

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 : S18-LED-ID-DCO-4FT-2E-H-8-35-FTO-ITL85169.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85169.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/15/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S18-LED-ID-DCO-4ft-2E-H-8-35-FTO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.4 WATTS

[ABSOLUTE]LUMENS]2980

[OTHER]see www.finelite.com for source file ITL85169. 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	2980
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	105
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.71 ft
Luminous Width (90-270)	0.10 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2940	2940	2940
55	2794	2794	2794
65	2613	2562	2562
75	2259	2259	2175
85	1491	1491	1491

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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	112.778	112.778	112.778	112.778	112.778
2.5	112.000	112.000	112.000	112.000	112.000
5.0	112.000	112.000	112.000	112.000	112.000
7.5	111.222	111.222	111.222	112.000	112.000
10.0	110.444	110.444	110.444	111.222	111.222
12.5	109.667	108.889	109.667	110.444	109.667
15.0	108.111	108.111	108.889	108.889	108.889
17.5	106.556	105.778	107.333	107.333	106.556
20.0	105.000	104.222	105.778	105.778	105.000
22.5	102.667	101.889	103.444	103.444	103.444
25.0	100.333	99.556	101.111	101.111	101.111
27.5	98.000	97.222	98.778	98.778	98.778
30.0	94.889	94.111	95.667	95.667	95.667
32.5	91.778	91.000	92.556	93.333	92.556
35.0	88.667	87.889	89.444	89.444	89.444
37.5	85.556	84.778	85.556	86.333	85.556
40.0	81.667	80.889	82.444	82.444	82.444
42.5	77.778	77.778	78.556	78.556	78.556
45.0	74.667	73.889	74.667	74.667	74.667
47.5	70.000	70.000	70.778	70.778	70.000
50.0	66.111	65.333	66.111	66.111	66.111
52.5	62.222	61.444	62.222	62.222	62.222
55.0	57.556	57.556	57.556	57.556	57.556
57.5	53.667	52.889	52.889	52.889	52.889
60.0	49.000	48.222	49.000	48.222	48.222
62.5	44.333	44.333	44.333	43.556	43.556
65.0	39.667	39.667	38.889	38.889	38.889
67.5	35.000	35.000	34.222	34.222	34.222
70.0	30.333	30.333	30.333	29.556	28.778
72.5	25.667	25.667	24.889	24.889	24.111
75.0	21.000	21.000	21.000	20.222	20.222
77.5	16.333	17.111	16.333	15.556	15.556
80.0	12.444	12.444	12.444	11.667	11.667
82.5	8.556	8.556	8.556	7.778	7.778
85.0	4.667	5.444	4.667	4.667	4.667
87.5	1.556	1.556	1.556	1.556	1.556
90.0	0.000	0.000	0.000	0.000	0.000
92.5	13.222	17.889	21.778	22.556	23.333
95.0	30.333	38.889	49.778	60.667	66.111
97.5	49.000	63.000	82.444	95.667	103.444
100.0	71.556	92.556	119.778	136.889	143.111
102.5	95.667	124.444	162.556	187.444	195.222
105.0	122.111	158.667	210.000	246.556	260.556
107.5	150.111	196.778	262.111	306.444	325.111
110.0	178.889	234.889	315.000	368.667	385.778
112.5	210.000	273.000	369.444	431.667	451.889
115.0	237.222	310.333	421.556	496.222	517.222
117.5	264.444	346.889	472.889	556.889	580.222
120.0	294.000	382.667	521.111	613.667	640.889
122.5	322.000	415.333	565.444	664.222	693.778
125.0	349.222	444.111	603.556	708.556	741.222
127.5	374.889	470.556	637.000	745.111	779.333
130.0	399.000	493.111	662.667	773.889	809.667
132.5	421.556	513.333	682.111	794.111	833.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-H-8-35-FTO-ITL85169.003.IES****CANDELA TABULATION - (Cont.)**

135.0	441.778	529.667	693.778	806.556	845.444
137.5	461.222	542.889	701.556	812.778	850.111
140.0	479.889	554.556	704.667	812.778	849.333
142.5	495.444	562.333	703.111	807.333	841.556
145.0	510.222	568.556	700.000	797.222	829.111
147.5	523.444	574.778	693.778	784.000	814.333
150.0	535.111	578.667	686.000	767.667	796.444
152.5	546.000	583.333	676.667	750.556	777.000
155.0	555.333	585.667	666.556	731.111	753.667
157.5	563.889	588.000	655.667	710.889	731.111
160.0	570.889	589.556	644.778	690.667	707.778
162.5	577.111	591.111	634.667	670.444	685.222
165.0	581.778	591.889	624.556	651.778	663.444
167.5	585.667	592.667	616.000	635.444	644.000
170.0	588.778	594.222	608.222	621.444	626.889
172.5	591.889	595.000	602.778	609.778	612.889
175.0	593.444	595.000	598.889	602.000	602.778
177.5	594.222	595.000	595.778	597.333	596.556
180.0	595.000	595.000	595.000	595.000	595.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-H-8-35-FTO-ITL85169.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	41.25	N.A.	1.40
0-30	87.65	N.A.	2.90
0-40	143.29	N.A.	4.80
0-60	252.02	N.A.	8.50
0-80	312.76	N.A.	10.50
0-90	318.40	N.A.	10.70
10-90	307.76	N.A.	10.30
20-40	102.04	N.A.	3.40
20-50	159.38	N.A.	5.30
40-70	147.57	N.A.	5.00
60-80	60.74	N.A.	2.00
70-80	21.90	N.A.	0.70
80-90	5.65	N.A.	0.20
90-110	270.71	N.A.	9.10
90-120	666.66	N.A.	22.40
90-130	1178.18	N.A.	39.50
90-150	2121.29	N.A.	71.20
90-180	2661.4	N.A.	89.30
110-180	2390.69	N.A.	80.20
0-180	2979.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	10.65
10-20	30.60
20-30	46.39
30-40	55.64
40-50	57.35
50-60	51.39
60-70	38.83
70-80	21.90
80-90	5.65
90-100	56.01
100-110	214.70
110-120	395.95
120-130	511.52
130-140	514.42
140-150	428.69
150-160	305.47
160-170	177.21
170-180	57.43

IES INDOOR REPORT

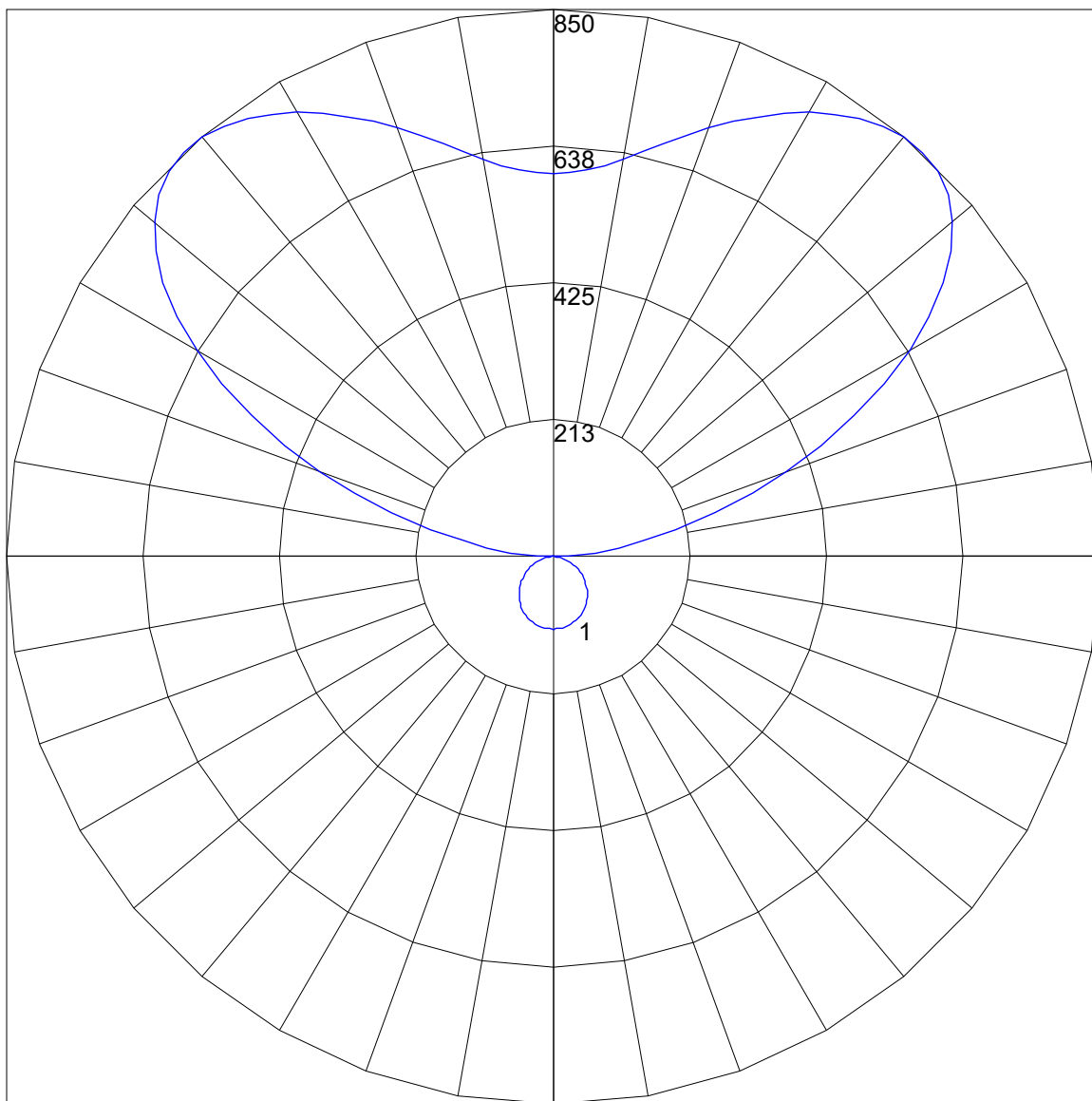
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	98	98	98	98	85	85	85	85	61	61	61	40	40	40	20	20	20	11
1	89	85	81	78	77	74	71	68	54	52	50	35	34	33	18	17	17	9
2	81	74	68	64	70	65	60	56	47	44	41	31	29	27	15	15	14	7
3	74	65	58	53	64	57	51	46	41	38	35	27	25	23	14	13	12	6
4	67	57	50	44	58	50	44	39	36	32	29	24	21	20	12	11	10	5
5	62	51	43	38	53	44	38	33	32	28	25	21	19	17	11	10	9	5
6	56	45	38	32	49	40	33	29	29	25	21	19	16	14	10	9	8	4
7	52	41	33	28	45	36	29	25	26	22	19	17	15	13	9	8	7	4
8	48	37	29	24	42	32	26	22	24	19	16	16	13	11	8	7	6	3
9	45	33	26	21	39	29	23	19	21	17	14	14	12	10	7	6	5	3
10	41	30	23	19	36	27	21	17	20	16	13	13	11	9	7	6	5	3

POLAR GRAPH



Maximum Candela = 850.111 Located At Horizontal Angle = 90, Vertical Angle = 137.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)