



# THE SUNDAY TIMES

## This'll dazzle you: bike lights outshine cars

**Alex Pell**

THE government has pledged to take action after a Sunday Times investigation found that 80% of popular bicycle lights are more powerful than the legal limit of brightness for dipped car headlights.

One of them exceeded the maximum for a dipped headlight by a factor of 13.

The brightness of 10 popular light-emitting diode (LED) bicycle lights was tested at a photometric laboratory. On their lowest setting and with angular adjustment to account for pointing down at the road, eight of the lights exceeded the legal maximum level for dipped car headlights. At their maximum brightness setting, nine of the lights were brighter than a car headlight.

The lights can also be set to flash, often at a brightness near maximum, giving an intrusive stroboscopic effect that could distract other road users and impair their ability to judge the cyclist's distance or speed. At least 100 cyclists are killed on Britain's roads each year.

Bicycle-light makers are engaged in an "arms race" to produce ever brighter lights. Stephen Young, managing director of Lumicycle, which makes the LED4Si light, said: "You have to offset the vulnerability of the cyclist and if that means causing dazzle to a driver, maybe that's worth it."

When pressed on whether the industry was out of control, Young

conceded: "What you are saying is correct — I've heard it for years."

Ben Terry, a student paramedic, claims to have sold 230,000 examples of the Cree XM-L T6 lamp from C&B Seen — the brightest light tested. Roger Terry, his father, who helps to run the business, said: "I'm not sure if we should be delighted that ours is the most powerful, or dismayed. We advise people to angle them onto the road and not ride on full beam."

The Department for Transport (DfT) says current rules specify a maximum intensity of 70 candela — a measure of luminous intensity — but technology has overtaken that limit, which is now widely ignored.

When asked to clarify the maximum brightness allowed for a front-facing bicycle light, the DfT referred the inquiry to the Road Vehicles Lighting Regulations, which state that it is an offence for any light on a vehicle to "cause undue dazzle or discomfort to other persons using the road".

When informed of the test results, Stephen Hammond, the road safety minister, said: "Cyclists are required to use lights to ensure that they are visible to others using the roads and to see the road ahead.

"However, we are aware that the law on vehicle lighting has not kept pace with developments in the market for bike lights, so we are reviewing the lighting regulations and hope to come forward with proposals to revise them later this year."

*The Sunday Times sent ten bicycle lights to be assessed by Dr Gareth John, technical director of Photometric and Optical Testing Services, using a radiant imaging photometer. This facility is probably the most up-to-date independent lighting test laboratory in the UK, and it specialises in the precision measurement of lighting. The tests were devised by and conducted in the presence of Chris Juden of the CTC, who also sits on the panel of the body creating the new international standard for bike lights.*