This study consisted of two experiments. In the first experiment, a survey of driver opinions concerning beam-pattern uniformity was conducted. The questions dealt with the uniformity of one’s own low-beam pattern (from memory and after nighttime driving), the important areas of the beam pattern for uniformity, and the degree of prior attention paid to uniformity. A total of 48 respondents returned the questionnaire. The main results of this experiment are as follows: (1) Ratings of uniformity from memory were similar to those made after driving. (2) Foreground in one’s own lane was rated as the most important area for uniformity.

The second experiment involved a field evaluation of the uniformity of a U.S. and a European beam pattern, first from memory after experiencing the beam pattern without prior instructions about uniformity, and then during actual viewing. A total of 16 subjects (both younger and older) participated. The main results of this experiment are as follows: (1) Although there was a tendency to assign higher uniformity ratings during viewing than from memory, the difference was not statistically significant. (2) Uniformity ratings tended to be based on illumination in one’s own lane. (3) The European beam pattern was rated as being more uniform than the U.S. beam pattern. (4) The uniformity of the ECE beam pattern was not significantly related to the areas that were considered important for uniformity. On the other hand, the uniformity of the U.S. beam pattern was positively related to the relative importance of the illumination in one’s own lane of travel.