

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-H-S-835-ASY-DAO-ITL89599-KPL2008-3.009.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.009 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/24/17

[ISSUEDATE]08/29/2021

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.3 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.2 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]4878

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4867
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	42.3
Ballast Factor	1.00
CIE Type	Semi-Indirect
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	9442	9777	7106
55	8013	8879	6338
65	6616	7687	5604
75	5519	6534	4703
85	5508	6508	3911

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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	577.911	577.911	577.911	577.911	577.911	577.911	577.911	577.911	577.911	577.911
2.5	597.585	596.610	593.761	595.419	593.720	590.233	589.851	590.957	589.896	580.886
5.0	620.023	618.068	614.882	614.159	609.314	603.153	599.414	596.354	591.680	577.911
7.5	638.978	637.235	632.561	630.732	623.847	613.821	606.937	600.223	591.595	573.404
10.0	654.702	653.471	648.326	644.079	635.068	622.275	612.334	602.178	589.469	566.820
12.5	669.999	667.959	661.160	655.677	644.331	628.099	615.349	601.836	585.389	558.489
15.0	678.668	676.502	670.381	664.009	647.944	631.626	615.902	599.414	579.695	548.629
17.5	681.984	679.562	673.824	667.155	653.938	633.028	613.907	594.314	571.152	536.347
20.0	679.010	676.843	671.869	665.793	652.491	631.370	609.615	587.006	561.252	524.533
22.5	671.276	669.150	664.899	659.250	646.883	625.591	603.535	576.806	548.458	509.744
25.0	657.848	656.994	653.979	649.008	637.661	616.329	594.143	565.544	535.075	493.894
27.5	643.396	640.124	637.873	634.475	624.018	604.852	582.414	551.860	519.437	475.833
30.0	622.149	619.686	619.088	616.540	608.042	588.534	566.649	535.628	501.034	457.731
32.5	598.691	597.163	597.118	596.098	590.363	572.047	549.182	518.287	482.592	437.204
35.0	570.474	571.961	571.408	574.424	569.027	550.925	528.910	499.502	462.446	417.318
37.5	541.151	541.533	543.829	548.162	543.915	528.699	506.432	477.064	440.475	396.534
40.0	509.532	510.553	513.271	519.563	518.035	504.985	483.652	455.309	418.379	376.433
42.5	474.175	476.768	481.783	489.858	488.667	477.999	458.028	431.510	395.559	353.231
45.0	439.756	441.711	448.933	456.667	459.601	451.184	442.857	405.841	370.528	330.964
47.5	407.117	407.158	414.469	424.499	429.470	423.264	404.736	380.172	346.773	308.099
50.0	370.061	370.357	379.579	390.629	396.620	394.453	376.051	352.297	321.783	285.023
52.5	335.808	337.467	346.940	356.759	367.212	364.834	347.111	325.608	297.350	262.756
55.0	302.747	304.531	313.155	326.290	335.979	334.914	319.788	298.878	272.998	239.469
57.5	269.088	272.786	280.350	294.074	304.019	303.084	289.913	272.063	248.052	217.795
60.0	239.087	241.720	249.158	261.269	272.404	273.465	262.330	244.866	225.062	197.227
62.5	208.996	213.207	221.237	231.735	242.529	243.590	234.495	218.815	200.966	172.436
65.0	184.181	185.668	192.890	202.583	211.886	216.096	208.659	192.890	177.337	155.988
67.5	159.447	159.874	167.904	175.085	184.222	188.769	182.055	168.713	155.834	136.375
70.0	136.416	137.350	143.129	150.863	159.487	162.548	157.833	145.722	133.908	116.128
72.5	113.722	114.360	119.968	125.321	133.908	136.883	131.526	123.154	114.827	97.876
75.0	94.088	95.193	99.314	104.923	110.194	112.572	109.556	101.822	93.194	80.173
77.5	75.048	77.003	79.595	84.781	88.988	90.560	88.309	82.485	75.942	64.424
80.0	58.816	59.962	62.132	65.700	68.293	69.354	67.529	64.127	59.368	48.920
82.5	43.941	44.538	46.237	48.318	50.700	51.293	50.188	48.107	46.067	35.516
85.0	31.619	31.184	32.391	36.971	37.126	37.597	36.658	35.354	29.262	22.454
87.5	18.979	19.829	19.601	20.593	21.438	21.414	20.442	18.406	16.354	10.591
90.0	14.631	14.631	13.818	12.192	10.567	8.128	5.690	3.658	1.626	0.000
92.5	60.681	61.459	60.681	57.569	52.123	49.011	46.678	42.788	37.342	18.671
95.0	121.362	122.918	121.362	117.472	113.582	109.692	104.247	94.911	78.574	45.900
97.5	184.377	185.932	183.599	183.599	183.599	181.265	171.151	151.702	119.806	74.684
100.0	238.834	242.724	247.391	259.061	267.618	263.728	245.057	210.827	160.260	104.247
102.5	306.516	315.074	330.633	354.750	367.975	357.084	322.853	267.618	197.602	133.031
105.0	399.093	415.431	447.327	476.889	482.335	457.440	400.649	319.742	232.610	162.594
107.5	542.238	560.909	594.361	614.588	609.921	564.021	475.334	365.641	265.284	192.934
110.0	725.059	734.394	755.399	763.957	738.284	658.932	537.570	405.317	296.403	223.275
112.5	905.545	910.991	921.883	909.435	851.088	735.172	585.804	441.103	326.743	253.615
115.0	1080.586	1079.031	1072.029	1029.241	936.664	792.741	625.480	473.000	357.862	285.511
117.5	1221.397	1209.728	1184.833	1118.706	998.123	832.417	655.820	502.562	388.980	318.186
120.0	1321.754	1305.417	1264.185	1177.053	1035.465	859.646	682.271	531.347	420.876	350.082
122.5	1386.325	1366.098	1312.419	1208.950	1058.026	879.873	705.610	560.131	452.773	381.978
125.0	1416.665	1394.882	1333.423	1222.175	1069.695	896.210	728.171	588.916	483.891	413.875
127.5	1422.889	1400.328	1334.979	1222.953	1075.141	910.213	751.509	617.700	515.010	444.993
130.0	1411.997	1389.437	1324.866	1217.507	1077.475	923.439	775.626	647.263	547.684	477.667
132.5	1391.770	1372.321	1310.863	1208.950	1079.808	937.442	798.965	677.603	580.358	510.342

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CANDELA TABULATION - (Cont.)

135.0	1369.210	1349.761	1292.969	1200.392	1082.920	952.223	822.304	706.388	613.032	543.794
137.5	1346.649	1327.978	1276.632	1193.391	1087.588	967.782	847.198	735.950	644.929	577.246
140.0	1322.532	1307.751	1262.629	1187.945	1092.256	983.341	871.315	765.513	676.825	609.921
142.5	1303.083	1290.636	1250.960	1184.833	1097.702	998.901	895.432	794.297	709.500	642.595
145.0	1286.746	1275.854	1240.068	1180.943	1103.925	1015.238	918.771	821.526	739.840	675.269
147.5	1271.965	1261.851	1230.733	1177.831	1110.149	1030.019	940.554	847.976	770.180	707.166
150.0	1255.627	1247.848	1221.397	1175.498	1116.373	1044.022	959.225	872.093	798.965	739.840
152.5	1242.402	1235.401	1213.618	1174.720	1121.040	1054.914	976.340	894.654	826.194	770.180
155.0	1231.511	1224.509	1205.838	1171.608	1123.374	1062.693	989.565	914.103	851.088	798.965
157.5	1220.619	1213.618	1197.280	1166.162	1121.040	1065.805	999.679	931.996	875.205	826.194
160.0	1205.838	1198.836	1183.277	1156.049	1115.595	1065.805	1006.680	945.999	895.432	851.088
162.5	1186.389	1180.165	1166.162	1141.267	1104.703	1061.915	1010.570	958.447	914.103	873.649
165.0	1161.494	1155.271	1142.045	1121.040	1090.700	1054.136	1011.348	967.004	929.662	893.876
167.5	1131.932	1126.486	1115.595	1097.702	1072.807	1043.244	1009.014	972.450	941.332	910.991
170.0	1097.702	1093.034	1084.476	1070.473	1052.580	1030.019	1002.790	974.784	950.667	924.216
172.5	1062.693	1059.582	1053.358	1044.022	1030.019	1012.904	994.233	974.006	955.335	935.108
175.0	1025.351	1023.017	1018.350	1012.904	1004.346	994.233	982.563	969.338	956.891	944.443
177.5	987.231	986.453	984.897	981.786	978.674	974.006	967.782	961.559	955.335	949.111
180.0	950.667	950.667	950.667	950.667	950.667	950.667	950.667	950.667	950.667	950.667

Vert. Angles

Horizontal Angles

	<u>100</u>	<u>110</u>	<u>120</u>	<u>130</u>	<u>140</u>	<u>150</u>	<u>160</u>	<u>170</u>	<u>180</u>
0.0	577.911	577.911	577.911	577.911	577.911	577.911	577.911	577.911	577.911
2.5	580.715	573.957	566.353	560.870	558.318	556.111	552.116	551.945	553.644
5.0	573.831	563.930	552.840	544.935	541.237	537.242	531.548	532.352	531.121
7.5	564.820	551.734	537.835	528.658	523.980	519.010	512.467	513.698	512.593
10.0	554.282	538.176	523.472	512.849	507.110	501.160	496.105	495.893	496.190
12.5	542.127	523.558	507.874	496.913	490.622	484.335	477.999	478.255	479.019
15.0	529.548	509.362	493.004	480.933	474.390	467.420	456.199	461.385	461.767
17.5	514.718	493.426	477.235	464.401	457.179	450.847	446.043	445.320	446.214
20.0	499.120	477.406	460.621	448.636	441.325	435.334	431.425	430.490	430.490
22.5	481.697	460.194	443.962	432.571	425.560	421.057	416.339	416.465	416.042
25.0	464.275	443.832	425.901	415.444	409.580	405.036	401.338	401.127	401.761
27.5	446.254	426.283	408.605	399.851	394.494	389.991	386.423	387.227	387.313
30.0	427.047	407.459	391.222	383.021	378.770	373.840	371.337	366.151	372.865
32.5	407.711	388.760	373.076	366.704	361.900	358.287	356.462	356.930	358.161
35.0	388.504	368.573	354.804	349.663	345.753	342.693	342.010	342.055	342.352
37.5	367.041	349.322	338.145	332.236	328.794	326.884	325.738	326.457	327.225
40.0	346.558	329.899	318.979	315.110	311.753	310.266	310.351	310.481	311.924
42.5	325.226	310.481	300.792	297.732	295.436	294.542	295.054	294.798	295.436
45.0	304.868	290.888	282.431	279.626	279.033	277.546	278.606	280.008	267.560
47.5	283.365	270.872	263.435	261.822	260.757	260.375	261.907	263.520	264.666
50.0	261.862	250.771	245.037	243.972	243.419	243.549	244.951	246.736	247.329
52.5	241.082	231.308	226.167	225.358	225.273	225.484	227.781	230.077	230.756
55.0	220.514	211.931	207.976	206.659	207.001	208.232	211.463	212.057	212.739
57.5	200.157	192.594	189.704	188.005	189.363	190.383	193.699	194.890	195.483
60.0	176.894	168.811	167.669	168.599	168.099	169.380	173.700	168.709	178.060
62.5	160.317	154.915	153.026	153.001	153.769	156.273	158.561	159.796	159.939
65.0	140.817	136.785	135.249	135.391	137.322	139.496	140.809	142.451	142.024
67.5	122.967	118.660	116.697	117.095	120.009	121.090	123.211	123.992	122.919
70.0	104.537	101.586	100.237	100.708	102.045	103.830	105.073	105.658	107.243
72.5	88.102	85.622	83.359	84.338	85.529	86.846	87.346	88.073	88.402
75.0	71.032	68.870	67.310	68.106	69.025	69.370	63.185	69.846	71.122
77.5	55.800	53.857	52.963	52.679	52.980	53.622	53.610	53.423	53.386
80.0	40.893	39.629	39.105	38.763	38.329	37.353	37.589	37.317	37.548

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-ASY-DAO-ITL89599-KPL2008-3.009.IES****CANDELA TABULATION - (Cont.)**

82.5	28.087	26.437	25.258	24.551	24.490	23.962	23.816	23.397	22.670
85.0	16.602	14.972	13.716	12.318	11.652	10.758	9.937	9.311	8.279
87.5	5.458	4.219	3.324	2.524	1.796	1.199	0.772	0.573	0.520
90.0	1.626	3.658	5.283	7.315	8.535	9.754	10.567	10.973	10.973
92.5	24.117	25.673	28.785	31.118	33.452	34.230	35.008	35.786	35.786
95.0	50.567	52.901	56.791	61.459	63.793	64.571	64.571	63.015	61.459
97.5	76.240	79.352	85.576	92.577	97.245	99.579	101.135	99.579	98.801
100.0	102.691	106.581	113.582	122.140	128.363	133.809	137.699	136.921	136.921
102.5	129.919	136.143	144.701	154.036	161.816	167.261	171.151	171.929	171.929
105.0	156.370	164.928	177.375	190.600	198.380	202.270	204.603	203.826	203.826
107.5	184.377	192.156	204.603	219.385	229.498	234.944	238.834	237.278	235.722
110.0	211.605	216.273	231.054	248.947	260.617	266.062	270.730	270.730	270.730
112.5	238.834	240.390	256.727	277.732	291.735	299.515	304.960	304.960	304.960
115.0	266.062	264.506	280.844	304.182	321.297	332.189	339.969	340.746	341.524
117.5	293.291	286.289	303.404	329.077	348.526	362.529	372.643	374.199	375.755
120.0	321.297	309.628	325.965	351.638	372.643	389.758	403.761	405.317	407.651
122.5	348.526	332.189	346.970	372.643	395.204	415.431	431.768	434.102	437.214
125.0	377.311	356.306	368.753	392.092	415.431	439.547	458.218	461.330	464.442
127.5	405.317	378.867	388.202	409.207	433.324	459.774	480.779	485.447	490.115
130.0	433.324	401.427	406.873	424.766	448.105	475.334	497.894	505.674	512.676
132.5	462.886	423.988	425.544	440.325	460.552	487.003	508.786	518.899	528.235
135.0	491.671	446.549	443.437	454.329	472.222	496.338	516.565	526.679	536.014
137.5	521.233	469.888	462.108	467.554	481.557	503.340	522.011	530.569	539.126
140.0	551.574	495.561	481.557	482.335	491.671	509.564	525.123	532.903	540.682
142.5	582.692	524.345	504.118	497.116	501.006	515.010	526.679	532.903	539.126
145.0	615.366	554.685	528.235	513.454	510.342	520.455	528.235	532.903	537.570
147.5	647.263	585.804	552.352	529.013	520.455	525.901	531.347	534.458	537.570
150.0	678.381	614.588	576.468	546.128	532.125	534.458	536.014	537.570	538.348
152.5	709.500	646.485	602.919	566.355	546.128	543.794	541.460	541.460	541.460
155.0	739.840	678.381	632.482	592.028	567.133	557.797	550.018	548.462	546.128
157.5	769.402	708.722	664.378	624.702	595.917	578.024	564.021	560.131	557.019
160.0	798.965	743.730	700.942	662.822	630.926	606.031	585.804	579.580	573.357
162.5	826.971	777.960	737.506	700.164	669.046	644.151	623.146	613.032	603.697
165.0	854.200	812.968	774.848	738.284	708.722	687.717	669.824	659.710	650.375
167.5	877.539	843.309	809.856	777.182	750.731	730.504	714.167	706.388	699.386
170.0	897.766	870.537	844.865	819.192	797.409	777.960	762.401	754.621	747.620
172.5	915.659	896.210	877.539	859.646	843.309	829.305	817.636	812.190	805.967
175.0	931.218	917.993	906.323	894.654	884.541	875.983	868.981	865.091	861.980
177.5	942.888	935.886	930.440	924.994	921.105	917.215	913.325	911.769	909.435
180.0	950.667	950.667	950.667	950.667	950.667	950.667	950.667	950.667	950.667

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-ASY-DAO-ITL89599-KPL2008-3.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	212.82	N.A.	4.40
0-30	450.57	N.A.	9.30
0-40	729.36	N.A.	15.00
0-60	1237.47	N.A.	25.40
0-80	1494.78	N.A.	30.70
0-90	1522.03	N.A.	31.30
10-90	1467.18	N.A.	30.10
20-40	516.54	N.A.	10.60
20-50	791.95	N.A.	16.30
40-70	674.06	N.A.	13.80
60-80	257.32	N.A.	5.30
70-80	91.36	N.A.	1.90
80-90	27.25	N.A.	0.60
90-110	401.81	N.A.	8.30
90-120	934.36	N.A.	19.20
90-130	1545.19	N.A.	31.70
90-150	2614.11	N.A.	53.70
90-180	3344.89	N.A.	68.70
110-180	2943.08	N.A.	60.50
0-180	4866.92	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	54.86
10-20	157.96
20-30	237.75
30-40	278.80
40-50	275.41
50-60	232.70
60-70	165.96
70-80	91.36
80-90	27.25
90-100	93.19
100-110	308.62
110-120	532.55
120-130	610.82
130-140	574.30
140-150	494.63
150-160	387.72
160-170	253.57
170-180	89.48

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-ASY-DAO-ITL89599-KPL2008-3.009.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

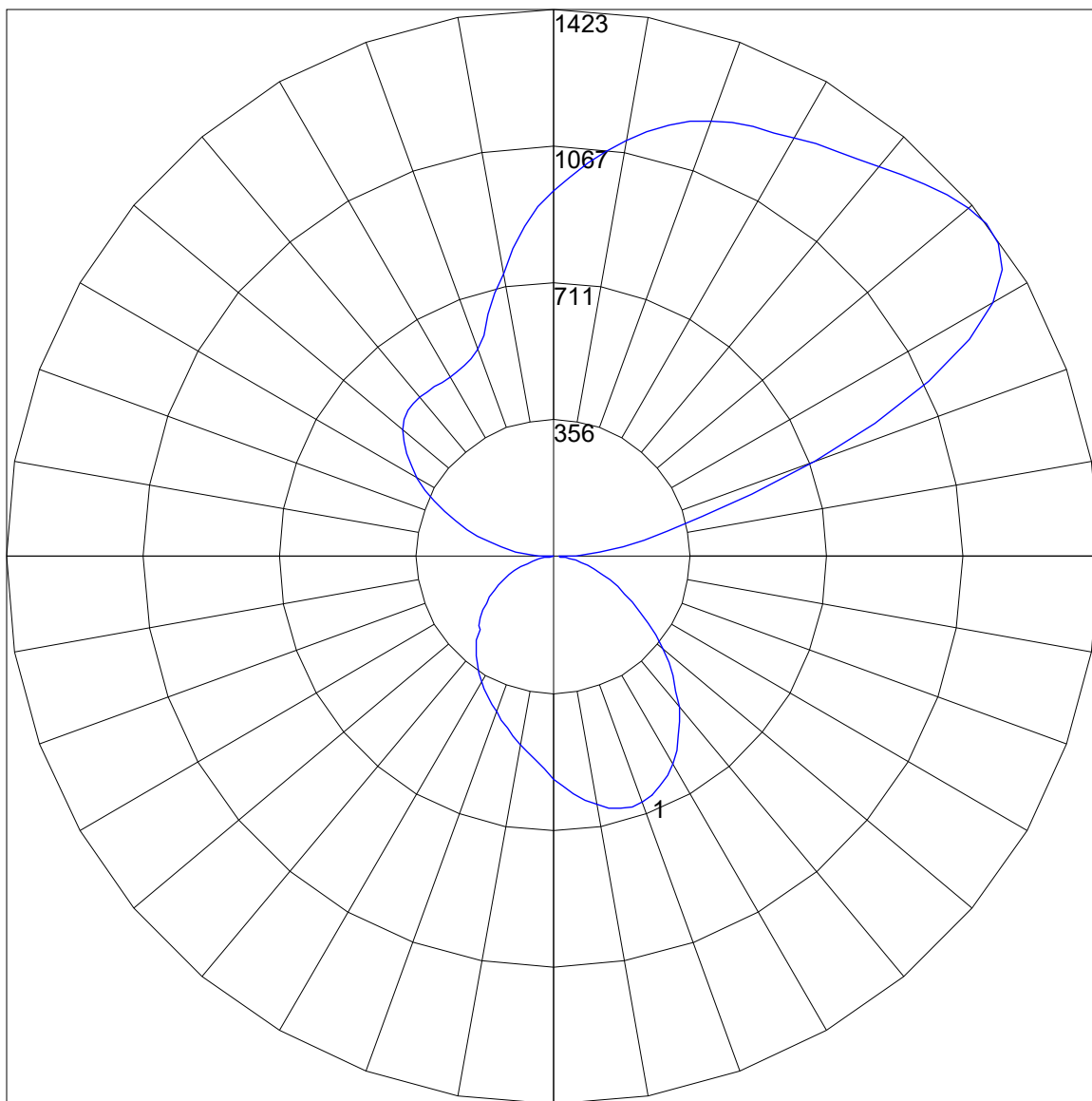
Effective Floor Cavity Reflectance 0.20

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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	31
1	94	89	86	82	84	81	77	75	64	62	60	49	47	46	34	34	33	26
2	85	78	72	67	76	70	65	61	56	53	50	43	40	38	30	29	28	22
3	78	69	62	56	70	62	56	51	49	45	42	38	35	32	27	25	24	19
4	71	61	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	16	12
7	55	43	36	30	50	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	20	22	19	16	16	14	12	10
9	48	36	29	24	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 1422.889 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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