

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-S-8-35-20U80D-ITL85163.204.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.204 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-S-8-35-20U80D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 27.4 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 30.2 WATTS

[ABSOLUTE]LUMENS]3002

[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	3002
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	27.4
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	6832	6476	6380
55	6383	5918	5812
65	5777	5238	5105
75	4786	4220	4246
85	2831	2863	3289

IES INDOOR REPORT

PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-20U80D-ITL85163.204.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	892.748	892.748	892.748	892.748	892.748
2.5	891.564	891.564	891.564	891.564	891.564
5.0	888.012	888.012	888.012	888.012	888.012
7.5	882.092	882.092	882.092	882.092	883.276
10.0	872.620	871.436	873.804	873.804	873.804
12.5	863.148	860.779	864.332	864.332	863.148
15.0	850.123	845.387	850.123	851.307	850.123
17.5	834.731	829.995	834.731	835.915	834.731
20.0	816.971	811.051	816.971	818.155	818.155
22.5	795.659	789.739	796.843	798.027	796.843
25.0	773.162	768.426	774.346	776.714	775.530
27.5	750.666	744.746	751.850	753.034	753.034
30.0	724.618	719.882	725.802	726.986	725.802
32.5	698.569	693.833	699.753	702.121	699.753
35.0	671.337	666.601	672.521	673.705	672.521
37.5	640.553	637.000	642.921	644.105	642.921
40.0	610.952	607.400	612.136	614.504	613.320
42.5	581.352	577.800	581.352	584.904	582.536
45.0	549.383	547.015	550.567	552.935	551.751
47.5	517.415	515.047	518.599	519.783	518.599
50.0	483.078	481.894	486.630	487.815	486.630
52.5	451.110	449.926	452.294	454.662	454.662
55.0	417.958	416.774	419.142	421.510	421.510
57.5	383.621	383.621	387.173	388.357	388.357
60.0	350.469	349.285	352.837	355.205	355.205
62.5	314.948	316.132	318.500	320.868	322.052
65.0	280.612	281.796	285.348	286.532	287.716
67.5	246.275	247.459	251.011	253.379	253.379
70.0	211.939	214.307	219.043	220.227	222.595
72.5	177.602	181.154	185.891	189.442	192.995
75.0	144.450	149.186	153.922	159.842	163.394
77.5	112.481	117.218	125.506	131.426	133.794
80.0	81.697	87.617	97.089	104.193	106.561
82.5	54.465	60.385	71.041	80.513	84.065
85.0	30.784	37.889	49.729	60.385	63.937
87.5	10.656	18.944	33.152	42.625	46.177
90.0	0.000	7.104	18.944	28.416	31.968
92.5	3.094	41.650	81.634	93.772	82.943
95.0	6.426	49.266	93.772	121.499	129.710
97.5	10.115	53.074	99.008	126.854	136.137
100.0	14.042	57.239	101.626	129.234	138.517
102.5	17.969	57.834	102.697	129.829	139.112
105.0	22.015	59.381	103.054	129.353	138.279
107.5	26.180	61.285	104.244	128.282	136.850
110.0	30.583	63.308	103.054	127.568	135.423
112.5	34.629	65.807	102.578	127.925	134.946
115.0	38.675	68.425	102.578	125.902	134.470
117.5	42.840	71.281	102.697	124.593	131.971
120.0	46.886	74.494	103.292	123.879	130.781
122.5	50.932	77.707	104.006	123.165	129.710
125.0	54.740	80.920	104.720	122.689	128.758
127.5	58.905	84.014	105.672	122.451	128.044
130.0	62.475	86.870	106.624	122.094	127.330
132.5	66.164	89.250	107.814	121.856	126.735

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-20U80D-ITL85163.204.IES****CANDELA TABULATION - (Cont.)**

135.0	69.615	91.035	109.004	121.737	126.259
137.5	72.947	92.463	110.313	121.618	125.664
140.0	76.279	93.772	111.860	121.618	125.188
142.5	79.373	94.843	113.050	121.737	124.831
145.0	82.229	95.557	114.240	121.975	124.474
147.5	84.966	96.033	114.835	122.332	124.474
150.0	87.465	96.509	114.597	122.570	124.474
152.5	89.845	96.866	113.764	122.451	124.355
155.0	91.987	97.461	112.693	121.261	123.760
157.5	93.891	98.175	111.027	119.357	122.094
160.0	95.557	98.770	109.123	116.977	119.595
162.5	97.104	99.484	107.100	114.002	116.620
165.0	98.294	99.960	105.196	110.551	112.931
167.5	99.365	100.555	103.887	107.219	109.123
170.0	100.198	100.912	102.935	104.839	106.029
172.5	100.793	101.269	102.340	103.411	104.006
175.0	101.269	101.626	101.983	102.459	102.697
177.5	101.626	101.745	101.745	101.983	101.983
180.0	101.745	101.745	101.745	101.745	101.745

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-20U80D-ITL85163.204.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	323.76	N.A.	10.80
0-30	680.01	N.A.	22.60
0-40	1099.41	N.A.	36.60
0-60	1898.62	N.A.	63.20
0-80	2343.99	N.A.	78.10
0-90	2400.24	N.A.	79.90
10-90	2315.94	N.A.	77.10
20-40	775.65	N.A.	25.80
20-50	1199.88	N.A.	40.00
40-70	1080.88	N.A.	36.00
60-80	445.36	N.A.	14.80
70-80	163.69	N.A.	5.50
80-90	56.25	N.A.	1.90
90-110	177.47	N.A.	5.90
90-120	272.64	N.A.	9.10
90-130	362.39	N.A.	12.10
90-150	511.79	N.A.	17.00
90-180	602.22	N.A.	20.10
110-180	424.75	N.A.	14.10
0-180	3002.47	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	84.30
10-20	239.46
20-30	356.25
30-40	419.40
40-50	424.23
50-60	374.98
60-70	281.67
70-80	163.69
80-90	56.25
90-100	79.18
100-110	98.30
110-120	95.16
120-130	89.75
130-140	81.18
140-150	68.22
150-160	50.71
160-170	29.96
170-180	9.77

IES INDOOR REPORT

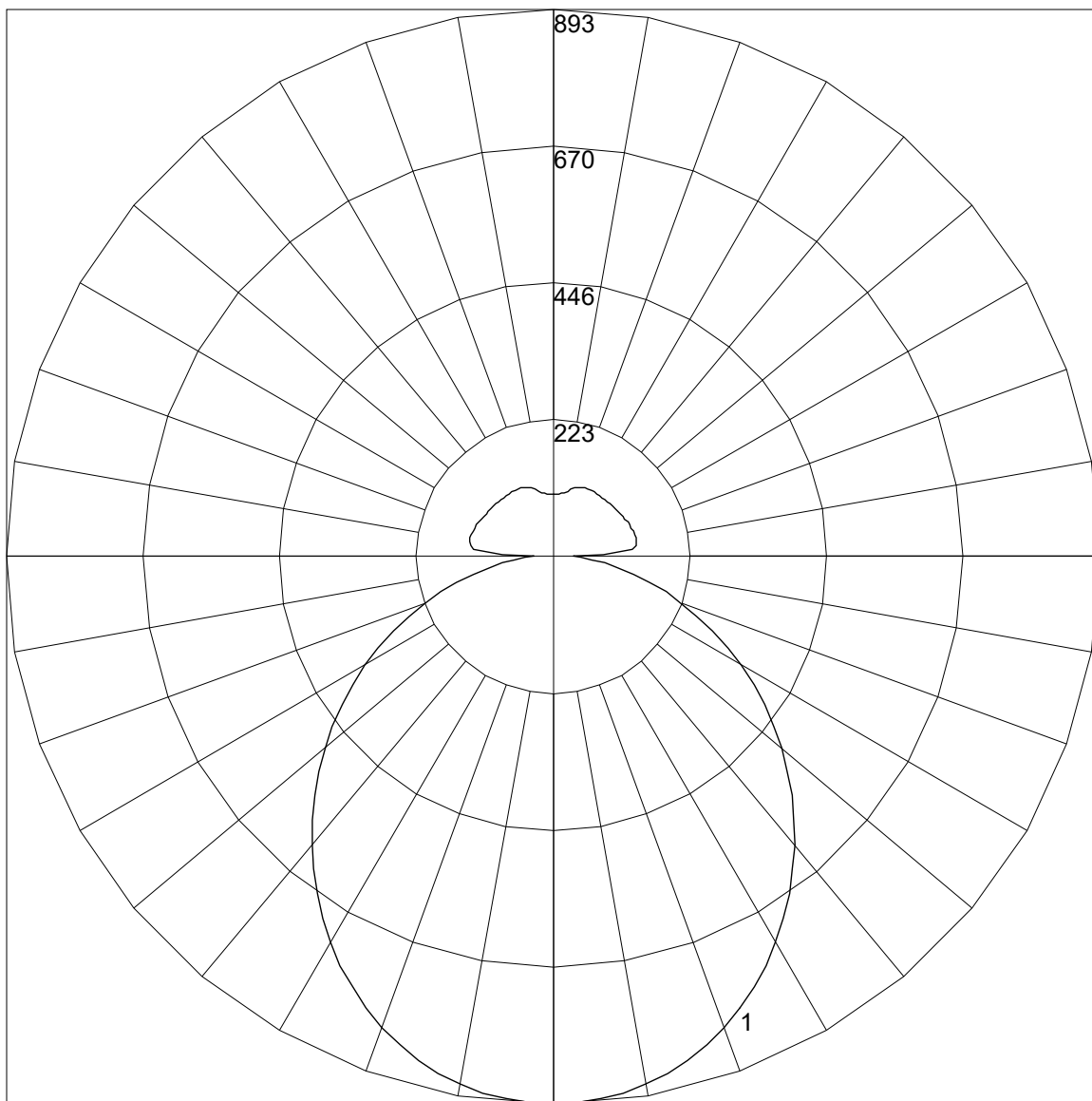
PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-S-8-35-20U80D-ITL85163.204.IES

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	95	92	99	95	92	88	87	85	82	80	78	76	74	72	70	67
2	95	87	80	75	90	83	77	72	77	72	68	70	67	63	65	62	59	56
3	87	76	68	62	82	73	66	60	67	62	57	62	57	53	57	53	50	47
4	79	68	59	53	75	65	57	51	60	54	48	55	50	46	51	47	43	40
5	73	60	52	45	69	58	50	44	54	47	42	50	44	40	46	41	37	35
6	67	54	46	40	64	52	44	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	47	40	34	44	37	32	41	35	31	38	33	29	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	27	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

POLAR GRAPH



Maximum Candela = 892.748 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)