



# TEST REPORT





**DT&C Co., Ltd.**

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1. Report No. : DRCKREL1805-0193
2. Customer
  - Name : LG Electronics Inc.
  - Address : 10, Magokjungang 10-ro, Gangseo-gu, Seoul, Republic of Korea
3. Use of Report : Validation
4. Product Name / Model Name : CV7A / LM-Q815L
5. Test Method Used : IEC 60529 : 2013, Degrees of protection provided by enclosures (IP Code)
6. Date of Test : April 23, 2018 ~ April 24, 2018
7. Testing Environment : Temperature (24 ± 2) °C, Humidity (50 ± 4) % R.H.
8. Test Result : Refer to the attached document

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&C Co., Ltd.

Affirmation	Tested by	Technical Manager
	Name : KiDeok Kim 	Name : JaeHan Jung 

The above test report is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.

**2018. 05. 03.**

**DT&C Co., Ltd.**

Accredited by KOLAS, Republic of KOREA

\* This laboratory is not accredited for the test results marked

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

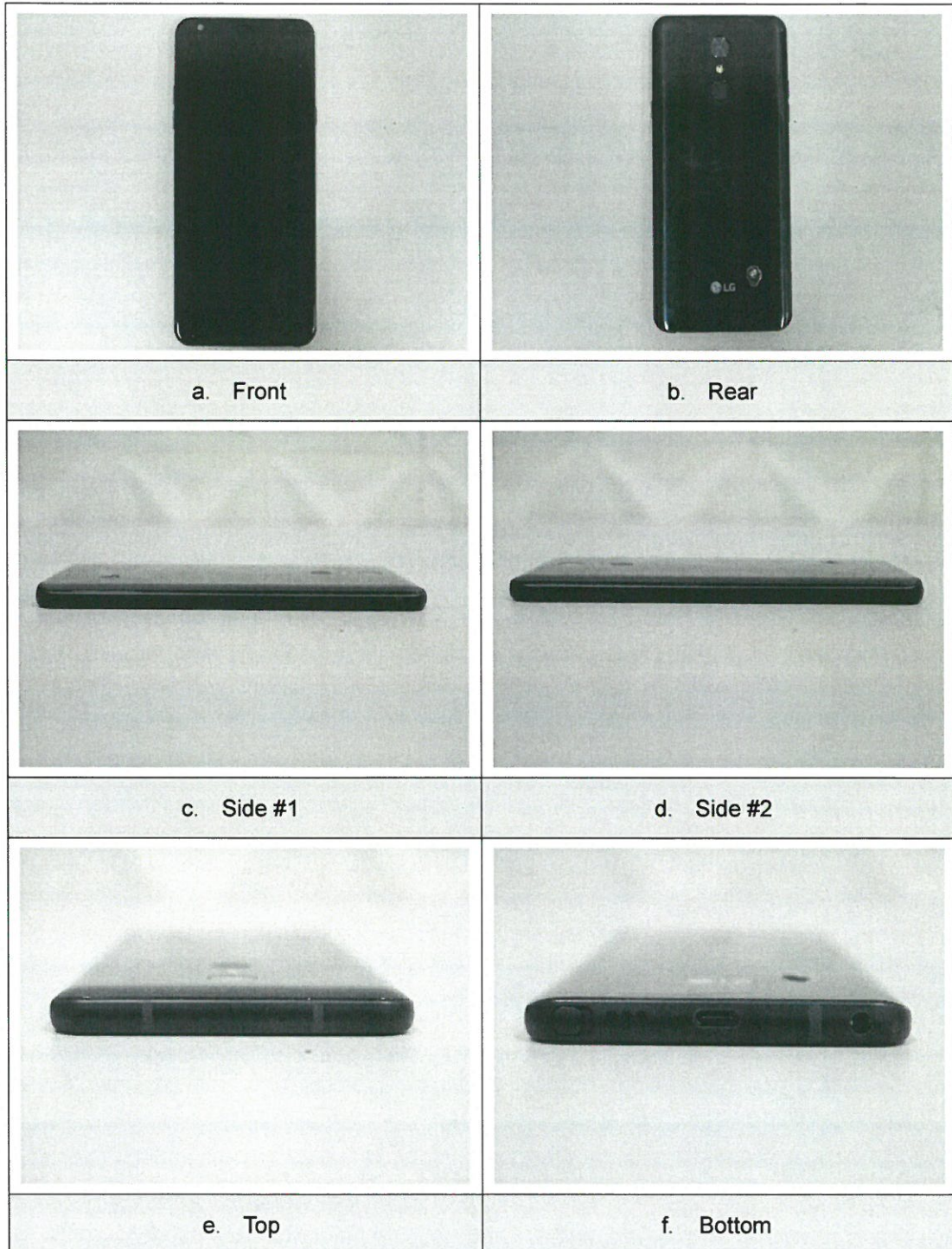
### 2.1. Description

- (1) Customer & Manufacturer : LG Electronics Inc.
- (2) Product name : CV7A
- (3) Model name : LM-Q815L
- (4) Derivative model : LM-Q710FA, LM-Q710RA, LM-Q710FM, LM-Q710GX,  
LM-Q710ZM, LM-Q710ZA, LM-Q710EM, LG-Q710PL, LM-Q710WA,  
LM-Q815S, LM-Q815K, LM-Q815L, LM-Q810S, LM-Q810K,  
LM-Q810L, SS1805



2.2. Photograph

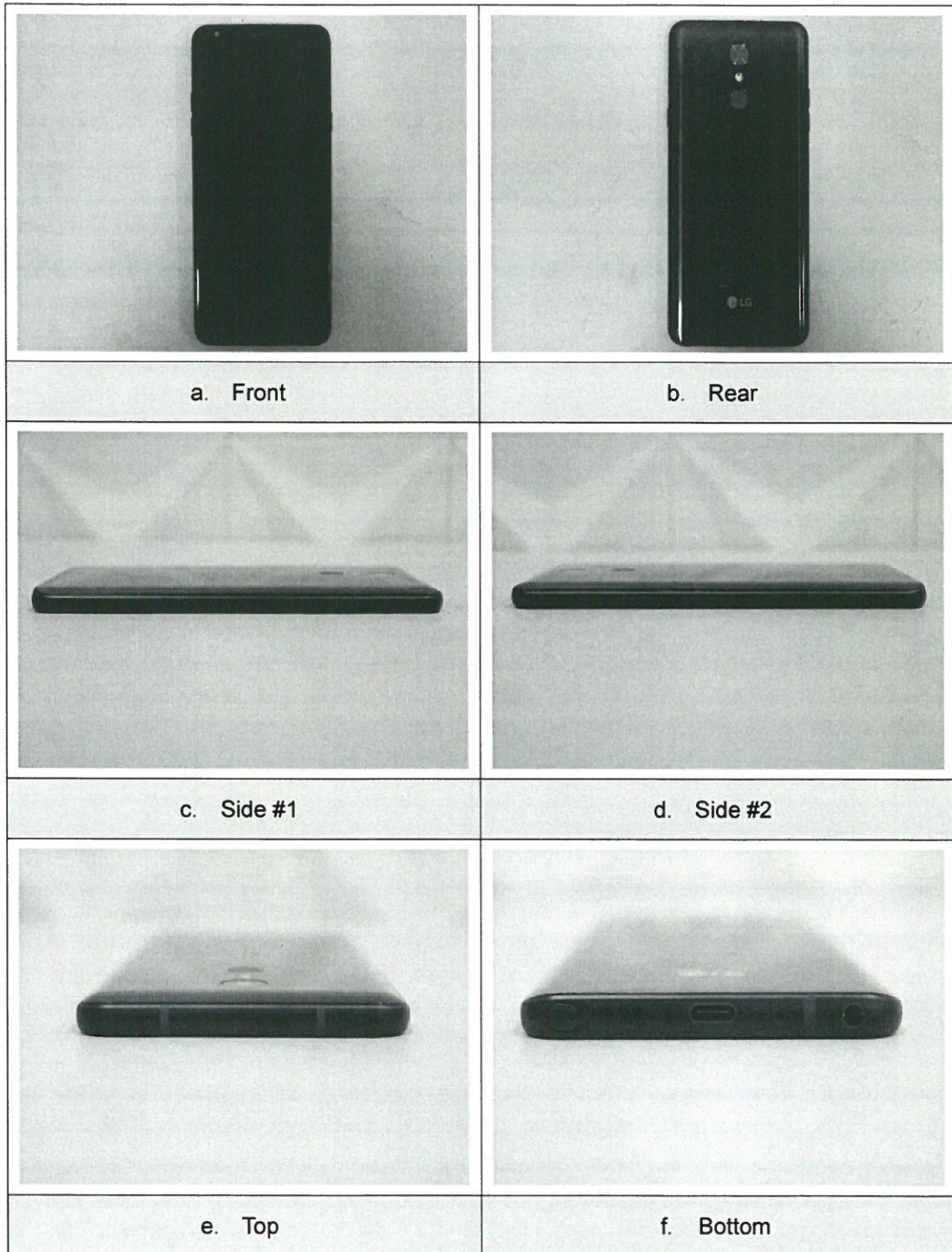
(1) IP6X



[Photo 1] IP6X test product



(2) IPX8



[Photo 2] IPX8 test product



3. Test condition & Test result

3.1. IP6X

<Table 1> Product information

Customer	LG Electronics Inc.	Date	April 23, 2018 ~ April 24, 2018
Product name	CV7A	Model name	LM-Q815L
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  $\text{kg}/\text{m}^3$
- 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



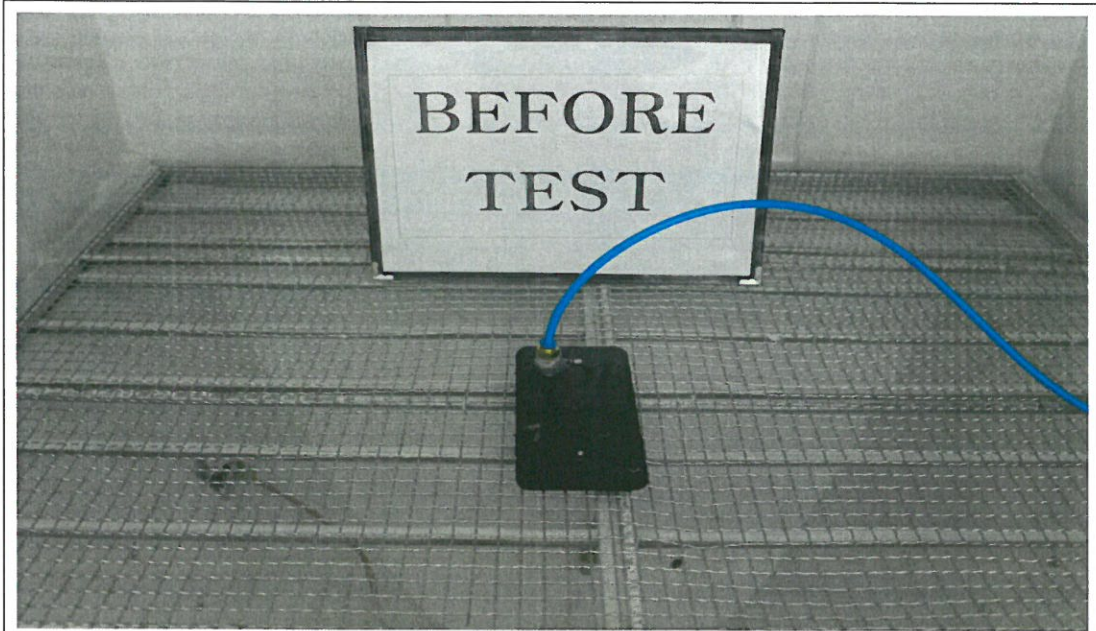
## (2) List of used equipment

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

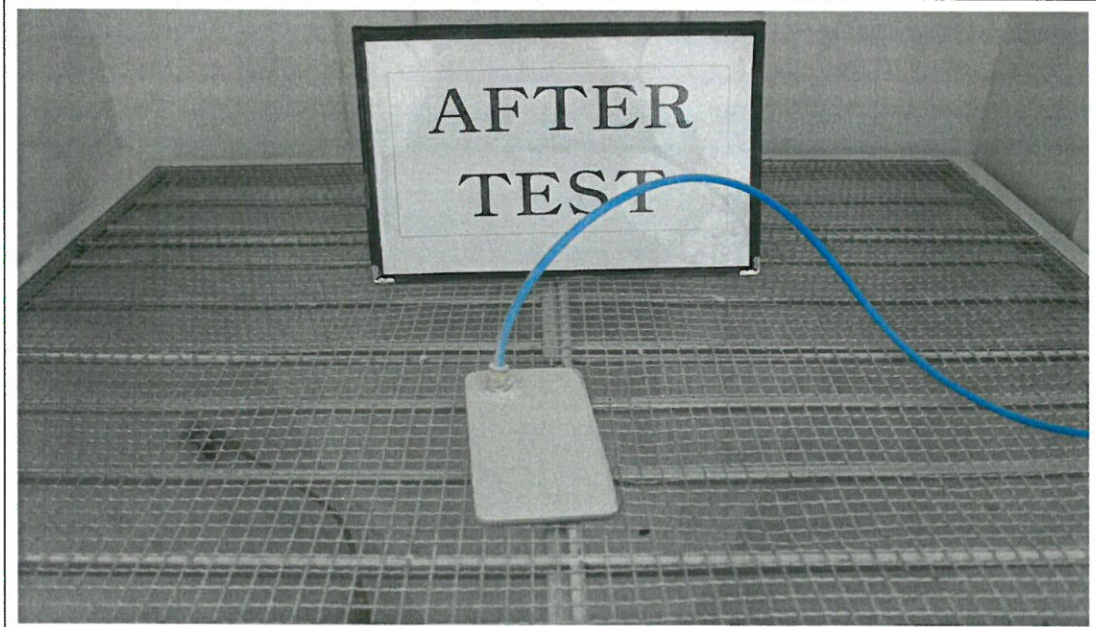
Description	Model / Manufacturer	Serial number	The next scheduled calibration date	Calibration laboratory
Dust chamber (Timer)	EN-DCT-1000F / Enex (LE3S / AUTONICS)	20150420-03 (14-16764)	- (March 28, 2019)	- (HCT)
Standard sieve	75 $\mu$ m / Chung Gye Sang Gong Sa	E9	February 21, 2019	SICT
Differential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





## (4) Test result

&lt;Table 3&gt; Test result

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



3.2. IPX8

<Table 4> Product information

Customer	LG Electronics Inc.	Date	April 23, 2018
Product name	CV7A	Model name	LM-Q815L
Test standard	IEC 60529 : 2013, Degrees of protection provided by enclosures (IP Code)		

(1) Test conditions

- 1) IP Code : IPX8 (Protected against the effects of continuous immersion in water)
- 2) The temperature difference between the water and product : 2.8 °C
- 3) Immersion depth : 1 500 mm
- 4) Immersion time : 30 min
- 5) Product check : Observation of water penetration
- 6) Product condition : ① Unpackaged ② Non-operation
- 7) Product quantity : 1 EA



(2) List of used equipment

<Table 5> List of used equipment

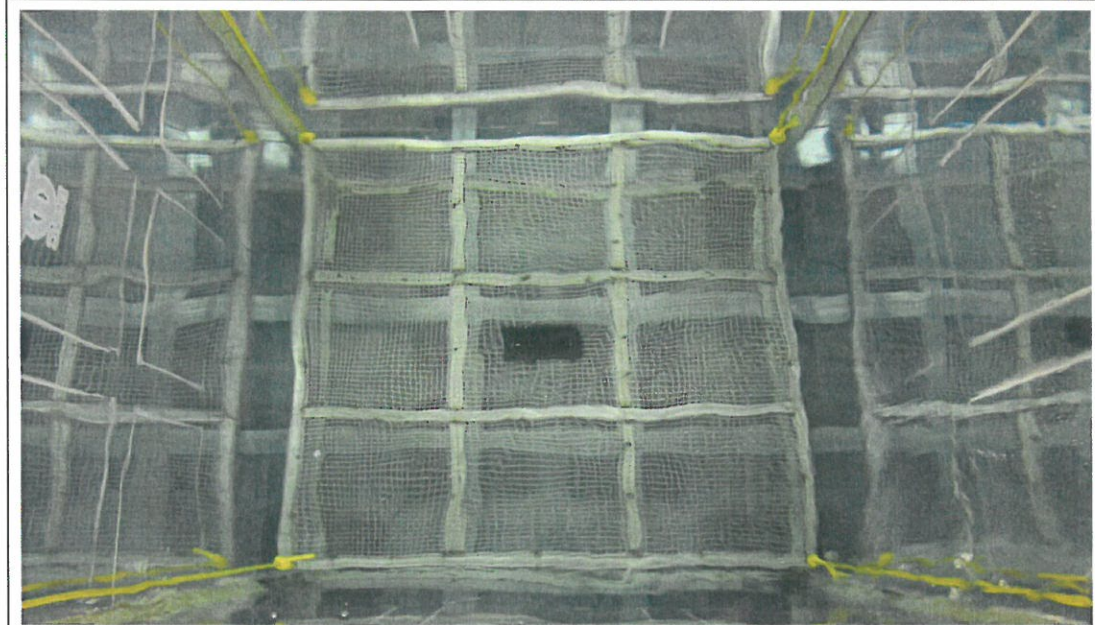
Description	Model / Manufacturer	Serial number	The next scheduled calibration date	Calibration laboratory
IP tester	SOS-100 / SCM TECH	E1	-	-
Stop watch	HS-70W-1DF / CASIO	412Q08R	February 14, 2020	SICT
Tape line	SFGL25-75 / TAJIMA	E15	September 02, 2018	HCT
Infrared thermometer	561 / FLUKE	31610040	February 19, 2019	SICT
Thermo-hygrometer	PC-5000TRH-2 / SATO	#3	August 16, 2018	SICT



(3) Test photograph



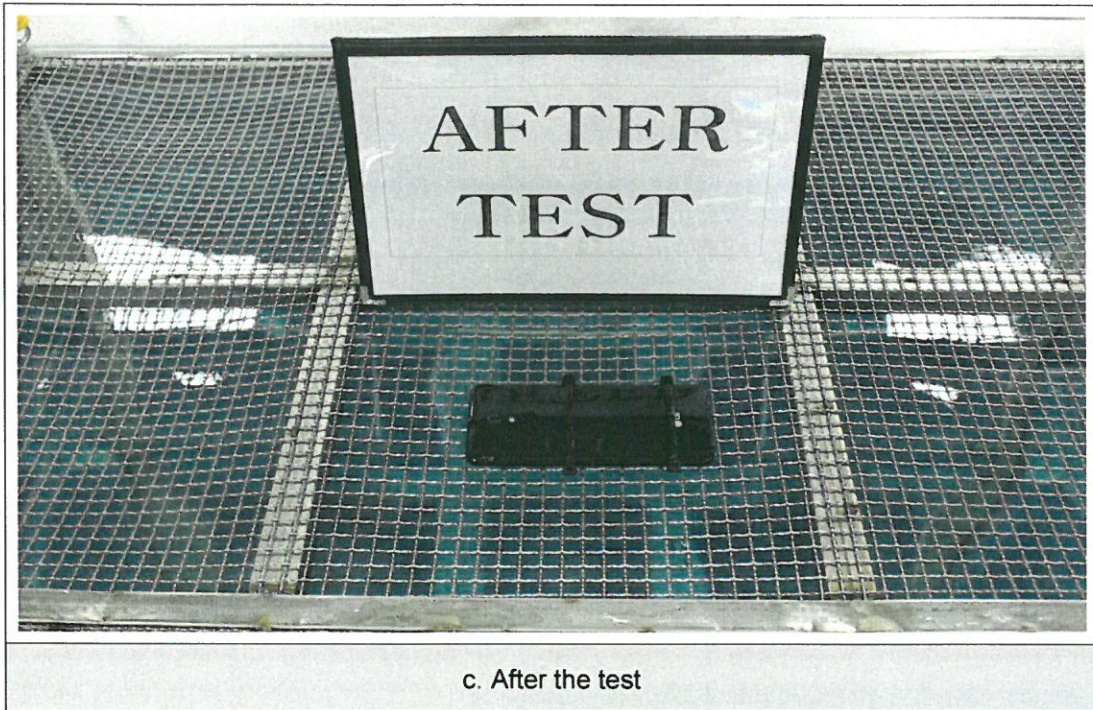
a. Before the test



b. During the test



(Continue)



c. After the test

[Photo 4] Test photograph

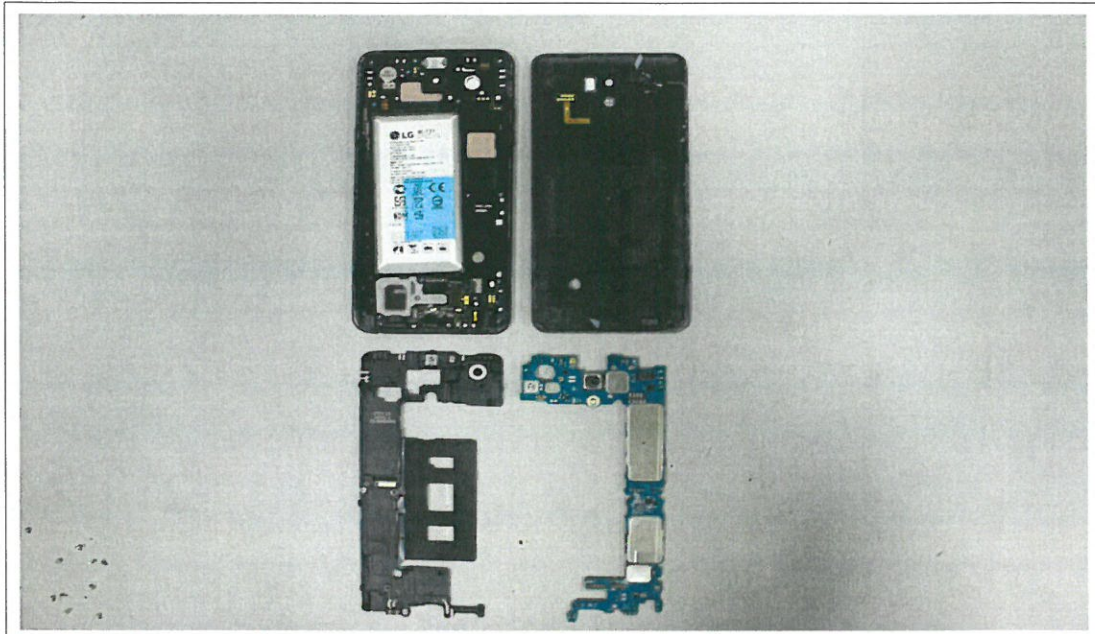
(4) Test result

<Table 6> Test result

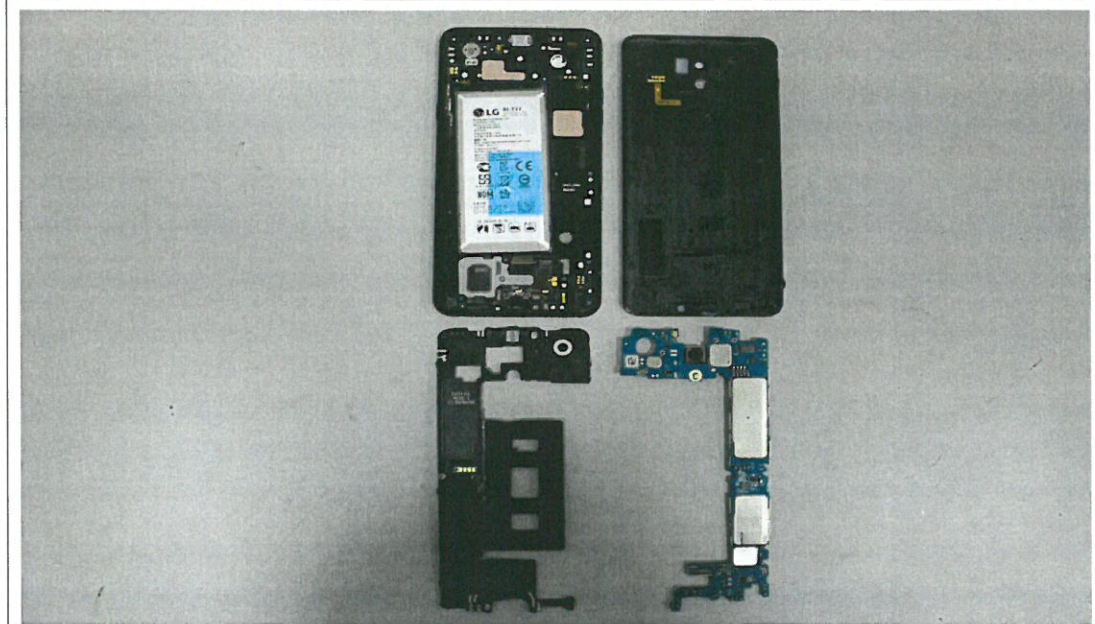
Check list	Test result
Observation of water penetration	No water penetration is observed. (Refer to * Appendix 1.)



\* Appendix 1. Test result



a. IP6X test result



b. IPX8 test result

[Photo 5] Test result photograph

-End-

