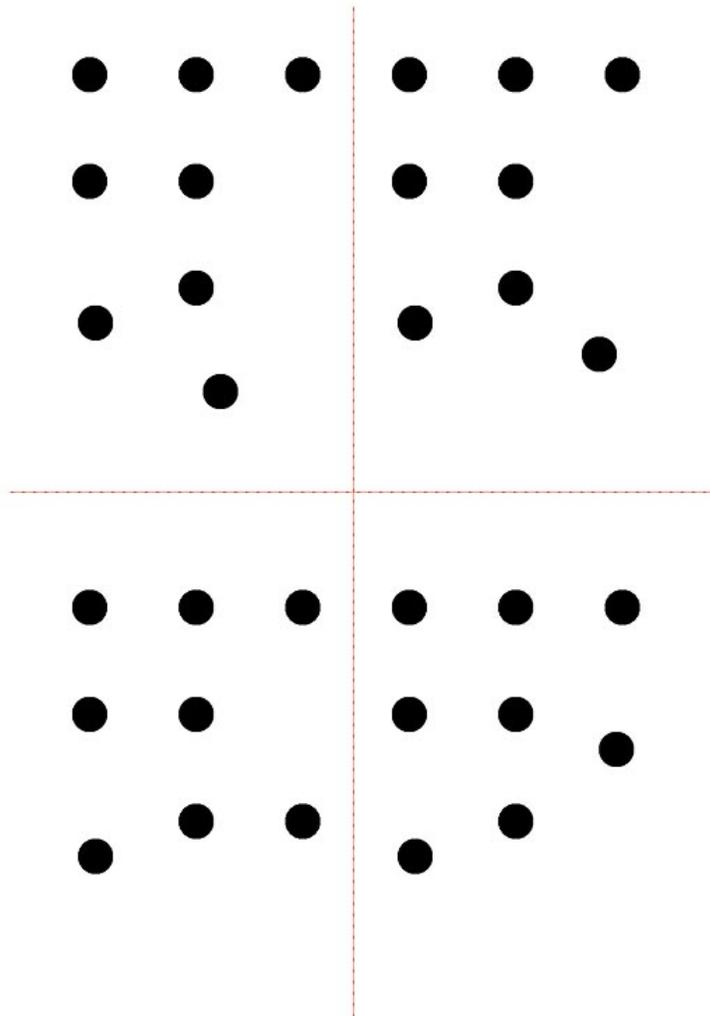


**Tips for taking photos for calibration using the B&W coded targets**

Digital camera settings (we recommend a Digital SLR camera) NEVER ZOOM!

1. ISO 200 to 400
2. Focus: Manual Focus.
3. Focus set to Infinity (often looks like this on the lens:  $\infty$ ), which is the widest possible angle, so you can see the most.
4. Image resolution: Highest quality JPG
5. For the best results, set camera mode to Aperture Priority F6.3 (refer to your camera manual for instructions)
6. Use the onboard camera flash.

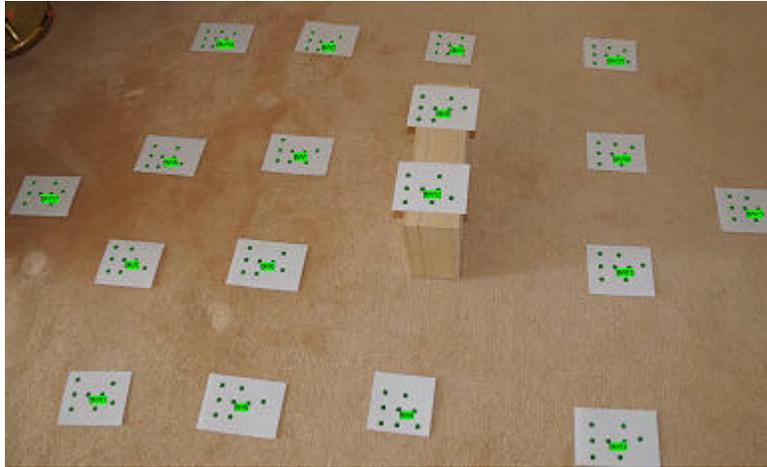
Cut up the 5 sheets of coded targets (see C:\Program Files\iWitness\docs\iWitness B&W CalCodes.pdf. There are 4 codes per sheet. Note the 8 target array pattern. **It is important you cut them as illustrated below, by the "dotted lines":**



**Example sheet of B&W coded targets**

Place the 20 B&W calibration codes on the ground, in a rectangle that is approximately 4' x 5.5', or so that they roughly match your cameras format ratio (sometimes 3:2, sometimes 4:3). See the image below for an

example. Notice how 2 of the coded targets are spread a little longer in length (left to right) in the below image. Also, elevate one or two of the codes about 4" (10cm) off the ground, i.e. by placing on a box.



Take the photographs positioned on the four corners of the aforementioned rectangle - in BOTH landscape and portrait at each position, and also on the sides of the "long side" of the rectangle. Therefore, you will end up with 12 images (6 landscape; and 6 portrait.)

When you take the photos, make sure the image viewfinder is basically filled with the coded targets, i.e. don't have a lot of 'dead space' on the edges of the viewfinder. The camera should be about 5 feet from the closest targets, and about 8 or 9 feet from the farthest.

Make sure you take the pictures indoors, with the code layout in even lighting (i.e., without shadows). Below is an illustration of the camera geometry in the iWitness 3D graphics view. See C:\Program Files\iWitness\docs\ (User Manual.pdf, or iWitness Updates.pdf for completing the automatic camera calibration process.)

