



IES INDOOR REPORT

PHOTOMETRIC FILENAME : GS-4-L480-850-HA-CA-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 14617179.01
[TESTLAB] UL Verification Services Inc.
[ISSUE DATE] 2023-03-14
[TEST DATE] 1/6/2023
[MANUFAC] WILLIAMS INDOOR
[OTHER] H.E. WILLIAMS, INC. - CARTHAGE, MO.
[LUMCAT] GS-4-L480-850-HA-CA-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	47888
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	153
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	47403	48870	49754
55	45371	47198	33949
65	41155	28785	9331
75	33691	9261	9380
85	14771	12696	11823

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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	18153.194	18153.194	18153.194	18153.194	18153.194
0.5	17928.940	18164.597	18204.506	18175.999	18212.108
1.0	17934.641	18166.497	18206.407	18175.999	18210.208
1.5	17942.243	18164.597	18208.307	18170.298	18204.506
2.0	17940.342	18168.398	18204.506	18172.199	18206.407
2.5	17936.542	18164.597	18206.407	18168.398	18200.705
3.0	17934.641	18156.995	18202.606	18170.298	18204.506
3.5	17928.940	18145.592	18200.705	18170.298	18204.506
4.0	17915.636	18139.891	18195.004	18177.900	18208.307
4.5	17898.532	18128.488	18187.402	18181.701	18212.108
5.0	17875.727	18115.185	18181.701	18177.900	18206.407
5.5	17858.623	18103.782	18174.099	18172.199	18198.805
6.0	17845.319	18092.379	18164.597	18158.895	18183.601
6.5	17826.315	18075.275	18155.094	18145.592	18162.696
7.0	17801.609	18056.271	18136.090	18126.588	18137.990
7.5	17780.704	18039.166	18118.986	18101.882	18111.384
8.0	17761.699	18018.261	18094.280	18075.275	18086.678
8.5	17752.197	17995.456	18071.474	18048.669	18067.673
9.0	17736.993	17970.750	18046.768	18022.062	18044.868
9.5	17716.088	17951.745	18025.863	18003.058	18027.764
10.0	17693.283	17934.641	18003.058	17980.252	18004.958
10.5	17672.378	17915.636	17976.451	17951.745	17978.352
11.0	17649.572	17896.632	17946.044	17919.437	17949.845
11.5	17630.567	17875.727	17915.636	17889.030	17906.134
12.0	17594.459	17849.120	17890.930	17849.120	17849.120
12.5	17554.549	17822.514	17856.722	17795.907	17803.509
13.0	17514.639	17792.107	17820.613	17742.695	17754.097
13.5	17472.829	17750.296	17784.505	17697.084	17698.984
14.0	17427.218	17710.387	17746.496	17645.771	17647.672
14.5	17366.404	17670.477	17700.884	17594.459	17603.961
15.0	17322.693	17630.567	17657.174	17543.146	17569.753
15.5	17297.987	17586.857	17605.861	17493.734	17535.544
16.0	17261.878	17537.445	17554.549	17450.024	17493.734
16.5	17223.869	17491.834	17493.734	17406.313	17455.725
17.0	17199.163	17444.322	17440.521	17362.603	17412.015
17.5	17159.253	17398.711	17383.508	17313.191	17370.204
18.0	17113.642	17345.498	17322.693	17267.580	17320.792
18.5	17064.230	17294.186	17269.480	17212.466	17256.177
19.0	17005.316	17244.774	17202.964	17155.452	17195.362
19.5	16940.700	17193.462	17140.249	17100.339	17145.950
20.0	16879.886	17142.149	17079.434	17041.425	17092.737
20.5	16820.972	17087.036	17024.321	16984.411	17039.524
21.0	16763.958	17028.122	16967.307	16931.198	16982.511
21.5	16697.442	16969.207	16908.393	16877.985	16919.795
22.0	16632.826	16910.293	16849.478	16820.972	16857.080
22.5	16577.713	16847.578	16786.763	16762.057	16800.066
23.0	16522.599	16782.962	16716.446	16693.641	16731.650
23.5	16467.486	16710.745	16648.030	16632.826	16670.835
24.0	16399.069	16646.129	16573.912	16572.011	16604.319
24.5	16340.155	16581.514	16497.893	16503.595	16541.604
25.0	16275.539	16501.694	16416.174	16440.880	16469.386
25.5	16201.422	16435.178	16343.956	16370.562	16400.970
26.0	16115.901	16368.662	16273.639	16300.245	16324.951
26.5	16022.778	16281.241	16205.222	16226.128	16250.834

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CANDELA TABULATION - (Cont.)

27.0	15937.25816195.72016131.10516153.91016176.716
27.5	15853.63716106.39916062.68816081.69316104.498
28.0	15773.81816017.07715988.57016013.27616032.281
28.5	15705.40115927.75515910.65115939.15815954.362
29.0	15629.38315840.33415830.83215851.73715878.343
29.5	15553.36515752.91315751.01315771.91815809.927
30.0	15477.34615655.99015665.49215688.29715730.107
30.5	15401.32815566.66815587.57315602.77715657.890
31.0	15319.60815467.84415509.65415522.95715578.071
31.5	15228.38615370.92115427.93415441.23815498.251
32.0	15133.36315283.49915342.41415357.61715414.631
32.5	15034.53915190.37715260.69415283.49915327.210
33.0	14931.91415099.15515186.57615201.78015247.391
33.5	14833.09015002.23115101.05515118.15915175.173
34.0	14732.36614899.60615007.93315030.73815091.553
34.5	14637.34314798.88214912.91014943.31715004.132
35.0	14549.92214694.35714808.38414857.79614911.009
35.5	14468.20214589.83114688.65514768.47514827.389
36.0	14369.37814477.70414591.73214679.15314739.968
36.5	14266.75314365.57714498.60914586.03114646.845
37.0	14148.92514253.45014395.98514494.80814555.623
37.5	14021.59414143.22314291.45914403.58614458.700
38.0	13899.96414034.89714198.33714308.56314357.975
38.5	13776.43513924.67014109.01514209.73914247.749
39.0	13668.10813814.44414004.49014103.31414145.124
39.5	13565.48413696.61513888.56213991.18714044.399
40.0	13459.05813573.08513772.63413884.76113939.874
40.5	13348.83113449.55513662.40713776.43513841.050
41.0	13246.20613326.02613550.28013658.60613740.326
41.5	13120.77613200.59513430.55113550.28013624.398
42.0	12982.04213077.06513308.92113434.35213506.569
42.5	12831.90612951.63513185.39213318.42413390.641
43.0	12685.57112824.30413067.56313202.49613278.514
43.5	12548.73712689.37112945.93413084.66713168.287
44.0	12427.10812562.04112835.70712970.64013065.663
44.5	12326.38412436.61012717.87812868.01512955.436
45.0	12221.85812303.57812600.05012761.58912828.105
45.5	12107.83112174.34712472.71912634.25812712.177
46.0	11972.89812041.31512330.18512493.62412586.747
46.5	11834.16411902.58112180.04812377.69612467.018
47.0	11687.82911769.54912052.71712257.96712351.090
47.5	11556.69711642.21811925.38712132.53712227.560
48.0	11436.96811518.68811790.45412012.80812100.229
48.5	11319.14011406.56111657.42211894.97911948.192
49.0	11193.70911252.62411531.99111773.35011754.345
49.5	11058.77711089.18411408.46111651.72011530.091
50.0	10889.63610952.35111279.23011520.58911260.226
50.5	10735.69910832.62211140.49711379.95510931.446
51.0	10591.26410690.08811001.76311208.91310553.254
51.5	10465.83310551.35410857.32810999.86310190.267
52.0	10346.10410401.21810720.49510756.6049897.596
52.5	10209.27110256.78310581.76110441.1279620.129
53.0	10051.53310100.94510439.22710080.0409203.928
53.5	9889.994 9956.510 10302.3949703.749 8643.292
54.0	9739.858 9825.378 10157.9599386.372 8002.837
54.5	9614.427 9680.943 10011.6239112.706 7472.609

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CANDELA TABULATION - (Cont.)

55.0	9488.997	9511.802	9870.989	8770.623	7100.119
55.5	9329.358	9355.965	9726.554	8284.105	6816.950
56.0	9156.416	9230.534	9585.920	7677.858	6541.383
56.5	9011.981	9097.502	9443.386	7113.422	6197.400
57.0	8890.352	8949.266	9293.249	6714.325	5849.616
57.5	8753.519	8783.926	9127.909	6429.256	5560.746
58.0	8595.781	8622.387	8951.167	6197.400	5382.103
58.5	8419.038	8468.450	8734.514	5914.232	5269.976
59.0	8276.503	8318.313	8485.554	5526.538	5176.853
59.5	8137.770	8156.774	8202.385	5205.360	5045.721
60.0	7959.127	7987.633	7867.904	5015.314	4870.879
60.5	7788.085	7843.198	7567.632	4903.187	4648.525
61.0	7634.148	7685.460	7284.463	4808.164	4372.958
61.5	7499.215	7522.021	6955.684	4669.430	4082.188
62.0	7337.676	7349.079	6598.397	4490.787	3791.418
62.5	7138.128	7174.237	6136.585	4257.030	3405.624
63.0	6963.285	7024.100	5615.859	3966.260	2825.984
63.5	6824.552	6875.864	5193.957	3684.992	2358.471
64.0	6655.411	6702.922	4906.988	3403.724	2081.004
64.5	6493.872	6550.886	4688.435	2985.623	1826.532
65.0	6341.835	6395.048	4435.674	2438.290	1437.888
65.5	6140.386	6218.305	4118.297	2060.099	1245.942
66.0	5969.345	6054.866	3852.232	1829.193	1202.991
66.5	5821.109	5906.630	3692.594	1489.010	1183.226
67.0	5659.570	5741.290	3567.163	1247.842	1165.932
67.5	5490.429	5577.850	3436.032	1160.611	1148.828
68.0	5315.587	5429.614	3266.891	1136.665	1132.864
68.5	5163.550	5254.772	3027.433	1117.661	1117.280
69.0	5015.314	5097.034	2753.767	1099.986	1101.697
69.5	4849.974	4935.495	2520.010	1083.452	1085.733
70.0	4688.435	4785.358	2198.832	1067.678	1069.959
70.5	4532.597	4614.317	1786.812	1051.525	1054.755
71.0	4395.764	4435.674	1521.318	1036.511	1039.552
71.5	4238.026	4249.429	1321.010	1021.497	1022.447
72.0	4080.288	4051.781	1091.814	1004.583	1005.913
72.5	3924.450	3799.020	978.547	988.429	988.239
73.0	3778.114	3534.856	949.090	972.085	969.045
73.5	3631.779	3308.701	929.515	954.601	949.660
74.0	3485.444	3069.243	910.320	935.787	928.375
74.5	3341.009	2806.979	892.266	915.452	907.280
75.0	3179.470	2472.498	874.022	894.737	885.234
75.5	3031.234	2238.742	856.537	873.451	862.239
76.0	2882.998	2067.700	839.623	851.406	838.863
76.5	2725.260	1880.695	821.379	828.791	814.727
77.0	2567.521	1682.287	803.134	805.605	790.781
77.5	2407.883	1553.056	783.560	782.229	766.075
78.0	2229.240	1395.508	763.225	758.093	741.369
78.5	2081.004	1198.240	741.369	732.817	715.903
79.0	1949.872	1046.013	719.324	708.111	691.007
79.5	1813.799	825.750	696.709	683.405	665.541
80.0	1676.396	709.822	673.333	657.939	639.505
80.5	1538.802	601.306	649.957	631.713	613.849
81.0	1399.119	564.437	625.631	605.677	590.663
81.5	1261.335	541.441	600.165	580.020	568.428
82.0	1137.235	517.495	573.559	553.984	538.780
82.5	1026.438	493.359	546.952	528.138	512.554

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CANDELA TABULATION - (Cont.)

83.0	907.280	469.794	518.636	501.531	487.088
83.5	790.971	445.278	490.509	475.305	461.052
84.0	678.654	420.192	461.432	447.938	434.255
84.5	573.749	393.585	432.925	419.432	406.318
85.0	469.414	366.789	403.468	388.644	375.721
85.5	415.251	338.282	371.920	355.576	344.363
86.0	355.766	308.825	338.662	320.798	310.345
86.5	269.295	278.037	301.413	283.169	275.947
87.0	224.064	245.920	261.883	243.829	238.508
87.5	195.557	212.471	219.693	203.919	198.218
88.0	167.240	175.793	177.503	160.019	152.987
88.5	136.263	136.263	134.553	112.507	103.765
89.0	99.584	98.254	91.602	72.978	67.086
89.5	62.335	65.946	58.914	49.982	48.462
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-CA-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-CA-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-CA-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6686.29	N.A.	14.00
0-30	14260.71	N.A.	29.80
0-40	23498.72	N.A.	49.10
0-60	41265.38	N.A.	86.20
0-80	47456.79	N.A.	99.10
0-90	47887.87	N.A.	100.00
10-90	46163.68	N.A.	96.40
20-40	16812.43	N.A.	35.10
20-50	26479.4	N.A.	55.30
40-70	22235.66	N.A.	46.40
60-80	6191.4	N.A.	12.90
70-80	1722.41	N.A.	3.60
80-90	431.08	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	47887.87	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1724.19
10-20	4962.1
20-30	7574.42
30-40	9238.01
40-50	9666.97
50-60	8099.7
60-70	4469.00
70-80	1722.41
80-90	431.08
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-CA-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-L480-850-HA-CA-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	25.8	27.4	26.2	27.7	28.0	23.4	25.0	23.8	25.3	25.6
	3H	27.5	28.9	27.9	29.2	29.6	23.5	24.9	23.9	25.2	25.6
	4H	28.0	29.3	28.4	29.7	30.1	23.6	24.9	24.0	25.3	25.6
	6H	28.3	29.5	28.7	29.9	30.3	23.7	24.9	24.1	25.3	25.7
	8H	28.4	29.5	28.8	29.9	30.3	23.8	24.9	24.2	25.3	25.7
	12H	28.4	29.5	28.8	29.9	30.3	23.8	24.9	24.3	25.3	25.7

UGR Viewed Endwise

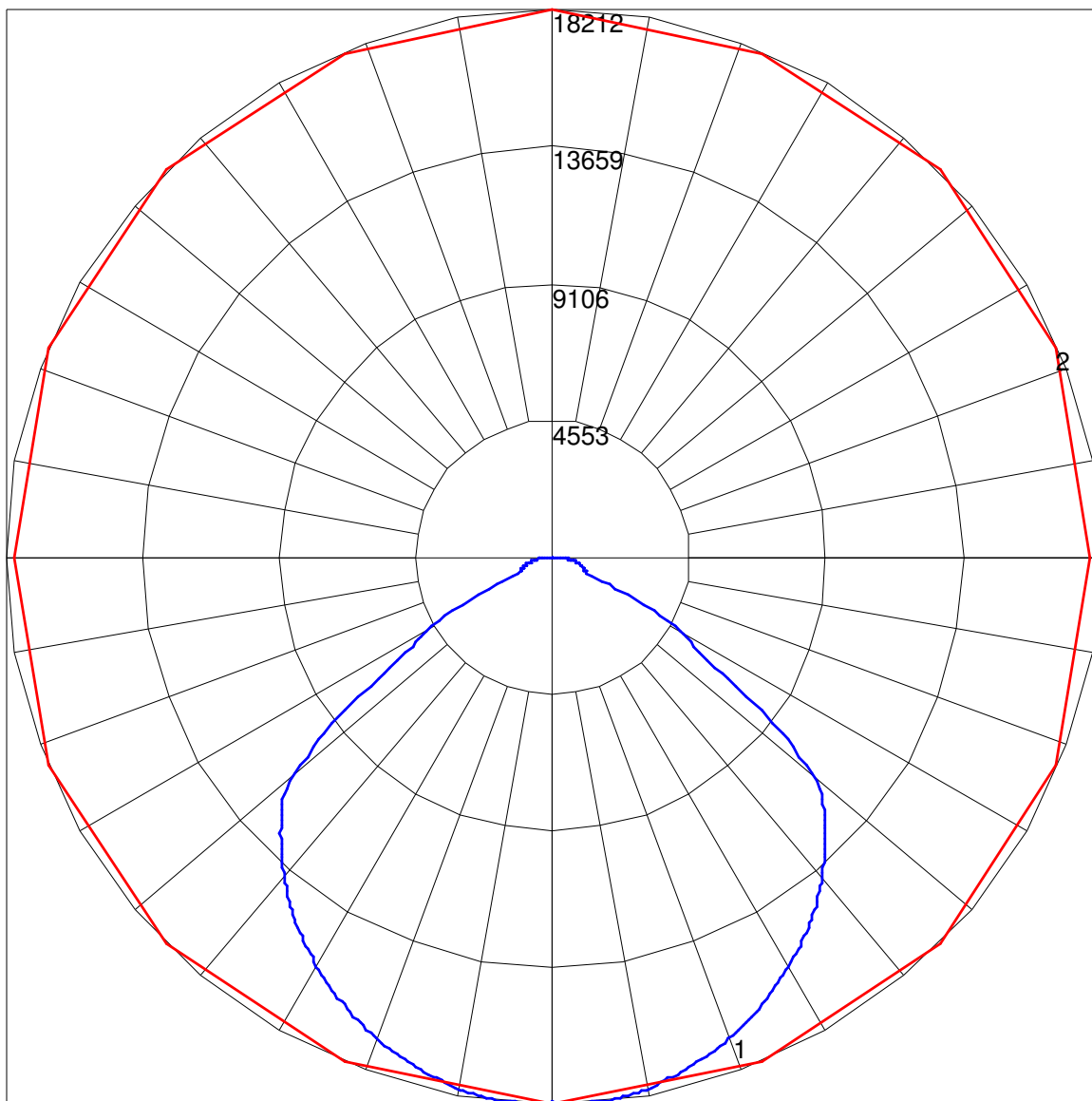
4H	2H	26.0	27.3	26.4	27.7	28.1	24.0	25.3	24.4	25.7	26.0
	3H	27.9	29.0	28.3	29.4	29.8	24.2	25.3	24.6	25.7	26.1
	4H	28.5	29.5	28.9	29.9	30.3	24.3	25.3	24.8	25.7	26.1
	6H	28.8	29.7	29.3	30.1	30.6	24.5	25.4	25.0	25.8	26.3
	8H	28.9	29.7	29.4	30.1	30.6	24.6	25.4	25.1	25.8	26.3
	12H	28.9	29.6	29.4	30.1	30.6	24.7	25.4	25.2	25.9	26.4

8H	4H	28.4	29.2	28.9	29.7	30.1	24.5	25.3	25.0	25.7	26.2
	6H	28.8	29.4	29.3	29.9	30.4	24.8	25.4	25.3	25.9	26.4
	8H	28.9	29.5	29.4	30.0	30.5	24.9	25.5	25.4	26.0	26.5
	12H	29.0	29.5	29.5	30.0	30.5	25.1	25.6	25.6	26.1	26.7

12H	4H	28.4	29.1	28.9	29.6	30.1	24.5	25.2	25.0	25.7	26.2
	6H	28.8	29.4	29.3	29.8	30.4	24.8	25.4	25.3	25.8	26.4
	8H	28.9	29.4	29.4	29.9	30.4	25.0	25.5	25.5	26.0	26.6

Maximum UGR = 30.6

POLAR GRAPH



Maximum Candela = 18212.108 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.)