

# Family Correlated Photometric Data

The following photometric information is developed using correlated data. Finelite considers a family to be a group of luminaires where critical performance metrics such as photometric performance, thermal performance, and electrical performance can be accurately projected via a combination of LM79 tests at the luminaire level and well-documented specifications at the component level.

For more information, please download [Finelite's Family Correlated White Paper](#)

Additional links:

- [Solid-State Lighting: Early Lessons Learned on the Way to Market](#)  
(U.S. Department of Energy)
- [Lighting Facts®](#)
- [Design Lights Consortium®](#)

## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-KPL2008-3.910 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]08/29/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-4ft-B-V-8TW-F-DAO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 59.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 61.2 WATTS

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and KPL2008-3. 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](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)

[ABSOLUTE LUMENS]5704

[\_CONVERT] Photometric web converted from original test data

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5702
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	59.7
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.48
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.18 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23232	24168	17485
55	19717	21943	15596
65	16280	19112	13788
75	13580	16144	11572
85	13552	16085	9624

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## CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990
2.5	1470.400	1462.610	1455.450	1453.410	1429.310	1407.190	1376.190	1361.030	1362.280	1361.030
5.0	1525.610	1512.860	1491.110	1469.050	1421.990	1380.380	1334.680	1311.680	1306.860	1311.680
7.5	1572.250	1555.630	1522.270	1480.860	1410.900	1347.440	1293.580	1255.680	1261.270	1255.680
10.0	1610.940	1593.320	1545.590	1487.820	1394.700	1313.920	1253.640	1223.260	1220.910	1223.260
12.5	1648.580	1624.850	1563.880	1489.020	1374.200	1277.170	1214.630	1180.080	1178.660	1180.080
15.0	1669.910	1646.860	1577.480	1484.780	1349.940	1242.400	1174.170	1131.720	1136.210	1131.720
17.5	1678.070	1654.960	1583.860	1474.060	1319.720	1202.400	1134.750	1099.560	1097.940	1099.560
20.0	1670.750	1650.570	1580.090	1458.070	1290.650	1163.350	1095.330	1063.280	1059.250	1063.280
22.5	1651.720	1633.840	1571.730	1435.170	1254.260	1121.260	1056.430	1026.210	1023.700	1026.210
25.0	1618.680	1606.760	1544.540	1409.500	1215.260	1079.480	1014.910	988.990	988.560	988.990
27.5	1583.120	1568.330	1516.200	1377.080	1170.820	1036.510	976.120	952.340	953.010	952.340
30.0	1530.840	1522.060	1475.630	1338.550	1126.280	991.440	937.010	914.280	917.460	914.280
32.5	1473.120	1469.570	1432.860	1295.990	1075.770	946.220	897.380	877.410	881.280	877.410
35.0	1403.690	1408.350	1381.520	1249.040	1026.840	898.900	855.660	840.190	842.380	840.190
37.5	1331.540	1339.590	1324.430	1193.620	975.700	850.960	813.310	801.710	805.160	801.710
40.0	1253.740	1267.550	1264.090	1138.720	926.240	804.060	771.590	762.910	767.510	762.910
42.5	1166.740	1189.860	1194.980	1078.650	869.150	757.010	729.550	725.170	726.940	725.170
45.0	1082.050	1109.910	1125.650	1016.430	814.360	708.170	685.640	683.810	658.350	683.810
47.5	1001.740	1025.580	1058.410	952.180	758.100	660.910	641.300	643.080	651.230	643.080
50.0	910.560	941.410	979.470	882.220	701.320	611.870	598.950	601.830	608.570	601.830
52.5	826.280	859.060	904.490	815.040	646.530	565.280	553.780	558.800	567.790	558.800
55.0	744.930	777.340	829.000	747.960	589.230	517.710	508.820	517.810	523.460	517.810
57.5	662.110	696.670	748.800	681.040	535.900	470.390	463.540	473.530	481.000	473.530
60.0	588.290	621.860	674.760	612.970	485.290	414.060	411.970	427.520	438.130	427.520
62.5	514.250	549.230	600.310	548.450	424.290	379.630	377.940	389.800	393.540	389.800
65.0	453.190	480.320	532.030	485.030	383.820	334.710	334.730	346.340	349.460	346.340
67.5	392.330	417.590	463.850	424.120	335.560	291.580	290.900	301.560	302.450	301.560
70.0	335.660	356.940	399.020	366.510	285.740	248.920	249.240	257.820	263.880	257.820
72.5	279.820	299.110	333.150	308.680	240.830	208.500	208.770	214.380	217.520	214.380
75.0	231.510	246.830	275.220	256.500	197.270	169.110	168.680	163.680	175.000	163.680
77.5	184.660	198.620	220.320	207.300	158.520	131.840	129.900	131.900	131.360	131.900
80.0	144.720	155.020	170.550	160.410	120.370	96.840	93.080	92.070	92.390	92.070
82.5	108.120	114.660	126.110	119.210	87.390	64.190	60.930	52.070	55.780	52.070
85.0	77.800	80.420	92.340	87.900	55.250	35.950	29.900	24.420	20.370	24.420
87.5	46.700	49.080	51.850	45.830	26.060	9.810	5.250	1.880	1.280	1.880
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	15.436	15.436	15.436	16.980	16.980	16.980	15.436	15.436	15.436	15.436
95.0	36.532	34.989	34.989	35.503	36.018	35.503	34.989	34.989	36.532	34.989
97.5	57.629	56.085	55.056	55.570	55.570	55.570	55.056	56.085	57.629	56.085
100.0	79.239	76.666	76.666	76.666	76.152	76.666	76.666	76.666	79.239	76.666
102.5	101.879	99.821	98.792	98.277	98.277	98.277	98.792	99.821	101.879	99.821
105.0	125.548	124.004	121.431	120.917	120.402	120.917	121.431	124.004	125.548	124.004
107.5	149.731	148.188	145.100	144.586	144.071	144.586	145.100	148.188	149.731	148.188
110.0	174.944	173.400	170.827	169.798	168.255	169.798	170.827	173.400	174.944	173.400
112.5	201.185	198.612	197.069	194.496	192.952	194.496	197.069	198.612	201.185	198.612
115.0	227.427	225.883	224.854	219.709	218.679	219.709	224.854	225.883	227.427	225.883
117.5	255.212	252.639	252.639	246.465	245.436	246.465	252.639	252.639	255.212	252.639
120.0	283.512	279.395	280.424	274.250	272.192	274.250	280.424	279.395	283.512	279.395
122.5	310.268	306.151	308.209	303.064	299.462	303.064	308.209	306.151	310.268	306.151
125.0	340.111	333.937	335.995	330.849	328.276	330.849	335.995	333.937	340.111	333.937
127.5	369.440	362.751	363.780	359.663	358.634	359.663	363.780	362.751	369.440	362.751
130.0	398.254	391.565	392.594	387.449	387.963	387.449	392.594	391.565	398.254	391.565
132.5	427.068	419.865	421.408	416.263	416.263	416.263	421.408	419.865	427.068	419.865

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES

## CANDELA TABULATION - (Cont.)

135.0	454.853	448.164	450.223	445.592	445.592	445.592	450.223	448.164	454.853	448.164
137.5	483.153	476.464	478.522	474.406	473.891	474.406	478.522	476.464	483.153	476.464
140.0	511.453	504.764	506.307	503.735	502.191	503.735	506.307	504.764	511.453	504.764
142.5	538.209	531.005	533.063	530.491	528.433	530.491	533.063	531.005	538.209	531.005
145.0	565.479	557.761	559.819	557.761	554.160	557.761	559.819	557.761	565.479	557.761
147.5	590.692	582.974	585.547	582.459	578.857	582.459	585.547	582.974	590.692	582.974
150.0	614.875	607.157	610.244	606.643	603.555	606.643	610.244	607.157	614.875	607.157
152.5	638.030	630.312	633.399	630.312	627.224	630.312	633.399	630.312	638.030	630.312
155.0	660.155	652.437	656.038	652.951	649.864	652.951	656.038	652.437	660.155	652.437
157.5	679.193	671.989	676.106	673.018	669.931	673.018	676.106	671.989	679.193	671.989
160.0	697.716	691.027	694.629	691.542	688.455	691.542	694.629	691.027	697.716	691.027
162.5	713.667	708.007	710.580	708.522	706.463	708.522	710.580	708.007	713.667	708.007
165.0	728.074	722.929	724.472	723.443	721.900	723.443	724.472	722.929	728.074	722.929
167.5	738.880	735.792	736.821	735.792	735.278	735.792	736.821	735.792	738.880	735.792
170.0	748.656	747.112	747.627	746.597	746.083	746.597	747.627	747.112	748.656	747.112
172.5	756.888	756.374	756.374	755.859	755.859	755.859	756.374	756.374	756.888	756.374
175.0	762.548	762.548	762.548	762.548	762.034	762.548	762.548	762.548	762.548	762.548
177.5	765.635	766.150	766.150	766.150	765.635	766.150	766.150	766.150	765.635	766.150
180.0	767.694	767.694	767.694	767.694	767.694	767.694	767.694	767.694	767.694	767.694

## Vert. Angles

## Horizontal Angles

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990	1421.990
2.5	1376.190	1407.190	1429.310	1453.410	1455.450	1462.610	1470.400
5.0	1334.680	1380.380	1421.990	1469.050	1491.110	1512.860	1525.610
7.5	1293.580	1347.440	1410.900	1480.860	1522.270	1555.630	1572.250
10.0	1253.640	1313.920	1394.700	1487.820	1545.590	1593.320	1610.940
12.5	1214.630	1277.170	1374.200	1489.020	1563.880	1624.850	1648.580
15.0	1174.170	1242.400	1349.940	1484.780	1577.480	1646.860	1669.910
17.5	1134.750	1202.400	1319.720	1474.060	1583.860	1654.960	1678.070
20.0	1095.330	1163.350	1290.650	1458.070	1580.090	1650.570	1670.750
22.5	1056.430	1121.260	1254.260	1435.170	1571.730	1633.840	1651.720
25.0	1014.910	1079.480	1215.260	1409.500	1544.540	1606.760	1618.680
27.5	976.120	1036.510	1170.820	1377.080	1516.200	1568.330	1583.120
30.0	937.010	991.440	1126.280	1338.550	1475.630	1522.060	1530.840
32.5	897.380	946.220	1075.770	1295.990	1432.860	1469.570	1473.120
35.0	855.660	898.900	1026.840	1249.040	1381.520	1408.350	1403.690
37.5	813.310	850.960	975.700	1193.620	1324.430	1339.590	1331.540
40.0	771.590	804.060	926.240	1138.720	1264.090	1267.550	1253.740
42.5	729.550	757.010	869.150	1078.650	1194.980	1189.860	1166.740
45.0	685.640	708.170	814.360	1016.430	1125.650	1109.910	1082.050
47.5	641.300	660.910	758.100	952.180	1058.410	1025.580	1001.740
50.0	598.950	611.870	701.320	882.220	979.470	941.410	910.560
52.5	553.780	565.280	646.530	815.040	904.490	859.060	826.280
55.0	508.820	517.710	589.230	747.960	829.000	777.340	744.930
57.5	463.540	470.390	535.900	681.040	748.800	696.670	662.110
60.0	411.970	414.060	485.290	612.970	674.760	621.860	588.290
62.5	377.940	379.630	424.290	548.450	600.310	549.230	514.250
65.0	334.730	334.710	383.820	485.030	532.030	480.320	453.190
67.5	290.900	291.580	335.560	424.120	463.850	417.590	392.330
70.0	249.240	248.920	285.740	366.510	399.020	356.940	335.660
72.5	208.770	208.500	240.830	308.680	333.150	299.110	279.820
75.0	168.680	169.110	197.270	256.500	275.220	246.830	231.510
77.5	129.900	131.840	158.520	207.300	220.320	198.620	184.660
80.0	93.080	96.840	120.370	160.410	170.550	155.020	144.720

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES****CANDELA TABULATION - (Cont.)**

82.5	60.930	64.190	87.390	119.210	126.110	114.660	108.120
85.0	29.900	35.950	55.250	87.900	92.340	80.420	77.800
87.5	5.250	9.810	26.060	45.830	51.850	49.080	46.700
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	15.436	16.980	16.980	16.980	15.436	15.436	15.436
95.0	34.989	35.503	36.018	35.503	34.989	34.989	36.532
97.5	55.056	55.570	55.570	55.570	55.056	56.085	57.629
100.0	76.666	76.666	76.152	76.666	76.666	76.666	79.239
102.5	98.792	98.277	98.277	98.277	98.792	99.821	101.879
105.0	121.431	120.917	120.402	120.917	121.431	124.004	125.548
107.5	145.100	144.586	144.071	144.586	145.100	148.188	149.731
110.0	170.827	169.798	168.255	169.798	170.827	173.400	174.944
112.5	197.069	194.496	192.952	194.496	197.069	198.612	201.185
115.0	224.854	219.709	218.679	219.709	224.854	225.883	227.427
117.5	252.639	246.465	245.436	246.465	252.639	252.639	255.212
120.0	280.424	274.250	272.192	274.250	280.424	279.395	283.512
122.5	308.209	303.064	299.462	303.064	308.209	306.151	310.268
125.0	335.995	330.849	328.276	330.849	335.995	333.937	340.111
127.5	363.780	359.663	358.634	359.663	363.780	362.751	369.440
130.0	392.594	387.449	387.963	387.449	392.594	391.565	398.254
132.5	421.408	416.263	416.263	416.263	421.408	419.865	427.068
135.0	450.223	445.592	445.592	445.592	450.223	448.164	454.853
137.5	478.522	474.406	473.891	474.406	478.522	476.464	483.153
140.0	506.307	503.735	502.191	503.735	506.307	504.764	511.453
142.5	533.063	530.491	528.433	530.491	533.063	531.005	538.209
145.0	559.819	557.761	554.160	557.761	559.819	557.761	565.479
147.5	585.547	582.459	578.857	582.459	585.547	582.974	590.692
150.0	610.244	606.643	603.555	606.643	610.244	607.157	614.875
152.5	633.399	630.312	627.224	630.312	633.399	630.312	638.030
155.0	656.038	652.951	649.864	652.951	656.038	652.437	660.155
157.5	676.106	673.018	669.931	673.018	676.106	671.989	679.193
160.0	694.629	691.542	688.455	691.542	694.629	691.027	697.716
162.5	710.580	708.522	706.463	708.522	710.580	708.007	713.667
165.0	724.472	723.443	721.900	723.443	724.472	722.929	728.074
167.5	736.821	735.792	735.278	735.792	736.821	735.792	738.880
170.0	747.627	746.597	746.083	746.597	747.627	747.112	748.656
172.5	756.374	755.859	755.859	755.859	756.374	756.374	756.888
175.0	762.548	762.548	762.034	762.548	762.548	762.548	762.548
177.5	766.150	766.150	765.635	766.150	766.150	766.150	765.635
180.0	767.694	767.694	767.694	767.694	767.694	767.694	767.694

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	523.14	N.A.	9.20
0-30	1107.93	N.A.	19.40
0-40	1793.79	N.A.	31.50
0-60	3043.17	N.A.	53.40
0-80	3676.09	N.A.	64.50
0-90	3739.99	N.A.	65.60
10-90	3605.19	N.A.	63.20
20-40	1270.65	N.A.	22.30
20-50	1947.83	N.A.	34.20
40-70	1657.72	N.A.	29.10
60-80	632.92	N.A.	11.10
70-80	224.58	N.A.	3.90
80-90	63.90	N.A.	1.10
90-110	169.39	N.A.	3.00
90-120	390.91	N.A.	6.90
90-130	689.69	N.A.	12.10
90-150	1384.95	N.A.	24.30
90-180	1962.13	N.A.	34.40
110-180	1792.74	N.A.	31.40
0-180	5702.12	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	134.80
10-20	388.33
20-30	584.80
30-40	685.86
40-50	677.18
50-60	572.20
60-70	408.34
70-80	224.58
80-90	63.90
90-100	39.65
100-110	129.74
110-120	221.52
120-130	298.78
130-140	346.06
140-150	349.20
150-160	300.89
160-170	203.98
170-180	72.30

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

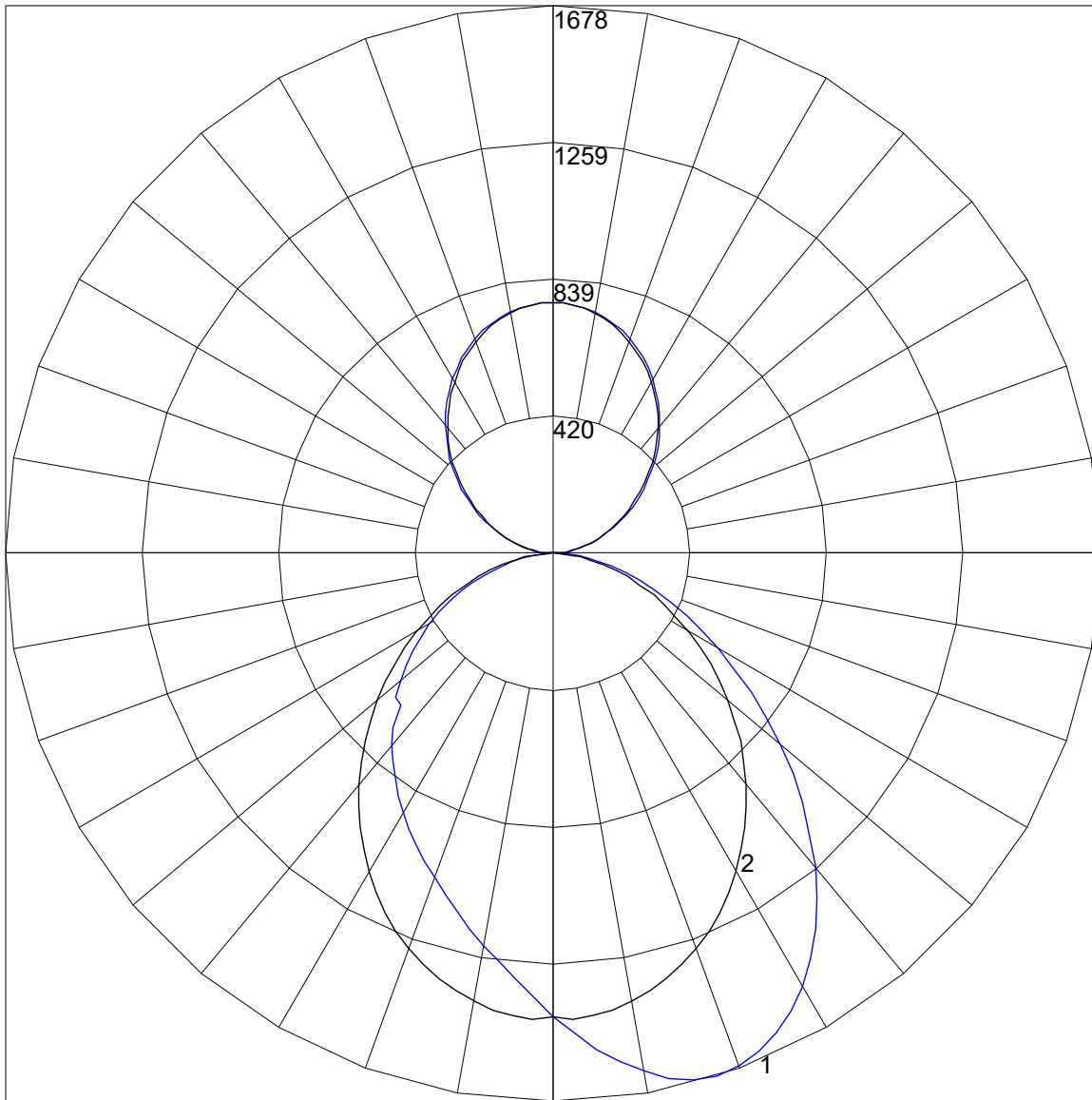
Effective Floor Cavity Reflectance 0.20

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	111	111	111	111	104	104	104	104	92	92	92	81	81	81	70	70	70	66
1	101	97	93	89	95	91	88	85	81	78	76	71	69	68	62	61	60	55
2	92	85	79	73	87	80	75	70	71	67	63	63	59	57	55	53	50	47
3	84	75	67	61	79	71	64	58	63	58	53	56	51	48	49	46	43	40
4	77	66	58	52	72	63	55	50	56	50	45	50	45	41	44	40	37	34
5	71	59	51	45	67	56	49	43	50	44	39	45	40	36	39	36	32	30
6	66	53	45	39	61	50	43	37	45	39	34	40	35	32	36	32	29	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	33	29	25	23
8	56	44	36	30	53	42	34	29	38	31	27	34	29	25	30	26	23	21
9	53	40	32	27	49	38	31	26	34	29	24	31	26	22	28	24	21	19
10	49	37	29	25	46	35	28	24	32	26	22	29	24	20	26	22	19	17

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-V-8TW-F-DAO-ITL85132-KPL2008-3.910.IES

## POLAR GRAPH



Maximum Candela = 1678.07 Located At Horizontal Angle = 0, Vertical Angle = 17.5

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)

# 2 - Vertical Plane Through Horizontal Angles (90 - 270)