

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 : 3D90 - HP-2-C-D-P-28IN-9-16IN-B-835-ITL94330.006.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.006 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]12/28/20

[ISSUEDATE]02/18/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]3D90 HP-2-P-D-28IN-9-16IN-B-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 9.1 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 9.5 WATTS

[_ABSOLUTE]LUMENS]799

[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	800
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	9.1
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)	2.02 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1832	1897	1991
55	1653	1724	1831
65	1475	1542	1650
75	1244	1313	1402
85	938	967	1026

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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	329.530	329.530	329.530	329.530	329.530	329.530	329.530	329.530	329.530
2.5	328.158	328.501	329.187	328.844	329.187	329.187	329.187	329.187	328.844
5.0	326.101	326.101	327.129	326.787	327.129	327.472	327.472	327.472	327.472
7.5	322.329	322.672	323.358	323.700	324.386	324.729	324.729	324.729	324.729
10.0	317.185	317.871	318.900	319.586	320.614	320.957	320.614	320.957	320.271
12.5	311.356	311.699	313.413	314.442	315.814	316.842	316.499	316.157	315.471
15.0	303.126	304.841	306.212	307.927	309.984	310.327	309.984	309.298	308.613
17.5	295.239	296.954	298.326	300.383	304.155	303.126	302.440	301.412	301.069
20.0	285.981	288.039	290.439	292.496	295.582	295.582	294.554	292.839	291.810
22.5	277.066	278.094	281.180	283.581	287.353	287.010	285.295	283.238	282.209
25.0	266.436	268.150	270.893	273.979	278.094	277.751	276.037	272.608	271.922
27.5	255.806	257.177	260.606	264.721	268.150	267.464	265.750	262.321	261.635
30.0	244.490	246.204	249.976	254.434	257.520	257.177	254.091	251.348	249.633
32.5	233.174	234.546	238.660	243.118	246.890	246.890	243.461	240.032	238.318
35.0	221.515	223.230	227.345	231.802	235.917	235.231	232.145	227.688	227.002
37.5	209.857	211.571	215.686	220.830	224.601	223.573	220.830	216.029	213.971
40.0	198.198	199.570	204.027	209.171	212.600	212.257	208.142	204.370	202.313
42.5	186.539	187.568	192.369	197.512	200.941	200.598	196.483	192.369	190.311
45.0	173.852	175.909	180.024	185.511	188.940	187.911	184.482	179.338	177.624
47.5	162.536	163.565	168.022	173.509	176.595	175.909	172.480	167.680	165.622
50.0	150.192	151.906	156.707	161.850	164.936	164.251	160.136	155.678	153.963
52.5	139.219	140.590	145.048	149.506	152.935	151.563	148.134	144.019	142.305
55.0	127.217	129.274	132.703	138.190	140.933	140.247	136.475	132.018	130.646
57.5	116.587	117.616	121.388	126.531	129.274	127.903	124.474	120.359	118.644
60.0	104.928	106.300	109.729	114.530	116.587	116.244	113.158	109.386	107.672
62.5	94.641	95.670	98.756	102.528	104.928	104.585	101.499	98.413	96.699
65.0	83.668	84.697	87.440	91.212	93.613	92.927	90.183	86.754	86.069
67.5	73.381	74.067	76.810	80.239	81.611	81.611	79.211	76.124	75.096
70.0	63.094	63.780	65.837	68.924	70.295	70.295	68.581	66.180	64.809
72.5	53.493	53.836	55.893	57.951	59.322	59.322	57.951	55.893	55.207
75.0	43.206	44.234	45.606	47.664	48.692	49.035	48.006	45.949	45.606
77.5	34.290	34.976	36.348	38.062	38.748	38.748	38.062	36.691	36.005
80.0	26.061	26.061	26.746	28.461	28.804	29.147	28.804	27.775	27.432
82.5	18.174	18.174	18.517	19.545	19.888	20.231	20.231	19.888	19.545
85.0	10.973	10.973	11.316	11.659	12.002	12.345	12.345	12.345	12.345
87.5	4.458	4.458	4.801	4.458	4.801	5.486	5.486	5.486	5.486
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 : 3D90 - HP-2-C-D-P-28IN-9-16IN-B-835-ITL94330.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	117.72	N.A.	14.70
0-30	243.52	N.A.	30.40
0-40	387.17	N.A.	48.40
0-60	648.49	N.A.	81.10
0-80	786.30	N.A.	98.30
0-90	799.95	N.A.	100.00
10-90	768.96	N.A.	96.10
20-40	269.46	N.A.	33.70
20-50	410.16	N.A.	51.30
40-70	349.53	N.A.	43.70
60-80	137.81	N.A.	17.20
70-80	49.61	N.A.	6.20
80-90	13.64	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	799.95	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	30.99
10-20	86.73
20-30	125.81
30-40	143.65
40-50	140.70
50-60	120.61
60-70	88.21
70-80	49.61
80-90	13.64
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

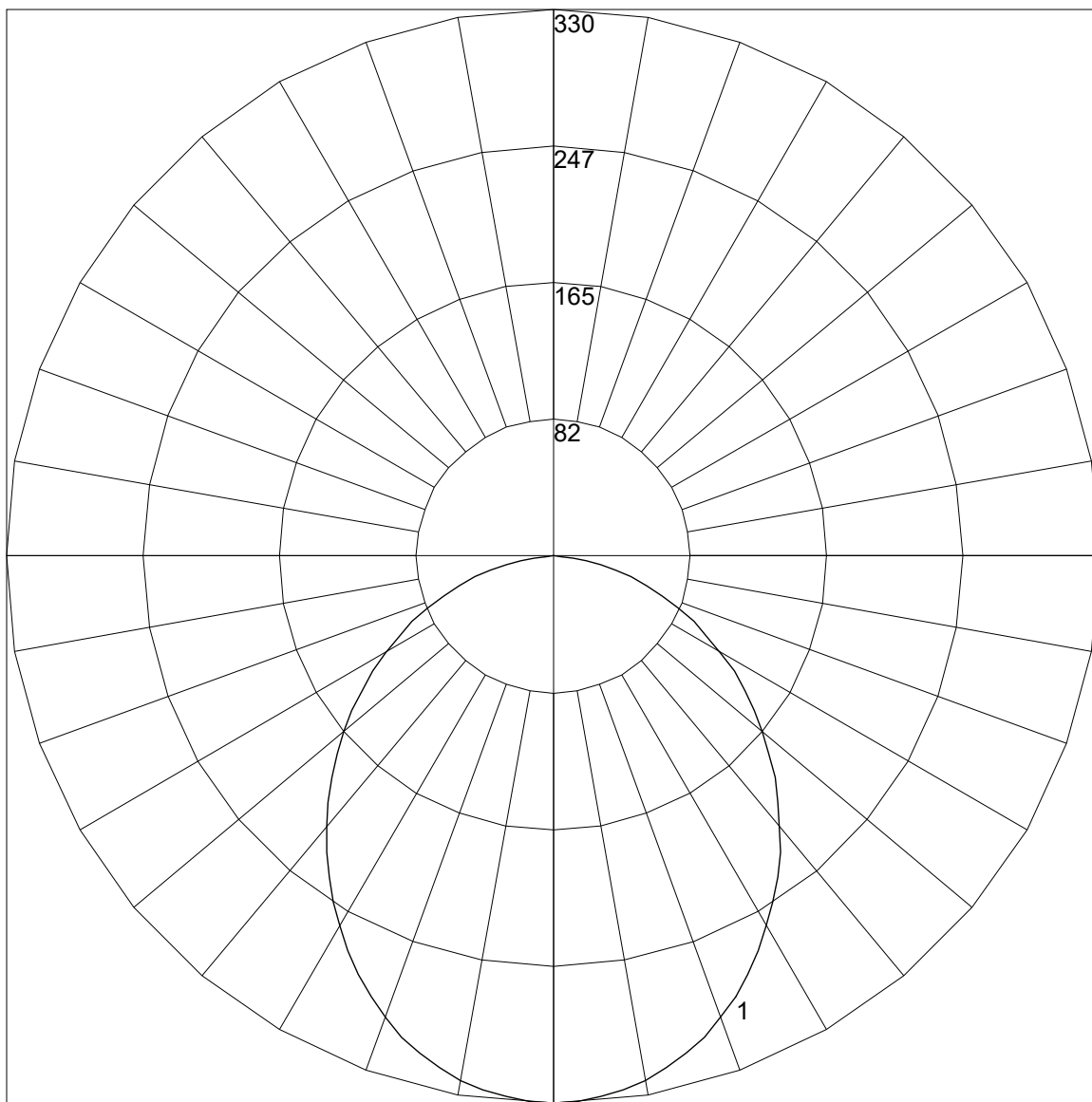
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	88	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 = 329.53 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)