

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-H-835-RT-RB-RE-ITL93794.004.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.004 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-H-835-RT-RB-RE

[_INPUT_ELECTRICAL]120.0 VOLTS, 61.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 61.3 WATTS

[_ABSOLUTE]LUMENS]7574

[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	7574
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	124
Total Luminaire Watts	61
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	12393	11256	11122
55	11671	10347	10466
65	10736	9551	10214
75	9588	9438	11156
85	7692	12664	15446

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1038.405	1038.405	1038.405	1038.405	1038.405
2.5	1036.849	1036.849	1036.849	1036.849	1036.849
5.0	1032.182	1032.960	1032.960	1033.738	1033.738
7.5	1025.959	1025.181	1026.737	1027.515	1028.293
10.0	1015.847	1015.070	1018.959	1020.514	1019.737
12.5	1004.958	1001.847	1007.291	1010.403	1009.625
15.0	990.179	985.512	994.068	997.957	997.180
17.5	973.845	966.844	978.512	983.957	982.401
20.0	952.843	947.398	959.066	966.844	966.066
22.5	931.064	925.619	938.842	947.398	945.843
25.0	905.395	900.729	917.063	924.841	926.397
27.5	879.727	875.060	892.172	900.729	902.284
30.0	850.947	847.058	866.504	876.616	877.394
32.5	819.834	818.278	836.946	848.614	850.947
35.0	789.499	787.943	808.167	819.056	822.945
37.5	756.830	756.052	777.053	789.499	793.388
40.0	721.050	723.383	743.607	759.163	763.052
42.5	686.047	689.936	710.938	727.272	732.717
45.0	651.823	654.156	677.491	693.048	700.826
47.5	613.709	618.376	642.489	660.379	668.935
50.0	575.595	581.818	605.931	626.932	637.044
52.5	538.259	545.260	570.928	595.041	605.153
55.0	500.146	505.590	534.370	561.594	574.817
57.5	462.032	468.254	498.590	529.703	543.704
60.0	420.029	430.141	462.032	500.146	514.924
62.5	381.137	392.027	428.585	469.810	487.700
65.0	341.468	353.135	396.694	441.030	461.254
67.5	303.354	315.800	365.581	416.140	437.141
70.0	264.463	280.019	335.245	392.027	414.584
72.5	227.127	245.795	308.021	371.803	395.138
75.0	189.791	211.570	284.686	353.135	379.582
77.5	154.011	181.235	265.240	338.357	364.803
80.0	119.008	154.788	247.350	325.134	353.135
82.5	86.339	133.009	235.683	315.800	344.579
85.0	55.226	117.453	226.349	308.021	337.579
87.5	23.335	108.896	220.904	304.132	335.245
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
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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

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	378.22	N.A.	5.00
0-30	799.63	N.A.	10.60
0-40	1303.44	N.A.	17.20
0-60	2303.41	N.A.	30.40
0-80	3000.71	N.A.	39.60
0-90	3243.06	N.A.	42.80
10-90	3144.93	N.A.	41.50
20-40	925.21	N.A.	12.20
20-50	1446.31	N.A.	19.10
40-70	1395.47	N.A.	18.40
60-80	697.30	N.A.	9.20
70-80	301.80	N.A.	4.00
80-90	242.35	N.A.	3.20
90-110	710.48	N.A.	9.40
90-120	1242.11	N.A.	16.40
90-130	1885.2	N.A.	24.90
90-150	3260.78	N.A.	43.10
90-180	4331.03	N.A.	57.20
110-180	3620.55	N.A.	47.80
0-180	7574.1	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	98.13
10-20	280.09
20-30	421.41
30-40	503.81
40-50	521.10
50-60	478.87
60-70	395.50
70-80	301.80
80-90	242.35
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

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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43
1	95	90	86	82	86	82	79	75	68	65	63	54	52	51	42	41	39	34
2	86	78	72	66	78	71	66	61	59	55	51	47	44	42	36	34	32	27
3	78	68	61	55	71	63	56	51	52	47	43	41	38	35	32	29	27	23
4	71	60	52	46	65	55	48	43	46	40	36	37	33	30	28	26	23	19
5	66	54	45	39	59	49	42	36	41	35	31	33	29	25	25	23	20	17
6	60	48	40	34	55	44	37	31	37	31	27	30	25	22	23	20	18	15
7	56	43	35	29	51	40	33	27	33	28	23	27	23	19	21	18	16	13
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	19	16	14	11
9	48	36	28	23	44	33	26	21	28	22	18	23	18	15	18	15	13	10
10	45	33	25	21	41	30	24	19	25	20	17	21	17	14	16	13	11	9

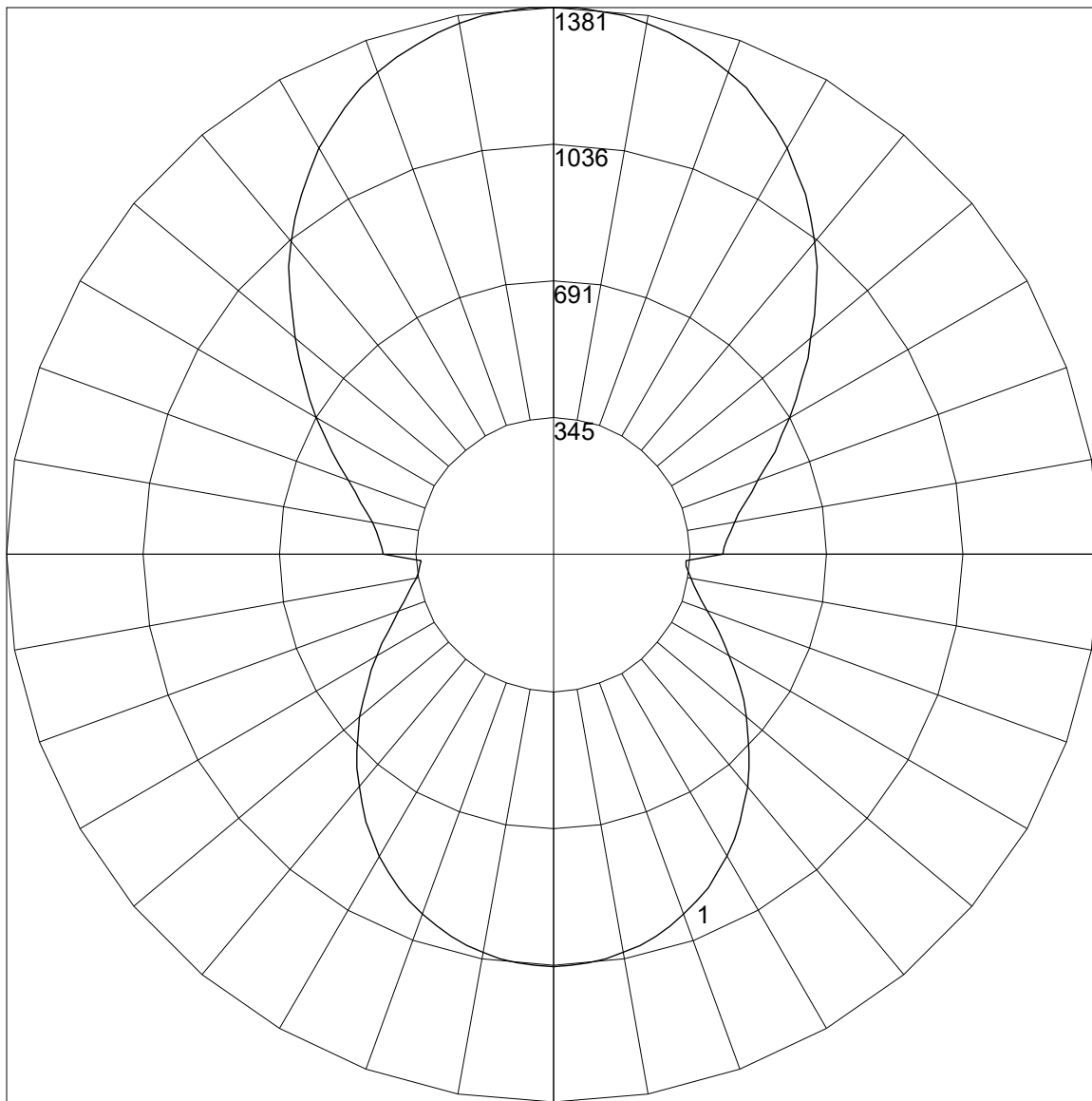
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UGR TABLE - CORRECTED

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	14.7	15.6	15.7	16.6	18.0	16.2	17.1	17.2	18.1	19.4
	3H	16.3	17.1	17.3	18.1	19.5	18.7	19.5	19.8	20.5	21.9
	4H	16.9	17.6	17.9	18.6	20.0	20.1	20.8	21.1	21.8	23.2
	6H	17.3	17.9	18.3	19.0	20.4	21.6	22.3	22.6	23.3	24.7
	8H	17.4	18.0	18.4	19.0	20.4	22.5	23.1	23.5	24.1	25.5
	12H	17.4	18.0	18.5	19.1	20.5	23.5	24.1	24.5	25.1	26.6
4H	2H	15.5	16.2	16.5	17.2	18.6	16.6	17.4	17.7	18.4	19.8
	3H	17.3	17.9	18.3	19.0	20.4	19.4	20.0	20.4	21.1	22.5
	4H	18.0	18.5	19.0	19.6	21.0	20.9	21.5	22.0	22.5	24.0
	6H	18.5	19.0	19.5	20.0	21.5	22.7	23.2	23.7	24.2	25.6
	8H	18.6	19.1	19.7	20.2	21.6	23.7	24.1	24.7	25.2	26.6
	12H	18.7	19.1	19.8	20.2	21.7	24.8	25.2	25.9	26.3	27.7
8H	4H	18.6	19.1	19.7	20.2	21.6	21.1	21.6	22.2	22.7	24.1
	6H	19.4	19.7	20.4	20.9	22.3	23.1	23.5	24.2	24.6	26.0
	8H	19.6	20.0	20.7	21.1	22.5	24.3	24.6	25.4	25.7	27.2
	12H	19.8	20.1	20.9	21.2	22.7	25.7	26.0	26.8	27.1	28.5
12H	4H	18.9	19.3	19.9	20.4	21.8	21.1	21.5	22.2	22.6	24.1
	6H	19.7	20.1	20.8	21.2	22.6	23.2	23.5	24.2	24.6	26.1
	8H	20.1	20.4	21.2	21.5	23.0	24.4	24.7	25.5	25.8	27.3

Maximum UGR = 28.5

POLAR GRAPH



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