photostationary state

A steady state reached by a reacting chemical system when light has been absorbed by at least one of the components. At this state the rates of formation and disappearance are equal for each of the transient molecular entities formed.

Source:

PAC, 1996, 68, 2223 (Glossary of terms used in photochemistry (IUPAC Recommendations 1996)) on page 2265

See also:

PAC, 1990, 62, 2167 (Glossary of atmospheric chemistry terms (Recommendations 1990)) on page 2206