



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HWL48LFA40.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] 4,199
[TESTLAB] TUV SUD America
[ISSUE DATE] 3/30/2016
[MANUFAC] LAMAR LED
[LUMCAT] HWL48LFA40
[LUMINAIRE] 4' WHITE FORMED STEEL HOUSING, 4000K
[MORE] HIGH TRANSMISSION ACRYLIC PATTERNED DIFFUSER
[MORE] LOW OUTPUT
[LAMP] (2) 44 LED
[BALLAST] ONE EVERLINE D700C30UNVTZ-C DRIVER
[OTHER] 25.4 C, 120 V, 0.195 A, 23.4 W, 0.9981 PF, 60 Hz

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2754
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	23.4
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.69 ft
Luminous Width (90-270)	0.38 ft
Luminous Height	0.21 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4670	3944	3977
55	3948	3377	3578
65	3166	2876	3170
75	2332	2402	2711
85	1226	2023	2288

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	857.949	857.949	857.949	857.949	857.949
0.5	857.428	859.511	856.908	856.908	860.031
1.0	856.908	858.990	856.908	856.387	860.031
1.5	856.908	858.990	856.908	856.387	860.031
2.0	856.387	858.469	856.387	856.387	859.511
2.5	855.866	857.949	856.387	856.387	859.511
3.0	855.346	857.428	855.866	855.866	858.990
3.5	854.305	856.908	855.346	855.346	858.469
4.0	853.263	856.387	854.825	854.825	857.949
4.5	852.743	855.346	854.305	854.825	857.428
5.0	851.181	854.305	853.784	853.784	856.908
5.5	850.140	853.263	852.743	852.743	856.387
6.0	849.099	851.702	851.702	852.222	855.346
6.5	847.537	850.660	850.660	851.181	854.825
7.0	845.975	849.099	849.619	850.140	853.784
7.5	844.413	847.537	848.057	849.099	852.222
8.0	842.331	845.454	846.496	848.057	851.181
8.5	840.248	843.893	844.934	846.496	850.140
9.0	838.166	841.810	843.372	844.934	848.578
9.5	836.084	839.728	841.290	843.372	847.016
10.0	834.001	837.645	839.728	841.810	845.454
10.5	831.398	835.563	837.645	839.728	843.372
11.0	828.795	832.960	835.563	837.645	841.810
11.5	826.192	830.878	832.960	835.563	839.728
12.0	823.589	828.275	830.878	832.960	837.125
12.5	820.466	825.672	828.275	830.878	835.042
13.0	817.863	823.069	825.672	828.275	832.439
13.5	814.739	819.945	822.548	825.672	829.836
14.0	811.615	816.821	819.945	823.069	827.233
14.5	807.971	814.218	817.342	819.945	824.110
15.0	804.327	810.574	814.218	816.821	820.986
15.5	801.203	807.451	811.095	814.218	817.863
16.0	797.559	803.806	807.971	811.095	814.739
16.5	793.915	800.683	804.327	807.451	811.095
17.0	789.750	797.039	801.203	804.327	807.971
17.5	786.106	793.394	798.080	800.683	804.848
18.0	781.941	789.230	794.436	797.039	801.203
18.5	777.776	785.065	790.791	793.915	797.559
19.0	773.612	781.421	787.147	789.750	793.915
19.5	768.926	777.256	782.982	786.106	790.271
20.0	764.241	773.091	779.338	782.462	786.627
20.5	759.555	768.406	775.173	778.818	782.982
21.0	754.870	764.241	770.488	774.653	779.338
21.5	750.705	759.555	766.323	770.488	775.173
22.0	745.499	754.870	762.158	766.844	771.529
22.5	740.814	750.185	757.473	762.679	767.364
23.0	735.608	745.499	753.308	758.514	763.200
23.5	730.402	740.293	748.623	754.349	759.035
24.0	725.196	735.608	743.937	749.664	754.870
24.5	719.990	730.402	739.252	745.499	750.705
25.0	714.263	725.196	734.567	740.814	746.020
25.5	709.057	719.990	729.361	736.128	741.855
26.0	702.810	714.263	724.675	731.443	737.170
26.5	697.083	709.057	719.990	726.758	732.484

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

27.0	691.357	703.331	714.784	722.072	728.319
27.5	684.589	697.604	710.098	717.387	723.634
28.0	678.862	692.398	704.892	712.701	718.949
28.5	673.136	686.671	699.686	708.016	713.743
29.0	666.368	680.945	694.480	702.810	709.578
29.5	660.121	674.698	688.754	698.125	704.892
30.0	653.874	668.971	683.548	693.439	700.207
30.5	647.626	662.724	677.821	688.233	695.522
31.0	641.379	656.997	672.615	683.548	690.836
31.5	634.611	651.271	666.889	678.342	686.671
32.0	628.364	645.023	661.683	673.656	681.986
32.5	622.117	638.776	655.956	668.971	677.301
33.0	615.870	632.529	650.229	663.765	673.136
33.5	609.102	626.282	644.503	659.080	667.930
34.0	602.855	620.035	639.297	654.394	663.765
34.5	596.087	613.267	633.570	649.188	659.080
35.0	589.840	607.020	627.844	644.503	654.394
35.5	583.072	600.772	622.117	639.297	649.709
36.0	575.784	594.005	616.390	634.611	645.023
36.5	569.016	587.757	610.664	629.405	640.338
37.0	561.727	580.990	605.458	624.199	635.653
37.5	554.960	574.742	599.731	619.514	630.967
38.0	547.671	567.975	594.005	614.308	626.282
38.5	540.383	561.727	587.757	609.623	621.596
39.0	533.615	554.960	582.551	604.417	616.911
39.5	526.327	548.712	576.825	599.731	612.746
40.0	519.246	541.945	571.098	594.525	608.061
40.5	512.166	535.697	565.372	589.840	603.375
41.0	505.034	528.930	559.645	584.634	598.690
41.5	497.902	522.682	553.918	579.948	594.005
42.0	490.666	516.279	547.671	574.742	589.319
42.5	483.794	509.667	541.945	570.057	585.154
43.0	476.453	503.212	536.218	564.851	580.469
43.5	469.842	496.652	530.491	560.166	575.784
44.0	462.709	489.989	524.765	555.480	571.619
44.5	455.733	483.377	519.194	550.274	566.933
45.0	448.653	476.765	513.572	546.109	562.248
45.5	441.781	470.310	507.793	541.424	558.083
46.0	434.805	463.542	502.171	536.218	553.918
46.5	428.089	456.983	496.496	531.533	549.233
47.0	421.374	450.527	490.822	526.847	545.068
47.5	414.293	443.916	485.251	522.162	540.383
48.0	407.109	437.408	479.577	517.372	535.697
48.5	400.237	430.849	474.006	512.791	531.533
49.0	394.667	424.341	468.540	507.897	527.368
49.5	387.951	417.938	462.761	503.264	523.203
50.0	382.120	411.586	457.295	498.631	518.466
50.5	375.248	405.131	451.568	493.945	514.040
51.0	368.325	399.873	445.946	489.208	509.563
51.5	361.401	394.042	440.428	484.366	505.294
52.0	354.477	388.368	434.857	479.577	500.765
52.5	347.709	382.277	429.391	474.943	496.288
53.0	340.941	376.602	423.820	470.102	491.759
53.5	334.381	370.355	418.354	465.364	487.073
54.0	327.874	364.212	412.888	460.627	482.388
54.5	321.262	358.069	407.890	455.785	477.963

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

55.0	314.703	351.874	402.840	450.996	473.017
55.5	308.247	345.730	397.947	446.258	468.332
56.0	301.740	339.639	392.793	441.313	463.646
56.5	295.336	333.548	388.003	436.471	458.805
57.0	288.985	327.509	382.849	431.734	454.119
57.5	282.686	321.523	378.216	426.788	449.434
58.0	276.387	315.588	372.854	422.102	444.592
58.5	270.139	309.653	367.648	417.365	439.803
59.0	263.892	303.770	362.338	412.992	435.065
59.5	257.697	297.991	357.132	408.359	430.172
60.0	251.502	292.213	351.926	403.881	425.434
60.5	245.359	286.590	346.720	399.352	420.385
61.0	239.320	280.968	341.566	394.511	415.699
61.5	233.333	275.449	336.412	389.565	412.315
62.0	227.450	269.931	331.258	384.828	407.161
62.5	221.567	264.517	326.208	380.350	402.320
63.0	215.685	259.051	321.158	375.977	397.374
63.5	209.802	253.688	316.056	371.552	392.324
64.0	204.075	248.378	311.111	366.607	387.378
64.5	198.453	243.068	306.061	361.765	382.329
65.0	192.882	237.810	301.115	356.819	377.279
65.5	187.468	232.552	296.221	351.874	373.531
66.0	182.106	227.398	291.276	346.928	368.481
66.5	176.744	222.192	286.486	341.982	363.275
67.0	171.329	217.038	281.645	336.984	358.121
67.5	166.071	211.936	276.855	332.039	352.967
68.0	160.709	206.886	272.066	327.093	347.813
68.5	155.555	201.889	267.276	322.199	342.607
69.0	150.453	196.943	262.539	317.254	337.349
69.5	145.456	192.049	257.801	312.360	332.195
70.0	140.510	187.208	253.064	307.414	326.937
70.5	135.512	182.470	248.430	302.469	321.783
71.0	130.566	177.733	243.797	297.575	316.629
71.5	125.673	173.100	239.216	292.785	311.475
72.0	120.779	168.570	234.686	287.892	306.373
72.5	116.094	164.041	230.157	283.206	301.323
73.0	111.513	159.668	225.732	278.521	296.378
73.5	106.983	155.347	221.411	273.888	291.484
74.0	102.610	151.078	217.142	269.358	286.642
74.5	98.289	146.913	212.977	264.829	281.801
75.0	93.968	142.801	208.917	260.404	277.011
75.5	89.699	138.740	204.908	255.979	272.326
76.0	85.587	134.731	200.900	251.606	267.693
76.5	81.578	130.827	196.943	247.285	263.111
77.0	77.674	126.974	193.038	242.912	258.478
77.5	73.873	123.122	189.134	238.591	253.897
78.0	70.073	119.322	185.229	234.218	249.315
78.5	66.272	115.625	181.377	229.897	244.786
79.0	62.576	111.929	177.577	225.576	240.257
79.5	58.828	108.285	173.776	221.307	235.728
80.0	55.236	104.745	170.028	217.090	231.303
80.5	51.696	101.257	166.280	212.873	226.877
81.0	48.260	97.873	162.583	208.709	222.452
81.5	44.876	94.489	158.991	204.648	218.027
82.0	41.544	91.209	155.399	200.587	213.654
82.5	38.316	87.981	151.859	196.527	209.281

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

83.0	35.036	84.754	148.371	192.518	205.012
83.5	31.809	81.630	144.935	188.561	200.743
84.0	28.633	78.506	141.499	184.605	196.527
84.5	25.561	75.383	138.063	180.752	192.310
85.0	22.594	72.363	134.679	176.952	188.249
85.5	19.679	69.292	131.347	173.152	184.188
86.0	16.763	66.324	128.016	169.351	180.232
86.5	13.848	63.357	124.788	165.655	176.327
87.0	10.985	60.442	121.508	162.011	172.475
87.5	8.173	57.526	118.332	158.471	168.779
88.0	5.362	54.715	115.261	154.879	165.082
88.5	2.655	51.956	112.189	151.443	161.542
89.0	1.354	49.353	109.326	148.163	158.158
89.5	0.052	47.166	106.827	145.195	155.191
90.0	0.000	45.605	104.797	142.644	152.588
90.5	0.000	44.563	103.235	140.510	150.193
91.0	0.000	43.991	101.933	138.636	148.163
91.5	0.000	43.470	100.788	136.970	146.289
92.0	0.000	43.054	99.695	135.356	144.519
92.5	0.000	42.637	98.654	133.846	142.853
93.0	0.000	42.221	97.613	132.337	141.135
93.5	0.000	41.856	96.675	130.879	139.521
94.0	0.000	41.440	95.738	129.473	137.907
94.5	0.000	41.075	94.801	128.068	136.397
95.0	0.000	40.711	93.916	126.714	134.940
95.5	0.000	40.347	93.083	125.413	133.430
96.0	0.000	39.982	92.198	124.163	132.076
96.5	0.000	39.670	91.365	122.914	130.723
97.0	0.000	39.357	90.532	121.716	129.421
97.5	0.000	38.993	89.751	120.519	128.172
98.0	0.000	38.681	88.971	119.374	126.922
98.5	0.000	38.368	88.190	118.228	125.725
99.0	0.000	38.056	87.409	117.135	124.580
99.5	0.000	37.744	86.628	115.990	123.434
100.0	0.000	37.431	85.899	114.948	122.341
100.5	0.000	37.119	85.118	113.907	121.248
101.0	0.000	36.806	84.389	112.866	120.207
101.5	0.000	36.546	83.608	111.877	119.113
102.0	0.000	36.234	82.932	110.888	118.072
102.5	0.000	35.973	82.203	109.899	117.083
103.0	0.000	35.661	81.474	108.962	116.042
103.5	0.000	35.401	80.797	108.025	115.053
104.0	0.000	35.141	80.068	107.087	114.063
104.5	0.000	34.880	79.392	106.150	113.126
105.0	0.000	34.620	78.715	105.265	112.189
105.5	0.000	34.360	78.090	104.380	111.252
106.0	0.000	34.151	77.465	103.495	110.367
106.5	0.000	33.891	76.789	102.662	109.482
107.0	0.000	33.631	76.164	101.829	108.597
107.5	0.000	33.423	75.539	100.996	107.764
108.0	0.000	33.162	74.914	100.163	106.931
108.5	0.000	32.954	74.342	99.383	106.098
109.0	0.000	32.694	73.769	98.550	105.317
109.5	0.000	32.485	73.144	97.769	104.484
110.0	0.000	32.225	72.572	96.988	103.704
110.5	0.000	32.017	71.999	96.207	102.923

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

111.0	0.000	31.757	71.426	95.478	102.142
111.5	0.000	31.548	70.854	94.697	101.361
112.0	0.000	31.288	70.281	93.968	100.632
112.5	0.000	31.080	69.708	93.187	99.851
113.0	0.000	30.820	69.136	92.511	99.122
113.5	0.000	30.611	68.563	91.730	98.393
114.0	0.000	30.403	68.042	91.053	97.613
114.5	0.000	30.143	67.522	90.324	96.884
115.0	0.000	29.935	66.949	89.647	96.155
115.5	0.000	29.674	66.429	88.918	95.426
116.0	0.000	29.362	65.908	88.242	94.697
116.5	0.000	29.102	65.335	87.513	93.968
117.0	0.000	28.789	64.815	86.784	93.292
117.5	0.000	28.477	64.294	86.107	92.511
118.0	0.000	28.164	63.774	85.430	91.834
118.5	0.000	27.852	63.253	84.702	91.105
119.0	0.000	27.488	62.680	84.025	90.428
119.5	0.000	27.175	62.160	83.348	89.699
120.0	0.000	26.811	61.639	82.619	89.023
120.5	0.000	26.446	61.118	81.942	88.294
121.0	0.000	26.134	60.598	81.266	87.617
121.5	0.000	25.874	60.077	80.589	86.940
122.0	0.000	25.666	59.505	79.912	86.211
122.5	0.000	25.353	58.932	79.235	85.535
123.0	0.000	25.041	58.411	78.559	84.858
123.5	0.000	24.729	57.787	77.882	84.129
124.0	0.000	24.416	57.214	77.153	83.400
124.5	0.000	24.104	56.589	76.528	82.723
125.0	0.000	23.791	55.965	75.799	81.995
125.5	0.000	23.479	55.288	75.071	81.266
126.0	0.000	23.167	54.611	74.394	80.589
126.5	0.000	22.854	53.934	73.717	79.808
127.0	0.000	22.594	53.205	72.988	79.079
127.5	0.000	22.282	52.476	72.311	78.298
128.0	0.000	21.969	51.800	71.583	77.569
128.5	0.000	21.657	51.071	70.906	76.841
129.0	0.000	21.345	50.342	70.177	76.060
129.5	0.000	21.032	49.613	69.500	75.331
130.0	0.000	20.720	48.884	68.771	74.602
130.5	0.000	20.408	48.156	68.042	73.873
131.0	0.000	20.147	47.427	67.366	73.092
131.5	0.000	19.835	46.646	66.637	72.363
132.0	0.000	19.523	45.865	65.908	71.583
132.5	0.000	19.262	45.136	65.179	70.854
133.0	0.000	18.950	44.407	64.450	70.125
133.5	0.000	18.637	43.626	63.774	69.344
134.0	0.000	18.377	42.897	63.045	68.563
134.5	0.000	18.065	42.169	62.316	67.834
135.0	0.000	17.805	41.440	61.587	67.053
135.5	0.000	17.492	40.711	60.858	66.272
136.0	0.000	17.232	39.930	60.077	65.439
136.5	0.000	16.972	39.253	59.348	64.711
137.0	0.000	16.711	38.524	58.620	63.930
137.5	0.000	16.451	37.952	57.839	63.149
138.0	0.000	16.191	37.431	57.110	62.316
138.5	0.000	15.930	36.911	56.329	61.535

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

139.0	0.000	15.670	36.390	55.496	60.754
139.5	0.000	15.462	35.765	54.715	59.973
140.0	0.000	15.254	35.193	53.882	59.140
140.5	0.000	14.993	34.568	53.049	58.359
141.0	0.000	14.785	33.943	52.164	57.526
141.5	0.000	14.577	33.370	51.331	56.745
142.0	0.000	14.317	32.746	50.446	55.912
142.5	0.000	14.108	32.173	49.509	55.132
143.0	0.000	13.900	31.548	48.572	54.351
143.5	0.000	13.692	30.976	47.583	53.570
144.0	0.000	13.484	30.351	46.646	52.737
144.5	0.000	13.223	29.778	45.709	51.904
145.0	0.000	13.015	29.206	44.720	51.123
145.5	0.000	12.807	28.633	43.782	50.290
146.0	0.000	12.599	28.008	42.845	49.457
146.5	0.000	12.390	27.436	41.856	48.676
147.0	0.000	12.130	26.863	40.867	47.843
147.5	0.000	11.922	26.342	39.930	47.010
148.0	0.000	11.714	25.822	38.993	46.229
148.5	0.000	11.505	25.301	38.004	45.396
149.0	0.000	11.297	24.781	37.067	44.563
149.5	0.000	11.037	24.260	36.182	43.782
150.0	0.000	10.828	23.791	35.349	42.950
150.5	0.000	10.620	23.271	34.464	42.117
151.0	0.000	10.360	22.802	33.579	41.336
151.5	0.000	10.152	22.334	32.746	40.503
152.0	0.000	9.891	21.813	31.913	39.670
152.5	0.000	9.683	21.345	31.028	38.837
153.0	0.000	9.423	20.876	30.247	38.004
153.5	0.000	9.215	20.355	29.414	37.119
154.0	0.000	8.954	19.887	28.633	36.338
154.5	0.000	8.694	19.418	27.852	35.505
155.0	0.000	8.486	18.950	27.071	34.620
155.5	0.000	8.225	18.481	26.290	33.735
156.0	0.000	8.017	18.013	25.561	32.850
156.5	0.000	7.757	17.544	24.833	31.965
157.0	0.000	7.549	17.128	24.104	31.080
157.5	0.000	7.340	16.659	23.375	30.195
158.0	0.000	7.080	16.191	22.646	29.310
158.5	0.000	6.872	15.722	21.917	28.373
159.0	0.000	6.664	15.306	21.188	27.488
159.5	0.000	6.403	14.837	20.460	26.603
160.0	0.000	6.195	14.369	19.731	25.718
160.5	0.000	5.987	13.900	19.002	24.885
161.0	0.000	5.727	13.431	18.273	24.104
161.5	0.000	5.518	13.015	17.596	23.375
162.0	0.000	5.310	12.494	16.920	22.646
162.5	0.000	5.102	12.026	16.191	21.813
163.0	0.000	4.894	11.557	15.514	21.032
163.5	0.000	4.633	11.089	14.889	20.199
164.0	0.000	4.425	10.568	14.212	19.366
164.5	0.000	4.217	10.100	13.588	18.481
165.0	0.000	3.957	9.631	12.911	17.648
165.5	0.000	3.748	9.163	12.286	16.815
166.0	0.000	3.488	8.694	11.661	16.034
166.5	0.000	3.280	8.225	11.037	15.254

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HWL48LFA40.IES

CANDELA TABULATION - (Cont.)

167.0	0.000	3.072	7.809	10.412	14.473
167.5	0.000	2.811	7.340	9.787	13.744
168.0	0.000	2.603	6.924	9.163	12.963
168.5	0.000	2.343	6.508	8.590	12.234
169.0	0.000	2.187	6.091	7.965	11.505
169.5	0.000	2.030	5.675	7.393	10.776
170.0	0.000	1.874	5.310	6.820	10.048
170.5	0.000	1.718	4.894	6.247	9.371
171.0	0.000	1.562	4.529	5.779	8.694
171.5	0.000	1.406	4.165	5.258	8.017
172.0	0.000	1.302	3.748	4.737	7.288
172.5	0.000	1.145	3.384	4.269	6.455
173.0	0.000	1.093	2.967	3.748	5.362
173.5	0.000	0.989	2.551	3.280	3.957
174.0	0.000	0.885	2.134	2.707	2.967
174.5	0.000	0.781	1.822	2.187	2.134
175.0	0.000	0.677	1.562	1.770	1.197
175.5	0.000	0.573	1.354	1.354	0.156
176.0	0.000	0.469	1.145	1.093	0.000
176.5	0.000	0.364	0.885	0.885	0.000
177.0	0.000	0.260	0.677	0.625	0.000
177.5	0.000	0.208	0.469	0.364	0.000
178.0	0.000	0.156	0.260	0.156	0.000
178.5	0.000	0.104	0.104	0.000	0.000
179.0	0.000	0.052	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 : HWL48LFA40.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	310.28	N.A.	11.30
0-30	647.45	N.A.	23.50
0-40	1038.54	N.A.	37.70
0-60	1790.73	N.A.	65.00
0-80	2294.93	N.A.	83.30
0-90	2429.23	N.A.	88.20
10-90	2348.17	N.A.	85.30
20-40	728.26	N.A.	26.40
20-50	1122.45	N.A.	40.80
40-70	1044.83	N.A.	37.90
60-80	504.20	N.A.	18.30
70-80	211.56	N.A.	7.70
80-90	134.30	N.A.	4.90
90-110	163.02	N.A.	5.90
90-120	221.29	N.A.	8.00
90-130	265.39	N.A.	9.60
90-150	313.23	N.A.	11.40
90-180	324.59	N.A.	11.80
110-180	161.57	N.A.	5.90
0-180	2753.82	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	81.06
10-20	229.22
20-30	337.16
30-40	391.09
40-50	394.19
50-60	358.00
60-70	292.63
70-80	211.56
80-90	134.30
90-100	90.15
100-110	72.87
110-120	58.27
120-130	44.10
130-140	30.03
140-150	17.81
150-160	8.47
160-170	2.65
170-180	0.24

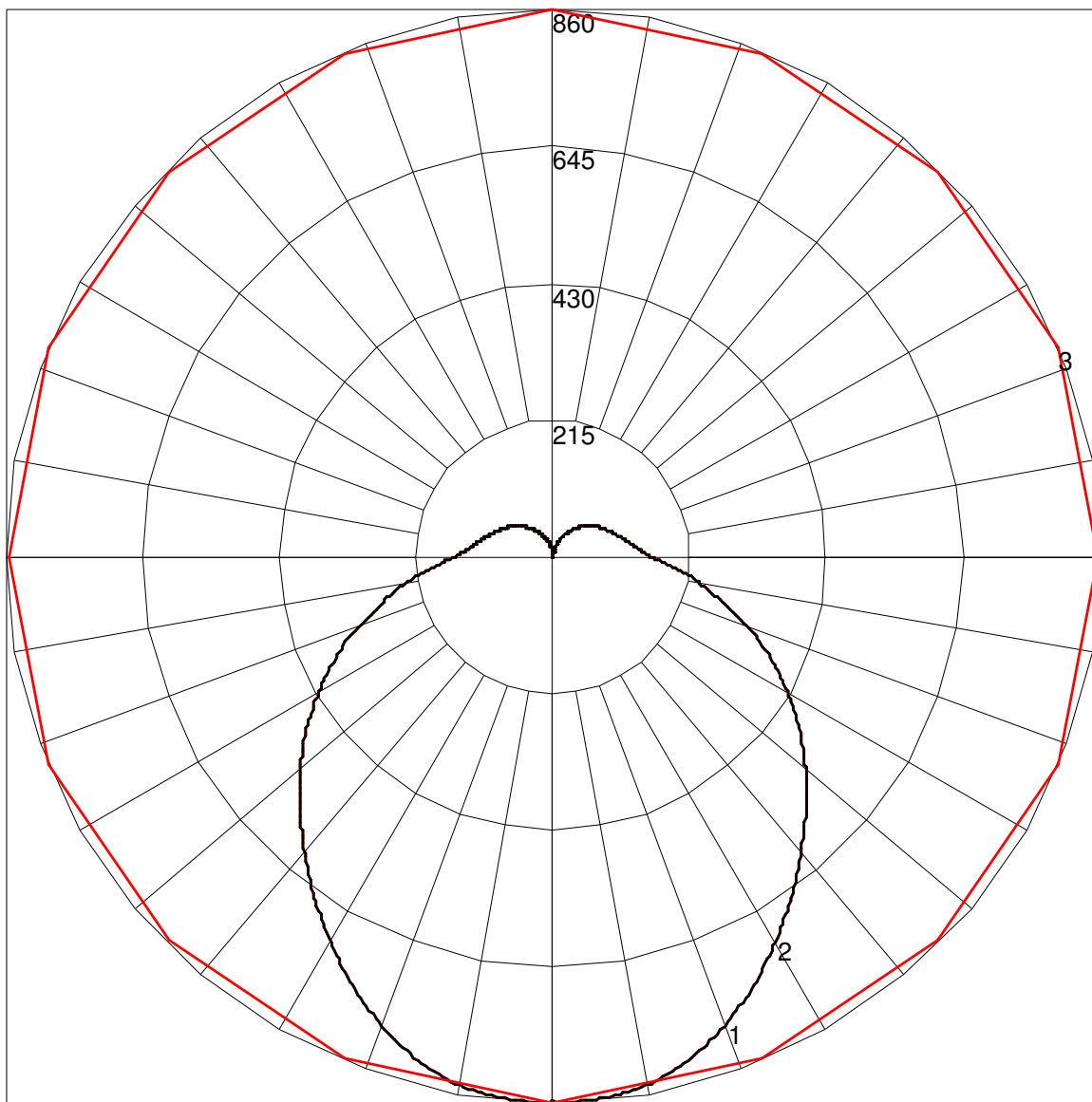
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88
1	105	99	95	90	101	96	92	88	89	86	83	84	81	78	78	76	74	71
2	95	86	79	73	91	83	77	71	78	72	68	73	68	64	68	64	61	58
3	86	75	67	60	83	73	65	59	68	62	56	64	59	54	60	55	52	49
4	79	67	58	51	76	65	56	50	61	54	48	57	51	46	53	48	44	42
5	73	60	51	44	70	58	49	43	54	47	41	51	45	40	48	43	38	36
6	67	54	45	38	64	52	44	38	49	42	36	46	40	35	44	38	34	32
7	62	49	40	34	60	47	39	33	45	37	32	42	36	31	40	34	30	28
8	58	44	36	30	56	43	35	30	41	34	29	39	32	28	37	31	27	25
9	54	41	33	27	52	40	32	27	38	31	26	36	30	25	34	28	24	23
10	51	38	30	25	49	37	29	24	35	28	24	33	27	23	32	26	22	20

POLAR GRAPH



Maximum Candela = 860.031 Located At Horizontal Angle = 90, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Vertical Plane Through Horizontal Angles (90 - 270)
3 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)