



IES INDOOR REPORT

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

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 14617179.01
[TESTLAB] UL Verification Services Inc.
[ISSUEDATE] 2023-03-14
[TESTDATE] 1/6/2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] GS-4-L480-840-HA-HE-DIM-UNV
[LUMINAIRE] White aluminum housing, prismatic lense enclosure
[LAMP] 448 White LEDs
[BALLAST] 0-10V LED DRIVER

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	48353
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	155
Total Luminaire Watts	312
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.42
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	47863	49344	50237
55	45812	47656	34279
65	41554	29064	9422
75	34018	9351	9471
85	14915	12819	11938

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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	18329.438	18329.438	18329.438	18329.438	18329.438
0.5	18103.006	18340.951	18381.248	18352.465	18388.924
1.0	18108.763	18342.870	18383.167	18352.465	18387.005
1.5	18116.439	18340.951	18385.086	18346.708	18381.248
2.0	18114.520	18344.789	18381.248	18348.627	18383.167
2.5	18110.682	18340.951	18383.167	18344.789	18377.410
3.0	18108.763	18333.276	18379.329	18346.708	18381.248
3.5	18103.006	18321.762	18377.410	18346.708	18381.248
4.0	18089.574	18316.005	18371.654	18354.384	18385.086
4.5	18072.304	18304.492	18363.978	18358.221	18388.924
5.0	18049.277	18291.059	18358.221	18354.384	18383.167
5.5	18032.006	18279.546	18350.546	18348.627	18375.492
6.0	18018.574	18268.033	18340.951	18335.194	18360.140
6.5	17999.385	18250.762	18331.357	18321.762	18339.032
7.0	17974.439	18231.573	18312.167	18302.573	18314.086
7.5	17953.331	18214.303	18294.897	18277.627	18287.222
8.0	17934.142	18193.195	18269.951	18250.762	18262.276
8.5	17924.547	18170.168	18246.925	18223.898	18243.087
9.0	17909.196	18145.222	18221.979	18197.033	18220.060
9.5	17888.088	18126.033	18200.871	18177.844	18202.790
10.0	17865.061	18108.763	18177.844	18154.817	18179.763
10.5	17843.953	18089.574	18150.979	18126.033	18152.898
11.0	17820.926	18070.385	18120.276	18093.412	18124.114
11.5	17801.737	18049.277	18089.574	18062.709	18079.979
12.0	17765.278	18022.412	18064.628	18022.412	18022.412
12.5	17724.981	17995.547	18030.088	17968.682	17976.358
13.0	17684.684	17964.845	17993.628	17914.953	17926.466
13.5	17642.468	17922.629	17957.169	17868.899	17870.818
14.0	17596.414	17882.331	17918.791	17817.088	17819.007
14.5	17535.009	17842.034	17872.737	17765.278	17774.872
15.0	17490.874	17801.737	17828.602	17713.467	17740.332
15.5	17465.928	17757.602	17776.791	17663.576	17705.792
16.0	17429.468	17707.711	17724.981	17619.441	17663.576
16.5	17391.090	17661.657	17663.576	17575.306	17625.197
17.0	17366.144	17613.684	17609.846	17531.171	17581.062
17.5	17325.847	17567.630	17552.279	17481.279	17538.846
18.0	17279.793	17513.901	17490.874	17435.225	17488.955
18.5	17229.902	17462.090	17437.144	17379.577	17423.712
19.0	17170.415	17412.198	17369.982	17322.009	17362.307
19.5	17105.172	17360.388	17306.658	17266.361	17312.415
20.0	17043.767	17308.577	17245.253	17206.875	17258.685
20.5	16984.281	17252.929	17189.605	17149.307	17204.956
21.0	16926.714	17193.442	17132.037	17095.578	17147.389
21.5	16859.552	17133.956	17072.551	17041.848	17084.064
22.0	16794.309	17074.470	17013.065	16984.281	17020.740
22.5	16738.660	17011.146	16949.741	16924.795	16963.173
23.0	16683.012	16945.903	16878.741	16855.714	16894.092
23.5	16627.364	16872.984	16809.660	16794.309	16832.687
24.0	16558.283	16807.741	16734.823	16732.904	16765.525
24.5	16498.797	16742.498	16658.066	16663.823	16702.201
25.0	16433.554	16661.904	16575.553	16600.499	16629.283
25.5	16358.716	16594.742	16502.634	16529.499	16560.202
26.0	16272.365	16527.580	16431.635	16458.499	16483.445
26.5	16178.338	16439.310	16362.554	16383.662	16408.608

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CANDELA TABULATION - (Cont.)

27.0	16091.98716352.95916287.71616310.74316333.770
27.5	16007.55516262.77116218.63616237.82516260.852
28.0	15926.96116172.58216143.79816168.74416187.933
28.5	15857.88016082.39316065.12316093.90616109.258
29.0	15781.12415994.12315984.52816005.63616032.501
29.5	15704.36715905.85315903.93415925.04215963.420
30.0	15627.61115807.98915817.58315840.61015882.826
30.5	15550.85515717.80015738.90815754.25915809.908
31.0	15468.34115618.01615660.23315673.66515729.313
31.5	15376.23415520.15215577.71915591.15215648.719
32.0	15280.28815431.88215491.36815506.72015564.287
32.5	15180.50515337.85515408.85515431.88215476.017
33.0	15076.88415245.74815334.01815349.36915395.423
33.5	14977.10015147.88315247.66715264.93715322.504
34.0	14875.39815044.26215153.64015176.66715238.072
34.5	14779.45214942.56015057.69415088.39715149.802
35.0	14691.18214837.02014952.15415002.04615055.776
35.5	14608.66914731.48014831.26314911.85714971.343
36.0	14508.88614618.26414733.39914821.66814883.074
36.5	14405.26514505.04814639.37214727.64214789.047
37.0	14286.29214391.83214535.75114635.53414696.939
37.5	14157.72514280.53614430.21114543.42614599.075
38.0	14034.91514171.15814336.18414447.48114497.372
38.5	13910.18614059.86114245.99514347.69714386.076
39.0	13800.80813948.56414140.45514240.23814282.454
39.5	13697.18713829.59114023.40114127.02314180.752
40.0	13589.72813704.86213906.34814019.56414075.212
40.5	13478.43113580.13313795.05113910.18613975.429
41.0	13374.81013455.40413681.83513791.21313873.726
41.5	13248.16113328.75613560.94413681.83513756.673
42.0	13108.08113204.02613438.13413564.78213637.700
42.5	12956.48713077.37813313.40413447.72813520.647
43.0	12808.73112948.81113194.43213330.67513407.431
43.5	12670.56912812.56913071.62213211.70213296.134
44.0	12547.75912684.00212960.32513096.56713192.513
44.5	12446.05712557.35312841.35212992.94613081.216
45.0	12340.51712423.03012722.38012885.48712952.649
45.5	12225.38212292.54412593.81312756.92012835.596
46.0	12089.13912158.22012449.89412614.92112708.947
46.5	11949.05912018.13912298.30012497.86712588.056
47.0	11801.30311883.81612169.73312376.97612471.002
47.5	11668.89811755.24912041.16612250.32812346.273
48.0	11548.00611630.51911904.92412129.43612217.706
48.5	11429.03411517.30411770.60012010.46412064.193
49.0	11302.38611361.87211643.95211887.65411868.464
49.5	11166.14311196.84611519.22311764.84311642.033
50.0	10995.36011058.68411388.73711632.43811369.548
50.5	10839.92810937.79311248.65611490.43911037.576
51.0	10694.09110793.87411108.57611317.73710655.713
51.5	10567.44310653.79410962.73811106.65710289.201
52.0	10446.55110502.20010824.57710861.0369993.688
52.5	10308.39010356.36310684.49610542.4979713.527
53.0	10149.12010199.01210540.57810177.9049293.286
53.5	9986.013 10053.17510402.4169797.959 8727.207
54.0	9834.419 9920.770 10256.5799477.501 8080.534
54.5	9707.771 9774.933 10108.8239201.178 7545.158

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CANDELA TABULATION - (Cont.)

55.0	9581.123	9604.149	9966.824	8855.774	7169.051
55.5	9419.934	9446.799	9820.986	8364.533	6883.134
56.0	9245.313	9320.151	9678.987	7752.400	6604.892
56.5	9099.476	9185.827	9535.069	7182.484	6257.569
57.0	8976.666	9036.152	9383.475	6779.512	5906.408
57.5	8838.504	8869.207	9216.529	6491.676	5614.734
58.0	8679.234	8706.099	9038.071	6257.569	5434.356
58.5	8500.776	8550.667	8819.315	5971.651	5321.140
59.0	8356.857	8399.073	8567.938	5580.193	5227.114
59.5	8216.777	8235.966	8282.020	5255.897	5094.709
60.0	8036.399	8065.183	7944.291	5064.006	4918.169
60.5	7863.697	7919.346	7641.104	4950.790	4693.656
61.0	7708.265	7760.076	7355.186	4854.845	4415.414
61.5	7572.023	7595.050	7023.214	4714.764	4121.821
62.0	7408.915	7420.429	6662.459	4534.387	3828.227
62.5	7207.430	7243.889	6196.164	4298.361	3438.688
63.0	7030.890	7092.295	5670.382	4004.767	2853.421
63.5	6890.809	6942.620	5244.384	3720.768	2381.369
64.0	6720.026	6767.999	4954.628	3436.770	2101.208
64.5	6556.919	6614.486	4733.953	3014.609	1844.265
65.0	6403.406	6457.135	4478.738	2461.963	1451.848
65.5	6200.001	6278.677	4158.280	2080.100	1258.038
66.0	6027.299	6113.650	3889.633	1846.952	1214.671
66.5	5877.624	5963.975	3728.444	1503.467	1194.714
67.0	5714.517	5797.030	3601.796	1259.957	1177.252
67.5	5543.734	5632.004	3469.391	1171.879	1159.982
68.0	5367.194	5482.329	3298.608	1147.701	1143.863
68.5	5213.681	5305.789	3056.825	1128.512	1128.128
69.0	5064.006	5146.519	2780.502	1110.666	1112.393
69.5	4897.061	4983.412	2544.476	1093.971	1096.274
70.0	4733.953	4831.818	2220.180	1078.044	1080.347
70.5	4576.603	4659.116	1804.160	1061.733	1064.996
71.0	4438.441	4478.738	1536.088	1046.574	1049.644
71.5	4279.171	4290.685	1333.835	1031.415	1032.374
72.0	4119.902	4091.118	1102.414	1014.336	1015.680
72.5	3962.551	3835.903	988.047	998.026	997.834
73.0	3814.795	3569.174	958.304	981.523	978.453
73.5	3667.039	3340.824	938.539	963.869	958.880
74.0	3519.283	3099.041	919.158	944.872	937.388
74.5	3373.446	2834.232	900.929	924.339	916.088
75.0	3210.338	2496.503	882.507	903.423	893.829
75.5	3060.663	2260.477	864.853	881.931	870.610
76.0	2910.988	2087.775	847.775	859.672	847.007
76.5	2751.718	1898.954	829.353	836.837	822.637
77.0	2592.449	1698.620	810.932	813.426	798.459
77.5	2431.260	1568.134	791.167	789.824	773.513
78.0	2250.883	1409.056	770.635	765.454	748.567
78.5	2101.208	1209.873	748.567	739.932	722.854
79.0	1968.803	1056.169	726.308	714.986	697.716
79.5	1831.409	833.767	703.473	690.040	672.003
80.0	1692.671	716.713	679.870	664.327	645.714
80.5	1553.742	607.143	656.268	637.846	619.808
81.0	1412.702	569.917	631.705	611.557	596.398
81.5	1273.581	546.698	605.992	585.652	573.946
82.0	1148.276	522.519	579.127	559.363	544.011
82.5	1036.404	498.149	552.263	533.265	517.530

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CANDELA TABULATION - (Cont.)

83.0	916.088	474.355	523.671	506.401	491.817
83.5	798.651	449.601	495.271	479.920	465.528
84.0	685.243	424.271	465.912	452.287	438.471
84.5	579.319	397.406	437.128	423.504	410.263
85.0	473.971	370.350	407.385	392.417	379.369
85.5	419.282	341.566	375.531	359.028	347.707
86.0	359.220	311.823	341.950	323.912	313.358
86.5	271.910	280.737	304.339	285.918	278.626
87.0	226.240	248.307	264.426	246.196	240.823
87.5	197.456	214.534	221.826	205.899	200.142
88.0	168.864	177.499	179.226	161.572	154.472
88.5	137.586	137.586	135.859	113.600	104.773
89.0	100.551	99.208	92.492	73.686	67.738
89.5	62.940	66.586	59.486	50.467	48.932
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-HE-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-HE-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-HE-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6751.2	N.A.	14.00
0-30	14399.16	N.A.	29.80
0-40	23726.86	N.A.	49.10
0-60	41666.01	N.A.	86.20
0-80	47917.53	N.A.	99.10
0-90	48352.79	N.A.	100.00
10-90	46611.87	N.A.	96.40
20-40	16975.66	N.A.	35.10
20-50	26736.48	N.A.	55.30
40-70	22451.54	N.A.	46.40
60-80	6251.51	N.A.	12.90
70-80	1739.13	N.A.	3.60
80-90	435.27	N.A.	0.90
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	48352.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1740.93
10-20	5010.28
20-30	7647.96
30-40	9327.7
40-50	9760.82
50-60	8178.33
60-70	4512.38
70-80	1739.13
80-90	435.27
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-HE-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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	50	62	55	50	61	54	49	59	53	49	47
6	72	59	51	44	70	58	50	44	57	49	44	55	48	43	53	48	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	34	29	40	33	28	39	33	28	38	32	28	26

IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-840-HA-HE-DIM-UNV_.IES

UGR TABLE - CORRECTED

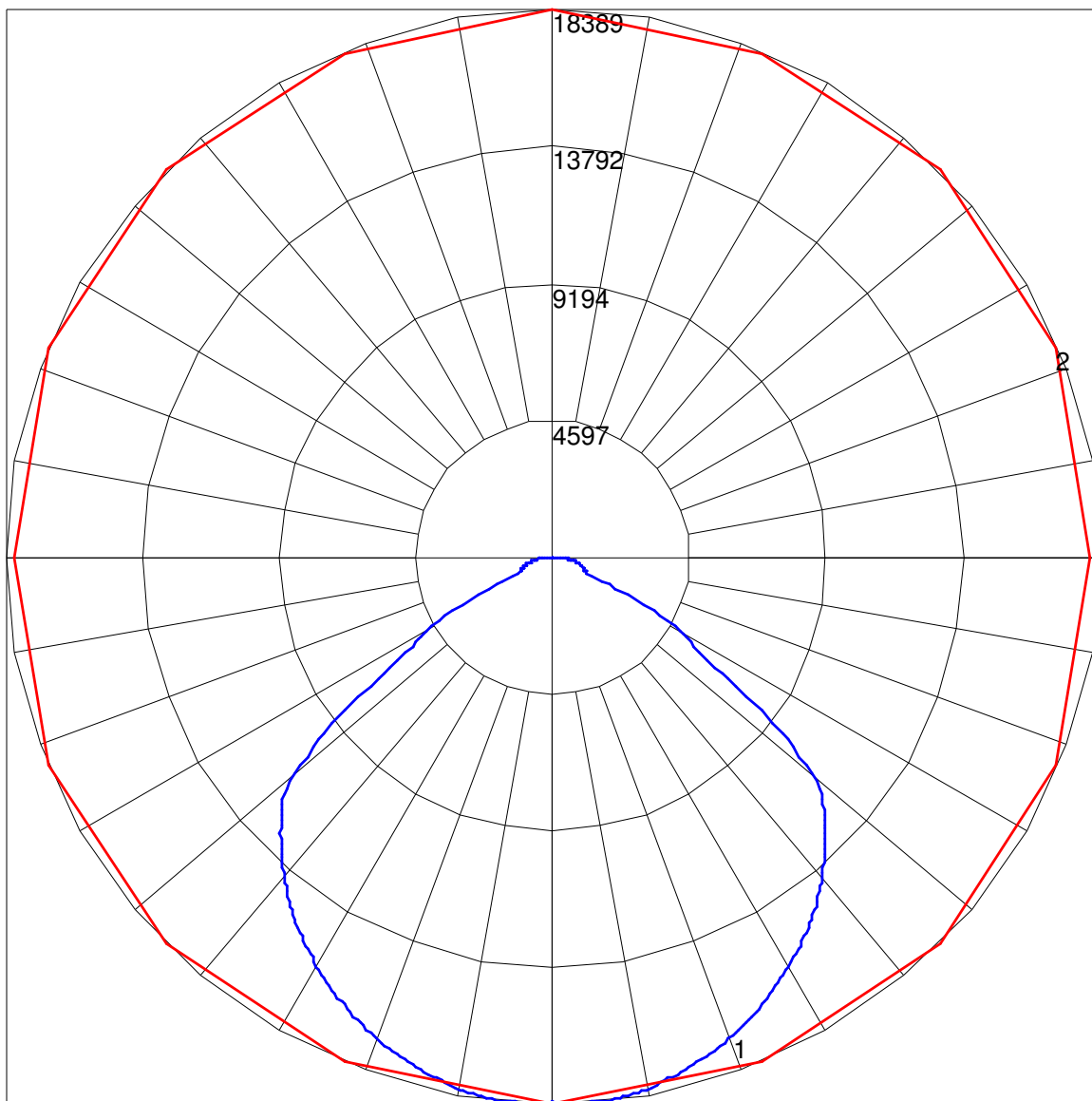
Reflectances

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	25.9	27.5	26.3	27.8	28.1	23.5	25.1	23.9	25.4	25.7
	3H	27.6	29.0	28.0	29.3	29.7	23.6	25.0	24.0	25.3	25.7
	4H	28.1	29.4	28.5	29.8	30.2	23.7	25.0	24.1	25.4	25.7
	6H	28.4	29.6	28.8	30.0	30.4	23.8	25.0	24.2	25.4	25.8
	8H	28.5	29.6	28.9	30.0	30.4	23.9	25.0	24.3	25.4	25.8
	12H	28.5	29.6	28.9	30.0	30.4	23.9	25.0	24.4	25.4	25.8
4H	2H	26.1	27.4	26.5	27.8	28.2	24.1	25.4	24.5	25.8	26.1
	3H	28.0	29.1	28.4	29.5	29.9	24.3	25.4	24.7	25.8	26.2
	4H	28.6	29.6	29.0	30.0	30.4	24.4	25.4	24.9	25.8	26.2
	6H	28.9	29.8	29.4	30.2	30.7	24.6	25.5	25.1	25.9	26.4
	8H	29.0	29.8	29.5	30.2	30.7	24.7	25.5	25.2	25.9	26.4
	12H	29.0	29.7	29.5	30.2	30.7	24.8	25.5	25.3	26.0	26.5
8H	4H	28.5	29.3	29.0	29.8	30.2	24.6	25.4	25.1	25.8	26.3
	6H	28.9	29.5	29.4	30.0	30.5	24.9	25.5	25.4	26.0	26.5
	8H	29.0	29.6	29.5	30.1	30.6	25.0	25.6	25.5	26.1	26.6
	12H	29.1	29.6	29.6	30.1	30.6	25.2	25.7	25.7	26.2	26.8
12H	4H	28.5	29.2	29.0	29.7	30.2	24.6	25.3	25.1	25.8	26.3
	6H	28.9	29.5	29.4	29.9	30.5	24.9	25.5	25.4	25.9	26.5
	8H	29.0	29.5	29.5	30.0	30.5	25.1	25.6	25.6	26.1	26.7

Maximum UGR = 30.7

POLAR GRAPH



Maximum Candela = 18388.924 Located At Horizontal Angle = 90, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)