

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-S-837-XXIC-ITL86019.201.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL86019.201 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]11/30/15

[ISSUEDATE]05/17/2021

[MANUFAC]FINELITE, INC.

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

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 26.7 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 27.5 WATTS

[ABSOLUTE LUMENS]2784

[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	2783
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	26.7
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	2946	2931	2965
55	2758	2758	2810
65	2527	2552	2625
75	2146	2249	2386
85	1509	1881	1915

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1041.221	1041.221	1041.221	1041.221	1041.221
2.5	1040.313	1040.313	1040.767	1040.313	1040.313
5.0	1036.682	1036.682	1036.682	1036.228	1036.682
7.5	1029.420	1029.874	1029.874	1029.420	1029.420
10.0	1020.342	1020.796	1019.434	1018.981	1017.619
12.5	1006.726	1007.633	1006.726	1004.910	1004.456
15.0	990.839	991.293	989.932	988.570	988.116
17.5	971.776	972.684	970.868	969.507	969.507
20.0	950.897	951.351	949.536	948.174	948.174
22.5	926.841	927.295	925.026	925.026	924.572
25.0	902.331	901.877	899.154	900.062	898.700
27.5	874.190	873.736	871.467	872.374	871.013
30.0	844.687	843.326	841.964	843.326	842.418
32.5	813.369	812.007	810.646	812.007	812.461
35.0	779.781	779.781	777.058	779.781	781.143
37.5	746.647	745.739	743.924	747.101	749.371
40.0	711.698	708.974	709.882	713.059	715.783
42.5	676.748	674.933	673.117	678.110	679.472
45.0	639.983	635.898	636.806	642.253	644.068
47.5	602.311	600.041	599.587	605.034	607.303
50.0	564.184	561.914	562.822	567.815	571.446
52.5	525.149	523.334	524.696	529.688	533.319
55.0	486.115	484.299	486.115	491.562	495.193
57.5	446.627	444.811	447.988	452.981	456.612
60.0	407.138	404.869	409.408	414.401	418.032
62.5	367.650	364.473	370.373	375.366	379.451
65.0	328.162	325.438	331.339	336.786	340.871
67.5	288.219	286.404	291.851	298.659	302.290
70.0	249.185	247.369	252.816	259.624	262.802
72.5	208.335	209.697	215.597	222.406	226.037
75.0	170.662	172.478	178.832	186.094	189.726
77.5	134.351	137.074	143.883	150.691	154.776
80.0	100.309	103.941	110.749	117.103	120.734
82.5	68.083	72.168	80.338	84.423	86.239
85.0	40.396	44.481	50.382	50.382	51.289
87.5	16.340	19.517	21.333	22.241	23.148
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	377.43	N.A.	13.60
0-30	791.99	N.A.	28.50
0-40	1279.52	N.A.	46.00
0-60	2209.31	N.A.	79.40
0-80	2728.28	N.A.	98.00
0-90	2783.31	N.A.	100.00
10-90	2684.91	N.A.	96.50
20-40	902.10	N.A.	32.40
20-50	1395.41	N.A.	50.10
40-70	1258.38	N.A.	45.20
60-80	518.98	N.A.	18.60
70-80	190.38	N.A.	6.80
80-90	55.03	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	2783.31	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	98.40
10-20	279.02
20-30	414.56
30-40	487.54
40-50	493.31
50-60	436.48
60-70	328.60
70-80	190.38
80-90	55.03
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

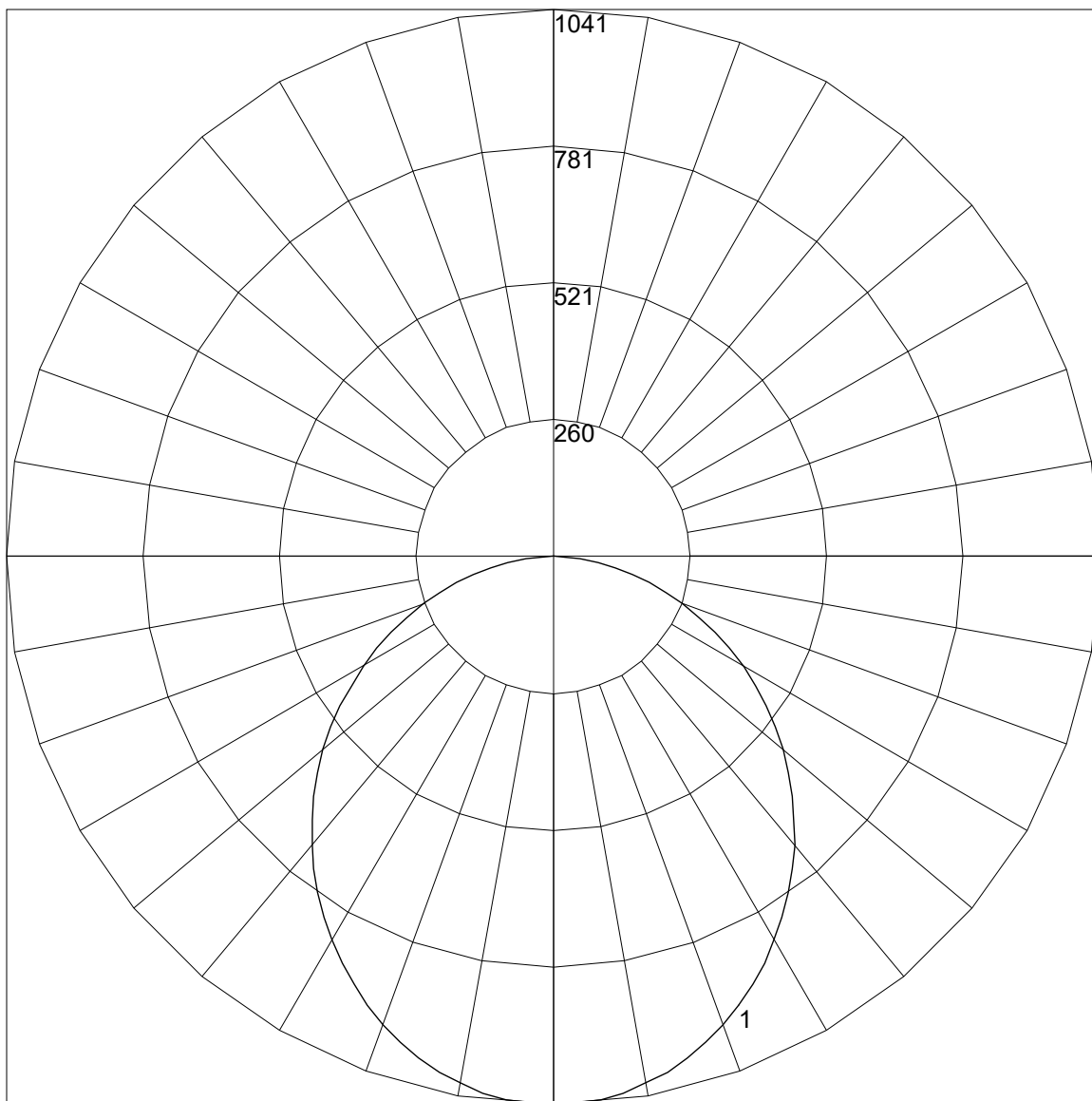
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 1041.221 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)