



AEROSPACE STANDARD

AS264™**REV. F**

Issued	1951-03
Revised	2001-10
Reaffirmed	2011-11
Cancelled	2016-08

Superseded by ARP4103

Instrument and Cockpit Lighting for Commercial Transport Aircraft

RATIONALE

AS264 was originally issued in 1951. The document is antiquated, providing guidance for applications that are no longer part of the modern flight deck such as for the flight engineer's station, navigator's station, and radio officer's station. The document uses outdated metrics, such as millimicrons and milliLamberts, recommends specific suppliers (Harry Davis Molding Corporation), calls out specific test equipment (Macbeth illuminometer) and lists references from the 1920s through 1940s. All relevant aspects of the document have been incorporated into ARP4103. This document is canceled and superseded by ARP4103.

CANCELLATION NOTICE

This Technical Report has been declared "CANCELLED" as of August 2016 and has been superseded by ARP4103. By this action, this document will remain listed in the respective index, if applicable. Cancelled Technical Reports are available from SAE.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2016 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
<http://www.sae.org>

SAE WEB ADDRESS:

Full document details: SAE AS264F

SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AS264F>

Documents

Document Sharing Hub

1. SCOPE:

The desired system for aircraft instrument panel and cockpit lighting is one that will furnish light of adequate intensity and distribution under all conditions of external lighting so that the crew may read instrumentation, placards, check lists, manuals, maps, instrument color coding, distinguish controls, etc., without undue interference with their vision outside of the aircraft.

2. METHODS OF LIGHTING:

Any method of providing red and white lighting separately controlled, which meets the requirements of this specification are considered satisfactory for air line transport use.

3. REQUIREMENTS:

3.1 To accomplish adequate lighting the following criteria are required and pertain to all:

3.2 Type of Light:

3.2.1 Both red and white lights separately controlled shall be incorporated.

3.2.2 The red light shall be above the wave length of 600 millimicrons (AN-C-56) and shall be obtained through either glass or plastic filters. Dipped bulbs as currently used are not considered satisfactory. However, bulbs with red glass envelopes that meet these requirements are considered satisfactory.

3.2.3 Lighting shall not interfere with legibility of white markings for daylight operation.

3.3 Arrangements:

- 3.3.1 The pilots' instrument panel shall be lighted in three sections consisting of the pilots' flight instruments, engine instruments, and copilots' flight instruments. The red light for each section shall be controlled by separate intensity controls. The white light for the entire panel shall be controlled by a single intensity control.
- 3.3.2 Side console lighting shall be only of the red type, each side controlled by a separate intensity control.
- 3.3.3 Red light shall be provided for overhead panels and controlled by a separate intensity control.
- 3.3.4 A 3 position override switch will be provided such that when in its neutral position all lights will operate on their respective intensity controls; when placed in up or forward position, white light at its highest intensity will be provided at all stations; and when placed in down or aft position all stations will provide only red light, through their respective intensity controls.
- 3.3.5 Aircraft containing large control cabins and multiple crew positions shall be provided with adequate light traps and curtains to isolate the pilots and flight engineer from strong light from other crew member positions.
- 3.3.6 Small adjustable position red lights of fixed intensity shall be provided at each pilots' station near the flight brief case position for lighting its interior.
- 3.3.7 Additional crew member stations including instrument panels and working areas shall be provided with both red and white lights controlled by separate intensity controls.
- 3.3.8 Each pilot shall be provided with a map-reading light controlled by an intensity control. This light must be capable of being quickly changed from red to white as required. (not connected to override circuit)
- 3.3.9 To provide an emergency lighting system a source of white light for the pilots and flight engineer panels shall be supplied.

3.4 Controls:

- 3.4.1 The intensity controls for operating the lights shall be of a rotary type. Full "off" in the extreme counter-clockwise position, proceeding clockwise from extinction to the approximate mid-point of its physical travel where the specified brightness values listed in Paragraph 3.5 will be met. Thereafter, proceeding to the full clockwise position of travel, at which point, approximately twice the specified values of brightness will be attained.