

**INTERNATIONAL ORGANISATION FOR STANDARDISATION
ORGANISATION INTERNATIONALE DE NORMALISATION
ISO/IEC JTC 1/SC 29/WG 2
MPEG TECHNICAL REQUIREMENTS**

ISO/IEC JTC 1/SC 29/WG 4 m73545

July 2025 – Daejeon

Title: [VCM][CE0] Cross-check of CE0.7

Source: Poznan University of Technology

Authors: Sławomir Różek, Olgierd Stankiewicz, Sławomir Maćkowiak,
Tomasz Grajek, Maciej Wawrzyniak, Jakub Stankowski, Mateusz
Lorkiewicz, Hubert Żabiński, Marek Domański,

Abstract

This document presents the results of crosschecking the CE0.7 experiment – Luma Enhancement Method off results which has been conducted under CE0 [1] between 150th and 151st MPEG meetings.

1. Procedure description

We have downloaded the software of the CE0.7 test from the dedicated Gitlab repository. We have checked and launched the software without any issues. We have performed the encoding and evaluation using the machines with the following specification:

Processor: Intel Core i7-12700K

RAM: 32 GB

GPU: nVidia RTX 4090.

Operating System: Ubuntu 22.04 (updated)

2. Cross-check results

The detailed cross-check results and comparison with original CE0.7 results [2] can be found in the attached excel file.

All the bitrates match. All the differences in metrics are in acceptable range.

The cross-check can be summarized as positive.

References

- [1] ISO/IEC JTC 1/SC 29/WG 4, “VCM-CE 0: Tool experiments”, doc. N0665, April 2025, online meeting.
- [2] Yegi Lee, “[VCM][CE0] Report of CE0.7”, doc. m72934, July 2025, Daejeon.