

# INTERNATIONAL STANDARD

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**Laser displays –  
Part 6-1: Visualization method of colour gamut intersection**

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## LASER DISPLAYS –

## Part 6-1: Visualization method of colour gamut intersection

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Draft	Report on voting
110/1751/FDIS	110/1768/RVD

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The language used for the development of this International Standard is English.

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## INTRODUCTION

The colour gamut of a display is the range of colour in a perceptually homogeneous 3D colour space from black at the bottom to white at the top, having protruded curves (or cusps) outward and enclosed by the 3D envelope of its most saturated colours. When evaluating the range of hue, it is difficult to inspect colour volumes and to compare chroma at different hue angles and lightness levels. Viewing the colour space along a single direction can often be misleading because parts of the gamut volume are almost always obscured from view. A solution to this problem is the new two-dimensional diagram called “gamut rings.” The gamut ring framework unwraps the display’s important volumetric information and lays it flat in a two-dimensional diagram that provides the information needed to describe the maximum colour capability.

The aim is to evaluate the colour gamuts of laser displays, more specifically of front-projection laser projectors. In order to measure the laser light sources, it is crucial to ensure that accuracy and precision are observed, and to properly specify the methods. To visualize the gamuts in a quantitative manner, the latest gamut ring framework is proposed.

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