

# 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-2X4-V-837-XXIC-ITL85837.200.IES**

**DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL85837.200 Family Correlation File  
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.  
[TESTDATE]10/16/15  
[ISSUEDATE]05/21/2021  
[MANUFAC]FINELITE, INC.  
[LUMCAT]HPR-LED-WAV-2X4-V-837-XXIC  
[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 51.7 WATTS  
[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 51.1 WATTS  
[ABSOLUTE]LUMENS]6079  
[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85837. 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	6079
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	118
Total Luminaire Watts	51.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.22
Spacing Criterion (90-270)	1.22
Spacing Criterion (Diagonal)	1.34
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	3044	3074	3097
55	2852	2885	2899
65	2598	2655	2699
75	2181	2319	2438
85	1359	1879	2108

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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>	2265.24	2265.24	2265.24	2265.24	2265.24
<b>2.5</b>	2262.66	2261.80	2262.66	2261.80	2261.80
<b>5.0</b>	2254.06	2253.20	2253.20	2253.20	2253.20
<b>7.5</b>	2238.58	2238.58	2238.58	2237.72	2238.58
<b>10.0</b>	2214.50	2215.36	2217.94	2219.66	2218.80
<b>12.5</b>	2183.54	2186.12	2190.42	2193.86	2192.14
<b>15.0</b>	2150.86	2151.72	2158.60	2161.18	2159.46
<b>17.5</b>	2113.02	2112.16	2119.04	2122.48	2121.62
<b>20.0</b>	2067.44	2066.58	2074.32	2078.62	2076.90
<b>22.5</b>	2016.70	2015.84	2024.44	2029.60	2027.88
<b>25.0</b>	1961.66	1961.66	1970.26	1976.28	1974.56
<b>27.5</b>	1902.32	1900.60	1911.78	1916.94	1915.22
<b>30.0</b>	1838.68	1839.54	1849.00	1853.30	1856.74
<b>32.5</b>	1771.60	1771.60	1781.92	1788.80	1790.52
<b>35.0</b>	1700.22	1701.08	1711.40	1718.28	1720.00
<b>37.5</b>	1626.26	1627.98	1639.16	1645.18	1647.76
<b>40.0</b>	1549.72	1551.44	1562.62	1568.64	1571.22
<b>42.5</b>	1471.46	1474.04	1484.36	1492.10	1494.68
<b>45.0</b>	1390.62	1394.06	1404.38	1412.12	1414.70
<b>47.5</b>	1308.06	1312.36	1323.54	1329.56	1333.86
<b>50.0</b>	1225.50	1228.08	1240.98	1247.00	1247.00
<b>52.5</b>	1142.08	1142.94	1156.70	1162.72	1163.58
<b>55.0</b>	1056.94	1059.52	1068.98	1076.72	1074.14
<b>57.5</b>	971.80	976.10	985.56	989.86	996.74
<b>60.0</b>	884.08	888.38	897.84	903.00	909.88
<b>62.5</b>	797.22	802.38	811.84	817.00	823.02
<b>65.0</b>	709.50	715.52	724.98	731.00	737.02
<b>67.5</b>	622.64	627.80	638.12	645.86	651.88
<b>70.0</b>	535.78	541.80	553.84	561.58	569.32
<b>72.5</b>	448.92	455.80	468.70	479.02	486.76
<b>75.0</b>	364.64	371.52	387.86	399.04	407.64
<b>77.5</b>	283.80	291.54	309.60	322.50	330.24
<b>80.0</b>	208.12	216.72	236.50	249.40	257.14
<b>82.5</b>	138.46	147.92	168.56	182.32	186.62
<b>85.0</b>	76.54	87.72	105.78	116.10	118.68
<b>87.5</b>	28.38	36.12	49.02	53.32	54.18
<b>90.0</b>	0.00	0.00	0.00	0.00	0.00

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	821.97	N.A.	13.50
0-30	1728.65	N.A.	28.40
0-40	2798.18	N.A.	46.00
0-60	4835.9	N.A.	79.60
0-80	5962.29	N.A.	98.10
0-90	6078.99	N.A.	100.00
10-90	5865.04	N.A.	96.50
20-40	1976.21	N.A.	32.50
20-50	3058.52	N.A.	50.30
40-70	2754.15	N.A.	45.30
60-80	1126.39	N.A.	18.50
70-80	409.97	N.A.	6.70
80-90	116.70	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	6078.99	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	213.95
10-20	608.02
20-30	906.68
30-40	1069.53
40-50	1082.31
50-60	955.42
60-70	716.42
70-80	409.97
80-90	116.70
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

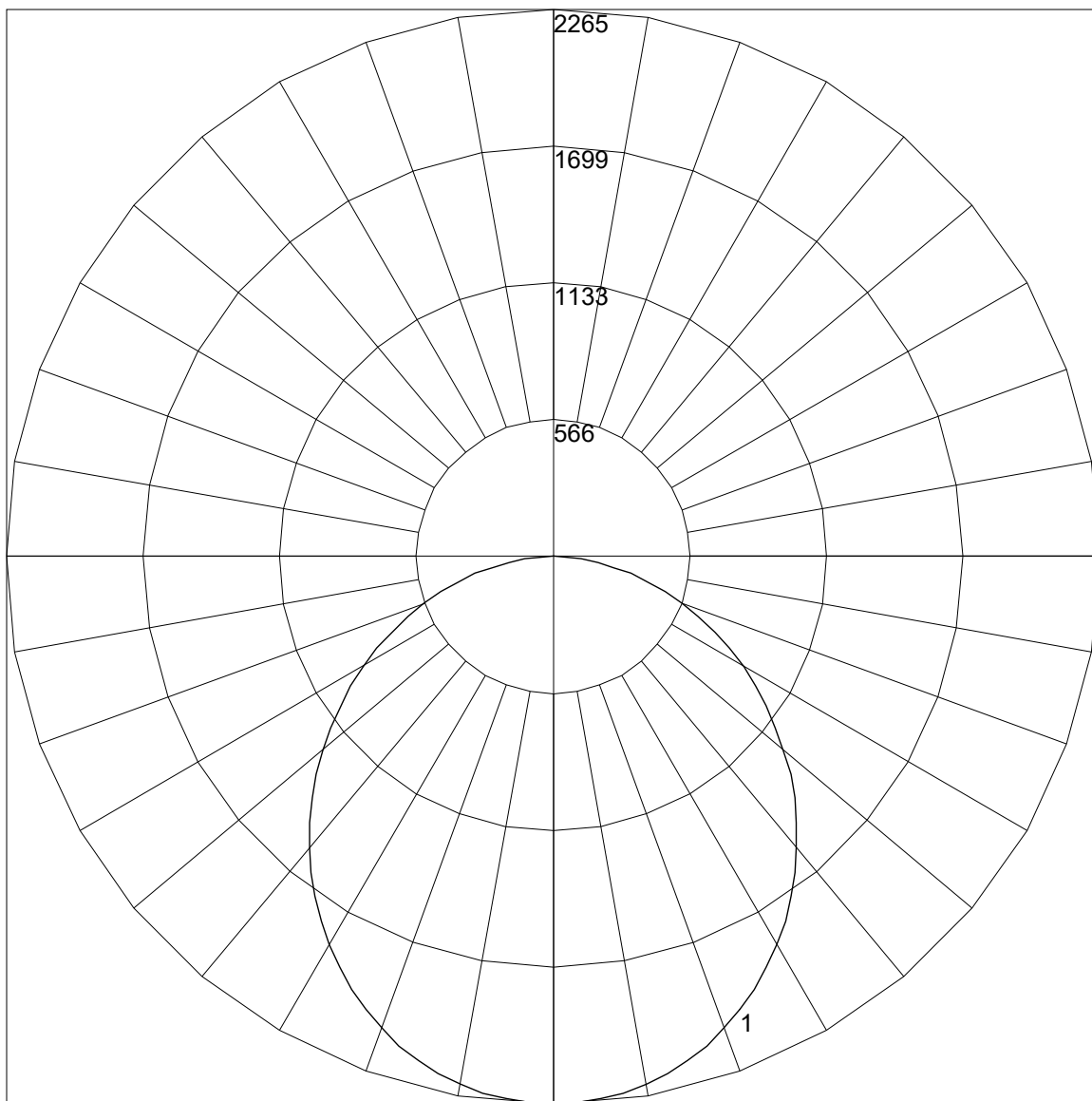
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**COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD**

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	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	80	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	68	56	48	42	54	47	41	53	46	41	51	45	41	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	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 = 2265.24 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)