

ICS 07.060

HY

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

HY/T 0279-2019

**High frequency ground wave radar electrical performance test
method**

高频地波雷达电性能检验方法

(English Translation)

Issued on: December 20, 2019

Implemented on: February 1, 2020

**Issued by: Ministry of Natural Resources of the People's Republic of
China**

Table of Contents

Foreword	1
Scope	2
Normative references	3
Terms and definitions	4
Power conditions	5
Environmental conditions	6
Test site conditions	7

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard was proposed by the Ministry of Natural Resources of the People's Republic of China.

This standard is provided by the Sub-Technical Committee for Ocean Observation and Development and Utilization of Marine Energy (SAC/TC283/SC2) Centralized.

1 Scope

This standard specifies the main electrical performance inspection requirements, inspection items, inspection methods, and report preparation for high-frequency ground wave radars.

This standard is applicable to the inspection of the main electrical performance of high-frequency ground wave radar.

2 Normative references

The following documents are essential for the application of this document. For dated references, only the dated version applies to this article Pieces. For the cited documents without date, the latest version (including all amendments) applies to this document.

GB/T 3784 Electrotechnical terminology radar GB/T 12572 General requirements and measurement methods of radio transmitting equipment parameters SJ2534.2 Antenna Test Method Design of Antenna Test Field SJ2534.14 Antenna Test Method Impedance Measurement

3 Terms and definitions

The terms and definitions defined in GB/T 3784 and the following apply to this document.

High frequency ground wave radar A basic principle that uses high-frequency electromagnetic waves to propagate along the surface and interact with the ocean surface to obtain surface currents (fields), waves (fields), Radar of marine dynamic parameters such as wind (field).

4.1.1 Power conditions

The AC power supply and DC power supply should meet the requirements of the equipment under test, instruments and meters. The AC power supply voltage should be within the nominal voltage ($1\pm 10\%$), the power supply frequency should be in the range of $50\text{Hz}\pm 1\text{Hz}$; the DC power supply voltage should be within the range of the nominal voltage ($1\pm 2\%$), pulsating Less than $\pm 2\%$.

4.1.2 Environmental conditions

If there are no special requirements, the following requirements shall be met.

- a) Temperature. $15^{\circ}\text{C}\sim 35^{\circ}\text{C}$;
- b) Relative humidity. $45\%\sim 75\%$.

4.1.3 Test site conditions

There should be no external radiation, interference and harmful gases that affect the measured frequency band of the radar, and obvious mechanical shock and vibration.