LITHIUM CELL TEST SUMMARY AND SUPPLIER INQUIRY

IN ACCORDANCE WITH SUB-SECTION 38.3 OF MANUAL OF TESTS AND CRITERIA

T6 - Impact - for cylindrical cells having a diameter of at least 18 mm
T6 - Crush - for prismatic cells, pouch cells, button cells and cylindrical cells

having a diameter of less than 18 mm

T7 – Overcharge

T8 - Forced Discharge

	Name/Description of cell / mode				
INR18650-2500A		142			
	Manufactu				
Name	Roofer Energy Technology (Baosha	an) Co., Ltd.			
Address		Roofer Industrial Zone, Baoshan Industrial Park, Longyang District,			
	Baoshan, Yunnan, P.R. China				
Phone	0755-33683810	0755-33683810			
E-Mail					
Website	www.rooferbs.com				
	Manufa	cturer			
Name	Technaxx Deutschland GmbH & Co. I	KG			
Address	Kruppstraße 105, 60388 Frankfurt ar	n Main			
Phone	+49 [69] 90 47552 0	+49 [69] 90 47552 0			
E-Mail	Zentrale@technaxx.de				
Website	http://www.technaxx.de/				
	Test laborat	ory of cell			
Name	Shanghai Research Insititute of che	Shanghai Research Insititute of chemical industry testing CO.,Ltd			
Address	NO.345 East Yunling Road, Shangh	NO.345 East Yunling Road, Shanghai, China			
Phone	021 31765555	021 31765555			
E-Mail	zmh@ghs.cn	zmh@ghs.cn			
Website	www.ghs.cn				
Unique test report	ID-number identification number	and date 1119070081			
Date of test report 2019.7.5					
	DESCRIPTION OF CELL	(Mark with an"X")			
Lithium ion cell		Х			
Lithium metal cell					
	Param	eters			
Mass in gram (g):					
		9.25			
Lithium metal: Indi	icate lithium metal content in gram (g):				
		1			
	Physical descr	ption of cell			
Lithium Ion					
	Model no	umbers			
INR18650-2500A					
	TESTS AND	RESULTS			
List of tests conduc			N/A	Pass	Fail
- Mark N/A, pass o	r fail with an "X"				
T1 - Altitude simula	ation			Х	
T2 - Thermal Test				Х	
T3 – Vibration				Х	
T4 – Shock				Х	
T5 - External Short	Circuit		<u> </u>	Х	

N/A

N/A

X

ADDITIONAL SUPPLIER INQUIRY

Mark Yes or no with an "X"		No
Quality management system for manufacturing cells		
Does the manufacturer of the cell/battery manufacture the products based on a		
documented quality management system according to transport regulations?		
Are the following parameters exceeded?		No
Lithium ion cell: more than 20 Wh		
Lithium metal cell: more than 1 g Lithium		

Check point 13 – 15 need to be answered when 12 has been ticked "YES":

Mark Yes or no with an "X"	Yes	No
Does each cell incorporates a safety venting device or is designed		
to preclude a violent rupture under normal conditions of carriage?		
Is each cell equipped with an effective means of preventing external short circuits?	Yes	
Is each battery containing cells or series of cells connected in parallel	Yes	
equipped with effective means as necessary to prevent dangerous reverse		
current flow (e.g. diodes, fuses, etc.) Not relevant for cells		

Only in air transport: State of Charge (SoC) for UN 3480 Lithium ion cells and lithium polymer cells

State of Charge (SoC) max. 30 %

CELLS INSTALLED IN EQUIPMENT

Check point 17 needs to be answered when the cells are installed in articles: Mark	N/A	Pass	Fail
N/A, pass or fail with an "X"			
17c) Only button cells enclosed?	N/A		
17b) Number of enclosed cells (other than button cells) per equipment 1			
When the equipment is intentionally active/switched on during transport e.g. data logge	rs:		
17c) Confirmation that no dangerous amount of heat is emitted from the equipment X			
17d)Confirmation that the equipment when transported by air fulfills the defined air		Х	
transport standards for electromagnetic radiation according to DO-160			

	X	
Single Cell or Battery	Build in Cell/ Battery	Over 100Wh
LITHIUM - METALL UN 3090 Einzel Zelle / Batterie	LITHIUM - IONEN UN 3481 Zelle / Batterie in Ausrüstungen	BATTERIE mit MEHR als 100 Wh

Place, Date	Signature	Company stamp and Signature
Frankfurt, 19.06.2020	PM	Technaxx Deutschland GmbH & Co. KG Kruppstr. 105 60388 Frankfurt a.M. Fon +49(0)69/90 47 55 2-0 Fax -16