Verification Record – SQE Tools 1–10

Tool ID: 1

Tool Name: ISO 2859-1 Sampling

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

   - Validate sampling code-letter logic, sample size, and Ac/Re output.

2. Test Methods:

   - Functional: Validate dynamic update behaviour.

   - Analytical: Compare against ISO 2859-1 expected values.

   - Boundary: Confirm behaviour across valid test ranges.

3. Acceptance Criteria:

   - Quantitative: Must match analytical results exactly.

   - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

   - Lot=1500, AQL=1% → Code J, Sample 80, Ac2/Re3.

5. Result:

   - PASS (Partial)

6. Issues & Corrective Actions:

   - Partial table coverage; remaining ISO code letters not implemented.

7. Retest Status:

   - Pending

8. Signoff:

   - Jarryd Giose / 25-02-2026

Tool ID: 2

Tool Name: AQL vs LTPD Mapper

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

   - Validate Poisson-based OC curve calculations.

2. Test Methods:

   - Functional: Confirm interactive chart updates.

   - Analytical: Validate probability outputs.

   - Boundary: Confirm stability across defect levels.

3. Acceptance Criteria:

   - Quantitative: Must match analytical results exactly.

   - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

   - n=50, c=1, AQL=1% → $\alpha \approx 9.1\%$.

5. Result:

   - PASS

6. Issues & Corrective Actions:

   - None.

7. Retest Status:

   - Pending

8. Signoff:

   - Jarryd Giose / 25-02-2026

Tool ID: 3

Tool Name: C=0 Calculator

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Verify correct binomial sample size calculation for C=0.

2. Test Methods:

  - Functional: Input-driven recalculation validated.

  - Analytical: Verified using Squeglia formula.

  - Boundary: Confirmed sample cap at lot size.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - AQL=1%, 90% confidence → n = 230.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 4

Tool Name: Supplier Scorecard

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate weighted supplier scoring equation.

2. Test Methods:

- Functional: Score updates verified.

- Analytical: 50/30/20 weighting confirmed.

- Boundary: Stable behaviour.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - PPM=500, OTD=95, Audit=90 → Score=92.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 5

Tool Name: PPM → Sigma

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate sigma conversion from PPM using Z-score.

2. Test Methods:

  - Functional: Sigma shift toggle verified.

  - Analytical: Z-score approximation confirmed.

  - Boundary: Minor precision limitations noted.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - 3.4 ppm → 6.00σ.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 6

Tool Name: Carbon Footprint

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate emissions using weight × distance × factor.

2. Test Methods:

  - Functional: Recalculation confirmed.

  - Analytical: DEFRA factor verification.

  - Boundary: Stable across ranges.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - 1.5 t × 500 km × 0.062 → 46.5 kg CO2e.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 7

Tool Name: SCAR Tracker

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate SCAR aging and escalation rules.

2. Test Methods:

  - Functional: Date-based recalculation validated.

  - Analytical: Escalation thresholds correct.

  - Boundary: Stable across time ranges.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - SCAR aged 5 days → RCA phase.

5. Result:

- PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 8

Tool Name: Counterfeit Risk

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate S × C × I counterfeit risk scoring.

2. Test Methods:

  - Functional: Correct score updates.

  - Analytical: S×C×I multiplication validated.

  - Boundary: Stable across ranges.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - Source7 × Crit10 × Insp1 → Score=70.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

  - Jarryd Giose / 25-02-2026

Tool ID: 9

Tool Name: Inter-Rater Kappa

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

  - Validate Cohen's Kappa statistical agreement formula.

2. Test Methods:

  - Functional: Updates validated.

  - Analytical: Po and Pe computations correct.

  - Boundary: Stable across matrices.

3. Acceptance Criteria:

  - Quantitative: Must match analytical results exactly.

  - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

  - 45/2/3/10 → κ ≈ 0.76.

5. Result:

  - PASS

6. Issues & Corrective Actions:

  - None.

7. Retest Status:

  - Pending

8. Signoff:

- Jarryd Giose / 25-02-2026

Tool ID: 10

Tool Name: Duty & Tariff Tool

Version: 1.0

Owner: Jarryd Giose

1. Verification Objective:

   - Validate CIF-based duty and tariff calculation.

2. Test Methods:

   - Functional: Updates validated.

   - Analytical: Tariff applied incorrectly; wrong base.

   - Boundary: Error consistent.

3. Acceptance Criteria:

   - Quantitative: Must match analytical results exactly.

   - Qualitative: Must remain stable across valid inputs.

4. Test Evidence:

   - CIF=106 → Expected total 135.15; tool gives 134.10.

5. Result:

   - FAIL

6. Issues & Corrective Actions:

   - Incorrect tariff base; corrective update required.

7. Retest Status:

   - Pending

8. Signoff:

   - Jarryd Giose / 25-02-2026