

Quantum yield measurement of Green Fluorescence Glass Plate (Lumilass G9)

INTRODUCTION

By using the F-7000 with the quantum yield measurement unit and thin film sample holder (special order), the quantum yields of plate samples can be measured. The system is applicable to samples such as plates with the organic EL, the emission device drawing attention, plates containing the fluorescent material for white LED, and glass plates with fluorescent properties. This time, an example of the quantum yield measurement for a green fluorescence glass plate, which produces fluorescence when irradiated with UV light (325 nm), is introduced.

SAMPLE

ACCESSORY

Sample : Green Fluorescence Glass Plate (Lumilass G9)  
(Sumita Optical Glass, Saitama, Japan)

Appearance of Sample

Sample size :  $\phi$  8 mm, t = 2 mm



Quantum yield measurement unit  
Thin film sample holder (special order)



INSTRUMENT CONDITIONS

QUANTUM YIELD MEASUREMENT

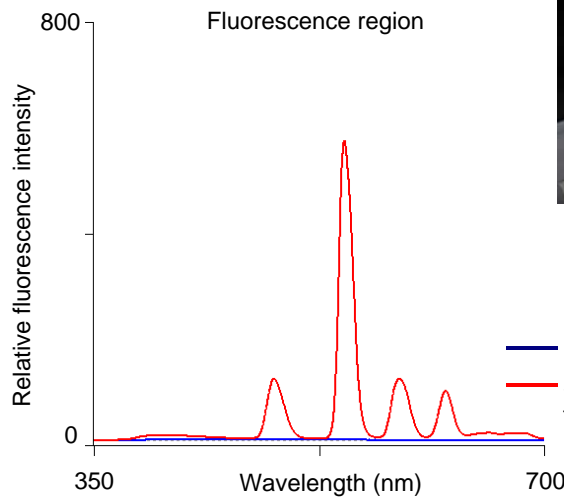
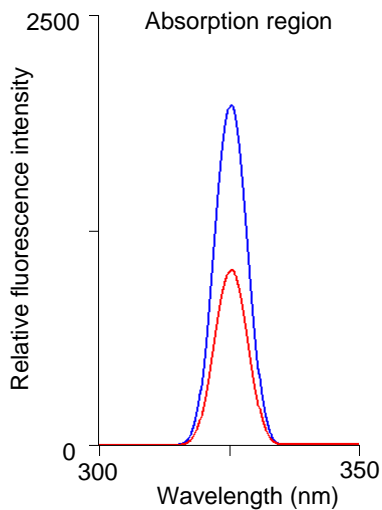
Instrument : F-7000  
Em Wavelength : 325 nm      Response : Auto  
Ex Bandpass : 5 nm      Detector : R928F  
Em Bandpass : 5 nm      Photomultiplier Vol. : 350 V  
Scan Speed : 1200 nm/min

[Calculation conditions]

Scattered radiation wavelength range: 315 - 335 nm  
Fluorescent radiation wavelength range: 380 - 700 nm

[Calculated result]

$$\phi = 0.63 \pm 0.05$$



View of Mounted Thin Film Sample Holder

— Reference : Quartz plate  
— Sample : Green fluorescence glass plate

Quantum Yield Measurement of Green Fluorescence Glass Plate

\* The measured value is for reference only and may differ from the actual value.

KEY WORDS

Electronics·Semiconductor Related,  
Other Electronics·Semiconductor Related, Fluorescence Glass, Plate,  
Thin Film, Vapor Deposition, Spin Coat, Quantum Yield, Quantum Efficiency,  
Material, Solid, Organic EL, LED, Dye Sensitization, Solar Cell,  
Next Generation Lighting, FL, F-7000, Solid Sample

Fluorophotometer (FL)

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