

Test Report

Number: SHAH00917731

Applicant:

Date: 16 Mar, 2018

Attn:

Sample Description:

One (1) style of submitted sample said to be :

Item Name : reading glasses.
Reference No : 52681,77471,76399.
Country Of Origin : China.

Tests Conducted:

As requested by the applicant, for details refer to attached page(s).

Conclusion:

The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details :

<u>Tested samples</u>	<u>Standard</u>	<u>Result</u>
Submitted samples	EN 14139 : 2010 - Ophthalmic optics - Specifications for ready-to-wear spectacles(also see Note (1) to (5)) Excluding: - Clause 5 - Marking on the spectacles, indications on packaging, instruction for use	Pass

To be continued

Authorized By:



Leo Shi
General Manager



Test Report

Number: SHAH00917731

Tests Conducted

Requirements for Ready-to-Wear Spectacles

Test standard: EN 14139:2010 - Ophthalmic optics - Specifications for ready-to-wear spectacles

Type of lenses:

Optical power declared by the applicant : +1.00, +1.50, +2.00, +2.50, +3.00

Centration distance (mm) : 62mm

UV protection : No claim

Number of samples tested: Two (2) pairs of reading glasses per diopter, total five (5) diopters (Frame test on blue frames).

Note:

1. Requirements of frame in EN 14139 : 2010 are referred to EN ISO 12870 : 2004.
2. Nickel release (EN ISO 12870 Clause 4.2.2) is included in the standard but not covered in the following test results.
3. The manufacturer of spectacle frames shall exclude from contact with the skin, any materials that amongst a significant proportion of users, during wear are known to cause irritation, allergic or toxic reaction to skin in a normal state of health per EN ISO 12870 Clause 4.2.1 General physiological compatibility.
4. Measurement of the stated nominal dimensions is made according to ISO 8624 per EN ISO 12870 Clause 4.3 measuring system.
5. Tolerance on screw threads (EN ISO 12870 Clause 4.5) used in the spectacle frame shall conform to ISO 11381.
6. CE marking is not specified in EN 14139:2010 but per 93/42/EEC, Article 17, the CE marking must appear in a visible, legible and indelible form on the device, the instructions for use and the sales packaging. The format of this CE marking was given in the Annex XII of the captioned directive.

However, the CE Marking was not found on the frame.

Clause	Requirement	Result
Requirements for FILTERS		
4.2	General requirements	
	Design	#1
	Physiological compatibility	#2
	Inflammability	P
	Mechanical strength	P
	Transmittance	
	Transmittance requirements	P
	Resistance to radiation	P
	Security of the lens	P
	Frame (Note : results refer to EN ISO 12870)	
Glazing of lenses (Note : results refer to EN ISO 12870, lens retention test)		
4.3	Optical power range	P
4.4	Optical power tolerances	P
4.5	Reference points and prismatic power tolerances	
4.5.1	Design reference points	#3
4.5.2	Prismatic power tolerances	P



Test Report

Number: SHAH00917731

Tests Conducted

5	Marking on the spectacles, indications on packaging, instruction for use	
5.1	Marking	#4
5.2	Indications on packaging and warnings	#5
Requirements for FRAMES (Test on blue frames)		
EN ISO 12870, 4.4	Dimensional tolerances on nominal size	#6
EN ISO 12870, 4.6	Dimensional stability at elevated temperature	P
EN ISO 12870, 4.7	Resistance to perspiration	P
EN ISO 12870, 4.8	Mechanical stability	
EN ISO 12870, 4.8.1	Bridge deformation	P
EN ISO 12870, 4.8.2	Lens retention characteristics	P
EN ISO 12870, 4.8.3	Endurance	P
EN ISO 12870, 4.9	Resistance to ignition	P
EN ISO 12870, 4.10	Resistance to optical radiation	P
EN ISO 12870, 9	Marking	#7(Note 6)
EN ISO 12870, 10	Additional information to be supplied by the manufacturer or other person (agent) placing the product on the market	#8

Abbreviation : P = Pass;

Test data:

Clause 4.2 General requirements

Transmittance requirements

Range(Tv)	Sample	Left ocular (%)	Right ocular(%)	Filters category
380 - 780nm	+1.00D	90.32	91.73	0
	+1.50D	90.36	90.87	0
	+2.00D	90.09	91.85	0
	+2.50D	90.23	90.92	0
	+3.00D	90.29	92.76	0

Requirement:

Categories	Range of luminous transmittance (Tv)	
	From over (%)	To (%)
0	80.0	100
1	43.0	80.0
2	18.0	43.0
3	8.0	18.0
4	3.0	8.0

Resistance to radiation

Relative change in luminous transmittance after irradiation (%)	Sample	Left ocular	Right ocular	Limit < ± 10% for categories 0 and 1 < ± 20% for categories 2, 3 and 4
	+1.00D	+2.4	+0.4	
	+1.50D	+0.4	+0.7	
	+2.00D	+0.2	+0.2	
	+2.50D	-0.5	+0.3	
	+3.00D	+0.2	-0.3	

To be continued



Test Report

Number: SHAH00917731

Tests Conducted

EN ISO 12870, 4.4 Dimensional tolerances on nominal size

Nominal size	Measured values (mm)	Claimed values (mm)	Limits (mm)
Horizontal boxed lens size	L: 54.63 R: 54.43	----	±0.5
Distance between lenses	15.66	----	±0.5
Overall length of the side	131.83	----	±2.0

EN ISO 12870, 4.6 Dimensional stability at elevated temperature

Deformation (mm)	Limits (mm)
-3.01	+6/-12

EN ISO 12870, 4.7 Resistance to perspiration

Time line	After 8 hours	After 24 hours
Location	Anywhere on the frame, excluding joints and screws	On the parts liable to come into prolonged contact with the skin during wear, i.e. the insides of sides, bottom and lower parts of the rim and the inside of the bridge
Assessment	Spotting or colour change	Corrosion, surface degradation or separation of any coating layer
Result	Not found	Not found

EN ISO 12870, 4.8.1 Bridge deformation

Deformation (%)	Limits (%)
0.83	2

EN ISO 12870, 4.8.3 Endurance

Deformation (mm)	Limits (mm)
1.48	5

EN ISO 12870, 4.10 Resistance to optical radiation

Assessment	Colour change on grey scale in ISO 105-A02 Limit: ≥ grade 3	Loss of lustre on bright surfaces
Result	4/5	Not found

Clause 4.4 Optical power tolerances

Optical power (m ⁻¹)	Sample	Left ocular	Right ocular	Tolerance (m-1)	
Spherical power	+1.00D	+1.11	+1.06	≤ ±0.12	
	+1.50D	+1.54	+1.53		
	+2.00D	+2.03	+2.02		
	+2.50D	+2.46	+2.43		
	+3.00D	+2.92	+2.97		
Astigmatic power	+1.00D	0.04	0.02	1.00 ≤ Claimed value ≤ 3.00	≤ 0.09
	+1.50D	0.01	0.05		
	+2.00D	0.02	0.06		
	+2.50D	0.03	0.01		
	+3.00D	0.08	0.04		

To be continued

Test Report

Number: SHAH00917731

Tests Conducted

Clause 4.5.2 Prismatic power tolerances

Prismatic power tolerances (cm/m)	Sample	Left ocular	Right ocular	Tolerance (cm/m)
Horizontal tolerance	+1.00D	0.07	0.09	0.33 absolute each lens
	+1.50D	0.09	0.11	
	+2.00D	0.19	0.19	
	+2.50D	0.15	0.16	
	+3.00D	0.24	0.31	
Vertical tolerance	+1.00D	0.10		0.33 imbalance between lenses
	+1.50D	0.25		
	+2.00D	0.13		
	+2.50D	0.31		
	+3.00D	0.23		

Remarks:

- #1 - The applicant's attention was drawn to the spectacles lenses requirements that they should be designed so that the overall risk associated with their use according to the conditions intended by the manufacturer, relative to the risk when the spectacle lenses were not used, was reduced to a level consistent with the materials used and compatible with the generally acknowledged state-of-the-art.
- #2 - The applicant's attention was drawn to the lenses requirement that they should not be made from materials known to be physiologically incompatible or known to create allergic or toxic reactions amongst a significant proportion of wearers when the lenses were used as intended by the manufacturer.
- #3 - The design reference points were not claimed by the applicant.
- #4 - The following information should be permanently marked on the spectacles:
 1. Name or trade mark of manufacturer or distributor;
 2. Manufacturer's declared spherical power, in dioptres.

NOTE Additional marking of ready-to-wear spectacles according to EN ISO 12870 is optional.

To be continued



Test Report

Number: SHAH00917731

Tests Conducted

#5 - Manufacturer's declared centration distance, in mm, shall be marked on the frame or on the hang tag or applied sticker.

The warning of the unsuitability for driving or road use should be indicated by the following symbol:



A legible notice is required in the national language of the intended destination in the form of an affixed label or swing tag, as follows:

WARNING

- For near vision and reading use only
- Only regular eye-care professional eye examinations can determine your visual needs and eye health
- Not for driving or vehicle operation
- Not for distance vision
- Not for use as eye protection

The name and address of the manufacturer shall be marked on the frame or be given on the hang tag or applied sticker or packaging or information provided with the device. For devices imported into the Community, the name and address of the authorized representative in the Community shall be marked on the frame or be given on the hang tag or applied sticker or packaging or information provided with the device.

If the manufacturer or supplier claims compliance with this European Standard, its number and year shall be included either on the packaging or in the available literature.

#6 - Dimensional tolerances on nominal size was specified in EN ISO 12870:2004, clause 4.4 but not requested by the applicant:

(Tolerance specified in bracket)

1. Horizontal boxed lens size ($\pm 0.5\text{mm}$);
2. Distance between lenses ($\pm 0.5\text{mm}$);
3. Bridge width ($\pm 0.5\text{mm}$);
4. Overall length of side ($\pm 2.0\text{mm}$).

The tolerance shall be applied per ISO 8624 to any marked dimensions of the unglazed spectacle frame using the boxed lens measurement.

To be continued



Test Report

Number: SHAH00917731

Tests Conducted

#7 - The following information should be marked on the spectacle frame at the specified locations:

- (A) Identification of manufacturer or supplier;
- (B) Model identification;
- (C) Colour identification;
- (D) Horizontal boxed lens size with box symbol □; on the front, whenever practicable
- (E) Distance between lenses; on the front, whenever practicable;
- (F) Overall length of side; on the side.

Specified order of marking of the dimensions of the front

xx	□	xx
Horizontal boxed lens size	Box symbol	Distance between lenses

#8 - The following additional information shall be supplied by the manufacturer of other person (agent) placing the product on the market:

1. Information with respect to particular processing conditions that may be required when fitting lenses or manipulating the spectacle frame for adjustment purposes.
2. The range available (sizes and colours) including other side lengths available in catalogues.
3. The following information should be made available upon request:
 - (a) Vertical boxed lens size;
 - (b) Bridge width;
 - (c) Bridge height;
 - (d) Effective diameter;
 - (e) Components available separately.

Date sample received: Mar.12, 2018

Testing period: Mar.13, 2018 To Mar.16, 2018

To be continued



Test Report

Number: SHAH00917731

Tests Conducted



End of report

This report is made solely on the basis of your instructions and/or information and materials supplied by you. It is not intended to be a recommendation for any particular course of action. Intertek does not accept a duty of care or any other responsibility to any person other than the Client in respect of this report and only accepts liability to the Client insofar as is expressly contained in the terms and conditions governing Intertek's provision of services to you. Intertek makes no warranties or representations either express or implied with respect to this report save as provided for in those terms and conditions. We have aimed to conduct the Review on a diligent and careful basis and we do not accept any liability to you for any loss arising out of or in connection with this report, in contract, tort, by statute or otherwise, except in the event of our gross negligence or wilful misconduct.

