International

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Digital photography — Gain map metadata for image conversion —

Part 1: Dynamic range conversion

Photographie numérique — Carte de gain pour la conversion d'images —

Partie 1: Conversion de plage de dynamique

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High dynamic range (HDR) images, that have been produced for HDR displays, can provide a better user experience. One challenge is ensuring that there is no image quality regression when displaying an HDR image on a display with limited or no headroom, such as a standard dynamic range (SDR) display.

This can be solved by creating a standardized solution that includes storing in the same file a baseline image and a gain map, to convert between the baseline and the alternate representations with different dynamic ranges. Compared with storing both representations, the benefit of this solution is the optimization of the file size, obtained by minimizing the amount of redundant data stored. It also avoids the logistical issues caused by having separate files.