

Verification Services

Report No.: 4788659233

Project No.: 4788659233

Report Issued Date: 2018-10-23



TEST REPORT

Page 1 of 11

Customer Information:

Applicant Information

Company Name : BQT Solutions (SEA) Pte Limited

Address : 41B Neil Road #03-01. Singapore 088824

Manufacturer Information

Company Name : BQT Solutions (NZ) Limited

Address : Unit 4, 101 Diana Drive, Wairau Valley, Auckland 0627, New Zealand

Factory Information

Company Name : BQT Solutions (NZ) Limited

Address : Unit 4, 101 Diana Drive, Wairau Valley, Auckland 0627, New Zealand

Per your request, project 4788659233 was opened, in accordance with your requested test protocol for the evaluation of product model YG80 performance property. The test was to verify the IP67 and IPX7 Test for EUT ORCA model YG80.

UL Verification Services did not select the sample(s), determine whether the sample(s) was representative of production samples, witness the production of the test sample(s), nor were we provided with information relative to the formulation or identification of component materials used in the test sample(s). The test results apply only to the actual sample(s) tested.

The issuance of this report in no way implies Listing, Classification or Recognition by UL LLC (UL) and does not authorize the use of UL Listing, Classification or Recognition Marks or any other reference to UL LLC (UL) on the product or system. UL Verification Services authorizes the above named company to reproduce this Report provided it is reproduced in its entirety. The name, Brand or Marks of

Verification Services

Report No.: 4788659233

Project No.: 4788659233

Report Issued Date: 2018-10-23



TEST REPORT

Page 2 of 11

UL LLC (UL) cannot be used in any packaging, advertising, promotion or marketing relating to the data in this Report, without UL's prior written permission.

UL Verification Services, its employees and agents shall not be responsible to anyone for the use or nonuse of the information contained in this Report, and shall not incur any obligation or liability for damages, including consequential damages, arising out of or in connection with the use of, or inability to use, the information contained in this Report.

You cannot use UL's name or marks in connection with any product, packaging, advertising, promotion, or marketing without UL's prior written permission.

In no event shall UL be responsible to anyone for whatever use or nonuse that is made of the information contained in this Report and in no event shall UL, its employees or its agents, incur any Obligation or liability for damages, including, but not limited to, consequential damages arising out of or in connection with the use, or inability to use, of the information contained in this Report.

Verification Services

Report No.: 4788659233

Project No.: 4788659233

Report Issued Date: 2018-10-23



TEST REPORT

Page 3 of 11

Report on the submitted sample said to be:

Sample name..... : ORCA
Sample model..... : YG80
Amount of Sample..... : 2 pcs
Sample Received Date : Sep.20.2018
Sample Tested Date..... : Sep.20.2018~ Oct.12.2018

Test Information:

No.	Item(s)	Test Result
1	Water test (IPX7)	Pass, See Appendix 2 for detail.
2	Dust test (IP6X)	Pass, See Appendix 3 for detail.

Testing laboratory (Report Stamp)

Reported by: Rachel Xu

Reviewed by: Van Yuan

Date: 2018-10-17

Date: 2018-10-18

Appendix 1

Sample Photos:

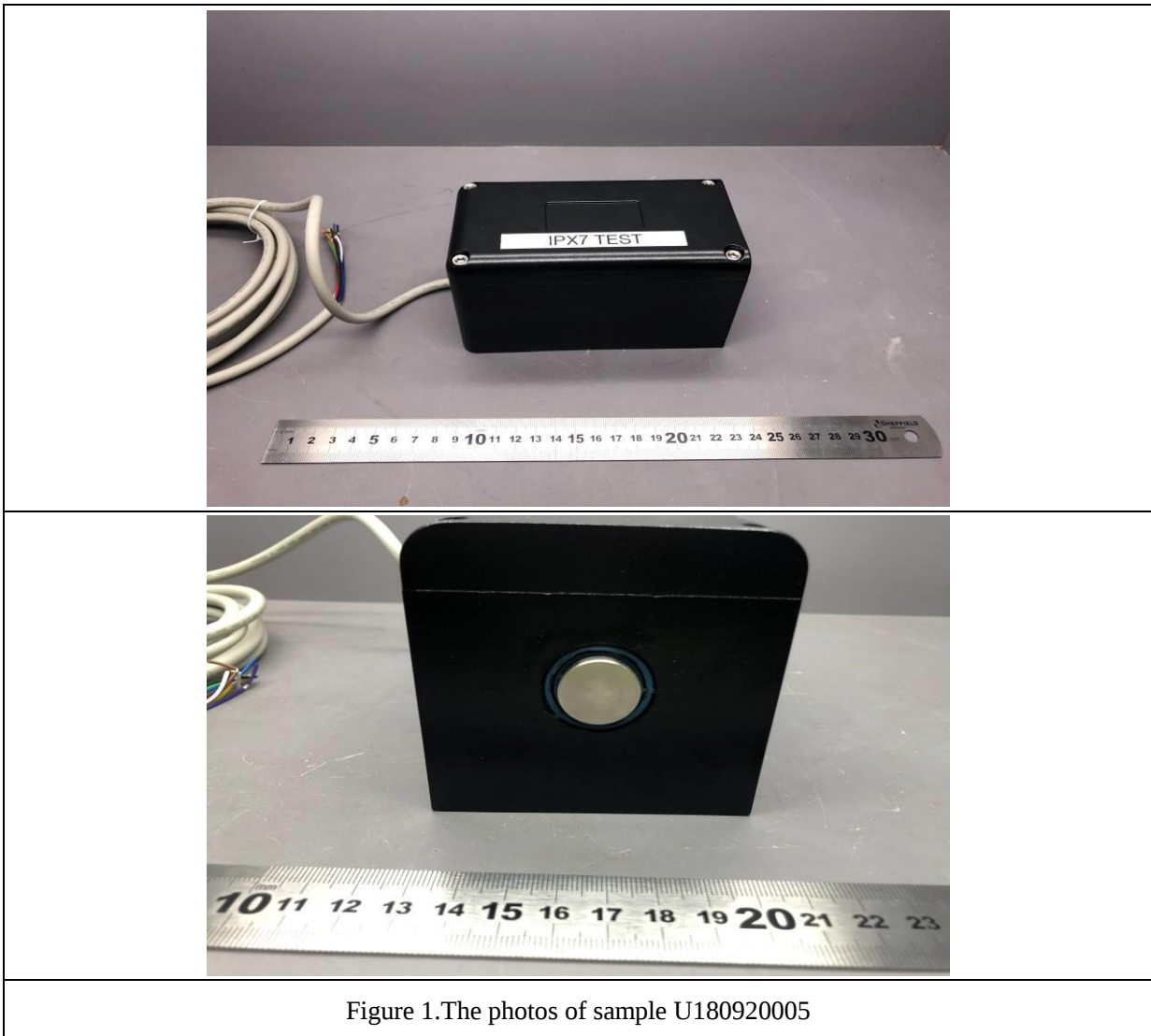


Figure 1. The photos of sample U180920005

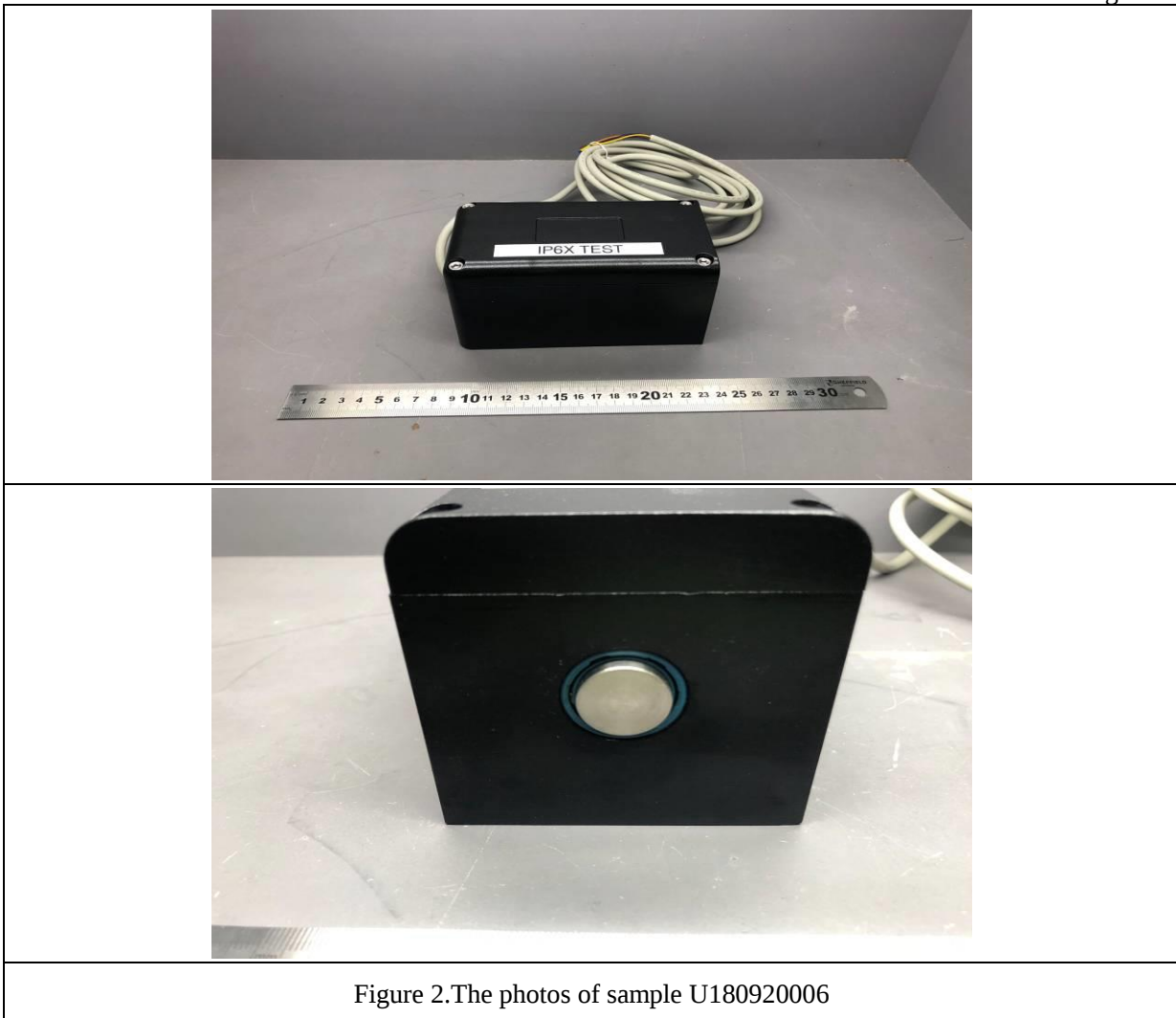


Figure 2.The photos of sample U180920006

Appendix 2

Test Item: Water test (IPX7)

1. Environment Condition:

Temperature: 22.6°C ; Relative humidity: 52%RH

2. Test Sample:

Sample No.	Sample name	Sample model	Sample photo	Sample Num.
U180920005	ORCA	YG80	See Appendix 1	1pc

3. Test Equipments:

No.	Name	Model No.
1	Waterproof Equipment	TL-LY1-4F
2	DC power supply	MP3020D

4. Testing Standard:

IEC 60529-2013 Degrees of protection provided by enclosures (IP Code)

5. Test Condition:

Water-level on enclosure: 0.15m above top, 1m above bottom.

Time: 30min

No electricity is used during the test.

Check product functional before and after test.

6. Test requirement:

After test, no water is allowed in the electrical part of the product. The product's function should be normal.

7. Test Result:

Sample No.	Test result	Test requirement	Judgement
U180920005	After test, there is no obvious water in the electrical part of the product. The product's function is normal.	After test, no water is allowed in the electrical part of the product. The product's function should be normal.	Pass

8. Test Photos:

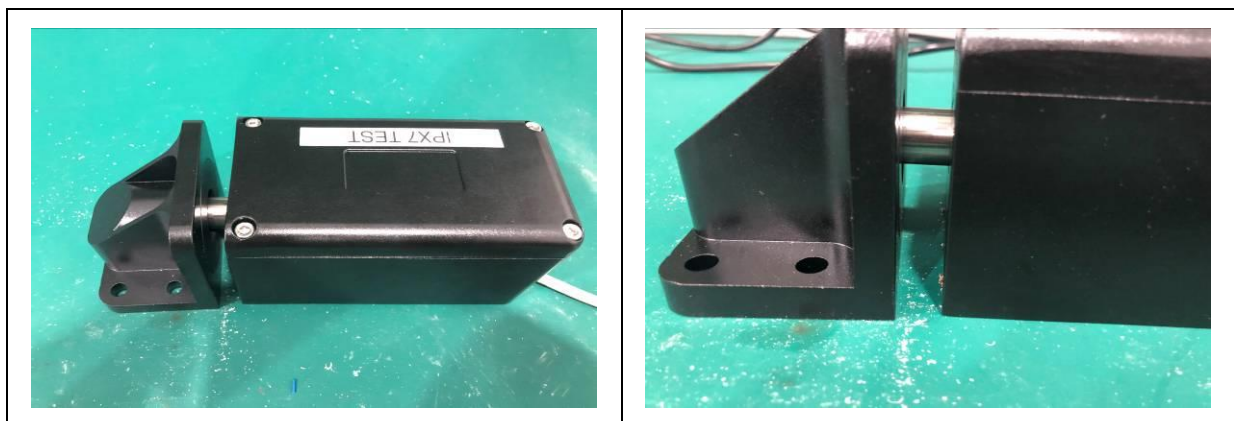


Figure 3.The photos of sample U180920005 functional check before test

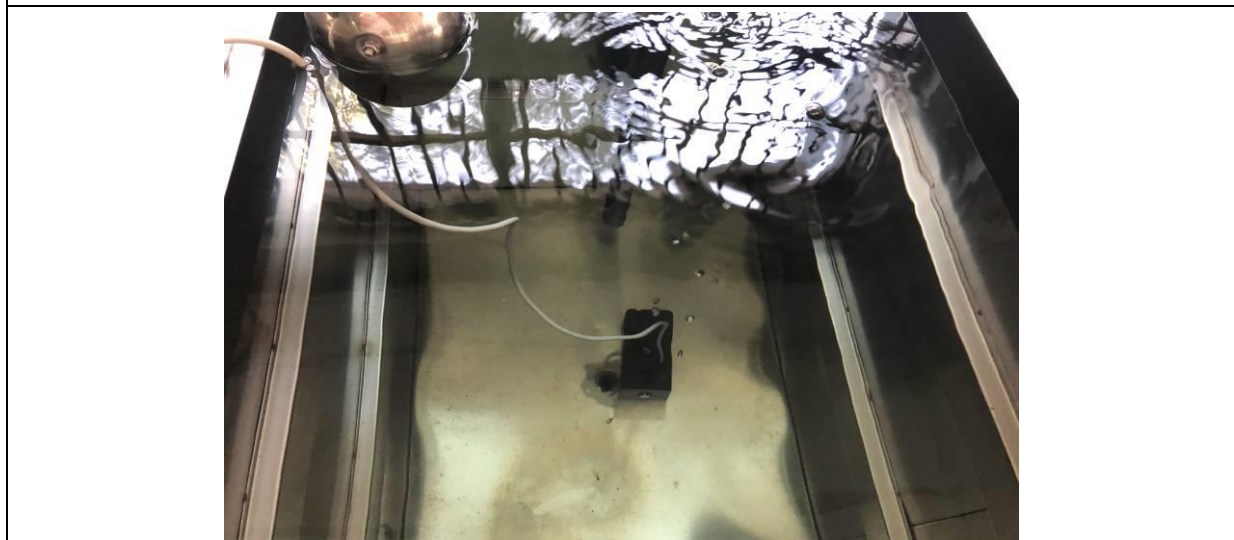


Figure 4.The photo of sample U180920005 during test

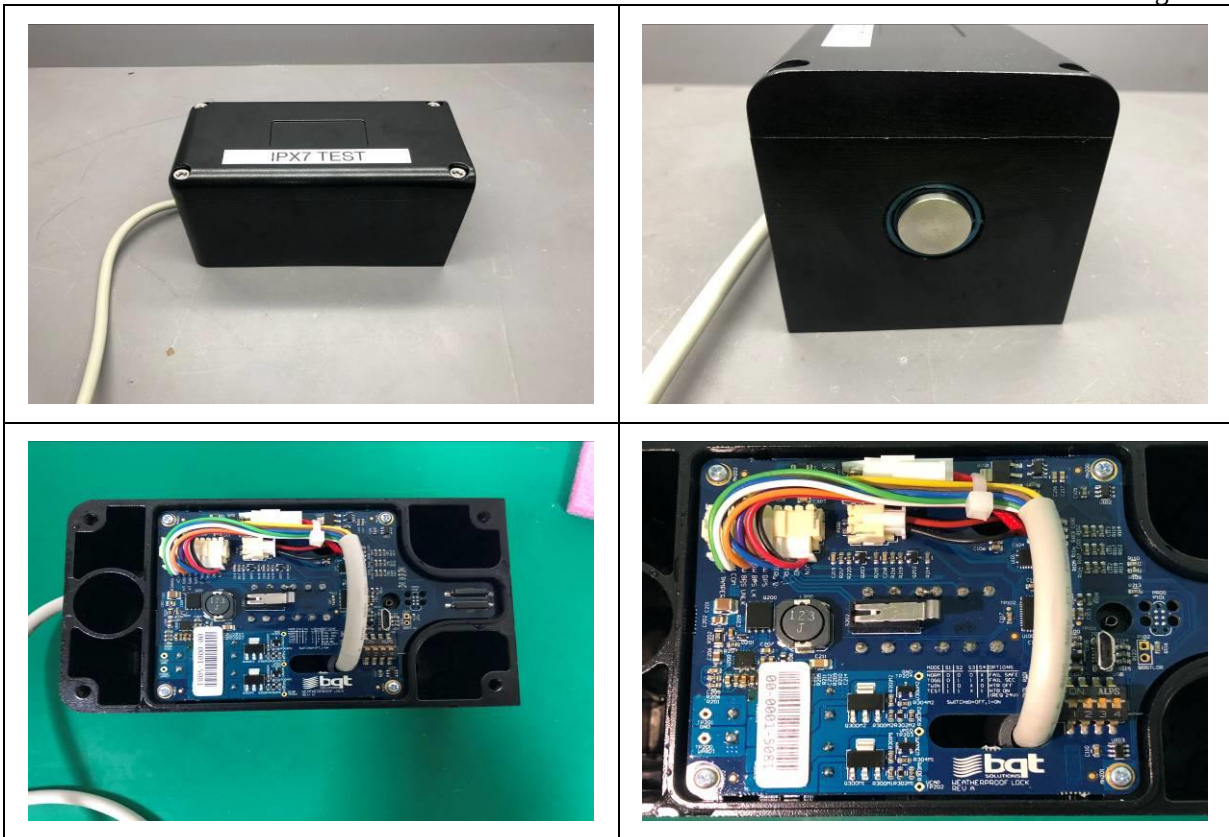


Figure 5.The photos of sample U180920005 after test

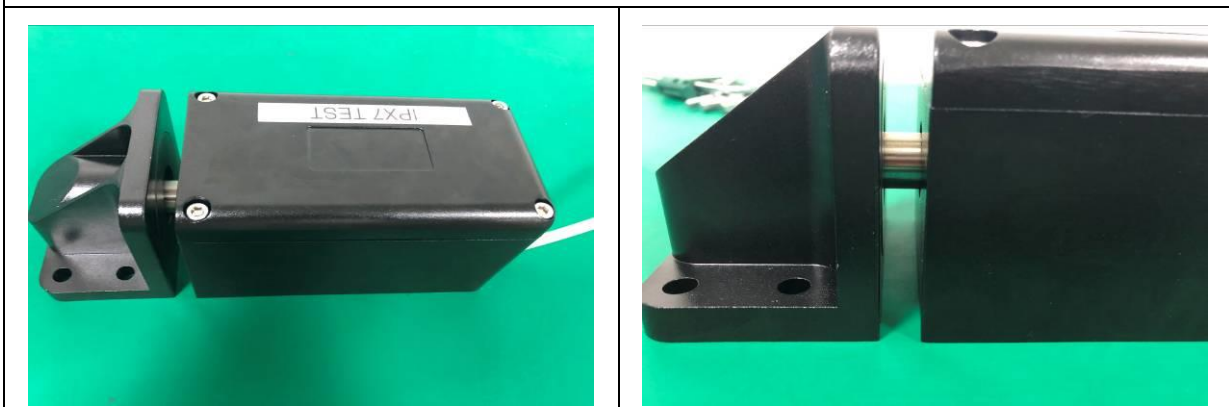


Figure 6.The photos of sample U180920005 functional check after test

Appendix 3

Test Item: Dust test (IP6X)**1. Environment Condition:**

Temperature: 22.6°C ; Relative humidity: 52%RH

2. Test Sample:

Sample No.	Sample name	Sample model	Sample photo	Sample Num.
U180920006	ORCA	YG80	See Appendix 1	1pc

3. Test Equipments:

No.	Name	Model No.
1	Dust test chamber	TL-SC-15F
2	IP4X test probe	/
3	DC power supply	MP3020D

4. Testing Standard:

IEC 60529-2013 Degrees of protection provided by enclosures (IP Code)

5. Test Condition:

The probe diameter: 1mm

Powder categories: talc powder

Density: 2kg/m³

Time: 2h

The samples need to be vacuumed during the test.

No electricity is used during the test.

Check product functional before and after test.

6. Test requirement:

After test, no dust is allowed in the electrical part of the product. The product's function should be normal.

7. Test Result:

Sample No.	Test result	Test requirement	Judgement
U180920006	After test, there is no obvious dust in the electrical part of the product. The product's function is normal.	After test, no dust is allowed in the electrical part of the product. The product's function should be normal.	Pass

8. Test Photos:

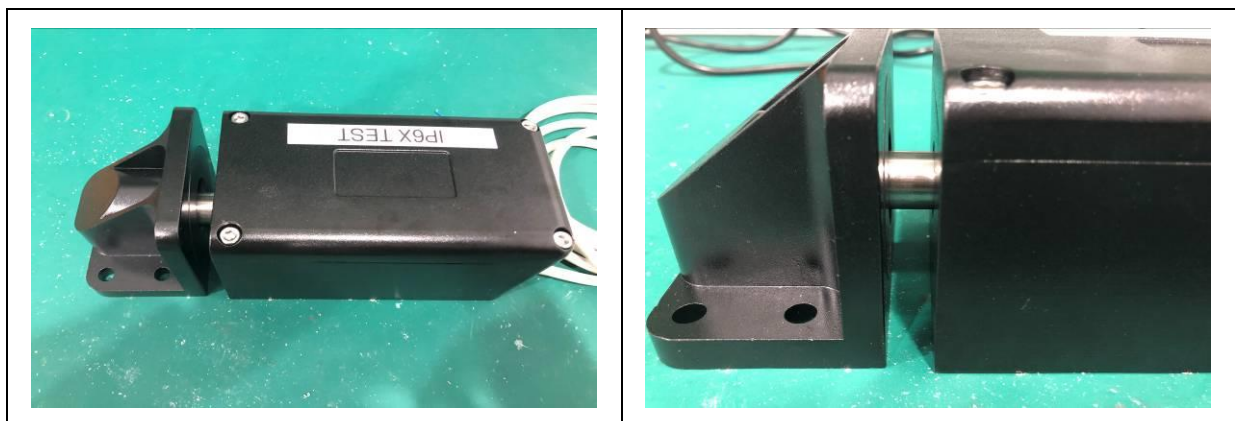


Figure 7.The photos of sample U180920006 functional check before test



Figure 8.The photo of sample U180920006 during test

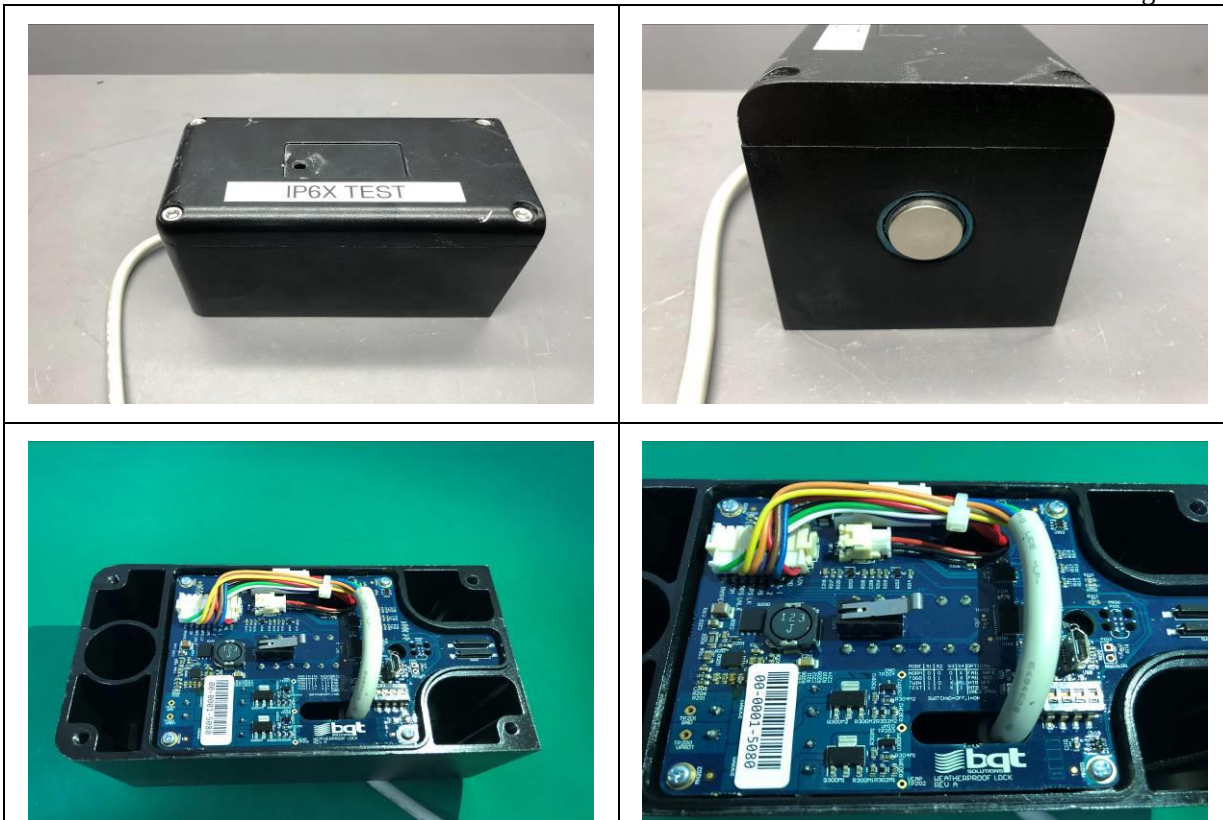


Figure 9.The photos of sample U180920006 after test



Figure 10.The photos of sample U180920006 functional check after test

*** End of Report ***