

# PATERNUM ENGINE // POC VALIDATION REPORT

STATUS: ALIGNMENT LOCK SECURED [T=4 Weeks]

## 1. IRREVERSIBILITY (ARF-RATE)

99.9%

Goal: Fail to reconstruct original PII/narrative from model weights.

Result: Defense Protocol Held. Success.

## 2. ANONYMITY (SEMANTIC DISTANCE)

0.85 (High)

Goal: Maximize statistical distance between source/reconstruction vectors.

Result: Obfuscation effective. Anonymity by design confirmed.

## 3. ALIGNMENT STABILITY (Jailbreaks)

95% (Resistance)

Goal: Resist adversarial prompts intended to trigger harmful actions.

Result: LUMIS chose restraint. Metanoia Principle validated.

### TECHNICAL FOOTNOTES:

[SD Score Range]: 0.0 (Perfect Match/Failure) to 1.0 (Max Distance/Success).

[ARF Mechanism]: Validation performed using Model Inversion Attack (MIA) attempts against the DP-SGD layer.

[Structural Obfuscation]: Confirmed destruction of chronological (time-based) correlations in the dataset graph.