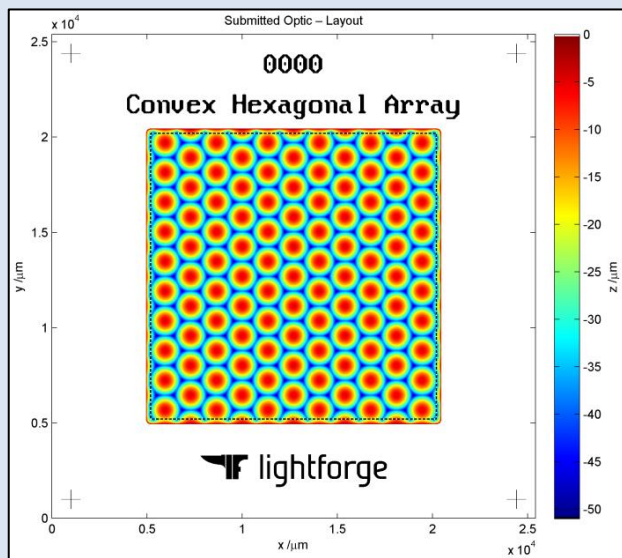


For many years, optic designers requiring new lens arrays or freeform optics have faced the challenges of high NRE, long lead times and detailed technical communication with vendors, so that designs which would benefit from application-specific optics are often tackled with standard catalog products. This leads to laser optics systems that have multiple performance compromises, including brightness and power efficiency degradations. With LightForge™, designers can simply upload their design to the PowerPhotonic web portal using data output from a number of industry wide optic CAD packages such as Zemax. After upload, the optic design is compared with the LightForge™ design guidelines to ensure compliance, and a physical layout generated for verification by the designer.



This process is completely automatic. Once the designer is happy with their design, there is a simple sign-off and ordering procedure before the part goes into manufacturing

Using LightForge™, optic designers have the ability to create innovative new freeform surfaces, test new ideas and verify designs for production without incurring expensive upfront engineering charges and lengthy prototyping lead times.

The new LightForge™ offering from PowerPhotonic can be used to create a very

wide range of refractive optical elements, from generic functions such as beam transformers and microlens arrays, to unique components such as diode laser smile correctors, wavefront compensator phaseplates and completely custom surface shapes. The scope of what can be done is only limited by the designer's imagination. The LightForge™ product comes with a variety of options including a broadband anti-reflection coating and a mounting option that enables quick and easy deployment using industry-standard 2-inch diameter lens mounts.

