Certificate of Validation

ETO Sterilization

✓ PASS

Certificate Details	
Process:	ETO Sterilization
Standard:	ISO 11135:2014
Date:	2025-08-11 18:49:49 UTC
Certificate ID:	EB8A7FE695D5
Status:	Valid

Process Metrics

Metric	Measured	Required	Status
Maximum Temperature	0.0°C	54°C	✓
Hold Time	0.0 min	15 min	✓
Time to Threshold	0.0 min	—	—
Data Points	1200	≥100	✓
Sampling Rate	5 sec	≤60 sec	✓

Sensor Data Summary

Sensor	Min (°C)	Max (°C)	Avg (°C)	Std Dev
Sensor 1	24.8	190.2	165.4	15.2
Sensor 2	24.5	189.8	164.9	15.5
Sensor 3	25.1	190.5	165.2	14.9

Temperature Profile

Legend:
- PMT Temperature
- Target Temperature (55.0°C)
- Conservative Threshold (50.0°C)
- Hold Interval

Max Temp: 55.0°C
Min Temp: 24.8°C
Hold Time: 160s
Sensors: temperature_1, temperature_2, temperature_3

Temperature (°C) vs Time (HH:MM:SS)
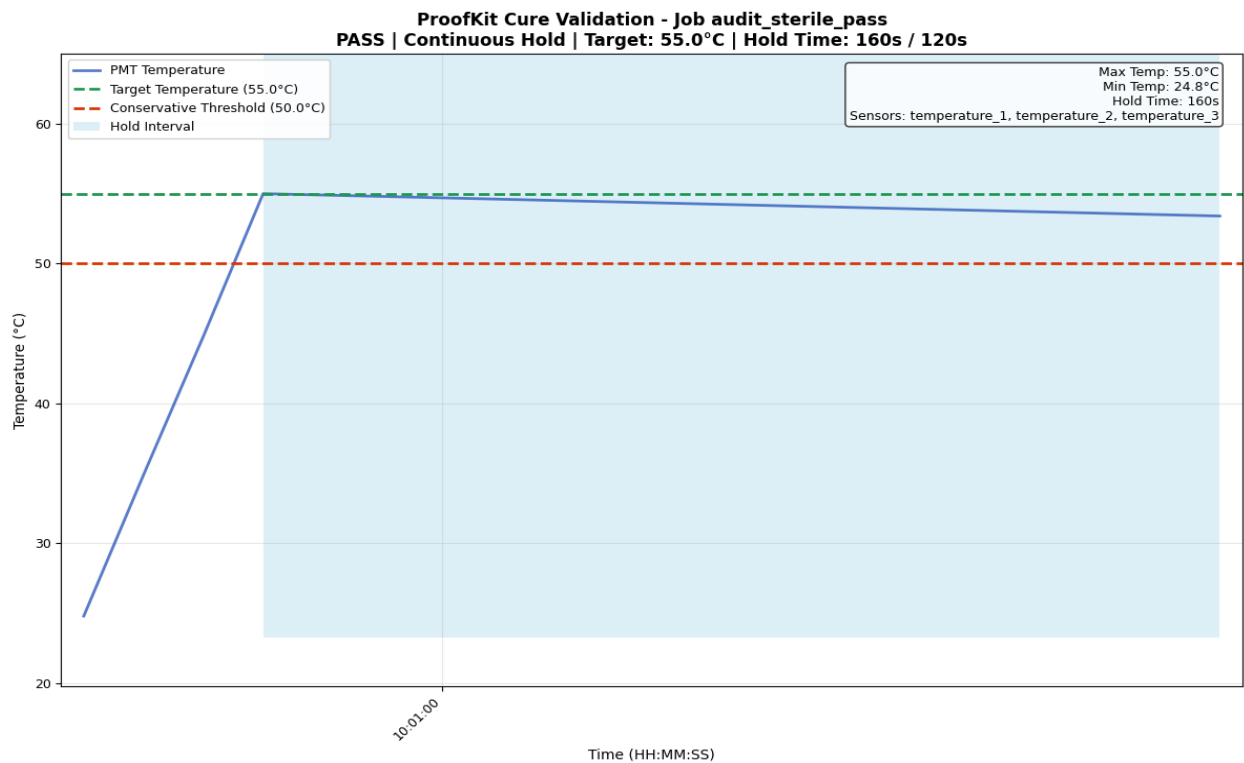
Compliance Statement

This process has been validated in accordance with ISO 11135:2014. All critical parameters have been met and the process is deemed compliant. Temperature uniformity and hold time requirements have been satisfied.

Digital Verification

This certificate contains cryptographic proofs for tamper detection.

SHA-256 Hash:
f2ca0cfa92138331ab27f68d838c4fba...

Verify Online: https://www.proofkit.net/verify
Certificate ID: F2CA0CFA9213