

# 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-H-B-835-WSOTG-F-ITL90350 ITL89456.008.IES****DESCRIPTION INFORMATION (From Photometric File)**

[TEST]ITL90350 ITL89456.008 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-H-B-835-WSO

[INPUT\_ELECTRICAL]120.0 VOLTS, 45.8 WATTS

[INPUT\_ELECTRICAL]277.0 VOLTS, 48.2 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]4611

**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4611
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	101
Total Luminaire Watts	45.8
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)	0.18 ft
Luminous Height	0.00 ft

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	9449	6719	5327
55	8501	5341	4155
65	7526	4049	3162
75	6401	3110	2838
85	5111	2510	2331

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	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>
<b>0.0</b>	787.009	787.009	787.009	787.009	787.009
<b>2.5</b>	785.979	785.465	784.950	784.435	783.920
<b>5.0</b>	782.376	781.347	778.773	775.685	774.141
<b>7.5</b>	776.199	773.626	766.420	760.243	757.155
<b>10.0</b>	767.449	761.273	750.463	739.140	734.507
<b>12.5</b>	756.640	745.316	729.360	712.889	706.197
<b>15.0</b>	742.743	726.786	705.168	683.035	673.770
<b>17.5</b>	727.301	706.197	677.373	650.093	638.254
<b>20.0</b>	709.286	683.035	647.519	615.092	601.194
<b>22.5</b>	687.668	657.299	615.606	577.517	562.076
<b>25.0</b>	665.534	630.019	582.150	539.942	523.471
<b>27.5</b>	641.343	601.194	547.663	501.853	484.353
<b>30.0</b>	615.606	571.855	513.177	463.249	446.263
<b>32.5</b>	587.297	542.001	478.176	425.160	409.203
<b>35.0</b>	558.987	511.118	443.690	389.644	371.629
<b>37.5</b>	530.163	479.720	409.718	355.158	337.657
<b>40.0</b>	500.309	447.807	376.261	322.730	305.744
<b>42.5</b>	470.455	416.924	343.834	291.847	275.890
<b>45.0</b>	440.087	385.526	312.950	263.022	248.096
<b>47.5</b>	409.203	355.672	283.097	235.742	222.874
<b>50.0</b>	378.835	325.304	254.272	210.006	198.682
<b>52.5</b>	350.525	295.450	227.507	187.358	177.064
<b>55.0</b>	321.186	265.596	201.771	165.740	156.990
<b>57.5</b>	292.362	237.801	177.064	145.666	137.945
<b>60.0</b>	264.052	211.036	153.902	126.621	119.930
<b>62.5</b>	236.257	184.785	132.798	109.121	102.944
<b>65.0</b>	209.492	160.078	112.724	91.620	88.017
<b>67.5</b>	182.211	136.401	94.194	79.267	78.238
<b>70.0</b>	156.990	113.753	77.208	68.973	67.943
<b>72.5</b>	132.798	92.650	63.825	59.193	57.649
<b>75.0</b>	109.121	72.576	53.016	48.898	48.384
<b>77.5</b>	88.017	54.046	42.207	39.633	39.119
<b>80.0</b>	67.428	38.089	32.427	30.369	30.369
<b>82.5</b>	47.354	26.765	23.163	21.618	21.618
<b>85.0</b>	29.339	16.471	14.412	13.383	13.383
<b>87.5</b>	12.353	7.206	6.177	5.662	5.662
<b>90.0</b>	0.000	0.000	0.000	0.000	0.000
<b>92.5</b>	13.999	24.110	24.110	23.332	23.332
<b>95.0</b>	36.554	64.553	64.553	53.665	52.887
<b>97.5</b>	61.442	105.774	129.884	93.330	87.886
<b>100.0</b>	87.108	137.662	258.213	150.106	132.218
<b>102.5</b>	115.107	167.994	356.987	265.213	210.770
<b>105.0</b>	142.328	200.660	413.763	432.429	356.210
<b>107.5</b>	169.549	232.547	448.762	583.313	543.647
<b>110.0</b>	196.771	262.102	479.872	671.976	678.976
<b>112.5</b>	223.992	290.878	516.426	730.307	759.862
<b>115.0</b>	251.991	318.100	559.980	772.306	815.082
<b>117.5</b>	279.990	345.321	607.423	811.971	857.858
<b>120.0</b>	307.989	374.098	646.310	853.970	900.635
<b>122.5</b>	333.655	398.208	674.309	913.079	945.744
<b>125.0</b>	357.765	421.541	689.864	977.632	1010.297
<b>127.5</b>	380.320	443.318	699.197	1021.186	1081.851
<b>130.0</b>	398.986	461.984	704.642	1039.074	1133.182
<b>132.5</b>	417.652	479.094	706.197	1032.074	1149.515

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-B-835-WSOTG-F-ITL90350 ITL89456.008.IES****CANDELA TABULATION - (Cont.)**

<b>135.0</b>	433.985	493.094	705.419	1010.297	1133.182
<b>137.5</b>	448.762	506.315	703.086	980.743	1098.961
<b>140.0</b>	463.539	517.982	699.197	948.077	1055.407
<b>142.5</b>	477.539	528.870	693.753	911.523	1008.742
<b>145.0</b>	492.316	538.981	688.309	876.524	961.299
<b>147.5</b>	504.760	546.758	682.087	840.748	913.079
<b>150.0</b>	517.204	555.314	674.309	808.860	867.969
<b>152.5</b>	528.870	561.536	664.976	778.528	825.971
<b>155.0</b>	539.759	566.202	655.643	748.973	787.083
<b>157.5</b>	549.869	572.424	647.088	721.752	752.084
<b>160.0</b>	558.425	576.313	636.977	695.309	719.419
<b>162.5</b>	566.202	579.424	626.867	672.754	689.087
<b>165.0</b>	572.424	582.535	616.756	650.977	663.421
<b>167.5</b>	577.868	584.868	608.978	632.311	640.866
<b>170.0</b>	582.535	587.201	603.534	617.534	622.978
<b>172.5</b>	584.868	588.757	597.312	605.090	609.756
<b>175.0</b>	587.979	589.535	593.423	597.312	598.868
<b>177.5</b>	589.535	589.535	591.090	591.090	591.868
<b>180.0</b>	590.312	590.312	590.312	590.312	590.312

**IES INDOOR REPORT****PHOTOMETRIC FILENAME : HP-2-ID-RG-4FT-H-B-835-WSOTG-F-ITL90350 ITL89456.008.IES****ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	271.45	N.A.	5.90
0-30	540.90	N.A.	11.70
0-40	823.79	N.A.	17.90
0-60	1271.56	N.A.	27.60
0-80	1467.49	N.A.	31.80
0-90	1486.16	N.A.	32.20
10-90	1412.75	N.A.	30.60
20-40	552.35	N.A.	12.00
20-50	804.54	N.A.	17.40
40-70	576.16	N.A.	12.50
60-80	195.93	N.A.	4.20
70-80	67.54	N.A.	1.50
80-90	18.68	N.A.	0.40
90-110	408.93	N.A.	8.90
90-120	948.46	N.A.	20.60
90-130	1565.19	N.A.	33.90
90-150	2586.44	N.A.	56.10
90-180	3124.85	N.A.	67.80
110-180	2715.92	N.A.	58.90
0-180	4611.01	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	73.41
10-20	198.04
20-30	269.46
30-40	282.89
40-50	252.19
50-60	195.57
60-70	128.39
70-80	67.54
80-90	18.68
90-100	71.33
100-110	337.60
110-120	539.53
120-130	616.74
130-140	576.42
140-150	444.83
150-160	305.77
160-170	175.71
170-180	56.93

# IES INDOOR REPORT

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## COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

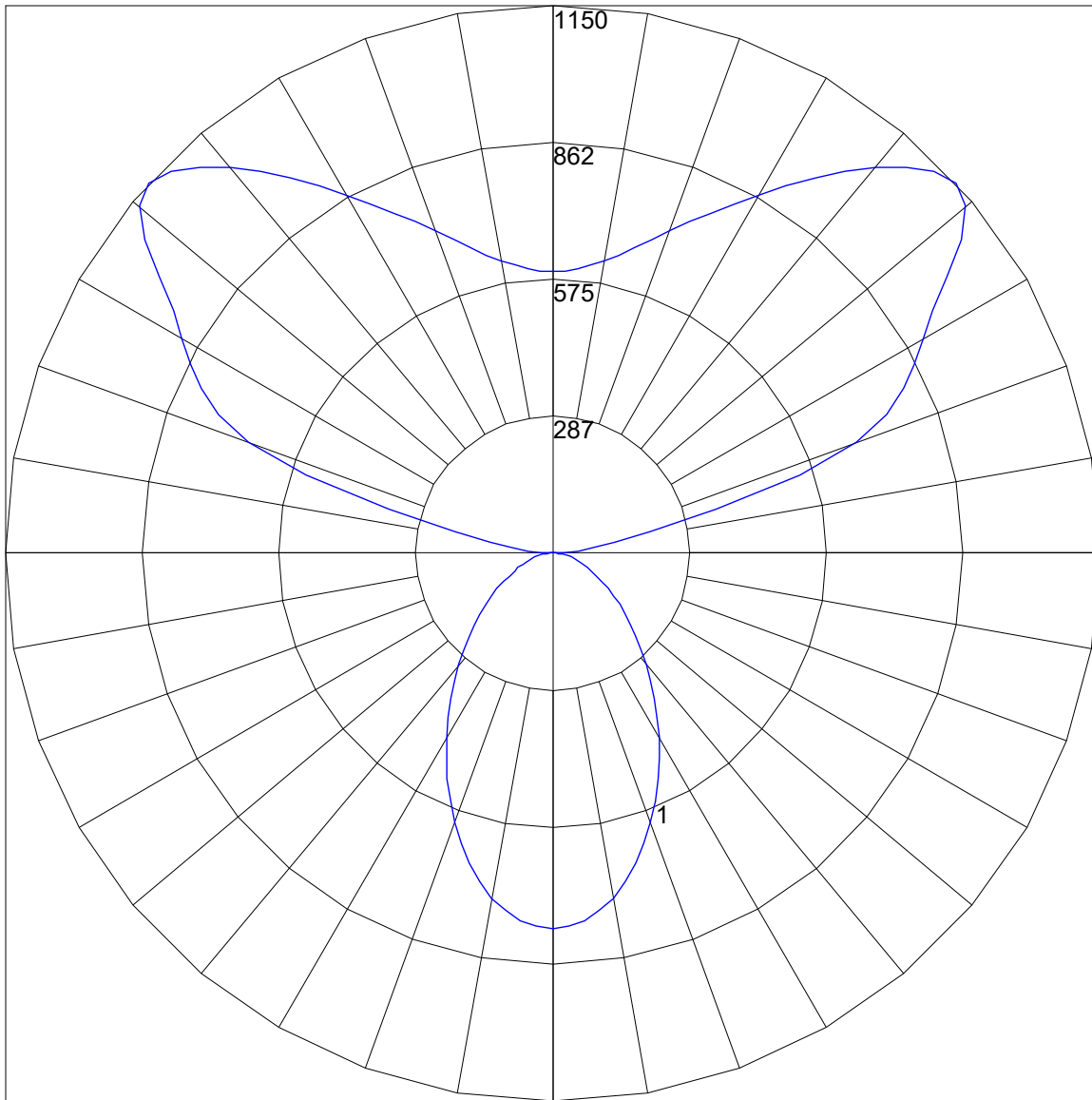
Effective Floor Cavity Reflectance 0.20

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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	67	63	57	54	51	44	42	40	32	31	29	24
3	79	70	63	57	71	63	57	53	51	47	43	39	36	34	29	27	25	21
4	72	62	54	49	65	56	50	45	45	41	37	35	32	30	26	24	22	18
5	66	55	48	42	60	50	44	39	41	36	32	32	28	26	23	21	20	16
6	61	50	42	36	55	45	39	34	37	32	28	29	25	23	21	19	17	14
7	56	45	37	32	51	41	34	30	33	28	25	26	23	20	20	17	16	13
8	52	41	33	28	47	37	31	26	30	26	22	24	21	18	18	16	14	12
9	49	37	30	25	44	34	28	23	28	23	20	22	19	16	17	15	13	11
10	46	34	27	23	41	31	25	21	26	21	18	20	17	15	16	13	12	10

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POLAR GRAPH



Maximum Candela = 1149.515 Located At Horizontal Angle = 90, Vertical Angle = 132.5  
# 1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)