The record for experiment Cal-3 was faint and could not be read precisely as the given error indicates, but the results are in good agreement with Cal-1 and Cal-2. The calibration parameter F should be constant for revolution speeds up to 5000 hz since beryllium mirrors[62] do not physically distort for these rotation speeds.

B.2. Dynamic Spatial Resolution

The practical definition of the spatial resolution was taken as the number of lines/mm distinguishable on the film in a simulated experimental setup. The dynamic spatial resolution of the camera was measured by dynamically recording the image of a Ronchi ruling. The glass ruling plate was located in the test chamber so the camera would view it in an experimental situation. The camera was focused on the ruling with the projection of the slit plane perpendicular to the rulings. The light for the camera was provided by an exploding wire light source located just behind the ruling. The camera was run at speeds up to 15 mm/μsec. The dynamic spatial resolution for this range of writing speeds was > 30 lines/mm.