

# 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-R-D-4FT-H-835-F-ITL93256.003.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITI93256.003 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUE DATE]03/23/20  
[ISSUE DATE]05/14/20  
[MANUFACTURER]FINELITE, INC.  
[LUMCAT]FINELITE HP-X-R-D-4ft-H-835-F  
[INPUT\_ELECTRICAL]120.0 VOLTS, 25.5 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 25.7 WATTS  
[ABSOLUTE LUMENS]3210  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL93256. 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	3210
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	126
Total Luminaire Watts	25.5
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.28
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.40
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.20 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	14210	14195	14105
55	13742	13760	13650
65	13000	13075	13050
75	11920	12165	12247
85	10789	11032	11032

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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	1099.038	1099.038	1099.038	1099.038	1099.038
2.5	1098.261	1098.261	1098.261	1098.261	1098.261
5.0	1095.927	1094.372	1095.149	1095.149	1094.372
7.5	1088.927	1088.149	1088.927	1088.149	1088.927
10.0	1081.927	1078.815	1080.371	1081.149	1080.371
12.5	1071.815	1067.148	1070.260	1071.037	1068.704
15.0	1060.148	1053.148	1057.815	1058.593	1056.259
17.5	1045.370	1035.258	1043.036	1043.036	1040.703
20.0	1027.480	1017.369	1025.925	1025.147	1022.036
22.5	1006.480	997.146	1004.924	1005.702	1002.591
25.0	985.479	974.590	983.145	983.145	980.812
27.5	961.367	949.700	959.811	959.034	956.700
30.0	934.922	924.810	934.144	931.810	930.255
32.5	905.365	897.587	905.365	903.809	901.476
35.0	876.586	868.030	875.808	873.475	870.364
37.5	845.474	836.918	844.696	841.585	839.252
40.0	810.473	803.473	811.251	807.362	805.028
42.5	775.472	770.027	777.027	772.360	769.249
45.0	739.693	735.026	738.915	735.804	734.248
47.5	702.358	696.913	702.358	697.691	696.913
50.0	664.245	658.801	663.468	660.356	657.245
52.5	621.466	619.133	623.022	619.133	617.577
55.0	580.243	577.909	581.020	577.909	576.353
57.5	538.241	535.908	539.797	535.908	535.908
60.0	494.684	492.351	494.684	493.128	491.573
62.5	451.127	449.571	451.905	448.793	450.349
65.0	404.459	405.236	406.792	406.014	406.014
67.5	360.902	360.902	364.013	361.679	364.013
70.0	315.789	316.567	318.900	318.900	318.900
72.5	272.232	273.010	276.121	276.121	275.343
75.0	227.119	229.452	231.786	232.564	233.341
77.5	185.118	186.673	190.562	191.340	192.896
80.0	145.450	147.005	149.339	150.894	150.894
82.5	106.559	106.559	108.893	110.448	110.448
85.0	69.225	68.447	70.780	70.780	70.780
87.5	30.334	30.334	33.446	32.668	33.446
90.0	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	402.24	N.A.	12.50
0-30	854.37	N.A.	26.60
0-40	1400.31	N.A.	43.60
0-60	2485.94	N.A.	77.40
0-80	3132.75	N.A.	97.60
0-90	3210.32	N.A.	100.00
10-90	3106.29	N.A.	96.80
20-40	998.07	N.A.	31.10
20-50	1566.3	N.A.	48.80
40-70	1487.52	N.A.	46.30
60-80	646.81	N.A.	20.10
70-80	244.93	N.A.	7.60
80-90	77.57	N.A.	2.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3210.32	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	104.04
10-20	298.20
20-30	452.13
30-40	545.94
40-50	568.23
50-60	517.41
60-70	401.88
70-80	244.93
80-90	77.57
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

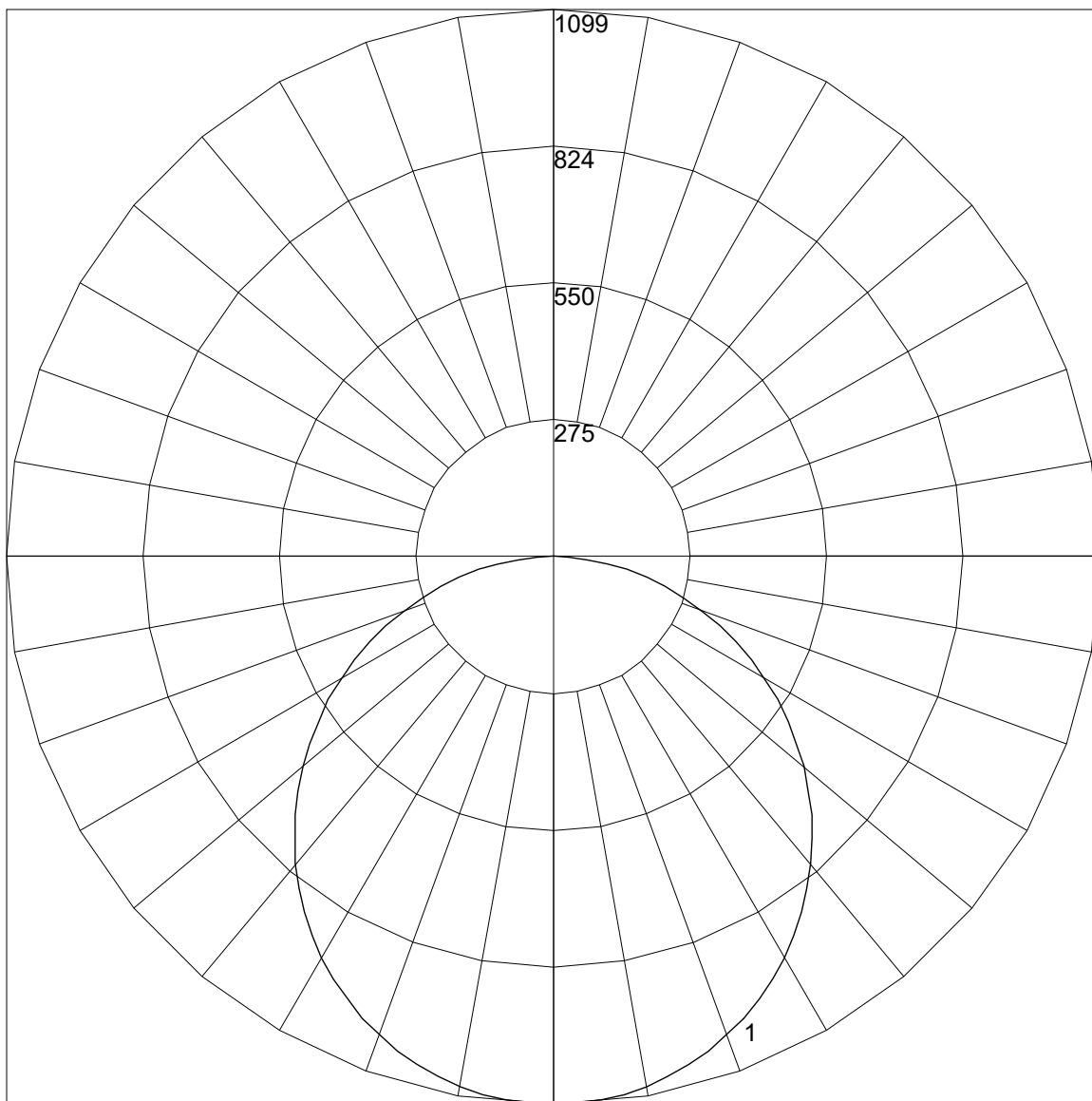
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	45	39	35	33
8	60	46	38	32	58	45	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	28	54	42	34	28	41	33	28	40	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

POLAR GRAPH



Maximum Candela = 1099.038 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)