

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-B-H-835-ASY-DAO-ITL89599-KPL2008-3.011.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.011 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/24/17

[ISSUEDATE]08/29/2021

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 45.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 47.3 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]5123

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5126
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	45.9
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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

IES INDOOR REPORT

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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	40.133	40.648	40.133	38.075	34.474	32.415	30.872	28.299	24.697	12.349
95.0	80.267	81.296	80.267	77.694	75.121	72.549	68.947	62.773	51.968	30.357
97.5	121.944	122.973	121.429	121.429	121.429	119.885	113.197	100.333	79.238	49.395
100.0	157.961	160.533	163.621	171.338	176.998	174.426	162.077	139.438	105.993	68.947
102.5	202.725	208.385	218.675	234.626	243.373	236.169	213.530	176.998	130.691	87.985
105.0	263.954	274.759	295.855	315.407	319.009	302.544	264.983	211.472	153.844	107.537
107.5	358.627	370.976	393.101	406.479	403.392	373.034	314.378	241.829	175.455	127.603
110.0	479.542	485.716	499.609	505.268	488.289	435.807	355.540	268.070	196.036	147.670
112.5	598.913	602.515	609.718	601.486	562.896	486.231	387.441	291.738	216.103	167.737
115.0	714.682	713.653	709.022	680.723	619.494	524.306	413.682	312.834	236.684	188.833
117.5	807.812	800.094	783.629	739.894	660.142	550.547	433.749	332.386	257.265	210.443
120.0	874.186	863.381	836.111	778.484	684.839	568.556	451.243	351.424	278.361	231.538
122.5	916.892	903.515	868.012	799.580	699.761	581.933	466.679	370.462	299.456	252.634
125.0	936.959	922.552	881.904	808.327	707.479	592.739	481.600	389.499	320.038	273.730
127.5	941.075	926.154	882.933	808.841	711.080	602.000	497.036	408.537	340.619	294.311
130.0	933.872	918.951	876.245	805.239	712.624	610.747	512.986	428.089	362.229	315.921
132.5	920.494	907.631	866.983	799.580	714.168	620.009	528.422	448.156	383.839	337.532

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

135.0	905.573	892.710	855.149	793.920	716.226	629.785	543.858	467.193	405.450	359.656
137.5	890.651	878.303	844.344	789.289	719.313	640.075	560.323	486.745	426.545	381.781
140.0	874.701	864.925	835.082	785.687	722.400	650.366	576.274	506.298	447.641	403.392
142.5	861.838	853.605	827.364	783.629	726.002	660.656	592.224	525.335	469.251	425.002
145.0	851.033	843.829	820.161	781.057	730.118	671.462	607.660	543.344	489.318	446.612
147.5	841.257	834.568	813.986	778.998	734.234	681.238	622.067	560.838	509.385	467.708
150.0	830.451	825.306	807.812	777.455	738.351	690.499	634.415	576.788	528.422	489.318
152.5	821.704	817.074	802.667	776.940	741.438	697.703	645.735	591.709	546.431	509.385
155.0	814.501	809.870	797.521	774.882	742.981	702.848	654.482	604.573	562.896	528.422
157.5	807.298	802.667	791.862	771.280	741.438	704.906	661.171	616.407	578.846	546.431
160.0	797.521	792.891	782.600	764.592	737.836	704.906	665.802	625.668	592.224	562.896
162.5	784.658	780.542	771.280	754.815	730.633	702.333	668.374	633.901	604.573	577.817
165.0	768.193	764.077	755.330	741.438	721.371	697.188	668.889	639.561	614.863	591.195
167.5	748.641	745.039	737.836	726.002	709.537	689.985	667.345	643.162	622.581	602.515
170.0	726.002	722.915	717.255	707.993	696.159	681.238	663.229	644.706	628.756	611.262
172.5	702.848	700.790	696.674	690.499	681.238	669.918	657.569	644.192	631.843	618.465
175.0	678.151	676.607	673.520	669.918	664.258	657.569	649.851	641.104	632.872	624.639
177.5	652.939	652.424	651.395	649.337	647.279	644.192	640.075	635.959	631.843	627.727
180.0	628.756	628.756	628.756	628.756	628.756	628.756	628.756	628.756	628.756	628.756

**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-B-H-835-ASY-DAO-ITL89599-KPL2008-3.011.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	15.950	16.979	19.038	20.581	22.125	22.639	23.154	23.668	23.668
95.0	33.444	34.988	37.561	40.648	42.191	42.706	42.706	41.677	40.648
97.5	50.424	52.482	56.598	61.229	64.316	65.860	66.889	65.860	65.345
100.0	67.918	70.491	75.121	80.781	84.897	88.499	91.072	90.557	90.557
102.5	85.927	90.043	95.703	101.877	107.022	110.624	113.197	113.711	113.711
105.0	103.421	109.080	117.313	126.060	131.205	133.778	135.321	134.807	134.807
107.5	121.944	127.089	135.321	145.097	151.786	155.388	157.961	156.932	155.903
110.0	139.952	143.039	152.815	164.650	172.368	175.969	179.056	179.056	179.056
112.5	157.961	158.990	169.795	183.687	192.949	198.094	201.696	201.696	201.696
115.0	175.969	174.940	185.745	201.181	212.501	219.704	224.850	225.364	225.879
117.5	193.978	189.347	200.667	217.646	230.509	239.771	246.460	247.489	248.518
120.0	212.501	204.783	215.588	232.568	246.460	257.780	267.041	268.070	269.614
122.5	230.509	219.704	229.480	246.460	261.381	274.759	285.564	287.108	289.166
125.0	249.547	235.655	243.887	259.323	274.759	290.709	303.058	305.116	307.174
127.5	268.070	250.576	256.750	270.643	286.593	304.087	317.980	321.067	324.154
130.0	286.593	265.497	269.099	280.933	296.369	314.378	329.299	334.444	339.075
132.5	306.145	280.419	281.448	291.224	304.602	322.096	336.503	343.191	349.366
135.0	325.183	295.340	293.282	300.486	312.320	328.270	341.648	348.337	354.511
137.5	344.735	310.776	305.631	309.233	318.494	332.901	345.250	350.909	356.569
140.0	364.802	327.756	318.494	319.009	325.183	337.017	347.308	352.453	357.598
142.5	385.383	346.793	333.415	328.785	331.357	340.619	348.337	352.453	356.569
145.0	406.993	366.860	349.366	339.590	337.532	344.221	349.366	352.453	355.540
147.5	428.089	387.441	365.316	349.880	344.221	347.822	351.424	353.482	355.540
150.0	448.670	406.479	381.267	361.200	351.939	353.482	354.511	355.540	356.055
152.5	469.251	427.574	398.761	374.578	361.200	359.656	358.113	358.113	358.113
155.0	489.318	448.670	418.313	391.557	375.092	368.918	363.773	362.744	361.200
157.5	508.870	468.737	439.409	413.168	394.130	382.296	373.034	370.462	368.403
160.0	528.422	491.891	463.592	438.380	417.284	400.819	387.441	383.325	379.209
162.5	546.945	514.530	487.774	463.077	442.496	426.031	412.139	405.450	399.275
165.0	564.954	537.684	512.472	488.289	468.737	454.845	443.010	436.321	430.147
167.5	580.390	557.751	535.626	514.015	496.521	483.144	472.339	467.193	462.562
170.0	593.768	575.759	558.780	541.800	527.393	514.530	504.239	499.094	494.463
172.5	605.602	592.739	580.390	568.556	557.751	548.489	540.771	537.169	533.053
175.0	615.892	607.145	599.427	591.709	585.021	579.361	574.730	572.157	570.099
177.5	623.610	618.980	615.378	611.776	609.203	606.631	604.058	603.029	601.486
180.0	628.756	628.756	628.756	628.756	628.756	628.756	628.756	628.756	628.756

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-H-835-ASY-DAO-ITL89599-KPL2008-3.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	407.22	N.A.	7.90
0-30	862.15	N.A.	16.80
0-40	1395.62	N.A.	27.20
0-60	2367.88	N.A.	46.20
0-80	2860.25	N.A.	55.80
0-90	2912.39	N.A.	56.80
10-90	2807.42	N.A.	54.80
20-40	988.40	N.A.	19.30
20-50	1515.39	N.A.	29.60
40-70	1289.81	N.A.	25.20
60-80	492.37	N.A.	9.60
70-80	174.81	N.A.	3.40
80-90	52.15	N.A.	1.00
90-110	267.09	N.A.	5.20
90-120	619.31	N.A.	12.10
90-130	1023.3	N.A.	20.00
90-150	1730.27	N.A.	33.80
90-180	2213.6	N.A.	43.20
110-180	1946.5	N.A.	38.00
0-180	5125.99	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	62.97
100-110	204.12
110-120	352.22
120-130	403.99
130-140	379.83
140-150	327.14
150-160	256.43
160-170	167.71
170-180	59.18

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-H-835-ASY-DAO-ITL89599-KPL2008-3.011.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

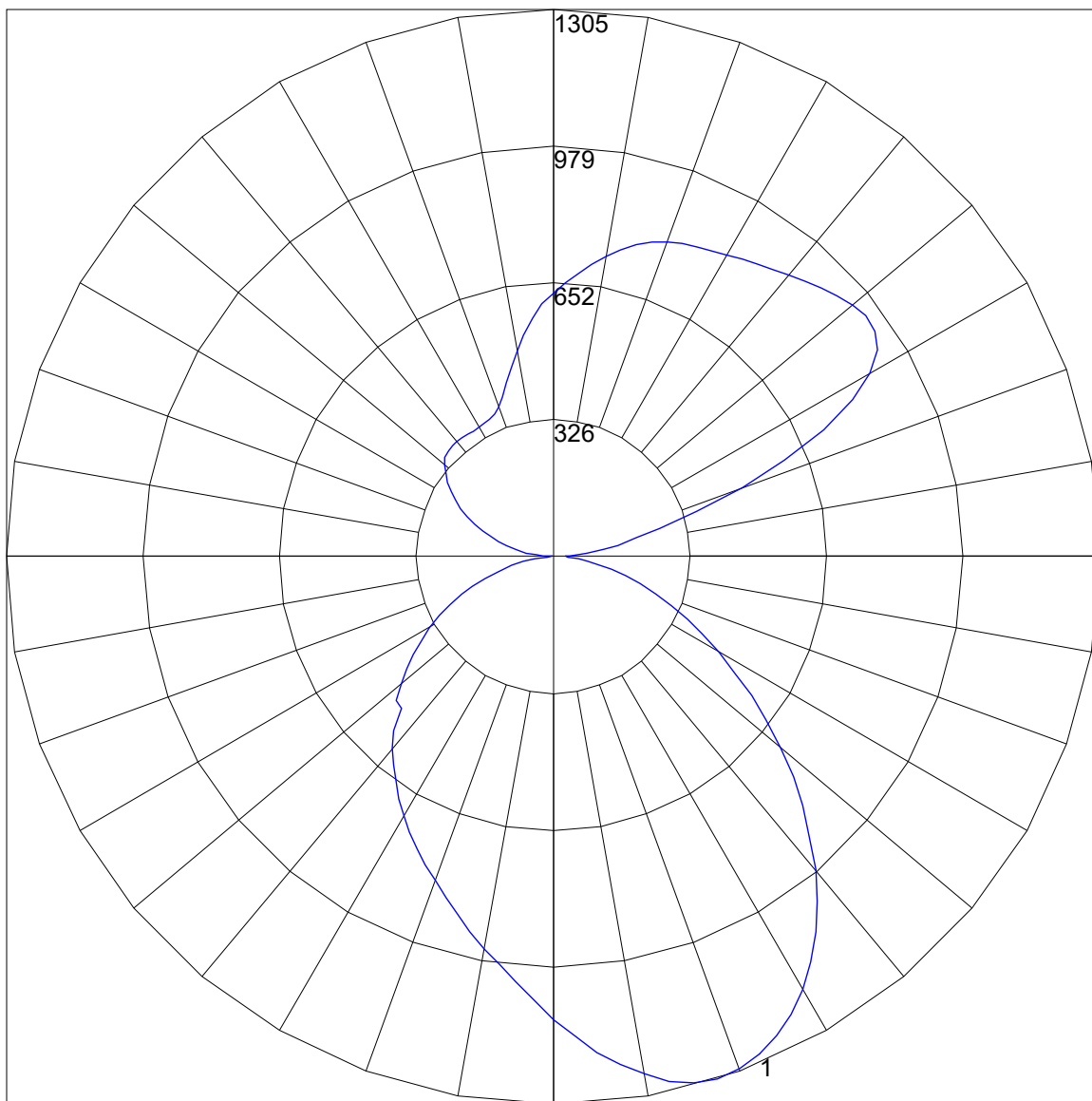
Effective Floor Cavity Reflectance 0.20

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	109	109	109	109	101	101	101	101	87	87	87	74	74	74	62	62	62	57
1	99	95	91	88	92	89	85	82	77	74	72	65	64	62	55	54	53	48
2	91	83	77	72	84	78	72	68	67	63	60	58	55	52	49	47	45	40
3	83	73	66	60	77	68	62	57	59	54	50	51	47	44	43	40	38	34
4	76	65	57	51	70	61	54	48	53	47	43	45	41	38	39	36	33	29
5	70	58	50	44	64	54	47	41	47	41	37	41	36	33	35	31	29	26
6	64	52	44	38	59	49	41	36	43	37	32	37	32	29	32	28	25	23
7	59	47	39	33	55	44	37	32	39	33	29	34	29	26	29	25	22	20
8	55	43	35	29	51	40	33	28	35	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	32	27	23	28	24	20	25	21	18	16
10	48	36	28	24	45	34	27	23	30	24	21	26	22	19	23	19	17	15

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.)