



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



COMMUNICATION

Concerning<sup>(1)</sup>:

- APPROVAL GRANTED
- ~~APPROVAL EXTENDED~~
- ~~APPROVAL REFUSED~~
- ~~APPROVAL WITHDRAWN~~
- ~~PRODUCTION DEFINITELY DISCONTINUED~~



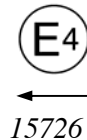
of a type of reversing lamps pursuant to Regulation Number 23.

Approval No.: E4-23R-0015726

Extension No.: 00


Approval mark

<i>RI</i>	<i>SI</i>	<i>2a</i>	<i>AR</i>	<i>FI</i>
02	02	01	00	00



*Indication of the approval mark.  
for the device on the left side  
The right side shall be symmetrical*

- |    |   |   |  |
|----|---|---|--|
| 1. | Trade name or mark of the device  | : |  |
| 2. | Manufacturer's name for the type of device                              | : | WJ20-0229  |
| 3. | Manufacturer's name and address   | : | Winjet Bright Auto Lighting Co., Ltd.<br>No.2, 3rd Street, New Technological Industrial Zone,<br>Xingtang Town, Shunde District, Foshan City, Guangdong<br>Province, P.R. China. |
| 4. | If applicable, name and address of the<br>manufacturer's representative | : | ---  |
| 5. | Submitted for approval on   | : | November 29, 2011  |
| 6. | Technical service responsible for<br>conducting approval tests          | : | TÜV NORD Mobilität GmbH & Co. KG<br>Institut für Fahrzeugtechnik und Mobilität<br>Adlerstr. 7<br>D-45307 Essen   |
| 7. | Date of report issued by that service                                   | : | December 5, 2011   |

- 8. Number of report issued by that service : CS023-A0-2011-00675
- 9. Concise description<sup>(2)</sup>
  - Number and category and kind of light source(s) : one W16W
  - Voltage and wattage : 12V 16W
  - Application of an electronic light source control gear : ~~yes~~ / ~~no~~
  - (a) being part of the lamp : ~~yes~~ / ~~no~~
  - (b) being not part of the lamp :
  - Input voltage(s) supplied by an electronic light source control gear : not applicable
  - Electronic light source control gear manufacturer and identification number (when the light source control gear is part of the lamp but is not included into the lamp body) : not applicable
  - Light source module : ~~yes~~ / no<sup>(1)</sup>
  - Light source module specific identification code : not applicable
  - Geometrical conditions of installation and relating variations, if any : refer to the drawing of information folder
- 10. Position of the approval mark : on the lens
- 11. Comments : ~~yes~~ / ~~no~~<sup>(1)</sup>  
-- This device shall be installed on a vehicle only as part of a pair of devices
- 12. Reason(s) for extension (if applicable) : ---
- 13. Approval : granted / ~~extended~~ / ~~refused~~ / ~~withdrawn~~<sup>(1)</sup>
- 14. Place : Zoetermeer
- 15. Date : 16-DEC-2011
- 16. Signature : 
- 17. The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained upon request.




R.F.R. Clement

<sup>(1)</sup> Strike out what does not apply.

Application date : November 29, 2011

## 1. Specification data

Type		WJ20-0229				
Function		Rear Fog Lamp	Rear Direction Lamp	Stop Lamp	Rear Position Lamp	Reversing Lamp
Emitted colour		Red	Amber	Red	Red	White
Rated	Voltage	12V(Input range: 9V~30V)				
	Wattage	16W	2.36W	3.51W	0.48W	16W
Applicable Regulation (ECE)		R38.00 Category F1	R6.01 Category 2a	R7.02 Category S1	R7.02 Category R1	R23.00 Category AR
Number and category of filament lamp(light source)		One, 12V W16W	Non-replaceable light source			One, 12V W16W
			19LEDs 2.36W@12V	24LEDs 3.51W@12V	18LEDs 0.48W@12V	
Location of marking	Filament Lamp category	Marked on Base				
	Trade mark				Marked on Base	
	Approval mark	Marked on Lens				
Part number		WJ20-0229; TL-GOLFIV-9904				

## 2. Construction and material

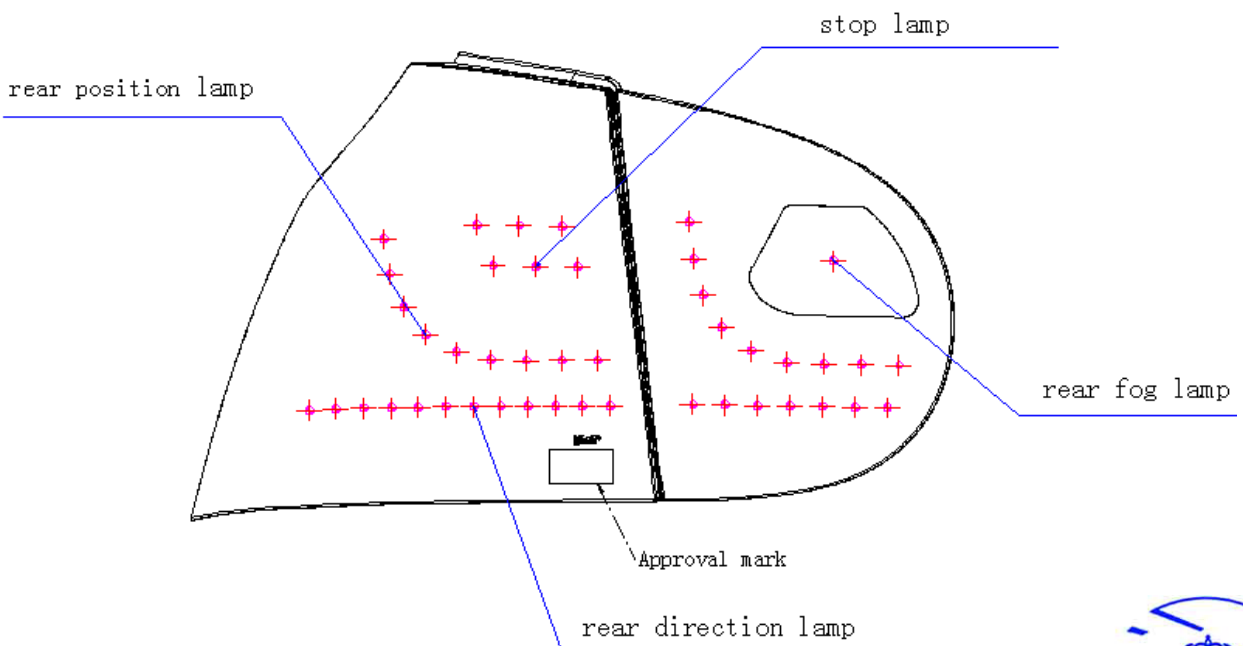
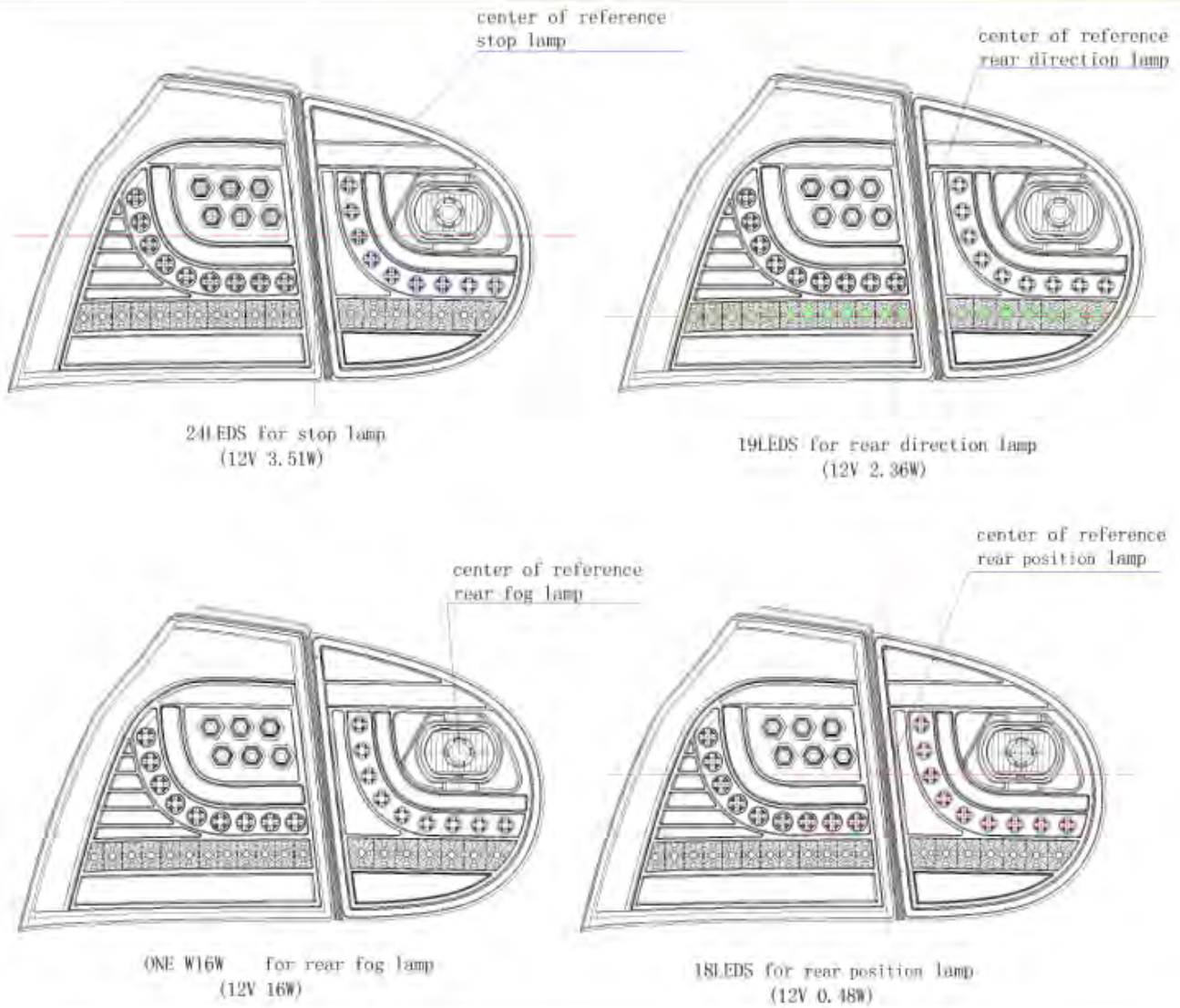
Construction	Material	Remarks
Outer lens	PMMA	Grey lens
Outer lens	PC	Grey lens
Reflector	ABS+PC	Aluminum coating
Base	ABS	Black
Electrical wiring	-	-

3. Name and address of manufacturer : Winjet Bright Auto Lighting Co., Ltd.  
No.2, 3<sup>rd</sup> Street, New Technological Industrial Zone, Xingtan Town,  
Shunde District, Foshan City, Guangdong Province, P.R. China.

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

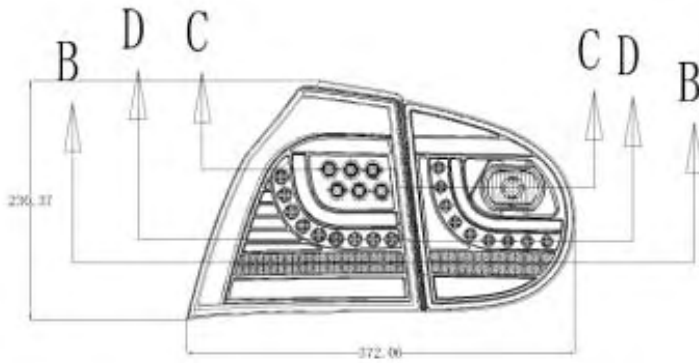
This information document consists of 15 pages.





RDW  
1000





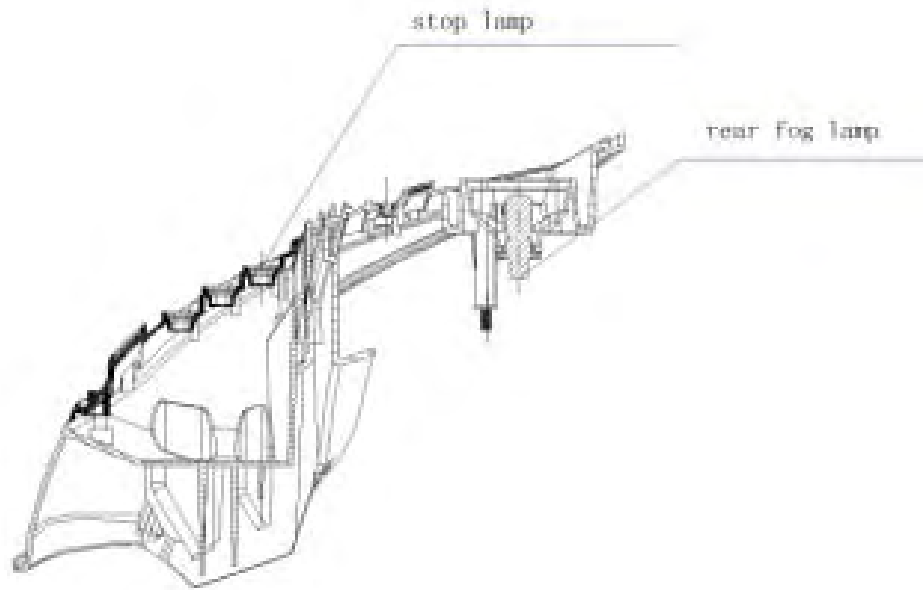
D-D

1、Marking: L  
W16W 12V / 12V LED

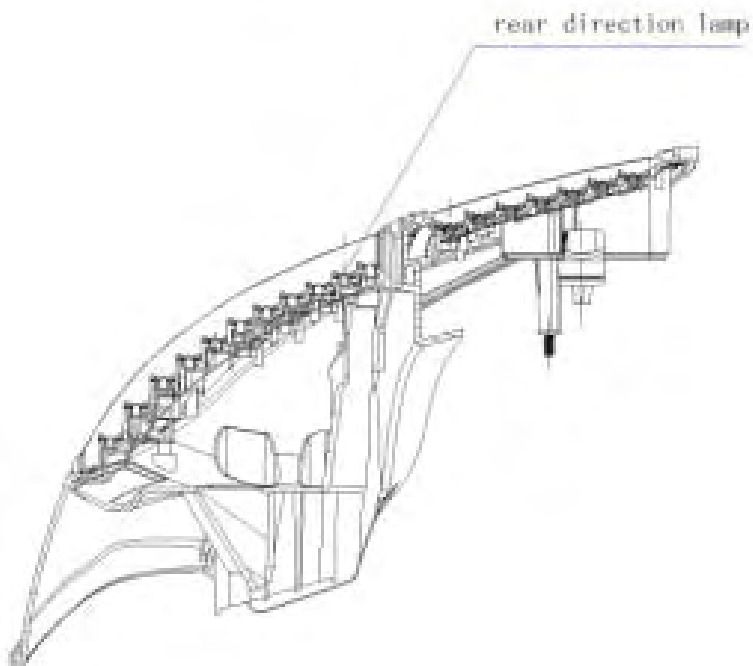
2、Approval Mark

2a R1 S1 AR FI<sub>a/3</sub>  
01 02 02 00 00  
a (E<sub>4</sub>)<sub>a/2</sub> a=8mm  
15726<sub>a/3</sub>





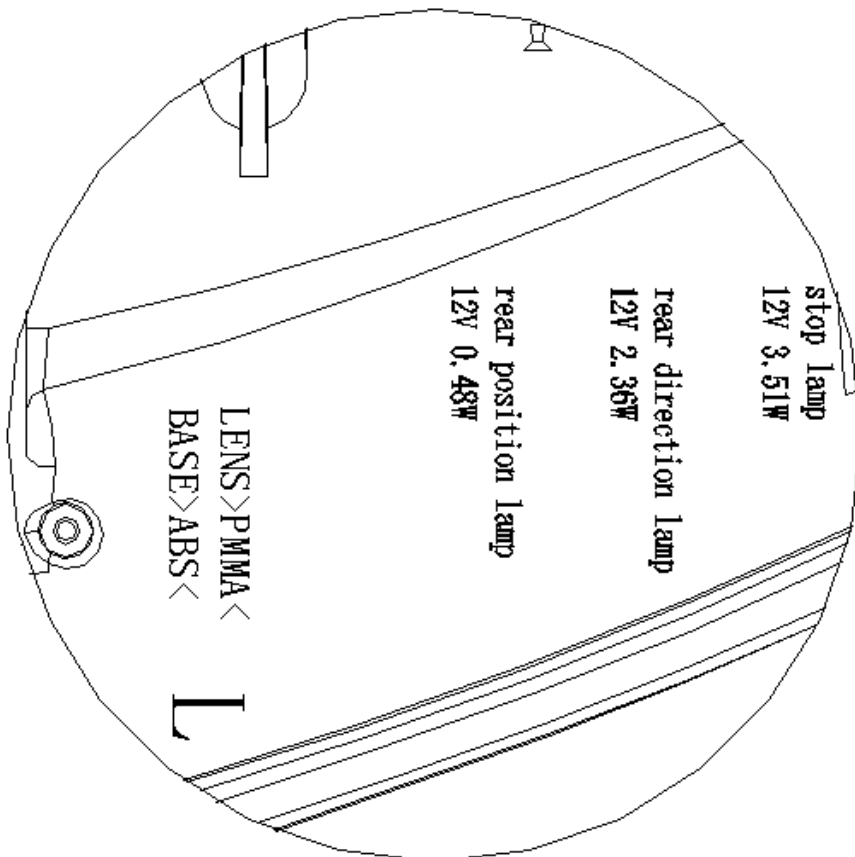
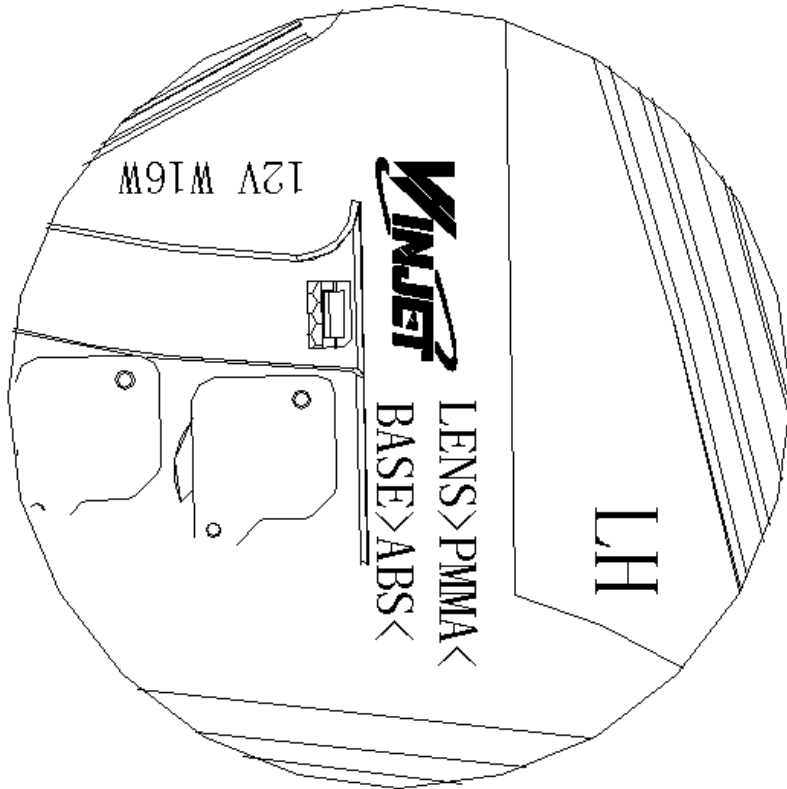
C-C



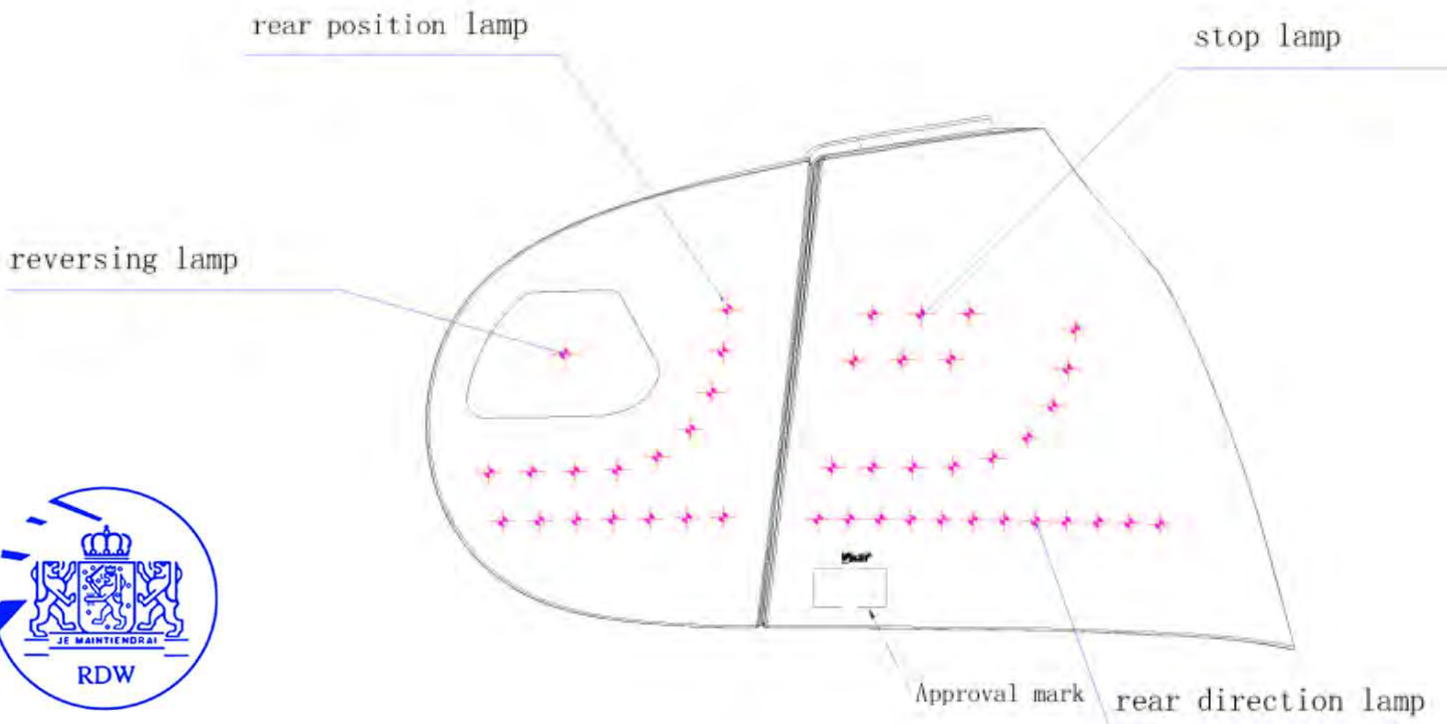
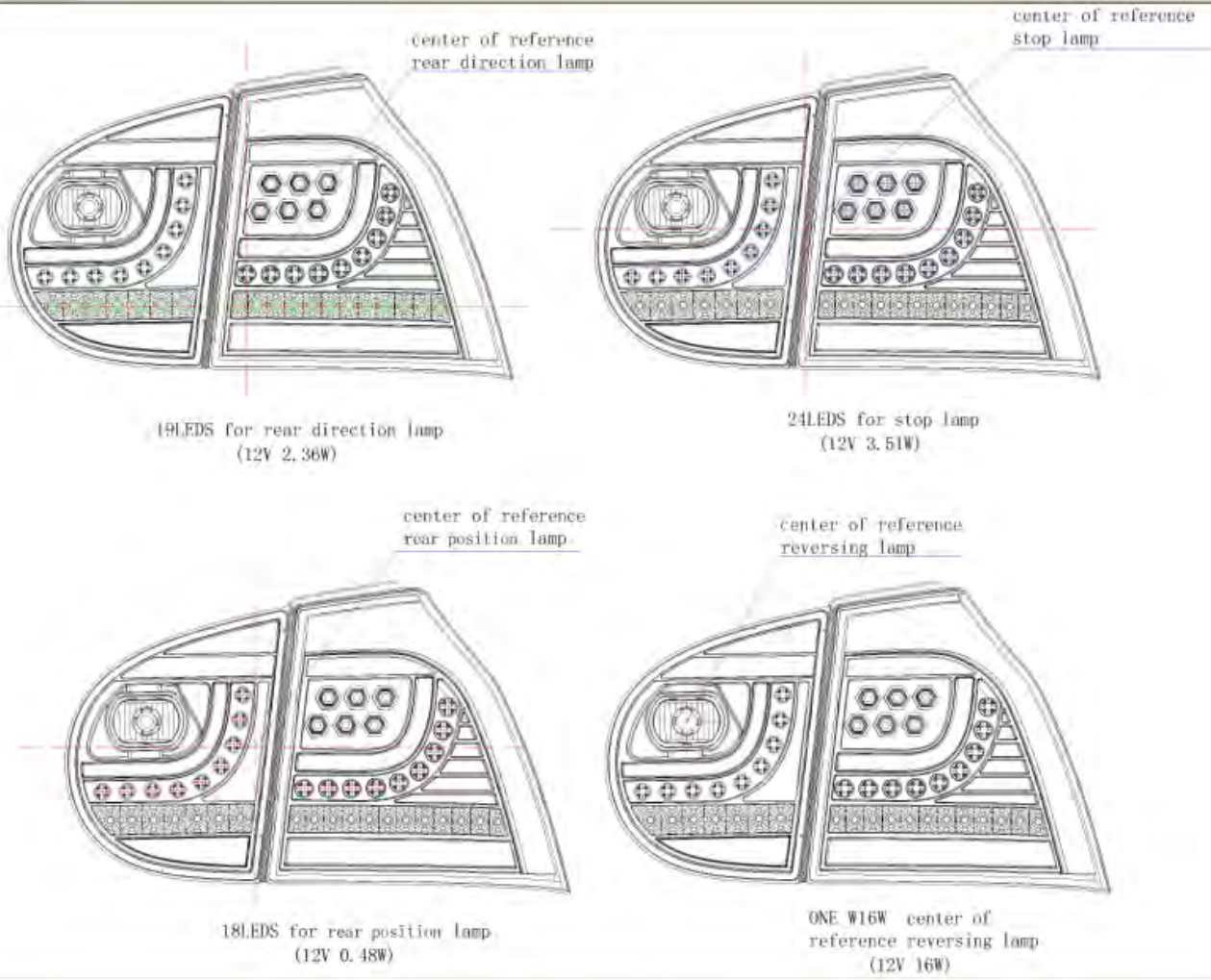
B-B

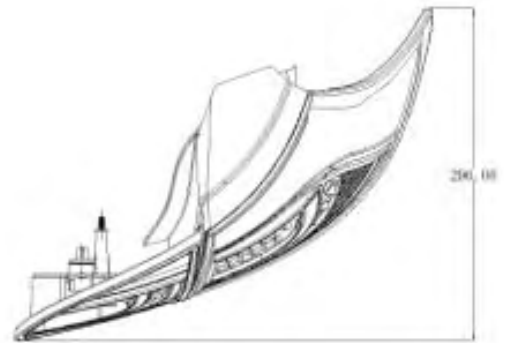








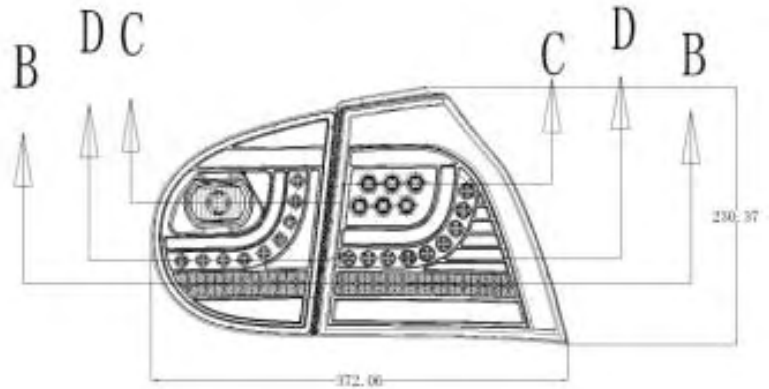
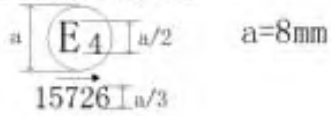




1、 Marking: R  
W16W 12V / 12V LED

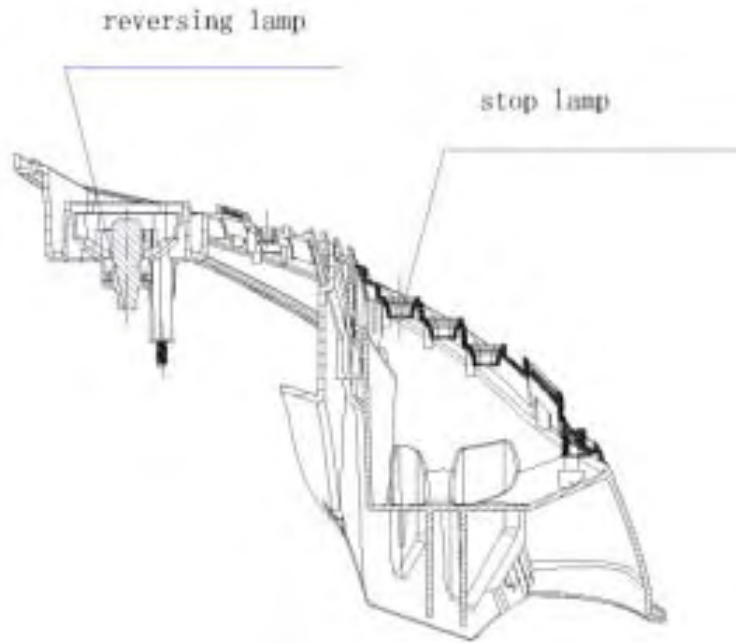
2、 Approval Mark

2a R1 S1 AR FI  $\frac{a}{3}$   
01 02 02 00 00

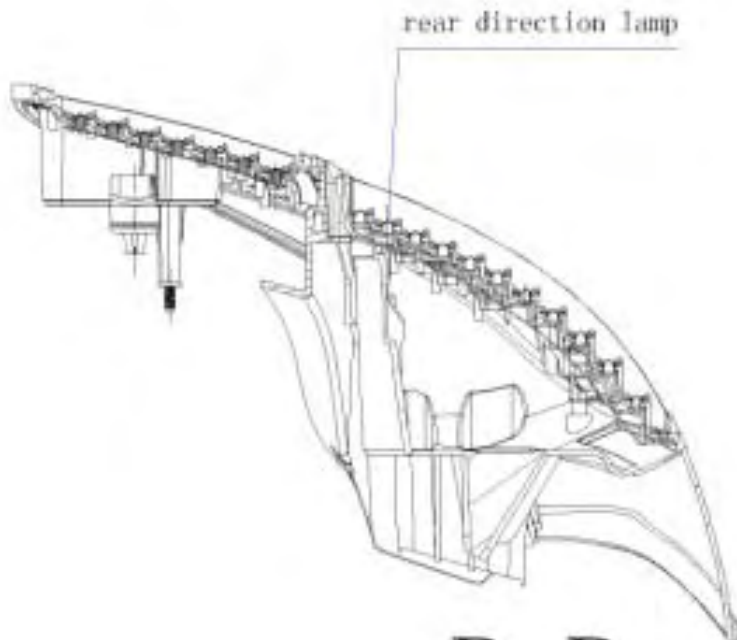


D-D



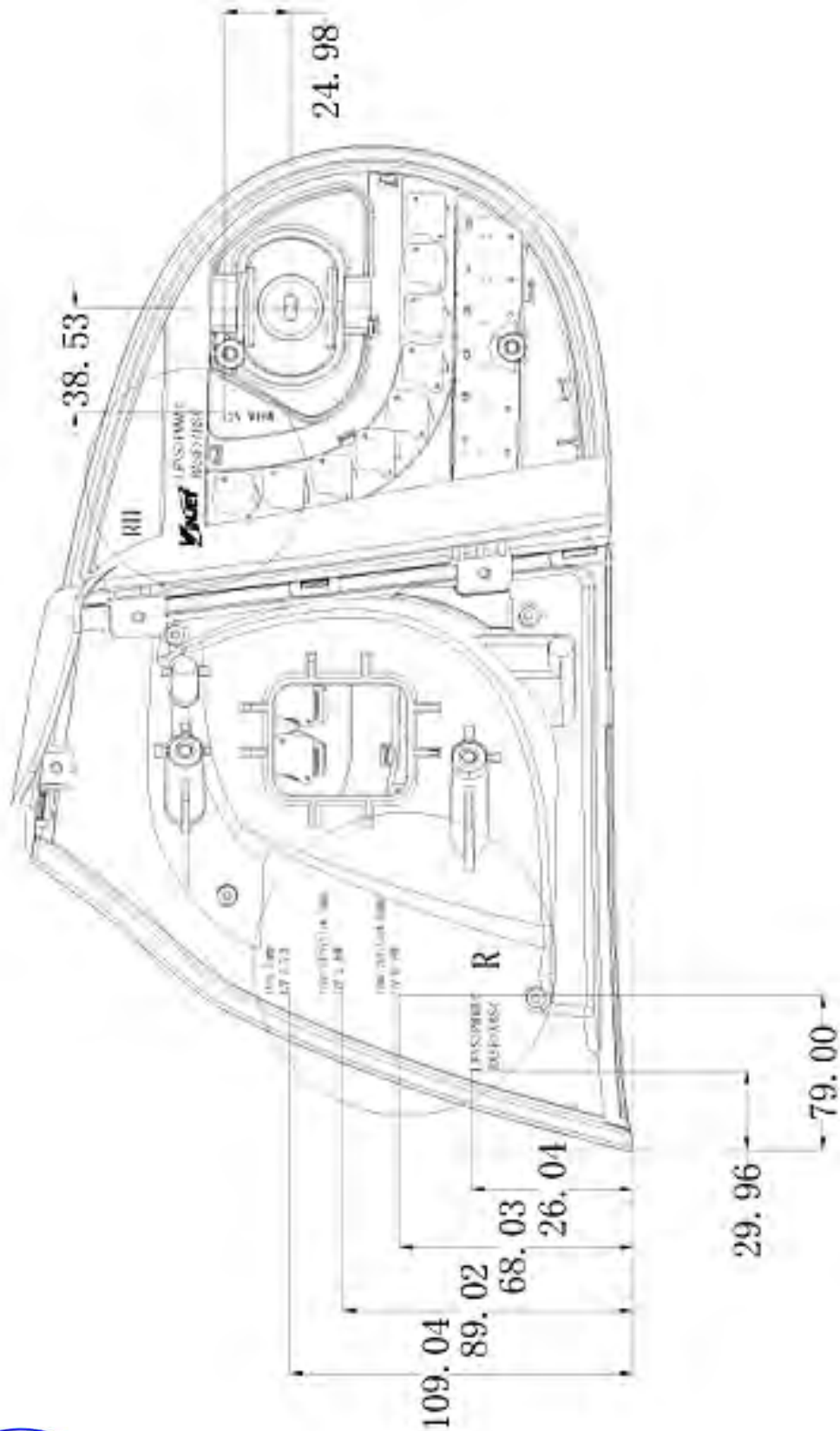


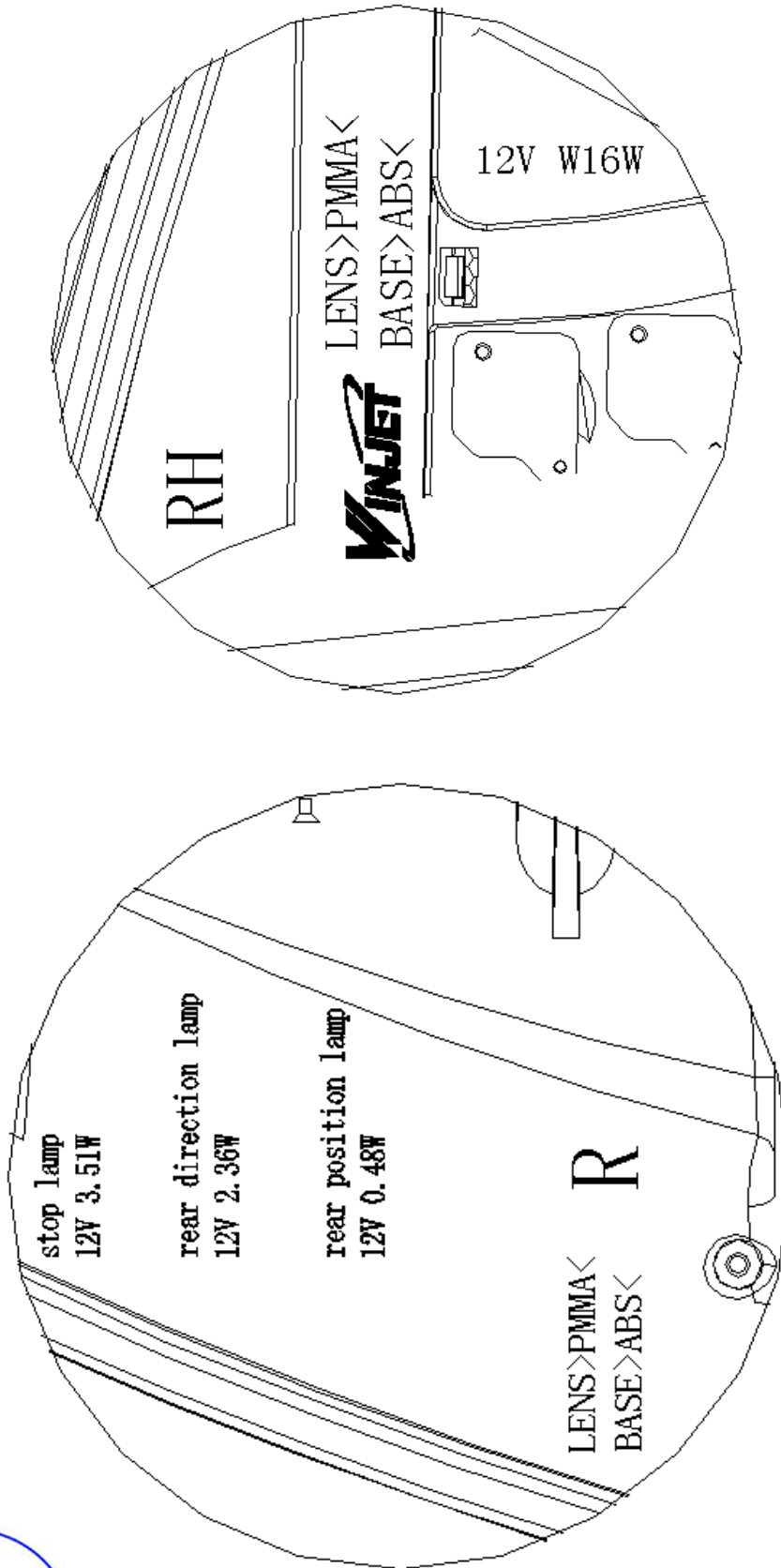
C-C



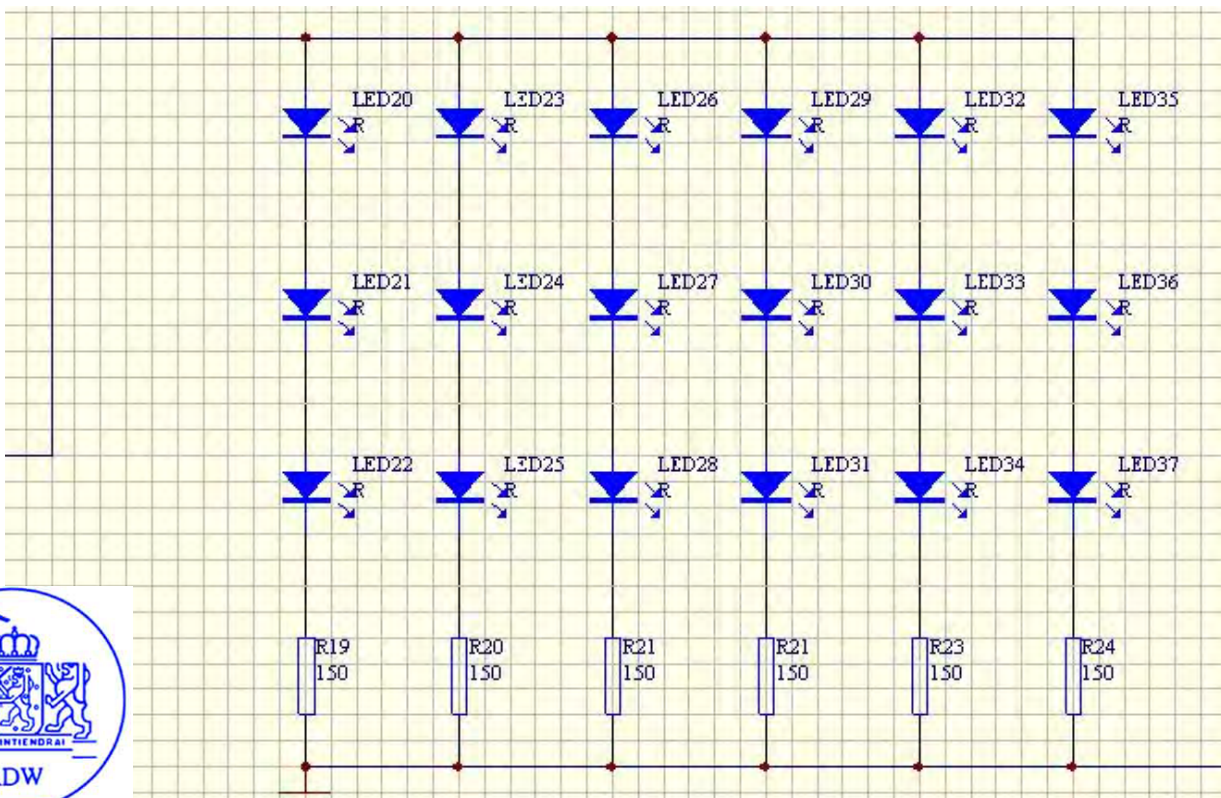
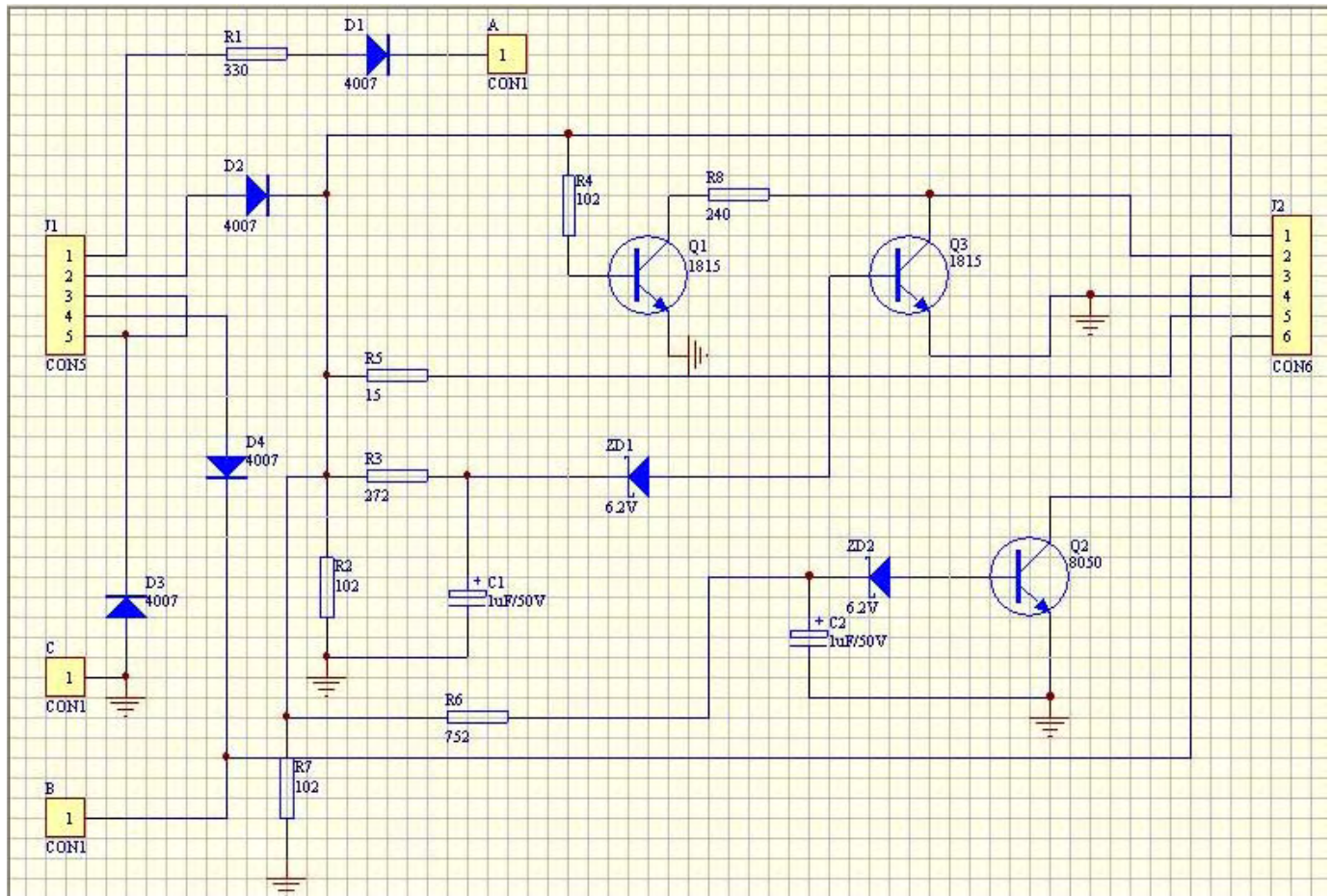
B-B



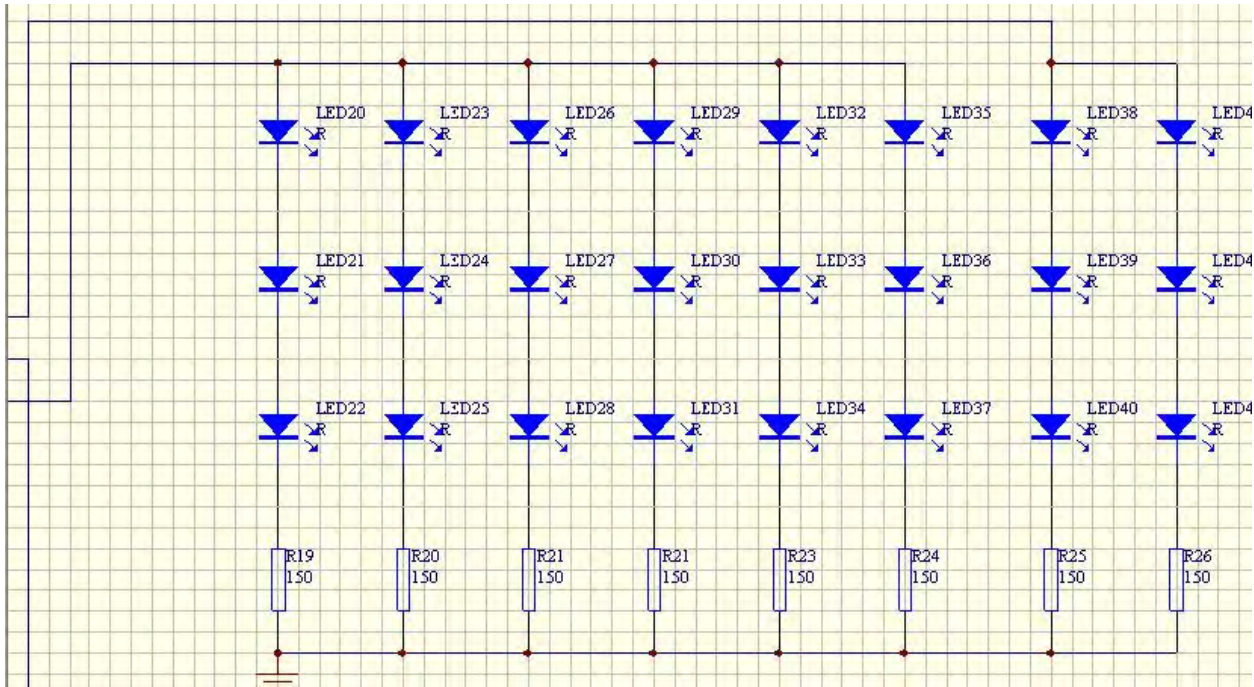




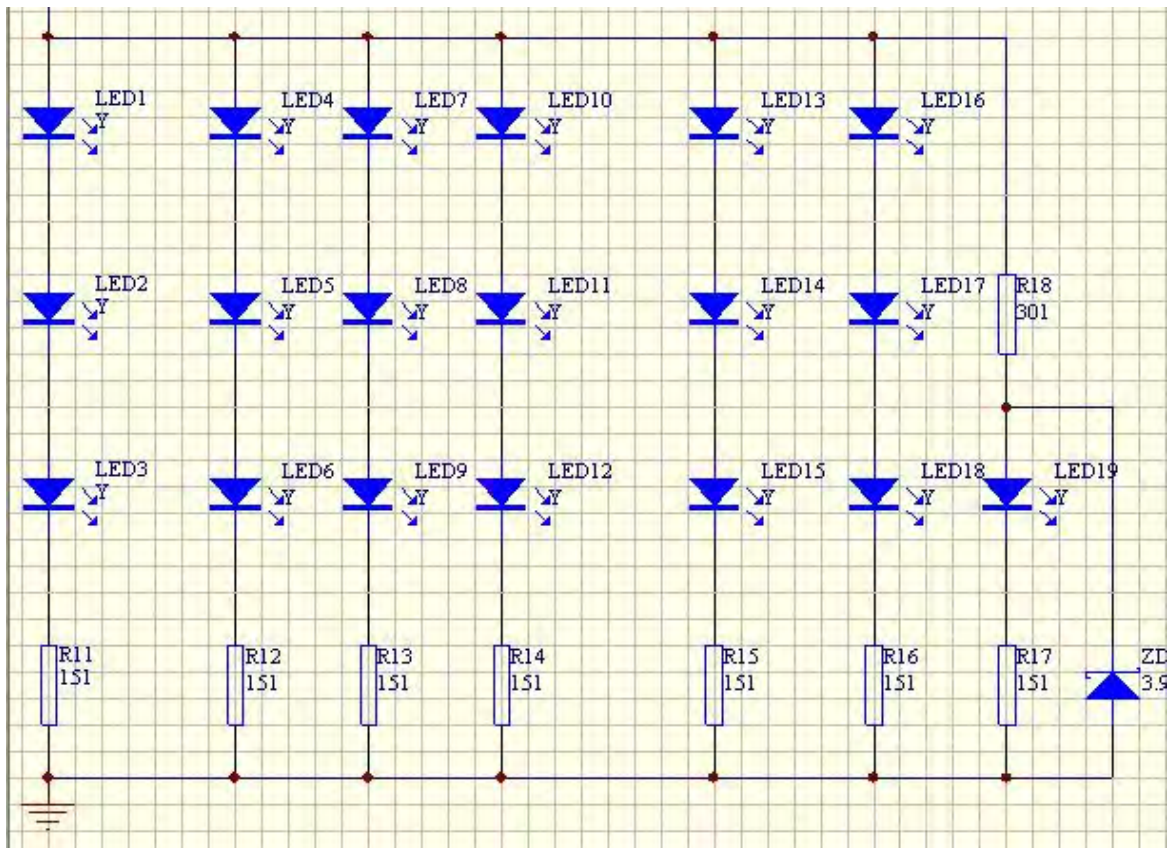
2. Circuit Figure



Rear position lamp:  
 12V 0.48W (Input range: 9V~30V)  
 18LEDs, Non-replaceable light source



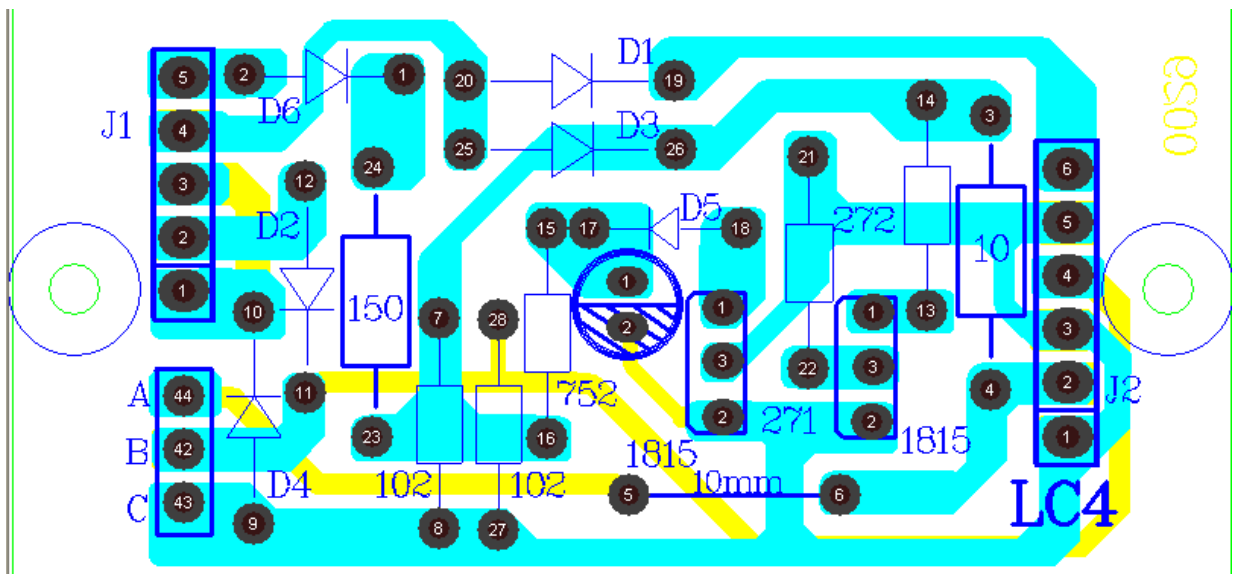
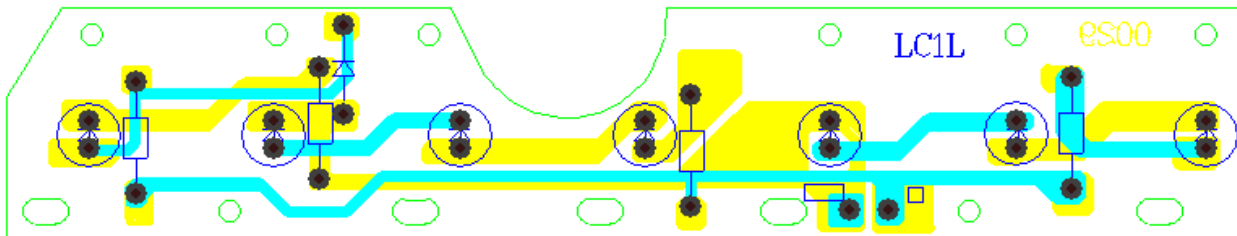
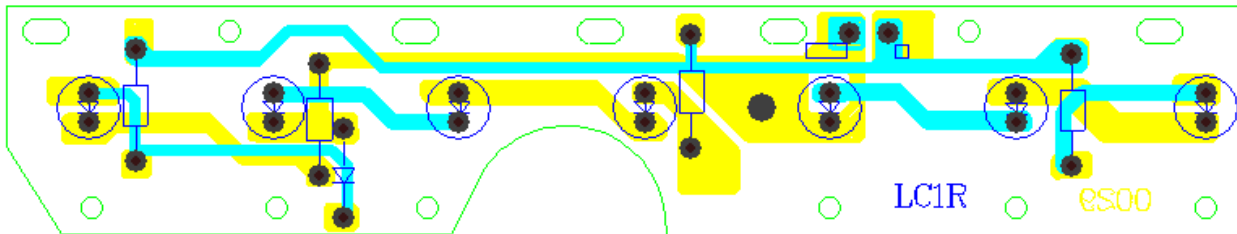
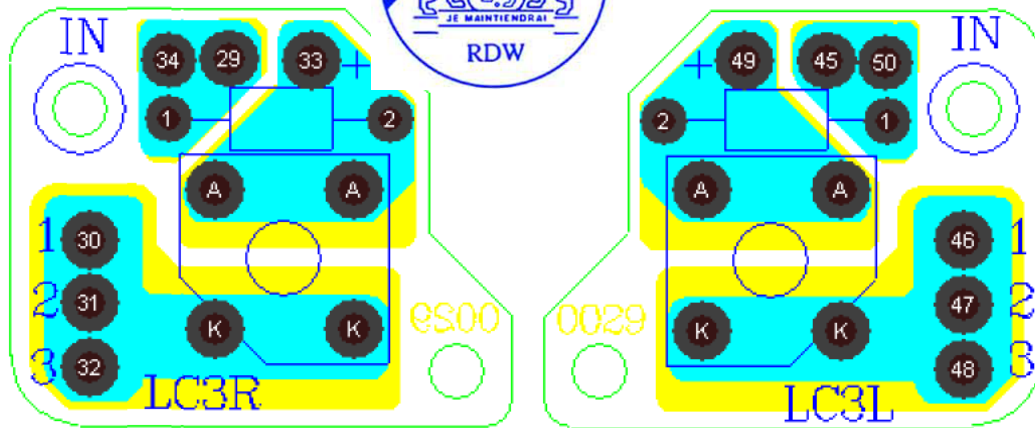
Stop lamp:  
 12V 3.51W (Input range: 9V~30V)  
 24LEDs, Non-replaceable light source



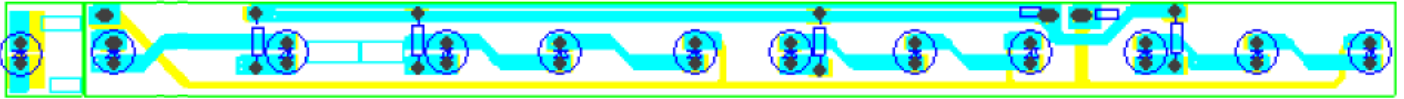
Rear Direction Indicator:  
 12V 2.36W (Input range: 9V~30V)  
 19LEDs, Non-replaceable light source



2、PCB







## 3. Bill of materials

## WJ20-0229 Bill of materials

No	Name	Type	Quantity
1	Amber LED lamp	WJ-HY0.04W	19
2	Red LED lights	WJ-HY0.06W	24
3	PCB	WJ20-0229PCB1 R/L	1
4	PCB	WJ20-0229PCB2 R/L	1
5	PCB	WJ20-0229PCB3 R/L	24
6	PCB	WJ20-0229PCB4	1
7	Transistor	S1815,GR331	2
8	diode	IN4007	5
9	diode	IN4148	1
10	diode	3.6V	1
11	Electrolytic Capacitor	1uF/50V	1
12	resistor	1/4W 330Ω,±1%	7
13	resistor	1/4W 150Ω,±1%	9
14	resistor	1/4W 270Ω,±1%	1
15	resistor	1/4W 7.5KΩ,±1%	1
16	resistor	1/4W 2.7KΩ,±1%	1
17	resistor	1/4W 1.2KΩ,±1%	1
18	resistor	1/4W 1KΩ,±1%	1
19	resistor	1/2W 150Ω,±1%	1
20	resistor	1/2W 10Ω,±1%	1



Type : **WJ20-0229**  
Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

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## Test Report

Agreement concerning the adoption of uniform technical prescriptions for the wheeled vehicles, equipment and parts which can be fitted and/or be used on wheeled vehicles and the conditions for reciprocal recognition of approvals granted on the basis of these prescriptions

### Uniform provisions concerning the approval of reversing lamps for power driven vehicles and their trailers

**ECE-R23**  
as last amended

not applicable

Approval status	
ECE	Number of approval
	E4-23R-0015726




**Test Report**  
**No. : CS023-A0-2011-00675**  
ECE Regulation No.23



Type : **WJ20-0229**  
Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

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**0. General information**

0.1. Trademark or trade name of the lamp : 

0.2. Manufacturer's name for the type of the lamp : WJ20-0229

0.3. Name and address of the manufacturer : Winjet Bright Auto Lighting Co., Ltd.  
No.2, 3rd Street, New Technological Industrial Zone,  
Xingtan Town, Shunde District, Foshan City,  
Guangdong Province, P.R. China.

0.4. Name and address of manufacturer's authorized representative : ---

0.5. No. of information folder : WJ20-0229  
date of issue : November 29, 2011  
date of last amendment : ---



Type : **WJ20-0229**  
Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

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## 1. Test object(s) and general test information

### 1.1. Test object(s)

identification number : ---  
version : ---  
Remark : reversing lamp  
filament lamp type: one W16W

### 1.2. General test information

1.2.1. Order issued by : ---  
(if different from manufacturer)  
1.2.2. Test object / test vehicle received on : not applicable  
1.2.3. Test date : November 29, 2011  
1.2.4. Test site : Guangzhou Vkan Certification & Testing Institute  
Guangzhou Science City, 510663 Guangzhou, P.R.  
China  
1.2.5. Remark : The results of the test refer exclusively to the  
object(s) mentioned under point 1.1 of this report.



Type : **WJ20-0229**  
Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

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## 2. Test minutes

2.1. Test facilities : The test facilities are in compliance with the requirements of the regulation.

2.2. Test results : ~~The type has been examined according to the amendments mentioned in appendix 0.~~

~~An actual test of the type was not required. The results of the previous tests are still valid. delete if unnecessary~~

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

The filament lamp type is clearly legible and indelible marked ~~on the lens and on the base of the lamp.~~

Space for the approval mark and for additional symbols is provided on the lens.

2.3. General specifications : The lamps are designed and made that under normal use their satisfactory operation is ensured and they retain the required characteristics.

The colour of the light emitted inside the field of the light distribution grid defined in paragraph 2 of Annex 3 is within the limits of the coordinates for **WHITE** prescribed in Annex 4 of the Regulation.

2.4. Photometric tests : The light emitted was obtained by means of an uncoloured standard lamp of the category stated in item 1.1, producing the required luminous flux.

The light distribution angles and levels of intensity have been measured in accordance with Annex 3 of the regulation, based on the manufacturer's indication of the centre of reference and axis of reference.

~~The single lamp containing complies with the minimum intensity required when anyone light source has failed.~~



Type : **WJ20-0229**  
 Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

Results of photometric tests of the **reversing lamp**

distribution of the intensity of the lamps in [cd]								
horizontal angle		L45°	L30°	L10°	V	R10°	R30°	R45°
vertical angle required minimum intensity	U10°	--	--	10	15	10	--	--
	U5°	15	--	20	25	20	--	15
	H	15	25	50	80	50	25	15
	D5°	15	25	50	80	50	25	15
vertical angle  sample no. 1	U10°	--	--	20.08	41.33	30.12	--	---
	U5°	19.92	--	40.55	77.81	56.34	--	35.37
	H	22.12	36.15	61.40	151.01	92.42	29.40	45.51
	D5°	23.30	35.35	80.02	142.45	80.78	41.82	47.15
vertical angle  sample no. 2	U10°	--	--	25.65	48.51	23.75	--	--
	U5°	37.94	--	61.12	80.08	37.96	--	20.18
	H	29.10	38.30	99.44	141.51	82.90	46.10	24.20
	D5°	37.84	40.65	98.71	159.50	161.17	25.57	31.15

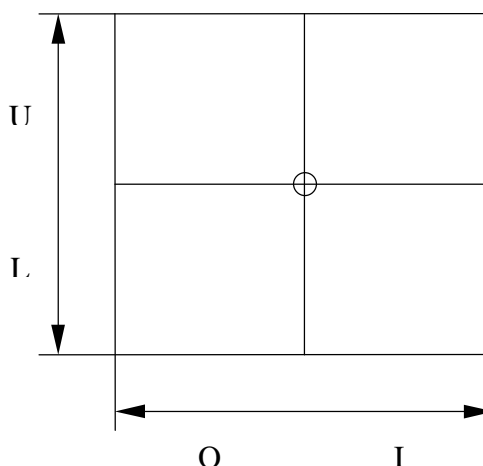
	Sample no. 1	sample no. 2	allowable maximum
maximum intensity [cd] in or above the horizontal plane	155.30	166.91	300
maximum intensity [cd] between the horizontal plane and 5°D	190.32	205.12	600
maximum intensity [cd] below 5°D	102.80	130.15	8000



Type : **WJ20-0229**  
 Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

2.5. Illuminating surface : Vertical and horizontal outlines of the illuminating surface of the light-signalling device in relation to the centre of reference and in accordance with Annex 3 of Regulation No. 48.

Definition of the illuminating surface of the device  
 ⊕ centre of reference



function	upper boundary (U) [mm]	lower boundary (L) [mm]	inner boundary (I) [mm]	outer boundary (O) [mm]
Reversing lamp	25	25	35	35

2.6. Explanatory note : This report describes the examination of the reversing 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 position lamp/stop lamp	CS007-A0-2011-00672
Rear direction indicator	CS006-A0-2011-00673
Rear fog lamp	CS038-A0-2011-00674

2.7. Variants and components : ---



Type : **WJ20-0229**  
Manufacturer : **Winjet Bright Auto Lighting Co., Ltd.**

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### 3. Remark concerning tested object(s)

All versions of the lamps as stated in the information document are covered with the tested version(s) and test object(s) respectively.

### 4. Appendices

0 List of modifications

Information folder no. : WJ20-0229

### 5. Statement of conformity

The type described in this test report and the appendices attached are in compliance with the Test Specification mentioned above.

The Test Report comprises pages 1 to 7.

The Test Report shall be reproduced and published in full only and by the client only. It shall be reproduced partially with the written permission of the Test Laboratory only.

## TEST LABORATORY

TÜV NORD Mobilität GmbH & Co. KG  
IFM - Institut für Fahrzeugtechnik und Mobilität,  
Adlerstr. 7, 45307 Essen

Designated Technical Service  
RDW No. 99050016

Guangzhou, December 5, 2011



B.S.M.E. C.Zong

