



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L240-835-HA-ND-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 14629546.01  
[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-L240-835-HA-ND-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	22740
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	169
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.10
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.22
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	20355	20037	20171
55	18751	18552	18208
65	16743	16590	15218
75	13994	13335	10854
85	10320	8206	6683

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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	10006.308	10006.308	10006.308	10006.308	10006.308
0.5	9917.407	10006.308	10026.064	10006.308	10026.064
1.0	9907.529	9996.430	10026.064	9996.430	10026.064
1.5	9907.529	9996.430	10016.186	9996.430	10016.186
2.0	9897.652	9986.553	10006.308	9986.553	10006.308
2.5	9897.652	9976.675	10006.308	9976.675	9996.430
3.0	9887.774	9966.797	9996.430	9966.797	9986.553
3.5	9871.969	9956.919	9976.675	9947.041	9956.919
4.0	9861.103	9947.041	9966.797	9937.163	9956.919
4.5	9849.250	9937.163	9956.919	9917.407	9937.163
5.0	9835.421	9917.407	9947.041	9907.529	9917.407
5.5	9818.628	9907.529	9927.285	9887.774	9897.652
6.0	9799.860	9887.774	9907.529	9866.042	9887.774
6.5	9780.105	9864.067	9887.774	9843.323	9861.103
7.0	9756.398	9840.360	9861.103	9820.604	9837.396
7.5	9727.752	9813.689	9832.457	9792.946	9812.702
8.0	9702.069	9785.043	9802.824	9764.300	9784.056
8.5	9673.423	9753.434	9771.214	9734.666	9754.422
9.0	9640.826	9719.849	9736.642	9703.057	9722.813
9.5	9606.254	9683.301	9703.057	9669.472	9688.240
10.0	9566.742	9645.765	9664.533	9634.899	9652.680
10.5	9527.230	9604.278	9626.009	9597.363	9613.168
11.0	9484.755	9562.791	9584.522	9557.852	9570.693
11.5	9441.293	9519.328	9543.035	9516.365	9530.194
12.0	9395.854	9473.890	9496.609	9471.914	9483.768
12.5	9351.404	9425.488	9449.195	9427.464	9437.342
13.0	9305.966	9377.086	9398.818	9378.074	9388.940
13.5	9257.564	9326.709	9347.453	9323.746	9336.587
14.0	9206.199	9272.381	9295.100	9266.454	9285.222
14.5	9153.846	9217.064	9240.771	9216.077	9229.906
15.0	9098.530	9162.736	9184.467	9161.748	9174.590
15.5	9041.238	9106.432	9127.176	9102.481	9118.286
16.0	8983.946	9048.152	9065.933	9042.226	9058.030
16.5	8922.703	8990.861	9005.678	8982.958	8994.812
17.0	8859.485	8930.606	8950.361	8920.728	8930.606
17.5	8796.266	8869.363	8886.155	8857.509	8865.411
18.0	8734.035	8806.144	8819.973	8793.303	8800.217
18.5	8668.841	8743.913	8756.755	8728.109	8733.048
19.0	8604.635	8680.695	8691.560	8661.927	8664.890
19.5	8539.441	8616.488	8627.354	8593.769	8598.708
20.0	8475.235	8550.307	8561.172	8526.600	8532.526
20.5	8410.040	8485.112	8494.990	8458.442	8464.369
21.0	8342.871	8419.918	8429.796	8390.285	8397.199
21.5	8279.652	8352.749	8362.627	8322.127	8328.054
22.0	8212.482	8287.555	8295.457	8253.970	8260.884
22.5	8148.276	8222.360	8227.299	8185.812	8192.727
23.0	8083.082	8155.191	8158.154	8115.679	8121.606
23.5	8017.888	8089.009	8087.033	8043.570	8050.485
24.0	7953.682	8024.802	8015.912	7971.462	7980.352
24.5	7893.426	7956.645	7941.828	7899.353	7908.243
25.0	7829.220	7889.475	7868.732	7827.245	7839.098
25.5	7763.038	7821.318	7795.635	7757.112	7768.965
26.0	7698.832	7753.160	7722.539	7686.978	7701.795
26.5	7634.626	7684.015	7649.442	7615.858	7633.638

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**CANDELA TABULATION - (Cont.)**

27.0	7570.419	7621.784	7576.346	7545.725	7566.468
27.5	7505.225	7562.517	7504.237	7474.604	7499.298
28.0	7440.031	7483.494	7433.117	7404.471	7432.129
28.5	7375.825	7415.336	7361.996	7335.325	7365.947
29.0	7304.704	7354.093	7291.863	7266.180	7299.765
29.5	7239.510	7283.960	7222.717	7199.010	7233.583
30.0	7174.316	7213.827	7154.560	7131.841	7164.438
30.5	7111.097	7147.645	7087.390	7066.647	7097.268
31.0	7046.891	7081.463	7019.233	7001.452	7030.098
31.5	6984.660	7015.282	6951.075	6935.271	6961.941
32.0	6923.417	6949.100	6883.906	6870.076	6894.771
32.5	6861.186	6884.893	6816.736	6805.870	6829.577
33.0	6799.943	6819.699	6749.566	6739.688	6764.383
33.5	6739.688	6756.481	6682.396	6674.494	6701.164
34.0	6678.445	6691.287	6616.215	6608.312	6637.946
34.5	6617.202	6626.092	6542.130	6541.143	6573.740
35.0	6554.972	6561.886	6477.924	6473.973	6509.533
35.5	6493.729	6497.680	6414.705	6406.803	6445.327
36.0	6431.498	6433.473	6347.536	6340.621	6380.133
36.5	6369.267	6367.292	6281.354	6273.452	6315.927
37.0	6308.024	6302.097	6215.172	6206.282	6249.745
37.5	6254.684	6234.928	6147.015	6139.112	6184.551
38.0	6195.416	6168.746	6080.833	6071.942	6119.356
38.5	6115.405	6101.576	6014.651	6005.761	6055.150
39.0	6049.223	6033.419	5951.432	5939.579	5989.956
39.5	5983.041	5966.249	5889.201	5873.397	5923.774
40.0	5914.884	5898.092	5818.081	5807.215	5857.592
40.5	5847.714	5830.922	5748.935	5741.033	5791.410
41.0	5780.545	5764.740	5683.741	5674.851	5725.228
41.5	5713.375	5696.582	5618.547	5607.681	5658.059
42.0	5645.217	5629.413	5552.365	5540.512	5590.889
42.5	5579.035	5562.243	5488.159	5473.342	5525.695
43.0	5511.866	5495.073	5423.953	5407.160	5461.489
43.5	5445.684	5427.904	5358.758	5339.003	5396.294
44.0	5379.502	5361.722	5295.540	5271.833	5330.113
44.5	5313.320	5291.589	5230.346	5205.651	5265.906
45.0	5248.126	5220.468	5166.139	5138.481	5200.712
45.5	5182.932	5157.249	5101.933	5071.312	5132.555
46.0	5116.750	5091.067	5037.727	5004.142	5066.373
46.5	5053.531	5017.971	4972.533	4936.972	4998.215
47.0	4988.337	4956.728	4908.326	4869.803	4930.058
47.5	4922.155	4894.497	4843.132	4803.621	4861.900
48.0	4856.961	4828.315	4778.926	4736.451	4791.767
48.5	4791.767	4761.146	4713.732	4670.269	4722.622
49.0	4726.573	4694.964	4649.526	4603.099	4654.464
49.5	4661.379	4628.782	4585.319	4538.893	4584.331
50.0	4595.197	4561.612	4521.113	4473.699	4515.186
50.5	4529.015	4494.443	4457.894	4405.541	4446.041
51.0	4461.845	4428.261	4393.688	4338.372	4375.908
51.5	4395.664	4362.079	4330.469	4274.165	4306.763
52.0	4328.494	4296.885	4266.263	4207.984	4235.642
52.5	4259.349	4230.703	4203.045	4141.802	4164.521
53.0	4191.191	4164.521	4138.838	4076.608	4093.400
53.5	4124.021	4098.339	4074.632	4011.413	4022.279
54.0	4056.852	4033.145	4010.426	3946.219	3951.158
54.5	3989.682	3967.951	3945.232	3879.050	3880.037

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**CANDELA TABULATION - (Cont.)**

55.0	3921.525	3902.757	3880.037	3812.868	3807.929
55.5	3855.343	3836.575	3815.831	3744.710	3736.808
56.0	3788.173	3770.393	3749.649	3677.541	3665.687
56.5	3721.003	3704.211	3679.516	3609.383	3594.566
57.0	3653.834	3639.017	3610.371	3541.226	3522.458
57.5	3587.652	3572.835	3550.116	3472.080	3450.349
58.0	3520.482	3506.653	3485.909	3402.935	3379.228
58.5	3453.312	3440.471	3419.727	3332.802	3306.132
59.0	3386.143	3373.301	3353.546	3261.681	3234.023
59.5	3318.973	3307.119	3287.364	3191.548	3162.902
60.0	3252.791	3239.950	3220.194	3120.427	3100.671
60.5	3185.621	3172.780	3155.000	3050.294	3022.636
61.0	3118.452	3105.610	3089.806	2980.161	2939.662
61.5	3051.282	3039.429	3022.636	2909.040	2864.590
62.0	2985.100	2971.271	2955.466	2837.919	2790.506
62.5	2916.943	2904.101	2888.297	2767.786	2715.434
63.0	2849.773	2837.919	2822.115	2696.666	2641.349
63.5	2781.615	2770.750	2756.921	2627.520	2566.277
64.0	2713.458	2704.568	2690.739	2557.387	2492.193
64.5	2646.288	2638.386	2623.569	2488.242	2418.109
65.0	2580.106	2572.204	2556.399	2418.109	2345.012
65.5	2513.924	2506.022	2491.205	2348.964	2272.904
66.0	2447.743	2439.840	2425.023	2279.818	2200.795
66.5	2381.561	2375.634	2358.841	2210.673	2128.687
67.0	2315.379	2310.440	2292.660	2135.601	2057.566
67.5	2250.185	2245.246	2226.478	2069.419	1987.433
68.0	2184.991	2180.052	2159.308	2003.237	1917.300
68.5	2120.784	2115.845	2093.126	1935.080	1848.154
69.0	2056.578	2050.651	2025.956	1865.935	1779.009
69.5	1993.359	1987.433	1959.775	1797.777	1711.839
70.0	1930.141	1923.226	1893.593	1729.620	1644.670
70.5	1867.910	1859.020	1827.411	1662.450	1578.488
71.0	1805.679	1794.814	1762.217	1595.280	1513.294
71.5	1743.449	1732.583	1697.022	1530.086	1448.100
72.0	1682.206	1669.364	1631.828	1464.892	1384.881
72.5	1620.963	1607.134	1567.622	1400.686	1322.650
73.0	1560.708	1544.903	1505.391	1337.467	1260.419
73.5	1500.452	1483.660	1442.173	1275.236	1200.164
74.0	1439.209	1422.417	1379.942	1214.981	1139.909
74.5	1380.930	1362.162	1318.699	1154.726	1081.630
75.0	1320.675	1302.894	1258.444	1095.459	1024.338
75.5	1262.395	1243.627	1197.201	1037.179	968.034
76.0	1205.103	1186.335	1137.934	980.875	914.693
76.5	1147.811	1129.043	1079.654	925.559	861.353
77.0	1091.507	1072.739	1021.374	872.218	807.024
77.5	1036.191	1018.411	965.070	819.865	754.671
78.0	981.863	964.083	908.766	768.500	709.233
78.5	928.522	910.742	853.450	719.111	664.782
79.0	876.169	858.389	800.110	670.709	620.332
79.5	824.804	807.024	746.769	623.295	576.869
80.0	774.427	756.647	694.416	577.857	535.382
80.5	725.038	708.245	644.039	537.358	494.883
81.0	677.624	659.843	593.662	498.834	457.347
81.5	631.198	612.430	545.260	453.395	421.786
82.0	584.771	566.991	499.822	413.884	387.214
82.5	539.333	521.553	455.371	377.336	353.629

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**CANDELA TABULATION - (Cont.)**

83.0	494.883	477.102	412.896	342.763	322.019
83.5	452.408	434.627	371.409	310.166	292.386
84.0	409.933	393.140	331.897	279.544	264.728
84.5	368.446	351.653	295.349	249.911	238.057
85.0	327.946	312.142	260.776	223.240	212.375
85.5	287.447	273.618	228.179	196.570	186.692
86.0	248.923	237.069	198.546	170.888	161.010
86.5	209.411	200.521	168.912	146.193	139.278
87.0	171.875	165.949	141.254	126.437	121.498
87.5	136.315	134.339	116.559	108.657	105.693
88.0	103.718	104.706	96.803	89.889	88.901
88.5	74.084	79.023	77.048	76.060	75.072
89.0	46.426	57.292	62.231	66.182	66.182
89.5	27.658	40.499	50.377	57.292	57.292
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-L240-835-HA-ND-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-L240-835-HA-ND-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-L240-835-HA-ND-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	3510.21	N.A.	15.40
0-30	7125.82	N.A.	31.30
0-40	11199.21	N.A.	49.20
0-60	18655.55	N.A.	82.00
0-80	22421.69	N.A.	98.60
0-90	22740.29	N.A.	100.00
10-90	21802.69	N.A.	95.90
20-40	7689.00	N.A.	33.80
20-50	11692.43	N.A.	51.40
40-70	9934.25	N.A.	43.70
60-80	3766.15	N.A.	16.60
70-80	1288.23	N.A.	5.70
80-90	318.60	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	22740.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	937.60
10-20	2572.61
20-30	3615.61
30-40	4073.39
40-50	4003.43
50-60	3452.91
60-70	2477.92
70-80	1288.23
80-90	318.60
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-L240-835-HA-ND-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	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	60	56	64	59	55	53
5	78	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	31	29
10	55	42	34	29	53	41	34	29	40	34	29	39	33	29	39	33	29	27

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : GS-4-L240-835-HA-ND-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

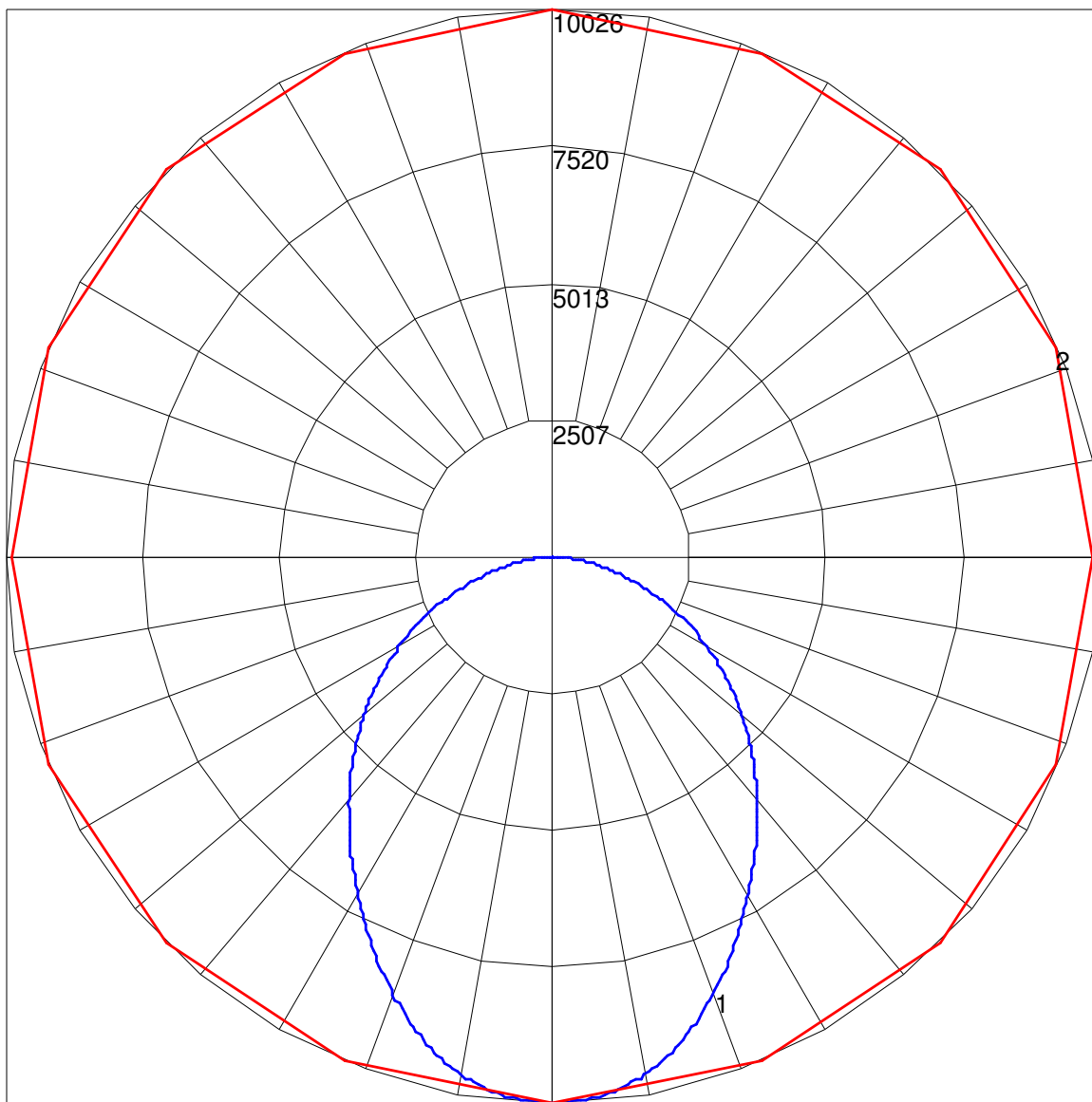
Reflectances

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	22.2	23.8	22.6	24.1	24.4	22.0	23.6	22.3	23.9	24.2
	3H	23.9	25.3	24.2	25.6	26.0	23.4	24.9	23.8	25.2	25.5
	4H	24.5	25.8	24.9	26.2	26.5	23.9	25.2	24.3	25.6	25.9
	6H	24.9	26.1	25.3	26.5	26.9	24.1	25.4	24.6	25.7	26.1
	8H	25.0	26.2	25.4	26.6	27.0	24.2	25.4	24.6	25.8	26.2
	12H	25.1	26.2	25.5	26.6	27.1	24.2	25.4	24.7	25.7	26.2
4H	2H	22.8	24.1	23.2	24.5	24.8	22.6	23.9	23.0	24.3	24.7
	3H	24.6	25.8	25.1	26.2	26.6	24.3	25.4	24.7	25.8	26.2
	4H	25.4	26.4	25.8	26.8	27.2	24.8	25.8	25.2	26.2	26.7
	6H	25.9	26.8	26.4	27.2	27.7	25.2	26.0	25.6	26.5	26.9
	8H	26.1	26.9	26.5	27.4	27.8	25.2	26.1	25.7	26.5	27.0
	12H	26.2	27.0	26.7	27.4	27.9	25.3	26.0	25.8	26.5	27.0
8H	4H	25.6	26.4	26.1	26.9	27.3	25.1	25.9	25.6	26.4	26.8
	6H	26.3	26.9	26.8	27.4	27.9	25.5	26.2	26.0	26.7	27.2
	8H	26.5	27.1	27.0	27.6	28.1	25.7	26.3	26.2	26.8	27.3
	12H	26.7	27.2	27.2	27.7	28.3	25.8	26.3	26.3	26.8	27.4
12H	4H	25.6	26.4	26.1	26.8	27.3	25.1	25.9	25.6	26.3	26.8
	6H	26.3	26.9	26.8	27.4	27.9	25.6	26.2	26.1	26.7	27.2
	8H	26.6	27.1	27.1	27.6	28.2	25.8	26.3	26.3	26.8	27.4

Maximum UGR = 28.3

POLAR GRAPH



Maximum Candela = 10026.064 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.)