

New Work Proposal for CIE/Division 8 TC (Technical Committee)

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Title: Adaptation under Mixed Illumination Conditions

Terms of Reference:

To investigate the state of adaptation of the visual system when comparing soft-copy images on self-luminous displays and hard copy images viewed under various ambient lighting conditions.

Working Program:

Sep.29-Oct.1/1998:	New work proposal at CIE/Division 8 meeting
Until End/1998:	Gather interested members/organizations and form a new TC
Until End/1999:	Survey past relevant works and Share a standard method and guideline for cross-examination
Until End/2000:	Perform cross-examinations at different laboratories and Publish a CIE Technical Report (or Progress Report)

Partial List of Relevant Works:

1. N. Katoh, "Practical Method for Appearance Match between Soft Copy and Hard Copy," SPIE 2170, 170-181 (1994)
2. N. Katoh, "Appearance Match between Soft Copy and Hard Copy under Mixed Chromatic Adaptation," Proc. IS&T/SID Color Imaging Conf. 3, 22-25 (1995)
3. N. Katoh, K. Nakabayashi, "Effect of Ambient Light on Color Appearance of Soft Copy Images," Proc. AIC Color 97 Kyoto, (1997)
4. D. H. Brainard, K. Ishigami, "Factors Influencing the Appearance of CRT Colors," Proc. IS&T/SID Color Imaging Conf. 3, 22-25 (1995)
5. K. H. Choh, et. al, "Effects of Ambient Illumination on the Appearance of CRT Colors," Proc. IS&T/SID Color Imaging Conf. 4, 224-226 (1996)
6. S. Berns, K. H. Choh, "Cathode-Ray-Tube to Reflection-Print Matching under Mixed Chromatic Adaptation Using RLAB," J. Elec. Imaging 4, 347-359 (1995)
7. Y. Shiraiwa, et al., "Matching of the appearance of colors in hard-copy and soft-copy images

- in different office environment" SPIE 3300 , 148-158 (1998)
8. M. D. Fairchild (CIE TC 1-34), "Testing Colour-Appearance Models: Guidelines for Coordinated Research," *Color Res. Appl.* 20 , 262-267 (1995)
 9. P. J. Alessi (CIE TC 1-27), "CIE Guidelines for Coordinated Research on Evaluation of Colour Appearance Models for Reflection Print and Self-Luminous Display Image Comparisons," *Color Res. Appl.* 19 , 48-58 (1994)
 10. K. M. Braun, et al., "Viewing Techniques for Cross-Media Image Comparisons," *Color Res. Appl.* 21 , 6-17 (1996)
 11. P. Alessi, "CIE TC 1-27 – An Update on Colour Appearance Model Evaluation for Hardcopy/Softcopy Image Comparison, Proc. CIE Expert Symp.'96, 74-85 (1996)
 12. M. D. Fairchild, L. Reniff, "Time Course of Chromatic Adaptation for Color-Appearance Judgments," *J. Opt. Soc. Am. A* 12 , 824-833 (1995)