

# 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-3X3-S-835-ITL91549.001.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL91549.001 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]03/01/19  
[ISSUEDATE]03/22/19  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HPT-RSE-3x3-S-835  
[INPUT\_ELECTRICAL]277.0 VOLTS, 32.1 WATTS  
[INPUT\_ELECTRICAL]277.0 VOLTS, 36.6 WATTS  
[ABSOLUTE LUMENS]4632  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL91549. 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	4632
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	144
Total Luminaire Watts	32.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.20
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	2.92 ft
Luminous Width (90-270)	2.92 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	1931	1919	1931
55	1779	1768	1779
65	1595	1579	1593
75	1308	1296	1312
85	865	853	890

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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>
<b>0.0</b>	1817.432	1817.432	1817.432	1817.432	1817.432
<b>2.5</b>	1815.286	1814.856	1813.998	1814.427	1815.715
<b>5.0</b>	1806.271	1805.413	1804.554	1805.842	1806.701
<b>7.5</b>	1791.677	1791.677	1789.960	1791.248	1791.677
<b>10.0</b>	1772.790	1771.932	1770.644	1771.932	1771.932
<b>12.5</b>	1747.894	1746.177	1745.748	1745.748	1747.465
<b>15.0</b>	1717.417	1716.129	1714.842	1716.129	1717.846
<b>17.5</b>	1683.077	1682.219	1680.502	1682.219	1683.077
<b>20.0</b>	1644.445	1643.587	1641.440	1642.728	1643.157
<b>22.5</b>	1601.950	1598.516	1598.945	1598.087	1600.662
<b>25.0</b>	1555.591	1550.869	1550.440	1551.728	1554.733
<b>27.5</b>	1501.506	1500.647	1498.072	1500.218	1504.511
<b>30.0</b>	1448.279	1447.850	1444.845	1447.421	1449.996
<b>32.5</b>	1392.477	1391.619	1389.043	1389.473	1392.477
<b>35.0</b>	1334.958	1329.807	1329.807	1330.236	1334.958
<b>37.5</b>	1274.434	1269.713	1267.996	1270.142	1274.434
<b>40.0</b>	1210.047	1206.184	1203.179	1205.755	1210.047
<b>42.5</b>	1143.943	1141.797	1139.222	1141.368	1146.948
<b>45.0</b>	1079.985	1074.834	1073.547	1075.693	1079.985
<b>47.5</b>	1012.164	1007.872	1007.872	1009.160	1014.311
<b>50.0</b>	946.060	941.768	937.475	940.480	945.631
<b>52.5</b>	876.952	873.518	869.225	873.947	879.098
<b>55.0</b>	807.414	803.980	802.263	805.697	806.984
<b>57.5</b>	740.880	734.871	734.012	736.159	740.451
<b>60.0</b>	670.913	667.479	662.328	665.762	673.059
<b>62.5</b>	600.517	597.083	594.936	597.512	603.092
<b>65.0</b>	533.125	530.549	527.974	530.979	532.696
<b>67.5</b>	465.733	462.728	460.582	462.728	463.587
<b>70.0</b>	399.200	394.907	394.049	393.619	397.483
<b>72.5</b>	332.237	331.379	326.657	329.232	333.096
<b>75.0</b>	267.850	267.421	265.275	267.850	268.709
<b>77.5</b>	209.043	206.468	207.326	206.897	209.902
<b>80.0</b>	154.958	152.812	151.524	153.241	153.241
<b>82.5</b>	106.024	103.019	103.019	102.590	104.307
<b>85.0</b>	59.665	59.665	58.807	60.095	61.382
<b>87.5</b>	21.892	23.179	23.179	22.750	23.179
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	654.98	N.A.	14.10
0-30	1369.4	N.A.	29.60
0-40	2201.84	N.A.	47.50
0-60	3751.48	N.A.	81.00
0-80	4560.77	N.A.	98.50
0-90	4632.19	N.A.	100.00
10-90	4460.91	N.A.	96.30
20-40	1546.86	N.A.	33.40
20-50	2376.85	N.A.	51.30
40-70	2074.55	N.A.	44.80
60-80	809.29	N.A.	17.50
70-80	284.38	N.A.	6.10
80-90	71.42	N.A.	1.50
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	4632.19	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	171.27
10-20	483.71
20-30	714.42
30-40	832.44
40-50	829.99
50-60	719.64
60-70	524.91
70-80	284.38
80-90	71.42
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

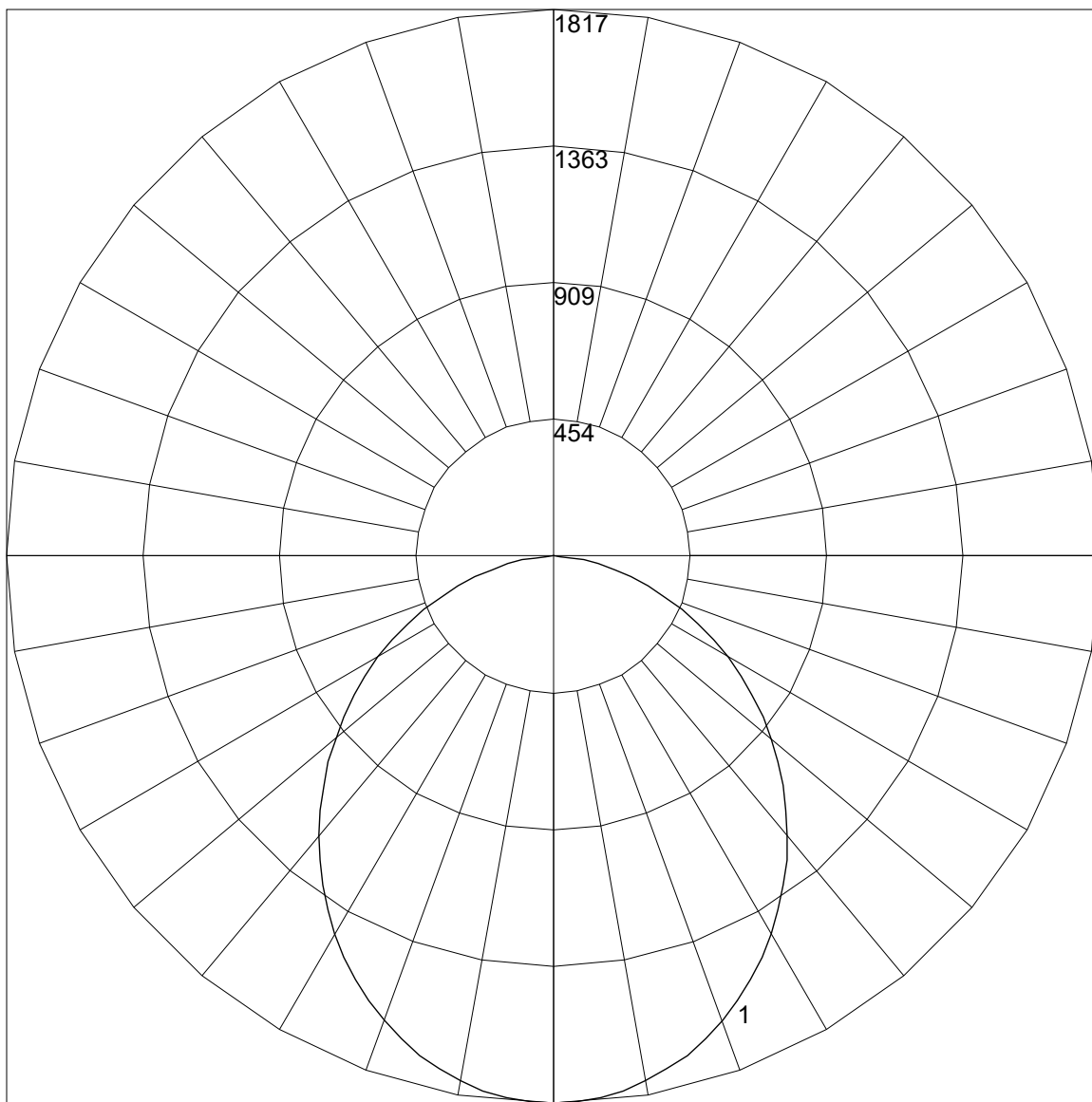
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	79	97	90	84	78	86	81	77	83	79	75	80	76	73	71
3	91	81	73	66	88	79	72	66	76	70	65	73	68	63	71	66	62	60
4	83	72	63	56	81	70	62	56	68	61	55	66	59	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	39
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	31	56	44	36	31	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

POLAR GRAPH



Maximum Candela = 1817.432 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)