

TEST REPORT

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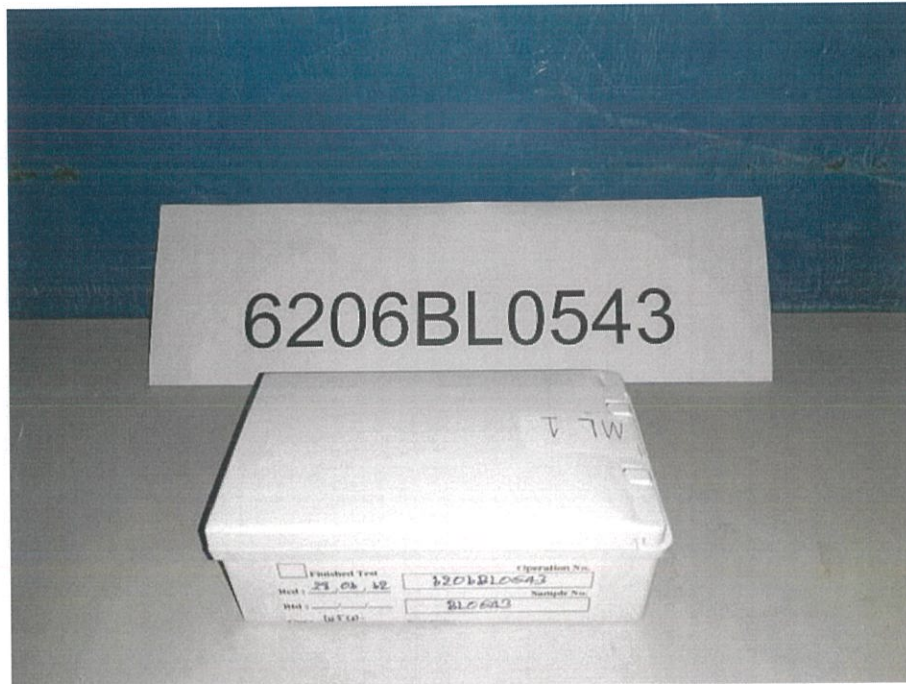
Report No.	L0503(E)/62	
Operation No.	6206BL0543	
Name and address of customer	LEGO ELECTRIC CO.,LTD. 72/127 Somdetphrachaotaksin Rd, Bukkhalo, Thonburi Bangkok 10600	
Sample description	Sample was submitted and identified by/on behalf of the customer as following:  ELECTRICAL PLASTIC ENCLOSURES  Trademark: PRI PRODUCTS  Model: ML1  Size: 140X78X50mm  1 set (1unit)	
Sample No.	BL0543	
Sample characteristic and condition	Normal	
Sample received date	June 28, 2019	
Test date	July 4, 2019 – July 5, 2019	
Issue date	July 9, 2019	
Test standard	IEC 60529:2001 (IP54)	
Test report	Details of the test report as shown on the following pages.	
Summary of testing	The test results comply with standard	
Tested by (name + signature)	Mr. Sutikorn Martdoug	
Approved by (name + signature)	Mr. Rachen Muongon	
Certified by (name, function + signature)	Mr. Arthit Wussanamongkol Division manager, Operation division 1	 

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Name and address of manufacturer	P.R.I. GROUP CO.,LTD 37/9 Moo 2 Sainoi, Sainoi, Nothaburi 11150
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Sample photo



Possible test case verdicts :

- P : test object does meet the requirement
- F : test object does not meet the requirement
- N : test case does not apply to the test object

### Test method

The sample was tested and complies with the IP54 requirement, Protection against access to hazardous parts, Protection against solid foreign objects and Protection against water test.

#### Protected against access to hazardous parts with a wire test (IP5X)

The test wire of 1.0 mm  $\varnothing$  shall not penetrate and adequate clearance shall be kept.

#### Dust-protected test (IP5X)

##### Category 2 enclosures

The enclosure under test is supported in its normal operating position inside the test chamber, but is not connected to a vacuum pump and test shall be continued for a period of 8 h.

The test is made using a dust chamber incorporating the basic principles show in figure 2 of IEC 60529:2001 whereby the powder circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be able to pass through a square-meshed sieve the nominal wire diameter of which is 50  $\mu\text{m}$  and the nominal width of a gap between wires 75  $\mu\text{m}$ . The amount of talcum powder to be used is 2 kg per cubic metre of the test chamber volume.

#### Protected against splashing water test (IPX4)

The test is made using of test devices described in figure 4 The oscillating tube has spray holes over the whole 180° of the semicircle and total flow rate is adjusted as specified in table 9 of IEC 60529:2001

The tube is caused to oscillate through an angle of almost 360°, 180° on either side of the vertical, the time for one complete oscillation being about 12 s. The test duration of the test is 10 min.

The support for the enclosure under test is perforated so as to avoid acting as a baffle and the enclosure is sprayed from every direction by oscillating the tube to the limit of its travel in each direction.

The tube radius is 400 mm.

The flow rate is 1.10 lite/min.

Distance from spray holes to enclosure surface 200 mm.

Test Result

Degree of protection			Result / Remark	Verdict	
Degree	Test	Definition			
IP54		Protected against access to hazardous parts with a wire	The access probe of 1.0 mm $\emptyset$ shall not penetrate	The access probe of 1.0 mm $\emptyset$ , not penetrate to the enclosure.	P
	IP5X	Dust-protected	Ingress of dust is not totally prevented, but dust shall not penetrate in quantity to interfere with satisfactory operation of the apparatus or to impair safety	No dust was found inside the enclosure.	P
	IPX4	Protected against splashing water	Water splashed against the enclosure from any direction shall have no harmful effects.	No water was found inside the enclosure.	P

Attached photo

Photo No.1 : Front view

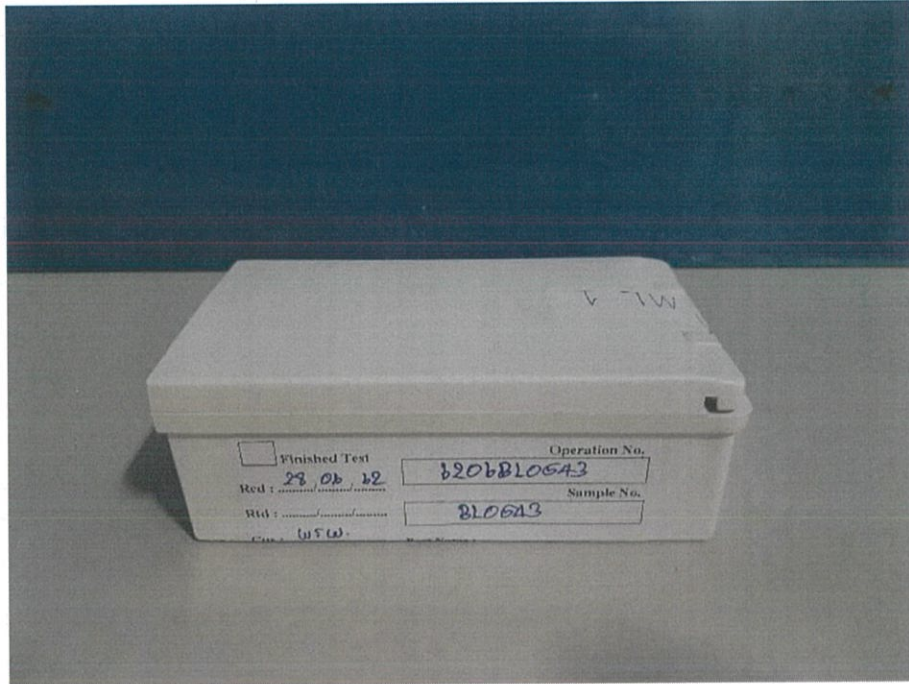


Photo No.2 : Back view



Attached photo

Photo No.3 : Side view



Photo No.4 : IP5X Dust test



Attached photo

Photo No.5 : IPX4 Water test

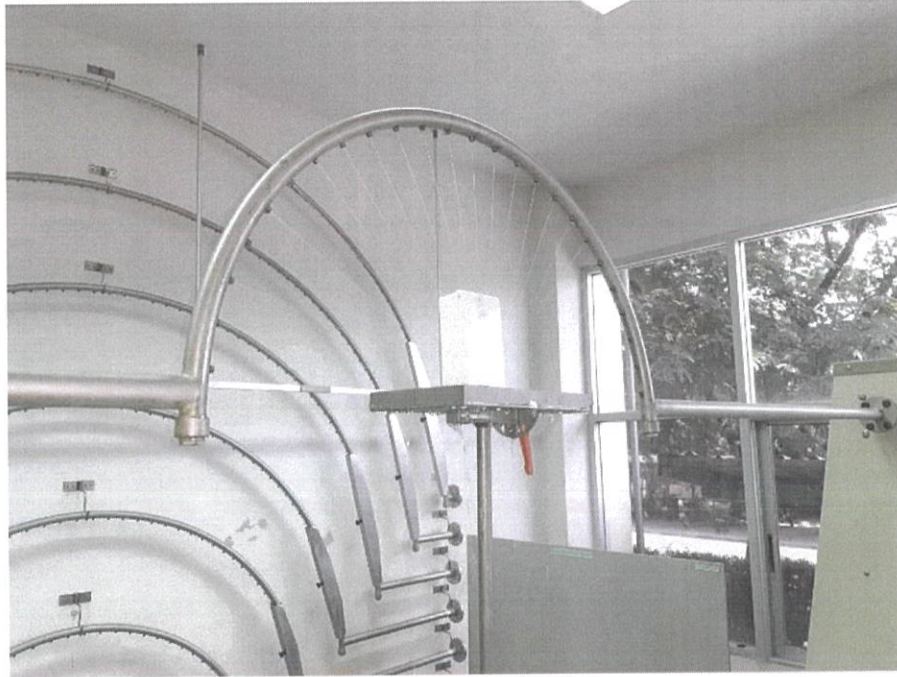
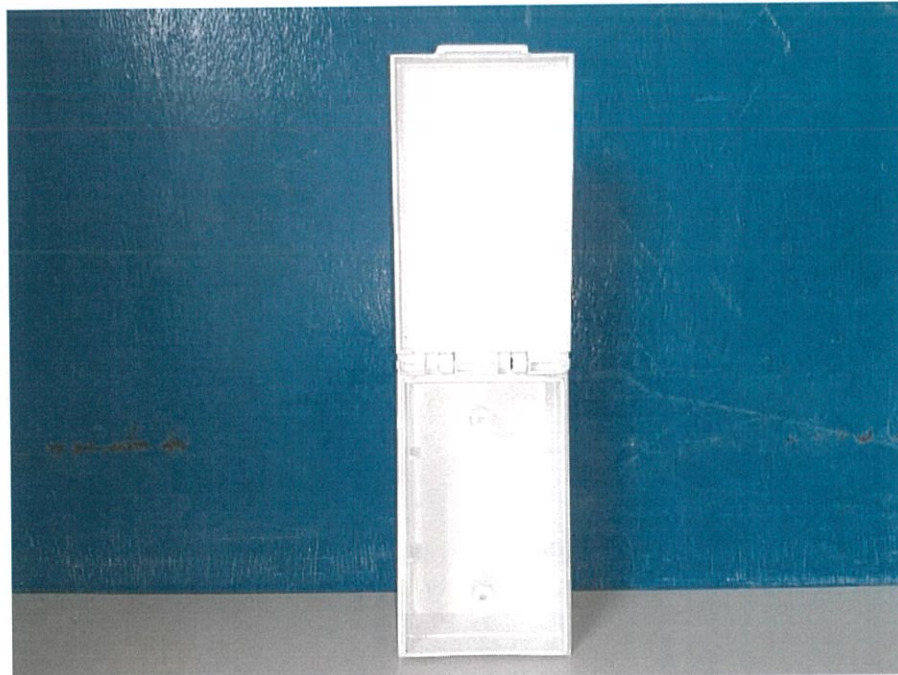


Photo No.6 : After test



Attached photo

Photo No.7 : After test

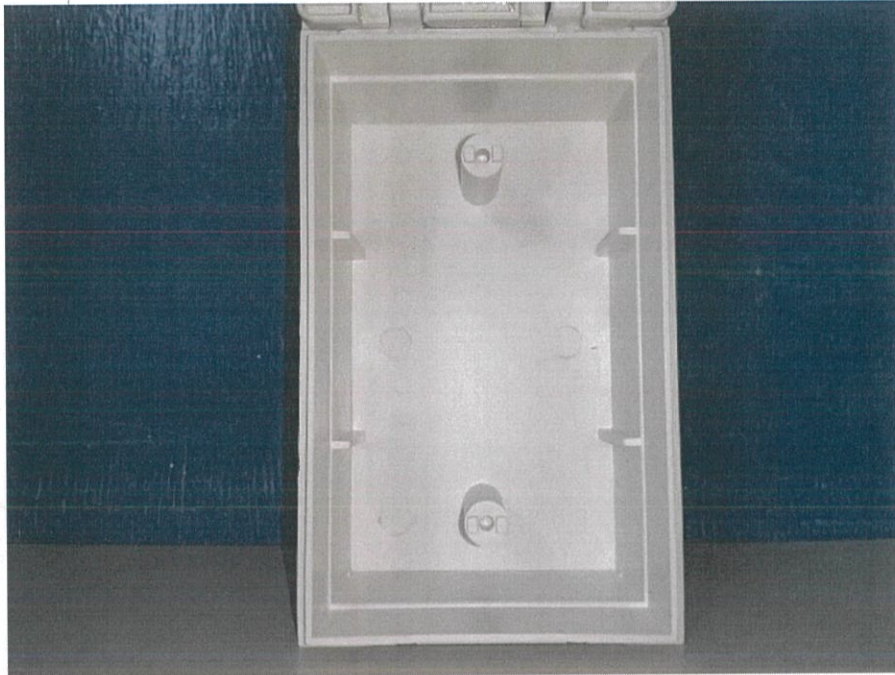


Photo No.8 : After test





Attached photo

Photo No.9 : After test

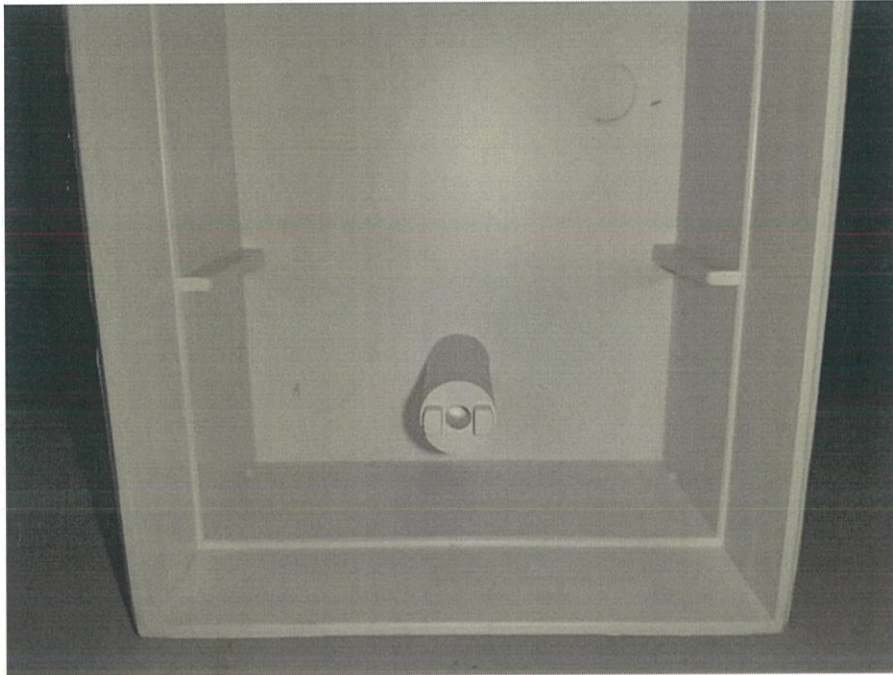


Photo No.10 : After test



- End of report -