

# DURACELL HPL LITHIUM CELLS/BATTERIES

## TEST SUMMARY

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

### CELL/BATTERY UN38.3 TEST SUMMARY

**Revision Date:** November 20, 2019

**Revision Number:** HPL\_TS-2020-REV1

**Product Manufacturer:** DURACELL US Operations Inc., 14 Research Drive, Bethel CT. 06801 USA

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DURACELL's product lithium metal cells and batteries have been successfully tested and comply with the UN Model Regulations, Manual of Tests and Criteria, Part III, subsection 38.3.

UN38.3 PERFORMED TESTS			RESULTS
38.3.4.1	T1	Altitude Simulation	PASS
38.3.4.2	T2	Thermal Test	PASS
38.3.4.3	T3	Vibration	PASS
38.3.4.4	T4	Shock	PASS
38.3.4.5	T5	External Short Circuit	PASS
38.3.4.6	T6	Impact/Crush	PASS
38.3.4.7	T7	Overcharge	n/a
38.3.4.8	T8	Forced Discharge	PASS

### PRODUCT TEST INFORMATION


The cells and batteries listed below were tested to UN Manual Tests and Criteria Revision 3 Amendment 1 or subsequent revisions or amendments.

Model Number	Physical Description	Battery Mass	Lithium grams	Test Report Number	Test Report Date
123A	Li metal cell CR/DL 123A, CR17345	17g	0.6g	No. CP0015-13	9/26/2013
CR2	Li metal cell, CR17355, CR2	11g	0.33g	RZUN2016-4115	01/11/2017
123A	Li metal cell CR/DL 123A, CR17345	17g	0.6g	RZUN2019-2932	10/18/2019
2/3A	Li metal cell CR/DL 2/3A, CR17345	16g	0.6g	No. CP0049-1	6/28/2018
223	Li metal BATTERY, CR223, CR-P2	37g	1.1g	No. BP0003-2	4/17/2009
245	Li metal BATTERY, CR223, 2CR5	38g	1.1g	No. BP0003-3	12/3/2008
1/3N	Li metal cell CR/DL 1/3N, CR11108	3.3g	0.06g	C-C-114-05	11/06/2019
PX28L	Li metal BATTERY, 2CR11108, 28L	9.1g	0.12g	C-B-168-01	11/06/2019
123A	Li metal cell CR/DL 123A, CR17345	17g	0.4g	RZUN2019-2693	08/23/2019

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<b>Signature with name and Job Title of signatory:</b>  Stephen Benoit <b>DURACELL,</b> <i>Manager of Product Safety and Regulatory</i> 	<b>Date this document was generated:</b>  November 20, 2019
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