

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-B-8-TW-FTO-ITL85169.902.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85169.902 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-B-8-TW-FTO

[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com for lumen adjustment factors for other CCT's & CRI

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 20.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 21.8 WATTS

[ABSOLUTE]LUMENS]1972

[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	1972
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	20.4
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	1945	1945	1945
55	1848	1848	1848
65	1729	1695	1695
75	1495	1495	1439
85	986	986	986

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85169.902.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	74.620	74.620	74.620	74.620	74.620
2.5	74.105	74.105	74.105	74.105	74.105
5.0	74.105	74.105	74.105	74.105	74.105
7.5	73.591	73.591	73.591	74.105	74.105
10.0	73.076	73.076	73.076	73.591	73.591
12.5	72.561	72.047	72.561	73.076	72.561
15.0	71.532	71.532	72.047	72.047	72.047
17.5	70.503	69.988	71.018	71.018	70.503
20.0	69.474	68.959	69.988	69.988	69.474
22.5	67.930	67.415	68.444	68.444	68.444
25.0	66.386	65.871	66.901	66.901	66.901
27.5	64.842	64.327	65.357	65.357	65.357
30.0	62.784	62.269	63.298	63.298	63.298
32.5	60.725	60.211	61.240	61.754	61.240
35.0	58.667	58.152	59.181	59.181	59.181
37.5	56.608	56.094	56.608	57.123	56.608
40.0	54.035	53.520	54.550	54.550	54.550
42.5	51.462	51.462	51.977	51.977	51.977
45.0	49.404	48.889	49.404	49.404	49.404
47.5	46.316	46.316	46.830	46.830	46.316
50.0	43.743	43.228	43.743	43.743	43.743
52.5	41.170	40.655	41.170	41.170	41.170
55.0	38.082	38.082	38.082	38.082	38.082
57.5	35.509	34.994	34.994	34.994	34.994
60.0	32.421	31.906	32.421	31.906	31.906
62.5	29.333	29.333	29.333	28.819	28.819
65.0	26.246	26.246	25.731	25.731	25.731
67.5	23.158	23.158	22.643	22.643	22.643
70.0	20.070	20.070	20.070	19.556	19.041
72.5	16.982	16.982	16.468	16.468	15.953
75.0	13.895	13.895	13.895	13.380	13.380
77.5	10.807	11.322	10.807	10.292	10.292
80.0	8.234	8.234	8.234	7.719	7.719
82.5	5.661	5.661	5.661	5.146	5.146
85.0	3.088	3.602	3.088	3.088	3.088
87.5	1.029	1.029	1.029	1.029	1.029
90.0	0.000	0.000	0.000	0.000	0.000
92.5	8.749	11.836	14.409	14.924	15.439
95.0	20.070	25.731	32.936	40.140	43.743
97.5	32.421	41.684	54.550	63.298	68.444
100.0	47.345	61.240	79.251	90.573	94.690
102.5	63.298	82.339	107.556	124.023	129.170
105.0	80.795	104.982	138.947	163.135	172.398
107.5	99.322	130.199	173.427	202.760	215.111
110.0	118.363	155.415	208.421	243.930	255.251
112.5	138.947	180.632	244.444	285.614	298.994
115.0	156.959	205.333	278.924	328.327	342.222
117.5	174.971	229.520	312.889	368.468	383.906
120.0	194.526	253.193	344.795	406.035	424.047
122.5	213.053	274.807	374.129	439.485	459.041
125.0	231.064	293.848	399.345	468.819	490.433
127.5	248.047	311.345	421.474	493.006	515.649
130.0	264.000	326.269	438.456	512.047	535.719
132.5	278.924	339.649	451.322	525.427	551.158

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S18-LED-ID-DCO-4FT-2E-B-8-TW-FTO-ITL85169.902.IES****CANDELA TABULATION - (Cont.)**

135.0	292.304	350.456	459.041	533.661	559.392
137.5	305.170	359.205	464.187	537.778	562.480
140.0	317.520	366.924	466.246	537.778	561.965
142.5	327.813	372.070	465.216	534.175	556.819
145.0	337.591	376.187	463.158	527.485	548.585
147.5	346.339	380.304	459.041	518.737	538.807
150.0	354.058	382.877	453.895	507.930	526.971
152.5	361.263	385.965	447.719	496.608	514.105
155.0	367.439	387.509	441.029	483.743	498.667
157.5	373.099	389.053	433.825	470.363	483.743
160.0	377.731	390.082	426.620	456.982	468.304
162.5	381.848	391.111	419.930	443.602	453.380
165.0	384.936	391.626	413.240	431.251	438.971
167.5	387.509	392.140	407.579	420.444	426.105
170.0	389.567	393.170	402.433	411.181	414.784
172.5	391.626	393.684	398.830	403.462	405.520
175.0	392.655	393.684	396.257	398.316	398.830
177.5	393.170	393.684	394.199	395.228	394.713
180.0	393.684	393.684	393.684	393.684	393.684

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Zone	Lumens	%Lamp	%Fixt
0-20	27.29	N.A.	1.40
0-30	57.99	N.A.	2.90
0-40	94.81	N.A.	4.80
0-60	166.75	N.A.	8.50
0-80	206.94	N.A.	10.50
0-90	210.67	N.A.	10.70
10-90	203.63	N.A.	10.30
20-40	67.51	N.A.	3.40
20-50	105.46	N.A.	5.30
40-70	97.64	N.A.	5.00
60-80	40.19	N.A.	2.00
70-80	14.49	N.A.	0.70
80-90	3.73	N.A.	0.20
90-110	179.12	N.A.	9.10
90-120	441.10	N.A.	22.40
90-130	779.55	N.A.	39.50
90-150	1403.56	N.A.	71.20
90-180	1760.92	N.A.	89.30
110-180	1581.81	N.A.	80.20
0-180	1971.6	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	7.05
10-20	20.25
20-30	30.70
30-40	36.82
40-50	37.94
50-60	34.00
60-70	25.69
70-80	14.49
80-90	3.73
90-100	37.06
100-110	142.05
110-120	261.98
120-130	338.45
130-140	340.37
140-150	283.64
150-160	202.11
160-170	117.25
170-180	38.00

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

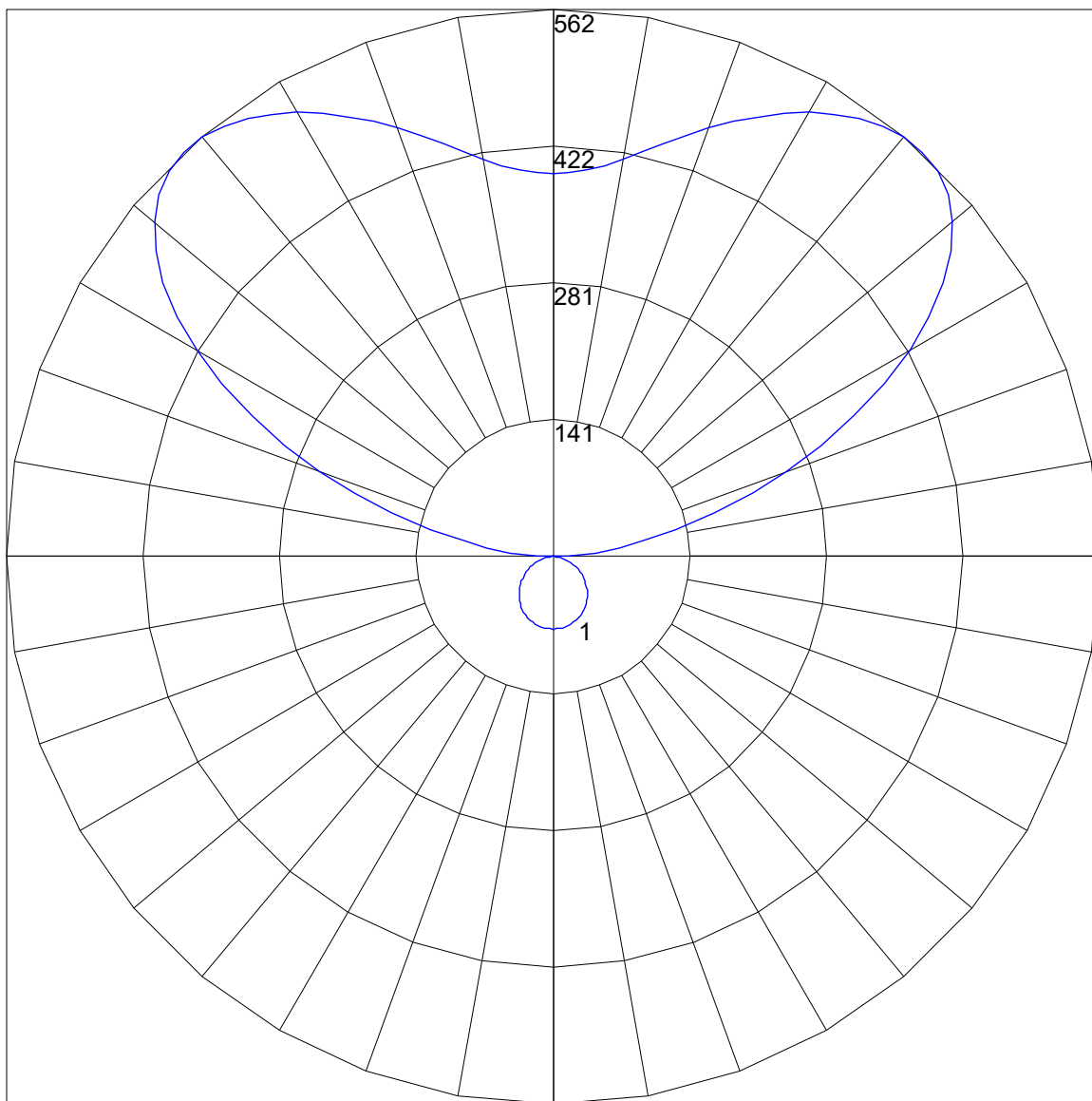
Effective Floor Cavity Reflectance 0.20

RC RW	80				70				50			30			10			0
	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

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POLAR GRAPH



Maximum Candela = 562.48 Located At Horizontal Angle = 90, Vertical Angle = 137.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)