

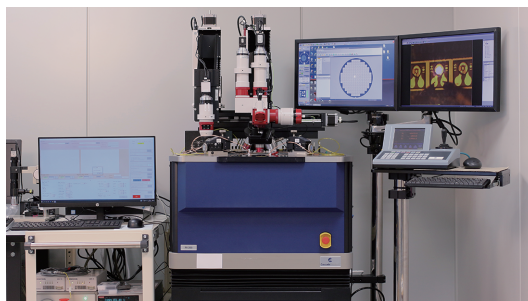
WAFER LEVEL OPTICAL CHARACTERISTIC MEASUREMENT SYSTEM FOR LIGHT EMITTING DEVICE

Wafer level testing of optical characteristic for light emitting device such as VCSEL in combination with manual/semi automatic prober system

Wafer level optical characteristic measurement system for light emitting device is the system that analyzes electrical and optical characteristics of light emitting device like VCSEL at wafer level. In addition to electrical characteristics measurement, optical characteristics, such as NFP, FFP, IVL, polarization, etc, can be measured at wafer level. By combining prober systems for semiconductor failure analysis, such as semi-automatic/manual probers, with our high-performance optical measurement optics for prober **M-Scope I/PFW**, FFP measurement optics **M-Scope type F**, IVL measurement module **PMD002/IVL**, polarization measurement module **PMD002/POL**, etc., various characteristics are measured under wafer level. In addition, it can be used for automatic measurement of mass-produced devices in combination with the semi-automatic prober.

[Features]

- Wafer level measurement of various electrical and optical characteristics of light emitting device like VCSEL in combination with semi-automatic/manual prober.
- Achieves automation of various measurements combining with the semi-automatic prober system. Applicable from off-line measurement of individual elements to in-line measurement.
- High-performance optical measurement optics M-Scope series and photometric module
 - High functional optical measurement optics designed for wafer level optical beam analysis.
- Prober interlocking optical measurement software **Optometrics customized version for LD**
 - Semi-automatic prober control and analysis automation, collection of measured data, unified management of measurement types and measurement recipes, etc.



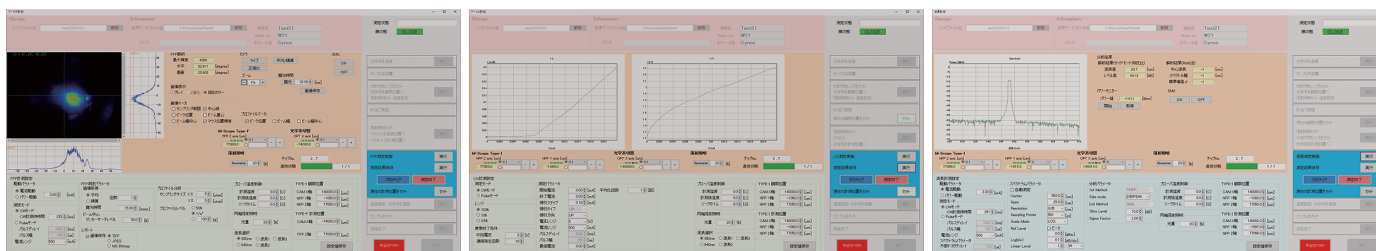
● Optical measurement optics for prober **M-Scope type I/PFW**

[Prober interlocking optical characteristic measurement software "Optometrics Customized Version for LD"]

This software has been developed for wafer-level optical element measurement, which automates analysis by controlling and linking the semi-auto prober, integrates electrical and optical characteristic data collection, and manages measurement types and measurement recipes. A wide range of support is available, from offline measurement to in-line automatic measurement. The measurement item customizes the software according to the measurement target, measurement content, measuring instrument used, measurement procedure and operation.

《Typical measurement items》

- electric and optical characteristic of light emitting device such as VCSEL
 - I-V-L characteristic, optical beam profile (NFP/FFP), polarization characteristic, spectrum characteristic, etc.
 - *Measurement instrument corresponding to each measurement is required.

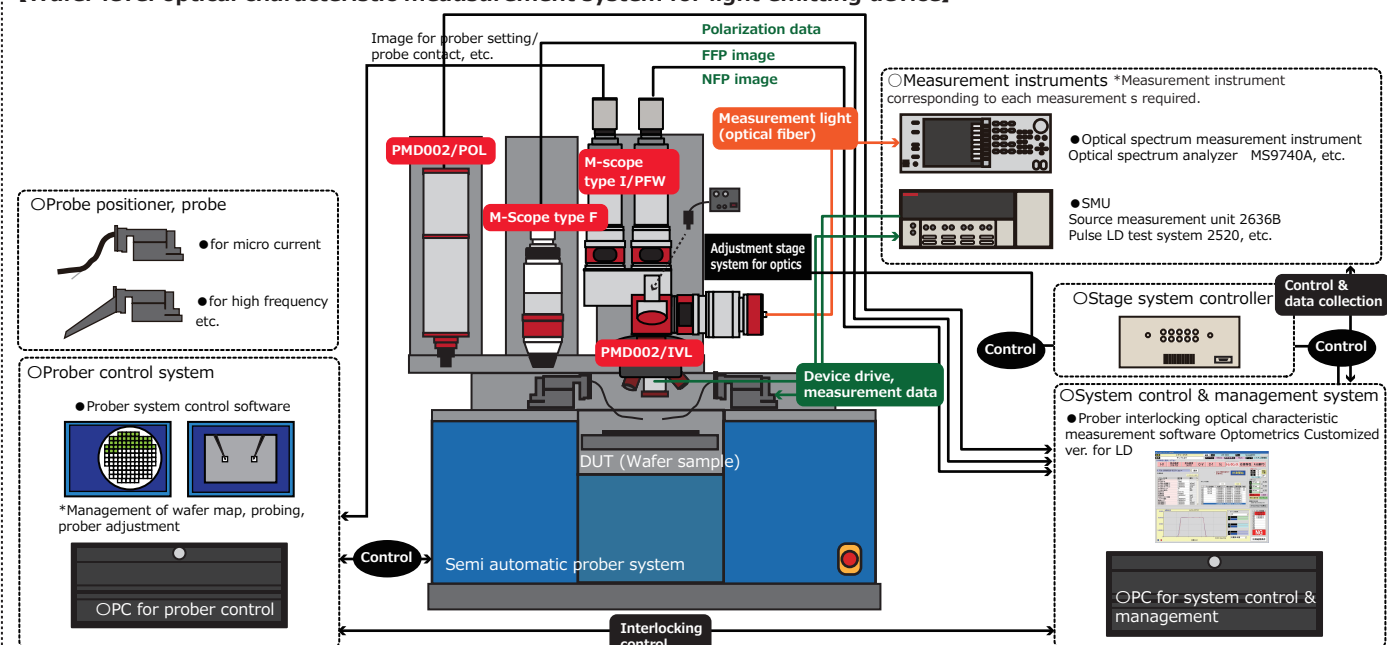


○ FFP measurement

○ IVL measurement

○ Optical spectrum measurement

[Wafer level optical characteristic measurement system for light emitting device]



*We will propose system with various configurations and specifications depending on the measurement sample, specifications, operating method, and budget.