

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-ID-4FT-S-S-835-WSO-DAO-ITL89033-ITL94331.003.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/08/17

[ISSUEDATE]08/27/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-S-S-835-WSO-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 29.1 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 32.0 WATTS

[_ABSOLUTE]LUMENS]3351

[_CONVERT] Photometric web converted from original test data

[OTHER]see www.finelite.com for source files ITL89033 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3351
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	29.1
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)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4912	5071	4203
55	4219	4510	3738
65	3532	3839	3258
75	2844	3147	2818
85	2229	2425	2464

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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	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345
2.5	648.445	647.626	644.351	639.848	634.936	629.205	625.111	621.836	620.608
5.0	658.680	657.042	651.311	642.305	631.661	621.427	611.602	606.280	604.233
7.5	666.458	663.592	655.814	642.305	626.339	610.374	596.864	589.496	586.630
10.0	671.779	669.323	657.451	639.848	619.789	598.092	582.127	571.893	566.980
12.5	673.417	671.370	657.451	634.936	612.011	584.174	566.162	553.471	548.149
15.0	671.779	669.323	654.586	627.567	600.958	568.618	548.968	534.640	528.909
17.5	666.458	664.411	649.264	618.971	588.268	552.243	529.318	515.809	508.849
20.0	657.451	656.223	641.077	606.689	574.349	533.821	510.077	496.159	490.018
22.5	645.170	643.942	630.024	593.999	559.611	514.581	491.656	476.509	472.006
25.0	629.614	629.205	616.514	579.261	541.599	495.340	472.006	458.087	454.403
27.5	611.192	611.192	599.730	562.068	522.768	475.281	451.128	440.075	435.572
30.0	589.905	591.133	580.899	543.237	501.890	453.584	432.297	421.653	418.788
32.5	566.162	567.799	560.021	523.587	480.193	432.706	412.238	403.231	402.003
35.0	538.324	542.418	537.915	501.071	456.859	410.600	392.997	386.038	384.400
37.5	511.306	516.218	512.124	477.328	432.297	388.903	372.938	368.844	368.435
40.0	481.012	487.971	486.334	452.765	408.553	366.388	352.879	350.422	352.469
42.5	451.128	456.040	459.725	427.794	383.991	344.691	333.638	333.638	335.276
45.0	417.150	425.337	430.659	399.547	356.972	322.176	314.398	316.854	318.901
47.5	386.038	395.044	401.185	372.938	332.410	300.888	293.929	299.251	303.345
50.0	354.516	362.294	370.891	346.329	306.620	279.601	275.098	281.648	286.151
52.5	323.404	330.363	341.007	317.673	281.239	256.267	255.857	263.636	268.957
55.0	290.654	300.070	310.713	289.426	257.495	235.798	236.617	246.033	252.173
57.5	261.179	268.957	280.420	262.817	232.933	214.511	217.376	228.430	234.570
60.0	230.886	240.301	251.764	236.617	210.008	194.452	197.727	208.780	215.330
62.5	204.277	210.827	223.517	209.599	187.902	174.393	179.714	190.767	197.317
65.0	179.305	185.036	194.861	184.217	165.386	155.971	160.065	172.346	178.486
67.5	153.105	158.018	168.252	160.474	144.099	136.730	142.462	153.924	158.018
70.0	130.999	134.683	143.690	137.140	124.859	118.308	124.040	134.683	139.186
72.5	108.074	112.168	120.355	114.624	106.027	100.706	106.846	115.443	120.355
75.0	88.424	91.699	97.840	94.156	87.606	84.331	89.243	97.430	101.524
77.5	70.412	72.459	77.371	75.324	70.412	67.956	72.868	79.009	81.465
80.0	53.218	54.856	58.540	58.131	54.037	52.809	56.493	61.815	63.453
82.5	37.662	38.072	40.937	40.528	39.300	38.481	40.937	44.212	45.850
85.0	23.334	23.334	25.381	25.381	25.790	24.562	26.200	27.428	28.656
87.5	9.006	9.825	10.644	11.462	11.872	11.462	11.872	12.281	12.691
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	6.550	11.462	12.280	12.280	12.280	12.280	12.280	11.462	6.550
95.0	18.421	32.748	33.566	26.198	26.198	26.198	33.566	32.748	18.421
97.5	32.338	55.671	85.962	53.624	46.665	53.624	85.962	55.671	32.338
100.0	48.712	76.138	136.312	100.699	79.003	100.699	136.312	76.138	48.712
102.5	68.361	92.921	201.397	155.960	126.897	155.960	201.397	92.921	68.361
105.0	86.372	110.932	251.337	241.104	193.210	241.104	251.337	110.932	86.372
107.5	104.792	128.943	274.260	352.854	296.774	352.854	274.260	128.943	104.792
110.0	122.394	145.726	285.313	445.776	424.899	445.776	285.313	145.726	122.394
112.5	140.405	162.100	298.412	484.254	509.633	484.254	298.412	162.100	140.405
115.0	157.597	177.655	320.516	496.125	541.562	496.125	320.516	177.655	157.597
117.5	171.515	191.982	338.118	501.856	553.433	501.856	338.118	191.982	171.515
120.0	184.205	205.900	349.580	524.370	562.029	524.370	349.580	205.900	184.205
122.5	195.257	219.408	356.948	552.205	588.637	552.205	356.948	219.408	195.257
125.0	205.900	231.279	362.269	567.351	619.747	567.351	362.269	231.279	205.900
127.5	215.724	241.922	366.363	567.760	636.121	567.760	366.363	241.922	215.724
130.0	223.911	251.337	369.638	557.936	633.255	557.936	369.638	251.337	223.911
132.5	232.507	260.343	372.503	544.428	618.109	544.428	372.503	260.343	232.507

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-S-S-835-WSO-DAO-ITL89033-ITL94331.003.IES****CANDELA TABULATION - (Cont.)**

135.0	240.694	268.530	374.550	529.691	598.461	529.691	374.550	268.530	240.694
137.5	248.472	275.898	375.368	513.727	575.947	513.727	375.368	275.898	248.472
140.0	256.659	282.857	375.778	497.762	552.205	497.762	375.778	282.857	256.659
142.5	264.846	289.406	375.368	480.979	528.463	480.979	375.368	289.406	264.846
145.0	273.442	295.956	373.322	465.424	505.130	465.424	373.322	295.956	273.442
147.5	280.401	301.277	370.456	449.869	482.617	449.869	370.456	301.277	280.401
150.0	287.769	306.599	367.591	434.723	462.149	434.723	367.591	306.599	287.769
152.5	295.137	311.101	364.316	419.987	443.320	419.987	364.316	311.101	295.137
155.0	301.687	315.604	361.041	406.069	424.490	406.069	361.041	315.604	301.687
157.5	307.827	319.288	356.948	393.380	407.707	393.380	356.948	319.288	307.827
160.0	313.558	322.972	353.673	381.918	392.561	381.918	353.673	322.972	313.558
162.5	318.470	325.838	349.580	371.275	379.462	371.275	349.580	325.838	318.470
165.0	323.382	328.294	345.896	361.860	368.000	361.860	345.896	328.294	323.382
167.5	327.066	330.341	342.621	353.673	358.176	353.673	342.621	330.341	327.066
170.0	329.931	332.387	340.165	347.124	349.580	347.124	340.165	332.387	329.931
172.5	331.978	333.615	338.118	341.802	343.440	341.802	338.118	333.615	331.978
175.0	334.025	334.434	336.071	337.709	338.937	337.709	336.071	334.434	334.025
177.5	334.843	334.843	335.253	335.662	335.662	335.662	335.253	334.843	334.843
180.0	335.253	335.253	335.253	335.253	335.253	335.253	335.253	335.253	335.253

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Zone	Lumens	%Lamp	%Fixt
0-20	229.11	N.A.	6.80
0-30	478.38	N.A.	14.30
0-40	766.61	N.A.	22.90
0-60	1289.85	N.A.	38.50
0-80	1561.03	N.A.	46.60
0-90	1589.8	N.A.	47.40
10-90	1529.89	N.A.	45.70
20-40	537.49	N.A.	16.00
20-50	820.57	N.A.	24.50
40-70	696.43	N.A.	20.80
60-80	271.18	N.A.	8.10
70-80	97.99	N.A.	2.90
80-90	28.77	N.A.	0.90
90-110	238.03	N.A.	7.10
90-120	567.00	N.A.	16.90
90-130	915.79	N.A.	27.30
90-150	1463.00	N.A.	43.70
90-180	1761.03	N.A.	52.60
110-180	1523.01	N.A.	45.50
0-180	3350.83	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	59.91
10-20	169.21
20-30	249.27
30-40	288.23
40-50	283.08
50-60	240.16
60-70	173.19
70-80	97.99
80-90	28.77
90-100	39.66
100-110	198.36
110-120	328.97
120-130	348.80
130-140	307.79
140-150	239.42
150-160	167.62
160-170	98.20
170-180	32.21

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

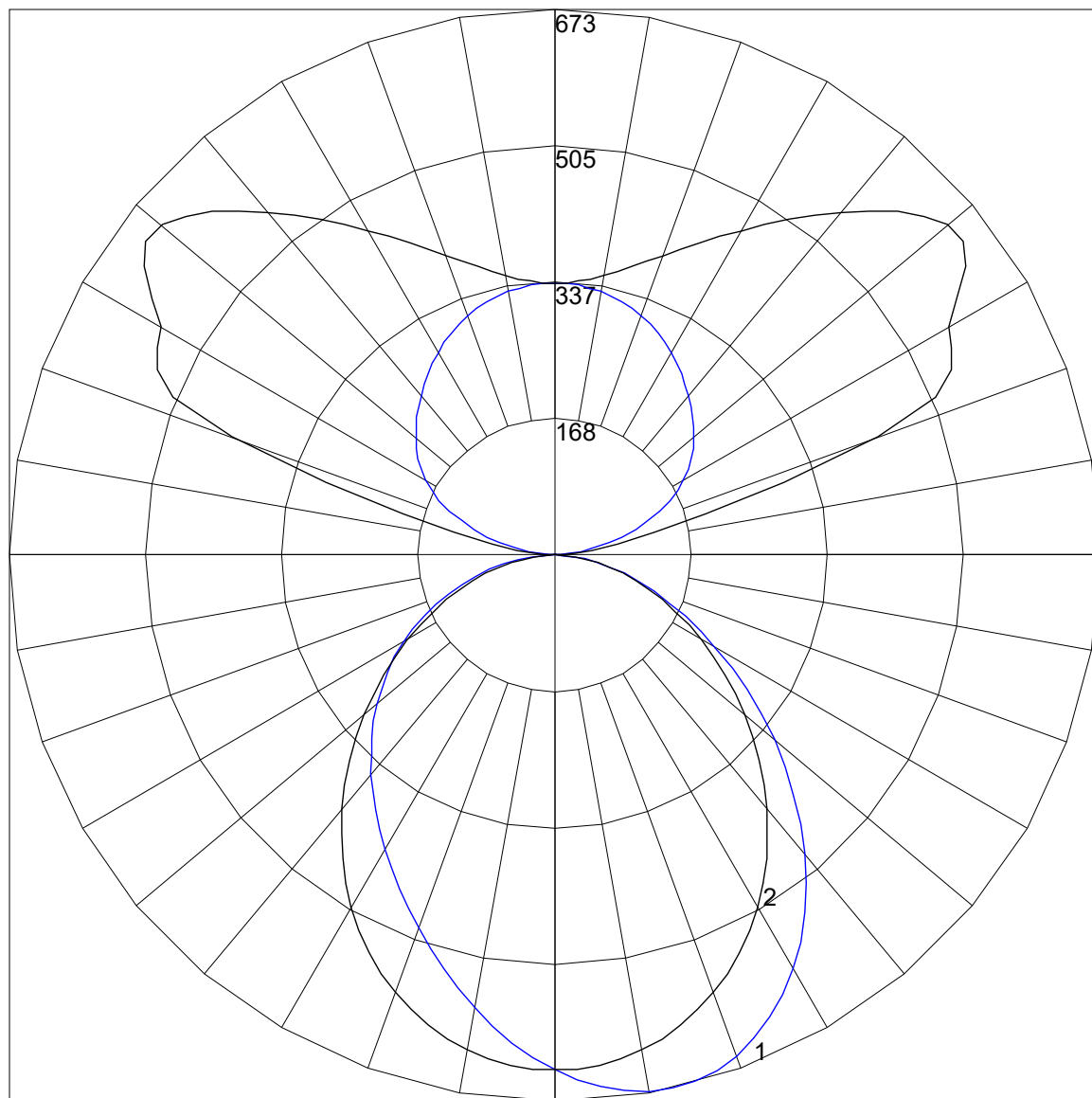
Effective Floor Cavity Reflectance 0.20

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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	97	93	89	86	89	86	82	79	72	70	67	59	58	56	48	47	46	40
2	89	81	75	70	81	75	70	65	63	59	56	52	49	47	42	40	38	34
3	81	71	64	58	74	66	60	55	56	51	47	46	43	40	37	35	33	29
4	74	63	55	49	68	59	52	46	50	44	40	41	37	34	33	31	28	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	30	27	25	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	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	17	15
9	50	38	30	25	46	35	29	24	30	25	21	26	21	18	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12

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POLAR GRAPH



Maximum Candela = 673.417 Located At Horizontal Angle = 0, Vertical Angle = 12.5

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

2 - Vertical Plane Through Horizontal Angles (90 - 270)