## Gemology



In gemology, there are two basic questions: "what are the characteristics of the stone I'm measuring?" and "are these characteristics natural? The easy way to answer these questions is with our gemology bundle. This bundle includes a sphere and a special gemology white reference tile to quickly categorize and validate gems.

Typical applications:

- Color
- · Natural or artificial
- Artificial coloring

Spectrometer	AvaSpec-ULS2048CL-EVO	Grating VA (360-1000 nm) 25 µm slit DCL-UV/VIS-200 detector collection lens OSC order-sorting coating AvaSoft-Full
Fiber optics	FC-UVIR600-2	
Included	AvaSphere-50-LS-HAL-12V light sphere AvaSphere-50-HOLD sphere holder WS-2-GEM white reference tile	PS-12V/1.25A power supply

## **Fluorescence**



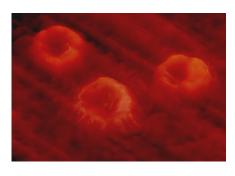
In spectroscopy, fluorescence is one of the more challenging setups, due to low fluorescent emission (about 3% of the excitation energy). The AvaSpec-ULS2048CL-EVO gives the highest sensitivity and the Avalight-LED series provides excitation at the requested wavelength.

Typical applications:

- · Dye identification
- Fluorescent lamps
- Diagnosis of malignancies
- · Fluorescent labeling

Spectrometer	AvaSpec-ULS2048CL-EVO	Grating VA (350-1000 nm) 200 µm slit, DCL-UV/VIS-200 detector collection lens, OSC order-sorting coating AvaSoft-Full
Light source	Avalight-LEDxxx	PS-12V/1.0A power supply
Fiber optics	FCR-UVIR200/600-2-IND FCR-FLTIP-IND	

## **Biomedical**



Spectroscopy helps achieve the goal of realizing non-intrusive measurement devices. This bundle non-invasively measures concentrations of unknown samples or changes in concentration

This bundle is meant for R&D usage.

Typical applications:

- · Oxygen in blood
- Hemoglobin
- · Microvascular circulation

Spectrometer	AvaSpec-ULS2048CL-EVO	Grating NB (500-1000nm) 50 µm slit OSF-475 order-sorting filter AvaSoft-Full and AvaSoft-Chem
Light source	AvaLight-HAL-S-Mini	PS-12V/2.08A
Fiber optics	FCR-7UVIR200-2-MS-PK-S	



