

NED™
Near-Eye Display
Measurement Systems
AR/VR Testing Solutions



ISSUFT

Imaging system easily integrates into Lab or Production lines for fully automated, instantaneous FOV AR/VR display testing.

- » High resolution
- » High speed
- » High color accuracy



Also configurable for high resolution microdisplay test applications.

NED™ M and NED™ W

Wide Field of View Benchtop Testers

NED M80: 80 degree FOV
Imaging Colorimeter Platforms

NED W150: 150 degree FOV
Imaging Colorimeter Platforms



GS-NEDTest™ Software Suite

Dedicated Software for Full Analysis and Insight

Most comprehensive near eye display test suite
with over 25+ fully automated tests

Measurements in real-time and after testing

3D interactive plots and complete test reports for
each DUT (left and right eye)

SDKs available for custom test scripts in
Python, Matlab, C, C++, and C#



*Complete performance verification
with high resolution 2D image*

*Complies with the latest international IEC 63145,
ISO and IDMS standards for near-eye display metrology.*

Most comprehensive
near eye display test suite

GS-NEDTest™ Software Suite

Fully Automated Measurement Capabilities



| Product Family | NED™ E-Series | | |
|----------------------------|--|-----------------------|---|
| GsNEDTest™ SW Features | Spectral Quality | Spatial Image Quality | |
| Standard SW | | | |
| 1. | Center Color and Luminance | 8. | MTF Curves/Contrast Curve |
| 2. | Luminance Uniformity | 9. | Michelson Contrast Uniformity |
| 3. | Color/Chromaticity Uniformity | 10. | Image Geometric Distortion |
| 4. | Color Gamut Area | 11. | Virtual Image Distance |
| 5. | Field of View (by Luminance) | 12. | Field of View (by Contrast) |
| 6. | Design Eyebox (by Luminance) | 13. | Design Eyebox (by Contrast) |
| 7. | Sequential / Full-On-Full-Off Contrast | 14. | Checkerboard Contrast |
| Binocular Disparity | | | |
| 15. | Interpupillary Distance (IPD) by Luminance | 16. | Interpupillary Distance (IPD) by Contrast |
| | | 17. | Left/Right Eye Parallax |

All test methods conform with the latest international standards being developed by the IEC, IDMS, and ISO for AR/VR Metrology; consult with Gamma Scientific for any additional tests.

Complete Family of AR/VR Testing Solutions to Fit Your Needs



| Product Family | NED™ E | | NED™ M | NED™ W | NED™ V | |
|------------------|--------------|------|----------|----------|----------|---------|
| Platform | Robotic Eye™ | | Benchtop | Benchtop | Benchtop | |
| Model # | E100 | E101 | M80 | W150 | V24-75 | V24-100 |
| Resolution (PPD) | 250 | 250 | 144 | 59 | 93 | 55 |
| FOV Horizontal | 160° | 160° | 65° | 150° | 56° | 96° |
| FOV Vertical | 45° | 90° | 48° | 117° | 49° | 83° |

