

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-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.010 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-V-835-ASY-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 54.3 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 55.5 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

[_ABSOLUTELUMENS]5955

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5959
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	54.3
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	23232	24058	17485
55	19717	21847	15596
65	16280	18915	13788
75	13580	16076	11572
85	13552	16014	9624

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES

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	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990
2.5	1470.400	1468.000	1460.990	1465.070	1460.890	1452.310	1451.370	1454.090	1451.480	1429.310
5.0	1525.610	1520.800	1512.960	1511.180	1499.260	1484.100	1474.900	1467.370	1455.870	1421.990
7.5	1572.250	1567.960	1556.460	1551.960	1535.020	1510.350	1493.410	1476.890	1455.660	1410.900
10.0	1610.940	1607.910	1595.250	1584.800	1562.630	1531.150	1506.690	1481.700	1450.430	1394.700
12.5	1648.580	1643.560	1626.830	1613.340	1585.420	1545.480	1514.110	1480.860	1440.390	1374.200
15.0	1669.910	1664.580	1649.520	1633.840	1594.310	1554.160	1515.470	1474.900	1426.380	1349.940
17.5	1678.070	1672.110	1657.990	1641.580	1609.060	1557.610	1510.560	1462.350	1405.360	1319.720
20.0	1670.750	1665.420	1653.180	1638.230	1605.500	1553.530	1500.000	1444.370	1381.000	1290.650
22.5	1651.720	1646.490	1636.030	1622.130	1591.700	1539.310	1485.040	1419.270	1349.520	1254.260
25.0	1618.680	1616.580	1609.160	1596.930	1569.010	1516.520	1461.930	1391.560	1316.590	1215.260
27.5	1583.120	1575.070	1569.530	1561.170	1535.440	1488.280	1433.070	1357.890	1278.110	1170.820
30.0	1530.840	1524.780	1523.310	1517.040	1496.130	1448.130	1394.280	1317.950	1232.830	1126.280
32.5	1473.120	1469.360	1469.250	1466.740	1452.630	1407.560	1351.300	1275.280	1187.450	1075.770
35.0	1403.690	1407.350	1405.990	1413.410	1400.130	1355.590	1301.420	1229.060	1137.880	1026.840
37.5	1331.540	1332.480	1338.130	1348.790	1338.340	1300.900	1246.110	1173.850	1083.820	975.700
40.0	1253.740	1256.250	1262.940	1278.420	1274.660	1242.550	1190.060	1120.320	1029.450	926.240
42.5	1166.740	1173.120	1185.460	1205.330	1202.400	1176.150	1127.010	1061.760	973.300	869.150
45.0	1082.050	1086.860	1104.630	1123.660	1130.880	1110.170	1089.680	998.600	911.710	814.360
47.5	1001.740	1001.840	1019.830	1044.510	1056.740	1041.470	995.880	935.440	853.260	758.100
50.0	910.560	911.290	933.980	961.170	975.910	970.580	925.300	866.850	791.770	701.320
52.5	826.280	830.360	853.670	877.830	903.550	897.700	854.090	801.180	731.650	646.530
55.0	744.930	749.320	770.540	802.860	826.700	824.080	786.860	735.410	671.730	589.230
57.5	662.110	671.210	689.820	723.590	748.060	745.760	713.350	669.430	610.350	535.900
60.0	588.290	594.770	613.070	642.870	670.270	672.880	645.480	602.510	553.780	485.290
62.5	514.250	524.610	544.370	570.200	596.760	599.370	576.990	538.410	494.490	424.290
65.0	453.190	456.850	474.620	498.470	521.360	531.720	513.420	474.620	436.350	383.820
67.5	392.330	393.380	413.140	430.810	453.290	464.480	447.960	415.130	383.440	335.560
70.0	335.660	337.960	352.180	371.210	392.430	399.960	388.360	358.560	329.490	285.740
72.5	279.820	281.390	295.190	308.360	329.490	336.810	323.630	303.030	282.540	240.830
75.0	231.510	234.230	244.370	258.170	271.140	276.990	269.570	250.540	229.310	197.270
77.5	184.660	189.470	195.850	208.610	218.960	222.830	217.290	202.960	186.860	158.520
80.0	144.720	147.540	152.880	161.660	168.040	170.650	166.160	157.790	146.080	120.370
82.5	108.120	109.590	113.770	118.890	124.750	126.210	123.490	118.370	113.350	87.390
85.0	77.800	76.730	79.700	90.970	91.350	92.510	90.200	86.990	72.000	55.250
87.5	46.700	48.790	48.230	50.670	52.750	52.690	50.300	45.290	40.240	26.060
90.0	36.000	36.000	34.000	30.000	26.000	20.000	14.000	9.000	4.000	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

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES

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	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990
2.5	1428.890	1412.260	1393.550	1380.060	1373.780	1368.350	1358.520	1358.100	1362.280
5.0	1411.950	1387.590	1360.300	1340.850	1331.750	1321.920	1307.910	1309.890	1306.860
7.5	1389.780	1357.580	1323.380	1300.800	1289.290	1277.060	1260.960	1263.990	1261.270
10.0	1363.850	1324.220	1288.040	1261.900	1247.780	1233.140	1220.700	1220.180	1220.910
12.5	1333.940	1288.250	1249.660	1222.690	1207.210	1191.740	1176.150	1176.780	1178.660
15.0	1302.990	1253.320	1213.070	1183.370	1167.270	1150.120	1122.510	1135.270	1136.210
17.5	1266.500	1214.110	1174.270	1142.690	1124.920	1109.340	1097.520	1095.740	1097.940
20.0	1228.120	1174.690	1133.390	1103.900	1085.910	1071.170	1061.550	1059.250	1059.250
22.5	1185.250	1132.340	1092.400	1064.370	1047.120	1036.040	1024.430	1024.740	1023.700
25.0	1142.380	1092.080	1047.960	1022.230	1007.800	996.620	987.520	987.000	988.560
27.5	1098.040	1048.900	1005.400	983.860	970.680	959.600	950.820	952.800	953.010
30.0	1050.780	1002.580	962.630	942.450	931.990	919.860	913.700	900.940	917.460
32.5	1003.200	956.570	917.980	902.300	890.480	881.590	877.100	878.250	881.280
35.0	955.940	906.900	873.020	860.370	850.750	843.220	841.540	841.650	842.380
37.5	903.130	859.530	832.030	817.490	809.020	804.320	801.500	803.270	805.160
40.0	852.730	811.740	784.870	775.350	767.090	763.430	763.640	763.960	767.510
42.5	800.240	763.960	740.120	732.590	726.940	724.740	726.000	725.370	726.940
45.0	750.150	715.750	694.940	688.040	686.580	682.920	685.530	688.980	658.350
47.5	697.240	666.500	648.200	644.230	641.610	640.670	644.440	648.410	651.230
50.0	644.330	617.040	602.930	600.310	598.950	599.270	602.720	607.110	608.570
52.5	593.200	569.150	556.500	554.510	554.300	554.820	560.470	566.120	567.790
55.0	542.590	521.470	511.740	508.500	509.340	512.370	520.320	521.780	523.460
57.5	492.500	473.890	466.780	462.600	465.940	468.450	476.610	479.540	481.000
60.0	435.260	415.370	412.560	414.850	413.620	416.770	427.400	415.120	438.130
62.5	394.470	381.180	376.530	376.470	378.360	384.520	390.150	393.190	393.540
65.0	346.490	336.570	332.790	333.140	337.890	343.240	346.470	350.510	349.460
67.5	302.570	291.970	287.140	288.120	295.290	297.950	303.170	305.090	302.450
70.0	257.220	249.960	246.640	247.800	251.090	255.480	258.540	259.980	263.880
72.5	216.780	210.680	205.110	207.520	210.450	213.690	214.920	216.710	217.520
75.0	174.780	169.460	165.620	167.580	169.840	170.690	155.470	171.860	175.000
77.5	137.300	132.520	130.320	129.620	130.360	131.940	131.910	131.450	131.360
80.0	100.620	97.510	96.220	95.380	94.310	91.910	92.490	91.820	92.390

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES****CANDELA TABULATION - (Cont.)**

82.5	69.110	65.050	62.150	60.410	60.260	58.960	58.600	57.570	55.780
85.0	40.850	36.840	33.750	30.310	28.670	26.470	24.450	22.910	20.370
87.5	13.430	10.380	8.180	6.210	4.420	2.950	1.900	1.410	1.280
90.0	4.000	9.000	13.000	18.000	21.000	24.000	26.000	27.000	27.000
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-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	523.65	N.A.	8.80
0-30	1108.65	N.A.	18.60
0-40	1794.64	N.A.	30.10
0-60	3044.88	N.A.	51.10
0-80	3678.02	N.A.	61.70
0-90	3745.07	N.A.	62.80
10-90	3610.09	N.A.	60.60
20-40	1270.99	N.A.	21.30
20-50	1948.65	N.A.	32.70
40-70	1658.58	N.A.	27.80
60-80	633.14	N.A.	10.60
70-80	224.79	N.A.	3.80
80-90	67.05	N.A.	1.10
90-110	267.68	N.A.	4.50
90-120	619.90	N.A.	10.40
90-130	1023.89	N.A.	17.20
90-150	1730.86	N.A.	29.00
90-180	2214.18	N.A.	37.20
110-180	1946.5	N.A.	32.70
0-180	5959.25	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	134.98
10-20	388.67
20-30	584.99
30-40	686.00
40-50	677.66
50-60	572.57
60-70	408.35
70-80	224.79
80-90	67.05
90-100	63.56
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-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

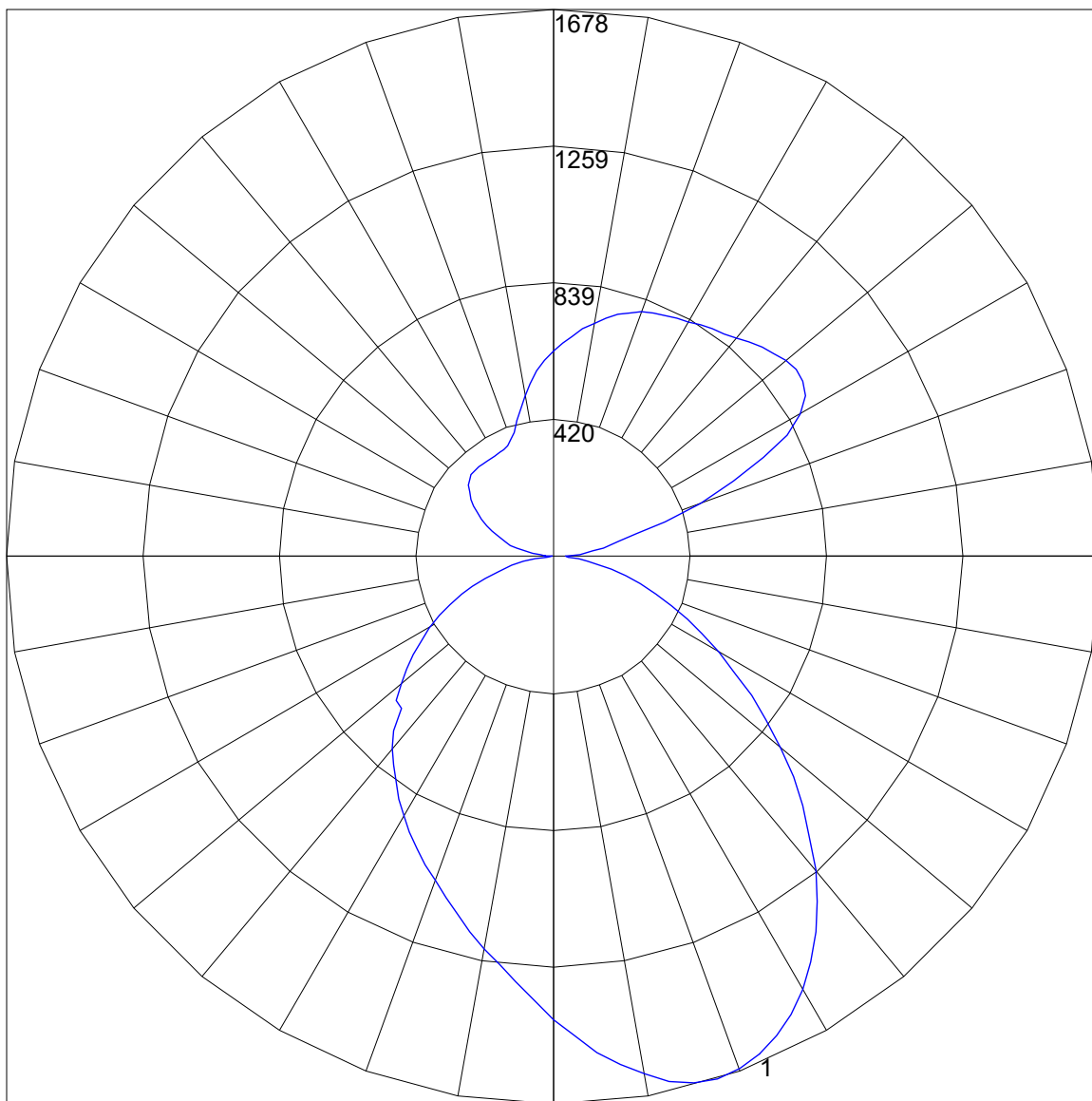
Effective Floor Cavity Reflectance 0.20

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	79	79	79	68	68	68	63
1	101	96	92	89	94	91	87	84	80	77	75	69	68	66	60	59	58	53
2	92	84	78	73	86	79	74	69	70	66	62	61	58	55	53	51	49	45
3	84	74	67	61	78	70	63	58	62	56	52	54	50	47	47	44	41	38
4	77	66	58	52	72	62	55	49	55	49	45	48	44	40	42	39	36	33
5	71	59	50	44	66	55	48	42	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	42	37	44	38	34	39	34	31	35	31	28	25
7	60	48	40	34	56	45	38	33	40	34	30	36	31	27	32	28	25	22
8	56	43	36	30	52	41	34	29	37	31	27	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	26	22	28	23	20	25	21	18	16

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-835-ASY-DAO-ITL89599-KPL2008-3.010.IES

POLAR GRAPH



Maximum Candela = 1678.07 Located At Horizontal Angle = 0, Vertical Angle = 17.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)