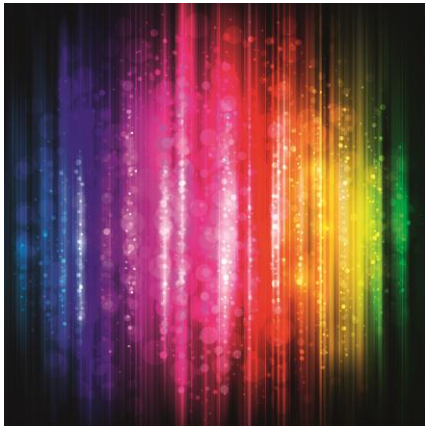


What is colour brightness?

If you're not seeing colour brightness you're only seeing half of the picture....



What is colour brightness?

Colour Brightness is a scientifically set global standard that measures a digital projector's Colour Light Output. It was concluded that there are such significant differences in colour brightness performance among different projector models and brands that colour should be measured separately to provide consumers with fair and accurate information.

What does it mean to me?

The Colour Brightness specification allows you to make a more informed decision when purchasing a projector. Colour Brightness (or Colour Light Output – CLO for short) measures the brightness of the colours in a projected image, not just the brightness of white.

This is critically important as most projectors are used for colour content, and colour is a key component of picture quality.

Where did it come from?

A committee of display experts, after extensive scientific evaluation, established a global standard – the International Display Measurements Standard (IDMS). The standard, published in June 2012, IDMS version 1.03, covers the three leading international display standards organisations worldwide – the Society for Information Display (SID), the Visual Electronics Standards Association (VESA) and the International Consortium Display Metrology (ICDM).

What should I look for?

Look for two lumens specifications, one for Colour Brightness and a separate White Brightness specification when comparing projector models. To select a projector with vibrant colour, crisp detail and realistic skin tones, look for a Colour Brightness and White Brightness measurements which are equally high. Look out for the term CLO – this just means Colour Brightness.



Three times brighter colours

Thanks to their 3LCD technology Epson projectors have equally high White and Colour Brightness with three times brighter colours¹.

¹ Compared to leading 1-chip DLP business and education projectors based on NPD data, July 2011 through June 2012. Colour brightness (Colour Light Output) measured in accordance with IDMS 15.4. Colour brightness will vary depending on usage conditions. For more information please visit www.epson.eu/CLO

Compare for yourself

Low colour brightness can result in images that are dull and not as bright as their 3LCD counterparts.

High CLO: bright Low CLO: dull



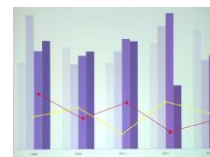
Colour Brightness:
2,800 lumens
White Brightness:
2,800 lumens



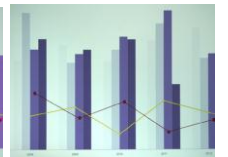
Colour Brightness:
700 lumens
White Brightness:
2,700 lumens

High CLO: clear

Low CLO: washed out



Colour Brightness:
2,800 lumens
White Brightness:
2,800 lumens



Colour Brightness:
700 lumens
White Brightness:
2,700 lumens

Actual photographs of side-by-side projected images from an identical signal source. Price, resolution and white brightness are similar for both projectors (Epson 3LCD and a 1-chip DLP competitor). Both projectors are set to their brightest mode.

Frequently asked questions

What do Colour Brightness and Colour Light Output (CLO) mean?

They mean the same and are ways to refer to how bright the colours are on your digital projector.

But isn't Colour Brightness included in the White Brightness?

No. Digital projectors create colour in different ways, so that's why it's important to know how bright a projector's colours are before you buy. White brightness doesn't give you the whole picture and it doesn't ensure good quality images or bright colour.

Does "lumens" cover both Colour Brightness and White Brightness?

No. Unless you see a separate specification for Colour Brightness, you are only getting the White Brightness of the projector. Colour Brightness may be a third of the brightness stated – or even lower.

How is Colour Brightness determined?

Colour Brightness (Colour Light Output) is measured in accordance with industry standard methodology from the IDMS book, section 15.4.

Can there be a difference between Colour Brightness and White Brightness?

Yes. For example, a projector with 3,000 lumens of White Brightness may only have 800 lumens of Colour Brightness. Image quality can vary greatly. Colour Brightness may be a third of the White Brightness stated. Look for separate Colour Brightness and White Brightness specifications to ensure you get the best overall image quality for everything you display.

Are DLP lumens different to 3LCD lumens?

No. A lumen is an international standard measurement of light output, regardless of the light source, technology or brand.

Why can't I find Colour Brightness as a published specification?

Not all projectors have both high Colour Brightness and high White Brightness, and many manufacturers may not want you to know their projectors may be a third as bright when it comes to colour – or even less – so they may not provide the Colour Brightness figure.



Where can I find out more about Colour Brightness?

Go to www.epson.eu/CLO

For more information visit:
www.epson.eu/CLO

EPSON®