

# 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

|  |   |
|--|---|
| [a] <input checked="" type="checkbox"/> Cell <input type="checkbox"/> Battery <input type="checkbox"/> Product<br><input checked="" type="checkbox"/> <b>Tested Type Part #:</b> HLC-1020<br><input type="checkbox"/> <b>Same Type Part #:</b>                     | [d] Unique report ID: 15Q-856   |
| [b] <b>Manufacturer</b><br>Tadiran Batteries Ltd.<br>44 Yitzhak Rabin Blvd,<br>Kiryat Ekron,<br>Israel 7695001<br>T. +972 8 9 44 503<br><a href="mailto:sales@tadiran-batt.com">sales@tadiran-batt.com</a><br><a href="http://www.tadiran.com">www.tadiran.com</a> | [e] Report date: June 2014<br>[c] <b>Test Laboratory</b><br>Tadiran Batteries Ltd.<br>44 Yitzhak Rabin Blvd,<br>Kiryat Ekron,<br>Israel 7695001<br>T. +972 8 9 44 560<br><a href="mailto:aya-d@tadiran-batt.com">aya-d@tadiran-batt.com</a><br><a href="http://www.tadiran.com">www.tadiran.com</a> |

**Same Type Part Numbers # (all):** covers all the HLC-1020/xxx part numbers with various contact terminations / harness.

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


(iv) **Description:** HLC-1020 is designed to be connected in parallel to a primary lithium metal battery with OCV of up to 3.9V, consists of a single cell and can be transported as a lithium metal battery under UN numbers 3090 and 3091. The HLC-1020 battery may come with the suffixes consist of a "T" followed by one or two letters and digits which indicate different finishing such as /T, /TP, /PT2, etc.  
 Tadiran manufactures all cells/batteries under a quality management system as required under this regulation.

(ii) Mass: 8 g  
 (iii)  Watt hour rating or  Lithium content: 0.07Wh and 0g  
 (v)  Cell  Battery  Product. Model number/Part number: HLC-1020

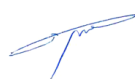
| [g] List of Tests Conducted                      | Result (Pass / Fail / N.A.) | Test record reference |
|--|-----------------------------|-----------------------|
| 38.3.4.1 T.1: Altitude simulation                | Pass                        | 15Q-856               |
| 38.3.4.2 T.2: Thermal test                       | Pass                        | 15Q-856               |
| 38.3.4.3 T.3: Vibration                          | Pass                        | 15Q-856               |
| 38.3.4.4 T.4: Shock                              | Pass                        | 15Q-856               |
| 38.3.4.5 T.5: External short circuit             | Pass                        | 15Q-856               |
| 38.3.4.6 T.6: Impact/Crush (cell only test)      | Pass                        | 15Q-856, 15Q-959      |
| 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-856               |

[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*

[j] Signatory A. Date: 2020.01.27  
 Name: Aya Daniel  
 Title: Quality Manager  
 Signature:  




[j] Signatory B. Date: 2020.01.27  
 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.