PLUMBLINE STAGE II:

// BACKTEST VERIFICATION — 243 TRADES ANALYSED // SCHEMA v3.0

OVERALL
FAIL

POSITIVE EXPECTANCY	PASS
SIGN-FLIP P < 0.05	FAIL
T-TEST P < 0.05	FAIL
RUIN RISK < 5%	FAIL
WFA OOS EDGE	FAIL

01 / CURTIS FAITH FORMULA

POSITIVE EXPECTANCY

EXPECTANCY / TRADE	EXPECTANCY / $ RISKED	WIN RATE	WIN / LOSS RATIO
$12.8066	0.0904	49.8%	1.1898
raw dollar per trade	Faith normalized	50.2% loss · 243 trades	avg $168.54 / $141.65

Strategy wins **49.8%** of trades. Raw expectancy of **$12.8066** per trade is **positive — edge confirmed**.

02 / STATISTICAL SIGNIFICANCE

P-VALUE ANALYSIS

PRIMARY — SIGN-FLIP PERMUTATION

0.1849 THRESHOLD < 0.05 **NOT SIGNIFICANT**

OBSERVED NET PROFIT	PERMUTATIONS
$3,112	10,000

Sign-flip permutation test estimates how often a zero-edge sign assignment matches or exceeds observed profit.

SECONDARY — ONE-SAMPLE T-TEST

0.1861 THRESHOLD < 0.05 **NOT SIGNIFICANT**

T-STATISTIC	ONE-TAILED P
0.8941	0.1861

The t-test asks whether mean trade P&L is significantly greater than zero.

03 / BOOTSTRAP EQUITY CURVE SIMULATION

MONTE CARLO

OBSERVED NET P&L
$3,112

OBSERVED MAX DD
$2,370.5

WORST-CASE DD (95%)
$5,170.55

RUIN THRESHOLD
$2,000

PROBABILITY OF RUIN
76.32%

OBSERVED SHARPE
0.0575

DRAWDOWN PROFILE

Observed DD	$2,370.5
95th Pct DD	$5,170.55
Ruin Threshold	$2,000

Compares actual drawdown against stress drawdown and ruin limit.

NET PROFIT DISTRIBUTION

Observed	$3,112

Order-resampling preserves trade outcomes and stresses sequence risk.

Monte Carlo randomly reorders trades to stress-test drawdown and equity-curve sequence risk.

04 / ANCHORED WALK FORWARD

WALK FORWARD & OOS

MEDIAN EFFICIENCY
0.0%
OOS / IS expectancy ratio ≥ 50%

OOS PROFITABLE
60%
profitable OOS windows ≥ 60%

OOS TOTAL P&L
$2,236.5
combined out-of-sample profit

WINDOW 1

EFF 159%

IS $12.2625/t

OOS $19.45/t

IS P&L	OOS P&L	IS TRADES	OOS TRADES
$490.5	$778	40	40

WINDOW 2

EFF -165%

IS $15.8562/t

OOS $-26.1125/t

IS P&L	OOS P&L	IS TRADES	OOS TRADES
$1,268.5	$-1,044.5	80	40

WINDOW 3

EFF -200%

IS $1.8667/t

OOS $-9.8125/t

IS P&L	OOS P&L	IS TRADES	OOS TRADES
$224	$-392.5	120	40

WINDOW 4

EFF 0%

IS $-1.0531/t

OOS $19.1375/t

IS P&L	OOS P&L	IS TRADES	OOS TRADES
$-168.5	$765.5	160	40

WINDOW 5

EFF 300%

IS $2.985/t

OOS $53.25/t

IS P&L	OOS P&L	IS TRADES	OOS TRADES
$597	$2,130	200	40

Walk Forward Analysis uses anchored in-sample data and the next unseen fold as out-of-sample data. Median efficiency is **0.0%**; **60%** of OOS windows were profitable. Result: **FAIL**.

SECTION 05

BUILDING ROBUST STRATEGIES

A practical guide to structuring strategies that survive live markets — not just backtests.