

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-8TW-ITL94330.906.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.906 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-8TW

[_INPUT_ELECTRICAL]120.0 VOLTS, 10.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 10.4 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)	80
Total Luminaire Watts	10
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 3D90 - HP-2-C-D-P-28IN-9-16IN-B-8TW-ITL94330.906.IES

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	112.997	112.997	112.997	112.997	112.997	112.997	112.997	112.997	112.997
2.5	112.526	112.644	112.879	112.762	112.879	112.879	112.879	112.879	112.762
5.0	111.821	111.821	112.174	112.056	112.174	112.291	112.291	112.291	112.291
7.5	110.528	110.645	110.880	110.998	111.233	111.351	111.351	111.351	111.351
10.0	108.764	108.999	109.352	109.587	109.939	110.057	109.939	110.057	109.822
12.5	106.765	106.883	107.470	107.823	108.294	108.646	108.528	108.411	108.176
15.0	103.943	104.531	105.001	105.589	106.294	106.412	106.294	106.059	105.824
17.5	101.238	101.826	102.297	103.002	104.296	103.943	103.708	103.355	103.237
20.0	98.064	98.769	99.592	100.298	101.356	101.356	101.003	100.415	100.063
22.5	95.007	95.359	96.417	97.241	98.534	98.417	97.829	97.123	96.770
25.0	91.362	91.949	92.890	93.948	95.359	95.242	94.654	93.478	93.243
27.5	87.717	88.187	89.363	90.774	91.949	91.714	91.126	89.951	89.715
30.0	83.836	84.424	85.718	87.246	88.304	88.187	87.129	86.188	85.600
32.5	79.956	80.427	81.837	83.366	84.659	84.659	83.484	82.308	81.720
35.0	75.958	76.546	77.957	79.486	80.897	80.661	79.603	78.075	77.840
37.5	71.961	72.548	73.959	75.723	77.016	76.664	75.723	74.077	73.371
40.0	67.963	68.433	69.961	71.725	72.901	72.784	71.373	70.079	69.374
42.5	63.965	64.318	65.964	67.727	68.903	68.786	67.375	65.964	65.258
45.0	59.614	60.320	61.731	63.612	64.788	64.435	63.259	61.496	60.908
47.5	55.734	56.087	57.615	59.497	60.555	60.320	59.144	57.498	56.792
50.0	51.501	52.089	53.735	55.499	56.557	56.322	54.911	53.382	52.794
52.5	47.739	48.209	49.737	51.266	52.442	51.971	50.796	49.385	48.797
55.0	43.623	44.328	45.504	47.386	48.326	48.091	46.798	45.269	44.799
57.5	39.978	40.331	41.624	43.388	44.328	43.858	42.683	41.271	40.683
60.0	35.980	36.451	37.626	39.273	39.978	39.860	38.802	37.509	36.921
62.5	32.453	32.806	33.864	35.157	35.980	35.863	34.804	33.746	33.158
65.0	28.690	29.043	29.983	31.277	32.100	31.865	30.924	29.748	29.513
67.5	25.163	25.398	26.338	27.514	27.985	27.985	27.162	26.103	25.751
70.0	21.635	21.870	22.576	23.634	24.104	24.104	23.517	22.693	22.223
72.5	18.343	18.461	19.166	19.872	20.342	20.342	19.872	19.166	18.931
75.0	14.815	15.168	15.638	16.344	16.697	16.814	16.461	15.756	15.638
77.5	11.758	11.993	12.464	13.052	13.287	13.287	13.052	12.581	12.346
80.0	8.936	8.936	9.171	9.759	9.877	9.995	9.877	9.524	9.407
82.5	6.232	6.232	6.350	6.702	6.820	6.937	6.937	6.820	6.702
85.0	3.763	3.763	3.880	3.998	4.116	4.233	4.233	4.233	4.233
87.5	1.529	1.529	1.646	1.529	1.646	1.881	1.881	1.881	1.881
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-8TW-ITL94330.906.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

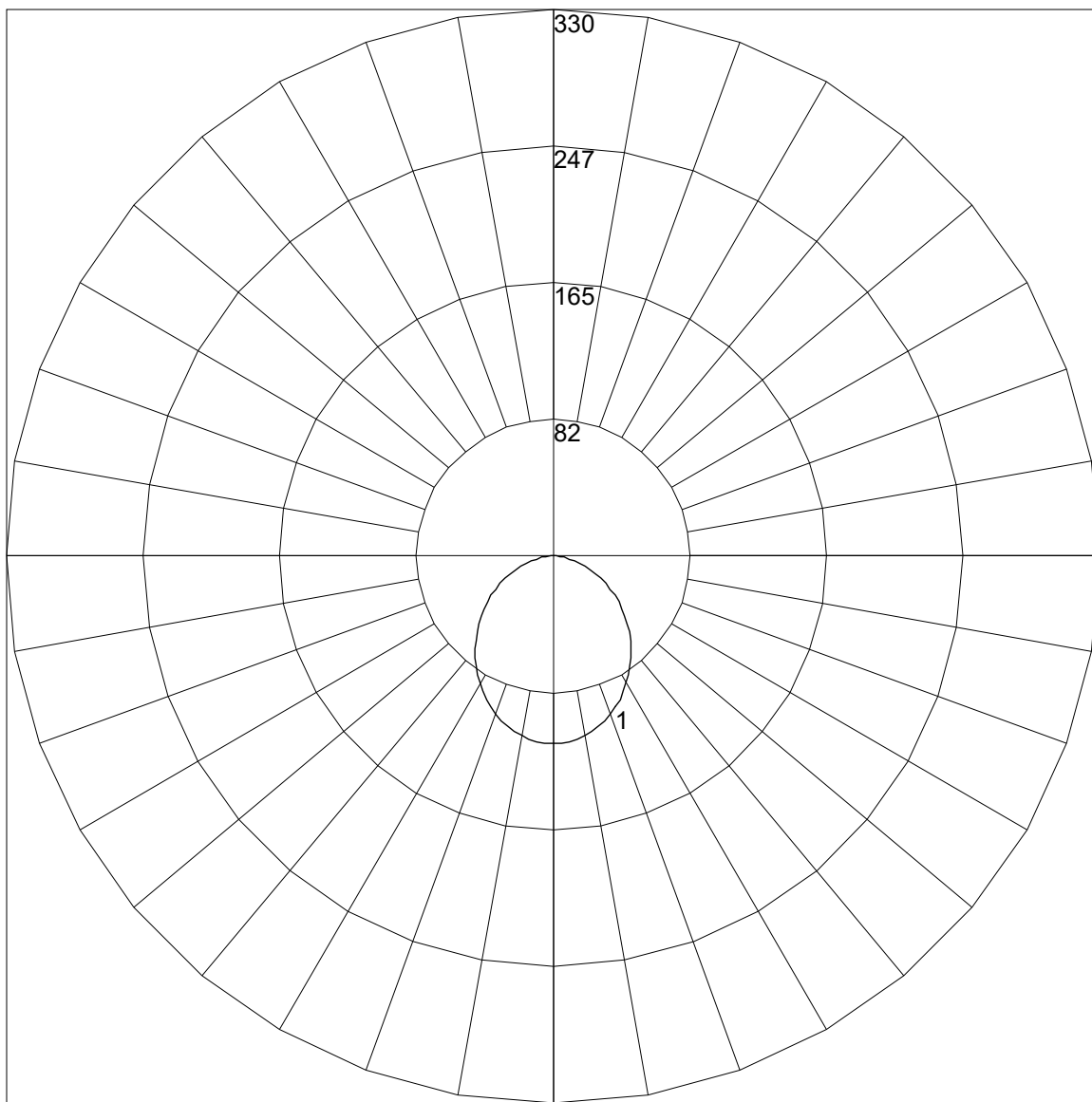
PHOTOMETRIC FILENAME : 3D90 - HP-2-C-D-P-28IN-9-16IN-B-8TW-ITL94330.906.IES

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)