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ICHIKAWA et al.(54) **LIGHTING CIRCUIT****Publication Classification**(71) Applicant: **KOITO MANUFACTURING CO., LTD.**, Tokyo (JP)(51) **Int. Cl.**
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H05B 45/345 (2006.01)(72) Inventors: **Tomoyuki ICHIKAWA**, Shizuoka-shi (JP); **Toru ITO**, Shizuoka-shi (JP); **Atsushi OZAWA**, Shizuoka-shi (JP)(52) **U.S. Cl.**
CPC **H05B 45/18** (2020.01); **H05B 45/345** (2020.01)(73) Assignee: **KOITO MANUFACTURING CO., LTD.**, Tokyo (JP)(57) **ABSTRACT**(21) Appl. No.: **17/867,870**(22) Filed: **Jul. 19, 2022****Related U.S. Application Data**

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An automotive lamp includes a temperature-sensing element having an electrical state that changes according to the temperature T of a semiconductor light source, and a constant current driver that generates a driving current I_{LED} that corresponds to the temperature T . The maximum value of the temperature differential of the driving current I_{LED} in a first temperature range from a reference temperature T_0 to a first temperature T_1 ($T_1 > T_0$) is smaller than the maximum value of the temperature differential of the driving current I_{LED} in a second temperature range from the first temperature T_1 to a second temperature T_2 ($T_2 > T_1$).

