

Battery Pack Test Report UN38.3

Customer: Lenovo

Pack Model: L16C2PB2

Nominal voltage: 7.6V

Nominal capacity: 30Wh

Configuration: 2S1P

Customer P/N: 5B10Q56955

Celxpert P/N: 921300176

Cell Type: Coslight CA595490HV-C 4030mAh

Jan.22 2018

Reviewed by

Prepared by

Approved by

Approved by

Approved by

Approved by



Figure photo of the pack







PS:此報告僅針對送檢樣品有效

The test report is valid for the tested samples only.



1. UN38	3.3 Test Re	port			
Test Period	2016/10/10~2	2016/11/07	Test Spec.	ST/SG/AC.	10/11/Rev.5 Amend.1& Amend.2
Parts Name	Battery Pack	Application	NB	Quantity	Pack 16PCS/Cell 25pcs

1.1 Test Summary

Item	Test Item	Test Result	Details
T1	Altitude simulation test (UN38.3-1)	Pass	Page 9
T2	Thermal test (UN38.3-2)	Pass	Page 10
T3	Vibration test (UN38.3-3)	Pass	Page 11
T4	Shock test (UN38.3-4)	Pass	Page 12
T5	Short Circuit test (UN38.3-5)	Pass	Page 13
T6	Crush Test (UN38.3-6)	Pass	Page 13
T7	Overcharge test (UN38.3-7)	Pass	Page 14
T8	Forced discharge test (UN38.3-8)	Pass	Page 15

The battery pack passes UN38.3 test.





1.2 Test sample list

No.	Pack S/N	Test item	No.	Cell Num.	Test item
1	Sample No:1/16	38.3.1~5	1	Coslight CA595490HV-C 4030mAh	38.3.6
2	Sample No:2/16	38.3.1~5	2	Coslight CA595490HV-C 4030mAh	38.3.6
3	Sample No:3/16	38.3.1~5	3	Coslight CA595490HV-C 4030mAh	38.3.6
4	Sample No:4/16	38.3.1~5	4	Coslight CA595490HV-C 4030mAh	38.3.6
5	Sample No:5/16	38.3.1~5	5	Coslight CA595490HV-C 4030mAh	38.3.6
6	Sample No:6/16	38.3.1~5	6	Coslight CA595490HV-C 4030mAh	38.3.8
7	Sample No:7/16	38.3.1~5	7	Coslight CA595490HV-C 4030mAh	38.3.8
8	Sample No:8/16	38.3.1~5	8	Coslight CA595490HV-C 4030mAh	38.3.8
9	Sample No:9/16	38.3.7	9	Coslight CA595490HV-C 4030mAh	38.3.8
10	Sample No:10/16	38.3.7	10	Coslight CA595490HV-C 4030mAh	38.3.8
11	Sample No:11/16	38.3.7	11	Coslight CA595490HV-C 4030mAh	38.3.8
12	Sample No:12/16	38.3.7	12	Coslight CA595490HV-C 4030mAh	38.3.8
13	Sample No:13/16	38.3.7	13	Coslight CA595490HV-C 4030mAh	38.3.8
14	Sample No:14/16	38.3.7	14	Coslight CA595490HV-C 4030mAh	38.3.8
15	Sample No:15/16	38.3.7	15	Coslight CA595490HV-C 4030mAh	38.3.8
16	Sample No:16/16	38.3.7	16	Coslight CA595490HV-C 4030mAh	38.3.8
			17	Coslight CA595490HV-C 4030mAh	38.3.8
			18	Coslight CA595490HV-C 4030mAh	38.3.8
			19	Coslight CA595490HV-C 4030mAh	38.3.8
			20	Coslight CA595490HV-C 4030mAh	38.3.8
			21	Coslight CA595490HV-C 4030mAh	38.3.8
			22	Coslight CA595490HV-C 4030mAh	38.3.8
			23	Coslight CA595490HV-C 4030mAh	38.3.8
			24	Coslight CA595490HV-C 4030mAh	38.3.8
			25	Coslight CA595490HV-C 4030mAh	38.3.8



1.3 Test result

1.3 Test	result								
Item	Test Item		Te	st specification	n	Judg	ge criteria	Samp	le(s)
T1	Altitude Simulation (UN38.3-1)	1-2.E 1-3.\ 1-3.\	patteries are patteries who charged bareasured a satteries slow 11.6 Kpa patteries at an C. Jacuum is measured.	or less for an	50 times, state. All sured. The ge are d. d. at a pressure t least six erature 20+/-5 cells weight is d cell voltage	no leakag no disass rupture ar Battery vo a 10%.	e, no venting, embly, no	4 packs are charged (Pa 4 packs 50 cending in full states (Pack	ck#1~4) ycled y charged
Test Per	iod		t: 2016/10		End:2016/	10/10			
Test Equ					F Q090, 真空		43		
Major Pr		-		-, Đ / / ·	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-77 . 744 ~0 1			
Warning		-							
		Tha	hattonur	packs pass	the test				
Recomm	nendation	THE	battery p	Jacks pass	s the test.				
					Altitude Simulation	on Test on Cl	harged Packs		
		No.	Be	efore	Afte	r	voltage residue	mass loss	other event
		NO.	OCV	Weight	ocv	Weight	Volt	Weight	other event
		1	(V) 8.546	(g) 135.19	(V) 8.544	(g) 135.18	(%) 99.98%	(%) 0.01%	0
		2	8.603	135.23	8.602	135.22	99.99%	0.01%	0
		3	8.594	135.21	8.593	135.20	99.99%	0.01%	0
		4	8.557	135.26	8.554	135.25	99.96%	0.01%	0
		5	8.345	135.21	8.343	135.20	99.98%	0.01%	0
		6	8.453	135.17	8.450	135.16	99.96%	0.01%	0
		7	8.324	135.25	8.323	135.24	99.99%	0.01%	0
		8	8.336	135.21	8.332	135.20	99.95%	0.01%	0
				-	sembly; R-Rupture Disassembly, No F				
Nav	w Data								



	Corporation								_	
Item	Test Item	0 /		st specificatio				udge criteria		ole(s)
Т2	Thermal test (UN38.3-2)	2-2.F	followed by some state of the maximu temperatus. Repeat 2-1 for packs at aml weight are m	ored for 6 houstorage for 6 hm time intervare extremes is or 10 times. The pient for 24 houseasured. The neasured and	ours at -40g al between to a 30 minutes then store the burs. All pac charged ba	±2°C . i eest i s. i le : ks	no leal no disa rupture	ss loss (<0.1%), kage, no venting, essembly, no e and no fire. v voltage drop <	4 packs are stacharged (Pack 4 packs 50 cyc fully charged s (Pack#5~8)	:#1~4) cled ending in
Test Per	iod	Star	t: 2016/10	/12	End:20	16/1	0/18			
Test Equ	ipment	數位	z電表 Q15	3, 電子天平	2 Q090, 7	令熱征	 	€ Q0446		
<u>·</u> Major Pr		-	<u> </u>	, 1	,	. ,,	- • •			
Warning		_								
	nendation	The	nacks na	ass the tes	.t					
IXECOIIII	lenuation	1110	, ρασκό ρι	200 110 100						
			_				on Cha	arged Packs		
		No.		efore		fter		voltage residue	mass loss	other event
		110.	OCV (V)	Weight (g)	OCV (V)	Wei	- 1	Volt (%)	Weight (%)	outer event
		1	8.544	135.18	8.475	135		99.19%	0.04%	0
		2	8.602	135.22	8.526	135	.16	99.12%	0.05%	0
		3	8.593	135.20	8.518	135	.14	99.13%	0.04%	0
		4	8.554	135.25	8.480	135		99.13%	0.03%	0
		5	8.343	135.20	8.272	135		99.15%	0.04%	0
		6	8.450	135.16	8.375	135		99.11%	0.04%	0
		7 8	8.323 8.332	135.24 135.20	8.255 8.257	135 135		99.18%	0.04%	0
				/enting ; D-Disass				99.1070	0.0470	U
				No Venting , No [Fire		
Rav	w Data									



2110197	Corporation					•					
Item	Test Item			Test spec	cification			Judge crite	eria	Sa	ample(s)
Т3		v a v ld 7 r n 3-2	ribration man man manner as ribration sha ogarithmic so repeated 12 mutually per The logarith 7-18 Hz → 18-50 Hz → 18-50 Hz → 14 mutually per man	0.8mm ai	distorting transmit the pidal waveful of 20 tes. This contains the terminary sweep is mplitude sured. The	the packs in vibration. Torm with a 100 Hz and buycle shall be urs for each al face. as follows:	The ack to e of 3	No mass loss (<0.1%), no leakage, no venting, no disassembly, rupture and n Battery voltagdrop < 10%.	no o fire.	charged	states
Test Per	iod	Sta	rt: 2016/1	0/26	End:	2016/10/2	27				
Test Equ	iipment	數位	:電表 Q15	i3, 電子天	平 Q090,	振動測試	i機 Q	300			
Major Pr	oblem	-									
Warning		-									
	nendation	The	packs p	ass the te	st.						
						tion Test on					
		No.		fore		ter	volt	age residue		ss loss	other event
			OCV (V)	Weight (g)	OCV (V)	Weight (g)		Volt (%)		eight (%)	
		1	8.475	135.13	8.468	135.09		99.92%	0.	.03%	0
		2	8.526	135.16	8.519	135.13		99.92%		.02%	0
		3	8.518 8.480	135.14 135.21	8.510 8.472	135.10 135.17		99.91% 99.91%		.03%	0
		5	8.272	135.15	8.264	135.17		99.90%		.03%	0
		6	8.375	135.11	8.369	135.06		99.93%	0.	.03%	0
		7	8.255	135.18	8.246	135.15		99.89%	0.	.02%	0
		8	8.257	135.14	8.250	135.11		99.92%	0.	.02%	0
				Venting; D-Disas			No Fire				
Rav	w Data		O-No Leakage	, No Venting , No	o Disassembly	, No Rupture ,	No Fire				



Energy	Corporation				1,106	J	J J.	IN-QA-Lab-O	10001710	7110010
Item	Test Item			Test specific	ation		Jı	udge criteria	Sam	ple(s)
Т4	Shock test (UN38.3-4)	4-2. 4-2. 1 1 1 4-3. /	by means of all mounting Packs shall of peak accept 6 millisect to 3 shocks in three shocks mutually per the pack for All batteries	a rigid moun surfaces. be subjected eleration 150, ands. Each pain the positive in the negative pendicularly a total of 18 weight are m	to the testing m t, which will su to a half-sine s gn and pulse d ack shall be su e direction follo tive direction of mounting posit shocks. heasured. The measured and	shock uration bjected wed by three	no leak no disa rupture Battery 10%.	as loss (<0.1%), age, no venting, assembly, no and no fire. voltage drop <	4 packs are charged (P 4 packs 50 ending in fu states (Pac	ack#1~4) cycled illy charged
Test Per	riod	Star	t: 2016/10)/28	End:201	6/10/2	8			
Test Equ	uipment	數位	電表 Q15	3, 電子天	平 Q090, 衝	擊測註	大機 Q1	54		
Major Pı	•	-		<u>, , , , , , , , , , , , , , , , , , , </u>	, ., .,	• • •				
Warning		-								
	nendation	The	packs pa	ass the te	st.					
		No.		fore		ter		voltage residue	mass loss	other event
		140.	OCV (V)	Weight (g)	OCV (V)	Wei	- 1	Volt (%)	Weight (%)	outer event
		1	8.468	135.09	8.462	135.		99.93%	0.00%	0
		2	8.519	135.13	8.514	135.	.12	99.94%	0.01%	0
		3	8.510	135.10	8.505	135	.10	99.94%	0.01%	0
		4	8.472	135.17	8.466	135.		99.93%	0.01%	0
D	D-4-	5 6	8.264 8.369	135.12 135.06	8.260 8.362	135. 135.		99.95% 99.92%	0.01%	0
Rav	w Data	7	8.246	135.00	8.240	135.		99.93%	0.01%	0
		8	8.250	135.11	8.245	135	.11	99.94%	0.00%	0
					sembly ; R-Rupture					
			O-No Leakage	, No Venting , No	Disassembly , No	Rupture,	No Fire			
		1								



	corporation							
Item	Test Item		Test specification			ge criteria		Sample(s)
Т5	Short Circuit Test (UN38.3-5)	ext 5-2.Wh sho wir 5-4. The	eks are placed in to a 55±2°C erior packs temperature are en packs exterior reach 55±2 orted by connecting terminals e of resistance less than 100 e short was continued for mothe cell temperature return to cks are observed for a further	monitored 2°C, they are s with a copper Om Ohm. ore than 1 hour o 55°C. The	explosion smoke. exterior	mbly, no on, no fire, no Packs	charge 4 pack	as are standard ed (Pack#1~4) as 50 cycled ending charged states #5~8)
Test Per	iod	Start	: 2016/11/04	End:2016/11	/07			
Test Equ	uipment	數位電	无表 Q153, 資料收集器	Q075, 烘箱 C	Q171			
Recomm	nendation	The p	acks pass the test.					
			Short Circuit Test on C	Charged Pacl	ks			
		No.	Max. Temp.(°C)	Other ev	ent			
		1	54.56	0				
		2	55.21	0				
		3	55.23	0				
Do	w Doto	4	54.68	0				
Ka	w Data	_ 5	55.21	0				
		6	55.34	0				
		7	55.28	0				
		- 8	54.98	0				
		Note:	D-Disassembly ; R-Ruptur	re ; F-Fire				
			O- No Disassembly , No	Rupture , No F	ire			
Item	Test Item		Test specificatio	n		Judge crite		Sample(s)
Т6	Crush test/ Impact test (UN38.3-6)	(A 9.1 H 61±2.56 6-2.Cel (The ce	I's diameter > 18mm, Execu Kg mass is to be dropped from cm onto the sample.) I's diameter < 18mm, Execu ells are crushed with a 13 KN Once the force is obtained in	om a height of tion crush test I with the crush	cell 170 disa with tes	ernal temper does not ex of and there assemb ly an in 6 hours o	ceed e is no d no fire	5 cells are 50% charged (Cell #1~5)
Test Per	iod	Start:	2016/10/17 E	nd:2016/10/1	7			1
Test Equ	uipment	數位電	表 Q153, 資料收集器	Q152, 擠壓記	式驗機(2437/撞擊》	則試機	Q231
Recomm	nendation	The C	Cells pass the test.					
			Crush Test on 509	% Charged C	ells			
		No.	Max. Temp.(°C)	Oth	er eve	nt		
		1	19.36		0			
_	ъ.	2	20.31		0			
Rav	w Data	3	19.97		0			
		4	20.16		0			
		5	20.31		0			
		Note: I	D-Disassembly ; F-Fire /	O-No Disasse	mbly , N	lo Fire		



Item							
пеш	Test Item		Te	est specification		Judge criteria	Sample(s)
Т7	Overcharge test (UN38.3-7)	red 7-2.The (a) W mo the bar (b) W tha tim 7-3. Tes	commended maxing minimum voltage with the Spec's repore than 18V, the report is lesser of two times there or 22V. When the Spec's rean 18V, the minimum is the maximum of the spect is the spect i	ecommended char um voltage of the t charge voltage. ucted at ambient t	harge current. be as follows: ge voltage is not of the test shall be harge voltage of the ge voltage is more test shall be 1.2	No disassembly, no fire within seven days after the test.	4 packs are fully charged (Pack#9~12) 4 packs are 50 times cycled ending in fully charged state (Pack #13~16)
Test Per	riod		2016/10/27	End:201	6/11/03		1
Test Equ	uipment	數位電	意表 Q153, 資	料收集器 Q078	3, 電源供應器 Q ²	148/Q149/Q15	0
Major P	roblem	-					
Warning	Point	-					
	nendation	The p	acks pass the	e test.			
				1	st on Charged	l Packs	
		No.	Charge Voltage(V)	ercharge Tes Charge Current(A)	Max. Temp.(°C		r event
		9	Charge	Charge	Max. Temp.(°0	C) Other	r event
		9	Charge	Charge	Max. Temp.(°0 20.54 20.36	C) Other	0
Ra	w Data	9 10 11	Charge	Charge	Max. Temp.(°0 20.54 20.36 21.23	C) Other	0 0
Ra	w Data	9 10 11 12	Charge	Charge	Max. Temp.(°C 20.54 20.36 21.23 20.19	C) Other	0 0 0 0
Ra	w Data	9 10 11 12 13	Charge Voltage(V)	Charge Current(A)	Max. Temp.(°C 20.54 20.36 21.23 20.19 20.87	C) Other	0 0 0 0 0
Ra	w Data	9 10 11 12 13 14	Charge Voltage(V)	Charge Current(A)	Max. Temp.(°C 20.54 20.36 21.23 20.19 20.87 20.13	C) Other	0 0 0 0 0 0
Ra	w Data	9 10 11 12 13	Charge Voltage(V)	Charge Current(A)	Max. Temp.(°C 20.54 20.36 21.23 20.19 20.87	C) Other	0 0 0 0 0



Forced connecting it in series with a 12 V D.C. power supply at an (Pack#6~15)	Forced discharge rest (UN38.3-8) Test Period Start: 2016/10/28 End:2016/11/02 The packs pass the test. Forced discharge are first cycle in fully discharged are after 50 cycles ending in fully discharge	Forced discharge test (UN38.3-8) The set of the proced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged less (Pack #16-25) The pack #16-25) The pack #16-25 The pack #1	Forced discharge test (UN38.3-8) Test Period Start: 2016/10/28 End:2016/11/02 Test Equipment 数位電表 Q153,資料收集器 Q160,電源供應器 Q147/Q236/Q237 Major Problem Point - Recommendation Forced discharge are first cycle in fully discharged less (Pack #16-25) The packs pass the test.	Energy		_						
T8 Forced discharge test (UN38.3-8) Ferriod Start: 2016/10/28 End:2016/11/02 Fest Period Start: 2016/10/28 End:2016/11/02 Fest Equipment 数位電表 Q153,資料收集器 Q160,電源供應器 Q147/Q236/Q237 Major Problem	T8 Period Start: 2016/10/28 End: 2016/11/02 Test Equipment 数位電表 Q153、資料收集器 Q160、電源供應器 Q147/Q236/Q237 Major Problem - Warning Point - Recommendation The packs pass the test. Forced discharge are first cycle in fully discharged states (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged states (Pack #16-25) The packs pass the test. Forced discharge are first cycle in fully discharged states (Pack #16-25) The packs pass the test.	T8 Forced discharge test initial current equal to the maximum discharge current Specified by the manufacturer. Cell shall be forced discharged at ambient temperature by connecting it in series with a 12 V D.C. power supply at an initial current equal to the maximum discharge current Specified by the manufacturer. Seet Period Start: 2016/10/28 End:2016/11/02 Test Equipment Specified by the manufacturer. Specified by the manufacturer. Each Period Start: 2016/10/28 End:2016/11/02 The packs Q 153, 資料收集器 Q 160, 電源供應器 Q 147/Q236/Q237 Major Problem Varning Point Recommendation The packs pass the test. Forced discharge are first cycle in fully discharged No. Max. Temp.(*C) Other event No. Max. T	T8 Forced discharge test (UN38.3-8)	Item	Test Item		T	est specification			Judge criteria	Sample(s)
Fest Period Start: 2016/10/28 End:2016/11/02 Fest Equipment 數位電表 Q153,資料收集器 Q160,電源供應器 Q147/Q236/Q237 Major Problem Warning Point Recommendation The packs pass the test. Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max Temp.(**C) Other event No. Max Temp.	Start: 2016/10/28	Start: 2016/10/28	Start: 2016/10/28 End:2016/11/02 East Equipment 数位電表 Q153、資料收集器 Q160、電源供應器 Q147/Q236/Q237 Major Problem	Т8	discharge test	conne initial	ecting it in series w current equal to th	vith a 12 V D.C. power ne maximum discharge	supply	no se re by at an	fire within ven days after	cycle in fully discharged states (Pack#6~15) 10 cells are after 5 cycles ending in fully discharged states
Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(*C) Other event No. Max. Temp.(*C) Other event Other event No. Max. Temp.(*C) Other event No. No.	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(°C) Other event No.	Test Per	riod	Start	: 2016/10/28	End:2016/1	11/02			,
Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(*C) Other event No. Max. Temp.(*C) Other event Other event No. Max. Temp.(*C) Other event No. No.	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(°C) Other event No.	Test Equ	uipment	數位	電表 Q153, 賞		電源化	共應器 Q14	47/Q236/Q23	37
Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(°C) Other event No. Max. Temp.(°C) Other event Other event No. Max. Temp.(°C) Other event Other event No. Max. Temp.(°C) Other event Other eve	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge	Forcet discharge are first cycle in fully discharged Forcet discharge are after 50 cycles ending in fully discharges	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(*C) Other event No. No. Max. Temp.(*C) Other event No.				3 (4 - 1 - 1 - 1)	() P 2/() 2 - 1 - 2		, t, , G		-
Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(°C) Other event No. Max. Temp.(°C) Other event O	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharge No. Max. Temp.(°C) Other event No. Max. Temp.(°C) Other event Ot	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharges	Forced discharge are first cycle in fully discharged Forced discharge are after 50 cycles ending in fully discharged No. Max. Temp.(°C) Other event No. No.			 _						
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Note:D-Disassembly ; F-Fire / O-No Disassembly , No Fire	Note:D-Disassembly ; F-Fire / O-No Disassembly , No Fire	Note:D-Disassembly ; F-Fire / O-No Disassembly , No Fire	Note:D-Disassembly ; F-Fire / O-No Disassembly , No Fire	Ra	w Data	No. 6 7 8 9 10 11 12 13	Max. Temp.(°C) 32.69 28.64 30.17 32.45 29.21 35.64 29.45 34.59	Other event O O O O O O O O O O O O O O O O O O	No. 16 17 18 19 20 21 22 23	Max. Temp.(29.54 31.34 35.44 35.94 25.12 29.65 26.77 35.67		Other event O O O O O O O O O O O O O O O O O O
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