

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-H-835-ITL94330.009.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.009 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-H-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 10.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 11.0 WATTS

[_ABSOLUTE]LUMENS]945

[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	945
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	87
Total Luminaire Watts	10.9
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	3231	3345	3511
55	2914	3040	3229
65	2601	2719	2911
75	2194	2315	2472
85	1654	1706	1809

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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	389.305	389.305	389.305	389.305	389.305	389.305	389.305	389.305	389.305
2.5	387.685	388.090	388.900	388.495	388.900	388.900	388.900	388.900	388.495
5.0	385.254	385.254	386.469	386.064	386.469	386.874	386.874	386.874	386.874
7.5	380.798	381.203	382.013	382.418	383.228	383.633	383.633	383.633	383.633
10.0	374.721	375.531	376.747	377.557	378.772	379.177	378.772	379.177	378.367
12.5	367.834	368.240	370.265	371.480	373.101	374.316	373.911	373.506	372.696
15.0	358.112	360.137	361.758	363.783	366.214	366.619	366.214	365.404	364.594
17.5	348.795	350.820	352.440	354.871	359.327	358.112	357.302	356.086	355.681
20.0	337.857	340.287	343.123	345.554	349.200	349.200	347.984	345.959	344.744
22.5	327.324	328.539	332.185	335.021	339.477	339.072	337.047	334.616	333.401
25.0	314.766	316.791	320.032	323.678	328.539	328.134	326.109	322.058	321.247
27.5	302.208	303.828	307.879	312.740	316.791	315.981	313.956	309.905	309.094
30.0	288.839	290.865	295.321	300.587	304.233	303.828	300.182	296.941	294.916
32.5	275.471	277.091	281.952	287.219	291.675	291.675	287.624	283.573	281.547
35.0	261.697	263.723	268.584	273.850	278.712	277.901	274.255	268.989	268.179
37.5	247.924	249.949	254.810	260.887	265.343	264.128	260.887	255.216	252.785
40.0	234.150	235.771	241.037	247.113	251.164	250.759	245.898	241.442	239.011
42.5	220.377	221.592	227.263	233.340	237.391	236.986	232.125	227.263	224.833
45.0	205.388	207.818	212.680	219.161	223.212	221.997	217.946	211.869	209.844
47.5	192.019	193.235	198.501	204.983	208.629	207.818	203.767	198.096	195.665
50.0	177.436	179.461	185.133	191.209	194.855	194.045	189.184	183.917	181.892
52.5	164.472	166.093	171.359	176.625	180.676	179.056	175.005	170.144	168.118
55.0	150.294	152.724	156.775	163.257	166.498	165.688	161.231	155.965	154.345
57.5	137.735	138.951	143.407	149.483	152.724	151.104	147.053	142.192	140.166
60.0	123.962	125.582	129.633	135.305	137.735	137.330	133.684	129.228	127.203
62.5	111.809	113.024	116.670	121.126	123.962	123.557	119.911	116.265	114.239
65.0	98.845	100.061	103.302	107.758	110.593	109.783	106.542	102.491	101.681
67.5	86.692	87.502	90.743	94.794	96.415	96.415	93.579	89.933	88.718
70.0	74.539	75.349	77.780	81.426	83.046	83.046	81.021	78.185	76.565
72.5	63.196	63.601	66.032	68.463	70.083	70.083	68.463	66.032	65.222
75.0	51.043	52.258	53.879	56.309	57.525	57.930	56.715	54.284	53.879
77.5	40.510	41.321	42.941	44.967	45.777	45.777	44.967	43.346	42.536
80.0	30.788	30.788	31.598	33.624	34.029	34.434	34.029	32.813	32.408
82.5	21.471	21.471	21.876	23.091	23.496	23.901	23.901	23.496	23.091
85.0	12.963	12.963	13.368	13.774	14.179	14.584	14.584	14.584	14.584
87.5	5.266	5.266	5.671	5.266	5.671	6.482	6.482	6.482	6.482
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-H-835-ITL94330.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	139.07	N.A.	14.70
0-30	287.70	N.A.	30.40
0-40	457.40	N.A.	48.40
0-60	766.12	N.A.	81.10
0-80	928.94	N.A.	98.30
0-90	945.05	N.A.	100.00
10-90	908.44	N.A.	96.10
20-40	318.33	N.A.	33.70
20-50	484.56	N.A.	51.30
40-70	412.93	N.A.	43.70
60-80	162.81	N.A.	17.20
70-80	58.60	N.A.	6.20
80-90	16.12	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	945.05	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	36.61
10-20	102.46
20-30	148.63
30-40	169.71
40-50	166.23
50-60	142.49
60-70	104.21
70-80	58.60
80-90	16.12
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

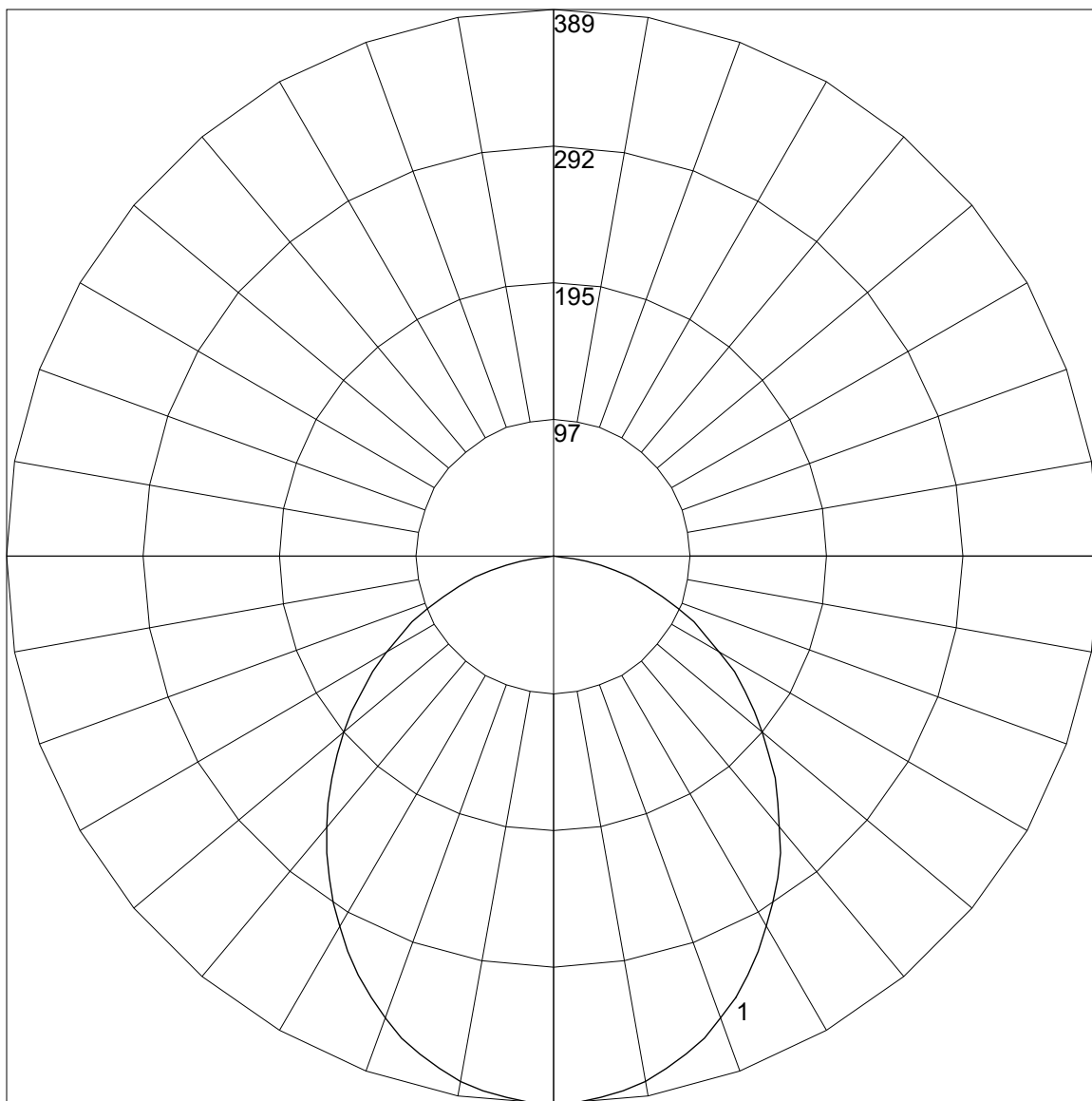
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	98	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	66	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 = 389.305 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)