

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-S-S-835-ASY-DAO-ITL89599-KPL2008-3.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89599-KPL2008-3.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/24/17

[ISSUEDATE]08/06/2021

[MANUFAC]FINELITE, INC.

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

[_INPUT_ELECTRICAL]120.0 VOLTS, 28.5 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 31.0 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]3293

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3283
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	28.5
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)	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	31.936	32.346	31.936	30.299	27.432	25.795	24.566	22.519	19.653	9.827
95.0	63.873	64.692	63.873	61.825	59.778	57.731	54.865	49.952	41.353	24.157
97.5	97.037	97.856	96.628	96.628	96.628	95.400	90.077	79.841	63.054	39.306
100.0	125.698	127.745	130.202	136.344	140.847	138.800	128.974	110.958	84.345	54.865
102.5	161.319	165.823	174.012	186.705	193.665	187.933	169.918	140.847	103.998	70.014
105.0	210.043	218.641	235.428	250.987	253.853	240.751	210.862	168.280	122.423	85.573
107.5	285.380	295.206	312.812	323.458	321.001	296.844	250.168	192.437	139.619	101.541
110.0	381.598	386.511	397.566	402.070	388.559	346.796	282.923	213.318	155.997	117.509
112.5	476.588	479.454	485.186	478.635	447.927	386.921	308.308	232.152	171.965	133.477
115.0	568.712	567.893	564.208	541.689	492.966	417.219	329.190	248.940	188.342	150.264
117.5	642.821	636.679	623.577	588.775	525.312	438.101	345.158	264.498	204.720	167.461
120.0	695.639	687.040	665.340	619.483	544.965	452.431	359.079	279.648	221.507	184.248
122.5	729.622	718.977	690.725	636.270	556.838	463.077	371.362	294.797	238.294	201.035
125.0	745.590	734.126	701.780	643.230	562.980	471.675	383.236	309.946	254.672	217.822
127.5	748.866	736.992	702.599	643.640	565.846	479.045	395.519	325.095	271.049	234.200
130.0	743.134	731.260	697.276	640.774	567.074	486.005	408.212	340.654	288.246	251.396
132.5	732.488	722.252	689.906	636.270	568.303	493.375	420.495	356.622	305.442	268.593

IES INDOOR REPORT

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CANDELA TABULATION - (Cont.)

135.0	720.614	710.378	680.489	631.766	569.940	501.155	432.778	371.772	322.639	286.199
137.5	708.741	698.914	671.891	628.081	572.397	509.343	445.880	387.330	339.426	303.804
140.0	696.048	688.269	664.521	625.215	574.854	517.532	458.573	402.889	356.213	321.001
142.5	685.812	679.261	658.380	623.577	577.720	525.721	471.265	418.038	373.409	338.197
145.0	677.214	671.482	652.647	621.530	580.995	534.319	483.549	432.369	389.377	355.394
147.5	669.434	664.112	647.734	619.892	584.271	542.099	495.013	446.290	405.346	372.181
150.0	660.836	656.742	642.821	618.664	587.546	549.469	504.840	458.982	420.495	389.377
152.5	653.876	650.191	638.726	618.254	590.003	555.201	513.847	470.856	434.825	405.346
155.0	648.143	644.459	634.632	616.617	591.231	559.295	520.808	481.092	447.927	420.495
157.5	642.411	638.726	630.128	613.751	590.003	560.933	526.130	490.509	460.620	434.825
160.0	634.632	630.947	622.758	608.428	587.137	560.933	529.815	497.879	471.265	447.927
162.5	624.396	621.120	613.751	600.648	581.405	558.886	531.863	504.430	481.092	459.801
165.0	611.294	608.018	601.058	590.003	574.035	554.791	532.272	508.934	489.281	470.447
167.5	595.735	592.869	587.137	577.720	564.618	549.059	531.044	511.800	495.422	479.454
170.0	577.720	575.263	570.759	563.389	553.972	542.099	527.768	513.028	500.336	486.415
172.5	559.295	557.657	554.382	549.469	542.099	533.091	523.264	512.619	502.792	492.147
175.0	539.642	538.414	535.957	533.091	528.587	523.264	517.123	510.162	503.611	497.060
177.5	519.579	519.170	518.351	516.713	515.076	512.619	509.343	506.068	502.792	499.517
180.0	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336

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-S-S-835-ASY-DAO-ITL89599-KPL2008-3.003.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	12.693	13.512	15.149	16.378	17.606	18.015	18.425	18.834	18.834
95.0	26.614	27.842	29.889	32.346	33.574	33.984	33.984	33.165	32.346
97.5	40.125	41.763	45.038	48.723	51.180	52.408	53.227	52.408	51.999
100.0	54.046	56.093	59.778	64.282	67.558	70.424	72.471	72.061	72.061
102.5	68.376	71.652	76.156	81.069	85.164	88.030	90.077	90.486	90.486
105.0	82.297	86.801	93.352	100.313	104.407	106.454	107.683	107.273	107.273
107.5	97.037	101.132	107.683	115.462	120.785	123.651	125.698	124.879	124.060
110.0	111.368	113.824	121.604	131.021	137.162	140.028	142.485	142.485	142.485
112.5	125.698	126.517	135.115	146.170	153.540	157.634	160.500	160.500	160.500
115.0	140.028	139.210	147.808	160.091	169.099	174.831	178.925	179.335	179.744
117.5	154.359	150.674	159.682	173.193	183.429	190.799	196.122	196.941	197.760
120.0	169.099	162.957	171.555	185.067	196.122	205.129	212.499	213.318	214.547
122.5	183.429	174.831	182.610	196.122	207.996	218.641	227.239	228.468	230.105
125.0	198.578	187.524	194.075	206.358	218.641	231.334	241.160	242.798	244.436
127.5	213.318	199.397	204.311	215.365	228.058	241.979	253.034	255.491	257.947
130.0	228.058	211.271	214.137	223.554	235.837	250.168	262.042	266.136	269.821
132.5	243.617	223.145	223.964	231.743	242.388	256.309	267.774	273.096	278.010
135.0	258.766	235.019	233.381	239.113	248.530	261.223	271.868	277.191	282.104
137.5	274.325	247.302	243.207	246.073	253.443	264.908	274.734	279.238	283.742
140.0	290.293	260.813	253.443	253.853	258.766	268.183	276.372	280.466	284.561
142.5	306.671	275.963	265.317	261.632	263.679	271.049	277.191	280.466	283.742
145.0	323.867	291.931	278.010	270.230	268.593	273.915	278.010	280.466	282.923
147.5	340.654	308.308	290.702	278.419	273.915	276.781	279.648	281.285	282.923
150.0	357.032	323.458	303.395	287.427	280.057	281.285	282.104	282.923	283.332
152.5	373.409	340.245	317.316	298.072	287.427	286.199	284.970	284.970	284.970
155.0	389.377	357.032	332.875	311.584	298.482	293.568	289.474	288.655	287.427
157.5	404.936	373.000	349.662	328.780	313.631	304.214	296.844	294.797	293.159
160.0	420.495	391.425	368.905	348.843	332.056	318.954	308.308	305.033	301.757
162.5	435.235	409.440	388.149	368.496	352.118	339.016	327.961	322.639	317.725
165.0	449.565	427.865	407.802	388.559	373.000	361.945	352.528	347.205	342.292
167.5	461.848	443.833	426.227	409.031	395.110	384.464	375.866	371.772	368.087
170.0	472.494	458.163	444.652	431.140	419.676	409.440	401.251	397.157	393.472
172.5	481.911	471.675	461.848	452.431	443.833	436.463	430.321	427.455	424.180
175.0	490.100	483.139	476.998	470.856	465.533	461.029	457.344	455.297	453.660
177.5	496.241	492.556	489.690	486.824	484.777	482.730	480.683	479.864	478.635
180.0	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336	500.336

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-ASY-DAO-ITL89599-KPL2008-3.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	212.82	N.A.	6.50
0-30	450.57	N.A.	13.70
0-40	729.36	N.A.	22.20
0-60	1237.47	N.A.	37.70
0-80	1494.78	N.A.	45.50
0-90	1522.03	N.A.	46.40
10-90	1467.18	N.A.	44.70
20-40	516.54	N.A.	15.70
20-50	791.95	N.A.	24.10
40-70	674.06	N.A.	20.50
60-80	257.32	N.A.	7.80
70-80	91.36	N.A.	2.80
80-90	27.25	N.A.	0.80
90-110	211.98	N.A.	6.50
90-120	492.26	N.A.	15.00
90-130	813.74	N.A.	24.80
90-150	1376.31	N.A.	41.90
90-180	1760.92	N.A.	53.60
110-180	1548.94	N.A.	47.20
0-180	3282.96	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	49.55
100-110	162.43
110-120	280.28
120-130	321.48
130-140	302.25
140-150	260.32
150-160	204.06
160-170	133.45
170-180	47.10

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-ASY-DAO-ITL89599-KPL2008-3.003.IES

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

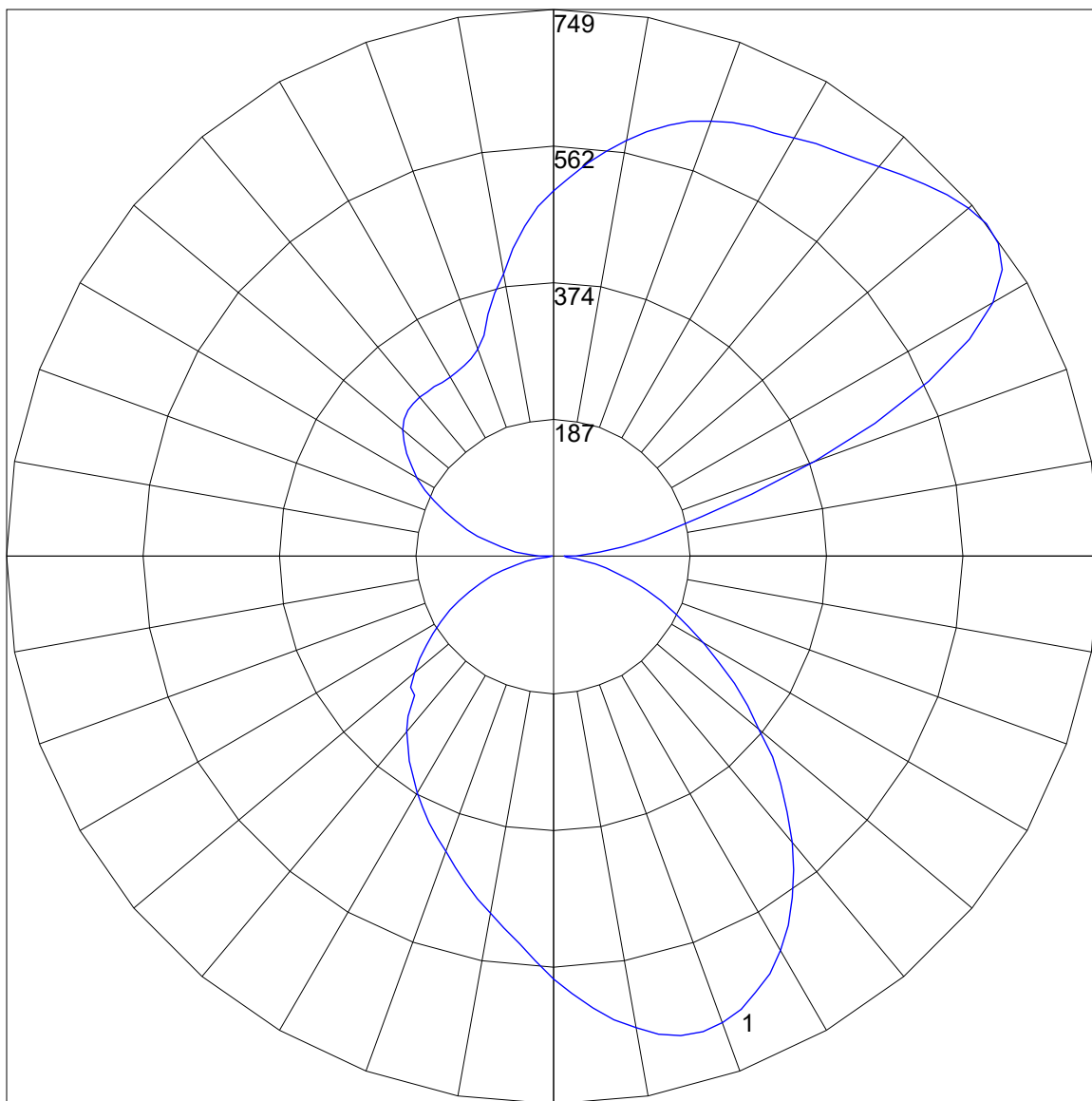
Effective Floor Cavity Reflectance 0.20

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	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	97	93	89	85	89	85	82	79	71	69	67	59	57	55	47	46	45	39
2	88	81	75	70	81	75	69	65	63	59	55	51	49	46	41	39	38	33
3	81	71	64	58	74	66	59	54	55	51	47	46	42	39	37	34	32	28
4	74	63	55	49	67	58	51	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	40	44	39	34	36	32	29	29	27	24	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	21	18
7	58	45	38	32	53	42	35	30	36	30	26	30	26	23	24	21	19	16
8	53	41	34	28	49	38	31	27	33	27	23	27	23	20	22	19	17	15
9	50	38	30	25	46	35	28	24	30	25	21	25	21	18	21	18	15	13
10	47	35	27	23	43	32	26	21	28	22	19	23	19	16	19	16	14	12

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-S-S-835-ASY-DAO-ITL89599-KPL2008-3.003.IES

POLAR GRAPH



Maximum Candela = 748.866 Located At Horizontal Angle = 0, Vertical Angle = 127.5

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