

# 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-H-835-WSO-MLB-ITL89456-KPL2008-6.011.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89456-KPL2008-6.011 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]07/19/17  
[ISSUE DATE]02/07/23  
[MANUFACTURER]FINELITE, INC.  
[LUMCAT]HP-2-ID-4ft-B-H-835-WSO-MLB  
[INPUT\_ELECTRICAL]120.0 VOLTS, 46.0 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 46.8 WATTS  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL89456 and KPL2008-6. For further details on Finelite family correlation files, go  
[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]3981

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3979
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	46
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.18 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	293	174	182
55	130	68	77
65	63	34	38
75	33	19	19
85	12	5	5

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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>
0.0	6084.714	6084.714	6084.714	6084.714	6084.714
2.5	5931.128	5984.797	5959.409	5952.525	5977.540
5.0	5590.253	5668.189	5630.870	5628.692	5661.625
7.5	5074.891	5171.021	5173.090	5180.051	5202.973
10.0	4411.863	4495.088	4637.855	4674.296	4679.336
12.5	3540.109	3674.608	4010.583	4128.040	4135.833
15.0	2845.027	2988.704	3347.990	3589.757	3539.821
17.5	2139.934	2340.391	2842.997	2907.835	2747.839
20.0	1447.170	1664.280	2110.128	2184.938	2138.915
22.5	901.637	1161.566	1549.724	1643.715	1621.376
25.0	530.886	640.355	1063.080	1157.654	1026.383
27.5	315.589	412.605	632.982	643.661	572.499
30.0	178.850	239.130	376.343	358.298	315.106
32.5	88.165	136.700	193.239	186.394	175.295
35.0	41.628	59.370	103.947	104.825	87.667
37.5	27.807	28.779	51.880	50.830	32.481
40.0	22.175	20.036	25.318	20.628	13.954
42.5	17.407	15.743	12.251	9.964	10.952
45.0	13.635	12.157	8.105	7.630	8.455
47.5	10.765	9.209	6.005	5.771	6.487
50.0	8.097	7.016	4.496	4.356	4.994
52.5	6.324	5.328	3.399	3.360	3.803
55.0	4.900	4.091	2.582	2.543	2.901
57.5	3.772	3.135	1.976	1.937	2.217
60.0	2.901	2.435	1.540	1.509	1.727
62.5	2.263	1.859	1.190	1.167	1.346
65.0	1.758	1.447	0.933	0.910	1.058
67.5	1.361	1.112	0.731	0.708	0.801
70.0	1.042	0.856	0.576	0.552	0.622
72.5	0.786	0.646	0.436	0.420	0.451
75.0	0.568	0.474	0.327	0.319	0.319
77.5	0.404	0.342	0.249	0.241	0.249
80.0	0.264	0.241	0.171	0.163	0.148
82.5	0.171	0.140	0.101	0.086	0.086
85.0	0.070	0.062	0.031	0.039	0.031
87.5	0.016	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	9.263	15.953	15.953	15.439	15.439
95.0	24.187	42.714	42.714	35.509	34.994
97.5	40.655	69.988	85.941	61.754	58.152
100.0	57.637	91.088	170.854	99.322	87.485
102.5	76.164	111.158	236.210	175.485	139.462
105.0	94.175	132.772	273.778	286.129	235.696
107.5	112.187	153.871	296.936	385.965	359.719
110.0	130.199	173.427	317.521	444.632	449.263
112.5	148.210	192.468	341.708	483.228	502.784
115.0	166.737	210.480	370.526	511.017	539.322
117.5	185.263	228.491	401.918	537.263	567.626
120.0	203.790	247.532	427.649	565.053	595.930
122.5	220.772	263.485	446.175	604.164	625.778
125.0	236.725	278.924	456.468	646.877	668.491
127.5	251.649	293.333	462.643	675.696	715.836
130.0	264.000	305.684	466.246	687.532	749.801
132.5	276.351	317.006	467.275	682.901	760.608

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-H-835-WSO-MLB-ITL89456-KPL2008-6.011.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	287.158	326.269	466.760	668.491	749.801
<b>137.5</b>	296.936	335.017	465.216	648.936	727.158
<b>140.0</b>	306.714	342.737	462.643	627.322	698.339
<b>142.5</b>	315.977	349.941	459.041	603.135	667.462
<b>145.0</b>	325.754	356.632	455.439	579.977	636.070
<b>147.5</b>	333.988	361.778	451.322	556.304	604.164
<b>150.0</b>	342.222	367.439	446.175	535.205	574.316
<b>152.5</b>	349.941	371.556	440.000	515.135	546.526
<b>155.0</b>	357.146	374.643	433.825	495.579	520.795
<b>157.5</b>	363.836	378.760	428.164	477.567	497.638
<b>160.0</b>	369.497	381.333	421.474	460.070	476.023
<b>162.5</b>	374.643	383.392	414.784	445.146	455.953
<b>165.0</b>	378.760	385.450	408.094	430.737	438.971
<b>167.5</b>	382.363	386.994	402.947	418.386	424.047
<b>170.0</b>	385.450	388.538	399.345	408.608	412.211
<b>172.5</b>	386.994	389.567	395.228	400.374	403.462
<b>175.0</b>	389.053	390.082	392.655	395.228	396.257
<b>177.5</b>	390.082	390.082	391.111	391.111	391.626
<b>180.0</b>	390.596	390.596	390.596	390.596	390.596

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-B-H-835-WSO-MLB-ITL89456-KPL2008-6.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1394.52	N.A.	35.00
0-30	1831.07	N.A.	46.00
0-40	1898.25	N.A.	47.70
0-60	1909.6	N.A.	48.00
0-80	1911.25	N.A.	48.00
0-90	1911.32	N.A.	48.00
10-90	1406.69	N.A.	35.40
20-40	503.74	N.A.	12.70
20-50	512.01	N.A.	12.90
40-70	12.56	N.A.	0.30
60-80	1.65	N.A.	0.00
70-80	0.44	N.A.	0.00
80-90	0.07	N.A.	0.00
90-110	270.58	N.A.	6.80
90-120	627.57	N.A.	15.80
90-130	1035.65	N.A.	26.00
90-150	1711.39	N.A.	43.00
90-180	2067.64	N.A.	52.00
110-180	1797.06	N.A.	45.20
0-180	3978.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	504.63
10-20	889.89
20-30	436.56
30-40	67.18
40-50	8.27
50-60	3.08
60-70	1.21
70-80	0.44
80-90	0.07
90-100	47.20
100-110	223.38
110-120	356.99
120-130	408.08
130-140	381.40
140-150	294.33
150-160	202.32
160-170	116.27
170-180	37.67

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

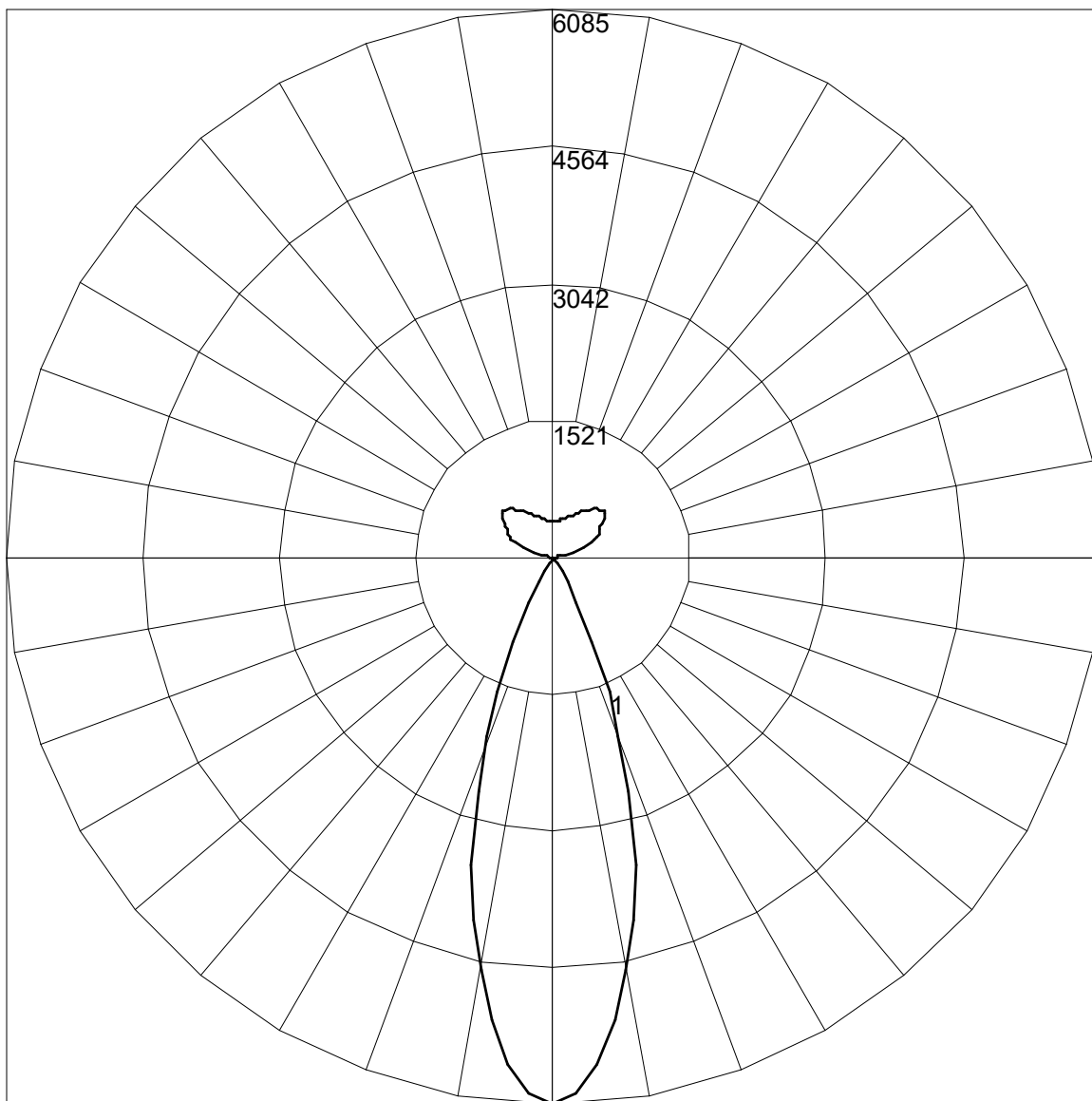
Effective Floor Cavity Reflectance 0.20

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	54	54	54	48
1	100	97	94	92	92	90	87	85	76	75	73	64	63	62	52	52	51	46
2	94	89	84	81	87	83	79	76	71	69	66	60	59	57	50	50	49	44
3	89	82	77	72	82	76	72	68	66	63	61	57	55	54	49	47	46	43
4	84	76	70	66	78	71	66	62	62	59	56	54	52	50	47	45	44	41
5	79	71	65	60	74	67	61	58	59	55	52	52	49	47	45	44	42	40
6	75	66	60	56	70	62	57	54	56	52	49	49	47	45	44	42	41	38
7	71	62	56	52	67	59	54	50	53	49	46	47	45	43	42	40	39	37
8	68	58	53	49	64	56	51	47	50	47	44	45	43	41	41	39	38	36
9	65	55	50	46	61	53	48	44	48	44	42	44	41	39	39	38	36	34
10	62	53	47	43	58	50	45	42	46	42	40	42	39	37	38	36	35	33

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POLAR GRAPH



Maximum Candela = 6084.714 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)