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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11**  7th Meeting: Geneva, 21-30 November, 2011 | Document: JCTVC-G292 |

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| *Title:* | **CE12 Subtest3: Cross Check of Mediatek’s Motion Data Line Buffer Reduction Proposal JCTVC-G229** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Information | | |
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# Abstract

The BD-rate results are cross checked and match those reported in JCTVC-G229. The subjective quality is similar to the HM4.0 anchor.

# Cross Check of Objective Results

The BD-rate results match those reported in JCTVC-G229. The execution times are measured in a variable computing environment and are approximate.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **All Intra HE** | | | **All Intra LC** | | |
|  | Y | U | V | Y | U | V |
| Class A | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class B | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class C | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class D | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class E | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| **Overall** | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
|  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Enc Time[%] | 100% | | | 100% | | |
| Dec Time[%] | 97% | | | 99% | | |
|  |  |  |  |  |  |  |
|  | **Random Access HE** | | | **Random Access LC** | | |
|  | Y | U | V | Y | U | V |
| Class A | 0.0% | -0.1% | -0.1% | 0.0% | 0.1% | 0.0% |
| Class B | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class C | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Class D | 0.0% | -0.1% | 0.1% | 0.0% | 0.0% | -0.1% |
| Class E |  |  |  |  |  |  |
| **Overall** | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
|  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Enc Time[%] | 94% | | | 95% | | |
| Dec Time[%] | 97% | | | 99% | | |
|  |  |  |  |  |  |  |
|  | **Low delay B HE** | | | **Low delay B LC** | | |
|  | Y | U | V | Y | U | V |
| Class A |  |  |  |  |  |  |
| Class B | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | -0.1% |
| Class C | 0.0% | -0.1% | -0.1% | 0.0% | 0.2% | -0.3% |
| Class D | 0.0% | 0.2% | 0.1% | 0.0% | 0.2% | 0.0% |
| Class E | 0.0% | 0.2% | 0.3% | 0.0% | 0.7% | -0.3% |
| **Overall** | 0.0% | 0.1% | 0.1% | 0.0% | 0.2% | -0.2% |
|  | 0.0% | 0.1% | 0.0% | 0.0% | 0.2% | -0.1% |
| Enc Time[%] | 96% | | | 93% | | |
| Dec Time[%] | 98% | | | 98% | | |
|  |  |  |  |  |  |  |
|  | **Low delay P HE** | | | **Low delay P LC** | | |
|  | Y | U | V | Y | U | V |
| Class A |  |  |  |  |  |  |
| Class B | 0.0% | 0.1% | 0.2% | 0.0% | 0.1% | -0.1% |
| Class C | 0.0% | 0.2% | 0.1% | 0.0% | 0.1% | 0.0% |
| Class D | 0.0% | 0.1% | 0.0% | 0.0% | -0.3% | -0.2% |
| Class E | 0.1% | 0.0% | 0.3% | 0.0% | 0.2% | -0.1% |
| **Overall** | 0.0% | 0.1% | 0.1% | 0.0% | 0.0% | -0.1% |
|  | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | -0.1% |
| Enc Time[%] | 96% | | | 95% | | |
| Dec Time[%] | 98% | | | 100% | | |

# Cross Check of Subjective Quality

The following decoded sequences were carefully compared with the HM4.0 anchor (recommended test set in CE12):

Class B:

Kimono, low-delay low-complexity, QP 32

Kimono, random-access high-efficiency, QP 37

Class C:

BQ\_Mall, low-delay low-complexity, QP 32

BQ\_Mall, random-access high-efficiency, QP 37

Class E:

Vidyo3, low-delay low-complexity, QP 32

Vidyo3, low-delay high-efficiency, QP 37

The conclusion is that the qualities are very similar. No artifacts that are significantly worse than the anchor are observed.