

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-2X4-CS-V-837-XXIC-ITL86020.200.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL86020.200 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]11/10/15
[ISSUEDATE]05/21/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HPR-LED-2X4-CS-V-837-XXIC
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 51.7 WATTS
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 51.1 WATTS
[ABSOLUTE]LUMENS]5678
[OTHER]see www.finelite.com for source file ITL86020. 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	5678
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	51.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.20
Spacing Criterion (Diagonal)	1.32
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	3.83 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	2910	2848	2841
55	2741	2673	2662
65	2498	2450	2454
75	2103	2145	2206
85	1375	1756	1711

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	2150.00	2150.00	2150.00	2150.00	2150.00
2.5	2148.28	2147.42	2147.42	2146.56	2147.42
5.0	2139.68	2138.82	2137.96	2137.10	2136.24
7.5	2125.06	2122.48	2120.76	2119.04	2117.32
10.0	2101.84	2100.98	2098.40	2094.10	2092.38
12.5	2073.46	2072.60	2070.02	2066.58	2063.14
15.0	2041.64	2039.92	2035.62	2030.46	2027.02
17.5	2004.66	2002.08	1994.34	1989.18	1987.46
20.0	1961.66	1958.22	1949.62	1944.46	1942.74
22.5	1915.22	1910.06	1901.46	1894.58	1892.86
25.0	1862.76	1855.88	1847.28	1839.54	1837.82
27.5	1806.00	1798.26	1788.80	1781.06	1779.34
30.0	1745.80	1736.34	1726.88	1718.28	1716.56
32.5	1683.02	1672.70	1662.38	1653.78	1652.06
35.0	1615.94	1605.62	1593.58	1584.98	1584.12
37.5	1547.14	1535.96	1523.92	1517.04	1515.32
40.0	1475.76	1463.72	1451.68	1447.38	1443.94
42.5	1405.24	1391.48	1378.58	1374.28	1371.70
45.0	1329.56	1313.22	1301.18	1299.46	1297.74
47.5	1252.16	1235.82	1225.50	1222.92	1222.06
50.0	1173.90	1157.56	1146.38	1146.38	1145.52
52.5	1095.64	1078.44	1068.12	1068.98	1064.68
55.0	1015.66	999.32	990.72	989.86	986.42
57.5	933.10	917.62	910.74	910.74	907.30
60.0	847.10	835.06	829.90	829.04	828.18
62.5	764.54	753.36	749.92	749.92	749.06
65.0	681.98	670.80	669.08	670.80	669.94
67.5	598.56	589.10	589.10	591.68	591.68
70.0	514.28	508.26	510.84	514.28	518.58
72.5	431.72	430.86	433.44	438.60	442.90
75.0	351.74	353.46	358.62	364.64	368.94
77.5	275.20	279.50	287.24	294.12	298.42
80.0	202.96	210.70	221.02	227.04	230.48
82.5	137.60	147.92	158.24	161.68	163.40
85.0	77.40	90.30	98.90	97.18	96.32
87.5	26.66	38.70	41.28	40.42	38.70
90.0	0.00	0.00	0.00	0.00	0.00

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	776.39	N.A.	13.70
0-30	1627.42	N.A.	28.70
0-40	2625.92	N.A.	46.30
0-60	4523.43	N.A.	79.70
0-80	5569.99	N.A.	98.10
0-90	5677.6	N.A.	100.00
10-90	5474.82	N.A.	96.40
20-40	1849.52	N.A.	32.60
20-50	2857.83	N.A.	50.30
40-70	2562.54	N.A.	45.10
60-80	1046.56	N.A.	18.40
70-80	381.53	N.A.	6.70
80-90	107.61	N.A.	1.90
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	5677.6	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	202.78
10-20	573.62
20-30	851.03
30-40	998.49
40-50	1008.31
50-60	889.20
60-70	665.03
70-80	381.53
80-90	107.61
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

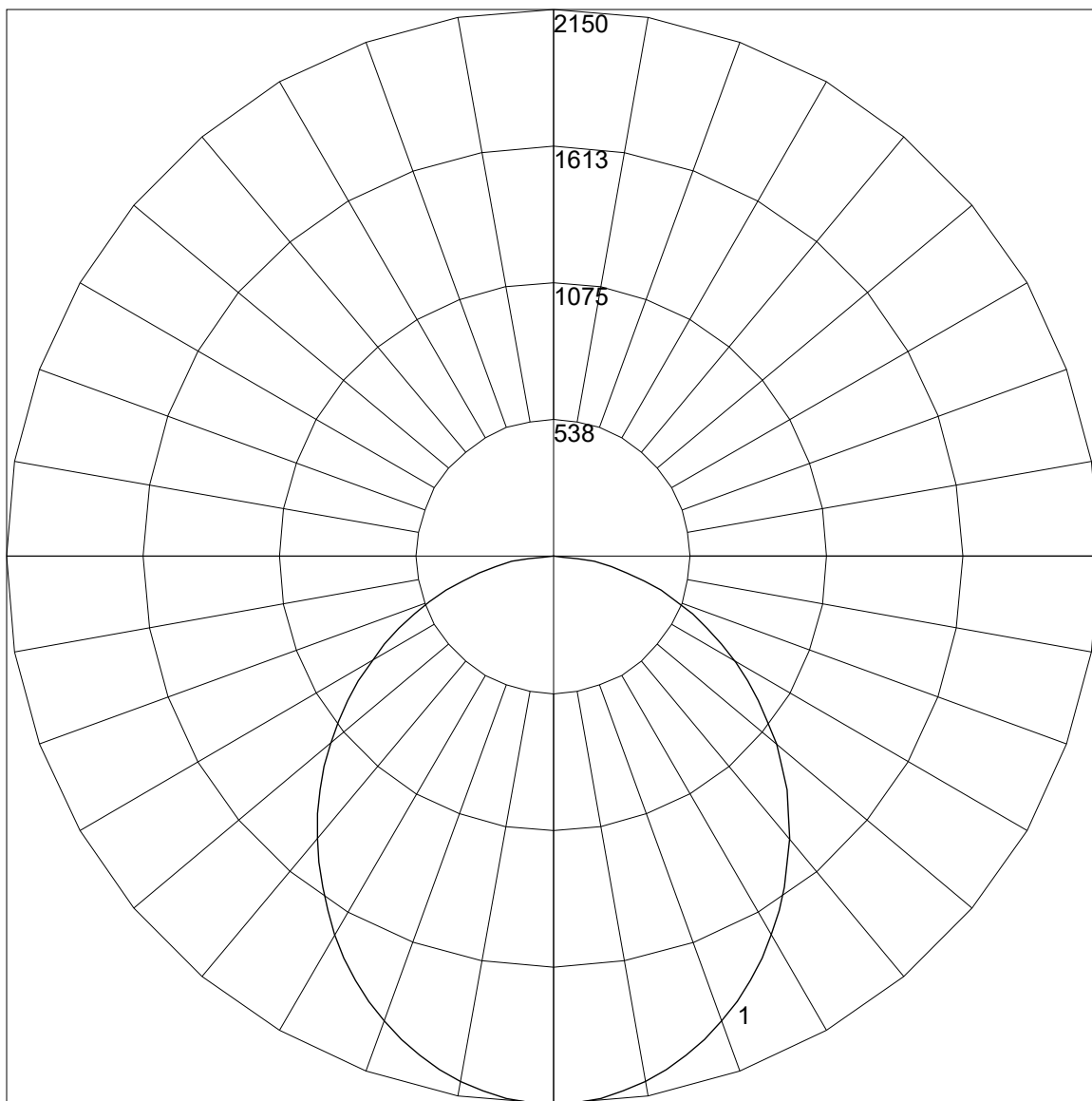
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 2150 Located At Horizontal Angle = 0, Vertical Angle = 0
1 - Vertical Plane Through Horizontal Angles (90 - 270)