

# QALIF ULTIMATE

## PART OF THE CUROLUX FAMILY

Designed for premium large format and cinemas that demand the highest presentation, through to post-production review rooms and for installation and service engineers, Qalif Ultimate is the best all-in-one product for a premiere calibration by providing the benefits of a video-meter and spectro-meter.

Qalif Ultimate allows for measurement of contrast, colour (down to 2nm), colour convergence, 144 point screen brightness and light uniformity, focus and audio. The unique functionality allows for up to four projectors to be aligned simultaneously, ideal for ensuring performance quality in dual or multiple projection setups such as premium large format theatres.

This solution also allows for fully-automated remote screen monitoring from the Network Operation Centre (NOC) and Theatre Management System (TMS).

### MOBILE KIT (SUBJECT TO CHANGE):

- Tripod
- Battery (five hour usage)
- W-Fi router
- Leica Disto Laser Measure

### FIXED KIT (SUBJECT TO CHANGE):

- Wall mount
- iPower switch (to remotely activate/ deactivate Qalif)
  - Microphone

## FUNCTIONS:

### MEASURES:

- Light uniformity (144 points, SMPTE 5 and 9 points)
- Brightness hot spot position
- Colour uniformity (144 points)
- Primaries 2D and 3D (laser compatible)
- Macbeth colours (content/ film rendering)
- Convergence
- Focus
- Focus uniformity
- Intra-frame contrast
- Sequential contrast
- Full spectrum audio analysis\*

# QALIF ULTIMATE

## FUNCTIONS:

### ADJUST (FULL AUTO):

- Focus (lens file)
- Light source power (lamp file)
- Colourimetry (MCGD projector file)
- Dual projector alignment zoom and position (lens file)
- Lamp alignment (on motorised lamp houses)

### MANUAL ADJUSTMENT (SOFTWARE ASSISTANCE):

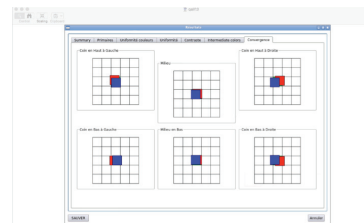
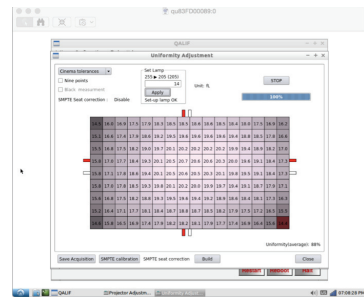
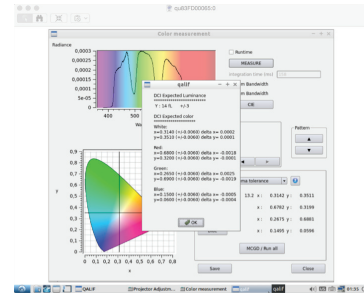
- Convergence
- Focus Uniformity (Scheimpflug)
- Light Uniformity

## FEATURES:

- Mobile and fixed
- Standalone (no software install)
- Integrated with digital cinema workflow (MCGD file, lens file, lamp File) and server
- Remote macros and trigger control
- With battery pack\*
- Reporting and multi-site control
- Confirm brightness and uniformity meet SMPTE/DCI standards
- Configurable tolerances
- Centralised reports (existing NOC integration via API or Zabbix Agent possible)
- Controllable by a text API
- SMPTE Seat- results displayed correctly if measured from the SMPTE seat
- Calibration tool needed for the Qalif Optimizer installation
- Light and colour distribution in 8 million pixels
- Supplied in a flight case

\*optional

## SPECIFICATIONS:



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### GENERAL

Luminance Accuracy *	± 1%
Repeatability	≤ 1%
Size (without handle) - Weight	L220 x H188 x W163 mm - 3.6kg
Interface	Wi-Fi or Ethernet
Colour Space	Selectable CIE curve

### CAMERA

Throw Ratio	Minimum of 0.8:1
Imaging/Pixel Array	3326 x 2504 pixels
CCD size	17.96 x 13.52 mm
Total Pixels	8.3 million
Pixel size	5.4 x 5.4 microns square
Shutter	Mechanical
Exposure	0.1 to 3600 seconds
A/D Converter	16 bits
Pixel Digitization Rate	10 million pixels per second
Full Frame Download	1 second
Cooling Delta	Single Stage TE, Max delta -40C
Temperature Regulation	+/- 0.1 deg. C

### SPECTRO

Color accuracy *	±0.0015 for CIE 1931 xy
Bandwidth	2nm
Resolution	0.3nm
Detector	2048 pixels
Pixel size	14 µm x 200 µm
Detector range	380-780nm
Aperture	2°
Shutter	Mechanical
A/D Resolution	16 bit
Dynamic range	1300:1 for a single acquisition
Integration time	1ms - 65s
Linearity	>99%

\* For a standard illuminant from NIST luminance standard