

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 : S16-LED-ID-DCO-4FT-3E-S-H-8-35-OPEN-ITL85122.014.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/03/15

[ISSUEDATE]04/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-3E-S-H-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 30.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 33.5 WATTS

[ABSOLUTE]LUMENS]3537

[OTHER]see www.finelite.com for source file ITL85122. 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	3537
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	30
Ballast Factor	1.00
CIE Type	General Diffuse
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)	3.57 ft
Luminous Width (90-270)	0.29 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5952	5894	5813
55	5614	5514	5457
65	5144	5047	4970
75	4357	4263	4199
85	2813	2907	2907

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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	652.556	652.556	652.556	652.556	652.556
2.5	652.556	651.778	652.556	652.556	651.778
5.0	649.444	648.667	648.667	649.444	648.667
7.5	645.556	644.778	644.778	644.778	644.778
10.0	639.333	637.000	638.556	637.778	637.000
12.5	631.556	628.444	630.000	630.000	627.667
15.0	622.222	618.333	620.667	620.667	617.556
17.5	610.556	605.111	608.222	607.444	604.333
20.0	598.111	591.111	594.222	594.222	591.111
22.5	582.556	576.333	578.667	578.667	575.556
25.0	566.222	560.000	562.333	561.556	559.222
27.5	548.333	542.889	544.444	542.889	541.333
30.0	528.889	523.444	525.778	523.444	521.111
32.5	509.445	504.778	505.555	503.222	500.889
35.0	489.222	484.555	485.333	482.222	480.667
37.5	468.222	464.333	464.333	461.222	458.889
40.0	446.445	441.778	442.555	439.445	437.111
42.5	423.889	419.222	420.000	416.111	414.555
45.0	400.555	396.667	396.667	392.778	391.222
47.5	378.778	374.111	373.333	369.445	368.667
50.0	354.667	350.000	349.222	345.333	345.333
52.5	330.555	326.667	325.111	322.000	322.000
55.0	306.445	302.555	301.000	297.889	297.889
57.5	282.333	278.445	277.667	273.778	273.000
60.0	257.445	254.333	252.778	249.667	248.889
62.5	232.556	229.444	227.889	224.778	224.000
65.0	206.889	204.556	203.000	199.889	199.889
67.5	182.000	179.667	178.111	175.778	175.000
70.0	156.333	154.778	153.222	150.889	150.889
72.5	131.444	130.667	129.111	127.556	126.778
75.0	107.333	106.556	105.000	104.222	103.444
77.5	84.000	83.222	82.444	81.667	81.667
80.0	61.444	61.444	60.667	60.667	60.667
82.5	41.222	42.000	41.222	41.222	41.222
85.0	23.333	24.111	24.111	24.111	24.111
87.5	7.778	8.556	8.556	8.556	8.556
90.0	0.000	0.000	0.000	0.000	0.000
92.5	6.550	24.561	17.193	17.602	17.602
95.0	18.830	110.936	56.901	32.748	31.111
97.5	33.567	129.357	270.175	150.234	87.602
100.0	49.532	142.865	300.468	373.743	368.830
102.5	66.316	152.690	310.292	402.398	430.643
105.0	82.690	167.018	318.889	409.357	440.058
107.5	97.836	180.936	326.257	412.632	442.105
110.0	113.801	193.216	327.895	416.725	444.561
112.5	128.947	204.678	333.626	419.591	447.836
115.0	143.684	216.140	340.994	417.953	446.608
117.5	158.012	227.602	347.544	418.772	444.561
120.0	171.520	238.246	353.275	422.456	445.380
122.5	184.210	248.480	358.187	425.731	447.836
125.0	196.082	257.895	361.871	427.778	449.064
127.5	207.544	266.901	365.555	429.415	449.883
130.0	218.596	275.497	368.012	429.825	449.883
132.5	229.240	283.275	370.877	429.415	448.655

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-H-8-35-OPEN-ITL85122.014.IES****CANDELA TABULATION - (Cont.)**

135.0	238.655	290.234	373.333	428.187	446.199
137.5	247.661	296.374	374.971	426.140	443.743
140.0	256.667	302.105	376.199	424.094	440.058
142.5	264.854	307.017	376.608	421.637	436.374
145.0	273.041	311.521	376.608	418.772	432.281
147.5	280.000	315.614	376.199	415.497	427.778
150.0	286.550	318.070	374.152	410.585	422.047
152.5	292.690	320.526	371.287	405.673	416.316
155.0	298.012	322.573	368.012	399.532	408.947
157.5	302.924	323.801	363.918	392.164	401.170
160.0	307.427	324.620	359.415	383.977	392.164
162.5	311.111	324.620	353.684	374.971	382.339
165.0	314.386	324.620	347.953	365.555	371.287
167.5	316.842	324.211	341.813	356.140	361.462
170.0	318.889	323.801	336.082	346.316	350.409
172.5	320.526	323.801	330.760	337.719	340.175
175.0	321.754	322.983	326.257	330.351	331.170
177.5	322.983	323.392	324.211	325.029	325.029
180.0	322.983	322.983	322.983	322.983	322.983

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-3E-S-H-8-35-OPEN-ITL85122.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	236.17	N.A.	6.70
0-30	494.74	N.A.	14.00
0-40	797.65	N.A.	22.60
0-60	1372.01	N.A.	38.80
0-80	1684.44	N.A.	47.60
0-90	1712.83	N.A.	48.40
10-90	1651.21	N.A.	46.70
20-40	561.48	N.A.	15.90
20-50	866.76	N.A.	24.50
40-70	775.02	N.A.	21.90
60-80	312.43	N.A.	8.80
70-80	111.78	N.A.	3.20
80-90	28.38	N.A.	0.80
90-110	399.29	N.A.	11.30
90-120	714.38	N.A.	20.20
90-130	1021.14	N.A.	28.90
90-150	1527.23	N.A.	43.20
90-180	1823.7	N.A.	51.60
110-180	1424.41	N.A.	40.30
0-180	3536.53	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	61.62
10-20	174.55
20-30	258.57
30-40	302.91
40-50	305.28
50-60	269.08
60-70	200.66
70-80	111.78
80-90	28.38
90-100	96.50
100-110	302.79
110-120	315.08
120-130	306.77
130-140	277.19
140-150	228.90
150-160	166.91
160-170	98.10
170-180	31.46

IES INDOOR REPORT

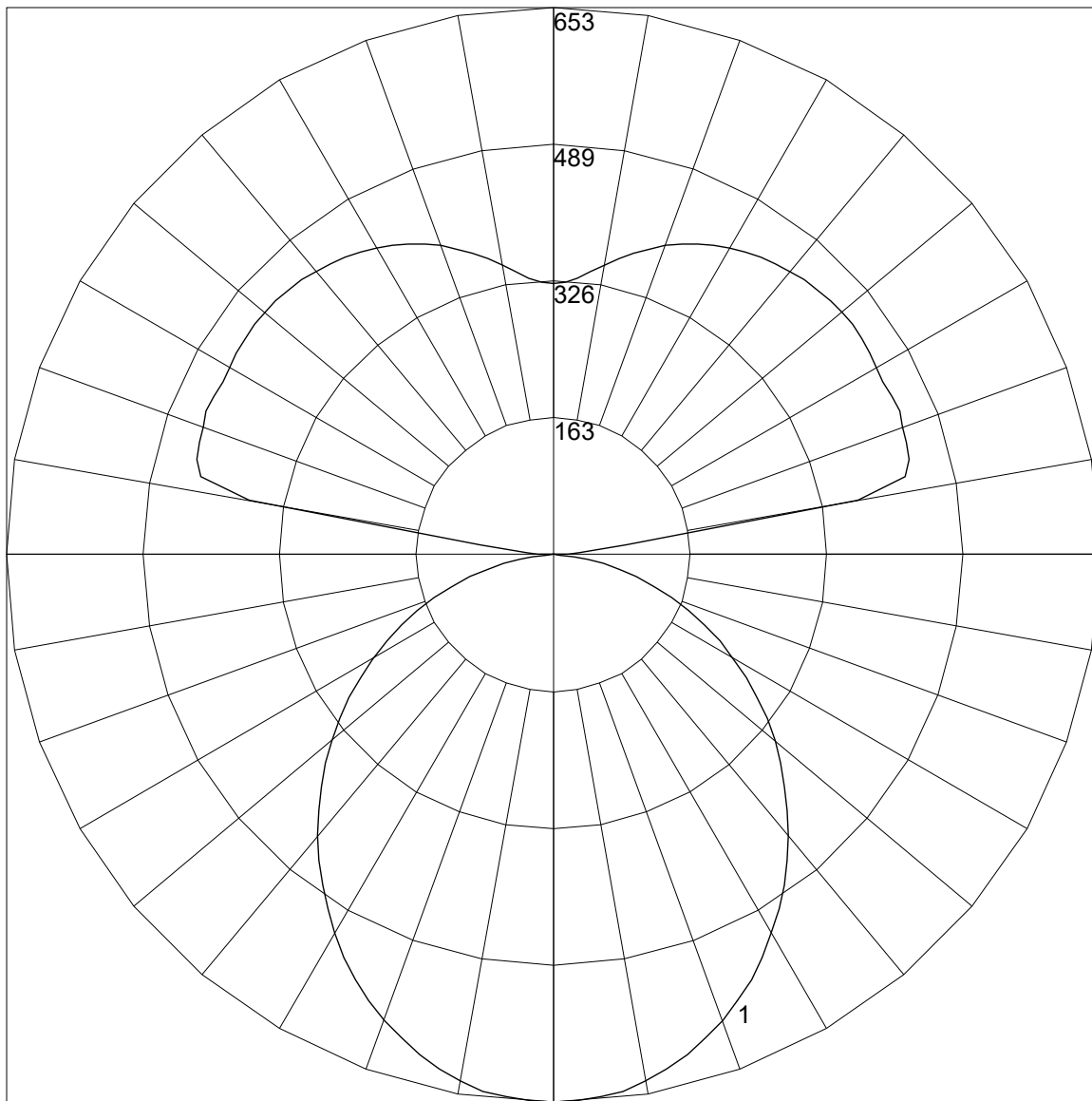
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	81	75	70	81	75	70	65	63	59	56	52	50	47	42	41	39	34
3	81	71	64	58	74	66	60	54	56	51	47	46	43	40	38	35	33	29
4	74	63	55	49	68	58	51	46	50	44	40	41	37	34	34	31	28	25
5	68	56	48	42	62	52	45	40	44	39	34	37	33	30	30	27	25	21
6	62	50	42	37	57	47	40	34	40	34	30	33	29	26	27	24	22	19
7	58	45	38	32	53	42	35	30	36	31	26	30	26	23	25	22	19	17
8	54	41	34	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	13
10	47	35	27	23	43	32	26	21	28	23	19	24	19	17	20	16	14	12

POLAR GRAPH



Maximum Candela = 652.556 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)