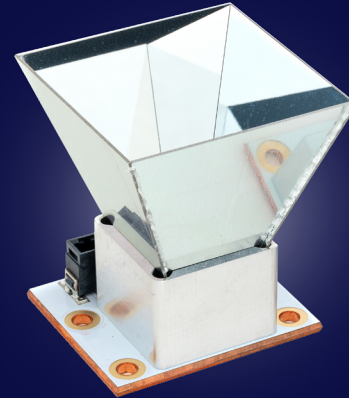


Compact Light Engines

LumiFlood™ & LumiLine™

Features

- Typical output up to 30 W (λ dependant)
- Highly uniform irradiance field
- Compact and robust
- Reflective metal optics for UV, high-power, high-temperature operation

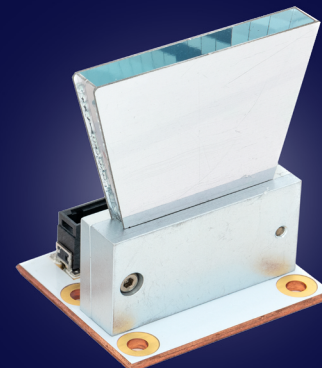


Applications

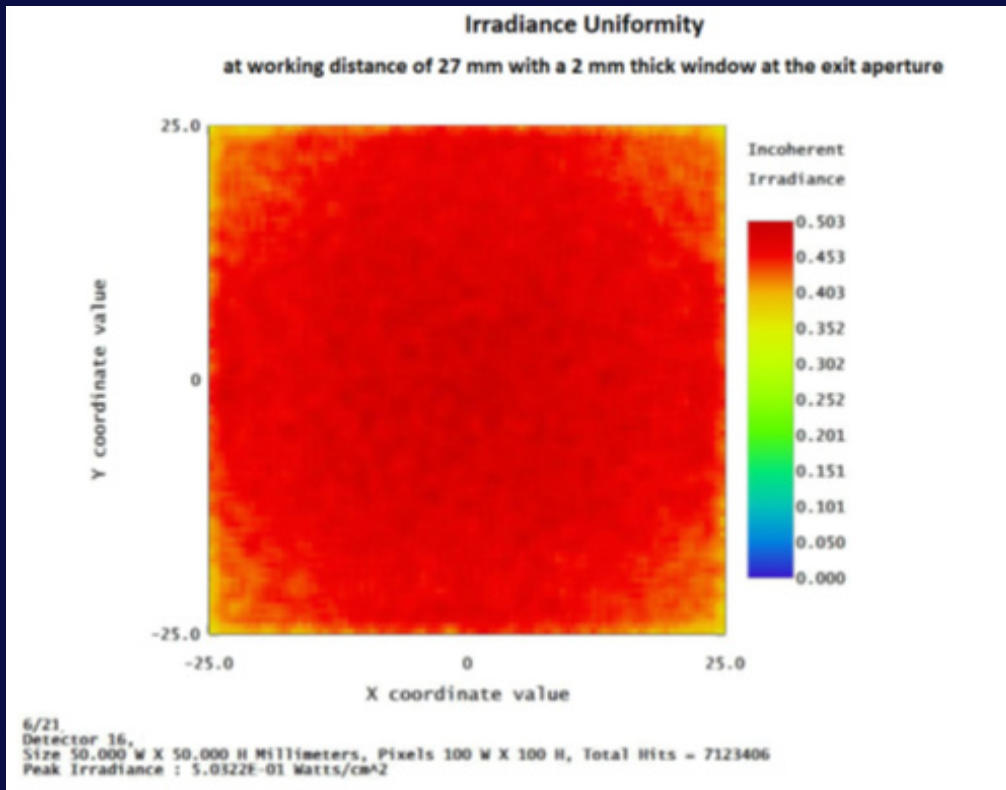
- UV Curing - Flood curing, Line Curing
- Medical phototherapy
- Document verification
- Machine vision

The LumiFlood™ and LumiLine™ ultraviolet Light Engines are designed for UV flood and line curing systems. Use a single LumiFlood™ or LumiLine™ or place in a tiled array to provide highly uniform coverage over a large area.

The LumiFlood™ and LumiLine™ offer multiple, ultraviolet, and visible wavelength configurations, excellent thermal performance, and real-time temperature monitoring for closed-loop control. These light engines utilize a 9-LED array, with output spanning from UV to Visible.

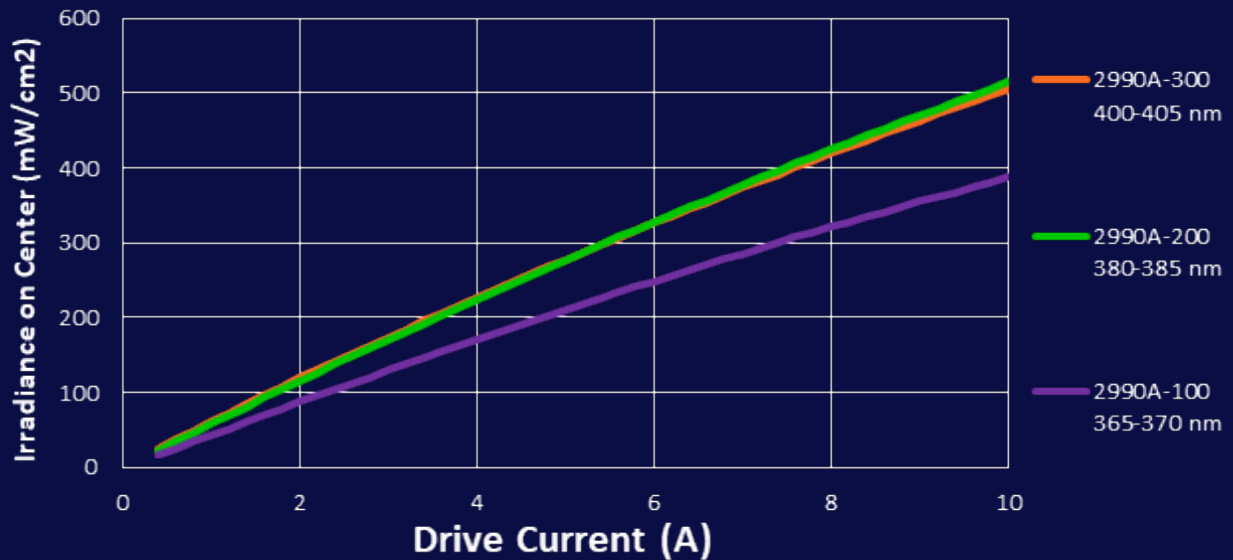


LumiFlood™ Example

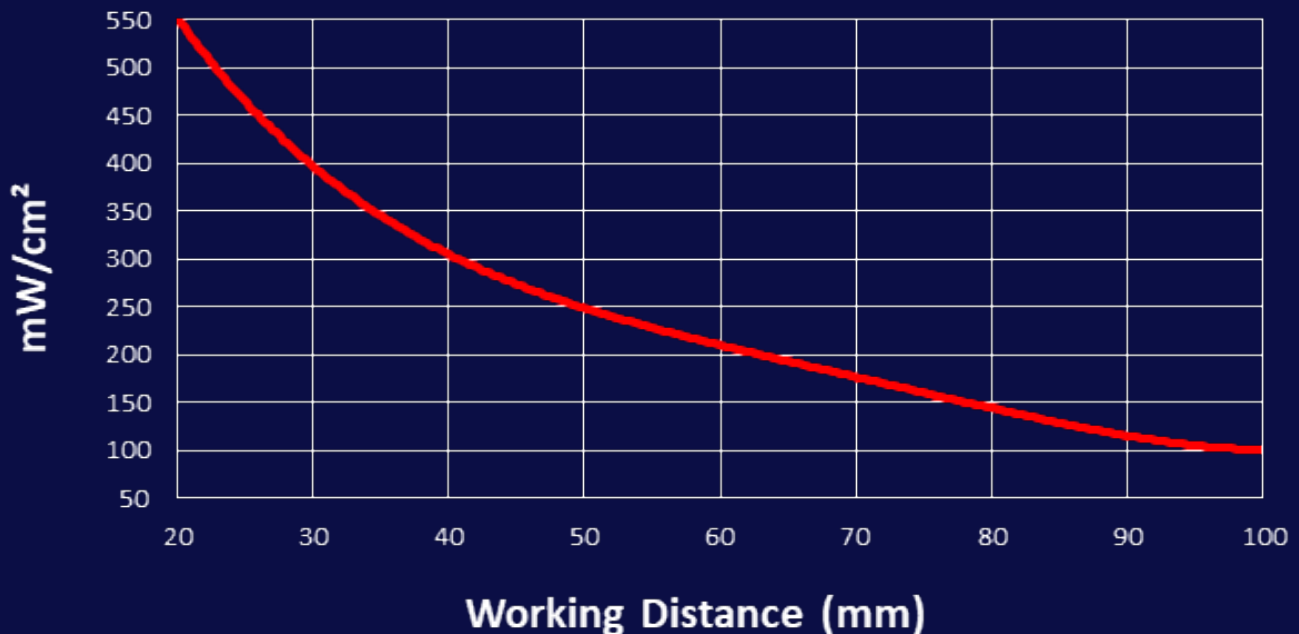


LumiFlood™ Irradiance

Irradiance vs Drive Current at 27 mm Working Distance



LumiFlood Irradiance at 10A Drive Current vs. Working Distance



LumiFlood™ Specifications

Parameter	Specification	Comments
UV Optical Power	> 30 Watts	At 30A total drive power
Available Center Wavelengths	365 nm to 405 nm	Contact Sales Engineer for additional λ
Field of Irradiance	50 x 50 mm	At 27 mm working distance
UV Irradiance	> 475 mW/cm ²	For > 380 nm die
Power output	365 - 370 nm	10.7W @ 10A
	385 - 390 nm	22.4W @ 25A
	400 - 405 nm	23.2W @ 25A
Forward Voltage	Turn on: 3.0V Limit: 5.6V	Constant current operation
Operating Environment	-15°C to 45°C	<85%, relative humidity, non-condensing
Temperature Monitoring	PCB temperature not to exceed 65°C	Built-in thermistor Thermal pad and heat sink recommended

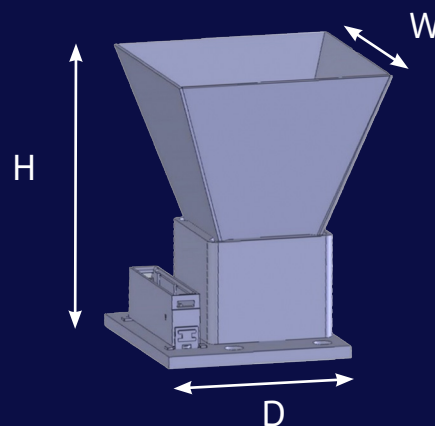
Notes on Thermal Management - LumiFlood™ and LumiLine™

The LumiFlood™ and LumiLine™ use a metal core circuit board for high thermal conductivity that allows heat to dissipate in all directions. An external heat sink or heat pipe is required to dissipate the heat generated at full drive power. Adding the feature of forced air convection across the heat sink or heat pipe sinks removes heat faster and more efficiently. The circuit board features an attached thermal pad for heat sink contact, no thermal grease is needed. Every circuit board has a built-in thermistor for temperature monitoring. Lifetime of the LEDs will be compromised if the temperature of the circuit board exceeds 65°C.

LumiFlood™ & LumiLine™ Specifications

Dimensions LumiFlood™

Height	Width	Depth
49.7 mm	38.0 mm	40.0 mm



Dimensions LumiLine™

Height	Width	Depth
48.2 mm	41 mm	38 mm

