**SCREENING REPORT** Page: 1

**Test Number:** 14798B00  **Report Date:** 2021-07-09

**Battery Name:** SAFT LM33600

**Chemistry:** Li/MnO₂

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**Request Number:** 210608-1

**Task Number:** 12831

**Lot Number:** 12249

**Form Factor:** Cylinder

**Purpose:** SCREENING

**Project Engineer:** VHE

Criteria:Screening Min.

**OCV (Volt):** 3.0

**CCV (Volt):** 2.0

**Drain Time (Sec):** 5.0

**Resistor (Ω): :** 1.0

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**Battery Size (mm):** D

**Discharge Temperature (°C):** 24

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**Number of Batteries Tested :** 67

**Number of Batteries Failed(\*):** 0

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**Date of Manufacture:** 07/15/2019

**Date of Receipt:** 11/06/2019

**Date Started:** 07/08/2021

**Date Completed:** 07/08/2021

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Prepared By: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_ Reviewed By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

Reviewed By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

**Test Number:** 14798B00

Note(s):  
  
1. Report Date:  
  
2. Test Responsibility:  
   
 a. Data file preparation:  
 b. Technical review:  
 c. Final review:  
  
3. The outlier is identified by use 1.5\*Interquartile Range rule (IQR). Q1, Q3 = [25% percentile, 75% percentile], the minimum for outliner = Q1 – 1.5\* IQR, the maximum for outlier = Q3 +1.5\* IQR.

**SCREENING REPORT**

**Test Number:** 14798B00  **Date:**2021-07-09

**Sample Name:** SAFT LM33600

**Chemistry:** Li/MnO₂

**Voltage Statistic Table**

All samples OCV CCV

**Maximum:** **3.215** **2.917**

**Minimum:** **3.061** **2.829**

**Median:** **3.194** **2.891**

**Mean (M):** **3.190** **2.891**

**Stander Deviation (SD):** **0.02516** **0.01443**

**Total Samples:** **67** **67**

**Total Passing Criterion:** **67** **67**

**Total Failing Criterion:** **0** **0**

**95%** **confidence Interval**  3.184 / 3.196 2.887 / 2.894

**Outlier Min/Max** 3.173 / 3.215 2.867 / 2.917

**Total Outlier:** 3 2

**OCV > or =** 3.000**V**

**CCV > or =** 2.000V **@** 1.0 Ohms for 5.0 Seconds.

**CUMULATIVE TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **All Sample OCV** | | **All Sample CCV** | |
| Voltage Range | Samples | Voltage Range | Samples |
| 3.215-3.199 | 17 | 2.917-2.907 | 4 |
| 3.199-3.183 | 47 | 2.907-2.897 | 14 |
| 3.183-3.167 | 0 | 2.897-2.887 | 26 |
| 3.167-3.151 | 0 | 2.887-2.877 | 18 |
| 3.151-3.135 | 0 | 2.877-2.867 | 3 |
| 3.135-3.119 | 1 | 2.867-2.857 | 0 |
| 3.119-3.103 | 0 | 2.857-2.847 | 0 |
| 3.103-3.087 | 0 | 2.847-2.837 | 0 |
| 3.087-3.071 | 0 | 2.837-2.827 | 2 |
| 3.071-3.055 | 2 |  |  |

**SCREENING REPORT**

**Test Number:** 14798B00 **Raw Data** **Chemistry:** Li/MnO₂

**Sample Name:** SAFT LM33600 **Load:** 1.0Ω

**Sort Order:** Bar Code Number **Load Time:** 5.0Sec(S)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Bar Code Number | Manufacturer  Number | Manufacture Date | Screening  OCV | Screening  CCV |  |  | Inspection |
| 471388 | 1 | 07/15/2019 | 3.184 | 2.888 |  |  | OK |
| 471389 | 2 | 07/15/2019 | 3.206 | 2.912 |  |  | OK |
| 471390 | 3 | 07/15/2019 | 3.201 | 2.904 |  |  | OK |
| 471391 | 4 | 07/15/2019 | 3.187 | 2.896 |  |  | OK |
| 471392 | 5 | 07/15/2019 | 3.202 | 2.903 |  |  | OK |
| 471393 | 6 | 07/15/2019 | 3.190 | 2.883 |  |  | OK |
| 471394 | 7 | 07/15/2019 | 3.192 | 2.882 |  |  | OK |
| 471395 | 8 | 07/15/2019 | 3.203 | 2.905 |  |  | OK |
| 471396 | 9 | 07/15/2019 | 3.190 | 2.885 |  |  | OK |
| 471397 | 10 | 07/15/2019 | 3.197 | 2.888 |  |  | OK |
| 471398 | 11 | 07/15/2019 | 3.187 | 2.880 |  |  | OK |
| 471399 | 12 | 07/15/2019 | 3.194 | 2.889 |  |  | OK |
| 471400 | 13 | 07/15/2019 | 3.197 | 2.888 |  |  | OK |
| 471401 | 14 | 07/15/2019 | 3.196 | 2.887 |  |  | OK |
| 471402 | 15 | 07/15/2019 | 3.194 | 2.892 |  |  | OK |
| 471403 | 16 | 07/15/2019 | 3.195 | 2.896 |  |  | OK |
| 471404 | 17 | 07/15/2019 | 3.192 | 2.895 |  |  | OK |
| 471405 | 18 | 07/15/2019 | 3.204 | 2.917 |  |  | OK |
| 471406 | 19 | 07/15/2019 | 3.194 | 2.891 |  |  | OK |
| 471407 | 20 | 07/15/2019 | 3.188 | 2.886 |  |  | OK |
| 471408 | 21 | 07/15/2019 | 3.194 | 2.897 |  |  | OK |
| 471409 | 22 | 07/15/2019 | 3.194 | 2.885 |  |  | OK |
| 471410 | 23 | 07/15/2019 | 3.190 | 2.898 |  |  | OK |
| 471411 | 24 | 07/15/2019 | 3.205 | 2.901 |  |  | OK |
| 471412 | 25 | 07/15/2019 | 3.199 | 2.884 |  |  | OK |
| 471413 | 26 | 07/15/2019 | 3.194 | 2.878 |  |  | OK |
| 471414 | 27 | 07/15/2019 | 3.189 | 2.891 |  |  | OK |
| 471415 | 28 | 07/15/2019 | 3.196 | 2.890 |  |  | OK |
| 471416 | 29 | 07/15/2019 | 3.191 | 2.883 |  |  | OK |
| 471417 | 30 | 07/15/2019 | 3.207 | 2.897 |  |  | OK |
| 471418 |  | 07/15/2019 | 3.215 | 2.887 |  |  | OK |
| 471419 | 32 | 07/15/2019 | 3.189 | 2.892 |  |  | OK |
| 471420 | 33 | 07/15/2019 | 3.186 | 2.886 |  |  | OK |
| 471421 | 34 | 07/15/2019 | 3.186 | 2.886 |  |  | OK |
| 471422 | 35 | 07/15/2019 | 3.189 | 2.884 |  |  | OK |
| 471423 | 36 | 07/15/2019 | 3.193 | 2.874 |  |  | OK |
| 471424 | 37 | 07/15/2019 | 3.197 | 2.895 |  |  | OK |
| 471425 | 38 | 07/15/2019 | 3.185 | 2.889 |  |  | OK |
| 471426 | 39 | 07/15/2019 | 3.192 | 2.895 |  |  | OK |
| 471427 | 40 | 07/15/2019 | 3.195 | 2.903 |  |  | OK |
| 471428 | 41 | 07/15/2019 | 3.204 | 2.905 |  |  | OK |
| 471429 | 42 | 07/15/2019 | 3.197 | 2.895 |  |  | OK |
| 471430 | 43 | 07/15/2019 | 3.064 \* | 2.829 \* |  |  | OK |
| 471431 | 44 | 07/15/2019 | 3.189 | 2.885 |  |  | OK |
| 471432 | 45 | 07/15/2019 | 3.207 | 2.909 |  |  | OK |
| 471433 | 46 | 07/15/2019 | 3.203 | 2.907 |  |  | OK |
| 471434 | 47 | 07/15/2019 | 3.204 | 2.904 |  |  | OK |
| 471435 | 48 | 07/15/2019 | 3.193 | 2.892 |  |  | OK |
| 471436 | 49 | 07/15/2019 | 3.204 | 2.904 |  |  | OK |
| 471437 | 50 | 07/15/2019 | 3.204 | 2.909 |  |  | OK |
| 471438 | 51 | 07/15/2019 | 3.189 | 2.887 |  |  | OK |
| 471439 | 52 | 07/15/2019 | 3.195 | 2.890 |  |  | OK |
| 471440 | 53 | 07/15/2019 | 3.196 | 2.881 |  |  | OK |
| 471441 | 54 | 07/15/2019 | 3.184 | 2.874 |  |  | OK |
| 471442 | 55 | 07/15/2019 | 3.201 | 2.899 |  |  | OK |
| 471443 | 56 | 07/15/2019 | 3.191 | 2.892 |  |  | OK |
| 471444 | 57 | 07/15/2019 | 3.188 | 2.898 |  |  | OK |
| 471445 | 58 | 07/15/2019 | 3.194 | 2.897 |  |  | OK |
| 471446 | 59 | 07/15/2019 | 3.192 | 2.872 |  |  | OK |
| 471447 | 60 | 07/15/2019 | 3.206 | 2.907 |  |  | OK |
| 471448 | 61 | 07/15/2019 | 3.196 | 2.893 |  |  | OK |
| 471449 | 62 | 07/15/2019 | 3.189 | 2.889 |  |  | OK |
| 471450 | 63 | 07/15/2019 | 3.061 \* | 2.830 \* |  |  | OK |
| 471451 | 64 | 07/15/2019 | 3.122 \* | 2.879 |  |  | OK |
| 471452 | 65 | 07/15/2019 | 3.200 | 2.903 |  |  | OK |
| 471453 | 66 | 07/15/2019 | 3.198 | 2.895 |  |  | OK |
| 471454 | 67 | 07/15/2019 | 3.196 | 2.888 |  |  | OK |

Key: ^ for Tab Tolerance Fail(T), ! for Criteria Fall(F), \* for outlier(OH for High)(OL for Low)