DCS LABS / R-SERIES · PRE-AUDIT EVIDENCE RECORD

Reference Implementation Suite

Full R2 v1.1 receipt core + hardening layer (LOG-03)

FINAL VERDICT
PASS

SYSTEM	TEST SUITE	FROZEN TAG	REPRODUCED
dcs-rseries-core	test/run-all.mjs	audit-tob-v1.1.0 · 697f339	27 Jul 2026

Closing metrics

195	0	13	404,000
CHECKS PASSED	FAILURES	TEST AREAS	FUZZ CASES

0	0
ATTACKS SUCCEEDED	PROD DEPENDENCIES

What this run demonstrates

We re-ran the complete test suite for the R-Series receipt system on a fresh copy of the frozen code. All 195 individual checks across 13 areas passed with zero failures. A separate stress test threw 404,000 malformed and malicious inputs at it and none broke it. In plain terms: the core behaves exactly as specified, and it holds up under attack.

> **What this does not prove:** That the AI action a receipt describes was correct or wise — only that the receipt is well-formed and unmodified.

Technical verification record

Test file	**test/run-all.mjs**
Checks passed	**195 (203 counting property assertions)**
Failures	**0**
Test areas	**13 sub-suites**
Adversarial fuzz	**404,000 cases · 0 attacks succeeded**
Environment	**Node v22.22.3 · clean checkout · 0 production dependencies**
Frozen root	**audit-tob-v1.1.0 · 697f339 (immutable)**
Reproduced	**27 Jul 2026 · live reproduction from a clean checkout**
Test-file sha256	`338afb23e3e4ffdd93b9b0b7caa0e0b49c42666a9e182ff48a3b61319fe1d116`
Final verdict	**PASS — reproduced, no failures**
Raw machine record	**DCS_RSeries_ReferenceCore_Record.json**

Complete test summary

- All 195 checks across 13 sub-suites passed, 0 failures — receipt issuance, key registry, interoperability, capability groups A–G, and the hardening layer.
- H-1 adversarial fuzzing ran 404,000 cases (signature malleability, downgrade, Merkle forgery); none succeeded.
- No counterexample was found across the suite.

Evidence scope & limitations

This document reports an internal, reproduced software test — not an operational service and not an external audit. A PASS verdict means the recorded test criteria were satisfied on the frozen code (tag audit-tob-v1.1.0 · commit 697f339) under the stated conditions. It does not establish flight qualification, operational deployment, certified post-quantum hardware roots, or independent external audit completion.

Post-quantum non-claim

> The Post-Quantum (PQ) leg currently utilizes size-conformant ground stand-ins (pending formal NIST FIPS 204 ML-DSA / FIPS 205 SLH-DSA hardware security module certification). Not flight-qualified. Not independently audited by external third parties.