

# 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-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90353 ITL89033.002 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-B-B-835-WSOTG-F

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 36.5 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 38.9 WATTS

[\_ABSOLUTE]LUMENS]4003

[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	4003
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	110
Total Luminaire Watts	36.5
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

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES

## 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	8.234	14.410	15.439	15.439	15.439
95.0	23.159	41.172	42.201	32.937	32.937
97.5	40.657	69.992	108.075	67.418	58.669
100.0	61.243	95.724	171.377	126.603	99.326
102.5	85.946	116.824	253.205	196.079	159.540
105.0	108.590	139.469	315.992	303.125	242.912
107.5	131.749	162.113	344.812	443.623	373.117
110.0	153.879	183.213	358.707	560.448	534.201
112.5	176.523	203.799	375.176	608.824	640.732
115.0	198.138	223.356	402.966	623.749	680.875
117.5	215.636	241.368	425.096	630.954	695.799
120.0	231.590	258.866	439.506	659.259	706.607
122.5	245.485	275.849	448.770	694.255	740.059
125.0	258.866	290.774	455.460	713.297	779.172
127.5	271.218	304.155	460.607	713.812	799.757
130.0	281.510	315.992	464.724	701.460	796.155
132.5	292.318	327.314	468.326	684.477	777.113

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	302.611	337.607	470.900	665.950	752.410
<b>137.5</b>	312.389	346.870	471.929	645.879	724.105
<b>140.0</b>	322.682	355.619	472.443	625.808	694.255
<b>142.5</b>	332.975	363.853	471.929	604.707	664.406
<b>145.0</b>	343.782	372.088	469.356	585.151	635.071
<b>147.5</b>	352.531	378.778	465.753	565.594	606.766
<b>150.0</b>	361.795	385.469	462.151	546.552	581.033
<b>152.5</b>	371.059	391.130	458.034	528.025	557.360
<b>155.0</b>	379.293	396.791	453.916	510.527	533.686
<b>157.5</b>	387.012	401.423	448.770	494.573	512.586
<b>160.0</b>	394.218	406.054	444.653	480.163	493.544
<b>162.5</b>	400.393	409.657	439.506	466.782	477.075
<b>165.0</b>	406.569	412.745	434.875	454.946	462.665
<b>167.5</b>	411.201	415.318	430.757	444.653	450.314
<b>170.0</b>	414.803	417.891	427.670	436.418	439.506
<b>172.5</b>	417.377	419.435	425.096	429.728	431.787
<b>175.0</b>	419.950	420.464	422.523	424.582	426.125
<b>177.5</b>	420.979	420.979	421.494	422.008	422.008
<b>180.0</b>	421.494	421.494	421.494	421.494	421.494

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	273.76	N.A.	6.80
0-30	567.00	N.A.	14.20
0-40	900.65	N.A.	22.50
0-60	1493.09	N.A.	37.30
0-80	1767.25	N.A.	44.10
0-90	1789.16	N.A.	44.70
10-90	1717.25	N.A.	42.90
20-40	626.89	N.A.	15.70
20-50	950.04	N.A.	23.70
40-70	776.61	N.A.	19.40
60-80	274.16	N.A.	6.80
70-80	89.99	N.A.	2.20
80-90	21.92	N.A.	0.50
90-110	299.26	N.A.	7.50
90-120	712.85	N.A.	17.80
90-130	1151.37	N.A.	28.80
90-150	1839.35	N.A.	45.90
90-180	2214.04	N.A.	55.30
110-180	1914.79	N.A.	47.80
0-180	4003.21	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	49.87
100-110	249.39
110-120	413.60
120-130	438.52
130-140	386.97
140-150	301.01
150-160	210.74
160-170	123.46
170-180	40.50

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

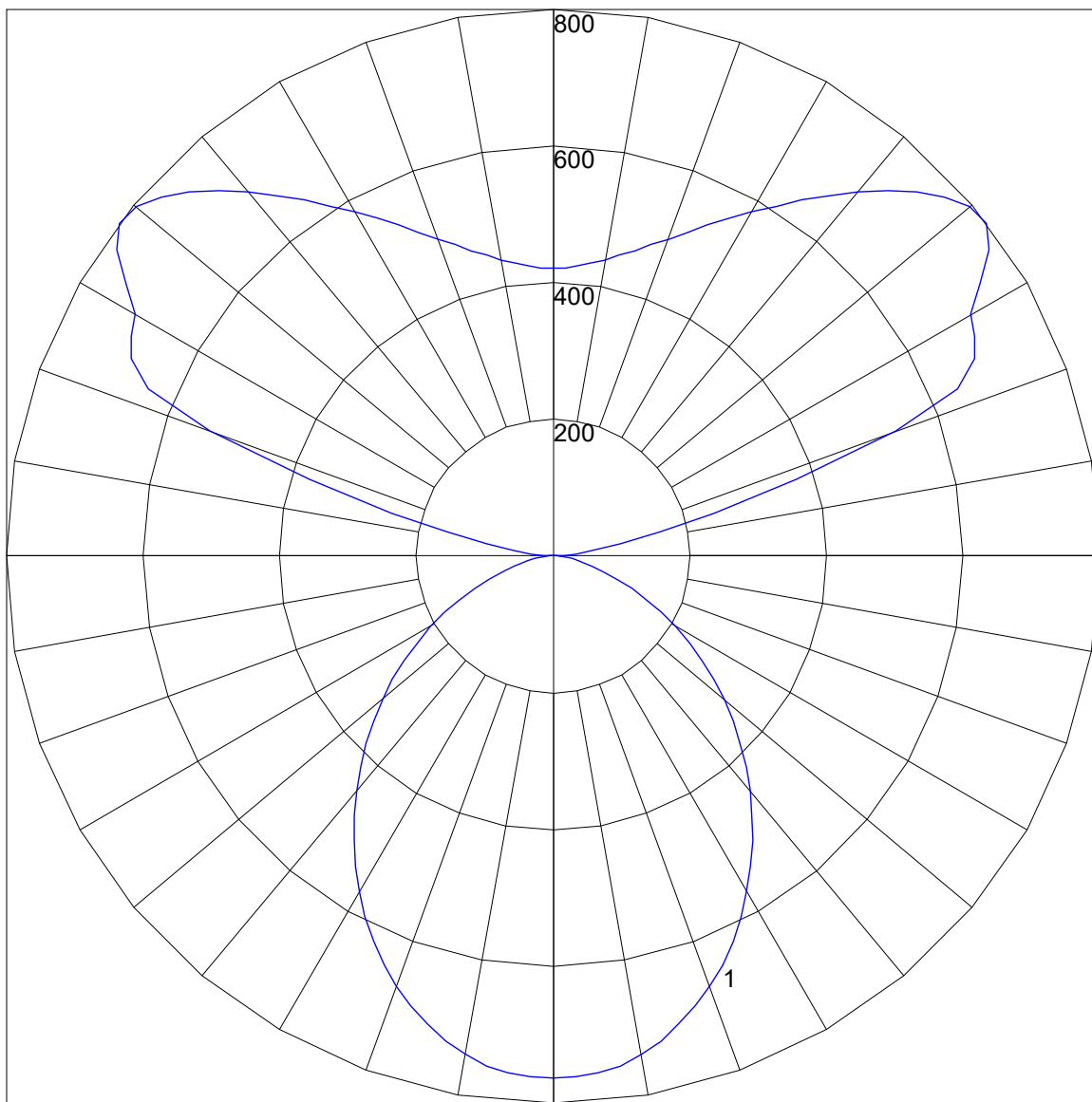
Effective Floor Cavity Reflectance 0.20

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	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	97	93	89	86	89	85	82	79	71	69	67	58	56	55	46	45	44	38
2	88	81	75	70	81	75	70	65	62	59	55	51	48	46	41	39	37	32
3	81	72	64	59	74	66	60	55	55	51	47	45	42	39	36	34	32	28
4	74	63	56	50	68	58	52	47	49	44	40	40	37	34	32	30	28	24
5	68	57	49	43	62	52	45	40	44	39	35	36	32	29	29	26	24	21
6	63	51	43	37	57	47	40	35	40	34	30	33	29	26	27	24	21	18
7	58	46	38	33	53	42	36	31	36	31	27	30	26	23	24	21	19	16
8	54	42	34	29	49	39	32	27	33	28	24	27	23	20	22	19	17	15
9	50	38	31	26	46	35	29	24	30	25	21	25	21	18	21	18	16	13
10	47	35	28	23	43	32	26	22	28	23	19	23	19	17	19	16	14	12

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-4-ID-RG-4FT-B-B-835-WSOTG-F-ITL90353 ITL89033.002.IES

## POLAR GRAPH



Maximum Candela = 799.757 Located At Horizontal Angle = 90, Vertical Angle = 127.5

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