

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 : HPO-ID-4FT-S-B-835-WSO-F-ITL92549.315.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92549.315 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]11/20/19
[ISSUEDATE]09/09/20
[MANUFAC]FINELITE, INC.
[LUMCAT]HPO-ID-4ft-S-B-835-WSO-F
[INPUT_ELECTRICAL]120.0 VOLTS, 30.7 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 32.6 WATTS
[ABSOLUTE LUMENS]3790
[OTHER]see www.finelite.com for source files ITL92549. 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	3789
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	123
Total Luminaire Watts	30.7
Ballast Factor	1.00
CIE Type	General Diffuse
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)	4.00 ft
Luminous Width (90-270)	0.20 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9114	9114	9045
55	8811	8811	8726
65	8386	8386	8353
75	7724	7832	7859
85	6817	7218	7298

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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	707.554	707.554	707.554	707.554	707.554
2.5	706.010	706.524	706.524	706.524	707.039
5.0	703.437	703.951	703.951	703.951	704.466
7.5	699.835	700.349	700.864	700.864	700.864
10.0	694.689	694.174	695.203	695.203	694.174
12.5	689.028	686.456	689.028	689.543	687.999
15.0	680.281	677.193	680.281	680.795	679.251
17.5	671.018	666.387	670.503	671.018	668.445
20.0	660.212	654.037	658.668	659.183	657.124
22.5	648.376	640.657	645.803	646.318	644.260
25.0	632.939	626.764	631.395	631.910	630.366
27.5	616.987	611.841	615.958	616.987	614.928
30.0	600.520	594.345	600.005	598.976	597.947
32.5	581.995	576.334	581.480	580.966	579.422
35.0	562.955	557.809	561.926	561.411	559.353
37.5	541.857	537.226	541.857	540.828	539.284
40.0	519.730	515.614	520.759	519.216	518.187
42.5	497.603	494.001	498.118	496.574	494.001
45.0	474.447	470.845	474.447	472.388	470.845
47.5	449.232	446.659	449.747	447.688	447.174
50.0	424.532	420.930	425.047	422.474	421.445
52.5	398.288	395.715	398.288	396.745	395.201
55.0	372.044	369.472	372.044	369.986	368.442
57.5	344.772	342.713	344.257	343.228	342.199
60.0	316.984	314.926	316.984	315.440	315.440
62.5	288.167	286.624	288.682	287.138	288.167
65.0	260.894	259.350	260.894	259.865	259.865
67.5	231.563	230.534	232.592	231.563	233.107
70.0	203.775	203.261	204.290	204.290	204.290
72.5	174.444	174.959	176.502	177.017	177.532
75.0	147.171	147.171	149.230	149.744	149.744
77.5	119.898	120.927	121.956	123.500	123.500
80.0	94.169	94.684	96.227	96.742	97.771
82.5	68.954	69.469	71.013	72.042	72.042
85.0	43.740	44.254	46.313	47.342	46.827
87.5	20.069	20.583	22.127	23.156	23.671
90.0	0.000	0.000	0.000	0.000	0.000
92.5	5.731	15.964	34.384	17.602	15.146
95.0	15.146	33.975	87.599	40.525	31.928
97.5	25.788	50.758	162.099	78.184	57.308
100.0	36.431	65.904	243.148	135.901	93.329
102.5	47.483	77.365	304.549	232.505	153.912
105.0	59.354	89.236	331.975	377.821	266.480
107.5	70.816	100.698	331.565	546.878	443.724
110.0	81.868	112.159	322.151	648.394	615.238
112.5	93.739	124.439	315.192	679.504	709.386
115.0	106.019	136.719	312.326	676.229	744.998
117.5	118.709	149.818	313.554	657.809	749.501
120.0	129.351	160.870	314.782	632.839	737.221
122.5	139.994	170.695	316.420	607.870	715.117
125.0	149.000	179.291	318.057	582.490	688.100
127.5	157.186	187.068	318.876	557.521	658.218
130.0	164.555	193.618	319.285	534.598	628.746
132.5	171.513	199.758	318.876	511.675	599.273

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CANDELA TABULATION - (Cont.)

135.0	178.472	205.489	317.238	489.980	568.982
137.5	185.431	210.401	314.373	468.694	539.919
140.0	192.390	216.131	310.689	446.180	509.628
142.5	198.939	221.044	305.777	423.257	478.518
145.0	205.898	225.956	300.865	401.562	449.046
147.5	212.447	230.049	295.953	381.095	421.211
150.0	218.178	234.142	291.041	361.447	394.194
152.5	224.318	237.826	286.538	343.845	369.634
155.0	229.640	241.101	282.035	327.881	348.348
157.5	234.961	243.967	277.942	313.554	329.519
160.0	239.873	247.241	274.258	301.683	313.554
162.5	244.376	250.107	270.574	291.450	300.046
165.0	247.651	252.153	267.299	282.444	287.766
167.5	250.925	254.200	264.434	274.667	278.351
170.0	253.381	255.837	261.978	268.936	270.983
172.5	255.428	257.065	260.340	264.024	265.661
175.0	256.656	257.475	259.112	260.340	261.159
177.5	257.884	258.293	258.703	259.112	258.703
180.0	257.884	257.884	257.884	257.884	257.884

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	258.68	N.A.	6.80
0-30	549.28	N.A.	14.50
0-40	899.94	N.A.	23.70
0-60	1595.43	N.A.	42.10
0-80	2010.07	N.A.	53.00
0-90	2060.8	N.A.	54.40
10-90	1993.87	N.A.	52.60
20-40	641.26	N.A.	16.90
20-50	1005.69	N.A.	26.50
40-70	952.73	N.A.	25.10
60-80	414.64	N.A.	10.90
70-80	157.40	N.A.	4.20
80-90	50.73	N.A.	1.30
90-110	313.77	N.A.	8.30
90-120	692.88	N.A.	18.30
90-130	1028.69	N.A.	27.10
90-150	1495.05	N.A.	39.50
90-180	1728.51	N.A.	45.60
110-180	1414.74	N.A.	37.30
0-180	3789.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

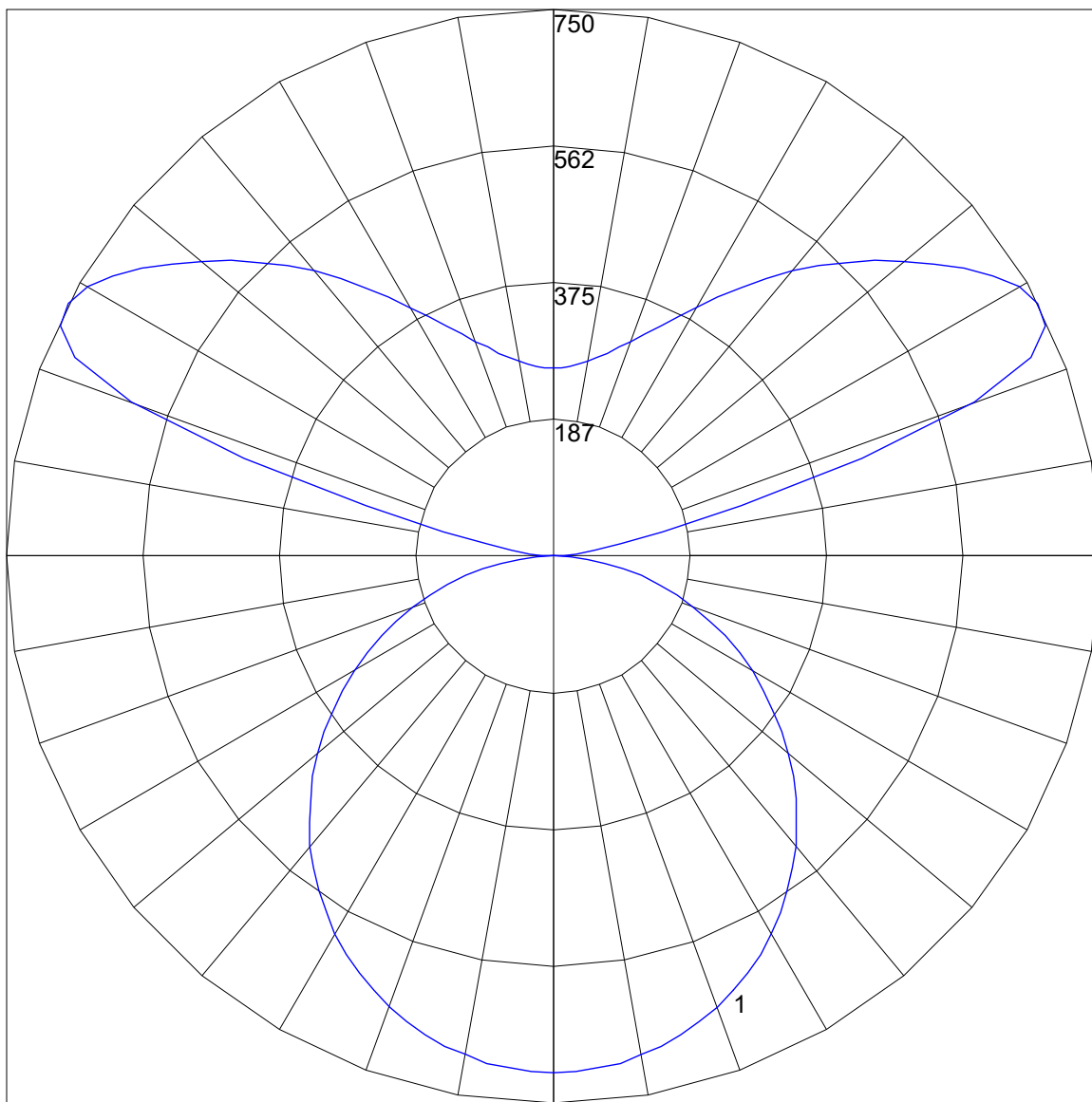
Zone	Lumens
0-10	66.93
10-20	191.76
20-30	290.60
30-40	350.65
40-50	364.43
50-60	331.06
60-70	257.24
70-80	157.40
80-90	50.73
90-100	57.90
100-110	255.87
110-120	379.11
120-130	335.81
130-140	268.58
140-150	197.77
150-160	132.50
160-170	76.13
170-180	24.83

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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54
1	98	94	90	86	91	87	84	81	75	72	70	63	61	60	53	51	50	45
2	89	82	75	70	83	76	70	66	65	61	57	55	52	49	46	44	42	37
3	81	72	64	58	75	67	60	55	57	52	48	49	45	41	41	38	35	31
4	74	63	55	49	69	59	52	46	51	45	41	43	39	35	36	33	30	27
5	68	56	48	42	63	52	45	39	45	39	35	39	34	30	32	29	26	23
6	63	50	42	36	58	47	40	34	41	35	30	35	30	27	29	26	23	20
7	58	45	37	32	54	42	35	30	37	31	27	32	27	23	27	23	20	18
8	54	41	33	28	50	39	31	26	34	28	24	29	24	21	24	21	18	16
9	50	38	30	25	46	35	28	24	31	25	21	27	22	19	23	19	16	14
10	47	34	27	22	43	32	26	21	28	23	19	25	20	17	21	17	15	13

POLAR GRAPH



Maximum Candela = 749.501 Located At Horizontal Angle = 90, Vertical Angle = 117.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)