



Lamp options



Colour requirements for manufacture and retail are complex and diverse. To ensure product colour, several types of light source are used (e.g. Artificial Daylight and a Point of Sale Light). Multiple light sources are also necessary to reveal colour inconsistencies and metamerism.

For many products, it is critical to ensure components are assessed under the same illuminants, using defined procedures, in a controlled viewing environment, by everyone in the supply chain.

This ensures standardised and repeatable colour assessment.

To ensure controlled standardised light, two factors require consideration...

1. COLOUR TEMPERATURE - Kelvin. (K)

- ✦ Colour temperature describes the colour appearance of the light and can vary along with its spectral power distribution.
- ✦ 'Correlated' colour temperature applies to fluorescent lamps and approximates the true colour temperature.
- ✦ Lower colour temperatures appear warmer, such as Illuminant A and 830. Lamps with a higher colour temperature look cooler or bluer, like VeriVide D65 and D75.

2. COLOUR RENDERING INDEX (CRI)

- ✦ A numerical system that measures how well colours are rendered by a lamp in comparison to a reference light source.
- ✦ CRI is measured on an index from 0 - 100, with 100 being an exact match, low values indicate poor colour rendering. VeriVide D65 has a CRI rating of 98, this shows colours more accurately than a CWR with a CRI rating of 62.
- ✦ This rating method is recognised by the Illuminating Engineering Society (IES) and the Commission International de L'Eclairage (CIE).

RETAILER SPECIFICATIONS

Some large retailers have differing specifications for the lamps and paint used in the Colour Assessment Cabinets, for more details please go to 'Retailer Specifications' at verivide.com

Lamp specifications overleaf →

VeriVide lamp specifications

CIE DAYLIGHT ILLUMINANTS

LIGHT SOURCE	NAME	DESCRIPTION	C.R.I.	LENGTH	WATTS	DIAM	PRODUCT CODE
D75	VeriVide D75 "Artificial Daylight"	Correlated colour temperature 7500K. Conforms to USA ASTM D1729-82 standard for D75 Illuminant. High CIE specifications for accurate colour matching.	96	600mm	20w	T12	600D75
D65	VeriVide D65 "Artificial Daylight"	VeriVide D65 'Artificial Daylight'. Correlated colour temperature 6500K. Within tolerances prescribed in BS 950: Part 1; and all international specifications for D65 illuminant. Specified for most applications where colour consistency and quality are required. High conformance to ISO 23603 - CIE S 012/E specifications for accurate colour matching.	98	600mm 1200mm 1500mm	18w 36w 58w	T8 T8 T8	600D65 1200D65 1500D65
D50	Osram Color Proof D50 "Artificial Daylight"	Correlated colour temperature of 5000K. For graphic and photographic applications. D50 lamps conform to ISO 3664. Recommended for viewing transparencies and for reflected light source to view reproductions.	98	600mm 1200mm 1500mm	18w 36w 58w	T8 T8 T8	60095 120095 150095

CIE ILLUMINANT 'A'

LIGHT SOURCE	NAME	DESCRIPTION	C.R.I.	LENGTH	WATTS	DIAM	PRODUCT CODE
'F'	Tungsten Filament	Tungsten Filament Lighting. Approximate colour temperature of 2800K. Required by BS 950: Part 1 as a test for metamerism (approximating CIE Illuminant 'A'). Typical light source used within domestic environments.	100	Globe Globe Clear-284mm Opal-284mm	40w 60w 60w 60w	45mm 45mm - -	40G450 60G450 28460CL 284600P
'A'	Tungsten Halogen	Tungsten Halogen Lighting (CIE Illuminant 'A'). This represents incandescent A (inc-A) with a colour temperature of 2856K. Typical light source used within domestic environments. Used to check for metamerism.	100	-	35w	-	HALO/12V /35WLP

ALTERNATIVE (FLUORESCENT) LIGHTING / POINT OF SALE

LIGHT SOURCE	NAME	DESCRIPTION	C.R.I.	LENGTH	WATTS	DIAM	PRODUCT CODE
840 P15	VeriVide 840 P15	Narrow Band Triphosphor Fluorescent Lamps. Correlated colour temperature of 4000K. CIE Illuminant F11. Often chosen as a European Point of Sale light source. Good colour rendering, manufactured to a tighter tolerance, specified by Marks & Spencer. (Formerly TL84P15)	85	600mm 1200mm 1500mm	18w 36w 58w	T8 T8 T8	60084P15 120084P15 150084P15
CWF	Cool White	Cool White Broad Band Fluorescent Lamps. Correlated colour temperature of 4000K. Used as an American "Point of Sale" light source. Moderate colour rendering.	62	600mm 1200mm 1500mm	20w 40w 65/80w	T12 T12 T12	60033 120033 150033
U35	Ultralume 35	Ultralume Narrow Band Triphosphor Fluorescent Lamp. Correlated colour temperature 3500K. An American "Point of Sale" light source, with good colour rendering.	85	600mm 1200mm	17w 32w	T8 T8	600U35 1200U35
830		Narrow Band Triphosphor Fluorescent Lamp. Correlated colour temperature 3000K. Often chosen as a European "Point of Sale" light source with good colour rendering. (Formerly TL83)	85	600mm 1200mm 1500mm	18w 36w 58w	T8 T8 T8	60083 120083 150083

HORIZON

LIGHT SOURCE	NAME	DESCRIPTION	C.R.I.	LENGTH	WATTS	DIAM	PRODUCT CODE
'H'	Tungsten Halogen	Colour temperature 2300K. Used for automotive, apparel and metamerism Testing. As specified by the ASTM (American Society for testing and Materials) D1729-74, Standard Practise for Visual Evaluation of Colour Differences of Opaque Materials	98	-	75w	-	HALO/12V /75W

ULTRAVIOLET

LIGHT SOURCE	NAME	DESCRIPTION	C.R.I.	LENGTH	WATTS	DIAM	PRODUCT CODE
UV	Ultraviolet	Ultraviolet Blacklight. Used to detect the presence of Optical Brightening Agents and/or Fluorescent dyes. Therefore it is useful when assessing white and Fluorescent shades to check the level present and its evenness.	N/A	Clear450mm Blacklight 600mm	15w 18w	T8 T8	450UV15 600UV18

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VeriVide is committed to innovation in colour assessment and quality control. From constructing bespoke standardised viewing environments to developing new lighting products to meet industry standards, improving your quality and productivity is always our priority.

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Scan the QR code on your mobile device to go directly to our website

Tel: +44 (0)116 284 7790
Email: sales@verivide.com

VeriVide Limited, Quartz Close, Warrens Business Park, Enderby, Leicester LE19 4SG UK