



Innovative Photonic Solutions

5525

Oblique Hybrid LED Lightlines™

KEY FEATURES

- Assymetric Cross-web Output
- “Parallel” Web Defect Detection
- Extruded Design to 2 meters
- High Output Cylindrical Lens
- Long Lifetime: 50,000 hours
- Multiple Wavelength Options
- US Pat. & Intl. Patents Pending



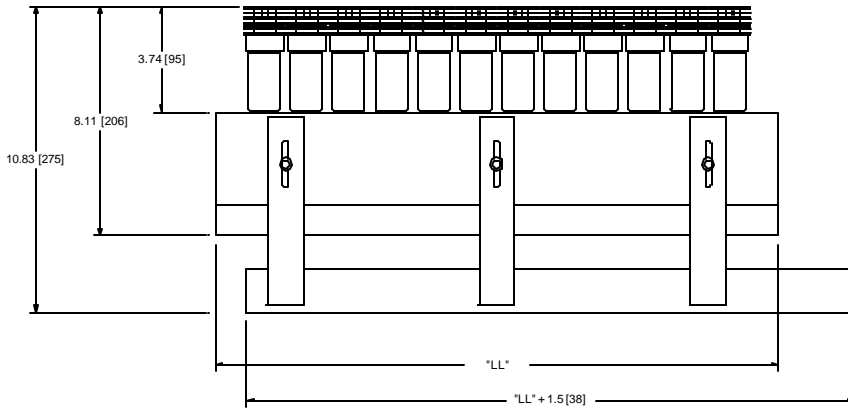
APPLICATIONS

- Rolled Metals - Scratches
- Coated Paper - Streaks
- Polymer - Embedded Defects
- Glass - Stones, Bubbles

High Intensity & Long Lifetime

Linescan users have often struggled with detecting surface defects aligned in the direction of travel. These “parallel” defects (scratches, rubs, laminations, etc.) tend to offer very low contrast ratios under normal linescan lighting modes (bright field or darkfield). Using an asymmetrical light output, the patented **5525** series Oblique Hybrid lightlines provide the correct structure to make these defects visible with extremely high contrast. These units are manufactured in a continuous extruded format which can be produced up to and exceeding 2 meters in length. The innovative LED lamp units are easily snapped into place for future retrofit or replacement, and are available in a wide range of wavelengths. The oblique hybrids come complete with an adjustable $\phi 50\text{mm}$ cylindrical focusing lens for working distances from 50 to 500mm.

Detail Drawing



NOTE: Specifications May Change without Notice

DXF File Available

PART NUMBER

5525 - WWW - LL

LL	Length (inches)
- 18	18" (450mm)
- 36	36" (900mm)
- 54	54" (1400mm)
- 72	72" (1800mm)

WWW	Wavelength, Color
-455	455 nm, Deep Blue
-470	470 nm, Blue
-505	505 nm, Light Blue
-530	530 nm, Green
-590	590 nm, Amber
-617	617 nm, Orange/Red
-627	627 nm, Red
-RGB	470/530/627nm
-WHT	5500K, White

Technical Specifications

Average Lifetime

Continuous: 50,000 Hours

Environmental

Temperature: 0 to 35C
Relative Humidity: 0 to 95%

Electrical

455-530nm, WHT: 0 to 700mA/Lamp
590-627nm 0 to 1000mA/Lamp

Output Comparisons (75mm Distance)

Wavelength	Photometric (lux)	Radiometric (mW/cm ²)	Silimetric (sW/cm ²) ⁺
455 nm	102,000	50.5	30.5
470 nm	336,000	77.0	48.0
505 nm	828,000	36.0	24.0
530 nm	1,150,000	37.0	25.5
590 nm	528,000	12.0	10.0
617 nm	685,000	47.0	42.0
627 nm	925,000	73.0	69.0
White	550,000	23.0	16.5
150W TH*	1,150,000	125.0	111.5

* Comparative output of a 150W Tungsten Halogen lightsource (80% drive) powering a 150mm Modular Fiberoptic Lightline with ϕ 50mm Cylindrical Focusing Lens (75mm working distance)

+ Artificial units developed by Illumination Technologies to more accurately predict the relative output signals generated by various wavelengths using silicon based detector systems, including CCD and CMOS cameras. For more detailed information on this topic visit our website and download Tech Note #125 - "Correct Measurement Units"

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LED Products