

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-B-8TW-RT-RB-RE-ITL93794.905.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.905 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]08/19/20

[TESTDATE]09/08/20

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPO-P-ID-4ft-V-B-8TW-RT-RB-RE

[_INPUT_ELECTRICAL]120.0 VOLTS, 56.8 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 57.9 WATTS

[_ABSOLUTE]LUMENS]6488

[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	6488
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	114
Total Luminaire Watts	56.8
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	8199	7447	7358
55	7721	6845	6924
65	7103	6319	6758
75	6343	6244	7381
85	5089	8378	10219

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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	686.998	686.998	686.998	686.998	686.998
2.5	685.969	685.969	685.969	685.969	685.969
5.0	682.881	683.396	683.396	683.911	683.911
7.5	678.764	678.250	679.279	679.794	680.308
10.0	672.075	671.560	674.133	675.162	674.648
12.5	664.870	662.812	666.414	668.472	667.958
15.0	655.093	652.005	657.666	660.239	659.724
17.5	644.286	639.654	647.374	650.976	649.947
20.0	630.392	626.789	634.509	639.654	639.140
22.5	615.983	612.380	621.129	626.789	625.760
25.0	599.001	595.913	606.720	611.866	612.895
27.5	582.019	578.931	590.252	595.913	596.942
30.0	562.978	560.405	573.270	579.960	580.475
32.5	542.394	541.365	553.716	561.434	562.978
35.0	522.324	521.295	534.675	541.880	544.452
37.5	500.711	500.197	514.091	522.324	524.898
40.0	477.039	478.583	491.963	502.255	504.828
42.5	453.882	456.455	470.349	481.156	484.758
45.0	431.239	432.783	448.221	458.513	463.659
47.5	406.024	409.111	425.064	436.900	442.561
50.0	380.808	384.925	400.878	414.772	421.462
52.5	356.107	360.738	377.720	393.673	400.363
55.0	330.891	334.493	353.534	371.545	380.293
57.5	305.676	309.792	329.862	350.446	359.709
60.0	277.887	284.577	305.676	330.891	340.669
62.5	252.157	259.361	283.548	310.822	322.658
65.0	225.912	233.631	262.449	291.781	305.161
67.5	200.696	208.930	241.864	275.314	289.208
70.0	174.966	185.258	221.795	259.361	274.285
72.5	150.265	162.615	203.784	245.981	261.420
75.0	125.564	139.973	188.346	233.631	251.127
77.5	101.892	119.903	175.481	223.853	241.350
80.0	78.735	102.406	163.644	215.105	233.631
82.5	57.121	87.998	155.925	208.930	227.970
85.0	36.537	77.705	149.750	203.784	223.339
87.5	15.438	72.045	146.148	201.211	221.795
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-B-8TW-RT-RB-RE-ITL93794.905.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-B-8TW-RT-RB-RE-ITL93794.905.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	250.23	N.A.	3.90
0-30	529.03	N.A.	8.20
0-40	862.34	N.A.	13.30
0-60	1523.91	N.A.	23.50
0-80	1985.24	N.A.	30.60
0-90	2157.43	N.A.	33.30
10-90	2092.51	N.A.	32.20
20-40	612.11	N.A.	9.40
20-50	956.86	N.A.	14.70
40-70	923.23	N.A.	14.20
60-80	461.33	N.A.	7.10
70-80	199.67	N.A.	3.10
80-90	172.19	N.A.	2.70
90-110	710.48	N.A.	10.90
90-120	1242.11	N.A.	19.10
90-130	1885.2	N.A.	29.10
90-150	3260.78	N.A.	50.30
90-180	4331.03	N.A.	66.70
110-180	3620.55	N.A.	55.80
0-180	6488.47	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	64.92
10-20	185.30
20-30	278.80
30-40	333.31
40-50	344.75
50-60	316.82
60-70	261.66
70-80	199.67
80-90	172.19
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	93	88	84	81	84	80	76	73	63	61	59	48	47	45	34	33	32	26
2	84	77	70	65	76	69	64	59	55	51	48	42	39	37	30	28	27	21
3	77	67	60	54	69	61	54	49	48	44	40	37	34	31	26	24	22	18
4	70	59	51	45	63	54	47	41	43	38	34	33	29	26	23	21	19	15
5	64	53	44	39	57	48	41	35	38	33	29	29	26	23	21	18	17	13
6	59	47	39	33	53	43	36	30	34	29	25	26	23	20	19	16	14	11
7	54	42	34	29	49	38	31	27	31	26	22	24	20	17	17	15	13	10
8	50	38	31	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9
9	47	35	27	22	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	18	24	19	15	18	15	12	13	11	9	7

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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

X=2H	Y=2H	12.2	13.0	13.3	14.1	15.6	13.7	14.5	14.8	15.6	17.0
	3H	13.8	14.5	14.9	15.6	17.1	16.2	16.9	17.3	18.0	19.5
	4H	14.4	15.0	15.5	16.1	17.6	17.6	18.2	18.7	19.3	20.8
	6H	14.7	15.3	15.8	16.4	18.0	19.1	19.7	20.2	20.8	22.3
	8H	14.8	15.4	15.9	16.5	18.0	19.9	20.5	21.0	21.6	23.1
	12H	14.9	15.4	16.0	16.5	18.1	20.9	21.5	22.1	22.6	24.1

UGR Viewed Endwise

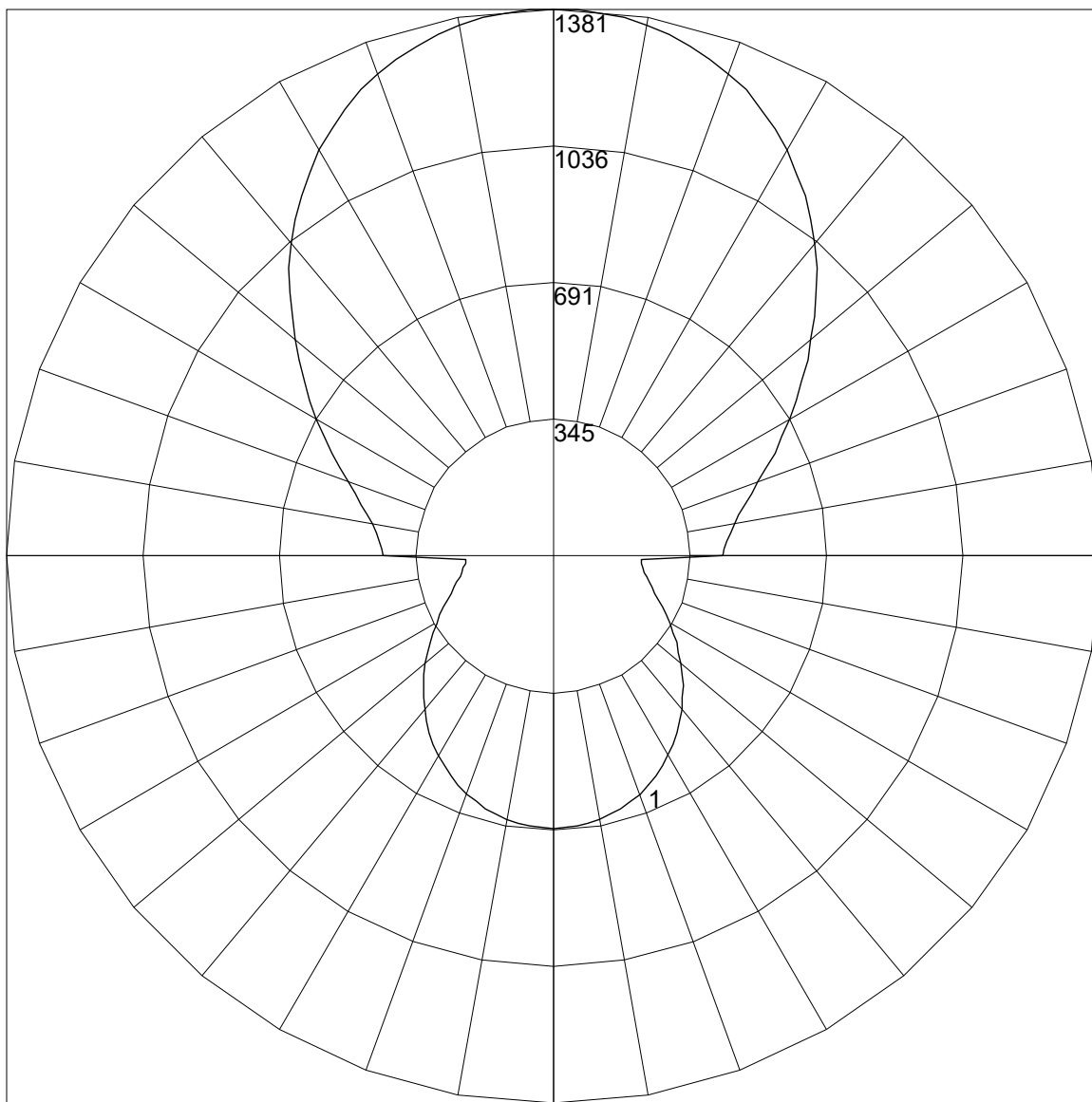
4H	2H	13.0	13.6	14.1	14.7	16.2	14.1	14.8	15.2	15.9	17.4
	3H	14.8	15.3	15.9	16.4	18.0	16.9	17.4	18.0	18.5	20.1
	4H	15.4	15.9	16.6	17.1	18.6	18.4	18.9	19.5	20.0	21.6
	6H	16.0	16.4	17.1	17.5	19.1	20.1	20.6	21.3	21.7	23.2
	8H	16.1	16.5	17.2	17.6	19.2	21.1	21.5	22.2	22.7	24.2
	12H	16.2	16.6	17.3	17.7	19.3	22.3	22.6	23.4	23.8	25.3

8H	4H	16.1	16.5	17.2	17.6	19.2	18.6	19.0	19.7	20.1	21.7
	6H	16.8	17.2	18.0	18.3	19.9	20.6	20.9	21.7	22.1	23.6
	8H	17.1	17.4	18.2	18.5	20.1	21.7	22.0	22.9	23.2	24.8
	12H	17.3	17.6	18.4	18.7	20.3	23.1	23.4	24.3	24.5	26.1

12H	4H	16.3	16.7	17.5	17.8	19.4	18.6	19.0	19.7	20.1	21.7
	6H	17.2	17.5	18.3	18.6	20.2	20.6	20.9	21.8	22.1	23.7
	8H	17.6	17.8	18.7	19.0	20.6	21.9	22.1	23.0	23.3	24.9

Maximum UGR = 26.1

POLAR GRAPH



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