

December 2022

**Test Results for Mobile Device Acquisition Tool:
Final Mobile Forensics 4 v10.3.2022**

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Introduction

The Computer Forensics Tool Testing (CFTT) program is a joint project of the Department of Homeland Security's (DHS) Science and Technology Directorate, the National Institute of Justice, and the National Institute of Standards and Technology's (NIST) Special Programs Office and Information Technology Laboratory. CFTT is supported by other organizations, including the Federal Bureau of Investigation, the U.S. Department of Defense Cyber Crime Center, U.S. Internal Revenue Service's Criminal Investigation Division Electronic Crimes Program, and the DHS' Bureau of Immigration and Customs Enforcement, U.S. Customs and Border Protection and U.S. Secret Service. The objective of the CFTT program is to provide measurable assurance to practitioners, researchers, and other applicable users that the tools used in computer forensics investigations provide accurate results. Accomplishing this requires the development of specifications and test methods for computer forensics tools and subsequent testing of specific tools against those specifications.

Test results provide the information necessary for developers to improve tools, users to make informed choices, and the legal community and others to understand the tools' capabilities. The CFTT approach to testing computer forensics tools is based on well-recognized methodologies for conformance and quality testing. Interested parties in the computer forensics community can review and comment on the specifications and test methods posted on the CFTT Web site (<https://www.cftt.nist.gov/>).

This document reports the results from testing Final Mobile Forensics 4 v10.3.2022 across supported mobile devices and UICCs.

Federated Testing is an expansion of the CFTT program to provide forensic investigators and labs with test materials for tool testing and to support shared test reports. The goal of Federated Testing is to help forensic investigators to test the tools they use in their labs and to enable sharing of tool test results. CFTT's Federated Testing Forensic Tool Testing Environment and included test suites can be downloaded from <https://www.cftt.nist.gov/federated-testing.html> and used to test forensic tools. The results can be optionally shared with CFTT, reviewed by CFTT staff, and then shared with the community.

Test results from this and other tools can be found on DHS's computer forensics web page, <https://www.dhs.gov/science-and-technology/nist-cftt-reports>.

How to Read This Report

This report is divided into four sections. Section 1 identifies and provides a summary of any significant anomalies observed in the test runs. This section is sufficient for most readers to assess the suitability of the tool for the intended use. Section 2 identifies the mobile devices used for testing. Section 3 lists testing environment, the internal memory data objects used to populate the mobile devices. Section 4 provides an overview of the test case results reported by the tool.

Test Results for Mobile Device Acquisition Tool

Tool Tested: Final Mobile Forensics 4

Software Version: v10.3.2022

Supplier: Final Data

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1 Results Summary

Final Mobile Forensics 4 v10.3.2022 was tested for its ability to acquire active data from the internal memory of supported mobile devices.

The data reported for the devices below varies based upon the data extraction technique supported. For instance, a physical and/or file system extraction will provide the user with more data than a logical extraction. Each supported data extraction technique was performed. Except for the following anomalies, the tool acquired all supported data objects completely and accurately for all mobile devices tested.

Equipment related data:

IMEI is not reported. (Devices: *Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy Note 10, One Plus 9, One Plus 10 PRO, iPhone XR, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

Personal Information Management (PIM) data:

- Contacts are not reported. (Devices: *Galaxy S22, Galaxy Z Fold 3 5G, iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

- Calendar data is not reported. (Devices: *Google Pixel 4, Google Pixel 6 PRO, Galaxy S22, Galaxy Z Fold 3 5G, One Plus 9, One Plus 10 PRO, iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)
- Notes or Memo entries are not reported. (Devices: *Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy Note 10, One Plus 9, One Plus 10 PRO, iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)
- Notes or Memo entries are partially reported. (Devices: *Galaxy S22, Galaxy Z Fold 3 5G*)
- Call log data (incoming, outgoing, missed calls) is not reported. (Devices: *Galaxy S22, Galaxy Z Fold 3 5G, One Plus 9, iPhone XR, iPhone11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

SMS Messages:

- SMS data (incoming, outgoing) is not reported. (Devices: *Google Pixel 6, Google Pixel 6 PRO, iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)
- SMS data is partially reported. (Devices: *Galaxy S22, One Plus 9, One Plus 10 PRO*)

MMS Messages:

- MMS audio file attachments are not reported. (Device: *Google Pixel 4*)
- MMS audio file attachments are not reported with the text message. (Devices: *Google Pixel 6, Google Pixel 6 PRO*)
- Outgoing MMS containing graphic file attachment is not reported. (Device: *Galaxy S22*)
- Incoming MMS containing video file attachment is not reported. (Device: *Galaxy S22*)
- MMS messages are not reported. (Devices: *iPhone XR, iPhone 11, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)
- MMS messages are partially reported. (Device: *iPhone 13*)

Stand-alone files:

- Audio files are not reported. (Devices: *iPhone XR, iPhone 13, iPhone 13 PRO Max, iPhone 13 Mini*)
- Document files are not reported. (Devices: *iPhone XR, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)
- Audio and video files are not reported. (Devices: *iPhone 11, iPhone 13 PRO*)

Social media Data:

- Social media related data (Facebook, LinkedIn, Instagram, Pinterest, Snapchat and WhatsApp) is not reported. (Device: *Google Pixel 4*)
- Social media related data (Twitter) is partially reported. (Devices: *Google Pixel 4, Galaxy Note 10*)
- Social media related data (Facebook, Twitter, LinkedIn, Instagram, Pinterest, Snapchat and WhatsApp) is not reported. (Devices: *Google Pixel 6, Google Pixel 6 PRO, One Plus 9, One Plus 10 PRO, iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

- Social media related data (LinkedIn, Pinterest and Snapchat) is not reported. (Devices: *Galaxy S9, Galaxy S10, iPhone 8, iPhone SE*)
- Social media related data (Instagram) is partially reported. (Devices: *Galaxy S9, Galaxy Note 10, iPhone X*)
- Social media related data (WhatsApp) is not reported. (Device: *Galaxy S10*)
- Social media related data (Facebook, Twitter, LinkedIn, Pinterest, Snapchat and WhatsApp) is not reported. (Devices: *Galaxy S22, Galaxy Z Fold 3 5G*)
- Social media related data (Facebook and WhatsApp) is partially reported. (Device: *Galaxy Note 10*)
- Social media related data (Facebook and Twitter) is partially reported. (Device: *iPhone 8*)
- Social media related data (Twitter, LinkedIn, Pinterest and Snapchat) is not reported. (Device: *iPhone X*)
- Social media related data (Facebook and Twitter) is not reported. (Device: *iPhone SE*)

Internet Data:

Internet data (browser history, bookmarks, and emails) is not reported. (Devices: *Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy S22, Galaxy Note 10, Galaxy Z Fold 3 5G, One Plus 9, One Plus 10 PRO, iPhone XR, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

GPS Location Data:

GPS related data (coordinates, locations, geotagged pictures & videos) is not reported. (Devices: *Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy S22, Galaxy Note 10, Galaxy Z Fold 3 5G, One Plus 9, One Plus 10 PRO, iPhone 13 PRO, iPhone 13 PRO Max, iPhone 13 Mini*)

UICCs:

- MSISDN is not reported.
- Password protected SIM is acquired without entering password.
- PIN attempts are not reported.

For more test result details see section 4.

2 Mobile Devices

The following table lists the mobile devices used for testing Final Mobile Forensics 4 v10.3.2022.

Make	Model Name	OS	Model #	CDMA
Apple iPhone	8	iOS 11.3.1	15E302	CDMA
Apple iPhone	X	iOS 11.3.1	15E302	CDMA
Apple iPhone	XR	iOS 15.1	NQCK2LL/A	CDMA
Apple iPhone	SE	iOS 15.1	MX9N2LL/A	CDMA
Apple iPhone	11	iOS 15.1	15E302	CDMA
Apple iPhone	13	iOS 15.6	MNGD3LL/A	CDMA
Apple iPhone	13 PRO	iOS 15.6	MNNDT3LL/A	CDMA
Apple iPhone	13 PRO Max	iOS 15.6	MNCP34LL/A	CDMA
Apple iPhone	13 Mini	iOS 15.6	MNF83LL/A	CDMA
Google	Pixel 4	Android 10	G0201	CDMA
Google	Pixel 6	Android 12	GR1YH	CDMA
Google	Pixel 6 PRO	Android 12	GF5KQ	CDMA
Samsung Galaxy	S9	Android 8.0.0	SM-G960U1	CDMA
Samsung Galaxy	S10	Android 9	SM-G973U1	CDMA
Samsung Galaxy	S22	Android 12	SM-S901U1	CDMA
Samsung Galaxy	Note 8	Android 7.1.1	SM-N950U1	CDMA
Samsung Galaxy	Note 10	Android 9	SM-N970U1	CDMA
Samsung Galaxy	Z Fold 3 5G	Android 12	SM-F926U1	CDMA
Huawei	P20 Pro	Android 8.1.0	CLTL29810106 (C636)	CDMA
One Plus	9	Android 11	LE2115	CDMA
One Plus	10 PRO	Android 12	NE2215	CDMA

Table 1: Mobile Devices

3 Testing Environment

The tests were run in the NIST CFTT lab. This section describes the selected test execution environment, and the data objects populated onto the internal memory of mobile devices.

3.1 Execution Environment

Final Mobile Forensics 4 v10.3.2022 was installed on Windows 10 Pro version 10.0.19044 Build 19044.

3.2 Internal Memory Data Objects

Final Mobile Forensics 4 v10.3.2022 was measured by analyzing acquired data from the internal memory of pre-populated mobile devices. Table 2 defines the data objects and elements used for populating mobile devices provided the mobile device supports the data element.

Data Objects	Data Elements
Address Book Entries	<i>Regular Length</i> <i>Maximum Length</i> <i>Special Character</i> <i>Blank Name</i> <i>Regular Length, email</i> <i>Regular Length, graphic</i> <i>Regular Length, Address</i> <i>Deleted Entry</i> <i>Non-Latin Entry</i> <i>Contact Groups</i>
PIM Data: Datebook/Calendar; Memos	<i>Regular Length</i> <i>Maximum Length</i> <i>Deleted Entry</i> <i>Special Character</i> <i>Blank Entry</i>
Call Logs	<i>Incoming</i> <i>Outgoing</i> <i>Missed</i> <i>Incoming – Deleted</i> <i>Outgoing – Deleted</i> <i>Missed - Deleted</i>

Data Objects	Data Elements
Text Messages	<i>Incoming SMS – Read Incoming SMS – Unread Outgoing SMS Incoming EMS – Read Incoming EMS – Unread Outgoing EMS Incoming SMS – Deleted Outgoing SMS – Deleted Incoming EMS – Deleted Outgoing EMS – Deleted Non-Latin SMS/EMS</i>
MMS Messages	<i>Incoming Audio Incoming Graphic Incoming Video Outgoing Audio Outgoing Graphic Outgoing Video</i>
Application Data	<i>Device Specific App Data</i>
Stand-alone data files	<i>Audio Graphic Video Audio – Deleted Graphic - Deleted Video - Deleted</i>
Internet Data	<i>Visited Sites Bookmarks E-mail</i>
Location Data	<i>GPS Coordinates Geo-tagged Data</i>
Social Media Data	<i>Facebook Twitter LinkedIn Instagram Pinterest Snapchat WhatsApp</i>

Table 2: Internal Memory Data Objects

4 Test Results

This section provides the test cases results reported by the tool. Sections 4.1 – 4.3 identify the mobile device operating system type, media type such as Android, iOS and UICCs, the make and model of mobile devices used for testing Final Mobile Forensics 4 v10.3.2022.

The *Test Cases* column (internal memory acquisition) in sections 4.1 - 4.3 are comprised of two sub-columns that define a particular test category and individual sub-categories that are verified when acquiring the internal memory for supported mobile devices and UICCs within each test case. Each individual sub-category row results for each mobile device/UICC tested. The results are as follows:

As Expected: the mobile forensic application returned expected test results – the tool acquired and reported data from the mobile device/UICC successfully.

Partial: the mobile forensic application returned some of data from the mobile device/UICC.

Not As Expected: the mobile forensic application failed to return expected test results – the tool did not acquire, or report supported data from the mobile device/UICC successfully.

NA: Not Applicable – the tool does not provide support for the acquisition for a particular data element.

4.1 Android Mobile Devices

The internal memory contents for Android devices were acquired and analyzed with Final Mobile Forensics v10.3.2022. All test cases pertaining to the acquisition of supported Android devices were successful except for the following across all Android devices.

- Equipment related data (IMEI number) is not reported for the Google Pixel 4, Pixel 6, Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy Note 10, One Plus 9 and One Plus 10 PRO.
- Contacts are not reported for the Galaxy S22 and Galaxy Z Fold 3 5G.
- Calendar event entries are not reported for the Google Pixel 4, Google Pixel 6 PRO, Galaxy S22 and Galaxy Z Fold 3 5G, One Plus 9 and One Plus 10 PRO.
- Memo or Note entries are not reported for the Google Pixel 4 and Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy Note 10, One Plus 9 and One Plus 10 PRO.
- Long memo entries are truncated for the Galaxy S22 and Galaxy Z Fold 3 5G.
- Call log data (incoming, outgoing, missed calls) is not reported for the Galaxy S22, Galaxy Z Fold 3 5G and One Plus 9.
- SMS messages (incoming, outgoing) are not reported for the Google Pixel 6 and Google Pixel 6 PRO.
- Not all SMS messages are reported for the Galaxy S22, One Plus 9 and One Plus 10 PRO.
- Audio file attachment within an MMS is not reported for the Google Pixel 4 and Google Pixel 6 PRO.
- Audio files are reported separate from the text portion of the message for the Google Pixel 6.
- Outgoing graphic MMS message is not reported for the Galaxy S22.
- Incoming video MMS message is not reported for the S22.
- Social media related data (Facebook, LinkedIn, Instagram, Pinterest, Snapchat and WhatsApp) is not reported for the Google Pixel 4.
- Social media related data (Twitter) is partially reported for the Google Pixel 4 and Galaxy Note 10.
- Social media related data (Facebook, Twitter, LinkedIn, Instagram, Pinterest, Snapchat and WhatsApp) is not reported for the Google Pixel 6, Google Pixel 6 PRO, One Plus 9 and One Plus 10 PRO.
- Social media related data (LinkedIn, Pinterest and Snapchat) is not reported for the Galaxy S9 and Galaxy S10.
- Social media related data (Instagram) is partially reported for the Galaxy S9 and Galaxy Note 10. Only user account information and graphic files is reported.
- Social media related data (WhatsApp) is not reported for the Galaxy S10.
- Social media related data (Facebook, Twitter, LinkedIn, Pinterest, Snapchat and WhatsApp) is not reported for the Galaxy S22 and Galaxy Fold 3 5G.
- Social media related data (Facebook and WhatsApp) is partially reported for the Galaxy Note10.
- Internet data (browser history, bookmarks and emails) is not reported for the Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy S22, Galaxy Note 10, Galaxy Z Fold 3 5G, One Plus 9 and One Plus 10 PRO.

- GPS related data (coordinates, locations, geotagged pictures & videos) is not reported for the Google Pixel 4, Google Pixel 6, Google Pixel 6 PRO, Galaxy S9, Galaxy S10, Galaxy S22, Galaxy Note 10, Galaxy Z Fold 3 5G, One Plus 9 and One Plus 10 PRO.

NOTE:

- Google was not an option to pick as a manufacturer, “Other” was selected as a manufacturer for the Google Pixel 4, Google Pixel 6 and Google Pixel 6 PRO.
- Acquisition method used for the Google Pixel 4 and Google Pixel 6 was Android Backup.
- Acquisition method, Android Backup, failed for the Google Pixel 6 Pro. Acquisition method used was Android Rooting.
- Deleted stand-alone video, audio and text files recovered were reported as active for the Google Pixel 6.
- There was not an exact profile for the Galaxy S9 model SM-G960U1, the results listed in this report are using the SM-960U model.
- Adb Backup acquisition method was used for the Galaxy S9 and Galaxy S10.
- Samsung Backup acquisition method results are listed for the Galaxy S22.
- Tool prompts user to use the Galaxy Note 10 profile to acquire the Galaxy Note 8, should the Galaxy Note 8 fails. When attempting to acquire the Galaxy Note 8 with its profile, it fails; Therefore, the Galaxy Note 10’s profile was used. No data was reported when finished.
- Samsung Backup and Adb Backup acquisition methods were both performed for the Galaxy Note 10. The results included in this report for the Galaxy Note 10 are from the Adb Backup as it reported more data artifacts.
- Samsung Backup and Adb Backup acquisition methods were both performed for the Galaxy Z Fold 3 5G. The results included in this report for the Galaxy Z Fold 3 5G are from the Samsung Backup as it reported more data artifacts.
- Tool falls in a loop and doesn’t acquire the Huawei P20 PRO.
- Android Rooting acquisition method is not supported for the One Plus 9 and One Plus 10 PRO. Results reported are using the Android Backup acquisition method.
- Tool prompts user to try to acquisition one more time after failing the first time. After saying “yes” acquisition continued and finished without re-starting.
- Deleted data recovered for the Galaxy S9: calendar entries.
- Deleted data recovered for the Galaxy S22 and Galaxy Z Fold 3 5G: memo entries.
- Recovered (deleted) stand-alone graphic file is reported as “active” for the One Plus 10 PRO.

See Table 3a, 3b below for more details.

Internal Memory Acquisition
Final Mobile Forensics 4 v10.3.2022
Mobile Device Platform: Android

Test Cases:	Google Pixel 4	Google Pixel 6	Google Pixel 6 PRO	Galaxy S9	Galaxy S10	Galaxy S22	Galaxy Note 10
Acquisition: Acquire All	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Acquisition: Disrupted	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Reporting: Preview-Pane	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Reporting: Generated Reports	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Equipment/User Data: IMEI/MEID/ESN	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
Equipment/User Data: MSISDN	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
PIM Data: Contacts	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
PIM Data: Calendar	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
PIM Data: Memos/Notes	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	Partial	Not As <i>Expected</i>
Call Logs: Incoming	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
Call Logs: Outgoing	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
Call Logs: Missed	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
SMS Messages: Incoming	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Partial	As <i>Expected</i>
SMS Messages: Outgoing	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
MMS Messages: Graphic	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Partial	As <i>Expected</i>
MMS Messages: Audio	Partial	Partial	Partial	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
MMS Messages: Video	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Partial	As <i>Expected</i>
Stand-alone Files: Graphic	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Stand-alone Files: Audio	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>
Stand-alone Files: Video	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Application Data: Documents (txt, pdf files)	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>

Test Cases:	Google Pixel 4	Google Pixel 6	Google Pixel 6 PRO	Galaxy S9	Galaxy S10	Galaxy S22	Galaxy Note 10
Social Media Data: Facebook	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>
Social Media Data: Twitter	<i>Partial</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>
Social Media Data: LinkedIn	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Instagram	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>	<i>As Expected</i>	<i>NA</i>	<i>Partial</i>
Social Media Data: Pinterest	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Snapchat	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: WhatsApp	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Partial</i>
Internet Data: Bookmarks	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: History	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Email	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
GPS Data: Coordinates/Geo-tagged	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Non-Latin Character: Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing: Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Case File Data Protection: Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Run SQLite Commands	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>

Table 3a: Android Devices

Internal Memory Acquisition
Final Mobile Forensics 4 v10.3.2022
Mobile Device Platform: Android

Test Cases:	Galaxy Z Fold 3 5G	One Plus 9	One Plus 10 PRO
Acquisition: Acquire All	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Acquisition: Disrupted	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Reporting: Preview-Pane	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Reporting: Generated Reports	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Equipment/User Data: IMEI/MEID/ESN	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Equipment/User Data: MSISDN	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
PIM Data: Contacts	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
PIM Data: Calendar	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
PIM Data: Memos/Notes	<i>Partial</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Call Logs: Incoming	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
Call Logs: Outgoing	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
Call Logs: Missed	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>
SMS Messages: Incoming	<i>As Expected</i>	<i>Partial</i>	<i>Partial</i>
SMS Messages: Outgoing	<i>As Expected</i>	<i>Partial</i>	<i>Partial</i>
MMS Messages: Graphic	<i>As Expected</i>	<i>NA</i>	<i>As Expected</i>
MMS Messages: Audio	<i>As Expected</i>	<i>NA</i>	<i>As Expected</i>
MMS Messages: Video	<i>As Expected</i>	<i>NA</i>	<i>As Expected</i>
Stand-alone Files: Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Stand-alone Files: Audio	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Stand-alone Files: Video	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Application Data: Documents (txt, pdf files)	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>

Test Cases:	Galaxy Z Fold 3 5G	One Plus 9	One Plus 10 PRO
Social Media Data: Facebook	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Twitter	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: LinkedIn	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Instagram	<i>NA</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Pinterest	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Snapchat	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: WhatsApp	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Bookmarks	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: History	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Email	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
GPS Data: Coordinates/Geo-tagged	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Non-Latin Character: Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing: Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Case File Data Protection: Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Run SQLite Commands	<i>NA</i>	<i>NA</i>	<i>NA</i>

Table 3b: Android Devices

4.2 iOS Mobile Devices

The internal memory contents for iOS devices were acquired and analyzed with Final Mobile Forensics 4 v10.3.2022.

All test cases pertaining to the acquisition of supported iOS devices were successful except for the following across all iOS devices.

- Equipment related data (IMEI number) is not reported for the iPhone XR, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Contacts are not reported for the iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Calendar event entries are not reported for the iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Memo or Note entries are not reported for the iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Call log data (incoming, outgoing, missed calls) is not reported for the iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- SMS messages are not reported for the iPhone XR, iPhone 11 and iPhone 13, iPhone 13 Pro, iPhone 13 Pro Max and iPhone 13 mini.
- MMS messages are not reported for the iPhone XR and iPhone 11.
- Only MMS graphic, audio and video files attachments are reported for the iPhone 13, iPhone 13 Pro, iPhone 13 Pro Max and iPhone 13 mini.
- Stand-alone audio files are not reported for the iPhone XR and iPhone 13.
- Stand-alone audio and video files are not reported for the iPhone 11, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Document files are not reported for the iPhone XR, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Social media related data (Facebook, Twitter, LinkedIn, Pinterest and Snapchat) is not reported for the iPhone 8.
- Social media related data (Instagram) is partially reported. Tool reports chat id and contact information but no messages for the iPhone X.
- Social media related data (Twitter, LinkedIn, Pinterest and Snapchat) is not reported for the iPhone X.
- Social media related data (Facebook, Twitter, LinkedIn, Instagram, Pinterest, Snapchat and WhatsApp) is not reported for the iPhone XR, iPhone 11, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- Internet data (browser history, bookmarks, and emails) is not reported for the iPhone XR, iPhone 13, iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.
- GPS related data (latitude and longitude coordinates) is not reported for the iPhone 13 PRO, iPhone 13 PRO Max and iPhone 13 Mini.

NOTE:

- Deleted data recovered for the iPhone 8: contacts, memos, call log, internet bookmarks.
- Deleted data recovered for the iPhone X: contacts, calendar, memos, call log, SMS

- iTunes Backup acquisition method was used for all iOS devices.
- Tool identifies the iPhone 13 as the iPhone 14.5, the iPhone 13 PRO as the iPhone 14.2, the iPhone 13 PRO Max as the iPhone 14.3 and the iPhone 13 Mini as the iPhone 14.4.

See Table 4a, 4b below for more details.

Internal Memory Acquisition
Final Mobile Forensics 4 v10.3.2022
Mobile Device Platform: iOS

Test Cases:	iPhone 8	iPhone X	iPhone XR	iPhone SE	iPhone 11	iPhone 13
Acquisition: Acquire All	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Acquisition: Disrupted	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Reporting: Preview-Pane	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Reporting: Generated Reports	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Equipment/User Data: IMEI/MEID/ESN	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Equipment/User Data: MSISDN	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
PIM Data: Contacts	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
PIM Data: Calendar	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
PIM Data: Memos/Notes	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
Call Logs: Incoming	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
Call Logs: Outgoing	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
Call Logs: Missed	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
SMS Messages: Incoming	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
SMS Messages: Outgoing	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
MMS Messages: Graphic	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Partial
MMS Messages: Audio	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Partial
MMS Messages: Video	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Partial
Stand-alone Files: Graphic	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>
Stand-alone Files: Audio	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>
Stand-alone Files: Video	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>
Application Data: Documents (txt, pdf files)	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>	As <i>Expected</i>	Not As <i>Expected</i>	Not As <i>Expected</i>

Test Cases:	iPhone 8	iPhone X	iPhone XR	iPhone SE	iPhone 11	iPhone 13
Social Media Data: Facebook	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Twitter	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: LinkedIn	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Instagram	<i>As Expected</i>	<i>Partial</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Pinterest	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Snapchat	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: WhatsApp	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Bookmarks	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
Internet Data: History	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>Not As Expected</i>
Internet Data: Email	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>
GPS Data: Coordinates/Geo-tagged	<i>NA</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Non-Latin Character: Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing: Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Case File Data Protection: Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Run SQLite Commands	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>	<i>NA</i>

Table 4a: iOS Devices

Test Cases:	iPhone 13 PRO	iPhone 13 PRO Max	iPhone 13 Mini
Acquisition: Acquire All	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Acquisition: Disrupted	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Reporting: Preview-Pane	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Reporting: Generated Reports	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Equipment/User Data: IMEI/MEID/ESN	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Equipment/User Data: MSISDN	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
PIM Data: Contacts	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
PIM Data: Calendar	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
PIM Data: Memos/Notes	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Call Logs: Incoming	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Call Logs: Outgoing	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Call Logs: Missed	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
SMS Messages: Incoming	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
SMS Messages: Outgoing	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
MMS Messages: Graphic	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
MMS Messages: Audio	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
MMS Messages: Video	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Stand-alone Files: Graphic	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Stand-alone Files: Audio	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Stand-alone Files: Video	<i>Not As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Application Data: Documents (txt, pdf files)	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Facebook	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Twitter	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>

Test Cases:	iPhone 13 PRO	iPhone 13 PRO Max	iPhone 13 Mini
Social Media Data: LinkedIn	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Instagram	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Pinterest	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: Snapchat	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Social Media Data: WhatsApp	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Bookmarks	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: History	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Internet Data: Email	<i>NA</i>	<i>NA</i>	<i>NA</i>
GPS Data: Coordinates/Geo-tagged	<i>Not As Expected</i>	<i>Not As Expected</i>	<i>Not As Expected</i>
Non-Latin Character: Reported in native format	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Hashing: Case File/ Individual Files	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
Case File Data Protection: Modify Case Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Report Active Data	<i>As Expected</i>	<i>As Expected</i>	<i>As Expected</i>
SQLite Data: Run SQLite Commands	<i>NA</i>	<i>NA</i>	<i>NA</i>

Table 4b: iOS Devices

4.3 Universal Integrated Circuit Cards (UICCs)

The internal memory contents for Universal Integrated Circuit Cards (UICCs) were acquired and analyzed with Fina Mobile Forensics v10.3.2022.

All test cases pertaining to the acquisition of UICCs were successful except for the following.

- MSISDN is not reported.
- Password protected SIM is acquired without user having to enter password.
- PIN attempts are not reported as user is not prompted to enter the password.

See Table 5 below for more details.

Internal Memory Acquisition
Oxygen Forensic Detective v15.0.0.126
Media Type: UICCs

Test Cases:	<i>Universal Integrated Circuit Card</i>
Connectivity: Non-Disrupted	<i>As Expected</i>
Connectivity: Disrupted	<i>As Expected</i>
Service Provider Name (SPN)	<i>As Expected</i>
ICCID	<i>As Expected</i>
IMSI	<i>As Expected</i>
MSISDN	<i>Not As Expected</i>
Abbreviated Dialing Numbers (ADNs)	<i>NA</i>
Last Numbers Dialed (LNDs)	<i>NA</i>
SMS Messages	<i>NA</i>
EMS Messages	<i>NA</i>
Location Related Data: LOCI	<i>NA</i>
Location Related Data: GRPSLOCI	<i>NA</i>
Acquisition: Acquire All	<i>As Expected</i>
Acquisition: Selected All	<i>NA</i>
Acquisition: Select Individual	<i>NA</i>
Case File Data Protection: Modify Case Data	<i>As Expected</i>
Password Protected SIM Acquire: Acquisition of Protected SIM	<i>Not As Expected</i>
PIN attempts reported	<i>Not As Expected</i>
PUK attempts reported	<i>NA</i>
Non-ASCII Character	<i>NA</i>
Hashing	<i>As Expected</i>

Table 5: Universal Integrated Circuit Cards