



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L240-850-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-L240-850-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	24147
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	143
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	21614	21276	21419
55	19911	19700	19334
65	17779	17616	16159
75	14860	14160	11526
85	10958	8713	7096

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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	10625.256	10625.256	10625.256	10625.256	10625.256
0.5	10530.856	10625.256	10646.233	10625.256	10646.233
1.0	10520.367	10614.767	10646.233	10614.767	10646.233
1.5	10520.367	10614.767	10635.745	10614.767	10635.745
2.0	10509.878	10604.278	10625.256	10604.278	10625.256
2.5	10509.878	10593.789	10625.256	10593.789	10614.767
3.0	10499.389	10583.300	10614.767	10583.300	10604.278
3.5	10482.607	10572.811	10593.789	10562.322	10572.811
4.0	10471.069	10562.322	10583.300	10551.833	10572.811
4.5	10458.482	10551.833	10572.811	10530.856	10551.833
5.0	10443.798	10530.856	10562.322	10520.367	10530.856
5.5	10425.967	10520.367	10541.344	10499.389	10509.878
6.0	10406.038	10499.389	10520.367	10476.313	10499.389
6.5	10385.060	10474.215	10499.389	10452.189	10471.069
7.0	10359.886	10449.042	10471.069	10428.064	10445.895
7.5	10329.469	10420.722	10440.651	10398.695	10419.673
8.0	10302.198	10390.304	10409.184	10368.278	10389.255
8.5	10271.780	10356.740	10375.620	10336.811	10357.789
9.0	10237.166	10321.078	10338.909	10303.246	10324.224
9.5	10200.455	10282.269	10303.246	10267.584	10287.513
10.0	10158.500	10242.411	10262.340	10230.873	10249.753
10.5	10116.544	10198.357	10221.433	10191.015	10207.797
11.0	10071.442	10154.304	10177.380	10149.060	10162.695
11.5	10025.291	10108.153	10133.326	10105.006	10119.691
12.0	9977.042	10059.904	10084.028	10057.806	10070.393
12.5	9929.842	10008.508	10033.682	10010.606	10021.095
13.0	9881.593	9957.113	9980.188	9958.162	9969.699
13.5	9830.197	9903.619	9925.646	9900.473	9914.108
14.0	9775.655	9845.930	9870.055	9839.637	9859.566
14.5	9720.064	9787.193	9812.366	9786.144	9800.828
15.0	9661.326	9729.504	9752.579	9728.455	9742.090
15.5	9600.490	9669.717	9691.744	9665.521	9682.304
16.0	9539.655	9607.832	9626.712	9601.539	9618.321
16.5	9474.623	9546.997	9562.730	9538.606	9551.192
17.0	9407.494	9483.014	9503.992	9472.526	9483.014
17.5	9340.365	9417.983	9435.814	9405.397	9413.788
18.0	9274.285	9350.854	9365.539	9337.219	9344.561
18.5	9205.059	9284.774	9298.410	9267.992	9273.236
19.0	9136.881	9217.645	9229.183	9197.716	9200.863
19.5	9067.654	9149.467	9161.005	9125.343	9130.587
20.0	8999.476	9079.192	9090.730	9054.018	9060.312
20.5	8930.249	9009.965	9020.454	8981.645	8987.938
21.0	8858.925	8940.738	8951.227	8909.272	8916.614
21.5	8791.796	8869.414	8879.903	8836.898	8843.192
22.0	8720.471	8800.187	8808.578	8764.525	8771.867
22.5	8652.294	8730.960	8736.205	8692.151	8699.494
23.0	8583.067	8659.636	8662.782	8617.680	8623.974
23.5	8513.840	8589.360	8587.262	8541.111	8548.453
24.0	8445.662	8521.182	8511.742	8464.542	8473.982
24.5	8381.680	8448.809	8433.076	8387.973	8397.413
25.0	8313.502	8377.484	8355.458	8311.404	8323.991
25.5	8243.226	8305.111	8277.840	8236.933	8249.520
26.0	8175.049	8232.738	8200.222	8162.462	8178.195
26.5	8106.871	8159.315	8122.604	8086.942	8105.822

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**CANDELA TABULATION - (Cont.)**

27.0	8038.693	8093.235	8044.986	8012.471	8034.497
27.5	7969.466	8030.302	7968.417	7936.951	7963.173
28.0	7900.239	7946.391	7892.897	7862.479	7891.848
28.5	7832.062	7874.017	7817.377	7789.057	7821.573
29.0	7756.542	7808.986	7742.906	7715.635	7751.297
29.5	7687.315	7734.515	7669.484	7644.310	7681.021
30.0	7618.088	7660.044	7597.110	7572.986	7607.599
30.5	7550.959	7589.768	7525.786	7503.759	7536.275
31.0	7482.781	7519.492	7453.412	7434.532	7464.950
31.5	7416.701	7449.217	7381.039	7364.257	7392.577
32.0	7351.670	7378.941	7309.714	7295.030	7321.252
32.5	7285.590	7310.763	7238.390	7226.852	7252.025
33.0	7220.559	7241.537	7167.065	7156.576	7182.799
33.5	7156.576	7174.408	7095.741	7087.350	7115.670
34.0	7091.545	7105.181	7025.465	7017.074	7048.541
34.5	7026.514	7035.954	6946.798	6945.750	6980.363
35.0	6960.434	6967.776	6878.621	6874.425	6912.185
35.5	6895.403	6899.598	6811.492	6803.101	6844.007
36.0	6829.323	6831.421	6740.167	6732.825	6774.780
36.5	6763.243	6761.145	6669.891	6661.500	6706.603
37.0	6698.212	6691.918	6599.616	6590.176	6636.327
37.5	6641.571	6620.594	6527.242	6518.851	6567.100
38.0	6578.638	6550.318	6456.967	6447.527	6497.874
38.5	6493.678	6478.993	6386.691	6377.251	6429.696
39.0	6423.402	6406.620	6319.562	6306.976	6360.469
39.5	6353.127	6335.296	6253.482	6236.700	6290.193
40.0	6280.753	6262.922	6177.962	6166.424	6219.918
40.5	6209.429	6191.598	6104.540	6096.149	6149.642
41.0	6138.104	6121.322	6035.313	6025.873	6079.366
41.5	6066.780	6048.949	5966.086	5954.548	6008.042
42.0	5994.406	5977.624	5895.811	5883.224	5936.717
42.5	5924.131	5906.300	5827.633	5811.899	5867.491
43.0	5852.806	5834.975	5759.455	5741.624	5799.313
43.5	5782.531	5763.651	5690.228	5669.250	5730.086
44.0	5712.255	5693.375	5623.099	5597.926	5659.810
44.5	5641.979	5618.904	5553.873	5527.650	5591.633
45.0	5572.753	5543.384	5485.695	5456.326	5522.406
45.5	5503.526	5476.255	5417.517	5385.001	5450.032
46.0	5433.250	5405.979	5349.339	5313.677	5379.757
46.5	5366.121	5328.361	5280.112	5242.352	5307.383
47.0	5296.894	5263.330	5211.934	5171.028	5235.010
47.5	5226.619	5197.250	5142.708	5100.752	5162.637
48.0	5157.392	5126.974	5074.530	5029.428	5088.165
48.5	5088.165	5055.650	5005.303	4959.152	5014.743
49.0	5018.939	4985.374	4937.125	4887.827	4942.370
49.5	4949.712	4915.099	4868.947	4819.650	4867.898
50.0	4879.436	4843.774	4800.770	4750.423	4794.476
50.5	4809.161	4772.449	4733.641	4678.049	4721.054
51.0	4737.836	4702.174	4665.463	4606.725	4646.583
51.5	4667.560	4631.898	4598.334	4538.547	4573.160
52.0	4596.236	4562.671	4530.156	4468.271	4497.640
52.5	4522.814	4492.396	4463.027	4397.996	4422.120
53.0	4450.440	4422.120	4394.849	4328.769	4346.600
53.5	4379.116	4351.845	4326.671	4259.542	4271.080
54.0	4307.791	4282.618	4258.493	4190.316	4195.560
54.5	4236.467	4213.391	4189.267	4118.991	4120.040

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**CANDELA TABULATION - (Cont.)**

55.0	4164.093	4144.164	4120.040	4048.715	4043.471
55.5	4093.818	4073.889	4051.862	3976.342	3967.951
56.0	4022.493	4003.613	3981.586	3905.017	3892.431
56.5	3951.169	3933.337	3907.115	3832.644	3816.911
57.0	3879.844	3864.111	3833.693	3760.271	3740.342
57.5	3809.568	3793.835	3769.711	3686.848	3663.773
58.0	3738.244	3723.559	3701.533	3613.426	3588.253
58.5	3666.919	3653.284	3631.257	3538.955	3510.635
59.0	3595.595	3581.959	3560.982	3463.435	3434.066
59.5	3524.270	3511.684	3490.706	3388.964	3358.546
60.0	3453.995	3440.359	3419.381	3313.443	3292.466
60.5	3382.670	3369.035	3350.155	3238.972	3209.603
61.0	3311.346	3297.710	3280.928	3164.501	3121.497
61.5	3240.021	3227.435	3209.603	3088.981	3041.781
62.0	3169.746	3155.061	3138.279	3013.461	2963.114
62.5	3097.372	3083.737	3066.954	2938.990	2883.399
63.0	3026.048	3013.461	2996.679	2863.470	2804.732
63.5	2953.674	2942.136	2927.452	2790.047	2725.016
64.0	2881.301	2871.861	2857.176	2715.576	2646.349
64.5	2809.976	2801.585	2785.852	2642.154	2567.683
65.0	2739.701	2731.310	2714.527	2567.683	2490.065
65.5	2669.425	2661.034	2645.301	2494.260	2413.496
66.0	2599.149	2590.758	2575.025	2420.838	2336.927
66.5	2528.874	2522.580	2504.749	2347.416	2260.358
67.0	2458.598	2453.354	2434.474	2267.700	2184.838
67.5	2389.371	2384.127	2364.198	2197.425	2110.367
68.0	2320.145	2314.900	2292.874	2127.149	2035.895
68.5	2251.967	2246.722	2222.598	2054.775	1962.473
69.0	2183.789	2177.496	2151.273	1981.353	1889.051
69.5	2116.660	2110.367	2080.998	1908.980	1817.726
70.0	2049.531	2042.189	2010.722	1836.606	1746.402
70.5	1983.451	1974.011	1940.446	1765.282	1676.126
71.0	1917.371	1905.833	1871.220	1693.957	1606.899
71.5	1851.291	1839.753	1801.993	1624.731	1537.673
72.0	1786.260	1772.624	1732.766	1555.504	1470.544
72.5	1721.228	1706.544	1664.588	1487.326	1404.464
73.0	1657.246	1640.464	1598.508	1420.197	1338.384
73.5	1593.264	1575.433	1531.379	1354.117	1274.401
74.0	1528.233	1510.402	1465.299	1290.135	1210.419
74.5	1466.348	1446.419	1400.268	1226.152	1148.535
75.0	1402.366	1383.486	1336.286	1163.219	1087.699
75.5	1340.481	1320.553	1271.255	1101.334	1027.912
76.0	1279.646	1259.717	1208.321	1041.548	971.272
76.5	1218.810	1198.881	1146.437	982.810	914.632
77.0	1159.023	1139.095	1084.552	926.170	856.943
77.5	1100.286	1081.406	1024.766	870.579	801.352
78.0	1042.597	1023.717	964.979	816.036	753.103
78.5	985.957	967.077	906.241	763.592	705.903
79.0	930.365	911.485	849.601	712.196	658.703
79.5	875.823	856.943	792.961	661.850	612.552
80.0	822.330	803.450	737.370	613.601	568.498
80.5	769.885	752.054	683.876	570.596	525.494
81.0	719.539	700.659	630.383	529.689	485.636
81.5	670.241	650.312	578.987	481.441	447.876
82.0	620.943	602.063	530.738	439.485	411.165
82.5	572.694	553.814	483.538	400.676	375.503

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**CANDELA TABULATION - (Cont.)**

83.0	525.494	506.614	438.436	363.965	341.938
83.5	480.392	461.512	394.383	329.351	310.471
84.0	435.289	417.458	352.427	296.836	281.103
84.5	391.236	373.405	313.618	265.369	252.782
85.0	348.231	331.449	276.907	237.049	225.511
85.5	305.227	290.543	242.294	208.729	198.240
86.0	264.320	251.734	210.827	181.458	170.969
86.5	222.365	212.925	179.360	155.236	147.893
87.0	182.507	176.214	149.991	134.258	129.013
87.5	144.747	142.649	123.769	115.378	112.231
88.0	110.133	111.182	102.791	95.449	94.400
88.5	78.667	83.911	81.813	80.765	79.716
89.0	49.298	60.836	66.080	70.276	70.276
89.5	29.369	43.004	53.493	60.836	60.836
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-L240-850-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-L240-850-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-L240-850-HA-ND-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	3727.34	N.A.	15.40
0-30	7566.59	N.A.	31.30
0-40	11891.95	N.A.	49.20
0-60	19809.5	N.A.	82.00
0-80	23808.6	N.A.	98.60
0-90	24146.91	N.A.	100.00
10-90	23151.31	N.A.	95.90
20-40	8164.61	N.A.	33.80
20-50	12415.67	N.A.	51.40
40-70	10548.74	N.A.	43.70
60-80	3999.1	N.A.	16.60
70-80	1367.91	N.A.	5.70
80-90	338.31	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	24146.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	995.60
10-20	2731.74
20-30	3839.25
30-40	4325.36
40-50	4251.06
50-60	3666.49
60-70	2631.19
70-80	1367.91
80-90	338.31
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-L240-850-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-L240-850-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

X=2H	Y=2H	22.4	24.0	22.8	24.3	24.6	22.2	23.8	22.5	24.1	24.4
	3H	24.1	25.5	24.4	25.8	26.2	23.6	25.1	24.0	25.4	25.7
	4H	24.7	26.0	25.1	26.4	26.7	24.1	25.4	24.5	25.8	26.1
	6H	25.1	26.3	25.5	26.7	27.1	24.3	25.6	24.8	25.9	26.3
	8H	25.2	26.4	25.6	26.8	27.2	24.4	25.6	24.8	26.0	26.4
	12H	25.3	26.4	25.7	26.8	27.3	24.4	25.6	24.9	25.9	26.4

UGR Viewed Endwise

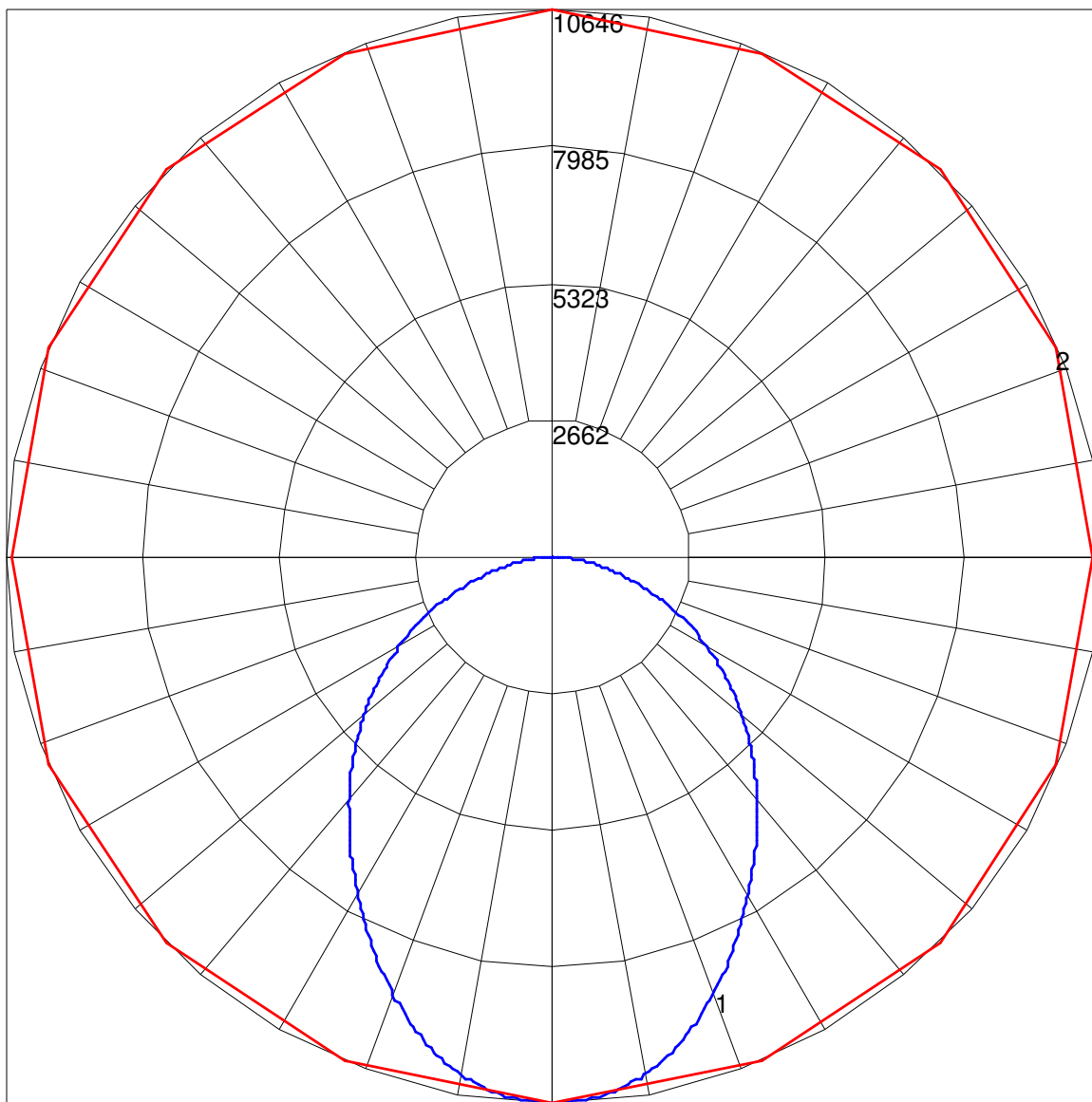
4H	2H	23.0	24.3	23.4	24.7	25.0	22.8	24.1	23.2	24.5	24.9
	3H	24.8	26.0	25.3	26.4	26.8	24.5	25.6	24.9	26.0	26.4
	4H	25.6	26.6	26.0	27.0	27.4	25.0	26.0	25.4	26.4	26.9
	6H	26.1	27.0	26.6	27.4	27.9	25.4	26.2	25.8	26.7	27.1
	8H	26.3	27.1	26.7	27.6	28.0	25.4	26.3	25.9	26.7	27.2
	12H	26.4	27.2	26.9	27.6	28.1	25.5	26.2	26.0	26.7	27.2

8H	4H	25.8	26.6	26.3	27.1	27.5	25.3	26.1	25.8	26.6	27.0
	6H	26.5	27.1	27.0	27.6	28.1	25.7	26.4	26.2	26.9	27.4
	8H	26.7	27.3	27.2	27.8	28.3	25.9	26.5	26.4	27.0	27.5
	12H	26.9	27.4	27.4	27.9	28.5	26.0	26.5	26.5	27.0	27.6

12H	4H	25.8	26.6	26.3	27.0	27.5	25.3	26.1	25.8	26.5	27.0
	6H	26.5	27.1	27.0	27.6	28.1	25.8	26.4	26.3	26.9	27.4
	8H	26.8	27.3	27.3	27.8	28.4	26.0	26.5	26.5	27.0	27.6

Maximum UGR = 28.5

POLAR GRAPH



Maximum Candela = 10646.233 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.)