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| **Joint Collaborative Team on Video Coding (JCT-VC)**  **of ITU-T SG16 WP3 and ISO/IEC JTC1/SC29/WG11**  5th Meeting: Geneva, 16-23 March, 2011 | Document: JCTVC-E448 |

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| *Title:* | **Cross-check of Qualcomm’s proposal on LCEC coefficient coding table reduction (JCTVC-E384)** | | |
| *Status:* | Input Document to JCT-VC | | |
| *Purpose:* | Proposal | | |
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| *Source:* | Nokia | | |

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# Abstract

This contribution provides cross-check for Qualcomm’s proposal JCTVC-E384 (on LCEC coefficient coding table reduction) confirming the reported results.

# Experimental Results

The experimental results are given below. It should be noted that the reported execution times are not reliable due to the computer cluster configuration. However, we do not expect the proposal to have impact on run-times.

**Table 1: Results for the Low Complexity configurations**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Intra LoCo | | |  | Random access LoCo |  | Low delay LoCo | | |
| Y BD-rate | U BD-rate | V BD-rate | Y BD-rate | U BD-rate | V BD-rate | Y BD-rate | U BD-rate | V BD-rate |
| Class A | 0.00 | 0.02 | 0.01 | 0.18 | 0.18 | 0.24 |  |  |  |
| Class B | 0.00 | 0.01 | 0.00 | 0.04 | 0.03 | -0.03 | 0.08 | -0.05 | 0.36 |
| Class C | 0.00 | 0.00 | 0.00 | 0.02 | 0.08 | 0.03 | -0.03 | -0.01 | -0.08 |
| Class D | 0.00 | 0.01 | -0.01 | 0.04 | -0.15 | -0.10 | 0.09 | 0.00 | 0.30 |
| Class E | 0.00 | 0.00 | 0.00 |  |  |  | 0.04 | 0.09 | -0.02 |
| All | 0.00 | 0.01 | 0.00 | 0.07 | 0.04 | 0.03 | 0.05 | 0.00 | 0.17 |
| Enc Time[%] | 80 % | | | 54 % | | | 50 % | | |
| Dec Time[%] | 102 % | | | 72 % | | | 72 % | | |

# Findings

The proposal reduces size of the tables required for LCEC coefficient coding as reported in JCTVC-E384 and does not have significant impact on the compression efficiency.

# Patent rights declaration(s)

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