



**FAA**  
**Great Lakes Region, Airports Division**  
**Safety Standards Branch**

## **Airport Certification Information Bulletin (ACIB) 2011-11**

### **Subject: Mixing of Light Source Technologies**



The increasing use of airport light emitting diode (LED) light fixtures on the airport has caused concerns when the LED light fixtures are interspersed with their incandescent counterparts. LED Light fixtures may present a difference in perceived color and/or brightness than an equivalent incandescent fixture. These differences can potentially distort the visual presentation to a pilot. Therefore, LED light fixtures must not be interspersed with incandescent lights of the same type.

Example: An airport adds an extension to a runway. On the existing runway, the runway centerline light fixtures are incandescent. The airport decides to install LED runway centerline fixtures on the new section of runway and retains the incandescent fixtures on the existing section. This interspersion of dissimilar technology is not approved for installation.

In addition, defective incandescent fixtures must not be replaced with their LED counterparts. When replacing defective light fixtures, make certain that the replacement uses the same light source technology to maintain a uniform appearance.

Since the use of LED technology on airfields is rapidly increasing, it is important Part 139 Airport Operators review plans with their respective Airport Certification Safety Inspector prior to installation of the lights to ensure the new lighting does not have a negative affect on safety.

## **LED Technology System(s) that are not to be interspersed:**

**Runway Guard Lights** – each pair of elevated RGLs must be the same technology. For in-pavement lights, do not mix LED with incandescent fixtures in the same bar.

### **Touchdown Zone Lights**

### **Runway Edge Lights Including Threshold, End, and Stopway**

**Signs per location** – do not collocate LED signs with incandescent signs. Example: runway holding positions signs on both sides of the taxiway, holding position signs on both sides of the runway, separate signs that form a sign array.

**Taxiway curved segments** (centerline and edge)

**Taxiway straight segments** (centerline and edge)

### **Approach Light Systems**

### **Stop Bars**

### **Runway Centerline**

### **Precision Approach Path Indicator (PAPI)**