

# 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-4-D-RG-4FT-S-835-RG-WCB-ITL90672.001.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90672.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/30/18

[ISSUEDATE]02/12/19

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-D-RG-4ft-S-835-RG-WCB

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 14.4 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 15.9 WATTS

[\_ABSOLUTE]LUMENS]1228

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90672. 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	1228
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	85
Total Luminaire Watts	14.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	0.94
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.10
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.30 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2529	3255	4470
55	2108	2413	3879
65	1810	1999	3068
75	1562	1660	2111
85	1254	1254	1421

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	669.446	669.446	669.446	669.446	669.446
2.5	665.354	665.763	666.991	668.628	668.628
5.0	653.487	655.124	659.216	664.127	665.763
7.5	636.301	639.575	647.759	657.170	660.853
10.0	615.432	619.524	632.209	647.759	653.487
12.5	591.290	595.791	613.795	633.846	642.439
15.0	566.738	571.648	592.926	615.841	627.299
17.5	540.140	544.641	568.784	596.609	610.931
20.0	511.087	516.407	543.004	574.512	592.108
22.5	480.806	487.763	515.997	551.597	572.466
25.0	450.935	458.710	488.172	526.227	551.188
27.5	420.245	428.838	459.528	500.448	528.273
30.0	389.965	397.330	430.884	474.259	505.767
32.5	358.047	367.868	401.422	447.661	482.443
35.0	325.721	336.360	372.778	420.654	456.664
37.5	294.622	305.670	343.316	393.238	431.703
40.0	263.523	275.390	315.491	367.050	406.333
42.5	231.196	245.518	286.847	340.452	380.962
45.0	200.916	215.238	258.612	313.036	355.183
47.5	180.047	187.412	232.015	286.847	328.585
50.0	164.497	167.771	205.417	261.068	301.987
52.5	150.584	152.630	179.228	234.879	275.799
55.0	135.853	138.718	155.495	210.327	250.019
57.5	123.168	125.214	137.081	185.775	223.422
60.0	110.483	111.711	122.350	162.451	198.051
62.5	98.207	99.026	108.028	139.945	171.863
65.0	85.931	87.568	94.934	118.667	145.674
67.5	75.292	76.520	81.839	98.207	121.531
70.0	65.062	65.472	69.563	81.430	97.798
72.5	55.242	55.651	58.515	66.699	73.655
75.0	45.421	45.830	48.285	53.605	61.380
77.5	36.419	36.828	38.055	42.147	48.694
80.0	28.235	28.235	28.644	31.508	35.600
82.5	20.051	19.641	20.460	21.687	23.733
85.0	12.276	12.276	12.276	12.685	13.913
87.5	4.910	4.910	4.501	4.910	4.910
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HP-4-D-RG-4FT-S-835-RG-WCB-ITL90672.001.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	228.88	N.A.	18.60
0-30	455.57	N.A.	37.10
0-40	693.08	N.A.	56.40
0-60	1056.1	N.A.	86.00
0-80	1213.55	N.A.	98.80
0-90	1228.06	N.A.	100.00
10-90	1165.93	N.A.	94.90
20-40	464.20	N.A.	37.80
20-50	670.45	N.A.	54.60
40-70	466.74	N.A.	38.00
60-80	157.45	N.A.	12.80
70-80	53.73	N.A.	4.40
80-90	14.51	N.A.	1.20
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	1228.06	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	62.13
10-20	166.75
20-30	226.69
30-40	237.51
40-50	206.25
50-60	156.77
60-70	103.72
70-80	53.73
80-90	14.51
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

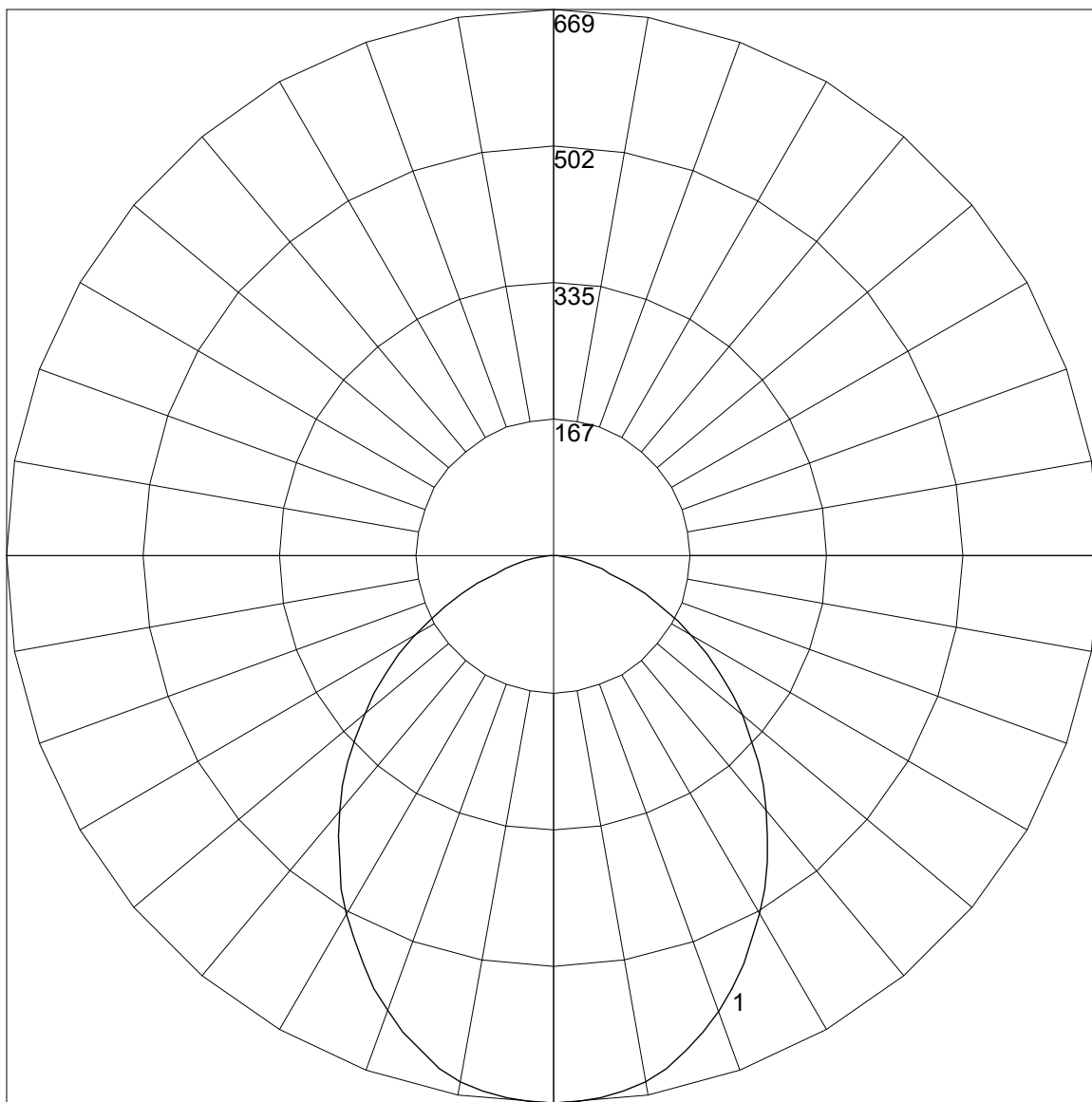
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	106	102	99	108	104	100	97	100	97	94	96	93	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	94	84	77	71	91	83	76	70	80	74	69	77	72	68	74	70	67	65
4	86	76	68	62	84	74	67	61	72	65	60	70	64	60	68	63	59	57
5	80	68	60	54	78	67	60	54	65	59	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	56	51	47	45
7	70	57	49	43	68	56	49	43	55	48	43	53	47	43	52	46	42	40
8	65	52	45	39	64	52	44	39	51	44	39	49	43	39	48	43	38	37
9	61	49	41	36	60	48	41	36	47	40	35	46	40	35	45	39	35	33
10	58	45	38	33	56	45	37	33	44	37	33	43	37	32	42	36	32	31

POLAR GRAPH



Maximum Candela = 669.446 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)