The 2026 American Society of Cinematographers Motion Imaging Technology Council Progress Report

By Curtis Clark, Michael Goi, David Morin, and Tim Kang

As technology evolves, the ASC MITC continues its dedicated mission to diligently track the emergence of motion imaging advancements, including powerful new tools incorporating artificial intelligence that have the ability to further expand and enhance the immersive/visceral impact of visual storytelling while preserving the work and intention of the creative artists involved. We continue to investigate its potential long-term impact on our motion picture industry, affecting virtually all facets of filmmaking.

Over the past year, the Council has convened numerous forums and working groups, drawing on the expertise of industry leaders and technologists dedicated to advancing both creative expression and technical precision. Our ongoing collaboration with key stakeholders across production and post-production sectors has catalyzed a series of initiatives focused on standardizing workflows, fostering interoperability, and exploring ethical considerations unique to AI-driven technologies.

We are just beginning to grasp the enormity of this technological challenge and identify best practices for incorporating these advancements while protecting the artists who create the images.

Our ASC MITC committees have been enthusiastically reporting on their progress, energized by the challenges they have overcome!

We will continue our tireless endeavors, supported by hundreds of industry experts who volunteer their time for the advancement and protection of the creative intent of the motion picture industry.

—Curtis Clark, ASC
MITC Chair

The ASC MITC:

- Curtis Clark, ASC, Chair
- Michael Goi, ASC, Co-Chair
- Wendy Aylsworth, Co-Chair
- Jay Holben, Co-Chair
- David Morin, Co-Chair
- David Reisner, Vice-Chair
- Steven Poster, ASC, Vice-Chair Emeritus
- Richard Edlund, ASC, Vice-Chair Emeritus

In the interest of brevity, the following report details the progress from only three of the ASC MITC's most active committees in the latter half of 2025 into the first half of 2026.

Artificial Intelligence Committee

- Michael Goi, ASC, ISC, Chair
- Annie Chang, Co-Chair
- David Morin, Vice-Chair

The ASC AI Committee presented two panels at the Camerimage festival in Toruń, Poland, in November 2025: "AI In Real Time," a content-creation session with Michael Goi, ASC, ISC, and AI director Ellenor Argyropoulos, and "Visual Artistry in the Age of AI," a panel with ASC President Mandy Walker, ASC, ACS; Andrzej Bartkowiak, ASC; Stephen Lighthill, ASC; Karl-Walter Lindenlaub, ASC, BVK; and Sandra Valde-Hansen, ASC. The committee is drafting a document outlining best-practice workflows for integrating generative AI into preproduction and production.

Virtual Production Committee

- David Morin, Chair
- Michael Goi, ASC, ISC, Vice-Chair
- Jay Holben, Vice-Chair

StEM3-VP Working Group (Standard Evaluation Material 3.0 for Virtual Production)

- David Morin, Chair
- Wendy Aylsworth, Vice-Chair
- Jay Holben, Vice-Chair

Assembled by the Motion Imaging Technology Council of the ASC in collaboration with a number of studios and companies, StEM3-VP provides freely available content for cinematographers and filmmakers to evaluate in-camera visual effects stages across three main categories: 3D scenes in Unreal Engine format, 2D video plates, and charts.

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Figure 1. *Warped: Cybercity* shoot at Amazon / MGM Studios Stage 15.



Figure 2. A photo of the *CyberCity* asset donated by Craftology (formerly ICVR).



Figure 3. A moment from a 2D driving plate donated by Spheris Array Systems.

Released to the public at Open-Source Days in July 2026, the StEM3-VP asset package provides a range of typical scenarios, such as interior scenes, exterior scenes, city scenes, and natural environments. They are intended to be loaded onto a virtual production stage after it has been first set up, or when a production first uses an existing virtual production stage and filmmakers want to visually evaluate the stage with familiar content.

Included with the assets is *Warped: CyberCity*, a sample sequence shot by David Klein, ASC, written by Michael Goi, ASC, ISC, and ASC associate member Jay Holben, who also directed the scene. Shot in a real-world virtual production scenario by a professional crew on October 21, 2025, at Amazon/MGM Studios Stage 15 in Culver City, it provides high-quality reference footage of the StEM3-VP CyberCity asset, along with a behind-the-scenes video chronicling the production process **(Figs. 1-6).**

The StEM3-VP assets are hosted at the Digital Production Example Library (dpel.aswf.io) of the Academy Software Foundation, licensed under the ASWF Digital Assets License v1.1, and can be downloaded for free at https://dpel.aswf.io/asc-stem3/

Filmmakers interested in learning more about StEM3 or contributing to DPEL projects can get involved via Slack at #assets, or join the mailing list.

- https://theasc.com/stem3/
- https://dpel.aswf.io/asc-stem3/

Lighting Committee

- Tim Kang, Chair
- John Miller, Vice-Chair

In the motion picture and television photographic lighting industry, LEDs have predominantly supplanted all prior forms of illuminants. However, although motion picture film stocks and camera sensors developed their sensitometry and colorimetry technologies on the radiometric foundations of blackbody radiation and CIE Daylight, the spectral power distributions (SPDs) of LED technology deviated sufficiently from these fundamental foundations to cause downstream colorimetry problems.



Figure 4. A frame capture from *Warped: CyberCity* featuring Juliette Sureau and Elijah Rashad.



Figure 5. Another frame capture from *Warped: CyberCity* featuring Ralph Valencia Jr.

In sum: real-world subjects, wardrobe, props, and environments often did not appear in camera as intended or expected by filmmakers accustomed to incandescent, HMI, full-spectrum fluorescent, carbon arc, or daylight illumination.

In 2019, the ASC MITC formed a Lighting Committee to collaborate with lighting manufacturers to solve this primary problem and other secondary problems. The Lighting Committee's efforts produced a white light specification entitled "ASC White Point." ASC White Point specifies the visible light electromagnetic radiation SPD and associated CIE 1931 colorimetric values for the two most common photographic white point colorimetric control parameters: Correlated Color Temperature (CCT) and Tint (also known as "plus or minus green" in the field).

ASC White Point specifies adherence to the Illuminating Engineering Society (IES) TM-30 reference illuminant series for CCT, and the convolution of the TM-30 reference illuminant series SPD with the idealized Wratten Color Compensation filter definitions of CC36 for Full Plus Green and CC30M for Minus Green. This rigorous definition of historical cinematography white point assumptions has not previously existed as a complete radiometric and colorimetric specification. Prior progress reports have presented and tracked the development and applications of this specification.

From 2022 to the present, multiple lighting manufacturers have used the ASC White Point radiometric and colorimetric specification to great success. At the end of 2025, the Lighting Committee published a succinct and simplified colorimetric lookup table (LUT) online that correlates the input parameters of CCT in Kelvin and tint in +/- % and provides the computational conventions to accurately interpolate between value entries. As a result, in 2026, in addition to multiple lighting fixtures using these radiometric and colorimetric control parameters, the following implementations of the ASC White Point LUT have been developed for production use:



Figure 6. The Saloon asset donated by Epic Games.

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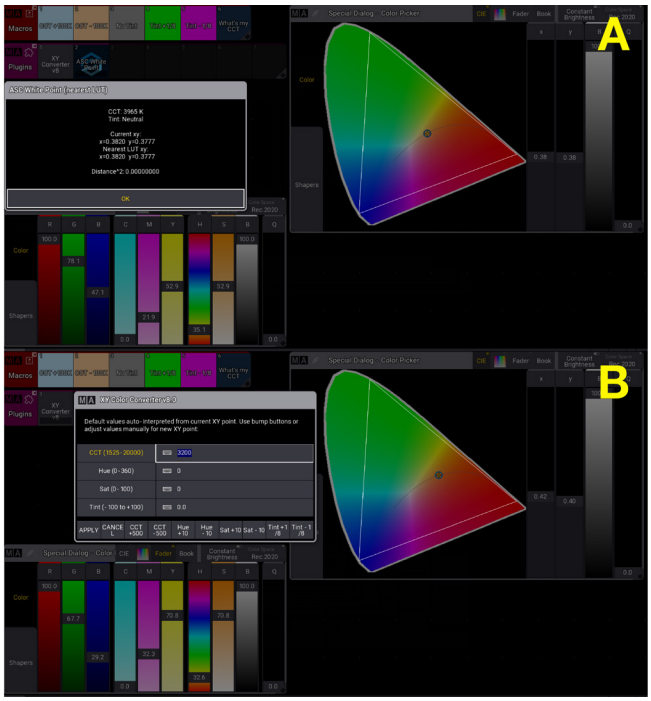

Figure 7. IATSE Local 728 Lighting Programmers' GrandMA3 Color Control Plugins. A) "ASC White Point" by Tom Howard, B) "xy Color Converter" by Patrick Mattes. Both plugins provide lighting console conversion of CCT and +/-G % input common in lighting workflows to CIE 1931 xy chromaticity communication to lighting fixtures.

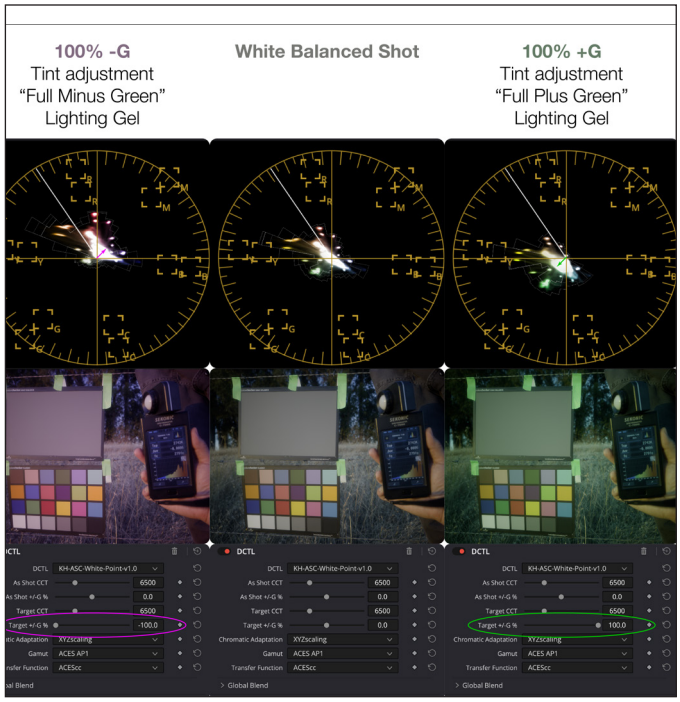

Figure 8. DaVinci Resolve Studio DCTL Plugin. "ASC White Point" by colorist Kaur Hendrikson. This example plugin applies white balancing operations with ASC White Point CCT and +/-G % adjustments. The vectorscope arrows from the center axis illustrate the direction and magnitude of these adjustments on the G/M vectorscope axis.

Lighting Control

In January, Tom Howard and Patrick Mattes, two IATSE 728 lighting programmers, created their own "ASC White Point" plugins for the GrandMA3 lighting control console that allow the same CCT and "plus green/minus green" tint control conventions used by motion picture lights and cameras **(Fig. 7).**

In 2026, Rune Solegard, a Swedish lighting programmer, created an ASC White Point plugin for StreamDeck peripheral control of the Assimilate Live FX media server used in virtual production environments. This color-managed virtual production workflow allows for colorimetrically accurate light card and light fixture controls.

Lighting Metrology

Throughout 2026, Marco Pirc of Lit Systems has started to implement ASC White Point tint as a +/- % metric for metering white light on motion picture productions.

Color Grading White Point Control

In August 2026, Kaur Hendrikson, an Estonian colorist and software developer, developed a DCTL plugin for DaVinci Resolve Studio that uses ASC White Point to drive CCT / Tint color adjustments on raw or log-encoded clips **(Fig. 8).**

About the Authors



Curtis Clark, ASC, has long been a leader in embracing new technologies and bringing them to Hollywood, serving for 20 years as Chair of the ASC MITC. In 2019 Clark was the recipient of the Motion Picture Academy's John A. Bonner Award in recognition of his extraordinary service to the motion picture industry. In 2023, the ASC created the Curtis Clark, ASC Technical Achievement Award.



Michael Goi, ASC, is a director, cinematographer, and producer. He is co-chair of the ASC MITC.



David Morin is the executive director of the Academy Software Foundation, an associate member of the ASC, chair of the MITC Virtual Production Committee, and MITC co-chair.



Tim Kang is an imaging specialist, Los Angeles-based cinematographer, associate member of the ASC, and chair of the MITC Lighting Committee.

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