

Figure 8. Colorimetric performance for the Phase One IQ 180.

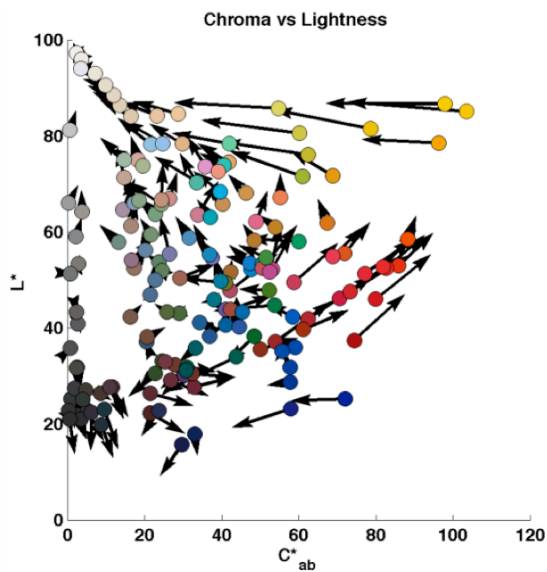


Figure 9. Colorimetric performance for the Betterlight 8000 K.

Conclusions

Our hypothesis was confirmed: the commercial cameras with profiles optimized for subjective color reproduction produced large colorimetric errors. The results for the Hasselblad and Phase One were especially disappointing. As a consequence, considerable visual editing would be required. Based on the second RIT benchmark study where editing did not improve performance in most of the cases, such editing would be unlikely to result in acceptable color accuracy. The Cruse and Sinar systems had acceptable color accuracy because their profiles were optimized for objective, colorimetric color reproduction. It seems that museums choosing to use commercial camera systems need to build their own profiles. Finally, of all the systems tested, only the Sinar

system using the RIT Dual-RGB approach and software would achieve a four-star rating using the FADGI criteria.

References

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Author Biography

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Stanley Smith received his BA in fine Art from Western Washington University (1975). In 1982 he founded Argentum, a Seattle-based custom photographic lab and early adopter of digital imaging. In 1995, he designed and implemented the digital imaging studios for Experience Music Project, Paul Allen's rock & roll museum, located in Seattle. In 2004, he was hired to manage the photographic and imaging studios at the J. Paul Getty Museum in Los Angeles. Currently Mr. Smith is the Head of Collection Information and Access at the Getty.