

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-4-ID-RG-4FT-H-H-835-ASYTG-F-ITL90353 ITL89988.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353 ITL89988.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/03/18

[ISSUEDATE]06/05/18

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 56.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 57.8 WATTS

[_ABSOLUTE]LUMENS]6155

[OTHER]see www.finelite.com for source files ITL90353 and ITL89988. 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	6155
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	56.6
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)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8004	7315	6779
55	7460	6444	5743
65	6785	5340	4439
75	5915	3717	2788
85	4319	2392	2232

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	1154.044	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043
2.5	1151.746	1151.406	1151.065	1151.235	1151.576	1151.746	1151.746	1151.746	1151.746	1151.746
5.0	1146.386	1146.045	1145.704	1145.620	1145.620	1145.790	1146.130	1146.470	1146.811	1147.152
7.5	1137.962	1137.622	1137.281	1137.197	1137.197	1137.197	1137.197	1137.112	1136.771	1136.430
10.0	1127.241	1125.540	1123.837	1123.922	1124.603	1124.433	1123.412	1122.305	1120.945	1119.583
12.5	1111.925	1109.883	1107.841	1107.330	1107.330	1106.309	1104.267	1102.140	1099.758	1097.375
15.0	1094.312	1090.909	1087.505	1086.399	1086.059	1084.527	1081.805	1078.911	1075.508	1072.104
17.5	1072.870	1068.785	1064.702	1062.404	1060.702	1057.979	1054.236	1050.578	1047.174	1043.770
20.0	1047.599	1042.834	1038.069	1034.836	1032.113	1028.199	1023.093	1018.499	1015.436	1012.372
22.5	1020.031	1014.925	1009.820	1005.225	1000.801	995.525	989.399	983.953	980.550	977.146
25.0	990.165	984.379	978.593	972.807	967.021	960.384	952.896	946.430	943.026	939.622
27.5	958.001	951.535	945.069	937.836	930.348	922.520	914.352	907.290	903.546	899.802
30.0	922.776	916.308	909.842	901.588	892.739	883.720	874.530	866.533	862.108	857.684
32.5	886.018	879.551	873.084	863.554	853.004	842.623	832.412	823.393	817.947	812.502
35.0	849.260	841.772	834.284	823.733	812.161	800.760	789.528	779.658	773.872	768.086
37.5	810.971	802.462	793.953	782.126	769.192	756.429	743.836	733.115	728.010	722.904
40.0	771.149	762.300	753.451	740.262	725.627	712.014	699.421	688.529	682.743	676.957
42.5	731.328	721.458	711.588	697.889	682.913	668.448	654.494	642.582	636.795	631.010
45.0	690.742	680.191	669.640	655.005	639.008	623.522	608.546	595.953	590.508	585.063
47.5	650.154	638.583	627.011	611.610	594.932	578.766	563.110	550.006	544.561	539.115
50.0	608.036	595.784	583.531	567.194	549.496	532.648	516.652	503.293	497.848	492.402
52.5	565.152	552.559	539.966	523.034	504.655	487.467	471.470	458.111	452.666	447.221
55.0	522.268	509.675	497.082	479.384	459.984	442.286	426.289	412.930	407.484	402.039
57.5	480.149	466.876	453.602	435.478	415.739	397.870	381.873	368.514	363.069	357.623
60.0	437.266	423.652	410.037	391.573	371.492	353.454	337.457	324.098	318.653	313.207
62.5	394.381	380.426	366.473	347.668	327.247	309.209	293.552	280.534	275.428	270.324
65.0	349.965	336.692	323.418	304.784	284.363	266.495	251.179	238.500	233.735	228.971
67.5	307.847	294.233	280.619	261.900	241.479	224.121	209.826	197.914	193.149	188.384
70.0	265.728	252.114	238.500	220.292	200.552	183.704	169.750	158.263	154.179	150.095
72.5	224.376	211.102	197.829	180.471	161.752	145.926	132.992	122.271	118.187	114.102
75.0	186.852	172.897	158.943	142.181	124.484	110.359	99.808	91.469	89.767	88.066
77.5	148.563	135.289	122.016	106.700	90.703	80.663	76.579	73.431	73.090	72.750
80.0	111.805	99.212	86.619	75.558	65.007	59.221	58.200	57.434	57.434	57.434
82.5	79.642	66.709	53.776	47.990	44.586	42.544	41.863	41.352	41.352	41.352
85.0	45.947	37.778	29.610	26.802	25.781	25.101	24.761	24.421	24.080	23.739
87.5	14.550	12.167	9.785	8.934	8.594	8.424	8.424	8.339	7.998	7.658
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	52.108	52.886	52.886	51.330	47.441	45.886	47.441	46.664	38.886	17.110
95.0	110.437	112.770	113.548	111.215	111.993	118.992	122.881	110.437	82.439	44.331
97.5	174.211	176.544	184.321	192.099	204.542	212.320	199.098	165.656	120.548	72.329
100.0	269.872	272.982	283.093	295.536	306.425	300.981	269.872	219.319	159.434	101.105
102.5	364.754	368.643	380.309	396.641	405.974	386.531	338.312	271.427	195.987	131.436
105.0	452.637	458.859	480.636	505.523	510.189	475.969	409.863	321.979	231.763	160.990
107.5	557.631	570.074	607.405	632.293	622.182	569.297	479.080	368.643	265.205	192.099
110.0	702.288	720.954	755.174	763.729	732.620	657.180	540.521	409.085	297.870	223.208
112.5	878.055	887.387	903.720	893.609	842.279	736.508	591.851	445.638	330.534	255.095
115.0	1038.266	1041.377	1045.266	1016.490	937.940	800.282	633.070	479.080	362.421	286.981
117.5	1188.368	1185.257	1172.813	1118.372	1009.490	845.390	665.735	510.189	395.863	318.868
120.0	1308.916	1299.583	1270.029	1191.479	1056.154	874.944	692.178	540.521	427.750	353.866
122.5	1396.021	1378.911	1332.248	1235.032	1081.042	895.942	717.843	570.852	462.748	389.642
125.0	1447.351	1425.575	1365.690	1252.919	1092.707	909.941	739.619	600.406	496.190	423.862
127.5	1465.239	1439.574	1371.912	1253.697	1095.041	922.385	761.395	629.959	530.410	458.859
130.0	1457.462	1431.019	1360.246	1243.586	1094.263	934.051	784.727	659.513	563.075	493.079
132.5	1433.352	1408.465	1340.025	1230.365	1092.707	946.495	808.837	690.622	598.073	528.077

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CANDELA TABULATION - (Cont.)

135.0	1402.243	1378.911	1315.915	1215.588	1091.930	960.494	832.946	720.954	633.070	563.075
137.5	1370.356	1349.358	1291.028	1202.367	1092.707	974.493	857.834	753.618	668.068	598.850
140.0	1338.469	1319.804	1269.252	1191.479	1095.041	989.270	882.721	785.505	703.066	635.404
142.5	1310.471	1294.139	1251.364	1184.479	1099.707	1005.602	909.164	817.392	738.064	671.179
145.0	1288.695	1273.140	1236.587	1179.813	1105.151	1021.934	934.829	849.279	772.284	706.955
147.5	1270.029	1257.586	1226.477	1176.702	1111.373	1039.044	960.494	879.610	806.504	742.730
150.0	1255.252	1243.586	1217.144	1175.147	1119.928	1056.932	985.381	909.164	839.168	778.505
152.5	1242.031	1231.921	1210.144	1174.369	1128.483	1072.486	1006.380	935.606	869.500	811.170
155.0	1229.588	1221.810	1204.700	1176.702	1137.038	1087.263	1025.823	959.716	898.275	843.057
157.5	1222.588	1215.588	1201.589	1178.257	1143.260	1098.151	1042.155	980.715	924.718	873.388
160.0	1217.144	1211.700	1200.034	1178.257	1146.371	1105.929	1054.599	999.380	948.828	901.386
162.5	1207.033	1204.700	1193.812	1174.369	1145.593	1109.817	1063.931	1014.157	969.826	927.051
165.0	1195.367	1193.034	1182.146	1164.258	1139.371	1108.262	1068.598	1025.823	987.714	948.828
167.5	1175.924	1174.369	1165.814	1149.482	1127.705	1100.485	1067.820	1032.822	1000.158	967.493
170.0	1151.037	1150.259	1142.482	1130.038	1112.151	1089.596	1063.931	1036.711	1010.268	983.826
172.5	1119.928	1120.706	1115.262	1105.151	1091.152	1074.042	1056.154	1036.711	1015.712	995.491
175.0	1089.596	1087.263	1083.375	1077.153	1067.820	1056.932	1045.266	1032.822	1018.823	1005.602
177.5	1050.710	1050.710	1048.377	1045.266	1040.600	1035.933	1030.489	1023.490	1016.490	1010.268
180.0	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043	1154.043
2.5	1151.746	1151.746	1151.746	1151.746	1151.576	1151.235	1151.065	1151.406	1151.746
5.0	1146.811	1146.470	1146.130	1145.790	1145.620	1145.620	1145.704	1146.045	1146.386
7.5	1136.771	1137.112	1137.197	1137.197	1137.197	1137.197	1137.281	1137.622	1137.962
10.0	1120.945	1122.305	1123.412	1124.433	1124.603	1123.922	1123.837	1125.540	1127.241
12.5	1099.758	1102.140	1104.267	1106.309	1107.330	1107.330	1107.841	1109.883	1111.925
15.0	1075.508	1078.911	1081.805	1084.527	1086.059	1086.399	1087.505	1090.909	1094.312
17.5	1047.174	1050.578	1054.236	1057.979	1060.702	1062.404	1064.702	1068.785	1072.870
20.0	1015.436	1018.499	1023.093	1028.199	1032.113	1034.836	1038.069	1042.834	1047.599
22.5	980.550	983.953	989.399	995.525	1000.801	1005.225	1009.820	1014.925	1020.031
25.0	943.026	946.430	952.896	960.384	967.021	972.807	978.593	984.379	990.165
27.5	903.546	907.290	914.352	922.520	930.348	937.836	945.069	951.535	958.001
30.0	862.108	866.533	874.530	883.720	892.739	901.588	909.842	916.308	922.776
32.5	817.947	823.393	832.412	842.623	853.004	863.554	873.084	879.551	886.018
35.0	773.872	779.658	789.528	800.760	812.161	823.733	834.284	841.772	849.260
37.5	728.010	733.115	743.836	756.429	769.192	782.126	793.953	802.462	810.971
40.0	682.743	688.529	699.421	712.014	725.627	740.262	753.451	762.300	771.149
42.5	636.795	642.582	654.494	668.448	682.913	697.889	711.588	721.458	731.328
45.0	590.508	595.953	608.546	623.522	639.008	655.005	669.640	680.191	690.742
47.5	544.561	550.006	563.110	578.766	594.932	611.610	627.011	638.583	650.154
50.0	497.848	503.293	516.652	532.648	549.496	567.194	583.531	595.784	608.036
52.5	452.666	458.111	471.470	487.467	504.655	523.034	539.966	552.559	565.152
55.0	407.484	412.930	426.289	442.286	459.984	479.384	497.082	509.675	522.268
57.5	363.069	368.514	381.873	397.870	415.739	435.478	453.602	466.876	480.149
60.0	318.653	324.098	337.457	353.454	371.492	391.573	410.037	423.652	437.266
62.5	275.428	280.534	293.552	309.209	327.247	347.668	366.473	380.426	394.381
65.0	233.735	238.500	251.179	266.495	284.363	304.784	323.418	336.692	349.965
67.5	193.149	197.914	209.826	224.121	241.479	261.900	280.619	294.233	307.847
70.0	154.179	158.263	169.750	183.704	200.552	220.292	238.500	252.114	265.728
72.5	118.187	122.271	132.992	145.926	161.752	180.471	197.829	211.102	224.376
75.0	89.767	91.469	99.808	110.359	124.484	142.181	158.943	172.897	186.852
77.5	73.090	73.431	76.579	80.663	90.703	106.700	122.016	135.289	148.563
80.0	57.434	57.434	58.200	59.221	65.007	75.558	86.619	99.212	111.805

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CANDELA TABULATION - (Cont.)

82.5	41.352	41.352	41.863	42.544	44.586	47.990	53.776	66.709	79.642
85.0	24.080	24.421	24.761	25.101	25.781	26.802	29.610	37.778	45.947
87.5	7.998	8.339	8.424	8.424	8.594	8.934	9.785	12.167	14.550
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	29.554	41.997	53.663	65.329	73.884	80.106	85.550	87.883	90.216
95.0	53.663	67.662	83.995	101.105	114.326	122.881	130.658	132.991	136.102
97.5	77.773	91.772	111.215	133.769	150.879	164.101	174.989	178.877	182.766
100.0	103.438	117.437	138.435	161.767	181.211	197.543	211.542	216.986	222.430
102.5	129.103	143.102	165.656	191.321	211.542	226.319	238.762	244.207	249.651
105.0	156.323	167.212	189.766	215.431	237.207	254.317	268.316	272.205	276.093
107.5	183.544	190.543	212.320	238.762	261.317	279.982	294.759	298.647	301.758
110.0	209.987	213.097	234.874	262.094	286.204	306.425	321.979	325.868	328.979
112.5	236.429	234.874	256.650	285.426	311.091	332.090	348.422	353.088	356.977
115.0	264.427	258.206	278.426	307.202	333.645	356.199	374.087	378.753	383.420
117.5	293.981	282.315	300.203	328.201	354.644	380.309	400.530	405.196	409.863
120.0	324.312	307.202	321.979	347.644	374.087	401.308	423.084	429.306	435.527
122.5	355.421	332.090	343.756	366.310	391.975	421.528	445.638	453.415	460.415
125.0	385.753	356.199	363.199	382.642	407.529	437.861	463.526	472.858	482.191
127.5	416.084	381.087	383.420	398.197	421.528	451.860	478.303	489.968	501.634
130.0	446.416	405.196	402.863	413.751	433.194	461.970	486.858	500.079	513.300
132.5	476.747	429.306	423.084	430.083	445.638	471.303	493.079	504.745	517.189
135.0	509.412	457.304	444.860	445.638	457.304	478.303	496.968	507.856	518.744
137.5	542.854	486.858	468.970	463.526	468.970	486.080	501.634	510.189	518.744
140.0	577.074	518.744	493.857	480.636	479.858	493.079	504.745	511.745	518.744
142.5	611.294	551.409	520.300	497.746	491.524	500.079	508.634	513.300	518.744
145.0	646.292	584.073	545.965	515.634	503.190	508.634	513.300	516.411	519.522
147.5	680.512	616.738	573.185	536.632	518.744	519.522	520.300	521.855	523.411
150.0	716.287	652.514	604.294	561.519	537.410	532.744	528.855	529.633	529.633
152.5	752.063	689.067	639.292	593.406	563.853	549.854	539.743	538.188	536.632
155.0	787.060	727.953	678.178	632.293	597.295	573.963	555.298	552.187	549.076
157.5	821.280	766.840	719.398	673.512	635.404	605.850	582.518	575.519	569.297
160.0	853.945	804.948	759.062	714.732	678.178	649.403	625.293	615.960	606.628
162.5	884.276	841.501	798.726	756.729	722.509	696.066	674.290	665.735	656.402
165.0	911.497	874.944	838.390	802.615	771.506	745.063	723.287	715.510	707.732
167.5	935.606	905.275	875.721	846.168	819.725	796.393	776.172	768.395	760.618
170.0	957.383	933.273	909.941	887.387	867.166	850.056	836.057	829.835	823.614
172.5	976.048	957.383	940.273	923.941	909.941	898.275	888.943	884.276	880.388
175.0	992.380	979.159	968.271	958.160	948.828	941.828	935.606	933.273	930.162
177.5	1004.046	997.047	991.603	986.159	982.270	978.381	975.270	973.715	972.160
180.0	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601	1012.601

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-H-H-835-ASYTG-F-ITL90353 ITL89988.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	413.78	N.A.	6.70
0-30	857.00	N.A.	13.90
0-40	1361.31	N.A.	22.10
0-60	2256.89	N.A.	36.70
0-80	2671.53	N.A.	43.40
0-90	2704.75	N.A.	43.90
10-90	2596.05	N.A.	42.20
20-40	947.54	N.A.	15.40
20-50	1436.01	N.A.	23.30
40-70	1174.05	N.A.	19.10
60-80	414.64	N.A.	6.70
70-80	136.17	N.A.	2.20
80-90	33.22	N.A.	0.50
90-110	449.30	N.A.	7.30
90-120	987.51	N.A.	16.00
90-130	1607.49	N.A.	26.10
90-150	2686.57	N.A.	43.70
90-180	3449.94	N.A.	56.10
110-180	3000.64	N.A.	48.80
0-180	6154.69	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	108.70
10-20	305.07
20-30	443.22
30-40	504.31
40-50	488.47
50-60	407.10
60-70	278.47
70-80	136.17
80-90	33.22
90-100	113.83
100-110	335.46
110-120	538.22
120-130	619.97
130-140	579.38
140-150	499.71
150-160	399.38
160-170	268.45
170-180	95.54

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-H-H-835-ASYTG-F-ITL90353 ITL89988.003.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

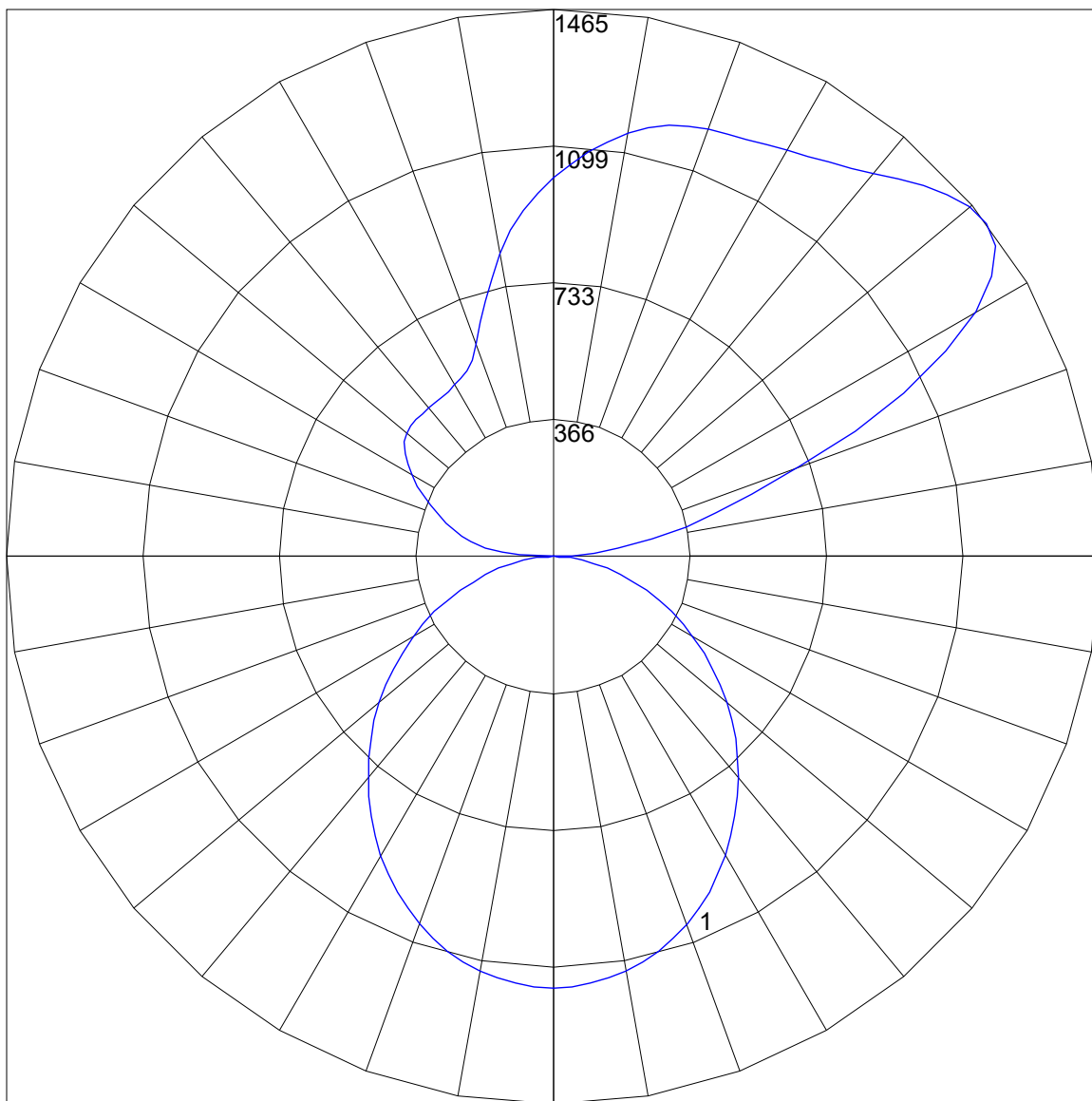
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	97	93	89	85	88	85	82	79	70	68	66	57	56	54	45	44	43	38
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	40	38	37	32
3	81	71	64	59	74	66	60	55	55	50	47	45	42	39	36	33	32	27
4	74	63	56	50	67	58	52	46	49	44	40	40	36	33	32	29	27	24
5	68	56	49	43	62	52	45	40	44	39	34	36	32	29	29	26	24	21
6	62	51	43	37	57	47	40	35	39	34	30	33	29	26	26	23	21	18
7	58	46	38	33	53	42	35	31	36	30	27	30	26	23	24	21	19	16
8	54	42	34	29	49	38	32	27	33	27	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	20	17	15	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	16	19	16	14	12

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 1465.239 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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