

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-H-8-35-40U60D-ITL85163.212.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.212 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-H-8-35-40U60D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 43.0 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 45.4 WATTS

[_ABSOLUTE]LUMENS]5003

[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	5003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	43
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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	8540	8095	7974
55	7978	7398	7265
65	7222	6547	6381
75	5983	5275	5307
85	3539	3579	4112

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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	1115.935	1115.935	1115.935	1115.935	1115.935
2.5	1114.455	1114.455	1114.455	1114.455	1114.455
5.0	1110.015	1110.015	1110.015	1110.015	1110.015
7.5	1102.615	1102.615	1102.615	1102.615	1104.095
10.0	1090.774	1089.295	1092.255	1092.255	1092.255
12.5	1078.934	1075.974	1080.414	1080.414	1078.934
15.0	1062.654	1056.734	1062.654	1064.134	1062.654
17.5	1043.414	1037.494	1043.414	1044.894	1043.414
20.0	1021.214	1013.813	1021.214	1022.694	1022.694
22.5	994.573	987.173	996.053	997.533	996.053
25.0	966.453	960.533	967.933	970.893	969.413
27.5	938.332	930.932	939.813	941.293	941.293
30.0	905.772	899.852	907.252	908.732	907.252
32.5	873.212	867.292	874.692	877.652	874.692
35.0	839.171	833.251	840.651	842.131	840.651
37.5	800.691	796.251	803.651	805.131	803.651
40.0	763.690	759.250	765.170	768.130	766.650
42.5	726.690	722.250	726.690	731.130	728.170
45.0	686.729	683.769	688.209	691.169	689.689
47.5	646.769	643.809	648.249	649.729	648.249
50.0	603.848	602.368	608.288	609.768	608.288
52.5	563.888	562.408	565.368	568.328	568.328
55.0	522.447	520.967	523.927	526.887	526.887
57.5	479.526	479.526	483.966	485.447	485.447
60.0	438.086	436.606	441.046	444.006	444.006
62.5	393.685	395.165	398.125	401.085	402.565
65.0	350.765	352.245	356.685	358.165	359.645
67.5	307.844	309.324	313.764	316.724	316.724
70.0	264.923	267.884	273.804	275.284	278.244
72.5	222.003	226.443	232.363	236.803	241.243
75.0	180.562	186.482	192.403	199.803	204.243
77.5	140.602	146.522	156.882	164.282	167.242
80.0	102.121	109.522	121.362	130.242	133.202
82.5	68.081	75.481	88.801	100.641	105.081
85.0	38.480	47.361	62.161	75.481	79.921
87.5	13.320	23.680	41.441	53.281	57.721
90.0	0.000	8.880	23.680	35.520	39.961
92.5	10.313	138.834	272.114	312.574	276.478
95.0	21.420	164.221	312.574	404.998	432.368
97.5	33.717	176.914	330.028	422.848	453.788
100.0	46.807	190.797	338.755	430.781	461.721
102.5	59.897	192.781	342.325	432.765	463.705
105.0	73.384	197.937	343.514	431.178	460.928
107.5	87.267	204.284	347.481	427.608	456.168
110.0	101.944	211.027	343.514	425.228	451.408
112.5	115.430	219.357	341.928	426.418	449.822
115.0	128.917	228.084	341.928	419.675	448.235
117.5	142.800	237.604	342.325	415.311	439.905
120.0	156.287	248.314	344.308	412.931	435.938
122.5	169.774	259.024	346.688	410.551	432.368
125.0	182.467	269.734	349.068	408.965	429.195
127.5	196.351	280.048	352.241	408.171	426.815
130.0	208.251	289.568	355.414	406.981	424.435
132.5	220.547	297.501	359.381	406.188	422.451

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-H-8-35-40U60D-ITL85163.212.IES****CANDELA TABULATION - (Cont.)**

135.0	232.051	303.451	363.348	405.791	420.865
137.5	243.157	308.211	367.711	405.395	418.881
140.0	254.264	312.574	372.868	405.395	417.295
142.5	264.577	316.144	376.835	405.791	416.105
145.0	274.098	318.524	380.801	406.585	414.915
147.5	283.221	320.111	382.785	407.775	414.915
150.0	291.551	321.698	381.991	408.568	414.915
152.5	299.484	322.888	379.215	408.171	414.518
155.0	306.624	324.871	375.645	404.205	412.535
157.5	312.971	327.251	370.091	397.858	406.981
160.0	318.524	329.234	363.745	389.925	398.651
162.5	323.681	331.614	357.001	380.008	388.735
165.0	327.648	333.201	350.654	368.505	376.438
167.5	331.218	335.184	346.291	357.398	363.745
170.0	333.994	336.375	343.118	349.464	353.431
172.5	335.978	337.565	341.135	344.704	346.688
175.0	337.565	338.755	339.945	341.531	342.325
177.5	338.755	339.151	339.151	339.945	339.945
180.0	339.151	339.151	339.151	339.151	339.151

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-H-8-35-40U60D-ITL85163.212.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	404.70	N.A.	8.10
0-30	850.01	N.A.	17.00
0-40	1374.26	N.A.	27.50
0-60	2373.28	N.A.	47.40
0-80	2929.99	N.A.	58.60
0-90	3000.3	N.A.	60.00
10-90	2894.92	N.A.	57.90
20-40	969.56	N.A.	19.40
20-50	1499.85	N.A.	30.00
40-70	1351.11	N.A.	27.00
60-80	556.71	N.A.	11.10
70-80	204.62	N.A.	4.10
80-90	70.32	N.A.	1.40
90-110	586.54	N.A.	11.70
90-120	903.76	N.A.	18.10
90-130	1202.93	N.A.	24.00
90-150	1700.93	N.A.	34.00
90-180	2002.39	N.A.	40.00
110-180	1415.85	N.A.	28.30
0-180	5002.69	N.A.	100.00

Total Luminaire Efficiency = N.A.%

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	105.38
10-20	299.32
20-30	445.31
30-40	524.25
40-50	530.29
50-60	468.73
60-70	352.09
70-80	204.62
80-90	70.32
90-100	258.89
100-110	327.65
110-120	317.22
120-130	299.17
130-140	270.59
140-150	227.42
150-160	169.03
160-170	99.88
170-180	32.55

IES INDOOR REPORT

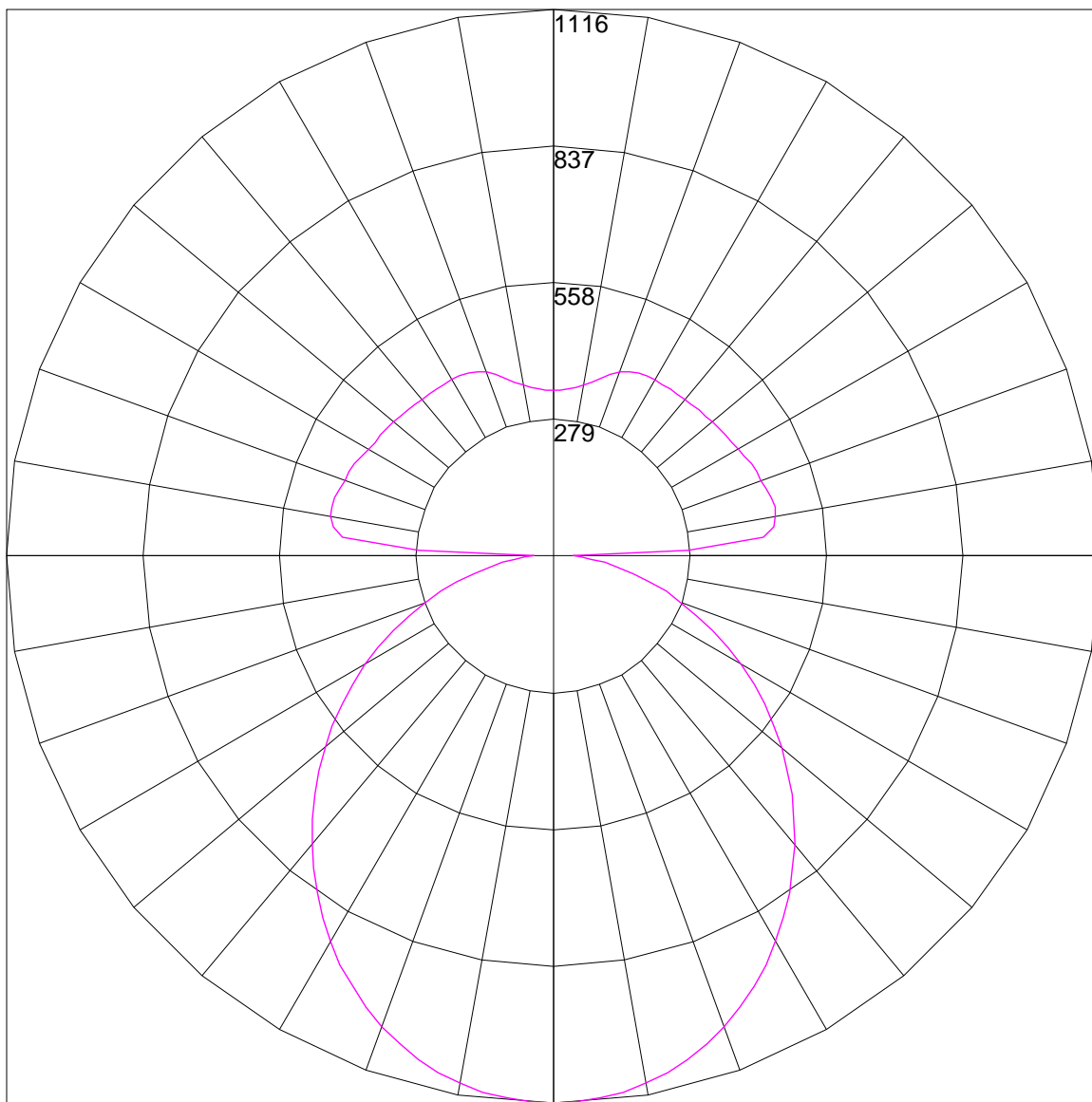
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	100	95	91	88	93	89	86	83	78	75	73	67	65	63	57	56	55	50
2	91	83	77	71	85	78	72	68	68	64	60	59	56	53	50	48	46	42
3	83	73	65	59	77	68	62	56	60	55	50	52	48	45	45	42	39	35
4	76	65	56	50	70	61	53	48	53	47	43	46	42	38	40	36	34	30
5	70	58	49	43	65	54	47	41	48	42	37	42	37	33	36	32	29	26
6	64	52	43	37	60	49	41	36	43	37	32	38	33	29	32	29	26	23
7	59	47	39	33	55	44	37	31	39	33	28	34	29	26	30	26	23	20
8	55	42	35	29	51	40	33	28	36	30	25	31	26	23	27	23	20	18
9	51	39	31	26	48	37	30	25	33	27	23	29	24	21	25	21	18	16
10	48	36	28	23	45	34	27	22	30	24	21	27	22	19	23	20	17	15

POLAR GRAPH



Maximum Candela = 1115.935 Located At Horizontal Angle = 0, Vertical Angle = 0
Vertical Plane Through Horizontal Angles (90 - 270)