

# 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-B-8TW-F-ITL93256.902.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL93256.902 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUEDATE]03/23/20  
[ISSUEDATE]05/14/20  
[MANUFAC]FINELITE, INC.  
[LUMCAT]FINELITE HP-X-R-D-4ft-B-8TW-F  
[OTHER]ies file is based on 3500K; see luminaire tech sheet at [www.finelite.com](http://www.finelite.com) for lumen adjustment factors for other CCT's & C  
[\_INPUT\_ELECTRICAL]120.0 VOLTS, 18.2 WATTS  
[\_INPUT\_ELECTRICAL]277.0 VOLTS, 19.1 WATTS  
[\_ABSOLUTE]LUMENS]2124  
[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	2124
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	18.2
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	9402	9392	9333
55	9093	9105	9032
65	8602	8652	8635
75	7887	8049	8103
85	7139	7299	7299

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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	727.215	727.215	727.215	727.215	727.215
2.5	726.700	726.700	726.700	726.700	726.700
5.0	725.156	724.127	724.641	724.641	724.127
7.5	720.524	720.009	720.524	720.009	720.524
10.0	715.892	713.833	714.863	715.377	714.863
12.5	709.201	706.114	708.172	708.687	707.143
15.0	701.482	696.850	699.938	700.452	698.908
17.5	691.703	685.012	690.159	690.159	688.615
20.0	679.866	673.175	678.837	678.322	676.263
22.5	665.970	659.794	664.941	665.455	663.397
25.0	652.074	644.869	650.530	650.530	648.986
27.5	636.120	628.400	635.090	634.576	633.032
30.0	618.621	611.931	618.107	616.563	615.533
32.5	599.064	593.918	599.064	598.035	596.491
35.0	580.022	574.361	579.507	577.963	575.905
37.5	559.435	553.774	558.921	556.862	555.318
40.0	536.276	531.644	536.790	534.217	532.673
42.5	513.116	509.513	514.145	511.057	508.999
45.0	489.442	486.354	488.927	486.868	485.839
47.5	464.738	461.135	464.738	461.650	461.135
50.0	439.520	435.917	439.005	436.946	434.888
52.5	411.213	409.669	412.243	409.669	408.640
55.0	383.936	382.392	384.451	382.392	381.363
57.5	356.145	354.601	357.174	354.601	354.601
60.0	327.324	325.780	327.324	326.294	325.265
62.5	298.503	297.473	299.017	296.959	297.988
65.0	267.623	268.138	269.167	268.653	268.653
67.5	238.802	238.802	240.861	239.317	240.861
70.0	208.952	209.467	211.011	211.011	211.011
72.5	180.131	180.646	182.704	182.704	182.190
75.0	150.281	151.825	153.369	153.883	154.398
77.5	122.489	123.518	126.092	126.606	127.636
80.0	96.241	97.271	98.815	99.844	99.844
82.5	70.508	70.508	72.052	73.082	73.082
85.0	45.805	45.290	46.834	46.834	46.834
87.5	20.072	20.072	22.130	21.616	22.130
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	266.15	N.A.	12.50
0-30	565.32	N.A.	26.60
0-40	926.56	N.A.	43.60
0-60	1644.91	N.A.	77.40
0-80	2072.89	N.A.	97.60
0-90	2124.22	N.A.	100.00
10-90	2055.38	N.A.	96.80
20-40	660.40	N.A.	31.10
20-50	1036.39	N.A.	48.80
40-70	984.27	N.A.	46.30
60-80	427.98	N.A.	20.10
70-80	162.06	N.A.	7.60
80-90	51.33	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	2124.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	68.84
10-20	197.31
20-30	299.17
30-40	361.24
40-50	375.99
50-60	342.36
60-70	265.92
70-80	162.06
80-90	51.33
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

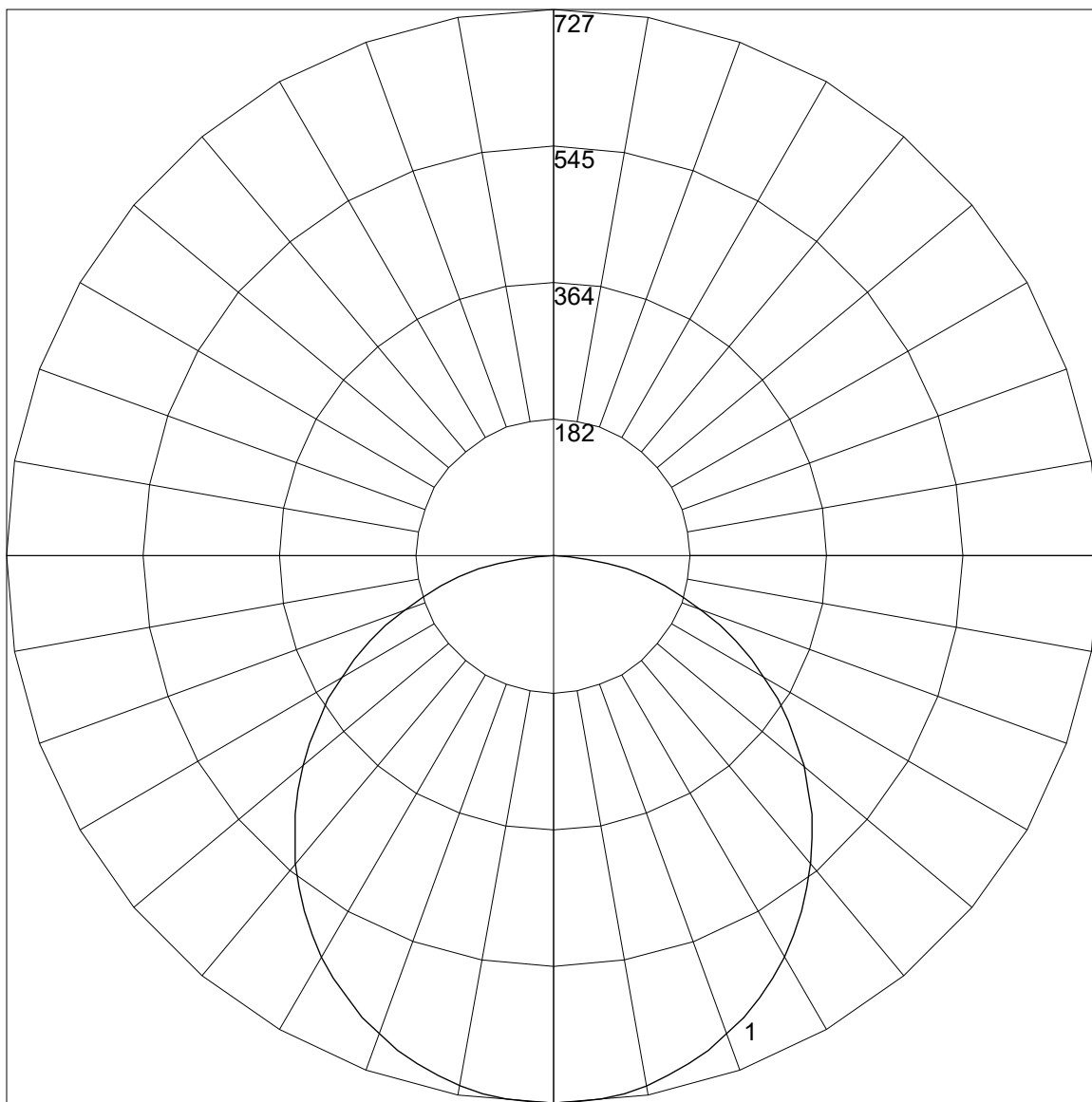
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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 = 727.215 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)