

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-H-835-ITL94330.005.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.005 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-H-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 14.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 14.0 WATTS

[_ABSOLUTE]LUMENS]1209

[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	1209
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	86
Total Luminaire Watts	14
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	2769	2867	3009
55	2498	2605	2767
65	2229	2330	2494
75	1880	1984	2118
85	1418	1462	1551

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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	498.024	498.024	498.024	498.024	498.024	498.024	498.024	498.024	498.024
2.5	495.951	496.469	497.506	496.987	497.506	497.506	497.506	497.506	496.987
5.0	492.842	492.842	494.396	493.878	494.396	494.914	494.914	494.914	494.914
7.5	487.141	487.659	488.696	489.214	490.250	490.769	490.769	490.769	490.769
10.0	479.367	480.404	481.959	482.995	484.550	485.068	484.550	485.068	484.032
12.5	470.557	471.076	473.667	475.222	477.294	478.849	478.331	477.813	476.776
15.0	458.120	460.711	462.784	465.375	468.484	469.003	468.484	467.448	466.412
17.5	446.200	448.792	450.864	453.974	459.674	458.120	457.083	455.529	455.010
20.0	432.208	435.317	438.945	442.054	446.719	446.719	445.164	442.573	441.018
22.5	418.734	420.289	424.953	428.580	434.281	433.763	431.172	428.062	426.507
25.0	402.669	405.260	409.406	414.070	420.289	419.770	417.179	411.997	410.960
27.5	386.603	388.676	393.859	400.077	405.260	404.223	401.632	396.450	395.413
30.0	369.502	372.093	377.793	384.530	389.195	388.676	384.012	379.866	377.275
32.5	352.400	354.473	360.692	367.429	373.129	373.129	367.947	362.765	360.173
35.0	334.780	337.371	343.590	350.327	356.546	355.509	350.845	344.108	343.072
37.5	317.160	319.751	325.970	333.743	339.444	337.889	333.743	326.488	323.379
40.0	299.540	301.613	308.350	316.123	321.306	320.787	314.569	308.868	305.759
42.5	281.920	283.475	290.730	298.503	303.686	303.167	296.949	290.730	287.620
45.0	262.745	265.855	272.073	280.365	285.548	283.993	278.810	271.037	268.446
47.5	245.643	247.198	253.935	262.227	266.891	265.855	260.672	253.417	250.308
50.0	226.987	229.578	236.833	244.607	249.271	248.235	242.016	235.279	232.688
52.5	210.403	212.476	219.213	225.950	231.133	229.060	223.878	217.659	215.068
55.0	192.265	195.375	200.557	208.849	212.995	211.958	206.258	199.520	197.448
57.5	176.200	177.755	183.455	191.229	195.375	193.302	188.119	181.900	179.309
60.0	158.580	160.653	165.835	173.090	176.200	175.682	171.018	165.317	162.726
62.5	143.033	144.588	149.252	154.952	158.580	158.062	153.398	148.733	146.142
65.0	126.449	128.004	132.150	137.851	141.478	140.442	136.296	131.113	130.077
67.5	110.902	111.939	116.085	121.267	123.340	123.340	119.712	115.048	113.493
70.0	95.355	96.392	99.501	104.165	106.238	106.238	103.647	100.019	97.946
72.5	80.845	81.363	84.472	87.582	89.655	89.655	87.582	84.472	83.436
75.0	65.298	66.852	68.925	72.035	73.589	74.108	72.553	69.443	68.925
77.5	51.824	52.860	54.933	57.524	58.561	58.561	57.524	55.451	54.415
80.0	39.386	39.386	40.422	43.014	43.532	44.050	43.532	41.977	41.459
82.5	27.466	27.466	27.985	29.539	30.058	30.576	30.576	30.058	29.539
85.0	16.584	16.584	17.102	17.620	18.138	18.656	18.656	18.656	18.656
87.5	6.737	6.737	7.255	6.737	7.255	8.292	8.292	8.292	8.292
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-H-835-ITL94330.005.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	177.91	N.A.	14.70
0-30	368.04	N.A.	30.40
0-40	585.14	N.A.	48.40
0-60	980.08	N.A.	81.10
0-80	1188.36	N.A.	98.30
0-90	1208.97	N.A.	100.00
10-90	1162.14	N.A.	96.10
20-40	407.23	N.A.	33.70
20-50	619.88	N.A.	51.30
40-70	528.24	N.A.	43.70
60-80	208.28	N.A.	17.20
70-80	74.97	N.A.	6.20
80-90	20.62	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	1208.97	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.83
10-20	131.08
20-30	190.13
30-40	217.10
40-50	212.65
50-60	182.28
60-70	133.31
70-80	74.97
80-90	20.62
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

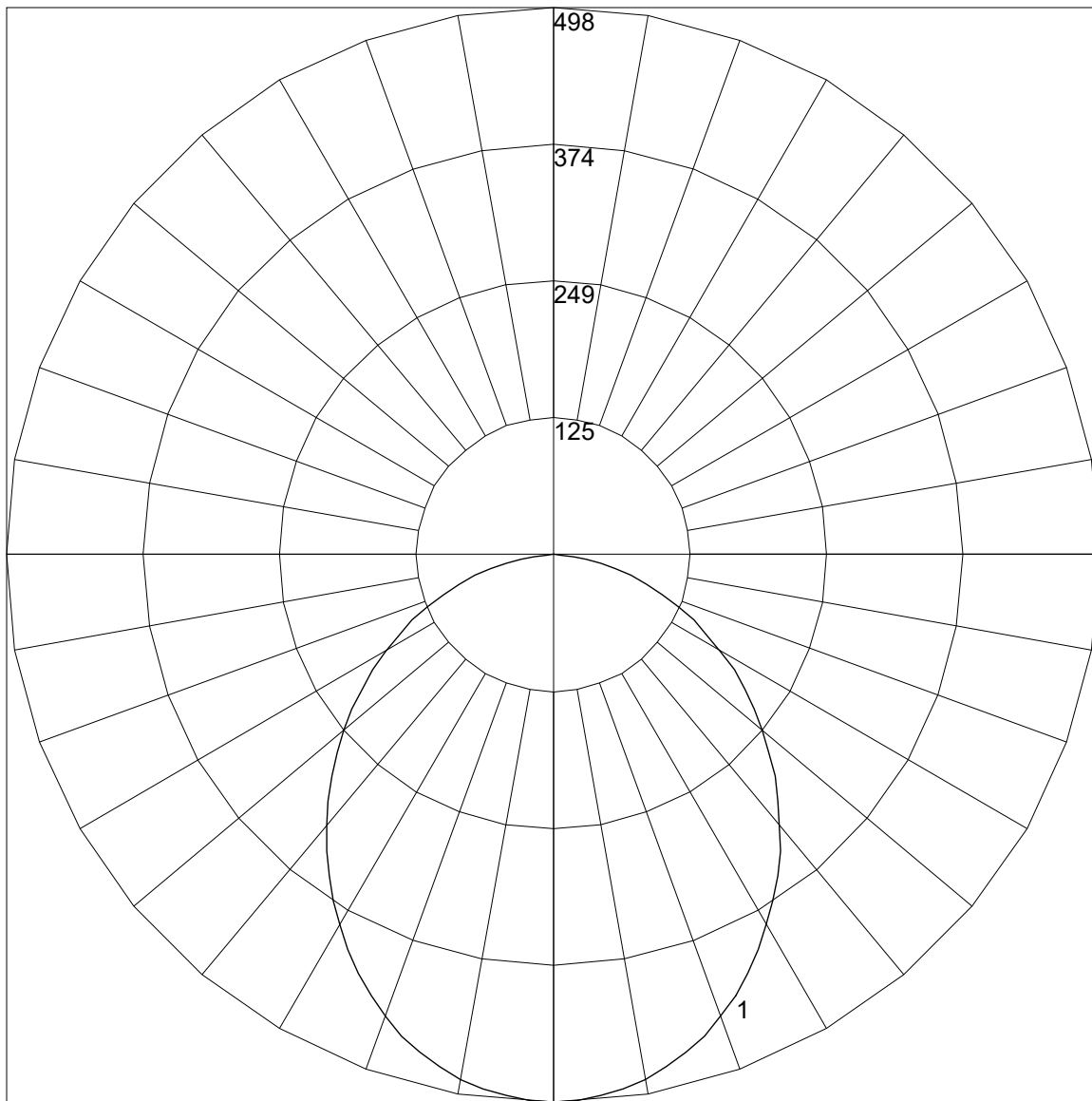
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 498.024 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)