

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-RG-4FT-H-H-835-ASY-TG-ITL90352 ITL89599.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90352 ITL89599.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/04/18

[ISSUEDATE]05/30/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-RG-4ft-H-H-835-ASY-F

[_INPUT_ELECTRICAL]120.0 VOLTS, 56.4 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 57.9 WATTS

[_ABSOLUTE]LUMENS]5592

[OTHER]see www.finelite.com for source files ITL90352 and ITL89599. 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

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5592
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	56.4
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)	4.00 ft
Luminous Width (90-270)	0.18 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14276	10227	8048
55	12845	8193	6278
65	11370	6272	4777
75	9671	4835	4288
85	7722	3861	3522

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	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080
2.5	1187.525	1187.525	1186.747	1186.747	1185.970	1185.970	1185.192	1185.192	1184.414	1184.414
5.0	1182.081	1181.303	1180.526	1178.970	1177.415	1175.860	1173.527	1171.971	1170.416	1169.638
7.5	1172.749	1171.194	1169.638	1164.972	1160.306	1155.640	1151.751	1147.863	1146.308	1143.975
10.0	1159.528	1155.640	1150.974	1144.752	1137.753	1129.976	1122.199	1115.978	1112.867	1109.756
12.5	1143.197	1135.420	1127.643	1118.311	1107.423	1096.536	1085.648	1076.316	1071.650	1066.984
15.0	1122.199	1111.312	1100.424	1087.204	1072.428	1057.652	1042.876	1030.433	1024.211	1017.990
17.5	1098.869	1084.871	1070.872	1052.208	1032.766	1014.101	996.214	979.883	972.106	964.329
20.0	1071.650	1053.763	1036.654	1014.101	989.993	967.440	945.665	927.001	917.668	908.336
22.5	1038.987	1018.767	998.548	972.106	944.110	917.668	892.005	870.229	859.342	849.232
25.0	1005.547	981.438	958.108	927.778	895.893	865.563	836.789	812.681	801.793	790.906
27.5	968.995	941.777	915.335	881.117	845.344	811.903	781.573	755.132	743.467	731.802
30.0	930.111	900.559	871.007	834.456	794.794	758.243	724.802	696.806	685.918	674.253
32.5	887.339	857.009	826.679	787.017	744.245	704.583	668.809	640.035	629.147	618.260
35.0	844.566	812.681	780.018	738.023	692.917	652.478	615.927	585.597	573.932	561.489
37.5	801.016	766.797	733.357	689.807	642.368	600.373	563.822	533.492	521.827	510.161
40.0	755.910	720.914	685.140	640.812	592.596	550.601	514.827	484.498	473.610	461.945
42.5	710.804	675.031	639.257	593.374	544.379	502.385	467.389	438.614	427.727	416.839
45.0	664.921	628.369	591.818	545.935	496.941	455.723	422.283	395.064	384.954	374.844
47.5	618.260	582.486	546.713	500.829	451.835	412.173	380.288	353.847	345.292	336.738
50.0	572.376	536.603	500.829	455.723	408.285	369.400	339.848	315.740	307.963	300.186
52.5	529.603	492.275	455.723	412.173	366.290	330.516	303.297	281.522	274.523	267.524
55.0	485.275	447.947	410.618	369.400	326.628	292.410	268.301	248.859	243.415	237.194
57.5	441.725	405.174	368.623	328.961	287.743	256.636	235.639	218.529	213.863	208.420
60.0	398.952	363.179	327.405	290.076	251.970	223.196	205.309	190.533	185.867	181.201
62.5	356.957	322.739	287.743	252.748	217.752	192.866	176.534	164.092	159.425	155.537
65.0	316.518	283.077	250.415	217.752	185.867	163.314	149.316	137.650	135.317	132.984
67.5	275.300	244.193	213.863	185.089	156.315	137.650	127.540	119.763	118.986	118.208
70.0	237.194	208.420	178.868	153.204	129.096	113.542	108.098	104.210	103.432	102.654
72.5	200.643	173.424	146.982	125.207	105.765	94.878	91.767	89.434	87.878	87.101
75.0	164.869	139.983	115.875	99.544	86.323	78.546	76.213	73.880	73.102	73.102
77.5	132.984	110.431	87.101	75.435	67.659	62.992	61.437	59.882	59.104	59.104
80.0	101.877	82.435	62.215	54.438	50.550	48.216	46.661	45.883	45.883	45.883
82.5	71.547	57.549	43.550	38.884	36.551	34.218	33.440	32.663	32.663	32.663
85.0	44.328	35.774	27.219	24.108	22.553	21.775	20.997	20.220	20.220	20.220
87.5	18.664	15.554	11.665	10.110	9.332	9.332	8.555	8.555	8.555	8.555
90.0	0.000	0.000	0.000	0.000	9.332	15.554	10.888	6.999	3.111	0.000
92.5	60.659	61.437	60.659	57.549	52.105	48.994	46.661	42.773	37.329	18.664
95.0	121.319	122.874	121.319	117.430	113.542	109.654	104.210	94.878	78.546	45.883
97.5	184.311	185.867	183.534	183.534	183.534	181.201	171.091	151.649	119.763	74.658
100.0	238.749	242.638	247.304	258.969	267.524	263.635	244.971	210.753	160.203	104.210
102.5	306.408	314.962	330.516	354.624	367.845	356.957	322.739	267.524	197.532	132.984
105.0	398.952	415.284	447.169	476.721	482.165	457.279	400.508	319.629	232.528	162.536
107.5	542.046	560.711	594.151	614.371	609.705	563.822	475.166	365.512	265.191	192.866
110.0	724.802	734.135	755.132	763.687	738.023	658.699	537.380	405.174	296.298	223.196
112.5	905.225	910.669	921.557	909.114	850.787	734.912	585.597	440.947	326.628	253.525
115.0	1080.204	1078.649	1071.650	1028.877	936.333	792.461	625.259	472.832	357.735	285.410
117.5	1220.965	1209.300	1184.414	1118.311	997.770	832.123	655.588	502.385	388.842	318.073
120.0	1321.287	1304.955	1263.738	1176.637	1035.099	859.342	682.030	531.159	420.728	349.958
122.5	1385.835	1365.615	1311.955	1208.522	1057.652	879.562	705.360	559.933	452.613	381.843
125.0	1416.164	1394.389	1332.952	1221.743	1069.317	895.893	727.913	588.708	483.720	413.728
127.5	1422.386	1399.833	1334.507	1222.521	1074.761	909.891	751.244	617.482	514.827	444.836
130.0	1411.498	1388.945	1324.398	1217.077	1077.094	923.112	775.352	647.034	547.490	477.499
132.5	1391.278	1371.836	1310.399	1208.522	1079.427	937.110	798.682	677.364	580.153	510.161

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

135.0	1368.726	1349.283	1292.512	1199.968	1082.538	951.886	822.013	706.138	612.816	543.602
137.5	1346.173	1327.508	1276.181	1192.969	1087.204	967.440	846.899	735.690	644.701	577.042
140.0	1322.064	1307.288	1262.183	1187.525	1091.870	982.994	871.007	765.242	676.586	609.705
142.5	1302.622	1290.179	1250.517	1184.414	1097.314	998.548	895.115	794.016	709.249	642.368
145.0	1286.291	1275.403	1239.630	1180.526	1103.535	1014.879	918.446	821.235	739.578	675.031
147.5	1271.515	1261.405	1230.298	1177.415	1109.756	1029.655	940.221	847.677	769.908	706.916
150.0	1255.184	1247.407	1220.965	1175.082	1115.978	1043.653	958.886	871.785	798.682	739.578
152.5	1241.963	1234.964	1213.189	1174.304	1120.644	1054.541	975.995	894.338	825.901	769.908
155.0	1231.075	1224.076	1205.412	1171.194	1122.977	1062.318	989.215	913.780	850.787	798.682
157.5	1220.188	1213.189	1196.857	1165.750	1120.644	1065.428	999.325	931.667	874.896	825.901
160.0	1205.412	1198.413	1182.859	1155.640	1115.200	1065.428	1006.324	945.665	895.115	850.787
162.5	1185.970	1179.748	1165.750	1140.864	1104.313	1061.540	1010.213	958.108	913.780	873.340
165.0	1161.084	1154.862	1141.642	1120.644	1090.314	1053.763	1010.990	966.662	929.334	893.560
167.5	1131.532	1126.088	1115.200	1097.314	1072.428	1042.876	1008.657	972.106	940.999	910.669
170.0	1097.314	1092.647	1084.093	1070.095	1052.208	1029.655	1002.436	974.439	950.331	923.890
172.5	1062.318	1059.207	1052.985	1043.653	1029.655	1012.546	993.881	973.662	954.997	934.777
175.0	1024.989	1022.656	1017.990	1012.546	1003.991	993.881	982.216	968.995	956.553	944.110
177.5	986.882	986.105	984.549	981.438	978.328	973.662	967.440	961.219	954.997	948.776
180.0	950.331	950.331	950.331	950.331	950.331	950.331	950.331	950.331	950.331	950.331

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080	1189.080
2.5	1184.414	1185.192	1185.192	1185.970	1185.970	1186.747	1186.747	1187.525	1187.525
5.0	1170.416	1171.971	1173.527	1175.860	1177.415	1178.970	1180.526	1181.303	1182.081
7.5	1146.308	1147.863	1151.751	1155.640	1160.306	1164.972	1169.638	1171.194	1172.749
10.0	1112.867	1115.978	1122.199	1129.976	1137.753	1144.752	1150.974	1155.640	1159.528
12.5	1071.650	1076.316	1085.648	1096.536	1107.423	1118.311	1127.643	1135.420	1143.197
15.0	1024.211	1030.433	1042.876	1057.652	1072.428	1087.204	1100.424	1111.312	1122.199
17.5	972.106	979.883	996.214	1014.101	1032.766	1052.208	1070.872	1084.871	1098.869
20.0	917.668	927.001	945.665	967.440	989.993	1014.101	1036.654	1053.763	1071.650
22.5	859.342	870.229	892.005	917.668	944.110	972.106	998.548	1018.767	1038.987
25.0	801.793	812.681	836.789	865.563	895.893	927.778	958.108	981.438	1005.547
27.5	743.467	755.132	781.573	811.903	845.344	881.117	915.335	941.777	968.995
30.0	685.918	696.806	724.802	758.243	794.794	834.456	871.007	900.559	930.111
32.5	629.147	640.035	668.809	704.583	744.245	787.017	826.679	857.009	887.339
35.0	573.932	585.597	615.927	652.478	692.917	738.023	780.018	812.681	844.566
37.5	521.827	533.492	563.822	600.373	642.368	689.807	733.357	766.797	801.016
40.0	473.610	484.498	514.827	550.601	592.596	640.812	685.140	720.914	755.910
42.5	427.727	438.614	467.389	502.385	544.379	593.374	639.257	675.031	710.804
45.0	384.954	395.064	422.283	455.723	496.941	545.935	591.818	628.369	664.921
47.5	345.292	353.847	380.288	412.173	451.835	500.829	546.713	582.486	618.260
50.0	307.963	315.740	339.848	369.400	408.285	455.723	500.829	536.603	572.376
52.5	274.523	281.522	303.297	330.516	366.290	412.173	455.723	492.275	529.603
55.0	243.415	248.859	268.301	292.410	326.628	369.400	410.618	447.947	485.275
57.5	213.863	218.529	235.639	256.636	287.743	328.961	368.623	405.174	441.725
60.0	185.867	190.533	205.309	223.196	251.970	290.076	327.405	363.179	398.952
62.5	159.425	164.092	176.534	192.866	217.752	252.748	287.743	322.739	356.957
65.0	135.317	137.650	149.316	163.314	185.867	217.752	250.415	283.077	316.518
67.5	118.986	119.763	127.540	137.650	156.315	185.089	213.863	244.193	275.300
70.0	103.432	104.210	108.098	113.542	129.096	153.204	178.868	208.420	237.194
72.5	87.878	89.434	91.767	94.878	105.765	125.207	146.982	173.424	200.643
75.0	73.102	73.880	76.213	78.546	86.323	99.544	115.875	139.983	164.869
77.5	59.104	59.882	61.437	62.992	67.659	75.435	87.101	110.431	132.984
80.0	45.883	45.883	46.661	48.216	50.550	54.438	62.215	82.435	101.877

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-H-835-ASY-TG-ITL90352 ITL89599.003.IES****CANDELA TABULATION - (Cont.)**

82.5	32.663	32.663	33.440	34.218	36.551	38.884	43.550	57.549	71.547
85.0	20.220	20.220	20.997	21.775	22.553	24.108	27.219	35.774	44.328
87.5	8.555	8.555	8.555	9.332	9.332	10.110	11.665	15.554	18.664
90.0	3.111	6.999	10.110	13.998	16.331	18.664	20.220	20.997	20.997
92.5	24.108	25.664	28.774	31.107	33.440	34.218	34.996	35.774	35.774
95.0	50.550	52.883	56.771	61.437	63.770	64.548	64.548	62.992	61.437
97.5	76.213	79.324	85.545	92.545	97.211	99.544	101.099	99.544	98.766
100.0	102.654	106.543	113.542	122.097	128.318	133.762	137.650	136.873	136.873
102.5	129.873	136.095	144.649	153.982	161.758	167.202	171.091	171.868	171.868
105.0	156.315	164.869	177.312	190.533	198.310	202.198	204.531	203.753	203.753
107.5	184.311	192.088	204.531	219.307	229.417	234.861	238.749	237.194	235.639
110.0	211.530	216.196	230.972	248.859	260.524	265.968	270.634	270.634	270.634
112.5	238.749	240.305	256.636	277.634	291.632	299.409	304.853	304.853	304.853
115.0	265.968	264.413	280.744	304.075	321.184	332.071	339.848	340.626	341.404
117.5	293.187	286.188	303.297	328.961	348.403	362.401	372.511	374.066	375.622
120.0	321.184	309.519	325.850	351.514	372.511	389.620	403.619	405.174	407.507
122.5	348.403	332.071	346.848	372.511	395.064	415.284	431.615	433.948	437.059
125.0	377.177	356.180	368.623	391.953	415.284	439.392	458.056	461.167	464.278
127.5	405.174	378.733	388.065	409.062	433.171	459.612	480.609	485.275	489.942
130.0	433.171	401.285	406.729	424.616	447.947	475.166	497.718	505.495	512.494
132.5	462.723	423.838	425.394	440.170	460.390	486.831	508.606	518.716	528.048
135.0	491.497	446.391	443.280	454.168	472.055	496.163	516.383	526.493	535.825
137.5	521.049	469.722	461.945	467.389	481.387	503.162	521.827	530.381	538.936
140.0	551.379	495.385	481.387	482.165	491.497	509.384	524.937	532.714	540.491
142.5	582.486	524.160	503.940	496.941	500.829	514.827	526.493	532.714	538.936
145.0	615.149	554.489	528.048	513.272	510.161	520.271	528.048	532.714	537.380
147.5	647.034	585.597	552.156	528.826	520.271	525.715	531.159	534.270	537.380
150.0	678.141	614.371	576.265	545.935	531.937	534.270	535.825	537.380	538.158
152.5	709.249	646.256	602.706	566.155	545.935	543.602	541.269	541.269	541.269
155.0	739.578	678.141	632.258	591.818	566.932	557.600	549.823	548.268	545.935
157.5	769.130	708.471	664.143	624.481	595.707	577.820	563.822	559.933	556.822
160.0	798.682	743.467	700.694	662.588	630.703	605.817	585.597	579.375	573.154
162.5	826.679	777.685	737.245	699.916	668.809	643.923	622.926	612.816	603.484
165.0	853.898	812.681	774.574	738.023	708.471	687.474	669.587	659.477	650.145
167.5	877.229	843.011	809.570	776.907	750.466	730.246	713.915	706.138	699.139
170.0	897.448	870.229	844.566	818.902	797.127	777.685	762.131	754.354	747.355
172.5	915.335	895.893	877.229	859.342	843.011	829.012	817.347	811.903	805.682
175.0	930.889	917.668	906.003	894.338	884.228	875.673	868.674	864.786	861.675
177.5	942.554	935.555	930.111	924.667	920.779	916.891	913.002	911.447	909.114
180.0	950.331	950.331	950.331	950.331	950.331	950.331	950.331	950.331	950.331

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-H-835-ASY-TG-ITL90352 ITL89599.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	410.13	N.A.	7.30
0-30	817.31	N.A.	14.60
0-40	1244.87	N.A.	22.30
0-60	1922.09	N.A.	34.40
0-80	2218.72	N.A.	39.70
0-90	2248.31	N.A.	40.20
10-90	2137.4	N.A.	38.20
20-40	834.74	N.A.	14.90
20-50	1216.11	N.A.	21.70
40-70	871.58	N.A.	15.60
60-80	296.63	N.A.	5.30
70-80	102.27	N.A.	1.80
80-90	29.60	N.A.	0.50
90-110	401.87	N.A.	7.20
90-120	934.23	N.A.	16.70
90-130	1544.84	N.A.	27.60
90-150	2613.38	N.A.	46.70
90-180	3343.9	N.A.	59.80
110-180	2942.04	N.A.	52.60
0-180	5592.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	110.91
10-20	299.22
20-30	407.18
30-40	427.57
40-50	381.37
50-60	295.85
60-70	194.36
70-80	102.27
80-90	29.60
90-100	93.35
100-110	308.51
110-120	532.36
120-130	610.61
130-140	574.10
140-150	494.45
150-160	387.59
160-170	253.48
170-180	89.45

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-H-835-ASY-TG-ITL90352 ITL89599.003.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

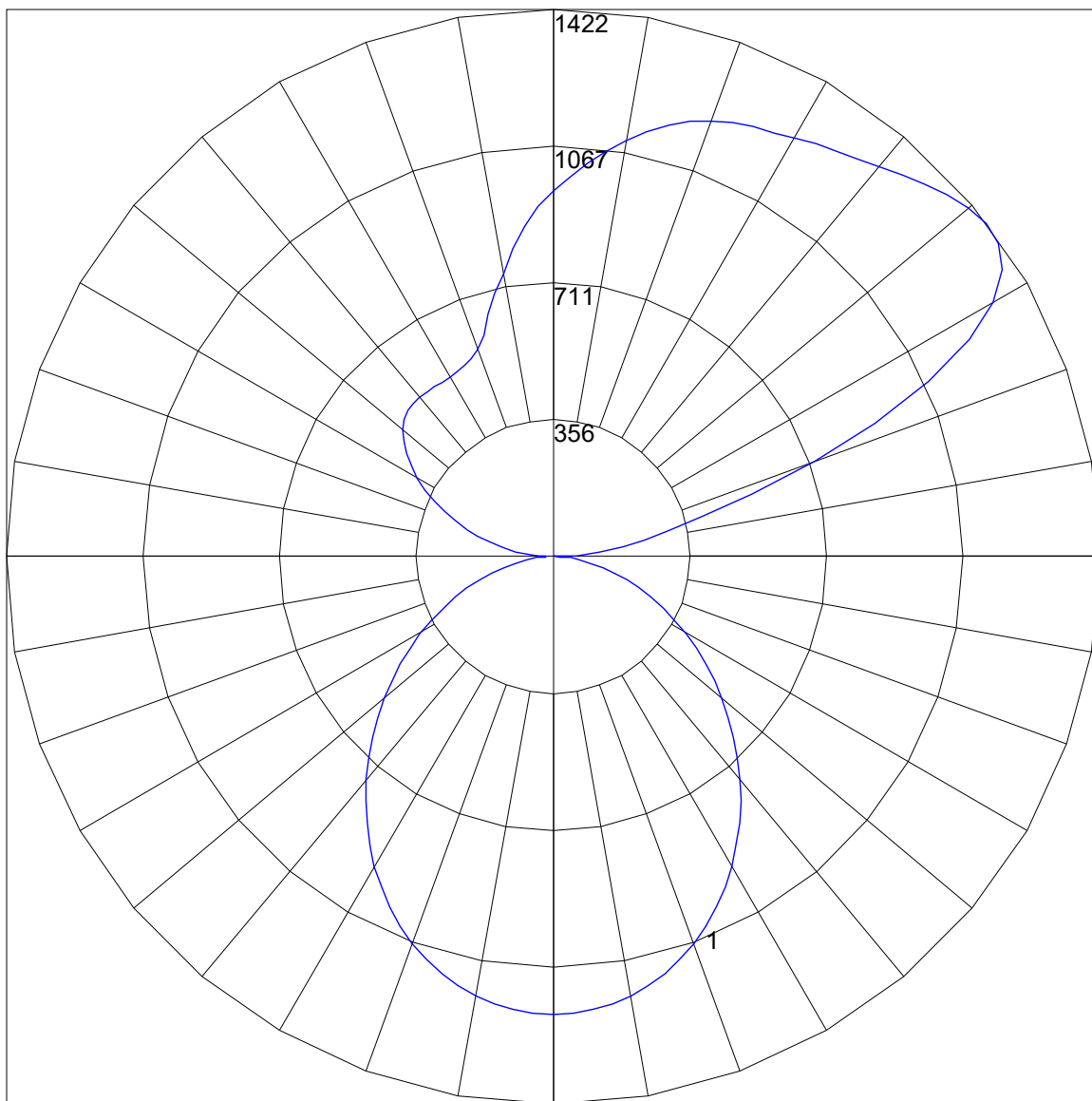
Effective Floor Cavity Reflectance 0.20

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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	42	41	41	35
2	88	81	75	70	80	74	69	65	61	57	54	49	46	44	38	36	35	30
3	80	71	64	59	73	65	59	55	54	50	46	44	41	38	34	32	30	26
4	74	63	56	50	67	58	52	47	48	44	40	39	36	33	31	28	26	23
5	68	57	49	43	62	52	45	40	43	38	35	35	32	29	28	25	23	20
6	63	51	43	38	57	47	40	35	39	34	30	32	28	26	25	23	21	18
7	58	46	39	33	53	43	36	31	36	31	27	29	26	23	23	21	19	16
8	54	42	35	29	49	39	32	28	33	28	24	27	23	20	22	19	17	14
9	50	38	31	26	46	36	29	25	30	25	22	25	21	18	20	17	15	13
10	47	35	28	24	43	33	27	22	28	23	20	23	19	17	19	16	14	12

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POLAR GRAPH



Maximum Candela = 1422.386 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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