The invention relates to a lighting strip (100) for mounting in or on a panel support element (210) of a modular panel system (200). The lighting strip comprises an optical waveguide (120) having a tapered portion increasing in thickness from the center towards a first side of the lighting strip. The lighting strip also comprises a first plurality of solid state lighting elements (110) placed along the first side of the lighting strip facing said tapered portion (120). The lighting strip further comprises a reflective surface (140) and a light output surface comprising a glare reducing member (130) each extending between the first side and a second side opposite to the first side. The optical waveguide is located between the reflective surface and the glare reducing member. A lighting system panel support element (210) and modular panel system (200) including such a lighting strip (100) are also disclosed.