

# **Product Guide**





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CE VeriVide equipment is manufactured in the U.K. VeriVide is registered under BS EN ISO 9001: 2000. Certificate No. 3393.





# Applications

VeriVide equipment provides the platform for true visual and colour assessment, surface imperfections, liquid assessment, printing and textile imaging. As a guide, the product range have these applications:



### **Textiles**

Including dyeing, outerwear, intimate wear, knitwear and hosiery, leather and footwear.

### Graphics

Including litho, web, digital, screen and flexo printing, repro-graphics, packaging and inks.

#### **Photo imaging**

Including professional digital and traditional photography and photo labs



#### Speak the same language

VeriVide is wholly and solely dedicated to this area of expertise; it's roots run back to the discovery of the constituents of light and the inception of the technologies to replicate it. Today, with a highly qualified workforce and a thorough understanding of the technology, VeriVide provides colour assessment products to ensure coherence and consistency throughout supply chains across a diversity of industry and commerce to all parts of the world, via a network of specialist agents.

### The leading light

VeriVide supplies equipment to blue chip organisations involved in textiles and apparel, graphics, automotive, telecommunications, interiors and furnishings. The diversity of our customers ranges from the fishing industry to the manufacture of the paper and print for the Euro currency.

For more information on VeriVide products and services please visit www.verivide.com or contact our Sales Department or email enquiries@verivide.com To help our customers ensure their standards remain consistent and reliable, VeriVide provides a planned maintenance service, please ask for further details.

# Retail colour matching

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Including interiors, furnishings, ceramics and auto refinishing, floorcoverings, ceramics and food.

### Industry colour and appearance

Including paint and component manufacture, automotive interior and exterior trim and finish, building materials such as roof tiles and bricks.

### **Medical & cosmetic**

Including ophthalmic, prosthetics, dentistry and cosmetic makeup.



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## **AATCC-VB & AATCC** Viewing Boards

**CAC** Colour Assessment Cabinet range

- Textile
- Built to American Association of Textile Chemists and Colorists (AATCC) approved test methods 88B/88C/124/128/143/178
- The AATCC Viewing Board is for the evaluation of the smoothness in appearance of flat fabric and seams and the retention of pressed creases in garments and other textile products after repeated laundering.
- Utilises a standard lighting and viewing area by rating the appearance of samples compared to appropriate reference standards.
- Uses either 2400mm (8ft) or 1200mm (4ft) Cool White lamps (as per section 12.4 of certain AATCC test methods).
- Can be either wall mounted or used on a mobile trolley.

### **ACCEL** Accelerotor Viewers

- Textile
- · Provides standardised viewing conditions for the grading of samples.
- Designed for the evaluation of samples for the AATCC Accelerotor tests, the Viewer enables the grading of abrasion and scuffing under controlled lighting conditions, by providing a constant, flicker free, and even illumination from transmitted liaht.
- Supplied with interchangeable masks to increase flexibility, conforming to a wide range of standards and applications.
- · Masks supplied in specific sizes and shapes for individual customer needs, to a maximum size of 260mm x 135mm.
- Conforming to ASTM D1175 M&S P26 and NEXT TM31



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- Developed to EN ISO 12945 standards; incorporating all 3 parts and adopting the following test methods:
- Part 1: ICI Pilling Box Method BS 5811
- Part 2: Modified Martindale Method SN 198 525
- Part 3: Atlas Random Tumble Method ASTM D 3512-96
- This versatile unit allows for the modified Martindale specimen head, enabling the fabric to be assessed during testing, whilst still mounted on the head.
- Uses D65 Artificial Daylight, with an option of CWF available, as specified by certain retailers.







### **CF-60** Colour Fastness Cabinets



- The VeriVide CAC range creates the perfect alternative to natural daylight.
- Developed for visual assessment of colour in accordance with British Standards 950 Part 1 directives and International Standards.
- The CAC range is available in 60, 120 and 150cm cabinet widths, with four or five types of light source.
- This range of cabinets is suitable for all industries and applications where there is a need to maintain colour consistency and product quality.
- Unique VeriVide control panel with advanced features including servicing indicator, auto sequence, warm-up, power save and data storage facility.

#### Textile

#### Graphics

#### Photo imaging

**Retail colour** matching

**Industry colour** & appearance

Medical & cosmet

- Colour fastness grading cabinets for grading and assessment of samples for colourfastness, in accordance to BS EN ISO 105 and retailer specifications.
- CF-60s are fitted with two light sources, the primary source is the VeriVide Artificial Daylight D65 at 6500 Kelvin, which provides the best D65 to CIE ratings in its sector, along with UV black light to reveal the presence of any fluorescent dyes and bleaches.
- The cabinet also features a built-in fixed angle table, enabling samples to be viewed at 45°.
- VeriVide's unique control panel, which gives the user advanced features including servicing indicator, auto sequence, warmup, power save and data storage facility.

#### Textile



## DigiEye

### **CMWS** Colour Management Work Station

The revolutionary noncontact digital imaging system that captures and measures the total colour and appearance of 2D and 3D images in a unique controlled lighting environment. The image is then displayed on a calibrated monitor and printed on a profiled printer.



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- Select and retrieve colour data from any pixel in high-resolution images, DigiEye allows measurement of very small or irregular shaped samples.
- The 'finger-prints' of measured colours are represented by colorimetric values or constant spectral reflectance values.
- Rapid electronic communication of the image and colour data is easy via the internet, using standard formats.
- The complete colour imaging solution combining both hardware and software, from characterised digital camera, unique illumination cabinet, calibrated high definition CRT monitor.
- Illumination cabinet provides even and consistent illumination, meeting international standards.
- Texture profiling and simulation builds an image database of representative textures, with the ability to re-colour to any desired shade.
- Colour difference for comparing colour areas on screen, using a choice of equations including the latest CIEDE2000
- Use complex shapes and patterns, DigiEye is able to automatically select areas of adjacent pixels of similar colour. The 'clustering' technique automatically groups pixels of the same colour together and calculates the percentage of the total pixels within the image.
- Physical standards can be replaced with stored high-resolution digital images.



#### DigiEye's vast range of applications includes: textiles packaging materials including metallic/ carpets pearlescent boxes printed fabric & wrappers lingerie foods – biscuits, meat, fruit, cereals, velours sweets building materials medical prosthetics such as concrete dentistry flooring

- cosmetics eye shadow, lipstick
- phone coversautomotive components

plastics

• Lighting can be adapted to create the correct environment for comparison of physical samples with calibrated on screen images. This ensures consistent and reliable viewing.

Provides controlled standardised lighting within a comfortable and flexible working environment.

- Retractable hood and curtain eliminate ambient lighting and external colour interferenceof onscreen colour perception.
- Incorporates VeriVide's digital control panel, allowing access to a wide variety of features and very accurate and lockable dimming control; to set and maintain the illumination level to a tight tolerance.
- Control panel also features service indicator, warm up, power save and storage facility.
- Monitor stand provides optimum viewing angle, large work area and keyboard storage. Choice of 45° fixed angle table or variable tilting table offered as standard.
- Choice of illuminants: CIE standard daylights, point-of-sale, tungsten filament and UV.
- Additional VeriVide storage units can be added to the system; including 4-drawer or 2-drawer options.

The Colour Management Work Station provides the perfect conditions for viewing colour samples and allowing consistency throughout the entire product chain, from designer to retailer.





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## **CCC** Colour Control Cabinets

Fenestra proofing console

- · Standardised viewing conditions for print checking and the assessment of colours, ink weight, register and dot gain; with a large viewing area.
- Created in collaboration with PIRA for the graphics and printing industries
- Uses VeriVide's unique neutral grey concave viewing deck to eliminate specular reflection, allowing accurate colour and quality control.
- Sheets are held in position using magnets provided; an ideal means for presenting to customers.
- CCC conforms to both BS 950 Part 1 and Part 2 standards, also to ISO 3664. This product is suitable for applications that require a large viewing area for print checking.





## **SBS** Side-By-Side Proof Viewing Cabinets

- · Created in collaboration with PIRA and in accordance with British and International Standards
- Can be used with both sizes of VeriVide Transparency Viewers, the VTV 1812 or 1824.
- Uses 'gentle grip' nylon fibre at the edge of the screen to firmly hold transparencies without damage.
- VeriVide's unique neutral grey concave viewing deck eliminates specular reflection, allowing accurate colour and quality control. Proof sheets can be held in place on the curved metal deck using magnets provided.



- Unique design features to ensure visual proofs meet the same exacting standards as your digital output. Designed to simulate the proof's appearance on the monitor, the Fenestra has a clutter-free interior and makes optimum use of the light within the cabinet.
- Uses LumiVide digital control technology to ensure accurate control of dimming, monitoring of lamp usage and service history.
- Unobstructed view of the proof, up to OS A3 size, without visual distraction and crystal clear viewing with no eyestrain.
- Unlike conventional designs, the innovative reflector gives a highly consistent colour quality over the whole proof deck even when dimmed to monitor brightness.
- High image contrast reveals more shadow detail, illumination level matches monitor brightness.

- working environment.

- Incorporates innovative lighting to give requirements.
- · Vacuum deck to secure proofs.

Graphics

Graphics

**Photo imaging** 

**Photo imaging** 

The Fenestra is the innovative new visual proofing console that delivers a new level of excellence for visual proofing.

Proofing colours on-screen requires a visual proofing unit that will simulate the same viewing conditions and appearance as your monitor.

 Highly uniform level of illumination, at all light levels and the matte interior significantly eliminates flaring off internal surfaces, providing a crisp, defined, high contrast image. The low-level of light spillage from the Fenestra reduces the degree of eyestrain for the user and means the unit remains unintrusive within the

• The monitor can be wall mounted or free standing to give the user a greater choice of viewing positions for the monitor.

· Fenestra boasts a Colour Rendering Index >95 and an x,y chromaticity variation <0.05 for consistent colour quality.

unrivalled visual agreement to the CIE D50 illuminant and meet ISO 3664

#### Textile

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## **Pantone**<sup>®</sup>







### (coated paper)

Solid spot colour, RGB and HTML reference Closest 4 colour equivalent CMYK screen values US version also available

#### Pantone<sup>®</sup> PLASTICS

1,740 opaque and transparent plastic sample chips including chromatics, browns, greys, pearlescent, fluorescent and metallic colours. The range has its own unique reference number system.



#### Pantone<sup>®</sup> huey™ & hueyPRO

Calibrate and correct your monitor Improve on screen colour rendering. Simple and easy to use with award winning results.



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## **TVT** Transparency Viewers

- VTV enables controlled, accurate and precision viewing of colour transparencies.
- Created in collaboration with PIRA, the VTV incorporates a D50 output conforming to British Standards, BS 950 Part 2 and International Standards, ISO 3664.
- Distinctive design and paramount features enable versatility of application, can be placed flat on a work surface, on a stand or wall mounted, allowing the user more flexibility.
- High frequency electronic ballasts to ensure perfect daylight simulation and special reflectors for an even and flicker-free illumination.
- 'Gentle grip' nylon fibre at the screen edge to hold transparencies firmly without damage.
- Manufactured from powder-coated aluminium extrusions with moulded ABS corners to enable a very strong but lightweight construction.
- · Ideal as part of our SBS cabinets or as a standalone unit.

### **VPT** Planning Tables Planning

- · When critical colour assessment is required over a large area, the VPT proves ideal.
- Can be used for general layout work, or cutting and cropping, with an attractive size that allows you the comfort of quality viewing conditions under internationally approved standards.
- Conforming to BS 950 Part 2 and ISO 3664 standards.



• Carefully designed to help optimise colour viewing in the work area, the VL Luminaires provide a perfect alternative to natural daylight.

**VL** Luminaires

- Extensively used within industries where colour assessment is critical such as textiles, printing, repro-graphic and design studios.
- Fitted with four suspension brackets and a glare-free reflector, enabling the unit to be positioned and installed at any angle.
- All VeriVide luminaries have a special opal diffuser and white reflector providing consistent, even illumination, eliminating any patterns from being formed or colour change in the emitted light, ensuring accurate visual colour evaluation.

- 3664 standards.
- The VL uses either the VeriVide D65

N.B. Viewing conditions for graphic technology and photography both have a very high Colour Rendering Index (C.R.I). For most applications where there is a need to maintain colour consistency and quality, D65 lamps should be specified. Wherever viewing conditions for the graphic technology and photography industries are to be undertaken, D50 lamps should be used.

## **MS100** Munsell 100 Hue Colour Guides

- · Determines colour vision anomalies and colour aptitude.
- Easy-to-administer test which is a highly effective method for measuring any individual's colour vision.
- Used by the government and industry for over 40 years, the test consists of four trays containing a total of 85 removable colour reference caps (incremental hue variation) spanning the visible spectrum.
- · Colour vision abnormalities and aptitude are detected by the ability of the test subject to place the colour caps in order of hue.



#### Graphics

**Photo imaging** 

Graphics

Photo imaging



• All VLs conform to BS 950 Part 2 and ISO

• Time elapsed meter indicates scheduling replacement of lamps after 2000 hours.

(6500K) lamp conforming to BS 950: Part 1 OR the D50 (5000K) lamp conforming to BS 950: Part 2 and ISO 3664 standards.

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### Lamp options

### Accessories

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With today's complex colour requirements, a shade cannot always be assessed under one light source. Several may be needed so that the shade is viewed in applicable conditions, i.e. 'Artificial Daylight' and 'Point of Sale' Light.

This allows inconsistencies such as metamerism to be detected. When two coloured materials have identical spectral reflection curves, they will match visually under any illuminant. However, it is possible for two materials to match visually

under one illuminant but miss-match under another, such matches are termed 'metameric'. This is usually a result of the colouring matter used in each material being different. With these factors influencing colour appearance it is important to standardise viewing conditions, especially for commercial use. VeriVide equipment provides these conditions for all applications. For consistency, the source of light must be controllable and constant.

To understand light sources, two factors need to be taken into consideration:

#### 1. Colour temperature articulated in Kelvin (K).

This refers to the colour appearance of a light source, which varies along with its spectral power distribution. Fluorescent lamps with lower colour temperatures look red; such as the CIE Illuminant 'A' and the Warm White Fluorescent lamp. Fluorescent lamps with higher colour temperature look blue, such as the VeriVide D75, and D65.

#### 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. The CRI is measured on an index from 0-100, with 100 representing an exact match, whilst low values indicate poor colour rendering. Hence a lamp rated with a CRI of 98 such as the VeriVide D65 will show colours more accurately than a lamp with a CRI rating of 62 such as the CWF. This rating method is recognised by the Illuminating Engineering Society (IES) and the Commission International de L'Eclairage (CIE).

#### CIE Daylight Illuminants

VeriVide D75 "Artificial Daylight". Correlated colour **D75** temperature 7500K. Conforming to the USA ASTM C.R.I 96 (American Society for Testing and Materials) D1729-82 standard for D75 Illuminant. With high CIE specifications,

for accurate colour matching.

- D65 98VeriVide D65 "Artificial Daylight". Correlated D65 colour temperature 6500K. Within the tolerances C.R.I 98 prescribed in BS 950: Part 1; Illuminant for colour matching appraisal. Specified for most applications where there is a need to maintain colour consistency and quality. Conforming highly to the CIE specifications, for accurate colour matching.
- D50 98D50 "Artificial Daylight". Correlated colour **D50** temperature of 5000K. For the Graphic Technology and C.R.I 98 Photography industries. D50 lamps conform to BS 950: Part 2 and ISO 3664. Recommended for transmitted light source to view transparencies and for the reflected light source to view reproductions.

#### CIE Illuminant 'A'

<b>F</b> C.R.I 100	Tungsten Filament Lighting. Correlated colour temperature 2800K. Required by BS 950: Part 1 (1967) as a test for metamerism (approxiamating CIE Illuminant 'A'). Typical light source used within domestic environments. Used to check for colour flaring. This is particularly important for those containing red and yellow colouring matters.
<b>A</b> C.R.I 98	Tungsten Halogen Lighting (CIE Illuminant 'A'). This represents incandescent A (inc-A). Correlated colour temperature 2856K. Typical light source used within domestic environments. Used to check for colour flaring. This light source is only available in the CAC60 and CVB.

#### Alternative (fluorescent) lighting

<b>TL84</b> C.R.I 85	Narrow Band Triphosphor Fluorescent Lamps. Correlated colour temperature of 4000K. CIE Illuminant F11. Often chosen as a European "Point of Sale" Illuminant, with good colour rendering.
<b>TL84/</b> <b>P15</b> C.R.I 85	As above, but manufactured to a tighter tolerance. (Marks & Spencer specification)
CWF C.R.I 62	Cool White Broad Band Fluorescent Lamps. Correlated colour temperature of 4000K. Used as an American "Point of Sale" Illuminant. Moderate colour rendering.
<b>U30</b> C.R.I 85	Ultralume Narrow Band Triphosphor Fluorescent Lamp. Correlated colour temperature 3000K. An American "Point of Sale" Illuminant, with good colour rendering.
<b>TL83</b> C.R.I 85	Narrow Band Triphosphor Fluorescent Lamp. Correlated colour temperature 3000K. Often chosen as a European "Point of Sale" Illuminant with good colour rendering.
<b>W</b> C.R.I 54	White Fluorescent Lamp. Correlated colour temperature 3450K. Used as a "Point of Sale" Illuminant but has a poor level of colour rendering. Used where accurate colour rendering is of little importance.
ww	Warm White Fluorescent Lamp. Correlated colour

temperature: 2950K. Used as "Point of Sale" Illuminant C.R.I 51 where accurate colour rendering is of little importance.

#### Horizon

Horizon lighting. Correlated colour temperature 2300k. н. Used for Automotive, Apparel and Metamerism Testing. C.R.I 98 As specified by the ASTM (American Society for testing and Materials) D1729-74, Standard Practise for Visual Evaluation of Colour Differences of Opaque Materials. This light source is only available in the CAC 60 and CVB.

#### Ultra Violet

UV Ultra-Violet Blacklight. Used to detect the presence UV 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

#### Fixed Angle Table

45° Fixed Angle Table suitable for the CAC 60/120/150 cabinets, creating standardised viewing geometry at the angle where light is incident, it is ideal for colourfastness assessments.

Dimensions (mm)	Width	Height	Depth
Overall	610	235	225
Viewing Area	610	305	
Footprint	610		200

#### **Tilting Table**

An adjustable Tilting Table for the CAC 60/120/150 used where multiple viewing angles are required for the assessment of colour, e.g.: vehicle finishing, surface coating, foil manufacture.

Dimensions (mm)	Width	Height	Depth
Dverall	640	235	310
/iewing Area	610	305	
ootprint	640		215

#### Diffuser

Diffusers are available for all cabinet sizes 60/120/150; it is recommended that they should be used when highly specular materials are to be assessed e.g. glass, polished surfaces and ceramics. Can also be used to create a barrier between the lamps and the viewing area to prevent contamination (i.e. glass contamination in the food).

Size	Width	Height	Depth
150	1560	80	610
120	1290	80	610
60-5	710	80	530
60	710	80	410

## Service and technical support

VeriVide's design, development and manufacturing base in the UK is supported by a international network of Sales and Service Agents, who provide product knowledge, application know-how and sales, service and spares support regionally. They can provide management for scheduled, routine maintenance to ensure you are getting the optimum from your VeriVide equipment.

VeriVide colour assessment equipment is specified by many leading brands worldwide. VeriVide's agents and trained engineers can ensure you you're your equipment remains up to standard.

#### www.verivide.com

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# Maintenance Pack

Benches

Siz 150 90

### Cupboards and plan chests

VeriVide manufactures a range of standard and custom cupboards, plan chests and other storage solutions with laminate finish to equip an effective workstation.



Cantilever steel, powder coated, standard benches are available to compliment the CAC, SBS and CCC ranges.

e	Width	Height	Depth
)	1570	925	610
)	1295	925	610
	910	925	610
	720	925	610

Size	Width	Height	Depth
150	1600	960	645
120	1330	960	645

#### Stands

Floorstands to hold either the 1812 or 1824 Transparency Viewe

lidth	Height	Depth
320	640	385

For use in conjunction with replacement lamps, enables the white reflector to be cleaned and polished, the grey interior walls to be prepared and repainted, providing a complete service from one disposable pack.

- Servicing and calibration includes:
- Initial inspection and functionality test
- Removal and disposal of all lamps
- Full inspection of lamp reflector
- Fit and test all new lamps if required, to specification
- Clean interior surface of cabinet
- Refinish interior surface to specification
- Clean exterior of cabinet
- Reset switch panels and record data
- Final inspection and test to VeriVide quality standards
- Annual certification of work carried out

VeriVide also provides advice and information on servicing requirements for future, to help ensure you get the most out of you specialist equipment. Contact Katie Strudwick, the Service Coordinator, on 0116 284 7790 or email k.strudwick@verivide.com

#### Textile

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