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laptop-bench-Dell-g15

Intel Core i7-11800H testing with a Dell G15 (model 5511, 1.7.0 BIOS, DDR4-3200AA) and GeForce RTX 3060 Laptop (94.06.22.00.47 VBIOS, built-in eDP display@165 Hz) GPU 6 GB on Ubuntu 20.04.3 via the Phoronix Test Suite.

Automated Executive Summary

1Rx08 had the most wins, coming in first place for 60% of the tests.

Based on the geometric mean of all complete results, the fastest (1Rx08) was 1.014x the speed of the slowest (1Rx16).

The results with the greatest spread from best to worst included:

Y-Cruncher (Calculating 500M Pi Digits) at 1.261x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: SMAA) at 1.045x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: SMAAT2x) at 1.042x
GNU Octave Benchmark at 1.037x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: Off) at 1.036x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: TAA) at 1.034x
srsRAN (Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM) at 1.026x
srsRAN (Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM) at 1.023x
srsRAN (Test: 4G PHY_DL_Test 100 PRB SISO 256-QAM) at 1.016x
Shadow of the Tomb Raider (Resolution: 1920 x 1080 - Graphics Preset: High - Anti Aliasing: Off) at 1.016x.

Test Systems:

1Rx08

1Rx16

Processor: Intel Core i7-11800H @ 4.60GHz (8 Cores / 16 Threads), Motherboard: Dell 0YC2KJ (1.7.0 BIOS), Chipset: Intel Device 43ef, Memory: 16GB, Disk: Kioxia KBG40ZNS1T02 NVMe 1024GB, Graphics: NVIDIA GeForce RTX 3060 Laptop GPU 6GB, Audio: Intel Device 43c8, Network: Realtek Device 2600 + Intel Device 43f0

OS: Ubuntu 20.04, Kernel: 5.14.0-1007-oem (x86_64), Desktop: GNOME Shell 3.36.9, Display Server: X Server 1.20.11, Display Driver: NVIDIA 470.82.00, OpenGL: 4.6.0, OpenCL: OpenCL 3.0 + OpenCL 3.0 CUDA 11.4.153, Vulkan: 1.2.145, Compiler: GCC 10.3.0 + Clang 10.0.0-4ubuntu1, File-System: ext4, Screen Resolution: 1920x1080

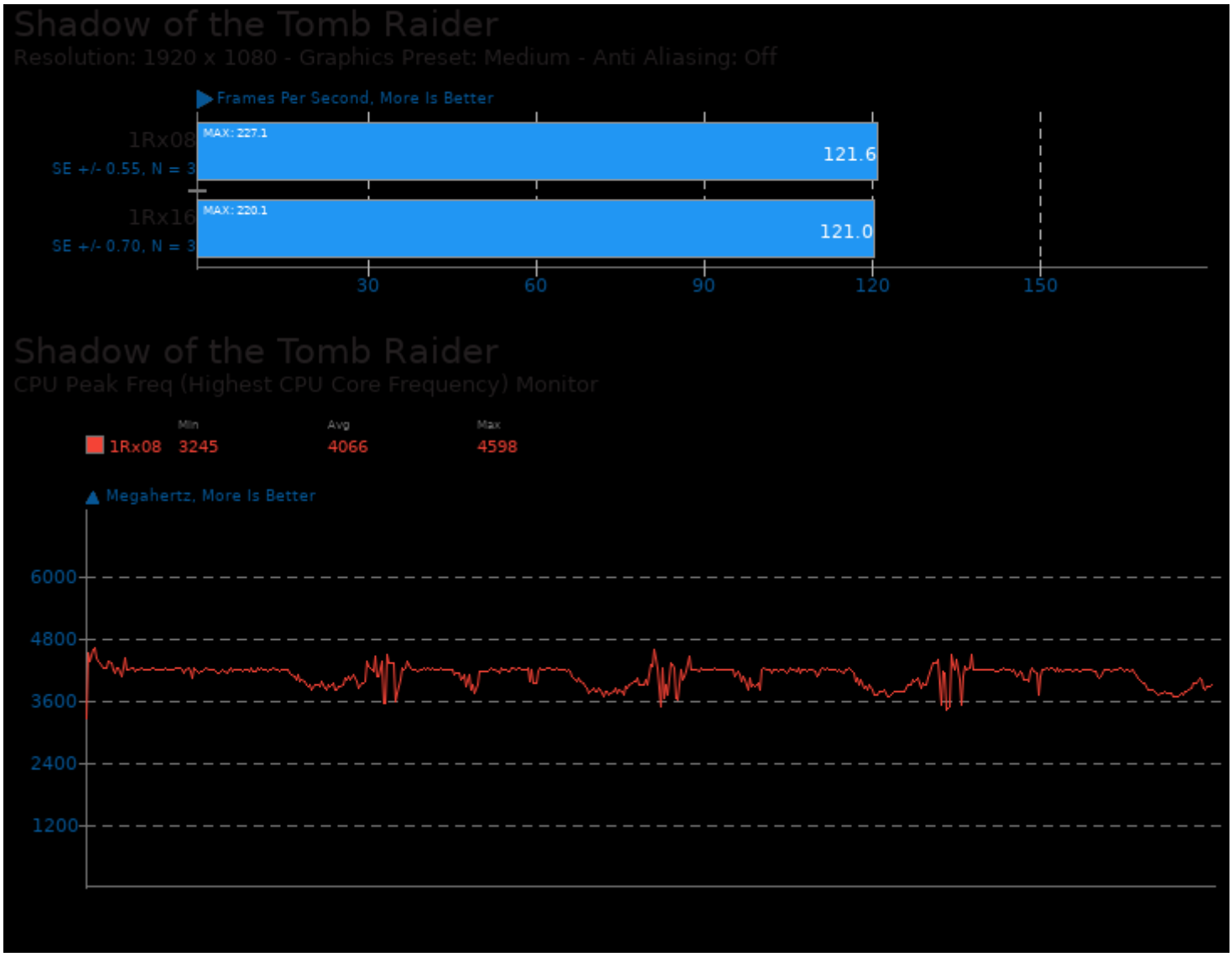
Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --build=x86_64-linux-gnu --disable-vtable-verify --disable-werror --enable-bootstrap --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --enable-libphobos-checking=release --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-link-mutex --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-10-S4I5Pr/gcc-10-10.3.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-10-S4I5Pr/gcc-10-10.3.0/debian/tmp-gcn/usr,hsa --enable-plugin --enable-shared --enable-threads=posix --host=x86_64-linux-gnu --program-prefix=x86_64-linux-gnu- --target=x86_64-linux-gnu --with-abi=m64 --with-arch-32=i686 --with-build-config=bootstrap-lto-lean --with-default-libstdcxx-abi=new --with-gcc-major-version-only --with-multilib-list=m32,m64,mx32 --with-target-system-zlib=auto --with-tune=generic --without-cuda-driver -v
Processor Notes: Scaling Governor: intel_pstate performance - CPU Microcode: 0x2c - Thermald 1.9.1
Graphics Notes: BAR1 / Visible vRAM Size: 8192 MiB
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl and seccomp + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Mitigation of Enhanced IBRS IBPB: conditional RSB filling + srbds: Not affected + tsx_async_abort: Not affected

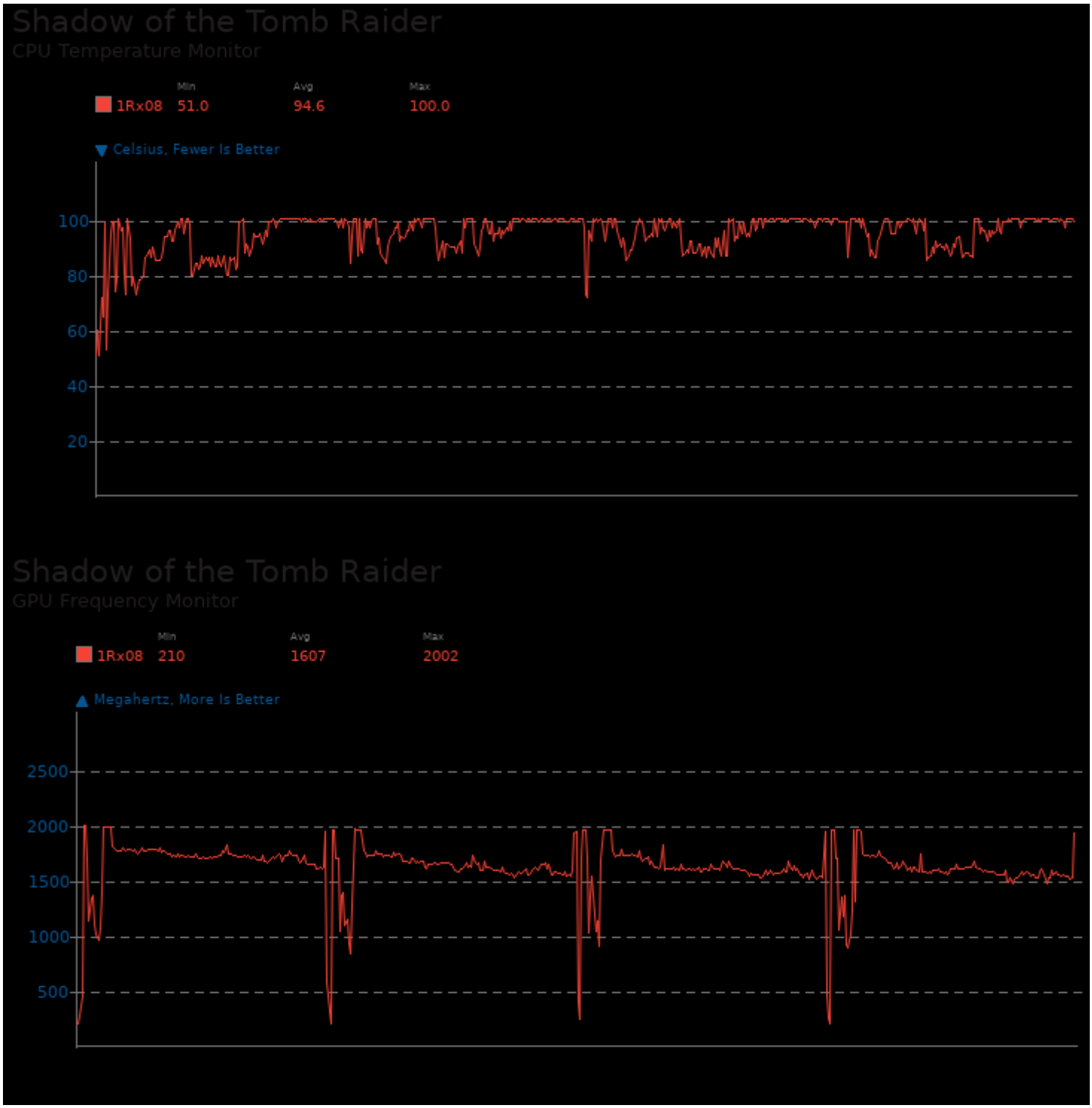
	1Rx08	1Rx16
Shadow of the Tomb Raider - 1920 x 1080 - Medium - Off (FPS)	**121.6**	**121.0**
Normalized	100%	99.51%
Standard Deviation	0.8%	1%
Shadow of the Tomb Raider - 1920 x 1080 - Medium - SMAA (FPS)	**119.1**	**119.4**
Normalized	99.75%	100%
Standard Deviation	0.2%	0.5%
Shadow of the Tomb Raider - 1920 x 1080 - Medium - TAA (FPS)	**119.7**	**118.7**
Normalized	100%	99.16%
Standard Deviation	0.1%	0.1%
Shadow of the Tomb Raider - 1920 x 1080 - Medium - SMAAT2x (FPS)	**119.5**	**118.5**
Normalized	100%	99.16%
Standard Deviation	0.2%	0%
Shadow of the Tomb Raider - 1920 x 1080 - High - Off (FPS)	**116.3**	**114.5**
Normalized	100%	98.45%
Standard Deviation	0.3%	0.1%

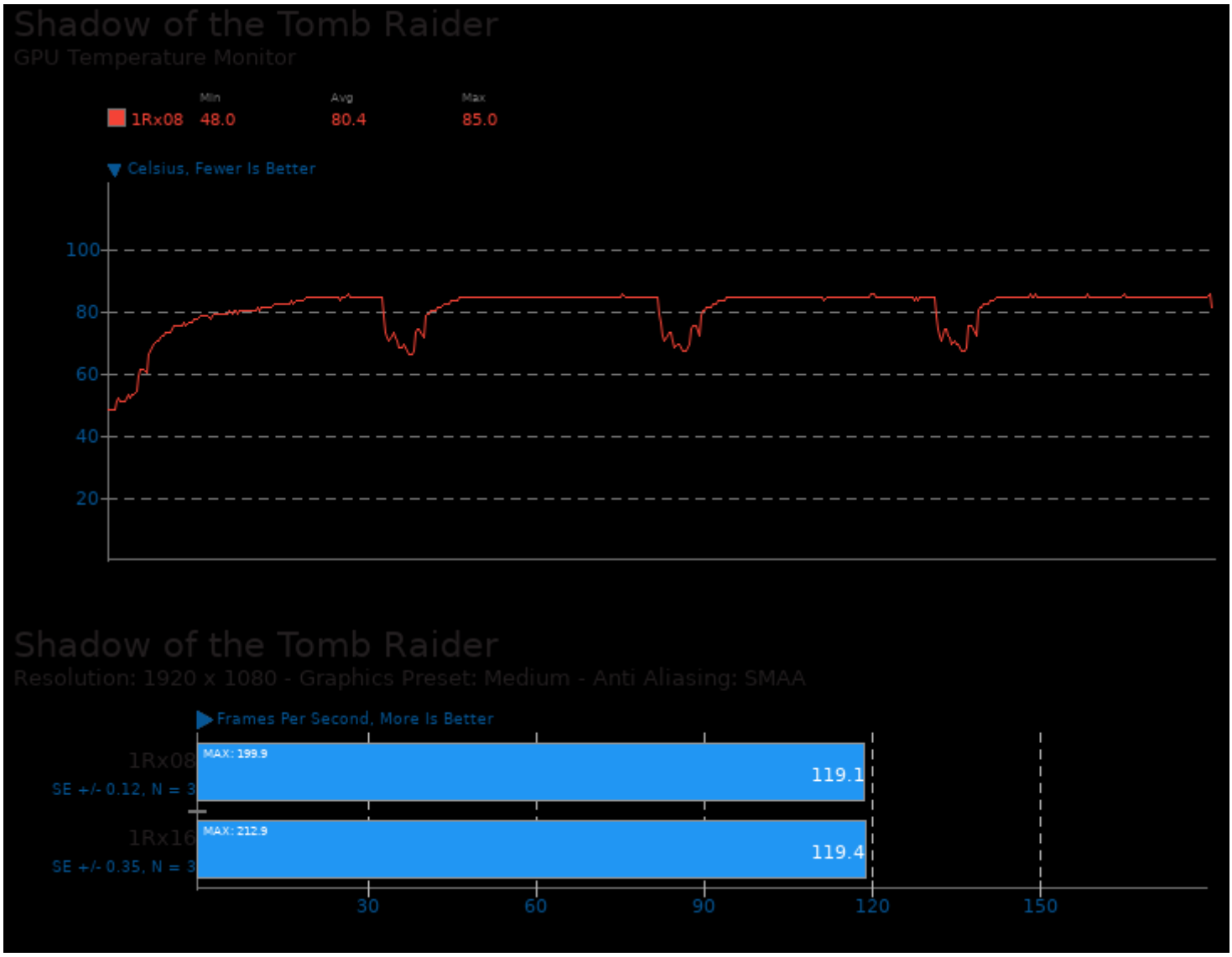
Shadow of the Tomb Raider - 1920 x 1080 - High - SMAA (FPS)	**115.4**	**114.5**
Normalized	100%	99.22%
Standard Deviation	0.2%	0.1%
Shadow of the Tomb Raider - 1920 x 1080 - High - TAA (FPS)	**115.6**	**114.8**
Normalized	100%	99.31%
Standard Deviation	0%	0.1%
Shadow of the Tomb Raider - 1920 x 1080 - High - SMAAT2x (FPS)	**115.6**	**115.0**
Normalized	100%	99.48%
Standard Deviation	0.4%	0.1%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - Off (FPS)	**98.8**	**95.4**
Normalized	100%	96.56%
Standard Deviation	0.3%	0.4%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - SMAA (FPS)	**99.4**	**95.1**
Normalized	100%	95.67%
Standard Deviation	0.4%	0.5%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - TAA (FPS)	**98.7**	**95.5**
Normalized	100%	96.76%
Standard Deviation	0.1%	0.2%
Shadow of the Tomb Raider - 1920 x 1080 - Highest - SMAAT2x (FPS)	**99.8**	**95.8**
Normalized	100%	95.99%
Standard Deviation	0.8%	0.2%
Y-Cruncher - C.5.P.D (sec)	**23.478**	**29.617**
Normalized	100%	79.27%
Standard Deviation	1.8%	0.8%
srsRAN - 4.P.1.P.S.6.Q (eNb Mb/s)	**385.8**	**395.7**
Normalized	97.5%	100%
Standard Deviation	1%	2.2%
srsRAN - 4.P.1.P.S.6.Q (UE Mb/s)	**230.8**	**236.0**
Normalized	97.8%	100%
Standard Deviation	1.3%	1.7%
srsRAN - 4.P.1.P.S.2.Q (eNb Mb/s)	**432.9**	**439.9**
Normalized	98.41%	100%
Standard Deviation	2%	1.4%
srsRAN - 4.P.1.P.S.2.Q (UE Mb/s)	**277.7**	**281.6**
Normalized	98.62%	100%
Standard Deviation	0.8%	1.1%
srsRAN - 4.P.1.P.M.6.Q (eNb Mb/s)	**400.7**	**403.9**
Normalized	99.21%	100%
Standard Deviation	0.4%	0.5%
srsRAN - 4.P.1.P.M.6.Q (UE Mb/s)	**164.3**	**165.4**
Normalized	99.33%	100%
Standard Deviation	0.8%	0.6%
srsRAN - 4.P.1.P.M.2.Q (eNb Mb/s)	**441.7**	**442.5**
Normalized	99.82%	100%
Standard Deviation	0.1%	0.1%
srsRAN - 4.P.1.P.M.2.Q (UE Mb/s)	**180.8**	**180.4**
Normalized	100%	99.78%

laptop-bench-Dell-g15

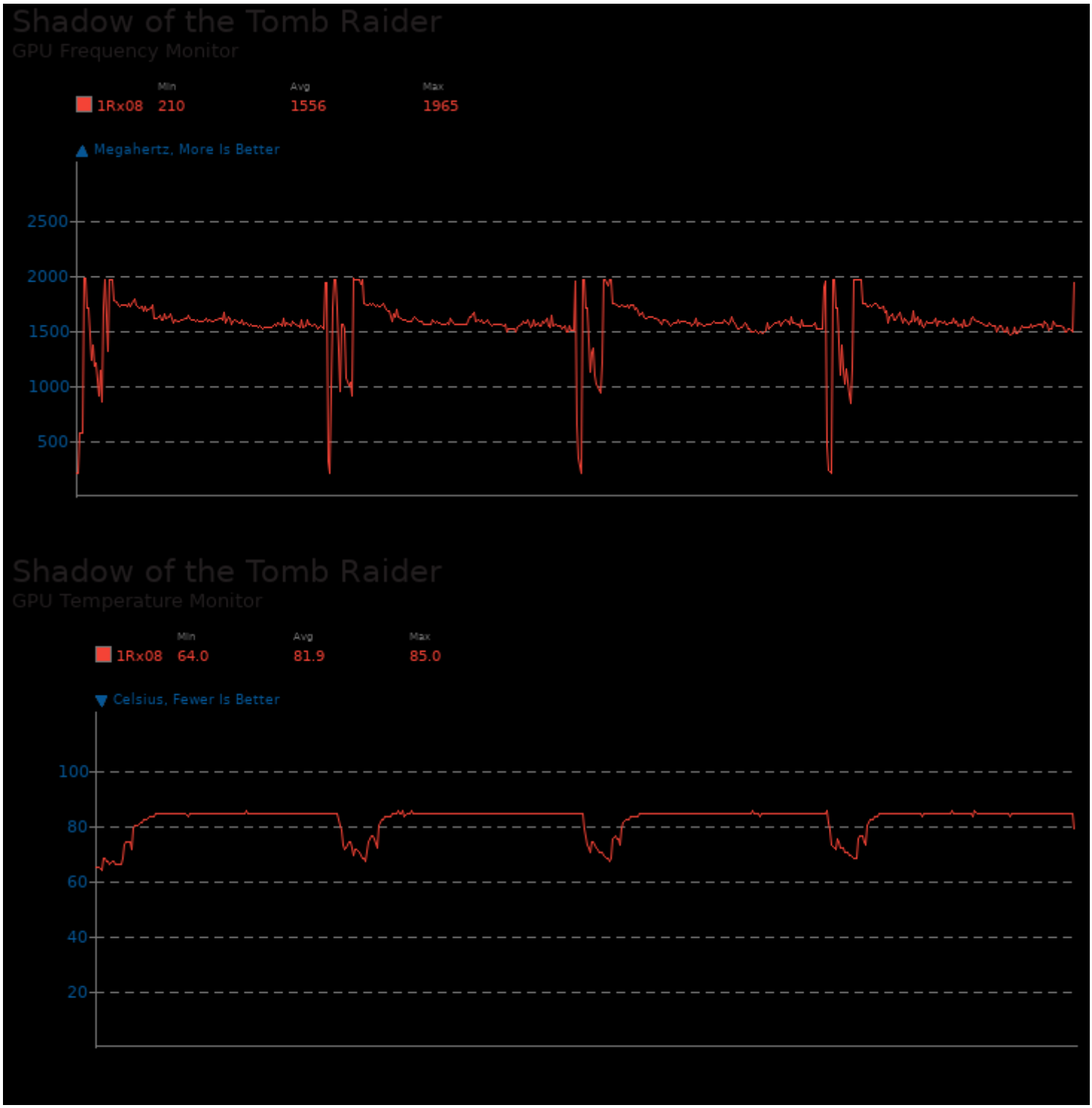
Standard Deviation	0.4%	0.3%
srsRAN - 5.P.T.5.P.S.6.Q (eNb Mb/s)	**156.8**	**157.8**
Normalized	99.37%	100%
Standard Deviation	0.8%	1%
srsRAN - 5.P.T.5.P.S.6.Q (UE Mb/s)	**99.7**	**99.2**
Normalized	100%	99.5%
Standard Deviation	0.5%	0.5%
srsRAN - 5.P.T.2.P.S.2.Q (eNb Mb/s)	**180.9**	**182.2**
Normalized	99.29%	100%
Standard Deviation	0.3%	0.3%
srsRAN - 5.P.T.2.P.S.2.Q (UE Mb/s)	**136.2**	**136.9**
Normalized	99.49%	100%
Standard Deviation	0.2%	0.1%
srsRAN - OFDM_Test (Samples / Second)	**170700000**	**168960000**
Normalized	100%	98.98%
Standard Deviation	1.3%	2.6%
Timed Linux Kernel Compilation - Time To Compile	**89.732**	**90.162**
Normalized	100%	99.52%
Standard Deviation	0.4%	0.8%
GNU Octave Benchmark (sec)	**6.077**	**6.302**
Normalized	100%	96.43%
Standard Deviation	0.4%	1%

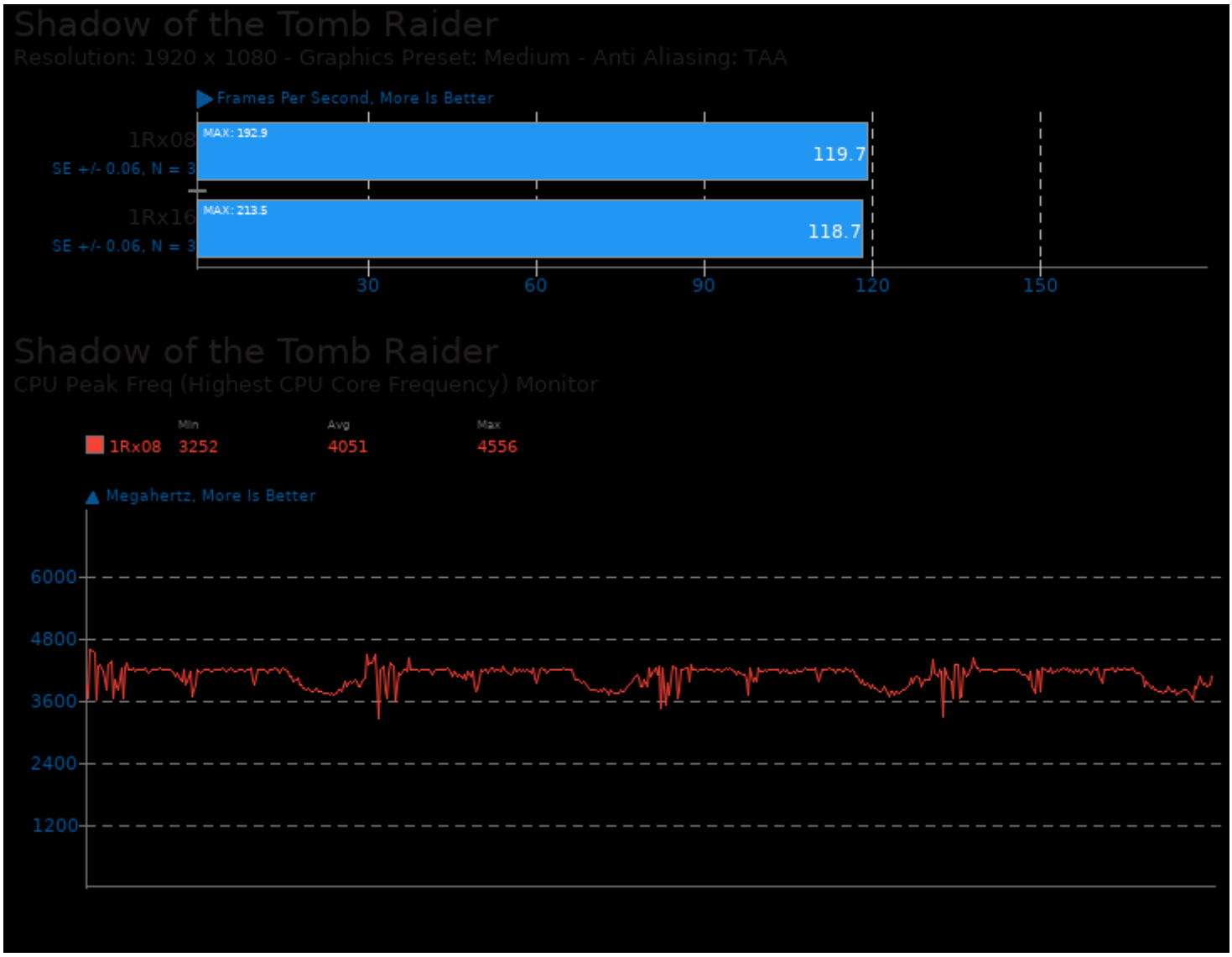

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Medium - Anti Aliasing: Off
Frames Per Second, More Is Better
1Rx08
SE +/- 0.55, N = 3
MAX: 227.1
121.6
1Rx16
SE +/- 0.70, N = 3
MAX: 220.1
121.0
30
60
90
120
150
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3245 4066 4598
Megahertz, More Is Better
6000
4800
3600
2400
1200

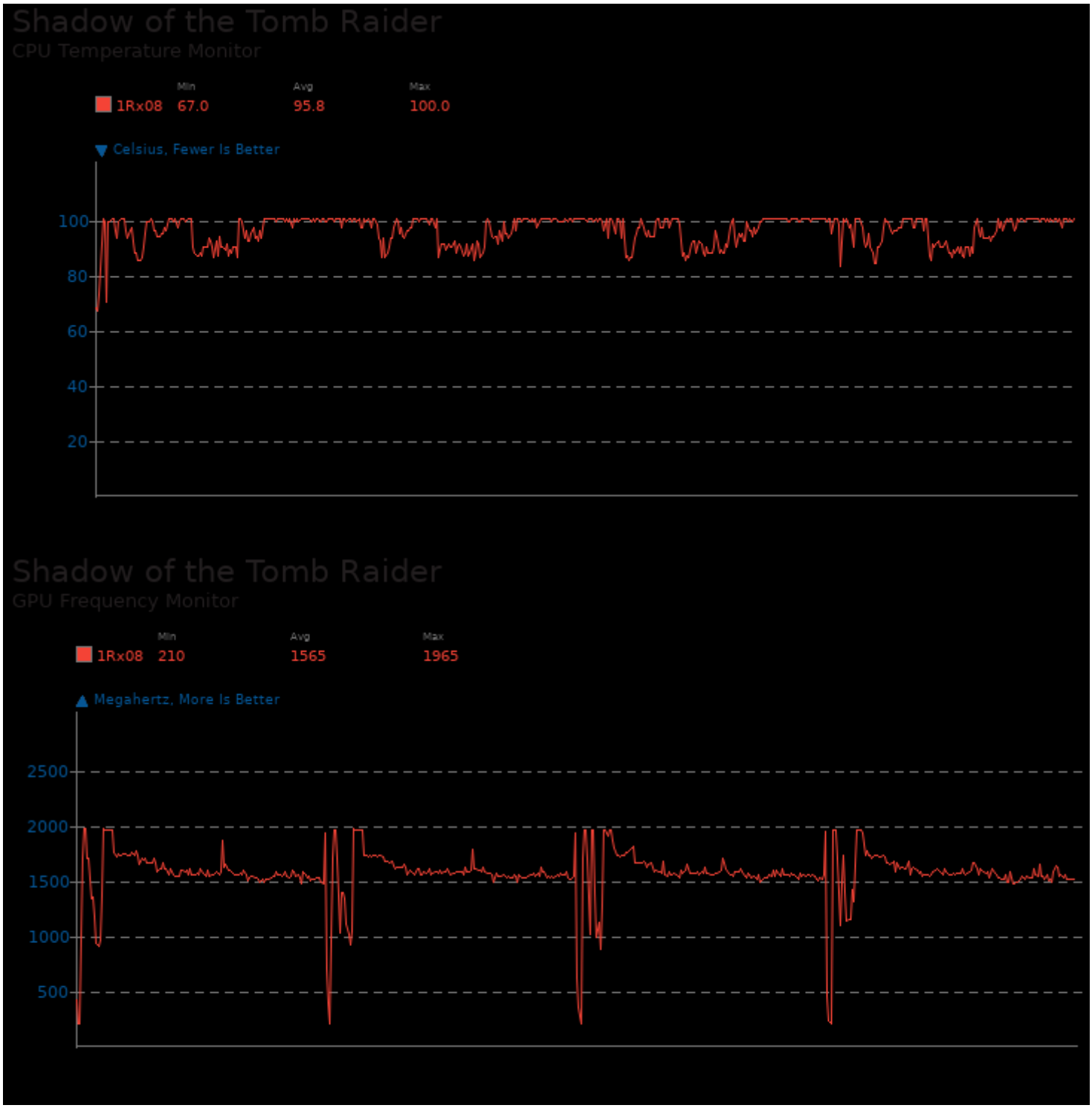

Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 51.0 94.6 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1607 2002
Megahertz, More Is Better
2500
2000
1500
1000
500

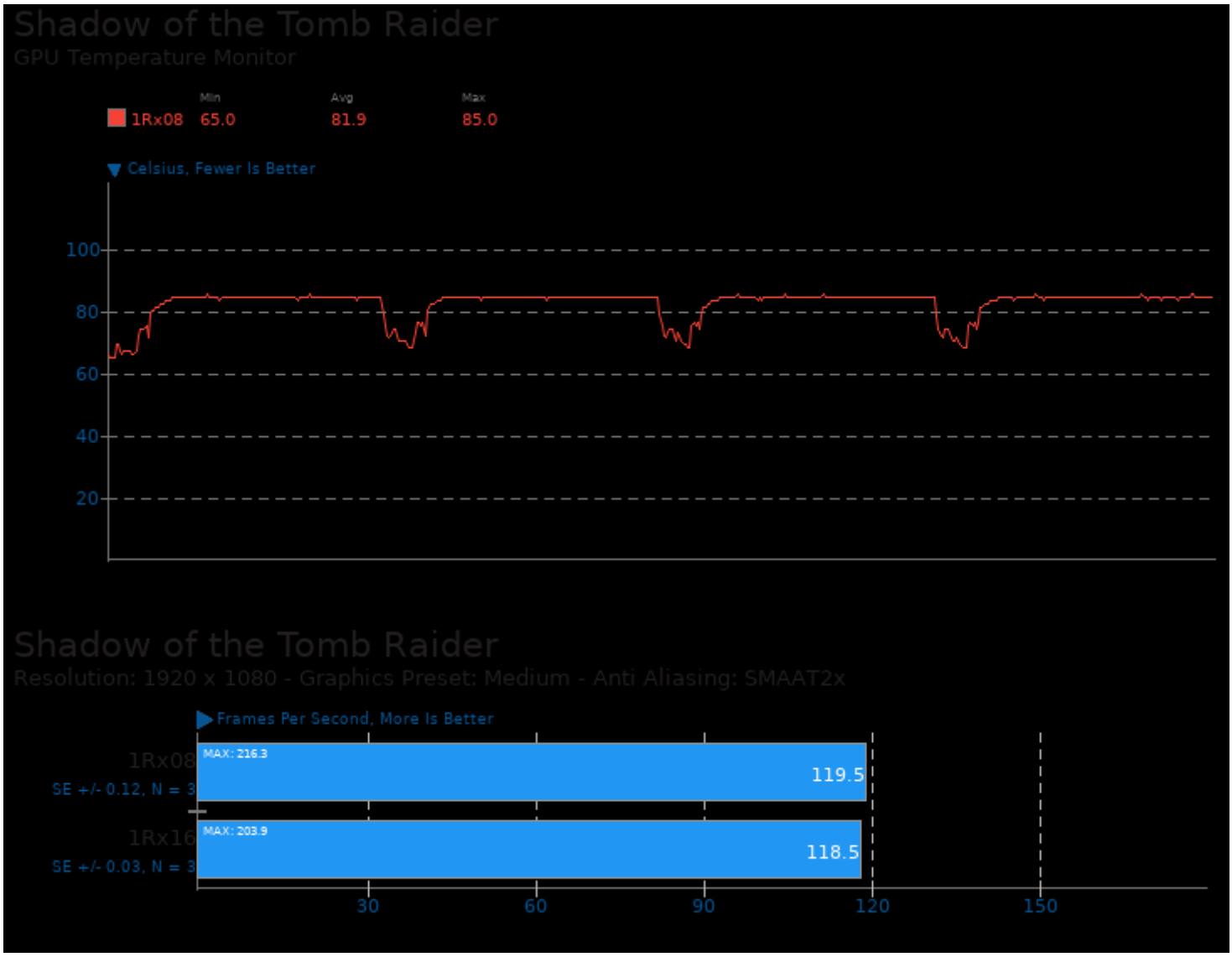

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08
48.0
80.4
85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Medium - Anti Aliasing: SMAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.12, N = 3
MAX: 199.9
119.1
1Rx16
SE +/- 0.35, N = 3
MAX: 212.9
119.4
30
60
90
120
150


Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3167 4045 4553
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 96.0 100.0
Celsius, Fewer Is Better
100
80
60
40
20

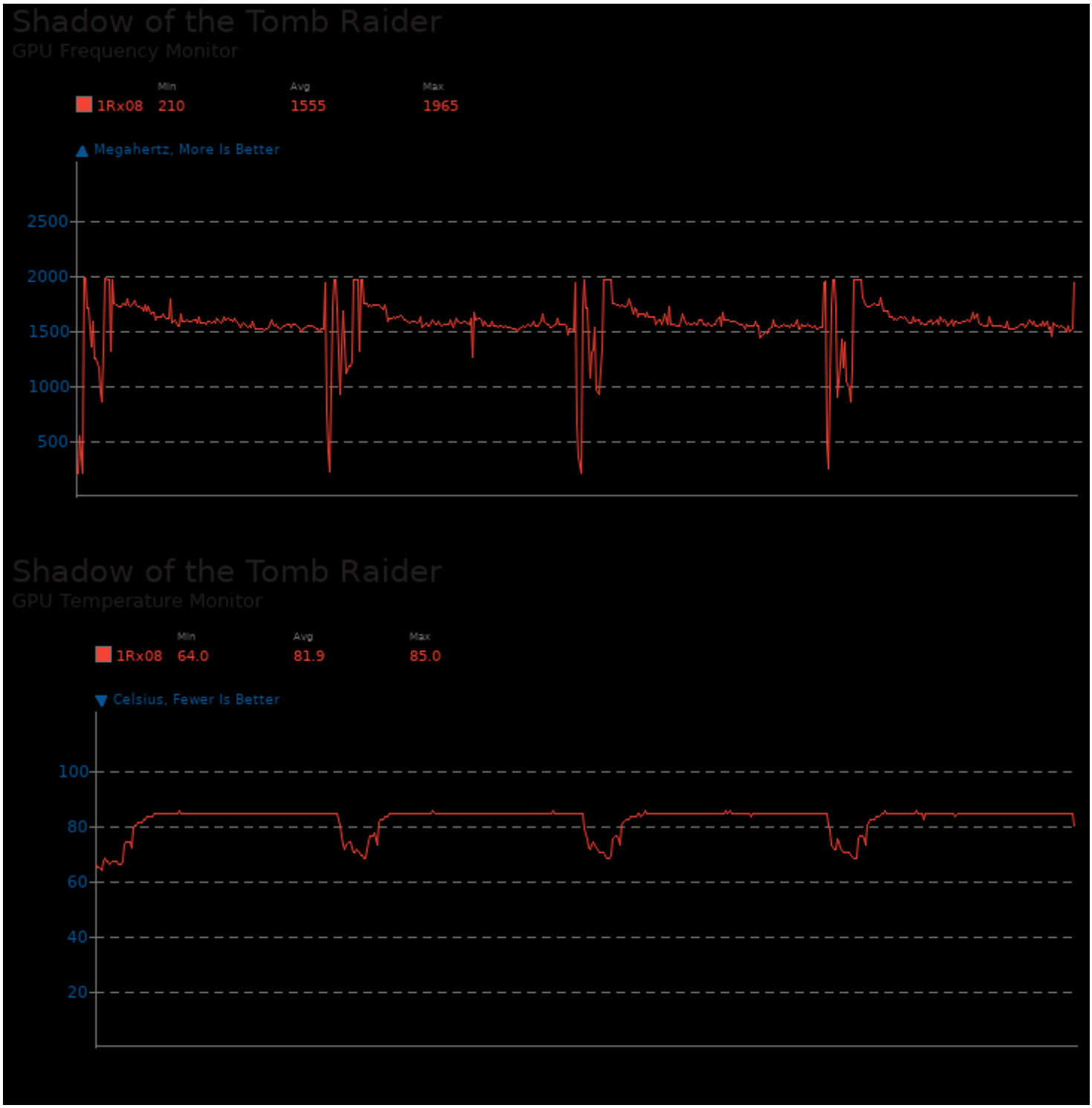

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1556 1965
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 64.0 81.9 85.0
Celsius, Fewer Is Better
100
80
60
40
20

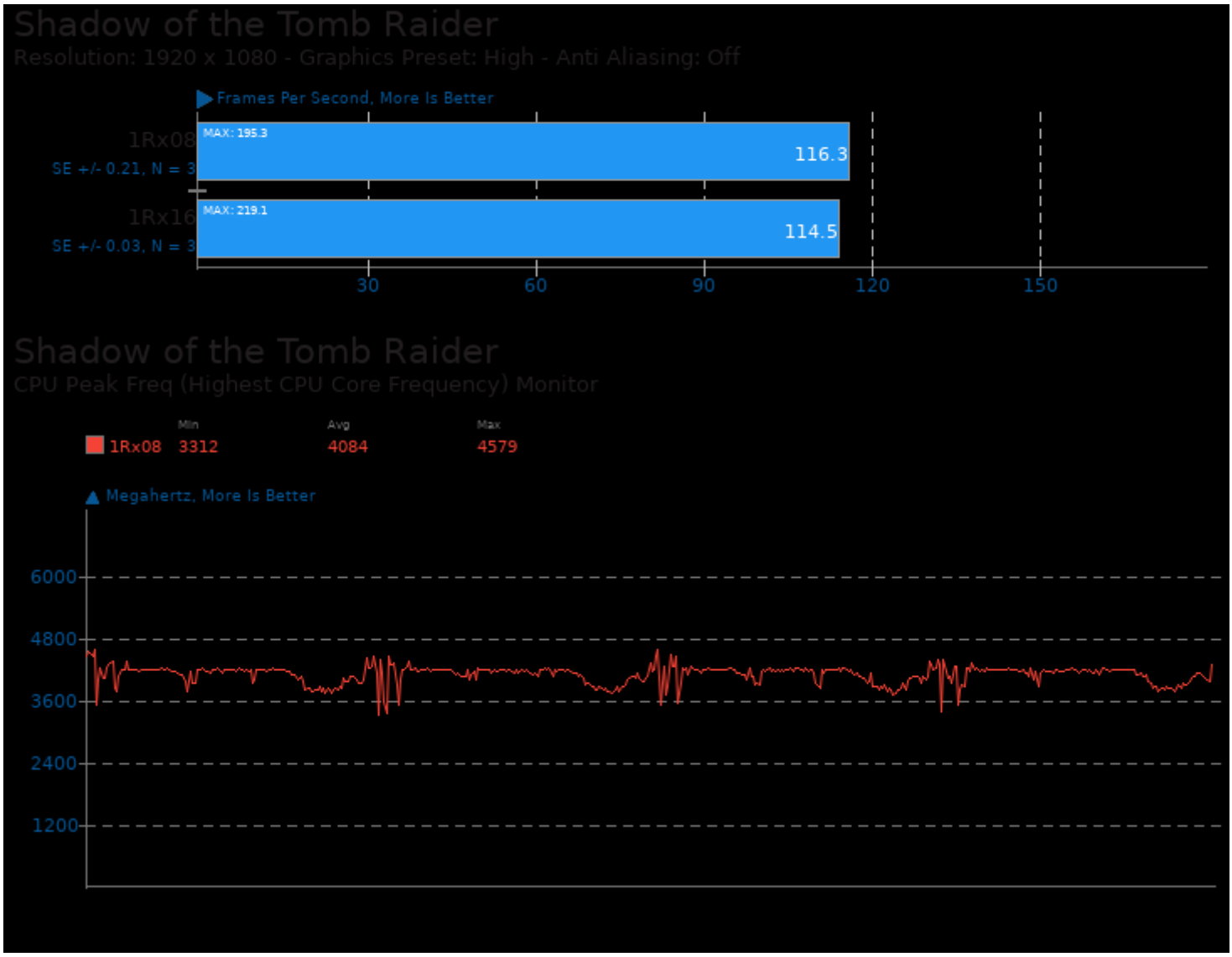

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Medium - Anti Aliasing: TAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.06, N = 3
MAX: 192.9
119.7
1Rx16
SE +/- 0.06, N = 3
MAX: 213.5
118.7
30
60
90
120
150
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
3252
4051
4556
Megahertz, More Is Better
6000
4800
3600
2400
1200

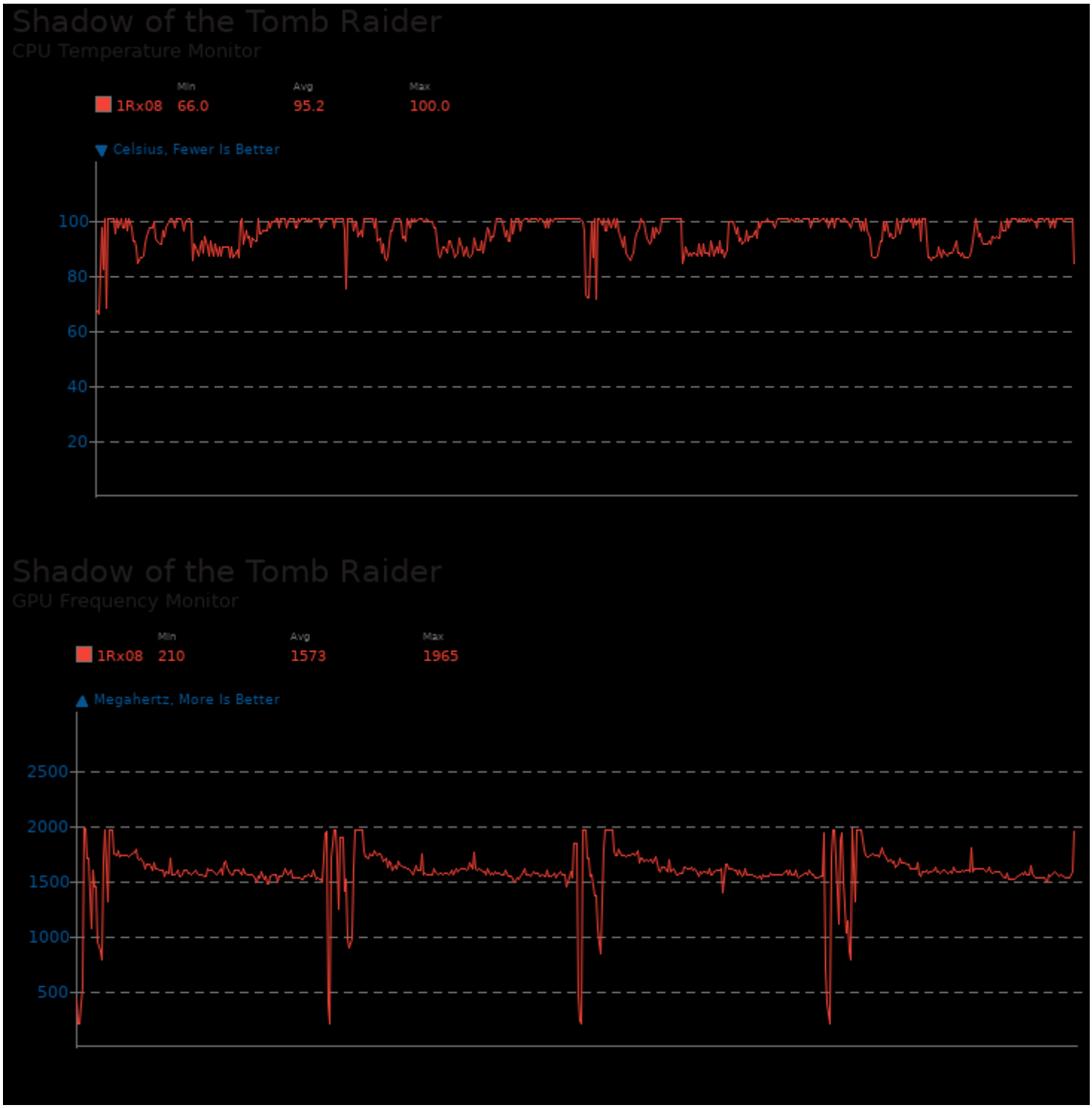

Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 67.0 95.8 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1565 1965
Megahertz, More Is Better
2500
2000
1500
1000
500

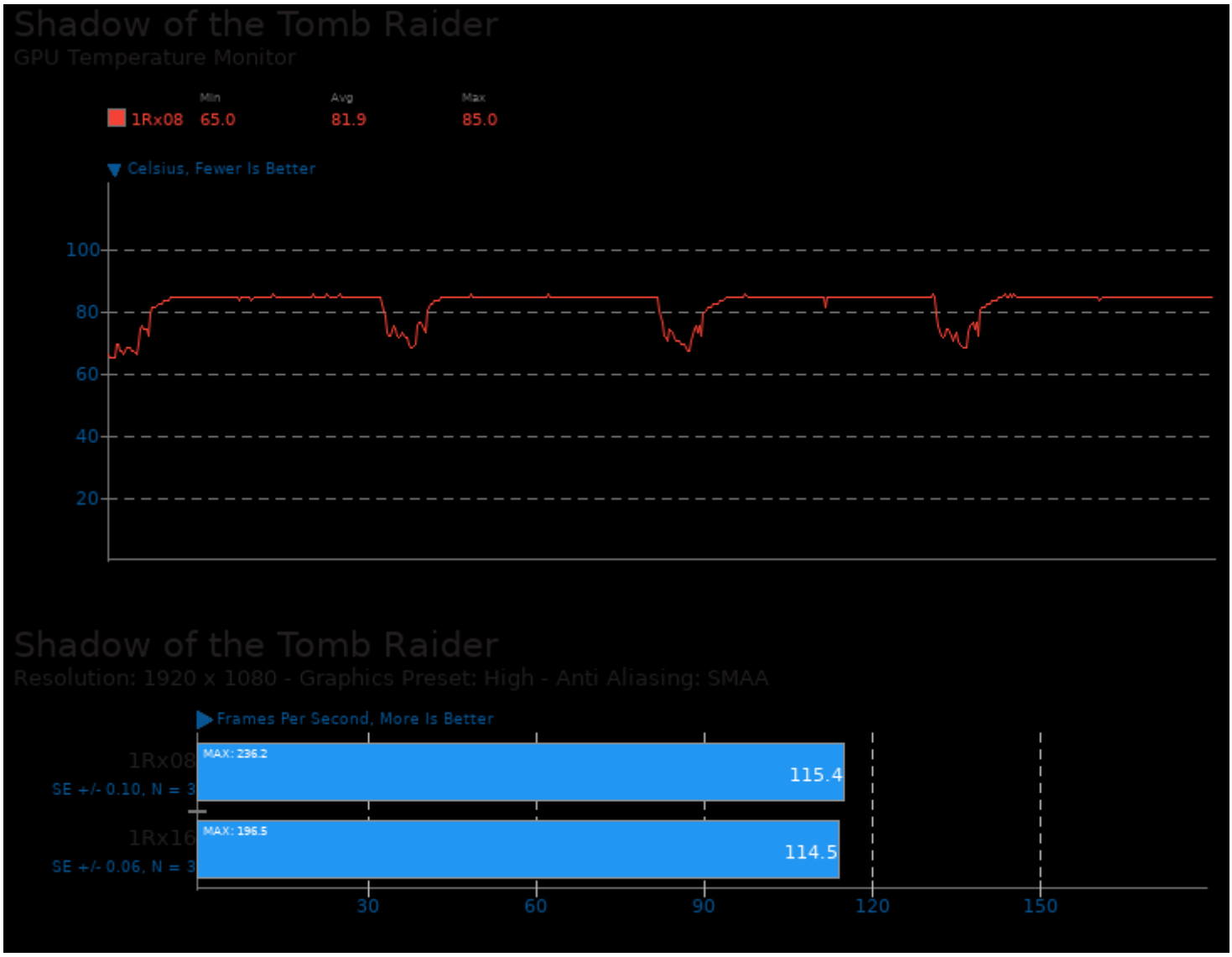

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08
65.0
81.9
85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Medium - Anti Aliasing: SMAAT2x
Frames Per Second, More Is Better
1Rx08
SE +/- 0.12, N = 3
MAX: 216.3
119.5
1Rx16
SE +/- 0.03, N = 3
MAX: 203.9
118.5
30
60
90
120
150


Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3278 4057 4580
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 95.4 100.0
Celsius, Fewer Is Better
100
80
60
40
20

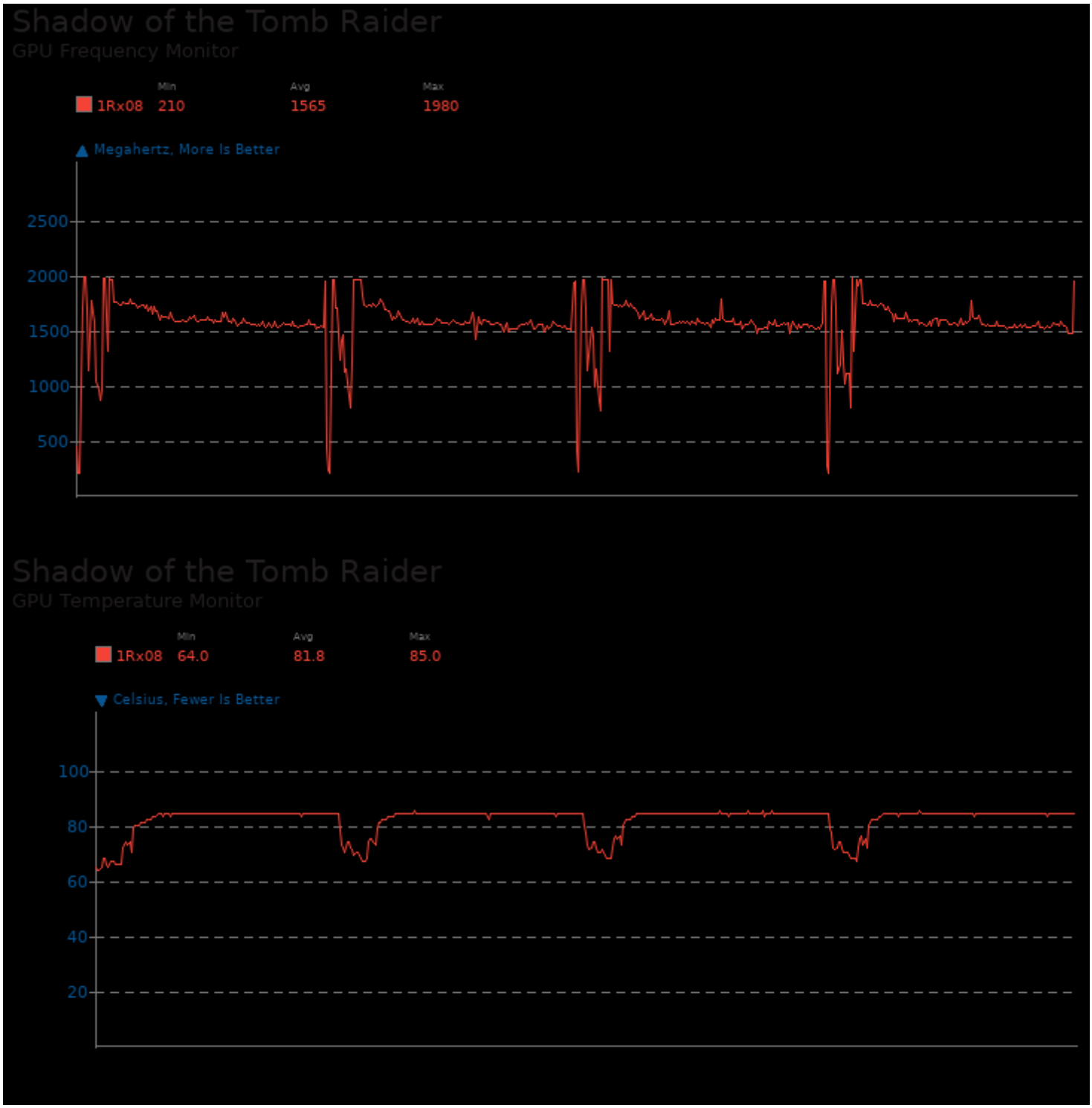

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1RxO8 210
1555
1965
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1RxO8 64.0
81.9
85.0
Celsius, Fewer Is Better
100
80
60
40
20

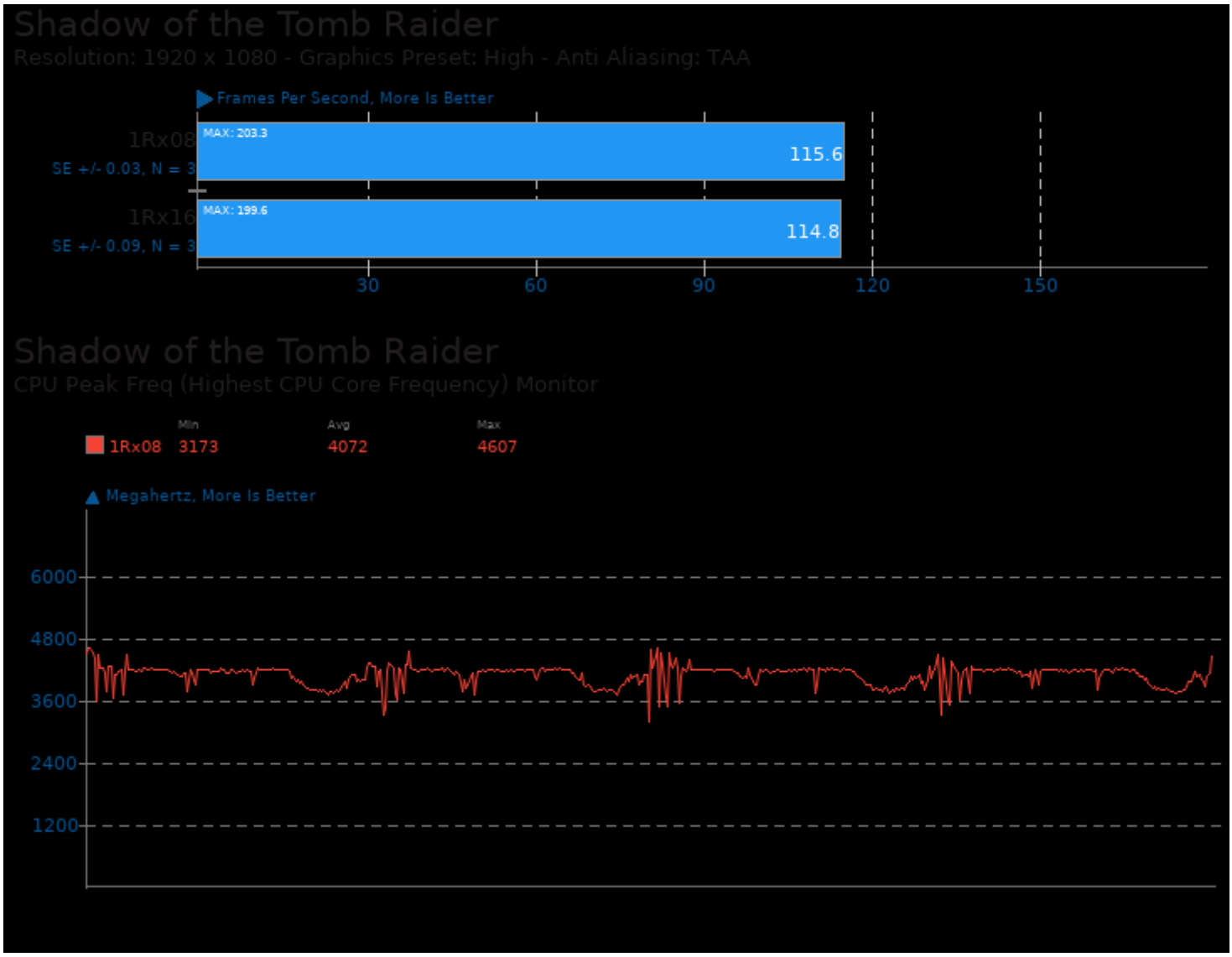

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: High - Anti Aliasing: Off
Frames Per Second, More Is Better
1Rx08
SE +/- 0.21, N = 3
MAX: 195.3
116.3
1Rx16
SE +/- 0.03, N = 3
MAX: 219.1
114.5
30
60
90
120
150
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
3312
4084
4579
Megahertz, More Is Better
6000
4800
3600
2400
1200

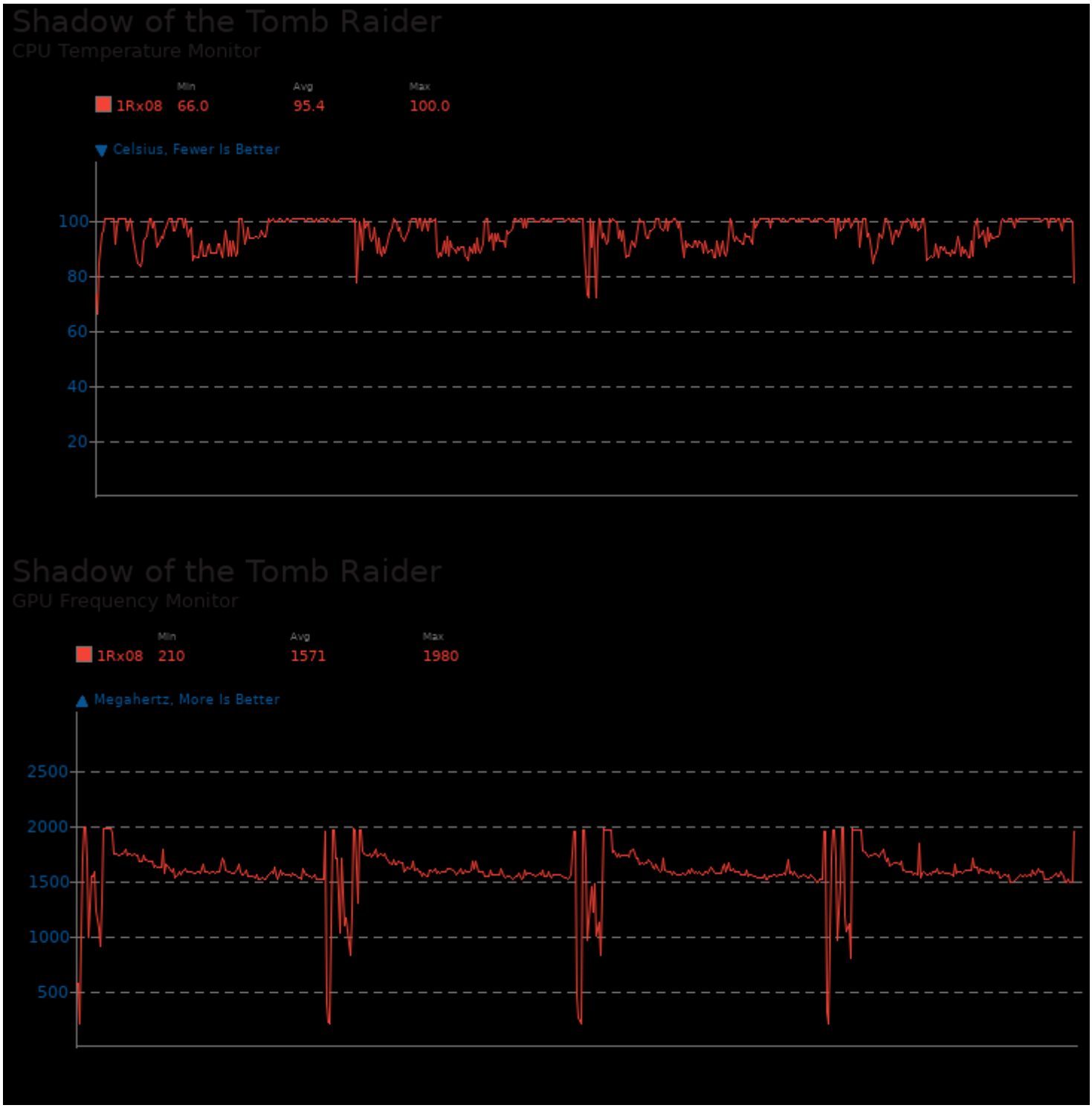

Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 95.2 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1573 1965
Megahertz, More Is Better
2500
2000
1500
1000
500

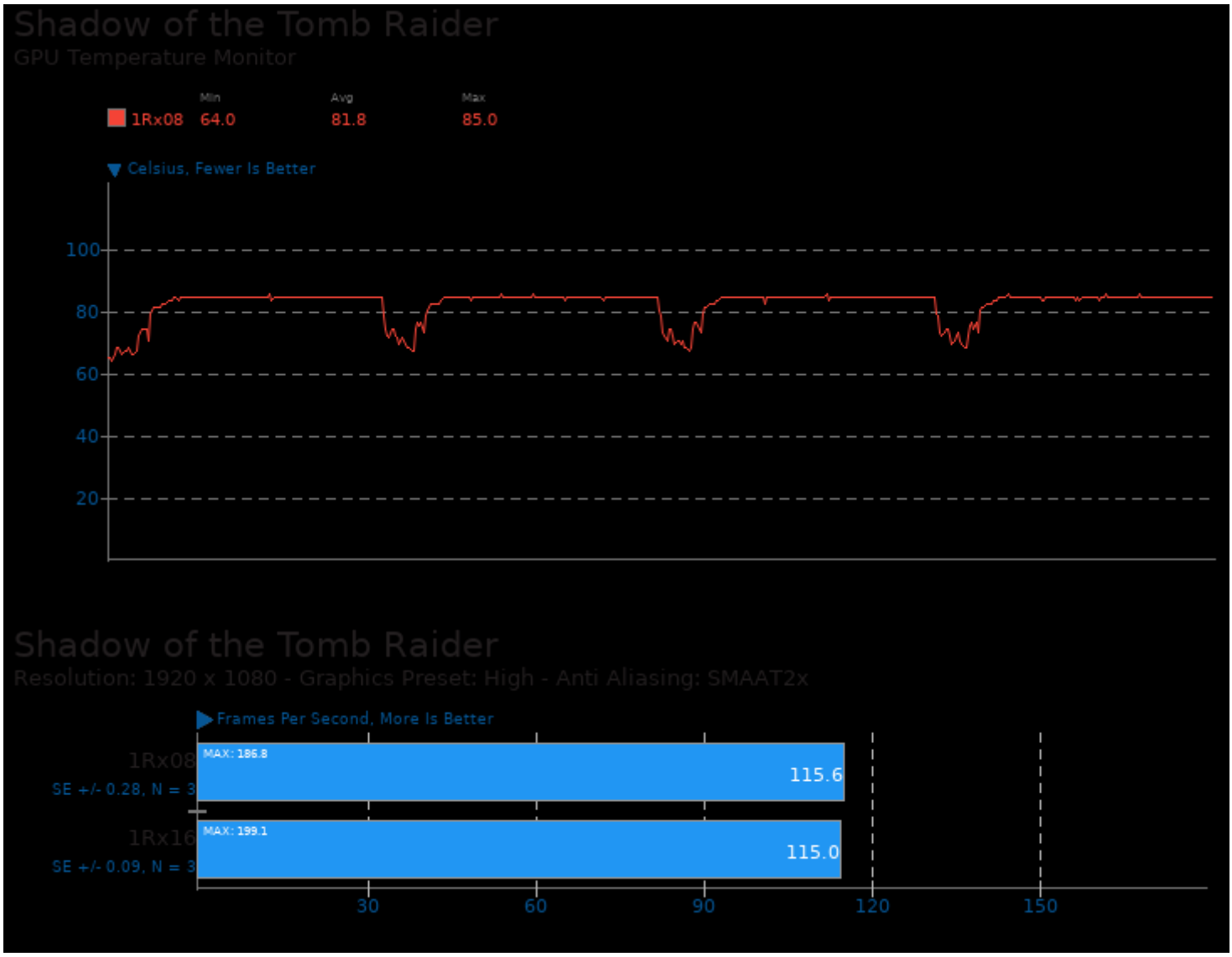

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 65.0 81.9 85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: High - Anti Aliasing: SMAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.10, N = 3
MAX: 236.2
115.4
1Rx16
SE +/- 0.06, N = 3
MAX: 196.5
114.5
30
60
90
120
150

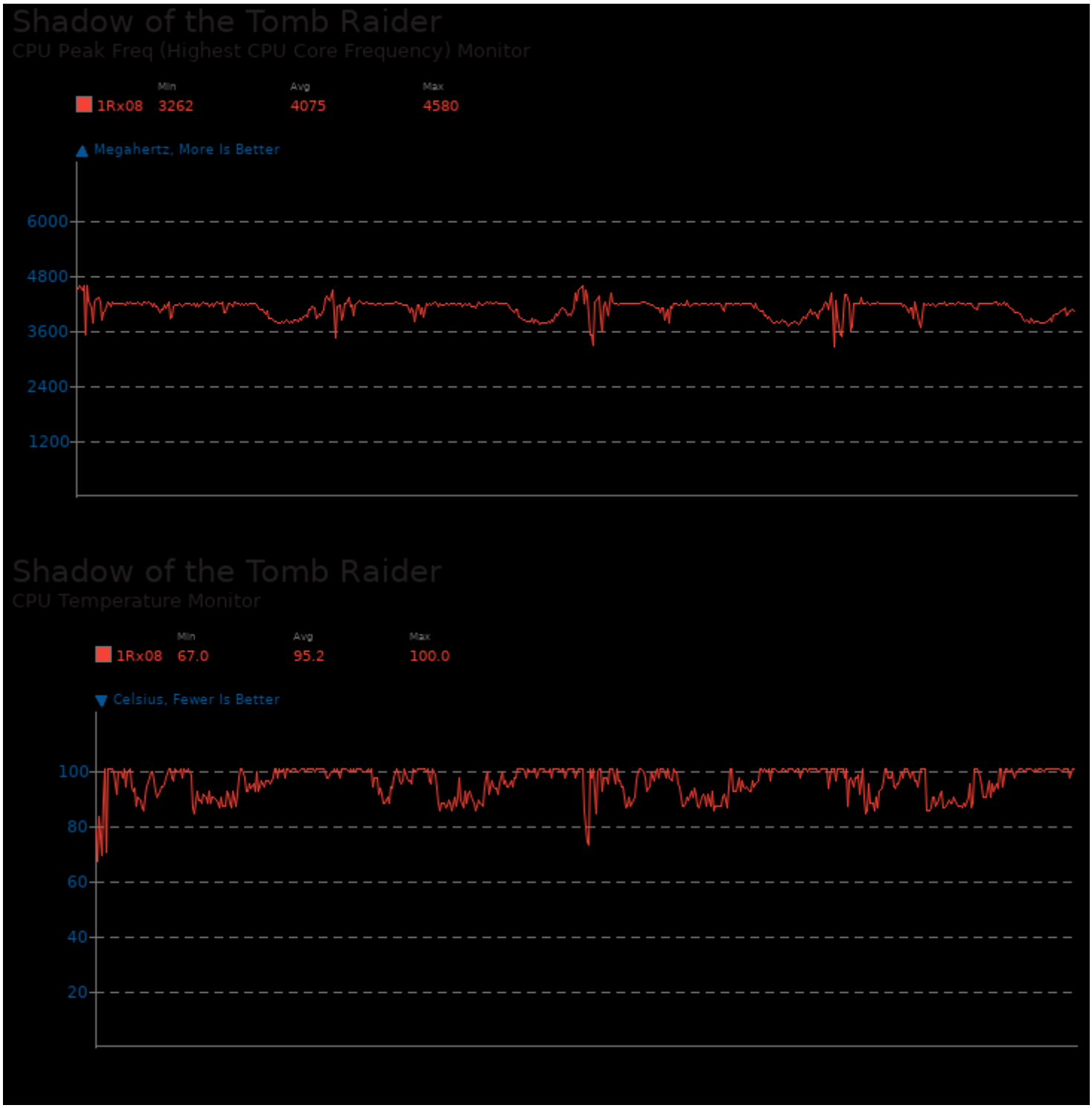

Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3300 4076 4579
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 95.3 100.0
Celsius, Fewer Is Better
100
80
60
40
20

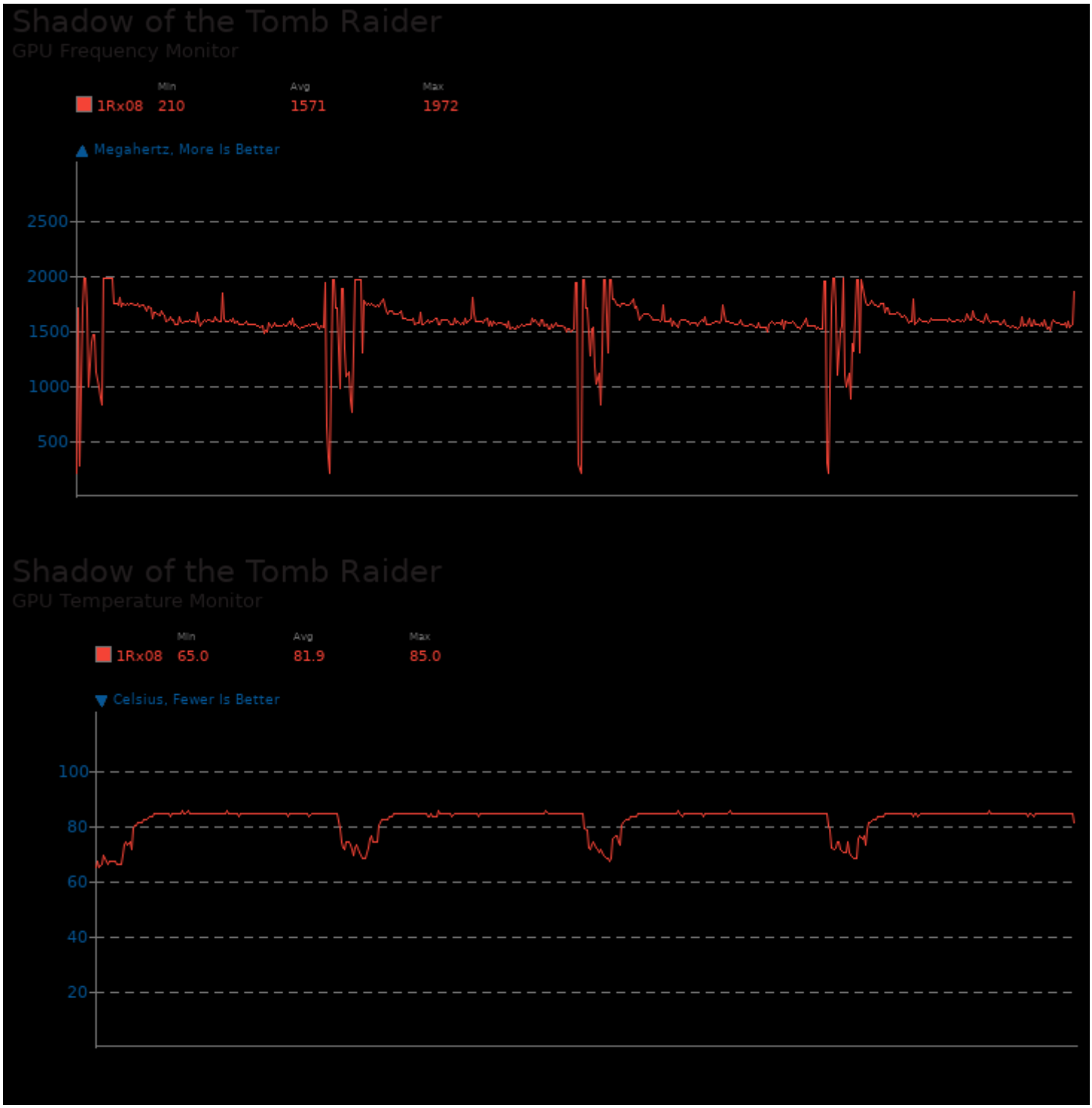

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1565 1980
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 64.0 81.8 85.0
Celsius, Fewer Is Better
100
80
60
40
20

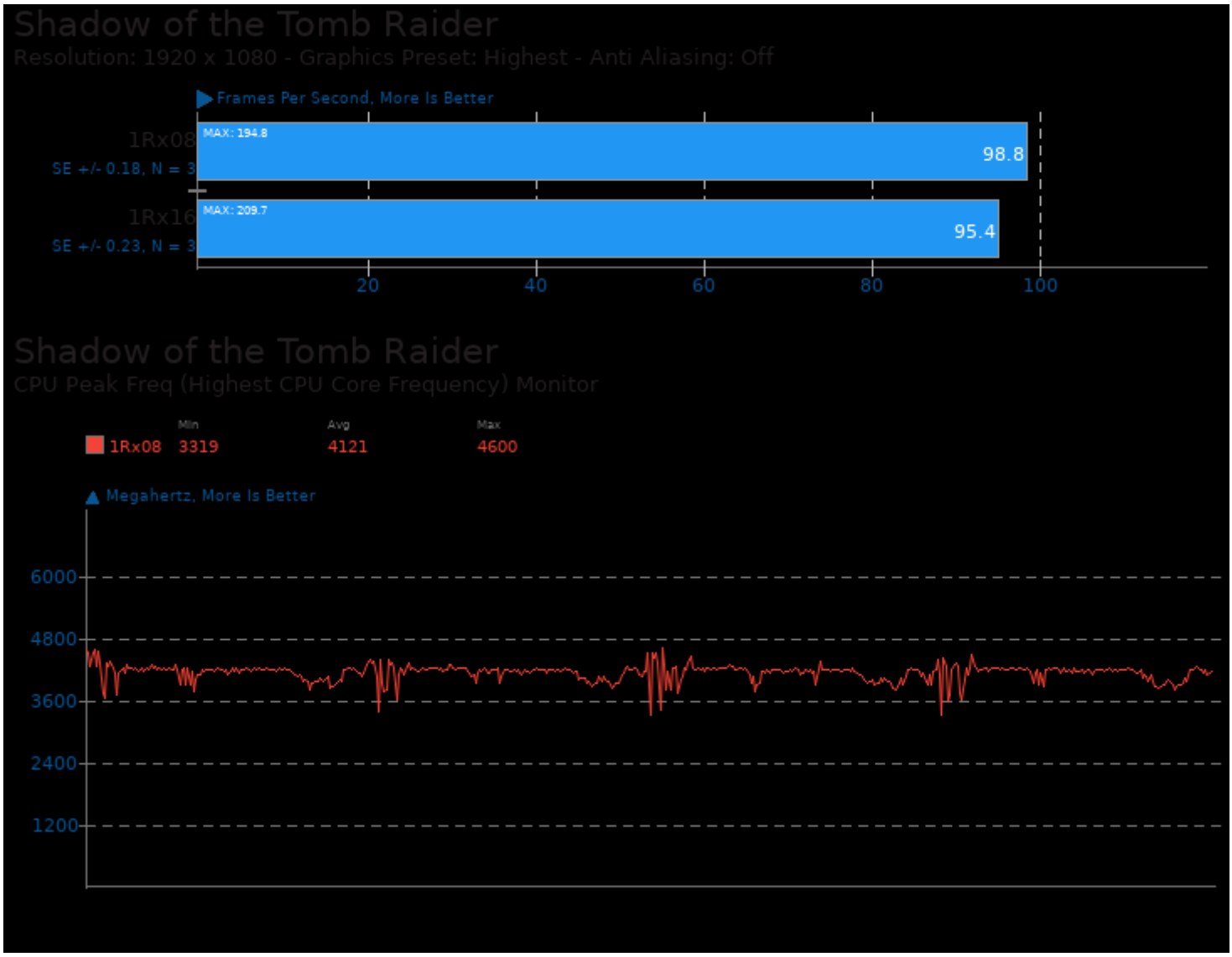

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: High - Anti Aliasing: TAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.03, N = 3
MAX: 203.3
115.6
1Rx16
SE +/- 0.09, N = 3
MAX: 199.6
114.8
30
60
90
120
150
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
3173
4072
4607
Megahertz, More Is Better
6000
4800
3600
2400
1200

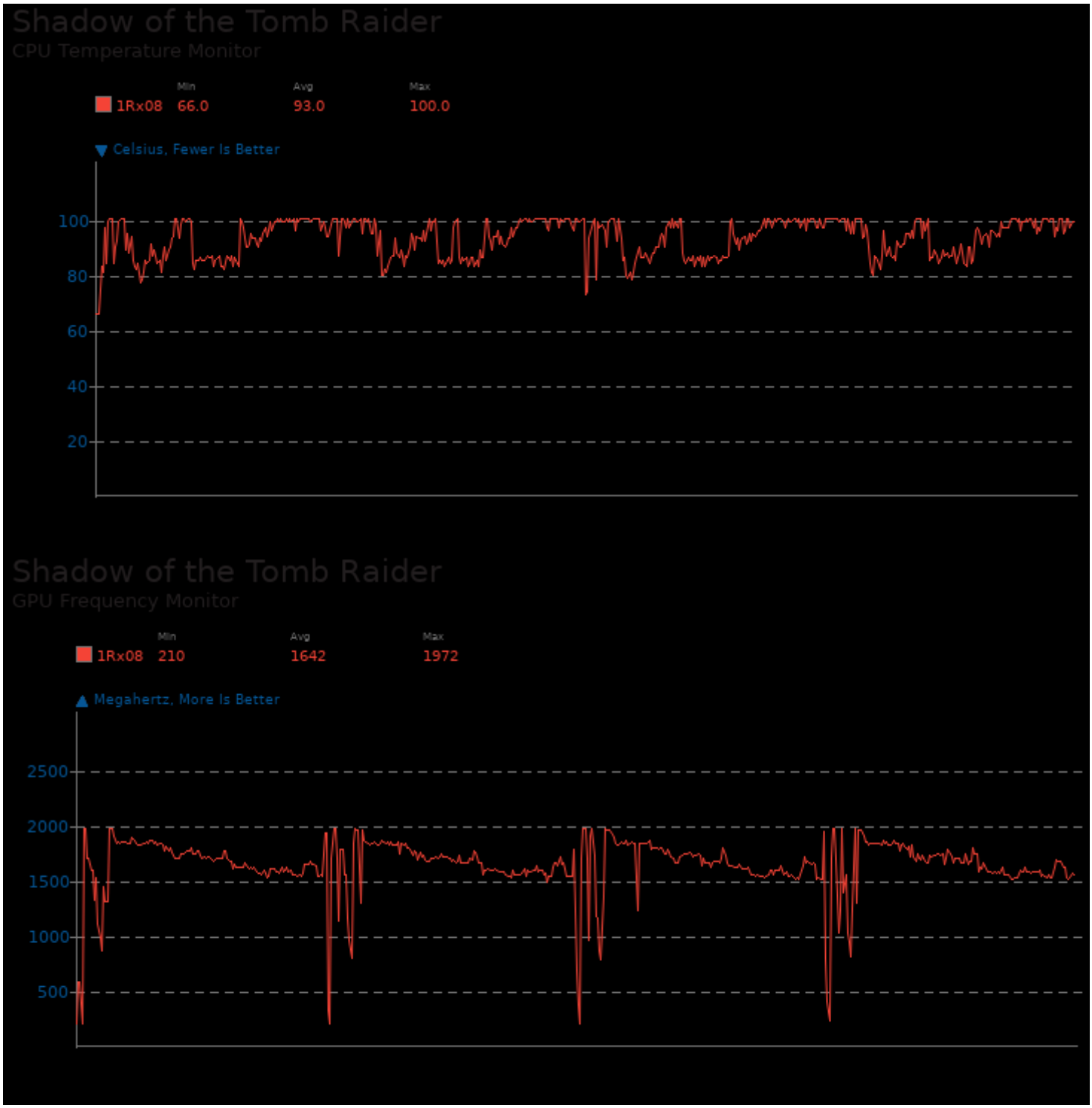

Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08
66.0
95.4
100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08
210
1571
1980
Megahertz, More Is Better
2500
2000
1500
1000
500

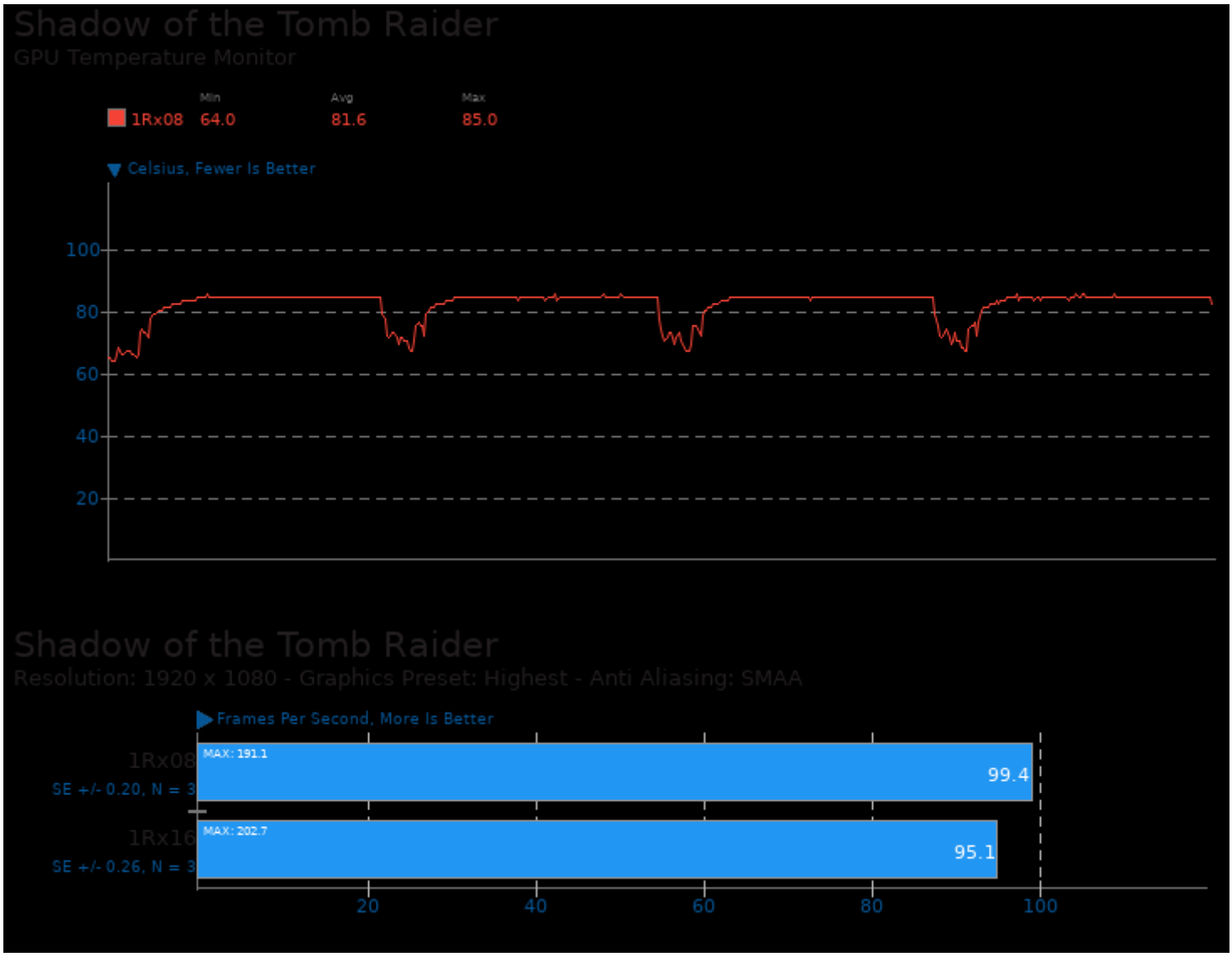

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08
64.0
81.8
85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: High - Anti Aliasing: SMAAT2x
Frames Per Second, More Is Better
1Rx08
SE +/- 0.28, N = 3
MAX: 186.8
115.6
1Rx16
SE +/- 0.09, N = 3
MAX: 199.1
115.0
30
60
90
120
150


Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3262 4075 4580
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 67.0 95.2 100.0
Celsius, Fewer Is Better
100
80
60
40
20

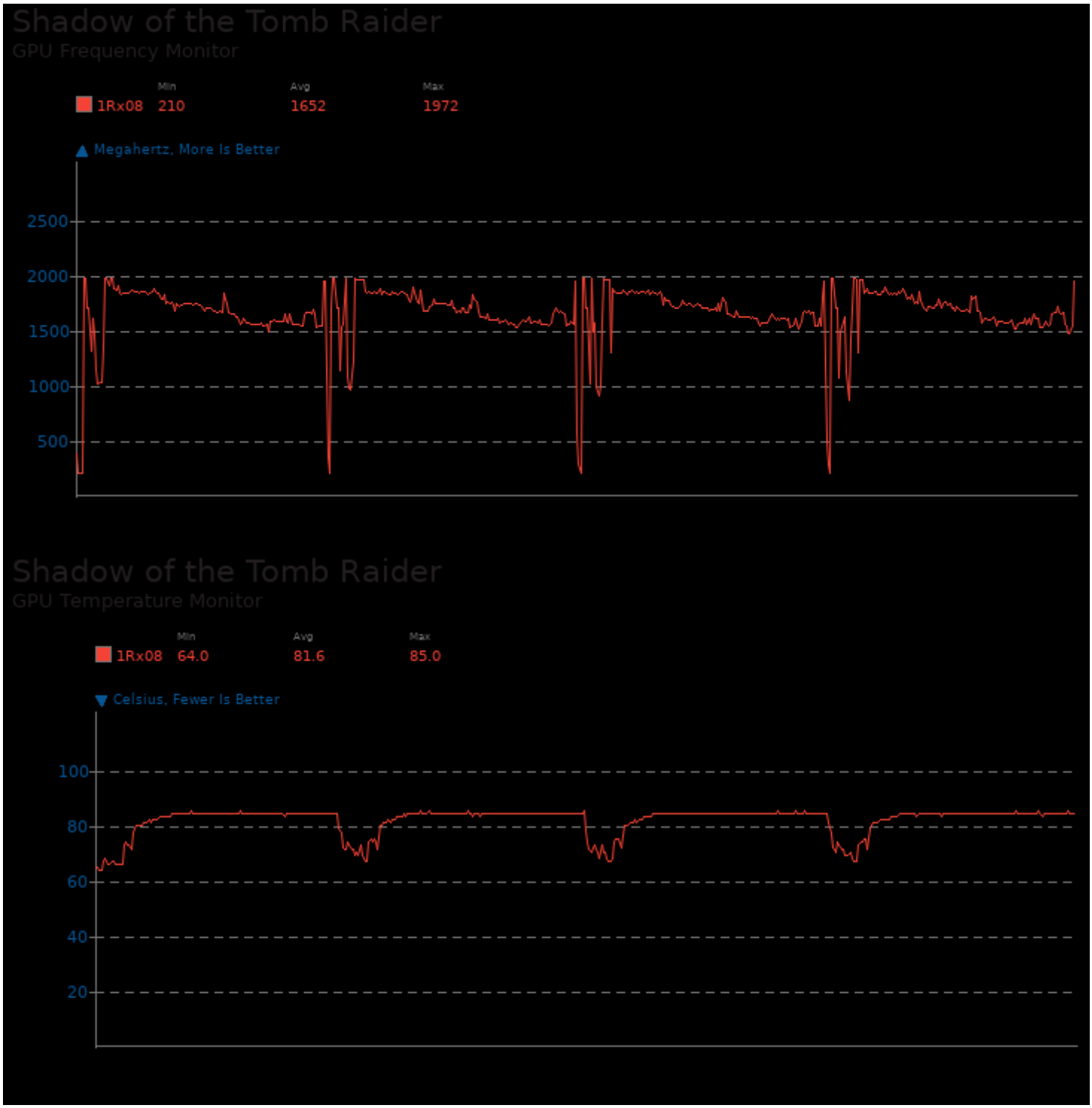

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1571 1972
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 65.0 81.9 85.0
Celsius, Fewer Is Better
100
80
60
40
20

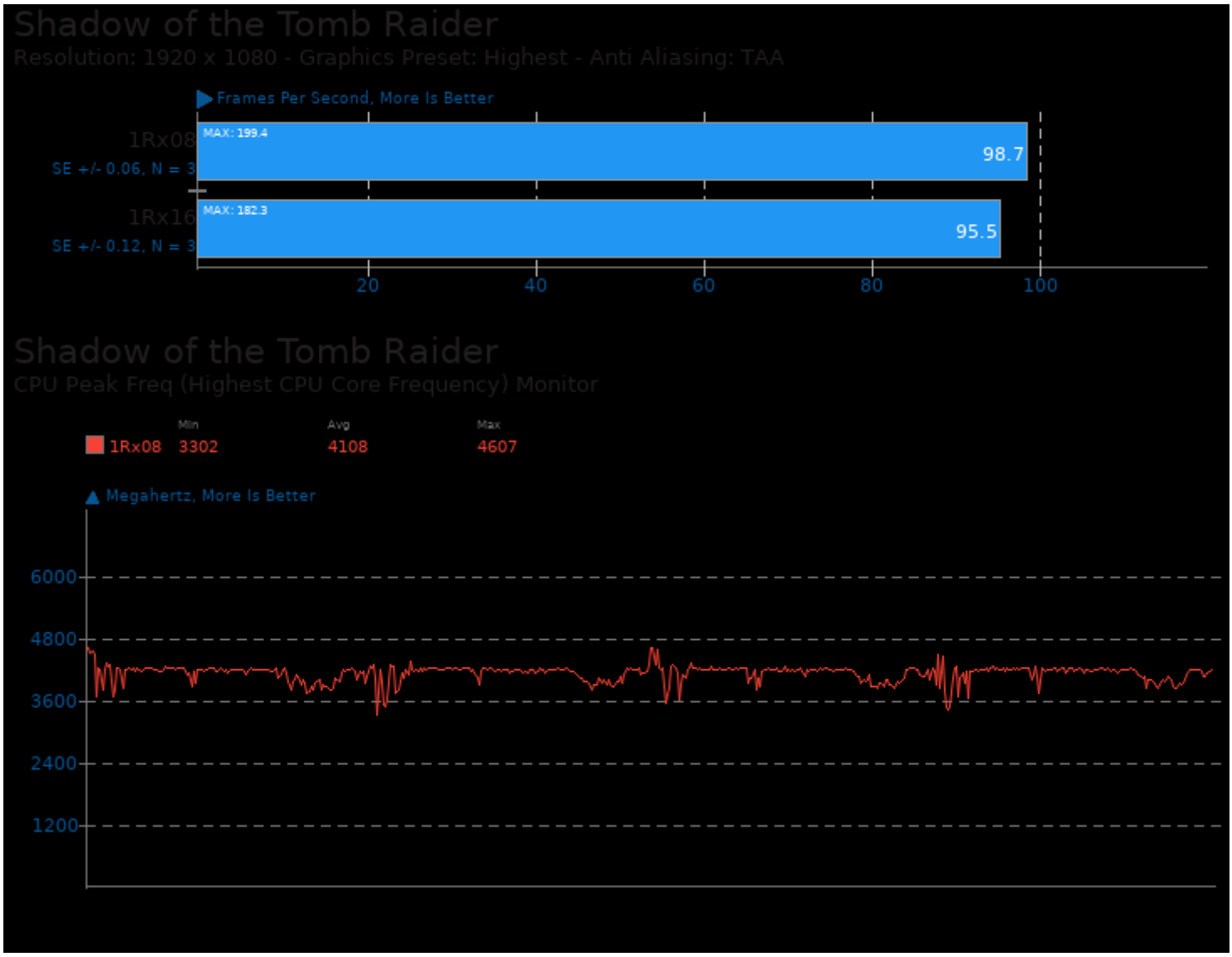

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: Off
Frames Per Second, More Is Better
1Rx08
SE +/- 0.18, N = 3
MAX: 194.8
98.8
1Rx16
SE +/- 0.23, N = 3
MAX: 209.7
95.4
20
40
60
80
100
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
3319
4121
4600
Megahertz, More Is Better
6000
4800
3600
2400
1200

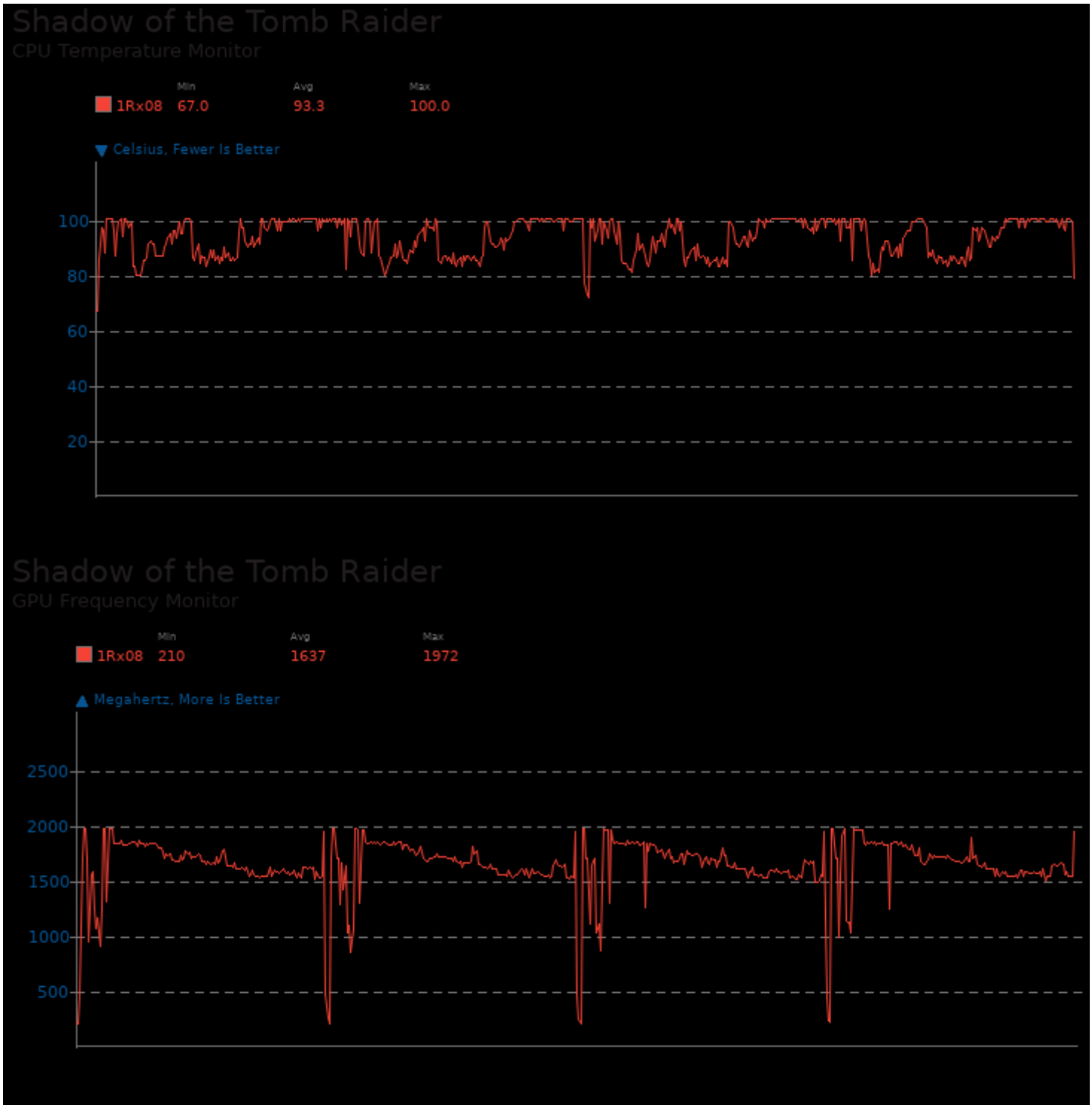

Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 93.0 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1642 1972
Megahertz, More Is Better
2500
2000
1500
1000
500

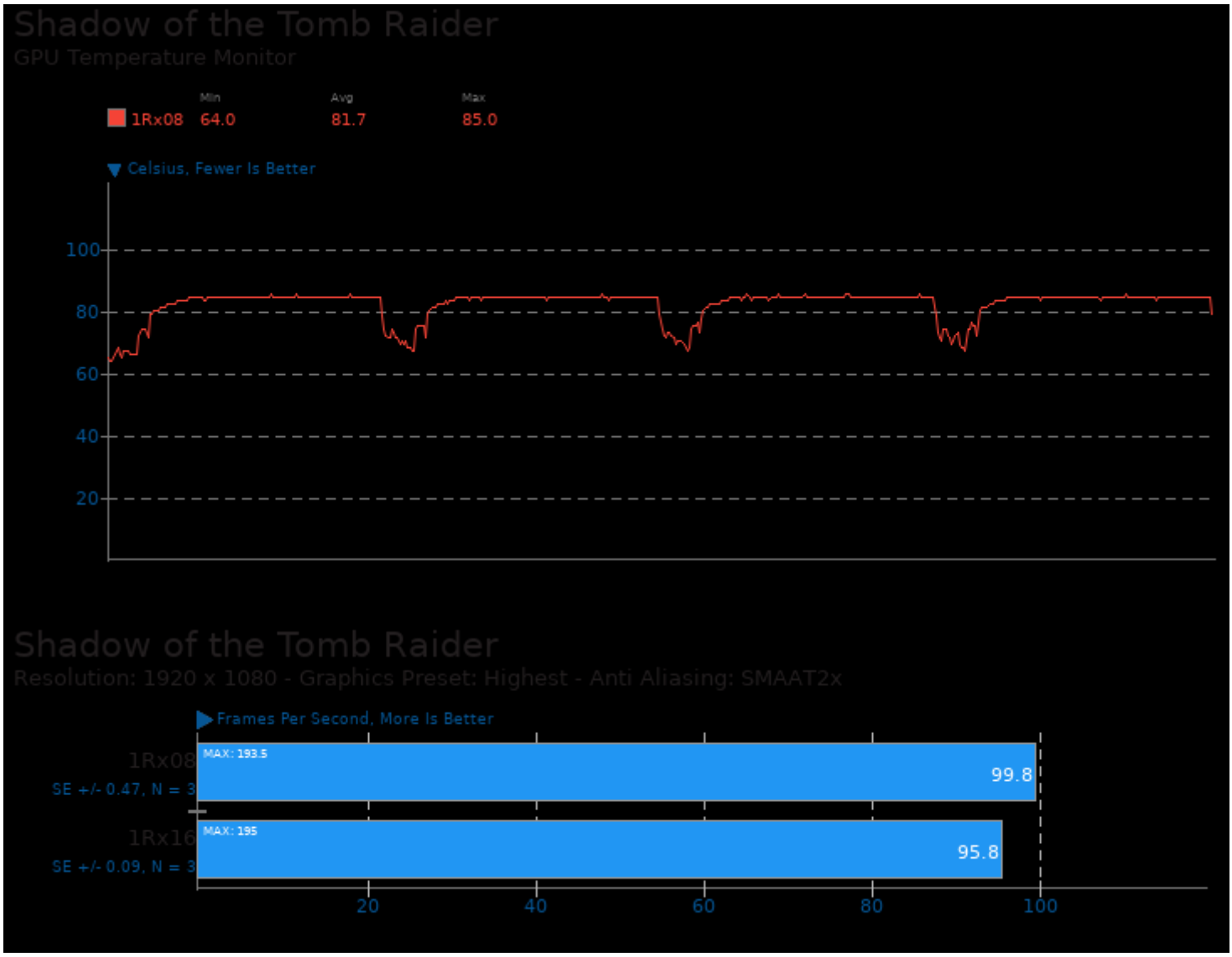

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08
64.0
81.6
85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: SMAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.20, N = 3
MAX: 191.1
99.4
1Rx16
SE +/- 0.26, N = 3
MAX: 202.7
95.1
20
40
60
80
100


Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3297 4119 4594
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 66.0 93.0 100.0
Celsius, Fewer Is Better
100
80
60
40
20

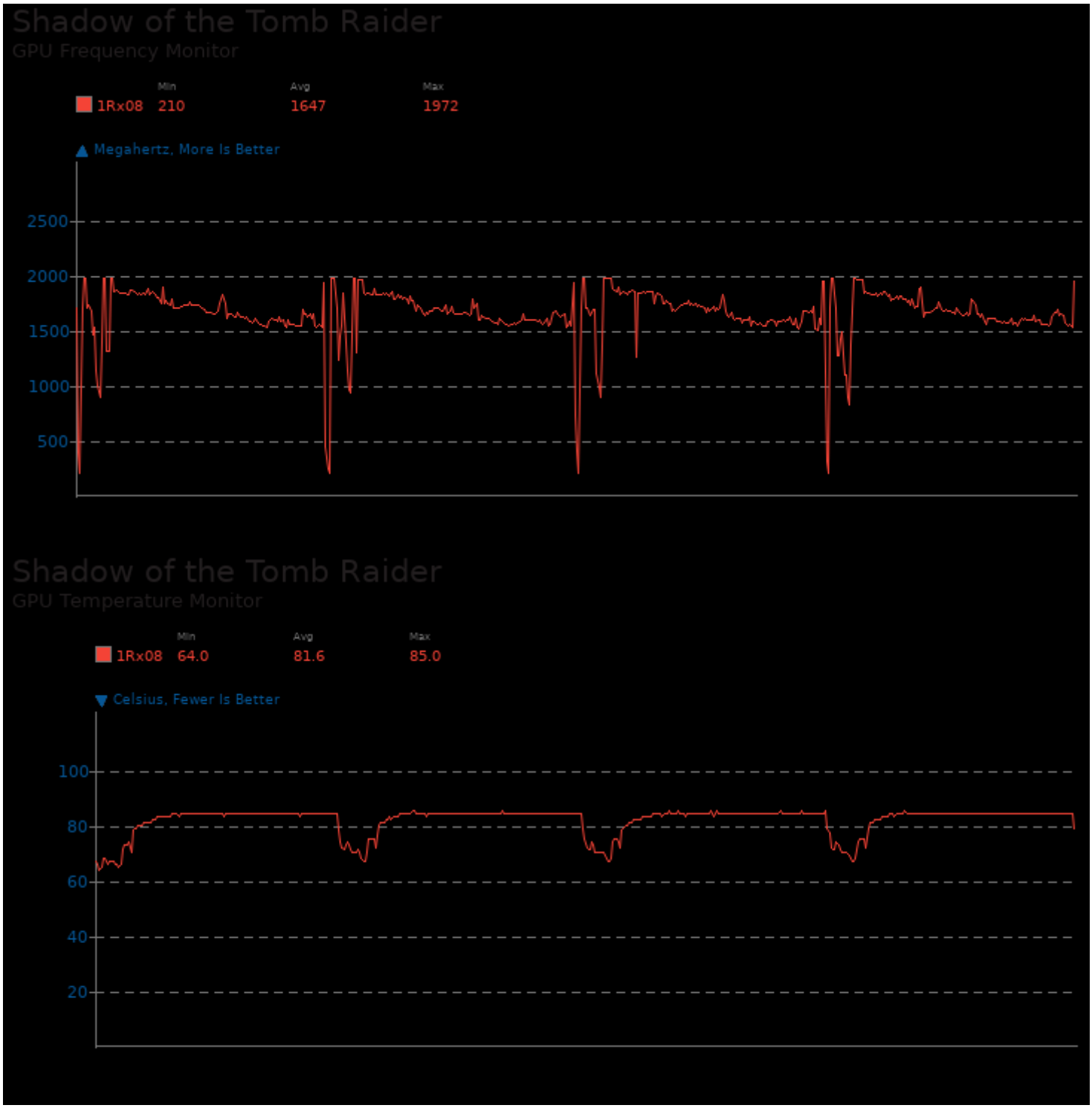

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1652 1972
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 64.0 81.6 85.0
Celsius, Fewer Is Better
100
80
60
40
20

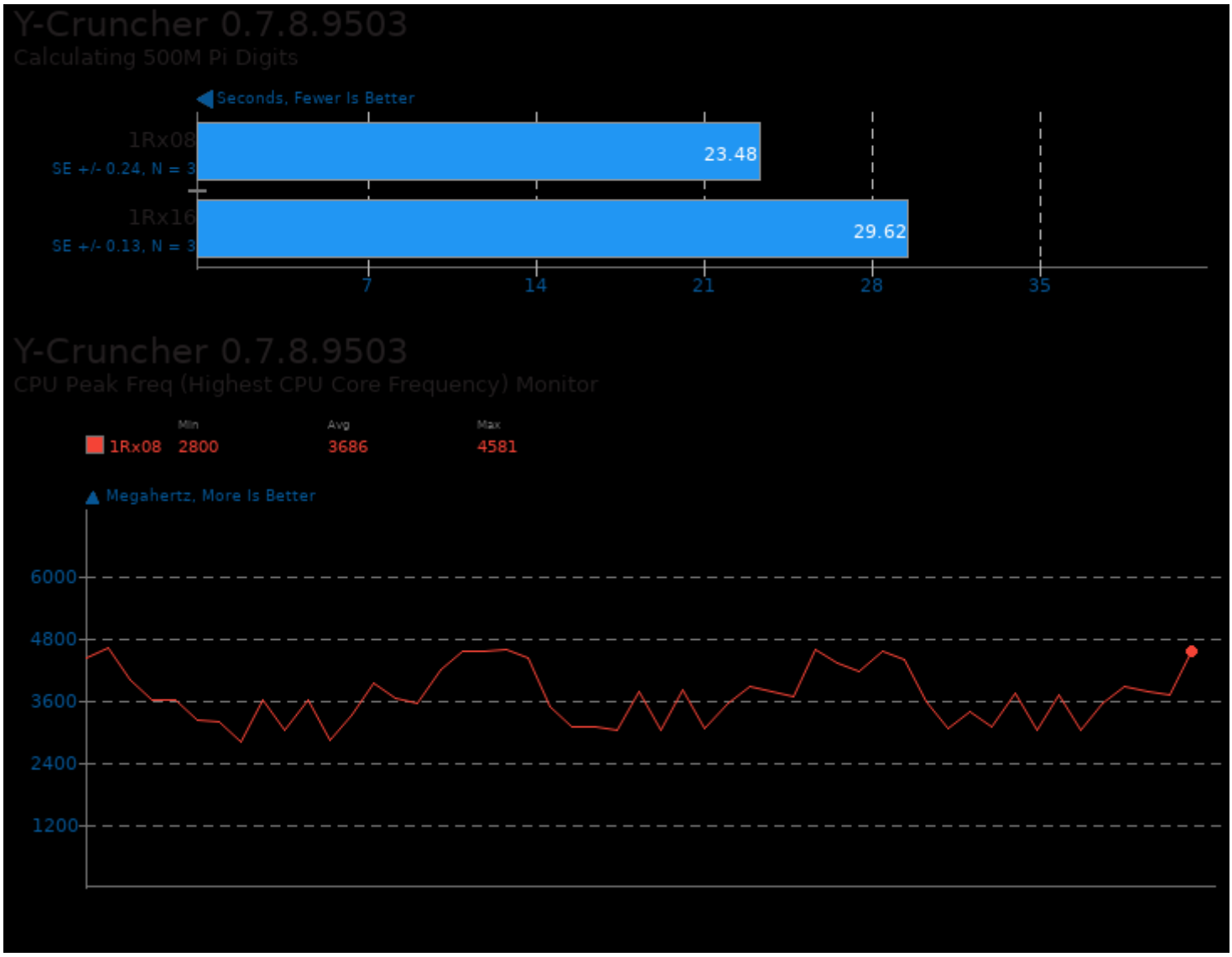

Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: TAA
Frames Per Second, More Is Better
1Rx08
SE +/- 0.06, N = 3
MAX: 199.4
98.7
1Rx16
SE +/- 0.12, N = 3
MAX: 182.3
95.5
20
40
60
80
100
Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
3302
4108
4607
Megahertz, More Is Better
6000
4800
3600
2400
1200


Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 67.0 93.3 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1637 1972
Megahertz, More Is Better
2500
2000
1500
1000
500

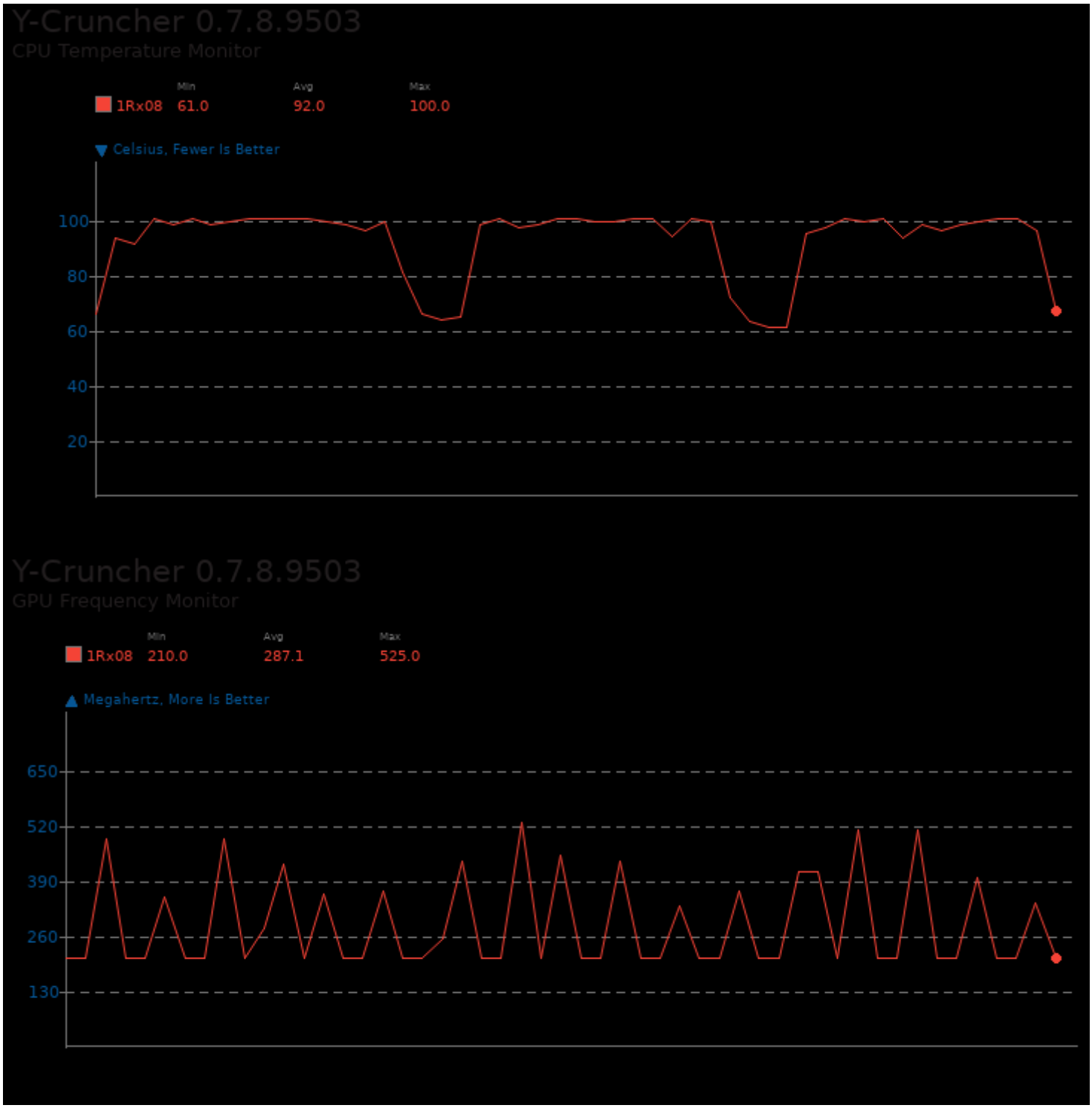

Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08
64.0
81.7
85.0
Celsius, Fewer Is Better
100
80
60
40
20
Shadow of the Tomb Raider
Resolution: 1920 x 1080 - Graphics Preset: Highest - Anti Aliasing: SMAAT2x
Frames Per Second, More Is Better
1Rx08
SE +/- 0.47, N = 3
MAX: 193.5
99.8
1Rx16
SE +/- 0.09, N = 3
MAX: 195
95.8
20
40
60
80
100

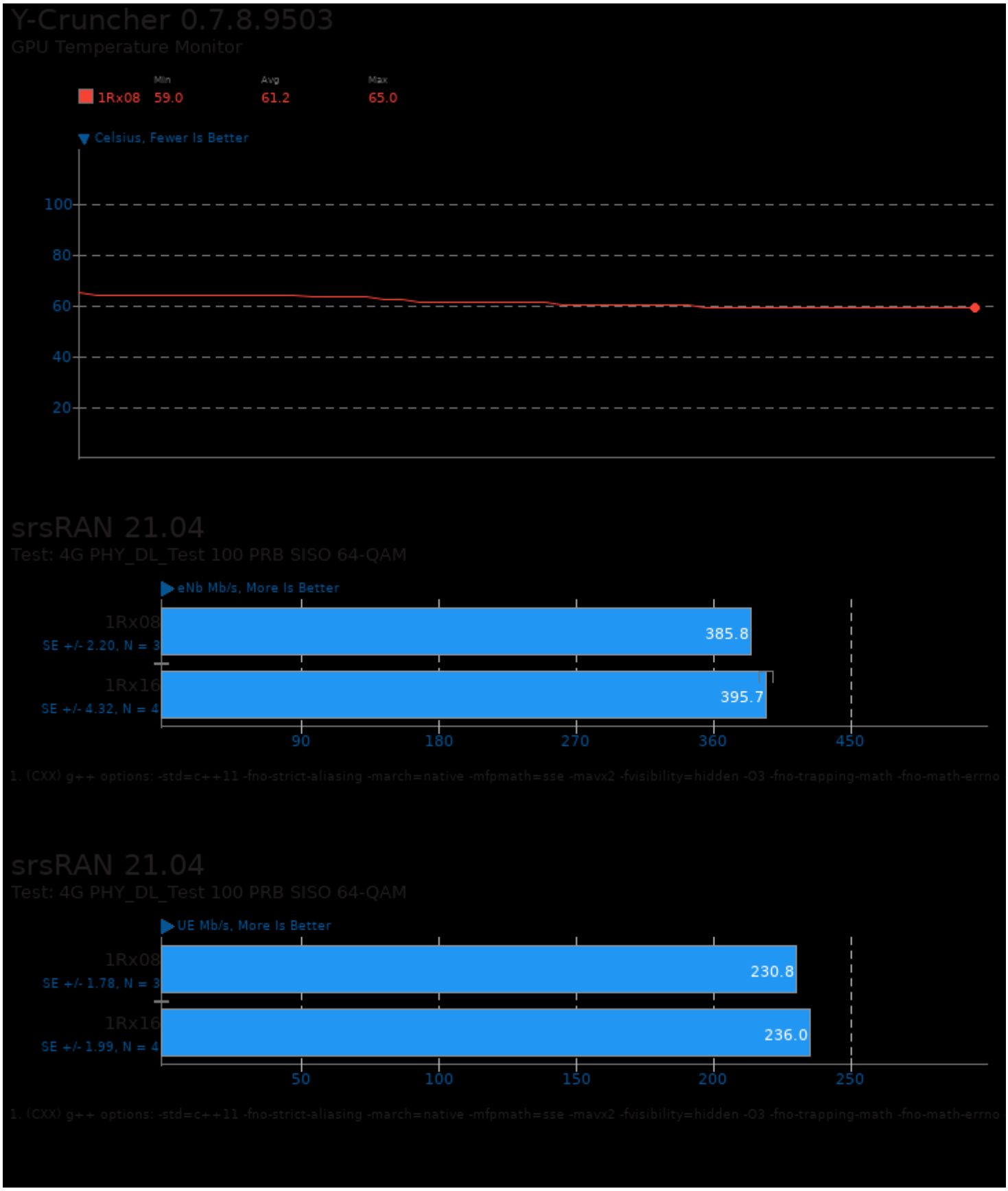

Shadow of the Tomb Raider
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3240 4118 4594
Megahertz, More Is Better
6000
4800
3600
2400
1200
Shadow of the Tomb Raider
CPU Temperature Monitor
Min
Avg
Max
1Rx08 67.0 93.2 100.0
Celsius, Fewer Is Better
100
80
60
40
20

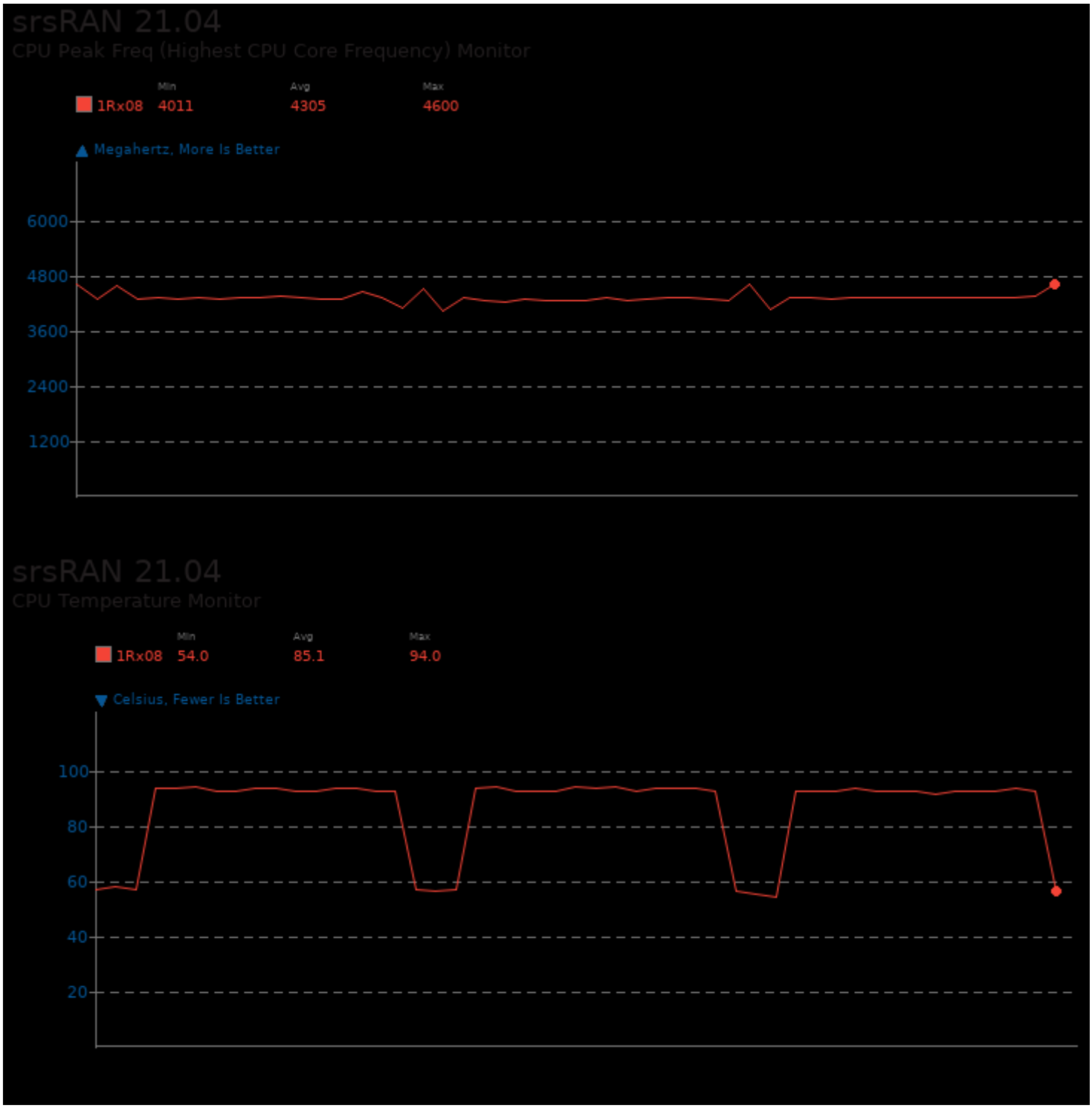

Shadow of the Tomb Raider
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 1647 1972
Megahertz, More Is Better
2500
2000
1500
1000
500
Shadow of the Tomb Raider
GPU Temperature Monitor
Min
Avg
Max
1Rx08 64.0 81.6 85.0
Celsius, Fewer Is Better
100
80
60
40
20

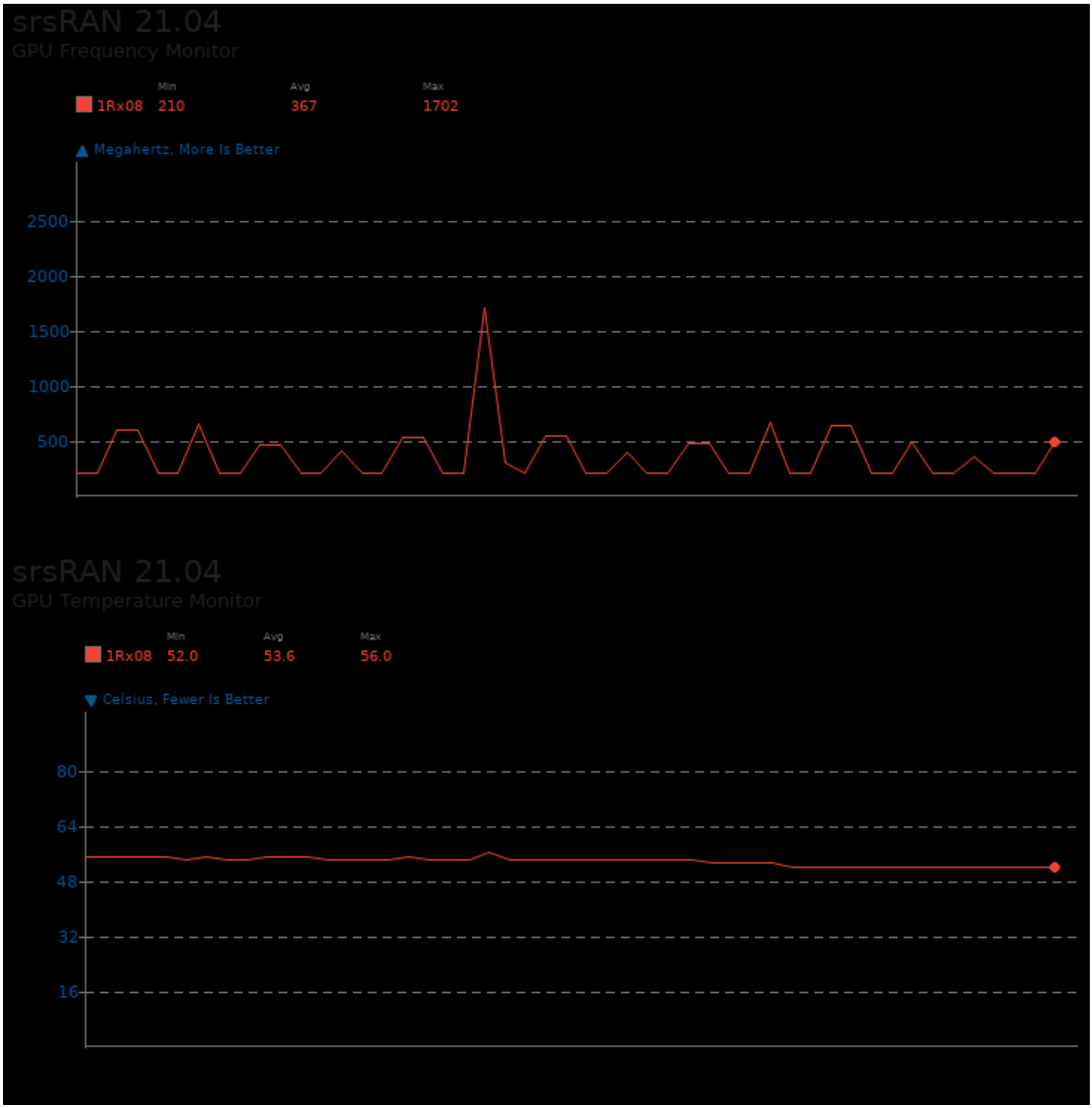

Y-Cruncher 0.7.8.9503
Calculating 500M Pi Digits
Seconds, Fewer Is Better
1Rx08
SE +/- 0.24, N = 3
23.48
1Rx16
SE +/- 0.13, N = 3
29.62
7
14
21
28
35

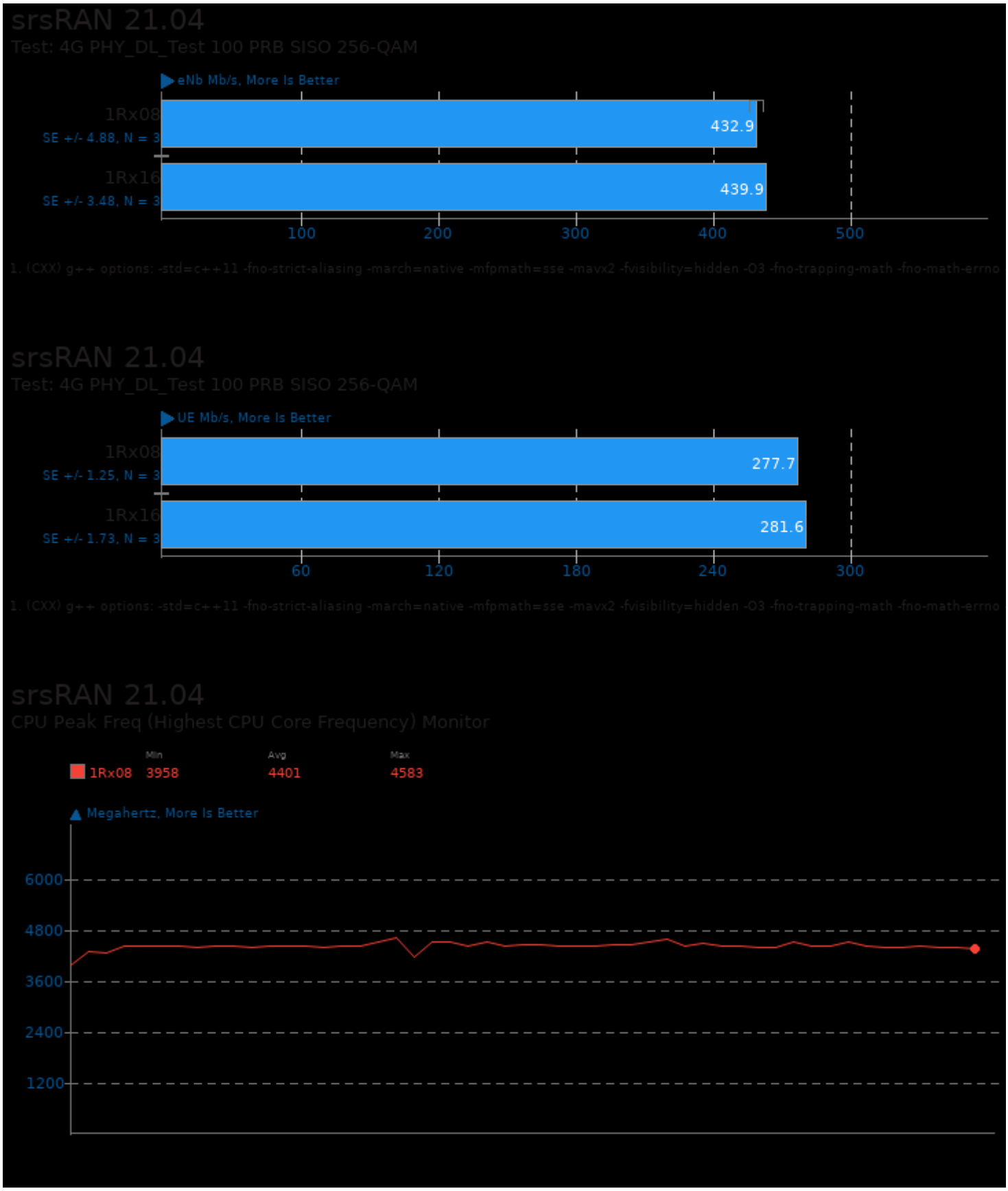
Y-Cruncher 0.7.8.9503
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
2800
3686
4581
Megahertz, More Is Better
6000
4800
3600
2400
1200

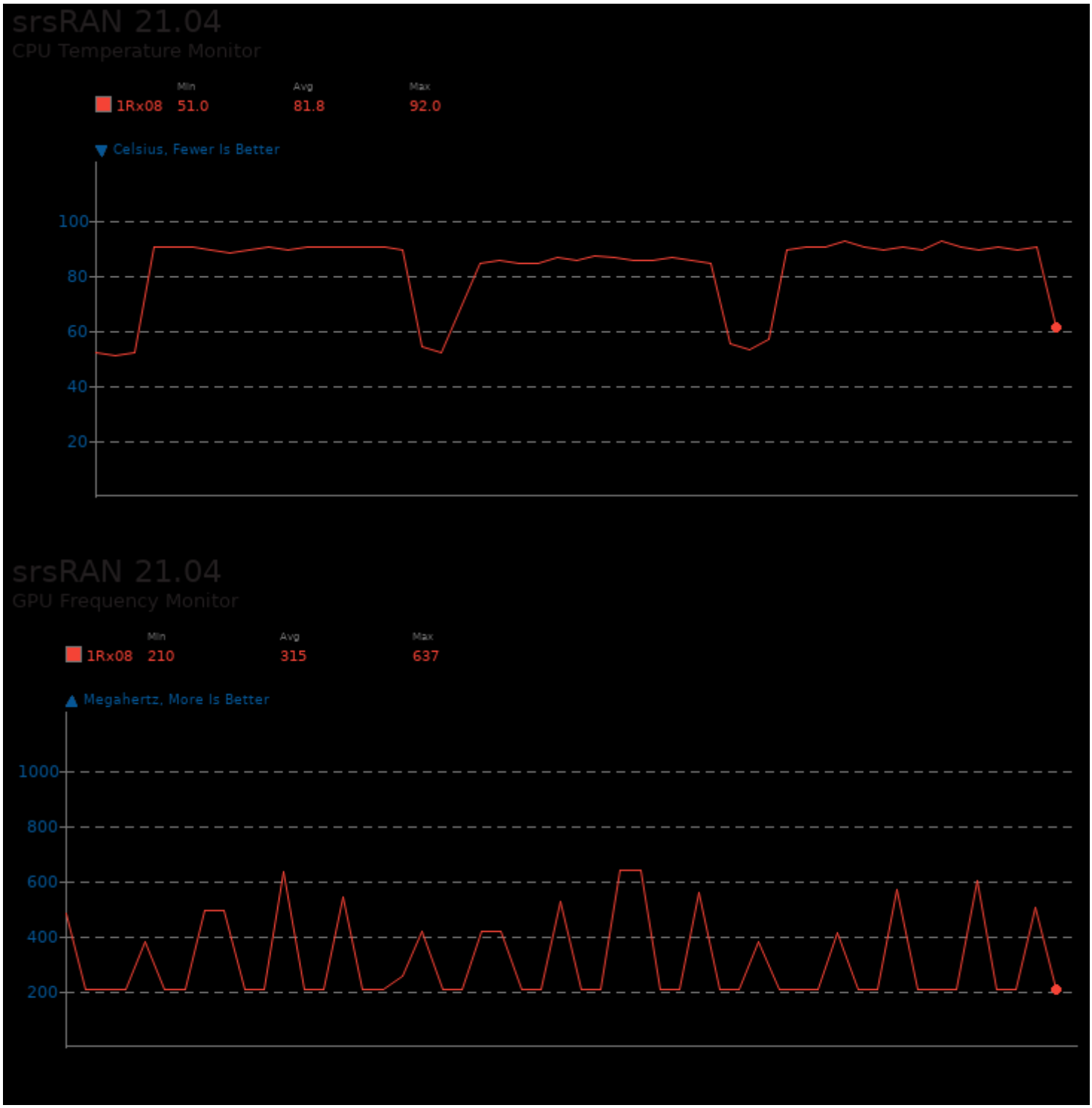

Y-Cruncher 0.7.8.9503
CPU Temperature Monitor
Min
Avg
Max
1Rx08 61.0 92.0 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Y-Cruncher 0.7.8.9503
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210.0 287.1 525.0
Megahertz, More Is Better
650
520
390
260
130

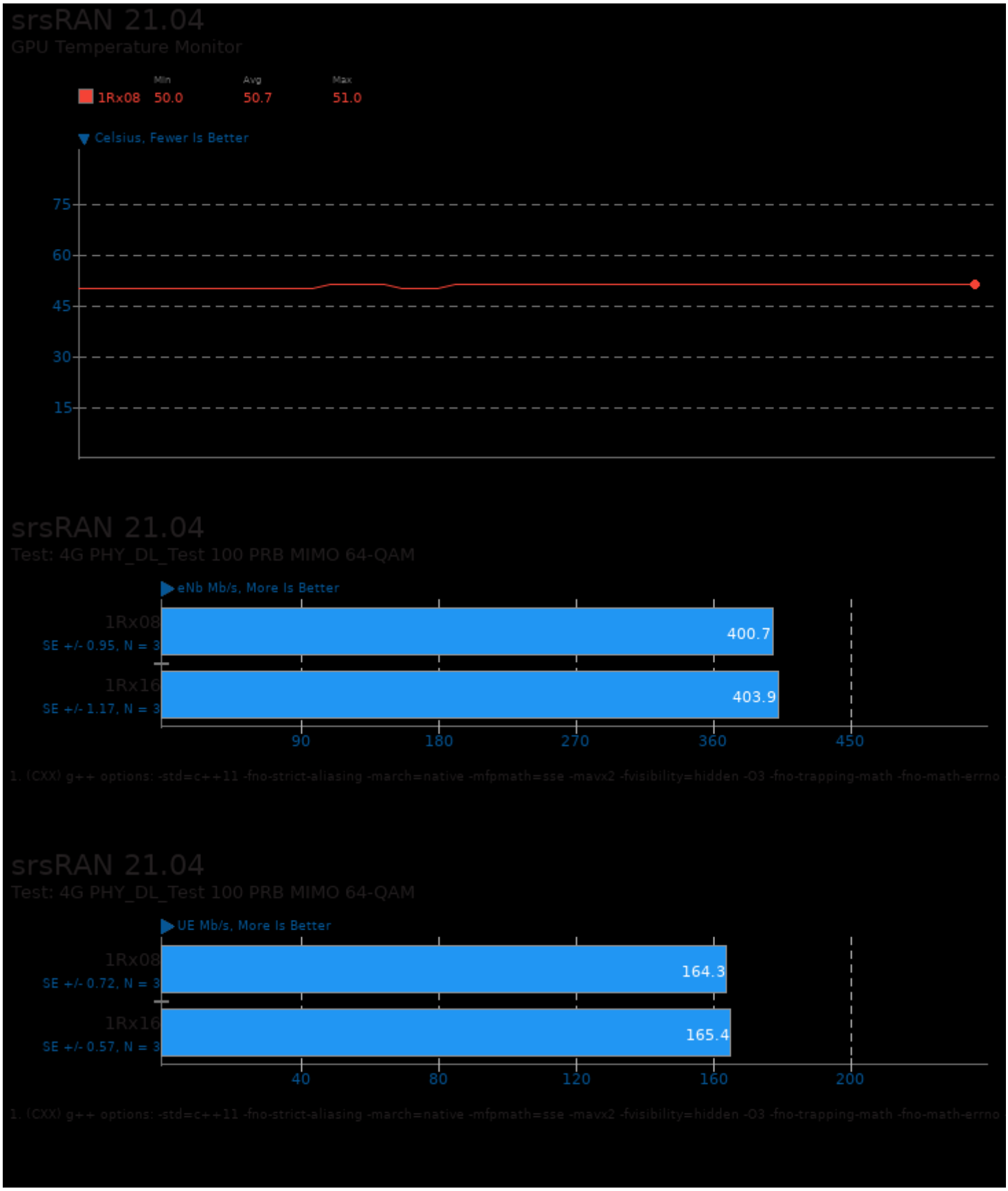

Y-Cruncher 0.7.8.9503
GPU Temperature Monitor
Min
Avg
Max
1Rx08 59.0 61.2 65.0
Celsius, Fewer Is Better
100
80
60
40
20
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 2.20, N = 3
385.8
1Rx16
SE +/- 4.32, N = 4
395.7
90
180
270
360
450
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB SISO 64-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 1.78, N = 3
230.8
1Rx16
SE +/- 1.99, N = 4
236.0
50
100
150
200
250
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

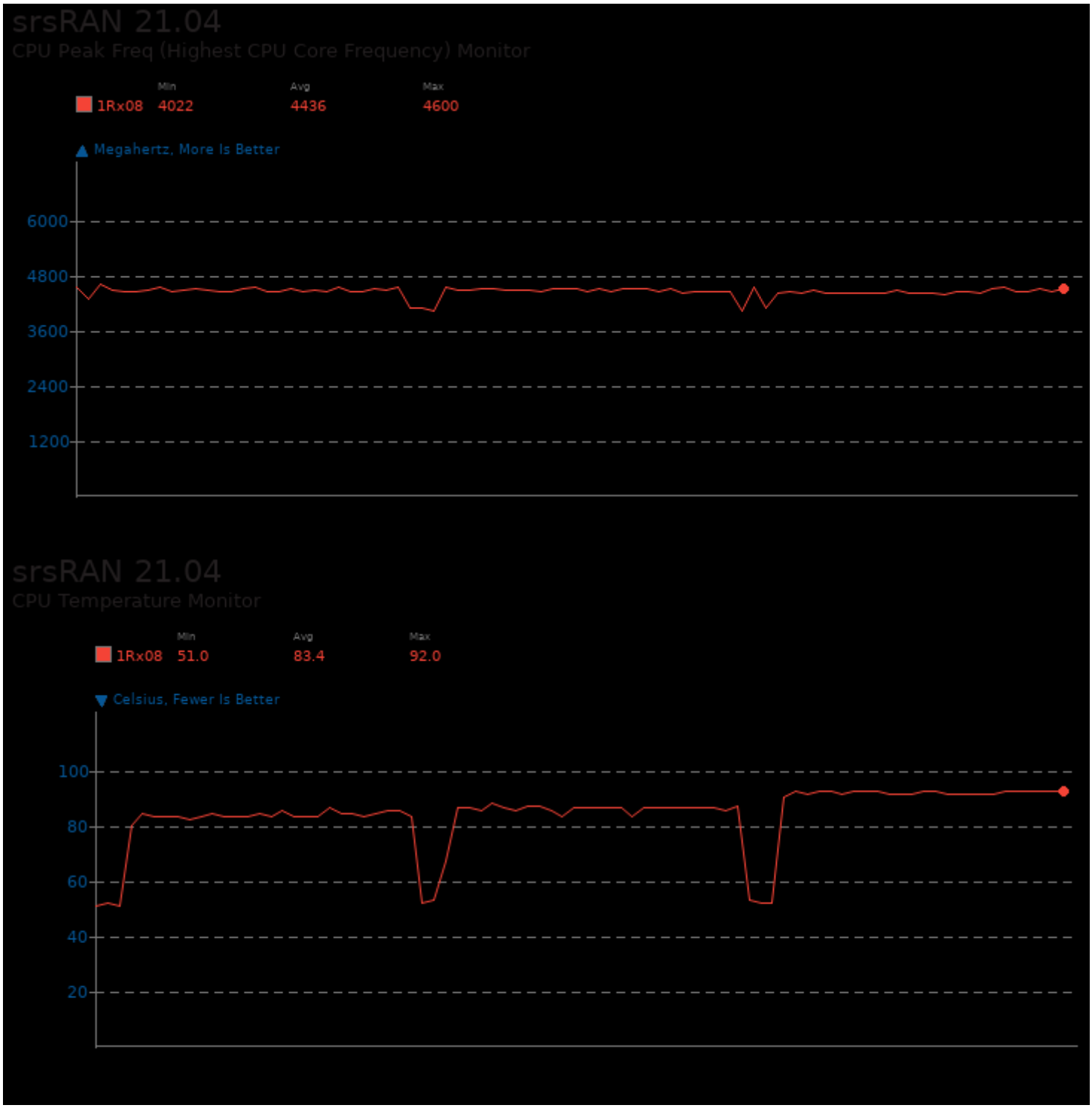

srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 4011 4305 4600
Megahertz, More Is Better
6000
4800
3600
2400
1200
srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 54.0 85.1 94.0
Celsius, Fewer Is Better
100
80
60
40
20

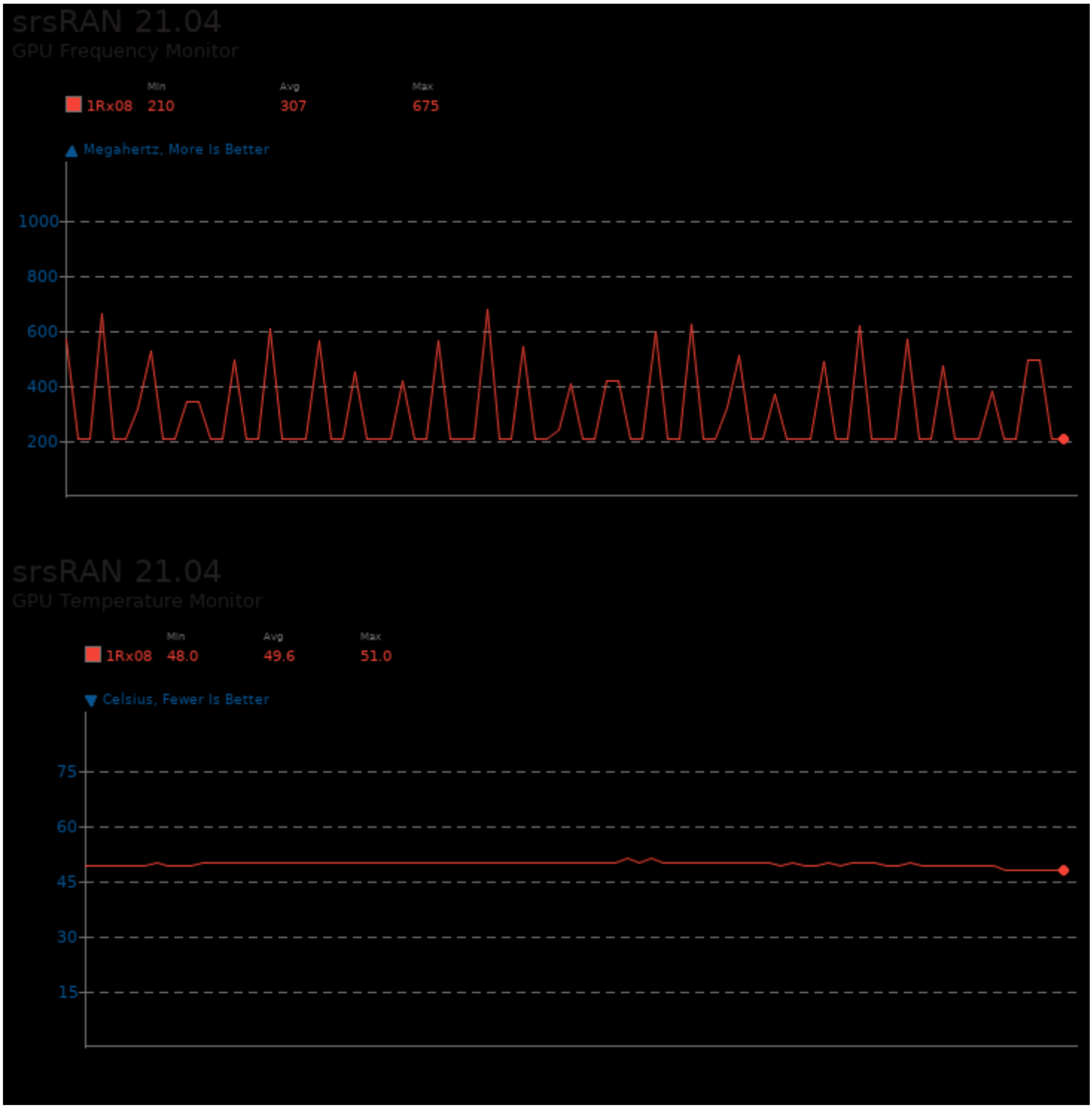

srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 367 1702
Megahertz, More Is Better
2500
2000
1500
1000
500
srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08 52.0 53.6 56.0
Celsius, Fewer Is Better
80
64
48
32
16

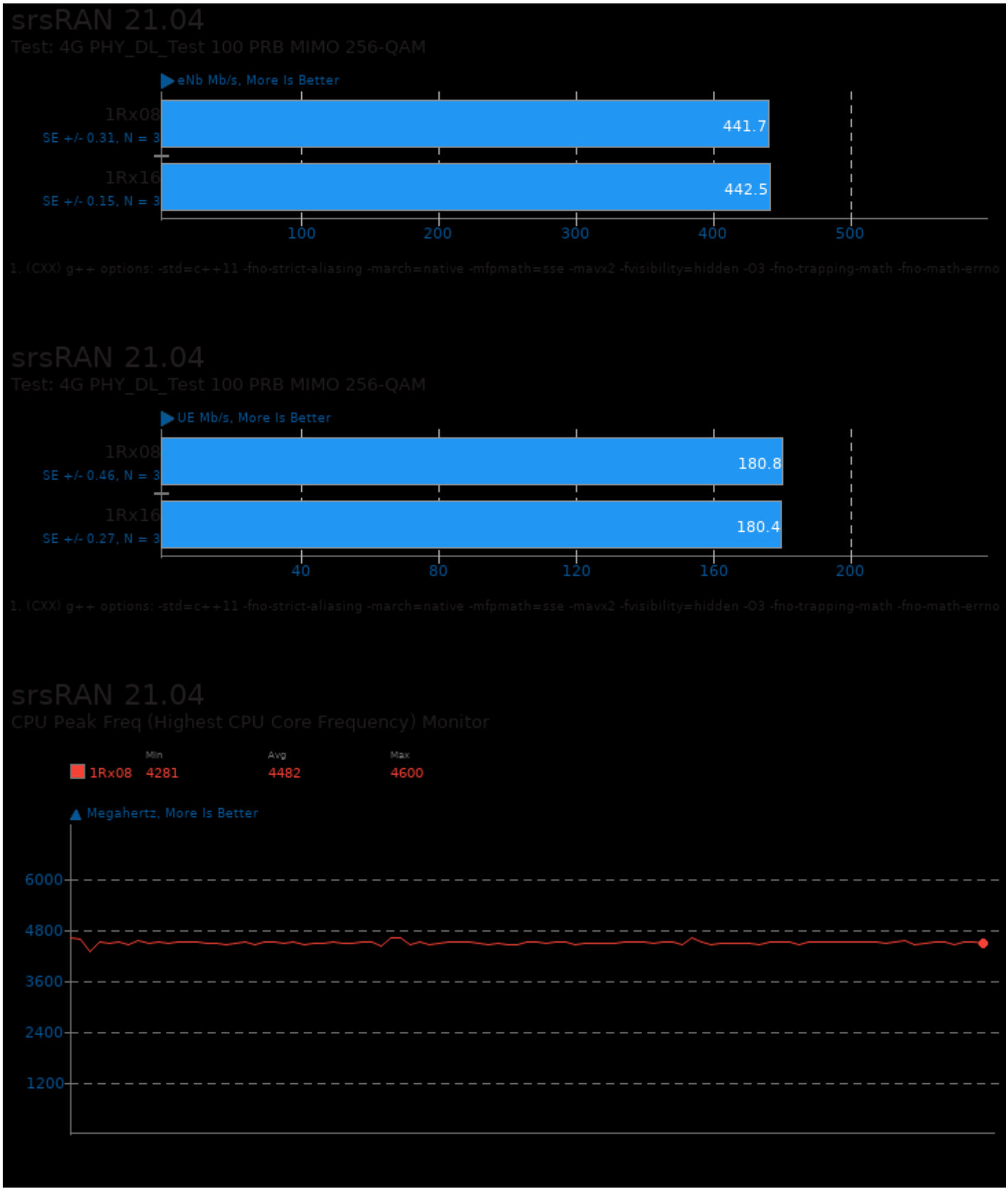

srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB SISO 256-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 4.88, N = 3
432.9
1Rx16
SE +/- 3.48, N = 3
439.9
100
200
300
400
500
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB SISO 256-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 1.25, N = 3
277.7
1Rx16
SE +/- 1.73, N = 3
281.6
60
120
180
240
300
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3958 4401 4583
Megahertz, More Is Better
6000
4800
3600
2400
1200

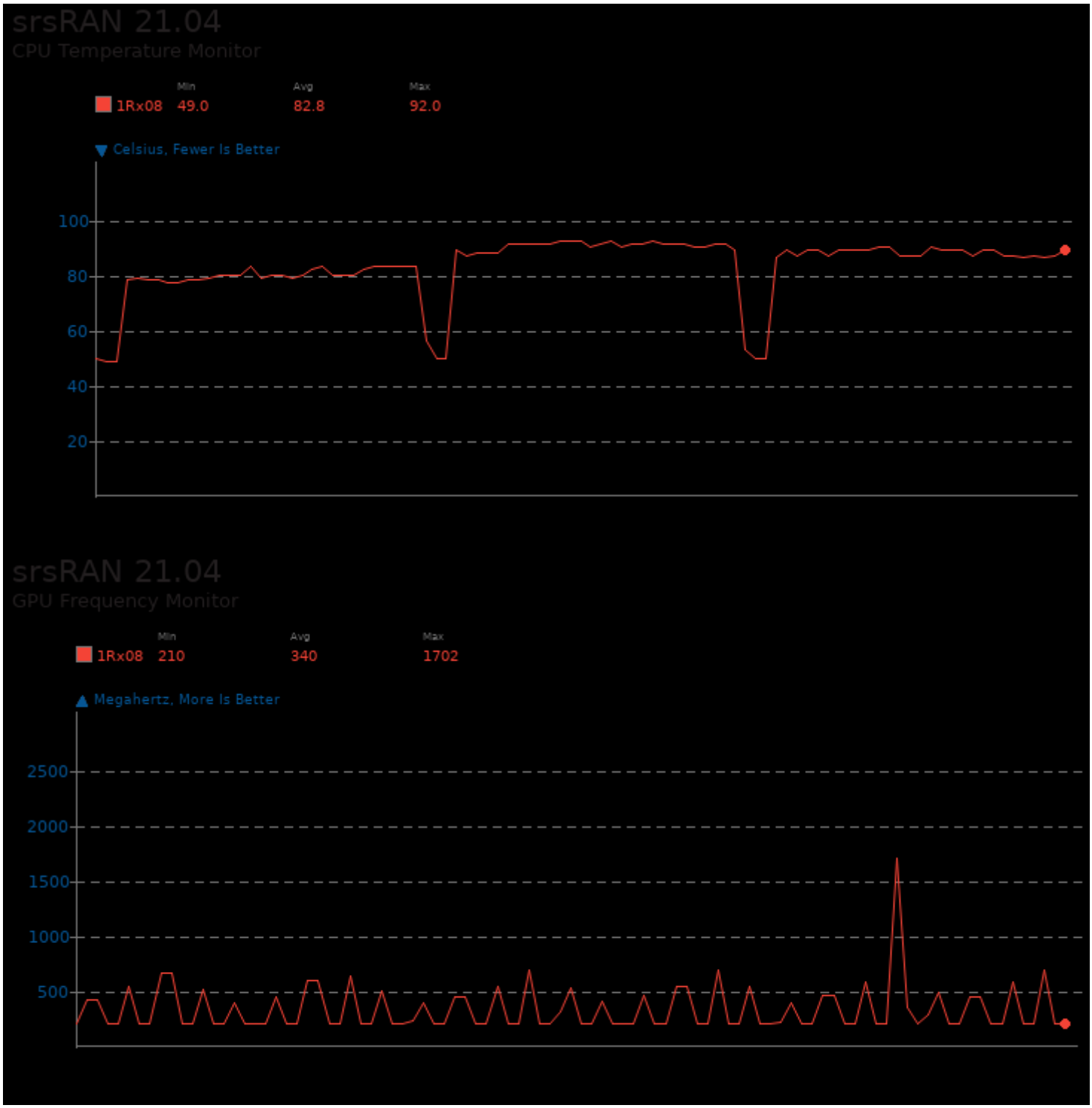

srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 51.0 81.8 92.0
Celsius, Fewer Is Better
100
80
60
40
20
srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 315 637
Megahertz, More Is Better
1000
800
600
400
200

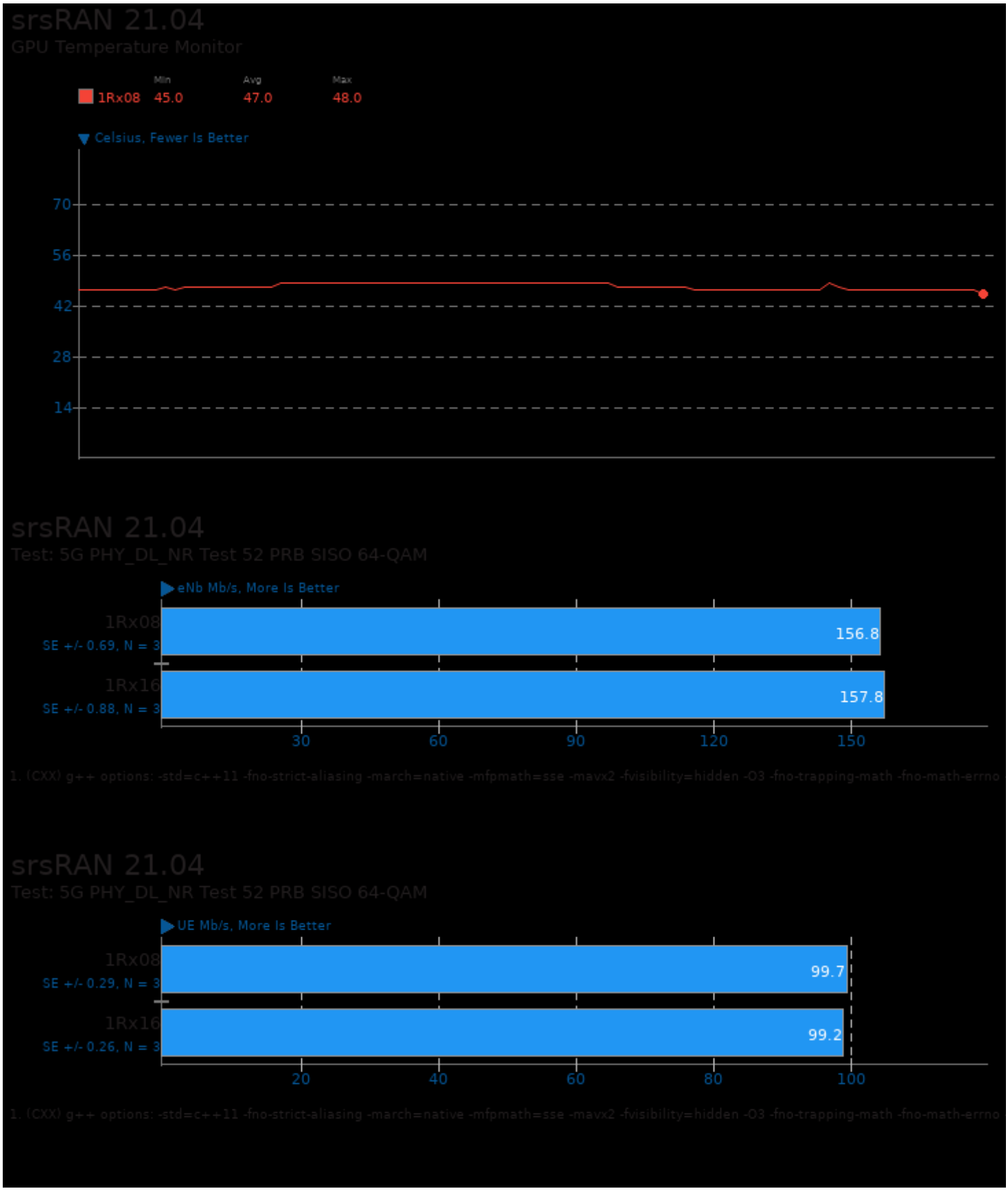

srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08
50.0
50.7
51.0
Celsius, Fewer Is Better
75
60
45
30
15
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB MIMO 64-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 0.95, N = 3
400.7
1Rx16
SE +/- 1.17, N = 3
403.9
90
180
270
360
450
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB MIMO 64-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 0.72, N = 3
164.3
1Rx16
SE +/- 0.57, N = 3
165.4
40
80
120
160
200
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

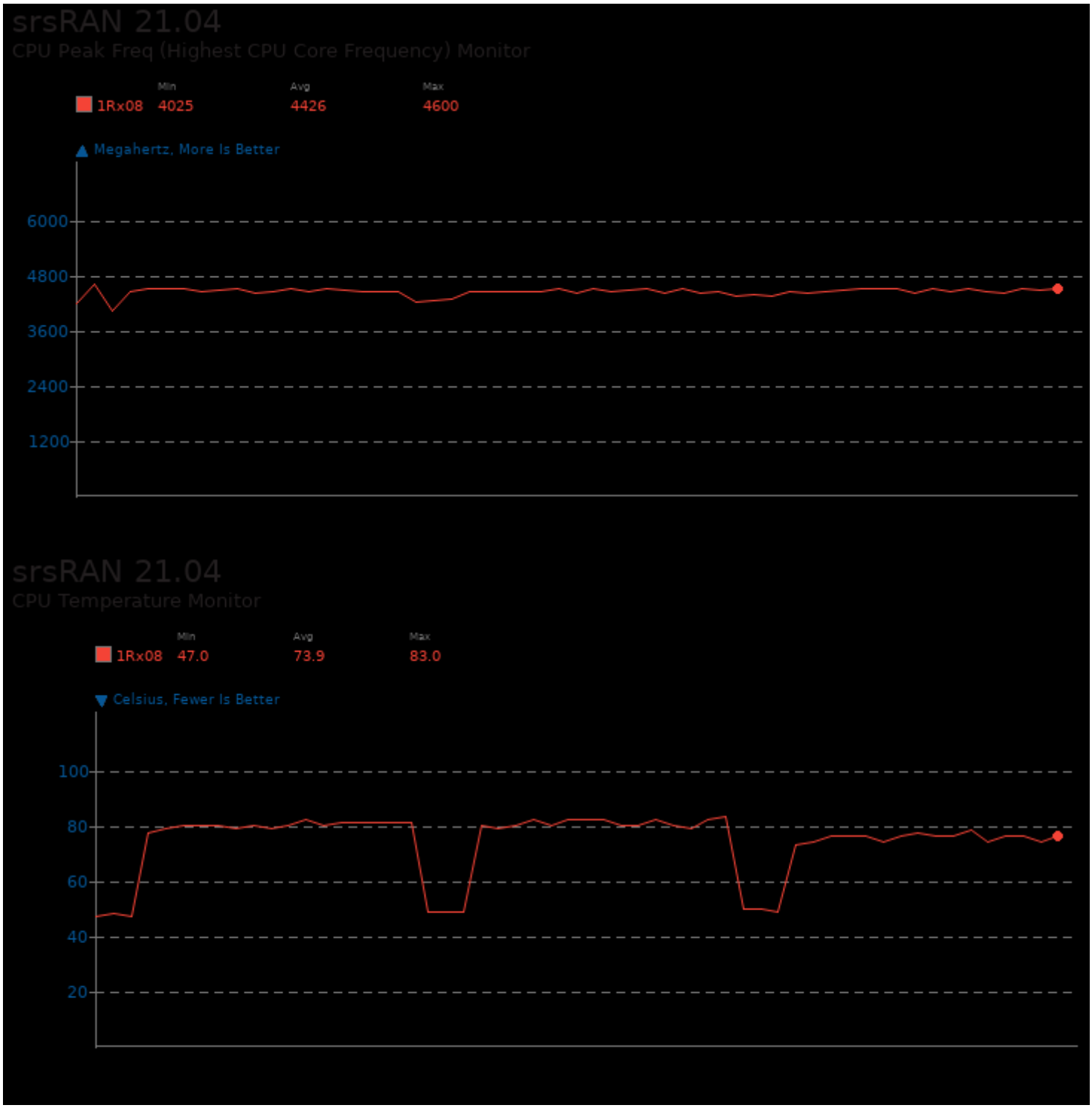

srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
4022
4436
4600
Megahertz, More Is Better
6000
4800
3600
2400
1200
srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08
51.0
83.4
92.0
Celsius, Fewer Is Better
100
80
60
40
20

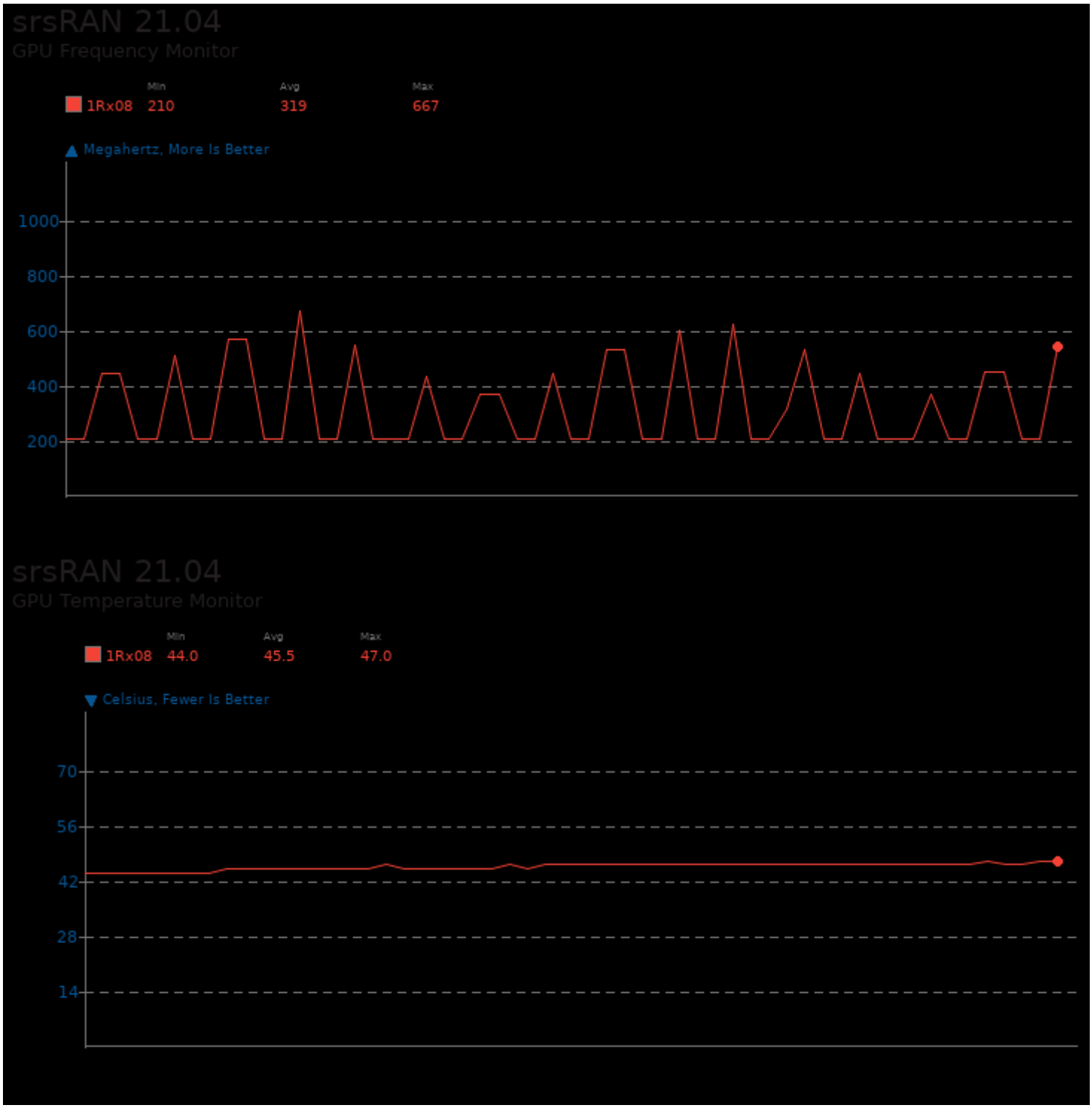

srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08
210
307
675
Megahertz, More Is Better
1000
800
600
400
200
srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08
48.0
49.6
51.0
Celsius, Fewer Is Better
75
60
45
30
15

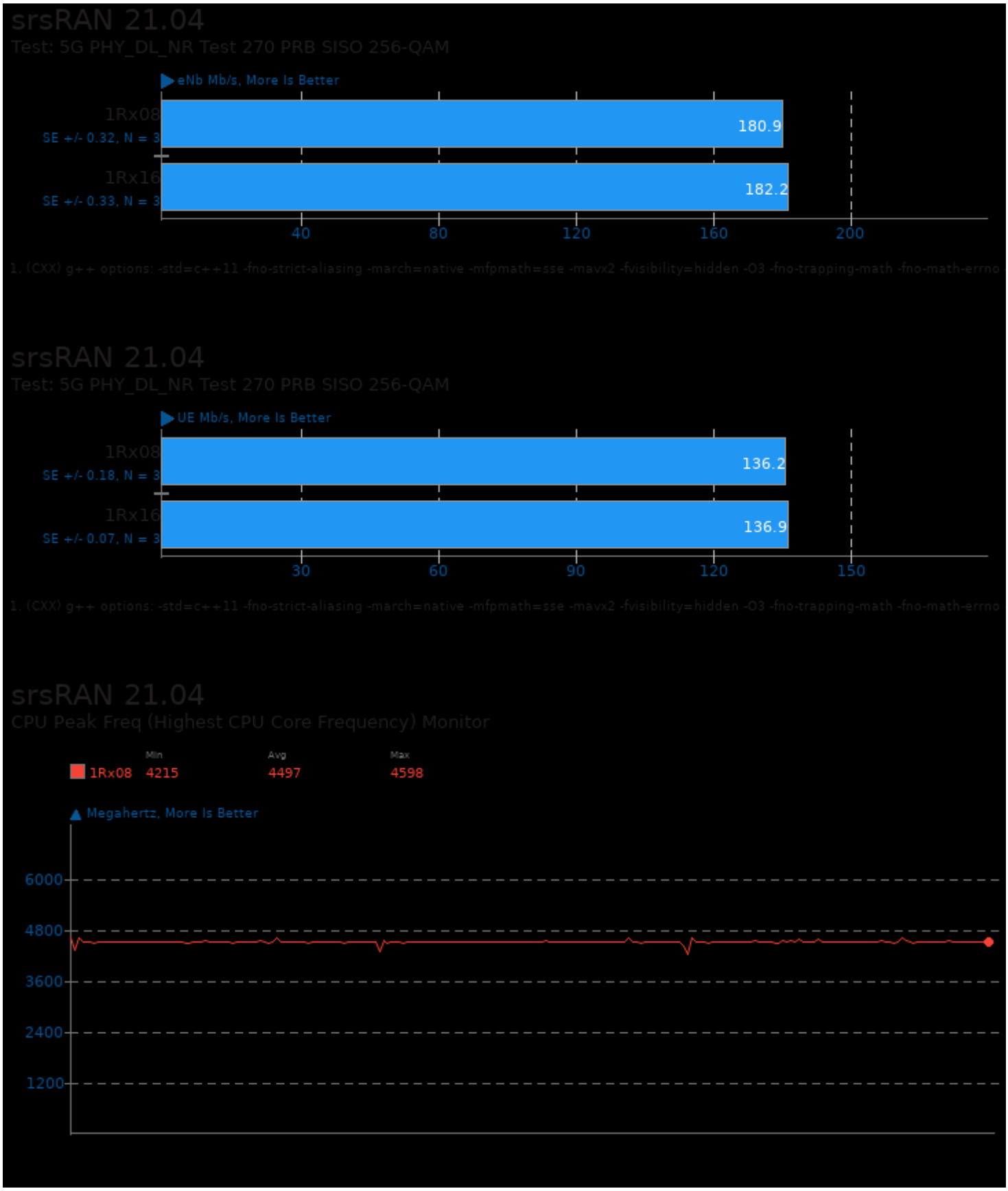

srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB MIMO 256-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 0.31, N = 3
441.7
1Rx16
SE +/- 0.15, N = 3
442.5
100
200
300
400
500
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 4G PHY_DL_Test 100 PRB MIMO 256-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 0.46, N = 3
180.8
1Rx16
SE +/- 0.27, N = 3
180.4
40
80
120
160
200
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
4281
4482
4600
Megahertz, More Is Better
6000
4800
3600
2400
1200

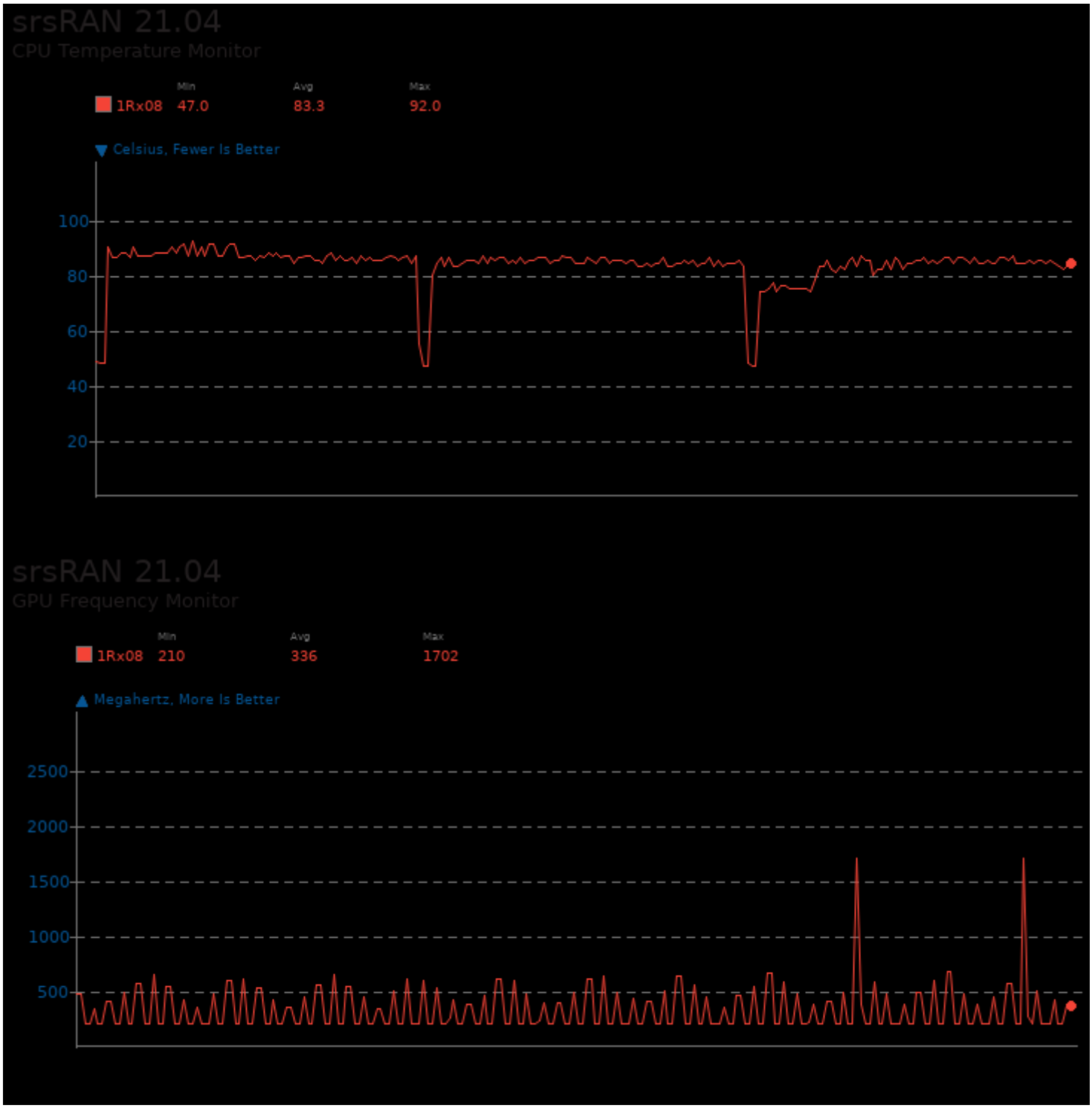

srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 49.0 82.8 92.0
Celsius, Fewer Is Better
100
80
60
40
20
srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 340 1702
Megahertz, More Is Better
2500
2000
1500
1000
500

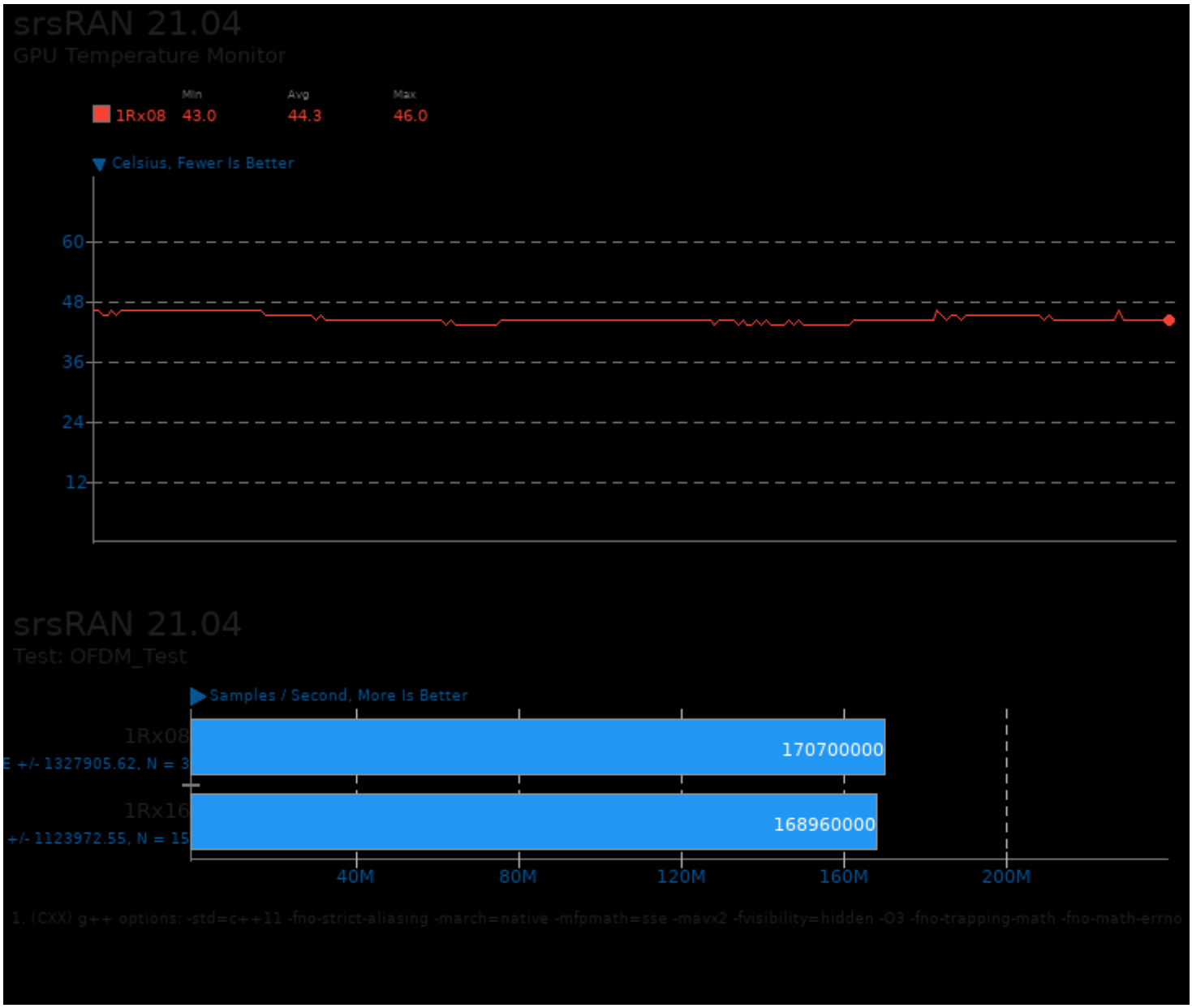

srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08 45.0 47.0 48.0
Celsius, Fewer Is Better
70
56
42
28
14
srsRAN 21.04
Test: 5G PHY_DL_NR Test 52 PRB SISO 64-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 0.69, N = 3
156.8
1Rx16
SE +/- 0.88, N = 3
157.8
30
60
90
120
150
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 5G PHY_DL_NR Test 52 PRB SISO 64-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 0.29, N = 3
99.7
1Rx16
SE +/- 0.26, N = 3
99.2
20
40
60
80
100
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

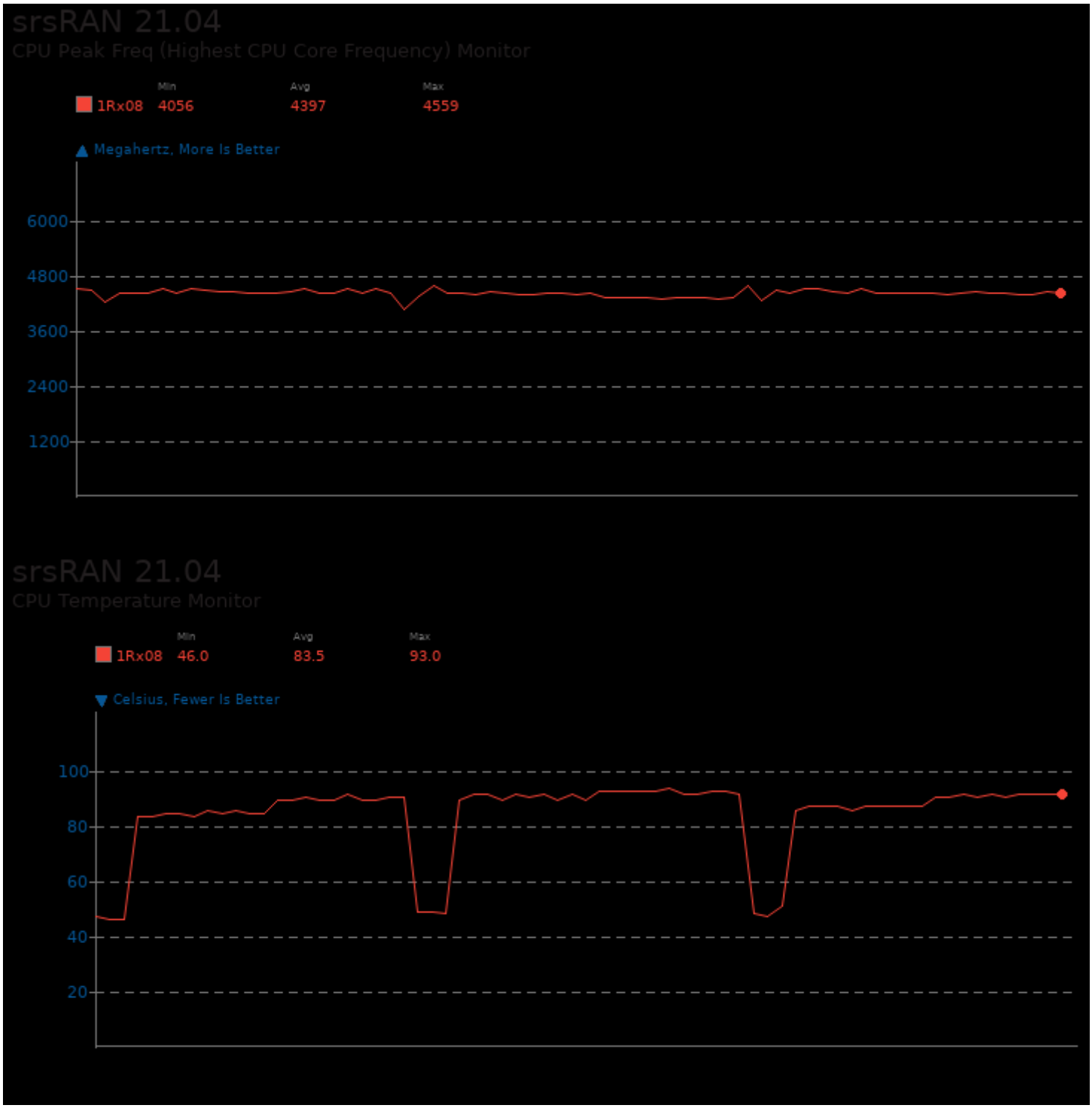

srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 4025 4426 4600
Megahertz, More Is Better
6000
4800
3600
2400
1200
srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 47.0 73.9 83.0
Celsius, Fewer Is Better
100
80
60
40
20

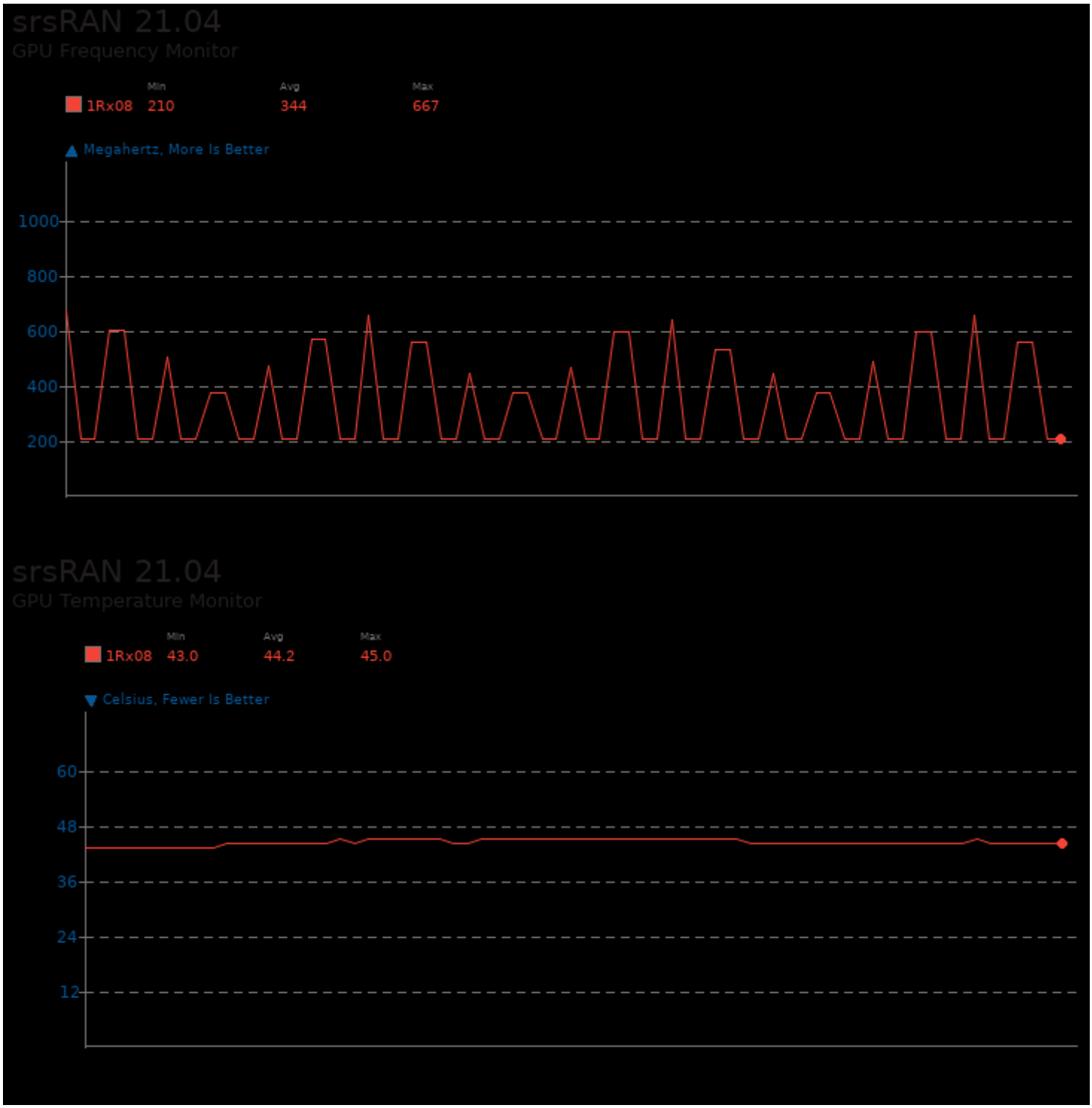

srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08
210
319
667
Megahertz, More Is Better
1000
800
600
400
200
srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08
44.0
45.5
47.0
Celsius, Fewer Is Better
70
56
42
28
14

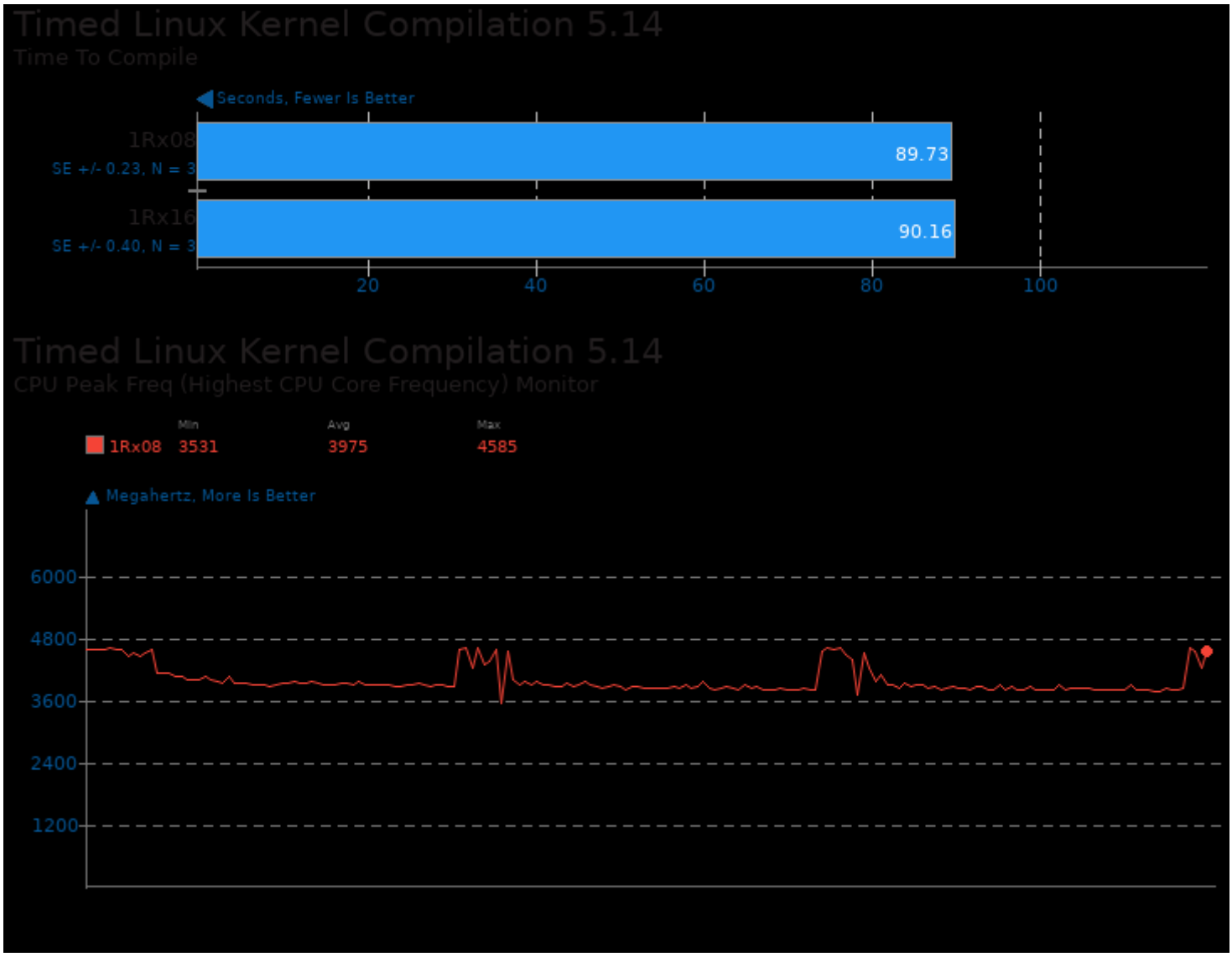

srsRAN 21.04
Test: 5G PHY_DL_NR Test 270 PRB SISO 256-QAM
eNb Mb/s, More Is Better
1Rx08
SE +/- 0.32, N = 3
180.9
1Rx16
SE +/- 0.33, N = 3
182.2
40
80
120
160
200
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
Test: 5G PHY_DL_NR Test 270 PRB SISO 256-QAM
UE Mb/s, More Is Better
1Rx08
SE +/- 0.18, N = 3
136.2
1Rx16
SE +/- 0.07, N = 3
136.9
30
60
90
120
150
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno
srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08
4215
4497
4598
Megahertz, More Is Better
6000
4800
3600
2400
1200

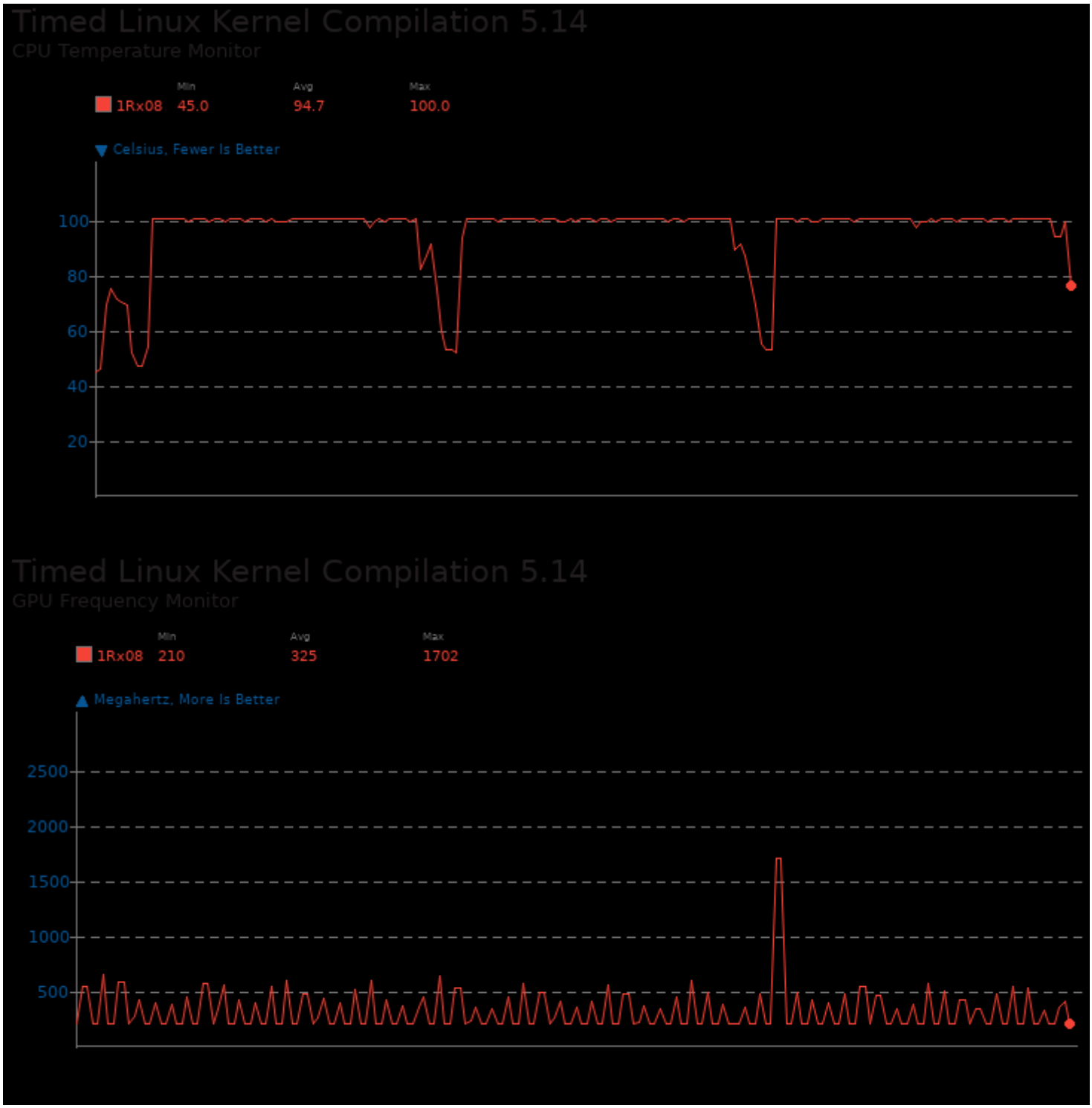

srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 47.0 83.3 92.0
Celsius, Fewer Is Better
100
80
60
40
20
srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 336 1702
Megahertz, More Is Better
2500
2000
1500
1000
500

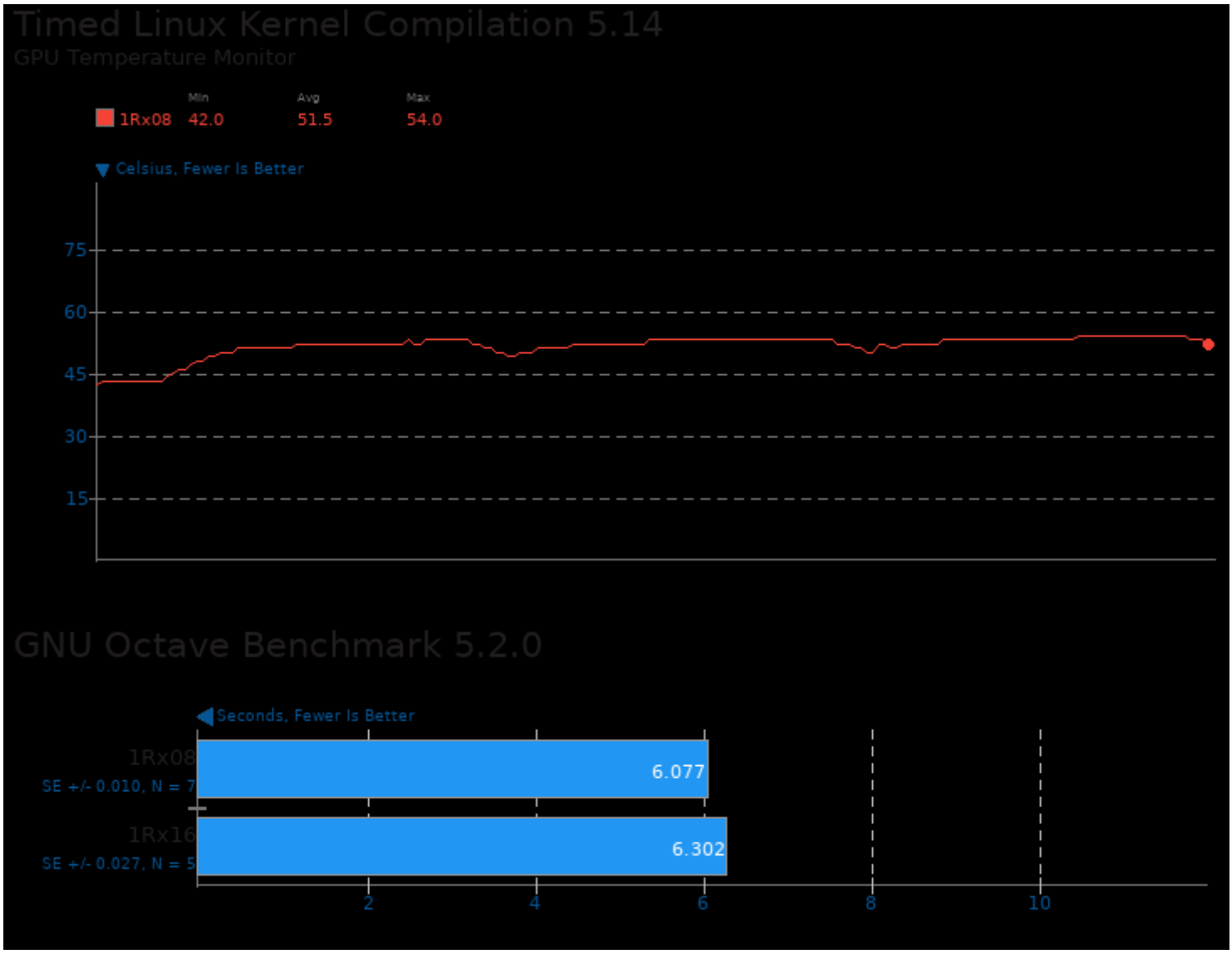

srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08 43.0 44.3 46.0
Celsius, Fewer Is Better
60
48
36
24
12
srsRAN 21.04
Test: OFDM_Test
Samples / Second, More Is Better
1Rx08
E +/- 1327905.62, N = 3
170700000
1Rx16
+/- 1123972.55, N = 15
168960000
40M
80M
120M
160M
200M
1. (CXX) g++ options: -std=c++11 -fno-strict-aliasing -march=native -mfpmath=sse -mavx2 -fvisibility=hidden -O3 -fno-trapping-math -fno-math-errno

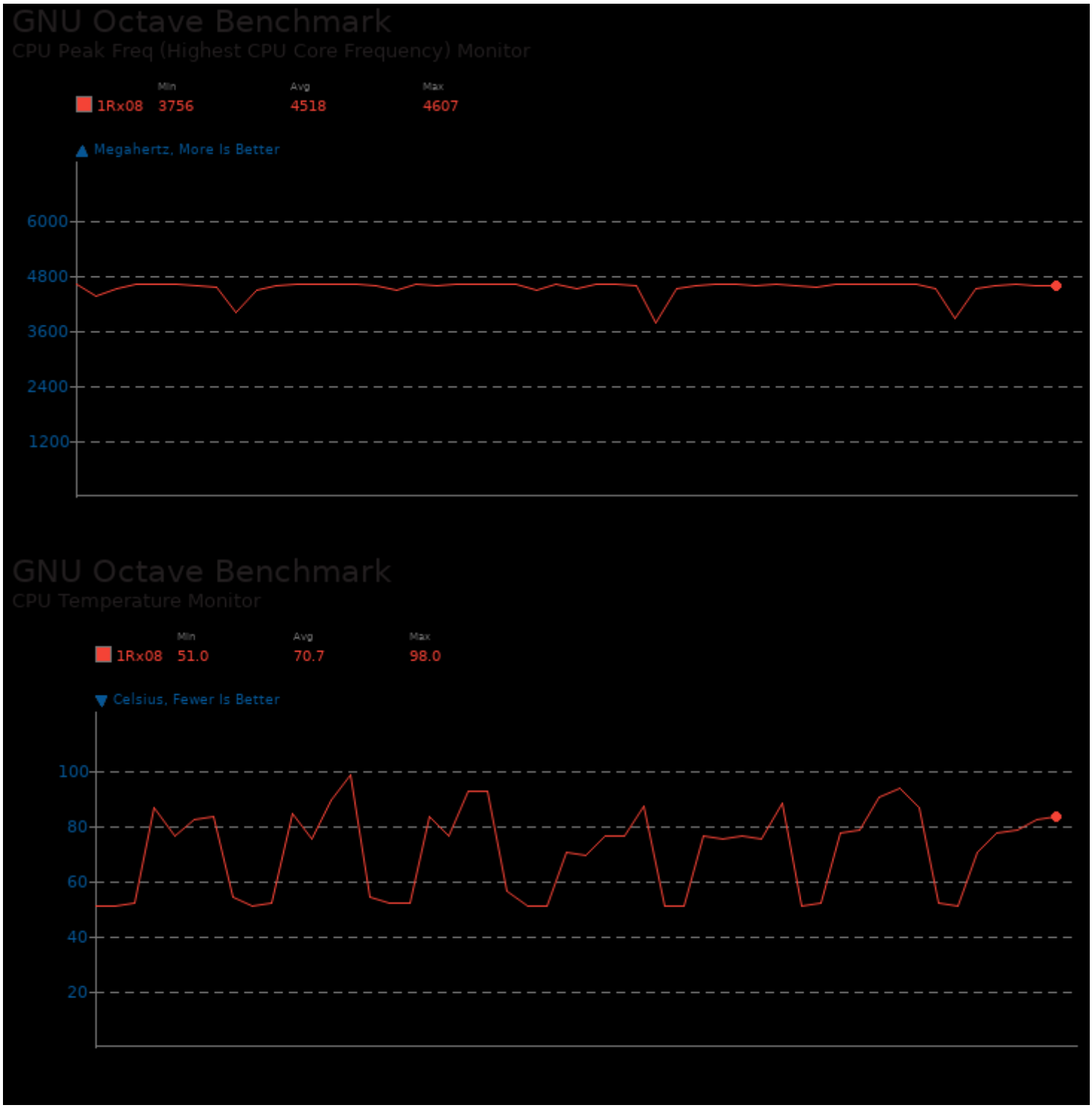

srsRAN 21.04
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 4056 4397 4559
Megahertz, More Is Better
6000
4800
3600
2400
1200
srsRAN 21.04
CPU Temperature Monitor
Min
Avg
Max
1Rx08 46.0 83.5 93.0
Celsius, Fewer Is Better
100
80
60
40
20

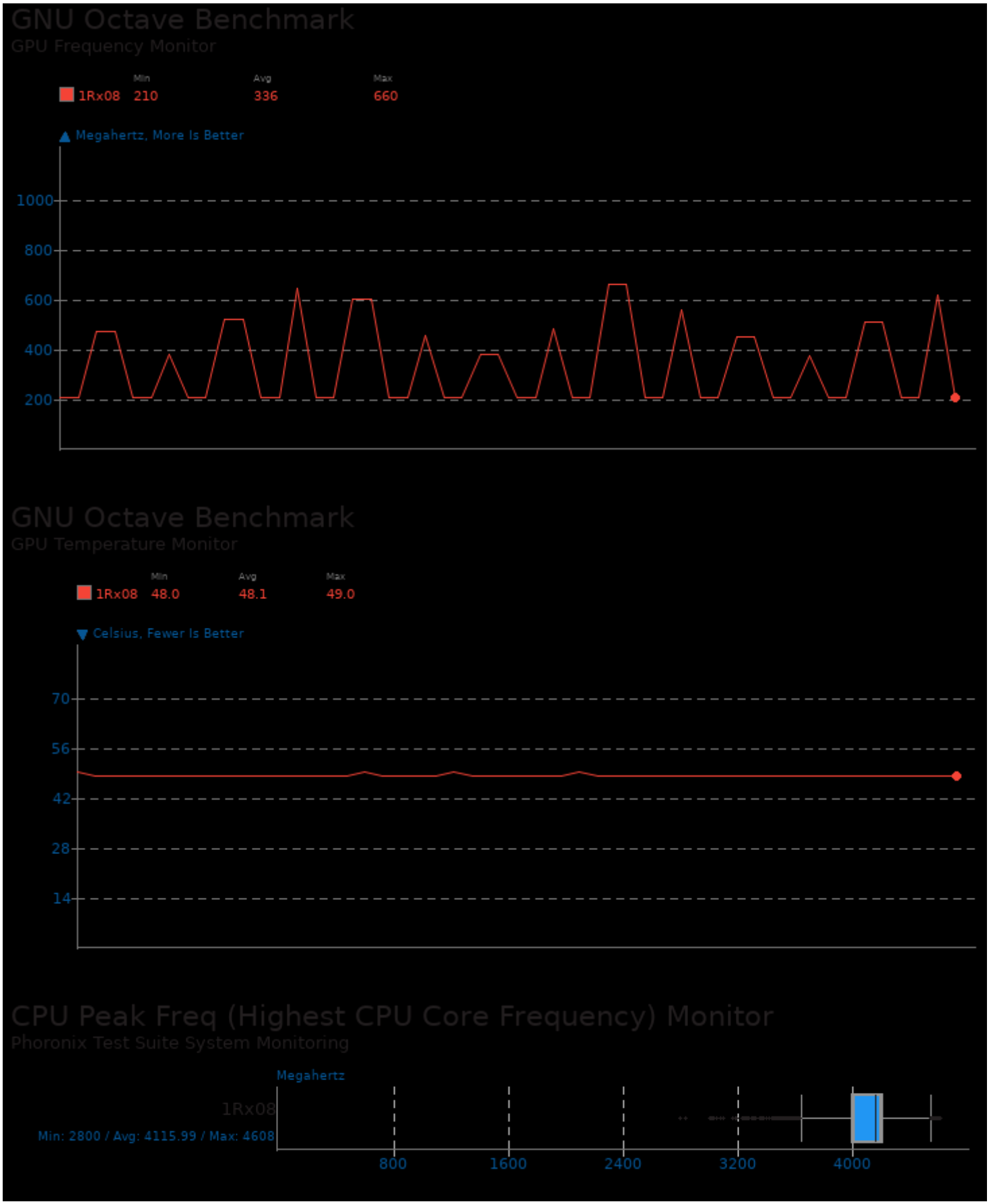

srsRAN 21.04
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 344 667
Megahertz, More Is Better
1000
800
600
400
200
srsRAN 21.04
GPU Temperature Monitor
Min
Avg
Max
1Rx08 43.0 44.2 45.0
Celsius, Fewer Is Better
60
48
36
24
12

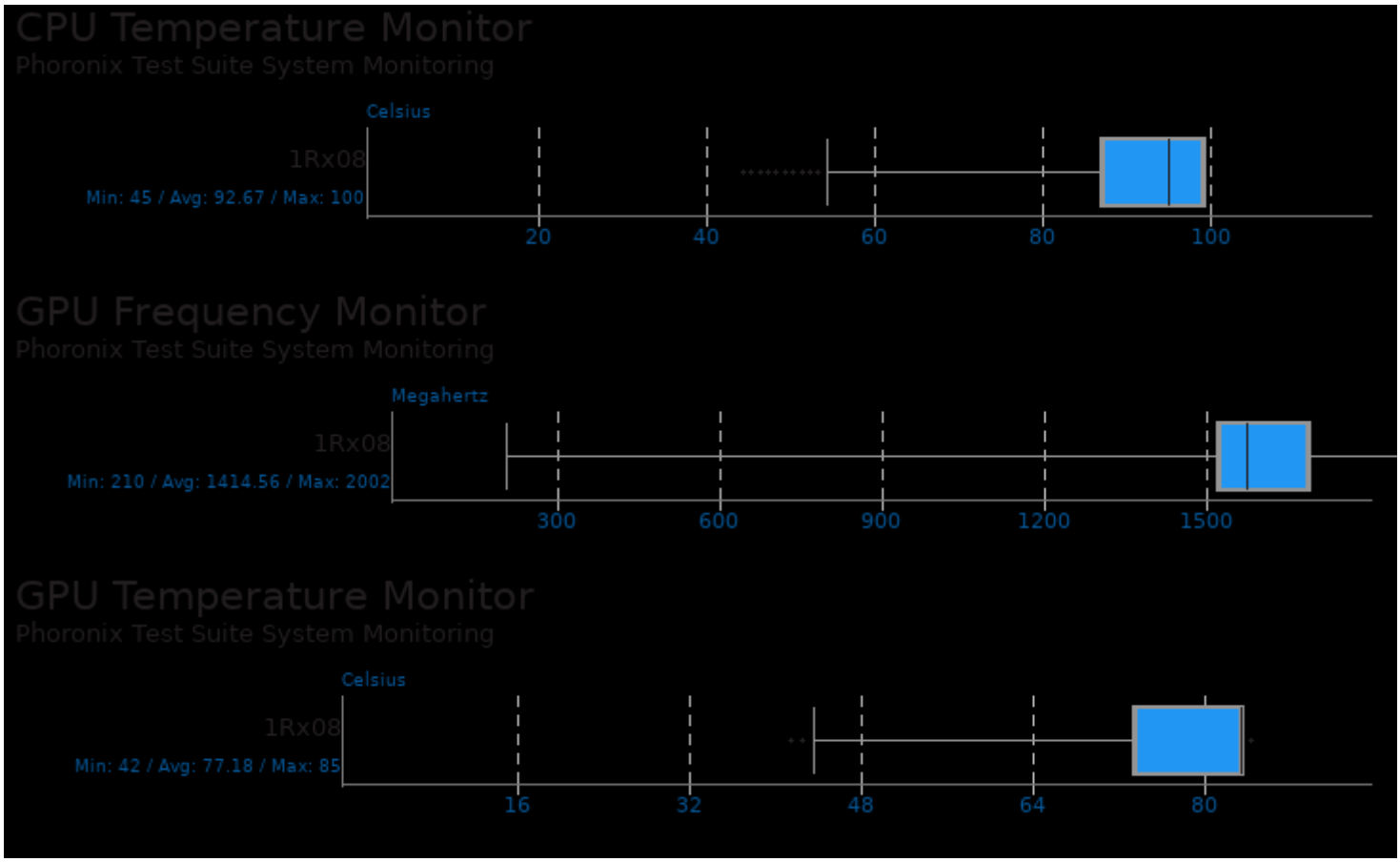

Timed Linux Kernel Compilation 5.14
Time To Compile
Seconds, Fewer Is Better
1Rx08
SE +/- 0.23, N = 3
89.73
1Rx16
SE +/- 0.40, N = 3
90.16
20
40
60
80
100
Timed Linux Kernel Compilation 5.14
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3531 3975 4585
Megahertz, More Is Better
6000
4800
3600
2400
1200


Timed Linux Kernel Compilation 5.14
CPU Temperature Monitor
Min
Avg
Max
1Rx08 45.0 94.7 100.0
Celsius, Fewer Is Better
100
80
60
40
20
Timed Linux Kernel Compilation 5.14
GPU Frequency Monitor
Min
Avg
Max
1Rx08 210 325 1702
Megahertz, More Is Better
2500
2000
1500
1000
500


Timed Linux Kernel Compilation 5.14
GPU Temperature Monitor
Min
Avg
Max
1Rx08 42.0 51.5 54.0
Celsius, Fewer Is Better
75
60
45
30
15
GNU Octave Benchmark 5.2.0
Seconds, Fewer Is Better
1Rx08
SE +/- 0.010, N = 7
6.077
1Rx16
SE +/- 0.027, N = 5
6.302
2
4
6
8
10

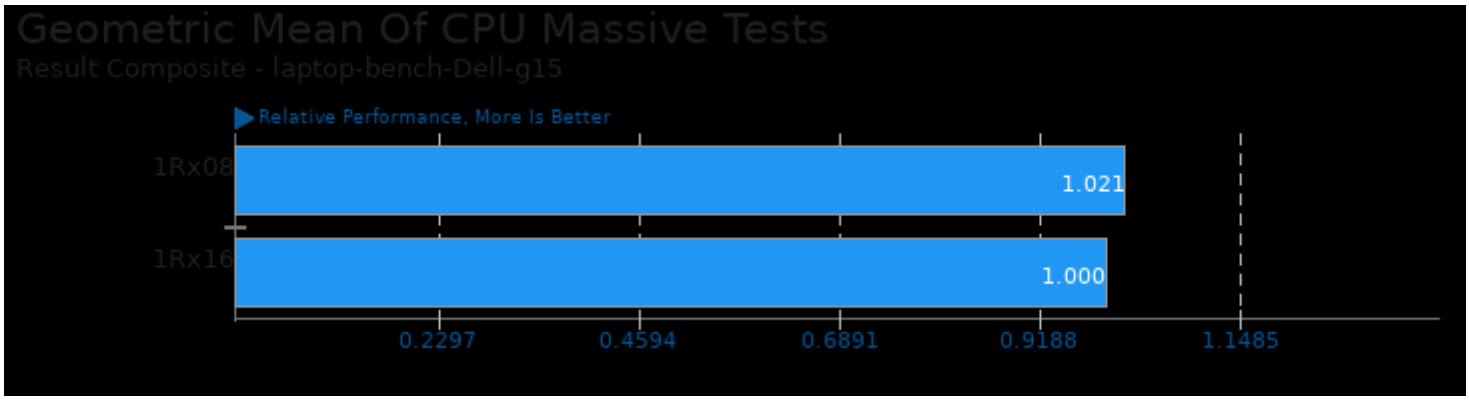

GNU Octave Benchmark
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Min
Avg
Max
1Rx08 3756 4518 4607
Megahertz, More Is Better
6000
4800
3600
2400
1200
GNU Octave Benchmark
CPU Temperature Monitor
Min
Avg
Max
1Rx08 51.0 70.7 98.0
Celsius, Fewer Is Better
100
80
60
40
20


GNU Octave Benchmark
GPU Frequency Monitor
Min
Avg
Max
1Rx08
210
336
660
Megahertz, More Is Better
1000
800
600
400
200
GNU Octave Benchmark
GPU Temperature Monitor
Min
Avg
Max
1Rx08
48.0
48.1
49.0
Celsius, Fewer Is Better
70
56
42
28
14
CPU Peak Freq (Highest CPU Core Frequency) Monitor
Phoronix Test Suite System Monitoring
Megahertz
1Rx08
Min: 2800 / Avg: 4115.99 / Max: 4608
800
1600
2400
3200
4000


CPU Temperature Monitor
Phoronix Test Suite System Monitoring
Celsius
1Rx08
Min: 45 / Avg: 92.67 / Max: 100
20
40
60
80
100
GPU Frequency Monitor
Phoronix Test Suite System Monitoring
Megahertz
1Rx08
Min: 210 / Avg: 1414.56 / Max: 2002
300
600
900
1200
1500
GPU Temperature Monitor
Phoronix Test Suite System Monitoring
Celsius
1Rx08
Min: 42 / Avg: 77.18 / Max: 85
16
32
48
64
80

laptop-bench-Dell-g15

These geometric means are based upon test groupings / test suites for this result file.



Geometric mean based upon tests: pts/build-linux-kernel and system/octave-benchmark

This file was automatically generated via the Phoronix Test Suite benchmarking software on Thursday, 28 March 2024 20:03.