



Accredited Testing Laboratory under the terms of ISO/IEC 17025

ENVIRONMENTAL TEST REPORT

for

Product: Livescanner

“MODEL NAME(S): BioMini Slim (S20)”

APPLICANT

SUPREMA

11F Parkview Tower, 6 Jeongja, Bundang, Seongnam, Gyeonggi, 463-863 Korea

June 13, 2013

Test Results

“Refer to the test results attached”

1. As a test result of sample which was submitted from the client, this test report does not guarantee the whole product quality.
2. This test report should not be used for public relations, advertisement, conduct propaganda and raised for a suit without a written agreement of testing institute, and should not be used for various purpose beside subscribed use.
3. This test report including test result conducted by using the test method which was suggested form a client.

(signature)

Goan Woo Lee / Managing Director

This is only valid in connection with Test Report: R136R-013

TEST REPORT

Report No: R136R-013

Date of issue: June 13, 2013

Testing Laboratory: ONETECH Corp.

AGR. No.: A136A-029

Address: 301-14 Daessangnyeong-ri, Chowol-eup, Gwangju-si, Gyeonggi-do 464-862 Korea

Test location: Same as above

Applicant.....: SUPREMA

Address.....: 11F Parkview Tower, 6 Jeongja, Bundang, Seongnam, Gyeonggi, 463-863 Korea

Standard: KS C IEC 60529:2006

Purpose of use.....: Quality Control

Number of pages (Report).: 7 Pages

Number of pages (Attachments)......: N/A

Prepared by:



Reviewed by ...:



(+ signature)

Sun Young Yoon / Engineer

(+ signature)

Jin Won Seo / Project Engineer

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1. CLIENT AND MANUFACTURER INFORMATION

-. Applicant : SUPREMA
 -. Address : 11F Parkview Tower, 6 Jeongja, Bundang, Seongnam, Gyeonggi, 463-863 Korea
 -. Manufacturer : SUPREMA
 -. Address : 11F Parkview Tower, 6 Jeongja, Bundang, Seongnam, Gyeonggi, 463-863 Korea
 -. Name of contact : LEE SEUNG WON
 -. Telephone No. : +82-31-710-2447
 -. Fax No. : +82-31-783-4516

2. TEST SUMMARY

2.1 Test items and results

Standards	Test Items	Results
KS C IEC 60529:2006	Degrees of protection provided by enclosures(IP65)	No apparent damage

2.2 Additions, deviations, exclusions from standards

No additions, deviations or exclusions have been made from standard.

3. EUT (Equipment Under Test)

3.1 Identification of EUT

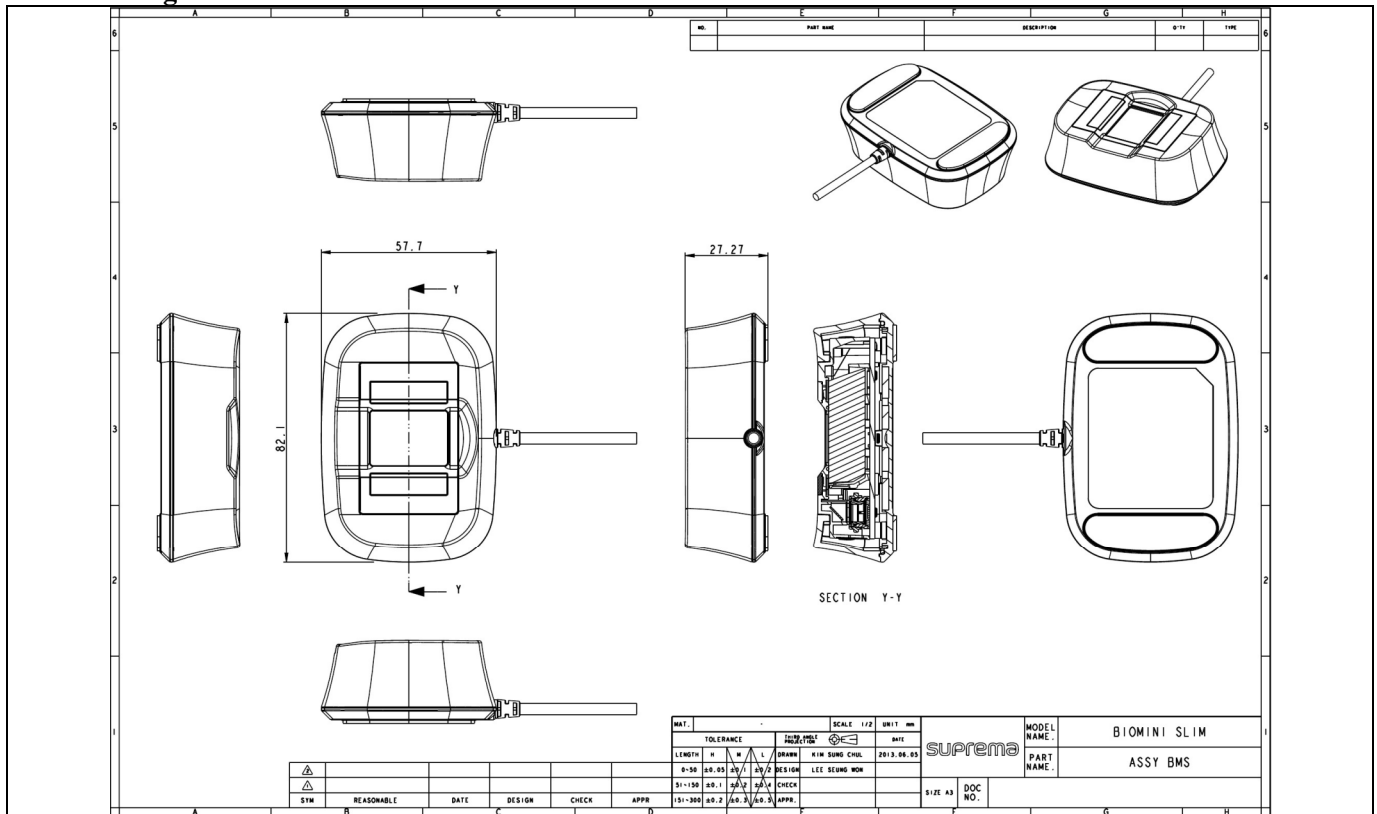
-. Equipment : Livescanner
 -. Type/model : BioMini Slim (S20)
 -. Brand Name : N/A
 -. Serial number : N/A
 -. Derivative Model : N/A

3.2 Configuration

Defined as equipment needed for correct operation of the EUT, but not considered as tested:

Model	Manufacturer	Description	Connected to
BioMini Slim (S20)	SUPREMA	Livescanner (EUT)	-

3.3 Drawing



4. DEGREES OF PROTECTION PROVIDED BY ENCLOSURES TEST(IP65)

The Degrees of protection provided by enclosures Test (IP65) was performed at ONETECH Corp.

Date : June 11 ~ June 12, 2013

4.1 Environmental condition

Ambient temperature 26 °C
Relative humidity 53 % R.H.

4.2 Test equipment used

Model Number	Manufacturer	Description	Serial Number
■ -	DAEKYUNG	JET NOZZLE SET(6.3 mm)	-
■ SOC-300DSEM	SCM	DUST CHAMBER	SOC-11-43-10DSEM

4.3 Test condition

4.3.1 Dust Test

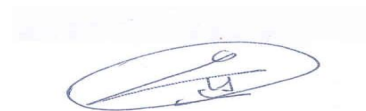
Items		Descriptions
1st Characteristic Numbers		6
Enclosures Category		<input checked="" type="checkbox"/> Category 1 <input type="checkbox"/> Category 2 <input type="checkbox"/> Category 1 and Category 2
Test Condition		-Wire diameter: 50 μm -Width between wires: 75 μm -Amount of talcum powder of the test chamber: 2 kg/m ³
Method	Category 1	<input type="checkbox"/> If an extraction rate of 40 to 60 volumes per hour is obtained the duration of the test is 2 h. <input checked="" type="checkbox"/> 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	<input type="checkbox"/> 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.
Acceptance Conditions		The protection is satisfactory if no deposit of dust is observable inside the enclosure at the end of the test.

4.3.2 Water Test

Items	Descriptions
2st Characteristic Numbers	5
Test Condition	-Internal diameter of the nozzle: 6.3 mm -Delivery rate: 12.5 l/min \pm 5 % -Distance from nozzle to enclosure surface: Between 2.5 m & 3 m -The duration of the test: 3 min
Acceptance Conditions	-Be sufficient to interfere with the correct operation of the equipment or impair safety. -Deposit on insulation parts where it could lead to tracking along the creepage distances. -Reach live parts or windings not designed to operate when wet. -Accumulate near the cable end or enter the cable if any.

4.4 Test result

Item	IP Code	Result
BioMini Slim (S20)	IP65	Pass



Tested by: Sun Young Yoon / Test Engineer

APPENDIX | - PHOTO OF IP43 TEST



IP6X



IPX5