

# 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-DD-B-837-XXIC-ITL85154.202.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85154.202 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/27/15

[ISSUEDATE]05/18/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-F-2X2-DD-B-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.6 WATTS

[ABSOLUTE]LUMENS]3007

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85154. 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](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	3008
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	34.9
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.20
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	3170	3183	3207
55	2854	2871	2898
65	2526	2539	2584
75	2143	2158	2180
85	1678	1678	1678

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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	1213.828	1213.828	1213.828	1213.828	1213.828
2.5	1212.661	1212.661	1212.661	1212.661	1212.078
5.0	1207.409	1206.826	1207.409	1206.826	1207.409
7.5	1197.488	1197.488	1198.072	1198.072	1198.072
10.0	1186.401	1185.817	1185.233	1185.233	1184.066
12.5	1167.726	1167.726	1168.310	1168.310	1168.310
15.0	1146.134	1146.718	1147.301	1147.885	1148.468
17.5	1122.208	1122.791	1123.958	1123.958	1125.126
20.0	1094.196	1094.780	1096.531	1097.114	1097.698
22.5	1062.683	1063.851	1065.601	1066.768	1067.936
25.0	1028.836	1030.587	1032.338	1034.088	1034.672
27.5	991.488	993.822	996.156	997.907	999.074
30.0	953.556	954.723	957.057	959.391	961.142
32.5	914.456	913.873	915.623	919.125	920.292
35.0	871.856	871.272	873.606	877.108	878.275
37.5	825.170	826.921	829.255	832.756	834.507
40.0	781.402	781.402	783.736	787.821	788.988
42.5	734.716	734.716	738.218	741.136	742.886
45.0	688.614	688.031	691.532	695.034	696.784
47.5	641.929	641.345	644.846	648.348	650.099
50.0	595.243	595.243	598.744	601.662	603.413
52.5	549.141	548.557	552.059	554.976	557.311
55.0	503.039	503.039	505.956	509.458	510.625
57.5	458.104	458.104	461.605	463.939	467.441
60.0	413.752	413.752	417.254	419.004	422.506
62.5	369.984	369.984	372.319	375.236	378.154
65.0	327.967	327.384	329.718	332.052	335.554
67.5	286.534	285.950	288.284	290.035	291.786
70.0	246.851	246.267	247.434	249.769	251.519
72.5	207.168	207.751	209.502	211.253	212.420
75.0	170.403	170.986	171.570	173.321	173.321
77.5	135.389	135.972	136.556	137.723	137.723
80.0	102.709	103.292	103.876	105.043	104.459
82.5	72.363	72.946	73.530	74.114	74.114
85.0	44.935	44.935	44.935	45.519	44.935
87.5	18.674	18.674	18.674	17.507	16.340
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HPR-LED-F-2X2-DD-B-837-XXIC-ITL85154.202.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	437.79	N.A.	14.60
0-30	912.66	N.A.	30.30
0-40	1458.84	N.A.	48.50
0-60	2445.88	N.A.	81.30
0-80	2956.45	N.A.	98.30
0-90	3007.75	N.A.	100.00
10-90	2893.22	N.A.	96.20
20-40	1021.05	N.A.	33.90
20-50	1554.78	N.A.	51.70
40-70	1314.54	N.A.	43.70
60-80	510.57	N.A.	17.00
70-80	183.06	N.A.	6.10
80-90	51.30	N.A.	1.70
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	3007.75	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	114.53
10-20	323.26
20-30	474.87
30-40	546.19
40-50	533.72
50-60	453.31
60-70	327.51
70-80	183.06
80-90	51.30
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

# IES INDOOR REPORT

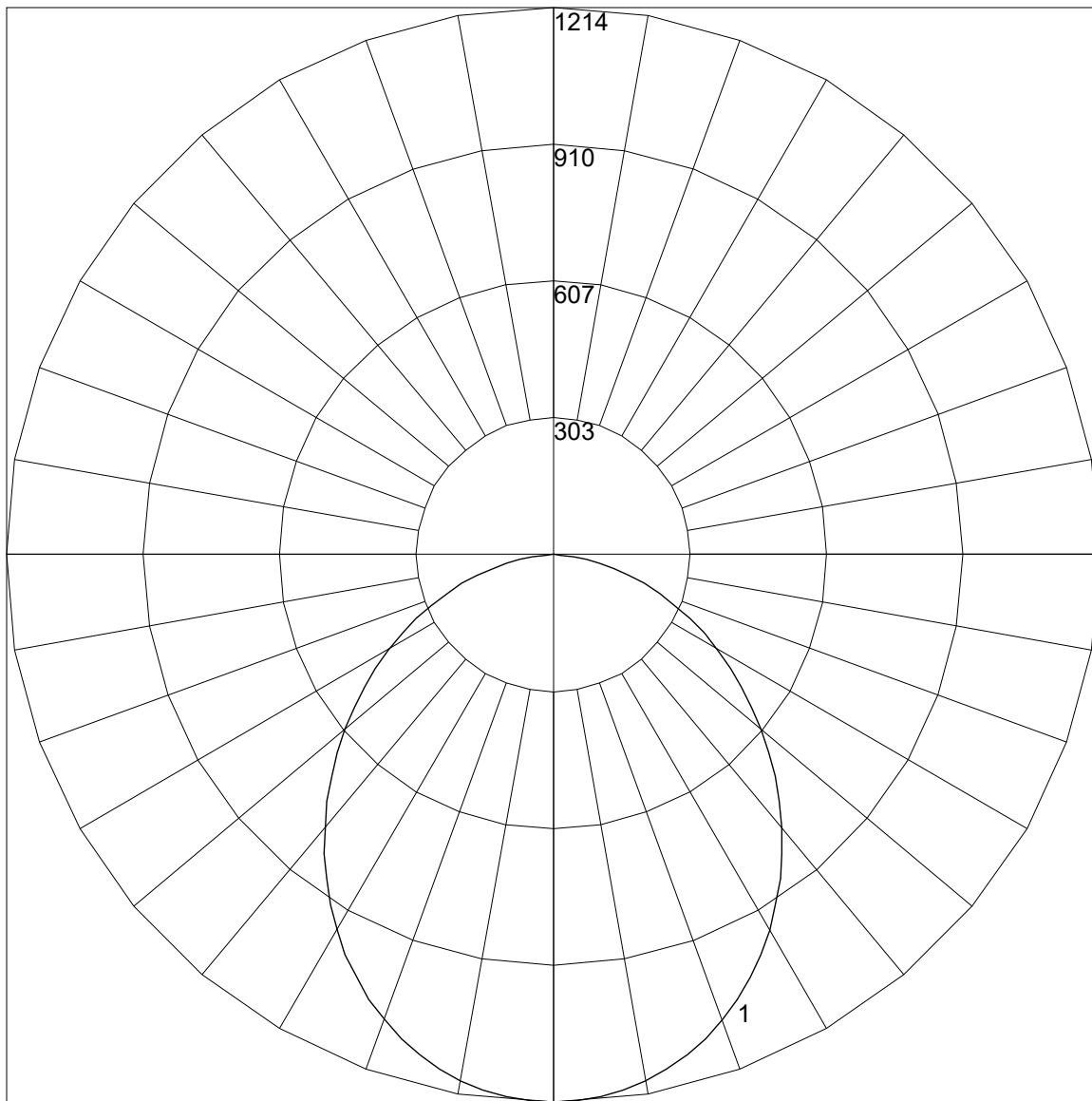
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	100	97	106	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	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	49	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	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	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 1213.828 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)