

# 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 : HP3-P-ID-4FT-B-H-835-ASY-F-KPL2008-103.009.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST] KPL2008-103.009 Family Correlation File  
[TESTLAB] Northern Lights Testing Laboratories  
[ISSUE DATE] 8/22/2024  
[TEST DATE] 12/4/2024  
[MANUFAC] Finelite Inc.  
[LUMCAT] HP3-P-ID-4ft-B-H-835-ASY-F  
[LUMINAIRE] HP3-P-ID Series  
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI  
[OTHER] INPUT ELECTRICAL: 277.0 VOLTS, 50.8 WATTS  
[ABSOLUTE LUMENS] 6762  
[LAMP] Samsung  
[BALLAST] Osram  
[BALLAST CAT] Oti50 x-2 @700mA

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6763
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	50.8
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)	0.25 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	10669	10182	9687
55	9706	9145	8676
65	8766	8237	7792
75	7822	7288	7032
85	7031	6598	6182

CANDELA TABULATION

	<u>0</u>	<u>15</u>	<u>30</u>	<u>45</u>	<u>60</u>	<u>75</u>	<u>90</u>	<u>105</u>	<u>120</u>	<u>135</u>
0.0	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637
2.5	1223.209	1241.581	1226.512	1227.193	1228.266	1226.470	1230.062	1226.470	1228.266	1227.193
5.0	1217.309	1235.332	1220.221	1220.434	1220.519	1218.765	1222.187	1218.765	1220.519	1220.434
7.5	1208.319	1224.886	1209.511	1208.532	1208.277	1205.919	1208.915	1205.919	1208.277	1208.532
10.0	1200.181	1217.003	1197.661	1193.166	1191.318	1187.385	1190.510	1187.385	1191.318	1193.166
12.5	1177.152	1195.090	1177.748	1177.621	1169.320	1165.166	1166.707	1165.166	1169.320	1177.621
15.0	1154.975	1170.818	1152.532	1152.319	1145.517	1138.409	1139.566	1138.409	1145.517	1152.319
17.5	1129.631	1144.061	1125.136	1121.842	1118.717	1107.029	1108.399	1107.029	1118.717	1121.842
20.0	1101.810	1115.167	1096.115	1088.368	1084.818	1074.287	1074.151	1074.287	1084.818	1088.368
22.5	1071.239	1081.046	1063.024	1052.280	1045.214	1037.765	1036.565	1037.765	1045.214	1052.280
25.0	1042.047	1049.113	1026.936	1015.375	1004.461	996.799	996.842	996.799	1004.461	1015.375
27.5	999.072	1009.297	989.733	977.491	964.611	955.621	952.232	955.621	964.611	977.491
30.0	960.882	963.751	948.086	935.836	920.895	911.437	908.653	911.437	920.895	935.836
32.5	919.363	927.237	903.945	894.146	877.103	866.785	862.767	866.785	877.103	894.146
35.0	878.857	884.212	863.022	847.654	839.520	820.342	819.014	820.342	839.520	847.654
37.5	836.395	838.151	818.415	802.405	785.966	774.836	771.668	774.836	785.966	802.405
40.0	788.706	791.959	772.482	755.743	740.033	729.331	724.579	729.331	740.033	755.743
42.5	743.843	744.741	726.120	711.180	694.698	683.996	679.201	683.996	694.698	711.180
45.0	698.551	700.007	680.400	666.659	648.037	637.592	634.252	637.592	648.037	666.659
47.5	651.975	651.975	635.195	620.254	602.617	592.000	588.790	592.000	602.617	620.254
50.0	605.143	606.684	588.062	574.064	556.769	548.036	544.183	548.036	556.769	574.064
52.5	558.738	560.408	542.771	529.500	514.346	504.457	502.059	504.457	514.346	529.500
55.0	515.502	514.688	499.791	485.707	472.822	465.630	460.792	465.630	472.822	485.707
57.5	471.751	468.284	454.799	443.412	430.954	422.392	419.439	422.392	430.954	443.412
60.0	427.231	424.276	413.403	400.347	389.559	382.538	379.285	382.538	389.559	400.347
62.5	385.106	382.367	371.836	359.353	347.088	342.594	340.783	342.594	347.088	359.353
65.0	343.017	340.093	331.818	322.349	311.120	307.418	304.926	307.418	311.120	322.349
67.5	301.527	299.814	292.229	282.528	274.523	270.927	269.249	270.927	274.523	282.528
70.0	263.564	260.816	252.352	246.210	240.200	235.644	234.660	235.644	240.200	246.210
72.5	223.572	216.877	216.209	209.629	204.009	200.995	200.404	200.995	204.009	209.629
75.0	187.451	185.687	180.888	174.651	172.369	168.229	168.529	168.229	172.369	174.651
77.5	153.854	151.239	146.722	142.150	139.697	136.705	136.919	136.705	139.697	142.150
80.0	119.967	117.937	114.179	112.146	109.085	107.522	106.619	107.522	109.085	112.146
82.5	87.569	86.593	85.082	83.027	81.752	80.695	83.460	80.695	81.752	83.027
85.0	56.738	55.733	53.746	53.250	52.338	51.285	49.889	51.285	52.338	53.250
87.5	29.649	27.526	26.297	25.369	24.024	24.136	24.409	24.136	24.024	25.369
90.0	2.448	2.385	2.710	2.564	3.087	3.267	2.483	3.267	3.087	2.564
92.5	18.057	18.308	19.494	19.578	20.164	21.403	23.708	32.858	41.765	44.587
95.0	37.285	36.989	37.118	37.240	37.041	73.368	54.300	78.723	77.050	79.560
97.5	53.380	52.794	52.406	52.429	98.423	137.663	86.269	112.419	105.801	104.888
100.0	67.603	66.090	69.596	101.960	194.078	201.836	120.093	155.317	157.751	149.688
102.5	83.850	85.737	144.973	290.173	263.354	252.553	155.142	191.750	203.692	214.036
105.0	186.350	223.978	296.061	419.705	383.348	298.532	190.518	221.186	257.543	263.704
107.5	300.092	459.182	559.582	517.216	484.661	346.534	227.400	248.948	310.405	306.526
110.0	615.031	653.670	718.550	685.464	564.146	386.771	263.803	276.406	350.261	371.330
112.5	832.562	854.624	875.770	868.850	616.475	425.410	304.206	306.755	377.720	433.092
115.0	1029.413	1052.987	1083.187	1016.480	657.244	467.472	340.298	335.962	401.222	489.149
117.5	1283.002	1290.989	1318.518	1072.916	701.968	502.687	376.046	363.496	421.531	512.043
120.0	1487.756	1518.939	1500.303	1087.823	733.001	536.383	412.251	390.802	440.165	535.090
122.5	1777.852	1760.964	1533.694	1094.750	760.842	565.742	443.817	416.891	461.082	550.758
125.0	1904.117	1819.154	1504.486	1099.538	783.274	592.972	475.001	447.467	481.087	560.114
127.5	1873.540	1767.128	1463.872	1097.942	802.976	623.321	507.784	481.923	499.873	569.774
130.0	1802.341	1696.769	1425.845	1096.422	821.914	651.083	541.631	509.457	519.497	581.563
132.5	1725.070	1629.911	1385.761	1091.937	837.357	680.823	576.010	539.501	538.513	595.711

**IES INDOOR REPORT**  
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**CANDELA TABULATION - (Cont.)**

135.0	1644.440	1564.045	1350.616	1086.991	854.321	710.639	611.227	567.568	555.094	609.478
137.5	1568.991	1503.503	1314.260	1081.591	875.157	740.302	645.379	596.472	576.010	623.321
140.0	1497.944	1441.584	1279.879	1076.493	894.859	771.718	682.192	626.743	594.646	637.544
142.5	1435.118	1386.745	1250.368	1071.471	915.468	801.909	715.279	659.526	623.929	650.018
145.0	1383.704	1341.638	1225.568	1071.018	936.917	831.504	749.963	693.982	660.438	659.754
147.5	1331.980	1297.758	1200.852	1075.200	959.054	862.837	786.322	734.446	696.035	671.315
150.0	1289.385	1261.553	1182.444	1080.373	978.983	891.206	819.864	773.162	723.873	687.136
152.5	1251.358	1230.666	1172.559	1087.823	997.694	919.424	854.397	808.149	752.016	719.690
155.0	1227.928	1211.577	1164.875	1095.507	1016.405	946.659	887.100	840.859	779.629	758.256
157.5	1210.737	1197.426	1160.919	1101.444	1031.160	972.063	916.837	887.712	812.558	786.095
160.0	1196.443	1186.551	1157.879	1103.796	1043.481	993.965	944.526	905.962	850.820	812.483
162.5	1184.274	1174.760	1150.649	1103.342	1052.685	1014.431	969.703	938.135	891.358	843.748
165.0	1167.840	1160.844	1140.235	1099.538	1060.444	1031.387	991.764	965.899	922.396	880.482
167.5	1147.760	1141.982	1126.084	1093.760	1065.769	1046.143	1012.525	992.823	950.690	926.344
170.0	1125.555	1120.155	1111.102	1087.218	1068.809	1056.338	1027.969	1014.582	979.285	953.730
172.5	1102.737	1101.444	1095.658	1079.382	1068.960	1063.258	1038.769	1032.378	1004.690	983.468
175.0	1085.236	1082.574	1081.364	1071.018	1066.835	1066.608	1047.360	1047.739	1026.751	1013.054
177.5	1068.355	1066.450	1068.431	1061.284	1062.494	1067.062	1051.770	1057.782	1044.623	1035.494
180.0	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931

**Vert.  
Angles**

**Horizontal Angles**

	<u>150</u>	<u>165</u>	<u>180</u>	<u>195</u>	<u>210</u>	<u>225</u>	<u>240</u>	<u>255</u>	<u>270</u>	<u>285</u>
0.0	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637	1231.637
2.5	1226.512	1241.581	1223.209	1241.581	1226.512	1227.193	1228.266	1226.470	1230.062	1226.470
5.0	1220.221	1235.332	1217.309	1235.332	1220.221	1220.434	1220.519	1218.765	1222.187	1218.765
7.5	1209.511	1224.886	1208.319	1224.886	1209.511	1208.532	1208.277	1205.919	1208.915	1205.919
10.0	1197.661	1217.003	1200.181	1217.003	1197.661	1193.166	1191.318	1187.385	1190.510	1187.385
12.5	1177.748	1195.090	1177.152	1195.090	1177.748	1177.621	1169.320	1165.166	1166.707	1165.166
15.0	1152.532	1170.818	1154.975	1170.818	1152.532	1152.319	1145.517	1138.409	1139.566	1138.409
17.5	1125.136	1144.061	1129.631	1144.061	1125.136	1121.842	1118.717	1107.029	1108.399	1107.029
20.0	1096.115	1115.167	1101.810	1115.167	1096.115	1088.368	1084.818	1074.287	1074.151	1074.287
22.5	1063.024	1081.046	1071.239	1081.046	1063.024	1052.280	1045.214	1037.765	1036.565	1037.765
25.0	1026.936	1049.113	1042.047	1049.113	1026.936	1015.375	1004.461	996.799	996.842	996.799
27.5	989.733	1009.297	999.072	1009.297	989.733	977.491	964.611	955.621	952.232	955.621
30.0	948.086	963.751	960.882	963.751	948.086	935.836	920.895	911.437	908.653	911.437
32.5	903.945	927.237	919.363	927.237	903.945	894.146	877.103	866.785	862.767	866.785
35.0	863.022	884.212	878.857	884.212	863.022	847.654	839.520	820.342	819.014	820.342
37.5	818.415	838.151	836.395	838.151	818.415	802.405	785.966	774.836	771.668	774.836
40.0	772.482	791.959	788.706	791.959	772.482	755.743	740.033	729.331	724.579	729.331
42.5	726.120	744.741	743.843	744.741	726.120	711.180	694.698	683.996	679.201	683.996
45.0	680.400	700.007	698.551	700.007	680.400	666.659	648.037	637.592	634.252	637.592
47.5	635.195	651.975	651.975	651.975	635.195	620.254	602.617	592.000	588.790	592.000
50.0	588.062	606.684	605.143	606.684	588.062	574.064	556.769	548.036	544.183	548.036
52.5	542.771	560.408	558.738	560.408	542.771	529.500	514.346	504.457	502.059	504.457
55.0	499.791	514.688	515.502	514.688	499.791	485.707	472.822	465.630	460.792	465.630
57.5	454.799	468.284	471.751	468.284	454.799	443.412	430.954	422.392	419.439	422.392
60.0	413.403	424.276	427.231	424.276	413.403	400.347	389.559	382.538	379.285	382.538
62.5	371.836	382.367	385.106	382.367	371.836	359.353	347.088	342.594	340.783	342.594
65.0	331.818	340.093	343.017	340.093	331.818	322.349	311.120	307.418	304.926	307.418
67.5	292.229	299.814	301.527	299.814	292.229	282.528	274.523	270.927	269.249	270.927
70.0	252.352	260.816	263.564	260.816	252.352	246.210	240.200	235.644	234.660	235.644
72.5	216.209	216.877	223.572	216.877	216.209	209.629	204.009	200.995	200.404	200.995
75.0	180.888	185.687	187.451	185.687	180.888	174.651	172.369	168.229	168.529	168.229
77.5	146.722	151.239	153.854	151.239	146.722	142.150	139.697	136.705	136.919	136.705
80.0	114.179	117.937	119.967	117.937	114.179	112.146	109.085	107.522	106.619	107.522

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**CANDELA TABULATION - (Cont.)**

82.5	85.082	86.593	87.569	86.593	85.082	83.027	81.752	80.695	83.460	80.695
85.0	53.746	55.733	56.738	55.733	53.746	53.250	52.338	51.285	49.889	51.285
87.5	26.297	27.526	29.649	27.526	26.297	25.369	24.024	24.136	24.409	24.136
90.0	2.710	2.385	2.448	2.385	2.710	2.564	3.087	3.267	2.483	3.267
92.5	45.979	44.944	46.321	44.944	45.979	44.587	41.765	32.858	23.708	21.403
95.0	81.766	83.439	84.580	83.439	81.766	79.560	77.050	78.723	54.300	73.368
97.5	112.419	115.689	116.525	115.689	112.419	104.888	105.801	112.419	86.269	137.663
100.0	132.879	138.584	140.713	138.584	132.879	149.688	157.751	155.317	120.093	201.836
102.5	203.920	167.715	158.968	167.715	203.920	214.036	203.692	191.750	155.142	252.553
105.0	278.383	264.008	249.024	264.008	278.383	263.704	257.543	221.186	190.518	298.532
107.5	330.258	326.835	326.606	326.835	330.258	306.526	310.405	248.948	227.400	346.534
110.0	370.646	383.272	385.174	383.272	370.646	371.330	350.261	276.406	263.803	386.771
112.5	414.305	422.976	426.703	422.976	414.305	433.092	377.720	306.755	304.206	425.410
115.0	505.274	469.221	467.472	469.221	505.274	489.149	401.222	335.962	340.298	467.472
117.5	571.752	574.413	542.012	574.413	571.752	512.043	421.531	363.496	376.046	502.687
120.0	611.455	658.689	663.709	658.689	611.455	535.090	440.165	390.802	412.251	536.383
122.5	639.674	695.351	714.214	695.351	639.674	550.758	461.082	416.891	443.817	565.742
125.0	658.156	720.983	740.227	720.983	658.156	560.114	481.087	447.467	475.001	592.972
127.5	665.763	740.227	757.265	740.227	665.763	569.774	499.873	481.923	507.784	623.321
130.0	665.382	743.954	768.065	743.954	665.382	581.563	519.497	509.457	541.631	651.083
132.5	666.523	734.674	758.785	734.674	666.523	595.711	538.513	539.501	576.010	680.823
135.0	671.467	725.166	746.159	725.166	671.467	609.478	555.094	567.568	611.227	710.639
137.5	677.780	722.504	739.010	722.504	677.780	623.321	576.010	596.472	645.379	740.302
140.0	685.691	723.113	736.880	723.113	685.691	637.544	594.646	626.743	682.192	771.718
142.5	691.852	725.091	736.880	725.091	691.852	650.018	623.929	659.526	715.279	801.909
145.0	698.621	725.623	736.728	725.623	698.621	659.754	660.438	693.982	749.963	831.504
147.5	703.413	725.547	735.054	725.547	703.413	671.315	696.035	734.446	786.322	862.837
150.0	706.152	725.699	734.294	725.699	706.152	687.136	723.873	773.162	819.864	891.206
152.5	710.639	723.265	730.643	723.265	710.639	719.690	752.016	808.149	854.397	919.424
155.0	722.733	724.254	728.817	724.254	722.733	758.256	779.629	840.859	887.100	946.659
157.5	758.029	735.739	735.358	735.739	758.029	786.095	812.558	887.712	916.837	972.063
160.0	796.585	774.229	763.958	774.229	796.585	812.483	850.820	905.962	944.526	993.965
162.5	825.188	813.246	809.745	813.246	825.188	843.748	891.358	938.135	969.703	1014.431
165.0	856.749	840.859	838.802	840.859	856.749	880.482	922.396	965.899	991.764	1031.387
167.5	896.379	876.753	874.855	876.753	896.379	926.344	950.690	992.823	1012.525	1046.143
170.0	944.223	927.486	922.926	927.486	944.223	953.730	979.285	1014.582	1027.969	1056.338
172.5	973.734	961.943	962.783	961.943	973.734	983.468	1004.690	1032.378	1038.769	1063.258
175.0	1006.444	996.249	998.836	996.249	1006.444	1013.054	1026.751	1047.739	1047.360	1066.608
177.5	1035.645	1028.574	1029.103	1028.574	1035.645	1035.494	1044.623	1057.782	1051.770	1067.062
180.0	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931	1054.931

**Vert.  
Angles**

**Horizontal Angles**

	<u>300</u>	<u>315</u>	<u>330</u>	<u>345</u>	<u>360</u>
0.0	1231.637	1231.637	1231.637	1231.637	1231.637
2.5	1228.266	1227.193	1226.512	1241.581	1223.209
5.0	1220.519	1220.434	1220.221	1235.332	1217.309
7.5	1208.277	1208.532	1209.511	1224.886	1208.319
10.0	1191.318	1193.166	1197.661	1217.003	1200.181
12.5	1169.320	1177.621	1177.748	1195.090	1177.152
15.0	1145.517	1152.319	1152.532	1170.818	1154.975
17.5	1118.717	1121.842	1125.136	1144.061	1129.631
20.0	1084.818	1088.368	1096.115	1115.167	1101.810
22.5	1045.214	1052.280	1063.024	1081.046	1071.239
25.0	1004.461	1015.375	1026.936	1049.113	1042.047
27.5	964.611	977.491	989.733	1009.297	999.072

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-H-835-ASY-F-KPL2008-103.009.IES****CANDELA TABULATION - (Cont.)**

30.0	920.895	935.836	948.086	963.751	960.882
32.5	877.103	894.146	903.945	927.237	919.363
35.0	839.520	847.654	863.022	884.212	878.857
37.5	785.966	802.405	818.415	838.151	836.395
40.0	740.033	755.743	772.482	791.959	788.706
42.5	694.698	711.180	726.120	744.741	743.843
45.0	648.037	666.659	680.400	700.007	698.551
47.5	602.617	620.254	635.195	651.975	651.975
50.0	556.769	574.064	588.062	606.684	605.143
52.5	514.346	529.500	542.771	560.408	558.738
55.0	472.822	485.707	499.791	514.688	515.502
57.5	430.954	443.412	454.799	468.284	471.751
60.0	389.559	400.347	413.403	424.276	427.231
62.5	347.088	359.353	371.836	382.367	385.106
65.0	311.120	322.349	331.818	340.093	343.017
67.5	274.523	282.528	292.229	299.814	301.527
70.0	240.200	246.210	252.352	260.816	263.564
72.5	204.009	209.629	216.209	216.877	223.572
75.0	172.369	174.651	180.888	185.687	187.451
77.5	139.697	142.150	146.722	151.239	153.854
80.0	109.085	112.146	114.179	117.937	119.967
82.5	81.752	83.027	85.082	86.593	87.569
85.0	52.338	53.250	53.746	55.733	56.738
87.5	24.024	25.369	26.297	27.526	29.649
90.0	3.087	2.564	2.710	2.385	2.448
92.5	20.164	19.578	19.494	18.308	18.057
95.0	37.041	37.240	37.118	36.989	37.285
97.5	98.423	52.429	52.406	52.794	53.380
100.0	194.078	101.960	69.596	66.090	67.603
102.5	263.354	290.173	144.973	85.737	83.850
105.0	383.348	419.705	296.061	223.978	186.350
107.5	484.661	517.216	559.582	459.182	300.092
110.0	564.146	685.464	718.550	653.670	615.031
112.5	616.475	868.850	875.770	854.624	832.562
115.0	657.244	1016.480	1083.187	1052.987	1029.413
117.5	701.968	1072.916	1318.518	1290.989	1283.002
120.0	733.001	1087.823	1500.303	1518.939	1487.756
122.5	760.842	1094.750	1533.694	1760.964	1777.852
125.0	783.274	1099.538	1504.486	1819.154	1904.117
127.5	802.976	1097.942	1463.872	1767.128	1873.540
130.0	821.914	1096.422	1425.845	1696.769	1802.341
132.5	837.357	1091.937	1385.761	1629.911	1725.070
135.0	854.321	1086.991	1350.616	1564.045	1644.440
137.5	875.157	1081.591	1314.260	1503.503	1568.991
140.0	894.859	1076.493	1279.879	1441.584	1497.944
142.5	915.468	1071.471	1250.368	1386.745	1435.118
145.0	936.917	1071.018	1225.568	1341.638	1383.704
147.5	959.054	1075.200	1200.852	1297.758	1331.980
150.0	978.983	1080.373	1182.444	1261.553	1289.385
152.5	997.694	1087.823	1172.559	1230.666	1251.358
155.0	1016.405	1095.507	1164.875	1211.577	1227.928
157.5	1031.160	1101.444	1160.919	1197.426	1210.737
160.0	1043.481	1103.796	1157.879	1186.551	1196.443
162.5	1052.685	1103.342	1150.649	1174.760	1184.274
165.0	1060.444	1099.538	1140.235	1160.844	1167.840
167.5	1065.769	1093.760	1126.084	1141.982	1147.760

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-H-835-ASY-F-KPL2008-103.009.IES**

**CANDELA TABULATION - (Cont.)**

<b>170.0</b>	1068.809	1087.218	1111.102	1120.155	1125.555
<b>172.5</b>	1068.960	1079.382	1095.658	1101.444	1102.737
<b>175.0</b>	1066.835	1071.018	1081.364	1082.574	1085.236
<b>177.5</b>	1062.494	1061.284	1068.431	1066.450	1068.355
<b>180.0</b>	1054.931	1054.931	1054.931	1054.931	1054.931

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-H-835-ASY-F-KPL2008-103.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	439.89	N.A.	6.50
0-30	908.34	N.A.	13.40
0-40	1439.3	N.A.	21.30
0-60	2389.44	N.A.	35.30
0-80	2896.59	N.A.	42.80
0-90	2956.54	N.A.	43.70
10-90	2840.68	N.A.	42.00
20-40	999.41	N.A.	14.80
20-50	1513.48	N.A.	22.40
40-70	1270.00	N.A.	18.80
60-80	507.15	N.A.	7.50
70-80	187.29	N.A.	2.80
80-90	59.95	N.A.	0.90
90-110	367.12	N.A.	5.40
90-120	990.09	N.A.	14.60
90-130	1759.31	N.A.	26.00
90-150	2996.09	N.A.	44.30
90-180	3806.16	N.A.	56.30
110-180	3439.04	N.A.	50.90
0-180	6762.7	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	115.86
10-20	324.03
20-30	468.46
30-40	530.96
40-50	514.07
50-60	436.07
60-70	319.86
70-80	187.29
80-90	59.95
90-100	68.73
100-110	298.39
110-120	622.97
120-130	769.22
130-140	678.72
140-150	558.07
150-160	429.49
160-170	281.39
170-180	99.19



# IES INDOOR REPORT

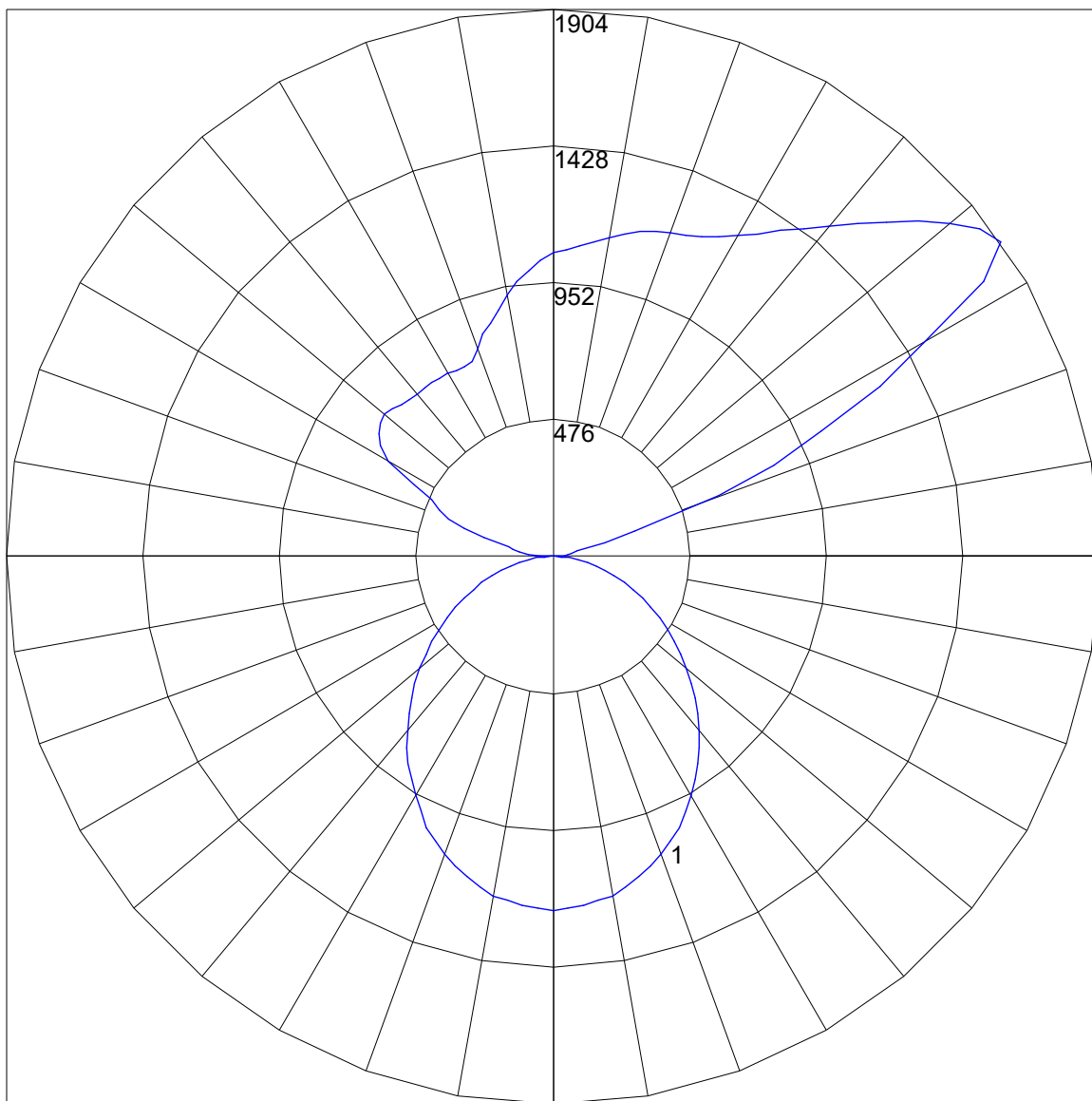
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-H-835-ASY-F-KPL2008-103.009.IES

## 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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	43	43	37
2	88	81	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23
5	67	56	48	42	61	52	45	39	43	38	34	35	32	28	28	25	23	20
6	62	50	42	36	57	46	39	34	39	34	30	32	28	25	26	23	21	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	21	18	16
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	22	19	16	14
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	19	16	14	12

POLAR GRAPH



Maximum Candela = 1904.117 Located At Horizontal Angle = 0, Vertical Angle = 125  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)