

# 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-V-V-835-F-DSO-ITL85132-ITL94139.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85132-ITL94139 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/11/15

[ISSUEDATE]12/17/2020

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 72.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 73.4 WATTS

[ABSOLUTE]LUMENS]7086

[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	7087
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	98
Total Luminaire Watts	72.6
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	13827	17477	17949
55	12573	16093	16093
65	11280	14298	13902
75	10031	12201	11556
85	8710	9232	8361

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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	1166	1166	1166	1166	1166
2.5	1164	1164	1165	1167	1167
5.0	1158	1159	1164	1169	1171
7.5	1147	1151	1160	1171	1177
10.0	1133	1138	1158	1179	1186
12.5	1116	1122	1156	1185	1193
15.0	1093	1103	1150	1187	1197
17.5	1069	1082	1142	1187	1199
20.0	1039	1058	1132	1182	1195
22.5	1007	1030	1115	1171	1186
25.0	971	1002	1096	1156	1170
27.5	935	972	1074	1135	1149
30.0	896	940	1046	1107	1118
32.5	856	904	1017	1075	1084
35.0	814	866	984	1036	1042
37.5	773	828	945	993	996
40.0	729	788	903	947	945
42.5	687	746	860	895	891
45.0	644	703	814	842	836
47.5	602	660	764	787	781
50.0	558	616	713	730	720
52.5	515	570	661	674	664
55.0	475	525	608	616	608
57.5	433	480	555	560	547
60.0	393	434	502	506	493
62.5	355	390	451	450	440
65.0	314	348	398	397	387
67.5	278	305	348	345	335
70.0	241	264	300	295	286
72.5	205	224	253	248	240
75.0	171	185	208	203	197
77.5	139	149	165	160	155
80.0	109	114	126	120	116
82.5	80	82	88	84	81
85.0	50	52	53	50	48
87.5	23	23	21	20	18
90.0	0	0	0	0	0
92.5	30	30	30	33	33
95.0	71	68	68	69	70
97.5	112	109	107	108	108
100.0	154	149	149	149	148
102.5	198	194	192	191	191
105.0	244	241	236	235	234
107.5	291	288	282	281	280
110.0	340	337	332	330	327
112.5	391	386	383	378	375
115.0	442	439	437	427	425
117.5	496	491	491	479	477
120.0	551	543	545	533	529
122.5	603	595	599	589	582
125.0	661	649	653	643	638
127.5	718	705	707	699	697
130.0	774	761	763	753	754
132.5	830	816	819	809	809

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-V-835-F-DSO-ITL85132-ITL94139.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	884	871	875	866	866
<b>137.5</b>	939	926	930	922	921
<b>140.0</b>	994	981	984	979	976
<b>142.5</b>	1046	1032	1036	1031	1027
<b>145.0</b>	1099	1084	1088	1084	1077
<b>147.5</b>	1148	1133	1138	1132	1125
<b>150.0</b>	1195	1180	1186	1179	1173
<b>152.5</b>	1240	1225	1231	1225	1219
<b>155.0</b>	1283	1268	1275	1269	1263
<b>157.5</b>	1320	1306	1314	1308	1302
<b>160.0</b>	1356	1343	1350	1344	1338
<b>162.5</b>	1387	1376	1381	1377	1373
<b>165.0</b>	1415	1405	1408	1406	1403
<b>167.5</b>	1436	1430	1432	1430	1429
<b>170.0</b>	1455	1452	1453	1451	1450
<b>172.5</b>	1471	1470	1470	1469	1469
<b>175.0</b>	1482	1482	1482	1482	1481
<b>177.5</b>	1488	1489	1489	1489	1488
<b>180.0</b>	1492	1492	1492	1492	1492

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

Zone	Lumens	%Lamp	%Fixt
0-20	434.77	N.A.	6.10
0-30	932.63	N.A.	13.20
0-40	1528.2	N.A.	21.60
0-60	2637.24	N.A.	37.20
0-80	3215.04	N.A.	45.40
0-90	3273.48	N.A.	46.20
10-90	3162.56	N.A.	44.60
20-40	1093.43	N.A.	15.40
20-50	1690.51	N.A.	23.90
40-70	1479.46	N.A.	20.90
60-80	577.80	N.A.	8.20
70-80	207.38	N.A.	2.90
80-90	58.43	N.A.	0.80
90-110	329.21	N.A.	4.60
90-120	759.73	N.A.	10.70
90-130	1340.41	N.A.	18.90
90-150	2691.63	N.A.	38.00
90-180	3813.36	N.A.	53.80
110-180	3484.15	N.A.	49.20
0-180	7086.84	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	110.92
10-20	323.86
20-30	497.85
30-40	595.58
40-50	597.08
50-60	511.96
60-70	370.42
70-80	207.38
80-90	58.43
90-100	77.06
100-110	252.15
110-120	430.52
120-130	580.67
130-140	672.56
140-150	678.67
150-160	584.78
160-170	396.44
170-180	140.51

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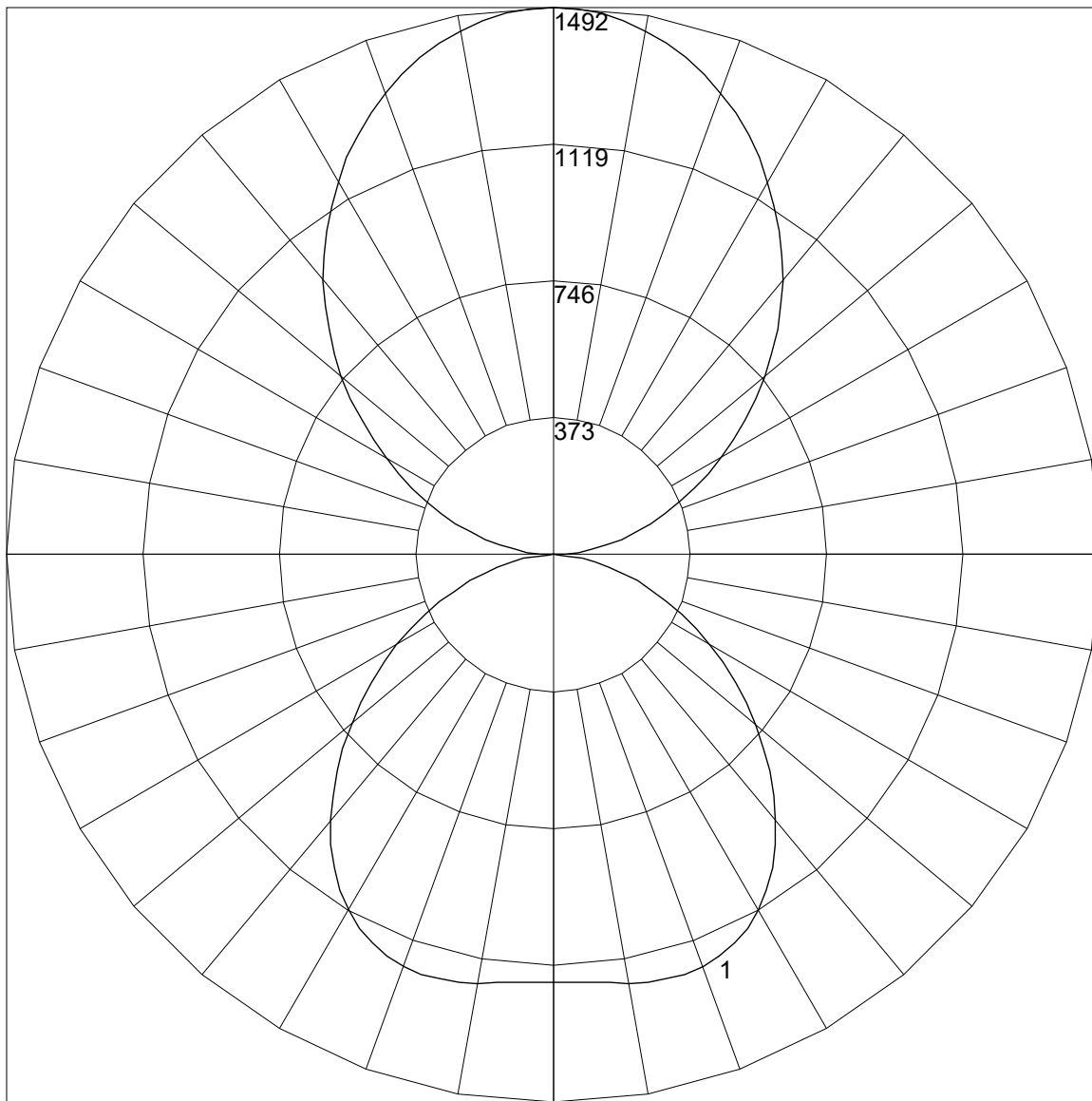
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	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

POLAR GRAPH



Maximum Candela = 1492 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)