



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 14629546.02  
[TESTLAB] UL Verification Services Inc.  
[ISSUEDATE] 2023-03-14  
[TESTDATE] 1/5/2023  
[MANUFAC] WILLIAMS INDOOR  
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.  
[LUMCAT] GS-4-L480-835-HA-MD-DIM-UNV  
[LUMINAIRE] White aluminum housing, prismatic lense enclosure  
[LAMP] 448 White LEDs  
[BALLAST] ULT D21CC80UNVPW-C

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	42843
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	137
Total Luminaire Watts	312
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.36 ft
Luminous Width (90-270)	1.17 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	40414	39269	34338
55	30517	28620	24178
65	23711	21441	19952
75	22836	18651	20086
85	20415	13847	15385

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**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	19369.088	19369.088	19369.088	19369.088	19369.088
0.5	19199.844	19350.283	19406.698	19369.088	19387.893
1.0	19199.844	19350.283	19406.698	19350.283	19387.893
1.5	19199.844	19350.283	19406.698	19350.283	19387.893
2.0	19181.039	19350.283	19387.893	19331.478	19369.088
2.5	19181.039	19331.478	19387.893	19331.478	19350.283
3.0	19162.234	19312.673	19369.088	19312.673	19331.478
3.5	19162.234	19312.673	19350.283	19293.868	19331.478
4.0	19143.429	19293.868	19331.478	19275.063	19312.673
4.5	19124.624	19275.063	19312.673	19256.259	19293.868
5.0	19124.624	19256.259	19312.673	19256.259	19275.063
5.5	19105.819	19237.454	19293.868	19237.454	19256.259
6.0	19087.014	19218.649	19275.063	19218.649	19237.454
6.5	19068.209	19218.649	19256.259	19199.844	19218.649
7.0	19049.404	19181.039	19237.454	19181.039	19199.844
7.5	19011.794	19162.234	19218.649	19162.234	19181.039
8.0	18992.989	19143.429	19199.844	19143.429	19162.234
8.5	18974.184	19124.624	19181.039	19124.624	19143.429
9.0	18936.575	19087.014	19143.429	19105.819	19105.819
9.5	18917.770	19068.209	19124.624	19068.209	19087.014
10.0	18880.160	19049.404	19105.819	19049.404	19049.404
10.5	18842.550	19011.794	19068.209	19011.794	19030.599
11.0	18823.745	18974.184	19030.599	18974.184	18992.989
11.5	18788.016	18936.575	18992.989	18936.575	18955.380
12.0	18754.167	18898.965	18955.380	18898.965	18917.770
12.5	18718.437	18861.355	18917.770	18861.355	18880.160
13.0	18678.947	18823.745	18880.160	18823.745	18842.550
13.5	18633.815	18772.972	18842.550	18776.733	18804.940
14.0	18588.683	18727.840	18784.255	18733.481	18761.689
14.5	18539.790	18680.827	18735.362	18688.349	18720.318
15.0	18489.017	18635.696	18686.469	18639.457	18677.066
15.5	18434.483	18584.922	18633.815	18590.564	18633.815
16.0	18379.948	18532.268	18577.400	18541.671	18584.922
16.5	18323.534	18477.734	18522.866	18490.897	18534.149
17.0	18265.238	18419.439	18464.571	18436.363	18479.615
17.5	18203.182	18357.382	18408.156	18381.829	18423.200
18.0	18139.245	18295.326	18351.741	18323.534	18364.904
18.5	18079.069	18231.389	18291.565	18263.358	18299.087
19.0	18015.133	18167.453	18231.389	18201.301	18237.031
19.5	17953.076	18099.755	18169.333	18137.365	18171.214
20.0	17887.259	18030.176	18097.874	18075.308	18109.157
20.5	17815.800	17954.957	18020.774	18013.252	18039.579
21.0	17742.461	17874.095	17936.152	17947.435	17971.881
21.5	17667.241	17793.234	17864.693	17875.976	17900.422
22.0	17588.260	17712.373	17789.473	17804.517	17828.964
22.5	17503.638	17625.870	17704.851	17727.417	17751.863
23.0	17417.135	17539.368	17616.468	17646.556	17669.122
23.5	17326.872	17450.984	17528.085	17561.933	17586.380
24.0	17230.967	17356.960	17434.060	17473.550	17501.758
24.5	17136.942	17261.054	17341.916	17381.406	17415.255
25.0	17039.156	17165.149	17249.771	17285.501	17324.991
25.5	16935.729	17061.722	17151.986	17185.835	17232.847
26.0	16834.182	16962.056	17054.200	17082.407	17133.181
26.5	16730.755	16854.868	16950.773	16978.980	17031.634

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**CANDELA TABULATION - (Cont.)**

27.0	16621.68616749.56016845.46516869.91216926.326
27.5	16510.73716640.49116736.39716758.96316817.258
28.0	16394.14716527.66216623.56716642.37216702.548
28.5	16277.55616411.07116505.09616523.90116582.196
29.0	16145.92116290.72016384.74416399.78816456.203
29.5	16019.92816166.60716260.63216271.91516324.568
30.0	15890.17416038.73316130.87816138.39916187.292
30.5	15754.77915908.97915995.48215997.36216040.614
31.0	15615.62215775.46415858.20615843.16215886.413
31.5	15474.58515640.06915713.40815681.43915722.810
32.0	15333.54815504.67315570.49015532.88015576.132
32.5	15184.98915357.99415420.05115373.03815414.409
33.0	15040.19115211.31615265.85015198.15215186.870
33.5	14887.87115057.11515104.12815021.38614978.135
34.0	14733.67014897.27314940.52514833.33714765.639
34.5	14581.35014735.55114771.28014634.00414545.621
35.0	14417.74714571.94814596.39414429.03014314.320
35.5	14254.14514404.58414413.98614214.65414069.856
36.0	14083.02014229.69814225.93713990.87513819.750
36.5	13908.13414049.17114028.48513755.81413560.242
37.0	13729.48713864.88213827.27213516.99113296.973
37.5	13547.07913676.83313620.41813266.88513028.062
38.0	13357.14913486.90313411.68313016.77912751.630
38.5	13163.45813291.33213195.42612759.15212475.197
39.0	12966.00613093.88012975.40912495.88312191.243
39.5	12762.91312894.54712749.74912230.73311909.168
40.0	12557.93912691.45412520.32911963.70311625.214
40.5	12347.32412486.48012285.26711692.91211337.498
41.0	12134.82812277.74512050.20611424.00111032.858
41.5	11924.21212065.24911811.38311151.32910720.696
42.0	11709.83611850.87311566.91910884.29910461.188
42.5	11495.46011634.61611326.21510636.07410201.680
43.0	11279.20311416.47911085.51210367.1639929.008
43.5	11062.94611194.58110844.80910081.3289652.576
44.0	10846.68910972.68210602.2259823.701 9379.904
44.5	10632.31310747.02310359.6419564.192 9116.635
45.0	10419.81710519.48310124.5809310.326 8853.366
45.5	10203.56010295.7059885.757 9060.220 8595.738
46.0	9987.304 10071.9269650.695 8815.756 8347.513
46.5	9776.688 9846.267 9421.275 8578.814 8106.810
47.0	9564.192 9624.368 9189.974 8345.632 7871.748
47.5	9351.697 9404.350 8964.315 8116.212 7646.089
48.0	9142.962 9184.333 8740.536 7894.314 7427.951
48.5	8934.227 8969.956 8518.638 7678.057 7215.455
49.0	8725.492 8757.461 8302.381 7463.681 7012.362
49.5	8514.877 8544.965 8089.885 7258.707 6816.791
50.0	8308.022 8336.230 7879.270 7057.494 6628.741
50.5	8104.929 8129.376 7670.535 6860.042 6444.453
51.0	7903.716 7926.282 7469.322 6671.993 6267.686
51.5	7700.623 7726.950 7268.109 6476.421 6100.323
52.0	7505.052 7529.498 7074.418 6299.655 5934.839
52.5	7307.600 7335.807 6890.130 6132.291 5776.878
53.0	7113.909 7143.997 6713.364 5966.807 5624.558
53.5	6923.979 6954.067 6519.673 5805.085 5475.999
54.0	6739.690 6767.898 6331.623 5647.123 5333.081
54.5	6559.163 6585.490 6154.857 5494.803 5193.924

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**CANDELA TABULATION - (Cont.)**

55.0	6382.397	6404.963	5985.612	5346.244	5056.648
55.5	6205.630	6226.316	5818.248	5201.446	4925.014
56.0	6038.266	6053.310	5654.645	5060.409	4797.140
56.5	5872.783	5882.185	5494.803	4925.014	4673.028
57.0	5709.180	5714.821	5338.722	4791.499	4550.795
57.5	5553.099	5551.218	5186.402	4661.745	4432.324
58.0	5402.659	5393.257	5037.843	4535.752	4317.614
58.5	5254.100	5237.176	4891.165	4413.519	4206.665
59.0	5109.302	5086.736	4748.247	4293.168	4099.477
59.5	4966.385	4938.177	4609.091	4176.577	3994.169
60.0	4830.989	4793.379	4473.695	4065.628	3894.503
60.5	4697.474	4656.103	4342.061	3954.679	3798.598
61.0	4567.720	4520.708	4212.307	3849.371	3702.693
61.5	4439.846	4389.073	4086.313	3745.944	3612.429
62.0	4317.614	4263.080	3964.081	3648.158	3525.926
62.5	4199.143	4140.848	3845.610	3552.253	3443.185
63.0	4082.552	4026.138	3729.020	3458.228	3364.204
63.5	3964.081	3917.069	3618.070	3367.965	3287.104
64.0	3828.686	3792.956	3510.882	3281.462	3213.764
64.5	3742.183	3687.649	3405.575	3198.720	3142.305
65.0	3653.800	3586.102	3304.028	3117.859	3074.608
65.5	3554.134	3486.436	3206.242	3040.759	3008.790
66.0	3461.989	3377.367	3112.218	2963.659	2944.854
66.5	3369.845	3281.462	3020.073	2890.319	2882.797
67.0	3283.343	3189.318	2929.810	2818.861	2822.621
67.5	3198.720	3099.054	2845.187	2749.282	2762.446
68.0	3117.859	3012.551	2762.446	2681.584	2704.150
68.5	3038.878	2927.929	2681.584	2615.767	2645.855
69.0	2963.659	2845.187	2602.604	2549.950	2589.440
69.5	2892.200	2764.326	2527.384	2486.013	2533.025
70.0	2820.741	2685.345	2452.164	2423.957	2478.491
70.5	2751.163	2608.245	2380.705	2360.020	2422.076
71.0	2683.465	2533.025	2307.366	2297.964	2367.542
71.5	2615.767	2457.806	2237.788	2235.907	2311.127
72.0	2551.830	2382.586	2168.210	2173.851	2254.712
72.5	2486.013	2309.247	2092.990	2109.914	2196.417
73.0	2422.076	2235.907	2025.292	2047.858	2138.122
73.5	2360.020	2162.568	1961.355	1982.041	2079.826
74.0	2297.964	2089.229	1893.657	1918.104	2019.651
74.5	2222.744	2015.890	1824.079	1852.287	1957.594
75.0	2155.046	1942.550	1760.142	1786.469	1895.538
75.5	2085.468	1871.092	1696.206	1718.772	1829.721
76.0	2014.009	1797.752	1619.105	1652.954	1765.784
76.5	1942.550	1724.413	1549.527	1585.256	1698.086
77.0	1869.211	1652.954	1479.949	1517.559	1630.388
77.5	1795.872	1579.615	1410.370	1449.861	1560.810
78.0	1718.772	1508.156	1342.673	1380.283	1489.351
78.5	1639.791	1434.817	1273.094	1312.585	1417.892
79.0	1562.691	1363.358	1205.397	1244.887	1344.553
79.5	1485.590	1290.019	1133.938	1175.309	1271.214
80.0	1406.610	1218.560	1066.240	1107.611	1197.875
80.5	1327.629	1147.101	998.542	1039.913	1122.655
81.0	1248.648	1075.643	930.845	972.215	1049.316
81.5	1171.548	1006.064	863.147	906.398	974.096
82.0	1094.448	938.367	797.329	840.581	900.757
82.5	1017.347	868.788	731.512	776.644	829.298

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**CANDELA TABULATION - (Cont.)**

83.0	942.127	795.449	669.456	712.707	757.839
83.5	866.908	735.273	609.280	650.651	690.141
84.0	793.568	676.978	549.104	588.595	620.563
84.5	720.229	611.161	492.689	530.299	554.746
85.0	648.770	552.865	440.036	472.004	488.928
85.5	579.192	496.450	387.382	417.470	428.753
86.0	507.733	438.155	338.489	364.816	366.696
86.5	440.036	381.740	293.357	308.401	312.162
87.0	372.338	325.325	248.225	255.747	257.628
87.5	306.521	268.911	204.974	206.854	206.854
88.0	240.703	218.137	165.483	161.722	161.722
88.5	176.766	173.005	129.754	124.113	118.471
89.0	124.113	133.515	99.666	92.144	86.503
89.5	84.622	99.666	71.459	65.817	65.817
90.0	0.000	0.000	0.000	0.000	0.000
90.5	0.000	0.000	0.000	0.000	0.000
91.0	0.000	0.000	0.000	0.000	0.000
91.5	0.000	0.000	0.000	0.000	0.000
92.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
93.0	0.000	0.000	0.000	0.000	0.000
93.5	0.000	0.000	0.000	0.000	0.000
94.0	0.000	0.000	0.000	0.000	0.000
94.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
95.5	0.000	0.000	0.000	0.000	0.000
96.0	0.000	0.000	0.000	0.000	0.000
96.5	0.000	0.000	0.000	0.000	0.000
97.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
98.0	0.000	0.000	0.000	0.000	0.000
98.5	0.000	0.000	0.000	0.000	0.000
99.0	0.000	0.000	0.000	0.000	0.000
99.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
100.5	0.000	0.000	0.000	0.000	0.000
101.0	0.000	0.000	0.000	0.000	0.000
101.5	0.000	0.000	0.000	0.000	0.000
102.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
103.0	0.000	0.000	0.000	0.000	0.000
103.5	0.000	0.000	0.000	0.000	0.000
104.0	0.000	0.000	0.000	0.000	0.000
104.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
105.5	0.000	0.000	0.000	0.000	0.000
106.0	0.000	0.000	0.000	0.000	0.000
106.5	0.000	0.000	0.000	0.000	0.000
107.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
108.0	0.000	0.000	0.000	0.000	0.000
108.5	0.000	0.000	0.000	0.000	0.000
109.0	0.000	0.000	0.000	0.000	0.000
109.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
110.5	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

111.0	0.000	0.000	0.000	0.000	0.000
111.5	0.000	0.000	0.000	0.000	0.000
112.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
113.0	0.000	0.000	0.000	0.000	0.000
113.5	0.000	0.000	0.000	0.000	0.000
114.0	0.000	0.000	0.000	0.000	0.000
114.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
115.5	0.000	0.000	0.000	0.000	0.000
116.0	0.000	0.000	0.000	0.000	0.000
116.5	0.000	0.000	0.000	0.000	0.000
117.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
118.0	0.000	0.000	0.000	0.000	0.000
118.5	0.000	0.000	0.000	0.000	0.000
119.0	0.000	0.000	0.000	0.000	0.000
119.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
120.5	0.000	0.000	0.000	0.000	0.000
121.0	0.000	0.000	0.000	0.000	0.000
121.5	0.000	0.000	0.000	0.000	0.000
122.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
123.0	0.000	0.000	0.000	0.000	0.000
123.5	0.000	0.000	0.000	0.000	0.000
124.0	0.000	0.000	0.000	0.000	0.000
124.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
125.5	0.000	0.000	0.000	0.000	0.000
126.0	0.000	0.000	0.000	0.000	0.000
126.5	0.000	0.000	0.000	0.000	0.000
127.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
128.0	0.000	0.000	0.000	0.000	0.000
128.5	0.000	0.000	0.000	0.000	0.000
129.0	0.000	0.000	0.000	0.000	0.000
129.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
130.5	0.000	0.000	0.000	0.000	0.000
131.0	0.000	0.000	0.000	0.000	0.000
131.5	0.000	0.000	0.000	0.000	0.000
132.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
133.0	0.000	0.000	0.000	0.000	0.000
133.5	0.000	0.000	0.000	0.000	0.000
134.0	0.000	0.000	0.000	0.000	0.000
134.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
135.5	0.000	0.000	0.000	0.000	0.000
136.0	0.000	0.000	0.000	0.000	0.000
136.5	0.000	0.000	0.000	0.000	0.000
137.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
138.0	0.000	0.000	0.000	0.000	0.000
138.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES

CANDELA TABULATION - (Cont.)

139.0	0.000	0.000	0.000	0.000	0.000
139.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
140.5	0.000	0.000	0.000	0.000	0.000
141.0	0.000	0.000	0.000	0.000	0.000
141.5	0.000	0.000	0.000	0.000	0.000
142.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
143.0	0.000	0.000	0.000	0.000	0.000
143.5	0.000	0.000	0.000	0.000	0.000
144.0	0.000	0.000	0.000	0.000	0.000
144.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
145.5	0.000	0.000	0.000	0.000	0.000
146.0	0.000	0.000	0.000	0.000	0.000
146.5	0.000	0.000	0.000	0.000	0.000
147.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
148.0	0.000	0.000	0.000	0.000	0.000
148.5	0.000	0.000	0.000	0.000	0.000
149.0	0.000	0.000	0.000	0.000	0.000
149.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
150.5	0.000	0.000	0.000	0.000	0.000
151.0	0.000	0.000	0.000	0.000	0.000
151.5	0.000	0.000	0.000	0.000	0.000
152.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
153.0	0.000	0.000	0.000	0.000	0.000
153.5	0.000	0.000	0.000	0.000	0.000
154.0	0.000	0.000	0.000	0.000	0.000
154.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
155.5	0.000	0.000	0.000	0.000	0.000
156.0	0.000	0.000	0.000	0.000	0.000
156.5	0.000	0.000	0.000	0.000	0.000
157.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
158.0	0.000	0.000	0.000	0.000	0.000
158.5	0.000	0.000	0.000	0.000	0.000
159.0	0.000	0.000	0.000	0.000	0.000
159.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
160.5	0.000	0.000	0.000	0.000	0.000
161.0	0.000	0.000	0.000	0.000	0.000
161.5	0.000	0.000	0.000	0.000	0.000
162.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
163.0	0.000	0.000	0.000	0.000	0.000
163.5	0.000	0.000	0.000	0.000	0.000
164.0	0.000	0.000	0.000	0.000	0.000
164.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
165.5	0.000	0.000	0.000	0.000	0.000
166.0	0.000	0.000	0.000	0.000	0.000
166.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
168.0	0.000	0.000	0.000	0.000	0.000
168.5	0.000	0.000	0.000	0.000	0.000
169.0	0.000	0.000	0.000	0.000	0.000
169.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
170.5	0.000	0.000	0.000	0.000	0.000
171.0	0.000	0.000	0.000	0.000	0.000
171.5	0.000	0.000	0.000	0.000	0.000
172.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
173.0	0.000	0.000	0.000	0.000	0.000
173.5	0.000	0.000	0.000	0.000	0.000
174.0	0.000	0.000	0.000	0.000	0.000
174.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
175.5	0.000	0.000	0.000	0.000	0.000
176.0	0.000	0.000	0.000	0.000	0.000
176.5	0.000	0.000	0.000	0.000	0.000
177.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
178.0	0.000	0.000	0.000	0.000	0.000
178.5	0.000	0.000	0.000	0.000	0.000
179.0	0.000	0.000	0.000	0.000	0.000
179.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	7089.97	N.A.	16.50
0-30	15009.68	N.A.	35.00
0-40	23999.52	N.A.	56.00
0-60	36928.51	N.A.	86.20
0-80	42256.7	N.A.	98.60
0-90	42843.21	N.A.	100.00
10-90	41012.01	N.A.	95.70
20-40	16909.55	N.A.	39.50
20-50	24550.35	N.A.	57.30
40-70	16282.79	N.A.	38.00
60-80	5328.19	N.A.	12.40
70-80	1974.38	N.A.	4.60
80-90	586.52	N.A.	1.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	42843.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	1831.21
10-20	5258.76
20-30	7919.71
30-40	8989.84
40-50	7640.79
50-60	5288.19
60-70	3353.81
70-80	1974.38
80-90	586.52
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES**

**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	95	93	91	92	90	88	86
2	101	94	88	83	99	92	86	82	89	84	80	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	69	77	72	67	74	70	66	64
4	86	75	67	61	84	74	66	61	71	65	60	69	64	59	67	62	58	56
5	80	68	60	53	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	53	47	72	61	53	47	59	52	47	57	51	46	56	50	46	44
7	69	56	48	42	67	56	48	42	54	47	42	53	46	42	51	46	41	40
8	64	52	44	38	63	51	43	38	50	43	38	49	42	38	47	42	37	36
9	60	48	40	35	59	47	40	35	46	39	34	45	39	34	44	38	34	32
10	57	44	37	32	55	44	36	32	43	36	31	42	36	31	41	35	31	30

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-4-L480-835-HA-MD-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

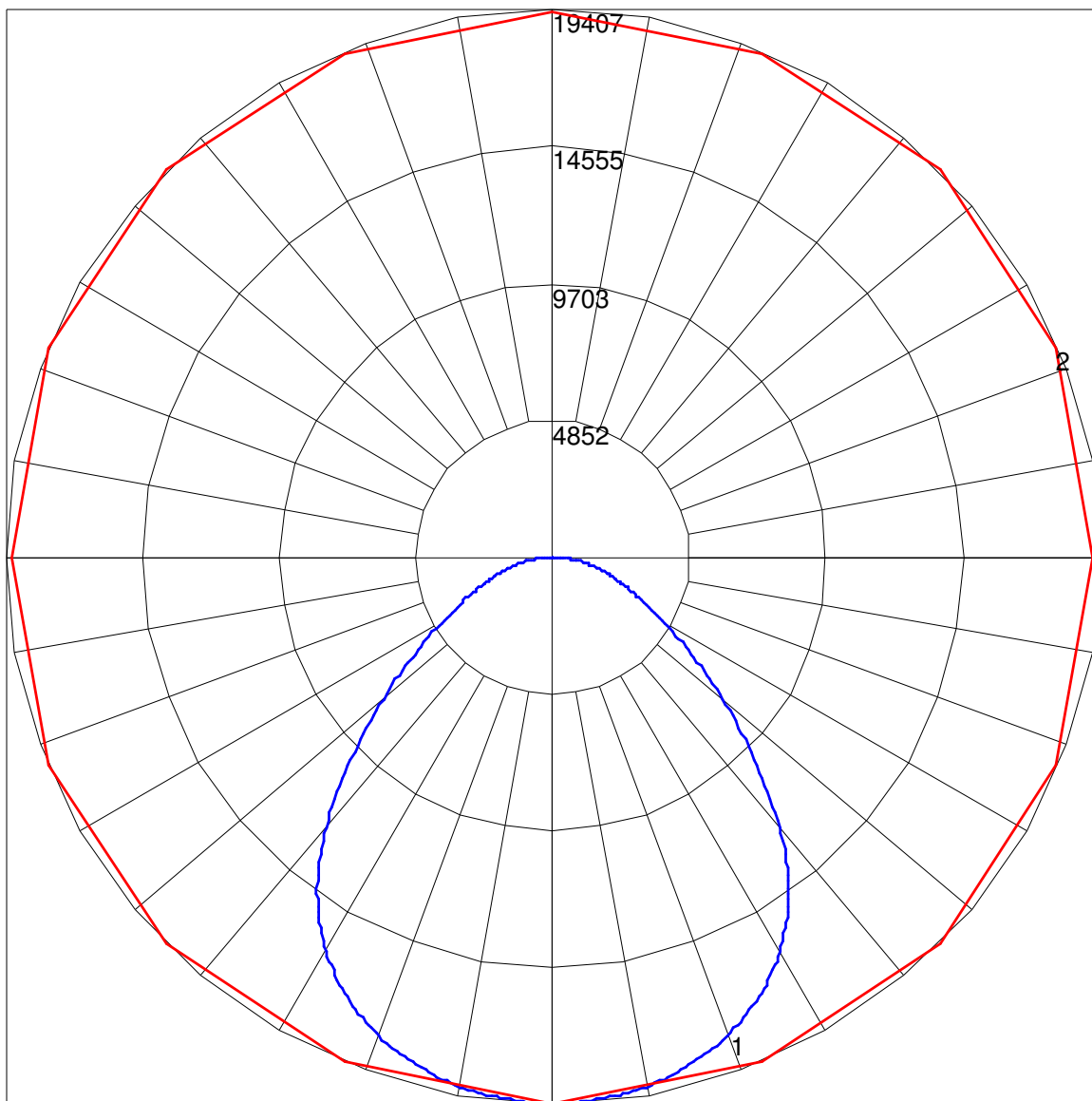
Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	23.1	24.6	23.5	24.9	25.3	21.9	23.4	22.2	23.7	24.0
	3H	24.6	25.9	24.9	26.2	26.6	23.4	24.8	23.8	25.1	25.5
	4H	25.2	26.5	25.6	26.8	27.2	24.1	25.4	24.5	25.8	26.1
	6H	25.8	26.9	26.2	27.3	27.7	24.7	25.9	25.1	26.2	26.6
	8H	25.9	27.1	26.4	27.4	27.8	24.9	26.0	25.3	26.4	26.8
	12H	26.1	27.1	26.5	27.5	28.0	25.0	26.1	25.5	26.5	26.9
4H	2H	23.5	24.7	23.9	25.1	25.5	22.4	23.7	22.8	24.0	24.4
	3H	25.2	26.2	25.6	26.6	27.0	24.2	25.3	24.6	25.7	26.1
	4H	26.0	26.9	26.4	27.3	27.7	25.1	26.0	25.5	26.4	26.9
	6H	26.6	27.5	27.1	27.9	28.4	25.8	26.6	26.2	27.0	27.5
	8H	26.9	27.7	27.4	28.1	28.6	26.0	26.8	26.5	27.2	27.7
	12H	27.1	27.8	27.6	28.3	28.7	26.2	26.8	26.6	27.3	27.8
8H	4H	26.1	26.9	26.6	27.4	27.8	25.4	26.1	25.8	26.6	27.0
	6H	27.0	27.6	27.5	28.1	28.6	26.2	26.8	26.7	27.3	27.8
	8H	27.3	27.9	27.8	28.4	28.9	26.5	27.1	27.0	27.6	28.1
	12H	27.6	28.1	28.1	28.6	29.1	26.7	27.2	27.2	27.7	28.3
12H	4H	26.2	26.9	26.7	27.3	27.8	25.4	26.1	25.9	26.6	27.0
	6H	27.0	27.6	27.5	28.0	28.6	26.2	26.8	26.8	27.3	27.8
	8H	27.4	27.9	27.9	28.4	28.9	26.6	27.1	27.1	27.6	28.2

Maximum UGR = 29.1

POLAR GRAPH



Maximum Candela = 19406.698 Located At Horizontal Angle = 45, Vertical Angle = .5  
# 1 - Vertical Plane Through Horizontal Angles (45 - 225) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)