

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-TDO-ITL85163.214.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85163.214 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-TDO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 37.3 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 38.1 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)	107
Total Luminaire Watts	37.3
Ballast Factor	1.00
CIE Type	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	11387	10793	10633
55	10638	9864	9686
65	9629	8730	8508
75	7977	7033	7076
85	4718	4772	5482

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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	1487.913	1487.913	1487.913	1487.913	1487.913
2.5	1485.940	1485.940	1485.940	1485.940	1485.940
5.0	1480.020	1480.020	1480.020	1480.020	1480.020
7.5	1470.153	1470.153	1470.153	1470.153	1472.126
10.0	1454.366	1452.393	1456.340	1456.340	1456.340
12.5	1438.579	1434.632	1440.553	1440.553	1438.579
15.0	1416.872	1408.979	1416.872	1418.846	1416.872
17.5	1391.218	1383.325	1391.218	1393.192	1391.218
20.0	1361.618	1351.751	1361.618	1363.592	1363.592
22.5	1326.098	1316.231	1328.071	1330.044	1328.071
25.0	1288.604	1280.710	1290.577	1294.524	1292.551
27.5	1251.110	1241.243	1253.083	1255.057	1255.057
30.0	1207.696	1199.803	1209.669	1211.643	1209.669
32.5	1164.282	1156.389	1166.255	1170.202	1166.255
35.0	1118.895	1111.002	1120.868	1122.842	1120.868
37.5	1067.588	1061.668	1071.534	1073.508	1071.534
40.0	1018.254	1012.333	1020.227	1024.174	1022.200
42.5	968.920	963.000	968.920	974.840	970.893
45.0	915.639	911.692	917.612	921.559	919.586
47.5	862.358	858.411	864.332	866.305	864.332
50.0	805.131	803.157	811.051	813.024	811.051
52.5	751.850	749.877	753.823	757.770	757.770
55.0	696.596	694.623	698.569	702.516	702.516
57.5	639.369	639.369	645.289	647.262	647.262
60.0	584.114	582.141	588.061	592.008	592.008
62.5	524.914	526.887	530.834	534.780	536.754
65.0	467.686	469.660	475.580	477.553	479.526
67.5	410.459	412.432	418.352	422.299	422.299
70.0	353.231	357.178	365.072	367.045	370.992
72.5	296.004	301.924	309.817	315.738	321.658
75.0	240.750	248.643	256.537	266.404	272.324
77.5	187.469	195.363	209.176	219.043	222.990
80.0	136.162	146.029	161.815	173.656	177.602
82.5	90.775	100.641	118.402	134.189	140.108
85.0	51.307	63.148	82.881	100.641	106.561
87.5	17.760	31.574	55.254	71.041	76.961
90.0	0.000	11.840	31.574	47.361	53.281
92.5	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-TDO-ITL85163.214.IES****CANDELA TABULATION - (Cont.)**

135.0	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-4E-B-8-35-TDO-ITL85163.214.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	539.60	N.A.	13.50
0-30	1133.35	N.A.	28.30
0-40	1832.35	N.A.	45.80
0-60	3164.37	N.A.	79.00
0-80	3906.65	N.A.	97.60
0-90	4000.4	N.A.	99.90
10-90	3859.89	N.A.	96.40
20-40	1292.75	N.A.	32.30
20-50	1999.8	N.A.	49.90
40-70	1801.47	N.A.	45.00
60-80	742.27	N.A.	18.50
70-80	272.82	N.A.	6.80
80-90	93.75	N.A.	2.30
90-110	4.02	N.A.	0.10
90-120	4.02	N.A.	0.10
90-130	4.02	N.A.	0.10
90-150	4.02	N.A.	0.10
90-180	4.02	N.A.	0.10
110-180	0.00	N.A.	0.00
0-180	4004.42	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	140.51
10-20	399.09
20-30	593.75
30-40	699.00
40-50	707.05
50-60	624.97
60-70	469.45
70-80	272.82
80-90	93.75
90-100	4.02
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

IES INDOOR REPORT

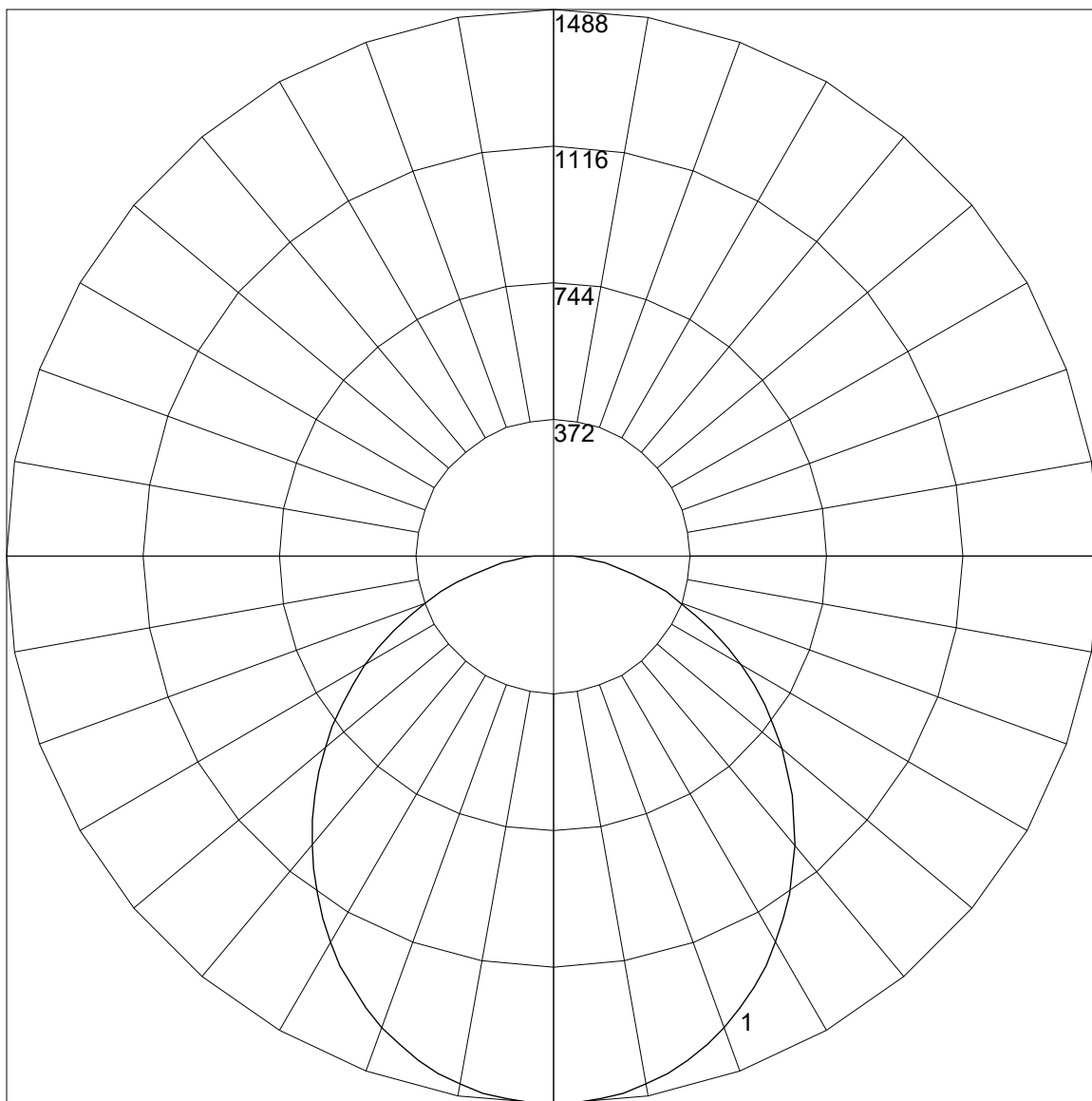
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	80	71	65	88	78	70	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	33	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

POLAR GRAPH



Maximum Candela = 1487.913 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)