

# 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 : E2-ID-L-4FT-H-S-835-ITL89277.010.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL89277.010 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]05/02/17  
[ISSUEDATE]05/19/17  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE E2-ID-L-4ft-H-S-835  
[OTHER]INPUT\_ELECTRICAL: 120.0 VOLTS, 22.1 WATTS  
[OTHER]INPUT\_ELECTRICAL: 277.0 VOLTS, 24.9 WATTS  
[ABSOLUTE]LUMENS]2339  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL89277. 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](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	2339
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	106
Total Luminaire Watts	22.1
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.06 ft
Luminous Width (90-270)	0.08 ft
Luminous Height	0.00 ft

**LUMINANCE DATA (cd/sq.m)**

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6100	6064	6009
55	5822	5754	5731
65	5503	5380	5380
75	5120	4970	5020
85	4323	4323	4472

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : E2-ID-L-4FT-H-S-835-ITL89277.010.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	212.694	212.694	212.694	212.694	212.694
2.5	212.694	212.694	212.694	212.694	212.694
5.0	211.876	211.876	211.876	211.876	211.876
7.5	210.240	210.240	210.240	210.240	209.831
10.0	208.604	208.195	208.604	208.604	208.604
12.5	206.150	205.741	206.150	206.559	206.150
15.0	203.287	202.060	203.287	203.287	203.287
17.5	200.015	198.378	200.015	200.015	199.606
20.0	196.333	194.288	196.333	195.924	195.106
22.5	191.834	189.789	191.425	191.425	191.016
25.0	186.926	184.881	186.517	186.108	185.699
27.5	181.608	179.563	181.199	180.790	179.972
30.0	175.882	173.837	175.473	174.655	174.246
32.5	169.747	168.110	169.338	168.929	168.110
35.0	163.611	161.566	162.793	162.384	161.975
37.5	157.067	155.431	156.249	155.840	155.431
40.0	150.113	148.477	149.295	148.886	148.477
42.5	142.751	141.524	141.933	141.524	141.115
45.0	135.797	134.161	134.979	134.161	133.752
47.5	128.435	126.799	127.208	126.799	126.390
50.0	120.663	119.436	119.845	119.027	119.027
52.5	113.301	111.665	112.074	111.256	111.256
55.0	105.120	103.893	103.893	103.484	103.484
57.5	97.349	96.122	95.712	95.303	95.303
60.0	89.577	87.941	87.941	87.532	87.532
62.5	81.397	80.169	79.760	79.351	79.760
65.0	73.216	71.989	71.580	71.580	71.580
67.5	65.444	64.217	63.808	63.808	63.808
70.0	57.264	56.037	56.037	55.628	56.037
72.5	49.492	48.265	48.265	48.265	48.674
75.0	41.721	40.903	40.494	40.494	40.903
77.5	34.358	33.131	33.131	33.540	33.540
80.0	26.587	25.769	25.769	26.178	26.587
82.5	19.224	18.406	18.815	19.224	19.224
85.0	11.862	11.453	11.862	11.862	12.271
87.5	4.499	4.499	4.908	5.317	5.317
90.0	0.000	0.000	0.000	0.000	0.000
92.5	5.444	4.667	3.111	2.333	2.333
95.0	15.556	14.000	10.889	8.556	8.556
97.5	29.556	25.667	20.222	16.333	16.333
100.0	45.889	38.889	30.333	24.889	24.111
102.5	65.333	53.667	41.222	33.444	31.889
105.0	88.667	72.333	54.444	43.556	40.444
107.5	115.889	94.111	68.444	54.444	49.778
110.0	146.222	120.556	84.778	66.889	60.667
112.5	180.444	150.889	104.222	80.889	73.111
115.0	216.222	183.556	128.333	96.444	87.889
117.5	254.333	219.333	157.111	115.889	103.444
120.0	292.444	255.111	195.222	138.444	122.889
122.5	330.556	293.222	241.889	166.444	147.000
125.0	366.333	331.333	293.222	206.111	178.111
127.5	402.111	371.000	342.222	258.222	220.889
130.0	437.111	409.889	384.222	321.222	277.667
132.5	470.556	446.444	419.222	385.000	346.889

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : E2-ID-L-4FT-H-S-835-ITL89277.010.IES

CANDELA TABULATION - (Cont.)

135.0	500.889	480.667	450.333	441.000	416.111
137.5	527.333	512.556	480.667	480.667	472.111
140.0	553.778	541.333	512.556	507.111	508.667
142.5	577.889	567.000	544.444	528.889	531.222
145.0	600.444	590.333	575.556	553.778	550.667
147.5	620.667	610.556	603.556	580.222	573.222
150.0	639.333	630.000	628.444	608.222	599.667
152.5	655.667	647.111	649.444	634.667	626.889
155.0	670.444	661.889	666.556	657.222	651.000
157.5	683.667	675.889	680.556	676.667	671.222
160.0	695.333	688.333	692.222	691.444	688.333
162.5	705.444	699.222	703.111	701.556	700.778
165.0	714.000	709.333	712.444	710.889	709.333
167.5	720.222	717.111	719.444	719.444	717.111
170.0	725.667	724.111	725.667	725.667	724.889
172.5	729.556	728.778	729.556	729.556	730.333
175.0	733.444	732.667	732.667	732.667	732.667
177.5	735.000	734.222	734.222	734.222	734.222
180.0	735.778	735.778	735.778	735.778	735.778

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : E2-ID-L-4FT-H-S-835-ITL89277.010.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	77.37	N.A.	3.30
0-30	163.03	N.A.	7.00
0-40	264.65	N.A.	11.30
0-60	461.30	N.A.	19.70
0-80	575.77	N.A.	24.60
0-90	589.01	N.A.	25.20
10-90	568.91	N.A.	24.30
20-40	187.28	N.A.	8.00
20-50	291.04	N.A.	12.40
40-70	267.92	N.A.	11.50
60-80	114.47	N.A.	4.90
70-80	43.20	N.A.	1.80
80-90	13.24	N.A.	0.60
90-110	77.73	N.A.	3.30
90-120	218.54	N.A.	9.30
90-130	467.21	N.A.	20.00
90-150	1175.14	N.A.	50.20
90-180	1749.97	N.A.	74.80
110-180	1672.25	N.A.	71.50
0-180	2338.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	20.11
10-20	57.26
20-30	85.66
30-40	101.61
40-50	103.77
50-60	92.89
60-70	71.27
70-80	43.20
80-90	13.24
90-100	14.22
100-110	63.50
110-120	140.81
120-130	248.67
130-140	349.08
140-150	358.86
150-160	304.39
160-170	200.74
170-180	69.70

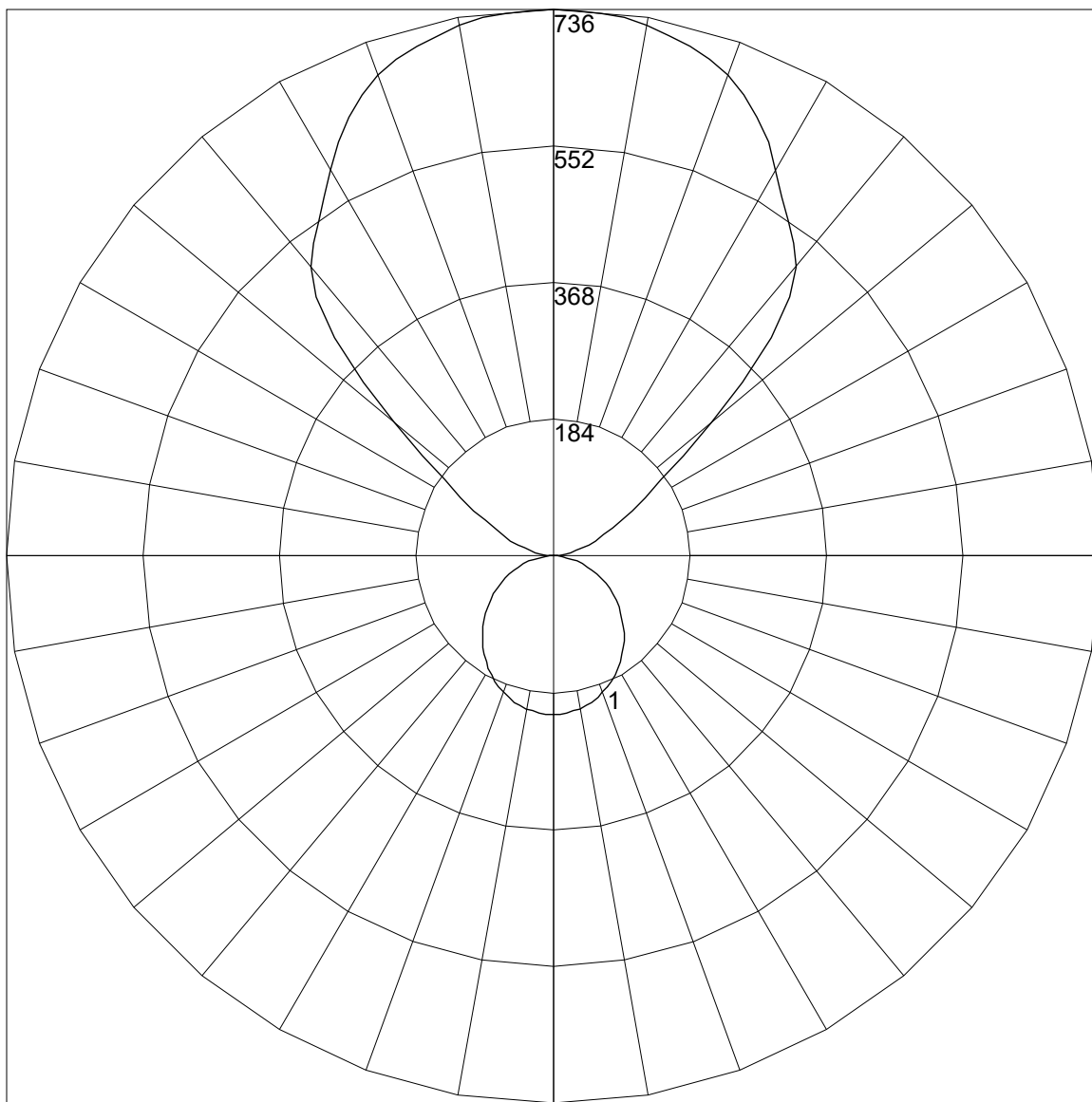
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : E2-ID-L-4FT-H-S-835-ITL89277.010.IES**

**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	101	101	101	101	90	90	90	90	70	70	70	51	51	51	33	33	33	25
1	92	88	84	81	82	78	75	72	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	26	24	23	17
3	76	67	60	55	68	60	54	49	47	42	39	34	31	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	40	35	37	32	28	27	24	21	18	16	15	11
6	59	47	39	34	52	42	35	31	33	28	25	24	21	19	16	14	13	9
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	14	12	10	7
9	46	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

POLAR GRAPH



Maximum Candela = 735.778 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)