

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-V-S-835-RT-RB-RE-ITL93794.006.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.006 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-V-S-835-RT-RB-RE

[_INPUT_ELECTRICAL]120.0 VOLTS, 48.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 49.2 WATTS

[_ABSOLUTE]LUMENS]6054

[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	6054
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	48
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)	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

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	136.000	282.000	390.000	429.000
92.5	36.000	142.000	287.000	394.000	434.000
95.0	79.000	156.000	296.000	401.000	441.000
97.5	121.000	178.000	309.000	412.000	451.000
100.0	164.000	211.000	327.000	429.000	464.000
102.5	209.000	247.000	351.000	446.000	481.000
105.0	260.000	287.000	381.000	468.000	502.000
107.5	308.000	330.000	414.000	494.000	525.000
110.0	358.000	379.000	450.000	525.000	552.000
112.5	408.000	429.000	489.000	558.000	583.000
115.0	461.000	478.000	531.000	592.000	618.000
117.5	517.000	528.000	576.000	630.000	653.000
120.0	568.000	579.000	624.000	671.000	690.000
122.5	618.000	629.000	671.000	713.000	729.000
125.0	672.000	678.000	720.000	754.000	768.000
127.5	725.000	731.000	768.000	795.000	811.000
130.0	775.000	784.000	815.000	839.000	851.000
132.5	828.000	837.000	861.000	886.000	895.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-V-S-835-RT-RB-RE-ITL93794.006.IES****CANDELA TABULATION - (Cont.)**

135.0	877.000	882.000	905.000	930.000	939.000
137.5	929.000	926.000	952.000	974.000	987.000
140.0	974.000	969.000	994.000	1016.000	1030.000
142.5	1017.000	1014.000	1036.000	1062.000	1070.000
145.0	1061.000	1055.000	1080.000	1102.000	1110.000
147.5	1103.000	1095.000	1122.000	1139.000	1145.000
150.0	1142.000	1133.000	1161.000	1175.000	1182.000
152.5	1178.000	1172.000	1197.000	1209.000	1214.000
155.0	1212.000	1206.000	1229.000	1239.000	1245.000
157.5	1247.000	1240.000	1262.000	1268.000	1273.000
160.0	1276.000	1269.000	1288.000	1292.000	1296.000
162.5	1300.000	1297.000	1310.000	1316.000	1316.000
165.0	1321.000	1318.000	1330.000	1334.000	1332.000
167.5	1339.000	1337.000	1346.000	1350.000	1349.000
170.0	1354.000	1353.000	1359.000	1361.000	1361.000
172.5	1365.000	1367.000	1369.000	1370.000	1371.000
175.0	1375.000	1375.000	1376.000	1376.000	1376.000
177.5	1379.000	1379.000	1380.000	1379.000	1380.000
180.0	1381.000	1381.000	1381.000	1381.000	1381.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-V-S-835-RT-RB-RE-ITL93794.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	199.03	N.A.	3.30
0-30	420.77	N.A.	7.00
0-40	685.89	N.A.	11.30
0-60	1212.08	N.A.	20.00
0-80	1579.01	N.A.	26.10
0-90	1723.14	N.A.	28.50
10-90	1671.5	N.A.	27.60
20-40	486.86	N.A.	8.00
20-50	761.07	N.A.	12.60
40-70	734.31	N.A.	12.10
60-80	366.93	N.A.	6.10
70-80	158.81	N.A.	2.60
80-90	144.13	N.A.	2.40
90-110	710.48	N.A.	11.70
90-120	1242.11	N.A.	20.50
90-130	1885.2	N.A.	31.10
90-150	3260.78	N.A.	53.90
90-180	4331.03	N.A.	71.50
110-180	3620.55	N.A.	59.80
0-180	6054.17	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	144.13
90-100	307.30
100-110	403.18
110-120	531.63
120-130	643.09
130-140	699.75
140-150	675.84
150-160	564.99
160-170	374.52
170-180	130.74

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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	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	92	88	83	80	82	78	75	72	61	59	57	45	44	42	31	30	29	22
2	84	76	70	65	74	68	63	58	53	49	46	39	37	35	27	25	24	18
3	76	67	59	53	68	60	53	48	47	42	39	35	32	29	23	22	20	15
4	69	59	51	45	62	53	46	41	41	36	33	31	27	25	21	19	17	13
5	64	52	44	38	56	47	40	35	37	32	28	27	24	21	19	16	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	27	23	27	22	19	20	17	14	14	12	10	8
9	46	34	27	22	41	31	25	20	25	20	16	19	15	13	13	11	9	7
10	43	31	24	20	39	28	22	18	23	18	15	17	14	11	12	10	8	6

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UGR TABLE - CORRECTED

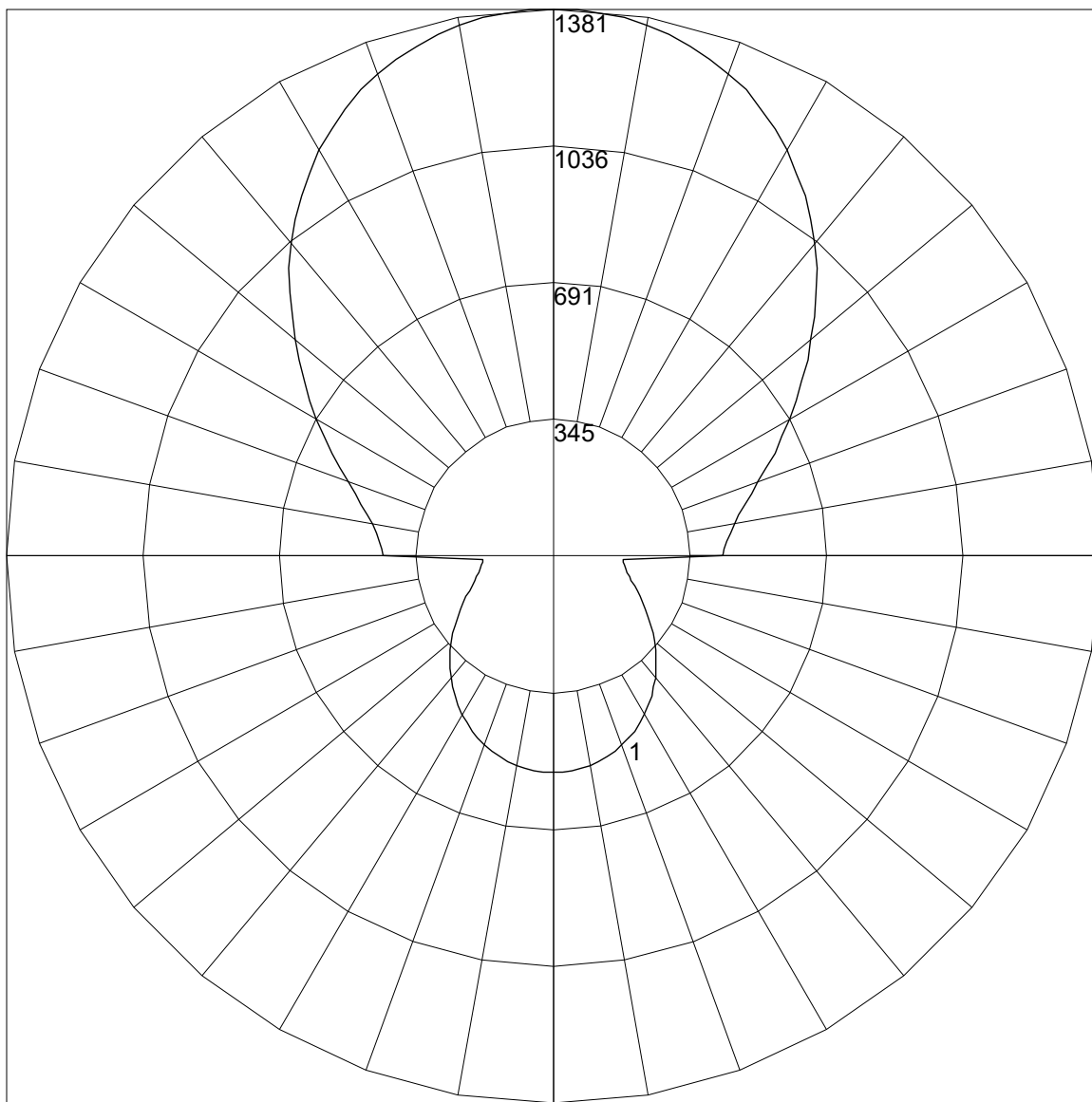
Reflectances

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	10.8	11.5	11.9	12.6	14.2	12.3	13.0	13.4	14.1	15.7
	3H	12.4	13.0	13.5	14.2	15.7	14.8	15.5	15.9	16.6	18.1
	4H	12.9	13.5	14.1	14.7	16.2	16.1	16.7	17.3	17.9	19.4
	6H	13.3	13.9	14.5	15.0	16.6	17.7	18.2	18.8	19.3	20.9
	8H	13.4	13.9	14.6	15.1	16.7	18.5	19.1	19.7	20.2	21.8
	12H	13.5	14.0	14.6	15.1	16.7	19.5	20.0	20.7	21.2	22.8
4H	2H	11.5	12.2	12.7	13.3	14.9	12.7	13.3	13.9	14.4	16.0
	3H	13.3	13.9	14.5	15.0	16.6	15.5	16.0	16.6	17.1	18.7
	4H	14.0	14.5	15.2	15.6	17.2	17.0	17.5	18.1	18.6	20.2
	6H	14.5	14.9	15.7	16.1	17.7	18.7	19.1	19.9	20.3	21.9
	8H	14.7	15.1	15.8	16.2	17.8	19.7	20.1	20.9	21.2	22.8
	12H	14.8	15.1	15.9	16.3	17.9	20.8	21.2	22.0	22.4	24.0
8H	4H	14.7	15.1	15.8	16.2	17.8	17.2	17.6	18.3	18.7	20.3
	6H	15.4	15.7	16.6	16.9	18.5	19.2	19.5	20.3	20.7	22.3
	8H	15.7	16.0	16.9	17.1	18.8	20.3	20.6	21.5	21.8	23.4
	12H	15.9	16.1	17.0	17.3	18.9	21.7	21.9	22.9	23.1	24.8
12H	4H	14.9	15.2	16.1	16.4	18.0	17.2	17.5	18.3	18.7	20.3
	6H	15.8	16.0	16.9	17.2	18.9	19.2	19.5	20.4	20.7	22.3
	8H	16.1	16.4	17.3	17.6	19.2	20.4	20.7	21.6	21.9	23.5

Maximum UGR = 24.8

POLAR GRAPH



Maximum Candela = 1381 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)