

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-H-8-35-TDO-ITL85122.215.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.215 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-H-8-35-TDO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 43.3 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 43.8 WATTS

[ABSOLUTE]LUMENS]5000

[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	5000
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	43.3
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	17375	17206	16970
55	16387	16096	15929
65	15015	14733	14507
75	12720	12443	12259
85	8211	8485	8485

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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	1904.913	1904.913	1904.913	1904.913	1904.913
2.5	1904.913	1902.643	1904.913	1904.913	1902.643
5.0	1895.831	1893.561	1893.561	1895.831	1893.561
7.5	1884.479	1882.209	1882.209	1882.209	1882.209
10.0	1866.316	1859.504	1864.045	1861.774	1859.504
12.5	1843.611	1834.529	1839.070	1839.070	1832.259
15.0	1816.366	1805.013	1811.825	1811.825	1802.743
17.5	1782.309	1766.415	1775.497	1773.227	1764.145
20.0	1745.981	1725.547	1734.629	1734.629	1725.547
22.5	1700.572	1682.408	1689.220	1689.220	1680.138
25.0	1652.893	1634.729	1641.540	1639.270	1632.458
27.5	1600.672	1584.779	1589.320	1584.779	1580.238
30.0	1543.911	1528.017	1534.829	1528.017	1521.206
32.5	1487.149	1473.526	1475.797	1468.986	1462.174
35.0	1428.117	1414.495	1416.765	1407.683	1403.142
37.5	1366.815	1355.463	1355.463	1346.381	1339.570
40.0	1303.242	1289.620	1291.890	1282.808	1275.997
42.5	1237.399	1223.776	1226.047	1214.695	1210.153
45.0	1169.285	1157.933	1157.933	1146.581	1142.040
47.5	1105.713	1092.090	1089.819	1078.467	1076.197
50.0	1035.328	1021.706	1019.435	1008.083	1008.083
52.5	964.944	953.592	949.051	939.969	939.969
55.0	894.560	883.208	878.667	869.585	869.585
57.5	824.176	812.823	810.553	799.201	796.930
60.0	751.521	742.439	737.898	728.817	726.546
62.5	678.867	669.785	665.244	656.162	653.891
65.0	603.942	597.130	592.589	583.507	583.507
67.5	531.287	524.476	519.935	513.123	510.853
70.0	456.362	451.821	447.280	440.469	440.469
72.5	383.707	381.437	376.896	372.355	370.084
75.0	313.323	311.053	306.512	304.241	301.971
77.5	245.209	242.939	240.668	238.398	238.398
80.0	179.366	179.366	177.096	177.096	177.096
82.5	120.334	122.605	120.334	120.334	120.334
85.0	68.114	70.384	70.384	70.384	70.384
87.5	22.705	24.975	24.975	24.975	24.975
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-H-8-35-TDO-ITL85122.215.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-H-8-35-TDO-ITL85122.215.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	689.42	N.A.	13.80
0-30	1444.22	N.A.	28.90
0-40	2328.46	N.A.	46.60
0-60	4005.11	N.A.	80.10
0-80	4917.15	N.A.	98.30
0-90	5000.01	N.A.	100.00
10-90	4820.13	N.A.	96.40
20-40	1639.04	N.A.	32.80
20-50	2530.2	N.A.	50.60
40-70	2262.39	N.A.	45.20
60-80	912.04	N.A.	18.20
70-80	326.29	N.A.	6.50
80-90	82.86	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	5000.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	179.88
10-20	509.54
20-30	754.80
30-40	884.24
40-50	891.16
50-60	785.49
60-70	585.75
70-80	326.29
80-90	82.86
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

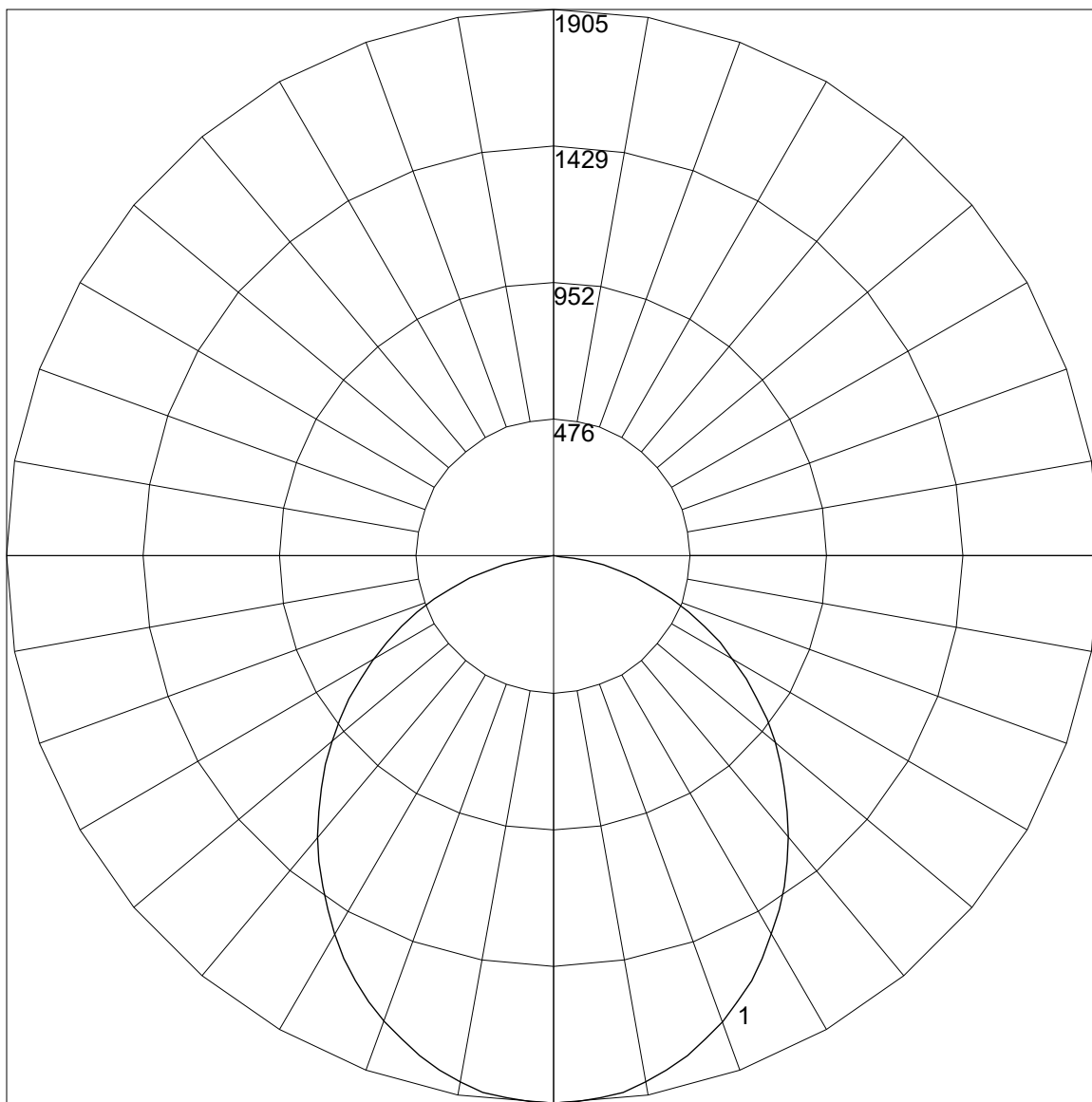
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 1904.913 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)