

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-P-D-4FT-V-837-XXIC-DSO-ITL92993.200.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92993.200 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[ISSUEDATE]01/22/20
[TESTDATE]04/27/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-4-P-D-4ft-V-837-XXIC-DSO
[INPUT_ELECTRICAL]120.0 VOLTS, 35.2 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 35.2 WATTS
[OTHER]see www.finelite.com for source file ITL92993. 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
[ABSOLUTE LUMENS]3500

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3500
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	99
Total Luminaire Watts	35.2
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.18
Spacing Criterion (90-270)	1.48
Spacing Criterion (Diagonal)	1.46
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.33 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	7619	10022	10927
55	7014	9525	10203
65	6419	8691	9141
75	5770	7566	7743
85	5071	5945	5770

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	1162.50	1162.50	1162.50	1162.50	1162.50
2.5	1159.71	1160.64	1162.50	1163.43	1164.36
5.0	1154.13	1155.99	1161.57	1167.15	1169.01
7.5	1143.90	1149.48	1160.64	1171.80	1175.52
10.0	1131.81	1137.39	1157.85	1179.24	1185.75
12.5	1119.72	1124.37	1155.99	1189.47	1197.84
15.0	1103.91	1119.72	1155.06	1196.91	1207.14
17.5	1069.50	1086.24	1154.13	1199.70	1214.58
20.0	1040.67	1061.13	1152.27	1199.70	1216.44
22.5	1011.84	1036.02	1129.95	1195.98	1215.51
25.0	979.29	1014.63	1113.21	1187.61	1209.00
27.5	940.23	983.94	1095.54	1175.52	1195.98
30.0	903.03	949.53	1074.15	1157.85	1176.45
32.5	863.97	917.91	1053.69	1137.39	1152.27
35.0	824.91	883.50	1019.28	1109.49	1120.65
37.5	783.06	845.37	985.80	1068.57	1083.45
40.0	744.00	806.31	948.60	1025.79	1042.53
42.5	699.36	768.18	908.61	983.01	995.10
45.0	657.51	725.40	864.90	931.86	943.02
47.5	616.59	682.62	820.26	881.64	891.87
50.0	573.81	638.91	771.90	829.56	833.28
52.5	531.03	595.20	718.89	772.83	774.69
55.0	491.04	549.63	666.81	711.45	714.24
57.5	451.05	504.99	612.87	652.86	653.79
60.0	410.13	459.42	558.00	593.34	594.27
62.5	369.21	416.64	502.20	534.75	531.96
65.0	331.08	371.07	448.26	472.44	471.51
67.5	293.88	326.43	394.32	414.78	412.92
70.0	253.89	283.65	341.31	356.19	351.54
72.5	218.55	241.80	289.23	300.39	296.67
75.0	182.28	201.81	239.01	246.45	244.59
77.5	148.80	161.82	190.65	196.23	194.37
80.0	115.32	125.55	145.08	148.80	144.15
82.5	84.63	90.21	102.30	104.16	100.44
85.0	53.94	56.73	63.24	61.38	61.38
87.5	25.11	25.11	26.04	24.18	23.25
90.0	0.00	0.00	0.00	0.00	0.00

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HP-4-P-D-4FT-V-837-XXIC-DSO-ITL92993.200.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	436.88	N.A.	12.50
0-30	944.68	N.A.	27.00
0-40	1566.57	N.A.	44.80
0-60	2773.07	N.A.	79.20
0-80	3431.74	N.A.	98.10
0-90	3499.9	N.A.	100.00
10-90	3389.12	N.A.	96.80
20-40	1129.69	N.A.	32.30
20-50	1770.41	N.A.	50.60
40-70	1626.09	N.A.	46.50
60-80	658.67	N.A.	18.80
70-80	239.07	N.A.	6.80
80-90	68.16	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	3499.9	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	110.78
10-20	326.10
20-30	507.79
30-40	621.90
40-50	640.72
50-60	565.78
60-70	419.60
70-80	239.07
80-90	68.16
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

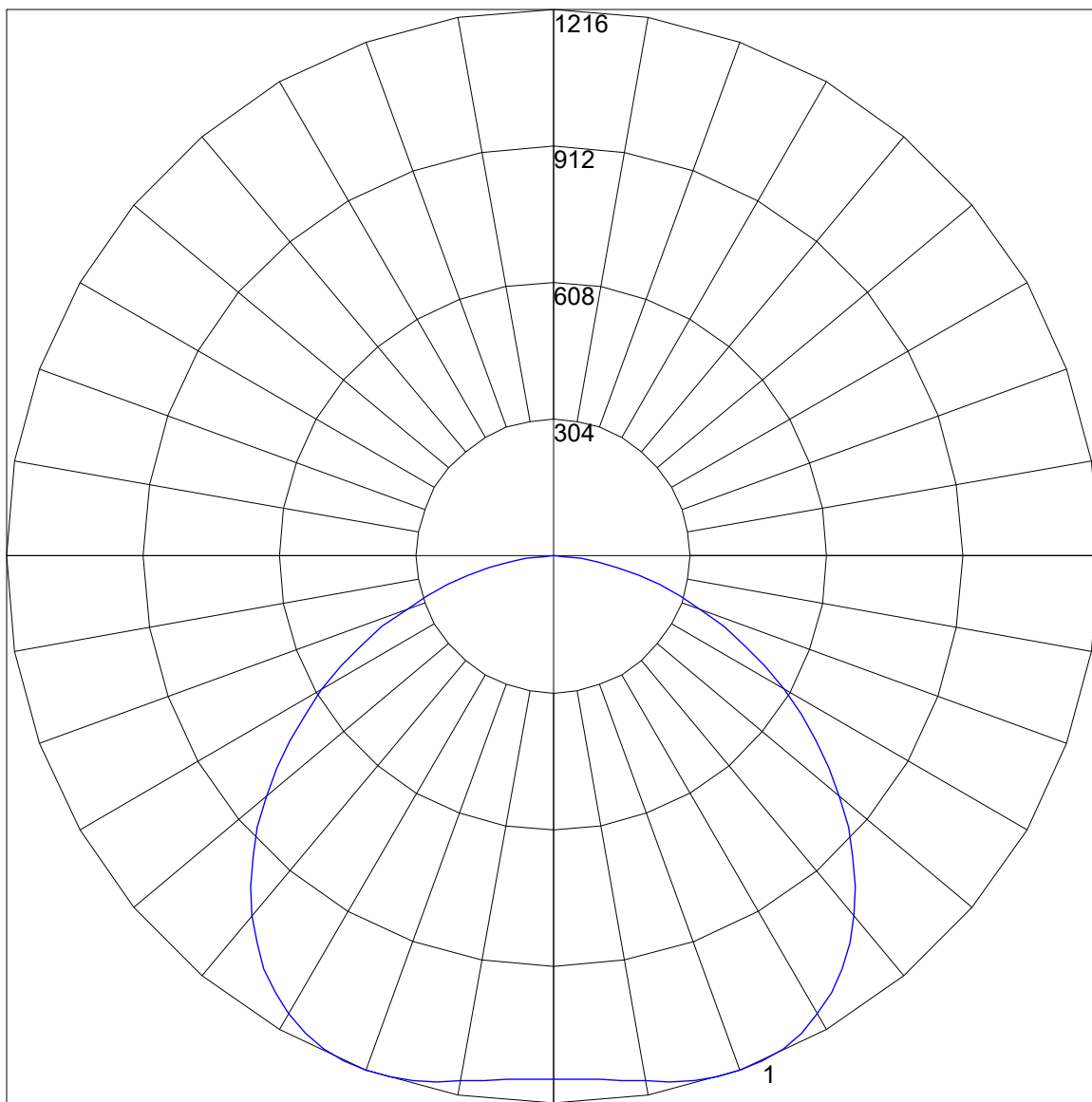
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	97	94	91	93	91	88	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	56	47	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

POLAR GRAPH



Maximum Candela = 1216.44 Located At Horizontal Angle = 90, Vertical Angle = 20
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)