

# 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-B-835-RG-WCB-ITL90672.002.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90672.002 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-B-835-RG-WCB

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 18.4 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 19.6 WATTS

[\_ABSOLUTE]LUMENS]1544

[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	1544
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	18.4
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	3179	4093	5621
55	2650	3034	4878
65	2275	2514	3857
75	1964	2088	2654
85	1576	1576	1786

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	841.714	841.714	841.714	841.714	841.714
2.5	836.569	837.084	838.627	840.685	840.685
5.0	821.649	823.707	828.852	835.026	837.084
7.5	800.040	804.156	814.446	826.279	830.910
10.0	773.801	778.946	794.895	814.446	821.649
12.5	743.446	749.105	771.743	796.953	807.757
15.0	712.576	718.750	745.504	774.315	788.721
17.5	679.134	684.793	715.148	750.134	768.141
20.0	642.604	649.293	682.735	722.351	744.475
22.5	604.532	613.278	648.778	693.540	719.779
25.0	566.974	576.749	613.793	661.641	693.025
27.5	528.387	539.191	577.778	629.228	664.213
30.0	490.314	499.575	541.763	596.300	635.916
32.5	450.183	462.531	504.720	562.858	606.590
35.0	409.538	422.915	468.705	528.901	574.177
37.5	370.437	384.328	431.661	494.430	542.792
40.0	331.335	346.255	396.676	461.502	510.894
42.5	290.690	308.697	360.661	428.060	478.995
45.0	252.617	270.624	325.161	393.589	446.582
47.5	226.378	235.639	291.719	360.661	413.140
50.0	206.827	210.943	258.277	328.248	379.697
52.5	189.334	191.907	225.349	295.320	346.770
55.0	170.812	174.414	195.508	264.451	314.357
57.5	154.863	157.436	172.356	233.581	280.914
60.0	138.914	140.457	153.834	204.255	249.016
62.5	123.479	124.508	135.827	175.957	216.088
65.0	108.044	110.102	119.363	149.204	183.160
67.5	94.667	96.211	102.899	123.479	152.805
70.0	81.805	82.319	87.464	102.385	122.964
72.5	69.457	69.971	73.573	83.863	92.609
75.0	57.109	57.623	60.710	67.399	77.174
77.5	45.790	46.305	47.848	52.993	61.225
80.0	35.500	35.500	36.015	39.616	44.761
82.5	25.210	24.696	25.725	27.268	29.841
85.0	15.435	15.435	15.435	15.949	17.493
87.5	6.174	6.174	5.659	6.174	6.174
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-D-RG-4FT-B-835-RG-WCB-ITL90672.002.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	287.78	N.A.	18.60
0-30	572.80	N.A.	37.10
0-40	871.43	N.A.	56.40
0-60	1327.87	N.A.	86.00
0-80	1525.83	N.A.	98.80
0-90	1544.07	N.A.	100.00
10-90	1465.95	N.A.	94.90
20-40	583.66	N.A.	37.80
20-50	842.98	N.A.	54.60
40-70	586.84	N.A.	38.00
60-80	197.96	N.A.	12.80
70-80	67.55	N.A.	4.40
80-90	18.24	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	1544.07	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	78.12
10-20	209.66
20-30	285.03
30-40	298.63
40-50	259.32
50-60	197.11
60-70	130.41
70-80	67.55
80-90	18.24
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

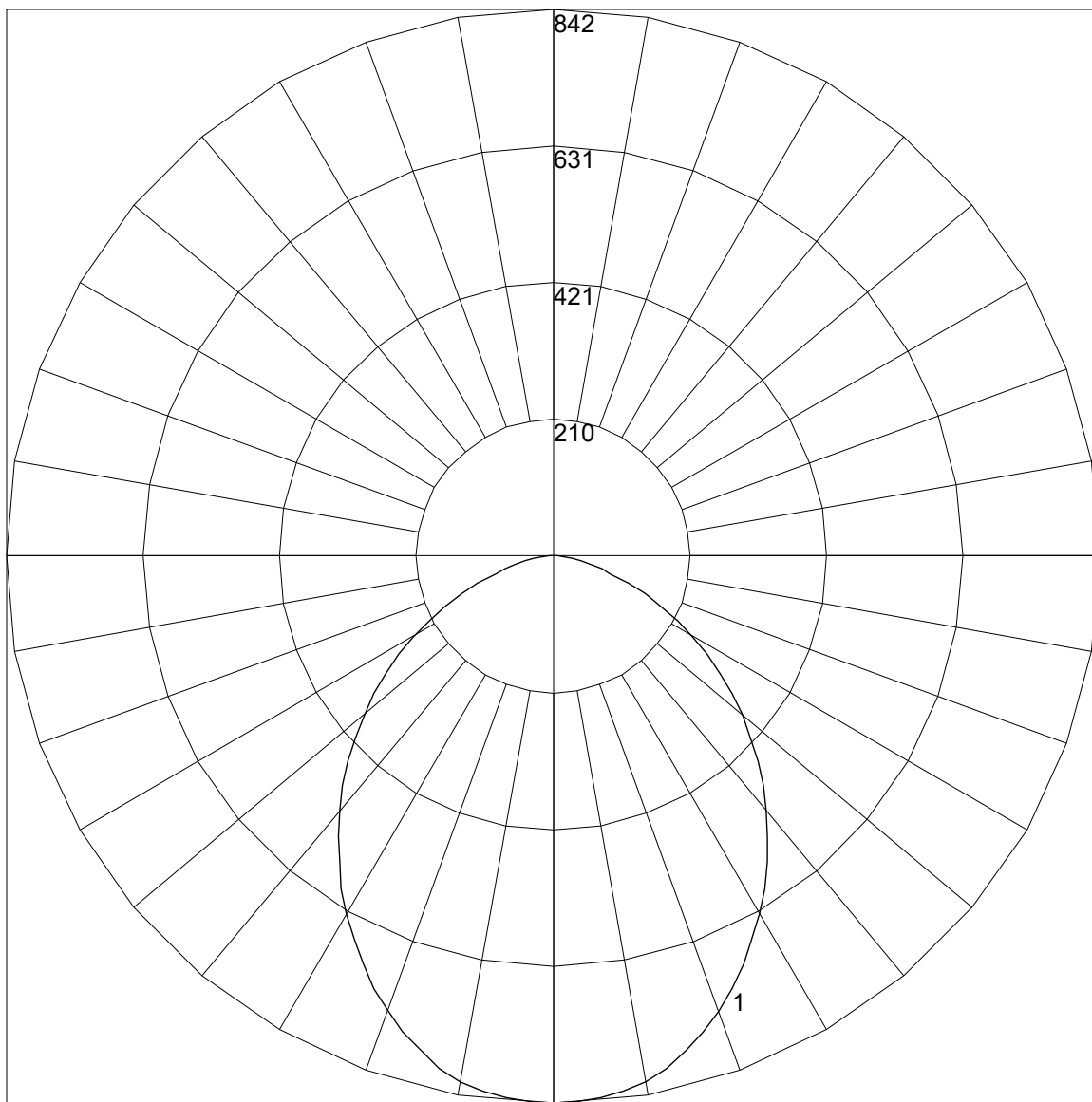
PHOTOMETRIC FILENAME : HP-4-D-RG-4FT-B-835-RG-WCB-ITL90672.002.IES

## 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	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 = 841.714 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)