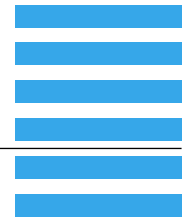


Choosing the right source



Several questions must be answered before choosing the right or best source for your application (all following discussions refer to incoherent light sources only operating by spontaneous emission).

The first one is:

What wavelength range do I need? If you know the answer to this question, you can usually narrow the choices down to two or even one.

The following highlights the major advantages of each light source family and therefore is a good help for the first step in narrowing down.

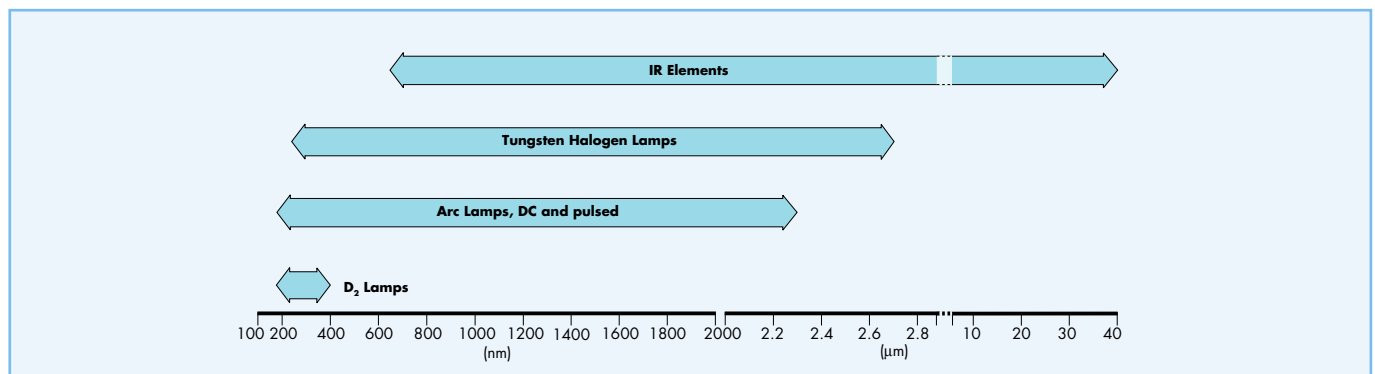
The best is to call us!

We will talk about your application and help you make your final selection of the best source and necessary accessories.

Further help for choosing the right source you'll find in these chapters

- Arc or Halogen Lamp
- Lamp Spectra and Irradiance data
- Estimating Output Power

on www.lot-oriel.com/lightsources („Basics“).



Deuterium Lamps: 160 to 400 nm

- Source with lowest wavelength output
- Negligible VIS-IR output
- Preferred source for UV spectroscopy because it ensures best S/N for UV measurements
- Smooth continuous UV spectrum
- Calibrated versions available

DC Arc Lamps: 200 to 2500 nm

- Produce highest irradiance of small targets
- Can produce intense collimated beams because of small, high radiance arc
- Intense UV output
- Can simulate solar spectrum

Pulsed Xenon Arc Lamps: 180 to 2500 nm

- More UV
- High peak power
- μs pulses for transient studies

Halogen Lamps: 250 to 2700 nm

- Excellent stability
- Continuous spectrum
- Ideal for radiometric and photometric applications
- High total visible output
- Easy and inexpensive to operate
- Calibrated versions available

IR Elements: 700 nm to 40 μm

- Small radiating area, therefore good for IR-spectroscopy
- Different models available with different emissivity
- Long life