

AvaLight-CAL Spectral Calibration Source

AvaLight-CAL-Mini



The AvaLight-CAL-xxx is a spectral calibration lamp. It's available in Mercury-Argon (253.6-922.5 nm), Neon (337-1084.5 nm), Argon (696.5-1704 nm) Zinc (202.5-636.2 nm) and Cadmium (214.4-643.8 nm) versions. The major lines including their relative intensity and structures are shown below.

The standard SMA-905 connector supplies an easy connection between the lamp and optical fibers, making the AvaLight-CAL-xxx a low cost wavelength calibration system for any fiber-optic spectrometer. AvaSoft-Full spectroscopy software includes an automatic recalibration procedure.

The AvaLight-CAL-Mini, AvaLight-CAL-AR-Mini, AvaLight-CAL-Neon-Mini all come in the Mini-housing. They are equipped with a connector at the rear enabling to switch the unit on/off remotely with a TTL signal.

The AvaLight-CAL can also be delivered in rack-mountable version, to be integrated in Avantes 19" Rack-mount or the 9.5" desk-top housing. The PS-12V/1.0A power supply should be ordered separately.

- Calibration light source
- Available in a variety of wavelength ranges (UV to NIR)

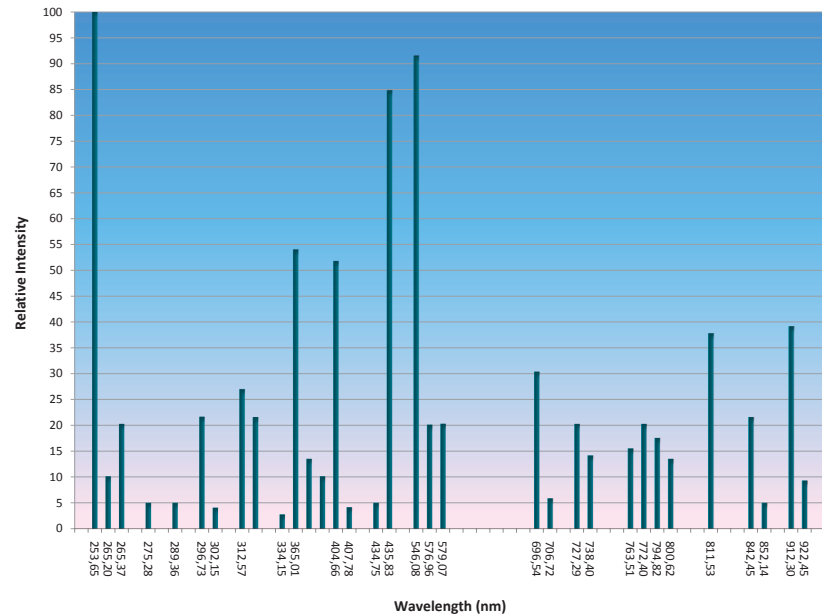


Figure 14 Spectral lines AvaLight-CAL-Mini

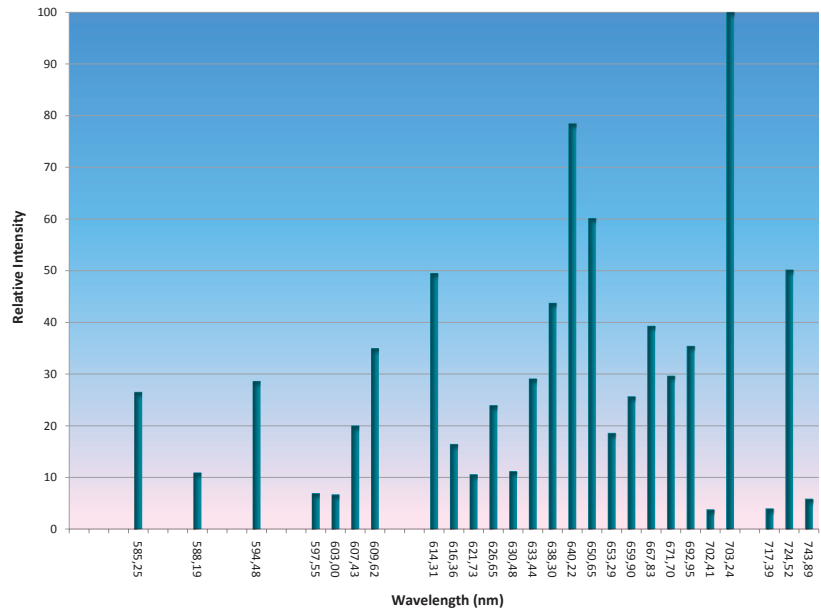


Figure 15 Spectral lines AvaLight-CAL-Neon-Mini

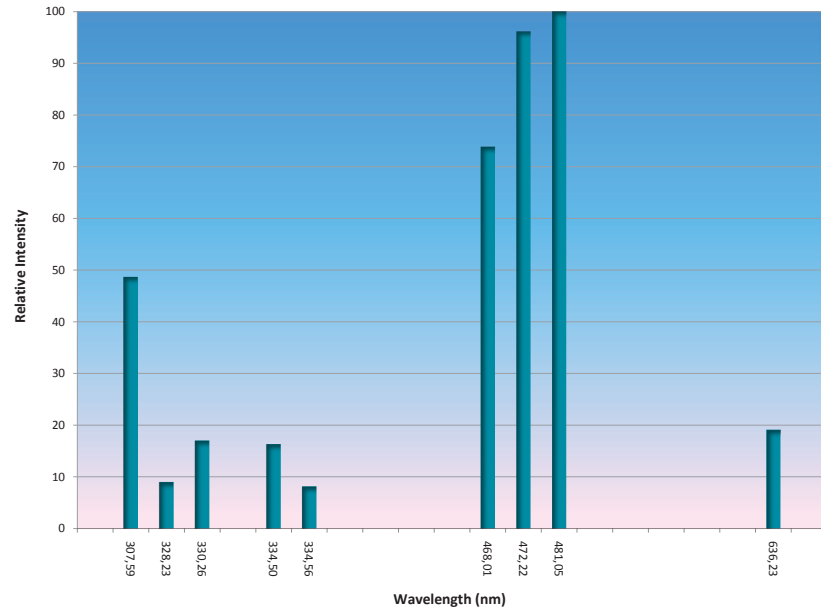


Figure 16 Spectral lines AvaLight-CAL-Zinc

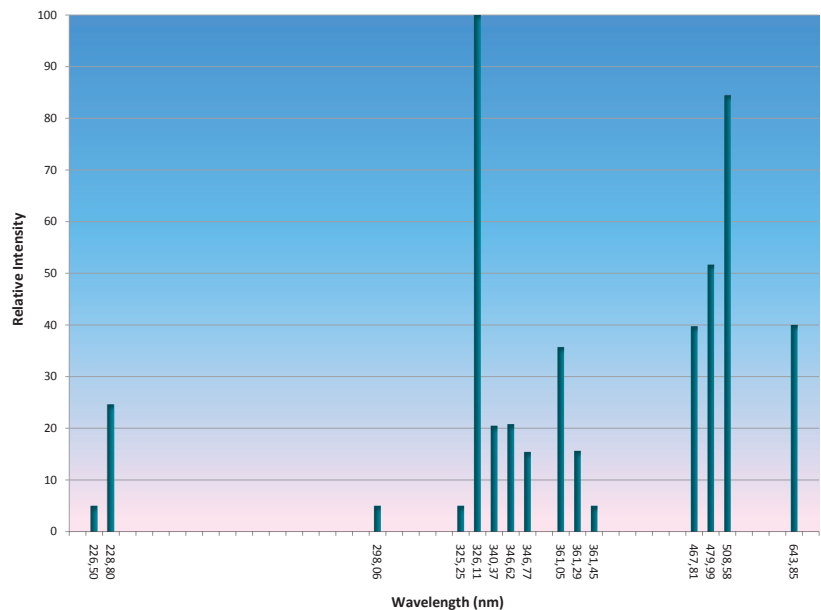


Figure 17 Spectral lines AvaLight-CAL-CAD

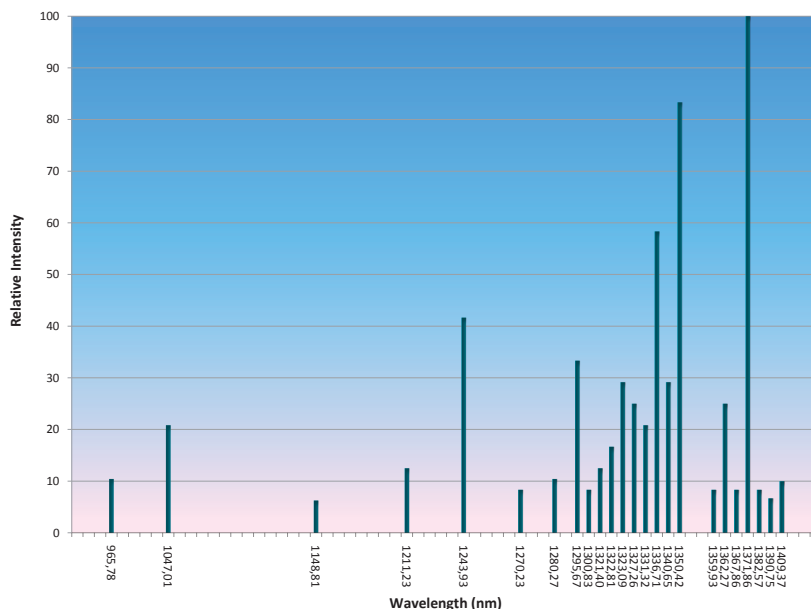


Figure 18 Spectral lines AvaLight-CAL-AR-Mini

Technical Data

| Lamp | HgAr | Neon | Ar | Zinc | Cadmium |
|-------------------------------|----------------------------------|------------|-------------|--|----------------|
| Output | 253.6–922.5 nm | 337-966 nm | 950-1704 nm | 202.5-636.2 nm | 214.4-643.8 nm |
| Optical power in 600 μm fiber | 1.6 μW | | | | |
| Connector | SMA-905 connector | | | | |
| Internal Voltage | 1200 Volts AC at 30 kHz, 10 mA | | | 1500 Volts AC at 27 kHz, 47.5 mA | |
| Warm up | 1 minute for vapor stabilization | | | < 10 min. | |
| Lamp lifetime | 5000 hrs. | | | 1000 hrs. | |
| Power requirement | 12VDC supply, 240 mA | | | 85-240 VAC, 1.0A | |
| Dimensions, weight | 150 x 78 x 37 mm, 480 grams | | | Lamp unit : 175 x 110 x 44 mm, 480 grams Power supply unit : 102 x 167 x 58 mm, 450 grams | |

Ordering Information

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|---------------------------------|--|
| AvaLight-CAL-Mini | • Mercury Argon Calibration source needs extra PS-12V/1.0A power supply, SMA |
| AvaLight-CAL-NEON-Mini | • Neon Calibration source needs extra PS-12V/1.0A power supply, SMA |
| AvaLight-CAL-AR-Mini | • Argon Calibration source needs extra PS-12V/1.0A power supply, SMA |
| AvaLight-CAL-RM | • Rack-mounted version of AvaLight-CAL |
| AvaLight-CAL-B-Mini | • Replacement bulb, Mercury-Argon |
| AvaLight-CAL-NEON-B-Mini | • Replacement bulb, Neon |
| AvaLight-CAL-AR-B-Mini | • Replacement bulb, Argon |
| AvaLight-CAL-ZINC | • Zinc Calibration Light source, including power supply |
| AvaLight-CAL-CAD | • Cadmium Calibration Light source, including power supply |
| AvaLight-CAL-ZINC-B | • Zinc replacement bulb |
| AvaLight-CAL-CAD-B | • Cadmium replacement bulb |
| PS-12V/1.0A | • Power supply 100-240 VAC/12 VDC, 1.0 A for AvaLight-CAL-Mini series |