

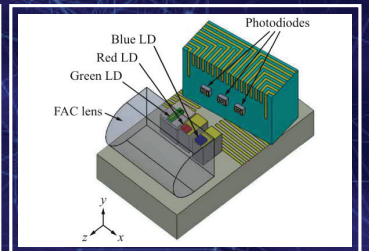
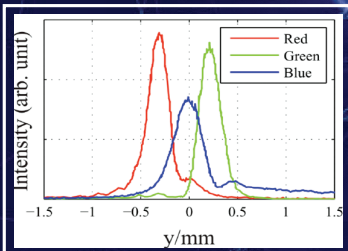
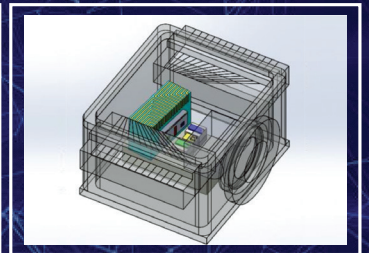
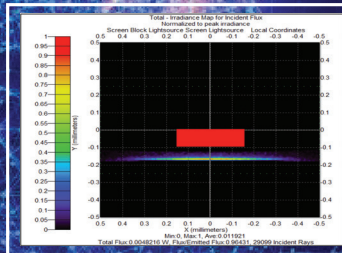
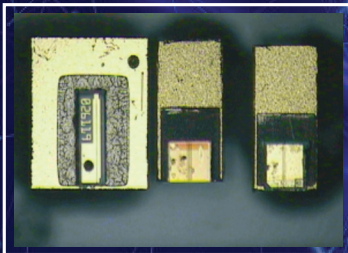
## MINIATURISED RGB LASER MODULE

### ■ Integrated optical & microelectronic sub assembly

- » Hermetic sealed package
- » Controlled internal environment
- » Tailored laser diode chips, Red: AlGaInP, Blue: GaInN, Green: GaInN

### ■ Optical & thermal design & simulation, FAC / SAC lens

- » 3D CAD model: Mechanical design, optical, thermal simulation
- » Micron pick and place component mounting & alignment



### ■ Optical properties: Light beams are fast and slow axis collimated

- » RGB laser diode active alignment
- » RGB beams, nearly diffraction-limited
- » Fast axis beam profiles at 50 cm (above image)

### ■ Conclusion

- » Miniaturised RGB laser light source
- » Custom red, blue laser diodes and FAC / SAC microlens
- » Total volume of only 0.45 cm<sup>3</sup>