



TEST REPORT FORM

Procedure used: ☒ 3A - STANDARD

☐ 3A - SMALL

☐ 3A - FLAT

☐ 3A - LONG

VERSION DATE:

WHEN SUBMITTING A 3A TEST REPORT FORM TO ISTA, PLEASE INCLUDE A PHOTO OR DRAWING OF THE TOP LOAD APPARATUS THAT WAS USED DURING TESTING.

> ISTA CERTIFIED LABORATORY

Laboratory Ninebot (Changzhou) Tech Co., Ltd.

ISTA Member ID 11120

Address No.2 workshop Intelligent Digital Industrial Park,Changzhou

Technician Performing Test Fan Yang

Science and Education City,No 18-65 Changwu Middle

Road,Changzhou,Jiangsu

City, State/Prov Changzhou, Jiangsu

Email fan.yang04@ninebot.com

ZIP/Postal Code, Country 213159, China

Lab Reference Number (if applicable)

> PRODUCT MANUFACTURER / SHIPPER

Test Requested by Yong,Yin

Phone +86 15724851960

Company Ninebot (Changzhou) Tech Co., Ltd.

Email yong.yin@ninebot.com

Address No.2 workshop Intelligent Digital Industrial Park,Changzhou

ISTA Member ID (if applicable) 11120

Science and Education City,No 18-65 Changwu Middle

Road,Changzhou,Jiangsu

City, State/Prov Changzhou, Jiangsu

ISTA Manufacturer's License Number (if applicable)

ZIP/Postal Code, Country 213159, China

> TEST DETAILS ALL FIELDS IN THIS SECTION MUST BE COMPLETED

Date Tested August 20, 2024

Product Damage Tolerance (PDT) No appearance damage on the package and product,and the product can ride normally

Number of Samples tested 1

Package Degradation Allowance (PDA) No serious deformation or ruptures on the outer carton.

Number of replicate tests 0

PDT/PDA Determined By/Date August 20, 2024

Gross Weight 23.55kg

Method used to determine Pass/Fail Visual checking

External Dimensions (L x W x H) 1195mm x 215mm x 584mm

Person determining Pass/Fail result Fan Yang

For review and acknowledgement of testing, submit test report and all appropriate additional documents/photos/data to:

ISTA • 1400 Abbot Road, Suite 160 • East Lansing, MI 48823-1900 USA

ista@ista.org • www.ista.org • Ph: +1 517 333 3437

FORM 3A updated MARCH 2017

> PRODUCT AND PACKAGE DESCRIPTIONS ALL FIELDS IN THIS SECTION MUST BE COMPLETED It is strongly recommended that photographs, detailed drawings, and/or complete specifications of product and exterior and interior packaging accompany this report. If there is insufficient information supplied by the product manufacturer, please indicate the reason in the TEST RESULTS section, at the end of this report form.

Specific PRODUCT TESTED: Include, as applicable, product name, brand, model number, serial number and similar information that will help to identify the specific product tested

Product Name: F2 PRO

Product NO.: F2P240820MJ -01

PRODUCT Description: Describe product in detail. Include type of product, accessories and other identifying information, including specifics on bottles, containers and liquid or solid contents

The product is an electric scooter that can travel short distances , it includes related assembly tools, instruction and charger.

Was the PACKAGING used during testing:

☐ **ORIGINAL** as arrived in the lab for testing

☒ **NEW** re-packaged with new materials before testing

PACKAGE Condition before testing: List any damage or irregularities seen prior to testing

No deformation or ruptures on the outer carton..

No appearance damage on the product, and the product can ride normally.

Did the lab OPEN the packaged-product before testing to determine product condition? ☒ **YES** ☐ **NO**

If YES to above, list PRODUCT Condition before testing:

List any damage or irregularities seen prior to testing

There is no any damage and irregularities.

PACKAGE Description: Describe entire shipping unit. Description must be detailed and specific and should include type, style and material of packaging; corrugated board composition; cushion details including performance; film gauge and composition; application or package forming details; mold numbers; any pallet or skid; unitization method for unit loads; methods of closure, etc.

The product is put in the plastic bag, protected by EPS, put into the EPS with fittings, sealed by adhesive tape.

For review and acknowledgement of testing, submit test report and all appropriate additional documents/photos/data to:

ISTA • 1400 Abbot Road, Suite 160 • East Lansing, MI 48823-1900 USA

ista@ista.org • www.ista.org • Ph: +1 517 333 3437

FORM 3A updated MARCH 2017

> ORIENTATION

- ☒ The faces, edges and corners of the packaged-product were identified with the package in its **most stable orientation**.

Include photograph of face/edge/corner identification.



> ATMOSPHERIC CONDITIONING

Required Preconditioning (Ambient)

Ambient Temperature (°F / °C) 25°C

Ambient Humidity (%) 51%

Time of conditioning prior to test 12hours

Start of test:

Temperature (°F / °C) 20°C

Humidity (%) 53%

Optional Conditioning (Controlled)

Time of Conditioning (hours) -

Temperature (°F / °C) -

Humidity (%) -

End of test:

Temperature (°F / °C) 21°C

Humidity (%) 52%

> SHOCK TEST FIRST DROP SEQUENCE (FOR SMALL: DO NOT TEST IN BAG)

Use the spaces below to record drop heights and orientations of each drop:

Shock Sequence Number	Height / Velocity of Shock (inches / mm OR fps / ips)	Orientation of packaged-product (ex: Face 6; Corner 2-3-5, Edge 3-5)		Was packaged-product CAUGHT to prevent tipping over?
1	460mm	EDGE	3-4	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
2	460mm	EDGE	3-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
3	460mm	EDGE	4-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
4	460mm	CORNER	3-4-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
5	460mm	CORNER	2-3-5	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
6	460mm	EDGE	2-3	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
7	460mm	EDGE	1-2	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
8	910mm	FACE	3	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
9	460mm	FACE	3	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N

For review and acknowledgement of testing, submit test report and all appropriate additional documents/photos/data to:

ISTA • 1400 Abbot Road, Suite 160 • East Lansing, MI 48823-1900 USA




ista@ista.org • www.ista.org • Ph: +1 517 333 3437

FORM 3A updated MARCH 2017

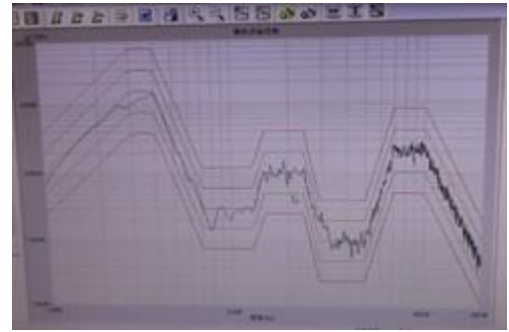
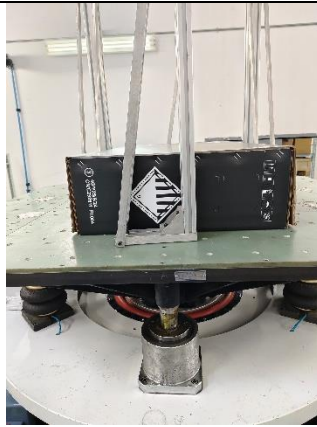
> VIBRATION UNDER DYNAMIC LOAD OVER-THE-ROAD

>> FOR STANDARD, FLAT, LONG:

Use the spaces below to record top-load calculations, test time and orientation:

Formula, with values, used to calculate Top Load		Calculated Top Load (lbs or kg)	Actual Top Load Used (lbs or kg)	Total Test Time (minutes)	Face Resting on platform (Face 3, 4 or 6)	Picture(s) of Test Setup – Each Orientation (Required)
TL-H	(2.7-H)*L*W*100	136.09kg	138kg	60min	3	
TL-W	(2.7-W)*L*H*100	42.67kg	44kg	30min	4	
TL-L	(2.7-L)*W*H*100	14.83kg	16kg	30min	6	

Picture(s) of
Vibration
Control Profile



ista TEST METHODS PROCEDURE 3A

>> FOR ALL: OVER THE ROAD
(FOR SMALL: TEST IN BAG)

Describe restraining devices used, if any:

Use the spaces below to record frequency and PSD levels used:

Frequency (Hz)	PSD Level, g^2 / Hz
1	0.0007
3	0.002
5	0.02
7	0.001
12	0.001
15	0.004
24	0.004
28	0.001
36	0.001
42	0.003
75	0.003
200	0.000004
Overall Grms:	0.53

>> FOR ALL: PICK-UP AND DELIVERY
(FOR SMALL: DO NOT TEST IN BAG)

Describe restraining devices used, if any:

Face resting on platform: Total test time:

Use the spaces below to record frequency and PSD levels used:

Frequency (Hz)	PSD Level, g^2 / Hz
1	0.001
3	0.035
4	0.035
7	0.0003
13	0.0003
15	0.001
24	0.001
29	0.0001
50	0.0001
70	0.002
100	0.002
200	0.00005
Overall Grms:	0.46

> SHOCK TEST SECOND DROP SEQUENCE (FOR SMALL: TEST IN BAG)

Use the spaces below to record drop heights and orientations of each drop:

Shock Sequence Number	Height / Velocity of Shock (inches / mm OR fps / ips)	Orientation of packaged-product (ex: Face 6; Corner 2-3-5, Edge 3-5)		Was packaged-product CAUGHT to prevent tipping over?
10	460mm	EDGE	3-4	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
11	460mm	EDGE	3-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
12	460mm	EDGE	1-5	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
13	460mm	CORNER	3-4-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
14	460mm	CORNER	1-2-6	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
15	460mm	CORNER	1-4-5	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N

16	910mm	FACE	3	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N
17 (on hazard, as applicable)	460mm	FACE	3	<input type="checkbox"/> Y <input checked="" type="checkbox"/> N

> TEST RESULTS

PRODUCT Condition after testing (if inspected): No appearance or structural damage on the product, and the product can ride normally.

PACKAGE Condition after testing: There is minor deformation on the drop corner and drop edge.

☒ **Pass** ☐ **Fail**

Comments or recommendations:



Pictures:

Pre-test:



Sample F2P240820MJ -01

Testing:

First Drop Test:



Corner Drop

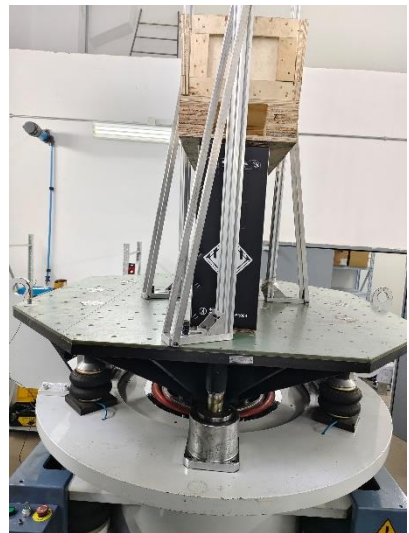
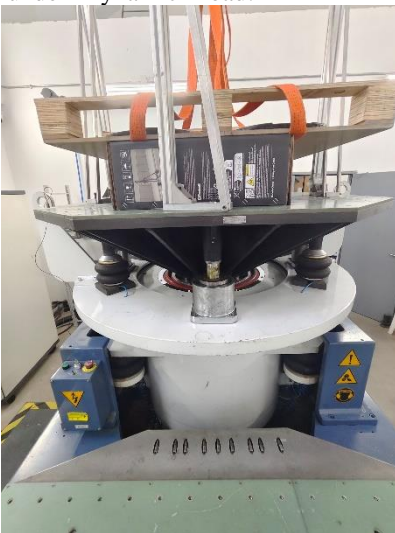


Edge Drop



Face Drop

Vibration under Dynamic Load:



Vibration:



Second Drop Test:



Corner Drop



Edge Drop



Face Drop



Face Drop on Hazard

Post-test:

