

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP2-P-D-4FT-B-8TW-MLW-KPL2008-7.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] KPL2008-7.002.902 Family Correlation File

[TESTLAB] Northern Lights Testing Laboratories

[TESTDATE] 2/10/2022

[ISSUEDATE] 2/10/2023

[MANUFAC] Finelite Inc.

[LUMCAT] HP2-P-D-4ft-B-8TW-MLW

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com
for lumen adjustment factors for other CCT's & CRI's

[LUMINAIRE] HP2 Series

[LAMPCAT] 128 NFSW757GT-V3 LEDs with 80 CRI

[LAMP] Nichia

[BALLAST] Osram

[BALLASTCAT] OTi50, 700mA

[MORE] extrapolated from KPL2008-7.IES

[OTHER]see www.finelite.com for source file KPL2008-7. For further details on Finelite family correlation files, go to

[more]http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1783
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	20.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.48
Spacing Criterion (90-270)	0.56
Spacing Criterion (Diagonal)	0.56
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.17 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2715	2653	2569
55	2263	2199	2093
65	1930	1826	1708
75	1635	1517	1370
85	1285	1161	1042

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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>
0.0	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4375.120	4394.455	4421.995	4424.897	4408.948	4393.966	4390.586	4377.055	4377.538	4381.402
5.0	4127.710	4139.790	4171.683	4173.134	4165.885	4149.941	4133.992	4140.757	4144.143	4151.387
7.5	3735.041	3751.036	3775.489	3779.549	3783.268	3784.863	3792.982	3787.955	3785.537	3799.408
10.0	3191.992	3224.420	3258.628	3288.155	3291.442	3298.208	3343.148	3356.725	3375.282	3404.855
12.5	2606.520	2634.544	2667.692	2685.040	2706.644	2722.443	2797.198	2834.550	2886.595	2957.244
15.0	2123.774	2133.874	2164.609	2187.704	2217.328	2258.307	2274.544	2331.081	2391.383	2477.739
17.5	1653.305	1656.932	1696.604	1733.713	1762.082	1795.374	1837.706	1890.523	1938.313	2027.129
20.0	1153.844	1183.612	1202.987	1250.248	1294.272	1358.248	1423.438	1492.924	1536.949	1584.106
22.5	776.058	792.151	818.729	904.453	961.133	976.552	1027.095	1108.903	1168.439	1193.371
25.0	523.719	532.223	549.474	579.098	603.886	644.669	699.035	761.611	816.893	906.289
27.5	375.815	378.779	381.449	387.057	393.807	440.460	475.687	500.572	539.133	599.971
30.0	274.364	278.171	285.997	295.370	307.286	324.351	339.601	348.275	365.206	383.342
32.5	209.169	212.991	209.210	222.062	232.984	243.258	253.965	258.981	262.099	270.408
35.0	174.580	175.856	179.231	180.342	182.894	188.497	196.975	203.401	204.394	203.473
37.5	159.114	159.701	160.468	160.848	160.498	160.884	162.289	166.111	168.180	168.447
40.0	145.702	144.128	147.945	147.724	147.096	146.906	145.475	145.501	145.558	145.043
42.5	133.575	133.812	134.496	135.078	134.604	134.574	133.982	132.876	131.204	129.959
45.0	121.413	121.938	122.571	123.162	122.946	122.586	122.211	121.573	120.214	118.640
47.5	106.406	110.660	111.432	112.039	111.833	111.535	111.103	110.192	109.467	107.964
50.0	99.851	100.386	101.014	101.148	101.194	100.690	100.391	99.789	98.961	98.508
52.5	91.136	91.316	91.897	92.144	92.051	91.305	90.791	90.626	89.994	88.754
55.0	82.070	80.897	82.991	83.218	82.770	82.112	81.561	81.499	80.702	79.745
57.5	73.597	73.710	74.214	74.672	73.998	73.525	73.206	72.938	72.012	71.055
60.0	65.581	65.766	66.163	66.379	66.019	65.669	65.339	64.892	64.223	63.153
62.5	58.507	58.631	57.864	58.867	58.404	58.065	57.936	57.190	56.614	55.708
65.0	51.577	51.495	51.711	51.664	51.258	51.227	50.826	50.188	49.447	48.799
67.5	44.575	44.652	44.914	45.022	44.714	44.534	43.988	43.587	42.918	42.208
70.0	38.308	38.375	38.586	37.912	38.283	38.087	37.650	37.105	36.760	36.096
72.5	32.011	32.366	32.521	32.485	32.176	31.985	31.733	31.229	30.828	30.272
75.0	26.763	26.609	26.671	26.784	26.681	26.295	25.992	25.807	25.374	24.819
77.5	21.320	21.346	21.320	21.228	20.682	20.934	20.662	20.363	20.183	19.710
80.0	16.515	16.438	16.232	16.355	16.175	16.047	15.764	15.599	15.239	15.013
82.5	11.509	11.566	11.566	11.540	11.519	11.226	11.092	10.989	10.696	10.495
85.0	7.084	7.064	7.182	7.100	7.033	6.565	6.724	6.632	6.565	6.400
87.5	2.891	2.994	2.989	2.979	2.969	2.938	2.886	2.727	2.768	2.655
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4386.238	4390.586	4385.271	4390.102	4379.957	4396.384	4390.586	4390.586	4393.482	4390.586
5.0	4158.636	4162.988	4157.669	4157.669	4152.354	4170.232	4171.683	4168.303	4167.336	4168.303
7.5	3827.529	3824.489	3831.059	3836.759	3828.594	3846.524	3844.976	3843.864	3831.301	3843.864
10.0	3431.963	3450.423	3464.484	3467.529	3468.883	3469.557	3475.741	3479.126	3476.708	3479.126
12.5	3000.831	3025.330	3059.590	3063.454	3068.820	3083.267	3082.207	3079.305	3089.358	3079.305
15.0	2543.022	2601.396	2630.052	2645.564	2640.054	2629.327	2655.422	2636.864	2636.962	2636.864
17.5	2073.715	2131.893	2152.236	2158.420	2122.859	2093.188	2083.135	2076.468	2073.906	2076.468
20.0	1621.365	1627.020	1639.244	1645.819	1658.331	1650.748	1640.988	1632.576	1624.411	1632.576
22.5	1206.758	1212.222	1233.239	1257.064	1275.956	1270.739	1260.105	1247.397	1231.644	1247.397
25.0	951.713	961.910	964.133	963.551	952.531	937.554	926.102	914.408	914.166	914.408
27.5	665.207	681.105	649.263	615.096	583.980	569.096	552.134	537.204	537.250	537.204
30.0	398.329	405.280	393.338	382.401	372.322	364.486	357.638	353.615	348.223	353.615
32.5	276.849	281.567	268.972	260.674	259.619	258.760	256.599	256.054	256.671	256.054
35.0	203.556	201.065	200.906	200.520	201.791	198.164	195.164	193.096	194.799	193.096
37.5	166.811	165.556	165.350	164.090	162.361	158.415	156.233	154.839	154.340	154.839
40.0	143.793	142.780	143.263	139.981	138.396	137.331	136.539	136.729	136.369	136.729
42.5	127.782	127.206	126.373	126.100	126.167	126.069	125.652	125.766	126.028	125.766
45.0	116.814	115.908	115.702	115.692	115.779	115.311	114.884	114.910	114.874	114.910
47.5	106.678	105.968	105.726	106.272	105.330	104.708	104.173	104.306	104.116	104.306
50.0	97.860	97.315	96.877	96.867	96.749	96.116	95.540	95.586	96.286	95.586
52.5	87.519	87.071	86.464	86.310	85.749	85.646	84.725	84.581	85.049	84.581
55.0	78.598	77.821	77.245	77.378	78.037	76.550	75.850	75.912	75.907	75.912
57.5	70.068	69.430	68.884	68.750	68.606	68.159	67.680	67.397	67.634	67.397
60.0	62.186	61.342	61.177	61.018	60.766	60.714	60.025	60.020	59.881	60.020
62.5	54.931	54.005	53.758	53.594	53.738	53.902	52.930	52.534	52.441	52.534
65.0	47.862	47.549	47.106	46.967	46.607	46.237	45.969	45.552	45.655	45.552
67.5	41.365	41.087	40.706	40.521	40.274	39.847	39.574	39.075	39.163	39.075
70.0	35.613	34.964	34.697	34.476	34.244	33.966	33.941	33.143	33.102	33.143
72.5	29.711	29.403	29.053	28.760	28.513	28.281	27.731	27.612	27.484	27.612
75.0	24.366	23.939	23.851	23.522	23.373	23.054	22.637	22.421	22.421	22.421
77.5	19.355	18.969	18.815	18.671	18.516	18.259	18.084	18.346	17.775	18.346
80.0	14.632	14.431	14.303	14.189	13.886	13.855	13.762	13.634	13.608	13.634

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CANDELA TABULATION - (Cont.)

82.5	10.259	10.063	10.002	9.971	9.873	9.708	9.626	9.513	9.384	9.513
85.0	6.416	6.174	6.158	6.040	5.891	5.906	5.845	5.767	5.742	5.767
87.5	2.737	2.526	2.547	2.480	2.475	2.454	2.382	2.413	2.356	2.413
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles
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	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4390.586	4396.384	4379.957	4390.102	4385.271	4390.586	4386.238	4381.402	4377.538	4377.055
5.0	4171.683	4170.232	4152.354	4157.669	4157.669	4162.988	4158.636	4151.387	4144.143	4140.757
7.5	3844.976	3846.524	3828.594	3836.759	3831.059	3824.489	3827.529	3799.408	3785.537	3787.955
10.0	3475.741	3469.557	3468.883	3467.529	3464.484	3450.423	3431.963	3404.855	3375.282	3356.725
12.5	3082.207	3083.267	3068.820	3063.454	3059.590	3025.330	3000.831	2957.244	2886.595	2834.550
15.0	2655.422	2629.327	2640.054	2645.564	2630.052	2601.396	2543.022	2477.739	2391.383	2331.081
17.5	2083.135	2093.188	2122.859	2158.420	2152.236	2131.893	2073.715	2027.129	1938.313	1890.523
20.0	1640.988	1650.748	1658.331	1645.819	1639.244	1627.020	1621.365	1584.106	1536.949	1492.924
22.5	1260.105	1270.739	1275.956	1257.064	1233.239	1212.222	1206.758	1193.371	1168.439	1108.903
25.0	926.102	937.554	952.531	963.551	964.133	961.910	951.713	906.289	816.893	761.611
27.5	552.134	569.096	583.980	615.096	649.263	681.105	665.207	599.971	539.133	500.572

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

30.0	357.638	364.486	372.322	382.401	393.338	405.280	398.329	383.342	365.206	348.275
32.5	256.599	258.760	259.619	260.674	268.972	281.567	276.849	270.408	262.099	258.981
35.0	195.164	198.164	201.791	200.520	200.906	201.065	203.556	203.473	204.394	203.401
37.5	156.233	158.415	162.361	164.090	165.350	165.556	166.811	168.447	168.180	166.111
40.0	136.539	137.331	138.396	139.981	143.263	142.780	143.793	145.043	145.558	145.501
42.5	125.652	126.069	126.167	126.100	126.373	127.206	127.782	129.959	131.204	132.876
45.0	114.884	115.311	115.779	115.692	115.702	115.908	116.814	118.640	120.214	121.573
47.5	104.173	104.708	105.330	106.272	105.726	105.968	106.678	107.964	109.467	110.192
50.0	95.540	96.116	96.749	96.867	96.877	97.315	97.860	98.508	98.961	99.789
52.5	84.725	85.646	85.749	86.310	86.464	87.071	87.519	88.754	89.994	90.626
55.0	75.850	76.550	78.037	77.378	77.245	77.821	78.598	79.745	80.702	81.499
57.5	67.680	68.159	68.606	68.750	68.884	69.430	70.068	71.055	72.012	72.938
60.0	60.025	60.714	60.766	61.018	61.177	61.342	62.186	63.153	64.223	64.892
62.5	52.930	53.902	53.738	53.594	53.758	54.005	54.931	55.708	56.614	57.190
65.0	45.969	46.237	46.607	46.967	47.106	47.549	47.862	48.799	49.447	50.188
67.5	39.574	39.847	40.274	40.521	40.706	41.087	41.365	42.208	42.918	43.587
70.0	33.941	33.966	34.244	34.476	34.697	34.964	35.613	36.096	36.760	37.105
72.5	27.731	28.281	28.513	28.760	29.053	29.403	29.711	30.272	30.828	31.229
75.0	22.637	23.054	23.373	23.522	23.851	23.939	24.366	24.819	25.374	25.807
77.5	18.084	18.259	18.516	18.671	18.815	18.969	19.355	19.710	20.183	20.363
80.0	13.762	13.855	13.886	14.189	14.303	14.431	14.632	15.013	15.239	15.599
82.5	9.626	9.708	9.873	9.971	10.002	10.063	10.259	10.495	10.696	10.989
85.0	5.845	5.906	5.891	6.040	6.158	6.174	6.416	6.400	6.565	6.632
87.5	2.382	2.454	2.475	2.480	2.547	2.526	2.737	2.655	2.768	2.727
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Vert.
Angles**

Horizontal Angles

	150	155	160	165	170	175	180	185	190	195
0.0	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4390.586	4393.966	4408.948	4424.897	4421.995	4394.455	4375.120	4394.455	4421.995	4424.897
5.0	4133.992	4149.941	4165.885	4173.134	4171.683	4139.790	4127.710	4139.790	4171.683	4173.134
7.5	3792.982	3784.863	3783.268	3779.549	3775.489	3751.036	3735.041	3751.036	3775.489	3779.549
10.0	3343.148	3298.208	3291.442	3288.155	3258.628	3224.420	3191.992	3224.420	3258.628	3288.155
12.5	2797.198	2722.443	2706.644	2685.040	2667.692	2634.544	2606.520	2634.544	2667.692	2685.040
15.0	2274.544	2258.307	2217.328	2187.704	2164.609	2133.874	2123.774	2133.874	2164.609	2187.704
17.5	1837.706	1795.374	1762.082	1733.713	1696.604	1656.932	1653.305	1656.932	1696.604	1733.713
20.0	1423.438	1358.248	1294.272	1250.248	1202.987	1183.612	1153.844	1183.612	1202.987	1250.248
22.5	1027.095	976.552	961.133	904.453	818.729	792.151	776.058	792.151	818.729	904.453
25.0	699.035	644.669	603.886	579.098	549.474	532.223	523.719	532.223	549.474	579.098
27.5	475.687	440.460	393.807	387.057	381.449	378.779	375.815	378.779	381.449	387.057
30.0	339.601	324.351	307.286	295.370	285.997	278.171	274.364	278.171	285.997	295.370
32.5	253.965	243.258	232.984	222.062	209.210	212.991	209.169	212.991	209.210	222.062
35.0	196.975	188.497	182.894	180.342	179.231	175.856	174.580	175.856	179.231	180.342
37.5	162.289	160.884	160.498	160.848	160.468	159.701	159.114	159.701	160.468	160.848
40.0	145.475	146.906	147.096	147.724	147.945	144.128	145.702	144.128	147.945	147.724
42.5	133.982	134.574	134.604	135.078	134.496	133.812	133.575	133.812	134.496	135.078
45.0	122.211	122.586	122.946	123.162	122.571	121.938	121.413	121.938	122.571	123.162
47.5	111.103	111.535	111.833	112.039	111.432	110.660	106.406	110.660	111.432	112.039
50.0	100.391	100.690	101.194	101.148	101.014	100.386	99.851	100.386	101.014	101.148
52.5	90.791	91.305	92.051	92.144	91.897	91.316	91.136	91.316	91.897	92.144
55.0	81.561	82.112	82.770	83.218	82.991	80.897	82.070	80.897	82.991	83.218
57.5	73.206	73.525	73.998	74.672	74.214	73.710	73.597	73.710	74.214	74.672
60.0	65.339	65.669	66.019	66.379	66.163	65.766	65.581	65.766	66.163	66.379
62.5	57.936	58.065	58.404	58.867	57.864	58.631	58.507	58.631	57.864	58.867
65.0	50.826	51.227	51.258	51.664	51.711	51.495	51.577	51.495	51.711	51.664
67.5	43.988	44.534	44.714	45.022	44.914	44.652	44.575	44.652	44.914	45.022
70.0	37.650	38.087	38.283	37.912	38.586	38.375	38.308	38.375	38.586	37.912
72.5	31.733	31.985	32.176	32.485	32.521	32.366	32.011	32.366	32.521	32.485
75.0	25.992	26.295	26.681	26.784	26.671	26.609	26.763	26.609	26.671	26.784
77.5	20.662	20.934	20.682	21.228	21.320	21.346	21.320	21.346	21.320	21.228
80.0	15.764	16.047	16.175	16.355	16.232	16.438	16.515	16.438	16.232	16.355
82.5	11.092	11.226	11.519	11.540	11.566	11.566	11.509	11.566	11.566	11.540
85.0	6.724	6.565	7.033	7.100	7.182	7.064	7.084	7.064	7.182	7.100
87.5	2.886	2.938	2.969	2.979	2.989	2.994	2.891	2.994	2.989	2.979
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4408.948	4393.966	4390.586	4377.055	4377.538	4381.402	4386.238	4390.586	4385.271	4390.102
5.0	4165.885	4149.941	4133.992	4140.757	4144.143	4151.387	4158.636	4162.988	4157.669	4157.669
7.5	3783.268	3784.863	3792.982	3787.955	3785.537	3799.408	3827.529	3824.489	3831.059	3836.759
10.0	3291.442	3298.208	3343.148	3356.725	3375.282	3404.855	3431.963	3450.423	3464.484	3467.529
12.5	2706.644	2722.443	2797.198	2834.550	2886.595	2957.244	3000.831	3025.330	3059.590	3063.454
15.0	2217.328	2258.307	2274.544	2331.081	2391.383	2477.739	2543.022	2601.396	2630.052	2645.564
17.5	1762.082	1795.374	1837.706	1890.523	1938.313	2027.129	2073.715	2131.893	2152.236	2158.420
20.0	1294.272	1358.248	1423.438	1492.924	1536.949	1584.106	1621.365	1627.020	1639.244	1645.819
22.5	961.133	976.552	1027.095	1108.903	1168.439	1193.371	1206.758	1212.222	1233.239	1257.064
25.0	603.886	644.669	699.035	761.611	816.893	906.289	951.713	961.910	964.133	963.551
27.5	393.807	440.460	475.687	500.572	539.133	599.971	665.207	681.105	649.263	615.096
30.0	307.286	324.351	339.601	348.275	365.206	383.342	398.329	405.280	393.338	382.401
32.5	232.984	243.258	253.965	258.981	262.099	270.408	276.849	281.567	268.972	260.674
35.0	182.894	188.497	196.975	203.401	204.394	203.473	203.556	201.065	200.906	200.520
37.5	160.498	160.884	162.289	166.111	168.180	168.447	166.811	165.556	165.350	164.090
40.0	147.096	146.906	145.475	145.501	145.558	145.043	143.793	142.780	143.263	139.981
42.5	134.604	134.574	133.982	132.876	131.204	129.959	127.782	127.206	126.373	126.100
45.0	122.946	122.586	122.211	121.573	120.214	118.640	116.814	115.908	115.702	115.692
47.5	111.833	111.535	111.103	110.192	109.467	107.964	106.678	105.968	105.726	106.272
50.0	101.194	100.690	100.391	99.789	98.961	98.508	97.860	97.315	96.877	96.867
52.5	92.051	91.305	90.791	90.626	89.994	88.754	87.519	87.071	86.464	86.310
55.0	82.770	82.112	81.561	81.499	80.702	79.745	78.598	77.821	77.245	77.378
57.5	73.998	73.525	73.206	72.938	72.012	71.055	70.068	69.430	68.884	68.750
60.0	66.019	65.669	65.339	64.892	64.223	63.153	62.186	61.342	61.177	61.018
62.5	58.404	58.065	57.936	57.190	56.614	55.708	54.931	54.005	53.758	53.594

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

65.0	51.258	51.227	50.826	50.188	49.447	48.799	47.862	47.549	47.106	46.967
67.5	44.714	44.534	43.988	43.587	42.918	42.208	41.365	41.087	40.706	40.521
70.0	38.283	38.087	37.650	37.105	36.760	36.096	35.613	34.964	34.697	34.476
72.5	32.176	31.985	31.733	31.229	30.828	30.272	29.711	29.403	29.053	28.760
75.0	26.681	26.295	25.992	25.807	25.374	24.819	24.366	23.939	23.851	23.522
77.5	20.682	20.934	20.662	20.363	20.183	19.710	19.355	18.969	18.815	18.671
80.0	16.175	16.047	15.764	15.599	15.239	15.013	14.632	14.431	14.303	14.189
82.5	11.519	11.226	11.092	10.989	10.696	10.495	10.259	10.063	10.002	9.971
85.0	7.033	6.565	6.724	6.632	6.565	6.400	6.416	6.174	6.158	6.040
87.5	2.969	2.938	2.886	2.727	2.768	2.655	2.737	2.526	2.547	2.480
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Horizontal Angles

	<u>250</u>	<u>255</u>	<u>260</u>	<u>265</u>	<u>270</u>	<u>275</u>	<u>280</u>	<u>285</u>	<u>290</u>	<u>295</u>
0.0	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4379.957	4396.384	4390.586	4390.586	4393.482	4390.586	4390.586	4396.384	4379.957	4390.102
5.0	4152.354	4170.232	4171.683	4168.303	4167.336	4168.303	4171.683	4170.232	4152.354	4157.669
7.5	3828.594	3846.524	3844.976	3843.864	3831.301	3843.864	3844.976	3846.524	3828.594	3836.759
10.0	3468.883	3469.557	3475.741	3479.126	3476.708	3479.126	3475.741	3469.557	3468.883	3467.529

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CANDELA TABULATION - (Cont.)

12.5	3068.820	3083.267	3082.207	3079.305	3089.358	3079.305	3082.207	3083.267	3068.820	3063.454
15.0	2640.054	2629.327	2655.422	2636.864	2636.962	2636.864	2655.422	2629.327	2640.054	2645.564
17.5	2122.859	2093.188	2083.135	2076.468	2073.906	2076.468	2083.135	2093.188	2122.859	2158.420
20.0	1658.331	1650.748	1640.988	1632.576	1624.411	1632.576	1640.988	1650.748	1658.331	1645.819
22.5	1275.956	1270.739	1260.105	1247.397	1231.644	1247.397	1260.105	1270.739	1275.956	1257.064
25.0	952.531	937.554	926.102	914.408	914.166	914.408	926.102	937.554	952.531	963.551
27.5	583.980	569.096	552.134	537.204	537.250	537.204	552.134	569.096	583.980	615.096
30.0	372.322	364.486	357.638	353.615	348.223	353.615	357.638	364.486	372.322	382.401
32.5	259.619	258.760	256.599	256.054	256.671	256.054	256.599	258.760	259.619	260.674
35.0	201.791	198.164	195.164	193.096	194.799	193.096	195.164	198.164	201.791	200.520
37.5	162.361	158.415	156.233	154.839	154.340	154.839	156.233	158.415	162.361	164.090
40.0	138.396	137.331	136.539	136.729	136.369	136.729	136.539	137.331	138.396	139.981
42.5	126.167	126.069	125.652	125.766	126.028	125.766	125.652	126.069	126.167	126.100
45.0	115.779	115.311	114.884	114.910	114.874	114.910	114.884	115.311	115.779	115.692
47.5	105.330	104.708	104.173	104.306	104.116	104.306	104.173	104.708	105.330	106.272
50.0	96.749	96.116	95.540	95.586	96.286	95.586	95.540	96.116	96.749	96.867
52.5	85.749	85.646	84.725	84.581	85.049	84.581	84.725	85.646	85.749	86.310
55.0	78.037	76.550	75.850	75.912	75.907	75.912	75.850	76.550	78.037	77.378
57.5	68.606	68.159	67.680	67.397	67.634	67.397	67.680	68.159	68.606	68.750
60.0	60.766	60.714	60.025	60.020	59.881	60.020	60.025	60.714	60.766	61.018
62.5	53.738	53.902	52.930	52.534	52.441	52.534	52.930	53.902	53.738	53.594
65.0	46.607	46.237	45.969	45.552	45.655	45.552	45.969	46.237	46.607	46.967
67.5	40.274	39.847	39.574	39.075	39.163	39.075	39.574	39.847	40.274	40.521
70.0	34.244	33.966	33.941	33.143	33.102	33.143	33.941	33.966	34.244	34.476
72.5	28.513	28.281	27.731	27.612	27.484	27.612	27.731	28.281	28.513	28.760
75.0	23.373	23.054	22.637	22.421	22.421	22.421	22.637	23.054	23.373	23.522
77.5	18.516	18.259	18.084	18.346	17.775	18.346	18.084	18.259	18.516	18.671
80.0	13.886	13.855	13.762	13.634	13.608	13.634	13.762	13.855	13.886	14.189
82.5	9.873	9.708	9.626	9.513	9.384	9.513	9.626	9.708	9.873	9.971
85.0	5.891	5.906	5.845	5.767	5.742	5.767	5.845	5.906	5.891	6.040
87.5	2.475	2.454	2.382	2.413	2.356	2.413	2.382	2.454	2.475	2.480
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**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	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597	4476.597
2.5	4385.271	4390.586	4386.238	4381.402	4377.538	4377.055	4390.586	4393.966	4408.948	4424.897
5.0	4157.669	4162.988	4158.636	4151.387	4144.143	4140.757	4133.992	4149.941	4165.885	4173.134
7.5	3831.059	3824.489	3827.529	3799.408	3785.537	3787.955	3792.982	3784.863	3783.268	3779.549
10.0	3464.484	3450.423	3431.963	3404.855	3375.282	3356.725	3343.148	3298.208	3291.442	3288.155
12.5	3059.590	3025.330	3000.831	2957.244	2886.595	2834.550	2797.198	2722.443	2706.644	2685.040
15.0	2630.052	2601.396	2543.022	2477.739	2391.383	2331.081	2274.544	2258.307	2217.328	2187.704
17.5	2152.236	2131.893	2073.715	2027.129	1938.313	1890.523	1837.706	1795.374	1762.082	1733.713
20.0	1639.244	1627.020	1621.365	1584.106	1536.949	1492.924	1423.438	1358.248	1294.272	1250.248
22.5	1233.239	1212.222	1206.758	1193.371	1168.439	1108.903	1027.095	976.552	961.133	904.453
25.0	964.133	961.910	951.713	906.289	816.893	761.611	699.035	644.669	603.886	579.098
27.5	649.263	681.105	665.207	599.971	539.133	500.572	475.687	440.460	393.807	387.057
30.0	393.338	405.280	398.329	383.342	365.206	348.275	339.601	324.351	307.286	295.370
32.5	268.972	281.567	276.849	270.408	262.099	258.981	253.965	243.258	232.984	222.062
35.0	200.906	201.065	203.556	203.473	204.394	203.401	196.975	188.497	182.894	180.342
37.5	165.350	165.556	166.811	168.447	168.180	166.111	162.289	160.884	160.498	160.848
40.0	143.263	142.780	143.793	145.043	145.558	145.501	145.475	146.906	147.096	147.724
42.5	126.373	127.206	127.782	129.959	131.204	132.876	133.982	134.574	134.604	135.078
45.0	115.702	115.908	116.814	118.640	120.214	121.573	122.211	122.586	122.946	123.162
47.5	105.726	105.968	106.678	107.964	109.467	110.192	111.103	111.535	111.833	112.039
50.0	96.877	97.315	97.860	98.508	98.961	99.789	100.391	100.690	101.194	101.148
52.5	86.464	87.071	87.519	88.754	89.994	90.626	90.791	91.305	92.051	92.144
55.0	77.245	77.821	78.598	79.745	80.702	81.499	81.561	82.112	82.770	83.218
57.5	68.884	69.430	70.068	71.055	72.012	72.938	73.206	73.525	73.998	74.672
60.0	61.177	61.342	62.186	63.153	64.223	64.892	65.339	65.669	66.019	66.379
62.5	53.758	54.005	54.931	55.708	56.614	57.190	57.936	58.065	58.404	58.867
65.0	47.106	47.549	47.862	48.799	49.447	50.188	50.826	51.227	51.258	51.664
67.5	40.706	41.087	41.365	42.208	42.918	43.587	43.988	44.534	44.714	45.022
70.0	34.697	34.964	35.613	36.096	36.760	37.105	37.650	38.087	38.283	37.912
72.5	29.053	29.403	29.711	30.272	30.828	31.229	31.733	31.985	32.176	32.485
75.0	23.851	23.939	24.366	24.819	25.374	25.807	25.992	26.295	26.681	26.784
77.5	18.815	18.969	19.355	19.710	20.183	20.363	20.662	20.934	20.682	21.228
80.0	14.303	14.431	14.632	15.013	15.239	15.599	15.764	16.047	16.175	16.355
82.5	10.002	10.063	10.259	10.495	10.696	10.989	11.092	11.226	11.519	11.540
85.0	6.158	6.174	6.416	6.400	6.565	6.632	6.724	6.565	7.033	7.100
87.5	2.547	2.526	2.737	2.655	2.768	2.727	2.886	2.938	2.969	2.979
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-B-8TW-MLW-KPL2008-7.902.IES

CANDELA TABULATION - (Cont.)

100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles	Horizontal Angles		
	<u>350</u>	<u>355</u>	<u>360</u>
0.0	4476.597	4476.597	4476.597
2.5	4421.995	4394.455	4375.120
5.0	4171.683	4139.790	4127.710
7.5	3775.489	3751.036	3735.041
10.0	3258.628	3224.420	3191.992
12.5	2667.692	2634.544	2606.520
15.0	2164.609	2133.874	2123.774
17.5	1696.604	1656.932	1653.305
20.0	1202.987	1183.612	1153.844
22.5	818.729	792.151	776.058
25.0	549.474	532.223	523.719
27.5	381.449	378.779	375.815
30.0	285.997	278.171	274.364
32.5	209.210	212.991	209.169
35.0	179.231	175.856	174.580
37.5	160.468	159.701	159.114
40.0	147.945	144.128	145.702
42.5	134.496	133.812	133.575
45.0	122.571	121.938	121.413

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP2-P-D-4FT-B-8TW-MLW-KPL2008-7.902.IES****CANDELA TABULATION - (Cont.)**

47.5	111.432	110.660	106.406
50.0	101.014	100.386	99.851
52.5	91.897	91.316	91.136
55.0	82.991	80.897	82.070
57.5	74.214	73.710	73.597
60.0	66.163	65.766	65.581
62.5	57.864	58.631	58.507
65.0	51.711	51.495	51.577
67.5	44.914	44.652	44.575
70.0	38.586	38.375	38.308
72.5	32.521	32.366	32.011
75.0	26.671	26.609	26.763
77.5	21.320	21.346	21.320
80.0	16.232	16.438	16.515
82.5	11.566	11.566	11.509
85.0	7.182	7.064	7.084
87.5	2.989	2.994	2.891
90.0	0.000	0.000	0.000
92.5	0.000	0.000	0.000
95.0	0.000	0.000	0.000
97.5	0.000	0.000	0.000
100.0	0.000	0.000	0.000
102.5	0.000	0.000	0.000
105.0	0.000	0.000	0.000
107.5	0.000	0.000	0.000
110.0	0.000	0.000	0.000
112.5	0.000	0.000	0.000
115.0	0.000	0.000	0.000
117.5	0.000	0.000	0.000
120.0	0.000	0.000	0.000
122.5	0.000	0.000	0.000
125.0	0.000	0.000	0.000
127.5	0.000	0.000	0.000
130.0	0.000	0.000	0.000
132.5	0.000	0.000	0.000
135.0	0.000	0.000	0.000
137.5	0.000	0.000	0.000
140.0	0.000	0.000	0.000
142.5	0.000	0.000	0.000
145.0	0.000	0.000	0.000
147.5	0.000	0.000	0.000
150.0	0.000	0.000	0.000
152.5	0.000	0.000	0.000
155.0	0.000	0.000	0.000
157.5	0.000	0.000	0.000
160.0	0.000	0.000	0.000
162.5	0.000	0.000	0.000
165.0	0.000	0.000	0.000
167.5	0.000	0.000	0.000
170.0	0.000	0.000	0.000
172.5	0.000	0.000	0.000
175.0	0.000	0.000	0.000
177.5	0.000	0.000	0.000
180.0	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-B-8TW-MLW-KPL2008-7.902.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1033.3	N.A.	58.00
0-30	1405.05	N.A.	78.80
0-40	1536.6	N.A.	86.20
0-60	1700.11	N.A.	95.40
0-80	1775.17	N.A.	99.60
0-90	1782.58	N.A.	100.00
10-90	1410.72	N.A.	79.10
20-40	503.30	N.A.	28.20
20-50	595.33	N.A.	33.40
40-70	212.11	N.A.	11.90
60-80	75.06	N.A.	4.20
70-80	26.46	N.A.	1.50
80-90	7.40	N.A.	0.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	1782.58	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	371.86
10-20	661.44
20-30	371.76
30-40	131.55
40-50	92.03
50-60	71.48
60-70	48.60
70-80	26.46
80-90	7.40
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

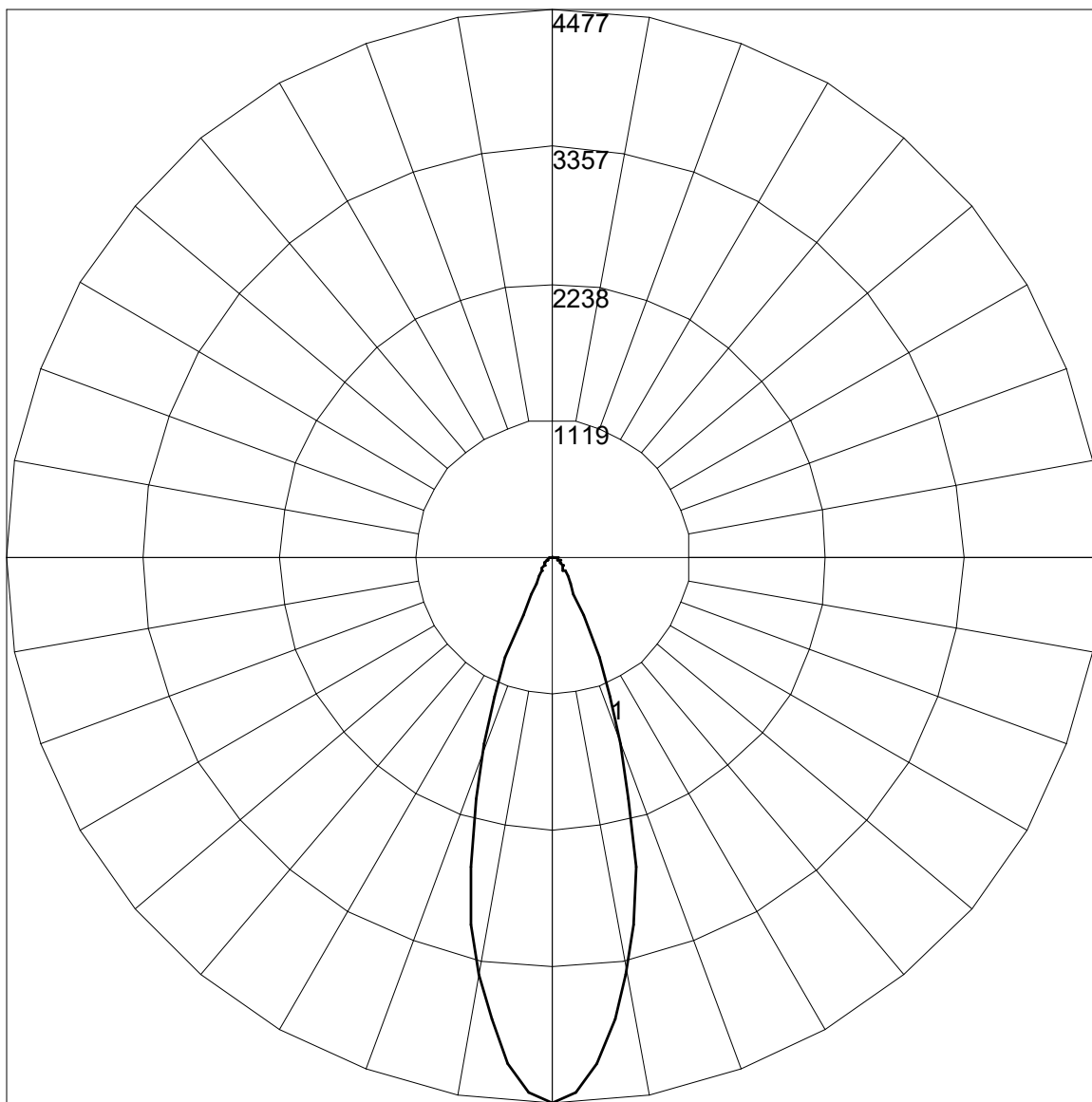
PHOTOMETRIC FILENAME : HP2-P-D-4FT-B-8TW-MLW-KPL2008-7.902.IES

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
2	108	103	99	96	106	101	98	95	98	95	93	95	93	91	92	90	89	87
3	103	97	92	88	101	95	91	87	93	89	86	90	87	84	88	85	83	82
4	98	91	86	82	97	90	85	81	88	84	80	86	82	79	84	81	78	77
5	94	86	81	77	92	85	80	76	84	79	76	82	78	75	80	77	74	73
6	90	82	76	72	89	81	76	72	80	75	72	78	74	71	77	73	71	69
7	87	78	73	69	85	77	72	69	76	72	68	75	71	68	74	70	67	66
8	83	75	69	65	82	74	69	65	73	68	65	72	68	65	71	67	65	63
9	80	71	66	63	79	71	66	62	70	66	62	69	65	62	68	65	62	61
10	77	69	63	60	76	68	63	60	67	63	60	67	63	60	66	62	59	58

POLAR GRAPH



Maximum Candela = 4476.597 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)