



IES INDOOR REPORT
PHOTOMETRIC FILENAME : GS-4-L480-835-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-L480-835-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	43295
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
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	38754	38148	38404
55	35699	35322	34665
65	31878	31585	28973
75	26644	25388	20665
85	19647	15623	12723

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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	19050.91419050.91419050.91419050.91419050.914				
0.5	18881.65619050.91419088.52719050.91419088.527				
1.0	18862.84919032.10719088.52719032.10719088.527				
1.5	18862.84919032.10719069.72019032.10719069.720				
2.0	18844.04319013.30119050.91419013.30119050.914				
2.5	18844.04318994.49419050.91418994.49419032.107				
3.0	18825.23718975.68819032.10718975.68819013.301				
3.5	18795.14618956.88218994.49418938.07518956.882				
4.0	18774.45918938.07518975.68818919.26918956.882				
4.5	18751.89118919.26918956.88218881.65618919.269				
5.0	18725.56218881.65618938.07518862.84918881.656				
5.5	18693.59218862.84918900.46218825.23718844.043				
6.0	18657.85918825.23718862.84918783.86218825.237				
6.5	18620.24618780.10118825.23718740.60818774.459				
7.0	18575.11118734.96618774.45918697.35318729.324				
7.5	18520.57218684.18818719.92118644.69518682.308				
8.0	18471.67618629.65018663.50118590.15618627.769				
8.5	18417.13718569.46918603.32118533.73718571.350				
9.0	18355.07618505.52718537.49818473.55618511.169				
9.5	18289.25318435.94318473.55618409.61418445.347				
10.0	18214.02818364.47918400.21118343.79218377.643				
10.5	18138.80218285.49218326.86618272.32718302.418				
11.0	18057.93418206.50518247.87918197.10218221.550				
11.5	17975.18618123.75718168.89218118.11518144.444				
12.0	17888.67618037.24718080.50218033.48618056.054				
12.5	17804.04717945.09617990.23117948.85717967.663				
13.0	17717.53817852.94417894.31817854.82517875.512				
13.5	17625.38617757.03117796.52517751.38917775.838				
14.0	17527.59317653.59617696.85117642.31217678.044				
14.5	17427.91917548.28017593.41517546.39917572.728				
15.0	17322.60317444.84517486.21917442.96417467.412				
15.5	17213.52517337.64817377.14117330.12517360.216				
16.0	17104.44817226.69017260.54217215.40617245.496				
16.5	16987.84817117.61317145.82217102.56817125.135				
17.0	16867.48717002.89317040.50616984.08717002.893				
17.5	16747.12616886.29416918.26516863.72616878.771				
18.0	16628.64516765.93216792.26116741.48416754.649				
18.5	16504.52316647.45216671.90016617.36216626.765				
19.0	16382.28116527.09116547.77816491.35916497.000				
19.5	16258.15916404.84916425.53616361.59416370.997				
20.0	16135.91716278.84616299.53316233.71016244.994				
20.5	16011.79516154.72316173.53016103.94616115.230				
21.0	15883.91116030.60116049.40715974.18215987.346				
21.5	15763.55015902.71715921.52415844.41715855.701				
22.0	15635.66615778.59515793.64015714.65315727.817				
22.5	15513.42415654.47215663.87615584.88915598.053				
23.0	15389.30215526.58915532.23115451.36315462.647				
23.5	15265.17915400.58615396.82415314.07615327.241				
24.0	15142.93815278.34415261.41815176.78915193.715				
24.5	15028.21815148.57915120.37015039.50215056.428				
25.0	14905.97615020.69614981.20214902.21514924.783				
25.5	14779.97314890.93114842.03514768.69014791.257				
26.0	14657.73214761.16714702.86714635.16414663.374				
26.5	14535.49014629.52214563.69914499.75814533.609				

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CANDELA TABULATION - (Cont.)

27.0	14413.24814511.04114424.53214366.23214405.725
27.5	14289.12614398.20314287.24514230.82614277.842
28.0	14165.00314247.75114151.83914097.30014149.958
28.5	14042.76114117.98714016.43213965.65514023.955
29.0	13907.35514001.38713882.90713834.01013897.952
29.5	13783.23313867.86213751.26213706.12613771.949
30.0	13659.11013734.33613621.49713578.24313640.304
30.5	13538.74913608.33313493.61413454.12013512.420
31.0	13416.50713482.33013363.84913329.99813384.536
31.5	13298.02713356.32713234.08513203.99513254.772
32.0	13181.42713230.32413106.20113079.87213126.888
32.5	13062.94613108.08212978.31712957.63013002.766
33.0	12946.34612983.95912850.43412831.62712878.643
33.5	12831.62712863.59812722.55012707.50512758.282
34.0	12715.02712739.47612596.54712581.50212637.921
34.5	12598.42812615.35312455.49912453.61812515.679
35.0	12479.94712493.11212333.25712325.73412393.437
35.5	12363.34712370.87012212.89612197.85112271.196
36.0	12244.86712248.62812085.01212071.84712147.073
36.5	12126.38612122.62511959.00911943.96412024.831
37.0	12009.78611998.50211833.00611816.08011898.828
37.5	11908.23211870.61911703.24111688.19611774.706
38.0	11795.39311744.61611577.23811560.31311650.583
38.5	11643.06111616.73211451.23511434.31011528.342
39.0	11517.05811486.96811330.87411308.30611404.219
39.5	11391.05511359.08411212.39411182.30311278.216
40.0	11261.29011229.31911076.98711056.30011152.213
40.5	11133.40711101.43610945.34210930.29711026.210
41.0	11005.52310975.43310821.22010804.29410900.207
41.5	10877.63910845.66810697.09710676.41010772.323
42.0	10747.87510717.78510571.09410548.52710644.439
42.5	10621.87210589.90110448.85310420.64310520.317
43.0	10493.98810462.01710326.61110294.64010398.075
43.5	10367.98510334.13310202.48810164.87510273.953
44.0	10241.98210208.13010082.12710036.99210147.950
44.5	10115.97910074.6059958.005 9910.989 10025.708
45.0	9991.856 9939.198 9835.763 9783.105 9901.585
45.5	9867.734 9818.837 9713.521 9655.221 9771.821
46.0	9741.731 9692.834 9591.279 9527.337 9645.818
46.5	9621.370 9553.666 9467.157 9399.454 9516.054
47.0	9497.247 9437.067 9344.915 9271.570 9386.289
47.5	9371.244 9318.586 9220.793 9145.567 9256.525
48.0	9247.122 9192.583 9098.551 9017.683 9122.999
48.5	9122.999 9064.699 8974.428 8891.680 8991.354
49.0	8998.877 8938.696 8852.187 8763.796 8861.590
49.5	8874.754 8812.693 8729.945 8641.555 8728.064
50.0	8748.751 8684.809 8607.703 8517.432 8596.419
50.5	8622.748 8556.926 8487.342 8387.668 8464.774
51.0	8494.864 8430.923 8365.100 8259.784 8331.249
51.5	8368.861 8304.920 8244.739 8137.542 8199.604
52.0	8240.978 8180.797 8122.497 8011.539 8064.197
52.5	8109.333 8054.794 8002.136 7885.536 7928.791
53.0	7979.568 7928.791 7879.894 7761.414 7793.385
53.5	7851.685 7802.788 7757.652 7637.291 7657.978
54.0	7723.801 7678.665 7635.411 7513.169 7522.572
54.5	7595.917 7554.543 7511.288 7385.285 7387.166

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CANDELA TABULATION - (Cont.)

55.0	7466.153	7430.421	7387.166	7259.282	7249.879
55.5	7340.150	7304.417	7264.924	7129.518	7114.473
56.0	7212.266	7178.414	7138.921	7001.634	6979.066
56.5	7084.382	7052.411	7005.395	6871.870	6843.660
57.0	6956.498	6928.289	6873.750	6742.105	6706.373
57.5	6830.495	6802.286	6759.031	6610.460	6569.086
58.0	6702.612	6676.283	6636.789	6478.815	6433.680
58.5	6574.728	6550.280	6510.786	6345.290	6294.512
59.0	6446.844	6422.396	6384.783	6209.883	6157.225
59.5	6318.961	6296.393	6258.780	6076.358	6021.819
60.0	6192.957	6168.509	6130.896	5940.951	5903.338
60.5	6065.074	6040.625	6006.774	5807.426	5754.768
61.0	5937.190	5912.742	5882.651	5673.900	5596.794
61.5	5809.306	5786.739	5754.768	5538.494	5453.865
62.0	5683.303	5656.974	5626.884	5403.087	5312.817
62.5	5553.539	5529.090	5499.000	5269.562	5169.888
63.0	5425.655	5403.087	5372.997	5134.155	5028.839
63.5	5295.891	5275.204	5248.875	5002.510	4885.911
64.0	5166.126	5149.201	5122.872	4868.985	4744.862
64.5	5038.243	5023.197	4994.988	4737.340	4603.814
65.0	4912.240	4897.194	4867.104	4603.814	4464.647
65.5	4786.236	4771.191	4742.982	4472.169	4327.360
66.0	4660.233	4645.188	4616.979	4340.524	4190.073
66.5	4534.230	4522.946	4490.976	4208.879	4052.786
67.0	4408.227	4398.824	4364.972	4065.950	3917.379
67.5	4284.105	4274.702	4238.969	3939.947	3783.854
68.0	4159.982	4150.579	4111.086	3813.944	3650.328
68.5	4037.741	4028.337	3985.083	3684.180	3518.683
69.0	3915.499	3904.215	3857.199	3552.535	3387.038
69.5	3795.138	3783.854	3731.196	3422.770	3259.154
70.0	3674.776	3661.612	3605.193	3293.006	3131.271
70.5	3556.296	3539.370	3479.190	3165.122	3005.268
71.0	3437.815	3417.128	3355.067	3037.238	2881.145
71.5	3319.335	3298.648	3230.945	2913.116	2757.023
72.0	3202.735	3178.287	3106.822	2788.994	2636.662
72.5	3086.135	3059.806	2984.580	2666.752	2518.181
73.0	2971.416	2941.326	2866.100	2546.391	2399.700
73.5	2856.697	2824.726	2745.739	2427.910	2284.981
74.0	2740.097	2708.126	2627.258	2313.191	2170.262
74.5	2629.139	2593.407	2510.658	2198.472	2059.304
75.0	2514.420	2480.568	2395.939	2085.633	1950.227
75.5	2403.462	2367.730	2279.339	1974.675	1843.030
76.0	2294.384	2258.652	2166.501	1867.479	1741.475
76.5	2185.307	2149.575	2055.543	1762.163	1639.921
77.0	2078.111	2042.378	1944.585	1660.608	1536.485
77.5	1972.795	1938.943	1837.388	1560.934	1436.811
78.0	1869.359	1835.508	1730.192	1463.140	1350.302
78.5	1767.804	1733.953	1624.876	1369.108	1265.673
79.0	1668.130	1634.279	1523.321	1276.957	1181.044
79.5	1570.337	1536.485	1421.766	1186.686	1098.296
80.0	1474.424	1440.573	1322.092	1100.176	1019.309
80.5	1380.392	1348.421	1226.179	1023.070	942.202
81.0	1290.121	1256.270	1130.266	949.725	870.738
81.5	1201.731	1165.999	1038.115	863.215	803.035
82.0	1113.341	1079.489	951.605	787.989	737.212
82.5	1026.831	992.980	866.976	718.406	673.270

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CANDELA TABULATION - (Cont.)

83.0	942.202	908.351	786.109	652.583	613.090
83.5	861.334	827.483	707.122	590.522	556.670
84.0	780.467	748.496	631.896	532.222	504.012
84.5	701.480	669.509	562.312	475.803	453.235
85.0	624.373	594.283	496.490	425.025	404.338
85.5	547.267	520.938	434.429	374.248	355.442
86.0	473.922	451.354	378.009	325.351	306.545
86.5	398.696	381.771	321.590	278.335	265.171
87.0	327.232	315.948	268.932	240.722	231.319
87.5	259.529	255.767	221.916	206.871	201.229
88.0	197.468	199.348	184.303	171.139	169.258
88.5	141.048	150.451	146.690	144.810	142.929
89.0	88.390	109.077	118.481	126.003	126.003
89.5	52.658	77.106	95.913	109.077	109.077
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-L480-835-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-L480-835-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-L480-835-HA-ND-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6683.06	N.A.	15.40
0-30	13566.78	N.A.	31.30
0-40	21322.07	N.A.	49.20
0-60	35518.12	N.A.	82.00
0-80	42688.45	N.A.	98.60
0-90	43295.03	N.A.	100.00
10-90	41509.94	N.A.	95.90
20-40	14639.01	N.A.	33.80
20-50	22261.1	N.A.	51.40
40-70	18913.72	N.A.	43.70
60-80	7170.33	N.A.	16.60
70-80	2452.65	N.A.	5.70
80-90	606.58	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	43295.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1785.09
10-20	4897.97
20-30	6883.72
30-40	7755.29
40-50	7622.09
50-60	6573.95
60-70	4717.68
70-80	2452.65
80-90	606.58
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-L480-835-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-L480-835-HA-ND-DIM-UNV_.IES

UGR TABLE - CORRECTED

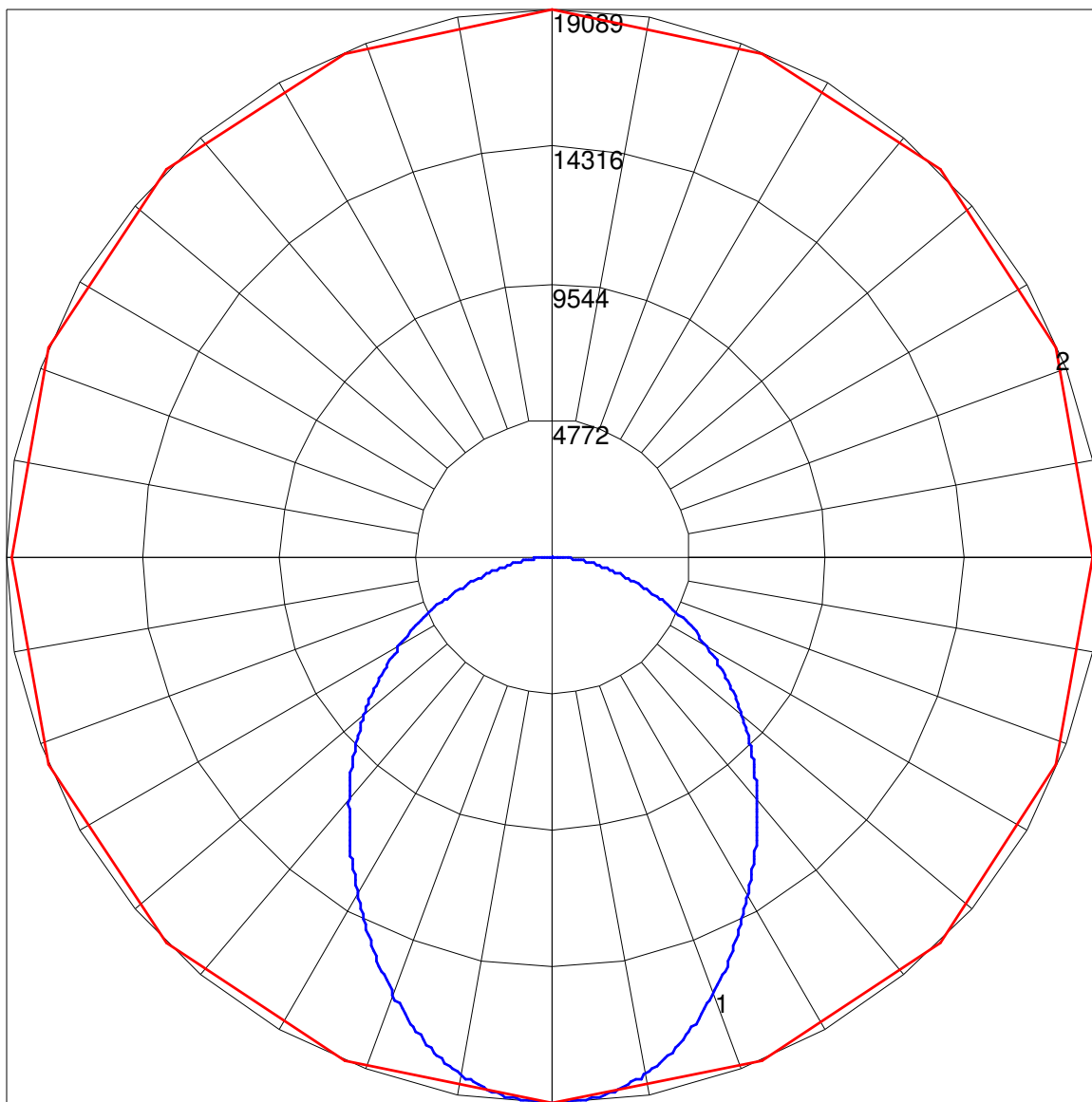
Reflectances

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	24.4	26.0	24.8	26.3	26.6	24.2	25.8	24.5	26.1	26.4
	3H	26.1	27.5	26.4	27.8	28.2	25.6	27.1	26.0	27.4	27.7
	4H	26.7	28.0	27.1	28.4	28.7	26.1	27.4	26.5	27.8	28.1
	6H	27.1	28.3	27.5	28.7	29.1	26.3	27.6	26.8	27.9	28.3
	8H	27.2	28.4	27.6	28.8	29.2	26.4	27.6	26.8	28.0	28.4
	12H	27.3	28.4	27.7	28.8	29.3	26.4	27.6	26.9	27.9	28.4
4H	2H	25.0	26.3	25.4	26.7	27.0	24.8	26.1	25.2	26.5	26.9
	3H	26.8	28.0	27.3	28.4	28.8	26.5	27.6	26.9	28.0	28.4
	4H	27.6	28.6	28.0	29.0	29.4	27.0	28.0	27.4	28.4	28.9
	6H	28.1	29.0	28.6	29.4	29.9	27.4	28.2	27.8	28.7	29.1
	8H	28.3	29.1	28.7	29.6	30.0	27.4	28.3	27.9	28.7	29.2
	12H	28.4	29.2	28.9	29.6	30.1	27.5	28.2	28.0	28.7	29.2
8H	4H	27.8	28.6	28.3	29.1	29.5	27.3	28.1	27.8	28.6	29.0
	6H	28.5	29.1	29.0	29.6	30.1	27.7	28.4	28.2	28.9	29.4
	8H	28.7	29.3	29.2	29.8	30.3	27.9	28.5	28.4	29.0	29.5
	12H	28.9	29.4	29.4	29.9	30.5	28.0	28.5	28.5	29.0	29.6
12H	4H	27.8	28.6	28.3	29.0	29.5	27.3	28.1	27.8	28.5	29.0
	6H	28.5	29.1	29.0	29.6	30.1	27.8	28.4	28.3	28.9	29.4
	8H	28.8	29.3	29.3	29.8	30.4	28.0	28.5	28.5	29.0	29.6

Maximum UGR = 30.5

POLAR GRAPH



Maximum Candela = 19088.527 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.)