

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-1X2-DCO-H-837-XXIC-ITL85140.202.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85140.202 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/17/15
[ISSUEDATE]05/17/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-F-1X2-DCO-H-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 21.5 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 23.4 WATTS
[ABSOLUTE]LUMENS]1891
[OTHER]see www.finelite.com for source file ITL85140. 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	1891
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	21.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.83 ft
Luminous Width (90-270)	0.81 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4643	4573	4463
55	4166	4043	3832
65	3691	3440	3154
75	3096	2712	2356
85	2359	1465	1383

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	771.714	771.714	771.714	771.714	771.714
2.5	770.741	770.741	770.741	770.741	770.741
5.0	767.822	767.822	767.822	767.822	768.795
7.5	761.983	762.956	762.956	763.929	764.902
10.0	755.171	756.144	756.144	757.117	759.063
12.5	746.412	746.412	747.385	749.332	750.305
15.0	734.734	734.734	736.681	737.654	739.600
17.5	721.110	721.110	723.056	725.003	725.976
20.0	703.593	705.539	706.513	709.432	710.405
22.5	685.103	687.049	688.023	689.969	690.942
25.0	665.640	666.613	668.559	669.533	669.533
27.5	643.257	644.231	645.204	646.177	646.177
30.0	618.928	619.902	620.875	620.875	619.902
32.5	592.653	594.599	594.599	593.626	593.626
35.0	566.378	567.351	567.351	564.432	564.432
37.5	538.156	539.129	538.156	533.291	533.291
40.0	509.935	509.935	507.015	502.149	499.230
42.5	480.740	479.767	475.874	470.035	466.143
45.0	450.572	449.599	443.760	436.948	433.055
47.5	420.404	417.485	411.646	403.861	399.968
50.0	388.290	386.344	380.505	371.746	366.881
52.5	358.122	356.176	348.391	338.659	333.793
55.0	327.954	326.008	318.223	307.518	301.679
57.5	299.733	295.840	287.082	275.404	270.538
60.0	270.538	266.645	256.914	245.236	239.397
62.5	242.316	237.451	227.719	216.041	210.202
65.0	214.095	209.229	199.497	187.819	182.954
67.5	185.873	181.981	171.276	160.571	155.705
70.0	158.625	155.705	145.001	135.269	131.376
72.5	133.323	130.403	119.698	109.967	107.047
75.0	109.967	106.074	96.343	87.584	83.692
77.5	86.611	83.692	73.960	66.175	63.255
80.0	65.202	62.282	53.524	45.738	43.792
82.5	45.738	41.846	34.061	28.222	28.222
85.0	28.222	24.329	17.517	16.544	16.544
87.5	12.651	8.758	7.785	6.812	6.812
90.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPR-LED-F-1X2-DCO-H-837-XXIC-ITL85140.202.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	280.55	N.A.	14.80
0-30	587.77	N.A.	31.10
0-40	941.27	N.A.	49.80
0-60	1566.01	N.A.	82.80
0-80	1866.27	N.A.	98.70
0-90	1890.95	N.A.	100.00
10-90	1818.00	N.A.	96.10
20-40	660.72	N.A.	34.90
20-50	1002.28	N.A.	53.00
40-70	821.92	N.A.	43.50
60-80	300.25	N.A.	15.90
70-80	103.08	N.A.	5.50
80-90	24.68	N.A.	1.30
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	1890.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

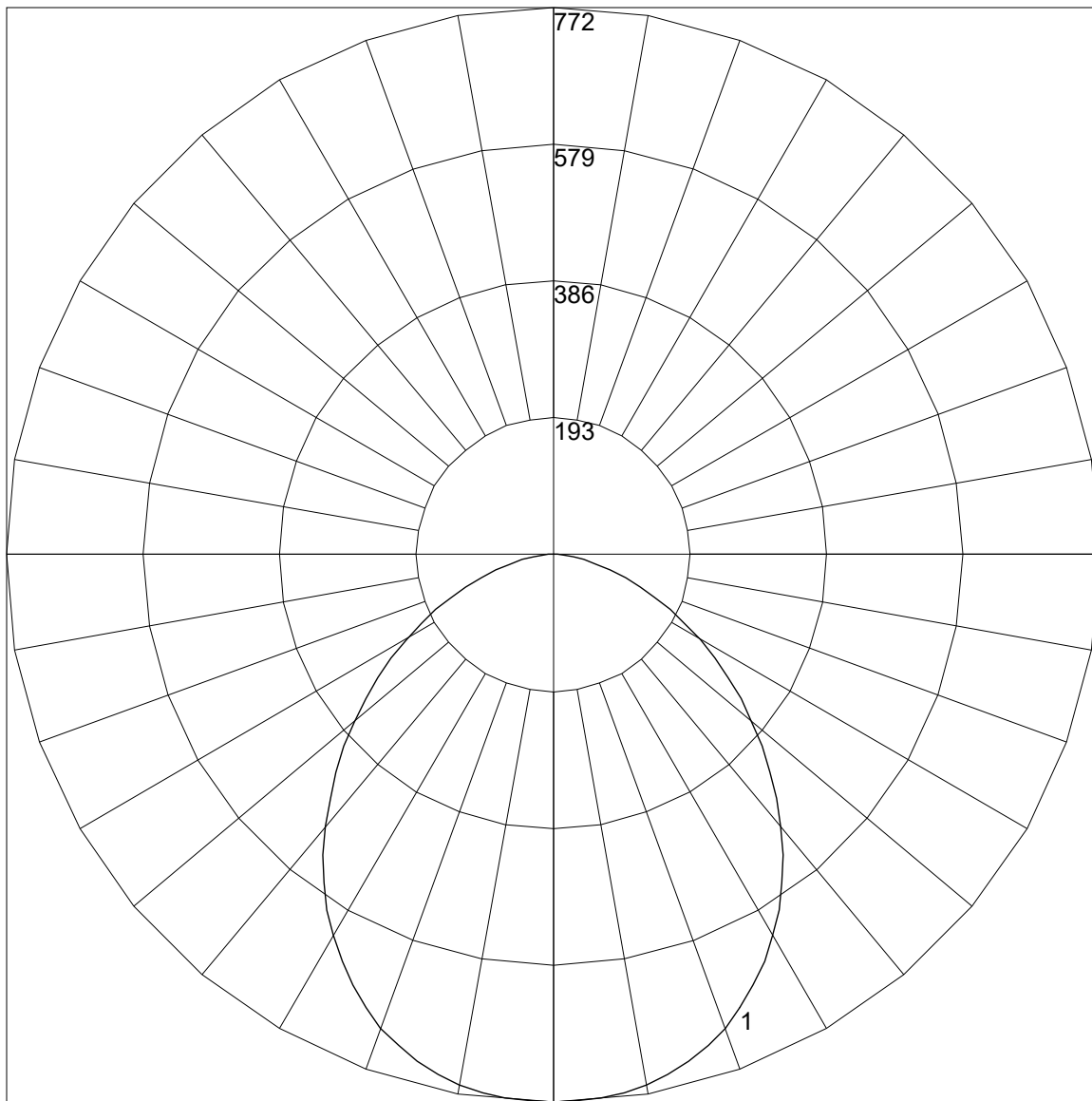
Zone	Lumens
0-10	72.95
10-20	207.60
20-30	307.22
30-40	353.50
40-50	341.56
50-60	283.19
60-70	197.17
70-80	103.08
80-90	24.68
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	99	96	93	95	92	90	91	89	87	85
2	100	92	86	80	98	90	85	79	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	65	59	55	53
5	78	65	57	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	44	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	39	49	43	38	36
8	62	49	41	35	61	48	41	35	47	40	35	46	39	35	45	39	34	33
9	58	45	37	32	57	45	37	32	43	36	32	42	36	31	41	36	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 = 771.714 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)