

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-D-4FT-V-8TW-RB-ITL93794.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93794.900 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUE DATE]08/19/20
[TEST DATE]09/08/20
[MANUFACT]FINELITE, INC.
[LUMCAT]FINELITE HPO-P-D-4ft-V-8TW-RB
[OTHER]ies file is based on 3500K; see luminaire tech sheet at
www.finelite.com for lumen adjustment factors for other CCT's & CRI's
[INPUT_ELECTRICAL]120.0 VOLTS, 38.0 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 38.1 WATTS
[ABSOLUTE LUMENS]4159
[CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4159
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	38
Ballast Factor	1.00
CIE Type	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

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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	1335	1335	1335	1335	1335
2.5	1333	1333	1333	1333	1333
5.0	1327	1328	1328	1329	1329
7.5	1319	1318	1320	1321	1322
10.0	1306	1305	1310	1312	1311
12.5	1292	1288	1295	1299	1298
15.0	1273	1267	1278	1283	1282
17.5	1252	1243	1258	1265	1263
20.0	1225	1218	1233	1243	1242
22.5	1197	1190	1207	1218	1216
25.0	1164	1158	1179	1189	1191
27.5	1131	1125	1147	1158	1160
30.0	1094	1089	1114	1127	1128
32.5	1054	1052	1076	1091	1094
35.0	1015	1013	1039	1053	1058
37.5	973	972	999	1015	1020
40.0	927	930	956	976	981
42.5	882	887	914	935	942
45.0	838	841	871	891	901
47.5	789	795	826	849	860
50.0	740	748	779	806	819
52.5	692	701	734	765	778
55.0	643	650	687	722	739
57.5	594	602	641	681	699
60.0	540	553	594	643	662
62.5	490	504	551	604	627
65.0	439	454	510	567	593
67.5	390	406	470	535	562
70.0	340	360	431	504	533
72.5	292	316	396	478	508
75.0	244	272	366	454	488
77.5	198	233	341	435	469
80.0	153	199	318	418	454
82.5	111	171	303	406	443
85.0	71	151	291	396	434
87.5	30	140	284	391	431
90.0	0	136	282	390	429

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	486.25	N.A.	11.70
0-30	1028.02	N.A.	24.70
0-40	1675.73	N.A.	40.30
0-60	2961.32	N.A.	71.20
0-80	3857.79	N.A.	92.70
0-90	4159.36	N.A.	100.00
10-90	4033.2	N.A.	97.00
20-40	1189.48	N.A.	28.60
20-50	1859.41	N.A.	44.70
40-70	1794.05	N.A.	43.10
60-80	896.47	N.A.	21.60
70-80	388.01	N.A.	9.30
80-90	301.57	N.A.	7.30
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	4159.36	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	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

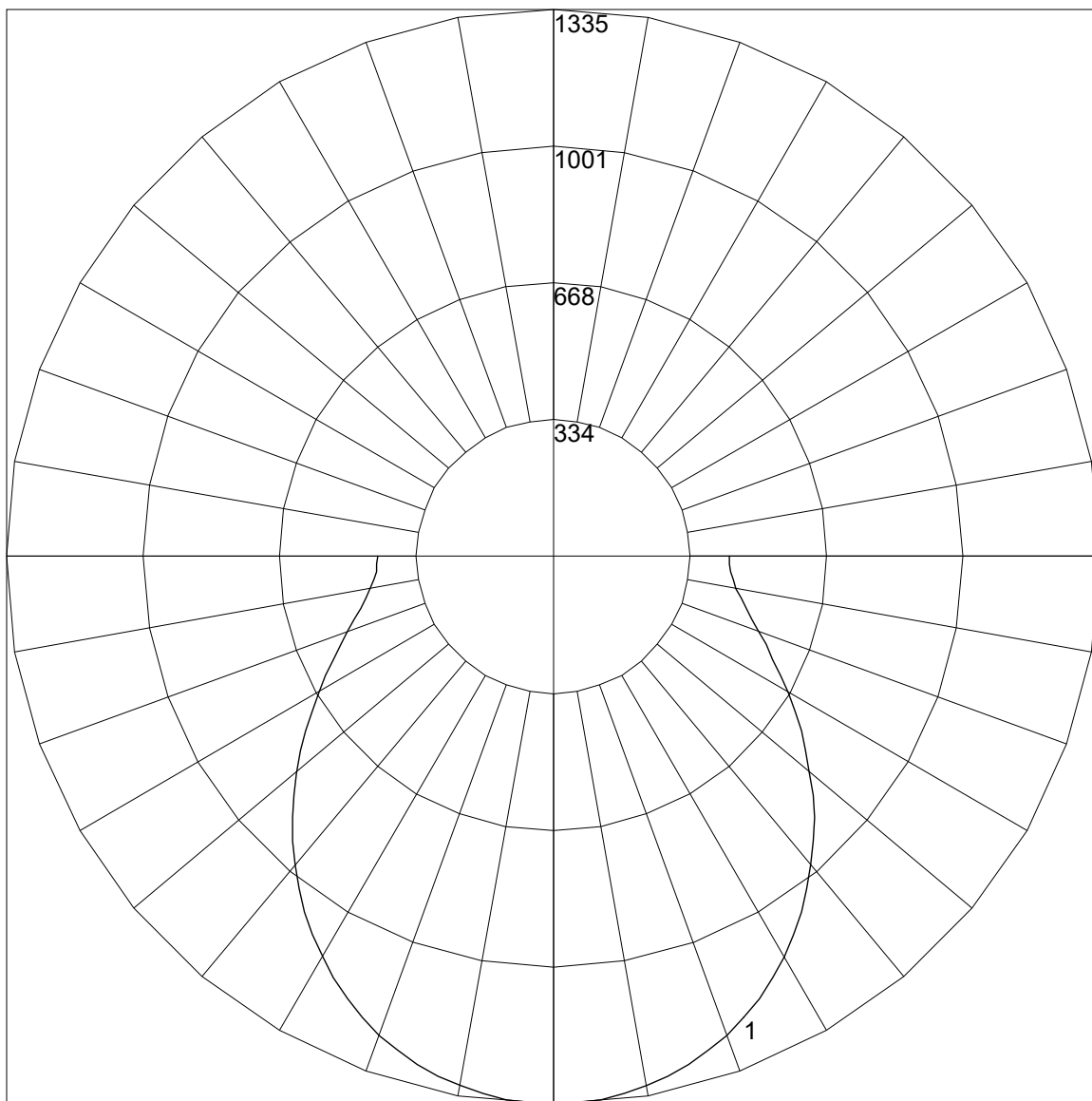
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	106	100	95	90	103	98	93	89	94	90	86	90	86	83	86	83	81	79
2	96	87	79	72	93	85	77	71	81	75	70	78	72	68	74	70	66	64
3	87	76	67	59	85	74	66	59	71	64	58	68	62	57	65	60	56	53
4	80	67	57	50	77	65	57	50	63	55	49	60	54	48	58	52	48	45
5	73	60	50	43	71	58	49	43	56	48	42	54	47	42	52	46	41	39
6	68	54	44	37	66	53	44	37	51	43	37	49	42	37	47	41	36	34
7	63	49	39	33	61	48	39	33	46	38	33	45	38	32	43	37	32	30
8	58	44	36	29	57	44	35	29	42	35	29	41	34	29	40	33	29	27
9	55	41	32	27	53	40	32	26	39	31	26	38	31	26	37	31	26	24
10	51	38	29	24	50	37	29	24	36	29	24	35	28	24	34	28	24	22

POLAR GRAPH



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