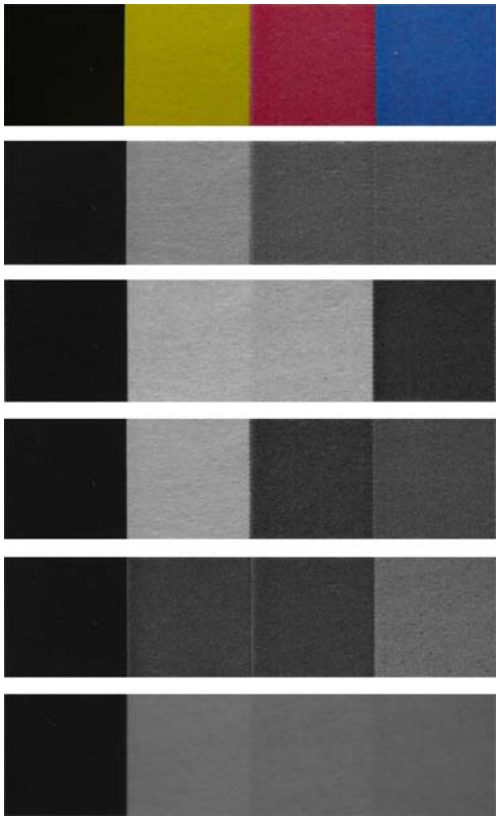
2. Wavelengths

Apart from the light geometry and the lighting angle, selecting the right lighting is also crucially dependent on the light's wavelength. This point is often neglected, however. Yet it is precisely this factor that can ultimately be decisive for your application.
The colour of the light is by no means only important when working with colour cameras.
For monochrome image acquisitions of colour objects in particular, surprising effects can be achieved.
In addition, the wavelength also directly affects image resolution capabilities. While shortwave light can render the ultrafine structures visible, longwave light has the ability to mask interference patterns.



1. Colour bar

2. White lighting

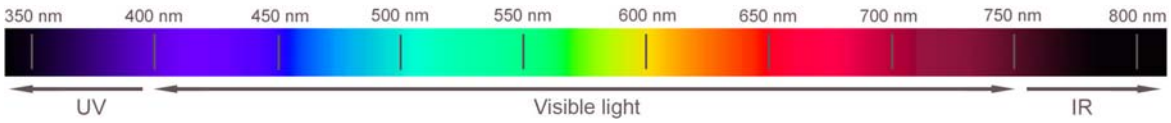
3. Red lighting

4. Green lighting

5. Blue lighting

6. IR lighting

Colour bar under light at various wavelengths



To demonstrate how a few tricks and the right light colour can be used to optimise application solutions, this chapter in the LUMIMAX® Knowledge Base focuses on the topic of wavelengths.