

## Test report

Pentax-Lens HS2V616ED (HK)

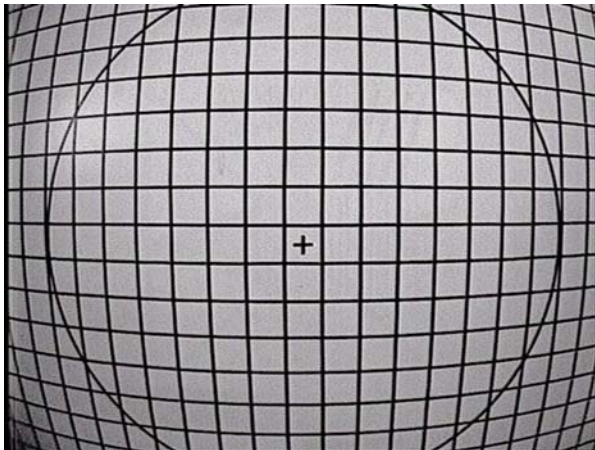
Varifocal lens 6-12mm, F=1:1.6 (with 6mm, F=1:2.0 with 12mm) ½" CS Mount, DC-Iris, IR-capable (Day & Night)

Lens mounted on the cameras FAC 848 I-IR and FAC 940 L-IR (pictures are made FAC 848), grid test chart, IR-Light with 880nm

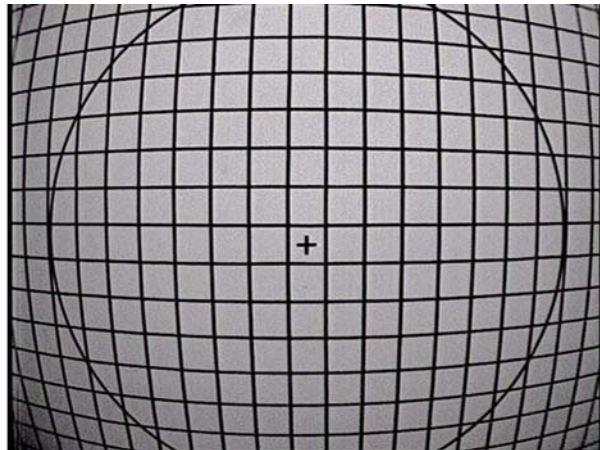
Difference of the brightness between the day light and the IR-light adapted with the shutter speed, the iris was totally open in each case, no correction of the focus.

The field of view at different focal lengths was adapted by changing the object distance.

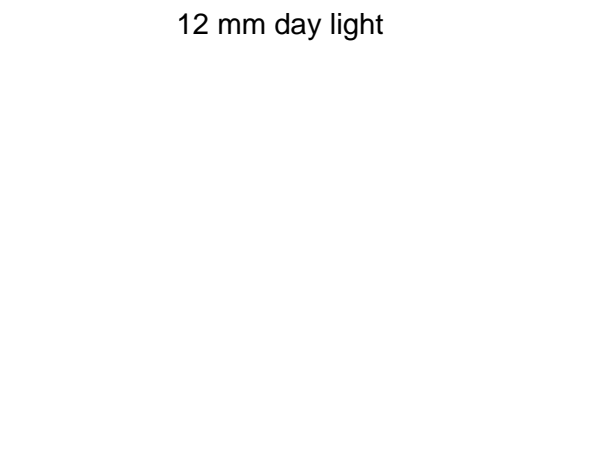
6 mm day light



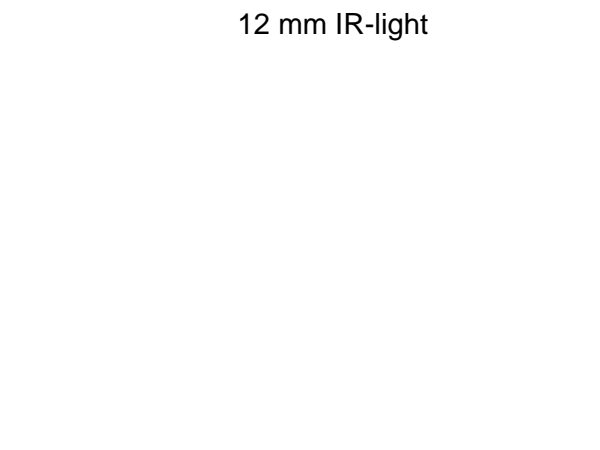
6 mm IR-light

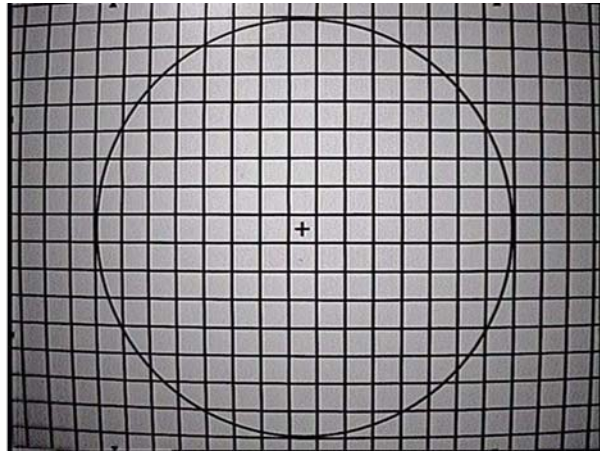
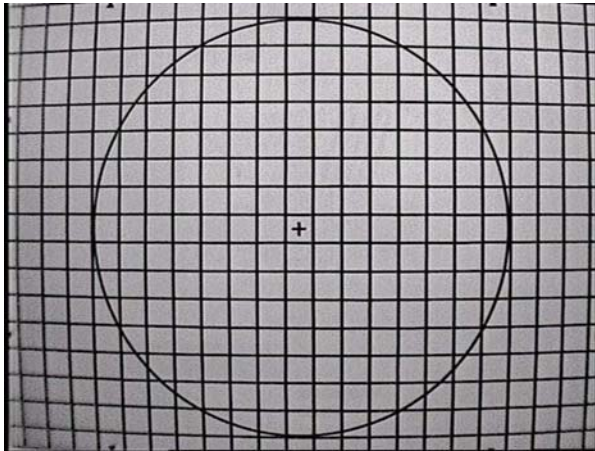


12 mm day light



12 mm IR-light





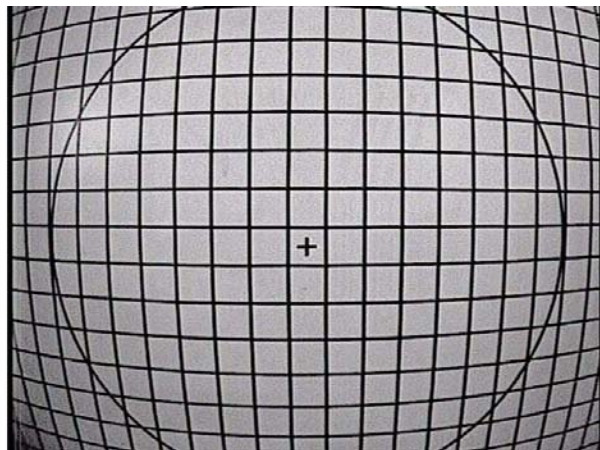
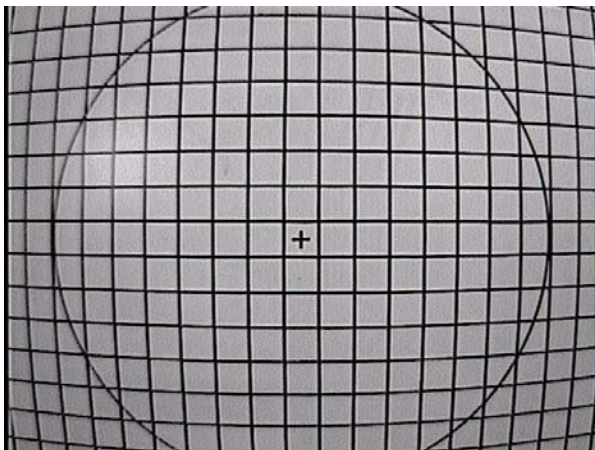
### Result:

Even if the iris is completely opened the focus shift between the day light and the IR-light is not visible. With both cameras there were no problems to control the DC-iris during the test.

The disadvantage was only a stronger barrel-shaped at 6mm focal length against a 2/3" 4,8 mm lens with fixed focal length.

4,8 mm Pentax C418DX with day light

6mm day light



Despite the stronger distortions this lens is suitable for IR cameras (naturally for the other cameras also). This Varifocal lens provides excellent sharpness at day light **and** IR-light even in the corner from all tested Varifocal lenses for small focal lengths. The advantage of this technology is that between 6 mm and 12 mm each focal length is adjustable without having to change the lens. Until now we never had such good optical characteristics.