

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-H-S-835-ITL93249.009.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.009 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-H-S-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 30.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 32.3 WATTS

[_ABSOLUTE]LUMENS]3490

[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	3489
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	30.9
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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	4000	4109	4325
55	3542	3676	3931
65	3096	3219	3547
75	2633	2704	3075
85	2254	2211	2571

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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	473.204	473.204	473.204	473.204	473.204	473.204	473.204	473.204	473.204
2.5	472.794	472.794	473.204	472.794	472.385	472.385	472.385	471.975	471.975
5.0	470.747	470.747	470.747	470.747	470.338	469.929	469.519	469.110	469.110
7.5	467.473	467.063	467.063	467.063	466.245	465.835	465.017	464.607	463.788
10.0	461.332	461.742	461.742	461.742	460.923	460.104	459.286	458.467	458.058
12.5	454.783	454.374	454.374	454.783	454.374	452.736	451.918	450.280	449.871
15.0	445.368	446.187	445.368	446.596	446.596	444.549	442.912	440.865	439.228
17.5	433.906	435.134	435.134	436.362	436.362	434.316	431.450	429.404	427.766
20.0	422.445	423.673	424.082	424.901	425.719	422.854	419.988	416.304	415.486
22.5	409.346	410.164	410.983	413.030	413.848	410.164	406.889	402.796	401.977
25.0	395.428	396.247	397.065	399.931	399.931	397.065	393.381	388.060	386.013
27.5	379.873	380.282	382.329	385.194	385.603	382.329	377.417	373.323	370.867
30.0	364.317	365.136	367.592	369.639	370.867	366.774	362.271	356.540	355.721
32.5	346.716	349.172	350.809	354.493	355.312	350.400	346.716	340.575	338.529
35.0	329.933	331.570	334.026	337.710	337.710	334.435	329.523	324.202	321.746
37.5	313.149	314.787	317.243	320.518	321.336	318.471	312.740	307.418	305.372
40.0	296.366	297.185	299.641	304.144	304.962	301.278	296.366	289.407	287.361
42.5	277.536	279.174	282.448	286.542	287.361	284.904	279.174	273.034	270.577
45.0	259.934	261.572	264.437	268.121	269.759	267.303	260.753	255.432	253.385
47.5	242.742	243.970	246.835	250.929	252.157	249.291	243.151	237.830	236.602
50.0	224.731	227.187	229.643	234.146	234.964	232.099	225.959	221.047	219.000
52.5	207.947	209.176	212.041	216.544	217.363	214.906	209.585	203.854	203.854
55.0	190.346	192.392	194.849	198.123	199.351	198.123	192.392	187.890	186.252
57.5	174.381	176.019	177.247	181.340	182.568	180.112	174.791	171.516	170.288
60.0	158.417	158.826	160.873	164.557	166.194	164.148	159.235	155.142	153.505
62.5	142.862	143.271	144.499	148.183	149.002	147.364	142.862	139.996	138.359
65.0	126.488	127.306	128.944	130.991	133.037	130.991	127.716	124.441	123.622
67.5	112.161	112.979	112.979	115.435	116.663	115.845	111.342	109.705	109.295
70.0	97.834	98.243	97.424	100.290	100.699	99.880	97.015	95.787	94.559
72.5	84.325	83.916	83.507	85.144	85.553	85.553	83.097	81.869	81.050
75.0	70.407	70.817	69.998	70.407	71.226	71.226	69.998	68.361	68.770
77.5	58.536	58.536	56.490	57.308	56.490	57.718	56.490	56.490	56.899
80.0	47.075	47.075	44.619	45.028	43.391	45.437	44.619	45.437	45.028
82.5	36.841	36.022	33.976	33.566	31.929	33.566	33.976	34.794	35.204
85.0	26.608	26.198	24.151	22.514	20.877	22.923	24.151	24.970	25.789
87.5	18.421	17.602	14.327	13.508	11.052	12.690	14.736	16.783	17.602
90.0	12.690	11.871	9.006	7.368	4.912	6.140	8.187	11.052	11.871
92.5	33.445	31.889	28.000	23.334	20.222	21.000	26.445	30.334	32.667
95.0	52.889	51.334	46.667	42.000	40.445	39.667	45.111	49.000	51.334
97.5	74.667	73.889	68.445	63.000	61.445	61.445	65.334	70.000	71.556
100.0	100.334	98.001	92.556	88.667	84.778	85.556	87.889	92.556	94.889
102.5	125.223	122.890	119.001	114.334	110.445	111.223	114.334	116.667	119.001
105.0	151.668	150.112	145.445	142.334	138.445	138.445	140.001	145.445	145.445
107.5	179.668	178.890	174.223	170.334	167.223	169.557	168.001	171.890	172.668
110.0	208.446	209.224	203.001	202.224	199.112	199.890	196.001	199.890	203.001
112.5	240.335	238.779	234.890	235.668	231.001	230.224	227.890	231.779	232.557
115.0	270.668	269.113	266.779	266.002	262.890	260.557	261.335	262.890	262.113
117.5	301.780	300.224	299.446	297.113	296.335	292.446	292.446	294.002	293.224
120.0	332.891	335.224	332.891	330.558	329.002	327.447	324.335	325.891	322.780
122.5	367.891	370.224	367.113	363.224	363.224	360.113	357.780	358.558	354.669
125.0	401.336	404.447	402.891	396.669	395.891	393.558	392.002	388.891	386.558
127.5	433.225	439.447	436.336	434.003	429.336	424.669	423.892	419.225	418.447
130.0	467.447	474.447	469.781	469.003	465.892	458.892	455.781	453.447	451.114
132.5	504.003	508.670	504.003	502.448	499.336	492.336	487.670	486.114	483.003

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-H-S-835-ITL93249.009.IES****CANDELA TABULATION - (Cont.)**

135.0	537.448	541.337	539.003	535.892	534.337	527.337	521.892	520.337	518.781
137.5	570.893	574.004	574.004	569.337	567.004	560.004	556.115	553.003	551.448
140.0	606.670	606.670	605.893	603.559	600.448	594.226	588.004	586.448	583.337
142.5	637.782	638.559	637.782	635.448	635.448	626.893	621.448	618.337	615.226
145.0	668.115	668.893	668.893	665.782	667.337	658.004	654.115	650.226	648.671
147.5	700.004	699.227	697.671	694.560	696.893	688.338	683.671	681.338	679.004
150.0	727.227	727.227	726.449	724.116	724.893	717.115	714.005	711.671	707.782
152.5	752.894	754.449	752.116	750.560	752.116	745.894	741.227	738.894	735.005
155.0	778.560	780.116	777.005	775.449	777.783	771.560	766.894	765.338	763.005
157.5	801.116	802.672	799.561	797.227	800.338	794.116	792.561	790.227	787.116
160.0	819.783	821.338	819.005	819.005	819.783	815.116	813.561	812.005	808.894
162.5	836.894	839.227	838.450	836.116	838.450	835.338	833.783	832.227	830.672
165.0	853.227	854.783	854.005	852.450	854.783	850.894	850.116	849.339	847.783
167.5	868.005	867.228	867.228	866.450	868.005	866.450	865.672	864.894	864.116
170.0	878.894	878.894	878.117	879.672	878.894	877.339	877.339	877.339	877.339
172.5	888.228	887.450	887.450	888.228	887.450	887.450	887.450	886.672	886.672
175.0	894.450	893.672	893.672	893.672	893.672	893.672	893.672	893.672	894.450
177.5	897.561	897.561	897.561	897.561	897.561	897.561	897.561	897.561	897.561
180.0	899.117	899.117	899.117	899.117	899.117	899.117	899.117	899.117	899.117

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-H-S-835-ITL93249.009.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	169.62	N.A.	4.90
0-30	351.46	N.A.	10.10
0-40	559.10	N.A.	16.00
0-60	935.74	N.A.	26.80
0-80	1137.94	N.A.	32.60
0-90	1165.2	N.A.	33.40
10-90	1120.63	N.A.	32.10
20-40	389.48	N.A.	11.20
20-50	592.53	N.A.	17.00
40-70	504.21	N.A.	14.50
60-80	202.20	N.A.	5.80
70-80	74.63	N.A.	2.10
80-90	27.25	N.A.	0.80
90-110	204.15	N.A.	5.90
90-120	466.28	N.A.	13.40
90-130	820.42	N.A.	23.50
90-150	1643.35	N.A.	47.10
90-180	2324.1	N.A.	66.60
110-180	2119.95	N.A.	60.80
0-180	3489.3	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	44.57
10-20	125.05
20-30	181.84
30-40	207.64
40-50	203.05
50-60	173.60
60-70	127.57
70-80	74.63
80-90	27.25
90-100	51.60
100-110	152.55
110-120	262.13
120-130	354.14
130-140	409.53
140-150	413.40
150-160	355.72
160-170	240.21
170-180	84.83

IES INDOOR REPORT

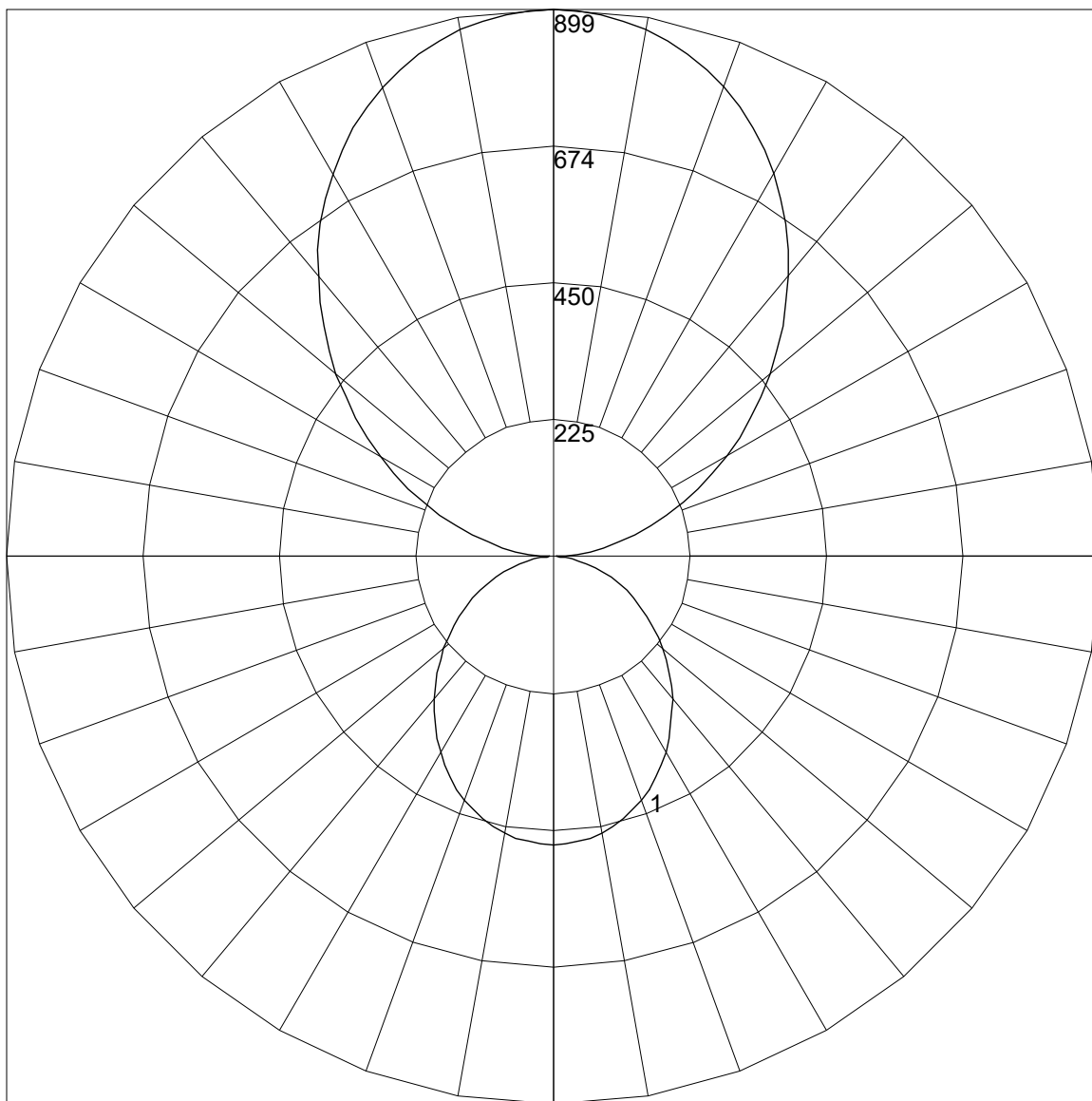
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-H-S-835-ITL93249.009.IES

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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	62	57	53	50	44	41	39	32	30	29	24
3	78	69	62	56	70	62	56	51	50	46	42	39	36	33	28	26	25	20
4	71	61	53	47	64	55	49	44	44	40	36	35	31	29	25	23	21	17
5	66	54	46	41	59	49	42	37	40	35	31	31	27	25	23	20	19	15
6	60	49	41	35	54	44	37	32	36	31	27	28	24	22	21	18	16	13
7	56	44	36	31	50	40	33	28	32	27	24	25	22	19	19	16	15	12
8	52	40	32	27	46	36	30	25	29	24	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	21	40	30	24	20	25	20	17	20	16	14	15	12	11	9

POLAR GRAPH



Maximum Candela = 899.117 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)