

# 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-H-837-XXIC-DSO-ITL92993.203.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL92993.203 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[ISSUEDATE]01/22/20

[ISSUEDATE]05/14/2021

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-P-D-4ft-H-837-XXIC-DSO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 27.0 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 27.2 WATTS

[OTHER]see [www.finelite.com](http://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](http://www.finelite.com/download_files/series_downloads/photometry_pdf/FL_Family_Correlation_WhitePaper.pdf)

[\_ABSOLUTE]LUMENS]2722

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2722
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	27
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	5926	7795	8499
55	5456	7409	7936
65	4993	6760	7110
75	4488	5885	6023
85	3944	4624	4488

CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
0.0	904.235	904.235	904.235	904.235	904.235
2.5	902.065	902.789	904.235	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	900.618	917.256	922.320
12.5	870.960	874.576	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	787.046	805.855	878.917	930.277	945.469
25.0	761.728	789.217	865.896	923.767	940.405
27.5	731.346	765.345	852.151	914.363	930.277
30.0	702.410	738.579	835.514	900.618	915.086
32.5	672.028	713.984	819.599	884.704	896.278
35.0	641.645	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	706.750	764.621	774.025
45.0	511.436	564.243	672.751	724.835	733.516
47.5	479.606	530.967	638.028	685.772	693.729
50.0	446.331	496.968	600.412	645.262	648.156
52.5	413.055	462.969	559.179	601.136	602.582
55.0	381.949	427.522	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	41.957	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

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-P-D-4FT-H-837-XXIC-DSO-ITL92993.203.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	339.82	N.A.	12.50
0-30	734.80	N.A.	27.00
0-40	1218.54	N.A.	44.80
0-60	2156.99	N.A.	79.20
0-80	2669.33	N.A.	98.10
0-90	2722.35	N.A.	100.00
10-90	2636.18	N.A.	96.80
20-40	878.71	N.A.	32.30
20-50	1377.09	N.A.	50.60
40-70	1264.83	N.A.	46.50
60-80	512.34	N.A.	18.80
70-80	185.96	N.A.	6.80
80-90	53.02	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	2722.35	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	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

# IES INDOOR REPORT

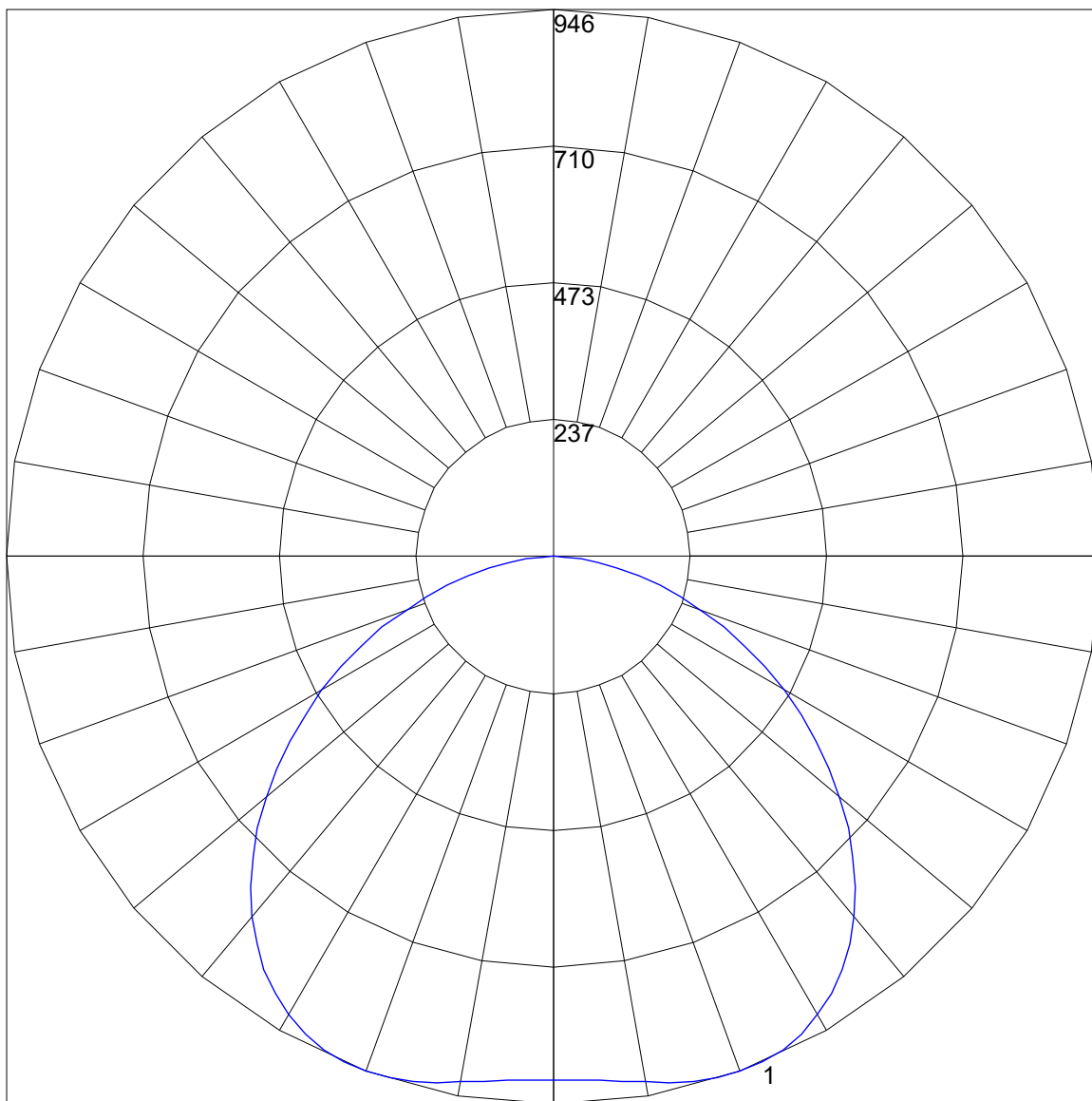
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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 = 946.192 Located At Horizontal Angle = 90, Vertical Angle = 20  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)