

SPECTROLINE®

QUADRAN™ 365

Series

Versatile, Dual-Intensity, Multi-LED, Broad-Beam NDT Inspection Lamps!

QUADRAN™ 365 Series NDT lamps feature four ultra-hi-flux UV-A LEDs plus a convenient white light LED to quickly switch between fluorescent inspection and flaw location. A unique dual-intensity feature provides both high and standard UV-A and white light output for added versatility.

The lamps' broad-beam configuration produces an extremely wide coverage area, making them ideal for both handheld and in-line applications. Models are available either with or without integral black light filters to meet your specific inspection requirements.



FEATURES:

- ▶ Dual-intensity capability: High setting produces a nominal steady-state UV-A intensity as high as $8,000 \mu\text{W}/\text{cm}^2$; standard setting produces a nominal steady-state intensity of $4,500 \mu\text{W}/\text{cm}^2$, both at 15 inches (38 cm)
- ▶ Extremely large coverage area of up to 6 inches (15 cm), with a minimum UV-A intensity of $2,000 \mu\text{W}/\text{cm}^2$
- ▶ Low visible light emission — less than 2 foot-candles (22 lux)
- ▶ Conveniently located rocker switches for quick and easy control of light sources
- ▶ Built-in fan keeps LEDs cool to maintain optimum light output during extended use
- ▶ Rubber bumper with Borofloat® glass lens protects LEDs from damage
- ▶ Rugged, modular construction allows for easy field serviceability
- ▶ Lamp handle pin receptacle allows for easy attachment of various Spectroline® mounting accessories for in-line inspection applications (accessories sold separately)
- ▶ Choice of standard 8 foot (2.4 m) or extra-long 20 foot (6.1 m) heavy-duty power cord with AC plug and rubber boot. Also available: Optional industrial power supply or in-line power supply with cord sets (sold separately). All power supplies available in 120V, 230V, 240V and 100V models.
- ▶ UV-absorbing spectacles and soft carrying case included



Also Available:

QUADRAN™ 365M Series portable, battery-operated AC/DC lamp kits. Include QUADRAN™ 365 UV lamp, rechargeable NiMH battery pack, AC and DC cord sets, smart AC charger, UV-absorbing spectacles and soft carrying case.

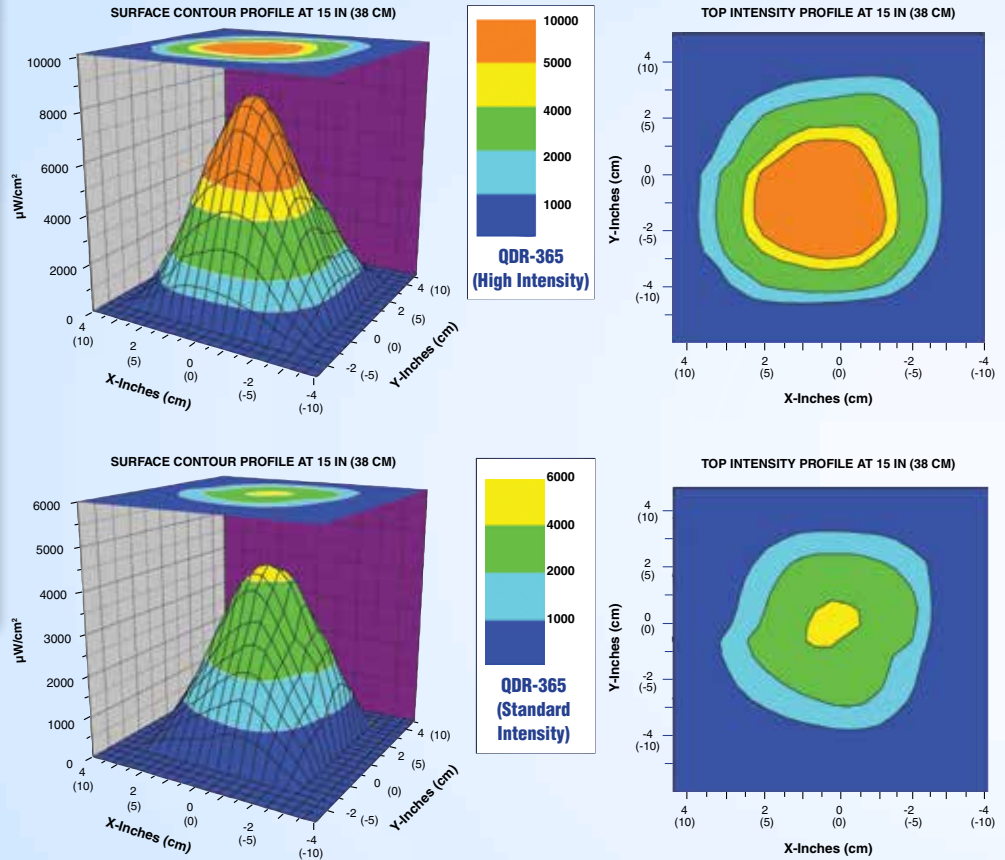
QDR-365 Model

UV-A Beam Profile

When the QDR-365 is in **high intensity** mode, the lamp provides a nominal steady-state UV-A intensity of **8,000 $\mu\text{W}/\text{cm}^2$** at 15 inches (38 cm).

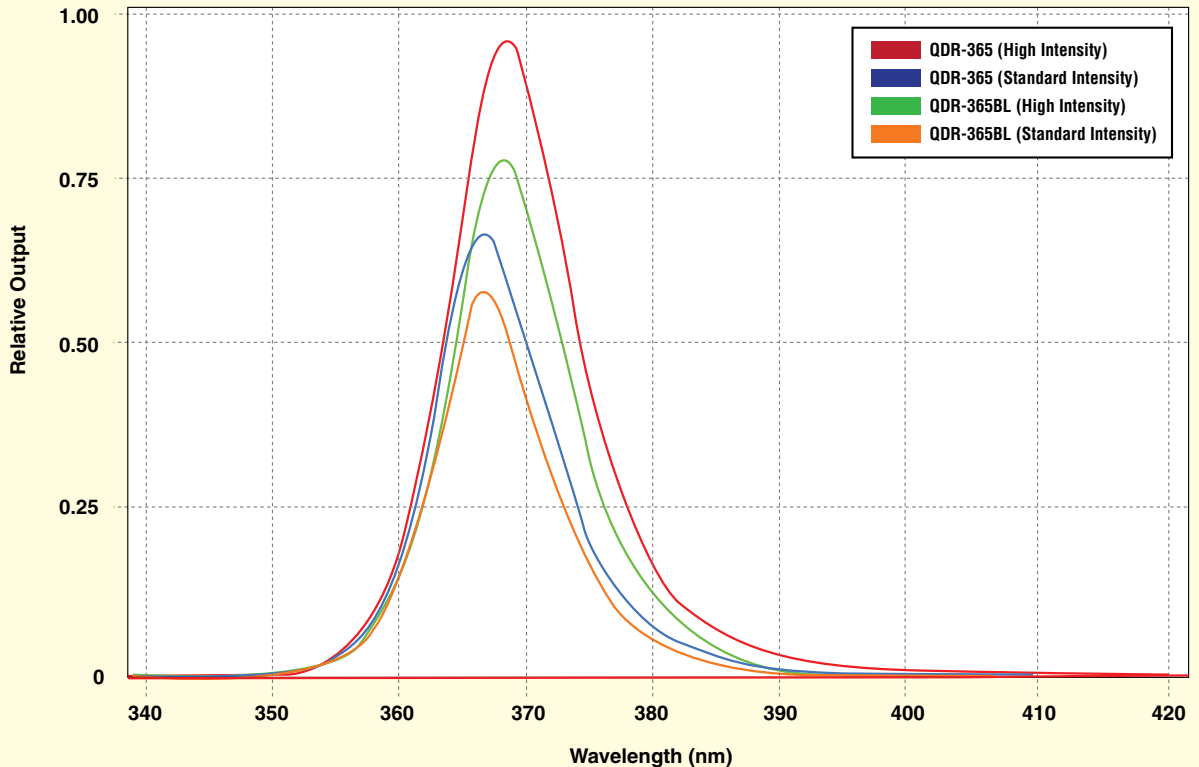
When switched to the **standard intensity** mode, the QDR-365 provides a nominal steady-state UV-A intensity of **4,500 $\mu\text{W}/\text{cm}^2$** at 15 inches (38 cm).

In addition, the lamp has a high/low switch to control the white light LED output.



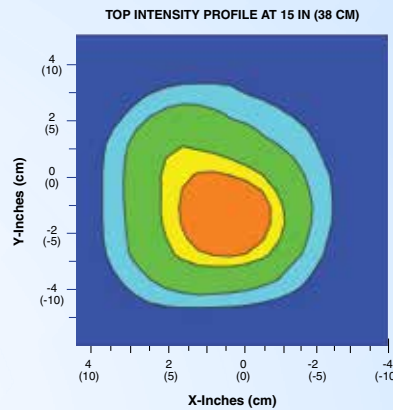
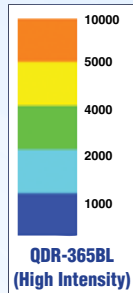
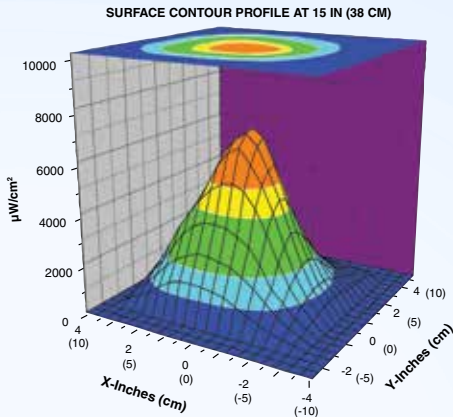
Typical wavelength output profile of QUADRAN™ 365 Series lamps with and without black light filter.

Normalized UV Irradiance



QDR-365BL Model

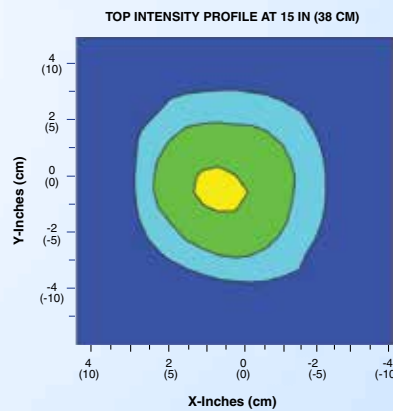
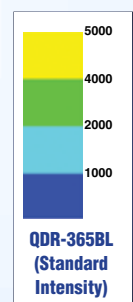
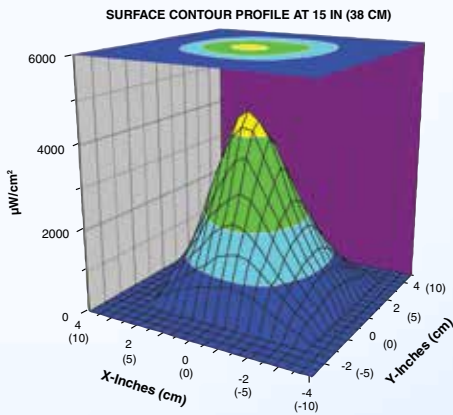
UV-A Beam Profile



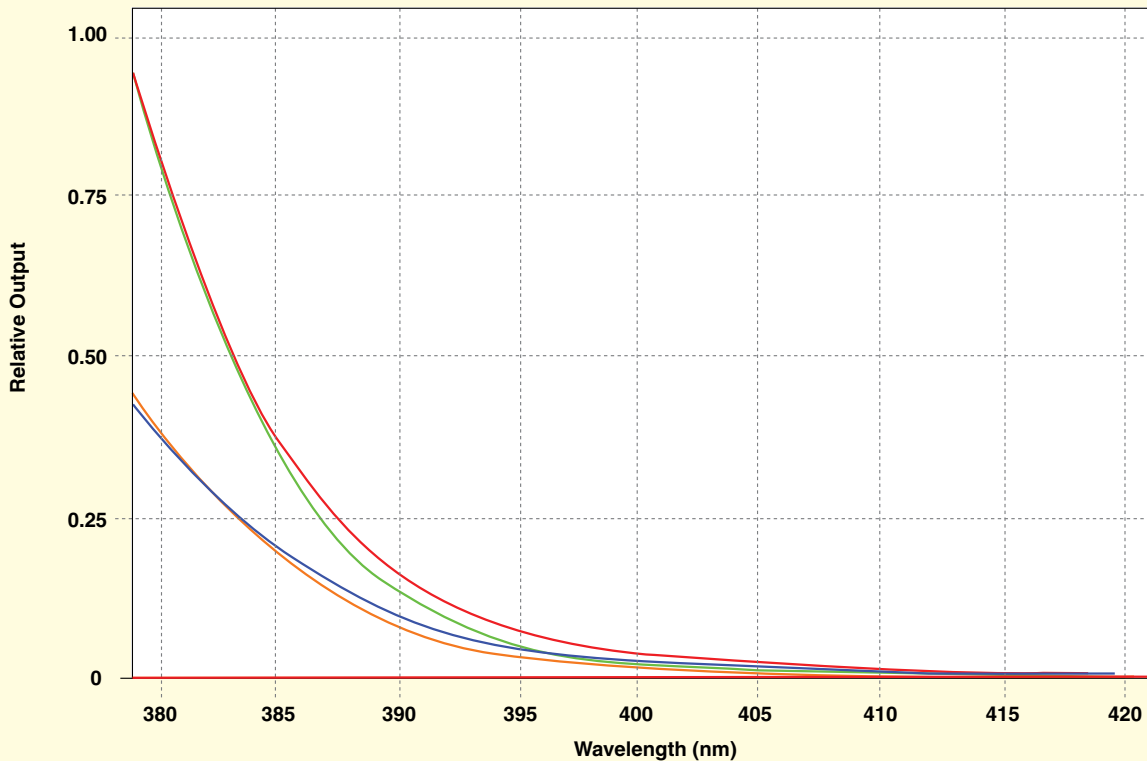
The QDR-365BL is equipped with integral black light filters that reduce the output of wavelengths longer than 400 nm. When in the *high intensity* mode, the lamp provides a nominal steady-state UV-A intensity of **7,000 $\mu\text{W}/\text{cm}^2$** at 15 inches (38 cm).

When switched to the *standard intensity* mode, the QDR-365BL provides a nominal steady-state standard UV-A intensity of **4,500 $\mu\text{W}/\text{cm}^2$** at 15 inches (38 cm).

In addition, the lamp has a high/low switch to control the white light LED output.



Wavelengths With and Without Black Light Filter



As the wavelength of the QUADRAN™ 365 moves into the visible light range, the black light filters significantly reduce the output of the lamp at 400 nm.



The QUADRAN™ 365 can be quickly mounted for in-line inspections using various Spectrolite® accessories (FA-100 flexible arm shown).



QUADRAN™ 365 faceplate shown with (top) and without (below) integral black light filters.



Specifications

| UV Switch Setting | Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ① | Visible light measurement | UV-A coverage area (at minimum 2,000 µW/cm²) |
|-------------------|---|---------------------------|--|
| QDR-365 | | | |
| Standard | 4,500 µW/cm² maximum | < 2 foot-candles (22 lux) | 5 in (13 cm) |
| High | 8,000 µW/cm² | < 2 foot-candles (22 lux) | 6 in (15 cm) |
| QDR-365BL | | | |
| Standard | 4,500 µW/cm² maximum | < 2 foot-candles (22 lux) | 4 in (10 cm) |
| High | 7,000 µW/cm² | < 2 foot-candles (22 lux) | 6 in (15 cm) |

Light Source: 4 UV-A LEDs, 1 White Light LED
Lamp Style: Pistol grip
Lamp Head (WxH): 6 x 5.5 in (15 x 14 cm)
Length: 10 in (25 cm)
Weight: 3 lb (1.36 kg)
White Light LED Intensity:
 High setting: 300 foot-candles (3,229 lux)
 Low setting: 10 foot-candles (108 lux)

Power Requirement:

AC lamp
 (QDR-365, QDR-365BL) 120VAC* power cord supplied with lamp

AC/DC lamp
 (QDR-365M, QDR-365MBL) 120VAC*/12VDC

Battery Pack: 12V, NiMH (rechargeable)
Type

Run time
 High intensity: 2.5 hours (continuous)
 Standard intensity: 4.5 hours (continuous)

Charge time 2 hours

*Also available in 230V, 240V and 100V versions.

① All UV-A intensity readings were taken with Spectrolite® AccuMAX™ Series meter, and are factory set to the values shown



Replacement Parts & Accessories

| | |
|-----------------|---|
| 127427 | Standard, 8 foot (2.4 m) AC power cord |
| 127431 | Extra-long, 20 foot (6.1 m) AC power cord |
| 127435 | 3.5 foot (1.1 m) DC power cord for "M" series lamps |
| 127922 | Particulate filter assembly |
| 127944 | Standard faceplate |
| 128094 | Faceplate with integral black light filters |
| B-6 | Bench mount |
| BP-30 | Battery pack with 12V rechargeable NiMH battery |
| BR-150A | Smart AC charger |
| CC-400 | Soft carrying case |
| FA-100 | Flexible arm |
| FP-550 | Rubber bumper with Borofloat® glass |
| PSA-250A | AC/DC power supply adapter for "M" series lamps |
| PS-200 | Industrial power supply with cord set |
| PS-300 | In-line power supply |
| W-6 | Bench mount with pin |
| WM-100 | Wall mounting bracket |
| UL-100 | UV-A lens |
| UVS-30 | UV-absorbing spectacles |

