



Passive Cooled GTX 1080 Test

Gigabyte GTX 1080 8GB

Test environment is (hopefully) similar to a more efficiently cooled server PC that only needs to run as a media server. GPU to replace iGPU for Emby streaming.

Test environment:

- Two 1440p monitors
- GPU fans manually stopped
- Fan housing intact, blocking potential air
- GPU usage at a constant 12%
- GPU Memory at a constant 1.7GB/8GB

Open programs:

- Chrome (3 tabs)
- HW Monitor
- Fan Control
- Task Manager
- Snip & Sketch

40 Min Temp Check:

Test has affected the temp of the whole PC.

GPU temp seems to have stabilised.

60 Min Result:

Temperature stabilized for over 30 minutes.

GPU = 47° to 68°

CPU = 41° to 44°

HDD = 28° to 35°

EXH = 22° to 24.7°

45W constant

Quick fan blast (15s) dropped the temp to 5°

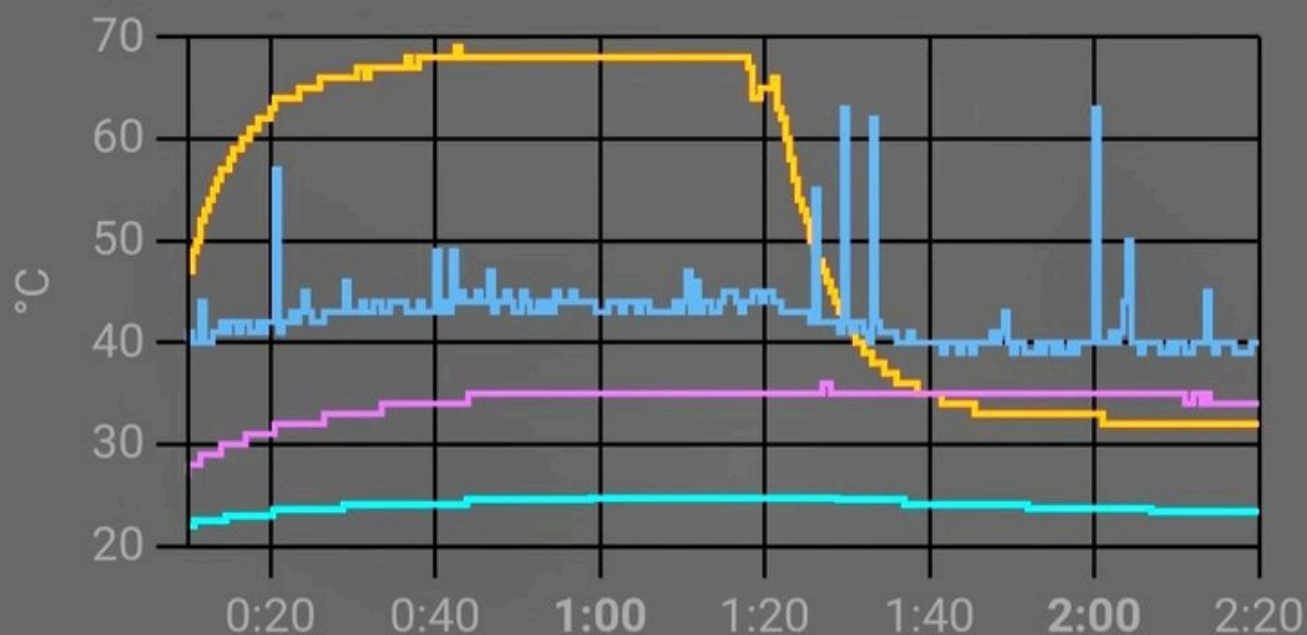
Phase 2: Screens Off

Incredible result

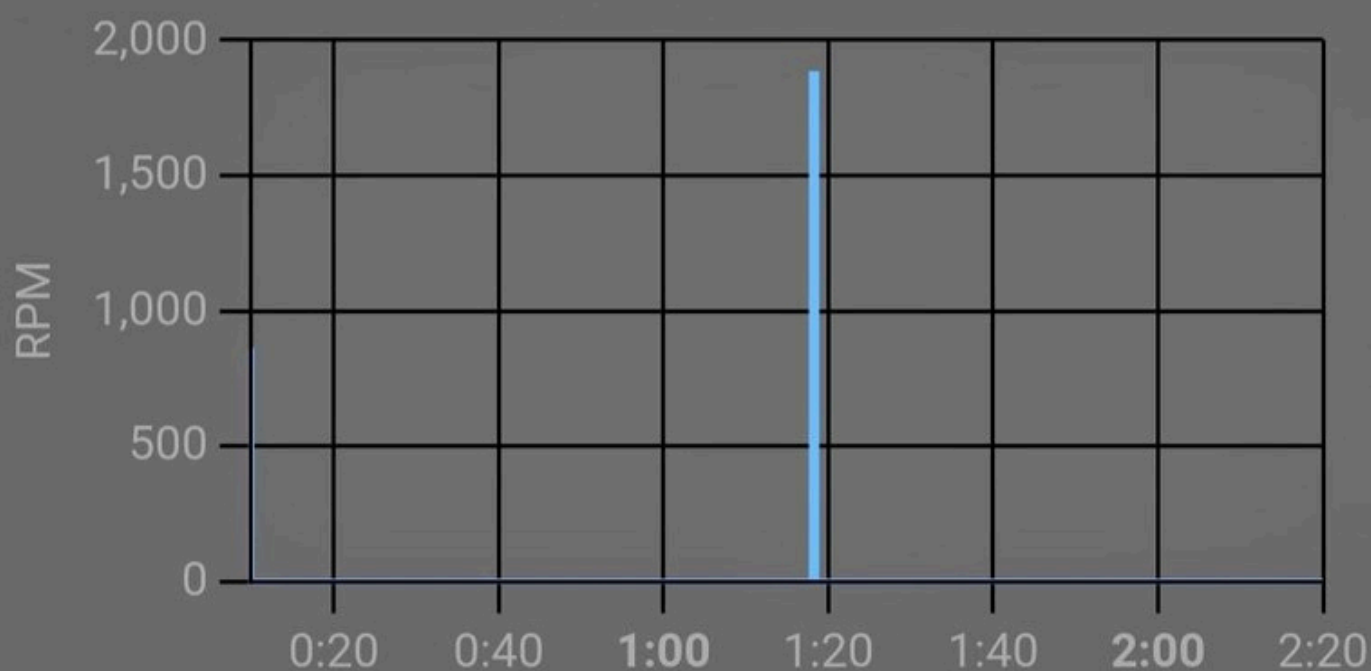
Temperatures dropped massively with no display. GPU stable at 32°, at 0° use.

Power dropped from 45W to 9W

- ODINN Intel Core i7-7700K Temperatures CPU C...
- ODINN WDC WD4004FZWX-00GBGB0 Temperatu...
- PC Sensor Temperature
- ODINN NVIDIA NVIDIA GeForce GTX 1080 Temp...

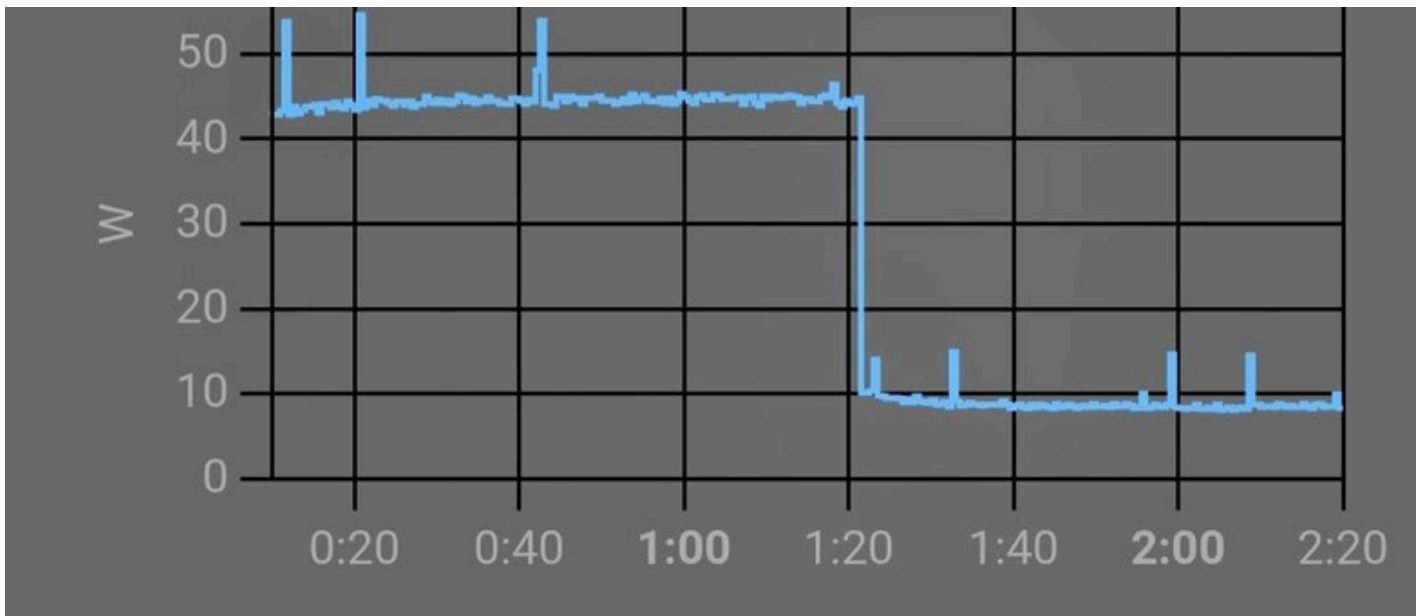


- ODINN NVIDIA NVIDIA GeForce GTX 1080 Fans ...



- ODINN NVIDIA NVIDIA GeForce GTX 1080 Power...

60



Ready for Test 2: Shroud removed.

Start: 03:35 (Attempt #2)

Initial:

Left monitor flashing off and minor flickering intermittently. Probably due to improper assembly (no fresh paste). Other than that all stats are identical to test 1.

10 Min:

Temperatures dropping after the rocky start and professional act of leaving the graphics-hungry wallpapers on. Visual glitches have definitely stopped.

45 Min:

Temperature stabilized for over 30 minutes.

GPU = 56°

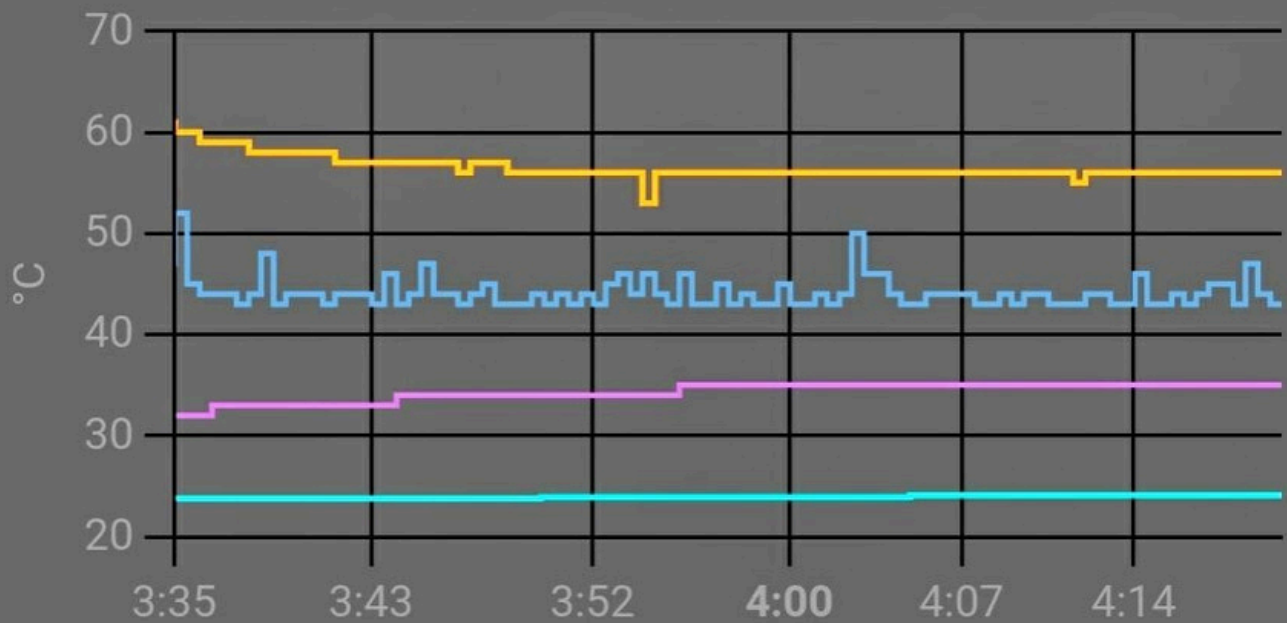
CPU = 44°

HDD = 35°

EXH = 24.1°

44W constant

- ODINN Intel Core i7-7700K Temperatures CPU C...
- ODINN WDC WD4004FZWX-00GBGB0 Temperatu...
- PC Sensor Temperature
- ODINN NVIDIA NVIDIA GeForce GTX 1080 Temp...



Phase 2: Screens Off

GPU Stable at 32°

- ODINN Intel Core i7-7700K Temperatures CPU C...
- ODINN WDC WD4004FZWX-00GBGB0 Temperatu...
- PC Sensor Temperature
- ODINN NVIDIA NVIDIA GeForce GTX 1080 Temp...

