

























Figure13: ROC curves tested on different payloads

there is still no obvious detection effect. The detector does work only if the message length greatly exceeds the hiding capacity. In general case, the proposed steganography scheme can be considered undetectable in the situation of lower payloads than hiding capacity.

## VII. CONCLUSION

In this study, a high-capacity steganographic scheme has been proposed for the JPEG2000 baseline system. The contributions of this work are mainly focused on dealing with two problems: bitstream truncation and redundancy measurement. The steganographic encoding procedure is explained to execute bit-plane encoding twice, whereas the rest parts, such as wavelet transform, quantization, rate-distortion optimization, bitstream organization, still are executed only once. Therefore, the computational complexity hasn't been increased too much.

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