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ICS 17.180

JJF

NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJF 1765-2019

Program of Pattern Evaluation of UV Radiometers

紫外辐射照度计型式评价大纲

(English Translation)

Implemented on: December 27, 2019

Issued by: State Administration for Market Regulation

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Introduction

This type evaluation outline is based on JJF 1015-2014 "General Specification for Type Evaluation of Measuring Instruments" and JJF 1016-the 2014 "Guidelines for the Compilation of the Type Evaluation Outline for Measuring Instruments" was prepared as a basic specification.

The technical indicators of this type evaluation outline refer to the verification regulations of JJG879-2015 "Ultraviolet Irradiance Meter".

This type evaluation outline is released for the first time.

Type Evaluation Outline of Ultraviolet Irradiance Meter

1 Scope

This type evaluation outline is applicable to UV-A, UV-B, UV-C, UV-A1, UV-365, UV-310, UV-Type evaluation of 254-band ultraviolet illuminance meter.

2 Reference documents this specification refers to the following documents.

JJG755-2015 UV radiation illuminance working standard device verification regulation JJG879-2015 UV radiation illuminance meter verification regulations JJF 1032-2005 Terms and definitions of optical radiation measurement GB 4793.1 Safety requirements for electrical equipment for measurement, control and laboratory use Part 1: General requirements GB/T 11606-2007 Environmental test methods for analytical instruments GB/T 12085.2-2010 Optical and optical instrument environmental test method Part 2: Low temperature, high temperature, Damp heat for dated reference documents, only the dated version applies to this specification; for undated references the latest version (including all amendments) is applicable to this specification.

3 term

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3.1 Long-wavelength range response characteristics
long-wavelengthrangeresponsecharacteristics Describe the long-wavelength spectral response characteristics of the ultraviolet radiometer outside the spectral response wavelength range.

3.2 cosine (directional response) characteristics cosine (directional response) characteristics Describe the response characteristics of the ultraviolet illuminance meter when the angle of the incident light deviates from the normal incidence (the law of cosine).

4 overview

The International Commission on Illumination (CIE) divides ultraviolet radiation into UV-A (315nm~400nm), UV-B (280nm~315nm) and UV-C (100nm~280nm) three bands. Since 100nm~200nm Ultraviolet radiation is strongly absorbed in the air, so for the UV-C band, this outline only considers.200nm~280nm the test in the wavelength range is suitable for the measurement of the UV-C band in the air, but not for the measurement in the vacuum.

Figure 1 Schematic diagram of the general composition structure of the UV illuminance meter detector

Comply with ultraviolet radiation UV-A, UV-B, UV-C, UV-A1, UV-365, UV-310, UV-254 bands

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