

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-2X2-DCO-H-837-XXIC-ITL85142.203.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85142.203 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]08/18/15
[ISSUEDATE]05/17/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-F-2X2-DCO-H-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 44.2 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 44.8 WATTS
[ABSOLUTE]LUMENS]4250
[OTHER]see www.finelite.com for source file ITL85142. 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	4250
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	44.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.30
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	1.82 ft
Luminous Width (90-270)	1.81 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4483	4541	4648
55	4028	4096	4182
65	3524	3570	3652
75	2956	2965	3048
85	2219	2096	2096

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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	1699.759	1699.759	1699.759	1699.759	1699.759
2.5	1698.439	1697.778	1697.778	1697.778	1697.778
5.0	1691.175	1691.175	1690.514	1689.854	1690.514
7.5	1679.288	1678.628	1678.628	1677.967	1678.628
10.0	1663.440	1662.119	1660.798	1660.138	1660.138
12.5	1639.667	1639.006	1638.346	1639.006	1639.667
15.0	1611.271	1610.611	1611.932	1612.592	1613.913
17.5	1578.914	1577.593	1579.574	1581.555	1583.536
20.0	1539.953	1540.613	1543.255	1547.877	1549.858
22.5	1498.350	1498.350	1502.312	1507.595	1510.897
25.0	1452.125	1452.125	1457.408	1464.012	1468.634
27.5	1401.278	1401.278	1408.542	1417.787	1421.749
30.0	1345.808	1347.129	1355.053	1366.939	1370.901
32.5	1289.017	1290.998	1298.922	1312.790	1316.752
35.0	1228.925	1230.245	1239.490	1254.679	1259.301
37.5	1166.191	1168.172	1178.077	1193.926	1199.209
40.0	1101.476	1103.457	1116.004	1131.192	1136.475
42.5	1041.383	1038.742	1052.609	1067.137	1075.061
45.0	974.027	972.706	986.574	1001.762	1009.686
47.5	906.670	906.670	920.538	935.066	942.330
50.0	839.974	839.974	853.842	867.709	873.652
52.5	774.599	774.599	787.806	799.692	804.975
55.0	709.884	709.224	721.770	732.336	736.959
57.5	646.490	645.169	657.055	665.640	670.262
60.0	581.114	581.114	590.359	600.265	600.925
62.5	517.060	519.701	525.644	532.908	536.870
65.0	457.627	459.609	463.571	470.174	474.136
67.5	399.516	399.516	404.139	410.082	413.384
70.0	342.725	342.725	346.027	351.310	354.612
72.5	287.916	287.916	289.236	292.538	297.821
75.0	235.087	233.766	235.747	239.049	242.351
77.5	184.900	184.900	186.221	187.541	190.843
80.0	139.335	138.015	138.675	140.656	142.637
82.5	97.072	95.752	96.412	97.072	97.733
85.0	59.432	57.451	56.130	54.810	56.130
87.5	25.094	22.452	20.471	19.150	19.811
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	614.68	N.A.	14.50
0-30	1285.85	N.A.	30.30
0-40	2062.09	N.A.	48.50
0-60	3469.77	N.A.	81.60
0-80	4183.5	N.A.	98.40
0-90	4249.89	N.A.	100.00
10-90	4089.45	N.A.	96.20
20-40	1447.41	N.A.	34.10
20-50	2209.41	N.A.	52.00
40-70	1868.98	N.A.	44.00
60-80	713.72	N.A.	16.80
70-80	252.43	N.A.	5.90
80-90	66.40	N.A.	1.60
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	4249.89	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

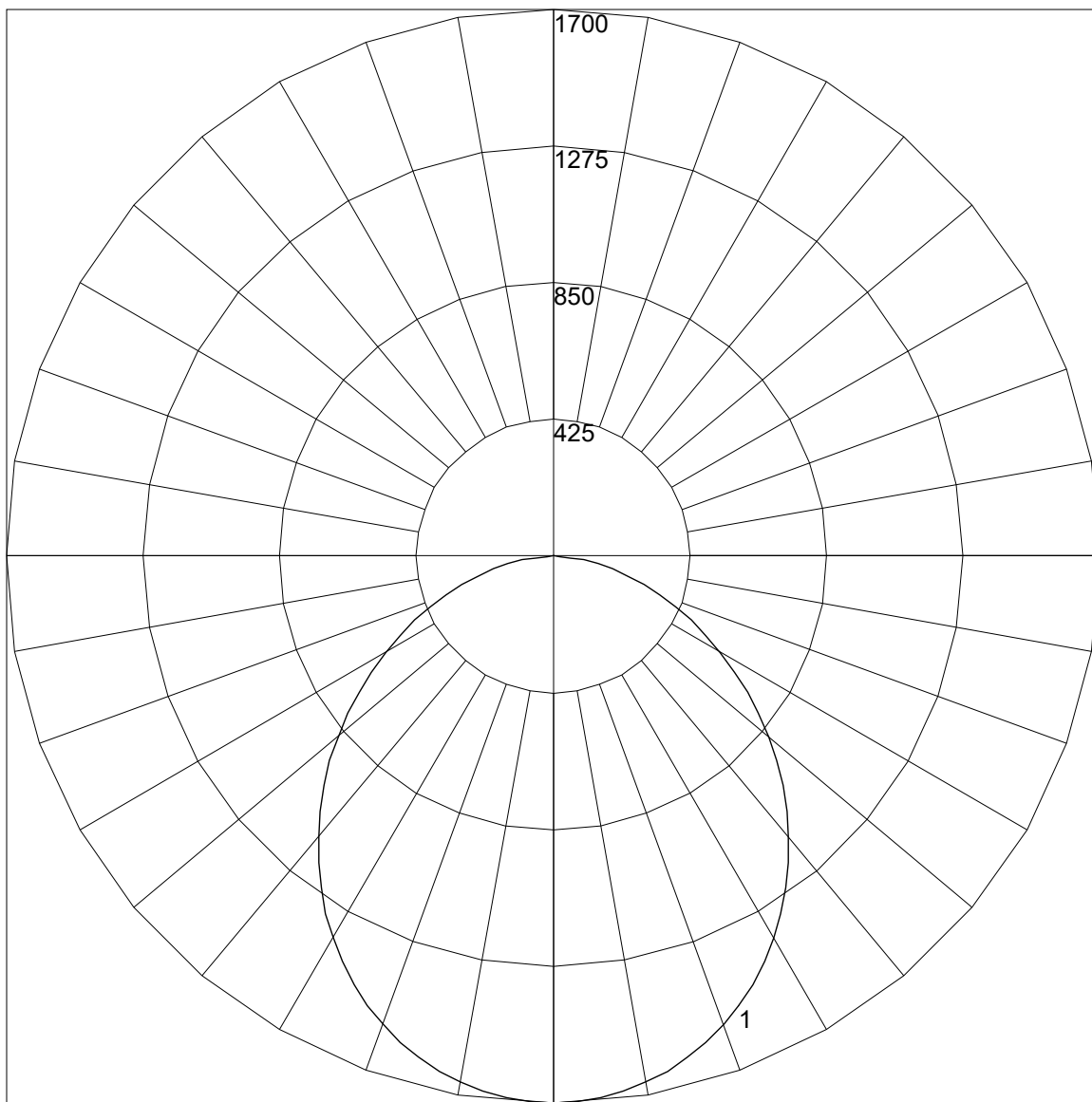
Zone	Lumens
0-10	160.45
10-20	454.23
20-30	671.17
30-40	776.25
40-50	762.00
50-60	645.68
60-70	461.30
70-80	252.43
80-90	66.40
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	45
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	45	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 1699.759 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)