

Test Report No.:	UNT150420C11R1						
Client							
Name :	LEGO System A/S						
Address :	Aastvej 1 7190 Billund, Denmark						
Test Item :	Lithium-Ion Rechargeable Battery						
Identification :	95656 MS-EV3 RECHARGEABLE B	ATTERY					
Testing laboratory							
Name :	Bureau Veritas Consumer Product Taoyuan Branch Lin Kou Laborato	s Services (H.K.) Ltd., ries					
Address :	No. 47-2, 14th Ling, Chia Pau Vil., L City, Taiwan	in Kou Dist., New Taipei.					
Test specification							
Standard :	United Nations, Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3						
Test Result :	The test item passed.						
Prepared By :	<u>Antony fling</u> Signature	<u>2020-11-16</u> Date					
	Antony Hung						
	Engineer						
Approved By:	Joseph Thi Signature	<u>2020-11-16</u> Date					
	<u>Joseph Tsai</u> Manager	Date					
This report should not be us approval, or endorsement agencies.	This report should not be used by the client to claim product certification, approval, or endorsement by TAF, NVLAP, NIST or any government agencies.						
This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. In this report, the measurement uncertainty is not included for the decision rule of the conformity assessment.							



TEST REPORT						
United Nations, Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (Rev. 5 th . Amendment 2). Section 38.3						
Report Reference No	UNT150420C11R1					
Compiled by:	See cover sheet					
Approved by:	See cover sheet					
Date of issue:	2020-11-16					
Total number of pages	24					
Testing Laboratory						
Name	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories					
Address	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan					
Testing location	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories					
Address	No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City, TAIWAN					
Website	https://www.bureauveritas.com.					
E-mail	service.adt@tw.bureauveritas.com					
Phone number	<u>(886) 3 3183232</u>					
Applicant's name:	LEGO System A/S					
Address	Aastvej 1 7190 Billund, Denmark					
Test specification:						
Standard:	United Nations, Recommendations on the Transport of Dangerous Goods, Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3.					
	Lithium-Ion Rechargeable Battery					
Test item description	Lithium-Ion Rechargeable Battery					
Trade Mark:	LEGO					
Manufacturer:	SIIX SINGAPORE PTE LTD					
Model/Type reference	95656					
Ratings:	7.4V, 2200mAh, 16.28Wh					



Summary of testing:

The load conditions used during testing: The battery pack is charged and discharged according to its rating.

Nominal capacity (Ah):	2.2
Nominal voltage (Vdc):	7.4
Watt hour rating (Wh):	16.28
Minimum end voltage of discharge (Vdc)	6.0
Max. charge voltage (Vdc):	8.46
(for internal battery module)	
Max. charge current (A):	1.5
(for internal battery module)	
Max. charge voltage (Vdc):	10 (DC jack)
Max. charge current (A):	0.6 (DC Jack)
Max. continue discharge current (A)	4.3



Tests performed (name of test and test clause):							
Reference Standard	Clause	Contents of Test					
UN 38.3	38.3.4.1	Altitude simulation					
UN 38.3	38.3.4.2	Thermal test					
UN 38.3	38.3.4.3	Vibration					
UN 38.3	38.3.4.4	Shock					
UN 38.3	38.3.4.5	External short circuit					
UN 38.3	38.3.4.6	Impact					
UN 38.3	38.3.4.7	Over charge					
UN 38.3	38.3.4.8	Forced discharge					







Test item particulars	
Classification of installation and use	Built-in
Supply Connection	Customized terminal
Possible test case verdicts:	
test case does not apply to the test object	N/A
- test object does most the requirement	
test object does meet the requirement	r (rass)
	0045 00 00
Date of receipt of test item	2015-03-20
Date (s) of performance of tests	2015-03-20 – 2015-04-20
General remarks:	
This report shall not be reproduced, except in full, withou "(see Enclosure #)" refers to additional information app "(see appended table)" refers to a table appended to the	ut the written approval of the Issuing testing laboratory. bended to the report. e report.
Throughout this report a point is used as the decimal s	eparator.
General product information:	
 The equipment under test (EUT) model 95656 is a Battery. 	2 series 1 parallel built in type Rechargeable Li-ion
(2) The battery pack maximum ambient temperature i Discharging.	s specified as 45°C for Charging and 60°C for
(3) Dimension of the Battery backup unit: (T) 21.29mr	n by (W) 69.1 mm by (L) 88.78mm max.
(4) Battery pack Weight: 122 g max.	
Test condition: Temperature: 20±5°C Relative humidity: 60% Air pressure: 950 mbar	



United Nations, Recommendations on the Transport of Dangerous Goods,						
	Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3					
Clause	Requirement + Test	Result - Remark	Verdict			

38.3	Lithium batteries	Р

38.3.1	Purpose					
38.3.2	Scope		Р			
38.3.2.1	Lithium cells or batteries which differ from a tested type by:	This a new product (new application)	N/A			
	 (a) A change of more than 0.1 g or 20% by mass, whichever is greater, to the cathode, to the anode, or to the electrolyte; or 					
	(b) A change that would materially affect the test results.					
38.3.2.2	Classification	The EUT is a rechargeable small battery.	Р			
38.3.3	The number and condition of cells and batter	ies	Р			
	Cells (Primary/Rechargeable)	The EUT is a rechargeable Lithium ion battery	Р			
	Batteries (Primary/Rechargeable)	The EUT is a rechargeable Lithium ion battery	N/A			
38.3.4	Procedure					
	Each cell and battery type must be subjected to tests 1 to 8. Tests 1 to 5 must be conducted in sequence on the same cell or battery. Tests 6	The sequence Test 1 to Test 5 tests were conducted on the same samples.				
	and 8 should be conducted using not otherwise tested cells or batteries. Test 7 may be conducted using undamaged batteries	Test 6 was conducted on the new component cell samples.	Р			
	previously used in Tests 1 to 5 for purposes of testing on cycled batteries.	Test 8 was conducted on the new component cell samples.				
38.3.4.1	Altitude simulation	The batteries were no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and the OCV of batteries after testing was not less than 90% of its voltage before testing.	Ρ			
38.3.4.2	Thermal test	The batteries were no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and the OCV of batteries after testing was not less than 90% of its voltage before testing.	Ρ			



	United Nations. Recommer	ndations on the Transport of Dangerous Goods.					
Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3							
Clause	Requirement + Test	Result - Remark	Verdict				
38.3.4.3	Vibration	The batteries were no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and the OCV of batteries after testing was not less than 90% of its voltage before testing.	Ρ				
38.3.4.4	Shock	The batteries were no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and the OCV of batteries after testing was not less than 90% of its voltage before testing.	Ρ				
38.3.4.5	External short test	The batteries were no disassembly, no fire and no rupture, and the external temperature did not exceed 170 °C.	Ρ				
38.3.4.6	Impact	The batteries were no disassembly, no fire and no rupture, and the external temperature did not exceed 170 °C.	Ρ				
	Crush	The battery is cylindrical type	N/A				
38.3.4.7	Overcharge	The batteries were no disassembly, no fire and no rupture	Ρ				
38.3.4.8	Forced discharge	The cells were no disassembly and no fire.	Р				



United Nations, Recommendations on the Transport of Dangerous Goods,						
	Manual of Test and Criteria (Rev. 5th, Amendment 2), Section 38.3					
Clause	Requirement + Test	Result - Remark	Verdict			

38.3.2.2	TABLE: List of critical Components							
Object/part No.		Manufacturer/ trademark	anufacturer/ Type/Model Technical Data Standard M ademark				larks of onformity	
supplementary information:								

38.3.4.1	Altitude si	Altitude simulation									Р
Model / Sample No.		Sam	ple Status	Befor Weight (g)	e test OCV (V)	After test Weight OCV (g) (V)		Mass loss (%)		ial %)	Other Event
95656 /	001	At f	irst cycle	121	8.33	121	8.32	0	99		OK
95656/	002	At f	irst cycle	122	8.33	122	8.32	0	99		OK
95656 /	003	At f	irst cycle	122	8.34	122	8.33	0	99		OK
95656 /	004	At f	irst cycle	122	8.32	122	8.31	0	99		OK
95656 /	005	Afte	r 50 cycle	122	8.32	122	8.30	0	99		OK
95656 /	006	Afte	r 50 cycle	122	8.33	122	8.33	0	99		OK
95656 /	007	Afte	r 50 cycle	121	8.33	121	8.33	0	99		OK
95656 /	008	After 50 cycle		121	8.34	121	8.33	0	99		OK
Note(s):											
Mass loss limit:											
Mass M of cell or battery Mass loss limit											
M<1g 0.5%											
1g <m<5g 0.2%<="" td=""><td></td></m<5g>											

M<1g	0.5%	
1g <m<5g< td=""><td>0.2%</td><td></td></m<5g<>	0.2%	
M>5g	0.1%	
L-Leakage		
V-Venting		
D-Disassembly		
R-Rupture		
F-Fire		

OK-No Leakage, No Venting, No Disassembly, No Rupture, No Fire



United Nations, Recommendations on the Transport of Dangerous Goods,							
	Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3						
Clause	Requirement + Test	Result - Remark	Verdict				

38.3.4.2	Thermal t	est							Р
				Before test After test		Mass	Desidual	Othor	
Model / Sample No.		Sample Status	Weight (g)	OCV (V)	Weight (g)	OCV (V)	loss (%)	OCV (%)	Event
95656 /	001	At first cycle	121	8.32	121	8.26	0	99	OK
95656/	002	At first cycle	122	8.32	122	8.26	0	99	OK
95656 /	003	At first cycle	122	8.33	122	8.25	0	99	OK
95656 /	004	At first cycle	122	8.31	122	8.24	0	99	ОК
95656 /	005	After 50 cycle	122	8.30	122	8.25	0	99	ОК
95656 /	006	After 50 cycle	122	8.33	122	8.27	0	99	OK
95656 /	007	After 50 cycle	121	8.33	121	8.27	0	99	OK
95656 /	008	After 50 cycle	121	8.33	121	8.26	0	99	OK
Note(s):									
Mass loss I	imit:								
Mass M o	f cell or batte	ery Mass loss	limit						
M<1g		0.5%							
1g <m<5g< td=""><td></td><td>0.2%</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></m<5g<>		0.2%							
M>5g									
L-Leakage									
V-Venting									
D-Disassembly									
R-Rupture									
		nting No Discours	nhly No F		No Eiro				
OK-No Lea	kage, No Ve	enting, No Disasser	nbly, No F	Rupture, I	No Fire				



United Nations, Recommendations on the Transport of Dangerous Goods,							
	Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3						
Clause	Clause Requirement + Test Result - Remark						

38.3.4.3	Vibration									Р
Model / Sa	ample No.	Sample Sta	itus	Befor Weight (g)	e test OCV (V)	After Weight (g)	OCV (V)	Mass loss (%)	Residual OCV (%)	Other Event
95656 /	001	At first cyc	le	121	8.25	121	8.23	0	99	ОК
95656/	002	At first cyc	le	121	8.25	121	8.23	0	99	OK
95656 /	003	At first cyc	le	121	8.25	121	8.22	0	99	OK
95656 /	004	At first cyc	le	122	8.24	122	8.21	0	99	OK
95656 /	005	After 50 cy	cle	122	8.24	122	8.22	0	99	OK
95656 /	006	After 50 cy	cle	121	8.26	121	8.23	0	99	OK
95656 /	007	After 50 cy	cle	121	8.26	121	8.22	0	99	OK
95656 /	008	After 50 cy	cle	121	8.26	121	8.22	0	99	OK
Note(s): Mass loss limit: Mass M of cell or battery Mass loss limit M<1g										
						100 VOUN, 100 VOUN,	100- 100-			un u



United Nations, Recommendations on the Transport of Dangerous Goods,								
	Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3							
Clause	Requirement + Test	Result - Remark	Verdict					

38.3.4.4	Shock										Р
Model / Sa	mple No.	Sam	ple Status	Befor Weight (g)	e test OCV (V)	After Weight (g)	OCV (V)	Mass loss (%)	Residu OCV (S	ial %)	Other Event
95656 /	001	At f	irst cycle	121	8.22	121	8.2\	0	99		Pass
95656/	002	At f	irst cycle	121	8.21	121		0	99		Pass
95656 /	003	At f	irst cycle	121	8.21	121		0	99		Pass
95656 /	004	At f	irst cycle	122	8.21	122		0	99		Pass
95656 /	005	Afte	r 50 cycle	122	8.22	122		0	99		Pass
95656 /	006	Afte	r 50 cycle	121	8.22	121		0	99		Pass
95656 /	007	Afte	r 50 cycle	121	8.22	121		0	99		Pass
95656 /	008	Afte	r 50 cycle	121	8.21	121		0	99		Pass
Note(s): Mass loss limit: Mass M of cell or battery Mass loss limit M 0.5% 1g <m<5g< td=""> 0.2% M>5g 0.1% L-Leakage V-Venting D-Disassembly R-Rupture F-Fire OK-No Leakage, No Venting, No Disassembly, No Rupture. No Fire</m<5g<>											
<section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>							844/1*3) 074/1*3) 180.8484/1*3 180.8484/1*3 190.8	1			
	X axis			Y axi	S		Zax	kis			



United Nations, Recommendations on the Transport of Dangerous Goods,								
	Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3							
Clause	Requirement + Test	Result - Remark	Verdict					

38.3.4.5	External sho	External short circuit						
Model /	Sample No.	Sample Status	Max. External temperature of EUT surface(°C)	Other E	Event			
95656 /	001	At first cycle	54.8	Ok	(
95656/	002	At first cycle	54.8	Ok	(
95656 /	003	At first cycle	54.7	Ok	(
95656 /	004	At first cycle	54.8	OK				
95656 /	005	At first cycle	54.5	Ok	(
95656 /	006	At first cycle	54.5	Ok	(
95656 /	007	At first cycle	54.4	Ok	(
95656 /	008	At first cycle	54.8	Ok	(
Note(s):								
D-Disasser	mbly							
R-Rupture								

F-Fire

OK- No Disassembly, No Fire, The external temperature of cell not exceeds 170°C.

38.3.4.6	Impact			Р				
Model / Sa	mple No.	Sample Status	Max. External temperature of EUT surface(°C)	Other Event				
UR18650A	/ 001	At first cycle 50% of the design rated capacity	93.6	OK				
UR18650A	/ 002	At first cycle 50% of the design rated capacity	88.5	ОК				
UR18650A	/ 003	At first cycle 50% of the design rated capacity	81.3	ОК				
UR18650A	/ 004	At first cycle 50% of the design rated capacity	92.4	ОК				
UR18650A	/ 005	At first cycle 50% of the design rated capacity	83.2	OK				
Note(s): The	Note(s): The component cell is cylindrical type							



	United Nations, Recommendations on the Transport of Dangerous Goods,						
	Manual of Test and Criteria (Rev. 5th, Amendment 2), Section 38.3						
Clause	Requirement + Test	Result - Remark	Verdict				

38.3.4.6	Crush			N/A					
Model / Sample No.		Sample Status	Max. External temperature of EUT surface(°C)	Other Event					
Note(s):									
D-Disassen	nbly								
F-Fire	F-Fire								
OK- No Dis	assembly, No	Fire, The external temperature of cell not exceeds	170ºC.						

38.3.4.7	Overcharge			Р
Mod	el / Sample No.	Sample Status	Other Event	t
95656 /	009	At first cycle	ОК	
95656/	010	At first cycle	ОК	
95656 /	011	At first cycle	ОК	
95656 /	012	At first cycle	ОК	
95656 /	013	At 50 cycle	ОК	
95656 /	014	At 50 cycle	ОК	
95656 /	015	At 50 cycle	ОК	
95656 /	016	At 50 cycle	ОК	
Note(s):				



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Manual of Test and Criteria (Rev. 5 th , Amendment 2), Section 38.3					
Clause	Requirement + Test	Result - Remark	Verdict		

38.3.4.8	Forced d	ischarge			Р
Mode	el / Sampl	e No.	Sample Status	Other Event	
UR1	8650A /	006	At first cycle	OK	
UR1	8650A /	007	At first cycle	OK	
UR1	8650A /	008	At first cycle	OK	
UR1	8650A /	009	At first cycle	OK	
UR1	8650A /	010	At first cycle	OK	
UR1	8650A /	011	At first cycle	OK	
UR1	8650A /	012	At first cycle	OK	
UR1	8650A /	013	At first cycle	OK	
UR1	8650A /	014	At first cycle	OK	
UR1	8650A /	015	At first cycle	OK	
UR1	8650A /	016	After 50 cycles	OK	
UR1	8650A /	017	After 50 cycles	OK	
UR1	8650A /	018	After 50 cycles	OK	
UR1	8650A /	019	After 50 cycles	OK	
UR1	8650A /	020	After 50 cycles	OK	
UR1	8650A /	021	After 50 cycles	OK	
UR1	8650A /	022	After 50 cycles	OK	
UR1	8650A /	023	After 50 cycles	OK	
UR1	8650A /	024	After 50 cycles	OK	
UR1	8650A /	025	After 50 cycles	OK	
Note(s):					
D-Disassem	nbly				
F-Fire					
OK- No Disa	assembly,	No Fire			



List of test equipment used:

(Note: This is an example of the required attachment. Other forms with a different layout but containing similar information are also acceptable.)

Clause	Measurement /	Testing / measuring equipment /	Range used	Calibration
	testing	material used		date
			/	



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Pile No: Propect No:			INSTRU	MENTATION RECORD DATA TEST INSTRUMENTS	21011			Page 1 of 3 Insured Date: 03-27-08 Nevtext: 04-15-2019
	Function	100 million (100 million)					A ST	1.11 - 11 - 11 - 11 - 11 - 11 - 11 - 11
1681	Check	Instruction and	Nango Used	International Type	Manor	Model	Getteration perio	Calibration Due
Therrol abuse	>	1. 5276210		Test Own	TNOHY	M043-200	Jun-09-3314	Jun-04-2015
Machanical shock:		2. 04037		Shock Tenter	VISOURCE	510062	Jun-10-2014	Jun-17-2015
Crushing of cells	×	3. 50701		Hydraulic Ram Apparatus	Aain Otech	8.1-1	May-15-2014	May-16-2015
ILON PRIMITY		-4. 06/01		Visuum Chimber	Asia Otoch	4-1	0ct-25-2014	Del:27-2015
Photoing		111. 4-TWA056T	-40-490 (C, 30CH	Hyderid Recorder	Yolohama	HR 200E	Apr-15-2015	Apr-14-2016
	>	13.42446999	40-490°C, 20CH	Hybrid Recorder	Yokopano	HR 1300	Dec-12-2014	Dec 11-2015
	>	14, 48JE0943	40-400°C, 20CH	Hydrid Recorder	Yokopawa	06130	Jan 09-2314	Jun 08-2016
	>	15.42VF0429	40-4070.300H	Hyteld Recording	Yokopawa	HR 2300	Mpr-09-2016	Mor OB-2016
input / Leokage /		22. 805820222	250V164, 369W 11	Electric Land	Product 3002	3302	Sep-03-2014	Sep-02-2015
Heating / Abnormal		23. 005820223	250VH64, 366WFH	Electric Land	Product 3342	3302	Oct-38-2014	Oct-29-2015
		24. 805820220	150WBA, 300W 1	Electric Land	Prodigt 3342	1251	Jan-23-2015	Jan-22-2016
Endosune Push		31. DB0353	0 - 30 Ng.	Push - Pull Meter	Alkah	AE-30	Nov-12-2014	Nov-11-2015
Gerenel	>	28, 70360742	R, V, A. Pull Range	Digital Multimeter	Pluke	8748	Jul-03-2014	01-02-20-PP
		40. 70360755	R, V, A, Pull Range	Digital Multimotor	Plates	8748	Jul-18-2014	Jul-17-2016
	>	40. 0009834	0-200 mm	Digimatic Caliper	Wadayo	900-197 CD-87C8	Jan-23-2015	Jan-22-2016
		H21 W281000	-42 ~150 Degree C	STANDARD TEMPERATURE MUNIDITY CHAMBER	ШT	TH-45-0	Jun-09-2014	Jun-08-2015
		- 100	Roal Time	Timer (Clack)	Chesu Jue	Character of the	Nov-11-2014	Nov-10-2015
	>	46-1, 8330R	Real Time	Timer (Disck)	ORENT	QUARTZ	Jun-25-2014	Jun-24-2015
Insublian		53. 1420073	30-1060V, 0.1-59GD	Insulation Testar	Edech	1205	Sep-09-2014	Sep-09-2015
		57. 12MB03613	-80-480°C, 80CH	Recorder	Yokokuwa	0423-0	Apr-17-2014	under calibration
Photoing		66. DU200-12	-40-430°C, 30CH	Peacordar	Yokokawa	062340	Dec-01-2014	Nov-30-2015
Input / Lookage /		71. 204020068	500454, 200811	Electric Load	Prodigt 3324	2005	Mar-12-2015	Mar-11-2016
		73. 254020077	2504/104, 307911	Electric Load	Product 3312C	2302	0ct-30-2014	Cel:23-2015
Photoing		77.124003683	40-40010, 20CH (I	Hydrid Recorder	Yologeni	06130	Mar-49-2015	Mar-09-23/19
		78.125615473	40-400°C, 40CH	Recorder	Yokohawa	06230	Jan-15-2014	Jun-17-2015
		99, 128419024	40.490°C, 20CH	Recorder	Yokokawa	06130-00-34-1	Jun 29-2014	Jun 25-2015
Vibration		GT. 4352	10Hb-100Hc, 0.3-1.5mm	Vibration Test	VISOURCE	V5-5060L	Dec-11-2014	Dec-10-2015

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文件編集 EAF-99



4:44.07. A signation of a store at the at 42 stores at all Barrows Vertus Consumer Products Services (RLK2) Each, Tanyana Banach. [[Farway Vertus (LDT]]]

				The second secon				Page 2 of 3
Phile No: Phoject No:			INSTRU	MENTATION RECORD DATA TEST INSTRUMENTS	SHELET			Insured Deter 05-27-09 Revised: 04-16-2016
Test	Punction	Instr No. SIN.	Range Used	 Instruments, Type 	Makon	Medol	Calibration Date	Calibration Due
		101. 27DA14291	-80-480°C, 30CH	Hybrid Recorder	Yokogeren	DIR-200	Jan-21-2015	Jan-20-2016
		102. 27 DAVISSZ	40-400°, 300H	Hybrid Recorder	Yokoginen	DIS-200	Aug-28-2014	Aug-27-2015
		103. 27 CA14593	40-40010, 300H - (I	Hybrid Resorder	Yokogawa	067530	May-06-2014	May-07-2016
		104. 27 CA14594	40-400(C, 30CH	Hybrid Recorder	Voloperei	09.230	Sep-12-2014	Sep-11-2515
		105. 27CA14506	40-400°C, 30CH	Hybrid Recorder	Volopereb	09-230	Sep-29-2014	Sep-25-2916
Input / Leakage /		109, 38801A019	901/060M	Electronic Load	Product	3301A	May-13-2014	Mop-12-2016
Heating / Abnornal		107, 30801A017	#01/060W	Electronic Load	Product	3301A	Jan-08-2011	stop uses
		100.30801A313	ACKNOM	Electronic Load	Product	3301A	May-10-2014	May-12-2015
		108.30801A030	A07/00A	Electronic Load	Product	ADDA	Dec-19-2014	Dec-18-2015
		110. 30901A021	ACT/CEM	Electronic Load	Prodigt	3301A.	Jul-10-2014	Jul-17-2015
General		113. 03290010	R, V, A full range	DC+AC 100AHz TI9AS DVM	RENTREM	DMODUCE	Sep-93-2014	Sep-02-2915
	>	114, 03290000	R. V. A full range	DOHIO 100KHI TRMBI DMM	RIVNEN	PhiloCock F	00-38-2014	Col-29-2015
Terrpostario cycling		116, 529904	-7012-10012. 2015-1985. IRH	THERMOHYGROMETER	THOM	MHU-4806U	New 19-2014	Nov 17-2816
Moulded care stress of high antident temperature		117, 820905	9-200/C	TEMPERATUER OVEN	THORN	CH-500	Nov-11-2014	Mov-17-2015
General		122. 550594	9-500%, 20M	Digital Power Meter	liding	CP-320A	Dec-12-2014	Dec-11-2015
		123. 680525	0-500V, 20A	Digital Power Meter	lidio:	ADD-020A	0ct-00-2014	Cet-01-2015
Proce fail	>	- 128	0-5m	tapa measure	8D5	5.Seen	Jun-30-2014	Jun-29-2015
Hoding		106.275214539.594	40-400°C, 30CH	Data Acquisition Unit.	Yokopene	MR100-E-10	Jan-25-2015	Jan-25-2016
Gerecel		107. 4090509004	0.003pH-0000H, 0.003pF-00.00mF, 00-600MD	LOR Mater	Motech	MT40901-51	Jan-29-2015	Jan-38-2016
incorrect installation of a cell		164. —	į	Tothin Residuce	Yen Shong	I	I	ļ
		160, 9193201	1	Crush Tester Equipment	Asia Otech	9.6	00-07-2018	Cot-99-2015
		101.0100202	1	Projectile Texter Equipment	出版	PROJ-6	00+07-2013	Col-46-2015
		102.0044413040	0-600g	Electronic Scole	HENCO	100-000	Dec-15-2014	Dec-54-2015

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以件編集: EAFE



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Test	Punction Check	Instr No. SIM.	Range Used	* Instruments, Type	Malker	Model	Calibration Date	Calibration Due
	3=	10-1242F-01- 00005FD0404	W006/W030/08	Electronic Load	Product	33008-01-118	Jul-03-2014	21-02-20-PF
	>	167. 2027-01- 00005FD6441	WOOLWOOM	Electronic Load	Product	39026-01-116	Jul-18-2014	Ad-17-2016
	>	168. 3342F-01- 00605FD4406	W000/000/00	Electronic Load	Product	3302F-01-18F	Jun-03-2014	01-00-00-PP
	>	1620, 33425F-01- 00602FD4436	W000W00W000	Electronic Load	Product	3302F-01-11F	Jun03-2014	01-02-00-10
	>	TTO. SEGNOS	90%,55M	Programatia DC Source	DHC	DISP-000-003HD	Jul-19-2514	Jul-16-2016
	>	TTT. SERVICE	30Y/25M	Programatia DC Source	040	DISP-000-009HD	Jul-20-2514	0102-01-01
	>	172. 599155	30Y/255A	Programatia DC Source	040	DBP-000-007HD	July 18-2514	Jul 17-2016
	>	173.600159	304/38A	Programatia DC Source	DRC	DI3P-000-008HD	Juli 21-2014	44-20-2015
ritection	>	214, 6290	ti-ta-2004a, 0.2. Trem	Witestion Test	派旗件状	V8-100	Jan-07-2015	Apr 04-2016
	>	S20211141 -222	0-11403, 0-8077	Internal resistance mater	HON	513862	Peb-05-2015	Feb-04-2016
		2221 CR28002	Terrig. : 0-5010 Humil: 0-10056	Thermo-Hygno Graph	CAESAM	CEHT-3009	Pub-05-2015	Feb-04-2010
		23M, C3PY22002W	0-0004, 0-004	DIGITAL POWER METER	Yokogawa	WT310	Dec-19-2014	Dec-19-2015
	>	2255. 130612	A32,V06	Programatia DC Source	D90	20152-000-d50	Dec-23-2014	Dec-22-2015
		2260, 281/080776	300-1200 hPa	atmospheris pressure pauge	feets:	teste 611	Jun-16/2014	Jun-16-2016

File No: Project No:



MAXIMUM UNCERTAINTIES OF MEASUREMENTS

This table indicates the maximum values of uncertainties associated with the tests being able to be present in this document.

Type of measurement	Uncertainty of measurement (k=2)
Generic measure of electrical value by direct reading of	
digital instrument)	
 Voltage (V) 	(V) meter accuracy 0.1%
Current (A)	(A) meter accuracy 0.5%
 Power (W) 	(W) meter accuracy 1.0%
 Resistance (Ohms) 	(Ohms) meter accuracy 1.5%
Generic measure of time	+/- 0.38 Second
Generic measure of length value	caliper (0-200mm): +/-0.15 mm
	tape measure (0-500cm): +/-1.4 mm
Generic measure of weight value	scale (0-600g): +/- 0.55 g
	balance (0-150kg): +/- 15.95 g



Photos:



Bottom external view of Battery pack







Vibration test condition -2 (Y axis direction)

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Vibration test condition -3 (Z axis direction)



Shock test condition -1 (X axis direction)



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Shock test condition -2 (Y axis direction)



Shock test condition -3 (Z axis direction)