Type : CHR-20

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 0560

Type : CHR-20

Manufacturer :

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-20-00

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. Models of vehicle to be fitted: All modes that all installation conditions are the same
1.2.	Remark	: ---

Type : CHR-20

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	: 20.4°C / 56.3%
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	: April 05, 2017
2.4.2.	Test date	: April 05 ~ 28, 2017
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.

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Type : CHR-20

Manufacturer :

4. Appendices

0	List of modifications	: ---
1	Test minutes for the mirror type	: attached
2	Information folder	: CHR-20-00

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:

Designated Technical Service: RDWT-T04

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, June 15, 2017
IFM/#

Cronus Huang
Engineer

Type : CHR-20

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 mm²	:	8596.0 mm²
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	:	The rear view mirrors can enable a 78 mm-diameter circle to be prescribed on their reflecting surface
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	:	Main dimensions of the reflecting surface : 144.66 x 81.47 mm

Decision : ■ Pass or □ Failed

Reflecting surface and coefficient of reflection

Radius of curvature

rp1 = (ri + r'i) / 2	:	RH : 1284 mm LH : 1238 mm
rp2 = (ri + r'i) / 2	:	RH : 1413 mm LH : 1330 mm
rp3 = (ri + r'i) / 2	:	RH : 1301 mm LH : 1223 mm
r = (rp1 + rp2 + rp3) / 3	:	RH : 1333 mm LH : 1263 mm
Design value of r	:	1300 mm
Required value of r	:	1000 mm ≦ r ≦1500 mm

Decision : ■ Pass or □ Failed

Type : CHR-20

Manufacturer :

Maximum difference between any of the radii (rp1, rp2, rp3) and r must not exceed 0.15 r	:	RH : 80.0 mm LH : 67.0 mm
Allowable maximum difference between any of the radii of curvature (rp1, rp2, rp3) and r	:	RH : 199.95 mm LH : 189.45 mm

Decision : ■ Pass or □ Failed

Coefficient of reflection	:	RH : 61.17% LH : 61.37%
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 : 40° (RH) ; 28° (LH) Backward : 29° (RH) ; 41° (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

RDW

DECLARATION

Name of manufacturer : ..
Address of manufacturer :

Declares the following:

The manufacturer with , we declare the reflecting surface of glass of rear view mirror that could prolong exposure to adverse weather conditions, in normal conditions of use for the customers.

And the reflecting surface of glass of rear view mirror could retain the requirement of the ECE R81 characteristics specified in paragraph 7.2.4.

Thank you.

Signed for the manufacturer;

Company Stamp;

Name: Joseph Liang

Date: 12 Mar. 2014

Place: Changhua, TAIWAN

Signature: (and stamped, if applicable)

Position: General Manager

RDW

統承國際有限公司
統一營業專用章
統一編號
28320638
TEL:(04)7332697
負責人:梁奕智
下廣厚安平街101號1樓

1. Specification Data April 05, 2017

Type		CHR-20
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 housing
	Approval mark	On the housing

2. Construction and Material :

Construction	Material	Remarks
Reflecting Surface	Glass	Chrome plating
Housing	Aluminum 6061	--
Fixed support (Rod)	Aluminum 6061	--

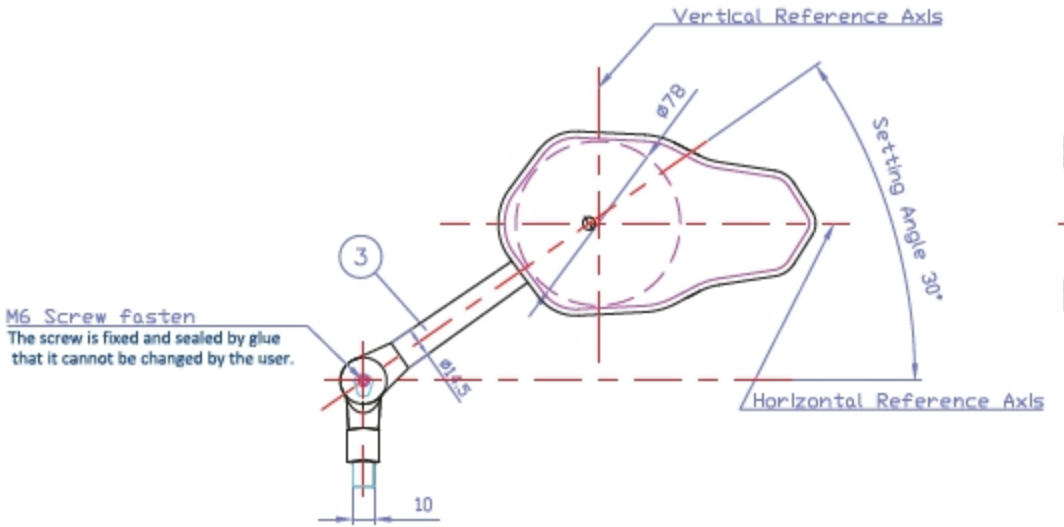
3. Name and Address of Manufactory :

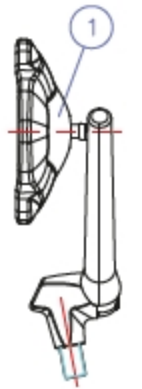
This document (including drawing) consists of 2 pages

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Note : 1. This drawing shall be applied for Right hand device only, and left hand one shall be symmetric except for approval markings.
2. The Adjustable 180° is only for Left or Right hand setting of the mirror.

No.	Description	Pcs	Material	Remark
1	Housing	1	AL 6061	N/A
2	MIRROR	1	Glass	N/A
3	STEM	1	AL 6061	N/A



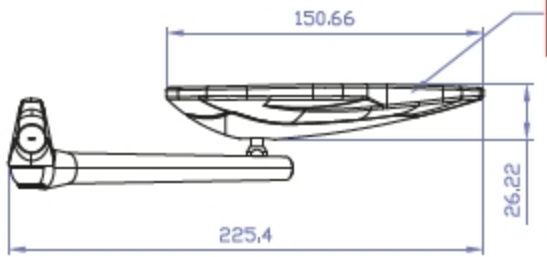


FRONT OF VEHICLE

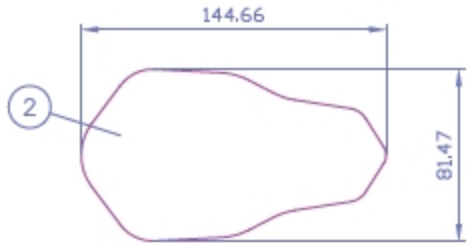
The Area of Reflecting Surface : 8596 mm²

Fixing Torque : 4.5 kg.m





Trade Mark CHR-20
L E4 00 0560



MIRROR DIMENSION

Type Model	CHR-20		
Function	Rear View Mirror		
Unit	mm	Drawing No.	CHR-20
Drawing By		Date	2017/06/01

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 0560 **Extension number: 00**

1.	Trade name of mark of device	:
2.	Equipment type	: CHR-20
3.	Brief description including in particular the following information:	
3.1.	Main dimensions (of the reflecting surface)	: 144.66 x 81.47 mm
3.2.	Nominal radius of curvature (of the reflecting surface)	: 1300 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	: April 05, 2017
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	: June 15, 2017

RDW

P.O. Box 777
2700 AT Zoetermeer
The Netherlands

Tel. + 31 (0)79 345 83 02
E-mail ttv@rdw.nl
www.rdw.nl

Vehicle Admission & Surveillance

9.	Number of report issued by that service	: TW081-A0-170003
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	:23-JUN-2017
15.	Signature	:

Uwe Löbig

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.