

# 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-S-B-835-WSOTG-F-ITL90353 ITL89033.013.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353 ITL89033.013 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-S-B-835-WSOTG-F

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 32.6 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 35.2 WATTS

[\_ABSOLUTE]LUMENS]3550

[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	3550
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	32.6
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)	0.33 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	5295	4837	4485
55	4936	4256	3800
65	4489	3517	2937
75	3914	2422	1844
85	2858	1572	1477

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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	763.530	763.530	763.530	763.530	763.530
2.5	762.010	761.503	762.010	762.010	762.010
5.0	758.463	757.956	757.956	758.463	758.970
7.5	752.890	752.383	752.383	752.383	751.876
10.0	745.797	743.263	744.277	742.757	740.730
12.5	735.664	732.624	732.624	729.584	726.037
15.0	724.010	718.944	718.437	714.384	709.317
17.5	709.824	703.744	701.211	695.638	690.571
20.0	693.105	686.011	681.958	674.358	669.798
22.5	674.865	667.265	660.679	651.559	646.492
25.0	655.105	646.492	637.879	626.733	621.666
27.5	633.826	624.199	613.053	600.893	595.320
30.0	610.520	600.893	587.720	574.040	567.454
32.5	586.200	576.574	560.867	545.668	537.561
35.0	561.881	550.734	533.508	516.788	508.175
37.5	536.548	523.882	504.629	485.882	478.283
40.0	510.202	497.029	475.243	456.497	447.883
42.5	483.856	469.163	446.870	426.097	417.484
45.0	457.003	441.297	417.484	395.191	387.085
47.5	430.150	412.924	388.098	364.792	356.685
50.0	402.284	384.045	357.699	333.886	325.779
52.5	373.912	355.165	327.806	303.993	295.887
55.0	345.539	326.793	297.913	274.101	265.994
57.5	317.673	297.913	268.527	244.714	236.608
60.0	289.300	269.034	239.141	215.328	207.222
62.5	260.928	240.155	209.755	186.449	178.849
65.0	231.542	211.782	181.383	158.583	151.490
67.5	203.675	183.409	153.010	131.730	124.637
70.0	175.809	155.543	126.157	105.384	99.305
72.5	148.450	128.690	100.824	81.572	75.492
75.0	123.624	102.851	76.505	60.799	58.265
77.5	98.291	78.532	54.719	48.639	48.132
80.0	73.972	55.225	39.519	37.999	37.999
82.5	52.692	33.439	28.373	27.359	27.359
85.0	30.399	18.240	16.720	16.213	15.706
87.5	9.627	6.080	5.573	5.573	5.067
90.0	0.000	0.000	0.000	0.000	0.000
92.5	6.550	11.462	12.280	12.280	12.280
95.0	18.421	32.748	33.566	26.198	26.198
97.5	32.338	55.671	85.962	53.624	46.665
100.0	48.712	76.138	136.312	100.699	79.004
102.5	68.361	92.921	201.398	155.960	126.897
105.0	86.372	110.932	251.338	241.104	193.211
107.5	104.792	128.944	274.261	352.855	296.775
110.0	122.394	145.727	285.313	445.776	424.900
112.5	140.405	162.100	298.412	484.255	509.634
115.0	157.598	177.655	320.517	496.125	541.563
117.5	171.515	191.983	338.119	501.856	553.434
120.0	184.205	205.900	349.580	524.370	562.030
122.5	195.257	219.409	356.948	552.206	588.637
125.0	205.900	231.280	362.270	567.351	619.748
127.5	215.725	241.923	366.363	567.761	636.121
130.0	223.911	251.338	369.638	557.937	633.256
132.5	232.508	260.343	372.503	544.428	618.110

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-S-B-835-WSOTG-F-ITL90353 ITL89033.013.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	240.695	268.530	374.550	529.692	598.462
<b>137.5</b>	248.472	275.898	375.369	513.727	575.948
<b>140.0</b>	256.659	282.857	375.778	497.763	552.206
<b>142.5</b>	264.846	289.407	375.369	480.980	528.464
<b>145.0</b>	273.442	295.956	373.322	465.425	505.131
<b>147.5</b>	280.401	301.278	370.457	449.870	482.617
<b>150.0</b>	287.769	306.599	367.591	434.724	462.150
<b>152.5</b>	295.137	311.102	364.317	419.988	443.320
<b>155.0</b>	301.687	315.605	361.042	406.070	424.490
<b>157.5</b>	307.827	319.289	356.948	393.380	407.707
<b>160.0</b>	313.558	322.973	353.674	381.918	392.561
<b>162.5</b>	318.470	325.838	349.580	371.276	379.462
<b>165.0</b>	323.382	328.294	345.896	361.861	368.001
<b>167.5</b>	327.066	330.341	342.621	353.674	358.176
<b>170.0</b>	329.932	332.388	340.165	347.124	349.580
<b>172.5</b>	331.978	333.616	338.119	341.803	343.440
<b>175.0</b>	334.025	334.434	336.072	337.709	338.937
<b>177.5</b>	334.844	334.844	335.253	335.663	335.663
<b>180.0</b>	335.253	335.253	335.253	335.253	335.253

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-S-B-835-WSOTG-F-ITL90353 ITL89033.013.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	273.76	N.A.	7.70
0-30	567.00	N.A.	16.00
0-40	900.65	N.A.	25.40
0-60	1493.09	N.A.	42.10
0-80	1767.25	N.A.	49.80
0-90	1789.16	N.A.	50.40
10-90	1717.25	N.A.	48.40
20-40	626.89	N.A.	17.70
20-50	950.04	N.A.	26.80
40-70	776.61	N.A.	21.90
60-80	274.16	N.A.	7.70
70-80	89.99	N.A.	2.50
80-90	21.92	N.A.	0.60
90-110	238.03	N.A.	6.70
90-120	567.00	N.A.	16.00
90-130	915.79	N.A.	25.80
90-150	1463.00	N.A.	41.20
90-180	1761.04	N.A.	49.60
110-180	1523.01	N.A.	42.90
0-180	3550.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	71.92
10-20	201.84
20-30	293.24
30-40	333.65
40-50	323.15
50-60	269.29
60-70	184.17
70-80	89.99
80-90	21.92
90-100	39.66
100-110	198.36
110-120	328.97
120-130	348.80
130-140	307.79
140-150	239.42
150-160	167.62
160-170	98.20
170-180	32.21

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

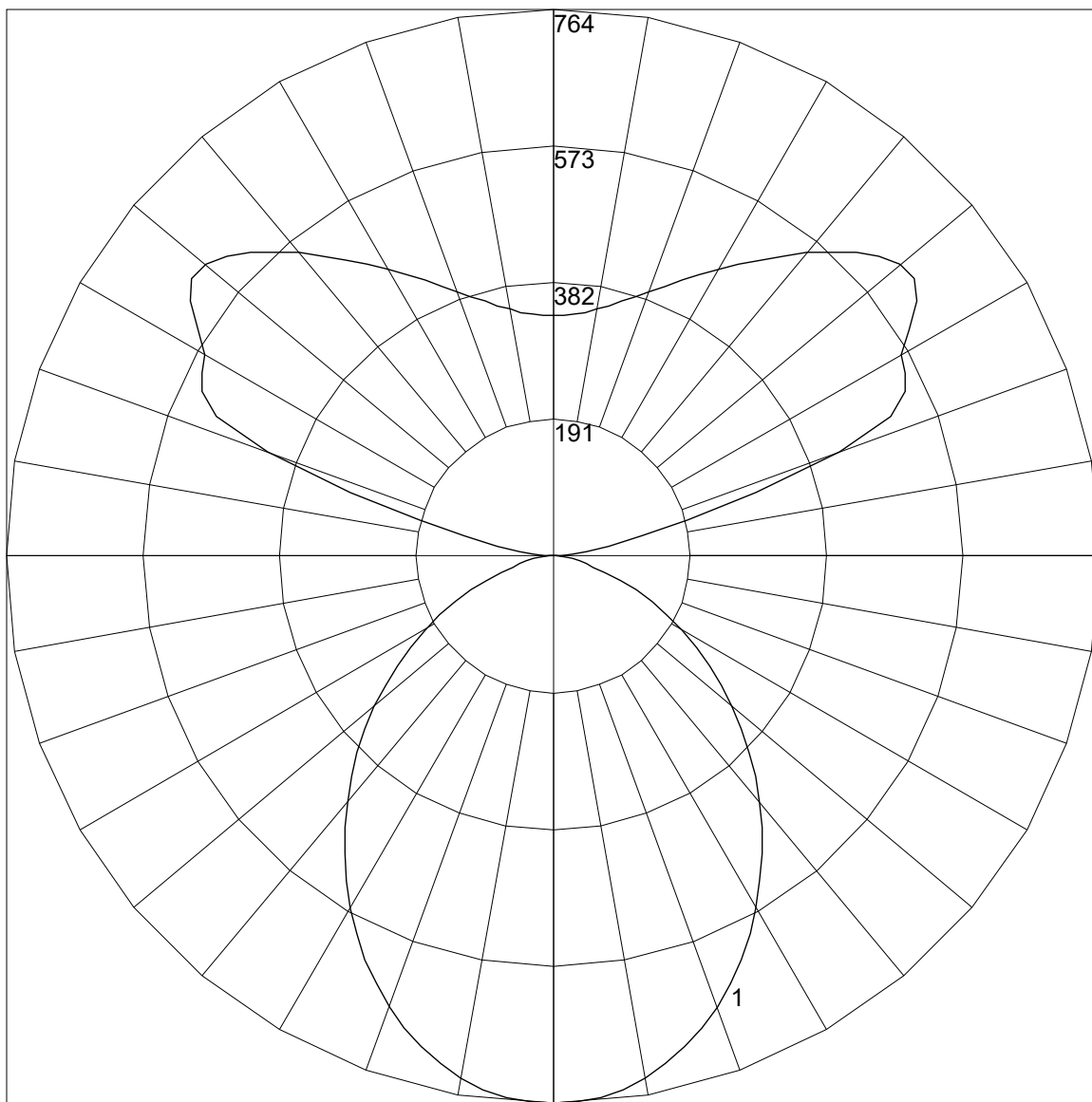
Effective Floor Cavity Reflectance 0.20

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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56	50
1	98	94	90	87	91	87	84	81	74	71	69	62	60	58	50	49	48	43
2	90	82	76	71	83	76	71	67	65	61	58	54	52	49	45	43	41	37
3	82	73	65	60	75	67	61	56	57	53	49	48	45	42	40	37	35	31
4	75	64	57	51	69	60	53	48	51	46	42	43	39	36	36	33	31	27
5	69	58	50	44	63	54	46	41	46	40	36	39	35	31	32	29	27	24
6	64	52	44	38	59	48	41	36	41	36	32	35	31	28	29	26	24	21
7	59	47	39	33	54	44	37	32	38	32	28	32	28	25	27	24	21	19
8	55	42	35	30	50	40	33	28	34	29	25	29	25	22	25	21	19	17
9	51	39	31	26	47	36	30	25	32	26	22	27	23	20	23	20	17	15
10	48	36	28	24	44	33	27	23	29	24	20	25	21	18	21	18	16	14

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POLAR GRAPH



Maximum Candela = 763.53 Located At Horizontal Angle = 0, Vertical Angle = 0

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