

# 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 : 4D90 - HP-2-C-D-P-37IN-11-16IN-V-8TW-ITL94330.900.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL94330.900 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]12/28/20

[ISSUEDATE]02/13/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]4D90 HP-2-P-D-37IN-11/16IN-V-8TW

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 30.1 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 30.0 WATTS

[\_ABSOLUTE]LUMENS]2333

[OTHER]see [www.finelite.com](http://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](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	2333
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	78
Total Luminaire Watts	30.1
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)	2.71 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3990	4132	4336
55	3599	3755	3987
65	3213	3358	3595
75	2709	2860	3053
85	2043	2107	2235

**IES INDOOR REPORT**

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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	961	961	961	961	961	961	961	961	961
2.5	957	958	960	959	960	960	960	960	959
5.0	951	951	954	953	954	955	955	955	955
7.5	940	941	943	944	946	947	947	947	947
10.0	925	927	930	932	935	936	935	936	934
12.5	908	909	914	917	921	924	923	922	920
15.0	884	889	893	898	904	905	904	902	900
17.5	861	866	870	876	887	884	882	879	878
20.0	834	840	847	853	862	862	859	854	851
22.5	808	811	820	827	838	837	832	826	823
25.0	777	782	790	799	811	810	805	795	793
27.5	746	750	760	772	782	780	775	765	763
30.0	713	718	729	742	751	750	741	733	728
32.5	680	684	696	709	720	720	710	700	695
35.0	646	651	663	676	688	686	677	664	662
37.5	612	617	629	644	655	652	644	630	624
40.0	578	582	595	610	620	619	607	596	590
42.5	544	547	561	576	586	585	573	561	555
45.0	507	513	525	541	551	548	538	523	518
47.5	474	477	490	506	515	513	503	489	483
50.0	438	443	457	472	481	479	467	454	449
52.5	406	410	423	436	446	442	432	420	415
55.0	371	377	387	403	411	409	398	385	381
57.5	340	343	354	369	377	373	363	351	346
60.0	306	310	320	334	340	339	330	319	314
62.5	276	279	288	299	306	305	296	287	282
65.0	244	247	255	266	273	271	263	253	251
67.5	214	216	224	234	238	238	231	222	219
70.0	184	186	192	201	205	205	200	193	189
72.5	156	157	163	169	173	173	169	163	161
75.0	126	129	133	139	142	143	140	134	133
77.5	100	102	106	111	113	113	111	107	105
80.0	76	76	78	83	84	85	84	81	80
82.5	53	53	54	57	58	59	59	58	57
85.0	32	32	33	34	35	36	36	36	36
87.5	13	13	14	13	14	16	16	16	16
90.0	0	0	0	0	0	0	0	0	0

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : 4D90 - HP-2-C-D-P-37IN-11-16IN-V-8TW-ITL94330.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	343.29	N.A.	14.70
0-30	710.18	N.A.	30.40
0-40	1129.1	N.A.	48.40
0-60	1891.18	N.A.	81.10
0-80	2293.08	N.A.	98.30
0-90	2332.86	N.A.	100.00
10-90	2242.5	N.A.	96.10
20-40	785.81	N.A.	33.70
20-50	1196.14	N.A.	51.30
40-70	1019.31	N.A.	43.70
60-80	401.90	N.A.	17.20
70-80	144.66	N.A.	6.20
80-90	39.78	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	2332.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	90.37
10-20	252.93
20-30	366.89
30-40	418.92
40-50	410.33
50-60	351.74
60-70	257.24
70-80	144.66
80-90	39.78
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

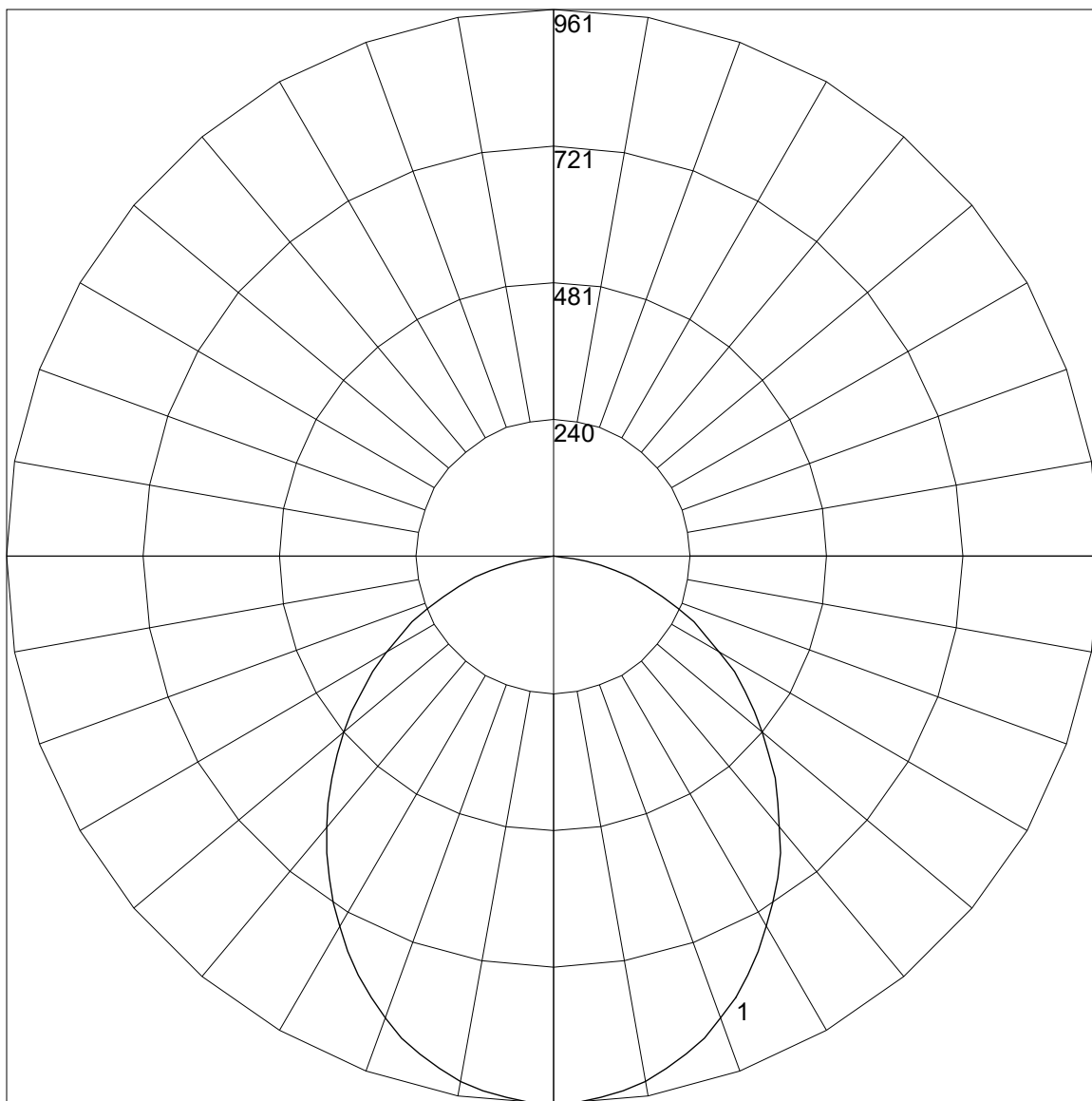
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 961 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)