Certificate of Inevitability

Recognition Science Verification Framework

IN PROGRESS

Generated: 2026-01-09T21:11:48.659561
Git Commit: `eef697fbe9b7`
Signature: `bc71347ce5dbcec795ca5bcfc69266ef...`

Executive Summary

This certificate attests to the formal verification status of the **IndisputableMonolith** codebase — a Lean 4 formalization of Recognition Science foundations.

Metric	Count
Total Modules	1448
Theorems/Lemmas	7565
Definitions	7588
Axioms	9
Sorries	88
Admits	0

Verification Guarantees

1. Zero-Sorry Core (88 remaining)

There are **88** sorry statements remaining in exploratory modules.

2. Gauge Invariance

The Meaning Compiler output is proven unique up to gauge equivalence:

- Phase rotations $e^{i\theta}$ preserve semantic identity
- Classification is deterministic modulo gauge class

3. Stability Bound

The Meaning Compiler guarantees classification stability under perturbations where the perturbation magnitude satisfies:

$$\epsilon < 0.21$$

This bound is derived from the DFT-8 orthonormality and the gap weight structure of the 20 canonical WTokens.

4. Axiom Classification

All axioms are classified and documented:

Category	Count
Numerical Bound	1
Other	8

Signature Verification

This certificate is cryptographically signed using SHA-256:

`bc71347ce5dbcec795ca5bcfc69266ef76699276fdbd53995acac3c71f5a7e46`

Compliance Statement

This compiled binary and its associated formal proofs are certified to be:

1. **Gauge-Invariant**: Semantic outputs are unique modulo phase rotation
2. **Stable**: Classification is robust under perturbations $\epsilon < 0.21$
3. **Parameter-Free**: All constants derived from φ (golden ratio) algebra
4. **Work-in-Progress**: 88 proofs remaining

Certificate generated by Recognition Science Verification Framework
https://github.com/jonwashburn/reality