

# 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 : S19-P-ID-4FT-2E-B-835-OPEN-ITL93789.002.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL93789.002 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]09/29/20  
[ISSUEDATE]10/19/20  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE S19-P-ID-4ft-2E-B-835-OPEN  
[INPUT\_ELECTRICAL]120.0 VOLTS, 17.1 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 17.9 WATTS  
[ABSOLUTE LUMENS]2398  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL93789. 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	2398
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	140
Total Luminaire Watts	17.1
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 w/Sides
Luminous Length (0-180)	3.83 ft
Luminous Width (90-270)	0.26 ft
Luminous Height	0.05 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2073	2111	2293
55	2076	2083	2293
65	2014	1952	2185
75	1855	1698	1938
85	1707	1493	1897

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : S19-P-ID-4FT-2E-B-835-OPEN-ITL93789.002.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	181.651	181.651	181.651	181.651	181.651
2.5	181.136	181.651	181.651	181.651	181.651
5.0	181.136	181.651	181.651	182.166	182.166
7.5	180.622	181.136	181.651	182.680	183.195
10.0	179.593	180.622	182.166	183.709	183.709
12.5	178.564	179.593	182.680	184.739	184.739
15.0	177.534	178.564	182.680	185.768	186.282
17.5	175.991	177.534	182.680	186.797	187.312
20.0	174.447	176.505	182.680	187.826	188.341
22.5	172.388	174.961	182.166	188.341	189.885
25.0	170.330	172.903	181.651	188.855	190.914
27.5	167.242	170.845	180.107	188.855	191.428
30.0	164.670	168.272	179.078	188.341	191.943
32.5	161.067	165.184	177.020	187.826	191.428
35.0	157.465	162.097	174.447	186.797	190.914
37.5	152.834	157.980	171.874	184.739	189.370
40.0	148.203	153.863	168.272	181.651	187.312
42.5	143.571	149.232	164.155	178.564	184.224
45.0	137.911	144.086	159.524	174.447	180.622
47.5	132.250	138.425	153.863	169.815	175.476
50.0	126.075	132.250	148.203	164.155	170.330
52.5	119.900	126.075	141.513	157.465	163.640
55.0	112.696	118.871	134.823	150.261	156.951
57.5	105.491	111.667	127.104	143.057	149.232
60.0	97.773	103.948	118.871	134.309	140.998
62.5	89.539	95.714	110.123	125.561	131.736
65.0	81.306	87.481	101.375	115.783	122.473
67.5	73.072	78.733	92.112	106.006	112.696
70.0	64.324	69.470	82.849	96.229	102.918
72.5	55.576	60.722	73.072	85.937	92.112
75.0	46.828	51.974	63.809	76.160	81.306
77.5	38.594	43.226	54.547	65.868	71.014
80.0	30.361	35.507	45.284	57.120	62.780
82.5	22.642	27.273	37.565	50.430	56.091
85.0	15.952	19.555	32.934	45.284	50.430
87.5	9.263	15.952	29.846	42.711	47.857
90.0	4.117	19.555	35.507	48.372	54.032
92.5	10.806	124.531	80.276	76.674	79.247
95.0	20.069	149.232	272.734	240.315	227.450
97.5	28.817	162.611	302.066	361.244	374.623
100.0	38.080	178.564	307.212	383.371	405.499
102.5	46.828	191.943	316.989	387.488	411.674
105.0	55.576	202.749	327.795	393.663	414.761
107.5	64.324	210.468	338.087	401.897	421.966
110.0	72.558	216.129	347.864	409.615	428.141
112.5	80.276	219.731	355.069	417.849	435.345
115.0	87.995	221.789	360.215	424.539	442.549
117.5	94.685	222.304	362.273	429.170	447.695
120.0	101.375	222.818	362.273	431.743	451.297
122.5	107.035	222.818	360.215	431.743	452.327
125.0	113.210	221.789	356.612	429.170	451.297
127.5	118.356	220.760	351.467	424.539	446.666
130.0	122.988	219.216	345.291	417.849	441.006
132.5	127.619	217.158	338.087	409.615	433.287

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : S19-P-ID-4FT-2E-B-835-OPEN-ITL93789.002.IES

CANDELA TABULATION - (Cont.)

135.0	131.221	215.100	330.368	400.353	424.024
137.5	135.338	212.012	321.620	389.546	412.188
140.0	137.911	208.924	311.843	377.711	399.838
142.5	140.484	205.322	301.551	364.846	385.944
145.0	143.057	201.720	290.745	350.437	370.506
147.5	145.115	198.633	279.424	335.514	354.039
150.0	146.659	194.516	267.073	320.591	338.087
152.5	148.203	190.399	255.238	303.609	320.076
155.0	149.232	186.797	242.888	286.628	301.551
157.5	150.261	183.195	230.537	269.132	282.511
160.0	150.776	179.078	218.702	252.150	263.471
162.5	151.290	173.932	207.895	234.139	244.946
165.0	151.805	169.815	197.089	218.187	226.421
167.5	151.805	165.699	187.312	203.264	208.924
170.0	151.805	162.097	177.534	189.885	194.001
172.5	151.805	158.494	168.272	176.505	180.107
175.0	152.319	155.407	161.067	165.184	167.242
177.5	151.805	152.834	154.892	156.436	156.951
180.0	152.319	152.319	152.319	152.319	152.319

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : S19-P-ID-4FT-2E-B-835-OPEN-ITL93789.002.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	68.99	N.A.	2.90
0-30	152.58	N.A.	6.40
0-40	261.69	N.A.	10.90
0-60	504.76	N.A.	21.10
0-80	672.92	N.A.	28.10
0-90	711.16	N.A.	29.70
10-90	693.81	N.A.	28.90
20-40	192.69	N.A.	8.00
20-50	315.49	N.A.	13.20
40-70	343.51	N.A.	14.30
60-80	168.16	N.A.	7.00
70-80	67.72	N.A.	2.80
80-90	38.24	N.A.	1.60
90-110	493.70	N.A.	20.60
90-120	807.87	N.A.	33.70
90-130	1096.28	N.A.	45.70
90-150	1505.76	N.A.	62.80
90-180	1686.59	N.A.	70.30
110-180	1192.89	N.A.	49.80
0-180	2397.76	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

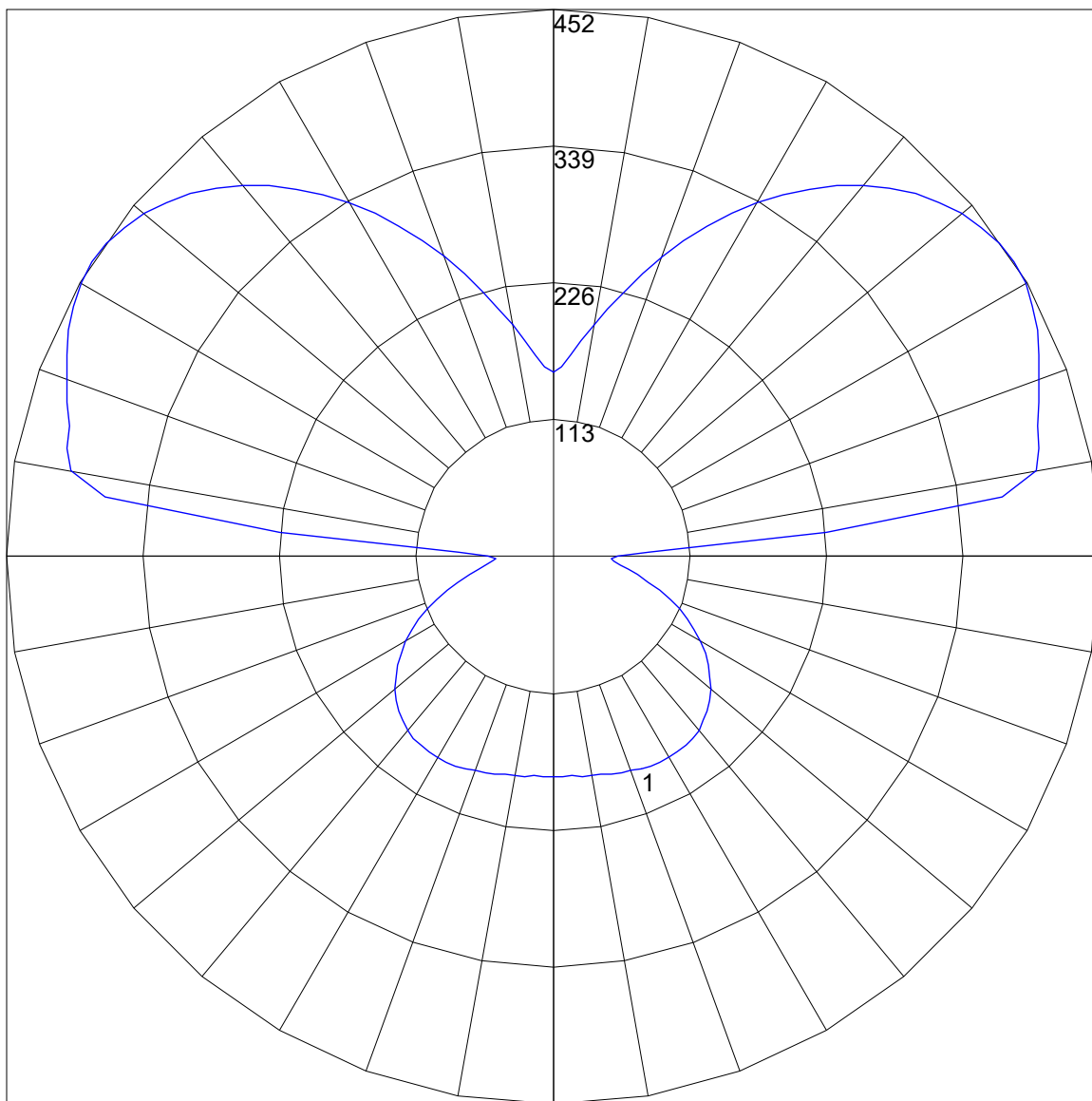
Zone	Lumens
0-10	17.36
10-20	51.64
20-30	83.58
30-40	109.11
40-50	122.80
50-60	120.28
60-70	100.44
70-80	67.72
80-90	38.24
90-100	187.30
100-110	306.41
110-120	314.17
120-130	288.41
130-140	236.54
140-150	172.95
150-160	109.49
160-170	55.56
170-180	15.78

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	37	37	37	30
1	93	88	84	80	83	79	76	72	62	60	57	46	45	43	32	31	30	24
2	84	76	70	65	75	68	63	59	54	50	47	40	38	36	28	26	25	19
3	76	67	59	53	68	60	54	48	47	43	39	35	32	30	24	22	21	16
4	69	59	51	45	62	53	46	41	41	37	33	31	28	25	21	19	17	13
5	63	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	11
6	58	46	38	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	28	48	37	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	22	27	22	18	20	17	14	14	12	10	7
9	46	34	27	22	41	31	24	20	24	20	16	19	15	12	13	11	9	7
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8	6

POLAR GRAPH



Maximum Candela = 452.327 Located At Horizontal Angle = 90, Vertical Angle = 122.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)