

# 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-2-ID-4FT-H-H-835-F-DSO-ITL85132-ITL94139.001.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL94139.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]12/17/2020

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-ID-4ft-H-H-835-F-DSO

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 55.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 56.7 WATTS

[ABSOLUTE]LUMENS]5512

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL85132 and ITL94139. 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](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	5513
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	55.7
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)	0.18 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	10756	13595	13962
55	9780	12518	12518
65	8774	11122	10814
75	7803	9491	8989
85	6775	7182	6504

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	907.008	907.008	907.008	907.008	907.008
<b>2.5</b>	905.452	905.452	906.230	907.785	907.785
<b>5.0</b>	900.785	901.562	905.452	909.341	910.897
<b>7.5</b>	892.228	895.339	902.340	910.897	915.564
<b>10.0</b>	881.338	885.227	900.785	917.120	922.565
<b>12.5</b>	868.114	872.781	899.229	921.787	928.010
<b>15.0</b>	850.222	858.001	894.562	923.343	931.122
<b>17.5</b>	831.553	841.666	888.338	923.343	932.678
<b>20.0</b>	808.217	822.997	880.560	919.454	929.566
<b>22.5</b>	783.325	801.216	867.336	910.897	922.565
<b>25.0</b>	755.321	779.435	852.556	899.229	910.119
<b>27.5</b>	727.317	756.099	835.443	882.893	893.784
<b>30.0</b>	696.980	731.207	813.662	861.113	869.669
<b>32.5</b>	665.865	703.203	791.104	836.221	843.221
<b>35.0</b>	633.194	673.644	765.433	805.883	810.551
<b>37.5</b>	601.301	644.084	735.096	772.434	774.768
<b>40.0</b>	567.074	612.969	702.425	736.652	735.096
<b>42.5</b>	534.403	580.298	668.976	696.202	693.091
<b>45.0</b>	500.954	546.849	633.194	654.975	650.307
<b>47.5</b>	468.284	513.400	594.300	612.191	607.524
<b>50.0</b>	434.057	479.174	554.628	567.852	560.073
<b>52.5</b>	400.608	443.391	514.178	524.291	516.512
<b>55.0</b>	369.493	408.387	472.951	479.174	472.951
<b>57.5</b>	336.822	373.382	431.723	435.613	425.500
<b>60.0</b>	305.707	337.600	390.495	393.607	383.495
<b>62.5</b>	276.147	303.373	350.824	350.046	342.267
<b>65.0</b>	244.254	270.702	309.596	308.818	301.039
<b>67.5</b>	216.250	237.253	270.702	268.368	260.590
<b>70.0</b>	187.469	205.360	233.364	229.475	222.474
<b>72.5</b>	159.465	174.245	196.804	192.914	186.691
<b>75.0</b>	133.017	143.908	161.799	157.910	153.242
<b>77.5</b>	108.125	115.904	128.350	124.461	120.571
<b>80.0</b>	84.789	88.678	98.013	93.346	90.234
<b>82.5</b>	62.230	63.786	68.453	65.342	63.008
<b>85.0</b>	38.894	40.450	41.228	38.894	37.338
<b>87.5</b>	17.891	17.891	16.335	15.558	14.002
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	23.336	23.336	23.336	25.669	25.669
<b>95.0</b>	55.228	52.895	52.895	53.673	54.451
<b>97.5</b>	87.121	84.787	83.232	84.009	84.009
<b>100.0</b>	119.791	115.902	115.902	115.902	115.124
<b>102.5</b>	154.017	150.906	149.350	148.572	148.572
<b>105.0</b>	189.799	187.465	183.576	182.798	182.020
<b>107.5</b>	226.359	224.025	219.358	218.580	217.802
<b>110.0</b>	264.474	262.140	258.251	256.695	254.362
<b>112.5</b>	304.145	300.256	297.922	294.033	291.699
<b>115.0</b>	343.816	341.483	339.927	332.148	330.593
<b>117.5</b>	385.821	381.932	381.932	372.597	371.042
<b>120.0</b>	428.604	422.381	423.936	414.602	411.491
<b>122.5</b>	469.053	462.830	465.941	458.163	452.717
<b>125.0</b>	514.169	504.834	507.946	500.167	496.278
<b>127.5</b>	558.507	548.395	549.951	543.728	542.172
<b>130.0</b>	602.067	591.955	593.511	585.732	586.510
<b>132.5</b>	645.628	634.738	637.071	629.293	629.293

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<b>135.0</b>	687.633	677.520	680.632	673.631	673.631
<b>137.5</b>	730.415	720.303	723.414	717.192	716.414
<b>140.0</b>	773.198	763.086	765.419	761.530	759.196
<b>142.5</b>	813.647	802.757	805.868	801.979	798.867
<b>145.0</b>	854.874	843.206	846.317	843.206	837.761
<b>147.5</b>	892.989	881.321	885.210	880.543	875.098
<b>150.0</b>	929.549	917.881	922.548	917.103	912.436
<b>152.5</b>	964.553	952.885	957.552	952.885	948.217
<b>155.0</b>	998.001	986.333	991.778	987.111	982.443
<b>157.5</b>	1026.782	1015.892	1022.115	1017.447	1012.780
<b>160.0</b>	1054.785	1044.673	1050.118	1045.451	1040.783
<b>162.5</b>	1078.899	1070.342	1074.232	1071.120	1068.009
<b>165.0</b>	1100.679	1092.900	1095.234	1093.678	1091.345
<b>167.5</b>	1117.014	1112.347	1113.903	1112.347	1111.569
<b>170.0</b>	1131.794	1129.460	1130.238	1128.682	1127.904
<b>172.5</b>	1144.239	1143.461	1143.461	1142.684	1142.684
<b>175.0</b>	1152.796	1152.796	1152.796	1152.796	1152.018
<b>177.5</b>	1157.463	1158.241	1158.241	1158.241	1157.463
<b>180.0</b>	1160.575	1160.575	1160.575	1160.575	1160.575

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-H-H-835-F-DSO-ITL85132-ITL94139.001.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	338.20	N.A.	6.10
0-30	725.47	N.A.	13.20
0-40	1188.76	N.A.	21.60
0-60	2051.46	N.A.	37.20
0-80	2500.92	N.A.	45.40
0-90	2546.37	N.A.	46.20
10-90	2460.09	N.A.	44.60
20-40	850.56	N.A.	15.40
20-50	1315.01	N.A.	23.90
40-70	1150.84	N.A.	20.90
60-80	449.46	N.A.	8.20
70-80	161.32	N.A.	2.90
80-90	45.45	N.A.	0.80
90-110	256.08	N.A.	4.60
90-120	590.97	N.A.	10.70
90-130	1042.66	N.A.	18.90
90-150	2093.73	N.A.	38.00
90-180	2966.28	N.A.	53.80
110-180	2710.2	N.A.	49.20
0-180	5512.65	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	86.28
10-20	251.92
20-30	387.27
30-40	463.29
40-50	464.46
50-60	398.24
60-70	288.14
70-80	161.32
80-90	45.45
90-100	59.94
100-110	196.14
110-120	334.89
120-130	451.69
130-140	523.16
140-150	527.91
150-160	454.88
160-170	308.38
170-180	109.30

# IES INDOOR REPORT

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

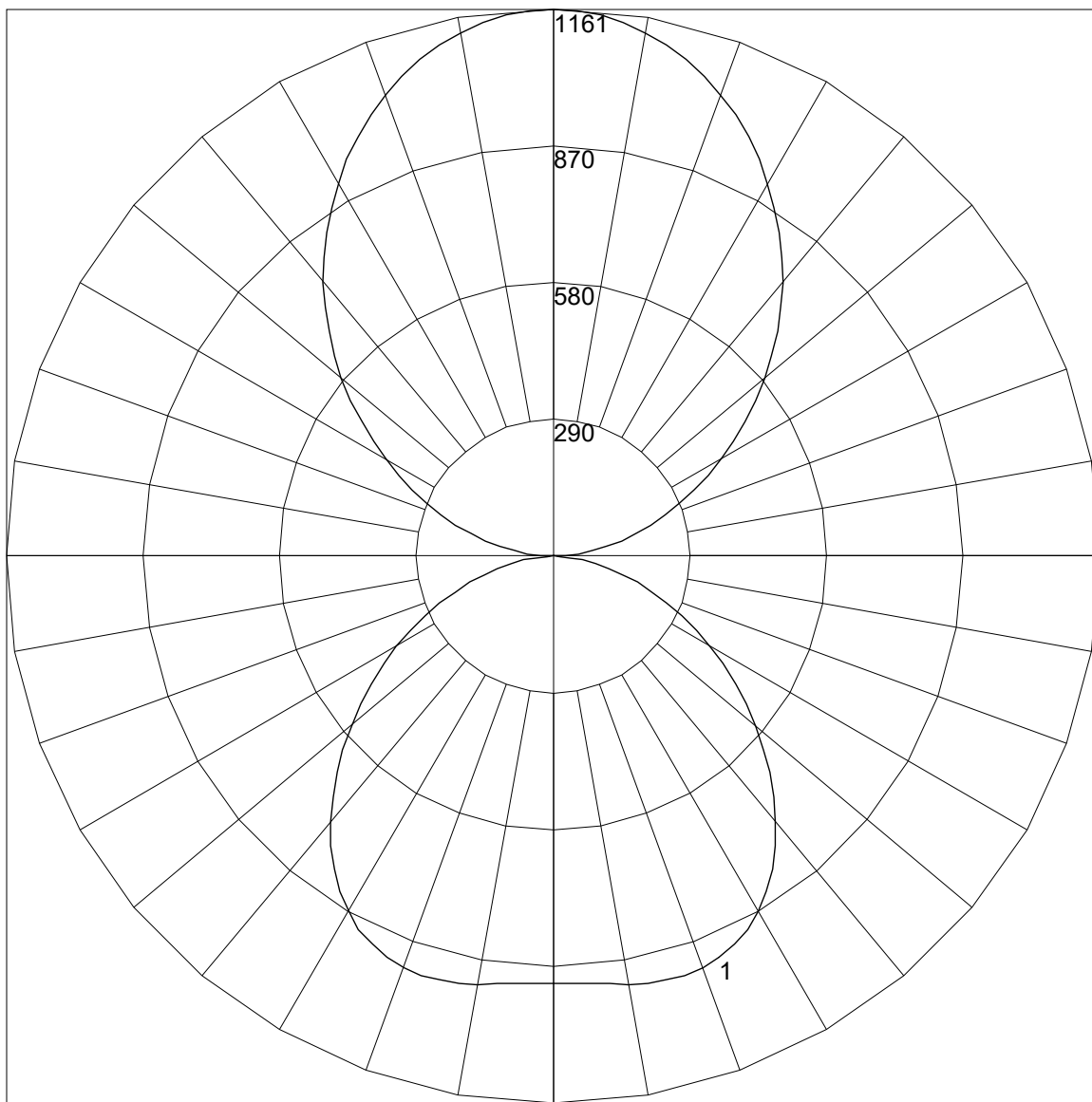
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	46	45	44	39
2	88	81	75	70	81	74	69	65	62	58	55	51	48	46	41	39	37	33
3	80	71	64	58	74	65	59	54	55	50	46	45	42	39	36	34	32	28
4	74	63	55	49	67	58	51	46	49	44	39	40	36	33	32	30	27	24
5	67	56	48	42	62	52	45	39	44	38	34	36	32	29	29	26	24	20
6	62	50	42	36	57	46	39	34	39	34	30	33	28	25	26	23	21	18
7	57	45	37	32	53	42	35	30	36	30	26	30	25	22	24	21	19	16
8	53	41	33	28	49	38	31	26	32	27	23	27	23	20	22	19	17	14
9	50	37	30	25	45	35	28	23	30	24	21	25	21	18	20	17	15	13
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	19	16	14	12

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POLAR GRAPH



Maximum Candela = 1160.575 Located At Horizontal Angle = 0, Vertical Angle = 180

# 1 - Vertical Plane Through Horizontal Angles (90 - 270)