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

JJF 1785-2019

Program of Pattern Evaluation of Breath Alcohol Analyzers

呼出气体酒精含量检测仪型式评价大纲

(English Translation)

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Appendix A Requirements for Ethanol Standard Gases in Air (19)

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Introduction

This type evaluation outline is based on JJF 1016-2014 "Guidelines for Compiling Type Evaluation Outline of Measuring Instruments", JJF 1015-2014 "General Specification for Type Evaluation of Measuring Instruments" and JJF 1001-2011 "General Terms and Definitions for Measuring Compiled by Yi.

The technical indicators of this type evaluation outline refer to JJG657-2019 "Exhaled Gas Alcohol Content Detector", GB/T 21254-2017 "Exhaled Gas Alcohol Content Detector" and OIMLR-126 (2012) "Exhaled Gas Alcohol Technical documents such as "Evidentialbreathanalyzers".

This type evaluation outline is released for the first time.

Outline of Type Evaluation of Exhaled Gas Alcohol Content Detector

1 Scope

This type of evaluation outline is applicable to the exhalation gas alcohol content detector with the classification code of measuring instrument 46580000 Type evaluation.

2 Reference documents JJG657-2019 exhaled gas alcohol content detector GB/T 11606-2007 Environmental testing methods of analytical instruments GB/T 17626.2-2018 Electromagnetic Compatibility Test and Measurement Technology Electrostatic Discharge Immunity Test GB/T 17626.3-2016 Electromagnetic compatibility test and measurement

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technology RF electromagnetic field radiation immunity test GB/T 18268.1-2010 Electromagnetic compatibility requirements for electrical equipment for measurement, control, and laboratory use Part. General requirements GB/T 21254-2017 Exhaled gas alcohol content detector OIMLR-126 (2012) Exhaled gas alcohol content detector (Evidentialbreathanalyzers) for dated reference documents, only the dated version applies to this outline; for those without date references the latest version (including all amendments) is applicable to this outline.

3 Overview

Exhaled breath alcohol content detector (hereinafter referred to as wine detector) is used to detect the alcohol content in human exhaled breath the amount. The wine detector consists of gas circuit, control circuit, alcohol sensor, breath detection system, sampling system and display printing system and other components. According to the measurement principle, the wine detector can be divided into fuel cell type (ie electrochemical type), semiconductor type and infrared Type and so on.

Among them, alcohol sensors, pressure sensors and temperature sensors are the key components and materials that affect the metering performance.

See Table 1.

Table 1 Key parts and materials table

No. Name Main Performance Index Remarks

1 Alcohol sensor

2 Pressure sensor

3 Temperature sensor

4 Legal management requirements

4.1 Unit of measurement the wine inspection instrument shall adopt the legal unit of measurement.

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