Application Note

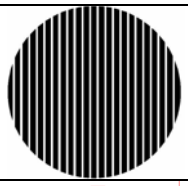
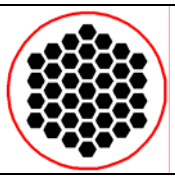
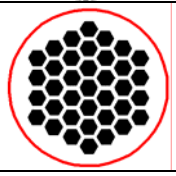
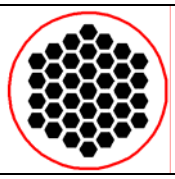
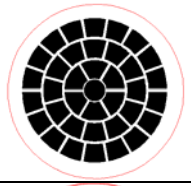
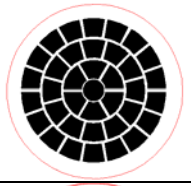
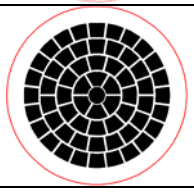
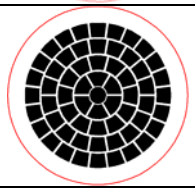
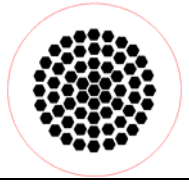
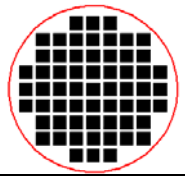
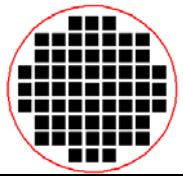
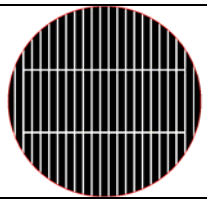
AN012: Pad Arrays

Introduction

A **pad array** is the actuator layout component in the deformable mirror assembly. Depending on end user requirements, the pad array selection is central to providing solutions to aberration or laser beam correction.

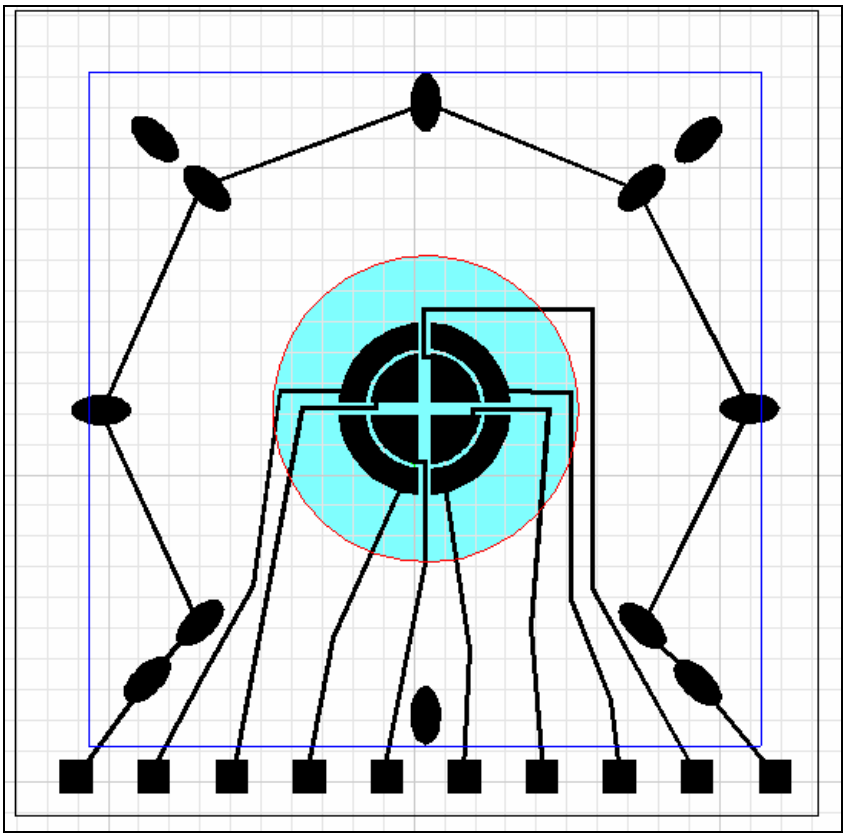
AgilOptics offers a range of pad array designs that can be applied to our deformable mirrors. This application note contains a summary of standard pad arrays as well as more detailed representation of the actual part. Custom pad arrays can be produced to match customer requirements.

Matrix of Pad Arrays

	Membrane diameters				
	10mm	**16mm**	**25mm**	**30mm**	**50mm**
Ophthalmology					
36 L					
37 Hex					
37 CC					
61 CC					
61 CirHex					
61 R					
61 L					

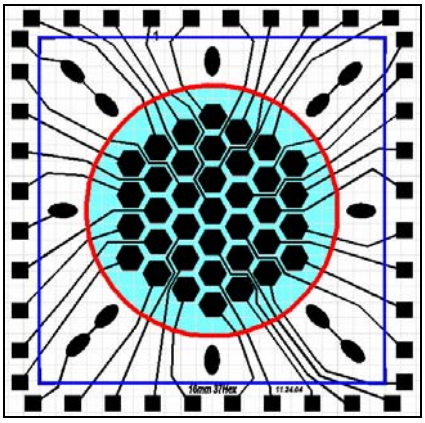
Legend:
CC = Concentric Circles **CirHex** = Circular Hex
R = Rectilinear **L** = Linear

10mm

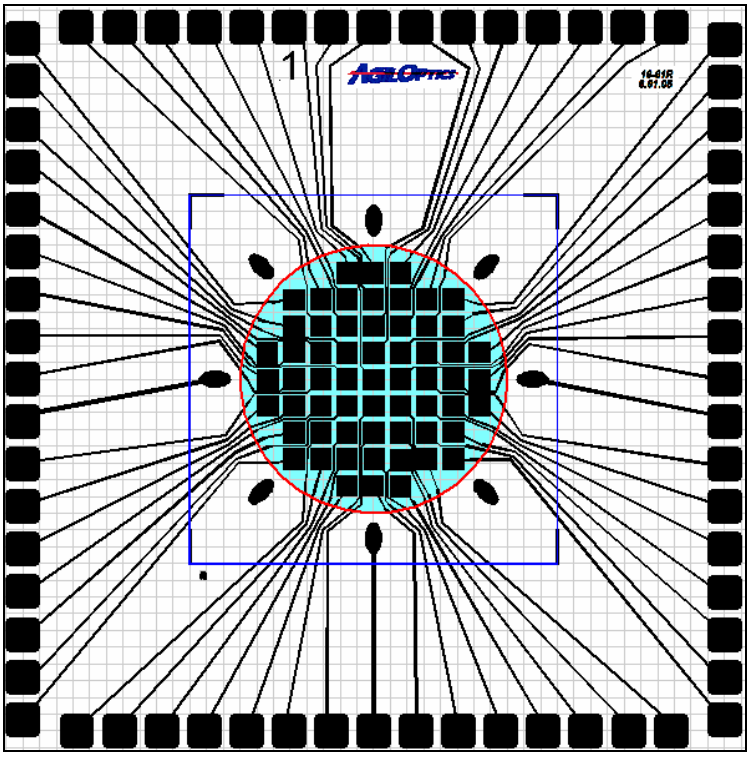


Ophthalmology

16mm

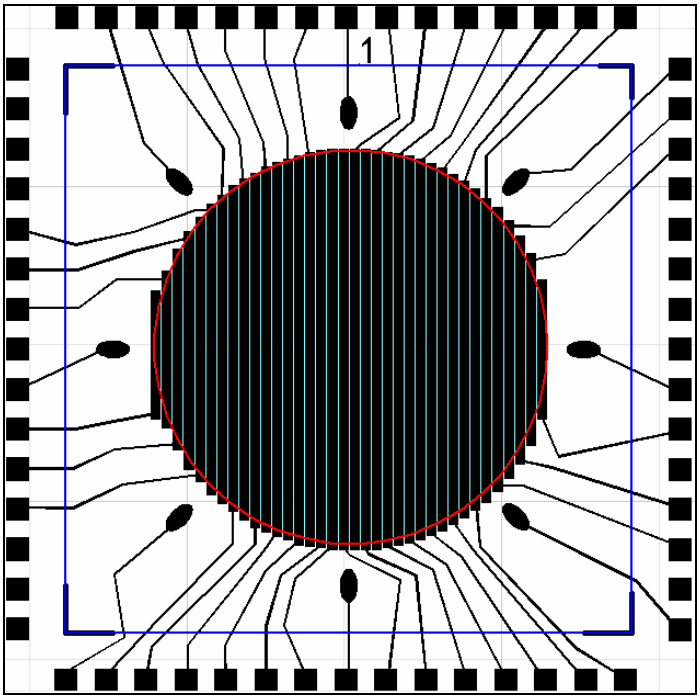


37Hex

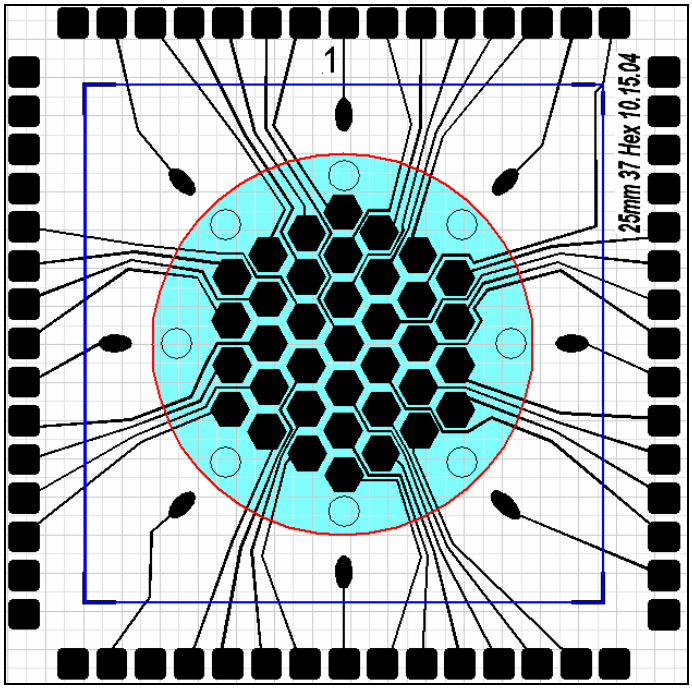


61R

25mm

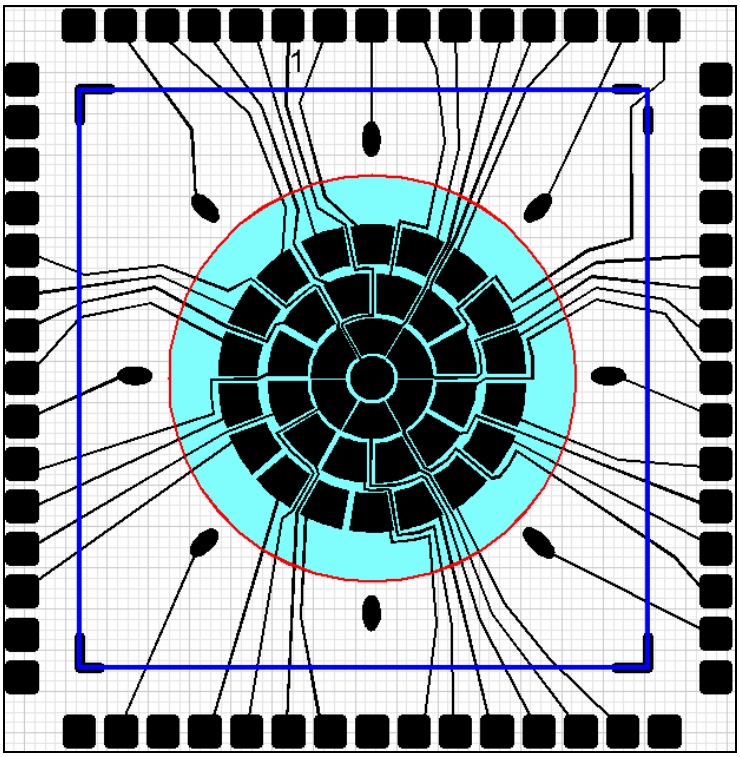


25-36 Linear

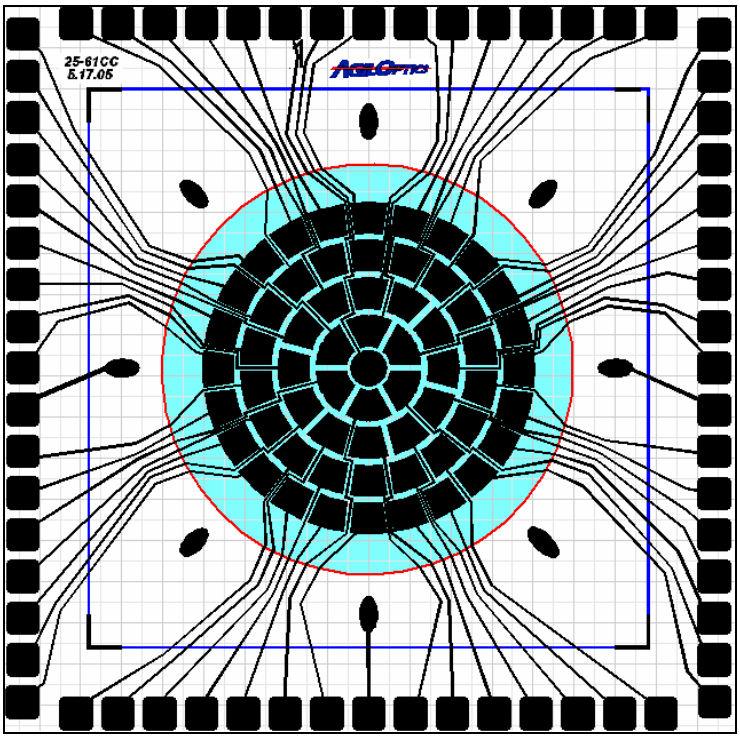


25-37 Hex

25mm

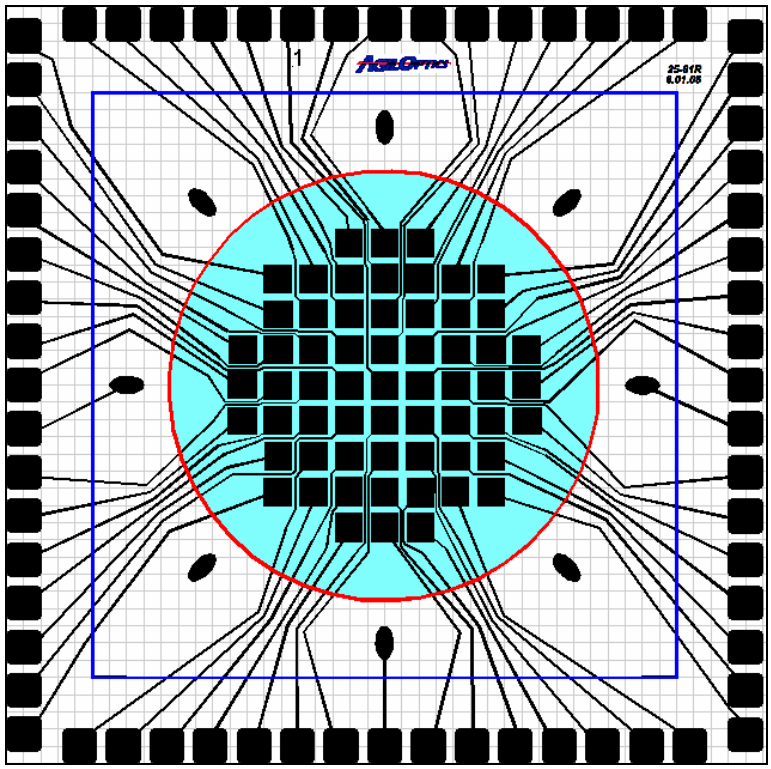


25-37CC



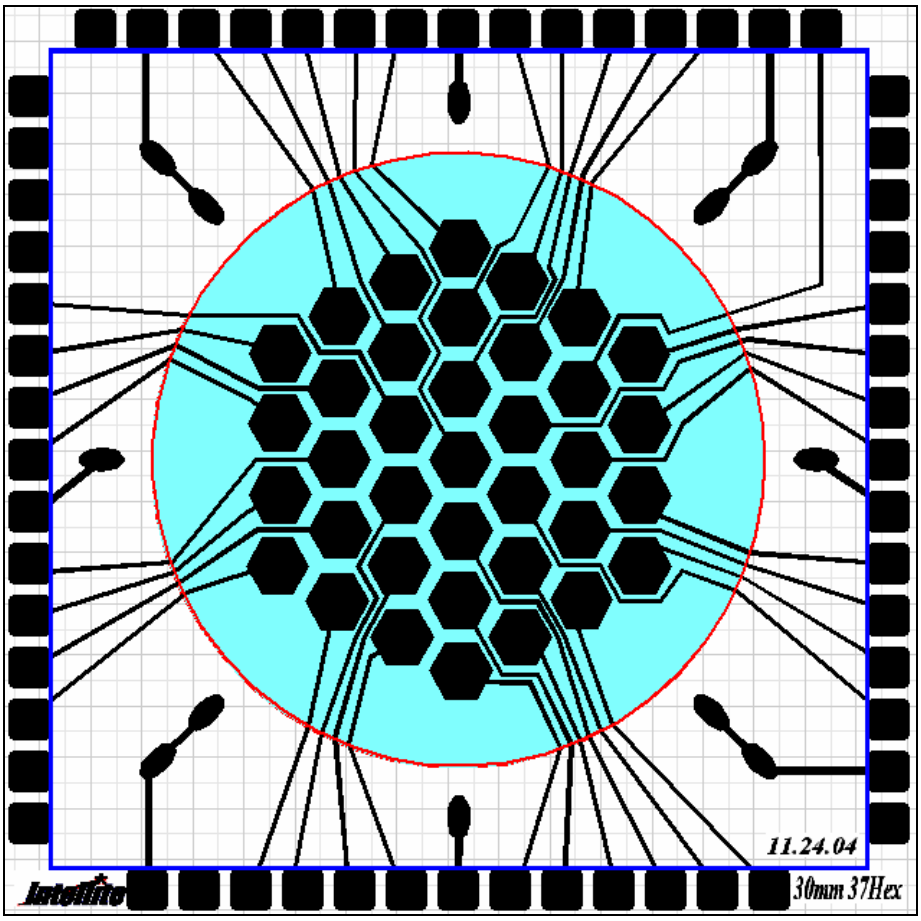
25-61CC

25mm



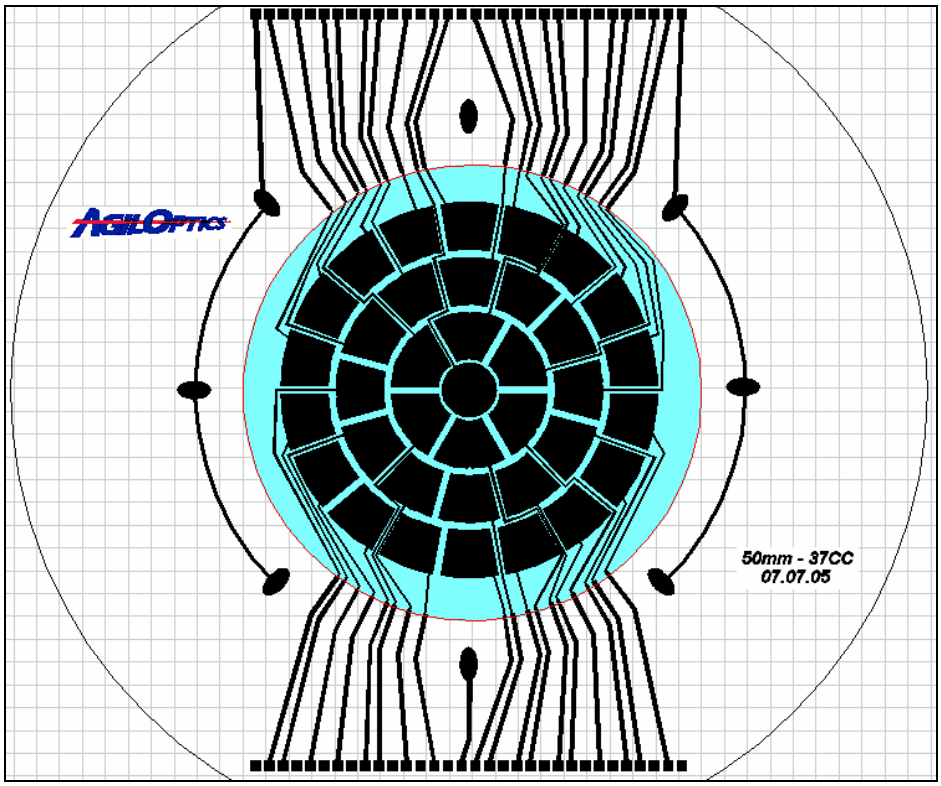
25-61 R

30mm

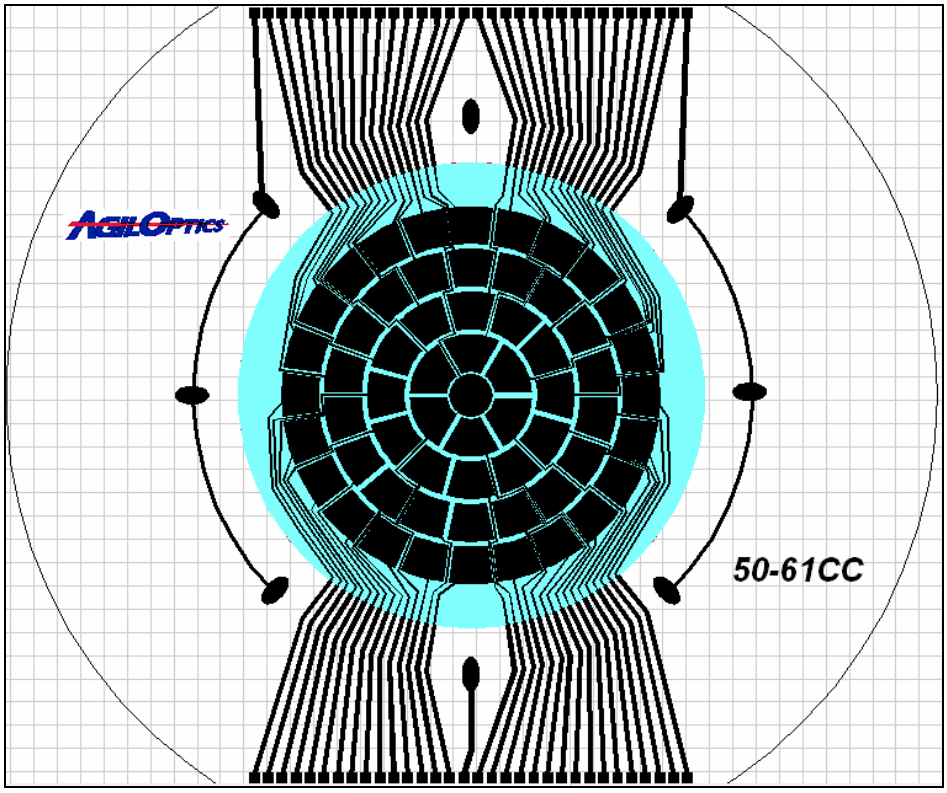


30-37Hex

50mm

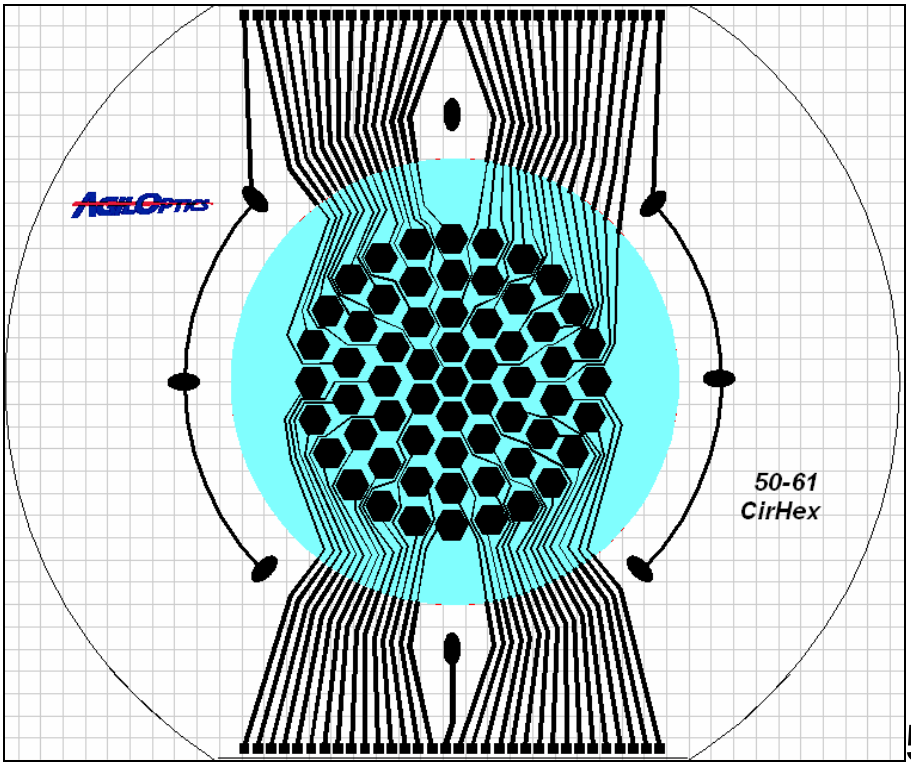


50-37CC

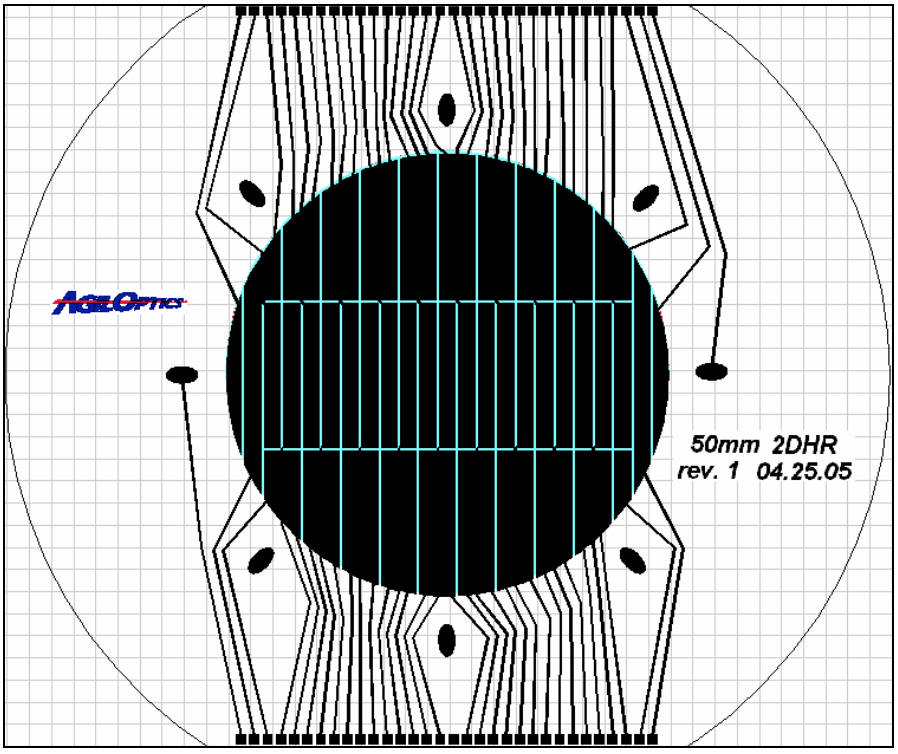


50-61CC

50mm



50-61 CirHex



50-61 Linear

What Can Deformable Mirrors Do?

- Correct Optical Aberrations
- Laser Beam Shaping
- Optical Image Enhancement

Deformable mirrors are revolutionizing laser and optical systems by replacing static components with dynamic optics. Deformable mirrors (DM) are adaptive optics with dynamic faces able to optimize or change the characteristics of reflected light for a specific application. With time-varying control, a DM can focus a beam at several different points at different times or it can replace a lens in an optical system. Deformable Mirrors can improve optical images in telescopes, cameras, and other imaging systems.

For further information and discussion about how deformable mirrors work and how they will solve your optical problems see the manuals for HVDD, Clarifi, and the application notes available on the Web.

http://www.agiloptics.com/app_notes.htm

http://www.agiloptics.com/downloads.htm