

# 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-H-H-835-ASY-F-KPL2008-103.005.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST] KPL2008-103.005 Family Correlation File  
[TESTLAB] Northern Lights Testing Laboratories  
[ISSUEDATE] 8/22/2024  
[TESTDATE] 12/4/2024  
[MANUFAC] Finelite Inc.  
[LUMCAT] HP3-P-ID-4ft-H-H-835-ASY-F  
[LUMINAIRE] HP3-P-ID Series  
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 53.8 WATTS  
[ABSOLUTELUMENS]7240  
[LAMP] Samsung  
[BALLAST] Osram  
[BALLASTCAT] Oti50 x-2 @700mA

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7241
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	135
Total Luminaire Watts	53.8
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	884.211	863.022	847.654	839.520	820.342	819.015	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	20.325	20.608	21.944	22.038	22.697	24.092	26.686	36.987	47.013	50.189
95.0	41.969	41.636	41.781	41.918	41.695	82.586	61.123	88.614	86.730	89.556
97.5	60.087	59.427	58.990	59.016	110.789	154.959	97.107	126.543	119.094	118.066
100.0	76.097	74.393	78.340	114.770	218.461	227.194	135.181	174.831	177.570	168.495
102.5	94.385	96.509	163.187	326.630	296.442	284.284	174.634	215.841	229.283	240.927
105.0	209.762	252.118	333.258	472.436	431.511	336.039	214.454	248.975	289.900	296.835
107.5	337.795	516.872	629.887	582.198	545.553	390.072	255.970	280.225	349.404	345.038
110.0	692.302	735.796	808.828	771.584	635.024	435.364	296.946	311.133	394.267	417.983
112.5	937.164	961.997	985.800	978.010	693.928	478.857	342.426	345.295	425.175	487.504
115.0	1158.747	1185.282	1219.276	1144.189	739.819	526.204	383.052	378.171	451.631	550.605
117.5	1444.196	1453.186	1484.174	1207.715	790.161	565.844	423.291	409.165	474.491	576.375
120.0	1674.675	1709.775	1688.799	1224.494	825.094	603.773	464.045	439.902	495.467	602.317
122.5	2001.218	1982.208	1726.385	1232.293	856.433	636.821	499.577	469.268	519.012	619.954
125.0	2143.346	2047.709	1693.506	1237.682	881.683	667.472	534.680	503.686	541.529	630.485
127.5	2108.927	1989.146	1647.790	1235.885	903.860	701.634	571.581	542.471	562.676	641.359
130.0	2028.784	1909.947	1604.986	1234.174	925.177	732.883	609.681	573.464	584.766	654.630
132.5	1941.804	1834.690	1559.865	1229.126	942.561	766.360	648.379	607.283	606.171	670.554

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

135.0	1851.044	1760.548	1520.304	1223.558	961.657	799.922	688.020	638.876	624.835	686.051
137.5	1766.116	1692.400	1479.381	1217.480	985.110	833.312	726.463	671.411	648.379	701.634
140.0	1686.142	1622.702	1440.680	1211.742	1007.288	868.675	767.901	705.486	669.356	717.644
142.5	1615.423	1560.972	1407.461	1206.089	1030.486	902.660	805.145	742.388	702.318	731.685
145.0	1557.550	1510.199	1379.546	1205.578	1054.630	935.972	844.186	781.172	743.414	742.644
147.5	1499.328	1460.805	1351.725	1210.286	1079.548	971.242	885.114	826.720	783.484	755.658
150.0	1451.381	1420.052	1331.004	1216.109	1101.980	1003.176	922.870	870.301	814.819	773.466
152.5	1408.576	1385.284	1319.877	1224.494	1123.042	1034.939	961.742	909.683	846.498	810.110
155.0	1382.202	1363.797	1311.227	1233.144	1144.104	1065.595	998.553	946.503	877.580	853.521
157.5	1362.852	1347.869	1306.775	1239.827	1160.713	1094.191	1032.027	999.242	914.646	884.859
160.0	1346.762	1335.627	1303.353	1242.475	1174.581	1118.845	1063.194	1019.785	957.715	914.561
162.5	1333.064	1322.354	1295.214	1241.964	1184.942	1141.882	1091.535	1056.000	1003.346	949.755
165.0	1314.565	1306.690	1283.491	1237.682	1193.677	1160.969	1116.368	1087.252	1038.284	991.104
167.5	1291.962	1285.458	1267.563	1231.177	1199.670	1177.578	1139.737	1117.560	1070.132	1042.728
170.0	1266.967	1260.889	1250.698	1223.813	1203.092	1189.054	1157.121	1142.052	1102.321	1073.555
172.5	1241.283	1239.827	1233.314	1214.994	1203.263	1196.844	1169.278	1162.084	1130.917	1107.029
175.0	1221.583	1218.586	1217.224	1205.578	1200.870	1200.615	1178.949	1179.374	1155.750	1140.333
177.5	1202.581	1200.436	1202.667	1194.622	1195.984	1201.126	1183.912	1190.680	1175.867	1165.591
180.0	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470

**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	884.211	878.857	884.211	863.022	847.654	839.520	820.342	819.015	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

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	51.755	50.591	52.141	50.591	51.755	50.189	47.013	36.987	26.686	24.092
95.0	92.038	93.922	95.206	93.922	92.038	89.556	86.730	88.614	61.123	82.586
97.5	126.543	130.224	131.165	130.224	126.543	118.066	119.094	126.543	97.107	154.959
100.0	149.574	155.995	158.392	155.995	149.574	168.495	177.570	174.831	135.181	227.194
102.5	229.540	188.786	178.940	188.786	229.540	240.927	229.283	215.841	174.634	284.284
105.0	313.359	297.178	280.311	297.178	313.359	296.835	289.900	248.975	214.454	336.039
107.5	371.751	367.897	367.640	367.897	371.751	345.038	349.404	280.225	255.970	390.072
110.0	417.213	431.425	433.566	431.425	417.213	417.983	394.267	311.133	296.946	435.364
112.5	466.357	476.118	480.313	476.118	466.357	487.504	425.175	345.295	342.426	478.857
115.0	568.756	528.173	526.204	528.173	568.756	550.605	451.631	378.171	383.052	526.204
117.5	643.585	646.581	610.110	646.581	643.585	576.375	474.491	409.165	423.291	565.844
120.0	688.277	741.445	747.096	741.445	688.277	602.317	495.467	439.902	464.045	603.773
122.5	720.041	782.713	803.946	782.713	720.041	619.954	519.012	469.268	499.577	636.821
125.0	740.846	811.566	833.227	811.566	740.846	630.485	541.529	503.686	534.680	667.472
127.5	749.408	833.227	852.406	833.227	749.408	641.359	562.676	542.471	571.581	701.634
130.0	748.979	837.423	864.563	837.423	748.979	654.630	584.766	573.464	609.681	732.883
132.5	750.264	826.977	854.117	826.977	750.264	670.554	606.171	607.283	648.379	766.360
135.0	755.829	816.275	839.905	816.275	755.829	686.051	624.835	638.876	688.020	799.922
137.5	762.935	813.278	831.858	813.278	762.935	701.634	648.379	671.411	726.463	833.312
140.0	771.840	813.964	829.460	813.964	771.840	717.644	669.356	705.486	767.901	868.675
142.5	778.775	816.190	829.460	816.190	778.775	731.685	702.318	742.388	805.145	902.660
145.0	786.394	816.788	829.289	816.788	786.394	742.644	743.414	781.172	844.186	935.972
147.5	791.788	816.703	827.405	816.703	791.788	755.658	783.484	826.720	885.114	971.242
150.0	794.871	816.874	826.549	816.874	794.871	773.466	814.819	870.301	922.870	1003.176
152.5	799.922	814.135	822.439	814.135	799.922	810.110	846.498	909.683	961.742	1034.939
155.0	813.535	815.247	820.384	815.247	813.535	853.521	877.580	946.503	998.553	1065.595
157.5	853.266	828.176	827.747	828.176	853.266	884.859	914.646	999.242	1032.027	1094.191
160.0	896.666	871.501	859.940	871.501	896.666	914.561	957.715	1019.785	1063.194	1118.845
162.5	928.863	915.421	911.479	915.421	928.863	949.755	1003.346	1056.000	1091.535	1141.882
165.0	964.389	946.503	944.187	946.503	964.389	991.104	1038.284	1087.252	1116.368	1160.969
167.5	1008.999	986.907	984.770	986.907	1008.999	1042.728	1070.132	1117.560	1139.737	1177.578
170.0	1062.854	1044.014	1038.880	1044.014	1062.854	1073.555	1102.321	1142.052	1157.121	1189.054
172.5	1096.072	1082.800	1083.745	1082.800	1096.072	1107.029	1130.917	1162.084	1169.278	1196.844
175.0	1132.892	1121.416	1124.328	1121.416	1132.892	1140.333	1155.750	1179.374	1178.949	1200.615
177.5	1165.762	1157.802	1158.398	1157.802	1165.762	1165.591	1175.867	1190.680	1183.912	1201.126
180.0	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470	1187.470

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-H-H-835-ASY-F-KPL2008-103.005.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	884.211	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	22.697	22.038	21.944	20.608	20.325
95.0	41.695	41.918	41.781	41.636	41.969
97.5	110.789	59.016	58.990	59.427	60.087
100.0	218.461	114.771	78.340	74.393	76.097
102.5	296.442	326.630	163.187	96.509	94.385
105.0	431.511	472.436	333.258	252.118	209.762
107.5	545.553	582.198	629.887	516.872	337.795
110.0	635.024	771.584	808.828	735.796	692.302
112.5	693.928	978.010	985.800	961.997	937.164
115.0	739.819	1144.189	1219.276	1185.282	1158.747
117.5	790.161	1207.715	1484.174	1453.186	1444.196
120.0	825.094	1224.494	1688.799	1709.775	1674.675
122.5	856.433	1232.293	1726.385	1982.208	2001.218
125.0	881.683	1237.682	1693.506	2047.709	2143.346
127.5	903.860	1235.885	1647.790	1989.146	2108.927
130.0	925.177	1234.174	1604.986	1909.947	2028.784
132.5	942.561	1229.126	1559.865	1834.690	1941.804
135.0	961.657	1223.558	1520.304	1760.548	1851.044
137.5	985.110	1217.480	1479.381	1692.400	1766.116
140.0	1007.288	1211.742	1440.680	1622.702	1686.142
142.5	1030.486	1206.089	1407.461	1560.972	1615.423
145.0	1054.630	1205.578	1379.546	1510.199	1557.550
147.5	1079.548	1210.286	1351.725	1460.805	1499.328
150.0	1101.980	1216.109	1331.004	1420.052	1451.381
152.5	1123.042	1224.494	1319.877	1385.284	1408.576
155.0	1144.104	1233.144	1311.227	1363.797	1382.202
157.5	1160.713	1239.827	1306.775	1347.869	1362.852
160.0	1174.581	1242.475	1303.353	1335.627	1346.762
162.5	1184.942	1241.964	1295.214	1322.354	1333.064
165.0	1193.677	1237.682	1283.491	1306.690	1314.565
167.5	1199.670	1231.177	1267.563	1285.458	1291.962

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-H-H-835-ASY-F-KPL2008-103.005.IES**

**CANDELA TABULATION - (Cont.)**

<b>170.0</b>	1203.092	1223.813	1250.698	1260.889	1266.967
<b>172.5</b>	1203.263	1214.994	1233.314	1239.827	1241.283
<b>175.0</b>	1200.870	1205.578	1217.224	1218.586	1221.583
<b>177.5</b>	1195.984	1194.622	1202.667	1200.436	1202.581
<b>180.0</b>	1187.470	1187.470	1187.470	1187.470	1187.470

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-H-H-835-ASY-F-KPL2008-103.005.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	439.89	N.A.	6.10
0-30	908.34	N.A.	12.50
0-40	1439.3	N.A.	19.90
0-60	2389.44	N.A.	33.00
0-80	2896.59	N.A.	40.00
0-90	2956.54	N.A.	40.80
10-90	2840.68	N.A.	39.20
20-40	999.41	N.A.	13.80
20-50	1513.48	N.A.	20.90
40-70	1270.00	N.A.	17.50
60-80	507.15	N.A.	7.00
70-80	187.29	N.A.	2.60
80-90	59.95	N.A.	0.80
90-110	413.19	N.A.	5.70
90-120	1114.43	N.A.	15.40
90-130	1980.3	N.A.	27.30
90-150	3372.47	N.A.	46.60
90-180	4284.31	N.A.	59.20
110-180	3871.11	N.A.	53.50
0-180	7240.85	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	77.32
100-110	335.88
110-120	701.24
120-130	865.87
130-140	763.99
140-150	628.18
150-160	483.45
160-170	316.74
170-180	111.65



# IES INDOOR REPORT

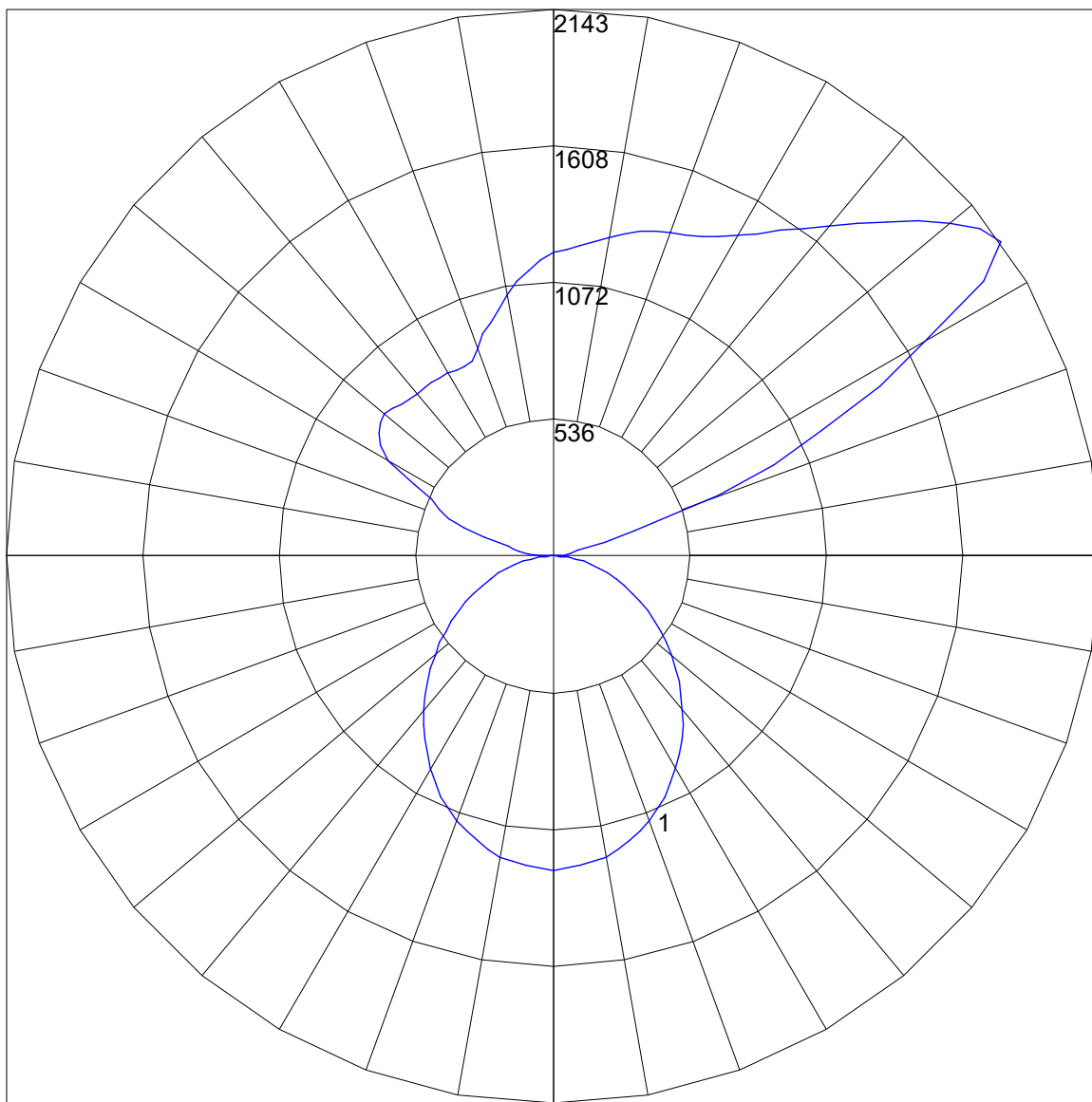
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-H-H-835-ASY-F-KPL2008-103.005.IES

## 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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	91	88	84	87	84	80	77	69	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	64	60	56	53	48	46	43	37	36	34	29
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	21
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	30	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	18	15	18	15	13	11

POLAR GRAPH



Maximum Candela = 2143.346 Located At Horizontal Angle = 0, Vertical Angle = 125  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)