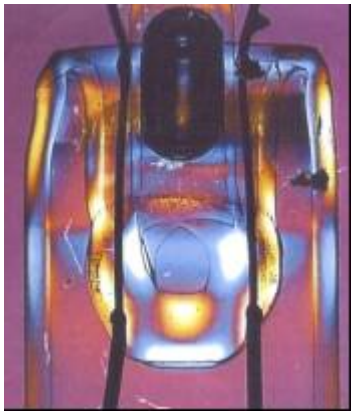
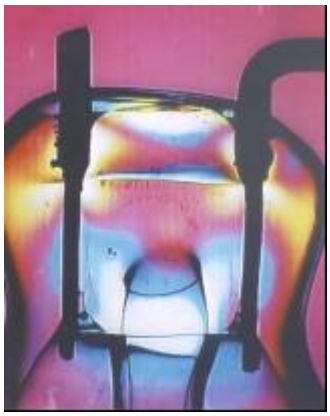
Below a CFL bridge, a CFL seal and a HID stem with intense strainpatterns are depicted:

5. Assessment of stress.

It has to be stated that the assessment of stress based on the colour picture seen with the polariscope requires experience as colour judgement remains rather subjective.
The following factors have to be considered:

1) **type of glass:**
colours that are unacceptable for e.g. softglass can be just acceptable for hardglass and fully acceptable for quartz.
One can understand this in relation to the effect of possible thermal handling of the product at a later stage whereby softglass is more sensible for cracks then hardglass or quartz.(see "Glass properties").

2) **thickness of the glass section :**
an incidental bright yellow/white colour observed in a thick piece of glass may be admissible but will certainly less acceptable in a thin piece of glass especially for soft glass. This can be understood from the formula as given in point 2. A big D (giving bright colours) combined with a big d will give a lower F then when the same D (given the same bright colour) is combined with a small d giving a big F.

3) **complementary colours:**
as explained before the same stress pattern can give "opposite" or complementary colours depending whether the stress pattern is placed under an angle of 45^{o} to the left or to the right of the polariser directions of the P and A. So e.g. blue doesn't mean tensile stress because also yellow can mean tensile stress depending on the above explained positioning.
If one was to bend a tube of glass one can determine what kind of stress is observed, but only because the type of strain is already known (the stretched part will always be tensile). This does not mean that an unknown peace of glass with the same colours has the same strain type. (glass has strain in more than one direction).
Be also aware of the fact that when you see a red/purple colour this not automatically means that there is no strain. One has to remember that when looking through the **combination** of a tensile and compressive zone the net phase shift will be small (or zero!).