

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-B-S-835-ITL93249.012.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.012 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-B-S-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 24.1 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 25.7 WATTS

[_ABSOLUTE]LUMENS]2703

[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	2703
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	24.1
Ballast Factor	1.00
CIE Type	General Diffuse
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	472.795	472.795	473.204	472.795	472.385	472.385	472.385	471.976	471.976
5.0	470.748	470.748	470.748	470.748	470.339	469.929	469.520	469.111	469.111
7.5	467.473	467.064	467.064	467.064	466.245	465.836	465.017	464.608	463.789
10.0	461.333	461.742	461.742	461.742	460.924	460.105	459.286	458.467	458.058
12.5	454.783	454.374	454.374	454.783	454.374	452.737	451.918	450.281	449.871
15.0	445.368	446.187	445.368	446.596	446.596	444.550	442.912	440.866	439.228
17.5	433.907	435.135	435.135	436.363	436.363	434.316	431.451	429.404	427.767
20.0	422.445	423.673	424.082	424.901	425.720	422.854	419.989	416.305	415.486
22.5	409.346	410.165	410.983	413.030	413.849	410.165	406.890	402.796	401.978
25.0	395.428	396.247	397.066	399.931	399.931	397.066	393.382	388.060	386.013
27.5	379.873	380.282	382.329	385.195	385.604	382.329	377.417	373.324	370.868
30.0	364.318	365.137	367.593	369.639	370.868	366.774	362.271	356.540	355.722
32.5	346.716	349.172	350.810	354.494	355.312	350.400	346.716	340.576	338.529
35.0	329.933	331.570	334.026	337.710	337.710	334.436	329.524	324.202	321.746
37.5	313.150	314.787	317.243	320.518	321.337	318.471	312.740	307.419	305.372
40.0	296.366	297.185	299.641	304.144	304.963	301.279	296.366	289.408	287.361
42.5	277.537	279.174	282.449	286.542	287.361	284.905	279.174	273.034	270.578
45.0	259.935	261.572	264.438	268.122	269.759	267.303	260.753	255.432	253.385
47.5	242.742	243.970	246.836	250.929	252.157	249.292	243.151	237.830	236.602
50.0	224.731	227.187	229.643	234.146	234.965	232.099	225.959	221.047	219.000
52.5	207.948	209.176	212.041	216.544	217.363	214.907	209.585	203.854	203.854
55.0	190.346	192.393	194.849	198.124	199.351	198.124	192.393	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	166.195	164.148	159.236	155.142	153.505
62.5	142.862	143.271	144.499	148.183	149.002	147.365	142.862	139.996	138.359
65.0	126.488	127.307	128.944	130.991	133.037	130.991	127.716	124.441	123.623
67.5	112.161	112.980	112.980	115.436	116.664	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	22.128	21.099	18.526	15.438	13.380	13.895	17.497	20.070	21.614
95.0	34.994	33.965	30.877	27.789	26.760	26.245	29.848	32.421	33.965
97.5	49.403	48.888	45.286	41.684	40.654	40.654	43.227	46.315	47.344
100.0	66.385	64.841	61.239	58.666	56.093	56.607	58.151	61.239	62.783
102.5	82.853	81.309	78.736	75.648	73.075	73.590	75.648	77.192	78.736
105.0	100.350	99.320	96.233	94.174	91.601	91.601	92.630	96.233	96.233
107.5	118.876	118.361	115.273	112.700	110.642	112.186	111.156	113.730	114.244
110.0	137.916	138.431	134.314	133.799	131.741	132.256	129.683	132.256	134.314
112.5	159.015	157.986	155.413	155.928	152.840	152.326	150.782	153.355	153.869
115.0	179.085	178.056	176.512	175.998	173.939	172.395	172.910	173.939	173.425
117.5	199.670	198.641	198.126	196.582	196.068	193.494	193.494	194.524	194.009
120.0	220.254	221.798	220.254	218.710	217.681	216.652	214.594	215.623	213.564
122.5	243.412	244.956	242.897	240.324	240.324	238.266	236.722	237.237	234.663
125.0	265.540	267.599	266.570	262.453	261.938	260.394	259.365	257.307	255.763
127.5	286.639	290.756	288.698	287.154	284.066	280.979	280.464	277.376	276.862
130.0	309.282	313.914	310.826	310.312	308.253	303.622	301.563	300.019	298.476
132.5	333.469	336.557	333.469	332.440	330.382	325.750	322.662	321.633	319.575

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-B-S-835-ITL93249.012.IES****CANDELA TABULATION - (Cont.)**

135.0	355.598	358.171	356.627	354.568	353.539	348.908	345.305	344.276	343.247
137.5	377.726	379.784	379.784	376.697	375.153	370.521	367.948	365.890	364.861
140.0	401.398	401.398	400.884	399.340	397.281	393.164	389.047	388.018	385.960
142.5	421.983	422.497	421.983	420.439	420.439	414.778	411.176	409.117	407.059
145.0	442.053	442.567	442.567	440.509	441.538	435.363	432.789	430.216	429.187
147.5	463.152	462.637	461.608	459.549	461.093	455.433	452.345	450.801	449.257
150.0	481.163	481.163	480.649	479.105	479.619	474.473	472.415	470.871	468.298
152.5	498.145	499.175	497.631	496.601	497.631	493.514	490.426	488.882	486.309
155.0	515.128	516.157	514.098	513.069	514.613	510.496	507.408	506.379	504.835
157.5	530.051	531.081	529.022	527.478	529.537	525.420	524.391	522.847	520.788
160.0	542.402	543.431	541.888	541.888	542.402	539.314	538.285	537.256	535.197
162.5	553.724	555.268	554.753	553.209	554.753	552.694	551.665	550.636	549.607
165.0	564.530	565.560	565.045	564.016	565.560	562.987	562.472	561.957	560.928
167.5	574.308	573.793	573.793	573.279	574.308	573.279	572.764	572.250	571.735
170.0	581.513	581.513	580.998	582.027	581.513	580.484	580.484	580.484	580.484
172.5	587.688	587.173	587.173	587.688	587.173	587.173	587.173	586.659	586.659
175.0	591.805	591.290	591.290	591.290	591.290	591.290	591.290	591.290	591.805
177.5	593.863	593.863	593.863	593.863	593.863	593.863	593.863	593.863	593.863
180.0	594.893	594.893	594.893	594.893	594.893	594.893	594.893	594.893	594.893

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-B-S-835-ITL93249.012.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	169.62	N.A.	6.30
0-30	351.46	N.A.	13.00
0-40	559.10	N.A.	20.70
0-60	935.74	N.A.	34.60
0-80	1137.94	N.A.	42.10
0-90	1165.2	N.A.	43.10
10-90	1120.63	N.A.	41.50
20-40	389.48	N.A.	14.40
20-50	592.53	N.A.	21.90
40-70	504.21	N.A.	18.70
60-80	202.20	N.A.	7.50
70-80	74.63	N.A.	2.80
80-90	27.25	N.A.	1.00
90-110	135.48	N.A.	5.00
90-120	308.92	N.A.	11.40
90-130	543.23	N.A.	20.10
90-150	1087.72	N.A.	40.20
90-180	1538.13	N.A.	56.90
110-180	1402.65	N.A.	51.90
0-180	2703.33	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	34.55
100-110	100.93
110-120	173.43
120-130	234.31
130-140	270.96
140-150	273.52
150-160	235.36
160-170	158.93
170-180	56.12

IES INDOOR REPORT

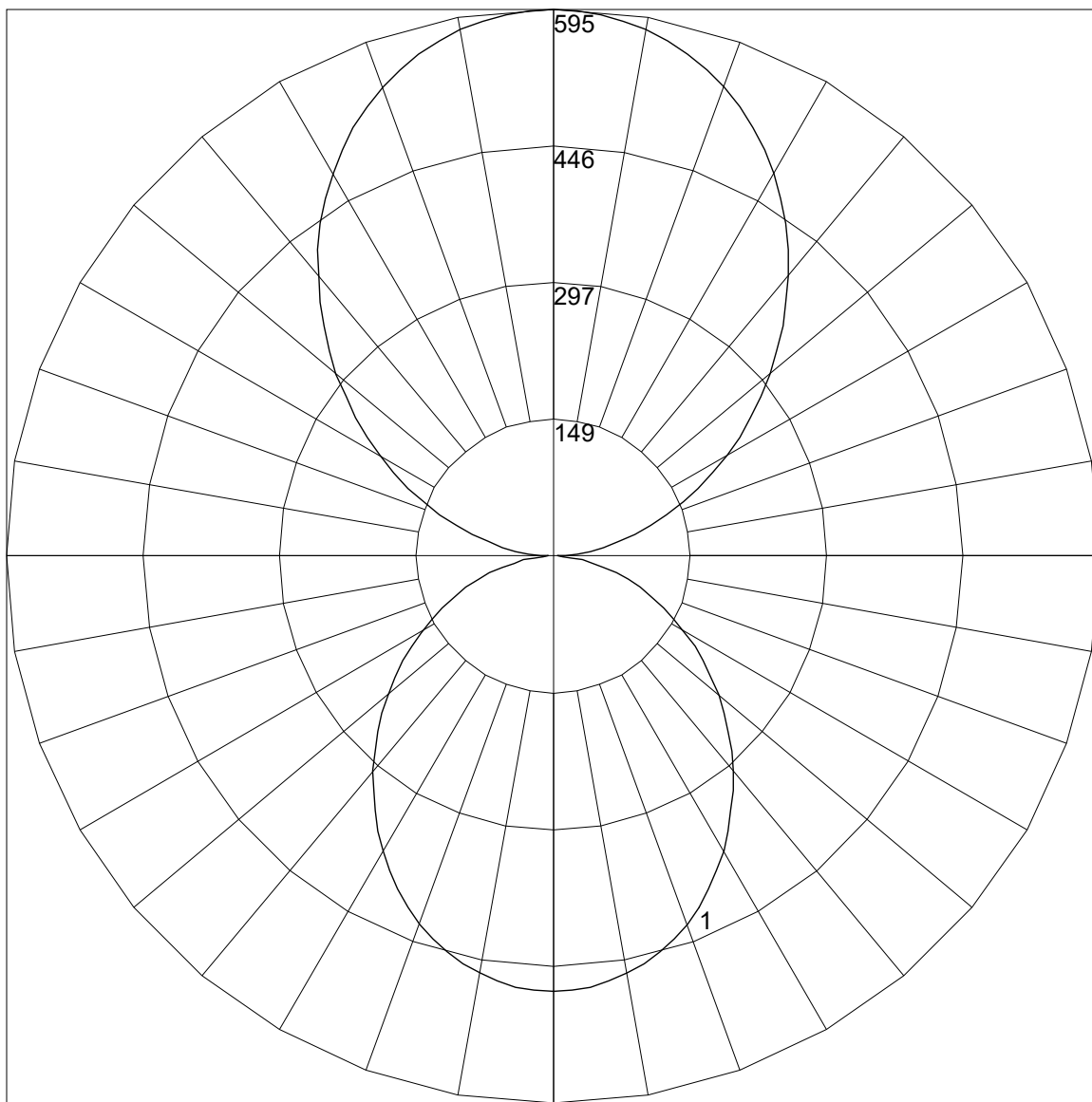
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-B-S-835-ITL93249.012.IES

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	106	106	106	106	96	96	96	96	80	80	80	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	67	65	56	55	53	44	43	42	36
2	88	80	74	69	80	74	68	64	61	57	54	49	47	44	39	37	35	30
3	80	71	63	58	73	65	59	53	54	49	45	44	40	38	34	32	30	26
4	73	63	55	49	67	57	51	45	48	43	39	39	35	32	31	28	26	22
5	67	56	48	42	61	51	44	39	43	38	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	39	33	29	32	28	25	25	22	20	17
7	57	45	37	32	52	42	35	30	35	30	26	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	26	22	19	21	18	16	14
9	49	37	30	25	45	35	28	23	29	24	20	24	20	17	20	17	14	12
10	46	34	27	22	42	32	25	21	27	22	18	22	19	16	18	15	13	11

POLAR GRAPH



Maximum Candela = 594.893 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)