

Quantum Claim Reality Audit

Independent review of quantum and post-quantum claims — for boards, CISOs, CTOs, investors, and vendor-risk teams.

258 min of QPU execution time on IBM quantum hardware	1,723 hardware jobs run, logged, and re-audited	\$24,720 equivalent compute value at IBM pay-as-you-go rates*	2 of my own multi-year projects falsified and retracted
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Vendors say quantum advantage is here. Skeptics say nothing matters until fault tolerance. Both answers are lazy. The question that matters for your organization is: **does this specific claim survive contact with real hardware, real statistics, and a real threat model?** I answer that question in writing, with evidence, in plain English.

I know how convincing bad quantum evidence looks because I built it, believed it, ran it on IBM QPUs for two years — and then killed it with the null tests it should have faced on day one. My apparent quantum signal-extraction result was reproduced perfectly by pure random noise. Most vendor claims have never faced that test. Yours will.

Five failure modes I catch

Timeline artifacts — results built on queue/file timestamps instead of actual QPU execution times.

Pipeline artifacts — “quantum” signal that is really classical post-processing, extraction bugs, or verification-oracle brute force.

Post-selection — endpoints, exclusions, and controls chosen after seeing the data.

Statistical theater — drift, autocorrelation, and uncorrected multiple comparisons dressed up as significance.

Unfalsifiable claims — results no outcome could have killed — which means no outcome can confirm them.

What you receive (fixed scope)

- 1. Claim map** — what exactly is being asserted, in testable terms.
- 2. Threat-model check** — what would need to be true for this to matter to you.
- 3. Evidence review** — hardware vs. simulator, benchmarks, post-processing, assumptions.
- 4. Failure-mode analysis** — where false positives and cherry-picking enter.
- 5. Board memo** — one page: ignore, monitor, test, fund, or reject.
- 6. Vendor question set** — the 5–10 questions to ask before signing.

The scorecard every claim is graded against

CATEGORY	THE QUESTION
Hardware reality	Was this run on a QPU, a simulator, an emulator, or a hybrid workflow?
Signal integrity	Does the result survive synthetic null replacement — random data through the same pipeline?
Post-processing dependence	Is the “quantum” result actually classical filtering or verification?
Threat relevance	Does this change your enterprise risk timing under NIST PQC standards and the 2030 federal deadline?
Business decision	Ignore, monitor, test, fund, or reject — with the reasoning on paper.

Founding audits: 3 slots this month at \$5,000 fixed scope, 10 business days.

Send me one vendor claim, deck, white paper, NISQ result, or board question. You get a defensible answer — and I don’t sell migration products, so the read is neutral.

*Usage independently visible in IBM Quantum Platform analytics; valued at IBM’s published \$96/min pay-as-you-go QPU rate. I do not sell quantum optimism or quantum cynicism. I sell quantum defensibility.