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A Stable document is “In Force”, and not deprecated or withdrawn.

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SMPTE STANDARD

for Television Digital Recording — 19-mm Type D-2 Composite Format — Magnetic Type



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1 Scope

This standard specifies the principal properties of the magnetic tape used for the 19-mm type D-2 composite digital television format.

2 Measurement environment

2.1 Dimensions are in the metric system.

2.2 Tests and measurements made on magnetic tape to check the requirements of this standard shall be made under the following atmospheric conditions unless otherwise stated:

- Temperature: $20^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Relative humidity: $(50 \pm 2)\%$
- Barometric pressure: $96 \text{ kPa} \pm 10 \text{ kPa}$

2.3 Conditioning of the tape stock before recording and testing shall be as follows:

- Storage conditioning: Not less than 24 hours
- Environmental: Stabilized to the conditions specified in 2.2
- Tape tension: Wound on a reel at a tension of 0.6 N to 1.5 N

3 Television tape specifications

3.1 Base

The base material shall be polyester or equivalent.

3.2 Width

The tape width shall be $19.010 \text{ mm} \pm 0.015 \text{ mm}$.

3.2.1 The tape, covered with a glass plate, shall be measured without tension at a minimum of five different positions along the tape using a calibrated microscope or profile projector having an accuracy of at least $2.5 \mu\text{m}$. Tape width is defined as the average of the five readings.

3.3 Delta width

Delta width (width fluctuation) shall not exceed $6 \mu\text{m}$ p-p.

3.3.1 Measurement of delta width shall be over a tape length of 230 mm with a tension of 0.7 N.