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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 40819-2021

Aeolian vibration fatigue test method for overhead conductors and cables

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1.Structure and Drafting Rules of Standardization Documents"

Drafting.

This document is drafted with reference to IEC 62568.2015 "Overhead Line Conductor Fatigue Test Method", and the degree of consistency is non-equivalent.

1 Scope

This document describes the test methods, test records and test reports of the breeze vibration fatigue characteristics of overhead cables.

This document is applicable to the fatigue characteristics test of overhead wires, ground wires, optical cables and their clamp systems (only metal suspension clamps).

2 Normative references

The content of the following documents constitutes an indispensable clause of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 2900.51-1998 Electrical terminology overhead line

DL/T 788 All dielectric self-supporting optical cable

DL/T 832 Optical fiber composite overhead ground wire

DL/T 1613 Optical fiber composite overhead phase line and related accessories

3 Terms and definitions

The following terms and definitions defined in GB/T 2900.51-1998 apply to this document.

3.1

Antinodeamplitude

Half-wave single-peak amplitude.

3.2

Bending amplitude

Yb

The peak-to-peak value (pp value) of the amplitude of the cable relative to the clamp measured at a distance of 89mm from the last contact point (LPC) of the cable and the clamp.

Note. The schematic diagram of the bending amplitude measurement position is shown in Figure 1.

a) LPC b) Measuring position

Figure 1 Schematic diagram of bending amplitude measurement position