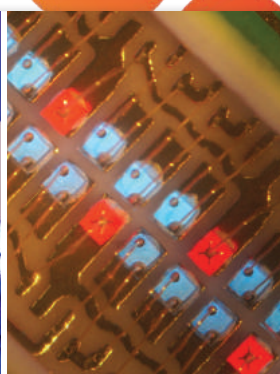
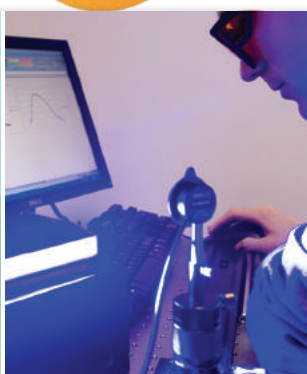
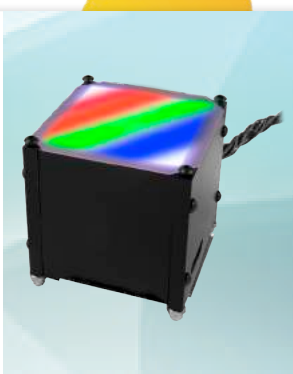
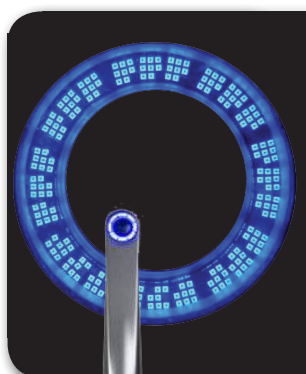




# PROPHOTONIX

Making Light Work For You

## Custom LED Solutions



# why PROPHOTONIX?

To create our custom LED Solutions, our in-house team of optical, electronic & mechanical engineers build a solution around the LED chip in its most fundamental form and work with you to design a complete lighting solution specifically for your application.

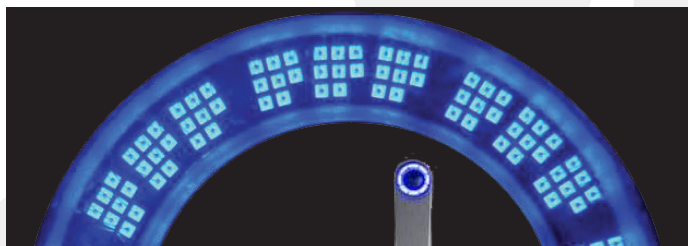
With over fifteen years' experience in designing custom solutions, we understand that you need the most appropriate solution - fast. Our expertise and experience means that we can rapidly deliver the most precise, efficient and cost effective solution, ensuring that you get the maximum performance from your system.

*"I have had nothing but positive experiences with ProPhotonix"*

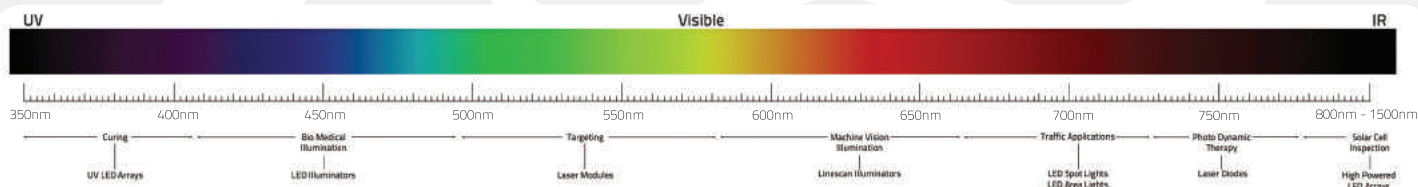
Lisa Carr, Buyer, CyberOptics.

## Why choose a Custom LED Solution?

For the most challenging applications, off-the-shelf lighting solutions cannot deliver the performance you need to optimize your system. Often designed for a wide range of applications, these off-the-shelf products simply cannot deliver the same results as a custom LED solution that is designed specifically to meet your requirements.



## Wavelengths



ProPhotonix' strengths in Chip-on-Board LED technology allow us to offer the widest range of wavelengths available on the market. We specialize in creating custom LED solutions that utilize multiple wavelengths or non-visible wavelengths such as UV & IR solutions. The strength of our relationships with LED suppliers means that we are always up-to-date with the latest in LED technology and can source LED chips at competitive prices.

*"ProPhotonix is the first company that I think of when I need a specific wavelength."*

Stephen, Research Scientist, Owens- Illinois

## Compact, High Intensity & Uniform Solutions

At ProPhotonix, we utilize Chip-on-Board technology to create compact, high intensity and uniform LED light sources. We design and manufacture products, from intricate LED arrays to complex turnkey solutions, integrating custom optics, electronics, mechanics and software to provide the best possible solution.

A key consideration when delivering high intensity products is thermal management. Proper thermal management allows the LEDs to be driven harder, maximizing light output without degrading the lifetime of your product. Our comprehensive LED experience has enabled us to develop unique capabilities and proprietary thermal modelling techniques setting us apart from others.

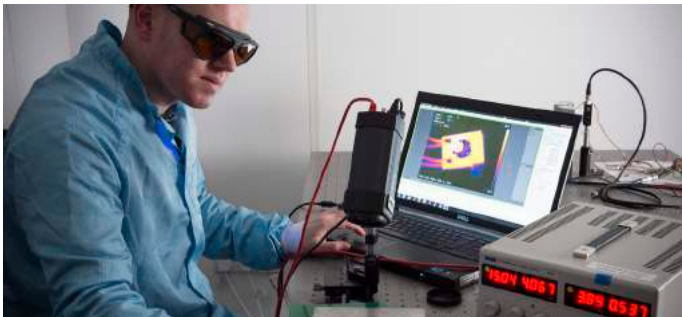
# ENGINEERING EXPERTISE

ProPhotonix' expertise in mechanical design, optical modelling, electronic engineering and advanced thermal management allows our team to tackle the most challenging of illumination requirements.

## Optical Design & Modelling

ProPhotonix has a dedicated team of highly qualified Optical engineers and has developed thousands of optical systems. We utilize standard design tools to model and create the optimal optical system for you. No matter the complexity of the design, from systems incorporating readily available components to entirely custom designs, we select the most qualified supply chain partners to ensure the highest quality solution for you.

- Custom optics design in plastic or glass
- Optical Systems Design incorporating readily available optics
- Optical Modelling
- Optical Characterisation and System Validation
- Trusted and qualified supply chain

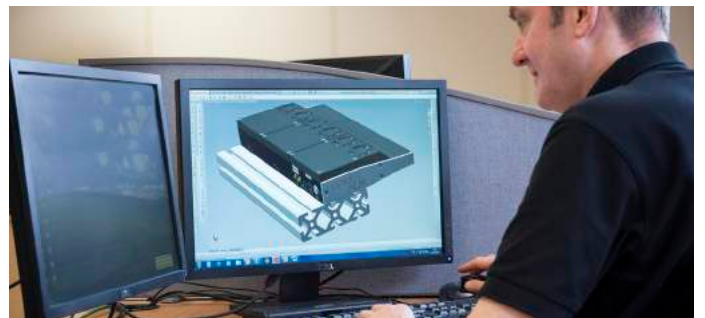


## Mechanical Engineering

Our in-house team of Mechanical engineers has experience across a wide range of industries and utilizes industry standard software. The engineering team is capable of designing a range of complex assemblies from compact to large turnkey LED solutions.

ProPhotonix specialize in:

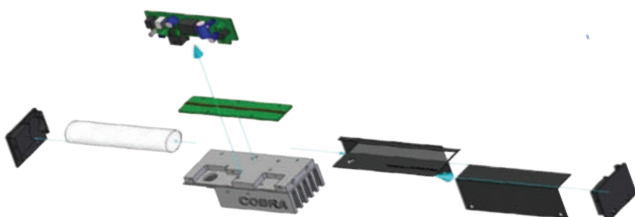
- Intricate, complex LED designs
- Robust solutions for harsh environments e.g. IP 67 products, products that operate at -50 °C
- Cooling systems for extremely high powered devices e.g. devices up to 4kW



## Control & Communications

The driver and control electronics of a turnkey LED solution are critical components. Our in-house team of Electronic engineers develops on-board electronics and software providing capabilities such as: strobing, temperature control, calibration and optical output monitoring. We develop both Firmware and Software and can work with any communications protocol including Ethernet, Ethercat, USB & Analogue.

- All disciplines in-house including design, layout, prototype assembly and validation
- Digital design, Analogue design & Software development
- Asic, FPGA, Micro-processors
- Communications protocol including Ethernet, Ethercat, USB & Analogue



If you have a challenging lighting application and would like to talk to our experts, contact us at [sales@prophotonix.com](mailto:sales@prophotonix.com)



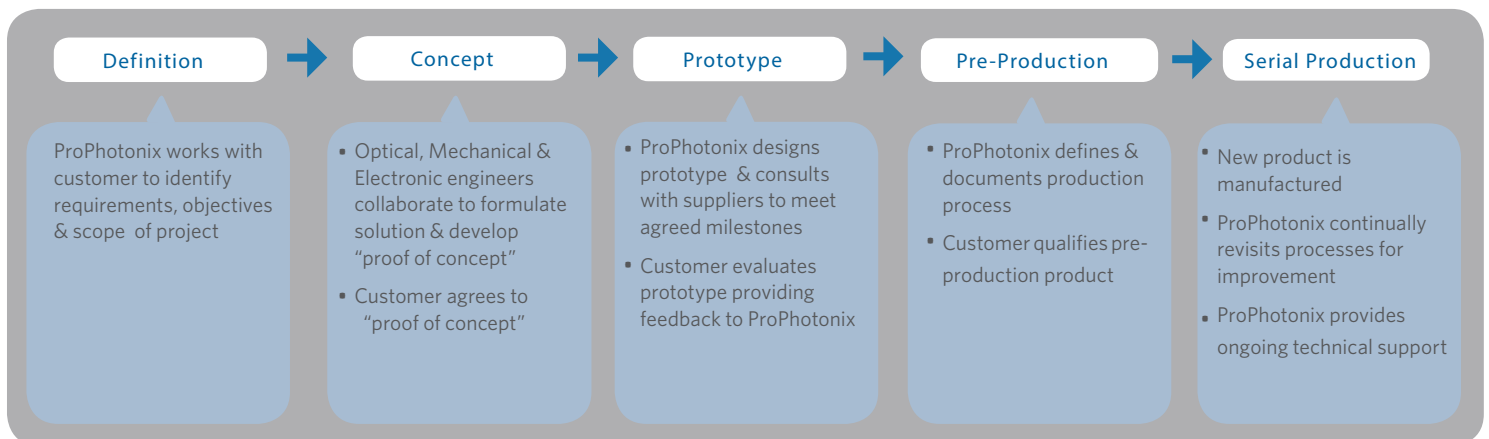
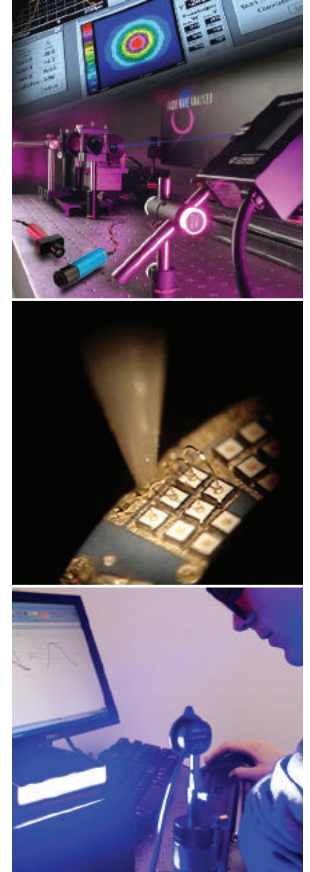
# Custom Solutions and Systems

Today's challenging applications often demand very detailed and exacting requirements that may not be available from off-the-shelf solutions. For over 20 years ProPhotonix has worked closely with customers to design LED and Laser solutions for their specific application needs. Our goal is to deliver the most precise, efficient and cost effective product for your application. We put all our resources and experience at your disposal to help you meet your targets.

At ProPhotonix our design process starts with the customer requirements. We recognize the importance of understanding every aspect of a customer's specification and our engineers collaborate directly with our customer to ensure that the correct specification is developed.

Once we agree on a full specification, ProPhotonix leverages the expertise of our in-house optical, electronic, thermal, mechanical and software engineers to develop a product concept for your approval. By working closely with our supply chain partners, we ensure prompt delivery of quality prototypes.

One of our key strengths at ProPhotonix is our ability to design and manufacture turnkey solutions. Our ISO certified production facilities offer the flexibility to produce highly complex products in both low and high volume for our global customers. Our processes and procedures ensure that we consistently deliver on time, every time.



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