

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-4FT-H-837-XXIC-ITL85124.203.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85124.203 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/05/15
[ISSUEDATE]05/12/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-4-D-4ft-H-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 27.0 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 27.2 WATTS
[OTHER]see www.finelite.com for source file ITL85124. 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
[_ABSOLUTE]LUMENS]2680

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2680
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	27
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7316	7222	7077
55	6793	6688	6541
65	6184	6142	6042
75	5491	5514	5491
85	4629	4768	4768

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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	1038.698	1038.698	1038.698	1038.698	1038.698
2.5	1037.251	1037.251	1037.251	1036.528	1037.251
5.0	1032.911	1032.911	1032.188	1032.188	1032.188
7.5	1024.955	1024.231	1024.231	1024.231	1023.508
10.0	1015.551	1012.658	1013.382	1013.382	1010.488
12.5	1001.808	997.468	999.638	999.638	995.298
15.0	985.895	978.662	982.278	981.555	976.492
17.5	967.089	958.409	962.749	960.579	956.239
20.0	945.389	935.262	940.325	936.709	931.646
22.5	920.072	909.946	914.286	909.222	904.882
25.0	894.033	883.183	886.799	881.736	876.673
27.5	864.376	854.250	857.143	850.633	846.293
30.0	833.996	823.870	824.593	818.806	813.743
32.5	800.723	790.597	791.320	784.810	779.747
35.0	766.727	757.324	758.047	750.090	745.027
37.5	731.284	722.604	721.881	713.924	711.031
40.0	695.118	687.161	686.438	678.481	674.864
42.5	658.228	650.995	650.271	642.315	637.975
45.0	621.338	614.105	613.382	604.702	601.085
47.5	583.725	577.215	575.769	567.812	564.919
50.0	545.389	539.602	537.432	530.199	527.306
52.5	507.052	501.266	499.819	492.586	488.246
55.0	467.993	462.206	460.759	454.250	450.633
57.5	429.656	424.593	423.146	417.360	414.467
60.0	390.597	386.257	384.810	379.747	377.577
62.5	352.260	350.814	347.197	343.580	340.687
65.0	313.924	312.477	311.754	307.414	306.691
67.5	277.034	276.311	274.864	271.971	271.971
70.0	240.868	240.145	239.421	236.528	237.251
72.5	204.702	204.702	204.702	203.255	203.978
75.0	170.705	170.705	171.429	169.982	170.705
77.5	137.432	137.432	138.879	138.156	139.602
80.0	106.329	106.329	107.776	107.776	108.499
82.5	76.673	78.119	78.119	78.843	78.843
85.0	48.463	49.186	49.910	50.633	49.910
87.5	21.700	22.423	23.146	23.146	23.146
90.0	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	374.35	N.A.	14.00
0-30	781.32	N.A.	29.20
0-40	1253.6	N.A.	46.80
0-60	2136.02	N.A.	79.70
0-80	2624.59	N.A.	97.90
0-90	2680.2	N.A.	100.00
10-90	2582.27	N.A.	96.30
20-40	879.24	N.A.	32.80
20-50	1350.6	N.A.	50.40
40-70	1190.00	N.A.	44.40
60-80	488.57	N.A.	18.20
70-80	180.99	N.A.	6.80
80-90	55.61	N.A.	2.10
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	2680.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	97.93
10-20	276.42
20-30	406.96
30-40	472.28
40-50	471.35
50-60	411.07
60-70	307.58
70-80	180.99
80-90	55.61
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

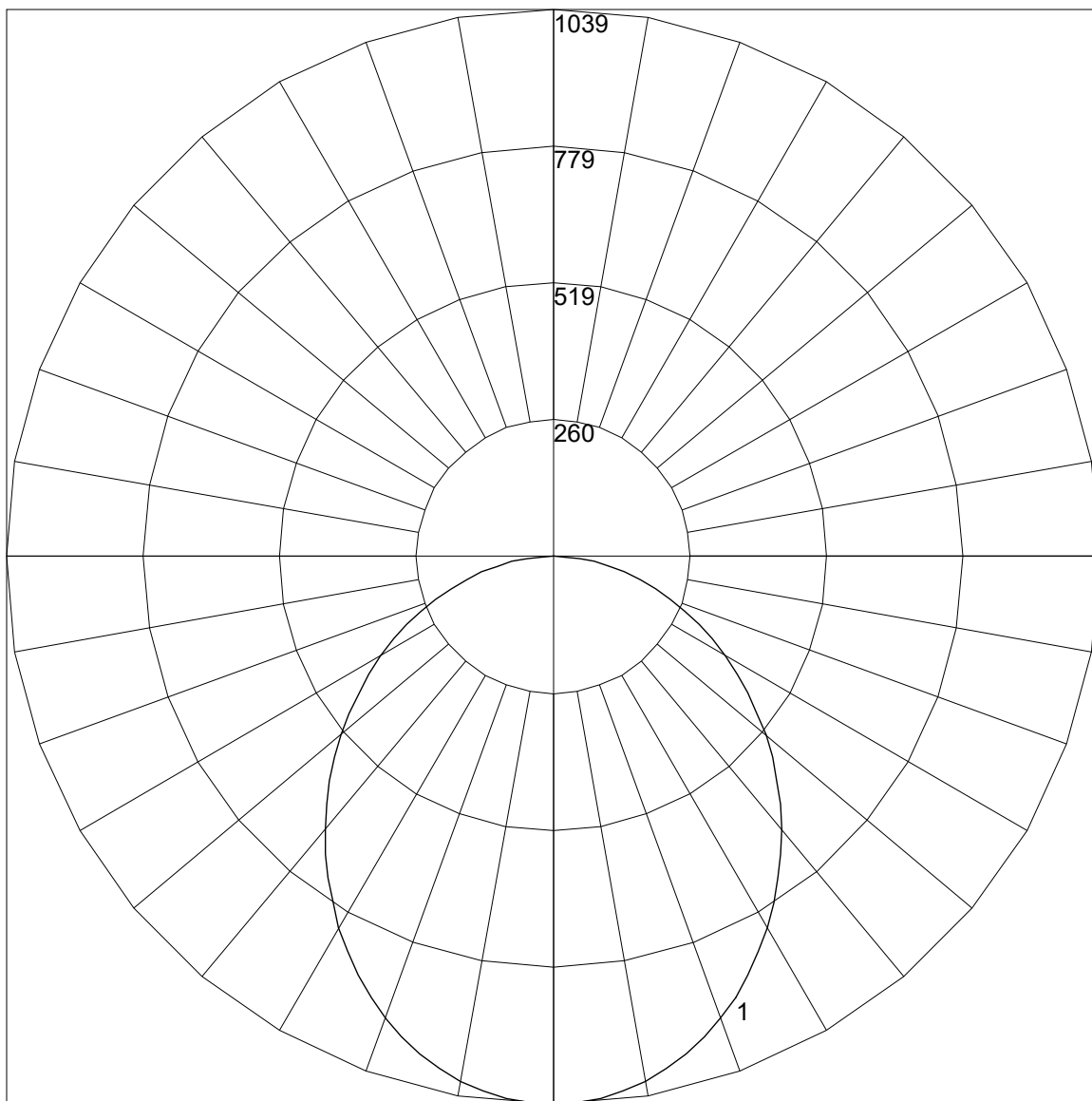
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	78	85	80	76	82	78	74	79	76	72	70
3	91	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1038.698 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)