

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-835-ITL94330.008.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.008 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, 14.2 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 14.2 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)	86
Total Luminaire Watts	14.2
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

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	500.578	500.578	500.578	500.578	500.578	500.578	500.578	500.578	500.578
2.5	498.495	499.015	500.057	499.536	500.057	500.057	500.057	500.057	499.536
5.0	495.369	495.369	496.932	496.411	496.932	497.453	497.453	497.453	497.453
7.5	489.639	490.160	491.202	491.723	492.765	493.286	493.286	493.286	493.286
10.0	481.826	482.868	484.430	485.472	487.035	487.556	487.035	487.556	486.514
12.5	472.971	473.492	476.096	477.659	479.742	481.305	480.784	480.263	479.222
15.0	460.469	463.074	465.157	467.762	470.887	471.408	470.887	469.845	468.804
17.5	448.489	451.093	453.177	456.302	462.032	460.469	459.428	457.865	457.344
20.0	434.425	437.550	441.196	444.322	449.010	449.010	447.447	444.843	443.280
22.5	420.882	422.444	427.132	430.778	436.508	435.987	433.383	430.258	428.695
25.0	404.734	407.338	411.505	416.193	422.444	421.923	419.319	414.110	413.068
27.5	388.586	390.670	395.879	402.129	407.338	406.297	403.692	398.483	397.441
30.0	371.397	374.001	379.731	386.503	391.191	390.670	385.982	381.815	379.210
32.5	354.207	356.291	362.542	369.313	375.043	375.043	369.834	364.625	362.021
35.0	336.497	339.101	345.352	352.124	358.374	357.333	352.645	345.873	344.831
37.5	318.787	321.391	327.642	335.455	341.185	339.622	335.455	328.163	325.037
40.0	301.076	303.160	309.931	317.745	322.954	322.433	316.182	310.452	307.327
42.5	283.366	284.928	292.221	300.034	305.243	304.722	298.472	292.221	289.096
45.0	264.093	267.218	273.469	281.803	287.012	285.449	280.240	272.427	269.823
47.5	246.903	248.466	255.238	263.572	268.260	267.218	262.009	254.717	251.591
50.0	228.151	230.756	238.048	245.861	250.550	249.508	243.257	236.485	233.881
52.5	211.483	213.566	220.338	227.109	232.318	230.235	225.026	218.775	216.171
55.0	193.251	196.377	201.586	209.920	214.087	213.045	207.315	200.544	198.460
57.5	177.104	178.666	184.396	192.210	196.377	194.293	189.084	182.833	180.229
60.0	159.393	161.477	166.686	173.978	177.104	176.583	171.895	166.165	163.560
62.5	143.766	145.329	150.017	155.747	159.393	158.872	154.184	149.496	146.892
65.0	127.098	128.661	132.828	138.558	142.204	141.162	136.995	131.786	130.744
67.5	111.471	112.513	116.680	121.889	123.973	123.973	120.326	115.638	114.076
70.0	95.844	96.886	100.011	104.699	106.783	106.783	104.179	100.532	98.449
72.5	81.259	81.780	84.906	88.031	90.114	90.114	88.031	84.906	83.864
75.0	65.633	67.195	69.279	72.404	73.967	74.488	72.925	69.800	69.279
77.5	52.089	53.131	55.215	57.819	58.861	58.861	57.819	55.736	54.694
80.0	39.588	39.588	40.630	43.234	43.755	44.276	43.755	42.192	41.671
82.5	27.607	27.607	28.128	29.691	30.212	30.733	30.733	30.212	29.691
85.0	16.669	16.669	17.189	17.710	18.231	18.752	18.752	18.752	18.752
87.5	6.772	6.772	7.293	6.772	7.293	8.334	8.334	8.334	8.334
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-835-ITL94330.008.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

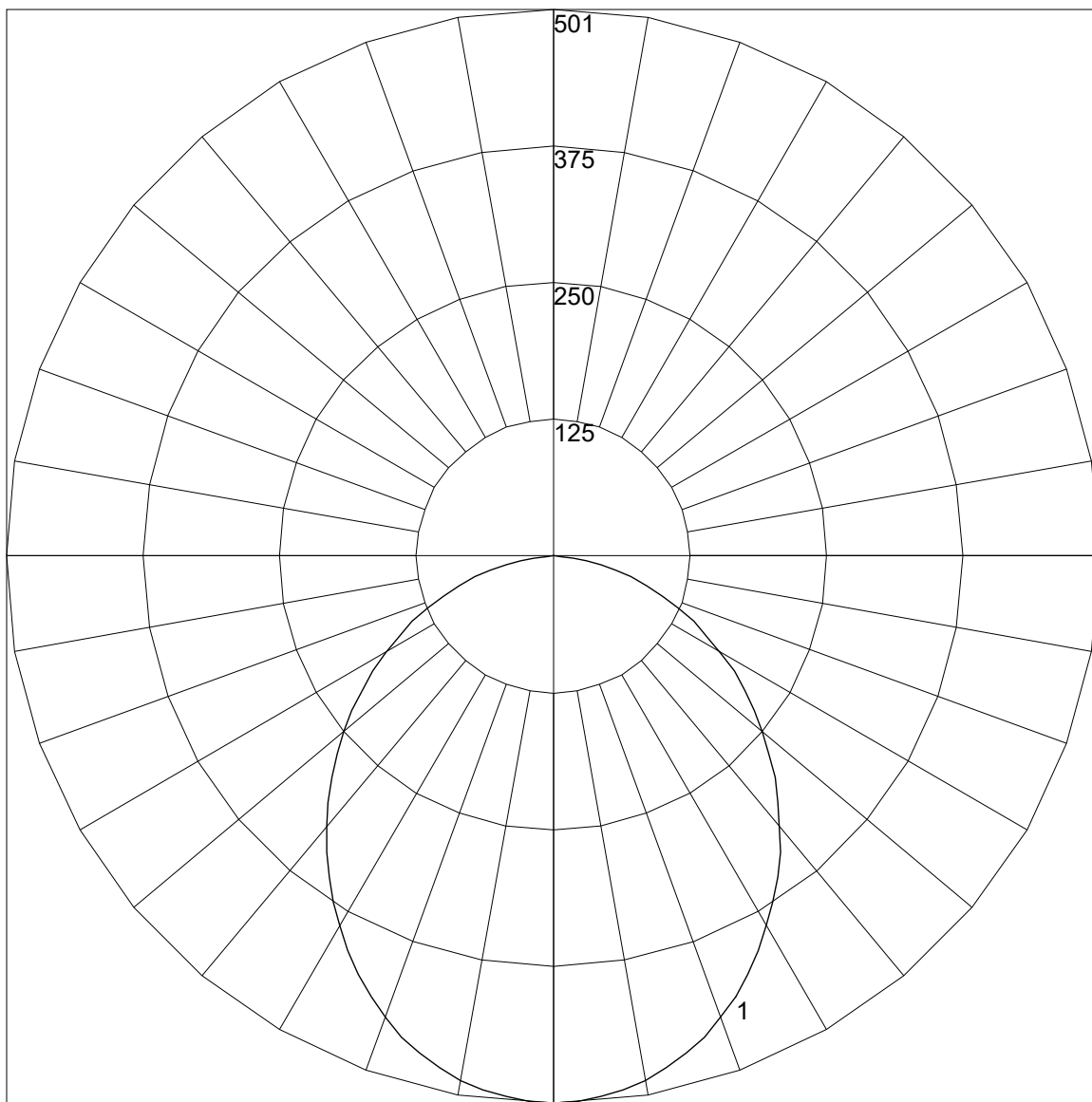
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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)