

Q2-2016 Newsletter

Now that the dust has settled from Photonics West in San Francisco and Laser World of Photonics in Shanghai, we would like to thank our many visitors for interesting discussions and just for dropping by to shake a hand and say hello.

What's New

New product releases in the first quarter of 2016

Couldn't find a suitable standard design from our comprehensive library (over 1000 unique designs) on your last visit to our website? Don't give up! In addition to the custom design alternative which is always available for minimal NRE costs, we are constantly adding new standard diffractive designs. In the first 3 months of 2016 we added 70 new designs throughout all product categories! Among others, we added few high efficiency diffractive axicons and several Top-Hat beam shapers for small input beams. Those new (and "older") designs can be fabricated in glass within 1-2 weeks (uncoated, and 5-6 weeks AR coated) with no NRE costs! Visit our

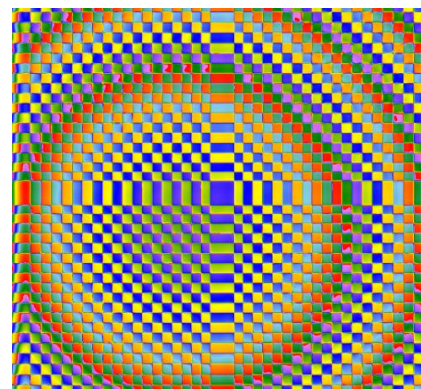


Figure 1- Phase example of a DOE

[new product release page.](#)

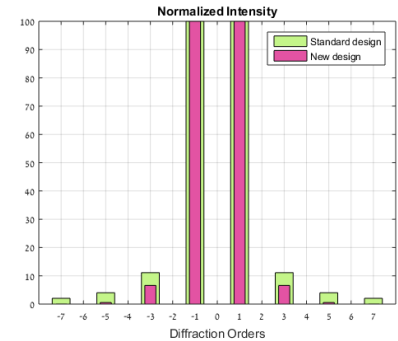
Upcoming exhibitions

 <p>International trade fair for laser material processing</p>	<p><u>LASYS 2016 – 31 May – 2 June, Stuttgart, Germany:</u> Visit us on Hall 4 Booth E17 via Laser Components GmbH our local distributor</p>	
	<p><u>OPTATEC 2016 – June 7-9, Frankfurt, Germany:</u> Visit us on Hall 3 Booth E01 via Laser Components GmbH our local distributor</p>	

Applications

[Double-Spot \(DS\) with suppressed higher orders](#)

Binary grating with duty cycle 50%, a.k.a Double-Spot, is a common DOE used in material processing, however this design is problematic in applications sensitive to the energy in the higher orders ($\pm 3, \pm 5$). To solve this problem, Holo/Or designed a product with a 66% reduction in energy in the nearby higher orders. This technique can be adapted to any of our existing designs and as well as to custom designs. [Read more in our publication section.](#)



Technical tips

[Homogenizers / Diffusers VirtualLab Black Box \(LPD\) files](#)

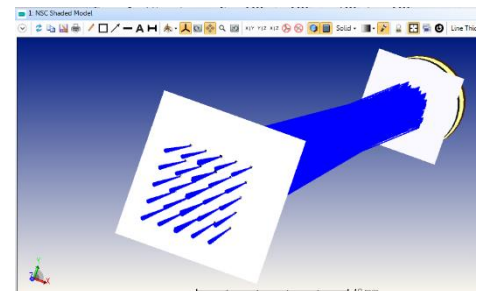
Integrating a Homogenizer / Diffuser has now been made easier, with the help of VirtualLab Black Box files (LPD) for selected products. This makes the design and modeling of an optical system with our products as straightforward as possible. You can find out more in the [product page](#) and [application note](#).



Tutorials

[Beam-Splitters \(Multi-spot\) in Zemax](#)

Our 1D & 2D Multi-Spot Diffractive Optical Element can be modeled in ZEMAX. We have published a comprehensive [tutorial](#) for design and integration of 1D and 2D Diffractive Beam Splitters (Multi-Spot) into optical systems in Sequential and non-Sequential mode of ZEMAX™.



FAQ

[Simulating custom and standard models of binary Top-Hat beam shaper \(ST\) with tolerances using MATLAB's p-code](#)

Holo/Or have released a free Matlab tool for nominal and post-tolerance simulation of our binary Top-Hat beam shaper (ST). Variables for tolerances include: defocus, wavelength, beam size and decenter. See our [product page](#) for more details and download.

