

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-8-35-20U80D-ITL85122.206.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85122.206 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-8-35-20U80D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 43.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 45.8 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	43.6
Ballast Factor	1.00
CIE Type	Semi-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	3.591	13.468	9.428	9.652	9.652
95.0	10.325	60.830	31.201	17.957	17.059
97.5	18.406	70.931	148.147	82.379	48.035
100.0	27.160	78.338	164.757	204.936	202.243
102.5	36.363	83.725	170.144	220.649	236.137
105.0	45.342	91.582	174.858	224.465	241.300
107.5	53.647	99.213	178.899	226.261	242.422
110.0	62.401	105.947	179.796	228.505	243.769
112.5	70.706	112.232	182.939	230.077	245.565
115.0	78.787	118.517	186.979	229.179	244.891
117.5	86.643	124.802	190.571	229.628	243.769
120.0	94.051	130.639	193.713	231.648	244.218
122.5	101.009	136.250	196.407	233.444	245.565
125.0	107.519	141.413	198.427	234.566	246.238
127.5	113.804	146.351	200.447	235.464	246.687
130.0	119.864	151.065	201.794	235.688	246.687
132.5	125.700	155.330	203.365	235.464	246.013

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-20U80D-ITL85122.206.IES****CANDELA TABULATION - (Cont.)**

135.0	130.863	159.146	204.712	234.790	244.667
137.5	135.801	162.513	205.610	233.668	243.320
140.0	140.739	165.655	206.283	232.546	241.300
142.5	145.229	168.349	206.508	231.199	239.280
145.0	149.718	170.818	206.508	229.628	237.035
147.5	153.534	173.062	206.283	227.832	234.566
150.0	157.125	174.409	205.161	225.138	231.423
152.5	160.492	175.756	203.590	222.445	228.281
155.0	163.410	176.878	201.794	219.078	224.240
157.5	166.104	177.552	199.549	215.037	219.976
160.0	168.573	178.001	197.080	210.548	215.037
162.5	170.593	178.001	193.938	205.610	209.650
165.0	172.389	178.001	190.795	200.447	203.590
167.5	173.736	177.776	187.428	195.284	198.202
170.0	174.858	177.552	184.286	189.897	192.142
172.5	175.756	177.552	181.368	185.184	186.530
175.0	176.429	177.103	178.899	181.143	181.592
177.5	177.103	177.327	177.776	178.225	178.225
180.0	177.103	177.103	177.103	177.103	177.103

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S16-LED-ID-DCO-4FT-4E-H-8-35-20U80D-ITL85122.206.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	551.54	N.A.	11.00
0-30	1155.38	N.A.	23.10
0-40	1862.77	N.A.	37.30
0-60	3204.09	N.A.	64.10
0-80	3933.72	N.A.	78.70
0-90	4000.01	N.A.	80.00
10-90	3856.11	N.A.	77.10
20-40	1311.23	N.A.	26.20
20-50	2024.16	N.A.	40.50
40-70	1809.91	N.A.	36.20
60-80	729.63	N.A.	14.60
70-80	261.04	N.A.	5.20
80-90	66.29	N.A.	1.30
90-110	218.95	N.A.	4.40
90-120	391.72	N.A.	7.80
90-130	559.93	N.A.	11.20
90-150	837.44	N.A.	16.70
90-180	1000.00	N.A.	20.00
110-180	781.05	N.A.	15.60
0-180	5000.01	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	52.92
100-110	166.03
110-120	172.77
120-130	168.21
130-140	151.99
140-150	125.51
150-160	91.52
160-170	53.79
170-180	17.25

IES INDOOR REPORT

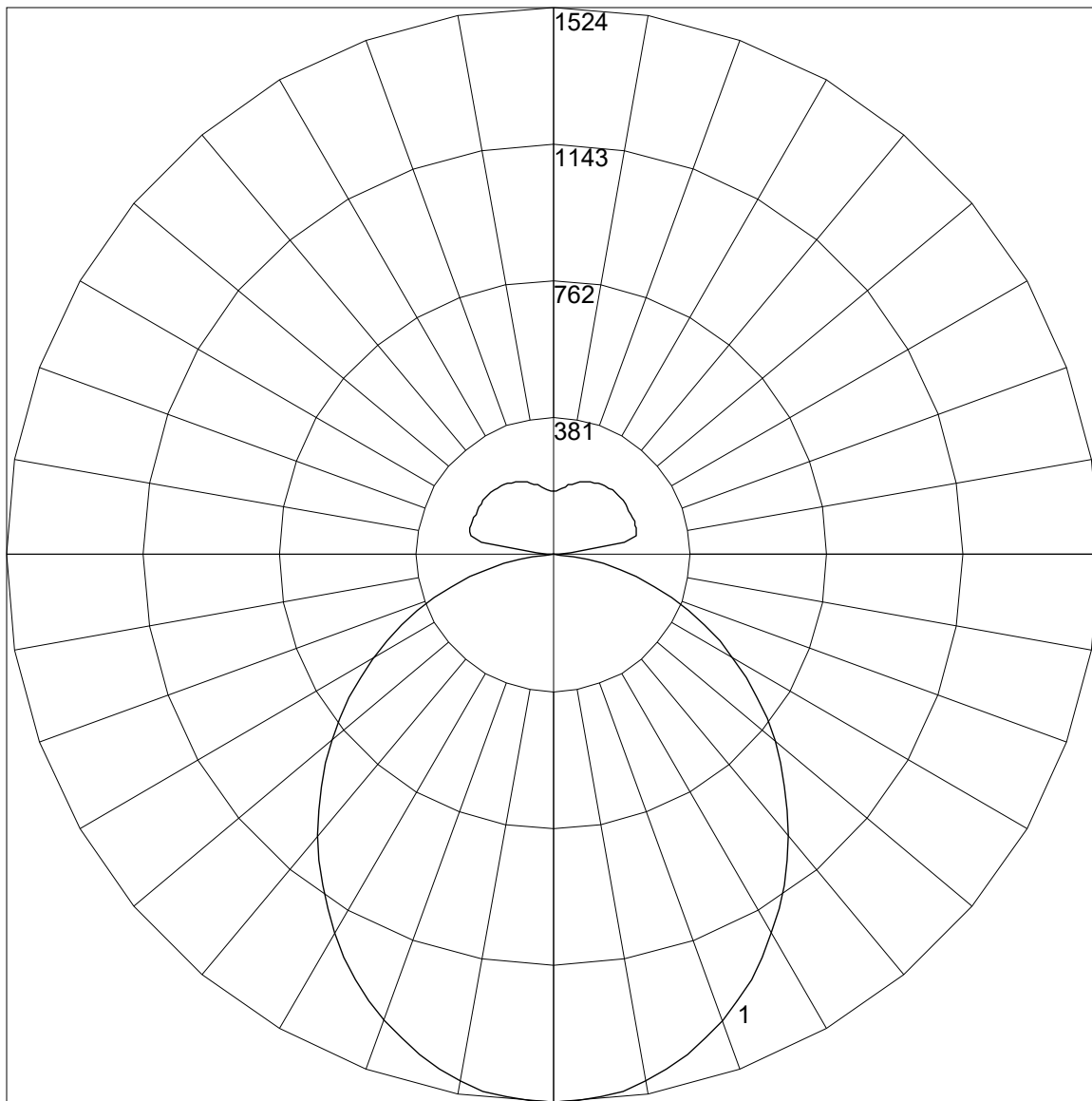
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	114	114	114	114	109	109	109	109	100	100	100	91	91	91	84	84	84	80
1	104	100	96	92	100	96	92	89	88	85	82	81	78	76	74	72	71	67
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	59	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	80	68	60	53	76	65	58	52	60	54	49	56	51	46	51	47	44	41
5	73	61	52	46	70	59	51	45	54	48	42	50	45	40	46	42	38	35
6	67	55	46	40	64	53	45	39	49	42	37	45	40	35	42	37	33	31
7	63	50	41	35	60	48	40	34	45	38	33	41	36	31	38	34	30	28
8	58	45	37	31	56	44	36	31	41	34	29	38	32	28	35	30	27	25
9	54	41	34	28	52	40	33	28	37	31	26	35	29	25	33	28	24	22
10	51	38	31	25	49	37	30	25	35	28	24	32	27	23	30	25	22	20

POLAR GRAPH



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