

# 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-X ID-4FT-V-V-8TW-TG-F-ITL92550.900.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL92550.900 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUEDATE]11/21/19  
[TESTDATE]01/08/20  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HP-X ID-4ft-V-V-8TW-TG-F  
[OTHER]ies file is based on 3500K; see luminaire tech sheet at  
[more]www.finelite.com for lumen adjustment factors for other CCT's & CRI's  
[INPUT\_ELECTRICAL]120.0 VOLTS, 75.8 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 76.0 WATTS  
[ABSOLUTE]LUMENS]8184  
[OTHER]see www.finelite.com for source file ITL92550. 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	8184
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	75.8
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 w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.20 ft
Luminous Height	0.02 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	17662	16822	16541
55	17122	16041	15813
65	16224	15020	14871
75	14846	13609	13662
85	12831	11668	12453

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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	1378	1378	1378	1378	1378
2.5	1376	1376	1377	1376	1377
5.0	1371	1372	1372	1372	1372
7.5	1364	1364	1365	1365	1365
10.0	1355	1352	1355	1355	1355
12.5	1342	1337	1342	1342	1340
15.0	1327	1318	1326	1327	1323
17.5	1308	1299	1307	1309	1306
20.0	1287	1275	1284	1286	1282
22.5	1261	1249	1260	1261	1256
25.0	1234	1221	1232	1233	1230
27.5	1202	1191	1202	1202	1199
30.0	1169	1157	1168	1168	1166
32.5	1134	1123	1134	1133	1132
35.0	1097	1087	1096	1095	1092
37.5	1056	1046	1057	1056	1055
40.0	1013	1004	1014	1015	1015
42.5	970	962	971	974	975
45.0	923	919	927	931	929
47.5	878	871	880	884	885
50.0	828	823	833	839	839
52.5	777	773	786	790	790
55.0	727	722	734	740	743
57.5	673	670	684	689	692
60.0	618	615	632	639	641
62.5	563	563	579	587	591
65.0	509	510	526	536	541
67.5	452	455	473	484	490
70.0	398	401	420	432	437
72.5	344	348	368	381	388
75.0	287	297	316	332	337
77.5	235	245	266	283	289
80.0	185	196	218	235	241
82.5	137	148	171	190	197
85.0	86	102	125	145	152
87.5	39	58	82	103	110
90.0	2	23	51	74	82
92.5	34	51	74	95	102
95.0	69	85	108	130	137
97.5	108	122	144	166	173
100.0	150	162	184	205	213
102.5	192	203	225	246	254
105.0	237	249	270	291	298
107.5	284	294	316	336	343
110.0	338	344	365	384	391
112.5	389	394	415	432	439
115.0	441	445	468	483	489
117.5	497	501	520	535	540
120.0	553	555	574	588	593
122.5	612	610	628	641	649
125.0	672	667	684	695	702
127.5	732	726	742	752	758
130.0	791	784	798	808	812
132.5	853	844	858	864	872

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**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	912	903	916	922	926
<b>137.5</b>	973	960	972	978	980
<b>140.0</b>	1032	1019	1030	1034	1033
<b>142.5</b>	1091	1075	1086	1088	1088
<b>145.0</b>	1147	1129	1142	1141	1141
<b>147.5</b>	1202	1184	1194	1193	1192
<b>150.0</b>	1252	1236	1243	1243	1240
<b>152.5</b>	1301	1282	1291	1288	1286
<b>155.0</b>	1347	1328	1337	1332	1329
<b>157.5</b>	1386	1370	1378	1374	1370
<b>160.0</b>	1423	1408	1416	1412	1406
<b>162.5</b>	1455	1443	1449	1446	1442
<b>165.0</b>	1485	1474	1478	1476	1470
<b>167.5</b>	1508	1502	1504	1502	1498
<b>170.0</b>	1528	1525	1526	1525	1522
<b>172.5</b>	1543	1542	1542	1541	1541
<b>175.0</b>	1554	1554	1554	1554	1554
<b>177.5</b>	1562	1561	1561	1561	1561
<b>180.0</b>	1564	1564	1564	1564	1564

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	504.14	N.A.	6.20
0-30	1070.63	N.A.	13.10
0-40	1754.42	N.A.	21.40
0-60	3123.16	N.A.	38.20
0-80	3974.26	N.A.	48.60
0-90	4111.13	N.A.	50.20
10-90	3980.73	N.A.	48.60
20-40	1250.29	N.A.	15.30
20-50	1964.1	N.A.	24.00
40-70	1887.23	N.A.	23.10
60-80	851.09	N.A.	10.40
70-80	332.61	N.A.	4.10
80-90	136.87	N.A.	1.70
90-110	404.53	N.A.	4.90
90-120	866.28	N.A.	10.60
90-130	1478.24	N.A.	18.10
90-150	2895.99	N.A.	35.40
90-180	4073.35	N.A.	49.80
110-180	3668.83	N.A.	44.80
0-180	8184.48	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	130.40
10-20	373.74
20-30	566.50
30-40	683.79
40-50	713.82
50-60	654.92
60-70	518.49
70-80	332.61
80-90	136.87
90-100	119.00
100-110	285.53
110-120	461.75
120-130	611.96
130-140	705.63
140-150	712.13
150-160	613.83
160-170	416.11
170-180	147.42

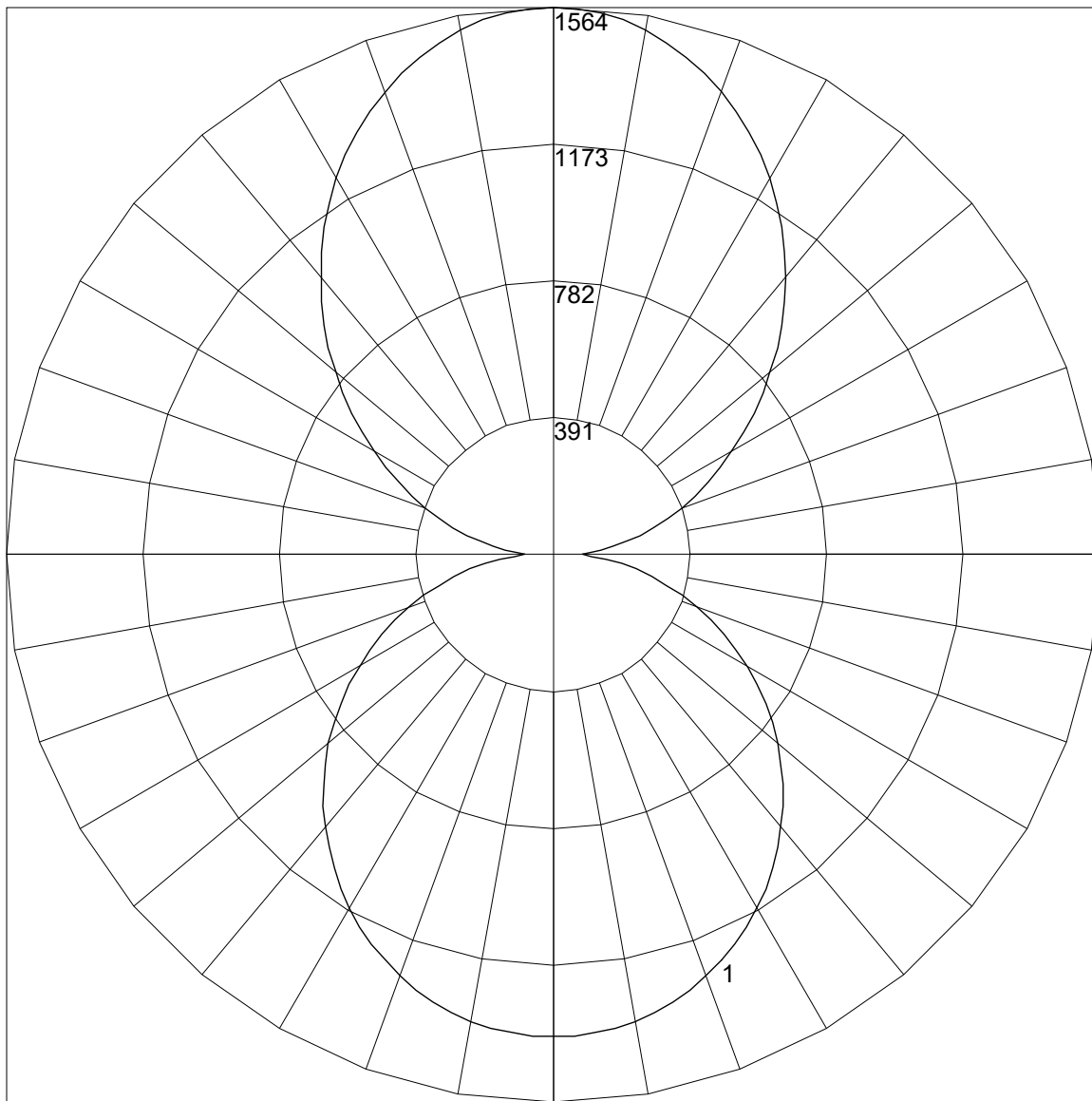
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	46	41
2	88	81	74	69	81	74	69	64	63	59	55	52	49	47	43	41	39	34
3	80	71	63	57	74	65	59	53	55	50	46	46	42	39	38	35	33	28
4	73	62	54	48	67	58	51	45	49	43	39	41	37	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	33	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	25	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	28	23	30	24	20	25	21	18	21	17	15	13
10	46	34	27	22	42	32	25	20	27	22	18	23	19	16	19	16	14	12

POLAR GRAPH



Maximum Candela = 1564 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)