

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[IESNA] LM-63-2002

[TEST] KPL2008-6.900

[TESTLAB] Northern Lights Testing Laboratories

[TESTDATE] 2/10/2022

[ISSUEDATE] 2/10/2023

[MANUFAC] Finelite, Inc.

[LUMCAT] HP2-P-D-4ft-V-8TW-MLB-277

[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 KPL2008-6.IES

[OTHER] see www.finelite.com for source file KPL2008-6. 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	2461
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	62
Total Luminaire Watts	39.6
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	392	233	243
55	174	92	103
65	85	45	51
75	45	26	25
85	16	7	7

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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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7625.42	7628.59	7681.45	7741.04	7705.61	7683.23	7632.22	7686.96	7614.41	7661.78
5.0	7187.17	7245.73	7318.83	7329.18	7302.52	7272.21	7169.46	7242.65	7247.41	7239.39
7.5	6524.59	6584.08	6648.51	6657.46	6643.47	6652.89	6649.53	6645.43	6645.90	6650.84
10.0	5672.16	5669.46	5728.11	5778.27	5768.11	5790.21	5821.35	5869.18	6019.59	5962.71
12.5	4551.38	4604.34	4662.90	4744.11	4768.17	4680.43	4882.58	4963.05	5050.88	5156.25
15.0	3657.74	3675.73	3747.72	3765.34	3808.14	3876.77	3935.51	4040.31	4179.25	4304.38
17.5	2751.23	2798.88	2845.78	2891.09	2962.33	3055.57	3125.88	3246.91	3354.79	3655.13
20.0	1860.57	1900.67	1978.34	2052.56	2031.11	2248.28	2396.53	2489.87	2610.71	2712.91
22.5	1159.20	1170.48	1232.67	1308.57	1401.44	1585.32	1756.42	1839.59	1940.39	1992.42
25.0	682.54	702.20	729.47	763.77	801.05	845.50	1042.08	1167.68	1273.42	1366.76
27.5	405.74	424.68	437.78	446.48	504.81	556.12	620.69	685.66	754.90	813.80
30.0	229.94	233.88	245.54	267.92	287.25	327.62	362.79	388.63	422.07	483.85
32.5	113.35	114.04	120.24	151.67	169.26	182.23	201.94	218.71	225.13	248.44
35.0	53.52	54.46	54.97	60.69	69.11	83.55	102.96	119.26	124.17	133.64
37.5	35.75	35.99	35.70	34.83	35.25	38.75	46.29	56.10	63.21	66.70
40.0	28.51	28.51	28.19	27.39	26.21	25.31	25.33	26.26	29.76	32.55
42.5	22.38	22.12	22.15	21.70	20.77	19.71	18.39	16.83	16.18	15.75
45.0	17.53	17.48	17.28	16.72	16.06	15.19	14.03	12.83	11.59	10.42
47.5	13.84	13.72	13.34	12.87	12.22	11.45	10.55	9.54	8.63	7.72
50.0	10.41	10.57	10.27	9.93	9.34	8.69	7.95	7.19	6.45	5.78
52.5	8.13	8.17	7.95	7.52	7.14	6.56	6.01	5.39	4.87	4.37
55.0	6.30	6.27	6.09	5.82	5.46	5.05	4.58	4.12	3.69	3.32
57.5	4.85	4.81	4.69	4.48	4.20	3.86	3.50	3.16	2.80	2.54
60.0	3.73	3.71	3.59	3.46	3.26	3.00	2.69	2.41	2.17	1.98
62.5	2.91	2.86	2.77	2.66	2.48	2.29	2.09	1.88	1.70	1.53
65.0	2.26	2.25	2.15	2.08	1.92	1.79	1.62	1.46	1.31	1.20
67.5	1.75	1.70	1.66	1.59	1.48	1.38	1.25	1.15	1.03	0.94
70.0	1.34	1.31	1.27	1.21	1.14	1.05	0.95	0.89	0.79	0.74
72.5	1.01	0.97	0.95	0.92	0.86	0.79	0.73	0.65	0.61	0.56
75.0	0.73	0.72	0.70	0.67	0.63	0.59	0.53	0.50	0.45	0.42
77.5	0.52	0.50	0.50	0.48	0.46	0.41	0.39	0.35	0.33	0.32
80.0	0.34	0.34	0.34	0.34	0.32	0.29	0.27	0.24	0.23	0.22
82.5	0.22	0.21	0.21	0.21	0.19	0.17	0.17	0.14	0.13	0.13
85.0	0.09	0.09	0.09	0.09	0.09	0.06	0.07	0.06	0.06	0.04
87.5	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CANDELA TABULATION - (Cont.)

135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7665.51	7666.44	7655.25	7657.12	7648.73	7658.05	7659.92	7669.24	7685.09	7669.24
5.0	7263.54	7259.53	7234.35	7232.21	7240.97	7255.80	7254.12	7265.97	7278.93	7265.97
7.5	6660.07	6677.69	6662.96	6658.11	6661.47	6670.61	6675.27	6663.61	6689.26	6663.61
10.0	6008.02	6028.54	6028.91	6016.41	6002.71	6020.05	6015.95	6011.29	6016.04	6011.29
12.5	5209.02	5267.30	5292.10	5300.40	5314.11	5321.47	5327.82	5333.50	5317.28	5333.50
15.0	4416.83	4532.17	4593.62	4619.54	4610.87	4613.85	4587.84	4554.46	4551.01	4554.46
17.5	3610.93	3710.05	3782.78	3768.14	3708.84	3658.20	3615.31	3554.52	3532.79	3554.52
20.0	2779.58	2788.90	2818.55	2807.83	2810.34	2786.94	2764.00	2744.24	2749.92	2744.24
22.5	2013.12	2028.88	2059.65	2103.56	2122.96	2136.94	2109.53	2092.84	2084.54	2092.84
25.0	1456.08	1529.19	1528.72	1516.60	1460.09	1409.93	1381.21	1321.63	1319.58	1321.63
27.5	879.69	931.08	870.91	842.32	812.73	787.28	760.47	751.42	736.04	751.42
30.0	538.56	546.18	511.29	472.23	449.07	435.62	416.99	408.60	405.12	408.60
32.5	259.57	262.00	248.03	242.10	237.17	242.92	233.66	229.10	225.37	229.10
35.0	132.79	131.98	124.58	129.82	139.72	129.50	120.94	115.93	112.71	115.93
37.5	67.54	67.22	68.29	67.71	62.99	54.75	48.15	43.05	41.76	43.05
40.0	32.95	33.39	31.90	28.85	24.19	19.61	18.01	17.90	17.94	17.90
42.5	15.63	15.13	14.10	12.76	12.85	13.11	13.33	13.80	14.08	13.80
45.0	9.72	9.38	9.41	9.66	9.96	10.17	10.34	10.71	10.87	10.71
47.5	7.16	6.96	7.07	7.28	7.56	7.76	7.89	8.16	8.34	8.16
50.0	5.32	5.18	5.27	5.47	5.72	5.93	6.01	6.26	6.42	6.26
52.5	4.04	3.94	4.03	4.21	4.43	4.53	4.62	4.77	4.89	4.77
55.0	3.07	3.01	3.07	3.20	3.33	3.44	3.53	3.62	3.73	3.62
57.5	2.37	2.30	2.34	2.42	2.55	2.65	2.71	2.79	2.85	2.79
60.0	1.85	1.81	1.82	1.90	1.98	2.06	2.10	2.12	2.22	2.12
62.5	1.45	1.41	1.42	1.46	1.53	1.58	1.61	1.66	1.73	1.66
65.0	1.13	1.10	1.11	1.15	1.19	1.23	1.27	1.29	1.36	1.29
67.5	0.88	0.86	0.88	0.89	0.93	0.96	1.00	1.00	1.03	1.00
70.0	0.68	0.65	0.66	0.69	0.72	0.74	0.76	0.75	0.80	0.75
72.5	0.53	0.51	0.51	0.53	0.54	0.56	0.58	0.58	0.58	0.58
75.0	0.39	0.40	0.39	0.40	0.41	0.43	0.43	0.43	0.41	0.43
77.5	0.30	0.29	0.28	0.30	0.32	0.32	0.31	0.31	0.32	0.31
80.0	0.21	0.20	0.19	0.21	0.21	0.21	0.22	0.20	0.19	0.20

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CANDELA TABULATION - (Cont.)

82.5	0.12	0.11	0.11	0.11	0.11	0.13	0.13	0.12	0.11	0.12
85.0	0.05	0.04	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.05
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. 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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7659.92	7658.05	7648.73	7657.12	7655.25	7666.44	7665.51	7661.78	7614.41	7686.96
5.0	7254.12	7255.80	7240.97	7232.21	7234.35	7259.53	7263.54	7239.39	7247.41	7242.65
7.5	6675.27	6670.61	6661.47	6658.11	6662.96	6677.69	6660.07	6650.84	6645.90	6645.43
10.0	6015.95	6020.05	6002.71	6016.41	6028.91	6028.54	6008.02	5962.71	6019.59	5869.18
12.5	5327.82	5321.47	5314.11	5300.40	5292.10	5267.30	5209.02	5156.25	5050.88	4963.05
15.0	4587.84	4613.85	4610.87	4619.54	4593.62	4532.17	4416.83	4304.38	4179.25	4040.31
17.5	3615.31	3658.20	3708.84	3768.14	3782.78	3710.05	3610.93	3655.13	3354.79	3246.91
20.0	2764.00	2786.94	2810.34	2807.83	2818.55	2788.90	2779.58	2712.91	2610.71	2489.87
22.5	2109.53	2136.94	2122.96	2103.56	2059.65	2028.88	2013.12	1992.42	1940.39	1839.59
25.0	1381.21	1409.93	1460.09	1516.60	1528.72	1529.19	1456.08	1366.76	1273.42	1167.68
27.5	760.47	787.28	812.73	842.32	870.91	931.08	879.69	813.80	754.90	685.66

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

30.0	416.99	435.62	449.07	472.23	511.29	546.18	538.56	483.85	422.07	388.63
32.5	233.66	242.92	237.17	242.10	248.03	262.00	259.57	248.44	225.13	218.71
35.0	120.94	129.50	139.72	129.82	124.58	131.98	132.79	133.64	124.17	119.26
37.5	48.15	54.75	62.99	67.71	68.29	67.22	67.54	66.70	63.21	56.10
40.0	18.01	19.61	24.19	28.85	31.90	33.39	32.95	32.55	29.76	26.26
42.5	13.33	13.11	12.85	12.76	14.10	15.13	15.63	15.75	16.18	16.83
45.0	10.34	10.17	9.96	9.66	9.41	9.38	9.72	10.42	11.59	12.83
47.5	7.89	7.76	7.56	7.28	7.07	6.96	7.16	7.72	8.63	9.54
50.0	6.01	5.93	5.72	5.47	5.27	5.18	5.32	5.78	6.45	7.19
52.5	4.62	4.53	4.43	4.21	4.03	3.94	4.04	4.37	4.87	5.39
55.0	3.53	3.44	3.33	3.20	3.07	3.01	3.07	3.32	3.69	4.12
57.5	2.71	2.65	2.55	2.42	2.34	2.30	2.37	2.54	2.80	3.16
60.0	2.10	2.06	1.98	1.90	1.82	1.81	1.85	1.98	2.17	2.41
62.5	1.61	1.58	1.53	1.46	1.42	1.41	1.45	1.53	1.70	1.88
65.0	1.27	1.23	1.19	1.15	1.11	1.10	1.13	1.20	1.31	1.46
67.5	1.00	0.96	0.93	0.89	0.88	0.86	0.88	0.94	1.03	1.15
70.0	0.76	0.74	0.72	0.69	0.66	0.65	0.68	0.74	0.79	0.89
72.5	0.58	0.56	0.54	0.53	0.51	0.51	0.53	0.56	0.61	0.65
75.0	0.43	0.43	0.41	0.40	0.39	0.40	0.39	0.42	0.45	0.50
77.5	0.31	0.32	0.32	0.30	0.28	0.29	0.30	0.32	0.33	0.35
80.0	0.22	0.21	0.21	0.21	0.19	0.20	0.21	0.22	0.23	0.24
82.5	0.13	0.13	0.11	0.11	0.11	0.11	0.12	0.13	0.13	0.14
85.0	0.04	0.05	0.04	0.05	0.04	0.04	0.05	0.04	0.06	0.06
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CANDELA TABULATION - (Cont.)

170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles	Horizontal Angles									
	150	155	160	165	170	175	180	185	190	195
0.0	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7632.22	7683.23	7705.61	7741.04	7681.45	7628.59	7625.42	7628.59	7681.45	7741.04
5.0	7169.46	7272.21	7302.52	7329.18	7318.83	7245.73	7187.17	7245.73	7318.83	7329.18
7.5	6649.53	6652.89	6643.47	6657.46	6648.51	6584.08	6524.59	6584.08	6648.51	6657.46
10.0	5821.35	5790.21	5768.11	5778.27	5728.11	5669.46	5672.16	5669.46	5728.11	5778.27
12.5	4882.58	4680.43	4768.17	4744.11	4662.90	4604.34	4551.38	4604.34	4662.90	4744.11
15.0	3935.51	3876.77	3808.14	3765.34	3747.72	3675.73	3657.74	3675.73	3747.72	3765.34
17.5	3125.88	3055.57	2962.33	2891.09	2845.78	2798.88	2751.23	2798.88	2845.78	2891.09
20.0	2396.53	2248.28	2031.11	2052.56	1978.34	1900.67	1860.57	1900.67	1978.34	2052.56
22.5	1756.42	1585.32	1401.44	1308.57	1232.67	1170.48	1159.20	1170.48	1232.67	1308.57
25.0	1042.08	845.50	801.05	763.77	729.47	702.20	682.54	702.20	729.47	763.77
27.5	620.69	556.12	504.81	446.48	437.78	424.68	405.74	424.68	437.78	446.48
30.0	362.79	327.62	287.25	267.92	245.54	233.88	229.94	233.88	245.54	267.92
32.5	201.94	182.23	169.26	151.67	120.24	114.04	113.35	114.04	120.24	151.67
35.0	102.96	83.55	69.11	60.69	54.97	54.46	53.52	54.46	54.97	60.69
37.5	46.29	38.75	35.25	34.83	35.70	35.99	35.75	35.99	35.70	34.83
40.0	25.33	25.31	26.21	27.39	28.19	28.51	28.51	28.51	28.19	27.39
42.5	18.39	19.71	20.77	21.70	22.15	22.12	22.38	22.12	22.15	21.70
45.0	14.03	15.19	16.06	16.72	17.28	17.48	17.53	17.48	17.28	16.72
47.5	10.55	11.45	12.22	12.87	13.34	13.72	13.84	13.72	13.34	12.87
50.0	7.95	8.69	9.34	9.93	10.27	10.57	10.41	10.57	10.27	9.93
52.5	6.01	6.56	7.14	7.52	7.95	8.17	8.13	8.17	7.95	7.52
55.0	4.58	5.05	5.46	5.82	6.09	6.27	6.30	6.27	6.09	5.82
57.5	3.50	3.86	4.20	4.48	4.69	4.81	4.85	4.81	4.69	4.48
60.0	2.69	3.00	3.26	3.46	3.59	3.71	3.73	3.71	3.59	3.46
62.5	2.09	2.29	2.48	2.66	2.77	2.86	2.91	2.86	2.77	2.66
65.0	1.62	1.79	1.92	2.08	2.15	2.25	2.26	2.25	2.15	2.08
67.5	1.25	1.38	1.48	1.59	1.66	1.70	1.75	1.70	1.66	1.59
70.0	0.95	1.05	1.14	1.21	1.27	1.31	1.34	1.31	1.27	1.21
72.5	0.73	0.79	0.86	0.92	0.95	0.97	1.01	0.97	0.95	0.92
75.0	0.53	0.59	0.63	0.67	0.70	0.72	0.73	0.72	0.70	0.67
77.5	0.39	0.41	0.46	0.48	0.50	0.50	0.52	0.50	0.50	0.48
80.0	0.27	0.29	0.32	0.34	0.34	0.34	0.34	0.34	0.34	0.34
82.5	0.17	0.17	0.19	0.21	0.21	0.21	0.22	0.21	0.21	0.21
85.0	0.07	0.06	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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CANDELA TABULATION - (Cont.)

117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7705.61	7683.23	7632.22	7686.96	7614.41	7661.78	7665.51	7666.44	7655.25	7657.12
5.0	7302.52	7272.21	7169.46	7242.65	7247.41	7239.39	7263.54	7259.53	7234.35	7232.21
7.5	6643.47	6652.89	6649.53	6645.43	6645.90	6650.84	6660.07	6677.69	6662.96	6658.11
10.0	5768.11	5790.21	5821.35	5869.18	6019.59	5962.71	6008.02	6028.54	6028.91	6016.41
12.5	4768.17	4680.43	4882.58	4963.05	5050.88	5156.25	5209.02	5267.30	5292.10	5300.40
15.0	3808.14	3876.77	3935.51	4040.31	4179.25	4304.38	4416.83	4532.17	4593.62	4619.54
17.5	2962.33	3055.57	3125.88	3246.91	3354.79	3655.13	3610.93	3710.05	3782.78	3768.14
20.0	2031.11	2248.28	2396.53	2489.87	2610.71	2712.91	2779.58	2788.90	2818.55	2807.83
22.5	1401.44	1585.32	1756.42	1839.59	1940.39	1992.42	2013.12	2028.88	2059.65	2103.56
25.0	801.05	845.50	1042.08	1167.68	1273.42	1366.76	1456.08	1529.19	1528.72	1516.60
27.5	504.81	556.12	620.69	685.66	754.90	813.80	879.69	931.08	870.91	842.32
30.0	287.25	327.62	362.79	388.63	422.07	483.85	538.56	546.18	511.29	472.23
32.5	169.26	182.23	201.94	218.71	225.13	248.44	259.57	262.00	248.03	242.10
35.0	69.11	83.55	102.96	119.26	124.17	133.64	132.79	131.98	124.58	129.82
37.5	35.25	38.75	46.29	56.10	63.21	66.70	67.54	67.22	68.29	67.71
40.0	26.21	25.31	25.33	26.26	29.76	32.55	32.95	33.39	31.90	28.85
42.5	20.77	19.71	18.39	16.83	16.18	15.75	15.63	15.13	14.10	12.76
45.0	16.06	15.19	14.03	12.83	11.59	10.42	9.72	9.38	9.41	9.66
47.5	12.22	11.45	10.55	9.54	8.63	7.72	7.16	6.96	7.07	7.28
50.0	9.34	8.69	7.95	7.19	6.45	5.78	5.32	5.18	5.27	5.47
52.5	7.14	6.56	6.01	5.39	4.87	4.37	4.04	3.94	4.03	4.21
55.0	5.46	5.05	4.58	4.12	3.69	3.32	3.07	3.01	3.07	3.20
57.5	4.20	3.86	3.50	3.16	2.80	2.54	2.37	2.30	2.34	2.42
60.0	3.26	3.00	2.69	2.41	2.17	1.98	1.85	1.81	1.82	1.90
62.5	2.48	2.29	2.09	1.88	1.70	1.53	1.45	1.41	1.42	1.46

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

CANDELA TABULATION - (Cont.)

65.0	1.92	1.79	1.62	1.46	1.31	1.20	1.13	1.10	1.11	1.15
67.5	1.48	1.38	1.25	1.15	1.03	0.94	0.88	0.86	0.88	0.89
70.0	1.14	1.05	0.95	0.89	0.79	0.74	0.68	0.65	0.66	0.69
72.5	0.86	0.79	0.73	0.65	0.61	0.56	0.53	0.51	0.51	0.53
75.0	0.63	0.59	0.53	0.50	0.45	0.42	0.39	0.40	0.39	0.40
77.5	0.46	0.41	0.39	0.35	0.33	0.32	0.30	0.29	0.28	0.30
80.0	0.32	0.29	0.27	0.24	0.23	0.22	0.21	0.20	0.19	0.21
82.5	0.19	0.17	0.17	0.14	0.13	0.13	0.12	0.11	0.11	0.11
85.0	0.09	0.06	0.07	0.06	0.06	0.04	0.05	0.04	0.04	0.05
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles **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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7648.73	7658.05	7659.92	7669.24	7685.09	7669.24	7659.92	7658.05	7648.73	7657.12
5.0	7240.97	7255.80	7254.12	7265.97	7278.93	7265.97	7254.12	7255.80	7240.97	7232.21
7.5	6661.47	6670.61	6675.27	6663.61	6689.26	6663.61	6675.27	6670.61	6661.47	6658.11
10.0	6002.71	6020.05	6015.95	6011.29	6016.04	6011.29	6015.95	6020.05	6002.71	6016.41

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

12.5	5314.11	5321.47	5327.82	5333.50	5317.28	5333.50	5327.82	5321.47	5314.11	5300.40
15.0	4610.87	4613.85	4587.84	4554.46	4551.01	4554.46	4587.84	4613.85	4610.87	4619.54
17.5	3708.84	3658.20	3615.31	3554.52	3532.79	3554.52	3615.31	3658.20	3708.84	3768.14
20.0	2810.34	2786.94	2764.00	2744.24	2749.92	2744.24	2764.00	2786.94	2810.34	2807.83
22.5	2122.96	2136.94	2109.53	2092.84	2084.54	2092.84	2109.53	2136.94	2122.96	2103.56
25.0	1460.09	1409.93	1381.21	1321.63	1319.58	1321.63	1381.21	1409.93	1460.09	1516.60
27.5	812.73	787.28	760.47	751.42	736.04	751.42	760.47	787.28	812.73	842.32
30.0	449.07	435.62	416.99	408.60	405.12	408.60	416.99	435.62	449.07	472.23
32.5	237.17	242.92	233.66	229.10	225.37	229.10	233.66	242.92	237.17	242.10
35.0	139.72	129.50	120.94	115.93	112.71	115.93	120.94	129.50	139.72	129.82
37.5	62.99	54.75	48.15	43.05	41.76	43.05	48.15	54.75	62.99	67.71
40.0	24.19	19.61	18.01	17.90	17.94	17.90	18.01	19.61	24.19	28.85
42.5	12.85	13.11	13.33	13.80	14.08	13.80	13.33	13.11	12.85	12.76
45.0	9.96	10.17	10.34	10.71	10.87	10.71	10.34	10.17	9.96	9.66
47.5	7.56	7.76	7.89	8.16	8.34	8.16	7.89	7.76	7.56	7.28
50.0	5.72	5.93	6.01	6.26	6.42	6.26	6.01	5.93	5.72	5.47
52.5	4.43	4.53	4.62	4.77	4.89	4.77	4.62	4.53	4.43	4.21
55.0	3.33	3.44	3.53	3.62	3.73	3.62	3.53	3.44	3.33	3.20
57.5	2.55	2.65	2.71	2.79	2.85	2.79	2.71	2.65	2.55	2.42
60.0	1.98	2.06	2.10	2.12	2.22	2.12	2.10	2.06	1.98	1.90
62.5	1.53	1.58	1.61	1.66	1.73	1.66	1.61	1.58	1.53	1.46
65.0	1.19	1.23	1.27	1.29	1.36	1.29	1.27	1.23	1.19	1.15
67.5	0.93	0.96	1.00	1.00	1.03	1.00	1.00	0.96	0.93	0.89
70.0	0.72	0.74	0.76	0.75	0.80	0.75	0.76	0.74	0.72	0.69
72.5	0.54	0.56	0.58	0.58	0.58	0.58	0.58	0.56	0.54	0.53
75.0	0.41	0.43	0.43	0.43	0.41	0.43	0.43	0.43	0.41	0.40
77.5	0.32	0.32	0.31	0.31	0.32	0.31	0.31	0.32	0.32	0.30
80.0	0.21	0.21	0.22	0.20	0.19	0.20	0.22	0.21	0.21	0.21
82.5	0.11	0.13	0.13	0.12	0.11	0.12	0.13	0.13	0.11	0.11
85.0	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.05	0.04	0.05
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

CANDELA TABULATION - (Cont.)

152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88	7822.88
2.5	7655.25	7666.44	7665.51	7661.78	7614.41	7686.96	7632.22	7683.23	7705.61	7741.04
5.0	7234.35	7259.53	7263.54	7239.39	7247.41	7242.65	7169.46	7272.21	7302.52	7329.18
7.5	6662.96	6677.69	6660.07	6650.84	6645.90	6645.43	6649.53	6652.89	6643.47	6657.46
10.0	6028.91	6028.54	6008.02	5962.71	6019.59	5869.18	5821.35	5790.21	5768.11	5778.27
12.5	5292.10	5267.30	5209.02	5156.25	5050.88	4963.05	4882.58	4680.43	4768.17	4744.11
15.0	4593.62	4532.17	4416.83	4304.38	4179.25	4040.31	3935.51	3876.77	3808.14	3765.34
17.5	3782.78	3710.05	3610.93	3655.13	3354.79	3246.91	3125.88	3055.57	2962.33	2891.09
20.0	2818.55	2788.90	2779.58	2712.91	2610.71	2489.87	2396.53	2248.28	2031.11	2052.56
22.5	2059.65	2028.88	2013.12	1992.42	1940.39	1839.59	1756.42	1585.32	1401.44	1308.57
25.0	1528.72	1529.19	1456.08	1366.76	1273.42	1167.68	1042.08	845.50	801.05	763.77
27.5	870.91	931.08	879.69	813.80	754.90	685.66	620.69	556.12	504.81	446.48
30.0	511.29	546.18	538.56	483.85	422.07	388.63	362.79	327.62	287.25	267.92
32.5	248.03	262.00	259.57	248.44	225.13	218.71	201.94	182.23	169.26	151.67
35.0	124.58	131.98	132.79	133.64	124.17	119.26	102.96	83.55	69.11	60.69
37.5	68.29	67.22	67.54	66.70	63.21	56.10	46.29	38.75	35.25	34.83
40.0	31.90	33.39	32.95	32.55	29.76	26.26	25.33	25.31	26.21	27.39
42.5	14.10	15.13	15.63	15.75	16.18	16.83	18.39	19.71	20.77	21.70
45.0	9.41	9.38	9.72	10.42	11.59	12.83	14.03	15.19	16.06	16.72
47.5	7.07	6.96	7.16	7.72	8.63	9.54	10.55	11.45	12.22	12.87
50.0	5.27	5.18	5.32	5.78	6.45	7.19	7.95	8.69	9.34	9.93
52.5	4.03	3.94	4.04	4.37	4.87	5.39	6.01	6.56	7.14	7.52
55.0	3.07	3.01	3.07	3.32	3.69	4.12	4.58	5.05	5.46	5.82
57.5	2.34	2.30	2.37	2.54	2.80	3.16	3.50	3.86	4.20	4.48
60.0	1.82	1.81	1.85	1.98	2.17	2.41	2.69	3.00	3.26	3.46
62.5	1.42	1.41	1.45	1.53	1.70	1.88	2.09	2.29	2.48	2.66
65.0	1.11	1.10	1.13	1.20	1.31	1.46	1.62	1.79	1.92	2.08
67.5	0.88	0.86	0.88	0.94	1.03	1.15	1.25	1.38	1.48	1.59
70.0	0.66	0.65	0.68	0.74	0.79	0.89	0.95	1.05	1.14	1.21
72.5	0.51	0.51	0.53	0.56	0.61	0.65	0.73	0.79	0.86	0.92
75.0	0.39	0.40	0.39	0.42	0.45	0.50	0.53	0.59	0.63	0.67
77.5	0.28	0.29	0.30	0.32	0.33	0.35	0.39	0.41	0.46	0.48
80.0	0.19	0.20	0.21	0.22	0.23	0.24	0.27	0.29	0.32	0.34
82.5	0.11	0.11	0.12	0.13	0.13	0.14	0.17	0.17	0.19	0.21
85.0	0.04	0.04	0.05	0.04	0.06	0.06	0.07	0.06	0.09	0.09
87.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
92.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
97.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

CANDELA TABULATION - (Cont.)

100.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
102.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
105.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
107.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
110.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
112.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
115.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
120.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
122.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
125.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
127.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
130.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
132.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
135.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
137.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
140.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
142.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
145.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
147.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
150.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
152.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
155.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
157.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
160.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
162.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
165.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
167.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
170.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
172.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
175.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
177.5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Vert. Angles	Horizontal Angles		
	<u>350</u>	<u>355</u>	<u>360</u>
0.0	7822.88	7822.88	7822.88
2.5	7681.45	7628.59	7625.42
5.0	7318.83	7245.73	7187.17
7.5	6648.51	6584.08	6524.59
10.0	5728.11	5669.46	5672.16
12.5	4662.90	4604.34	4551.38
15.0	3747.72	3675.73	3657.74
17.5	2845.78	2798.88	2751.23
20.0	1978.34	1900.67	1860.57
22.5	1232.67	1170.48	1159.20
25.0	729.47	702.20	682.54
27.5	437.78	424.68	405.74
30.0	245.54	233.88	229.94
32.5	120.24	114.04	113.35
35.0	54.97	54.46	53.52
37.5	35.70	35.99	35.75
40.0	28.19	28.51	28.51
42.5	22.15	22.12	22.38
45.0	17.28	17.48	17.53

IES INDOOR REPORT
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CANDELA TABULATION - (Cont.)

47.5	13.34	13.72	13.84
50.0	10.27	10.57	10.41
52.5	7.95	8.17	8.13
55.0	6.09	6.27	6.30
57.5	4.69	4.81	4.85
60.0	3.59	3.71	3.73
62.5	2.77	2.86	2.91
65.0	2.15	2.25	2.26
67.5	1.66	1.70	1.75
70.0	1.27	1.31	1.34
72.5	0.95	0.97	1.01
75.0	0.70	0.72	0.73
77.5	0.50	0.50	0.52
80.0	0.34	0.34	0.34
82.5	0.21	0.21	0.22
85.0	0.09	0.09	0.09
87.5	0.00	0.00	0.02
90.0	0.00	0.00	0.00
92.5	0.00	0.00	0.00
95.0	0.00	0.00	0.00
97.5	0.00	0.00	0.00
100.0	0.00	0.00	0.00
102.5	0.00	0.00	0.00
105.0	0.00	0.00	0.00
107.5	0.00	0.00	0.00
110.0	0.00	0.00	0.00
112.5	0.00	0.00	0.00
115.0	0.00	0.00	0.00
117.5	0.00	0.00	0.00
120.0	0.00	0.00	0.00
122.5	0.00	0.00	0.00
125.0	0.00	0.00	0.00
127.5	0.00	0.00	0.00
130.0	0.00	0.00	0.00
132.5	0.00	0.00	0.00
135.0	0.00	0.00	0.00
137.5	0.00	0.00	0.00
140.0	0.00	0.00	0.00
142.5	0.00	0.00	0.00
145.0	0.00	0.00	0.00
147.5	0.00	0.00	0.00
150.0	0.00	0.00	0.00
152.5	0.00	0.00	0.00
155.0	0.00	0.00	0.00
157.5	0.00	0.00	0.00
160.0	0.00	0.00	0.00
162.5	0.00	0.00	0.00
165.0	0.00	0.00	0.00
167.5	0.00	0.00	0.00
170.0	0.00	0.00	0.00
172.5	0.00	0.00	0.00
175.0	0.00	0.00	0.00
177.5	0.00	0.00	0.00
180.0	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	1793.34	N.A.	72.90
0-30	2357.72	N.A.	95.80
0-40	2444.16	N.A.	99.30
0-60	2458.71	N.A.	99.90
0-80	2460.82	N.A.	100.00
0-90	2460.91	N.A.	100.00
10-90	1811.41	N.A.	73.60
20-40	650.82	N.A.	26.40
20-50	661.43	N.A.	26.90
40-70	16.11	N.A.	0.70
60-80	2.11	N.A.	0.10
70-80	0.56	N.A.	0.00
80-90	0.09	N.A.	0.00
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	2460.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	649.50
10-20	1143.84
20-30	564.38
30-40	86.44
40-50	10.61
50-60	3.95
60-70	1.55
70-80	0.56
80-90	0.09
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

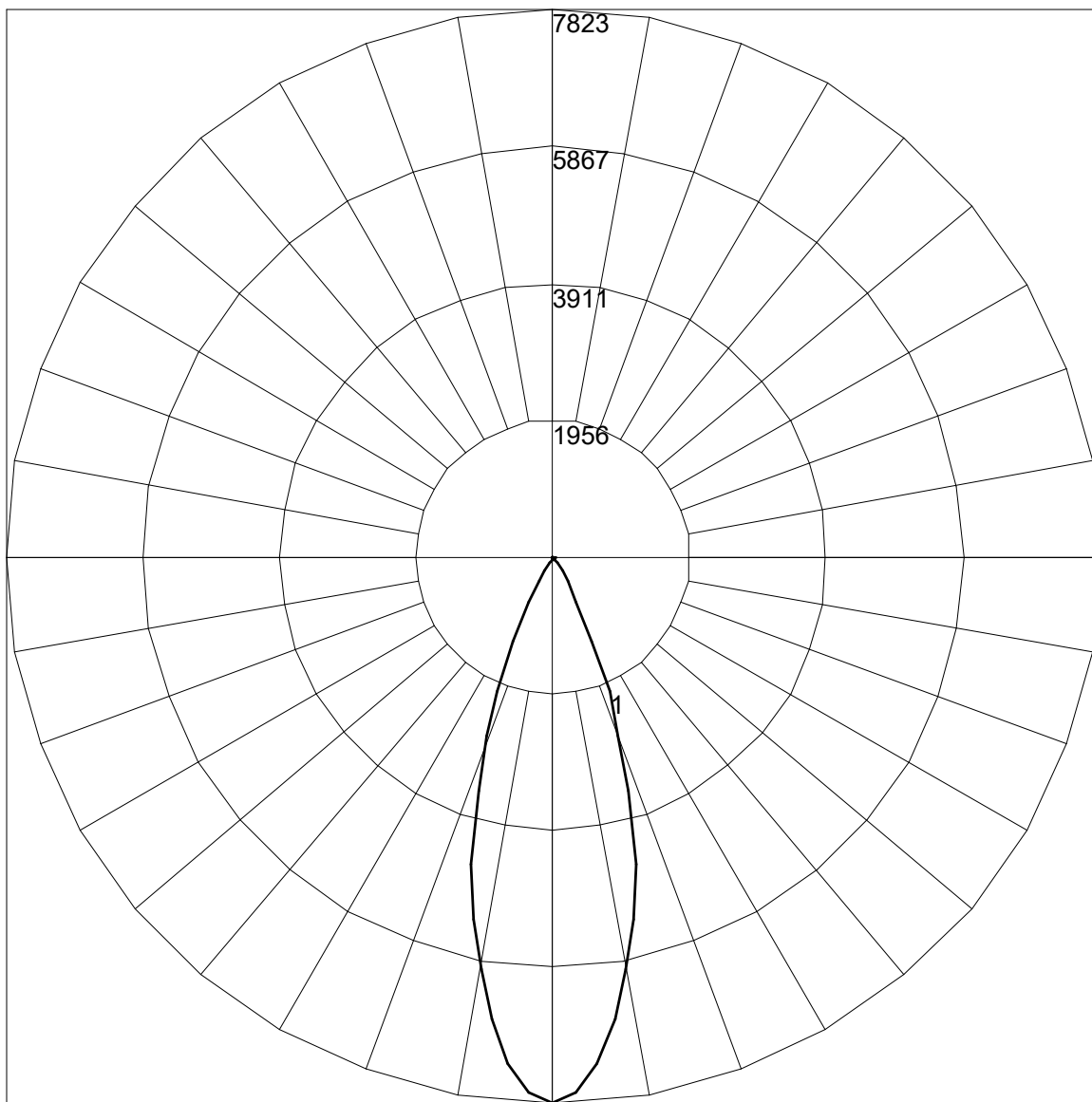
PHOTOMETRIC FILENAME : HP2-P-D-4FT-V-8TW-MLB-KPL2008-6.900.IES

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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92
3	107	102	98	95	105	101	97	94	98	95	93	96	94	92	94	92	90	89
4	103	98	93	90	102	97	93	90	95	91	89	93	90	88	91	89	87	85
5	100	94	89	86	98	93	89	86	91	88	85	90	87	84	88	86	84	82
6	97	90	86	82	95	89	85	82	88	84	82	87	83	81	85	83	81	79
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74
9	88	81	76	73	87	80	76	73	79	76	73	79	75	73	78	75	73	72
10	85	78	74	71	84	78	74	71	77	73	71	76	73	70	76	73	70	69

POLAR GRAPH



Maximum Candela = 7822.88 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)