

# Modern nighttime visibility analysis and how it has revolutionized courtroom demonstrations

By Jason Fries and Sean Daly

It should come as no surprise that driving at night creates riskier conditions than during the day. In fact, the National Highway Traffic Safety Administration (NHTSA) has calculated that almost 50% of all fatal car accidents happen at night though only 25% of all vehicular travel takes place at this time. Because of this, you are likely to handle more serious accident cases that occur at night, and nighttime visibility issues are therefore more likely to come up.

There are many factors that lead to dangerous driving conditions at night, including decreased visibility, improper lighting systems and distracted drivers. However, visibility has been the most

challenging factor for legal teams and forensic specialists to demonstrate in court.

Nighttime visibility reconstruction hasn't historically had an objective approach, but as with most industries, modern technology is allowing experts to create standard practices. Today, math-based strategies allow experts to deliver exhibits and videos that would previously have no objective support. It's important for any attorney that works with serious nighttime incidents to know what can be demonstrated and how to effectively communicate nighttime visibility to juries and judges.

This knowledge is also important so you can recognize inaccurate forensic

assertions from opposing counsel. With no ability to quantify lumens, light or visibility, nighttime visibility experts in the past could admit courtroom exhibits based on subjective observation. Thanks to critical advancements, basic observations can now be supported with mathematical analysis. This means that simply saying, "because I said so," no longer suffices as the foundation of an intelligent assertion.

The modern process of demonstrating nighttime visibility accurately can be broken down into a few steps that allow a forensically accurate, provable video to put the jury into the driver's (or pedestrian's) perspective.

## Scheduling a Nighttime Site Visit

First, it's important to schedule an incident site inspection when conditions are most similar to the time of the incident. Nighttime inspections allow attorneys and experts to observe elements of a nighttime environment with better perspectives than from photos or video taken by emergency responders. Putting yourself at the location of an accident can reveal hidden factors that wouldn't be obvious when reviewing a case in the office.

If the accident occurred over an hour after the sun had set or an hour before



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