

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-2-ID-4FT-S-H-835-ASY-DAO-ITL89599-KPL2008-3.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/24/17

[ISSUEDATE]08/29/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-4ft-S-H-835-ASY-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 43.6 WATTS

[OTHER]see www.finelite.com for source files ITL89599 and KPL2008-3. 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

[_ABSOLUTE LUMENS]4671

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4674
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	42
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.48
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.18 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18067	18709	13597
55	15333	16990	12129
65	12660	14710	10722
75	10561	12502	8999
85	10539	12453	7484

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CANDELA TABULATION

	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0.0	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825
2.5	1143.471	1141.605	1136.153	1139.326	1136.076	1129.403	1128.672	1130.788	1128.758	1111.517
5.0	1186.406	1182.665	1176.568	1175.184	1165.915	1154.125	1146.971	1141.115	1132.172	1105.825
7.5	1222.676	1219.340	1210.397	1206.897	1193.724	1174.539	1161.365	1148.518	1132.009	1097.200
10.0	1252.764	1250.407	1240.562	1232.436	1215.195	1190.714	1171.693	1152.259	1127.942	1084.602
12.5	1282.035	1278.131	1265.121	1254.630	1232.918	1201.858	1177.463	1151.606	1120.134	1068.660
15.0	1298.622	1294.477	1282.766	1270.572	1239.831	1208.608	1178.520	1146.971	1109.239	1049.794
17.5	1304.968	1300.333	1289.353	1276.591	1251.302	1211.291	1174.702	1137.211	1092.892	1026.293
20.0	1299.275	1295.130	1285.612	1273.986	1248.533	1208.118	1166.490	1123.229	1073.948	1003.687
22.5	1284.477	1280.409	1272.275	1261.466	1237.801	1197.060	1154.856	1103.709	1049.468	975.388
25.0	1258.783	1257.150	1251.379	1241.869	1220.156	1179.337	1136.885	1082.161	1023.859	945.059
27.5	1231.129	1224.869	1220.561	1214.059	1194.050	1157.376	1114.441	1055.977	993.935	910.500
30.0	1190.473	1185.760	1184.617	1179.741	1163.480	1126.153	1084.276	1024.917	958.723	875.863
32.5	1145.587	1142.662	1142.577	1140.625	1129.652	1094.603	1050.852	991.734	923.432	836.583
35.0	1091.594	1094.440	1093.382	1099.152	1088.825	1054.188	1012.062	955.791	884.884	798.532
37.5	1035.485	1036.216	1040.610	1048.900	1040.773	1011.658	969.050	912.856	842.843	758.763
40.0	974.983	976.935	982.138	994.176	991.252	966.281	925.462	871.228	800.562	720.300
42.5	907.327	912.289	921.885	937.337	935.058	914.645	876.431	825.688	756.896	675.903
45.0	841.467	845.208	859.027	873.825	879.440	863.335	847.401	776.571	709.000	633.295
47.5	779.013	779.091	793.081	812.274	821.784	809.910	774.456	727.454	663.546	589.544
50.0	708.106	708.674	726.319	747.463	758.926	754.781	719.569	674.115	615.728	545.388
52.5	642.565	645.738	663.865	682.653	702.655	698.105	664.192	623.046	568.975	502.781
55.0	579.302	582.716	599.218	624.352	642.892	640.854	611.910	571.899	522.378	458.221
57.5	514.896	521.973	536.445	562.707	581.736	579.948	554.744	520.589	474.645	416.748
60.0	457.490	462.529	476.760	499.934	521.242	523.272	501.964	468.548	430.653	377.391
62.5	399.912	407.968	423.335	443.422	464.076	466.106	448.702	418.700	384.545	329.953
65.0	352.428	355.274	369.093	387.640	405.441	413.497	399.266	369.093	339.332	298.481
67.5	305.099	305.916	321.282	335.024	352.505	361.208	348.361	322.830	298.186	260.952
70.0	261.029	262.818	273.876	288.675	305.177	311.033	302.012	278.838	256.231	222.209
72.5	217.605	218.826	229.557	239.799	256.231	261.924	251.674	235.654	219.720	187.284
75.0	180.036	182.151	190.037	200.768	210.855	215.404	209.634	194.835	178.325	153.409
77.5	143.603	147.343	152.305	162.228	170.276	173.286	168.978	157.834	145.314	123.275
80.0	112.543	114.736	118.889	125.717	130.678	132.708	129.216	122.707	113.601	93.607
82.5	84.081	85.224	88.474	92.456	97.013	98.148	96.033	92.052	88.148	67.960
85.0	60.502	59.670	61.980	70.744	71.039	71.941	70.145	67.649	55.992	42.966
87.5	36.317	37.942	37.507	39.404	41.022	40.975	39.116	35.220	31.293	20.266
90.0	27.996	27.996	26.440	23.330	20.219	15.553	10.887	6.999	3.111	0.000
92.5	31.936	32.346	31.936	30.299	27.432	25.795	24.566	22.519	19.653	9.827
95.0	63.873	64.692	63.873	61.825	59.778	57.731	54.865	49.952	41.353	24.157
97.5	97.037	97.856	96.628	96.628	96.628	95.400	90.077	79.841	63.054	39.306
100.0	125.698	127.745	130.202	136.344	140.847	138.800	128.974	110.958	84.345	54.865
102.5	161.319	165.823	174.012	186.705	193.665	187.933	169.918	140.847	103.998	70.014
105.0	210.043	218.641	235.428	250.987	253.853	240.751	210.862	168.280	122.423	85.573
107.5	285.380	295.206	312.812	323.458	321.001	296.844	250.168	192.437	139.619	101.541
110.0	381.598	386.511	397.566	402.070	388.559	346.796	282.923	213.318	155.997	117.509
112.5	476.588	479.454	485.186	478.635	447.927	386.921	308.308	232.152	171.965	133.477
115.0	568.712	567.893	564.208	541.689	492.966	417.219	329.190	248.940	188.342	150.264
117.5	642.821	636.679	623.577	588.775	525.312	438.101	345.158	264.498	204.720	167.461
120.0	695.639	687.040	665.340	619.483	544.965	452.431	359.079	279.648	221.507	184.248
122.5	729.622	718.977	690.725	636.270	556.838	463.077	371.362	294.797	238.294	201.035
125.0	745.590	734.126	701.780	643.230	562.980	471.675	383.236	309.946	254.672	217.822
127.5	748.866	736.992	702.599	643.640	565.846	479.045	395.519	325.095	271.049	234.200
130.0	743.134	731.260	697.276	640.774	567.074	486.005	408.212	340.654	288.246	251.396
132.5	732.488	722.252	689.906	636.270	568.303	493.375	420.495	356.622	305.442	268.593

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CANDELA TABULATION - (Cont.)

135.0	720.614	710.378	680.489	631.766	569.940	501.155	432.778	371.772	322.639	286.199
137.5	708.741	698.914	671.891	628.081	572.397	509.343	445.880	387.330	339.426	303.804
140.0	696.048	688.269	664.521	625.215	574.854	517.532	458.573	402.889	356.213	321.001
142.5	685.812	679.261	658.380	623.577	577.720	525.721	471.265	418.038	373.409	338.197
145.0	677.214	671.482	652.647	621.530	580.995	534.319	483.549	432.369	389.377	355.394
147.5	669.434	664.112	647.734	619.892	584.271	542.099	495.013	446.290	405.346	372.181
150.0	660.836	656.742	642.821	618.664	587.546	549.469	504.840	458.982	420.495	389.377
152.5	653.876	650.191	638.726	618.254	590.003	555.201	513.847	470.856	434.825	405.346
155.0	648.143	644.459	634.632	616.617	591.231	559.295	520.808	481.092	447.927	420.495
157.5	642.411	638.726	630.128	613.751	590.003	560.933	526.130	490.509	460.620	434.825
160.0	634.632	630.947	622.758	608.428	587.137	560.933	529.815	497.879	471.265	447.927
162.5	624.396	621.120	613.751	600.648	581.405	558.886	531.863	504.430	481.092	459.801
165.0	611.294	608.018	601.058	590.003	574.035	554.791	532.272	508.934	489.281	470.447
167.5	595.735	592.869	587.137	577.720	564.618	549.059	531.044	511.800	495.422	479.454
170.0	577.720	575.263	570.759	563.389	553.972	542.099	527.768	513.028	500.336	486.415
172.5	559.295	557.657	554.382	549.469	542.099	533.091	523.264	512.619	502.792	492.147
175.0	539.642	538.414	535.957	533.091	528.587	523.264	517.123	510.162	503.611	497.060
177.5	519.579	519.170	518.351	516.713	515.076	512.619	509.343	506.068	502.792	499.517
180.0	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825	1105.825
2.5	1111.191	1098.258	1083.708	1073.218	1068.334	1064.111	1056.467	1056.140	1059.391
5.0	1098.017	1079.073	1057.851	1042.725	1035.649	1028.004	1017.109	1018.649	1016.293
7.5	1080.776	1055.736	1029.140	1011.580	1002.629	993.119	980.598	982.954	980.839
10.0	1060.612	1029.793	1001.657	981.329	970.349	958.964	949.290	948.885	949.453
12.5	1037.352	1001.820	971.811	950.837	938.799	926.769	914.645	915.135	916.597
15.0	1013.283	974.657	943.356	920.260	907.739	894.402	872.931	882.854	883.585
17.5	984.906	944.165	913.183	888.624	874.805	862.689	853.497	852.113	853.824
20.0	955.060	913.509	881.392	858.459	844.469	833.006	825.525	823.736	823.736
22.5	921.721	880.576	849.516	827.718	814.303	805.687	796.658	796.899	796.091
25.0	888.383	849.267	814.957	794.947	783.726	775.031	767.955	767.550	768.764
27.5	853.902	815.688	781.859	765.109	754.859	746.243	739.415	740.954	741.118
30.0	817.150	779.666	748.599	732.906	724.771	715.338	710.548	700.625	713.472
32.5	780.148	743.886	713.876	701.683	692.491	685.577	682.086	682.980	685.336
35.0	743.396	705.260	678.913	669.075	661.594	655.738	654.432	654.518	655.085
37.5	702.328	668.422	647.036	635.729	629.143	625.487	623.294	624.671	626.141
40.0	663.134	631.258	610.362	602.959	596.535	593.689	593.852	594.101	596.862
42.5	622.315	594.101	575.562	569.706	565.312	563.601	564.581	564.091	565.312
45.0	583.362	556.610	540.427	535.061	533.926	531.080	533.109	535.792	511.972
47.5	542.216	518.310	504.079	500.992	498.954	498.223	501.155	504.243	506.436
50.0	501.070	479.847	468.875	466.837	465.779	466.028	468.711	472.125	473.261
52.5	461.308	442.605	432.768	431.220	431.057	431.461	435.855	440.249	441.548
55.0	421.951	405.526	397.960	395.440	396.093	398.450	404.632	405.767	407.074
57.5	382.998	368.525	362.996	359.746	362.343	364.295	370.641	372.919	374.054
60.0	338.484	323.017	320.831	322.612	321.656	324.105	332.372	322.822	340.716
62.5	306.764	296.428	292.812	292.766	294.235	299.026	303.404	305.768	306.040
65.0	269.451	261.737	258.797	259.070	262.764	266.924	269.436	272.578	271.761
67.5	235.297	227.053	223.297	224.059	229.635	231.704	235.763	237.256	235.203
70.0	200.030	194.384	191.802	192.704	195.263	198.677	201.056	202.176	205.209
72.5	168.581	163.837	159.506	161.380	163.659	166.178	167.135	168.527	169.157
75.0	135.919	131.782	128.796	130.320	132.078	132.739	120.903	133.649	136.090
77.5	106.773	103.056	101.345	100.800	101.376	102.604	102.581	102.223	102.153
80.0	78.248	75.830	74.826	74.173	73.341	71.475	71.926	71.405	71.848

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-ASY-DAO-ITL89599-KPL2008-3.014.IES****CANDELA TABULATION - (Cont.)**

82.5	53.744	50.587	48.332	46.978	46.862	45.851	45.571	44.770	43.378
85.0	31.767	28.649	26.246	23.571	22.296	20.585	19.014	17.816	15.841
87.5	10.444	8.072	6.361	4.829	3.437	2.294	1.478	1.097	0.995
90.0	3.111	6.999	10.110	13.998	16.331	18.664	20.219	20.997	20.997
92.5	12.693	13.512	15.149	16.378	17.606	18.015	18.425	18.834	18.834
95.0	26.614	27.842	29.889	32.346	33.574	33.984	33.984	33.165	32.346
97.5	40.125	41.763	45.038	48.723	51.180	52.408	53.227	52.408	51.999
100.0	54.046	56.093	59.778	64.282	67.558	70.424	72.471	72.061	72.061
102.5	68.376	71.652	76.156	81.069	85.164	88.030	90.077	90.486	90.486
105.0	82.297	86.801	93.352	100.313	104.407	106.454	107.683	107.273	107.273
107.5	97.037	101.132	107.683	115.462	120.785	123.651	125.698	124.879	124.060
110.0	111.368	113.824	121.604	131.021	137.162	140.028	142.485	142.485	142.485
112.5	125.698	126.517	135.115	146.170	153.540	157.634	160.500	160.500	160.500
115.0	140.028	139.210	147.808	160.091	169.099	174.831	178.925	179.335	179.744
117.5	154.359	150.674	159.682	173.193	183.429	190.799	196.122	196.941	197.760
120.0	169.099	162.957	171.555	185.067	196.122	205.129	212.499	213.318	214.547
122.5	183.429	174.831	182.610	196.122	207.996	218.641	227.239	228.468	230.105
125.0	198.578	187.524	194.075	206.358	218.641	231.334	241.160	242.798	244.436
127.5	213.318	199.397	204.311	215.365	228.058	241.979	253.034	255.491	257.947
130.0	228.058	211.271	214.137	223.554	235.837	250.168	262.042	266.136	269.821
132.5	243.617	223.145	223.964	231.743	242.388	256.309	267.774	273.096	278.010
135.0	258.766	235.019	233.381	239.113	248.530	261.223	271.868	277.191	282.104
137.5	274.325	247.302	243.207	246.073	253.443	264.908	274.734	279.238	283.742
140.0	290.293	260.813	253.443	253.853	258.766	268.183	276.372	280.466	284.561
142.5	306.671	275.963	265.317	261.632	263.679	271.049	277.191	280.466	283.742
145.0	323.867	291.931	278.010	270.230	268.593	273.915	278.010	280.466	282.923
147.5	340.654	308.308	290.702	278.419	273.915	276.781	279.648	281.285	282.923
150.0	357.032	323.458	303.395	287.427	280.057	281.285	282.104	282.923	283.332
152.5	373.409	340.245	317.316	298.072	287.427	286.199	284.970	284.970	284.970
155.0	389.377	357.032	332.875	311.584	298.482	293.568	289.474	288.655	287.427
157.5	404.936	373.000	349.662	328.780	313.631	304.214	296.844	294.797	293.159
160.0	420.495	391.425	368.905	348.843	332.056	318.954	308.308	305.033	301.757
162.5	435.235	409.440	388.149	368.496	352.118	339.016	327.961	322.639	317.725
165.0	449.565	427.865	407.802	388.559	373.000	361.945	352.528	347.205	342.292
167.5	461.848	443.833	426.227	409.031	395.110	384.464	375.866	371.772	368.087
170.0	472.494	458.163	444.652	431.140	419.676	409.440	401.251	397.157	393.472
172.5	481.911	471.675	461.848	452.431	443.833	436.463	430.321	427.455	424.180
175.0	490.100	483.139	476.998	470.856	465.533	461.029	457.344	455.297	453.660
177.5	496.241	492.556	489.690	486.824	484.777	482.730	480.683	479.864	478.635
180.0	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-ASY-DAO-ITL89599-KPL2008-3.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	407.22	N.A.	8.70
0-30	862.15	N.A.	18.40
0-40	1395.62	N.A.	29.90
0-60	2367.88	N.A.	50.70
0-80	2860.25	N.A.	61.20
0-90	2912.39	N.A.	62.30
10-90	2807.42	N.A.	60.10
20-40	988.40	N.A.	21.10
20-50	1515.39	N.A.	32.40
40-70	1289.81	N.A.	27.60
60-80	492.37	N.A.	10.50
70-80	174.81	N.A.	3.70
80-90	52.15	N.A.	1.10
90-110	212.96	N.A.	4.60
90-120	493.24	N.A.	10.60
90-130	814.72	N.A.	17.40
90-150	1377.29	N.A.	29.50
90-180	1761.9	N.A.	37.70
110-180	1548.94	N.A.	33.10
0-180	4674.29	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	104.97
10-20	302.25
20-30	454.93
30-40	533.47
40-50	526.99
50-60	445.26
60-70	317.56
70-80	174.81
80-90	52.15
90-100	50.53
100-110	162.43
110-120	280.28
120-130	321.48
130-140	302.25
140-150	260.32
150-160	204.06
160-170	133.45
170-180	47.10

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-H-835-ASY-DAO-ITL89599-KPL2008-3.014.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

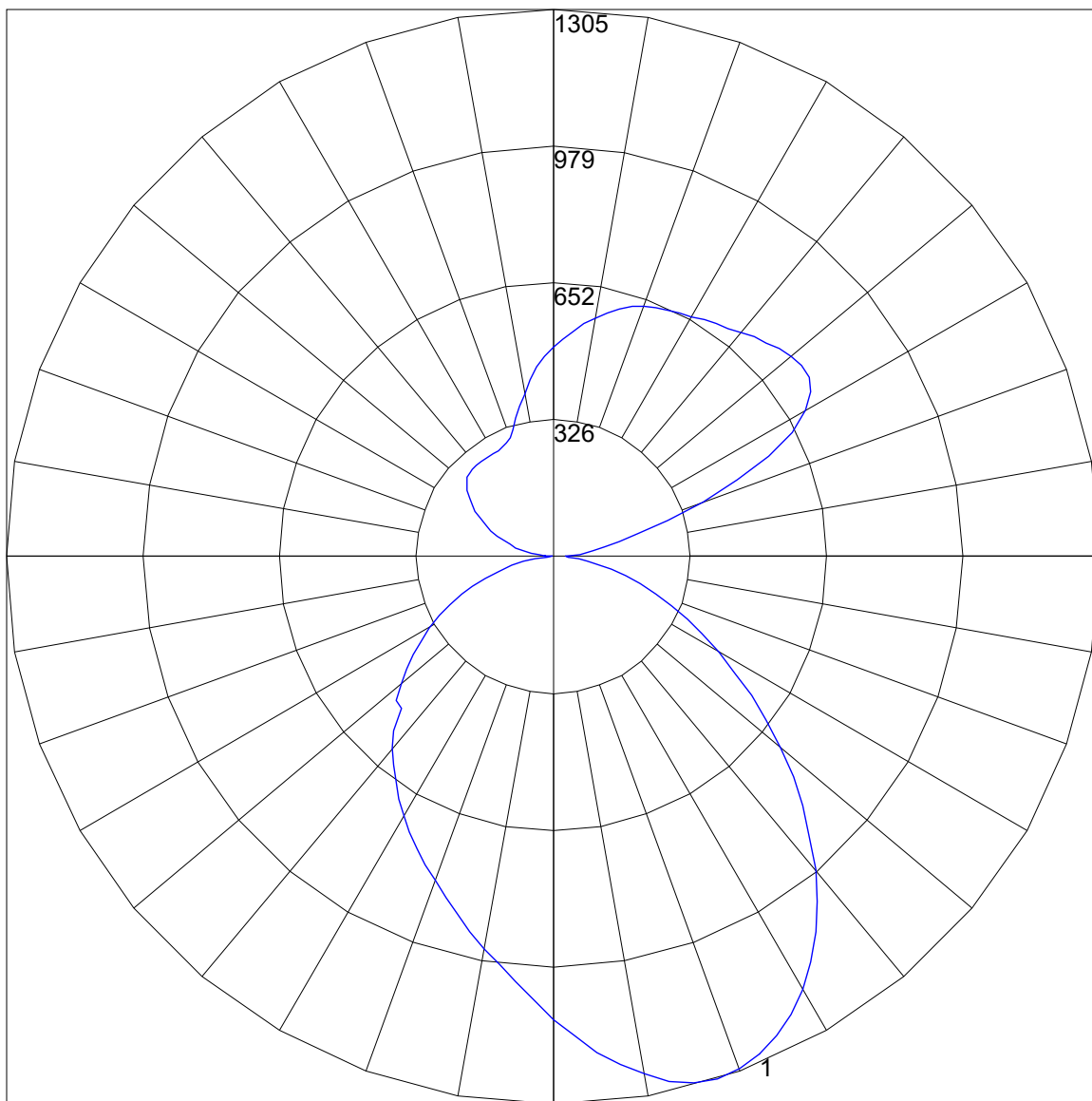
Effective Floor Cavity Reflectance 0.20

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	101	96	92	89	94	90	87	84	79	77	74	69	67	65	60	58	57	53
2	92	84	78	73	86	79	74	69	70	65	62	61	58	55	53	50	48	44
3	84	74	67	61	78	70	63	58	61	56	52	54	50	47	47	44	41	38
4	77	66	58	51	72	62	55	49	55	49	44	48	44	40	42	38	36	32
5	70	59	50	44	66	55	48	42	49	43	38	43	38	35	38	34	31	28
6	65	53	44	39	61	50	42	37	44	38	34	39	34	30	34	30	27	25
7	60	48	40	34	56	45	38	32	40	34	30	36	31	27	31	27	24	22
8	56	43	35	30	52	41	34	29	37	31	26	33	28	24	29	25	22	20
9	52	40	32	27	49	38	31	26	34	28	24	30	25	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	25	21	28	23	20	25	21	18	16

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 1304.968 Located At Horizontal Angle = 0, Vertical Angle = 17.5
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)