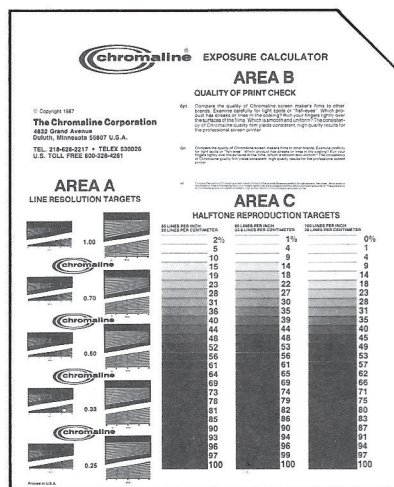


# THE CHROMALINE EXPOSURE CALCULATOR

## Description

Do not remove the Neutral Density Filter that is taped to the calculator.



### AREA A

#### Line Resolution Targets

This is the area of the calculator you will use first. It is made up of five pairs of boxes with lines in them which are called LINE RESOLUTION TARGETS. Notice the numbers in between each pair of these targets.

### AREA B

#### Quality of Print Check

This area of the calculator should be used only after line resolution calculation has been performed. The print quality check copy is three paragraphs of sample print in 8 point, 6 point and 4 point type.

### AREA C

#### Halftone Reproduction Targets

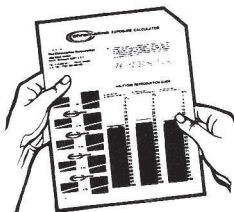
Use this area when working with halftones. Instructions for using this area can be found on the back page of this folder.

NOTE: A small piece of film

## Instructions for Use

### 1. Place Calculator On Screen

Place calculator on screen so that emulsion side of calculator is in contact with stencil. To find emulsion side of calculator: When holding calculator so that the notched corner is on the upper right (see illustration) the emulsion side of the calculator is facing you.



### 2. Expose the Screen

Expose the screen for twice the time you estimate is the correct exposure time for your UV lamp. Record this time and call it the TEST EXPOSURE TIME.

$$\text{Test Exposure Time} = \frac{\text{Estimated Exposure Time}}{2} \times 2$$

### 3. Develop the Screen

Develop the screen, then dry as normal. Wet screens will be swollen and misleading.

### 4. Study the Line Resolution Targets (Area A) On Stencil to Determine Correct Exposure Time.

Look only at Area A. Areas B and C may be grossly overexposed.

Look at each pair of line resolution targets and pick the clearest, sharpest image. Record the number in between the best pair and go to step 5.

*Note: If it is impossible to choose a "best" pair of images, do one of the following things, depending on what you see.*

- If all line resolution targets are "washed away," start over at step 1 and double your original test exposure time. Record the new, longer exposure time.

- Or, if all the line resolution targets are "filled in," start over at step one and cut your original test exposure time in half. Record the new, shorter test exposure time.

NOTE: Sometimes you won't find a pair of targets with clear, sharp lines. For example, targets numbered 0.50 may be too filled in and targets numbered 0.33 may be too washed away. Use a number that would be in between the targets that weren't quite right. In the example given, 0.40 would work to give the correct exposure time.

### 5. Use This Formula to Determine Correct Exposure Time:

$$\text{Best Target Number} \times \frac{\text{Test Exposure Time}}{\text{Correct Exposure Time}} = \text{Correct Exposure Time}$$

Example:

$$0.50 \times 2 \text{ minutes} = 1 \text{ minute}$$

### 6. How To Use AREA B to Check Print Quality

Make a new stencil of the calculator using the correct exposure time established in Step 5.

Look at the Print Quality Check Copy. Ask yourself: How clear and sharp is the print in each paragraph? Is it as clear and sharp as you need your printed material to be?

*If the paragraphs in Area B on the stencil must be sharper and clearer, first do this:*

- Double-check your correct exposure time by looking at the first pair (1.00) of line resolution targets in Area A. The image here should be sharp and clear if your exposure time is correct.

If you used the correct exposure time, you may need to make one or more of these changes to get a sharper, clearer image:

Use a screen with a higher mesh count.

Check emulsion/film thickness

Use a different type of Chromaline emulsion system.

Contact Chromaline at 1-800-328-4261

SEE BACK OF FOLDER FOR AREA C INSTRUCTIONS