

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-H-837-XXIC-WSO-ITL89033-ITL92993.203.IES

DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL89033 and ITL92993.203 Family Correlation File
[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.
[TESTDATE]03/27/17
[ISSUE DATE]05/14/2021
[MANUFAC]FINELITE, INC.
[LUMCAT]FINELITE HP-4-ID-4ft-H-H-837-XXIC-WSO-DSO
[INPUT_ELECTRICAL]120.0 VOLTS, 54.1 WATTS
[INPUT_ELECTRICAL]277.0 VOLTS, 54.4 WATTS
[OTHER]see www.finelite.com for source files ITL89033 and 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]5833

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5834
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	108
Total Luminaire Watts	54.1
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	6022	7921	8636
55	5544	7529	8064
65	5073	6869	7225
75	4561	5980	6120
85	4008	4699	4561

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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	904.236	904.236	904.236	904.236	904.236
2.5	902.065	902.789	904.236	904.959	905.682
5.0	897.725	899.172	903.512	907.852	909.299
7.5	889.768	894.108	902.789	911.469	914.363
10.0	880.364	884.704	900.619	917.256	922.320
12.5	870.960	874.577	899.172	925.214	931.724
15.0	858.662	870.960	898.448	931.001	938.958
17.5	831.897	844.918	897.725	933.171	944.745
20.0	809.472	825.386	896.278	933.171	946.192
22.5	787.047	805.855	878.917	930.278	945.469
25.0	761.728	789.217	865.896	923.767	940.405
27.5	731.346	765.345	852.152	914.363	930.278
30.0	702.410	738.580	835.514	900.619	915.086
32.5	672.028	713.984	819.599	884.704	896.278
35.0	641.646	687.219	792.834	863.002	871.683
37.5	609.093	657.560	766.792	831.173	842.747
40.0	578.711	627.178	737.856	797.897	810.918
42.5	543.988	597.519	706.751	764.622	774.026
45.0	511.436	564.243	672.751	724.835	733.516
47.5	479.606	530.967	638.029	685.772	693.730
50.0	446.331	496.968	600.412	645.262	648.156
52.5	413.055	462.969	559.179	601.136	602.583
55.0	381.949	427.523	518.669	553.392	555.562
57.5	350.843	392.800	476.713	507.819	508.542
60.0	319.014	357.354	434.033	461.522	462.245
62.5	287.185	324.078	390.630	415.948	413.778
65.0	257.526	288.632	348.673	367.481	366.758
67.5	228.591	253.909	306.717	322.631	321.184
70.0	197.485	220.633	265.484	277.058	273.441
72.5	169.996	188.081	224.974	233.654	230.761
75.0	141.784	156.975	185.911	191.698	190.251
77.5	115.742	125.870	148.295	152.635	151.188
80.0	89.700	97.657	112.849	115.742	112.125
82.5	65.828	70.169	79.573	81.019	78.126
85.0	41.956	44.127	49.190	47.744	47.744
87.5	19.531	19.531	20.255	18.808	18.085
90.0	0.000	0.000	0.000	0.000	0.000
92.5	11.573	20.253	21.700	21.700	21.700
95.0	32.549	57.866	59.312	46.293	46.293
97.5	57.142	98.372	151.897	94.755	82.459
100.0	86.075	134.538	240.866	177.937	139.601
102.5	120.795	164.194	355.874	275.585	224.229
105.0	152.621	196.020	444.119	426.036	341.407
107.5	185.170	227.846	484.625	623.502	524.407
110.0	216.273	257.502	504.154	787.696	750.807
112.5	248.099	286.435	527.301	855.688	900.534
115.0	278.478	313.921	566.360	876.665	956.953
117.5	303.071	339.237	597.463	886.791	977.929
120.0	325.494	363.830	617.716	926.574	993.119
122.5	345.024	387.700	630.735	975.759	1040.135
125.0	363.830	408.676	640.139	1002.522	1095.107
127.5	381.190	427.482	647.372	1003.246	1124.040
130.0	395.656	444.119	653.158	985.886	1118.977
132.5	410.846	460.032	658.222	962.016	1092.214

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HP-4-ID-4FT-H-H-837-XXIC-WSO-DSO-ITL89033-ITL92993.203.IES****CANDELA TABULATION - (Cont.)**

135.0	425.312	474.498	661.838	935.977	1057.495
137.5	439.056	487.518	663.285	907.767	1017.712
140.0	453.522	499.814	664.008	879.558	975.759
142.5	467.988	511.388	663.285	849.902	933.807
145.0	483.178	522.961	659.668	822.415	892.578
147.5	495.475	532.364	654.605	794.929	852.795
150.0	508.494	541.767	649.542	768.166	816.629
152.5	521.514	549.724	643.755	742.127	783.356
155.0	533.087	557.680	637.969	717.534	750.083
157.5	543.937	564.190	630.735	695.111	720.427
160.0	554.064	570.700	624.949	674.858	693.664
162.5	562.743	575.763	617.716	656.052	670.518
165.0	571.423	580.103	611.206	639.415	650.265
167.5	577.933	583.720	605.419	624.949	632.905
170.0	582.996	587.336	601.079	613.376	617.716
172.5	586.613	589.506	597.463	603.973	606.866
175.0	590.230	590.953	593.846	596.739	598.909
177.5	591.676	591.676	592.399	593.123	593.123
180.0	592.399	592.399	592.399	592.399	592.399

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Zone	Lumens	%Lamp	%Fixt
0-20	339.82	N.A.	5.80
0-30	734.80	N.A.	12.60
0-40	1218.54	N.A.	20.90
0-60	2157.00	N.A.	37.00
0-80	2669.33	N.A.	45.80
0-90	2722.35	N.A.	46.70
10-90	2636.18	N.A.	45.20
20-40	878.71	N.A.	15.10
20-50	1377.09	N.A.	23.60
40-70	1264.83	N.A.	21.70
60-80	512.34	N.A.	8.80
70-80	185.96	N.A.	3.20
80-90	53.02	N.A.	0.90
90-110	420.60	N.A.	7.20
90-120	1001.9	N.A.	17.20
90-130	1618.23	N.A.	27.70
90-150	2585.16	N.A.	44.30
90-180	3111.79	N.A.	53.30
110-180	2691.19	N.A.	46.10
0-180	5834.14	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	86.17
10-20	253.66
20-30	394.98
30-40	483.73
40-50	498.37
50-60	440.08
60-70	326.38
70-80	185.96
80-90	53.02
90-100	70.09
100-110	350.51
110-120	581.30
120-130	616.33
130-140	543.87
140-150	423.06
150-160	296.19
160-170	173.52
170-180	56.92

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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

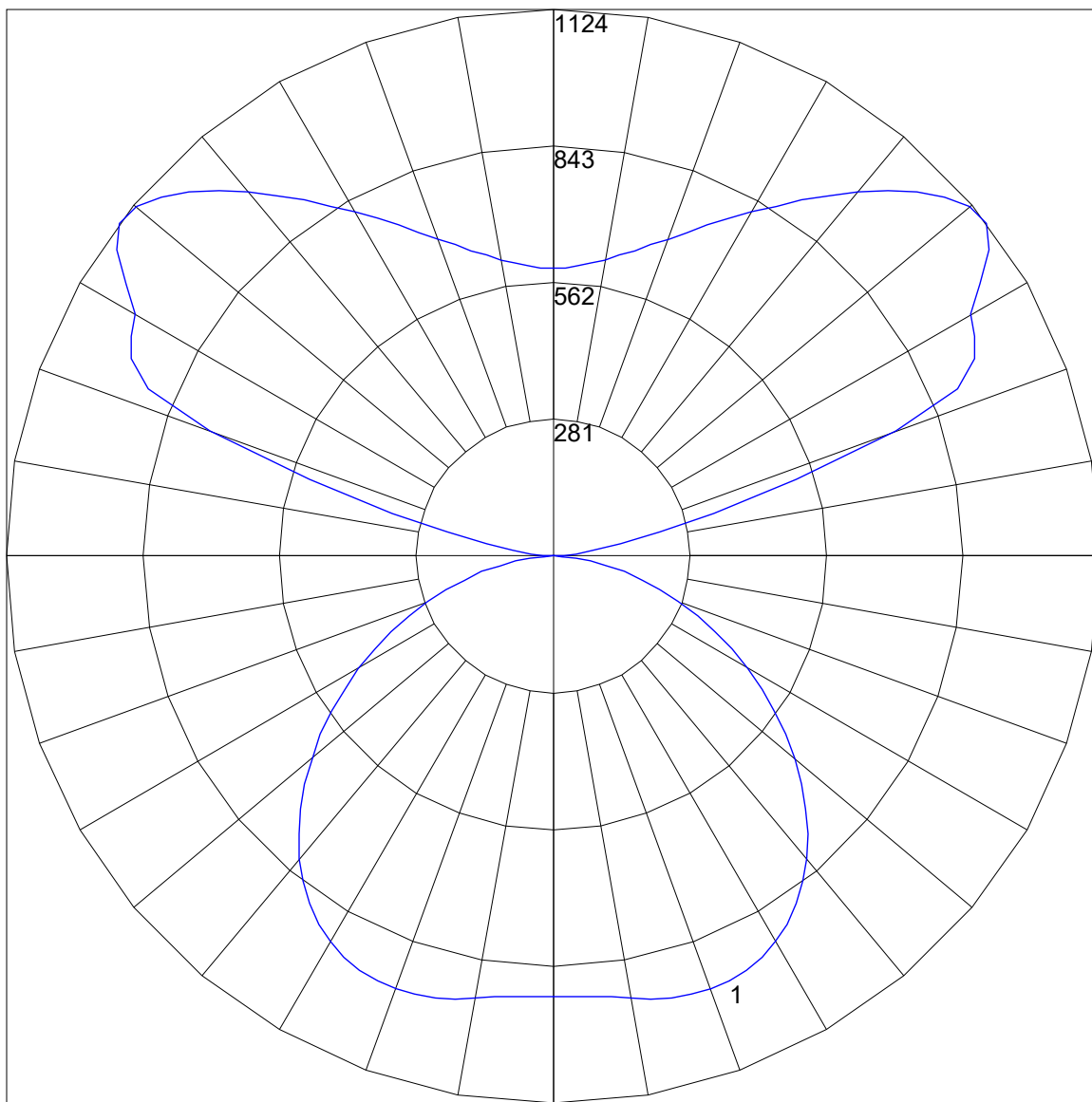
Effective Floor Cavity Reflectance 0.20

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	67	67	67	53	53	53	47
1	97	93	89	85	89	85	82	79	71	69	67	58	57	55	47	46	45	39
2	88	81	74	69	81	74	69	64	62	58	55	51	48	46	41	39	37	32
3	80	71	63	57	73	65	59	54	55	50	46	45	42	39	36	34	32	27
4	73	62	55	48	67	58	51	45	49	43	39	40	36	33	32	29	27	23
5	67	56	47	41	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	21	18
7	57	45	37	31	52	41	34	29	35	30	26	29	25	22	24	21	18	15
8	53	41	33	27	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	29	24	45	34	28	23	29	24	20	25	20	17	20	17	15	12
10	46	34	27	22	42	31	25	21	27	22	18	23	19	16	19	15	13	11

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POLAR GRAPH



Maximum Candela = 1124.04 Located At Horizontal Angle = 90, Vertical Angle = 127.5
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)