

## Editorial

### DVN US AEB Discussion Session: A Quick Recap



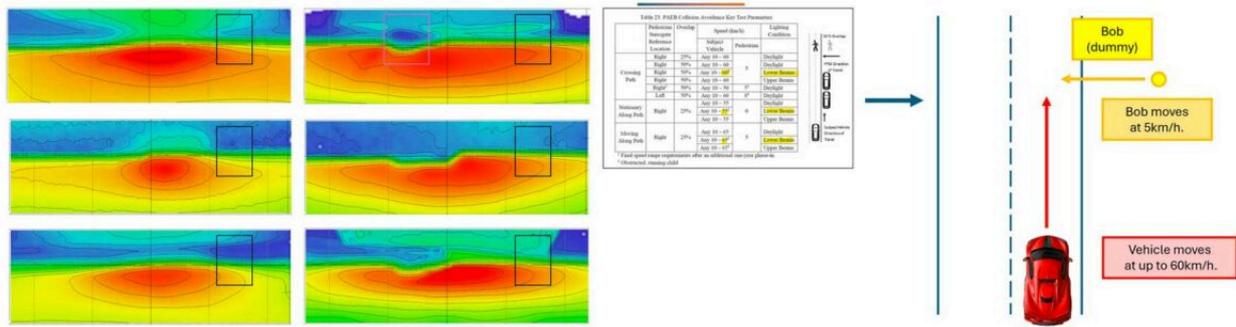
DVN's Sensing & Function business unit held an event last week focusing on US-spec AEB (automatic emergency braking) to comply with the tough, [disputed](#) new FMVSS 127. As we [described](#) this past January, a third of the test scenarios are done by night, and some of them without any streetlights and just low beam headlamps. The questions at hand: can we detect pedestrians with a simple front camera and our current low beam? Should we change the low beam to avoid extra cost for the ADAS sensor kit?

At the DVN-S&F event, for the first time the lighting and ADAS communities were at the same table to exchange ideas and explain the constraints and the needs. Jody Allen from GM explained very clearly what would need to change in the low beam to improve camera performance, and how it is quite impossible with current regulations and IIHS test protocols without increasing glare, or without the use of ADB—which is not allowed in the FMVSS 127 test protocol. Magna's Jan Erik Kallhamer explained the challenges for each sensor technology and the need for redundancy. Can we accept using only radar if the front camera cannot detect? do we need an additional sensor, like an infrared camera for safe redundancy with radar? what is the ASIL qualifications of such a function by night?

Each question seems to spawn more questions; that's the stage things are at. What is certain is that a camera will not be adequate at night by itself. Is adding radar enough, including AI to better classify objects and pedestrians? what about in adverse weather conditions? With IR cameras or lidars, you can fulfil the regulation, and you can go beyond. Higher speed, in bad weather conditions, smoke environment, etc. IR camera cost has come down a lot, with a target price of \$100 in 2029. But is the supply chain able to produce the needed quantity in only four years?

Each automaker has to answer all these questions and define their own requirements. Lighting seems not to be the solution. We'd need light where there is none today—see

six examples below of low beam patterns; the vertical-rectangular box is where light is needed for a camera to be able to detect a pedestrian coming from the right. And even if it would be the solution, over 400 lamps would need to be redesigned by 2029. Impossible!



The UNECE GRE biannual meetings are next week. So in today's in-depth article, we bring you the agenda. Central questions for DVN readership involve adoption of signaling road projections for reversing lamps and direction indicators.

Sincerely yours,

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

# In Depth Lighting Technology

## GRE 92nd Session: Agenda & Highlights



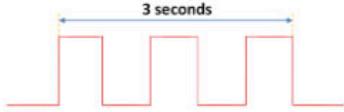
**By Eric Blusseau, DVN Regulation expert**

GRE, the Working Party on Lighting and Light-Signaling, is the subsidiary body of the World Forum for Harmonization of Vehicle Regulations (WP.29) which prepares regulatory proposals on active safety, specifically regarding vehicle lighting. The group of over 80 experts convene officially twice a year, and assigns working groups with specific problems that need to be solved urgently or that require special expertise.

The 92<sup>nd</sup> GRE session will be held at the Palais des Nations in Geneva next week, from 22 to 25 April. The provisional agenda of the session is [published](#), and the working documents and informal documents for the session are [here](#). The working group for simplification of the lighting and light-signalling regulations (IWG SLR) will present their progress report.

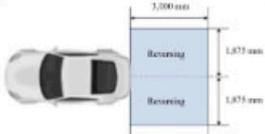
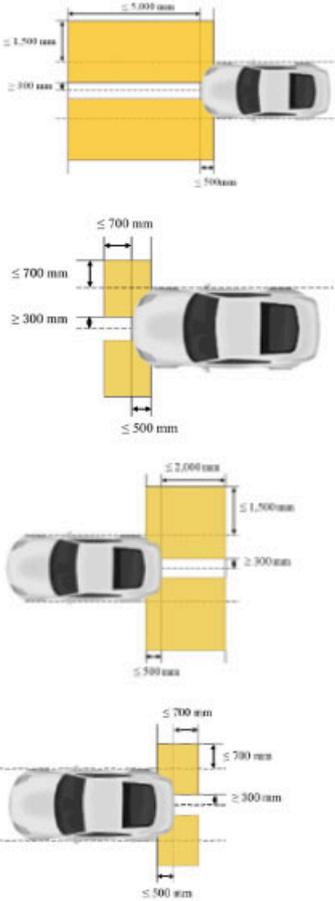
Six official proposals have been tabled to modify the lighting installation regulation (R48):

<u>Document</u>	<u>Proposed by</u>	<u>Regulation:</u>	<u>Proposal</u>	<u>Comments</u>
2025/2	Germany	R48 S8& 9	5.5.5: Only light-signalling functions may incorporate a logo  Markings required by UN Regulations, symbols and/or text that are not identifiable at a distance larger than 10 m* are not regarded as manufacturer logos.  In case of doubt, the character height shall not be more than 12 mm.	Small luminous logos, mainly inside lamps, are not considered as such; they are disregarded if they are less than 12mm high.

2024/12/ Rev.1	France	R48 S8 & 9	Introduction of 'Work Lamp' and its technical characteristics (installation rules and activation).	New lighting function in R48 §6.28.  Manually activated. Operating tell-tale mandatory.  Automatically switched off when vehicle forward speed exceeds [15] km/h.
2025/4	OICA	R48 S6, 7, 8 & 9	Parking lamp; §6.12.1: On motor vehicles not exceeding 6m in length, <del>and not exceeding 2m in width</del> : optional.	The target is to allow the installation of the parking lamps on vehicles >2m wide.
2025/5	OICA	R48 S9	6.26: Manœuvring lamp:  6.26.2. Number:  Rear mounted: One	Possibility to install manœuvring lamps on the rear of the vehicle.  
2025/6	GTB	R48 S6, 7, 8 & 9		Possibility to allow the installation of side marker lamps combined with retro-reflectors on the lateral foremost position on semi-trailers (Cat. O3 and O4)
2025/7	GTB	R48	6.27.9.4: The duration of the optical indication of the answer-back signal shall not exceed 3 seconds. This time is defined from the beginning to the end of the signal, irrespective of whether it contains flashes, variations of intensity, or variations in apparent surface.	To avoid any misinterpretation, it is necessary to clarify the duration of the optical indication of the answer-back signal.   <small>Figure 1 Duration of the answer-back signal.</small>

Three official proposals have been tabled to modify the signalling lamp regulation (R148)—with effects on the vehicle lamp installation regulation R48—for signaling road projections. GTB will propose an update of the proposal from last year, having taken account of remarks by contracting parties (countries applying the regulation), to be able to reach agreement for signaling road projections for turn indicators and reversing lamps. If text is approved, after a final approval in WP.29, this signaling projection may be legal in the many countries applying UN Regulations...just one year after Chinese regulations will allow them from July 2025.

If text is finally approved, DVN will provide a complete explanation of this new regulation including differences between China and UN Regulations.

Document:	Proposed	Regulation:	Proposal:	Comments:
GRE-89-24	France	X	X	<p>Concern expressed by France about the colour perceived by the other road users, which can be different from the measurements.</p> <p>GRE expects considerations of the GTB Group Photometry on this topic.</p> 
/2024/20/ Rev.1	GTB	R148 S01  R48 S6,7, 8 & 9.	<p>Reversing projector. Installation requirements in R48 (position of the projection on the ground, installation rules of the 'reversing projector' on the vehicle.</p> <p>In R148, technical requirements of the device.</p>	 <p>Based on the GRE feedback and especially UK, during the previous session, GTB submits an updated proposal. (Reversing projection may vary, Activation linked to the activation of the windshield wipers...)</p>
2024/21 Rev.1	GTB	R148 S01  R48 S6,7, 8 & 9.	<p>Introduction of the direction indicator projectors.</p> <p>Compared to the original GTB proposal in CE/TRANS/GRE/2024/21:</p> <ul style="list-style-type: none"> <li>Removed the possibility to have sequential activation</li> <li>Clarified that the projected pattern shall be in a straight line</li> <li>Deleted side direction indicator projections. Now maximum two per side for M and N vehicles (front and/or rear) and maximum one per side for trailers (rear only)</li> <li>Removed the possibility to activate direction indicator projections when the hazard warning signal is switched ON</li> <li>Limited the switch ON and duration of direction indicator projections up to 15 km/h</li> <li>Clarified switching conditions according to the direction of motion</li> </ul>	<p>Positions of projections on the ground (front DI projectors).</p>  <p>Basic element</p> 

One proposal has been tabled to modify the road illuminating device regulation (R149) –it is just editorial modifications. Proposals to modify R10 (EMC) and R65 (emergency vehicle special warning lights) are also on the docket, so far without any proposed text.

Also on the docket: the status of the task forces on glare (TF GP) and autonomous vehicle signaling requirements (TF AVSR). Informal documents will be presented by the task forces based on the latest status of the discussion (document AVSR-21-02\_Rev.4 and AVSR-21-03\_Rev.1).

We will share a synthesis next week, a summary of the important informal documents that will be also on the agenda.

# Lighting News

## Hyundai Nexo, Ioniq 6, Insteroid at Seoul Auto Show

### LIGHTING NEWS

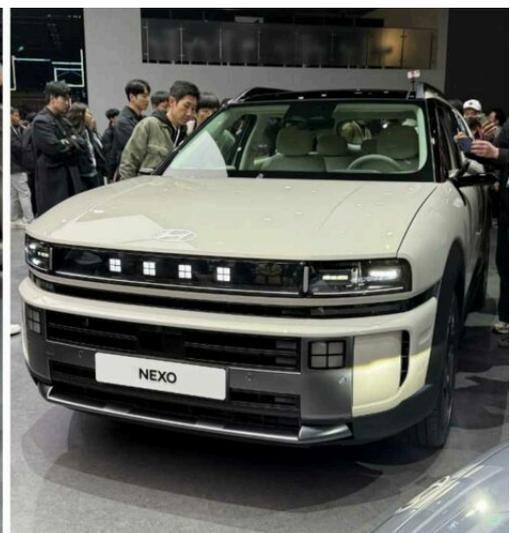


**By Paul-Henri Matha**

Hyundai have just revealed three cars at the Seoul motor show, and I have been spending time analyzing the lamp designs.

First is the second-generation Nexo. Its daytime running lights seem to be in the bumper with a 4-square arrangement, fulfilling the 25-cm<sup>2</sup> requirement.

Low beam is done by two slim projectors with height less than 25mm, with a main module outboard and a complementary module inboard—for design purpose, I suppose. We see a slim line below the module, with estimated height 2 to 5mm, which continues into the complete front fascia. In the middle of the front, the standard grille is replaced by a sort of display with four groups of four squares, lit as position lamps. This design may be compatible with V2X animation as a display usage. It seems that the complete front fascia is a single lens, like the Renault 4 presented last year in Paris.



The rear design is also interesting, with a very homogeneously-lit 4-square rear position lamp design. The high mounted stop lamp is composed of four groups of four squares, similar to the design of the front position lamp.

Inspired by the HTWO symbol, representing Hydrogen for Humanity, these signature lamps cast a futuristic glow, defining hydrogen mobility.



The second car on the spotlight is the refreshed Ioniq 6 EV with totally new front lamp design. The front lighting is split into an upper part including signaling functions and a lower part for lighting functions, done by two slim modules.



The rear lamps are also changed. with interesting small square dots set into the piano-black tailgate.

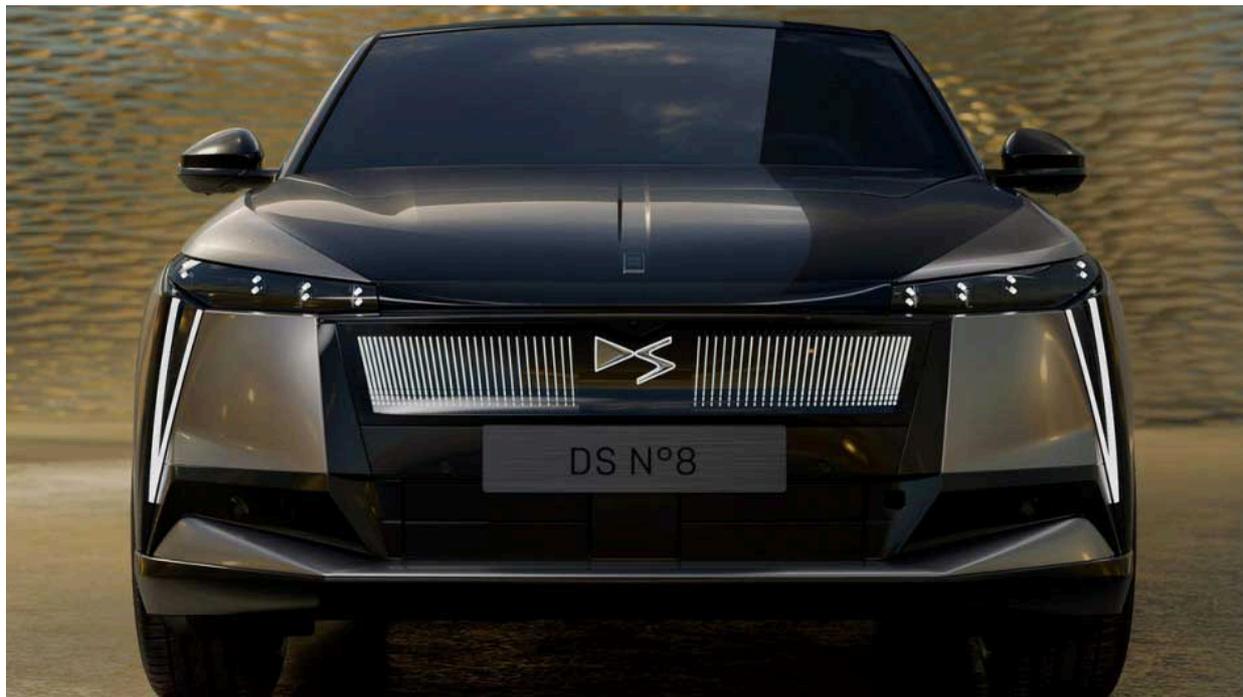


Hyundai also presented a concept called the Insteroid, with interesting round-lamp designs which appear feasible, including the white light rings shown here, looking a bit like jet afterburners, as possible reversing lamps.



# DS N° 8 Front Lamp Details

LIGHTING NEWS



After we published our [DS Studio article](#) this past February, we received more information about the N° 8's front lighting systems.

The headlamps, developed by Mind, comprise three modules with narrow configuration including AFS modes: bending light, digital left/right-hand traffic configuration, low beam booster, ADB, and high beam booster. All of them are outlined by eight diamonds in a Clous-de-Paris pattern, for a stylish, low-profile headlamp.

The DS Lightblade, also developed by Mind, integrates the signaling functions. The V-shaped layout, which first appeared on the DS E-Tense Performance, emphasizes a prominent appearance of the car. Slim and elongated, the DS Lightblade contributes to the car's aerodynamic efficiency.

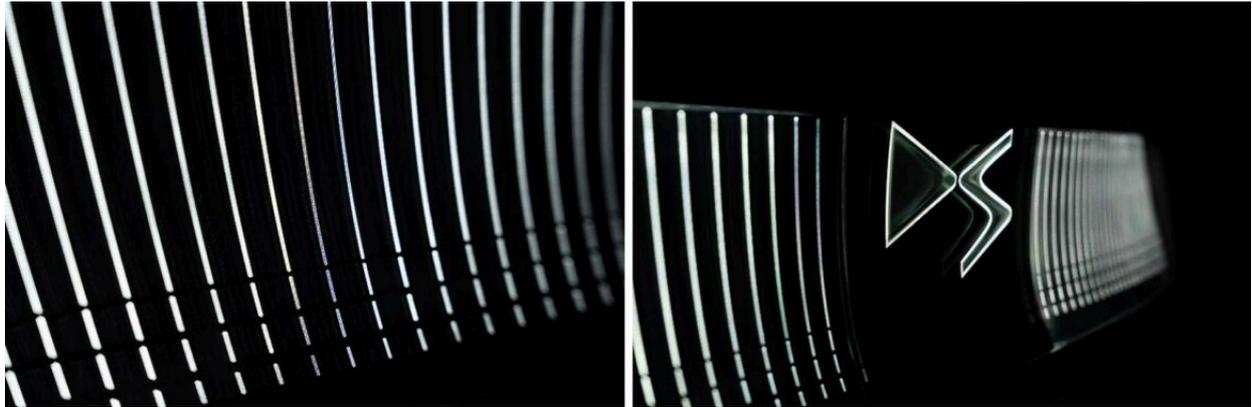


The front lit grille and logo were developed by Flex-N-Gate, as part of the extension of the front position lamp, and certified as a front position lamp (Y-lamp, in regulatory terms). Flex-N-Gate received a specification to reach a maximum 60 cd to be always

compliant with position lamp regulation (maximum 140 cd), and a luminance target of 600 cd/m<sup>2</sup>, what is enough to be visible by night—this grille is only lit by night.

One of the main challenges of the development was the shock management (low speed crash and pedestrian shock). To fulfil the requirement, the design includes a special restricted vertical section, a sort of triangle shape which permits a rotation of the component during impact to avoid the bumper beam. PCBs are located in the upper area of the lit grille for this purpose, as well as for better thermal management.

The optical system includes a flat PCB to generate lighting into a light curtain on which laser shots in the tool insert reflect the light. To avoid any reflection at the opposite of the light source, the crystal light curtain is overmolded with a black layer to absorb stray light.



The lit logo area is also produced by a light curtain, composed of a 2K lens (crystal and black), on which Flex-N-Gate did a PVD deposit + laser etching. Luminance is a bit higher compared to the rest of the lit grille, at 1,000 cd/m<sup>2</sup>.

This is the first asymmetric lit logo on a DS, and one of the first one in Europe to fulfil the legal requirements (maximum 100 cm<sup>2</sup> lit area). Due to the size of the lit grille—it's over a metre wide—one of the challenges was the gap and flush management. Flex-N-Gate, thanks to their experience with Opel Vizor production from 2021, got the job done well.

This project was the first one that involved the new Flex-N-Gate PCB and ECU plant in Treviso, Italy, the former Osram plant. Plastic components and final assembly are done in the Sabadell plant in Spain, to a final delivery in Melfi, Italy, where the DS N° 8 is produced.

# Refond's New ADS Turquoise Light Source

## LIGHTING NEWS



Refond have just released their new Cyan Blue-Green LED, designed for future possible autonomous driving signal lights.

Two solutions are proposed—round or rectangular—with chip-level and phosphor conversion solutions. The chip-level solution has small colour shift for thermal stability and good life performance, with a more bluish colour. The phosphor-converted solution offers better colour adjustment and usage next to a white phosphor-converted LED

Refond offer two different powers, as well: 0.5W and 1W. A 3W solution using high-power LEDs is in development also, for light guide applications.

AECQ102 qualification is available at chip level.

**REFOND**

**Inspiring Vision, Intelligent Future**  
- Autonomous Driving ADS Cyan Blue-Green LED -

**Safe Penetration** **Accurate Recognition** **Stable & Reliable** **Energy Efficiency Leader**

**Core Technical Selling Points:**

- Multiple Specifications:** 2720 & 3030 and other packaging options, using cyan chips for direct light emission, with a dominant wavelength of 490-497.5nm, falling within the cyan regulatory color zone
- Safe Penetration:** 495nm wavelength compatible with mainstream sensors, improving penetration in rain, fog, and nighttime by 50%
- Ultra-Long Lifespan:** 50,000 hours of continuous operation, stable performance in extreme environments from -40°C to 125°C
- Energy Efficiency Leader:** Low thermal resistance, 20% lower power consumption, compliant with EU RoHS certification

**Applications for Automotive Autonomous Driving Indicator Lights**

- Headlights
- Side Dynamic Indicator Lights
- Taillights
- Sensor Auxiliary Light Source

**Cyan Color Zone Design Definition**

- Both chip solutions and phosphor solutions fall within the international cyan regulatory color zone.
- Flexible solution options are available for customers with different color design requirements.

Model: RF-A3E31-G90E-B1 Size: 3.0\*3.0\*0.55mm  
Model: RF-A3E27-G90E-B1 Size: 2.7\*2.0\*0.6mm  
Model: RF-A3E31-W15E-B1 Size: 3.0\*3.0\*0.55mm  
Model: RF-A3E27-W15E-B1 Size: 2.7\*2.0\*0.6mm

# Glare Forum at SAE Lighting Standards Meeting

## LIGHTING NEWS



DVN's Daniel Stern speaks at SAE glare forum (photo courtesy of Bart Terburg)

The SAE Lighting Systems Group held their Spring standards-development meetings on 31 March to 3 April in Savannah, Georgia, USA.

A featured event was the North American vehicle lighting expert group's first-ever glare forum. Panellist speakers included Transport Canada Senior Regulatory Development Engineer Marie Williams-Davignon; renowned lighting researcher John Bullough of the Icahn School of Medicine at Mt. Sinai's Lighting and Health Research Center; DVN Chief Editor Daniel Stern, and accomplished headlamp engineering consultant Glenn McCarter.

Williams-Davignon described ongoing and planned research into headlight glare being undertaken by Transport Canada to get an up-to-date understanding of what is driving the increase in volume and the sharpening tone of citizen complaints about traffic glare.

### **DVN's Daniel Stern speaks at SAE glare forum (photo courtesy of Bart Terburg)**

Bullough described Lighting and Health Research Center studies on the subject, with particular emphasis on the trend toward increasing blue-light content in headlamp output spectra, and the robust link between blue light and discomfort glare.

Stern spoke about research into headlight glare, particularly in North America, going back decades, touching on regulated and unregulated aspects of headlamp design, installation, and performance. He described how glare complaints are increasing all over the world, and some of the unregulated aspects (shrinking headlamps making higher luminance, trend toward blue light) are common to both the generally higher-glare North American regulatory island and the generally lower-glare ECE rest-of-world. Other glare-relevant factors like lens ice and lens dirt and the lack of standardized self-levelling in North America, he said, might warrant attention from SAE.

McCarter spoke from a different perspective, posing the thought-provoking question of whether there really is actually any glare problem at all. Could it just be a matter of people always finding something to complain about? And how can calls for less glare be reconciled with the IIHS protocol driving more and wider low-beam light at the horizon?

There was great participation and discussion; the roomful of subject matter experts grappled with thorny knots: how to know what, if anything, to do first? And in the absence of regulation, or at least industry-wide agreed coöperation, how can one automaker be expected to something that reduces glare but might make their vehicles seem less attractive to car buyers? This gets at a major difficulty from the automaker's standpoint: people want less glare from *other* cars, but they don't necessarily want any changes to their own car.

Aside from the glare forum, the meeting included productive discussions on signalling and driver assistance projections, with questions and ideas circulating vigorously: should the SAE standards be more permissive than the relatively cautious, conservative ECE standards for these kinds of projections? If so, how much more permissive, and where should the extra latitude go? More variation in the symbols for specific functions? More different kinds of symbols?

There was discussion on the technical specifications of the proposed turquoise ADS light, in almost all of its aspects: placement, intensity, automatic operation, manual override, and more.

On other subjects, it was noted that Tesla have now released a US-specification ADB system, joining Rivian to become the second brand with the feature in the US market. There was also spirited discussion as to whether sequential operation of side turn signals should or should not be allowed.

# Breaking News

## FMVSS ADB on Tesla vehicles

BREAKING NEWS



Tesla just informed about its 2025 Spring release with introduction of ADB in USA and Canada, based on FMVSS108 ADB specification.

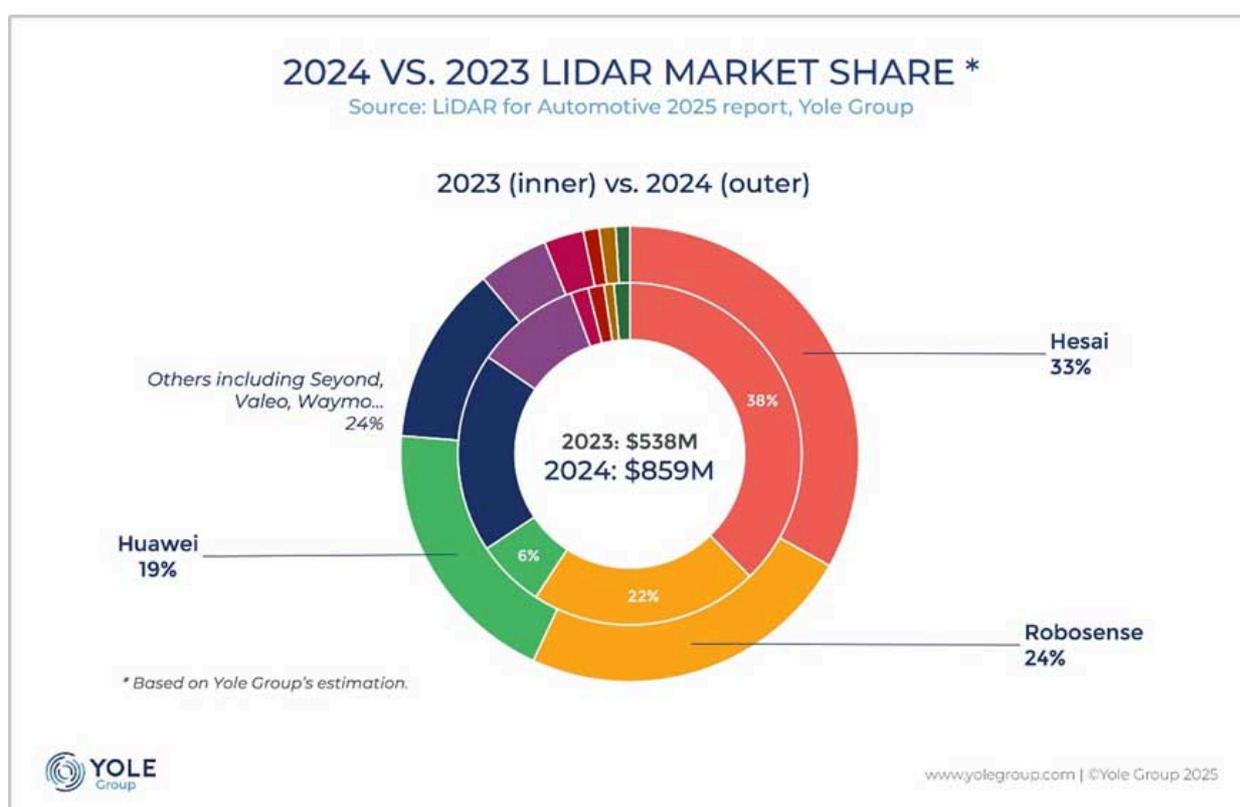
According to Tesla, "If your vehicle has the necessary hardware, you will see the setting under Controls > Lights > Adaptive Headlights". It seems to be available on Model 3, S, X and Y with pixel lamps, based on OTA update.



# Driver Assistance News

## Lidar Enters Mass Adoption, Hesai Still Lead Global Market

### DRIVER ASSISTANCE NEWS



Hesai Group have been named the top automotive lidar company by market share for the fourth consecutive year by Yole Group, whose report highlights Hesai's continued leadership in the global lidar industry. Points of emphasis include the supplier's market-leading revenue share, and their dominant presence across both ADAS-enabled passenger cars and robotaxis. This leadership position was bolstered by strategic partnerships with the world's automakers, ongoing technological innovations, and rapidly growing demand in passenger car and robotaxi market segments.

Yole's Lidar for Automotive 2025 report, which ranks lidar companies by key indicators of success, noted that Hesai captured 33 per cent of the global market revenue in 2024. The market has witnessed enormous growth of 60 per cent year-on-year, to reach a value of USD \$859m. Hesai's leadership is particularly evident in the rapidly expanding ADAS-enabled passenger vehicle market, which is experiencing explosive growth, particularly in China. Yole Group reports that around 120 vehicle models have adopted lidar since 2018, with adoption accelerating. Nearly 40 new lidar-equipped models have launched in the last two years alone. As the technology continues to grow in popularity, Chinese automakers are now implementing lidar beyond luxury vehicles, into more affordable, mass-market models, including C-segment cars priced around \$25,000. This democratization drove the ADAS passenger car lidar market to grow by 68 per cent year-on-year in 2024. This marks a major turning point for the industry as it enters a true mass adoption phase.

# PASSENGER CARS MARKET: LIDAR PARTNERSHIPS & SUPPLY CHAIN\*

Source: LiDAR for Automotive 2025 report, Yole Group



\* Based on public information.

# To go further ...

## Lynk & Co 02 Interior Lighting, Eileen Hwang interview

TO GO FURTHER ...



Eileen Hwang, Samuel Wijk and Kevin Mulligan

### **By Paul-Henri Matha**

In October 2024, DVN was glad to be invited to the Lynk & Co 02 reveal in Milano. We took time to talk and listen with Eileen Hwang, Lynk's interior designer and lighting experience specialist, to talk about the car's interior lighting design (amongst other topics). We also talked about the 07, 08, and 900 models.

I wanted to know more about the 'Infinite Light' concept that was presented, and we wanted to know a bit more about the technology behind and beyond it.



Lynk & Co 02

**Paul-Henri Matha, DVN:** Eileen, can you give more details about what you call Infinity Light on Lynk & Co 02?

**Eileen Hwang:** It all began during an interior team workshop three years ago. The task was to bring an inspiring image, and I brought this one.



I thought it was a great futuristic reference, a simple yet powerful structure that creates the illusion of infinite space using mirrors. That was the beginning of our Infinity Light experiment.

With Lynk & Co's 'Next Day' design philosophy, we emphasize four key pillars: Proud Tech, Rich Experience, Dare to be Lynk & Co, and Next Premium. Our vision for this new lighting concept was to encapsulate all four.

The journey continued with sketching and brainstorming alongside our lighting engineer, Kevin Mulligan. One of our early ideas was a floating headrest that appeared to exist within an infinite space. It was a bold concept, so we tested it in VR, and it turned out to be the perfect embodiment of Proud Tech, delivering a beyond-reality impression.

We explored various placement options for the Infinity Light, and to enhance the user experience, we ultimately positioned it on both sides of the central screen. This not only amplifies the lighting effect but also creates a more spacious feel inside the cabin.

**DVN:** Can you explain the evolution of the 02 from previous Lynk & Co models, like the 07?



Lynk & Co 07

**E.H.:** The lighting feature in the 07 was mostly carried over from the 08. Our key focus was achieving a ‘techy’ and ‘next premium’ look, which we accomplished through careful material selection and pattern design.

We used a tinted lens with a backlit pattern, allowing the light to appear sharper, creating a sophisticated and premium feel. Additionally, we extended the lighting animation through the door speakers in a stretched design, further enhancing the sense of roominess.

However, the approach for 02 was completely different from the start. We always strive to create lighting features that best fit the interior theme, and the 02 is a very different car from the 07 and 08—so it had to have a distinct lighting identity.



Lynk & Co 02

Our goal was to innovate beyond existing market solutions and showcase how bold and forward-thinking our brand is. That’s why Infinity Light in the 02 fully embodies our core design principles.

**DVN:** What is the technology behind it? it looks like a well know technology (mirror effect) also seen on exterior lighting like Citroën DS3 rear lamp. Am I correct?



Citroën DS3 rear lamp (L) · Lynk & Co 02 instrument panel light detail (R)

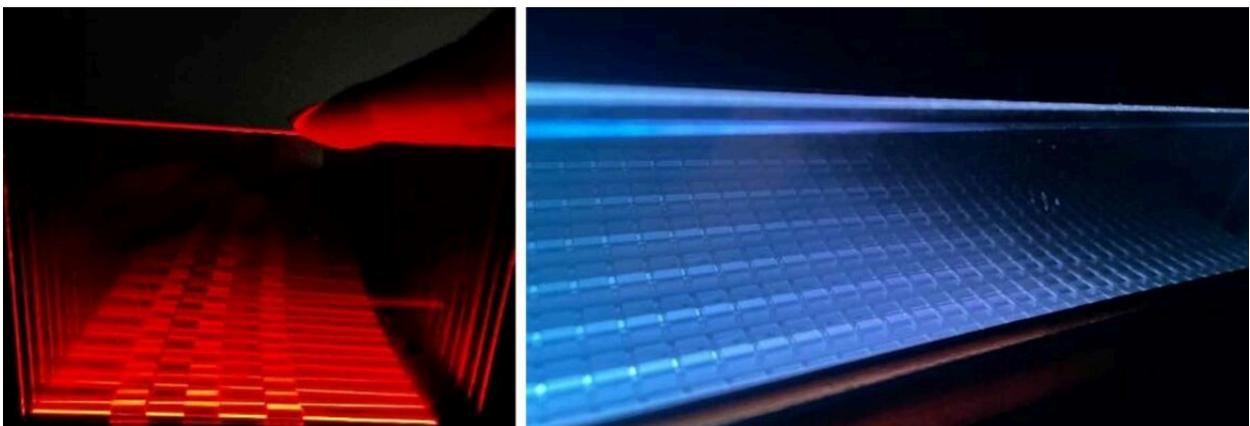
**E.H.:** The effect itself isn't rocket science—and that's the beauty of it. With a relatively simple process, we can create a powerful experience. It's a bit of 'smoke and mirrors' in its approach.

Unlike rear lamps, our Infinity Light spans across the instrument panel, meaning it follows a compound curve. One of the biggest challenges was overcoming the 'fishbowl effect' caused by this curvature.

Packaging constraints were another major hurdle. To maximize reflections, we conducted extensive testing and had to carefully refine every detail—because even the slightest error could create wavy lines or distortions in the pattern.

**DVN:** Could you share a vertical section to understand how it works? And, what is the pitch between each led ?

**Eileen:** Sorry, but we can't share too many details. However, LED pitch is driven by cost and animation requirements. It varies across brands, but our approach was to use the minimum necessary while ensuring the smoothest possible animation.



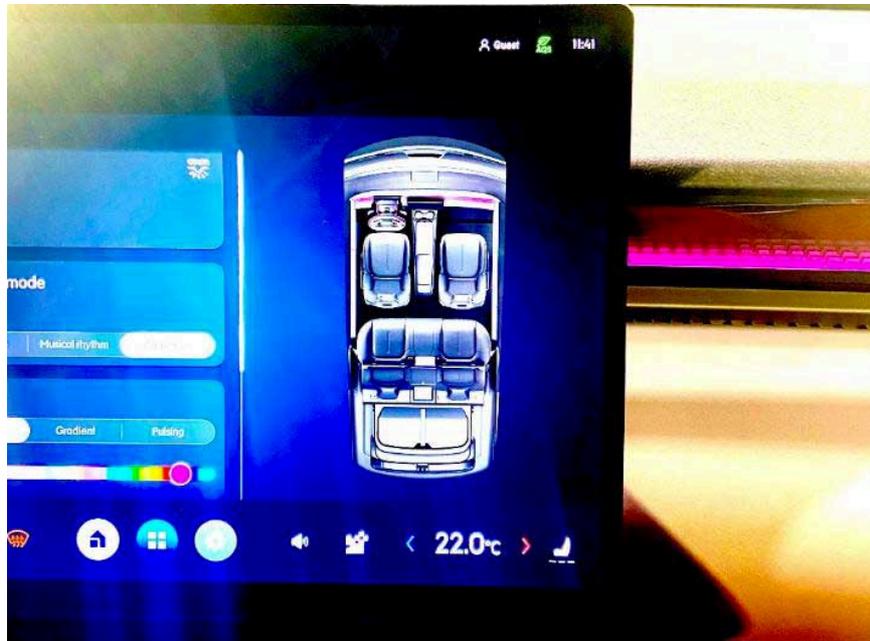
**DVN:** Did you develop unique technology with your lighting and interior suppliers to obtain this final design? How did you develop it—like, did you render it with virtual tools like Speos, for example? Or did you need physical mockups?

**E.H.:** I'm proud to say that we developed everything in-house first. We started with a very simple test like left image and gradually refined it into small box prototype to mock up. And we took the prototype to the China R&D centre in Hangzhou and

collaborate with our supplier. it wasn't easy for them either. Our supplier worked with Speos simulations and CAD data, but physical verification was still necessary, so we travelled multiple times to fine-tune and improve quality.

**DVN: How many colours are selectable from the central display? can you explain us how you define different colours?**

**Eileen:** The following picture is self-explanatory:



**DVN: What is the role in your team between you and Samuel from UX? How do you define the role, is it similar to R&D between hardware and software engineers?**

**E.H.:** It's a highly collaborative effort. Once we had a clear direction with prototype finished, Samuel's UX team 'breathed life' into the concept, shaping how the interaction system works with the Infinity Light to provide real value to the customer.

For example, it also plays a role in warning functions, like door open alerts or seatbelt reminders, making interactions more intuitive.

We don't see our roles as strictly divided like traditional hardware and software engineers. Instead, we take a holistic approach, merging technology and design to enhance the overall interior experience

**DVN: Do you have sequential animation of infinite light, LED by LED?**

**E.H.:** The RGB LED rear combination lamp can generate a total of 256 different colour variants from the three basic shades of red, green, and blue, thus creating not only dynamic but also multicoloured lighting animations. In addition to welcome/goodbye scenarios, this also includes coloured animations after locking the vehicle, during the charging process, or as a burglar alarm.

**DVN:** can you talk on the next step? We have already seen on the Lynk & Co 900 what seems to be an evolution of Infinite Light.



**E.H.:** The lighting feature in the 900 is more of an evolution of the 08 and 07 rather than the 02, as they belong to different design sectors.

The 900 approach is more advanced than what we used in the 08 and 07. We introduced laser-etched patterns on a PVD-coated surface behind a 3D 2K mold structure with Yanfeng partnership. Additionally, the speakers feature backlit PVD accents.



Our goal was to create a 3D pattern under a clear lens to enhance depth perception. Even when the lights are off, the structure remains visually appealing. But when illuminated, it delivers a highly technical and futuristic feel.

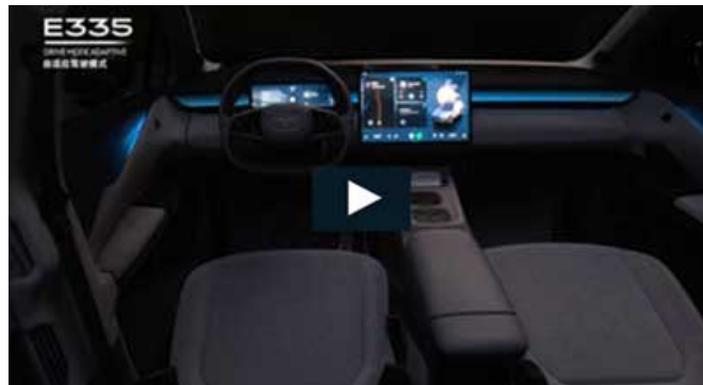
**DVN:** Can you talk about the user experience and lighting UX features you have developed?

**E.H.:** we have different ambient modes. Lynk & Co design is done in Sweden. Each car has its own UX experience. This new way of thinking and working is clearly pushed by Chinese customer expectations.

On the Lynk & Co 02, we are interacting with music and turn indicator activation.



We are proposing, for example, two Swedish mode available with OTA update: Aurora and Westcoast, on top of the standard drives modes



Second, we use interior lighting to interact with different functions (phone call, voice assistant, climate control, drive modes, fireplace, turn indicator). Possibilities are infinite.





Moving forward, we will continue designing lighting features that not only elevate the aesthetic but also enhance the overall interior storytelling.

And right now, we're already cooking up the next evolution of Infinity Light—so stay tuned!