

# 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 : HP-2-WW-D-K-4FT-H-835-ITL85137.003.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST]ITL85137.003 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]08/15/15

[ISSUEDATE]02/10/17

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-2-WW-D-K-4ft-H-835

[OTHER]INPUT ELECTRICAL: 120.0 VOLTS, 15.1 WATTS

[OTHER]INPUT ELECTRICAL: 277.0 VOLTS, 17.7 WATTS

[ABSOLUTE]LUMENS]1167

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL85137. 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	1166
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	77
Total Luminaire Watts	15.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.90
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.48
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	0.11 ft
Luminous Width (90-270)	4.00 ft
Luminous Height	0.03 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	12218	14083	8933
55	7717	11210	8274
65	5498	7826	7430
75	5648	6035	6316
85	6376	6309	4833

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	377.222	377.222	377.222	377.222	377.222	377.222	377.222	377.222	377.222
2.5	441.778	434.778	423.111	401.333	376.444	351.556	332.111	320.444	315.778
5.0	507.111	497.778	471.333	426.222	375.667	329.000	294.000	273.000	266.000
7.5	564.667	555.333	517.222	451.111	374.111	306.444	260.556	235.667	227.889
10.0	612.889	602.000	556.111	472.889	371.778	285.444	233.333	208.444	201.444
12.5	648.667	637.778	588.000	492.333	368.667	266.778	211.556	189.000	182.778
15.0	671.222	663.444	614.444	508.667	365.556	248.889	195.222	175.000	170.333
17.5	686.000	679.000	631.556	521.889	360.889	233.333	182.000	165.667	161.778
20.0	693.000	686.778	641.667	532.000	356.222	219.333	171.889	157.889	154.778
22.5	692.222	686.778	645.556	538.222	350.000	206.889	163.333	151.667	149.333
25.0	686.000	682.111	644.778	540.556	343.778	195.222	156.333	146.222	143.111
27.5	675.889	672.000	638.556	539.000	336.778	185.111	149.333	140.778	137.667
30.0	662.667	658.778	627.667	534.333	328.222	175.000	143.111	134.556	131.444
32.5	642.444	640.889	612.889	525.778	318.889	166.444	137.667	128.333	125.222
35.0	618.333	617.556	594.222	512.556	308.778	157.889	130.667	122.111	118.222
37.5	587.222	589.556	572.444	497.000	297.111	149.333	124.444	115.111	110.444
40.0	549.111	555.333	548.333	479.111	284.667	141.556	117.444	107.333	101.889
42.5	504.000	515.667	520.333	458.111	272.222	133.000	110.444	98.000	92.556
45.0	451.889	471.333	489.222	434.778	259.000	125.222	103.444	88.667	81.667
47.5	404.444	423.111	456.556	409.889	243.444	117.444	94.889	78.556	73.111
50.0	350.000	374.111	419.222	383.444	227.889	109.667	86.333	69.222	64.556
52.5	298.667	324.333	380.333	355.444	211.556	101.889	77.000	60.667	56.000
55.0	253.556	278.444	339.111	326.667	195.222	93.333	66.889	52.889	48.222
57.5	217.000	238.000	300.222	297.889	179.667	84.778	58.333	44.333	40.444
60.0	188.222	203.778	261.333	269.111	162.556	76.222	49.778	36.556	32.667
62.5	168.000	177.333	226.333	241.111	146.222	67.667	42.000	29.556	25.667
65.0	152.444	158.667	194.444	214.667	129.889	58.333	33.444	21.778	18.667
67.5	142.333	143.889	167.222	188.222	114.333	49.778	25.667	14.778	11.667
70.0	135.333	133.778	144.667	162.556	98.778	40.444	18.667	8.556	5.444
72.5	128.333	125.222	126.778	139.222	83.222	31.111	11.667	2.333	0.778
75.0	122.889	118.222	112.778	117.444	68.444	23.333	5.444	0.000	0.000
77.5	117.444	112.000	101.111	98.778	54.444	14.778	0.778	0.000	0.000
80.0	111.222	105.778	92.556	80.111	42.000	7.778	0.000	0.000	0.000
82.5	104.222	98.778	84.000	65.333	30.333	1.556	0.000	0.000	0.000
85.0	96.444	91.000	75.444	52.111	18.667	0.000	0.000	0.000	0.000
87.5	84.778	80.111	65.333	41.222	9.333	0.000	0.000	0.000	0.000
90.0	72.333	67.667	52.889	29.556	0.000	0.000	0.000	0.000	0.000
92.5	59.889	54.444	39.667	16.333	0.000	0.000	0.000	0.000	0.000
95.0	46.667	42.000	26.444	4.667	0.000	0.000	0.000	0.000	0.000
97.5	34.222	30.333	14.778	0.000	0.000	0.000	0.000	0.000	0.000
100.0	22.556	17.889	4.667	0.000	0.000	0.000	0.000	0.000	0.000
102.5	10.889	7.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	1.556	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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CANDELA TABULATION - (Cont.)

135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	149.59	N.A.	12.80
0-30	329.34	N.A.	28.20
0-40	548.53	N.A.	47.00
0-60	932.42	N.A.	79.90
0-80	1112.63	N.A.	95.40
0-90	1151.5	N.A.	98.70
10-90	1114.72	N.A.	95.60
20-40	398.94	N.A.	34.20
20-50	614.04	N.A.	52.60
40-70	496.06	N.A.	42.50
60-80	180.21	N.A.	15.40
70-80	68.05	N.A.	5.80
80-90	38.87	N.A.	3.30
90-110	14.98	N.A.	1.30
90-120	14.98	N.A.	1.30
90-130	14.98	N.A.	1.30
90-150	14.98	N.A.	1.30
90-180	14.98	N.A.	1.30
110-180	0.00	N.A.	0.00
0-180	1166.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	36.78
10-20	112.81
20-30	179.75
30-40	219.19
40-50	215.10
50-60	168.79
60-70	112.17
70-80	68.05
80-90	38.87
90-100	13.97
100-110	1.01
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

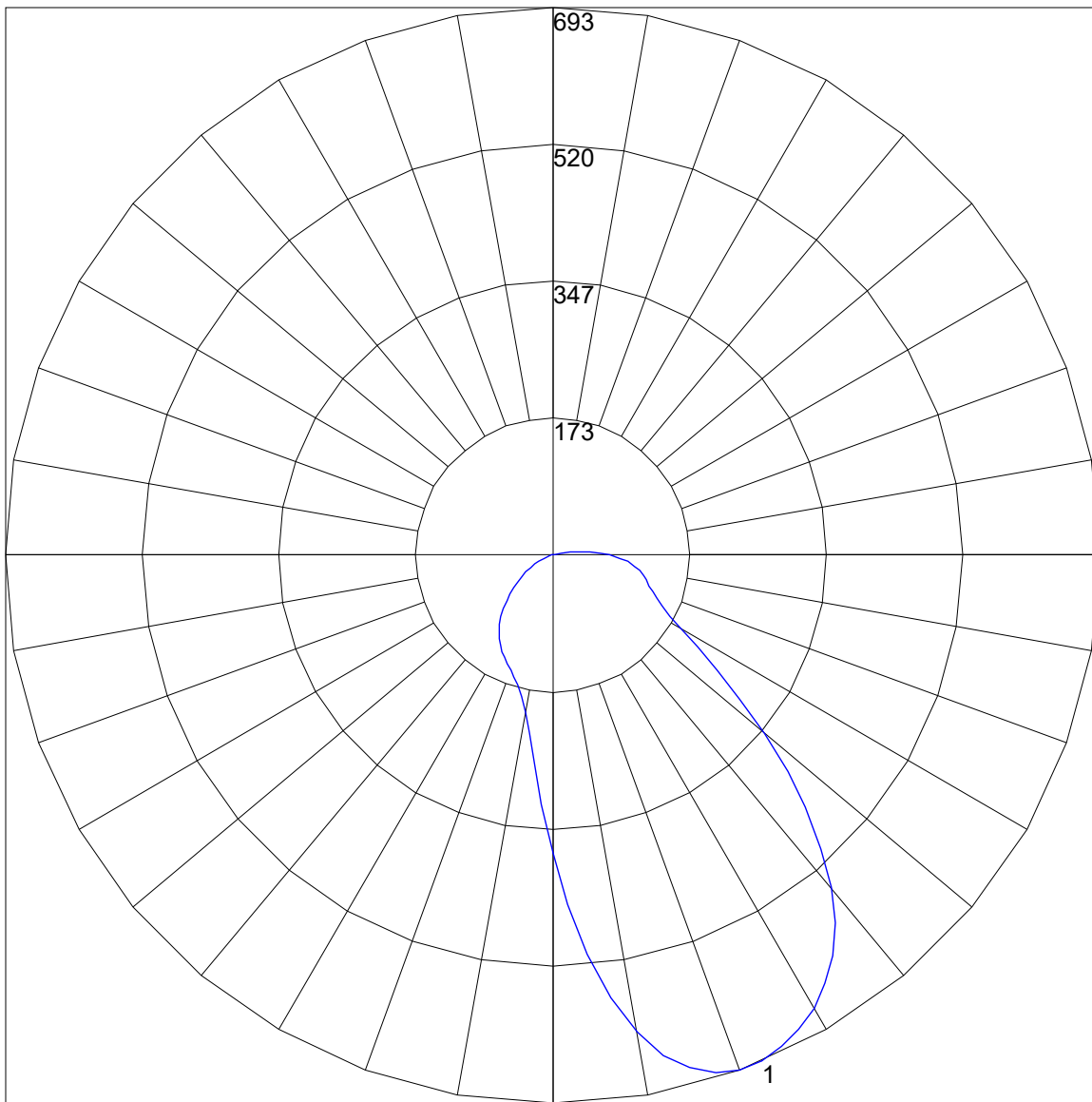
Effective Floor Cavity Reflectance 0.20

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	110	110	110	105	105	105	101	101	101	99
1	108	104	99	95	105	101	97	94	97	93	90	92	90	87	89	87	85	82
2	99	91	84	78	96	89	82	77	85	80	75	81	77	73	78	75	71	69
3	90	80	72	66	88	78	71	65	75	69	64	72	67	62	70	65	61	59
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	62	57	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	56	51	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	41	37	47	41	36	34
8	61	48	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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POLAR GRAPH



Maximum Candela = 693 Located At Horizontal Angle = 0, Vertical Angle = 20

# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)