

Open Film Tools

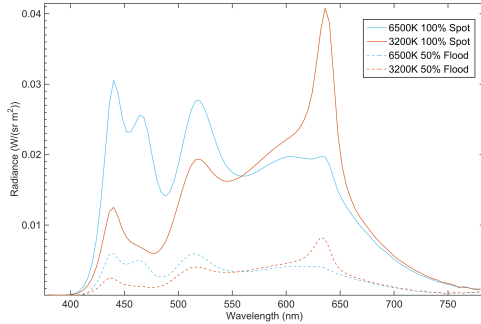
Camera Colour Management Tools for Movie and TV Production



- Based on the procedure for creating Input Device Transforms (ACES-IDT) defined by the Academy of Motion Picture Arts and Sciences
- ACES requires spectral characteristics of cameras and lighting.
- Manufacturers do not provide this data.

Open Film Tools brings data, hardware and software for creating camera profiles.

Open Film Tools Components



Spectral Database of Cine Lighting

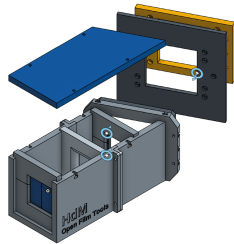
Web Based IDT Profile Creation Server

Open Film Tools IDT Profile Creation

Submission Form [Progress Status](#)

Production Information	Profile Optimization	Camera Information
Production A Better Colour	White Point Daylight D50	Camera Arri Alexa
Company HdM Stuttgart	Color Domain Lab	Sensor Diagonal (mm) n.n.
Operator Andreas Karge	Patch Set Gretag Macbeth Color Checker	Lens Stop 8
E-Mail karge@hdm-stuttgart.de	Scene Illumination Tungsten (Illuminant A)	Focal Length (mm) 45
Time 31.05.2017 15:47:26		Spectrometer UprTek
		Camera Settings comment 25 Hz, ISO 800, WB D50
Calibration Mode: <input type="radio"/> Color Checker <input checked="" type="radio"/> Spectral (experimental)		
Camera Images Kino Flo Calibration Image File line.tiff	Spectrometer Measurements Kino Flo Measurement File ESPD_line.xls	Test Image Demo Image to preview the IDT testimage-testimage-checker-simpledebayer-clear
Dedolight Calibration Image File light.tiff	Dedolight Measurement File ESPD_light.xls	

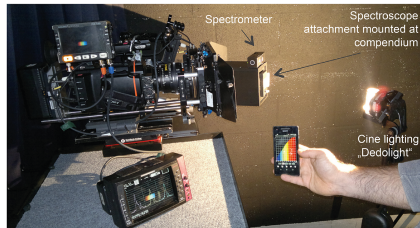
Hardware for Measuring Camera Response



3D-printable Case Design



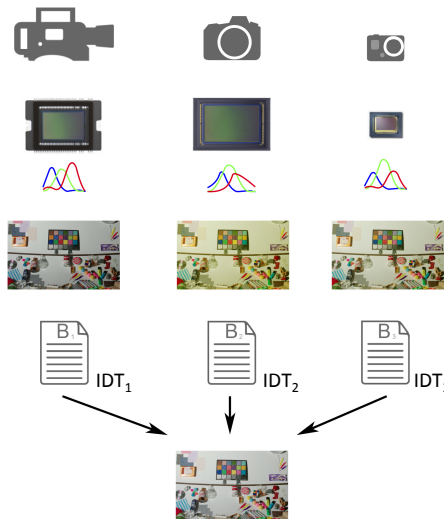
Spectral Image



Measurement Setup

Benefits of Open Film Tools

- Increase cost efficiency in postproduction



- Replace manual colour correction by automatic colour mapping for different cameras

- Awareness of lens colour character



Art Work by Bo Regard (www.appreciating-art.de)

- Create profiles for unknown cameras
- Improve colours for mixed illumination



	L_{CCT}	a_{CCT}	b_{CCT}	L_{spec}	a_{spec}	b_{spec}	$\Delta E_{2000_{CCT}}$	$\Delta(\Delta E_{2000})_{spec-CCT}$
Dark Skin	44.65	10.74	24.44	44.58	11.31	23.49	9.21	-0.70
Orange	67.88	30.75	68.00	67.72	32.27	63.25	6.76	-1.77
Cyan	48.50	-16.68	-23.55	48.69	-17.94	-22.41	6.18	-0.60