ECE TYPE-APPROVAL CERTIFICATE [1]

E24

Communication concerning:[2] Approval granted
~~Approval extended~~
~~Approval refused~~
~~Approval withdrawn~~
~~Production definitely discontinued~~

of a type of device or system pursuant to UN Regulation No. 149

Class of the device:	***F3***	Change index:	***0***
Approval No:	***E24*149R00/08*0493*00***		
Unique Identifier (UI) (If applicable)		***N/A***	
Reason(s) for extension (if applicable):		***N/A***	

1. Trade name or mark of the device or system: ***Custom Dynamics***

2. Manufacturer's name for the type of device or system: ***FOG-SD-W/FOG-SD-Y***

3. Manufacturer's name and address: ***SHENZHEN CARJERO TECHNOLOGY CO., LTD.***
Area A5-A7, Floor 3, Building 1, PengChengZhongJun COMPASS Innovation Park Houting community, Shajing Town, Shenzhen city, Guangdong

4. If applicable, name and address of manufacturer's representative: ***N/A***

5. Submitted for approval on: ***04.08.2025***

6. Technical Service responsible for conducting approval tests: ***TÜV NORD Mobilität GmbH & Co. KG***
IFM - Institut für Fahrzeugtechnik und Mobilität
Schönscheidtstr. 28
D-45307 Essen

7. Date of report issued by that service: ***31.07.2025***

8. Number of report issued by that service: ***CS149-A0-2025-05391***

[1] Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).
[2] Strike out what does not apply.

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Approval No: ***E24*149R00/08*0493*00***

9. Brief description:

9.1. For Headlamps of Classes A and B[1]

9.1.1. Category as described by the relevant marking:[3] ***N/A***

9.1.2. Number, category and kind of light source(s): ***N/A***

9.1.3. Reference luminous flux used for the principal passing-beam (lm): ***N/A***

9.1.4. Principal passing-beam operated at approximately (V): ***N/A***

9.1.5. Measures according to paragraph 4.12. of this Regulation: ***N/A***

9.1.6. Number and specific identification code(s) of LED module(s) and for each LED module a statement whether it is replaceable or not: *yes/no*[1] ***N/A***

9.1.7. Number and specific identification code(s) of electronic light source Control gear(s) ***N/A***

9.1.8. Total objective luminous flux as described in paragraph 4.5.2.6. of this Regulation exceeds 2.00 10^3 lumens: yes/no/does not apply[1] ***N/A***

9.1.9. The adjustment of the cut-off has been determined at: 10 m/25 m/does not apply[1] ***N/A***

The determination of the minimum sharpness of the "cut-off" has been carried out at: 10 m/25 m/does not apply[1] ***N/A***

9.2. For headlamps of Class D

9.2.1. Headlamp/system submitted for approval as type:[4] ***N/A***

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[3] Indicate the appropriate marking selected from the list below:

C, C, C , R, R PL, CR, CR, CR , C/R, C/R, C/R , C/ , C/ , C/ ,

C, PL, C PL, C PL, CR PL, CR PL, CR PL, C/R PL, C/R PL, C/R PL,

C/PL, C/PL, C/PL

HC, HC, HC , HR, HR PL, HCR, HCR, HCR, HC/R, HC/R, HC/R, HC/, HC/, HC/,

HC PL, HC PL, HC PL, HCR PL, HCR PL, HCR PL, HC/R PL, HC/R PL, HC/R PL,

HC/PL, HC/PL, HC/PL

[4] Indicate the appropriate marking selected from the list below:

DC, DC/, DC/PL, DR, DCR, DC/R, DC PL, DR PL, DCR DC/R
DC, DCR, DC/R, DC/, DC PL, DCR PL, DC/R PL, DC/PL, PL, PL,

DC, DCR, DC/R, DC/, DC PL, DCR PL, DC/R PL, DC/PL,

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9.2.2. The passing beam light source may/may not1 be lit simultaneously with the driving beam light source and/or another reciprocally incorporated headlamp. ***N/A***

9.2.3. The rated voltage of the device is: ***N/A***

9.2.4. Number, category and kind of light source(s): ***N/A***

9.2.4.1. If more than one objective luminous flux value is specified: ***N/A***

Objective luminous flux value used for the principal passing beam ***N/A***

9.2.4.2. If more than one objective luminous flux value is specified: ***N/A***

Objective luminous flux value used for the driving beam ***N/A***

9.2.5. Trade name and identification number of separate ballast(s) or part(s) of ballast(s): ***N/A***

9.2.6. The adjustment of the "cut-off" has been determined at 10 m/25 m.(2) ***N/A***

The determination of the minimum sharpness of the "cut-off" has been carried out at 10 m/25 m.[1] ***N/A***

9.2.7. Number and specific identification code(s) of LED module(s): ***N/A***

9.2.8. Distributed lighting system with one common gas-discharge light source: Yes/No[1] ***N/A***

9.2.9. Remarks (if any): ***N/A***

9.2.10. Measures according to paragraph 4.12. of this Regulation: ***N/A***

9.3. For AFS – Systems

9.3.1. Category as described by the relevant marking[5] ***N/A***

9.3.2. Number, category and kind of light source(s) ***N/A***

9.3.2.1. Number and specific identification code(s) of LED module(s) and for each LED module a statement whether it is replaceable or not: yes/no[1] ***N/A***

9.3.2.2. Number and specific identification code(s) of electronic light source control gear(s), if applicable ***N/A***

9.3.2.3. Total objective luminous flux as described in paragraph 4.5.2.6. of This Regulation exceeds 2,000 lumen: yes/no[1] ***N/A***

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9.3.3. (a) Indications according to paragraph 5.3.5.1. of this Regulation (which lighting unit(s) provide a "cut-off" as defined in Annex 5 of this Regulation, that projects into a zone extending from 6 degrees left to 4 degrees right and upwards from a horizontal line positioned at 0.8 degree down) ***N/A***

(b) The adjustment of the "cut-off" has been determined at 10 m / 25 m[1] ***N/A***

(c) The determination of the minimum sharpness of the "cut-off" has been carried out at 10 m / 25 m[1] ***N/A***

9.3.4. The vehicle(s) for which the system is intended as original equipment ***N/A***

9.3.5. Whether approval is sought for a system which is not intended to be included as part of the approval of a vehicle type according to UN Regulation No. 48: yes/no[1] ***N/A***

9.3.5.1. If in the affirmative: information sufficient to identify the vehicle(s) for which the system is intended ***N/A***

9.3.6. Indications according to paragraph 5.3.5.2. of this Regulation (which class E passing beam mode(s), if any, comply with a "data set" of Table 14 of this Regulation) ***N/A***

9.3.7. Whether approval is sought for a system intended to be installed on vehicles only, which provide means for a stabilization/limitation of the system's supply: yes/no[1] ***N/A***

9.3.8. The adjustment of the "cut-off" has been determined at 10 m / 25 m.[1] ***N/A***

The determination of the minimum sharpness of the "cut-off" has been Carried out at 10 m / 25 m.[1] ***N/A***

9.3.9. The system is designed to provide passing beams of:[6] ***N/A***

9.3.9.1. Class C ☐ Class V ☐ Class E ☐ Class W ☐

9.3.9.2. With the following mode(s), identified by the designation(s), if it applies[14]

Mode No. C	Mode No. V	Mode No. E	Mode No. W
Mode No. C	Mode No. V	Mode No. E	Mode No. W
Mode No. C	Mode No. V	Mode No. E	Mode No. W

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[5] Indicate the appropriate marking as foreseen according to this Regulation for each installation unit or assembly of installation units.
[6] Mark with an X where applicable.
[7] To be extended if more modes are provided.
[8] To be continued if more units are provided.

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9.3.9.3. Where the lighting units indicated below are energized[5,7,8] for the mode No.

(a) If no bend lighting applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐
(b) If bend lighting of category 1 applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐
(c) if bend lighting of category 2 applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐

9.3.9.4. The lighting units marked below are energized, when the system is in its neutral state[5,7]

Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐

9.3.9.5. The lighting units marked below are energized, when the system is in its traffic change function[5,6,7]

(a) If no bend lighting applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐
(b) If bend lighting of category 1 applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐
(c) if bend lighting of category 2 applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐

9.3.10. The system is designed to provide a main beam[5,6,7]:

9.3.10.1. Yes ☐ No ☐

9.3.10.2. With the following mode(s), identified by the designation(s), if it applies:
Main beam mode No. M
Main beam mode No. M
Main beam mode No. M

9.3.10.3. Where the lighting units marked below are energized, for mode No.
(a) If no bend lighting applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐
(b) If bend lighting applies:
Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐

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9.3.10.4. The lighting units marked below are energized, when the system is in its neutral state[6,8]

Left side No.1 ☐ No.3 ☐ No.5 ☐ No.7 ☐ No. 9 ☐ No.11 ☐
Right side No.2 ☐ No.4 ☐ No.6 ☐ No.8 ☐ No.10 ☐ No.12 ☐

9.3.10.5. The system is designed to provide an adaptation of the driving beam for:

Right-Hand and Left-Hand traffic: yes ☐ no ☐
Right-Hand traffic only: yes ☐ no ☐
Left-Hand traffic only: yes ☐ no ☐

9.4. For headlamps of Classes AS, BS, CS, DS and ES1

9.4.1. Category as described by the relevant marking:[9] ***N/A***

9.4.2. Number, category and kind of light source(s), if any: ***N/A***

9.4.3. Number and specific identification code(s) of LED modules and for eachL ED module a statement whether it is replaceable or not: yes/no[1] ***N/A***

9.4.4. Number and specific identification code(s) of electronic light source control gear(s), if any: ***N/A***

9.4.5. The determination of "cut-off" sharpness yes / no[1] ***N/A***

If yes, it was carried out at 10 m / 25 m[1]

9.4.6. Trade name and identification number of separate ballast(s) or part(s) of ballast(s): ***N/A***

9.4.7. The passing beam light source may/may not[1] be lit simultaneously with the driving beam light source and/or another reciprocally incorporated headlamp. ***N/A***

9.4.8. The minimum bank angle(s) to satisfy the requirement of paragraph 5.4.5.2., if any ***N/A***

9.4.9. Primary Driving Beam: yes / no[1] ***N/A***
Secondary Driving Beam: yes / no[1] ***N/A***
The Secondary Driving Beam shall only be operated together with a passing beam or a primary driving beam. ***N/A***

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[9] Indicate the appropriate marking selected from the list below:

C-AS,	C- BS,	R- BS,	CR- BS,	C/ -BS,	C/R-BS,
	C-BS PL,	R-BS PL,	CR-BS PL,	C/ -BS PL,	C/R-BS PL,
WC-CS,	WC-DS,	WR-CS	WR-DS,	WCR-CS,	WCR-DS,
WC/-CS,	WC/-DS,	WC/R-CS,	WC/R-DS,	WC-CS PL,	
WC-DS PL,	WR-CS PL,	WR-DS PL,	WCR-CS PL,	WCR-DS PL,	

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9.5. For front fog lamps Class F3

9.5.1. Class as described by the relevant marking: (~~F3, F3/, F3PL,~~ F3/PL)	***F3 PL***
9.5.2. Number, category and kind of light source(s):	***non-replaceable light source, One LED module of 1 LED***
9.5.3 LED module: yes/no[1] and for each LED module a statement whether it is replaceable or not: yes/no[1]	***N/A***
9.5.4. LED module specific identification code:	***N/A***
9.5.5. Application of electronic light source control gear:[10] yes/no[1]	
Supply to the light source:	***N/A***
Specification of the light source control gear:	***N/A***
Input voltage:[11]	***N/A***
In the case of an electronic light source control gear not being part of the lamp:	***N/A***
Output signal specification:	***N/A***
9.5.6. Colour of light emitted:	***White/Selective yellow (I)***
9.5.7. Luminous flux of the light source (see paragraph 4.5.2.6.) greater than 2,000 lumens: ~~yes~~/no[1]	***No***
9.5.8. Luminous intensity is variable: … ~~yes~~/no[1]	***No***
9.5.9. The determination of the cut-off gradient (if measured) was carried out at 10 m / 25 m[1]	***N/A***

9.6. For cornering lamps

9.6.1. Number, category and kind of light source(s):[12]	***N/A***
9.6.2. Voltage and wattage:	***N/A***

WC/CS PL,	WC/-DS PL,	WC/R-CS PL,	WC/R-DS PL,		
WC+-CS,	WC+-DS,	WC+R-CS,	WC+R-DS,	C+-BS,	C+R-BS,
WC+-CS PL,	WC+-DS PL,	WC+R-CS PL,	WC+R-DS PL,	C+-BS PL,	C+R-BS PL
WC-ES,	WR-ES,	WCR-ES,	WC/-ES,	WC/R-ES,	WC-ES PL,
WR-ES PL,	WCR-ES PL,	WC/-ES PL,	WC/R-ES PL		
WC+-ES,	WC+R-ES,	WC+-ES PL,	WC+R-ES PL		

[10] The voltage specifications shall include the tolerances or voltage range as specified by the manufacturer and verified by this approval.

[11] The parameters of the input voltage including duty cycle, frequency, pulse shape and peak voltage shall be included.

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9.6.3. Light source module: yes/no[1] ***N/A***

9.6.4. Light source module specific identification code: ***N/A***

9.6.5. Application of an electronic light source control gear:
(a) Being part of the lamp yes/no[1]
(b) Being not part of the lamp yes/no[1]

9.6.6. Input voltage supplied by an electronic light source control gear: ***N/A***

9.6.7. Electronic light source control gear manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body): ***N/A***

9.6.8. Geometrical conditions of installation and relating variations, if any: ***N/A***

10. Approval mark(s) position(s): ***Marked on lens***

11. Reason(s) for extension of approval (if applicable): ***N/A***

12. Approval granted / ~~extended / refused / withdrawn~~[1] ***Granted***

13. Place: ***Dublin***

14. Date: ***15th September, 2025***

15. Signature:

NATIONAL STANDARDS AUTHORITY OF IRELAND
NSAI Certification
TRANSPORT DEPARTMENT

16. The list of documents deposited with the Type Approval Authority, which has granted approval is annexed to this communication and may be obtained on request.

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[12] For cornering lamps with non-replaceable light sources indicate the number and total wattage of the light sources used.

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Index to the Information Package

Date of issue:	***15th September, 2025***
Date of latest amendment:	***N/A***
Reason for extension/revision	***N/A***

1. Additional conditions, and advisory notes on legal alternatives

2. Test report(s)

- numbers(s):	***CS149-A0-2025-05391***
- date of issue:	***31.07.2025***
- date of latest amendment:	***N/A***

3. Information document

- numbers(s):	***FOG-SD-W/FOG-SD-Y-00***
- date of issue:	***15.07.2025***
- date of latest amendment:	***N/A***

Documentation: ***28 pages***

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Approval No: ***E24*149R00/08*0493*00***

Appendix: **Additional conditions, and advisory notes on legal alternatives**

A: Additional conditions:

1. The lamp, Type *FOG-SD-W/FOG-SD-Y* shall be marked as prescribed by the regulation.
2. Fitting instructions shall be supplied with each lamp, giving details of any limitations in the use of the lamp.
3. The lamp should be fitted in accordance with the fitting instructions.
4. The attached technical report, with any of its attachments, forms part of this Type Approval certificate.
5. Each individual product from series production shall be to the measurements specified in the attached drawings, and shall be manufactured only from the materials specified in the Approval documents.
6. Changes in the product are permitted only with the explicit permission of NSAI. Breaches of this requirement will lead to a withdrawal of the Type Approval, and in addition may be subject to criminal prosecution.
7. This Type Approval will expire when it is surrendered by the holder, or withdrawn by NSAI, or when the approved type of product no longer conforms to legal requirements. The recall of the Type Approval can be issued by NSAI when the conditions required for the issuing or continuation of the Type Approval are no longer current, or when the Approval holder is in breach of the duties attached to the Type Approval, or when it is established that the approved type no longer meets the requirements of traffic safety.
8. NSAI may at any time check the correct performance of the duties imposed by the grant of this Type Approval, and in order to do so, may make tests, or have tests made.
9. Changes in the company name, address or manufacturing site, as well as in any of the sales or other agents specified in the issuing of the approval must immediately be notified to the NSAI.
10. The duties imposed by the issuing of this certificate are not transferable. The legal protection of third parties is not affected by this certificate.
11. When the manufacture or sale of the vehicle, system, component or separate technical unit has not been started within one year of the date of issue of this certificate, then NSAI is to be informed. This requirement also applies when the manufacture or sale has been halted for more than one year, or when it ought to have been halted for more than one year. The initial commencement of manufacture or sale, or the resumption of manufacture or sale, shall then be notified to NSAI within one month of commencement or resumption.

B : Legal Options

Any objection to the requirements set out in this certificate shall be made within one month of the date of issue. The objection shall be made, in writing, to NSAI in Dublin

NSAI, 1 Swift Square, Northwood, Santry, Dublin 9, Ireland. Telephone: (+353+1) 807 3800, Facsimile: 01-807 3844

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Test Report

Agreement concerning the adoption of uniform technical prescriptions for the wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

Uniform provisions concerning the approval of road illumination devices (lamps) and systems for power-driven vehicles

ECE-R149
as last amended

Supplement 08 to the 00 series of amendments

Approval status	
ECE	Number of approval
	E24*149R00/08*0493*00

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

0. General information

0.1. Trademark or trade name of the lamp	:	Custom Dynamics
0.2. Manufacturer's name for the type of the lamp	:	FOG-SD-W/FOG-SD-Y
0.3. Name and address of the manufacturer	:	SHENZHEN CARJERO TECHNOLOGY CO., LTD. Area A5-A7, Floor 3, Building 1, PengChengZhongJun COMPASS Innovation Park Houting community, Shajing Town, Shenzhen city, Guangdong
0.4. Name and address of manufacturer's authorized representative	:	---
0.5. No. of information folder	:	FOG-SD-W/FOG-SD-Y-00
Date of issue	:	July 15, 2025
Date of last amendment	:	---

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

1. Test object(s) and general test information

1.1. Test object(s)

identification number	:	---
Variant	:	Variant 1: FOG-SD-W (Clear outer lens) Variant 2: FOG-SD-Y (Yellow outer lens)
Remark	:	Front fog lamp incorporating a lens made of plastic for class F3 light source: non-replaceable light source, One LED module of 1 LED, 12V, 13W for Front fog lamp

1.2. Worse case : ~~About test for stability of photometric performance, the worst case was determined as of following:~~

~~The test shall be carried out with the filament light source operated at the highest voltage (28V) that can be used, and two high beam operated together.~~

1.3. General test information

1.3.1. Order issued by (if different from manufacturer)	:	---
1.3.2. Test object / ~~test vehicle~~ received on	:	July 15, 2025
1.3.3. Test date	:	July 16, 2025~July 18, 2025
1.3.4. Test site	:	Zhejiang Aike Automobile Technology Service Co., Ltd. Building 3, Essence Adream Space, No.350, Jinghua Road, Ningbo Hi-tech Zone, Yinzhou District, Ningbo, Zhejiang, China
1.3.5. Remark	:	The results of the test refer exclusively to the object(s) mentioned under point 1.1 of this report.

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

2. Test minutes

2.1. Test facilities : The test facilities are in compliance with the requirements of the Regulation

2.2. Test results : ~~The lamp has been tested according the amendments mentioned in Appendix 0. The photometric values were carried over from the basic report.~~

2.2.1 Temperature : 25 °C

2.2.2 Markings : The trade mark is marked clearly legible and indelible on the lens.

Space for the approval mark and for additional symbols is provided on the lens. The lens can not be separated from the housing.

The ~~filament lamp type~~ / voltage and wattage is clearly legible and indelible marked on the housing of the lamp.

2.3. General specifications : The lamp is designed and made that, under normal use, their satisfactory operation is ensured and they retain the required characteristics.

The colour of the light emitted inside the field of the light distribution grid defined in item 4.16. is within the limits of the coordinates for **WHITE / Selective yellow**.

The LED modules of the lamp complies with the relevant requirements as described in paragraph Annex 9.

LED module(s) was so designed as to be and to remain in good working order when in normal use.

The lamp is ~~not~~ fitted with a device enabling the correct adjustment on the lamp as to comply with the requirements applicable to it. ~~The adjustment system is provided by a device where the lamp is fitted to.~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

2.4. Requirements for LED modules and front fog lamp including LED modules : A LED module is considered to have failed if any one of its LEDs has failed.

All samples are tested under the conditions as specified in paragraphs 4.6. of this Regulation.

For the measurement of electrical and photometric characteristics, the headlamp is operated in a dry and still atmosphere at an ambient temperature of 23 °C +5 °C.

Upon the request of the applicant the LED module is operated for 15 h and cooled down to ambient temperature before starting the tests as specified in this Regulation.

~~The total objective luminous flux of all LED modules producing the principal passing beam was equal or greater than 1,000 lumens~~.

2.4.1. Colour rendering : Variant 1: $K1_{red}$= **0.08466** limit ≥ 0.05
Variant 2: $K1_{red}$= **0.1022** limit ≥ 0.05

2.4.2. UV-radiation : Variant 1: $K1_{UV}$= **4.034×10^{-7}** limit ≤ 10^{-5} W/lm
Variant 2: $K1_{UV}$= **1.139×10^{-7}** limit ≤ 10^{-5} W/lm

2.5. Photometric test : The aiming screen for visual adjustment (see Annex 6 paragraph 4) shall be positioned at either a distance of 10 m or at a measurement distance of 25 m and a detector with a diameter of approximately 30 mm.

All measurements on front fog lamps equipped with LED module(s) shall be made at ~~6.3 V~~, 13.2 V ~~or 28.0 V~~ respectively.

The luminous intensity produced by the front fog lamp shall be measured at 25 m distance by means of a photoelectric cell having a useful area comprised within a square of 65 mm side.

The fog lamp was adjusted so that the cut-off on the screen is 1^0 below the line hh.

The beam shall produce on this aiming screen, over a width of not less than 5.0° on both sides of the line v, a symmetrical and substantially horizontal cut-off to enable visual vertical adjustment.

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

2.7. Explanatory note : This report describes the examination of the front fog lamp as a part of a lamp device.

For the examination of the other lamp of the device, refer to the following report:

Type of lamp	Test report No.
---	---

2.8. Variants and components : not applicable

2.9. Test conclusion : Passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

3. Remark concerning tested object(s)

All versions of the lamps as stated in the information document are covered with the tested version(s) and test object(s) respectively.

4. Appendices

0 List of modifications

1 Test minutes

2 Communication concerning the type approval

Information folder no. : FOG-SD-W/FOG-SD-Y-00

5. Statement of conformity

The type described in this test report and the appendices attached are in compliance with the Test Specification mentioned above.

The samples / ~~test vehicles~~ used were representative in terms of the type to be approved.

The Test Report comprises pages 1 to 25.

The Test Report shall be reproduced and published in full only and by the client only. It shall be reproduced partially with the written permission of the Test Laboratory only.

TEST LABORATORY

TÜV NORD Mobilität GmbH & Co. KG
IFM - Institut für Fahrzeugtechnik und Mobilität,
Schönscheidtstr. 28, 45307 Essen, Germany

Designated Technical Service
Technical Service Number: 115

Shanghai, July 31, 2025
RT/MM

Ryan Tong

B.S.M.E. R.Tong

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

List of modifications

Appendix 0

More details for application of : **Date** :

Correction of : -

Modification of : -

Addition of : -

Deletion of : -

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Test minutes **Appendix 1**

Variant 1

1.1. Results of photometric tests -Front fog lamp

Temperature stability

Luminous intensity produced on the screen in cd						
Designated Point	illumination required (cd)		sample no.1		sample no. 2	
	Minimum	Maximum	1 minute	stability	1 minute	stability
H 0°/ V 2.5°D	2700	---	3980.0	3838.0	3823.0	3675.0

*The lamp was continued operation until photometric stability has occurred. The moment at which the photometry is stable is defined as the point in time at which the variation of the photometric value is less than 3 percent withi any 15 minutes period.

Results of photometric tests of the front fog lamps continue operation until photometric stability

Luminous intensity produced on the screen in cd						
No.	*Designated lines or zones*	*illumination required (cd)*		sample no.1	sample no. 2	To comply
		Minimum	*Maximum*			
1	Point 1**	---	85	6.7	9.6	all points
2	Point 2**	---	85	7.3	9.1	all points
3	Point 3**	---	85	17.0	20.4	all points
4	Point 4**	---	85	19.5	19.9	all points
5	Point 5**	---	85	7.1	7.2	all points
6	Point 6**	---	85	8.2	6.6	all points
7	Point 7**	---	85	13.1	12.3	all points
8	Point10**	---	85	17.7	11.6	all points
9	Point 8**	---	85	23.8	12.2	all points
10	Point 9**	---	85	27.2	11.9	all points
11	Line 1**	---	130	38.1	34.4	All line
12	Line 2**	---	150	68.6	68.2	All line
13	Line 3	---	245	111.0	117.8	All line
14	Line 4	---	360	179.5	160.9	All line
15	Line 5	---	485	248.5	235.6	All line
16	Line 6	2700	---	3543.1	3431.4	All line
17	Line 7	---	50% of max. on line 6****	1968.6	1628.8	All line
18	Line 8L and R***	1100	---	5012.6	3585.5	One or more points
19	Line 9L and R***	450	---	2999.3	3130.8	One or more points
20	Zone D	---	12000	5881.9	4242.8	Whole zone

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

* The co-ordinates are specified in degrees for an angular web with a vertical polar axis.
** See paragraph 5.5.2.4.
*** See paragraph 5.5.2.2.
**** The maximum value on line 6 of sample 1/sample 2 is **3950.4 / 3713.8** cd.

Test results : passed / ~~failed~~

1.2. Stability of photometric performance of front fog lamps in operation

Clean fog lamp : The device was operated for 12 hours as described in Annex 7 paragraph 2.1 of the Regulation, with each light source of the specified functions lit successively for the prescribed time.

The visual inspection after this test did not show any distortion, deformation, cracking or change in color of either the headlamp lens or the external lens.

photometric test results (in cd)				
points on screen	initial	end of test	difference in %	allowable difference in %
Imax in Zone D	5881.9	5698.9	3.11%	10
Line 5 (H=0)	226.5	219.7	3.00%	10

Dirty fog lamp : After preparation as prescribed in Annex 7 paragraph 2.1. of the Regulation, and confirmation that the illumination values have dropped to 15% to 20 % of the prior values, the head lamp was operated for 1 hour as described in Annex 7 paragraph 2.1.1., with each light source of the specified functions (driving beam / passing beam) lit successively for the prescribed time.

The visual inspection after this test did not show any distortion, deformation, cracking or change in color of either the headlamp lens or the external lens.

Photometric test results (in cd)				
points on screen	initial	end of test	difference in %	allowable difference in %
I_{max} in Zone D	5698.9	5587.4	1.96%	10
Line 5 (H=0)	219.7	216.5	1.46%	10

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Change in vertical position of the cut-off line under the influence of heat : Test result in accordance with paragraph 3 of Annex 7 of the Regulation in milliradians (mrad) (maximum deviation measurement):

points on screen	sample no. 1	sample no. 2	maximum permissible
r_3	0.00	--	
r_{60}	-0.35	--	
$r_1 = \lvert r_3 - r_{60} \rvert$	0.35	--	2.0

Test results : passed / ~~failed~~

1.3. Color of light emitted

The coloring beam is obtained through : The CIE trichromatic coordinates of the light emitted by the front fog lamp are within the required colour boundaries in both instances.

Chromaticity coordinates	**Sample no.**		
	1		**2**
x	0.3112		0.3113
y	0.3169		0.3111
Tolerance area	Boundaries	W_{12} green boundary: y=0.150+0.640x W_{23} yellowish green boundary: y=0.440 W_{34} yellow boundary: x=0.5000 W_{45} reddish purple boundary y = 0.382 W_{56} purple boundary: y = 0.050 + 0.750 x W_{61} blue boundary: x = 0.310	
	Intersection points	W_1 x=0.310 y=0.348 W_2 x=0.453 y=0.440 W_3 x=0.500 y=0.440 W_4 x=0.500 y=0.382 W_5 x=0.443 y=0.382 W_6 x=0.310 y=0.283	

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

1.4. Lamps incorporating lenses of plastic material : The lamp manufacturer proved that the product had already passed the tests prescribed in paragraphs 3.1.- 3.5. of Annex 8 to this ECE-Regulation, or the equivalent tests pursuant to another Regulation.

With references to:
Test report No. : **GJW2024-3209**
issued by
CVC Testing Technology Co., Ltd.
No.3,Tiantaiyi Road,
Kaitai Avenue, Science City,
Guangzhou, China
Report date: August 15, 2024

Those tests need not to be repeated. Only the tests prescribed in appendix 1, table A8-2 were conducted.

Tests according to paragraph 3.7. in Annex 8 of the complete lamp incorporating a lens of plastic material : The lens of sample No. 1 was conditioned in accordance with the test described in paragraph 3.5.1.

photometric test results after conditioning (in cd)		
point	illumination measured	illumination required for Class F3
Line 2	72.2	≤ 195
Line 5	261.3	≤ 630.5

Test of adherence of coatings : The sample No.2 complies with the requirements mentioned paragraph 3.6.

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Variant 2

1.1. Results of photometric tests -Front fog lamp（Variant 2）

Temperature stability

Luminous intensity produced on the screen in cd						
Designated Point	illumination required (cd)		sample no.1		sample no. 2	
	Minimum	Maximum	1 minute	stability	1 minute	stability
H 0°/ V 2.5°D	2700	---	2892.0	2781.0	3218.0	3097.0

*The lamp was continued operation until photometric stability has occurred. The moment at which the photometry is stable is defined as the point in time at which the variation of the photometric value is less than 3 percent withi any 15 minutes period.

Results of photometric tests of the front fog lamps continue operation until photometric stability

Luminous intensity produced on the screen in cd						
No.	*Designated lines or zones*	*illumination required (cd)*		sample no.1	sample no. 2	To comply
		Minimum	*Maximum*			
1	Point 1**	---	85	8.0	12.8	all points
2	Point 2**	---	85	7.3	11.5	all points
3	Point 3**	---	85	16.4	26.5	all points
4	Point 4**	---	85	15.6	20.8	all points
5	Point 5**	---	85	8.7	10.7	all points
6	Point 6**	---	85	8.1	9.8	all points
7	Point 7**	---	85	15.2	17.5	all points
8	Point10**	---	85	14.4	18.2	all points
9	Point 8**	---	85	20.5	17.0	all points
10	Point 9**	---	85	21.7	17.2	all points
11	Line 1**	---	130	23.2	24.0	All line
12	Line 2**	---	150	30.8	28.4	All line
13	Line 3	---	245	62.0	54.4	All line
14	Line 4	---	360	115.1	90.8	All line
15	Line 5	---	485	141.3	149.5	All line
16	Line 6	2700	---	3029.0	2900.8	All line
17	Line 7	---	50% of max. on line 6****	1585.5	1502.4	All line
18	Line 8L and R***	1100	---	3459.7	2715.4	One or more points
19	Line 9L and R***	450	---	2102.5	2150.7	One or more points
20	Zone D	---	12000	4177.8	3532.7	Whole zone

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

* The co-ordinates are specified in degrees for an angular web with a vertical polar axis.
** See paragraph 5.5.2.4.
*** See paragraph 5.5.2.2.
**** The maximum value on line 6 of sample 1/sample 2 is **3203.1 / 3015.6** cd.

Test results : passed / ~~failed~~

1.2. Stability of photometric performance of front fog lamps in operation

Clean fog lamp : The device was operated for 12 hours as described in Annex 7 paragraph 2.1 of the Regulation, with each light source of the specified functions lit successively for the prescribed time.

The visual inspection after this test did not show any distortion, deformation, cracking or change in color of either the headlamp lens or the external lens.

photometric test results (in cd)				
points on screen	initial	end of test	difference in %	allowable difference in %
I_{max} in Zone D	4177.8	4039.8	3.30%	10
Line 5 (H=0)	110.8	106.9	3.52%	10

Dirty fog lamp : After preparation as prescribed in Annex 7 paragraph 2.1. of the Regulation, and confirmation that the illumination values have dropped to 15% to 20 % of the prior values, the head lamp was operated for 1 hour as described in Annex 7 paragraph 2.1.1., with each light source of the specified functions (driving beam / passing beam) lit successively for the prescribed time.

The visual inspection after this test did not show any distortion, deformation, cracking or change in color of either the headlamp lens or the external lens.

Photometric test results (in cd)				
points on screen	initial	end of test	difference in %	allowable difference in %
I_{max} in Zone D	4039.8	3983.5	1.29%	10
Line 5 (H=0)	106.9	105.1	1.68%	10

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Change in vertical position of the cut-off line under the influence of heat : Test result in accordance with paragraph 3 of Annex 7 of the Regulation in milliradians (mrad) (maximum deviation measurement):

points on screen	sample no. 1	sample no. 2	maximum permissible
r_3	0.00	--	
r_{60}	-0.35	--	
$r_1 = \lvert r_3 - r_{60} \rvert$	0.35	--	2.0

Test results : passed / ~~failed~~

1.3. Color of light emitted

The coloring beam is obtained through : The CIE trichromatic coordinates of the light emitted by the front fog lamp are within the required colour boundaries in both instances.

Chromaticity coordinates	**Sample no.**		
	1		**2**
x	0.4955		0.4943
y	0.4915		0.4898
Tolerance area	Boundaries	SY12 green boundary: y=1.290x-0.100 SY23 the spectral locus SY34 red boundary: y=0.138+0.580x SY45 yellowish white boundary: y=0.440 SY51 white boundary: y=0.940-x	
	Intersection points	SY1 x=0.454 y=0.486 SY2 x=0.480 y=0.519 SY3 x=0.545 y=0.454 SY4 x=0.521 y=0.440 SY5 x=0.500 y=0.440	

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

1.4. Lamps incorporating lenses of plastic material : The lamp manufacturer proved that the product had already passed the tests prescribed in paragraphs 3.1.- 3.5. of Annex 8 to this ECE-Regulation, or the equivalent tests pursuant to another Regulation.

With references to:
Test report No. : **GJW2024-3209**
issued by
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No.3,Tiantaiyi Road,
Kaitai Avenue, Science City,
Guangzhou, China
Report date : August 15, 2024

Those tests need not to be repeated. Only the tests prescribed in appendix 1, table A8-2 were conducted.

Tests according to paragraph 3.7. in Annex 8 of the complete lamp incorporating a lens of plastic material : The lens of sample No. 1 was conditioned in accordance with the test described in paragraph 3.5.1.

photometric test results after conditioning (in cd)		
point	illumination measured	illumination required for Class F3
Line 2	32.3	≤ 195
Line 5	148.5	≤ 630.5

Test of adherence of coatings : The sample No.2 complies with the requirements mentioned paragraph 3.6.

Test results : passed / ~~failed~~

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

Communication concerning the type approval **Appendix 2**

Class of the device : F3

1.	Trade name or mark of the device or system	: Custom Dynamics
2.	Manufacturer's name for the type of device or system	: FOG-SD-W/FOG-SD-Y
3.	Manufacturer's name and address	: SHENZHEN CARJERO TECHNOLOGY CO., LTD. Area A5-A7, Floor 3, Building 1, PengChengZhongJun COMPASS Innovation Park Houting community, Shajing Town, Shenzhen city, Guangdong
4.	If applicable, name and address of the manufacturer's representative	: ---
5.	Submitted for approval on	: July 15, 2025
6.	Technical service responsible for conducting approval tests	: TÜV NORD Mobilität GmbH & Co. KG IFM - Institut für Fahrzeugtechnik und Mobilität Schönscheidtstr. 28 45307 Essen Germany
7.	Date of report issued by that Service	: July 31, 2025
8.	Number of report issued by that Service	: CS149-A0-2025-05391
9.	Brief description	
9.1.	For Headlamps of Classes A and B	
9.1.1.	Category as described by the relevant marking (2)	: ---
9.1.2.	Number, category and kind of light source(s)	: ---
9.1.3.	Reference luminous flux used for the principal passing-beam (lm)	: ---
9.1.4.	Principal passing-beam operated at approximately (V)	: ---
9.1.5.	Measures according to paragraph 4.12. of this Regulation	: ---

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

9.1.6.	Number and specific identification code(s) of LED module(s) and for each LED module a statement whether it is replaceable or not	: ~~yes/no~~ (1)
9.1.7.	Number and specific identification code(s) of electronic light source control gear(s):	: ---
9.1.8.	Total objective luminous flux as described in paragraph 4.5.2.6. of this Regulation exceeds 2.00 103 lumens	: ~~yes/no/does not apply~~ (1)
9.1.9.	The adjustment of the cut-off has been determined at	: ~~10 m/25 m~~/~~does not apply~~ (1)
	The determination of the minimum sharpness of the 'cut-off' has been carried out at	: ~~10 m/25 m/does not apply~~ (1)
9.2.	For headlamps of Class D	
9.2.1.	Headlamp/system submitted for approval as type (3)	: ---

9.2.2. The passing beam light source may/may not (1) be lit simultaneously with the driving beam light source and/or another reciprocally incorporated headlamp.

9.2.3.	The rated voltage of the device is	: ---
9.2.4.	Number, category and kind of light source(s)	: ---

9.2.4.1. If more than one objective luminous flux value is specified: ---

	Objective luminous flux value used for the principal passing beam	: ---

9.2.4.2. If more than one objective luminous flux value is specified:

	Objective luminous flux value used for the driving beam	: ---
9.2.5.	Trade name and identification number of separate ballast(s) or part(s) of ballast(s)	: ---

9.2.6. The adjustment of the 'cut-off' has been determined at 10 m/25 m (1)

The determination of the minimum sharpness of the 'cut-off' has been carried out at 10 m/25 m (1)

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

9.2.7.	Number and specific identification code(s) of LED module(s)	: ---
9.2.8.	Distributed lighting system with one common gas-discharge light source	: ~~yes/no~~ (1)
9.2.9.	Remarks (if any)	: ---
9.2.10.	Measures according to paragraph 4.12. of this Regulation	: ---
9.3.	For AFS – Systems	
9.3.1.	Category as described by the relevant marking (4)	: ---
9.3.2.	Number, category and kind of light source(s)	: ---
9.3.2.1.	Number and specific identification code(s) of LED module(s) and for each LED module a statement whether it is replaceable or not	: ~~yes/no~~ (1)
9.3.2.2.	Number and specific identification code(s) of electronic light source control gear(s), if applicable	: ---
9.3.2.3.	Total objective luminous flux as described in paragraph 4.5.2.6. of this Regulation exceeds 2,000 lumen	: ~~yes/no~~ (1)
9.3.3.	(a) Indications according to paragraph 5.3.5.1. of this Regulation (which lighting unit(s) provide a 'cut-off' as defined in Annex 5 of this Regulation, that projects into a zone extending from 6 degrees left to 4 degrees right and upwards from a horizontal line positioned at 0.8 degree down)	: ---
	(b) The adjustment of the 'cut-off' has been determined at ~~10 m/25 m~~ (1)	
	(c) The determination of the minimum sharpness of the 'cut-off' has been carried out at ~~10 m/25 m~~ (1)	
9.3.4.	The vehicle(s) for which the system is intended as original equipment	: ---

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

9.3.5. Whether approval is sought for a system which is not intended to be included as part of the approval of a vehicle type according to UN Regulation No. 48 : ~~yes/no~~ (1)

9.3.5.1. If in the affirmative: information sufficient to identify the vehicle(s) for which the system is intended : ---

9.3.6. Indications according to paragraph 5.3.5.2. of this Regulation (which class E passing beam mode(s), if any, comply with a 'data set' of Table 14 of this Regulation) : ---

9.3.7. Whether approval is sought for a system intended to be installed on vehicles only, which provide means for a stabilization/limitation of the system's supply : ~~yes/no~~ (1)

9.3.8. The adjustment of the 'cut-off' has been determined at ~~10 m/25 m~~ (1)

The determination of the minimum sharpness of the 'cut-off' has been carried out at ~~10 m/25 m~~ (1)

9.3.9. The system is designed to provide passing beams of (5)

9.3.9.1. Class C ☐ Class V ☐ Class E ☐ Class W ☐

9.3.9.2. With the following mode(s), identified by the designation(s), if it applies (6)

Mode No. C	Mode No. V …	Mode No. E …	Mode No. W …
Mode No. C …	Mode No. V …	Mode No. E …	Mode No. W …
Mode No. C …	Mode No. V …	Mode No. E …	Mode No. W …

9.3.9.3. Where the lighting units indicated below are energized (5) (6) (7) for the mode No. …

(a) If no bend lighting applies:

Left side	No 1 ☐	No 3 ☐	No 5 ☐	No 7 ☐	No 9 ☐	No 11 ☐
Right side	No 2 ☐	No 4 ☐	No 6 ☐	No 8 ☐	No 10 ☐	No 12 ☐

(b) If bend lighting of category 1 applies:

Left side	No 1 ☐	No 3 ☐	No 5 ☐	No 7 ☐	No 9 ☐	No 11 ☐
Right side	No 2 ☐	No 4 ☐	No 6 ☐	No 8 ☐	No 10 ☐	No 12 ☐

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

(c) If bend lighting of category 2 applies:

Left side No 1 ☐ No 3 ☐ No 5 ☐ No 7 ☐ No 9 ☐ No 11 ☐

Right side No 2 ☐ No 4 ☐ No 6 ☐ No 8 ☐ No 10 ☐ No 12 ☐

Note: Indications according to paragraph (a) through (c) above are needed additionally for each further mode.

9.3.9.4. The lighting units marked below are energized, when the system is in its neutral state (5) (6) (7)

Left side No 1 ☐ No 3 ☐ No 5 ☐ No 7 ☐ No 9 ☐ No 11 ☐

Right side No 2 ☐ No 4 ☐ No 6 ☐ No 8 ☐ No 10 ☐ No 12 ☐

9.3.9.5. The lighting units marked below are energized, when the system is in its traffic change function (5) (6) (7)

(a) If no bend lighting applies:

Left side No 1 ☐ No 3 ☐ No 5 ☐ No 7 ☐ No 9 ☐ No 11 ☐

Right side No 2 ☐ No 4 ☐ No 6 ☐ No 8 ☐ No 10 ☐ No 12 ☐

(b) If bend lighting of category 1 applies:

Left side No 1 ☐ No 3 ☐ No 5 ☐ No 7 ☐ No 9 ☐ No 11 ☐

Right side No 2 ☐ No 4 ☐ No 6 ☐ No 8 ☐ No 10 ☐ No 12 ☐

(c) If bend lighting of category 2 applies:

Left side No 1 ☐ No 3 ☐ No 5 ☐ No 7 ☐ No 9 ☐ No 11 ☐

Right side No 2 ☐ No 4 ☐ No 6 ☐ No 8 ☐ No 10 ☐ No 12 ☐

9.3.10. The system is designed to provide a main beam (5) (6)

9.3.10.1. Yes ☐ No ☐

9.3.10.2. With the following mode(s), identified by the designation(s), if it applies:---

Main beam mode No M 1

Main beam mode No M …

Main beam mode No M …

Type : FOG-SD-W/FOG-SD-Y
Manufacturer : SHENZHEN CARJERO TECHNOLOGY CO., LTD.

9.3.10.3. Where the lighting units marked below are energized, for mode No. …[5] [6] [7]

(a) If no bend lighting applies:

Left side	No 1 ☐	No 3 ☐	No 5 ☐	No 7 ☐	No 9 ☐	No 11 ☐
Right side	No 2 ☐	No 4 ☐	No 6 ☐	No 8 ☐	No 10 ☐	No 12 ☐

(b) If bend lighting of category 1 applies:

Left side	No 1 ☐	No 3 ☐	No 5 ☐	No 7 ☐	No 9 ☐	No 11 ☐
Right side	No 2 ☐	No 4 ☐	No 6 ☐	No 8 ☐	No 10 ☐	No 12 ☐

Note: Indications according to paragraph (a) through (b) above are needed additionally for each further mode.

9.3.10.4. The lighting units marked below are energized, when the system is in its neutral state [5] [6] [7]

Left side	No 1 ☐	No 3 ☐	No 5 ☐	No 7 ☐	No 9 ☐	No 11 ☐
Right side	No 2 ☐	No 4 ☐	No 6 ☐	No 8 ☐	No 10 ☐	No 12 ☐

9.3.10.5. The system is designed to provide an adaptation of the driving beam for: [5]

Right-Hand and Left-Hand traffic : Yes ☐ No ☐

Right-Hand traffic only : Yes ☐ No ☐

Left-Hand traffic only : Yes ☐ No ☐

9.4. For headlamps of Classes AS, BS, CS, DS and ES

9.4.1. Category as described by the relevant marking [8] : ---

9.4.2. Number, category and kind of light source(s), if any : ---

9.4.3. Number and specific identification code(s) of LED modules and for each LED module a statement whether it is replaceable or not : ~~yes/no~~ [1]

9.4.4. Number and specific identification code(s) of electronic light source control gear(s), if any : ---

9.4.5. The determination of 'cut-off' sharpness: ~~yes/no~~ [1]

If yes, it was carried out at 10 m/25 m [1]

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9.4.6.	Trade name and identification number of separate ballast(s) or part(s) of ballast(s)	: ---
9.4.7.	The passing beam light source ~~may/may not~~ (1) be lit simultaneously with the driving beam light source and/or another reciprocally incorporated headlamp	
9.4.8.	The minimum bank angle(s) to satisfy the requirement of paragraph 5.4.5.2., if any	
9.4.9.	Primary Driving Beam	~~yes/no~~ (1)
	Secondary Driving Beam	~~yes/no~~ (1)
	The Secondary Driving Beam shall only be operated together with a passing beam or a primary driving beam.	
9.5.	For front fog lamps Class F3	
9.5.1.	Class as described by the relevant marking (F3, F3/, F3PL, F3/PL)	: F3 PL
9.5.2.	Number, category and kind of light source(s)	: non-replaceable light source, One LED module of 1 LED
9.5.3.	LED module: yes/~~no~~ (1) and for each LED module a statement whether it is replaceable or not	: ~~yes/~~no (1)
9.5.4.	LED module specific identification code	: ---
9.5.5.	Application of electronic light source control gear	: ~~yes~~/no (1)
	Supply to the light source	: ---
	Specification of the light source control gear	: ---
	Input voltage (9) (10)	---
	In the case of an electronic light source control gear not being part of the lamp:	
	Output signal specification	: ---
9.5.6.	Colour of light emitted	: white/selective yellow (1)
9.5.7.	Luminous flux of the light source (see paragraph 4.5.2.6.)	
	greater than 2,000 lumens	: ~~yes~~/no (1)

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9.5.8.	Luminous intensity is variable	: ~~yes~~/no (1)
9.5.9.	The determination of the cut-off gradient (if measured) was carried out at ~~10 m/25 m~~ (1)	
9.6.	For cornering lamps	
9.6.1.	Number, category and kind of light source(s) (11)	: ---
9.6.2.	Voltage and wattage	: ---
9.6.3.	Light source module	: ~~yes/no~~ (1)
9.6.4.	Light source module specific identification code	: ---
9.6.5.	Application of an electronic light source control gear: ---	
	(a) Being part of the lamp	: ~~yes/no~~ (1)
	(b) Being not part of the lamp	: ~~yes/no~~ (1)
9.6.6.	Input voltage supplied by an electronic light source control gear	: ---
9.6.7.	Electronic light source control gear manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body)	: ---
9.6.8.	Geometrical conditions of installation and relating variations, if any	: ---
10.	Approval mark(s) position(s)	: marked on the lens
11.	Reason(s) for extension of approval (if applicable)	: ---
12.	Approval	granted/~~extended~~/~~refused~~/~~withdrawn~~ (1)

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(1) Strike out what does not apply.
(2) Indicate the appropriate marking selected from the list below:

C, C, C, R, R PL, CR, CR, CR, C/R, C/R, C/R, C/, C/, C/,

C, PL, C PL, C PL, CR PL, CR PL, CR PL, C/R PL, C/R PL, C/R PL,

C/PL, C/PL, C/PL,

HC, HC, HC, HR, HR PL, HCR, HCR, HCR, HC/R, HC/R, HC/R, HC/, HC/, HC/,

HC PL, HC PL, HC PL, HCR PL, HCR PL, HCR PL, HC/R PL, HC/R PL, HC/R PL,

HC/PL, HC/PL, HC/PL,

(3) Indicate the appropriate marking selected from the list below:

DC DC/, DC/PL, DR, DCR, DC/R, DC PL, DR PL, DCR DC/R
DC, DCR, DC/R, DC/, DC PL, DCR PL, DC/R PL, DC/PL, PL, PL,

DC, DCR, DC/R, DC/, DC PL, DCR PL, DC/R PL, DC/PL,

(4) Indicate the appropriate marking as foreseen according to this Regulation for each installation unit or assembly of installation units.
(5) Mark with an X where applicable.
(6) To be extended if more modes are provided.
(7) To be continued if more units are provided.
(8) Indicate the appropriate marking selected from the list below:

C-AS,	C-BS,	R-BS,	CR-BS,	C/-BS,	C/R-BS,
	C-BS PL,	R-BS PL,	CR-BS PL,	C/-BS PL,	C/R-BS PL,
WC-CS,	WC-DS,	WR-CS,	WR-DS,	WCR-CS,	WCR-DS,
WC/-CS,	WC/-DS,	WC/R-CS,	WC/R-DS,	WC-CS PL,	
WC-DS PL,	WR-CS PL,	WR-DS PL,	WCR-CS PL,	WCR-DS PL,	
WC/CS PL,	WC/-DS PL,	WC/R-CS PL,	WC/R-DS PL,		
WC+-CS,	WC+-DS,	WC+R-CS,	WC+R-DS,	C+-BS,	C+R-BS,
WC+-CS PL,	WC+-DS PL,	WC+R-CS PL,	WC+R-DS PL,	C+-BS PL,	C+R-BS PL,
WC-ES,	WR-ES,	WCR-ES,	WC/-ES,	WC/R-ES,	WC-ES PL,
WR-ES PL,	WCR-ES PL,	WC/-ES PL,	WC/R-ES PL		
WC+-ES,	WC+R-ES,	WC+-ES PL,	WC+R-ES PL		

(9) The voltage specifications shall include the tolerances or voltage range as specified by the manufacturer and verified by this approval.
(10) The parameters of the input voltage including duty cycle, frequency, pulse shape and peak voltage shall be included.
(11) For cornering lamps with non-repleable light sources indicate the number and total wattage of the light sources used.

Application date : July 15, 2025

1. Specification data

Type		FOG-SD-W/FOG-SD-Y	
Variants		Variant 1: FOG-SD-W (Clear outer lens) Variant 2: FOG-SD-Y (Yellow outer lens)	
Function		Front fog lamp	
Emitted colour		White / Selective yellow	
Rated	Voltage	12V	
	Wattage	13W	
Applicable Regulation (UN)		R149.00 Category F3 PL	
Number and category of light source		One LED module of 1 LED	
		Non-replaceable	
Location of marking	Rated voltage/ Rated wattage	Marked on housing	
	Trade mark	**Custom Dynamics**	Marked on lens
	Approval mark	Marked on lens	

2. Construction and material

Construction	Material	Remarks
Outer lens	PC Type: Panlite L-1250Z 100-K Manufacturer: Teijin Polycarbonate China Ltd Coating: UVHC3000	Variant 1: Clear
		Variant 2: Yellow, without pattern
Inner lens	PC	Clear
Reflector	PC	Aluminum coating
Housing	Aluminium	Black
Electrical wiring	Copper covered with insulation	-

3. Apparent surface/mm

Function	Upside	Downside	Inside	Outside
Front fog lamp	15	15	21	21

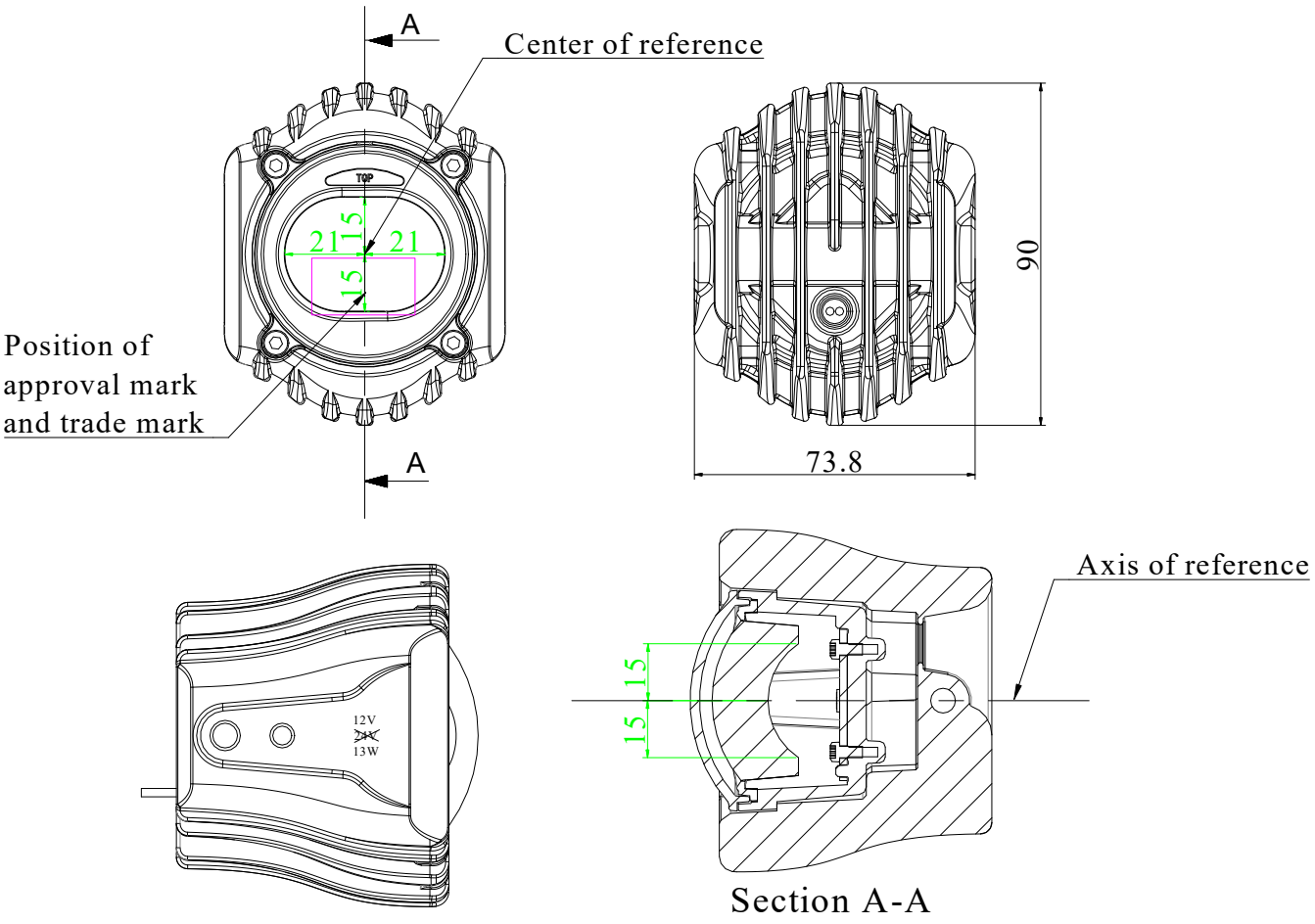
4. Remark

4.1. Application of an electronic light source control gear: No Input voltage supplied by an electronic light source control gear: --
4.2. Only for limited mounting height of equal to or less than 750 mm above the ground: No

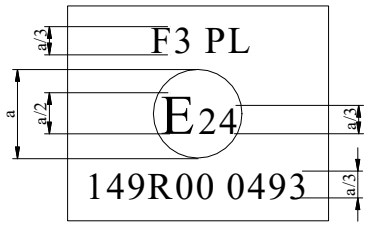
5. Name and address of manufacturer: SHENZHEN CARJERO TECHNOLOGY CO., LTD.
Area A5-A7, Floor 3, Building 1, PengChengZhongJun COMPASS Innovation Park Houting community, Shajing Town, Shenzhen city, Guangdong

6. Name and address of representative of manufacturer: Not applicable

This information document consists of **3** pages.

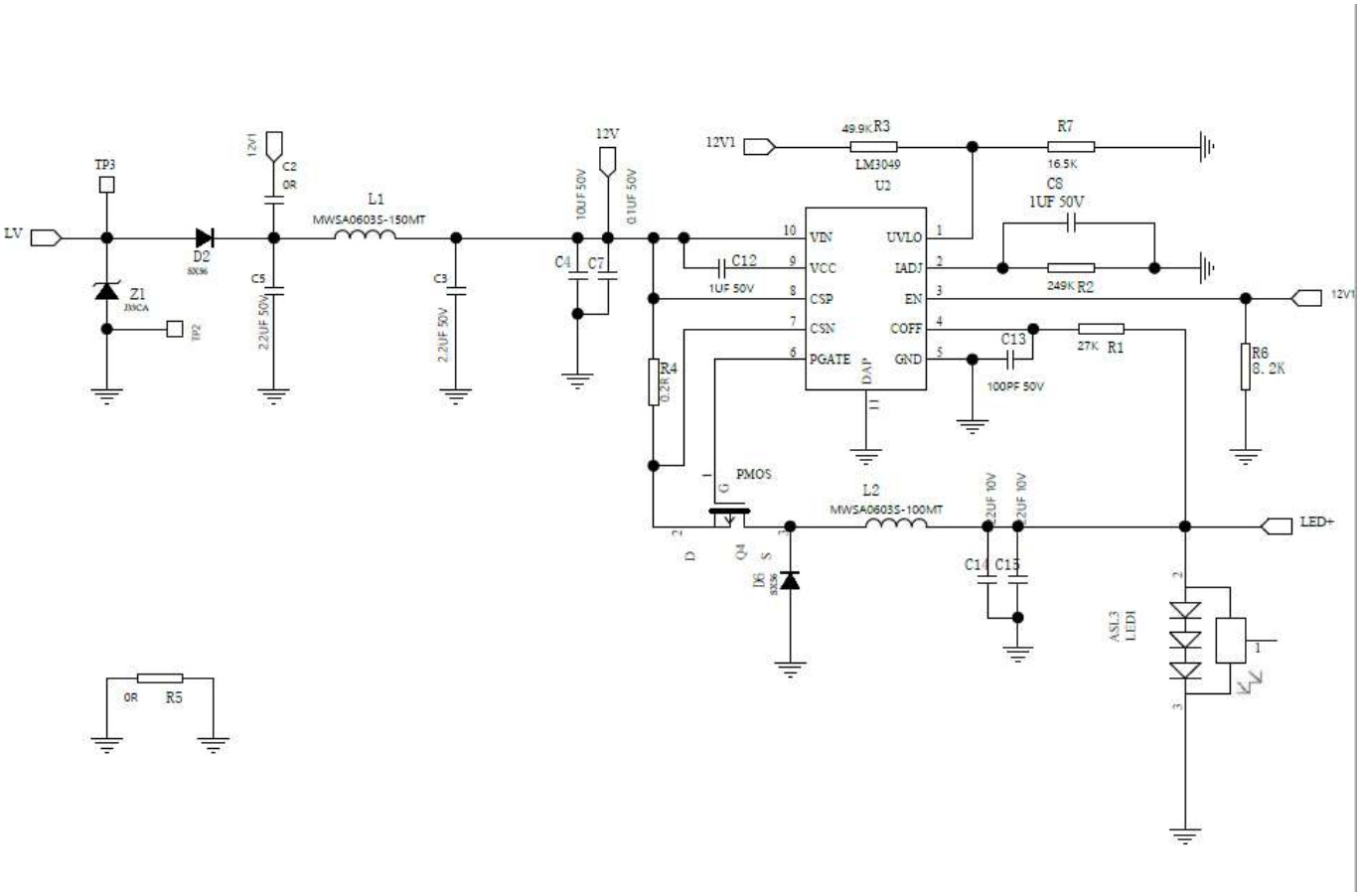


Approval mark



a >= 5mm

CIRCUIT DIAGRAM



Front fog lamp: One LED module of 1 LED, 12V 13W

Non-replaceable