



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 14629546.01
[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-L480-840-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	44634
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	143
Total Luminaire Watts	312
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	39952	39328	39591
55	36803	36414	35737
65	32863	32561	29869
75	27468	26173	21304
85	20255	16106	13117

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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	19640.115	19640.115	19640.115	19640.115	19640.115
0.5	19465.622	19640.115	19678.891	19640.115	19678.891
1.0	19446.234	19620.727	19678.891	19620.727	19678.891
1.5	19446.234	19620.727	19659.503	19620.727	19659.503
2.0	19426.846	19601.339	19640.115	19601.339	19640.115
2.5	19426.846	19581.951	19640.115	19581.951	19620.727
3.0	19407.458	19562.563	19620.727	19562.563	19601.339
3.5	19376.437	19543.175	19581.951	19523.787	19543.175
4.0	19355.110	19523.787	19562.563	19504.399	19543.175
4.5	19331.845	19504.399	19543.175	19465.622	19504.399
5.0	19304.701	19465.622	19523.787	19446.234	19465.622
5.5	19271.742	19446.234	19485.010	19407.458	19426.846
6.0	19234.904	19407.458	19446.234	19364.804	19407.458
6.5	19196.128	19360.927	19407.458	19320.212	19355.110
7.0	19149.597	19314.395	19355.110	19275.619	19308.579
7.5	19093.371	19262.048	19298.885	19221.333	19260.109
8.0	19042.962	19205.822	19240.721	19165.107	19203.883
8.5	18986.737	19143.780	19178.679	19106.943	19145.719
9.0	18922.756	19077.861	19110.821	19044.901	19083.677
9.5	18854.898	19006.125	19044.901	18978.982	19015.819
10.0	18777.346	18932.450	18969.288	18911.124	18946.022
10.5	18699.794	18851.021	18893.674	18837.449	18868.470
11.0	18616.425	18769.591	18812.244	18759.897	18785.101
11.5	18531.117	18684.283	18730.815	18678.467	18705.610
12.0	18441.932	18595.098	18639.691	18591.220	18614.486
12.5	18354.686	18500.096	18546.628	18503.974	18523.362
13.0	18265.501	18405.095	18447.749	18407.034	18428.361
13.5	18170.499	18306.216	18346.931	18300.399	18325.604
14.0	18069.681	18199.581	18244.174	18187.949	18224.786
14.5	17966.925	18091.008	18137.540	18089.069	18116.213
15.0	17858.351	17984.374	18027.028	17982.435	18007.640
15.5	17745.901	17873.862	17914.577	17866.107	17897.128
16.0	17633.450	17759.472	17794.371	17747.839	17778.860
16.5	17513.244	17647.021	17676.104	17631.511	17654.777
17.0	17389.160	17528.754	17567.530	17509.366	17528.754
17.5	17265.076	17408.548	17441.508	17385.282	17400.793
18.0	17142.932	17284.464	17311.608	17259.260	17272.832
18.5	17014.970	17162.320	17187.524	17131.299	17140.993
19.0	16888.948	17038.236	17059.563	17001.399	17007.215
19.5	16760.987	16912.214	16933.540	16867.621	16877.315
20.0	16634.964	16782.313	16803.640	16735.782	16747.415
20.5	16507.003	16654.352	16673.740	16602.004	16613.637
21.0	16375.164	16526.391	16545.779	16468.227	16481.798
21.5	16251.080	16394.552	16413.940	16334.449	16346.082
22.0	16119.241	16266.591	16282.101	16200.671	16214.243
22.5	15993.219	16138.630	16148.324	16066.894	16080.465
23.0	15865.258	16006.791	16012.607	15929.238	15940.871
23.5	15737.297	15876.891	15873.013	15787.705	15801.277
24.0	15611.274	15750.868	15733.419	15646.173	15663.622
24.5	15493.007	15617.090	15588.008	15504.640	15522.089
25.0	15366.984	15485.252	15444.537	15363.107	15386.372
25.5	15237.084	15351.474	15301.065	15225.451	15248.717
26.0	15111.062	15217.696	15157.593	15087.796	15116.878
26.5	14985.039	15081.980	15014.121	14948.202	14983.101

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CANDELA TABULATION - (Cont.)

27.0	14859.01714959.83514870.65014810.54714851.262
27.5	14731.05614843.50614729.11714670.95314719.423
28.0	14603.09414688.40214589.52314533.29714587.584
28.5	14477.07214554.62414449.92914397.58114457.684
29.0	14337.47814434.41814312.27314261.86414327.784
29.5	14209.51714296.76314176.55714130.02514197.884
30.0	14081.55514159.10814042.77913998.18714062.167
30.5	13957.47214029.20813910.94013870.22513930.328
31.0	13831.44913899.30713777.16313742.26413798.489
31.5	13709.30413769.40713643.38513612.36413664.712
32.0	13589.09813639.50713511.54613484.40313532.873
32.5	13466.95313513.48513379.70713358.38013404.912
33.0	13346.74713385.52413247.86813228.48013276.950
33.5	13228.48013261.44013116.02913100.51913152.867
34.0	13108.27413133.47912986.12912970.61913028.783
34.5	12988.06813005.51712840.71912838.78012902.761
35.0	12865.92312879.49512714.69612706.94112776.738
35.5	12745.71712753.47312590.61312575.10212650.716
36.0	12623.57212627.45012458.77412445.20212522.754
36.5	12501.42812497.55012328.87412313.36312396.732
37.0	12381.22212369.58912198.97412181.52412266.832
37.5	12276.52612237.75012065.19612049.68612138.871
38.0	12160.19812107.85011935.29611917.84712010.909
38.5	12003.15411976.01111805.39611787.94711884.887
39.0	11873.25411842.23311681.31211658.04711756.926
39.5	11743.35411710.39411559.16711528.14611627.026
40.0	11609.57611576.61711419.57311398.24611497.126
40.5	11477.73811444.77811283.85711268.34611367.226
41.0	11345.89911314.87811155.89611138.44611237.325
41.5	11214.06011181.10011027.93411006.60711105.487
42.0	11080.28211049.26110898.03410874.76910973.648
42.5	10950.38210917.42210772.01210742.93010845.686
43.0	10818.54310785.58310645.98910613.03010719.664
43.5	10688.64310653.74510518.02810479.25210591.703
44.0	10558.74310523.84410393.94410347.41310461.803
44.5	10428.84310386.18910265.98310217.51310335.780
45.0	10300.88210246.59510139.96110085.67410207.819
45.5	10172.92010122.51110013.9389953.835 10074.041
46.0	10043.0209992.611 9887.916 9821.996 9944.141
46.5	9918.937 9849.140 9759.954 9690.157 9810.363
47.0	9790.975 9728.934 9633.932 9558.319 9676.586
47.5	9661.075 9606.789 9505.971 9428.418 9542.808
48.0	9533.114 9476.889 9379.948 9296.580 9405.153
48.5	9405.153 9345.050 9251.987 9166.680 9269.436
49.0	9277.192 9215.150 9125.965 9034.841 9135.659
49.5	9149.230 9085.250 8999.942 8908.818 8998.003
50.0	9019.330 8953.411 8873.920 8780.857 8862.287
50.5	8889.430 8821.572 8749.836 8647.079 8726.570
51.0	8757.591 8691.672 8623.814 8515.240 8588.915
51.5	8627.691 8561.772 8499.730 8389.218 8453.199
52.0	8495.852 8433.810 8373.707 8259.318 8313.604
52.5	8360.136 8303.910 8249.624 8129.418 8174.010
53.0	8226.358 8174.010 8123.601 8001.457 8034.416
53.5	8094.519 8044.110 7997.579 7873.495 7894.822
54.0	7962.680 7916.149 7871.556 7745.534 7755.228
54.5	7830.842 7788.188 7743.595 7613.695 7615.634

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CANDELA TABULATION - (Cont.)

55.0	7697.064	7660.226	7615.634	7483.795	7474.101
55.5	7567.164	7530.326	7489.611	7350.017	7334.507
56.0	7435.325	7400.426	7359.711	7218.179	7194.913
56.5	7303.486	7270.526	7222.056	7084.401	7055.319
57.0	7171.647	7142.565	7086.340	6950.623	6913.786
57.5	7041.747	7012.665	6968.072	6814.907	6772.253
58.0	6909.908	6882.765	6842.050	6679.190	6632.659
58.5	6778.069	6752.865	6712.150	6541.535	6489.187
59.0	6646.230	6621.026	6582.250	6401.941	6347.654
59.5	6514.392	6491.126	6452.350	6264.285	6208.060
60.0	6384.491	6359.287	6320.511	6124.691	6085.915
60.5	6252.653	6227.448	6192.550	5987.036	5932.749
61.0	6120.814	6095.609	6064.588	5849.381	5769.890
61.5	5988.975	5965.709	5932.749	5709.787	5622.540
62.0	5859.075	5831.931	5800.911	5570.193	5477.130
62.5	5725.297	5700.093	5669.072	5432.537	5329.780
63.0	5593.458	5570.193	5539.172	5292.943	5184.370
63.5	5459.681	5438.354	5411.210	5157.227	5037.021
64.0	5325.903	5308.454	5281.310	5019.571	4891.610
64.5	5194.064	5178.554	5149.471	4883.855	4746.200
65.0	5064.164	5048.653	5017.633	4746.200	4602.728
65.5	4934.264	4918.753	4889.671	4610.483	4461.195
66.0	4804.364	4788.853	4759.771	4474.767	4319.662
66.5	4674.464	4662.831	4629.871	4339.050	4178.129
67.0	4544.564	4534.870	4499.971	4191.701	4038.535
67.5	4416.602	4406.908	4370.071	4061.801	3900.880
68.0	4288.641	4278.947	4238.232	3931.901	3763.224
68.5	4162.619	4152.925	4108.332	3798.123	3627.508
69.0	4036.596	4024.963	3976.493	3662.406	3491.791
69.5	3912.513	3900.880	3846.593	3528.629	3359.953
70.0	3788.429	3774.857	3716.693	3394.851	3228.114
70.5	3666.284	3648.835	3586.793	3263.012	3098.214
71.0	3544.139	3522.812	3458.832	3131.173	2970.252
71.5	3421.994	3400.667	3330.870	3003.212	2842.291
72.0	3301.788	3276.584	3202.909	2875.251	2718.207
72.5	3181.582	3154.439	3076.887	2749.228	2596.063
73.0	3063.315	3032.294	2954.742	2625.145	2473.918
73.5	2945.048	2912.088	2830.658	2503.000	2355.651
74.0	2824.842	2791.882	2708.513	2384.733	2237.383
74.5	2710.452	2673.615	2588.307	2266.465	2122.994
75.0	2592.185	2557.286	2470.040	2150.137	2010.543
75.5	2477.795	2440.958	2349.834	2035.747	1900.031
76.0	2365.345	2328.507	2233.506	1925.235	1795.335
76.5	2252.894	2216.056	2119.116	1816.662	1690.640
77.0	2142.382	2105.544	2004.726	1711.967	1584.005
77.5	2033.809	1998.910	1894.214	1609.210	1481.249
78.0	1927.174	1892.276	1783.702	1508.392	1392.063
78.5	1822.479	1787.580	1675.129	1411.452	1304.817
79.0	1719.722	1684.823	1570.434	1316.450	1217.571
79.5	1618.904	1584.005	1465.738	1223.387	1132.263
80.0	1520.025	1485.126	1362.981	1134.202	1050.833
80.5	1423.084	1390.125	1264.102	1054.711	971.342
81.0	1330.022	1295.123	1165.223	979.098	897.668
81.5	1238.898	1202.060	1070.221	889.912	827.871
82.0	1147.774	1112.875	981.036	812.360	760.012
82.5	1058.589	1023.690	893.790	740.624	694.093

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CANDELA TABULATION - (Cont.)

83.0	971.342	936.444	810.421	672.766	632.051
83.5	887.974	853.075	728.991	608.785	573.887
84.0	804.605	771.645	651.439	548.682	519.600
84.5	723.175	690.215	579.703	490.518	467.252
85.0	643.684	612.663	511.845	438.170	416.844
85.5	564.193	537.050	447.864	385.823	366.435
86.0	488.579	465.314	389.700	335.414	316.026
86.5	411.027	393.578	331.536	286.943	273.372
87.0	337.352	325.720	277.249	248.167	238.473
87.5	267.555	263.678	228.779	213.269	207.452
88.0	203.575	205.514	190.003	176.431	174.493
88.5	145.411	155.105	151.227	149.288	147.349
89.0	91.124	112.451	122.145	129.900	129.900
89.5	54.287	79.491	98.879	112.451	112.451
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-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-L480-840-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-L480-840-HA-ND-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6889.75	N.A.	15.40
0-30	13986.37	N.A.	31.30
0-40	21981.52	N.A.	49.20
0-60	36616.61	N.A.	82.00
0-80	44008.7	N.A.	98.60
0-90	44634.05	N.A.	100.00
10-90	42793.74	N.A.	95.90
20-40	15091.76	N.A.	33.80
20-50	22949.59	N.A.	51.40
40-70	19498.68	N.A.	43.70
60-80	7392.09	N.A.	16.60
70-80	2528.5	N.A.	5.70
80-90	625.34	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	44634.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1840.3
10-20	5049.45
20-30	7096.62
30-40	7995.15
40-50	7857.82
50-60	6777.27
60-70	4863.59
70-80	2528.5
80-90	625.34
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-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-L480-840-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	24.5	26.1	24.9	26.4	26.7	24.3	25.9	24.6	26.2	26.5
	3H	26.2	27.6	26.5	27.9	28.3	25.7	27.2	26.1	27.5	27.8
	4H	26.8	28.1	27.2	28.5	28.8	26.2	27.5	26.6	27.9	28.2
	6H	27.2	28.4	27.6	28.8	29.2	26.4	27.7	26.9	28.0	28.4
	8H	27.3	28.5	27.7	28.9	29.3	26.5	27.7	26.9	28.1	28.5
	12H	27.4	28.5	27.8	28.9	29.4	26.5	27.7	27.0	28.0	28.5

UGR Viewed Endwise

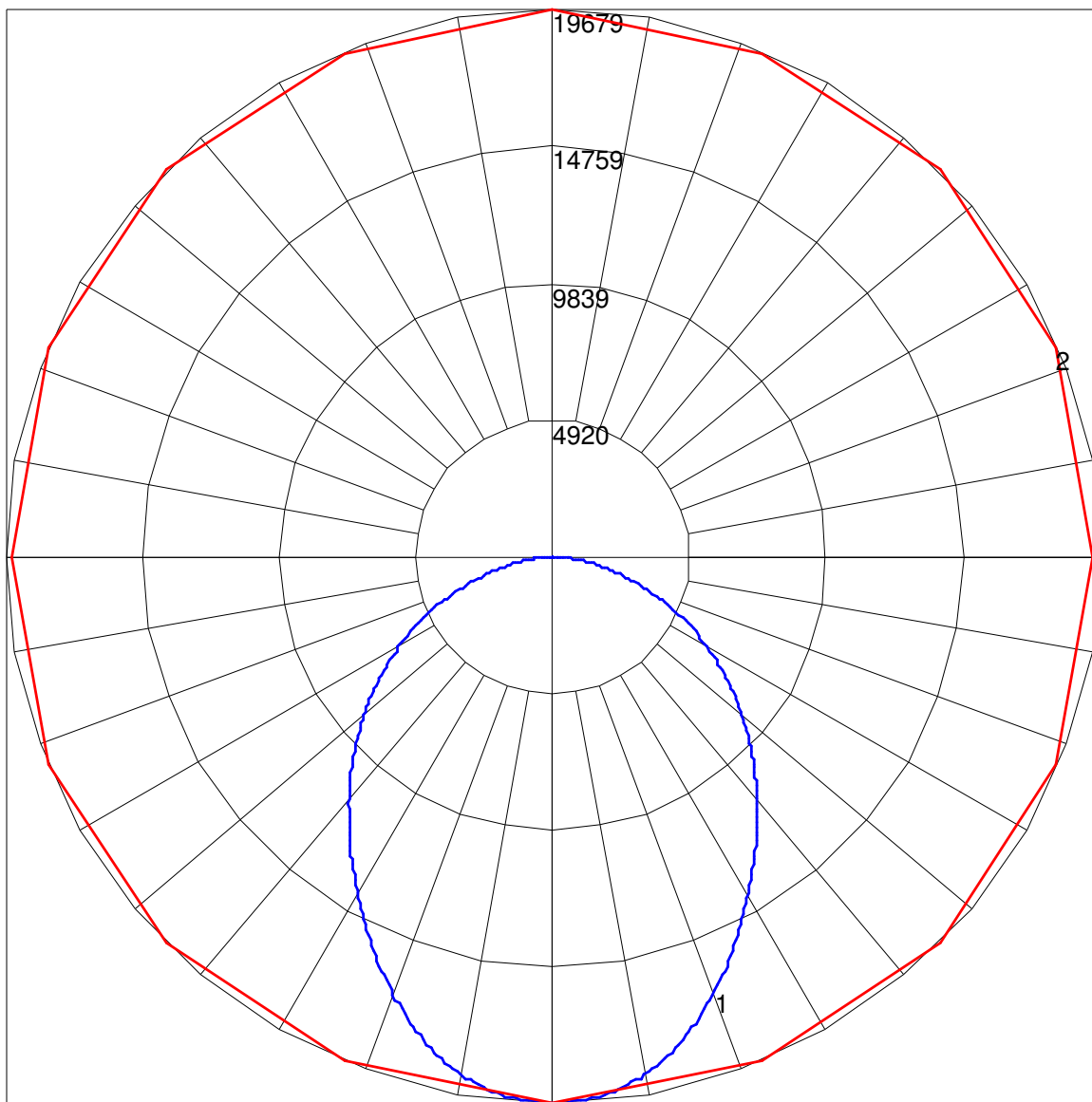
4H	2H	25.1	26.4	25.5	26.8	27.1	24.9	26.2	25.3	26.6	27.0
	3H	26.9	28.1	27.4	28.5	28.9	26.6	27.7	27.0	28.1	28.5
	4H	27.7	28.7	28.1	29.1	29.5	27.1	28.1	27.5	28.5	29.0
	6H	28.2	29.1	28.7	29.5	30.0	27.5	28.3	27.9	28.8	29.2
	8H	28.4	29.2	28.8	29.7	30.1	27.5	28.4	28.0	28.8	29.3
	12H	28.5	29.3	29.0	29.7	30.2	27.6	28.3	28.1	28.8	29.3

8H	4H	27.9	28.7	28.4	29.2	29.6	27.4	28.2	27.9	28.7	29.1
	6H	28.6	29.2	29.1	29.7	30.2	27.8	28.5	28.3	29.0	29.5
	8H	28.8	29.4	29.3	29.9	30.4	28.0	28.6	28.5	29.1	29.6
	12H	29.0	29.5	29.5	30.0	30.6	28.1	28.6	28.6	29.1	29.7

12H	4H	27.9	28.7	28.4	29.1	29.6	27.4	28.2	27.9	28.6	29.1
	6H	28.6	29.2	29.1	29.7	30.2	27.9	28.5	28.4	29.0	29.5
	8H	28.9	29.4	29.4	29.9	30.5	28.1	28.6	28.6	29.1	29.7

Maximum UGR = 30.6

POLAR GRAPH



Maximum Candela = 19678.891 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.)