





















# SECU-CHEK

## UV-LED-Handlamp H-224

RRES 90061 Qualified | Extreme Large Irradiated Area

### Revolutionary UV Features:

-  Electronic UV-LED Monitoring to use LED-Sources as Discharging Bulb-based UV-Sources without Additional Checks and Records
-   Adaption Time Signalization (1, 3 or 5 minutes pre-adjustable)
-  Battery Monitoring with Pre-Warning and Security Switch-Off Before Output Drops
-  Temperature Monitoring With Pre-Warning and Overheat Protection
-   Temperature Regulated and Electronic Monitored Cooling System
-  ECO-Mode for Maximum Life-Time and Power-Saving
-   Auto Switch-Off When Not Used, Instant ON when Resuming Work, (Can be Deactivated and Pre-Adjusted)
-  **RRES 90061** Qualified and Approved According to Rolls-Royce Engineering Specification RRES 90061
-  **2017**  **ASME CODE**  **ASTM E2297** Guaranteed Requalification Possibility for Upcoming ASTM and ISO Standards (at Least Until 2017)
-  **ASTM E3022**  **ISO 3452**  **ASTM E1417**
-  **ISO 3059**  **ISO 9934**  **ASTM E1444** Conform to All Actual Major Standards(August 2015)

### Revolutionary Whitelight Option:

-  **UV** Stepless Soft White Light Dimming and Crossfade Features for Maximum Interpretation Capability Instead of Showing Different Picture AND Flash Blinding the Eyes
-  **UV**  **UV** UV/VIS Toggling and White Light Shiftable in Addition to UV
-    **IN USE** Finely In-Use Adjustable White Light Output With Fallback And Configuration Options



### Configuration Option:

-  Focussed Spot With Hard Radiation Drop at the Edges
-  High Quality White Light Options
-  Flood Lamp With Soft Radiation Drop Extremely Uniform Beam Pattern and Short Minimum Working Distance
-  All Worldwide Mains Plugs and Voltage Versions Available

### Detailed Specification:

-  **UV 365** Real Peak 365 ± 5 nm, also at maximum qualified ambient temperature
-  **T<sub>70</sub> 15K**  **T<sub>50</sub> 18K** Exceptional Life-Time
-  **uv** Integrated UV-Pass Filter
-   **RGB** Acoustic and Visual Indicators
-  Robust Design for Reliable Operation Even Under Rough Industrial Conditions
-  Optional Mains Operation or Rechargeable Battery
-  **50°C**  **122°F**  **5°C**  **40°F** Qualified and Approved for Ambient Temperatures from 5° to 50°C (40° - 122° F)
-  **NDT**  **D** Engineered and Made in Germany by NDT-experts
-  Qualification Report and Certificate of Compliance Stating All Relevant Lamp Individual Results

## Lamp Type

## UVE-H224

## UVE-H224W

### Beam Pattern

FL: Flood with soft radiation drop at the edges - FO: Focussed spot

FL

FO

FL

FO

## Specification UV-A Radiation

### Number of UV-LEDs

8 Highpower UV-LEDs

### Peak-Wavelength

365 ± 5 nm (within the approved ambient temperature range)

### Approved ambient temperature

5 - 50° C (40 - 122° F)

### Full Width Half Maximum (FWHM) UV-Spectrum

maximal ± 10 nm of the peak-wavelength

### Integrated, automatic adaption time signalization

pre-selectable: 1, 3 or 5 minutes after switch-on of UV

### Advanced Electronic UV-LED Monitoring for maximum process reliability and usage of LED lamps without additional checks and records

✓

### Automated shutdown when lamp is not in use (ECO-Mode)

after 3 minutes, immediate reconnection by movement, deactivatable

### Connection possibility for external foot paddels

✓

### Battery monitoring and security switch-off

integrated, with early-warning

### Electronic fan monitoring

✓

### Temperature-sensitive fan control

✓

### Standard conformance, approvals and qualifications (Λ= ready for upcoming standards)\*

ASTM E1444, ASTM E1417, ASTM E2297, ASTM E0709, ASTM E165, ASME, EN ISO 3059, EN ISO 3452, EN ISO 9934, NADCAP^, Pratt & Whitney^

### Rolls-Royce RRES 90061 conform

✓

-

✓

-

### UV-A intensity (μW/cm²) in 15 in. (38 cm) distance

> 2,600

> 9,000

> 2,600

> 9,000

### Irradiated area in 15 in. (38 cm) distance (> 1,000 μW/cm²)

Ø 36 - 38 cm

Ø 19 - 22 cm

Ø 36 - 38 cm

Ø 19 - 22 cm

### Irradiated area in 15 in. (38 cm) distance (> 100 μW/cm²)

Ø 50 - 58 cm

Ø 13 - 28 cm

Ø 50 - 58 cm

Ø 13 - 28 cm

### Minimum working distance

7 cm

25 cm

7 cm

25 cm

### Typical Lifetime T70 / T50

> 15.000 h / > 18.000 h

### Stability of UV-intensity

> 85 %

### Amount of visible light

< 0,5 fc (< 5 Lux), not visible

### Risk Class acc. DGZfP EM6

2 (up to 9.000 μW/cm²); 3 (more than 9.000 μW/cm²)

## Specification high quality, integrated whitelight functions for daylight inspection (W versions)

### Illuminance in 15 in. (38 cm) distance

-

> 115 fc (> 1.250 lx)

### Pre-adjustable white light output

-

0.5 - 100 %, fine adjustable

### In-use illuminance adjustment

-

0.5 - 100 %, fine adjustable

### UV / VIS toggling

-

✓

### Shiftable white light (UV + VIS)

-

✓

### Automated stepless white light dimming in addition to UV

-

2 dimming speeds or white light switching selectable

### Automated stepless crossfading (UV / VIS)

-

### Color temperature TCP (Light color)

5.300 K - 6.000 K (similar to daylight)

### Color Rendering Index (CRI)

-

Ra > 80

## Technical Specification

### Power Supply

100 - 230V AC/DC-power supply and optional battery

### Status Indicators

1 separate multicolor LED for UV and VIS\*, acoustic signal

### Power Consumption (only UV / with VIS)

35 W / 60 W

### Operating Voltage lamp unit

< 50 V DC (SELV)

### Electric Protection Class

III (Safety extra-low voltage, SELV)

### Weight\*: (Lamp unit / complete with power supply)

1.65 lbs / 2.85 lbs

## Accessories



**Foot-Paddle for Handsfree Operation of the Whitelight Options**



**Extra Robust Power Supply in Metal Casing, Made in Germany**



**High Power Rechargeable Li-Ion Battery Pack**



**UV-Pass Filter**



**Advanced Power Supply**



**Various Mounting Equipment and Stands**



**UV Protection Glasses**



**Robust Carrying Case**



# H1 UV LED HANDLAMPS

advanced and professional tools for enhanced fluorescent inspection

**GROUNDBREAKING INNOVATION**  
uncompromising better than bulb-based UV lamps

The Perfect UV-A LED Blacklight for Every Specific Application

## REVOLUTIONARY INTERPRETATION



Automatic Stepless  
White Light Dimming and  
Crossfade Features

*Uninterrupted, relaxed and enhanced observation  
of indications by viewing films of transition between  
the 3 possible illuminations:*

*UV only / UV and VIS together / VIS only*

*NO Flash Blinded Eyes, NO Loss of Sharpness,*

*NO Unneeded Stress for the Eyes*

## ORIENTATION AND CLEAR VISION



REAL Floodlamps with Soft Radiation Drop and  
NO Inhomogeneity Within the Beam  
Even When Moving the Lamp

*UV LED lamps WITHOUT any compromises, always  
BETTER than using bulb-based UV sources.*

*Clear and sharp display, even of tiny indications.*

*WITHOUT loss of inspection performance by using the full detection  
capability of the human eye for fast, secure, easy and tireless inspection  
NO hotspots even in very short distances*

## INVESTMENT SECURITY



Guaranteed Requalification  
Possibility for Upcoming Standards (until 2017)  
Conform to All Actual Major Standards

*Using UV LED Technology by NOW without worries and  
NO waste of money! Paper requalification and necessary  
technical upgrades free of charge for upcoming  
ASTM, ISO and NADCAP requirements (at least until 2017)*

## MAXIMUM PROCESS SECURITY



MORE Secure Inspection due to  
Electronic System Monitoring and  
Adaption Time Signalization

*Easier, better and more reliable inspection by  
additional integrated process support and security features*



## HIGH QUALITY



For NDT Professionals  
Engineered and  
Made in Germany

*Completely designed, manufactured,  
assembled and qualified in Germany*

## Further Highlights of UVE Series



Electronic UV-LED Monitoring to Use UV LED Sources At Least As Secure As Bulb-based UV Sources



Programmable Adaption Time Signalization (1, 3 or 5 minutes)



Individually Configurable by the User



Exceptional Life-Time



Optional Stepless Soft White Light Dimming and Crossfade Features for Maximum Interpretation Capability



High-End White Light in Daylight Quality (5,700 K | CRI > 90)



ECO-Mode for Maximum Life-Time and Power-Saving



Battery Monitoring with Pre-Warning and Security Switch-Off Before Output drops

## Additional Highlights of UVN Series



Adaption Time Signalization



In-Use Adjustable White Light. Shiftable in Addition to UV / VIS Toggling



Qualified and Approved According to Aerospace Standards



Qualification Report and Certificate of Compliance Stating All Relevant Lamp Individual Results



Guaranteed Requalification Possibility for Upcoming Aerospace, ASTM and ISO Standards (at Least Until 2017, for Selected Models)



Enhanced Ambient Temperature Range 40 - 122°F (5 to 50°C)



Temperature Monitoring and Overheat Protection With Pre-Warning



Integrated UV Pass Filter

## Highlights of All Series



Real Peak 365 ± 5 nm Always During Operation Within the Qualified Temperature Range



Optional UV / White Light Toggling



Wearless Touch Switches (Work Also When Wearing Gloves)



Monitored Fan Cooling



Battery Monitoring with Security Switch-Off Before Output Drops



Acoustic and Visual Indicators



Mains Supply by AC/DC Transformer and Mobile Battery Supply by Rechargeable NiMH or Lilon Battery Packs



Easy and Tireless Long-Term Usage Based on Groundbreaking Ergonomic and Lightweight Design



Conform to All Actual Major Standards (November 2015)



High Stability of Intensity and Wavelength



Exchangeable Rubber Bumper With Integrated Protective Sheave



Integrated Holder for Standard Mount and Fixation Possibility



Robust Design For Reliable Operation Even Under Rough Industrial Conditions



Designed for NDT Applications by NDT-Experts for NDT-Professionals



Safety Extra Low Voltage (SELV) at Hand Set



Engineered, Manufactured, Assembled and Qualified in Germany

## Select the perfect UV LED lamp for your needs from 48 different models and many options:

### 3 Series

-  **UVS** Basic Series for Standard Applications
-  **UVN** Advanced Series for Applications with Enhanced Requirements
-  **UVE** Professional Series with Advanced Monitoring Features for Maximum Process Security





### Optional White Light Features

-  Automatic Stepless White Light Dimmung and Crossfade Features
-   UV / White Light Toggling and White Light Shiftable in Addition to UV
-    In-Use Adjustable White Light Output, With Fallback Option

### Beam Style

-  Focussed Spot With Hard Radiation Drop at the Edges
-  Flood Lamp With Soft Radiation Drop at the Edges and Extreme Homogeneity of the Beam

### Number of UV LED Elements

-   3 to 6 UV-LEDs to Select Various Intensities (1,700 to 12,500  $\mu\text{W}/\text{cm}^2$ ) and Irradiation Area Sizes
-  

### Power Supply

-  All Worldwide Mains Plugs and Voltages Versions Available
-  External Standard Transformer with Permanently Fixed Cables Made in Europe
-  Extra Lightweight, High Power Rechargeable Li-Ion Battery Pack
-  Extra Robust Metal Cased Transformer Made in Germany
-  Aluminium Cased Transformer for Expanded Connections Made in Germany
-  Rechargeable NiMH Battery Pack

### Accessories

-  Foot-Paddle for Handsfree Operation of the White Light Options
-  Robust Carrying Case
-  Various Mounting Equipments
-  UV Pass Filter
-  UV Protection Glasses
-  Qualified Retractable Coiled and Straight Extension Cords

## Detailed UV Specification:



Real Peak 365 ± 5 nm  
Always During Operation  
Within the Qualified Temperature Range



Battery Monitoring With  
Security Switch-Off  
Before Output Drops



Robust Design for Reliable  
Operation Even Under  
Rough Industrial Conditions



Conform to Actual Major Standards  
(November 2015)



Groundbreaking Ergonomic and  
Lightweight Design for  
Easy and Tireless Long-Term Usage



Monitored  
Fan Cooling



Temperature Monitoring  
and Overheat Protection



10,000 Hours Typical Operation Time with  
At Least 70% of the Output at Delivery  
Under Real Conditions



Qualified and Approved for Ambient Temperature from  
5° to 40° C (40° - 105° F)



Mains Supply by AC/DC Transformer and  
Mobile Battery Supply by  
Rechargeable NiMH or Lilon Battery Packs



Acoustic and  
Visual Indicators



Standard Qualification Report and  
Certificate

## High Quality White Light Option:



UV / White Light Toggling



Multi-Level Pre-Adjustable  
White Light Output



High Quality Cool White Light  
(5,000 K | CRI > 80)  
Large Illumination Area



We reserve the right of error, improvement and technical modification without notice.



1H1016v

## Advanced UV Features:



Qualified and Approved According to Rolls-Royce RRES 90061



Adaption Time Signalization  
1 Minute



Ideal for NDT



Qualified and Approved for Ambient Temperatures from 5° to 50° C (40° - 122° F)



Temperature Monitoring and Overheat Protection With Pre-Warning



Guaranteed Requalification Possibility for Upcoming Aerospace, ASTM and ISO Standards (at Least Until 2017, for Selected Models)



Conform to All Actual Major Standards (November 2015)



Integrated UV-Pass Filter



Superior Life-Time



Detailed Qualification Report and Certificate of Compliance Stating All Lamp Individual Results

## Advanced White Light Option:



White Light Shiftable in Addition to UV



In-Use Adjustable White Light Output



High Quality Cool White Light (5,000 K | CRI > 80) Large Illumination Area



UV / White Light Toggling



## Basic Specification:



Real Peak 365 ± 5 nm Always During Operation within the Qualified Temperature Range



Mains Supply by AC/DC Transformer and Mobile Battery Supply by Rechargeable NiMH or Lilon Battery Packs



Groundbreaking Ergonomic and Lightweight Design for Easy and Tireless Long-Term Usage



Acoustic and Visual Indicators



Robust Design for Reliable Operation even under Rough Industrial Conditions



Battery Monitoring with Security Switch-Off Before Output Drops
























Monitored Fan Cooling

We reserve the right of error, improvement and technical modification without notice.



## Revolutionary UV Features:











-  Electronic UV-LED Monitoring to Use UV LED Sources At Least As Secure As Bulb-based UV Sources
-   Programmable Adaption Time Signalization (1, 3 or 5 minutes)
-  **RRES 90061** Qualified and Approved According to Rolls-Royce RRES 90061
-  Individually Configurable by the User
-  **2017**  **ISO 3059** Guaranteed Requalification Possibility for Upcoming Aerospace, ASTM and ISO Standards (at Least Until 2017, for Selected Models)
-  **NADCAP**  **ASME CODE**
-  **ASTM E2297**  **ASTM E3022** Conform to All Actual Major Standards (November 2015)
-    **ECO-Mode for Maximum Life-Time and Power-Saving, Auto Switch-OFF and Switch-ON**
-    Acoustic, Visual and Tactile (Vibrating) Indicators
-  **T<sub>70</sub> 15K**  **T<sub>50</sub> 18K** Exceptional Life-Time of more than 18.000 hours Time of Usage Under Real Conditions
-  Retractable Coiled Power Cord
-  Detailed Qualification Report and Certificate of Compliance Stating All Lamp Individual Results

## Revolutionary White Light Option:

-  Stepless Soft White Light Dimming and Crossfade Features for Maximum Interpretation Capability Instead of Showing Different Pictures and Flash Blinding the Eyes
-    **IN USE** In-Use Adjustable White Light Output, With Fallback Option
-  White Light Functions Additionally Hands-free Operable by Foot Paddles
-  **5.700 KELVIN**  **CRI >90**  High-End White Light in Daylight Quality (5,700 K | CRI > 90) Extreme Uniform and Large Illumination
-   White Light Shiftable in Addition to UV UV / White Light Toggling



## Basic Specification:

-  **UV 365** Real Peak 365 ± 5 nm Always During Operation Within the Qualified Temperature Range
-  Battery Monitoring with Pre-Warning and Security Switch-Off Before Output Drops
-  **50°C**  **122°F** **5°C**  **40°F** Qualified and Approved for Ambient Temperatures from 5° to 50° C (40° - 122° F)
-  Groundbreaking Ergonomic and Lightweight Design for Easy and Tireless Long-Term Usage
-  Temperature Monitoring and Overheat Protection With Pre-Warning
-  Integrated UV-Pass Filter
-  Robust Design for Reliable Operation Even Under Rough Industrial Conditions
-  Mains Supply by AC/DC Transformer and Mobile Battery Supply by Rechargeable NiMH or Lilon Battery Packs



For detailed product and qualification information, contact or visit us at [www.secu-chek.com/uve-h1](http://www.secu-chek.com/uve-h1)

# UV-LED-Floodlamps UVED-S



- extra long-lasting, state-of-the-art LED-Technology
- Peak-Wavelength: 365 nm ( $\pm 5$  nm)
- extra large irradiation area for optimal examination performance
- exceptional uniform distribution of the UV-radiation
- instant ON/OFF
- any irradiation area feasible
- low heat development
- tough industrial-grade for 24/7 and heavy duty use
- optional finely dimmable white light, shiftable in addition to UV or autonomous usable
- NO visible reflections, also on shining surfaces
- maximum contrast
- maximum stability of intensity and wavelength
- high-quality fan-cooling
- according to ISO/DIS 3059, ISO 9934, ISO 3452, ASTM- und ASME-standards
- engineered and manufactured in Germany

exceptional uniform  
distribution of the  
radiation

UV-intensity adjustable  
ex works

shiftable + dimmable  
white light up  
to 185 fc (2.000 lux)



further product information on the back side and  
[www.uv-led-lamp.com/uv-led-s](http://www.uv-led-lamp.com/uv-led-s)

# UVED-S stationary UV-LED-Floodlamps for industrial usage

Type:	Focus: * *	UVED-S712W	UVED-S712	UVED-S710S	UVED-S710SW	UVED-S610	UVED-S608S	UVED-S508	UVED-S507S
Order Number:		800-UVED-S712W	800-UVED-S712	800-UVED-S710S	800-UVED-S710SW	800-UVED-S610	800-UVED-S608S	800-UVED-S508	800-UVED-S507S
Peak-Wavelength:		365 nm (± 5nm)							
FWHM (Full Width Half Maximum):		< 15 nm							
UV-A-Intensity in 38 cm (15 in.) Distance (high level):	FL	> 3,000 µW/cm² (30 W/m²)	> 2,200 µW/cm² (22 W/m²)	> 3,000 µW/cm² (30 W/m²)	> 2,000 µW/cm² (20 W/m²)	> 2,600 µW/cm² (26 W/m²)	> 2,000 µW/cm² (20 W/m²)	> 2,000 µW/cm² (20 W/m²)	> 2,000 µW/cm² (20 W/m²)
	F1	> 5,500 µW/cm² (55 W/m²)	> 4,000 µW/cm² (40 W/m²)	> 5,500 µW/cm² (55 W/m²)	> 4,000 µW/cm² (40 W/m²)	> 5,000 µW/cm² (50 W/m²)	> 4,000 µW/cm² (40 W/m²)	> 4,000 µW/cm² (40 W/m²)	> 4,000 µW/cm² (40 W/m²)
	F2	> 6,700 µW/cm² (67 W/m²)	not available	> 7,500 µW/cm² (75 W/m²)	not available	> 6,300 µW/cm² (63 W/m²)	not available	not available	not available
Minimum Working Distance:	FL	14 cm [5.5 in.]	15 cm [6 in.]	10 cm [4 in.]	15 cm [6 in.]	20 cm [8 in.]	15 cm [6 in.]	20 cm [8 in.]	15 cm [6 in.]
	F1	23 cm [9 in.]	25 cm [10 in.]	20 cm [8 in.]	25 cm [10 in.]	31 cm [12 in.]	25 cm [10 in.]	31 cm [12 in.]	25 cm [10 in.]
	F2	26 cm [10 in.]	not available	34 cm [13 in.]	not available	34 cm [13 in.]	not available	34 cm [13 in.]	not available
Irradiated Area in 38 cm (15 in.): > 1,000 µW/cm² (10 W/m²)	FL	70 x 40 cm (28 x 16 in.)	65 x 35 cm (26 x 14 in.)	60 x 40 cm (24 x 16 in.)	55 x 35 cm (22 x 14 in.)	50 x 40 cm (20 x 16 in.)	45 x 35 cm (18 x 14 in.)	45 x 35 cm (18 x 14 in.)	45 x 35 cm (18 x 14 in.)
	F1								
	F2	65 x 35 cm (26 x 14 in.)	not available	55 x 35 cm (22 x 14 in.)	not available	45 x 35 cm (18 x 14 in.)	not available	45 x 35 cm (18 x 14 in.)	not available
Irradiated Area in 38 cm (15 in.) > 100 µW/cm² (1 W/m²) (realized area):	FL	105 x 95 cm (41 x 37 in.)	90 x 80 cm (35 x 32 in.)	95 x 85 cm (37 x 33 in.)	90 x 80 cm (35 x 32 in.)	85 x 75 cm (33 x 30 in.)	70 x 60 cm (28 x 24 in.)	70 x 60 cm (28 x 24 in.)	70 x 60 cm (28 x 24 in.)
	F1	90 x 65 cm (35 x 26 in.)	70 x 50 cm (28 x 20 in.)	80 x 60 cm (32 x 24 in.)	70 x 55 cm (28 x 22 in.)	60 x 50 cm (24 x 20 in.)	50 x 40 cm (20 x 16 in.)	50 x 40 cm (20 x 16 in.)	50 x 40 cm (20 x 16 in.)
	F2	85 x 60 cm (33 x 24 in.)	not available	70 x 55 cm (28 x 22 in.)	not available	55 x 45 cm (22 x 18 in.)	not available	55 x 45 cm (22 x 18 in.)	not available
UV Intensity Levels:		1							
Stability of UV-Intensity		> 90%							
Number of UV-LEDs:		39	33	28	26	24			
Visible Output:		< 2 Lux	< 5 Lux	< 2 Lux	< 5 Lux	< 2 Lux	< 5 Lux	< 2 Lux	< 5 Lux
Visible Reflections: *		NO Reflections	minimal, substantial less than HID-UV-Sources	NO Reflections	minimal, substantial less than HID-UV-Sources	NO Reflections	minimal, substantial less than HID-UV-Sources	NO Reflections	minimal, substantial less than HID-UV-Sources
Typical Life Time T70		> 10,000 h	> 8,000 h	> 10,000 h	> 8,000 h	> 10,000 h	> 8,000 h	> 10,000 h	> 8,000 h
Typical Life Time T50		> 15,000 h	> 12,000 h	> 15,000 h	> 12,000 h	> 15,000 h	> 12,000 h	> 15,000 h	> 12,000 h
Risk Class according to DGZfP EM-6:		2							
Allowed Ambient Conditions:		Temperature: 0 - 55 °C (35 - 135 °F), Humidity: 20 - 80 % (non-condensing)							
Shiftable and Autonomous Usable White Light:		finely dimmable	not available	finely dimmable	not available	not available	not available	not available	not available
Dimmable White Light		stepless 20 - 800 Lux via control dial	not available	stepless 20 - 800 Lux via push button	not available	not available	not available	not available	not available

\* when using ISO/DIS 3059 conform, clear UV-Protection-Glasses (Article 800-UV-SB-NR)

\*\* FL: Floodlamp F1: softly focussed F2: focussed



robust, multipurpose fixture  
for easy and stable mounting  
800-UVED-S-Z-UH500  
800-UVED-S-Z-UH6007



protection-pane  
attachment set  
800-UVED-S-Z-SSBS

UV-permeable protection-pane  
3 different sizes  
800-UVED-S500-XSS3  
800-UVED-S600-XSS3  
800-UVED-S700-XSS3



high-quality white-light filter  
for zero VIS-emission and  
NO reflections  
800-UVED-SFG-XXX-YY



foot-operated dimmer for all  
UVED-lamp types to dimm  
UV or VIS (customizable)  
800-UVED-SW-FR



customizable  
ON/OFF-foot-switch  
for UV and/or VIS  
800-UVED-SW-FS-UVWL

We reserve the right of error, improvement and technical modification without notice.



  
**SPECTROLINE®**

# Inspection Products for Nondestructive Testing

Solutions for the NDT Technician



**ISO 9001:2008**  
CERTIFIED COMPANY

# NDT: AN OVERVIEW

Nondestructive testing (NDT) is a procedure used to examine and/or inspect materials and components to locate surface and subsurface defects in a way that allows such materials to be examined without changing or destroying their original design or structure.

NDT plays a crucial role in everyday life. It is necessary to ensure structural integrity, safety and reliability in aircraft, motor vehicles, pipelines, seafaring vessels, bridges, trains, tunnels, power stations, refineries and oil platforms. All are inspected using some method of nondestructive testing.

Nondestructive testing is also a quality assurance production and management tool which can provide impressive results when used correctly. It requires an understanding of the various methods available, their capabilities and limitations, knowledge of the relevant standards and specifications for performing the tests.

Materials, products and equipment that fail to achieve their design requirements or projected life due to undetected defects may require expensive repair or early replacement. Such defects may also be the cause of unsafe conditions or catastrophic failure, as well as the loss of revenue due to unplanned shutdowns.

Nondestructive testing can be applied to each stage of an item's development, manufacture or construction. The item's materials and assembly can be examined using NDT and either accepted, rejected or repaired. NDT techniques can then be used to monitor the integrity of the item or structure throughout its service life.

The most commonly used NDT methods are visual inspection, liquid penetrant inspection, magnetic particle inspection, Eddy current inspection, acoustic emission, ultrasonic inspection and radiography.





Surface metal defect revealed  
using the TRITAN™ 365 UV-A  
inspection lamp and Zyglo®  
liquid penetrant

## TABLE OF CONTENTS

PAGE NO.

<b>UV-A LED INSPECTION LAMPS</b>	
OLX-365 Series OPTI-LUX™ 365	4
OPX-365 OPTIMAX™ 365	8
OPK-300N OPTIMAX™ Multi-Lite™	9
TRI-365 Series TRITAN™ 365	10
TRI-365SBLC TRITAN™ 365 (Rolls-Royce RRES 90061 Compliant)	14
QDR-365 Series QUADRAN™ 365	16
QDR-365 S-Series QUADRAN™ 365	20
EK-3000 EagleEye™	24
<b>UV-A STATIONARY LAMPS</b>	
PM-1600 Series PowerMAX™ 365	26
UV-400 Series SuperFlood™	30
<b>UV-A MDL INSPECTION LAMP</b>	
ML-3500 Series MAXIMA™	32
<b>UV-A/WHITE LIGHT LED MODULAR INSPECTION SYSTEM</b>	
ONT-365 On-Trak™ 365	34
<b>BLUE LIGHT LED INSPECTION LAMPS</b>	
OPX-450 OPTIMAX™ 450	37
TRI-450B TRITAN™ 450	38
PM-1600B PowerMAX™ 450	40
<b>BLUE LIGHT LED MODULAR INSPECTION SYSTEM</b>	
ONT-450 On-Trak™ 450	42
<b>DIGITAL RADIOMETERS</b>	
XP-2000 Accu-PRO™	44
XP-4000 Accu-PRO™ Plus	44
XRP-3000 AccuMAX™	46
DM-365XA	47
<b>REPLACEMENT PARTS &amp; ACCESSORIES</b>	48
<b>CUSTOMER SERVICE/SUPPORT</b>	54
<b>PRODUCT INDEX</b>	55

Spectronics Corporation manufactures a wide array of medium and high-intensity inspection lamps and products that are used to detect and identify surface and subsurface flaws in the performance of nondestructive testing utilizing the visual inspection, liquid penetrant and magnetic particle methods. For more information see [www.spectroline.com](http://www.spectroline.com).

## OLX-365 Series

### OPTI-LUX™ 365 UV-A LED Inspection Flashlights

#### ***Affordable, Super-Compact and Designed Specifically for NDT!***

Feature a powerful UV-A (365 nm) LED light source coupled with a rugged anodized lamp body. Lightweight and compact, they reduce user fatigue while providing an extremely uniform beam profile that surpasses those of more expensive lamps.

Available in four models to suit your specific NDT needs: high-intensity or standard-intensity versions, each with or without an internal black light filter.



- Choice of nominal steady-state UV-A intensity of **10,000  $\mu\text{W}/\text{cm}^2$**  or maximum of **4,500  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm)
- Coverage area up to 2.5 inch (6.3 cm) diameter at 15 inches (38 cm), with minimum UV-A intensity of **2,000  $\mu\text{W}/\text{cm}^2$**
- Anodized aluminum lamp body minimizes corrosion and stands up to years of heavy use
- Instant-on operation; lamp reaches full intensity **immediately!**
- Convenient on/off switch for easy, one-handed operation
- Powered by one rechargeable lithium-ion battery with an extra battery included with the lamp. Each provides 4 hours of continuous inspection between charges.
- Meets ASTM UV-A intensity and wavelength specifications for LPT and MPT
- Both high- and standard-intensity versions are available with internal black light filter. Externally mounted black light filter with rubber bumper can be purchased as an accessory.
- **Certificate of compliance** for both wavelength and output measurements supplied with every lamp





**OPTI-LUX™ 365** flashlight with **BF-365LX** external black light filter accessory



**OPTI-LUX™ 365 Series** flashlights come complete with lanyard, belt holster, two rechargeable batteries, smart charging cradle with AC and DC cord sets, UV-absorbing spectacles and a padded carrying case.

Model	Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ①	Visible light measurement	Diameter of UV-A coverage area at 15 inches (38 cm)
<b>OLX-365</b> High intensity, with clear filter	10,000 $\mu\text{W}/\text{cm}^2$	0.8 foot-candles (8.6 lux)	2 inch (5.0 cm)
<b>OLX-365B</b> High intensity, with internal black light filter	10,000 $\mu\text{W}/\text{cm}^2$	0.4 foot-candles (4.3 lux)	2 inch (5.0 cm)
<b>OLX-365FL</b> Standard intensity, with clear filter	4,500 $\mu\text{W}/\text{cm}^2$ maximum ②	0.3 foot-candles (3.2 lux)	2.5 inch (6.3 cm)
<b>OLX-365BFL</b> Standard intensity, with internal black light filter	4,500 $\mu\text{W}/\text{cm}^2$ maximum ②	0.2 foot-candles (2.1 lux)	2.5 inch (6.3 cm)

<b>Light Source:</b>	UV-A LED
<b>Lamp Style:</b>	Cordless flashlight
<b>Lamp Head Diameter:</b>	1.25 in (3.2 cm)
<b>Length:</b>	5.9 in (15 cm)
<b>Weight (w/Battery):</b>	4.6 oz (130 g)
<b>Power Requirement:</b>	One 3.7V 2200mA/Hr lithium-ion battery (rechargeable)
<b>Run Time:</b>	4 hours (continuous)
<b>Charge Time:</b>	4 hours (one or two batteries)
<b>Charging Cradle:</b>	Two-battery capability with AC and DC cord sets

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

② To address aerospace industry concerns



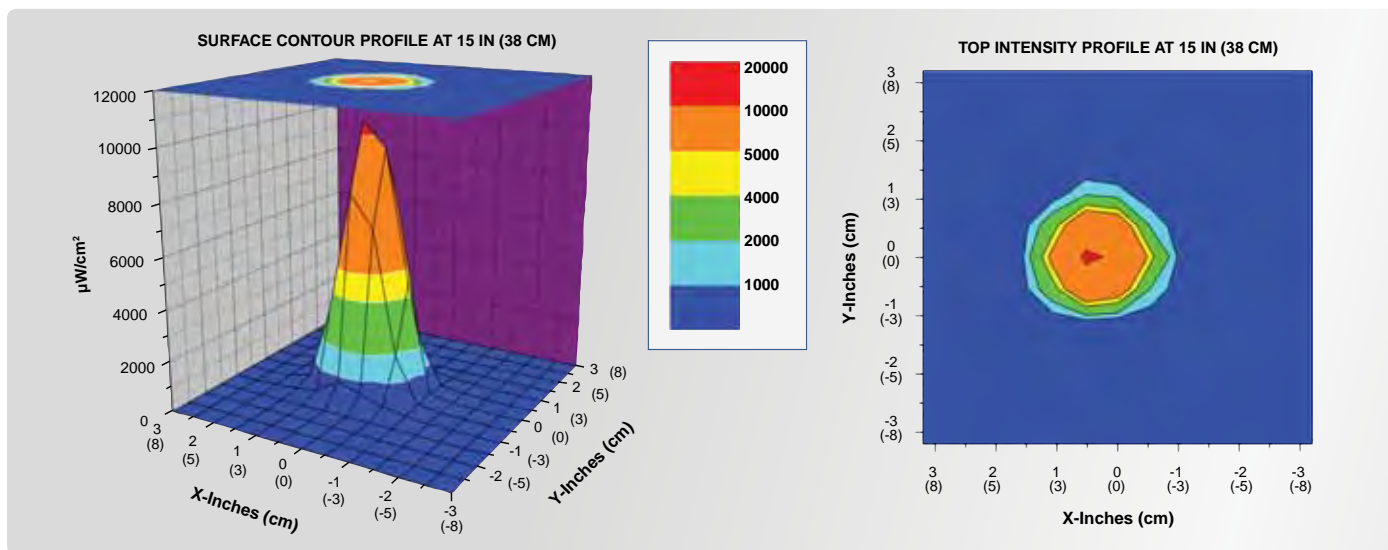
## Replacement Parts & Accessories

<b>BF-365LX</b>	External black light filter with rubber bumper
<b>127423</b>	Dome lens
<b>127568</b>	Lithium-ion battery (rechargeable)
<b>127607</b>	Internal black light filter
<b>127785</b>	Internal clear filter
<b>128217</b>	Battery charging cradle with AC cord
<b>128225</b>	DC cord set
<b>127574</b>	Belt holster
<b>UVS-30</b>	UV-absorbing spectacles
<b>CC-365</b>	Carrying case

## HIGH-INTENSITY MODELS

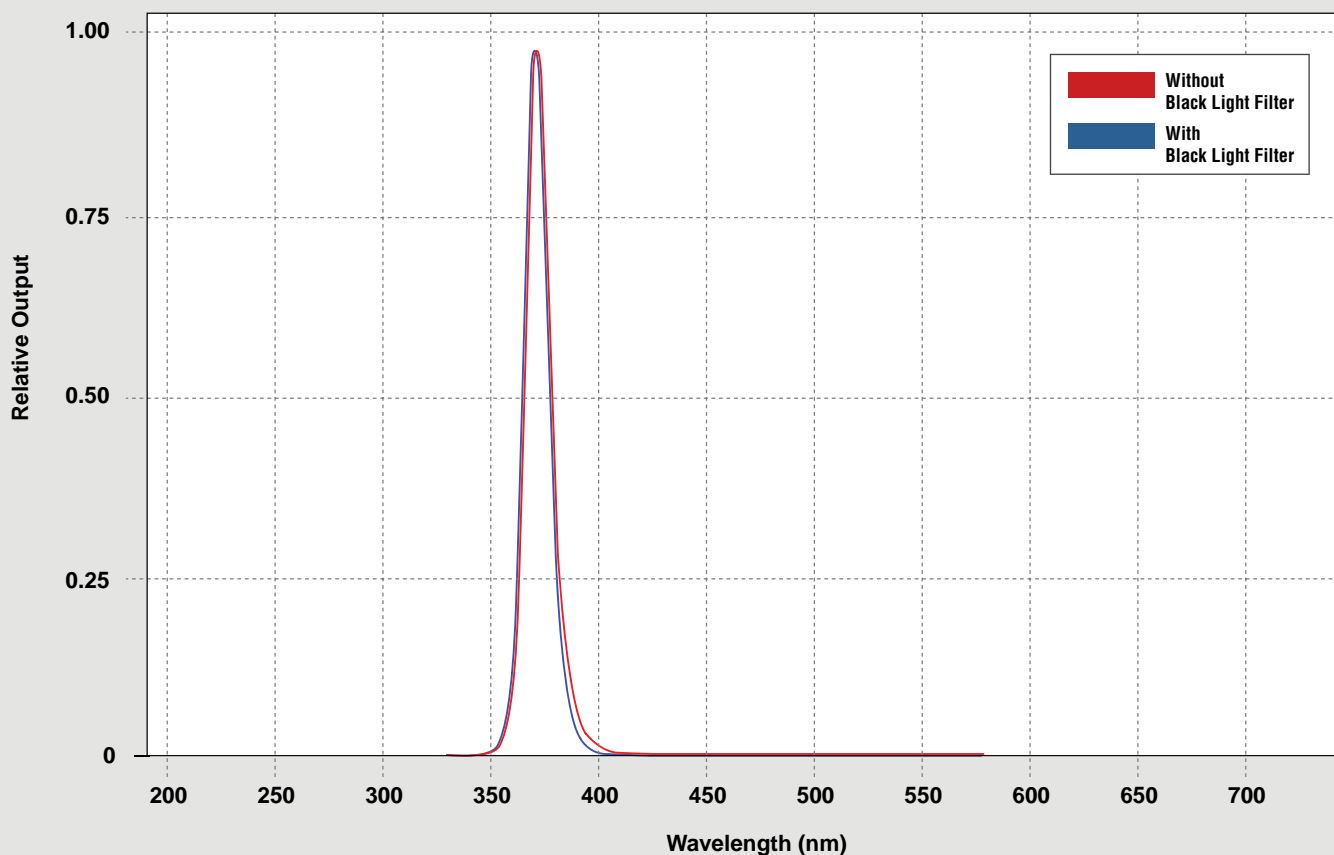
**OPTI-LUX™ 365 Series** flashlights are available in two **high-intensity** models that are designed for NDT inspection applications requiring high UV-A output. The **OLX-365** is equipped with a clear filter, while the **OLX-365B** comes with an internal black light filter that reduces the output of wavelengths longer than 400 nm. Both versions provide a nominal steady-state UV-A intensity of **10,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).

### UV-A BEAM PROFILE



### NORMALIZED UV IRRADIANCE

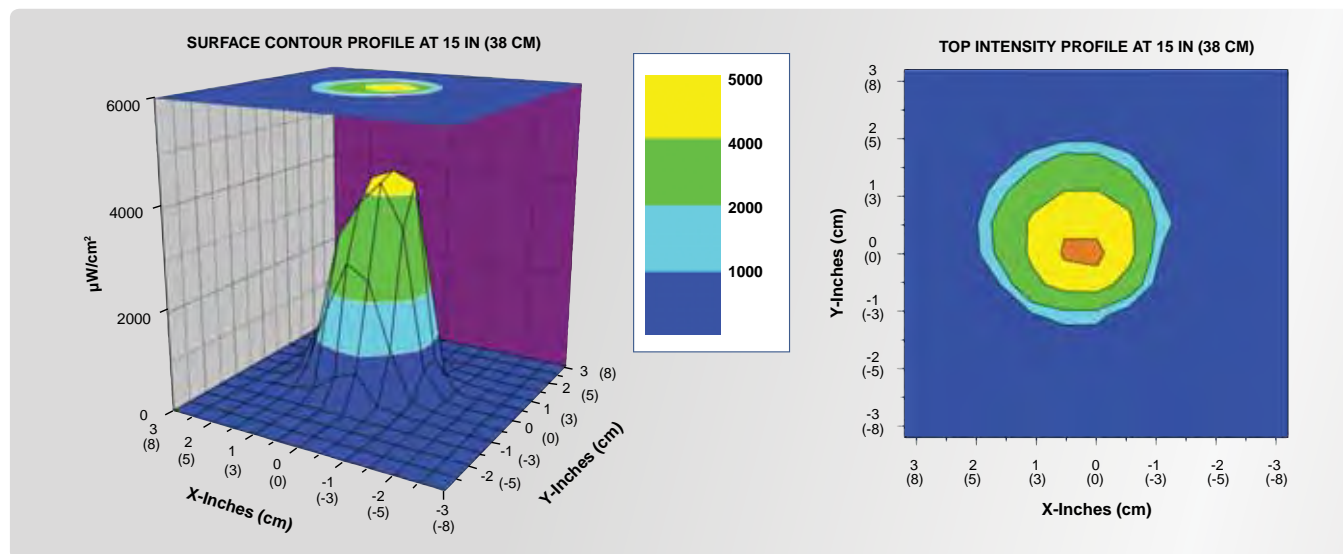
Typical wavelength output profile of OPTI-LUX™ 365 with and without black light filter, with peak at 365 nm.



## STANDARD-INTENSITY MODELS

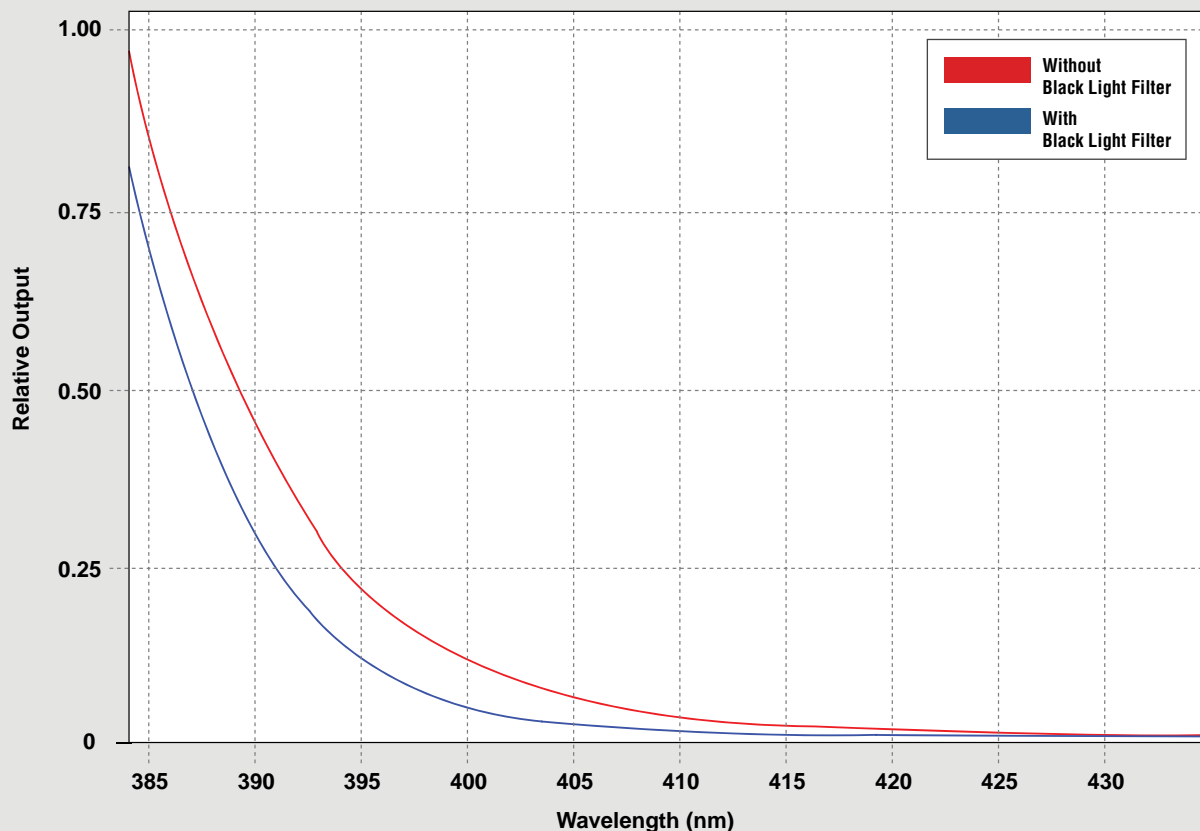
OPTI-LUX™ 365 flashlights are also available in two **standard-intensity** models that are designed for inspection applications requiring limited UV-A output. The **OLX-365FL** is equipped with a clear filter, while the **OLX-365BFL** comes with an internal black light filter that reduces the output of wavelengths longer than 400 nm. These lamps also offer a larger coverage area compared to high-intensity models. Both versions provide a nominal steady-state UV-A intensity of **4,500  $\mu\text{W}/\text{cm}^2$**  maximum at 15 inches (38 cm), and comply with aerospace industry standards.

### UV-A BEAM PROFILE



### SELECT WAVELENGTHS WITH AND WITHOUT BLACK LIGHT FILTER

As the wavelength of the OPTI-LUX™ 365 moves into the visible light range, the black light filter significantly reduces the UV-A output of the lamp by as much as 50% at 400 nm.



# OPX-365

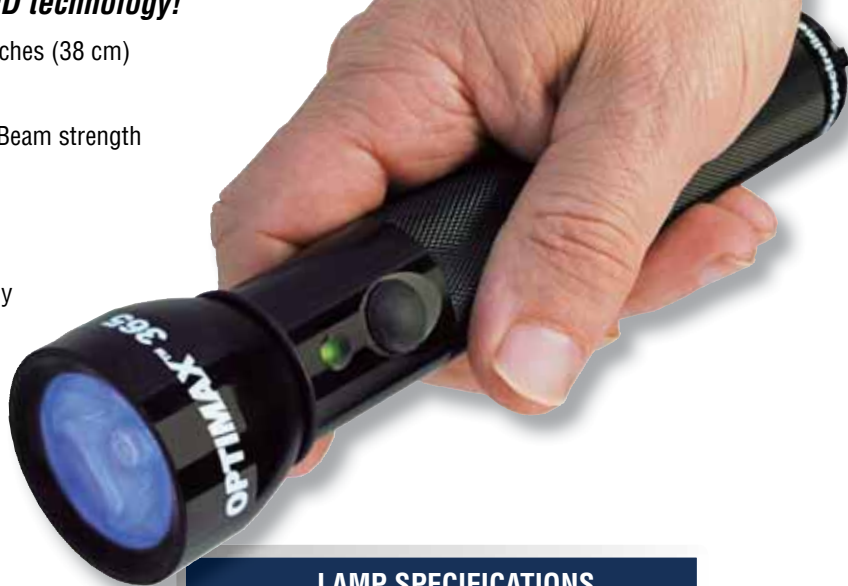
## OPTIMAX™ 365 UV-A LED Inspection Flashlight

(U.S. and foreign patents pending)

**Powerful, rechargeable, high-intensity UV-A inspection flashlight featuring state-of-the-art, ultra-hi-flux LED technology!**

- Nominal steady-state UV-A intensity of **18,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm)
- Low visible light emission — less than 2 foot-candles (22 lux)
- Electronic Intensity Stabilizer assures consistent performance. Beam strength will not weaken between charges!
- Instant-on operation. Lamp reaches full intensity immediately!
- Rubber lamp protector prevents damage to LED head
- Ergonomic, portable and rugged. Anodized aluminum lamp body minimizes corrosion and stands up to years of heavy use.
- Powered by a rechargeable NiMH battery. Provides 90 minutes of continuous inspection between charges.

Also available: DF-365 diffusing filter (sold separately).



OPTIMAX™ 365 UV-A LED Inspection Flashlight comes complete with rubber lamp protector, smart AC and DC chargers, UV-absorbing spectacles, belt holster and padded carrying case.

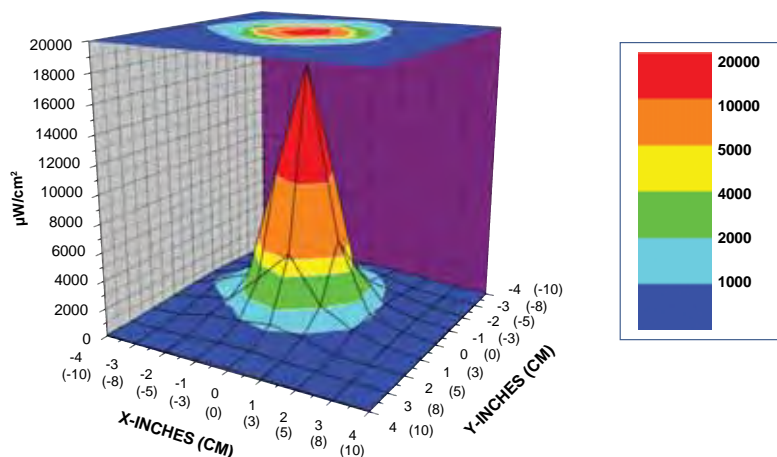
### LAMP SPECIFICATIONS

Style	Cordless flashlight body with UV-A LED lamp head
Length	8.0 inch (20.3 cm)
Weight (with Battery)	11.8 oz (335 g)
Power Requirement	3.6V, 2 AH NiMH internal battery stick (rechargeable)
Run Time	90 minutes (continuous)
Charge Time	4 hours
Spectacles	UVS-30 UV-absorbing, clear

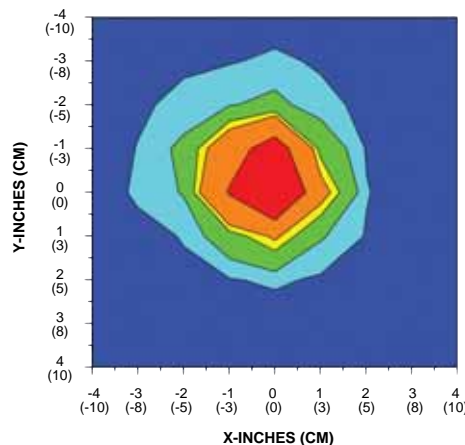


### UV-A BEAM PROFILE

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)



TOP INTENSITY PROFILE AT 15 IN (38 CM)



# OPK-300N

## OPTIMAX™ Multi-Lite™ NDT Inspection Kit

(U.S. patent no. 5,905,268; foreign patents pending)

### A New Powerful, Versatile, Multi-LED, NDT Light Source!

Features three Qwik-Connect™ interchangeable LED lamp heads that connect to a rugged, black-anodized flashlight body. It provides single-wavelength illumination in UV-A and blue light, and is ideal for both pre-screening of fluorescent particles in ambient light conditions and full-fledged NDT inspections utilizing magnetic particles or fluorescent penetrants. A convenient white light LED provides general illumination of dark work areas.

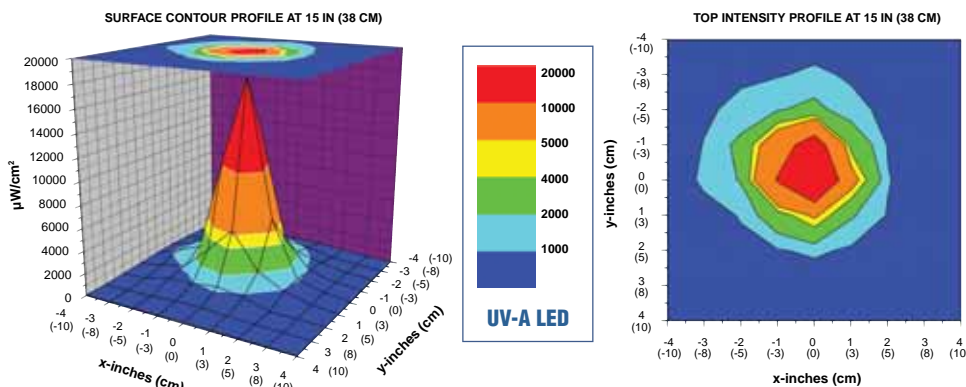
- Super-powerful LED optical output with ultra-high intensity 365 nm UV-A and 450 nm blue light performance
- Provides nominal steady-state intensity of **18,000  $\mu\text{W}/\text{cm}^2$**  (UV LED) or **7,000  $\mu\text{W}/\text{cm}^2$**  (blue light LED) at 15 inches (38 cm)
- Blue light LED with patented thin-film dichroic lens filters out long-wave visible light
- Electronic Intensity Stabilizer ensures consistent performance. Beam strength will not weaken between charges!
- Instant-on operation. Lamp reaches full intensity immediately!
- Lightweight, cordless, ergonomic design eliminates fatigue
- Powered by a rechargeable NiMH battery. Provides 90 minutes of continuous inspection between charges (smart AC and DC chargers included).



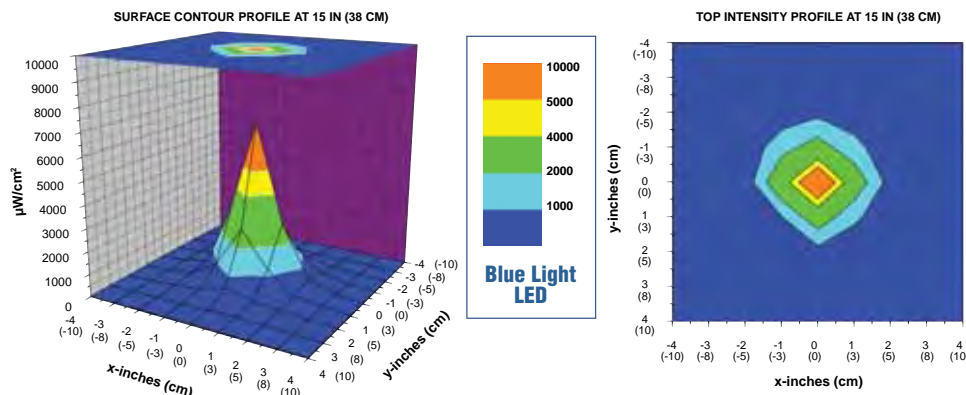
UV-A LED INSPECTION LAMPS

OPK-300N Multi-Lite™ Inspection Kit comes complete with three storage pouches for the LED lamp heads, smart AC and DC battery chargers, UV-absorbing spectacles, fluorescent-enhancing, yellow spectacles and a padded carrying case.

### UV-A BEAM PROFILE



### BLUE LIGHT BEAM PROFILE



### LAMP SPECIFICATIONS

<b>Style</b>	Cordless flashlight body with three interchangeable LED lamp heads
<b>Length</b>	9.0 inch (22.9 cm)
<b>Weight (with Battery)</b>	15.3 oz (434 g)
<b>Power Requirement</b>	3.6V, 2 AH NiMH internal battery stick (rechargeable)
<b>Run Time</b>	90 minutes (continuous)
<b>Charge Time</b>	4 hours
<b>Spectacles</b>	UVS-30 UV-absorbing, clear UVS-40 fluorescent-enhancing, yellow



## TRI-365 Series

### TRITAN™ 365 Multi-LED, Broad-Beam UV-A Inspection Lamps

Feature three ultra-hi-flux UV-A LEDs for fluorescent inspection, plus a convenient white light LED to scan for surface flaws and illuminate dark work areas. Their broad-beam configuration provides an extremely wide coverage area, while a compact head design allows access into areas inaccessible to larger UV inspection lamps.

Available in three models to meet your specific NDT inspection requirements: high-intensity, standard-intensity and standard-intensity with integral black light filters.



- Choice of one high-intensity model with a nominal steady-state UV-A intensity of **9,000  $\mu\text{W}/\text{cm}^2$**  or two standard-intensity models, both with a maximum UV-A intensity of less than 5,000  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm)
- Large 4 inch (10 cm) diameter coverage area at 15 inches (38 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)
- Grip-mounted, three-way rocker switch (white light/off/UV) for easy control of light sources
- Built-in fans keep LEDs cool to maintain optimum light output during extended use
- Long-lasting UV-A lenses reduce the rate of solarization
- Rubber bumper with Borofloat® glass lens protects LEDs from damage
- Modular construction for easy servicing in the field
- 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 in-line power supply or industrial power supply with cord sets (sold separately).
- Meets ASTM UV-A intensity and wavelength specifications for LPT and MPT
- **Certificate of compliance** for both wavelength and output measurements supplied with every lamp
- UV-absorbing spectacles and soft carrying case included



TRITAN™ 365 faceplate shown with (left) and without (right) integral black light filters.



TRITAN™ 365 shown with optional PS-200A (above) and PS-300A (below) power supplies.



#### Also Available:

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

Model	Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ①	Visible light measurement	Diameter of UV-A coverage area at 15 inches (38 cm)
<b>TRI-365HB</b> High intensity, with clear filter	9,000 $\mu\text{W}/\text{cm}^2$	< 2 foot-candles (22 lux)	4 inch (10 cm)
<b>TRI-365DB</b> Standard intensity, with clear filter	< 5,000 $\mu\text{W}/\text{cm}^2$ maximum ②	< 1 foot-candle (11 lux)	4 inch (10 cm)
<b>TRI-365DBB</b> Standard intensity, with integral black light filters	< 5,000 $\mu\text{W}/\text{cm}^2$ maximum ②	< 0.5 foot-candle (5 lux)	4 inch (10 cm)

<b>Light Source:</b>	3 UV-A LEDs, 1 White Light LED
<b>Lamp Style:</b>	Pistol grip
<b>Lamp Head Diameter:</b>	3.25 in (8.25 cm)
<b>Length:</b>	8.0 in (20.3 cm)
<b>Weight:</b>	1 lb (454 g)
<b>White Light LED Intensity:</b>	400 foot-candles (4,306 lux)
<b>Power Requirements:</b>	
<b>AC Lamp</b> (TRI-365DB, TRI-365DBB, TRI-365HB)	120VAC*
<b>AC/DC Lamp</b> (TRI-365MDB, TRI-365MDBB, TRI-365MHB)	120VAC*/12VDC
<b>Battery Pack:</b>	
<b>Type</b>	12V, NiMH (rechargeable)
<b>Run Time</b>	3.5 hours (continuous)
<b>Charge Time</b>	2 hours

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

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

② To address aerospace industry concerns



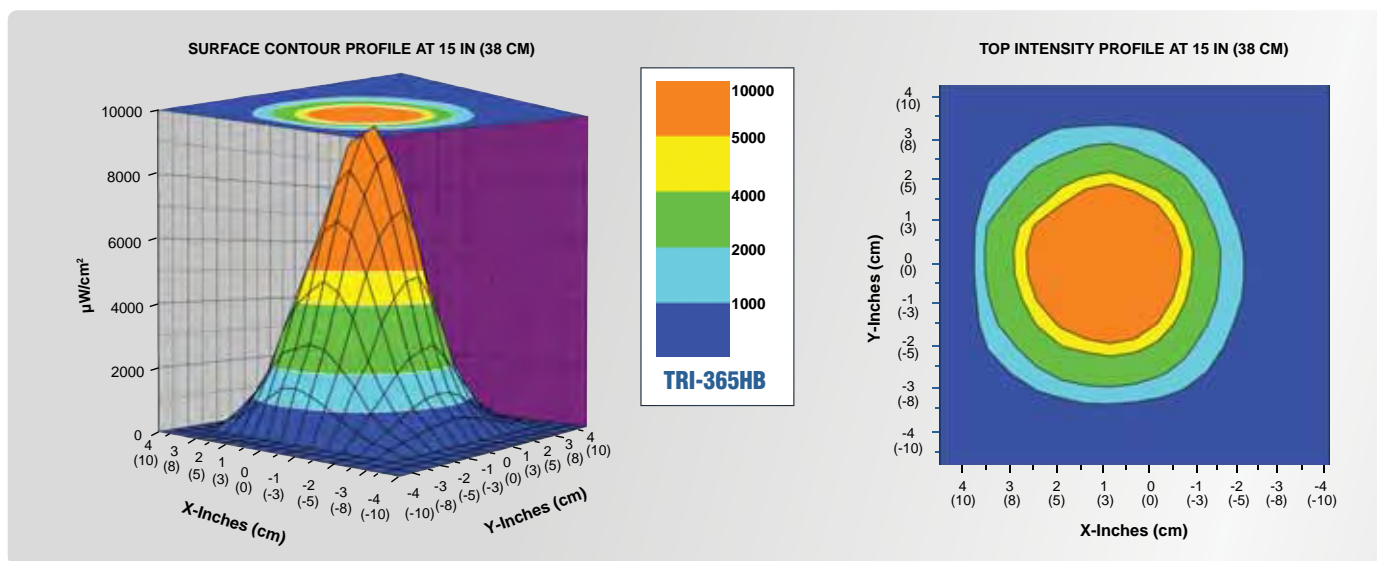
#### Replacement Parts & Accessories

<b>129141</b>	Standard, 8 foot (2.4 m) AC power cord
<b>129145</b>	Extra-long, 20 foot (6.1 m) AC power cord
<b>129162</b>	3.5 foot (1.1 m) DC power cord for "M" series lamps
<b>127933</b>	Particulate filter assembly
<b>127955</b>	Standard faceplate
<b>128196</b>	Faceplate with integral black light filters
<b>BP-30</b>	Battery pack with 12V rechargeable NiMH battery
<b>BR-150A</b>	Smart AC charger
<b>CC-370A</b>	Soft carrying case
<b>FP-365</b>	Rubber bumper with Borofloat® glass
<b>PSA-250A</b>	AC/DC power supply adapter for "M" series lamps
<b>PS-200A</b>	Industrial power supply. Primary cord: 8 feet (2.4 m); secondary cord: 20 feet (6.1 m).
<b>PS-300A</b>	In-line power supply. Primary cord: 8 feet (2.4 m); secondary cord: 8 feet (2.4 m).
<b>UL-100</b>	UV-A Lens
<b>UVS-30</b>	UV-absorbing spectacles

## HIGH-INTENSITY MODEL UV-A BEAM PROFILE

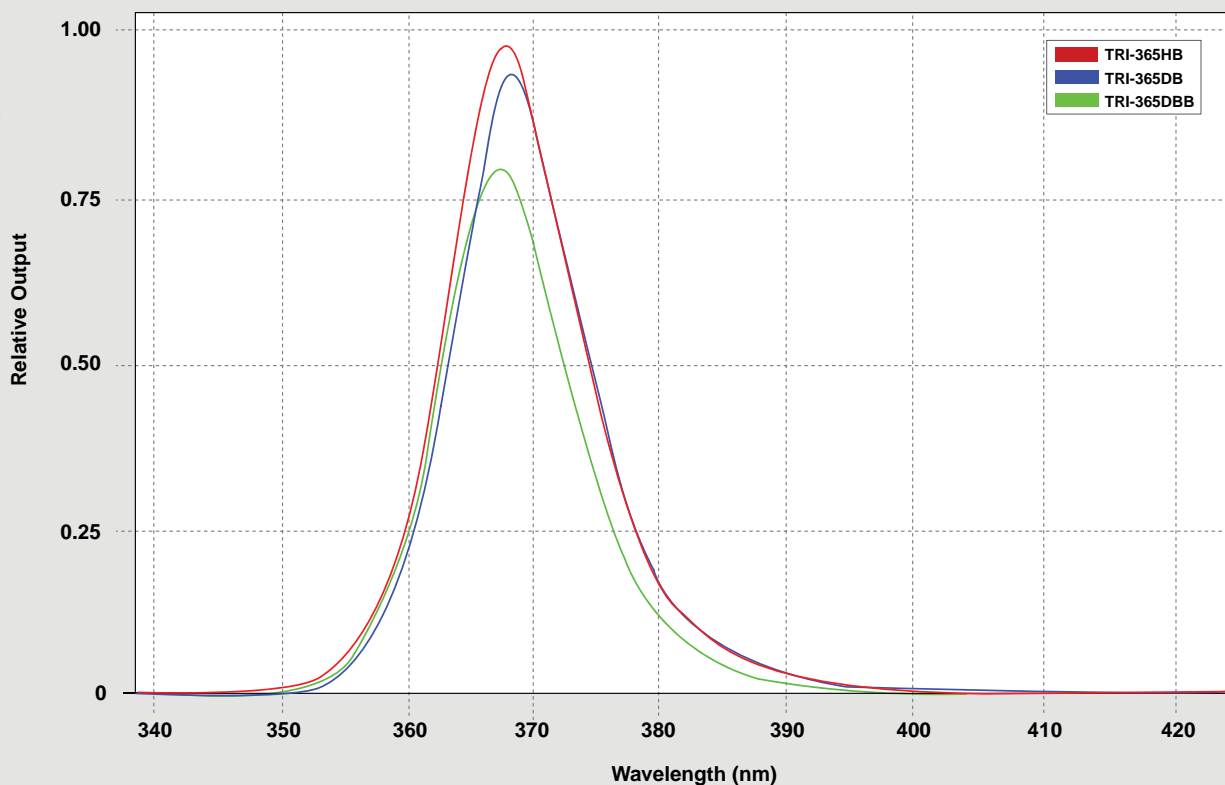
The **TRITAN™ 365** lamp is available in a **high-intensity** model specifically designed for NDT inspection applications requiring high UV-A output.

The **TRI-365HB** comes equipped with a clear glass filter and is “tuned” to provide a nominal steady-state UV-A intensity of **9,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).



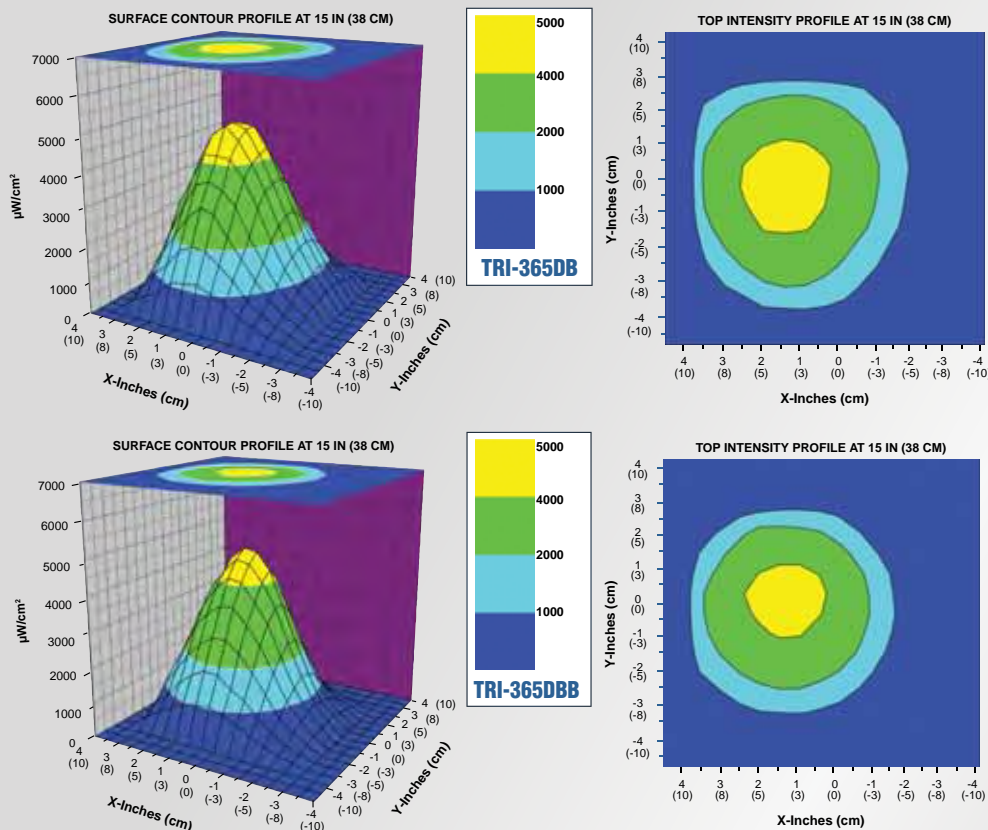
## NORMALIZED UV IRRADIANCE

Typical wavelength output profile of TRITAN™ 365 Series with and without integral black light filters.



# STANDARD-INTENSITY MODELS

## UV-A BEAM PROFILES

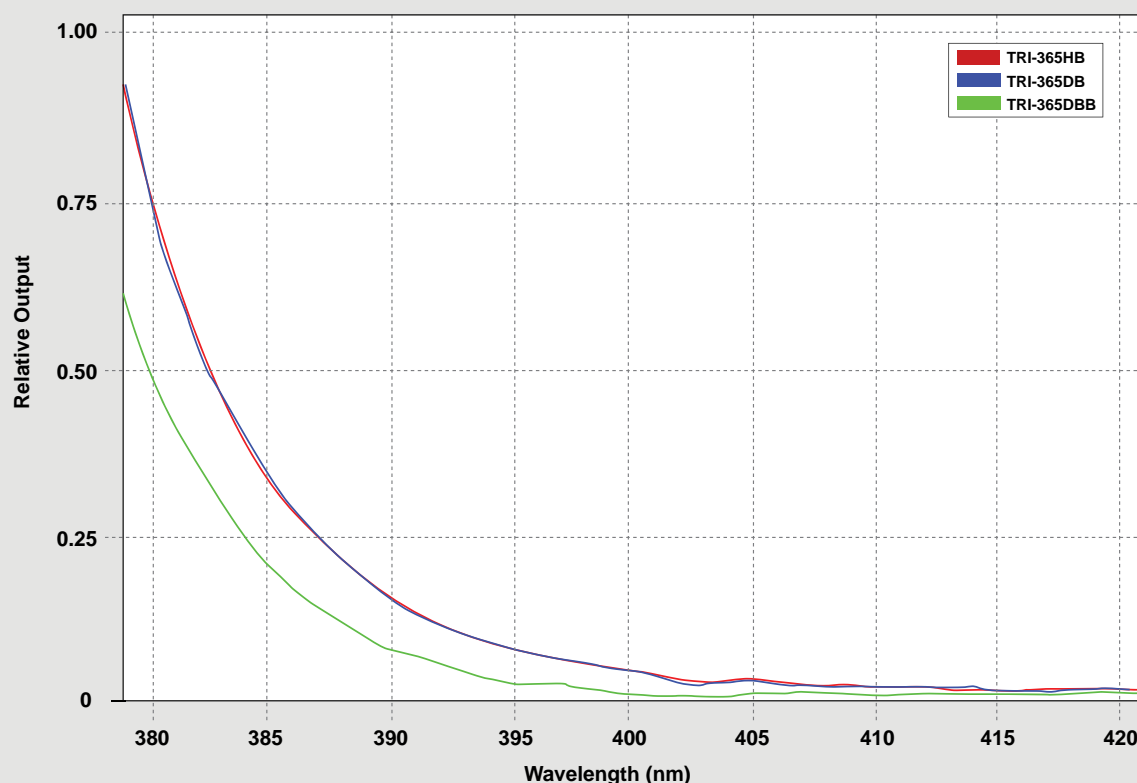


The **TRITAN™ 365** lamp is also available in two **standard-intensity** models that are designed for inspection applications requiring limited UV-A output.

The **TRI-365DB** is fitted with a clear glass filter. The **TRI-365DBB** is equipped with a faceplate with integral black light filters that cover each of the LEDs and reduce the output of wavelengths longer than 400 nm. This addresses aerospace industry concerns.

Both versions are “tuned” to ensure that they provide a maximum steady-state UV-A intensity of less than 5,000  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm).

## SELECT WAVELENGTHS WITH AND WITHOUT BLACK LIGHT FILTER



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



# TRI-365SBLC

## TRITAN™ 365 UV-A Inspection Lamp

### Key Features:

- ▶ Nominal steady-state UV-A intensity of less than  $5,000 \mu W/cm^2$  at 15 inches (38 cm).
- ▶ Large 4 inch (10 cm) diameter coverage area at 15 inches (38 cm), with a minimum UV-A intensity of  $2,500 \mu W/cm^2$ .
- ▶ Low visible light emission—less than 0.5 foot-candle (5 lux).
- ▶ Long-lasting UV-A lenses reduce the rate of solarization.
- ▶ Thermal cut-off circuitry prevents lamp from going out of compliance when internal temperature exceeds specifications.
- ▶ Certificate of compliance and **full serialized validation report** for both output and wavelength measurements supplied with each lamp.

**LONG-LASTING  
UV-A LENSES**  
reduce the rate of  
solarization

**RUBBER BUMPER**  
with Borofloat® glass lens  
protects LEDs from damage

**BUILT-IN FANS**  
maintain optimum  
light output

Faceplate with  
**INTEGRAL  
BLACK LIGHT  
FILTERS**

**EASY CONTROL**  
Grip-mounted,  
three-way rocker switch  
(white light/off/UV)

**THERMAL CUT-OFF CIRCUITRY**  
prevents lamp from going out of compliance  
when internal temperature exceeds  
specifications

**TWO CORD CHOICES!**  
Standard or Extra-Long  
with AC plug and rubber boot

# TRI-365

- Faceplate with integral blacklight filters reduce output of wavelengths longer than 400 nm.
- White light LED allows for scanning of surface flaws or illuminating dark work spaces.
- Grip-mounted, three-way rocker switch (white light/off/UV) for easy control of light sources.
- Built-in fans keep LEDs cool to maintain optimum light output during extended use.
- 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.
- Meets ASTM UV-A intensity and wavelength specifications for LPT and MPT.
- UV-absorbing spectacles and soft carrying case included.

Model	Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ①	Visible light measurement	Diameter of UV-A coverage area at 15 inches (38 cm)
TRI-365SBLC	< 5,000 $\mu\text{W}/\text{cm}^2$ maximum	< 0.5 foot-candle (5 lux)	4 inch (10 cm)

**Light Source:** 3 UV-A LEDs, 1 White Light LED  
**Lamp Style:** Pistol grip  
**Lamp Head Diameter:** 3.25 in (8.25 cm)  
**Length:** 8.0 in (20.3 cm)  
**Weight:** 1 lb (454 g)  
**White Light LED Intensity:** 400 foot-candles (4,306 lux)  
**Power Requirements:** 120VAC\* Power Cord

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

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



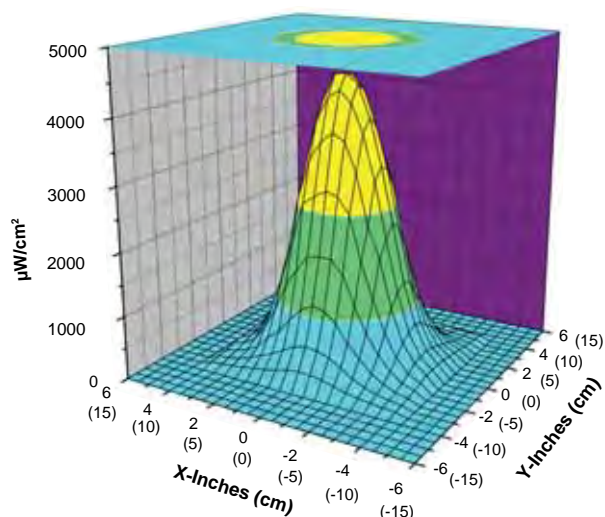
FULL SERIALIZED  
VALIDATION REPORT



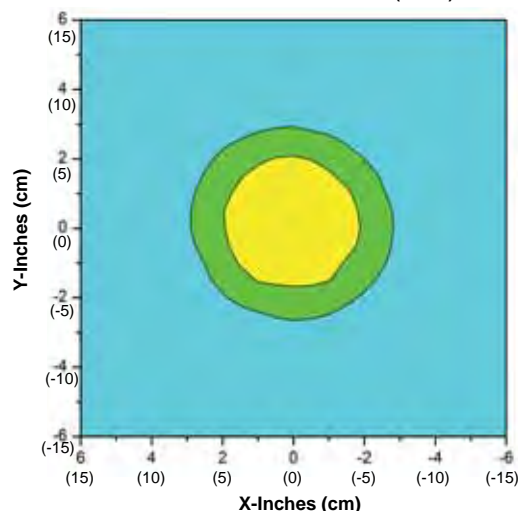
CERTIFICATE OF  
COMPLIANCE

## UV-A BEAM PROFILE

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)



TOP INTENSITY PROFILE AT 15 IN (38 CM)



## QDR-365 Series

# QUADRAN™ 365

**Versatile, Dual-Intensity, Multi-LED,  
Broad-Beam NDT Inspection 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 in-line and hand-held applications. Models are available either with or without integral black light filters to meet your specific inspection requirements.



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

- 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 Spectrolite® 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).
- UV-absorbing spectacles and soft carrying case included





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



Model	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)
<b>QDR-365A</b> Standard Intensity, with clear filter	4,500 µW/cm² maximum	< 1 foot-candle (11 lux)	5 in (13 cm)
High Intensity, with clear filter	8,000 µW/cm²	< 2 foot-candles (22 lux)	6 in (15 cm)
<b>QDR-365BLA</b> Standard Intensity, with integral black light filters	4,500 µW/cm² maximum	< 0.5 foot-candle (5 lux)	4 in (10 cm)
High Intensity, with integral black light filters	7,000 µW/cm²	< 1 foot-candle (11 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-365A, QDR-365BLA) 120VAC\* power cord supplied with lamp  
**AC/DC Lamp**  
(QDR-365MA, QDR-365MBLA) 120VAC\*/12VDC  
**Battery Pack:**  
Type 12V, NiMH (rechargeable)  
**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



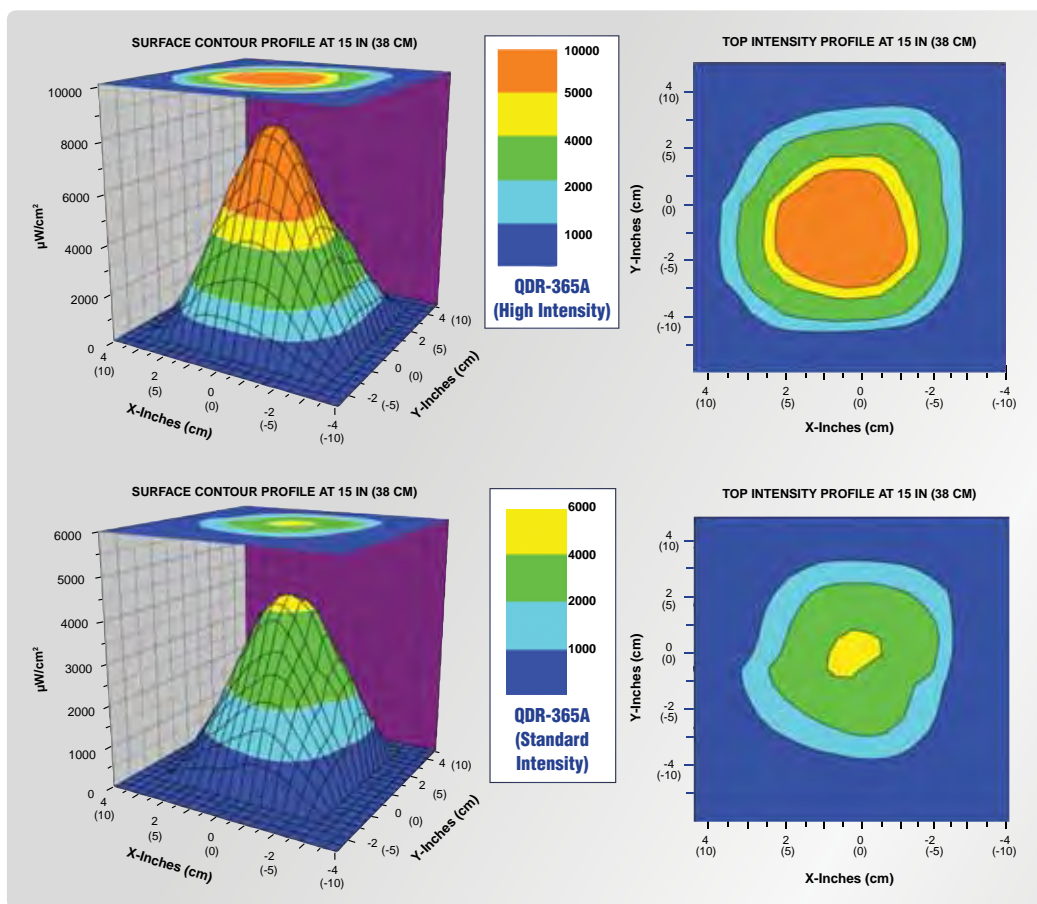
#### Also Available:

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

When the **QDR-365A** 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).

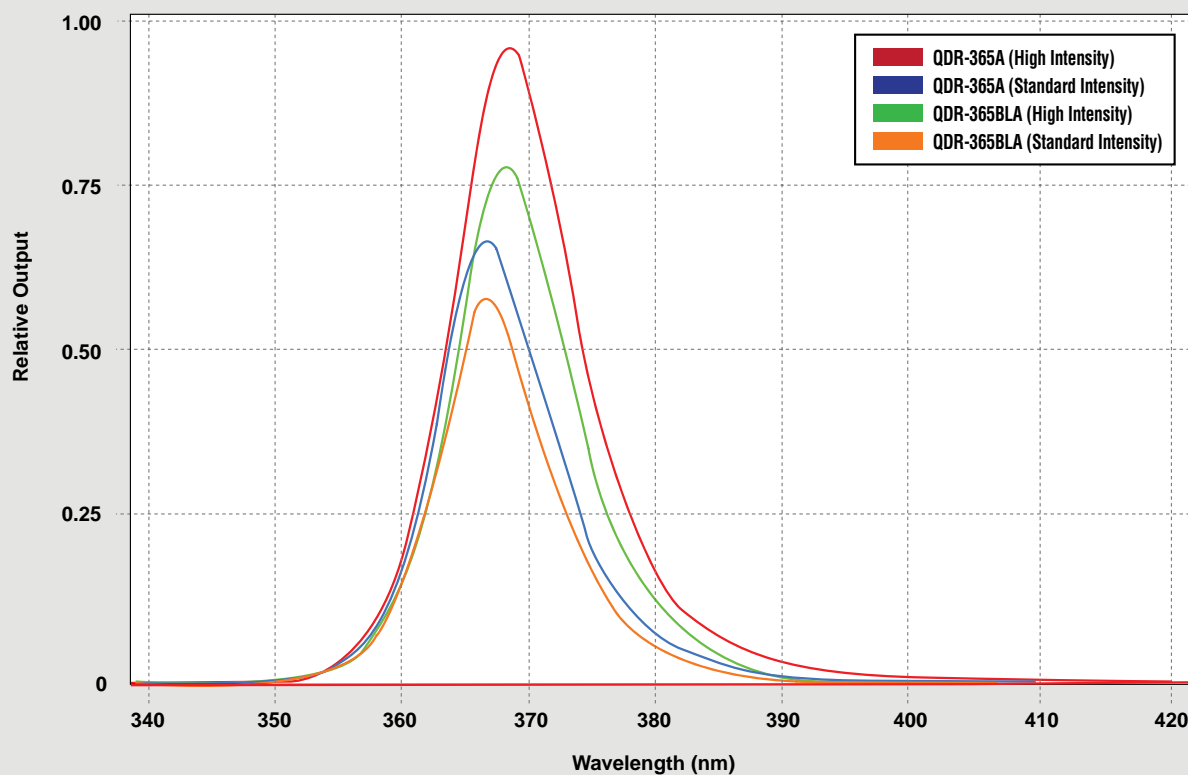
When switched to the **standard intensity** mode, the **QDR-365A** provides a nominal steady-state UV-A intensity of  **$4,500 \mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).

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



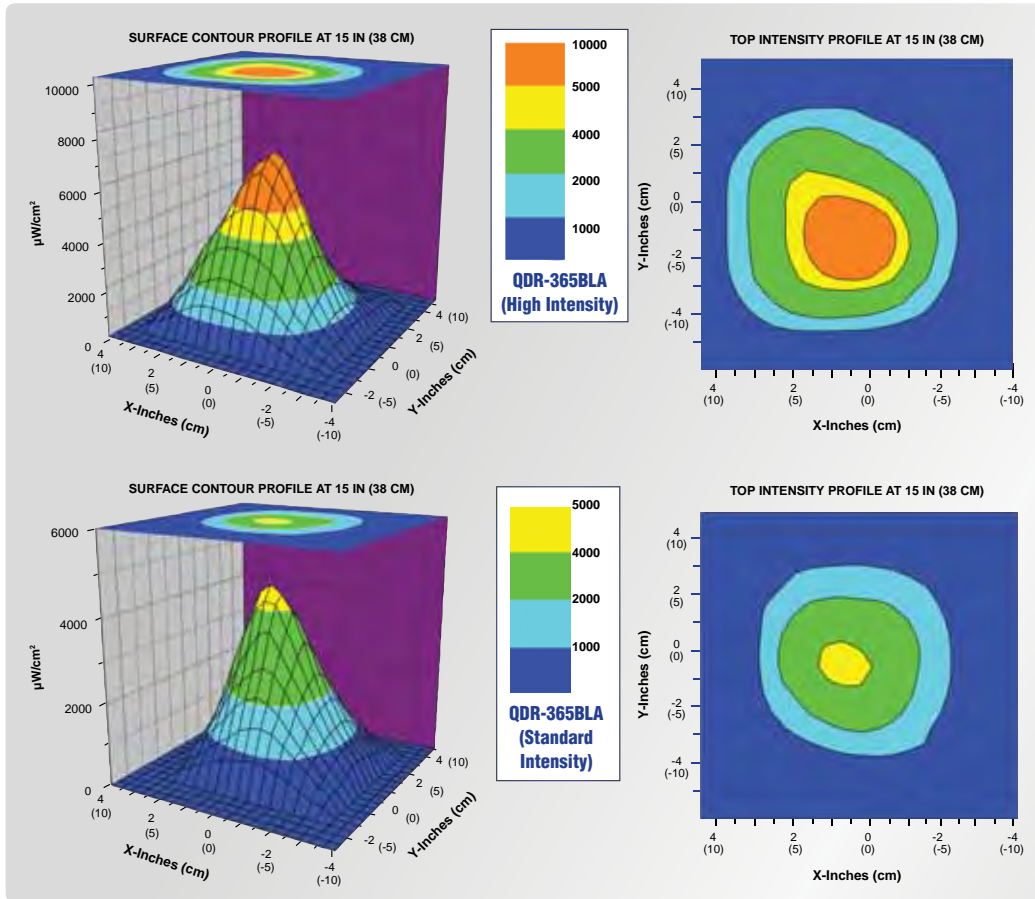
## NORMALIZED UV IRRADIANCE

Typical wavelength output profile of QUADRAN™ 365 with and without integral black light filters, with peak at 365 nm.



# QDR-365BLA MODELS

## UV-A BEAM PROFILES

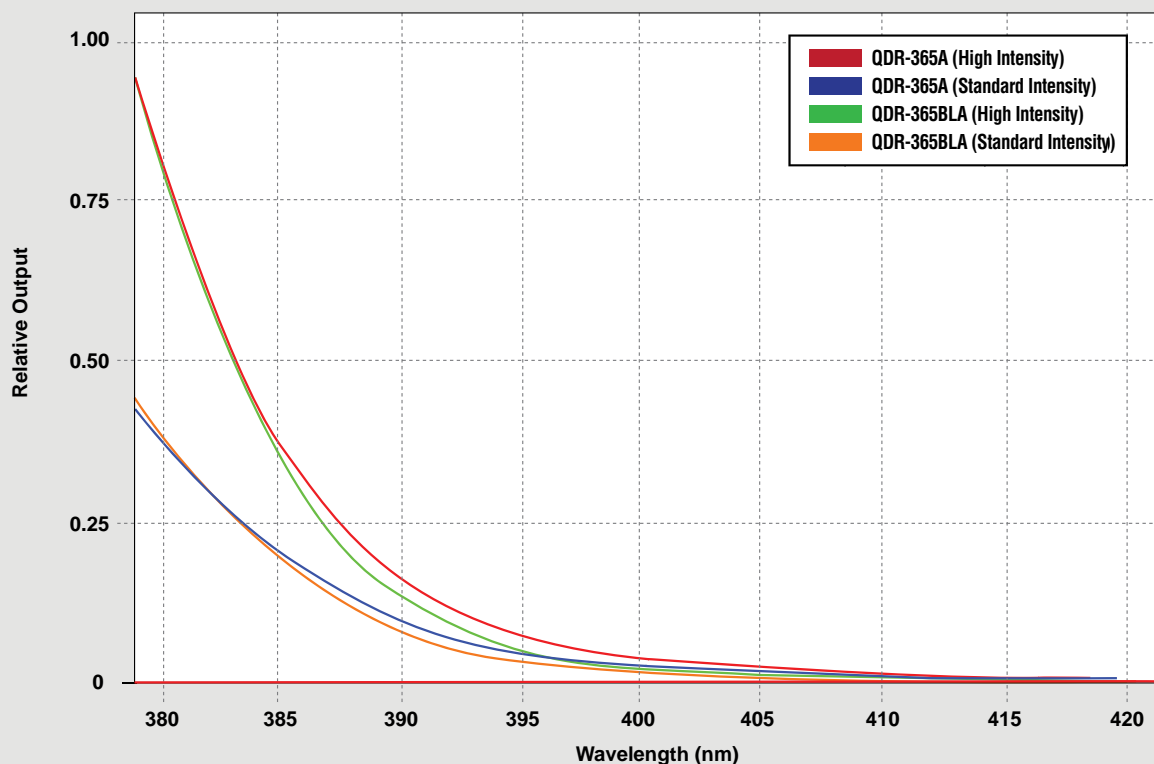


The **QDR-365BLA** is equipped with integral black light filters that reduce the output of wavelengths longer than 400 nm. When in the **high intensity** mode, the lamp provides a nominal steady-state UV-A intensity of **7,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).

When switched to the **standard intensity** mode, the **QDR-365BLA** 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.

## SELECT 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.

## QDR-365 S-Series

# QUADRAN™ 365

### Powerful, Multi-LED, Broad-Beam NDT Inspection Lamps!

Feature four ultra-hi-flux UV-A LEDs plus a convenient white light LED to quickly switch between fluorescent inspection and flaw location. For increased flexibility, a unique dual-intensity feature provides high/low white light output control.

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

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



- Choice of two models, both with a maximum standard UV-A intensity of **4,500  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm)
- Extremely large coverage area of up to 5 inches (13 cm), with a minimum UV-A intensity of **2,000  $\mu\text{W}/\text{cm}^2$**
- Low visible light emission — less than 1 foot-candle (11 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
- Long-lasting UV-A lenses reduce the rate of solarization
- 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 Spectrolite® 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).
- Meets ASTM UV-A intensity and wavelength specifications for LPT and MPT
- **Certificate of compliance** for both wavelength and output measurements supplied with every lamp
- UV-absorbing spectacles and soft carrying case included





QUADRAN™ 365 S-Series faceplate shown with (top) and without (bottom) integral black light filters.



Model	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-365SA	4,500 µW/cm² maximum ②	< 1 foot-candle (11 lux)	5 in (13 cm)
QDR-365SBLA With integral black light filters	4,500 µW/cm² maximum ②	< 0.5 foot-candle (5 lux)	4 in (10 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-365SA, QDR-365SBLA) 120VAC\* power cord supplied with lamp

**AC/DC Lamp**  
 (QDR-365MSA, QDR-365MSBLA) 120VAC\*/12VDC

**Battery Pack:**  
**Type** 12V, NiMH (rechargeable)  
**Run Time** 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 Spectroline® AccuMAX™ Series meter, and are factory set to the values shown

② To address aerospace industry concerns



**Also Available:**

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

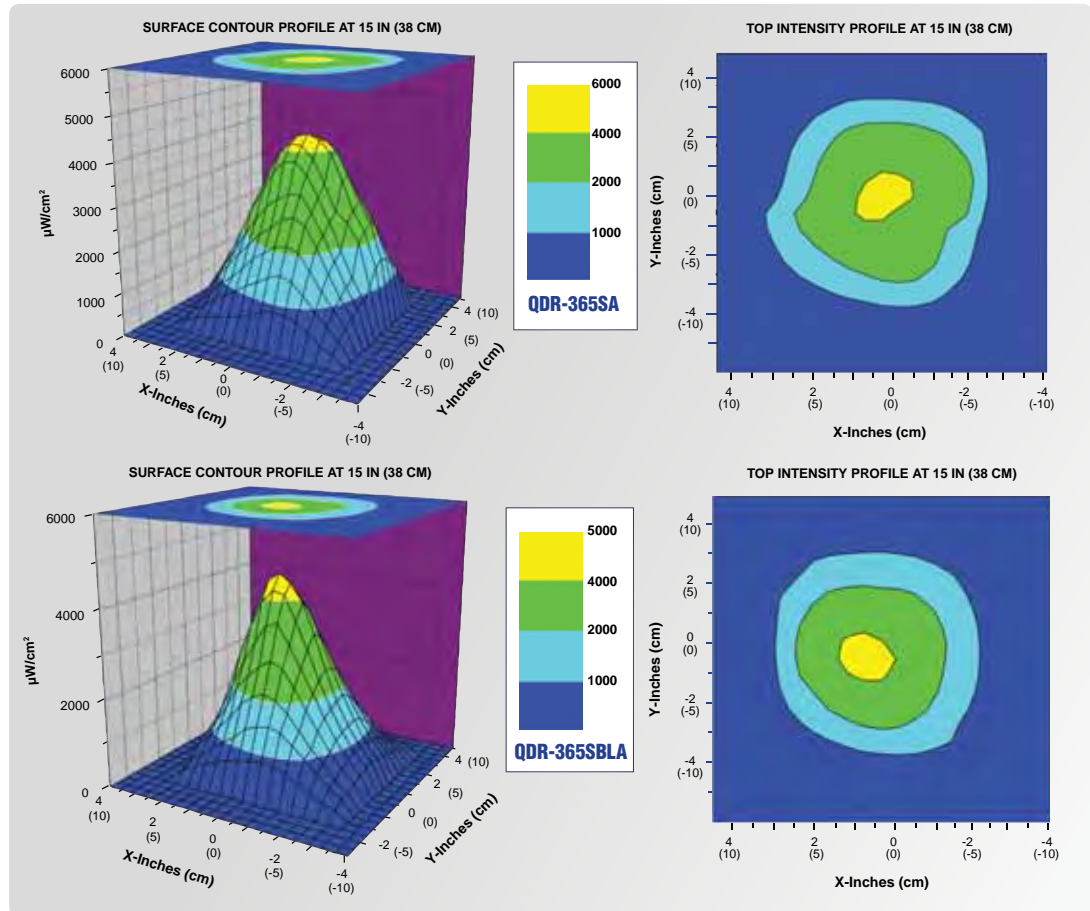
## UV-A BEAM PROFILES

**QUADRAN™ 365 S-Series** lamps are available in two models (**QDR-365SA** and **QDR-365SBLA**).

Both are designed for NDT inspection applications requiring limited UV-A output. The **QDR-365SA** comes with a standard faceplate. The **QDR-365SBLA** is equipped with a faceplate containing integral black light filters that reduce the output of wavelengths longer than 400 nm.

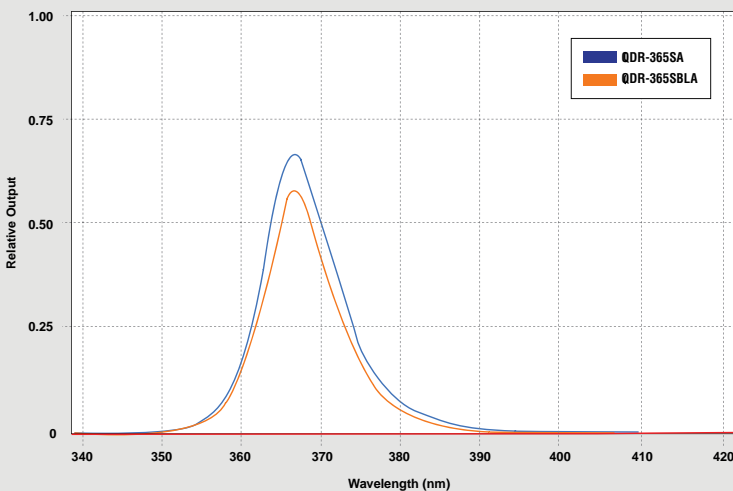
Both lamps are “tuned” to provide a nominal steady-state UV-A intensity of **4,500  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm). This addresses aerospace industry concerns.

In addition, both lamps have a high/low switch to control the white light LED output.



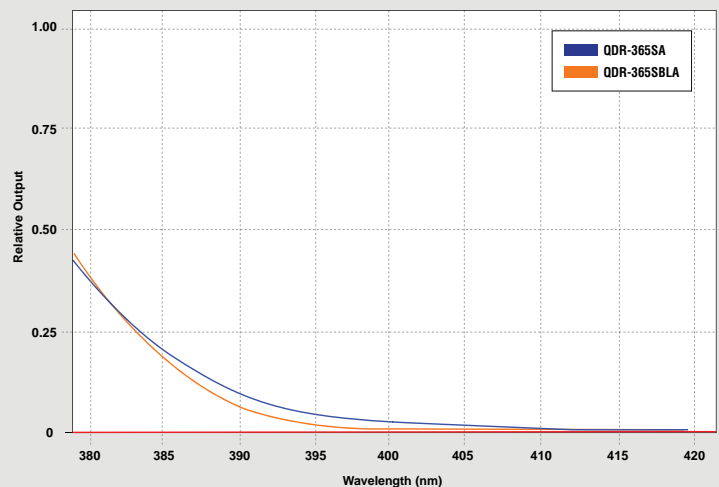
## NORMALIZED UV IRRADIANCE

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



## SELECT WAVELENGTHS WITH AND WITHOUT BLACK LIGHT FILTER

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



**All QUADRAN™ 365 S-Series lamps are ideal for performing both in-line and hand-held inspections!**

Each lamp can easily be attached to a variety of Spectroline® mounting accessories, as well as to our optional in-line power supplies.



QUADRAN™ 365 lamp shown with optional PS-200A (left) and PS-300A (right) power supplies.

#### Replacement Parts & Accessories for the QDR-365 & QDR-365 S-Series

<b>129141</b>	Standard, 8 foot (2.4 m) AC power cord
<b>129145</b>	Extra-long, 20 foot (6.1 m) AC power cord
<b>129162</b>	3.5 foot (1.1 m) DC power cord for "M" series lamps
<b>127922</b>	Particulate filter assembly
<b>127944</b>	Standard faceplate
<b>128094</b>	Faceplate with integral black light filters
<b>B-6</b>	Bench mount
<b>BP-30</b>	Battery pack with 12V rechargeable NiMH battery
<b>BR-150A</b>	Smart AC charger
<b>CC-400</b>	Soft carrying case

<b>FA-100</b>	Flexible arm
<b>FP-550</b>	Rubber bumper with Borofloat® glass
<b>PSA-250A</b>	AC/DC power supply adapter for "M" series lamps
<b>PS-200A</b>	Industrial power supply. Primary cord: 8 feet (2.4 m); secondary cord: 20 feet (6.1 m).
<b>PS-300A</b>	In-line power supply. Primary cord: 8 feet (2.4 m); secondary cord: 8 feet (2.4 m).
<b>W-6</b>	Wall mount with pin
<b>WM-100</b>	Wall mounting bracket
<b>UL-100</b>	UV-A Lens
<b>UVS-30</b>	UV-absorbing spectacles

**EK-3000**



**UV-A/White Light LED Inspection Kit**

(U.S. patent: 8,616,722; CN patent ZL201010265212.4)

***Palm-Sized, Cool-Running,  
Hands-Free Light Source!***

**Ideal for fluorescent magnetic particle  
and penetrant testing, mining inspection  
and a variety of other specialized  
applications!**



**Spray and inspect  
in one simple step!**

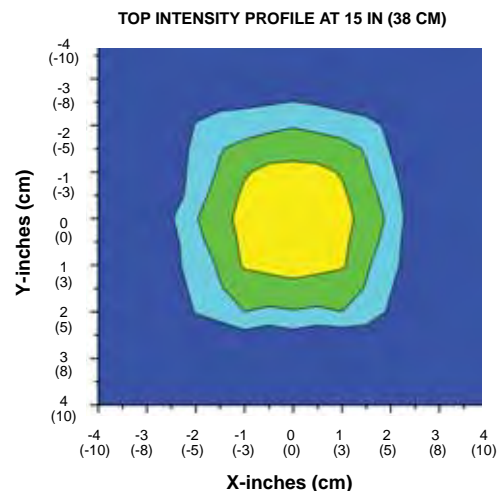
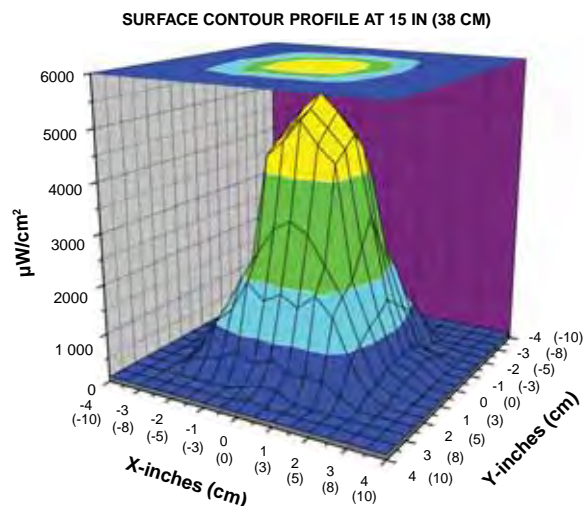
- Compact, lightweight lamp with two ultra-high intensity UV-A (365 nm) LEDs for inspection, plus a three-LED white light assembly for general illumination
- Adjustable strap allows lamp to be worn on a hard hat or directly on the head for hands-free operation
- Unique lamp mount/sprayer attachment permits lamp and spray can to be mounted together for convenient, single-handed fluorescent yoke inspection
- Built-in fan keeps lamp cool to maintain optimum UV-A intensity during extended use
- Long-lasting UV-A lenses reduce the rate of solarization
- Splash guard with integral particulate filter protects UV lenses and cooling fan from damage
- Powered by a rechargeable lithium-ion battery (included). Provides up to 75 minutes of continuous inspection between charges.
- **Certificate of compliance** for both wavelength and output measurements supplied with every lamp





**EK-3000 EagleEye™ Kit** comes with a lanyard, two replacement splash guards with integral particulate filters, two spare batteries, battery charging cradle with AC and DC cord sets, UV-absorbing spectacles and soft carrying case.

## UV-A BEAM PROFILE



## Replacement Parts & Accessories

<b>EE-365</b>	UV-A/white light LED lamp
<b>LMS-100</b>	Lamp mount/sprayer
<b>HS-100</b>	Head strap
<b>SG-100</b>	Splash guard with integral particulate filter (set of three)
<b>128217</b>	Battery charging cradle with AC cord

<b>128225</b>	DC cord set for 128217
<b>127568</b>	Lithium-ion battery (rechargeable)
<b>UL-100</b>	UV-A Lens
<b>UVS-30</b>	UV-absorbing spectacles
<b>CC-370A</b>	Soft carrying case

## LAMP SPECIFICATIONS

**Product Number:**  
EE-365

**Light Sources:**  
2 UV LEDs, 3 white light LEDs

**Dimensions:**  
Length 3.75 in (9.5 cm)  
Width 2.25 in (5.7 cm)  
Height 1.85 in (4.7 cm)

**Weight with Battery:** 8 oz (227 g)

**Power Requirement:**  
One 3.7V 2200mA/Hr lithium-ion battery (rechargeable)

**Run Time:**  
75 minutes (continuous)

**Charge Time:**  
4 hours (two batteries)

**Charging Cradle:**  
Two-battery capability with AC and DC cord sets.

**Nominal Steady-State UV-A (365 nm) Intensity:**  
6 in (15 cm) — 20,000  $\mu\text{W}/\text{cm}^2$   
15 in (38 cm) — 4,500  $\mu\text{W}/\text{cm}^2$   
24 in (61 cm) — 2,000  $\mu\text{W}/\text{cm}^2$   
36 in (91 cm) — 1,000  $\mu\text{W}/\text{cm}^2$

**NOTE:** All UV-A intensity readings taken with a Spectroline® AccuMAX™ Series meter



## PM-1600 Series

# PowerMAX™ 365

### UV-A LED Panel Flood Lamps *Designed Specifically for NDT Professionals!*

**PowerMAX™ 365 Series** flood lamps feature a panel of 16 powerful UV-A (365 nm) LEDs specially engineered for non-destructive testing applications. These versatile, stationary light sources can be installed overhead or in-line, and can be ganged together to provide an even wider coverage area.

Available in four models to meet your specific inspection needs: high-intensity and standard-intensity versions, each with or without a black light filter. Ideal for NDT inspection booths, fluorescent penetrant and magnetic particle inspection, screening of fluorescent particles, wash station inspection and many other applications requiring maximum uniformity of UV-A coverage over a large area.



- Choice of two high-intensity models with a nominal steady-state UV-A intensity as high as 8,000  $\mu\text{W}/\text{cm}^2$  or two standard-intensity models with a maximum UV-A intensity of 4,500  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm)
- Large coverage area of 15 inches by 6 inches (38 cm x 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)
- Easily mountable for overhead inspection or in-line applications
- Built-in fans keep LEDs cool to maintain optimum light output during extended use
- Customizable — multiple lamp units can be “ganged” together longitudinally or back-to-back for a larger coverage area to meet your specific inspection requirements!
- Both high- and standard-intensity versions available with or without black light filter
- Standard-intensity lamps meet ASTM UV-A intensity and wavelength specifications for LPT and MPT, and come with a **certificate of compliance** for both wavelength and output measurements





For applications requiring extremely large coverage areas, the PowerMAX™ 365 can be quickly ganged together longitudinally (top) or back-to-back (below) using customized, easy-to-install connecting plates and brackets.



Model	Nominal steady-state UV-A (365 nm) intensity at 15 inches (38 cm) ①	Visible light measurement	UV-A coverage area (at minimum 2000 µW/cm²)
<b>PM-1600UVH</b> High intensity, with clear filter	8,000 µW/cm²	< 2 foot-candles (22 lux)	15 in by 6 in (38 cm x 15 cm)
<b>PM-1600BLH</b> High intensity, with black light filter	6,500 µW/cm²	< 1 foot-candle (11 lux)	15 in by 6 in (38 cm x 15 cm)
<b>PM-1600UV</b> Standard intensity, with clear filter	4,500 µW/cm² maximum ②	< 1 foot-candle (11 lux)	15 in by 6 in (38 cm x 15 cm)
<b>PM-1600BL</b> Standard intensity, with black light filter	4,000 µW/cm² maximum ②	< 0.5 foot-candle (5 lux)	15 in by 6 in (38 cm x 15 cm)

**Light Source:** 16 UV-A (365 nm) LEDs

**Lamp Style:** Panel flood lamp

**Dimensions:** 5.5 x 13.75 x 6 in (14 x 35 x 15 cm)  
(W x L x H)

**Weight:** 9 lb (4 kg)

**Power Requirement:** AC power (main AC power cord supplied with the unit)

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

② To address aerospace industry concerns



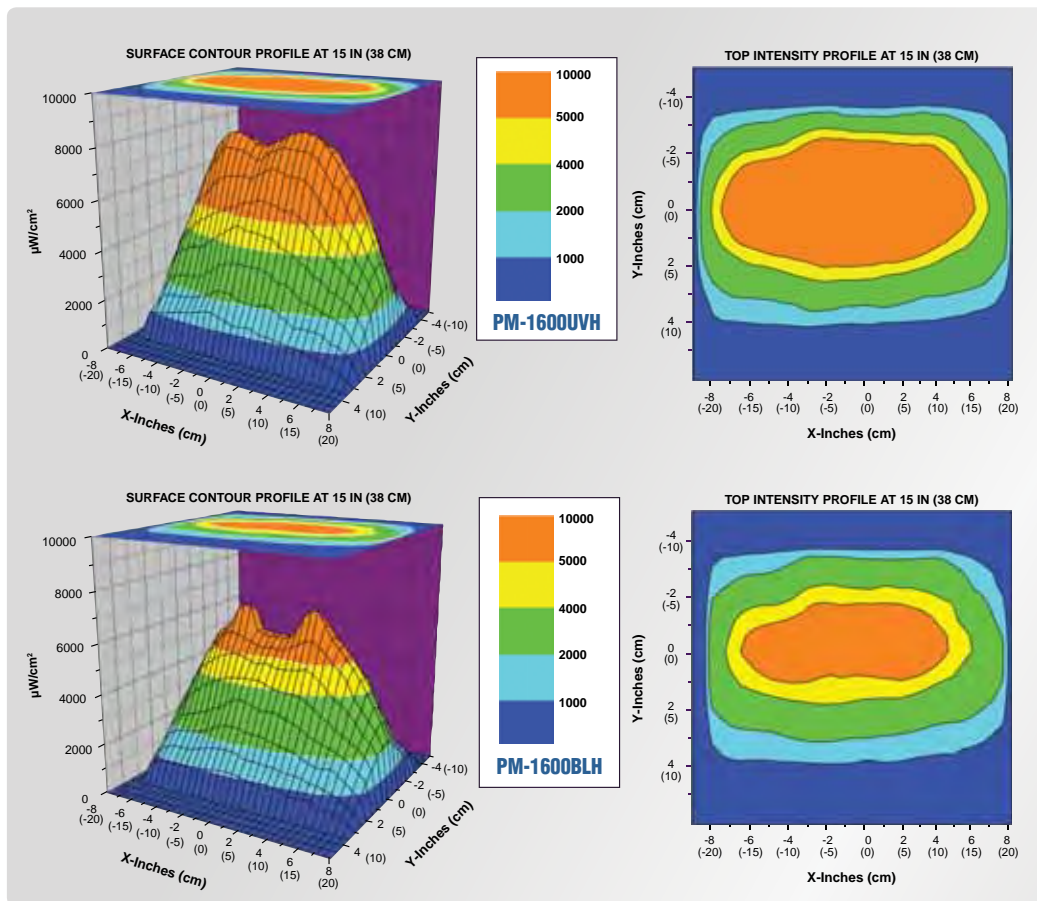
## Replacement Parts & Accessories

128177	AC power cord
BF-365PM	Black light filter assembly
CF-100	Clear glass filter assembly
127918	Particulate air filter
127935	Retainer, LED assembly face plate
CC-200	Connector cable for ganging lamps
CP-100	Top connecting plate for ganging lamps longitudinally
CP-200	Top connecting plate for ganging lamps back-to-back (Two required)
CP-300	Side connecting bracket for ganging lamps longitudinally (Two required)
UL-100	UV-A lens
UVF-80	Face shield, UV-absorbing
UVG-50	Goggles, UV-absorbing
UVS-30	Spectacles, UV-absorbing

**PowerMAX™ 365 Series** UV-A LED panel flood lamps are available in two **high-intensity** models that are specifically designed for NDT inspection applications requiring high UV-A output.

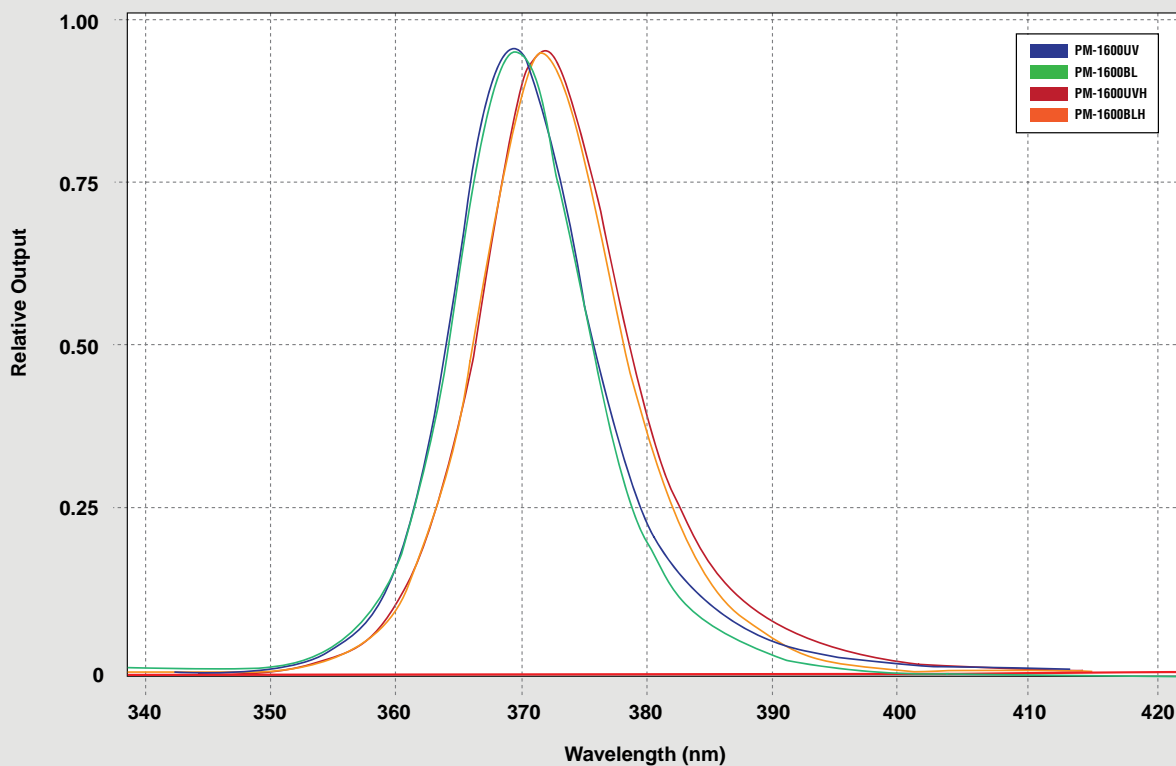
The **PM-1600UVH** is equipped with a clear glass filter and provides a nominal steady-state UV-A intensity of **8,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).

The **PM-1600BLH** is equipped with a black light filter that reduces the output of wavelengths longer than 400 nm. It provides a nominal steady-state UV-A intensity of **6,500  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm).



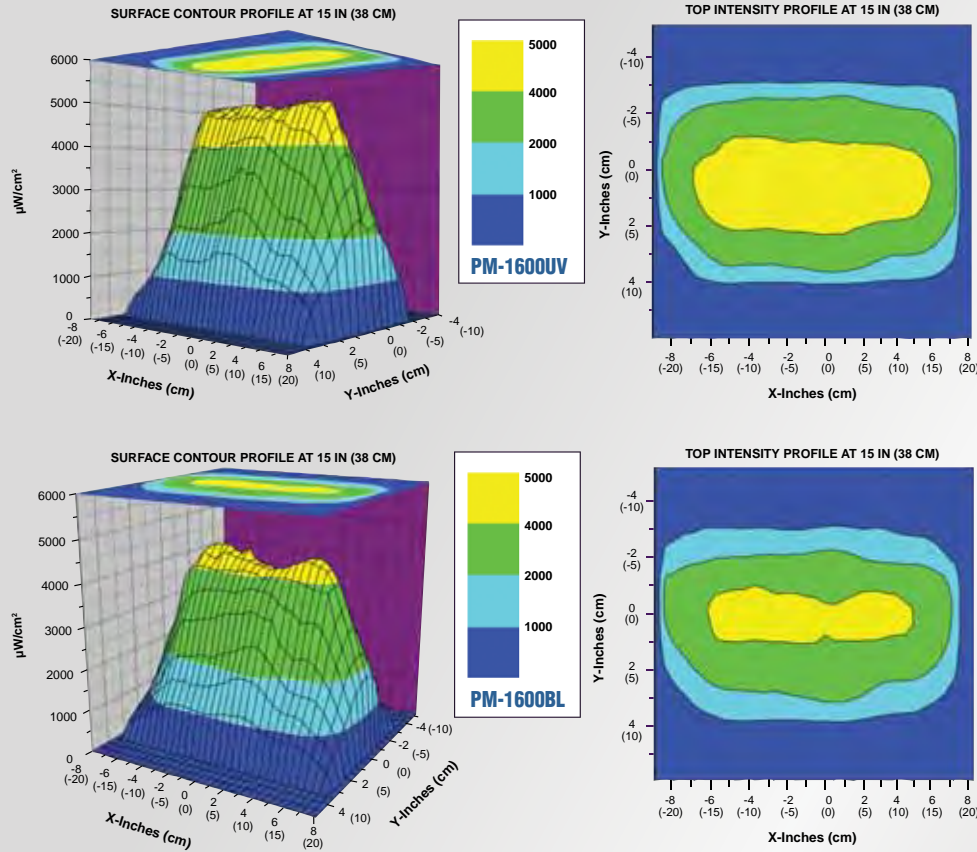
## NORMALIZED UV IRRADIANCE

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



# STANDARD-INTENSITY MODELS

## UV-A BEAM PROFILES



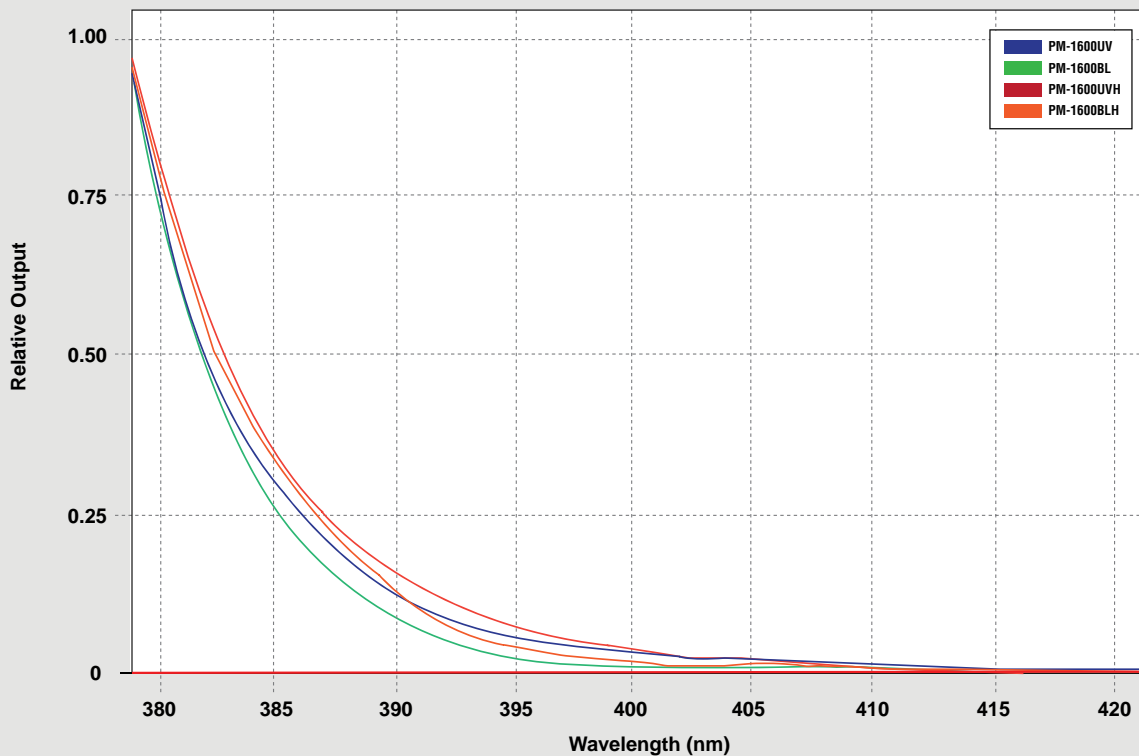
**PowerMAX™ 365 Series UV-A LED panel flood lamps** are also available in two **standard-intensity** models that are designed for NDT inspection applications requiring limited UV-A output.

The **PM-1600UV** is equipped with a clear glass filter and provides a nominal steady-state UV-A intensity of **4,500  $\mu\text{W}/\text{cm}^2$**  (maximum) at 15 inches (38 cm).

The **PM-1600BL** is equipped with a black light filter that reduces the output of wavelengths longer than 400 nm. It provides a nominal steady-state UV-A intensity of **4,000  $\mu\text{W}/\text{cm}^2$**  (maximum) at 15 inches (38 cm). This addresses aerospace industry concerns.

UV-A STATIONARY LAMPS

## SELECT WAVELENGTHS WITH AND WITHOUT BLACK LIGHT FILTER



As the wavelength of the PowerMAX™ 365 moves into the visible light range, the black light filter significantly reduces the output of the lamp at 400 nm.

## UV-400 Series SuperFlood™

### Our Most Powerful UV-A Flood Lamps Designed Specifically for NDT

These super-powerful and versatile lamps have been specially engineered for fluorescent penetrant and magnetic particle inspection, parts degreasing inspections and wash station inspections.

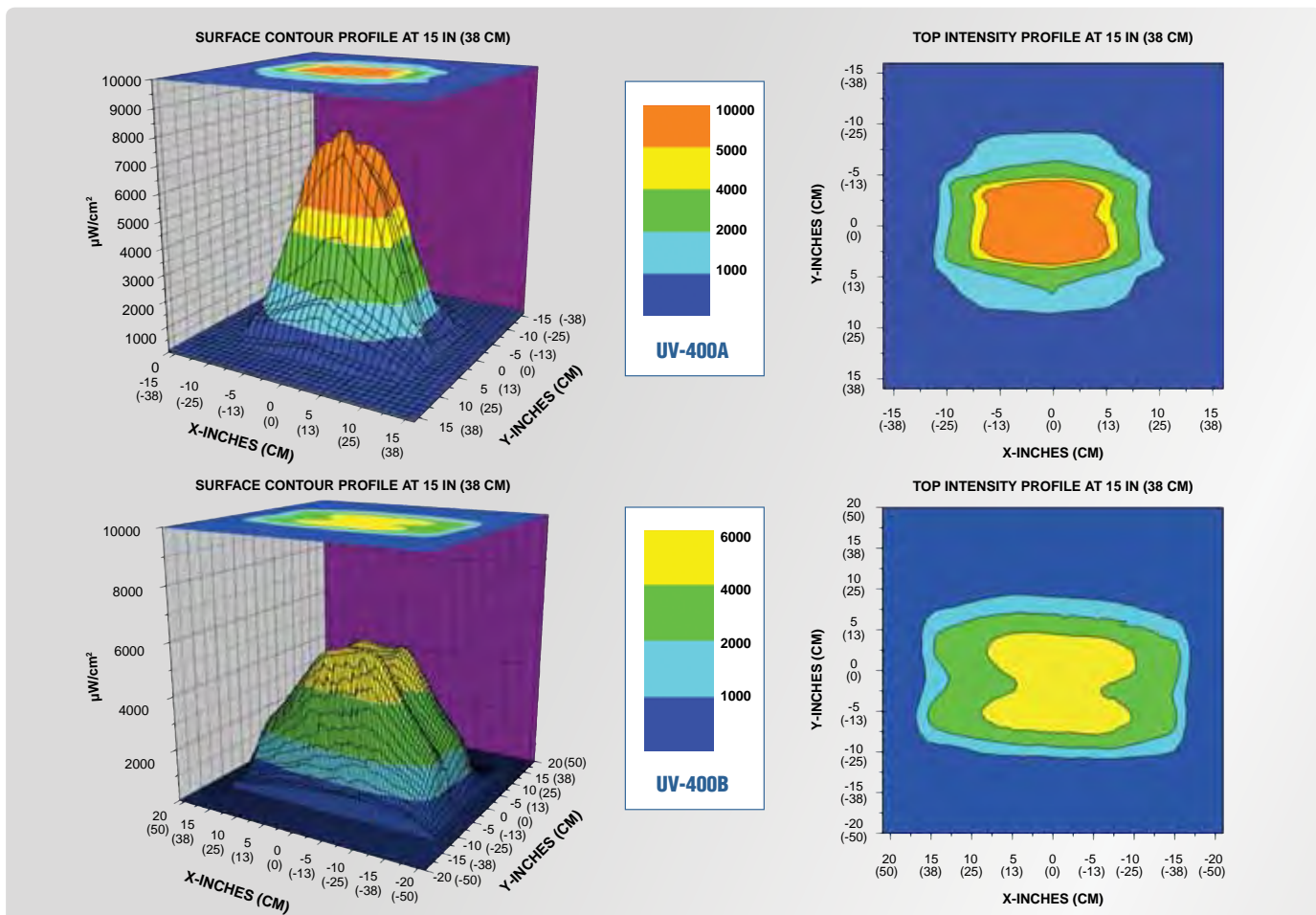
- Powerful, 400-watt metal halide bulb, combined with tempered, heat-resistant low solarization UV filters provide the highest intensity over the largest area
- Unique twin-filter system eliminates hazardous UV-B and UV-C radiation escaping from lamp
- Easily mounts over automated magnetic particle systems or above penetrant inspection booths for the most accurate inspections of even the largest parts
- Compact design and built-in mounting features allow lamps to be positioned anywhere — even in previously inaccessible areas



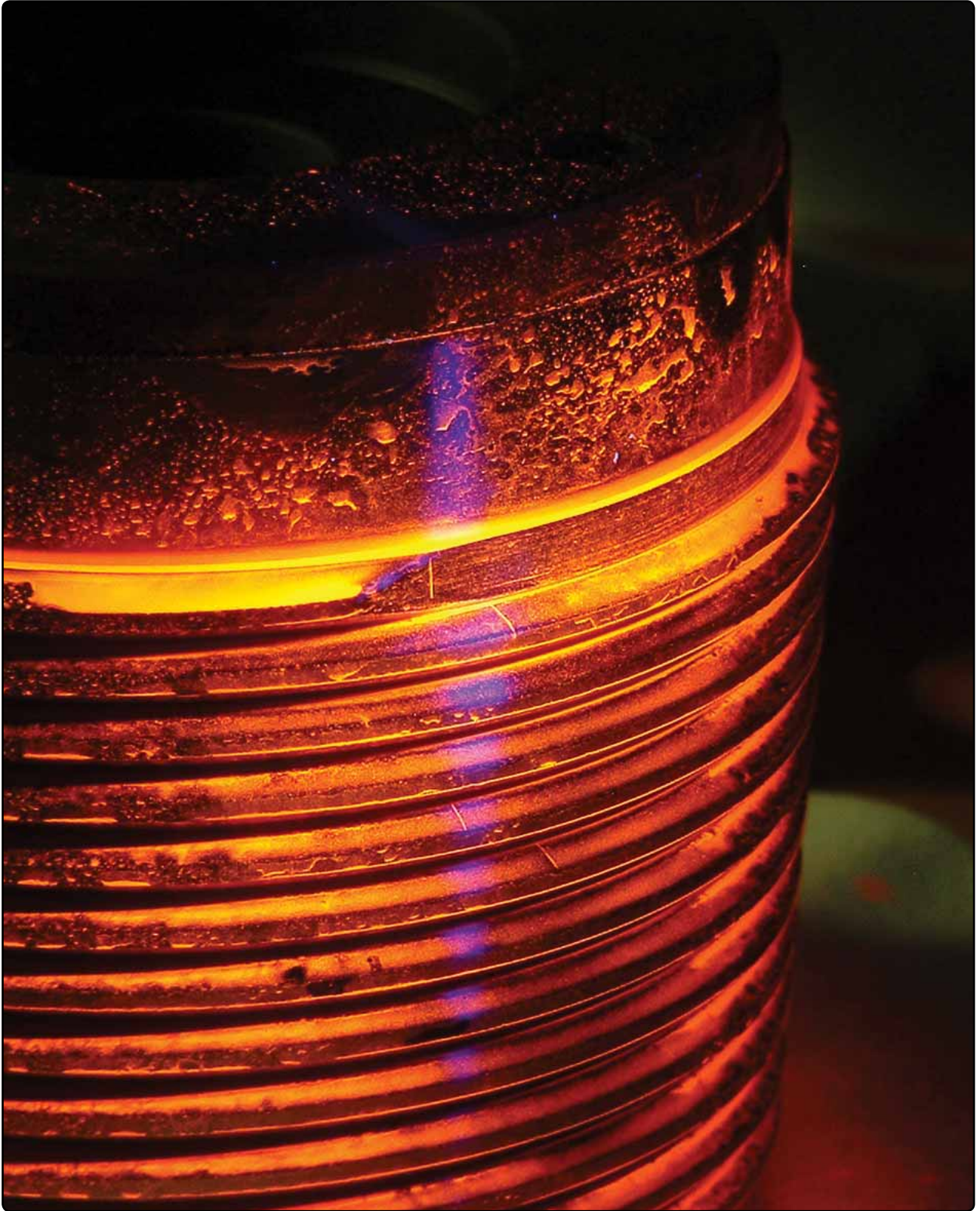
The **UV-400A** features a concentrated-beam reflector designed to assure the highest concentrated UV-A intensity available. It has a peak steady-state UV-A intensity of **8,000  $\mu\text{W}/\text{cm}^2$**  within the lamp's center area, measured at 15 inches (38 cm). The lamp irradiates an area as large as 16" x 10" (41 cm x 25 cm), producing a nominal steady-state UV-A irradiance of not less than **2,000  $\mu\text{W}/\text{cm}^2$** .

The **UV-400B** features a unique broad-beam reflector designed to provide NDT inspectors with maximum uniformity of coverage over the largest area. It has a peak steady-state UV-A intensity of **5,000  $\mu\text{W}/\text{cm}^2$**  within the lamp's center area, measured at 15 inches (38 cm). The lamp irradiates an area as wide as 27" x 15" (69 cm x 38 cm) with unmatched uniformity, producing a nominal steady-state UV-A irradiance of not less than **2,000  $\mu\text{W}/\text{cm}^2$** .

### UV-A BEAM PROFILE



## A weld defect...



Revealed by the MAXIMA™ ML-3500S UV-A inspection lamp using the liquid penetrant method.

## ML-3500 Series MAXIMA™

### Ultra-High Intensity UV-A Lamps

These super-powerful lamps make NDT inspections easier, safer and more reliable. They feature state-of-the-art micro discharge light (MDL) technology with a fatigue-free ergonomic design.

- Powerful, 35 watt high-intensity MDL bulb
- Deliver up to 10 times the UV-A output of conventional HID inspection lamps
- Prefocused at the factory
- Instant on/off/restrike
- Lightweight, solid-state ballast
- Integral bulb/reflector assembly
- Stay-cool, impact-resistant and dent-proof housing
- Battery-operated versions available
- All bulbs feature a rated life of 2,000 hours
- Come complete with both UV-absorbing and fluorescent-enhancing spectacles

#### The MAXIMA™ series consists of three models:

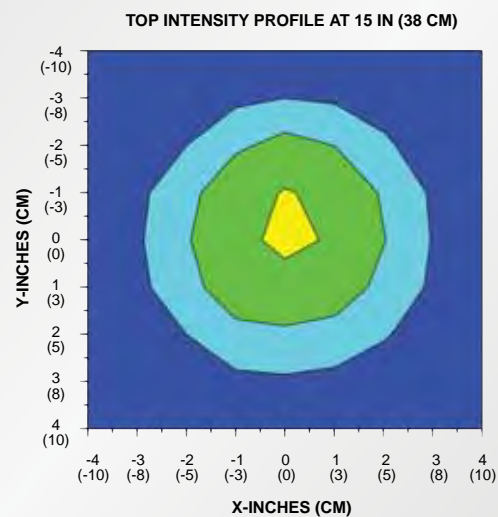
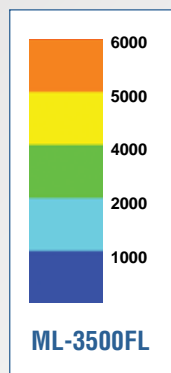
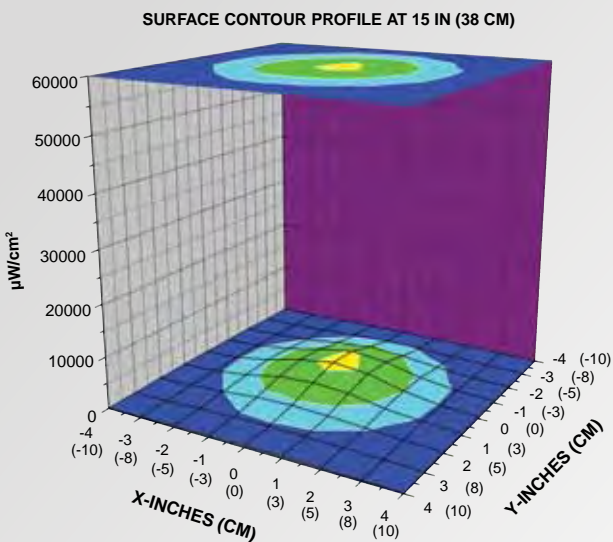
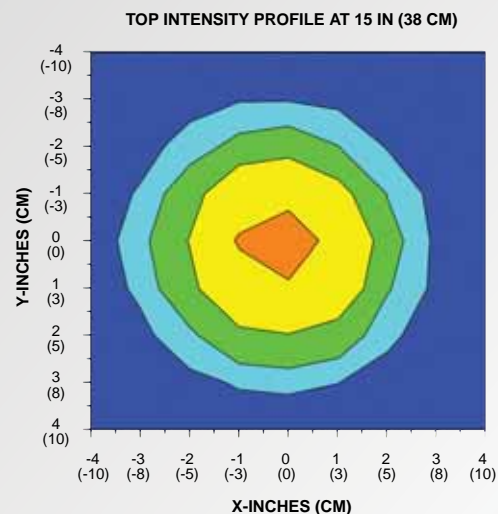
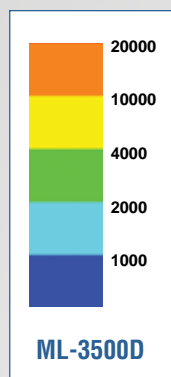
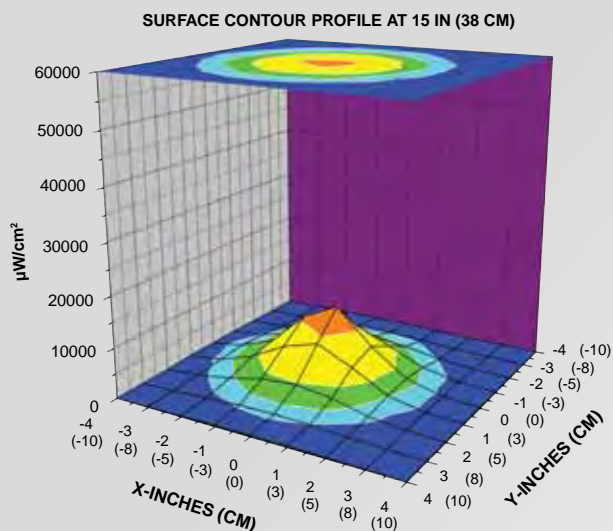
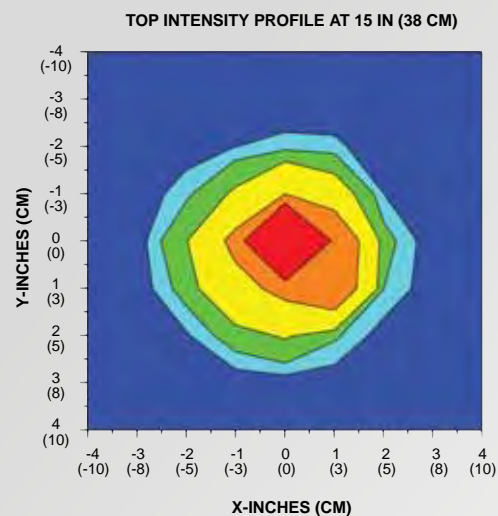
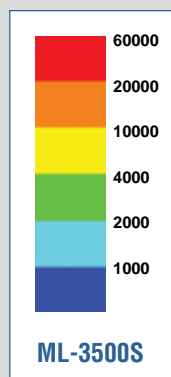
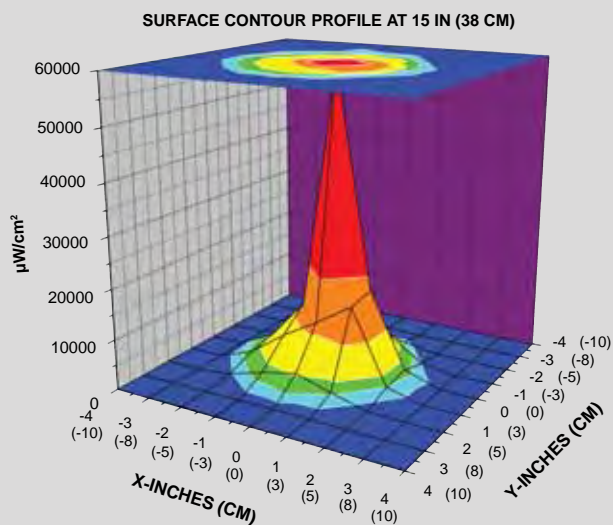
- » The **ML-3500S** with a spot reflector has a nominal steady-state UV-A intensity of 50,000  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm). Works even in direct sunlight!
- » The **ML-3500D** with a spot reflector and diffusing filter has a nominal steady-state UV-A intensity of 14,000  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm).
- » The **ML-3500FL** with a flood reflector has a nominal steady-state UV-A intensity of 4,500  $\mu\text{W}/\text{cm}^2$  at 15 inches (38 cm).

All models come standard with 8 foot (2.4 m) primary and secondary cords. Lamps are also available with extended length primary cords or with a 35 foot (10.7 m) secondary cord housed in a retractable "flying" reel.

In addition, all MAXIMA™ lamps are available in battery-operated "M" versions. Each includes a 12-volt, 7 amp/hr rechargeable battery that will operate the lamp for a full two hours. A battery charger and carrying case are included.



## UV-A BEAM PROFILES



# ONT-365 On-Trak™

Modular Inspection System

*(U.S. and foreign patents pending)*

The **ONT-365 On-Trak™** is an innovative, track light-style modular inspection system. It features four broad-beam lamps, each of which utilizes three powerful, ultra-high-flux UV-A (365 nm) LEDs for inspection plus one white light LED for general illumination. This overhead lighting system allows inspectors to customize lamp beam patterns to suit their individual needs. Two lamp head assemblies can be added, as desired, to increase the coverage area. Perfect for NDT inspection booths, pre-inspections and screening applications requiring maximum uniformity of coverage over large areas.



- Cool-running, energy-efficient LEDs
- Broad-beam profiles provide wide coverage area
- Electronic Intensity Stabilizers ensure consistent LED performance
- Instant-on operation; lamps reach full intensity immediately
- Built-in fans keep LEDs cool to maintain optimum UV-A intensity during extended use
- Long-lasting UV-A lenses reduce the rate of solarization
- Produces less than 2 foot-candles of visible light
- Filter protectors with rubber bumpers and Borofloat® glass lenses prevent damage to LEDs
- Easily customizable! Move, adjust and add up to two lamp heads according to your specific inspection requirements (additional lamp heads sold separately)
- Optional remote control with three-position rocker switch provides added convenience and versatility
- Comes complete with UVS-30 UV-absorbing spectacles





Optional remote control with three-position rocker switch adds convenience and versatility

## LAMP SPECIFICATIONS

**Product Number:**  
ONT-365

**Light Sources:**  
3 UV-A LEDs and 1 white light LED per lamp head

**System dimensions:** (L x W x H)  
28.5 x 18.3 x 11 in (72 x 46 x 28 cm)

**Lamp:**  
Head diameter: 3.25 in (8.3 cm)  
Length: 9.5 in (24 cm)

**Platform Dimensions:** (L x W x H)  
28.5 x 18.3 x 2.5 in (72 x 46 x 6 cm)

**Platform Weight:**  
13 lb (5.9 kg)

**Power Supply Cord:**  
8 ft (2.4 m)

**Power Supply:**  
Input: 100-240 VAC 50/60 Hz  
Output: 12 VDC

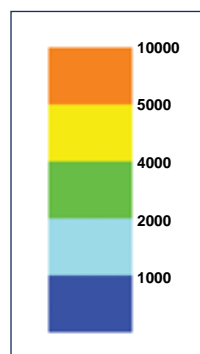
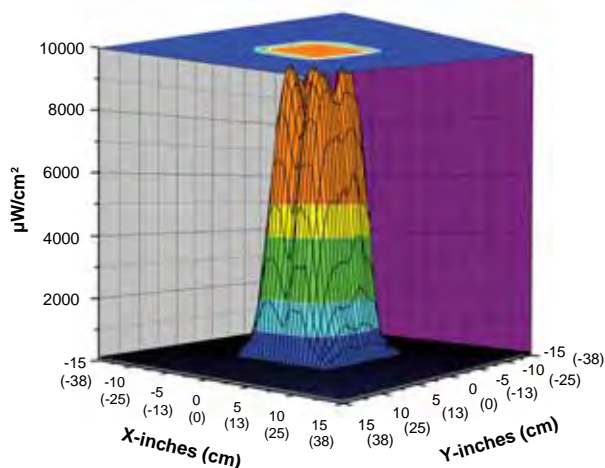
**Nominal Steady-State UV-A (365 nm) Intensity:**  
15 in (38 cm) — 9,000  $\mu\text{W}/\text{cm}^2$

**NOTE:** UV-A intensity reading taken with a Spectroline® AccuMAX™ Series meter

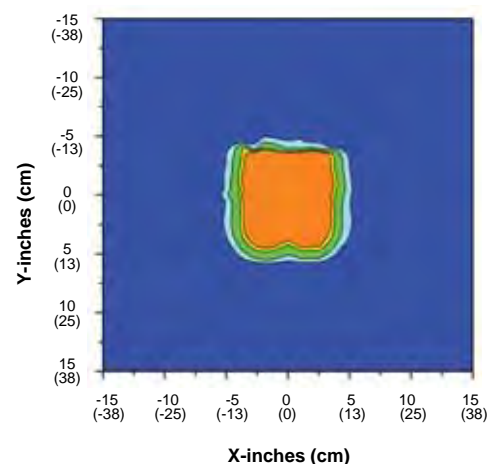
UV-A/WHITE LIGHT LED  
MODULAR INSPECTION SYSTEM

## UV-A BEAM PROFILE

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)



TOP INTENSITY PROFILE AT 15 IN (38 CM)



## Replacement Parts & Accessories

**LA-365** UV-A/white light LED lamp head assembly

**PT-200** Platform and track assembly

**FP-100** Filter protector with rubber bumper and Borofloat® glass lens

**AF-200** Air filter (package of 24)

**PS-100A** Power supply module

**RC-200** AC remote control with 8 foot (2.4 m) cord

**UL-100** UV-A Lens

**UVS-30** Spectacles, UV-absorbing

**UVG-50** Goggles, UV-absorbing

**UVF-80** Face shield, UV-absorbing

## LED Light Sources in Blue Light Wavelengths!

The importance of high-intensity UV-A black lights for proper magnetic particle or penetrant NDT inspection is well established. However, a concern for UV safety has always existed. Our new blue light inspection lamps and modular systems address this concern. While still no substitute for UV-A lamps, blue light does provide the safety and convenience desired for quick pre-inspection or screening of fluorescent particles in operating conditions with ambient light, saving time and limiting the use of black lights to only when necessary.



# OPX-450

## OPTIMAX™ 450 Rechargeable Blue Light LED Flashlight

(U.S. patent no. 5,905,268; foreign patents pending)

This versatile, cordless inspection lamp features a high-intensity, 450 nm blue light LED, a black anodized lamp body and our patented, thin-film dichroic lens to filter out long-wave visible light.

- Nominal steady-state blue light intensity of **7,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm)
- Patented, thin-film dichroic lens improve contrast and fluorescent response
- Electronic Intensity Stabilizer assures consistent performance. Beam strength will not weaken between charges!
- Instant-on operation. Lamp reaches full intensity immediately!
- Lightweight, cordless, ergonomic design eliminates fatigue
- Portable and rugged. Anodized aluminum lamp body minimizes corrosion and stands up to years of heavy use.
- Powered by a rechargeable NiMH battery. Provides 90 minutes of continuous inspection between charges.



OPTIMAX™ 450 comes complete with smart AC and DC chargers, fluorescent-enhancing, yellow spectacles, belt holster and rugged, padded carrying case.

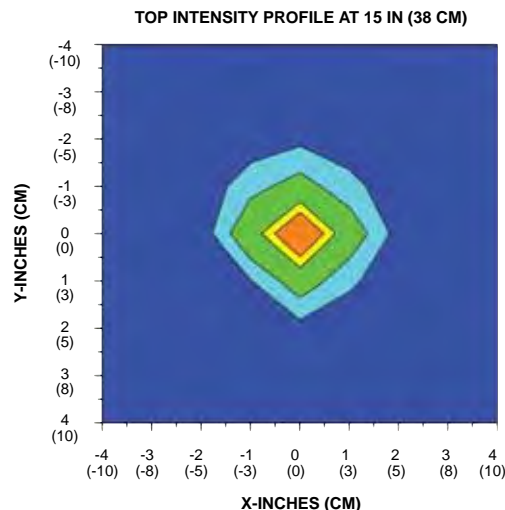
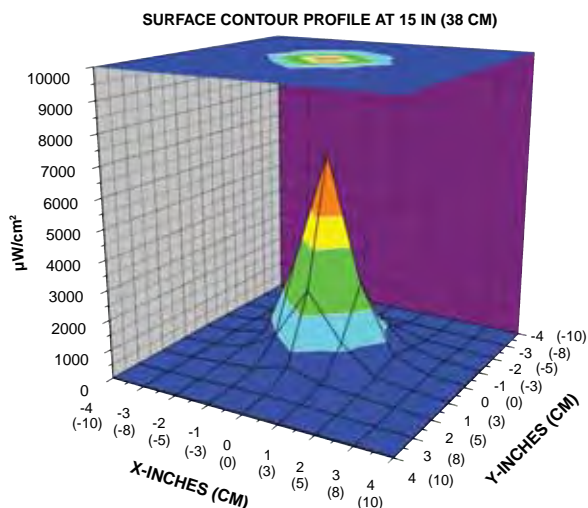
### LAMP SPECIFICATIONS

Style	Cordless flashlight
Lamp Head Diameter	2.0 inch (5.1 cm)
Length	8.0 inch (20.3 cm)
Weight (with Battery)	11.8 oz (335 g)
Power Requirement	3.6V, 2 AH NiMH internal battery stick (rechargeable)
Run Time	90 minutes (continuous)
Charge Time	4 hours



BLUE LIGHT LED INSPECTION LAMPS

### BLUE LIGHT BEAM PROFILE



## TRI-450B Series

### TRITAN™ 450 Multi-LED, Broad-Beam Blue Light Lamp

*(U.S. patent no. 5,905,268; foreign patents pending)*

Feature three cool-running, ultra-high flux 450 nm blue light LEDs with a broad-beam configuration. This powerful lamp provides a wider coverage area than conventional inspection lamps, while its compact head design allows access into areas inaccessible to larger inspection lamps. Ideal for most non-destructive testing applications.



- Nominal steady-state blue light intensity of  $9,500 \mu\text{W}/\text{cm}^2$  at 15 inches (38 cm)
- Large 5 inch (13 cm) diameter coverage area at 15 inches (38 cm) with a minimum intensity of  $2,000 \mu\text{W}/\text{cm}^2$
- Rubber bumper with patented thin-film dichroic lens filters out long-wave visible light
- Electronic Intensity Stabilizer ensures consistent LED performance
- Built-in fans keep LEDs cool to maintain optimum light output during extended use
- Instant-on operation. Lamp reaches full intensity immediately!
- Rugged, ergonomic, angled lamp body provides safe, fatigue-free handling
- 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 in-line power supply or industrial power supply with cord sets (sold separately).
- Includes fluorescent-enhancing, yellow spectacles and soft carrying case





### Also Available:

**TRITAN™ 450MB** portable, battery-operated AC/DC lamp kit. Includes TRITAN 450 blue light LED lamp, rechargeable NiMH battery pack, power supply adapter with AC and DC cord sets, smart AC charger, fluorescent-enhancing, yellow spectacles and soft, lightweight carrying case.

## LAMP SPECIFICATIONS

<b>Style</b>	Pistol grip
<b>Light Source</b>	3 blue light LEDs
<b>Lamp Head Diameter</b>	5 in (13 cm)
<b>Length</b>	8.0 in (20.3 cm)
<b>Weight</b>	1 lb (454 g)
<b>Power Requirements:</b>	
<b>AC lamp</b>	(TRI-450B) 120VAC*
<b>AC/DC lamp</b>	(TRI-450MB) 120VAC*/12VDC
<b>Battery Pack:</b>	
<b>Type</b>	12V, NiMH (rechargeable)
<b>Run Time</b>	3.5 hours (continuous)
<b>Charge Time</b>	2 hours

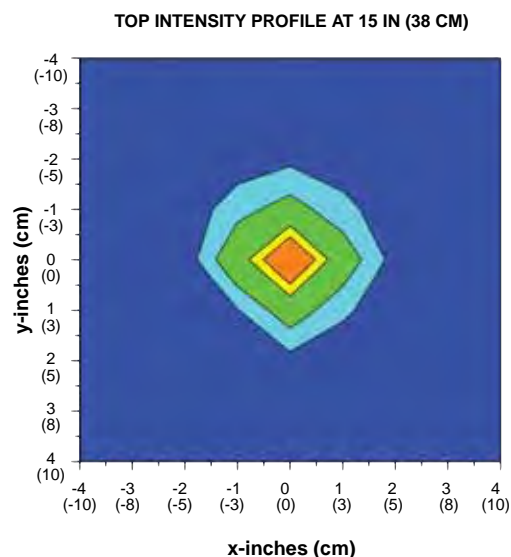
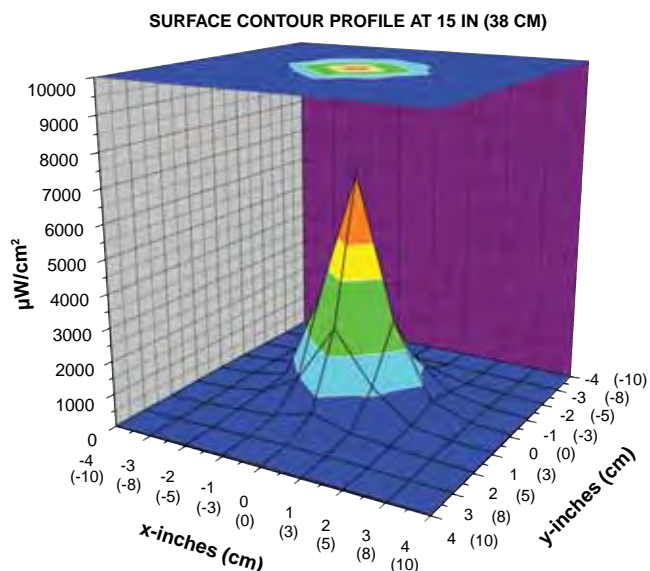
\*Also available in 230V, 240V and 100V versions.



## Replacement Parts & Accessories

<b>129141</b>	Standard, 8 foot (2.4 m) AC power cord
<b>129145</b>	Extra-long, 20 foot (6.1 m) AC power cord
<b>129162</b>	3.5 foot (1.1 m) DC power cord for "M" series lamps
<b>127933</b>	Particulate filter assembly
<b>BP-30</b>	Battery pack with 12V rechargeable NiMH battery
<b>BR-150A</b>	Smart AC charger
<b>CC-370A</b>	Soft carrying case
<b>FP-450</b>	Rubber bumper with dichroic lens
<b>PSA-250A</b>	AC/DC power supply adapter for "M" series lamps
<b>PS-200A</b>	Industrial power supply. Primary cord: 8 feet (2.4 m); secondary cord: 20 feet (6.1 m).
<b>PS-300A</b>	In-line power supply. Primary cord: 8 feet (2.4 m); secondary cord: 8 feet (2.4 m).
<b>UVS-40</b>	Fluorescent-enhancing spectacles, yellow

## BLUE LIGHT BEAM PROFILE



## PM-1600B

# PowerMAX™ 450

### Blue Light LED Panel Flood Lamp

*Designed Specifically for NDT Professionals!*

**PowerMAX™ 450** flood lamp features a panel of 16 powerful blue light (450 nm) LEDs specially engineered for non-destructive testing applications when limiting the use of UV-A light is a requirement. This versatile, stationary light source can be installed overhead or in-line, and can be ganged together to provide an even wider coverage area.

Ideal for NDT inspection booths, quick pre-inspection or screening of fluorescent particles in ambient light conditions and any other applications requiring maximum uniformity of blue light coverage over a large area.



- Nominal steady-state blue light intensity of **14,000  $\mu\text{W}/\text{cm}^2$**  at 15 inches (38 cm)
- Large coverage area of 18 inches by 8 inches (46 cm x 20 cm) with a minimum blue light intensity of **2,000  $\mu\text{W}/\text{cm}^2$**
- Patented, thin-film dichroic lens to filter out long-wave visible light
- Easily mountable for overhead inspection or in-line applications
- Built-in fans keep LEDs cool to maintain optimum light output during extended use
- Customizable — multiple lamp units can be “ganged” together longitudinally or back-to-back for a larger coverage area to meet your specific inspection requirements!





## LAMP SPECIFICATIONS

<b>Style</b>	Panel flood lamp
<b>Light Source</b>	16 blue light (450 nm) LEDs
<b>Dimensions (WxLxH)</b>	5.5 x 13.75 x 6 in (14 x 35 x 15 cm)
<b>Weight</b>	9 lb (4 kg)
<b>Power Requirement</b>	AC power (main AC power cord supplied with the unit)

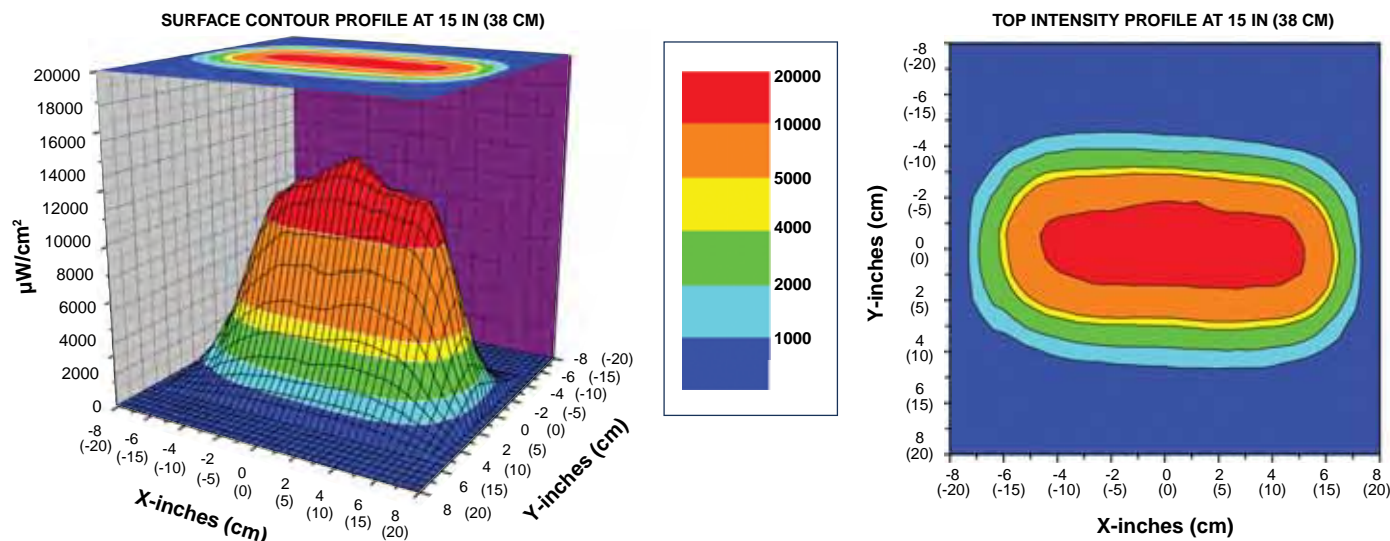


For applications requiring extremely large coverage areas, the PowerMAX™ 450 can be quickly ganged together longitudinally (top) or back-to-back (bottom) using customized, easy-to-install connecting plates and brackets.

## Replacement Parts & Accessories

<b>128177</b>	AC power cord
<b>127918</b>	Particulate air filter
<b>127935</b>	Retainer, LED assembly face plate
<b>DF-450PM</b>	Dichroic filter assembly
<b>CC-200</b>	Connector cable for ganging lamps
<b>CP-100</b>	Top connecting plate for ganging lamps longitudinally
<b>CP-200</b>	Top connecting plate for ganging lamps back-to-back (two required)
<b>CP-300</b>	Side connecting bracket for ganging lamps longitudinally (two required)
<b>UVS-40</b>	Fluorescent-enhancing spectacles, yellow

## BLUE LIGHT BEAM PROFILE



# ONT-450

# On-Trak™

Modular Inspection System

*(U.S. and foreign patents pending)*

## Blue Light LED Inspection System

The **ONT-450 On-Trak™** is an innovative, modular, track light-style inspection system. It features four broad-beam lamps, each of which utilizes three powerful, blue light (450 nm) LEDs. This overhead lighting system provides a fast, safe and effective alternative to UV-A light. It allows inspectors to customize lamp beam patterns to suit their individual needs, and provides the ability to add two additional lamp head assemblies to further increase the coverage area. Perfect for NDT inspection booths, pre-inspections and screening of fluorescent particles in operating conditions with ambient light or any application requiring maximum uniformity of coverage over large areas.



- Powerful, cool running, energy-efficient blue light LEDs
- Broad-beam profiles provide wide coverage area
- Electronic Intensity Stabilizers ensure consistent LED performance
- Instant-on operation; lamps reach full intensity immediately
- Built-in fans keep LEDs cool to maintain optimum light output during extended use
- Rubber bumpers with patented thin-film dichroic lenses filter out long-wave visible light while preventing damage to the LEDs
- Easily customizable! Move, adjust and add up to two additional lamp heads according to your specific inspection requirements (additional lamp heads sold separately)
- Optional remote control with two-position rocker switch provides added convenience and versatility
- Comes complete with UVS-40 fluorescence-enhancing spectacles



Optional remote control with two-position rocker switch adds convenience and versatility

## LAMP SPECIFICATIONS

**Product Number:**  
ONT-450

**Light Sources:**  
3 blue light LEDs per lamp head

**System dimensions:** (L x W x H)  
28.5 x 18.3 x 11 in (72 x 46 x 28 cm)

**Lamp:**  
Head diameter: 3.25 in (8.3 cm)  
Length: 9.5 in (24 cm)

**Platform Dimensions:** (L x W x H)  
28.5 x 18.3 x 2.5 in (72 x 46 x 6 cm)

**Platform Weight:** 13 lb (5.9 kg)

**Power Supply Cord:** 8 ft (2.4 m)

**Power Supply:**  
Input: 100-240 VAC 50/60 Hz  
Output: 12 VDC

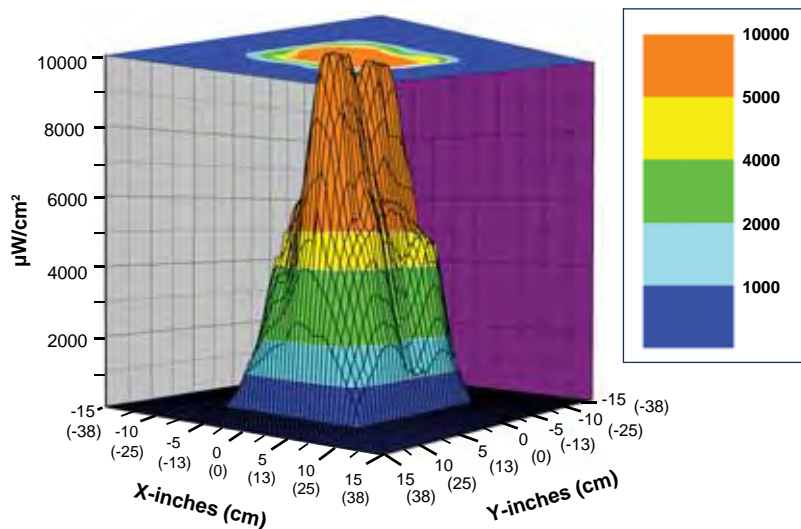
**Nominal Steady-State Blue Light (450 nm) Intensity:**  
15 in (38 cm) — 9,500  $\mu\text{W}/\text{cm}^2$

**NOTE:** Blue light intensity reading taken with a Spectroline® AccuMAX™ Series meter

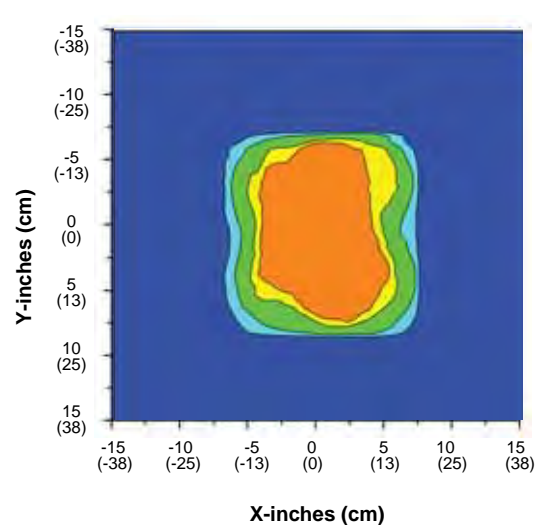
## BLUE LIGHT BEAM PROFILE

BLUE LIGHT LED  
MODULAR INSPECTION SYSTEM

SURFACE CONTOUR PROFILE AT 15 IN (38 CM)



TOP INTENSITY PROFILE AT 15 IN (38 CM)



## Replacement Parts & Accessories

<b>LA-450</b>	Lamp head assembly with three blue light LEDs
<b>PS-100A</b>	Power supply module
<b>PT-200</b>	Platform and track assembly
<b>RC-300</b>	AC remote control with 8 foot (2.4 m) cord

<b>FP-200</b>	Filter protector with rubber bumper and thin-film dichroic lens
<b>UVS-40</b>	Fluorescence-enhancing spectacles, yellow
<b>AF-200</b>	Air filter (package of 24)

# AccuPRO™ Series

## Digital Radiometer/Photometers

The **AccuPRO™ Series** meters feature an advanced, microprocessor-controlled readout unit calibrated to accurately measure and display both UV-A and visible light readings for non-destructive testing applications.

**Available in two versions:** The AccuPRO™ (XP-2000) readout unit features a single dual-wavelength sensor detector designed to measure both ultraviolet and visible light. The AccuPRO™ Plus (XP-4000) features a single 3-in-1 multi-purpose sensor that measures ultraviolet, visible and blue light.

These compact, lightweight, battery-operated units are ideal for use in the field, the factory or anywhere accurate light measurements are needed!



- Large, easy to read, LCD screen with 4-digit autoranging display
- Both units provide accurate readouts for UV-A irradiance as well as visible illuminance. AccuPRO™ Plus unit also measures blue light
- Simply to use, three-button interface. Toggle between light measurement modes.
- Overall accuracy greater than  $\pm 5\%$  per NIST standards
- Superior band-pass interference filter provides excellent cosine response
- One-touch PEAK with reset functions
- User-defined power save and automatic shutoff
- User-selectable, multilingual display settings at any operational level. Choose from English, French, German, Chinese and Spanish.
- Rugged meter features protective rubber housing for better grip and to help prevent accidental breakage
- Sealed sensor with water-resistant housing
- Multi-wavelength sensor directly attached to meter by 3 ft (0.9 m) cord
- Complies with ASTM specifications for LPT and MPT
- Convenient on-board recharging
- Powered by four rechargeable “AAA” nickel-metal hydride batteries (included)
- Come complete with AC charger and padded carrying case



The AccuPRO™ meter features a dual-wavelength UV/visible light sensor, while the AccuPRO™ Plus (shown) features a 3-in-1 sensor that measures UV, visible and blue light.

## SPECIFICATIONS

### Readout Unit

<b>Resolution</b>	4-digit autoranging display
<b>Screen</b>	128 x 64 dot pixel chip on glass STN transmissive monochrome LCD 2.25 in (5.7cm) diagonal illuminated (backlit)
<b>Read Update</b>	2 Hz
<b>Overall Accuracy</b>	Better than $\pm 5\%$ with reference to NIST standards
<b>Temperature Coefficient</b>	$\pm 0.025\%/^{\circ}\text{C}$ (0 to $50^{\circ}\text{C}$ )
<b>Power Requirements</b>	Four "AAA" nickel-metal hydride batteries (rechargeable). AC charger included. Available in 120V, 230V, 240V or 100V versions.

### Dimensions

<b>Length</b>	6.0 in (15.2 cm)
<b>Width</b>	3.0 in (7.6 cm)
<b>Thickness</b>	1.0 in (2.5 cm)
<b>Weight</b>	8 oz (227 g)

### Sensor Detector

<b>Length</b>	3.0 in (7.6 cm)
<b>Width</b>	2.0 in (5.1 cm)
<b>Thickness</b>	0.5 in (1.3 cm)
<b>Weight</b>	5.6 oz (159 g)

### Spectral Range

<b>UV-A Sensor</b>	320-400 nm
<b>Visible Sensor</b>	460-675 nm
<b>Blue Light Sensor</b>	410-475 nm

### XP-2000 AccuPRO™

#### Dual Sensor (UV-A/VIS)

Sensitive to UV and Visible Light

#### Wavelength/Measurement Range

UV-A (365 nm) Irradiance	0-100 mW/cm <sup>2</sup>
Visible (555 nm) Illuminance	0-5,382 Lux (0-500 fc)

### XP-4000 AccuPRO™ Plus

#### 3-in-1 Sensor (UV-A/VIS/Blue)

Sensitive to UV, Visible and Blue Light

#### Wavelength/Measurement Range

UV-A (365 nm) Irradiance	0-100 mW/cm <sup>2</sup>
Visible (555 nm) Illuminance	0-5,382 Lux (0-500 fc)
Blue (450 nm)	0-100 mW/cm <sup>2</sup>



# XRP-3000 AccuMAX™

## Digital Radiometer/Photometer

Features an advanced microprocessor-controlled readout unit with a dual-wavelength sensor detector to measure ***both*** ultraviolet and visible light.

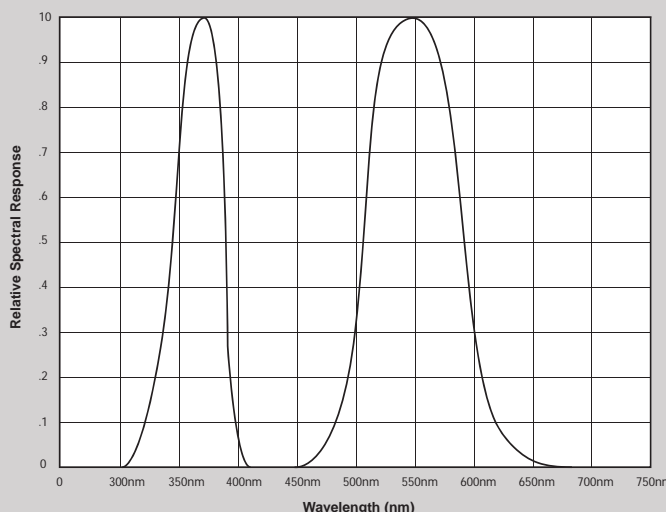
- Large, easy-to-read LCD screen
- Provides readouts for UV-A, visible irradiance or radiance
- Overall accuracy greater than  $\pm 5\%$  per NIST standards
- Choice of direct or USB cable connection between sensor detector and readout unit
- Superior bandpass interference filter
- Automatic zeroing, integration and signal hold
- Excellent cosine response
- User-selectable, multilingual display settings. Choose from English, French, German and Spanish.
- User-defined power save and automatic shutoff
- Rugged meter housing features removable, protective rubber boot for better grip and to help prevent accidental breakage
- Sealed sensor housing and USB connection with water-resistant adapter
- Compact, lightweight and battery-operated for convenient use in the factory, field or anywhere measurements are needed
- Complies with ASTM specifications for LPT and MPT
- Comes complete with readout unit, dual-wavelength sensor detector, USB cable with water-resistant adapter, protective rubber boot, two 9V alkaline batteries and padded carrying case.



XR-1000 readout unit with dual-wavelength sensor detector connected directly to unit



XR-1000 readout unit with dual-wavelength sensor detector connected to unit via USB cable



## SPECIFICATIONS

### Readout Unit (XR-1000)

<b>Resolution</b>	4-digit autoranging display
<b>Screen</b>	128 x 64 dot pixel chip on glass STN transmissive monochrome LCD 2.8 in (7.1 cm) diagonal illuminated (backlit)
<b>Sample Rate</b>	7.5 Hz (single sensor) 15 Hz (dual sensor)
<b>Read Update</b>	2 Hz
<b>Overall Accuracy</b>	Better than $\pm 5\%$ with reference to NIST standards
<b>Temperature Coefficient</b>	$\pm 0.025\%/^{\circ}\text{C}$ (0 to $50^{\circ}\text{C}$ )
<b>Power Requirements</b>	Two 9V alkaline batteries (included)

### Dimensions

<b>Length</b>	7.75 in (19.7 cm)
<b>Width</b>	4.25 in (10.8 cm)
<b>Thickness</b>	1.25 in (3.2 cm)
<b>Weight</b>	0.8 lb (360 g)



### Dual UV-A/Visible Sensor Detector (XDS-1000)

<b>Irradiance Range</b>	
UV-A Sensor	0-100 mW/cm <sup>2</sup> (0-100,000 $\mu\text{W}/\text{cm}^2$ )
Visible Sensor	0-5,300 lux (0-500 fc)
<b>Spectral Range</b>	
UV-A Sensor	320-400 nm
Visible Sensor	460-675 nm
<b>Dimensions</b>	
Length	4.75 in (12.1 cm)
Width	2.0 in (5.1 cm)
Thickness	7/8 in (2.2 cm)
Weight	0.22 lb (100 g)
USB Cable (Length)	5 ft (1.5 m)

# DM-365XA

## Digital UV-A Radiometer

**Provides increased accuracy for more repeatable results.**

- Measures UV-A light sources with overall accuracy of  $\pm 5\%$  per NIST standards
- Autozeroing, excellent linearity and cosine response, solid-state design, compact, durable, simple operation, battery-level indicator
- Sealed silicone photodiode protects against shock and humidity
- Sensor housing is constructed with series of baffles and unique self-sealing mechanism to eliminate light leakage
- Compact, lightweight and battery operated so measurements can be taken anywhere
- Complies with ASTM specifications for LPT and MPT



### SPECIFICATIONS

#### Readout Unit

Resolution	10 $\mu\text{W}/\text{cm}^2$
Screen	4½ digit, 7 segment, LED display 0.5 in (1.3 cm) high
Overall Accuracy	Better than $\pm 5\%$ with reference to NIST standards
Temperature Coefficient	$\pm 0.025\%/^{\circ}\text{C}$ (0 to $50^{\circ}\text{C}$ )
Irradiance Range	0-19,900 $\mu\text{W}/\text{cm}^2$
Spectral Range	320-400 nm
Power Requirements	Two "AA" alkaline batteries (included)
Length	7¼ in (18.4 cm)
Width	3.5 in (8.9 cm)
Thickness	2 in (5.1 cm)
Weight	1 lb (0.45 kg)



#### Sensor Detector

Length	3 in (7.6 cm)
Width	2 in (5.1 cm)
Thickness	0.70 in (1.8 cm)
Weight	1¼ lb (0.57 kg)
Cord Length	3 ft (91.4 cm)

## REPLACEMENT PARTS & ACCESSORIES



### **BP-12A** BATTERY PACK

Complete with RB-12S Smart Charger with Cordset, 12 Volt Rechargeable NiMH Battery and Nylon Carrying Case for MAXIMA™ ML-3500 Series Lamps. (120V)\*



### **BP-30** BATTERY PACK

Complete with BR-150A Smart Charger, 12 Volt Rechargeable NiMH Battery for QUADRAN™ QDR-365M, TRITAN™ TRI-365M and TRI-450MB AC/DC Lamp Kits. (100-120V)\*



### **CC-120A** CARRYING CASE

for BIB-150P Series, FC-Series and SB-100P Series Lamps



### **CC-350** CARRYING CASE

for MAXIMA™ ML-3500 Series Lamps



### **CC-365** CARRYING CASE

for OPTIMAX™ OPX-365 and OPX-450 Flashlights



### **CC-370A** CARRYING CASE

for EagleEye™ and TRITAN™ Series Lamp Kits



### **CC-400** CARRYING CASE

for QUADRAN™ 365 Series Lamp Kits



### **UVS-30** SPECTACLES

UV-Absorbing



### **UVS-40** SPECTACLES

Fluorescence-Enhancing



### **UVF-80** FACE SHIELD

UV-Absorbing



### **UVG-50** GOGGLES

UV-Absorbing

*\*For other voltages, please see price list.*

Using genuine Spectrolite® replacement parts ensures that lamps will operate at their optimum performance.



**BLE-35PRA**  
MDL BULB/POLISHED  
REFLECTOR ASSEMBLY

for MAXIMA™ ML-3500 Series Lamps



**BLE-35RA**  
MDL BULB/COATED REFLECTOR  
ASSEMBLY

for MAXIMA™ ML-3500 Series Lamps



**BLE-35RAF**  
MDL BULB/ANODIZED  
REFLECTOR ASSEMBLY

for MAXIMA™ ML-3500 Series Lamps  
for CH-50P/12 and MAXIMA™ ML-3500  
Series Lamps



**BLE-400**  
METAL HALIDE BULB

400 Watt for SuperFlood™ UV-400 Series  
Lamps



**119584**  
MDL BULB

35 Watt for MAXIMA™ ML-3500 Series  
Lamps



**120344**  
COATED SPOT REFLECTOR

for MAXIMA™ ML-3500 Series Lamps



**120514**  
ANODIZED FLOOD REFLECTOR

for MAXIMA™ ML-3500 Series Lamps



**123378**  
POLISHED REFLECTOR

for MAXIMA™ ML-3500 Series Lamps



**127423**  
DOME LENS

for OPTI-LUX™ 365 Series LED Flashlights



**UL-100**  
UV-A LENS

for all UV-A (365 nm) LED Lamps,  
*except* TRITAN™ 365 TRI-365SBLC



**UL-110**  
UV-A LENS

for TRITAN™ 365 TRI-365SBLC Lamp



**OF-300W**  
LED LAMP HEAD, WHITE LIGHT

for OPTIMAX™ OPK-300N Multi-Lite™ Lamp



**OF-365UV**  
LED LAMP HEAD, UV (365 nm)

for OPTIMAX™ OPK-300N Multi-Lite™ Lamp



**OF-450BD**  
LED LAMP HEAD, BLUE LIGHT (450 nm)

with dichroic lens for OPTIMAX™ OPK-300N  
Multi-Lite™ Lamp



**2F110**  
UV-A FILTER

for SuperFlood™ UV-400 Series Lamps



**2F350**  
DIFFUSING FILTER

for FC-Series and MAXIMA™ ML-3500  
Series Lamps



**2F400B**  
UV-B BLOCKING FILTER

for SuperFlood™ UV-400 Series Lamps



## 2F958 UV-A FILTER

for BIB-150P Series, FC-Series and  
MAXIMA™ ML-3500 Series Lamps



## 125565 RUBBER LAMP PROTECTOR

for OPTIMAX™ Flashlights



## 127796 RUBBER LAMP PROTECTOR

for OPTI-LUX™ 365 Flashlight



## BF-365LX EXTERNAL BLACK LIGHT FILTER WITH RUBBER BUMPER

for OPTI-LUX™ 365 Flashlight



## DF-365 DIFFUSING FILTER

for OPTIMAX™ OPX-365 Flashlight



## FP-100 FILTER PROTECTOR

with Rubber Bumper/Borofloat® glass  
lens for ONT-365 On-Trak™ Inspection  
System Lamps



## FP-200 FILTER PROTECTOR

with Rubber Bumper/Dichoric glass  
lens for ONT-450 On-Trak™ blue light  
Inspection System Lamps



## FP-365 FILTER PROTECTOR

with Rubber Bumper/Borofloat® Glass for  
TRITAN™ 365 Series Lamps



## FP-450 FILTER PROTECTOR

with Rubber Bumper/Dichroic Filter for  
TRITAN™ 450 Series Lamps



## HS-100 HEAD STRAP

for EagleEye™ Lamp



## LMS-100 LAMP MOUNT/SPRAYER

for EagleEye™ Lamp



## SG-100 SPLASH GUARDS WITH INTEGRAL PARTICULATE FILTER

for EagleEye™ Lamp (3 pack)



## 127243 HOLSTER

for OPTIMAX™ OPX-365 and OPX-450  
Flashlights



## 127574 BELT HOLSTER

For OPTI-LUX™ 365 Series Flashlights



**124826  
CORD SET**

2 Foot (0.6 m), 7 Pin for MAXIMA™  
ML-3500 Series Lamps. (12V DC version)



**124827  
CORD SET**

8 Foot (2.4 m), 7 Pin for MAXIMA™  
ML-3500 Series Lamps. (230V version)



**124828  
CORD SET**

8 Foot (2.4 m), 7 Pin for MAXIMA™  
ML-3500 Series Lamps. (115V and 100V  
versions)



**129141  
AC CORD SET**

8 Foot (2.4 m) for QUADRAN™ A and  
TRITAN™ B Series Lamps. (100-120V)\*



**129145  
AC CORD SET**

20 Foot (6.1 m) for QUADRAN™ A and  
TRITAN™ B Series Lamps. (100-120V)\*



**129162  
DC CORD SET**

3.5 Foot (1.1 m) for QUADRAN™ A and  
TRITAN™ B “M” Series Lamps



**128217  
BATTERY CHARGING CRADLE**

with AC cord for Eagle-Eye™ Inspection  
Lamp and OPTI-LUX™ 365 Series  
Flashlights. (100-120V)\*



**128225  
DC CORD SET**

for Eagle-Eye™ Inspection Lamp and  
OPTI-LUX™ 365 Series Flashlights



**BR-150A  
SMART BATTERY CHARGER**

for BP-30 Battery Pack. (100-120V)\*



**PS-200A  
INDUSTRIAL POWER SUPPLY**

with cord sets for QUADRAN™ 365 and  
TRITAN™ Series Lamps. (100-120V)\*



**PS-300A  
IN-LINE POWER SUPPLY**

for QUADRAN™ 365 and TRITAN™  
Series Lamps. (100-120V)\*



**PSA-250A  
POWER SUPPLY ADAPTER**

with AC and 12V DC connections for  
QUADRAN™ and TRITAN™ “M” Series  
Lamps. (100-120V)\*



**RB-12S  
SMART BATTERY CHARGER**

for BP-12A Battery Pack. (120V)\*



**RB-300  
SMART AC CHARGER**

for OPTIMAX™ OPK-300N, OPX-365 and  
OPX-450 Flashlights. (100-120V)\*

\*For other voltages, please see price list.



## **RB-300DC** **12V DC CHARGER**

for OPTIMAX™ OPK-300N, OPX-365 and OPX-450 Flashlights.



## **RC-200** **AC REMOTE CONTROL**

for On-Trak™ ONT-365 UV-A Inspection System with 8 foot (2.4 m) cord



## **RC-300** **AC REMOTE CONTROL**

for On-Trak™ ONT-450 Blue Light Inspection System with 8 foot (2.4 m) cord



## **125608** **BATTERY STICK WITH TAILCAP**

for OPTIMAX™ OPK-300N, OPX-365 and OPX-450 Flashlights



## **127568** **LITHIUM-ION BATTERY**

Rechargeable for EagleEye™ Lamp and OPTI-LUX™ 365 LED Flashlights



## **XCB-100** **WATER-RESISTANT USB CABLE WITH ADAPTER**

for AccuMAX™ Meter



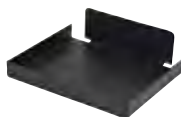
## **XCC-100** **CARRYING CASE**

for AccuMAX™ XRP-3000 Meter



## **XRB-100** **RUBBER BOOT**

for AccuMAX™ XR-1000 Readout Unit



## **AB-100** **ADAPTER BRACKET**

for Mounting Transformer-Based Spectrolines® HID Lamps onto a Magnaflux® Wet Horizontal Mag Machine



## **B-6** **BENCH MOUNT**

for all Spectrolines® HID, QUADRAN™ and TRITAN™ Series Lamps



## **FA-100** **FLEXIBLE ARM**

for all Spectrolines® HID, QUADRAN™ and TRITAN™ Series Lamps



## **LH-200** **LAMP HOLDER**

for OPTIMAX™ OPX-365 and OPX-450 Flashlights (for use with VF-100A)



## **LH-300A** **LAMP HOLDER**

for TRITAN™ Series Lamps (for use with VF-100A, FA-100, WM-100, B-6 and W-6)



## **VF-100A** **SPEC-STIK™ VERIFICATION FIXTURE**

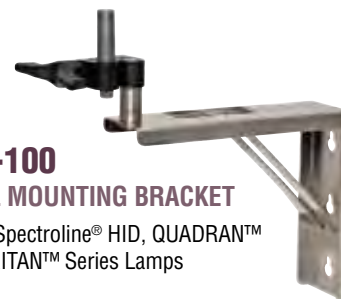
for all Spectrolines® sensors, as well as HID, QUADRAN™, TRITAN™ and OPTIMAX™ Series Lamps.

NOTE: Lamp mounting accessories for TRITAN™ and OPTIMAX™ Series Lamps are sold separately (see LH-200 and LH-300A)



## **W-6** **WALL MOUNT**

for all Spectrolines® HID and TRITAN™ Series Lamps



## **WM-100** **WALL MOUNTING BRACKET**

for all Spectrolines® HID, QUADRAN™ and TRITAN™ Series Lamps

## REPLACEMENT PARTS & ACCESSORIES (HID LAMPS\*)



### **100S** SPOT BULB

Ad-Medium Base, 100 Watt for SB-100P and FC-Series Lamps



### **100S/M** SPOT BULB

Medium Base, 100 Watt for SB-100P and FC-Series Lamps



### **100S/M-PQL** UPGRADED, PREMIUM QUALITY LIGHTING SPOT BULB

Medium Base, 100 Watt for SB-100P and FC-100 Series Lamps



### **BLE-150BS-115/M** BROAD-BEAM BULB

Self-Ballasted, 150 Watt for BIB-150P Series Lamps (115 volt version)



### **BLE-150CS-100/M** CONCENTRATED SPOT BULB

Self-Ballasted, 150 Watt for BIB-150P Series Lamps (100 volt version)



### **BLE-150CS-115/M** CONCENTRATED SPOT BULB

Self-Ballasted, 150 Watt for BIB-150P Series Lamps (115 volt version)



### **BLE-150CS-230/M** CONCENTRATED SPOT BULB

Self-Ballasted, 150 Watt for BIB-150P Series Lamps (230 volt version)



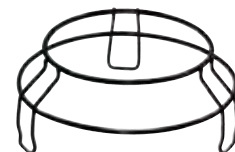
### **BLE-150FC-115/M** CONCENTRATED SPOT BULB

Self-Ballasted, 150 Watt for FC-150 Lamp (115 volt version)



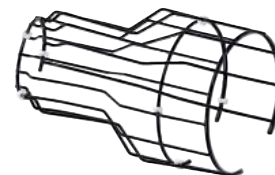
### **BLE-150FC-230/M** CONCENTRATED SPOT BULB

Self-Ballasted, 150 Watt for FC-150 Lamp, (230 volt version)



### **FP-175** FILTER PROTECTOR/LAMP STAND

for BIB-150PR and FC-Series Lamps



### **HGS-100A** HEAT GUARD/STAND

for SB-100P Series Lamps



### **HGS-150A** HEAT GUARD/STAND

for BIB-150P and BIB-150PX Lamps

\*Mercury Vapor Bulbs.

## COMPANY BACKGROUND

Spectronics Corporation is the world's leading manufacturer of ultraviolet equipment and fluorescent materials. Spectronics supplies over 1,000 different products for the nondestructive testing, laboratory, biotechnology, industrial, electronics, semi-conductor, forensics, financial, automotive, HVAC/R and other markets.

Spectronics' modern, 100,000 square-foot manufacturing facility and office headquarters is located in Westbury, New York. Nearly 200 personnel are involved in all phases of research and development, manufacturing, sales, marketing, customer service, and logistical and technical support.

Over five decades since its inception, the goal of Spectronics is still the same — to produce effective, top-quality products with the utmost dedication to customer satisfaction.



**SPECTRONICS CORPORATION**

### Warranty

All equipment is warranted against defects in manufacture. Spectronics Corporation's obligation under this warranty is limited to repairing or replacing, at the option of Spectronics Corporation, any part(s) of the product which, if properly installed, used and maintained, proves upon factory examination to have been defective in materials or workmanship within 12 months from the date of delivery to the customer, including LEDs.

This warranty does not apply to any component which (1) is normally consumed in operation or (2) has a normal life inherently shorter than the warranty stated. For example, bulbs, filters and rechargeable batteries are warranted for 30 days; the 100S/M-PQL bulb is warranted for 90 days. In addition, Spectronics Corporation does not warrant any instrument that has been subjected to misuse, negligence or accident, or has been repaired or altered by anyone other than Spectronics Corporation.

This warranty is in place of all other warranties of quality. There are no other warranties either oral, written, express, implied or statutory. IMPLIED WARRANTIES OF FITNESS FOR PURPOSE AND MERCHANTABILITY ARE EXCLUDED. This warranty and your remedies thereunder are solely as stated in this form. In no event shall Spectronics Corporation be liable for special, indirect, incidental or consequential damages, nor for any damages arising out of delay in shipment or production.

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Spectronics Corporation reserves the right to alter product specifications without notice. Spectronics is under no obligation to make similar changes in its products previously produced.

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## UV-A LED INSPECTION LAMPS

EK-3000	24
OLX-365	4, 5
OLX-365B	5
OLX-365FL	5
OLX-365BFL	5
OPX-365	8
OPK-300N	9
QDR-365A	16, 17
QDR-365BLA	17
QDR-365MA	17
QDR-365MBLA	17
QDR-365SA	20, 21
QDR-365SBLA	21
QDR-365MSA	21
QDR-365MSBLA	21
TRI-365DB	11
TRI-365DBB	11
TRI-365HB	10, 11
TRI-365MDB	11
TRI-365MDBB	11
TRI-365MHB	11
TRI-365SBLC	14

## UV-A STATIONARY LAMPS

PM-1600BL	26, 27
PM-1600BLH	27
PM-1600UV	27
PM-1600UVH	27
UV-400A	30
UV-400B	30

## UV-A MDL INSPECTION LAMP

ML-3500D	32
ML-3500FL	32
ML-3500MD	32
ML-3500MFL	32
ML-3500S	32

## UV-A/WHITE LIGHT LED MODULAR INSPECTION SYSTEM

ONT-365	34
---------	----

## BLUE LIGHT LED INSPECTION LAMPS

OPX-450	37
PM-1600B	40
TRI-450B	38
TRI-450MB	39

## BLUE LIGHT LED MODULAR INSPECTION SYSTEM

ONT-450	42
---------	----

## DIGITAL RADIOMETERS

DM-365XA	47
XRP-3000	46
XP-2000	44
XP-4000	44

## REPLACEMENT PARTS & ACCESSORIES

AB-100	52
AF-200	35, 43
B-6	23, 52
BF-365LX	5, 50
BF-365PM	27
BLE-35PRA	49
BLE-35RA	49
BLE-35RAF	49
BLE-400	49
BP-12A	48
BP-30	11, 23, 39, 48
BR-150A	11, 23, 39, 51
CC-120A	48
CC-200	27, 41
CC-350	48
CC-365	5, 48
CC-370A	11, 25, 39, 48
CC-400	23, 48
CF-100	27
CP-100	27, 41
CP-200	27, 41
CP-300	27, 41
DF-365	8, 50
DF-450PM	41
EE-365	25
FA-100	16, 20, 23, 52
FP-100	35, 50
FP-200	43, 50
FP-365	13, 50
FP-450	39, 50
FP-550	23
HS-100	25, 50
LA-365	35
LA-450	43
LH-200	52
LH-300A	52
LMS-100	25, 50
OF-300W	49
OF-365UV	49
OF-450BD	49
PS-100A	35, 43
PS-200A	11, 23, 39, 51
PS-300A	11, 23, 39, 51
PSA-250A	11, 23, 39, 51
PT-200	35, 43
RB-12S	48, 51
RB-300	51
RB-300DC	52
RC-200	35, 52
RC-300	43, 52
SG-100	25, 50
UL-100	9, 11, 23, 25, 27, 35, 49
UL-110	14, 49
UVF-80	27, 35, 48
UVG-50	27, 35, 48
UVS-30	5, 8, 9, 11, 23, 25, 27, 35, 48
UVS-40	9, 39, 41, 43, 48
VF-100A	52

W-6	23, 52
WM-100	23, 52
XCB-100	52
XCC-100	52
XRB-100	52
119584	49
120344	49
120514	49
123378	49
124826	51
124827	51
124828	51
125565	49
125608	52
127243	50
127423	5, 49
127568	5, 25, 52
127574	5, 50
127607	5
127785	5
127796	50
127918	27, 41
127922	23
127933	11, 39
127935	27, 41
127944	23
127955	11
128094	23
128177	27, 41
128196	11
128217	5, 25, 51
128225	5, 25, 51
129141	11, 23, 39, 51
129145	11, 23, 39, 51
129162	11, 23, 39, 51
2F110	49
2F350	49
2F400B	49
2F958	49

## REPLACEMENT PARTS & ACCESSORIES (HID LAMPS)

BLE-150BS-115/M	53
BLE-150CS-100/M	53
BLE-150CS-115/M	53
BLE-150CS-230/M	53
BLE-150FC-115/M	53
BLE-150FC-230/M	53
FP-175	53
HGS-100A	53
HGS-150A	53
100S	53
100S/M	53
100S/M-PQL	53

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## NONDESTRUCTIVE TESTING EQUIPMENT

### BLUELINE MODEL FL5000™ INSPECTION LIGHT

The BlueLine Model FL5000 is a revolutionary new flashlight for fluorescent NDT inspection. It does the job that you are used to doing with high powered UV lights, but does it with much more **convenience**.



- **Compact, lightweight**
- **Instant on/off**
- **High intensity, low power consumption**
- **Flashing mode for ambient light inspection**
- **Doesn't get hot**
- **No bulb to break or burn out**
- **Safe blue wavelengths**
- **Rugged, waterproof**

Three styles of filter glasses, all ANSI-certified safety glasses



Model FG1



Model FG2



Model FG3



WHITE LIGHT



BLUE LIGHT



BLUE LIGHT + YELLOW FILTER

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## **NONDESTRUCTIVE TESTING EQUIPMENT**

### **Features**

- Two high intensity 3W LEDs with current-regulated output
- Focusing optics for intense spot beam
- Matched with BlueLine filter glasses for maximum contrast
- Two operating modes – steady and flashing
- Non-breakable locking switch prevents accidental actuation
- Integral pistol style grip
- Front lens protected by heavy rubber boot for drop protection
- Tough, non-corroding ABS and polycarbonate plastic construction
- Rubber sleeve wrist lanyard
- Environmentally sealed - waterproof to 500 feet

### **Specifications**

- Intensity:  $>3,500 \mu\text{W}/\text{cm}^2$  at 15"
- Lamp life:  $>10,000$  hours
- Batteries: 4 C cell alkaline
- Weight: 25 oz. (0.7 kg)
- Size: 5" L x 3.2" D (12.7 cm L x 8.1 cm D)

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