

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-B-8TW-ITL93249.902.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.902 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-B-8TW

[_INPUT_ELECTRICAL]120.0 VOLTS, 29.8 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 31.5 WATTS

[_ABSOLUTE]LUMENS]3003

[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	3003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	29.8
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	5029	5166	5438
55	4453	4621	4943
65	3892	4047	4459
75	3310	3400	3865
85	2833	2779	3232

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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	594.893	594.893	594.893	594.893	594.893	594.893	594.893	594.893	594.893
2.5	594.378	594.378	594.893	594.378	593.863	593.863	593.863	593.349	593.349
5.0	591.805	591.805	591.805	591.805	591.290	590.776	590.261	589.746	589.746
7.5	587.688	587.173	587.173	587.173	586.144	585.630	584.600	584.086	583.057
10.0	579.969	580.484	580.484	580.484	579.454	578.425	577.396	576.367	575.852
12.5	571.735	571.221	571.221	571.735	571.221	569.162	568.133	566.074	565.560
15.0	559.899	560.928	559.899	561.443	561.443	558.870	556.811	554.238	552.180
17.5	545.490	547.034	547.034	548.577	548.577	546.004	542.402	539.829	537.771
20.0	531.081	532.625	533.139	534.168	535.197	531.595	527.993	523.361	522.332
22.5	514.613	515.642	516.671	519.245	520.274	515.642	511.525	506.379	505.350
25.0	497.116	498.145	499.175	502.777	502.777	499.175	494.543	487.853	485.280
27.5	477.561	478.075	480.649	484.251	484.765	480.649	474.473	469.327	466.239
30.0	458.006	459.035	462.123	464.695	466.239	461.093	455.433	448.228	447.199
32.5	435.877	438.965	441.023	445.655	446.684	440.509	435.877	428.158	425.585
35.0	414.778	416.837	419.924	424.556	424.556	420.439	414.264	407.574	404.486
37.5	393.679	395.737	398.825	402.942	403.971	400.369	393.164	386.474	383.901
40.0	372.580	373.609	376.697	382.358	383.387	378.755	372.580	363.831	361.258
42.5	348.908	350.966	355.083	360.229	361.258	358.171	350.966	343.247	340.159
45.0	326.779	328.838	332.440	337.072	339.130	336.042	327.808	321.118	318.545
47.5	305.166	306.709	310.312	315.458	317.002	313.399	305.680	298.990	297.446
50.0	282.522	285.610	288.698	294.359	295.388	291.786	284.066	277.891	275.318
52.5	261.423	262.967	266.570	272.230	273.260	270.172	263.482	256.277	256.277
55.0	239.295	241.868	244.956	249.073	250.617	249.073	241.868	236.207	234.149
57.5	219.225	221.284	222.827	227.974	229.517	226.430	219.740	215.623	214.079
60.0	199.155	199.670	202.243	206.874	208.933	206.360	200.185	195.038	192.980
62.5	179.600	180.114	181.658	186.290	187.319	185.261	179.600	175.998	173.939
65.0	159.015	160.045	162.103	164.676	167.249	164.676	160.559	156.442	155.413
67.5	141.004	142.033	142.033	145.121	146.665	145.636	139.975	137.916	137.402
70.0	122.993	123.507	122.478	126.080	126.595	125.566	121.963	120.419	118.876
72.5	106.010	105.496	104.981	107.040	107.554	107.554	104.466	102.923	101.893
75.0	88.513	89.028	87.999	88.513	89.543	89.543	87.999	85.940	86.455
77.5	73.590	73.590	71.017	72.046	71.017	72.560	71.017	71.017	71.531
80.0	59.181	59.181	56.093	56.607	54.549	57.122	56.093	57.122	56.607
82.5	46.315	45.286	42.713	42.198	40.140	42.198	42.713	43.742	44.257
85.0	33.450	32.935	30.362	28.304	26.245	28.818	30.362	31.391	32.421
87.5	23.158	22.128	18.012	16.982	13.895	15.953	18.526	21.099	22.128
90.0	15.953	14.924	11.322	9.263	6.175	7.719	10.292	13.895	14.924
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-B-8TW-ITL93249.902.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-B-8TW-ITL93249.902.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	213.24	N.A.	7.10
0-30	441.84	N.A.	14.70
0-40	702.88	N.A.	23.40
0-60	1176.38	N.A.	39.20
0-80	1430.58	N.A.	47.60
0-90	1464.84	N.A.	48.80
10-90	1408.81	N.A.	46.90
20-40	489.64	N.A.	16.30
20-50	744.90	N.A.	24.80
40-70	633.87	N.A.	21.10
60-80	254.20	N.A.	8.50
70-80	93.83	N.A.	3.10
80-90	34.26	N.A.	1.10
90-110	135.80	N.A.	4.50
90-120	309.23	N.A.	10.30
90-130	543.55	N.A.	18.10
90-150	1088.03	N.A.	36.20
90-180	1538.44	N.A.	51.20
110-180	1402.65	N.A.	46.70
0-180	3003.28	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	56.03
10-20	157.21
20-30	228.61
30-40	261.04
40-50	255.26
50-60	218.24
60-70	160.37
70-80	93.83
80-90	34.26
90-100	34.86
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

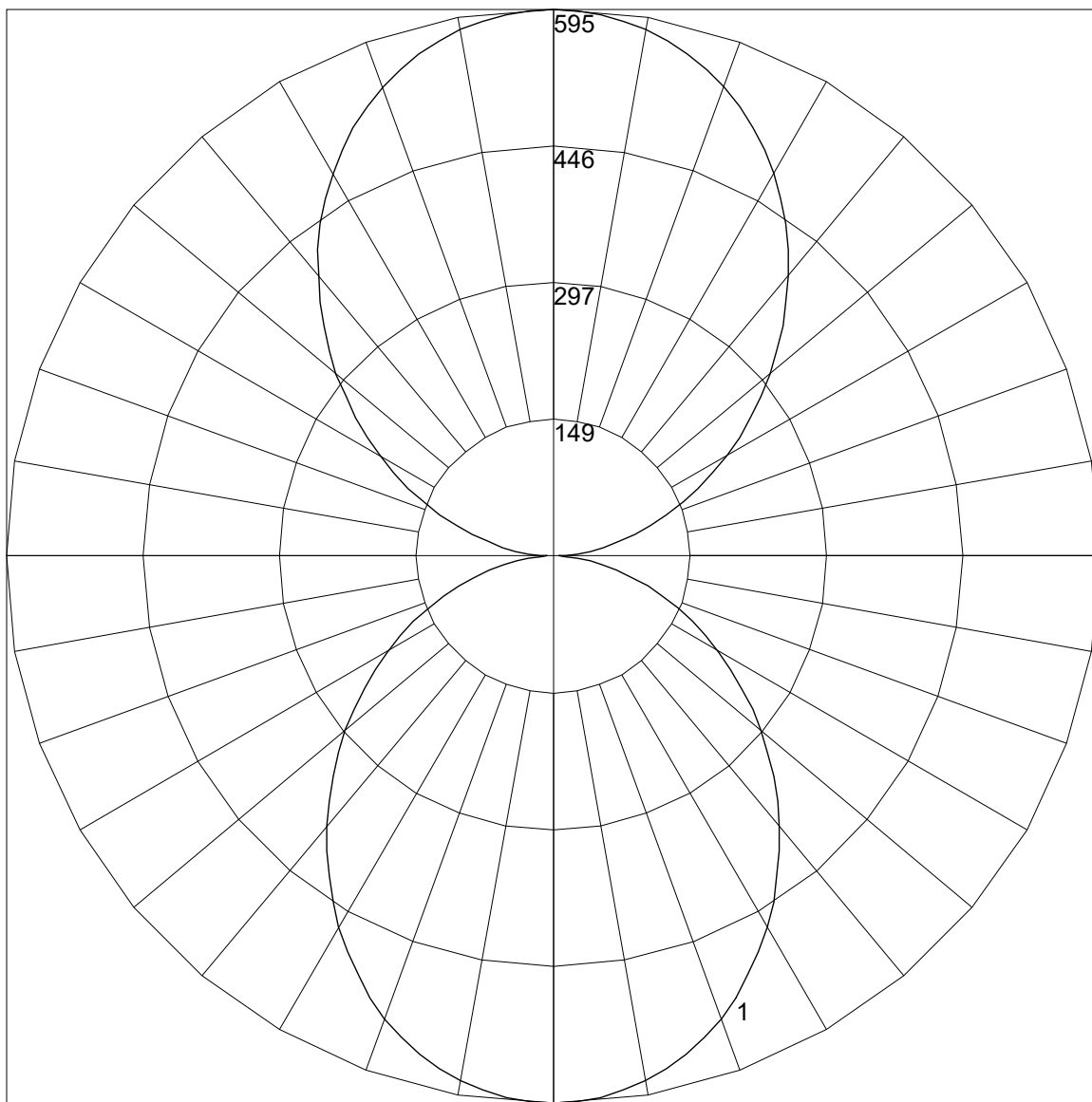
PHOTOMETRIC FILENAME : 4D90 - HP-4C-ID-P-37IN11-16IN-B-B-8TW-ITL93249.902.IES

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	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	81	75	70	82	75	70	65	63	60	56	53	50	47	43	41	39	34
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	35	33	29
4	74	63	56	50	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	57	48	42	63	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15	13

POLAR GRAPH



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