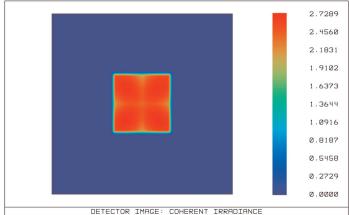
NeoBeam[™] Homogenizer (Collimated)

NeoBeam™ Homogenizer (Collimated)





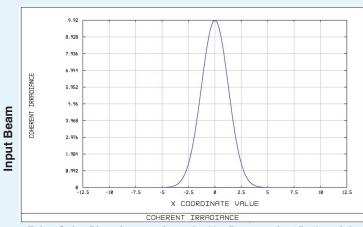
System Description: The NeoBeamTM collimated beam homogenizer takes the input of a Gaussian laser beam and converts it to a square, collimated, top-hat profile at the output. The device produces very steep edges in the top-hat profile and with $< \pm 10\%$ spatial uniformity. In addition, there is minimal modulation in the profile (interference effects caused by high spatial coherence in the input beam) due to the novel way the beam is broken up and recombined.

The NeoBeam collimated beam homogenizer is less susceptible to beam variations then in alternate free-form phase shifting devices and has the added advantage of producing a square profile which is more efficient in scribing applications over round beams. Alignment is simple and easy to maintain.

Includes the Following:

- Designed for low M², polarized and unpolarized DPSS lasers
- Includes all optics necessary to transform an input beam of up to 15 mm diameter into a square, top-hat collimated output profile
- Up to 25 mm Clear Aperture (dependent upon specified input/output beam dimensions)
- Mounts for most input/output configurations
- Easy alignment
- Removable cover allows quick access for alignment without disassembly of beam delivery system
- Optical rail configuration
- Modular design
- Anodized Aluminum, Stainless Steel, & Brass Construction
- Accessory Kit

<sup>2.583
2.263
2.003
1.752
1.592
1.592
1.691
8.751
8.5897
8.2583</sup>X COORDINATE VALUE
COHERNI TRRODIANCE



False Color Plot of output from the NeoBeam and a 2D plot of the input beam and the corresponding output beam.

^{*} The NeoBeam™ Homogenizer is manufactured and distributed by Haas Laser Technologies, Inc. under agreement with Neoteric Concepts, LLC.

