

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 : S12-LED-ID-DCO-4FT-4E-B-8-35-10U90D-ITL85163.202.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.202 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]09/11/15

[ISSUEDATE]08/15/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE S12-LED-ID-DCO-4ft-4E-B-8-35-10U90D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 37.2 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 39.7 WATTS

[ABSOLUTE]LUMENS]4004

[OTHER]see www.finelite.com for source file ITL85163. 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	4004
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	37.2
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.34
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	3.32 ft
Luminous Width (90-270)	0.36 ft
Luminous Height	0.03 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10249	9714	9569
55	9574	8877	8718
65	8666	7857	7657
75	7179	6330	6369
85	4247	4295	4934

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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	1339.122	1339.122	1339.122	1339.122	1339.122
2.5	1337.346	1337.346	1337.346	1337.346	1337.346
5.0	1332.018	1332.018	1332.018	1332.018	1332.018
7.5	1323.138	1323.138	1323.138	1323.138	1324.914
10.0	1308.929	1307.153	1310.705	1310.705	1310.705
12.5	1294.721	1291.169	1296.497	1296.497	1294.721
15.0	1275.185	1268.081	1275.185	1276.961	1275.185
17.5	1252.097	1244.993	1252.097	1253.873	1252.097
20.0	1225.456	1216.576	1225.456	1227.232	1227.232
22.5	1193.488	1184.608	1195.264	1197.040	1195.264
25.0	1159.743	1152.639	1161.520	1165.072	1163.295
27.5	1125.999	1117.119	1127.775	1129.551	1129.551
30.0	1086.927	1079.822	1088.703	1090.478	1088.703
32.5	1047.854	1040.750	1049.630	1053.182	1049.630
35.0	1007.005	999.901	1008.781	1010.558	1008.781
37.5	960.829	955.501	964.381	966.157	964.381
40.0	916.428	911.100	918.204	921.756	919.980
42.5	872.028	866.700	872.028	877.356	873.804
45.0	824.075	820.523	825.851	829.403	827.627
47.5	776.122	772.570	777.898	779.674	777.898
50.0	724.618	722.842	729.946	731.722	729.946
52.5	676.665	674.889	678.441	681.993	681.993
55.0	626.936	625.160	628.712	632.264	632.264
57.5	575.432	575.432	580.760	582.536	582.536
60.0	525.703	523.927	529.255	532.807	532.807
62.5	472.422	474.198	477.750	481.302	483.078
65.0	420.918	422.694	428.022	429.798	431.574
67.5	369.413	371.189	376.517	380.069	380.069
70.0	317.908	321.460	328.564	330.340	333.892
72.5	266.404	271.732	278.836	284.164	289.492
75.0	216.675	223.779	230.883	239.763	245.091
77.5	168.722	175.826	188.258	197.139	200.691
80.0	122.546	131.426	145.634	156.290	159.842
82.5	81.697	90.577	106.561	120.770	126.098
85.0	46.177	56.833	74.593	90.577	95.905
87.5	15.984	28.416	49.729	63.937	69.265
90.0	0.000	10.656	28.416	42.625	47.953
92.5	2.063	27.767	54.423	62.515	55.295
95.0	4.284	32.844	62.515	81.000	86.474
97.5	6.743	35.383	66.006	84.570	90.758
100.0	9.361	38.160	67.751	86.156	92.344
102.5	11.979	38.556	68.465	86.553	92.741
105.0	14.677	39.587	68.703	86.236	92.186
107.5	17.453	40.857	69.496	85.522	91.234
110.0	20.389	42.206	68.703	85.046	90.282
112.5	23.086	43.871	68.386	85.284	89.964
115.0	25.783	45.617	68.386	83.935	89.647
117.5	28.560	47.521	68.465	83.062	87.981
120.0	31.257	49.663	68.862	82.586	87.188
122.5	33.955	51.805	69.338	82.110	86.474
125.0	36.493	53.947	69.814	81.793	85.839
127.5	39.270	56.010	70.448	81.634	85.363
130.0	41.650	57.913	71.083	81.396	84.887
132.5	44.109	59.500	71.876	81.238	84.490

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-10U90D-ITL85163.202.IES****CANDELA TABULATION - (Cont.)**

135.0	46.410	60.690	72.670	81.158	84.173
137.5	48.632	61.642	73.542	81.079	83.776
140.0	50.853	62.515	74.574	81.079	83.459
142.5	52.916	63.229	75.367	81.158	83.221
145.0	54.819	63.705	76.160	81.317	82.983
147.5	56.644	64.022	76.557	81.555	82.983
150.0	58.310	64.340	76.398	81.714	82.983
152.5	59.897	64.578	75.843	81.634	82.904
155.0	61.325	64.974	75.129	80.841	82.507
157.5	62.594	65.450	74.018	79.572	81.396
160.0	63.705	65.847	72.749	77.985	79.730
162.5	64.736	66.323	71.400	76.002	77.747
165.0	65.529	66.640	70.131	73.701	75.288
167.5	66.244	67.037	69.258	71.480	72.749
170.0	66.799	67.275	68.624	69.893	70.686
172.5	67.196	67.513	68.227	68.941	69.338
175.0	67.513	67.751	67.989	68.306	68.465
177.5	67.751	67.830	67.830	67.989	67.989
180.0	67.830	67.830	67.830	67.830	67.830

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-10U90D-ITL85163.202.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	485.64	N.A.	12.10
0-30	1020.01	N.A.	25.50
0-40	1649.12	N.A.	41.20
0-60	2847.94	N.A.	71.10
0-80	3515.98	N.A.	87.80
0-90	3600.36	N.A.	89.90
10-90	3473.9	N.A.	86.80
20-40	1163.47	N.A.	29.10
20-50	1799.82	N.A.	45.00
40-70	1621.33	N.A.	40.50
60-80	668.05	N.A.	16.70
70-80	245.54	N.A.	6.10
80-90	84.38	N.A.	2.10
90-110	120.33	N.A.	3.00
90-120	183.77	N.A.	4.60
90-130	243.60	N.A.	6.10
90-150	343.20	N.A.	8.60
90-180	403.50	N.A.	10.10
110-180	283.17	N.A.	7.10
0-180	4003.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.46
10-20	359.19
20-30	534.37
30-40	629.10
40-50	636.34
50-60	562.48
60-70	422.50
70-80	245.54
80-90	84.38
90-100	54.79
100-110	65.53
110-120	63.44
120-130	59.83
130-140	54.12
140-150	45.48
150-160	33.81
160-170	19.98
170-180	6.51

IES INDOOR REPORT

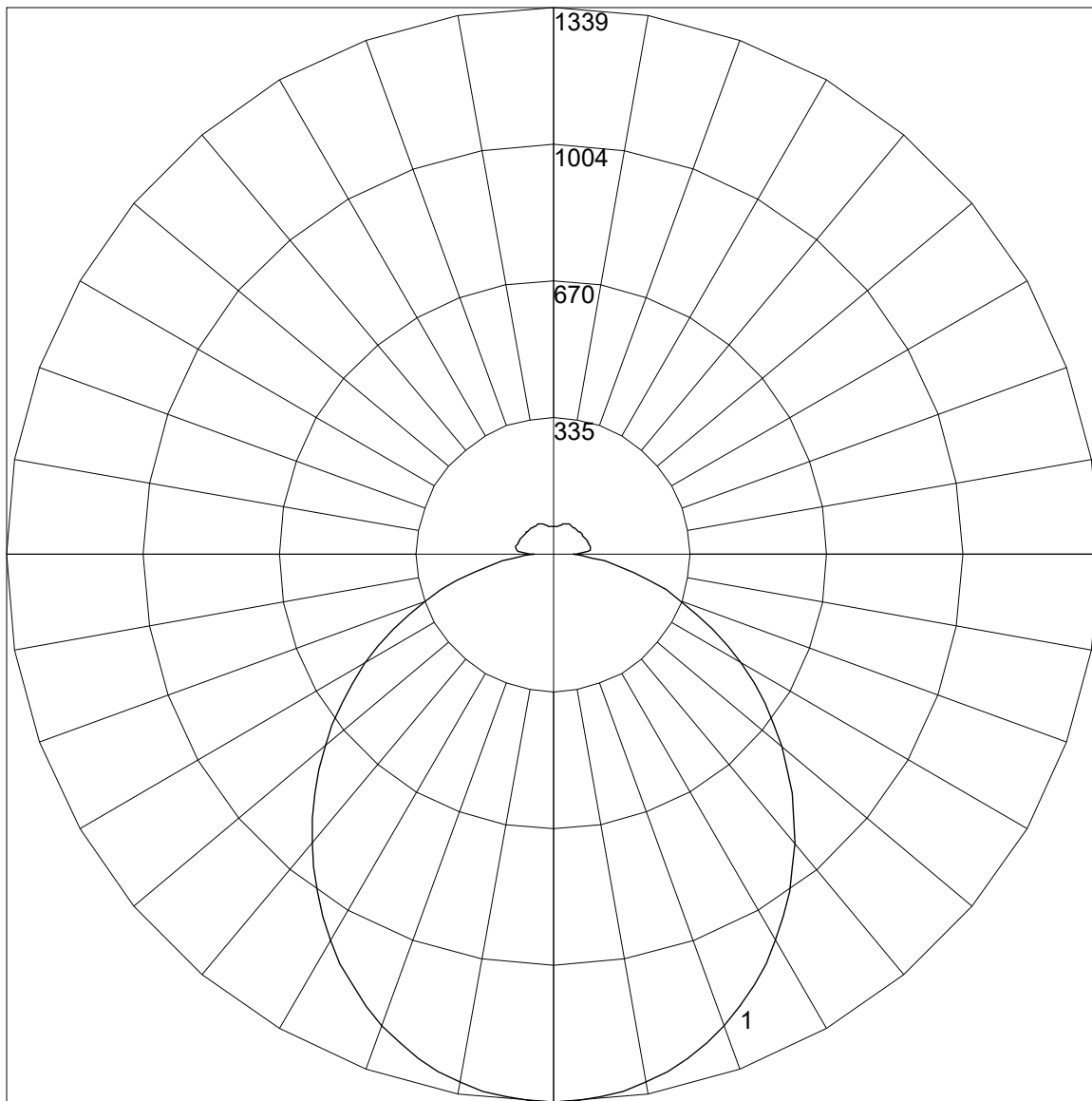
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	106	102	97	94	103	98	95	91	92	89	86	87	84	82	82	80	78	75
2	97	89	82	76	93	86	80	75	81	76	71	76	72	68	72	68	65	63
3	88	78	70	64	85	76	68	62	71	65	60	67	62	58	63	59	55	53
4	81	69	61	54	78	67	59	53	63	57	51	60	54	49	57	52	48	45
5	74	62	53	46	72	60	52	46	57	50	44	54	48	43	51	46	42	39
6	69	56	47	41	66	54	46	40	51	44	39	49	43	38	46	41	37	34
7	64	50	42	36	61	49	41	35	47	40	34	44	38	33	42	37	33	30
8	59	46	38	32	57	45	37	32	43	36	31	41	35	30	39	33	29	27
9	55	42	34	29	53	41	34	28	39	33	28	38	31	27	36	30	26	25
10	52	39	31	26	50	38	31	26	36	30	25	35	29	25	33	28	24	22

POLAR GRAPH



Maximum Candela = 1339.122 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)