

THE NETHERLANDS
(N E D E R L A N D)

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- approval withdrawn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	: 2a
Change index	: ---
Approval number	: E4*148R00/03*0343*00
Unique Identifier (UI) (if applicable)	: ---

1. Trade name or mark of the lamp :  (K-LITE), K-LITE, KYI
2. Manufacturer's name for the type of lamp : T134-ZX
3. Manufacturer's name and address : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road,
Yangming Industrial Zone, Yuyao City,
Zhejiang Province, 315400 China (PRC)
4. If applicable, name and address of the manufacturer's representative : ---
5. Submitted for approval on : 20/04/2022
6. Technical service responsible for conducting approval tests : IDIADA
L'Albornar- PO Box 20
E-43710 Santa Oliva (Tarragona)
SPAIN
7. Date of report issued by that Service : 18/05/2022
8. Number of report issued by that Service : CN22040600
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) : ---
- 9.1.2. A direction indicator :
- 9.1.3. Sequential activation of light sources : yes/no⁽¹⁾
A reversing lamp : ---

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 :

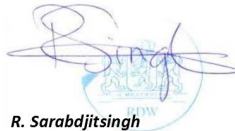
The maximum mounting height : ---
- 9.2. By light signalling function and category:

For mounting either outside or inside or both⁽¹⁾



- Colour of light emitted : ~~red/white/amber/colourless~~⁽¹⁾
- Number, category and kind of light source(s) : Rear direction indicator: 15x LEDs
- Voltage and wattage : Rear direction indicator: 12V/24V, 1.2W;
- Light source module : ~~yes/no~~⁽¹⁾
- Light source module specific identification code : ---
- 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 : ---
- Application of an electronic light source control gear/variable intensity control :
- (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 : ---
- 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) : ---
- Variable luminous intensity, if applicable : ~~yes/no~~⁽¹⁾
- Function(s) produced by an interdependent lamp forming part of an interdependent lamp system, if applicable : ---
- 9.3. ~~The front position lamp⁽⁺⁾, rear position lamp⁽⁺⁾, stop lamp⁽⁺⁾, end-outline marker lamp⁽⁺⁾, daytime running lamp~~
(⁽¹⁾ is only for use on a vehicle fitted with a tell-tale indicating failure : ~~yes/no~~⁽¹⁾
10. Position of the approval mark : Marked on Lens
11. Reason(s) for extension (if applicable) : ---
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 : 20 May 2022
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.

Statement manufacturer and authorization regarding application

1 **EC & UNECE type-approval number** : E4*148R00/03*0343*00

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

3 Company name : K-Lite (Yuyao) Plastics Co., Ltd.
4 Name authorized person : Zhu Xiaolong
5 Job title : General manager
6 E-mail address : 18605844788@163.com
7 Address : No.5 Workshop, No.20 Xingye Road, Yangming Industrial Zone, Yuyao City,Zhejiang
Province, 315400 China (PRC)
8 Country : China

9 **Statement**

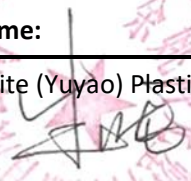
10 Hereby : Zhu Xiaolong ,
11 declares on behalf of
the manufacturer : K-Lite (Yuyao) Plastics Co., Ltd. ,
12 for the application with
type-approval number : E4*148R00/03*0343*00 ,
13 the following:
14 a) the manufacturer has not applied for an EC & UNECE type-approval for the same type to any other 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 : IDIADA AUTOMOTIVE TECHNOLOGY International Offices Homologation Department
20 E-mail address : suppliers@idiada.com
21 Address : Pol. Ind. L'Albornar - s/n E – 43710 Santa Oliva (Tarragona)
22 Country : España

23 **Authorization**

24 By means of this
declaration, I : Zhu Xiaolong ,
25 on behalf of : K-Lite (Yuyao) Plastics Co., Ltd. ,
26 Authorizes : IDIADA AUTOMOTIVE TECHNOLOGY International Offices Homologation Department ,
27 to respectively apply for a type-approval with type-approval number:
E4*148R00/03*0343*00 ,
28 handle all communication concerning this application and receive the type-approval certificate.

29 Date	Place	Name:
30 May 16, 2022	Zhejiang, China	K-Lite (Yuyao) Plastics Co., Ltd.
31	On their behalf, signature :	
32	Name :	Zhu Xiaolong

⁽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.

TECHNICAL DOCUMENTATION

Application date : April 20, 2022

1. Specification data

17. Specification data			
Type		T134-ZX	
Function		Rear Direction Indicator	
Emitted color		Amber	
Rated	Voltage	12V/24V	
	Wattage	1.2W	
Applicable Regulation (UN)		R148.00 Cat. 2a	
Number and category of light source		15xLED Non-replaceable light source	
Location of marking	Rated voltage and wattage	Marked on Housing	
	Trade mark	 (K-LITE), K-LITE, KYI	Marked on Lens
	Approval mark	Marked on Lens	

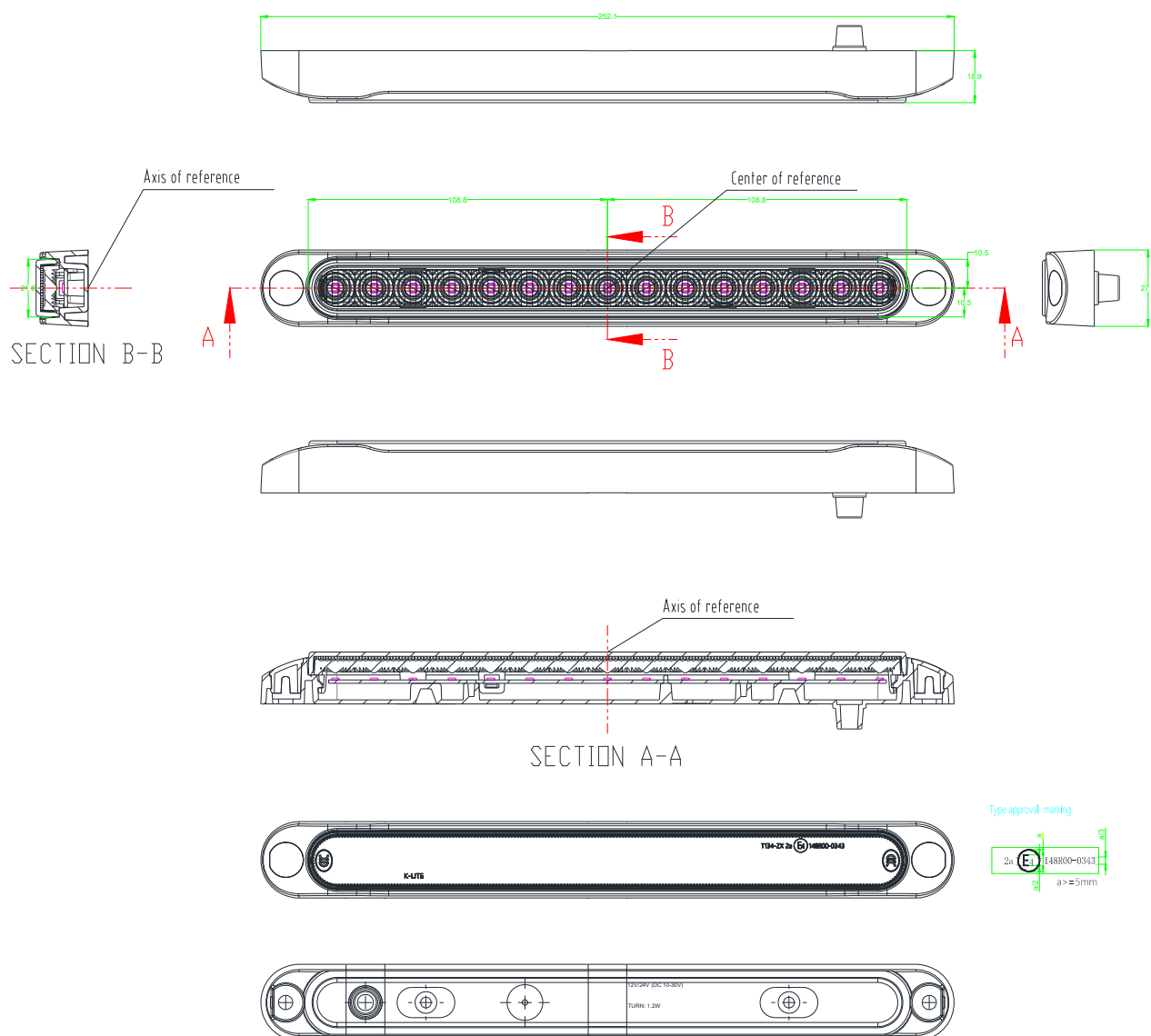
2. Construction and material

Construction	Material	Remarks
Outer Lens	PMMA	Amber, Non-Textured
Inner Lens	PMMA	Clear, Non-textured
Housing	ABS	Black
Electrical wiring	---	---

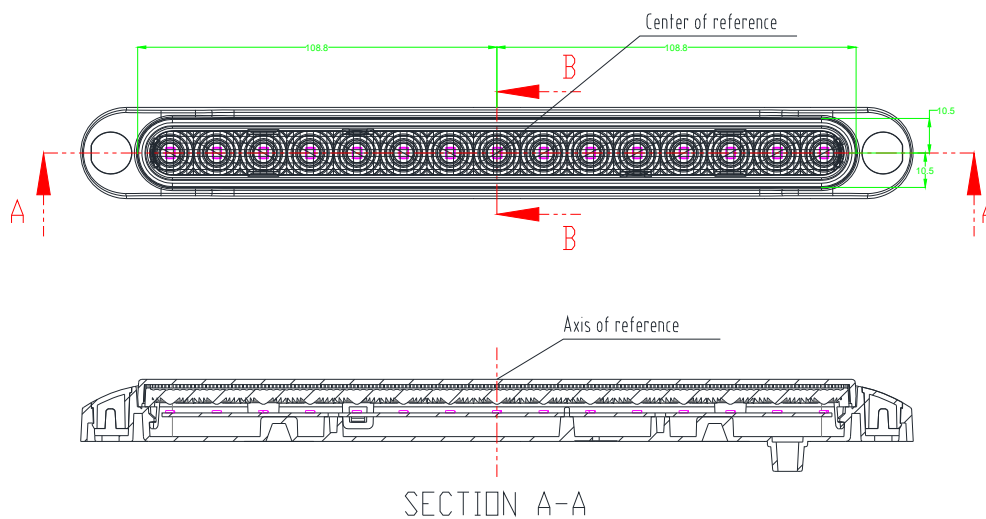
3. Name and address of manufacturer : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road,
Yangming Industrial Zone, Yuyao City,
Zhejiang Province, 315400 China (PRC)

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

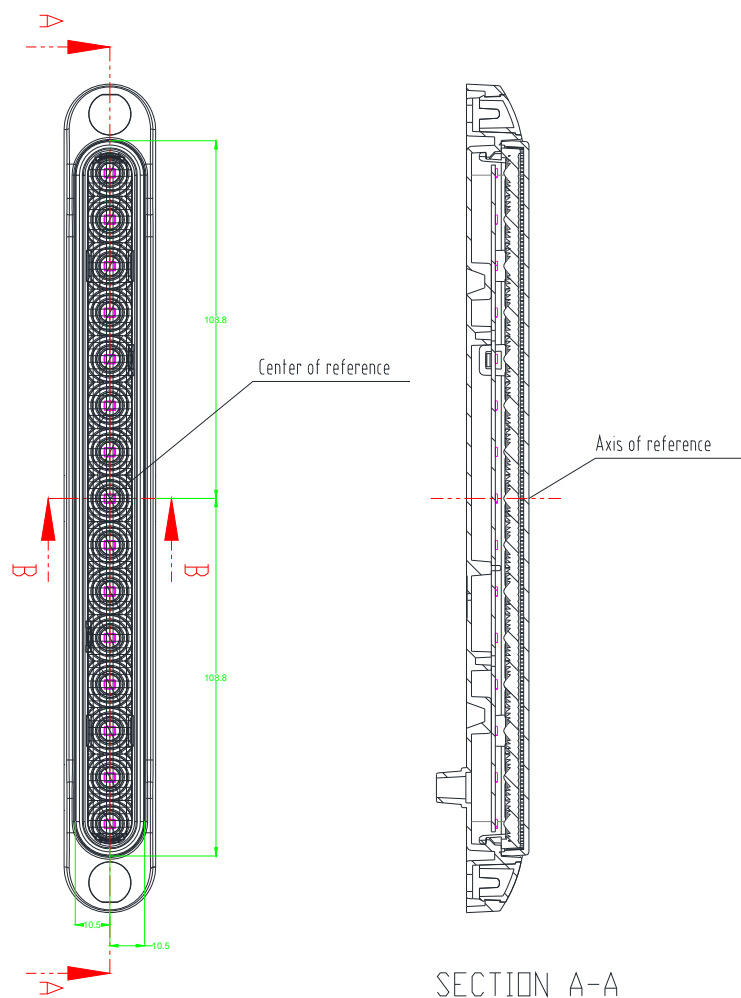
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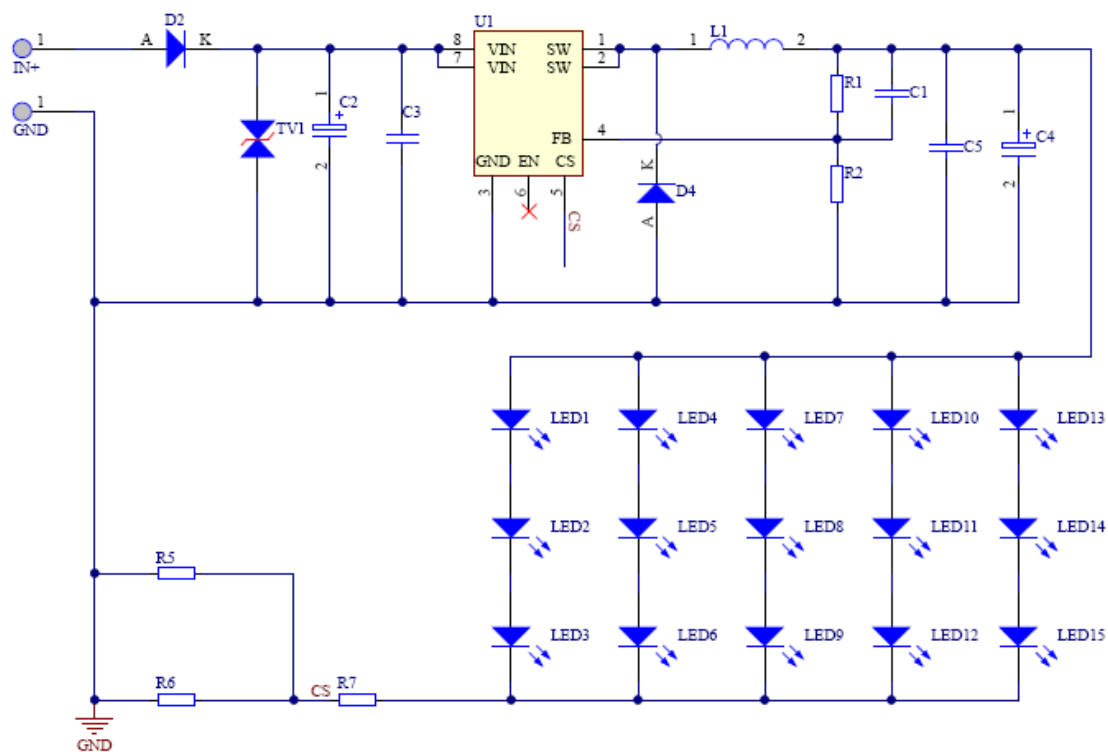


Installation condition 1: Horizontal mounting



Installation condition 2: Vertical mounting



pppCIRCUIT SCHEMATIC DIAGRAM

Rated voltage: 12V/24V (Input range: DC 10 - 30V)

Rear Direction Indicator: 15xLED, 1.2W, Non-replaceable light source

REPORT No. CN22040600**CONCERNING THE APPROVAL OF LIGHT-SIGNALLING DEVICES (LAMPS) FOR POWER-DRIVEN
VEHICLES AND THEIR TRAILERS ACCORDING TO UN REGULATION No. 148R00/03**

Manufacturer's name and address : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road,
Yangming Industrial Zone, Yuyao City,
Zhejiang Province, 315400 China (PRC)

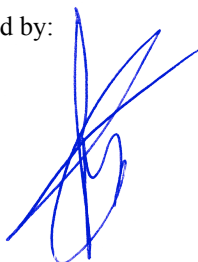
Trade mark :  (K-LITE), K-LITE, KYI

Type : T134-ZX

Place and date of test report issue : L'Albornar, Santa Oliva (Tarragona)
18/05/2022

CONCLUSIONS: This device **FULFILLS** the prescriptions with regard to the approval of light-signalling devices (lamps) for motor vehicles and their trailers in application of UN Regulation No. 148R00/03 as detailed in the annex to this report.

Performed by:

Joan Fonts Sala
TEST ENGINEER

Revised by:

Josep Masip Gomez
DEPARTMENT MANAGER

ANNEX TO THE REPORT

Manufacturer's name and address ⁽¹⁾ : K-Lite (Yuyao) Plastics Co., Ltd.
No.5 Workshop, No.20 Xingye Road,
Yangming Industrial Zone, Yuyao City,
Zhejiang Province, 315400 China (PRC)

Trade mark ⁽¹⁾ :  (K-LITE), K-LITE, KYI

Type ⁽¹⁾ : T134-ZX

Variants ⁽¹⁾ : ---

Sample identification : CN22040600

Lamp ⁽¹⁾⁽²⁾ : ~~- Rear registration plate illuminating lamp~~
~~- Front direction indicator lamp~~
~~- Rear direction indicator lamp~~
~~- Stop lamp~~
~~- Front position lamp~~
~~- Rear position lamp~~
~~- Front end-outline marker lamp~~
~~- Rear end-outline marker lamp~~
~~- Reversing lamp~~
~~- Manoeuvring lamp~~
~~- Rear fog lamp~~
~~- Parking lamp~~
~~- Daytime running lamp~~
~~- Side marker lamp~~
~~- Rear registration plate illuminating lamp for category L vehicles~~
~~- Front direction indicator lamp for category L vehicles~~
~~- Rear direction indicator lamp for category L vehicles~~
~~- Stop lamp for category L vehicles~~
~~- Front position lamp for category L vehicles~~
~~- Rear position lamp for category L vehicles~~

⁽¹⁾ Information provided by the client. The laboratory is not responsible for such information

⁽²⁾ Strike out what does not apply

Lamp ⁽¹⁾	Category ⁽¹⁾⁽²⁾	Kind of lamp ⁽¹⁾⁽²⁾	Light sources number and category ⁽¹⁾	Replaceability ⁽¹⁾⁽²⁾	Light source module specific identification code (if applicable)
Direction indicator lamp	1-1a-1b-2a-2b-5-6 Sequential – Non-sequential	Single – D-lamp Y-lamp	15 x LEDs	Replaceable Non-replaceable	---

⁽¹⁾ Information provided by the client. The laboratory is not responsible for such information

⁽²⁾ Strike out what does not apply

REAR DIRECTION INDICATOR

MARKING

Marking	CORRECT
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GENERAL SPECIFICATIONS

The requirements contained in sections 5. "General specifications" and 6. "Individual specifications" and in the Annexes referenced in the said sections of Regulations Nos. 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. The requirements pertinent to each lamp and to the category/ies of vehicle on which the lamp is intended to be installed shall be applied, where its verification at the moment of lamp type approval is feasible.	CORRECT
Vibration endurance	CORRECT

LIGHT SOURCE MODULES

The design of the light source module(s) shall be such as: a) That each light source module can only be fitted in no other position than the designated and correct one and can only be removed with the use of tool(s); b) If there are more than one light source module used in the housing for a device, light source modules having different characteristics cannot be interchanged within the same lamp housing.	NOT APPLICABLE
The light source module(s) shall be tamperproof.	NOT APPLICABLE
A light source module shall be so designed that regardless of the use of tool(s), it shall not be mechanically interchangeable with any replaceable approved light source.	NOT APPLICABLE

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

REPLACEABLE LIGHT SOURCE(S)

Light source approved according to Regulation UN No. 37 and/or Regulation UN No. 128.	NOT APPLICABLE
The design of the device shall be such that the light source cannot be fixed in any other position but the correct one.	NOT APPLICABLE
The light source holder shall conform to the characteristics given in IEC Publication 60061.	NOT APPLICABLE

NON-REPLACEABLE FILAMENT LAMP OR LIGHT SOURCE MODULE EQUIPPED WITH NON-REPLACEABLE FILAMENT LAMP(S)

In the case of non-replaceable filament lamp(s) or light source module(s) equipped with non-replaceable filament lamp(s), the applicant shall annex to the type approval documentation a report (by the light source manufacturer indicated in the type approval documentation), acceptable to the Authority responsible for type approval, that demonstrates compliance of these non-replaceable filament lamp(s) with the requirements as specified in paragraph 4.11. of IEC 60809, Edition 3.	NOT APPLICABLE
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SEQUENTIAL ACTIVATION OF LIGHT SOURCE(S)

Each light source, after its activation, shall remain lit until the end of the ON cycle.	NOT APPLICABLE
The sequence of activation of the light sources shall produce a signal which proceeds in a uniform progressive manner from inboard towards the outboard edge of the light emitting surface.	NOT APPLICABLE
It shall be one signal with no interruption and no vertical oscillations (e.g. not more than one change of direction along the vertical axis). The distance between two adjacent/tangential distinct parts of the light emitting surface of the sequential direction indicator shall not exceed 50mm, when measured perpendicularly to the reference axis, instead of the values defined in paragraph 5.7.2. of Regulation 48. These interruptions of the signal shall not create any overlap in the vertical axis between the different parts, from inboard towards the outboard of the vehicle, and shall not be used for any other lighting or light signalling functions.	NOT APPLICABLE
The variation shall finish no more than 200 ms after the beginning of the ON cycle. $T_{ON} = \text{--- ms}$	NOT APPLICABLE
The orthogonal projection of the light emitting surfaces of the direction indicator in the direction of the axis of reference shall be circumscribed by a rectangle on a plane normal to the axis of reference and having its longer sides parallel to the H-plane. The ratio of the horizontal to the vertical sides shall not be less than 1.7.	NOT APPLICABLE

INTERDEPENDENT LAMP

An interdependent lamp system shall meet the requirements when all its interdependent lamps are opened together.	NOT APPLICABLE
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HORIZONTAL INSTALLATION

COLORIMETRIC SPECIFICATIONS

AMBER ZONE:

- Limit towards the green: $y \leq x - 0.120$
- Limit towards the red: $y \geq 0.390$
- Limit towards the white: $y \geq 0.790 - 0.670x$

Chromatic co-ordinates (reference axis)	SAMPLE A	SAMPLE B
x	0.5848	0.5854
y	0.4130	0.4126
z	0.0022	0.0020

Test result: The samples tested fulfil with the colorimetric specifications within the field of the light distribution grid defined in the present Regulation. Outside this field no sharp variation of colour is observed.

PHOTOMETRIC SPECIFICATIONS

- Luminous intensities measured after one minute of operation.

	SAMPLE A	SAMPLE B
Luminous intensity in the angular field specified: $500.0 \geq I(\text{cd}) \geq 0.3$ H = 80° outboard / 45° inboard; V = 15° upwards / 15° downwards H = 80° outboard / 45° inboard; V = 15° upwards / 0° and H = 80° outboard / 20° inboard; V = 0° / 5° downwards: device installed with the H plane of the lamp with mounting height < 750 mm above the ground H = 80° outboard / 45° inboard; V = 5° upwards / 15° downwards: device installed with the H plane of the lamp with mounting height > 2100 mm above the ground	$I_{\text{max}} (\text{cd}) = 117.9$ $I_{\text{min}} (\text{cd}) = 0.620$ CORRECT	$I_{\text{max}} (\text{cd}) = 131.8$ $I_{\text{min}} (\text{cd}) = 0.574$ CORRECT

SPATIAL LUMINOUS DISTRIBUTION TABLE

SAMPLE A

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 88.11Cd 10.0		500.0 86.88Cd 10.0		
max 5° min	500.0 36.28Cd 5.0	500.0 80.08Cd 10.0		500.0 111.9Cd 35.0		500.0 81.87Cd 10.0	500.0 39.49Cd 5.0
max 0° min		500.0 80.47Cd 17.5	500.0 104.6Cd 45.0	500.0 117.8Cd 50.0	500.0 105.3Cd 45.0	500.0 84.38Cd 17.5	
max 5° min	500.0 35.81Cd 5.0	500.0 75.49Cd 10.0		500.0 103.7Cd 35.0		500.0 79.87Cd 10.0	500.0 38.54Cd 5.0
max 10° min			500.0 76.73Cd* 10.0		500.0 77.14Cd* 10.0		

SAMPLE B

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 88.55Cd 10.0		500.0 100.2Cd 10.0		
max 5° min	500.0 34.48Cd 5.0	500.0 81.40Cd 10.0		500.0 120.1Cd 35.0		500.0 98.94Cd 10.0	500.0 50.94Cd 5.0
max 0° min		500.0 82.17Cd 17.5	500.0 104.9Cd 45.0	500.0 130.5Cd 50.0	500.0 121.5Cd 45.0	500.0 100.7Cd 17.5	
max 5° min	500.0 33.40Cd 5.0	500.0 75.89Cd 10.0		500.0 114.0Cd 35.0		500.0 94.94Cd 10.0	500.0 49.04Cd 5.0
max 10° min			500.0 81.92Cd* 10.0		500.0 91.73Cd* 10.0		

*In the case where the lamp is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of 5° downwards

2. Luminous intensities measured after 30 minutes of operation.

	SAMPLE A	SAMPLE B
Luminous intensity in the angular field specified: $500.0 \geq I(\text{cd}) \geq 0.3$ H = 80° outboard / 45° inboard; V = 15° upwards / 15° downwards H = 80° outboard / 45° inboard; V = 15° upwards / 0° and H = 80° outboard / 20° inboard; V = 0° / 5° downwards: device installed with the H plane of the lamp with mounting height < 750 mm above the ground H = 80° outboard / 45° inboard; V = 5° upwards / 15° downwards: device installed with the H plane of the lamp with mounting height > 2100 mm above the ground	$I_{\text{max}}(\text{cd}) = 116.2$ $I_{\text{min}}(\text{cd}) = 0.611$ CORRECT	$I_{\text{max}}(\text{cd}) = 127.5$ $I_{\text{min}}(\text{cd}) = 0.555$ CORRECT
In case of failure of a single lamp or of an interdependent lamp system of the categories 1, 1a, 1b, 2a and 2b containing more than one light source, a signal for activation of the tell-plate prescribed in paragraph 6.5.8. of Regulation No. 48 is produced if: - any one light source has failed ⁽¹⁾, or - in the case of a lamp designed for only two light sources, the intensity in the axis of reference is less than 50% of the minimum intensity, or - as a consequence of a failure of one or more light sources, the intensity in one of the following directions as indicated in this Regulation is less than the minimum intensity required: - H = 0°, V = 0° - H = 20° outboard, V = 5° upwards - H = 10° inboard, V = 0° Note 1: A group of light sources, wired so that the failure of any one of them causes all of them to stop emitting light, shall be considered to be one light source.	CORRECT	CORRECT

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.
* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

SPATIAL LUMINOUS DISTRIBUTION TABLE

SAMPLE A

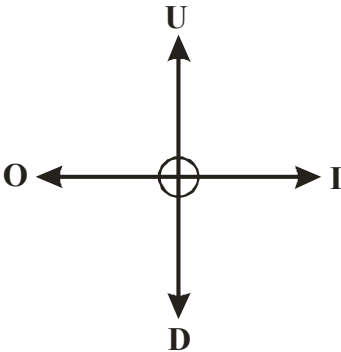
H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 86.84Cd 10.0		500.0 85.63Cd 10.0		
max 5° min	500.0 35.76Cd 5.0	500.0 78.92Cd 10.0		500.0 110.3Cd 35.0		500.0 80.69Cd 10.0	500.0 38.92Cd 5.0
max 0° min		500.0 79.31Cd 17.5	500.0 103.1Cd 45.0	500.0 116.1Cd 50.0	500.0 103.8Cd 45.0	500.0 83.16Cd 17.5	
max 5° min	500.0 35.29Cd 5.0	500.0 74.40Cd 10.0		500.0 102.2Cd 35.0		500.0 78.72Cd 10.0	500.0 37.98Cd 5.0
max 10° min			500.0 75.62Cd* 10.0		500.0 76.03Cd* 10.0		

SAMPLE B

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 85.63Cd 10.0		500.0 96.91Cd 10.0		
max 5° min	500.0 33.34Cd 5.0	500.0 78.72Cd 10.0		500.0 116.1Cd 35.0		500.0 95.68Cd 10.0	500.0 49.26Cd 5.0
max 0° min		500.0 79.46Cd 17.5	500.0 101.4Cd 45.0	500.0 126.2Cd 50.0	500.0 117.5Cd 45.0	500.0 97.35Cd 17.5	
max 5° min	500.0 32.30Cd 5.0	500.0 73.39Cd 10.0		500.0 110.2Cd 35.0		500.0 91.81Cd 10.0	500.0 47.42Cd 5.0
max 10° min			500.0 79.22Cd* 10.0		500.0 88.71Cd* 10.0		

* In the case where the lamp is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of 5° downwards

ILLUMINATING SURFACE



Upper boundary “U” (mm)	Down boundary “D” (mm)	Inner boundary “I” (mm)	Outer boundary “O” (mm)
9	9	101	101

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* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.
* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

VERTICAL INSTALLATION

COLORIMETRIC SPECIFICATIONS

AMBER ZONE:

- Limit towards the green: $y \leq x - 0.120$
- Limit towards the red: $y \geq 0.390$
- Limit towards the white: $y \geq 0.790 - 0.670x$

Chromatic co-ordinates (reference axis)	SAMPLE A	SAMPLE B
x	0.5848	0.5854
y	0.4130	0.4126
z	0.0022	0.0020

Test result: The samples tested fulfil with the colorimetric specifications within the field of the light distribution grid defined in the present Regulation. Outside this field no sharp variation of colour is observed.

PHOTOMETRIC SPECIFICATIONS

3. Luminous intensities measured after one minute of operation.

	SAMPLE A	SAMPLE B
Luminous intensity in the angular field specified: $500.0 \geq I(\text{cd}) \geq 0.3$ H = 80° outboard / 45° inboard; V = 15° upwards / 15° downwards H = 80° outboard / 45° inboard; V = 15° upwards / 0° and H = 80° outboard / 20° inboard; V = 0° / 5° downwards: device installed with the H plane of the lamp with mounting height < 750 mm above the ground H = 80° outboard / 45° inboard; V = 5° upwards / 15° downwards: device installed with the H plane of the lamp with mounting height > 2100 mm above the ground	$I_{\text{max}} (\text{cd}) = 118.1$ $I_{\text{min}} (\text{cd}) = 0.646$ CORRECT	$I_{\text{max}} (\text{cd}) = 132.1$ $I_{\text{min}} (\text{cd}) = 0.791$ CORRECT

SPATIAL LUMINOUS DISTRIBUTION TABLE

SAMPLE A

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 77.24Cd 10.0		500.0 82.18Cd 10.0		
max 5° min	500.0 33.63Cd 5.0	500.0 77.25Cd 10.0		500.0 106.7Cd 35.0		500.0 89.68Cd 10.0	500.0 42.24Cd 5.0
max 0° min		500.0 81.33Cd 17.5	500.0 103.4Cd 45.0	500.0 117.8Cd 50.0	500.0 112.2Cd 45.0	500.0 95.39Cd 17.5	
max 5° min	500.0 33.25Cd 5.0	500.0 76.07Cd 10.0		500.0 103.3Cd 35.0		500.0 86.08Cd 10.0	500.0 41.54Cd 5.0
max 10° min			500.0 78.07Cd* 10.0		500.0 80.17Cd* 10.0		

SAMPLE B

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 78.20Cd 10.0		500.0 83.86Cd 10.0		
max 5° min	500.0 36.16Cd 5.0	500.0 83.56Cd 10.0		500.0 107.8Cd 35.0		500.0 90.28Cd 10.0	500.0 43.91Cd 5.0
max 0° min		500.0 95.06Cd 17.5	500.0 115.0Cd 45.0	500.0 131.5Cd 50.0	500.0 121.1Cd 45.0	500.0 101.7Cd 17.5	
max 5° min	500.0 37.88Cd 5.0	500.0 90.70Cd 10.0		500.0 119.8Cd 35.0		500.0 99.35Cd 10.0	500.0 45.35Cd 5.0
max 10° min			500.0 93.16Cd* 10.0		500.0 97.01Cd* 10.0		

*In the case where the lamp is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of 5° downwards

4. Luminous intensities measured after 30 minutes of operation.

	SAMPLE A	SAMPLE B
Luminous intensity in the angular field specified: $500.0 \geq I(\text{cd}) \geq 0.3$ H = 80° outboard / 45° inboard; V = 15° upwards / 15° downwards H = 80° outboard / 45° inboard; V = 15° upwards / 0° and H = 80° outboard / 20° inboard; V = 0° / 5° downwards: device installed with the H plane of the lamp with mounting height < 750 mm above the ground H = 80° outboard / 45° inboard; V = 5° upwards / 15° downwards: device installed with the H plane of the lamp with mounting height > 2100 mm above the ground	$I_{\text{max}}(\text{cd}) = 116.4$ $I_{\text{min}}(\text{cd}) = 0.637$ CORRECT	$I_{\text{max}}(\text{cd}) = 127.6$ $I_{\text{min}}(\text{cd}) = 0.764$ CORRECT
In case of failure of a single lamp or of an interdependent lamp system of the categories 1, 1a, 1b, 2a and 2b containing more than one light source, a signal for activation of the tell-plate prescribed in paragraph 6.5.8. of Regulation No. 48 is produced if: d. any one light source has failed ⁽¹⁾, or e. in the case of a lamp designed for only two light sources, the intensity in the axis of reference is less than 50% of the minimum intensity, or f. as a consequence of a failure of one or more light sources, the intensity in one of the following directions as indicated in this Regulation is less than the minimum intensity required: (iv) H = 0°, V = 0° (v) H = 20° outboard, V = 5° upwards (vi) H = 10° inboard, V = 0° Note 1: A group of light sources, wired so that the failure of any one of them causes all of them to stop emitting light, shall be considered to be one light source.	CORRECT	CORRECT

* THE PRESENTED RESULTS REFER ONLY TO THE TESTED SAMPLE.

* THE PARTIAL REPRODUCTION OF THIS REPORT WITHOUT THE PERMISSION OF IDIADA IS COMPLETELY FORBIDDEN.

* MEASUREMENT UNCERTAINTY OF THE RESULTS HAS BEEN CALCULATED BY THE LABORATORY.

SPATIAL LUMINOUS DISTRIBUTION TABLE

SAMPLE A

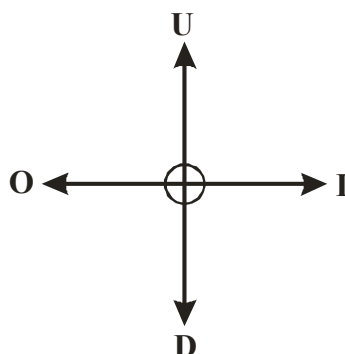
H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 76.13Cd 10.0		500.0 80.99Cd 10.0		
max 5° min	500.0 33.14Cd 5.0	500.0 76.14Cd 10.0		500.0 105.2Cd 35.0		500.0 88.39Cd 10.0	500.0 41.63Cd 5.0
max 0° min		500.0 80.16Cd 17.5	500.0 101.9Cd 45.0	500.0 116.1Cd 50.0	500.0 110.6Cd 45.0	500.0 94.01Cd 17.5	
max 5° min	500.0 32.77Cd 5.0	500.0 74.97Cd 10.0		500.0 101.8Cd 35.0		500.0 84.84Cd 10.0	500.0 40.94Cd 5.0
max 10° min			500.0 76.94Cd* 10.0		500.0 79.01Cd* 10.0		

SAMPLE B

H→ V↓	20°	10°	5°	0°	5°	10°	20°
max 10° min			500.0 75.52Cd 10.0		500.0 80.99Cd 10.0		
max 5° min	500.0 34.92Cd 5.0	500.0 80.70Cd 10.0		500.0 104.1Cd 35.0		500.0 87.19Cd 10.0	500.0 42.41Cd 5.0
max 0° min		500.0 91.81Cd 17.5	500.0 111.1Cd 45.0	500.0 127.0Cd 50.0	500.0 117.0Cd 45.0	500.0 98.24Cd 17.5	
max 5° min	500.0 36.58Cd 5.0	500.0 87.60Cd 10.0		500.0 115.7Cd 35.0		500.0 95.95Cd 10.0	500.0 43.80Cd 5.0
max 10° min			500.0 89.97Cd* 10.0		500.0 93.69Cd* 10.0		

* In the case where the lamp is intended to be installed at a mounting height of equal to or less than 750 mm above the ground, the photometric intensity is verified only up to an angle of 5° downwards

ILLUMINATING SURFACE



Upper boundary "U" (mm)	Down boundary "D" (mm)	Inner boundary "I" (mm)	Outer boundary "O" (mm)
101	101	9	9

Test place: NVTC, Ningbo China
Test date: 09/05/2022-10/05/2022

Joan Fonts Sala
TEST ENGINEER