**SCREENING REPORT** Page: 1

**Test Number:** 14891C00  **Report Date:** 2021-06-28

**Battery Name:** Panasonic CR2032

**Chemistry:** Li/MnO₂

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**Request Number:** 210609-2

**Task Number:** 12827

**Lot Number:** 13031

**Form Factor:** Coin

**Purpose:** Screening

**Project Engineer:** CJH

Criteria:Screening Min.

**OCV (Volt):** 3.2

**CCV (Volt):** 2.7

**Drain Time (Sec):** 5

**Current(mA):** 0.002

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**Battery Size (mm):** 3.2(H) X 20.0(D)

**Discharge Temperature (°C):** 24

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**Number of Batteries Tested :** 34

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

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**Date of Manufacture:** 2019-06-15

**Date of Receipt:** 2021-05-13

**Date Started:** 2021-06-18

**Date Completed:** 2021-06-18

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

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

**Test Number:** 14891C00

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:** 14891C00  **Date:**2021-07-09

**Sample Name:** Panasonic CR2032

**Chemistry:** Li/MnO₂

**Voltage Statistic Table**

All samples OCV CCV

**Maximum:** **3.257** **3.230**

**Minimum:** **3.242** **3.192**

**Median:** **3.250** **3.223**

**Mean (M):** **3.249** **3.221**

**Stander Deviation (SD):** **0.00316** **0.00745**

**Total Samples:** **34** **34**

**Total Passing Criterion:** **34** **34**

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

**95%** **confidence Interval**  3.248 / 3.251 3.218 / 3.223

**Outlier Min/Max** 3.244 / 3.256 3.208 / 3.235

**Total Outlier:** 4 1

**OCV > or =** 3.200**V**

**CCV > or =** 2.700V **@** 0.002 mA for 5 Seconds.

**CUMULATIVE TABLE**

|  |  |  |  |
| --- | --- | --- | --- |
| **All Sample OCV** | | **All Sample CCV** | |
| Voltage Range | Samples | Voltage Range | Samples |
| 3.257-3.254 | 1 | 3.230-3.224 | 14 |
| 3.254-3.251 | 7 | 3.224-3.218 | 11 |
| 3.251-3.248 | 14 | 3.218-3.212 | 4 |
| 3.248-3.245 | 8 | 3.212-3.206 | 4 |
| 3.245-3.242 | 3 | 3.206-3.200 | 0 |
| 3.242-3.239 | 1 | 3.200-3.194 | 0 |
| 3.239-3.236 | 0 | 3.194-3.188 | 1 |
|  |  |  |  |

**SCREENING REPORT**

**Test Number:** 14891C00 **Raw Data** **Chemistry:** Li/MnO₂

**Sample Name:** Panasonic CR2032 **Load:** 0.002mV

**Sort Order:** Bar Code Number **Load Time:** 5Sec(S)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Bar Code Number | Manufacturer  Number | Manufacture Date | Screening  OCV | Screening  CCV |  |  | Inspection |
| 471259 |  | 2019-06-15 | 3.257 \* | 3.192 \* |  |  | OK |
| 471260 |  | 2019-06-15 | 3.252 | 3.223 |  |  | OK |
| 471261 |  | 2019-06-15 | 3.253 | 3.227 |  |  | OK |
| 471262 |  | 2019-06-15 | 3.244 \* | 3.222 |  |  | OK |
| 471263 |  | 2019-06-15 | 3.249 | 3.225 |  |  | OK |
| 471264 |  | 2019-06-15 | 3.253 | 3.211 |  |  | OK |
| 471265 |  | 2019-06-15 | 3.249 | 3.212 |  |  | OK |
| 471266 |  | 2019-06-15 | 3.252 | 3.225 |  |  | OK |
| 471267 |  | 2019-06-15 | 3.250 | 3.225 |  |  | OK |
| 471268 |  | 2019-06-15 | 3.247 | 3.219 |  |  | OK |
| 471269 |  | 2019-06-15 | 3.250 | 3.227 |  |  | OK |
| 471270 |  | 2019-06-15 | 3.251 | 3.226 |  |  | OK |
| 471271 |  | 2019-06-15 | 3.242 \* | 3.215 |  |  | OK |
| 471272 |  | 2019-06-15 | 3.248 | 3.219 |  |  | OK |
| 471273 |  | 2019-06-15 | 3.249 | 3.225 |  |  | OK |
| 471274 |  | 2019-06-15 | 3.254 | 3.209 |  |  | OK |
| 471275 |  | 2019-06-15 | 3.254 | 3.230 |  |  | OK |
| 471276 |  | 2019-06-15 | 3.250 | 3.224 |  |  | OK |
| 471277 |  | 2019-06-15 | 3.251 | 3.227 |  |  | OK |
| 471278 |  | 2019-06-15 | 3.244 \* | 3.218 |  |  | OK |
| 471279 |  | 2019-06-15 | 3.248 | 3.211 |  |  | OK |
| 471280 |  | 2019-06-15 | 3.249 | 3.214 |  |  | OK |
| 471281 |  | 2019-06-15 | 3.250 | 3.226 |  |  | OK |
| 471282 |  | 2019-06-15 | 3.245 | 3.223 |  |  | OK |
| 471283 |  | 2019-06-15 | 3.252 | 3.217 |  |  | OK |
| 471284 |  | 2019-06-15 | 3.248 | 3.223 |  |  | OK |
| 471285 |  | 2019-06-15 | 3.251 | 3.228 |  |  | OK |
| 471286 |  | 2019-06-15 | 3.246 | 3.223 |  |  | OK |
| 471287 |  | 2019-06-15 | 3.250 | 3.225 |  |  | OK |
| 471288 |  | 2019-06-15 | 3.248 | 3.224 |  |  | OK |
| 471289 |  | 2019-06-15 | 3.251 | 3.226 |  |  | OK |
| 471290 |  | 2019-06-15 | 3.246 | 3.222 |  |  | OK |
| 471291 |  | 2019-06-15 | 3.250 | 3.225 |  |  | OK |
| 471357 |  | 2019-06-15 | 3.248 | 3.222 |  |  | OK |

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