

# 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-WAV-2X2-V-837-XXIC-ITL85836.200.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL85836.200 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]10/15/15

[ISSUEDATE]05/17/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HPR-LED-WAV-2X2-V-837-XXIC

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 54.6 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 53.6 WATTS

[ABSOLUTE]LUMENS]5654

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85836. 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	5654
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
Total Luminaire Watts	54.6
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.24
Spacing Criterion (Diagonal)	1.34
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	5878	6001	6124
55	5485	5632	5783
65	5020	5173	5378
75	4218	4553	4877
85	2762	3469	3693

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	2113.02	2113.02	2113.02	2113.02	2113.02
2.5	2111.30	2112.16	2112.16	2112.16	2112.16
5.0	2102.70	2103.56	2103.56	2104.42	2105.28
7.5	2088.08	2088.94	2089.80	2091.52	2092.38
10.0	2069.16	2070.02	2070.88	2070.88	2071.74
12.5	2043.36	2042.50	2045.08	2045.94	2047.66
15.0	2007.24	2010.68	2013.26	2018.42	2019.28
17.5	1967.68	1971.12	1976.28	1982.30	1983.16
20.0	1925.54	1927.26	1935.00	1941.02	1945.32
22.5	1875.66	1878.24	1889.42	1896.30	1901.46
25.0	1823.20	1824.92	1836.96	1845.56	1853.30
27.5	1763.86	1769.02	1781.92	1792.24	1799.98
30.0	1704.52	1707.10	1722.58	1733.76	1741.50
32.5	1637.44	1643.46	1658.94	1671.84	1679.58
35.0	1569.50	1576.38	1592.72	1605.62	1615.94
37.5	1499.84	1506.72	1524.78	1538.54	1548.86
40.0	1427.60	1434.48	1453.40	1467.16	1478.34
42.5	1352.78	1360.52	1379.44	1395.78	1405.24
45.0	1277.10	1284.84	1303.76	1320.96	1330.42
47.5	1200.56	1208.30	1228.08	1242.70	1254.74
50.0	1124.02	1130.90	1151.54	1167.02	1178.20
52.5	1045.76	1052.64	1073.28	1088.76	1099.08
55.0	966.64	974.38	992.44	1009.64	1019.10
57.5	886.66	895.26	912.46	927.94	939.12
60.0	810.98	813.56	831.62	847.10	858.28
62.5	727.56	735.30	752.50	768.84	778.30
65.0	651.88	656.18	671.66	688.00	698.32
67.5	571.90	576.20	591.68	610.60	618.34
70.0	488.48	495.36	513.42	532.34	540.08
72.5	411.08	417.96	436.88	453.22	463.54
75.0	335.40	341.42	362.06	377.54	387.86
77.5	261.44	270.04	288.10	305.30	313.04
80.0	191.78	201.24	218.44	233.92	239.94
82.5	128.14	137.60	153.08	164.26	167.70
85.0	73.96	80.84	92.88	96.32	98.90
87.5	30.10	33.54	36.98	35.26	35.26
90.0	0.00	0.00	0.00	0.00	0.00

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPR-LED-WAV-2X2-V-837-XXIC-ITL85836.200.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	767.39	N.A.	13.60
0-30	1613.17	N.A.	28.50
0-40	2608.78	N.A.	46.10
0-60	4501.32	N.A.	79.60
0-80	5549.59	N.A.	98.20
0-90	5653.8	N.A.	100.00
10-90	5454.03	N.A.	96.50
20-40	1841.38	N.A.	32.60
20-50	2846.85	N.A.	50.40
40-70	2558.4	N.A.	45.30
60-80	1048.27	N.A.	18.50
70-80	382.42	N.A.	6.80
80-90	104.21	N.A.	1.80
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	5653.8	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	199.77
10-20	567.63
20-30	845.77
30-40	995.61
40-50	1005.47
50-60	887.07
60-70	665.85
70-80	382.42
80-90	104.21
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

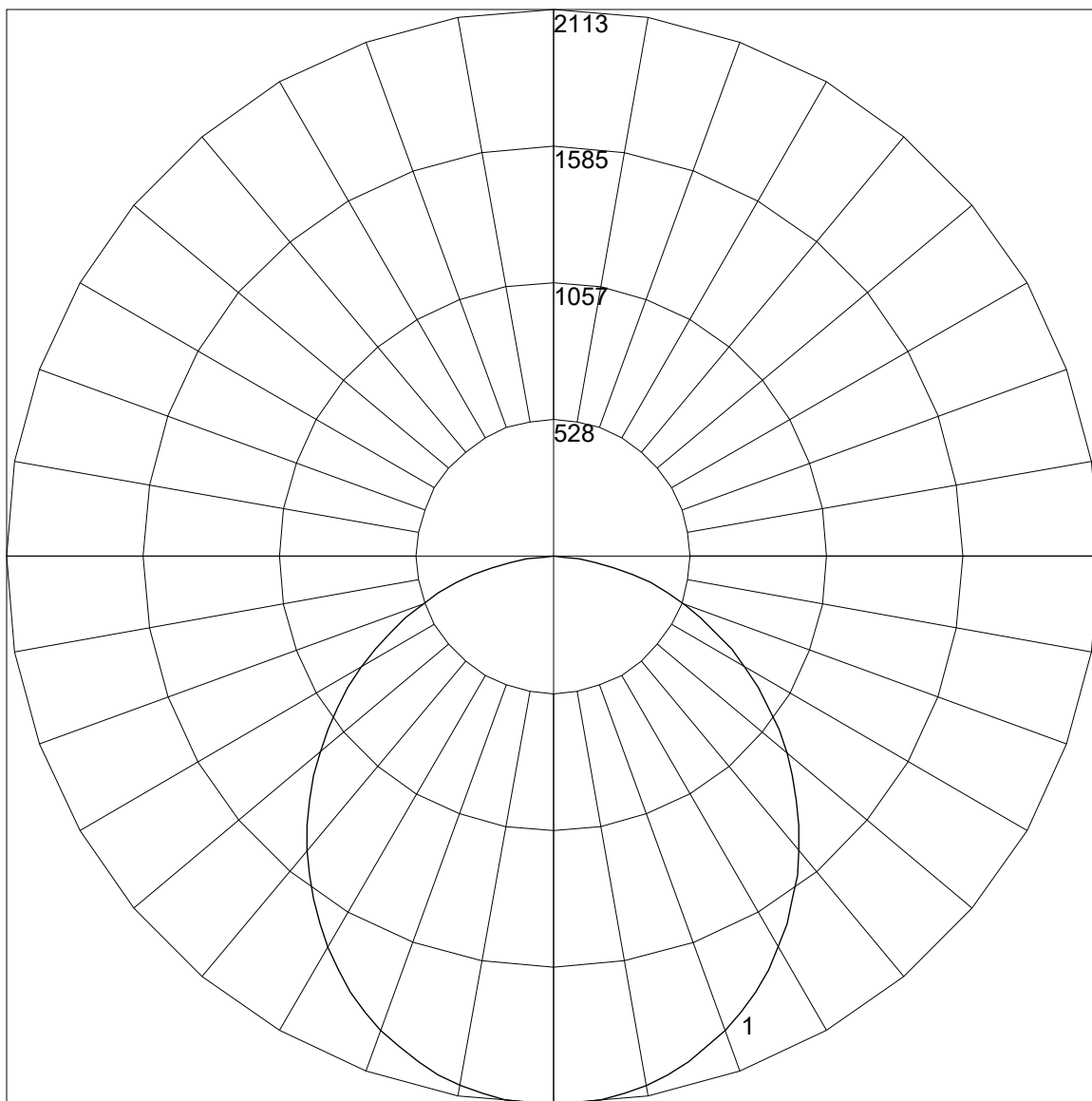
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HPR-LED-WAV-2X2-V-837-XXIC-ITL85836.200.IES**

**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	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	75	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	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	37	33	43	37	32	30
9	57	44	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 = 2113.02 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)