

# 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-A-1X1-DCO-S-8-35-ITL85139.005.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST]ITL85139.005 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]08/16/15  
[ISSUE DATE]04/28/16  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HPR-LED-A-1X1-DCO-S-8-35  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 15.2 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 17.8 WATTS  
[ABSOLUTE LUMENS]1488  
[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	1488
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	15.2
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	6250	6250	6250
55	5623	5553	5501
65	4946	4781	4711
75	4192	3923	3731
85	3198	2284	2170

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	616.000	616.000	616.000	616.000	616.000
2.5	615.222	615.222	615.222	615.222	615.222
5.0	612.111	612.111	612.889	612.111	612.889
7.5	607.444	607.444	607.444	607.444	608.222
10.0	599.667	600.444	601.222	601.222	602.000
12.5	591.111	591.889	591.889	592.667	593.444
15.0	580.222	581.000	581.000	582.556	582.556
17.5	567.778	568.556	568.556	570.111	570.889
20.0	553.000	553.778	554.556	556.111	557.667
22.5	537.444	538.222	538.222	540.556	542.111
25.0	520.333	520.333	521.111	522.667	524.222
27.5	501.667	501.667	502.444	504.000	505.556
30.0	481.444	482.222	482.222	483.778	485.333
32.5	460.444	460.444	461.222	462.778	464.333
35.0	439.444	438.667	439.444	440.222	442.556
37.5	416.111	415.333	416.889	417.667	419.222
40.0	392.778	392.000	392.778	393.556	395.111
42.5	369.444	368.667	369.444	369.444	371.000
45.0	345.333	345.333	345.333	345.333	345.333
47.5	322.000	320.444	321.222	319.667	320.444
50.0	298.667	296.333	297.111	295.556	295.556
52.5	274.556	273.000	273.000	270.667	270.667
55.0	252.000	250.444	248.889	246.556	246.556
57.5	229.444	227.889	224.778	222.444	222.444
60.0	206.889	205.333	202.222	199.111	199.889
62.5	184.333	183.556	179.667	176.556	177.333
65.0	163.333	161.778	157.889	155.556	155.556
67.5	142.333	141.556	136.889	134.556	134.556
70.0	122.111	121.333	116.667	114.333	114.333
72.5	102.667	101.889	98.000	94.889	94.111
75.0	84.778	83.222	79.333	76.222	75.444
77.5	66.889	66.111	61.444	57.556	56.778
80.0	51.333	49.000	44.333	40.444	39.667
82.5	35.778	34.222	28.778	26.444	24.889
85.0	21.778	19.444	15.556	15.556	14.778
87.5	8.556	7.778	7.000	7.000	6.222
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPR-LED-A-1X1-DCO-S-8-35-ITL85139.005.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	221.89	N.A.	14.90
0-30	461.91	N.A.	31.00
0-40	736.65	N.A.	49.50
0-60	1225.42	N.A.	82.30
0-80	1467.5	N.A.	98.60
0-90	1488.41	N.A.	100.00
10-90	1430.32	N.A.	96.10
20-40	514.76	N.A.	34.60
20-50	780.97	N.A.	52.50
40-70	646.24	N.A.	43.40
60-80	242.09	N.A.	16.30
70-80	84.61	N.A.	5.70
80-90	20.90	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	1488.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

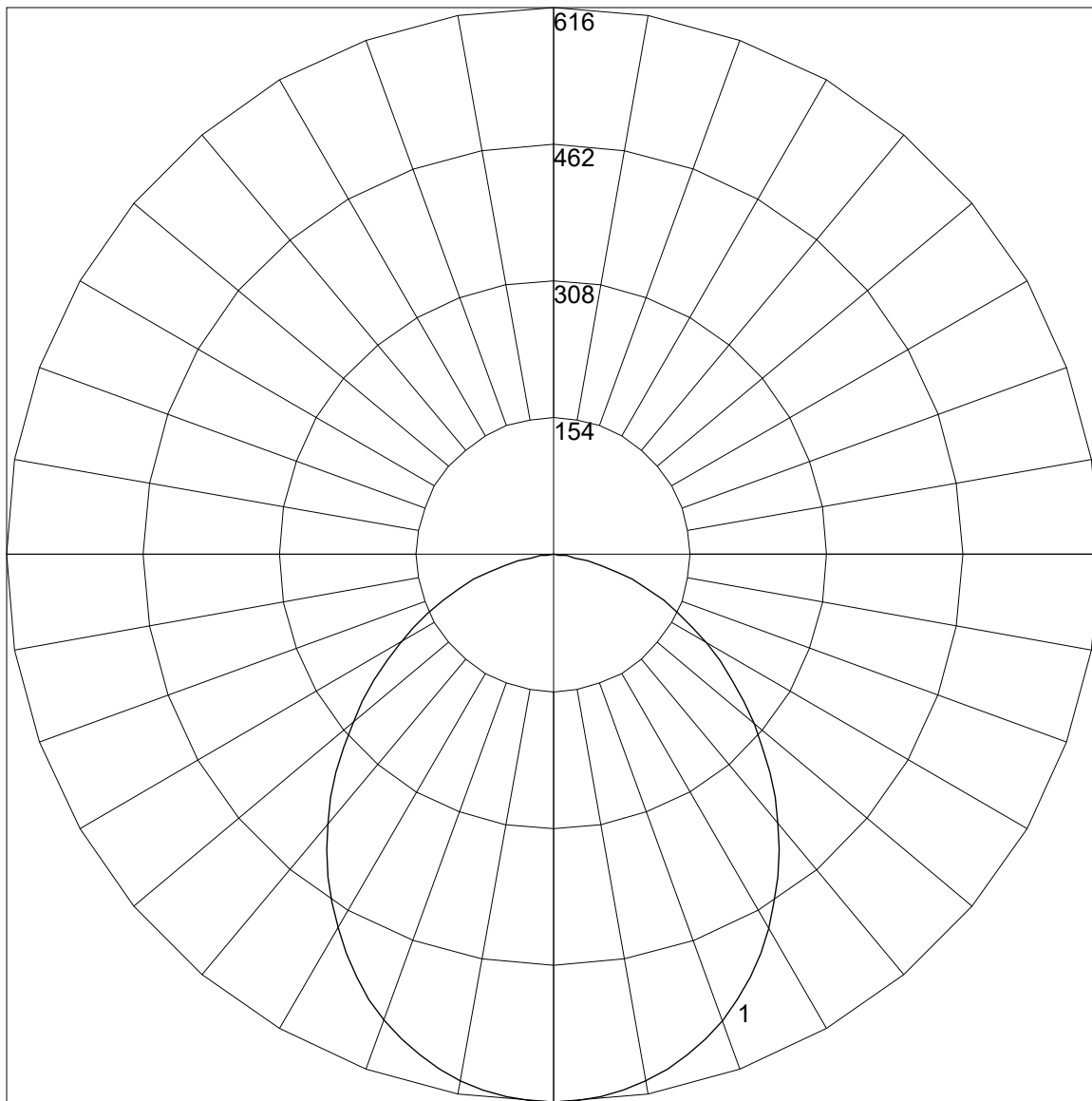
Zone	Lumens
0-10	58.09
10-20	163.80
20-30	240.02
30-40	274.75
40-50	266.20
50-60	222.56
60-70	157.48
70-80	84.61
80-90	20.90
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

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	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	55	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 = 616 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)