

# 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-S-835-F-F-KPL2008-50.011.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST] KPL2008-50.011 Family Correlation File  
[TESTLAB] Northern Lights Testing Laboratories  
[ISSUEDATE] 1/18/2024  
[TESTDATE] 11/27/2024  
[MANUFAC] Finelite, Inc.  
[LUMCAT] HP3-P-ID-4ft-B-S-835-F-F  
[LUMINAIRE] HP3 Series  
[LAMPCAT] 320 LM561B+ LEDs with 80 CRI  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.0 WATTS  
[ABSOLUTELUMENS]5700  
[LAMP] Samsung  
[BALLAST] Osram  
[BALLASTCAT] x2 @ 700mA

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5702
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	43
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)	4.00 ft
Luminous Width (90-270)	0.25 ft
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8370	7988	7600
55	7615	7175	6807
65	6877	6462	6113
75	6136	5717	5517
85	5516	5176	4850

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	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241
2.5	959.629	974.042	962.220	962.755	963.596	962.187	965.005	962.187	963.596	962.755
5.0	955.000	969.139	957.285	957.452	957.518	956.143	958.827	956.143	957.518	957.452
7.5	947.948	960.945	948.883	948.115	947.914	946.064	948.415	946.064	947.914	948.115
10.0	941.563	954.760	939.586	936.059	934.610	931.524	933.976	931.524	934.610	936.059
12.5	923.497	937.569	923.964	923.864	917.352	914.093	915.302	914.093	917.352	923.864
15.0	906.098	918.528	904.181	904.015	898.678	893.101	894.010	893.101	898.678	904.015
17.5	886.216	897.536	882.689	880.104	877.653	868.483	869.559	868.483	877.653	880.104
20.0	864.389	874.868	859.921	853.843	851.058	842.797	842.690	842.797	851.058	853.843
22.5	840.406	848.100	833.961	825.532	819.989	814.145	813.203	814.145	819.989	825.532
25.0	817.504	823.048	805.649	796.579	788.017	782.006	782.040	782.006	788.017	796.579
27.5	783.790	791.811	776.463	766.859	756.754	749.701	747.043	749.701	756.754	766.859
30.0	753.829	756.079	743.790	734.180	722.458	715.038	712.854	715.038	722.458	734.180
32.5	721.256	727.434	709.161	701.473	688.103	680.008	676.855	680.008	688.103	701.473
35.0	689.478	693.679	677.056	664.999	658.618	643.572	642.531	643.572	658.618	664.999
37.5	656.167	657.544	642.061	629.501	616.604	607.872	605.387	607.872	616.604	629.501
40.0	618.754	621.306	606.026	592.894	580.569	572.173	568.445	572.173	580.569	592.894
42.5	583.557	584.263	569.654	557.933	545.003	536.607	532.845	536.607	545.003	557.933
45.0	548.026	549.168	533.786	523.006	508.396	500.202	497.582	500.202	508.396	523.006
47.5	511.486	511.486	498.321	486.600	472.764	464.434	461.916	464.434	472.764	486.600
50.0	474.745	475.954	461.345	450.363	436.795	429.944	426.921	429.944	436.795	450.363
52.5	438.340	439.650	425.813	415.402	403.513	395.755	393.874	395.755	403.513	415.402
55.0	404.420	403.782	392.094	381.046	370.937	365.294	361.500	365.294	370.937	381.046
57.5	370.097	367.377	356.798	347.864	338.091	331.374	329.057	331.374	338.091	347.864
60.0	335.170	332.852	324.322	314.079	305.616	300.107	297.556	300.107	305.616	314.079
62.5	302.122	299.973	291.712	281.918	272.296	268.771	267.350	268.771	272.296	281.918
65.0	269.103	266.809	260.317	252.888	244.079	241.175	239.220	241.175	244.079	252.888
67.5	236.553	235.210	229.259	221.648	215.368	212.547	211.231	212.547	215.368	221.648
70.0	206.771	204.615	197.975	193.156	188.441	184.867	184.095	184.867	188.441	193.156
72.5	175.396	170.144	169.620	164.458	160.049	157.684	157.221	157.684	160.049	164.458
75.0	147.058	145.674	141.910	137.017	135.226	131.979	132.214	131.979	135.226	137.017
77.5	120.701	118.649	115.106	111.519	109.595	107.247	107.416	107.247	109.595	111.519
80.0	94.116	92.524	89.575	87.980	85.579	84.353	83.645	84.353	85.579	87.980
82.5	68.699	67.934	66.749	65.136	64.136	63.306	65.476	63.306	64.136	65.136
85.0	44.512	43.723	42.165	41.775	41.060	40.234	39.139	40.234	41.060	41.775
87.5	23.260	21.595	20.631	19.902	18.848	18.935	19.149	18.935	18.848	19.902
90.0	2.403	2.341	2.660	2.517	3.030	3.206	2.438	3.206	3.030	2.517
92.5	33.674	35.053	35.095	34.107	34.825	33.069	35.010	33.069	34.825	34.107
95.0	70.407	70.609	71.697	70.966	71.773	67.996	67.197	67.996	71.773	70.966
97.5	101.846	102.065	100.241	99.207	98.900	98.581	99.896	98.581	98.900	99.207
100.0	139.377	138.272	135.277	134.688	134.403	132.894	132.822	132.894	134.403	134.688
102.5	175.859	175.544	173.043	171.812	169.493	168.303	168.261	168.303	169.493	171.812
105.0	214.222	214.562	212.180	210.037	208.197	206.751	207.650	206.751	208.197	210.037
107.5	257.224	255.014	251.812	249.682	248.064	246.842	245.131	246.842	248.064	249.682
110.0	299.193	298.151	295.445	291.919	288.592	288.655	288.125	288.655	288.592	291.919
112.5	339.809	343.809	339.565	335.002	332.573	329.346	329.984	329.346	332.573	335.002
115.0	383.634	389.517	383.760	389.139	376.113	372.121	373.886	372.121	376.113	389.139
117.5	432.713	435.948	428.847	427.460	422.292	418.216	419.939	418.216	422.292	427.460
120.0	479.018	483.304	477.253	474.858	469.185	465.152	464.563	465.152	469.185	474.858
122.5	529.441	531.080	526.542	522.633	514.902	514.860	510.028	514.860	514.902	522.633
125.0	577.427	581.755	577.259	573.098	562.341	563.687	559.358	563.687	562.341	573.098
127.5	628.017	631.716	625.749	620.160	613.815	613.101	609.781	613.101	613.815	620.160
130.0	676.423	682.223	676.970	671.760	664.196	663.103	662.473	663.103	664.196	671.760
132.5	725.334	733.108	724.955	721.804	713.989	713.148	717.098	713.148	713.989	721.804

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**CANDELA TABULATION - (Cont.)**

135.0	773.824	783.783	774.202	771.975	767.185	765.294	768.698	765.294	767.185	771.975
137.5	825.087	831.853	820.969	819.288	820.255	814.708	819.709	814.708	820.255	819.288
140.0	872.232	883.497	870.386	868.957	869.584	865.974	870.135	865.974	869.584	868.957
142.5	918.451	928.913	918.793	917.197	917.448	913.663	915.092	913.663	917.448	917.197
145.0	966.441	973.794	964.293	962.405	963.165	961.861	963.583	961.861	963.165	962.405
147.5	1009.551	1018.500	1010.311	1010.269	1010.227	1006.400	1008.715	1006.400	1010.227	1010.269
150.0	1053.839	1062.287	1051.148	1051.532	1051.783	1049.092	1052.744	1049.092	1051.783	1051.532
152.5	1090.564	1103.341	1092.921	1094.266	1092.921	1089.553	1094.174	1089.553	1092.921	1094.266
155.0	1127.958	1142.665	1130.691	1130.440	1130.942	1125.101	1131.410	1125.101	1130.942	1130.440
157.5	1163.172	1179.684	1166.489	1163.380	1164.099	1164.768	1164.099	1164.768	1164.099	1163.380
160.0	1196.956	1211.579	1195.778	1192.836	1194.474	1189.185	1192.168	1189.185	1194.474	1192.836
162.5	1222.927	1238.637	1222.969	1220.863	1222.584	1215.991	1219.735	1215.991	1222.584	1220.863
165.0	1247.043	1261.332	1247.252	1244.779	1246.116	1240.575	1244.862	1240.575	1246.116	1244.779
167.5	1266.873	1281.922	1268.093	1265.828	1266.998	1262.552	1267.215	1262.552	1266.998	1265.828
170.0	1283.268	1299.696	1285.240	1282.883	1285.365	1280.284	1285.615	1280.284	1285.365	1282.883
172.5	1296.203	1313.517	1299.228	1296.671	1299.353	1294.022	1299.654	1294.022	1299.353	1296.671
175.0	1305.704	1323.394	1309.272	1306.414	1309.230	1304.693	1310.241	1304.693	1309.230	1306.414
177.5	1311.587	1329.110	1314.904	1312.130	1315.280	1310.409	1316.542	1310.409	1315.280	1312.130
180.0	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862

**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	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241	966.241
2.5	962.220	974.042	959.629	974.042	962.220	962.755	963.596	962.187	965.005	962.187
5.0	957.285	969.139	955.000	969.139	957.285	957.452	957.518	956.143	958.827	956.143
7.5	948.883	960.945	947.948	960.945	948.883	948.115	947.914	946.064	948.415	946.064
10.0	939.586	954.760	941.563	954.760	939.586	936.059	934.610	931.524	933.976	931.524
12.5	923.964	937.569	923.497	937.569	923.964	923.864	917.352	914.093	915.302	914.093
15.0	904.181	918.528	906.098	918.528	904.181	904.015	898.678	893.101	894.010	893.101
17.5	882.689	897.536	886.216	897.536	882.689	880.104	877.653	868.483	869.559	868.483
20.0	859.921	874.868	864.389	874.868	859.921	853.843	851.058	842.797	842.690	842.797
22.5	833.961	848.100	840.406	848.100	833.961	825.532	819.989	814.145	813.203	814.145
25.0	805.649	823.048	817.504	823.048	805.649	796.579	788.017	782.006	782.040	782.006
27.5	776.463	791.811	783.790	791.811	776.463	766.859	756.754	749.701	747.043	749.701
30.0	743.790	756.079	753.829	756.079	743.790	734.180	722.458	715.038	712.854	715.038
32.5	709.161	727.434	721.256	727.434	709.161	701.473	688.103	680.008	676.855	680.008
35.0	677.056	693.679	689.478	693.679	677.056	664.999	658.618	643.572	642.531	643.572
37.5	642.061	657.544	656.167	657.544	642.061	629.501	616.604	607.872	605.387	607.872
40.0	606.026	621.306	618.754	621.306	606.026	592.894	580.569	572.173	568.445	572.173
42.5	569.654	584.263	583.557	584.263	569.654	557.933	545.003	536.607	532.845	536.607
45.0	533.786	549.168	548.026	549.168	533.786	523.006	508.396	500.202	497.582	500.202
47.5	498.321	511.486	511.486	511.486	498.321	486.600	472.764	464.434	461.916	464.434
50.0	461.345	475.954	474.745	475.954	461.345	450.363	436.795	429.944	426.921	429.944
52.5	425.813	439.650	438.340	439.650	425.813	415.402	403.513	395.755	393.874	395.755
55.0	392.094	403.782	404.420	403.782	392.094	381.046	370.937	365.294	361.500	365.294
57.5	356.798	367.377	370.097	367.377	356.798	347.864	338.091	331.374	329.057	331.374
60.0	324.322	332.852	335.170	332.852	324.322	314.079	305.616	300.107	297.556	300.107
62.5	291.712	299.973	302.122	299.973	291.712	281.918	272.296	268.771	267.350	268.771
65.0	260.317	266.809	269.103	266.809	260.317	252.888	244.079	241.175	239.220	241.175
67.5	229.259	235.210	236.553	235.210	229.259	221.648	215.368	212.547	211.231	212.547
70.0	197.975	204.615	206.771	204.615	197.975	193.156	188.441	184.867	184.095	184.867
72.5	169.620	170.144	175.396	170.144	169.620	164.458	160.049	157.684	157.221	157.684
75.0	141.910	145.674	147.058	145.674	141.910	137.017	135.226	131.979	132.214	131.979
77.5	115.106	118.649	120.701	118.649	115.106	111.519	109.595	107.247	107.416	107.247
80.0	89.575	92.524	94.116	92.524	89.575	87.980	85.579	84.353	83.645	84.353

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**CANDELA TABULATION - (Cont.)**

82.5	66.749	67.934	68.699	67.934	66.749	65.136	64.136	63.306	65.476	63.306
85.0	42.165	43.723	44.512	43.723	42.165	41.775	41.060	40.234	39.139	40.234
87.5	20.631	21.595	23.260	21.595	20.631	19.902	18.848	18.935	19.149	18.935
90.0	2.660	2.341	2.403	2.341	2.660	2.517	3.030	3.206	2.438	3.206
92.5	35.095	35.053	33.674	35.053	35.095	34.107	34.825	33.069	35.010	33.069
95.0	71.697	70.609	70.407	70.609	71.697	70.966	71.773	67.996	67.197	67.996
97.5	100.241	102.065	101.846	102.065	100.241	99.207	98.900	98.581	99.896	98.581
100.0	135.277	138.272	139.377	138.272	135.277	134.688	134.403	132.894	132.822	132.894
102.5	173.043	175.544	175.859	175.544	173.043	171.812	169.493	168.303	168.261	168.303
105.0	212.180	214.562	214.222	214.562	212.180	210.037	208.197	206.751	207.650	206.751
107.5	251.812	255.014	257.224	255.014	251.812	249.682	248.064	246.842	245.131	246.842
110.0	295.445	298.151	299.193	298.151	295.445	291.919	288.592	288.655	288.125	288.655
112.5	339.565	343.809	339.809	343.809	339.565	335.002	332.573	329.346	329.984	329.346
115.0	383.760	389.517	383.634	389.517	383.760	389.139	376.113	372.121	373.886	372.121
117.5	428.847	435.948	432.713	435.948	428.847	427.460	422.292	418.216	419.939	418.216
120.0	477.253	483.304	479.018	483.304	477.253	474.858	469.185	465.152	464.563	465.152
122.5	526.542	531.080	529.441	531.080	526.542	522.633	514.902	514.860	510.028	514.860
125.0	577.259	581.755	577.427	581.755	577.259	573.098	562.341	563.687	559.358	563.687
127.5	625.749	631.716	628.017	631.716	625.749	620.160	613.815	613.101	609.781	613.101
130.0	676.970	682.223	676.423	682.223	676.970	671.760	664.196	663.103	662.473	663.103
132.5	724.955	733.108	725.334	733.108	724.955	721.804	713.989	713.148	717.098	713.148
135.0	774.202	783.783	773.824	783.783	774.202	771.975	767.185	765.294	768.698	765.294
137.5	820.969	831.853	825.087	831.853	820.969	819.288	820.255	814.708	819.709	814.708
140.0	870.386	883.497	872.232	883.497	870.386	868.957	869.584	865.974	870.135	865.974
142.5	918.793	928.913	918.451	928.913	918.793	917.197	917.448	913.663	915.092	913.663
145.0	964.293	973.794	966.441	973.794	964.293	962.405	963.165	961.861	963.583	961.861
147.5	1010.311	1018.500	1009.551	1018.500	1010.311	1010.269	1010.227	1006.400	1008.715	1006.400
150.0	1051.148	1062.287	1053.839	1062.287	1051.148	1051.532	1051.783	1049.092	1052.744	1049.092
152.5	1092.921	1103.341	1090.564	1103.341	1092.921	1094.266	1092.921	1089.553	1094.174	1089.553
155.0	1130.691	1142.665	1127.958	1142.665	1130.691	1130.440	1130.942	1125.101	1131.410	1125.101
157.5	1166.489	1179.684	1163.172	1179.684	1166.489	1163.380	1164.099	1164.768	1164.099	1164.768
160.0	1195.778	1211.579	1196.956	1211.579	1195.778	1192.836	1194.474	1189.185	1192.168	1189.185
162.5	1222.969	1238.637	1222.927	1238.637	1222.969	1220.863	1222.584	1215.991	1219.735	1215.991
165.0	1247.252	1261.332	1247.043	1261.332	1247.252	1244.779	1246.116	1240.575	1244.862	1240.575
167.5	1268.093	1281.922	1266.873	1281.922	1268.093	1265.828	1266.998	1262.552	1267.215	1262.552
170.0	1285.240	1299.696	1283.268	1299.696	1285.240	1282.883	1285.365	1280.284	1285.615	1280.284
172.5	1299.228	1313.517	1296.203	1313.517	1299.228	1296.671	1299.353	1294.022	1299.654	1294.022
175.0	1309.272	1323.394	1305.704	1323.394	1309.272	1306.414	1309.230	1304.693	1310.241	1304.693
177.5	1314.904	1329.110	1311.587	1329.110	1314.904	1312.130	1315.280	1310.409	1316.542	1310.409
180.0	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862	1317.862

**Vert.  
Angles**

**Horizontal Angles**

	<u>300</u>	<u>315</u>	<u>330</u>	<u>345</u>	<u>360</u>
0.0	966.241	966.241	966.241	966.241	966.241
2.5	963.596	962.755	962.220	974.042	959.629
5.0	957.518	957.452	957.285	969.139	955.000
7.5	947.914	948.115	948.883	960.945	947.948
10.0	934.610	936.059	939.586	954.760	941.563
12.5	917.352	923.864	923.964	937.569	923.497
15.0	898.678	904.015	904.181	918.528	906.098
17.5	877.653	880.104	882.689	897.536	886.216
20.0	851.058	853.843	859.921	874.868	864.389
22.5	819.989	825.532	833.961	848.100	840.406
25.0	788.017	796.579	805.649	823.048	817.504
27.5	756.754	766.859	776.463	791.811	783.790

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-S-835-F-F-KPL2008-50.011.IES****CANDELA TABULATION - (Cont.)**

30.0	722.458	734.180	743.790	756.079	753.829
32.5	688.103	701.473	709.161	727.434	721.256
35.0	658.618	664.999	677.056	693.679	689.478
37.5	616.604	629.501	642.061	657.544	656.167
40.0	580.569	592.894	606.026	621.306	618.754
42.5	545.003	557.933	569.654	584.263	583.557
45.0	508.396	523.006	533.786	549.168	548.026
47.5	472.764	486.600	498.321	511.486	511.486
50.0	436.795	450.363	461.345	475.954	474.745
52.5	403.513	415.402	425.813	439.650	438.340
55.0	370.937	381.046	392.094	403.782	404.420
57.5	338.091	347.864	356.798	367.377	370.097
60.0	305.616	314.079	324.322	332.852	335.170
62.5	272.296	281.918	291.712	299.973	302.122
65.0	244.079	252.888	260.317	266.809	269.103
67.5	215.368	221.648	229.259	235.210	236.553
70.0	188.441	193.156	197.975	204.615	206.771
72.5	160.049	164.458	169.620	170.144	175.396
75.0	135.226	137.017	141.910	145.674	147.058
77.5	109.595	111.519	115.106	118.649	120.701
80.0	85.579	87.980	89.575	92.524	94.116
82.5	64.136	65.136	66.749	67.934	68.699
85.0	41.060	41.775	42.165	43.723	44.512
87.5	18.848	19.902	20.631	21.595	23.260
90.0	3.030	2.517	2.660	2.341	2.403
92.5	34.825	34.107	35.095	35.053	33.674
95.0	71.773	70.966	71.697	70.609	70.407
97.5	98.900	99.207	100.241	102.065	101.846
100.0	134.403	134.688	135.277	138.272	139.377
102.5	169.493	171.812	173.043	175.544	175.859
105.0	208.197	210.037	212.180	214.562	214.222
107.5	248.064	249.682	251.812	255.014	257.224
110.0	288.592	291.919	295.445	298.151	299.193
112.5	332.573	335.002	339.565	343.809	339.809
115.0	376.113	389.139	383.760	389.517	383.634
117.5	422.292	427.460	428.847	435.948	432.713
120.0	469.185	474.858	477.253	483.304	479.018
122.5	514.902	522.633	526.542	531.080	529.441
125.0	562.341	573.098	577.259	581.755	577.427
127.5	613.815	620.160	625.749	631.716	628.017
130.0	664.196	671.760	676.970	682.223	676.423
132.5	713.989	721.804	724.955	733.108	725.334
135.0	767.185	771.975	774.202	783.783	773.824
137.5	820.255	819.288	820.969	831.853	825.087
140.0	869.584	868.957	870.386	883.497	872.232
142.5	917.448	917.197	918.793	928.913	918.451
145.0	963.165	962.405	964.293	973.794	966.441
147.5	1010.227	1010.269	1010.311	1018.500	1009.551
150.0	1051.783	1051.532	1051.148	1062.287	1053.839
152.5	1092.921	1094.266	1092.921	1103.341	1090.564
155.0	1130.942	1130.440	1130.691	1142.665	1127.958
157.5	1164.099	1163.380	1166.489	1179.684	1163.172
160.0	1194.474	1192.836	1195.778	1211.579	1196.956
162.5	1222.584	1220.863	1222.969	1238.637	1222.927
165.0	1246.116	1244.779	1247.252	1261.332	1247.043
167.5	1266.998	1265.828	1268.093	1281.922	1266.873

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-S-835-F-F-KPL2008-50.011.IES**

**CANDELA TABULATION - (Cont.)**

<b>170.0</b>	1285.365	1282.883	1285.240	1299.696	1283.268
<b>172.5</b>	1299.353	1296.671	1299.228	1313.517	1296.203
<b>175.0</b>	1309.230	1306.414	1309.272	1323.394	1305.704
<b>177.5</b>	1315.280	1312.130	1314.904	1329.110	1311.587
<b>180.0</b>	1317.862	1317.862	1317.862	1317.862	1317.862

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-S-835-F-F-KPL2008-50.011.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	345.10	N.A.	6.10
0-30	712.61	N.A.	12.50
0-40	1129.15	N.A.	19.80
0-60	1874.56	N.A.	32.90
0-80	2272.42	N.A.	39.90
0-90	2319.53	N.A.	40.70
10-90	2228.64	N.A.	39.10
20-40	784.06	N.A.	13.80
20-50	1187.36	N.A.	20.80
40-70	996.34	N.A.	17.50
60-80	397.86	N.A.	7.00
70-80	146.93	N.A.	2.60
80-90	47.11	N.A.	0.80
90-110	297.77	N.A.	5.20
90-120	675.59	N.A.	11.80
90-130	1186.56	N.A.	20.80
90-150	2385.58	N.A.	41.80
90-180	3382.41	N.A.	59.30
110-180	3084.64	N.A.	54.10
0-180	5701.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	90.89
10-20	254.20
20-30	367.51
30-40	416.54
40-50	403.30
50-60	342.11
60-70	250.93
70-80	146.93
80-90	47.11
90-100	74.48
100-110	223.29
110-120	377.82
120-130	510.97
130-140	595.50
140-150	603.52
150-160	520.81
160-170	351.72
170-180	124.30



# IES INDOOR REPORT

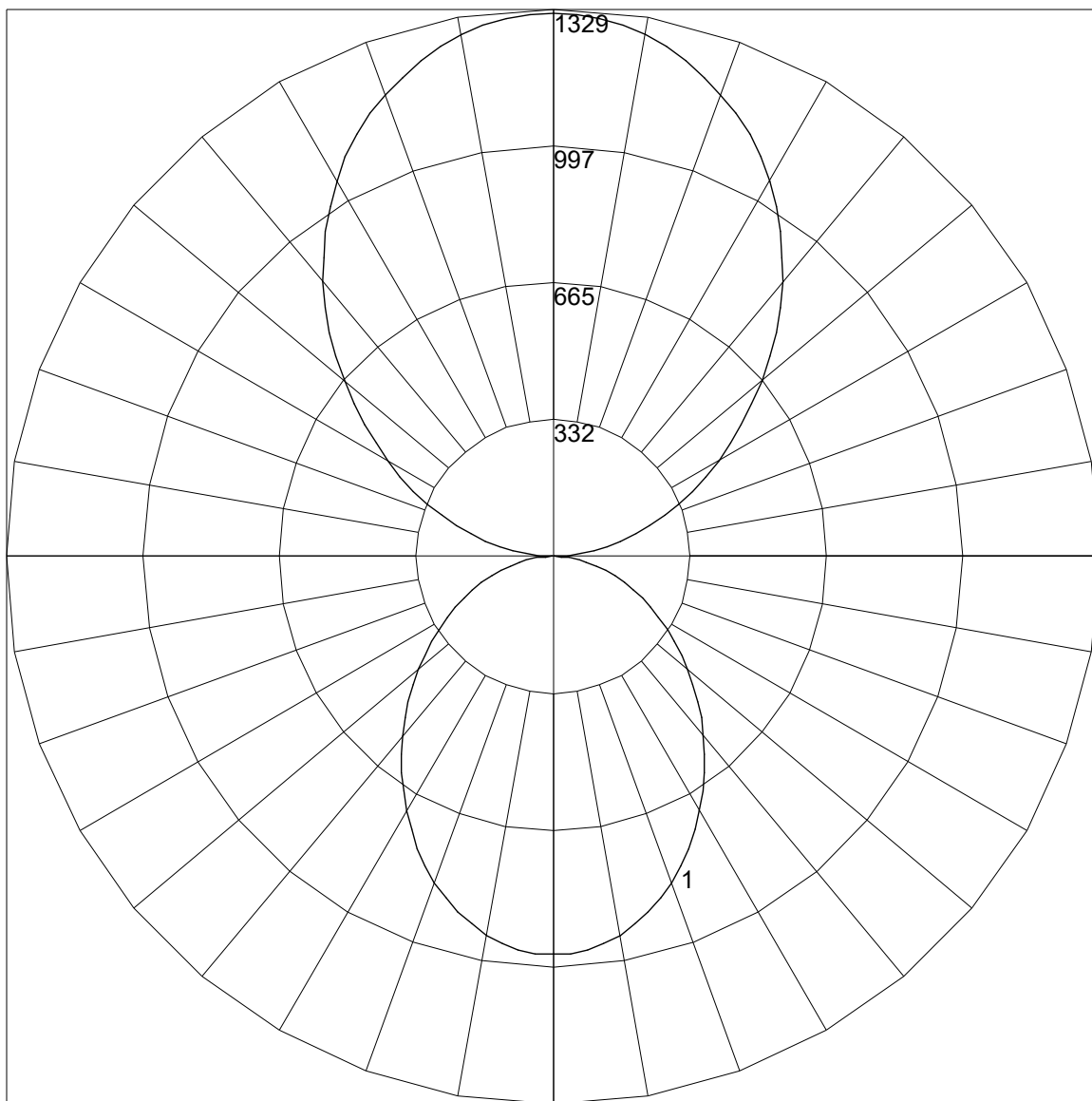
PHOTOMETRIC FILENAME : HP3-P-ID-4FT-B-S-835-F-F-KPL2008-50.011.IES

## 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	83	80	77	68	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	35	34	29
3	80	70	63	57	72	64	58	53	53	49	45	43	39	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	34	32	30	27	25	21
5	67	55	48	42	61	51	44	39	42	37	33	34	30	27	27	24	22	18
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19	16
7	57	45	37	32	52	41	34	30	34	29	25	28	24	21	22	19	17	14
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	18	15	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	31	25	21	27	22	18	22	18	15	17	15	13	11

POLAR GRAPH



Maximum Candela = 1329.11 Located At Horizontal Angle = 15, Vertical Angle = 177.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)