

UN 38.3 Test Summary Report

Lithium Cell or Battery Test Summary in Accordance with Section 2.9.4 UN Model Regulations and Sub-section 38.3 of the UN Manual of Tests and Criteria, Part III, subsection 38.3.5

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|--|---------------------------------------|
| <p>[a] <input type="checkbox"/> Cell <input checked="" type="checkbox"/> Battery <input type="checkbox"/> Product <input checked="" type="checkbox"/> Tested Type Part #: TLP-83221/A <input type="checkbox"/> Same Type Part #:</p> | <p>[d] Unique report ID: 15Q-1000</p> |
| <p>[b] Manufacturer Tadiran Batteries Ltd. 44 Yitzhak Rabin Blvd, Kiryat Ekron, Israel 7695001 T. +972 8 9 44 503 sales@tadiran-batt.com www.tadiran.com</p> | <p>[e] Report date: April 2017</p> |
| <p>[c] Test Laboratory Tadiran Batteries Ltd. 44 Yitzhak Rabin Blvd, Kiryat Ekron, Israel 7695001 T. +972 8 9 44 560 aya-d@tadiran-batt.com www.tadiran.com</p> | |

Same Type Part Numbers # (all): covers all the TLP-83221/A/xxxx part numbers with harness/cables.

[f] (i) Li-ion Li-metal.


(iv) **Description:** Primary (non-rechargeable) 3.9 V Lithium Sulfuryl Chloride (Li/SO₂Cl₂) hybrid battery, assembled from 2 (two) "D" size cell and 1 (one) HLC-1530 in parallel connection. The battery is designed to preclude violent rupture under normal conditions incident to transport. The TLP-83221/A battery may come with optional suffixes consisting of a "/" followed by one or more letters and a digit. These suffixes indicate different types of finishing to the battery, e.g. harness.

(ii) Mass: 220 g
(iii) Watt hour rating or Lithium content: 0.43 Wh and 10 g
(v) Cell Battery Product. Model number/Part number: TLP-83221/A


| [g] List of Tests Conducted | Result (Pass / Fail / N.A.) | Test record reference |
|--|-----------------------------|-----------------------|
| 38.3.4.1 T.1: Altitude simulation | Pass | 15Q-1000 |
| 38.3.4.2 T.2: Thermal test | Pass | 15Q-1000 |
| 38.3.4.3 T.3: Vibration | Pass | 15Q-1000 |
| 38.3.4.4 T.4: Shock | Pass | 15Q-1000 |
| 38.3.4.5 T.5: External short circuit | Pass | 15Q-1000 |
| 38.3.4.6 T.6: Impact/Crush (cell only test) | Pass | 15Q-619, 654 |
| 38.3.4.7 T.7: Overcharge (N.A for Li-metal only) | N.A. | N.A. |
| 38.3.4.8 T.8: Forced discharge (cell only test) | Pass | 15Q-619, 654 |

[h] Battery assembly: Not Applicable. UN38.3.3 (f) UN38.3.3 (g)

[i] Test Reference: UN Manual of Tests and Criteria, Part III, sub-section 38.3. *Sixth revised edition*

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|---|
| [j] Signatory A. Date: 2019.07.29 |
| Name: Aya Daniel |
| Title: Quality Manager |
| Signature.  |



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|---|
| [j] Signatory B. Date: 2019.07.29 |
| Name: Kobi Pinsky |
| Title: VP Marketing and Sales |
| Signature.  |

Important! The above signatory / signatories affirm that this document is a true and correct summary of the original individual tests and test data. The original test data is confidential information available to competent State Authorities with valid identification and only upon their formal request. Disclosure of the original test data to any other entity upon its request will be considered by Tadiran and, should Tadiran consider this request is with merit, may be subject to the prior execution of a nondisclosure agreement.