

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-V-835-ITL93249.007.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.007 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-V-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 48.5 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 49.1 WATTS

[_ABSOLUTE]LUMENS]5171

[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	5172
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	48.5
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	9772	10038	10567
55	8653	8979	9604
65	7563	7864	8665
75	6432	6607	7511
85	5505	5401	6280

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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	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000	1156.000
2.5	1155.000	1155.000	1156.000	1155.000	1154.000	1154.000	1154.000	1153.000	1153.000
5.0	1150.000	1150.000	1150.000	1150.000	1149.000	1148.000	1147.000	1146.000	1146.000
7.5	1142.000	1141.000	1141.000	1141.000	1139.000	1138.000	1136.000	1135.000	1133.000
10.0	1127.000	1128.000	1128.000	1128.000	1126.000	1124.000	1122.000	1120.000	1119.000
12.5	1111.000	1110.000	1110.000	1111.000	1110.000	1106.000	1104.000	1100.000	1099.000
15.0	1088.000	1090.000	1088.000	1091.000	1091.000	1086.000	1082.000	1077.000	1073.000
17.5	1060.000	1063.000	1063.000	1066.000	1066.000	1061.000	1054.000	1049.000	1045.000
20.0	1032.000	1035.000	1036.000	1038.000	1040.000	1033.000	1026.000	1017.000	1015.000
22.5	1000.000	1002.000	1004.000	1009.000	1011.000	1002.000	994.000	984.000	982.000
25.0	966.000	968.000	970.000	977.000	977.000	970.000	961.000	948.000	943.000
27.5	928.000	929.000	934.000	941.000	942.000	934.000	922.000	912.000	906.000
30.0	890.000	892.000	898.000	903.000	906.000	896.000	885.000	871.000	869.000
32.5	847.000	853.000	857.000	866.000	868.000	856.000	847.000	832.000	827.000
35.0	806.000	810.000	816.000	825.000	825.000	817.000	805.000	792.000	786.000
37.5	765.000	769.000	775.000	783.000	785.000	778.000	764.000	751.000	746.000
40.0	724.000	726.000	732.000	743.000	745.000	736.000	724.000	707.000	702.000
42.5	678.000	682.000	690.000	700.000	702.000	696.000	682.000	667.000	661.000
45.0	635.000	639.000	646.000	655.000	659.000	653.000	637.000	624.000	619.000
47.5	593.000	596.000	603.000	613.000	616.000	609.000	594.000	581.000	578.000
50.0	549.000	555.000	561.000	572.000	574.000	567.000	552.000	540.000	535.000
52.5	508.000	511.000	518.000	529.000	531.000	525.000	512.000	498.000	498.000
55.0	465.000	470.000	476.000	484.000	487.000	484.000	470.000	459.000	455.000
57.5	426.000	430.000	433.000	443.000	446.000	440.000	427.000	419.000	416.000
60.0	387.000	388.000	393.000	402.000	406.000	401.000	389.000	379.000	375.000
62.5	349.000	350.000	353.000	362.000	364.000	360.000	349.000	342.000	338.000
65.0	309.000	311.000	315.000	320.000	325.000	320.000	312.000	304.000	302.000
67.5	274.000	276.000	276.000	282.000	285.000	283.000	272.000	268.000	267.000
70.0	239.000	240.000	238.000	245.000	246.000	244.000	237.000	234.000	231.000
72.5	206.000	205.000	204.000	208.000	209.000	209.000	203.000	200.000	198.000
75.0	172.000	173.000	171.000	172.000	174.000	174.000	171.000	167.000	168.000
77.5	143.000	143.000	138.000	140.000	138.000	141.000	138.000	138.000	139.000
80.0	115.000	115.000	109.000	110.000	106.000	111.000	109.000	111.000	110.000
82.5	90.000	88.000	83.000	82.000	78.000	82.000	83.000	85.000	86.000
85.0	65.000	64.000	59.000	55.000	51.000	56.000	59.000	61.000	63.000
87.5	45.000	43.000	35.000	33.000	27.000	31.000	36.000	41.000	43.000
90.0	31.000	29.000	22.000	18.000	12.000	15.000	20.000	27.000	29.000
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	70.001	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	234.891	235.668	231.002	230.224	227.890	231.779	232.557
115.0	270.668	269.113	266.780	266.002	262.891	260.557	261.335	262.891	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	324.336	325.891	322.780
122.5	367.891	370.225	367.114	363.225	363.225	360.113	357.780	358.558	354.669
125.0	401.336	404.447	402.892	396.669	395.892	393.558	392.003	388.892	386.558
127.5	433.225	439.447	436.336	434.003	429.336	424.670	423.892	419.225	418.447
130.0	467.448	474.448	469.781	469.003	465.892	458.892	455.781	453.447	451.114
132.5	504.003	508.670	504.003	502.448	499.337	492.337	487.670	486.114	483.003

IES INDOOR REPORT**PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-H-V-835-ITL93249.007.IES****CANDELA TABULATION - (Cont.)**

135.0	537.448	541.337	539.004	535.893	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	553.004	551.448
140.0	606.671	606.671	605.893	603.560	600.448	594.226	588.004	586.448	583.337
142.5	637.782	638.560	637.782	635.449	635.449	626.893	621.449	618.337	615.226
145.0	668.116	668.893	668.893	665.782	667.338	658.004	654.115	650.227	648.671
147.5	700.005	699.227	697.671	694.560	696.894	688.338	683.671	681.338	679.005
150.0	727.227	727.227	726.449	724.116	724.894	717.116	714.005	711.671	707.783
152.5	752.894	754.449	752.116	750.561	752.116	745.894	741.227	738.894	735.005
155.0	778.561	780.116	777.005	775.450	777.783	771.561	766.894	765.338	763.005
157.5	801.116	802.672	799.561	797.228	800.339	794.116	792.561	790.227	787.116
160.0	819.783	821.339	819.005	819.005	819.783	815.117	813.561	812.005	808.894
162.5	836.894	839.228	838.450	836.117	838.450	835.339	833.783	832.228	830.672
165.0	853.228	854.784	854.006	852.450	854.784	850.895	850.117	849.339	847.783
167.5	868.006	867.228	867.228	866.450	868.006	866.450	865.673	864.895	864.117
170.0	878.895	878.895	878.117	879.673	878.895	877.339	877.339	877.339	877.339
172.5	888.228	887.450	887.450	888.228	887.450	887.450	887.450	886.673	886.673
175.0	894.450	893.673	893.673	893.673	893.673	893.673	893.673	893.673	894.450
177.5	897.562	897.562	897.562	897.562	897.562	897.562	897.562	897.562	897.562
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-V-835-ITL93249.007.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	414.36	N.A.	8.00
0-30	858.59	N.A.	16.60
0-40	1365.84	N.A.	26.40
0-60	2285.95	N.A.	44.20
0-80	2779.91	N.A.	53.70
0-90	2846.48	N.A.	55.00
10-90	2737.61	N.A.	52.90
20-40	951.48	N.A.	18.40
20-50	1447.5	N.A.	28.00
40-70	1231.74	N.A.	23.80
60-80	493.96	N.A.	9.60
70-80	182.33	N.A.	3.50
80-90	66.58	N.A.	1.30
90-110	205.90	N.A.	4.00
90-120	468.03	N.A.	9.00
90-130	822.17	N.A.	15.90
90-150	1645.1	N.A.	31.80
90-180	2325.85	N.A.	45.00
110-180	2119.95	N.A.	41.00
0-180	5172.34	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	108.88
10-20	305.49
20-30	444.23
30-40	507.25
40-50	496.03
50-60	424.08
60-70	311.63
70-80	182.33
80-90	66.58
90-100	53.35
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

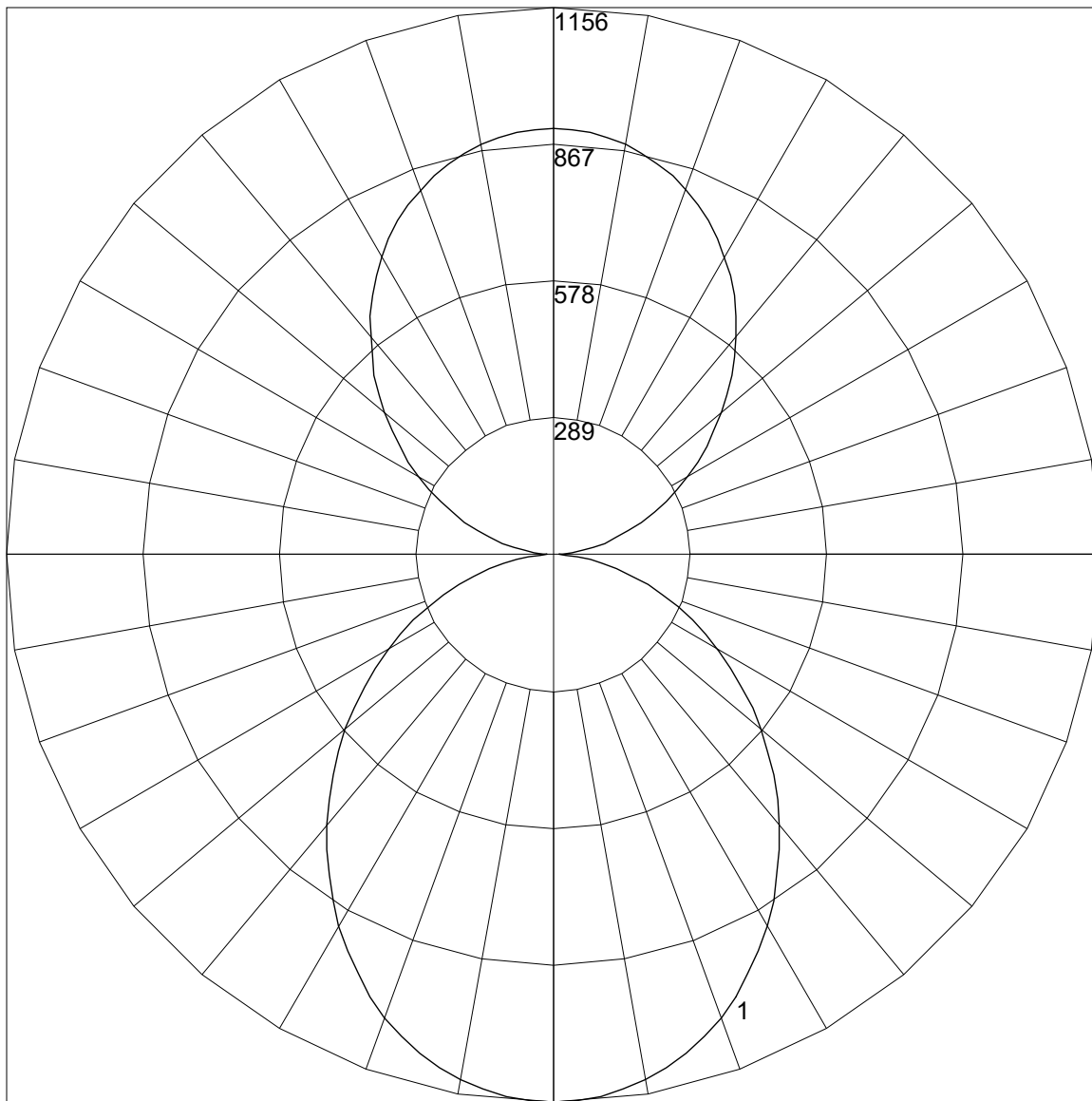
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-H-V-835-ITL93249.007.IES

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	94	91	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46
2	90	83	76	71	83	77	71	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	70	60	53	48	52	47	42	45	40	37	38	34	32	28
5	69	57	49	43	64	54	46	41	47	41	37	40	36	32	34	31	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	25	22
7	59	47	39	33	55	44	37	31	38	32	28	33	28	25	28	25	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	20	17
9	51	39	31	26	47	36	30	25	32	26	23	28	23	20	24	20	18	16
10	48	36	28	24	44	34	27	23	30	24	20	26	21	18	22	19	16	14

POLAR GRAPH



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