



# Unparalleled Characterization and Calibration



The concept of HELIOS Uniform Luminance & Radiance Systems is to provide a whole new level of knowledge about the radiometric performance of each system. Our calibration laboratories have been designed to ensure fast, repeatable, COMPLETE testing of each system with industry-leading uncertainty.

HELIOS calibrations first start by matching CCTs on the lamps as closely as possible. Then multiple spectral radiance measurements are done for each lamp and for several levels of operation over the dynamic range of the system. Data from the detector, or multiple detectors or spectrometers are gathered during each measurement. Each HELIOS system is then measured again for spatial and angular uniformity on each lamp, multiple lamps and over several levels of operation. This extensive and unique level of product characterization gives Labsphere the ability to establish a full operational checkout and ensure performance across multiple systems, multiple system batches and establish understood and repeatable product norms.

In addition to our innovative testing systems, we also offer optional additional services on our core double-monochromator based system for world-class uncertainty. This system also provides us with a foundation for HELIOS testing system speed and accuracy.

Our goal is to provide you the testing data, product consistency and highest level of performance and uncertainty on every HELIOS product that current technology allows. HELIOS system characterization is provided whether you buy one system or a product suite for your whole enterprise from R&D to Production to Field Use.

## VALUE

Fast, automatic and semi-automatic test stations for each HELIOS system

Characterization and calibration in almost every relevant state of use for each system at no additional charge

Uniformity verification over all lamps and levels

Database of archived calibration tied to system serial numbers for each tracking and re-calibration

Unique characterizations to each HELIOS Family of systems that suit relevant application and industry needs

A true-dark lab for low-level testing and certification

All data provided in Excel format and PDF (Certificates) on USB stick for use with HELIOSense software

World-Class calibration standards laboratory with over 35 years of Labsphere experience

## Existing System Re-Calibrations

When it comes time to renew your system certification and commissioning, HELIOS provides quick and efficient re-calibration services grouped by the family of the system that you purchased. This enables you to quickly calculate the cost of ownership going forward.

## VALUE

Similar suite of calibrations to the original system calibrations

Each calibration includes QTH replacements as part of our service to make sure you're working at peak condition

Plasma Lamps and Xenon Lamp replacements can be ordered as options

HELIOS common calibrations allows Labsphere the ability to quickly turn the system so you can keep working

We also offer electronic calibration as an option to make sure our detectors, power supplies and other electronic items are all in compliance

Out-Of-Tolerance Reports (OOTR) can also be ordered for either optical or electronic calibrations. OOTR compares your system in an "as-received" state to your original calibration, so you have a record of any offsets that may have happened during your use. We report on the OOTR before we place any new calibrations on the system





## D-FAMILY RECALIBRATIONS

H-D-OCAL	SYSTEMS - HELIOS	D-Family Optical Calibration Service. Includes lamp replacements. Electronics calibration must be purchased separately. OTR Reports must be purchased separately.	
H-D-ECAL	SYSTEMS - HELIOS	Electronics Recalibration of HELIOS D System Power Supplies, Detectors and other system rack electronics	
H-D-OOTR	SYSTEMS - HELIOS	Optical Out of Tolerance Report for D System. Comparison of Incoming System State of Last Calibration State	
H-D-EOTR	SYSTEMS - HELIOS	Electronics Out of Tolerance Report for D System. Comparison of Incoming System State of Last Calibration State	



## A-FAMILY RECALIBRATIONS

H-A-OCAL	SYSTEMS - HELIOS	A-Family Optical Calibration Service. Includes lamp replacements and spectrometer wavelength verification. Electronics calibration must be purchased separately. OTR Reports must be purchased separately.	
H-A-ECAL	SYSTEMS - HELIOS	Electronics Recalibration of HELIOS A System Power Supplies, Detectors and other system rack electronics	
H-A-OOTR	SYSTEMS - HELIOS	Optical Out of Tolerance Report for A System. Comparison of Incoming System State of Last Calibration State	
H-A-EOTR	SYSTEMS - HELIOS	Electronics Out of Tolerance Report for A System. Comparison of Incoming System State of Last Calibration State	



## L-FAMILY RECALIBRATIONS

H-L-OCAL	SYSTEMS - HELIOS	L-Family Optical Calibration Service. Includes lamp replacements. Electronics calibration must be purchased separately. OTR Reports must be purchased separately.	
H-L-ECAL	SYSTEMS - HELIOS	Electronics Recalibration of HELIOS L System Power Supplies, Detectors and other system rack electronics	
H-L-OOTR	SYSTEMS - HELIOS	Optical Out of Tolerance Report for L System. Comparison of Incoming System State of Last Calibration State	
H-L-EOTR	SYSTEMS - HELIOS	Electronics Out of Tolerance Report for L System. Comparison of Incoming System State of Last Calibration State	



## V-FAMILY RECALIBRATIONS

H-V-OCAL	SYSTEMS - HELIOS	V-Family Optical Calibration Service. Includes lamp replacements. Electronics calibration must be purchased separately. OTR Reports must be purchased separately.	
H-V-ECAL	SYSTEMS - HELIOS	Electronics Recalibration of HELIOS V System Power Supplies, Detectors and other system rack electronics	
H-V-OOTR	SYSTEMS - HELIOS	Optical Out of Tolerance Report for V System. Comparison of Incoming System State of Last Calibration State	
H-V-EOTR	SYSTEMS - HELIOS	Electronics Out of Tolerance Report for V System. Comparison of Incoming System State of Last Calibration State	



## S-FAMILY RECALIBRATIONS

H-S-ONSITE	SYSTEMS - HELIOS	S-Family 1-Day On-Site Calibration Service (Single Sources). Includes Optical and Electrical Certified Calibrations. OTRs must be ordered separately. Travel, Shipping and Expenses will be estimated and billed separately	
H-S-OCAL	SYSTEMS - HELIOS	S-Family Optical Calibration Service. Includes lamp replacements. Electronics calibration must be purchased separately. OTR Reports must be purchased separately.	
H-S-ECAL	SYSTEMS - HELIOS	Electronics Recalibration of HELIOS S System Power Supplies, Detectors and other system rack electronics	
H-S-OOTR	SYSTEMS - HELIOS	Optical Out of Tolerance Report for S System. Comparison of Incoming System State of Last Calibration State	
H-S-EOTR	SYSTEMS - HELIOS	Electronics Out of Tolerance Report for S System. Comparison of Incoming System State of Last Calibration State	