

# **TEST REPORT**

## ST/SG/AC.10/11/Rev.6

# RECOMMENDATIONS ON THETRANSPORT OF DANGEROUS GOODS MANUAL OF TEST AND CRITERIA

(Section 38.3: Lithium Metal and Lithium Ion batteries)

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Report reference No:	T1901036-086
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Applicant's Name:	EliteScreens Visual & Sound Co., Ltd.
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Test specification	
Test specification Standard	ST/SG/AC.10/11/Rev.6 Section 38.3
<b>Test specification</b> Standard: Test procedure:	ST/SG/AC.10/11/Rev.6 Section 38.3 Test Report
Test specification Standard: Test procedure Non-standard test method:	ST/SG/AC.10/11/Rev.6 Section 38.3 Test Report N/A
Test specification         Standard         Test procedure         Non-standard test method         Test item description	ST/SG/AC.10/11/Rev.6 Section 38.3 Test Report N/A Battery Pack of MG1 LED Projector
Test specification         Standard         Test procedure         Non-standard test method         Test item description         Manufacturer	ST/SG/AC.10/11/Rev.6 Section 38.3 Test Report N/A Battery Pack of MG1 LED Projector Formosa Electronic Industries., INC. 5F,No8, Lane 130, Ming Chuan Rd. Hsin Tien City,Taipei Hsien, Taiwan R.O.C.
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Particulars: test item vs. test requirements	
Classification:	[] Lithium metal batteries; [] Lithium metal cells; [X] Lithium ion batteries; [] Lithium ion cells;
SamplesType:	[ ] Large battery; [ ] Large cell; [X] Small battery; [ ] Small cell
Packing Material:	Plastic
Shape:	Cylinder
Dimension:	Pack: Height max.67.4mm, Width max.160.25mm, Length max.64.3mm
	Cell: Diameter max.: 18.4mm, Height max.65.15mm
Mass of equipment (kg):	0.59
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement	P (Pass)
- test object does not meet the requirement	F (Fail)
Testing	
Date of receipt of test item	2019-02-11
Date(s) of performance of tests	2019-02-11 to 2019-02-27
General remarks:	
The test results presented in this report relate only to t	he object tested.
This report shall not be reproduced, except in full, with laboratory.	out the written approval of the Issuing testing
"(see appended table)" refers to a table appended to the	he report.
Throughout this report a point is used as the decimal s	eparator.
Factor(ies):	
Formosa Electronic Industries., INC. 5F,No8, Lane 130, Ming Chuan Rd. Hsin Tien City,Tai	pei Hsien, Taiwan R.O.C.
General product information:	
<ol> <li>The tesed product model MGFU-xxxxxx (x can be 0 Projector for use in the Information equipment.</li> <li>Model MGFU-xxxxxx (x can be 0~9 or A~Z or space 3. The cells manufacturer LG Chem, model INR18650</li> </ol>	~9 or A~Z or space) is a Battery Pack of MG1 LED e) is equipped with 12 cells (4S3P). F1L, technical data 3.63 Vdc 3350 mAh.



# Test item:

Test 1: Altitude simulation	.P
Test 2: Thermal Test	.P
Test 3: Vibration	.P
Test 4: Shock	.P
Test 5: External short circuit	.P
Test 6: Impact/Crush	. P (for components cells)
Test 7: Overcharge	.P
Test 8: Forced Discharge	. P (for components cells)



ST/SG/AC.10/11/Rev.6 Section 38.3			
Clause	Requirement + Test	Result - Remark	Verdict
38.3	Lithium metal and lithium ion batteries		Р
38.3.1	Purpose		Р
	This section presents the procedures to be followed for the classification of Lithium metal and lithium ion cells and batteries.		Р
38.3.2	Scope		Р
38.3.2.1	All cell types shall be subjected to tests T.1 to T.6 and T.8. All non-rechargeable batterytypes, including those composed of previously tested cells, shall be subjected to tests T.1 to T.5. Allrechargeable battery types, including those composed of previously tested cells, shall be subjected to testsT.1 to T.5 and T.7. In addition, rechargeable single cell batteries with overcharge protection shall besubjected to test T.7. A component cell that is not transported separately from the battery it is part of needsonly to be tested according to tests T.6 and T.8. A component cell that is transported separately from thebattery shall be subjected to tests T.1 to T.6 and T.8.		P
38.3.2.2	Lithium metal and lithium ion cells and batteries which differ from a tested type by:		Р
	a) For primary cells and batteries, 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.		N/A
	b) For rechargeable cells and batteries, a change in watt-hours of more than 20% or an increase in voltage of more than 20%.		Р
	c) A change that would lead to failure of any of the tests, shall be considered a new type and shall be subjected to the required test.		Р
38.3.2.3	I For the purposes of classification, the following definitions apply:		Р
38.3.3	When a cell or battery type is to be tested under this sub-section, the number and condition of cells and batteries of each type to be tested are as follows:	Tests 1 to 5 must be conducted in sequence on the same batteries	P
	a) When testing primary cells and batteries under tests 1 to 5, the following shall be tested:		N/A
	Ten cells in undischarged states,		N/A
	Ten cells in fully discharged states,		N/A
	Four small batteries in undischarged states,		N/A
	Four small batteries in fully discharged states,		N/A
	Four large batteries in undischarged states		N/A



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Clause	Requirement + Test	Result - Remark	Verdict
	Four large batteries in fully discharged states		N/A
	b) When testing rechargeable cells and batteries under tests 1 to 5 the following shall be tested:		Р
	Ten cells at first cycle, in fully charged states,		N/A
	Four small batteries at first cycle, in fully charged states.		Р
	Four small batteries 50 cycle ending in fully charged states.		Р
	Two large batteries at first cycle, in fully charged states.		N/A
	Two large batteries 25 cycle ending in fully charged states.		N/A
	c) When testing primary and rechargeable cells under test 6(Impact/Crush), the following shall be tested in the quantity indicated:		Р
	For primary cells, five cells in undischarged states and five cells in fully discharged states		N/A
	For component cells of primary batteries, Five cells in undischarged states and five cells in fully discharged states.		N/A
	For rechargeable cells, five cells at first cycle at 50% of the design rated capacity.		N/A
	For components cells of rechargeable batteries, five cells at first cycle at 50% of the design rated capacity.		Р
	d) When testing rechargeable batteries under test 7(Overcharge), the following shall be tested in the quantity indicated:		Р
	Four small batteries at first cycle, in fully charged states.		Р
	Four small batteries after 50 cycles ending in fully charged states.		Р
	Two large batteries at first cycle, in fully charged states,		N/A
	Two large batteries after 25 cycles ending in fully charged states.		N/A
	e) When testing primary and rechargeable cells under test 8(Forced Discharge), the following shall be tested in the quantity indicated:		Р
	Ten primary cells in fully discharged states		N/A
	Ten rechargeable cells, at first cycle in fully discharged states	Component cells	Р



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Clause	Requirement + Test	Result - Remark	Verdict
	Ten rechargeable cells after 50 cycles ending in fully discharged states	Component cells	Р
	f) When testing a battery assembly in which the aggregate lithium content of all anodes, when fully charged, is not more than 500g, or in the case of a lithium ion battery, with a watt-hour rating of not more than 6200 Watt-hours.	The requirement is not applicable to test cells.	N/A
38.3.4	Procedure		Р
	Test 1 to 5 must be conducted in sequence on the same cell or battery.	Tested to batteries.	Р
	Test 6 and 8 should be conducted using not otherwise tested cells or batteries	Tested to component cells.	Р
	Test 7 may be conducted using undamaged batteries previously used in tests 1 to 5 for purposes of testing on cycled batteries	Tested to batteries.	Р
38.3.4.1	Test 1: Altitude Simulation	See below.	Р
38.3.4.1.1	Purpose		Р
	This test simulates air transport under low- pressure conditions.		
38.3.4.1.2	Test procedure		Р
	stored at a pressure	11.6 kPa	
	ambient temperature (20 $\pm$ 5 $^{\circ}$ C).	22.5°C	
	Stored times( ≥ 6 hours)	6 hours.	
38.3.4.1.3	Requirement	See below.	Р
	Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure.The requirement relating to voltage is not applicable totest cells and batteries at fully discharged states	No mass loss, no leakage, no venting, no disassembly, no rupture and no fire. Cells after testing are not less than 90% of its voltage immediately prior to this procedure. See appended table Test 1 for details.	Ρ
38.3.4.2	Test 2: Thermal Test	See below.	Р
38.3.4.2.1	Purpose		Р
	This test assesses cell and battery seal integrity and internal electrical connections. The test is conducted using rapid and extreme temperature changes.		Р
38.3.4.2.2	Test procedure		Р
	Test temperature and stored hours	1) 72°C, ≥6h 2) -40°C, ≥6h	



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Clause	Requirement + Test	Result - Remark	Verdict		
	The maximum time interval	Between test temperature extremes is 30 minutes.			
	Test times	Repeated 10 times.			
	After which all test cells and batteries are to be stored for 24 hours at ambient temperature $(20\pm5^{\circ}C)$	25°C			
	For large cells and batteries the duration of exposure to the test temperature extremes should be at least 12 hours.	Small batteries.	N/A		
38.3.4.2.3	Requirement	See below.	Р		
	<ul> <li>Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure. The requirement relating to voltage is not applicable totest cells and batteries at fully discharged states</li> <li>Test 3: Vibration</li> </ul>				
38.3.4.3	Test 3: Vibration	See below.	Р		
38.3.4.3.1	Purpose		Р		
	This test simulates vibration during transport		Р		
38.3.4.3.2	Test procedure		Р		
	Cells and batteries are firmly secured to the platform of the vibration machine without distorting the cells insuch a manner as to faithfully transmit the vibration.				
	The vibration shall be a sinusoidal waveform with a logarithmic		Р		
	Duration	15min			
	Frequency range	7Hz to 200Hz to 7Hz			
	Amplitude	0.8mm			
	This cycle shall be repeated 12 times for a total of 3 hours for each of three mutually perpendicular mounting positions of the cell.	A total of 3 hours for each axis.			
38.3.4.3.3	Requirement	See below.	P		
	Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure.The requirement relating to voltage is not applicable	No mass loss, no leakage, no venting, no disassembly, no rupture and no fire. See appended table Test 3 for details	Ρ		



ST/SG/AC.10/11/Rev.6 Section 38.3				
Clause	Requirement + Test	Result - Remark	Verdict	
	totest cells and batteries at fully discharged states			
38.3.4.4	Test 4: Shock	See below.	Р	
38.3.4.4.1	Purpose		Р	
	This test simulates vibration during transport.		Р	
38.3.4.4.2	.4.4.2 Test procedure			
	Test cells and batteries shall be secured to the testing machine by means of a rigid mount which will support all mounting surfaces of each test battery.	Small batteries.		
	a half-sine shock of peak acceleration	150g <sub>n</sub>	Р	
	Pulse duration	6ms		
	the positive direction followed	Three times shocks for each axis.		
	Each cell or battery shall be subjected to three shocks in the positive direction followed by three shocks in the negative direction of three mutually perpendicular mounting positions of the cell or battery for a total of18 shocks.	A total of 18 times shocks.		
38.3.4.4.3	.3.4.4.3 Requirement		Р	
	Cells and batteries meet this requirement if there is no mass loss, no leakage, no venting, no disassembly, no rupture and no fire and if the open circuit voltage of each test cell or battery after testing is not less than 90% of its voltage immediately prior to this procedure.The requirement relating to voltage is not applicable totest cells and batteries at fully discharged states	No mass loss, no leakage, no venting, no disassembly, no rupture and no fire. See appended table Test 4 for details	Ρ	
38.3.4.5	Test 5: External Short Circuit	See below.	Р	
38.3.4.5.1	Purpose		Р	
	This test simulates an external short circuit.		Р	
38.3.4.5.2	Test procedure		Р	
	The cell or battery to be tested shall be temperature stabilized so that its external case temperature reaches57±4 °C	All external case temperature reached 55°C.		
	Short circuit condition with a total External resistance of less than 0.10hm	Less than 0.10hm.		
	The cell or battery must be observed for a further six hours for the test to be concluded.	Further 6 hours.		



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Clause	Requirement + Test	Result - Remark	Verdict		
	This short circuit condition is continued for at least one hour after the cell or battery external case temperaturehas returned to $57\pm4$ °C	Returned to 55°C.			
38.3.4.5.3	Requirement	See below.	Р		
	Cells and batteries meet this requirement if their external temperature does not exceed $170^{\circ}$ C andthere is no disassembly, no rupture and no fire within six hours of this test.	Cells external temperature does not exceed 170°C, and there is no disassembly, no fire and no rupture during the test and within 6 hours after this test. See appended table Test 5 for details	Ρ		
38.3.4.6	Test6: Impact / Crush	See below.	Р		
38.3.4.6.1	Purpose		Р		
	These tests simulate mechanical abuse from an impact or crush that may result in an internal short circuit.       Impact test.				
38.3.4.6.2	Test procedure – Impact (applicable to cylindrical cells not less than 18 mm in diameter)	Impact test.	Р		
	- Dropped height	Cylinder cells.			
	- mass	62.5 cm			
	- diameter bar	9.1 kg			
	- Impact position: The vertical track orchannel used to guide the falling mass shall be oriented 90 degrees from the horizontal supporting surface.The test sample is to be impacted with its longitudinal axis parallel to the flat surface and perpendicular to the longitudinal axis of the 15.8 mm $\pm$ 0.1mm diameter curved surface lying across the center of the test sample.	15.8 mm			
38.3.4.6.3	Test Procedure – Crush (applicable to prismatic, pouch, coin/button cells and cylindricalcells less than 18 mm in diameter) The test shall be conducted using test cells or component cells that have notpreviously been subjected to other tests.Each test cell or component cell is to be subjected to one crush only.		N/A		
	- The speed at the first point of contact.				
	<ul> <li>The crushing is to be stopped until the first of the three options below is reached:</li> <li>(a) The applied force reaches 13 kN ± 0.78 kN;</li> <li>(b) The voltage of the cell drops by at least 100 mV</li> <li>(c) The cell is deformed by 50% or more of its</li> </ul>				



	ST/SG/AC.10/11/Rev.6 Sectio	on 38.3	
Clause	Requirement + Test	Result - Remark	Verdict
	original thickness.		
38.3.4 6.4	Requirement	See below.	Р
	Cells and component cells meet this requirement if their external temperature does notexceed 170 °C and there is no disassembly and no fire during the test and within six hours after this test.	Cells external temperature does not exceed 170°C, and there is no disassembly, no fire and no rupture during the test and within 6 hours after this test See appended table Test 6 for details	Ρ
38.3.4.7	Test 7: Overcharge		Р
38.3.4.7.1	Purpose		Р
	This test evaluates the ability of a rechargeable battery to withstand an overcharge condition.		Р
38.3.4.7.2	Test procedure		Р
	The charge current	Test charge current: 4 A	
	The minimum voltage of the test:		
	a) The minimum voltage of the test (The manufacturer's recommended charge voltage is not more than 18V).	Test charge voltage: 22 Vdc	
	Ambient temperature.	22.5°C	
	The duration of the test.	24 hours.	
38.3.4.7.3	Requirement		Р
	Rechargeable batteries meet this requirement if there is no disassembly and no fire within seven days of the test	Batteries is no disassembly, no fire and no rupture during the test and within 7 days after this test. See appended table Test 7 for details.	Ρ
38.3.4.8	Test 8: Forced discharge	See below.	Р
38.3.4.8.1	Purpose		Р
	This test evaluates the ability of a primary or a rechargeable cell to withstand a forced discharge condition.	This test evaluates the ability of a rechargeable cell.	
38.3.4.8.2	Test procedure		Р



	ST/SG/AC.10/11/Rev.6 Section 38.3			
Clause	Requirement + Test	Result - Remark	Verdict	
	Each cell shall be forced discharged at ambient temperature by connecting it in series with a 12 V DC, power supply at an initial current equal to themaximum discharge current specified by the manufacturer.	Equal to the maximum discharge current specified by the manufacturer.	Ρ	
	The specified discharge current is to be obtained by connecting a resistive load of the appropriate size and rating in series with the test cell, Each cell shall be forced discharged for a time interval (in hours) equal to its rated capacity divided by the initial test current(in ampere)		Ρ	
38.3.4.8.3	Requirement	See below.	Р	
	Primary or rechargeable cells meet this requirement if there is no disassembly and no fire within seven days of the test.	There is no disassembly and no fireduring the test and within seven days after the test. See appended table Test 8 for details.	Ρ	



Test 1	TABLE:	BLE: Altitude Simulation					Р	
Group		Mass M of Test Cell (g)			OCV (V)			
	No.	M1 (beforetest)	M2 (aftertest)	Mass Loss limit (0.1%)	OCV1 (beforetest)	OCV2 (after test)	(	OCV ≥90%)
Group A (at	1	585.36	585.36	0.00	16.74	16.73		99.94
first cycle, in fully charged	2	585.44	585.44	0.00	16.74	16.74		100.00
states)	3	585.55	585.55	0.00	16.74	16.74		100.00
	4	585.46	585.46	0.00	16.74	16.74		100.00
Group B	5	585.42	585.42	0.00	16.74	16.73		99.94
(after fifty cycles	6	585.39	585.39	0.00	16.74	16.74		100.00
ending in	7	585.41	585.41	0.00	16.74	16.74		100.00
states)	8	585.54	585.54	0.00	16.74	16.74		100.00

#### Remark:

1.Mass loss (%)=(M1-M2)/M1\*100% (Where M1 is the mass before the test and M2 is the mass after the test)

2. When mass loss does not exceed the value in Table: Mass loss limit, it shall be considered as "no mass loss".

3. The OCV of each test cell after testing is not less than 90% of its voltage immediately prior to this procedure.

4. Ambient temperature: 23.4°C

Test 2	TABLE:	ThermalTest	ermalTest			Р	
Group		Mass M of Test Cell (g)		OCV (V)			
	No.	M1 (beforetest)	M2 (aftertest)	Mass Loss limit (0.1%)	OCV1 (beforetest)	OCV2 (after test)	OCV (≥90%)
Group A (at first cycle, in fully charged states)	1	585.36	585.30	-0.01	16.73	16.50	98.63
	2	585.44	585.41	-0.01	16.74	16.53	98.75
	3	585.55	585.49	-0.01	16.74	16.55	98.87
	4	585.46	585.46	0.00	16.74	16.50	98.57
Group B (after fifty cycles ending in fully charged states)	5	585.42	585.42	0.00	16.73	16.55	98.92
	6	585.39	585.39	0.00	16.74	16.54	98.81
	7	585.41	585.41	0.00	16.74	16.55	98.87
	8	585.54	585.50	-0.01	16.74	16.54	98.81

#### Remark:

1.Mass loss (%)=(M1-M2)/M1\*100% (Where M1 is the mass before the test and M2 is the mass after the test)

2. When mass loss does not exceed the value in Table: Mass loss limit, it shall be considered as "no mass loss".

3. The OCV of each test cell after testing is not less than 90% of its voltage immediately prior to this procedure.

4. Ambient temperature: 23.5°C



Test 3	TABLE:	VibrationTest				Р		
Group		Mass	ass M of Test Cell (g)		OCV (V)			
	No.	M1 (beforetest)	M2 (aftertest)	Mass Loss limit (0.1%)	OCV1 (beforetest)	OCV2 (after test)	(	OCV (≥90%)
Group A (at first cycle, in fully charged states)	1	585.30	585.31	0.00	16.50	16.50		100.00
	2	585.41	585.41	0.00	16.53	16.53		100.00
	3	585.49	585.49	0.00	16.55	16.54		99.94
	4	585.46	585.46	0.00	16.50	16.50		100.00
Group B (after fifty cycles ending in fully charged	5	585.42	585.42	0.00	16.55	16.54		99.94
	6	585.39	585.39	0.00	16.54	16.54		100.00
	7	585.41	585.41	0.00	16.55	16.55		100.00
states)	8	585.50	585.50	0.00	16.54	16.53		99.94

#### Remark:

1.Mass loss (%)=(M1-M2)/M1\*100% (Where M1 is the mass before the test and M2 is the mass after the test)

2. When mass loss does not exceed the value in Table: Mass loss limit, it shall be considered as "no mass loss".

3. The OCV of each test cell after testing is not less than 90% of its voltage immediately prior to this procedure.

4. Ambient temperature: 22.5°C

Test 4	TABLE:	BLE:ShockTest				Р		
Group		Mass M of Test Cell (g)			OCV (V)			
	No.	M1 (beforetest)	M2 (aftertest)	Mass Loss limit (0.1%)	OCV1 (beforetest)	OCV2 (after test)	(	OCV ≥90%)
Group A (at first cycle, in fully charged states)	1	585.31	585.31	0.00	16.50	16.50	1	100.00
	2	585.41	585.41	0.00	16.53	16.53	1	100.00
	3	585.49	585.49	0.00	16.54	16.54	1	100.00
	4	585.46	585.46	0.00	16.50	16.50	<b>1</b>	100.00
Group B (after fifty cycles ending in fully charged states)	5	585.42	585.42	0.00	16.54	16.54	1	100.00
	6	585.39	585.35	-0.01	16.54	16.53		99.94
	7	585.41	585.41	0.00	16.55	16.54		99.94
	8	585.50	585.50	0.00	16.53	16.52		99.94

#### Remark:

1.Mass loss (%)=(M1-M2)/M1\*100% (Where M1 is the mass before the test and M2 is the mass after the test)

2. When mass loss does not exceed the value in Table: Mass loss limit, it shall be considered as "no mass loss".

3. The OCV of each test cell after testing is not less than 90% of its voltage immediately prior to this procedure.

4. Ambient temperature: 22.9°C



Test 5	TABLE:External Short Circuit				
Group	No.	ExternalHighestTemperature(°C)	Criteria	Result	
Group A (at	1	55.4	Cells external temperature does not exceed 170°C, and there is no disassembly, nofire and norupture within six hours after this test	Pass	
first cycle, in fully charged states)	2	55.4		Pass	
	3	55.3		Pass	
	4	55.4		Pass	
Group B	5	55.3		Pass	
(after fifty cycles	6	55.3		Pass	
ending in	7	55.2		Pass	
states)	8	55.4		Pass	
Remark: 1. Ambient to	emperatu	ıre: 54.8°C	· · · · ·		

Test 6	TABLE	:Impact/Crush Test		Р
Group	No.	ExternalHighestTemperature(℃)	Criteria	Result
Group A (at	17	25.7	Cells external temperature	Pass
first cycle, ir 50% of the	י 18	25.6	does not exceed 170°C, and there is no disassembly. no	Pass
design	. 19	25.7	fire and norupture within six	Pass
y discharge	d 20	25.5	nours after this test	Pass
states)	21	17     25.7     Cells external temperature       18     25.6     does not exceed 170°C, and there is no disassembly, no fire and norupture within six hours after this test       20     25.5       21     26.4	Pass	
Remark:				

1. Ambient temperature: 21.4°C

Test 7	TABLE:	Overcharge Test		N/A
Group	No.	ExternalHighestTemperature(℃)	Criteria	Result
Group A (at first cycle, in fully charged states)	09	21.1	There is no disassembly and	Pass
	10	21.3	no fire during the test and within seven days after the test.	Pass
	11	21.3		Pass
	12	21.1		Pass
Group B	13	21.2		Pass
(after fifty cycles	14	21.0		Pass
ending in fully charged states)	15	21.2		Pass
	16	21.3		Pass
Remark: 1. Ambient te	mperatu	ıre: 20.9°C		



Test 8	TABLE:	Forced discharge		Р
Group	No.	ExternalHighestTemperature(℃)	Criteria	Result
Group A (at	22	55.5	There is no disassembly and	Pass
first cycle, in fully	23	52.2	no fire during the test and within seven days after the	Pass
discharged	24	55.5	test.	Pass
states)	25	55.1		Pass
	26	55.4		Pass
	27	51.6		Pass
	28	54.2		Pass
	29	52.8		Pass
	30	47.9		Pass
	31	51.5		Pass
Group B	32	53.2		Pass
(after fifty cvcles	33	50.7		Pass
ending in	34	50.9		Pass
discharged	35	51.5		Pass
states)	36	52.7	-	Pass
	37	51.7		Pass
	38	50.1		Pass
	39	50.6		Pass
	40	52.0		Pass
	41	43.9		Pass

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# Photo(s)

Battery Pack of MG1 LED Projector



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