

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-4C-ID-P-37IN11-16IN-S-H-835-ITL93249.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/20/20

[ISSUEDATE]09/28/20

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4C-ID-P-37in11-16in-S-H-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 32.2 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 33.4 WATTS

[_ABSOLUTE]LUMENS]3437

[OTHER]see www.finelite.com for source file ITL93249. 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	3439
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	32.2
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.16
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.28
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	2.88 ft
Luminous Height	0.02 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7600	7807	8218
55	6730	6984	7470
65	5882	6116	6740
75	5003	5139	5842
85	4282	4201	4885

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-S-H-835-ITL93249.014.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	899.117	899.117	899.117	899.117	899.117	899.117	899.117	899.117	899.117
2.5	898.339	898.339	899.117	898.339	897.562	897.562	897.562	896.784	896.784
5.0	894.450	894.450	894.450	894.450	893.673	892.895	892.117	891.339	891.339
7.5	888.228	887.450	887.450	887.450	885.895	885.117	883.562	882.784	881.228
10.0	876.562	877.339	877.339	877.339	875.784	874.228	872.673	871.117	870.339
12.5	864.117	863.339	863.339	864.117	863.339	860.228	858.672	855.561	854.784
15.0	846.228	847.783	846.228	848.561	848.561	844.672	841.561	837.672	834.561
17.5	824.450	826.783	826.783	829.117	829.117	825.228	819.783	815.894	812.783
20.0	802.672	805.005	805.783	807.339	808.894	803.450	798.005	791.005	789.450
22.5	777.783	779.339	780.894	784.783	786.339	779.339	773.116	765.338	763.783
25.0	751.338	752.894	754.449	759.894	759.894	754.449	747.449	737.338	733.449
27.5	721.783	722.560	726.449	731.894	732.672	726.449	717.116	709.338	704.671
30.0	692.227	693.782	698.449	702.338	704.671	696.894	688.338	677.449	675.893
32.5	658.782	663.449	666.560	673.560	675.116	665.782	658.782	647.115	643.227
35.0	626.893	630.004	634.671	641.671	641.671	635.449	626.115	616.004	611.337
37.5	595.004	598.115	602.782	609.004	610.560	605.115	594.226	584.115	580.226
40.0	563.115	564.670	569.337	577.893	579.448	572.448	563.115	549.893	546.004
42.5	527.337	530.448	536.670	544.448	546.004	541.337	530.448	518.781	514.115
45.0	493.892	497.003	502.448	509.448	512.559	507.892	495.448	485.337	481.448
47.5	461.225	463.559	469.003	476.781	479.114	473.670	462.003	451.892	449.559
50.0	427.003	431.670	436.336	444.892	446.447	441.003	429.336	420.003	416.114
52.5	395.114	397.447	402.892	411.447	413.003	408.336	398.225	387.336	387.336
55.0	361.669	365.558	370.225	376.447	378.780	376.447	365.558	357.002	353.891
57.5	331.336	334.447	336.780	344.558	346.891	342.224	332.113	325.891	323.558
60.0	301.002	301.780	305.669	312.669	315.780	311.891	302.558	294.780	291.669
62.5	271.446	272.224	274.557	281.557	283.113	280.002	271.446	266.002	262.891
65.0	240.335	241.891	245.002	248.891	252.780	248.891	242.668	236.446	234.891
67.5	213.113	214.668	214.668	219.335	221.668	220.113	211.557	208.446	207.668
70.0	185.890	186.668	185.112	190.557	191.335	189.779	184.335	182.001	179.668
72.5	160.223	159.446	158.668	161.779	162.557	162.557	157.890	155.557	154.001
75.0	133.779	134.556	133.001	133.779	135.334	135.334	133.001	129.890	130.667
77.5	111.223	111.223	107.334	108.890	107.334	109.667	107.334	107.334	108.112
80.0	89.445	89.445	84.778	85.556	82.445	86.334	84.778	86.334	85.556
82.5	70.001	68.445	64.556	63.778	60.667	63.778	64.556	66.112	66.889
85.0	50.556	49.778	45.889	42.778	39.667	43.556	45.889	47.445	49.000
87.5	35.000	33.445	27.222	25.667	21.000	24.111	28.000	31.889	33.445
90.0	24.111	22.556	17.111	14.000	9.333	11.667	15.556	21.000	22.556
92.5	17.602	16.783	14.736	12.280	10.643	11.052	13.918	15.964	17.192
95.0	27.835	27.017	24.561	22.105	21.286	20.877	23.742	25.789	27.017
97.5	39.297	38.888	36.022	33.157	32.338	32.338	34.385	36.841	37.660
100.0	52.806	51.578	48.712	46.665	44.619	45.028	46.256	48.712	49.940
102.5	65.905	64.677	62.630	60.174	58.127	58.536	60.174	61.402	62.630
105.0	79.823	79.004	76.548	74.910	72.864	72.864	73.682	76.548	76.548
107.5	94.559	94.150	91.694	89.647	88.009	89.237	88.419	90.466	90.875
110.0	109.705	110.114	106.839	106.430	104.793	105.202	103.155	105.202	106.839
112.5	126.488	125.669	123.623	124.032	121.576	121.166	119.938	121.985	122.394
115.0	142.452	141.634	140.406	139.996	138.359	137.131	137.540	138.359	137.950
117.5	158.826	158.008	157.598	156.370	155.961	153.914	153.914	154.733	154.323
120.0	175.200	176.428	175.200	173.972	173.153	172.335	170.697	171.516	169.879
122.5	193.621	194.849	193.211	191.165	191.165	189.527	188.299	188.708	186.662
125.0	211.222	212.860	212.041	208.767	208.357	207.129	206.310	204.673	203.445
127.5	228.006	231.280	229.643	228.415	225.959	223.503	223.094	220.637	220.228
130.0	246.017	249.701	247.245	246.836	245.198	241.514	239.877	238.649	237.421
132.5	265.256	267.712	265.256	264.438	262.800	259.116	256.660	255.841	254.204

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-S-H-835-ITL93249.014.IES****CANDELA TABULATION - (Cont.)**

135.0	282.858	284.905	283.677	282.039	281.221	277.537	274.671	273.853	273.034
137.5	300.460	302.097	302.097	299.641	298.413	294.729	292.682	291.045	290.226
140.0	319.290	319.290	318.880	317.652	316.015	312.740	309.466	308.647	307.010
142.5	335.664	336.073	335.664	334.436	334.436	329.933	327.067	325.430	323.793
145.0	351.628	352.038	352.038	350.400	351.219	346.307	344.260	342.213	341.395
147.5	368.411	368.002	367.183	365.546	366.774	362.271	359.815	358.587	357.359
150.0	382.738	382.738	382.329	381.101	381.510	377.417	375.780	374.552	372.505
152.5	396.247	397.066	395.838	395.019	395.838	392.563	390.107	388.879	386.832
155.0	409.755	410.574	408.937	408.118	409.346	406.071	403.615	402.796	401.568
157.5	421.626	422.445	420.808	419.580	421.217	417.942	417.124	415.896	414.258
160.0	431.451	432.269	431.041	431.041	431.451	428.995	428.176	427.357	425.720
162.5	440.456	441.684	441.275	440.047	441.275	439.638	438.819	438.000	437.182
165.0	449.053	449.871	449.462	448.643	449.871	447.825	447.415	447.006	446.187
167.5	456.830	456.421	456.421	456.011	456.830	456.011	455.602	455.193	454.783
170.0	462.561	462.561	462.152	462.970	462.561	461.742	461.742	461.742	461.742
172.5	467.473	467.064	467.064	467.473	467.064	467.064	467.064	466.654	466.654
175.0	470.748	470.339	470.339	470.339	470.339	470.339	470.339	470.339	470.748
177.5	472.385	472.385	472.385	472.385	472.385	472.385	472.385	472.385	472.385
180.0	473.204	473.204	473.204	473.204	473.204	473.204	473.204	473.204	473.204

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-S-H-835-ITL93249.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	322.28	N.A.	9.40
0-30	667.80	N.A.	19.40
0-40	1062.33	N.A.	30.90
0-60	1777.97	N.A.	51.70
0-80	2162.16	N.A.	62.90
0-90	2213.95	N.A.	64.40
10-90	2129.27	N.A.	61.90
20-40	740.04	N.A.	21.50
20-50	1125.84	N.A.	32.70
40-70	958.03	N.A.	27.90
60-80	384.19	N.A.	11.20
70-80	141.81	N.A.	4.10
80-90	51.78	N.A.	1.50
90-110	109.11	N.A.	3.20
90-120	247.07	N.A.	7.20
90-130	433.45	N.A.	12.60
90-150	866.56	N.A.	25.20
90-180	1224.84	N.A.	35.60
110-180	1115.73	N.A.	32.40
0-180	3438.79	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	84.68
10-20	237.60
20-30	345.51
30-40	394.53
40-50	385.80
50-60	329.84
60-70	242.38
70-80	141.81
80-90	51.78
90-100	28.82
100-110	80.29
110-120	137.96
120-130	186.38
130-140	215.53
140-150	217.57
150-160	187.22
160-170	126.42
170-180	44.64

IES INDOOR REPORT

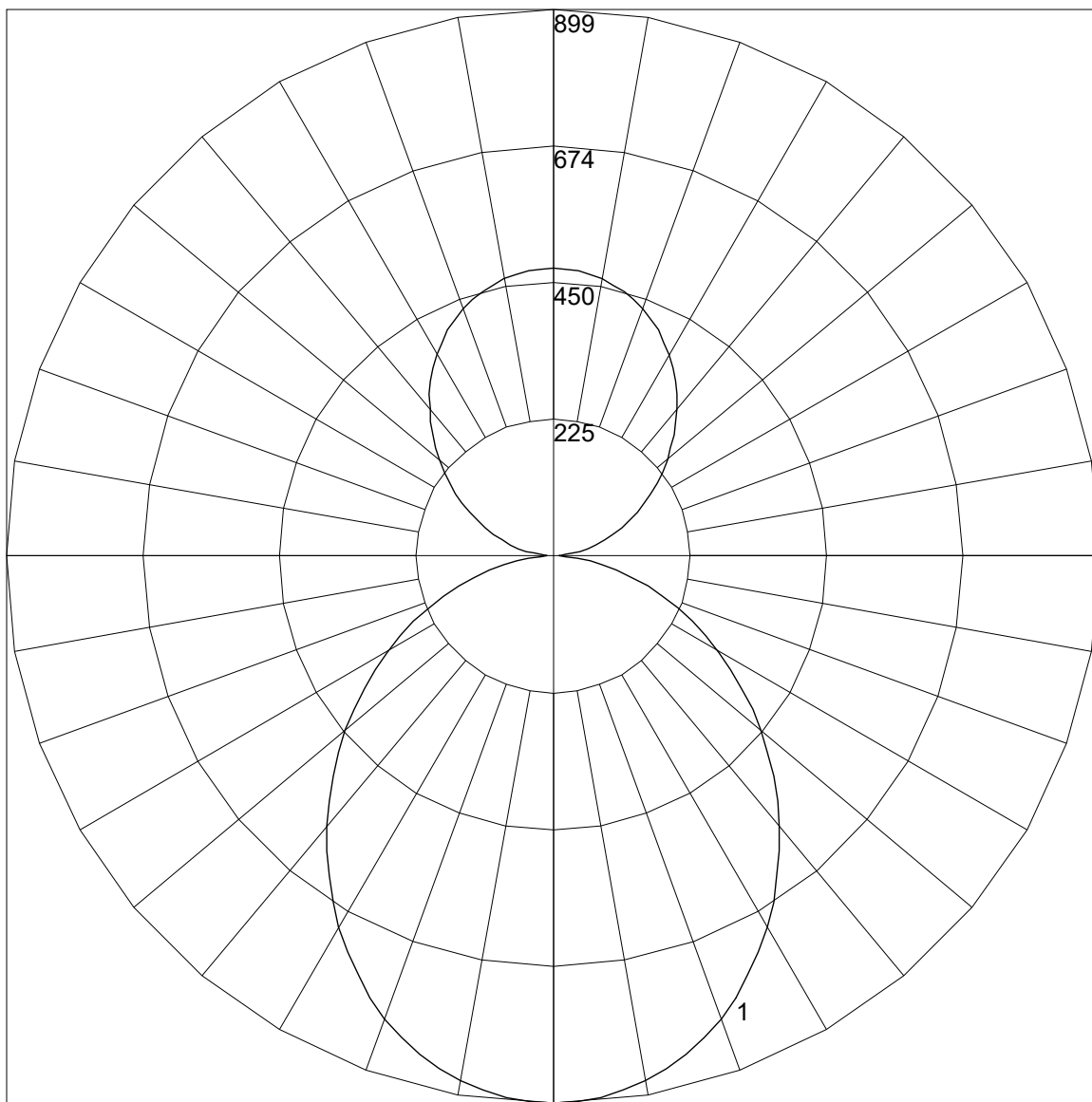
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-S-H-835-ITL93249.014.IES

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	111	111	111	111	104	104	104	104	91	91	91	80	80	80	69	69	69	64
1	101	96	92	89	95	91	87	84	80	77	75	70	68	66	61	60	58	54
2	92	84	78	73	86	79	74	69	70	66	62	62	59	56	54	52	49	45
3	84	74	67	61	79	70	63	58	62	57	52	55	51	47	48	45	42	39
4	77	66	58	52	72	62	55	49	55	50	45	49	44	41	43	39	36	33
5	71	59	51	44	66	56	48	43	50	44	39	44	39	35	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	25
7	61	48	40	34	57	45	38	33	41	35	30	36	31	28	32	28	25	23
8	56	44	36	30	53	41	34	29	37	31	27	33	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	37	29	25	46	35	28	24	32	26	22	28	24	20	25	21	19	17

POLAR GRAPH



Maximum Candela = 899.117 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)