

# 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-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES

### DESCRIPTION INFORMATION (From Photometric File)

[TEST]ITL90350 ITL89456.012 Family Correlation File

[TESTLAB]INDEPENDENT TESTING LABORATORIES, INC.

[TESTDATE]07/19/17

[ISSUEDATE]05/31/18

[MANUFAC]FINELITE, INC.

[LUMCAT]HP-2-ID-RG-4ft-B-V-835-WSO

[\_INPUT\_ELECTRICAL]120.0 VOLTS, 54.3 WATTS

[\_INPUT\_ELECTRICAL]277.0 VOLTS, 56.6 WATTS

[OTHER]see [www.finelite.com](http://www.finelite.com) for source file ITL89456. 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]4955

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4955
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	91
Total Luminaire Watts	54.3
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)	0.18 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	18357	13054	10349
55	16517	10376	8073
65	14621	7867	6143
75	12436	6042	5514
85	9929	4877	4529

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES****CANDELA TABULATION**

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	1529.000	1529.000	1529.000	1529.000	1529.000
<b>2.5</b>	1527.000	1526.000	1525.000	1524.000	1523.000
<b>5.0</b>	1520.000	1518.000	1513.000	1507.000	1504.000
<b>7.5</b>	1508.000	1503.000	1489.000	1477.000	1471.000
<b>10.0</b>	1491.000	1479.000	1458.000	1436.000	1427.000
<b>12.5</b>	1470.000	1448.000	1417.000	1385.000	1372.000
<b>15.0</b>	1443.000	1412.000	1370.000	1327.000	1309.000
<b>17.5</b>	1413.000	1372.000	1316.000	1263.000	1240.000
<b>20.0</b>	1378.000	1327.000	1258.000	1195.000	1168.000
<b>22.5</b>	1336.000	1277.000	1196.000	1122.000	1092.000
<b>25.0</b>	1293.000	1224.000	1131.000	1049.000	1017.000
<b>27.5</b>	1246.000	1168.000	1064.000	975.000	941.000
<b>30.0</b>	1196.000	1111.000	997.000	900.000	867.000
<b>32.5</b>	1141.000	1053.000	929.000	826.000	795.000
<b>35.0</b>	1086.000	993.000	862.000	757.000	722.000
<b>37.5</b>	1030.000	932.000	796.000	690.000	656.000
<b>40.0</b>	972.000	870.000	731.000	627.000	594.000
<b>42.5</b>	914.000	810.000	668.000	567.000	536.000
<b>45.0</b>	855.000	749.000	608.000	511.000	482.000
<b>47.5</b>	795.000	691.000	550.000	458.000	433.000
<b>50.0</b>	736.000	632.000	494.000	408.000	386.000
<b>52.5</b>	681.000	574.000	442.000	364.000	344.000
<b>55.0</b>	624.000	516.000	392.000	322.000	305.000
<b>57.5</b>	568.000	462.000	344.000	283.000	268.000
<b>60.0</b>	513.000	410.000	299.000	246.000	233.000
<b>62.5</b>	459.000	359.000	258.000	212.000	200.000
<b>65.0</b>	407.000	311.000	219.000	178.000	171.000
<b>67.5</b>	354.000	265.000	183.000	154.000	152.000
<b>70.0</b>	305.000	221.000	150.000	134.000	132.000
<b>72.5</b>	258.000	180.000	124.000	115.000	112.000
<b>75.0</b>	212.000	141.000	103.000	95.000	94.000
<b>77.5</b>	171.000	105.000	82.000	77.000	76.000
<b>80.0</b>	131.000	74.000	63.000	59.000	59.000
<b>82.5</b>	92.000	52.000	45.000	42.000	42.000
<b>85.0</b>	57.000	32.000	28.000	26.000	26.000
<b>87.5</b>	24.000	14.000	12.000	11.000	11.000
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	9.264	15.955	15.955	15.441	15.441
<b>95.0</b>	24.190	42.719	42.719	35.513	34.998
<b>97.5</b>	40.660	69.997	85.952	61.762	58.159
<b>100.0</b>	57.645	91.099	170.875	99.334	87.496
<b>102.5</b>	76.173	111.172	236.240	175.507	139.479
<b>105.0</b>	94.187	132.788	273.812	286.164	235.725
<b>107.5</b>	112.201	153.891	296.973	386.013	359.764
<b>110.0</b>	130.215	173.448	317.560	444.687	449.319
<b>112.5</b>	148.229	192.492	341.750	483.288	502.846
<b>115.0</b>	166.758	210.506	370.572	511.081	539.389
<b>117.5</b>	185.286	228.520	401.968	537.330	567.696
<b>120.0</b>	203.815	247.563	427.702	565.123	596.004
<b>122.5</b>	220.799	263.518	446.231	604.239	625.856
<b>125.0</b>	236.755	278.959	456.525	646.958	668.574
<b>127.5</b>	251.680	293.370	462.701	675.780	715.925
<b>130.0</b>	264.033	305.722	466.304	687.618	749.894
<b>132.5</b>	276.385	317.045	467.333	682.986	760.703

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	287.194	326.310	466.818	668.574	749.894
<b>137.5</b>	296.973	335.059	465.274	649.016	727.248
<b>140.0</b>	306.752	342.779	462.701	627.400	698.426
<b>142.5</b>	316.016	349.985	459.098	603.210	667.545
<b>145.0</b>	325.795	356.676	455.495	580.049	636.149
<b>147.5</b>	334.030	361.823	451.378	556.373	604.239
<b>150.0</b>	342.265	367.484	446.231	535.271	574.387
<b>152.5</b>	349.985	371.602	440.055	515.199	546.594
<b>155.0</b>	357.191	374.690	433.878	495.641	520.860
<b>157.5</b>	363.882	378.807	428.217	477.627	497.699
<b>160.0</b>	369.543	381.381	421.526	460.127	476.083
<b>162.5</b>	374.690	383.440	414.835	445.202	456.010
<b>165.0</b>	378.807	385.498	408.144	430.790	439.025
<b>167.5</b>	382.410	387.042	402.998	418.438	424.099
<b>170.0</b>	385.498	388.586	399.395	408.659	412.262
<b>172.5</b>	387.042	389.616	395.277	400.424	403.512
<b>175.0</b>	389.101	390.130	392.704	395.277	396.307
<b>177.5</b>	390.130	390.130	391.160	391.160	391.675
<b>180.0</b>	390.645	390.645	390.645	390.645	390.645

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	527.37	N.A.	10.60
0-30	1050.87	N.A.	21.20
0-40	1600.47	N.A.	32.30
0-60	2470.38	N.A.	49.90
0-80	2851.03	N.A.	57.50
0-90	2887.32	N.A.	58.30
10-90	2744.7	N.A.	55.40
20-40	1073.1	N.A.	21.70
20-50	1563.06	N.A.	31.50
40-70	1119.36	N.A.	22.60
60-80	380.65	N.A.	7.70
70-80	131.21	N.A.	2.60
80-90	36.28	N.A.	0.70
90-110	270.61	N.A.	5.50
90-120	627.65	N.A.	12.70
90-130	1035.78	N.A.	20.90
90-150	1711.6	N.A.	34.50
90-180	2067.9	N.A.	41.70
110-180	1797.28	N.A.	36.30
0-180	4955.21	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	142.62
10-20	384.75
20-30	523.50
30-40	549.60
40-50	489.96
50-60	379.95
60-70	249.45
70-80	131.21
80-90	36.28
90-100	47.20
100-110	223.41
110-120	357.04
120-130	408.13
130-140	381.45
140-150	294.37
150-160	202.34
160-170	116.28
170-180	37.67

# IES INDOOR REPORT

PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES

## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

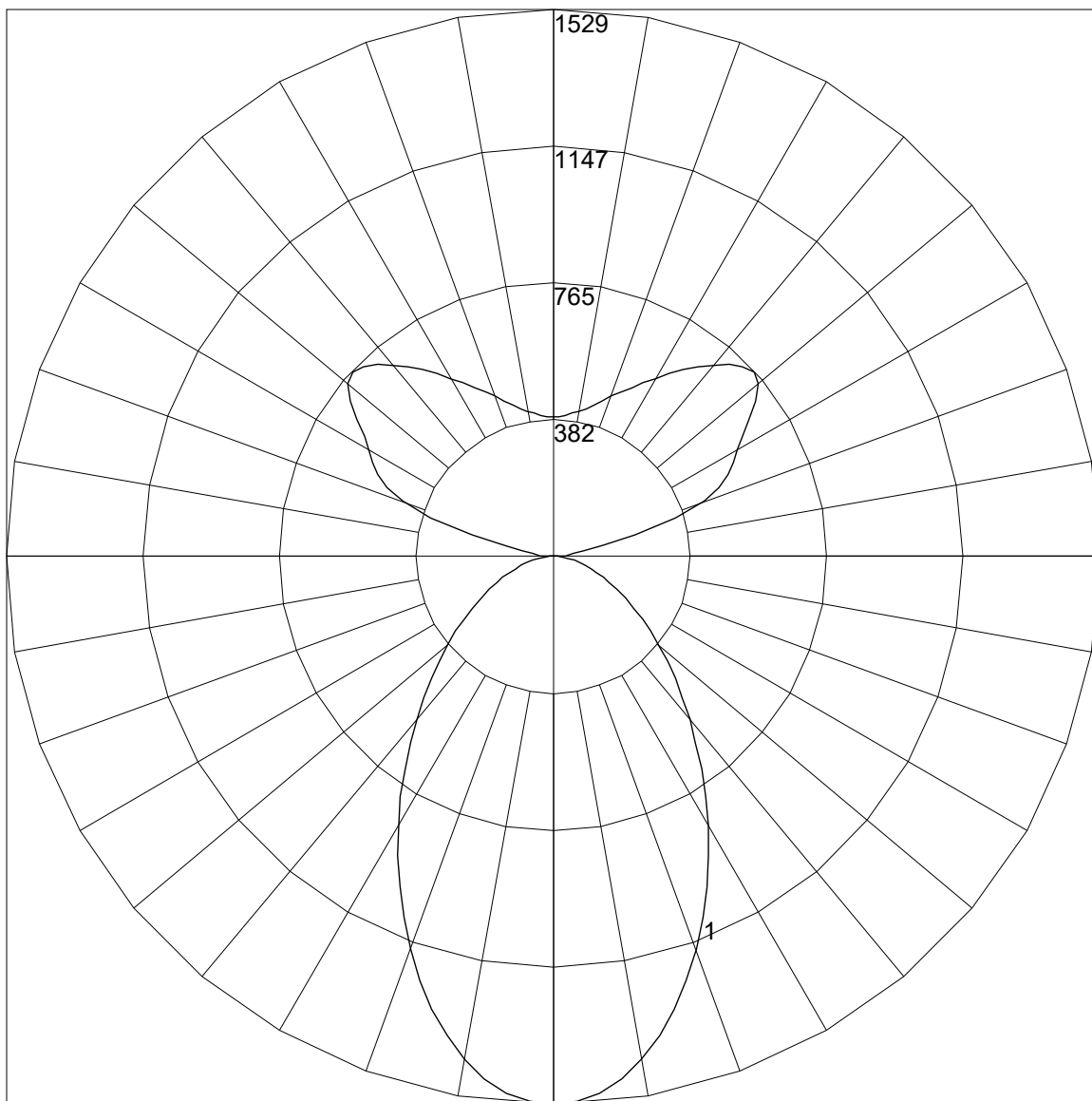
Effective Floor Cavity Reflectance 0.20

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	64	64	64	58
1	100	96	92	89	93	90	87	84	78	76	74	67	66	64	57	56	55	50
2	92	85	79	74	86	79	74	70	69	65	62	60	57	55	51	49	47	43
3	84	75	68	62	78	70	64	59	62	57	53	54	50	47	46	43	41	37
4	77	67	59	54	72	63	56	51	55	50	46	48	44	41	42	39	36	33
5	71	60	52	46	67	57	50	44	50	44	40	44	39	36	38	35	32	29
6	66	54	46	41	62	51	44	39	45	40	35	40	35	32	35	31	29	26
7	61	49	42	36	57	47	40	35	41	36	32	36	32	29	32	28	26	23
8	57	45	37	32	53	43	36	31	38	32	28	34	29	26	29	26	23	21
9	53	41	34	29	50	39	32	28	35	30	26	31	27	23	27	24	21	19
10	50	38	31	26	47	36	30	25	32	27	23	29	24	21	26	22	19	18

**IES INDOOR REPORT**

**PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-B-V-835-WSOTG-F-ITL90350 ITL89456.012.IES**

**POLAR GRAPH**



Maximum Candela = 1529 Located At Horizontal Angle = 0, Vertical Angle = 0

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