

Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

Page:

of

Date:

JUN. 19, 2014

### Onelensolution Optical Technology Sdn Bhd

A2-11, 2rd Floor, K.L Industrial Park 5th Miles, Old Klang Road, 58200 Kuala Lumpur, Malaysia

The following merchandise was submitted and identified by the applicant as:

Product Description:

Blue Nanomite

Manufacturer/Vendor:

Onelensolution Optical Technology Sdn Bhd

Country of Origin:

Malaysia

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Requested:

1. Solar blue-light transmittance

2. Solar IR transmittance

Test Method:

1. According to clause 7.1.1 of EN ISO 12311:2013

(The calculation of solar blue-light transmittance is according to clause 7.4

of EN ISO 12311:2013)

2. According to clause 7.1.1 of EN ISO 12311:2013

( The calculation of solar blue-light transmittance is according to clause 7.5

of EN ISO 12311:2013)

Test Result:

--See following sheet(s)--

Date of Receipt:

JUN. 11, 2014

Testing Period:

JUN. 11 ~ 19, 2014

--- See Next Page ---

Signed for and on behalf of SGS Taiwan Ltd.

Laboratory address:

61, Kai-Fa Road, Nanzih Export Processing Zone, 81170, Kaohsiung, Taiwan

Tenya Chien Supervisor

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TWB 4130798



Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

Page:

of

## **Test Result**

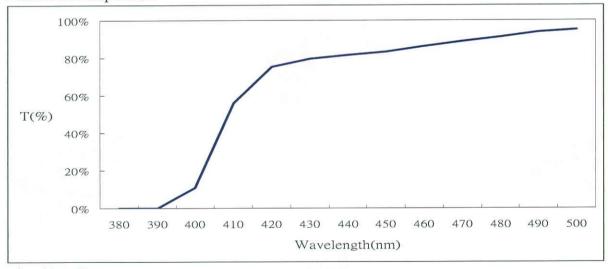
## 1. Solar blue-light transmittance

**Finding** 

| Sample | Range     | Test Value |
|--------|-----------|------------|
| 1      | 380~500nm | 82.17 %    |

| Wavelength(nm) | Transmittance (%) | Wavelength(nm) | Transmittance (%) |
|----------------|-------------------|----------------|-------------------|
| 380            | 0.00              | 450            | 83.10             |
| 390            | 0.00              | 460            | 86.30             |
| 400            | 11.00             | 470            | 88.80             |
| 410            | 55.80             | 480            | 91.20             |
| 420            | 75.20             | 490            | 93.60             |
| 430            | 79.60             | 500            | 95.00             |
| 440            | 81.60             | Allenda .      |                   |

## Transmittance spectrum



--- See Next Page ---

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Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

Page:

3

## **Test Result**

#### 2. Solar IR transmittance

Finding

| Sample | Range      | Test Value |
|--------|------------|------------|
| 1      | 780~2000nm | 68.47 %    |

| Wavelength(nm) | Transmittance (%) | Wavelength(nm) | Transmittance (%) |
|----------------|-------------------|----------------|-------------------|
| 780            | 76.864            | 1030           | 65.940            |
| 790            | 75.386            | 1040           | 66.888            |
| 800            | 73.802            | 1050           | 67.615            |
| 810            | 72.558            | 1060           | 68.278            |
| 820            | 71.405            | 1070           | 68.777            |
| 830            | 70.451            | 1080           | 69.237            |
| 840            | 69.655            | 1090           | 69.811            |
| 850            | 68.699            | 1100           | 70.532            |
| 860            | 67.941            | 1110           | 71.349            |
| 870            | 67.118            | 1120           | 72.028            |
| 880            | 66.077            | 1130           | 72.388            |
| 890            | 64.641            | 1140           | 72.154            |
| 900            | 63.736            | 1150           | 71.047            |
| 910            | 63.378            | 1160           | 68.635            |
| 920            | 63.450            | 1170           | 65.044            |
| 930            | 63.933            | 1180           | 62.451            |
| 940            | 64.106            | 1190           | 63.056            |
| 950            | 64.508            | 1200           | 66.141            |
| 960            | 64.890            | 1210           | 69.813            |
| 970            | 64.733            | 1220           | 72.721            |
| 980            | 64.761            | 1230           | 74.965            |
| 990            | 65.045            | 1240           | 76.947            |
| 1000           | 64.966            | 1250           | 78.735            |
| 1010           | 64.984            | 1260           | 79.978            |
| 1020           | 65.286            | 1270           | 80.591            |

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TWB 4130800



Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

Page:

of

### **Test Result**

| Wavelength(nm) | Transmittance (%) | Wavelength(nm) | Transmittance (%) |
|----------------|-------------------|----------------|-------------------|
| 1280           | 80.924            | 1530           | 64.862            |
| 1290           | 81.390            | 1540           | 68.833            |
| 1300           | 82.009            | 1550           | 72.220            |
| 1310           | 82.515            | 1560           | 74.081            |
| 1320           | 82.806            | 1570           | 74.230            |
| 1330           | 82.938            | 1580           | 74.132            |
| 1340           | 83.048            | 1590           | 74.837            |
| 1350           | 82.427            | 1600           | 76.326            |
| 1360           | 80.422            | 1610           | 77.928            |
| 1370           | 78.273            | 1620           | 79.163            |
| 1380           | 76.587            | 1630           | 79.632            |
| 1390           | 75.003            | 1640           | 79.073            |
| 1400           | 73.363            | 1650           | 77.193            |
| 1410           | 72.481            | 1660           | 73.049            |
| 1420           | 72.943            | 1670           | 64.842            |
| 1430           | 74.345            | 1680           | 51.647            |
| 1440           | 75.658            | 1690           | 38.413            |
| 1450           | 76.472            | 1700           | 29.958            |
| 1460           | 76.262            | 1710           | 24.975            |
| 1470           | 73.669            | 1720           | 20.832            |
| 1480           | 67.458            | 1730           | 17.670            |
| 1490           | 60.655            | 1740           | 17.490            |
| 1500           | 57.494            | 1750           | 21.894            |
| 1510           | 58.325            | 1760           | 31.205            |
| 1520           | 61.242            | 1770           | 41.454            |

<sup>---</sup> See Next Page ---

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Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

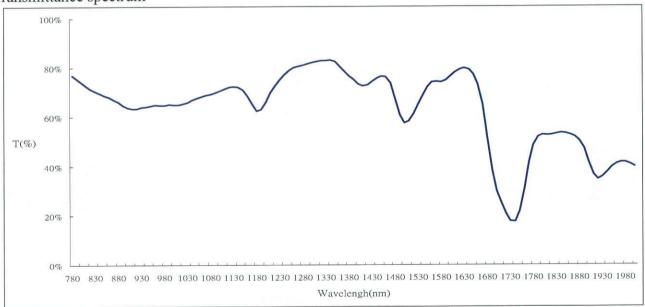
Page:

of 5

## **Test Result**

| Wavelength(nm) | Transmittance (%) | Wavelength(nm) | Transmittance (%) |
|----------------|-------------------|----------------|-------------------|
| 1780           | 48.570            | 1900           | 41.707            |
| 1790           | 51.838            | 1910           | 36.567            |
| 1800           | 52.611            | 1920           | 34.775            |
| 1810           | 52.515            | 1930           | 35.670            |
| 1820           | 52.665            | 1940           | 37.703            |
| 1830           | 53.063            | 1950           | 39.568            |
| 1840           | 53.388            | 1960           | 40.904            |
| 1850           | 53.311            | 1970           | 41.585            |
| 1860           | 52.675            | 1980           | 41.500            |
| 1870           | 51.799            | 1990           | 40.765            |
| 1880           | 50.298            | 2000           | 39.693            |
| 1890           | 47.214            |                | Same .            |

#### Transmittance spectrum



--- See Next Page ---

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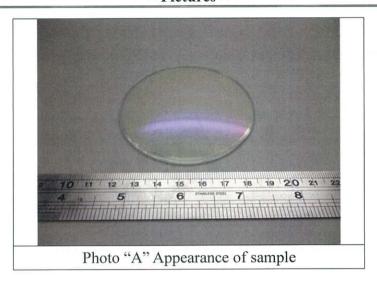
Mechanical & Hardgoods Laboratory

Report No.: YA60028/2014

Page:

of

- Pictures -



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