

ATTACHMENT N
RECRUITMENT ADVERTISEMENT/FLYER

VISUAL PERCEPTION OF COLOR QUALITY RESEARCH STUDY

Part 6: Color perception depending on light level

Sign up to participate in our study of the color properties of light sources for general illumination (e.g., at home, at work, in public places such as stores and museums, etc.).

What is required to participate?

- You can be a NIST employee that has the permission of your management to participate.
- You can be a non-NIST employee that is either a Federal or a non-Federal participant.
- Normal vision or corrected to normal vision (good enough to get a driver's license). Glasses or contact lenses are acceptable.
- Normal color vision. For only the purpose of this research experiment, a NIST researcher will also test your color vision after obtaining your informed consent.
- If your vision accuracy or color perception is unacceptable for the purpose of the research experiment, we will excuse you from the study without any penalty.
- If your vision accuracy and color perception are acceptable for the purpose of the research experiment, we will ask you to provide your age, gender, and race/ethnicity in a brief demographic survey and assign a participant number to you.
- These data will not be connected to your name in our records, but if you prefer not to provide your age, gender, and race/ethnicity, we will excuse you from the study without any penalty.

What will we be doing in the experiments?

- After screening your vision, experiments may begin at your first visit if you have time, or we can schedule you to come back another time to complete all experimental sessions.
- There will be two different experiments, which will take a total of about one and half hour.
- You are welcome to take short breaks between sessions or any time if necessary.
- You have no obligation after you volunteer. You can cancel participation or withdraw from experiment at any time for any reason.
- The experimental sessions will take place at the National Institute of Standards and Technology's Gaithersburg campus (Room B307 of Building 220).
- The experiments will use a double-booth (two gray boxes side by side with front opening) with spectrally tunable light sources.
- You will sit in front of the booth, and you will be asked to adapt to the illumination for each eye for 5 minutes before each experimental session.
- During adaptation, the operator will explain the experiment and procedures, and let you do practice runs.
- Each of your eyes will be adapted to each side of the booth. The left side has higher light level, right side is lower. A color sample (gray, red, green, yellow, blue) is placed in one side of the booth and a set of 20 color samples of similar color are placed in the other side of the booth. You will choose which of the 20 color samples looks closest color to the one on the other side. This study will provide findings on how light level affect perception of colors. This experiment in total will take 45 minutes to one (1) hour including a break of 15 to 30 minutes between the two sessions.

How will your privacy be protected?

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- All the demographic and experimental data will be recorded by a pseudo-randomly assigned participant number.
- No key will be kept that will link your name, or any personally identifiable information to any vision testing results, experimental data or demographic information collected under the study.

How do you get involved?

- The Principal Investigator is Dr. Yoshi Ohno. You can call him at 301-975-2321 or e-mail him at ohno@nist.gov to express your interest and learn more.

We plan to recruit ~25 volunteers, NIST employees and non-NIST employees, for this experiment initially, and possibly more in the future.

This research is being conducted by the Sensor Science Division, Physical Measurement Laboratory.