

4K HDR Ultra HD

Logo & Test Materials



There are now a huge number of TV manufacturers announcing displays that will support multiple HDR technologies in the coming months/years, and whilst implementing the technology in devices and content promises a certain quality, in reality, interoperability between devices and compatibility issues with content result in problems in the marketplace. No current HDR Logo scheme places requirements on both broadcast and broadband as well as HDMI delivery of HDR content. It is for this reason that Eurofins Digital Testing has introduced the 4K HDR Ultra HD Logo and created a set of high quality Test Materials, which enables manufacturers and content providers to deliver High Dynamic Range (HDR), Ultra-High Definition (UHD) and Wide Colour Gamut (WCG) simultaneously. The Logo and Test Materials, backed by a certification and audit scheme, will ensure that the latest generation of UHD HDR screens will be compliant with the latest regional specifications and can be easily recognised by consumers.

To date, LG Electronics, MStar and Hisense have committed to supporting Eurofins' 4K HDR Ultra HD logo technical requirements in their forthcoming products and LG TVs are proudly displaying the logo on 2017 retail models. Other manufacturers are expected to announce their participation in the coming months, and the technical requirements and test materials are also available and useful for manufacturers and operators who don't necessarily wish to display the logo.



Benefits for Consumers

- Televisions with the logo will display UHD HDR content for their region, whether broadcast conventionally, delivered OTT or via HDMI connection.

Benefits for Manufacturers & Retailers

- In a simple way, the Logo conveys to consumers that a complex set of features and technologies will work together, for the region applicable.
- By using the Test Materials to verify compliance of their device to current standards for HDR content delivery, manufacturers can give consumers greater confidence in the future compatibility of their UHD TV purchase, manufacturers and retailers can make their range of UHD TVs more compelling.
- Because retailers can be confident that TVs carrying the Logo have been tested against a wide range of HDR content delivered over HDMI, broadband and broadcast, they know that the chance of dissatisfied consumers and returned purchases is reduced.

Benefits for Broadcasters & Operators

- In supporting the logo, broadcasters can have confidence that the broadcast and OTT UHD HDR content they produce will work and deliver the expected quality on all compliant televisions.



About the 4K HDR Ultra HD Logo & Test Materials

The Logo is intended to broadly cover 4K HDR Ultra HD receivers, and allow manufacturers to differentiate on performance and additional features. It does not attempt to define requirements on specific maximum brightness or black levels. The Test Materials comprise a set of conformance streams that ensure correct reception and display of UHD resolution, HEVC, both Hybrid Log Gamma (HLG) and Perceptual Quantizer (PQ10) 'flavours' of HDR, BT.2020 WCG and seamless transitions between formats expected in real-world scenarios.

Currently the Logo technical requirements refer to HDMI 2.0b, the DVB UHD Phase 2 specification for broadcast and an HTML5 + MSE and EME browser environment and DVB-DASH with DRM for broadband services – covering most of Europe and some other parts of the world. As other open standards requiring HDR are published and services begin to be deployed for a region, the logo technical requirements will be reviewed and updated.

Device manufacturers wishing to display the Logo should contact us for licence fee information, and use of the Logo is free of charge for companies that are not TV device manufacturers. Such companies wishing to display the Logo must follow the Logo Usage Rules.

How Is the Logo Different From the Other UHD Logos?

While there are many UHD, 4K and HDR logos and different terms in use from both individual manufacturers and industry consortia, none of them indicate whether the TV is able to decode UHD/HDR content delivered via broadcast, nor do they offer an assurance that the TV is capable of receiving via broadband UHD/HDR content in a standard format. All this has arguably held back the deployment of 4K HDR Ultra HD services and resulted in considerable confusion for consumers. If you've invested in an HDR TV before now, there's a chance you might not be able to watch HDR broadcasts when they are launched in the future. It is now clear that content providers and broadcasters will only invest in UHD technology when all the benefits of UHD, HDR and WCG can be realised simultaneously, as this delivers a real step change in visual quality.

The 4K HDR Ultra HD Logo aims to bridge the gap not covered by existing logos, by specifying requirements for broadcast and broadband UHD HDR services based on open standards as well as via HDMI from a secondary source. It backs this with Test Materials to ensure conformance and a compliance regime operated by a respected independent testing specialist to ensure confidence.



About Eurofins Digital Testing

Eurofins Digital Testing is the world's leading end-to-end Quality Assurance (QA) service provider for Digital TV Operators and device testing specialists, operating globally with test lab facilities in the UK, Belgium, Poland, Sweden and Hong Kong. We provide specialised on-site test resources, testing tools and services to validate digital media delivery systems and device conformance for multiple standards and operators across the world. Eurofins Digital Testing was formed from the merger of Digital TV Labs and Testronic Labs Belgium and is part of the Eurofins Group. Eurofins has a network of more than 225 laboratories in 39 countries and has over 23,000 employees worldwide. Eurofins Digital Testing delivers complete testing solutions to manufacturers, broadcasters, operators and related media and device supply chains, covering terrestrial, satellite, cable, OTT and IPTV delivery.



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