

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-4E-B-8-35-TDO-ITL85122.214.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.214 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE] 08/4/15

[ISSUEDATE]08/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S16-LED-ID-DCO-4ft-4E-B-8-35-TDO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.3 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.1 WATTS

[ABSOLUTE]LUMENS]4000

[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	4000
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	34.3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
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	13900	13765	13576
55	13110	12877	12744
65	12012	11786	11606
75	10176	9955	9807
85	6569	6788	6788

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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	1523.931	1523.931	1523.931	1523.931	1523.931
2.5	1523.931	1522.114	1523.931	1523.931	1522.114
5.0	1516.665	1514.849	1514.849	1516.665	1514.849
7.5	1507.583	1505.767	1505.767	1505.767	1505.767
10.0	1493.052	1487.603	1491.236	1489.420	1487.603
12.5	1474.889	1467.623	1471.256	1471.256	1465.807
15.0	1453.092	1444.011	1449.460	1449.460	1442.194
17.5	1425.847	1413.132	1420.398	1418.581	1411.316
20.0	1396.785	1380.438	1387.703	1387.703	1380.438
22.5	1360.458	1345.927	1351.376	1351.376	1344.111
25.0	1322.314	1307.783	1313.232	1311.416	1305.967
27.5	1280.538	1267.823	1271.456	1267.823	1264.190
30.0	1235.129	1222.414	1227.863	1222.414	1216.965
32.5	1189.719	1178.821	1180.638	1175.188	1169.739
35.0	1142.494	1131.596	1133.412	1126.147	1122.514
37.5	1093.452	1084.370	1084.370	1077.105	1071.656
40.0	1042.594	1031.696	1033.512	1026.246	1020.797
42.5	989.919	979.021	980.837	971.755	968.123
45.0	935.428	926.346	926.346	917.264	913.632
47.5	884.570	873.672	871.855	862.774	860.957
50.0	828.263	817.364	815.548	806.466	806.466
52.5	771.955	762.874	759.241	751.975	751.975
55.0	715.648	706.566	702.933	695.668	695.668
57.5	659.341	650.259	648.442	639.361	637.544
60.0	601.217	593.952	590.319	583.053	581.237
62.5	543.093	535.828	532.195	524.930	523.113
65.0	483.153	477.704	474.071	466.806	466.806
67.5	425.029	419.580	415.948	410.499	408.682
70.0	365.089	361.457	357.824	352.375	352.375
72.5	306.966	305.149	301.517	297.884	296.068
75.0	250.658	248.842	245.209	243.393	241.577
77.5	196.167	194.351	192.535	190.718	190.718
80.0	143.493	143.493	141.677	141.677	141.677
82.5	96.267	98.084	96.267	96.267	96.267
85.0	54.491	56.307	56.307	56.307	56.307
87.5	18.164	19.980	19.980	19.980	19.980
90.0	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-TDO-ITL85122.214.IES****CANDELA TABULATION - (Cont.)**

135.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-B-8-35-TDO-ITL85122.214.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	551.54	N.A.	13.80
0-30	1155.38	N.A.	28.90
0-40	1862.77	N.A.	46.60
0-60	3204.09	N.A.	80.10
0-80	3933.72	N.A.	98.30
0-90	4000.01	N.A.	100.00
10-90	3856.11	N.A.	96.40
20-40	1311.23	N.A.	32.80
20-50	2024.16	N.A.	50.60
40-70	1809.91	N.A.	45.20
60-80	729.63	N.A.	18.20
70-80	261.04	N.A.	6.50
80-90	66.29	N.A.	1.70
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	4000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	143.90
10-20	407.63
20-30	603.84
30-40	707.39
40-50	712.93
50-60	628.39
60-70	468.60
70-80	261.04
80-90	66.29
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

IES INDOOR REPORT

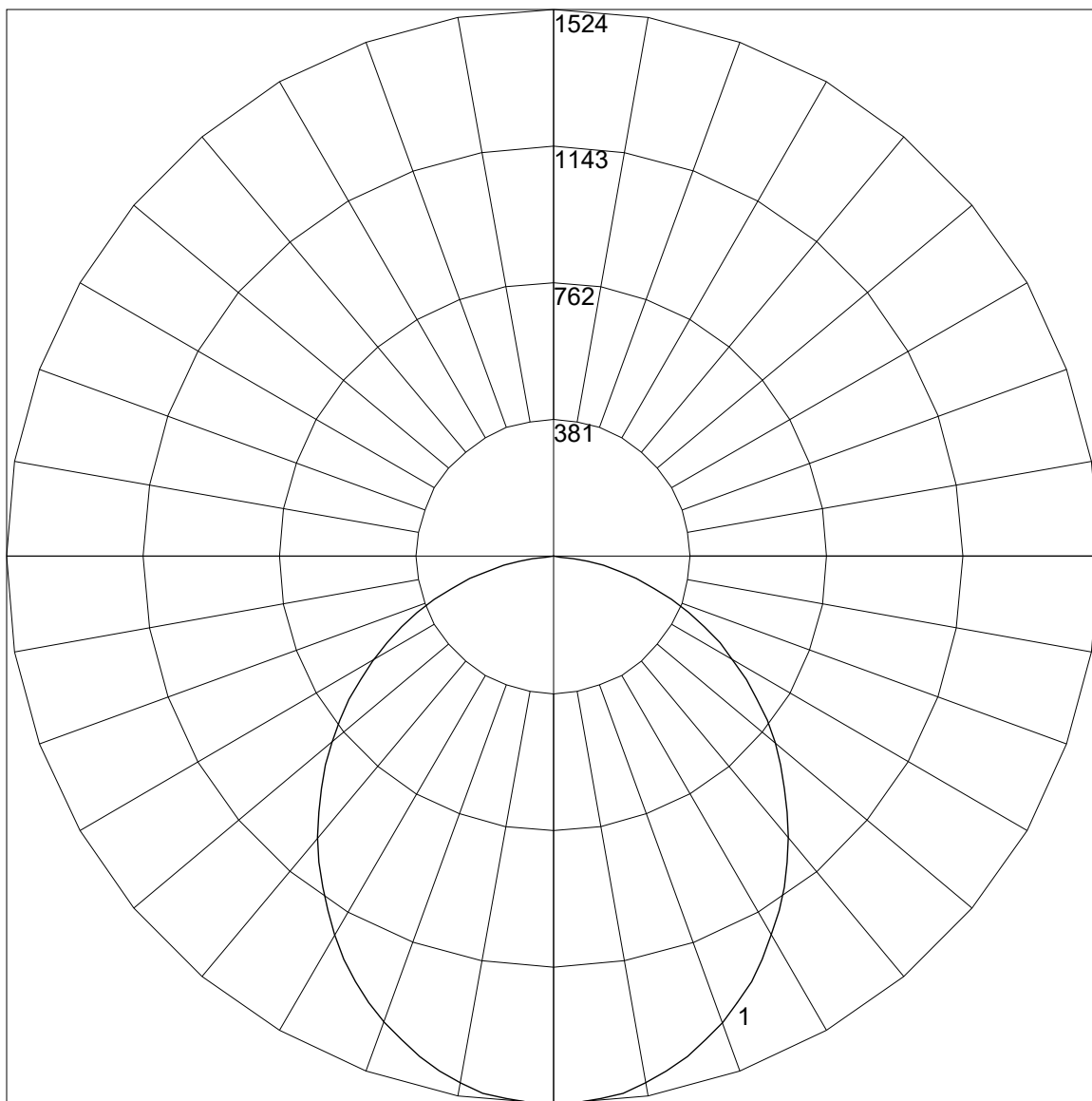
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1523.931 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)