

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-V-S-835-ITL93249.006.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.006 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-V-S-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 36.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 38.2 WATTS

[_ABSOLUTE]LUMENS]4155

[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	4153
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	113
Total Luminaire Watts	36.9
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

IES INDOOR REPORT

PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-V-S-835-ITL93249.006.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	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	43.000	41.000	36.000	30.000	26.000	27.000	34.000	39.000	42.000
95.0	68.000	66.000	60.000	54.000	52.000	51.000	58.000	63.000	66.000
97.5	96.000	95.000	88.000	81.000	79.000	79.000	84.000	90.000	92.000
100.0	129.000	126.000	119.000	114.000	109.000	110.000	113.000	119.000	122.000
102.5	161.000	158.000	153.000	147.000	142.000	143.000	147.000	150.000	153.000
105.0	195.000	193.000	187.000	183.000	178.000	178.000	180.000	187.000	187.000
107.5	231.000	230.000	224.000	219.000	215.000	218.000	216.000	221.000	222.000
110.0	268.000	269.000	261.000	260.000	256.000	257.000	252.000	257.000	261.000
112.5	309.000	307.000	302.000	303.000	297.000	296.000	293.000	298.000	299.000
115.0	348.000	346.000	343.000	342.000	338.000	335.000	336.000	338.000	337.000
117.5	388.000	386.000	385.000	382.000	381.000	376.000	376.000	378.000	377.000
120.0	428.000	431.000	428.000	425.000	423.000	421.000	417.000	419.000	415.000
122.5	473.000	476.000	472.000	467.000	467.000	463.000	460.000	461.000	456.000
125.0	516.000	520.000	518.000	510.000	509.000	506.000	504.000	500.000	497.000
127.5	557.000	565.000	561.000	558.000	552.000	546.000	545.000	539.000	538.000
130.0	601.000	610.000	604.000	603.000	599.000	590.000	586.000	583.000	580.000
132.5	648.000	654.000	648.000	646.000	642.000	633.000	627.000	625.000	621.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-V-S-835-ITL93249.006.IES****CANDELA TABULATION - (Cont.)**

135.0	691.000	696.000	693.000	689.000	687.000	678.000	671.000	669.000	667.000
137.5	734.000	738.000	738.000	732.000	729.000	720.000	715.000	711.000	709.000
140.0	780.000	780.000	779.000	776.000	772.000	764.000	756.000	754.000	750.000
142.5	820.000	821.000	820.000	817.000	817.000	806.000	799.000	795.000	791.000
145.0	859.000	860.000	860.000	856.000	858.000	846.000	841.000	836.000	834.000
147.5	900.000	899.000	897.000	893.000	896.000	885.000	879.000	876.000	873.000
150.0	935.000	935.000	934.000	931.000	932.000	922.000	918.000	915.000	910.000
152.5	968.000	970.000	967.000	965.000	967.000	959.000	953.000	950.000	945.000
155.0	1001.000	1003.000	999.000	997.000	1000.000	992.000	986.000	984.000	981.000
157.5	1030.000	1032.000	1028.000	1025.000	1029.000	1021.000	1019.000	1016.000	1012.000
160.0	1054.000	1056.000	1053.000	1053.000	1054.000	1048.000	1046.000	1044.000	1040.000
162.5	1076.000	1079.000	1078.000	1075.000	1078.000	1074.000	1072.000	1070.000	1068.000
165.0	1097.000	1099.000	1098.000	1096.000	1099.000	1094.000	1093.000	1092.000	1090.000
167.5	1116.000	1115.000	1115.000	1114.000	1116.000	1114.000	1113.000	1112.000	1111.000
170.0	1130.000	1130.000	1129.000	1131.000	1130.000	1128.000	1128.000	1128.000	1128.000
172.5	1142.000	1141.000	1141.000	1142.000	1141.000	1141.000	1141.000	1140.000	1140.000
175.0	1150.000	1149.000	1149.000	1149.000	1149.000	1149.000	1149.000	1149.000	1150.000
177.5	1154.000	1154.000	1154.000	1154.000	1154.000	1154.000	1154.000	1154.000	1154.000
180.0	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-V-S-835-ITL93249.006.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	169.62	N.A.	4.10
0-30	351.46	N.A.	8.50
0-40	559.10	N.A.	13.50
0-60	935.74	N.A.	22.50
0-80	1137.94	N.A.	27.40
0-90	1165.2	N.A.	28.10
10-90	1120.63	N.A.	27.00
20-40	389.48	N.A.	9.40
20-50	592.53	N.A.	14.30
40-70	504.21	N.A.	12.10
60-80	202.20	N.A.	4.90
70-80	74.63	N.A.	1.80
80-90	27.25	N.A.	0.70
90-110	262.13	N.A.	6.30
90-120	599.15	N.A.	14.40
90-130	1054.47	N.A.	25.40
90-150	2112.52	N.A.	50.90
90-180	2987.77	N.A.	71.90
110-180	2725.64	N.A.	65.60
0-180	4152.96	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	65.99
100-110	196.14
110-120	337.02
120-130	455.32
130-140	526.53
140-150	531.51
150-160	457.35
160-170	308.83
170-180	109.06

IES INDOOR REPORT

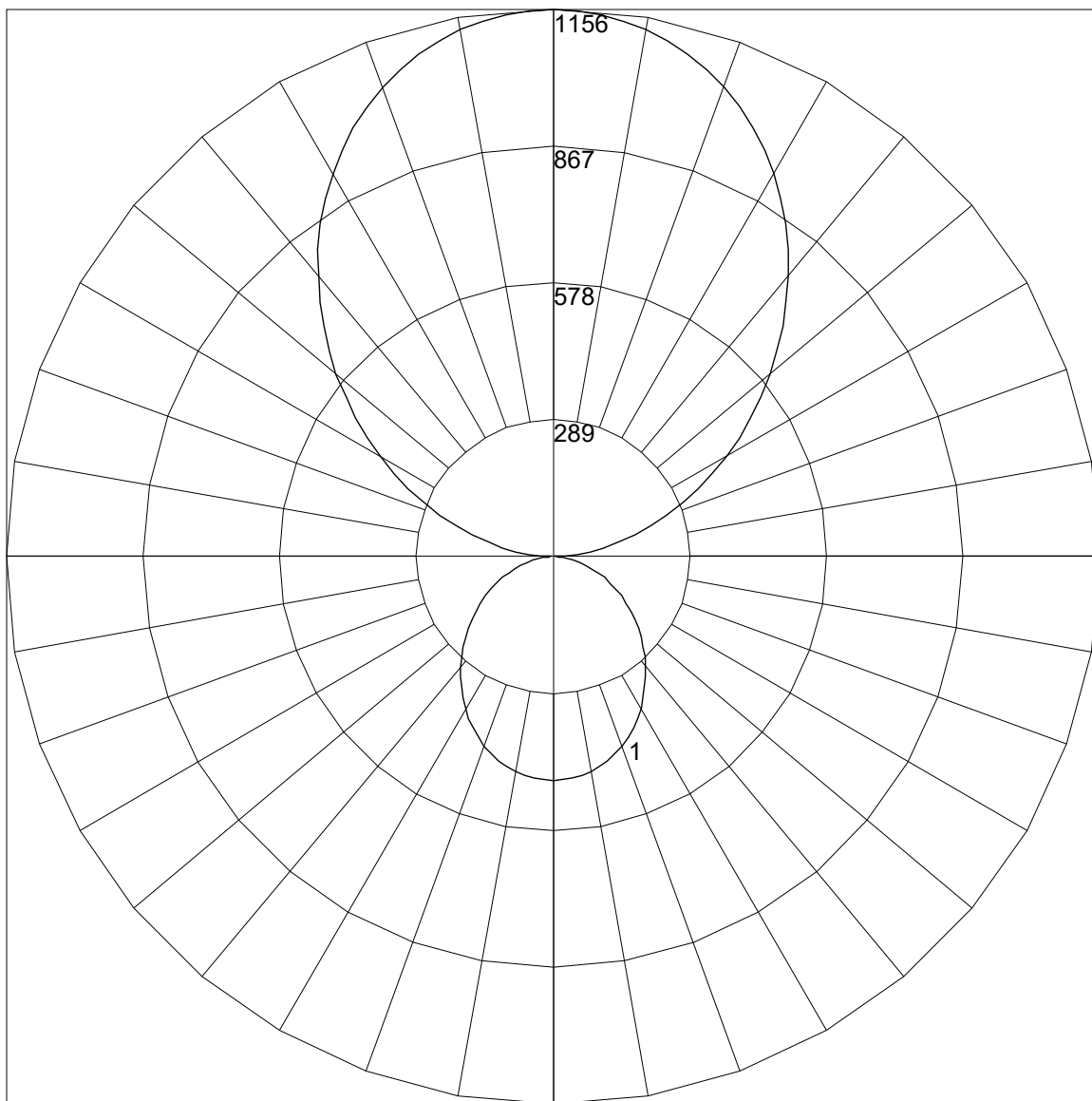
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-V-S-835-ITL93249.006.IES

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	85	77	72	67	75	69	64	60	54	51	48	41	38	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	53	47	63	54	48	43	43	38	34	32	29	26	22	20	19	14
5	65	53	46	40	58	48	41	36	38	33	30	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	32	34	29	26	26	23	20	18	16	14	11
7	55	43	35	30	49	39	32	28	31	26	23	23	20	18	17	14	13	10
8	51	39	32	26	45	35	29	24	28	23	20	21	18	16	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	24	19	16	18	15	13	13	11	9	7

POLAR GRAPH



Maximum Candela = 1156 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)