

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-B-835-ASY-TG-ITL90352 ITL89599.008.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90352 ITL89599.008 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/04/18

[ISSUEDATE]05/31/18

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 46.5 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 48.5 WATTS

[_ABSOLUTE]LUMENS]4832

[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	4832
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	46.5
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)	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	9449	6769	5327
55	8501	5422	4155
65	7526	4151	3162
75	6401	3200	2838
85	5111	2555	2331

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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	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009
2.5	785.979	785.979	785.465	785.465	784.950	784.950	784.435	784.435	783.920	783.920
5.0	782.376	781.861	781.347	780.317	779.288	778.258	776.714	775.685	774.655	774.141
7.5	776.199	775.170	774.141	771.052	767.964	764.876	762.302	759.729	758.699	757.155
10.0	767.449	764.876	761.787	757.670	753.037	747.890	742.743	738.625	736.566	734.507
12.5	756.640	751.493	746.346	740.169	732.963	725.757	718.551	712.374	709.286	706.197
15.0	742.743	735.537	728.330	719.580	709.801	700.021	690.241	682.006	677.888	673.770
17.5	727.301	718.036	708.771	696.418	683.550	671.196	659.358	648.549	643.401	638.254
20.0	709.286	697.447	686.123	671.196	655.240	640.313	625.901	613.548	607.371	601.194
22.5	687.668	674.285	660.902	643.401	624.871	607.371	590.385	575.973	568.767	562.076
25.0	665.534	649.578	634.136	614.062	592.959	572.885	553.840	537.884	530.678	523.471
27.5	641.343	623.327	605.827	583.179	559.502	537.369	517.295	499.794	492.073	484.353
30.0	615.606	596.047	576.488	552.296	526.045	501.853	479.720	461.190	453.984	446.263
32.5	587.297	567.223	547.149	520.898	492.588	466.337	442.660	423.615	416.409	409.203
35.0	558.987	537.884	516.265	488.470	458.616	431.851	407.659	387.585	379.864	371.629
37.5	530.163	507.515	485.382	456.558	425.160	397.365	373.173	353.099	345.378	337.657
40.0	500.309	477.147	453.469	424.130	392.217	364.423	340.745	320.671	313.465	305.744
42.5	470.455	446.778	423.101	392.732	360.305	332.510	309.347	290.303	283.097	275.890
45.0	440.087	415.895	391.703	361.334	328.907	301.627	279.494	261.478	254.787	248.096
47.5	409.203	385.526	361.849	331.480	299.053	272.802	251.699	234.198	228.536	222.874
50.0	378.835	355.158	331.480	301.627	270.229	244.493	224.933	208.977	203.830	198.682
52.5	350.525	325.818	301.627	272.802	242.434	218.756	200.741	186.329	181.697	177.064
55.0	321.186	296.479	271.773	244.493	216.183	193.535	177.579	164.711	161.108	156.990
57.5	292.362	268.170	243.978	217.727	190.447	169.858	155.960	144.637	141.548	137.945
60.0	264.052	240.375	216.698	191.991	166.770	147.725	135.886	126.107	123.018	119.930
62.5	236.257	213.609	190.447	167.284	144.122	127.651	116.842	108.606	105.518	102.944
65.0	209.492	187.358	165.740	144.122	123.018	108.091	98.826	91.106	89.561	88.017
67.5	182.211	161.623	141.548	122.504	103.459	91.106	84.414	79.267	78.752	78.238
70.0	156.990	137.945	118.386	101.400	85.444	75.149	71.546	68.973	68.458	67.943
72.5	132.798	114.783	97.282	82.870	70.002	62.796	60.737	59.193	58.163	57.649
75.0	109.121	92.650	76.694	65.884	57.134	51.987	50.443	48.898	48.384	48.384
77.5	88.017	73.090	57.649	49.928	44.781	41.692	40.663	39.633	39.119	39.119
80.0	67.428	54.560	41.178	36.031	33.457	31.913	30.883	30.369	30.369	30.369
82.5	47.354	38.089	28.824	25.736	24.192	22.648	22.133	21.618	21.618	21.618
85.0	29.339	23.677	18.015	15.956	14.927	14.412	13.898	13.383	13.383	13.383
87.5	12.353	10.294	7.721	6.691	6.177	6.177	5.662	5.662	5.662	5.662
90.0	0.000	0.000	0.000	0.000	9.332	15.553	10.887	6.999	3.111	0.000
92.5	60.655	61.432	60.655	57.544	52.101	48.990	46.657	42.769	37.326	18.663
95.0	121.309	122.865	121.309	117.421	113.533	109.645	104.202	94.870	78.540	45.880
97.5	184.297	185.852	183.519	183.519	183.519	181.186	171.077	151.637	119.754	74.652
100.0	238.731	242.619	247.284	258.949	267.503	263.615	244.952	210.736	160.190	104.202
102.5	306.384	314.938	330.490	354.596	367.816	356.929	322.714	267.503	197.516	132.974
105.0	398.921	415.251	447.134	476.683	482.127	457.243	400.476	319.603	232.510	162.523
107.5	542.004	560.667	594.105	614.323	609.657	563.777	475.128	365.483	265.170	192.851
110.0	724.745	734.077	755.073	763.627	737.965	658.647	537.338	405.142	296.275	223.178
112.5	905.154	910.597	921.484	909.042	850.721	734.855	585.551	440.913	326.602	253.505
115.0	1080.120	1078.564	1071.566	1028.796	936.259	792.399	625.210	472.795	357.707	285.388
117.5	1220.869	1209.205	1184.321	1118.223	997.691	832.058	655.537	502.345	388.812	318.048
120.0	1321.183	1304.853	1263.639	1176.545	1035.017	859.274	681.976	531.117	420.695	349.931
122.5	1385.726	1365.507	1311.851	1208.428	1057.568	879.493	705.305	559.889	452.577	381.813
125.0	1416.053	1394.280	1332.847	1221.647	1069.233	895.823	727.856	588.661	483.682	413.696
127.5	1422.274	1399.723	1334.402	1222.425	1074.676	909.820	751.185	617.433	514.787	444.801
130.0	1411.387	1388.836	1324.293	1216.981	1077.009	923.039	775.291	646.983	547.447	477.461
132.5	1391.169	1371.728	1310.296	1208.428	1079.342	937.037	798.620	677.310	580.107	510.121

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

135.0	1368.618	1349.177	1292.411	1199.873	1082.452	951.812	821.948	706.082	612.768	543.559
137.5	1346.067	1327.404	1276.081	1192.875	1087.118	967.364	846.832	735.632	644.650	576.997
140.0	1321.961	1307.186	1262.083	1187.432	1091.784	982.917	870.939	765.182	676.533	609.657
142.5	1302.520	1290.078	1250.419	1184.321	1097.227	998.469	895.045	793.954	709.193	642.317
145.0	1286.190	1275.303	1239.532	1180.433	1103.448	1014.799	918.374	821.171	739.520	674.977
147.5	1271.415	1261.306	1230.201	1177.322	1109.669	1029.574	940.147	847.610	769.848	706.860
150.0	1255.085	1247.309	1220.869	1174.990	1115.890	1043.571	958.810	871.716	798.620	739.520
152.5	1241.865	1234.867	1213.093	1174.212	1120.556	1054.458	975.918	894.267	825.837	769.848
155.0	1230.978	1223.980	1205.317	1171.101	1122.889	1062.234	989.138	913.708	850.721	798.620
157.5	1220.092	1213.093	1196.763	1165.658	1120.556	1065.345	999.247	931.593	874.827	825.837
160.0	1205.317	1198.318	1182.766	1155.549	1115.112	1065.345	1006.245	945.591	895.045	850.721
162.5	1185.876	1179.655	1165.658	1140.774	1104.226	1061.457	1010.133	958.033	913.708	873.271
165.0	1160.992	1154.771	1141.552	1120.556	1090.229	1053.680	1010.911	966.586	929.260	893.490
167.5	1131.443	1125.999	1115.112	1097.227	1072.343	1042.794	1008.578	972.030	940.925	910.597
170.0	1097.227	1092.562	1084.008	1070.010	1052.125	1029.574	1002.357	974.363	950.256	923.817
172.5	1062.234	1059.124	1052.903	1043.571	1029.574	1012.466	993.803	973.585	954.922	934.704
175.0	1024.908	1022.575	1017.910	1012.466	1003.912	993.803	982.139	968.919	956.477	944.035
177.5	986.805	986.027	984.472	981.361	978.251	973.585	967.364	961.143	954.922	948.701
180.0	950.256	950.256	950.256	950.256	950.256	950.256	950.256	950.256	950.256	950.256

Vert. Angles

Horizontal Angles

	100	110	120	130	140	150	160	170	180
0.0	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009	787.009
2.5	783.920	784.435	784.435	784.950	784.950	785.465	785.465	785.979	785.979
5.0	774.655	775.685	776.714	778.258	779.288	780.317	781.347	781.861	782.376
7.5	758.699	759.729	762.302	764.876	767.964	771.052	774.141	775.170	776.199
10.0	736.566	738.625	742.743	747.890	753.037	757.670	761.787	764.876	767.449
12.5	709.286	712.374	718.551	725.757	732.963	740.169	746.346	751.493	756.640
15.0	677.888	682.006	690.241	700.021	709.801	719.580	728.330	735.537	742.743
17.5	643.401	648.549	659.358	671.196	683.550	696.418	708.771	718.036	727.301
20.0	607.371	613.548	625.901	640.313	655.240	671.196	686.123	697.447	709.286
22.5	568.767	575.973	590.385	607.371	624.871	643.401	660.902	674.285	687.668
25.0	530.678	537.884	553.840	572.885	592.959	614.062	634.136	649.578	665.534
27.5	492.073	499.794	517.295	537.369	559.502	583.179	605.827	623.327	641.343
30.0	453.984	461.190	479.720	501.853	526.045	552.296	576.488	596.047	615.606
32.5	416.409	423.615	442.660	466.337	492.588	520.898	547.149	567.223	587.297
35.0	379.864	387.585	407.659	431.851	458.616	488.470	516.265	537.884	558.987
37.5	345.378	353.099	373.173	397.365	425.160	456.558	485.382	507.515	530.163
40.0	313.465	320.671	340.745	364.423	392.217	424.130	453.469	477.147	500.309
42.5	283.097	290.303	309.347	332.510	360.305	392.732	423.101	446.778	470.455
45.0	254.787	261.478	279.494	301.627	328.907	361.334	391.703	415.895	440.087
47.5	228.536	234.198	251.699	272.802	299.053	331.480	361.849	385.526	409.203
50.0	203.830	208.977	224.933	244.493	270.229	301.627	331.480	355.158	378.835
52.5	181.697	186.329	200.741	218.756	242.434	272.802	301.627	325.818	350.525
55.0	161.108	164.711	177.579	193.535	216.183	244.493	271.773	296.479	321.186
57.5	141.548	144.637	155.960	169.858	190.447	217.727	243.978	268.170	292.362
60.0	123.018	126.107	135.886	147.725	166.770	191.991	216.698	240.375	264.052
62.5	105.518	108.606	116.842	127.651	144.122	167.284	190.447	213.609	236.257
65.0	89.561	91.106	98.826	108.091	123.018	144.122	165.740	187.358	209.492
67.5	78.752	79.267	84.414	91.106	103.459	122.504	141.548	161.623	182.211
70.0	68.458	68.973	71.546	75.149	85.444	101.400	118.386	137.945	156.990
72.5	58.163	59.193	60.737	62.796	70.002	82.870	97.282	114.783	132.798
75.0	48.384	48.898	50.443	51.987	57.134	65.884	76.694	92.650	109.121
77.5	39.119	39.633	40.663	41.692	44.781	49.928	57.649	73.090	88.017
80.0	30.369	30.369	30.883	31.913	33.457	36.031	41.178	54.560	67.428

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-B-835-ASY-TG-ITL90352 ITL89599.008.IES****CANDELA TABULATION - (Cont.)**

82.5	21.618	21.618	22.133	22.648	24.192	25.736	28.824	38.089	47.354
85.0	13.383	13.383	13.898	14.412	14.927	15.956	18.015	23.677	29.339
87.5	5.662	5.662	5.662	6.177	6.177	6.691	7.721	10.294	12.353
90.0	3.111	6.999	10.109	13.997	16.330	18.663	20.218	20.996	20.996
92.5	24.106	25.662	28.772	31.105	33.438	34.215	34.993	35.771	35.771
95.0	50.545	52.878	56.767	61.432	63.765	64.543	64.543	62.987	61.432
97.5	76.207	79.318	85.539	92.537	97.203	99.536	101.091	99.536	98.758
100.0	102.646	106.534	113.533	122.087	128.308	133.751	137.639	136.862	136.862
102.5	129.863	136.084	144.638	153.970	161.746	167.189	171.077	171.855	171.855
105.0	156.302	164.856	177.298	190.518	198.294	202.182	204.515	203.737	203.737
107.5	184.297	192.073	204.515	219.290	229.399	234.842	238.731	237.175	235.620
110.0	211.514	216.179	230.954	248.840	260.504	265.947	270.613	270.613	270.613
112.5	238.731	240.286	256.616	277.612	291.609	299.385	304.829	304.829	304.829
115.0	265.947	264.392	280.722	304.051	321.159	332.045	339.822	340.599	341.377
117.5	293.164	286.166	303.273	328.935	348.375	362.373	372.482	374.037	375.592
120.0	321.159	309.494	325.824	351.486	372.482	389.589	403.587	405.142	407.475
122.5	348.375	332.045	346.820	372.482	395.033	415.251	431.581	433.914	437.025
125.0	377.148	356.152	368.594	391.922	415.251	439.358	458.020	461.131	464.241
127.5	405.142	378.703	388.034	409.030	433.137	459.576	480.572	485.237	489.903
130.0	433.137	401.254	406.697	424.583	447.911	475.128	497.679	505.455	512.454
132.5	462.686	423.805	425.360	440.135	460.353	486.793	508.566	518.675	528.007
135.0	491.458	446.356	443.246	454.132	472.018	496.124	516.342	526.451	535.783
137.5	521.008	469.685	461.909	467.352	481.349	503.123	521.786	530.340	538.893
140.0	551.335	495.346	481.349	482.127	491.458	509.344	524.896	532.672	540.448
142.5	582.440	524.119	503.900	496.902	500.790	514.787	526.451	532.672	538.893
145.0	615.101	554.446	528.007	513.232	510.121	520.230	528.007	532.672	537.338
147.5	646.983	585.551	552.113	528.784	520.230	525.674	531.117	534.228	537.338
150.0	678.088	614.323	576.219	545.892	531.895	534.228	535.783	537.338	538.116
152.5	709.193	646.205	602.658	566.110	545.892	543.559	541.226	541.226	541.226
155.0	739.520	678.088	632.208	591.772	566.888	557.556	549.780	548.225	545.892
157.5	769.070	708.415	664.091	624.432	595.660	577.774	563.777	559.889	556.779
160.0	798.620	743.408	700.639	662.535	630.653	605.769	585.551	579.330	573.109
162.5	826.614	777.624	737.187	699.861	668.756	643.873	622.877	612.768	603.436
165.0	853.831	812.617	774.513	737.965	708.415	687.419	669.534	659.425	650.093
167.5	877.160	842.944	809.506	776.846	750.407	730.189	713.859	706.082	699.084
170.0	897.378	870.161	844.500	818.838	797.064	777.624	762.071	754.295	747.297
172.5	915.263	895.823	877.160	859.274	842.944	828.947	817.283	811.839	805.618
175.0	930.816	917.596	905.932	894.267	884.158	875.604	868.606	864.718	861.607
177.5	942.480	935.481	930.038	924.595	920.707	916.818	912.930	911.375	909.042
180.0	950.256	950.256	950.256	950.256	950.256	950.256	950.256	950.256	950.256

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-B-835-ASY-TG-ITL90352 ITL89599.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	271.45	N.A.	5.60
0-30	540.94	N.A.	11.20
0-40	823.93	N.A.	17.10
0-60	1272.16	N.A.	26.30
0-80	1468.49	N.A.	30.40
0-90	1488.51	N.A.	30.80
10-90	1415.1	N.A.	29.30
20-40	552.49	N.A.	11.40
20-50	804.90	N.A.	16.70
40-70	576.87	N.A.	11.90
60-80	196.33	N.A.	4.10
70-80	67.69	N.A.	1.40
80-90	20.02	N.A.	0.40
90-110	401.83	N.A.	8.30
90-120	934.16	N.A.	19.30
90-130	1544.72	N.A.	32.00
90-150	2613.18	N.A.	54.10
90-180	3343.64	N.A.	69.20
110-180	2941.81	N.A.	60.90
0-180	4832.15	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	73.41
10-20	198.04
20-30	269.50
30-40	282.99
40-50	252.41
50-60	195.82
60-70	128.64
70-80	67.69
80-90	20.02
90-100	93.34
100-110	308.49
110-120	532.32
120-130	610.56
130-140	574.05
140-150	494.41
150-160	387.56
160-170	253.46
170-180	89.44

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-B-835-ASY-TG-ITL90352 ITL89599.008.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

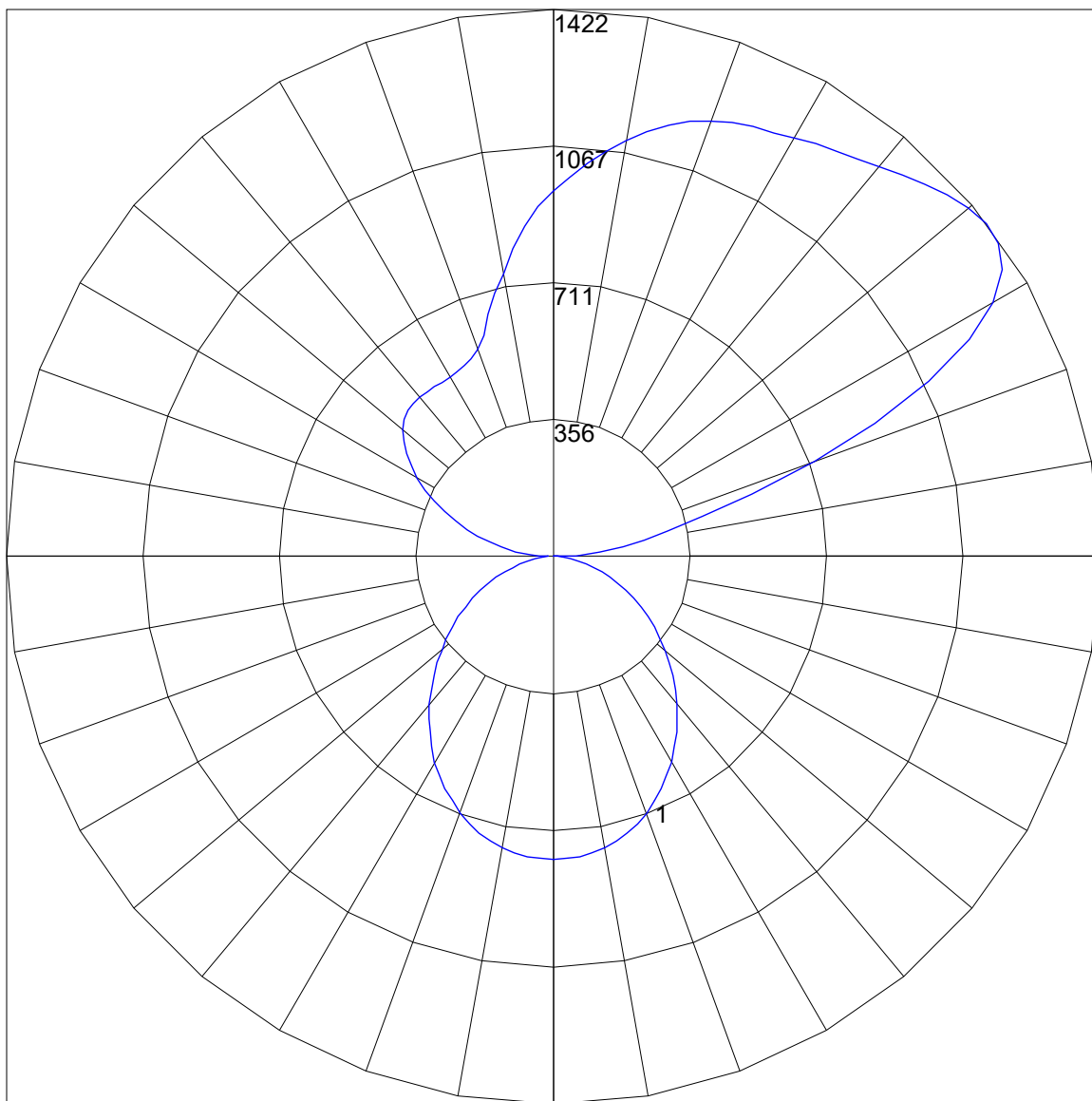
Effective Floor Cavity Reflectance 0.20

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	38	38	38	31
1	94	90	86	83	84	81	78	75	64	62	60	49	47	46	34	34	33	27
2	86	79	73	68	77	71	66	62	57	53	50	43	41	39	31	30	28	23
3	78	69	63	57	70	63	57	52	50	46	43	38	36	33	28	26	25	20
4	72	62	54	49	64	56	49	44	45	40	37	34	31	29	25	23	21	17
5	66	55	47	42	59	50	43	38	40	35	32	31	28	25	23	21	19	15
6	61	49	42	36	55	45	38	33	36	31	28	28	25	22	21	18	17	14
7	56	45	37	32	50	41	34	29	33	28	25	26	22	20	19	17	15	12
8	52	40	33	28	47	37	30	26	30	25	22	24	20	18	17	15	14	11
9	49	37	30	25	44	34	27	23	27	23	20	22	18	16	16	14	12	10
10	45	34	27	22	41	31	25	21	25	21	18	20	17	14	15	13	11	9

IES INDOOR REPORT

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POLAR GRAPH



Maximum Candela = 1422.274 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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