

ICS 17.240
CCS A 58

JJG

**INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

JJG 776-2014

Replacing JJG 776-1992

**Verification Regulation for Microwave Radiation and Leakage
Energy Measuring Instruments
(English Translation)**

Issued on: January 23, 2014

Implemented on: July 23, 2014

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

Table of Contents

Introduction (II)	
1 Scope (1)	
2 Overview (1)	
3 Metering performance requirements (1)	
4 General Requirements (1)	
5 Control of measuring instruments (1)	
5.1 Test conditions (1)	
5.2 Test items and test methods (3)	
5.3 Test results processing (4)	
5.4 Test cycle (4)	
Appendix A Test recording format (5)	
Appendix B Test certificates/test results in the notice page and format (6)	

5.4 Test cycle (4)

Appendix A test recording format (5)

Appendix B test certificates/test results in the notice page and format (6)

Introduction

The regulations refer to international standards IEEEStd1309-2005, IEEEStandardforCalibrationofElec-tromagneticFieldSensorsandProbes, ExcludingAntennas, from9kHzto40GHz be prepared by. The standard is based on the current major international calibration laboratories electromagnetic field probe and sensor calibration.

The procedures in place JJG 776-92 "Microwave radiation and leakage measurement instrument." The version with procedures and JJG 776-92 Than the power density of the device used in the device varies. In addition, the test frequency limit extended to 18GHz, for Verification also in the basic range of minor changes to the (0 ~ 1) mW/cm² as the basic range of the test, if the subject Instrument range than 1mW/cm², the increase (1 ~ 3) mW/cm² power density of the measurement values.

The previous versions of the release JJG 776 case.

--- JJG 776-1992.

Microwave radiation and leakage meter

1 Scope

This procedure is applied for the first time in the operating frequency range of 915MHz ~ 18GHz microwave radiation leakage and measuring instrument Test, test and subsequent use of checks.

2 Overview

Microwave radiation and leakage meter is used to measure radiation and microwave equipment microwave energy leaking to the space instruments.

Microwave probe of the electromagnetic field sensitive element, can be directly converted microwave signal into a DC signal, the indicator value.

3 metering performance requirements Frequency range. 915MHz ~ 18GHz;

Power density measurement range. (0 ~ 3) mW/cm²;

Power density measurement maximum permissible error. $\pm 2.75\text{dB}$.

4 General technical requirements it should be the subject instrument manufacturer, instrument name, instrument model, serial number and power requirements information. Microwave radiation and leakage measurement instrument control buttons, key switch, input and output ports should be clearly marked, and having a metering device A manufacturing license logo.

There should be no prejudice to the subject instrument readings and affect the normal mechanical damage, control knobs and buttons should be able to work properly for the display to show, all kinds of signs should be clear and complete; pointer instrument gauge needles should bend, mechanical meter Zero can be adjusted freely.

5 control of measuring instruments Controls include initial verification of measuring instruments, verification and subsequent use of checks.

5.1.1 Environmental conditions

1) Ambient temperature. $(23 \pm 5) ^\circ\text{C}$.

2) Relative Humidity. 20% to 80%.

3) Power supply voltage and frequency. $(220 \pm 11) \text{ V}$, $(50 \pm 1) \text{ Hz}$.

4) The laboratory shall be no severe impact and vibration measurements of electromagnetic interference.

5.1.2 The test equipment

5.1.2.1 Power density means the overall requirements of the standard

Frequency range. 915MHz ~ 18GHz;

The maximum power density value. $\geq 3\text{mW/cm}^2$;

Standard power density Uncertainty. $\leq 1\text{dB}$.