

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-V-H-835-ASY-F-KPL2008-103.001.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST] KPL2008-103.001 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-V-H-835-ASY-F
[LUMINAIRE] HP3-P-ID Series
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI
[OTHER] INPUT ELECTRICAL: 277.0 VOLTS, 61.3 WATTS
[ABSOLUTE LUMENS] 8434
[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	8434
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	138
Total Luminaire Watts	61.3
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)	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	25.989	26.350	28.058	28.179	29.021	30.805	34.122	47.292	60.112	64.173
95.0	53.663	53.236	53.423	53.598	53.313	105.597	78.153	113.303	110.896	114.508
97.5	76.828	75.984	75.426	75.460	141.657	198.134	124.164	161.800	152.276	150.962
100.0	97.299	95.121	100.167	146.747	279.329	290.495	172.846	223.543	227.045	215.442
102.5	120.682	123.398	208.655	417.637	379.037	363.492	223.291	275.980	293.167	308.054
105.0	268.207	322.364	426.111	604.068	551.740	429.668	274.206	318.345	370.673	379.540
107.5	431.913	660.885	805.388	744.412	697.557	498.755	327.289	358.303	446.756	441.173
110.0	885.194	940.806	1034.186	986.565	811.956	556.667	379.683	397.822	504.119	534.444
112.5	1198.280	1230.032	1260.467	1250.507	887.272	612.278	437.834	441.502	543.639	623.335
115.0	1481.601	1515.530	1558.995	1462.987	945.950	672.817	489.779	483.539	577.466	704.016
117.5	1846.583	1858.078	1897.700	1544.213	1010.319	723.502	541.230	523.167	606.695	736.967
120.0	2141.279	2186.159	2159.338	1565.668	1054.984	771.999	593.339	562.469	633.516	770.137
122.5	2558.804	2534.497	2207.396	1575.638	1095.055	814.254	638.771	600.017	663.621	792.688
125.0	2740.533	2618.249	2165.357	1582.529	1127.341	853.445	683.654	644.025	692.412	806.153
127.5	2696.524	2543.369	2106.904	1580.232	1155.697	897.126	730.837	693.616	719.451	820.057
130.0	2594.051	2442.104	2052.172	1578.044	1182.953	937.082	779.552	733.245	747.695	837.025
132.5	2482.836	2345.878	1994.481	1571.589	1205.181	979.886	829.033	776.487	775.064	857.387

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-H-835-ASY-F-KPL2008-103.001.IES

CANDELA TABULATION - (Cont.)

135.0	2366.789	2251.078	1943.897	1564.470	1229.597	1022.799	879.719	816.882	798.929	877.201
137.5	2258.197	2163.942	1891.572	1556.698	1259.586	1065.493	928.872	858.482	829.033	897.126
140.0	2155.941	2074.825	1842.087	1549.361	1287.942	1110.708	981.856	902.051	855.854	917.596
142.5	2065.518	1995.896	1799.613	1542.134	1317.604	1154.162	1029.477	949.234	898.001	935.549
145.0	1991.520	1930.976	1763.920	1541.481	1348.475	1196.756	1079.397	998.825	950.547	949.562
147.5	1917.076	1867.820	1728.347	1547.500	1380.335	1241.853	1131.727	1057.063	1001.781	966.202
150.0	1855.770	1815.712	1701.853	1554.946	1409.018	1282.684	1180.004	1112.787	1041.847	988.972
152.5	1801.039	1771.257	1687.626	1565.668	1435.948	1323.297	1229.706	1163.142	1082.352	1035.826
155.0	1767.317	1743.783	1676.566	1576.727	1462.878	1362.494	1276.773	1210.221	1122.094	1091.332
157.5	1742.575	1723.416	1670.873	1585.272	1484.115	1399.058	1319.574	1277.655	1169.488	1131.401
160.0	1722.001	1707.764	1666.498	1588.657	1501.847	1430.582	1359.425	1303.921	1224.557	1169.380
162.5	1704.487	1690.793	1656.091	1588.004	1515.095	1460.037	1395.662	1350.227	1282.902	1214.379
165.0	1680.833	1670.765	1641.102	1582.529	1526.263	1484.442	1427.414	1390.187	1327.575	1267.249
167.5	1651.933	1643.617	1620.736	1574.212	1533.926	1505.679	1457.294	1428.938	1368.296	1333.257
170.0	1619.974	1612.202	1599.172	1564.797	1538.302	1520.352	1479.522	1460.255	1409.454	1372.672
172.5	1587.133	1585.272	1576.945	1553.520	1538.520	1530.312	1495.066	1485.868	1446.017	1415.473
175.0	1561.945	1558.113	1556.372	1541.481	1535.461	1535.134	1507.432	1507.976	1477.769	1458.056
177.5	1537.649	1534.906	1537.758	1527.471	1529.213	1535.788	1513.778	1522.431	1503.491	1490.353
180.0	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328

**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

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-H-835-ASY-F-KPL2008-103.001.IES

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	66.176	64.687	66.669	64.687	66.176	64.173	60.112	47.292	34.122	30.805
95.0	117.683	120.091	121.733	120.091	117.683	114.508	110.896	113.303	78.153	105.597
97.5	161.800	166.507	167.711	166.507	161.800	150.962	152.276	161.800	124.164	198.134
100.0	191.248	199.459	202.524	199.459	191.248	215.442	227.045	223.543	172.846	290.495
102.5	293.495	241.387	228.797	241.387	293.495	308.054	293.167	275.980	223.291	363.492
105.0	400.668	379.979	358.412	379.979	400.668	379.540	370.673	318.345	274.206	429.668
107.5	475.329	470.402	470.074	470.402	475.329	441.173	446.756	358.303	327.289	498.755
110.0	533.458	551.630	554.368	551.630	533.458	534.444	504.119	397.822	379.683	556.667
112.5	596.296	608.776	614.140	608.776	596.296	623.335	543.639	441.502	437.834	612.278
115.0	727.224	675.334	672.817	675.334	727.224	704.016	577.466	483.539	489.779	672.817
117.5	822.903	826.734	780.101	826.734	822.903	736.967	606.695	523.167	541.230	723.502
120.0	880.048	948.029	955.255	948.029	880.048	770.137	633.516	562.469	593.339	771.999
122.5	920.662	1000.795	1027.944	1000.795	920.662	792.688	663.621	600.017	638.771	814.254
125.0	947.263	1037.688	1065.384	1037.688	947.263	806.153	692.412	644.025	683.654	853.445
127.5	958.210	1065.384	1089.906	1065.384	958.210	820.057	719.451	693.616	730.837	897.126
130.0	957.663	1070.748	1105.451	1070.748	957.663	837.025	747.695	733.245	779.552	937.082
132.5	959.305	1057.392	1092.094	1057.392	959.305	857.387	775.064	776.487	829.033	979.886
135.0	966.421	1043.708	1073.923	1043.708	966.421	877.201	798.929	816.882	879.719	1022.799
137.5	975.507	1039.877	1063.633	1039.877	975.507	897.126	829.033	858.482	928.872	1065.493
140.0	986.893	1040.753	1060.567	1040.753	986.893	917.596	855.854	902.051	981.856	1110.708
142.5	995.760	1043.600	1060.567	1043.600	995.760	935.549	898.001	949.234	1029.477	1154.162
145.0	1005.502	1044.365	1060.349	1044.365	1005.502	949.562	950.547	998.825	1079.397	1196.756
147.5	1012.399	1044.256	1057.940	1044.256	1012.399	966.202	1001.781	1057.063	1131.727	1241.853
150.0	1016.341	1044.475	1056.845	1044.475	1016.341	988.972	1041.847	1112.787	1180.004	1282.684
152.5	1022.799	1040.972	1051.590	1040.972	1022.799	1035.826	1082.352	1163.142	1229.706	1323.297
155.0	1040.205	1042.395	1048.963	1042.395	1040.205	1091.332	1122.094	1210.221	1276.773	1362.494
157.5	1091.006	1058.925	1058.377	1058.925	1091.006	1131.401	1169.488	1277.655	1319.574	1399.058
160.0	1146.499	1114.322	1099.540	1114.322	1146.499	1169.380	1224.557	1303.921	1359.425	1430.582
162.5	1187.667	1170.479	1165.439	1170.479	1187.667	1214.379	1282.902	1350.227	1395.662	1460.037
165.0	1233.091	1210.221	1207.260	1210.221	1233.091	1267.249	1327.575	1390.187	1427.414	1484.442
167.5	1290.130	1261.882	1259.150	1261.882	1290.130	1333.257	1368.296	1428.938	1457.294	1505.679
170.0	1358.990	1334.901	1328.337	1334.901	1358.990	1372.672	1409.454	1460.255	1479.522	1520.352
172.5	1401.464	1384.494	1385.702	1384.494	1401.464	1415.473	1446.017	1485.868	1495.066	1530.312
175.0	1448.542	1433.869	1437.592	1433.869	1448.542	1458.056	1477.769	1507.976	1507.432	1535.134
177.5	1490.570	1480.393	1481.155	1480.393	1490.570	1490.353	1503.491	1522.431	1513.778	1535.788
180.0	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328	1518.328

**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-V-H-835-ASY-F-KPL2008-103.001.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	29.021	28.179	28.058	26.350	25.989
95.0	53.313	53.598	53.423	53.236	53.663
97.5	141.657	75.460	75.426	75.984	76.828
100.0	279.329	146.748	100.167	95.121	97.299
102.5	379.037	417.637	208.655	123.398	120.682
105.0	551.740	604.068	426.111	322.364	268.207
107.5	697.557	744.412	805.388	660.885	431.913
110.0	811.956	986.565	1034.186	940.806	885.194
112.5	887.272	1250.507	1260.467	1230.032	1198.280
115.0	945.950	1462.987	1558.995	1515.530	1481.601
117.5	1010.319	1544.213	1897.700	1858.078	1846.583
120.0	1054.984	1565.668	2159.338	2186.159	2141.279
122.5	1095.055	1575.638	2207.396	2534.497	2558.804
125.0	1127.341	1582.529	2165.357	2618.249	2740.533
127.5	1155.697	1580.232	2106.904	2543.369	2696.524
130.0	1182.953	1578.044	2052.172	2442.104	2594.051
132.5	1205.181	1571.589	1994.481	2345.878	2482.836
135.0	1229.597	1564.470	1943.897	2251.078	2366.789
137.5	1259.586	1556.698	1891.572	2163.942	2258.197
140.0	1287.942	1549.361	1842.087	2074.825	2155.941
142.5	1317.604	1542.134	1799.613	1995.896	2065.518
145.0	1348.475	1541.481	1763.920	1930.976	1991.520
147.5	1380.335	1547.500	1728.347	1867.820	1917.076
150.0	1409.018	1554.946	1701.853	1815.712	1855.770
152.5	1435.948	1565.668	1687.626	1771.257	1801.039
155.0	1462.878	1576.727	1676.566	1743.783	1767.317
157.5	1484.115	1585.272	1670.873	1723.416	1742.575
160.0	1501.847	1588.657	1666.498	1707.764	1722.001
162.5	1515.095	1588.004	1656.091	1690.793	1704.487
165.0	1526.263	1582.529	1641.102	1670.765	1680.833
167.5	1533.926	1574.212	1620.736	1643.617	1651.933

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-H-835-ASY-F-KPL2008-103.001.IES

CANDELA TABULATION - (Cont.)

170.0	1538.302	1564.797	1599.172	1612.202	1619.974
172.5	1538.520	1553.520	1576.945	1585.272	1587.133
175.0	1535.461	1541.481	1556.372	1558.113	1561.945
177.5	1529.213	1527.471	1537.758	1534.906	1537.649
180.0	1518.328	1518.328	1518.328	1518.328	1518.328

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-H-835-ASY-F-KPL2008-103.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	439.89	N.A.	5.20
0-30	908.34	N.A.	10.80
0-40	1439.3	N.A.	17.10
0-60	2389.44	N.A.	28.30
0-80	2896.59	N.A.	34.30
0-90	2956.54	N.A.	35.10
10-90	2840.68	N.A.	33.70
20-40	999.41	N.A.	11.80
20-50	1513.48	N.A.	17.90
40-70	1270.00	N.A.	15.10
60-80	507.15	N.A.	6.00
70-80	187.29	N.A.	2.20
80-90	59.95	N.A.	0.70
90-110	528.22	N.A.	6.30
90-120	1424.83	N.A.	16.90
90-130	2531.95	N.A.	30.00
90-150	4312.01	N.A.	51.10
90-180	5477.91	N.A.	64.90
110-180	4949.7	N.A.	58.70
0-180	8434.46	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	98.76
100-110	429.46
110-120	896.62
120-130	1107.12
130-140	976.85
140-150	803.21
150-160	618.15
160-170	405.00
170-180	142.75

IES INDOOR REPORT

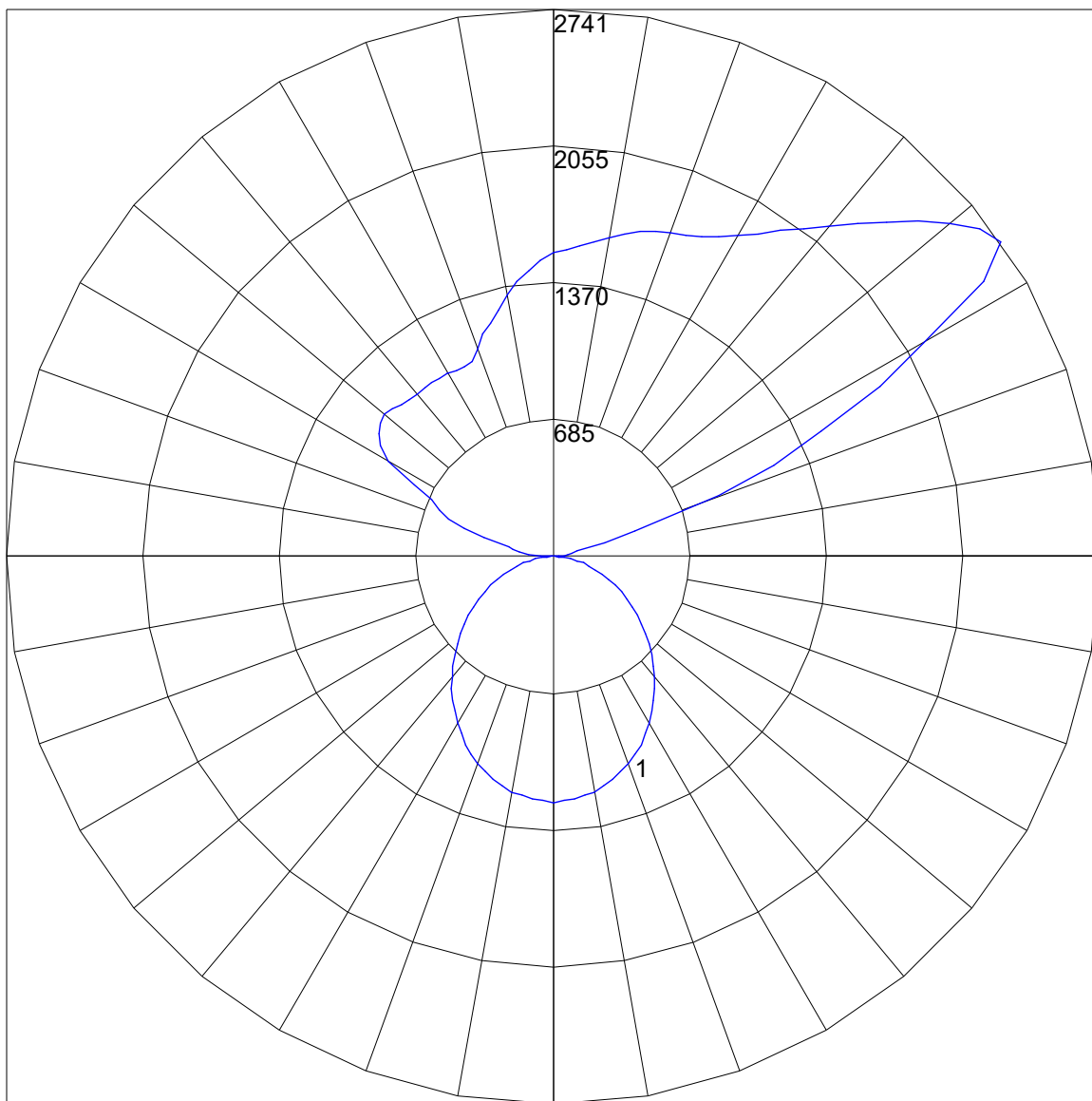
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-H-835-ASY-F-KPL2008-103.001.IES

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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35
1	94	90	86	83	85	82	79	76	66	64	62	51	50	48	37	37	36	30
2	86	79	73	68	78	71	66	62	58	54	51	45	42	40	33	32	30	25
3	79	69	62	57	71	63	57	52	51	47	43	40	37	34	29	27	26	21
4	72	61	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22	18
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	24	21	19	16
6	61	49	41	35	55	45	38	33	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	29	33	28	24	26	22	20	20	17	15	12
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14	11
9	48	36	29	24	44	33	27	23	27	23	19	22	18	16	17	14	12	10
10	45	33	26	22	41	31	24	20	25	20	17	20	17	14	15	13	11	9

POLAR GRAPH



Maximum Candela = 2740.533 Located At Horizontal Angle = 0, Vertical Angle = 125
1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)