

OMB Control No. 0693-0043
NIST Generic Clearance for Usability Data Collections
Evaluation of the Whiteness and Color Rendering of Different Correlated
Color Temperatures of Lamps.

FOUR STANDARD SURVEY QUESTIONS

1. Explain who will be surveyed and why the group is appropriate to survey.

NIST is seeking approval for a demographic questionnaire related to the study described below.

The Sensor Science Division of the Physical Measurement Laboratory (PML), of the National Institute of Standards and Technology (NIST) is proposing to conduct a study of the color properties of several light sources for general illumination. The data collected from the study, will be used to make recommendations to help improve lighting design and to aid light source manufactures with the information necessary to create desirable products.

Participants in the study - *Evaluations of the whiteness and color rendering of different correlated color temperatures of lamps* will be selected. The selection process will be random. Any group with diversity in age and gender is acceptable.

Participants will be asked to complete a total of four experimental runs. Each run would consist of four individual (4) trials, which requires a participant to spend 5 minutes seated under a reference light, then the participant will be presented with a pair of lights options, (A and B), that illuminates a set of objects. Participants will be asked to provide a verbal answer as to which of the two lights options (A or B) looks more natural. These verbal responses will be recorded as a dialog by the Principal Investigator (PI) for this study. Each trial testing would take approximately 10 minutes to complete for a total of 40 minutes.

The group is appropriate because the result of the data is not expected to show a correlation between the gender and age of respondents. Without collecting this information we cannot confirm the hypothesis.

Participants will be required to complete the demographic questionnaire which is collecting two points – gender and age which will be associated with their data and will not include any personally identifying information.

2. Explain how the survey was developed including consultation with interested parties, pre-testing, and responses to suggestions for improvement.

The demographic questionnaire was developed by the PI and co-PIs. The questionnaire was designed to collect only the necessary content necessary for this collection.

3. Explain how the survey will be conducted, how customers will be sampled if fewer than all customers will be surveyed, expected response rate, and actions your agency plans to take to improve the response rate.

The demographic questionnaire will be provided to the respondent during the instructional period. Each demographic questionnaire will be assigned a random identification number for each participant and will ask respondents to provide their age and gender. There will be no key identifying the participants by the assigned random identification number. Participation of the participants is expected to be 100%. Participation in this study is voluntary and a respondent may choose not to participate at any time during the study, without penalty. The participants will sign an Informed Consent Form, which provides all the details regarding this study. A copy of the Informed Consent has been uploaded into ROCIS as a part of the submission package.

4. Describe how the results of the survey will be analyzed and used to generalize the results to the entire customer population.

The information collected under this study will be analyzed, in an effort to determine or define any trends with respect to age and gender. The hypothesis is that neither age nor gender will have an effect on the perception of white lighting. Given this result the study results can then be generalized to the entire consumer population through peer reviewed journals and specifically presented to standards developing communities.