

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-V-8TW-ITL93249.910.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.910 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-V-8TW

[_INPUT_ELECTRICAL]120.0 VOLTS, 45.8 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 46.9 WATTS

[_ABSOLUTE]LUMENS]4384

[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	4386
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	96
Total Luminaire Watts	45.8
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	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	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-V-8TW-ITL93249.910.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

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Zone	Lumens	%Lamp	%Fixt
0-20	414.36	N.A.	9.40
0-30	858.59	N.A.	19.60
0-40	1365.84	N.A.	31.10
0-60	2285.95	N.A.	52.10
0-80	2779.91	N.A.	63.40
0-90	2846.48	N.A.	64.90
10-90	2737.61	N.A.	62.40
20-40	951.48	N.A.	21.70
20-50	1447.5	N.A.	33.00
40-70	1231.74	N.A.	28.10
60-80	493.96	N.A.	11.30
70-80	182.33	N.A.	4.20
80-90	66.58	N.A.	1.50
90-110	137.23	N.A.	3.10
90-120	310.67	N.A.	7.10
90-130	544.98	N.A.	12.40
90-150	1089.47	N.A.	24.80
90-180	1539.88	N.A.	35.10
110-180	1402.65	N.A.	32.00
0-180	4386.37	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	36.30
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

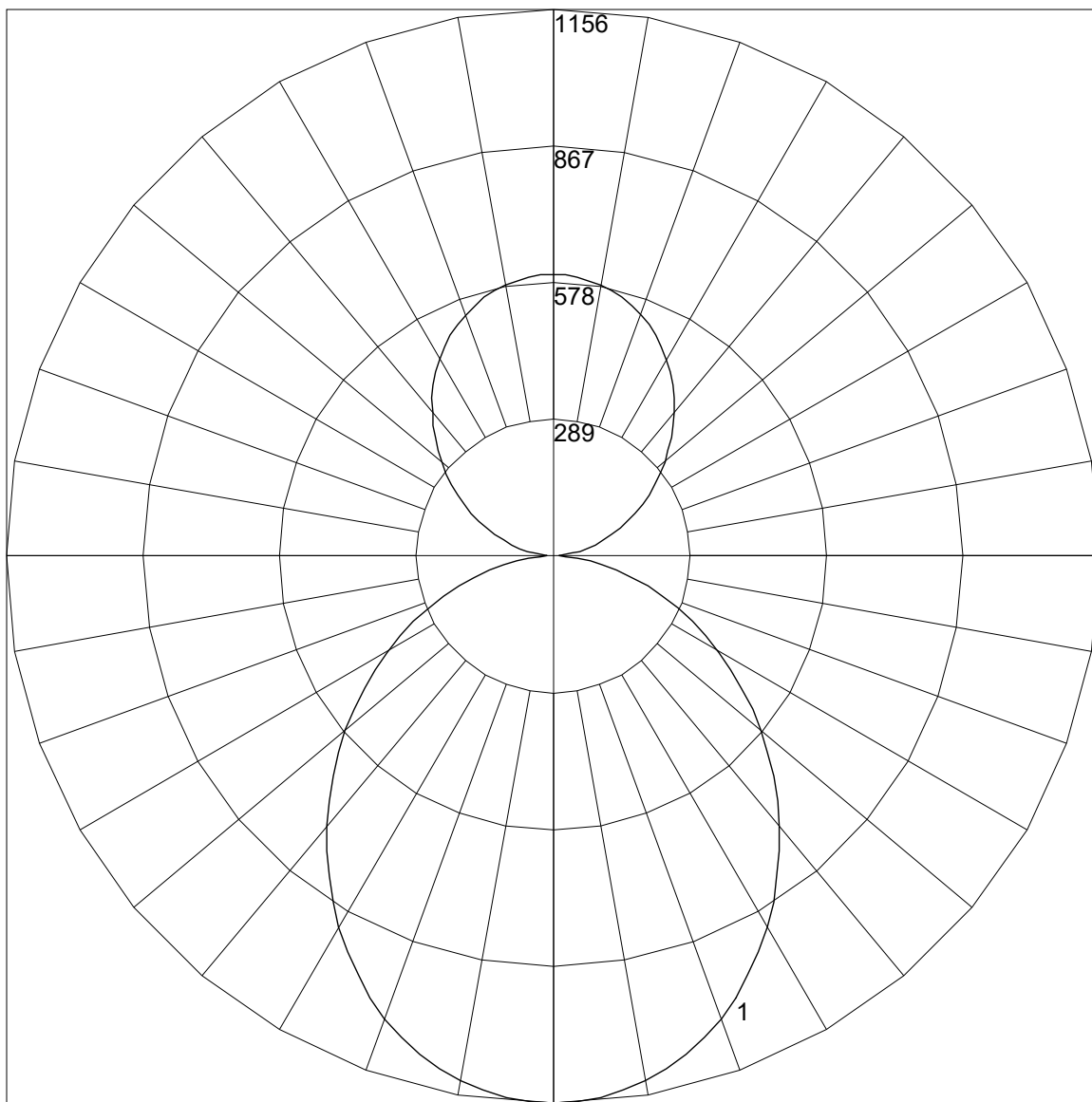
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-B-V-8TW-ITL93249.910.IES

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	92	92	92	80	80	80	70	70	70	65
1	101	97	93	89	95	91	87	84	80	78	75	71	69	67	62	60	59	55
2	92	84	78	73	86	80	74	69	70	66	62	62	59	56	54	52	50	46
3	84	74	67	61	79	70	63	58	62	57	53	55	51	47	48	45	42	39
4	77	66	58	52	72	62	55	49	56	50	45	49	45	41	43	40	37	33
5	71	59	51	45	66	56	48	43	50	44	39	44	39	36	39	35	32	29
6	65	53	45	39	61	50	43	37	45	39	34	40	35	31	35	31	28	26
7	61	48	40	34	57	46	38	33	41	35	30	37	32	28	32	28	25	23
8	56	44	36	30	53	42	34	29	37	31	27	34	29	25	30	26	23	20
9	53	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	21	19
10	49	37	29	25	46	35	28	24	32	26	22	29	24	20	26	22	19	17

POLAR GRAPH



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