



International Commission on Illumination
Commission Internationale de l'Eclairage
Internationale Beleuchtungskommission

PRESS RELEASE

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Joint ISO/CIE Standard

ISO/CIE 11664-5:2016
Colorimetry - Part 5: CIE 1976 $L^*u^*v^*$ colour space
and u', v' uniform chromaticity scale diagram

This joint ISO/CIE International Standard is replacing the joint ISO/CIE International Standard ISO 11664-5:2009/CIE S 014-5:2009 without modification of its technical content.

This ISO/CIE International Standard specifies the method of calculating the coordinates of the CIE 1976 $L^*u^*v^*$ colour space including correlates of lightness, chroma, saturation and hue. It includes two methods for calculating Euclidean distances in this space to represent the relative perceived magnitude of colour differences. It also specifies the method of calculating the coordinates of the u', v' uniform chromaticity scale diagram.

The standard is applicable to tristimulus values calculated using the colour-matching functions of the CIE 1931 standard colorimetric system or the CIE 1964 standard colorimetric system. The standard may be used for the specification of colour stimuli perceived as belonging to a reflecting or transmitting object, where a three-dimensional space more uniform than tristimulus space is required. This includes self-luminous displays, like cathode ray tubes, if they are being used to simulate reflecting or transmitting objects and if the stimuli are appropriately normalized. The standard, as a whole, does not apply to colour stimuli perceived as belonging to an area that appears to be emitting light as a primary light source, or that appears to be specularly reflecting such light. Only the u', v' chromaticity diagram defined in Clause 4.1 and the correlates of hue and saturation defined in Clause 4.3 apply to such colour stimuli.

This ISO/CIE International Standard has been approved by the CIE National Committees and by ISO. It is readily available from the [CIE Webshop](#) or from the National Committees of the CIE.

The price of this publication is EUR 57,- (Members of the National Committees of the CIE receive a 66,7 % discount on this price).