

# 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-6-R-4FT-S-8-35-ITL86098.001.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL86098.001 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]11/30/15  
[ISSUE DATE]04/28/16  
[MANUFACTURER]FINELITE, INC.  
[LUMCAT]FINELITE HP-6-R-4ft-S-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 14.7 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 16.2 WATTS  
[ABSOLUTE LUMENS]1543  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL86098. 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)

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1543
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	14.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.43 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3114	3103	3082
55	2965	2952	2938
65	2801	2777	2765
75	2587	2567	2567
85	2366	2337	2366

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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>
<b>0.0</b>	556.725	556.725	556.725	556.725	556.725
<b>2.5</b>	555.906	555.906	555.906	556.316	556.316
<b>5.0</b>	553.860	553.860	553.860	554.269	554.269
<b>7.5</b>	550.585	550.585	550.585	550.585	550.585
<b>10.0</b>	546.082	544.854	545.263	546.082	544.854
<b>12.5</b>	540.351	537.895	539.532	540.351	538.713
<b>15.0</b>	532.573	529.298	531.754	532.164	529.708
<b>17.5</b>	524.386	519.883	523.158	522.749	520.292
<b>20.0</b>	514.561	509.649	512.515	511.696	509.240
<b>22.5</b>	501.871	496.959	500.234	499.825	498.187
<b>25.0</b>	488.363	484.269	487.953	486.725	485.088
<b>27.5</b>	474.444	470.351	474.035	472.398	470.760
<b>30.0</b>	459.708	456.023	458.480	457.251	456.023
<b>32.5</b>	443.743	440.468	442.924	441.287	440.468
<b>35.0</b>	426.959	423.275	425.322	424.094	423.275
<b>37.5</b>	409.357	406.491	408.538	407.310	406.491
<b>40.0</b>	390.936	388.480	390.526	388.889	388.480
<b>42.5</b>	372.924	370.058	372.105	370.468	370.058
<b>45.0</b>	354.094	351.228	352.865	351.637	350.409
<b>47.5</b>	334.035	331.579	333.626	331.579	331.170
<b>50.0</b>	313.977	311.520	312.749	311.520	311.111
<b>52.5</b>	293.918	291.462	292.690	291.053	291.462
<b>55.0</b>	273.450	270.994	272.222	270.585	270.994
<b>57.5</b>	252.982	250.526	251.345	250.117	250.526
<b>60.0</b>	232.105	229.649	230.468	229.649	229.649
<b>62.5</b>	210.819	209.591	210.000	208.772	208.772
<b>65.0</b>	190.351	188.304	188.713	188.304	187.895
<b>67.5</b>	169.064	167.427	167.836	167.427	167.018
<b>70.0</b>	148.596	146.959	147.368	146.959	146.550
<b>72.5</b>	128.129	126.491	126.901	126.491	126.491
<b>75.0</b>	107.661	106.842	106.842	106.433	106.842
<b>77.5</b>	88.421	87.602	88.012	87.602	88.421
<b>80.0</b>	69.591	68.772	69.181	69.181	69.591
<b>82.5</b>	51.579	51.170	50.760	50.760	51.170
<b>85.0</b>	33.158	32.749	32.749	32.339	33.158
<b>87.5</b>	15.146	15.146	15.146	14.737	15.146
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	202.42	N.A.	13.10
0-30	426.46	N.A.	27.60
0-40	692.16	N.A.	44.90
0-60	1206.36	N.A.	78.20
0-80	1506.43	N.A.	97.60
0-90	1542.72	N.A.	100.00
10-90	1490.11	N.A.	96.60
20-40	489.74	N.A.	31.70
20-50	761.16	N.A.	49.30
40-70	700.91	N.A.	45.40
60-80	300.07	N.A.	19.50
70-80	113.36	N.A.	7.30
80-90	36.29	N.A.	2.40
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	1542.72	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	52.61
10-20	149.81
20-30	224.04
30-40	265.70
40-50	271.42
50-60	242.77
60-70	186.71
70-80	113.36
80-90	36.29
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

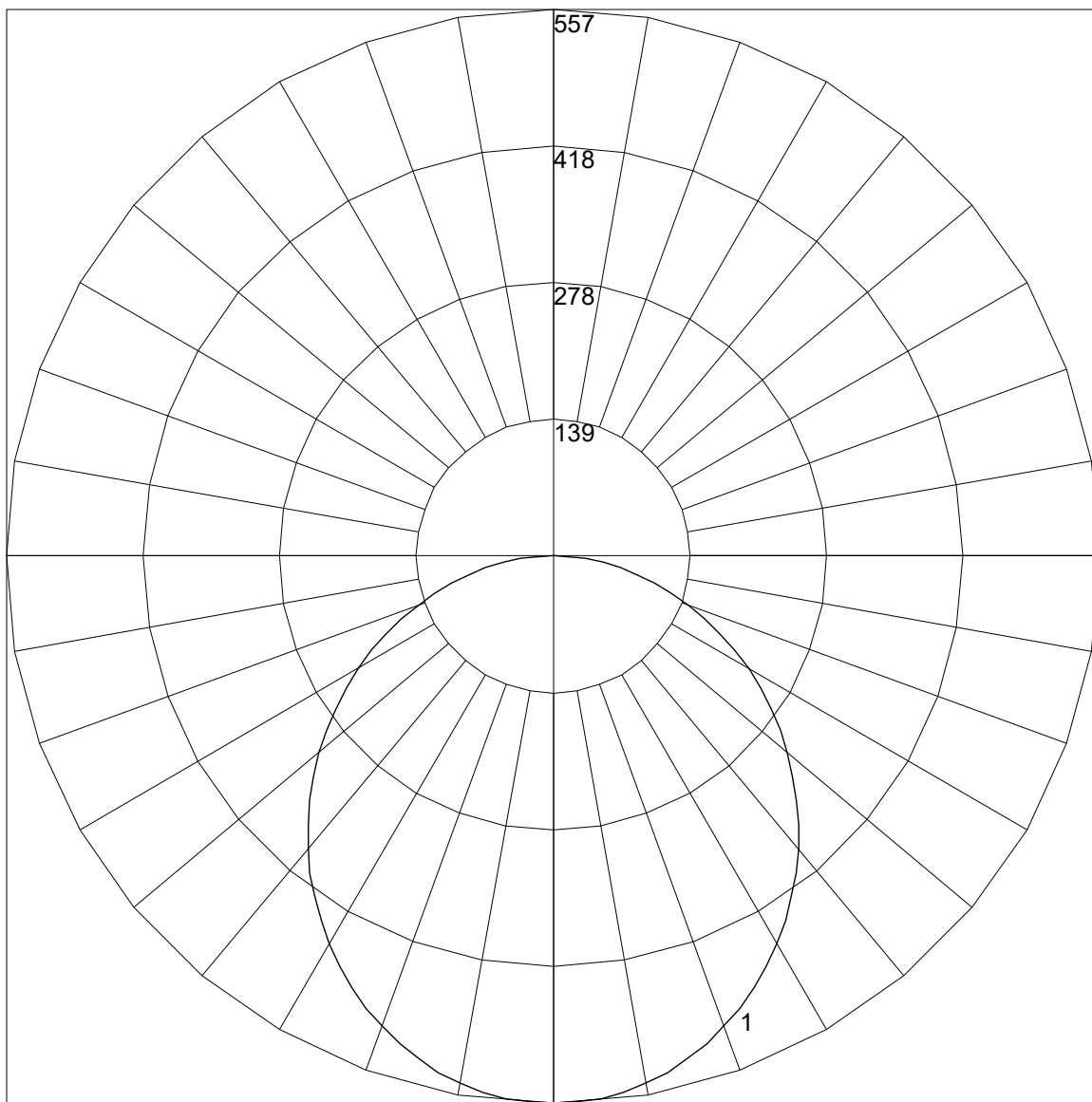
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 556.725 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)