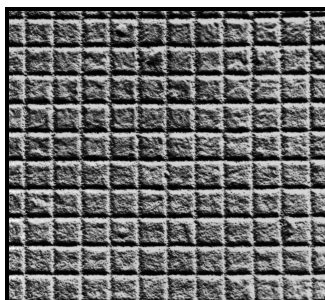


**SEM MAGNIFICATION CALIBRATION  
463NM DIFFRACTION GRATING REPLICA**

**Product No. 604, 604-A to 604-R**

This specimen is a replica of a 2,160 lines/mm cross line diffraction grating and is mounted on a 400 mesh copper TEM grid with a diameter of 3mm. When imaging the specimen, it should be kept in mind that the line spacing is 463nm and the pattern will not be visible until the imaging system is set to resolve that level of detail - around x2,500.



**To calculate electron microscope magnification:**

Take the measurement, in millimeters, between the limiting lines of as many squares of the replica pattern as possible. Apply the following formula:

$$\text{Magnification} = A \times 2,160/B$$

Where “A” represents distance in mm between limiting lines of first and last square measured, and  
“B” represents number of spaces between limiting lines of first and last square measured.

*Alternatively, use the online PELCO® Magnification Calibration Calculator by scanning the QR code below:*



**CARE OF THE SPECIMEN:**

When not in use, the replica should be kept in a dry and dust-free container. The replica surface may be damaged if touched. **Never try to clean it.** Dust can be removed using a rubber bulb attached to a glass pipette. Use a gentle stream of air.