

# 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 : HO4-D-RO-4FT-B-835-OPN-ITL89348.002.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89348.002 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]06/19/17

[ISSUEDATE]08/02/17

[MANUFAC]FINELITE, INC.

[LUMCAT]HO4-D-RO-4ft-B-835-OPN

[OTHER]120.0 VOLTS, 17.4 WATTS

[OTHER]277.0 VOLTS, 18.7 WATTS

[\_ABSOLUTE]LUMENS]2089

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL89348. 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	2089
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	120
Total Luminaire Watts	17.4
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.25 ft
Luminous Height	0.18 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	6554	4215	3742
55	6483	3734	3227
65	6379	3232	3017
75	6046	3026	2740
85	4841	1617	578

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HO4-D-RO-4FT-B-835-OPN-ITL89348.002.IES**

**CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	617.286	617.286	617.286	617.286	617.286
2.5	617.286	616.258	614.714	613.686	613.686
5.0	615.743	613.171	610.085	608.027	606.998
7.5	613.686	608.541	604.426	601.340	600.311
10.0	610.599	602.883	597.739	594.653	592.595
12.5	606.998	596.196	590.537	586.936	584.879
15.0	601.340	587.965	582.307	578.192	576.134
17.5	595.167	578.706	573.562	569.447	566.875
20.0	586.936	568.932	563.274	559.673	557.101
22.5	578.706	557.615	553.500	549.385	547.327
25.0	568.418	546.298	541.669	538.582	536.010
27.5	557.615	534.467	529.837	527.265	525.208
30.0	545.270	521.093	516.977	514.920	513.376
32.5	531.895	507.718	504.117	502.574	501.031
35.0	518.006	492.800	490.743	489.199	487.656
37.5	502.574	477.883	476.339	475.311	473.767
40.0	485.599	461.936	460.907	459.878	458.850
42.5	468.109	444.961	444.961	444.446	443.417
45.0	450.619	427.471	429.014	427.985	425.413
47.5	431.072	409.467	411.524	409.981	406.895
50.0	411.524	390.434	394.034	391.462	388.890
52.5	390.434	370.372	375.001	371.401	367.800
55.0	368.314	350.824	354.940	349.796	351.339
57.5	346.195	330.763	334.878	334.363	338.479
60.0	322.532	309.672	313.273	321.503	326.647
62.5	299.384	288.581	291.668	309.158	315.330
65.0	275.207	267.491	276.236	297.326	304.014
67.5	249.487	245.371	262.347	285.495	292.182
70.0	223.766	222.737	248.972	272.635	279.322
72.5	197.017	200.104	235.598	258.231	264.404
75.0	170.268	179.013	221.709	241.256	245.371
77.5	143.005	163.066	205.762	220.680	220.165
80.0	115.741	148.149	185.186	189.301	182.614
82.5	87.449	133.231	153.807	137.861	123.972
85.0	59.671	112.655	95.165	55.041	43.724
87.5	32.408	64.815	32.922	19.547	10.803
90.0	0.000	32.922	21.605	8.745	0.000
92.5	0.000	31.379	21.091	8.230	0.000
95.0	0.000	29.836	20.576	8.230	0.000
97.5	0.000	27.778	20.062	7.716	0.000
100.0	0.000	26.235	19.033	7.716	0.000
102.5	0.000	26.749	18.519	7.716	0.000
105.0	0.000	28.292	18.004	7.202	0.000
107.5	0.000	27.263	17.490	7.202	0.000
110.0	0.000	25.720	18.519	7.202	0.000
112.5	0.000	24.177	19.547	7.202	0.000
115.0	0.000	22.634	20.576	7.202	0.000
117.5	0.000	21.091	19.547	7.716	0.000
120.0	0.000	20.062	18.004	8.230	0.000
122.5	0.000	18.519	16.975	8.230	0.000
125.0	0.000	16.975	15.947	8.230	0.000
127.5	0.000	15.432	14.403	7.202	0.000
130.0	0.000	14.918	13.375	6.173	0.000
132.5	0.000	13.375	11.831	6.173	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-D-4FT-B-835-OPN-ITL89348.002.IES****CANDELA TABULATION - (Cont.)**

135.0	0.000	11.831	11.317	6.173	0.000
137.5	0.000	10.803	10.803	5.144	0.000
140.0	0.000	9.774	8.745	4.115	0.000
142.5	0.000	8.230	8.230	3.601	0.000
145.0	0.000	6.173	7.716	3.086	0.000
147.5	0.000	3.086	6.173	3.086	0.000
150.0	0.000	2.572	5.658	3.086	0.000
152.5	0.000	1.543	5.658	2.572	0.000
155.0	0.000	0.000	4.630	1.029	0.000
157.5	0.000	0.000	2.572	0.000	0.000
160.0	0.000	0.000	2.058	0.000	0.000
162.5	0.000	0.000	1.029	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HO4-D-RO-4FT-B-835-OPN-ITL89348.002.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	222.93	N.A.	10.70
0-30	474.24	N.A.	22.70
0-40	783.43	N.A.	37.50
0-60	1433.24	N.A.	68.60
0-80	1936.6	N.A.	92.70
0-90	2028.55	N.A.	97.10
10-90	1970.61	N.A.	94.30
20-40	560.51	N.A.	26.80
20-50	892.69	N.A.	42.70
40-70	930.04	N.A.	44.50
60-80	503.37	N.A.	24.10
70-80	223.14	N.A.	10.70
80-90	91.94	N.A.	4.40
90-110	29.82	N.A.	1.40
90-120	42.15	N.A.	2.00
90-130	51.28	N.A.	2.50
90-150	59.57	N.A.	2.90
90-180	60.36	N.A.	2.90
110-180	30.54	N.A.	1.50
0-180	2088.91	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	57.93
10-20	164.99
20-30	251.31
30-40	309.20
40-50	332.18
50-60	317.62
60-70	280.23
70-80	223.14
80-90	91.94
90-100	15.89
100-110	13.93
110-120	12.33
120-130	9.13
130-140	5.64
140-150	2.64
150-160	0.75
160-170	0.04
170-180	0.00

# IES INDOOR REPORT

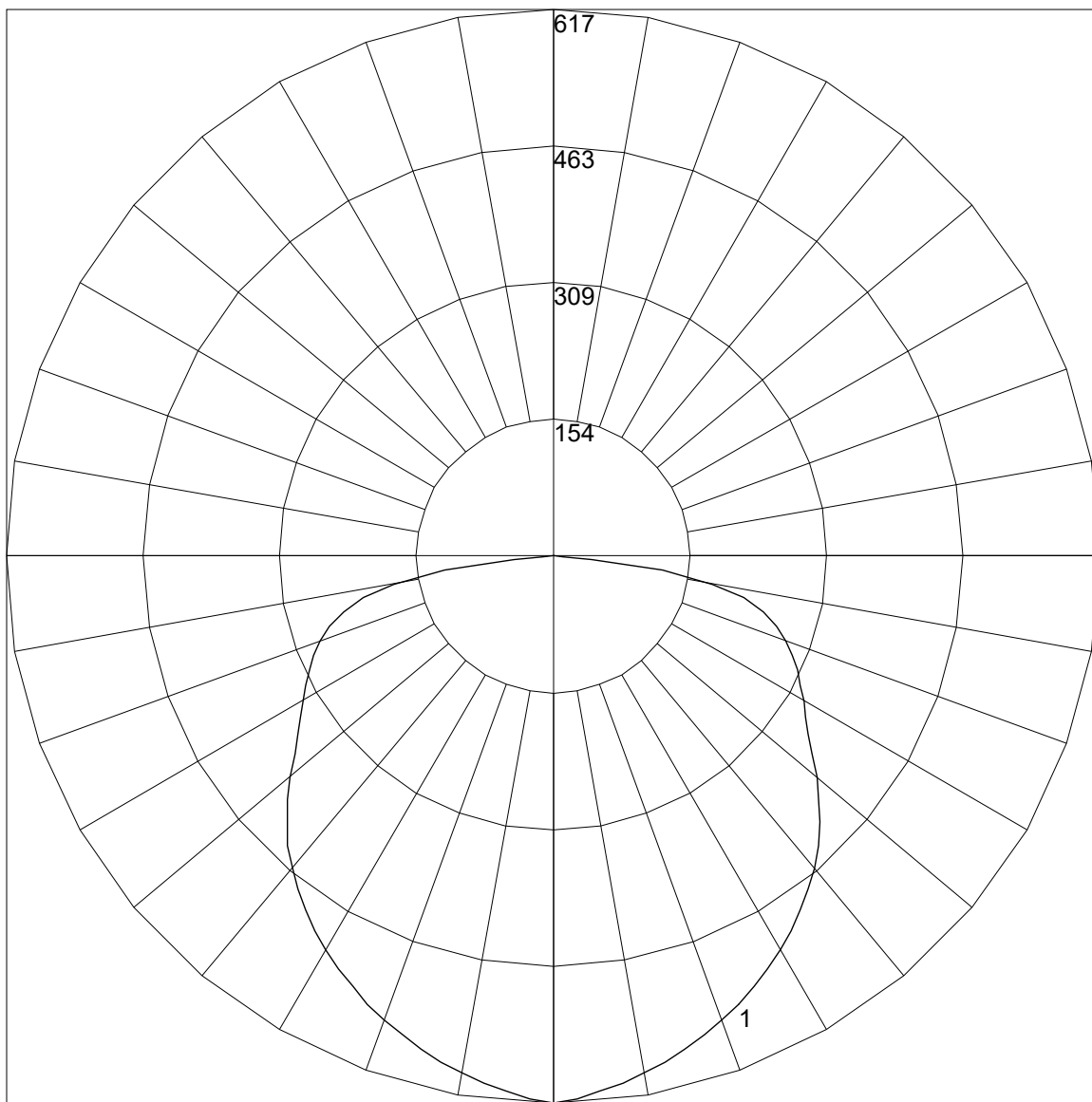
PHOTOMETRIC FILENAME : HO4-D-RO-4FT-B-835-OPN-ITL89348.002.IES

## 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	118	118	118	118	115	115	115	115	110	110	110	104	104	104	99	99	99	97
1	106	101	96	91	103	98	93	89	93	89	86	89	86	83	85	82	80	77
2	96	86	79	72	93	84	77	71	80	74	69	76	71	67	73	69	65	63
3	87	75	66	59	84	73	65	58	70	63	57	66	60	55	64	58	54	52
4	79	66	57	49	76	64	56	49	62	54	48	59	52	47	56	51	46	43
5	72	59	49	42	70	57	48	42	55	47	41	53	46	40	50	44	40	37
6	67	53	43	36	65	52	43	36	49	41	36	47	40	35	45	39	34	32
7	62	48	38	32	60	47	38	32	45	37	31	43	36	31	41	35	30	28
8	57	43	35	28	56	43	34	28	41	33	28	39	33	28	38	32	27	25
9	54	40	31	25	52	39	31	25	38	30	25	36	30	25	35	29	24	23
10	50	37	28	23	49	36	28	23	35	28	23	34	27	22	33	27	22	20

POLAR GRAPH



Maximum Candela = 617.286 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)