



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-850-MD-DIM-UNV\_.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
[TEST] 14629546.02  
[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-L480-850-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	47789
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	141
Total Luminaire Watts	338
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	45079	43802	38302
55	34040	31924	26969
65	26448	23916	22256
75	25472	20804	22404
85	22772	15445	17161

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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	21604.98021604.98021604.98021604.98021604.980				
0.5	21416.19921584.00521646.93221604.98021625.956				
1.0	21416.19921584.00521646.93221584.00521625.956				
1.5	21416.19921584.00521646.93221584.00521625.956				
2.0	21395.22321584.00521625.95621563.02921604.980				
2.5	21395.22321563.02921625.95621563.02921584.005				
3.0	21374.24721542.05321604.98021542.05321563.029				
3.5	21374.24721542.05321584.00521521.07721563.029				
4.0	21353.27221521.07721563.02921500.10221542.053				
4.5	21332.29621500.10221542.05321479.12621521.077				
5.0	21332.29621479.12621542.05321479.12621500.102				
5.5	21311.32021458.15021521.07721458.15021479.126				
6.0	21290.34521437.17521500.10221437.17521458.150				
6.5	21269.36921437.17521479.12621416.19921437.175				
7.0	21248.39321395.22321458.15021395.22321416.199				
7.5	21206.44221374.24721437.17521374.24721395.223				
8.0	21185.46621353.27221416.19921353.27221374.247				
8.5	21164.49021332.29621395.22321332.29621332.296				
9.0	21122.53921290.34521353.27221311.32021311.320				
9.5	21101.56321269.36921332.29621269.36921290.345				
10.0	21059.61221248.39321311.32021248.39321248.393				
10.5	21017.66021206.44221269.36921206.44221227.417				
11.0	20996.68521164.49021227.41721164.49021185.466				
11.5	20956.83121122.53921185.46621122.53921143.515				
12.0	20919.07521080.58821143.51521080.58821101.563				
12.5	20879.22121038.63621101.56321038.63621059.612				
13.0	20835.17220996.68521059.61220996.68521017.660				
13.5	20784.83020940.05021017.66020944.24520975.709				
14.0	20734.48820889.70920952.63620896.00120927.465				
14.5	20679.95120837.26920898.09920845.66020881.318				
15.0	20623.31720786.92820843.56220791.12320833.074				
15.5	20562.48720730.29320784.83020736.58620784.830				
16.0	20501.65820671.56120721.90320682.04920730.293				
16.5	20438.73120610.73220661.07320625.41520673.659				
17.0	20373.70620545.70720596.04920564.58520612.829				
17.5	20304.48620476.48720533.12220503.75620549.902				
18.0	20233.16920407.26720470.19420438.73120484.877				
18.5	20166.04720335.95020403.07220371.60920411.462				
19.0	20094.72920264.63220335.95020302.38920342.243				
19.5	20025.50920189.12020266.73020231.07120268.828				
20.0	19952.09420111.51020187.02220161.85120199.608				
20.5	19872.38720027.60720101.02220092.63220121.998				
21.0	19790.58119937.41120006.63120019.21720046.485				
21.5	19706.67919847.21619926.92419939.50919966.777				
22.0	19618.58119757.02019843.02119859.80119887.070				
22.5	19524.19019660.53219748.63019773.80119801.069				
23.0	19427.70219564.04419650.04419683.60519708.776				
23.5	19327.01819465.45819551.45819589.21519616.483				
24.0	19220.04219360.57919446.58019490.62919522.092				
24.5	19115.16419253.60319343.79919387.84819425.604				
25.0	19006.09019146.62719241.01819280.87219324.921				
25.5	18890.72319031.26119131.94419169.70019222.140				
26.0	18777.45518920.08919022.87019054.33419110.968				
26.5	18662.08818800.52818907.50418938.96818997.700				

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**CANDELA TABULATION - (Cont.)**

27.0	18540.42918683.06418790.04018817.30918880.236
27.5	18416.67218561.40518668.38118693.55218758.577
28.0	18286.62318435.55118542.52718563.50218630.625
28.5	18156.57418305.50118410.38018431.35518496.380
29.0	18009.74418171.25718276.13518292.91618355.843
29.5	17869.20618032.81718137.69618150.28118209.013
30.0	17724.47417890.18217992.96318001.35318055.890
30.5	17573.44917745.45017841.93817844.03617892.280
31.0	17418.22917596.52217688.81517672.03517720.279
31.5	17260.91117445.49717527.30217491.64417537.790
32.0	17103.59317294.47217367.88717325.93617374.180
32.5	16937.88517130.86217200.08117147.64217193.789
33.0	16776.37216967.25117028.08116952.56816939.983
33.5	16606.46916795.25016847.68916755.39616707.152
34.0	16434.46816616.95716665.20116545.63916470.127
34.5	16264.56516436.56616476.41916323.29716224.711
35.0	16082.07616254.07716281.34516094.66115966.710
35.5	15899.58716067.39316077.88115855.53815694.025
36.0	15708.70815872.31915868.12415605.92715415.049
36.5	15513.63415670.95215647.87915343.73115125.584
37.0	15314.36515465.39015423.43915077.34014831.924
37.5	15110.90115255.63315192.70614798.36314531.971
38.0	14899.04615043.77814959.87614519.38614223.628
38.5	14682.99614825.63114718.65514232.01913915.285
39.0	14462.75114605.38614473.23913938.35913598.552
39.5	14236.21414383.04414221.53113642.60113283.916
40.0	14007.57814156.50613965.62713344.74612967.183
40.5	13772.65113927.87113703.43113042.69612646.255
41.0	13535.62513695.04013441.23412742.74312306.448
41.5	13300.69713458.01513174.84312438.59511958.252
42.0	13061.57413218.89212902.15912140.74011668.787
42.5	12822.45112977.67112633.67011863.86111379.322
43.0	12581.23012734.35312365.18011563.90811075.174
43.5	12340.01012486.84012096.69111245.07810766.831
44.0	12098.78912239.32611826.10510957.71010462.684
44.5	11859.66611987.61811555.51810668.24610169.024
45.0	11622.64011733.81211293.32210385.0749875.364
45.5	11381.42011484.20111026.93010106.0979587.997
46.0	11140.19911234.59010764.7349833.412 9311.117
46.5	10905.27110982.88110508.8309569.118 9042.628
47.0	10668.24610735.36810250.8299309.020 8780.432
47.5	10431.22010489.9529999.120 9053.116 8528.723
48.0	10198.39010244.5369749.510 8805.603 8285.405
48.5	9965.559 10005.4139501.996 8564.382 8048.380
49.0	9732.729 9768.388 9260.776 8325.259 7821.842
49.5	9497.801 9531.362 9023.750 8096.624 7603.694
50.0	9267.068 9298.532 8788.822 7872.184 7393.937
50.5	9040.531 9067.799 8555.992 7651.939 7188.375
51.0	8816.090 8841.261 8331.552 7442.182 6991.204
51.5	8589.553 8618.919 8107.112 7224.034 6804.520
52.0	8371.405 8398.674 7891.062 7026.863 6619.934
52.5	8151.161 8182.624 7685.500 6840.179 6443.738
53.0	7935.111 7968.672 7488.328 6655.592 6273.835
53.5	7723.256 7756.817 7272.278 6475.201 6108.126
54.0	7517.694 7549.158 7062.521 6299.005 5948.711
54.5	7316.327 7345.693 6865.350 6129.102 5793.491

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**CANDELA TABULATION - (Cont.)**

55.0	7119.156	7144.326	6676.568	5963.394	5640.368
55.5	6921.984	6945.057	6489.884	5801.881	5493.538
56.0	6735.300	6752.081	6307.396	5644.563	5350.903
56.5	6550.714	6561.202	6129.102	5493.538	5212.464
57.0	6368.225	6374.518	5955.004	5344.611	5076.122
57.5	6194.127	6192.029	5785.101	5199.878	4943.975
58.0	6026.321	6015.833	5619.392	5059.341	4816.023
58.5	5860.613	5841.735	5455.782	4922.999	4692.266
59.0	5699.100	5673.929	5296.367	4788.754	4572.705
59.5	5539.685	5508.221	5141.146	4658.705	4455.241
60.0	5388.660	5346.708	4990.121	4534.948	4344.069
60.5	5239.732	5193.586	4843.291	4411.192	4237.093
61.0	5095.000	5042.560	4698.559	4293.728	4130.117
61.5	4952.365	4895.730	4558.022	4178.361	4029.434
62.0	4816.023	4755.193	4421.679	4069.288	3932.945
62.5	4683.876	4618.851	4289.532	3962.311	3840.652
63.0	4553.826	4490.899	4159.483	3857.433	3752.554
63.5	4421.679	4369.240	4035.726	3756.749	3666.554
64.0	4270.654	4230.800	3916.165	3660.261	3584.749
64.5	4174.166	4113.337	3798.701	3567.968	3505.041
65.0	4075.580	4000.068	3685.432	3477.773	3429.528
65.5	3964.409	3888.896	3576.358	3391.772	3356.113
66.0	3861.628	3767.237	3471.480	3305.772	3284.796
66.5	3758.847	3660.261	3368.699	3223.966	3215.576
67.0	3662.359	3557.480	3268.015	3144.259	3148.454
67.5	3567.968	3456.797	3173.625	3066.649	3081.332
68.0	3477.773	3360.309	3081.332	2991.136	3016.307
68.5	3389.675	3265.918	2991.136	2917.721	2951.282
69.0	3305.772	3173.625	2903.038	2844.306	2888.355
69.5	3226.064	3083.429	2819.135	2772.989	2825.428
70.0	3146.356	2995.331	2735.232	2703.769	2764.598
70.5	3068.746	2909.331	2655.525	2632.451	2701.671
71.0	2993.234	2825.428	2573.719	2563.232	2640.842
71.5	2917.721	2741.525	2496.109	2494.012	2577.915
72.0	2846.404	2657.622	2418.499	2424.792	2514.988
72.5	2772.989	2575.817	2334.596	2353.475	2449.963
73.0	2701.671	2494.012	2259.084	2284.255	2384.938
73.5	2632.451	2412.207	2187.766	2210.840	2319.913
74.0	2563.232	2330.401	2112.254	2139.522	2252.791
74.5	2479.329	2248.596	2034.644	2066.107	2183.571
75.0	2403.816	2166.791	1963.326	1992.692	2114.351
75.5	2326.206	2087.083	1892.009	1917.180	2040.936
76.0	2246.498	2005.278	1806.009	1843.765	1969.619
76.5	2166.791	1923.473	1728.398	1768.252	1894.107
77.0	2084.985	1843.765	1650.788	1692.740	1818.594
77.5	2003.180	1761.960	1573.178	1617.227	1740.984
78.0	1917.180	1682.252	1497.666	1539.617	1661.276
78.5	1829.082	1600.447	1420.055	1464.104	1581.568
79.0	1743.081	1520.739	1344.543	1388.592	1499.763
79.5	1657.081	1438.934	1264.835	1310.982	1417.958
80.0	1568.983	1359.226	1189.323	1235.469	1336.153
80.5	1480.885	1279.518	1113.810	1159.957	1252.250
81.0	1392.787	1199.811	1038.298	1084.444	1170.445
81.5	1306.787	1122.200	962.785	1011.029	1086.542
82.0	1220.786	1046.688	889.370	937.614	1004.736
82.5	1134.786	969.078	815.955	866.297	925.029

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**CANDELA TABULATION - (Cont.)**

83.0	1050.883	887.272	746.735	794.979	845.321
83.5	966.980	820.150	679.613	725.760	769.809
84.0	885.175	755.126	612.491	656.540	692.198
84.5	803.370	681.711	549.564	591.515	618.783
85.0	723.662	616.686	490.832	526.490	545.368
85.5	646.052	553.759	432.100	465.661	478.246
86.0	566.344	488.734	377.563	406.929	409.026
86.5	490.832	425.807	327.221	344.002	348.197
87.0	415.319	362.880	276.879	285.270	287.367
87.5	341.904	299.953	228.635	230.733	230.733
88.0	268.489	243.318	184.586	180.391	180.391
88.5	197.172	192.977	144.732	138.440	132.147
89.0	138.440	148.928	111.171	102.781	96.488
89.5	94.391	111.171	79.708	73.415	73.415
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-L480-850-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-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-MD-DIM-UNV\_.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	7908.41	N.A.	16.50
0-30	16742.34	N.A.	35.00
0-40	26769.93	N.A.	56.00
0-60	41191.39	N.A.	86.20
0-80	47134.64	N.A.	98.60
0-90	47788.87	N.A.	100.00
10-90	45746.27	N.A.	95.70
20-40	18861.53	N.A.	39.50
20-50	27384.34	N.A.	57.30
40-70	18162.41	N.A.	38.00
60-80	5943.26	N.A.	12.40
70-80	2202.29	N.A.	4.60
80-90	654.22	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	47788.87	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	2042.59
10-20	5865.81
20-30	8833.93
30-40	10027.59
40-50	8522.82
50-60	5898.64
60-70	3740.96
70-80	2202.3
80-90	654.22
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-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-MD-DIM-UNV\_.IES**

**UGR TABLE - CORRECTED**

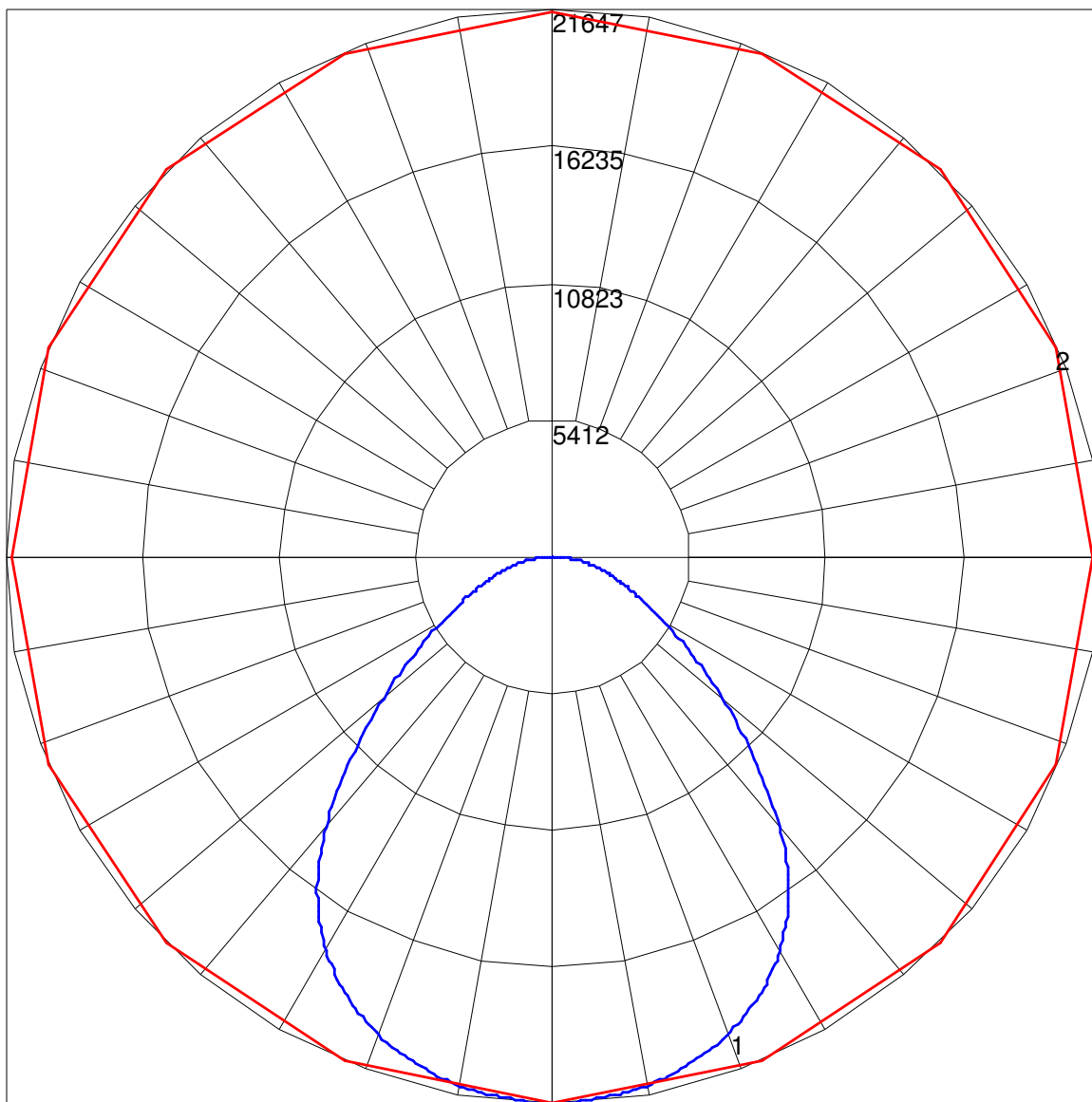
Reflectances

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	23.4	24.9	23.8	25.2	25.6	22.2	23.7	22.5	24.0	24.3
	3H	24.9	26.2	25.2	26.5	26.9	23.7	25.1	24.1	25.4	25.8
	4H	25.5	26.8	25.9	27.1	27.5	24.4	25.7	24.8	26.1	26.4
	6H	26.1	27.2	26.5	27.6	28.0	25.0	26.2	25.4	26.5	26.9
	8H	26.2	27.4	26.7	27.7	28.1	25.2	26.3	25.6	26.7	27.1
	12H	26.4	27.4	26.8	27.8	28.3	25.3	26.4	25.8	26.8	27.2
4H	2H	23.8	25.0	24.2	25.4	25.8	22.7	24.0	23.1	24.3	24.7
	3H	25.5	26.5	25.9	26.9	27.3	24.5	25.6	24.9	26.0	26.4
	4H	26.3	27.2	26.7	27.6	28.0	25.4	26.3	25.8	26.7	27.2
	6H	26.9	27.8	27.4	28.2	28.7	26.1	26.9	26.5	27.3	27.8
	8H	27.2	28.0	27.7	28.4	28.9	26.3	27.1	26.8	27.5	28.0
	12H	27.4	28.1	27.9	28.6	29.0	26.5	27.1	26.9	27.6	28.1
8H	4H	26.4	27.2	26.9	27.7	28.1	25.7	26.4	26.1	26.9	27.3
	6H	27.3	27.9	27.8	28.4	28.9	26.5	27.1	27.0	27.6	28.1
	8H	27.6	28.2	28.1	28.7	29.2	26.8	27.4	27.3	27.9	28.4
	12H	27.9	28.4	28.4	28.9	29.4	27.0	27.5	27.5	28.0	28.6
12H	4H	26.5	27.2	27.0	27.6	28.1	25.7	26.4	26.2	26.9	27.3
	6H	27.3	27.9	27.8	28.3	28.9	26.5	27.1	27.1	27.6	28.1
	8H	27.7	28.2	28.2	28.7	29.2	26.9	27.4	27.4	27.9	28.5

Maximum UGR = 29.4

POLAR GRAPH



Maximum Candela = 21646.932 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.)