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16. Abstract <p>This experiment evaluated the potential benefits of hydrophobic coating of windshields under simulated conditions of use. The main independent variables were hydrophobic treatment, participant age, and time of day. The dependent measures were minimum visual angle resolved and response time. The results indicate that the hydrophobic coating decreased the minimum visual angle resolved by almost 50% and reduced the response time by more than one second. In more practical terms, visual performance improved in the treated-nighttime condition to approximately the level of performance in the untreated-daytime condition.</p> <p>This experiment showed that hydrophobic coatings can result in significantly improved driver visual performance. However, this experiment did not address the durability/longevity of these products, as the hydrophobic coating was only tested when it was newly applied (and therefore could be expected to be near peak performance). Benefits associated with hydrophobic coatings are likely to diminish with time and wear, unless the coating is reapplied or product durability is infinite.</p>					
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