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TESTING
CNAS L1073

No.W-08-20-6196



TEST REPORT

Model&Type SUN-ODN-JZ

Name of Product Optical fiber cable distribution box

Client Name Shanghai Sun Telecommunication Co., Ltd.

Test Sort Commission Inspection



WRI Testing Technologies Co.,Ltd.
Quality Supervision & Inspection Center of Optical Communication Products, M.I.I



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Test Report

| | | | |
|---------------------------------|---|---|-----------------------|
| Name of Product | Optical fiber cable distribution box | Model/Type | SUN-ODN-JZ |
| Client Name | Shanghai Sun Telecommunication Co., Ltd. | Manufacturing Number / Production Date | _____ |
| Manufacturer | _____ | Test Sort | Commission Inspection |
| Production Address | _____ | | |
| Arrival Date of Samples | 2020.12.07 | Specimen Deliverer | Sting Zhang |
| Amount of Samples | _____ | Quantity of Samples | 1 |
| Initial State of Samples | Good | | |
| Reference Documents | YD/T 2150-2010 Optical fiber cable distribution box | | |
| Conclusion | <p style="text-align: center;">All the inspection results meet the requirements specified in YD/T 2150-2010.</p> <div style="text-align: right;">  <p>Date of Issue: Dec 30, 2020</p> </div> | | |
| Remarks | Inspection Origin: This inspection is committed by Shanghai Sun Telecommunication Co., Ltd. | | |

Approved by: *Li Hongqiang*

Inspected by: *LiWen*

Chief tested by: *He Dejin*

李宏强

李文

何德进



Sample information

Item name: Optical fiber cable distribution box

Model: SUN-ODN-JZ

Photo description:

Figure 1- Sample appearance

Figure 2-Internal structure

Location: Quality Supervision & Inspection Center of Optical Communication Products, M.I.I

Date: 2020.12.08

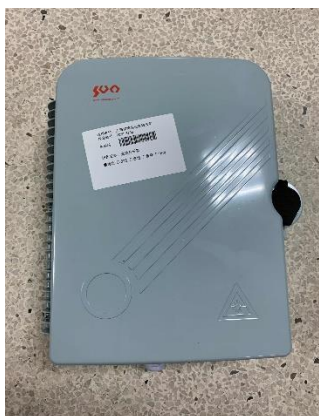


Figure 1



Figure 2



Outline of Test Result

| Sequence number | Inspection items | | Conclusion |
|-----------------|---|--------------------------|------------|
| 1 | Appearance and structure | | Pass |
| 2 | Functional requirement | | Pass |
| 3 | Voltage resistance level | | Pass |
| 4 | Insulation resistance | | Pass |
| 5 | The mechanical strength of the top surface of the box | | Pass |
| 6 | Mechanical strength of the door | | Pass |
| 7 | Tensile test | | Pass |
| 8 | Torsion test | | Pass |
| 9 | Sealing performance | | Pass |
| 10 | Vibration test | Product appearance | Pass |
| 11 | | Voltage resistance level | Pass |
| 12 | | Insulation resistance | Pass |
| 13 | High temperature test | Product appearance | Pass |
| 14 | | Voltage resistance level | Pass |
| 15 | | Insulation resistance | Pass |
| 16 | Low temperature test | Product appearance | Pass |
| 17 | | Voltage resistance level | Pass |
| 18 | | Insulation resistance | Pass |
| 19 | Damp heat test | Product appearance | Pass |
| 20 | | Voltage resistance level | Pass |
| 21 | | Insulation resistance | Pass |
| 22 | Salt spray test | Product appearance | Pass |
| 23 | | Voltage resistance level | Pass |
| 24 | | Insulation resistance | Pass |



Test Result

| Sequence Number | Inspection Items | Unit | Requirements | Inspection Results | Conclusion |
|-----------------|---|------------------------|---|--|------------|
| 1 | Appearance and structure | mm | The size of optical fiber cable distribution box should not exceed 1000mm×800mm×600mm (Height×width×depth) | 310×230×105 | Pass |
| | | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. | Meet the requirements. | |
| | | - | The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements. | |
| | | - | The metal structure of coating, the coating and the substrate has good adhesion; adhesion should be not less than level 2 in Table 1 of GB/T 9286-1998. | Meet the requirements. | |
| | | - | High voltage protection grounding device and cable metal strengthening core and metal moisture barrier. There should be an obvious ground mark for the protection of the earth. | The protection of the ground is marked with a ground mark. | |
| | | - | The box should have a clear line sequence of the logo. For the installation of optical splitter module shall be clearly marked with the road and branch number. | Meet the requirements. | |
| | | - | All fasteners should be firmly secured. | Meet the requirements. | |
| | | - | The opening angle of the box door is not less than 120°. | 185° Meet the requirements. | |
| | | - | The box sealing strip bonding should be flat and firm and the door lock should be flexible and reliable. | Meet the requirements. | |
| | | - | When the optical cable is introduced, the bending radius should be more than 15 times the diameter of the optical cable. | Meet the requirements. | |
| - | In the deployment of optical fiber devices, regardless of where to turn, the bending radius should not be less than 30mm. For bending insensitive fiber, the bending radius of the optical fiber can be performed according to the requirements of the optical fiber. | Meet the requirements. | | | |

a) Test procedure

1. According to conditions 6.2 of YD/T 2150-2010.
2. Use a tape measure to check the dimension of the box..Use hand to operate the rotation, plug and lock parts properly and use universal angle ruler to detect the opening angle of the door.Check fasteners manually with assembly tools and touch exposed and operating parts with bare hands.Detect the bending radius of optical cable tail by using R gauge .Carry out coating adhesion test according to Chapter 7 of GB/t9286-1998.Other visual inspection methods.

b) Test conditions

| Date | Environment | Location |
|------------|---------------|------------|
| 2020.12.08 | 20°C, 58%R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|-----------------------|-------------|------------|
| Steel tape | 0-5(m) | 001 |
| Universal angle ruler | 0-360°C | 4-8091783 |
| Vernier caliper | 91512 | S161110010 |



Test Result

| Sequence Number | Inspection Items | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|-------------------------|------|---|---------------------------------|------------|
| 2 | Functional requirements | - | Fixed and protection function of cable: cable into the separating box, fixed and protection device should be reliable, after the fixed cable metal armoring layer and a moisture barrier, strengthen the core should be connected to the high voltage protection grounding device, application of plastic spiral pipe or casing protecting and fixing the optical fiber welding device after cable stripping. | Meet the requirement | Pass |
| | | | Optical fiber terminating equipment function: optical fiber terminating device should follow for fiber core and fiber core or pigtail, the installation and maintenance of equipment operation, at the same time should have a surplus of fiber optic cable storage space. | Meet the requirement | |
| | | | Optical fiber relay protection function: after the connection of fiber and fiber, the connecting part should be protected. The protection measures can be used as heat shrinkable fiber protection tube, guard clamp, fiber cold connector and so on. | Meet the requirement | |
| | | | Line switching function: it can dispatch the optical fiber number in the optical fiber cable and change the routing of the transmission system quickly and conveniently by jumping fiber. | Meet the requirement | |
| | | | Capacity: the capacity of the device should be stipulated in the product enterprise standard. The terminal, connection and storage of optical fiber should be conveniently configured in the full capacity range. | 24-core Meet the requirement | |
| | | | The box should have good corrosion resistance and aging resistance, the door lock should be the anti-theft structure, and has good anti damage function. | Meet the requirement | |
| | | | The installation and connection of the optical splitter: the equipment should have the space and the function (optional) to provide the space for installation of the light divider. | — | |

a)Test procedure

1. According to conditions 6.3 of YD/T 2150-2010.
2. All parts of the product shall be checked according to the assembly drawing, and the inspection method and operation verification method shall be used to check the installation completeness and functionality of each functional device.

b)Test conditions

| Date | Environment | Location |
|------------|--------------|------------|
| 2020.12.08 | 20°C,58%R.H. | Laboratory |

c)Test equipment

| Item name | Item number | Code |
|-----------|-------------|------|
| - | - | - |



Test Result

| Sequence Number | Inspection Items | Unit | Requirements | Inspection Result | Conclusion |
|--|--------------------------|---------------|---|---------------------------|------------|
| 3 | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1min. | No breakdown, no fly arc. | Pass |
| 4 | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V(DC) | $> 1 \times 10^6$ | Pass |
| a)Test procedure | | | | | |
| <p>1. According to conditions 6.5.1 and 6.5.2 of YD/T 2150-2010.</p> <p>2. According to method C of "test 4A: withstand voltage" in GB / T 5095.2-1997. The test voltage is 3000V DC, the rate of applying test voltage is not more than 500V / s, the test voltage withstand time is 60s \pm 5s, and the test results shall meet the requirements of 5.5.1.</p> <p>3. According to method C of "test 3A: insulation resistance" in GB / T 5095.2-1997. The DC voltage applied to the circuit for measuring insulation resistance is 500 \pm 50V, and the stable insulation resistance value shall be read. If it is not stable, the value shall be read within 60s \pm 5s after pressurization, and the test results shall meet the requirements of 5.5.2.</p> | | | | | |
| b)Test conditions | | | | | |
| Date | | Environment | | Location | |
| 2020.12.08 | | 20°C, 58%R.H. | | Laboratory | |
| c)Test equipment | | | | | |
| Item name | | Item number | | Code | |
| Electrical safety tester | | GPT-9904 | | GER133570 | |
| Electronic insulation resistance meter | | IR3455-30 | | 170524173 | |



Test Result

| Sequence Number | Inspection Items | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|--|------|--|--|------------|
| 5 | The mechanical strength of the top surface of the box body | - | The mechanical strength of the top surface of the box body, the surface should be able to withstand the vertical pressure of not less than 500N, the load unload box, no signs of damage and permanent deformation. | There is no damage trace and permanent deformation after the test | Pass |
| 6 | Mechanical strength of the door | - | Mechanical strength of the door: after the door is opened, the outside end of the door should be able to withstand the vertical pressure of not less than 100N. Remove the load box, no signs of damage and permanent deformation. | There is no damage trace and permanent deformation after the test. | Pass |
| 7 | Tensile | - | Tensile test: after the optical cable is fixed, it should bear the axial tensile force of not less than 500N. After testing, check the fixing part and fixing device of optical cable, and the cable should not loose or destroy. | There is no loosening and destruction after the test. | Pass |
| 8 | Torsion | - | Torsion test: cable fixed position should be able to withstand the torsion angle of 90 degrees for 3 cycles. After testing the fixing and fixing device of the optical fiber cable, there should be no loosening and failure of the optical cable. | There is no loosening and destruction after the test. | Pass |

a) Test procedure

1. According to conditions 6.6 of YD/T 2150-2010.
2. Mechanical strength of the box surface: the top surface of the box shall be able to bear a vertical pressure which is not less than 500N, and the pressure on the load bearing surface shall be about $2.5 \times 10^4 \text{ N/m}^2$, which shall be maintained for 15min. After the load is removed, the test results shall meet the requirements of section 5.6.
3. Mechanical strength of the door: after the door is opened, load is applied at the outermost end of the door according to the requirements of section 5.6 for 15min. After the load is removed, the test results shall meet the requirements of section 5.6.
4. Optical cable tensile test: prepare an optical cable (about 1m long) which used in the box, fix one end of the optical cable firmly on the optical cable fixing device of the equipment according to the working state, fix the reinforcing core of the optical cable at the same time, clamp the other end of the optical cable firmly and stretch it with the tensile clamp, and the stretching speed is 20 mm / min. After reaching the maximum tension, continue for 2min, remove the tensile force, and check the fixing position and fixing device of the optical cable, which shall meet the requirements of section 5.6.
5. Optical Cable torsion test: prepare an optical cable (about 1m long) which used in the box, fix one end of the optical cable firmly on the optical cable fixing device of the equipment according to the working state, fix the reinforcing core of the optical cable in the mean time, and twist the optical cable at 50cm away from the optical cable outlet according to the provisions of section 5.6, first twist 90° and hold it at this position for 1min Then return to the starting position, repeat the same operation in the opposite direction, complete a cycle, a total of 3 cycles. After the test, check the fixing position and fixing device of the optical cable, which shall meet the requirements of section 5.6.

b) Test conditions

| Date | Environment | Location |
|------------|----------------|------------|
| 2020.12.09 | 19°C, 57% R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|--|-------------|-------|
| Weight group | 1 kg ~50kg | — |
| Microcomputer controlled horizontal tensile testing machine | WDL-10 | 14429 |
| Microcomputer controlled bending and torsion testing machine | NDW-100 | 14430 |



Test Result

| Sequence Number | Inspection Items | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|--------------------------|------|---|---|------------|
| 9 | Sealing performance test | - | Meets the requirements of IPx5 in GB 4208-2008 Nozzle inner diameter: 6.3 mm, water flow rate: (12.5 ± 0.625) L / min, spraying time per square meter of shell surface: 1 min, test duration: 3 min, distance from nozzle to shell surface: 2.5 m, test duration: 1 min After that, check the water in the shell, and the amount of water will not be harmful | After the water spray test, there is no water in the box, which meets the requirements of IPx5. | Pass |
| | | - | It meets the requirements of IP6x in GB / T 4208-2008 1) Place the sample in the position specified in the test, the test wire with diameter of 1.0 mm shall not enter the shell and keep enough clearance with the live part; 2) Put the sample in the dust proof test box, add the negative pressure, the air extraction speed is 40-60 times of the box volume per hour, the test will be 2 hours, after the test, there is no obvious dust in the box | 1) The test wire does not pass through any opening of the shell and keeps enough gaps with the live part; 2) there is no dust in the shell after the test. Meets the requirements of IP6x. | |

a) Test procedure

1. According to conditions IP65 of GB 4208-2008.
2. Meet the requirements of IP6x in GB 4208-2008 enclosure protection grade: (1) place the sample in the specified position, the test wire with diameter of 1.0 mm shall not enter the enclosure, and keep enough gap (2) place the sample in the dust-proof test box, add negative pressure, and the extraction speed is 40-60 times of the enclosure volume per hour, and the test spend 2 h. After the test, observe the amount and place of talc. If there is dust in the shell, to check the amount of dust will not affect the normal operation or safety of the equipment.
3. Meet the requirements of IPx5 in GB 4208-2008: nozzle inner diameter: 6.3mm, water flow: (12.5 ± 0.625) L / min, water spraying time per square meter of shell surface: 1 min, the test lasts for 3 min, the distance between nozzle and shell surface is 2.5 m, after the test, check the water inflow of shell which is not harmful.

b) Test conditions

| Date | Environment | Location |
|------------|---------------|------------|
| 2020.12.09 | 19°C, 57%R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|---|-------------|------------|
| Rain test device | SC/IP-84A | 2013110270 |
| Falling dust Laboratory | WiD27-La | 201411001 |
| Digital force gauge | ZP-50N | K170121 |
| Shell protection level touching test tool | KXT0301, | K170117 |
| | KX T0302, | K170118 |
| | KXT0307, | K170119 |
| | KXT0308 | K170120 |



Test Result

| Sequence Number | Inspection Items | | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|------------------|--------------------------|------|---|---------------------------|------------|
| 10 | Vibration test | Product appearance | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements | Pass |
| 11 | | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1min. | No breakdown, no fly arc. | Pass |
| 12 | | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V (DC). | $>1 \times 10^6$ | Pass |

a) Test procedure

1. According to conditions 6.9.4 of YD/T 2150-2010.

2. Test conditions: frequency range: 10Hz ~ 55Hz, frequency sweeping requirements: frequency sweeping rate should be one octave per minute, tolerance $\pm 10\%$, amplitude: 0.75mm, duration in each direction: vertical and horizontal duration: 30min per axis. The sample is placed on the shaking table, and the test procedure is carried out according to the method of GB / T 2423.10-2008. The sample shall bear vibration in two vertical directions; one of direction is parallel to the common axis of the connector. After the test, the fiber separation box can still meet the requirements of 5.2.2.1, 5.2.2.2 and 5.5.

b) Test conditions

| Date | Environment | Location |
|------------|----------------|------------|
| 2020.12.10 | 21 °C, 59%R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|--------------------------------|-------------|--------|
| Electric vibration test system | DC-1000-15 | 140103 |



Test Result

| Sequence Number | Inspection Items | | Unit | Requirements | Inspection Result | Conclusion | | | | | | | | | | | | |
|--|---|--------------------------|------|---|---------------------------|------------|-----------|-------------|----------|-------------------------------|---|------------|-------------------------------------|----------|-----------|--|-----------|-----------|
| 13 | High temperature test | Product appearance | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements | Pass | | | | | | | | | | | | |
| 14 | | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1min. | No breakdown, no fly arc. | Pass | | | | | | | | | | | | |
| 15 | | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V (DC). | $>1 \times 10^6$ | Pass | | | | | | | | | | | | |
| a) Test procedure 1. According to conditions 6.9.2 of YD/T 2150-2010. 2. Test conditions: temperature: $60 \pm 2 \text{ }^\circ\text{C}$, test time: 2h. The samples are placed in the test chamber, and the test procedure is carried out according to GB / T 2423.2-2008 "test BB". After the test, the samples are recovered for 1h under the standard test atmospheric conditions for testing. After the test, the fiber separation box can still meet the requirements of 5.2.2.1, 5.2.2.2 and 5.5. | | | | | | | | | | | | | | | | | | |
| b) Test conditions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 20%;">Date</th> <th style="width: 40%;">Environment</th> <th style="width: 40%;">Location</th> </tr> </thead> <tbody> <tr> <td>2020.12.16</td> <td>(18~20)$^\circ\text{C}$, (57-59)%R.H.</td> <td>Laboratory</td> </tr> </tbody> </table> | | | | | | | Date | Environment | Location | 2020.12.16 | (18~20) $^\circ\text{C}$, (57-59)%R.H. | Laboratory | | | | | | |
| Date | Environment | Location | | | | | | | | | | | | | | | | |
| 2020.12.16 | (18~20) $^\circ\text{C}$, (57-59)%R.H. | Laboratory | | | | | | | | | | | | | | | | |
| c) Test equipment <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 35%;">Item name</th> <th style="width: 30%;">Item number</th> <th style="width: 35%;">Code</th> </tr> </thead> <tbody> <tr> <td>Walk in temperature test room</td> <td>Wic36-60W</td> <td>201711001</td> </tr> <tr> <td>Electrical safety tester calibrator</td> <td>GPT-9904</td> <td>GER133570</td> </tr> <tr> <td>Electronic insulation resistance meter</td> <td>IR3455-30</td> <td>170524173</td> </tr> </tbody> </table> | | | | | | | Item name | Item number | Code | Walk in temperature test room | Wic36-60W | 201711001 | Electrical safety tester calibrator | GPT-9904 | GER133570 | Electronic insulation resistance meter | IR3455-30 | 170524173 |
| Item name | Item number | Code | | | | | | | | | | | | | | | | |
| Walk in temperature test room | Wic36-60W | 201711001 | | | | | | | | | | | | | | | | |
| Electrical safety tester calibrator | GPT-9904 | GER133570 | | | | | | | | | | | | | | | | |
| Electronic insulation resistance meter | IR3455-30 | 170524173 | | | | | | | | | | | | | | | | |



Test Result

| Sequence Number | Inspection Items | | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|----------------------|--------------------------|------|---|---------------------------|------------|
| 16 | Low temperature test | Product appearance | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements | Pass |
| 17 | | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1min. | No breakdown, no fly arc. | Pass |
| 18 | | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V (DC). | $>1 \times 10^6$ | Pass |

a) Test procedure

1. According to conditions 6.9.1 of YD/T 2150-2010.
2. Test conditions: temperature: $-40 \pm 3^\circ\text{C}$, test time: 2h. The samples were placed in the test chamber, and the test procedure was carried out according to the "test AB" method in GB / T 2423.1-2008. After the test, the samples were recovered for 1H under the standard test atmospheric conditions for testing. After the test, the fiber separation box can still meet the requirements of 5.2.2.1, 5.2.2.2 and 5.5.

b) Test conditions

| Date | Environment | Location |
|------------|---|------------|
| 2020.12.16 | $(18 \sim 20)^\circ\text{C}$, $(57 \sim 59)\% \text{R.H.}$ | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|--|-------------|-----------|
| Walk in temperature test room | Wic36-60W | 201711001 |
| Electrical safety tester calibrator | GPT-9904 | GER133570 |
| Electronic insulation resistance meter | IR3455-30 | 170524173 |



Test Result

| Sequence Number | Inspection Items | | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|------------------|--------------------------|------|---|---------------------------|------------|
| 19 | Damp heat test | Product appearance | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements | Pass |
| 20 | | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1 min. | No breakdown, no fly arc. | Pass |
| 21 | | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V (DC). | $>1 \times 10^6$ | Pass |

a) Test procedure

1. According to conditions 6.9.4 of YD/T 2150-2010.
2. Test conditions: temperature: $40 \pm 2 \text{ }^\circ\text{C}$, test time: 144h, test type is alternating damp heat test. The samples were placed in the test chamber, and the test procedure was carried out according to GB / T 2423.4-2008 standard "test dB, alternating damp heat test method". After the test, the samples were recovered for 2 hours under the standard atmospheric conditions. After the test, the fiber separation box can still meet the requirements of 5.2.2.1, 5.2.2.2 and 5.5.

b) Test conditions

| Date | Environment | Location |
|-----------------------|--|------------|
| 2020.12.16~2020.12.22 | (18~23) $^\circ\text{C}$, (55-63)%R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|--|-------------|-----------|
| Walk in temperature test room | Wic36-60W | 201711001 |
| Electrical safety tester calibrator | GPT-9904 | GER133570 |
| Electronic insulation resistance meter | IR3455-30 | 170524173 |



Test Result

| Sequence Number | Inspection Items | | Unit | Requirements | Inspection Result | Conclusion |
|-----------------|------------------|--------------------------|------|---|---------------------------|------------|
| 22 | | Product appearance | - | The box is complete, the plastic parts without burr, no bubbles, no cracks and voids, no warping, no impurities and other defects. The metal structure of smooth surface, uniform color, no peeling, paint, rust and other defects, no sagging, scratches, bubbles and show, white and so on. | Meet the requirements | Pass |
| 23 | Salt spray test | Voltage resistance level | - | The voltage resistance level between the grounding device, the box and the metal components is not less than 3000V (DC), no breakdown or fly arc after 1min. | No breakdown, no fly arc. | Pass |
| 24 | | Insulation resistance | MΩ | The insulation resistance between the device and the body parts of the metalworking should not be less than $2 \times 10^4 \text{M}\Omega$, the test voltage is 500V (DC). | $>1 \times 10^6$ | Pass |

a) Test procedure

- According to conditions 6.9.5 of YD/T 2150-2010.
- Test conditions: test temperature: $35 \pm 2^\circ\text{C}$, test time: 48h, salt water concentration: 5%. The samples were placed in the test chamber and tested according to GB / T 2423.17-2008 "Test Ka". At the end of the test, the specimen shall be taken out immediately and washed with clean water without damaging the corrosion point state. After cleaning, the specimen shall be restored for 2 hours under the standard test atmospheric conditions. After the test, the fiber separation box can still meet the requirements of 5.2.2.1, 5.2.2.2 and 5.5.

b) Test conditions

| Date | Environment | Location |
|-----------------------|--|------------|
| 2020.12.11~2020.12.13 | (19~22) $^\circ\text{C}$, (58-61)%R.H. | Laboratory |

c) Test equipment

| Item name | Item number | Code |
|--|-------------|-----------|
| Salt spray test box | YWX/Q-016 | 20100710A |
| Electrical safety tester calibrator | GPT-9904 | GER133570 |
| Electronic insulation resistance meter | IR3455-30 | 170524173 |