

# 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-B-835-ITL89277.011.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL89277.011 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-B-835  
[OTHER]INPUT\_ELECTRICAL: 120.0 VOLTS, 24.0 WATTS  
[OTHER]INPUT\_ELECTRICAL: 277.0 VOLTS, 26.9 WATTS  
[ABSOLUTE]LUMENS]2491  
[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	2491
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	24
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	7675	7628	7559
55	7324	7238	7210
65	6923	6769	6769
75	6442	6252	6315
85	5439	5439	5626

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**CANDELA TABULATION**

	<u><b>0.0</b></u>	<u><b>22.5</b></u>	<u><b>45.0</b></u>	<u><b>67.5</b></u>	<u><b>90.0</b></u>
<b>0.0</b>	267.579	267.579	267.579	267.579	267.579
<b>2.5</b>	267.579	267.579	267.579	267.579	267.579
<b>5.0</b>	266.550	266.550	266.550	266.550	266.550
<b>7.5</b>	264.491	264.491	264.491	264.491	263.977
<b>10.0</b>	262.433	261.918	262.433	262.433	262.433
<b>12.5</b>	259.346	258.831	259.346	259.860	259.346
<b>15.0</b>	255.744	254.200	255.744	255.744	255.744
<b>17.5</b>	251.627	249.569	251.627	251.627	251.112
<b>20.0</b>	246.996	244.423	246.996	246.481	245.452
<b>22.5</b>	241.336	238.763	240.821	240.821	240.306
<b>25.0</b>	235.161	232.588	234.646	234.131	233.617
<b>27.5</b>	228.471	225.898	227.956	227.442	226.413
<b>30.0</b>	221.267	218.694	220.752	219.723	219.209
<b>32.5</b>	213.548	211.490	213.034	212.519	211.490
<b>35.0</b>	205.830	203.257	204.801	204.286	203.772
<b>37.5</b>	197.597	195.538	196.568	196.053	195.538
<b>40.0</b>	188.849	186.791	187.820	187.305	186.791
<b>42.5</b>	179.587	178.043	178.557	178.043	177.528
<b>45.0</b>	170.839	168.781	169.810	168.781	168.266
<b>47.5</b>	161.576	159.518	160.033	159.518	159.004
<b>50.0</b>	151.800	150.256	150.770	149.741	149.741
<b>52.5</b>	142.537	140.479	140.993	139.964	139.964
<b>55.0</b>	132.246	130.702	130.702	130.187	130.187
<b>57.5</b>	122.469	120.925	120.410	119.896	119.896
<b>60.0</b>	112.692	110.634	110.634	110.119	110.119
<b>62.5</b>	102.400	100.857	100.342	99.827	100.342
<b>65.0</b>	92.109	90.565	90.051	90.051	90.051
<b>67.5</b>	82.332	80.788	80.274	80.274	80.274
<b>70.0</b>	72.040	70.497	70.497	69.982	70.497
<b>72.5</b>	62.264	60.720	60.720	60.720	61.234
<b>75.0</b>	52.487	51.457	50.943	50.943	51.457
<b>77.5</b>	43.224	41.680	41.680	42.195	42.195
<b>80.0</b>	33.447	32.418	32.418	32.933	33.447
<b>82.5</b>	24.185	23.156	23.670	24.185	24.185
<b>85.0</b>	14.923	14.408	14.923	14.923	15.437
<b>87.5</b>	5.660	5.660	6.175	6.689	6.689
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	5.444	4.667	3.111	2.333	2.333
<b>95.0</b>	15.556	14.000	10.889	8.556	8.556
<b>97.5</b>	29.556	25.667	20.222	16.333	16.333
<b>100.0</b>	45.889	38.889	30.333	24.889	24.111
<b>102.5</b>	65.333	53.667	41.222	33.444	31.889
<b>105.0</b>	88.667	72.333	54.444	43.556	40.444
<b>107.5</b>	115.889	94.111	68.444	54.444	49.778
<b>110.0</b>	146.222	120.556	84.778	66.889	60.667
<b>112.5</b>	180.444	150.889	104.222	80.889	73.111
<b>115.0</b>	216.222	183.556	128.333	96.444	87.889
<b>117.5</b>	254.333	219.333	157.111	115.889	103.444
<b>120.0</b>	292.444	255.111	195.222	138.444	122.889
<b>122.5</b>	330.556	293.222	241.889	166.444	147.000
<b>125.0</b>	366.333	331.333	293.222	206.111	178.111
<b>127.5</b>	402.111	371.000	342.222	258.222	220.889
<b>130.0</b>	437.111	409.889	384.222	321.222	277.667
<b>132.5</b>	470.556	446.444	419.222	385.000	346.889

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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

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	97.34	N.A.	3.90
0-30	205.10	N.A.	8.20
0-40	332.94	N.A.	13.40
0-60	580.34	N.A.	23.30
0-80	724.35	N.A.	29.10
0-90	741.01	N.A.	29.70
10-90	715.71	N.A.	28.70
20-40	235.60	N.A.	9.50
20-50	366.15	N.A.	14.70
40-70	337.06	N.A.	13.50
60-80	144.01	N.A.	5.80
70-80	54.35	N.A.	2.20
80-90	16.66	N.A.	0.70
90-110	77.73	N.A.	3.10
90-120	218.54	N.A.	8.80
90-130	467.21	N.A.	18.80
90-150	1175.14	N.A.	47.20
90-180	1749.97	N.A.	70.30
110-180	1672.25	N.A.	67.10
0-180	2490.98	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	25.29
10-20	72.04
20-30	107.77
30-40	127.83
40-50	130.54
50-60	116.85
60-70	89.66
70-80	54.35
80-90	16.66
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

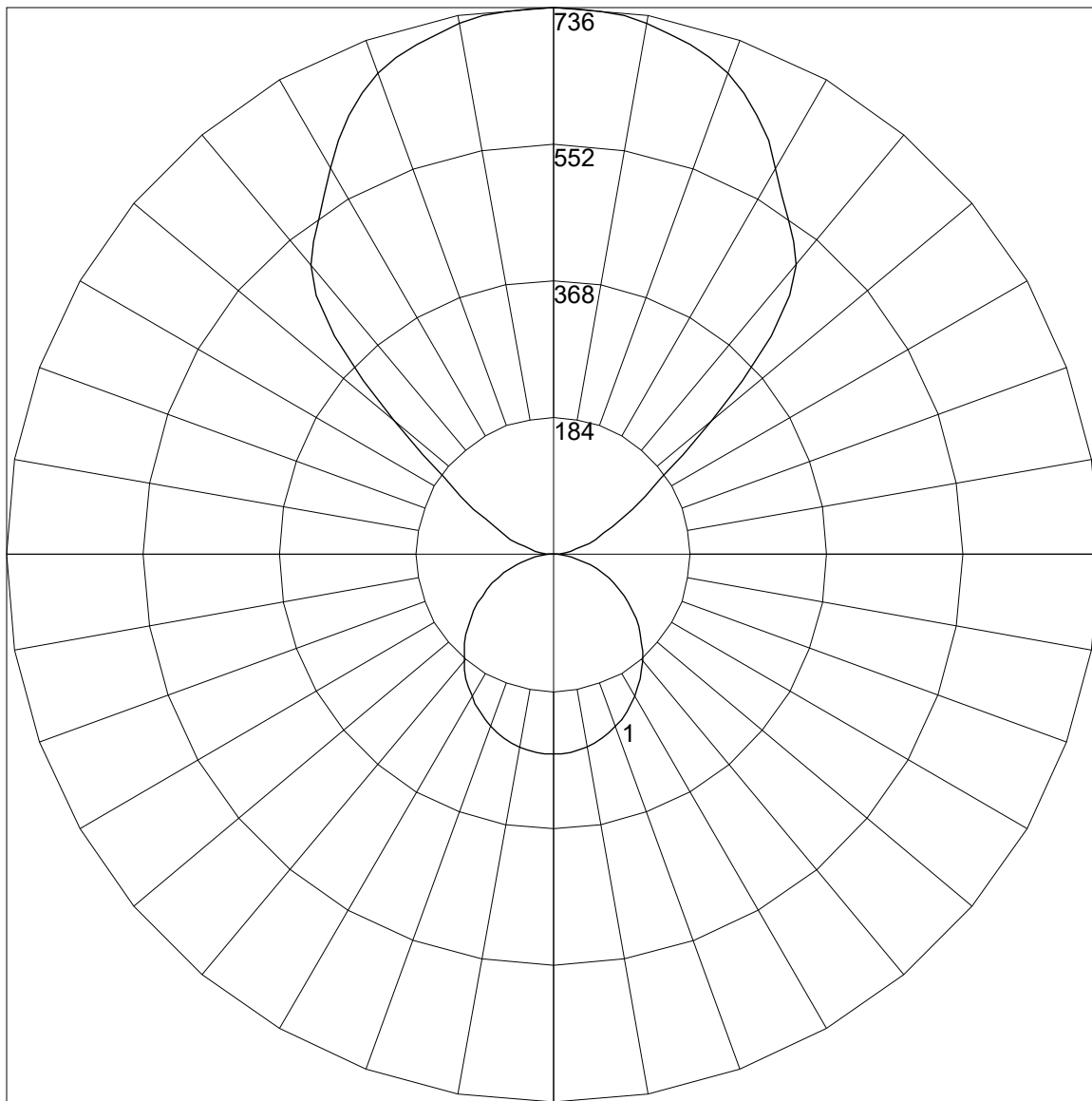
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	82	83	80	77	74	63	61	59	47	46	45	33	32	31	25
2	85	77	71	66	76	70	65	60	55	51	48	41	39	37	29	27	26	21
3	77	68	61	55	69	61	55	50	48	44	41	36	34	31	25	24	22	17
4	70	60	52	46	63	54	47	42	43	38	34	32	29	27	23	21	19	15
5	65	53	45	40	58	48	41	36	38	33	29	29	26	23	20	18	17	13
6	59	48	40	34	53	43	36	31	34	29	26	26	23	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	12	13	11	9	7

POLAR GRAPH



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