

# 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-V-837-XXIC-ITL85139.203.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85139.203 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/16/15

[ISSUEDATE]04/28/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-F-1X1-DCO-V-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.5 WATTS

[ABSOLUTE]LUMENS]2426

[OTHER]see [www.finelite.com](http://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](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	2425
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	84
Total Luminaire Watts	28.9
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	10185	10185	10185
55	9162	9049	8964
65	8060	7791	7676
75	6831	6392	6079
85	5211	3722	3536

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1003.755	1003.755	1003.755	1003.755	1003.755
2.5	1002.488	1002.488	1002.488	1002.488	1002.488
5.0	997.419	997.419	998.686	997.419	998.686
7.5	989.814	989.814	989.814	989.814	991.082
10.0	977.141	978.408	979.675	979.675	980.943
12.5	963.200	964.467	964.467	965.734	967.002
15.0	945.456	946.724	946.724	949.259	949.259
17.5	925.179	926.446	926.446	928.981	930.248
20.0	901.099	902.366	903.633	906.168	908.703
22.5	875.751	877.019	877.019	880.821	883.355
25.0	847.869	847.869	849.137	851.671	854.206
27.5	817.452	817.452	818.720	821.254	823.789
30.0	784.501	785.768	785.768	788.303	790.838
32.5	750.282	750.282	751.549	754.084	756.619
35.0	716.063	714.796	716.063	717.330	721.132
37.5	678.042	676.774	679.309	680.577	683.111
40.0	640.021	638.753	640.021	641.288	643.823
42.5	602.000	600.732	602.000	602.000	604.535
45.0	562.711	562.711	562.711	562.711	562.711
47.5	524.690	522.156	523.423	520.888	522.156
50.0	486.669	482.867	484.135	481.600	481.600
52.5	447.381	444.846	444.846	441.044	441.044
55.0	410.627	408.092	405.558	401.756	401.756
57.5	373.874	371.339	366.269	362.467	362.467
60.0	337.120	334.585	329.516	324.446	325.714
62.5	300.366	299.099	292.762	287.693	288.960
65.0	266.147	263.613	257.276	253.474	253.474
67.5	231.928	230.661	223.057	219.255	219.255
70.0	198.977	197.709	190.105	186.303	186.303
72.5	167.293	166.025	159.688	154.619	153.352
75.0	138.143	135.608	129.272	124.202	122.935
77.5	108.994	107.726	100.122	93.785	92.518
80.0	83.646	79.844	72.240	65.903	64.636
82.5	58.299	55.764	46.893	43.091	40.556
85.0	35.486	31.684	25.347	25.347	24.080
87.5	13.941	12.674	11.406	11.406	10.139
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPR-LED-F-1X1-DCO-V-837-XXIC-ITL85139.203.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	361.56	N.A.	14.90
0-30	752.66	N.A.	31.00
0-40	1200.36	N.A.	49.50
0-60	1996.78	N.A.	82.30
0-80	2391.26	N.A.	98.60
0-90	2425.32	N.A.	100.00
10-90	2330.67	N.A.	96.10
20-40	838.79	N.A.	34.60
20-50	1272.56	N.A.	52.50
40-70	1053.04	N.A.	43.40
60-80	394.48	N.A.	16.30
70-80	137.87	N.A.	5.70
80-90	34.06	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	2425.32	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	94.65
10-20	266.91
20-30	391.10
30-40	447.69
40-50	433.77
50-60	362.66
60-70	256.61
70-80	137.87
80-90	34.06
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

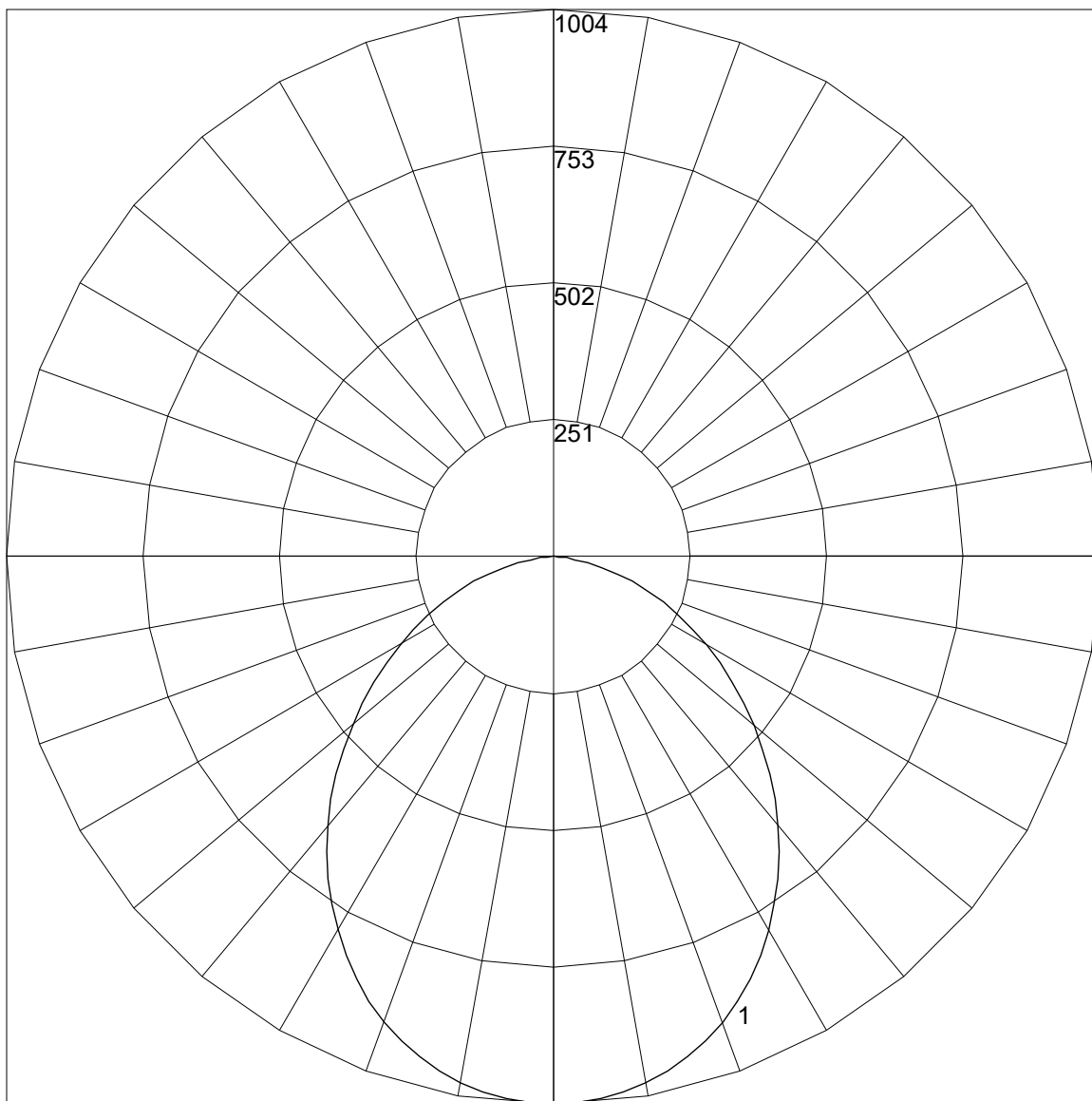
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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 = 1003.755 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)