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## Marelli Named CES 2024 Innovation Award Honoree

The company's LASER and optical fiber rear lamp technology is an industry-first solution pairing a red LASER with rear automotive lighting functionality

Marelli, a leading mobility technology supplier to the automotive sector, was named a CES 2024 Innovation Award Honoree for its **Red LASER & Optical Fiber Rear Lamp**. Marelli is the first lighting manufacturer to develop and bring to market red LASER technology paired with rear lighting functionality. To produce the lamp, Marelli coupled a red LASER diode with optical sidelight fibers within the LASER. The result is a very thin illuminated line, that gives OEMs the flexibility to create equally unique and stylish brand signatures.

Marelli developed this technology for a German luxury vehicle manufacturer with very specific requirements – to achieve a unique night-time appearance using thin suspended light guides no more than 1 mm in diameter. State-of-the-art light guides could not be used, as they are about 6 mm in diameter, made of plastic, heavier than optical fibers, and not aesthetically suitable for the application. Optical fibers offer more design flexibility in that they can achieve different shapes and curves using light - and guarantee homogeneity - which can't be achieved with a larger plastic light guide. The decorative fibers occupy very little space while giving the appearance of multiple illuminated lines. The fibers can be considered a standard component that can be reused with different design and position options 360 degrees around the car.

The LASER and optical fiber combination is truly unique in that it supports styling flexibility while also being sustainable, due to its power efficiency and reduced weight. To achieve the same illumination and homogeneity with LEDs as the light source, the power consumption would be three times higher. LASER technology also enables a "speckle effect" along the fibers, resulting in a distinguishing appearance never before seen in a rear lamp.

Marelli will showcase its latest technologies, including the LASER and optical fiber rear lamp at CES 2024 in Las Vegas, NV, January 9-11, 2024, at the Wynn Hotel, Latour Ballroom 5-6.



## **About Marelli**

Marelli is a leading mobility technology supplier to the automotive sector. With a strong and established track record in innovation and manufacturing excellence, our mission is to transform the future of mobility through working with customers and partners to create a safer, greener, and better-connected world. With around 50,000 employees worldwide, the Marelli footprint includes 170 facilities and R&D centers across Asia, the Americas, Europe, and Africa.