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

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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 149th and 150th 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.

The vast majority of differences in metrics are in acceptable range. The bigger relative mismatches are incidental, and are caused by the very low performance in that points, thus can be treated as acceptable.

The cross-check can be summarized as positive.

References

- [1] ISO/IEC JTC 1/SC 29/WG 4, “VCM-CE 0: Tool experiments”, doc. N0640, January 2025, Geneva.
- [2] Yegi Lee, “[VCM][CE0] Report of CE0.7”, doc. m72130, April 2025, online meeting.