Lumina R480™ and R480S™ Systems Accelerate the Next Level of Photonics Device Manufacturing

Lumina MOCVD Platform

Enabling As/P-based Photonics Devices with Over 20 Years of High-Volume MOCVD Experience

Designed to advance next generation devices:

> **VCSELs**
  - 3D Sensing
  - LiDAR
  - High Speed Data Communication

> **Mini and Micro LEDs**
  - 4K and 8K Television Displays
  - Smartphones
  - Wearable Devices
  - AR/VR

> **Edge-Emitting Lasers**
  - Advanced Optical Communications
  - Silicon Photonics
Introducing the Lumina MOCVD Platform

The Lumina R480 and R480S systems are based on Veeco’s industry leading MOCVD TurboDisc® technology which features excellent uniformity and low defectivity over long campaigns for exceptional yield and flexibility. In addition, Veeco’s proprietary technology drives uniform injection and thermal control for excellent thickness and compositional uniformity. Providing a seamless wafer size transition, the system is capable of depositing high quality As/P epitaxial layers on wafers up to six inches in diameter. The R480 and R480S systems allow users to customize their systems for maximum value for VCSEL, Edge-Emitting Laser, and Mini / Micro LED high volume production.

Advantages of Veeco World-Class MOCVD

- Cleanroom-rated glovebox and improved Galaxy software allows adjustable pressure differentials to account for zero-drift for better defectivity performance
- Modular design for ease of operation and maintenance
- Improved i-Flange with tunable alkyl and secondary hydride zone for better source efficiency.
- Capable of depositing high quality As/P epitaxial layers on wafers up to six inches in diameter

Lumina’s Superior Design, Technology and Performance

Best-in-class total population uniformity, excellent defectivity, and high source efficiency for lowest cost-of-ownership

- Based on industry-leading TurboDisc MOCVD technology
- Simple, effective and reliable design
- Stable and clean operation leads to long campaign between preventive maintenance

Find out more at www.veeco.com/Lumina or call 1.888.24.VEECO

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