



Computer Generated Hologram System for Wavefront Measurement System Calibration

Description

This computer generated hologram system (CGHS) creates a hologram that is an image conjugate to a wavefront measurement system image of an optical system or surface under test. This hologram is used to calibrate the wavefront measurement system. This system is capable of calibrating middle and high spatial frequency errors in the wavefront measurement system.

Features and Benefits

- This CGHS is especially well suited to calibrate wavefront measurement systems that include a reflective null lens.
- The imaging properties of the CGHS can be provided by a simple Plano convex lens.
- Reflective patches on the lens can boost the reflected signal if needed.
- The CGHS is positioned at an image conjugate of the wavefront measurement system, allowing calibration of middle (5-30 cycles over a clear aperture) and high spatial frequencies (30 cycles over a clear aperture or higher).

Applications

This tool is useful for calibrating telescopes, interferometers and other optical systems.

For More Information

If you are interested in more information or want to pursue transfer of this technology, GSC-15676-1, please contact:

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To view Goddard's entire portfolio of wavefront sensing technologies, please visit:
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