

2026 HEL Optics Metrology Workshop Agenda

University of North Carolina at Charlotte; Duke Centennial Hall

August 11-12, 2026 | Eastern Daylight Time (EDT)

Tuesday - August 11

0800 – Check-in Opens (Duke Centennial Hall)

0900 – Welcome *Justin Sigley, AmeriCOM*

0910 – SCADE Overview and Keynote *Chris Behre, SCADE, OUSW (R&E)/OASW(CT)*

0950 – SCADE S&T *Chris Wilson, SCADE, OUSW(R&E)*

1025 – Break (Coffee and Water Provided)

1045 – Qualification Testing Readiness Assessment for the Directed Energy Industrial Base (DE) *Adam Hansen and Zach Lyles, Radiance Technologies*

1120 – Materials and Metrology Challenges for HEL Applications *Kathleen Richardson, Center for Directed Energy, College of Optics and Photonics University of Central Florida*

1200 – Lunch

1300 – Specification and Metrology Best Practices for High Energy Laser (HEL) Optics *Joseph Randi, Penn State Applied Research Laboratory*

1335 – Workshop Session: DEWS Optics Specification and Metrology Standards

1500 – Break (Coffee and Water Provided)

1520 – Precision at Scale: Raytheon's Solutions to Metrology Challenges in Large Aperture High Energy Laser Telescopes *Jason Lavine, Raytheon*

1555 – High Framerate 2D-3D eSWIR Active Imaging Sensor for Beam Control, Targeting and HEL Applications *Richard Scritchfield, Leonardo DRS*

1630 – End of Sessions

1730 – Evening Social *Flying Saucer, 9605 N Tryon St (15 min walk)*

Wednesday – August 12

0830 – Check-in Opens

0900 – Anti-Reflective Structured Surface (ARSS) Laser Windows: LIDT and Biofouling

Thomas C. Hutchens, UNC Charlotte

0930 – Can Interference Coatings Meet the Demands of Next Generation Ultra-Intense and

Ultra-High Power Lasers? *Carmen S. Menoni, Colorado State University, XUV Lasers Inc.*

1000 – Meeting the Challenges in Understanding Optical Damage Mechanisms for CW

Lasers *Martin Richardson, Center for Directed Energy, College of Optics and Photonics University of Central Florida*

1030 – Break (Coffee and Water Provided)

1050 – Round Robin of FOD Resistant HEL Coatings Using Standardized Metrology *Justin*

Sigley, AmeriCOM

1120 – Recent Methods and Results for Foreign Object Debris Laser Damage Testing of

HEL Optics *Joseph J. Talghader, University of Minnesota*

1200 – Lunch

1300 – Framework for Quantitatively Assessing the Risk of Contamination-Induced Laser

Damage in LWS *Jeff Shores, Lockheed Martin*

1335 – Workshop Session: Metrology and Test Standards for FOD and Contamination-Induced Laser Damage

1445 – Break (Coffee and Water Provided)

1500 – Overview of United States Advanced Ceramics Association *Aisha Haynes, USACA*

1530 – Tours of UNC Charlotte Center for Precision Metrology and Optics Cleanroom