



Accredited Testing Laboratory under the terms of ISO/IEC 17025

ENVIRONMENTAL TEST REPORT

for

Product: Bio Entry W 2

“MODEL NAME(S): Bio Entry W 2”

AUTHORIZED

SUPREMA INC.

17F Parkview Tower, 248, jeongjail-ro, bundang-gu, Seongnam-si, Gyeonggi, 463-863, Rep of KOREA

March 09, 2016

Test Results

“Refer to the test results attached”

1. This report is not valid for whole product's quality. This has only done for product sample which had been submitted by client for testing.

2. This report has not been supposed to using as advertisement, materials for judgment etc without written consent from ONETECH.

This report is strictly forbidden to use other purpose.

3. This report has included the test result according to the testing methods or standards which are suggested from client.

(signature)

Jin Won Seo / Technical Manager

This is only valid in connection with Test Report: R163R-D016

TEST REPORT

Report No		R163R-D016	
Date of issue		March 09, 2016	
Testing Laboratory		ONETECH Corp.	AGR. No.: A163A-007R
Address		43-14, Jinsaegol-gil, Chowol-eup, Gwangju-si, Gyeonggi-do 12735 Korea	
Applicant		SUPREMA INC.	
Address		17F Parkview Tower, 248, jeongjail-ro, bundang-gu, Seongnam-si, Gyeonggi, 463-863, Rep of KOREA	
Standard		KS C IEC 60529:2006 / IP67	
Purpose of use		Quality Control	
Number of pages (Report)		10 Pages	
Number of pages (Attachments)		N/A	
Tested by		Approved by	
 		 	
(+ signature) Dong Kyun Park / Engineer		(+ signature) Jin Won Seo / Technical Manager	

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1. CLIENT AND MANUFACTURER INFORMATION

- . Applicant : SUPREMA INC.
- . Address : 17F Parkview Tower, 248, jeongjail-ro, bundang-gu, Seongnam-si, Gyeonggi, 463-863, Rep of KOREA
- . Manufacturer : SUPREMA INC.
- . Address : 17F Parkview Tower, 248, jeongjail-ro, bundang-gu, Seongnam-si, Gyeonggi, 463-863, Rep of KOREA

2. TEST SUMMARY

Standards	Test Items	Results
KS C IEC 60529:2006 / IP67	Degrees of protection provided by enclosures	Refer to 4.4

3. EUT (Equipment Under Test)

3.1 Identification of EUT

- . Equipment : Bio Entry W 2
- . Type/model : Bio Entry W 2

4. DEGREES OF PROTECTION PROVIDED BY ENCLOSURES TEST (IP67)

The Degrees of protection provided by enclosures Test (IP67) was performed at ONETECH Corp.

Date: February 26 ~ March 04, 2016

4.1 Environmental condition

Ambient temperature	(25 ± 2) °C
Relative humidity	(30 ± 3) % R.H.
Atmospheric Pressure	102 kPa

4.2 Test equipment used

Model Number	Manufacturer	Description	Serial Number	Calibration date
■ BPT-02	DaeKyung Eng	1.0 mm Test Probe	N/A	November 11, 2013
■ PFI-1000N	E.D.&D.	PORTABLE FORCE INDICATOR	07-0164-07	May 06, 2015
■ SOC-300DSEM	SCM	DUST CHAMBER	SOC-11-43-10DSEM	N/A
■ RMA-21-SSV (T18T)	Dwyer	Gas Flowmeters; Variable Area	Chi S98-C	September 23, 2015
■ PA-20	KOMETER	Gas Flowmeters; Variable Area	Chi S98-E	September 23, 2015
■ RMA-13-SSV (T46S)	Dwyer	Gas Flowmeters; Variable Area	Chi S98-B	September 23, 2015
■ -	DAEKYUNG	Water Tank	-	N/A
■ HS-5	CASIO	STOP WATCH	N/A	April 28, 2015

4.3 Test condition

4.3.1 Degrees of protection against access to hazardous parts against solid foreign objects

Items	Descriptions
1 st Characteristic Numbers	6 (Tests for protection against access to hazardous parts indicated by the first characteristic numeral)
Test Condition	1) access to hazardous parts - Access probes : Test wire 1.0 mm diameter, 100 mm long - Test force : 1 N ± 10 % - Inserted through any openings of the enclosure with the force specified. 2) solid foreign objects access - Access probes : Rigid steel rod 1.0 ⁺ ₀ ^{0.05} mm diameter with edges free from burrs - Test force : 1 N ± 10 % - Inserted through any openings of the enclosure with the force specified.

4.3.2 Dust Test

Items		Descriptions
1st Characteristic Numbers		6 (Tests for protection against solid foreign objects indicated by the first characteristic numeral)
Enclosures Category		☒ Category 1 ☐ Category 2 ☐ Category 1 and Category 2
Test Condition		-Wire diameter: 50 μm -Width between wires: 75 μm -Amount of talcum powder of the test chamber: 2 kg/m ³
Method	Category 1	☐ If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2 h. ☒ If, with a maximum depression of 2 kPa(20 mbar), the extraction rate is less than 40 volumes per hour, the test is continued until 80 volumes have been drawn, or a period of 8 h has elapsed.
	Category 2	☐ The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump. Any drain-hole normally open shall be left open for the duration of the test. The test shall be continued for a period of 8 h.

4.3.3 Water Test

Items		Descriptions
2nd Characteristic Numbers		7 (Degrees of protection against ingress of water indicated by the second characteristic numeral)
Test Condition		-Immersion tank Water-level on enclosure : 0.15 m above top 1 m above bottom -The duration of the test: 30 min

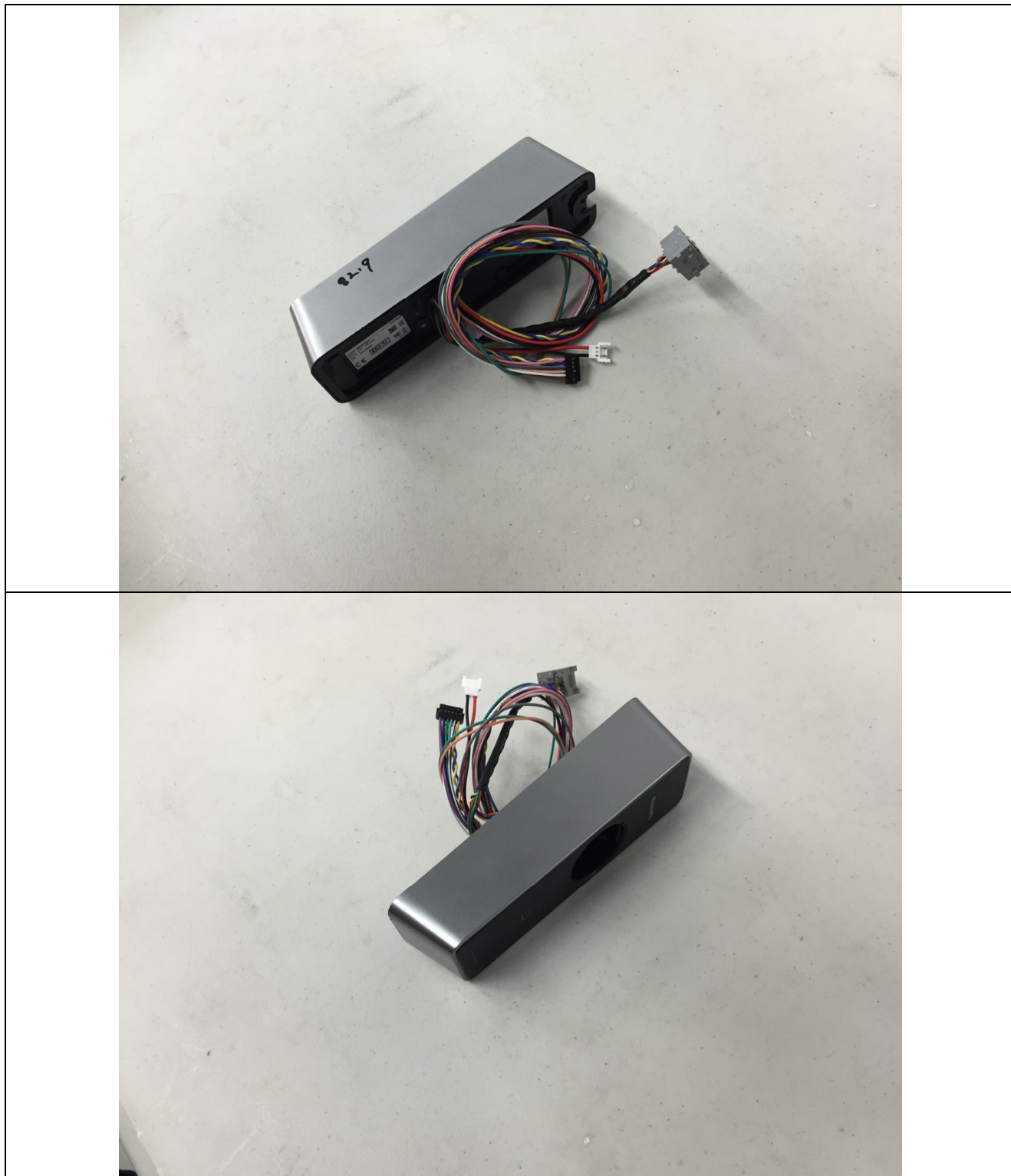
4.4 Test result

Item	IP Code	Result
Bio Entry W 2	IP6X	No pass of probe were found at any point within the enclosure.
	IP6X	No traces of dust deposits were found at any point within the enclosure.
	IPX7	No water deposits were found at any point within the enclosure.

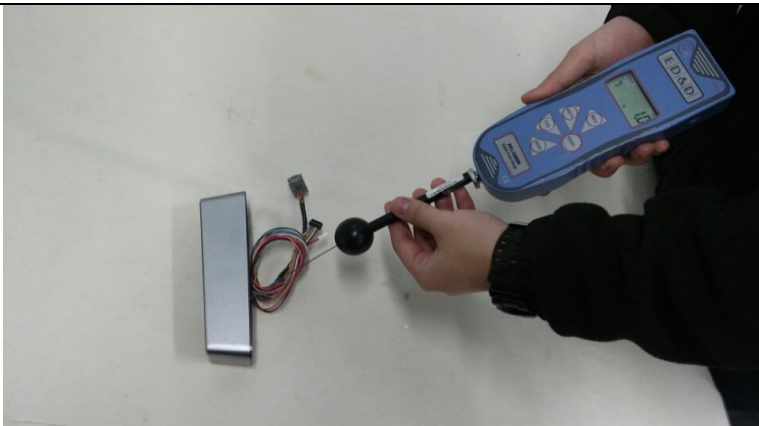
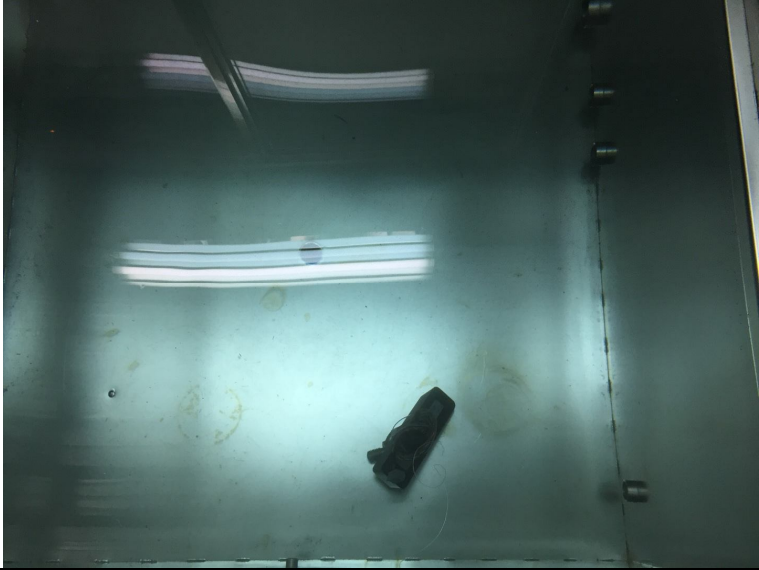


Tested by: Dong Kyun Park / Test Engineer

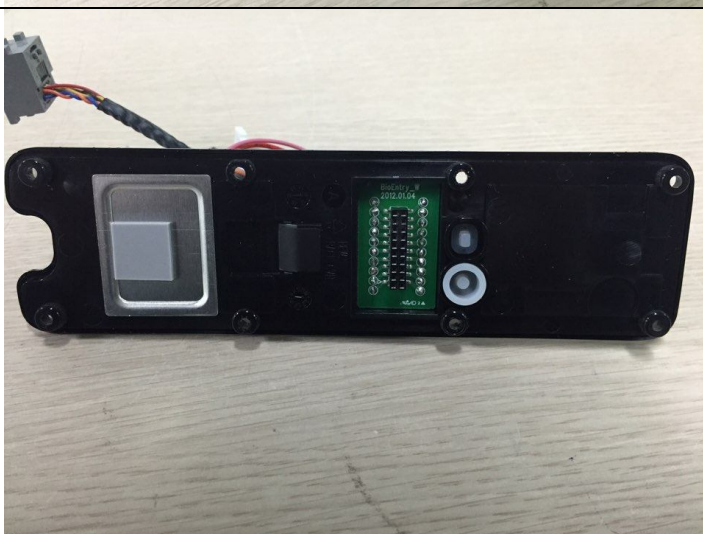
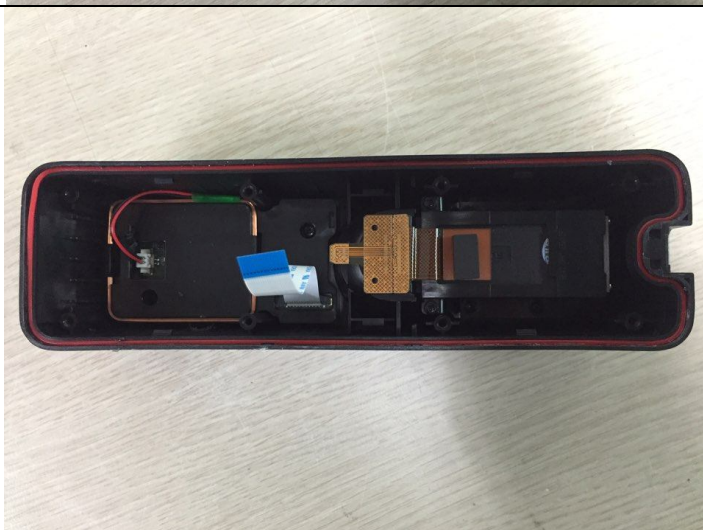
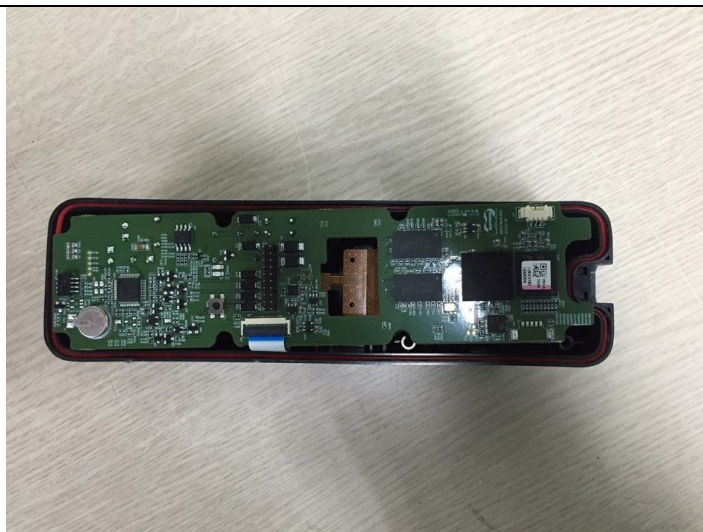
APPENDIX I - PHOTO OF EUT



APPENDIX II - PHOTO OF IP67 TEST

		
	IP6X (Tests for protection against access to hazardous parts indicated by the first characteristic numeral)	
		
	IP6X (Tests for protection against solid foreign objects indicated by the first characteristic numeral)	
		
	IPX7 (Degrees of protection against ingress of water indicated by the second characteristic numeral)	

APPENDIX III - PHOTO OF INSIDE AFTER IP67 TEST



IP6X



IPX7

APPENDIX IV - DRAWING

