

Taxi and Landing Lights for Aircrafts

Introduction

The LED based Taxi & Landing Lights has been designed and developed to replace existing filament based lights on left hand (LH) and right hand (RH) Nose Landing Gear of Light Combat Aircraft (LCA). Two lights are required per aircraft for Taxi and Landing. One is installed on port (LH) side of Nose



Undercarriage and the other on the Starboard (RH) side. Taxi & Landing Lights have three modes of operation i.e. OFF mode, Taxi Mode and Landing Mode. This Light operates on Aircraft nominal power supply i.e. 28V DC. CSIR-CSIO has developed the Taxi and Landing Lights along with its Indoor and Outdoor Test Rigs.

Features

- Mode-I: Taxi Mode
In this mode of operation, wide beam and lower intensity aviation white light output is provided. Light beam spread is 18° horizontal and 13° vertical.
- Mode-II: Landing Mode
In this mode of operation, narrow beam and high intensity aviation white light output is provided. Light beam spread is 10° horizontal and 8° vertical.

Specifications

Input Power Supply	28 V DC as per MIL-STD 704D
Power Consumption	Taxi mode 170 W max. Landing mode 250 W max.
Light	Aviation White as per MIL-C-25050/SAE-AS25050
MTBF	>10,000 hrs
Light output (Taxi)	≥ 5.38 Lux at 300 feet
Light output (Landing)	≥ 12 Lux at 400 feet

Light beam (Taxi)	18° (H) x 13° (V)
Light beam (Landing)	10° (H) x 8° (V)

Applications

Aircraft Taxi and Landing Lights for Fighter and Passenger Aircrafts and Helicopters.

Outdoor Test Rig for Taxi & Landing Lights



Indoor Test Rig for Taxi & Landing Lights



Status

The technology has been developed and qualification testing has been completed. The technology is ready for deployment in the field.