

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 : HPR-LED-F-1X1-DCO-H-837-XXIC-ITL85139.202.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85139.202 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/16/15
[ISSUEDATE]05/17/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-F-1X1-DCO-H-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 21.5 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 23.4 WATTS
[ABSOLUTE]LUMENS]1863
[OTHER]see www.finelite.com for source file ITL85139. 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	1862
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	21.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.92 ft
Luminous Width (90-270)	0.92 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7820	7820	7820
55	7035	6948	6883
65	6189	5982	5894
75	5245	4908	4668
85	4001	2858	2715

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	770.741	770.741	770.741	770.741	770.741
2.5	769.768	769.768	769.768	769.768	769.768
5.0	765.875	765.875	766.848	765.875	766.848
7.5	760.036	760.036	760.036	760.036	761.009
10.0	750.305	751.278	752.251	752.251	753.224
12.5	739.600	740.573	740.573	741.546	742.519
15.0	725.976	726.949	726.949	728.895	728.895
17.5	710.405	711.378	711.378	713.325	714.298
20.0	691.915	692.888	693.862	695.808	697.754
22.5	672.452	673.425	673.425	676.345	678.291
25.0	651.043	651.043	652.016	653.962	655.908
27.5	627.687	627.687	628.660	630.606	632.553
30.0	602.385	603.358	603.358	605.304	607.251
32.5	576.109	576.109	577.083	579.029	580.975
35.0	549.834	548.861	549.834	550.807	553.727
37.5	520.639	519.666	521.613	522.586	524.532
40.0	491.445	490.472	491.445	492.418	494.364
42.5	462.250	461.277	462.250	462.250	464.196
45.0	432.082	432.082	432.082	432.082	432.082
47.5	402.887	400.941	401.914	399.968	400.941
50.0	373.693	370.773	371.746	369.800	369.800
52.5	343.525	341.578	341.578	338.659	338.659
55.0	315.303	313.357	311.411	308.491	308.491
57.5	287.082	285.135	281.243	278.323	278.323
60.0	258.860	256.914	253.021	249.128	250.102
62.5	230.638	229.665	224.799	220.907	221.880
65.0	204.363	202.417	197.551	194.632	194.632
67.5	178.088	177.115	171.276	168.356	168.356
70.0	152.786	151.813	145.974	143.054	143.054
72.5	128.457	127.484	122.618	118.725	117.752
75.0	106.074	104.128	99.262	95.369	94.396
77.5	83.692	82.718	76.879	72.014	71.041
80.0	64.228	61.309	55.470	50.604	49.631
82.5	44.765	42.819	36.007	33.087	31.141
85.0	27.248	24.329	19.463	19.463	18.490
87.5	10.705	9.732	8.758	8.758	7.785
90.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	277.63	N.A.	14.90
0-30	577.94	N.A.	31.00
0-40	921.70	N.A.	49.50
0-60	1533.25	N.A.	82.30
0-80	1836.15	N.A.	98.60
0-90	1862.3	N.A.	100.00
10-90	1789.62	N.A.	96.10
20-40	644.07	N.A.	34.60
20-50	977.15	N.A.	52.50
40-70	808.58	N.A.	43.40
60-80	302.90	N.A.	16.30
70-80	105.86	N.A.	5.70
80-90	26.15	N.A.	1.40
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	1862.3	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	72.68
10-20	204.95
20-30	300.31
30-40	343.76
40-50	333.07
50-60	278.47
60-70	197.04
70-80	105.86
80-90	26.15
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

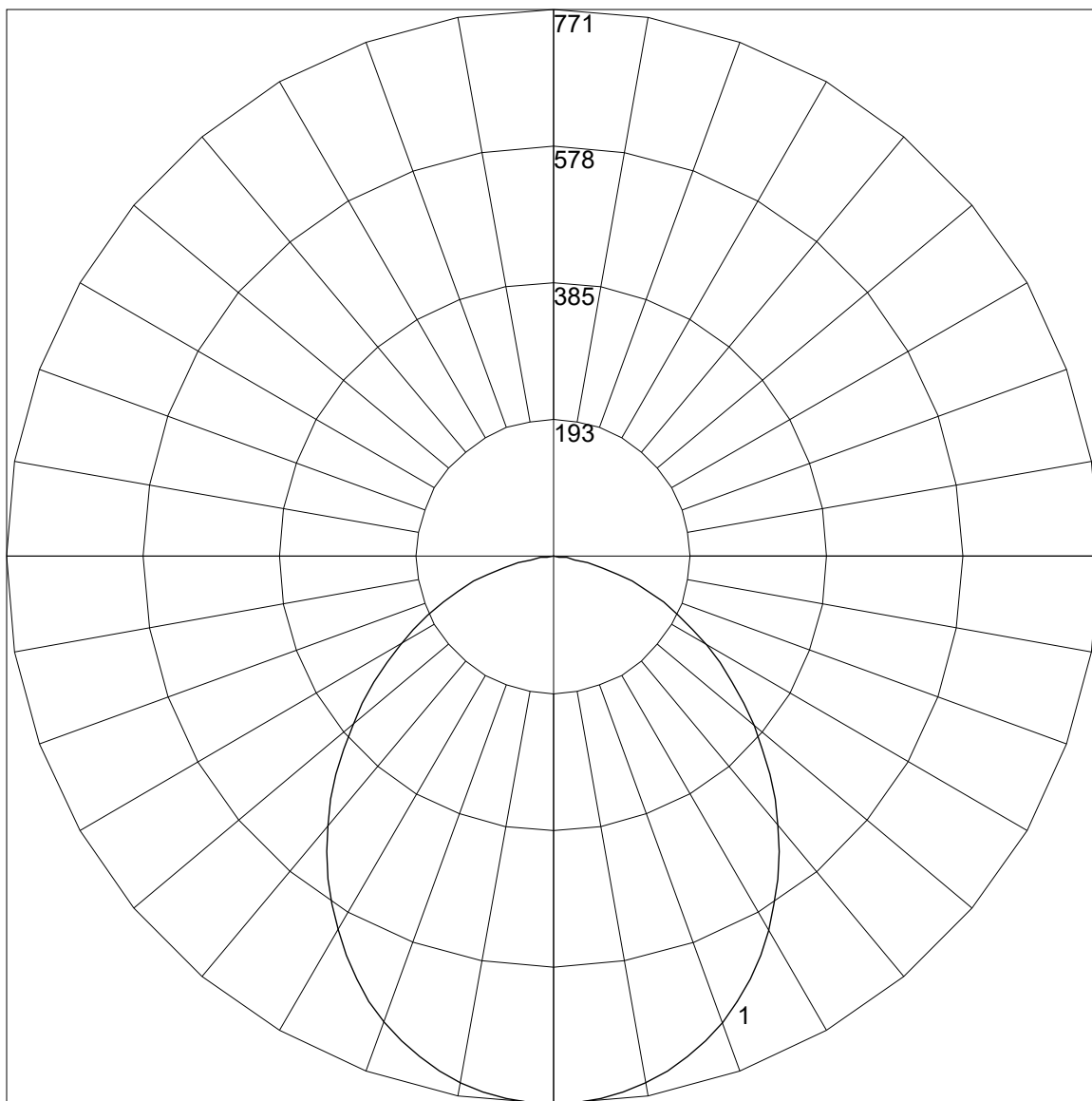
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	73	64	58	82	71	63	57	69	62	56	66	61	56	64	59	55	53
5	78	65	56	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	48	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

POLAR GRAPH



Maximum Candela = 770.741 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)