



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-850-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-L480-850-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	45493
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	146
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	42913	41698	36462
55	32405	30390	25674
65	25178	22767	21187
75	24248	19805	21328
85	21678	14703	16337

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-850-HA-MD-DIM-UNV_.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	20567.175	20567.175	20567.175	20567.175	20567.175
0.5	20387.461	20547.206	20607.111	20567.175	20587.143
1.0	20387.461	20547.206	20607.111	20547.206	20587.143
1.5	20387.461	20547.206	20607.111	20547.206	20587.143
2.0	20367.493	20547.206	20587.143	20527.238	20567.175
2.5	20367.493	20527.238	20587.143	20527.238	20547.206
3.0	20347.525	20507.270	20567.175	20507.270	20527.238
3.5	20347.525	20507.270	20547.206	20487.302	20527.238
4.0	20327.557	20487.302	20527.238	20467.334	20507.270
4.5	20307.589	20467.334	20507.270	20447.366	20487.302
5.0	20307.589	20447.366	20507.270	20447.366	20467.334
5.5	20287.621	20427.398	20487.302	20427.398	20447.366
6.0	20267.653	20407.429	20467.334	20407.429	20427.398
6.5	20247.684	20407.429	20447.366	20387.461	20407.429
7.0	20227.716	20367.493	20427.398	20367.493	20387.461
7.5	20187.780	20347.525	20407.429	20347.525	20367.493
8.0	20167.812	20327.557	20387.461	20327.557	20347.525
8.5	20147.844	20307.589	20367.493	20307.589	20307.589
9.0	20107.908	20267.653	20327.557	20287.621	20287.621
9.5	20087.939	20247.684	20307.589	20247.684	20267.653
10.0	20048.003	20227.716	20287.621	20227.716	20227.716
10.5	20008.067	20187.780	20247.684	20187.780	20207.748
11.0	19988.099	20147.844	20207.748	20147.844	20167.812
11.5	19950.159	20107.908	20167.812	20107.908	20127.876
12.0	19914.217	20067.971	20127.876	20067.971	20087.939
12.5	19876.277	20028.035	20087.939	20028.035	20048.003
13.0	19834.344	19988.099	20048.003	19988.099	20008.067
13.5	19786.421	19934.185	20008.067	19938.178	19968.131
14.0	19738.497	19886.261	19946.166	19892.252	19922.204
14.5	19686.580	19836.341	19894.249	19844.328	19878.274
15.0	19632.666	19788.417	19842.331	19792.411	19832.347
15.5	19574.758	19734.503	19786.421	19740.494	19786.421
16.0	19516.851	19678.593	19726.516	19688.577	19734.503
16.5	19456.946	19620.685	19668.609	19634.663	19680.590
17.0	19395.045	19558.784	19606.707	19576.755	19622.682
17.5	19329.150	19492.889	19546.803	19518.848	19562.778
18.0	19261.259	19426.994	19486.899	19456.946	19500.876
18.5	19197.361	19359.103	19423.001	19393.048	19430.988
19.0	19129.469	19291.211	19359.103	19327.154	19365.093
19.5	19063.574	19219.326	19293.208	19259.262	19295.205
20.0	18993.686	19145.444	19217.329	19193.367	19229.310
20.5	18917.807	19065.571	19135.460	19127.472	19155.428
21.0	18839.931	18979.708	19045.603	19057.584	19083.542
21.5	18760.059	18893.845	18969.724	18981.705	19007.664
22.0	18676.193	18807.982	18889.852	18905.826	18931.785
22.5	18586.336	18716.129	18799.995	18823.957	18849.915
23.0	18494.483	18624.275	18706.145	18738.094	18762.056
23.5	18398.636	18530.425	18612.295	18648.237	18674.196
24.0	18296.798	18430.585	18512.454	18554.387	18584.339
24.5	18196.957	18328.747	18414.610	18456.543	18492.486
25.0	18093.123	18226.910	18316.766	18354.706	18396.639
25.5	17983.298	18117.085	18212.932	18248.875	18298.795
26.0	17875.471	18011.254	18109.098	18139.050	18192.964
26.5	17765.646	17897.435	17999.273	18029.225	18085.136

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-850-HA-MD-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

27.0	17649.83117785.61417887.45117913.41017973.314
27.5	17532.01917669.79917771.63617795.59817857.499
28.0	17408.21617549.99017651.82717671.79617735.694
28.5	17284.41417426.18817526.02817545.99617607.898
29.0	17144.63717298.39217398.23217414.20717474.111
29.5	17010.85017166.60217266.44317278.42317334.334
30.0	16873.07017030.81917128.66217136.65017188.567
30.5	16729.30016893.03816984.89216986.88917032.815
31.0	16581.53616751.26516839.12516823.15016869.077
31.5	16431.77516607.49416685.37016651.42416695.354
32.0	16282.01416463.72416533.61216493.67616539.603
32.5	16124.26516307.97216373.86716323.94716367.877
33.0	15970.51116152.22116210.12816138.24316126.262
33.5	15808.76915988.48216038.40215950.54315904.616
34.0	15645.03015818.75315864.68015750.86115678.976
34.5	15483.28815647.02715684.96715539.19915445.349
35.0	15309.56615473.30415499.26315321.54715199.741
35.5	15135.84315295.58815305.57215093.91014940.155
36.0	14954.13315109.88415105.89114856.28914674.579
36.5	14768.42914918.19014896.22514606.68814399.019
37.0	14578.73214722.50314682.56614353.09214119.465
37.5	14385.04114522.82114462.91714087.51613833.921
38.0	14183.36314321.14314241.27113821.94013540.389
38.5	13977.69114113.47514011.63713548.37713246.858
39.0	13768.02613903.80913778.01013268.82312945.339
39.5	13552.37013692.14713538.39312987.27212645.817
40.0	13334.71813476.49113294.78112703.72512344.298
40.5	13111.07513258.83913045.18012416.18412038.786
41.0	12885.43513037.19212795.57812130.63911715.302
41.5	12661.79212811.55312541.98311841.10111383.831
42.0	12434.15512583.91612282.39711557.55411108.271
42.5	12206.51812354.28212026.80511293.97510832.711
43.0	11976.88512122.65211771.21311008.43010543.173
43.5	11747.25111887.02811515.62110704.91510249.641
44.0	11517.61811651.40411258.03210431.3519960.104
44.5	11289.98111411.78711000.44310155.7919680.550
45.0	11064.34111170.17210750.8429886.221 9400.996
45.5	10834.70810932.55110497.2469620.645 9127.432
46.0	10605.07410694.93110247.6459361.060 8863.853
46.5	10381.43110455.31310004.0339109.461 8608.261
47.0	10155.79110219.6899758.425 8861.856 8358.659
47.5	9930.151 9986.062 9518.808 8618.245 8119.042
48.0	9708.505 9752.435 9281.187 8382.621 7887.412
48.5	9486.859 9524.798 9045.563 8152.988 7661.772
49.0	9265.213 9299.158 8815.930 7925.351 7446.116
49.5	9041.570 9073.519 8590.290 7707.698 7238.447
50.0	8821.920 8851.872 8366.647 7494.039 7038.766
50.5	8606.264 8632.223 8145.000 7284.374 6843.078
51.0	8392.605 8416.567 7931.341 7084.693 6655.378
51.5	8176.949 8204.905 7717.682 6877.024 6477.662
52.0	7969.281 7995.239 7512.011 6689.324 6301.942
52.5	7759.616 7789.568 7316.323 6511.607 6134.210
53.0	7553.944 7585.893 7128.623 6335.888 5972.468
53.5	7352.266 7384.215 6922.951 6164.162 5814.720
54.0	7156.578 7186.530 6723.270 5996.430 5662.962
54.5	6964.884 6992.839 6535.569 5834.688 5515.198

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-850-HA-MD-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

55.0	6777.184	6801.145	6355.856	5676.940	5369.430
55.5	6589.483	6611.448	6178.140	5523.185	5229.653
56.0	6411.767	6427.741	6004.417	5373.424	5093.870
56.5	6236.047	6246.031	5834.688	5229.653	4962.080
57.0	6062.324	6068.315	5668.952	5087.880	4832.288
57.5	5896.589	5894.592	5507.210	4950.100	4706.488
58.0	5736.844	5726.860	5349.462	4816.313	4584.683
58.5	5579.096	5561.124	5193.711	4686.520	4466.871
59.0	5425.341	5401.379	5041.953	4558.724	4353.052
59.5	5273.583	5243.631	4894.189	4434.922	4241.231
60.0	5129.813	5089.876	4750.418	4317.110	4135.400
60.5	4988.039	4944.109	4610.641	4199.298	4033.562
61.0	4850.259	4800.339	4472.861	4087.476	3931.725
61.5	4714.476	4660.562	4339.075	3977.652	3835.878
62.0	4584.683	4526.775	4209.282	3873.817	3744.024
62.5	4458.884	4396.982	4083.483	3771.980	3656.165
63.0	4335.081	4275.177	3959.680	3672.139	3572.299
63.5	4209.282	4159.362	3841.868	3576.292	3490.429
64.0	4065.511	4027.572	3728.050	3484.439	3412.554
64.5	3973.658	3915.750	3616.228	3396.579	3336.675
65.0	3879.808	3807.923	3508.401	3310.716	3264.789
65.5	3773.977	3702.091	3404.566	3228.847	3194.901
66.0	3676.133	3586.276	3304.726	3146.977	3127.009
66.5	3578.289	3484.439	3206.882	3069.102	3061.114
67.0	3486.436	3386.595	3111.035	2993.223	2997.216
67.5	3396.579	3290.748	3021.178	2919.341	2933.318
68.0	3310.716	3198.895	2933.318	2847.455	2871.417
68.5	3226.850	3109.038	2847.455	2777.567	2809.516
69.0	3146.977	3021.178	2763.589	2707.679	2749.612
69.5	3071.098	2935.315	2683.717	2639.787	2689.707
70.0	2995.220	2851.449	2603.844	2573.892	2631.800
70.5	2921.338	2769.580	2527.965	2506.000	2571.895
71.0	2849.452	2689.707	2450.090	2440.106	2513.988
71.5	2777.567	2609.835	2376.208	2374.211	2454.083
72.0	2709.675	2529.962	2302.325	2308.316	2394.179
72.5	2639.787	2452.086	2222.453	2240.424	2332.278
73.0	2571.895	2374.211	2150.568	2174.529	2270.376
73.5	2506.000	2296.335	2082.676	2104.641	2208.475
74.0	2440.106	2218.459	2010.791	2036.749	2144.577
74.5	2360.233	2140.584	1936.909	1966.861	2078.682
75.0	2288.348	2062.708	1869.017	1896.972	2012.788
75.5	2214.466	1986.829	1801.125	1825.087	1942.899
76.0	2138.587	1908.953	1719.256	1755.199	1875.007
76.5	2062.708	1831.078	1645.374	1683.313	1803.122
77.0	1984.832	1755.199	1571.492	1611.428	1731.237
77.5	1906.956	1677.323	1497.610	1539.543	1657.355
78.0	1825.087	1601.444	1425.725	1465.661	1581.476
78.5	1741.221	1523.568	1351.842	1393.776	1505.597
79.0	1659.352	1447.689	1279.957	1321.890	1427.721
79.5	1577.482	1369.814	1204.078	1248.008	1349.846
80.0	1493.616	1293.935	1132.193	1176.123	1271.970
80.5	1409.750	1218.056	1060.308	1104.238	1192.097
81.0	1325.884	1142.177	988.422	1032.352	1114.222
81.5	1244.015	1068.295	916.537	962.464	1034.349
82.0	1162.145	996.410	846.649	892.575	956.473
82.5	1080.276	922.528	776.760	824.684	880.595

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-850-HA-MD-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

83.0	1000.403	844.652	710.865	756.792	804.716
83.5	920.531	780.754	646.967	690.897	732.830
84.0	842.655	718.853	583.069	625.002	658.948
84.5	764.779	648.964	523.165	563.101	589.060
85.0	688.901	587.063	467.254	501.200	519.171
85.5	615.018	527.159	411.343	443.292	455.273
86.0	539.140	465.257	359.426	387.382	389.379
86.5	467.254	405.353	311.503	327.477	331.471
87.0	395.369	345.449	263.579	271.567	273.563
87.5	325.481	285.544	217.653	219.649	219.649
88.0	255.592	231.630	175.720	171.726	171.726
88.5	187.700	183.707	137.780	131.790	125.799
89.0	131.790	141.774	105.831	97.844	91.853
89.5	89.857	105.831	75.879	69.888	69.888
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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-850-HA-MD-DIM-UNV_.IES

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-L480-850-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-L480-850-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-L480-850-HA-MD-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	7528.52	N.A.	16.50
0-30	15938.11	N.A.	35.00
0-40	25484.03	N.A.	56.00
0-60	39212.74	N.A.	86.20
0-80	44870.51	N.A.	98.60
0-90	45493.31	N.A.	100.00
10-90	43548.83	N.A.	95.70
20-40	17955.5	N.A.	39.50
20-50	26068.92	N.A.	57.30
40-70	17289.97	N.A.	38.00
60-80	5657.77	N.A.	12.40
70-80	2096.51	N.A.	4.60
80-90	622.80	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	45493.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1944.48
10-20	5584.05
20-30	8409.59
30-40	9545.91
40-50	8113.42
50-60	5615.29
60-70	3561.26
70-80	2096.51
80-90	622.80
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-L480-850-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-L480-850-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

X=2H	Y=2H	23.3	24.8	23.7	25.1	25.5	22.1	23.6	22.4	23.9	24.2
	3H	24.8	26.1	25.1	26.4	26.8	23.6	25.0	24.0	25.3	25.7
	4H	25.4	26.7	25.8	27.0	27.4	24.3	25.6	24.7	26.0	26.3
	6H	26.0	27.1	26.4	27.5	27.9	24.9	26.1	25.3	26.4	26.8
	8H	26.1	27.3	26.6	27.6	28.0	25.1	26.2	25.5	26.6	27.0
	12H	26.3	27.3	26.7	27.7	28.2	25.2	26.3	25.7	26.7	27.1

UGR Viewed Endwise

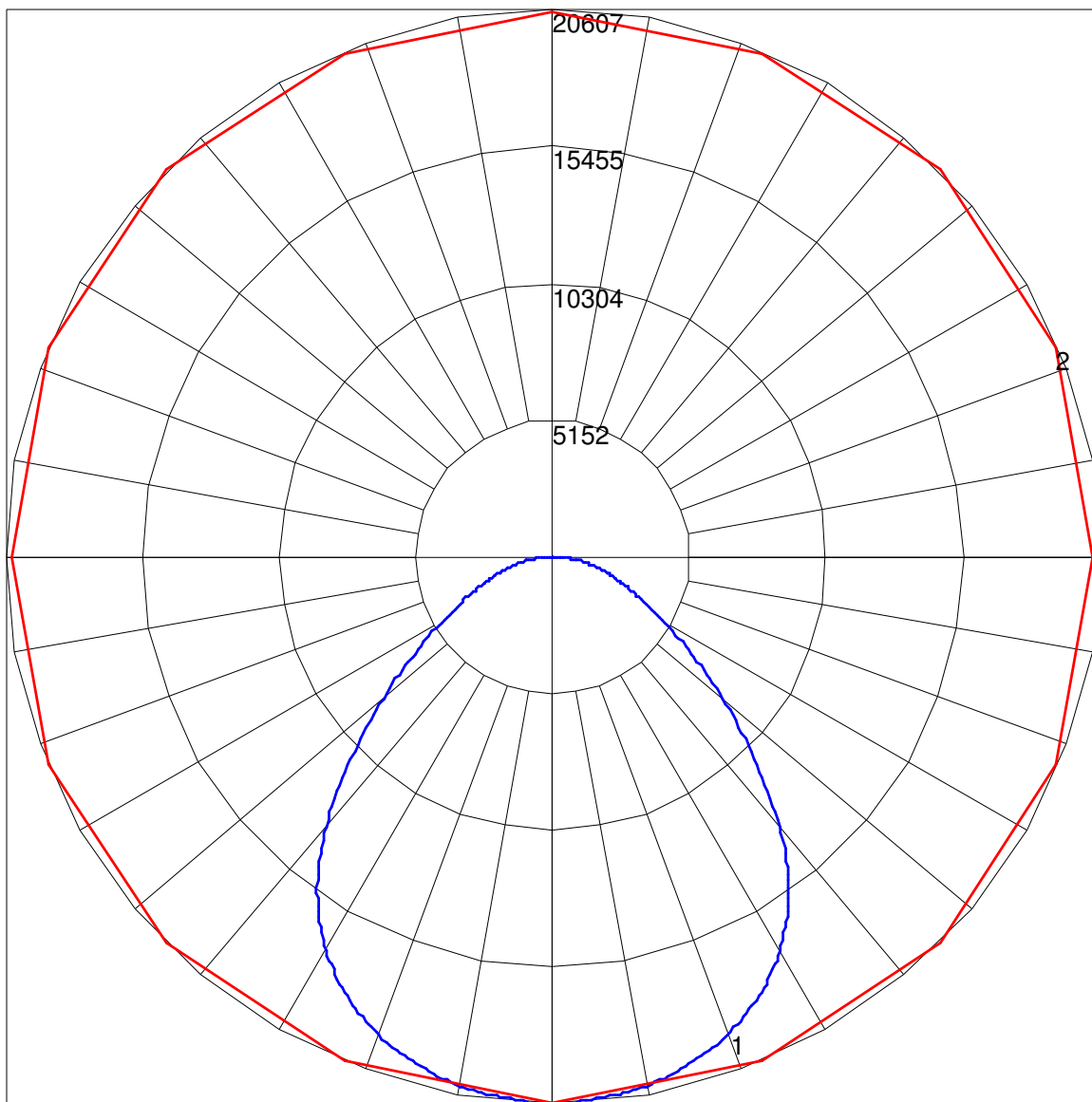
4H	2H	23.7	24.9	24.1	25.3	25.7	22.6	23.9	23.0	24.2	24.6
	3H	25.4	26.4	25.8	26.8	27.2	24.4	25.5	24.8	25.9	26.3
	4H	26.2	27.1	26.6	27.5	27.9	25.3	26.2	25.7	26.6	27.1
	6H	26.8	27.7	27.3	28.1	28.6	26.0	26.8	26.4	27.2	27.7
	8H	27.1	27.9	27.6	28.3	28.8	26.2	27.0	26.7	27.4	27.9
	12H	27.3	28.0	27.8	28.5	28.9	26.4	27.0	26.8	27.5	28.0

8H	4H	26.3	27.1	26.8	27.6	28.0	25.6	26.3	26.0	26.8	27.2
	6H	27.2	27.8	27.7	28.3	28.8	26.4	27.0	26.9	27.5	28.0
	8H	27.5	28.1	28.0	28.6	29.1	26.7	27.3	27.2	27.8	28.3
	12H	27.8	28.3	28.3	28.8	29.3	26.9	27.4	27.4	27.9	28.5

12H	4H	26.4	27.1	26.9	27.5	28.0	25.6	26.3	26.1	26.8	27.2
	6H	27.2	27.8	27.7	28.2	28.8	26.4	27.0	27.0	27.5	28.0
	8H	27.6	28.1	28.1	28.6	29.1	26.8	27.3	27.3	27.8	28.4

Maximum UGR = 29.3

POLAR GRAPH



Maximum Candela = 20607.111 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.)