Vehicle Certification Agency

Far East Office

英國車輛驗證局遠東辦事處

ISOQA 建維驗證

VCA REFERENCES	
Test Report Number	EAH177936
Number of Pages	2
Number of Annexes	3

TEST DETAILS	
Subject	Tail Lamp, details listed as Category
Specific Requirements	ECE Reg. 4.00
Duration	2007/1/24
Technical Service	Integrated Service of Quality Assessment for Vehicle Certification Agency
VCA Representative	ARTHUR C. H. CHANG
Manufacturer's Representative	Lin Qi
Reason for Test	Type of Approval

MANUFACTURER DETAILS	
Manufacturer's Name	Taizhou Dafa Mold Manufacturing CO., LTD
Manufacturer's Address	NO.292 Xinqiao Road, Xinqiao Town, Luqiao District, Taizhou City, Zhejiang, China
Premise of Manufacturing	Same As Above
Model Type & description	DF-TR011
Category	L for Rear Registration Plate Lamp.
CONCLUSION	The submitted samples are tested in accordance with Specific Requirements and found in compliance with all aspects.

Signature: Archer Chang

Name: ARTHUR C H CHANG
Position: COE of ISOQA
Date: 16 April 2007

LIST OF ANNEXES

Annex	Total page	Subject	Reference
1	1	Information document	
2	2	Drawings	DF-TR011
		PHOTO	DF-TR011
3	3	Test Record	07-0099
4			

VCA 24 APR 2007 UK APPROVAL AUTHORITY

Tel:886-4-24061011 Fax:886-4-24060419 E-mail:isoqa@ms12.hinet.net http:www.isoqa.com.tw

ECE REGULATION NO. 4

item	Parameter	results	YES/NO
5.	**GENERAL SPECIFICATIONS** Each sample shall conform to the lighting specifications set forth in paragraph 9 . 3/		YES
	3/ These specifications are such as to ensure good visibility if the inclination of the registration plate does not exceed 30 °on either side of the vertical.		
5.1.	The devices for the illumination of rear registration plates shall be so constructed that the whole surface of the plate will be visible within the angles given in annex 4.		
5.2.	All measurements shall be made with the standard filament lamp of the category prescribed by the manufacturer, the supply voltage being so regulated as to produce the reference luminous flux. All measurements on the devices with non-replaceable light sources shall be made at 6.75 V, 13.5 V or 28.0 V respectively.		YES
5.3.	In the case of light sources supplied by a special power supply, the above test voltages shall be applied to the input terminals of that power supply. The test laboratory may require from manufacturer the special power supply needed to supply the light sources.		N/A
5.4.	any rear registration plate illuminating device, except those equipped with filament lamp(s), the luminance values measured after one minute and after 30 minutes of operation shall comply with the minimum requirements.		YES
	The luminance distribution after one minute of operation can be calculated by applying at each test point the ratio of luminance values measured in one point after one minute and after 30 minutes of operation.		YES
5.5.	Light source module		N/A
5.5.1.	The design of the light source module(s) shall be such that even in darkness the light source module(s) can be fitted in no other position, but the correct one.		N/A
5.5.2.	The light source module(s) shall be tamperproof		N/A
6.	**COLOUR OF LIGHT** The light of the lamp used in the illuminating device must be sufficiently colourless not to cause any appreciable change in the colour of the registration plate.	C5W standard bulb used	YES
7.	**INCIDENCE OF THE LIGHT** The manufacturer of the illuminating device shall specify the position in which the device is to be fitted in relation to the space for the registration plate; the device must be so placed that the angle of incidence of the light on the surface of the plate does not exceed 82 °at any point on the surface to be illuminated, this angle being measured from the extremity of the device's illuminating area which is furthest from the surface of the plate. If there is more than one illuminating device, the foregoing requirement shall apply only to that part of the plate intended to be illuminated by the device concerned.	Please see Record No. 07-0099 attached.	YES
	When the device has one outer edge of the illuminating surface that is parallel to the surface of the registration plate, the extremity of the illuminating surface of the device which is furthest from the surface of the plate is the middle point of the edge of the illuminating surface, which is parallel to the plate and is furthest from the surface of the plate		
	The device must be so designed that no light is emitted directly towards the rear, with the exception of red light if the device is combined or grouped with a rear lamp.		YES
8.	**MEASURING PROCEDURE** Luminance measurements shall be made on a diffuse colourless surface with known diffuse reflection factor. 4/ The diffuse colourless surface shall have the dimensions of the registration plate or the dimension exceeding one measuring point. Its centre shall be placed in the centre of the positions of the measuring points.		
	This diffuse colourless surface(s) shall be placed in the position normally occupied by the registration plate and 2 mm in front of its holder		
	Luminance measurements shall be made perpendicularly to the surface of the diffuse colourless surface with the tolerance of 5° in each direction at the points shown in annex 3 to this Regulation, each point representing a circular area of 25 mm in diameter. The measured luminance shall be corrected for the diffuse reflection factor 1.0		
9.	**PHOTOMETRIC CHARACTERISTICS** At each of the points of measurement shown in annex 3, the luminance B shall be at least equal to 2.5 cd/m^2.	Please see Record No. 07-0099 attached.	YES
	The gradient of the luminance between the values B_1 and B_2, measured at any two points 1 and 2 selected from among those mentioned above, shll not exceed 2 x Bo/cm, Bo being the minimum luminance measured at the various points, that is to say:		
	$\frac{}{B_2-B_1} \leq 2 \times Bo/cm$	Please see Record No. 07-0099 attached.	YES

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Taizhou Dafa Mold Manufacturing CO.,LTD

台州大發模具制造有限公司

Information Document

for Initial application to ECE Homologation

of Model Number DF-TR011

items	Details		Initial	Extension- 00	Remark
1.	VCA				
1.1	Job Number		EAH177936		
1.2	Approval Number		000395		
2.	Manufacturer				
2.1	Name		Taizhou Dafa Mold Manufacturing CO.,LTD		
2.2	Address		NO.292 Xinqiao Road, Xinqiao Town, Luqiao District, Taizhou City, Zhejiang, China		
2.3	Trade name or mark		DAFA		
3.	Product		Registration Plate Lamp		
3.1	Model Number		DF-TR011		
3.2	Intended functions	Charteristic			
3.2.1	Rear Registration Plate Lamp (Reg.4)	Category	L		
		Bulb	C5W 12V 5W		
		Color of light	White		
		Color of lens	Clear		
		Incidence angle	1. Wide plate 71°		
			2. tall plate 72°		
			3. Agricultural or forestry tractors 74 °		
4.	Drawings		DF-TR011		

VCA
24 APR 2007
UK APPROVAL AUTHORITY

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THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

Rev 1/03

E11

COMMUNICATION CONCERNING THE APPROVAL GRANTED OF A TYPE OF DEVICE FOR THE ILLUMINATION OF REAR REGISTRATION PLATES OF MOTOR VEHICLES (EXCEPT MOTOR CYCLES) AND THEIR TRILERS PURSUANT TO REGULATION NO . 4.

Approval No: 000395

1. Trade name or mark of the device: DAFA

2. Manufacturer's name for the type of device: DF-TR011

3. Manufacturer's name and address:

   Taizhou Dafa Mold Manufacturing CO.,LTD.
   NO.292 Xinqiao Road, Xinqiao Town, Luqiao District,
   Taizhou City, Zhejiang, China

4. If applicable, name and address of manufacturer's representative: Not applicable

5. Submitted for approval on: 24 January 2007

6. Technical service responsible for conducting approval tests: Vehicle Certification Agency

7. Date of report issued by that service: 16 April 2007

8. Number of report issued by that service: EAH177936

VCA 24 APR 2007 UK APPROVAL AUTHORITY

An executive agency of the Department for Transport

9. Concise description: [3]/

Device for illuminating:

A tall plate

A wide plate

A plate for agricultural or forestry tractor [2]/

Number and category of filament lamp(s): 1 x C5W

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): please see test record

10. Position of the approval mark: On the lens

11. Reason(s) for extension (if applicable): Not applicable

12. Approval GRANTED

13. Place: BRISTOL

14. Date: 24 APRIL 2007

15. Signature:

A.W. STENNING
Head of Product Certification

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.

EAH177936

VCA
24 APR 2007
UK APPROVAL AUTHORITY

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ISOQA 建維品質驗證有限公司
Integrated Services of Quality Assessment

Testing and Certification Body to Specific Product and System Standards

CERTIFICATE of Type Approval

No: ***0109-00006***

According to the

Test Report No. **EAH177936-000395**

ISOQA hereby certifies the samples with following details are complied with the related requirements :

Function :

Illumination of Rear Registration Plate of ECE Regulation 4

Model No. ***DF-TR011***
Make: *Taizhou Dafa Mold Manufacturing CO., LTD*
Address: *NO.292 Xinqiao Road, Xinqiao Town, Luqiao District, Taizhou City, Zhejiang, China*

Signed by ***Date of approval: 2007/4/24***

Arthur Chang

Arthur C. H. Chang ***Expiry date: 2007/7/24***

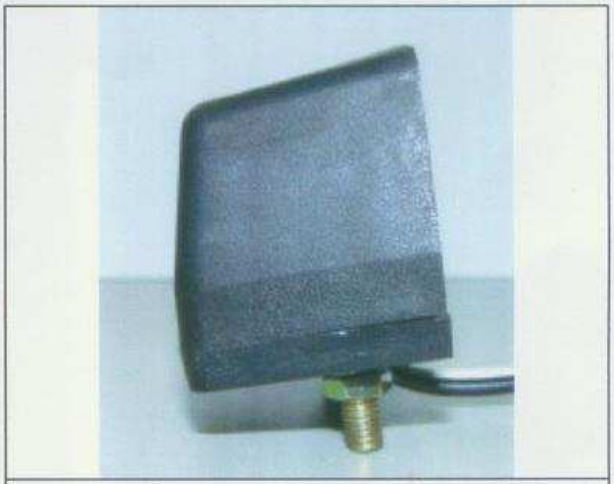
Chief Executive Officer
Integrated Service of Quality Assessment
This certificate is applicable to samples tested only.
This certificate is not a stand-alone document.
The certificate has to be used together with the Certificate of Conformity of Production.

E1/ E11/DOT/SAE
Made in Taiwan
Approved by ISOQA
中國生產、建維驗證

TEL:886-4-24061011 FAX:886-4-24060419 e-mail:isoqa@ms12.hinet.net http://www.isoqa.com.tw

Taizhou Dafa Mold Manufacturing CO., LTD
台州大發模具制造有限公司

DF-TR011 Front View



DF-TR011 Side View

DF-TR011 Top View

DF-TR011 Rear View

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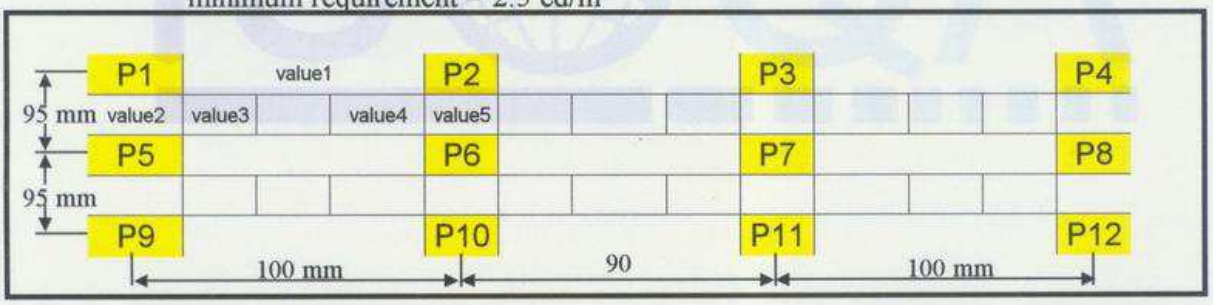
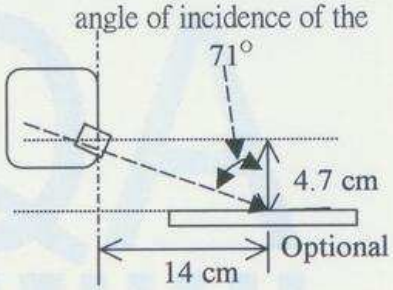
Photometric Characteristics (tall plate)

Record No.	07-	0099	Reference	EAH177936 4	000395
Requirement	ECE R4	Clause7 Annex 6	Function	Rear Registration Plate Lamp (Reg.4)	
Subject	DF-TR011		Date	24/1/2007	

minimum requirement = 2.5 cd/m^2



Note:
Value 1 = (P1 - P2) / distance 1-2
Value 2 = (P1 - P5) / distance 1-5
Value 3 = (P1 - P6) / distance 1-6
Value 4 = (P2 - P5) / distance 2-5
Value 5 = (P2 - P6) / distance 2-6 etc
distance 1-6 = $\sqrt{}$ (9.5 x 9.5 + 10 x 10)
distance 2-7 = $\sqrt{}$ (9.5 x 9.5 + 9 x 9)



Sample 1
S-07-0079

2.36	0.01	2.45	0.00	2.45	0.01	2.31	P12 = Bo
0.02	0.02 0.01	0.02	0.00 0.00	0.02	0 0.02	0.01	(B2-B1)
2.55	0.01	2.65	0.01	2.60	0.02	2.41	distance1-2 in cm
0.01	0.02 0.01	0.02	0.00 0.00	0.01	0.02 0.02	0.02	≤ 2 x Bo/cm= 5.52
2.45	0.03	2.79	0.02	2.65	0.04	2.26	

Sample 2
S-07-0080

2.55	0.00	2.55	0.00	2.55	0.01	2.45	P12 = Bo
0.01	0.01 0.01	0.02	0.00 0.00	0.01	0 0.02	0.01	(B2-B1)
2.69	0.01	2.74	0.01	2.69	0.01	2.55	distance1-2 in cm
0.01	0.02 0.00	0.03	0.00 0.00	0.02	0.02 0.02	0.01	≤ 2 x Bo/cm= 4.82
2.79	0.02	2.98	0.02	2.84	0.04	2.41	

Tested by Arthur C. H. Chang Signature Archer Chang

Approved by Arthur C. H. Chang Signature Archer Chang

VCA 24 APR 2007 UK APPROVAL AUTHORITY

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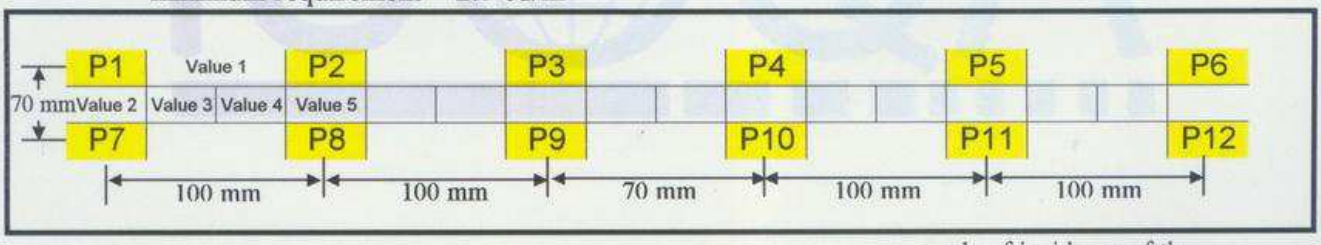
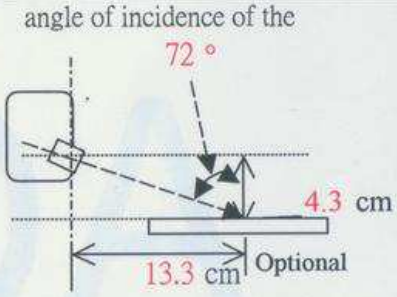
Photometric Characteristics (wide plate)

Requirement	ECE R4 Clause 8 Annex 3	Function	Rear Registration Plate Lamp (R4)
Subject	Model No. DF-TR011	Date	24/1/2007
Lamp	C5W	Valtage , Current	14V , 0.38A

minimum requirement = 2.5 cd/m^2



Note:
Value 1 = (P1-P2) / distance 1-2
Value 2 = (P1-P7) / distance 1-7
Value 3 = (P1-P8) / distance 1-8
Value 4 = (P2-P7) / distance 2-7
Value 5 = (P2-P8) / distance 2-8 etc.
distance 1-8 = $\sqrt{}$ (7 x 7 + 10 x 10)
distance 3-10 = $\sqrt{}$ (7 x 7 + 7 x 7)



2.31	0.06		2.89	0.01		2.98	0.00		2.98	0.01		2.89	0.05		2.36
0.03	0.05	0.07	0.01	0.02	0.00	0.03	0.015	0.019	0.02	0.01	0.02	0.01	0.067	0.039	0.04
2.07	0.09		2.93	0.02		3.17	0.01		3.13	0.03		2.84	0.08		2.07
S-06-0079															

2.31	0.07		2.98	0.00		3.03	0.00		3.03	0.01		2.93	0.07		2.26
0.01	0.05	0.06	0.00	0.02	0.00	0.03	0.014	0.019	0.02	0.01	0.02	0.01	0.063	0.052	0.01
2.21	0.08		2.98	0.02		3.22	0.01		3.17	0.03		2.89	0.07		2.16
S-06-0080															

P12 = Bo
(B2-B1)
distance1-2 in cm
$\leq$ 2 x Bo/cm = 4.14
S-06-0079

P12 = Bo
(B2-B1)
distance1-2 in cm
$\leq$ 2 x Bo/cm = 4.32
S-06-0080

Tested by Arthur C. H. Chang Signature Archer Chang

Approvec Arthur C. H. Chang Signature Archer Chang

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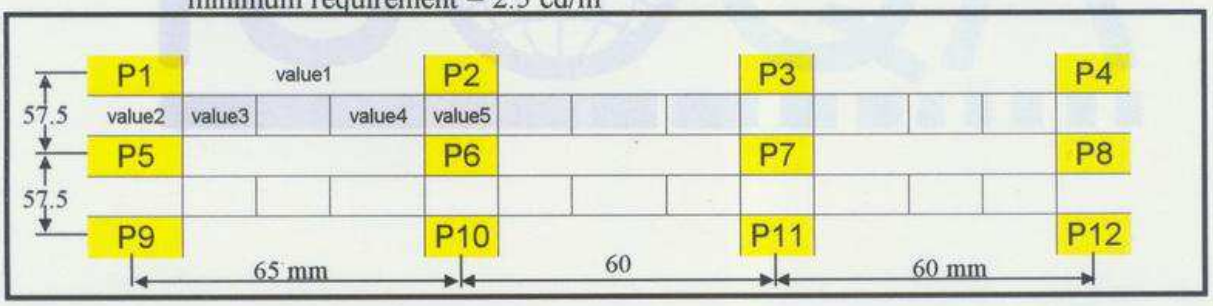
Photometric Characteristics (forestry plate)

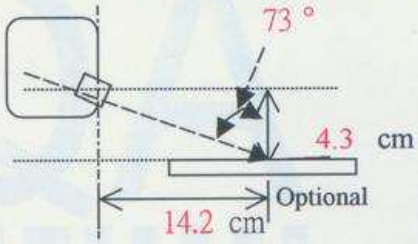
Requirement	ECE R4	Clause7 Annex 6	Function	Rear Registration Plate Lamp (R4)
Subject	Model No.DF-TR011		Date	24/1/2007
Lamp	12V/5W C5W		Voltage , Corrent	13.5V,0.38A

minimum requirement = 2.5 cd/m^2



Note:
Value 1 = (P1 - P2) / distance 1-2
Value 2 = (P1 - P5) / distance 1-5
Value 3 = (P1 - P6) / distance 1-6
Value 4 = (P2 - P5) / distance 2-5
Value 5 = (P2 - P6) / distance 2-6 etc
distance 1-6 = $\sqrt{}$(9.5 x 9.5 + 10 x 10)
distance 2-7 = $\sqrt{}$(9.5 x 9.5 + 9 x 9)

angle of incidence of the light



Sample 1
S-07-0079

2.55	0.00		2.55	0.01		2.60	0.01		2.50	P4 = Bo
0.01	0.01	0.01	0.01	0.00	0.00	0.01	0	0.01	0.01	(B2-B1)
2.65	0.00		2.65	0.00		2.65	0.01		2.55	distance1-2 in cm
0.01	0.01	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.01	≤ 2 x Bo/cm= 5
2.69	0.00		2.74	0.00		2.74	0.02		2.50	

Sample 2
S-07-0080

2.60	0.00		2.60	0.00		2.60	0.01		2.55	P4 = Bo
0.01	0.01	0.01	0.01	0.00	0.00	0.01	0	0.01	0.01	(B2-B1)
2.69	0.01		2.74	0.00		2.74	0.01		2.65	distance1-2 in cm
0.01	0.01	0.00	0.02	0.00	0.00	0.01	0	0.01	0.00	≤ 2 x Bo/cm= 5.1
2.79	0.01		2.89	0.01		2.84	0.02		2.69	

Tested by Arthur C. H. Chang Signature Archer Chang

Approved by Arthur C. H. Chang Signature Archer Chang

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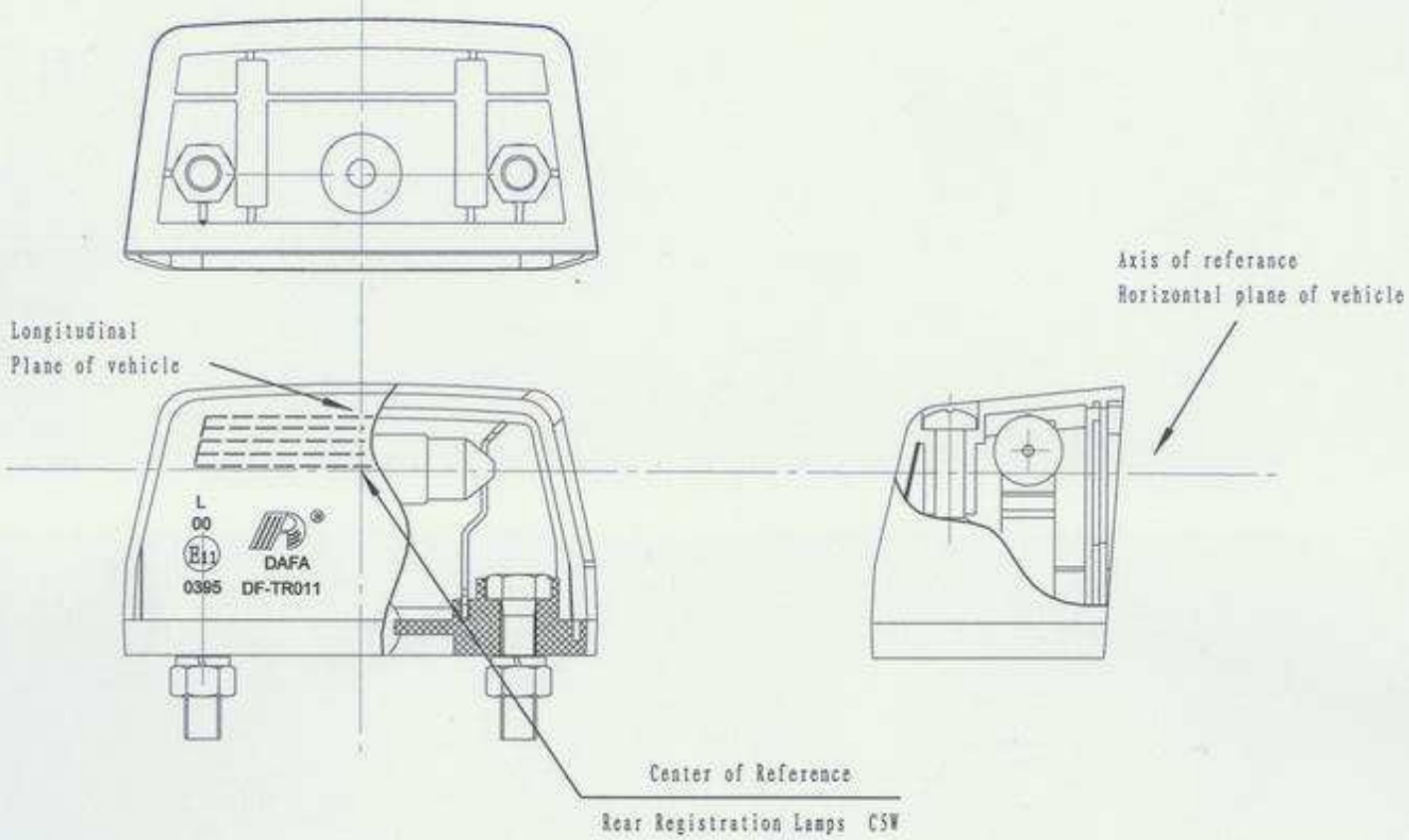

技术要求：

1、装配前各零部件要求清洁、完整，然后组装；

2、组装后做点亮检查；

3、曲面部分见三维模型；

UK APPROVAL AUTHORITY
24 APR 2007
VCA

标记	处数	分区	更改文件号	签名	年、月、日
设计			标准化		
审核					
工艺			批准		

阶段标记	重量	比例
		1:1
共 张	第 张	

DF-TR011

浙江大发模具制造有限公司