

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 : HPR-LED-2X2-CS-B-837-XXIC-ITL86019.202.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL86019.202 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]11/30/15

[ISSUEDATE]04/28/16

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-2X2-CS-B-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 34.9 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 35.6 WATTS

[ABSOLUTE]LUMENS]3579

[OTHER]see www.finelite.com for source file ITL86019. 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	3579
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	34.9
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)	1.82 ft
Luminous Width (90-270)	1.81 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3787	3769	3812
55	3547	3547	3613
65	3249	3281	3375
75	2759	2891	3068
85	1940	2419	2463

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1338.713	1338.713	1338.713	1338.713	1338.713
2.5	1337.546	1337.546	1338.129	1337.546	1337.546
5.0	1332.877	1332.877	1332.877	1332.293	1332.877
7.5	1323.540	1324.123	1324.123	1323.540	1323.540
10.0	1311.868	1312.452	1310.701	1310.118	1308.367
12.5	1294.361	1295.528	1294.361	1292.027	1291.443
15.0	1273.936	1274.520	1272.769	1271.018	1270.435
17.5	1249.426	1250.593	1248.259	1246.508	1246.508
20.0	1222.582	1223.166	1220.831	1219.081	1219.081
22.5	1191.653	1192.236	1189.318	1189.318	1188.735
25.0	1160.140	1159.556	1156.055	1157.222	1155.471
27.5	1123.958	1123.375	1120.457	1121.624	1119.873
30.0	1086.026	1084.276	1082.525	1084.276	1083.108
32.5	1045.760	1044.009	1042.258	1044.009	1044.593
35.0	1002.576	1002.576	999.074	1002.576	1004.326
37.5	959.975	958.808	956.473	960.558	963.476
40.0	915.040	911.538	912.706	916.791	920.292
42.5	870.105	867.771	865.436	871.856	873.606
45.0	822.836	817.583	818.751	825.753	828.088
47.5	774.399	771.481	770.898	777.901	780.818
50.0	725.379	722.461	723.629	730.048	734.716
52.5	675.192	672.858	674.609	681.028	685.696
55.0	625.005	622.671	625.005	632.008	636.676
57.5	574.234	571.900	575.985	582.404	587.073
60.0	523.464	520.546	526.381	532.801	537.469
62.5	472.693	468.608	476.194	482.614	487.866
65.0	421.922	418.421	426.007	433.010	438.262
67.5	370.568	368.234	375.236	383.990	388.659
70.0	320.381	318.046	325.049	333.803	337.888
72.5	267.859	269.610	277.196	285.950	290.619
75.0	219.423	221.757	229.927	239.264	243.933
77.5	172.737	176.239	184.992	193.746	198.998
80.0	128.969	133.638	142.391	150.561	155.230
82.5	87.536	92.788	103.292	108.544	110.879
85.0	51.938	57.190	64.776	64.776	65.944
87.5	21.009	25.094	27.428	28.595	29.762
90.0	0.000	0.000	0.000	0.000	0.000

IES INDOOR REPORT
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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	485.26	N.A.	13.60
0-30	1018.27	N.A.	28.50
0-40	1645.1	N.A.	46.00
0-60	2840.54	N.A.	79.40
0-80	3507.79	N.A.	98.00
0-90	3578.55	N.A.	100.00
10-90	3452.03	N.A.	96.50
20-40	1159.84	N.A.	32.40
20-50	1794.09	N.A.	50.10
40-70	1617.92	N.A.	45.20
60-80	667.26	N.A.	18.60
70-80	244.77	N.A.	6.80
80-90	70.75	N.A.	2.00
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	3578.55	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	126.52
10-20	358.74
20-30	533.01
30-40	626.83
40-50	634.25
50-60	561.18
60-70	422.48
70-80	244.77
80-90	70.75
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

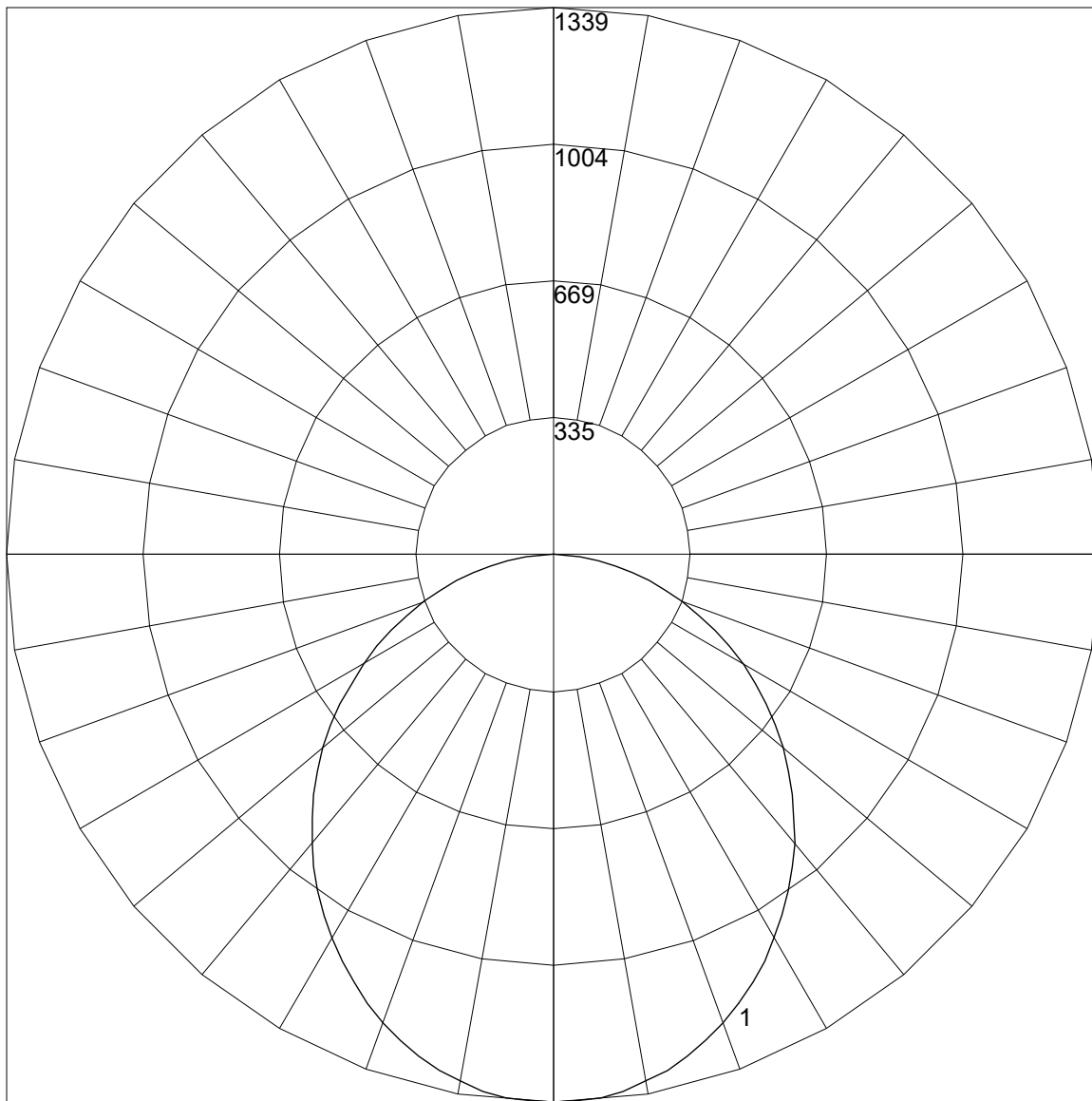
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	100	96	106	102	98	94	97	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30
9	57	43	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 1338.713 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)