

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-V-835-ASY-DAO-ITL89599-KPL2008-3.013.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.013 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-V-835-ASY-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 50.4 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 51.8 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]5503

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5508
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	50.4
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

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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	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	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

IES INDOOR REPORT

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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	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-S-V-835-ASY-DAO-ITL89599-KPL2008-3.013.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	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-V-835-ASY-DAO-ITL89599-KPL2008-3.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	523.65	N.A.	9.50
0-30	1108.65	N.A.	20.10
0-40	1794.64	N.A.	32.60
0-60	3044.88	N.A.	55.30
0-80	3678.02	N.A.	66.80
0-90	3745.07	N.A.	68.00
10-90	3610.09	N.A.	65.50
20-40	1270.99	N.A.	23.10
20-50	1948.65	N.A.	35.40
40-70	1658.58	N.A.	30.10
60-80	633.14	N.A.	11.50
70-80	224.79	N.A.	4.10
80-90	67.05	N.A.	1.20
90-110	213.55	N.A.	3.90
90-120	493.83	N.A.	9.00
90-130	815.30	N.A.	14.80
90-150	1377.88	N.A.	25.00
90-180	1762.49	N.A.	32.00
110-180	1548.94	N.A.	28.10
0-180	5507.56	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	51.12
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-V-835-ASY-DAO-ITL89599-KPL2008-3.013.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

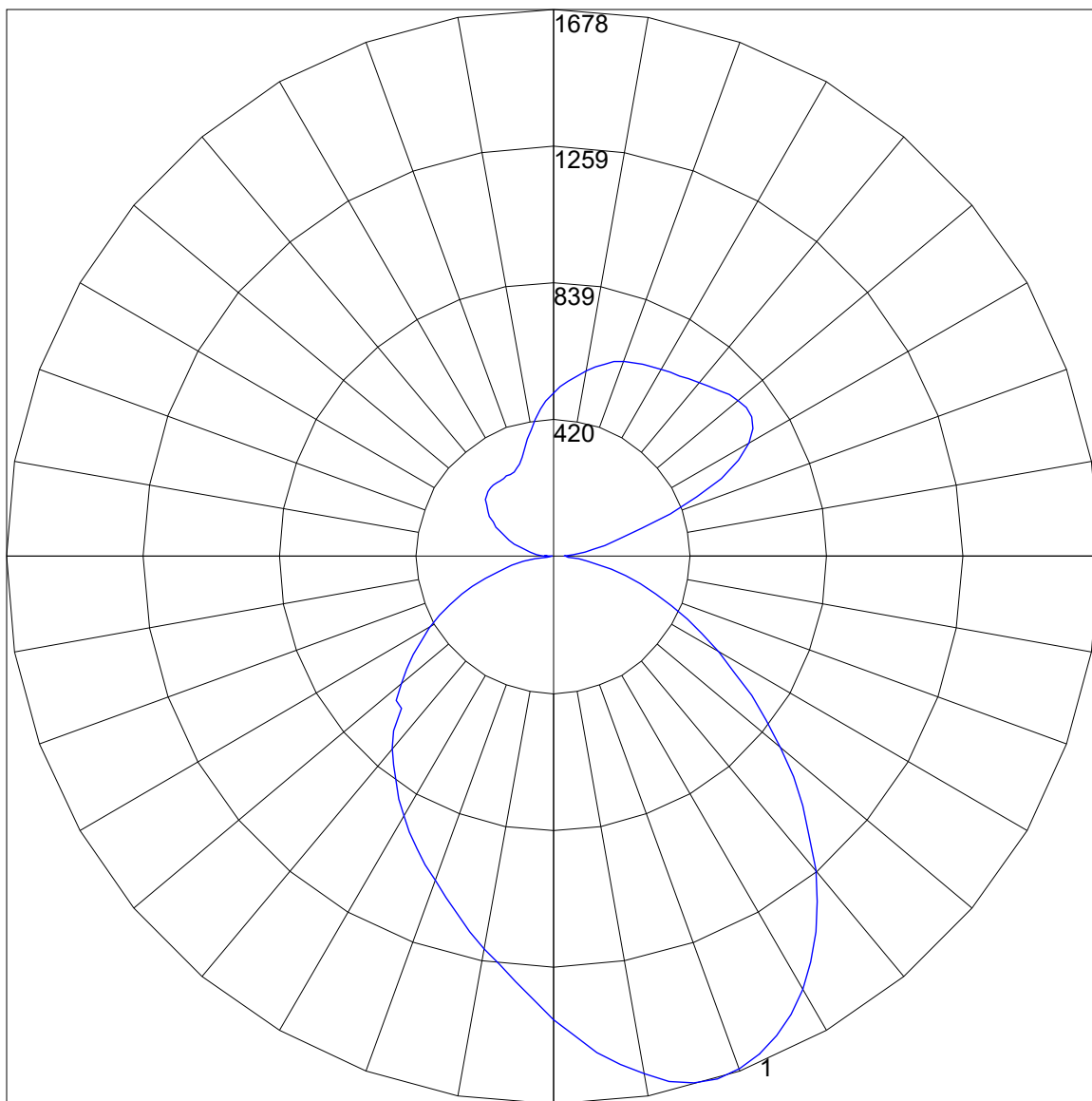
Effective Floor Cavity Reflectance 0.20

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	111	111	111	111	105	105	105	105	93	93	93	83	83	83	73	73	73	68
1	102	97	94	90	96	92	89	85	82	79	77	73	71	69	64	63	62	57
2	93	85	79	74	87	81	75	70	72	68	64	64	61	58	57	54	52	48
3	85	75	68	62	80	71	64	59	64	58	54	57	53	49	50	47	44	41
4	78	67	58	52	73	63	56	50	57	51	46	51	46	42	45	41	38	35
5	71	59	51	45	67	57	49	43	51	45	40	46	41	37	41	37	33	31
6	66	53	45	39	62	51	43	38	46	40	35	41	36	32	37	33	30	27
7	61	48	40	34	57	46	39	33	42	35	31	38	32	29	34	30	26	24
8	57	44	36	31	53	42	35	30	38	32	28	34	29	26	31	27	24	21
9	53	40	33	27	50	39	31	27	35	29	25	32	27	23	29	24	21	19
10	50	37	30	25	47	35	29	24	32	26	22	29	24	21	27	22	19	18

IES INDOOR REPORT

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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.)