












# TEST REPORT

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<p>1. Report No. : DRCKREL1805-0217</p> <p>2. Customer</p> <ul style="list-style-type: none"><li>• Name : HANYOUNGNEX CO., LTD</li><li>• Address : 28, Gilpa-ro 71 beon-gil, Nam-gu, Incheon, Korea</li></ul> <p>3. Use of Report : Validation</p> <p>4. Product Name / Model Name : Digital thermometer / VX4</p> <p>5. Test Method Used : IEC 60529 : 2013, Degrees of protection provided by enclosures (IP Code)</p> <p>6. Date of Test : April 19, 2018 ~ May 14, 2018</p> <p>7. Testing Environment : Temperature (23 ± 3) °C, Humidity (52 ± 12) % R.H.</p> <p>8. Test Result : Refer to the attached document</p> <p>The test results presented in this test report are limited only to the sample supplied by applicant and the use of this test report is inhibited other than its purpose. This test report shall not be reproduced except in full, without the written approval of DT&amp;C Co., Ltd.</p> <table border="1" data-bbox="255 1391 1385 1532"><tr><td data-bbox="255 1391 389 1532" rowspan="2">Affirmation</td><td data-bbox="389 1391 884 1447">Tested by</td><td data-bbox="884 1391 1385 1447">Technical Manager</td></tr><tr><td data-bbox="389 1447 884 1532">Name : GyuJin Lim </td><td data-bbox="884 1447 1385 1532">Name : JaeHan Jung </td></tr></table> <p>The above test report is the accredited test result by Korea Laboratory Accreditation Scheme which signed the ILAC-MRA.</p> <p><b>2018. 05. 24.</b></p> <p><b>DT&amp;C Co., Ltd.</b> Accredited by KOLAS, Republic of KOREA</p> <p><small>* This laboratory is not accredited for the test results marked</small></p>				Affirmation	Tested by	Technical Manager	Name : GyuJin Lim 	Name : JaeHan Jung 
Affirmation	Tested by	Technical Manager						
	Name : GyuJin Lim 	Name : JaeHan Jung 						

If this report is required to confirmation of authenticity, please contact to [report@dtnc.net](mailto:report@dtnc.net)



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## 1. Overview

This test is performed in accordance with requirement of the customer along with the test specifications and the test product submitted by the customer.

## 2. Product

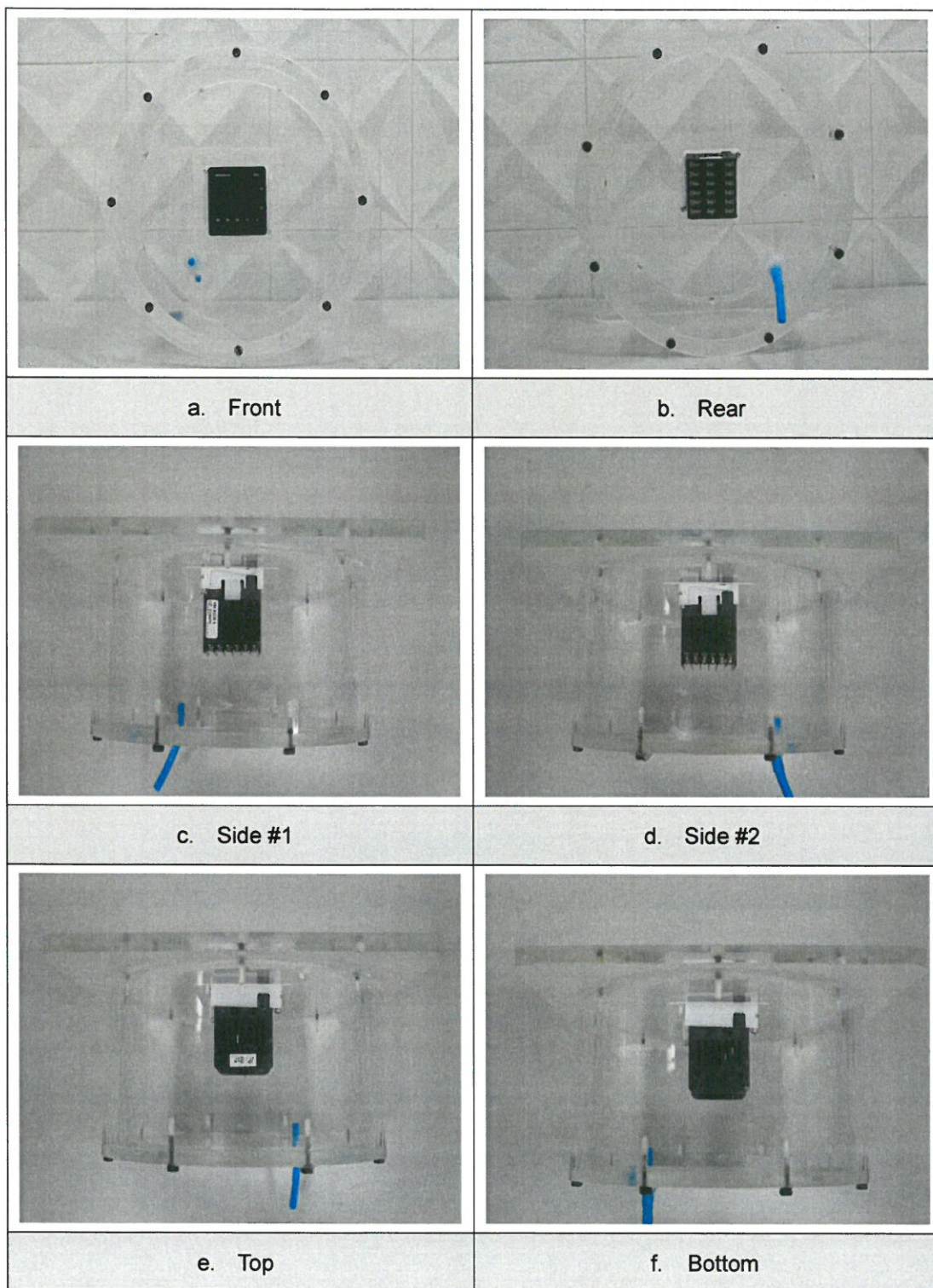
### 2.1. Description

- (1) Customer & Manufacturer : HANYOUNGNUX CO., LTD
- (2) Product name : Digital thermometer
- (3) Model name : VX4





## 2.2. Photograph



[Photo 1] Digital thermometer



## 3. Test condition &amp; Test result

## 3.1. IP6X

&lt;Table 1&gt; Product information

Customer	HANYOUNGNUX CO., LTD	Date	May 14, 2018
Product name	Digital thermometer	Model name	VX4
Test standard	IEC 60529 : 2013, Degrees of protection provided by enclosures (IP Code)		

## (1) Test conditions

- 1) IP Code : IP6X (Dust-tight)
- 2) Talcum powder(mesh) : wire diameter of which is 50  $\mu\text{m}$  and the nominal width of a gap between wires 75  $\mu\text{m}$
- 3) Amount of talcum powder of the test chamber : 2 kg/m<sup>3</sup>
- 4) Maximum depression : 2 kPa (20 mbar)
- 5) Test time : 8 h
- 6) Product check : Observation of dust penetration
- 7) Product condition : ① Unpackaged    ② Non-operation
- 8) Product quantity : 1 EA





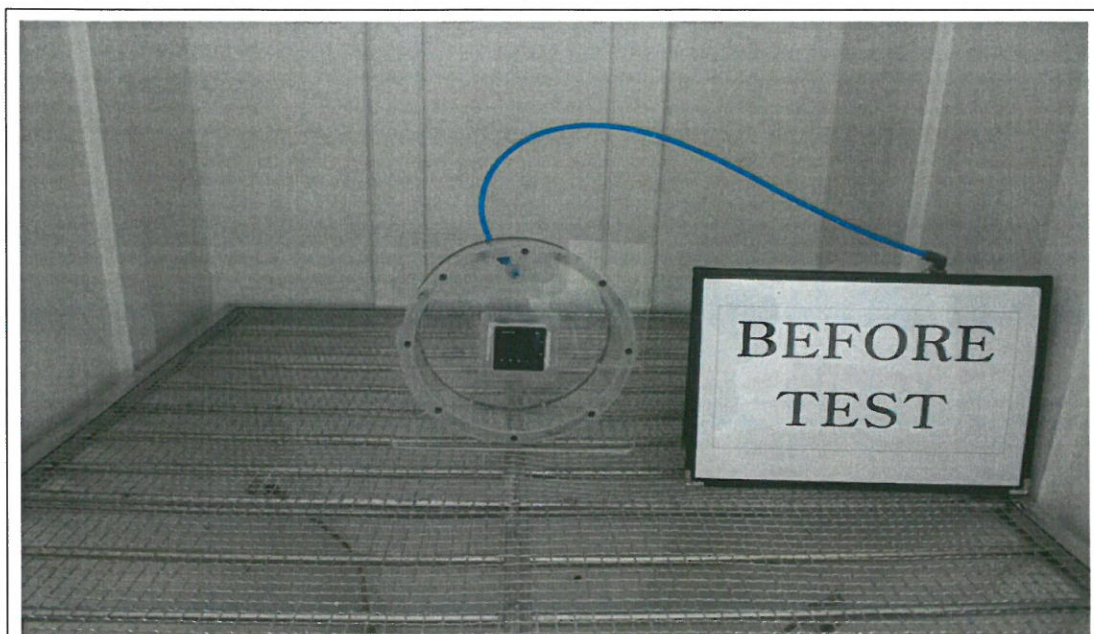
## (2) List of used equipment

&lt;Table 2&gt; List of used equipment

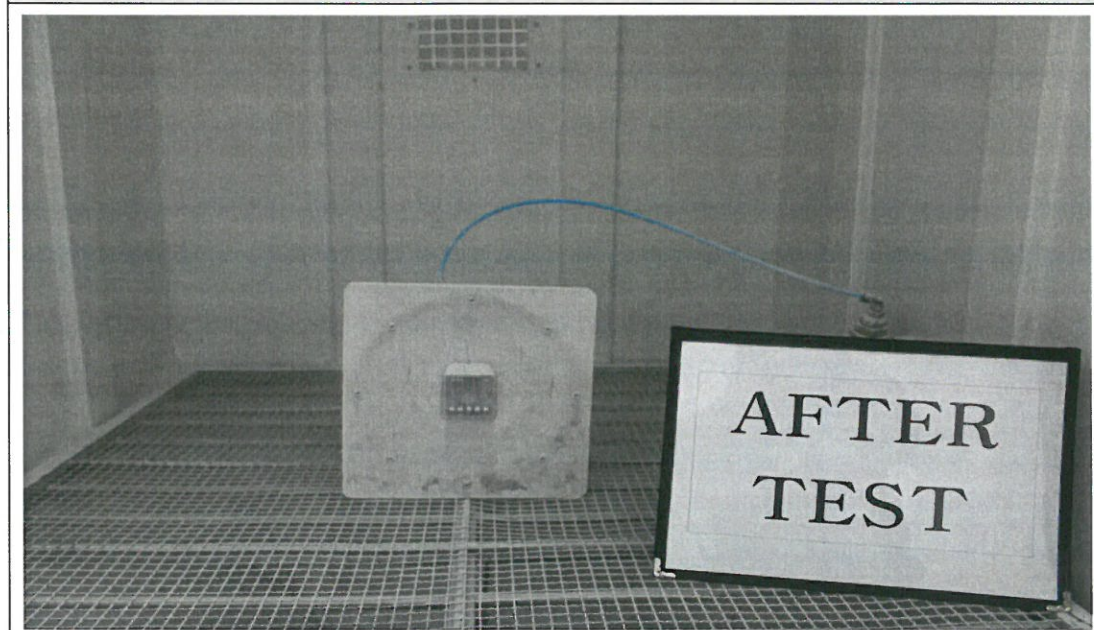
Description	Model / Manufacturer	Serial number	The next scheduled calibration date	Calibration laboratory
Dust tester (Timer)	EN-DCT-1000F / Enex (LE3S / AUTONICS)	20150420-03 (14-16764)	- (March 28, 2019)	- (HCT)
Standard sieve	75 $\mu$ m / Chung Gye Sang Gong Sa	E9	February 21, 2019	SICT
Differential pressure gauge	(0 ~ 300) mmH <sub>2</sub> O / DWYER	E10	June 10, 2018	SICT
Gas flow meter	RMA-14-SSV / DWYER	E11	June 14, 2018	KTL
Thermo- hygrometer	PC-5000TRH-2 / SATO	#3	August 16, 2018	SICT



(3) Test photograph



a. Before the test



b. After the test

[Photo 2] Test photograph





(4) Test result

<Table 3> Test result

Check list	Test result
Observation of dust penetration	No dust penetration is observed. (Refer to * Appendix 1.)





### 3.2. IPX6

<Table 4> Product information

Customer	HANYOUNGNUX CO., LTD	Date	April 19, 2018
Product name	Digital thermometer	Model name	VX4
Test standard	IEC 60529 : 2013, Degrees of protection provided by enclosures (IP Code)		

#### (1) Test conditions

- 1) IP Code : IPX6 (Protected against powerful water jets)
- 2) Water flow rate :  $100 \times (1 \pm 5 \%)$  L/min
- 3) Nozzle diameter : 12.5 mm
- 4) Spray distance : (2.5 ~ 3.0) m
- 5) Test time : 3 min
- 6) Product check : Observation of water penetration
- 7) Product condition : ① Unpackaged ② Non-operation
- 8) Product quantity : 1 EA

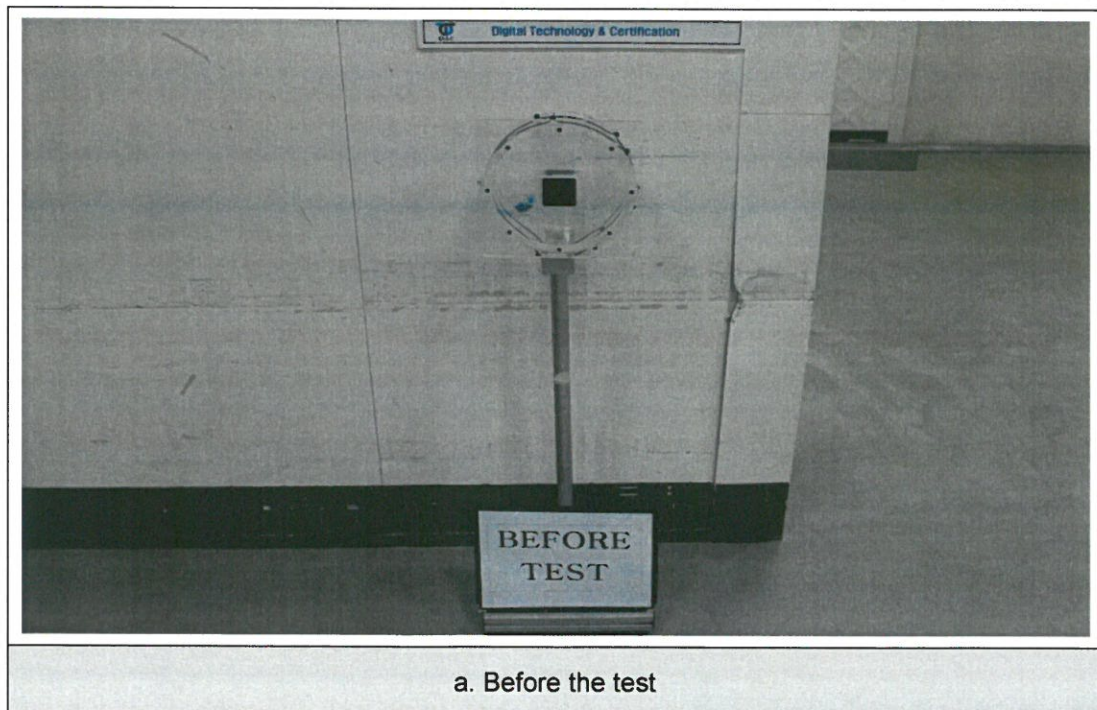


## (2) List of used equipment

&lt;Table 5&gt; List of used equipment

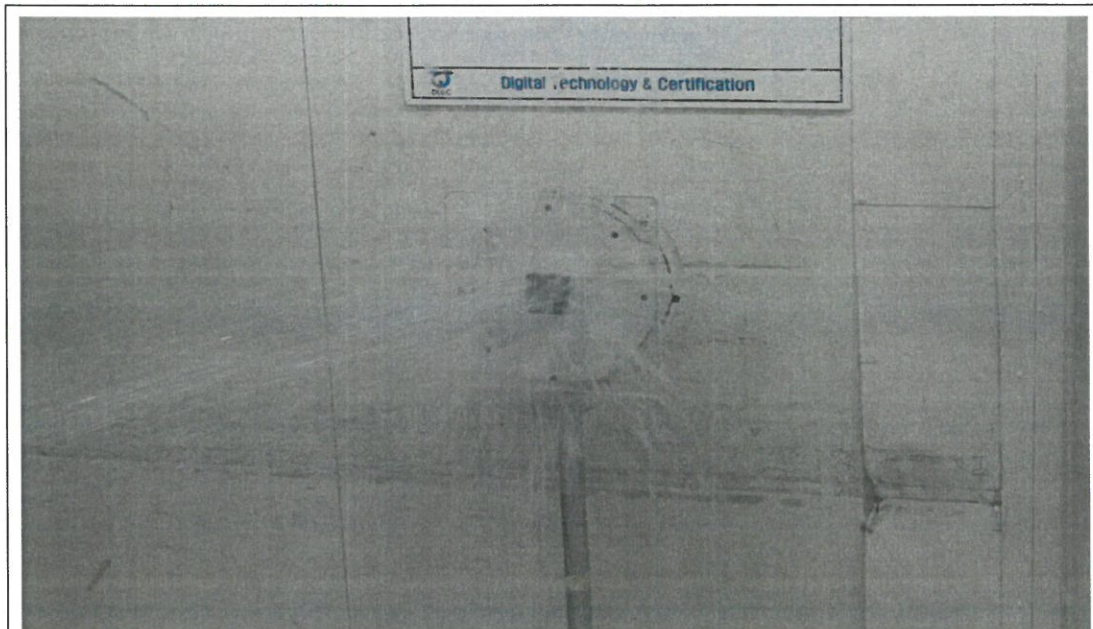
Description	Model / Manufacturer	Serial number	The next scheduled calibration date	Calibration laboratory
IP tester	SOS-100 / SCM TECH	E1	-	-
Area flow meter	GA-101 / Kometer	G-1503240	December 14, 2018	DDHI
Stop watch	HS-70W-1DF / CASIO	412Q08R	February 14, 2020	SICT
Tape line	SFGL25-75 / TAJIMA	E15	September 02, 2018	HCT
Thermo - hygrometer	PC-5000TRH-2 / SATO	#3	August 16, 2018	SICT

## (3) Test photograph





(Continue)



b. During the test



c. After the test

[Photo 3] Test photograph



(4) Test result

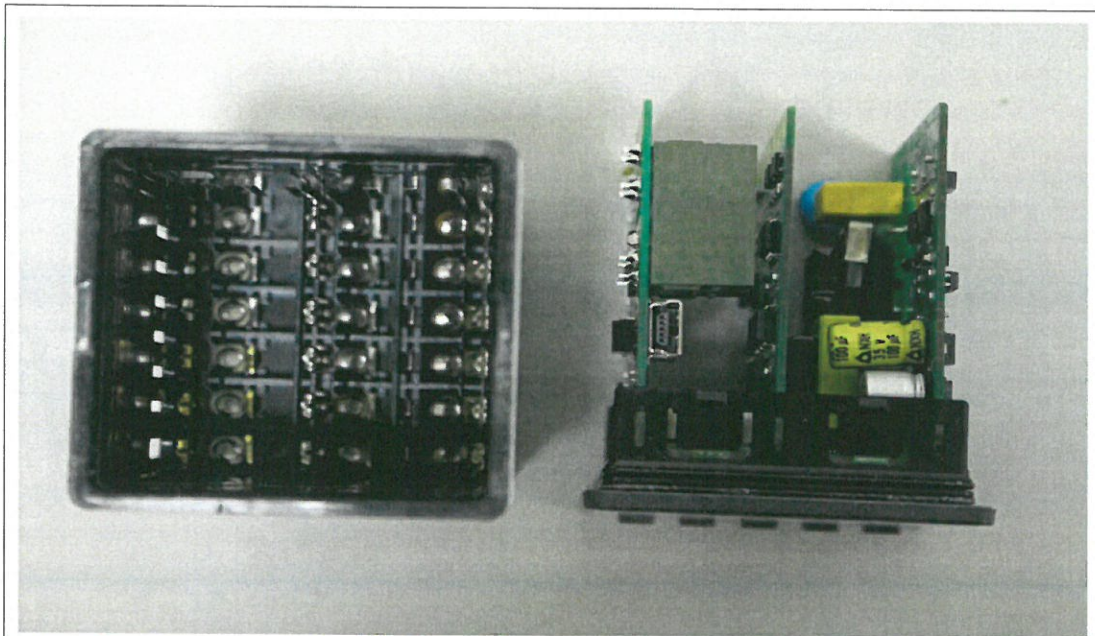
<Table 6> Test result

Check list	Test result
Observation of water penetration	No water penetration is observed. (Refer to * Appendix 1.)

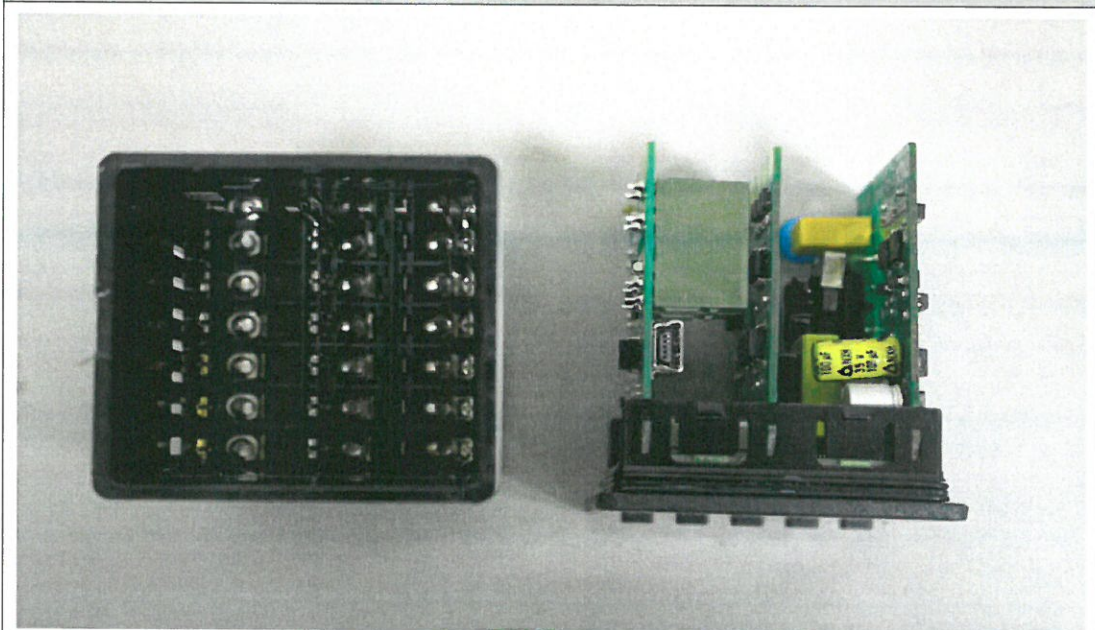




\* Appendix 1. Test result



a. IP6X test



b. IPX6 test

[Photo 4] Test result photograph

-End-

