



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HBIA48-LED175DMV40.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
 [TEST] LLIA000974-011A
 [TESTLAB] LightLab International Allentown, LLC
 [MANUFAC] Mobern Lighting Co., 8200 Stayton Drive, Jessup, MD 20794, USA
 [LUMCAT] HBIA48-LED175DMV40
 [LUMINAIRE] Catalog Number: HBIA48-LED175DMV40
 [MORE] Pendant/surface mounted, formed steel housing, formed
 [MORE] aluminum LED mounting plates, no enclosure.
 [MORE] 624 white LEDs, four ULT Everline M18CC840D156N2S50C LED boards with 156 LEDs each.
 [MORE] Two ULT Everline D23CC90UNVTW-F LED drivers
 [MORE] 120.0Vac, 60.00Hz, 175W, 0.993PF, 7.7%THD(i)
 [OTHER] Absolute test - lamp lumens value set to -1
 [MORE] NA conventions used for C0 plane alignment and C-plane rotation direction.
 [MORE] The sample was tested at a distance of 9.5m.
 [MORE] This IES file was extrapolated from LLIA00974-011A
 [DATE] This file created: Wednesday, August 29, 2018 4:00:29 PM
 [ISSUE DATE] Wednesday, August 29, 2018 4:00:29 PM

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	23996
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	137
Total Luminaire Watts	175
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.30
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	1.14 m
Luminous Width (90-270)	0.29 m
Luminous Height	0.02 m

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	25206	23752	23322
55	24213	22550	22023
65	22267	20199	16275
75	17722	8122	1749
85	7873	374	336

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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	8602.940	8602.940	8602.940	8602.940	8602.940
0.5	8675.712	8601.551	8586.461	8581.767	8603.303
1.0	8674.572	8600.510	8585.420	8579.949	8601.402
1.5	8673.382	8598.609	8583.536	8578.197	8598.014
2.0	8670.969	8596.080	8581.156	8574.991	8594.262
2.5	8668.010	8593.023	8577.305	8571.007	8588.775
3.0	8664.572	8589.403	8573.288	8566.214	8582.875
3.5	8661.052	8584.941	8568.132	8560.149	8575.834
4.0	8656.094	8579.635	8562.314	8553.372	8568.297
4.5	8650.887	8573.701	8555.950	8545.620	8559.306
5.0	8644.970	8567.669	8548.728	8537.323	8549.620
5.5	8638.128	8560.512	8540.794	8527.588	8538.662
6.0	8631.037	8553.008	8532.183	8517.539	8526.812
6.5	8623.038	8544.298	8522.134	8505.904	8513.275
7.0	8614.509	8535.224	8511.738	8494.070	8499.292
7.5	8605.303	8525.076	8500.102	8480.765	8484.616
8.0	8595.518	8514.680	8488.103	8467.145	8468.749
8.5	8584.742	8503.573	8474.649	8452.287	8452.105
9.0	8573.867	8491.756	8461.493	8436.866	8435.660
9.5	8562.198	8479.889	8447.213	8420.817	8417.512
10.0	8549.901	8466.600	8431.941	8403.595	8398.885
10.5	8536.596	8452.584	8416.272	8386.125	8380.440
11.0	8523.159	8438.023	8399.496	8367.564	8360.259
11.5	8508.631	8423.445	8382.076	8349.268	8340.029
12.0	8493.574	8407.413	8363.631	8329.748	8318.757
12.5	8478.385	8391.646	8345.119	8310.642	8297.700
13.0	8462.187	8374.737	8325.186	8290.048	8275.569
13.5	8445.279	8357.267	8305.188	8269.900	8254.050
14.0	8428.751	8339.020	8285.189	8248.513	8231.340
14.5	8410.636	8320.112	8263.851	8226.564	8208.102
15.0	8392.472	8300.593	8241.968	8204.780	8185.161
15.5	8373.316	8279.850	8218.763	8181.955	8161.278
16.0	8353.466	8258.760	8195.805	8159.592	8137.693
16.5	8332.624	8236.762	8171.377	8135.974	8112.934
17.0	8311.551	8213.870	8146.998	8112.983	8087.927
17.5	8289.701	8190.301	8121.396	8088.770	8062.623
18.0	8267.272	8166.964	8095.927	8064.127	8037.682
18.5	8244.943	8142.998	8070.473	8040.128	8012.047
19.0	8222.333	8117.082	8043.500	8015.303	7986.032
19.5	8198.053	8091.315	8016.724	7989.949	7959.538
20.0	8172.815	8065.118	7988.875	7963.884	7932.878
20.5	8146.949	8038.558	7961.438	7937.605	7905.111
21.0	8120.586	8010.328	7932.035	7910.185	7876.550
21.5	8095.084	7982.462	7903.375	7883.707	7848.816
22.0	8066.656	7953.621	7873.394	7855.543	7819.942
22.5	8039.467	7924.746	7843.544	7827.743	7791.068
23.0	8011.402	7895.078	7813.232	7799.745	7761.945
23.5	7981.817	7864.088	7781.564	7770.358	7731.435
24.0	7953.191	7832.983	7750.723	7741.087	7701.420
24.5	7922.383	7800.323	7718.692	7710.824	7669.537
25.0	7891.260	7767.796	7685.999	7680.826	7638.465
25.5	7859.841	7734.145	7652.728	7649.307	7605.871
26.0	7827.611	7700.064	7620.052	7618.152	7573.328
26.5	7794.109	7665.257	7585.558	7585.426	7539.660

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CANDELA TABULATION - (Cont.)

27.0	7760.970	7630.283	7551.065	7553.345	7506.323
27.5	7726.724	7594.996	7516.637	7519.975	7472.804
28.0	7691.040	7557.973	7481.845	7485.911	7437.815
28.5	7654.811	7521.149	7446.244	7451.549	7402.494
29.0	7615.540	7483.201	7409.106	7416.246	7366.777
29.5	7576.088	7445.070	7372.513	7380.595	7330.763
30.0	7533.710	7405.618	7334.482	7343.936	7292.848
30.5	7491.696	7365.488	7296.649	7306.996	7255.065
31.0	7448.062	7323.672	7257.180	7269.064	7216.356
31.5	7405.172	7281.427	7218.703	7231.066	7177.813
32.0	7361.819	7238.223	7179.614	7192.721	7138.889
32.5	7316.565	7192.787	7138.955	7152.740	7097.983
33.0	7272.799	7147.252	7098.759	7112.957	7057.902
33.5	7227.099	7099.949	7056.811	7071.686	7016.185
34.0	7184.292	7052.911	7015.095	7030.119	6973.857
34.5	7140.278	7005.624	6972.419	6987.328	6930.570
35.0	7096.148	6957.280	6929.595	6943.942	6886.193
35.5	7052.316	6910.555	6886.771	6900.126	6842.526
36.0	7008.004	6863.219	6842.972	6855.451	6797.371
36.5	6963.031	6816.296	6799.074	6811.337	6752.035
37.0	6916.753	6767.439	6753.605	6764.927	6704.467
37.5	6870.706	6719.871	6707.657	6718.632	6657.743
38.0	6821.419	6671.742	6660.751	6670.849	6609.365
38.5	6772.100	6623.778	6614.043	6622.836	6561.103
39.0	6718.714	6573.814	6566.062	6573.185	6511.685
39.5	6664.817	6524.973	6517.618	6524.560	6462.299
40.0	6608.060	6474.084	6467.142	6473.836	6411.294
40.5	6552.443	6423.161	6417.045	6423.954	6359.561
41.0	6497.091	6371.792	6366.156	6372.750	6308.275
41.5	6439.937	6317.332	6313.679	6320.026	6253.782
42.0	6383.708	6263.186	6261.517	6267.880	6200.413
42.5	6326.703	6207.817	6207.421	6212.859	6145.110
43.0	6272.062	6152.664	6154.432	6158.994	6091.477
43.5	6216.280	6095.592	6098.997	6103.427	6035.513
44.0	6161.638	6039.612	6043.364	6048.140	5979.136
44.5	6105.443	5980.409	5987.301	5990.722	5922.247
45.0	6050.173	5923.057	5931.783	5933.849	5864.762
45.5	5994.127	5866.184	5875.787	5877.357	5807.344
46.0	5934.725	5806.171	5817.310	5818.071	5746.819
46.5	5874.068	5748.554	5760.785	5759.958	5687.632
47.0	5809.575	5687.979	5702.044	5699.383	5626.991
47.5	5745.695	5629.189	5643.585	5640.031	5566.796
48.0	5680.227	5568.762	5583.919	5578.249	5505.014
48.5	5616.032	5508.600	5524.054	5517.476	5445.166
49.0	5549.160	5445.943	5462.653	5453.876	5384.128
49.5	5486.354	5383.731	5401.565	5391.615	5321.024
50.0	5423.878	5322.214	5339.139	5329.239	5258.086
50.5	5360.196	5257.937	5275.192	5264.019	5195.147
51.0	5298.315	5195.147	5212.204	5199.626	5132.093
51.5	5233.475	5130.308	5146.356	5133.663	5068.014
52.0	5169.727	5067.386	5082.128	5068.691	5004.546
52.5	5100.756	5002.464	5015.141	5000.976	4939.690
53.0	5030.941	4938.946	4949.128	4934.748	4876.024
53.5	4958.483	4872.967	4880.371	4866.322	4808.805
54.0	4888.205	4807.780	4812.590	4799.070	4743.767
54.5	4817.400	4741.966	4744.643	4731.735	4678.399

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55.0	4747.189	4673.209	4674.961	4662.053	4609.775
55.5	4679.936	4603.924	4606.006	4593.792	4542.208
56.0	4612.155	4532.721	4535.481	4522.920	4472.510
56.5	4544.142	4462.758	4465.700	4453.552	4404.761
57.0	4474.030	4391.456	4394.167	4382.432	4333.129
57.5	4399.406	4321.692	4323.692	4311.511	4262.654
58.0	4322.634	4251.431	4251.960	4238.523	4191.583
58.5	4247.729	4181.584	4182.063	4165.899	4120.232
59.0	4173.419	4112.133	4110.447	4093.655	4047.112
59.5	4099.737	4041.360	4037.625	4019.692	3973.976
60.0	4029.328	3970.273	3965.563	3945.333	3899.732
60.5	3956.125	3895.319	3891.534	3868.874	3824.645
61.0	3880.427	3820.993	3818.183	3793.457	3750.517
61.5	3801.737	3742.683	3742.204	3716.155	3673.315
62.0	3723.180	3664.704	3668.406	3638.722	3598.658
62.5	3644.077	3586.113	3591.088	3558.941	3518.133
63.0	3569.833	3509.407	3514.233	3481.540	3427.990
63.5	3495.358	3433.213	3437.295	3403.181	3296.691
64.0	3418.007	3358.159	3359.861	3323.715	3099.926
64.5	3336.772	3282.510	3282.031	3238.331	2869.558
65.0	3254.148	3203.606	3203.374	3128.387	2617.027
65.5	3175.574	3124.684	3123.594	2963.817	2388.478
66.0	3098.851	3039.549	3042.358	2744.342	2183.283
66.5	3018.492	2959.454	2961.355	2511.529	2001.656
67.0	2935.224	2879.541	2878.698	2281.095	1831.451
67.5	2851.642	2801.645	2799.579	2071.272	1686.996
68.0	2775.117	2721.335	2721.269	1888.688	1561.896
68.5	2693.320	2640.265	2639.604	1714.268	1447.489
69.0	2610.746	2561.344	2556.320	1571.796	1356.304
69.5	2526.106	2478.638	2470.556	1445.341	1292.209
70.0	2447.384	2396.543	2382.065	1334.702	1243.583
70.5	2362.777	2315.441	2253.675	1244.724	1199.520
71.0	2280.038	2235.957	2063.686	1181.983	1145.688
71.5	2198.257	2149.450	1855.863	1133.094	1074.270
72.0	2116.245	2070.264	1665.841	1086.534	906.676
72.5	2033.787	1990.417	1481.702	1030.951	738.570
73.0	1952.634	1908.075	1300.092	922.923	624.973
73.5	1869.945	1830.608	1152.944	745.909	530.466
74.0	1788.346	1747.538	1034.339	615.949	373.318
74.5	1707.475	1670.766	932.328	525.491	269.092
75.0	1626.487	1588.903	853.241	392.441	187.874
75.5	1546.624	1512.709	795.922	264.431	121.911
76.0	1466.794	1432.812	747.561	183.329	76.756
76.5	1387.773	1356.519	690.474	121.613	45.237
77.0	1312.356	1281.399	562.084	72.971	36.791
77.5	1234.906	1204.065	444.421	44.279	35.370
78.0	1160.497	1128.829	363.616	35.601	34.048
78.5	1084.832	1052.635	256.035	33.717	32.792
79.0	1011.481	961.268	156.570	32.246	31.602
79.5	937.964	821.359	100.755	30.808	30.246
80.0	867.439	700.324	57.567	29.618	29.222
80.5	797.393	580.348	37.452	28.312	27.866
81.0	730.901	461.263	30.742	27.172	27.040
81.5	666.161	381.185	28.610	26.065	25.916
82.0	602.660	324.808	26.957	24.941	24.759
82.5	541.061	274.778	25.370	23.850	23.668

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CANDELA TABULATION - (Cont.)

83.0	482.337	200.204	23.701	22.891	22.610
83.5	426.009	147.298	22.181	21.668	21.338
84.0	371.467	88.507	20.809	20.296	19.999
84.5	321.222	46.543	19.470	18.858	18.296
85.0	272.646	31.122	18.065	17.338	17.040
85.5	228.433	25.123	16.528	15.883	15.635
86.0	187.593	22.610	14.991	14.330	13.933
86.5	147.893	20.098	13.487	12.561	12.016
87.0	111.052	17.850	11.999	10.727	10.214
87.5	74.954	15.751	10.148	8.876	8.396
88.0	44.725	13.983	8.727	7.454	6.942
88.5	23.652	12.132	7.289	5.884	5.405
89.0	15.255	10.661	6.016	4.611	4.281
89.5	5.934	9.652	5.041	3.487	3.025
90.0	0.793	8.495	4.099	2.628	1.917
90.5	0.744	7.338	3.239	1.818	1.322
91.0	0.628	5.768	2.595	1.240	0.678
91.5	0.612	4.628	2.380	1.074	0.694
92.0	0.711	3.868	2.000	0.992	0.413
92.5	0.628	3.686	1.851	0.975	0.496
93.0	0.744	3.570	1.702	0.843	0.430
93.5	0.942	3.339	1.719	0.893	0.446
94.0	1.107	3.206	1.587	0.975	0.512
94.5	1.504	2.925	1.702	0.926	0.694
95.0	1.669	2.892	1.768	0.843	0.578
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

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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

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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
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	3145.43	N.A.	13.10
0-30	6707.32	N.A.	28.00
0-40	11060.05	N.A.	46.10
0-60	19808.72	N.A.	82.60
0-80	23897.45	N.A.	99.60
0-90	23994.58	N.A.	100.00
10-90	23181.01	N.A.	96.60
20-40	7914.62	N.A.	33.00
20-50	12491.68	N.A.	52.10
40-70	11752.9	N.A.	49.00
60-80	4088.72	N.A.	17.00
70-80	1084.5	N.A.	4.50
80-90	97.14	N.A.	0.40
90-110	1.21	N.A.	0.00
90-120	1.21	N.A.	0.00
90-130	1.21	N.A.	0.00
90-150	1.21	N.A.	0.00
90-180	1.21	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	23995.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	813.57
10-20	2331.86
20-30	3561.89
30-40	4352.73
40-50	4577.06
50-60	4171.61
60-70	3004.22
70-80	1084.5
80-90	97.14
90-100	1.21
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

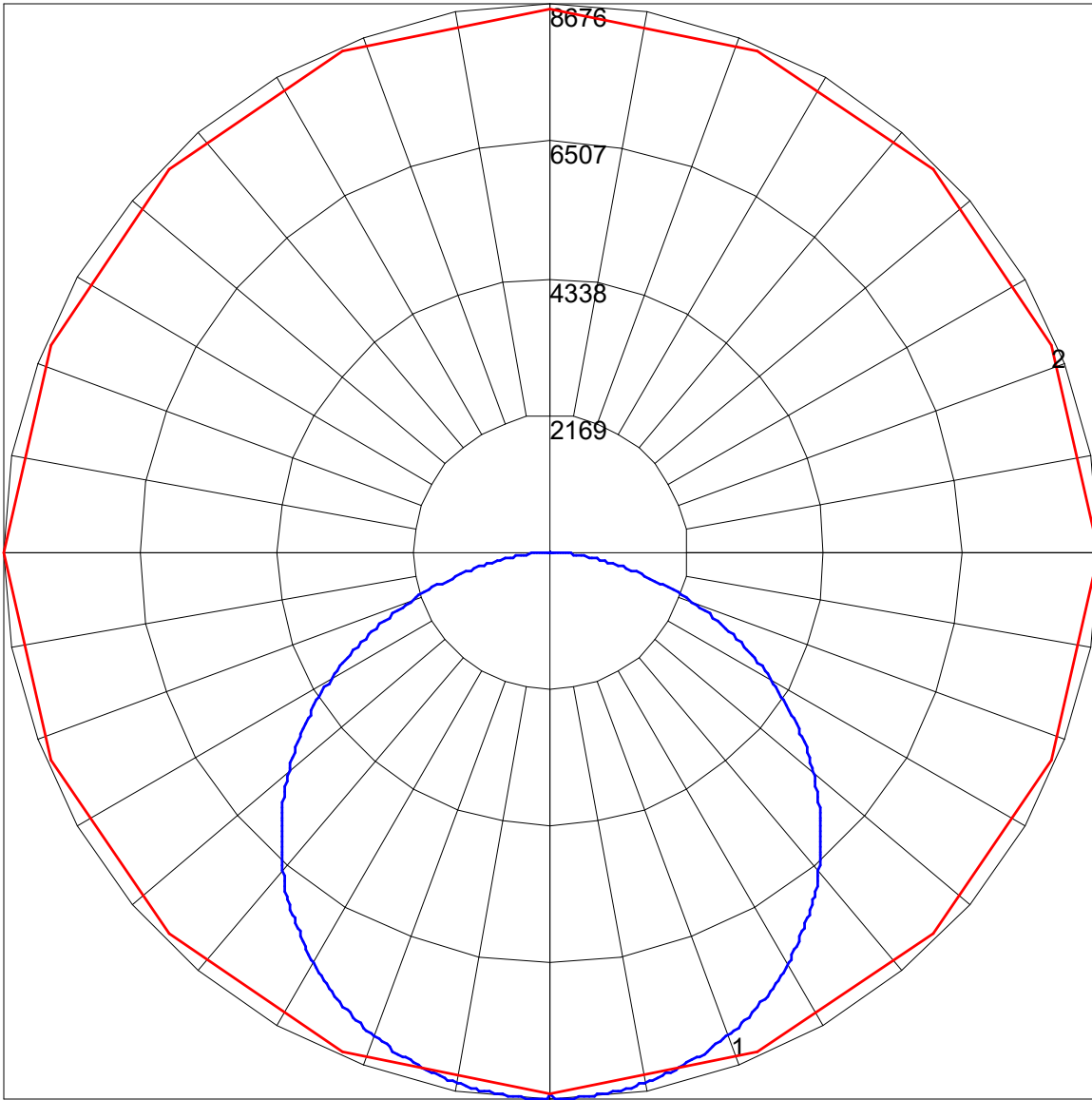
IES INDOOR REPORT
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	99	96	99	96	93	95	92	90	91	89	88	86
2	100	92	86	80	97	90	84	79	87	82	77	83	79	76	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 8675.712 Located At Horizontal Angle = 0, Vertical Angle = .5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (.5) (Through Max. Cd.)