

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-P-ID-4FT-B-S-835-RT-RB-RE-ITL93794.012.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.012 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]08/19/20
[TESTDATE]09/04/20
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPO-P-ID-4ft-B-S-835-RT-RB-RE
[INPUT_ELECTRICAL]120.0 VOLTS, 30.7 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 32.6 WATTS
[ABSOLUTE LUMENS]3935
[OTHER]see www.finelite.com for source file ITL93794. 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	3935
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	128
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.20 ft
Luminous Height	0.04 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6521	5923	5852
55	6141	5445	5508
65	5649	5026	5375
75	5045	4967	5871
85	4047	6664	8128

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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	546.422	546.422	546.422	546.422	546.422
2.5	545.604	545.604	545.604	545.604	545.604
5.0	543.148	543.557	543.557	543.966	543.966
7.5	539.873	539.464	540.283	540.692	541.101
10.0	534.552	534.143	536.190	537.008	536.599
12.5	528.822	527.185	530.050	531.687	531.278
15.0	521.045	518.590	523.092	525.138	524.729
17.5	512.450	508.766	514.906	517.771	516.952
20.0	501.399	498.534	504.673	508.766	508.357
22.5	489.938	487.073	494.031	498.534	497.715
25.0	476.431	473.975	482.571	486.664	487.482
27.5	462.924	460.468	469.473	473.975	474.794
30.0	447.780	445.733	455.966	461.287	461.696
32.5	431.408	430.589	440.412	446.552	447.780
35.0	415.445	414.626	425.268	430.998	433.045
37.5	398.254	397.844	408.896	415.445	417.491
40.0	379.426	380.654	391.296	399.482	401.528
42.5	361.007	363.054	374.105	382.700	385.565
45.0	342.998	344.226	356.505	364.691	368.784
47.5	322.942	325.397	338.086	347.500	352.002
50.0	302.886	306.160	318.849	329.900	335.221
52.5	283.239	286.923	300.430	313.118	318.439
55.0	263.183	266.048	281.193	295.518	302.476
57.5	243.127	246.402	262.365	278.737	286.104
60.0	221.025	226.346	243.127	263.183	270.960
62.5	200.560	206.290	225.527	247.220	256.634
65.0	179.685	185.825	208.746	232.076	242.718
67.5	159.629	166.178	192.373	218.978	230.029
70.0	139.164	147.350	176.411	206.290	218.160
72.5	119.517	129.340	162.085	195.648	207.927
75.0	99.870	111.331	149.806	185.825	199.741
77.5	81.042	95.368	139.573	178.048	191.964
80.0	62.624	81.452	130.159	171.089	185.825
82.5	45.433	69.991	124.019	166.178	181.322
85.0	29.061	61.805	119.108	162.085	177.638
87.5	12.279	57.303	116.243	160.038	176.411
90.0	0.000	69.986	145.119	200.696	220.766
92.5	18.526	73.074	147.692	202.755	223.339
95.0	40.654	80.278	152.323	206.357	226.941
97.5	62.267	91.600	159.013	212.017	232.087
100.0	84.395	108.582	168.276	220.766	238.777
102.5	107.552	127.108	180.626	229.514	247.525
105.0	133.797	147.692	196.065	240.835	258.332
107.5	158.499	169.820	213.047	254.215	270.168
110.0	184.229	195.035	231.572	270.168	284.062
112.5	209.959	220.766	251.642	287.150	300.015
115.0	237.233	245.981	273.255	304.646	318.026
117.5	266.051	271.712	296.413	324.201	336.037
120.0	292.296	297.957	321.114	345.300	355.078
122.5	318.026	323.687	345.300	366.914	375.147
125.0	345.815	348.902	370.516	388.012	395.217
127.5	373.089	376.177	395.217	409.111	417.345
130.0	398.819	403.451	419.403	431.754	437.929
132.5	426.093	430.725	443.075	455.940	460.572

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-B-S-835-RT-RB-RE-ITL93794.012.IES****CANDELA TABULATION - (Cont.)**

135.0	451.309	453.882	465.718	478.583	483.214
137.5	478.068	476.525	489.904	501.226	507.916
140.0	501.226	498.653	511.518	522.839	530.044
142.5	523.354	521.810	533.131	546.511	550.628
145.0	545.996	542.909	555.774	567.095	571.212
147.5	567.610	563.493	577.387	586.136	589.223
150.0	587.679	583.048	597.457	604.661	608.264
152.5	606.205	603.118	615.983	622.158	624.731
155.0	623.702	620.614	632.450	637.596	640.684
157.5	641.713	638.111	649.432	652.520	655.093
160.0	656.636	653.034	662.812	664.870	666.929
162.5	668.987	667.443	674.133	677.221	677.221
165.0	679.794	678.250	684.425	686.484	685.454
167.5	689.057	688.028	692.659	694.717	694.203
170.0	696.776	696.261	699.349	700.378	700.378
172.5	702.436	703.466	704.495	705.009	705.524
175.0	707.582	707.582	708.097	708.097	708.097
177.5	709.641	709.641	710.155	709.641	710.155
180.0	710.670	710.670	710.670	710.670	710.670

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	199.03	N.A.	5.10
0-30	420.77	N.A.	10.70
0-40	685.89	N.A.	17.40
0-60	1212.08	N.A.	30.80
0-80	1579.01	N.A.	40.10
0-90	1706.14	N.A.	43.40
10-90	1654.5	N.A.	42.00
20-40	486.86	N.A.	12.40
20-50	761.07	N.A.	19.30
40-70	734.31	N.A.	18.70
60-80	366.93	N.A.	9.30
70-80	158.81	N.A.	4.00
80-90	127.12	N.A.	3.20
90-110	365.62	N.A.	9.30
90-120	639.20	N.A.	16.20
90-130	970.13	N.A.	24.70
90-150	1678.02	N.A.	42.60
90-180	2228.77	N.A.	56.60
110-180	1863.16	N.A.	47.30
0-180	3934.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	51.64
10-20	147.39
20-30	221.75
30-40	265.11
40-50	274.21
50-60	251.99
60-70	208.12
70-80	158.81
80-90	127.12
90-100	158.14
100-110	207.48
110-120	273.58
120-130	330.94
130-140	360.09
140-150	347.79
150-160	290.75
160-170	192.73
170-180	67.28

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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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	43
1	95	90	86	82	87	83	79	75	68	65	63	55	53	51	42	41	40	34
2	86	78	72	66	78	72	66	61	59	55	51	47	44	42	37	35	33	28
3	78	68	61	55	71	63	56	51	52	47	43	42	38	35	32	30	28	23
4	72	60	52	46	65	55	48	43	46	40	36	37	33	30	29	26	24	20
5	66	54	45	39	60	49	42	36	41	35	31	33	29	26	26	23	20	17
6	60	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18	15
7	56	43	35	30	51	40	33	28	33	28	24	27	23	20	21	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14	12
9	48	36	28	23	44	33	26	22	28	22	19	23	19	16	18	15	13	10
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	17	14	11	9

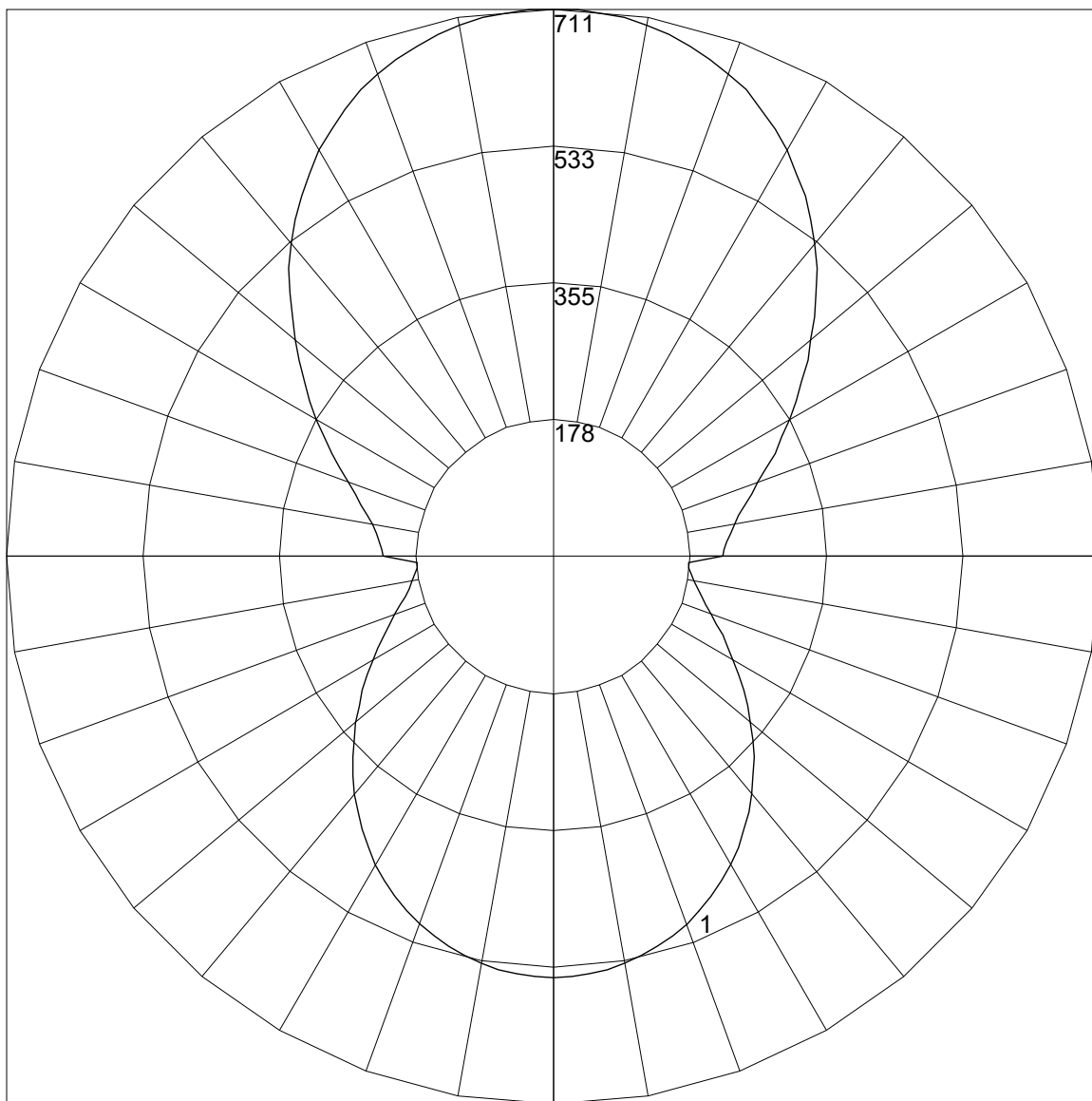
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UGR TABLE - CORRECTED

Reflectances											
Ceiling Cavity	70	70	50	50	30	70	70	50	50	30	
Walls	50	30	50	30	30	50	30	50	30	30	
Floor Cavity	20	20	20	20	20	20	20	20	20	20	
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	12.6	13.5	13.6	14.5	15.8	14.1	15.0	15.1	16.0	17.3
	3H	14.2	15.0	15.2	16.0	17.4	16.6	17.4	17.7	18.4	19.8
	4H	14.8	15.5	15.8	16.5	17.9	18.0	18.7	19.0	19.7	21.1
	6H	15.1	15.8	16.2	16.8	18.2	19.5	20.1	20.5	21.2	22.6
	8H	15.2	15.9	16.3	16.9	18.3	20.3	21.0	21.4	22.0	23.4
	12H	15.3	15.9	16.3	16.9	18.4	21.4	22.0	22.4	23.0	24.4
4H	2H	13.4	14.1	14.4	15.1	16.5	14.5	15.3	15.6	16.3	17.7
	3H	15.2	15.8	16.2	16.9	18.3	17.3	17.9	18.3	19.0	20.4
	4H	15.9	16.4	16.9	17.5	18.9	18.8	19.4	19.9	20.4	21.9
	6H	16.4	16.9	17.4	17.9	19.4	20.6	21.0	21.6	22.1	23.5
	8H	16.5	17.0	17.6	18.1	19.5	21.6	22.0	22.6	23.1	24.5
	12H	16.6	17.0	17.7	18.1	19.6	22.7	23.1	23.8	24.2	25.6
8H	4H	16.5	17.0	17.6	18.1	19.5	19.0	19.5	20.1	20.6	22.0
	6H	17.3	17.6	18.3	18.7	20.2	21.0	21.4	22.1	22.5	23.9
	8H	17.5	17.9	18.6	19.0	20.4	22.2	22.5	23.3	23.6	25.1
	12H	17.7	18.0	18.8	19.1	20.6	23.6	23.9	24.6	24.9	26.4
12H	4H	16.8	17.2	17.8	18.2	19.7	19.0	19.4	20.1	20.5	22.0
	6H	17.6	18.0	18.7	19.1	20.5	21.1	21.4	22.1	22.5	24.0
	8H	18.0	18.3	19.1	19.4	20.9	22.3	22.6	23.4	23.7	25.2

Maximum UGR = 26.4

POLAR GRAPH



Maximum Candela = 710.67 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)