# ECE TYPE-APPROVAL CERTIFICATE

| | | | |
|---|---|---|---|
| E24 | Issued by: | Name of Administration:<br>**National Standard Authority of Ireland**<br>**1 Swift Square, Northwood, Santry, Dublin 9, Ireland**<br>**D09 A0E4** | |
| | Concerning[2]: | Approval granted<br>~~Approval extended~~<br>~~Approval refused~~<br>~~Approval withdrawn~~<br>~~Production definitely discontinued~~ | |
| | | Of a type of lamp pursuant to UN Regulation No. 148 | |
| | Lamp:[2] | Rear-registration plate illuminating lamp<br>~~Direction indicator lamp~~<br>Stop lamp<br>Position lamp<br>~~End-outline marker lamp~~<br>~~Reversing lamp~~<br>~~Manoeuvring lamp~~<br>~~Rear fog lamp~~<br>~~Parking lamp~~<br>~~Daytime running lamp~~<br>~~Side marker lamp~~ | |
| Category of the lamp: | ***MR, MS, LM1*** | Change index: | ***0*** |
| Approval No: | ***E24*148R00/02*0040*00*** | Unique Identifier (UI) (If applicable) | |

[1] Distinguishing number of the country which has granted/extended/refused/withdrawn approval (see approval provisions in this Regulation).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


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

Approval No: ***E24*148R00/02*0040*00***

| | | |
|---|---|---|
| 1. | Trade name or mark of the lamp: | ***CD*** |
| 2. | Manufacturer's name for the type of lamp: | ***TL-W-R*** |
| | Variant (s): | ***Variant 1: TL-W-R***<br>***Variant 2: TL-NW-R*** |
| 3. | Manufacturer's name and address: | ***Shanghai Jason Plastic Co., Ltd.***<br>***B3, No. 108, Pengfeng Road, Malu Town,***<br>***Jiading District, Shanghai, China*** |
| 4. | If applicable, name and address of manufacturer's representative: | ***N/A*** |
| 5. | Submitted for approval on: | ***31.05.2021*** |
| 6. | Technical service responsible for conducting approval tests: | ***TÜV SÜD Auto Service GmbH,***<br>***Westendstraße 199, D-80686 München*** |
| 7. | Date of test report issued by that service: | ***17.05.2021*** |
| 8. | Number of report issued by that service: | ***21-00913-CX-SHA-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 manufacturer's information document*** |
| 9.1.2. | A direction indicator: | |
| | Sequential activation of light sources: yes/no[2] | ***N/A*** |
| 9.1.3. | A reversing lamp: | |
| | The lamp shall be installed on a vehicle only as part of a pair of lamps: yes/no | ***N/A*** |
| 9.1.4. | A manoeuvring lamp: | |
| | The maximum mounting height: | ***N/A*** |


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Approval No: ***E24*148R00/02*0040*00***

9.1.5. A daytime running lamp

| | |
|---|---|
| Maximum luminous intensity does not exceed 700 cd: | ***N/A*** |
| 9.2. By light signalling function and category: | ***Rear position lamp MR, Stop lamp MS Rear registration plate lamp LM1*** |
| For mounting either outside or ~~inside or both~~[2] | ***Outside*** |
| Colour of light emitted: red/~~white/amber/~~colourless[2] | ***Red, Colourless*** |
| Number, category and kind of light source(s): | ***See test report 21-00913-CX-SHA-00 for full details*** |
| Lamp approved for LED substitute light source(s): | ***yes/no*** |
| If yes, category of LED substitute light source(s) | |
| Voltage and Wattage: | ***See test report 21-00913-CX-SHA-00 for full details*** |
| Light source module: ~~yes~~/no[2] | ***No*** |
| Light source module specific identification code: | ***N/A*** |
| Only for limited mounting height of equal to or less than 750 mm above the ground, if applicable: yes/no[2] | ***No*** |
| Geometrical conditions of installation and relating variations (if any): | ***Reference axis parallel to the median longitudinal plane of the vehicle and parallel to the bearing plane of the vehicle on the road (see drawings of the information document)*** |
| Application of an electronic light source control gear/ variable intensity control: | |
| (a) being part of the lamp: yes/~~no~~[2] | ***N/A*** |
| (b) being not part of the lamp: ~~yes~~/no[2] | ***N/A*** |
| Input voltage(s) supplied by an electronic light source control gear/variable intensity control: | ***N/A*** |
| 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): | ***N/A*** |
| Variable luminous intensity if applicable: ~~yes~~/no | ***No*** |


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Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable: ***N/A***

9.3 The ~~front position lamp~~[2], rear position lamp[2], stop lamp[2], ~~end-outline marker lamp~~[2]~~, daytime running lamp~~[2] is only for use on a vehicle fitted with a tell-tale indicating failure: yes/no[2] ***No***

10. Position of the approval mark: ***On the lens***

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

12. Approval granted~~/extended/refused/withdrawn~~[2] ***Granted***

13. Approval granted for devices to be used on vehicles already in use only, ~~yes~~/no[2] ***No***

14. Place: ***Dublin***

15. Date: ***16th June, 2021***

16. Signature:

NATIONAL STANDARDS AUTHORITY OF IRELAND
NSAI Certification
TRANSPORT DEPARTMENT

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.


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

Approval No: ***E24*148R00/02*0040*00***

# Index to the Information Package

| | |
|---|---|
| Date of issue: | ***16th June, 2021*** |
| 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): | ***21-00913-CX-SHA-00*** |
| - date of issue: | ***17.05.2021*** |
| - date of latest amendment: | ***N/A*** |

3. Information document

| | |
|---|---|
| - number(s): | ***TL-W-R-00*** |
| - date of issue: | ***28.04.2021*** |
| - date of latest amendment: | ***N/A*** |

Documentation: ***24 pages***


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Approval No: ***E24*148R00/02*0040*00***

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

A: Additional conditions:

1. The lamp, Type *TL-W-R* 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


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Auto Service

# Test Report

## No.: 21-00913-CX-SHA-00

Test of a type of component
with regard to

**UN/ECE Regulation No. 148**

including all amendments up to
supplement 02 to the 00 series of amendments

Approval subject:
**Rear position lamp MR**
**Stop lamp MS**
**Rear registration plate lamp LM1**

| Approval status | | | |
|---|---|---|---|
| ☑ | Granting of a type approval | | |
| ☐ | Extension/correction to type approval no. | : | --- |



E24*148R00/02*0040*00

## I. General

| | | | | | |
|---|---|---|---|---|---|
| Make (trade name of manufacturer) | : | CD | | | |
| Type | : | TL-W-R | | | |
| Variants | : | Variant 1: TL-W-R<br>Variant 2: TL-NW-R | | | |
| Means of identification of type | : | By letters, TL-W-R, TL-NW-R, on the housing | | | |
| By category of lamp | | | Color | Light source(s) | Voltage & wattage |
| Rear position lamp | : | MR | Red | 53*LEDs, Non-replaceable | 12V/0.5W |
| Stop lamp | : | MS | Red | 45*LEDs, Non-replaceable | 12V/2.67W |
| Rear registration plate lamp | | LM1 | Colorless | 2*LEDs, Non-replaceble | 12V/0.29W |
| For mounting either outside or inside or both | : | Outside | | | |
| Light source module specific identification code | : | No | | | |
| Only for limited mounting height of equal to or less than 750 mm above the ground | : | No | | | |
| A direction indicator | | | | | |
| Sequential activation of light sources | : | N/A | | | |
| A reversing lamp | | | | | |
| The lamp shall be installed on a vehicle only as part of a pair of lamps | : | N/A | | | |
| Geometrical conditions of installation and relating variations, if any | : | See manufacturer’s information document | | | |
| Application of an electronic light source control gear/variable intensity control | | | | | |
| Being part of the lamp | : | N/A | | | |
| Being not part of the lamp | : | N/A | | | |

| | |
|---|---|
| Input voltage(s) supplied by an electronic light source control gear/ variable intensity control | : N/A |
| 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) | : N/A |
| Variable luminous intensity | : No |
| Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable | : N/A |
| The ~~front position lamp~~ (1), rear position lamp (1), stop lamp (1),~~ end-outline marker lamp~~ (1), ~~daytime running lamp~~ (1) is only for use on a vehicle fitted with a tell-tale indicating failure | : No |
| Name and address of manufacturer | : Shanghai Jason Plastic Co., Ltd.<br>B3, No. 108, Pengfeng Road, Malu Town, Jiading District, Shanghai, China |
| Address of assembly plant | : Same as above |
| Location of the approval mark | : On the lens |
| If applicable, name and address of the manufacturer's representative | : N/A |

## II. Test results

Refer to the Annex II

## III. Enclosures

Information folder No. TL-W-R-00 dated 2021-04-28 (YYYY-MM-DD)

## IV. Statement of conformity

The mentioned information folder and the type described therein are in accordance with the test basis mentioned above. The worst-case was selected in accordance with document "Requirements for Test Reports (AS-PB-T-02)".
The test report may be reproduced and published in full and by the client only. It can be reproduced partially with the written permission of the test laboratory only.

TÜV SÜD Auto Service GmbH is designated as Technical Service by:

| Approval authority | Country | Registration number |
|---|---|---|
| Kraftfahrt-Bundesamt (KBA) | Germany | KBA-P 00100-10 |
| Vehicle Certification Agency (VCA) | United Kingdom | VCA-TS-006 |
| Approval Authority of the Netherlands (RDW) | The Netherlands | RDWT-082-xx |
| National Standards Authority of Ireland (NSAI) | Ireland | Technical Service Number: 49 |
| Société Nationale de Certification et d'Homologation (SNCH) | Luxembourg | 13/B(g) |

München, 2021-05-17 (YYYY-MM-DD)

Henry Chen

# Annex I Reason of Extension

Correction of : ---

Modification of : ---

Addition of : ---

Deletion of : ---

# Annex II Test results

| | | | |
|---|---|---|---|
| 1. | Test conditions | | |
| 1.1. | Technical data of the test samples | : | Two samples were tested.<br>Sample No. 1 and Sample No. 2.<br>For information about the form of the lamp, the position of the reference point and the reference axis, see information document. |
| 1.2. | Test procedures used | : | According to ECE Regulation No.: 148.00 |
| 1.3. | Measuring and test equipment | : | Full automatic photometric test system for automobile lamps<br>EVERFINE PHOTO-E-INFO CO., LTD.<br>Type GO-HD5 |
| 2. | Test results | | |
| 2.1. | General Specifications | : | The devices have been designed and constructed that in normal conditions of use, and notwithstanding the vibrations to which they may be subjected in such use, their satisfactory operation remains assured and they retain the characteristics prescribed by this Regulation. |

2.2. Intensity of light emitted

2.2.1. Rear position lamp

2.2.1.1. Sample No. 1, normal mode, 53 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 0.80 | 17.00 | 7.57 | 8.05 | Complies |
| 2 | 5R | 10U | 0.80 | 17.00 | 7.61 | 8.09 | Complies |
| 3 | 20R | 5U | 0.40 | 17.00 | 6.24 | 6.64 | Complies |
| 4 | 10R | 5U | 0.80 | 17.00 | 10.59 | 11.26 | Complies |
| 5 | H | 5U | 2.80 | 17.00 | 11.20 | 11.91 | Complies |
| 6 | 10L | 5U | 0.80 | 17.00 | 9.39 | 9.99 | Complies |
| 7 | 20L | 5U | 0.40 | 17.00 | 5.18 | 5.51 | Complies |
| 8 | 10L | V | 1.40 | 17.00 | 11.39 | 12.11 | Complies |
| 9 | 5L | V | 3.60 | 17.00 | 12.31 | 13.09 | Complies |
| 10 | H | V | 4.00 | 17.00 | 12.75 | 13.56 | Complies |
| 11 | 5R | V | 3.60 | 17.00 | 12.66 | 13.46 | Complies |
| 12 | 10R | V | 1.40 | 17.00 | 11.01 | 11.71 | Complies |
| 13 | 20R | 5D | 0.40 | 17.00 | 8.35 | 8.88 | Complies |
| 14 | 10R | 5D | 0.80 | 17.00 | 12.77 | 13.58 | Complies |
| 15 | H | 5D | 2.80 | 17.00 | 11.88 | 12.63 | Complies |
| 16 | 10L | 5D | 0.80 | 17.00 | 12.29 | 13.07 | Complies |
| 17 | 20L | 5D | 0.40 | 17.00 | 7.46 | 7.93 | Complies |
| 18 | 5L | 10D | 0.80 | 17.00 | 11.05 | 11.75 | Complies |
| 19 | 5R | 10D | 0.80 | 17.00 | 11.54 | 12.27 | Complies |
| 20 | All directions Min. | | 0.05 | --- | 0.47 | 0.50 | Complies |
| 21 | All directions Max. | | --- | 17.00 | 13.06 | 13.89 | Complies |

2.2.1.2. Sample No. 2, normal mode, 53 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 0.80 | 17.00 | 8.25 | 8.82 | Complies |
| 2 | 5R | 10U | 0.80 | 17.00 | 8.58 | 9.17 | Complies |
| 3 | 20R | 5U | 0.40 | 17.00 | 6.54 | 6.99 | Complies |
| 4 | 10R | 5U | 0.80 | 17.00 | 11.61 | 12.41 | Complies |
| 5 | H | 5U | 2.80 | 17.00 | 12.47 | 13.33 | Complies |
| 6 | 10L | 5U | 0.80 | 17.00 | 11.07 | 11.83 | Complies |
| 7 | 20L | 5U | 0.40 | 17.00 | 6.34 | 6.78 | Complies |
| 8 | 10L | V | 1.40 | 17.00 | 12.01 | 12.84 | Complies |
| 9 | 5L | V | 3.60 | 17.00 | 12.43 | 13.29 | Complies |
| 10 | H | V | 4.00 | 17.00 | 13.22 | 14.13 | Complies |
| 11 | 5R | V | 3.60 | 17.00 | 12.60 | 13.47 | Complies |
| 12 | 10R | V | 1.40 | 17.00 | 12.39 | 13.24 | Complies |
| 13 | 20R | 5D | 0.40 | 17.00 | 7.80 | 8.34 | Complies |
| 14 | 10R | 5D | 0.80 | 17.00 | 11.14 | 11.91 | Complies |
| 15 | H | 5D | 2.80 | 17.00 | 12.23 | 13.07 | Complies |
| 16 | 10L | 5D | 0.80 | 17.00 | 11.65 | 12.45 | Complies |
| 17 | 20L | 5D | 0.40 | 17.00 | 7.32 | 7.82 | Complies |
| 18 | 5L | 10D | 0.80 | 17.00 | 10.79 | 11.53 | Complies |
| 19 | 5R | 10D | 0.80 | 17.00 | 10.25 | 10.96 | Complies |
| 20 | All directions Min. | | 0.05 | --- | 0.56 | 0.60 | Complies |
| 21 | All directions Max. | | --- | 17.00 | 13.69 | 14.63 | Complies |

2.2.1.3. Sample No. 1, failed mode, 49 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 0.80 | 17.00 | 7.17 | 7.56 | Complies |
| 2 | 5R | 10U | 0.80 | 17.00 | 7.24 | 7.63 | Complies |
| 3 | 20R | 5U | 0.40 | 17.00 | 5.96 | 6.28 | Complies |
| 4 | 10R | 5U | 0.80 | 17.00 | 10.02 | 10.57 | Complies |
| 5 | H | 5U | 2.80 | 17.00 | 10.86 | 11.45 | Complies |
| 6 | 10L | 5U | 0.80 | 17.00 | 8.84 | 9.32 | Complies |
| 7 | 20L | 5U | 0.40 | 17.00 | 4.98 | 5.25 | Complies |
| 8 | 10L | V | 1.40 | 17.00 | 10.82 | 11.41 | Complies |
| 9 | 5L | V | 3.60 | 17.00 | 11.57 | 12.20 | Complies |
| 10 | H | V | 4.00 | 17.00 | 12.12 | 12.78 | Complies |
| 11 | 5R | V | 3.60 | 17.00 | 11.96 | 12.61 | Complies |
| 12 | 10R | V | 1.40 | 17.00 | 10.43 | 11.00 | Complies |
| 13 | 20R | 5D | 0.40 | 17.00 | 7.66 | 8.08 | Complies |
| 14 | 10R | 5D | 0.80 | 17.00 | 11.98 | 12.63 | Complies |
| 15 | H | 5D | 2.80 | 17.00 | 11.29 | 11.90 | Complies |
| 16 | 10L | 5D | 0.80 | 17.00 | 11.65 | 12.28 | Complies |
| 17 | 20L | 5D | 0.40 | 17.00 | 7.29 | 7.69 | Complies |
| 18 | 5L | 10D | 0.80 | 17.00 | 10.44 | 11.01 | Complies |
| 19 | 5R | 10D | 0.80 | 17.00 | 10.98 | 11.58 | Complies |
| 20 | All directions Min. | | 0.05 | --- | 0.45 | 0.47 | Complies |
| 21 | All directions Max. | | --- | 17.00 | 12.39 | 13.06 | Complies |

2.2.1.4. Sample No. 2, failed mode, 49 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 0.80 | 17.00 | 7.78 | 8.25 | Complies |
| 2 | 5R | 10U | 0.80 | 17.00 | 8.12 | 8.61 | Complies |
| 3 | 20R | 5U | 0.40 | 17.00 | 6.15 | 6.52 | Complies |
| 4 | 10R | 5U | 0.80 | 17.00 | 10.96 | 11.62 | Complies |
| 5 | H | 5U | 2.80 | 17.00 | 11.78 | 12.49 | Complies |
| 6 | 10L | 5U | 0.80 | 17.00 | 10.47 | 11.10 | Complies |
| 7 | 20L | 5U | 0.40 | 17.00 | 6.12 | 6.49 | Complies |
| 8 | 10L | V | 1.40 | 17.00 | 11.33 | 12.01 | Complies |
| 9 | 5L | V | 3.60 | 17.00 | 11.78 | 12.49 | Complies |
| 10 | H | V | 4.00 | 17.00 | 12.51 | 13.26 | Complies |
| 11 | 5R | V | 3.60 | 17.00 | 11.93 | 12.65 | Complies |
| 12 | 10R | V | 1.40 | 17.00 | 11.76 | 12.47 | Complies |
| 13 | 20R | 5D | 0.40 | 17.00 | 7.34 | 7.78 | Complies |
| 14 | 10R | 5D | 0.80 | 17.00 | 10.55 | 11.18 | Complies |
| 15 | H | 5D | 2.80 | 17.00 | 11.56 | 12.25 | Complies |
| 16 | 10L | 5D | 0.80 | 17.00 | 9.98 | 10.58 | Complies |
| 17 | 20L | 5D | 0.40 | 17.00 | 6.95 | 7.37 | Complies |
| 18 | 5L | 10D | 0.80 | 17.00 | 10.21 | 10.82 | Complies |
| 19 | 5R | 10D | 0.80 | 17.00 | 8.42 | 8.92 | Complies |
| 20 | All directions Min. | | 0.05 | --- | 0.53 | 0.56 | Complies |
| 21 | All directions Max. | | --- | 17.00 | 12.95 | 13.73 | Complies |

2.2.2. Stop lamp

2.2.2.1. Sample No. 1, normal mode, 45 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 8.00 | 260.00 | 99.24 | 101.66 | Complies |
| 2 | 5R | 10U | 8.00 | 260.00 | 101.20 | 103.66 | Complies |
| 3 | 20R | 5U | 4.00 | 260.00 | 67.59 | 69.24 | Complies |
| 4 | 10R | 5U | 8.00 | 260.00 | 135.52 | 138.82 | Complies |
| 5 | H | 5U | 28.00 | 260.00 | 157.19 | 161.02 | Complies |
| 6 | 10L | 5U | 8.00 | 260.00 | 132.24 | 135.46 | Complies |
| 7 | 20L | 5U | 4.00 | 260.00 | 65.92 | 67.53 | Complies |
| 8 | 10L | V | 14.00 | 260.00 | 177.64 | 181.97 | Complies |
| 9 | 5L | V | 36.00 | 260.00 | 183.12 | 187.58 | Complies |
| 10 | H | V | 40.00 | 260.00 | 219.31 | 224.65 | Complies |
| 11 | 5R | V | 36.00 | 260.00 | 185.63 | 190.15 | Complies |
| 12 | 10R | V | 14.00 | 260.00 | 179.86 | 184.24 | Complies |
| 13 | 20R | 5D | 4.00 | 260.00 | 103.53 | 106.05 | Complies |
| 14 | 10R | 5D | 8.00 | 260.00 | 169.32 | 173.44 | Complies |
| 15 | H | 5D | 28.00 | 260.00 | 177.53 | 181.85 | Complies |
| 16 | 10L | 5D | 8.00 | 260.00 | 168.69 | 172.80 | Complies |
| 17 | 20L | 5D | 4.00 | 260.00 | 105.56 | 108.13 | Complies |
| 18 | 5L | 10D | 8.00 | 260.00 | 162.85 | 166.82 | Complies |
| 19 | 5R | 10D | 8.00 | 260.00 | 165.90 | 169.94 | Complies |
| 20 | All directions Min. | | 0.30 | --- | 4.04 | 4.14 | Complies |
| 21 | All directions Max. | | --- | 260.00 | 223.67 | 229.12 | Complies |

2.2.2.2. Sample No. 2, normal mode, 45 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 8.00 | 260.00 | 103.37 | 105.90 | Complies |
| 2 | 5R | 10U | 8.00 | 260.00 | 109.16 | 111.84 | Complies |
| 3 | 20R | 5U | 4.00 | 260.00 | 67.55 | 69.21 | Complies |
| 4 | 10R | 5U | 8.00 | 260.00 | 138.35 | 141.74 | Complies |
| 5 | H | 5U | 28.00 | 260.00 | 165.13 | 169.18 | Complies |
| 6 | 10L | 5U | 8.00 | 260.00 | 143.12 | 146.63 | Complies |
| 7 | 20L | 5U | 4.00 | 260.00 | 70.38 | 72.11 | Complies |
| 8 | 10L | V | 14.00 | 260.00 | 186.74 | 191.32 | Complies |
| 9 | 5L | V | 36.00 | 260.00 | 189.39 | 194.03 | Complies |
| 10 | H | V | 40.00 | 260.00 | 227.58 | 233.16 | Complies |
| 11 | 5R | V | 36.00 | 260.00 | 185.33 | 189.87 | Complies |
| 12 | 10R | V | 14.00 | 260.00 | 183.94 | 188.45 | Complies |
| 13 | 20R | 5D | 4.00 | 260.00 | 99.66 | 102.10 | Complies |
| 14 | 10R | 5D | 8.00 | 260.00 | 166.85 | 170.94 | Complies |
| 15 | H | 5D | 28.00 | 260.00 | 169.11 | 173.26 | Complies |
| 16 | 10L | 5D | 8.00 | 260.00 | 170.61 | 174.79 | Complies |
| 17 | 20L | 5D | 4.00 | 260.00 | 100.08 | 102.53 | Complies |
| 18 | 5L | 10D | 8.00 | 260.00 | 163.04 | 167.04 | Complies |
| 19 | 5R | 10D | 8.00 | 260.00 | 157.28 | 161.14 | Complies |
| 20 | All directions Min. | | 0.30 | --- | 4.86 | 4.98 | Complies |
| 21 | All directions Max. | | --- | 260.00 | 231.74 | 237.42 | Complies |

2.2.2.3. Sample No. 1, failed mode, 42 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 8.00 | 260.00 | 93.27 | 94.90 | Complies |
| 2 | 5R | 10U | 8.00 | 260.00 | 94.35 | 96.00 | Complies |
| 3 | 20R | 5U | 4.00 | 260.00 | 64.28 | 65.40 | Complies |
| 4 | 10R | 5U | 8.00 | 260.00 | 127.43 | 129.66 | Complies |
| 5 | H | 5U | 28.00 | 260.00 | 147.23 | 149.80 | Complies |
| 6 | 10L | 5U | 8.00 | 260.00 | 124.46 | 126.64 | Complies |
| 7 | 20L | 5U | 4.00 | 260.00 | 61.53 | 62.61 | Complies |
| 8 | 10L | V | 14.00 | 260.00 | 166.84 | 169.76 | Complies |
| 9 | 5L | V | 36.00 | 260.00 | 171.54 | 174.54 | Complies |
| 10 | H | V | 40.00 | 260.00 | 205.96 | 209.56 | Complies |
| 11 | 5R | V | 36.00 | 260.00 | 174.11 | 177.15 | Complies |
| 12 | 10R | V | 14.00 | 260.00 | 168.85 | 171.80 | Complies |
| 13 | 20R | 5D | 4.00 | 260.00 | 87.91 | 89.45 | Complies |
| 14 | 10R | 5D | 8.00 | 260.00 | 158.74 | 161.51 | Complies |
| 15 | H | 5D | 28.00 | 260.00 | 166.36 | 169.27 | Complies |
| 16 | 10L | 5D | 8.00 | 260.00 | 159.31 | 162.09 | Complies |
| 17 | 20L | 5D | 4.00 | 260.00 | 98.81 | 100.54 | Complies |
| 18 | 5L | 10D | 8.00 | 260.00 | 152.95 | 155.62 | Complies |
| 19 | 5R | 10D | 8.00 | 260.00 | 155.54 | 158.26 | Complies |
| 20 | All directions Min. | | 0.30 | --- | 3.82 | 3.89 | Complies |
| 21 | All directions Max. | | --- | 260.00 | 208.34 | 211.98 | Complies |

2.2.2.4. Sample No. 2, failed mode, 42 LEDs lit together, test voltage 13.5V.

| No. | Point of the measurement | | Limits [cd] | | Measured values [cd] | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | 30 minutes | 1 minute | |
| 1 | 5L | 10U | 8.00 | 260.00 | 97.24 | 99.01 | Complies |
| 2 | 5R | 10U | 8.00 | 260.00 | 101.93 | 103.78 | Complies |
| 3 | 20R | 5U | 4.00 | 260.00 | 63.38 | 64.53 | Complies |
| 4 | 10R | 5U | 8.00 | 260.00 | 130.36 | 132.73 | Complies |
| 5 | H | 5U | 28.00 | 260.00 | 153.86 | 156.66 | Complies |
| 6 | 10L | 5U | 8.00 | 260.00 | 134.31 | 136.75 | Complies |
| 7 | 20L | 5U | 4.00 | 260.00 | 66.37 | 67.58 | Complies |
| 8 | 10L | V | 14.00 | 260.00 | 175.58 | 178.77 | Complies |
| 9 | 5L | V | 36.00 | 260.00 | 178.66 | 181.91 | Complies |
| 10 | H | V | 40.00 | 260.00 | 214.46 | 218.36 | Complies |
| 11 | 5R | V | 36.00 | 260.00 | 174.77 | 177.95 | Complies |
| 12 | 10R | V | 14.00 | 260.00 | 172.23 | 175.36 | Complies |
| 13 | 20R | 5D | 4.00 | 260.00 | 93.75 | 95.45 | Complies |
| 14 | 10R | 5D | 8.00 | 260.00 | 157.75 | 160.62 | Complies |
| 15 | H | 5D | 28.00 | 260.00 | 158.22 | 161.10 | Complies |
| 16 | 10L | 5D | 8.00 | 260.00 | 160.07 | 162.98 | Complies |
| 17 | 20L | 5D | 4.00 | 260.00 | 94.05 | 95.76 | Complies |
| 18 | 5L | 10D | 8.00 | 260.00 | 153.04 | 155.82 | Complies |
| 19 | 5R | 10D | 8.00 | 260.00 | 149.36 | 152.08 | Complies |
| 20 | All directions Min. | | 0.30 | --- | 4.58 | 4.66 | Complies |
| 21 | All directions Max. | | --- | 260.00 | 218.54 | 222.51 | Complies |

2.2.3. The ratio between the luminous intensities actually measured of the two lamps when turned on simultaneously at the intensity of the rear position lamp when turned on alone

| No. | Point of the measurement | | Limits | | Measured values | | Conclusion |
|---|---|---|---|---|---|---|---|
| | | | Min. | Max. | Sample No. 1 | Sample No. 2 | |
| 4 | 10R | 5U | 5.00 | --- | 13.66 | 12.81 | Complies |
| 5 | V | 5U | 5.00 | --- | 14.94 | 14.12 | Complies |
| 6 | 10L | 5U | 5.00 | --- | 14.92 | 13.80 | Complies |
| 8 | 10L | H | 5.00 | --- | 16.45 | 16.43 | Complies |
| 9 | 5L | H | 5.00 | --- | 15.76 | 16.11 | Complies |
| 10 | V | H | 5.00 | --- | 18.11 | 18.09 | Complies |
| 11 | 5R | H | 5.00 | --- | 15.57 | 15.59 | Complies |
| 12 | 10R | H | 5.00 | --- | 17.19 | 15.74 | Complies |
| 14 | 10R | 5D | 5.00 | --- | 14.11 | 15.81 | Complies |
| 15 | V | 5D | 5.00 | --- | 15.84 | 14.71 | Complies |
| 16 | 10L | 5D | 5.00 | --- | 14.62 | 15.51 | Complies |

2.3. Colour – Red

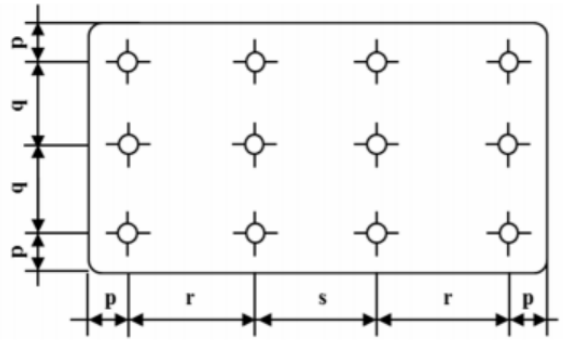
2.3.1 Rear position lamp

| Sample | Measured values | | Limits | | Conclusion |
|---|---|---|---|---|---|
| | x | Y | y ≤ 0.335 | y ≥ 0.980 - x | |
| No. 1 | 0.6782 | 0.3145 | Yes | Yes | Complies |
| No. 2 | 0.6786 | 0.3150 | Yes | Yes | Complies |

2.3.2. Stop lamp

| Sample | Measured values | | Limits | | Conclusion |
|---|---|---|---|---|---|
| | x | y | y ≤ 0.335 | y ≥ 0.980 - x | |
| No. 1 | 0.6758 | 0.3142 | Yes | Yes | Complies |
| No. 2 | 0.6765 | 0.3150 | Yes | Yes | Complies |

2.4. Rear registration plate lamp, category 1 (240 mm x 130 mm)




2.4.1. Sample No. 1 and sample No. 2, normal mode, 2*LEDs lit together, test voltage 13.5V, 1 minute (LUMINANCE ≥ 2cd/m2).

| | | | | |
|---|---|---|---|---|
| Luminance Measurements (B) Sample No. 1 | 1 | 2 | 3 | 4 |
| | 3.30 | 3.60 | 3.90 | 3.50 |
| | 5 | 6 | 7 | 8 |
| | 4.50 | 8.60 | 9.00 | 4.80 |
| | 9 | 10 | 11 | 12 |
| | 7.60 | 27.70 | 28.90 | 8.10 |
| Luminance Measurements (B) Sample No. 2 | 1 | 2 | 3 | 4 |
| | 3.50 | 3.90 | 4.30 | 3.70 |
| | 5 | 6 | 7 | 8 |
| | 4.90 | 9.10 | 9.60 | 5.10 |
| | 9 | 10 | 11 | 12 |
| | 7.90 | 28.70 | 29.40 | 8.50 |

2.4.1.1. The gradient of the luminance between the values B1 and B2

| | Sample No. 1 | Sample No. 2 |
|---|---|---|
| Requirement | Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2\ (cm)} \leq 2 \times Bo / cm$ | |
| Results | Max. of gradient of luminance= 3.3<br>2 x Bo / cm= 9.96<br>Complies | Max. of gradient of luminance= 3.5<br>2 x Bo / cm= 9.90<br>Complies |
| Conclusion | Complies | Complies |

2.4.2. Sample No. 1 and sample No. 2, normal mode, 2*LEDs lit together, test voltage 13.5V, 30 minutes (LUMINANCE ≥ 2cd/m$^2$).

| | | | | |
|---|---|---|---|---|
| Luminance Measurements (B) Sample No. 1 | 1 | 2 | 3 | 4 |
| | 3.00 | 3.30 | 3.50 | 3.20 |
| | 5 | 6 | 7 | 8 |
| | 4.10 | 7.80 | 8.20 | 4.40 |
| | 9 | 10 | 11 | 12 |
| | 6.90 | 25.20 | 26.30 | 7.40 |
| Luminance Measurements (B) Sample No. 2 | 1 | 2 | 3 | 4 |
| | 3.20 | 3.60 | 3.90 | 3.40 |
| | 5 | 6 | 7 | 8 |
| | 4.50 | 8.30 | 8.80 | 4.70 |
| | 9 | 10 | 11 | 12 |
| | 7.20 | 26.20 | 26.90 | 7.80 |

2.4.2.1. The gradient of the luminance between the values B1 and B2

| | Sample No. 1 | Sample No. 2 |
|---|---|---|
| Requirement | Gradient of luminance: $\frac{B_2 - B_1}{d_1 - d_2\ (cm)} \leq 2 \times Bo / cm$ | |
| Results | Max. of gradient of luminance= 3<br>2 x Bo / cm= 9.06<br>Complies | Max. of gradient of luminance= 3.2<br>2 x Bo / cm= 9.06<br>Complies |
| Conclusion | Complies | Complies |

2.4.3. Incidence of the light

| | Sample No. 1 | Sample No. 2 |
|---|---|---|
| Requirement | According to this regulation paragraph 7. | |
| Results | The angle of incidence of the light on the surface of the plate does not exceed 82° at any point on the surface | |
| Conclusion | Complies | Complies |

2.4.4. Colour of the light

| | Sample No. 1 | Sample No. 2 |
|---|---|---|
| Requirement | According to this regulation paragraph 6. | |
| Results | The light of the lamp used in the illuminating device is sufficiently colourless not to cause any appreciable change in the colour of the registration plate. | |
| Conclusion | Complies | Complies |

2.5. Apparent surface

| | Limit (O) | Limit (I) | Limit (U) | Limit (D) |
|---|---|---|---|---|
| Stop lamp | 61 mm | 61 mm | 41 mm | 41 mm |
| Rear position lamp | 61 mm | 61 mm | 41 mm | 41 mm |
| Rear registration plate lamp | 21 mm | 21 mm | 12 mm | 12 mm |

3. Specimen submitted to test on : 2021-04-28 (YYYY-MM-DD)

4. Place and date of the test : Jiangsu Huachen Vehicle Inspection Co., Ltd., Zhenjiang City, P.R. China
2021-05-11 (YYYY-MM-DD)

| | |
|---|---|
| Information folder No. : | TL-W-R-00 |
| First application date : | April 28, 2021 |

1. Specification data

| Type | | TL-W-R | | |
|---|---|---|---|---|
| Variant | | Variant 1: TL-W-R<br>Variant 2: TL-NW-R | | |
| Function | | Rear group lamp | | |
| | | Stop lamp | Rear position lamp | Rear registration plate lamp |
| Color | | Red | Red | Colorless |
| Rated | Voltage | 12V | 12V | 12V |
| | Wattage | 2.67W | 0.5W | 0.29W |
| Application Regulation ECE | | R148.00 MS | R148.00 MR | R148.00 LM1 |
| Location of marking | Number and category of light source | 45*LEDs | 53*LEDs | 2*LEDs |
| | | Non-replaceable light source | | |
| | | Marked on housing | | |
| | Trade mark | CD | | |
| | | Marked on lens | | |
| | Approval mark | Marked on lens | | |
| | Type | Marked on housing | | |

2. Construction and material

| Construction | | Material | Remarks |
|---|---|---|---|
| Outer lens | Stop lamp + Rear position lamp | PC | Color: Red |
| | Rear registration plate lamp | PC | Color: Clear |
| Inner lens | Stop lamp + Rear position lamp | PMMA | Color: Clear |
| Housing | | ABS | -- |
| Electrical Wiring | | Copper covered with insulation | -- |

3. Name and address of manufacturer : Shanghai Jason Plastic Co., Ltd.
B3, No. 108, Pengfeng Road, Malu Town,
Jiading District, Shanghai, China

4. Name and address of the assembly plant : See 3.

5. Name and address of the manufacturer's representative : N/A

6: Apparent surface

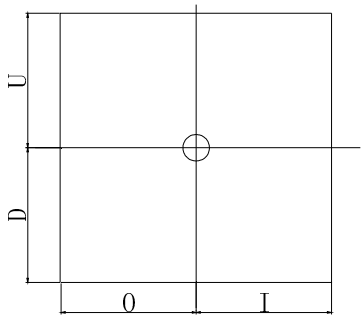
⊕ :Reference center

U= Upper limit

D= Down limit

I= Inside limit

O= Outside limit



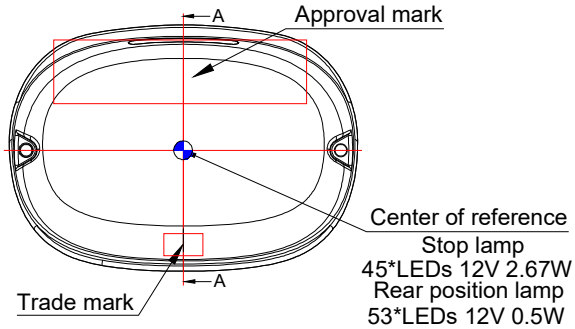

Unit: mm

| Function | Limit (O) | Limit (I) | Limit (U) | Limit (D) |
|---|---|---|---|---|
| Stop lamp | 61 | 61 | 41 | 41 |
| Rear position lamp | 61 | 61 | 41 | 41 |
| Rear registration plate lamp | 21 | 21 | 12 | 12 |
| -- | -- | -- | -- | -- |

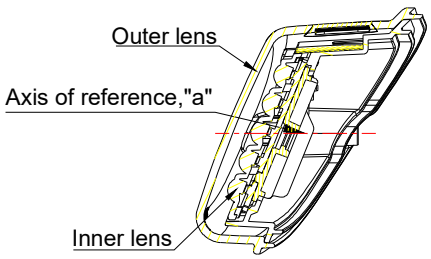
| | |
|---|---|
| Information folder No. : | TL-W-R-00 |
| First application date : | April 28, 2021 |

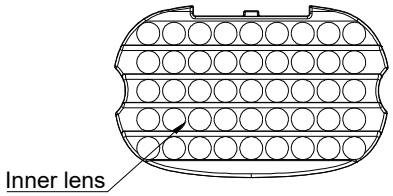
Variant 1: TL-W-R (With Rear registration plate lamp)

## Front view

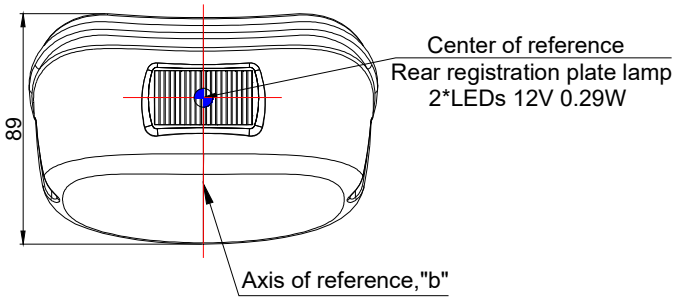



## Section A-A




## Top view

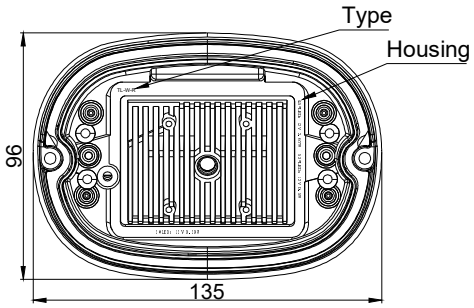



NOTE:
1. "a": Horizontal Plane of Vehicle
2. "b": Longitudinal Plane of Vehicle

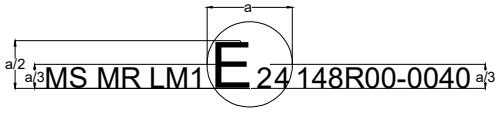
## Trade mark

CD

## Back view




## Approval mark



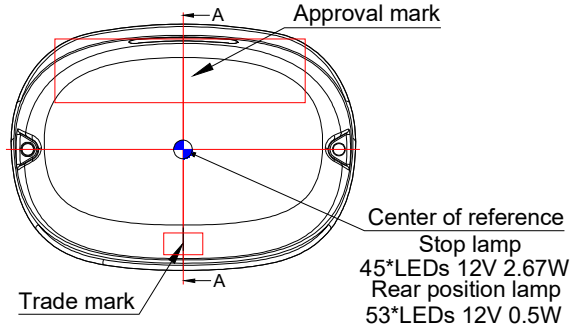

a=5mm min

| | |
|---|---|
| Product Type | TL-W-R |
| General assembly drawing | |
| Drawing No. | TL-W-R-01 |

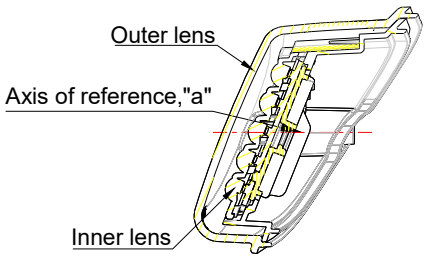
| | |
|---|---|
| Information folder No. : | TL-W-R-00 |
| First application date : | April 28, 2021 |

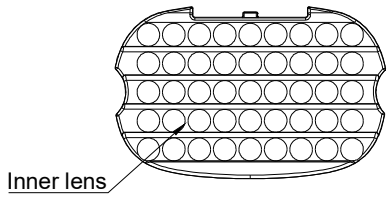
Variant 2: TL-NW-R (Without Rear registration plate lamp)

## Front view

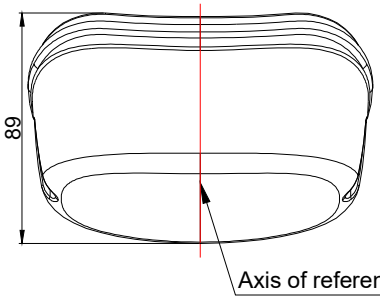



## Section A-A




## Top view

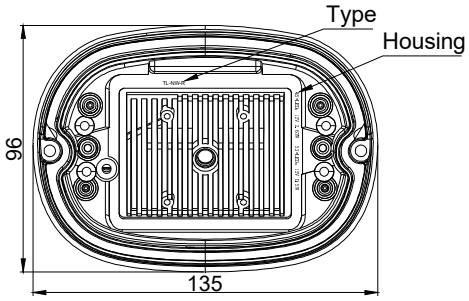



NOTE:
1. "a": Horizontal Plane of Vehicle
2. "b": Longitudinal Plane of Vehicle

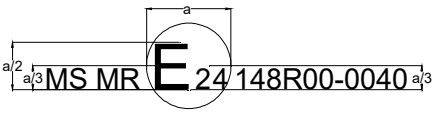
## Trade mark

CD

## Back view



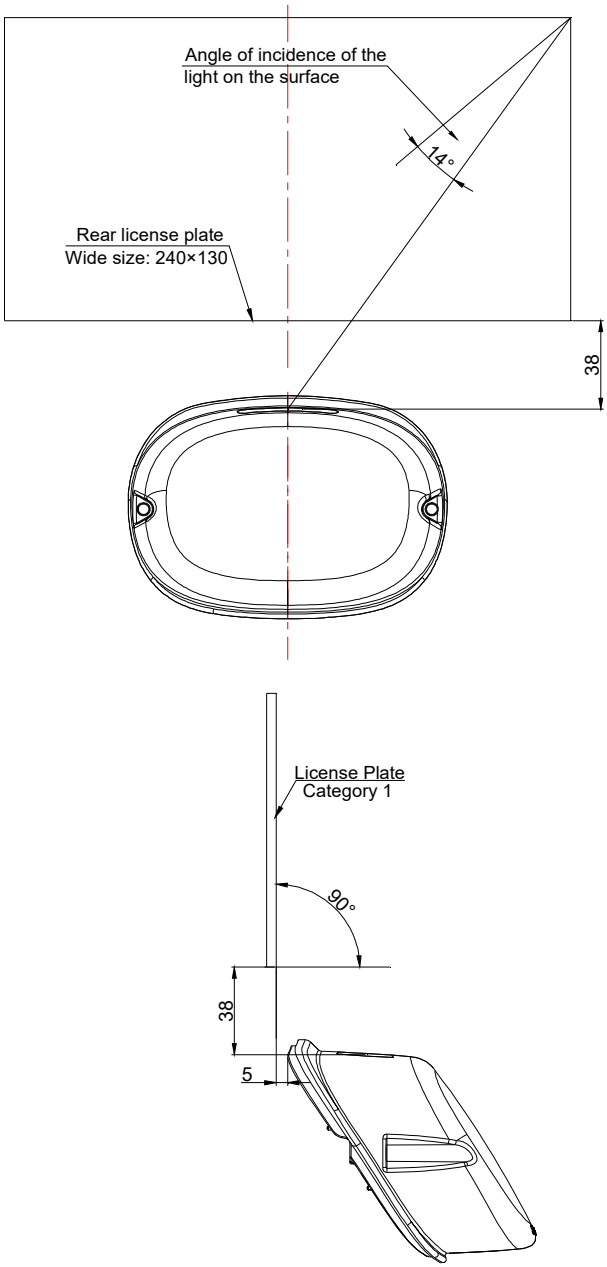

## Approval mark




a=5mm min

| | |
|---|---|
| Product Type | TL-W-R |
| General assembly drawing | |
| Drawing No. | TL-W-R-02 |

# Installation requirements of rear license plate




| | |
|---|---|
| Product Type | TL-W-R |
| Installation requirements | |
| Drawing No. | TL-W-R-03 |

| | |
|---|---|
| Information folder No. : | TL-W-R-00 |
| First application date : | April 28, 2021 |

Stop lamp

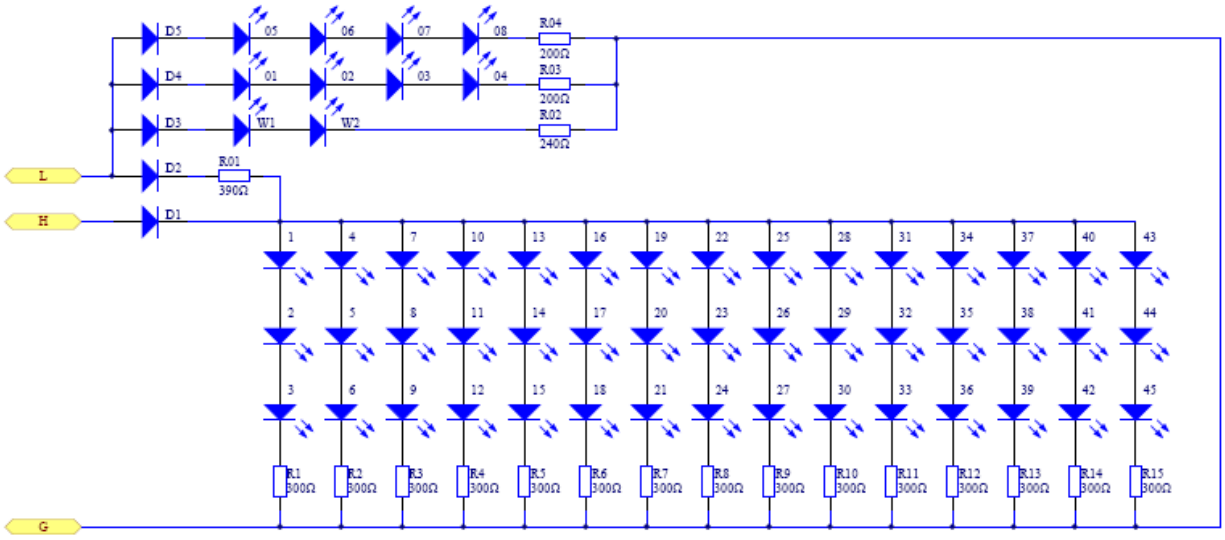
45*LEDs 12V 2.67W

Rear position lamp

53*LEDs 12V 0.5W

Rear registration plate lamp

2*LEDs 12V 0.29W




| | |
|---|---|
| Product Type | TL-W-R |
| Led circuit diagram | |
| Drawing No. | TL-W-R-04 |