



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-840-HA-MD-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 14629546.02
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2023-03-14
[TEST DATE] 1/5/2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] GS-4-L480-840-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	44168
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	142
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	41664	40483	35400
55	31461	29505	24926
65	24444	22104	20569
75	23542	19228	20707
85	21046	14275	15861

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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	19968.136	19968.136	19968.136	19968.136	19968.136
0.5	19793.657	19948.749	20006.909	19968.136	19987.522
1.0	19793.657	19948.749	20006.909	19948.749	19987.522
1.5	19793.657	19948.749	20006.909	19948.749	19987.522
2.0	19774.270	19948.749	19987.522	19929.363	19968.136
2.5	19774.270	19929.363	19987.522	19929.363	19948.749
3.0	19754.884	19909.976	19968.136	19909.976	19929.363
3.5	19754.884	19909.976	19948.749	19890.589	19929.363
4.0	19735.497	19890.589	19929.363	19871.203	19909.976
4.5	19716.111	19871.203	19909.976	19851.816	19890.589
5.0	19716.111	19851.816	19909.976	19851.816	19871.203
5.5	19696.724	19832.430	19890.589	19832.430	19851.816
6.0	19677.338	19813.043	19871.203	19813.043	19832.430
6.5	19657.951	19813.043	19851.816	19793.657	19813.043
7.0	19638.564	19774.270	19832.430	19774.270	19793.657
7.5	19599.791	19754.884	19813.043	19754.884	19774.270
8.0	19580.405	19735.497	19793.657	19735.497	19754.884
8.5	19561.018	19716.111	19774.270	19716.111	19716.111
9.0	19522.245	19677.338	19735.497	19696.724	19696.724
9.5	19502.859	19657.951	19716.111	19657.951	19677.338
10.0	19464.086	19638.564	19696.724	19638.564	19638.564
10.5	19425.313	19599.791	19657.951	19599.791	19619.178
11.0	19405.926	19561.018	19619.178	19561.018	19580.405
11.5	19369.092	19522.245	19580.405	19522.245	19541.632
12.0	19334.196	19483.472	19541.632	19483.472	19502.859
12.5	19297.361	19444.699	19502.859	19444.699	19464.086
13.0	19256.650	19405.926	19464.086	19405.926	19425.313
13.5	19210.122	19353.582	19425.313	19357.460	19386.539
14.0	19163.594	19307.055	19365.214	19312.871	19341.950
14.5	19113.189	19258.588	19314.809	19266.343	19299.300
15.0	19060.846	19212.061	19264.404	19215.938	19254.711
15.5	19004.625	19159.717	19210.122	19165.533	19210.122
16.0	18948.404	19105.435	19151.962	19115.128	19159.717
16.5	18890.244	19049.214	19095.741	19062.784	19107.373
17.0	18830.146	18989.115	19035.643	19006.563	19051.152
17.5	18766.170	18925.140	18977.483	18950.342	18992.993
18.0	18700.256	18861.164	18919.324	18890.244	18932.894
18.5	18638.219	18795.250	18857.287	18828.207	18865.042
19.0	18572.305	18729.336	18795.250	18764.232	18801.066
19.5	18508.329	18659.544	18731.274	18698.317	18733.213
20.0	18440.476	18587.814	18657.606	18634.342	18669.237
20.5	18366.807	18510.268	18578.121	18570.366	18597.507
21.0	18291.200	18426.906	18490.881	18502.513	18527.716
21.5	18213.654	18343.544	18417.212	18428.844	18454.047
22.0	18132.230	18260.182	18339.666	18355.176	18380.378
22.5	18044.991	18171.003	18252.427	18275.691	18300.893
23.0	17955.813	18081.825	18161.310	18192.329	18215.592
23.5	17862.757	17990.709	18070.193	18105.089	18130.292
24.0	17763.886	17893.776	17973.261	18013.972	18043.052
24.5	17666.953	17794.905	17878.267	17918.978	17953.874
25.0	17566.143	17696.033	17783.273	17820.107	17860.819
25.5	17459.517	17589.407	17682.463	17717.358	17765.825
26.0	17354.830	17486.659	17581.653	17610.732	17663.076
26.5	17248.204	17376.155	17475.027	17504.106	17558.389

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CANDELA TABULATION - (Cont.)

27.0	17135.76217267.59117366.46217391.66517449.824
27.5	17021.38217155.14917254.02017277.28417337.382
28.0	16901.18517038.83017137.70117157.08717219.124
28.5	16780.98916918.63317015.56617034.95217095.050
29.0	16645.28316794.55916891.49216907.00116965.161
29.5	16515.39316666.60816763.54116775.17316829.455
30.0	16381.62616534.78016629.77416637.52816687.933
30.5	16242.04316401.01216490.19016492.12916536.718
31.0	16098.58216263.36816348.66916333.15916377.749
31.5	15953.18316123.78516199.39216166.43516209.086
32.0	15807.78415984.20216052.05516013.28216057.871
32.5	15654.63115832.98715896.96215848.49615891.146
33.0	15505.35415681.77215737.99315668.20115656.569
33.5	15348.32315522.80215571.26815485.96815441.379
34.0	15189.35415358.01715402.60615292.10215222.311
34.5	15032.32315191.29215228.12715086.60514995.488
35.0	14863.66015022.62915047.83214875.29214757.034
35.5	14694.99714850.08914859.78214654.28514505.009
36.0	14518.57914669.79414665.91714423.58514247.168
36.5	14338.28514483.68414462.35814181.25413979.634
37.0	14154.11214293.69614254.92213935.04513708.222
37.5	13966.06314099.83014041.67113677.20413430.995
38.0	13770.25913904.02613826.48013419.36313146.012
38.5	13570.57813702.40613603.53513153.76712861.030
39.0	13367.01913498.84713376.71212882.35512568.294
39.5	13157.64413293.35013144.07412609.00512277.495
40.0	12946.33113083.97512907.55812333.71611984.759
40.5	12729.20212872.66212665.22612054.55011688.145
41.0	12510.13412657.47212422.89411777.32311374.083
41.5	12293.00512438.40412176.68511496.21811052.266
42.0	12071.99812217.39711924.66011220.92910784.732
42.5	11850.99211994.45211676.51310965.02710517.198
43.0	11628.04611769.56811428.36510687.79910236.093
43.5	11405.10111540.80711180.21710393.1249951.111
44.0	11182.15611312.04610930.13110127.5289670.006
44.5	10961.14911079.40710680.0459859.994 9398.594
45.0	10742.08210844.83010437.7139598.276 9127.183
45.5	10519.13610614.13010191.5049340.435 8861.587
46.0	10296.19110383.4319949.172 9088.410 8605.685
46.5	10079.06210150.7929712.656 8844.139 8357.537
47.0	9859.994 9922.031 9474.202 8603.746 8115.205
47.5	9640.926 9695.208 9241.563 8367.230 7882.567
48.0	9425.735 9468.386 9010.864 8138.469 7657.683
48.5	9210.545 9247.379 8782.102 7915.524 7438.615
49.0	8995.354 9028.311 8559.157 7694.518 7229.241
49.5	8778.225 8809.244 8340.089 7483.204 7027.621
50.0	8564.973 8594.053 8122.960 7275.768 6833.755
50.5	8355.599 8380.801 7907.769 7072.210 6643.767
51.0	8148.163 8171.426 7700.333 6878.344 6461.534
51.5	7938.788 7965.929 7492.898 6676.724 6288.993
52.0	7737.168 7762.370 7293.216 6494.491 6118.392
52.5	7533.609 7562.689 7103.228 6321.951 5955.545
53.0	7333.928 7364.946 6920.995 6151.349 5798.514
53.5	7138.124 7169.142 6721.313 5984.625 5645.360
54.0	6948.136 6977.216 6527.448 5821.778 5498.023
54.5	6762.025 6789.166 6345.214 5664.747 5354.562

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CANDELA TABULATION - (Cont.)

55.0	6579.791	6603.055	6170.736	5511.593	5213.040
55.5	6397.558	6418.883	5998.195	5362.317	5077.335
56.0	6225.018	6240.527	5829.532	5216.918	4945.506
56.5	6054.416	6064.110	5664.747	5077.335	4817.555
57.0	5885.753	5891.569	5503.839	4939.690	4691.543
57.5	5724.845	5722.906	5346.808	4805.923	4569.407
58.0	5569.753	5560.060	5193.654	4676.033	4451.149
58.5	5416.599	5399.151	5042.439	4550.021	4336.769
59.0	5267.323	5244.059	4895.101	4425.947	4226.266
59.5	5119.985	5090.905	4751.641	4305.750	4117.701
60.0	4980.402	4941.629	4612.058	4191.370	4014.952
60.5	4842.758	4800.107	4476.352	4076.989	3916.081
61.0	4708.990	4660.524	4342.585	3968.425	3817.210
61.5	4577.162	4524.818	4212.695	3861.799	3724.154
62.0	4451.149	4394.928	4086.683	3760.989	3634.976
62.5	4329.014	4268.916	3964.547	3662.117	3549.675
63.0	4208.818	4150.658	3844.351	3565.185	3468.252
63.5	4086.683	4038.216	3729.970	3472.129	3388.767
64.0	3947.099	3910.265	3619.467	3382.951	3313.160
64.5	3857.921	3801.700	3510.902	3297.650	3239.491
65.0	3766.805	3697.013	3406.215	3214.288	3169.699
65.5	3664.056	3594.264	3305.405	3134.803	3101.846
66.0	3569.062	3481.822	3208.472	3055.319	3035.932
66.5	3474.068	3382.951	3113.478	2979.711	2971.956
67.0	3384.890	3287.957	3020.423	2906.042	2909.920
67.5	3297.650	3194.902	2933.183	2834.312	2847.883
68.0	3214.288	3105.724	2847.883	2764.521	2787.784
68.5	3132.865	3018.484	2764.521	2696.668	2727.686
69.0	3055.319	2933.183	2683.097	2628.815	2669.526
69.5	2981.650	2849.821	2605.551	2562.901	2611.367
70.0	2907.981	2768.398	2528.005	2498.925	2555.146
70.5	2836.251	2688.913	2454.336	2433.011	2496.986
71.0	2766.459	2611.367	2378.728	2369.035	2440.765
71.5	2696.668	2533.821	2306.998	2305.060	2382.606
72.0	2630.753	2456.275	2235.268	2241.084	2324.446
72.5	2562.901	2380.667	2157.722	2175.170	2264.348
73.0	2496.986	2305.060	2087.930	2111.194	2204.250
73.5	2433.011	2229.452	2022.016	2043.341	2144.151
74.0	2369.035	2153.845	1952.225	1977.427	2082.114
74.5	2291.489	2078.237	1880.494	1909.574	2018.139
75.0	2221.697	2002.630	1814.580	1841.721	1954.163
75.5	2149.967	1928.961	1748.666	1771.930	1886.310
76.0	2076.298	1853.353	1669.181	1704.077	1820.396
76.5	2002.630	1777.746	1597.451	1634.285	1750.605
77.0	1927.022	1704.077	1525.721	1564.494	1680.813
77.5	1851.415	1628.469	1453.990	1494.702	1609.083
78.0	1771.930	1554.800	1384.199	1422.972	1535.414
78.5	1690.506	1479.193	1312.469	1353.180	1461.745
79.0	1611.021	1405.524	1242.677	1283.389	1386.138
79.5	1531.537	1329.917	1169.008	1211.659	1310.530
80.0	1450.113	1256.248	1099.217	1141.867	1234.923
80.5	1368.690	1182.579	1029.425	1072.076	1157.376
81.0	1287.266	1108.910	959.634	1002.284	1081.769
81.5	1207.781	1037.180	889.842	934.431	1004.223
82.0	1128.297	967.388	821.989	866.578	928.615
82.5	1048.812	895.658	754.136	800.664	854.946

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CANDELA TABULATION - (Cont.)

83.0	971.266	820.051	690.161	734.750	781.278
83.5	893.719	758.014	628.124	670.774	711.486
84.0	818.112	697.915	566.087	606.799	639.756
84.5	742.504	630.063	507.927	546.700	571.903
85.0	668.836	569.964	453.645	486.602	504.050
85.5	597.105	511.805	399.363	430.381	442.013
86.0	523.437	451.706	348.958	376.099	378.038
86.5	453.645	393.547	302.430	317.939	321.817
87.0	383.853	335.387	255.902	263.657	265.596
87.5	316.001	277.228	211.313	213.252	213.252
88.0	248.148	224.884	170.602	166.724	166.724
88.5	182.233	178.356	133.767	127.951	122.135
89.0	127.951	137.644	102.749	94.994	89.178
89.5	87.239	102.749	73.669	67.853	67.853
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-L480-840-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-L480-840-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-L480-840-HA-MD-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	7309.25	N.A.	16.50
0-30	15473.9	N.A.	35.00
0-40	24741.78	N.A.	56.00
0-60	38070.63	N.A.	86.20
0-80	43563.61	N.A.	98.60
0-90	44168.27	N.A.	100.00
10-90	42280.43	N.A.	95.70
20-40	17432.53	N.A.	39.50
20-50	25309.64	N.A.	57.30
40-70	16786.39	N.A.	38.00
60-80	5492.98	N.A.	12.40
70-80	2035.44	N.A.	4.60
80-90	604.66	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	44168.27	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1887.84
10-20	5421.41
20-30	8164.65
30-40	9267.88
40-50	7877.11
50-60	5451.74
60-70	3457.54
70-80	2035.44
80-90	604.66
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-L480-840-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-L480-840-HA-MD-DIM-UNV_.IES

UGR TABLE - CORRECTED

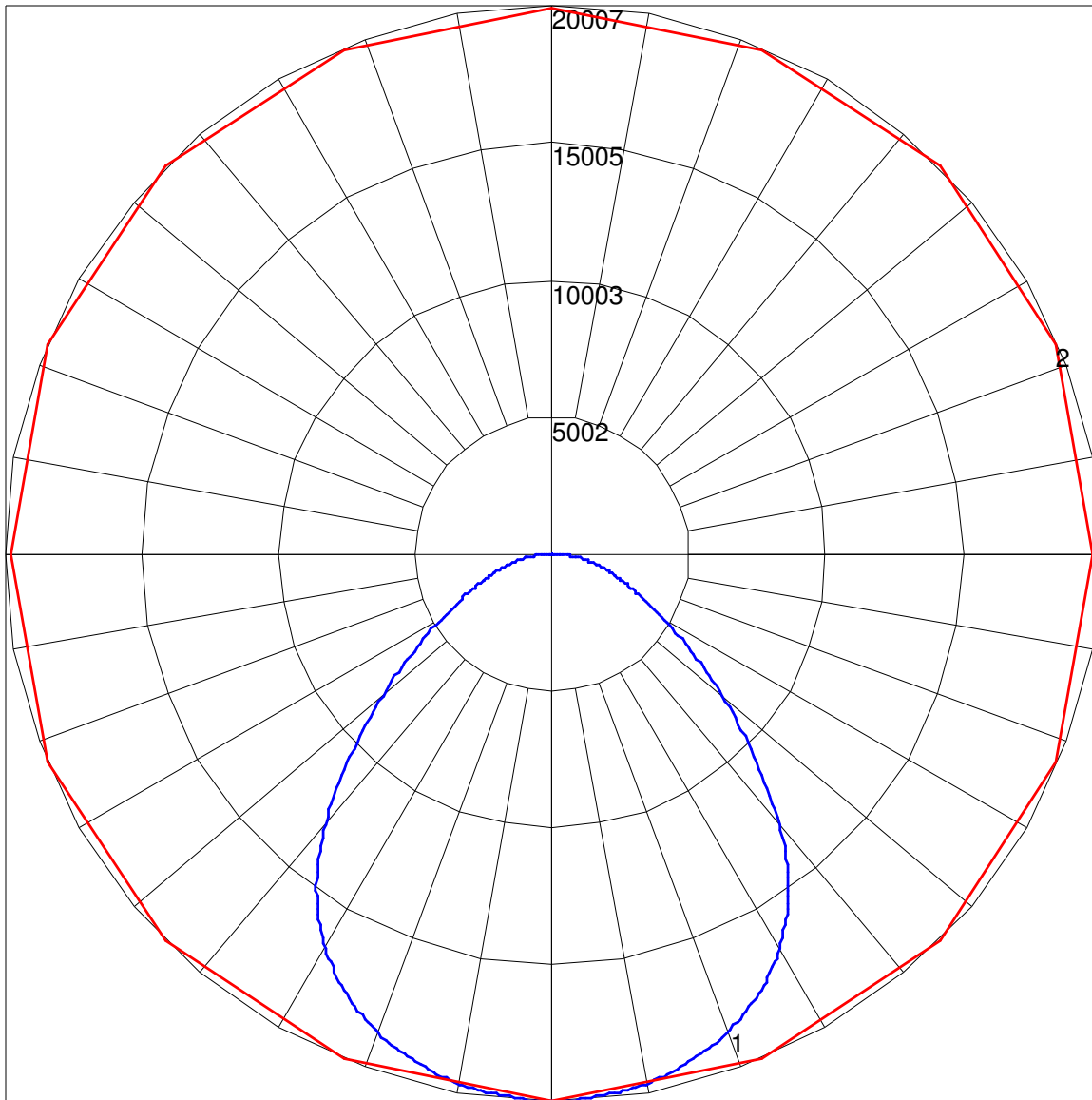
Reflectances

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	23.2	24.7	23.6	25.0	25.4	22.0	23.5	22.3	23.8	24.1
	3H	24.7	26.0	25.0	26.3	26.7	23.5	24.9	23.9	25.2	25.6
	4H	25.3	26.6	25.7	26.9	27.3	24.2	25.5	24.6	25.9	26.2
	6H	25.9	27.0	26.3	27.4	27.8	24.8	26.0	25.2	26.3	26.7
	8H	26.0	27.2	26.5	27.5	27.9	25.0	26.1	25.4	26.5	26.9
	12H	26.2	27.2	26.6	27.6	28.1	25.1	26.2	25.6	26.6	27.0
4H	2H	23.6	24.8	24.0	25.2	25.6	22.5	23.8	22.9	24.1	24.5
	3H	25.3	26.3	25.7	26.7	27.1	24.3	25.4	24.7	25.8	26.2
	4H	26.1	27.0	26.5	27.4	27.8	25.2	26.1	25.6	26.5	27.0
	6H	26.7	27.6	27.2	28.0	28.5	25.9	26.7	26.3	27.1	27.6
	8H	27.0	27.8	27.5	28.2	28.7	26.1	26.9	26.6	27.3	27.8
	12H	27.2	27.9	27.7	28.4	28.8	26.3	26.9	26.7	27.4	27.9
8H	4H	26.2	27.0	26.7	27.5	27.9	25.5	26.2	25.9	26.7	27.1
	6H	27.1	27.7	27.6	28.2	28.7	26.3	26.9	26.8	27.4	27.9
	8H	27.4	28.0	27.9	28.5	29.0	26.6	27.2	27.1	27.7	28.2
	12H	27.7	28.2	28.2	28.7	29.2	26.8	27.3	27.3	27.8	28.4
12H	4H	26.3	27.0	26.8	27.4	27.9	25.5	26.2	26.0	26.7	27.1
	6H	27.1	27.7	27.6	28.1	28.7	26.3	26.9	26.9	27.4	27.9
	8H	27.5	28.0	28.0	28.5	29.0	26.7	27.2	27.2	27.7	28.3

Maximum UGR = 29.2

POLAR GRAPH



Maximum Candela = 20006.909 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.)