

# DURACELL LITHIUM COIN CELLS

## 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:** Coin\_TS-2020-REV1

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

**Telephone:** 203-796-4523, **Email:** UN38.3\_Duracell@duracell.com, **Web:** www.duracell.com

**Test Laboratory:** DURACELL US Operations Inc., 14 Research Drive, Bethel CT. 06801 USA

**Telephone:** 203-796-4523, **Email:** UN38.3\_Duracell@duracell.com, **Web:** www.duracell.com

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 |
|--------------|------------------------------------|--------------|---------------|--------------------|------------------|
| 1220         | Li Metal coin cell, CR1220, DL1220 | 1.0g         | 0.01g         | No. CP0005-8       | 7/30/2008        |
| 1616         | Li Metal coin cell, CR1616, DL1616 | 1.2g         | 0.02g         | No. CP0002-8       | 7/23/2008        |
| 1616         | Li Metal coin cell, CR1616, DL1616 | 1.2g         | 0.02g         | LJKL20180604U01    | 06/22/2018       |
| 1620         | Li Metal coin cell, CR1620, DL1620 | 1.3g         | 0.02g         | No. CP0010-6       | 8/5/2008         |
| 1632         | Li Metal coin cell, CR1632, DL1632 | 1.8g         | 0.04g         | No. CP0018-7       | 9/12/2018        |
| 1632         | Li Metal coin cell, CR1632, DL1632 | 2.0g         | 0.03g         | LJKJ20180901U08    | 9/25/2018        |
| 2016         | Li Metal coin cell, CR2016, DL2016 | 1.7g         | 0.03g         | RZUN2019-2931      | 10/18/2019       |
| 2016         | Li Metal coin cell, CR2016, DL2016 | 2.0g         | 0.03g         | LJKJ20180901U09    | 9/25/2018        |

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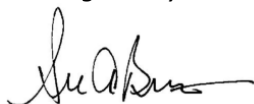
|             |                                    |      |       |                 |            |
|-------------|------------------------------------|------|-------|-----------------|------------|
| <b>2025</b> | Li Metal coin cell, CR2025, DL2025 | 2.4g | 0.05g | RZUN2019-2933   | 10/18/2019 |
| <b>2025</b> | Li Metal coin cell, CR2025, DL2025 | 2.6g | 0.04g | LJKJ20180112U02 | 2/1/2018   |
| <b>2032</b> | Li Metal coin cell, CR2032, DL2032 | 2.9g | 0.07g | RZUN2016-3925   | 12/27/2016 |
| <b>2032</b> | Li Metal coin cell, CR2032, DL2032 | 3.2g | 0.07g | LJKJ20180112U01 | 2/1/2018   |
| <b>2430</b> | Li Metal coin cell, CR2430, DL2430 | 4.5g | 0.08g | RZUN2019-2934   | 12/29/2016 |
| <b>2430</b> | Li Metal coin cell, CR2430, DL2430 | 4.5g | 0.09g | LJKJ20180901U05 | 9/25/2018  |
| <b>2450</b> | Li Metal coin cell, CR2450, DL2450 | 6.3g | 0.18g | No. CP0024-7    | 1/21/2009  |
| <b>2450</b> | Li Metal coin cell, CR2450, DL2450 | 6.3g | 0.17g | LJKJ20180405Z01 | 4/25/2018  |

**Signature with name and Job Title of signatory:**

Stephen Benoit

**DURACELL**

*Manager of Product Safety and Regulatory*



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