



**International  
Standard**

**ISO/IEC 29170-3**

**Information technology — JPEG AIC  
Assessment of image coding —**

Part 3:  
**Subjective quality assessment of  
high-fidelity images**

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## Foreword

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This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology, Subcommittee SC 29, Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 29170 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

# Information technology — JPEG AIC Assessment of image coding —

## Part 3: Subjective quality assessment of high-fidelity images

### 1 Scope

This document specifies a subjective image quality assessment methodology that covers a range from good quality up to mathematically lossless.

This document is applicable to the assessment of distortions due to image coding (i.e. lossy compression) and not necessarily other kinds of distortions (e.g. capture, sensor or rendering artefacts).

### 2 Normative references

There are no normative references in this document.

### 3 Terms, definitions, symbols and abbreviated terms

#### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org>

##### 3.1.1

##### **image quality**

degree to which an image is free of undesirable aesthetic flaws or noticeable artefacts, as judged by observers

Note 1 to entry: This is an umbrella term that can refer to fidelity, appeal, or a combination of both.

##### 3.1.2

##### **appeal**

aesthetic pleasingness of a stimulus under consideration, regardless of its difference with the source image

Note 1 to entry: It is possible to obtain distorted images with a better appeal than the source image (e.g. by applying denoising, sharpening, contrast or saturation stretching, or other image enhancement methods). Appeal of a stimulus can be assessed without reference to the source image.

##### 3.1.3

##### **fidelity**

truthfulness to the source image, i.e. the degree to which there is no noticeable difference between the source image and the stimulus under consideration

Note 1 to entry: By definition, the source image itself has the highest possible fidelity; no distorted image can have a higher fidelity. Fidelity of a stimulus can only be assessed in relation to the source image. In this document, image quality refers specifically to fidelity.