

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 : HP-4-P-D-4FT-B-B-835-ASY-DAO-ITL89988-ITL94331.602.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89988-ITL94331.602 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]01/11/21

[_REVISED]08/25/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-P-D-4ft-B-B-835-ASY-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 36.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 39.5 WATTS

[OTHER]see www.finelite.com for source files ITL89988 and ITL94331. 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

[_ABSOLUTE LUMENS]4282

[_CONVERT] Photometric web converted from original test data

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4279
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	116
Total Luminaire Watts	36.9
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
Luminous Length (0-180)	0.33 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6077	6274	5200
55	5220	5580	4624
65	4370	4750	4031
75	3519	3894	3487
85	2758	3000	3048

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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	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777	798.777
2.5	815.247	814.217	810.100	804.439	798.263	791.057	785.910	781.793	780.249
5.0	828.114	826.055	818.850	807.527	794.145	781.278	768.926	762.235	759.662
7.5	837.893	834.290	824.511	807.527	787.454	767.382	750.398	741.133	737.531
10.0	844.583	841.495	826.570	804.439	779.220	751.942	731.869	719.002	712.826
12.5	846.642	844.069	826.570	798.263	769.441	734.443	711.797	695.842	689.151
15.0	844.583	841.495	822.967	788.998	755.544	714.885	690.181	672.167	664.961
17.5	837.893	835.319	816.276	778.190	739.589	694.298	665.476	648.492	639.742
20.0	826.570	825.026	805.983	762.750	722.091	671.138	641.286	623.787	616.067
22.5	811.129	809.585	792.086	746.795	703.562	646.948	618.126	599.083	593.421
25.0	791.572	791.057	775.102	728.266	680.916	622.758	593.421	575.922	571.290
27.5	768.411	768.411	754.000	706.650	657.241	597.539	567.173	553.277	547.615
30.0	741.648	743.192	730.325	682.975	630.993	570.261	543.498	530.116	526.514
32.5	711.797	713.856	704.077	658.271	603.715	544.013	518.279	506.956	505.412
35.0	676.799	681.946	676.284	629.963	574.378	516.220	494.089	485.339	483.281
37.5	642.830	649.006	643.860	600.112	543.498	488.942	468.870	463.723	463.208
40.0	604.744	613.494	611.435	569.232	513.647	460.635	443.651	440.563	443.136
42.5	567.173	573.349	577.981	537.836	482.766	433.357	419.461	419.461	421.520
45.0	524.455	534.748	541.439	502.324	448.798	405.050	395.271	398.359	400.933
47.5	485.339	496.662	504.382	468.870	417.917	378.287	369.537	376.228	381.375
50.0	445.709	455.488	466.296	435.416	385.492	351.524	345.862	354.097	359.759
52.5	406.594	415.344	428.725	399.389	353.582	322.187	321.673	331.451	338.142
55.0	365.420	377.257	390.639	363.876	323.731	296.453	297.483	309.320	317.040
57.5	328.363	338.142	352.553	330.422	292.851	269.690	273.293	287.189	294.909
60.0	290.277	302.115	316.526	297.483	264.029	244.471	248.589	262.485	270.720
62.5	256.823	265.058	281.013	263.514	236.236	219.252	225.943	239.839	248.074
65.0	225.428	232.633	244.986	231.604	207.929	196.092	201.238	216.679	224.399
67.5	192.489	198.665	211.532	201.753	181.166	171.902	179.107	193.518	198.665
70.0	164.696	169.328	180.651	172.417	156.976	148.741	155.947	169.328	174.990
72.5	135.875	141.021	151.315	144.109	133.301	126.610	134.330	145.139	151.315
75.0	111.170	115.287	123.008	118.376	110.141	106.023	112.199	122.493	127.640
77.5	88.524	91.098	97.274	94.700	88.524	85.436	91.612	99.332	102.421
80.0	66.908	68.967	73.599	73.084	67.937	66.393	71.025	77.716	79.775
82.5	47.350	47.865	51.468	50.953	49.409	48.380	51.468	55.585	57.644
85.0	29.337	29.337	31.910	31.910	32.425	30.881	32.939	34.483	36.027
87.5	11.323	12.352	13.382	14.411	14.926	14.411	14.926	15.440	15.955
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	34.482	34.996	29.850	31.394	11.322	29.850	46.833	56.097	59.700
95.0	73.081	74.625	75.139	76.683	29.335	47.348	72.566	85.947	90.064
97.5	115.282	123.002	139.986	116.312	47.863	62.788	95.725	115.282	120.944
100.0	178.585	188.878	204.832	154.396	66.905	79.771	114.768	138.956	147.191
102.5	241.372	253.209	267.620	191.966	86.976	96.755	135.354	156.969	165.204
105.0	299.528	322.687	332.981	229.021	106.533	112.709	151.308	177.041	182.702
107.5	369.006	408.635	401.429	262.988	127.119	127.119	166.748	194.539	199.685
110.0	464.732	503.845	466.790	291.808	147.705	141.530	182.702	212.552	217.698
112.5	581.043	598.027	531.122	317.026	168.806	155.425	198.656	230.050	236.226
115.0	687.062	690.150	583.616	340.186	189.907	169.835	213.066	247.033	253.724
117.5	786.390	770.950	620.672	360.257	211.008	184.760	226.447	264.017	271.222
120.0	866.161	831.165	643.316	379.299	234.167	200.715	238.284	278.942	288.206
122.5	923.802	870.793	656.183	398.856	257.841	216.154	249.607	293.867	304.675
125.0	957.769	889.320	662.873	417.384	280.486	231.079	259.385	305.189	319.085
127.5	969.606	891.894	666.990	435.396	303.645	246.519	268.649	314.453	331.951
130.0	964.460	884.174	670.078	454.439	326.290	261.444	277.398	320.114	339.671
132.5	948.505	871.308	673.681	473.995	349.449	276.369	286.662	324.231	342.244

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-P-D-4FT-B-B-835-ASY-DAO-ITL89988-ITL94331.602.IES****CANDELA TABULATION - (Cont.)**

135.0	927.919	856.383	678.313	493.552	372.609	293.867	295.411	327.319	343.274
137.5	906.819	841.972	683.974	514.138	396.283	312.909	304.675	330.407	343.274
140.0	885.718	828.591	690.150	534.725	420.471	333.495	313.424	332.981	343.274
142.5	867.190	818.813	696.840	555.311	444.146	355.111	322.173	335.554	343.274
145.0	852.780	810.578	703.531	575.382	467.820	376.211	331.437	339.156	343.788
147.5	840.428	804.403	711.765	594.939	491.494	397.827	342.759	344.303	346.361
150.0	830.650	799.771	720.514	613.466	515.168	420.986	357.169	349.964	350.479
152.5	821.901	795.654	729.263	630.450	536.783	445.690	377.755	357.169	355.111
155.0	813.666	793.080	736.983	645.375	557.884	471.937	402.973	367.977	363.345
157.5	809.034	792.051	742.644	658.756	577.955	498.699	430.250	386.504	376.726
160.0	805.432	791.022	746.247	670.078	596.483	524.431	458.041	415.325	401.429
162.5	798.741	787.419	746.761	678.827	613.466	549.649	486.862	447.748	434.367
165.0	791.022	779.699	744.188	685.518	627.877	572.809	519.285	480.171	468.334
167.5	778.155	768.892	737.498	689.120	640.228	593.909	550.164	515.168	503.331
170.0	761.687	754.481	728.749	690.664	651.036	613.466	579.499	554.281	545.018
172.5	741.100	736.468	716.397	689.120	658.756	630.450	606.261	588.763	582.587
175.0	721.029	716.397	703.016	685.518	665.446	645.889	630.450	619.642	615.525
177.5	695.296	693.238	686.547	678.313	668.534	658.756	651.036	645.375	643.316
180.0	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078	670.078

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Zone	Lumens	%Lamp	%Fixt
0-20	288.05	N.A.	6.70
0-30	601.44	N.A.	14.10
0-40	963.81	N.A.	22.50
0-60	1621.64	N.A.	37.90
0-80	1962.58	N.A.	45.90
0-90	1998.75	N.A.	46.70
10-90	1923.43	N.A.	44.90
20-40	675.76	N.A.	15.80
20-50	1031.65	N.A.	24.10
40-70	875.58	N.A.	20.50
60-80	340.94	N.A.	8.00
70-80	123.20	N.A.	2.90
80-90	36.17	N.A.	0.80
90-110	297.21	N.A.	6.90
90-120	653.51	N.A.	15.30
90-130	1063.33	N.A.	24.80
90-150	1775.95	N.A.	41.50
90-180	2280.44	N.A.	53.30
110-180	1983.22	N.A.	46.30
0-180	4279.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	75.32
10-20	212.73
20-30	313.39
30-40	362.37
40-50	355.90
50-60	301.94
60-70	217.74
70-80	123.20
80-90	36.17
90-100	75.02
100-110	222.20
110-120	356.30
120-130	409.81
130-140	382.59
140-150	330.02
150-160	263.85
160-170	177.45
170-180	63.19

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

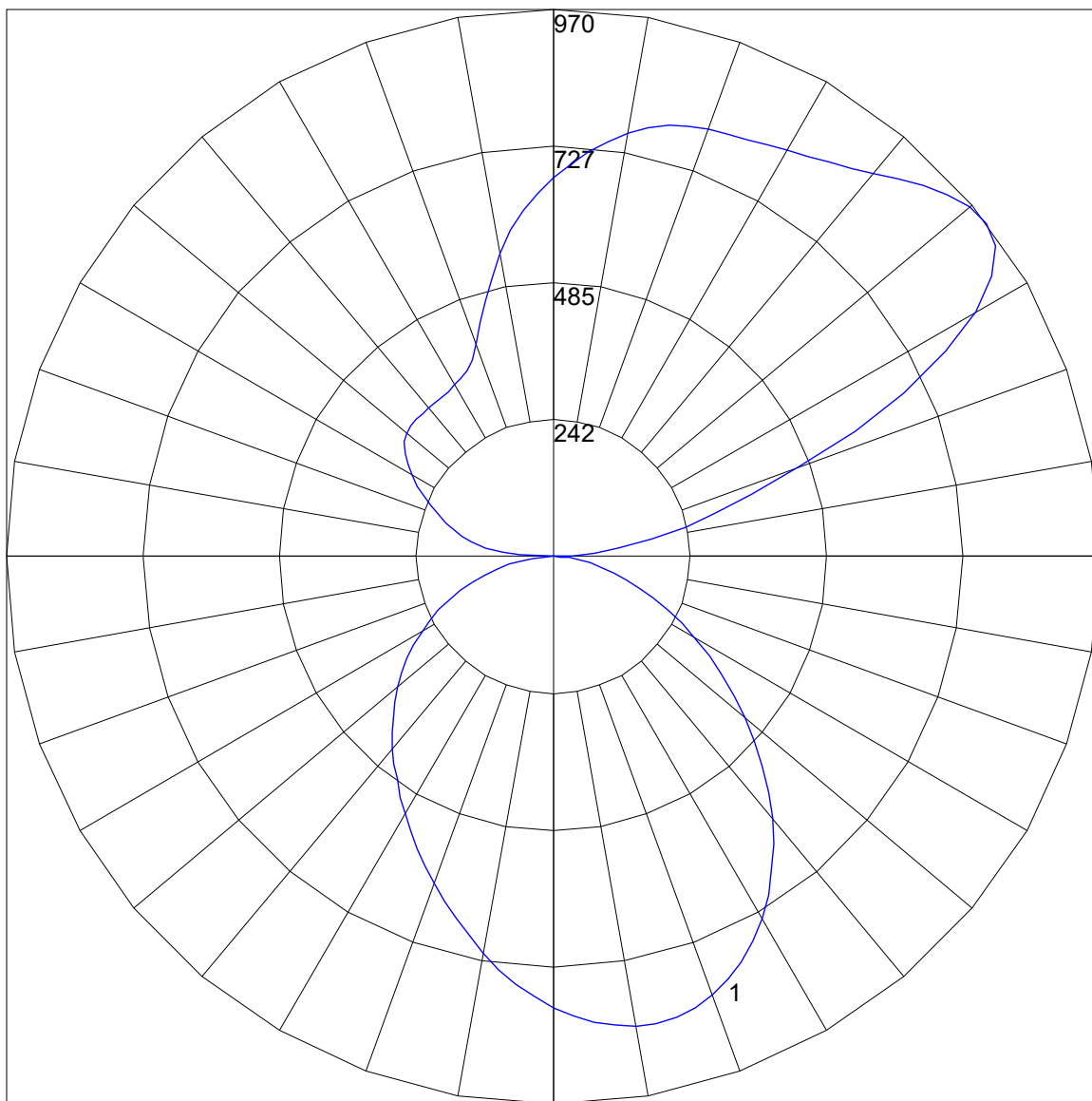
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	53	53	53	47
1	97	93	89	86	89	85	82	79	72	69	67	59	57	56	47	46	45	39
2	88	81	75	70	81	75	70	65	63	59	56	52	49	47	41	40	38	33
3	81	71	64	58	74	66	60	54	55	51	47	46	42	39	37	34	32	28
4	74	63	55	49	68	58	52	46	49	44	40	41	37	34	33	30	28	24
5	68	56	48	42	62	52	45	40	44	39	35	37	33	29	30	27	24	21
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	22	19
7	58	46	38	32	53	42	35	30	36	31	27	30	26	23	25	22	19	17
8	54	41	34	28	49	38	32	27	33	27	24	28	23	20	23	20	17	15
9	50	38	30	25	46	35	29	24	30	25	21	25	21	18	21	18	16	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

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POLAR GRAPH



Maximum Candela = 969.606 Located At Horizontal Angle = 0, Vertical Angle = 127.5

1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)