


**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- ~~approval withdrawn~~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 device pursuant to Regulation number 7.



Approval number: E4-7R-0224691**Extension number: 00**

1. Trade name or mark of the device : 
2. Manufacturer's name for the type of device : DF-TRS002-EU-A
3. Manufacturer's name and address : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province,
P.R. China 317000
4. If applicable, name and address of the manufacturer's representative : Not applicable
5. Submitted for approval on : 14 December 2015
6. Technical service responsible for conducting approval tests : TÜV SÜD Auto Service GmbH
Westendstraße 199
D-80686 München
7. Date of report issued by that service : 5 January 2016
8. Number of report issued by that service : 15-00896-CX-SHA-00



9. Concise description
- 9.1. By category of lamp : 1) R1 and
2) S1
- For mounting either outside or inside or both ⁽¹⁾ : Outside
- Colour of light emitted : red/~~white~~ ⁽¹⁾
- Number, category and kind of light source(s) : 1) Not applicable (Lamp consists of 10 LED's)
2) Not applicable (Lamp consists of 6 LED's)
- Voltage and wattage : 1) 12V/24V and 1.2W;
2) 12V/24V and 2W
- Light source module specific identification code : Not applicable
- Only for limited mounting height of equal to or less than 750 mm above the ground : ~~yes~~/no ⁽¹⁾
- 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:
(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 : ~~yes~~/no ⁽¹⁾



- 9.2. Function(s) produced by an interdependent lamp forming part of an interdependent lamp system:
- | | |
|-------------------------|-------------------------------------|
| Front position lamp | : yes /no ⁽¹⁾ |
| R1 Rear position lamp | : yes /no ⁽¹⁾ |
| R2 Rear position lamp | : yes /no ⁽¹⁾ |
| S1 Stop lamp | : yes /no ⁽¹⁾ |
| S2 Stop lamp | : yes /no ⁽¹⁾ |
| S3 Stop lamp | : yes /no ⁽¹⁾ |
| S4 Stop lamp | : yes /no ⁽¹⁾ |
| End-outline marker lamp | : yes /no ⁽¹⁾ |
10. Position of the approval mark : On the lens
11. Reason(s) for extension (if applicable) : Not applicable
12. Approval : ~~granted/extended/refused/withdrawn~~⁽¹⁾
13. Place : Zoetermeer
14. Date : 11 January 2016
15. Signature : 

K.J. van Steensel RDW
16. The list of documents deposited with the Administrative Service which has granted approval, is annexed to this communication and may be obtained on request.
- Information document No.: DF-TRS002-EU-A-00, 6 pages dated 14 December 2015

⁽¹⁾ Strike out what does not apply.


Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, P.R. China 317000

December 14, 2015

Dear Sirs,

We would like to apply for the type approval according to ECE.

Function	ECE approval number
Rear retro-reflector	E4-3R-0224691
Rear direction indicator lamp	E4-6R-0124691
Rear position lamp	E4-7R-0224691
Stop lamp	E4-7R-0224691
Reversing lamp	E4-23R-0024691
Rear fog lamp	E4-38R-0024691

Trade name or mark	:	
Manufacturer's name for type of device	:	DF-TRS002-EU-A
Name and address of manufacturer	:	Zhejiang Dahao Automotive Co., Ltd. Xiaotian Village, Duqiao Town, Linhai City, Taizhou City, Zhejiang Province, P.R. China 317000

We confirm that the above mentioned application has not been submitted to any other EC member state nor has any other member state granted a corresponding approval.

Sincerely




Mr. Wang Ping
Zhejiang Dahao Automotive Co., Ltd.



Information folder No. : DF-TRS002-EU-A-00

First application date : December 14, 2015

1. Specification data

Type		DF-TRS002-EU-A					
Function		Rear group lamp					
		Rear retro-reflector	Rear direction indicator lamp	Rear position lamp	Stop lamp	Reversing lamp	Rear fog lamp
Color		Red	Amber	Red	Red	White	Red
Rated	Voltage	--	12V/24V	12V/24V	12V/24V	12V/24V	12V/24V
	Wattage	--	1W	1.2W	2W	2.5W	4W
Application Regulation ECE		R3.02 Class IIIA	R6.01 Cat. 2a	R7.02 Cat. R1	R7.02 Cat. S1	R23.00 AR	R38.00 Cat. F1
Location of marking	Number and category of light source	--	6*LED	10*LED	6*LED	10*LED	8*LED
		Non-replaceable light source					
	Marked on housing						
	Trade mark						
		Marked on lens					
	Approval mark	Marked on lens					
Part No.	DF-TRS002-EU-B						

2. Construction and material

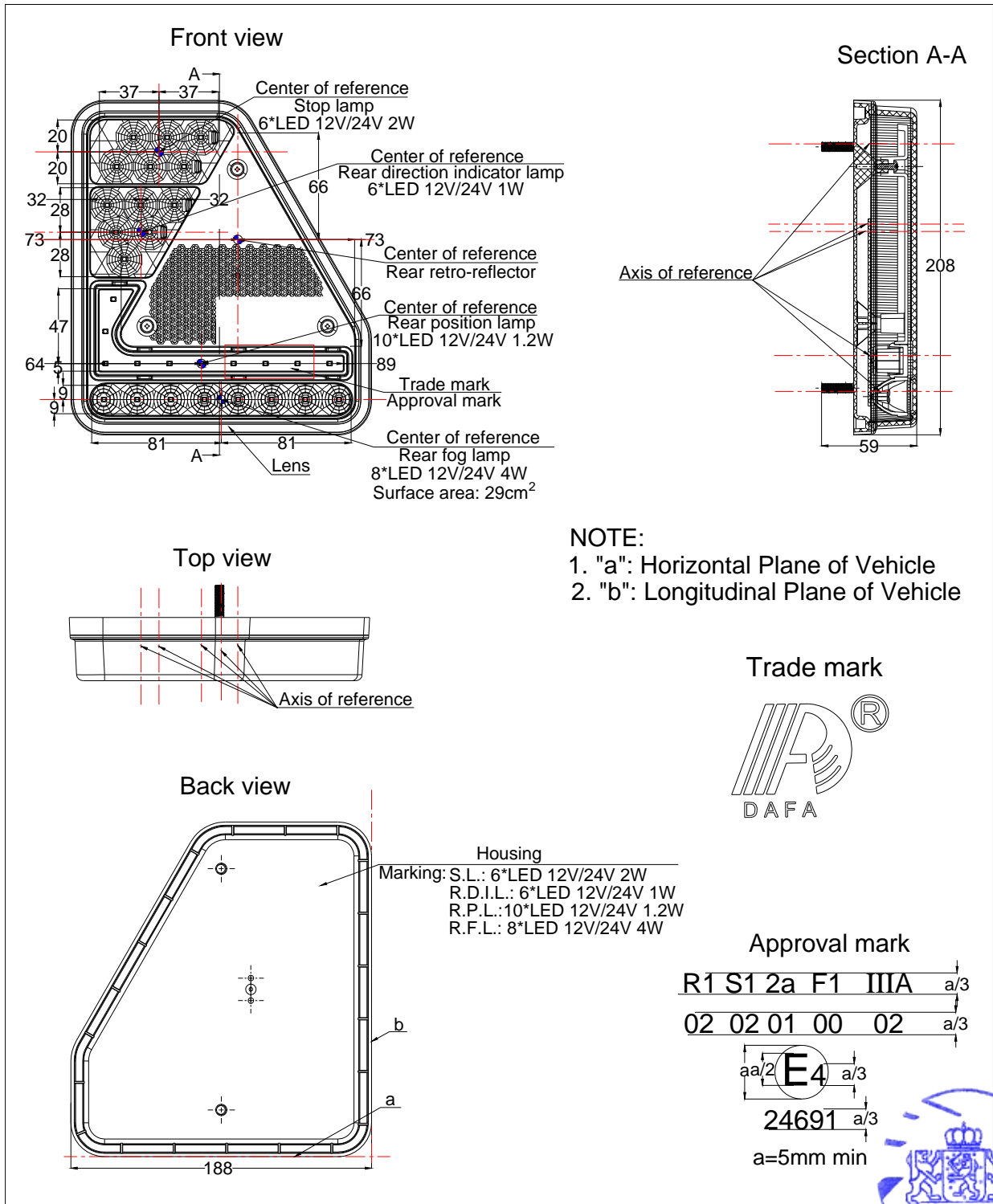
Construction	Material	Remarks
Lens	PMMA	Rear retro-reflector and Rear fog lamp: Red Rear direction indicator lamp: Amber Rear position lamp and Stop lamp: Red Reversing lamp: Clear
Inner lens	PMMA	Rear position lamp: Clear
Reflector	ABS	Painting on the inside surface Color: Metal silver
Housing	ABS	--
Electrical Wiring	Copper covered with insulation	--

3. Name and address of manufacturer : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai City,
Taizhou City, Zhejiang Province, P.R. China 317000

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

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

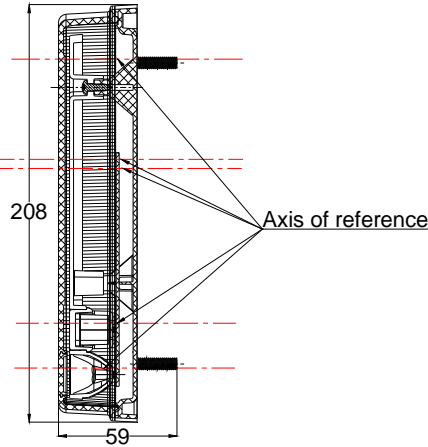




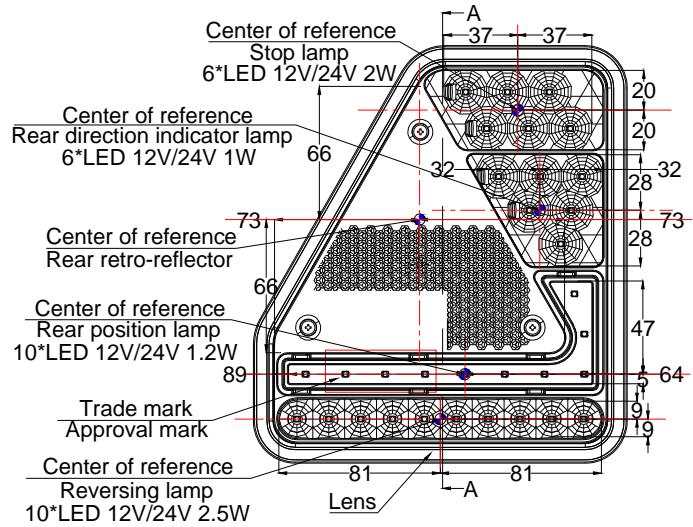
NOTE:
1. "a": Horizontal Plane of Vehicle
2. "b": Longitudinal Plane of Vehicle

Product Type	DF-TRS002-EU-A
General assembly drawing (Left side)	
Drawing No.	DF-TRS002-EU-A-01

Section A-A



Front view



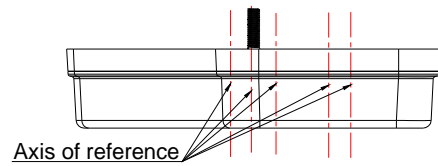
NOTE:

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

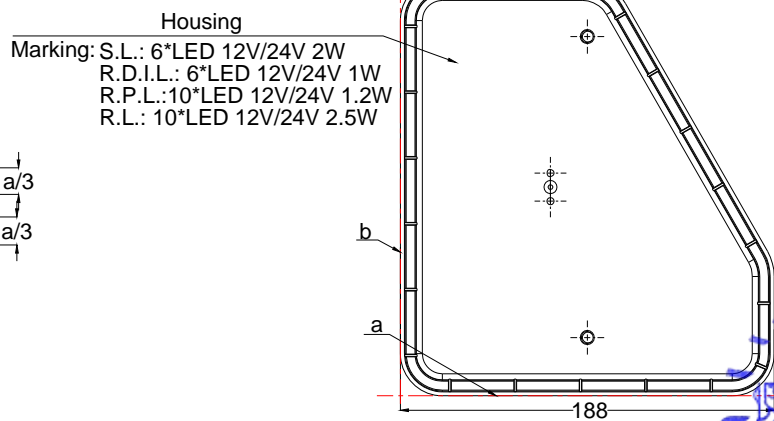
Trade mark



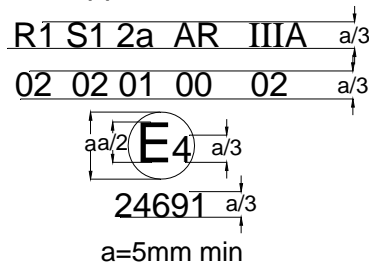
Top view



Back view

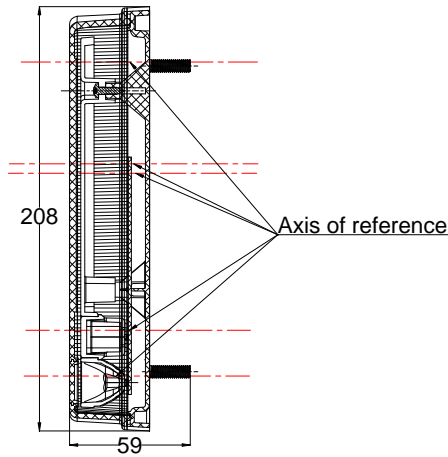


Approval mark

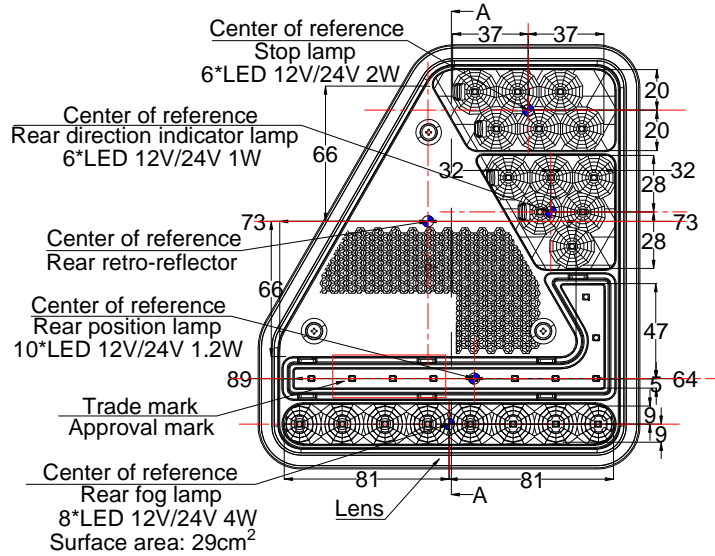


Product Type	DF-TRS002-EU-A
General assembly drawing (Right side)	
Drawing No.	DF-TRS002-EU-A-02

Section A-A



Front view



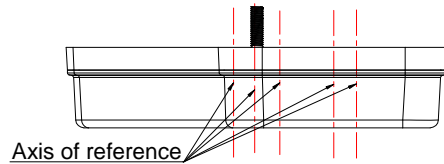
NOTE:

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

Trade mark

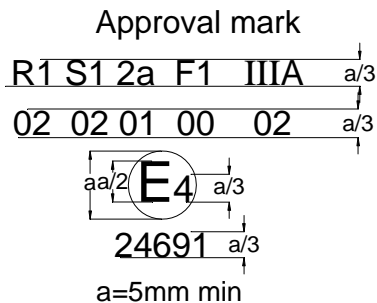
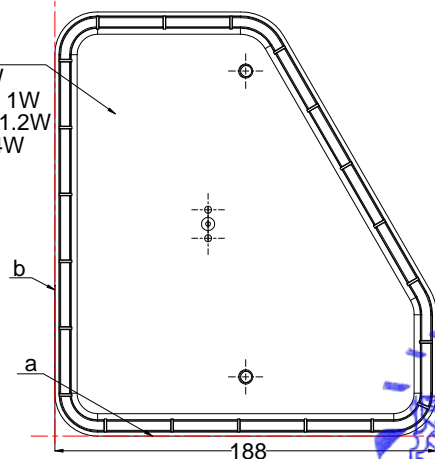


Top view

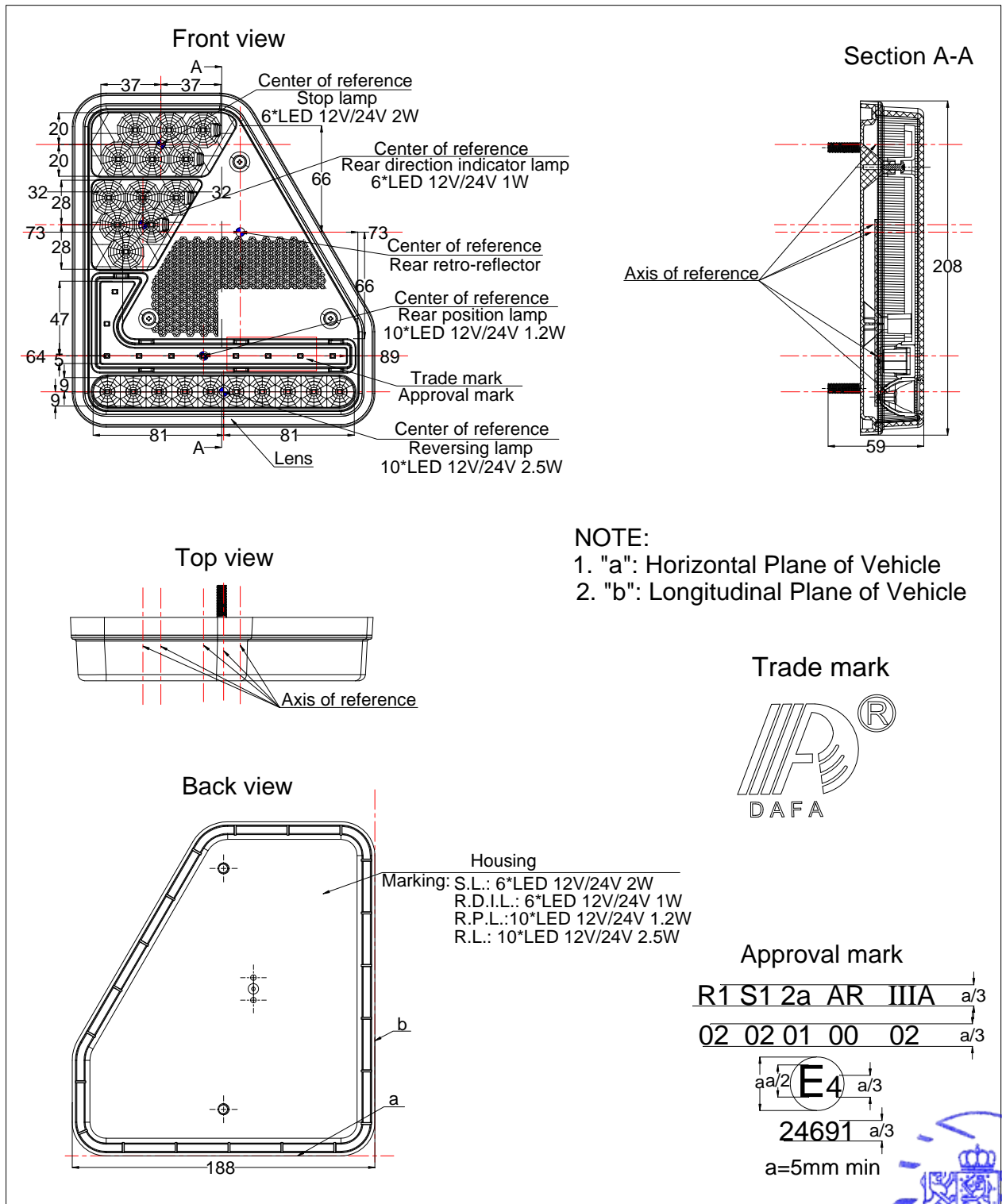


Back view

Housing
 Marking: S.L.: 6*LED 12V/24V 2W
 R.D.I.L.: 6*LED 12V/24V 1W
 R.P.L.: 10*LED 12V/24V 1.2W
 R.F.L.: 8*LED 12V/24V 4W



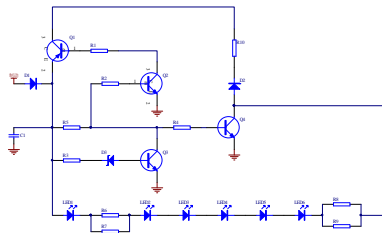
Product Type	DF-TRS002-EU-A
General assembly drawing (Left side)	
Drawing No.	DF-TRS002-EU-B-01



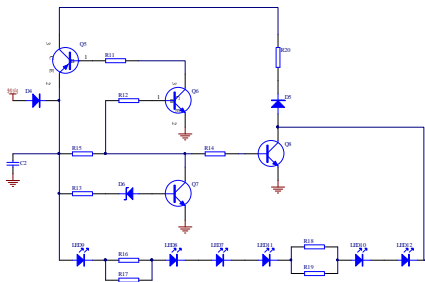
NOTE:
 1. "a": Horizontal Plane of Vehicle
 2. "b": Longitudinal Plane of Vehicle

Product Type	DF-TRS002-EU-A
General assembly drawing (Right side)	
Drawing No.	DF-TRS002-EU-B-02

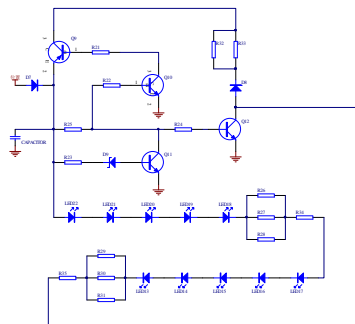
Stop lamp
 6*LED 12V/24V 2W



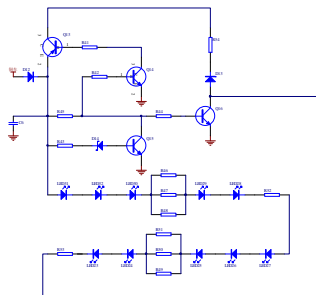
Rear direction indicator lamp
 6*LED 12V/24V 1W



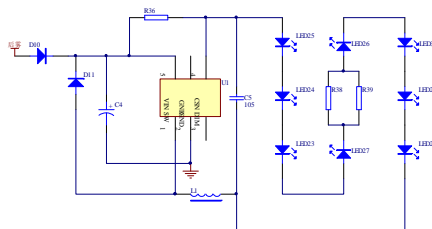
Rear position lamp
 10*LED 12V/24V 1.2W



Reversing lamp
 10*LED 12V/24V 2.5W



Rear fog lamp
 8*LED 12V/24V 4W



Product Type	DF-TRS002-EU-A
Led circuit diagram	
Drawing No.	DF-TRS002-EU-B-03



Technical Report No.: 15-00896-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRS002-EU-A

TECHNICAL REPORT

No.: 15-00896-CX-SHA-00

Test according to ECE regulation relating to

Rear position lamp and stop lamp

ECE Regulation No. 7


Supplement 24 to the 02 series of amendments

Approvals granted up to now		
ECE	Number of approval	Date
	---	---

Technical Report No.: 15-00896-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRS002-EU-A

Page 2 / 10

I. Technical description

- 0.1. Make (trade name of manufacturer) : 
- 0.2. Type : DF-TRS002-EU-A
- 0.2.1. Variants : N/A
- 0.3. Means of identification of type : By digits and letters
- 0.4. Location of the trade mark : On the lens
- 0.5. By category of lamp : Rear position lamp category R1 and Stop lamp category S1
- For mounting either outside or inside or both : Outside
- Color of light emitted : Red
- Number, category and kind of light source(s) : Rear position lamp: 10*LED;
Stop lamp: 6*LED
- Voltage and wattage : Rear position lamp: 12V/24V and 1.2W;
Stop lamp: 12V/24V and 2W
- In case of a single lamp containing more than one light source : In series, single light source
- Light source module specific identification code : N/A
- Only for limited mounting height of equal to or less than 750 mm above the ground : No
- 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 : No
Being not part of the lamp : No



Technical Report No.: 15-00896-CX-SHA-00
Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
Type: DF-TRS002-EU-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 : N/A

Variable luminous intensity : No

0.6. Name and address of manufacturer : Zhejiang Dahao Automotive Co., Ltd.
Xiaotian Village, Duqiao Town, Linhai
City, Taizhou City, Zhejiang Province,
P.R. China 317000

0.8. Name and address of assembly plant : See 0.6.

0.9. Location of the approval mark : On the lens

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

II. Test record

1. Test conditions

- 1.1. Technical data of the test samples : Two samples are tested.
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.: 7.02.
- 1.3. Measuring and test equipment : The above equipments on which the tests were carried out fulfilled the requirements of ECE Regulation No.: 7.02.
- 1.4. Standard bulb : N/A
- Luminous flux : N/A

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.

No light source module or light generator is used.

2.2. Intensity of light emitted

2.2.1. Rear position lamp, sample No. 1, test voltage 13.499V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	4.00	17.00	8.97

2.2.1.1. Sample No. 1, test voltage 13.499V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]	
			Minimum	Maximum		
1	5L	10U	0.80	17.00	8.08	
2	5R	10U	0.80	17.00	8.20	
3	20R	5U	0.40	17.00	7.87	
4	10R	5U	0.80	17.00	8.29	
5	H	5U	2.80	17.00	8.38	
6	10L	5U	0.80	17.00	8.07	
7	20L	5U	0.40	17.00	7.45	
8	10L	V	1.40	17.00	8.22	
9	5L	V	3.60	17.00	8.42	
10	H	V	4.00	17.00	8.53	
11	5R	V	3.60	17.00	8.54	
12	10R	V	1.40	17.00	8.45	
13	20R	5D	0.40	17.00	8.11	
14	10R	5D	0.80	17.00	8.53	
15	H	5D	2.80	17.00	8.61	
16	10L	5D	0.80	17.00	8.28	
17	20L	5D	0.40	17.00	7.63	
18	5L	10D	0.80	17.00	8.47	
19	5R	10D	0.80	17.00	8.61	
20	All directions defined by Annex 1		0.05	17.00	Min. 0.62	Max. 9.24

2.2.1.2. Sample No. 1, intensity of light emitted (LED) after 1 minute -by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.2.2. Rear position lamp, sample No. 2, test voltage 27.999V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	4.00	17.00	7.93

2.2.2.1. Sample No. 2, test voltage 27.999V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]	
			Minimum	Maximum		
1	5L	10U	0.80	17.00	7.11	
2	5R	10U	0.80	17.00	7.24	
3	20R	5U	0.40	17.00	6.98	
4	10R	5U	0.80	17.00	7.35	
5	H	5U	2.80	17.00	7.40	
6	10L	5U	0.80	17.00	7.12	
7	20L	5U	0.40	17.00	6.59	
8	10L	V	1.40	17.00	7.22	
9	5L	V	3.60	17.00	7.40	
10	H	V	4.00	17.00	7.50	
11	5R	V	3.60	17.00	7.51	
12	10R	V	1.40	17.00	7.45	
13	20R	5D	0.40	17.00	7.05	
14	10R	5D	0.80	17.00	7.45	
15	H	5D	2.80	17.00	7.51	
16	10L	5D	0.80	17.00	7.21	
17	20L	5D	0.40	17.00	6.64	
18	5L	10D	0.80	17.00	7.34	
19	5R	10D	0.80	17.00	7.46	
20	All directions defined by Annex 1		0.05	17.00	Min. 0.58	Max. 8.37

2.2.2.2. Sample No. 2, intensity of light emitted (LED) after 1 minute
 -by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.2.3. Stop lamp, sample No. 1, test voltage 13.499V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	60.00	260.00	99.78

2.2.3.1. Sample No. 1, test voltage 13.499V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]	
			Minimum	Maximum		
1	5L	10U	12.00	260.00	49.48	
2	5R	10U	12.00	260.00	64.74	
3	20R	5U	6.00	260.00	23.00	
4	10R	5U	12.00	260.00	79.76	
5	H	5U	42.00	260.00	93.27	
6	10L	5U	12.00	260.00	43.03	
7	20L	5U	6.00	260.00	18.95	
8	10L	V	21.00	260.00	52.32	
9	5L	V	54.00	260.00	90.90	
10	H	V	60.00	260.00	96.25	
11	5R	V	54.00	260.00	92.05	
12	10R	V	21.00	260.00	96.59	
13	20R	5D	6.00	260.00	26.83	
14	10R	5D	12.00	260.00	91.27	
15	H	5D	42.00	260.00	95.39	
16	10L	5D	12.00	260.00	47.53	
17	20L	5D	6.00	260.00	19.63	
18	5L	10D	12.00	260.00	63.56	
19	5R	10D	12.00	260.00	83.69	
20	All directions defined by Annex 1		0.30	260.00	Min. 4.17	Max. 100.58

2.2.3.2. Sample No. 1, intensity of light emitted (LED) after 1 minute

-by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.2.4. Stop lamp, sample No. 2, test voltage 27.999V, at HV after 1 minute of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]
			Minimum	Maximum	
1	H	V	60.00	260.00	97.67

2.2.4.1. Sample No. 2, test voltage 27.999V, after 30 minutes of operation.

No.	Point of the measurement		Limits [cd]		Measured values [cd]	
			Minimum	Maximum		
1	5L	10U	12.00	260.00	64.24	
2	5R	10U	12.00	260.00	72.71	
3	20R	5U	6.00	260.00	18.56	
4	10R	5U	12.00	260.00	65.71	
5	H	5U	42.00	260.00	90.47	
6	10L	5U	12.00	260.00	54.75	
7	20L	5U	6.00	260.00	18.89	
8	10L	V	21.00	260.00	55.34	
9	5L	V	54.00	260.00	88.46	
10	H	V	60.00	260.00	94.05	
11	5R	V	54.00	260.00	83.53	
12	10R	V	21.00	260.00	63.65	
13	20R	5D	6.00	260.00	15.38	
14	10R	5D	12.00	260.00	49.82	
15	H	5D	42.00	260.00	93.81	
16	10L	5D	12.00	260.00	43.47	
17	20L	5D	6.00	260.00	15.76	
18	5L	10D	12.00	260.00	39.19	
19	5R	10D	12.00	260.00	42.07	
20	All directions defined by Annex 1		0.30	260.00	Min. 3.24	Max. 98.16

2.2.4.2. Sample No. 2, intensity of light emitted (LED) after 1 minute

-by calculation

The luminous intensity distribution after 1 minute of operation complies with the minimum and maximum requirements.

2.3. Colour

2.3.1. Rear position lamp - Red

Sample	Measured values		Limits	
	x	y	$y \leq 0.335$	$y \geq 0.980 - x$
No. 1	0.6808	0.3135	Yes	Yes
No. 2	0.6812	0.3129	Yes	Yes

2.3.2. Stop lamp - Red

Sample	Measured values		Limits	
	x	y	$y \leq 0.335$	$y \geq 0.980 - x$
No. 1	0.6834	0.3123	Yes	Yes
No. 2	0.6847	0.3116	Yes	Yes

2.4. Apparent surface

2.4.1. Rear position lamp

Upper boundary "U"(mm)	Down boundary "D"(mm)	Inner boundary "I"(mm)	Outer boundary "O"(mm)
47	5	89	64

2.4.2. Stop lamp

Upper boundary "U"(mm)	Down boundary "D"(mm)	Inner boundary "I"(mm)	Outer boundary "O"(mm)
20	20	37	37

3. Specimen submitted to test on: 14.12.2015 (DD.MM.YYYY)

4. Place of test: Jiangsu Huacheng Vehicle Inspection Co.,
 Ltd., Zhenjiang City, P.R. China

Date of test: 23.12.2015 (DD.MM.YYYY)



Technical Report No.: 15-00896-CX-SHA-00
 Manufacturer: Zhejiang Dahao Automotive Co., Ltd.
 Type: DF-TRS002-EU-A

III. Enclosures

Manufacturer's information docu-

ment No.: DF-TRS002-EU-A-00

Dated on: 14.12.2015 (DD.MM.YYYY)

IV. Statement of conformity

The information folder as mentioned under No. III and the type described therein are in compliance with the test specification mentioned above. The worst-case was selected in accordance with document "Preparation of Test Reports".

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.

München, 05.01.2016
 (DD.MM.YYYY)



Gu, Qing

Test Laboratory / DIN EN ISO 17025

Genehmigungsbehörde / Approval authority	Land/Country	Registriernummer/ Registration-number	Aktueller Benennungsumfang/ Actual scope list
Kraftfahrt-Bundesamt (KBA)	Deutschland/ Germany	KBA-P 00100-10	www.kba.de
Vehicle Certification Agency (VCA)	Vereintes Königreich/ United Kingdom	VCA-TS-006	http://ec.europa.eu/enterprise/sectors/automotive/approval-authorities-technical-services/technical-services/index_en.htm
Approval Authority of the Netherlands (RDW)	Niederlande/ The Netherlands	RDWT-082-01	
National Standards Authority of Ireland (NSAI)	Irland/ Ireland	Technical Service Number: 49	
Vehicle Safety Certification Center (VSCC)	Taiwan/ Taiwan	DE04-06-2	http://www.vsc.org.tw/English/Default.aspx