

# 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-ID-RO-4FT-V-V-835-TG-ITL90233.001.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90233.001 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]03/01/18

[TESTDATE]03/06/18

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HO4-ID-RO-4ft-V-V-835-TG

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 71.8 WATTS, 0.599 AMPS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 73.5 WATTS, 0.276 AMPS

[\_ABSOLUTE]LUMENS]8420

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL90233. 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	8420
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	117
Total Luminaire Watts	71.8
Ballast Factor	1.00
CIE Type	General Diffuse
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
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	12699	8093	7193
55	12503	7155	6194
65	12174	6179	5819
75	11424	5858	5485
85	8883	3211	961

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-V-V-835-TG-ITL90233.001.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	1207.364	1207.364	1207.364	1207.364	1207.364
2.5	1206.395	1205.426	1201.550	1198.643	1198.643
5.0	1204.457	1198.643	1191.860	1187.015	1185.077
7.5	1199.612	1189.922	1180.232	1172.481	1172.481
10.0	1192.829	1177.325	1165.698	1157.946	1156.008
12.5	1184.108	1161.822	1150.194	1141.473	1137.597
15.0	1173.450	1145.349	1133.721	1124.031	1120.155
17.5	1160.853	1126.938	1114.341	1105.620	1100.775
20.0	1146.318	1107.558	1094.961	1085.271	1081.395
22.5	1127.907	1086.240	1073.643	1064.922	1061.046
25.0	1107.558	1062.015	1050.388	1042.636	1039.729
27.5	1085.271	1037.791	1027.132	1019.380	1016.473
30.0	1061.046	1011.628	1000.969	995.155	993.217
32.5	1033.915	983.527	974.806	968.992	967.054
35.0	1005.814	954.457	946.705	942.829	940.891
37.5	977.713	924.419	918.605	915.698	913.760
40.0	943.798	892.442	887.597	885.659	884.690
42.5	908.915	858.527	855.620	854.651	850.775
45.0	873.062	823.643	823.643	821.705	817.829
47.5	834.302	786.822	789.729	784.884	781.008
50.0	793.605	750.000	754.845	749.031	742.248
52.5	752.907	712.209	718.992	710.271	702.519
55.0	710.271	673.450	680.233	668.605	674.419
57.5	664.729	633.721	639.535	641.473	650.194
60.0	619.186	593.023	597.868	617.248	628.876
62.5	574.612	552.326	557.170	594.961	607.558
65.0	525.194	509.690	528.101	572.674	586.240
67.5	476.744	467.054	500.969	551.357	566.860
70.0	426.357	424.419	476.744	531.008	545.543
72.5	374.031	378.876	453.488	508.721	521.318
75.0	321.705	339.147	429.264	482.558	491.279
77.5	268.411	309.109	402.132	446.705	449.612
80.0	215.116	281.977	367.248	391.473	383.721
82.5	161.822	254.845	311.046	294.574	265.504
85.0	109.496	218.023	188.953	108.527	72.674
87.5	61.047	113.372	75.581	59.109	46.512
90.0	31.008	71.705	62.984	49.419	38.760
92.5	54.264	101.744	93.992	83.333	72.674
95.0	93.023	138.566	133.721	123.062	113.372
97.5	130.814	176.357	174.419	164.729	155.039
100.0	169.574	219.961	218.023	209.302	199.612
102.5	215.116	266.473	264.535	256.783	246.124
105.0	264.535	316.860	312.984	306.202	294.574
107.5	316.860	366.279	364.341	355.620	344.961
110.0	371.124	416.667	418.605	408.915	397.287
112.5	429.264	465.116	476.744	464.147	451.550
115.0	487.403	521.318	534.884	520.349	507.752
117.5	547.481	582.364	594.961	579.457	565.891
120.0	609.496	641.473	655.039	638.566	624.031
122.5	673.450	700.581	715.116	699.612	681.201
125.0	737.403	762.597	774.225	761.628	741.279
127.5	802.326	823.643	829.457	823.643	803.295
130.0	867.248	885.659	892.442	885.659	865.310
132.5	934.108	948.643	958.333	947.674	928.295

IES INDOOR REPORT  
PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-V-V-835-TG-ITL90233.001.IES

CANDELA TABULATION - (Cont.)

135.0	999.031	1009.690	1021.318	1009.690	991.279
137.5	1063.953	1072.674	1079.457	1069.767	1053.294
140.0	1127.907	1131.783	1139.535	1127.907	1113.372
142.5	1190.891	1190.891	1197.674	1186.046	1173.450
145.0	1250.969	1248.062	1253.876	1244.186	1232.558
147.5	1307.170	1300.387	1307.170	1300.387	1287.791
150.0	1361.434	1355.620	1362.403	1354.651	1343.992
152.5	1412.791	1403.101	1412.791	1404.070	1392.442
155.0	1460.271	1448.643	1459.302	1450.581	1443.798
157.5	1502.907	1492.248	1500.000	1492.248	1487.403
160.0	1542.636	1531.008	1541.667	1532.946	1529.070
162.5	1577.519	1566.860	1576.550	1567.829	1563.953
165.0	1607.558	1599.806	1604.651	1599.806	1594.961
167.5	1632.752	1627.907	1629.845	1627.907	1625.000
170.0	1654.070	1651.163	1652.132	1651.163	1649.225
172.5	1669.574	1670.543	1668.605	1668.605	1668.605
175.0	1682.170	1682.170	1682.170	1682.170	1681.201
177.5	1689.922	1689.922	1689.922	1688.953	1688.953
180.0	1691.860	1691.860	1691.860	1691.860	1691.860

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HO4-ID-RO-4FT-V-V-835-TG-ITL90233.001.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	434.25	N.A.	5.20
0-30	921.95	N.A.	11.00
0-40	1519.6	N.A.	18.00
0-60	2767.61	N.A.	32.90
0-80	3740.51	N.A.	44.40
0-90	3928.43	N.A.	46.70
10-90	3815.29	N.A.	45.30
20-40	1085.34	N.A.	12.90
20-50	1724.39	N.A.	20.50
40-70	1785.58	N.A.	21.20
60-80	972.90	N.A.	11.60
70-80	435.34	N.A.	5.20
80-90	187.92	N.A.	2.20
90-110	459.86	N.A.	5.50
90-120	974.81	N.A.	11.60
90-130	1654.05	N.A.	19.60
90-150	3211.49	N.A.	38.10
90-180	4491.14	N.A.	53.30
110-180	4031.28	N.A.	47.90
0-180	8419.57	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

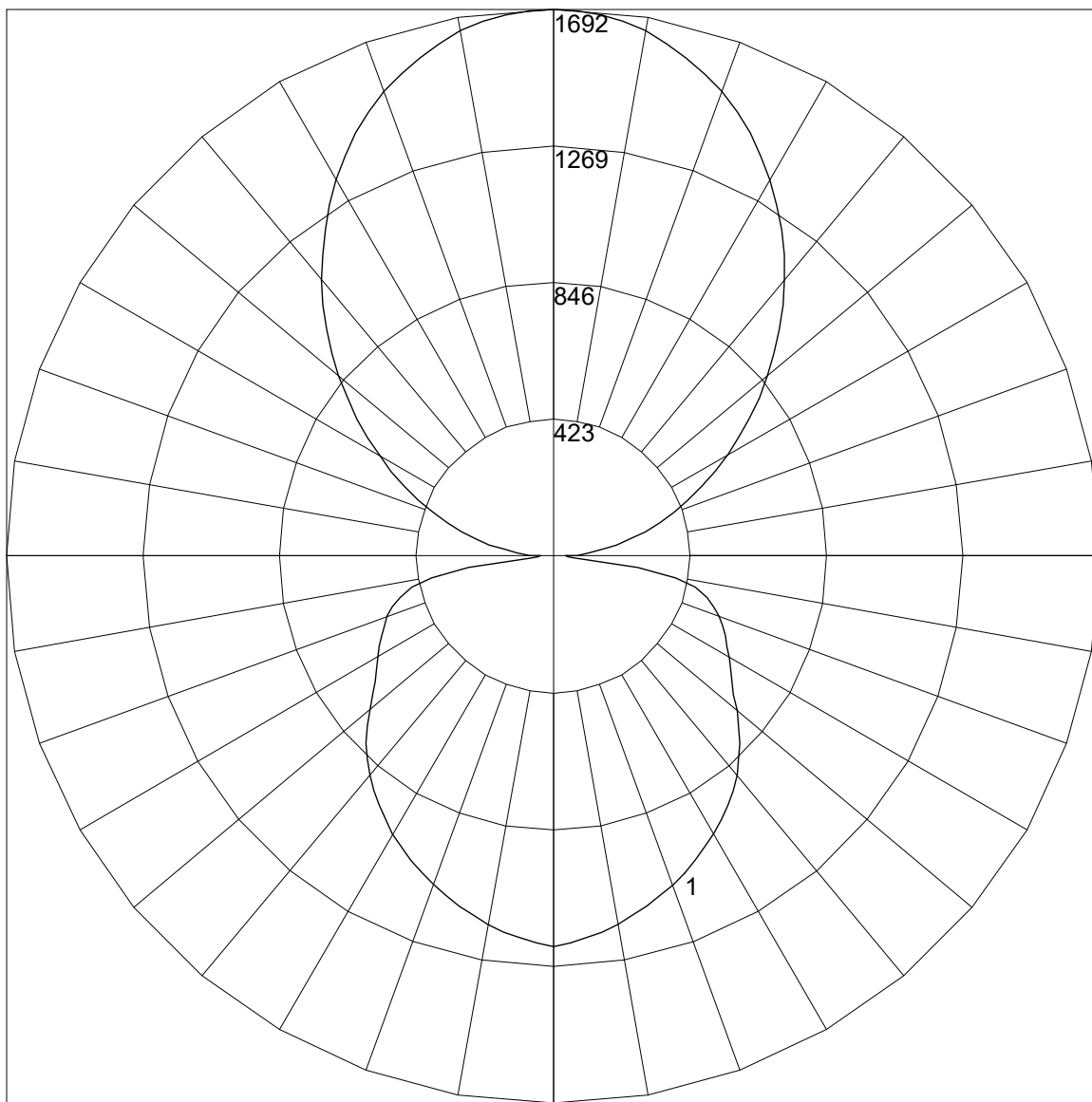
Zone	Lumens
0-10	113.14
10-20	321.11
20-30	487.70
30-40	597.65
40-50	639.04
50-60	608.97
60-70	537.56
70-80	435.34
80-90	187.92
90-100	137.88
100-110	321.98
110-120	514.95
120-130	679.24
130-140	777.99
140-150	779.45
150-160	668.62
160-170	451.44
170-180	159.58

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	106	106	106	106	98	98	98	98	81	81	81	67	67	67	53	53	53	47
1	96	91	87	83	88	84	80	77	70	67	65	57	55	53	45	44	43	37
2	87	79	72	67	79	72	67	62	60	56	52	49	46	43	39	37	35	30
3	79	69	61	55	72	63	56	51	53	48	43	43	39	36	34	31	29	25
4	72	61	52	46	66	56	48	43	47	41	37	38	34	31	30	27	25	21
5	66	54	45	39	60	50	42	36	41	36	31	34	30	26	27	24	21	18
6	61	48	40	34	55	44	37	31	37	31	27	31	26	23	24	21	19	16
7	56	43	35	29	51	40	33	27	34	28	24	28	23	20	22	19	16	14
8	52	39	31	26	47	36	29	24	31	25	21	25	21	18	20	17	15	12
9	48	36	28	23	44	33	26	21	28	22	19	23	19	16	19	15	13	11
10	45	33	25	20	41	30	24	19	26	20	17	21	17	14	17	14	12	10

POLAR GRAPH



Maximum Candela = 1691.86 Located At Horizontal Angle = 0, Vertical Angle = 180  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270)