DVN Tokyo Report

2025 June 11-12

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Brightek

Brightek presented numerous demos with ICLEDs at DVN Lighting Tokyo, including the ICLED EVO 3838, ICLED ISELED 3233 and Mini ICLED 1212.

A live demonstration powerfully illustrated their exceptional color precision and ultra-brightness. Beyond ICLEDs, Brightek unveiled an innovative smart lighting solution for MCU-less automotive systems. This innovation is driven by ETR, Brightek's new smart transceiver. The ETR allows a single SPI port to easily control up to 32 light modules, offering flexible compatibility with SPI, I2C, and CAN FD protocols. Its CAN FD capability supports transmission up to 10 meters at 5 Mbit/s. This clever solution significantly simplifies system complexity by reducing the number of components required, minimizing the need for MCUs, and enabling the use of smaller PCBs. Ultimately, this streamlines design processes and enhances functionality.

BrightView

The DVN Tokyo Workshop was a high-impact event for BrightView, with two full days of engagement with Japanese OEMs and Tier 1 suppliers. The workshop featured compelling keynotes from industry leaders including Nissan, Stanley Electric, and Honda, all setting the stage for in-depth conversations around the future of automotive lighting.

BrightView's team was on hand to showcase our advanced Computational Optics Film solutions, which are already helping automotive lighting designers achieve more compact, lightweight, and efficient systems. Our films are engineered to enable precise beam shaping, glare control, and optical efficiency in both exterior applications—such as headlamps, DRLs, and signal lights—and interior use cases like ambient lighting and display integration.

A highlight of the event was BrightView's participation in the Innovative Technology session, where Chief Commercial Officer Michael Murphy presented how computational optics is driving the transformation in lighting design. His talk focused on how BrightView's micro lens array films enable thinner form factors, reduce system cost, and improve energy efficiency—all while meeting increasingly complex optical requirements.

FlowDry Technology Inc. / Filtration Group Automotive

We have presented the passive condensation management device Opticlear.

Presented were generation 1 and generation 2 of the device.

The device is controlling the humidity within the headlights and taillights without a need for any electrical power, it is fully regenerative and lasts for the lifetime of the light module.

Inova Semiconductors GmbH

Attending the DVN Tokyo Lighting Workshop during June 2025 has reiterated our understanding, that the Japanese automotive market has recognised the potential of interior lighting and its beneficial significance to the passengers. With this, we have joined this year's DVN Tokyo Lighting Workshop with a booth, a lecture and multiple demonstrators to enlighten the Japanese automotive market on the well-established interior lighting standard ISELED and the magnitude of fully available products of its Ecosystem.

• ISELED End-Application Demonstrator – BMW X3 (2024) in production door module with different lighting scenarios e.g. Warning-Application for the Driver.

• ISELED End-Application Demonstrator – Hyundai Grandeur (2022) in production dashboard module.

• ILaS Wifi Streaming Demonstrator – simulated ILaS Car Network with +350 induvial controllable End-Points provided by six different Ecosystem contributors.

• Presentation in 'SESSION 2 – INTERIOR LIGHTING' with the title "ISELED – The automotive ambient lighting standard".

Especially the direct feedback received after my presentation, has underlined our mutual understanding of the current market developments in Japan. But moreover, has proven the perfect fit between the Japanese market needs and the full availability of the ISELED-Ecosystem itself, with its +200 standardized devices. DVN has again proven, being one of the most-suitable channels to address our target audience, especially in markets as the Japanese.

Luminit

Luminit showcased cutting-edge innovations in automotive optics with live demonstrations of rear lighting and HUD technologies. Our featured presentation, "Illuminating the Road Ahead: Integrated 3D Curve Light Shaping Diffuser Lens Meets Prism Film for Next-Gen RCL/DRL," highlighted how our Light Shaping Microstructures are revolutionizing automotive lighting design.

These advanced optical elements precisely shape, homogenize, and control light output with over 90% transmission efficiency, eliminating LED hotspots and enabling uniform illumination across complex surfaces. A key innovation, our breakthrough technique for applying these microstructures to free-form 3D surfaces, opens the door for seamless integration into rear combination lamps, DRLs, LiDAR, HUDs, and more.

Visitors to our booth experienced firsthand how Luminit's proprietary technology meets the evolving demands of modern automotive design, combining performance, precision, and compliance with industry standards.

MPLD

MPLD is a leading and independent manufacturer of vibration fixtures and validation jigs for quality tests.

Thanks to the know-how we gained in more than 20 years of experience, the continues investments in technology and human resources, we offer high quality products and services with certified processes according to ISO9001.

Most of our manufacturing takes place internally in our departments of R&D, production, assembly, dimensional control and dynamic validation.

We like to work with our customers as a consultant in the whole validation process to define together the jigs necessary to validate the product in order to optimize all the cost parameters.

Each fixture is realized in order to maximize performance, ensure repeatability, minimize time setup and facilitate the work of the validation engineers.

For Japan area we are partner of IMV Corporation (vibration shaker manufacturer): they are the right interface between European and Japanese cultures.

Nichia

Nichia presented exhibits that were in line with the content of the lectures given in the two sessions. We showcased HD Digital Light, high-resolution demo units using µPLS, 10mmx60mm Compact Design Low-beam Headlight, as well as RGB laser projection demo units for both interior and exterior applications, presenting products that incorporate these latest technologies. Also, LASER Fiber RGB Full Color Lamp caught the attention.

Nichia held a joint presentation on µPLS with Mr. Haruyuki Komatsu from Infineon Technologies Japan K.K.," Light Digitalization with µPLS and Advanced Automotive System". Additionally, there was a presentation titled "Revolutionizing automotive interior the future of Laser illumination" by Hiroaki Kuroda.

We believe that the demonstrations we showcased have left a lasting impression on all of you.

OLEDWorks

OLEDWorks attended the DVN Tokyo Workshop at the Hilton Tokyo Odaiba, displaying its robust and automotive qualified **Atala** organic light emitting diode (OLED) lighting technology.

Attendees were able to view both flexible and rigid high-brightness Atala panels at the OLEDWorks booth. Flexible panels can bend and wrap around a vehicle, allowing light to follow curves for greater visibility and design freedom. This functionality increases viewing angles, enhances communication capabilities, and improves safety for any vehicle, whether two-, three-, or four-wheeled.

Automotive red Atala panels on display featured custom OLEDWorks animation software. They demonstrated the functionality of individually addressable, high-contrast segments, including hidden symbols that are only visible when desired by the designer. One of the demonstrators with these hidden symbols was a retrofitted taillight demonstrator with 40-micron gaps between segments, almost imperceptible at regular viewing distances.

Cutting-edge Atala demonstrators at DVN Tokyo expressed form, function, and safety in an elegant package. They are the thinnest, brightest, and longest-lifetime OLED lights on the road—customizable for the segmentation and luminance that each location and function of the vehicle requires.

Sumitomo Chemical

Sumitomo Chemical proposed a concept for sustainable lighting using newly developed PMMA materials. The lamp cover material, SUMIPEX MH022, offers excellent anti-scratch resistance, eliminating the need for a hard coating process. Meanwhile, SUMIPEX K2405, for lamp housings, provides outstanding toughness and mechanical recyclability. By combining MH022 and K2405, the mono-materialized lamp enables a reduction in CO2 emissions and promotes resource circulation by chemically & mechanically recycling. This innovative approach demonstrates Sumitomo Chemical's commitment to sustainability and cutting-edge material solutions.

TactoTek

At the DVN Tokyo Workshop 2025 presentation and booth, TactoTek showcased the advantages of IMSE® (In-Mold Structural Electronics) for functional, illuminated surface designs. Presented by Mika Mäkinen, we emphasized that TactoTek is a technology innovator and licensor—not a manufacturer—with over 300 patents, one million FTE hours invested, and more than 200,000 hours of validation and OEM testing.

We highlighted both exterior applications, like dynamic 3D light lines, illuminated emblems, and grille lighting, and interior uses such as center consoles, decorative functional surfaces, and steering wheels. Demonstrated IMSE platforms included 2F-PC, LightChannels, and SurfaceLight.

Our booth featured live IMSE demos: illuminated emblems on the 2F-PC platform, high luminance and uniformity symbols, and light lines with the LightChannels platform, CES2025 award-winning door trim on the SurfaceLight platform, as well as Kyocera's "HAPTIVITY® i" IMSE demo unit with integrated touch, force sensing, haptics, and illumination.

We also introduced the TactoTek Online portal for sharing IMSE knowledge and illustrated how our ecosystem and licensee model enable scalable, high-performance electronics integration - achieving drastic reductions in part count, PCBA size, assembly steps, and component weight.

Toshiba Corporation

Toshiba Lighting & Technology Corporation proposes socket-type LED light sources that retain the convenience of traditional incandescent bulbs while supporting a wide range of design applications. These products simplify lamp design and enable a significant reduction in the time required for evaluation and mass production. Installation is as straightforward as with incandescent bulbs, and in the event of a failure, only the light source component needs to be replaced.

The product lineup includes models compliant with UNECE regulations.
The high-output Series 6 is suitable for elongated lamps and wide-area lighting fixtures.
Customized solutions tailored to individual customer needs are also available.

Recently, the company proposed a new concept for an environmentally conscious light source module based on the socket-type LED design. By using recycled resin for the housing, resource efficiency is improved, and the structure allows for easy disassembly of metal and resin components, enabling the reuse of individual parts. Through initiatives such as product recovery and the development of collection systems, the company aims to promote waste reduction.