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GB/T 7256-2015

**Lighting fixtures for civil airport - Part 1: General requirements
(English Translation)**

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Table of Contents

Preface
Introduction
1 Scope
2 Normative references
3 Terms and Definitions
4 Category
5 Technical Requirements
5.1 Environmental Requirements
5.2 Luminosity and chromaticity requirements
5.3 Dimensional requirements
5.4 Structural Requirements
5.5 Electrical requirements
5.6 Electromagnetic compatibility
5.7 Maintenance requirements
5.8 Surface quality
5.9 Surface color
5.10 Option
5.11 Marking and Instructions for Use
6 Test methods
6.1 Test conditions
6.2 Test protocol
6.3 Photometric test
6.4 Chromaticity test
6.5 Test of recessed lamps
6.6 Vertical luminaire test
6.7 Size
6.8 Salt spray test
6.9 Low pressure test
6.10 Electrical test
6.11 Electromagnetic compatibility test
6.12 Interchangeability check
6.13 Lamp life

6.14 Adjustment device inspection

6.15 Surface Quality Inspection

6.16 Lamp failure monitoring test

6.17 Antifreeze component test

Appendix A (normative) Photometric characteristics of airport luminaires

Appendix B (normative) Particular requirements for runway warning lights

Appendix C (normative) Particular requirements for luminaire mounting accessories

Appendix D (normative) Qualification tests during manufacture

Appendix E (normative) Determination of Photometric Characteristics of Airport Luminaires

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules of Standardization Documents" drafted.

This document is part 1 of GB/T 7256 "Navigation aids for civil airports". GB/T 7256 has published the following parts.

--- Part 1: General requirements.

This document replaces GB/T 7256-2015 "General Requirements for Lamps in Civil Airports". Compared with GB/T 7256-2015, except for structural adjustment in addition to editorial changes, the main technical changes are as follows.

--- Increased the light output and light distribution requirements of the embedded taxiway edge lights [see 5.2.1.1b)], increased the entrance lights of the non-instrument runway the light output and light distribution requirements [see 5.2.1.1c)], the light output and light distribution requirements of the non-instrument runway threshold wing bar lights have been added [see 5.2.1.1d)], the light output and light distribution requirements of runway end lights for non-instrument runways are added [see 5.2.1.1e)], added - the light output and light distribution requirements for runway edge lights intended to provide circling guidance [see 5.2.1.1f)];

--- Revised the requirements for the color of LED lights (see 5.2.2, 11.2 of the 2015 edition);

--- The size specifications of recessed lamps are changed from recommended requirements to normative requirements (see 5.3.1, Appendix A of the 2015 edition);

--- Increased the requirements for power cables of vertical lamps (see 5.3.2);

--- Increased the requirements for protection against electric shock (see 5.5.2);

- Increased electrical strength requirements (see 5.5.4);
- Increased power requirements (see 5.5.5);
- Modified the requirements for electromagnetic compatibility (see 5.6, Chapter 16 of the 2015 edition);
- Increased the life requirements of LED lamps (see 5.7.2);
- Increased the requirements for the adjustment device (see 5.7.3);
- Increased the daytime visual surface requirements in the surface color (see 5.9);
- Added optional requirements (see 5.10);
- The rain test requirements are changed from IP34 that passed the GB 7000.1-2015 test to IPX4 that passed the GB/T 4208 test (see 6.6.3, 8.1 of the 2015 edition);
- Added solar radiation test method (see 6.6.6);
- Added low pressure test method (see 6.9);
- Modified the photometric characteristics requirements of airport lamps (see Appendix A, Appendix A of the 2015 edition);
- Added special requirements for runway warning lights (see Appendix B);
- Added special requirements for luminaire installation accessories (see Appendix C).

Please note that some content of this document may be patented. The issuing agency of this document assumes no responsibility for identifying patents.

Introduction

GB/T 7256 "Civil Airport Navigation Lamps" is proposed to be composed of five parts.

--- Part 1: General requirements. It mainly stipulates that tungsten filament lamps and LEDs used in civil airports are used as light sources, and the power supply voltage does not exceed General requirements for 1000V navigation aids. It is suitable for providing light guidance signals for aircraft taxiing, take-off or approach landing.

Aviation lamps. The main products covered are approach lights, runway threshold identification lights, runway threshold wing bar lights, runway threshold lights, runway end lights, touchdown strip lights, runway centerline lights, runway edge lights, taxiway centerline lights, taxiway edge lights, stop bar lights, runway warning lights, etc.

--- Part 2: Sequential flashing lights and runway threshold identification lights. It mainly stipulates the use in civil airports and provides clear information for aircraft.

Requirements for the sequential flashing lights and runway threshold identification lights for runway approach direction guidance.

--- Part 3: Precision approach course indicator. It mainly stipulates the purpose of use in civil airports for pilots preparing to land.

See the requirements of the Precision Approach Path Indicator (PAPI) for Precision Approach Path Indication. The main products covered are precision Near Course Indicator (PAPI) and Reduced Precision Approach Course Indicator (APAPI).

--- Part 4: Weather vane. It mainly specifies the requirements for weather vanes used in civil airports.

--- Part 5: Aviation beacons. Mainly specifies the use in civil airports to indicate the location of the airport to air vehicles (aircraft).

requirements for aviation beacons. The main products covered are medium-intensity airport lights, medium-intensity seaplane base lights, high-intensity lights Airport light signs, high light intensity seaplane base light signs, low light intensity airport light signs, low light intensity seaplane base light signs, etc.

Civil airport navigation aids - Part 1: General requirements

1 Scope

This document specifies the use of tungsten filament lamps and LEDs as light sources for navigation aids in civil airports with a power supply voltage not exceeding 1000V (with hereinafter referred to as the general requirements for lamps).

This document applies to aids to navigation lamps that provide light guidance signals for aircraft taxiing, take-off or approach landing.

This document does not apply to high pole lighting fixtures and flood light fixtures in civil airports. This document does not apply to luminaires for heliports.

2 Normative references

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, dated citations documents, only the version corresponding to that date applies to this document; for undated references, the latest edition (including all amendments) applies to this document.

GB/T 2423.17 Environmental Testing of Electrical and Electronic Products Part 2: Test Methods Test Ka. Salt Spray GB/T 2423.21 Environmental Testing of Electrical and Electronic Products Part 2: Test Methods Test M. Low Air Pressure GB/T 2423.24-2013 Environmental Test Part 2: Test Method Test Sa. Simulated Solar Radiation on the Ground and Its Test test guide GB/T 2828.1 Counting Sampling Inspection Procedure Part 1: Lot-by-Lot Inspection Sampling Plan Retrieved by Acceptance Quality Limit (AQL) GB/T 3977-2008 Representation method of color GB/T 3979 Measurement method of object