

## INSTRUCTIONS FOR CREATING E1-I CONFIGURATION FILES

To accurately model an **E1-I Configuration (E1-I C)** luminaire, Finelite recommends using **E1-I Linear (E1-I L)** IES files. Certain limitations of the IES file restrict fixture dimensions to x, y & z. Thus, using the outside dimensions (x,y,z) in the **E1-I C** IES file will generate a solid "box" in your model and will not allow light to bounce off the ceiling and through the center of the fixture, resulting in an inaccurate light calculation. By "building" each **E1-I C** with **E1-I L** IES files, you enable the fixture symbol to have an open center.

Using a 1'x3' **E1-I C** as an example: use two 1' **E1-I L** and two 3' **E1-I L** IES files in your lighting analysis software to form the rectangle. Once the rectangle is made, group the four linear fixtures to represent your 1'x3' fixture. The grouping can then be added to your plan and fixture schedule.

If you need assistance or have questions about creating the configuration files, our lighting applications team is available to help you:

<http://www.finelite.com/service/request-info/request-design-support/>

## INSTRUCTIONS FOR ADJUSTING LUMENS FOR OTHER CCTs AND CRIs

### CONCEPT AND SAMPLE CALCULATION

The IES file and LM-79 reports provided are for Very High Output (V), 80 CRI, 3500K CCT luminaires.

Use the Lumen Adjustment Factors below to calculate lumen output for the desired CCT and CRI.

CRI	CCT	Lumen Adjustment Factor
80	3000K	0.985
80	3500K	1.000
80	4000K	1.032
90	3000K	0.746
90	3500K	0.760
90	4000K	0.789

### Formula to adjust lumen output from 80 CRI-3500K to 90CRI-3000K:

$$\text{Lumen Adjustment Factor}_{(90 \text{ CRI}-3000\text{K})} = 0.746$$

$$\text{Total Light Output}_{(90 \text{ CRI}-3000\text{K})} = \text{Total Light Output}_{(80 \text{ CRI}-3500\text{K})} \times \text{Lumen Adjustment Factor}_{(90 \text{ CRI}-3000\text{K})}$$

## USING LUMEN ADJUSTMENT FACTORS IN AGI

When using the AGI software package, the Lumen Adjustment Factor is entered into the **User Defined Factor** (UDF) cell:

Description	Abb.	Factor
Lamp Lumen Depreciation	LLD	..
Luminaire Dirt Depreciation	LDD	..
Ballast Factor	BF	..
Luminaire Ambient Temperature Factor	LATF	..
Room Surface Dirt Depreciation	RSDD	..
Luminaire Surface Depreciation	LSD	..
Lamp Burnout Factor	LBO	..
Voltage-To-Luminaire Factor	VTLF	..
Ballast-Lamp Photometric Factor	BLPF	..
Heat Extraction Thermal Factor	HETF	..
Equipment Operating Factor	EOF	..
User Defined Factor	UDF	..
<b>Total Light Loss Factor</b>	<b>LLF</b>	<b>1.000</b>

## USING LUMEN ADJUSTMENT FACTORS IN VISUAL USER

When using the Visual User software package, the Lumen Adjustment Factor is entered into the **Other** cell:

### Step 4 – Miscellaneous Factors

Other Factors	Results
Lamp Burnout Factor	LLD 1.00
Room Surface Dirt Depreciation Factor	LDD 1.00
Luminaire Ambient Temperature Factor	Ballast 1.00
Heat Extraction Thermal Factor	Other 1.00
Voltage-to-Luminaire Factor	
Ballast-Lamp Photometric Factor	
Equipment Operating Factor	
Lamp Position Factor	
	<b>Total LLF 1.00</b>

1. Enter the values for any of the factors listed under the Other Factors Header. The multiplication of these factors will be entered in the Other text box under the Results Header. The total LLF is listed at the bottom of the calculator.
2. Select FINISH to close the **Light Loss Factor Calculator**. The calculated LLF will be entered in the LLF text box in the **Lumen Method Tool**.