

PRESS RELEASE

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CIE Technical Note "The Use of "Accuracy" and Related Terms in the Specifications of Testing and Measurement Equipment"

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Many measurement instruments have technical specifications and datasheets that say, for example, "Accuracy: 4 %". This is an inappropriate use of the term "accuracy" because an "accuracy" is not a quantity and cannot be assigned a value. This document describes how to use the term "accuracy" correctly, as well as giving examples of acceptable expressions that could be used in place of the incorrect expression used in the example here. Furthermore, some other commonly misused terms are discussed, and examples of correct use are given.

The document provides guidance on the correct use of the terms "accuracy", "error", "tolerance", "reproducibility", and "repeatability" in relation to the properties and specifications of testing and measurement instruments on the one hand, and the terms "error" and "uncertainty", and a measurement instrument's sensitivity in relation to a measurement process or a calibration on the other hand. It also summarizes the concepts of quality indices and tolerance intervals and provides guidance for acceptable methods of specifying the performance of equipment and for expressing specifications for the requirements of equipment to be used for a specific purpose. This will be of assistance to equipment manufacturers in producing brochures, manuals, and datasheets as well as tender specification writers in producing technical specifications for procurement of equipment that use the above terms correctly.

The publication is written in English, consists of 19 pages and is freely downloadable from the <u>CIE webpage</u>.