

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-WAV-2X2-H-837-XXIC-ITL85836.203.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85836.203 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]10/15/15

[ISSUEDATE]05/17/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-WAV-2X2-H-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 40.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 40.7 WATTS

[ABSOLUTE]LUMENS]4341

[OTHER]see www.finelite.com for source file ITL85836. 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	4341
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	40.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34
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	4514	4608	4702
55	4212	4324	4440
65	3855	3972	4130
75	3239	3496	3745
85	2121	2663	2836

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1622.497	1622.497	1622.497	1622.497	1622.497
2.5	1621.177	1621.837	1621.837	1621.837	1621.837
5.0	1614.573	1615.234	1615.234	1615.894	1616.554
7.5	1603.347	1604.007	1604.668	1605.989	1606.649
10.0	1588.819	1589.480	1590.140	1590.140	1590.800
12.5	1569.009	1568.348	1570.329	1570.990	1572.310
15.0	1541.274	1543.915	1545.896	1549.858	1550.519
17.5	1510.897	1513.539	1517.501	1522.123	1522.784
20.0	1478.540	1479.860	1485.804	1490.426	1493.728
22.5	1440.239	1442.220	1450.805	1456.087	1460.050
25.0	1399.957	1401.278	1410.523	1417.126	1423.070
27.5	1354.392	1358.355	1368.260	1376.184	1382.127
30.0	1308.828	1310.809	1322.695	1331.280	1337.223
32.5	1257.320	1261.942	1273.829	1283.734	1289.677
35.0	1205.152	1210.435	1222.981	1232.887	1240.811
37.5	1151.663	1156.946	1170.813	1181.379	1189.303
40.0	1096.193	1101.476	1116.004	1126.569	1135.154
42.5	1038.742	1044.685	1059.213	1071.760	1079.024
45.0	980.630	986.574	1001.101	1014.309	1021.572
47.5	921.859	927.802	942.990	954.216	963.461
50.0	863.087	868.370	884.218	896.105	904.689
52.5	802.994	808.277	824.126	836.012	843.936
55.0	742.241	748.185	762.052	775.259	782.523
57.5	680.828	687.432	700.639	712.525	721.110
60.0	622.717	624.698	638.565	650.452	659.036
62.5	558.662	564.605	577.812	590.359	597.623
65.0	500.551	503.852	515.739	528.286	536.210
67.5	439.137	442.439	454.326	468.854	474.797
70.0	375.083	380.366	394.233	408.761	414.704
72.5	315.651	320.934	335.461	348.008	355.932
75.0	257.539	262.162	278.010	289.897	297.821
77.5	200.749	207.352	221.220	234.427	240.370
80.0	147.260	154.524	167.731	179.617	184.240
82.5	98.393	105.657	117.544	126.128	128.770
85.0	56.791	62.074	71.319	73.960	75.941
87.5	23.112	25.754	28.395	27.075	27.075
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	589.25	N.A.	13.60
0-30	1238.68	N.A.	28.50
0-40	2003.17	N.A.	46.10
0-60	3456.37	N.A.	79.60
0-80	4261.29	N.A.	98.20
0-90	4341.31	N.A.	100.00
10-90	4187.92	N.A.	96.50
20-40	1413.92	N.A.	32.60
20-50	2185.98	N.A.	50.40
40-70	1964.48	N.A.	45.30
60-80	804.92	N.A.	18.50
70-80	293.64	N.A.	6.80
80-90	80.02	N.A.	1.80
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	4341.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

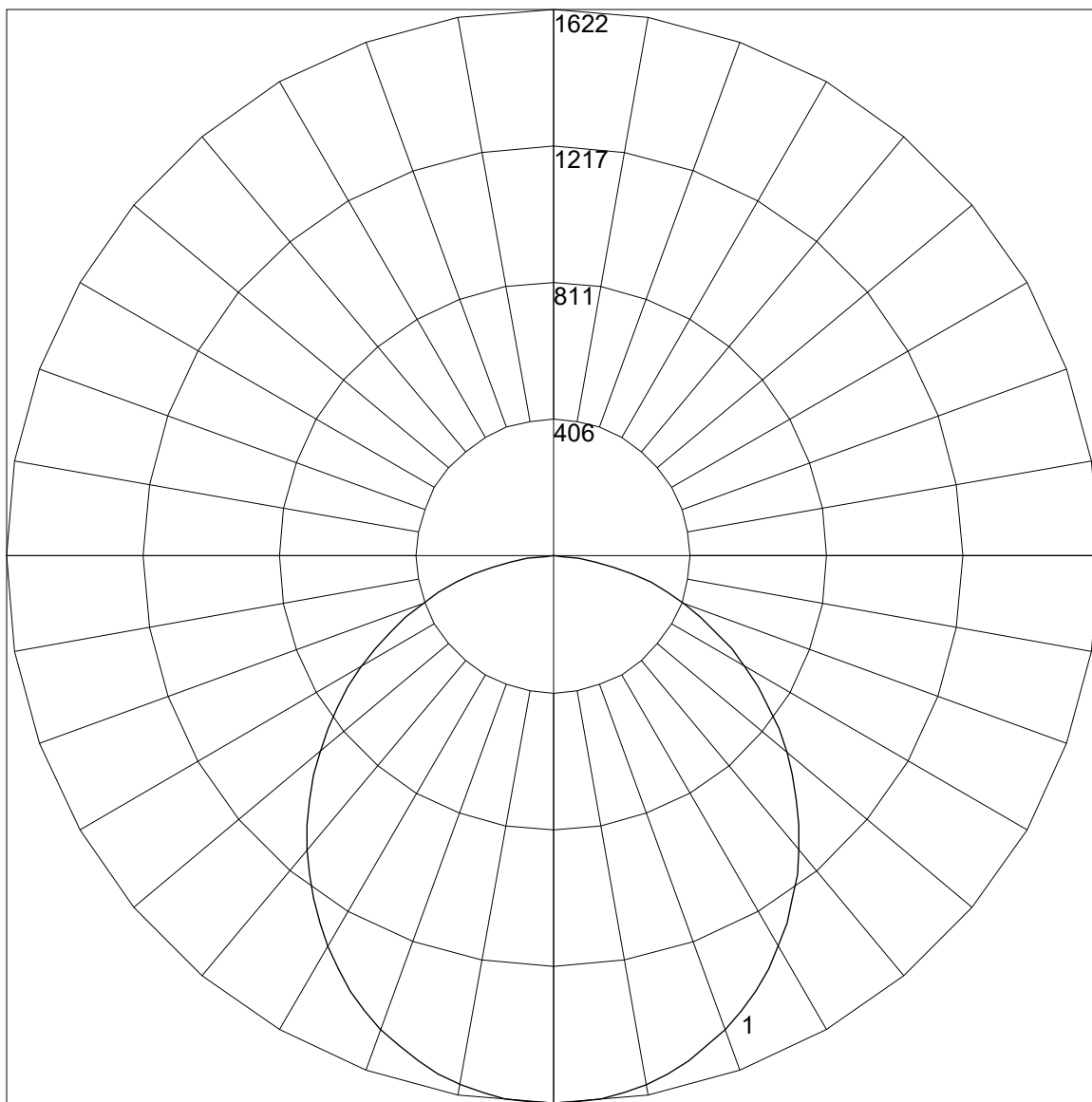
Zone	Lumens
0-10	153.39
10-20	435.86
20-30	649.43
30-40	764.49
40-50	772.06
50-60	681.14
60-70	511.28
70-80	293.64
80-90	80.02
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	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	77	85	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	44	35	30	56	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1622.497 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)