

# 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-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.007 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]03/08/17

[ISSUEDATE]08/27/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]FINELITE HP-4-ID-4ft-H-V-835-WSO-DAO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 65.5 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 67.1 WATTS

[\_ABSOLUTE]LUMENS]7230

[\_CONVERT] Photometric web converted from original test data

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL89033 and ITL94331. 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	7230
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	65.5
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
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.32 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	11998	12386	10267
55	10306	11017	9130
65	8629	9377	7959
75	6948	7688	6884
85	5445	5923	6018

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES

## 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	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000	1552.000
2.5	1584.000	1582.000	1574.000	1563.000	1551.000	1537.000	1527.000	1519.000	1516.000
5.0	1609.000	1605.000	1591.000	1569.000	1543.000	1518.000	1494.000	1481.000	1476.000
7.5	1628.000	1621.000	1602.000	1569.000	1530.000	1491.000	1458.000	1440.000	1433.000
10.0	1641.000	1635.000	1606.000	1563.000	1514.000	1461.000	1422.000	1397.000	1385.000
12.5	1645.000	1640.000	1606.000	1551.000	1495.000	1427.000	1383.000	1352.000	1339.000
15.0	1641.000	1635.000	1599.000	1533.000	1468.000	1389.000	1341.000	1306.000	1292.000
17.5	1628.000	1623.000	1586.000	1512.000	1437.000	1349.000	1293.000	1260.000	1243.000
20.0	1606.000	1603.000	1566.000	1482.000	1403.000	1304.000	1246.000	1212.000	1197.000
22.5	1576.000	1573.000	1539.000	1451.000	1367.000	1257.000	1201.000	1164.000	1153.000
25.0	1538.000	1537.000	1506.000	1415.000	1323.000	1210.000	1153.000	1119.000	1110.000
27.5	1493.000	1493.000	1465.000	1373.000	1277.000	1161.000	1102.000	1075.000	1064.000
30.0	1441.000	1444.000	1419.000	1327.000	1226.000	1108.000	1056.000	1030.000	1023.000
32.5	1383.000	1387.000	1368.000	1279.000	1173.000	1057.000	1007.000	985.000	982.000
35.0	1315.000	1325.000	1314.000	1224.000	1116.000	1003.000	960.000	943.000	939.000
37.5	1249.000	1261.000	1251.000	1166.000	1056.000	950.000	911.000	901.000	900.000
40.0	1175.000	1192.000	1188.000	1106.000	998.000	895.000	862.000	856.000	861.000
42.5	1102.000	1114.000	1123.000	1045.000	938.000	842.000	815.000	815.000	819.000
45.0	1019.000	1039.000	1052.000	976.000	872.000	787.000	768.000	774.000	779.000
47.5	943.000	965.000	980.000	911.000	812.000	735.000	718.000	731.000	741.000
50.0	866.000	885.000	906.000	846.000	749.000	683.000	672.000	688.000	699.000
52.5	790.000	807.000	833.000	776.000	687.000	626.000	625.000	644.000	657.000
55.0	710.000	733.000	759.000	707.000	629.000	576.000	578.000	601.000	616.000
57.5	638.000	657.000	685.000	642.000	569.000	524.000	531.000	558.000	573.000
60.0	564.000	587.000	615.000	578.000	513.000	475.000	483.000	510.000	526.000
62.5	499.000	515.000	546.000	512.000	459.000	426.000	439.000	466.000	482.000
65.0	438.000	452.000	476.000	450.000	404.000	381.000	391.000	421.000	436.000
67.5	374.000	386.000	411.000	392.000	352.000	334.000	348.000	376.000	386.000
70.0	320.000	329.000	351.000	335.000	305.000	289.000	303.000	329.000	340.000
72.5	264.000	274.000	294.000	280.000	259.000	246.000	261.000	282.000	294.000
75.0	216.000	224.000	239.000	230.000	214.000	206.000	218.000	238.000	248.000
77.5	172.000	177.000	189.000	184.000	172.000	166.000	178.000	193.000	199.000
80.0	130.000	134.000	143.000	142.000	132.000	129.000	138.000	151.000	155.000
82.5	92.000	93.000	100.000	99.000	96.000	94.000	100.000	108.000	112.000
85.0	57.000	57.000	62.000	62.000	63.000	60.000	64.000	67.000	70.000
87.5	22.000	24.000	26.000	28.000	29.000	28.000	29.000	30.000	31.000
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	12.444	21.778	23.333	23.333	23.333	23.333	23.333	21.778	12.444
95.0	35.000	62.222	63.778	49.778	49.778	49.778	63.778	62.222	35.000
97.5	61.444	105.778	163.333	101.889	88.667	101.889	163.333	105.778	61.444
100.0	92.556	144.667	259.000	191.333	150.111	191.333	259.000	144.667	92.556
102.5	129.889	176.556	382.667	296.333	241.111	296.333	382.667	176.556	129.889
105.0	164.111	210.778	477.556	458.111	367.111	458.111	477.556	210.778	164.111
107.5	199.111	245.000	521.111	670.445	563.889	670.445	521.111	245.000	199.111
110.0	232.556	276.889	542.111	847.000	807.334	847.000	542.111	276.889	232.556
112.5	266.778	308.000	567.000	920.111	968.334	920.111	567.000	308.000	266.778
115.0	299.445	337.556	609.000	942.667	1029.000	942.667	609.000	337.556	299.445
117.5	325.889	364.778	642.445	953.556	1051.556	953.556	642.445	364.778	325.889
120.0	350.000	391.222	664.222	996.334	1067.889	996.334	664.222	391.222	350.000
122.5	371.000	416.889	678.222	1049.223	1118.445	1049.223	678.222	416.889	371.000
125.0	391.222	439.445	688.334	1078.000	1177.556	1078.000	688.334	439.445	391.222
127.5	409.889	459.667	696.111	1078.778	1208.667	1078.778	696.111	459.667	409.889
130.0	425.445	477.556	702.334	1060.111	1203.223	1060.111	702.334	477.556	425.445
132.5	441.778	494.667	707.778	1034.445	1174.445	1034.445	707.778	494.667	441.778

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES****CANDELA TABULATION - (Cont.)**

135.0	457.334	510.222	711.667	1006.445	1137.111	1006.445	711.667	510.222	457.334
137.5	472.111	524.222	713.222	976.111	1094.334	976.111	713.222	524.222	472.111
140.0	487.667	537.445	714.000	945.778	1049.223	945.778	714.000	537.445	487.667
142.5	503.222	549.889	713.222	913.889	1004.111	913.889	713.222	549.889	503.222
145.0	519.556	562.333	709.334	884.334	959.778	884.334	709.334	562.333	519.556
147.5	532.778	572.445	703.889	854.778	917.000	854.778	703.889	572.445	532.778
150.0	546.778	582.556	698.445	826.000	878.111	826.000	698.445	582.556	546.778
152.5	560.778	591.111	692.222	798.000	842.334	798.000	692.222	591.111	560.778
155.0	573.222	599.667	686.000	771.556	806.556	771.556	686.000	599.667	573.222
157.5	584.889	606.667	678.222	747.445	774.667	747.445	678.222	606.667	584.889
160.0	595.778	613.667	672.000	725.667	745.889	725.667	672.000	613.667	595.778
162.5	605.111	619.111	664.222	705.445	721.000	705.445	664.222	619.111	605.111
165.0	614.445	623.778	657.222	687.556	699.222	687.556	657.222	623.778	614.445
167.5	621.445	627.667	651.000	672.000	680.556	672.000	651.000	627.667	621.445
170.0	626.889	631.556	646.333	659.556	664.222	659.556	646.333	631.556	626.889
172.5	630.778	633.889	642.445	649.445	652.556	649.445	642.445	633.889	630.778
175.0	634.667	635.445	638.556	641.667	644.000	641.667	638.556	635.445	634.667
177.5	636.222	636.222	637.000	637.778	637.778	637.778	637.000	636.222	636.222
180.0	637.000	637.000	637.000	637.000	637.000	637.000	637.000	637.000	637.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	559.67	N.A.	7.70
0-30	1168.58	N.A.	16.20
0-40	1872.64	N.A.	25.90
0-60	3150.8	N.A.	43.60
0-80	3813.23	N.A.	52.70
0-90	3883.51	N.A.	53.70
10-90	3737.17	N.A.	51.70
20-40	1312.97	N.A.	18.20
20-50	2004.47	N.A.	27.70
40-70	1701.22	N.A.	23.50
60-80	662.43	N.A.	9.20
70-80	239.36	N.A.	3.30
80-90	70.28	N.A.	1.00
90-110	452.26	N.A.	6.30
90-120	1077.33	N.A.	14.90
90-130	1740.06	N.A.	24.10
90-150	2779.79	N.A.	38.50
90-180	3346.07	N.A.	46.30
110-180	2893.8	N.A.	40.00
0-180	7229.58	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	146.34
10-20	413.34
20-30	608.90
30-40	704.07
40-50	691.50
50-60	586.66
60-70	423.06
70-80	239.36
80-90	70.28
90-100	75.36
100-110	376.90
110-120	625.06
120-130	662.73
130-140	584.82
140-150	454.91
150-160	318.49
160-170	186.59
170-180	61.20

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

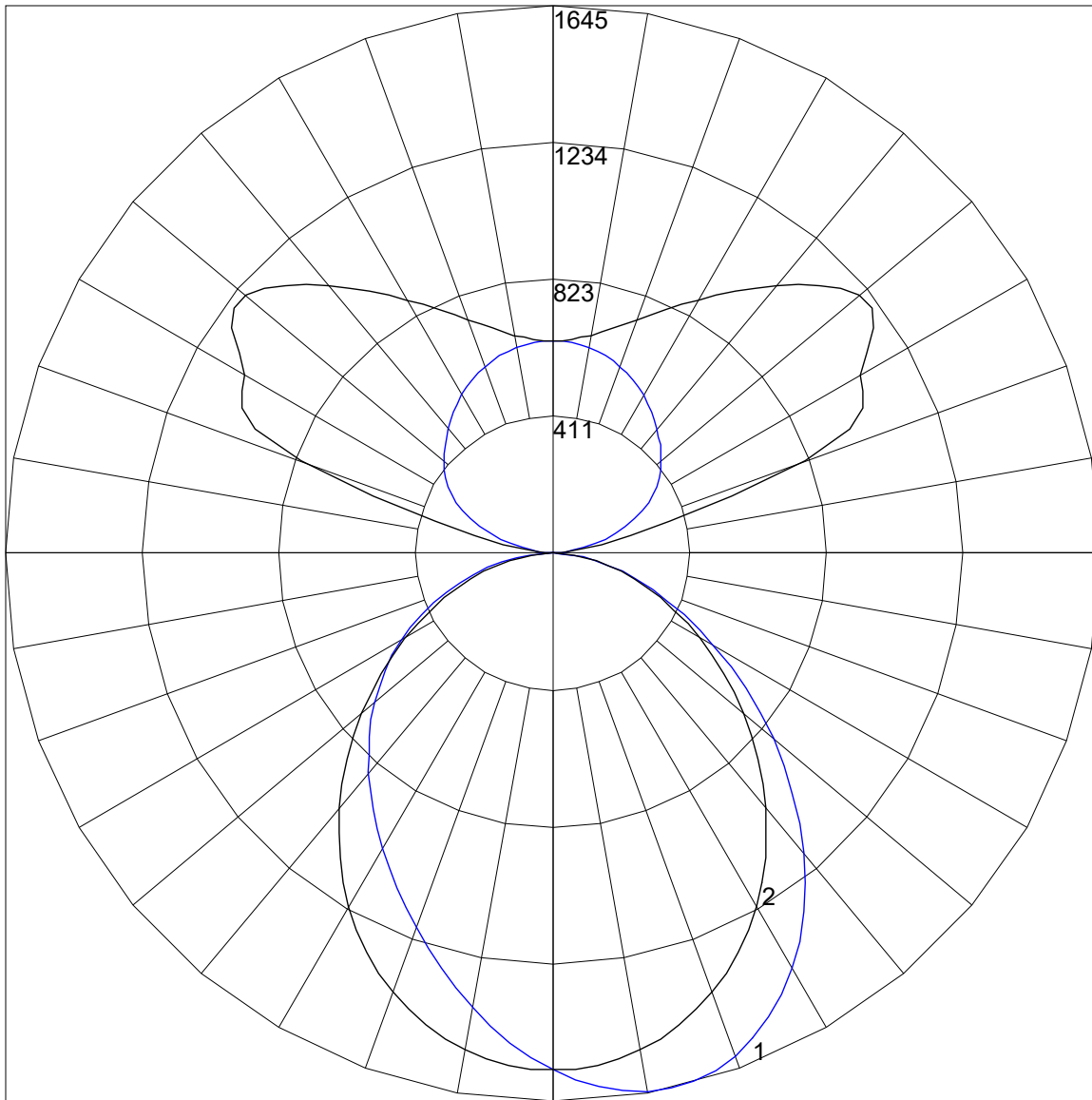
Effective Floor Cavity Reflectance 0.20

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	108	108	108	108	100	100	100	100	85	85	85	72	72	72	60	60	60	54
1	99	94	90	87	91	88	84	81	75	73	70	63	62	60	53	52	50	45
2	90	83	76	71	83	77	71	67	66	62	58	56	53	50	47	44	43	38
3	82	73	65	59	76	68	61	56	58	53	49	49	46	43	41	39	36	32
4	75	64	56	50	69	60	53	48	52	46	42	44	40	37	37	34	31	28
5	69	57	49	43	64	54	46	41	46	41	36	40	35	32	33	30	27	24
6	64	52	43	38	59	48	41	36	42	36	32	36	31	28	30	27	24	21
7	59	47	39	33	54	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	25	22	25	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	17	15
10	48	36	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-V-835-WSO-DAO-ITL89033-ITL94331.007.IES

## POLAR GRAPH



Maximum Candela = 1645 Located At Horizontal Angle = 0, Vertical Angle = 12.5

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

# 2 - Vertical Plane Through Horizontal Angles (90 - 270)