

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-RG-4FT-S-H-835-TG-F-ITL90353.014.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353.014 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/03/18

[ISSUEDATE]05/18/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-RG-4ft-S-H-835-TG-F

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.4 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 44.5 WATTS

[_ABSOLUTE]LUMENS]4550

[OTHER]see www.finelite.com for source file ITL90353. 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	4550
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	42.4
Ballast Factor	1.00
CIE Type	Semi-Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.26
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	8129	7426	6886
55	7577	6533	5833
65	6891	5398	4509
75	6008	3718	2832
85	4387	2413	2267

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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>
0.0	1172.134	1172.134	1172.134	1172.134	1172.134
2.5	1169.801	1169.023	1169.801	1169.801	1169.801
5.0	1164.356	1163.578	1163.578	1164.356	1165.134
7.5	1155.801	1155.023	1155.023	1155.023	1154.245
10.0	1144.911	1141.023	1142.578	1140.245	1137.134
12.5	1129.356	1124.689	1124.689	1120.022	1114.578
15.0	1111.466	1103.688	1102.911	1096.688	1088.910
17.5	1089.688	1080.355	1076.466	1067.910	1060.132
20.0	1064.021	1053.132	1046.910	1035.243	1028.243
22.5	1036.021	1024.354	1014.242	1000.242	992.464
25.0	1005.687	992.464	979.242	962.130	954.352
27.5	973.019	958.241	941.130	922.463	913.907
30.0	937.241	922.463	902.240	881.240	871.128
32.5	899.907	885.129	861.017	837.683	825.239
35.0	862.573	845.461	819.016	793.349	780.127
37.5	823.683	804.238	774.682	745.904	734.237
40.0	783.238	763.015	729.570	700.792	687.569
42.5	742.792	720.236	686.014	654.124	640.902
45.0	701.569	677.458	640.902	606.679	594.234
47.5	660.346	633.901	595.790	560.011	547.566
50.0	617.568	589.567	549.122	512.566	500.121
52.5	574.011	545.233	503.232	466.676	454.231
55.0	530.455	501.677	457.342	420.786	408.341
57.5	487.676	457.342	412.230	375.674	363.229
60.0	444.120	413.008	367.118	330.562	318.117
62.5	400.563	368.674	322.006	286.228	274.561
65.0	355.451	325.118	278.450	243.449	232.560
67.5	312.673	281.561	234.894	202.226	191.337
70.0	269.894	238.783	193.670	161.781	152.447
72.5	227.893	197.559	154.781	125.225	115.891
75.0	189.782	157.892	117.447	93.335	89.446
77.5	150.892	120.558	84.002	74.668	73.890
80.0	113.558	84.779	60.668	58.334	58.334
82.5	80.890	51.334	43.556	42.001	42.001
85.0	46.668	28.001	25.667	24.889	24.112
87.5	14.778	9.334	8.556	8.556	7.778
90.0	0.000	0.000	0.000	0.000	0.000
92.5	12.279	13.507	14.735	15.144	15.144
95.0	30.697	31.925	33.153	34.381	34.790
97.5	49.524	51.162	53.208	54.845	55.254
100.0	69.580	71.217	73.673	75.719	75.719
102.5	90.454	92.091	94.956	97.412	97.412
105.0	112.965	115.011	117.467	119.923	119.923
107.5	136.294	137.931	140.387	143.252	142.843
110.0	160.442	161.670	164.126	166.582	166.582
112.5	185.000	186.228	188.684	191.139	190.730
115.0	210.376	211.195	214.060	216.106	215.288
117.5	235.752	235.752	239.027	239.845	240.254
120.0	261.538	261.538	263.993	265.221	265.631
122.5	287.732	287.732	289.369	290.597	291.825
125.0	313.108	312.699	314.336	315.973	316.792
127.5	338.485	337.666	339.712	340.940	342.577
130.0	363.861	362.633	364.679	366.316	367.135
132.5	388.009	386.372	388.827	390.874	391.283

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-S-H-835-TG-F-ITL90353.014.IES****CANDELA TABULATION - (Cont.)**

135.0	413.385	410.520	413.794	415.841	415.841
137.5	437.942	434.259	437.942	439.170	439.580
140.0	460.863	457.179	462.091	462.091	462.909
142.5	484.602	480.100	485.011	485.011	484.192
145.0	507.931	502.201	507.522	507.113	506.294
147.5	529.624	523.484	528.805	528.396	526.759
150.0	549.679	543.540	548.861	548.042	547.223
152.5	568.916	563.186	568.507	567.279	566.051
155.0	586.925	581.604	586.516	585.697	583.650
157.5	603.296	597.976	602.887	600.841	599.613
160.0	618.850	614.347	618.440	616.394	614.347
162.5	632.356	628.263	631.538	629.491	628.263
165.0	644.226	640.951	642.998	641.770	640.542
167.5	654.458	652.002	653.230	652.411	651.593
170.0	662.644	661.416	661.825	661.416	660.597
172.5	668.783	668.783	668.783	667.965	667.965
175.0	673.695	673.695	673.695	673.285	673.285
177.5	676.969	676.969	676.969	676.969	676.969
180.0	677.788	677.788	677.788	677.788	677.788

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-S-H-835-TG-F-ITL90353.014.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	420.26	N.A.	9.20
0-30	870.43	N.A.	19.10
0-40	1382.63	N.A.	30.40
0-60	2292.12	N.A.	50.40
0-80	2712.99	N.A.	59.60
0-90	2746.64	N.A.	60.40
10-90	2636.23	N.A.	57.90
20-40	962.37	N.A.	21.20
20-50	1458.45	N.A.	32.10
40-70	1192.22	N.A.	26.20
60-80	420.88	N.A.	9.30
70-80	138.15	N.A.	3.00
80-90	33.65	N.A.	0.70
90-110	161.39	N.A.	3.50
90-120	372.67	N.A.	8.20
90-130	653.91	N.A.	14.40
90-150	1289.23	N.A.	28.30
90-180	1803.32	N.A.	39.60
110-180	1641.93	N.A.	36.10
0-180	4549.96	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	110.41
10-20	309.86
20-30	450.16
30-40	512.20
40-50	496.08
50-60	413.41
60-70	282.73
70-80	138.15
80-90	33.65
90-100	37.24
100-110	124.15
110-120	211.29
120-130	281.24
130-140	319.01
140-150	316.31
150-160	269.15
160-170	181.02
170-180	63.92

IES INDOOR REPORT

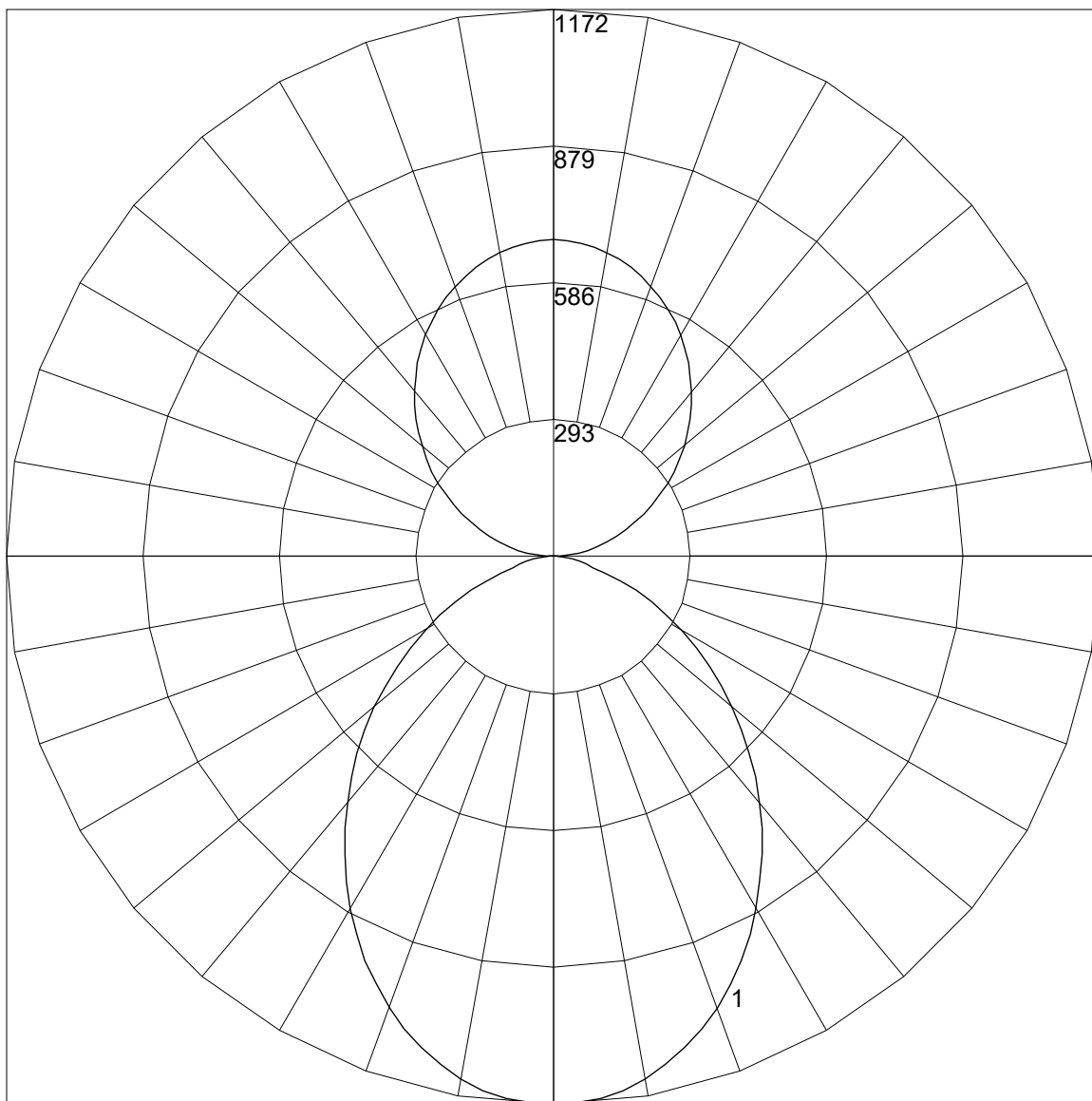
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	110	110	110	110	102	102	102	102	89	89	89	77	77	77	66	66	66	60
1	100	96	92	89	94	90	87	84	79	76	74	68	67	65	59	57	56	52
2	92	84	78	73	86	79	74	69	69	65	62	60	57	55	52	50	48	44
3	84	75	67	61	78	70	64	58	62	56	52	54	50	47	46	44	41	37
4	77	66	58	52	72	62	55	50	55	49	45	48	44	40	42	38	36	32
5	71	59	51	45	66	56	48	43	49	43	39	43	39	35	38	34	31	28
6	65	53	45	39	61	50	43	38	45	39	34	39	34	31	34	31	28	25
7	61	48	40	35	56	46	38	33	40	35	30	36	31	27	31	28	25	22
8	56	44	36	31	53	42	34	30	37	31	27	33	28	25	29	25	22	20
9	52	40	33	28	49	38	31	26	34	28	24	30	26	22	27	23	20	18
10	49	37	30	25	46	35	28	24	31	26	22	28	23	20	25	21	18	16

POLAR GRAPH



Maximum Candela = 1172.134 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)