Tue, 7 January 2025
Weekly Newsletter

DVN Lighting

NEWSLETTER #886

Editorial

DVN Wishes You A Very Happy New Year 2025!

I and the whole of the DVN team wish you a happy new year's celebration into 2025 and a lot of good things for you, your company, lighting, and automotive market.

DVN has just closed 2024 in China with our Shanghai event. Detailed report can be found **here**.

Just after this event, I took time to visit Hasco Vision and their Vice General Manager, Mr Ao, to talk about automotive market in China and automotive lighting challenges and trends. I hope you will enjoy this very interesting discussion including some ideas like standardization and how it may reduce drastically cost and increase development speed. I also spent time to visit a lot of automotive dealers in a shopping mall in Pudong. When you are a car addict like me, you really enjoy, trust me !

Now we are in 2025, CES 2025 is starting today. I collected my bucket list in this newsletter for people who have the chance to be there, but much more to see for sure. Feel free to meet Wolfgang Huhn, who will be there.

Paul-Henri Matha
DVN Chief Executive Officer and Lighting General Editor

In Depth Lighting Technology

DVN Interview: Hasco Vision Vice General Manager

By Paul-Henri Matha

Just after our DVN Shanghai event first week of December 2024, I took time to visit Hasco Vision HQ and main R&D center, just 2km away from our event, to meet Mr. Ao, Vice General Manager of Hasco Vision.

Hasco Vision was renamed in 2018 after the Hasco wholly owned acquisition of Japan's Koito and Toyota Tsusho. Hasco Vision key figures in 2023 are a global revenue of C¥ 15.3bn, with 6,855 people and more than 500 in R&D team, which represent a 22 per cent market share in China

Main customer is SAIC (mother company) with their different brands IMM, Roewe, MG, SAIC VV (VW, Audi and GM) but also Toyota, Lynk & co (08, 01, 09), Ford, Gac,Chery, Changan, Xpeng, Xiaomi (SU7) etc... Hasco is the main Chinese lamp maker, just followed by Xingyu and BYD Fudi.

DVN: Mr Ao, you launched the first DLP in 2021 on Hiphi X and IM L7. DLP is more and more used in China with new application (Aito M9, Deepal S05). We have seen a very interesting presentation from BYD about ADB technology including DLP on Denza N9 and BYD Yangwang U7. What do you think about DLP versus microLED technology in China?

Mr Ao: HD technology is increasing very fast in China. We have projects in development with SOP in the next few years. We see a strong interest in China for road projection. As you know, they were integrated in new GB last month and OEM will be able to certify lamps including projection from July 1st.

MicroLED technology for ADB and projection will also be launched in 2025. However, resolution is not enough today for nice projection, that is why DLP technology is still preferred. MicroLED should be better, but for the moment, there is no clear advantage of microLED compared to DLP.

For customers, resolution is the key point. We are developing also some improvements with autofocus to be able to adjust the projection and video according to the distance. This interest was clearly demonstrated by S&P Global during the event with an important estimated growth and a focus on projection

DVN: Do you see other applications for DLP? I know that Smart #5 has a RGB DLP projection system in front bumper for example

Mr Ao: DLP is also used for signaling projection for projection. Hasco applies small DLP projection technology, integrated into the rearview mirror or chassis, to achieve the projection function of signal lights on the side or around the vehicle. And it has been mass-produced on the Zeekr X, providing functions such as steering prompt, welcome, door opening prompt, etc.

Paul-Henri Matha: about microLED application, do you work with local Chinese manufacturer?

Mr Ao: We are working with ams Osram and Nichia. We have close contact with a local LED supplier, but not yet in project. We need more time.

Paul-Henri Matha: what about ISD? you were one of the first lamp maker to deliver such lamp in China. What is your latest product release?

Mr Ao: We are producing the lamp behind the bumper of GAC. This is the first time an ISD is incorporated directly in the front bumper.

DVN: What do you think about miniLED technology for ISD? we have just seen 2 cars in China with this technology for the moment (Great Wall SAR and Changan CD701)

Mr Ao: This is a new technology with high potential. However, the technology will come into the market only with high-cost reduction. Current ISD with led technology are already expensive

For a 10 × 10 cm display, the price is currently C¥ 1,000. 3 years ago, it was around C¥ 3,000. If volumes are there, then the price will go done for sure. For that, we should perhaps think about a standard between OEMs. Which size, which resolution, which luminance? If each OEM has different specification, you will never go to a standard. If everybody comes with a common specification, then you can meet LED manufacturer with a very strong pressure to compete with consumer market (TV especially).

DVN: What do you think about SRP (Signaling Road projection)? I have seen some examples in China in parking conditions (that is already legal)

Mr Ao: Like Driver assistance Projection (DAP), it will become legal from July 1st in driving conditions. This technology has a big future because it is a really competitive solution and bring value to the final customer. Developments are ongoing for Chinese OEM, and Hasco Vision is ready for the market

DVN: I would like to know more how you have been able to reduce drastically the development time with your Chinese OEM customers. In Europe, everybody is looking at you nowadays.

Mr Ao: I would say first "Hard Work". We are integrating more and more automatic design routine for CAD and optical simulation, and we are working on AI integration in CAD design. Researches are ongoing with a great potential. During DVN design round table, IM Motors (part of SAIC Group) exterior designer (Sharon Li) mentioned the close relationship between OEM designer and lamp maker during all the project phase (from advanced sketches to tool go). This is the unique way to save time. More direct contact, less intermediate people, this is part of the secret story.

The Styling decision mechanism is also something very important. In new EV start up like IM Motors, it can go very fast. Not the case with legacy OEMs.

We can also save time if we use more platform part (module). A common specification for all OEM could also help a lot to reduce diversity (same performance and same size).

DVN: Sustainability is an important topic in Europe. Is it also the same in China?

Mr Ao: There are less constraints in China for power consumption. Less compared to Europe, but still important. I would say it is more balanced. It is not a dogmatic topic.

Recycled material usage is pushed by European OEM in China. But Chinese Government emphasizes the sustainable policy, so it will come. And when it will come, it will come very fast, as usual in China

DVN: A last question. What about competition in China. There are now a lot of competitors. If I just mention Chinese players (without any JV with European suppliers), I see more than 10 players: Hasco, Fudi BYD, Xingyu, Liaowang, Anrui, Jiali, TYC, Depo, Mind etc ... What do you think about this competition?

Mr Ao: There are too many lamp makers, too much competition. It is similar with OEMs, too many OEMs. In Europe and America, usually there are mergers between companies. In China this rarely happen. You grow or you die.

Lighting News

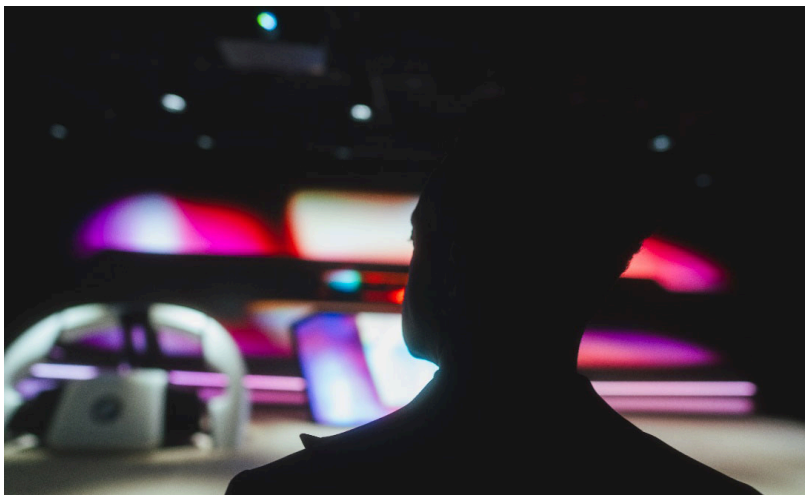
CES 2025 is On!

LIGHTING NEWS

CES 2025 is opening today for 4 days. See below what my list of visits would be if I were there. Wolfgang will publish next week his main takeaways from the event.

Some major players like Magna, ZF, LG ZKW or Marelli will not be part of CES this year. Many OEMs too.

BMW



At the BMW Pavillon in the Silver lot, you will be able to experience the first-ever BMW Panoramic iDrive display- and operating-concept of the Neue Klasse in a “magical” way. With this presentation, BMW is not only showcasing technology that will be featured in the series production Neue Klasse vehicles for the first time, but also once again setting standards for in-vehicle experience with a clear focus on driver orientation, safety, and personalization.

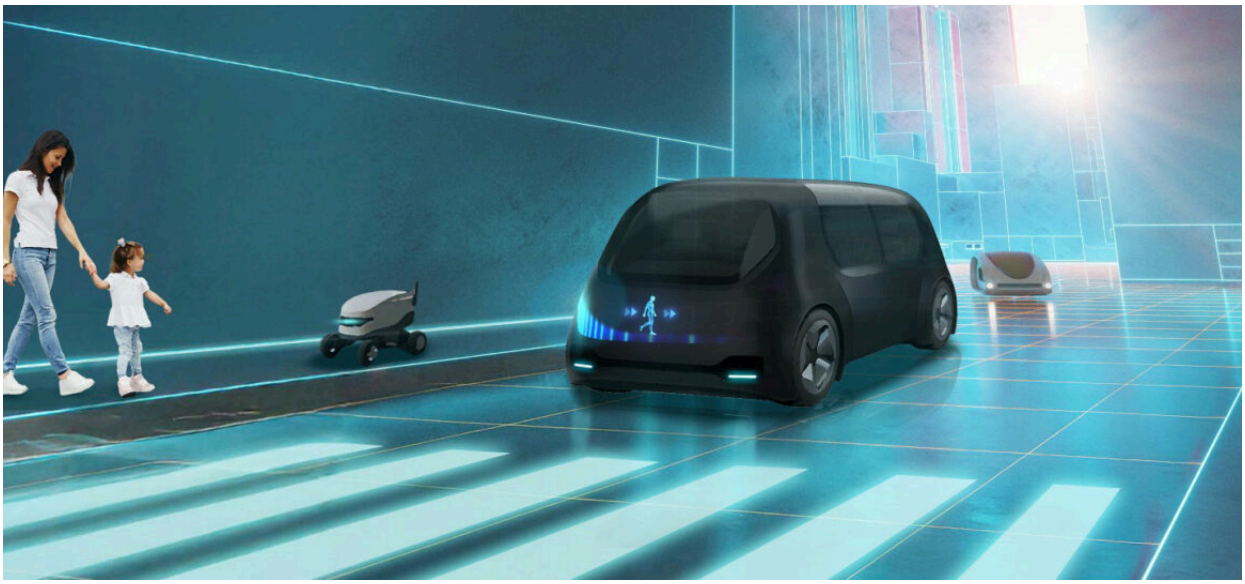
Koito (West Hall)

Koito will present their ADB development that meets U.S. regulations, as they plan to launch it in the market in 2025. As the next-generation ADB, they will demonstrate a "High-Definition ADB" with 16,000 segments including road projection function that visually conveys the state and intentions (messages) of the vehicle to other participants in the traffic.

	Nova	Vista®-X90	Ultra
Appearance			
Usage	Surrounding monitoring (short-range)	Forward monitoring (medium-range)	Forward monitoring (long-range)
Features	Super wide-angle up, down, left and right	Used for purposes other than in-vehicle	Thin / high resolution
Detection distance	0.1m ～ 40m	2m ～ 175m	1m ～ 300m
Detection range	120° H x 90° V	90° H x 25° V	120° H x 25° V

Koito will also present their lidar lineup of Nova (short-range), Vista-X90 (medium-range), and Ultra (long-range), which combine optical and automotive technologies developed in lighting with Cepton's advanced sensing technologies.

Stanley (West Hall)



Under the theme of "Realizing Mutual Understanding between People and Vehicles through the Power of Light" in the mobility field, Stanley Electric will introduce its proposals for a society in which self-driving cars and people coexist in order to realize comfort and enjoyment of mobility in addition to safety and security.

Valeo (Central Plaza)

At booth CP709 on Central Plaza, Valeo will be presenting its latest technologies for Circular economy, electrification, ADAS and lighting. About Lighting, they will present:

- The front end of the Lynk & Co Z10 equipped with 224 RGB LEDs. The 256 lighting colours available respond to a strong market trend for more design identity and information on the front fascia. Its horizontal design incorporates vertical light guides on either side of the hood to create a link with the A-pillars. The lighting function is provided by Valeo ThinBilite ultra-thin headlamps just 15 mm high.
- The front fascia of the Zeekr 7X features more than 1,700 LEDs, enabling users to personalise their vehicle, particularly during welcoming scenarios. The front also features an illuminated logo, as well as a horizontal line of light linking the 2 ultra-thin (15mm x 200), dual-function, adaptive headlamps (ADB) from the Valeo Thinbilite range
- The rear lights of the Audi A6 e-tron feature 10 OLED 2.0 digital panels, each with 45 individually controllable segments. OLED 2.0 technology ensures a very high level of light homogeneity for the benefit of perceived quality. 8 light signatures are available so that the driver can personalise the style to his or her liking. The precision of the lighting segments made possible by the latest generation of OLEDs makes it possible to communicate and alert other road users by displaying specific symbols, when coupled with a detection system. The solution offers enhanced signage for greater road safety.
- On the Audi Q5, Valeo is presenting a 3rd brake light solution combining 2 light systems. In addition to the standard stop function, the solution is enhanced by a projection on the rear window. This projection enhances the braking signal, enhancing the safety of other road users and giving the vehicle a brand signature. The projection on the rear window is transparent for the driver's rear view

Mobis (West Hall)

Mobis will unveil their Holographic Windshield Display, a groundbreaking innovation that enhances driving visibility through augmented reality. Co-developed with German optics company Zeiss, the display will be featured in Kia’s electric vehicle, the EV9, exclusively for its unveiling at CES. By integrating specialized optical film, the system provides easy access to key information while maintaining an open, spacious feel and improving overall driving safety. Hyundai Mobis plans to begin mass production of this advanced technology as early as 2027.

Under the theme “Beyond and More,” Hyundai Mobis will showcase a unique user experience at CES through its “Human Tech” initiative—a suite of technologies designed to bridge the gap between people and technology while enhancing safety and convenience with seamless, adaptive connections. Alongside the holographic windshield display, the company will unveil a human-centric interior lighting system that intelligently adapts to user needs and M.Brain, an advanced brainwave-based system that monitors and addresses driver distractions.

Hyundai Mobis will unveil its Human-Centric Interior Lighting technology, an adaptive lighting solution designed to adjust to the user’s mood and environment. This innovative system offers 32 situational modes, including features to reduce driver stress, alleviate motion sickness, prevent dismounting hazards, and even provide UV-C sterilization. Visitors to the Hyundai Mobis booth can experience firsthand how this advanced lighting technology dynamically responds to biological rhythms, health conditions, and the vehicle’s surroundings.

Another standout innovation is so M.Brain, Hyundai Mobis’ flagship brainwave-based technology. This advanced system monitors driver focus in real-time by analysing brainwave data, providing alerts during states of drowsiness or inattention. Live demonstrations at CES will give visitors the opportunity to see M.Brain in action and explore its potential to enhance driver safety.

CES 2025 will mark Hyundai Mobis’ tenth consecutive appearance at the world’s largest tech show. Over the years, the company has consistently highlighted groundbreaking mobility innovations and production-ready technologies.

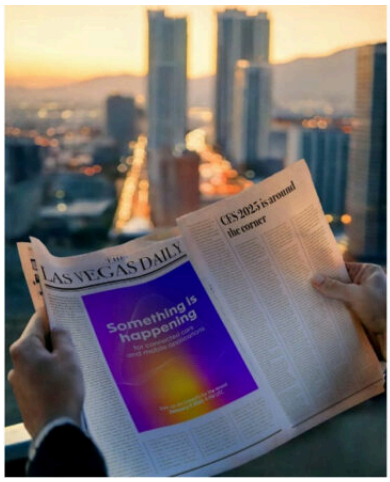
OPMobility (West hall)

OPM will present their latest comprehensive range of modular exterior and advanced lighting solutions, designed to address the diverse needs of automakers worldwide. Lighting will focus on 4 innovations:

- Digital front and rear system: Large, customizable optical panel to highlight a brand's signature
- NHTSA-Compliant ADB, with a compact and scalable design to maximize uptake among manufacturers.
- Eco-Light technology: High-efficiency headlights that reduce power consumption by up to 60 per cent on low beam and over 70 per cent on high beam.

- Surface LED rear lamp: Ultra-customizable alternative to OLED lamps (colours, animations).

Forvia



Forvia will participate at CES 2025 to showcase the latest advancements in their scalable, white-label and growing Apps Market & ecosystem. CES will also be an opportunity to unveil the new name of its Apps Market and to share the company's ambitions.

“We are very thrilled to participate once again at this global event in Las Vegas and this time with a new ambition, so many surprises, news, product updates and introduction of new revenue models for Software as a Service (SaaS) in automotive. 2024 has been a tremendous year for our growth and strategic partnerships. Meet us at CES to learn about all the positive momentum and market evangelism we have been working on.” Said Mona Levacher, Software as a Service Director at Forvia

***DVN comment**: No lighting presentation from Forvia, parent company of Hella, this year at CES!*

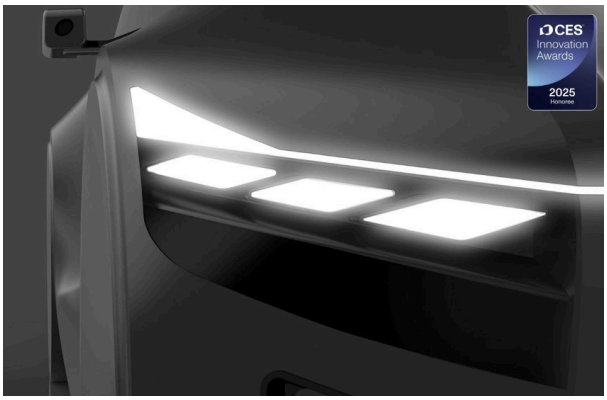
Zeiss (North Hall)


Zeiss will showcase groundbreaking applications of their Multifunctional Smart Glass technology, which have the potential to redefine everyday life in mobility, consumer electronics, and smart home sectors:

- Transparent Displays for windshields and side windows: windshield display technology takes driving safety and the driving experience to a new level. The holographic solution projects vital information directly into the driver's field of view, minimizing distractions and enhancing the safety of passengers. The windshield becomes a transparent display, seamlessly integrating ultra-precise optics through holographic processes.

- Communication with light & customized lighting solutions: With holographic solutions, custom light signatures for front, rear, and brake lights can be precisely tailored to the designers' vision, all while saving installation space and creating an impressive depth effect.

LG Innotek (West hall)



LG Innotek will exhibit 41 future automotive components featuring their sensing, communication, lighting, and control technologies. A highlight of the booth will be the Future Vehicle Mock-up, featuring 15 flagship products. The booth will feature a separate Nexlide Zone to display actual modules and exploded views of two of LG Innotek's latest Nexlide products equipped with the company's unique vehicle lighting technology, including the Nexlide A+, a vehicle lighting module that won a CES 2025 Innovation Award.

Taktotek (The Venetian Resort)

TactoTek was named a CES Innovation Award Honoree in the VehicleTech and Advanced Mobility category with two products:

- IMSE Technology Platform – a revolutionary approach to designing and manufacturing electronics
- IMSE Intelligent Illuminated Door Panel – an innovative application of IMSE that redefines lighting and functionality in vehicle interiors

Covestro (North Hall)

Covestro will present their partnership with Cetes to advance holographic transparent displays.

Covestro, US specialty materials company Eastman, and Scottish Ceres Holographics, a provider of holographic optical elements for displays, join forces to redefine HUDs. The partners signed a Memorandum of Understanding (MOU) to explore the commercial production of the Holographic In-Plan Transparent Display (HIPTD). That is a laminated hologram solution that allows multiple head-up displays in a single windshield.

The MOU builds on years of collaboration, leveraging each company's technologies to manufacture holographic-enabled transparent HUDs for the automotive market. It enables to look into the steps needed to setup and establish the required facilities and manufacturing capacity, ensuring an efficient, market-ready supply chain to meet the planned production timelines of OEMs wishing to adopt the technology for new driver and passenger experiences. The partnership aims to accelerate the commercialization of the HUD solution, with Eastman leveraging its relationships with automotive OEMs and tier-1 suppliers.

In 2024, Ceres and Eastman demonstrated the latest holographic transparent display HUDs to OEMs in Europe, the USA, and China. These HUDs featured multiple transparent displays within a single, fully laminated windshield, each measuring up to 400mm by 300mm. Custom-designed holographic optical elements (HOEs) were incorporated into a single sheet of Bayfol HX film, laminated with Eastman's new developed interlayer stack, achieving the industry's largest field of view.

This achievement was enabled by combining Covestro's expertise in photopolymer films, Ceres' digital mastering and HoloFlekt roll-to-roll replication system, which produces finished films up to 1400mm wide, and Eastman's solutions to encapsulate functional films into automotive approved laminates.

"This agreement solidifies our collaboration and moves us closer to delivering a full-stack solution for innovative display implementations," said Hemant Dandekar, Eastman's global commercial director of automotive for advanced materials,

interlayers. “With the building blocks and relationships in place, we’re excited to define a path to viable holographic transparent displays globally.”

“Our Bayfol HX enables next-generation truly transparent projection displays for windshields while meeting the high automotive safety requirements.” said Günther Walze, Head of Holographic Lightguiding at Covestro. “With the necessary establishment of hologram mastering and scalable mass-production replication equipment by Ceres, combined with Eastman’s windshield lamination technology, this innovation is ready for deployment to end customers.”

“We have been working closely with global OEMs for years and are now at a tipping point for adoption and scaling of this display technology,” said Andy Travers, CEO of Ceres Holographics. “This is being driven by a combination of a desire for more safety-oriented and intuitive information display features, pressure from safety regulators to reduce driver distractions, and the accelerated pace of innovation and associated need for differentiation among a new generation of car makers.”

This agreement joins the material expertise of Covestro, Eastman’s interlayer solutions and encapsulation know-how, as well as Ceres capabilities in mastering and high-volume manufacturing technology for the successful commercialization and industrialization of holography in transparent displays for windshields.

Elmos (Renaissance)

The focus will be on efficient and intelligent solutions for e-mobility, driver assistance systems, lighting control and cyber security.

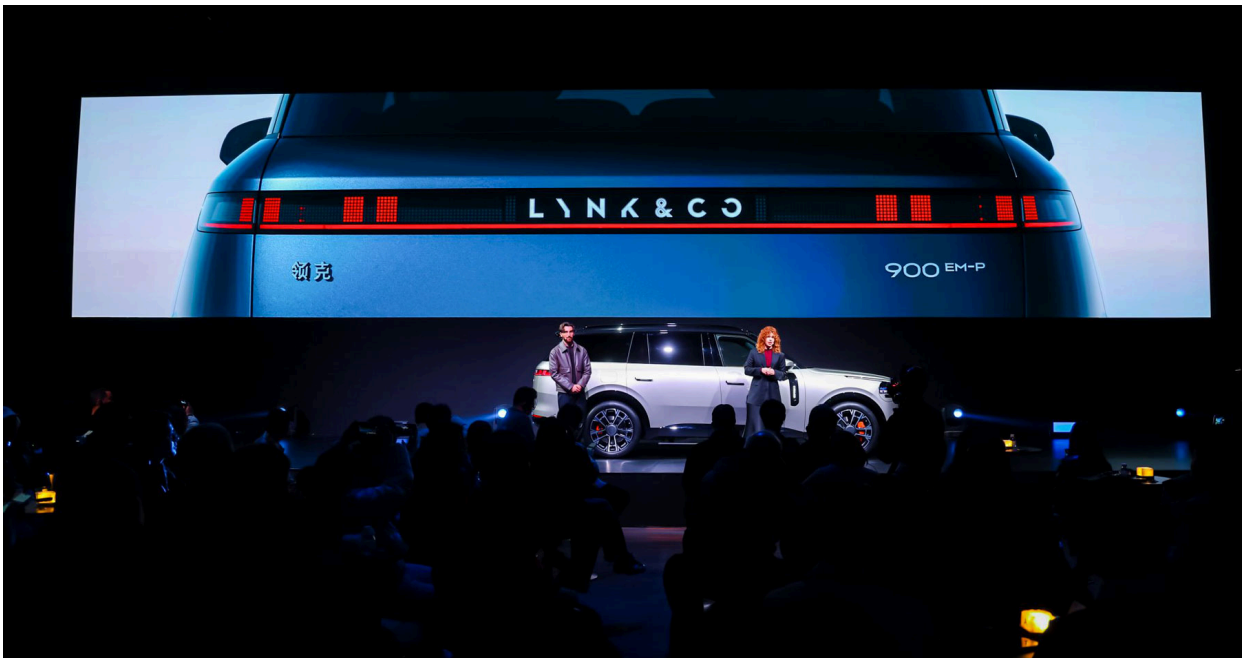
About lighting, they will demonstrate the E522.96 high-side OLED driver underlines the expertise of Elmos in the field of vehicle lighting. It controls up to 48 OLED segments or LEDs simultaneously and can be cascaded to enable complex lighting designs and animations. The integrated CAN-FD interface ensures fast control and opens up new possibilities for dynamic vehicle lighting.

Appotronics (Renaissance)

They will showcase their latest innovations in automotive interior and exterior display: World 1st automotive grade exterior laser projector, 1st All-in-one laser smart headlight, Distributed illumination and display system with fibre coupled light source, High performance laser beam scanning (LBS) display, Transparent surface display and PHUD and Finger size ultra-compact DLP projector

Lynk&Co 900

LIGHTING NEWS

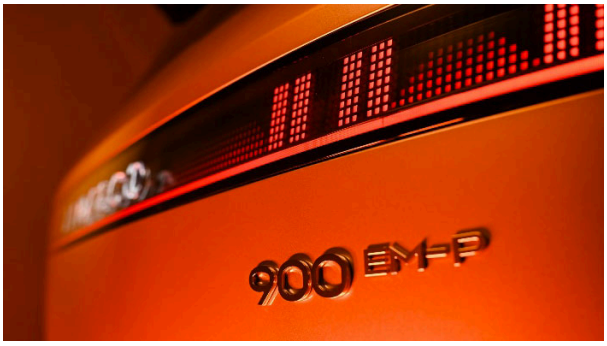


The Lynk & Co 900 has just been revealed in Shanghai last week. The car is positioned as the flagship six-seater SUV of Smart City Travel, which is based on the SPA Evo architecture. In terms of exterior design, the new car has been upgraded on the basis of the original family design language (Lynk&Co 02 and Z10), and many new elements have been added to the details.

Front signalling signatures is similar to Lynk&Co Z10 and 02, with an additional front ISD (Interactive Signalling Display) that is replacing the front grill. This display contains 10,192 pixels (RGB LEDs), and can address a variety of set patterns that can also be customized.

Low beam and high bean have been produced by 2-rows thin modules.

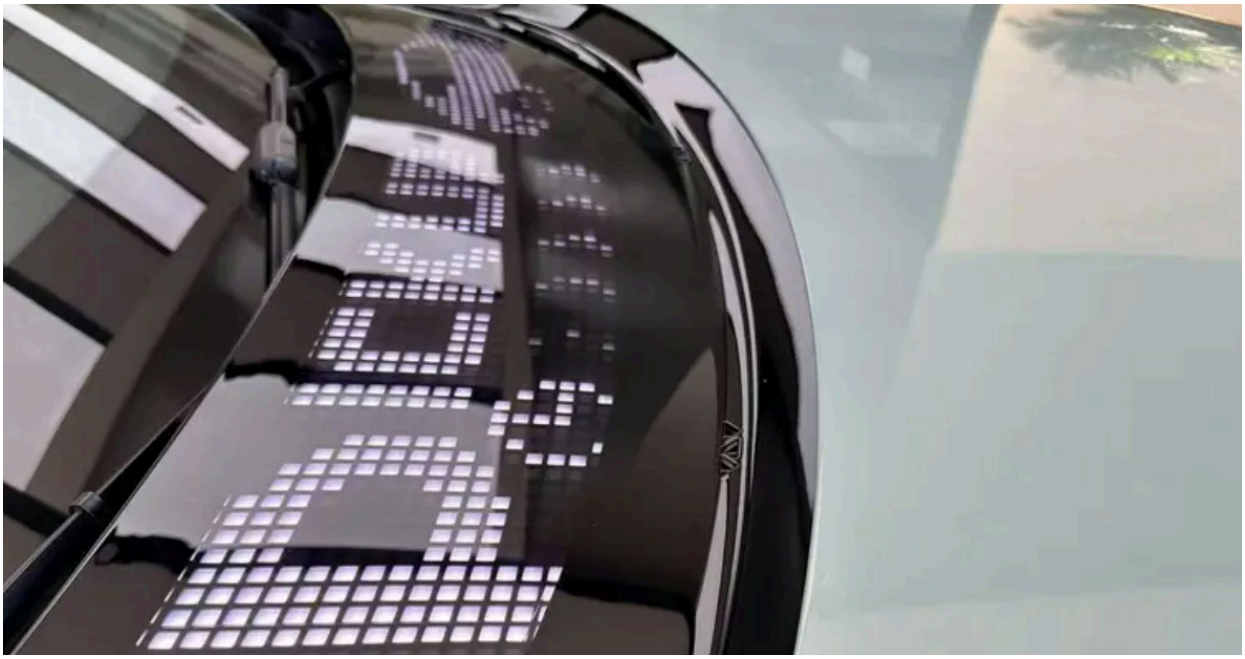
At the rear, there are continuous taillights. Like the front face, the taillights are also a customizable interactive screen, with 2,400 LED lamp beads inside, which will be displayed in the traditional Lynk & Co energy block style under normal conditions, and the illuminated Lynk & Co logo in the middle.



Last but not least, the instrument panel is embedded with a 256-color ambient light strip, and the upper HUD can also share part of the driving information display function.

Chipone's MiniLED Driver on Avatr 07 Interactive Screen

LIGHTING NEWS



The Avatr 07 is equipped with the "Interactive Outdoor Quarter Moon HALO Interactive Screen", in the middle of the front hood and windshield of the vehicle, which is an innovative application of miniLED technology in the on-board display. Set maker is Anrui Wipac; for the Avatr 11 & 12 the set maker was Liaowang.

Behind such a smart interactive screen, the miniLED display driver comes from Chipone (ICND7001 and ICND7201). These are the first set of mass-produced automotive chips of Chipone's automotive business unit.The two chips are independently designed by Chipone and packaged and mass-produced by the domestic supply chain to produce domestically produced automotive mini LED display driver chips.

The two chips have undergone nearly 30 rigorous tests and verifications, such as high-acceleration stress tests and wide temperature range operations and have officially passed the AEC-Q100 authoritative certification in the field of automotive electronics in 2023, perfectly adapting to the high-performance requirements of existing automotive application components such as intelligent cockpits and intelligent interactions.

Among them, ICND7001 adopts QFN56 package, supports 48-channel output, 16-bit dimming, 7680hz high refresh, and built-in GCLK to effectively reduce electromagnetic interference. The ICND7201 is available in a QFN16 package, integrating 8 power PMOS outputs, with a maximum continuous current of 2.5A and 8 levels of anti-contrast potential, which can effectively remove ghosting on LEDs.

OEM Lit Logo in Concept Store

LIGHTING NEWS

By Paul-Henri Matha

Renault has just opened a new store concept in Paris, **#rnlt** in December. In their new strategy, they are entering (again) in inner city, with similar strategy in different cities like Paris, Berlin, Madrid, Milan, Rotterdam, Bruxelles, Seongsu, Daegu or Yuseong.

Indeed, they just copy what is done by Tesla (with success for ten years now). And what is done by all Chinese OEMs in China. Even VW and BMW are doing similar strategy in China, Polestar, Nio and Lynk & Co in Europe. Will it become the new standard?

Anyhow, why do I talk about this topic in a DVN lighting newsletter? Indeed, I want to talk about light signature and especially lit logos. Renault is using for marketing purpose the Renault lit logo they have now on some of their new R4 and Estafette vehicles.

And Renault is not the only one with this strategy. Most automakers have similar strategy in China to promote their inner-city shops. That is why we see more and more lit logos on cars. That is why we see more and more coast-to-coast lamp (due to 75mm rule in Europe and China)

See some examples below.

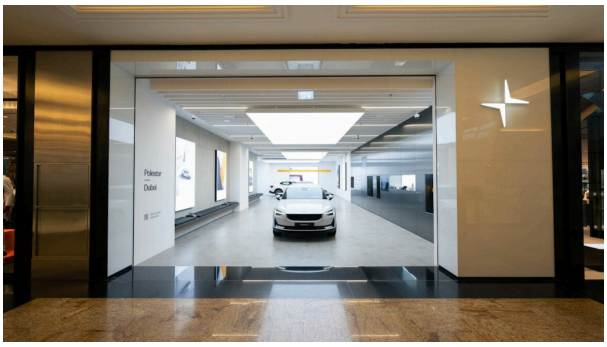
Avatr

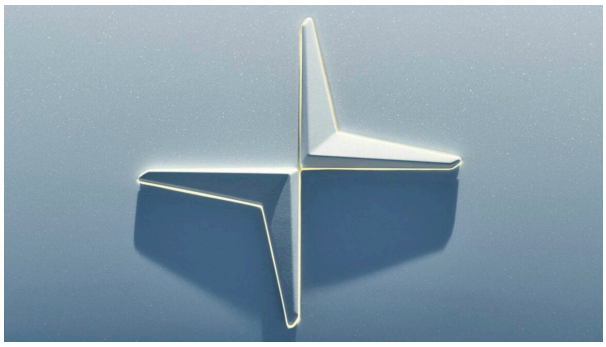
Denza (BYD)

Voyah

Zeekr

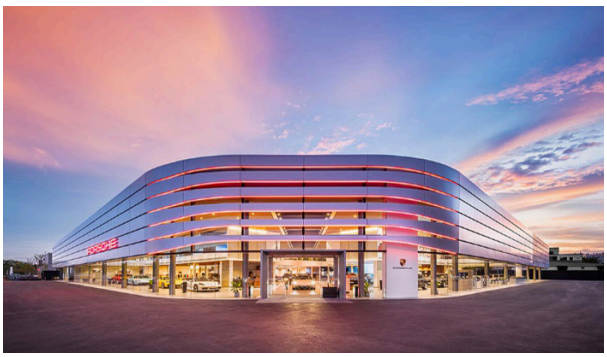
Polestar



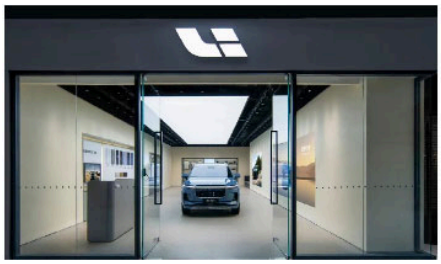


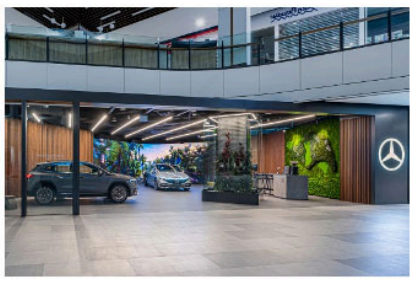
VW

Porsche



Some other brands are using the lit logo only for their concept stores, and not on their car. Will it change soon?





Smart #5 Has Appotronics Laser Projection Components

LIGHTING NEWS

At the launch event in Australia on August 28th, the built-in automotive-grade laser projection light of the new Smart #5 was specifically mentioned: "What is the real camping experience about this? I would like to take your attention on the built-in projector that is coming this vehicle, giving you the opportunity on a maximum size of 233 inches of projecting your own content, somewhere between 2 to 7 meters away from the vehicle." The core components of this automotive-grade laser projection light are provided by Appotronics

This is the first application of automotive-grade laser projection light worldwide. It is reported that the new Smart #5 is committed to creating the next generation of immersive intelligent cockpit experience, making every human-vehicle interaction a real luxury enjoyment. The industry's first automotive-grade full-colour laser projection light is equipped with ALPD semiconductor laser light source technology, with a brightness of up to 2,000 lumens (nearly 1,000 lumens of light output), which can project a super-clear picture of up to 233 inches, reaching a 1080P display effect, making every frame vivid, allowing users to feel the immersive outdoor cinema. At the same time, it supports 10 adjustable brightness levels, automatic focusing, trapezoidal correction, and screen scaling, ensuring the best viewing experience even in complex projection environments. The design of IP67 dust and water resistance and electric lens protective cover greatly extends the service life of the projection light.

General News

Valeo, Amazon partner to accelerate SDV

GENERAL NEWS

Valeo and Amazon Web Services (AWS) have collaborated to help revolutionize the era of Software-Defined Vehicles (SDV) within the automotive industry. The collaboration between Valeo and AWS helps enable faster and more efficient development, testing, and validation of distributed vehicle software stacks across vehicle domains like ADAS, infotainment systems, and Autonomous Mobility (AM). It also helps drive the development of new end user functionalities that improve the driving experience. The first three solutions that Valeo will announce during CES 2025 as part of this collaboration are Valeo Virtualized Hardware Lab, Valeo Cloud Hardware Lab, and the assistance system Assist XR.

Valeo will bring its extensive expertise in automotive software development, middleware, software-oriented architecture, and high-performance computing (HPC) for centralized computing architectures. AWS will offer support through cloud services for AI, compute, data management, analytics, innovation mechanisms like “working backwards,” as well as reference architectures and solutions for virtual engineering, ADAS, and SDV.

The new solutions offered by Valeo and powered by AWS will support all steps of the SDV transformation along the automotive development chain.

To further strengthen the collaboration between both companies Valeo announced today that they have joined the AWS Partner Network (APN). The APN is a global community of AWS Partners that leverages AWS technologies, programs, expertise, and tools to build solutions and services for customers.

“Valeo is focused on empowering its customers as they navigate the industry’s transformation toward software-driven mobility,” said Marc Vrecko, CEO of Valeo Brain division. “By working with AWS, we are creating new services that will dramatically improve efficiency and reduce the cost of software development cycles for our customers, making it easier for them to lead in this area and set new standards for automotive innovation.”

Mass MicroLED Display Production Starts Next year: Foxconn

GENERAL NEWS

Apple's key supplier Foxconn says they expect to begin mass production of advanced microLED displays late next year.

Apple is already looking ahead to an even more advanced display tech, however, known as micro-LED. This offers even brighter displays with greater colour accuracy, longevity, and power efficiency, and without the burn-in weakness of OLED.

The company was expected to begin this move with a microLED Apple Watch, but later cancelled (or, likely, postponed) this plan as the tech wasn’t sufficiently advanced.

Foxconn has announced that it expects to begin mass production of its first microLED screens late next year. These are tiny displays destined for a future AR headset. That would likely indicate the first products incorporating the tech launching in Q1 2026.

Foxconn says that the tech would meet the needs of “future mainstream global clients,” but doesn’t get any more specific than this.

To go further ...

Tesla Light show 2024

To go further ...

900 Tesla vehicles in Finland created a synchronized light show, showcasing innovation and creativity. How do you see such artistic uses of technology impacting brand engagement. See online video.