Type : CHR-9

Manufacturer :

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 rear-view mirrors and of two-wheeled power-driven vehicles with or without side car, with regard to the installation of rear-view mirrors on handlebars

ECE-Regulation 81

including all amendments until

series of Amendments: 00
Supplement 2 dated: June 18, 2007

Approval status	
ECE	Number of approval
	E4-81R-00 0417

Type : CHR-9

Manufacturer :

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0. General information

0.1.	Make (trade name of the manufacturer)	:
0.2.	Class	: L
0.3.	Worst case	: Not applicable
0.4.	Name and address of the manufacturer	:
0.5.	Name and address of the manufacturer's authorised representative	: not applicable
0.6.	No. of information folder	: CHR-9-00

1. Test object(s)

1.1.	Description	: Exterior rear-view mirrors with spherically convex reflecting surface. The adjustment of the ~~reflecting surface relatively to the~~ mirror housing is performed manually; ~~Cable control type with manual folding type~~. ~~Optional available is a flat reflecting surface with part cylindrical reflecting surface and convex reflecting surface with part aspherical reflecting surface. For the tests the cylindrical and the aspherical part is regarded as not reflecting therefore covered. Cable control type with manual folding type.~~ Models of vehicle to be fitted: All modes that all installation conditions are the same
1.2.	Remark	: ~~valid for RHD and LHD symmetrically~~

Type : CHR-9

Manufacturer :

2. Test minutes

2.1.	Test facilities	: The test equipment used was in compliance with the requirements of the regulation.
2.2.	Temperature/Relative Humidity of laboratory	: 20.02°C / 61.55 %
2.3.	Test results	: see Appendix 1. ~~The mirror type has been tested 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.~~
2.3.1.	General regulations	: The rear-view mirror complies with the general requirements of the Paragraph 6 in this regulation.
2.3.2.	Special regulations	: The rear-view mirror complies with the special requirements of the Paragraph 7 in this regulation.
2.3.3.	Tests	: The rear-view mirror fulfils requirements of the Paragraph 8 in this regulation regarding impact and bending test.
2.4.	General test information	
2.4.1.	Test object received on	: January 29, 2014
2.4.2.	Test date	: February 13 ~ 24, 2014
2.4.3.	Test site	: TUV Asia Pacific Ltd. Taiwan Branch 4F., No. 8, Huasin St., North District, Taichung 404, Taiwan R.O.C. Zhifu Science Technologies Co., Ltd No.243, Hejian Rd., Hemei Township, Changhua County 508, Taiwan R.O.C
2.4.4.	Remark	: The results of the test refer exclusively to the object(s) mentioned under point 1.1 of this report.

3. Remark concerning tested object(s) : All versions of the mirror type as stated in the information document are covered with the tested test object(s) respectively.

Type : CHR-9

Manufacturer :

4. Appendices

0	List of modifications	: ---
1	Test minutes for the mirror type	: attached
2	Information folder	: CHR-9-00

5. Statement of conformity

The information folder and the type described there comply with the requirements of ~~directive/~~ ECE Regulation No.81.

The samples / test vehicles used were representative in terms of the type to be approved.

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

Certification Number: RDW-99050016

The technical report comprises the pages 1 to 6 (including appendix 1) and shall not be reproduced except in full without the written approval of the test laboratory.

Taipei, March 17, 2014
IFM/#



Cronus Huang
Engineer

Type : CHR-9

Manufacturer :

Test minutes for the mirror type — Appendix 1

		Convex mirror (Class L)
Dimension of reflecting surface		
Its area shall not be less than 6900 mm^2	:	7437 mm^2
The diameter of circular mirrors shall not be less than 94 mm	:	Not applicable
Where rear view mirrors are not circular, their dimensions shall enable a 78 mm-diameter circle to be prescribed on their reflecting surface	:	Yes
The maximum diameter of reflecting surface of any circular rear view mirror shall not be greater than 150 mm,	:	Not applicable
The reflecting surface of any non-circular rear view mirror shall lie within a rectangle measuring 120mm x 200mm	:	Yes

Decision : ■ Pass or □ Failed

Reflecting surface and coefficient of reflection		
Radius of curvature		
rp1 = (ri + r'i) / 2	:	RH : 1226 mm LH : 1194 mm
rp2 = (ri + r'i) / 2	:	RH : 1249 mm LH : 1280 mm
rp3 = (ri + r'i) / 2	:	RH : 1138 mm LH : 1219 mm
r = (rp1 + rp2 + rp3) / 3	:	RH : 1204 mm LH : 1231 mm
Design value of r		1200 mm
Required value of r	:	1000 mm ≦ r ≦1500 mm

Decision : ■ Pass or □ Failed

Type : CHR-9

Manufacturer :

Maximum difference between any of the radii (rp1, rp2, rp3) and r must not exceed 0.15 r	:	RH : 66 mm LH : 49 mm
Allowable maximum difference between any of the radii of curvature (rp1, rp2, rp3) and r	:	RH : 180.60 mm LH : 184.65 mm

Decision : ■ Pass or □ Failed

Reflecting surface and coefficient of reflection

Coefficient of reflection	:	RH : 62.35 % LH : 63.26 %
Required minimum coefficient	:	≥ 40.0 %

Decision : ■ Pass or □ Failed

Impact point according to test 1 (from front) & 2 (from rear)

Pendulum angle of return to the vertical Requirement Minimum : 20°	:	Forward : 47° (RH) ; 42° (LH) Backward : 41° (RH) ; 48° (LH)
Breaking of reflecting surface	:	no

Decision : ■ Pass or □ Failed

Bending test	:	the required load (25 kg) has been applied for one minute
Breaking of reflecting surface and housing	:	no
Radius of curvature "c" at of the edge of the projection	:	≥ 2.5 mm

Decision : ■ Pass or □Failed

1. Specification Data February 13, 2014

Type		CHR-9
Function		Rear-View Mirror
Class		L
Mounting Instruction		Fixed the Rear-view Mirror on vehicle by screw
Applicable Vehicle		General
Application Regulation (ECE)		ECE R81
Location of marking	Trade mark	
		On the Mirror
	Approval mark	On the Mirror

2. Construction and Material :

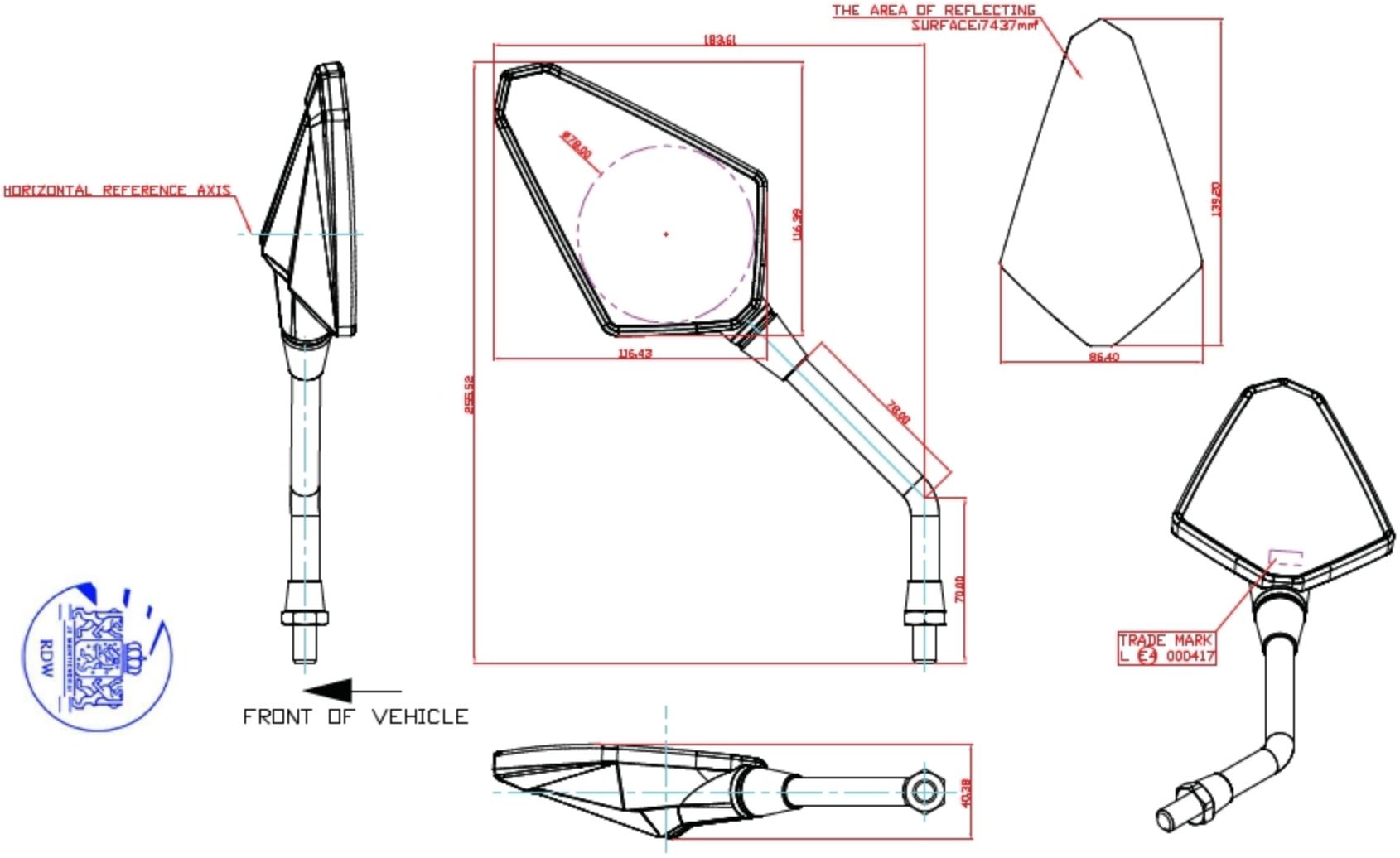
Construction	Material	Remarks
Housing	ABS	--
Fixed support	Steel	--
Mirror	Glass	--

3. Name and Address of Manufactory :

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

RDW

This document (including drawing) consists of 2 pages



				TOLERANCE	APPROVED		DATE		UNIT	MM	STYLE CHR-9
				DIMENSION	TOL.	DESIGN	Craig	DATE	03.07.2014	SCALE	1/1	DESCRIPTION
						DRAWCP		DATE		MATERIAL		
										PCS.		
										SURFACE		DRAWING NO. CHR-9-001
	RECYCLE COMMENTS	SIGN	DATE							THICK		

RDW

Vehicle Technology Division

THE NETHERLANDS
(NEDERLAND)

E4

COMMUNICATION

Concerning [1]:

- approval granted
- ~~approval extended~~
- ~~approval refused~~
- ~~approval withdrawn~~
- ~~production definitely discontinued~~

of a type of rear-view mirror pursuant to Regulation number 81.

Approval number: E4-81R-00 0417 **Extension number: 00**

1.	Trade name of mark of device	: _
2.	Equipment type	: CHR-9
3.	Brief description including in particular the following information:	
3.1.	Main dimensions (of the reflecting surface)	: 86.4 x 139.2 mm
3.2.	Nominal radius of curvature (of the reflecting surface)	: 1200 mm
4.	Manufacturer's name and address	:
5.	If applicable, name and address of manufacturer's representative	: not applicable
6.	Equipment submitted for approval on	: January 29, 2014
7.	Technical service responsible for conducting approval tests	: TÜV NORD Mobilität GmbH & Co. KG Institut für Fahrzeugtechnik und Mobilität Adlerstrasse 7, D-45307 Essen
8.	Date of report issued by that service	: March 17, 2014
9.	Number of report issued by that service	: TW081-A0-130289

RDW

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Vehicle Approval and Information

10.	Vehicles for which the equipment is designed	: General
11.	Approval	: granted/~~refused/extended/withdrawn~~ [1]
12.	Reason(s) for extension (if applicable)	: not applicable
13.	Place	: Zoetermeer
14.	Date	: 21-MAR-2014
15.	Signature	:



16. A list of documents contained in the approval file transmitted to the administrative service which has granted approval is annexed to communication.

[1] Strike out what does not apply.