

# Family Correlated Photometric Data

The following photometric information is developed using correlated data. Finelite considers a family to be a group of luminaires where critical performance metrics such as photometric performance, thermal performance, and electrical performance can be accurately projected via a combination of LM79 tests at the luminaire level and well-documented specifications at the component level.

For more information, please download [Finelite's Family Correlated White Paper](#)

Additional links:

- [Solid-State Lighting: Early Lessons Learned on the Way to Market](#)  
(U.S. Department of Energy)
- [Lighting Facts®](#)
- [Design Lights Consortium®](#)

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-WG-6W-6D-4FT-S-835-ITL88851.001.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL88851.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]01/25/17

[ISSUEDATE]04/17/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-WG-6W-6D-4ft-S-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 14.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 15.9 WATTS

[ABSOLUTE]LUMENS]1058

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL88851. For further details on Finelite family correlation files, go to

[more][http://www.finelite.com/download\\_files/series\\_downloads/photometry\\_pdf/FL\\_Family\\_Correlation\\_WhitePaper.pdf](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1058
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	73
Total Luminaire Watts	14.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.28
Spacing Criterion (90-270)	1.06
Spacing Criterion (Diagonal)	0.52
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.49 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.49 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	550	640	3916
55	541	546	2765
65	734	581	1770
75	1070	814	826
85	125	140	182

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**CANDELA TABULATION**

	<u>0.0</u>	<u>5.0</u>	<u>15.0</u>	<u>25.0</u>	<u>35.0</u>	<u>45.0</u>	<u>55.0</u>	<u>65.0</u>	<u>75.0</u>	<u>85.0</u>
0.0	1399.067	1399.067	1399.067	1399.067	1399.067	1399.067	1399.067	1399.067	1399.067	1399.067
0.5	1369.996	1367.540	1368.358	1370.815	1373.681	1376.547	1380.642	1385.965	1391.287	1396.201
1.0	1327.414	1332.737	1334.375	1339.288	1345.430	1352.390	1361.807	1372.453	1382.689	1393.744
1.5	1291.383	1295.887	1298.753	1305.714	1315.540	1327.005	1341.335	1357.304	1373.681	1390.468
2.0	1254.124	1256.581	1260.675	1270.092	1284.013	1299.572	1319.635	1341.745	1364.264	1385.965
2.5	1215.227	1215.636	1221.778	1233.652	1251.258	1271.320	1297.115	1325.776	1354.847	1383.508
3.0	1172.235	1173.054	1180.424	1195.164	1216.865	1242.250	1273.777	1309.399	1344.201	1379.004
3.5	1128.425	1129.244	1137.023	1155.858	1182.062	1212.770	1250.439	1292.612	1333.965	1374.500
4.0	1082.158	1082.977	1092.803	1114.913	1146.031	1182.062	1226.282	1275.415	1323.320	1369.996
4.5	1033.025	1035.481	1047.355	1072.331	1108.362	1149.716	1201.306	1256.990	1311.855	1365.083
5.0	984.301	986.758	1000.679	1028.521	1069.875	1116.960	1175.101	1237.746	1299.981	1358.532
5.5	933.939	937.624	953.183	984.710	1030.159	1092.394	1148.897	1218.912	1287.698	1354.437
6.0	884.397	889.720	905.688	940.081	990.852	1049.812	1121.464	1199.259	1274.596	1346.658
6.5	835.673	842.224	860.240	895.861	950.317	1023.198	1093.622	1178.786	1261.903	1341.745
7.0	789.406	796.776	816.020	852.870	910.192	988.395	1065.780	1158.314	1248.392	1333.146
7.5	744.777	754.194	773.028	811.925	870.476	952.774	1037.119	1138.252	1234.880	1328.233
8.0	703.014	714.478	733.312	772.619	832.398	917.971	1008.049	1117.370	1221.368	1320.863
8.5	677.628	677.219	696.463	735.360	794.729	883.578	978.978	1095.669	1207.447	1315.131
9.0	641.188	643.644	662.479	700.148	759.107	849.594	950.727	1074.378	1193.936	1307.761
9.5	607.613	612.117	630.542	666.983	725.942	815.610	928.617	1053.087	1179.196	1299.572
10.0	576.905	584.275	601.472	637.093	694.415	783.674	899.956	1030.977	1164.456	1291.793
11.0	531.048	534.323	551.110	583.456	637.503	724.714	844.681	987.986	1135.795	1275.824
11.5	505.253	511.804	528.181	559.299	611.708	696.463	817.658	965.467	1121.055	1267.226
12.0	490.103	491.332	507.300	537.189	588.370	670.258	791.453	943.766	1106.315	1259.037
12.5	467.584	472.088	487.237	516.308	565.441	645.282	765.658	922.066	1091.166	1250.029
13.0	447.931	454.482	468.812	497.064	544.150	621.534	740.682	900.365	1072.331	1241.022
13.5	435.238	437.695	452.025	478.639	525.315	599.425	717.344	879.074	1057.182	1232.014
14.0	416.813	422.136	436.057	461.442	506.072	578.134	694.825	857.374	1040.804	1223.006
14.5	406.167	408.215	421.726	445.883	488.056	558.890	673.534	836.901	1025.655	1213.998
15.0	391.427	395.112	407.805	431.553	472.088	540.465	651.833	811.107	1009.686	1204.991
16.0	367.680	371.365	380.782	404.120	440.970	505.253	611.708	771.391	979.388	1184.928
17.0	347.208	350.893	359.900	381.191	413.947	474.544	575.267	734.131	950.317	1165.275
18.0	328.373	332.468	340.247	360.719	390.199	446.293	542.103	699.329	920.837	1144.803
19.0	314.043	314.862	323.051	341.885	369.318	420.907	511.394	665.754	891.767	1124.330
20.0	296.437	298.484	306.673	325.098	349.664	397.979	483.143	633.818	863.515	1104.268
22.5	253.445	257.130	266.547	284.153	308.720	349.255	421.726	561.346	794.319	1048.174
25.0	226.013	227.241	233.383	248.941	273.508	309.948	371.774	498.702	727.990	990.852
27.5	207.178	207.997	211.682	221.918	241.981	276.374	330.011	443.836	664.935	928.207
30.0	196.533	197.761	198.989	203.493	217.414	246.894	294.799	395.931	605.566	867.610
32.5	182.202	182.202	186.706	190.800	199.399	222.328	265.319	356.625	550.291	807.012
35.0	163.368	163.368	169.100	176.879	185.478	202.674	238.705	320.184	498.702	746.824
37.5	155.179	155.179	156.407	162.139	172.375	186.706	216.595	287.020	450.387	687.864
40.0	149.447	149.037	149.856	152.313	158.864	173.194	196.942	258.768	405.349	628.904
42.5	145.352	144.943	144.943	145.762	149.037	160.502	180.564	235.020	366.042	571.992
45.0	142.486	142.077	141.667	140.439	141.667	148.628	166.234	212.091	327.554	516.308
47.5	137.573	137.573	137.573	137.163	135.935	139.620	153.541	192.438	293.161	463.080
50.0	136.345	135.935	133.478	132.660	131.841	132.250	141.667	174.013	258.768	409.443
52.5	140.030	140.030	138.392	131.022	127.746	126.518	131.431	158.045	230.926	361.129
55.0	137.982	137.982	136.754	135.526	125.290	122.423	123.242	143.714	203.903	315.271
57.5	141.667	141.667	137.573	133.888	130.203	118.329	116.282	130.203	179.336	272.280
60.0	152.313	152.313	146.581	137.982	128.975	119.148	110.959	117.920	155.998	233.792
62.5	163.368	162.549	156.817	147.399	132.250	120.786	106.865	108.093	135.116	196.942
65.0	178.927	177.698	169.919	156.817	141.258	121.605	106.046	99.085	116.282	162.958
67.5	202.674	201.446	190.391	171.147	149.447	127.746	106.865	91.715	99.904	132.250

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**CANDELA TABULATION - (Cont.)**

70.0	231.745	230.516	216.595	192.438	163.368	134.297	107.274	85.164	84.755	104.408
72.5	253.855	253.036	239.524	214.548	180.564	143.305	111.368	85.164	74.109	79.022
75.0	240.752	240.343	232.564	218.233	191.210	153.132	114.644	82.707	63.873	57.731
77.5	179.745	184.249	181.793	180.564	171.966	152.313	117.510	82.707	55.275	40.535
80.0	87.211	92.534	97.038	110.140	117.920	121.605	109.731	80.660	51.180	24.976
82.5	25.385	25.795	26.204	31.118	47.086	65.101	76.975	70.834	47.495	16.787
85.0	24.976	24.976	25.385	24.976	24.157	22.519	30.299	42.582	40.535	13.102
87.5	24.567	24.567	24.976	24.567	23.338	21.700	19.653	17.606	22.929	10.236
90.0	23.748	24.157	24.157	23.748	22.929	20.882	18.834	16.378	13.921	7.370
92.5	23.338	23.338	23.748	23.338	22.110	20.472	18.015	15.559	12.283	5.732
95.0	22.929	22.929	23.338	22.519	21.700	19.653	17.197	14.331	10.646	4.094
97.5	22.110	22.110	22.519	22.110	20.882	18.834	15.968	13.102	8.598	2.457
100.0	21.291	21.700	21.700	21.291	19.653	18.015	15.149	11.874	6.961	1.638
102.5	20.472	20.882	20.882	20.063	18.834	16.787	14.331	10.646	5.732	1.228
105.0	19.653	19.653	20.063	19.244	18.015	15.968	13.102	9.008	4.094	0.819
107.5	18.834	18.834	18.834	18.425	16.787	14.740	11.464	7.779	3.276	0.819
110.0	18.015	18.015	18.015	17.197	15.968	13.512	10.236	6.142	2.457	0.409
112.5	16.787	16.787	16.787	15.968	14.331	11.874	9.008	4.913	2.047	0.409
115.0	15.559	15.559	15.559	14.740	13.102	10.646	7.370	3.685	1.638	0.409
117.5	13.921	13.921	13.921	13.102	11.464	9.008	5.732	2.866	1.228	0.000
120.0	12.283	12.283	12.283	11.464	9.827	7.370	4.094	2.457	1.228	0.000
122.5	10.646	10.646	10.646	9.827	8.189	5.732	2.866	2.047	1.228	0.000
125.0	9.008	9.008	9.008	8.189	6.551	4.094	2.457	1.638	0.819	0.000
127.5	7.370	7.370	7.370	6.551	4.913	2.866	2.047	1.638	0.819	0.000
130.0	5.732	5.732	5.323	4.913	3.276	2.047	2.047	1.638	0.819	0.000
132.5	4.094	4.094	3.685	3.276	2.047	2.047	1.638	1.228	0.409	0.000
135.0	2.457	2.047	2.047	1.638	1.638	1.638	1.638	1.228	0.409	0.000
137.5	0.409	0.409	0.819	1.228	1.228	1.638	1.228	1.228	0.409	0.000
140.0	0.000	0.000	0.409	0.819	1.228	1.228	0.819	0.819	0.000	0.000
142.5	0.000	0.000	0.409	0.819	0.819	0.819	0.819	0.819	0.000	0.000
145.0	0.000	0.000	0.409	0.409	0.819	0.819	0.819	0.819	0.000	0.000
147.5	0.000	0.000	0.000	0.409	0.409	0.409	0.409	0.819	0.000	0.000
150.0	0.000	0.000	0.000	0.409	0.409	0.409	0.409	0.409	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.409	0.409	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles	Horizontal Angles				
	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	1399.067	1399.067	1399.067	1399.067	1399.067
0.5	1399.067	1410.941	1419.948	1426.499	1427.728
1.0	1399.067	1424.043	1438.783	1448.200	1449.428
1.5	1398.657	1431.413	1453.113	1464.168	1463.759
2.0	1398.248	1441.239	1464.168	1472.766	1468.672
2.5	1397.019	1448.609	1469.491	1471.129	1462.121
3.0	1395.791	1454.342	1469.900	1461.302	1446.972

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**CANDELA TABULATION - (Cont.)**

3.5	1394.972	1457.617	1464.578	1445.334	1424.862
4.0	1393.334	1460.483	1454.751	1422.405	1396.201
4.5	1390.878	1460.074	1440.830	1394.563	1362.626
5.0	1388.012	1458.026	1422.814	1362.626	1324.139
5.5	1384.736	1453.523	1401.933	1327.414	1283.194
6.0	1380.642	1446.562	1377.776	1288.927	1239.384
6.5	1376.547	1438.373	1350.752	1247.982	1192.707
7.0	1372.862	1428.956	1322.091	1205.810	1144.803
7.5	1368.358	1417.492	1291.793	1161.590	1096.079
8.0	1363.445	1405.208	1259.447	1116.551	1046.536
8.5	1358.532	1394.972	1226.282	1069.875	995.765
9.0	1353.209	1376.138	1191.479	1023.198	944.994
9.5	1347.477	1363.855	1155.858	975.703	893.814
10.0	1341.335	1345.839	1120.236	928.207	842.224
11.0	1329.461	1308.580	1046.127	833.626	741.501
11.5	1322.910	1288.108	1009.277	786.131	691.959
12.0	1316.359	1266.407	971.199	739.454	643.644
12.5	1309.399	1244.707	933.530	693.596	597.377
13.0	1301.619	1223.006	895.861	648.558	548.654
13.5	1294.249	1200.077	858.193	604.747	496.654
14.0	1286.470	1177.967	820.524	559.299	446.702
14.5	1278.690	1155.448	784.083	510.575	400.435
15.0	1270.911	1132.519	746.824	463.489	357.034
16.0	1253.714	1087.071	666.164	377.097	279.240
17.0	1236.927	1040.804	598.196	301.759	211.682
18.0	1218.502	993.718	531.048	235.839	150.266
19.0	1199.668	947.042	457.757	176.470	92.534
20.0	1178.786	901.184	390.609	119.557	58.141
22.5	1124.740	786.131	250.170	38.897	21.291
25.0	1067.827	673.943	135.935	19.244	13.921
27.5	1007.639	568.307	55.684	13.512	10.236
30.0	945.813	471.678	24.976	10.236	2.457
32.5	883.169	374.231	17.197	3.276	2.047
35.0	818.886	283.335	13.102	2.866	1.638
37.5	755.013	205.540	9.417	2.457	1.228
40.0	691.549	136.345	4.504	1.638	0.819
42.5	628.904	76.975	3.685	1.228	0.409
45.0	566.669	39.307	3.276	1.228	0.409
47.5	507.300	23.338	2.866	1.228	0.409
50.0	449.568	16.787	2.457	0.819	0.409
52.5	395.112	12.693	2.047	0.819	0.000
55.0	339.838	8.598	2.047	0.819	0.000
57.5	292.752	5.732	1.638	0.819	0.000
60.0	249.351	4.913	1.638	0.819	0.000
62.5	209.225	4.504	1.638	0.409	0.000
65.0	172.375	4.094	1.228	0.409	0.000
67.5	138.392	3.276	1.228	0.409	0.000
70.0	107.684	2.866	1.228	0.409	0.000
72.5	80.660	2.457	0.819	0.409	0.000
75.0	56.913	2.047	0.819	0.409	0.000
77.5	37.259	1.638	0.409	0.409	0.000
80.0	20.882	1.228	0.409	0.000	0.000
82.5	12.283	0.819	0.409	0.000	0.000
85.0	6.961	0.409	0.000	0.000	0.000
87.5	2.866	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	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 : HP-WG-6W-6D-4FT-S-835-ITL88851.001.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	312.95	N.A.	29.60
0-30	493.46	N.A.	46.60
0-40	644.16	N.A.	60.90
0-60	854.30	N.A.	80.80
0-80	1013.41	N.A.	95.80
0-90	1034.12	N.A.	97.70
10-90	922.30	N.A.	87.20
20-40	331.21	N.A.	31.30
20-50	448.04	N.A.	42.30
40-70	292.10	N.A.	27.60
60-80	159.11	N.A.	15.00
70-80	77.15	N.A.	7.30
80-90	20.71	N.A.	2.00
90-110	16.42	N.A.	1.60
90-120	20.95	N.A.	2.00
90-130	23.08	N.A.	2.20
90-150	23.81	N.A.	2.30
90-180	23.83	N.A.	2.30
110-180	7.40	N.A.	0.70
0-180	1057.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	111.82
10-20	201.13
20-30	180.51
30-40	150.70
40-50	116.83
50-60	93.31
60-70	81.96
70-80	77.15
80-90	20.71
90-100	9.37
100-110	7.05
110-120	4.53
120-130	2.13
130-140	0.60
140-150	0.13
150-160	0.01
160-170	0.00
170-180	0.00

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-WG-6W-6D-4FT-S-835-ITL88851.001.IES

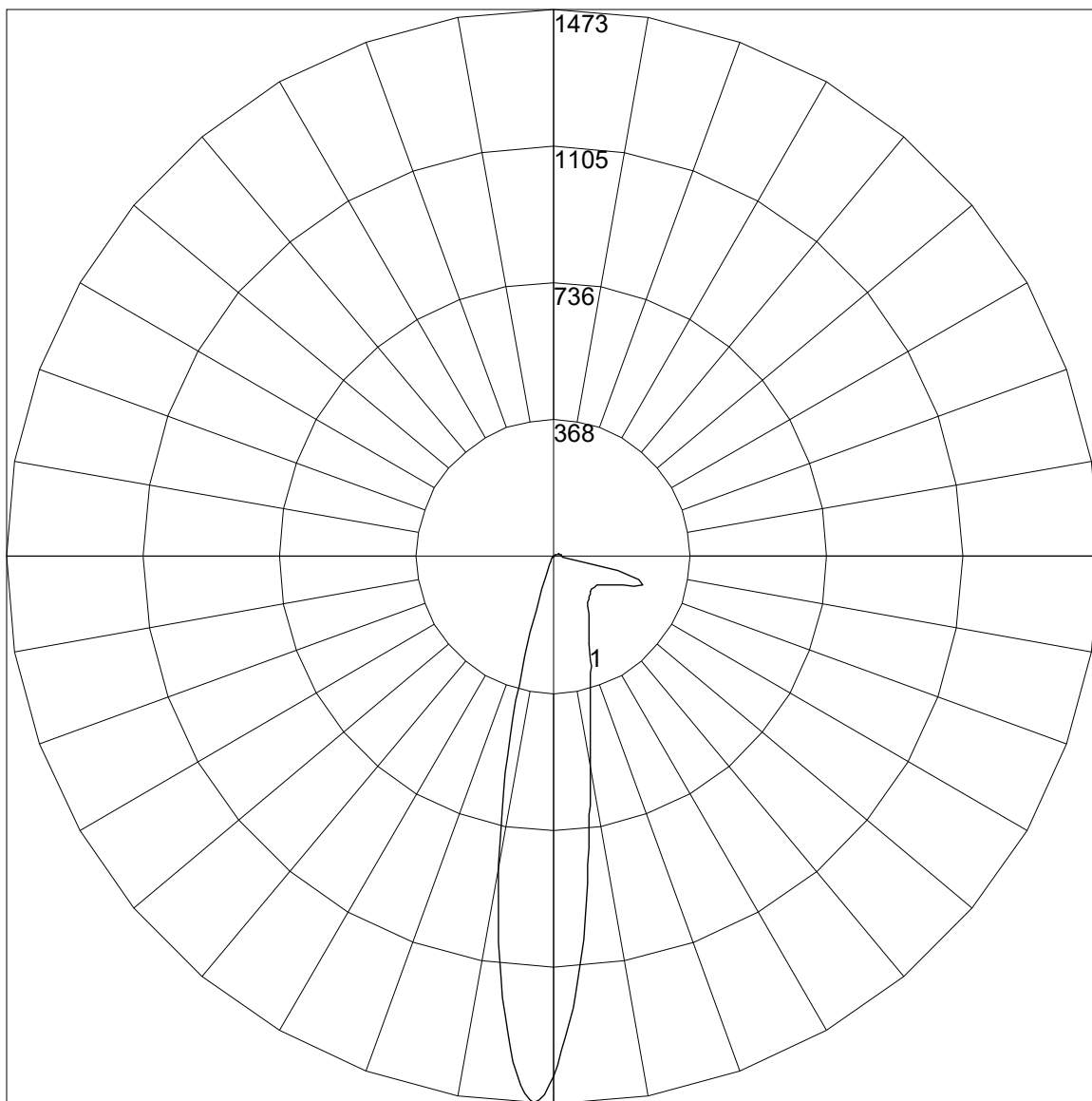
## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	115	115	115	115	110	110	110	105	105	105	100	100	100	98
1	109	105	101	98	107	103	99	96	98	95	93	94	92	89	90	88	86	84
2	101	94	88	83	98	92	86	82	88	84	80	85	81	78	81	78	76	73
3	94	85	78	72	91	83	77	71	80	74	70	77	72	68	74	70	67	65
4	88	77	70	64	85	76	69	64	73	67	62	71	66	61	69	64	60	58
5	82	71	63	58	80	70	63	57	68	61	57	66	60	56	64	59	55	53
6	77	66	58	53	75	65	58	52	63	56	52	61	55	51	59	54	51	49
7	73	61	54	48	71	60	53	48	59	52	48	57	51	47	56	51	47	45
8	69	57	50	45	67	56	50	45	55	49	44	54	48	44	53	47	44	42
9	65	54	47	42	64	53	46	42	52	46	41	51	45	41	50	45	41	39
10	62	51	44	39	61	50	44	39	49	43	39	48	43	39	47	42	38	37



POLAR GRAPH



Maximum Candela = 1472.766 Located At Horizontal Angle = 157.5, Vertical Angle = 2  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180)