

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-2E-H-8-35-OPEN-ITL85120.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85120.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/04/15

[ISSUEDATE]04/22/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-2E-H-8-35-OPEN

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.4 WATTS

[ABSOLUTE]LUMENS]3673

[OTHER]see www.finelite.com for source file ITL85120. 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	3673
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	128
Total Luminaire Watts	28.6
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)	3.57 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	2901	3097	3282
55	2821	3021	3220
65	2649	2843	3017
75	2273	2431	2589
85	1500	1688	1782

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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	280.778	280.778	280.778	280.778	280.778
2.5	280.000	280.778	280.778	280.778	280.778
5.0	279.222	280.000	280.000	280.778	280.778
7.5	278.444	279.222	279.222	280.778	280.778
10.0	276.889	276.889	278.444	280.000	280.000
12.5	274.556	274.556	277.667	280.000	280.000
15.0	272.222	271.444	276.111	279.222	279.222
17.5	268.333	268.333	273.778	277.667	278.444
20.0	264.444	264.444	271.444	275.333	276.889
22.5	260.556	259.778	267.556	273.000	274.556
25.0	255.111	255.111	263.667	269.889	272.222
27.5	249.667	250.444	259.778	266.778	269.111
30.0	243.444	244.222	254.333	262.111	264.444
32.5	236.444	238.000	248.111	256.667	259.778
35.0	229.444	231.000	241.889	250.444	253.556
37.5	221.667	224.000	234.889	243.444	247.333
40.0	213.111	215.444	226.333	235.667	239.556
42.5	204.556	206.889	217.778	227.111	231.000
45.0	195.222	197.556	208.444	217.778	220.889
47.5	185.111	188.222	198.333	206.889	210.778
50.0	175.000	178.111	187.444	196.000	199.889
52.5	164.889	167.222	176.556	184.333	188.222
55.0	154.000	156.333	164.889	172.667	175.778
57.5	142.333	144.667	152.444	160.222	162.556
60.0	130.667	133.000	140.000	147.000	149.333
62.5	119.000	120.556	127.556	133.000	135.333
65.0	106.556	108.111	114.333	119.778	121.333
67.5	93.333	94.889	101.111	105.000	107.333
70.0	80.889	82.444	87.111	91.000	91.778
72.5	68.444	70.000	73.889	77.000	77.778
75.0	56.000	57.556	59.889	63.000	63.778
77.5	43.556	45.111	47.444	49.778	50.556
80.0	32.667	33.444	35.000	36.556	37.333
82.5	22.556	23.333	24.111	24.889	25.667
85.0	12.444	13.222	14.000	14.000	14.778
87.5	3.889	4.667	4.667	4.667	4.667
90.0	0.000	0.000	0.000	0.000	0.000
92.5	16.333	11.667	3.889	2.333	2.333
95.0	28.778	258.222	28.778	21.000	18.667
97.5	38.889	290.889	538.222	108.889	46.667
100.0	49.000	313.444	569.333	724.889	777.000
102.5	59.111	335.222	584.111	743.556	798.000
105.0	70.000	366.333	602.000	750.556	806.556
107.5	80.889	381.111	607.444	760.667	814.333
110.0	92.556	387.333	613.667	766.889	824.444
112.5	103.444	388.889	621.444	764.556	820.556
115.0	113.556	388.111	637.000	765.333	817.444
117.5	123.667	386.556	647.889	765.333	815.111
120.0	133.778	385.000	646.333	769.222	812.778
122.5	143.111	383.444	640.111	777.000	812.778
125.0	152.444	381.889	630.778	774.667	815.889
127.5	160.222	380.333	620.667	763.778	808.889
130.0	167.222	376.444	608.222	748.222	794.111
132.5	173.444	372.556	595.000	731.111	775.444

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-OPEN-ITL85120.003.IES****CANDELA TABULATION - (Cont.)**

135.0	178.889	367.111	580.222	712.444	754.444
137.5	184.333	360.889	563.889	692.222	732.667
140.0	189.000	353.889	546.778	668.889	707.778
142.5	192.889	346.111	529.667	645.556	679.778
145.0	196.000	336.778	510.222	619.111	649.444
147.5	199.111	326.667	490.000	592.667	620.667
150.0	201.444	316.556	468.222	564.667	589.556
152.5	203.778	304.889	444.889	535.111	557.667
155.0	205.333	293.222	421.556	504.778	525.778
157.5	207.667	281.556	395.111	472.889	492.333
160.0	208.444	270.667	368.667	437.889	457.333
162.5	210.000	259.000	342.222	402.111	419.222
165.0	210.778	248.111	316.556	366.333	380.333
167.5	211.556	237.222	291.667	329.778	342.222
170.0	211.556	227.889	267.556	295.556	304.889
172.5	211.556	220.889	244.222	264.444	270.667
175.0	210.778	214.667	225.556	235.667	239.556
177.5	210.778	211.556	214.667	217.000	217.778
180.0	210.778	210.778	210.778	210.778	210.778

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-2E-H-8-35-OPEN-ITL85120.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	104.59	N.A.	2.80
0-30	226.01	N.A.	6.20
0-40	376.90	N.A.	10.30
0-60	684.09	N.A.	18.60
0-80	860.36	N.A.	23.40
0-90	876.65	N.A.	23.90
10-90	849.95	N.A.	23.10
20-40	272.31	N.A.	7.40
20-50	432.56	N.A.	11.80
40-70	419.71	N.A.	11.40
60-80	176.27	N.A.	4.80
70-80	63.75	N.A.	1.70
80-90	16.29	N.A.	0.40
90-110	725.94	N.A.	19.80
90-120	1284.96	N.A.	35.00
90-130	1792.15	N.A.	48.80
90-150	2500.81	N.A.	68.10
90-180	2796.01	N.A.	76.10
110-180	2070.07	N.A.	56.40
0-180	3672.66	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	26.70
10-20	77.89
20-30	121.42
30-40	150.89
40-50	160.25
50-60	146.94
60-70	112.53
70-80	63.75
80-90	16.29
90-100	159.57
100-110	566.38
110-120	559.01
120-130	507.19
130-140	411.50
140-150	297.16
150-160	184.19
160-170	88.29
170-180	22.72

IES INDOOR REPORT

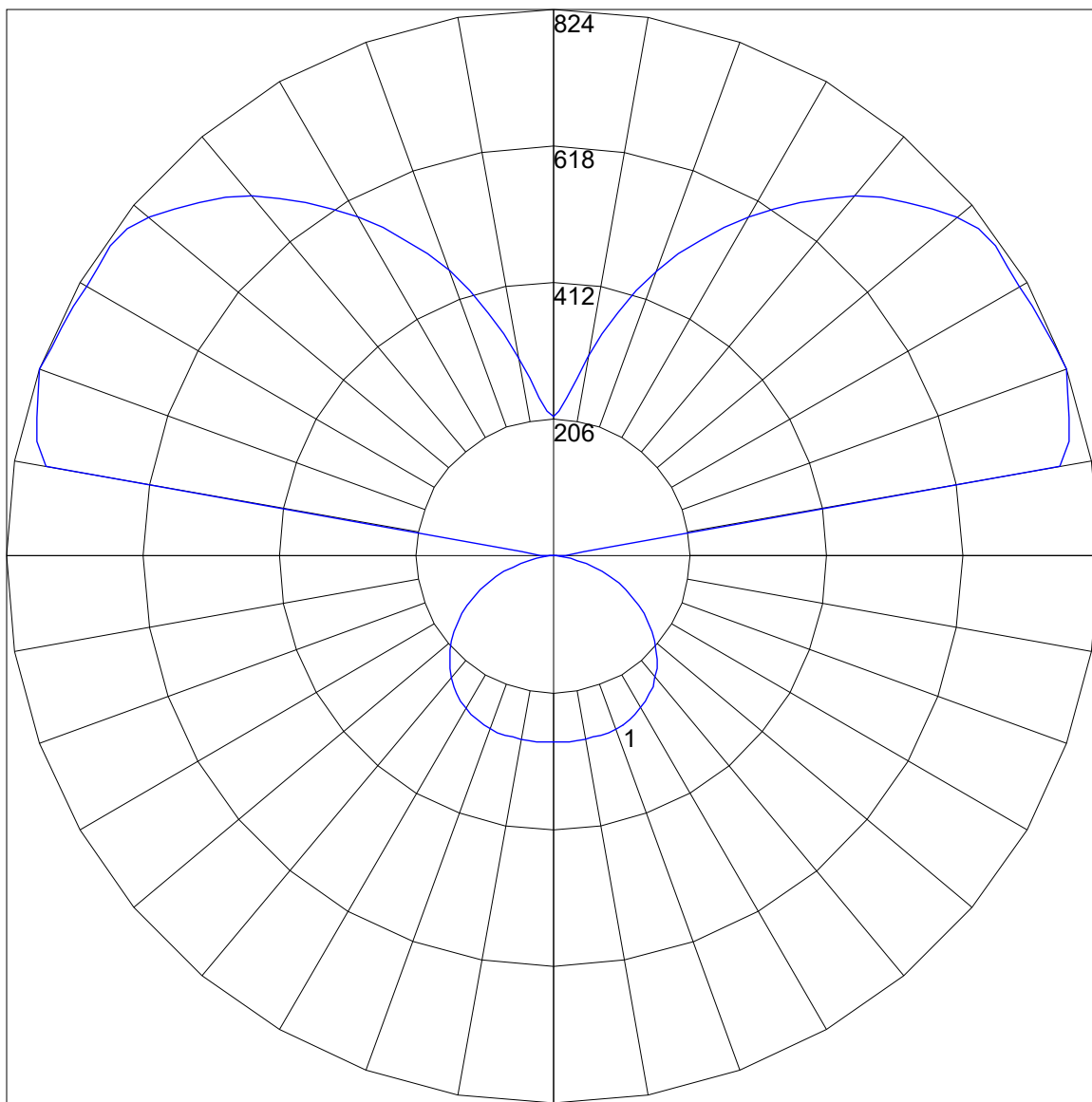
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	80	81	78	75	72	60	58	56	43	42	41	28	27	27	20
2	83	76	70	65	74	68	63	59	52	49	46	38	36	34	25	23	22	16
3	76	67	60	54	67	60	54	49	46	42	39	33	31	29	22	20	19	14
4	69	59	51	46	61	53	46	41	41	36	33	30	27	24	19	18	16	12
5	63	52	44	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	33	52	42	35	30	32	28	24	24	20	18	16	14	12	9
7	54	42	34	29	48	38	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9	7
9	46	34	27	22	41	31	25	20	24	20	16	18	15	12	12	10	8	6
10	43	31	24	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

POLAR GRAPH



Maximum Candela = 824.444 Located At Horizontal Angle = 90, Vertical Angle = 110
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)