

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- ~~- APPROVAL WITHDRAWN~~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 retro-reflecting device pursuant to Regulation No. 3

Approval No.: **E4-3R-0216003**Extension No.: **00***Approval mark:*

IB	2a	R1-S1		16003
02	01	02		

1. Trade name or mark of the device
2. Manufacturer's name for the type of device
3. Manufacturer's name and address
4. If applicable, name and address of manufacturer's representative : not applicable
5. Submitted for approval on : August 22, 2011
6. Technical service responsible for conducting approval tests : TÜV Rheinland Kraftfahrt GmbH
Technologiezentrum Verkehrssicherheit
Am Grauen Stein
D-51105 Köln (Poll)
7. Date of test report : October 27, 2011
8. Number of test report : 87-R3-588/11



9. Concise description

~~In isolation~~/part of an assembly of devices⁽¹⁾ : Class IB

Colour of light emitted : ~~white~~ / red / ~~amber~~⁽¹⁾

Installation as an integral part of a lamp which is integrated into the body of a vehicle : yes / ~~no~~⁽¹⁾

Geometric conditions of installation and relating variations, if any : not applicable

10. Position of the approval mark : on the lens

11. Reason(s) for extension (if applicable) : ---

12. Approval : granted / ~~extended~~ / ~~refused~~ / ~~withdrawn~~

13. Place : Zoetermeer

14. Date : 03-NOV-2011

15. Signature :

A handwritten signature in blue ink is written over a circular official stamp. The stamp features a royal coat of arms with a crown on top, the text 'JE M' below it, and 'RDW' at the bottom. The name 'J.D. Vecht' is printed in bold across the middle of the stamp.

16. The following documents, bearing the approval number shown above, are available on request.
-Information document
-Test report

⁽¹⁾ Strike out which does not apply

Re Application date : August 22, 2011

1. Specification data

Type		GS-LTL1010			
Function		Rear retro-reflector	Rear direction indicator	Rear position lamp	Stop lamp
Emitted color		Red	Amber	Red	Red
Rated	Voltage	---	12V		
	Wattage	---	1.2W	0.3W	1.2W
Applicable Regulation (ECE)		R3.02 Class IB	R6.01 Category 2a	R7.02 Category R1-S1	
Number and category of filament lamp(light source)		---	5LEDs, Non-replaceable light source	5LEDs, Non-replaceable light source	
Location of marking	Rated Voltage and Wattage	Marked on Housing			
	Trade mark			Marked on Lens	
	Approval mark	Marked on Lens			
Special supply voltage		Not applicable			
Application of additional supply system		Yes / No			
Light source module		Yes /No			

2. Construction and material

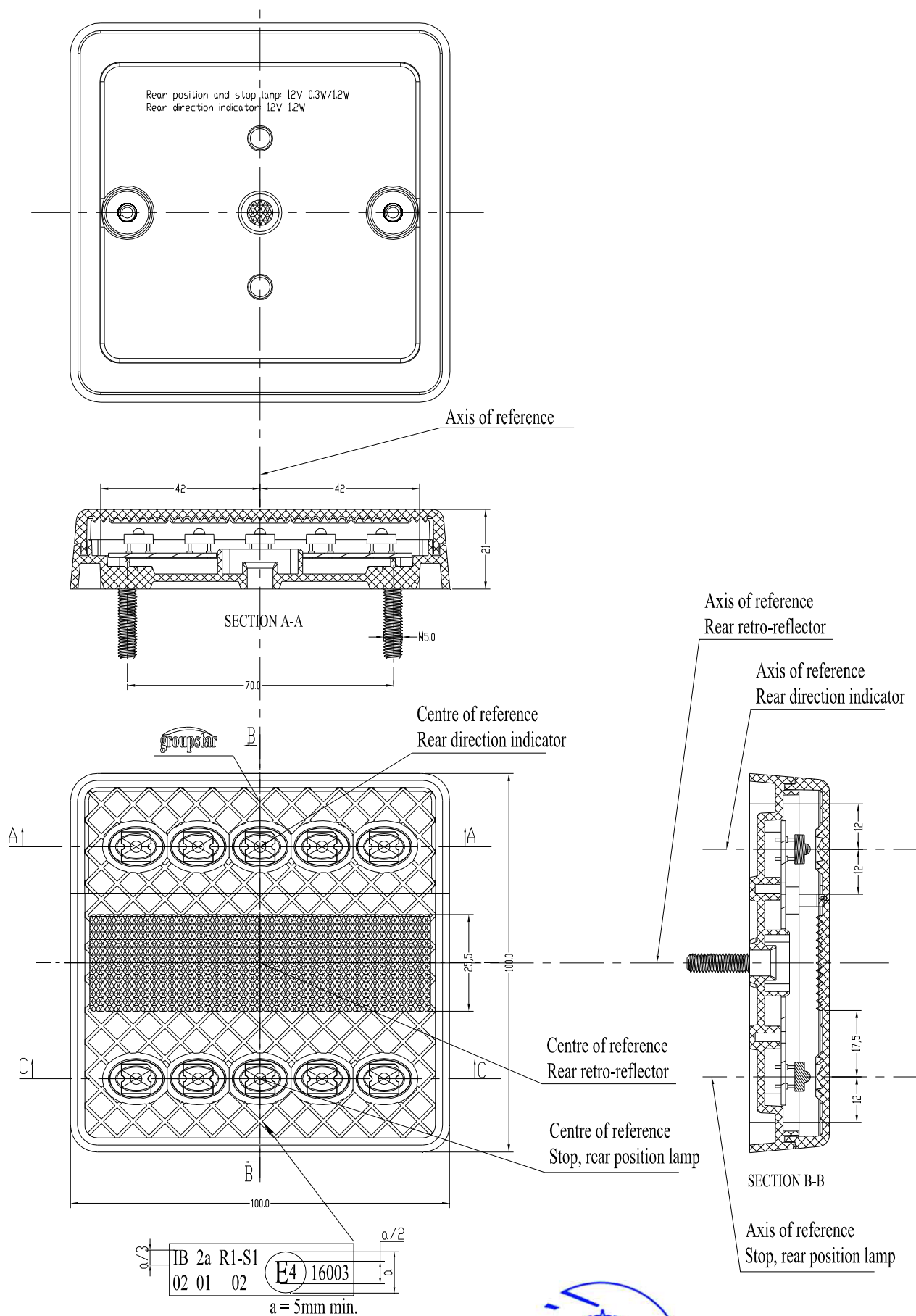
Construction	Material	Remarks
Outer lens	PC	Rear direction indicator: Amber Rear retro-reflector: Red Stop and rear position lamp: Red
Housing	ABS	-
Electrical wiring	Copper covered with insulation	-

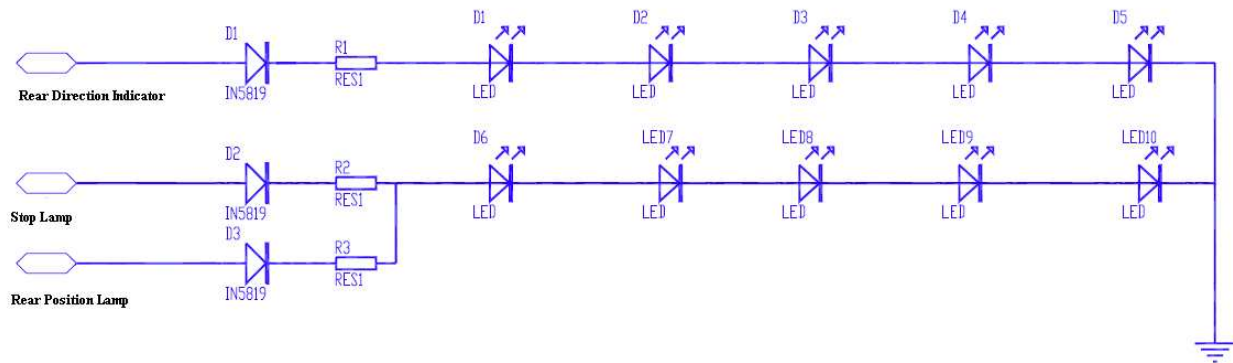
3. Name and address of manufacturer :

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

This information document consists of 3 pages.







Rear direction indicator; 5LEDs, 12V 1.2W, Non-replaceable light source

Rear position and stop lamp; 5LEDs, 12V 0.3/1.2W, Non-replaceable light source



Manufacturer :
Type :

TEST REPORT

According to ECE-Regulation

**uniform provisions concerning the approval of retro reflecting devices
for power-driven vehicles and their trailers**

ECE-R3

including all amendments until

**series of Amendments:02
supplement 12**

Previously granted	
ECE - certificate	: ---

Structure of report :

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

Manufacturer :
Type :

0. General information

- 0.1. Trademark or trade name of the lamp :
0.2. Manufacturer's name for the type of the lamp :
0.3. Name and address of the manufacturer :
0.4. Name and address of manufacturer's authorized representative : not applicable
0.5. No. of information folder : GS-LTL1010-00
date of issue : August 22, 2011
date of last amendment : ---

1. Test object(s) and general test information

- 1.1. Test object(s)
identification number : ---
version : ---
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 26, 2011
1.2.4. Test site : Quality Inspection And Testing Centre For Vehicle Lamps
And Lanterns Products
Jiangsu, 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 :
Type :

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.~~

Markings : The trade mark is marked clearly legible and indelible 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 retro reflector is designed and made that under normal use their satisfactory operation is ensured and they retain the required characteristics.

The components are not capable of being easily dismantled, and the optical unit is not replaceable.

The shape and dimension of retro reflector is in accordance with the stated in Annex 5 of the Regulation.

The test samples have been tested in the chronological order indicated in Annex 12 of the Regulation, and in accordance with the test procedure stated in Annex 4 of the Regulation.

Manufacturer :
 Type :

2.4. Special tests : class IB

number of Annex	test	test samples	result of examination	remark
5	shape and dimensions	all	complying	
6	colormetry	all	complying	
10	heat	all	complying	
7	photometry	all	complying	20', V=H=0°
7	photometry	5 and 7	refer to 2.5.	complete
8(1.2.)	moisture and dust exposure	8 and 9	complying	
8	motor fuels	3 and 4	complying	
	oils	3 and 4	complying	
4	colormetry	3 and 4	complying	
	photometry	3 and 4	complying	20', V=H=0°
8	corrosion	---	---	not applicable *)
	abrasive - strength	---	---	
9	stability of optical properties with ageing	---	---	not examined
11	colour-fastness	---	---	not examined

*) Remark : the device does not incorporate any metal component, the rear face of the device is not accessible

Manufacturer :
Type :

2.5. Photometric tests

: Results of photometric tests of reflex (retro) reflector, class IB coefficients of luminous intensity (CIL) in accordance with Annex 7 of the Regulation.

Number of sample	CIL measured [mcd/lux] (20', V=H=0°)	Minimum value required *)
1	456.2	≥ 300
2	475.9	
3	445.6	
4	452.3	
5	418.5	
6	448.0	
7	487.7	
8	464.3	
9	444.2	
10	426.8	

distribution of the intensity of the retro reflector [mcd/lux]								
		sample no. 5			sample no. 7			required min. *)
horizontal angle		L20°	V	R20°	L20°	V	R20°	
vertical angle $\alpha=20'$	U10°	-	356.5	-	-	365.7	-	200
	U5°	250.1	-	245.6	258.2	-	255.7	100
	H	-	418.5	-	-	487.7	-	300
	D5°	236.6	-	237.5	242.9	-	245.6	100
	D10°	-	325.1	-	-	330.2	-	200
vertical angle $\alpha=1^\circ 30'$	U10°	-	47.71	-	-	52.79	-	2.8
	U5°	39.93	-	42.19	42.69	-	45.64	2.5
	H	-	116.1	-	-	121.3	-	5
	D5°	39.56	-	43.07	41.50	-	47.25	2.5
	D10°	-	49.33	-	-	51.26	-	2.8

*) Remark

: minimum requirements for red retro reflector of class ~~IA~~ / IB / ~~IIIA~~ / ~~IIIB~~ / ~~IVA~~.

Manufacturer :
Type :

- 2.6. Colour : The requirements regarding the visual test for colorimetric specifications had been meet (Red).
- 2.7. Explanatory note : This report describes the examination of the retro reflecting device 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 direction indicator 87-R6-589/11
Rear position and stop lamp 87-R7-590/11
- 2.8. Variants and componenets : ---

3. Remark concerning tested object(s)

All versions of the reflectors 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. : GS-LTL1010-00

5. Statement of conformity

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

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

Accreditation Number: RDW-99050014-05.

The test report comprises the pages 1 to 7 (including appendix 0) and shall not be reproduced except in full without the written approval of the test laboratory.

Cologne, October 27, 2011
ND/HH



B.S.M.E. N. Deng

Manufacturer :
Type :

List of modifications

Appendix 0

Correction of : - --

Modification of : - --

Addition of : - --

Deletion of : - --