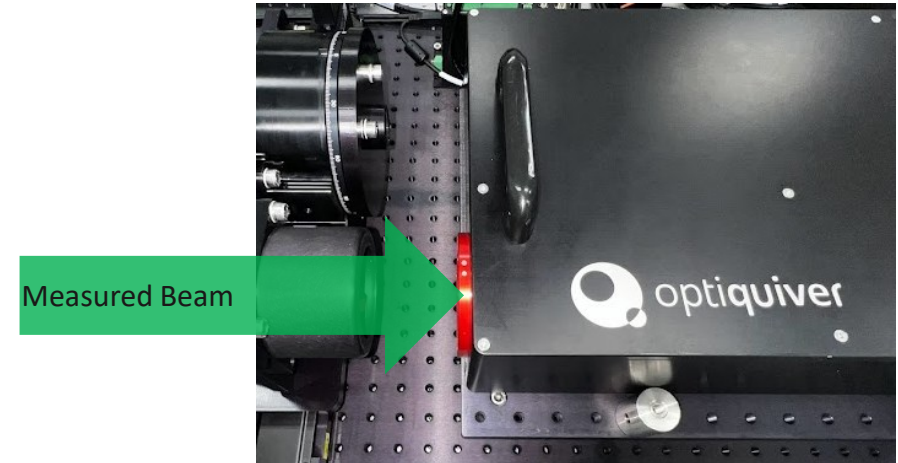
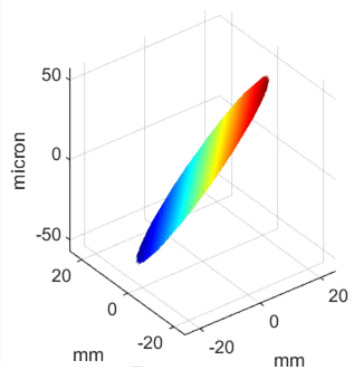


# OPTIQUIVER APP NOTE: BEAM MEASUREMENT WITH TILT

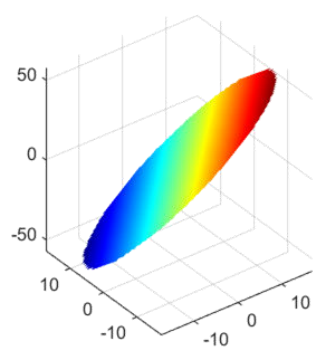
- **Test:**
  - Directly measure a 45 mm collimated beam for Wavefront and Tilt, such as a lens assembly or parabolic mirror system
- **Result:**
  - **Easy setup, live feedback for lens/mirror alignment, no compression optics required**
  - Wavefront PV = 114.69  $\mu\text{m}$
  - Wavefront PV (tilt removed) = 0.130  $\mu\text{m}$
  - X Tilt = -0.4570 degrees
  - Y Tilt = -0.1867 degrees



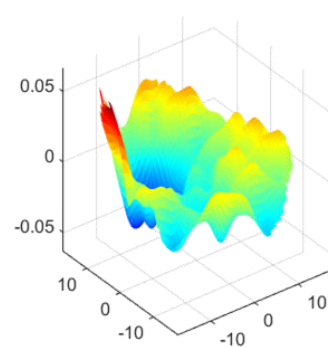
**Measured Wavefront**  
 PV = 114.693micron  
 RMS = 25.206 micron



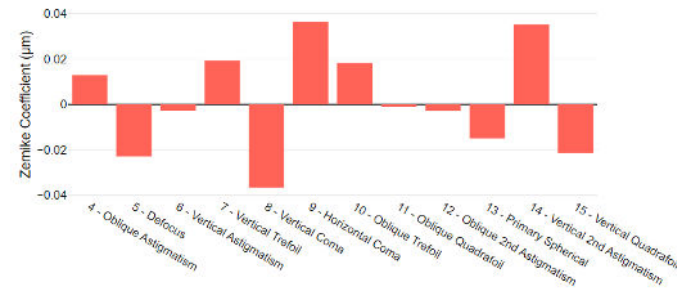
**Zernike Surface**  
 PV = 114.705 micron  
 RMS = 25.206 micron



**Measured Wavefront & Tilt Removed**  
 PV = 0.13 micron  
 RMS = 0.017 micron

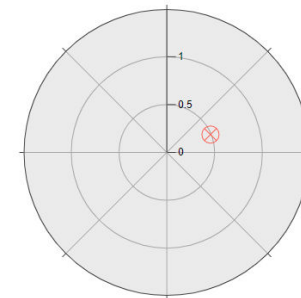


**Zernike Decomposition**



**Beam Tilt**

Angular Measurement



Point Components

Phi	22.2227 °
Theta	0.4937 °
Tilt X	-0.4570 °
Tilt Y	-0.1867 °