

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP3-P-D-4FT-H-835-DAO-120-KPL2008-115.001.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] KPL2008-115.001 Family Correlation File  
[TESTLAB] Northern Lights Testing Laboratories  
[ISSUE DATE] 1/29/2025  
[TEST DATE] 1/29/2025  
[MANUFAC] Finelite, Inc.  
[LUMCAT] HP3-P-D-4ft-H-835-DAO  
[LUMINAIRE] HP3 Series  
[LAMPCAT] 160 757HT-V2H6 LEDs with 80CRI  
[LAMP] Nichia  
[BALLAST] Osram  
[BALLASTCAT] OTi50, 700mA

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3462
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	30.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.44
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.10 m
Luminous Width (90-270)	1.22 m
Luminous Height	0.00 m

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10766	11429	8540
55	8957	10067	7702
65	7293	8511	6786
75	5786	6833	5743
85	4375	5134	4645

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**CANDELA TABULATION**

	<u>0</u>	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>	<u>35</u>	<u>40</u>	<u>45</u>
<b>0.0</b>	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
<b>2.5</b>	1366.756	1366.185	1369.181	1371.178	1370.536	1367.469	1366.827	1366.542	1363.760	1363.261
<b>5.0</b>	1411.691	1411.121	1413.832	1414.544	1413.047	1408.196	1405.130	1402.277	1396.499	1392.719
<b>7.5</b>	1452.918	1452.134	1454.559	1454.559	1451.776	1445.143	1440.008	1434.088	1425.529	1418.967
<b>10.0</b>	1488.724	1488.082	1490.222	1488.652	1485.443	1476.812	1469.323	1461.192	1449.637	1439.723
<b>12.5</b>	1516.826	1516.042	1517.682	1516.185	1511.263	1502.205	1492.504	1482.447	1468.039	1454.915
<b>15.0</b>	1533.945	1532.946	1535.015	1532.447	1527.668	1517.611	1506.698	1495.643	1479.879	1464.401
<b>17.5</b>	1539.793	1538.581	1541.077	1538.224	1533.089	1523.531	1511.619	1499.566	1482.162	1465.543
<b>20.0</b>	1533.659	1532.233	1535.015	1532.447	1527.811	1518.752	1506.627	1494.430	1476.527	1458.339
<b>22.5</b>	1514.401	1513.902	1516.541	1514.901	1510.978	1503.631	1491.934	1479.594	1462.333	1443.361
<b>25.0</b>	1483.588	1483.161	1486.441	1485.871	1483.160	1477.026	1467.255	1455.771	1439.651	1420.393
<b>27.5</b>	1441.791	1441.434	1445.286	1445.928	1444.144	1440.008	1432.661	1422.819	1408.481	1389.794
<b>30.0</b>	1389.581	1389.295	1393.789	1396.071	1395.001	1394.145	1388.796	1381.092	1368.967	1352.419
<b>32.5</b>	1328.525	1329.238	1333.732	1337.012	1338.082	1339.152	1337.370	1331.520	1322.391	1307.697
<b>35.0</b>	1259.053	1260.979	1266.471	1270.894	1273.889	1277.812	1278.739	1275.244	1269.252	1256.842
<b>37.5</b>	1185.016	1187.512	1192.078	1199.424	1203.347	1210.266	1213.975	1212.905	1209.481	1199.710
<b>40.0</b>	1107.413	1110.409	1114.974	1123.889	1129.667	1138.298	1144.503	1146.286	1144.646	1138.226
<b>42.5</b>	1027.385	1029.810	1035.373	1045.430	1051.137	1061.836	1069.895	1076.386	1076.743	1073.391
<b>45.0</b>	946.929	949.425	954.846	965.688	972.606	983.376	994.361	1002.920	1006.129	1005.274
<b>47.5</b>	865.332	868.827	875.175	884.376	894.219	905.132	917.970	928.170	933.448	934.874
<b>50.0</b>	786.872	790.795	795.360	805.631	816.687	827.457	841.081	852.849	859.554	861.694
<b>52.5</b>	711.552	715.475	719.897	729.455	740.795	751.424	765.475	777.101	786.373	789.868
<b>55.0</b>	639.085	642.865	646.930	655.989	666.758	677.244	690.225	702.636	713.834	718.257
<b>57.5</b>	570.468	573.606	577.173	585.447	595.432	605.918	617.686	631.595	641.652	648.072
<b>60.0</b>	503.850	506.916	510.910	518.542	527.601	538.514	549.284	561.267	572.180	579.313
<b>62.5</b>	441.938	444.221	448.500	454.206	463.407	473.892	484.234	494.577	504.848	512.337
<b>65.0</b>	383.408	385.690	388.265	394.264	402.153	411.888	421.610	430.782	439.812	447.430
<b>67.5</b>	329.214	331.076	333.629	338.722	345.470	353.479	362.424	371.447	378.187	384.820
<b>70.0</b>	277.245	280.141	282.388	286.404	291.789	299.172	306.853	314.692	321.204	326.276
<b>72.5</b>	229.956	232.887	233.843	236.711	242.046	247.324	255.013	260.933	267.038	271.960
<b>75.0</b>	186.290	188.116	190.106	191.903	196.183	200.669	205.755	211.782	216.454	219.985
<b>77.5</b>	145.620	147.232	149.856	151.526	153.409	157.803	161.775	165.720	169.736	172.823
<b>80.0</b>	109.344	109.893	111.818	113.773	115.214	117.610	121.169	124.393	127.374	129.750
<b>82.5</b>	76.847	77.047	77.696	79.586	81.440	82.589	84.044	86.604	89.008	90.363
<b>85.0</b>	47.432	47.539	48.324	49.115	49.943	51.669	52.924	53.951	54.750	55.656
<b>87.5</b>	21.612	21.655	21.626	22.033	22.497	22.789	23.424	24.515	25.228	25.849
<b>90.0</b>	1.698	1.733	1.769	1.797	1.812	1.854	1.897	1.955	2.033	2.118
<b>92.5</b>	1.256	1.256	1.277	1.284	1.284	1.291	1.312	1.327	1.355	1.370
<b>95.0</b>	1.141	1.134	1.141	1.149	1.149	1.149	1.162	1.162	1.184	1.198
<b>97.5</b>	1.084	1.084	1.084	1.084	1.084	1.091	1.091	1.098	1.113	1.127
<b>100.0</b>	1.055	1.055	1.063	1.063	1.055	1.055	1.055	1.070	1.070	1.084
<b>102.5</b>	1.042	1.042	1.055	1.048	1.048	1.042	1.048	1.048	1.048	1.055
<b>105.0</b>	1.042	1.042	1.042	1.048	1.034	1.042	1.034	1.034	1.042	1.048
<b>107.5</b>	1.042	1.042	1.048	1.042	1.034	1.034	1.034	1.034	1.034	1.042
<b>110.0</b>	1.027	1.034	1.042	1.042	1.034	1.034	1.020	1.020	1.027	1.042
<b>112.5</b>	1.027	1.042	1.048	1.042	1.042	1.042	1.020	1.027	1.027	1.027
<b>115.0</b>	1.042	1.027	1.042	1.034	1.027	1.027	1.012	1.020	1.020	1.027
<b>117.5</b>	1.070	1.077	1.077	1.084	1.077	1.070	1.063	1.063	1.063	1.070
<b>120.0</b>	1.184	1.184	1.184	1.177	1.170	1.170	1.162	1.162	1.177	1.170
<b>122.5</b>	1.341	1.341	1.348	1.334	1.341	1.334	1.334	1.327	1.327	1.348
<b>125.0</b>	1.541	1.533	1.548	1.541	1.541	1.533	1.526	1.533	1.541	1.548
<b>127.5</b>	1.783	1.776	1.783	1.776	1.769	1.769	1.762	1.776	1.776	1.783
<b>130.0</b>	1.997	1.997	2.011	2.011	2.004	2.011	2.011	2.019	2.026	2.040
<b>132.5</b>	2.240	2.240	2.247	2.247	2.254	2.254	2.254	2.275	2.290	2.311

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**CANDELA TABULATION - (Cont.)**

135.0	2.511	2.511	2.517	2.517	2.517	2.532	2.539	2.553	2.582	2.603
137.5	2.782	2.789	2.796	2.803	2.796	2.810	2.832	2.846	2.875	2.910
140.0	3.067	3.067	3.081	3.081	3.096	3.102	3.117	3.138	3.167	3.216
142.5	3.338	3.338	3.359	3.366	3.359	3.388	3.402	3.431	3.460	3.509
145.0	3.595	3.602	3.616	3.623	3.630	3.645	3.659	3.694	3.730	3.788
147.5	3.837	3.831	3.852	3.866	3.873	3.895	3.916	3.944	3.980	4.030
150.0	4.052	4.052	4.073	4.073	4.101	4.108	4.137	4.172	4.223	4.279
152.5	4.251	4.244	4.273	4.279	4.301	4.315	4.337	4.380	4.422	4.487
155.0	4.408	4.415	4.444	4.451	4.465	4.487	4.515	4.565	4.622	4.679
157.5	4.579	4.594	4.607	4.607	4.629	4.679	4.715	4.757	4.822	4.879
160.0	4.764	4.786	4.800	4.807	4.828	4.864	4.907	4.950	4.993	5.029
162.5	4.936	4.943	4.971	4.971	5.000	5.050	5.085	5.107	5.121	5.150
165.0	5.121	5.128	5.157	5.178	5.199	5.207	5.221	5.221	5.228	5.235
167.5	5.349	5.357	5.392	5.392	5.378	5.364	5.342	5.328	5.328	5.321
170.0	5.621	5.606	5.592	5.542	5.506	5.471	5.435	5.407	5.392	5.385
172.5	5.677	5.670	5.649	5.592	5.542	5.506	5.464	5.443	5.428	5.421
175.0	5.464	5.506	5.549	5.527	5.506	5.471	5.449	5.428	5.421	5.407
177.5	5.335	5.328	5.357	5.371	5.371	5.371	5.357	5.349	5.342	5.349
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

Vert. Angles	Horizontal Angles									
	<u>50</u>	<u>55</u>	<u>60</u>	<u>65</u>	<u>70</u>	<u>75</u>	<u>80</u>	<u>85</u>	<u>90</u>	<u>95</u>
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1362.476	1355.130	1347.712	1342.434	1334.088	1327.954	1325.957	1319.538	1314.260	1310.622
5.0	1388.724	1377.740	1366.827	1357.340	1345.073	1334.302	1328.240	1317.826	1307.769	1300.137
7.5	1411.192	1396.713	1381.734	1367.969	1351.706	1336.513	1326.314	1311.621	1297.141	1285.800
10.0	1428.952	1410.621	1391.791	1374.388	1353.775	1334.588	1319.894	1301.421	1283.090	1267.113
12.5	1441.221	1419.751	1396.926	1375.886	1351.207	1327.455	1308.696	1286.799	1264.046	1244.574
15.0	1447.568	1423.460	1396.641	1371.749	1343.718	1316.043	1292.862	1267.683	1241.507	1218.754
17.5	1447.640	1420.607	1390.936	1362.619	1331.378	1300.137	1273.318	1244.787	1215.045	1190.009
20.0	1439.438	1411.478	1379.595	1348.211	1314.260	1279.738	1249.567	1217.969	1185.444	1157.698
22.5	1424.245	1395.643	1362.048	1328.881	1292.362	1254.631	1221.108	1187.512	1152.776	1122.606
25.0	1401.349	1372.961	1337.512	1303.489	1265.758	1224.959	1188.725	1153.633	1117.113	1085.230
27.5	1371.463	1343.860	1308.054	1272.320	1234.160	1192.006	1153.204	1116.543	1078.027	1044.860
30.0	1334.659	1308.126	1272.605	1235.658	1197.570	1154.488	1113.833	1075.673	1036.871	1003.063
32.5	1291.293	1267.256	1232.234	1194.003	1155.701	1113.262	1071.464	1032.592	993.505	958.626
35.0	1241.293	1219.824	1186.657	1147.926	1109.695	1068.540	1026.172	987.157	947.428	913.334
37.5	1186.871	1167.613	1135.373	1098.498	1059.981	1019.611	978.027	938.869	900.352	866.687
40.0	1127.099	1110.765	1081.022	1044.574	1007.057	968.327	926.957	889.369	851.708	818.970
42.5	1063.904	1049.282	1023.320	988.369	950.852	913.976	874.746	838.370	801.780	770.182
45.0	998.070	984.446	962.763	929.739	892.863	857.913	821.180	785.874	751.138	721.466
47.5	929.026	918.041	898.783	868.755	834.305	801.067	766.973	733.306	700.140	672.037
50.0	859.269	850.281	833.734	806.844	774.818	743.220	711.837	679.740	649.284	623.036
52.5	788.870	781.451	766.759	744.291	714.619	685.304	656.702	626.887	599.070	574.534
55.0	718.898	711.909	699.925	680.454	654.420	626.674	600.282	574.462	549.498	526.746
57.5	648.784	643.720	633.093	617.044	594.077	569.541	545.932	523.036	500.426	479.884
60.0	580.882	577.030	567.829	554.063	534.663	513.051	492.224	471.896	451.781	433.022
62.5	514.049	511.267	503.850	491.652	475.747	457.630	439.934	421.539	403.343	387.594
65.0	450.141	448.357	440.847	430.718	418.294	402.980	387.980	373.636	356.739	343.073
67.5	387.937	387.373	381.489	373.065	362.580	350.377	338.037	326.182	311.853	300.020
70.0	329.036	328.643	325.269	317.474	309.449	299.607	289.956	279.913	267.745	257.809
72.5	274.471	274.001	271.390	265.355	258.587	251.725	243.722	235.841	225.235	216.697
75.0	222.674	223.201	220.755	216.711	210.584	205.620	199.721	194.272	184.885	177.666
77.5	174.543	175.056	173.929	170.670	166.754	162.267	158.794	154.742	147.339	141.305
80.0	130.748	131.134	130.948	128.737	125.941	123.031	120.613	118.016	111.889	106.840

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82.5	91.818	92.132	91.312	90.214	89.001	87.196	85.470	84.215	79.522	75.079
85.0	56.462	56.968	57.075	56.334	55.684	54.807	54.329	53.659	50.356	46.091
87.5	26.333	26.719	26.612	26.569	26.526	26.526	26.099	26.333	23.488	20.014
90.0	2.240	2.296	2.454	2.575	2.547	2.568	2.654	2.646	2.525	1.741
92.5	1.391	1.419	1.434	1.426	1.405	1.398	1.398	1.398	1.362	1.320
95.0	1.227	1.234	1.241	1.234	1.227	1.227	1.227	1.234	1.205	1.156
97.5	1.141	1.149	1.156	1.149	1.141	1.141	1.156	1.170	1.156	1.113
100.0	1.084	1.106	1.106	1.098	1.106	1.120	1.127	1.149	1.141	1.127
102.5	1.070	1.077	1.084	1.084	1.091	1.098	1.106	1.134	1.149	1.127
105.0	1.048	1.070	1.070	1.077	1.070	1.091	1.120	1.141	1.149	1.141
107.5	1.048	1.055	1.055	1.063	1.084	1.091	1.120	1.149	1.170	1.156
110.0	1.042	1.055	1.063	1.055	1.070	1.084	1.120	1.149	1.184	1.177
112.5	1.048	1.042	1.063	1.055	1.077	1.098	1.134	1.162	1.198	1.205
115.0	1.034	1.042	1.055	1.055	1.070	1.091	1.127	1.156	1.191	1.191
117.5	1.070	1.084	1.091	1.091	1.120	1.156	1.184	1.220	1.205	1.156
120.0	1.177	1.191	1.213	1.220	1.241	1.269	1.320	1.348	1.248	1.113
122.5	1.348	1.362	1.398	1.398	1.419	1.462	1.505	1.555	1.341	1.091
125.0	1.562	1.576	1.612	1.627	1.648	1.691	1.747	1.790	1.469	1.098
127.5	1.805	1.833	1.869	1.883	1.919	1.983	2.033	2.097	1.655	1.149
130.0	2.069	2.104	2.140	2.168	2.211	2.268	2.339	2.411	1.848	1.205
132.5	2.339	2.382	2.425	2.468	2.525	2.589	2.667	2.739	2.062	1.305
135.0	2.646	2.689	2.739	2.789	2.860	2.931	3.017	3.096	2.311	1.434
137.5	2.960	3.010	3.074	3.117	3.188	3.274	3.353	3.452	2.575	1.627
140.0	3.259	3.317	3.388	3.445	3.524	3.588	3.681	3.788	2.853	1.833
142.5	3.559	3.623	3.688	3.752	3.837	3.916	4.009	4.108	3.124	2.062
145.0	3.831	3.902	3.980	4.037	4.123	4.208	4.301	4.393	3.381	2.268
147.5	4.087	4.159	4.251	4.308	4.386	4.465	4.565	4.665	3.630	2.511
150.0	4.337	4.401	4.487	4.551	4.629	4.708	4.807	4.893	3.866	2.739
152.5	4.543	4.622	4.708	4.764	4.836	4.907	4.993	5.079	4.094	3.003
155.0	4.757	4.815	4.886	4.936	4.993	5.057	5.135	5.214	4.287	3.231
157.5	4.922	4.971	5.029	5.064	5.114	5.178	5.250	5.328	4.465	3.467
160.0	5.064	5.100	5.135	5.171	5.221	5.278	5.349	5.421	4.629	3.702
162.5	5.178	5.199	5.235	5.257	5.300	5.349	5.413	5.464	4.764	3.923
165.0	5.250	5.271	5.306	5.314	5.342	5.392	5.456	5.499	4.907	4.151
167.5	5.335	5.349	5.378	5.385	5.428	5.456	5.499	5.542	5.050	4.393
170.0	5.400	5.413	5.443	5.443	5.471	5.492	5.535	5.563	5.157	4.615
172.5	5.421	5.428	5.443	5.443	5.471	5.485	5.527	5.549	5.250	4.800
175.0	5.413	5.413	5.428	5.413	5.435	5.449	5.478	5.492	5.314	4.993
177.5	5.342	5.349	5.371	5.357	5.364	5.378	5.385	5.400	5.357	5.157
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

**Vert.  
Angles**

**Horizontal Angles**

	<u>100</u>	<u>105</u>	<u>110</u>	<u>115</u>	<u>120</u>	<u>125</u>	<u>130</u>	<u>135</u>	<u>140</u>	<u>145</u>
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1309.124	1302.633	1300.850	1301.206	1299.067	1299.210	1299.139	1294.502	1289.580	1287.584
5.0	1294.431	1284.088	1278.597	1275.672	1270.322	1267.612	1264.617	1257.484	1250.637	1246.357
7.5	1276.314	1262.690	1253.703	1247.284	1239.438	1234.160	1228.525	1219.110	1210.979	1204.560
10.0	1253.989	1237.655	1225.529	1216.400	1206.414	1199.067	1191.578	1180.737	1171.036	1164.974
12.5	1228.026	1209.195	1194.859	1183.447	1171.107	1161.906	1154.274	1141.792	1132.734	1125.316
15.0	1199.139	1178.240	1162.406	1148.782	1134.802	1125.459	1116.614	1104.061	1094.717	1086.514
17.5	1167.969	1145.002	1127.242	1111.764	1098.212	1088.654	1078.597	1065.972	1056.486	1049.211
20.0	1133.946	1109.553	1090.508	1074.674	1060.979	1050.994	1040.010	1028.027	1018.968	1011.479
22.5	1097.499	1071.393	1052.349	1036.087	1022.463	1012.406	1001.422	990.010	981.950	975.530
25.0	1058.127	1032.235	1013.405	996.786	983.519	973.676	963.191	952.563	945.716	940.510
27.5	1017.542	991.365	972.963	956.844	943.719	934.304	925.103	915.545	909.697	905.417

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

30.0	975.103	949.425	932.021	915.474	903.848	895.360	886.158	878.955	874.532	871.252
32.5	931.094	907.200	889.297	874.033	864.048	856.416	848.142	842.507	839.226	837.229
35.0	886.587	863.620	846.002	831.951	823.534	817.043	810.196	806.131	804.276	802.778
37.5	840.296	819.041	802.707	790.153	782.807	776.958	772.037	768.684	768.541	768.399
40.0	793.435	773.962	758.770	747.786	741.723	736.872	733.663	731.737	732.593	733.521
42.5	747.143	728.599	714.619	705.418	700.496	697.215	694.505	694.291	695.789	697.429
45.0	700.639	683.449	670.040	662.550	659.341	656.916	654.990	656.488	658.556	661.195
47.5	653.635	638.014	625.960	620.325	618.043	616.474	615.618	617.900	620.753	623.821
50.0	606.773	592.152	581.952	577.744	576.531	575.390	575.746	578.314	581.524	585.946
52.5	559.127	547.145	538.799	535.304	534.377	534.235	535.518	537.943	542.223	547.287
55.0	513.336	502.495	495.718	493.293	492.723	492.509	494.934	497.787	502.423	507.630
57.5	468.115	457.844	452.923	451.354	450.711	451.282	454.064	457.273	461.981	468.186
60.0	422.316	412.965	409.221	408.237	407.552	408.679	411.867	415.119	420.498	427.045
62.5	378.337	370.598	367.166	366.361	366.261	368.008	370.576	374.870	380.333	386.953
65.0	335.462	328.900	325.798	324.927	325.369	327.310	330.356	335.070	340.812	346.211
67.5	293.251	287.467	285.091	284.506	284.984	287.217	290.940	294.977	300.533	305.769
70.0	252.039	247.716	245.456	244.735	245.969	248.451	251.375	256.111	260.876	266.361
72.5	212.353	209.050	206.533	206.240	207.674	210.113	213.551	217.667	222.453	227.182
75.0	174.129	170.977	169.821	169.586	170.912	173.423	176.682	180.356	184.792	188.801
77.5	138.402	136.112	135.042	134.907	136.554	138.808	141.347	145.043	148.002	151.005
80.0	104.907	102.767	102.096	102.632	103.545	105.463	108.009	109.900	112.738	115.527
82.5	73.266	72.132	71.904	72.389	73.345	74.650	76.219	78.059	79.814	81.989
85.0	45.178	44.465	44.330	44.486	45.042	45.591	46.840	47.931	49.222	50.135
87.5	19.387	19.144	19.073	19.179	19.344	19.565	19.708	19.800	19.858	20.292
90.0	1.776	1.790	1.805	1.826	1.833	1.833	1.797	1.769	1.719	1.676
92.5	1.334	1.341	1.355	1.370	1.383	1.383	1.341	1.320	1.277	1.234
95.0	1.191	1.184	1.198	1.220	1.227	1.220	1.205	1.162	1.134	1.106
97.5	1.141	1.141	1.156	1.170	1.177	1.184	1.156	1.134	1.098	1.070
100.0	1.149	1.156	1.177	1.177	1.191	1.198	1.170	1.141	1.113	1.091
102.5	1.156	1.156	1.170	1.191	1.198	1.191	1.170	1.149	1.113	1.091
105.0	1.170	1.170	1.191	1.191	1.198	1.198	1.191	1.156	1.141	1.106
107.5	1.191	1.184	1.198	1.205	1.205	1.220	1.198	1.177	1.149	1.120
110.0	1.198	1.205	1.220	1.220	1.227	1.241	1.220	1.191	1.177	1.141
112.5	1.234	1.234	1.256	1.263	1.263	1.269	1.248	1.227	1.213	1.177
115.0	1.227	1.234	1.241	1.256	1.263	1.269	1.248	1.234	1.205	1.177
117.5	1.184	1.191	1.205	1.213	1.213	1.227	1.213	1.191	1.177	1.156
120.0	1.141	1.141	1.170	1.177	1.177	1.191	1.170	1.162	1.141	1.120
122.5	1.120	1.127	1.156	1.170	1.170	1.198	1.177	1.170	1.149	1.127
125.0	1.141	1.149	1.170	1.191	1.198	1.213	1.205	1.198	1.191	1.170
127.5	1.177	1.184	1.198	1.220	1.234	1.256	1.256	1.248	1.234	1.220
130.0	1.234	1.248	1.277	1.291	1.320	1.348	1.348	1.348	1.348	1.334
132.5	1.334	1.341	1.377	1.412	1.419	1.455	1.455	1.455	1.455	1.448
135.0	1.477	1.477	1.512	1.541	1.555	1.591	1.584	1.584	1.591	1.591
137.5	1.662	1.676	1.698	1.719	1.741	1.754	1.762	1.769	1.776	1.783
140.0	1.861	1.883	1.897	1.919	1.933	1.955	1.955	1.983	1.983	1.983
142.5	2.082	2.097	2.104	2.125	2.147	2.168	2.183	2.189	2.197	2.211
145.0	2.304	2.304	2.326	2.339	2.361	2.375	2.390	2.397	2.411	2.418
147.5	2.539	2.532	2.547	2.553	2.596	2.582	2.596	2.625	2.632	2.639
150.0	2.768	2.761	2.782	2.789	2.810	2.817	2.832	2.825	2.846	2.853
152.5	3.017	3.010	3.017	3.031	3.046	3.053	3.060	3.067	3.067	3.074
155.0	3.245	3.231	3.245	3.259	3.267	3.259	3.267	3.274	3.274	3.281
157.5	3.473	3.467	3.473	3.481	3.495	3.488	3.488	3.481	3.473	3.488
160.0	3.709	3.702	3.694	3.702	3.723	3.716	3.716	3.709	3.709	3.694
162.5	3.923	3.916	3.902	3.902	3.923	3.916	3.909	3.902	3.895	3.895
165.0	4.165	4.144	4.130	4.123	4.130	4.116	4.108	4.108	4.101	4.087
167.5	4.401	4.380	4.372	4.358	4.358	4.330	4.308	4.308	4.287	4.287

# IES INDOOR REPORT

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## CANDELA TABULATION - (Cont.)

170.0	4.607	4.586	4.586	4.572	4.572	4.551	4.515	4.494	4.472	4.451
172.5	4.800	4.779	4.764	4.764	4.772	4.750	4.715	4.701	4.665	4.637
175.0	5.000	4.978	4.971	4.965	4.978	4.950	4.936	4.929	4.907	4.871
177.5	5.171	5.143	5.135	5.128	5.143	5.128	5.121	5.114	5.107	5.079
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

### Vert. Angles

### Horizontal Angles

	150	155	160	165	170	175	180	185	190	195
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1283.875	1280.665	1280.379	1278.454	1274.174	1271.250	1272.034	1271.250	1274.174	1278.454
5.0	1241.078	1236.443	1235.373	1232.020	1227.812	1224.531	1224.531	1224.531	1227.812	1232.020
7.5	1198.640	1192.434	1191.150	1187.227	1182.591	1179.168	1179.595	1179.168	1182.591	1187.227
10.0	1157.413	1150.851	1148.782	1145.501	1140.723	1137.513	1138.084	1137.513	1140.723	1145.501
12.5	1117.756	1111.479	1109.339	1105.559	1100.352	1097.499	1097.998	1097.499	1100.352	1105.559
15.0	1079.168	1072.820	1070.538	1066.900	1061.193	1058.697	1059.624	1058.697	1061.193	1066.900
17.5	1041.294	1035.730	1033.519	1029.310	1024.960	1022.250	1022.962	1022.250	1024.960	1029.310
20.0	1004.703	999.639	997.927	994.503	990.509	987.941	988.869	987.941	990.509	994.503
22.5	968.897	965.331	964.118	961.337	957.841	955.773	956.344	955.773	957.841	961.337
25.0	934.304	932.307	931.594	929.454	926.530	924.746	925.103	924.746	926.530	929.454
27.5	900.710	899.640	900.210	898.213	895.574	894.362	895.146	894.362	895.574	898.213
30.0	867.828	867.971	869.183	867.257	865.902	864.904	865.332	864.904	865.902	867.257
32.5	835.018	836.587	838.370	836.944	836.587	835.803	836.230	835.803	836.587	836.944
35.0	801.922	804.561	806.844	806.844	806.915	805.988	806.986	805.988	806.915	806.844
37.5	768.969	772.179	774.961	775.675	776.601	776.031	777.172	776.031	776.601	775.675
40.0	735.161	739.298	742.437	743.577	744.576	744.933	746.359	744.933	744.576	743.577
42.5	700.853	705.703	709.055	710.554	712.122	712.907	714.262	712.907	712.122	710.554
45.0	665.118	670.896	674.248	676.174	678.099	679.027	680.026	679.027	678.099	676.174
47.5	628.956	634.876	637.801	640.725	642.865	643.934	645.361	643.934	642.865	640.725
50.0	591.652	596.859	600.140	603.849	606.274	607.415	609.269	607.415	606.274	603.849
52.5	553.636	558.557	562.123	566.260	568.471	570.112	572.037	570.112	568.471	566.260
55.0	514.121	519.256	523.535	527.601	529.883	531.667	533.806	531.667	529.883	527.601
57.5	474.392	479.456	484.520	488.372	490.440	492.224	494.577	492.224	490.440	488.372
60.0	433.308	439.299	444.363	447.930	450.355	452.138	453.493	452.138	450.355	447.930
62.5	392.274	397.202	402.801	406.033	409.228	410.897	411.382	410.897	409.228	406.033
65.0	351.610	357.160	361.767	364.856	368.180	369.955	370.341	369.955	368.180	364.856
67.5	311.162	316.882	320.826	324.135	326.632	329.000	328.714	329.000	326.632	324.135
70.0	271.547	276.047	278.958	282.994	285.084	287.282	286.275	287.282	285.084	282.994
72.5	231.710	235.170	238.836	241.803	244.471	244.656	245.006	244.656	244.471	241.803
75.0	192.538	195.998	199.265	201.804	203.487	202.909	204.621	202.909	203.487	201.804
77.5	154.293	157.289	159.764	162.531	162.931	162.638	164.493	162.638	162.931	162.531
80.0	118.252	120.584	122.739	123.887	123.509	124.364	126.291	124.364	123.509	123.887
82.5	83.809	85.727	86.184	86.555	86.911	87.966	89.357	87.966	86.911	86.555
85.0	50.763	51.319	51.591	52.046	52.717	53.566	53.623	53.566	52.717	52.046
87.5	20.478	21.012	20.970	21.063	21.391	21.533	21.526	21.533	21.391	21.063
90.0	1.633	1.612	1.584	1.576	1.555	1.541	1.541	1.541	1.555	1.576
92.5	1.205	1.184	1.162	1.149	1.141	1.120	1.113	1.120	1.141	1.149
95.0	1.070	1.055	1.042	1.020	1.020	1.006	0.999	1.006	1.020	1.020
97.5	1.042	1.012	1.012	0.999	0.991	0.970	0.970	0.970	0.991	0.999
100.0	1.055	1.042	1.012	1.012	1.006	0.984	0.984	0.984	1.006	1.012
102.5	1.070	1.048	1.034	1.012	1.012	0.999	0.999	0.999	1.012	1.012
105.0	1.084	1.063	1.042	1.034	1.020	1.012	1.012	1.012	1.020	1.034
107.5	1.098	1.084	1.063	1.055	1.048	1.027	1.027	1.027	1.048	1.055
110.0	1.127	1.098	1.077	1.063	1.048	1.034	1.027	1.034	1.048	1.063
112.5	1.162	1.134	1.106	1.098	1.084	1.070	1.070	1.070	1.084	1.098
115.0	1.162	1.141	1.120	1.098	1.098	1.084	1.084	1.084	1.098	1.098

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

117.5	1.134	1.113	1.091	1.084	1.077	1.055	1.055	1.055	1.077	1.084
120.0	1.106	1.084	1.070	1.063	1.063	1.048	1.042	1.048	1.063	1.063
122.5	1.113	1.098	1.084	1.070	1.063	1.048	1.055	1.048	1.063	1.070
125.0	1.156	1.141	1.120	1.113	1.113	1.091	1.084	1.091	1.113	1.113
127.5	1.220	1.220	1.213	1.213	1.220	1.198	1.198	1.198	1.220	1.213
130.0	1.341	1.327	1.327	1.320	1.320	1.312	1.312	1.312	1.320	1.320
132.5	1.455	1.448	1.434	1.441	1.441	1.426	1.412	1.426	1.441	1.441
135.0	1.591	1.591	1.591	1.598	1.605	1.591	1.598	1.591	1.605	1.598
137.5	1.783	1.790	1.783	1.790	1.797	1.783	1.783	1.783	1.797	1.790
140.0	1.990	2.004	1.997	2.011	2.019	2.011	1.997	2.011	2.019	2.011
142.5	2.225	2.225	2.232	2.240	2.247	2.240	2.240	2.240	2.247	2.240
145.0	2.425	2.439	2.454	2.454	2.468	2.461	2.454	2.461	2.468	2.454
147.5	2.646	2.660	2.675	2.675	2.682	2.682	2.696	2.682	2.682	2.675
150.0	2.867	2.881	2.888	2.903	2.917	2.903	2.896	2.903	2.917	2.903
152.5	3.089	3.102	3.102	3.124	3.138	3.124	3.110	3.124	3.138	3.124
155.0	3.295	3.310	3.310	3.317	3.338	3.317	3.323	3.317	3.338	3.317
157.5	3.488	3.509	3.516	3.524	3.531	3.538	3.538	3.538	3.531	3.524
160.0	3.688	3.702	3.709	3.723	3.745	3.752	3.737	3.752	3.745	3.723
162.5	3.895	3.887	3.887	3.895	3.909	3.902	3.909	3.902	3.909	3.895
165.0	4.094	4.080	4.073	4.073	4.087	4.087	4.080	4.087	4.087	4.073
167.5	4.279	4.287	4.279	4.273	4.287	4.266	4.251	4.266	4.287	4.273
170.0	4.458	4.451	4.444	4.436	4.436	4.415	4.408	4.415	4.436	4.436
172.5	4.622	4.615	4.615	4.622	4.607	4.572	4.551	4.572	4.607	4.622
175.0	4.850	4.828	4.828	4.828	4.828	4.793	4.779	4.793	4.828	4.828
177.5	5.064	5.036	5.007	5.000	5.029	5.029	5.036	5.029	5.029	5.000
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

**Vert.  
Angles**

**Horizontal Angles**

	<u>200</u>	<u>205</u>	<u>210</u>	<u>215</u>	<u>220</u>	<u>225</u>	<u>230</u>	<u>235</u>	<u>240</u>	<u>245</u>
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1280.379	1280.665	1283.875	1287.584	1289.580	1294.502	1299.139	1299.210	1299.067	1301.206
5.0	1235.373	1236.443	1241.078	1246.357	1250.637	1257.484	1264.617	1267.612	1270.322	1275.672
7.5	1191.150	1192.434	1198.640	1204.560	1210.979	1219.110	1228.525	1234.160	1239.438	1247.284
10.0	1148.782	1150.851	1157.413	1164.974	1171.036	1180.737	1191.578	1199.067	1206.414	1216.400
12.5	1109.339	1111.479	1117.756	1125.316	1132.734	1141.792	1154.274	1161.906	1171.107	1183.447
15.0	1070.538	1072.820	1079.168	1086.514	1094.717	1104.061	1116.614	1125.459	1134.802	1148.782
17.5	1033.519	1035.730	1041.294	1049.211	1056.486	1065.972	1078.597	1088.654	1098.212	1111.764
20.0	997.927	999.639	1004.703	1011.479	1018.968	1028.027	1040.010	1050.994	1060.979	1074.674
22.5	964.118	965.331	968.897	975.530	981.950	990.010	1001.422	1012.406	1022.463	1036.087
25.0	931.594	932.307	934.304	940.510	945.716	952.563	963.191	973.676	983.519	996.786
27.5	900.210	899.640	900.710	905.417	909.697	915.545	925.103	934.304	943.719	956.844
30.0	869.183	867.971	867.828	871.252	874.532	878.955	886.158	895.360	903.848	915.474
32.5	838.370	836.587	835.018	837.229	839.226	842.507	848.142	856.416	864.048	874.033
35.0	806.844	804.561	801.922	802.778	804.276	806.131	810.196	817.043	823.534	831.951
37.5	774.961	772.179	768.969	768.399	768.541	768.684	772.037	776.958	782.807	790.153
40.0	742.437	739.298	735.161	733.521	732.593	731.737	733.663	736.872	741.723	747.786
42.5	709.055	705.703	700.853	697.429	695.789	694.291	694.505	697.215	700.496	705.418
45.0	674.248	670.896	665.118	661.195	658.556	656.488	654.990	656.916	659.341	662.550
47.5	637.801	634.876	628.956	623.821	620.753	617.900	615.618	616.474	618.043	620.325
50.0	600.140	596.859	591.652	585.946	581.524	578.314	575.746	575.390	576.531	577.744
52.5	562.123	558.557	553.636	547.287	542.223	537.943	535.518	534.235	534.377	535.304
55.0	523.535	519.256	514.121	507.630	502.423	497.787	494.934	492.509	492.723	493.293
57.5	484.520	479.456	474.392	468.186	461.981	457.273	454.064	451.282	450.711	451.354
60.0	444.363	439.299	433.308	427.045	420.498	415.119	411.867	408.679	407.552	408.237
62.5	402.801	397.202	392.274	386.953	380.333	374.870	370.576	368.008	366.261	366.361

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP3-P-D-4FT-H-835-DAO-120-KPL2008-115.001.IES

## CANDELA TABULATION - (Cont.)

65.0	361.767	357.160	351.610	346.211	340.812	335.070	330.356	327.310	325.369	324.927
67.5	320.826	316.882	311.162	305.769	300.533	294.977	290.940	287.217	284.984	284.506
70.0	278.958	276.047	271.547	266.361	260.876	256.111	251.375	248.451	245.969	244.735
72.5	238.836	235.170	231.710	227.182	222.453	217.667	213.551	210.113	207.674	206.240
75.0	199.265	195.998	192.538	188.801	184.792	180.356	176.682	173.423	170.912	169.586
77.5	159.764	157.289	154.293	151.005	148.002	145.043	141.347	138.808	136.554	134.907
80.0	122.739	120.584	118.252	115.527	112.738	109.900	108.009	105.463	103.545	102.632
82.5	86.184	85.727	83.809	81.989	79.814	78.059	76.219	74.650	73.345	72.389
85.0	51.591	51.319	50.763	50.135	49.222	47.931	46.840	45.591	45.042	44.486
87.5	20.970	21.012	20.478	20.292	19.858	19.800	19.708	19.565	19.344	19.179
90.0	1.584	1.612	1.633	1.676	1.719	1.769	1.797	1.833	1.833	1.826
92.5	1.162	1.184	1.205	1.234	1.277	1.320	1.341	1.383	1.383	1.370
95.0	1.042	1.055	1.070	1.106	1.134	1.162	1.205	1.220	1.227	1.220
97.5	1.012	1.012	1.042	1.070	1.098	1.134	1.156	1.184	1.177	1.170
100.0	1.012	1.042	1.055	1.091	1.113	1.141	1.170	1.198	1.191	1.177
102.5	1.034	1.048	1.070	1.091	1.113	1.149	1.170	1.191	1.198	1.191
105.0	1.042	1.063	1.084	1.106	1.141	1.156	1.191	1.198	1.198	1.191
107.5	1.063	1.084	1.098	1.120	1.149	1.177	1.198	1.220	1.205	1.205
110.0	1.077	1.098	1.127	1.141	1.177	1.191	1.220	1.241	1.227	1.220
112.5	1.106	1.134	1.162	1.177	1.213	1.227	1.248	1.269	1.263	1.263
115.0	1.120	1.141	1.162	1.177	1.205	1.234	1.248	1.269	1.263	1.256
117.5	1.091	1.113	1.134	1.156	1.177	1.191	1.213	1.227	1.213	1.213
120.0	1.070	1.084	1.106	1.120	1.141	1.162	1.170	1.191	1.177	1.177
122.5	1.084	1.098	1.113	1.127	1.149	1.170	1.177	1.198	1.170	1.170
125.0	1.120	1.141	1.156	1.170	1.191	1.198	1.205	1.213	1.198	1.191
127.5	1.213	1.220	1.220	1.220	1.234	1.248	1.256	1.256	1.234	1.220
130.0	1.327	1.327	1.341	1.334	1.348	1.348	1.348	1.348	1.320	1.291
132.5	1.434	1.448	1.455	1.448	1.455	1.455	1.455	1.455	1.419	1.412
135.0	1.591	1.591	1.591	1.591	1.591	1.584	1.584	1.591	1.555	1.541
137.5	1.783	1.790	1.783	1.783	1.776	1.769	1.762	1.754	1.741	1.719
140.0	1.997	2.004	1.990	1.983	1.983	1.983	1.955	1.955	1.933	1.919
142.5	2.232	2.225	2.225	2.211	2.197	2.189	2.183	2.168	2.147	2.125
145.0	2.454	2.439	2.425	2.418	2.411	2.397	2.390	2.375	2.361	2.339
147.5	2.675	2.660	2.646	2.639	2.632	2.625	2.596	2.582	2.596	2.553
150.0	2.888	2.881	2.867	2.853	2.846	2.825	2.832	2.817	2.810	2.789
152.5	3.102	3.102	3.089	3.074	3.067	3.067	3.060	3.053	3.046	3.031
155.0	3.310	3.310	3.295	3.281	3.274	3.274	3.267	3.259	3.267	3.259
157.5	3.516	3.509	3.488	3.488	3.473	3.481	3.488	3.488	3.495	3.481
160.0	3.709	3.702	3.688	3.694	3.709	3.709	3.716	3.716	3.723	3.702
162.5	3.887	3.887	3.895	3.895	3.895	3.902	3.909	3.916	3.923	3.902
165.0	4.073	4.080	4.094	4.087	4.101	4.108	4.108	4.116	4.130	4.123
167.5	4.279	4.287	4.279	4.287	4.287	4.308	4.308	4.330	4.358	4.358
170.0	4.444	4.451	4.458	4.451	4.472	4.494	4.515	4.551	4.572	4.572
172.5	4.615	4.615	4.622	4.637	4.665	4.701	4.715	4.750	4.772	4.764
175.0	4.828	4.828	4.850	4.871	4.907	4.929	4.936	4.950	4.978	4.965
177.5	5.007	5.036	5.064	5.079	5.107	5.114	5.121	5.128	5.143	5.128
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

## Vert. Horizontal Angles

Angles	250	255	260	265	270	275	280	285	290	295
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1300.850	1302.633	1309.124	1310.622	1314.260	1319.538	1325.957	1327.954	1334.088	1342.434
5.0	1278.597	1284.088	1294.431	1300.137	1307.769	1317.826	1328.240	1334.302	1345.073	1357.340
7.5	1253.703	1262.690	1276.314	1285.800	1297.141	1311.621	1326.314	1336.513	1351.706	1367.969
10.0	1225.529	1237.655	1253.989	1267.113	1283.090	1301.421	1319.894	1334.588	1353.775	1374.388



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

12.5	1194.859	1209.195	1228.026	1244.574	1264.046	1286.799	1308.696	1327.455	1351.207	1375.886
15.0	1162.406	1178.240	1199.139	1218.754	1241.507	1267.683	1292.862	1316.043	1343.718	1371.749
17.5	1127.242	1145.002	1167.969	1190.009	1215.045	1244.787	1273.318	1300.137	1331.378	1362.619
20.0	1090.508	1109.553	1133.946	1157.698	1185.444	1217.969	1249.567	1279.738	1314.260	1348.211
22.5	1052.349	1071.393	1097.499	1122.606	1152.776	1187.512	1221.108	1254.631	1292.362	1328.881
25.0	1013.405	1032.235	1058.127	1085.230	1117.113	1153.633	1188.725	1224.959	1265.758	1303.489
27.5	972.963	991.365	1017.542	1044.860	1078.027	1116.543	1153.204	1192.006	1234.160	1272.320
30.0	932.021	949.425	975.103	1003.063	1036.871	1075.673	1113.833	1154.488	1197.570	1235.658
32.5	889.297	907.200	931.094	958.626	993.505	1032.592	1071.464	1113.262	1155.701	1194.003
35.0	846.002	863.620	886.587	913.334	947.428	987.157	1026.172	1068.540	1109.695	1147.926
37.5	802.707	819.041	840.296	866.687	900.352	938.869	978.027	1019.611	1059.981	1098.498
40.0	758.770	773.962	793.435	818.970	851.708	889.369	926.957	968.327	1007.057	1044.574
42.5	714.619	728.599	747.143	770.182	801.780	838.370	874.746	913.976	950.852	988.369
45.0	670.040	683.449	700.639	721.466	751.138	785.874	821.180	857.913	892.863	929.739
47.5	625.960	638.014	653.635	672.037	700.140	733.306	766.973	801.067	834.305	868.755
50.0	581.952	592.152	606.773	623.036	649.284	679.740	711.837	743.220	774.818	806.844
52.5	538.799	547.145	559.127	574.534	599.070	626.887	656.702	685.304	714.619	744.291
55.0	495.718	502.495	513.336	526.746	549.498	574.462	600.282	626.674	654.420	680.454
57.5	452.923	457.844	468.115	479.884	500.426	523.036	545.932	569.541	594.077	617.044
60.0	409.221	412.965	422.316	433.022	451.781	471.896	492.224	513.051	534.663	554.063
62.5	367.166	370.598	378.337	387.594	403.343	421.539	439.934	457.630	475.747	491.652
65.0	325.798	328.900	335.462	343.073	356.739	373.636	387.980	402.980	418.294	430.718
67.5	285.091	287.467	293.251	300.020	311.853	326.182	338.037	350.377	362.580	373.065
70.0	245.456	247.716	252.039	257.809	267.745	279.913	289.956	299.607	309.449	317.474
72.5	206.533	209.050	212.353	216.697	225.235	235.841	243.722	251.725	258.587	265.355
75.0	169.821	170.977	174.129	177.666	184.885	194.272	199.721	205.620	210.584	216.711
77.5	135.042	136.112	138.402	141.305	147.339	154.742	158.794	162.267	166.754	170.670
80.0	102.096	102.767	104.907	106.840	111.889	118.016	120.613	123.031	125.941	128.737
82.5	71.904	72.132	73.266	75.079	79.522	84.215	85.470	87.196	89.001	90.214
85.0	44.330	44.465	45.178	46.091	50.356	53.659	54.329	54.807	55.684	56.334
87.5	19.073	19.144	19.387	20.014	23.488	26.333	26.099	26.526	26.526	26.569
90.0	1.805	1.790	1.776	1.741	2.525	2.646	2.654	2.568	2.547	2.575
92.5	1.355	1.341	1.334	1.320	1.362	1.398	1.398	1.398	1.405	1.426
95.0	1.198	1.184	1.191	1.156	1.205	1.234	1.227	1.227	1.227	1.234
97.5	1.156	1.141	1.141	1.113	1.156	1.170	1.156	1.141	1.141	1.149
100.0	1.177	1.156	1.149	1.127	1.141	1.149	1.127	1.120	1.106	1.098
102.5	1.170	1.156	1.156	1.127	1.149	1.134	1.106	1.098	1.091	1.084
105.0	1.191	1.170	1.170	1.141	1.149	1.141	1.120	1.091	1.070	1.077
107.5	1.198	1.184	1.191	1.156	1.170	1.149	1.120	1.091	1.084	1.063
110.0	1.220	1.205	1.198	1.177	1.184	1.149	1.120	1.084	1.070	1.055
112.5	1.256	1.234	1.234	1.205	1.198	1.162	1.134	1.098	1.077	1.055
115.0	1.241	1.234	1.227	1.191	1.191	1.156	1.127	1.091	1.070	1.055
117.5	1.205	1.191	1.184	1.156	1.205	1.220	1.184	1.156	1.120	1.091
120.0	1.170	1.141	1.141	1.113	1.248	1.348	1.320	1.269	1.241	1.220
122.5	1.156	1.127	1.120	1.091	1.341	1.555	1.505	1.462	1.419	1.398
125.0	1.170	1.149	1.141	1.098	1.469	1.790	1.747	1.691	1.648	1.627
127.5	1.198	1.184	1.177	1.149	1.655	2.097	2.033	1.983	1.919	1.883
130.0	1.277	1.248	1.234	1.205	1.848	2.411	2.339	2.268	2.211	2.168
132.5	1.377	1.341	1.334	1.305	2.062	2.739	2.667	2.589	2.525	2.468
135.0	1.512	1.477	1.477	1.434	2.311	3.096	3.017	2.931	2.860	2.789
137.5	1.698	1.676	1.662	1.627	2.575	3.452	3.353	3.274	3.188	3.117
140.0	1.897	1.883	1.861	1.833	2.853	3.788	3.681	3.588	3.524	3.445
142.5	2.104	2.097	2.082	2.062	3.124	4.108	4.009	3.916	3.837	3.752
145.0	2.326	2.304	2.304	2.268	3.381	4.393	4.301	4.208	4.123	4.037
147.5	2.547	2.532	2.539	2.511	3.630	4.665	4.565	4.465	4.386	4.308
150.0	2.782	2.761	2.768	2.739	3.866	4.893	4.807	4.708	4.629	4.551

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

152.5	3.017	3.010	3.017	3.003	4.094	5.079	4.993	4.907	4.836	4.764
155.0	3.245	3.231	3.245	3.231	4.287	5.214	5.135	5.057	4.993	4.936
157.5	3.473	3.467	3.473	3.467	4.465	5.328	5.250	5.178	5.114	5.064
160.0	3.694	3.702	3.709	3.702	4.629	5.421	5.349	5.278	5.221	5.171
162.5	3.902	3.916	3.923	3.923	4.764	5.464	5.413	5.349	5.300	5.257
165.0	4.130	4.144	4.165	4.151	4.907	5.499	5.456	5.392	5.342	5.314
167.5	4.372	4.380	4.401	4.393	5.050	5.542	5.499	5.456	5.428	5.385
170.0	4.586	4.586	4.607	4.615	5.157	5.563	5.535	5.492	5.471	5.443
172.5	4.764	4.779	4.800	4.800	5.250	5.549	5.527	5.485	5.471	5.443
175.0	4.971	4.978	5.000	4.993	5.314	5.492	5.478	5.449	5.435	5.413
177.5	5.135	5.143	5.171	5.157	5.357	5.400	5.385	5.378	5.364	5.357
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

Vert. Angles	Horizontal Angles									
	<u>300</u>	<u>305</u>	<u>310</u>	<u>315</u>	<u>320</u>	<u>325</u>	<u>330</u>	<u>335</u>	<u>340</u>	<u>345</u>
0.0	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829	1323.829
2.5	1347.712	1355.130	1362.476	1363.261	1363.760	1366.542	1366.827	1367.469	1370.536	1371.178
5.0	1366.827	1377.740	1388.724	1392.719	1396.499	1402.277	1405.130	1408.196	1413.047	1414.544
7.5	1381.734	1396.713	1411.192	1418.967	1425.529	1434.088	1440.008	1445.143	1451.776	1454.559
10.0	1391.791	1410.621	1428.952	1439.723	1449.637	1461.192	1469.323	1476.812	1485.443	1488.652
12.5	1396.926	1419.751	1441.221	1454.915	1468.039	1482.447	1492.504	1502.205	1511.263	1516.185
15.0	1396.641	1423.460	1447.568	1464.401	1479.879	1495.643	1506.698	1517.611	1527.668	1532.447
17.5	1390.936	1420.607	1447.640	1465.543	1482.162	1499.566	1511.619	1523.531	1533.089	1538.224
20.0	1379.595	1411.478	1439.438	1458.339	1476.527	1494.430	1506.627	1518.752	1527.811	1532.447
22.5	1362.048	1395.643	1424.245	1443.361	1462.333	1479.594	1491.934	1503.631	1510.978	1514.901
25.0	1337.512	1372.961	1401.349	1420.393	1439.651	1455.771	1467.255	1477.026	1483.160	1485.871
27.5	1308.054	1343.860	1371.463	1389.794	1408.481	1422.819	1432.661	1440.008	1444.144	1445.928
30.0	1272.605	1308.126	1334.659	1352.419	1368.967	1381.092	1388.796	1394.145	1395.001	1396.071
32.5	1232.234	1267.256	1291.293	1307.697	1322.391	1331.520	1337.370	1339.152	1338.082	1337.012
35.0	1186.657	1219.824	1241.293	1256.842	1269.252	1275.244	1278.739	1277.812	1273.889	1270.894
37.5	1135.373	1167.613	1186.871	1199.710	1209.481	1212.905	1213.975	1210.266	1203.347	1199.424
40.0	1081.022	1110.765	1127.099	1138.226	1144.646	1146.286	1144.503	1138.298	1129.667	1123.889
42.5	1023.320	1049.282	1063.904	1073.391	1076.743	1076.386	1069.895	1061.836	1051.137	1045.430
45.0	962.763	984.446	998.070	1005.274	1006.129	1002.920	994.361	983.376	972.606	965.688
47.5	898.783	918.041	929.026	934.874	933.448	928.170	917.970	905.132	894.219	884.376
50.0	833.734	850.281	859.269	861.694	859.554	852.849	841.081	827.457	816.687	805.631
52.5	766.759	781.451	788.870	789.868	786.373	777.101	765.475	751.424	740.795	729.455
55.0	699.925	711.909	718.898	718.257	713.834	702.636	690.225	677.244	666.758	655.989
57.5	633.093	643.720	648.784	648.072	641.652	631.595	617.686	605.918	595.432	585.447
60.0	567.829	577.030	580.882	579.313	572.180	561.267	549.284	538.514	527.601	518.542
62.5	503.850	511.267	514.049	512.337	504.848	494.577	484.234	473.892	463.407	454.206
65.0	440.847	448.357	450.141	447.430	439.812	430.782	421.610	411.888	402.153	394.264
67.5	381.489	387.373	387.937	384.820	378.187	371.447	362.424	353.479	345.470	338.722
70.0	325.269	328.643	329.036	326.276	321.204	314.692	306.853	299.172	291.789	286.404
72.5	271.390	274.001	274.471	271.960	267.038	260.933	255.013	247.324	242.046	236.711
75.0	220.755	223.201	222.674	219.985	216.454	211.782	205.755	200.669	196.183	191.903
77.5	173.929	175.056	174.543	172.823	169.736	165.720	161.775	157.803	153.409	151.526
80.0	130.948	131.134	130.748	129.750	127.374	124.393	121.169	117.610	115.214	113.773
82.5	91.312	92.132	91.818	90.363	89.008	86.604	84.044	82.589	81.440	79.586
85.0	57.075	56.968	56.462	55.656	54.750	53.951	52.924	51.669	49.943	49.115
87.5	26.612	26.719	26.333	25.849	25.228	24.515	23.424	22.789	22.497	22.033
90.0	2.454	2.296	2.240	2.118	2.033	1.955	1.897	1.854	1.812	1.797
92.5	1.434	1.419	1.391	1.370	1.355	1.327	1.312	1.291	1.284	1.284
95.0	1.241	1.234	1.227	1.198	1.184	1.162	1.162	1.149	1.149	1.149
97.5	1.156	1.149	1.141	1.127	1.113	1.098	1.091	1.091	1.084	1.084

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP3-P-D-4FT-H-835-DAO-120-KPL2008-115.001.IES

## CANDELA TABULATION - (Cont.)

100.0	1.106	1.106	1.084	1.084	1.070	1.070	1.055	1.055	1.055	1.063
102.5	1.084	1.077	1.070	1.055	1.048	1.048	1.048	1.042	1.048	1.048
105.0	1.070	1.070	1.048	1.048	1.042	1.034	1.034	1.042	1.034	1.048
107.5	1.055	1.055	1.048	1.042	1.034	1.034	1.034	1.034	1.034	1.042
110.0	1.063	1.055	1.042	1.042	1.027	1.020	1.020	1.034	1.034	1.042
112.5	1.063	1.042	1.048	1.027	1.027	1.027	1.020	1.042	1.042	1.042
115.0	1.055	1.042	1.034	1.027	1.020	1.020	1.012	1.027	1.027	1.034
117.5	1.091	1.084	1.070	1.070	1.063	1.063	1.063	1.070	1.077	1.084
120.0	1.213	1.191	1.177	1.170	1.177	1.162	1.162	1.170	1.170	1.177
122.5	1.398	1.362	1.348	1.348	1.327	1.327	1.334	1.334	1.341	1.334
125.0	1.612	1.576	1.562	1.548	1.541	1.533	1.526	1.533	1.541	1.541
127.5	1.869	1.833	1.805	1.783	1.776	1.776	1.762	1.769	1.769	1.776
130.0	2.140	2.104	2.069	2.040	2.026	2.019	2.011	2.011	2.004	2.011
132.5	2.425	2.382	2.339	2.311	2.290	2.275	2.254	2.254	2.254	2.247
135.0	2.739	2.689	2.646	2.603	2.582	2.553	2.539	2.532	2.517	2.517
137.5	3.074	3.010	2.960	2.910	2.875	2.846	2.832	2.810	2.796	2.803
140.0	3.388	3.317	3.259	3.216	3.167	3.138	3.117	3.102	3.096	3.081
142.5	3.688	3.623	3.559	3.509	3.460	3.431	3.402	3.388	3.359	3.366
145.0	3.980	3.902	3.831	3.788	3.730	3.694	3.659	3.645	3.630	3.623
147.5	4.251	4.159	4.087	4.030	3.980	3.944	3.916	3.895	3.873	3.866
150.0	4.487	4.401	4.337	4.279	4.223	4.172	4.137	4.108	4.101	4.073
152.5	4.708	4.622	4.543	4.487	4.422	4.380	4.337	4.315	4.301	4.279
155.0	4.886	4.815	4.757	4.679	4.622	4.565	4.515	4.487	4.465	4.451
157.5	5.029	4.971	4.922	4.879	4.822	4.757	4.715	4.679	4.629	4.607
160.0	5.135	5.100	5.064	5.029	4.993	4.950	4.907	4.864	4.828	4.807
162.5	5.235	5.199	5.178	5.150	5.121	5.107	5.085	5.050	5.000	4.971
165.0	5.306	5.271	5.250	5.235	5.228	5.221	5.221	5.207	5.199	5.178
167.5	5.378	5.349	5.335	5.321	5.328	5.328	5.342	5.364	5.378	5.392
170.0	5.443	5.413	5.400	5.385	5.392	5.407	5.435	5.471	5.506	5.542
172.5	5.443	5.428	5.421	5.421	5.428	5.443	5.464	5.506	5.542	5.592
175.0	5.428	5.413	5.413	5.407	5.421	5.428	5.449	5.471	5.506	5.527
177.5	5.371	5.349	5.342	5.349	5.342	5.349	5.357	5.371	5.371	5.371
180.0	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269	5.269

Vert. Angles	Horizontal Angles		
	350	355	360
0.0	1323.829	1323.829	1323.829
2.5	1369.181	1366.185	1366.756
5.0	1413.832	1411.121	1411.691
7.5	1454.559	1452.134	1452.918
10.0	1490.222	1488.082	1488.724
12.5	1517.682	1516.042	1516.826
15.0	1535.015	1532.946	1533.945
17.5	1541.077	1538.581	1539.793
20.0	1535.015	1532.233	1533.659
22.5	1516.541	1513.902	1514.401
25.0	1486.441	1483.161	1483.588
27.5	1445.286	1441.434	1441.791
30.0	1393.789	1389.295	1389.581
32.5	1333.732	1329.238	1328.525
35.0	1266.471	1260.979	1259.053
37.5	1192.078	1187.512	1185.016
40.0	1114.974	1110.409	1107.413
42.5	1035.373	1029.810	1027.385
45.0	954.846	949.425	946.929

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP3-P-D-4FT-H-835-DAO-120-KPL2008-115.001.IES****CANDELA TABULATION - (Cont.)**

<b>47.5</b>	875.175	868.827	865.332
<b>50.0</b>	795.360	790.795	786.872
<b>52.5</b>	719.897	715.475	711.552
<b>55.0</b>	646.930	642.865	639.085
<b>57.5</b>	577.173	573.606	570.468
<b>60.0</b>	510.910	506.916	503.850
<b>62.5</b>	448.500	444.221	441.938
<b>65.0</b>	388.265	385.690	383.408
<b>67.5</b>	333.629	331.076	329.214
<b>70.0</b>	282.388	280.141	277.245
<b>72.5</b>	233.843	232.887	229.956
<b>75.0</b>	190.106	188.116	186.290
<b>77.5</b>	149.856	147.232	145.620
<b>80.0</b>	111.818	109.893	109.344
<b>82.5</b>	77.696	77.047	76.847
<b>85.0</b>	48.324	47.539	47.432
<b>87.5</b>	21.626	21.655	21.612
<b>90.0</b>	1.769	1.733	1.698
<b>92.5</b>	1.277	1.256	1.256
<b>95.0</b>	1.141	1.134	1.141
<b>97.5</b>	1.084	1.084	1.084
<b>100.0</b>	1.063	1.055	1.055
<b>102.5</b>	1.055	1.042	1.042
<b>105.0</b>	1.042	1.042	1.042
<b>107.5</b>	1.048	1.042	1.042
<b>110.0</b>	1.042	1.034	1.027
<b>112.5</b>	1.048	1.042	1.027
<b>115.0</b>	1.042	1.027	1.042
<b>117.5</b>	1.077	1.077	1.070
<b>120.0</b>	1.184	1.184	1.184
<b>122.5</b>	1.348	1.341	1.341
<b>125.0</b>	1.548	1.533	1.541
<b>127.5</b>	1.783	1.776	1.783
<b>130.0</b>	2.011	1.997	1.997
<b>132.5</b>	2.247	2.240	2.240
<b>135.0</b>	2.517	2.511	2.511
<b>137.5</b>	2.796	2.789	2.782
<b>140.0</b>	3.081	3.067	3.067
<b>142.5</b>	3.359	3.338	3.338
<b>145.0</b>	3.616	3.602	3.595
<b>147.5</b>	3.852	3.831	3.837
<b>150.0</b>	4.073	4.052	4.052
<b>152.5</b>	4.273	4.244	4.251
<b>155.0</b>	4.444	4.415	4.408
<b>157.5</b>	4.607	4.594	4.579
<b>160.0</b>	4.800	4.786	4.764
<b>162.5</b>	4.971	4.943	4.936
<b>165.0</b>	5.157	5.128	5.121
<b>167.5</b>	5.392	5.357	5.349
<b>170.0</b>	5.592	5.606	5.621
<b>172.5</b>	5.649	5.670	5.677
<b>175.0</b>	5.549	5.506	5.464
<b>177.5</b>	5.357	5.328	5.335
<b>180.0</b>	5.269	5.269	5.269

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP3-P-D-4FT-H-835-DAO-120-KPL2008-115.001.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	485.57	N.A.	14.00
0-30	1026.17	N.A.	29.60
0-40	1658.4	N.A.	47.90
0-60	2807.29	N.A.	81.10
0-80	3391.38	N.A.	98.00
0-90	3449.96	N.A.	99.60
10-90	3324.52	N.A.	96.00
20-40	1172.84	N.A.	33.90
20-50	1795.23	N.A.	51.90
40-70	1525.11	N.A.	44.10
60-80	584.09	N.A.	16.90
70-80	207.87	N.A.	6.00
80-90	58.58	N.A.	1.70
90-110	2.55	N.A.	0.10
90-120	3.67	N.A.	0.10
90-130	4.92	N.A.	0.10
90-150	8.52	N.A.	0.20
90-180	12.18	N.A.	0.40
110-180	9.63	N.A.	0.30
0-180	3462.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

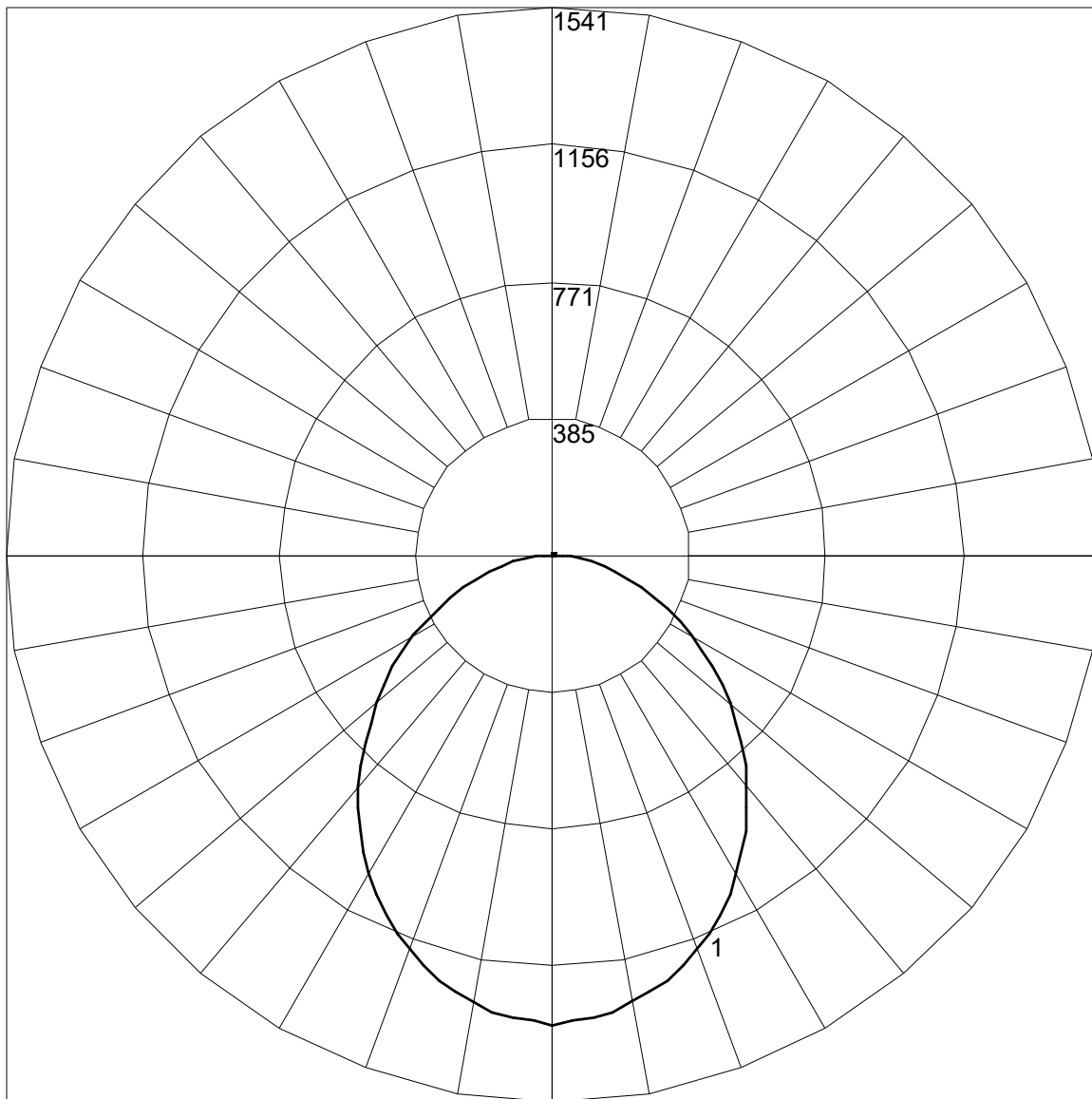
Zone	Lumens
0-10	125.45
10-20	360.12
20-30	540.60
30-40	632.23
40-50	622.40
50-60	526.49
60-70	376.22
70-80	207.87
80-90	58.58
90-100	1.39
100-110	1.16
110-120	1.12
120-130	1.25
130-140	1.65
140-150	1.95
150-160	1.84
160-170	1.32
170-180	0.49

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	100	92	85	79	97	90	84	78	86	81	77	83	78	75	80	76	73	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	63	71	66	62	60
4	84	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	41	35	30	40	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	38	32	28	38	32	27	26

POLAR GRAPH



Maximum Candela = 1541.077 Located At Horizontal Angle = 10, Vertical Angle = 17.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)