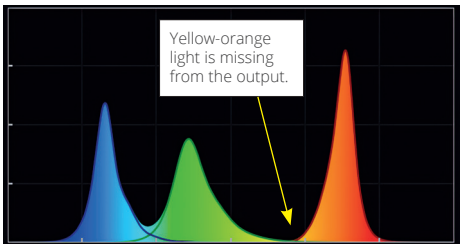
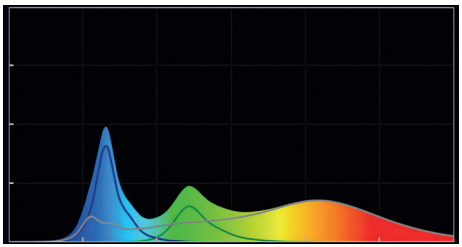
BROMPTON TECHNOLOGY

TRUELIGHT®

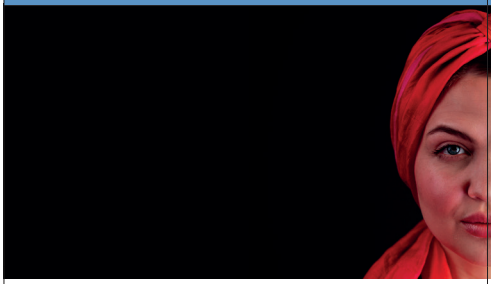
Show your true colours

Why RGBW panels for lighting?

RGB panels are great for direct view – but not so good when the panels are lighting a scene. White light from an RGB panel has limited output at certain wavelengths.

RGB	RGBW
	
Blending red, green and blue only creates the perception of other colours for direct view.	Adding a white emitter creates a broader spectrum with light output at all wavelengths.

Objects in the illuminated scene that reflect these missing wavelengths will not look correct when lit by RGB. This is especially important for skin tones.

RGB	RGBW
	
Skin tones are shifted towards red.	Skin tones look natural without additional lighting.

An additional white emitter turns a panel into a high-quality light fixture. But special control functionality and complex processing algorithms are required to maintain colour accuracy and calibration. Brompton Technology has solved this problem with Truelight - **exclusively available on the G1.**

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Why TrueLight?

Built on Dynamic Calibration

Spectrally-aware calibration of RGBW panels is performed by the Hydra calibration system

Full colour and luminance correction are applied to achieve colorimetric accuracy

Full per-pixel calibration offers the image quality required for direct-view applications, including reflections

All four LED colours are fully corrected, maintaining calibration accuracy for any RGBW spectral mix

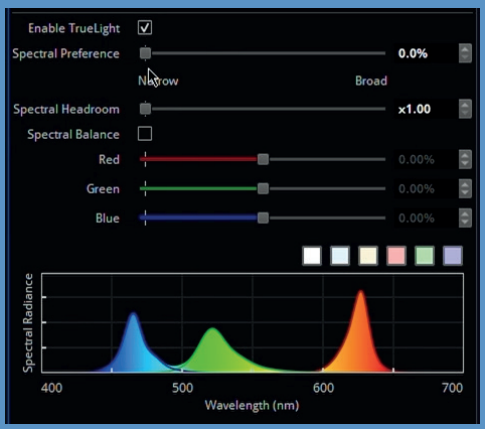
User control over the RGB to RGBW signal conversion is available

Metamerism - with RGBW there are many different combinations that achieve the same colour. Choose the right one for your application with Spectral Preference

Brighter Output - when using panels for lighting you can achieve higher brightness by combining all four LEDs, controlled with Spectral Headroom

On-Camera - different cameras will perceive the white LED differently – adjust the colour mix to maintain accuracy with Spectral Balance

Complexity - the calculations to deliver this control of colour in real-time are very intensive. The only receiver card with sufficient power is the Tessera G1



Tessera G1

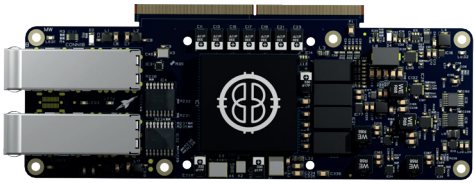
Standard RGB video is input to the receiver card

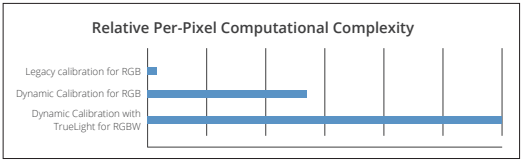
Conversion to RGBW is performed in realtime based on content, calibration and user preference

Per-pixel full-colour calibration achieves Brompton's standard of accuracy

Dynamic controls adapt the spectral output in real-time

TrueLight is exclusive to the Tessera G1





TRUELIGHT®

TrueLight is a new patent-pending technology from Brompton Technology. **Find out more** on our website www.bromptontech.com or speak to your sales representative.

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