

# Shanghai CATA Signal CO., LTD.

---



RDW

Certification and Supervision Centre  
Europaweg 205  
P. O. Box 777  
2700 AT Zoetermeer  
The Netherlands

Subject for ECE-type approval

Dear Sir :

We hereby apply for type approval according to ECE:

Trade name or trade mark :  ,  , K&T,

Manufacturer's name for type of device : High-mounted stop lamp: AL10027S3

Name and address of manufacturer : Shanghai CATA Signal CO., LTD.  
No. 89, Nanxuan Road, Nanhui Industrial  
Park, 201314 Shanghai,  
P. R. China

We here with declare that we have not applied and will not apply for approval with another Contracting Party of the ECE for the same type of product. Nor has any other member state granted a corresponding approval.

Sincerely

*MANUFACTURER'S STAMP*

Signature:



*Zhang Wen Hu*  
Name:

Date: Oct 6, 2008

THIS APPLICATION IS ACCOMPANIED BY

- Information folder No. AL10027S3-00 for the devices
- The test reports





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



COMMUNICATION

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

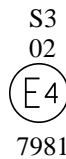
- APPROVAL GRANTED
- ~~APPROVAL EXTENDED~~
- ~~APPROVAL REFUSED~~
- ~~APPROVAL WITHDRAWN~~
- ~~PRODUCTION DEFINITELY DISCONTINUED~~

of a type of device pursuant to Regulation number 7.

Approval No.: E4-7R-027981

Extension No.: 00

Approval mark

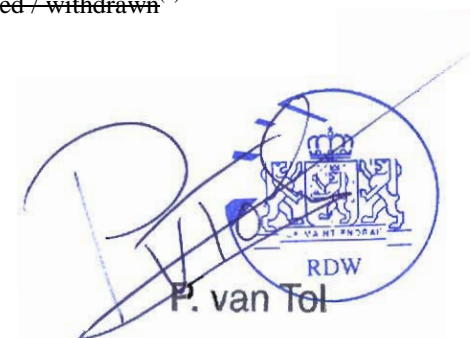


1. Trade name or mark of the device : ;
2. Manufacturer's name for the type of device : AL10027S3
3. Manufacturer's name and address : Shanghai CATA Signal Co.,Ltd.  
No.89, Nanxuan Road, Nanhui Industrial Park,  
201314, Shanghai,  
P.R.China
4. If applicable, name and address of the manufacturer's representative : ---
5. Submitted for approval on : October 6, 2008
6. Technical service responsible for conducting approval tests : TÜV Rheinland Kraftfahrt GmbH  
Technologiezentrum Verkehrssicherheit  
Typprüfstelle Fahrzeuge/Fahrzeugteile  
Am Grauen Stein  
D-51105 Köln (Poll)
7. Date of report issued by that service : October 10, 2008
8. Number of report issued by that service : 87-R7-1530/08



9. Concise description<sup>(2)</sup>

- By category of lamp : S3
- For mounting either : outside ~~or inside or both~~
- Colour of light emitted : red ~~/white~~
- Number and category and kind of light source(s) : 2.1W at 12V, non replaceable light source, LED  
2.1W at 24V
- Voltage and wattage : 12V 2.1W and 24V 2.1W
- Light source module specific identification code : not applicable
- Only of limited mounting height of equal to or less than 750 mm above the ground : ~~yes~~/ no
- Geometrical conditions of installation and relating variations if any : refer to the drawing of the information folder
- Application of an electronic light source control gear/variable intensity control
- (a) being part of the lamp : ~~yes~~/no
- (b) being not part of the lamp : ~~yes~~/no
- 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
10. Position of the approval mark : on the lens
11. Reason(s) for extension (if applicable) : ---
12. Approval : granted ~~/extended / refused / withdrawn~~<sup>(1)</sup>
13. Place : Zoetermeer
14. Date : 23-OCT-2008
15. Signature :



16. The list of documents deposited with the Administrative Service which has granted approval is annexed to this communication and may be obtained upon request.

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

<sup>(2)</sup> For lamps with non-replaceable light sources indicate the number and the total wattage of the light sources.



# Shanghai CATA Signal CO., LTD

Information folder No. AL10027S3-00

Page 1 of 5

First application date: Oct 6, 2008

## 1. Specification data

Type		AL10027S3
Function		High-mounted stop lamp
Color		Amber
Rated	Voltage	12V and 24V
	Wattage	2.1W
Applicable Regulation (ECE)		ECE R7 category S3
Location Of marking	Filament Lamp category	Non-replaceable light source, LED
		Marked on housing
Trade mark		  K&T
		Marked on lens

## 2. Construction and material

Construction	Material	Remarks
Lens	PC / PMMA	---
Reflector	PC	---
Housing	ABS	---
Electrical wiring	---	---

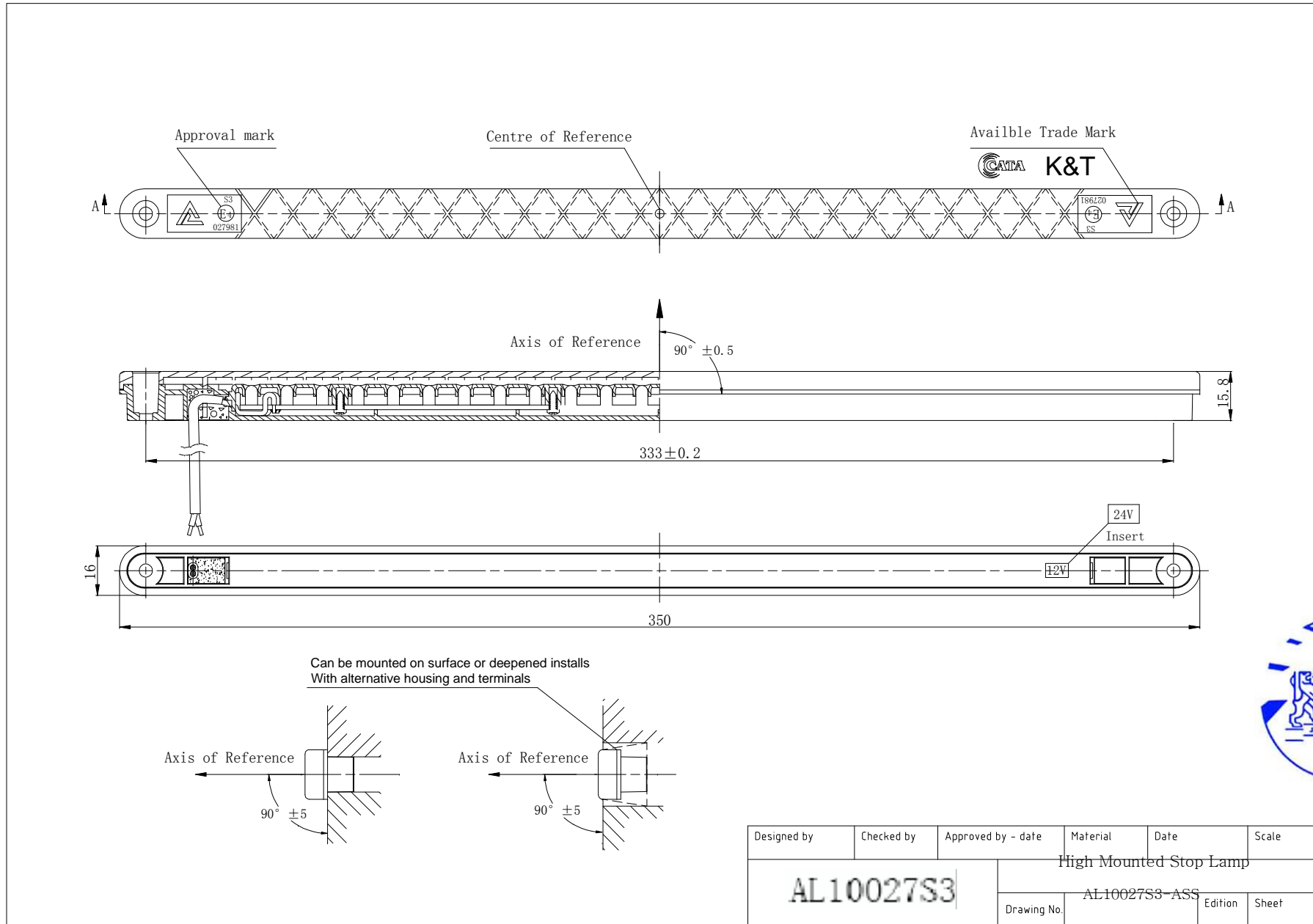
3. Name and address of manufacturer : Shanghai CATA Signal CO.,LTD

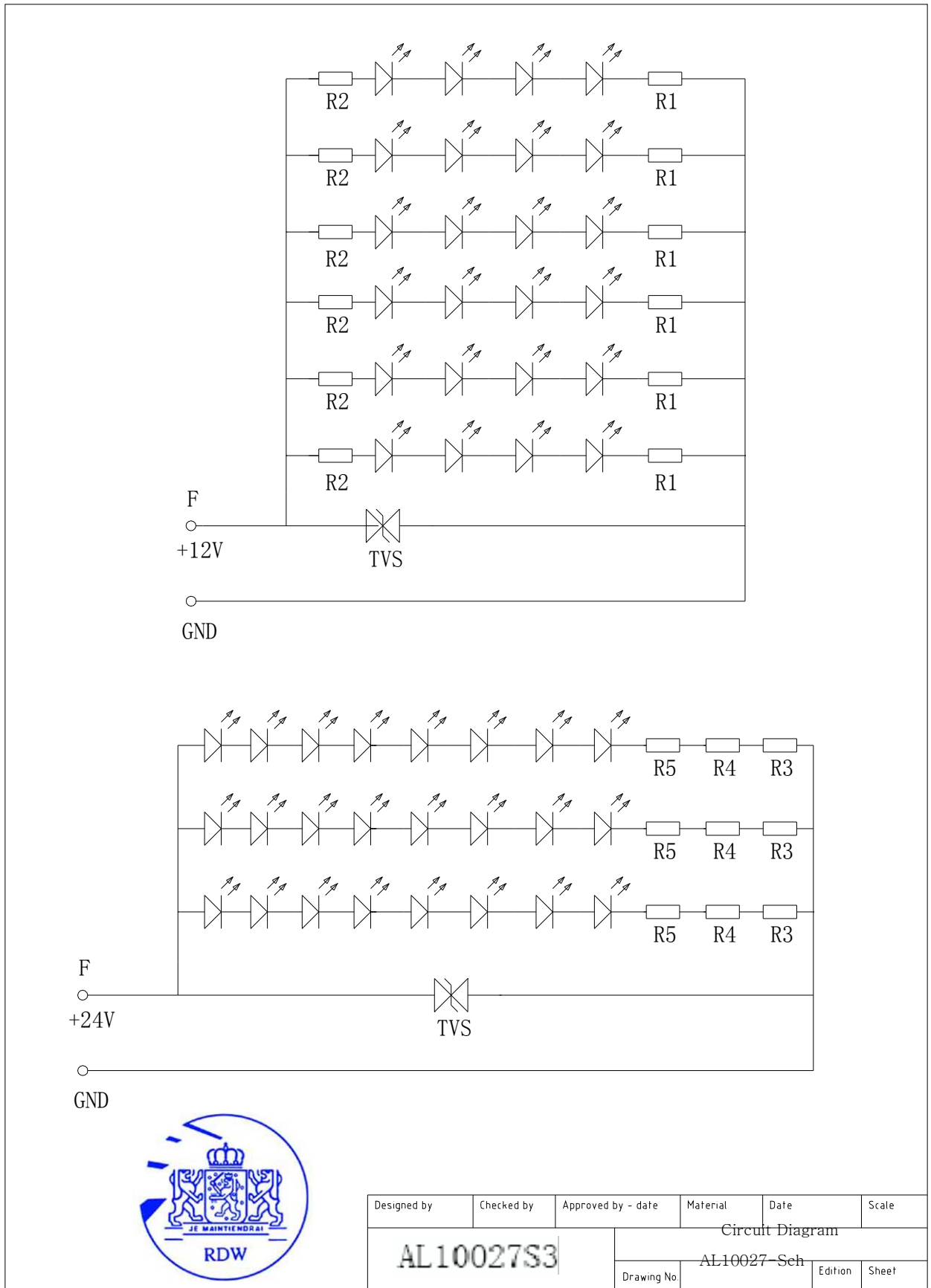
No. 89, Nanxuan Road, Nanhui Industrial Park,  
201314 Shanghai,  
P. R. China

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

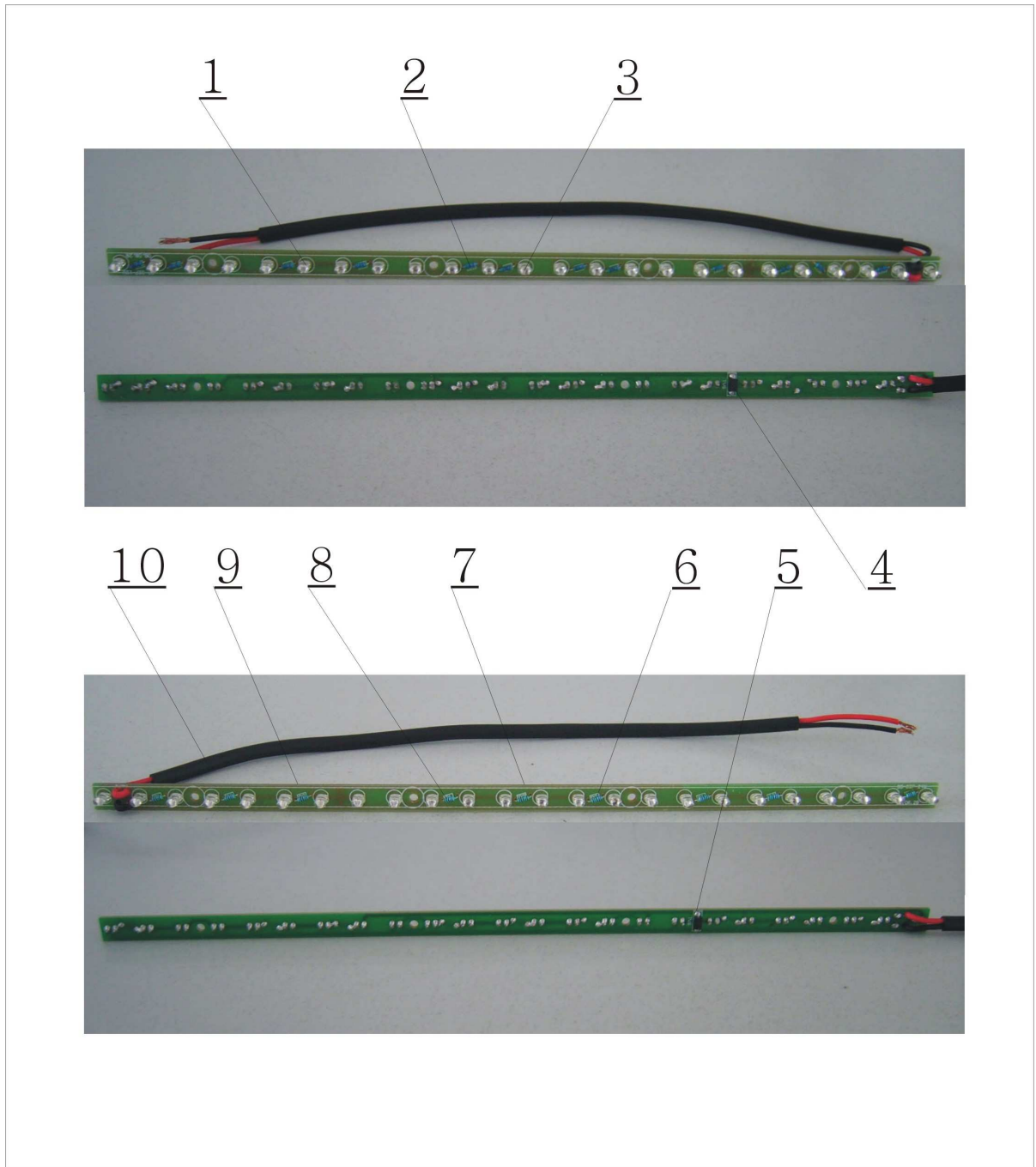


This information document consists of 5 page





Designed by	Checked by	Approved by - date	Material	Date	Scale
AL10027S3			Circuit Diagram		
			Drawing No.	AL10027-Sch	Edition



Bill of Materials					
No.	Park Name	Type	Drawing No.	Qty	Remark
1	LED	Φ3 ellipse		24	red
2	Resistance	1/8W	R1	6	For 12V
3	Resistance	1/8W	R2	6	For 12V
4	Suppressor diode	SMAJ18A	TVS	1	For 12V
5	Suppressor diode	SMAJ36CA	TVS	1	For 24V
6	Resistance	1/8W	R3	3	For 24V
7	Resistance	1/8W	R4	3	For 24V
8	Resistance	1/8W	R5	3	For 24V
9	PCB	1.5mm		1	
10	Cable	2*0.5 <sup>2</sup>		1	





Manufacturer : Shanghai CATA Signal Co.,Ltd.  
Type : AL10027S3

---

## TEST REPORT

according to ECE-Regulation

**Uniform provisions concerning the approval of front and rear position  
(side) lamps, stop-lamps and end-outline marker lamps for motor vehicles  
(except motor cycles) and their trailers**

**ECE-R7**

including all amendments until

**series of amendments 02  
Supplement 12**

Previously granted	
ECE - certificate	: ---



Structure of report:

1. Test object(s) and general test information
2. Test minutes
3. Remarks concerning tested object(s)
4. Appendices
5. Statement of conformity

Manufacturer : Shanghai CATA Signal Co.,Ltd.  
Type : AL10027S3

---

## 0. General information

- 0.1. Trademark or trade name of the lamp :  ; 
- 0.2. Manufacturer's name for the type of the lamp : AL10027S3
- 0.3. Name and address of the manufacturer : Shanghai CATA Signal Co.,Ltd.  
No.89, Nanxuan Road, Nanhui Industrial Park,  
201314, Shanghai,  
P.R.China
- 0.4. Name and address of manufacturer's authorized representative : not applicable
- 0.5. No. of information folder : AL10027S3-00  
date of issue : October 6, 2008  
date of last amendment : ---

Manufacturer : Shanghai CATA Signal Co.,Ltd.  
Type : AL10027S3

---

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

### 1.1. Test object(s)

identification number : ---  
version : ---  
Remark : Stop lamp of category S3  
lamp type:  
non replaceable light source, LED, 2.1W at 12V  
2.1W at 24V

### 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 : October 8, 2008  
1.2.4. Test site : Shanghai Motor Vehicle Inspection Center  
68, Yutian South Road, Anting, Jiading,  
201805, Shanghai,  
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.

**Manufacturer** : Shanghai CATA Signal Co.,Ltd.  
**Type** : AL10027S3

---

## 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 O.~~  
~~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 housing of the lamp.~~  
 The rated voltage and rated wattage are clearly legible and indelible marked ~~on the lens~~ and on the housing 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 4 is within the limits of the coordinates for prescribed in Annex 5 of the Regulation.
- 2.4. Photometric tests : The light intensity was measured after 1 minute burning period and after 30 minutes burning in reference axis. The distribution of the light intensity after 1 minute burning period was calculated using the ratio of the two described measurements. The light intensity and its distribution are in compliance with the requirement after 1 minute burning period and after 30 minutes burning period.  
 The light distribution angles and levels of intensity have been measured in accordance with Annex 4 of the Regulation, based on the manufacturer's indication of the centre of reference and axis of reference.  
 In case of different intensities of light emitted required by the Regulation, the evaluations are based on the most unfavourable limits specified.  
 The single lamp containing LEDs complies with the minimum intensity required when anyone light source has failed.

**Manufacturer** : Shanghai CATA Signal Co.,Ltd.  
**Type** : AL10027S3

Results of photometric tests of the **stop lamp S3** (test voltage: 13.5V)

distribution of the intensity of the lamps in [cd]						
horizontal angle		L10°	L5°	V	R5°	R10°
vertical angle required minimum intensity	U10°	8	---	16	---	8
	U5°	16	25	25	25	16
	H	16	25	25	25	16
	D5°	16	25	25	25	16
vertical angle sample no. 1	U10°	15.41	---	23.41	---	16.75
	U5°	27.42	33.43	37.81	35.56	29.30
	H	42.66	45.52	46.70	47.31	42.99
	D5°	48.60	50.13	48.80	49.96	47.71
vertical angle sample no. 2	U10°	19.11	---	26.35	---	18.07
	U5°	35.01	40.29	44.47	40.97	33.98
	H	48.01	50.13	51.50	52.60	47.75
	D5°	47.47	48.23	48.12	50.81	48.14

	sample 1	sample 2	allowable maximum	required minimum
maximum intensity [cd]	50.04	52.91	110	----
minimum intensity in the fields defined in annex 1 of the regulation [cd]	14.44	16.86	----	0.3

**Manufacturer** : Shanghai CATA Signal Co.,Ltd.  
**Type** : AL10027S3

Results of photometric tests of the **stop lamp S3** (test voltage: 28V)

distribution of the intensity of the lamps in [cd]						
horizontal angle		L10°	L5°	V	R5°	R10°
vertical angle required minimum intensity	U10°	8	---	16	---	8
	U5°	16	25	25	25	16
	H	16	25	25	25	16
	D5°	16	25	25	25	16
vertical angle sample no. 1	U10°	25.35	---	37.63	---	27.73
	U5°	38.08	44.36	47.81	48.66	42.70
	H	48.00	52.68	52.54	55.06	52.89
	D5°	45.70	51.21	51.59	50.03	49.98
vertical angle sample no. 2	U10°	17.45	---	26.08	---	19.20
	U5°	30.12	36.14	40.29	38.56	32.21
	H	45.21	48.20	48.75	49.56	45.34
	D5°	49.80	51.95	50.47	51.13	48.74

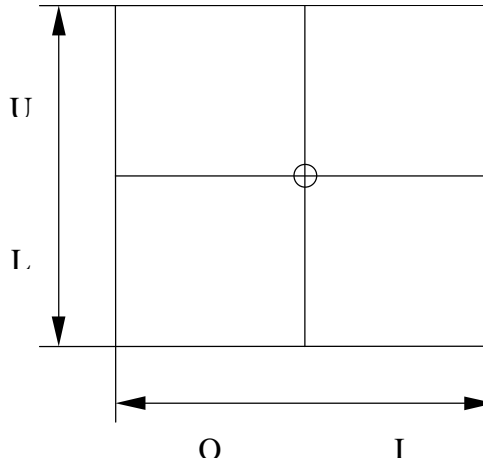
	sample 1	sample 2	allowable maximum	required minimum
maximum intensity [cd]	54.05	51.56	110	----
minimum intensity in the fields defined in annex 1 of the regulation [cd]	23.08	16.05	----	0.3

Manufacturer : Shanghai CATA Signal Co.,Ltd.  
 Type : AL10027S3

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]
Stop lamp S3	5	5	110	110

2.6. Explanatory note : ~~This report describes the examination of the stop 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 \_\_\_\_\_ Technical Report No. \_\_\_\_\_~~

2.7. Variants and components : 12V and 24V

Manufacturer : Shanghai CATA Signal Co.,Ltd.  
Type : AL10027S3

---

### 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. : AL10027S3-00

### 5. Statement of conformity

The information folder and the type described there comply with the requirements in the above mentioned directive/regulation.

The test laboratory is accredited for the above mentioned tests by the RDW, Vehicle Technology and Information Centre, the Netherlands:

Certification Number: RDW-99050014-02.

The test report (including appendix 0) comprises the pages 1 to 9 and shall not be reproduced except in full without the written approval of the test laboratory.

Cologne, October 10, 2008  
PC



B.S.M.E. P.Chen



Manufacturer : Shanghai CATA Signal Co.,Ltd.  
Type : AL10027S3

---

List of modifications

Appendix 0

Correction of : ---

Modification of : ---

Addition of : ---

Deletion of : ---