

ECE TYPE-APPROVAL CERTIFICATE



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~~Approval withdrawn~~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*149R00/07*0741*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:



2. Manufacturer's name for the type of device or system:

N90F/FL28W

3. Manufacturer's name and address:

**Guangzhou New View Electrical & Lighting Co., Ltd.
 Floor 1-4, Building 1, No.4, Longkou Industrial Road, Huashan Town, Huadu District, Guangzhou City, Guangdong Province, 510880, China.**

4. If applicable, name and address of manufacturer's representative:

N/A

5. Submitted for approval on:

23.11.2023

6. Technical Service responsible for conducting approval tests:

**CETOC Technical Service srl
 Via della Bufalotta, 374,
 00139 Roma**

7. Date of report issued by that service:

20.11.2023

8. Number of report issued by that service:

CN-112-17-168-COM23-09167-IR

¹ Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in the Regulation).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.

Approval No: E24*149R00/07*0741*00

9. Brief description:

9.1. For Headlamps of Classes A and B¹

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 2.00 10³ 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 apply¹ *N/A*

The determination of the minimum sharpness of the "cut-off" has been carried out at: 10 m/25 m/does not apply¹ *N/A*

9.2. For headlamps of Class D

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

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, DCR, DC/, DC PL, DCR PL, DC/R DC/PL, PL, PL,
 → → → → → PL, →
 →
 DC, DCR, DC/R, DC/, DC PL, DCR PL, DC/R DC/PL,
 ↔ ↔ ↔ ↔ ↔ 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/No¹ *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 marking⁵ *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/no¹ *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/no¹ *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 m¹ *N/A*
- (c) The determination of the minimum sharpness of the "cut-off" has been carried out at 10 m / 25 m¹ *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/no¹ *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/no¹ *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 applies¹⁴
- | | | | |
|------------|------------|------------|------------|
| 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 |

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 each LED module a statement whether it is replaceable or not: yes/no¹ *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 / no¹ *N/A*

If yes, it was carried out at 10 m / 25 m¹

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 not¹ 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 / no¹ *N/A*

Secondary Driving Beam: yes / no¹ *N/A*

The Secondary Driving Beam shall only be operated together with a passing beam or a primary driving beam. *N/A*

⁹ Indicate the appropriate marking selected from the list below:

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

9.5.2. Number, category and kind of light source(s):

**1 LED module with 2 LEDs,
non-replaceable**

9.5.3 LED module: yes/~~no~~¹ and for each LED module a statement whether it
is replaceable or not: yes/~~no~~¹

Yes, non-replaceable

9.5.4. LED module specific identification code:

N/A

9.5.5. Application of electronic light source control gear:¹⁰ yes/no¹

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~~⁽¹⁾

9.5.7. Luminous flux of the light source (see paragraph 4.5.2.6.)
greater than 2,000 lumens: ~~yes~~/no¹

No

9.5.8. Luminous intensity is variable: ... ~~yes~~/no¹

No

9.5.9. The determination of the cut-off gradient (if measured) was carried
out at ~~10 m~~/ 25 m¹

25m

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/no¹ *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/no¹

(b) Being not part of the lamp yes/no¹

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*

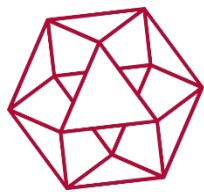
14. Date: *7th February, 2024*

15. Signature:



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.

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



NSAI

Approval No: **E24*149R00/07*0741*00**

Index to the Information Package

Date of issue: **7th February, 2024**

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): **CN-112-17-168-COM23-09167-IR**

- date of issue: **20.11.2023**

- date of latest amendment: **N/A**

3. Information document

- numbers(s): **N90F/FL28W -00**

- date of issue: **09.11.2023**

- date of latest amendment: **N/A**

Documentation: **15 pages**



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

A: Additional conditions:

1. The lamp, Type *N90F/FL28W* 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

Illumination Devices (Lamps) For Power-Driven Vehicles And Their Trailers

0. Legislation:

0.1. Requirements according to : UNECE Regulation 149.00 to Supplement 7

1. General

1.1. Reason for Inspection Report : New approval / ~~Extension of approval~~ / ~~Test report only~~ / ~~COP~~
1.2. Manufacturer's Representative(s) : No attendance
1.3. CETOC TS Representative(s) : Xiaoli Li
1.4. Location of Test : GuangZhou ShunTai Quality Technical Service Co., Ltd.
Room 206A, 2F, 4# Plant, No.63 Punan Road, Huangpu District,
Guangzhou, China, 510760
1.5. Data of test : 05/11/2023-08/11/2023

2. Manufacturer Details

2.1. Make :  NVEL,
2.2. Type : N90F/FL28W
2.3. Variant/Version : N90F, FL28W
2.4. Category : F3
2.5. Name and Address of manufacturer : Guangzhou New View Electrical & Lighting Co., Ltd.
Floor 1-4, Building 1, No.4, Longkou Industrial Road, Huashan Town,
Huadu District, Guangzhou City, Guangdong Province, 510880,
China.

3. Conclusion:

3.1. Final conclusion of the inspection: The above mentioned type was tested in accordance with the above mentioned legislation and was found to comply in all respects. This Inspection report relates only to the items tested.

Signature: :

Name: : Xiaoli Li

Position: : Type Approval Engineer

Place and date: : Guangzhou China, 20/11/2023

Massimo Peraboni

Tech. Mgr.

Roma, 20/11/2023

4. List of appendixes:

Appendix Nr.	Page Nr.	Subject
Appendix 1	2	: Test report history
Appendix 2	2	: General specification
Appendix 3	5	: Inspection results

APPENDIX 1 - TEST REPORT HISTORY

List this report and previous reports, with extension details.

Inspection Report Number	Reason for Extension	Date of Issue
CN-112-17-168-COM23-09167-IR	N/A	20/11/2023

APPENDIX 2 – GENERAL SPECIFICATION

1. **Worst Case Rationale** : For the two variants, the difference between them is the model name. Model N90F was tested.
2. **Significant Interpretations, Alternative Test Methods, New Technologies** : N/A
3. **Summary of test results** :
 - 3.1. Applicability

	PASS	FAIL	N/A	COVERED PREVIOUS EXTENSION	If covered previous extension see approval/Report Nr.
Headlamps emitting a driving-beam and/or an asymmetrical passing-beam for vehicles of categories L, M, N and T	☐	☐	☒	☐	
Adaptive front-lighting systems (AFS) for vehicles of categories M and N	☐	☐	☒	☐	
Headlamps emitting a driving-beam and/or a symmetrical passing-beam for vehicles of categories L and T	☐	☐	☒	☐	
Front fog lamps for vehicles of categories L3, L4, L5, L7, M, N and T	☒	☐	☐	☐	
Cornering lamps for vehicles of categories M, N and T	☐	☐	☒	☐	

4. Component Specification

For front fog lamps Class F3

Class as described by the relevant marking :	~~F3, F3/, F3PL, F3/PL~~
Number, category and kind of light source(s) :	1LED module with 2 x LED
LED module :	yes
and for each LED module a statement whether it is replaceable or not :	no
LED module specific identification code :	--
Application of electronic light source control gear :	no
Colour of light emitted :	white
Luminous flux of the light source (see paragraph 4.5.2.6.) greater than 2,000 lumens :	no
Luminous intensity is variable :	no
The determination of the cut-off gradient (if measured) was carried out at :	~~10 m~~ - 25 m

Strike out what does not apply.

Lamp	Category of Vehicle	Category	Traffic direction	Light sources number and category	Replaceability *	Light source module specific identification code (if applicable)
Headlamp (emitting a driving beam)	~~L~~ ~~M~~ ~~N~~ ~~T~~	~~Class A~~ ~~Class B~~ ~~Class D~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Headlamp (emitting an asymmetrical passing beam)	~~L~~ ~~M~~ ~~N~~ ~~T~~	~~Class A~~ ~~Class B~~ ~~Class D~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Adaptive front lighting systems (AFS)	~~M~~ ~~N~~		~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Headlamp (emitting a driving beam)	~~L~~ ~~T~~	~~Class AS~~ ~~Class BS~~ ~~Class CS~~ ~~Class DS~~ ~~Class ES~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Headlamp (emitting a symmetrical passing beam)	~~L~~ ~~T~~	~~Class BS~~ ~~Class CS~~ ~~Class DS~~ ~~Class ES~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Front fog lamp	~~L3~~ ~~L4~~ ~~L5~~ ~~L7~~ ~~M~~ ~~N~~ ~~T~~	~~Class F3~~ ~~Class B~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--
Cornering lamp	~~M~~ ~~N~~ ~~T~~	~~K~~	~~Right hand traffic~~ ~~Left hand traffic~~ ~~Right hand and Left hand traffic~~	--	~~Replaceable~~ ~~Non-replaceable~~	--



CETOC TS

CETOC Technical Service srl
Via della Bufalotta, 374,
00139 Roma

Inspection Report Nr.:CN-112-17-165-COM23-09164-IR
Manufacturer: Guangzhou New View Electrical &
Lighting Co., Ltd.
Type: N90F/FL28W

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ISP N° 0184 E

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC

Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

5. Facility and Equipment Checks

- 5.1. Calibration certificates checked and valid, recorded in the following table : Conform
- 5.2. All instruments are equipped with identification label : Yes
- 5.3. Calibration certificates are complete of calibration-chain with detailed information regarding primary used. : Yes

Description	Serial number or Certificate Nr.	Calibration due date*
Automotive and Signal Goniophotometers	CN 2GB23062713337-0008	29/06/2024
Lux Illuminance Photometer	CN 1GA23062713337-0072	29/06/2024
High Accuracy Array Spectroradiometer	CN 2GB23062713337-0013	29/06/2024
DC Power Supply	CN 2GB23062713337-0017	29/06/2024
UV-VIS-near IR Spectrophotocolormeter	CN 2GB23062713337-0026	29/06/2024

*Specify calibrated date + (interval) or calibration due date.

APPENDIX 3 – INSPECTION RESULTS

		PASS	FAIL	N/A
	MARKING			
3.	Marking	☒	☐	☐
4.	GENERAL TECHNICAL REQUIREMENTS			
	Lamps submitted for approval shall conform to the requirements set forth in paragraphs 4 and 5. The requirements contained in sections 5 "General specifications" and 6 "Individual specifications" (and in the Annexes referenced in the said sections) of UN Regulations No. 48, 53, 74 or 86, and their series of amendments in force at the time of application for the lamp type approval shall apply to this Regulation.	☒	☐	☐
4.1	Vibration endurance	☒	☐	☐
4.3	Adjusting device	☒	☐	☐
	(a) UN Regulation No. 37, or	☐	☐	☒
	(b) UN Regulation No. 99, or	☐	☐	☒
	(c) UN Regulation No. 128,	☐	☐	☒
4.5.1.2	Front fog lamps, irrespective of whether the light sources can be replaced or not, shall only be equipped with one or more light sources approved according to:			
	And/or, one or more LED modules where the requirements of Annex 9 shall apply; compliance with these requirements shall be tested.	☒	☐	☐

		The design of the device is such that the light source(s) can be fixed in no other position but the correct one.	☐	☐	☒
4.5.2.2	Replaceable light sources	The light source fits easily into the front fog lamp.	☐	☐	☒
		The light source's holder is conform to the characteristics given in IEC Publication 60061	☐	☐	☒
4.5.2.6.	In case of front fog lamps with light source(s) having a total objective luminous flux that exceeds 2,000 lumens, a reference shall be made in the communication form in Annex 1.		☐	☐	☒

LED MODULES(ANNEX 9)

LED modules are so designed as to be, and to remain in good working order when in normal use. They moreover exhibit no fault in design or manufacture.

☒ ☐ ☐

LED module(s) shall be tamperproof.

The design of removable LED module(s) is such that:

After removal and replacement of the module the photometric requirements of the headlamp are still met.

☐ ☐ ☒

Non-identical LED modules within the same lamp housing cannot be interchanged.

☐ ☐ ☒

The LED(s) on the LED module are equipped with suitable fixation elements.

☒ ☐ ☐

The fixation elements are strong and firmly secured to the light source(s) and the LED module.

☒ ☐ ☐

Red content

Red content: $k_{red} = 0.072 \geq 0.05$

☒ ☐ ☐

UV-radiation

UV-radiation: $k_{UV} = 4.940 \times 10^{-11} \leq 10^{-5} \text{ W/lm}$

☒ ☐ ☐

Total objective luminous flux

Front fog lamp:

☒ ☐ ☐

Temperature stability

Test Point	Luminous intensity I(cd)					
	Value after 1 minute	Value after phot. stability	$I_{1 \text{ minute}} / I_{\text{stabilization}}$			
	$I_{1 \text{ minute}}$	$I_{\text{stabilization}}$				
0°H (Horizontal) – 2.5°D (vertical)	3453	3319	1.040	☒	☐	☐

Colour

WHITE ZONE:

Limit towards the blue:	$x \geq 0.310$
Limit towards the yellow:	$x \leq 0.500$
Limit towards the green:	$y \leq 0.150 + 0.640x$
Limit towards the green:	$y \leq 0.440$
Limit towards the purple:	$y \geq 0.050 + 0.750x$
Limit towards the red:	$y \geq 0.382$

Chromatic co-ordinates	Colour after 1 minute	Colour after photometric stabilization
x	0.3142	0.3141
y	0.3319	0.3318
z	0.3539	0.3541

☒ ☐ ☐

The sample tested fulfils with the colorimetric specifications defined in the present Regulation.

☒ ☐ ☐

5.5. TECHNICAL REQUIREMENTS CONCERNING FRONT FOG LAMPS OF THE CLASS F3

CUT-OFF AIMING

Measurement distance

~~10 meters *~~

25 meters *

Strike out what does not apply

☒ ☐ ☐

The beam produces on the 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.

☒ ☐ ☐

In the case that visual aim leads to problems or ambiguous positions, the instrumental method as specified below shall be applied:

☐ ☐ ☒

PHOTOMETRIC SPECIFICATIONS

Luminous intensity values (calculation) after one minute (LED module)

Designated LINES or ZONES	Luminous intensity I(cd)		I(cd) required
	SAMPLE L	SAMPLE R	
Point 1	7.687	7.948	I(cd) ≤ 85 cd (all points)
Point 2	15.33	16.37	
Point 3	15.39	15.78	
Point 4	17.16	17.60	
Point 5	60.72	62.52	
Point 6	57.27	59.25	
Point 7	21.59	22.33	
Point 8	29.60	30.44	
Point 9	25.69	26.45	
Point 10	14.54	15.13	



CETOC TS

CETOC Technical Service srl
Via della Bufalotta, 374,
00139 Roma

Inspection Report Nr.:CN-112-17-165-COM23-09164-IR
Manufacturer: Guangzhou New View Electrical &
Lighting Co., Ltd.
Type: N90F/FL28W

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ISP N° 0184 E

Membro degli Accordi di Mutuo Riconoscimento
EA, IAF e ILAC

Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

Line 1	79.51	81.95	$I(\text{cd}) \leq 130 \text{ cd}$ (all line)
Line 2	111.8	115.4	$I(\text{cd}) \leq 150 \text{ cd}$ (all line)
Line 3	162.1	163.8	$I(\text{cd}) \leq 245 \text{ cd}$ (all line)
Line 4	353.4	355.4	$I(\text{cd}) \leq 360 \text{ cd}$ (all line)
Line 5	391.1	405.3	$I(\text{cd}) \leq 485 \text{ cd}$ (all line)
Line 6	2871	2970	$I(\text{cd}) \geq 2700 \text{ cd}$ (all line)
Maximum line 6	3057	3151	----
Line 7	1229	1202	$I(\text{cd}) < 50\%$ of maximum on line 6 (all line)
Line 8L	3202	3313	$I(\text{cd}) \geq 1100 \text{ cd}$ (one or more points)
Line 8R	2766	2870	
Line 9L	1581	1624	$I(\text{cd}) \geq 450 \text{ cd}$ (one or more points)
Line 9R	1690	1750	
Zone D	6879	7103	$I(\text{cd}) \leq 12000 \text{ cd}$ (whole zone)

Luminous intensity values measured after photometric stabilization (LED module or filament light sources)

Designated LINES or ZONES	Luminous intensity $I(\text{cd})$		$I(\text{cd})$ required
	SAMPLE L	SAMPLE R	
Point 1	7.639	7.792	$I(\text{cd}) \leq 85 \text{ cd}$ (all points)
Point 2	15.73	16.04	
Point 3	15.17	15.47	
Point 4	16.92	17.26	
Point 5	60.09	61.29	
Point 6	56.95	58.09	
Point 7	21.46	21.89	
Point 8	29.26	29.85	
Point 9	25.42	25.93	
Point 10	14.54	14.83	
Line 1	78.77	80.35	$I(\text{cd}) \leq 130 \text{ cd}$ (all line)
Line 2	110.9	113.1	$I(\text{cd}) \leq 150 \text{ cd}$ (all line)
Line 3	157.4	160.5	$I(\text{cd}) \leq 245 \text{ cd}$ (all line)
Line 4	348.0	350.2	$I(\text{cd}) \leq 360 \text{ cd}$ (all line)



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Line 5	389.6	397.4	$I(cd) \leq 485$ cd (all line)
Line 6	2855	2912	$I(cd) \geq 2700$ cd (all line)
Maximum line 6	3029	3090	----
Line 7	1155	1178	$I(cd) < 50\%$ of maximum on line 6 (all line)
Line 8L	3184	3248	$I(cd) \geq 1100$ cd (one or more points)
Line 8R	2759	2814	
Line 9L	1561	1592	$I(cd) \geq 450$ cd (one or more points)
Line 9R	1682	1716	
Zone D	6827	6964	$I(cd) \leq 12000$ cd (whole zone)

COLORIMETRIC SPECIFICATIONS

WHITE ZONE:

Limit towards the blue:	$x \geq 0.310$
Limit towards the yellow:	$x \leq 0.500$
Limit towards the green:	$y \leq 0.150 + 0.640x$
Limit towards the green:	$y \leq 0.440$
Limit towards the purple:	$y \geq 0.050 + 0.750x$
Limit towards the red:	$y \geq 0.382$

Trichromatic coordinates	SAMPLE L	SAMPLE R
x	0.3576	0.3575
y	0.3321	0.3322
z	0.3103	0.3103

Test result: The samples tested FULFIL with the colorimetric specifications defined in the present Regulation.

TEST FOR STABILITY OF PHOTOMETRIC PERFORMANCE (Annex 7)

CLEAN HEADLAMP

The device shall be operated for 12 hours as described in paragraph 2.1.1. and checked as prescribed in paragraph 2.1.2.

TEST RESULTS:

Visual inspection (no distortion, deformation, cracking or change in colour of either the headlamp lens or the external lens).

PASS FAIL N/A

☒ ☐ ☐

Point in the measure screen	Luminous intensities I(cd)	
	Previous values to the test	Values after the test
Line 5 – point H: 0°	389.6	380.3
I _{max} (Zone D)	6827	6758

Conclusion: The 10% of discrepancy allowed between the values measured prior to the test and the values measured after the test is complied.

DIRTY HEADLAMP

The headlamp has been prepared in accordance with paragraph 2.2.1.

TEST RESULTS:

Visual inspection (no distortion, deformation, cracking or change in colour of either the headlamp lens or the external lens).

PASS FAIL N/A

☒ ☐ ☐

Point in the measure screen	Luminous intensities I(cd)	
	Previous values to the test	Values after the test
Line 5 – point H: 0°	380.3	373.0
I _{max} (Zone D)	6758	6648

Conclusion: The 10% of discrepancy allowed between the values measured prior to the test and the values measured after the test is complied.

TEST FOR CHANGE OF VERTICAL POSITION OF THE CUT-OFF LINE UNDER THE INFLUENCE OF HEAT

The device tested in accordance with paragraph 2., shall be subjected to the test described in paragraph 3.1., without being removed from or readjusted in relation to its test fixture.

SAMPLE A	$\nabla r_I = r_3 - r_{60} = 0.34 \text{ mrad}$ $\nabla r_I \leq 2.0 \text{ mrad}$
SAMPLE B	$\nabla r_{II} = r_3 - r_{60} = \text{---}$
SAMPLE A & B	$(\nabla r_I + \nabla r_{II}) / 2 = \text{---} \leq 2.0 \text{ mrad}$

TEST OF LENS OR MATERIAL SAMPLES AND COMPLETE HEADLAMPS INCORPORATING LENSES OF PLASTIC MATERIAL (Annex 8)

Note: The manufacturer has proved that the product already passed the tests prescribed in paragraphs 3.1 -3.5 of Annex 8 to this UN Regulation, or equivalent tests pursuant to another. Those tests need not to be repeated; only the tests prescribed in 3.7 have been performed.

RESISTANCE TO MECHANICAL DETERIORATION

The lens has been submitted for the test described in paragraph 2.6.1.1 of the present Regulation.

PASS **FAIL** **NA**
☒ ☐ ☐

PHOTOMETRIC TEST

Line on measuring screen	I measured (cd) SAMPLE N° 1	Limits
Line 2 (maximum)	110.9	$I(\text{cd}) \leq 195 \text{ cd}$
Line 5 (maximum)	389.4	$I(\text{cd}) \leq 630.5 \text{ cd}$

TEST OF ADHERENCE OF COATINGS

No appreciable impairment of the gridded area.

Impairments at the intersections between squares or at the edges of the cuts do not exceed 15% of the gridded surface.

PASS **FAIL** **NA**
☒ ☐ ☐
☒ ☐ ☐

Remarks

None

Note: CETOC TS apply measurement uncertainty to calibrated items but not test results.

INFORMATION DOCUMENT

FIRST APPLICATION DATE: 09/11/2023

1. Specification data

Type	N90F/FL28W	
Trade name or mark	 NVEL,	
Variants	N90F, FL28W The difference between them is the model name.	
Function	Front fog lamp	
Emitted colour	White	
Number and category of light sources	1LED module with 2 x LED Non-replaceable light source	
Rated	Voltage	12V/24V
	Wattage	28 W
Applicable Regulation		R149.00 Class F3
Location of marking	Rated Voltage and Wattage	Marked on Lens
	Trade mark	Marked on Housing and Reflector
	Approval mark	Marked on Lens

2. Construction and material

Construction	Material	Remarks
Lens	PC	Base material: Polycarbonate Type: Panlite L-1225Z 100 Coating: Weatherable abrasion resistant silicone hardcoat Type: UVHC 3000
Reflector	PC	--
Housing	ADC12	--
Electrical wiring	PVC	--

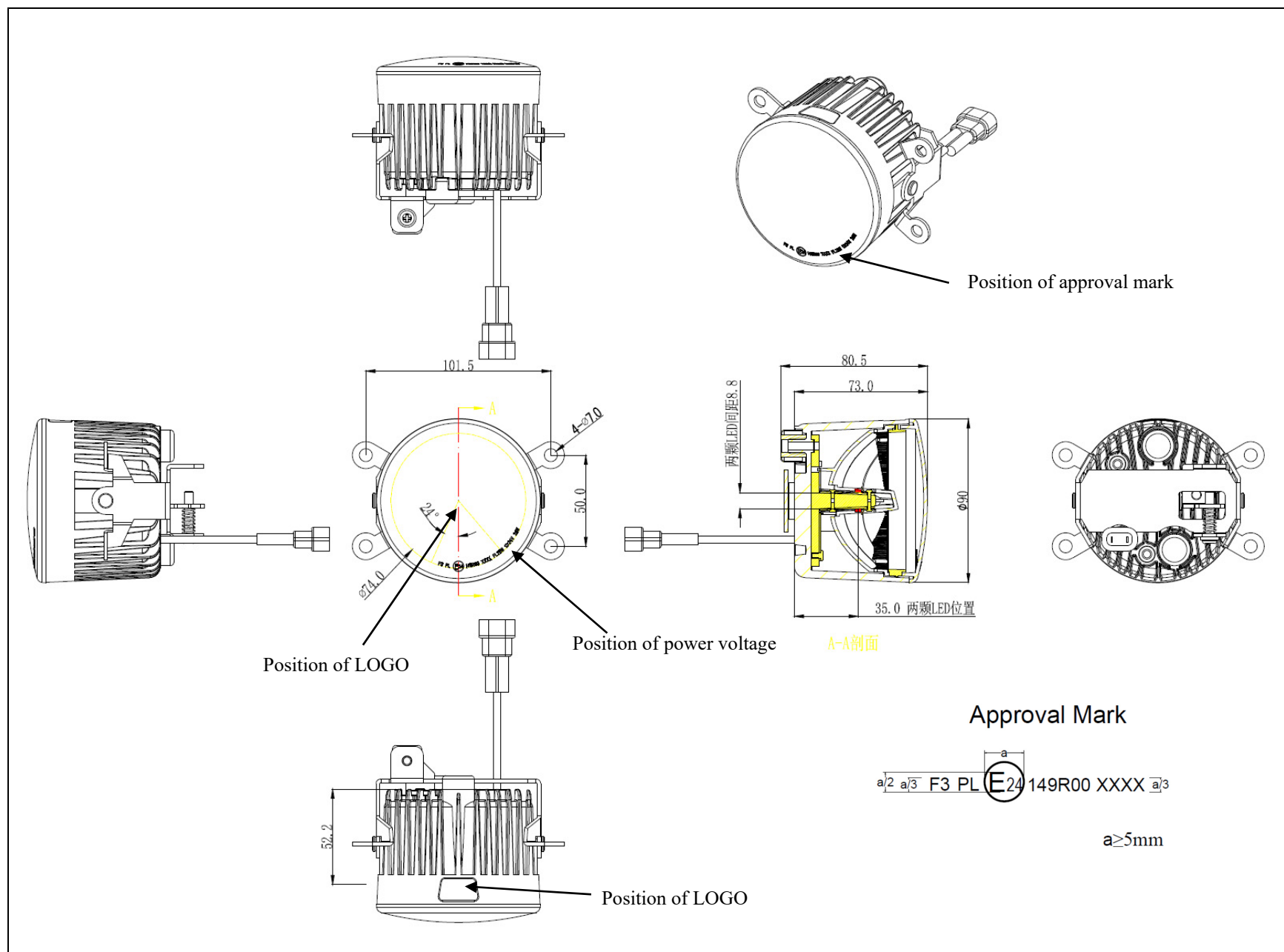
3. Name and address of manufacturer

Guangzhou New View Electrical & Lighting Co., Ltd.

Floor 1-4, Building 1, No.4, Longkou Industrial Road, Huashan Town, Huadu District, Guangzhou City, Guangdong Province, 510880, China.

NOTE: APPROVAL MARKINGS ARE SHOWN IN THE ATTACHED DRAWINGS.

THIS INFORMATION DOCUMENT CONSISTS OF 4 PAGE



CIRCUIT DIAGRAM

