

# 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-RG-4FT-H-V-835-TG-F-ITL90352.009.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90352.009 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/04/18

[ISSUEDATE]05/17/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-RG-4ft-H-V-835-TG-F

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 64.7 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 66.3 WATTS

[\_ABSOLUTE]LUMENS]6275

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90352. 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	6275
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	97
Total Luminaire Watts	64.7
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	18722	13161	10370
55	16702	10349	8020
65	14477	7831	6215
75	12084	6042	5514
85	8361	4529	4181

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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	1585.000	1585.000	1585.000	1585.000	1585.000
2.5	1582.000	1582.000	1580.000	1578.000	1577.000
5.0	1573.000	1571.000	1564.000	1558.000	1556.000
7.5	1560.000	1554.000	1539.000	1525.000	1520.000
10.0	1542.000	1529.000	1505.000	1481.000	1469.000
12.5	1519.000	1498.000	1461.000	1428.000	1410.000
15.0	1492.000	1459.000	1411.000	1364.000	1342.000
17.5	1459.000	1416.000	1353.000	1295.000	1269.000
20.0	1423.000	1367.000	1291.000	1221.000	1193.000
22.5	1382.000	1315.000	1225.000	1147.000	1113.000
25.0	1334.000	1260.000	1157.000	1068.000	1034.000
27.5	1285.000	1200.000	1088.000	992.000	955.000
30.0	1230.000	1139.000	1016.000	916.000	877.000
32.5	1176.000	1078.000	945.000	841.000	802.000
35.0	1118.000	1013.000	875.000	770.000	730.000
37.5	1058.000	950.000	807.000	700.000	661.000
40.0	998.000	885.000	740.000	635.000	597.000
42.5	937.000	820.000	674.000	574.000	537.000
45.0	872.000	758.000	613.000	516.000	483.000
47.5	811.000	696.000	554.000	462.000	432.000
50.0	748.000	634.000	497.000	412.000	385.000
52.5	691.000	575.000	443.000	366.000	343.000
55.0	631.000	517.000	391.000	324.000	303.000
57.5	571.000	460.000	344.000	285.000	266.000
60.0	514.000	407.000	299.000	248.000	231.000
62.5	458.000	356.000	258.000	212.000	197.000
65.0	403.000	307.000	218.000	178.000	173.000
67.5	351.000	262.000	182.000	157.000	153.000
70.0	300.000	218.000	148.000	136.000	133.000
72.5	252.000	176.000	124.000	116.000	113.000
75.0	206.000	138.000	103.000	96.000	94.000
77.5	162.000	102.000	82.000	77.000	75.000
80.0	122.000	73.000	62.000	59.000	58.000
82.5	84.000	51.000	44.000	42.000	41.000
85.0	48.000	30.000	26.000	25.000	24.000
87.5	15.000	11.000	10.000	9.000	8.000
90.0	0.000	0.000	0.000	0.000	0.000
92.5	23.334	22.556	21.778	20.223	19.445
95.0	53.668	53.668	53.668	51.334	49.779
97.5	85.557	85.557	84.002	84.002	82.446
100.0	119.780	119.780	119.002	118.225	117.447
102.5	156.336	155.559	155.559	154.781	154.003
105.0	195.226	194.448	194.448	193.671	192.115
107.5	236.449	235.671	235.671	234.116	232.560
110.0	279.228	277.672	278.450	276.117	275.339
112.5	324.340	322.784	323.562	320.451	319.673
115.0	371.785	368.674	370.229	366.341	365.563
117.5	419.231	416.897	416.897	414.564	413.008
120.0	468.231	465.120	465.898	462.009	460.454
122.5	518.788	514.121	515.677	511.788	510.232
125.0	570.900	564.678	566.233	562.344	560.789
127.5	623.012	616.012	617.568	614.457	609.790
130.0	675.125	667.346	669.680	666.569	661.124
132.5	725.681	718.681	721.792	717.903	713.236

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-V-835-TG-F-ITL90352.009.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	777.793	770.015	773.126	770.015	763.793
<b>137.5</b>	831.461	821.350	825.239	822.127	815.127
<b>140.0</b>	882.795	871.906	876.573	872.684	865.684
<b>142.5</b>	934.130	920.907	927.130	922.463	914.685
<b>145.0</b>	983.908	968.352	974.575	970.686	962.908
<b>147.5</b>	1029.020	1014.242	1021.242	1017.354	1009.576
<b>150.0</b>	1073.354	1058.576	1065.577	1060.910	1053.910
<b>152.5</b>	1114.578	1099.022	1107.577	1102.133	1095.910
<b>155.0</b>	1152.689	1137.911	1148.023	1141.023	1135.578
<b>157.5</b>	1188.468	1173.690	1183.023	1176.801	1172.134
<b>160.0</b>	1218.024	1206.357	1214.913	1209.468	1205.579
<b>162.5</b>	1246.802	1235.913	1242.914	1238.247	1234.358
<b>165.0</b>	1271.692	1262.358	1267.803	1264.692	1260.803
<b>167.5</b>	1291.914	1285.692	1288.803	1287.248	1283.359
<b>170.0</b>	1309.026	1305.137	1306.693	1305.137	1303.581
<b>172.5</b>	1320.693	1320.693	1320.693	1319.137	1319.137
<b>175.0</b>	1331.582	1330.804	1330.804	1330.026	1329.248
<b>177.5</b>	1337.026	1337.026	1337.026	1337.026	1337.026
<b>180.0</b>	1339.360	1339.360	1339.360	1339.360	1339.360

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	543.66	N.A.	8.70
0-30	1079.84	N.A.	17.20
0-40	1639.69	N.A.	26.10
0-60	2516.13	N.A.	40.10
0-80	2894.15	N.A.	46.10
0-90	2928.15	N.A.	46.70
10-90	2780.7	N.A.	44.30
20-40	1096.04	N.A.	17.50
20-50	1591.43	N.A.	25.40
40-70	1124.88	N.A.	17.90
60-80	378.02	N.A.	6.00
70-80	129.59	N.A.	2.10
80-90	34.00	N.A.	0.50
90-110	265.61	N.A.	4.20
90-120	631.12	N.A.	10.10
90-130	1136.5	N.A.	18.10
90-150	2338.77	N.A.	37.30
90-180	3347.29	N.A.	53.30
110-180	3081.68	N.A.	49.10
0-180	6275.44	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	147.45
10-20	396.21
20-30	536.19
30-40	559.85
40-50	495.40
50-60	381.04
60-70	248.44
70-80	129.59
80-90	34.00
90-100	59.28
100-110	206.33
110-120	365.50
120-130	505.38
130-140	594.98
140-150	607.29
150-160	525.78
160-170	356.52
170-180	126.22

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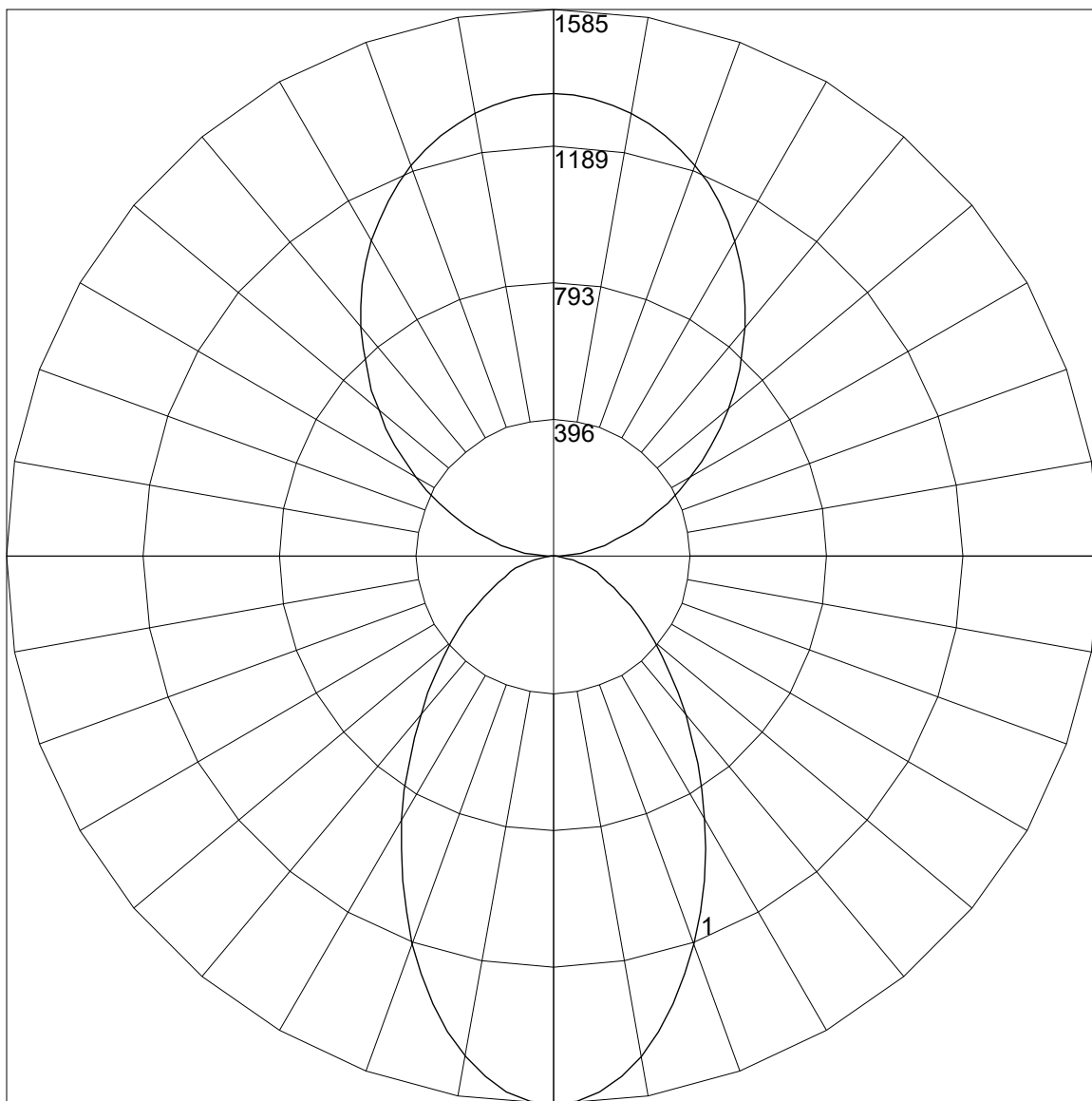
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	67	67	67	53	53	53	47
1	98	94	90	87	90	86	83	80	72	70	68	59	58	57	48	47	46	40
2	89	82	77	72	82	76	71	67	64	60	57	53	50	48	43	41	40	35
3	82	73	66	60	75	67	61	56	57	52	49	47	44	41	38	36	34	30
4	75	65	57	52	69	60	53	48	51	46	42	43	39	36	35	32	30	26
5	69	58	50	45	64	54	47	42	46	41	37	39	35	32	32	29	27	23
6	64	52	45	39	59	49	42	37	42	36	32	35	31	28	29	26	24	21
7	59	47	40	34	54	44	37	33	38	33	29	32	28	25	27	24	21	19
8	55	43	36	31	51	40	34	29	35	29	26	29	25	23	25	22	19	17
9	51	40	32	27	47	37	31	26	32	27	23	27	23	20	23	20	18	16
10	48	36	29	25	44	34	28	24	30	25	21	25	21	19	21	18	16	14

POLAR GRAPH



Maximum Candela = 1585 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)