.213 Located At Horizontal Angle = 90, Vertical Angle = 2  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (2) (Through Max. Cd.)



ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
Front: Low=410.6, Medium=114.6, High=4.9, Very High=0.3  
Back: Low=410.6, Medium=114.6, High=4.9, Very High=0.3  
Uplight: Low=0.2, High=0.0

BUG Rating : B1-U1-G0