

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-S-V-835-RT-RB-RE-ITL93794.013.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.013 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-S-V-835-RT-RB-RE

[_INPUT_ELECTRICAL]120.0 VOLTS, 48.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 49.2 WATTS

[_ABSOLUTE]LUMENS]5953

[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	5953
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	48
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.36
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	15932	14471	14298
55	15005	13302	13456
65	13802	12279	13132
75	12327	12134	14343
85	9888	16281	19858

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HPO-P-ID-4FT-S-V-835-RT-RB-RE-ITL93794.013.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	1335.000	1335.000	1335.000	1335.000	1335.000
2.5	1333.000	1333.000	1333.000	1333.000	1333.000
5.0	1327.000	1328.000	1328.000	1329.000	1329.000
7.5	1319.000	1318.000	1320.000	1321.000	1322.000
10.0	1306.000	1305.000	1310.000	1312.000	1311.000
12.5	1292.000	1288.000	1295.000	1299.000	1298.000
15.0	1273.000	1267.000	1278.000	1283.000	1282.000
17.5	1252.000	1243.000	1258.000	1265.000	1263.000
20.0	1225.000	1218.000	1233.000	1243.000	1242.000
22.5	1197.000	1190.000	1207.000	1218.000	1216.000
25.0	1164.000	1158.000	1179.000	1189.000	1191.000
27.5	1131.000	1125.000	1147.000	1158.000	1160.000
30.0	1094.000	1089.000	1114.000	1127.000	1128.000
32.5	1054.000	1052.000	1076.000	1091.000	1094.000
35.0	1015.000	1013.000	1039.000	1053.000	1058.000
37.5	973.000	972.000	999.000	1015.000	1020.000
40.0	927.000	930.000	956.000	976.000	981.000
42.5	882.000	887.000	914.000	935.000	942.000
45.0	838.000	841.000	871.000	891.000	901.000
47.5	789.000	795.000	826.000	849.000	860.000
50.0	740.000	748.000	779.000	806.000	819.000
52.5	692.000	701.000	734.000	765.000	778.000
55.0	643.000	650.000	687.000	722.000	739.000
57.5	594.000	602.000	641.000	681.000	699.000
60.0	540.000	553.000	594.000	643.000	662.000
62.5	490.000	504.000	551.000	604.000	627.000
65.0	439.000	454.000	510.000	567.000	593.000
67.5	390.000	406.000	470.000	535.000	562.000
70.0	340.000	360.000	431.000	504.000	533.000
72.5	292.000	316.000	396.000	478.000	508.000
75.0	244.000	272.000	366.000	454.000	488.000
77.5	198.000	233.000	341.000	435.000	469.000
80.0	153.000	199.000	318.000	418.000	454.000
82.5	111.000	171.000	303.000	406.000	443.000
85.0	71.000	151.000	291.000	396.000	434.000
87.5	30.000	140.000	284.000	391.000	431.000
90.0	0.000	136.000	282.000	390.000	429.000
92.5	14.741	58.145	117.519	161.333	177.712
95.0	32.348	63.878	121.204	164.199	180.578
97.5	49.546	72.886	126.527	168.703	184.673
100.0	67.154	86.399	133.898	175.664	189.996
102.5	85.580	101.140	143.725	182.625	196.957
105.0	106.463	117.519	156.009	191.634	205.556
107.5	126.118	135.126	169.522	202.280	214.974
110.0	146.591	155.190	184.263	214.974	226.029
112.5	167.065	175.664	200.232	228.486	238.723
115.0	188.767	195.728	217.430	242.408	253.055
117.5	211.698	216.202	235.857	257.968	267.386
120.0	232.581	237.085	255.511	274.757	282.537
122.5	253.055	257.559	274.757	291.955	298.506
125.0	275.166	277.623	294.821	308.743	314.476
127.5	296.868	299.325	314.476	325.531	332.083
130.0	317.342	321.027	333.721	343.548	348.462
132.5	339.044	342.729	352.557	362.793	366.479

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-S-V-835-RT-RB-RE-ITL93794.013.IES****CANDELA TABULATION - (Cont.)**

135.0	359.108	361.156	370.574	380.810	384.495
137.5	380.401	379.172	389.819	398.827	404.150
140.0	398.827	396.780	407.017	416.025	421.758
142.5	416.435	415.206	424.214	434.861	438.137
145.0	434.451	431.995	442.231	451.240	454.515
147.5	451.649	448.373	459.429	466.390	468.847
150.0	467.619	463.933	475.399	481.131	483.998
152.5	482.360	479.903	490.140	495.053	497.101
155.0	496.282	493.825	503.243	507.338	509.794
157.5	510.613	507.747	516.755	519.212	521.260
160.0	522.488	519.622	527.402	529.040	530.678
162.5	532.316	531.087	536.410	538.867	538.867
165.0	540.914	539.686	544.600	546.237	545.419
167.5	548.285	547.466	551.151	552.789	552.380
170.0	554.427	554.018	556.474	557.293	557.293
172.5	558.931	559.750	560.569	560.979	561.388
175.0	563.026	563.026	563.435	563.435	563.435
177.5	564.664	564.664	565.073	564.664	565.073
180.0	565.483	565.483	565.483	565.483	565.483

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HPO-P-ID-4FT-S-V-835-RT-RB-RE-ITL93794.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	486.25	N.A.	8.20
0-30	1028.02	N.A.	17.30
0-40	1675.73	N.A.	28.10
0-60	2961.32	N.A.	49.70
0-80	3857.79	N.A.	64.80
0-90	4159.36	N.A.	69.90
10-90	4033.2	N.A.	67.70
20-40	1189.48	N.A.	20.00
20-50	1859.41	N.A.	31.20
40-70	1794.05	N.A.	30.10
60-80	896.47	N.A.	15.10
70-80	388.01	N.A.	6.50
80-90	301.57	N.A.	5.10
90-110	311.61	N.A.	5.20
90-120	529.30	N.A.	8.90
90-130	792.63	N.A.	13.30
90-150	1355.89	N.A.	22.80
90-180	1794.13	N.A.	30.10
110-180	1482.52	N.A.	24.90
0-180	5953.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.16
10-20	360.09
20-30	541.77
30-40	647.71
40-50	669.93
50-60	615.65
60-70	508.46
70-80	388.01
80-90	301.57
90-100	146.52
100-110	165.09
110-120	217.69
120-130	263.33
130-140	286.53
140-150	276.74
150-160	231.35
160-170	153.36
170-180	53.54

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HPO-P-ID-4FT-S-V-835-RT-RB-RE-ITL93794.013.IES

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	112	112	112	112	106	106	106	106	94	94	94	84	84	84	74	74	74	70
1	100	95	90	86	94	90	86	82	80	77	74	71	69	66	63	61	59	55
2	91	82	75	69	85	78	71	66	69	64	60	62	58	54	54	51	49	45
3	83	72	64	57	77	68	61	55	61	55	50	54	49	45	48	44	41	37
4	75	63	55	48	71	60	52	46	54	47	42	48	43	38	42	38	35	32
5	69	56	48	41	65	54	45	39	48	41	36	43	37	33	38	34	30	27
6	64	51	42	36	60	48	40	34	43	37	32	39	33	29	35	30	26	24
7	59	46	37	31	55	44	36	30	39	33	28	35	30	26	32	27	23	21
8	55	42	33	28	52	40	32	27	36	29	25	32	27	23	29	24	21	19
9	51	38	30	25	48	36	29	24	33	27	22	30	24	21	27	22	19	17
10	48	35	27	22	45	33	26	21	30	24	20	28	22	19	25	20	17	15

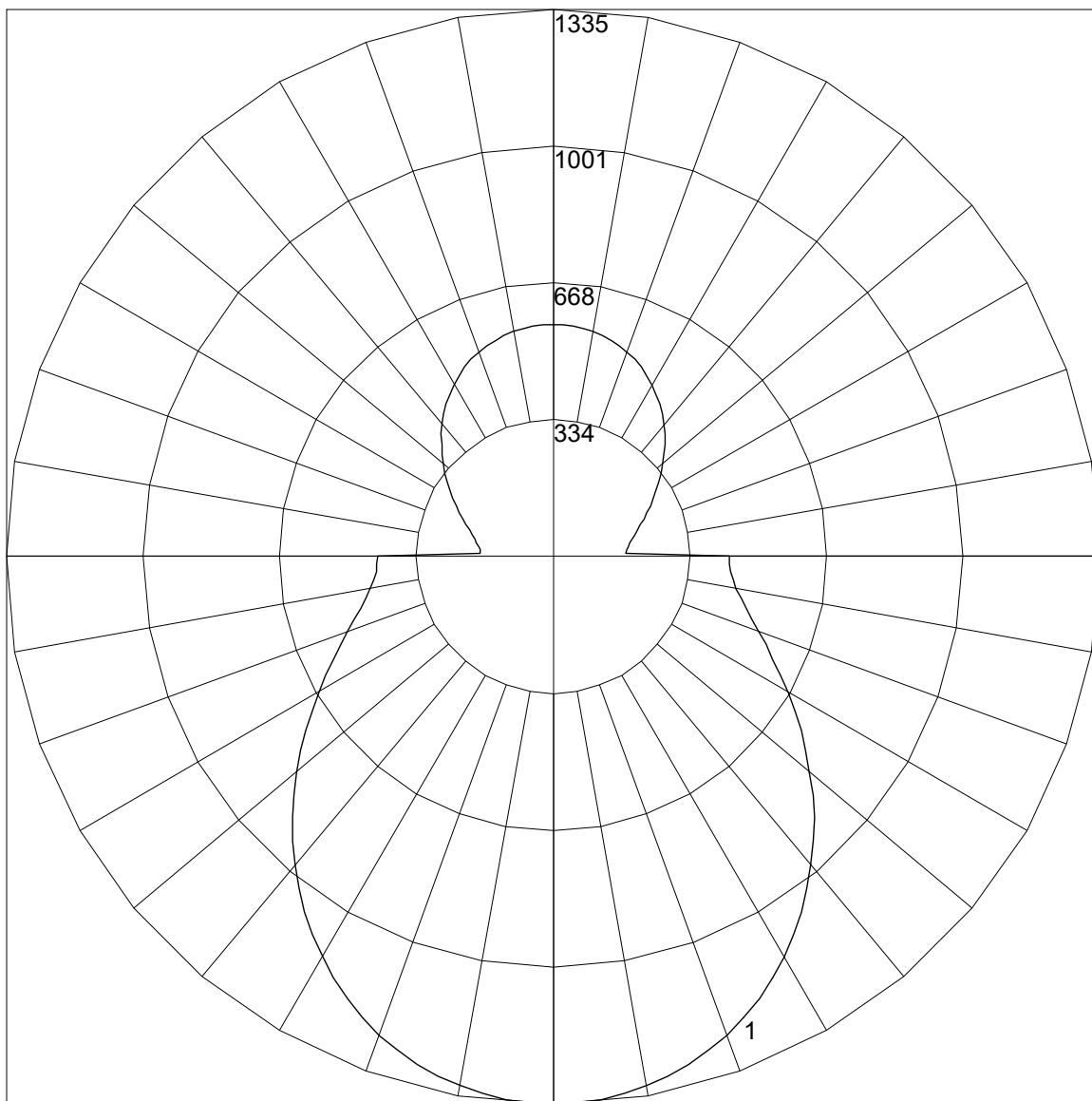
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HPO-P-ID-4FT-S-V-835-RT-RB-RE-ITL93794.013.IES

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	18.0	19.1	18.7	19.9	20.8	19.5	20.6	20.2	21.4	22.3
	3H	19.6	20.6	20.3	21.4	22.4	22.0	23.0	22.8	23.8	24.8
	4H	20.1	21.1	20.9	21.9	22.9	23.3	24.3	24.1	25.1	26.1
	6H	20.5	21.4	21.3	22.2	23.2	24.9	25.8	25.7	26.6	27.6
	8H	20.6	21.5	21.4	22.3	23.3	25.7	26.6	26.5	27.4	28.4
	12H	20.7	21.5	21.5	22.3	23.4	26.8	27.6	27.6	28.4	29.5
4H	2H	18.7	19.7	19.5	20.5	21.5	19.9	20.9	20.7	21.7	22.7
	3H	20.6	21.4	21.4	22.2	23.2	22.7	23.5	23.5	24.3	25.3
	4H	21.3	22.0	22.1	22.9	23.9	24.2	25.0	25.0	25.8	26.8
	6H	21.8	22.5	22.6	23.3	24.3	26.0	26.6	26.8	27.5	28.5
	8H	22.0	22.6	22.8	23.4	24.5	27.0	27.6	27.8	28.5	29.5
	12H	22.0	22.6	22.9	23.5	24.6	28.1	28.7	29.0	29.6	30.6
8H	4H	22.0	22.6	22.8	23.4	24.5	24.5	25.1	25.3	25.9	27.0
	6H	22.7	23.2	23.5	24.1	25.2	26.4	27.0	27.3	27.9	28.9
	8H	23.0	23.4	23.8	24.3	25.4	27.6	28.1	28.5	29.0	30.0
	12H	23.2	23.6	24.0	24.5	25.6	29.0	29.4	29.9	30.3	31.4
12H	4H	22.2	22.8	23.0	23.6	24.7	24.4	25.0	25.3	25.9	27.0
	6H	23.1	23.5	23.9	24.4	25.5	26.5	27.0	27.4	27.8	28.9
	8H	23.4	23.9	24.3	24.8	25.9	27.7	28.2	28.6	29.1	30.2

Maximum UGR = 31.4

POLAR GRAPH



Maximum Candela = 1335 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)