

# 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-RG-4FT-V-S-835-WSOTG-F-ITL90353 ITL89033.004.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353 ITL89033.004 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]04/03/18

[ISSUEDATE]06/04/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-4-ID-RG-4ft-V-S-835-WSOTG-F

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 51.0 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 53.1 WATTS

[\_ABSOLUTE]LUMENS]5725

[OTHER]see [www.finelite.com](http://www.finelite.com) for source files ITL90353 and ITL89033. 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)

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	5725
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	112
Total Luminaire Watts	51
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)	0.33 ft
Luminous Height	0.00 ft

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4212	3848	3568
55	3926	3385	3022
65	3571	2797	2336
75	3113	1926	1467
85	2273	1250	1174

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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	607.324	607.324	607.324	607.324	607.324
2.5	606.115	605.712	606.115	606.115	606.115
5.0	603.294	602.891	602.891	603.294	603.697
7.5	598.861	598.458	598.458	598.458	598.055
10.0	593.219	591.204	592.010	590.801	589.189
12.5	585.159	582.741	582.741	580.323	577.502
15.0	575.890	571.860	571.457	568.233	564.203
17.5	564.606	559.770	557.755	553.322	549.292
20.0	551.307	545.665	542.441	536.396	532.769
22.5	536.799	530.754	525.515	518.261	514.231
25.0	521.082	514.231	507.380	498.514	494.483
27.5	504.156	496.498	487.632	477.960	473.527
30.0	485.617	477.960	467.482	456.601	451.362
32.5	466.273	458.616	446.123	434.033	427.585
35.0	446.929	438.063	424.361	411.062	404.211
37.5	426.779	416.704	401.390	386.479	380.434
40.0	405.823	395.345	378.016	363.105	356.254
42.5	384.867	373.180	355.448	338.925	332.074
45.0	363.508	351.015	332.074	314.342	307.894
47.5	342.149	328.447	308.700	290.161	283.713
50.0	319.984	305.476	284.519	265.578	259.130
52.5	297.416	282.504	260.742	241.801	235.353
55.0	274.847	259.936	236.965	218.024	211.576
57.5	252.682	236.965	213.591	194.650	188.202
60.0	230.114	213.994	190.217	171.276	164.828
62.5	207.546	191.023	166.843	148.305	142.260
65.0	184.172	168.455	144.275	126.140	120.498
67.5	162.007	145.887	121.707	104.781	99.138
70.0	139.842	123.722	100.347	83.824	78.988
72.5	118.080	102.362	80.197	64.883	60.047
75.0	98.332	81.809	60.853	48.360	46.345
77.5	78.182	62.465	43.524	38.688	38.285
80.0	58.838	43.927	31.434	30.225	30.225
82.5	41.912	26.598	22.568	21.762	21.762
85.0	24.180	14.508	13.299	12.896	12.493
87.5	7.657	4.836	4.433	4.433	4.030
90.0	0.000	0.000	0.000	0.000	0.000
92.5	16.000	28.000	30.000	30.000	30.000
95.0	45.000	80.000	82.000	64.000	64.000
97.5	79.000	136.000	210.000	131.000	114.000
100.0	119.000	186.000	333.000	246.000	193.000
102.5	167.000	227.000	492.000	381.000	310.000
105.0	211.000	271.000	614.000	589.000	472.000
107.5	256.000	315.000	670.000	862.000	725.000
110.0	299.000	356.000	697.000	1089.000	1038.000
112.5	343.000	396.000	729.000	1183.000	1245.000
115.0	385.000	434.000	783.000	1212.000	1323.000
117.5	419.000	469.000	826.000	1226.000	1352.000
120.0	450.000	503.000	854.000	1281.000	1373.000
122.5	477.000	536.000	872.000	1349.000	1438.000
125.0	503.000	565.000	885.000	1386.000	1514.000
127.5	527.000	591.000	895.000	1387.000	1554.000
130.0	547.000	614.000	903.000	1363.000	1547.000
132.5	568.000	636.000	910.000	1330.000	1510.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-V-S-835-WSOTG-F-ITL90353 ITL89033.004.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	588.000	656.000	915.000	1294.000	1462.000
<b>137.5</b>	607.000	674.000	917.000	1255.000	1407.000
<b>140.0</b>	627.000	691.000	918.000	1216.000	1349.000
<b>142.5</b>	647.000	707.000	917.000	1175.000	1291.000
<b>145.0</b>	668.000	723.000	912.000	1137.000	1234.000
<b>147.5</b>	685.000	736.000	905.000	1099.000	1179.000
<b>150.0</b>	703.000	749.000	898.000	1062.000	1129.000
<b>152.5</b>	721.000	760.000	890.000	1026.000	1083.000
<b>155.0</b>	737.000	771.000	882.000	992.000	1037.000
<b>157.5</b>	752.000	780.000	872.000	961.000	996.000
<b>160.0</b>	766.000	789.000	864.000	933.000	959.000
<b>162.5</b>	778.000	796.000	854.000	907.000	927.000
<b>165.0</b>	790.000	802.000	845.000	884.000	899.000
<b>167.5</b>	799.000	807.000	837.000	864.000	875.000
<b>170.0</b>	806.000	812.000	831.000	848.000	854.000
<b>172.5</b>	811.000	815.000	826.000	835.000	839.000
<b>175.0</b>	816.000	817.000	821.000	825.000	828.000
<b>177.5</b>	818.000	818.000	819.000	820.000	820.000
<b>180.0</b>	819.000	819.000	819.000	819.000	819.000

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-V-S-835-WSOTG-F-ITL90353 ITL89033.004.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	217.75	N.A.	3.80
0-30	451.00	N.A.	7.90
0-40	716.39	N.A.	12.50
0-60	1187.63	N.A.	20.70
0-80	1405.7	N.A.	24.60
0-90	1423.13	N.A.	24.90
10-90	1365.93	N.A.	23.90
20-40	498.64	N.A.	8.70
20-50	755.67	N.A.	13.20
40-70	617.73	N.A.	10.80
60-80	218.07	N.A.	3.80
70-80	71.58	N.A.	1.30
80-90	17.43	N.A.	0.30
90-110	581.48	N.A.	10.20
90-120	1385.14	N.A.	24.20
90-130	2237.22	N.A.	39.10
90-150	3574.02	N.A.	62.40
90-180	4302.09	N.A.	75.10
110-180	3720.6	N.A.	65.00
0-180	5725.22	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	57.21
10-20	160.55
20-30	233.25
30-40	265.39
40-50	257.04
50-60	214.20
60-70	146.49
70-80	71.58
80-90	17.43
90-100	96.89
100-110	484.59
110-120	803.65
120-130	852.09
130-140	751.91
140-150	584.88
150-160	409.48
160-170	239.90
170-180	78.69

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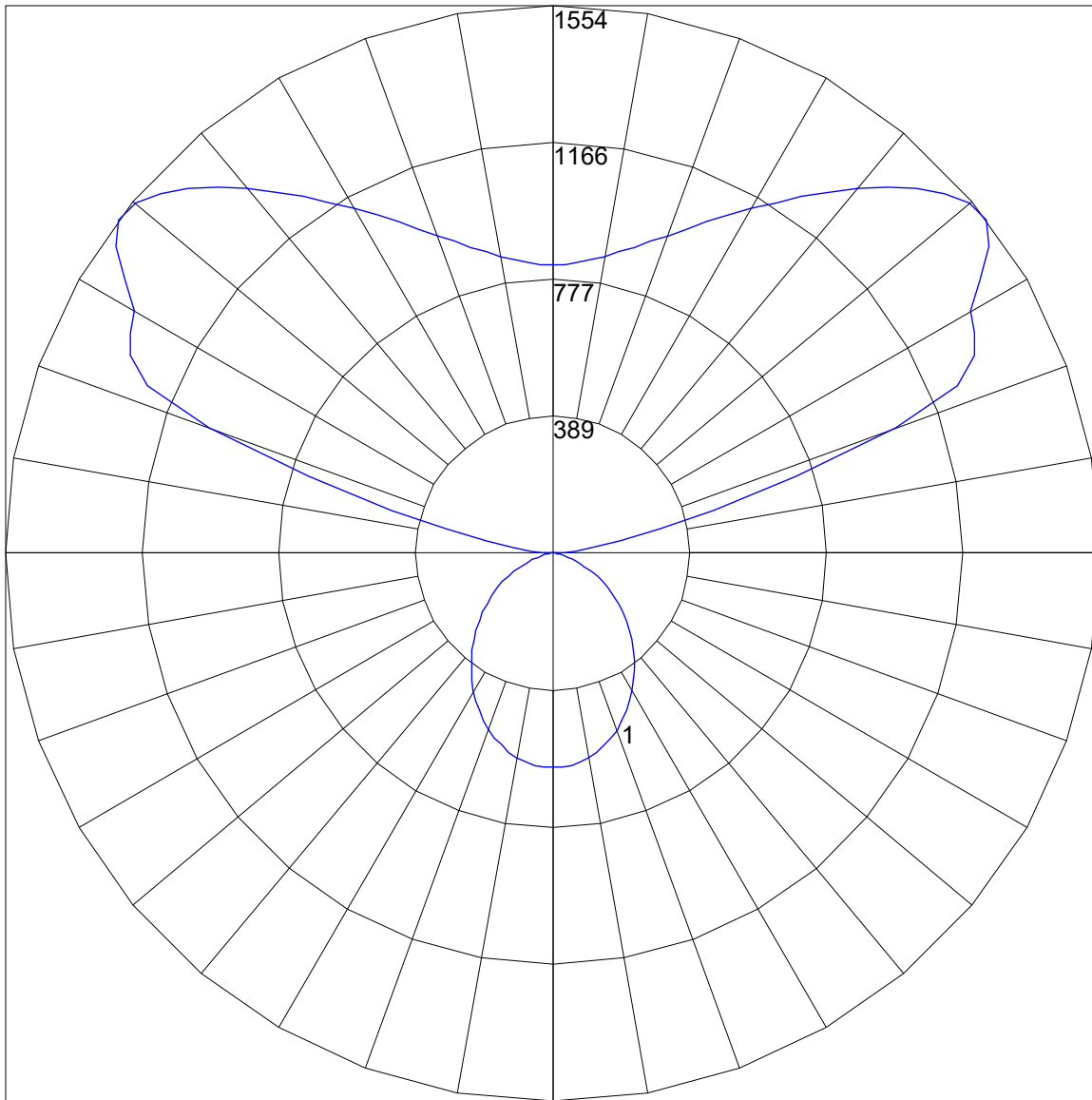
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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25
1	92	88	85	81	82	79	76	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	67	75	69	64	60	53	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	61	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	47	62	54	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	46	40	57	48	41	36	37	33	29	28	25	22	19	17	15	12
6	59	48	40	35	53	43	36	31	34	29	25	25	22	19	17	15	14	10
7	55	43	35	30	48	39	32	27	30	26	22	23	19	17	15	14	12	9
8	51	39	31	26	45	35	29	24	28	23	20	21	18	15	14	12	11	8
9	47	35	28	23	42	32	26	21	25	21	17	19	16	14	13	11	10	7
10	44	32	25	21	39	29	23	19	23	19	16	17	14	12	12	10	9	7

POLAR GRAPH



Maximum Candela = 1554 Located At Horizontal Angle = 90, Vertical Angle = 127.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)