

LED TEST SERVICE

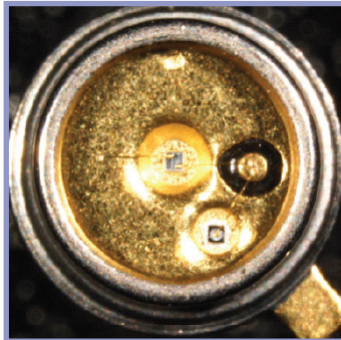
- MULTIPLE TEST SYSTEMS AVAILABLE
- WIDE RANGE OF TEST PARAMETERS
- RELIABILITY TESTING OF LEDS
- FAILURE AND CONSTRUCTION ANALYSIS OF LEDS

LED TEST SERVICE



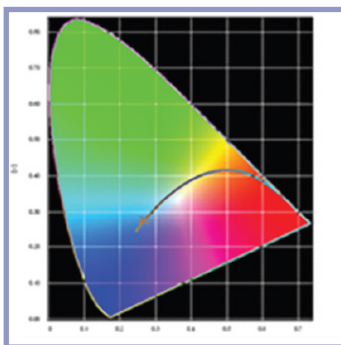
TEST SYSTEMS

- Instrument Systems MAS40 Mini-Array Spectrometer (390 – 950 nm)
- Ocean Optics Flame Spectrometer (200–1100 nm)
- Integrating sphere for spectral output measurement
- Wavelength:
 - Ultraviolet: 230 - 380nm
 - Visible: 380 - 700nm
 - Infrared: 700 - 1100 (1650nm)



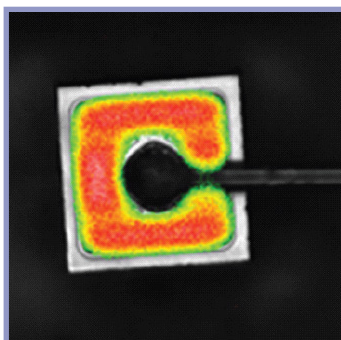
TEST PARAMETERS

- Peak Wavelength (nm)
- Spectrum Half Width (nm)
- Luminous Flux (Lm)
- Optical Power, Radiant Power, Radiant flux (W)
- Luminous Intensity (cd)
- Radiant Intensity (W/Sr)
- Power Supply (DC & pulsed)



RELIABILITY TEST

- Lumen maintenance
- Optical characterization
- Thermal management
- Environmental test
- Mechanical robustness / vibration
- ESD



FAILURE AND CONSTRUCTION ANALYSIS

- Electrical / optical verification
- Silicon lens removal by Microwave Induced Plasma
- Optical / SEM inspection
- Cross-sectioning with optical / SEM inspection
- Fault localization (EMMI/OBIRCH/LIT)
- Dual beam plasma FIB cross-sectioning