

# 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-S-835-ASY-F-KPL2008-103.003.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST] KPL2008-103.003 Family Correlation File  
[TESTLAB] Northern Lights Testing Laboratories  
[ISSUEDATE] 8/22/2024  
[TESTDATE] 12/4/2024  
[MANUFAC] Finelite Inc.  
[LUMCAT] HP3-P-ID-4ft-V-S-835-ASY-F  
[LUMINAIRE] HP3-P-ID Series  
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 53.5 WATTS  
[ABSOLUTE LUMENS]7577  
[LAMP] Samsung  
[BALLAST] Osram  
[BALLASTCAT] Oti50 x-2 @700mA

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7577
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	142
Total Luminaire Watts	53.5
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	7576	7230	6878
55	6892	6494	6160
65	6224	5849	5533
75	5554	5175	4993
85	4992	4685	4389

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	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523
2.5	868.538	881.583	870.884	871.367	872.129	870.854	873.405	870.854	872.129	871.367
5.0	864.349	877.146	866.417	866.568	866.628	865.383	867.813	865.383	866.628	866.568
7.5	857.966	869.729	858.812	858.117	857.936	856.261	858.389	856.261	857.936	858.117
10.0	852.187	864.132	850.398	847.206	845.895	843.102	845.320	843.102	845.895	847.206
12.5	835.836	848.572	836.259	836.168	830.275	827.325	828.419	827.325	830.275	836.168
15.0	820.089	831.339	818.354	818.203	813.373	808.326	809.148	808.326	813.373	818.203
17.5	802.094	812.340	798.902	796.563	794.344	786.045	787.018	786.045	794.344	796.563
20.0	782.339	791.824	778.295	772.794	770.274	762.796	762.700	762.796	770.274	772.794
22.5	760.632	767.596	754.799	747.170	742.153	736.864	736.012	736.864	742.153	747.170
25.0	739.905	744.922	729.175	720.966	713.217	707.776	707.807	707.776	713.217	720.966
27.5	709.390	716.650	702.759	694.067	684.921	678.538	676.132	678.538	684.921	694.067
30.0	682.273	684.310	673.188	664.489	653.881	647.165	645.188	647.165	653.881	664.489
32.5	652.793	658.384	641.845	634.888	622.786	615.460	612.607	615.460	622.786	634.888
35.0	624.031	627.834	612.788	601.876	596.101	582.483	581.540	582.483	596.101	601.876
37.5	593.882	595.128	581.115	569.747	558.074	550.171	547.922	550.171	558.074	569.747
40.0	560.020	562.330	548.500	536.615	525.460	517.861	514.487	517.861	525.460	536.615
42.5	528.165	528.803	515.581	504.972	493.270	485.671	482.266	485.671	493.270	504.972
45.0	496.006	497.039	483.117	473.361	460.138	452.722	450.350	452.722	460.138	473.361
47.5	462.934	462.934	451.019	440.411	427.888	420.349	418.070	420.349	427.888	440.411
50.0	429.681	430.775	417.553	407.613	395.333	389.133	386.397	389.133	395.333	407.613
52.5	396.732	397.917	385.394	375.971	365.211	358.189	356.487	358.189	365.211	375.971
55.0	366.032	365.454	354.876	344.876	335.726	330.620	327.185	330.620	335.726	344.876
57.5	334.967	332.505	322.930	314.844	305.999	299.919	297.822	299.919	305.999	314.844
60.0	303.355	301.257	293.537	284.266	276.606	271.621	269.311	271.621	276.606	284.266
62.5	273.444	271.499	264.022	255.158	246.449	243.258	241.972	243.258	246.449	255.158
65.0	243.559	241.483	235.607	228.884	220.910	218.282	216.512	218.282	220.910	228.884
67.5	214.099	212.883	207.497	200.609	194.925	192.372	191.180	192.372	194.925	200.609
70.0	187.144	185.192	179.182	174.821	170.554	167.319	166.620	167.319	170.554	174.821
72.5	158.747	153.993	153.519	148.847	144.856	142.716	142.297	142.716	144.856	148.847
75.0	133.099	131.847	128.439	124.011	122.390	119.451	119.664	119.451	122.390	124.011
77.5	109.244	107.387	104.180	100.933	99.192	97.067	97.220	97.067	99.192	100.933
80.0	85.182	83.741	81.073	79.629	77.456	76.346	75.705	76.346	77.456	79.629
82.5	62.178	61.485	60.413	58.953	58.048	57.297	59.260	57.297	58.048	58.953
85.0	40.287	39.573	38.162	37.810	37.162	36.415	35.424	36.415	37.162	37.810
87.5	21.052	19.545	18.672	18.013	17.058	17.138	17.332	17.138	17.058	18.013
90.0	1.738	1.693	1.924	1.821	2.192	2.319	1.763	2.319	2.192	1.821
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

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**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	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523	874.523
2.5	870.884	881.583	868.538	881.583	870.884	871.367	872.129	870.854	873.405	870.854
5.0	866.417	877.146	864.349	877.146	866.417	866.568	866.628	865.383	867.813	865.383
7.5	858.812	869.729	857.966	869.729	858.812	858.117	857.936	856.261	858.389	856.261
10.0	850.398	864.132	852.187	864.132	850.398	847.206	845.895	843.102	845.320	843.102
12.5	836.259	848.572	835.836	848.572	836.259	836.168	830.275	827.325	828.419	827.325
15.0	818.354	831.339	820.089	831.339	818.354	818.203	813.373	808.326	809.148	808.326
17.5	798.902	812.340	802.094	812.340	798.902	796.563	794.344	786.045	787.018	786.045
20.0	778.295	791.824	782.339	791.824	778.295	772.794	770.274	762.796	762.700	762.796
22.5	754.799	767.596	760.632	767.596	754.799	747.170	742.153	736.864	736.012	736.864
25.0	729.175	744.922	739.905	744.922	729.175	720.966	713.217	707.776	707.807	707.776
27.5	702.759	716.650	709.390	716.650	702.759	694.067	684.921	678.538	676.132	678.538
30.0	673.188	684.310	682.273	684.310	673.188	664.489	653.881	647.165	645.188	647.165
32.5	641.845	658.384	652.793	658.384	641.845	634.888	622.786	615.460	612.607	615.460
35.0	612.788	627.834	624.031	627.834	612.788	601.876	596.101	582.483	581.540	582.483
37.5	581.115	595.128	593.882	595.128	581.115	569.747	558.074	550.171	547.922	550.171
40.0	548.500	562.330	560.020	562.330	548.500	536.615	525.460	517.861	514.487	517.861
42.5	515.581	528.803	528.165	528.803	515.581	504.972	493.270	485.671	482.266	485.671
45.0	483.117	497.039	496.006	497.039	483.117	473.361	460.138	452.722	450.350	452.722
47.5	451.019	462.934	462.934	462.934	451.019	440.411	427.888	420.349	418.070	420.349
50.0	417.553	430.775	429.681	430.775	417.553	407.613	395.333	389.133	386.397	389.133
52.5	385.394	397.917	396.732	397.917	385.394	375.971	365.211	358.189	356.487	358.189
55.0	354.876	365.454	366.032	365.454	354.876	344.876	335.726	330.620	327.185	330.620
57.5	322.930	332.505	334.967	332.505	322.930	314.844	305.999	299.919	297.822	299.919
60.0	293.537	301.257	303.355	301.257	293.537	284.266	276.606	271.621	269.311	271.621
62.5	264.022	271.499	273.444	271.499	264.022	255.158	246.449	243.258	241.972	243.258
65.0	235.607	241.483	243.559	241.483	235.607	228.884	220.910	218.282	216.512	218.282
67.5	207.497	212.883	214.099	212.883	207.497	200.609	194.925	192.372	191.180	192.372
70.0	179.182	185.192	187.144	185.192	179.182	174.821	170.554	167.319	166.620	167.319
72.5	153.519	153.993	158.747	153.993	153.519	148.847	144.856	142.716	142.297	142.716
75.0	128.439	131.847	133.099	131.847	128.439	124.011	122.390	119.451	119.664	119.451
77.5	104.180	107.387	109.244	107.387	104.180	100.933	99.192	97.067	97.220	97.067
80.0	81.073	83.741	85.182	83.741	81.073	79.629	77.456	76.346	75.705	76.346

CANDELA TABULATION - (Cont.)

82.5	60.413	61.485	62.178	61.485	60.413	58.953	58.048	57.297	59.260	57.297
85.0	38.162	39.573	40.287	39.573	38.162	37.810	37.162	36.415	35.424	36.415
87.5	18.672	19.545	21.052	19.545	18.672	18.013	17.058	17.138	17.332	17.138
90.0	1.924	1.693	1.738	1.693	1.924	1.821	2.192	2.319	1.763	2.319
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	874.523	874.523	874.523	874.523	874.523
2.5	872.129	871.367	870.884	881.583	868.538
5.0	866.628	866.568	866.417	877.146	864.349
7.5	857.936	858.117	858.812	869.729	857.966
10.0	845.895	847.206	850.398	864.132	852.187
12.5	830.275	836.168	836.259	848.572	835.836
15.0	813.373	818.203	818.354	831.339	820.089
17.5	794.344	796.563	798.902	812.340	802.094
20.0	770.274	772.794	778.295	791.824	782.339
22.5	742.153	747.170	754.799	767.596	760.632
25.0	713.217	720.966	729.175	744.922	739.905
27.5	684.921	694.067	702.759	716.650	709.390

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-S-835-ASY-F-KPL2008-103.003.IES**

**CANDELA TABULATION - (Cont.)**

30.0	653.881	664.489	673.188	684.310	682.273
32.5	622.786	634.888	641.845	658.384	652.793
35.0	596.101	601.876	612.788	627.834	624.031
37.5	558.074	569.747	581.115	595.128	593.882
40.0	525.460	536.615	548.500	562.330	560.020
42.5	493.270	504.972	515.581	528.803	528.165
45.0	460.138	473.361	483.117	497.039	496.006
47.5	427.888	440.411	451.019	462.934	462.934
50.0	395.333	407.613	417.553	430.775	429.681
52.5	365.211	375.971	385.394	397.917	396.732
55.0	335.726	344.876	354.876	365.454	366.032
57.5	305.999	314.844	322.930	332.505	334.967
60.0	276.606	284.266	293.537	301.257	303.355
62.5	246.449	255.158	264.022	271.499	273.444
65.0	220.910	228.884	235.607	241.483	243.559
67.5	194.925	200.609	207.497	212.883	214.099
70.0	170.554	174.821	179.182	185.192	187.144
72.5	144.856	148.847	153.519	153.993	158.747
75.0	122.390	124.011	128.439	131.847	133.099
77.5	99.192	100.933	104.180	107.387	109.244
80.0	77.456	79.629	81.073	83.741	85.182
82.5	58.048	58.953	60.413	61.485	62.178
85.0	37.162	37.810	38.162	39.573	40.287
87.5	17.058	18.013	18.672	19.545	21.052
90.0	2.192	1.821	1.924	1.693	1.738
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-S-835-ASY-F-KPL2008-103.003.IES**

**CANDELA TABULATION - (Cont.)**

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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-S-835-ASY-F-KPL2008-103.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	312.34	N.A.	4.10
0-30	644.97	N.A.	8.50
0-40	1021.97	N.A.	13.50
0-60	1696.62	N.A.	22.40
0-80	2056.72	N.A.	27.10
0-90	2099.29	N.A.	27.70
10-90	2017.02	N.A.	26.60
20-40	709.63	N.A.	9.40
20-50	1074.65	N.A.	14.20
40-70	901.76	N.A.	11.90
60-80	360.10	N.A.	4.80
70-80	132.98	N.A.	1.80
80-90	42.57	N.A.	0.60
90-110	528.11	N.A.	7.00
90-120	1424.73	N.A.	18.80
90-130	2531.84	N.A.	33.40
90-150	4311.9	N.A.	56.90
90-180	5477.8	N.A.	72.30
110-180	4949.7	N.A.	65.30
0-180	7577.1	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	82.27
10-20	230.07
20-30	332.63
30-40	377.00
40-50	365.02
50-60	309.63
60-70	227.11
70-80	132.98
80-90	42.57
90-100	98.65
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

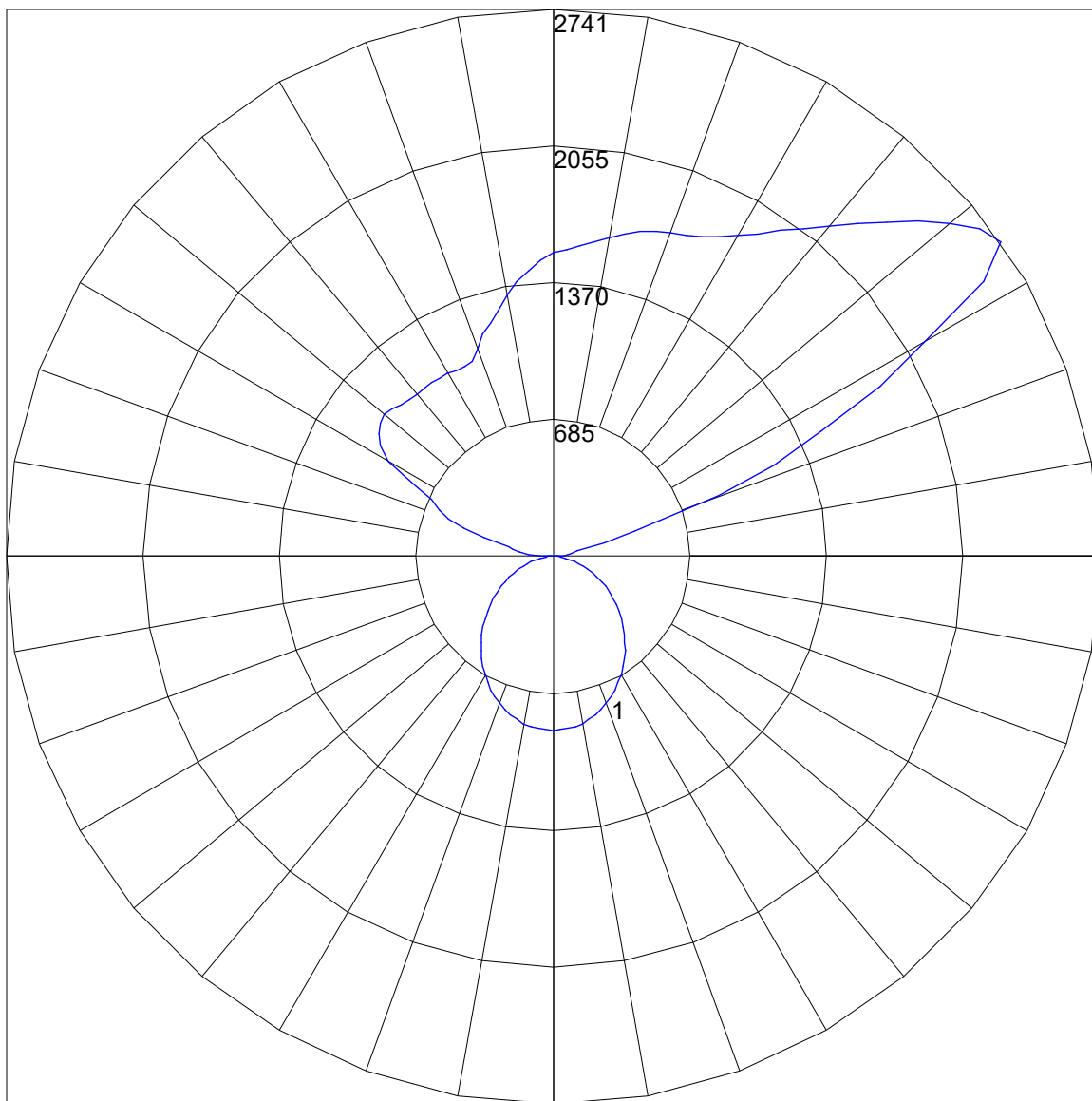
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-V-S-835-ASY-F-KPL2008-103.003.IES

## 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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	79	76	73	62	60	58	46	45	44	31	31	30	23
2	85	77	72	67	75	69	64	60	54	51	48	41	38	36	28	27	25	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	53	47	63	54	48	43	43	38	34	32	29	26	22	20	19	14
5	65	53	46	40	58	48	41	36	38	33	30	29	25	23	20	18	16	13
6	59	48	40	35	53	43	36	32	34	29	26	26	23	20	18	16	14	11
7	55	43	35	30	49	39	32	28	31	26	23	23	20	18	16	14	13	10
8	51	39	32	26	45	35	29	24	28	23	20	21	18	16	15	13	11	9
9	47	35	28	23	42	32	26	22	26	21	18	20	16	14	14	12	10	8
10	44	32	26	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

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.)