

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-S-835-ITL94330.011.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.011 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-S-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 5.6 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 6.0 WATTS

[_ABSOLUTE]LUMENS]497

[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	497
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	89
Total Luminaire Watts	5.6
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	1700	1760	1848
55	1534	1600	1699
65	1369	1431	1532
75	1154	1218	1301
85	871	898	952

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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	204.870	204.870	204.870	204.870	204.870	204.870	204.870	204.870	204.870
2.5	204.017	204.230	204.657	204.443	204.657	204.657	204.657	204.657	204.443
5.0	202.738	202.738	203.378	203.164	203.378	203.591	203.591	203.591	203.591
7.5	200.393	200.606	201.033	201.246	201.672	201.885	201.885	201.885	201.885
10.0	197.195	197.622	198.261	198.687	199.327	199.540	199.327	199.540	199.114
12.5	193.571	193.784	194.850	195.490	196.342	196.982	196.769	196.556	196.129
15.0	188.455	189.521	190.373	191.439	192.718	192.932	192.718	192.292	191.866
17.5	183.551	184.617	185.470	186.749	189.094	188.455	188.028	187.389	187.176
20.0	177.795	179.075	180.567	181.846	183.765	183.765	183.125	182.059	181.420
22.5	172.253	172.892	174.811	176.303	178.648	178.435	177.369	176.090	175.450
25.0	165.644	166.710	168.415	170.334	172.892	172.679	171.613	169.481	169.055
27.5	159.035	159.888	162.020	164.578	166.710	166.284	165.218	163.086	162.659
30.0	152.000	153.066	155.411	158.183	160.101	159.888	157.969	156.264	155.198
32.5	144.965	145.818	148.376	151.147	153.492	153.492	151.361	149.229	148.163
35.0	137.717	138.783	141.341	144.112	146.671	146.244	144.326	141.554	141.128
37.5	130.469	131.535	134.093	137.290	139.636	138.996	137.290	134.306	133.027
40.0	123.220	124.073	126.844	130.042	132.174	131.961	129.403	127.058	125.779
42.5	115.972	116.612	119.596	122.794	124.926	124.713	122.154	119.596	118.317
45.0	108.084	109.363	111.922	115.333	117.464	116.825	114.693	111.495	110.429
47.5	101.049	101.689	104.460	107.871	109.790	109.363	107.232	104.247	102.968
50.0	93.375	94.441	97.425	100.623	102.542	102.115	99.557	96.786	95.720
52.5	86.553	87.405	90.177	92.948	95.080	94.227	92.095	89.537	88.471
55.0	79.091	80.370	82.502	85.913	87.619	87.192	84.847	82.076	81.223
57.5	72.483	73.122	75.467	78.665	80.370	79.518	77.386	74.828	73.762
60.0	65.234	66.087	68.219	71.203	72.483	72.269	70.351	68.006	66.940
62.5	58.839	59.478	61.397	63.742	65.234	65.021	63.102	61.184	60.118
65.0	52.017	52.656	54.362	56.707	58.199	57.773	56.067	53.936	53.509
67.5	45.621	46.048	47.753	49.885	50.738	50.738	49.246	47.327	46.687
70.0	39.226	39.652	40.931	42.850	43.703	43.703	42.637	41.145	40.292
72.5	33.257	33.470	34.749	36.028	36.881	36.881	36.028	34.749	34.323
75.0	26.861	27.501	28.353	29.633	30.272	30.485	29.846	28.567	28.353
77.5	21.318	21.745	22.598	23.663	24.090	24.090	23.663	22.811	22.384
80.0	16.202	16.202	16.628	17.694	17.907	18.121	17.907	17.268	17.055
82.5	11.299	11.299	11.512	12.151	12.365	12.578	12.578	12.365	12.151
85.0	6.822	6.822	7.035	7.248	7.461	7.675	7.675	7.675	7.675
87.5	2.771	2.771	2.985	2.771	2.985	3.411	3.411	3.411	3.411
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-S-835-ITL94330.011.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	73.18	N.A.	14.70
0-30	151.40	N.A.	30.40
0-40	240.71	N.A.	48.40
0-60	403.17	N.A.	81.10
0-80	488.85	N.A.	98.30
0-90	497.33	N.A.	100.00
10-90	478.06	N.A.	96.10
20-40	167.52	N.A.	33.70
20-50	255.00	N.A.	51.30
40-70	217.30	N.A.	43.70
60-80	85.68	N.A.	17.20
70-80	30.84	N.A.	6.20
80-90	8.48	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	497.33	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	19.27
10-20	53.92
20-30	78.21
30-40	89.31
40-50	87.48
50-60	74.99
60-70	54.84
70-80	30.84
80-90	8.48
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

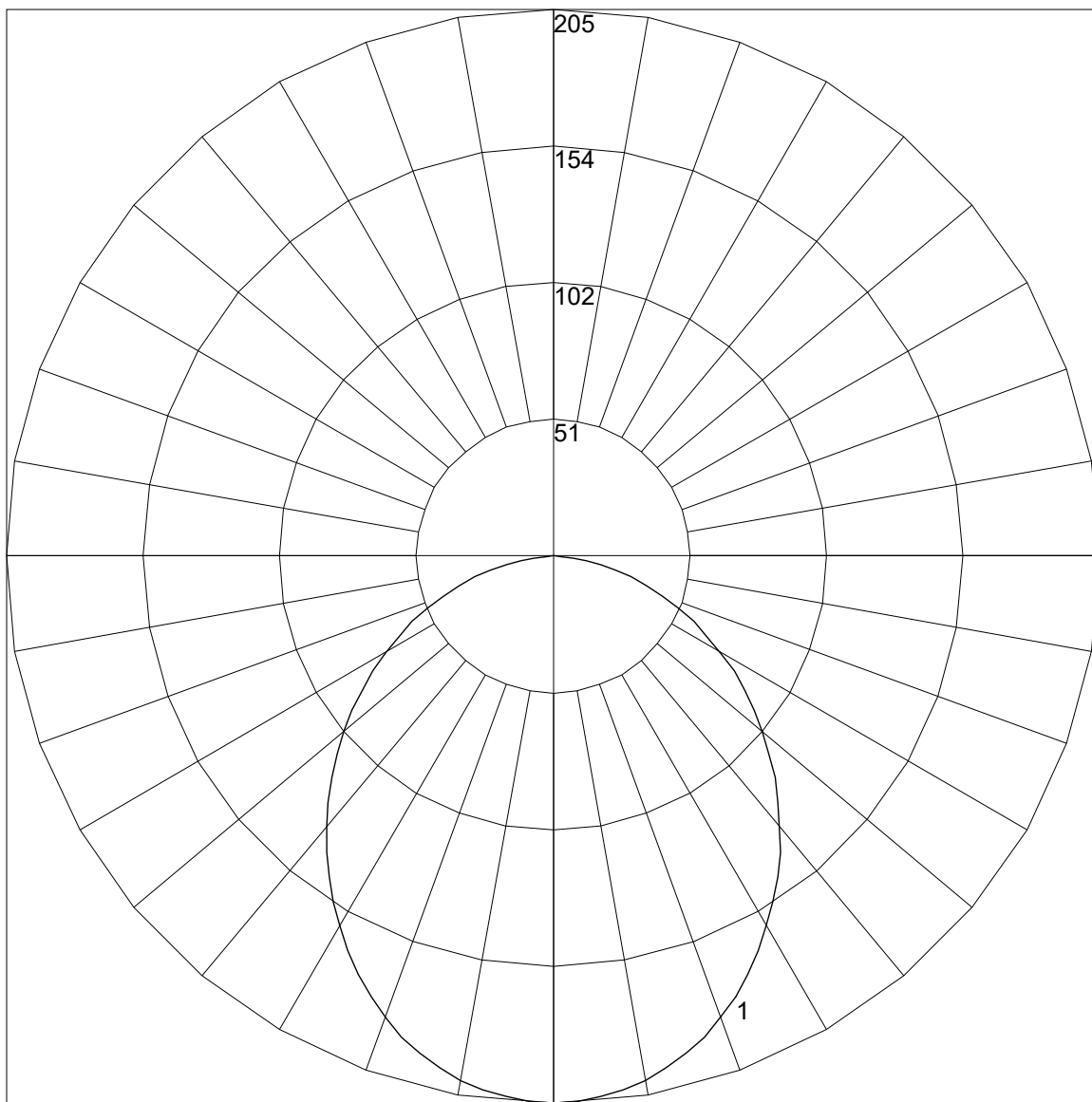
Effective Floor Cavity Reflectance 0.20

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	109	105	100	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	79	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	59	54	52
5	77	65	56	49	75	63	55	49	61	54	49	59	53	48	58	52	47	45
6	71	58	50	43	70	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

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POLAR GRAPH



Maximum Candela = 204.87 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)