

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-S-835-WSO-DAO-ITL89033-ITL94331.009.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033-ITL94331.009 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-S-835-WSO-DAO

[_INPUT_ELECTRICAL]120.0 VOLTS, 42.9 WATTS

[_INPUT_ELECTRICAL]277.0 VOLTS, 45.2 WATTS

[_ABSOLUTE]LUMENS]4936

[_CONVERT] Photometric web converted from original test data

[OTHER]see 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

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4936
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	115
Total Luminaire Watts	42.9
Ballast Factor	1.00
CIE Type	Semi-Indirect
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	4912	5071	4203
55	4219	4510	3738
65	3532	3839	3258
75	2844	3147	2818
85	2229	2425	2464

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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>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>
0.0	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345	635.345
2.5	648.445	647.626	644.351	639.848	634.936	629.205	625.111	621.836	620.608
5.0	658.680	657.042	651.311	642.305	631.661	621.427	611.602	606.280	604.233
7.5	666.458	663.592	655.814	642.305	626.339	610.374	596.864	589.496	586.630
10.0	671.779	669.323	657.451	639.848	619.789	598.092	582.127	571.893	566.980
12.5	673.417	671.370	657.451	634.936	612.011	584.174	566.162	553.471	548.149
15.0	671.779	669.323	654.586	627.567	600.958	568.618	548.968	534.640	528.909
17.5	666.458	664.411	649.264	618.971	588.268	552.243	529.318	515.809	508.849
20.0	657.451	656.223	641.077	606.689	574.349	533.821	510.077	496.159	490.018
22.5	645.170	643.942	630.024	593.999	559.611	514.581	491.656	476.509	472.006
25.0	629.614	629.205	616.514	579.261	541.599	495.340	472.006	458.087	454.403
27.5	611.192	611.192	599.730	562.068	522.768	475.281	451.128	440.075	435.572
30.0	589.905	591.133	580.899	543.237	501.890	453.584	432.297	421.653	418.788
32.5	566.162	567.799	560.021	523.587	480.193	432.706	412.238	403.231	402.003
35.0	538.324	542.418	537.915	501.071	456.859	410.600	392.997	386.038	384.400
37.5	511.306	516.218	512.124	477.328	432.297	388.903	372.938	368.844	368.435
40.0	481.012	487.971	486.334	452.765	408.553	366.388	352.879	350.422	352.469
42.5	451.128	456.040	459.725	427.794	383.991	344.691	333.638	333.638	335.276
45.0	417.150	425.337	430.659	399.547	356.972	322.176	314.398	316.854	318.901
47.5	386.038	395.044	401.185	372.938	332.410	300.888	293.929	299.251	303.345
50.0	354.516	362.294	370.891	346.329	306.620	279.601	275.098	281.648	286.151
52.5	323.404	330.363	341.007	317.673	281.239	256.267	255.857	263.636	268.957
55.0	290.654	300.070	310.713	289.426	257.495	235.798	236.617	246.033	252.173
57.5	261.179	268.957	280.420	262.817	232.933	214.511	217.376	228.430	234.570
60.0	230.886	240.301	251.764	236.617	210.008	194.452	197.727	208.780	215.330
62.5	204.277	210.827	223.517	209.599	187.902	174.393	179.714	190.767	197.317
65.0	179.305	185.036	194.861	184.217	165.386	155.971	160.065	172.346	178.486
67.5	153.105	158.018	168.252	160.474	144.099	136.730	142.462	153.924	158.018
70.0	130.999	134.683	143.690	137.140	124.859	118.308	124.040	134.683	139.186
72.5	108.074	112.168	120.355	114.624	106.027	100.706	106.846	115.443	120.355
75.0	88.424	91.699	97.840	94.156	87.606	84.331	89.243	97.430	101.524
77.5	70.412	72.459	77.371	75.324	70.412	67.956	72.868	79.009	81.465
80.0	53.218	54.856	58.540	58.131	54.037	52.809	56.493	61.815	63.453
82.5	37.662	38.072	40.937	40.528	39.300	38.481	40.937	44.212	45.850
85.0	23.334	23.334	25.381	25.381	25.790	24.562	26.200	27.428	28.656
87.5	9.006	9.825	10.644	11.462	11.872	11.462	11.872	12.281	12.691
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-S-835-WSO-DAO-ITL89033-ITL94331.009.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

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Zone	Lumens	%Lamp	%Fixt
0-20	229.11	N.A.	4.60
0-30	478.38	N.A.	9.70
0-40	766.61	N.A.	15.50
0-60	1289.85	N.A.	26.10
0-80	1561.03	N.A.	31.60
0-90	1589.8	N.A.	32.20
10-90	1529.89	N.A.	31.00
20-40	537.49	N.A.	10.90
20-50	820.57	N.A.	16.60
40-70	696.43	N.A.	14.10
60-80	271.18	N.A.	5.50
70-80	97.99	N.A.	2.00
80-90	28.77	N.A.	0.60
90-110	452.26	N.A.	9.20
90-120	1077.33	N.A.	21.80
90-130	1740.06	N.A.	35.30
90-150	2779.79	N.A.	56.30
90-180	3346.07	N.A.	67.80
110-180	2893.8	N.A.	58.60
0-180	4935.87	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	59.91
10-20	169.21
20-30	249.27
30-40	288.23
40-50	283.08
50-60	240.16
60-70	173.19
70-80	97.99
80-90	28.77
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

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

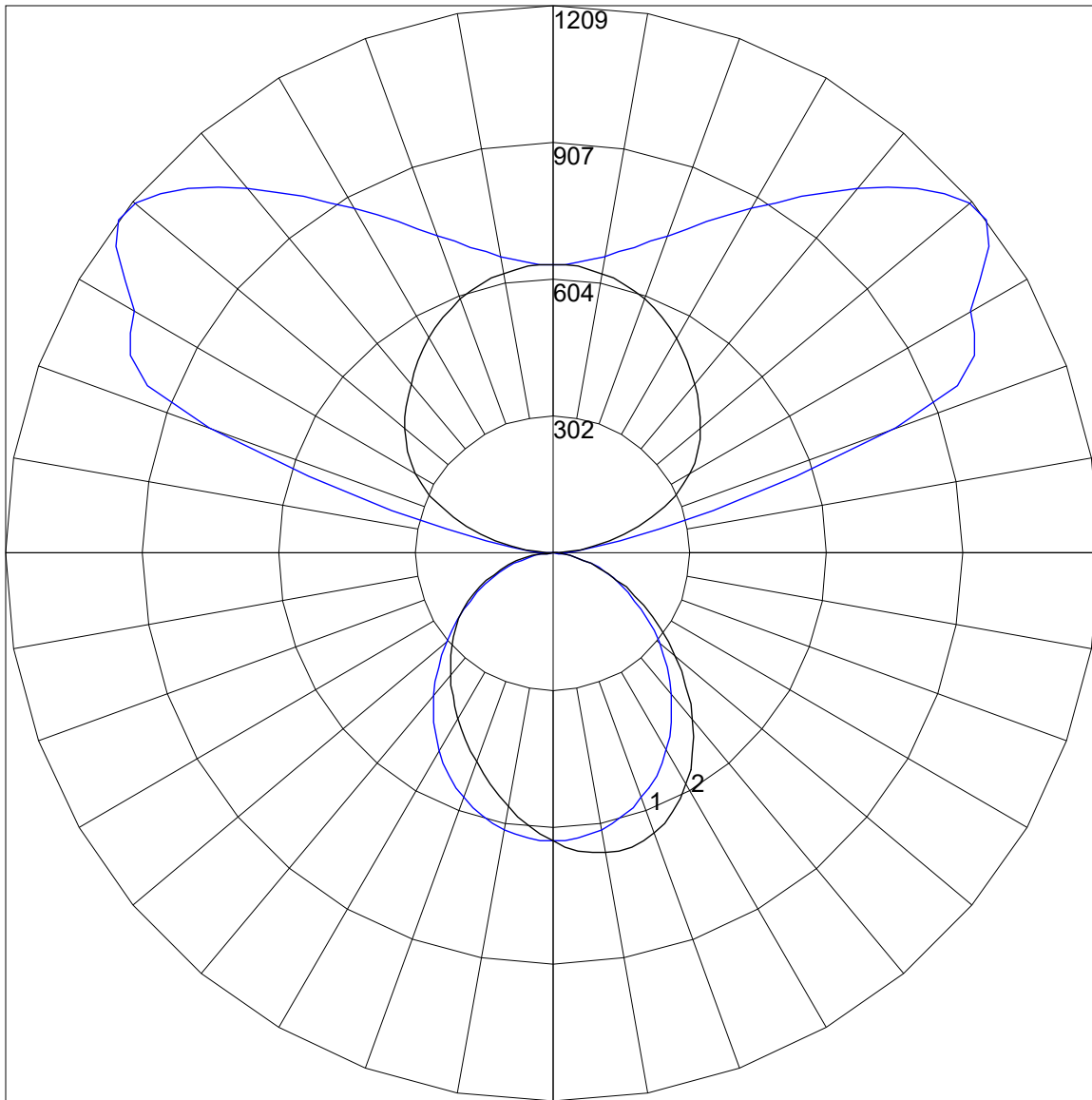
Effective Floor Cavity Reflectance 0.20

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	82	84	81	78	75	64	62	60	49	48	47	35	34	34	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	30	28	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	19
4	71	61	53	47	64	55	49	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	41	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	56	44	36	31	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	40	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	25	20	17	19	16	13	14	12	10	8

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POLAR GRAPH



Maximum Candela = 1208.667 Located At Horizontal Angle = 90, Vertical Angle = 127.5

1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)

2 - Vertical Plane Through Horizontal Angles (0 - 180)