

radiation trapping

Process by which the resonance radiation emitted in a lamp is absorbed and re-emitted many times in the plasma prior to striking the phosphor. This process is called radiation trapping or imprisonment.

Note:

Radiation trapping lengthens the effective lifetime of emission as viewed from outside the lamp. The control of this trapping is, therefore, an important design consideration for low-pressure lamps.

Source:

PAC, 2007, 79, 293 (*Glossary of terms used in photochemistry, 3rd edition (IUPAC Recommendations 2006)*) on page 410