



**U.S. Department
of Transportation
Federal Aviation
Administration**

InFO

Information for Operators

InFO 21003
DATE: 03/29/21

Flight Standards Service
Washington, DC

http://www.faa.gov/other_visit/aviation_industry/airline_operators/airline_safety/info

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Subject: Issues Related to the Use of Light Emitting Diode (LED) Landing Lights in an Icing Environment.

Purpose: This InFO serves to inform operators of aircraft equipped with LED landing lights that LED landing light icing can occur more frequently than incandescent landing light icing, resulting in reduced light output and pilot visibility.

Background: Operational experience has revealed that LED retractable landing lights are susceptible to icing during the landing phase of flight causing the landing lights to be ineffective. This issue has been reported in Boeing airplane models MD88/90, B717 and Airbus airplane models A319/320/321.

Discussion: Icing can reduce light output of LED landing lights by approximately one-third. Engineering tests have determined that it takes about 20 minutes for LED landing lights to warm up enough to start melting ice. The LED landing lights tested showed a slow initial temperature increase followed by a relatively linear increase to get above the freezing point in the center of the lens.

Recommended Action: In consideration of safety management system principles, operators of aircraft equipped with LED landing lights should consider adapting procedures during operations in icing conditions to mitigate the effects of reduced LED landing light output.

Contact: Questions or comments regarding this InFO should be directed to the Federal Aviation Administration (FAA) Air Transportation Division at (202) 267-8166.