

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-2X2-CS-S-8-35-ITL86019.001.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL86019.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]11/30/15

[ISSUEDATE]04/28/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-2X2-CS-S-8-3500K

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.3 WATTS

[ABSOLUTE]LUMENS]3236

[OTHER]see www.finelite.com for source file ITL86098. 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	3236
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
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	3425	3408	3447
55	3208	3208	3267
65	2939	2967	3053
75	2496	2615	2774
85	1754	2188	2227

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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	1210.722	1210.722	1210.722	1210.722	1210.722
2.5	1209.667	1209.667	1210.194	1209.667	1209.667
5.0	1205.444	1205.444	1205.444	1204.917	1205.444
7.5	1197.000	1197.528	1197.528	1197.000	1197.000
10.0	1186.444	1186.972	1185.389	1184.861	1183.278
12.5	1170.611	1171.667	1170.611	1168.500	1167.972
15.0	1152.139	1152.667	1151.083	1149.500	1148.972
17.5	1129.972	1131.028	1128.917	1127.333	1127.333
20.0	1105.694	1106.222	1104.111	1102.528	1102.528
22.5	1077.722	1078.250	1075.611	1075.611	1075.083
25.0	1049.222	1048.694	1045.528	1046.583	1045.000
27.5	1016.500	1015.972	1013.333	1014.389	1012.806
30.0	982.194	980.611	979.028	980.611	979.556
32.5	945.778	944.194	942.611	944.194	944.722
35.0	906.722	906.722	903.556	906.722	908.306
37.5	868.194	867.139	865.028	868.722	871.361
40.0	827.556	824.389	825.444	829.139	832.306
42.5	786.917	784.806	782.694	788.500	790.083
45.0	744.167	739.417	740.472	746.806	748.917
47.5	700.361	697.722	697.194	703.528	706.167
50.0	656.028	653.389	654.444	660.250	664.472
52.5	610.639	608.528	610.111	615.917	620.139
55.0	565.250	563.139	565.250	571.583	575.806
57.5	519.333	517.222	520.917	526.722	530.944
60.0	473.417	470.778	476.056	481.861	486.083
62.5	427.500	423.806	430.667	436.472	441.222
65.0	381.583	378.417	385.278	391.611	396.361
67.5	335.139	333.028	339.361	347.278	351.500
70.0	289.750	287.639	293.972	301.889	305.583
72.5	242.250	243.833	250.694	258.611	262.833
75.0	198.444	200.556	207.944	216.389	220.611
77.5	156.222	159.389	167.306	175.222	179.972
80.0	116.639	120.861	128.778	136.167	140.389
82.5	79.167	83.917	93.417	98.167	100.278
85.0	46.972	51.722	58.583	58.583	59.639
87.5	19.000	22.694	24.806	25.861	26.917
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	438.87	N.A.	13.60
0-30	920.92	N.A.	28.50
0-40	1487.82	N.A.	46.00
0-60	2568.96	N.A.	79.40
0-80	3172.42	N.A.	98.00
0-90	3236.41	N.A.	100.00
10-90	3121.99	N.A.	96.50
20-40	1048.95	N.A.	32.40
20-50	1622.57	N.A.	50.10
40-70	1463.23	N.A.	45.20
60-80	603.46	N.A.	18.60
70-80	221.37	N.A.	6.80
80-90	63.99	N.A.	2.00
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	3236.41	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	114.42
10-20	324.44
20-30	482.05
30-40	566.90
40-50	573.61
50-60	507.53
60-70	382.09
70-80	221.37
80-90	63.99
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

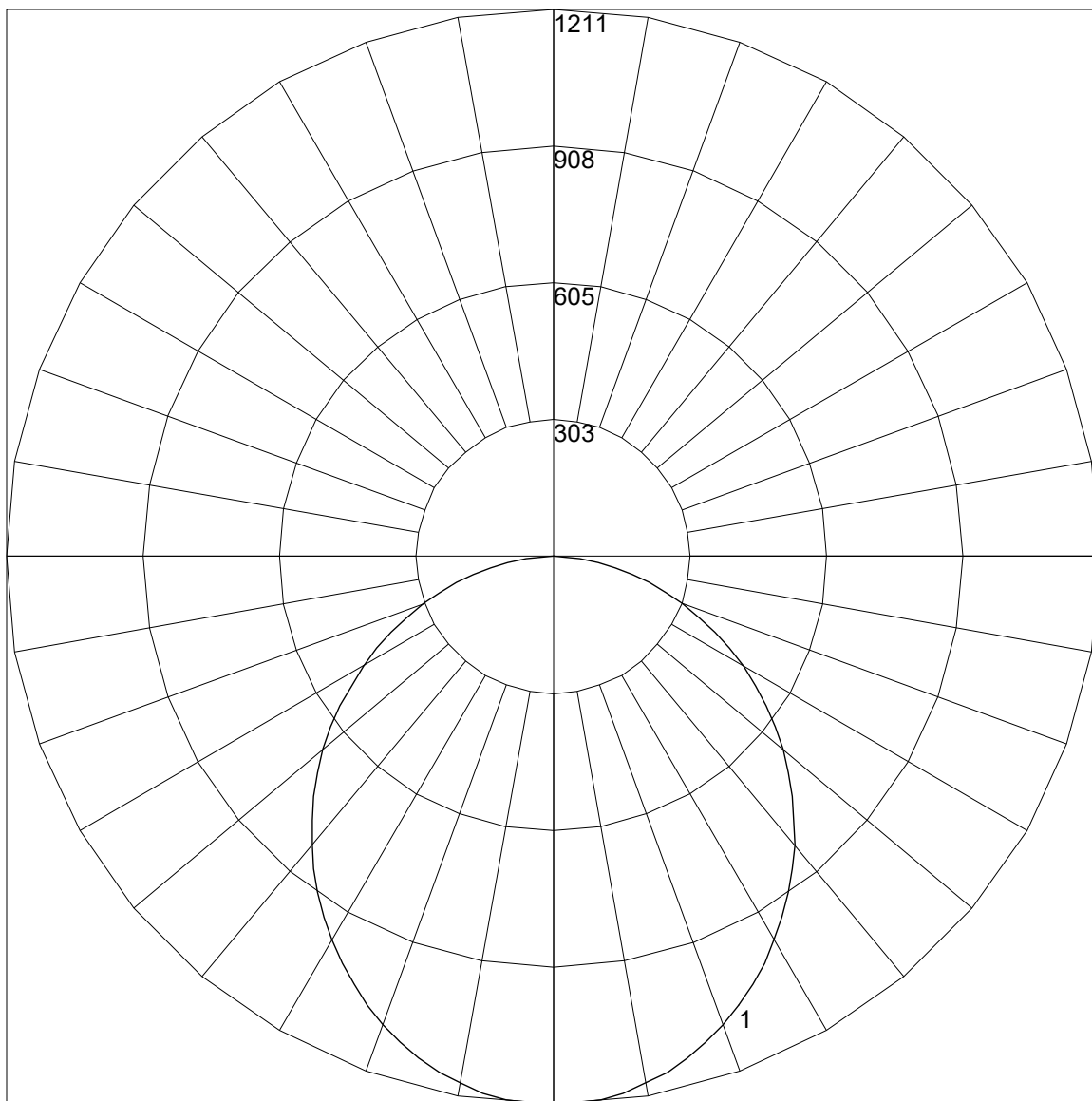
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	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	43	35	30	55	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 = 1210.722 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)