

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-ID-4FT-V-V-8TW-WSO-MLW-ITL89456-KPL2008-7.900.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89456-KPL2008-7.900 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]07/19/17
[ISSUEDATE]02/07/23
[MANUFAC]FINELITE, INC.
[LUMCAT]HP-2-ID-4ft-V-V-8TW-WSO-MLW
[OTHER]ies file is based on 3500K; see luminaire tech sheet at www.finelite.com
for lumen adjustment factors for other CCT's & CRI's
[INPUT_ELECTRICAL]120.0 VOLTS, 79.6 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 79.6 WATTS
[OTHER]see www.finelite.com for source files ITL89456 and KPL2008-7. For further details on Finelite family correlation files, go
[more]http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf
[ABSOLUTE LUMENS]7482

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	7480
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	94
Total Luminaire Watts	79.6
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)	0.18 ft
Luminous Height	0.00 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5067	4951	4794
55	4222	4103	3905
65	3601	3407	3188
75	3051	2830	2556
85	2399	2167	1944

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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>
0.0	8701.14	8701.14	8701.14	8701.14	8701.14
2.5	8503.90	8555.09	8516.11	8523.16	8539.59
5.0	8023.01	8081.72	8069.03	8076.08	8100.03
7.5	7259.78	7355.07	7384.89	7449.56	7446.88
10.0	6204.26	6404.14	6618.00	6741.14	6757.66
12.5	5066.28	5276.25	5747.98	5959.64	6004.77
15.0	4127.97	4349.64	4815.97	5136.82	5125.45
17.5	3213.52	3457.31	3940.12	4160.75	4031.04
20.0	2242.72	2577.85	3079.02	3211.13	3157.36
22.5	1508.42	1883.14	2319.55	2461.71	2393.94
25.0	1017.95	1213.41	1761.55	1862.14	1776.86
27.5	730.47	810.78	1166.16	1165.32	1044.25
30.0	533.28	613.86	745.10	733.48	676.84
32.5	406.56	462.84	525.59	505.65	498.89
35.0	339.33	360.94	395.49	390.99	378.63
37.5	309.27	312.34	327.41	317.26	299.99
40.0	283.20	285.73	281.92	270.54	265.06
42.5	259.63	261.60	252.60	245.17	244.96
45.0	235.99	238.62	230.60	224.96	223.28
47.5	206.82	217.08	209.85	205.65	202.37
50.0	194.08	196.20	191.47	188.17	187.15
52.5	177.14	178.20	172.51	167.22	165.31
55.0	159.52	160.24	155.00	151.04	147.54
57.5	143.05	143.37	138.11	133.49	131.46
60.0	127.47	127.98	122.75	118.36	116.39
62.5	113.72	113.19	108.28	104.31	101.93
65.0	100.25	99.60	94.85	90.94	88.74
67.5	86.64	86.74	82.04	78.52	76.12
70.0	74.46	74.22	70.16	66.79	64.34
72.5	62.22	62.36	58.84	55.66	53.42
75.0	52.02	51.49	48.24	45.58	43.58
77.5	41.44	40.45	38.31	36.14	34.55
80.0	32.10	31.32	29.18	27.29	26.45
82.5	22.37	22.11	20.40	19.29	18.24
85.0	13.77	13.22	12.44	11.60	11.16
87.5	5.62	5.74	5.16	4.82	4.58
90.0	0.00	0.00	0.00	0.00	0.00
92.5	18.00	31.00	31.00	30.00	30.00
95.0	47.00	83.00	83.00	69.00	68.00
97.5	79.00	136.00	167.00	120.00	113.00
100.0	112.00	177.00	332.00	193.00	170.00
102.5	148.00	216.00	459.00	341.00	271.00
105.0	183.00	258.00	532.00	556.00	458.00
107.5	218.00	299.00	577.00	750.00	699.00
110.0	253.00	337.00	617.00	864.00	873.00
112.5	288.00	374.00	664.00	939.00	977.00
115.0	324.00	409.00	720.00	993.00	1048.00
117.5	360.00	444.00	781.00	1044.00	1103.00
120.0	396.00	481.00	831.00	1098.00	1158.00
122.5	429.00	512.00	867.00	1174.00	1216.00
125.0	460.00	542.00	887.00	1257.00	1299.00
127.5	489.00	570.00	899.00	1313.00	1391.00
130.0	513.00	594.00	906.00	1336.00	1457.00
132.5	537.00	616.00	908.00	1327.00	1478.00

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-V-8TW-WSO-MLW-ITL89456-KPL2008-7.900.IES****CANDELA TABULATION - (Cont.)**

135.0	558.00	634.00	907.00	1299.00	1457.00
137.5	577.00	651.00	904.00	1261.00	1413.00
140.0	596.00	666.00	899.00	1219.00	1357.00
142.5	614.00	680.00	892.00	1172.00	1297.00
145.0	633.00	693.00	885.00	1127.00	1236.00
147.5	649.00	703.00	877.00	1081.00	1174.00
150.0	665.00	714.00	867.00	1040.00	1116.00
152.5	680.00	722.00	855.00	1001.00	1062.00
155.0	694.00	728.00	843.00	963.00	1012.00
157.5	707.00	736.00	832.00	928.00	967.00
160.0	718.00	741.00	819.00	894.00	925.00
162.5	728.00	745.00	806.00	865.00	886.00
165.0	736.00	749.00	793.00	837.00	853.00
167.5	743.00	752.00	783.00	813.00	824.00
170.0	749.00	755.00	776.00	794.00	801.00
172.5	752.00	757.00	768.00	778.00	784.00
175.0	756.00	758.00	763.00	768.00	770.00
177.5	758.00	758.00	760.00	760.00	761.00
180.0	759.00	759.00	759.00	759.00	759.00

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-2-ID-4FT-V-V-8TW-WSO-MLW-ITL89456-KPL2008-7.900.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	2007.08	N.A.	26.80
0-30	2729.14	N.A.	36.50
0-40	2984.44	N.A.	39.90
0-60	3302.22	N.A.	44.10
0-80	3448.07	N.A.	46.10
0-90	3462.43	N.A.	46.30
10-90	2740.62	N.A.	36.60
20-40	977.36	N.A.	13.10
20-50	1156.11	N.A.	15.50
40-70	412.24	N.A.	5.50
60-80	145.84	N.A.	1.90
70-80	51.38	N.A.	0.70
80-90	14.36	N.A.	0.20
90-110	525.79	N.A.	7.00
90-120	1219.49	N.A.	16.30
90-130	2012.46	N.A.	26.90
90-150	3325.54	N.A.	44.50
90-180	4017.8	N.A.	53.70
110-180	3492.02	N.A.	46.70
0-180	7480.23	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	721.81
10-20	1285.27
20-30	722.05
30-40	255.31
40-50	178.76
50-60	139.03
60-70	94.46
70-80	51.38
80-90	14.36
90-100	91.71
100-110	434.08
110-120	693.70
120-130	792.97
130-140	741.14
140-150	571.94
150-160	393.14
160-170	225.92
170-180	73.20

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

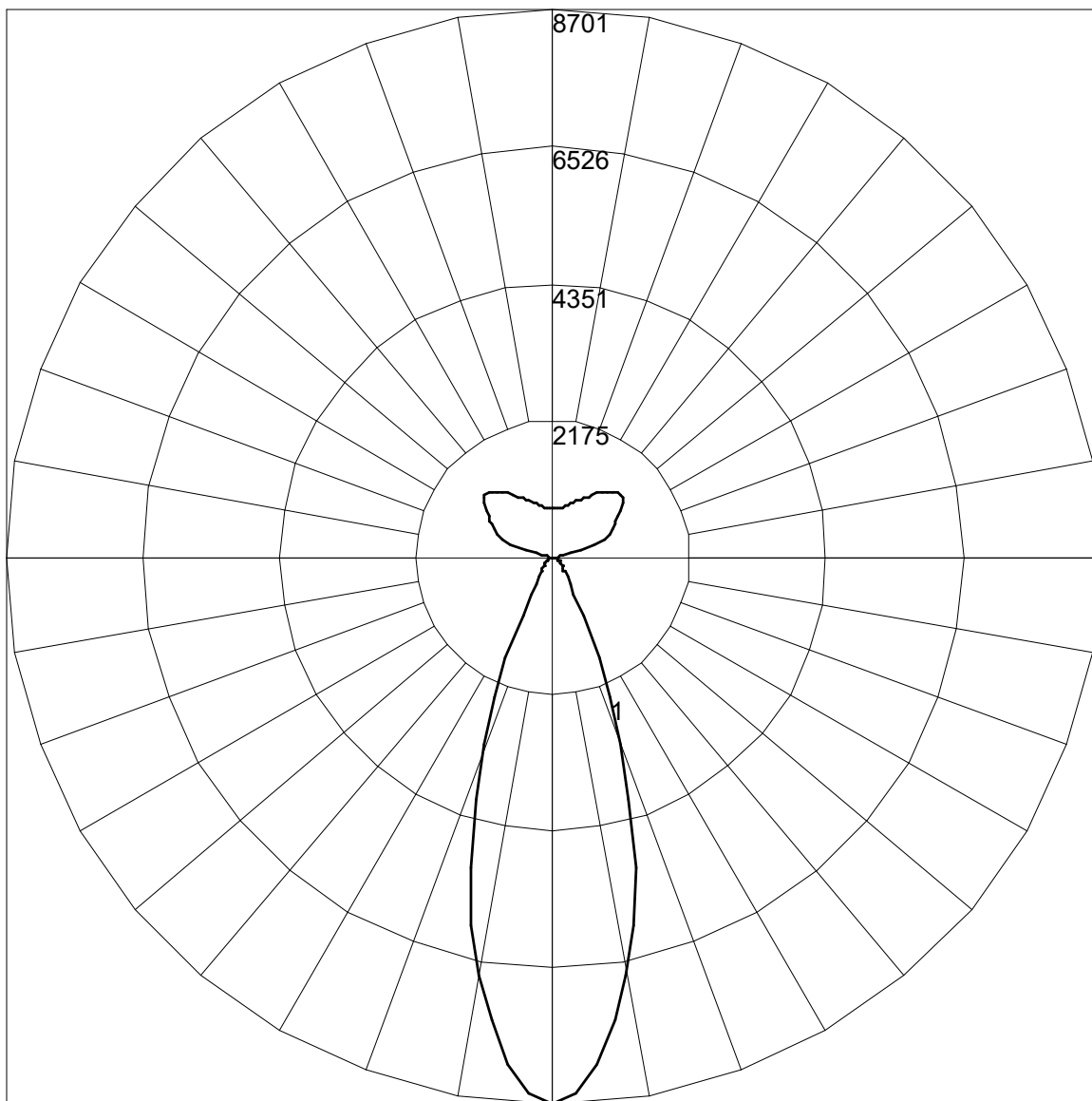
Effective Floor Cavity Reflectance 0.20

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	106	106	106	106	98	98	98	98	81	81	81	66	66	66	53	53	53	46
1	99	96	92	90	91	88	86	83	74	73	71	62	60	59	50	49	49	43
2	92	86	82	77	85	80	76	72	68	65	63	57	55	54	47	46	45	40
3	86	79	73	68	79	73	68	64	63	59	56	53	51	49	44	43	42	38
4	81	72	66	61	75	67	62	58	58	54	51	50	47	45	42	40	39	36
5	76	66	60	55	70	62	57	52	54	50	47	47	44	42	40	38	37	34
6	71	61	55	50	66	58	52	48	51	47	43	44	41	39	38	36	35	32
7	67	57	51	46	63	54	48	44	48	44	40	42	39	37	37	35	33	31
8	64	54	47	43	59	51	45	41	45	41	38	40	37	35	35	33	31	29
9	60	50	44	40	56	48	42	39	43	39	36	38	35	33	34	32	30	28
10	57	47	41	37	54	45	40	36	41	36	34	36	33	31	32	30	29	27

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POLAR GRAPH



Maximum Candela = 8701.14 Located At Horizontal Angle = 0, Vertical Angle = 0

1 - Vertical Plane Through Horizontal Angles (90 - 270)