## 技術基準適合確認書

製品名称
製品型番
試験分類
試験設備機器

適用技術基準 ECE R46
試験結果 合格

確認書発行元 昌騰有限会社
（試験委託者）

試験委託機関 Jiangsu Huachen Vehicle Inspection Co．，Ltd．

試験成績書 委託試験成績書番号 2203MM005
デジタルルームミラー
SV5－MDR－A002
衝撃テスト
インパクト試験機 ZJ165

〒596－0821 大阪府岸和田市小松里町2333－2

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本書（P．2以降の試験結果詳細含む）を，自動車検査証と一緒に大切に保管してください。

お問い合わせ先 MAXWIN 昌騰有限会社

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# Testing Report 

Sample Name ：Motor Vehicles Interior Mirror

Sample Type ：SV5－MDR－A002

Consigner ：SHOUTO CO．，LTD

Test Category ：Entrusted Test

Jiangsu Huachen Vehicle Inspection Co．，Ltd．

## Notice

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| Sample Name | Motor Vehicles Interior Mirror | Sample Type | SV5－MDR－A002 |
| :---: | :---: | :---: | :---: |
| Consigner | SHOUTO CO．，LTD | Trade Mark | ／ |
| Manufacturer | SHOUTO CO．，LTD | Test Category | Entrusted Test |
| Sample Arrival Date | 2022．03．30 | Sample Quantity | 2 |
| Sample Condition | Meet the inspection requirement | Sender | Joka |
| Sample No． | 220330SH－01／220330SH－02 | 检测日期 <br> Date of Test | 2022．03．30 |
| Items | General Specifications <br> Dimension Requirements <br> Reflecting surface and coefficients of reflection Impact Test |  |  |
| Standard | ECE R46 <br> Uniform provisions concerning the approval of devices for indirect vision and of motor vehicles with regard to the installation of these devices |  |  |
| Conclusion | After inspection，the tested item（s）for Mirror meet the requirements of ECE |  | ehicles Interior |
| Remark | Sample No．220330SH－01～02，corresponding report 1\＃～2\＃． |  |  |

Prepared by


Auditor by ：


Approved by


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## Summary of test results

| No． | Items | Technical Requirement | Test Result |  | Result Judgment |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1\＃ | 2\＃ |  |
| 1 | General Specificat ions | All mirrors shall be adjustable． | All mirrors are adjustable． | All mirrors are adjustable． | Pass |
|  |  | The edge of the reflecting surface shall be enclosed in a protective housing（holder，etc．）which，on its perimeter，shall have a value＂c＂ greater than or equal to 2.5 mm at all points and in all directions．If the reflecting surface projects beyond the protective housing，the radius of curvature＂ c ＂on the edge of the projecting part shall be not less than 2.5 mm and the reflecting surface shall return into the protective housing under a force of 50 N applied to the point of greatest projection，relative to the protective housing，in a horizontal direction， approximately parallel to the longitudinal median plane of the vehicle． | The edge of the reflecting surface is enclosed in a protective housing （holder，etc．） which，on its perimeter，have a value＂c＂greater than 2.5 mm at all points and in all directions． | The edge of the reflecting surface is enclosed in a protective housing （holder，etc．） which，on its perimeter，have a value＂c＂greater than 2.5 mm at all points and in all directions． | Pass |
|  |  | When the mirror is mounted on a plane surface，all parts，irrespective of the adjustment position of the device，including those parts remaining attached to the support after the test provided，which are in potential，static contact with a sphere either 165 mm in diameter in the case of a Class I mirror or 100 mm in diameter in the case of a Class II to VII mirror，shall have a radius of curvature＇c＇of not less than 2.5 mm ． | After the impact test，the parts which are in potential， static contact with a sphere 165 mm in diameter in the case of an exterior mirror，have a radius of curvature ＂c＂of not less than 2.5 mm ． | After the impact test，the parts which are in potential， static contact with a sphere 165 mm in diameter in the case of an exterior mirror，have a radius of curvature ＂c＂of not less than 2.5 mm ． | Pass |
|  |  | The device for the attachment of mirrors to the vehicle shall be so designed that a cylinder with a 70 mm radius（ 50 mm in the case of an L－category vehicle），having as its axis the axis，or one of the axes，of pivot or rotation which ensures deflection of the mirror in the direction of impact concerned， passes through at least part of the surface to which the device is attached． | Meet the requirements | Meet the requirements | Pass |


| No． | Items | Technical Requirement | Test Result |  | Result Judgment |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1\＃ | 2\＃ |  |
| 2 | Dimension Requireme nt | 1．Rear－view mirrors（Class I） The dimension of the reflecting surface shall be such that it is possible to inscribe thereon a rectangle one side of which is 40 mm and the other＇$a$＇ mm in length， where $a=150 /(1+1000 / \mathrm{r}) \mathrm{mm}$ <br> 2．Main rear－view mirrors（Class II and Class III） <br> Class II $a \geq 170 /(1+1000 / r) \quad b \geq 200$ Class III $\geq 130 /(1+1000 / r) \quad b \geq 70$ The dimensions of the reflecting surface shall be such that it is possible to inscribe therein a rectangle 40 mm high the base length of which，measured in millimeters，has the value＂$a$＂；and a segment which is parallel to the height of the rectangle and the length of which，expressed in millimeters，has the value＂b＂； <br> 3．Rear－view mirrors（Class IV and Class V <br> The contours of the reflecting surface shall be of simple geometric form and its dimensions meet the requirements． <br> 4．Rear－view mirrors（Class VII） <br> The minimum dimensions of the reflecting surface shall be such that： <br> a）Its area shall not be less than $6,900 \mathrm{~mm} 2$ ； <br> b）The diameter of circular mirrors shall not be less than 94 mm ； <br> c）Where rear－view mirrors are not circular，their dimensions shall enable a 78 mm －diameter circle to be prescribed on their reflecting surface． <br> 5．The maximum dimensions of the reflecting surface shall be such that： <br> a）The diameter of any circular rear－view mirror shall not be greater than 150 mm ； <br> b）The reflecting surface of any non－circular rear－view mirror shall lie within a rectangle measuring $120 \mathrm{~mm} \times 200 \mathrm{~mm}$ | $\begin{gathered} \text { Rear-view } \\ \text { mirrors: Class I } \\ \mathrm{a}=218 \mathrm{~mm} \\ \mathrm{~b}=/ \mathrm{mm} \end{gathered}$ | $\begin{aligned} & \text { Rear-view } \\ & \text { mirrors: Class I } \\ & \begin{array}{c} \mathrm{a}=218 \mathrm{~mm} \\ \mathrm{~b}=/ \mathrm{mm} \end{array} \end{aligned}$ | Pass |


| No． | Items | Technical Requirement | Test Result |  | Result Judgment |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1\＃ | 2\＃ |  |
| 4 | Reflecting surface and coefficients of reflection | The reflecting surface of a mirror shall be either flat or spherically convex． | The reflecting surface of a mirror is flat． | The reflecting surface of a mirror is flat． | Pass |
|  |  | Differences between the radii of curvature of mirrors shall meet the following requirements： <br> a）The difference between ri or ri｀，and rp at each reference point shall not exceed 0.15 r ； <br> b）The difference between any of the radii of curvature（rp1，rp2， and rp3）and $r$ shall not exceed 0.15 r <br> When $r$ is not less than $3,000 \mathrm{~mm}$ ， the value of 0.15 r quoted in a）and b）is replaced by 0.25 r． | Meet the requirements | Meet the requirements | Pass |
|  |  | Requirements for aspherical parts of mirrors： <br> a）The surface width shall be no less than 30 mm ，and the radius of curvature of the aspherical part shall not be less than 150 mm ． | －－ | －－ | N／A |
|  |  | Value of＂ r ＂for spherical mirrors shall not be less than： <br> a． $1,200 \mathrm{~mm}$ for rear－view mirrors （Class I）； <br> b． $1,200 \mathrm{~mm}$ for Class II and III main rear－view mirrors； <br> c． 300 mm for＂wide－angle＂mirrors （Class IV）and＂close－proximity＂ mirrors（Class V）； <br> d． 200 mm for front mirrors（Class VI）； <br> e． $1,000 \mathrm{~mm}$ or more than $1,500 \mathrm{~mm}$ for Class VII main rear－view mirrors | $\begin{aligned} & \text { Rear-view } \\ & \text { mirrors: Class I } \\ & \text { r: } \infty \end{aligned}$ | $\begin{aligned} & \text { Rear-view } \\ & \text { mirrors: Class I } \\ & \text { r: } \infty \end{aligned}$ | Pass |
|  |  | The value of the normal coefficient of reflection $\geq 40 \%$（＂day＂position） | 46．0\％ | 46．2\％ | Pass |
|  |  | The value of the normal coefficient of reflection $\geq 4 \%$（＂night＂position） | 7．0\％ | 6．8\％ | Pass |


| No． | Items | Technical Requirement | Test Result |  | Result Judgment |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1\＃ | 2\＃ |  |
| 4 | Impact Test | The pendulum must swing up to 200 after falling from 600 and hitting the mirror． <br> The reflecting surface must not break，but breakage of the reflecting surface will be allowed if one of the following conditions is fulfilled： <br> a：The fragments of glass still adhere to be the back of the housing or to a surface firmly attached to the housing；partial separation of the glass from its backing is admissible provided that this does not exceed 2.5 mm on either side of the cracks； <br> b ：The reflecting surface is made of safety glass． <br> Remark：No need to do impact test if the mirror is installed on the vehicle with length more that 2 m ． | After frontal impact test，the mirror base fell off and the remaining protruding part was not more than 10 mm ，and the radius of curvature of the surrounding parts is more than 2.5 mm ． The reflecting surface is not broken． | After $45^{\circ}$ angle impact test，The reflecting surface is not broken． | Pass |

## Appendix A Tested Sample

| Sample Name | Motor Vehicles Interior Mirror |
| :--- | :---: |
| Sample Type | SV5－MDR－A002 |
| Sample Category | Class I |
| Category of vehicle for which the <br> device is intended | -- |
| Remark | -- |

Appendix B Tested Sample Photos


## List of Main Equipments

| No． | Name | Serial No． | Type | Next Calibration Date |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Device for measuring the radius <br> of curvature | CHCMM001 | $(0 \sim 6.5) \mathrm{mm}$ <br> $200 \times 100 \mathrm{~mm}$ | 2022.10 .13 |
| 2 | Device for measuring the <br> reflection <br> factor（Daytime）／Standard mirror | CHCMM005 | HS150／ 445 | 2022.10 .14 |
| 3 | Device for measuring the <br> reflection factor（Night <br> mode）／Standard mirror | CHCMM006 | HS150－A／ 50 | 2022.10 .14 |
| 4 | Impact test apparatus | CHCMM003 | ZJ165 | 2022.10 .12 |
| 5 | Straight Steel Ruler | CHCMM008 | 500 mm | 2022.09 .26 |
| 6 | Radius gauge | CHCMM009 | R1－7mm | 2022.09 .26 |

＊All the instruments have been calibrated and are in the period of validity．

