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| *Title:* | **Non-RCE2: A cross-check report for N-0354** | | |
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# Abstract

This contribution summarizes Samsung’s cross-check for JCTVC-N0354 proposal on combination of Mirroring of non-transformed residual blocks (Test B.3) with other methods. The simulation results (BD Rates and PSNR’s as verified by Samsung match closely with the results provided by the proponents in JCTVC-N0354.

# Introduction

JCTVC-N0354 [1] proposes combining the method of mirroring the residual for non-transformed coefficients with tools such as Intra\_DC replacement; extension of DPCM to inter/lossy scenario; Rice parameter update; and 8x8 Transform Skip. We cross-checked lossy and lossless version of the tests.

# Simulation Results

The test conditions as stipulated in common conditions for RCE 2 for testing were followed for conducting the simulations.

## R-D Results

The tables below show simulation results for JCTVC-N0354 proposal as cross-checked by Samsung. Detailed results are available in the attached Excel sheet. The BD Rates and PSNR’s for the tests matched with those provided by the proponents, while the encoding and decoding times are within cluster noise.

**Table 1: BD-Rate and PSNR results for cross-check of JCTVC-N0354 (8×8, Lossy)**



**Table 2: BD-Rate and PSNR results for cross-check of JCTVC-N0354 (4×4, Lossy)**



**Table 3: BD-Rate and PSNR results for cross-check of JCTVC-N0354 (4×4, Lossless)**



# Conclusions

We have cross-checked JCTVC-N0354, and verified the simulation results.

# References

1. R. Weerakkody, M. Mrak, and M. Naccari, “Non-RCE2: Results for combination of mirroring of non-transformed residual blocks (RCE2 Test B.3) with other methods,” JCTVC-N0354, Vienna, July 2013.e tests.
2. R. Joshi, P. Amon, R. Cohen, S. Lee, M. Naccari, “HEVC Range Extensions Core Experiment 2 (RCE2): Prediction and coding techniques for transform-skip and transform-bypass blocks,” JCTVC-M1122, Incheon, KR, April 2013.