

Statement manufacturer and authorization regarding application

This statement must only be sent with new "00" applications. This applies to both the statements that the application has not been submitted to another authority and the authorization of the applicant. If the authorized party is changed in the meantime (i.e. in case of an extension or correction request), this declaration must be filled in again.

1 **EC & UNECE type-approval number** : E4*148R00/04*30676*01

2 **Manufacturer/** **Manufacturer's representative** ⁽¹⁾

3 Company name : K-Lite (Yuyao) Plastics Co., Ltd.
4 Name authorized person : Xiaolong Zhu
5 Job title : General Manager
6 E-mail address : zhur.ok@163.com
7 Address manufacturer : No.5 Workshop, No.20 Xingye Road, Yangming Industrial Zone, Yuyao City,
Zhejiang Province, 315400
8 Country : China (PRC)

9 Statement

10 Hereby : Xiaolong Zhu ,
11 declares on behalf of
the manufacturer : K-Lite (Yuyao) Plastics Co., Ltd. ,
12 for the application with
type-approval number : E4*148R00/04*30676*01 ,
13 the following:
14 a) the manufacturer has not applied for an EC & UNECE type-approval for the same type to any other approval
authority, and no other approval authority granted the manufacturer such an approval;
15 b) no approval authority has refused to grant type-approval of that type;
16 c) no approval authority has withdrawn type-approval of that type;
17 d) the manufacturer has not revoked an application for a type-approval of that type.


18 Authorization regarding handling of this application (if applicable) ⁽²⁾

19 Company name : TÜV Rheinland Kraftfahrt GmbH
20 E-mail address : Ruby.Yu@tuv.com
21 Address : Technischer Dienst, Am Grauen Stein, 51105 Cologne
22 Country : Germany

23 Authorization

24 By means of this
declaration, I : Xiaolong Zhu ,
25 on behalf of : K-Lite (Yuyao) Plastics Co., Ltd. ,
26 authorizes : TÜV Rheinland Kraftfahrt GmbH ,
27 to respectively apply for a type-approval with type-approval number:
E4*148R00/04*30676*01 ,
28 handle all communication concerning this application and receive the type-approval certificate.

29 Date	Place	Name:
30 August 28, 2023	Zhejiang Province, China	K-Lite (Yuyao) Plastics Co., Ltd.

31 On their behalf, signature : 

32 Name : Xiaolong Zhu



⁽¹⁾ Mark the specific checkbox.

⁽²⁾ This authorization only concerns the application procedure and all activities that are directly or indirectly related to this procedure. If and insofar as other procedures, including the lodging of objections, are deemed necessary, a new authorization must be submitted in respect of that specific procedure.

**THE NETHERLANDS****COMMUNICATION**Concerning ⁽¹⁾:

- ~~approval granted~~
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of lamp pursuant to UN Regulation number 148 (LSD).

Lamp ⁽¹⁾	Rear-registration plate illuminating lamp
	Direction indicator lamp
	Stop lamp
	Position lamp
	End-outline marker lamp
	Reversing lamp
	Manoeuvring lamp
	Rear fog lamp
	Parking lamp
	Daytime running lamp
Side marker lamp	

Category of the lamp	: 2;MS;MR
Change index	: 0
Approval number	: E4*148R00/04*30676*01
Unique Identifier (UI) (if applicable)	: Not applicable



1. Trade name or mark of the lamp : **K-LITE& KYI**
2. Manufacturer's name for the type of lamp : M162
3. Manufacturer's name and address : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road, Yangming Industrial Zone, Yuyao City, 315400 Zhejiang Province, China (PRC)
4. If applicable, name and address of the manufacturer's representative : Not applicable
5. Submitted for approval on : August 28, 2023
6. Technical service responsible for conducting approval tests : TÜV Rheinland Kraftfahrt GmbH
Technischer Dienst
Am Grauen Stein
51105 Köln
Germany
7. Date of report issued by that Service : September 12, 2023
8. Number of report issued by that Service : 87-R148-1529/23-00
9. Concise description:
 - 9.1. In case of
 - 9.1.1. A rear-registration plate illuminating lamp :

Geometrical conditions of installation (position(s) and inclination(s) of the device in relation to the space to be occupied by the registration plate and/or different inclinations of this space) : See the information document
 - 9.1.2. A direction indicator : Not applicable
Sequential activation of light sources : yes/no⁽¹⁾
 - 9.1.3. A reversing lamp : Not applicable

The lamp shall be installed on a vehicle only as part of a pair of lamps : yes/no⁽¹⁾
 - 9.1.4. A manoeuvring lamp : Not applicable

The maximum mounting height : Not applicable
 - 9.1.5. A daytime running lamp : Not applicable

Maximum luminous intensity does not exceed 700 cd : yes/no⁽¹⁾
 - 9.2. By light signalling function and category : Rear-registration plate illuminating lamp: category 2
Stop lamp: category MS
Rear position lamp: category MR

For mounting either : outside or inside or both⁽¹⁾

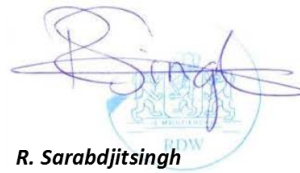


Colour of light emitted	: Rear-registration plate illuminating lamp: red/white/amber /colourless ⁽¹⁾ Stop lamp: red/ white/amber /colourless ⁽¹⁾ Rear position lamp: red/ white/amber /colourless ⁽¹⁾
Number, category and kind of light source(s)	: Non-replaceable light source: Rear-registration plate illuminating lamp: 3 LEDs Stop lamp/Rear position lamp: 3 LEDs
Lamp approved for LED substitute light source(s)	: yes /no ⁽¹⁾
If yes, category of LED substitute light source(s)	: Not applicable
Voltage and wattage	: Rear-registration plate illuminating lamp: 12V, 0.3W Stop lamp: 12V, 0.9W Rear position lamp: 12V, 0.3W
Light source module	: yes /no ⁽¹⁾
Light source module specific identification code	: Not applicable
Only for limited mounting height of equal to or less than 750 mm above the ground, if applicable	: yes /no ⁽¹⁾
Geometrical conditions of installation and relating variations, if any	: See the drawing of information document
Application of an electronic light source control gear/variable intensity control	: Not applicable
(a) Being part of the lamp	: yes /no ⁽¹⁾
(b) Being not part of the lamp	: yes /no ⁽¹⁾
Input voltage(s) supplied by an electronic light source control gear/variable intensity control	: Not applicable
Electronic light source control gear/variable intensity control manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body)	: Not applicable
Variable luminous intensity, if applicable	: yes /no ⁽¹⁾
Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable	: yes /no ⁽¹⁾
9.3. The front position lamp ⁽⁴⁾ , rear position lamp ⁽¹⁾ , stop lamp ⁽¹⁾ , end-outline marker lamp ⁽⁴⁾ , daytime running lamp ⁽⁴⁾ is only for use on a vehicle fitted with a tell-tale indicating failure	: yes /no ⁽¹⁾



Approval No: E4*148R00/04*30676*01

10. Position of the approval mark : On the lens
11. Reason(s) for extension (if applicable) : 1) Deletion of original installation condition
2) Addition of new installation conditions
3) Modification of technical service
12. Approval : ~~granted/extended/refused/withdrawn~~ ⁽¹⁾
13. Approval granted for devices to be used on vehicles already in use only : ~~yes~~/no ⁽¹⁾
14. Place : Zoetermeer
15. Date : 02 October 2023
16. Signature :



R. Sarabdjitsingh

17. 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.

⁽¹⁾ Strike out what does not apply.

Application date : August 28, 2023
Reasons for extension : 1) Deletion of original installation condition
2) Addition of new installation conditions
3) Modification of technical service

1. Specification data

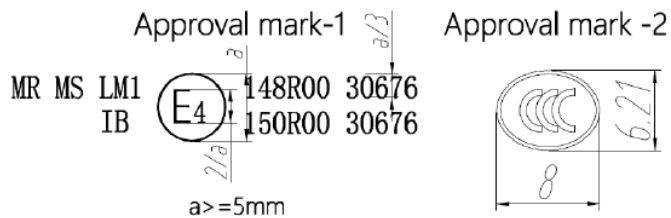
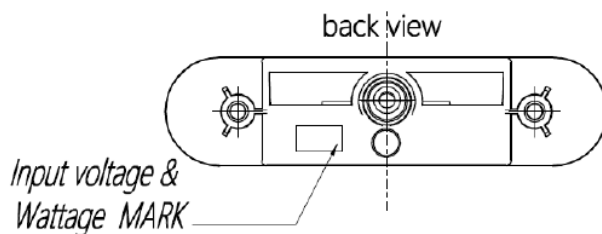
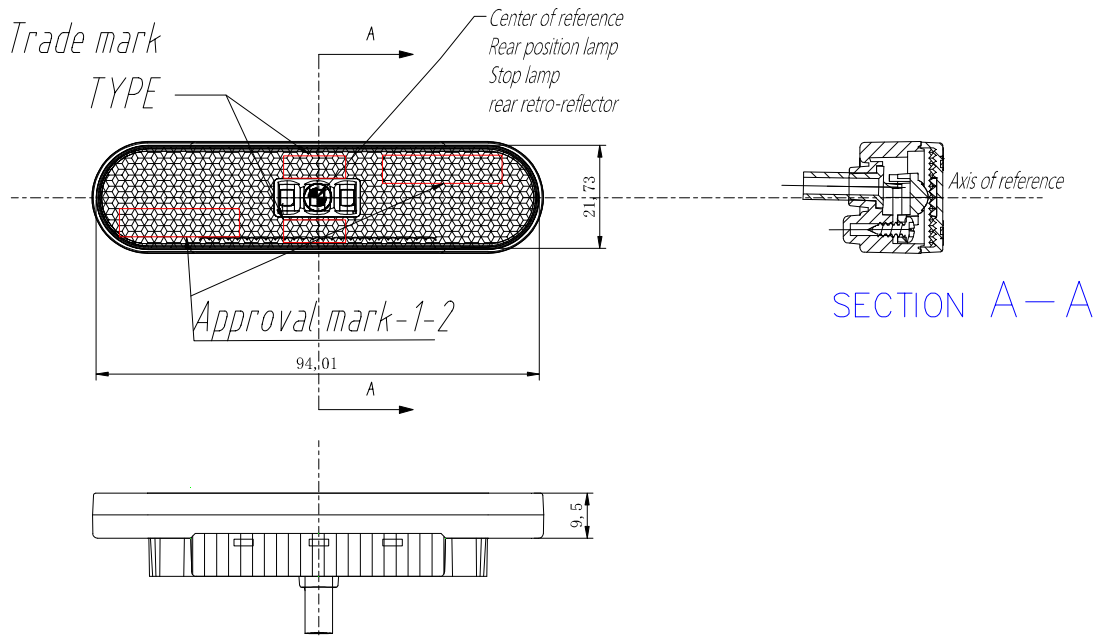
Type		M162			
Function		Stop lamp	Rear position lamp	Rear-registration plate illuminating lamp	Rear retro-reflector
Emitted color		Red	Red	Colourless	Red
Rated	Voltage	12V			
	Wattage	0.9W	0.3W	0.3W	---
Applicable Regulation (UN)		R148.00 Category MS	R148.00 Category MR	R148.00 Category 2	R150.00 Class IB
Number and category of light source		3 LEDs		3 LEDs	
		Non-replaceable light source			
Location of marking	Rated voltage	Marked on Housing			
	Trade mark	K-LITE& KYI		Marked on Lens	
	Approval mark	Marked on Lens			

2. Construction and material

Construction	Material	Remarks
Outer Lens	PMMA	Stop lamp/Rear position lamp/Rear retro-reflector: Red with pattern
		Rear-registration plate illuminating lamp: Clear with pattern
Inner Lens	PMMA	Stop lamp/Rear position lamp: Clear with pattern
Housing	ABS	Clear
Electrical wiring	---	---

3. Name and address of manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road, Yangming Industrial Zone, Yuyao City, 315400 Zhejiang Province, China (PRC)

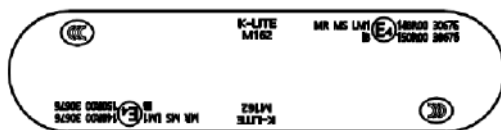
4. Name and address of representative of manufacturer : Not applicable



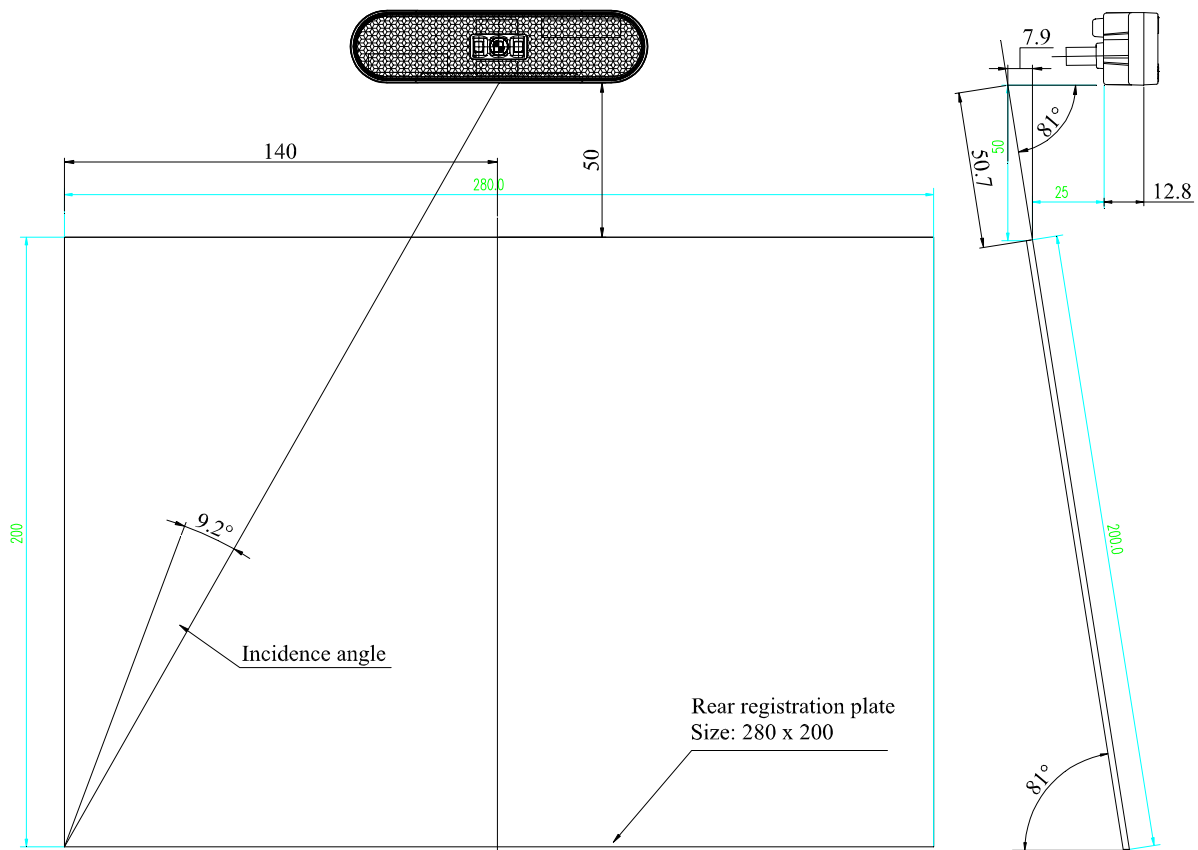
Input voltage & Wattage MARK

DC 12V >AC
STOP: 0.9 W
POSI: 0.3 W

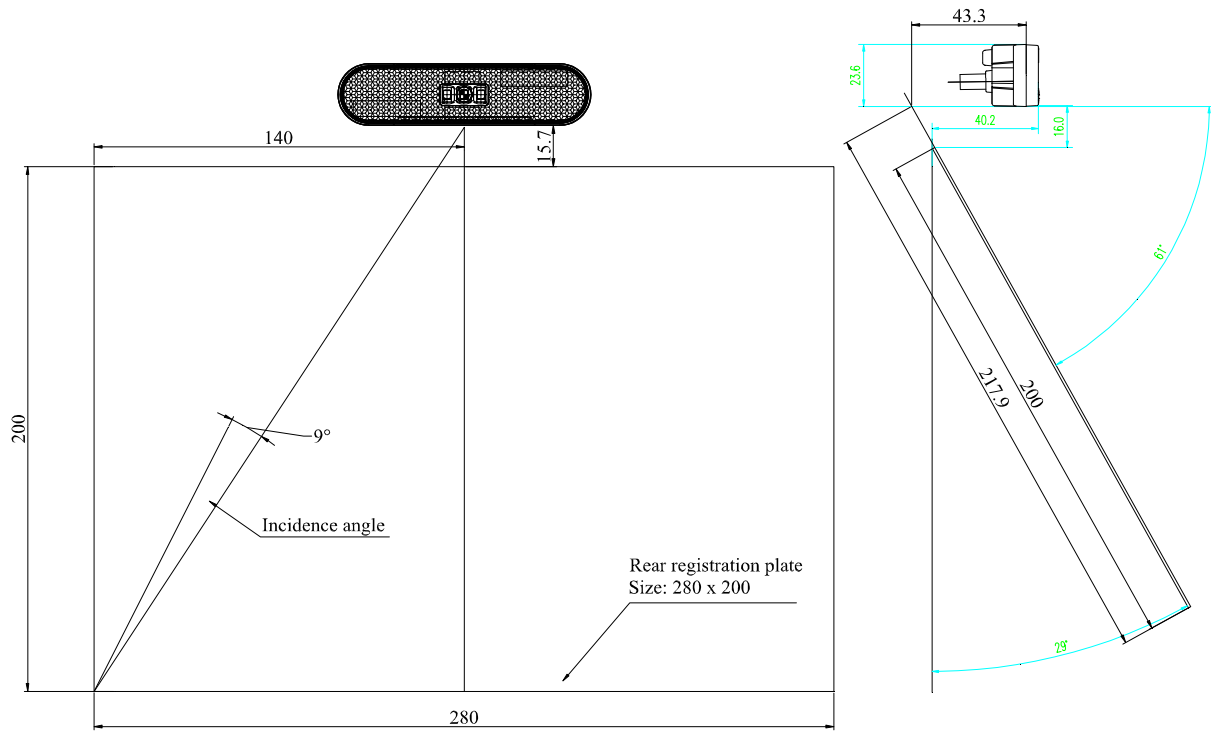
TYPE
M162



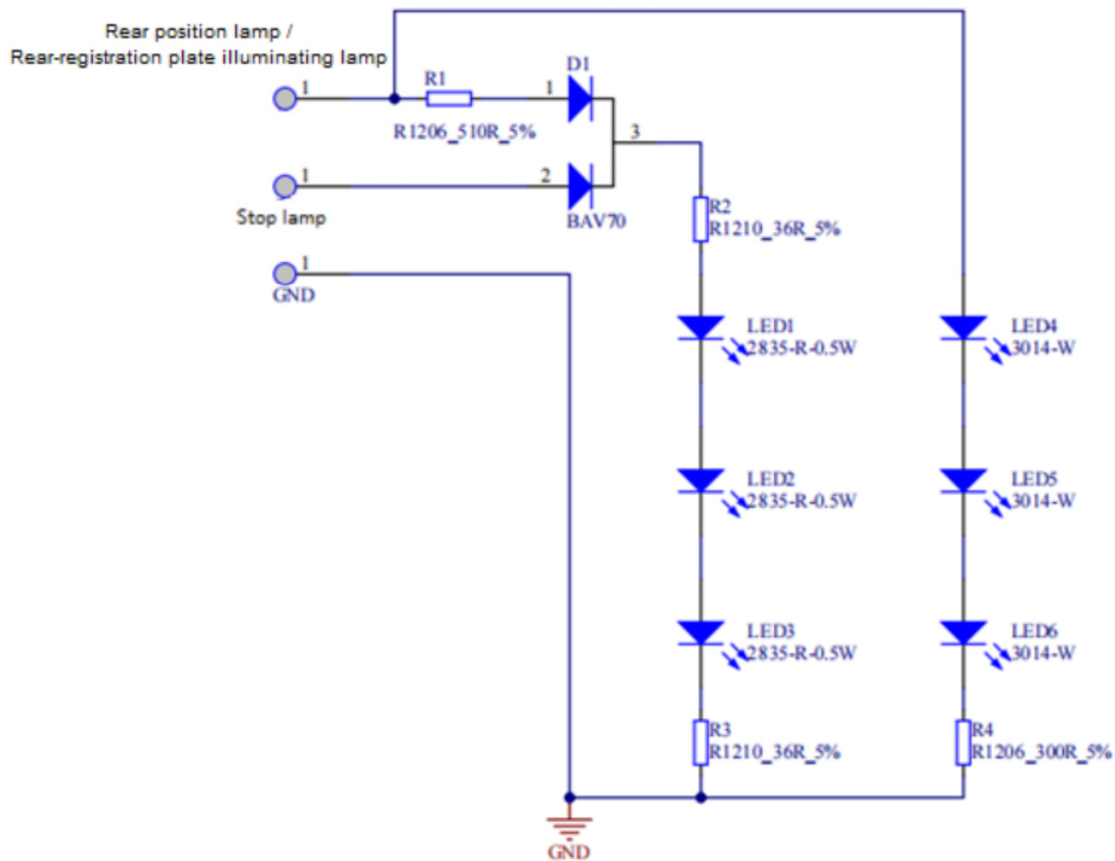
Installation condition 1



Installation condition 2



CIRCUIT DIAGRAM



Rear position lamp/Stop lamp: 3 LEDs, 12V 0.3W/0.9W

Non-replaceable light source

Rear-registration plate illuminating lamp: 3 LEDs, 12V 0.3W

Non-replaceable light source

Type : M162
Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

TEST REPORT

according to UN-Regulation

**Uniform provisions concerning the approval of light-signalling devices (lamps)
for power-driven vehicles and their trailers**

UN Regulation No. 148

as last amended by

**series of Amendments: 00
Supplement 4**

Approval Status

UN-Type approval : E4*148R00/04*30676*00

Structure of the Test Report

Item No.	
0	General information
1	Tested vehicle(s) / object(s)
2	Test record
3	Appendices
4	Statement of conformity

The Test Report shall be reproduced and published only in its entirety by the client. It may however be reproduced and published partially, but only with the written permission of the Technical Service.

Test Report No.: 87-R148-1529/23-00

Type : **M162**
 Manufacturer : **K-Lite (Yuyao) Plastics Co., Ltd.**

0. General information

- 0.1. Trademark or trade name of the lamp : **K-LITE& KYI**
- 0.2. Manufacturer's name for the type of the lamp : M162
- 0.3. Name and address of the manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.
 No.5 Workshop, No.20 Xingye Road, Yangming Industrial Zone, Yuyao City, 315400 Zhejiang Province, China (PRC)
- 0.4. Name and address of manufacturer's authorized representative : ---
- 0.5. No. of the information document : M162-01
 -Date of issue : August 28, 2023
 -Date of last change : ---

1. Tested vehicle(s) / object(s)

- 1.1. Test object(s)
- 1.1.1. ~~Vehicle~~/ object
- Commercial description : Not applicable
- Type(s) /~~variant(s)~~ /~~version(s)~~ : M162
- Remark : Non-replaceable light source:
 Rear Position Lamp/Stop Lamp:
 3 LEDs, 12V 0.3W/0.9W
 Rear-registration plate illuminating lamp:
 3 LEDs, 12V 0.3W
- 1.1.2. Condition of ~~vehicle(s)~~/ Object(s) : ~~new, used, pretested~~
- 1.2. Worst case configuration : There is no worst case selection applicable because all installation methods mentioned in the information folder are tested.
- 1.2.1. Test date : August 29, 2023
- 1.2.2. Test site : Zhejiang Aike Automobile Test Technology Service Co., Ltd. Building 3, Essence Adream Space, No.350, Jinhua Road, Ningbo Hi-tech Zone, Yinzhou District, Ningbo, Zhejiang, China
- 1.2.3. Remark : The results of the test refer exclusively to the object(s) mentioned under point 1.1 of this report.

Type : M162
 Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

2. Test record

2.1. Equipment for measuring and testing : The test facilities / measurement equipment used were in compliance with the test requirements.

Equipment	Make	Type	Serial no.	Calibration expire date
Goniophotometer System	Optronik Berlin GmbH	SMS 10h	ATTC.D.05	2024.04.22

2.2. Test results : The type has been tested according to the modification(s) mentioned in Appendix 0.

The new parts meet the requirements of the regulation.

An actual practical test of the rear position lamp and stop lamp were not necessary. The results of the previous tests are still valid.

The previous test of rear position lamp and stop lamp were conducted by TÜV NORD Mobilität GmbH & Co. KG, IFM - Institut für Fahrzeugtechnik und Mobilität, Schönscheidtstr. 28, D-45307 Essen. Please refer to test report: CS148-A0-2023-00640 or certificate: E4*148R00/04*30676*00.

2.2.1. Temperature : 22°C

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

The rated voltage is clearly legible and indelible marked on the housing of the lamp.

Space for the approval mark and for additional symbols is provided on the lens of the lamp (the lens can not be separated from the housing).

2.3. General technical requirements : For stop lamp and rear position lamp, please refer to the test report: CS148-A0-2023-00640 issued by TÜV NORD Mobilität GmbH & Co. KG, IFM - Institut für Fahrzeugtechnik und Mobilität, Schönscheidtstr. 28, D-45307 Essen.

For rear-registration plate illuminating lamp, the light of the illuminating device is sufficiently colourless.

Type : M162
 Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

- 2.4. Photometric tests : For stop lamp and rear position lamp, please refer to the test report: CS148-A0-2023-00640 issued by TÜV NORD Mobilität GmbH & Co. KG, IFM - Institut für Fahrzeugtechnik und Mobilität, Schönscheidtstr. 28, D-45307 Essen.
- For rear-registration plate illuminating lamp, the requirements of the Regulation have been met. The test results are attached in Appendix 1.
- 2.4.1. Rear-registration plate illuminating lamp : The lamp is equipped with non-replaceable light source. Test voltage is 13.5V.
- The light intensity was measured after 1 minute burning period and after 30 minutes burning in reference axis. The distribution of the light intensity after 1 minute burning period was calculated using the ratio of the two described measurements. The light intensity and its distribution are in compliance with the requirement after 1 minute burning period and after 30 minutes burning period.
- The lamp fulfils the requirement that the whole surface of the plate is visible within the angles given in Part D of Annex 2.
- The angle of incidence of the light on the surface of the plate does not exceed 82° at any point on the surface to be illuminated. No light is emitted towards the rear of the vehicle.
- The luminance have been measured in accordance with Annex 3 of the regulation, based on the position in which the device is to be fitted in relation to the space to be occupied by the registration plate.
- The luminance measurements have been made on a piece of clean white blotting paper with known diffuse reflection factor, of the same dimensions as the registration plate, placed in the position normally occupied by it and 2 mm in front of its holder, as checked in accordance with paragraph 3 of Annex 3.
- 2.5. Colorimetric tests : For stop lamp and rear position lamp, please refer to the test report: CS148-A0-2023-00640 issued by TÜV NORD Mobilität GmbH & Co. KG, IFM - Institut für Fahrzeugtechnik und Mobilität, Schönscheidtstr. 28, D-45307 Essen.
- 2.6. Heat resistance test : Not applicable.
- 2.7. Apparent surface : For stop lamp and rear position lamp, please refer to the test report: CS148-A0-2023-00640 issued by TÜV NORD Mobilität GmbH & Co. KG, IFM - Institut für Fahrzeugtechnik und Mobilität, Schönscheidtstr. 28, D-45307 Essen.

Type : M162
 Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

2.8. Explanatory note : This report describes the examination of the rear position lamp, stop lamp and rear-registration plate illuminating 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.
Rear retro-reflector	87-R150-1530-23-00

3. Appendices

- 0 List of modifications
- 1 Photometric test results
- 2 Colorimetric test results
- 3 Apparent surface test results

Information folder no. : M162-01

4. Statement of conformity

The Information Document listed in section 0.5, and the type described therein, comply with the requirements stated on page 1. The test results in this report refer to the vehicle(s)/object(s) described under section 1.1. With regards to the required level of performance to be achieved, the tested samples were representative for the type to be approved (see section 1.2).

Engineering Center Shanghai, September 12, 2023
 TY/YH/R



Ted Yang
 Technical Expert Technical Service

Type : M162
Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

List of modifications

Appendix 0

Correction of : ---

Modification of : technical service

Addition of : new installation conditions

Deletion of : original installation condition

Type : M162
 Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

Photometric test results

Appendix 1

Results of photometric tests of the **rear-registration plate illuminating lamp, category 2** (tested with 13.5V)

Installation condition 1

Measured after **1 minute** burning period when all light sources lit

	light intensity of the lamps in (X:25, Y:25) [cd/m ²]	required minimum [cd/m ²]
sample no. 1	6.010	2.0
sample no. 2	7.205	2.0

Measured after **30 minutes** burning period when all light sources lit

Luminance B of the measuring points of the plate [cd/m ²]						
X-axis[mm]		25	105	175	255	Required value
Y-axis[mm]	25	5.883	49.17	37.22	4.282	≥ 2.0
sample no.1	105	3.895	9.550	8.884	3.263	≥ 2.0
	175	2.917	3.079	3.242	2.940	≥ 2.0
Y-axis[mm]	25	7.054	51.11	40.78	5.427	≥ 2.0
sample no.2	105	4.275	10.89	10.80	3.459	≥ 2.0
	175	3.021	3.160	3.348	2.840	≥ 2.0

	sample no. 1	sample no. 2	Required value
Minimum luminance Bo [cd/m ²]	2.917	2.840	≥ 2.0 cd/m ²
Maximum gradient [(cd/m ²)/cm]	5.411	5.507	≤ 2 x Bo/cm

Type : M162
 Manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.

Photometric test results

Appendix 1

Results of photometric tests of the **rear-registration plate illuminating lamp, category 2** (tested with 13.5V)

Installation condition 2

Measured after **1 minute** burning period when all light sources lit

	light intensity of the lamps in (X:25, Y:25) [cd/m ²]	required minimum [cd/m ²]
sample no. 1	5.732	2.0
sample no. 2	6.883	2.0

Measured after **30 minutes** burning period when all light sources lit

Luminance B of the measuring points of the plate [cd/m ²]						
X-axis[mm]		25	105	175	255	Required value
Y-axis[mm]	25	5.621	43.77	39.87	5.028	≥ 2.0
sample no.1	105	5.016	19.25	20.36	4.600	≥ 2.0
	175	3.125	4.268	4.073	3.344	≥ 2.0
Y-axis[mm]	25	6.760	33.55	43.67	6.652	≥ 2.0
sample no.2	105	6.312	25.25	26.57	6.262	≥ 2.0
	175	2.666	5.210	5.776	2.978	≥ 2.0

	sample no. 1	sample no. 2	Required value
Minimum luminance Bo [cd/m ²]	3.125	2.666	≥ 2.0 cd/m ²
Maximum gradient [(cd/m ²)/cm]	4.769	4.627	≤ 2 x Bo/cm