If you're not seeing "Color Brightness" you're only getting half of the picture.
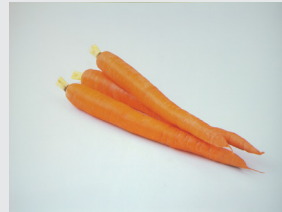
What should you look for?

Look for two lumens specifications, one for Color Brightness and a separate White Brightness spec, when comparing projector models. To select a projector with vibrant color, crisp detail and realistic skin tones, look for both High Color Brightness and High White Brightness.
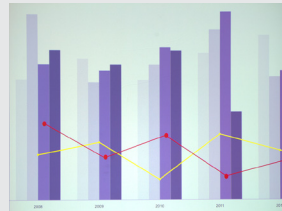
Compare for yourself

COLOR

MUTED

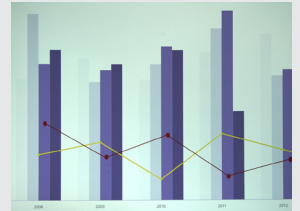Color Brightness: 2800 lumens
White Brightness: 2800 lumens

Color Brightness: 700 lumens
White Brightness: 2700 lumens

DETAIL

LOST

Color Brightness: 2800 lumens
White Brightness: 2800 lumens

Color Brightness: 700 lumens
White Brightness: 2700 lumens

SKIN TONES

UNREALISTIC

Color Brightness: 2800 lumens
White Brightness: 2800 lumens

Color Brightness: 700 lumens
White Brightness: 2700 lumens

Low Color Brightness can result in images that are 1/3 as bright.

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 1-chip DLP competitor). Both projectors are set to their brightest mode.

What is Color Brightness?

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

What does it mean to you?

The Color Brightness specification allows you to make a more informed decision when purchasing a projector. Color Brightness (or Color Light Output) measures the brightness of the colors in a projected image, not just the brightness of white. This is critically important as most projectors are used for color content, and color is a critical component of picture quality.

Where did the spec come from?

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

Frequently Asked Questions

Q: Does "lumens" cover both Color Brightness and White Brightness?

A: No. Unless you see a separate specification for Color Brightness, you are only getting the White Brightness of the projector. Color Brightness may be 1/3 of the brightness stated.

Q: How is Color Brightness determined?

A: Color Brightness (Color Light Output) is measured in accordance with IDMS 15.4.

Q: Can there be a difference between Color Brightness and White Brightness?

A: Yes. For example, a projector with 3000 lumens of White Brightness may only have 800 lumens of Color Brightness. Image quality can vary greatly, even among projectors at similar price points and with traditional specifications – you may not get what you paid for. Color Brightness may be 1/3 of the White Brightness stated. Look for separate Color Brightness and White Brightness specifications to ensure you get the best overall image quality for everything you display.

Q: Are LED lumens different than regular lumens?

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

Q: Why can't I find Color Brightness as a published specification?

A: Not all projectors have both High Color Brightness and High White Brightness, and many manufacturers may not want you to know their projectors may be 1/3 as bright when it comes to color.

Q: Where can I find out more about Color Brightness?

A: Go to www.colorlightoutput.com