

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 : 2D90 - HP-2-C-D-P-18IN-7-8IN-V-8TW-ITL94330.908.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.908 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]12/28/20

[ISSUEDATE]02/18/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]2D90 HP-2-P-D-18IN-7-8IN-V-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 15.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 15.6 WATTS

[_ABSOLUTE]LUMENS]1215

[OTHER]see www.finelite.com for source file ITL94330. 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	1215
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	15.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.12
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.71 ft
Luminous Width (90-270)	1.36 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4154	4302	4515
55	3747	3909	4151
65	3345	3496	3743
75	2821	2977	3179
85	2127	2194	2327

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	70.749	70.749	70.749	70.749	70.749	70.749	70.749	70.749	70.749
2.5	70.454	70.527	70.675	70.601	70.675	70.675	70.675	70.675	70.601
5.0	70.012	70.012	70.233	70.160	70.233	70.307	70.307	70.307	70.307
7.5	69.203	69.276	69.424	69.497	69.644	69.718	69.718	69.718	69.718
10.0	68.098	68.246	68.466	68.614	68.834	68.908	68.834	68.908	68.761
12.5	66.847	66.921	67.288	67.509	67.804	68.024	67.951	67.878	67.730
15.0	65.080	65.448	65.742	66.111	66.552	66.626	66.552	66.405	66.258
17.5	63.386	63.755	64.049	64.491	65.301	65.080	64.932	64.712	64.638
20.0	61.399	61.840	62.356	62.798	63.460	63.460	63.240	62.871	62.650
22.5	59.484	59.705	60.368	60.884	61.694	61.620	61.252	60.810	60.589
25.0	57.202	57.571	58.159	58.822	59.705	59.632	59.264	58.528	58.380
27.5	54.920	55.215	55.951	56.834	57.571	57.423	57.055	56.319	56.172
30.0	52.491	52.859	53.669	54.626	55.289	55.215	54.552	53.963	53.595
32.5	50.061	50.356	51.240	52.197	53.006	53.006	52.270	51.534	51.166
35.0	47.559	47.926	48.810	49.767	50.650	50.503	49.841	48.884	48.736
37.5	45.055	45.423	46.307	47.411	48.221	48.000	47.411	46.380	45.939
40.0	42.552	42.847	43.803	44.908	45.644	45.571	44.687	43.877	43.436
42.5	40.049	40.270	41.301	42.405	43.141	43.067	42.184	41.301	40.859
45.0	37.325	37.767	38.650	39.828	40.565	40.344	39.607	38.503	38.135
47.5	34.896	35.117	36.074	37.252	37.914	37.767	37.031	36.000	35.558
50.0	32.245	32.614	33.644	34.748	35.411	35.264	34.380	33.423	33.055
52.5	29.890	30.184	31.141	32.098	32.834	32.540	31.804	30.920	30.552
55.0	27.313	27.755	28.491	29.669	30.258	30.111	29.301	28.344	28.049
57.5	25.030	25.251	26.061	27.166	27.755	27.460	26.724	25.840	25.472
60.0	22.528	22.822	23.558	24.589	25.030	24.957	24.294	23.484	23.117
62.5	20.319	20.540	21.202	22.012	22.528	22.454	21.791	21.128	20.761
65.0	17.963	18.184	18.773	19.583	20.098	19.951	19.362	18.626	18.479
67.5	15.754	15.902	16.491	17.227	17.522	17.522	17.006	16.344	16.123
70.0	13.546	13.693	14.135	14.798	15.092	15.092	14.724	14.208	13.914
72.5	11.485	11.559	12.000	12.442	12.736	12.736	12.442	12.000	11.853
75.0	9.276	9.497	9.791	10.233	10.454	10.528	10.307	9.865	9.791
77.5	7.362	7.509	7.803	8.172	8.319	8.319	8.172	7.877	7.730
80.0	5.595	5.595	5.742	6.111	6.184	6.257	6.184	5.963	5.890
82.5	3.901	3.901	3.975	4.196	4.270	4.344	4.344	4.270	4.196
85.0	2.356	2.356	2.429	2.503	2.576	2.650	2.650	2.650	2.650
87.5	0.957	0.957	1.031	0.957	1.031	1.178	1.178	1.178	1.178
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 2D90 - HP-2-C-D-P-18IN-7-8IN-V-8TW-ITL94330.908.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	178.82	N.A.	14.70
0-30	369.93	N.A.	30.40
0-40	588.14	N.A.	48.40
0-60	985.10	N.A.	81.10
0-80	1194.45	N.A.	98.30
0-90	1215.17	N.A.	100.00
10-90	1168.1	N.A.	96.10
20-40	409.32	N.A.	33.70
20-50	623.06	N.A.	51.30
40-70	530.95	N.A.	43.70
60-80	209.35	N.A.	17.20
70-80	75.35	N.A.	6.20
80-90	20.72	N.A.	1.70
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	1215.17	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.07
10-20	131.75
20-30	191.11
30-40	218.21
40-50	213.74
50-60	183.22
60-70	133.99
70-80	75.35
80-90	20.72
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

IES INDOOR REPORT

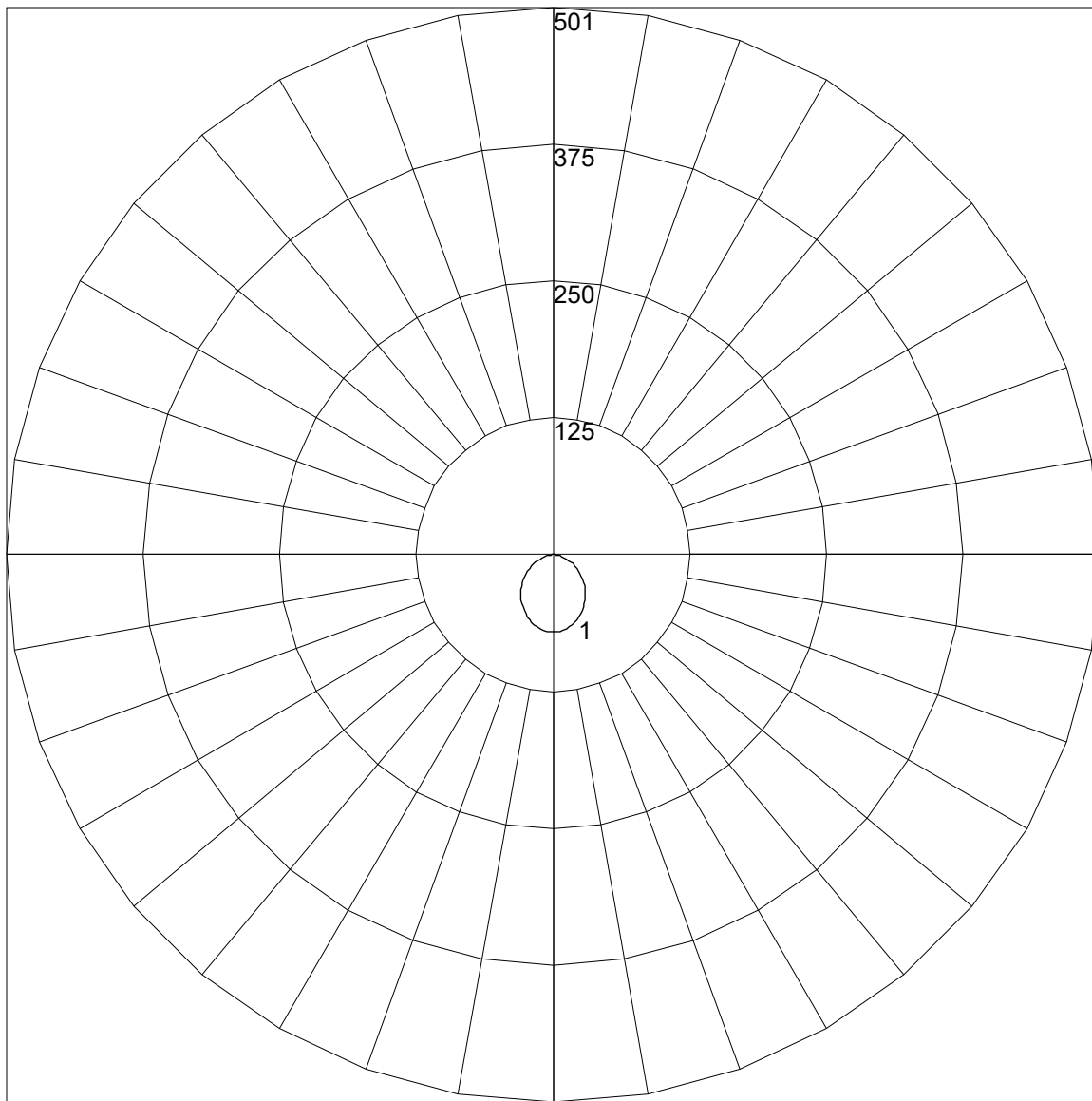
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	50	43	69	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 500.578 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)