


**www.phoronix-test-suite.com**

# 5950x1221

AMD Ryzen 9 5950X 16-Core testing with a MSI MEG X570 GODLIKE (MS-7C34) v1.0 (1.I0 BIOS) and eVGA NVIDIA GeForce GTX 1060 6GB on Gentoo 2.9 via the Phoronix Test Suite.

## Test Systems:

### AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX

Processor: AMD Ryzen 9 5950X 16-Core @ 3.40GHz (16 Cores / 32 Threads), Motherboard: MSI MEG X570 GODLIKE (MS-7C34) v1.0 (1.I0 BIOS), Chipset: AMD Starship/Matisse, Memory: 2 x 16 GB DDR4-3733MT/s TEAMGROUP-UD4-3600, Disk: 3 x 1000GB Samsung SSD 980 PRO 1TB, Graphics: eVGA NVIDIA GeForce GTX 1060 6GB, Audio: NVIDIA GP106 HD Audio, Network: Realtek Device 2600 + Realtek Killer E3000 2.5GbE + Intel Wi-Fi 6 AX200

OS: Gentoo 2.9, Kernel: 6.1.0-gentoo-harambe-edition (x86_64), Desktop: KDE Plasma 5.26.4, Display Server: X Server 1.21.1.4, Display Driver: NVIDIA 515.86.01, Compiler: GCC 12.2.1 20221210 + Clang 15.0.6 + LLVM 15.0.6, File-System: ext4

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --bindir=/usr/x86_64-pc-linux-gnu/gcc-bin/12 --build=x86_64-pc-linux-gnu --datadir=/usr/share/gcc-data/x86_64-pc-linux-gnu/12 --disable-cet --disable-default-ssp --disable-esp --disable-fixed-point --disable-isl-version-check --disable-libada --disable-libsanitizer --disable-libssp --disable-libstdcxx-pch --disable-libunwind-exceptions --disable-libvtv --disable-nls --disable-systemtap --disable-valgrind-annotations --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-languages=c,c++,go,fortran --enable-libgomp --enable-libstdcxx-time --enable-lto --enable-multilib --enable-obsolete --enable-secureplt --enable-shared --enable-targets=all --enable-threads=posix --host=x86_64-pc-linux-gnu --includedir=/usr/lib/gcc/x86_64-pc-linux-gnu/12/include --mandir=/usr/share/gcc-data/x86_64-pc-linux-gnu/12/man --with-build-config=bootstrap-lto --with-gcc-major-version-only --with-isl --with-multilib-list=m32,m64 --with-python-dir=/share/gcc-data/x86_64-pc-linux-gnu/12/python --with-zstd
Processor Notes: Scaling Governor: acpi-cpufreq performance (Boost: Enabled) - CPU Microcode: 0xa201016
Python Notes: Python 3.11.1
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + mmio_stale_data: Not affected + retbleed: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + spectre_v1: Mitigation of usercopy/swapgs barriers and __user pointer sanitization + spectre_v2: Vulnerable IBPB: conditional IBRS_FW STIBP: always-on RSB filling PBRSB-eIBRS: Not affected + srbds: Not affected + tsx_async_abort: Not affected

| | AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX |
|---|---|
| **Numenta Anomaly Benchmark - C.A.D.O (sec)** | 27.189 |
| **Standard Deviation** | 1% |
| **Numenta Anomaly Benchmark - B.C (sec)** | 21.782 |
| **Standard Deviation** | 0.1% |
| **Numenta Anomaly Benchmark - Earthgecko Skyline (sec)** | 60.003 |
| **Standard Deviation** | 0.6% |
| **Numenta Anomaly Benchmark - Windowed Gaussian (sec)** | 5.086 |
| **Standard Deviation** | 2.3% |
| **Numenta Anomaly Benchmark - Relative Entropy (sec)** | 11.583 |
| **Standard Deviation** | 1.6% |
| **Numenta Anomaly Benchmark - KNN CAD (sec)** | 94.812 |
| **Standard Deviation** | 2% |
| **CockroachDB - KV, 95% Reads - 1024 (ops/s)** | 95007 |
| **Standard Deviation** | 2.4% |
| **CockroachDB - KV, 60% Reads - 1024 (ops/s)** | 76152 |
| **Standard Deviation** | 2.2% |
| **CockroachDB - KV, 50% Reads - 1024 (ops/s)** | 73145 |
| **Standard Deviation** | 2.4% |
| **CockroachDB - KV, 10% Reads - 1024 (ops/s)** | 61327 |
| **Standard Deviation** | 2.3% |
| **CockroachDB - KV, 95% Reads - 512 (ops/s)** | 99540 |
| **Standard Deviation** | 1.6% |
| **CockroachDB - KV, 95% Reads - 256 (ops/s)** | 103868 |
| **Standard Deviation** | 0.9% |
| **CockroachDB - KV, 95% Reads - 128 (ops/s)** | 107498 |
| **Standard Deviation** | 0.4% |
| **CockroachDB - KV, 60% Reads - 512 (ops/s)** | 80865 |
| **Standard Deviation** | 0.1% |
| **CockroachDB - KV, 60% Reads - 256 (ops/s)** | 87214 |
| **Standard Deviation** | 1.4% |
| **CockroachDB - KV, 60% Reads - 128 (ops/s)** | 90039 |
| **Standard Deviation** | 1.1% |
| **CockroachDB - KV, 50% Reads - 512 (ops/s)** | 78630 |
| **Standard Deviation** | 0.4% |
| **CockroachDB - KV, 50% Reads - 256 (ops/s)** | 82916 |
| **Standard Deviation** | 0.8% |
| **CockroachDB - KV, 50% Reads - 128 (ops/s)** | 85474 |

| | |
|---|---|
| **Standard Deviation** | 0.3% |
| **CockroachDB - KV, 10% Reads - 512 (ops/s)** | 65181 |
| **Standard Deviation** | 0.3% |
| **CockroachDB - KV, 10% Reads - 256 (ops/s)** | 69678 |
| **Standard Deviation** | 1.1% |
| **CockroachDB - KV, 10% Reads - 128 (ops/s)** | 73504 |
| **Standard Deviation** | 1.8% |
| **CockroachDB - MoVR - 1024 (ops/s)** | 1535 |
| **Standard Deviation** | 0.2% |
| **CockroachDB - MoVR - 512 (ops/s)** | 1538 |
| **Standard Deviation** | 0.1% |
| **CockroachDB - MoVR - 256 (ops/s)** | 1534 |
| **Standard Deviation** | 0% |
| **CockroachDB - MoVR - 128 (ops/s)** | 1541 |
| **Standard Deviation** | 0.1% |
| **ClickHouse - 1.R.W.A.D.T.R (Queries/min, Geo Mean)** | 259.44 |
| **Standard Deviation** | 1.9% |
| **ClickHouse - 1.R.W.A.D.S.R (Queries/min, Geo Mean)** | 265.07 |
| **Standard Deviation** | 1% |
| **ClickHouse - 1.R.W.A.D.F.R.C.C (Queries/min, Geo Mean)** | 255.20 |
| **Standard Deviation** | 2% |

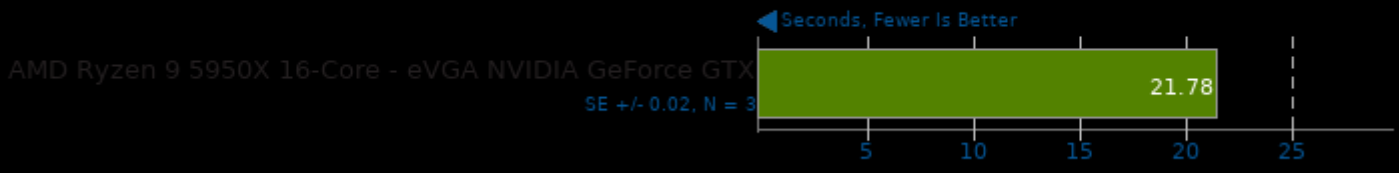
## Numenta Anomaly Benchmark 1.1

Detector: Contextual Anomaly Detector OSE



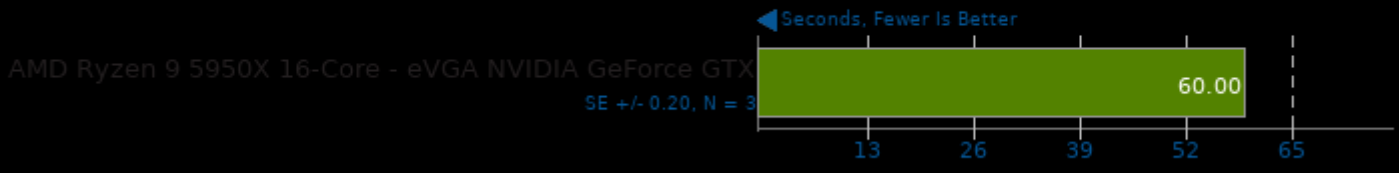

## Numenta Anomaly Benchmark 1.1

Detector: Bayesian Changepoint




## Numenta Anomaly Benchmark 1.1

Detector: Earthgecko Skyline




## Numenta Anomaly Benchmark 1.1

Detector: Windowed Gaussian



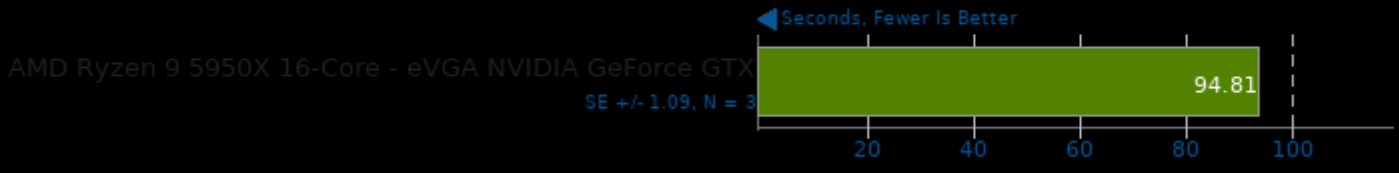

## Numenta Anomaly Benchmark 1.1

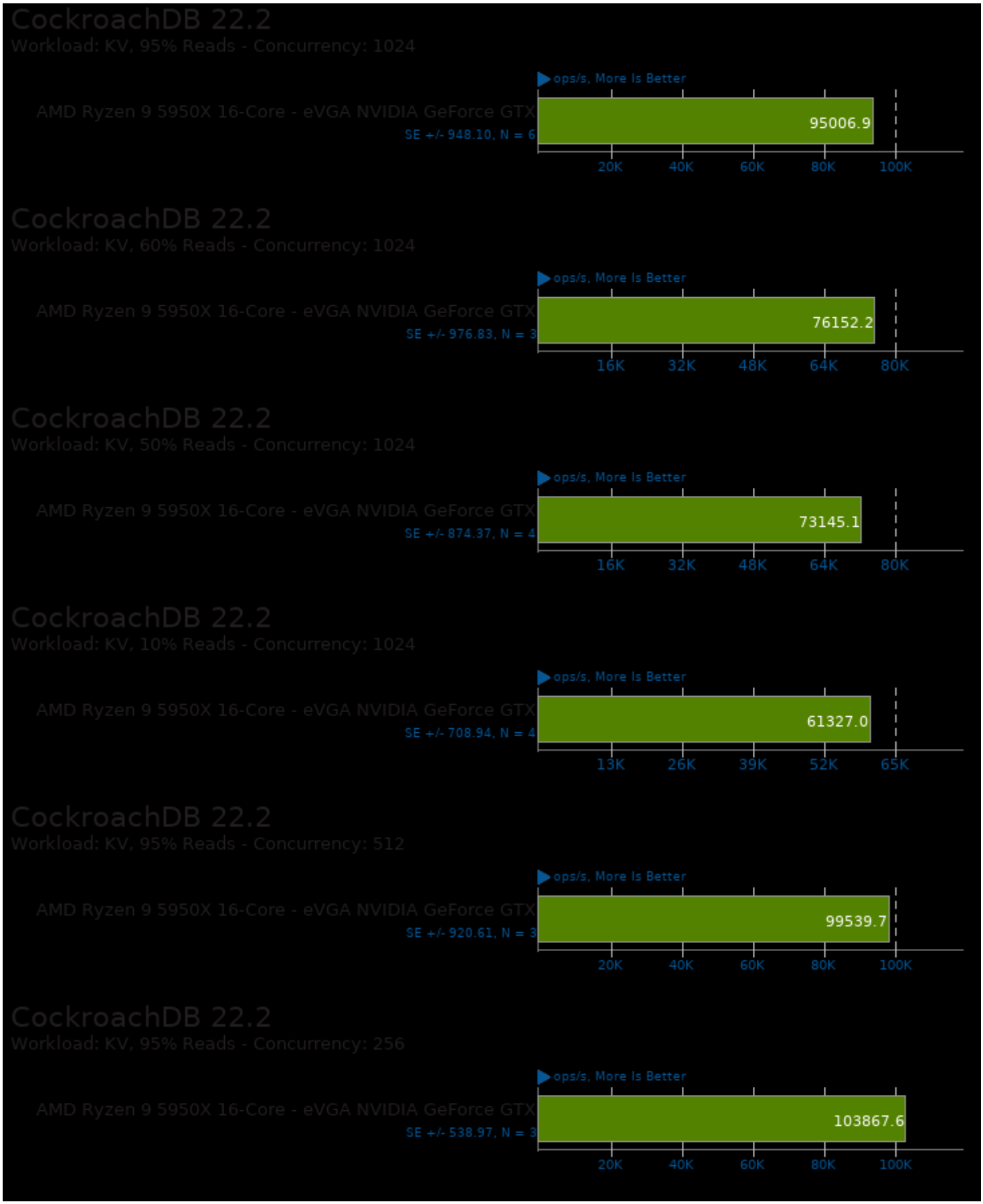
Detector: Relative Entropy

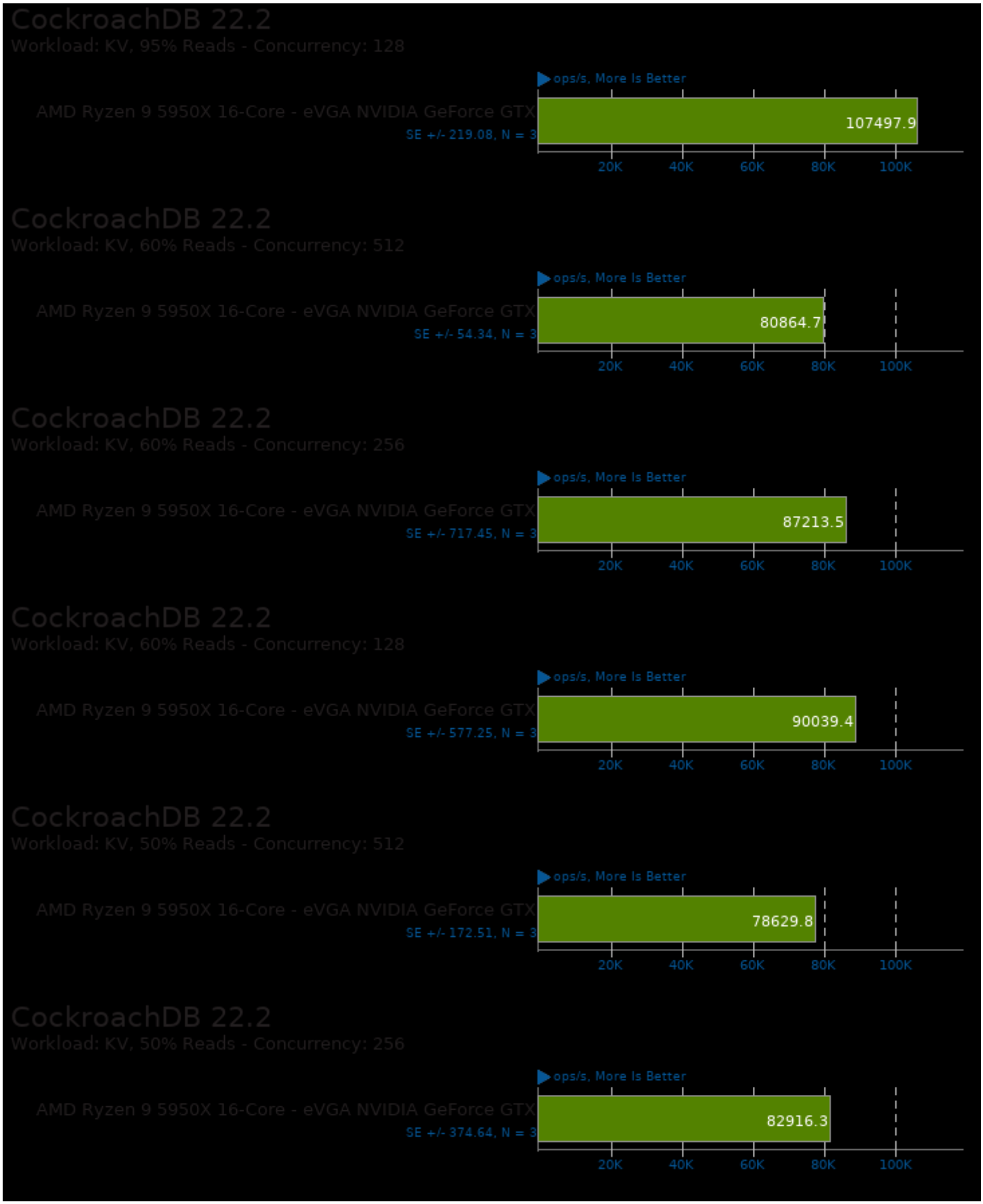



## Numenta Anomaly Benchmark 1.1

Detector: KNN CAD




CockroachDB 22.2
Workload: KV, 95% Reads - Concurrency: 1024
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 948.10, N = 6
95006.9
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 60% Reads - Concurrency: 1024
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 976.83, N = 3
76152.2
16K
32K
48K
64K
80K
CockroachDB 22.2
Workload: KV, 50% Reads - Concurrency: 1024
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 874.37, N = 4
73145.1
16K
32K
48K
64K
80K
CockroachDB 22.2
Workload: KV, 10% Reads - Concurrency: 1024
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 708.94, N = 4
61327.0
13K
26K
39K
52K
65K
CockroachDB 22.2
Workload: KV, 95% Reads - Concurrency: 512
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 920.61, N = 3
99539.7
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 95% Reads - Concurrency: 256
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 538.97, N = 3
103867.6
20K
40K
60K
80K
100K


CockroachDB 22.2
Workload: KV, 95% Reads - Concurrency: 128
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 219.08, N = 3
107497.9
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 60% Reads - Concurrency: 512
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 54.34, N = 3
80864.7
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 60% Reads - Concurrency: 256
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 717.45, N = 3
87213.5
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 60% Reads - Concurrency: 128
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 577.25, N = 3
90039.4
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 50% Reads - Concurrency: 512
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 172.51, N = 3
78629.8
20K
40K
60K
80K
100K
CockroachDB 22.2
Workload: KV, 50% Reads - Concurrency: 256
ops/s, More Is Better
AMD Ryzen 9 5950X 16-Core - eVGA NVIDIA GeForce GTX
SE +/- 374.64, N = 3
82916.3
20K
40K
60K
80K
100K

## CockroachDB 22.2

Workload: KV, 50% Reads - Concurrency: 128




## CockroachDB 22.2

Workload: KV, 10% Reads - Concurrency: 512




## CockroachDB 22.2

Workload: KV, 10% Reads - Concurrency: 256




## CockroachDB 22.2

Workload: KV, 10% Reads - Concurrency: 128



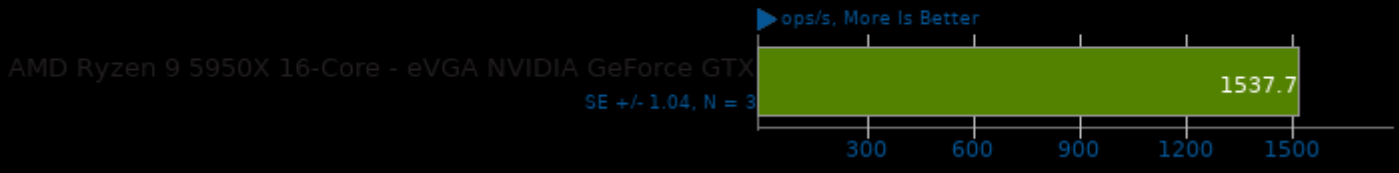

## CockroachDB 22.2

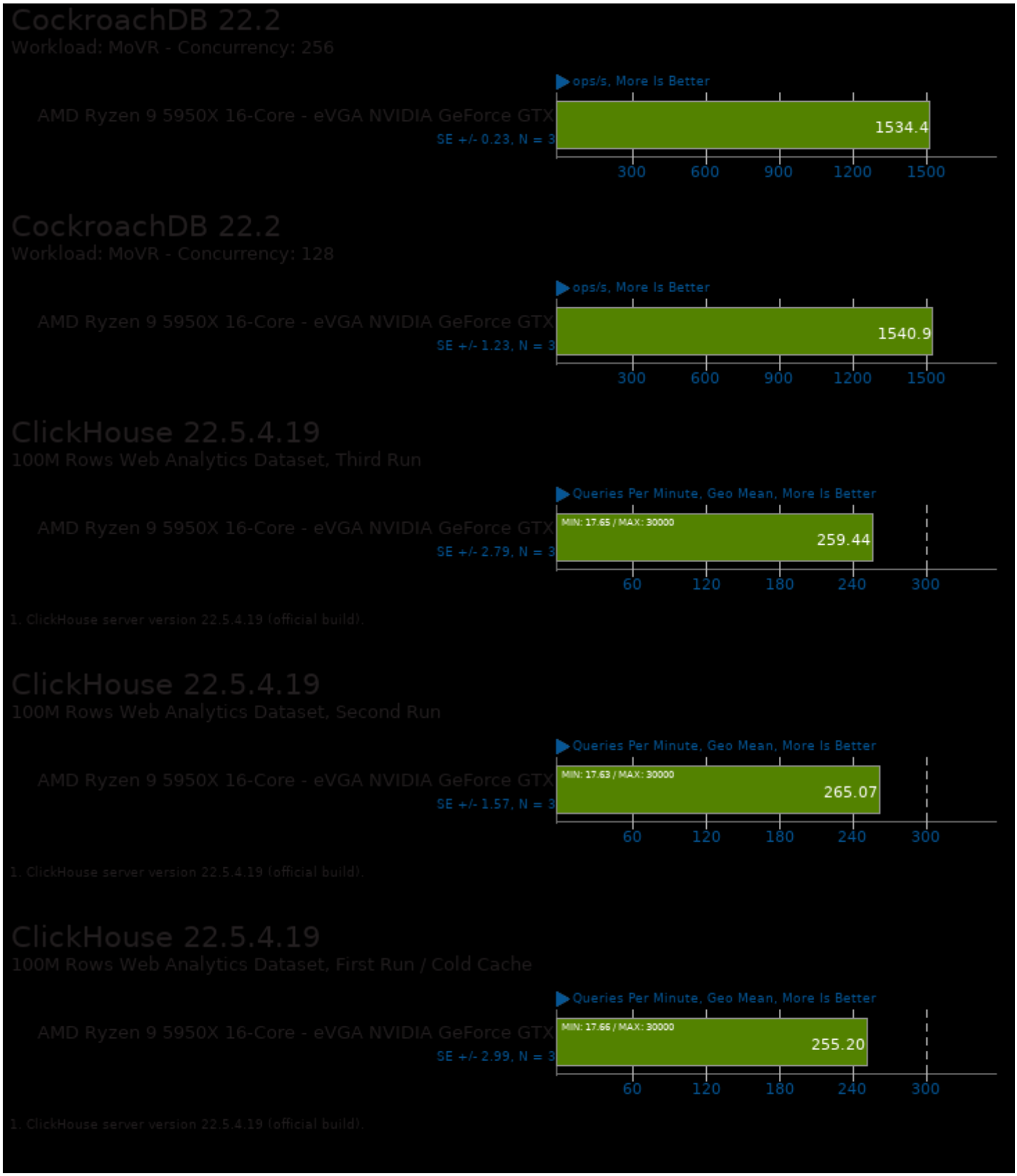
Workload: MoVR - Concurrency: 1024




## CockroachDB 22.2

Workload: MoVR - Concurrency: 512






*This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 08:10.*