

# TEST REPORT

**Applicant** : Shenzhen Beste Optics Co., Ltd.  
**Address** : 2716, Block A, Bldg. 1, Meili Shidai Mansion, Xixiang, Baoan district, Shenzhen  
**Manufacturer** : Shenzhen Beste Optics Co., Ltd.  
**Address** : 2716, Block A, Bldg. 1, Meili Shidai Mansion, Xixiang, Baoan district, Shenzhen

The following sample(s) was (were) submitted and identified by client as:

**Trade Mark:** : Beste  
**Sample Name:** : Paper solar eclipse glasses  
**Sample Model:** : BP03SE, BP01SE, BP03SE, BP04SE  
**Sample Received Date:** : Jun. 05, 2026  
**Testing Period:** : Jun. 05, 2026 to Jun. 12, 2026

## Testing Requested

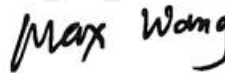
As requested by the applicant, refer to attached page(s) for details.

Checked by



Damon Lee

Approved by



Max Wang





**Summary of Test Results:**

| Test Standard: |                                                                                                                                  | Conclusion |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|------------|
| 1              | EN ISO 12312-2:2015 Eye and face protection - Sunglasses and related eyewear - Part 2: Filters for direct observation of the sun | Pass       |

**Test Results:**

(1) EN ISO 12312-2:2015 Eye and face protection - Sunglasses and related eyewear - Part 2: Filters for direct observation of the sun

| Clause | Test Request                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Result(s) | Verdict |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| 4      | Requirements and associated test methods                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |           |         |
| 4.1    | Transmittance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | M         | Pass    |
| 4.1.1  | General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | M         | Pass    |
| 4.1.2  | Uniformity of luminous transmittance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | M         | Pass    |
|        | The relative difference in the luminous transmittance value between any two points of the filter shall not be greater than 10 % (relative to the higher value). This requirement shall apply within a circle 40 mm in diameter around the boxed centre or to the edge of the filter less the marginal zone 5 mm wide, whichever is greater.                                                                                                                                                                                             | M         | Pass    |
| 4.2    | Material and surface quality                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | M         | Pass    |
| 4.2.1  | Requirements                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | M         | Pass    |
|        | Except in a marginal area 5 mm wide, filters shall be free from defects likely to impair vision in use, such as bubbles, scratches, inclusions, dull spots, pitting, scouring, pocking, scaling, and undulations. Metal coated filter materials shall not exhibit more than one pinhole defect not greater than 200 µm in average diameter within any 5 mm diameter circular zone.                                                                                                                                                      | M         | Pass    |
| 4.2.2  | Test method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | M         | Pass    |
|        | A filter shall be illuminated from one side by an intense white light source (e.g. projector beam or light table) and the opposite side viewed through a low power magnifying lens. Metal coated filters showing visible pinhole defects shall be examined in a light microscope at 25× to 40× magnification.                                                                                                                                                                                                                           | M         | Pass    |
| 4.3    | Mounting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | M         | Pass    |
| 4.3.1  | General                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | M         | Pass    |
|        | Filters may be made with or without a mounting. If mounted, a filter shall be held securely so that it cannot be dislodged by normal handling or by gusts of wind. Mountings may be handheld or shaped in the form of spectacles to be worn on the face in front of any corrective (spectacle or contact) lenses worn by the user.                                                                                                                                                                                                      | M         | Pass    |
| 4.3.2  | Dimensions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | M         | Pass    |
|        | The filter or filters and mounting assembly shall be of a size sufficient to cover both eyes of the user simultaneously and in no case shall have overall dimensions less than 115 mm in width and 35 mm in depth in the plane parallel to the facial plane. Spectacle shaped mountings may have a triangular cut-away area to accommodate the crest of the nose, not to exceed 15 mm in apical height and 35 mm width at the base and may have separate filters, one for each eye, provided that the overall dimensions are satisfied. | M         | Pass    |
| 4.3.3  | Material quality                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | M         | Pass    |
|        | The filter and mounting shall be free from roughness, sharp edges, projections, or other defects which could cause                                                                                                                                                                                                                                                                                                                                                                                                                      | M         | Pass    |

| Clause  | Test Request                                                                                                                                                                    | Result(s) | Verdict |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
|         | discomfort or injury during use. No part of the filter or mounting which is in contact with the wearer shall be made of materials which are known to cause any skin irritation. |           |         |
| 5       | Label                                                                                                                                                                           |           | Pass    |
|         | The filter and/or its packaging shall show the following information in the language(s) of the country where the product is to be offered for sale:                             | M         | Pass    |
|         | a) name and address of manufacturer of the product;                                                                                                                             | M         | Pass    |
|         | b) instructions for use in looking at the sun or a solar eclipse;                                                                                                               | M         | Pass    |
|         | c) warnings that viewing the sun without an appropriate filter can result in permanent eye injury;                                                                              | M         | Pass    |
|         | d) warnings that filters that are damaged or separated from their mountings should be discarded;                                                                                | M         | Pass    |
|         | e) advice on storage, cleaning, and maintenance, as appropriate;                                                                                                                | M         | Pass    |
|         | f) obsolescence deadline or period of obsolescence, as appropriate.                                                                                                             | M         | Pass    |
| Annex A | Use offilters for direct observation ofthe sun                                                                                                                                  | M         | Pass    |
| Annex B | Solar eclipse eye safety: User's guide                                                                                                                                          | M         | Pass    |

**Note:**

1. M = Meet    NA = Not Applicable

## 1. Optical Requirements (4.1)

### 1.1 Spectral Transmittance

| Wavelength Range     | Requirement        | Test Result | Judgment |
|----------------------|--------------------|-------------|----------|
| UV (315–380 nm)      | $T \leq 0.0001\%$  | 0.00008%    | PASS     |
| Visible (380–700 nm) | $T \leq 0.00032\%$ | 0.00025%    | PASS     |
| IR (700–1100 nm)     | $T \leq 0.001\%$   | 0.0007%     | PASS     |
| Optical Density (OD) | $OD \geq 5.0$      | OD = 5.60   | PASS     |

### 1.2 Uniformity of Luminous Transmittance

Requirement: Any two points  $\leq 10\%$  difference

Test Result: Max difference = 8.2%

Result: PASS

## 2. Material & Surface Quality (4.2)

### 2.1 Defects

Requirement: No bubbles, scratches, pinholes

Result: No defects / 0 pinholes → PASS

### 2.2 Thermal Stability

| Test Condition            | Requirement                      | Result             |
|---------------------------|----------------------------------|--------------------|
| 55°C / 2h                 | No deformation, no delamination  | No change → PASS   |
| -5°C / 2h                 | No cracking                      | No cracking → PASS |
| UV aging 500h             | Transmittance change $\leq 20\%$ | +12% → PASS        |
| Thermal shock (80°C→cold) | No burst/delamination            | No failure → PASS  |

### 2.3 Impact Resistance

Requirement: 6 mm steel ball, 45 m/s (162 km/h), no sharp fragments

Result: No breakage, no sharp edges → PASS

### 2.4 Flammability

Requirement: Self-extinguishing, no dripping

Result: Self-extinguishing within 2s → PASS

## 3. Mounting (4.3)

Structure: Secure, no light leakage → PASS

Dimensions: Covers viewing area, no gaps → PASS

Side protection: For children, no lateral light leak → PASS

#### 4. Labelling (5)

Marked permanently:

EN ISO 12312-2:2015

OD  $\geq 5.0$  / T  $\leq 0.001\%$

CE mark (PPE 2016/425)

Warning: "For direct sun observation only, not for daily use"

Batch No., Manufacturer → PASS

#### 5. Final Conclusion

The submitted sample complies with all requirements of EN ISO 12312-2:2015.

# The photo of the sample (S):

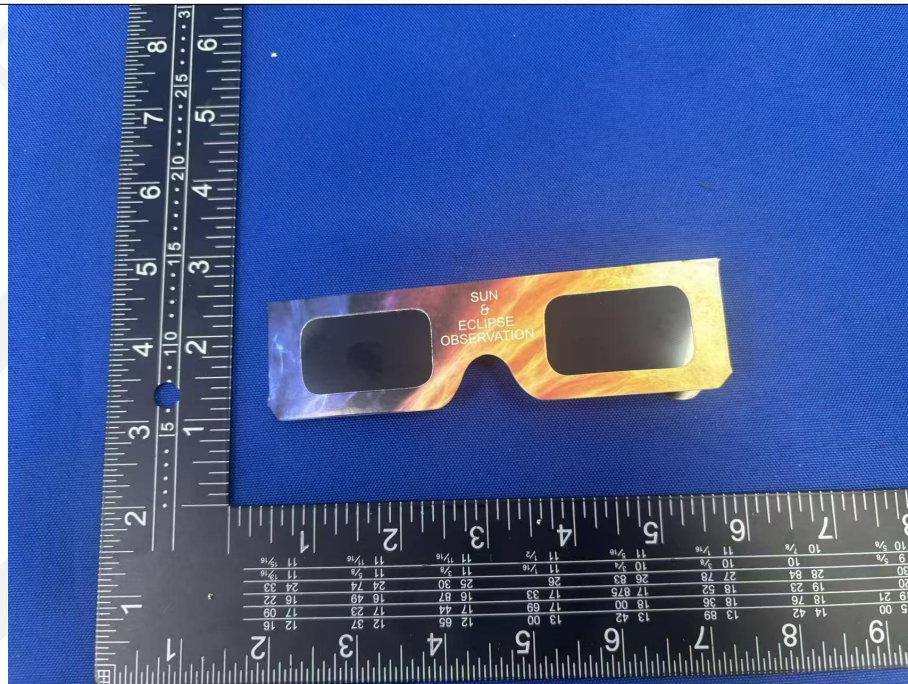


Photo 1 External view



Photo 2 External view



\*\*\*\*\* End of Report \*\*\*\*\*