

# 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-H-B-835-WSO-MLB-ITL89456-KPL2008-6.008.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89456-KPL2008-6.008 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]07/19/17  
[ISSUE DATE]02/07/23  
[MANUFACTURER]FINELITE, INC.  
[LUMCAT]HP2ID-4ft-H-B-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]4390

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4389
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	95
Total Luminaire Watts	46
Ballast Factor	1.00
CIE Type	Semi-Indirect
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	194	115	120
55	86	45	51
65	42	22	25
75	22	13	12
85	8	4	4

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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	4024.747	4024.747	4024.747	4024.747	4024.747
2.5	3923.156	3958.656	3941.863	3937.310	3953.856
5.0	3697.684	3749.235	3724.550	3723.110	3744.893
7.5	3356.797	3420.382	3421.751	3426.355	3441.517
10.0	2918.236	2973.285	3067.719	3091.823	3095.156
12.5	2341.612	2430.577	2652.808	2730.500	2735.656
15.0	1881.849	1976.884	2214.535	2374.452	2341.422
17.5	1415.464	1548.057	1880.506	1923.393	1817.564
20.0	957.234	1100.841	1395.749	1445.232	1414.790
22.5	596.390	768.320	1025.068	1087.238	1072.463
25.0	351.156	423.564	703.176	765.732	678.903
27.5	208.747	272.918	418.687	425.751	378.681
30.0	118.300	158.173	248.933	236.997	208.428
32.5	58.317	90.421	127.818	123.291	115.949
35.0	27.535	39.271	68.756	69.337	57.987
37.5	18.393	19.036	34.316	33.622	21.485
40.0	14.668	13.253	16.746	13.644	9.230
42.5	11.514	10.413	8.103	6.591	7.244
45.0	9.019	8.041	5.361	5.047	5.592
47.5	7.120	6.091	3.972	3.817	4.291
50.0	5.356	4.641	2.974	2.881	3.303
52.5	4.183	3.524	2.248	2.223	2.516
55.0	3.241	2.706	1.708	1.682	1.919
57.5	2.495	2.073	1.307	1.281	1.466
60.0	1.919	1.610	1.019	0.998	1.142
62.5	1.497	1.230	0.787	0.772	0.890
65.0	1.163	0.957	0.617	0.602	0.700
67.5	0.900	0.736	0.484	0.468	0.530
70.0	0.689	0.566	0.381	0.365	0.412
72.5	0.520	0.427	0.288	0.278	0.298
75.0	0.376	0.314	0.216	0.211	0.211
77.5	0.268	0.226	0.165	0.159	0.165
80.0	0.175	0.159	0.113	0.108	0.098
82.5	0.113	0.093	0.067	0.057	0.057
85.0	0.046	0.041	0.021	0.026	0.021
87.5	0.010	0.000	0.000	0.000	0.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	14.000	24.111	24.111	23.333	23.333
95.0	36.556	64.556	64.556	53.667	52.889
97.5	61.444	105.778	129.889	93.333	87.889
100.0	87.111	137.667	258.222	150.111	132.222
102.5	115.111	168.000	357.000	265.222	210.778
105.0	142.333	200.667	413.778	432.444	356.222
107.5	169.556	232.556	448.778	583.333	543.667
110.0	196.778	262.111	479.889	672.000	679.000
112.5	224.000	290.889	516.445	730.333	759.889
115.0	252.000	318.111	560.000	772.333	815.111
117.5	280.000	345.333	607.445	812.000	857.889
120.0	308.000	374.111	646.333	854.000	900.667
122.5	333.667	398.222	674.333	913.111	945.778
125.0	357.778	421.556	689.889	977.667	1010.333
127.5	380.333	443.333	699.222	1021.222	1081.889
130.0	399.000	462.000	704.667	1039.111	1133.222
132.5	417.667	479.111	706.222	1032.111	1149.556

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-B-835-WSO-MLB-ITL89456-KPL2008-6.008.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	434.000	493.111	705.445	1010.333	1133.222
<b>137.5</b>	448.778	506.333	703.111	980.778	1099.000
<b>140.0</b>	463.556	518.000	699.222	948.111	1055.444
<b>142.5</b>	477.556	528.889	693.778	911.555	1008.778
<b>145.0</b>	492.333	539.000	688.333	876.555	961.333
<b>147.5</b>	504.778	546.778	682.111	840.778	913.111
<b>150.0</b>	517.222	555.333	674.333	808.889	868.000
<b>152.5</b>	528.889	561.555	665.000	778.555	826.000
<b>155.0</b>	539.778	566.222	655.667	749.000	787.111
<b>157.5</b>	549.889	572.445	647.111	721.778	752.111
<b>160.0</b>	558.445	576.333	637.000	695.333	719.445
<b>162.5</b>	566.222	579.445	626.889	672.778	689.111
<b>165.0</b>	572.445	582.555	616.778	651.000	663.445
<b>167.5</b>	577.889	584.889	609.000	632.333	640.889
<b>170.0</b>	582.555	587.222	603.555	617.555	623.000
<b>172.5</b>	584.889	588.778	597.333	605.111	609.778
<b>175.0</b>	588.000	589.555	593.445	597.333	598.889
<b>177.5</b>	589.555	589.555	591.111	591.111	591.889
<b>180.0</b>	590.333	590.333	590.333	590.333	590.333

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-B-835-WSO-MLB-ITL89456-KPL2008-6.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	922.40	N.A.	21.00
0-30	1211.17	N.A.	27.60
0-40	1255.6	N.A.	28.60
0-60	1263.11	N.A.	28.80
0-80	1264.2	N.A.	28.80
0-90	1264.25	N.A.	28.80
10-90	930.46	N.A.	21.20
20-40	333.20	N.A.	7.60
20-50	338.67	N.A.	7.70
40-70	8.31	N.A.	0.20
60-80	1.09	N.A.	0.00
70-80	0.29	N.A.	0.00
80-90	0.05	N.A.	0.00
90-110	408.95	N.A.	9.30
90-120	948.49	N.A.	21.60
90-130	1565.25	N.A.	35.70
90-150	2586.53	N.A.	58.90
90-180	3124.96	N.A.	71.20
110-180	2716.01	N.A.	61.90
0-180	4389.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	333.79
10-20	588.62
20-30	288.76
30-40	44.44
40-50	5.47
50-60	2.03
60-70	0.80
70-80	0.29
80-90	0.05
90-100	71.33
100-110	337.61
110-120	539.54
120-130	616.76
130-140	576.44
140-150	444.84
150-160	305.78
160-170	175.72
170-180	56.93

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

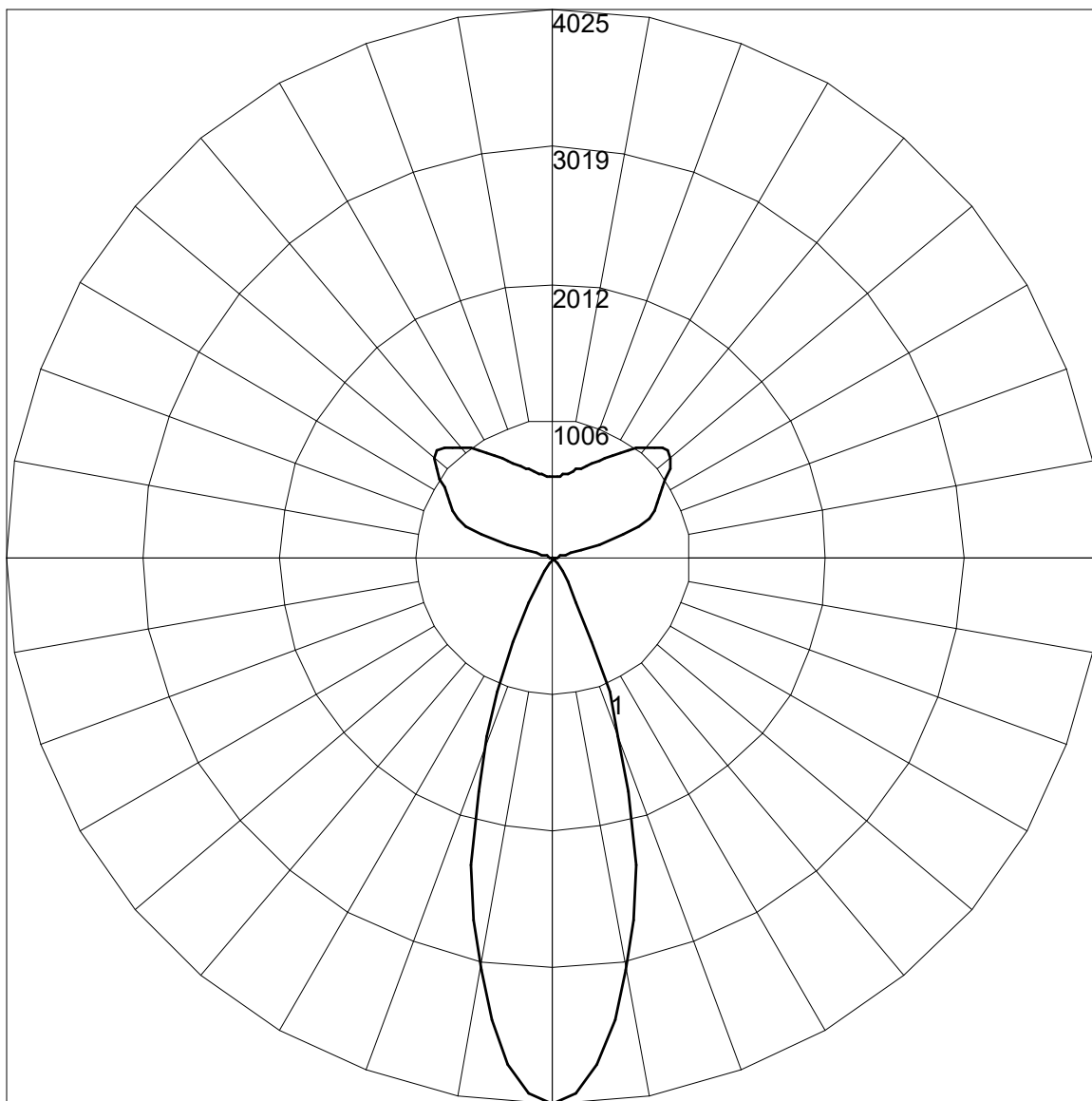
Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	102	102	102	102	91	91	91	91	72	72	72	53	53	53	37	37	37	29
1	95	91	88	85	85	82	80	77	65	63	62	49	49	48	35	35	34	28
2	88	82	77	73	79	74	70	67	60	57	55	46	44	43	33	33	32	27
3	82	74	68	64	74	68	63	59	55	52	49	43	41	39	32	31	30	26
4	76	68	61	57	69	62	56	52	51	47	44	40	38	36	31	29	29	25
5	71	62	56	51	65	57	51	47	47	43	40	38	36	34	29	28	27	24
6	67	57	51	46	61	53	47	43	44	40	37	36	33	31	28	27	26	23
7	63	53	46	42	57	49	43	39	41	37	34	34	31	30	27	26	25	22
8	59	49	43	39	54	46	40	36	39	35	32	32	30	28	26	25	24	21
9	56	46	40	36	51	43	37	34	36	33	30	31	28	26	25	24	23	21
10	53	43	37	33	49	40	35	32	35	31	28	29	27	25	24	23	22	20

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POLAR GRAPH



Maximum Candela = 4024.747 Located At Horizontal Angle = 0, Vertical Angle = 0

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