

# Test Plan Mandarijn Proof

---



Tim Roordink - Emiel Visser  
HAN | ARNHEM

# Table of contents

---

Mandarijn Proof Test Plan .....	2
Objective .....	2
Equipment.....	2
Test Procedure.....	2
Preparation: .....	2
Drop Test: .....	2
Inspection: .....	2
Documentation: .....	2
Criteria for Certification: .....	2
Mandarijn Proof Test Plan Documentation Form .....	3
Drop Test results.....	3
Post-Test analysis .....	3
Comments .....	3
Approval.....	3

# Mandarijn Proof Test Plan

---

## Objective

To determine if the PCB or embedded electronic device can withstand the impact of a mandarin dropped from a standard height without sustaining functional damage.

## Equipment

- Mandarins (average size and weight)
- Drop test apparatus (or by hand)
- Surface for testing (the floor)

## Test Procedure

### Preparation:

Ensure the PCB or device is operational and document its initial functional status.  
Place the device on a standard laboratory floor.

### Drop Test:

Drop a mandarin from a height of 1 meter directly onto the device.  
Repeat the drop test three times to ensure consistency.

### Inspection:

After each drop, inspect the device for any physical damage.  
Perform a functional test to ensure the device operates as expected.

### Documentation:

Record any physical damage and the results of the functional tests after each drop.  
Compare the pre-test and post-test functional status of the device.

### Criteria for Certification:

The device should show no significant physical damage that could affect its functionality.  
The device must pass all functional tests post-impact to be certified as "Mandarijn Proof."

This test plan ensures that the device is tested under conditions that simulate an accidental drop of a mandarin, verifying its robustness against such an impact.

# Mandarijn Proof Test Plan Documentation Form

Name Tester:	
Name Reviewer:	
Date:	
Device Description:	
Device Serial Number:	
Initial Functional Status:	
Drop Height:	1 meter
Surface:	The Floor
Mandarins Used:	Average size and weight
Number of drops:	3

## Drop Test results

Drop	Physical Damage	Functional Status
Drop 1		
Drop 2		
Drop 3		

## Post-Test analysis

Criteria for Certification	Result
No significant physical damage	Yes / No
Passed all functional tests	Yes / No
Certified as Mandarijn Proof	Yes / No

## Comments

--

## Approval

X

Tester

X

Reviewer