

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-2E-H-8-35-30U70D-ITL87816.003.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL87816.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/14/16

[ISSUE DATE]07/27/16

[MANUFAC]FINELITE, INC.

[LUMCAT]S12-LED-ID-DCO-4ft-2E-H-8-35-30U70D

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 28.5 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 29.2 WATTS

[ABSOLUTE LUMENS]2689

[OTHER]see www.finelite.com for source file ITL87816. 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	2689
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	28.5
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.40
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	4962	4885	4982
55	4715	4568	4665
65	4356	4083	4154
75	3711	3326	3456
85	2575	2374	2801

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-30U70D-ITL87816.003.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	609.778	609.778	609.778	609.778	609.778
2.5	609.000	609.000	609.000	609.000	609.000
5.0	607.444	607.444	607.444	607.444	607.444
7.5	604.333	603.556	604.333	605.111	605.111
10.0	599.667	598.889	601.222	602.000	602.778
12.5	594.222	591.889	596.556	598.111	598.111
15.0	585.667	583.333	589.556	592.667	591.889
17.5	576.333	574.778	581.778	585.667	586.444
20.0	566.222	563.889	572.444	577.889	578.667
22.5	554.556	552.222	562.333	567.778	569.333
25.0	541.333	539.778	550.667	557.667	559.222
27.5	526.556	525.778	536.667	545.222	547.556
30.0	511.000	511.000	522.667	532.000	535.111
32.5	494.667	495.444	507.889	517.222	520.333
35.0	476.778	478.333	491.556	501.667	505.556
37.5	458.111	460.444	473.667	483.778	488.444
40.0	438.667	441.778	455.000	465.889	470.556
42.5	420.778	423.111	436.333	447.222	451.889
45.0	399.000	401.333	415.333	426.222	430.889
47.5	378.000	380.333	393.556	404.444	409.111
50.0	356.222	357.778	371.000	381.889	386.556
52.5	332.889	335.222	347.667	358.556	362.444
55.0	308.778	311.889	323.556	333.667	338.333
57.5	285.444	288.556	298.667	308.000	312.667
60.0	261.333	264.444	273.778	282.333	287.000
62.5	236.444	239.556	248.111	255.889	260.556
65.0	211.556	214.667	222.444	230.222	234.111
67.5	185.889	189.000	196.778	203.778	207.667
70.0	161.000	164.111	171.111	177.333	181.222
72.5	136.111	140.000	146.222	152.444	156.333
75.0	112.000	115.111	121.333	128.333	133.000
77.5	87.889	91.778	98.000	106.556	109.667
80.0	66.111	69.222	77.000	84.778	88.667
82.5	45.111	48.222	56.778	66.111	70.000
85.0	28.000	31.111	41.222	50.556	54.444
87.5	10.889	16.333	27.222	36.556	39.667
90.0	0.000	7.778	17.889	25.667	28.000
92.5	5.444	7.778	16.333	24.111	27.222
95.0	10.889	13.222	20.222	31.111	31.889
97.5	17.889	21.000	28.778	37.333	41.222
100.0	25.667	31.111	42.778	51.333	55.222
102.5	35.000	43.556	56.000	70.000	74.667
105.0	44.333	52.889	72.333	91.000	96.444
107.5	53.667	65.333	89.444	112.778	120.556
110.0	63.778	77.778	107.333	135.333	144.667
112.5	73.889	90.222	126.000	157.889	169.556
115.0	84.000	101.889	143.889	180.444	193.667
117.5	93.333	114.333	161.778	203.000	217.778
120.0	103.444	126.000	178.111	222.444	240.333
122.5	113.556	137.667	192.889	241.889	260.556
125.0	123.667	147.000	206.111	258.222	278.444
127.5	131.444	155.556	216.222	271.444	293.222
130.0	138.444	161.778	224.778	282.333	304.111
132.5	144.667	167.222	230.222	288.556	310.333

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-30U70D-ITL87816.003.IES****CANDELA TABULATION - (Cont.)**

135.0	150.111	171.111	232.556	290.889	312.667
137.5	154.778	174.222	233.333	289.333	310.333
140.0	159.444	176.556	231.000	284.667	304.889
142.5	162.556	177.333	227.111	276.889	295.556
145.0	165.667	178.111	222.444	266.778	283.889
147.5	168.000	178.889	216.222	255.889	269.889
150.0	169.556	178.889	210.000	243.444	255.889
152.5	171.111	178.111	203.778	231.000	241.889
155.0	171.889	177.333	198.333	219.333	227.889
157.5	172.667	176.556	192.889	208.444	215.444
160.0	172.667	175.778	188.222	199.889	204.556
162.5	173.444	175.000	183.556	192.111	195.222
165.0	172.667	174.222	180.444	185.889	188.222
167.5	172.667	173.444	177.333	181.222	182.778
170.0	172.667	172.667	175.778	177.333	178.111
172.5	171.889	172.667	173.444	175.000	175.000
175.0	171.889	171.889	172.667	172.667	173.444
177.5	171.889	171.889	171.889	171.889	171.889
180.0	171.889	171.889	171.889	171.889	171.889

IES INDOOR REPORT**PHOTOMETRIC FILENAME : S12-LED-ID-DCO-4FT-2E-H-8-35-30U70D-ITL87816.003.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	223.98	N.A.	8.30
0-30	477.16	N.A.	17.70
0-40	783.95	N.A.	29.20
0-60	1392.35	N.A.	51.80
0-80	1741.87	N.A.	64.80
0-90	1788.5	N.A.	66.50
10-90	1730.73	N.A.	64.40
20-40	559.97	N.A.	20.80
20-50	879.62	N.A.	32.70
40-70	828.47	N.A.	30.80
60-80	349.52	N.A.	13.00
70-80	129.45	N.A.	4.80
80-90	46.63	N.A.	1.70
90-110	102.56	N.A.	3.80
90-120	242.16	N.A.	9.00
90-130	422.40	N.A.	15.70
90-150	740.15	N.A.	27.50
90-180	900.60	N.A.	33.50
110-180	798.03	N.A.	29.70
0-180	2689.09	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	57.76
10-20	166.21
20-30	253.18
30-40	306.79
40-50	319.65
50-60	288.75
60-70	220.07
70-80	129.45
80-90	46.63
90-100	26.06
100-110	76.50
110-120	139.59
120-130	180.24
130-140	177.85
140-150	139.91
150-160	92.46
160-170	51.43
170-180	16.56

IES INDOOR REPORT

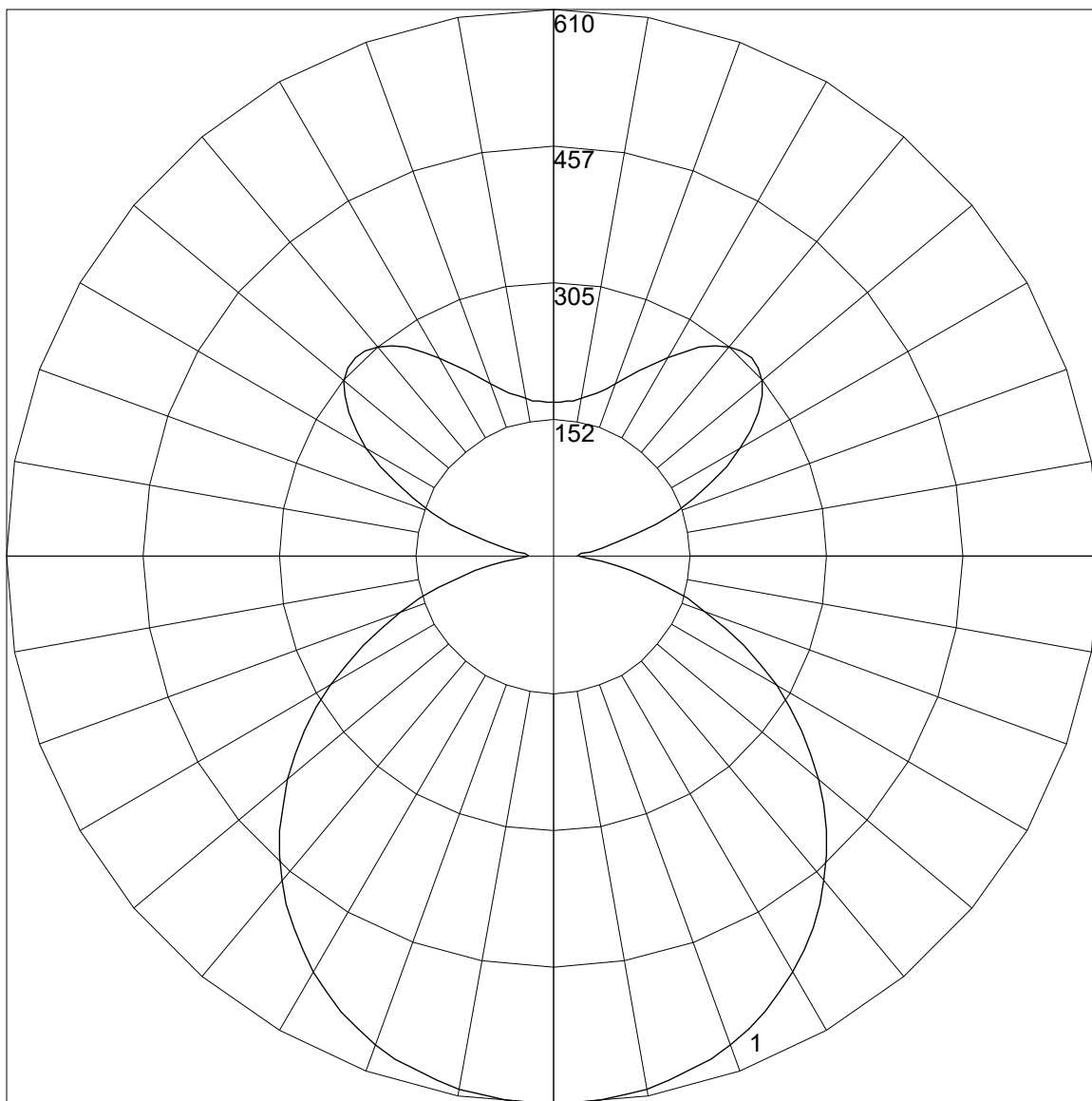
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	111	111	111	111	105	105	105	105	93	93	93	81	81	81	71	71	71	67
1	101	96	92	89	95	91	87	84	81	78	75	71	69	67	62	61	59	55
2	92	84	77	72	86	79	73	69	70	66	62	62	59	56	55	52	50	46
3	84	74	66	60	78	69	63	57	62	56	52	55	50	47	48	45	42	38
4	76	65	57	50	72	61	54	48	55	49	44	49	44	40	43	39	36	33
5	70	58	49	43	66	55	47	41	49	43	38	44	38	34	38	34	31	28
6	65	52	43	37	61	49	41	36	44	38	33	39	34	30	35	31	27	25
7	60	47	39	33	56	45	37	31	40	34	29	36	30	27	32	27	24	22
8	55	43	35	29	52	40	33	28	36	30	26	33	27	24	29	25	22	19
9	52	39	31	26	49	37	30	25	33	27	23	30	25	21	27	23	19	17
10	48	36	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

POLAR GRAPH



Maximum Candela = 609.778 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)