

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-8-35-30U70D-ITL85163.208.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.208 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-8-35-30U70D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 35.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 38.2 WATTS

[ABSOLUTE]LUMENS]4003

[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	4003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	35.6
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	7971	7555	7443
55	7446	6904	6780
65	6740	6111	5956
75	5584	4923	4953
85	3303	3341	3837

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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	1041.539	1041.539	1041.539	1041.539	1041.539
2.5	1040.158	1040.158	1040.158	1040.158	1040.158
5.0	1036.014	1036.014	1036.014	1036.014	1036.014
7.5	1029.107	1029.107	1029.107	1029.107	1030.488
10.0	1018.056	1016.675	1019.438	1019.438	1019.438
12.5	1007.005	1004.243	1008.387	1008.387	1007.005
15.0	991.811	986.285	991.811	993.192	991.811
17.5	973.853	968.328	973.853	975.234	973.853
20.0	953.133	946.226	953.133	954.514	954.514
22.5	928.268	921.362	929.650	931.031	929.650
25.0	902.023	896.497	903.404	906.167	904.785
27.5	875.777	868.870	877.158	878.540	878.540
30.0	845.387	839.862	846.769	848.150	846.769
32.5	814.998	809.472	816.379	819.142	816.379
35.0	783.226	777.701	784.608	785.989	784.608
37.5	747.311	743.167	750.074	751.455	750.074
40.0	712.778	708.633	714.159	716.922	715.540
42.5	678.244	674.100	678.244	682.388	679.625
45.0	640.947	638.184	642.329	645.091	643.710
47.5	603.651	600.888	605.032	606.413	605.032
50.0	563.591	562.210	567.736	569.117	567.736
52.5	526.295	524.914	527.676	530.439	530.439
55.0	487.617	486.236	488.998	491.761	491.761
57.5	447.558	447.558	451.702	453.083	453.083
60.0	408.880	407.499	411.643	414.406	414.406
62.5	367.440	368.821	371.584	374.346	375.728
65.0	327.380	328.762	332.906	334.287	335.668
67.5	287.321	288.702	292.847	295.609	295.609
70.0	247.262	250.025	255.550	256.931	259.694
72.5	207.203	211.347	216.872	221.016	225.160
75.0	168.525	174.050	179.576	186.482	190.626
77.5	131.228	136.754	146.423	153.330	156.093
80.0	95.313	102.220	113.271	121.559	124.322
82.5	63.542	70.449	82.881	93.932	98.076
85.0	35.915	44.203	58.017	70.449	74.593
87.5	12.432	22.102	38.678	49.729	53.873
90.0	0.000	8.288	22.102	33.152	37.297
92.5	6.188	83.300	163.268	187.545	165.887
95.0	12.852	98.532	187.545	242.999	259.421
97.5	20.230	106.148	198.017	253.709	272.273
100.0	28.084	114.478	203.253	258.469	277.033
102.5	35.938	115.668	205.395	259.659	278.223
105.0	44.030	118.762	206.109	258.707	276.557
107.5	52.360	122.570	208.489	256.565	273.701
110.0	61.166	126.616	206.109	255.137	270.845
112.5	69.258	131.614	205.157	255.851	269.893
115.0	77.350	136.850	205.157	251.805	268.941
117.5	85.680	142.563	205.395	249.187	263.943
120.0	93.772	148.988	206.585	247.759	261.563
122.5	101.864	155.415	208.013	246.331	259.421
125.0	109.480	161.840	209.441	245.379	257.517
127.5	117.810	168.029	211.345	244.903	256.089
130.0	124.950	173.741	213.249	244.189	254.661
132.5	132.328	178.501	215.629	243.713	253.471

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-30U70D-ITL85163.208.IES****CANDELA TABULATION - (Cont.)**

135.0	139.231	182.071	218.009	243.475	252.519
137.5	145.894	184.927	220.627	243.237	251.329
140.0	152.559	187.545	223.721	243.237	250.377
142.5	158.746	189.687	226.101	243.475	249.663
145.0	164.458	191.115	228.481	243.951	248.949
147.5	169.933	192.067	229.671	244.665	248.949
150.0	174.931	193.019	229.195	245.141	248.949
152.5	179.691	193.733	227.529	244.903	248.711
155.0	183.975	194.923	225.387	242.523	247.521
157.5	187.783	196.351	222.055	238.715	244.189
160.0	191.115	197.541	218.247	233.955	239.191
162.5	194.209	198.969	214.201	228.005	233.241
165.0	196.589	199.921	210.393	221.103	225.863
167.5	198.731	201.111	207.775	214.439	218.247
170.0	200.397	201.825	205.871	209.679	212.059
172.5	201.587	202.539	204.681	206.823	208.013
175.0	202.539	203.253	203.967	204.919	205.395
177.5	203.253	203.491	203.491	203.967	203.967
180.0	203.491	203.491	203.491	203.491	203.491

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-30U70D-ITL85163.208.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	377.72	N.A.	9.40
0-30	793.34	N.A.	19.80
0-40	1282.65	N.A.	32.00
0-60	2215.06	N.A.	55.30
0-80	2734.65	N.A.	68.30
0-90	2800.28	N.A.	70.00
10-90	2701.93	N.A.	67.50
20-40	904.92	N.A.	22.60
20-50	1399.86	N.A.	35.00
40-70	1261.03	N.A.	31.50
60-80	519.59	N.A.	13.00
70-80	190.98	N.A.	4.80
80-90	65.63	N.A.	1.60
90-110	352.93	N.A.	8.80
90-120	543.26	N.A.	13.60
90-130	722.76	N.A.	18.10
90-150	1021.56	N.A.	25.50
90-180	1202.44	N.A.	30.00
110-180	849.51	N.A.	21.20
0-180	4002.72	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	98.35
10-20	279.37
20-30	415.62
30-40	489.30
40-50	494.93
50-60	437.48
60-70	328.61
70-80	190.98
80-90	65.63
90-100	156.34
100-110	196.59
110-120	190.33
120-130	179.50
130-140	162.35
140-150	136.45
150-160	101.42
160-170	59.93
170-180	19.53

IES INDOOR REPORT

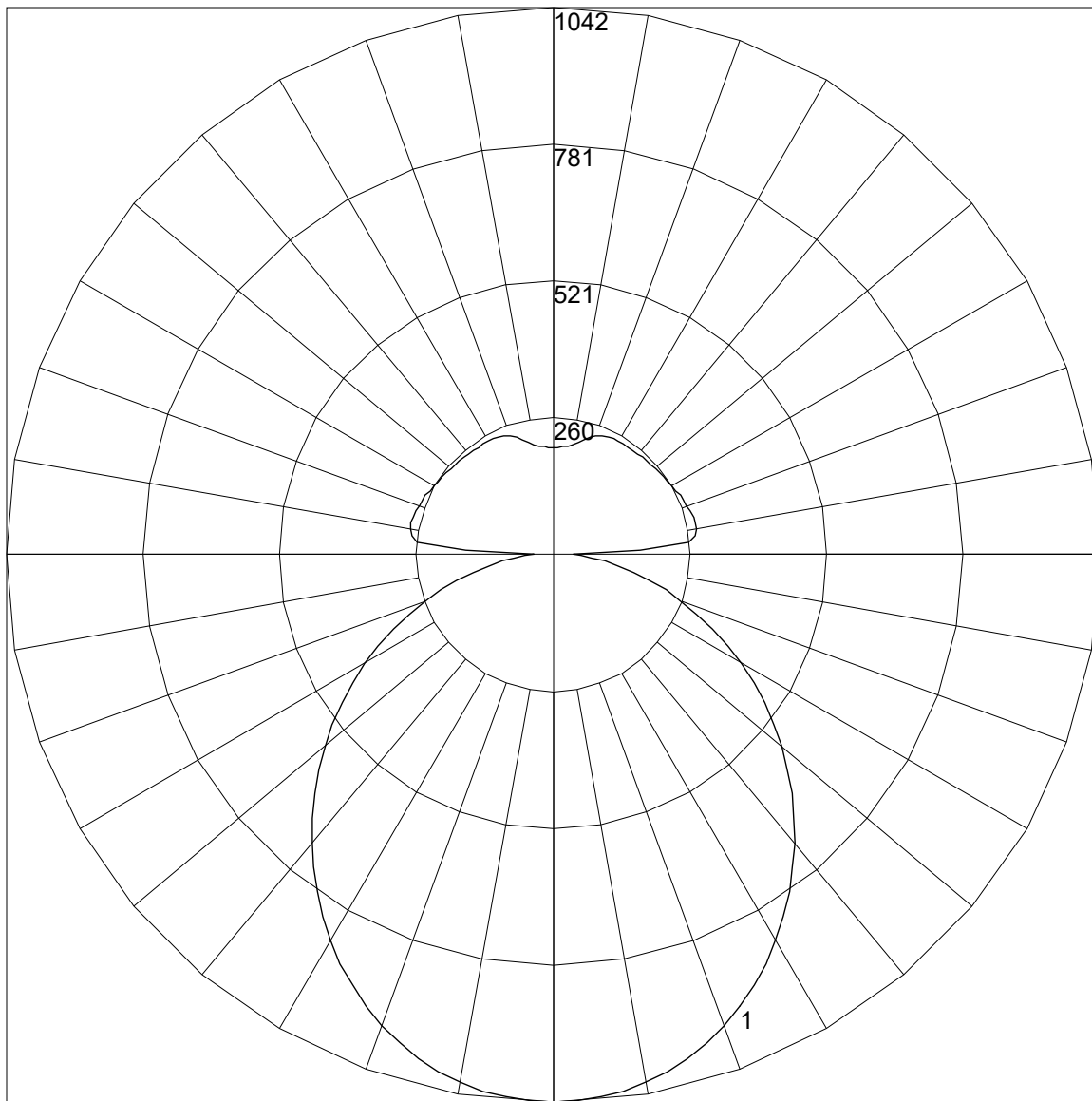
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	102	97	93	90	96	92	89	85	83	80	77	74	72	70	65	64	62	58
2	93	85	79	73	87	81	75	70	72	68	64	65	61	58	57	55	52	49
3	85	75	67	61	80	71	64	58	64	58	54	57	53	49	51	47	45	41
4	77	66	58	51	73	63	55	50	57	50	46	51	46	42	45	42	38	35
5	71	59	51	44	67	56	48	43	51	44	39	46	40	36	41	37	33	31
6	66	53	45	38	62	51	43	37	46	39	34	41	36	32	37	33	29	27
7	61	48	40	34	57	46	38	33	42	35	30	38	32	28	34	29	26	24
8	56	44	36	30	53	42	34	29	38	32	27	34	29	25	31	27	23	21
9	53	40	32	27	50	38	31	26	35	29	24	32	26	23	29	24	21	19
10	49	37	29	24	47	35	28	24	32	26	22	29	24	21	27	22	19	17

POLAR GRAPH



Maximum Candela = 1041.539 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)