

# WAVE Streaming Media Test Suite – Test Content Product Description

## Product Overview

The *CTA WAVE Streaming Media Test Suite – Test Content* is a standardized set of CMAF-based test vectors. It was primarily developed to validate device media playback behavior against the CTA WAVE Device Playback specification (CTA-5003). The content forms a core input to the *WAVE Streaming Media Test Suite – Devices* and enables consistent, repeatable verification of playback requirements across devices, platforms, and implementations.

The test content is also of value independently of the Test Suite as reference for conforming CMAF (conforming to ISO/IEC 23000-19) and the CTA WAVE Content specification (conforming to CTA-5001). The content is publicly accessible through a maintained test vector repository and is supported by tooling for systematic generation, validation, and evolution of test vectors.

## Product Components

### Test Vectors

- CMAF-encoded media assets packaged with DASH MPDs.
- Aligned with CTA WAVE media profiles and content options.

### Test Vector Repository

- Public, stable repository of test vectors and associated metadata (<https://cta-wave.github.io/Test-Content/>).
- Organized by codec, media profile, and test purpose.
- Provides persistent URLs suitable for automated testing and long-term reference.

### Test Content Generation Framework

- Open-source framework to generate test vectors from mezzanine content (<https://github.com/cta-wave/Test-Content-Generation>).
- Encodes, packages, annotates, and (optionally) encrypts content according to CTA WAVE test content specifications.
- Ensures reproducibility, traceability, and scalability of test content.

# Purpose and Use

CTA WAVE Test Content is designed to:

- Provide **deterministic input content** for device playback test cases.
- Enable objective verification of playback behavior through:
  - Well-defined stimuli (test vectors).
  - Clear, observable playback outcomes.
- Support automated and manual testing using HTML5/MSE-like APIs and equivalent device playback environments.
- Serve as a common industry reference for device manufacturers, platform providers, and test laboratories.

The test content itself is non-normative, but it is explicitly designed to validate normative playback requirements defined in CTA WAVE specifications.

# Level of Support and Maintenance

- **Baseline stability:** Published test vectors remain available to ensure reproducible test results.
- **Controlled evolution:** New test vectors may be added to cover new codecs, media profiles, or playback scenarios.
- **Transparency:** Test vectors, generation tools, and metadata are publicly documented.
- **Community process:** Additions and updates follow WAVE DPCTF review and alignment.

# Positioning Summary

CTA WAVE Test Content provides the practical link between specification text and real-world device behavior. By combining curated test vectors, a public repository, and a controlled generation framework, it enables interoperable, repeatable validation of CMAF-based playback across the WAVE ecosystem.