

# 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 : HPT-RSE-4X4-B-8TW-ITL91550.902.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL91550.902 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[ISSUE DATE]02/27/19  
[ISSUE DATE]04/22/19  
[MANUFACTURER]FINELITE, INC.  
[LUMEN CATEGORY]HPT-RSE-4x4-B-8TW  
[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, 78.0 WATTS  
[INPUT ELECTRICAL]277.0 VOLTS, 83.7 WATTS  
[ABSOLUTE LUMENS]10371  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL91550. 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	10371
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	133
Total Luminaire Watts	78
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.92 ft
Luminous Width (90-270)	3.92 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2397	2390	2392
55	2230	2222	2225
65	2005	2002	2007
75	1668	1654	1651
85	1070	1074	1074

IES INDOOR REPORT  
 PHOTOMETRIC FILENAME : HPT-RSE-4X4-B-8TW-ITL91550.902.IES

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	3988.763	3988.763	3988.763	3988.763	3988.763
2.5	3980.749	3985.023	3983.420	3985.023	3980.749
5.0	3962.050	3967.392	3965.255	3966.324	3963.118
7.5	3932.666	3938.008	3935.337	3936.940	3932.666
10.0	3892.062	3896.336	3893.665	3896.871	3892.596
12.5	3841.842	3844.513	3841.308	3845.048	3839.705
15.0	3777.197	3782.005	3779.868	3779.334	3778.800
17.5	3705.607	3708.278	3706.675	3707.744	3707.744
20.0	3623.865	3627.605	3622.797	3627.071	3623.865
22.5	3534.110	3534.110	3532.507	3535.713	3531.439
25.0	3435.807	3435.807	3432.067	3435.807	3433.670
27.5	3325.216	3330.558	3326.818	3325.216	3328.955
30.0	3211.953	3210.885	3209.282	3213.022	3216.761
32.5	3092.814	3089.608	3087.471	3091.211	3088.005
35.0	2968.332	2964.592	2960.852	2967.263	2964.592
37.5	2833.699	2835.836	2832.096	2829.959	2835.836
40.0	2694.258	2693.724	2695.861	2696.395	2696.929
42.5	2557.488	2556.954	2553.748	2556.420	2559.625
45.0	2417.513	2413.773	2410.568	2415.910	2413.239
47.5	2267.921	2265.250	2265.250	2267.387	2270.592
50.0	2118.329	2117.795	2114.589	2117.260	2125.809
52.5	1972.477	1971.943	1968.737	1970.874	1974.080
55.0	1824.488	1815.940	1818.077	1817.008	1820.214
57.5	1670.087	1667.950	1661.005	1667.950	1671.690
60.0	1514.084	1515.687	1511.413	1508.742	1522.098
62.5	1364.492	1356.479	1356.479	1358.616	1359.684
65.0	1209.024	1205.818	1206.887	1207.955	1210.092
67.5	1060.500	1053.555	1051.418	1057.295	1055.692
70.0	907.168	902.894	899.689	899.689	908.771
72.5	757.042	757.576	754.371	751.700	757.576
75.0	615.998	613.327	610.656	611.724	609.587
77.5	481.900	474.420	474.420	476.023	474.420
80.0	352.075	349.938	344.596	347.267	348.870
82.5	235.073	234.539	232.936	234.005	235.073
85.0	133.030	136.236	133.564	134.633	133.564
87.5	52.891	52.891	53.960	53.426	53.960
90.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPT-RSE-4X4-B-8TW-ITL91550.902.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1441.76	N.A.	13.90
0-30	3023.15	N.A.	29.20
0-40	4876.51	N.A.	47.00
0-60	8363.44	N.A.	80.60
0-80	10208.64	N.A.	98.40
0-90	10370.75	N.A.	100.00
10-90	9994.48	N.A.	96.40
20-40	3434.75	N.A.	33.10
20-50	5295.79	N.A.	51.10
40-70	4681.44	N.A.	45.10
60-80	1845.2	N.A.	17.80
70-80	650.69	N.A.	6.30
80-90	162.11	N.A.	1.60
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	10370.75	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	376.27
10-20	1065.49
20-30	1581.39
30-40	1853.37
40-50	1861.04
50-60	1625.89
60-70	1194.51
70-80	650.69
80-90	162.11
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

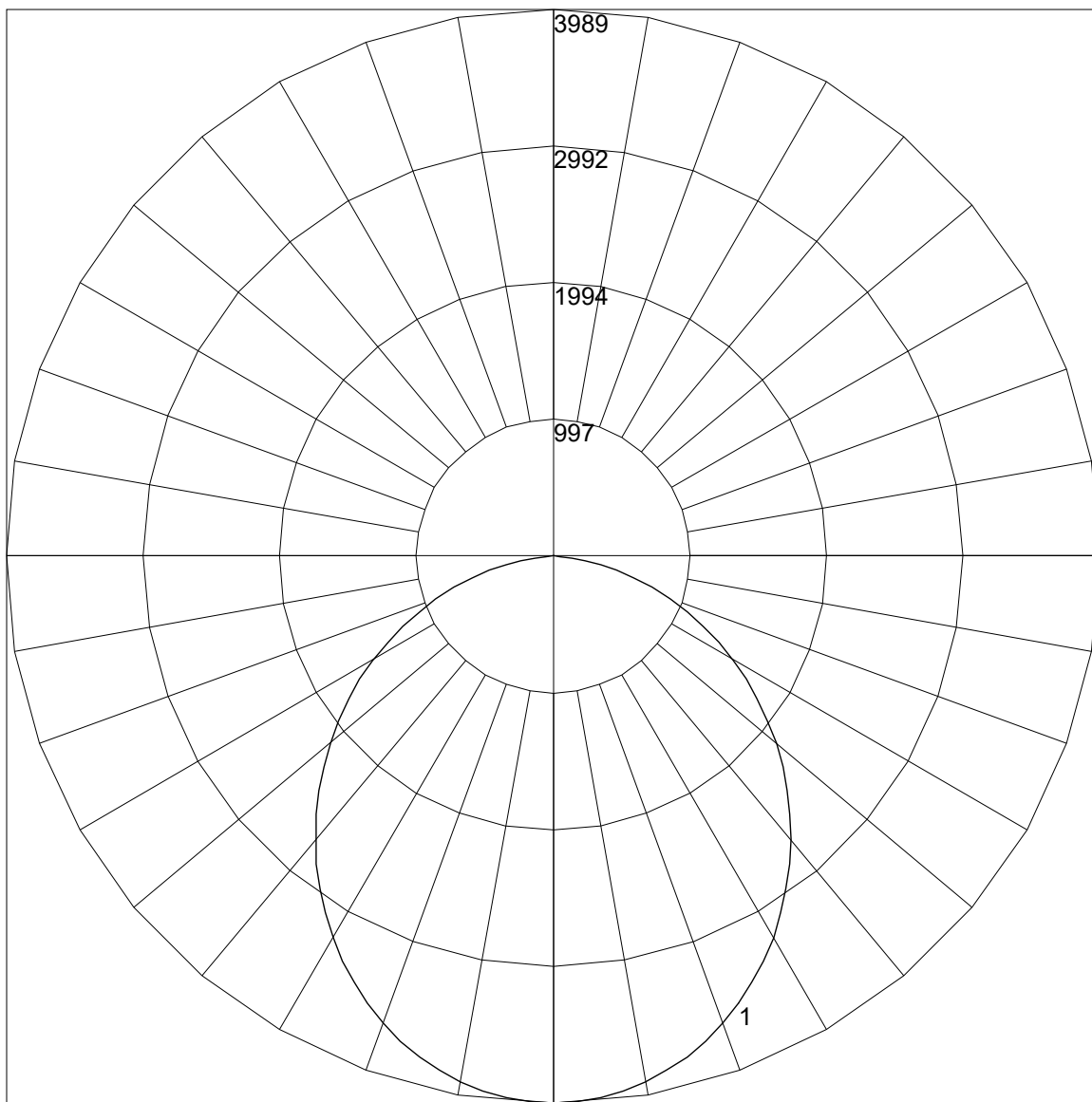
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPT-RSE-4X4-B-8TW-ITL91550.902.IES**

**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	109	104	100	97	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	70	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	51
5	77	64	55	49	75	63	55	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	43	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	37	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 3988.763 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)