QUANTUM YIELD BERLIN

Report

Sample: *PV1*
Project: *PV*
Instrument: *LuQY Scanner*

External Luminescence Quantum Yield (LuQY)

The external luminescence quantum yield ($LuQY$, η_{ext}) describes how efficiently a material emits photons relative to the absorbed excitation:

$$\eta_{\mathrm{ext}} = \frac{\Phi_{\mathrm{lum}}}{\Phi_{\mathrm{exc}} - \Phi_{\mathrm{exc,R}}}$$

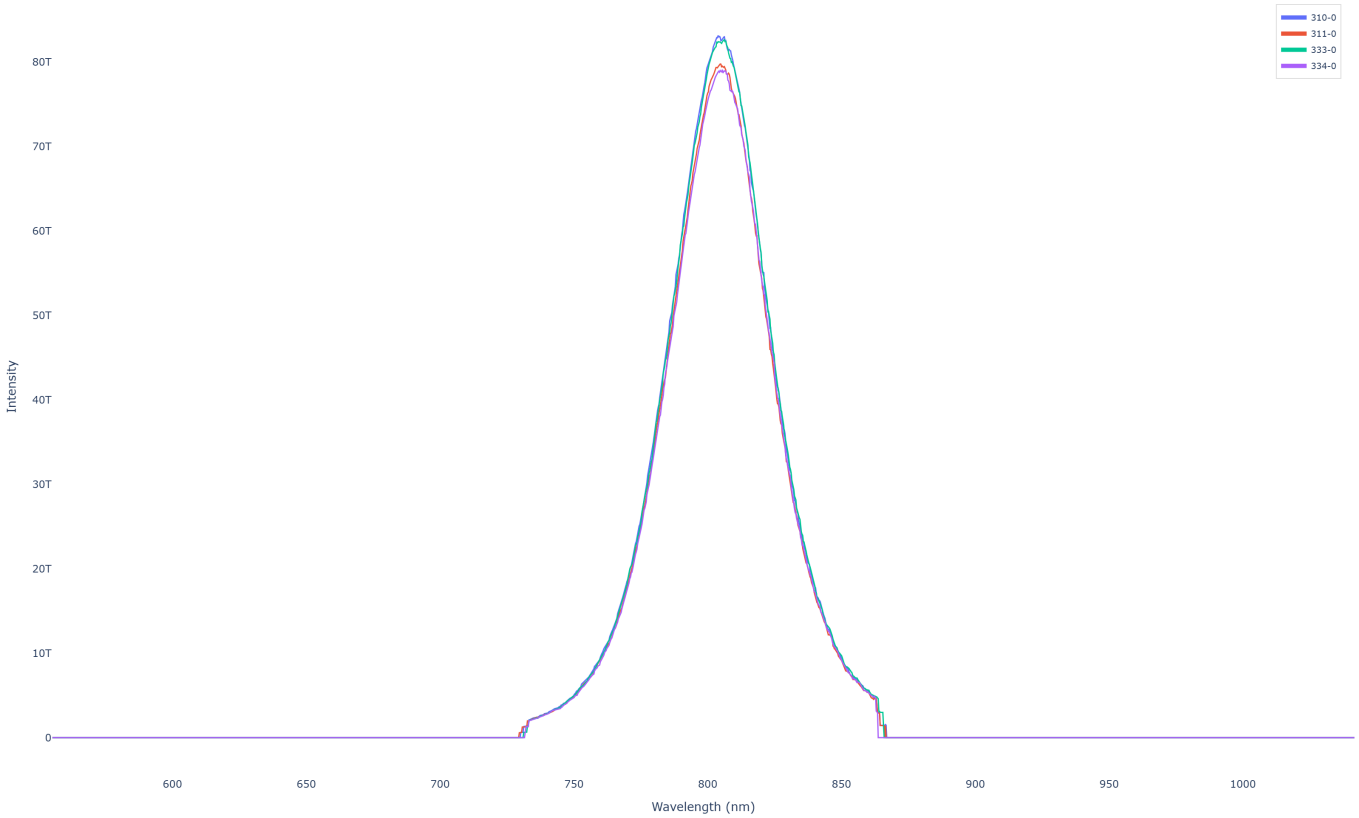
Where:

- Φ_{lum} — total emitted photon flux
- Φ_{exc} — excitation photon flux
- $\Phi_{\mathrm{exc,R}}$ — reflected / non-absorbed excitation flux

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Summary Table

Parameter	Value	Units
LuQY	3.8	%
QFLS	1.16	eV


310-0
311-0
333-0
334-0
80T
70T
60T
50T
40T
30T
20T
10T
0
Intensity
600
650
700
750
800
850
900
950
1000
Wavelength (nm)