

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-B-835-ITL93249.008.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL93249.008 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-B-835

[_INPUT_ELECTRICAL]120.0 VOLTS, 34.0 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 35.1 WATTS

[_ABSOLUTE]LUMENS]3790

[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	3789
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	111
Total Luminaire Watts	34
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	5029	5166	5438
55	4453	4621	4943
65	3892	4047	4459
75	3310	3400	3865
85	2833	2779	3232

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	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	356.669
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-B-835-ITL93249.008.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-B-835-ITL93249.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	213.24	N.A.	5.60
0-30	441.84	N.A.	11.70
0-40	702.88	N.A.	18.50
0-60	1176.38	N.A.	31.00
0-80	1430.58	N.A.	37.80
0-90	1464.84	N.A.	38.70
10-90	1408.81	N.A.	37.20
20-40	489.64	N.A.	12.90
20-50	744.90	N.A.	19.70
40-70	633.87	N.A.	16.70
60-80	254.20	N.A.	6.70
70-80	93.83	N.A.	2.50
80-90	34.26	N.A.	0.90
90-110	204.46	N.A.	5.40
90-120	466.59	N.A.	12.30
90-130	820.73	N.A.	21.70
90-150	1643.66	N.A.	43.40
90-180	2324.41	N.A.	61.30
110-180	2119.95	N.A.	55.90
0-180	3789.25	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	51.91
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

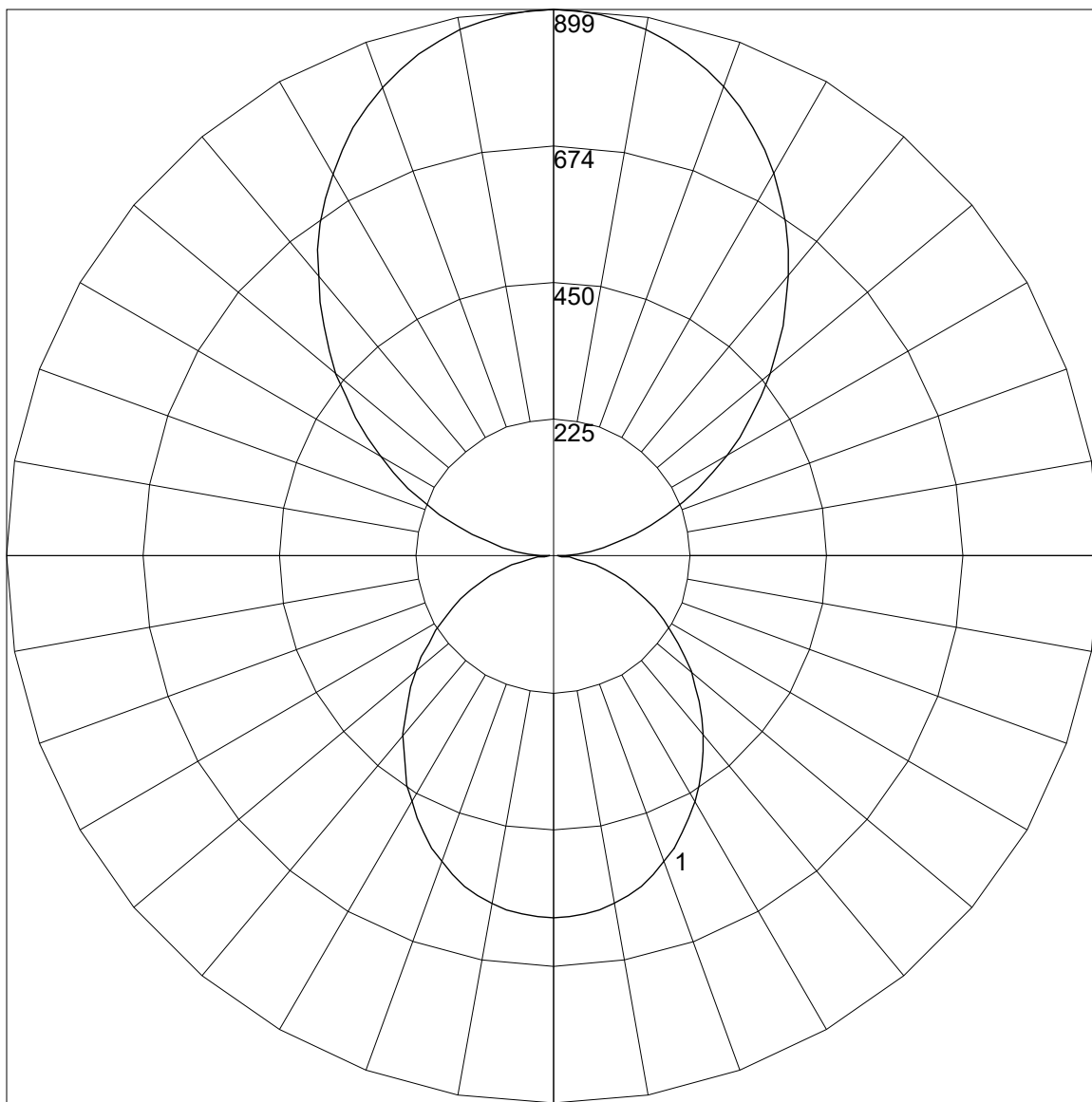
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	67	65	63	53	52	50	40	39	38	32
2	87	79	73	68	79	72	67	63	59	55	52	47	44	42	36	34	32	27
3	79	70	63	57	72	64	58	53	52	48	44	41	38	36	32	29	28	23
4	72	62	54	48	65	56	50	45	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	21	21	18	16	14
8	52	40	33	28	48	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

POLAR GRAPH



Maximum Candela = 899.117 Located At Horizontal Angle = 0, Vertical Angle = 180
1 - Vertical Plane Through Horizontal Angles (90 - 270)