

OAK4-S_P5-Mechanical shock test

ISO 19014-3: 2018 Section 5.7

Date: 11.6.2025
Location: SIQ-Ljubljana, Slovenia

Standards used

- **ISO 19014-3: 2018 Section 5.7**
  - Peak Acceleration: 30 G
  - Pulse duration: 18 ms
  - Number of Directions: 3 (X, Y, Z)
  - Pulses per Direction: 3 positive + 3 negative
  - Total cycles: 18 shocks

Devices under test

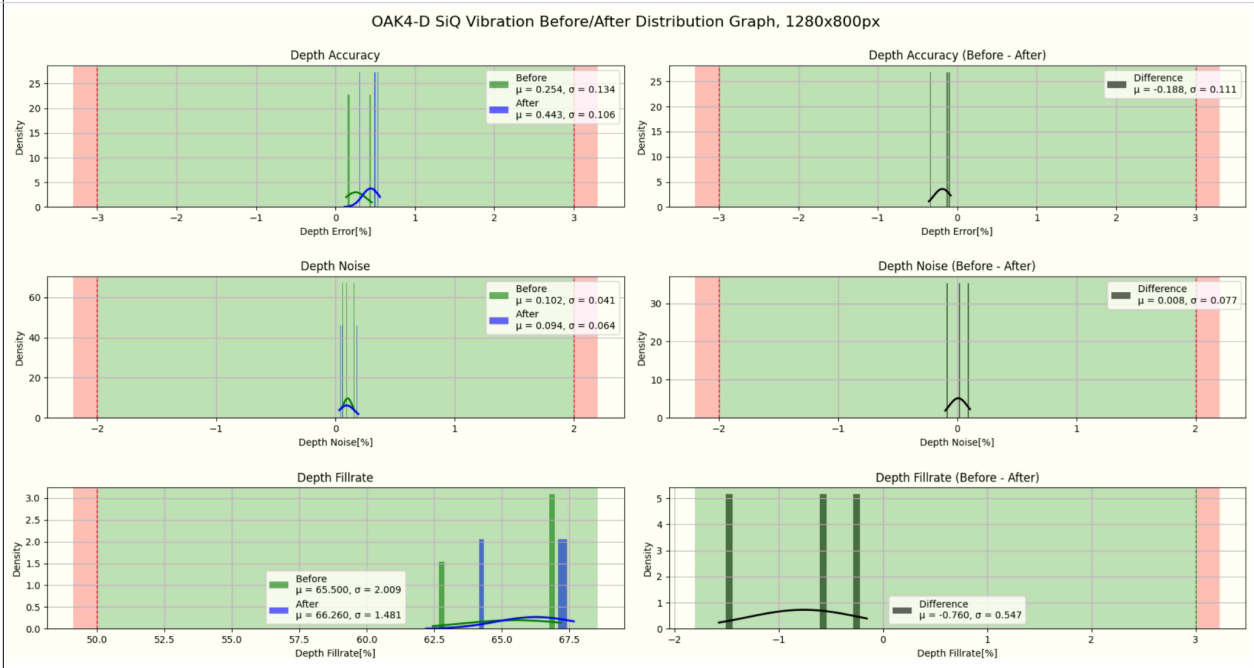
Lux ID	Variant	Testing mark	Unit ID	MXID
CR1.5A SLO4	OAK4-S-AF	/	4SAF-T2519-00033	/
CR1.5A SLO7	OAK4-S-AF	/	4SAF-T2519-00037	/

Detected crashes

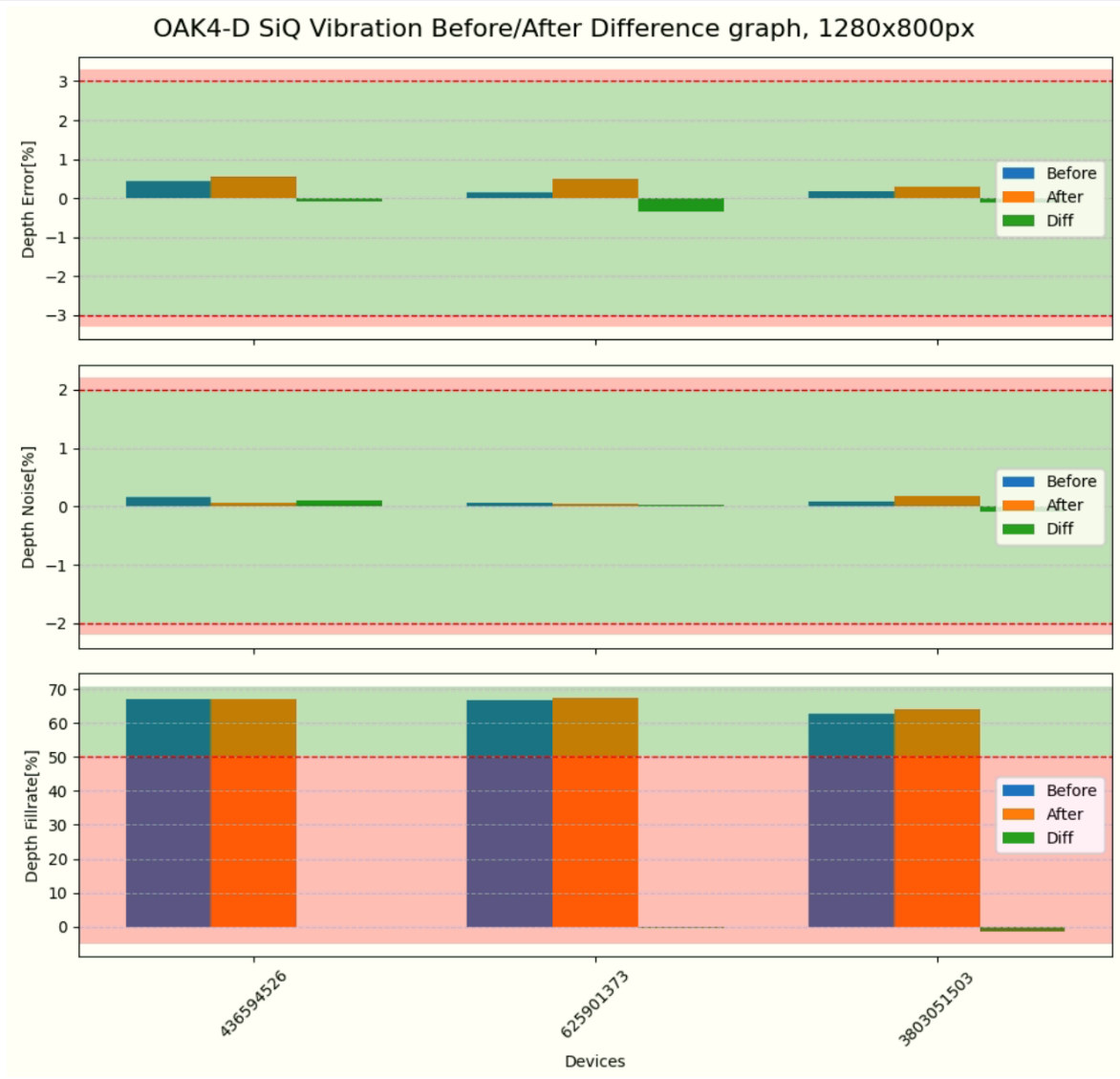
The test itself is relatively quick (about 30s per axis). The devices ran from start to finish and none of them crashed.

Depth evaluation

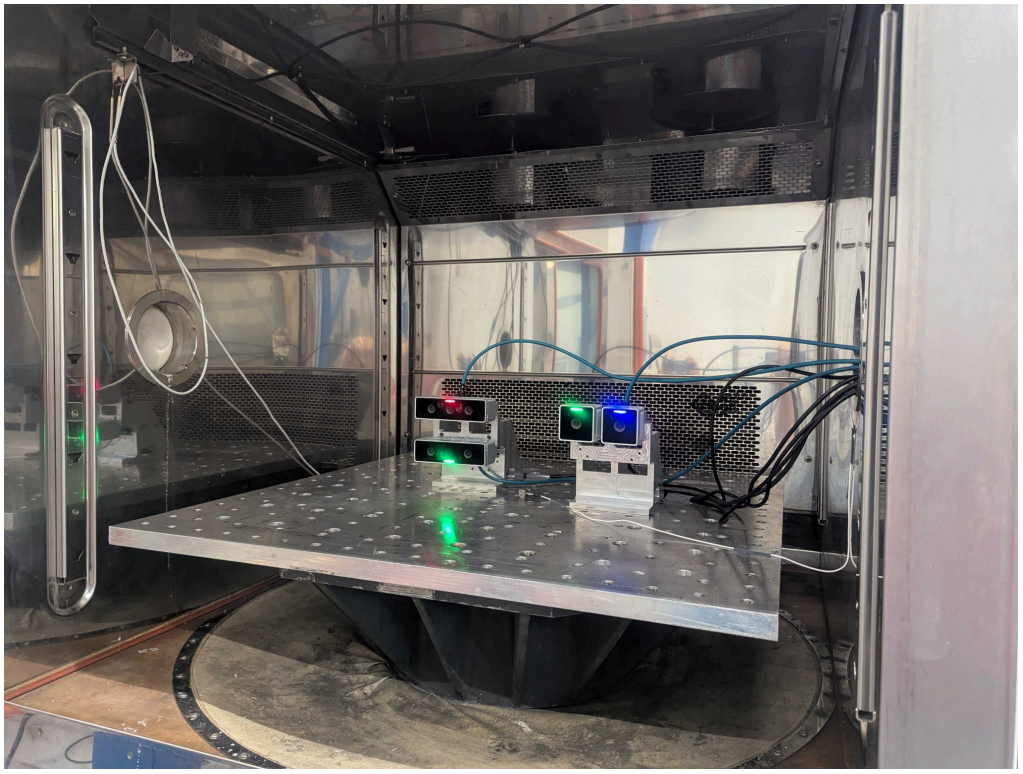
- All devices showed no degradation in depth quality.
- Depth accuracy remained within the predefined specifications.
- Depth noise stayed within acceptable limits for all devices.

Depth evaluation distribution	
Description:	An evaluation of depth quality from before and after the test.
OS:	Luxonis OS RVC4 1.8.0
DepthAI version	3.0.0-alpha.15
OpenCV version	4.5.5
Test setup:	Calibrig-Slovenia-A
Results:	
Notes:	All devices show minimal differences between before and after the test.
Pass/Fail:	Pass

Depth evaluation per each device	
Description:	An evaluation of depth quality from before and after the test.
OS:	Luxonis OS RVC4 1.8.0
DepthAI version	3.0.0-alpha.15
OpenCV version	4.5.5
Test setup:	Calibrig-Slovenia-A

Results:	
Notes:	All devices show minimal differences between before and after the test.
Pass/Fail:	Pass

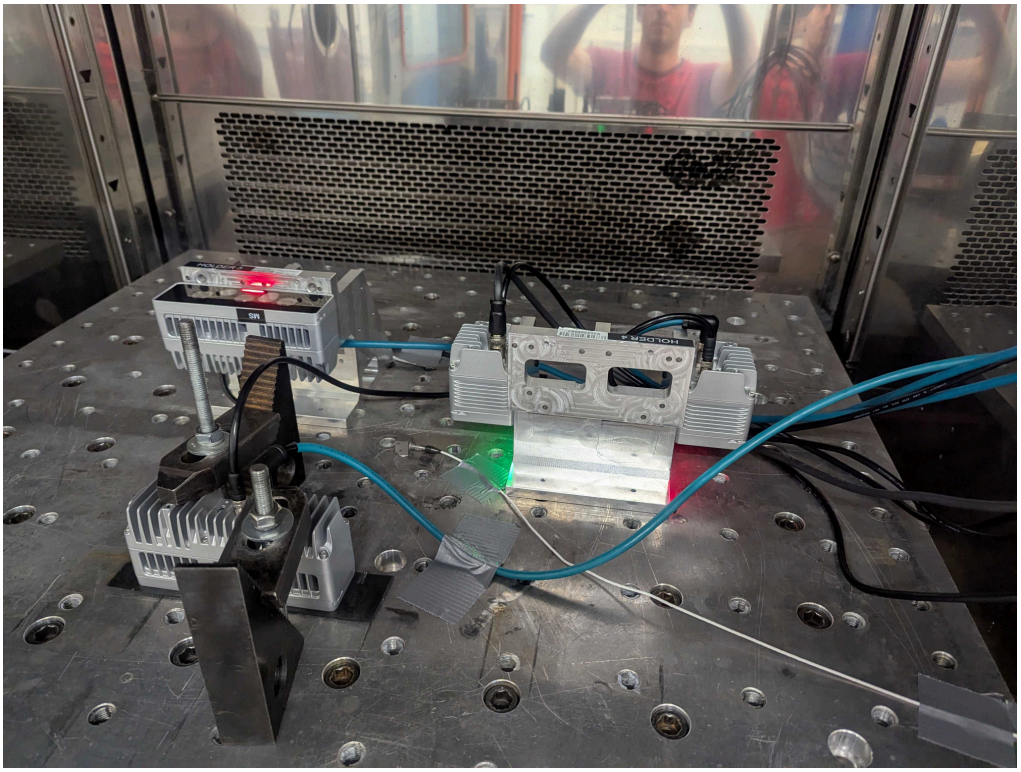
Testing setup

Test setup	
Picture:	
Description	Devices used for the test.

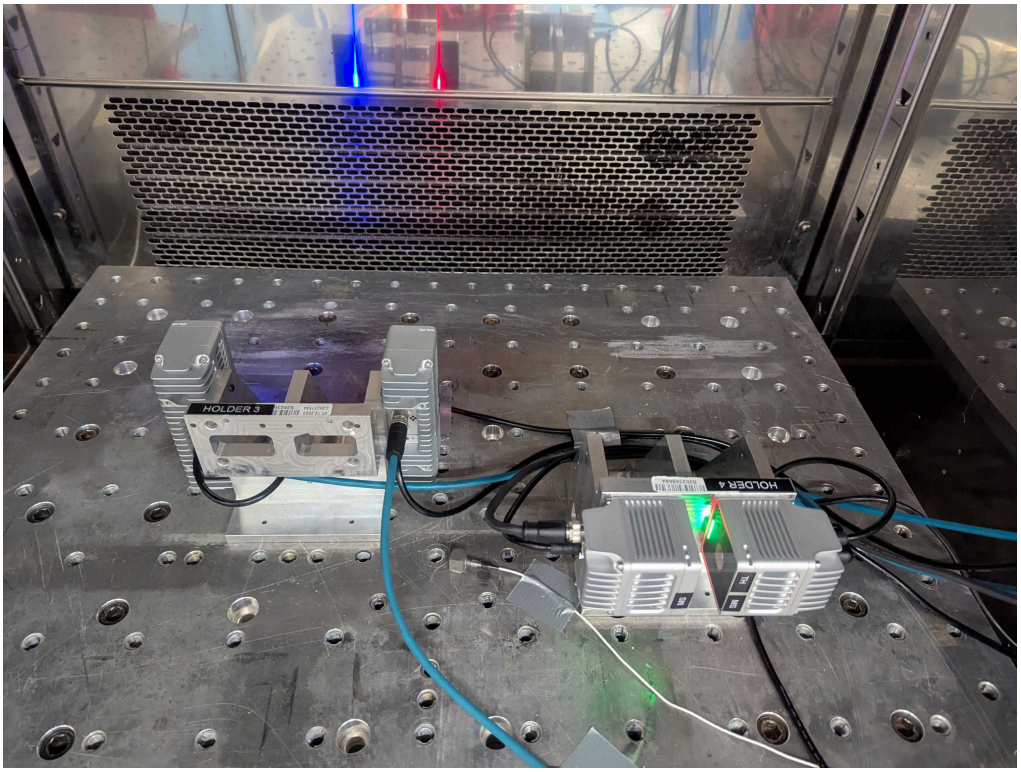
Test setup

Picture:	
Description	Placement of devices in the testing chamber.

Test setup

Picture:	
Description	Testing setup with laptop and cables.

Test setup

Picture:	
Description	Running the stress test on the device while testing.