



### 1. Detection of a reference mark on an aluminum foil

A diffuse reference mark on a shiny aluminum foil should be detected. A proper detection of the reference mark should be guaranteed, which means, that the diffuse stripe must not be detected as a reference mark. For this purpose a color sensor type **SPECTRO-3-FIO-JR** in connection with a cross fiber **X-S-A2.0-(2.5)-1200-67°** and two frontends type **KL-3-A2.0** are used. The special feature of the cross fiber is, that each end of the fiber is working as a transmitter and receiver simultaneously, thus the color of the two light spots will be measured with one color detector. The spot size of each white light spot is around 1.2mm in diameter at a distance of 11mm. As shown in the screen shots, the reference mark can be detected properly.

