

AvaLight-CAL Spectral Calibration Source

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.

AvaLight-CAL-Mini



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

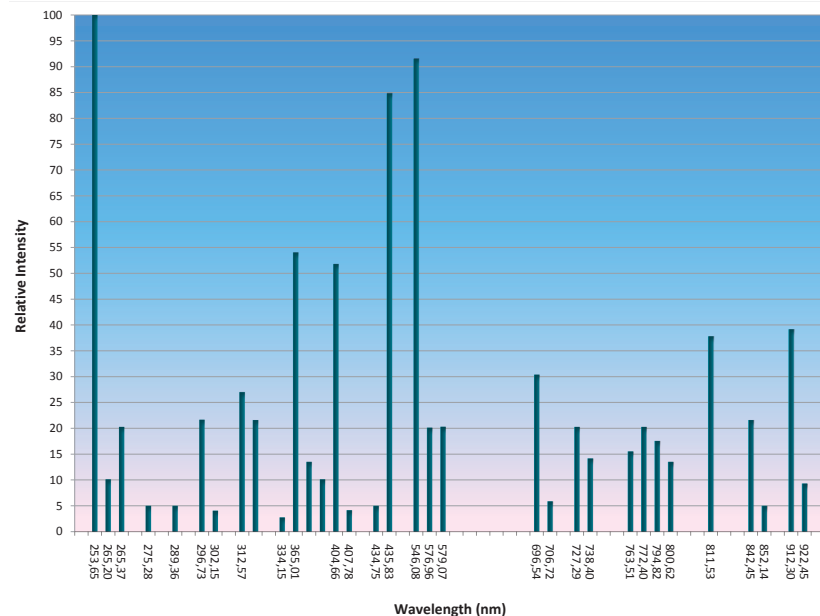


Figure 14 Spectral lines AvaLight-CAL-Mini

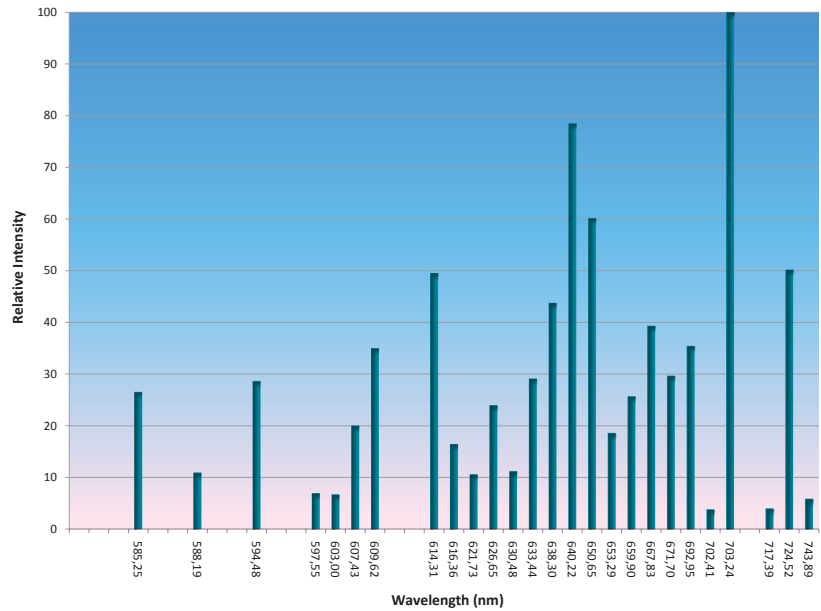


Figure 15 Spectral lines AvaLight-CAL-Neon-Mini

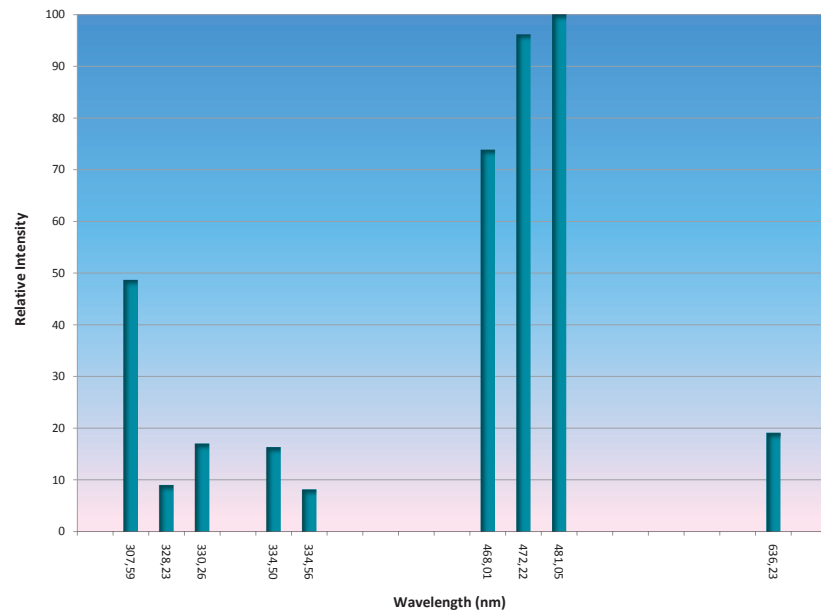


Figure 16 Spectral lines AvaLight-CAL-Zinc

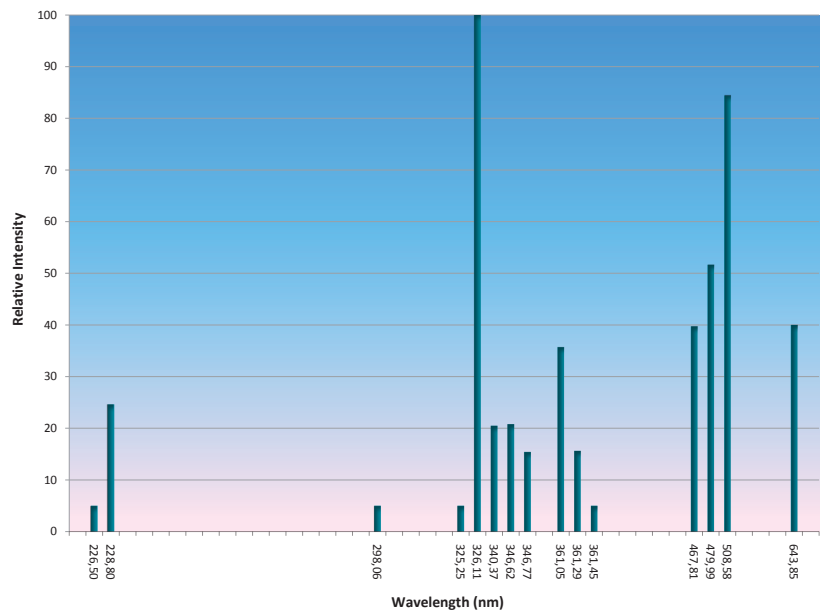


Figure 17 Spectral lines AvaLight-CAL-CAD

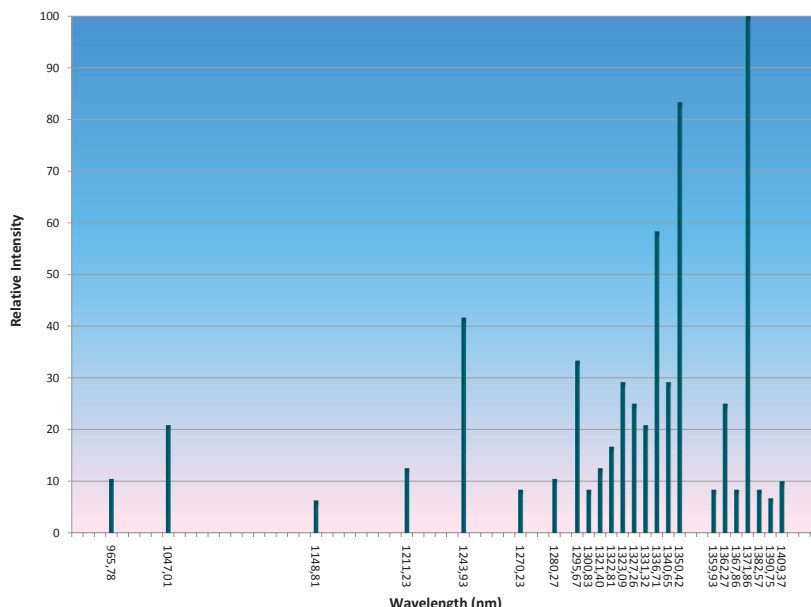


Figure 18 Spectral lines AvaLight-CAL-AR-Mini

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

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