MULTISPECTRAL UV BAR
ARDL44

Key features

- Multispectral from 250nm to 400nm
- Wide-beam light brush handle option on request
- Ultra-compact, lightweight design for access to limited areas
- Quartz filter and filters adapted to your UV applications
- Integrated air cooling option: disipator
- External, continuous LED power supply
- Variable and tunable
- ON/OFF on power supply unit
- USB or Ethernet interface with HMI developed in Python
- No Ozone Emission

Main applications

- QC for inactivating biomolecules and micro-organisms
- UV drying and curing: inks, sealants and coatings
- High contamination risks

Main analyses

- Fluorescent, industrial inspection
- UV curing (manual or automated)

Tunable multispectral LED UV source

Innovative, unique source spectrally **tunable** over the **UVA-UVB-UVC** range for illuminating all surfaces for UV inspection. Its adjustable spectral irradiance levels (W/m²/nm) make it ideal for coupling with UV matrix, multispectral or hyperspectral cameras on the market!

If irradiance levels are not sufficient, you can cascade these bars to increase the irradiance level (W/m²)

You can create and load other spectra profiles to share your preferred parameters and settings with the whole supply chain.

ARDOP LIGHTING
1 B CHEMIN DE LA COUME
09300 LAVELANET FRANCE

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SPECIFICATIONS
ARDL44

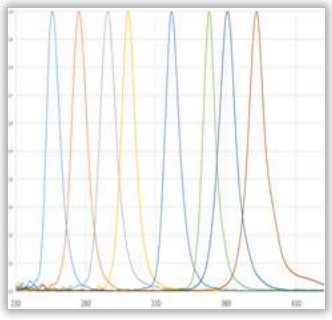
Optical performance	Colors	
	Number of LED	24 to 48 MAX
	Wavelengths 8λ * (nm)	256-275-295-310-341-368-381-402
	FWHM	20-30nm
	Irradiance	>35W/m2
	Diffusers	Transparent / Quartz
	Beam Uniformity	>0,8 (5x25cm)
	Materials	Aluminium, ABS et Quartz
Electronics	Connectors Cables	CBL-17 pins Length 2m
	Power supply (4)(5) & control	48V DC max
		230V AC External power supply CW control, USB interface
	Power consumption	Cf LED
	Dimming	1 to 100% % via HMI
Other	Operating temperature	de -10°C à +50°C
	Warranty	12 months
	Dimensions (mm)*	300x45x45

(*) Excluding dimensions, contact Ardop lighting

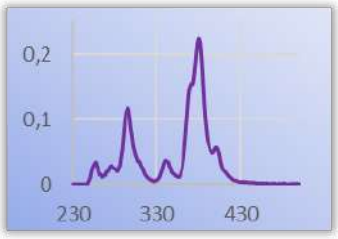
Important notes
(1) Peak wavelength +/-5nm
(2) Minimum measured values
(4) Continuous mode without switching power supply at LED level, very low dimming possible (<1% in some cases)
(5) Natural dissipation for powers below 50% of flux, forced and active dissipation for high powers.

UV protection goggles recommended
ARD-000-K0278-ONTO-54

Relative UV spectrum

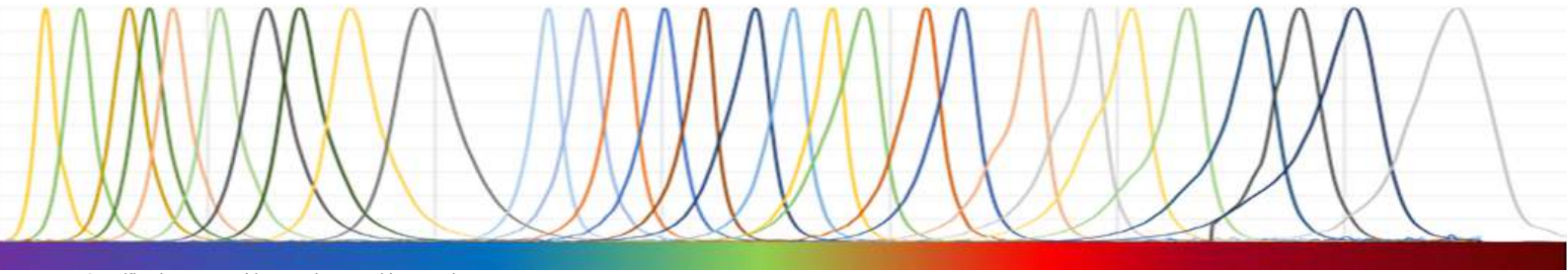


Full power UV spectrum @15cm W/m²/nm (center)



Adjusted UV spectrum

Spectrums measured on ARDOP Lighting products



Specifications are subject to change without notice

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SAFETY DATASHEET
ARDL44

1. IDENTIFYING HAZARDS

- **UV radiation:** UV LEDs emit ultraviolet radiation which can cause eye damage (cataracts, macular degeneration) and skin damage (burns, premature aging, skin cancer).
- **Glare:** Light intensity can cause temporary or permanent glare
- **Electrical risks:** As with all electrical equipment, there is a risk of electric shock in the event of incorrect handling or faulty materials.

2. PRECAUTIONS TO BE TAKEN

- **Personal precautions**
  - **Eyes:** Wear special CE-marked UV protection goggles, suitable for the type of UV radiation emitted by LED 99.99% protection against UV and blue light below 525 nm. Compliant with EN 166 and EN 170 standards, these goggles feature a UV filtering screen.
  - **Skin:** Wear covering protective clothing (long sleeves, long pants, gloves) and a high SPF sunscreen.

- **Working environment**
  - **Ventilation:** NOT necessary for this type of UV LED lighting (NO OZONE)
  - **Auxiliary lighting:** Use auxiliary lighting if necessary to reduce glare and eye strain.

- **Handling**
  - **Installation:** Follow the manufacturer's instructions for installation and commissioning of LED UV lights.
  - **Maintenance:** Carry out regular maintenance and cleaning of equipment, following the manufacturer's recommendations.

- **Signage**
  - **Signs:** Install signs indicating the presence of UV radiation and the precautions to be taken.
  - **Safety doors:** Equip access to areas where UV LED are used with safety doors that automatically cut off lighting when opened

3. FIRST AID

- **In case of overexposure without glasses or glare:** Contact and consult a doctor
- **In case of skin contact:** No danger
- **In case of burns:** Cool the burned area with cold water and consult a doctor

4. TRAINING

- **Personnel training:** Train all employees using or working in the proximity of LED UV lights in the risks associated with their use and the preventive measures to be implemented.

Additional advice

- **Risk assessment:** Carry out a risk assessment specific to your situation to identify potential hazards and implement appropriate prevention measures.
- **Medical monitoring:** Implement regular medical monitoring of personnel exposed to UV radiation.
- **Documentation:** Keep up-to-date records of UV radiation exposure and incidents.
  We strongly recommend that you consult an occupational health and safety expert to draw up a comprehensive safety data sheet tailored to your specific situation

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Ardop Lighting products comply with the international standard IEC 62471:2008, which classifies sources of optical radiation into risk groups based on their potential photobiological hazard. Due to the emission of high UV irradiation, our products fall under Risk Group 3 (hazardous even for momentary exposure). Therefore, special safety measures, detailed below, must be observed.

Aware of the risks associated with UV rays, Ardop Lighting offers its customers a wide range of high-quality UV protection and services.

Eyes/Skin protection	 UV Safety goggles ARD-000-K0278-ONTO-54	 UV Safety all the face ARD-000-K0278-ONTO-55	 UV Safety lighting box ARD-000-K0278-ONTO-56
Body protection	 UV Safety protective gloves ARD-000-K0278-ONTO-57	 UV Safety protective clothing ARD-000-K0278-ONTO-58	 UV Safety windows (all workers around) ARD-000-K0278-ONTO-59
UV measurement	 UV spectroradiometer, direct value in real-time ARD-000-K0278-ONTO-60		
ARDOP Lighting skills	Compliance to European Directive 2006/25/EC	Recommended monitoring and calibration of all your devices performance	Service & Maintenance On site & LED repair

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