

# 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-F-DAO-ITL85132-KPL2008-3.009.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-3.009 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]08/29/2021

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 42.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 44.1 WATTS

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 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](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)

[\_ABSOLUTE]LUMENS]4498

[\_CONVERT] Photometric web converted from original test data

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4497
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	42.2
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	9511	9895	7158
55	8073	8984	6385
65	6665	7825	5645
75	5560	6610	4737
85	5548	6585	3940

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DAO-ITL85132-KPL2008-3.009.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	582.177	582.177	582.177	582.177	582.177	582.177	582.177	582.177	582.177	582.177
2.5	601.996	598.807	595.876	595.041	585.174	576.118	563.426	557.219	557.731	557.219
5.0	624.600	619.380	610.475	601.444	582.177	565.141	546.431	537.015	535.042	537.015
7.5	643.695	636.891	623.233	606.279	577.637	551.655	529.605	514.088	516.377	514.088
10.0	659.535	652.321	632.780	609.128	571.004	537.932	513.253	500.815	499.853	500.815
12.5	674.945	665.230	640.268	609.620	562.611	522.886	497.282	483.137	482.555	483.137
15.0	683.678	674.241	645.836	607.884	552.679	508.651	480.717	463.337	465.176	463.337
17.5	687.019	677.557	648.448	603.495	540.307	492.275	464.578	450.171	449.508	450.171
20.0	684.022	675.760	646.905	596.948	528.405	476.287	448.439	435.317	433.668	435.317
22.5	676.231	668.910	643.482	587.573	513.507	459.055	432.513	420.141	419.113	420.141
25.0	662.704	657.824	632.350	577.063	497.540	441.950	415.514	404.902	404.726	404.902
27.5	648.145	642.090	620.747	563.790	479.345	424.358	399.633	389.898	390.172	389.898
30.0	626.741	623.147	604.138	548.016	461.110	405.905	383.621	374.315	375.617	374.315
32.5	603.110	601.657	586.627	530.591	440.431	387.392	367.396	359.220	360.805	359.220
35.0	574.685	576.593	565.608	511.369	420.399	368.019	350.316	343.982	344.879	343.982
37.5	545.146	548.442	542.235	488.680	399.461	348.392	332.977	328.228	329.641	328.228
40.0	513.294	518.948	517.531	466.203	379.212	329.190	315.897	312.343	314.226	312.343
42.5	477.675	487.141	489.237	441.610	355.839	309.927	298.685	296.892	297.617	296.892
45.0	443.002	454.408	460.852	416.137	333.407	289.932	280.708	279.959	269.535	279.959
47.5	410.122	419.883	433.324	389.832	310.374	270.583	262.555	263.283	266.620	263.283
50.0	372.792	385.423	401.005	361.190	287.127	250.506	245.216	246.395	249.155	246.395
52.5	338.287	351.708	370.307	333.686	264.696	231.431	226.723	228.778	232.459	228.778
55.0	304.982	318.251	339.401	306.222	241.237	211.956	208.316	211.997	214.310	211.997
57.5	271.074	285.224	306.566	278.825	219.403	192.582	189.778	193.868	196.926	193.868
60.0	240.852	254.596	276.254	250.956	198.683	169.520	168.665	175.031	179.375	175.031
62.5	210.539	224.860	245.773	224.541	173.709	155.424	154.732	159.588	161.119	159.588
65.0	185.541	196.648	217.818	198.576	157.140	137.034	137.042	141.795	143.072	141.795
67.5	160.624	170.966	189.905	173.639	137.382	119.376	119.097	123.462	123.826	123.462
70.0	137.423	146.135	163.363	150.053	116.985	101.910	102.041	105.554	108.035	105.554
72.5	114.561	122.459	136.395	126.377	98.598	85.362	85.473	87.769	89.055	87.769
75.0	94.783	101.055	112.678	105.014	80.764	69.235	69.059	67.012	71.647	67.012
77.5	75.602	81.317	90.201	84.871	64.900	53.977	53.182	54.001	53.780	54.001
80.0	59.250	63.467	69.825	65.673	49.281	39.647	38.108	37.694	37.825	37.694
82.5	44.265	46.943	51.631	48.806	35.778	26.280	24.945	21.318	22.837	21.318
85.0	31.852	32.925	37.805	35.987	22.620	14.718	12.241	9.998	8.340	9.998
87.5	19.119	20.094	21.228	18.763	10.669	4.016	2.149	0.770	0.524	0.770
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	23.334	23.334	23.334	25.668	25.668	25.668	23.334	23.334	23.334	23.334
95.0	55.225	52.891	52.891	53.669	54.447	53.669	52.891	52.891	55.225	52.891
97.5	87.115	84.781	83.226	84.003	84.003	84.003	83.226	84.781	87.115	84.781
100.0	119.783	115.894	115.894	115.894	115.116	115.894	115.894	115.894	119.783	115.894
102.5	154.006	150.895	149.340	148.562	148.562	148.562	149.340	150.895	154.006	150.895
105.0	189.786	187.452	183.563	182.785	182.008	182.785	183.563	187.452	189.786	187.452
107.5	226.343	224.009	219.342	218.565	217.787	218.565	219.342	224.009	226.343	224.009
110.0	264.455	262.122	258.233	256.677	254.344	256.677	258.233	262.122	264.455	262.122
112.5	304.124	300.235	297.901	294.012	291.679	294.012	297.901	300.235	304.124	300.235
115.0	343.792	341.459	339.903	332.125	330.569	332.125	339.903	341.459	343.792	341.459
117.5	385.794	381.905	381.905	372.571	371.015	372.571	381.905	381.905	385.794	381.905
120.0	428.573	422.351	423.906	414.573	411.461	414.573	423.906	422.351	428.573	422.351
122.5	469.019	462.797	465.908	458.130	452.685	458.130	465.908	462.797	469.019	462.797
125.0	514.132	504.799	507.910	500.132	496.243	500.132	507.910	504.799	514.132	504.799
127.5	558.468	548.356	549.912	543.689	542.134	543.689	549.912	548.356	558.468	548.356
130.0	602.025	591.913	593.469	585.691	586.469	585.691	593.469	591.913	602.025	591.913
132.5	645.582	634.693	637.026	629.248	629.248	629.248	637.026	634.693	645.582	634.693

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## CANDELA TABULATION - (Cont.)

135.0	687.584	677.473	680.584	673.583	673.583	673.583	680.584	677.473	687.584	677.473
137.5	730.364	720.252	723.363	717.141	716.363	717.141	723.363	720.252	730.364	720.252
140.0	773.143	763.032	765.365	761.476	759.143	761.476	765.365	763.032	773.143	763.032
142.5	813.589	802.700	805.811	801.922	798.811	801.922	805.811	802.700	813.589	802.700
145.0	854.813	843.146	846.257	843.146	837.701	843.146	846.257	843.146	854.813	843.146
147.5	892.926	881.259	885.148	880.481	875.036	880.481	885.148	881.259	892.926	881.259
150.0	929.483	917.816	922.483	917.038	912.371	917.038	922.483	917.816	929.483	917.816
152.5	964.484	952.817	957.484	952.817	948.150	952.817	957.484	952.817	964.484	952.817
155.0	997.930	986.263	991.708	987.041	982.374	987.041	991.708	986.263	997.930	986.263
157.5	1026.709	1015.820	1022.042	1017.375	1012.709	1017.375	1022.042	1015.820	1026.709	1015.820
160.0	1054.710	1044.599	1050.043	1045.377	1040.710	1045.377	1050.043	1044.599	1054.710	1044.599
162.5	1078.823	1070.267	1074.156	1071.044	1067.933	1071.044	1074.156	1070.267	1078.823	1070.267
165.0	1100.601	1092.823	1095.156	1093.601	1091.267	1093.601	1095.156	1092.823	1100.601	1092.823
167.5	1116.935	1112.268	1113.824	1112.268	1111.490	1112.268	1113.824	1112.268	1116.935	1112.268
170.0	1131.714	1129.380	1130.158	1128.602	1127.824	1128.602	1130.158	1129.380	1131.714	1129.380
172.5	1144.159	1143.381	1143.381	1142.603	1142.603	1142.603	1143.381	1143.381	1144.159	1143.381
175.0	1152.714	1152.714	1152.714	1152.714	1151.937	1152.714	1152.714	1152.714	1152.714	1152.714
177.5	1157.381	1158.159	1158.159	1158.159	1157.381	1158.159	1158.159	1158.159	1157.381	1158.159
180.0	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493

## Vert. Angles

## Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	582.177	582.177	582.177	582.177	582.177	582.177	582.177
2.5	563.426	576.118	585.174	595.041	595.876	598.807	601.996
5.0	546.431	565.141	582.177	601.444	610.475	619.380	624.600
7.5	529.605	551.655	577.637	606.279	623.233	636.891	643.695
10.0	513.253	537.932	571.004	609.128	632.780	652.321	659.535
12.5	497.282	522.886	562.611	609.620	640.268	665.230	674.945
15.0	480.717	508.651	552.679	607.884	645.836	674.241	683.678
17.5	464.578	492.275	540.307	603.495	648.448	677.557	687.019
20.0	448.439	476.287	528.405	596.948	646.905	675.760	684.022
22.5	432.513	459.055	513.507	587.573	643.482	668.910	676.231
25.0	415.514	441.950	497.540	577.063	632.350	657.824	662.704
27.5	399.633	424.358	479.345	563.790	620.747	642.090	648.145
30.0	383.621	405.905	461.110	548.016	604.138	623.147	626.741
32.5	367.396	387.392	440.431	530.591	586.627	601.657	603.110
35.0	350.316	368.019	420.399	511.369	565.608	576.593	574.685
37.5	332.977	348.392	399.461	488.680	542.235	548.442	545.146
40.0	315.897	329.190	379.212	466.203	517.531	518.948	513.294
42.5	298.685	309.927	355.839	441.610	489.237	487.141	477.675
45.0	280.708	289.932	333.407	416.137	460.852	454.408	443.002
47.5	262.555	270.583	310.374	389.832	433.324	419.883	410.122
50.0	245.216	250.506	287.127	361.190	401.005	385.423	372.792
52.5	226.723	231.431	264.696	333.686	370.307	351.708	338.287
55.0	208.316	211.956	241.237	306.222	339.401	318.251	304.982
57.5	189.778	192.582	219.403	278.825	306.566	285.224	271.074
60.0	168.665	169.520	198.683	250.956	276.254	254.596	240.852
62.5	154.732	155.424	173.709	224.541	245.773	224.860	210.539
65.0	137.042	137.034	157.140	198.576	217.818	196.648	185.541
67.5	119.097	119.376	137.382	173.639	189.905	170.966	160.624
70.0	102.041	101.910	116.985	150.053	163.363	146.135	137.423
72.5	85.473	85.362	98.598	126.377	136.395	122.459	114.561
75.0	69.059	69.235	80.764	105.014	112.678	101.055	94.783
77.5	53.182	53.977	64.900	84.871	90.201	81.317	75.602
80.0	38.108	39.647	49.281	65.673	69.825	63.467	59.250

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DAO-ITL85132-KPL2008-3.009.IES****CANDELA TABULATION - (Cont.)**

82.5	24.945	26.280	35.778	48.806	51.631	46.943	44.265
85.0	12.241	14.718	22.620	35.987	37.805	32.925	31.852
87.5	2.149	4.016	10.669	18.763	21.228	20.094	19.119
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	23.334	25.668	25.668	25.668	23.334	23.334	23.334
95.0	52.891	53.669	54.447	53.669	52.891	52.891	55.225
97.5	83.226	84.003	84.003	84.003	83.226	84.781	87.115
100.0	115.894	115.894	115.116	115.894	115.894	115.894	119.783
102.5	149.340	148.562	148.562	148.562	149.340	150.895	154.006
105.0	183.563	182.785	182.008	182.785	183.563	187.452	189.786
107.5	219.342	218.565	217.787	218.565	219.342	224.009	226.343
110.0	258.233	256.677	254.344	256.677	258.233	262.122	264.455
112.5	297.901	294.012	291.679	294.012	297.901	300.235	304.124
115.0	339.903	332.125	330.569	332.125	339.903	341.459	343.792
117.5	381.905	372.571	371.015	372.571	381.905	381.905	385.794
120.0	423.906	414.573	411.461	414.573	423.906	422.351	428.573
122.5	465.908	458.130	452.685	458.130	465.908	462.797	469.019
125.0	507.910	500.132	496.243	500.132	507.910	504.799	514.132
127.5	549.912	543.689	542.134	543.689	549.912	548.356	558.468
130.0	593.469	585.691	586.469	585.691	593.469	591.913	602.025
132.5	637.026	629.248	629.248	629.248	637.026	634.693	645.582
135.0	680.584	673.583	673.583	673.583	680.584	677.473	687.584
137.5	723.363	717.141	716.363	717.141	723.363	720.252	730.364
140.0	765.365	761.476	759.143	761.476	765.365	763.032	773.143
142.5	805.811	801.922	798.811	801.922	805.811	802.700	813.589
145.0	846.257	843.146	837.701	843.146	846.257	843.146	854.813
147.5	885.148	880.481	875.036	880.481	885.148	881.259	892.926
150.0	922.483	917.038	912.371	917.038	922.483	917.816	929.483
152.5	957.484	952.817	948.150	952.817	957.484	952.817	964.484
155.0	991.708	987.041	982.374	987.041	991.708	986.263	997.930
157.5	1022.042	1017.375	1012.709	1017.375	1022.042	1015.820	1026.709
160.0	1050.043	1045.377	1040.710	1045.377	1050.043	1044.599	1054.710
162.5	1074.156	1071.044	1067.933	1071.044	1074.156	1070.267	1078.823
165.0	1095.156	1093.601	1091.267	1093.601	1095.156	1092.823	1100.601
167.5	1113.824	1112.268	1111.490	1112.268	1113.824	1112.268	1116.935
170.0	1130.158	1128.602	1127.824	1128.602	1130.158	1129.380	1131.714
172.5	1143.381	1142.603	1142.603	1142.603	1143.381	1143.381	1144.159
175.0	1152.714	1152.714	1151.937	1152.714	1152.714	1152.714	1152.714
177.5	1158.159	1158.159	1157.381	1158.159	1158.159	1158.159	1157.381
180.0	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493	1160.493

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DAO-ITL85132-KPL2008-3.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	214.18	N.A.	4.80
0-30	453.60	N.A.	10.10
0-40	734.40	N.A.	16.30
0-60	1245.91	N.A.	27.70
0-80	1505.03	N.A.	33.50
0-90	1531.19	N.A.	34.00
10-90	1476.00	N.A.	32.80
20-40	520.22	N.A.	11.60
20-50	797.46	N.A.	17.70
40-70	678.69	N.A.	15.10
60-80	259.12	N.A.	5.80
70-80	91.95	N.A.	2.00
80-90	26.16	N.A.	0.60
90-110	256.06	N.A.	5.70
90-120	590.93	N.A.	13.10
90-130	1042.58	N.A.	23.20
90-150	2093.58	N.A.	46.60
90-180	2966.07	N.A.	66.00
110-180	2710.01	N.A.	60.30
0-180	4497.26	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	55.19
10-20	158.99
20-30	239.42
30-40	280.80
40-50	277.24
50-60	234.27
60-70	167.18
70-80	91.95
80-90	26.16
90-100	59.94
100-110	196.12
110-120	334.86
120-130	451.65
130-140	523.12
140-150	527.87
150-160	454.85
160-170	308.35
170-180	109.29

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DAO-ITL85132-KPL2008-3.009.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

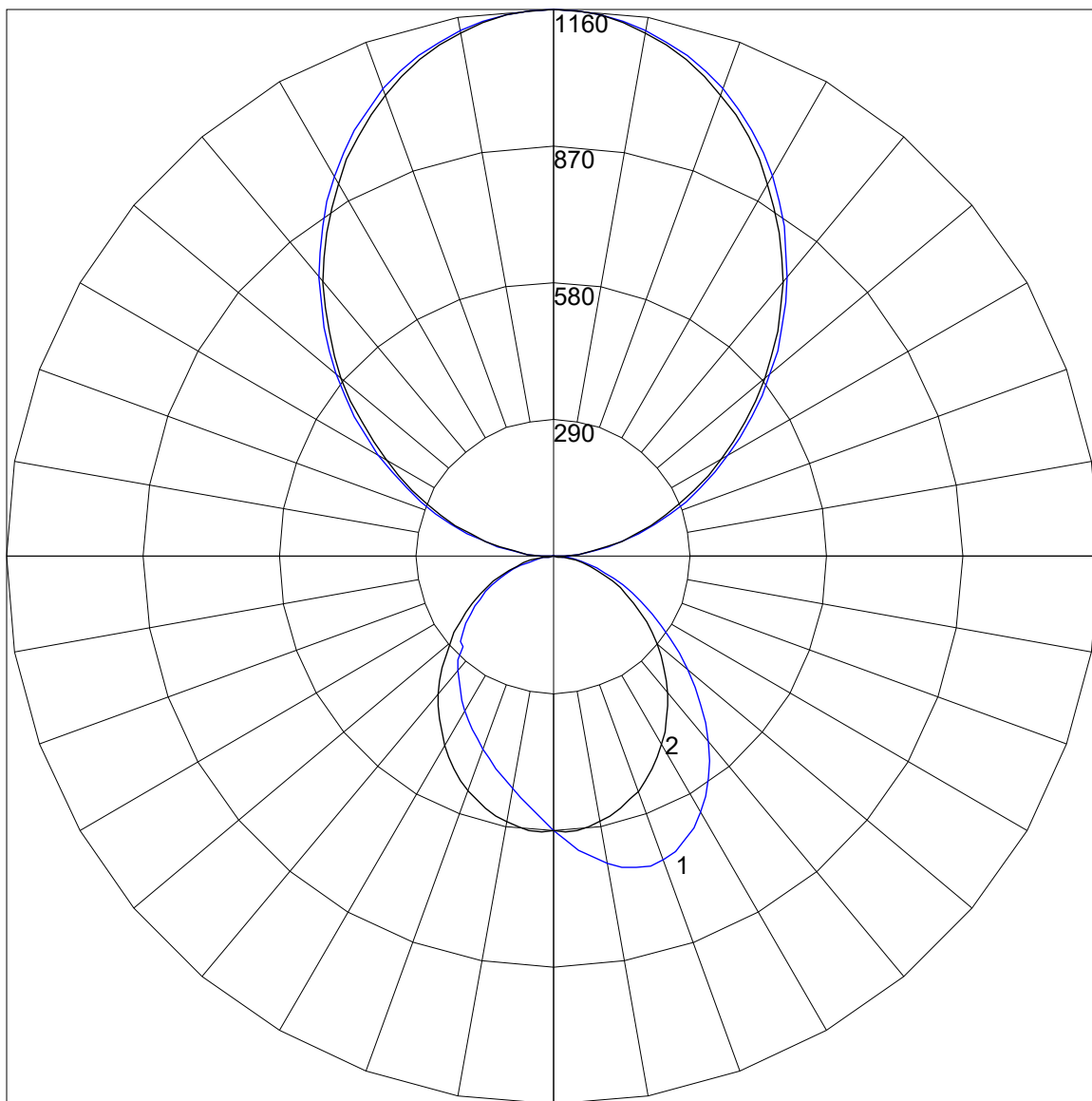
Effective Floor Cavity Reflectance 0.20

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	93	93	93	93	74	74	74	57	57	57	41	41	41	34
1	94	90	86	83	85	81	78	75	65	63	61	50	49	48	37	36	35	29
2	86	79	73	68	77	71	66	62	57	54	51	44	42	40	32	31	30	24
3	78	69	62	56	70	63	57	52	50	46	43	39	36	34	29	27	25	21
4	72	61	53	48	64	55	49	44	45	40	36	35	32	29	26	24	22	18
5	66	54	47	41	59	49	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	25	22	21	19	17	13
7	56	44	36	31	50	40	33	28	33	27	24	26	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	18	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	13	11	9

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-S-835-F-DAO-ITL85132-KPL2008-3.009.IES

## POLAR GRAPH



Maximum Candela = 1160.493 Located At Horizontal Angle = 0, Vertical Angle = 180

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

# 2 - Vertical Plane Through Horizontal Angles (90 - 270)