



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-850-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-L480-850-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	45973
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	147
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	41151	40508	40779
55	37907	37506	36809
65	33849	33538	30765
75	28292	26959	21944
85	20863	16589	13510

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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	20229.316	20229.316	20229.316	20229.316	20229.316
0.5	20049.589	20229.316	20269.256	20229.316	20269.256
1.0	20029.619	20209.347	20269.256	20209.347	20269.256
1.5	20029.619	20209.347	20249.286	20209.347	20249.286
2.0	20009.650	20189.377	20229.316	20189.377	20229.316
2.5	20009.650	20169.407	20229.316	20169.407	20209.347
3.0	19989.680	20149.438	20209.347	20149.438	20189.377
3.5	19957.728	20129.468	20169.407	20109.498	20129.468
4.0	19935.762	20109.498	20149.438	20089.528	20129.468
4.5	19911.798	20089.528	20129.468	20049.589	20089.528
5.0	19883.840	20049.589	20109.498	20029.619	20049.589
5.5	19849.892	20029.619	20069.559	19989.680	20009.650
6.0	19811.949	19989.680	20029.619	19945.746	19989.680
6.5	19772.010	19941.753	19989.680	19899.816	19935.762
7.0	19724.083	19893.825	19935.762	19853.886	19887.834
7.5	19666.171	19839.907	19877.849	19797.971	19837.910
8.0	19614.249	19781.995	19817.940	19740.058	19779.998
8.5	19556.337	19718.092	19754.037	19680.149	19720.089
9.0	19490.437	19650.195	19684.143	19616.246	19656.186
9.5	19420.543	19576.307	19616.246	19548.349	19586.292
10.0	19340.664	19500.422	19538.364	19478.455	19514.401
10.5	19260.785	19416.549	19460.483	19402.570	19434.522
11.0	19174.916	19332.676	19376.610	19322.692	19348.652
11.5	19087.049	19244.810	19292.737	19238.819	19266.776
12.0	18995.188	19152.949	19198.879	19148.955	19172.919
12.5	18905.325	19055.097	19103.025	19059.091	19079.061
13.0	18813.464	18957.246	19001.179	18959.243	18981.209
13.5	18715.612	18855.400	18897.337	18849.409	18875.370
14.0	18611.770	18745.567	18791.497	18733.585	18771.528
14.5	18505.930	18633.737	18681.664	18631.740	18659.697
15.0	18394.100	18523.903	18567.836	18521.906	18547.867
15.5	18278.276	18410.076	18452.012	18402.088	18434.039
16.0	18162.451	18292.254	18328.200	18280.273	18312.224
16.5	18038.639	18176.430	18206.385	18160.454	18184.418
17.0	17910.833	18054.615	18094.554	18034.645	18054.615
17.5	17783.027	17930.803	17964.751	17906.839	17922.815
18.0	17657.218	17802.997	17830.954	17777.036	17791.015
18.5	17525.418	17677.187	17703.148	17645.236	17655.221
19.0	17395.614	17549.381	17571.348	17511.439	17517.430
19.5	17263.814	17419.578	17441.545	17373.648	17383.633
20.0	17134.011	17285.781	17307.748	17237.854	17249.836
20.5	17002.211	17153.981	17173.951	17100.063	17112.045
21.0	16866.417	17022.181	17042.151	16962.272	16976.251
21.5	16738.611	16886.387	16906.357	16824.481	16836.463
22.0	16602.817	16754.587	16770.563	16686.690	16700.669
22.5	16473.014	16622.787	16632.772	16548.899	16562.878
23.0	16341.214	16486.993	16492.984	16407.114	16419.096
23.5	16209.414	16353.196	16349.202	16261.335	16275.314
24.0	16079.611	16223.392	16205.420	16115.556	16133.529
24.5	15957.795	16085.601	16055.647	15969.777	15987.750
25.0	15827.992	15949.807	15907.871	15823.998	15847.962
25.5	15694.195	15812.016	15760.095	15682.213	15706.177
26.0	15564.392	15674.225	15612.319	15540.428	15570.383
26.5	15434.589	15534.437	15464.544	15396.646	15432.592

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CANDELA TABULATION - (Cont.)

27.0	15304.78615408.62815316.76815254.86215296.798
27.5	15172.98615288.81015170.98915111.08015161.004
28.0	15041.18615129.05215027.20714969.29515025.210
28.5	14911.38314991.26114883.42514829.50714891.413
29.0	14767.60114867.44914741.64014689.71914757.616
29.5	14635.80114725.66414601.85214553.92514623.819
30.0	14504.00014583.87914464.06114418.13114484.031
30.5	14376.19414450.08214328.26714286.33114348.237
31.0	14246.39114316.28514190.47614154.53114212.443
31.5	14120.58214182.48814052.68514020.73314074.652
32.0	13996.77014048.69113916.89113888.93313938.858
32.5	13870.96113918.88813781.09713759.13013807.058
33.0	13747.14813787.08813645.30313625.33313675.257
33.5	13625.33313659.28213509.50913493.53313547.451
34.0	13501.52113527.48213375.71213359.73613419.645
34.5	13377.70913395.68213225.93913223.94213289.842
35.0	13251.90013265.87813096.13613088.14813160.039
35.5	13128.08713136.07512968.33012952.35413030.236
36.0	13002.27813006.27212832.53612818.55712898.436
36.5	12876.46912872.47512698.73912682.76312768.633
37.0	12752.65712740.67512564.94212546.96912634.836
37.5	12644.82012604.88112427.15112411.17512503.036
38.0	12525.00212471.08412293.35412275.38112371.235
38.5	12363.24812335.29012159.55612141.58412241.432
39.0	12229.45012197.49912031.75012007.78712109.632
39.5	12095.65312061.70511905.94111873.99011975.835
40.0	11957.86211923.91411762.15911740.19311842.038
40.5	11822.06811788.12011622.37111606.39611708.241
41.0	11686.27411654.32311490.57111472.59811574.444
41.5	11550.48011516.53211358.77111336.80411438.650
42.0	11412.68911380.73811224.97411201.01011302.856
42.5	11278.89211244.94411095.17111065.21611171.056
43.0	11143.09811109.15010965.36810931.41911041.253
43.5	11009.30110973.35610833.56810793.62810909.453
44.0	10875.50410839.55910705.76210657.83410775.656
44.5	10741.70710697.77410573.96210524.03710645.852
45.0	10609.90710553.99210444.15810388.24310514.052
45.5	10478.10710426.18610314.35510252.44910376.261
46.0	10344.31010292.38910184.55210116.65510242.464
46.5	10216.50410144.61310052.7529980.861 10104.673
47.0	10084.70410020.8019922.949 9845.067 9966.882
47.5	9950.907 9894.991 9791.149 9711.270 9829.091
48.0	9819.106 9761.194 9661.346 9575.476 9687.306
48.5	9687.306 9625.400 9529.546 9441.679 9547.518
49.0	9555.506 9491.603 9399.743 9305.885 9409.727
49.5	9423.706 9357.806 9269.939 9176.082 9267.942
50.0	9289.909 9222.012 9140.136 9044.282 9128.154
50.5	9156.112 9086.218 9012.330 8906.491 8988.367
51.0	9020.318 8952.421 8882.527 8770.697 8846.582
51.5	8886.521 8818.624 8754.721 8640.894 8706.794
52.0	8750.727 8686.824 8624.918 8507.097 8563.012
52.5	8610.939 8553.027 8497.112 8373.299 8419.230
53.0	8473.148 8419.230 8367.309 8241.499 8275.448
53.5	8337.354 8285.433 8237.505 8109.699 8131.666
54.0	8201.560 8153.633 8107.702 7977.899 7987.884
54.5	8065.766 8021.833 7975.902 7842.105 7844.102

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CANDELA TABULATION - (Cont.)

55.0	7927.975	7890.032	7844.102	7708.308	7698.323
55.5	7794.178	7756.235	7714.299	7570.517	7554.541
56.0	7658.384	7622.438	7580.502	7434.723	7410.759
56.5	7522.590	7488.641	7438.717	7296.932	7266.978
57.0	7386.796	7356.841	7298.929	7159.141	7121.199
57.5	7252.999	7223.044	7177.114	7019.353	6975.420
58.0	7117.205	7089.247	7047.311	6879.565	6831.638
58.5	6981.411	6955.450	6913.514	6737.780	6683.862
59.0	6845.617	6819.656	6779.717	6593.998	6538.083
59.5	6709.823	6685.859	6645.920	6452.213	6394.301
60.0	6576.026	6550.065	6510.125	6308.431	6268.492
60.5	6440.232	6414.271	6378.325	6166.646	6110.731
61.0	6304.437	6278.477	6246.525	6024.862	5942.986
61.5	6168.643	6144.680	6110.731	5881.080	5791.216
62.0	6034.846	6006.889	5974.937	5737.298	5641.443
62.5	5897.055	5871.095	5839.143	5595.513	5489.673
63.0	5761.261	5737.298	5705.346	5451.731	5339.900
63.5	5623.470	5601.504	5573.546	5311.943	5188.131
64.0	5485.679	5467.707	5439.749	5170.158	5038.358
64.5	5349.885	5333.910	5303.955	5030.370	4888.585
65.0	5216.088	5200.113	5168.161	4888.585	4740.809
65.5	5082.291	5066.315	5036.361	4748.797	4595.030
66.0	4948.494	4932.518	4902.564	4609.009	4449.251
66.5	4814.697	4802.715	4768.767	4469.221	4303.473
67.0	4680.900	4670.915	4634.970	4317.451	4159.691
67.5	4549.100	4539.115	4501.173	4183.654	4017.906
68.0	4417.300	4407.315	4365.379	4049.857	3876.121
68.5	4287.497	4277.512	4231.582	3912.066	3736.333
69.0	4157.694	4145.712	4095.788	3772.278	3596.545
69.5	4029.888	4017.906	3961.990	3634.487	3460.751
70.0	3902.081	3888.103	3828.193	3496.696	3324.957
70.5	3776.272	3758.299	3694.396	3360.902	3191.160
71.0	3650.463	3628.496	3562.596	3225.108	3059.360
71.5	3524.654	3502.687	3430.796	3093.308	2927.560
72.0	3400.842	3374.881	3298.996	2961.508	2799.753
72.5	3277.029	3249.072	3169.193	2831.705	2673.944
73.0	3155.214	3123.263	3043.384	2703.899	2548.135
73.5	3033.399	2999.450	2915.578	2578.090	2426.320
74.0	2909.587	2875.638	2789.769	2456.274	2304.505
74.5	2791.765	2753.823	2665.956	2334.459	2186.683
75.0	2669.950	2634.005	2544.141	2214.641	2070.859
75.5	2552.129	2514.187	2420.329	2096.820	1957.032
76.0	2436.305	2398.362	2300.511	1982.992	1849.195
76.5	2320.480	2282.538	2182.689	1871.162	1741.359
77.0	2206.653	2168.711	2064.868	1763.325	1631.525
77.5	2094.823	2058.877	1951.041	1657.486	1525.686
78.0	1984.989	1949.044	1837.213	1553.643	1433.825
78.5	1877.153	1841.207	1725.383	1453.795	1343.961
79.0	1771.313	1735.368	1617.547	1355.943	1254.098
79.5	1667.471	1631.525	1509.710	1260.089	1166.231
80.0	1565.625	1529.680	1403.871	1168.228	1082.358
80.5	1465.777	1431.828	1302.025	1086.352	1000.482
81.0	1369.922	1333.977	1200.180	1008.470	924.598
81.5	1276.064	1238.122	1102.328	916.610	852.707
82.0	1182.207	1146.261	1010.467	836.731	782.813
82.5	1090.346	1054.401	920.604	762.843	714.916

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CANDELA TABULATION - (Cont.)

83.0	1000.482	964.537	834.734	692.949	651.013
83.5	914.613	878.667	750.861	627.049	591.103
84.0	828.743	794.794	670.982	565.143	535.188
84.5	744.870	710.922	597.094	505.234	481.270
85.0	662.994	631.043	527.200	451.315	429.349
85.5	581.119	553.161	461.300	397.397	377.428
86.0	503.237	479.273	401.391	345.476	325.506
86.5	423.358	405.385	341.482	295.552	281.573
87.0	347.473	335.491	285.567	255.612	245.627
87.5	275.582	271.588	235.643	219.667	213.676
88.0	209.682	211.679	195.703	181.724	179.727
88.5	149.773	159.758	155.764	153.767	151.770
89.0	93.858	115.824	125.809	133.797	133.797
89.5	55.915	81.876	101.846	115.824	115.824
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-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-L480-850-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-L480-850-HA-ND-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	7096.45	N.A.	15.40
0-30	14405.96	N.A.	31.30
0-40	22640.96	N.A.	49.20
0-60	37715.1	N.A.	82.00
0-80	45328.96	N.A.	98.60
0-90	45973.06	N.A.	100.00
10-90	44077.55	N.A.	95.90
20-40	15544.51	N.A.	33.80
20-50	23638.07	N.A.	51.40
40-70	20083.64	N.A.	43.70
60-80	7613.85	N.A.	16.60
70-80	2604.36	N.A.	5.70
80-90	644.10	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	45973.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1895.51
10-20	5200.94
20-30	7309.51
30-40	8235.00
40-50	8093.56
50-60	6980.59
60-70	5009.49
70-80	2604.36
80-90	644.10
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-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-L480-850-HA-ND-DIM-UNV_.IES

UGR TABLE - CORRECTED

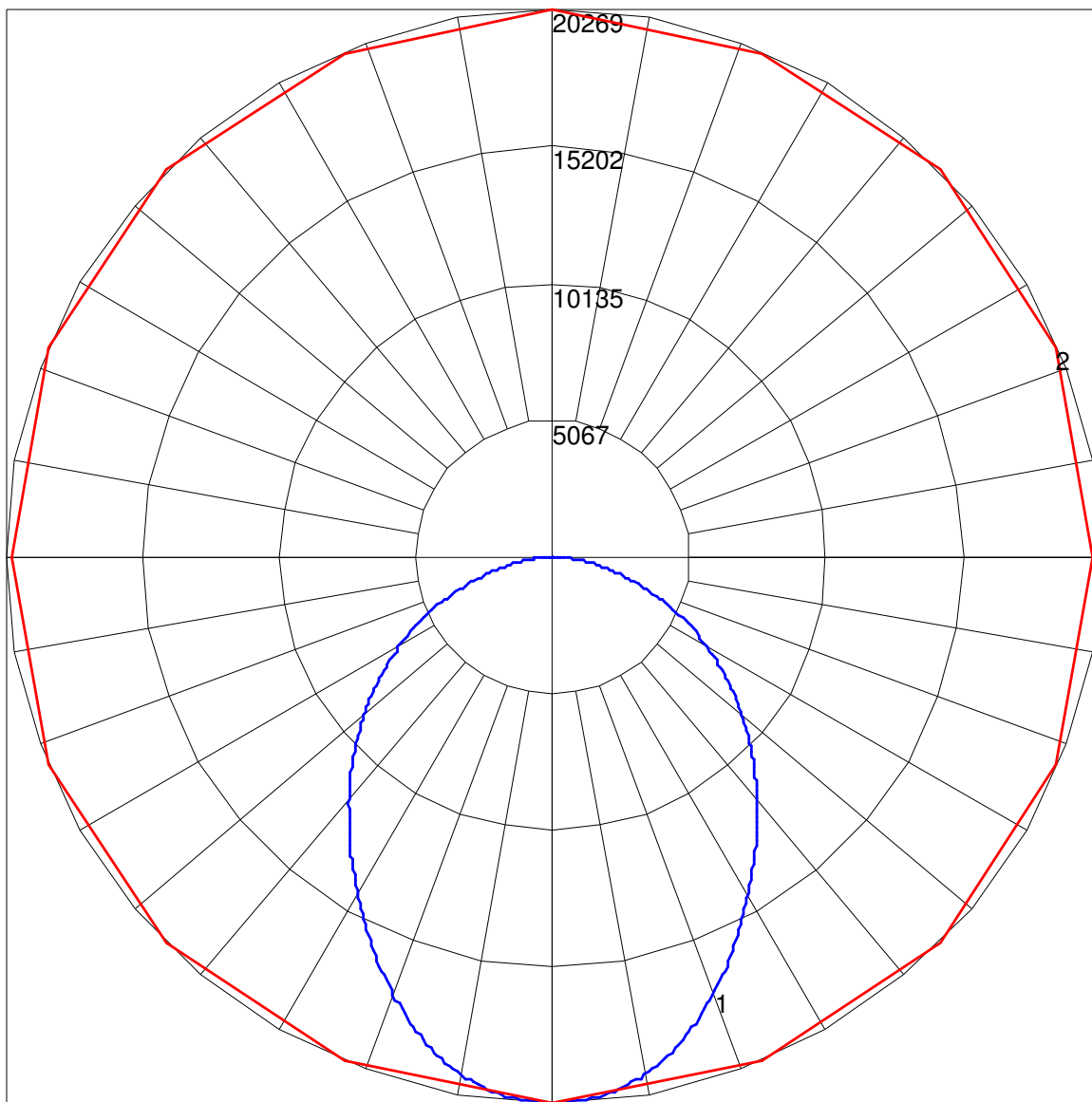
Reflectances

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					UGR Viewed Endwise				
X=2H	Y=2H	24.6	26.2	25.0	26.5	26.8	24.4	26.0	24.7	26.3	26.6
	3H	26.3	27.7	26.6	28.0	28.4	25.8	27.3	26.2	27.6	27.9
	4H	26.9	28.2	27.3	28.6	28.9	26.3	27.6	26.7	28.0	28.3
	6H	27.3	28.5	27.7	28.9	29.3	26.5	27.8	27.0	28.1	28.5
	8H	27.4	28.6	27.8	29.0	29.4	26.6	27.8	27.0	28.2	28.6
	12H	27.5	28.6	27.9	29.0	29.5	26.6	27.8	27.1	28.1	28.6
4H	2H	25.2	26.5	25.6	26.9	27.2	25.0	26.3	25.4	26.7	27.1
	3H	27.0	28.2	27.5	28.6	29.0	26.7	27.8	27.1	28.2	28.6
	4H	27.8	28.8	28.2	29.2	29.6	27.2	28.2	27.6	28.6	29.1
	6H	28.3	29.2	28.8	29.6	30.1	27.6	28.4	28.0	28.9	29.3
	8H	28.5	29.3	28.9	29.8	30.2	27.6	28.5	28.1	28.9	29.4
	12H	28.6	29.4	29.1	29.8	30.3	27.7	28.4	28.2	28.9	29.4
8H	4H	28.0	28.8	28.5	29.3	29.7	27.5	28.3	28.0	28.8	29.2
	6H	28.7	29.3	29.2	29.8	30.3	27.9	28.6	28.4	29.1	29.6
	8H	28.9	29.5	29.4	30.0	30.5	28.1	28.7	28.6	29.2	29.7
	12H	29.1	29.6	29.6	30.1	30.7	28.2	28.7	28.7	29.2	29.8
12H	4H	28.0	28.8	28.5	29.2	29.7	27.5	28.3	28.0	28.7	29.2
	6H	28.7	29.3	29.2	29.8	30.3	28.0	28.6	28.5	29.1	29.6
	8H	29.0	29.5	29.5	30.0	30.6	28.2	28.7	28.7	29.2	29.8

Maximum UGR = 30.7

POLAR GRAPH



Maximum Candela = 20269.256 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.)