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JJF 1407-2013

Calibration Specification for Thermometers of WBGT-index Meters

WBGT指数仪温度计校准规范

(English Translation)

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules" establishment, where measurement uncertainty Evaluation of in accordance JJF 1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement" in.

The specification for the first time to develop.

WBGT Index instrument thermometer calibration specification

1 Scope

This instruction applies to WBGT Index instrument thermometer calibration. WBGT Index instrument, including natural wet bulb thermometer Meter, the black bulb thermometer and dry bulb thermometer. Natural wet bulb thermometer measuring range. 5 °C ~ 40 °C;

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black-bulb temperature Meter measuring range. 20 °C ~ 120 °C; dry bulb thermometer measuring range. 10 °C ~ 60 °C.

2. References

This specification refers to the following documents.

JJG205-2005 mechanical hygrometer GB/T 4200-2008 hot job classification GB/T 17244-1998 thermal environment based on WBGT index (wet bulb globe temperature) of the thermal load workers Evaluation charge for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 Terms and definitions

3.1 WBGT index WBGT-index Also known as the wet bulb, black bulb temperature, is a comprehensive evaluation of the basic parameters of human exposure to the operating environment of the thermal load, single Bit °C. [GB/T 4200-2008,3.4]

3.2 WBGT Index instrument thermometer thermometerofWBGT-indexmeter WBGT Index instrument measuring natural wet bulb temperature, globe temperature, dry bulb temperature of the thermometer.

3.3 heat load heatstress the extent of the human body heat when operating in a hot environment to WBGT index, said heat depends on manual labor and the amount of heat exchange between the environment and human characteristics. [GB/T 17244-1998,2.2] 3.4 effective area Meet the appropriate space temperature fluctuation and uniformity required in an incubator, or product specification prescribed area.

4 Overview

WBGT index is a basic parameter of human exposure to environmental heat load. WBGT Index instrument were measured Natural wet bulb temperature, globe temperature, dry bulb temperature and the three parameters, then get WBGT index calculated by the formula.

WBGT Index instrument usually consists of a temperature sensor and instrument host of two parts, natural wet bulb temperature, black ball temperature and dry-bulb temperature of the three sensors mounted on the same bracket, there are two connections and a direct connection by measuring cable Forms. FIG. 1 (a) and 1 (b) below.

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