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Clear Linux 36260

2 x Intel Xeon Platinum 8380 testing with a Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS) and ASPEED on Arch Linux via the Phoronix Test Suite.

Automated Executive Summary

Clear Linux 36260 had the most wins, coming in first place for 38% of the tests.

Based on the geometric mean of all complete results, the fastest (Clear Linux 36260) was 1.442x the speed of the slowest (openSUSE Tumbleweed). CentOS Stream 9 was 0.957x the speed of Clear Linux 36260, AlmaLinux 8.5 was 0.95x the speed of CentOS Stream 9, Arch Linux was 0.824x the speed of AlmaLinux 8.5, Fedora Server 36 was 0.979x the speed of Arch Linux, Ubuntu 20.04.4 LTS was 0.972x the speed of Fedora Server 36, Ubuntu 22.04 LTS was 0.975x the speed of Ubuntu 20.04.4 LTS, openSUSE Tumbleweed was 0.998x the speed of Ubuntu 22.04 LTS.

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

Zstd Compression (Compression Level: 3, Long Mode - Compression Speed) at 11.611x
Zstd Compression (Compression Level: 8, Long Mode - Compression Speed) at 8.03x
Renaissance (Test: In-Memory Database Shootout) at 5.763x
Stress-NG (Test: NUMA) at 5.284x
Renaissance (Test: Genetic Algorithm Using Jenetics + Futures) at 5.201x
Apache HTTP Server (Concurrent Requests: 200) at 4.88x

Apache HTTP Server (Concurrent Requests: 500) at 4.858x
DaCapo Benchmark (Java Test: H2) at 4.778x
Stress-NG (Test: Context Switching) at 4.748x
Zstd Compression (Compression Level: 3, Long Mode - Compression Speed) at 4.553x.

Test Systems:

Clear Linux 36260

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: Clear Linux OS 36260, Kernel: 5.17.4-1139.native (x86_64), Desktop: GNOME Shell 42.0, Display Server: X Server 1.21.1.3, Compiler: GCC 12.0.1 20220429 + Clang 14.0.1 + LLVM 14.0.1, File-System: ext4, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: FFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,--enable-new-dtags" CXXFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=skylake -mrelax-cmpxchg-loop -fvisibility-inlines-hidden -Wl,--enable-new-dtags" FCFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -malign-data=abi -fno-semantic-interposition -ftree-vectorize -ftree-loop-vectorize -Wl,-sort-common -Wl,--enable-new-dtags" CFLAGS="-g -O3 -feliminate-unused-debug-types -pipe -Wall -Wp,-D_FORTIFY_SOURCE=2 -fexceptions -Wformat -Wformat-security -m64 -fasynchronous-unwind-tables -Wp,-D_REENTRANT -ftree-loop-distribute-patterns -Wl,-z -Wl,now -Wl,-z -Wl,relro -fno-semantic-interposition -ffat-lto-objects -fno-trapping-math -Wl,-sort-common -Wl,--enable-new-dtags -mtune=skylake -mrelax-cmpxchg-loop" THEANO_FLAGS="floatX=float32,openmp=true,gcc.cxxflags="-ftree-vectorize -mavx""
Compiler Notes: --build=x86_64-generic-linux --disable-libmpx --disable-libunwind-exceptions --disable-multiarch --disable-vtable-verify --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-clocale=gnu --enable-default-pie --enable-gnu-indirect-function --enable-host-shared --enable-languages=c,c++,fortran,go,jit --enable-ld=default --enable-libstdcxx-pch --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --exec-prefix=/usr --includedir=/usr/include --target=x86_64-generic-linux --with-arch=x86-64-v3 --with-gcc-major-version-only --with-glibc-version=2.35 --with-gnu-ld --with-isl --with-pic --with-ppl=yes --with-tune=skylake-avx512
Processor Notes: Scaling Governor: intel_pstate performance (EPP: performance) - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment (build 1.8.0-u252-ga-b00)
Python Notes: Python 3.10.4
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + 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

Ubuntu 22.04 LTS

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: Ubuntu 22.04, Kernel: 5.15.0-27-generic (x86_64), Desktop: GNOME Shell 42.0, Display Server: X Server 1.21.1.3, Vulkan: 1.2.204, Compiler: GCC 11.2.0, 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-cet --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-serialization=2 --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto

--enable-offload-targets=nvptx-none=/build/gcc-11-gBFGDP/gcc-11-11.2.0/debian/tmp-nvptx/usr,amdgcn-amdhsa=/build/gcc-11-gBFGDP/gcc-11-11.2.0/debian/tmp-gcn/usr --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 powersave (EPP: balance_performance) - CPU Microcode: 0xd0002a0
Java Notes: OpenJDK Runtime Environment (build 11.0.15+10-Ubuntu-0ubuntu0.22.04.1)
Python Notes: Python 3.10.4
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

Ubuntu 20.04.4 LTS

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: Ubuntu 20.04, Kernel: 5.13.0-40-generic (x86_64), Desktop: GNOME Shell 3.36.9, Display Server: X Server 1.20.13, Vulkan: 1.1.182, Compiler: GCC 9.4.0, 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-checking=release --enable-clocale=gnu --enable-default-pie --enable-gnu-unique-object --enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,gm2 --enable-libstdcxx-debug --enable-libstdcxx-time=yes --enable-multiarch --enable-multilib --enable-nls --enable-objc-gc=auto --enable-offload-targets=nvptx-none=/build/gcc-9-Av3uEd/gcc-9-9.4.0/debian/tmp-nvptx/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-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 powersave (EPP: balance_performance) - CPU Microcode: 0xd0002a0
Java Notes: OpenJDK Runtime Environment (build 11.0.15+10-Ubuntu-0ubuntu0.20.04.1)
Python Notes: Python 3.8.10
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

Fedora Server 36

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: Fedora Linux 36, Kernel: 5.17.5-300.fc36.x86_64 (x86_64), Compiler: GCC 12.0.1 20220413, File-System: xfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Environment Notes: DEBUGINFOD_URLS=https://debuginfod.fedoraproject.org/
Compiler Notes: --build=x86_64-redhat-linux --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,fortran,objc,obj-c++,ada,go,d,lto --enable-libstdcxx-backtrace --enable-link-serialization=1 --enable-multilib --enable-offload-defaulted --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=i686 --with-build-config=bootstrap-lto --with-gcc-major-version-only --with-linker-hash-style=gnu --with-tune=generic --without-cuda-driver
Processor Notes: Scaling Governor: intel_pstate powersave (EPP: balance_performance) - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment 21.9 (build 17.0.2+8)
Python Notes: Python 3.10.4
Security Notes: SELinux + itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + 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

AlmaLinux 8.5

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: AlmaLinux 8.5, Kernel: 4.18.0-348.23.1.el8_5.x86_64 (x86_64), Desktop: GNOME Shell 3.32.2, Display Server: X Server, Compiler: GCC 8.5.0 20210514, File-System: xfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-redhat-linux --disable-libmpx --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-initfini-array --enable-languages=c,c++,fortran,lto --enable-multilib --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=x86-64 --with-gcc-major-version-only --with-isl --with-linker-hash-style=gnu --with-tune=generic --without-cuda-driver
Processor Notes: Scaling Governor: intel_pstate performance (EPP: performance) - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment (build 1.8.0_332-b09)
Python Notes: Python 3.6.8
Security Notes: SELinux + 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

CentOS Stream 9

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: CentOS Stream 9, Kernel: 5.14.0-85.el9.x86_64 (x86_64), Desktop: GNOME Shell 40.10, Display Server: X Server 1.20.11, Compiler: GCC 11.3.1 20220421, File-System: xfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Environment Notes: DEBUGINFOD_URLS=https://debuginfod.centos.org/
Compiler Notes: --build=x86_64-redhat-linux --disable-libunwind-exceptions --enable-__cxa_atexit --enable-bootstrap --enable-cet --enable-checking=release --enable-gnu-indirect-function --enable-gnu-unique-object --enable-host-bind-now --enable-host-pie --enable-initfini-array --enable-languages=c,c++,fortran,lto --enable-link-serialization=1 --enable-multilib --enable-offload-targets=nvptx-none --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-arch_32=x86-64 --with-arch_64=x86-64-v2 --with-build-config=bootstrap-lto --with-gcc-major-version-only --with-linker-hash-style=gnu --with-tune=generic --without-cuda-driver --without-isl
Processor Notes: Scaling Governor: intel_pstate performance (EPP: performance) - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment 18.9 (build 11.0.15-ea+8-LTS)
Python Notes: Python 3.9.10
Security Notes: SELinux + itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + 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

openSUSE Tumbleweed

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: openSUSE Tumbleweed 20220507, Kernel: 5.17.4-1-default (x86_64), Compiler: GCC 11.2.1 20220420 [revision 691af15031e00227ba6d5935c1d737026cda4129], File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: always
Compiler Notes: --build=x86_64-suse-linux --disable-libcc1 --disable-libssp --disable-libstdcxx-pch --disable-libvtv --disable-werror --enable-cet=auto --enable-checking=release --enable-gnu-indirect-function --enable-host-shared --enable-languages=c,c++,objc,fortran,obj-c++,ada,go,d,jit --enable-libphobos --enable-libstdcxx-allocator=new --enable-link-mutex --enable-linux-futex --enable-multilib --enable-offload-targets=nvptx-none,amdgcn-amdhsa, --enable-plugin --enable-ssp --enable-version-specific-runtime-libs --host=x86_64-suse-linux --mandir=/usr/share/man --with-arch-32=x86-64 --with-build-config=bootstrap-lto-lean --with-gcc-major-version-only --with-slibdir=/lib64 --with-tune=generic --without-cuda-driver --without-system-libunwind
Processor Notes: Scaling Governor: intel_pstate powersave (EPP: balance_performance) - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment (IcedTea 3.22.0) (build 1.8.0_322-b06 suse-2.1-x86_64)
Python Notes: Python 3.8.13
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: 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: eIBRS with unprivileged eBPF + srbds: Not affected + tsx_async_abort: Not affected

Arch Linux

Clear Linux 36260

Processor: 2 x Intel Xeon Platinum 8380 @ 3.40GHz (80 Cores / 160 Threads), Motherboard: Intel M50CYP2SB2U (SE5C6200.86B.0022.D08.2103221623 BIOS), Chipset: Intel Device 0998, Memory: 512GB, Disk: 800GB INTEL SSDPF21Q800GB, Graphics: ASPEED, Monitor: VE228, Network: 2 x Intel X710 for 10GBASE-T + 2 x Intel E810-C for QSFP

OS: Arch Linux, Kernel: 5.17.5-arch1-1 (x86_64), Compiler: GCC 11.2.0, File-System: btrfs, Screen Resolution: 1920x1080

Kernel Notes: Transparent Huge Pages: madvise
Compiler Notes: --disable-libssp --disable-libstdcxx-pch --disable-werror --enable-__cxa_atexit --enable-bootstrap --enable-cet=auto --enable-checking=release --enable-clocale=gnu --enable-default-pie --enable-default-ssp --enable-gnu-indirect-function --enable-gnu-unique-object --enable-languages=c,c++,ada,fortran,go,lto,objc,obj-c++,d --enable-link-serialization=1 --enable-lto --enable-multilib --enable-plugin --enable-shared --enable-threads=posix --mandir=/usr/share/man --with-build-config=bootstrap-lto --with-linker-hash-style=gnu
Processor Notes: Scaling Governor: intel_cpufreq schedutil - CPU Microcode: 0xd000331
Java Notes: OpenJDK Runtime Environment (build 11.0.15+10)
Python Notes: Python 3.10.4
Security Notes: itlb_multihit: Not affected + l1tf: Not affected + mds: Not affected + meltdown: Not affected + spec_store_bypass: Mitigation of SSB disabled via prctl + 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

	Clear Linux 36260	Ubuntu 22.04 LTS	Ubuntu 20.04.4 LTS	Fedora Server 36	AlmaLinux 8.5	CentOS Stream 9	openSUSE Tumbleweed	Arch Linux
Algebraic Multi-Grid Benchmark (Figure Of Merit)	2139248667	2056240667	2058724333	**2050134333**	2155880333	2157891333	**2159126667**	2078483000
Normalized	99.08%	95.23%	95.35%	94.95%	99.85%	99.94%	100%	96.26%
Standard Deviation	0.2%	0%	0.2%	0.5%	0%	0.1%	0.1%	0.2%
Apache HTTP Server - 200 (Reqs/sec)	142295	**40387**		52163	128388	127990	**197076**	130805
Normalized	72.2%	20.49%		26.47%	65.15%	64.94%	100%	66.37%
Standard Deviation	0.6%	0.8%		4.1%	0.2%	0.5%	1.1%	0.8%
Apache HTTP Server - 500 (Reqs/sec)	161054	**42512**		104313	143169	136257	**206531**	116518
Normalized	77.98%	20.58%		50.51%	69.32%	65.97%	100%	56.42%
Standard Deviation	3.1%	8%		22.5%	0.8%	0.7%	2.2%	0.4%
Apache HTTP Server - 1000 (Reqs/sec)	119226	**46917**		114687	114771	117895	**213476**	122320
Normalized	55.85%	21.98%		53.72%	53.76%	55.23%	100%	57.3%
Standard Deviation	0%	9.8%		14.5%	0.4%	1.6%	1.2%	1.2%
ASTC Encoder - Medium (sec)	4.4530	5.8603	**5.9653**	5.3372	**4.4191**	4.5934	5.5042	5.0963
Normalized	99.24%	75.41%	74.08%	82.8%	100%	96.21%	80.29%	86.71%
Standard Deviation	0.1%	7.2%	0.8%	8.8%	0%	0.4%	3.7%	7.3%
ASTC Encoder - Thorough (sec)	6.0837	**7.4776**	7.0949	7.1950	**6.0474**	6.2710	7.0018	6.5131
Normalized	99.4%	80.87%	85.24%	84.05%	100%	96.43%	86.37%	92.85%
Standard Deviation	0%	2.4%	5.8%	2%	0.5%	0.2%	2.4%	1.4%
ASTC Encoder - Exhaustive (sec)	**8.2286**	**9.0528**	8.9093	8.7701	8.6117	8.7208	8.9358	8.8048
Normalized	100%	90.9%	92.36%	93.83%	95.55%	94.36%	92.09%	93.46%

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Standard Deviation	0.1%	0.4%	0.2%	0.5%	0.3%	0.1%	0.2%	0.3%
Blender - BMW27 - CPU-Only (sec)	23.59	24.89	24.41	24.78	23.30	23.66	24.35	24.74
Normalized	98.77%	93.61%	95.45%	94.03%	100%	98.48%	95.69%	94.18%
Standard Deviation	0.5%	0.2%	0.6%	0.6%	0.5%	0.3%	0.3%	0.3%
Blender - Classroom - CPU-Only (sec)	61.96	63.96	63.32	64.04	61.64	62.18	62.52	64.06
Normalized	99.48%	96.37%	97.35%	96.25%	100%	99.13%	98.59%	96.22%
Standard Deviation	0.2%	0.1%	0.3%	0.2%	0.4%	0.2%	0.2%	0.7%
Blender - Fishy Cat - CPU-Only (sec)	32.02	33.81	34.84	33.87	33.17	32.21	32.85	33.87
Normalized	100%	94.71%	91.91%	94.54%	96.53%	99.41%	97.47%	94.54%
Standard Deviation	0.6%	0.6%	1.9%	0.7%	0.3%	0.7%	1%	1.1%
Blender - Barbershop - CPU-Only (sec)	248.34	259.21	254.38	260.62	245.74	249.03	253.04	259.48
Normalized	98.95%	94.8%	96.6%	94.29%	100%	98.68%	97.12%	94.7%
Standard Deviation	0.1%	0.5%	0.5%	0.1%	0.2%	0.5%	0.2%	0.4%
Blender - Pabellon Barcelona - CPU-Only (sec)	77.63	80.83	80.20	81.07	77.16	77.77	78.46	80.62
Normalized	99.39%	95.46%	96.21%	95.18%	100%	99.22%	98.34%	95.71%
Standard Deviation	0.1%	0.2%	0.7%	0.2%	0.2%	0.1%	0.3%	0%
DaCapo Benchmark - H2 (msec)	4151	10642	10670	10665	3705	2734	13062	10477
Normalized	65.86%	25.69%	25.62%	25.64%	73.79%	100%	20.93%	26.1%
Standard Deviation	1.6%	1.8%	2%	2.4%	4.1%	0.4%	2.3%	1.8%
DaCapo Benchmark - Jython (msec)	3537	5594	4882	5350	3650	3832	5564	4920
Normalized	100%	63.23%	72.45%	66.11%	96.9%	92.3%	63.57%	71.89%
Standard Deviation	0.4%	12.4%	13.8%	11.4%	0.7%	1.4%	13.7%	17.6%
Embree - Pathtracer - Crown (FPS)	64.8288	64.1254	64.2996	61.9441	63.5296			
Normalized	100%	98.91%	99.18%	95.55%	98%			
Standard Deviation	0.1%	1%	0.9%	1.7%	1%			
Embree - Pathtracer ISPC - Crown (FPS)	74.9695	66.5276	67.5723	65.7758	72.9157			
Normalized	100%	88.74%	90.13%	87.74%	97.26%			
Standard Deviation	0.4%	0.7%	1.3%	0.4%	1.1%			
Embree - Pathtracer - Asian Dragon (FPS)	84.0912	83.2807	81.3470	82.5283	84.8031			
Normalized	99.16%	98.2%	95.92%	97.32%	100%			
Standard Deviation	0.2%	0.6%	2.8%	1.1%	0.4%			
Embree - Pathtracer ISPC - Asian Dragon (FPS)	108.5649	107.1081	105.7740	105.4751	108.4509			
Normalized	100%	98.66%	97.43%	97.15%	99.89%			
Standard Deviation	1.1%	0.8%	1.6%	1.6%	1%			
GROMACS - MPI CPU - water_GMX50_bare (Ns/Day)	9.534	9.005	8.993	8.905	8.642	8.801	9.052	8.959
Normalized	100%	94.45%	94.33%	93.4%	90.64%	92.31%	94.94%	93.97%
Standard Deviation	0.7%	1.6%	0.2%	2.2%	0.4%	1.5%	0.5%	0.4%

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LAMMPS Molecular Dynamics Simulator - 20k Atoms (ns/day)	35.396	34.955	35.544	35.430	**35.553**	34.796	**34.102**	35.502
Normalized	99.56%	98.32%	99.97%	99.65%	100%	97.87%	95.92%	99.86%
Standard Deviation	0.3%	0.1%	0.2%	0.4%	0.1%	0.2%	0.3%	0.1%
LAMMPS Molecular Dynamics Simulator - Rhodopsin Protein (ns/day)	32.137	**23.267**	24.193	27.387	**32.797**	32.596	24.607	28.857
Normalized	97.99%	70.94%	73.77%	83.5%	100%	99.39%	75.03%	87.99%
Standard Deviation	5.8%	16%	5.5%	6.1%	10%	5.5%	7.1%	5.6%
libavif avifenc - 0 (sec)	83.014	87.149	87.632	88.075	**81.997**	83.877	85.511	**88.228**
Normalized	98.77%	94.09%	93.57%	93.1%	100%	97.76%	95.89%	92.94%
Standard Deviation	2.4%	1.9%	1.2%	2.2%	0.7%	1.8%	1.3%	1%
libavif avifenc - 2 (sec)	47.214	**50.471**	50.285	49.882	**45.821**	46.184	47.816	49.219
Normalized	97.05%	90.79%	91.12%	91.86%	100%	99.21%	95.83%	93.1%
Standard Deviation	1%	1.4%	0.8%	0.5%	1.4%	0.9%	2.3%	2.5%
libavif avifenc - 6 (sec)	**4.472**	**6.587**	6.413	6.521	4.697	4.662	5.878	6.050
Normalized	100%	67.89%	69.73%	68.58%	95.21%	95.92%	76.08%	73.92%
Standard Deviation	2.2%	0.5%	4%	4.3%	2.1%	1.6%	4.2%	1.6%
libavif avifenc - 6, Lossless (sec)	**7.180**	**10.767**	10.537	10.728	8.201	7.574	9.789	9.801
Normalized	100%	66.69%	68.14%	66.93%	87.55%	94.8%	73.35%	73.26%
Standard Deviation	0.2%	6.4%	4.7%	4.6%	2%	0.8%	3.7%	1.6%
libavif avifenc - 10, Lossless (sec)	**4.656**	7.974	**8.354**	8.308	5.654	4.967	7.097	7.560
Normalized	100%	58.39%	55.73%	56.04%	82.35%	93.74%	65.61%	61.59%
Standard Deviation	0.9%	1.9%	2.5%	2.4%	0.3%	0.6%	1.8%	2.4%
Liquid-DSP - 128 - 256 - 57 (samples/s)	**3942700000**	3178400000	3270666667	3238700000	3326100000	3215700000	**1410166667**	3209133333
Normalized	100%	80.61%	82.95%	82.14%	84.36%	81.56%	35.77%	81.39%
Standard Deviation	0.2%	0.4%	0.4%	0.8%	0.1%	0.3%	0.5%	0.2%
Liquid-DSP - 160 - 256 - 57 (samples/s)	**3773500000**	2969233333	3049700000	3046533333	3138433333	3046500000	**1458400000**	3056733333
Normalized	100%	78.69%	80.82%	80.73%	83.17%	80.73%	38.65%	81.01%
Standard Deviation	0.1%	0.6%	0.7%	0.7%	0%	0.1%	0.9%	0%
LuxCoreRender - DLSC - CPU (M samples/sec)	9.19	9.10	9.12	9.01		**8.95**	9.05	**9.46**
Normalized	97.15%	96.19%	96.41%	95.24%		94.61%	95.67%	100%
Standard Deviation	0.3%	3.7%	2.8%	1.7%		2.9%	3.7%	2.1%
LuxCoreRender - Danish Mood - CPU (M samples/sec)	**6.48**	4.80	**4.69**	4.82		6.46	4.85	5.99
Normalized	100%	74.07%	72.38%	74.38%		99.69%	74.85%	92.44%
Standard Deviation	4.1%	5.6%	5.2%	5.6%		4.1%	5.4%	5.5%
LuxCoreRender - Orange Juice - CPU (M samples/sec)	14.15	14.01	**13.87**	14.07		**14.59**	14.33	13.94
Normalized	96.98%	96.02%	95.07%	96.44%		100%	98.22%	95.54%
Standard Deviation	0.6%	1.1%	1.2%	2.3%		2.5%	0.2%	2.4%

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LuxCoreRender - LuxCore Benchmark - CPU (M samples/sec)	6.54	4.98	4.52	4.68		6.67	4.75	6.14
Normalized	98.05%	74.66%	67.77%	70.16%		100%	71.21%	92.05%
Standard Deviation	5.2%	2.2%	6.7%	7.8%		4.7%	5.2%	5.7%
nginx - 100 (Reqs/sec)	221581	80571		82252	216280	207090	79426	203560
Normalized	100%	36.36%		37.12%	97.61%	93.46%	35.85%	91.87%
Standard Deviation	0.1%	0.6%		0.2%	0.2%	0.4%	0.9%	0.8%
nginx - 200 (Reqs/sec)	209351	191936		184716	190417	194926	197969	195642
Normalized	100%	91.68%		88.23%	90.96%	93.11%	94.56%	93.45%
Standard Deviation	1.6%	3.6%		1.7%	1.9%	0.1%	1.7%	1.2%
nginx - 500 (Reqs/sec)	222157	201485		197007	200635	203857	208850	207517
Normalized	100%	90.69%		88.68%	90.31%	91.76%	94.01%	93.41%
Standard Deviation	2%	2.4%		0.7%	1.1%	0.8%	2.4%	0.5%
nginx - 1000 (Reqs/sec)	226219	208941		200512	205275	206787	214270	212054
Normalized	100%	92.36%		88.64%	90.74%	91.41%	94.72%	93.74%
Standard Deviation	1%	1.9%		1.2%	0.5%	0.4%	0.7%	0.8%
Numpy Benchmark (Score)	380.72	375.17	374.70	390.38	339.03	390.81	392.96	411.66
Normalized	92.48%	91.14%	91.02%	94.83%	82.36%	94.94%	95.46%	100%
Standard Deviation	0.2%	1.4%	0.2%	0.1%	1.4%	0.3%	2.1%	0.5%
oneDNN - R.N.N.T - f32 - CPU (ms)	733.981	749.082	615.245	763.807	605.709	715.289	678.302	771.997
Normalized	82.52%	80.86%	98.45%	79.3%	100%	84.68%	89.3%	78.46%
Standard Deviation	5.6%	7.1%	0.3%	8.4%	1.2%	2.2%	2.5%	1.6%
oneDNN - R.N.N.I - f32 - CPU (ms)	504.478	497.835	377.722	512.912	369.383	429.064	430.983	493.925
Normalized	73.22%	74.2%	97.79%	72.02%	100%	86.09%	85.71%	74.79%
Standard Deviation	1.8%	7.1%	0.3%	9%	1.6%	2.5%	6.2%	4.1%
oneDNN - R.N.N.T - u8s8f32 - CPU (ms)	731.978	727.508	615.177	775.400	606.959	695.815	688.678	740.178
Normalized	82.92%	83.43%	98.66%	78.28%	100%	87.23%	88.13%	82%
Standard Deviation	4.5%	6.3%	0.4%	6.6%	0.2%	1.9%	1.2%	4.4%
oneDNN - R.N.N.I - u8s8f32 - CPU (ms)	482.151	486.486	377.054	516.527	369.215	456.857	431.517	494.774
Normalized	76.58%	75.89%	97.92%	71.48%	100%	80.82%	85.56%	74.62%
Standard Deviation	5%	8.4%	0.5%	5.2%	0.4%	4.9%	7.5%	3.4%
oneDNN - R.N.N.T - bf16bf16bf16 - CPU	730.888	770.074	619.970	739.443	606.602	699.283	705.397	754.779
Normalized	83%	78.77%	97.84%	82.03%	100%	86.75%	85.99%	80.37%
Standard Deviation	3%	7.6%	2.4%	8.3%	0.8%	2.4%	0.7%	4.7%
oneDNN - R.N.N.I - bf16bf16bf16 - CPU	483.076	496.157	375.104	497.005	370.968	458.113	424.347	492.389
Normalized	76.79%	74.77%	98.9%	74.64%	100%	80.98%	87.42%	75.34%
Standard Deviation	5.8%	7%	0.1%	7.7%	0.9%	0.7%	6.7%	5.7%
ONNX Runtime - GPT-2 - CPU - Standard (Inferences/min)	10227	13003		10978	9423	9272	9395	12563
Normalized	78.65%	100%		84.43%	72.47%	71.31%	72.25%	96.62%
Standard Deviation	6.3%	0.2%		6.2%	1.1%	1.1%	2%	6.4%

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ONNX Runtime - yolov4 - CPU - Standard (Inferences/min)	684	693		666	689	650	622	674
Normalized	98.7%	100%		96.1%	99.42%	93.8%	89.75%	97.26%
Standard Deviation	0.2%	0.2%		4.5%	0.4%	4.8%	2.3%	3.4%
ONNX Runtime - ArcFace ResNet-100 - CPU - Standard (Inferences/min)	2224	1897		2174	1891	1878	1820	1909
Normalized	100%	85.3%		97.75%	85.03%	84.44%	81.83%	85.84%
Standard Deviation	0.9%	0.5%		3.7%	2.8%	1%	3.1%	1%
ONNX Runtime - super-resolution-10 - CPU - Standard (Inferences/min)	8130	11847		7100	10951	6896	12429	12321
Normalized	65.41%	95.32%		57.12%	88.11%	55.48%	100%	99.13%
Standard Deviation	27.9%	0.8%		0.3%	1.3%	0.4%	0.4%	1%
OSPray - particle_volume/pathtracer/real_time	341.385	239.155	262.954	280.758	340.922	343.423	277.377	234.328
Normalized	99.41%	69.64%	76.57%	81.75%	99.27%	100%	80.77%	68.23%
Standard Deviation	0.5%	15.1%	15%	8%	1.1%	1.7%	7.9%	2.4%
OSPray - gravity_spheres_volume/dim_512/ao/real_time (Items/sec)	22.0819	20.5716	20.6689	20.5269	21.9776	22.1243	21.9072	20.7606
Normalized	99.81%	92.98%	93.42%	92.78%	99.34%	100%	99.02%	93.84%
Standard Deviation	0.7%	0.4%	0.7%	0.9%	0.8%	1.1%	0.3%	0.9%
Pennant - sedovbig (Hydro Cycle Time -	7.988127	15.45863	14.76050	15.99931	14.96581	14.62528	15.70179	15.26595
Normalized	100%	51.67%	54.12%	49.93%	53.38%	54.62%	50.87%	52.33%
Standard Deviation	2.5%	2.2%	0.8%	1.1%	0.4%	0.1%	0.5%	0.2%
PHPBench - P.B.S (Score)	1683588	797186	708575	804810	642030	769031	655272	646622
Normalized	100%	47.35%	42.09%	47.8%	38.13%	45.68%	38.92%	38.41%
Standard Deviation	0.8%	1%	0.5%	0.3%	0.2%	0.1%	0%	0.4%
PyBench - T.F.A.T.T (Milliseconds)	1045	1020	981	1158	1193	1155	1206	1037
Normalized	93.88%	96.18%	100%	84.72%	82.23%	84.94%	81.34%	94.6%
Standard Deviation	0.2%	0.3%	0.3%	0.4%	0.1%	0.1%	0.2%	0.1%
PyPerformance - go (Milliseconds)	225	260	310	275	295	287	328	219
Normalized	97.33%	84.23%	70.65%	79.64%	74.24%	76.31%	66.77%	100%
Standard Deviation	0%	5.7%	1%	0.6%		0.6%	1.5%	0%
PyPerformance - 2to3 (Milliseconds)	310	505	507	523	351	337	558	310
Normalized	100%	61.39%	61.14%	59.27%	88.32%	91.99%	55.56%	100%
Standard Deviation	0%	0.1%		0.1%	0.2%	0%	0.2%	0%
PyPerformance - chaos (Milliseconds)	104	143	129	128	127	124	208	94.1
Normalized	90.48%	65.8%	72.95%	73.52%	74.09%	75.89%	45.24%	100%
Standard Deviation	0%	0.4%	8.3%	2.3%		0%	0.3%	0.3%

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PyPerformance - float (Milliseconds)	103	147	145	133	122	125	205	95.6
Normalized	92.82%	65.03%	65.93%	71.88%	78.36%	76.48%	46.63%	100%
Standard Deviation	0%	0.4%	9.5%	1.6%		0%	0.3%	0.1%
PyPerformance - nbody (Milliseconds)	129	182	136	162	124	136	219	123
Normalized	95.35%	67.58%	90.44%	75.93%	99.19%	90.44%	56.16%	100%
Standard Deviation	0.4%	0.3%	6.2%	2.3%		0.4%	0%	0.5%
PyPerformance - pathlib (Milliseconds)	16.5	27.3	27.3	29.7	20.2	18.5	31.1	17.2
Normalized	100%	60.44%	60.44%	55.56%	81.68%	89.19%	53.05%	95.93%
Standard Deviation	0%	0.2%	5.1%	0.2%	0%	0.3%	0.2%	0%
PyPerformance - json_loads	23.7	33.7	29.8	26.1	26.4	24.1	37.5	25.3
Normalized	100%	70.33%	79.53%	90.8%	89.77%	98.34%	63.2%	93.68%
Standard Deviation	0.4%	2.4%	7.8%	2.2%	0.2%	0%	0.2%	0.5%
PyPerformance - crypto_pyaes (Milliseconds)	110	159	129	137	113	121	194	104
Normalized	94.55%	65.41%	80.62%	75.91%	92.04%	85.95%	53.61%	100%
Standard Deviation	0%	0.4%	7.8%	2.9%		0.5%	0%	0.6%
PyPerformance - regex_compile (Milliseconds)	166	224	197	207	208	189	295	167
Normalized	100%	74.11%	84.26%	80.19%	79.81%	87.83%	56.27%	99.4%
Standard Deviation	0%	7.5%	1.6%	1.1%		0%	0.2%	0.3%
PyPerformance - python_startup (Milliseconds)	9.53	17.4	17.9	17.8	10.4	8.65	26.5	12.1
Normalized	90.77%	49.71%	48.32%	48.6%	83.17%	100%	32.64%	71.49%
Standard Deviation	0%	0.7%	0.3%	0.6%	0%	0.1%	0.2%	0%
PyPerformance - django_template (Milliseconds)	45.1	64.2	54.8	51.4	78.3	53.1	85.7	44.4
Normalized	98.45%	69.16%	81.02%	86.38%	56.7%	83.62%	51.81%	100%
Standard Deviation	0.1%	0.3%	3.5%	0.7%	0.1%	0.1%	0.2%	0%
PyPerformance - pickle_pure_python (Milliseconds)	426	588	530	500	535	479	790	407
Normalized	95.54%	69.22%	76.79%	81.4%	76.07%	84.97%	51.52%	100%
Standard Deviation	0.1%	7%	6.7%	2.5%		0.4%	0.1%	0%
QuantLib (MFLOPS)	2571	2493	2387	2604	2076	2612		2543
Normalized	98.41%	95.42%	91.39%	99.69%	79.46%	100%		97.34%
Standard Deviation	0.7%	0.7%	0.8%	0.1%	0.3%	0.2%		0.2%
Renaissance - Scala Dotty (ms)	727.7	1260	1143	1276	703.5	795.1	1141	891.3
Normalized	96.67%	55.85%	61.53%	55.14%	100%	88.48%	61.67%	78.93%
Standard Deviation	5.6%	13.7%	21.1%	11.5%	1.5%	5.9%	12.9%	1.5%
Renaissance - Rand Forest (ms)	665.0	1540	1518		686.6	705.5	1503	1570
Normalized	100%	43.18%	43.8%		96.85%	94.26%	44.24%	42.36%
Standard Deviation	0.5%	2.2%	2.1%		2.4%	0.7%	1.9%	1.3%

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Renaissance - ALS Movie Lens (ms)	6365	18081	18027		6619	6756	18753	19593
Normalized	100%	35.2%	35.31%		96.16%	94.21%	33.94%	32.49%
Standard Deviation	1.1%	0.7%	1.5%		1.5%	1.1%	1.7%	0.9%
Renaissance - Apache Spark ALS (ms)	1285	3097	3113		1328	1559	2978	3369
Normalized	100%	41.48%	41.27%		96.72%	82.38%	43.13%	38.12%
Standard Deviation	0.8%	1.6%	1.4%		0.2%	0.1%	1.4%	0.6%
Renaissance - Apache Spark Bayes (ms)	523.1	1007	978.8		530.2	541.6	1131	1422
Normalized	100%	51.93%	53.44%		98.66%	96.58%	46.26%	36.78%
Standard Deviation	5.2%	1.4%	2.6%		1.3%	4.3%	8%	2.2%
Renaissance - Savina Reactors.IO (ms)	13586	21731	21355	16485	14216	13458	21280	21672
Normalized	99.06%	61.93%	63.02%	81.64%	94.67%	100%	63.25%	62.1%
Standard Deviation	2.1%	1.3%	2.4%	6.9%	2.3%	0.5%	13.2%	1.2%
Renaissance - A.S.P (ms)	2999	5438	4895		3019	3423	3586	4352
Normalized	100%	55.15%	61.27%		99.34%	87.63%	83.64%	68.92%
Standard Deviation	2.9%	5.6%	0.8%		2.2%	1%	2.1%	4.2%
Renaissance - F.H.R (ms)	3487	7643	7522	4569		4398	5779	7828
Normalized	100%	45.63%	46.36%	76.33%		79.28%	60.34%	44.55%
Standard Deviation	1.3%	2.4%	2%	9.8%		2.4%	12%	2.2%
Renaissance - I.M.D.S (ms)	3688	19323	18850		3824	3975	21253	18550
Normalized	100%	19.08%	19.56%		96.44%	92.77%	17.35%	19.88%
Standard Deviation	4%	1.6%	2.2%		0.6%	2.2%	1.6%	2%
Renaissance - A.U.C.T (ms)	14522	35859	34196	35264	14642	15747	34924	36868
Normalized	100%	40.5%	42.47%	41.18%	99.18%	92.22%	41.58%	39.39%
Standard Deviation	0.7%	1.6%	2.3%	0.2%	2.3%	1.3%	0.9%	1.8%
Renaissance - G.A.U.J.F (ms)	1714	7004	6840	7289	1721	1402	6896	7249
Normalized	81.77%	20.01%	20.49%	19.23%	81.43%	100%	20.32%	19.33%
Standard Deviation	3.2%	1.1%	0.9%	1.9%	1.1%	2.4%	1.1%	0.7%
Stockfish - Total Time (Nodes/s)	188273155	182991428	187135241	181841138	187578776	182441249	184534600	175077904
Normalized	100%	97.19%	99.4%	96.58%	99.63%	96.9%	98.01%	92.99%
Standard Deviation	2%	3.2%	2.5%	2.3%	2.4%	1.4%	1.7%	1.9%
Stress-NG - MMAP (Bogo Ops/s)		3990	3865	3796	3481	4670	4665	4793
Normalized		83.25%	80.65%	79.21%	72.63%	97.43%	97.32%	100%
Standard Deviation		1.7%	1.2%	1.3%	0.4%	0.1%	1.3%	0.2%
Stress-NG - NUMA (Bogo Ops/s)		41.67	44.91	40.62	9.87	10.40	8.50	40.29
Normalized		92.79%	100%	90.45%	21.98%	23.16%	18.93%	89.71%
Standard Deviation		1.3%	2.1%	2.1%	3.8%	0.1%	11.2%	1.6%
Stress-NG - MEMFD (Bogo Ops/s)		3924	3697	3443	2749	4211	4539	4028
Normalized		86.45%	81.46%	75.86%	60.57%	92.78%	100%	88.75%
Standard Deviation		1.5%	1.5%	1.5%	0.1%	0.1%	1.6%	0.4%

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Stress-NG - Crypto (Bogo Ops/s)	86093	81867	**88806**	**73716**	82644	85026	83677
Normalized	96.94%	92.19%	100%	83.01%	93.06%	95.74%	94.22%
Standard Deviation	0.4%	0.7%	1.7%	0.1%	1.6%	1.3%	0.2%
Stress-NG - Malloc (Bogo Ops/s)	296692558	289035194	309894608	293929417	308033821	**311705066**	**281820121**
Normalized	95.18%	92.73%	99.42%	94.3%	98.82%	100%	90.41%
Standard Deviation	0.5%	0.7%	0.2%	0.4%	0.3%	0.6%	1%
Stress-NG - Forking (Bogo Ops/s)	65524	62898	64707	61691	63328	**86556**	**59282**
Normalized	75.7%	72.67%	74.76%	71.27%	73.16%	100%	68.49%
Standard Deviation	0.6%	0.4%	0.6%	0.6%	0.4%	2.1%	0.9%
Stress-NG - IO_uring (Bogo Ops/s)	7688144		**8045113**			7561316	**5596387**
Normalized	95.56%		100%			93.99%	69.56%
Standard Deviation	1.8%		1.7%			43.3%	33.1%
Stress-NG - SENDFILE (Bogo Ops/s)	1187151	1159657	1308045	**1033952**	1228334	1308527	**1324156**
Normalized	89.65%	87.58%	98.78%	78.08%	92.76%	98.82%	100%
Standard Deviation	0.5%	0.3%	0.7%	0.2%	0.2%	0.6%	0.4%
Stress-NG - CPU Stress (Bogo Ops/s)	135845	120965	**140717**	**119736**	137195	136088	138853
Normalized	96.54%	85.96%	100%	85.09%	97.5%	96.71%	98.68%
Standard Deviation	0.4%	0.4%	0.3%	0.3%	0.7%	0.6%	0%
Stress-NG - Semaphores (Bogo	**6433945**	7023878	6478012	12375254	14395329	12219151	**14581624**
Normalized	44.12%	48.17%	44.43%	84.87%	98.72%	83.8%	100%
Standard Deviation	0.5%	0.3%	1.5%	0%	0.1%	0.1%	0.1%
Stress-NG - Matrix Math (Bogo Ops/s)	307771	290508	**324399**	322138	**287622**	307119	310375
Normalized	94.87%	89.55%	100%	99.3%	88.66%	94.67%	95.68%
Standard Deviation	0.1%	0.5%	0.2%	0.2%	0.2%	0.1%	0.3%
Stress-NG - Vector Math (Bogo Ops/s)	323484	289906	307010	**258246**	323883	324345	**327978**
Normalized	98.63%	88.39%	93.61%	78.74%	98.75%	98.89%	100%
Standard Deviation	0.4%	0.3%	0.2%	2%	0.5%	0.5%	0.1%
Stress-NG - Memory Copying (Bogo Ops/s)	13436	12729	13333	**8847**	12851	13248	**13458**
Normalized	99.84%	94.58%	99.07%	65.74%	95.49%	98.44%	100%
Standard Deviation	0.1%	0.1%	0.2%	1.1%	0.1%	0.1%	0.3%
Stress-NG - Context Switching (Bogo Ops/s)	**4369355**	5399024	4487317	11877978	5702782	**20744069**	5495132
Normalized	21.06%	26.03%	21.63%	57.26%	27.49%	100%	26.49%
Standard Deviation	1.9%	2%	2.2%	3.2%	0.4%	1.8%	0.7%
Stress-NG - G.Q.D.S (Bogo Ops/s)	**917.54**	964.44	936.98	**981.51**	944.05	934.51	971.00
Normalized	93.48%	98.26%	95.46%	100%	96.18%	95.21%	98.93%
Standard Deviation	0.6%	0.8%	0.6%	0.2%	0.1%	0.6%	0.2%
Stress-NG - S.V.M.P (Bogo Ops/s)	2900794	**2857499**	**8150981**	5030927	7110771	6948990	6930568
Normalized	35.59%	35.06%	100%	61.72%	87.24%	85.25%	85.03%
Standard Deviation	0.2%	0.3%	2%	0%	0.1%	2.4%	0.1%

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SVT-AV1 - Preset 10 - Bosphorus 4K (FPS)	**156.935**	79.706	76.889	77.729	149.310	153.611	80.048	**59.751**
Normalized	100%	50.79%	48.99%	49.53%	95.14%	97.88%	51.01%	38.07%
Standard Deviation	2.5%	0.5%	0.7%	2.3%	2%	0.1%	1.2%	0.8%
SVT-AV1 - Preset 12 - Bosphorus 4K (FPS)	188.230	91.815	89.823	89.821	184.182	**188.254**	92.525	**73.465**
Normalized	99.99%	48.77%	47.71%	47.71%	97.84%	100%	49.15%	39.02%
Standard Deviation	2%	0.3%	1.6%	1.4%	0.3%	0.9%	2%	1.7%
SVT-HEVC - 1 - Bosphorus 1080p (FPS)	**39.36**	**29.48**	30.16	30.45	38.14	37.40	29.83	36.90
Normalized	100%	74.9%	76.63%	77.36%	96.9%	95.02%	75.79%	93.75%
Standard Deviation	1.2%	1.2%	1.8%	1.2%	1.3%	1.7%	0.7%	2.4%
SVT-HEVC - 7 - Bosphorus 1080p (FPS)	**334.10**	168.51	170.04	168.96	312.30	316.49	174.38	**129.98**
Normalized	100%	50.44%	50.89%	50.57%	93.48%	94.73%	52.19%	38.9%
Standard Deviation	1.9%	1.6%	0.3%	2.3%	1%	2.4%	1.9%	1.5%
SVT-HEVC - 10 - Bosphorus 1080p (FPS)	**596.52**	266.28	261.98	257.25	571.26	578.59	264.92	**213.47**
Normalized	100%	44.64%	43.92%	43.13%	95.77%	96.99%	44.41%	35.79%
Standard Deviation	1.6%	0.7%	0.5%	1.3%	0.6%	0.3%	1.9%	2.2%
SVT-VP9 - VMAF Optimized - Bosphorus 1080p (FPS)	**477.52**	217.65	214.89	212.57	460.40	477.41	221.22	**169.61**
Normalized	100%	45.58%	45%	44.52%	96.41%	99.98%	46.33%	35.52%
Standard Deviation	1.4%	2.4%	2.4%	2.3%	2.4%	2.5%	1.5%	2.5%
SVT-VP9 - P.S.O - Bosphorus 1080p (FPS)	**481.19**	211.31	210.30	210.19	449.99	473.84	214.71	**168.52**
Normalized	100%	43.91%	43.7%	43.68%	93.52%	98.47%	44.62%	35.02%
Standard Deviation	1.5%	0.3%	1.8%	0.7%	0.4%	2%	2%	1.9%
SVT-VP9 - V.Q.O - Bosphorus 1080p (FPS)	369.18	177.02	175.37	174.84	361.65	**378.07**	175.65	**127.91**
Normalized	97.65%	46.82%	46.39%	46.25%	95.66%	100%	46.46%	33.83%
Standard Deviation	1.7%	3.4%	4%	2%	1.6%	2.4%	3%	1.6%
Tachyon - Total Time (sec)	**22.0506**	24.0886	24.0235	24.0281	**24.3076**	23.6410	23.6253	23.6892
Normalized	100%	91.54%	91.79%	91.77%	90.71%	93.27%	93.33%	93.08%
Standard Deviation	0.3%	0.2%	0.2%	0.2%	0.2%	0.4%	0.3%	0.2%
Timed Gem5 Compilation - Time To	**170.147**	180.514	**234.970**	196.188		179.659		
Normalized	100%	94.26%	72.41%	86.73%		94.71%		
Standard Deviation	1.1%	0.3%	1.9%	2.5%		1.8%		
WireGuard + Linux Networking Stack Stress Test (sec)	**249.622**	605.178	590.217	**623.198**		256.068	580.279	460.662
Normalized	100%	41.25%	42.29%	40.06%		97.48%	43.02%	54.19%
Standard Deviation	1.4%	3.3%	1.7%	1.5%		0.3%	2.4%	0.7%
Xcompact3d Incompact3d - X.b.i.i (sec)	**280.482768**	293.971924	298.321961	289.724233	319.809102	**324.538951**	294.412639	316.644399
Normalized	100%	95.41%	94.02%	96.81%	87.7%	86.42%	95.27%	88.58%
Standard Deviation	0.2%	0.8%	0.1%	0.2%	0.1%	0.1%	0.1%	0.1%

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Xcompact3d Incompact3d - i.i.1.C.P.D (sec)	**10.7636703**	11.3107700	11.5400302	11.2158957	12.0911318	**12.3377584**	11.4217421	11.9100717
Normalized	100%	95.16%	93.27%	95.97%	89.02%	87.24%	94.24%	90.37%
Standard Deviation	0.1%	0.5%	0.8%	0.9%	1.5%	2.1%	0.7%	0.5%
Zstd Compression - 3 - Compression Speed (MB/s)	7850	5785	**5093**	6467	**9099**	7571	6695	5896
Normalized	86.19%	63.53%	55.92%	71.01%	99.91%	83.13%	73.52%	64.74%
Standard Deviation	0.4%	3.9%	2.4%	2.3%	2.5%	0.3%	1.3%	2.2%
Zstd Compression - 3 - D.S (MB/s)	3028	2759	**1918**	2959		2987	**3063**	
Normalized	98.88%	90.09%	62.62%	96.63%		97.54%	100%	
Standard Deviation		0.4%	0.9%			0.4%	0.1%	
Zstd Compression - 19 - Compression Speed (MB/s)	88.0	74.8	**61.8**	80.1	66.4	**88.6**	84.3	75.4
Normalized	99.32%	84.42%	69.75%	90.41%	74.94%	100%	95.15%	85.1%
Standard Deviation	0.5%	2.4%	2.3%	0.3%	1.2%	0.4%	2.7%	0.1%
Zstd Compression - 19 - D.S (MB/s)	2553	2476	2512	2535	2553	2543	**2576**	**2380**
Normalized	99.08%	96.11%	97.5%	98.42%	99.11%	98.7%	100%	92.38%
Standard Deviation	0.7%	1.2%	2.2%	0.4%	0.2%	0.2%	0.7%	0.4%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	**1192**	**102.7**	155.9	292.7	401.2	1117	278.6	289.1
Normalized	100%	8.61%	13.07%	24.55%	33.65%	93.63%	23.36%	24.25%
Standard Deviation	0.3%	1.6%	0.2%	1.6%	2.4%	0.3%	0.8%	1.2%
Zstd Compression - 3, Long Mode - D.S (MB/s)	3234	**2937**	3008	3172	3008	3220	**3252**	3051
Normalized	99.46%	90.33%	92.51%	97.55%	92.5%	99.01%	100%	93.81%
Standard Deviation	0.1%	0.4%	0.4%	0.7%	0.1%	0%	0.9%	1.6%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	**1004**	**125.0**	169.4	324.9	391.3	936.1	314.3	305.5
Normalized	100%	12.45%	16.88%	32.37%	38.99%	93.26%	31.31%	30.44%
Standard Deviation	0.7%	0.4%	0.8%	1.7%	1%	1.3%	0.9%	1.1%
Zstd Compression - 8, Long Mode - D.S (MB/s)	3199	**2930**	3013	3199	3031	3199	**3249**	3040
Normalized	98.46%	90.19%	92.74%	98.47%	93.29%	98.48%	100%	93.57%
Standard Deviation		0.1%	0.4%	0.5%	0.2%	0.8%	0.7%	0.4%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	**45.4**	38.3	**15.1**	41.2	18.1	45.3	43.1	41.1
Normalized	100%	84.36%	33.26%	90.75%	39.87%	99.78%	94.93%	90.53%
Standard Deviation	2.5%	0.3%	0%	2.3%	2.4%	2.4%	4.2%	1%
Zstd Compression - 19, Long Mode - D.S (MB/s)	2625	2507	2633	2611	2672	2596	**2674**	**2469**
Normalized	98.15%	93.75%	98.46%	97.65%	99.9%	97.08%	100%	92.32%

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Standard Deviation	0.9%	0.2%	0.5%	0.1%	0.5%	0.2%	0.2%	0.1%
Zstd Compression - 3 - Compression Speed (MB/s)	7795	6073	4532	6223	6546	7130	6426	6170
Normalized	100%	77.91%	58.13%	79.83%	83.97%	91.47%	82.43%	79.15%
Standard Deviation	3.1%	3.1%	0.6%	2.4%	6.5%	3.4%	2.5%	2.4%
Zstd Compression - 3 - D.S (MB/s)	2962	3014	2964		2895	2998	3035	
Normalized	97.58%	99.29%	97.64%		95.36%	98.78%	100%	
Standard Deviation	0.3%	0.5%			0.8%	0.7%	0.2%	
Zstd Compression - 19 - Compression Speed (MB/s)	88.1	81.4	80.1	81.8	88.7	88.2	85.8	80.2
Normalized	99.32%	91.77%	90.3%	92.22%	100%	99.44%	96.73%	90.42%
Standard Deviation	0.3%	0.7%	0.7%	2%	0.5%	1.4%	0.8%	0.7%
Zstd Compression - 19 - D.S (MB/s)	2595	2635	2561	2637	2581	2643	2660	2595
Normalized	97.54%	99.06%	96.28%	99.13%	97.05%	99.38%	100%	97.56%
Standard Deviation	0.1%	0.4%	0.3%	1.2%	0.1%	0.9%	0.3%	0.5%
Zstd Compression - 3, Long Mode - Compression Speed (MB/s)	1138	262.9	261.1	302.7	1143	1189	294.9	277.9
Normalized	95.75%	22.11%	21.96%	25.46%	96.14%	100%	24.8%	23.37%
Standard Deviation	0.3%	2.4%	2.3%	2.5%	0.6%	0.4%	0.3%	3.2%
Zstd Compression - 3, Long Mode - D.S (MB/s)	3175	3191	3101	3184	3095	3220	3233	3175
Normalized	98.21%	98.69%	95.9%	98.48%	95.75%	99.59%	100%	98.22%
Standard Deviation	0.2%	0.8%	0.8%	0.3%	0.8%	0.6%	0.4%	1.6%
Zstd Compression - 8, Long Mode - Compression Speed (MB/s)	1033	302.7	303.7	345.6	1038	1069	323.6	298.7
Normalized	96.68%	28.33%	28.42%	32.34%	97.13%	100%	30.28%	27.95%
Standard Deviation	0.4%	1.1%	2.1%	0.8%	0.8%	0.5%	1.5%	2.5%
Zstd Compression - 19, Long Mode - Compression Speed (MB/s)	47.9	46.7	45.7	44.8	47.1	50.0	47.7	46.1
Normalized	95.8%	93.4%	91.4%	89.6%	94.2%	100%	95.4%	92.2%
Standard Deviation	1.4%	3.5%	4.5%	2.7%	1.9%	1.1%	1.8%	2.7%
Zstd Compression - 19, Long Mode - D.S (MB/s)	2687	2693	2659	2695	2647	2727	2742	2679
Normalized	98%	98.21%	96.96%	98.29%	96.52%	99.46%	100%	97.71%
Standard Deviation	0.6%	0.2%	0.6%	0.8%	0.2%	0.1%	0.1%	0.3%
Zstd Compression - 8, Long Mode - D.S (MB/s)							3293	3204
Normalized							100%	97.28%
Standard Deviation							1.3%	2.6%

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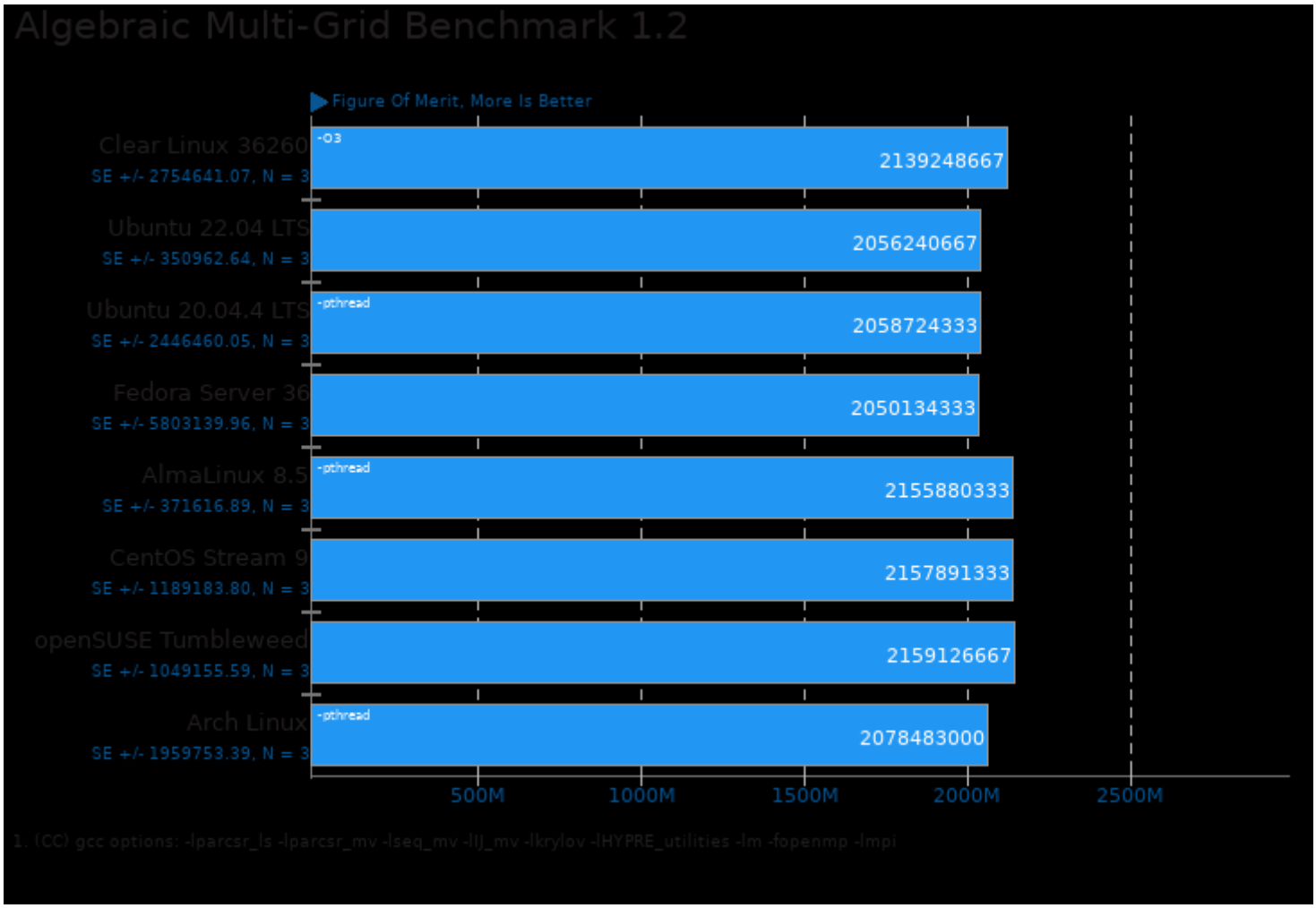

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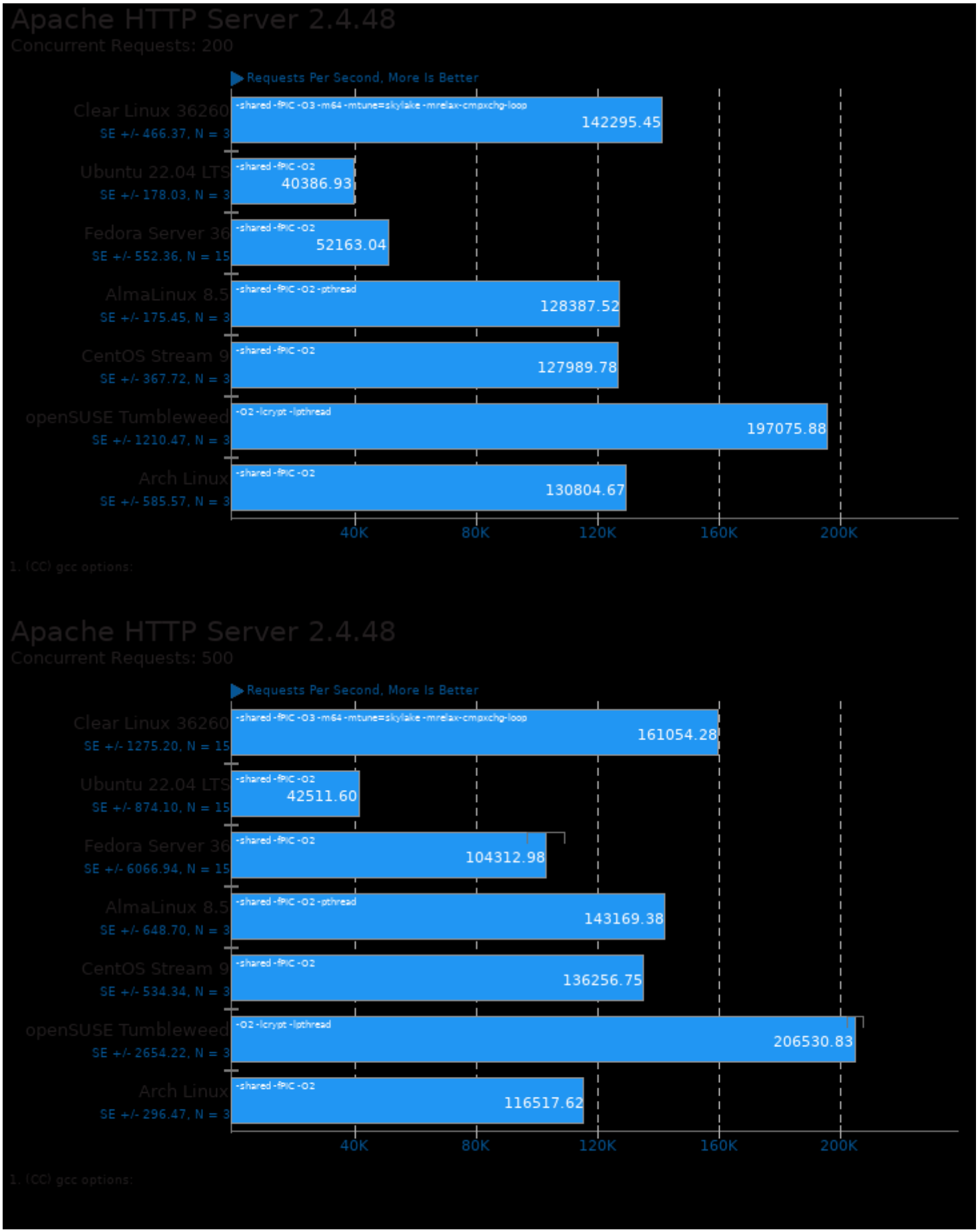

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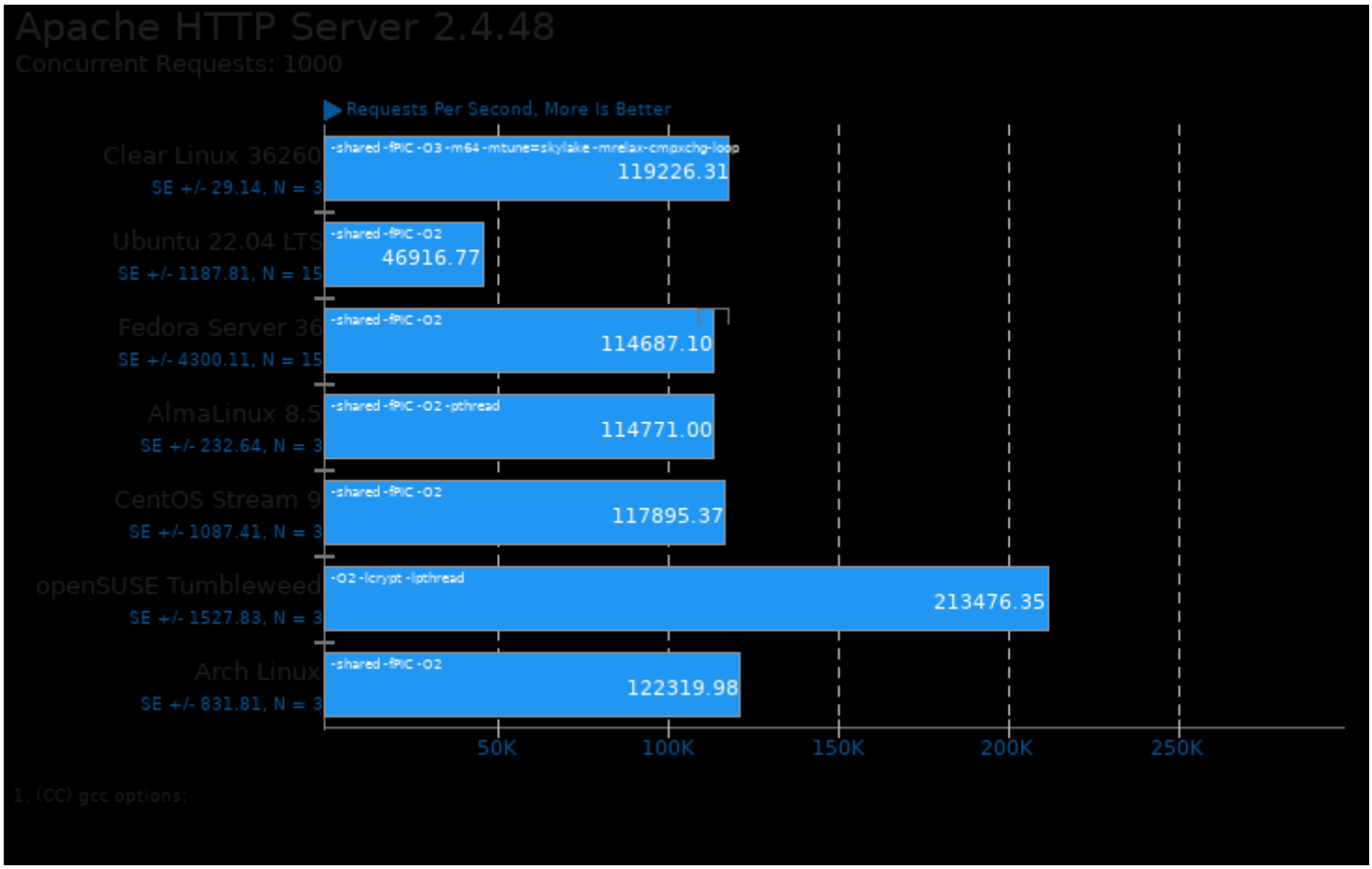

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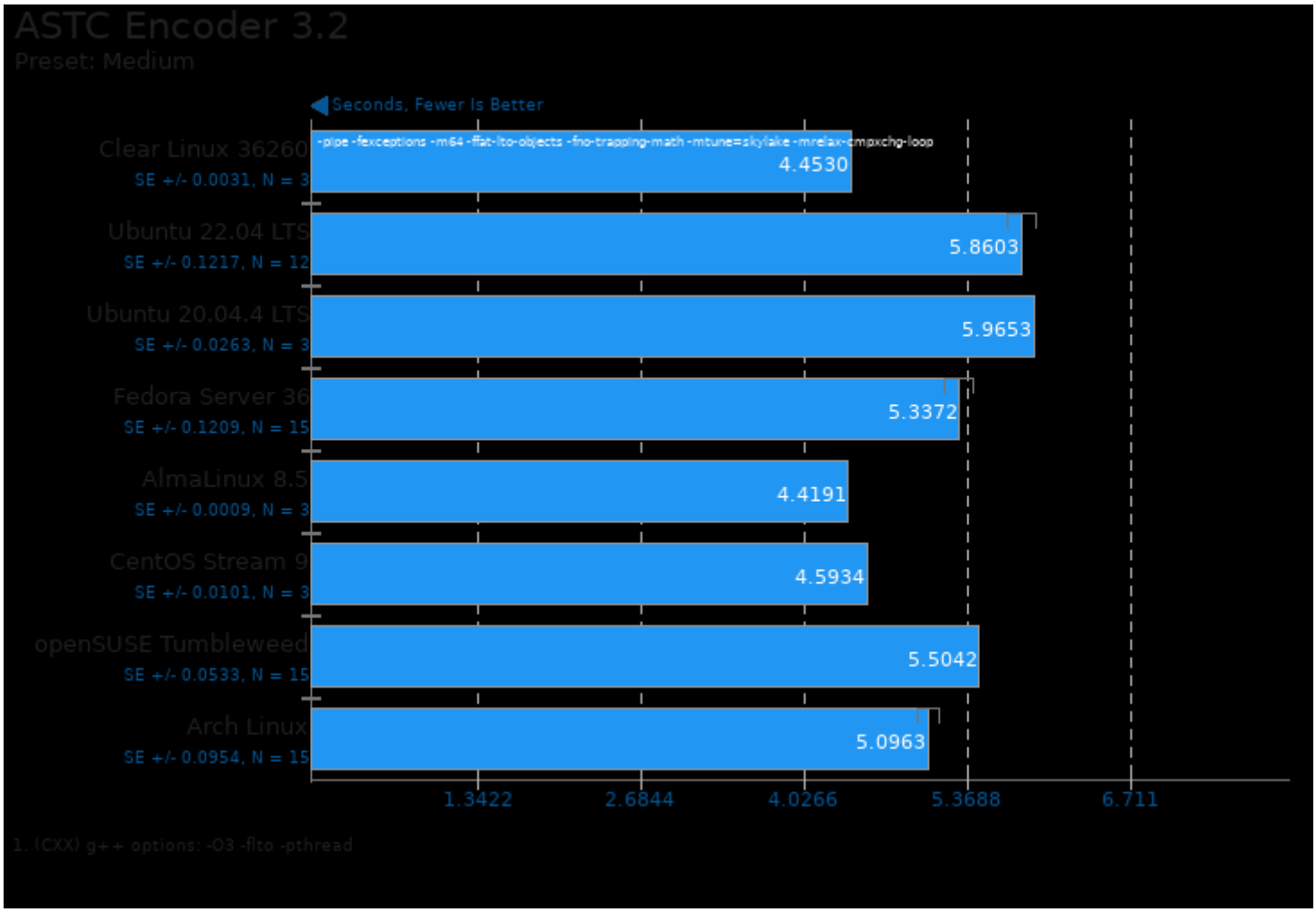

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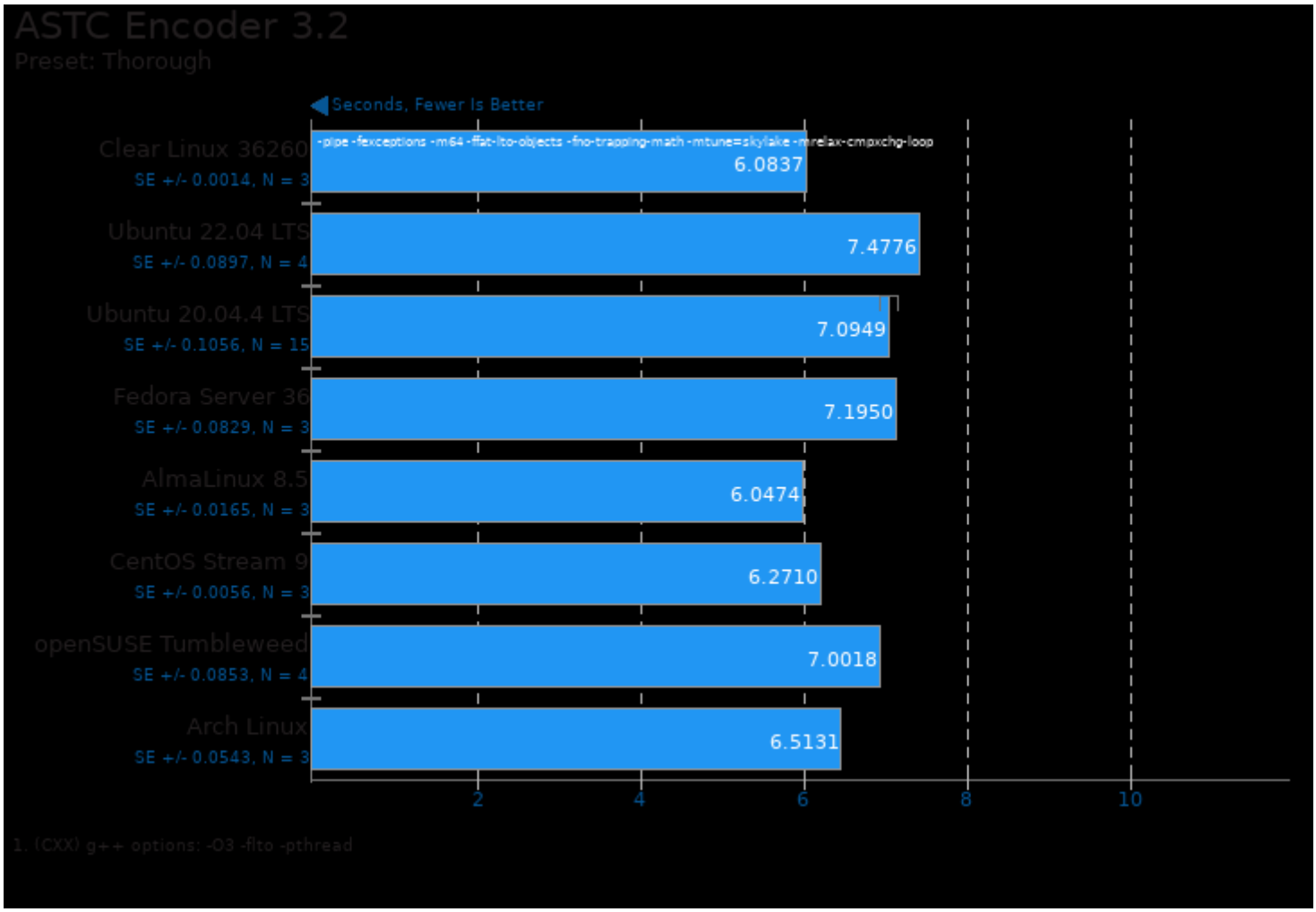

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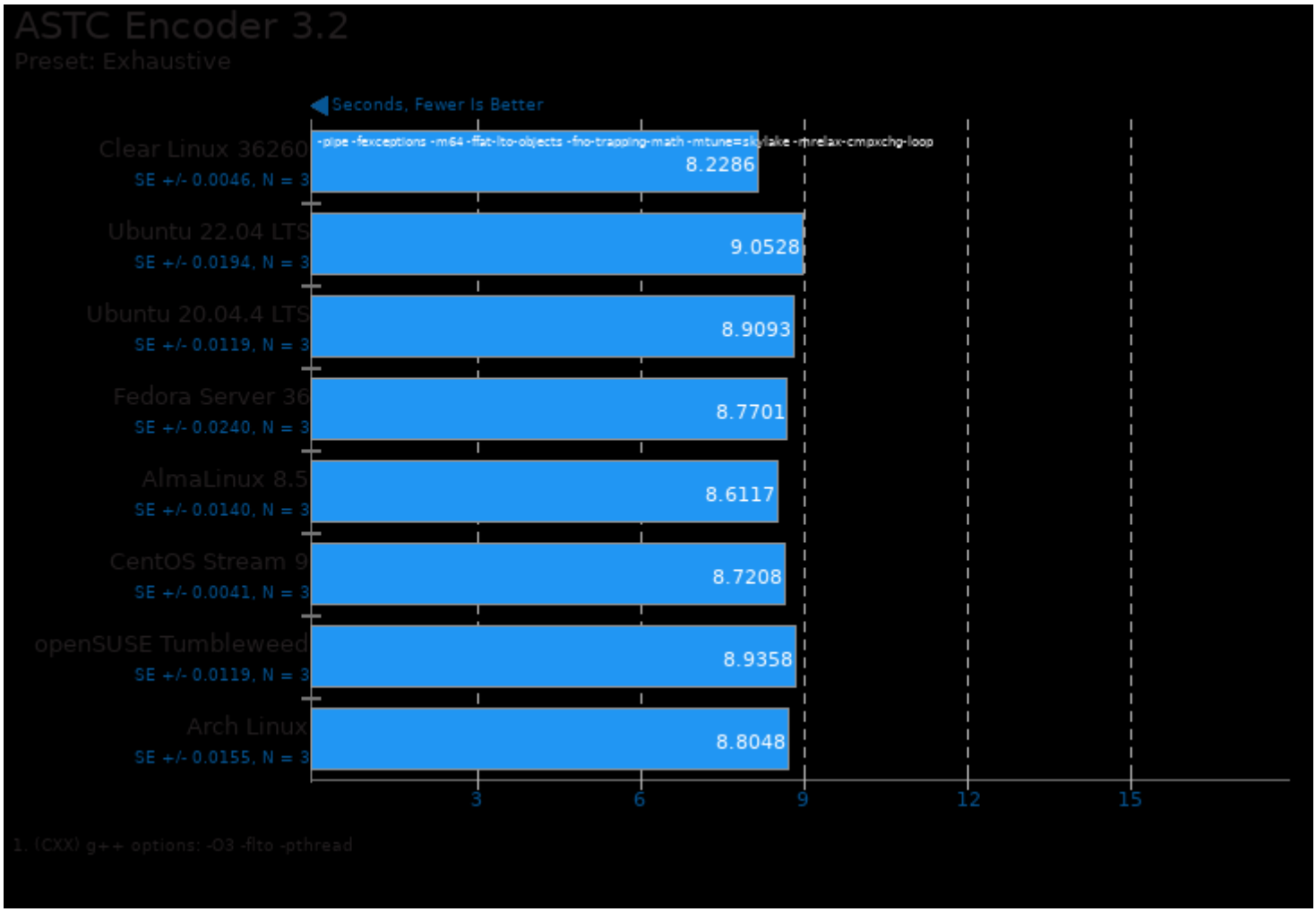

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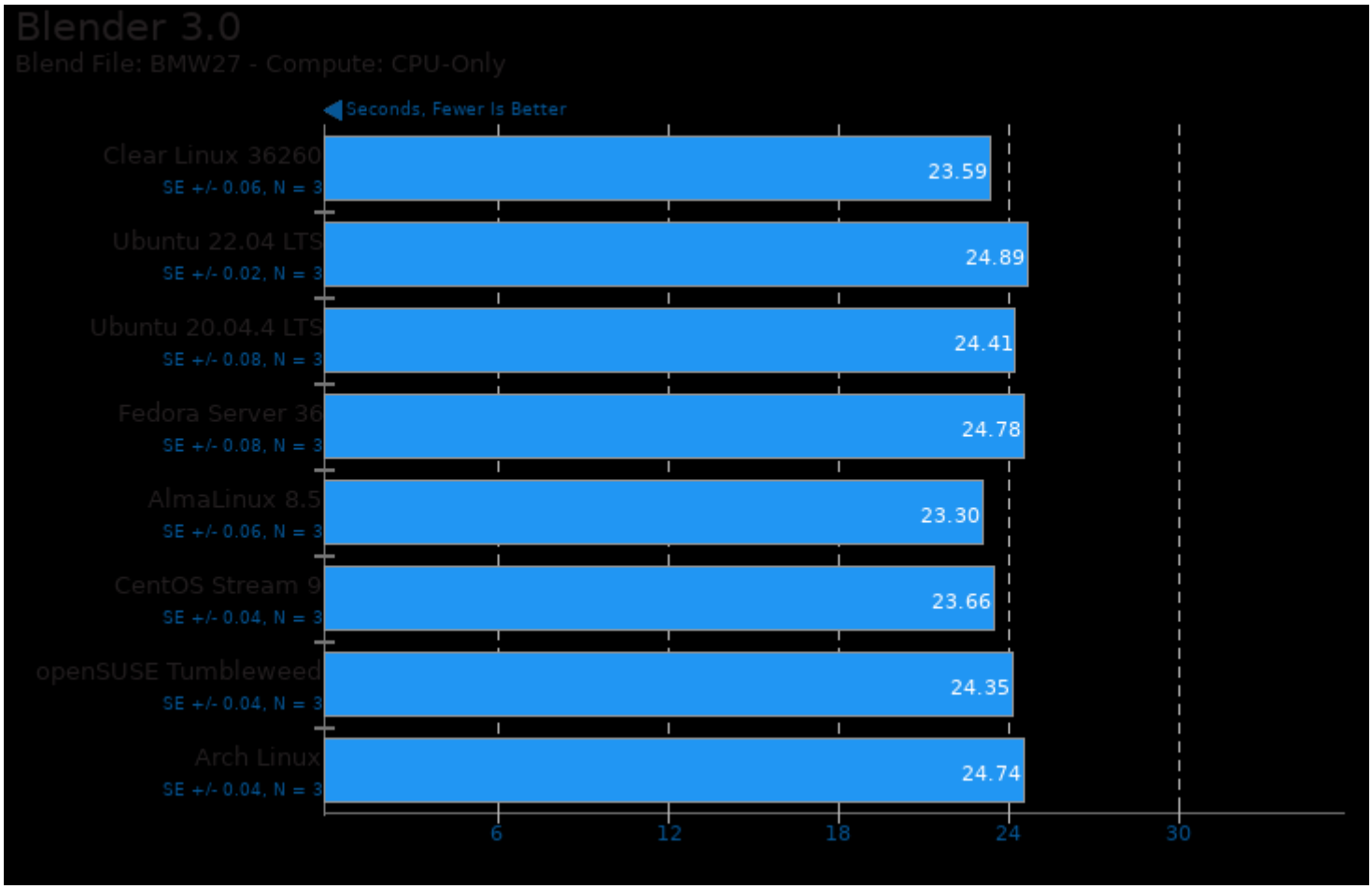

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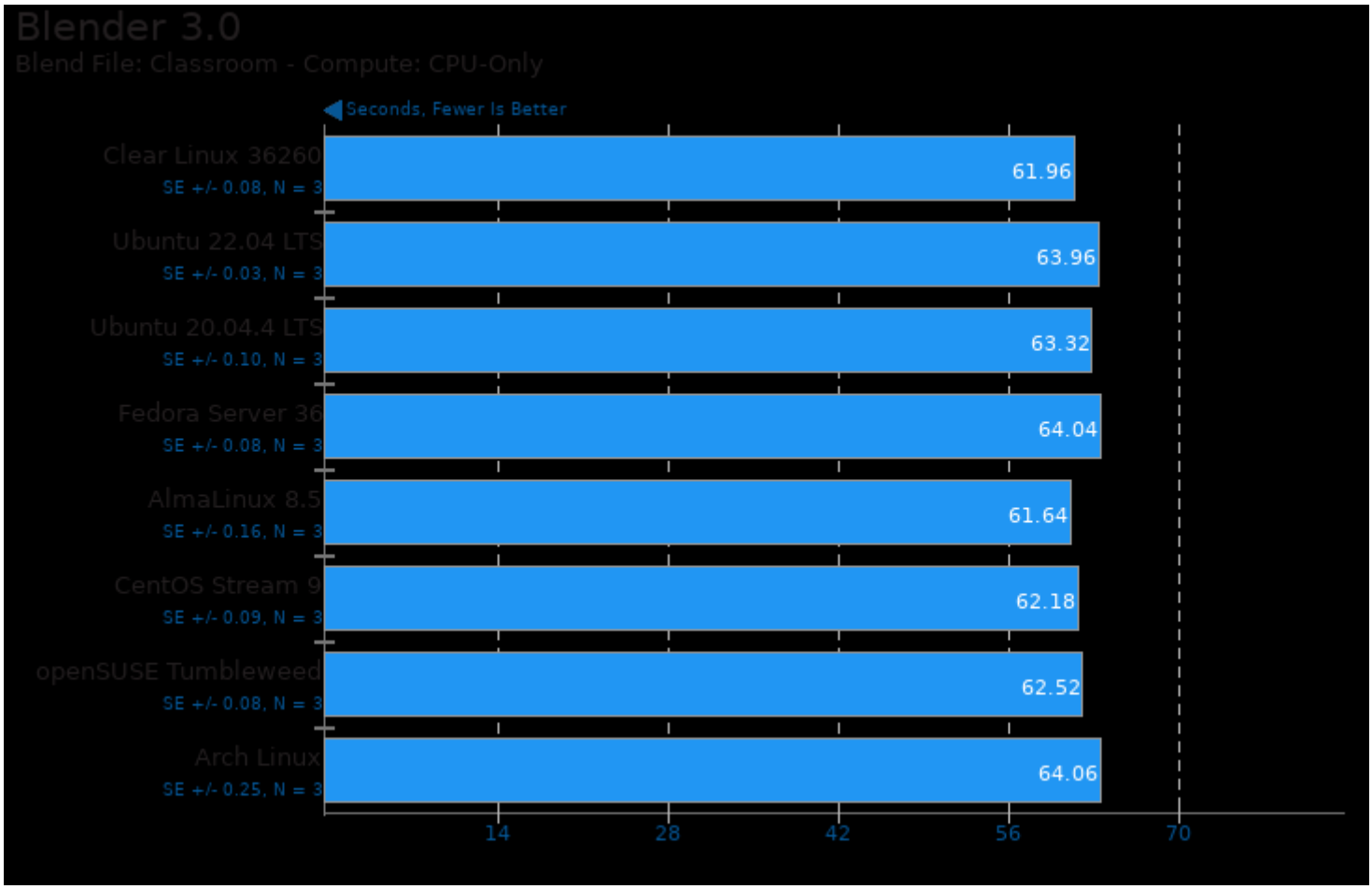

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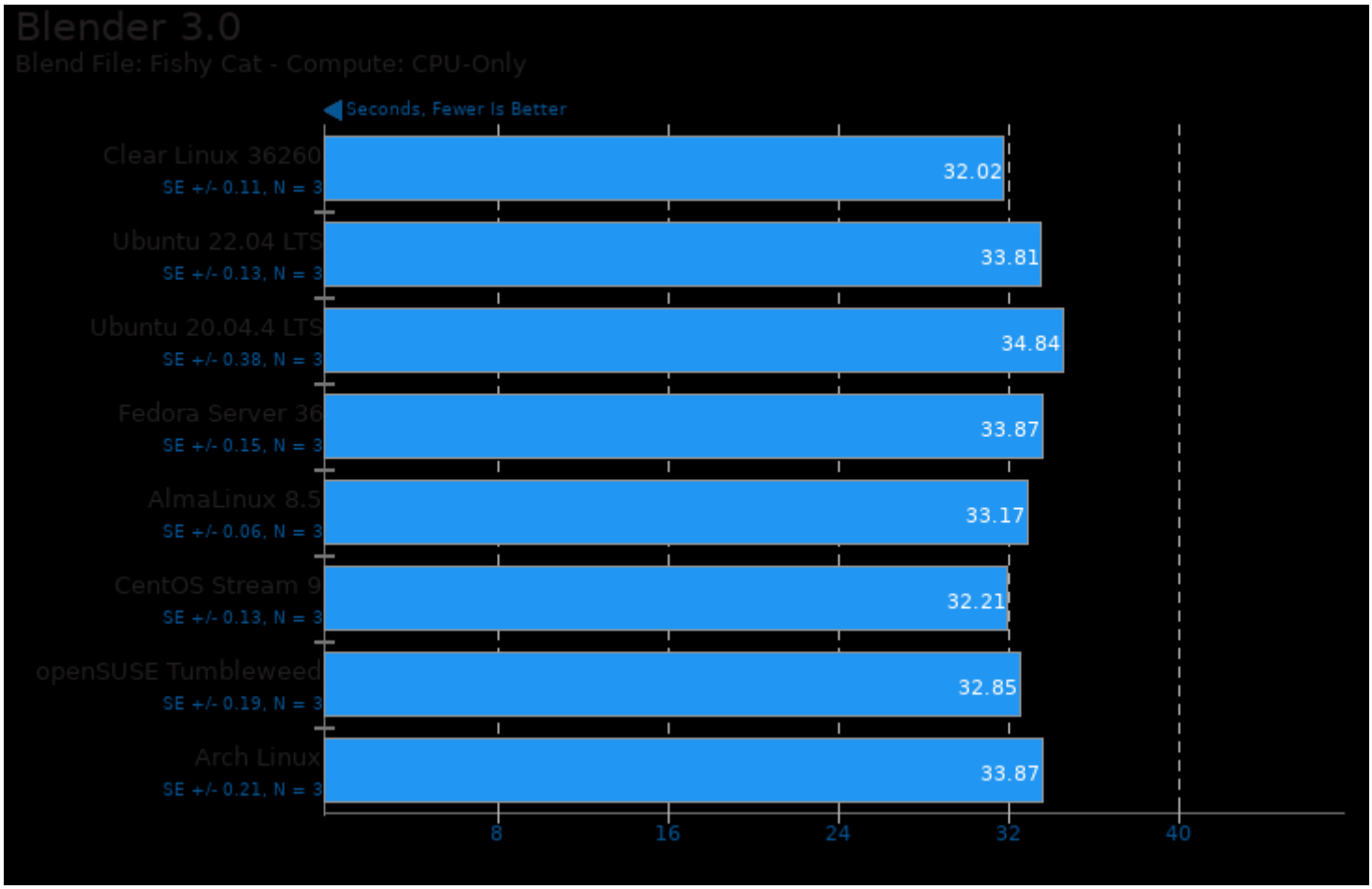

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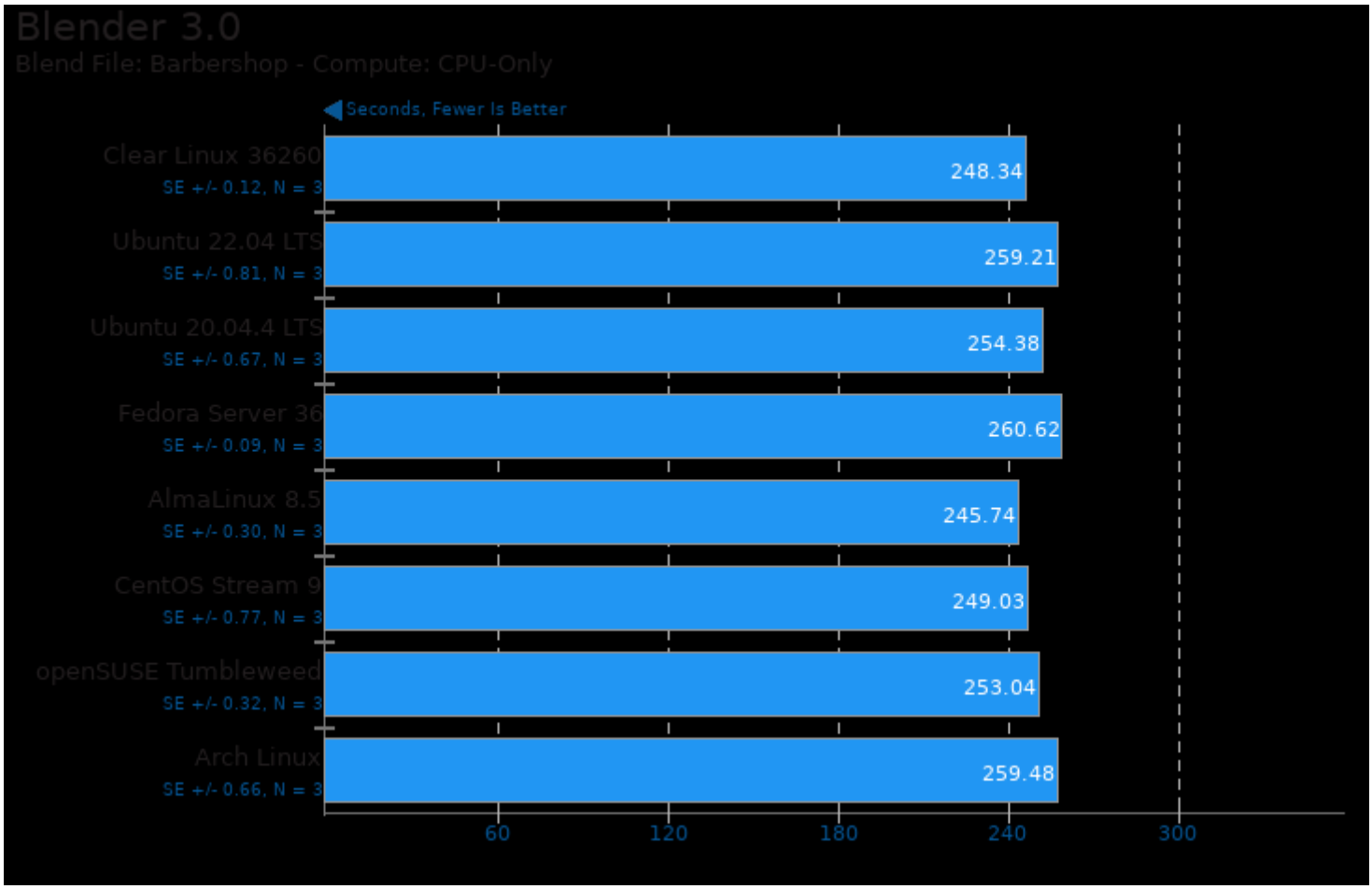

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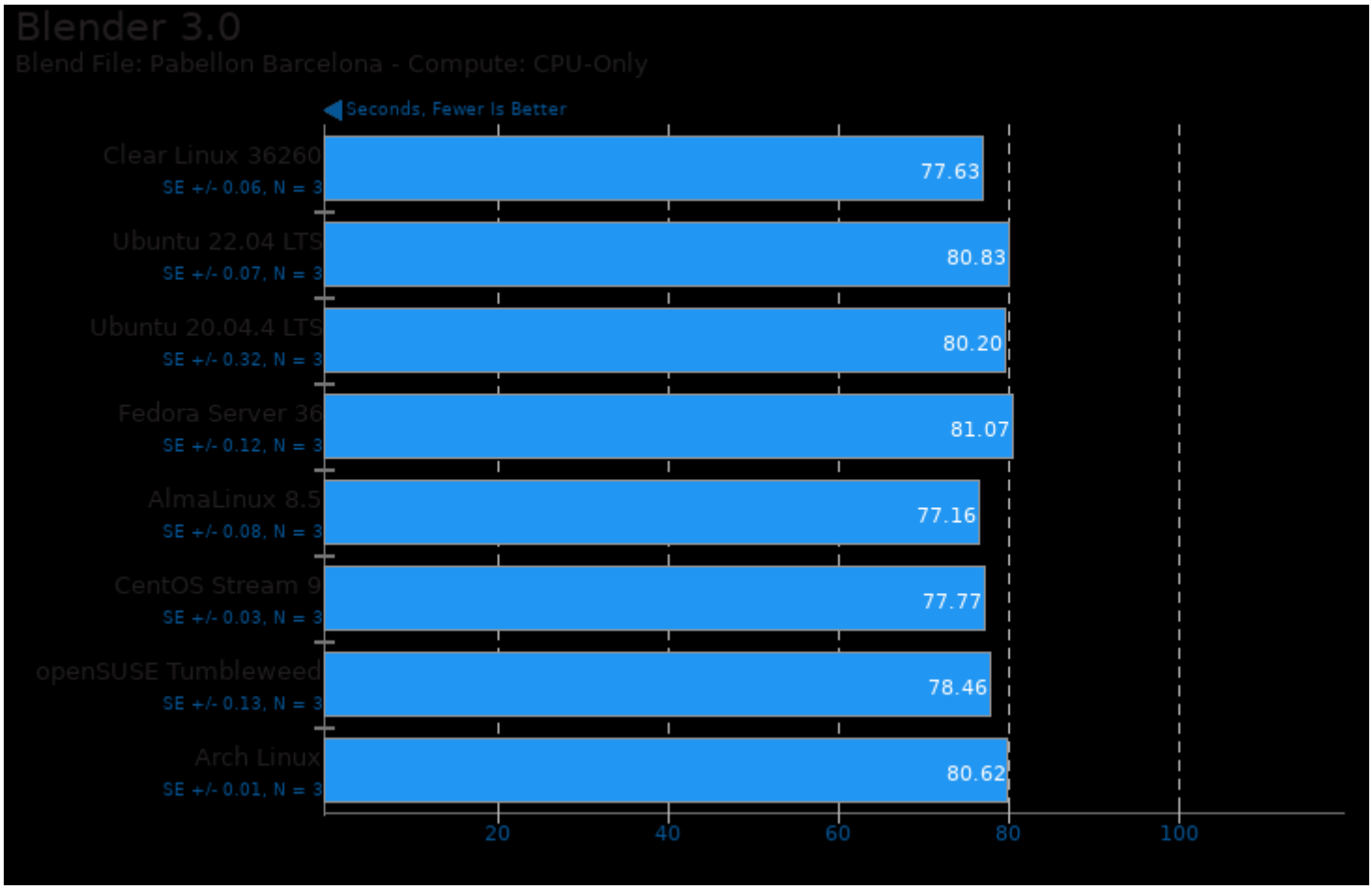

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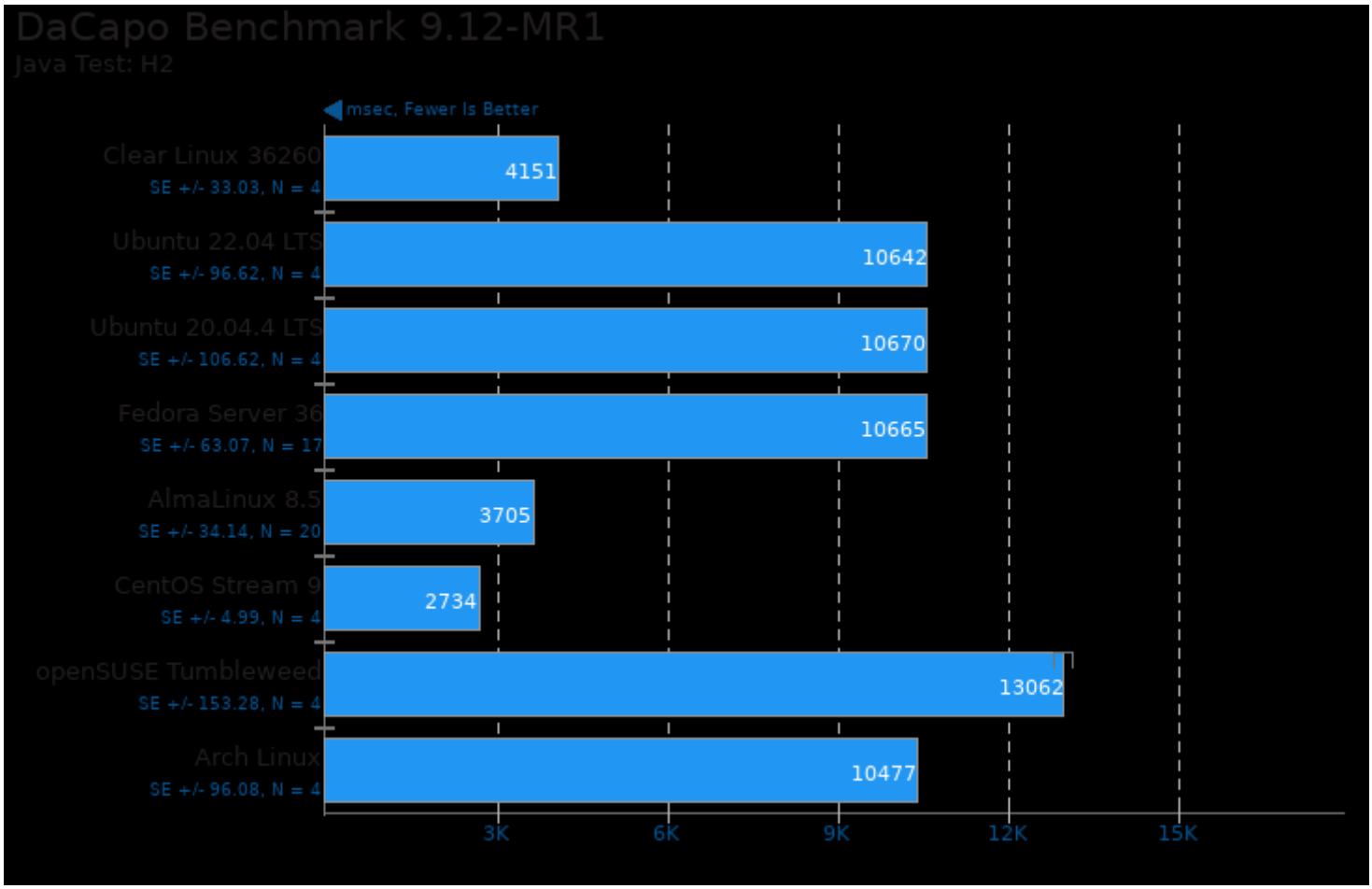

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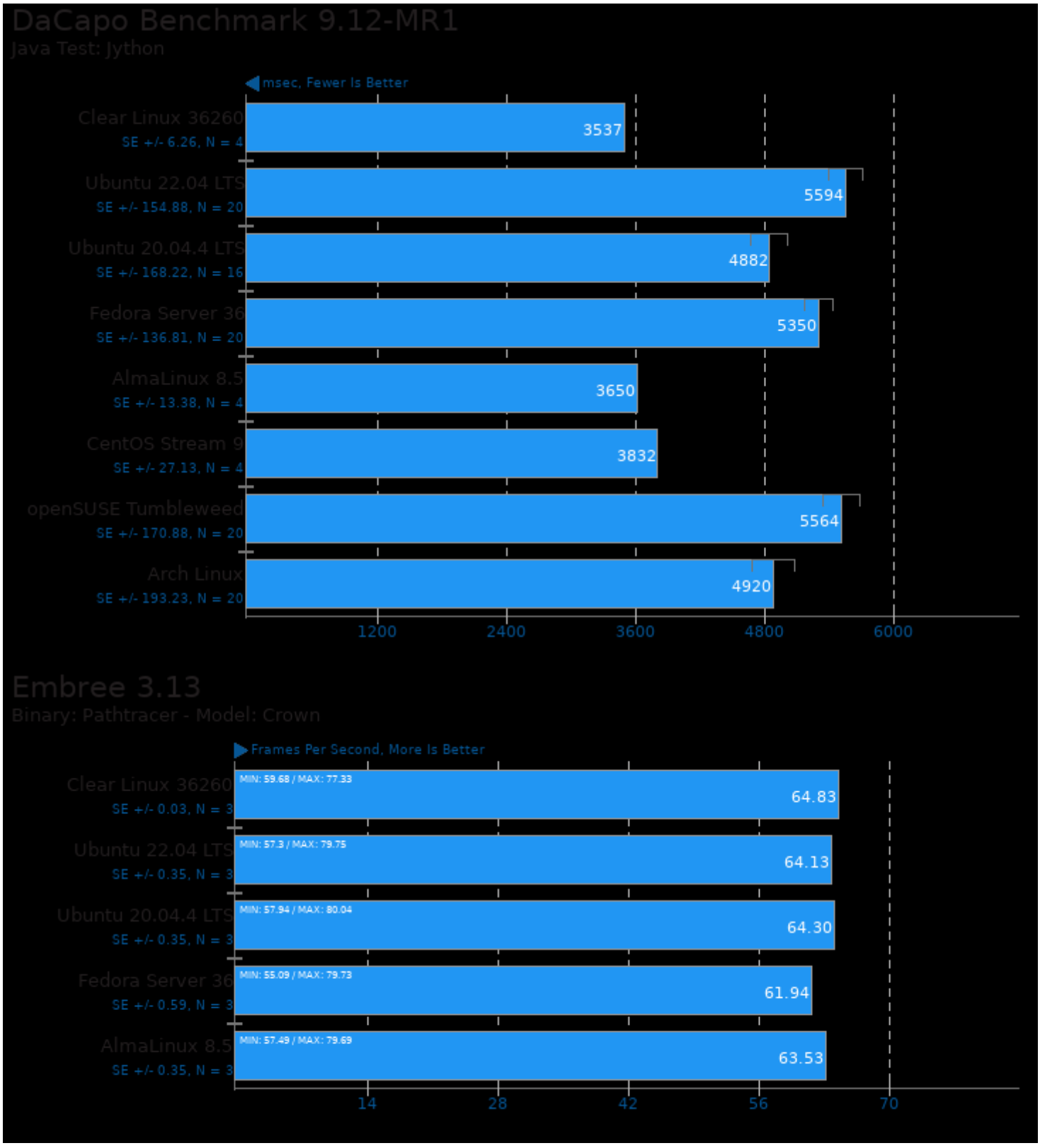
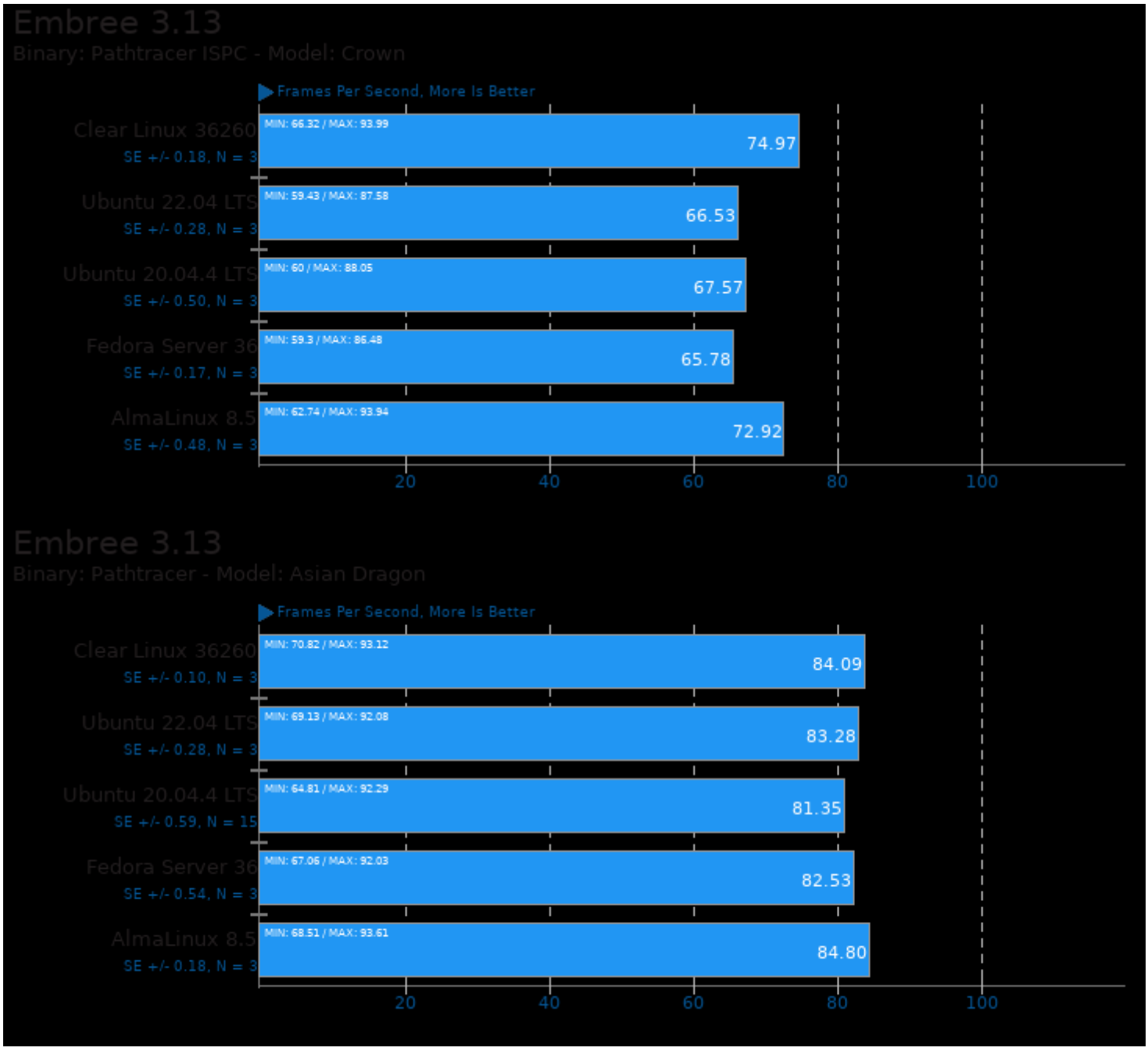
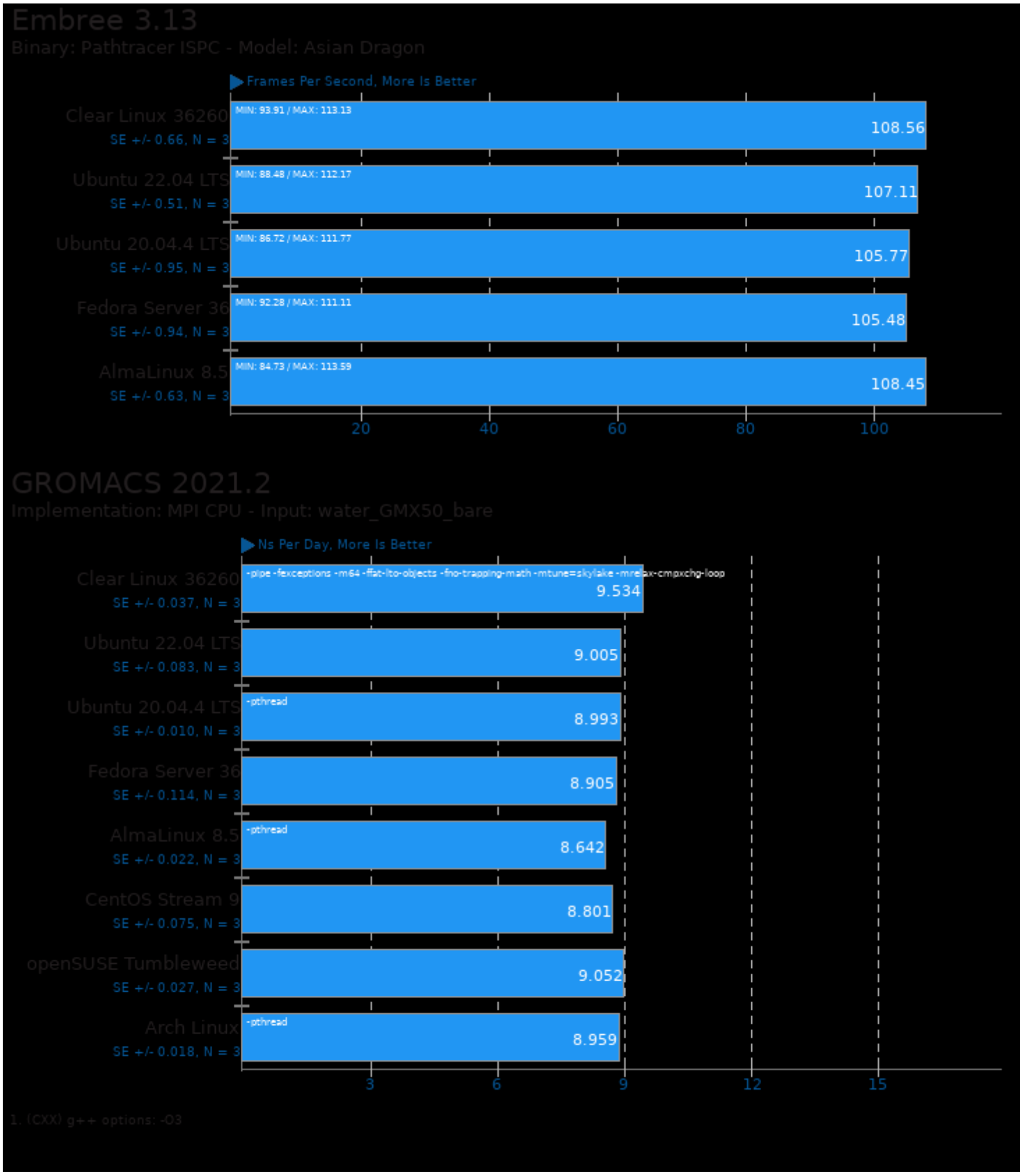
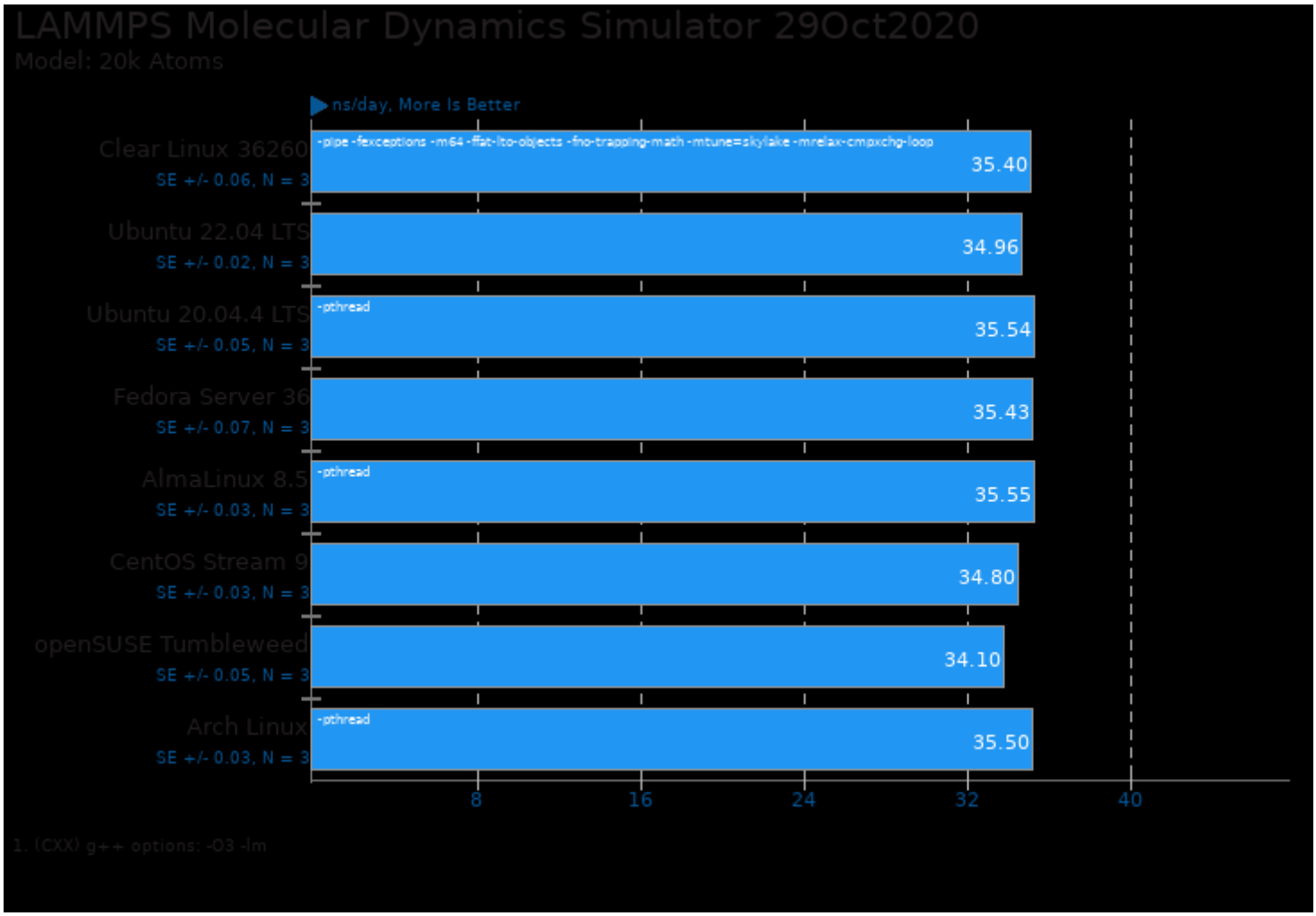


Clear Linux 36260

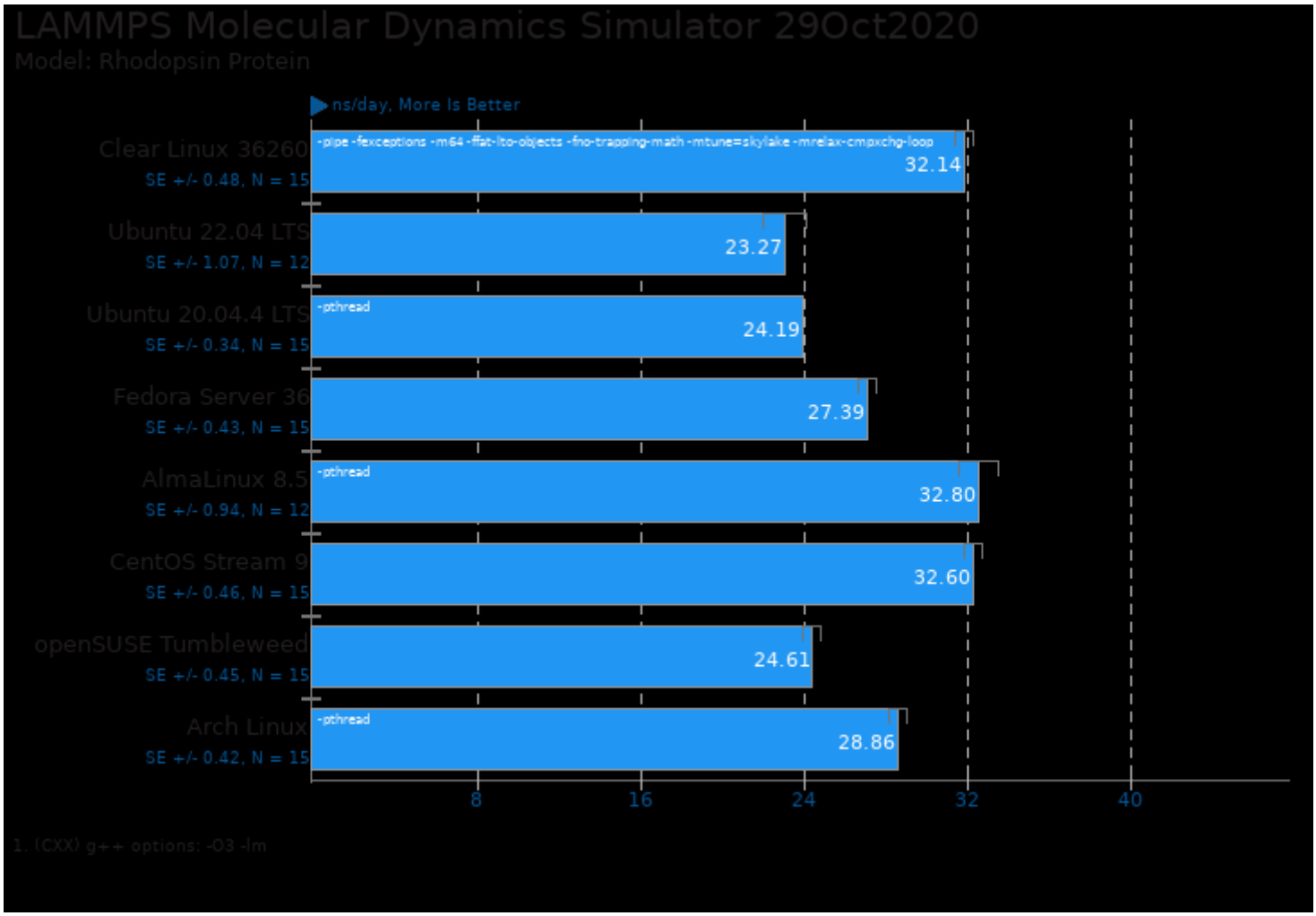


Clear Linux 36260

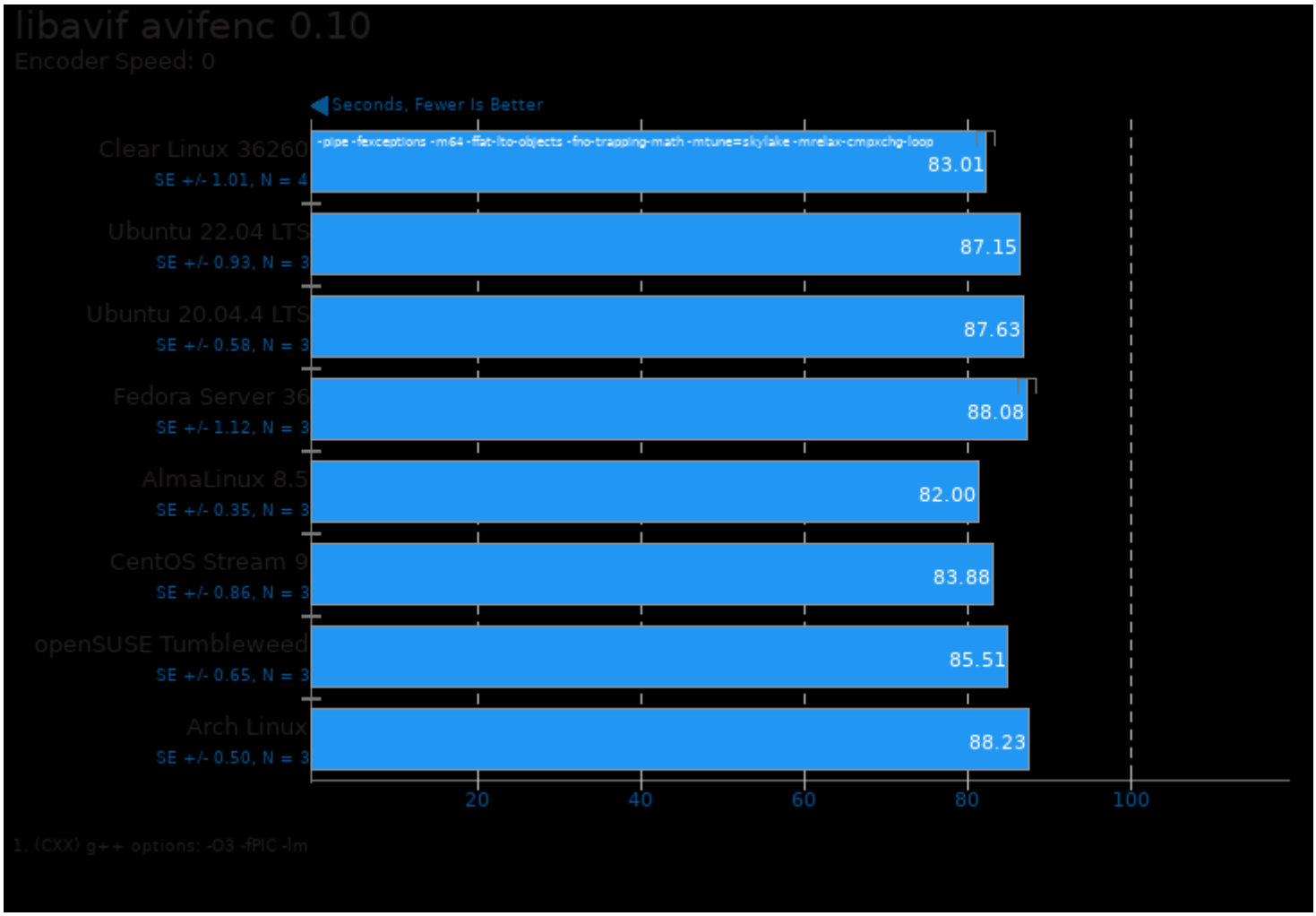



LAMMPS Molecular Dynamics Simulator 29Oct2020
Model: 20k Atoms
ns/day, More Is Better
Clear Linux 36260
SE +/- 0.06, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
35.40
Ubuntu 22.04 LTS
SE +/- 0.02, N = 3
34.96
Ubuntu 20.04.4 LTS
SE +/- 0.05, N = 3
-pthread
35.54
Fedora Server 36
SE +/- 0.07, N = 3
35.43
AlmaLinux 8.5
SE +/- 0.03, N = 3
-pthread
35.55
CentOS Stream 9
SE +/- 0.03, N = 3
34.80
openSUSE Tumbleweed
SE +/- 0.05, N = 3
34.10
Arch Linux
SE +/- 0.03, N = 3
-pthread
35.50
8
16
24
32
40
1. (CXX) g++ options: -O3 -lm

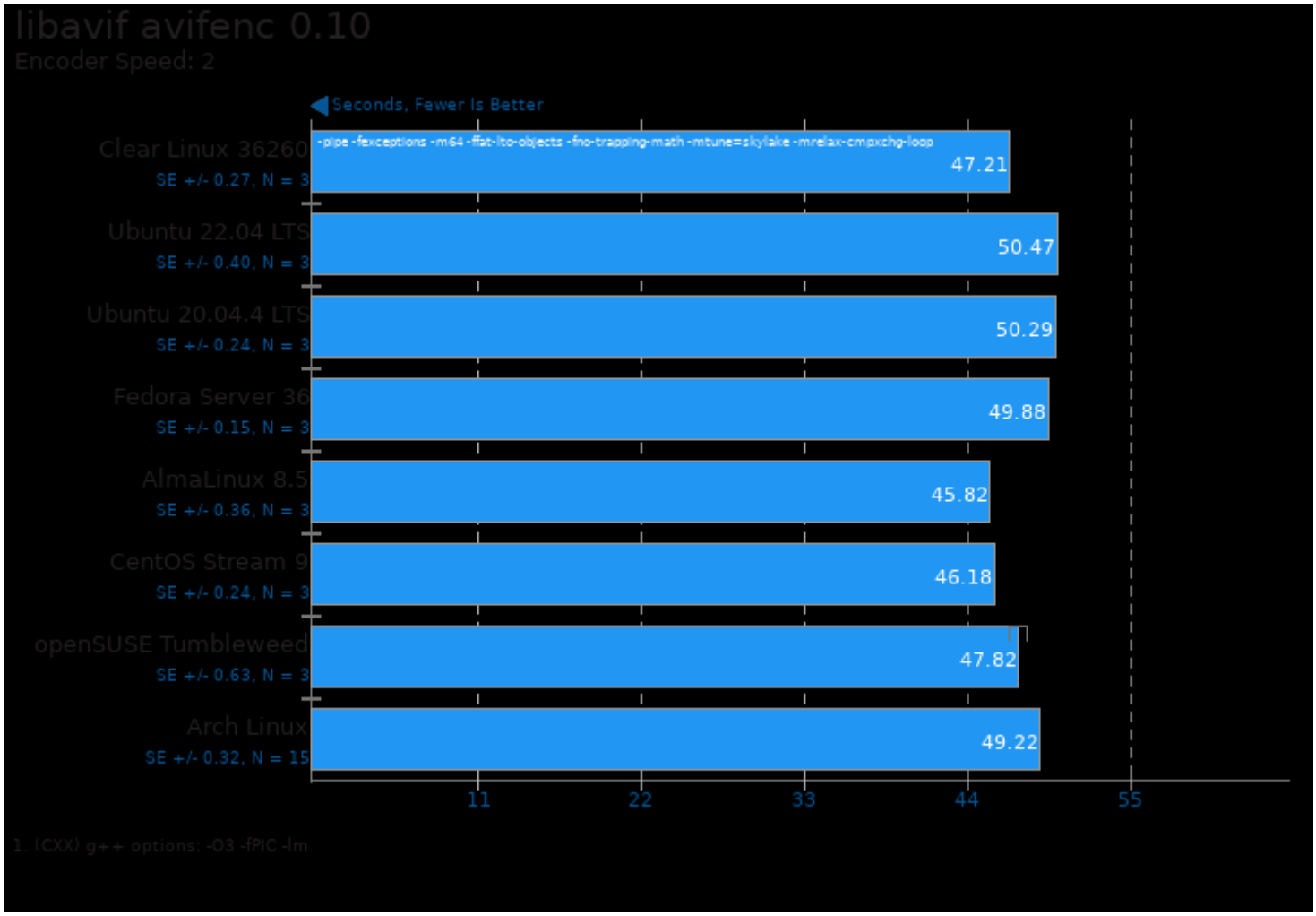
Clear Linux 36260



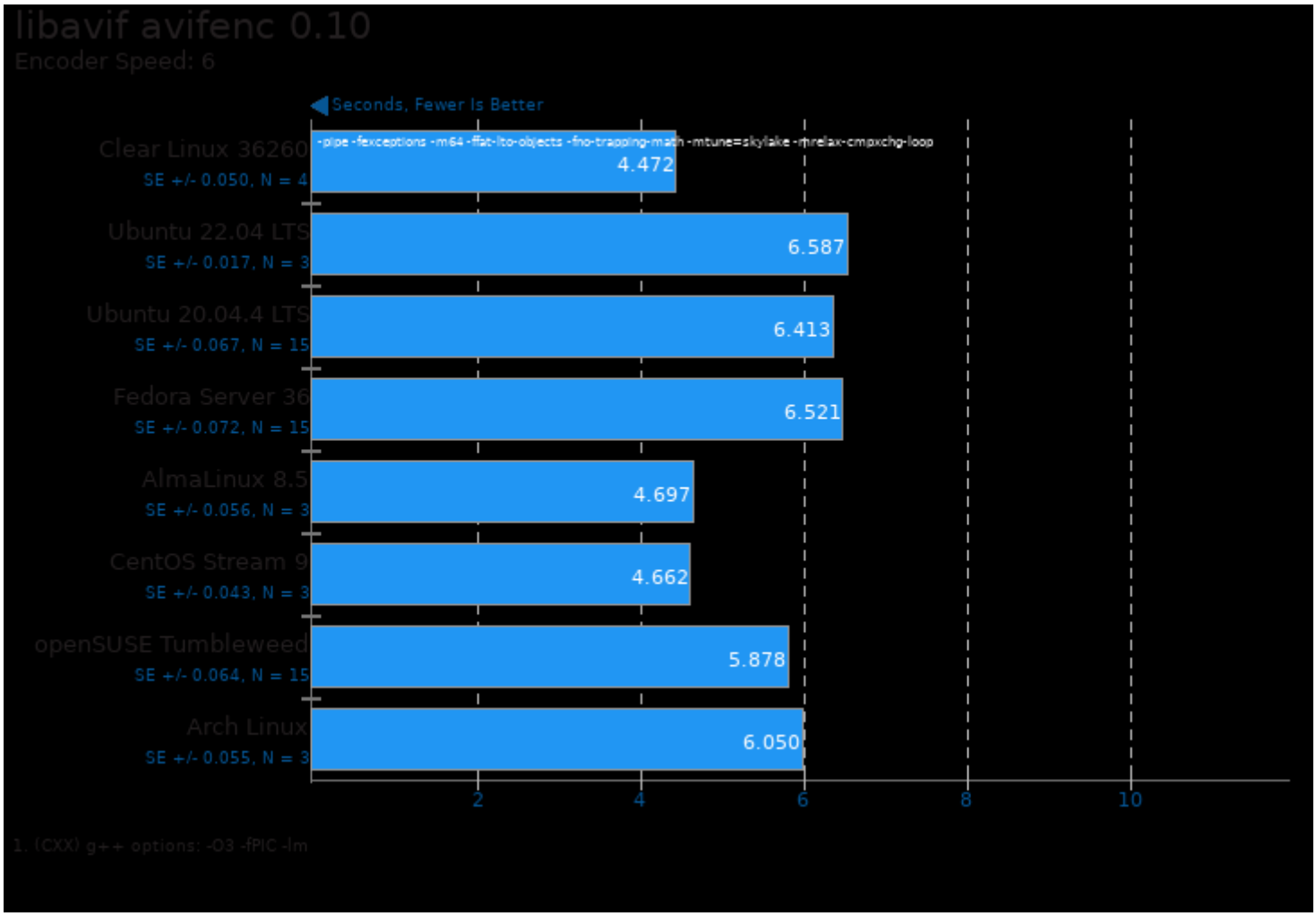
Clear Linux 36260



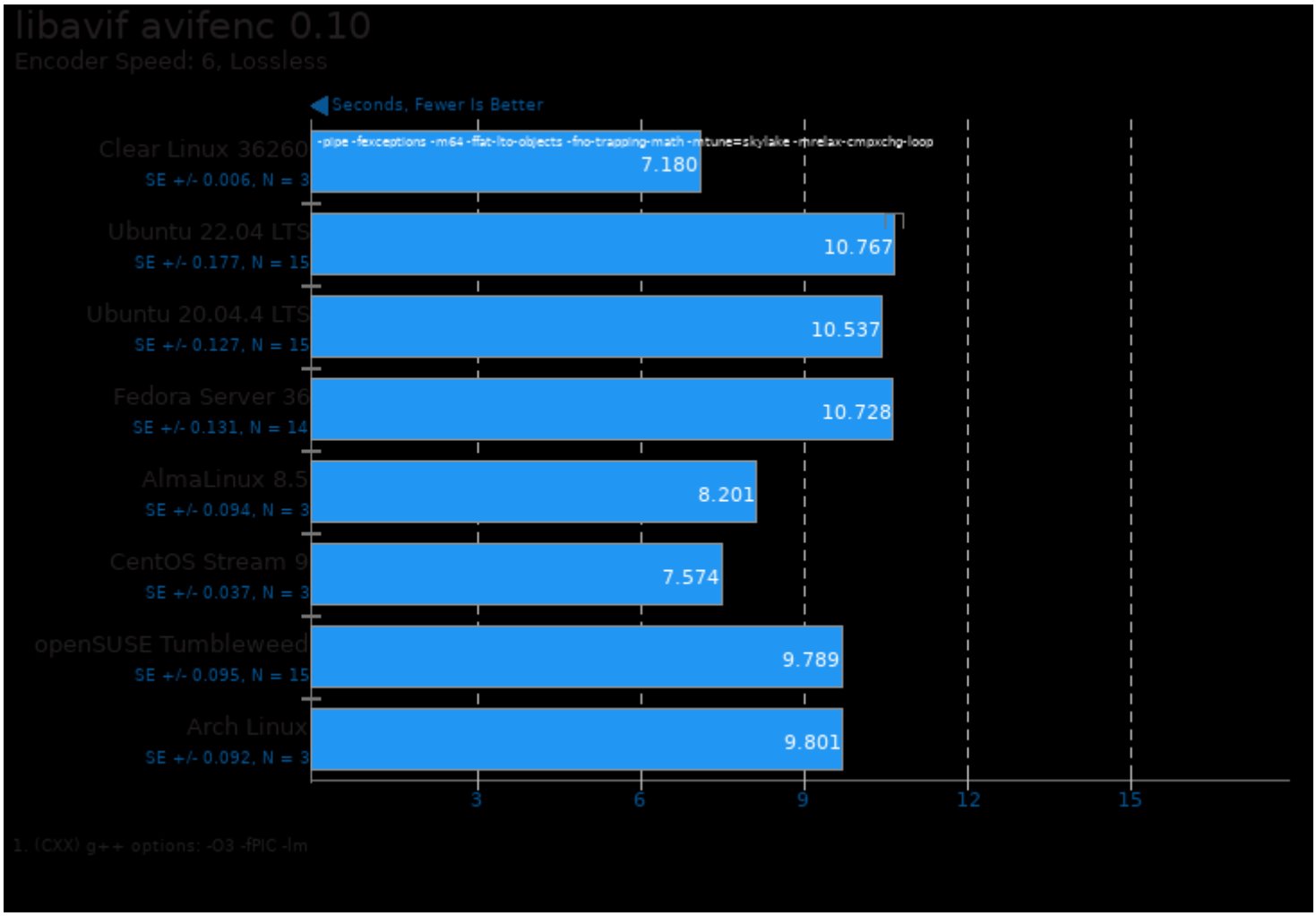
Clear Linux 36260



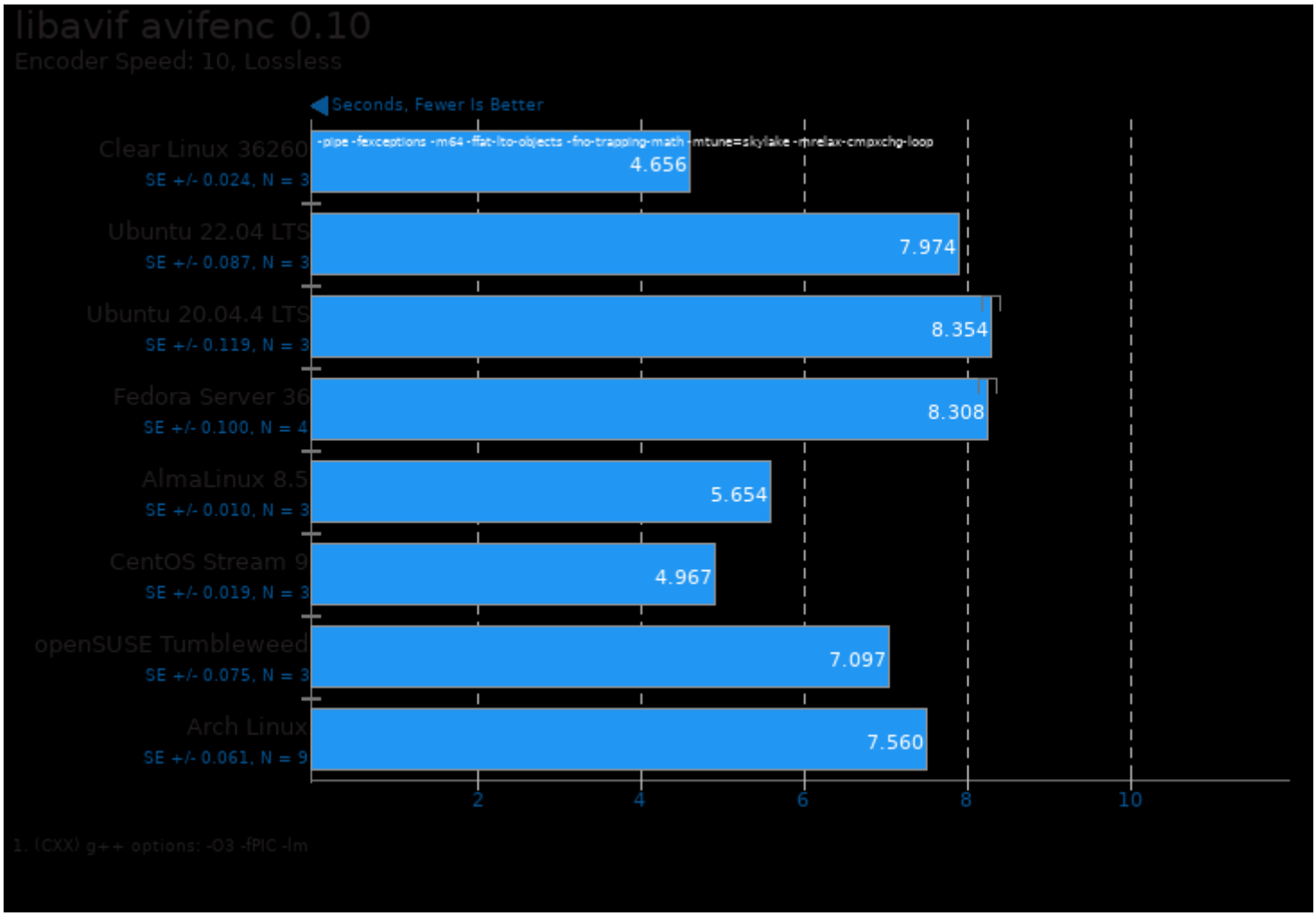
Clear Linux 36260



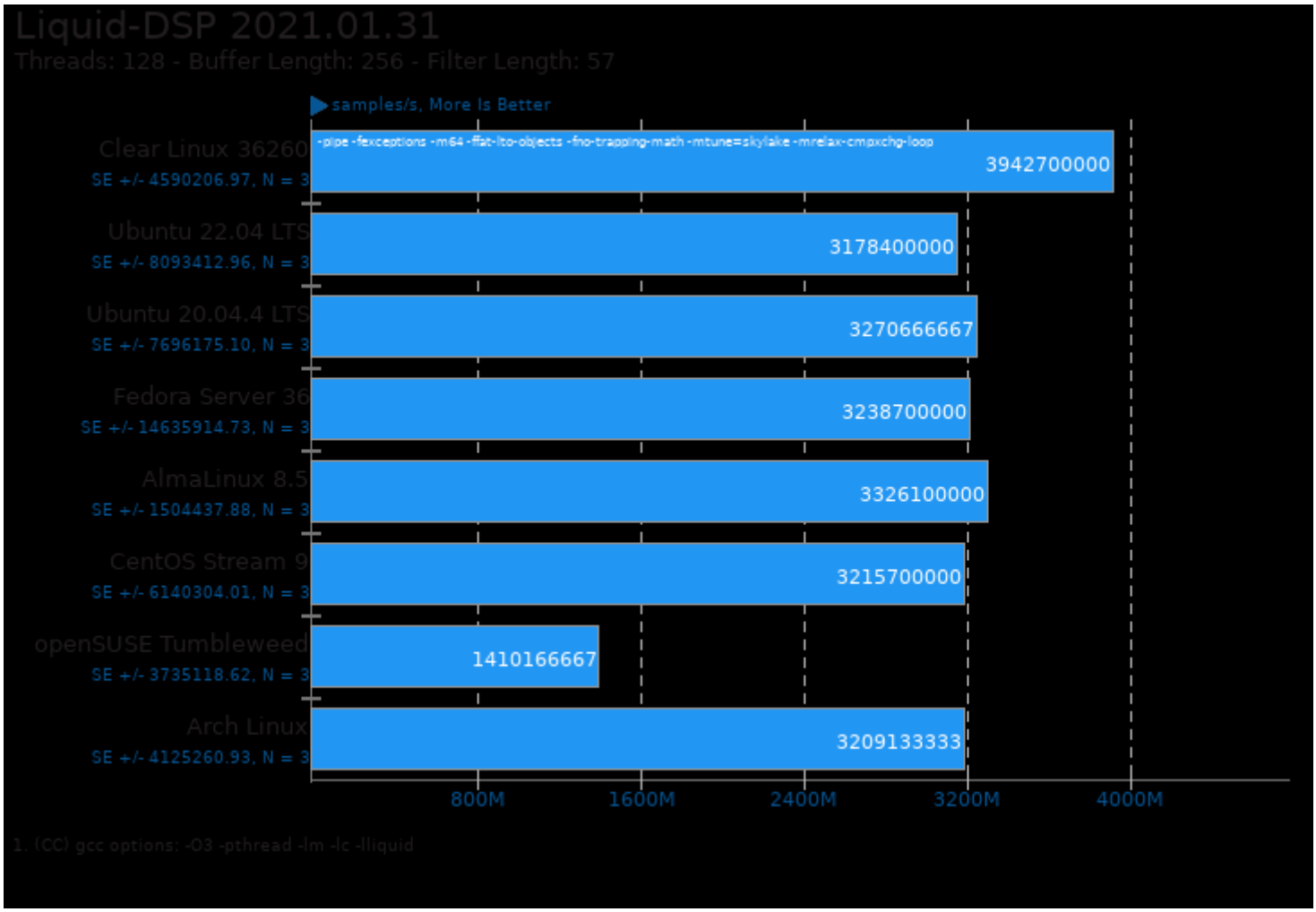
Clear Linux 36260

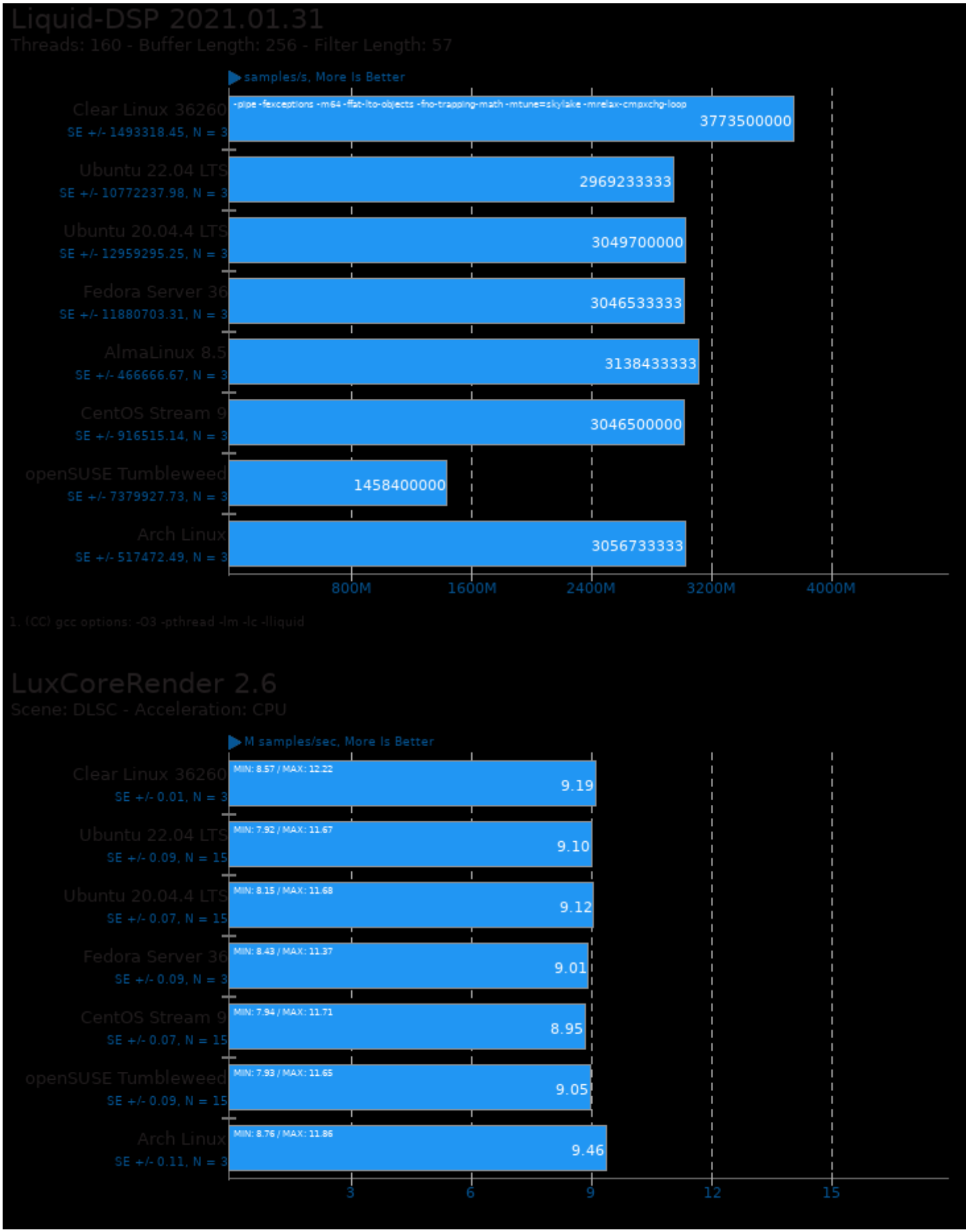


Clear Linux 36260

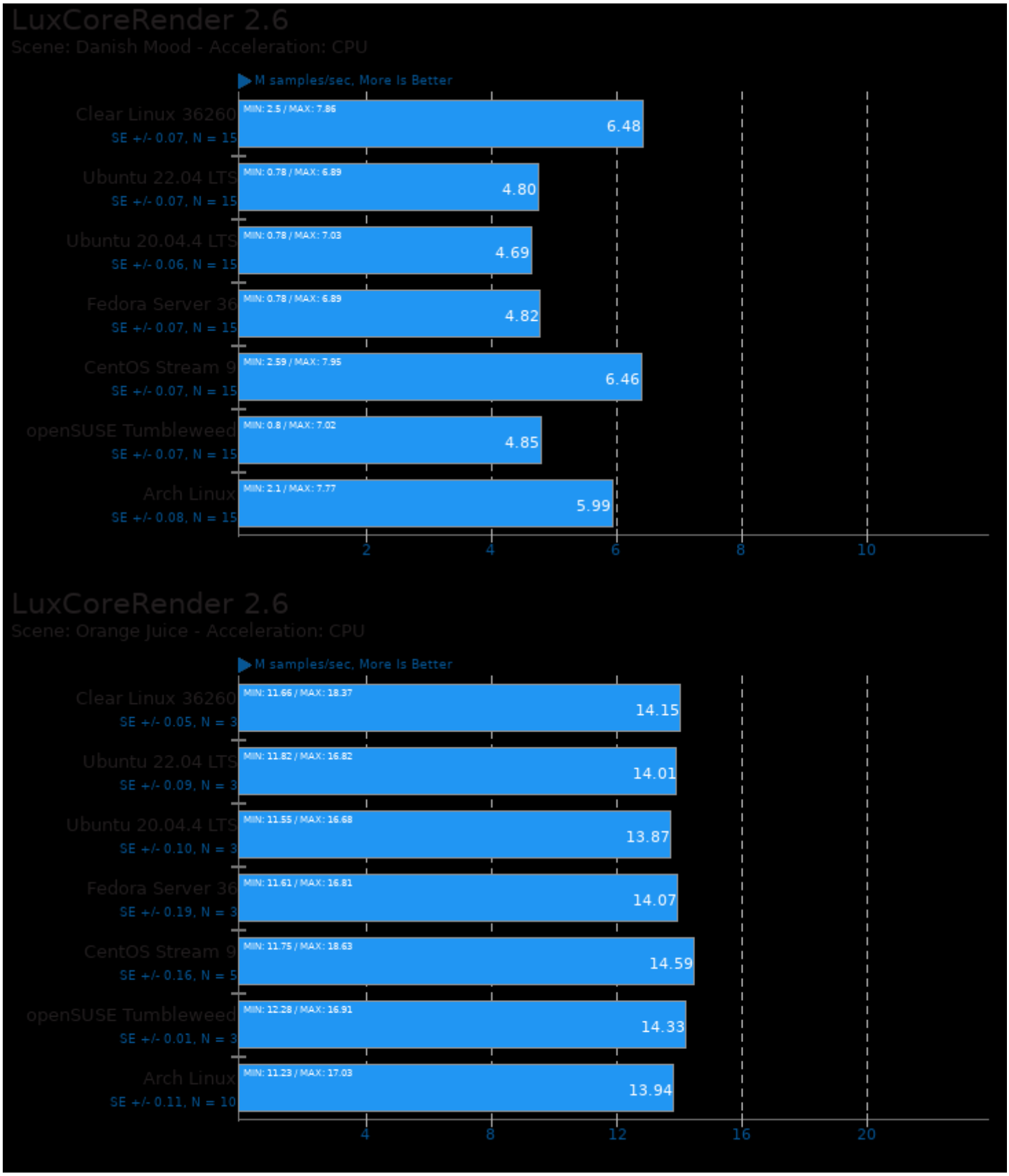


Clear Linux 36260

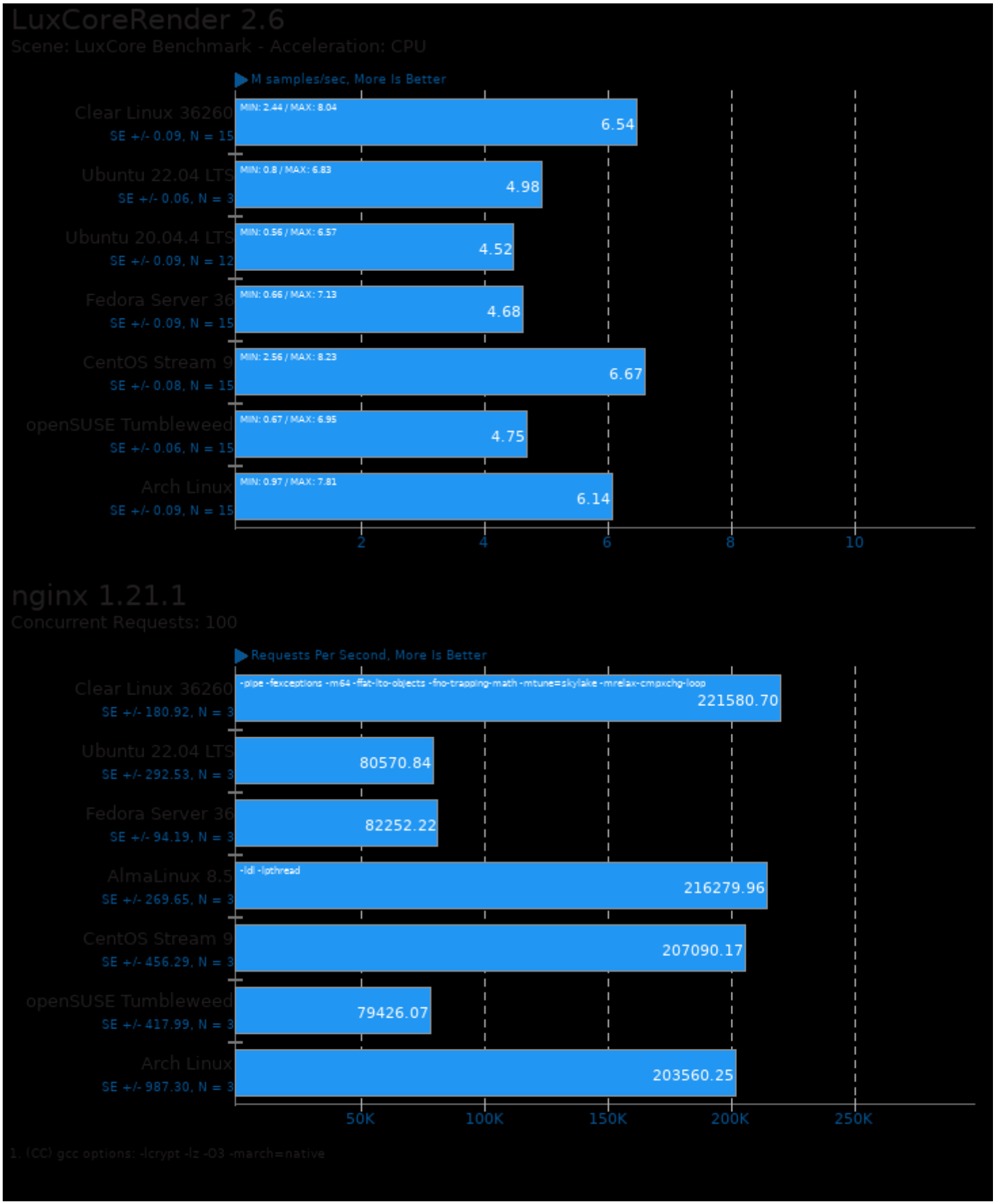


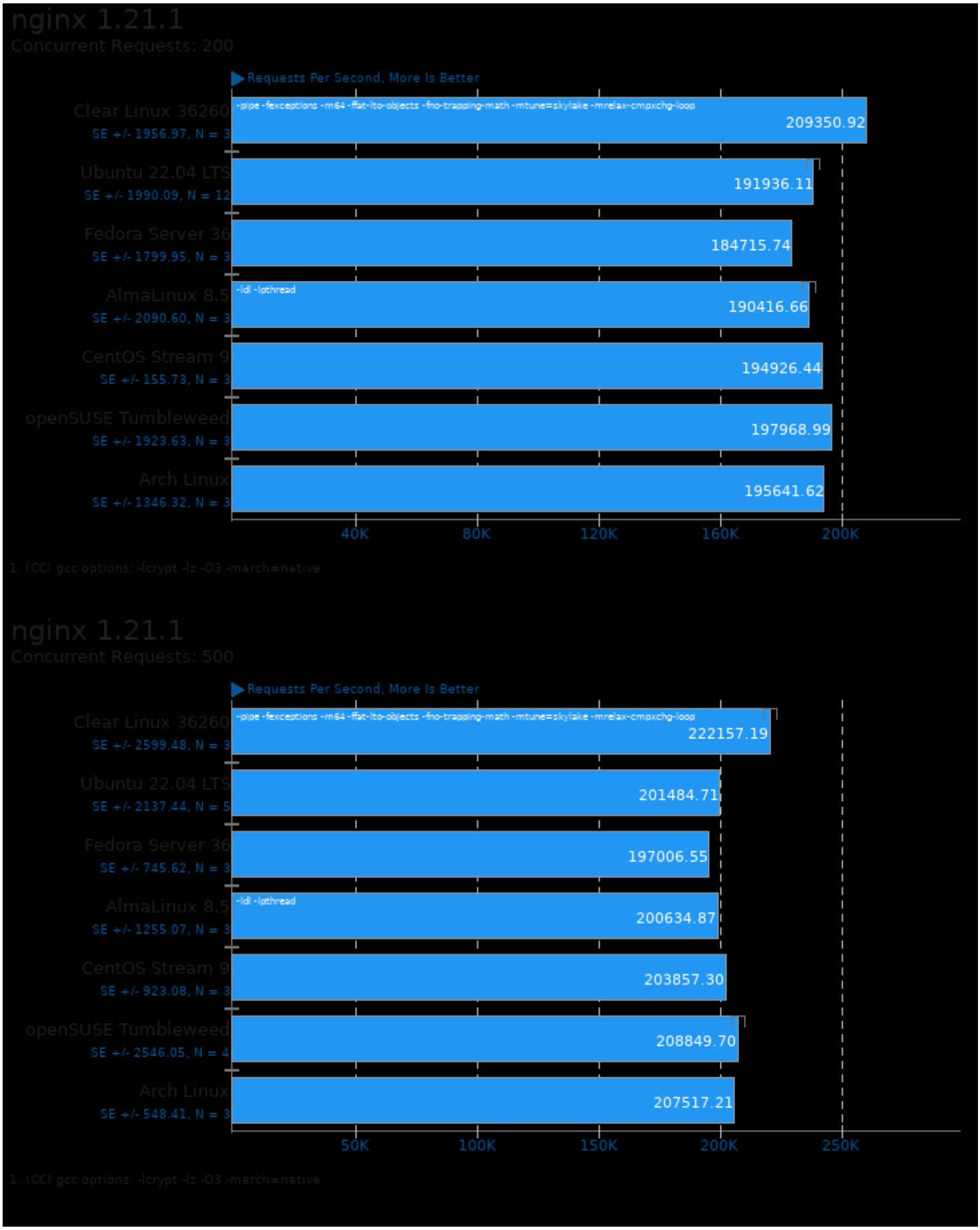

Liquid-DSP 2021.01.31
Threads: 160 - Buffer Length: 256 - Filter Length: 57
samples/s, More Is Better
Clear Linux 36260
SE +/- 1493318.45, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
3773500000
Ubuntu 22.04 LTS
SE +/- 10772237.98, N = 3
2969233333
Ubuntu 20.04.4 LTS
SE +/- 12959295.25, N = 3
3049700000
Fedora Server 36
SE +/- 11880703.31, N = 3
3046533333
AlmaLinux 8.5
SE +/- 466666.67, N = 3
3138433333
CentOS Stream 9
SE +/- 916515.14, N = 3
3046500000
openSUSE Tumbleweed
SE +/- 7379927.73, N = 3
1458400000
Arch Linux
SE +/- 517472.49, N = 3
3056733333
800M
1600M
2400M
3200M
4000M
1. (CC) gcc options: -O3 -pthread -lm -lc -lliquid
LuxCoreRender 2.6
Scene: DLSC - Acceleration: CPU
M samples/sec, More Is Better
Clear Linux 36260
SE +/- 0.01, N = 3
MIN: 8.57 / MAX: 12.22
9.19
Ubuntu 22.04 LTS
SE +/- 0.09, N = 15
MIN: 7.92 / MAX: 11.67
9.10
Ubuntu 20.04.4 LTS
SE +/- 0.07, N = 15
MIN: 8.15 / MAX: 11.68
9.12
Fedora Server 36
SE +/- 0.09, N = 3
MIN: 8.43 / MAX: 11.37
9.01
CentOS Stream 9
SE +/- 0.07, N = 15
MIN: 7.94 / MAX: 11.71
8.95
openSUSE Tumbleweed
SE +/- 0.09, N = 15
MIN: 7.93 / MAX: 11.65
9.05
Arch Linux
SE +/- 0.11, N = 3
MIN: 8.76 / MAX: 11.86
9.46
3
6
9
12
15

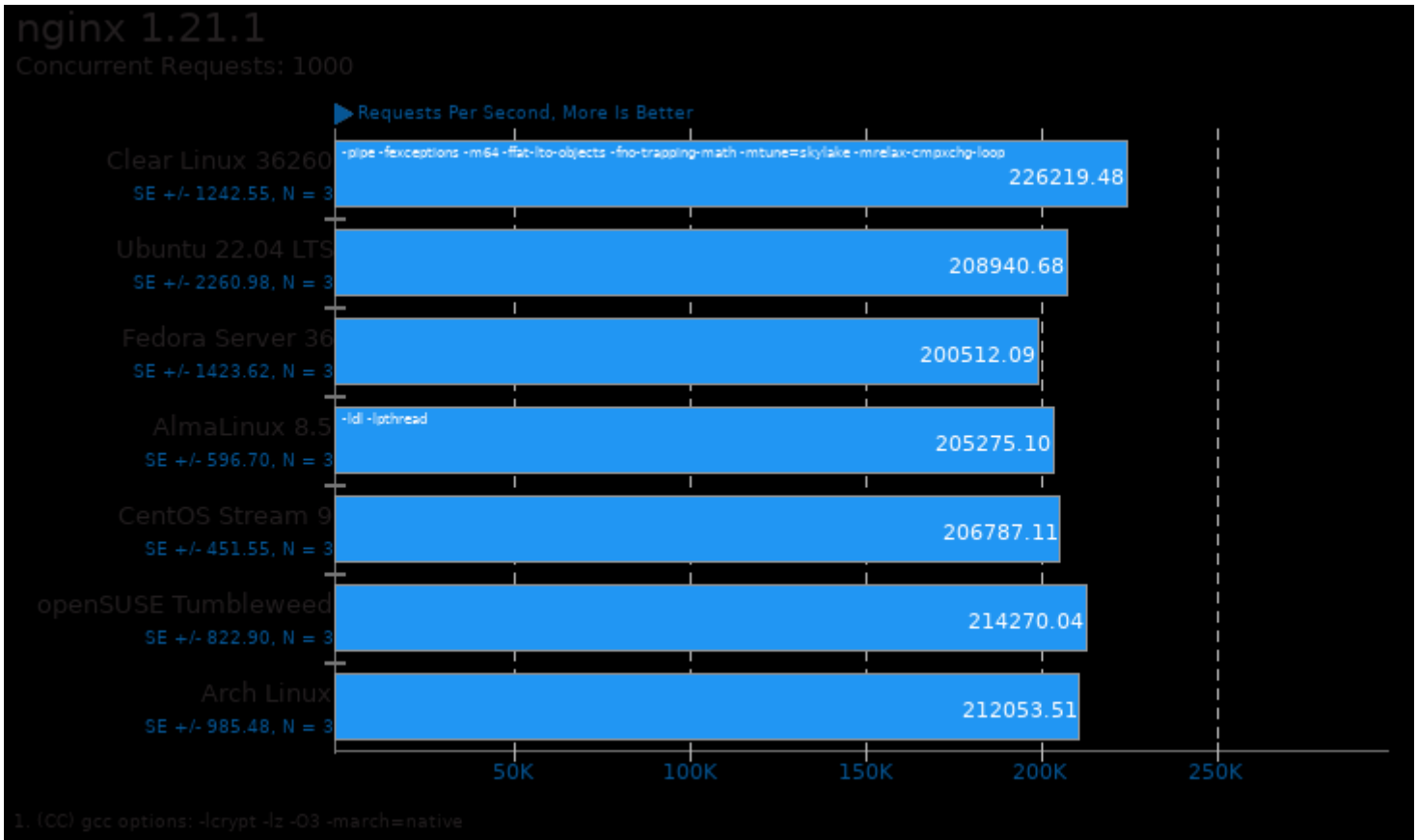
Clear Linux 36260

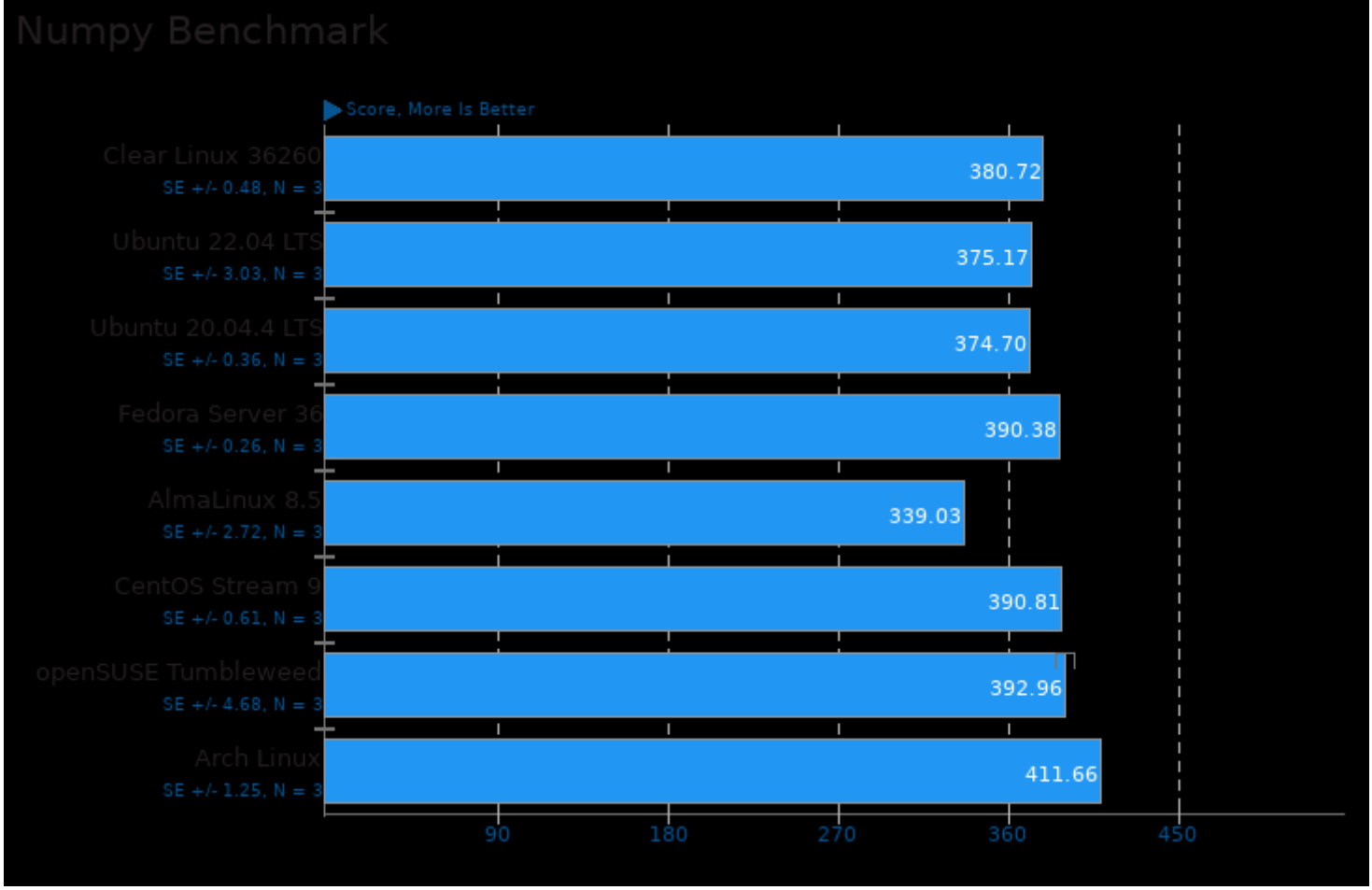


Clear Linux 36260

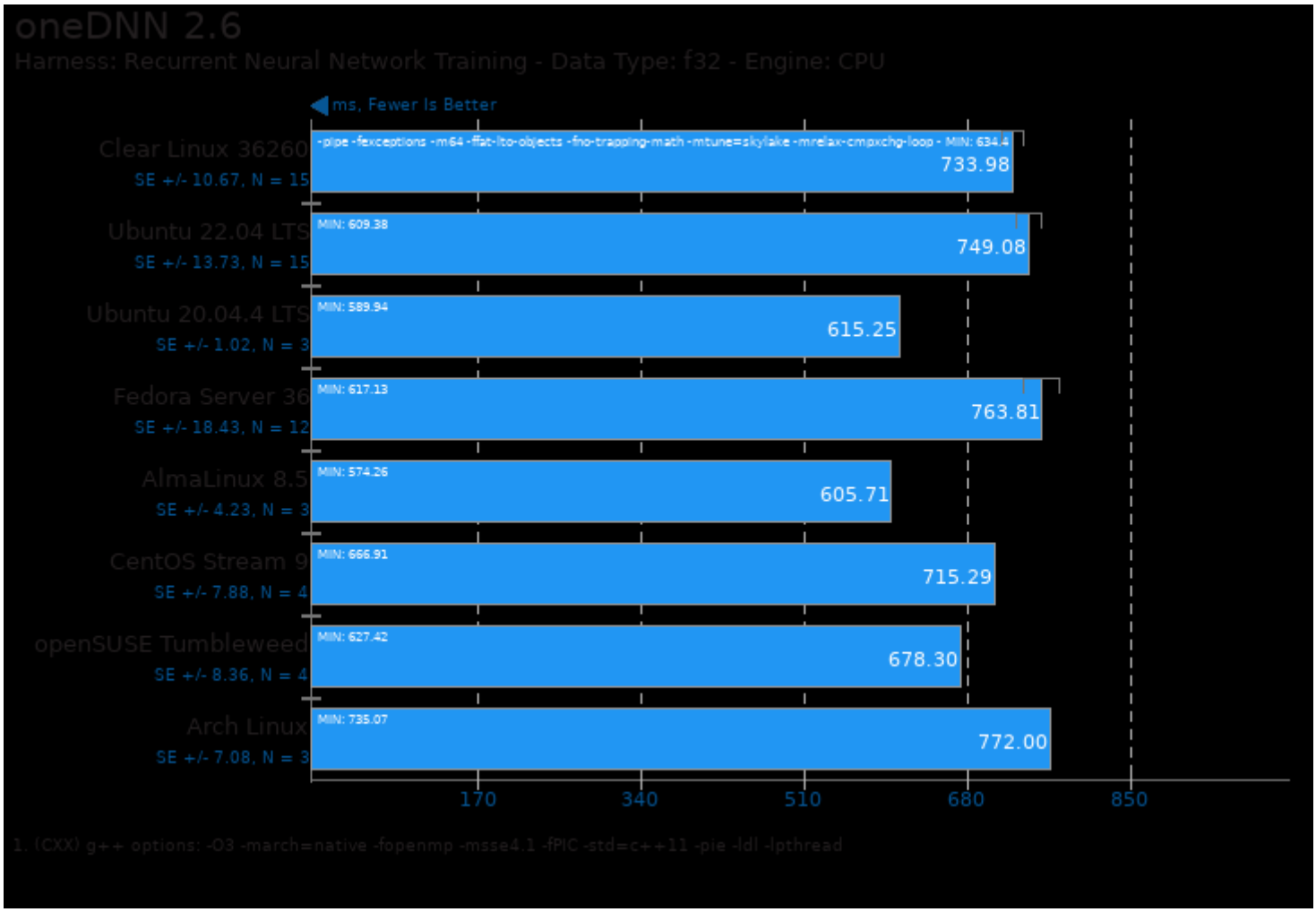



nginx 1.21.1
Concurrent Requests: 200
Requests Per Second, More Is Better
Clear Linux 36260
SE +/- 1956.97, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
209350.92
Ubuntu 22.04 LTS
SE +/- 1990.09, N = 12
191936.11
Fedora Server 36
SE +/- 1799.95, N = 3
184715.74
AlmaLinux 8.5
SE +/- 2090.60, N = 3
-ldl -lpthread
190416.66
CentOS Stream 9
SE +/- 155.73, N = 3
194926.44
openSUSE Tumbleweed
SE +/- 1923.63, N = 3
197968.99
Arch Linux
SE +/- 1346.32, N = 3
195641.62
40K
80K
120K
160K
200K
1. (CC) gcc options: -lcrypt -lz -O3 -march=native
nginx 1.21.1
Concurrent Requests: 500
Requests Per Second, More Is Better
Clear Linux 36260
SE +/- 2599.48, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
222157.19
Ubuntu 22.04 LTS
SE +/- 2137.44, N = 5
201484.71
Fedora Server 36
SE +/- 745.62, N = 3
197006.55
AlmaLinux 8.5
SE +/- 1255.07, N = 3
-ldl -lpthread
200634.87
CentOS Stream 9
SE +/- 923.08, N = 3
203857.30
openSUSE Tumbleweed
SE +/- 2546.05, N = 4
208849.70
Arch Linux
SE +/- 548.41, N = 3
207517.21
50K
100K
150K
200K
250K
1. (CC) gcc options: -lcrypt -lz -O3 -march=native

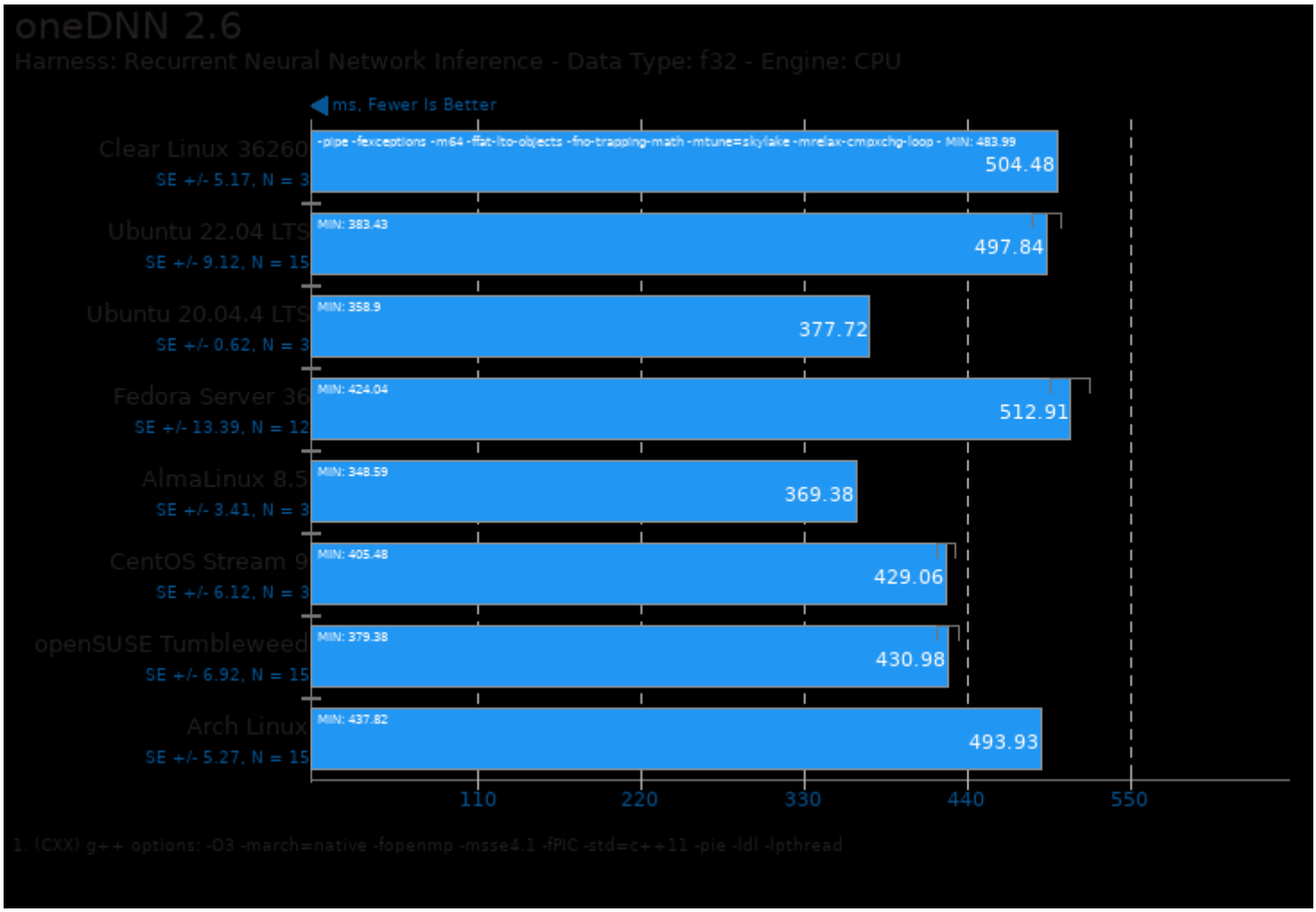

nginx 1.21.1
Concurrent Requests: 1000
Requests Per Second, More Is Better
Clear Linux 36260
SE +/- 1242.55, N = 3
-pipe -fexceptions -m64 -flat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
226219.48
Ubuntu 22.04 LTS
SE +/- 2260.98, N = 3
208940.68
Fedora Server 36
SE +/- 1423.62, N = 3
200512.09
AlmaLinux 8.5
SE +/- 596.70, N = 3
-ldl -lpthread
205275.10
CentOS Stream 9
SE +/- 451.55, N = 3
206787.11
openSUSE Tumbleweed
SE +/- 822.90, N = 3
214270.04
Arch Linux
SE +/- 985.48, N = 3
212053.51
50K
100K
150K
200K
250K
1. (CC) gcc options: -lcrypt -lz -O3 -march=native


Numpy Benchmark
Score, More Is Better
Clear Linux 36260
SE +/- 0.48, N = 3
380.72
Ubuntu 22.04 LTS
SE +/- 3.03, N = 3
375.17
Ubuntu 20.04.4 LTS
SE +/- 0.36, N = 3
374.70
Fedora Server 36
SE +/- 0.26, N = 3
390.38
AlmaLinux 8.5
SE +/- 2.72, N = 3
339.03
CentOS Stream 9
SE +/- 0.61, N = 3
390.81
openSUSE Tumbleweed
SE +/- 4.68, N = 3
392.96
Arch Linux
SE +/- 1.25, N = 3
411.66
90
180
270
360
450

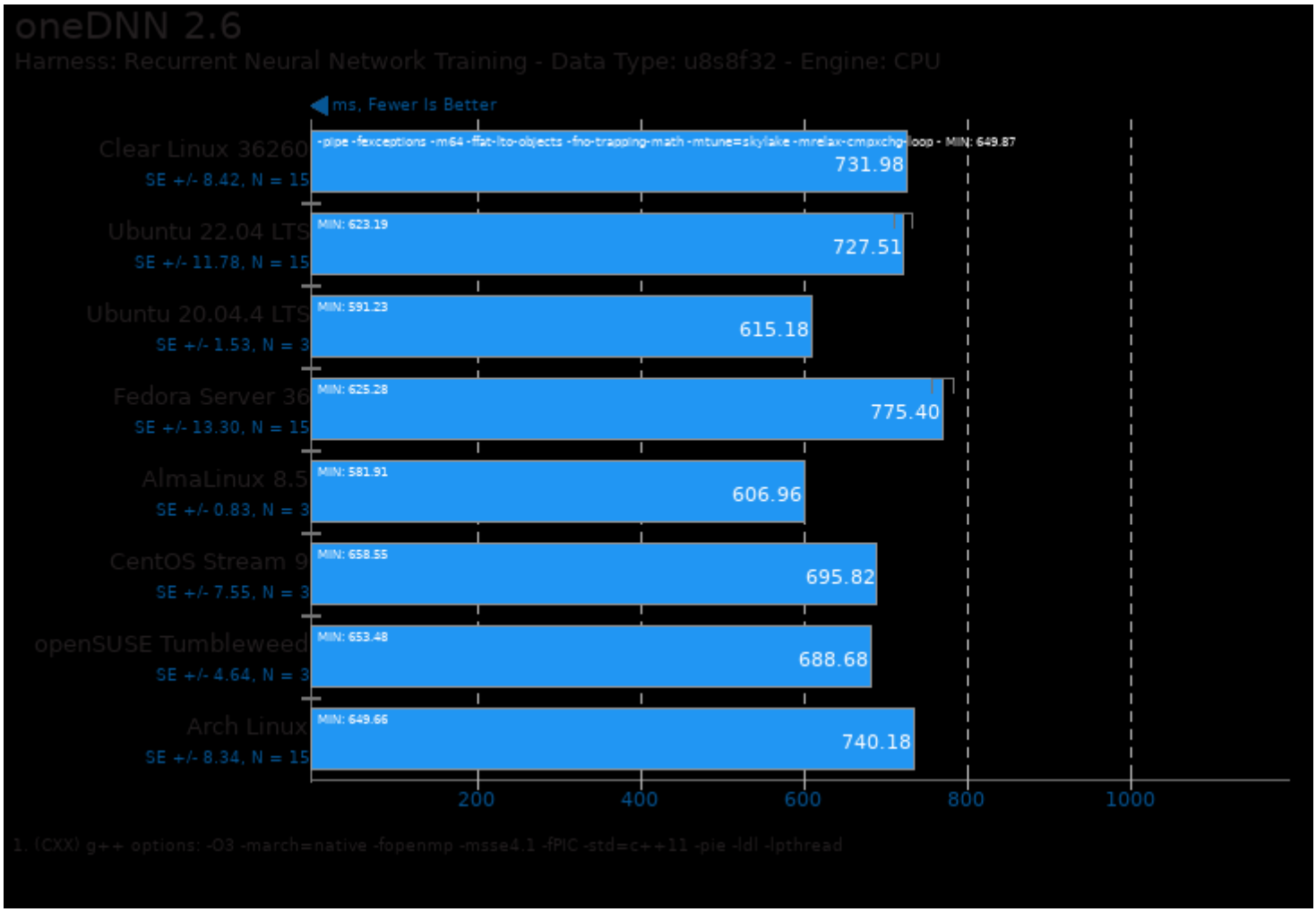
Clear Linux 36260



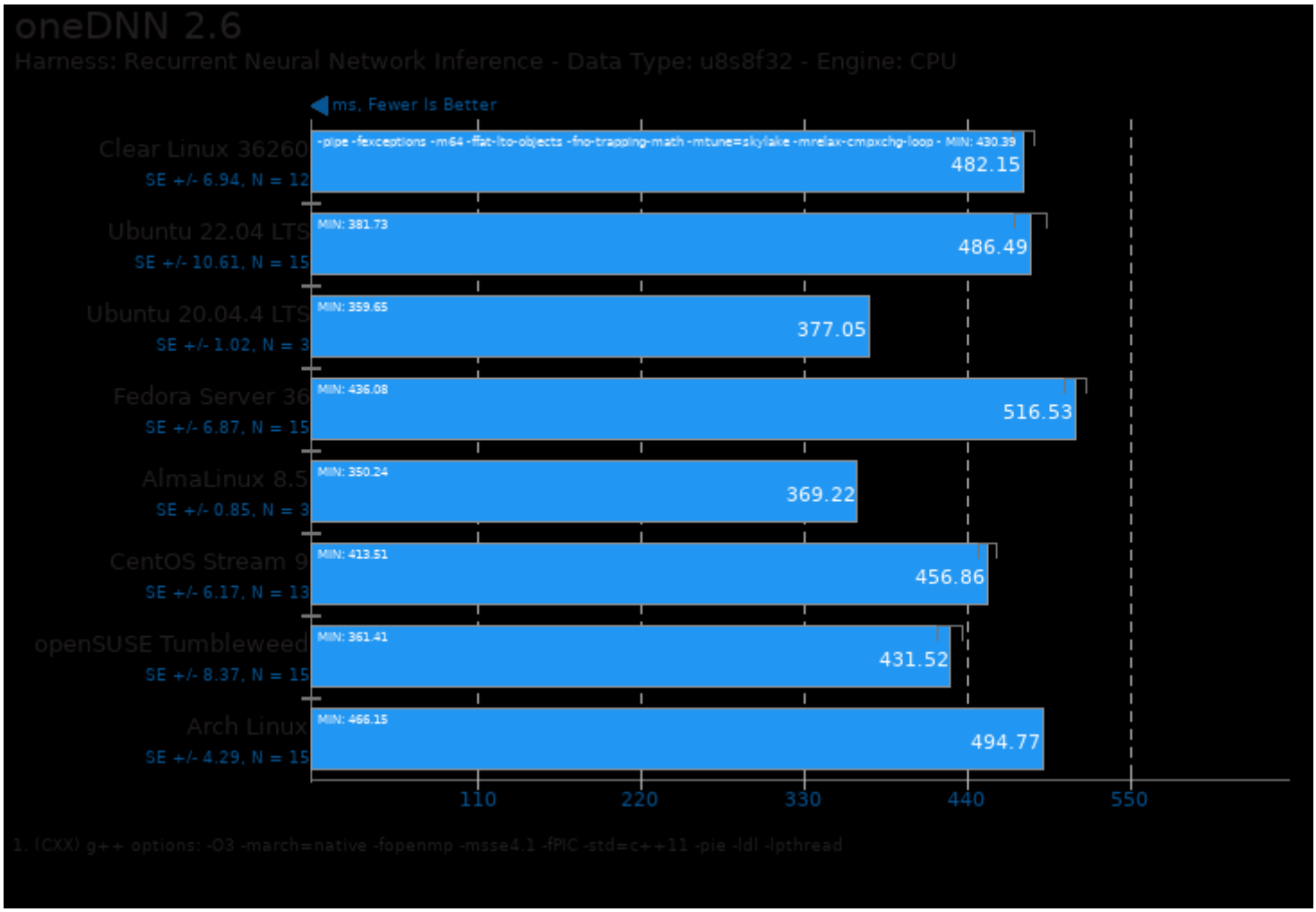
Clear Linux 36260



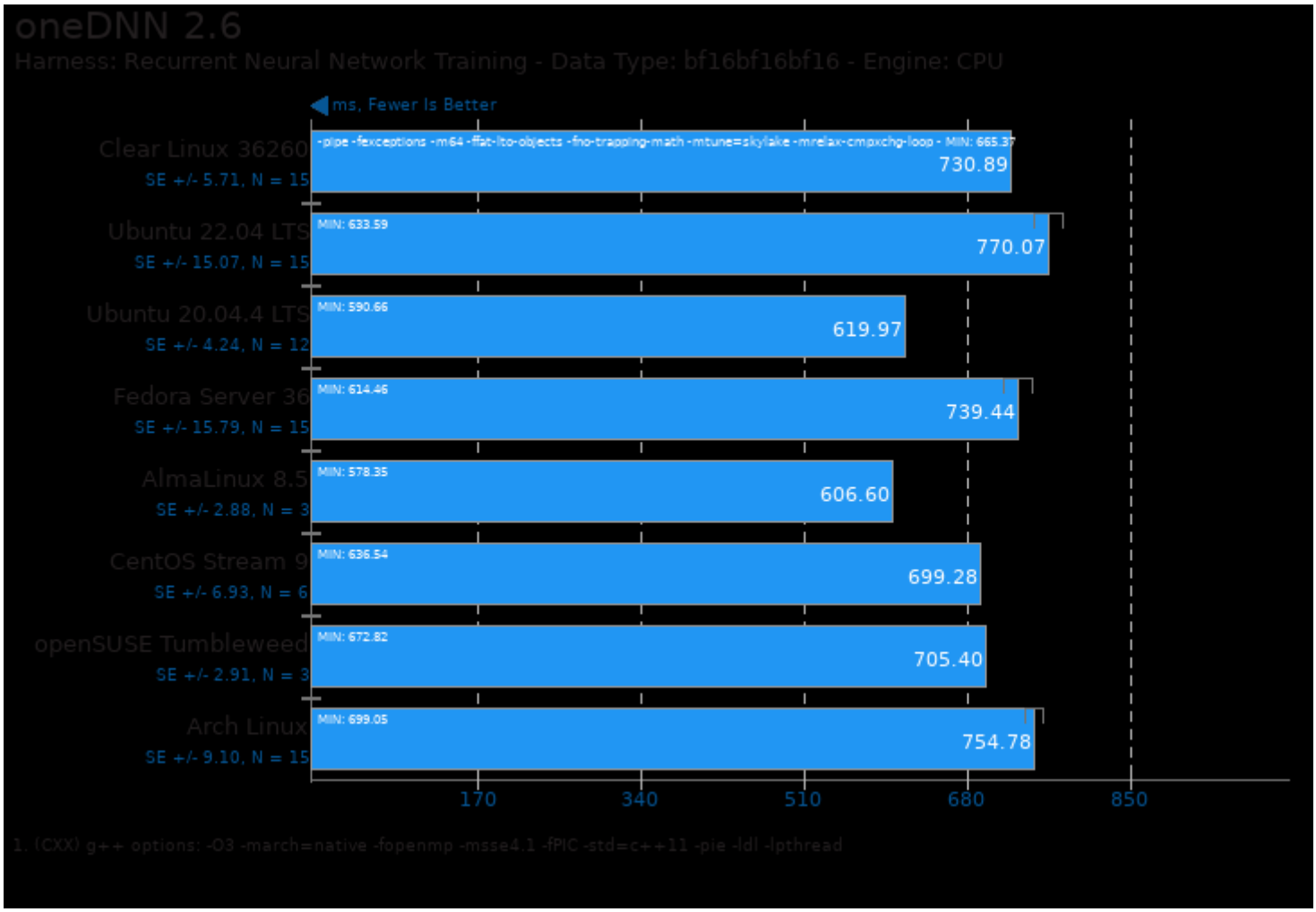
Clear Linux 36260



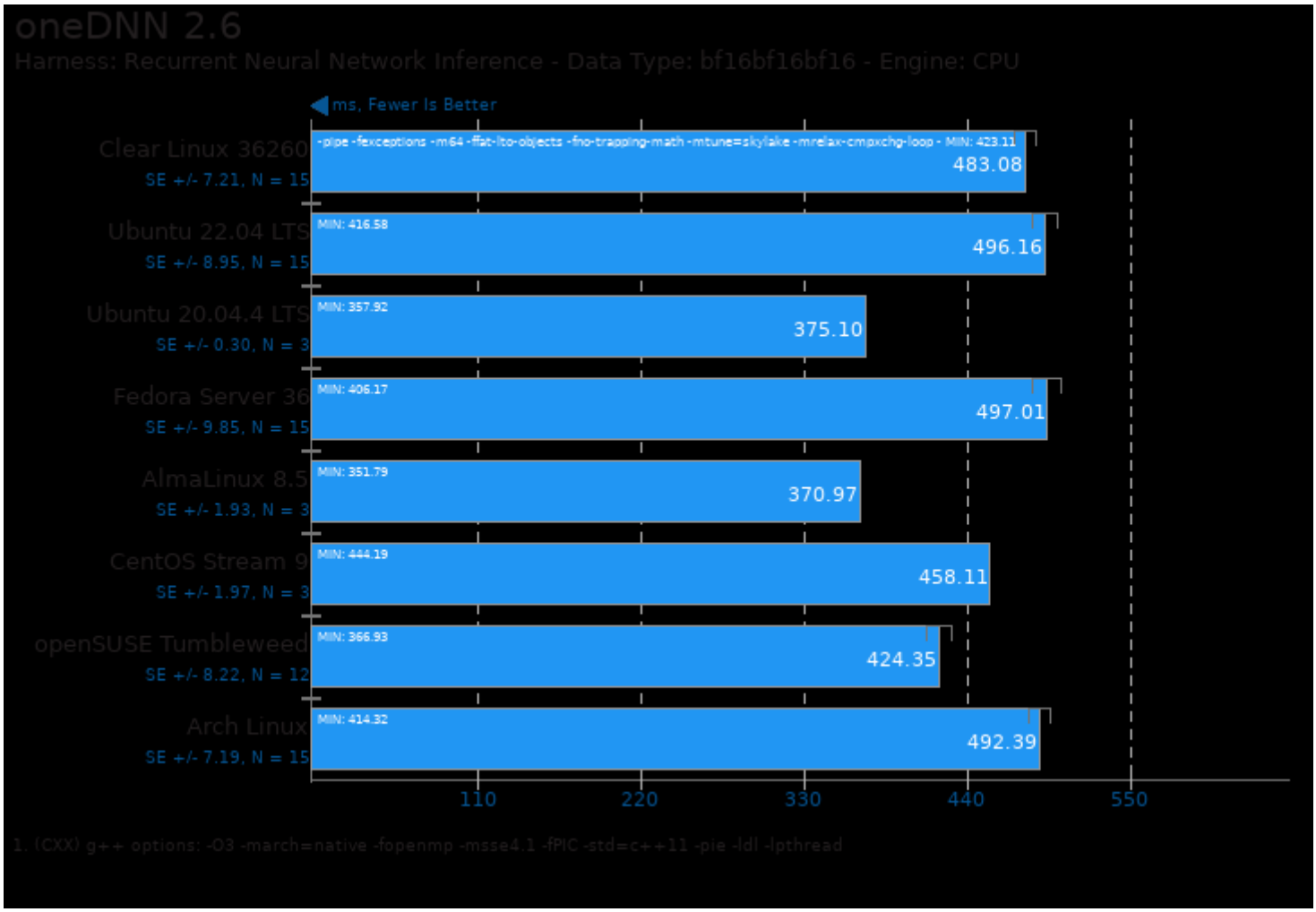
Clear Linux 36260

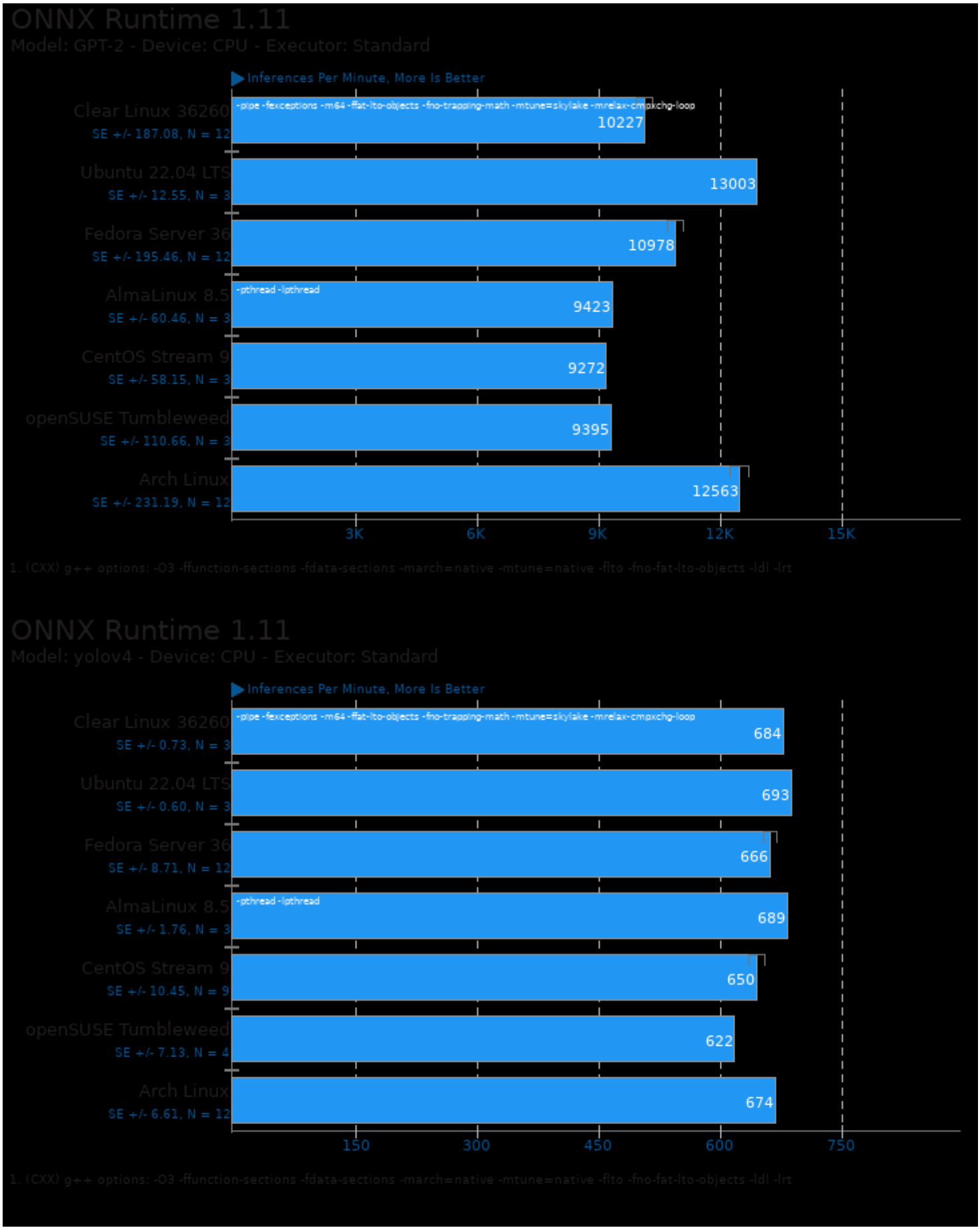


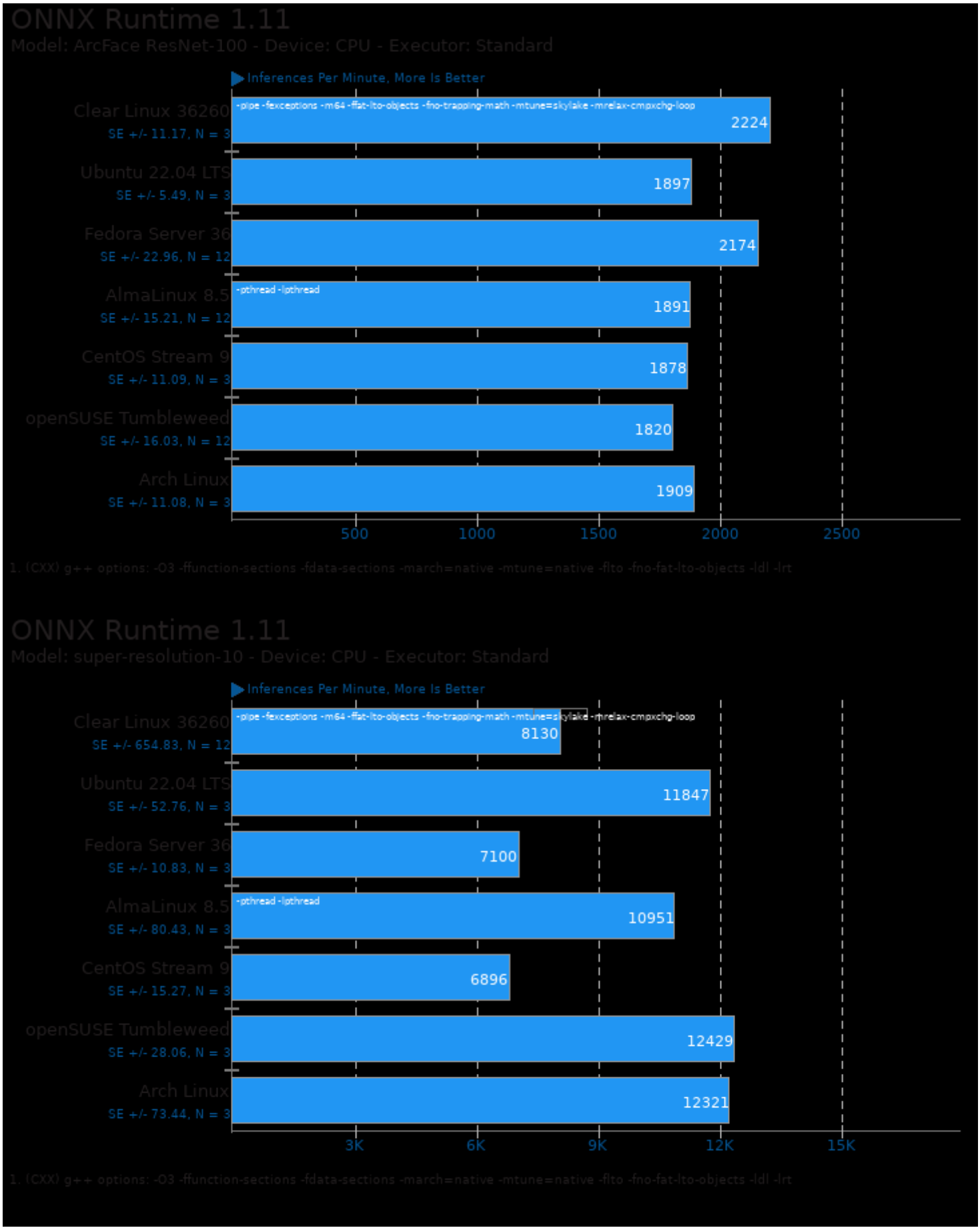
Clear Linux 36260



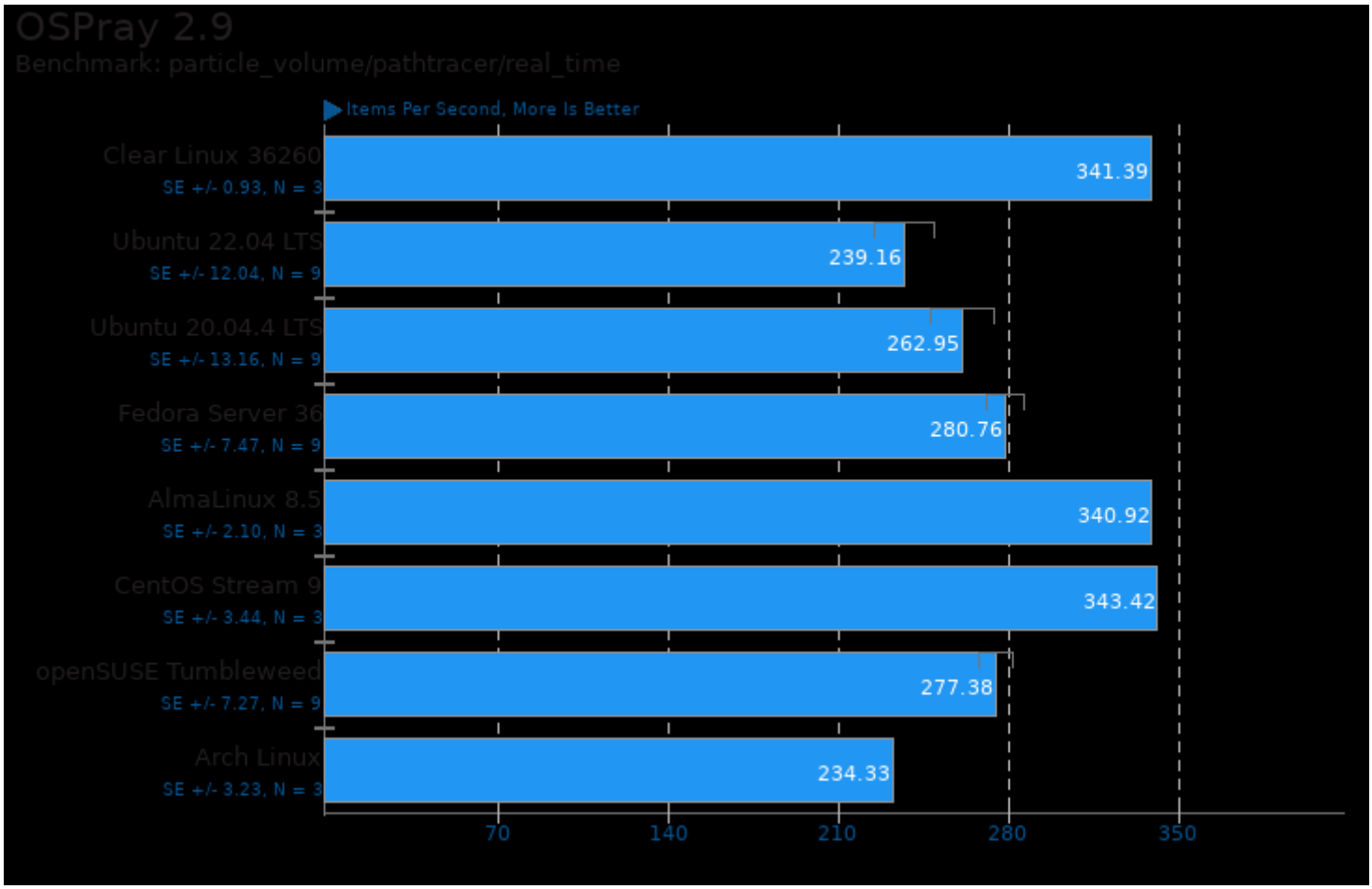
Clear Linux 36260



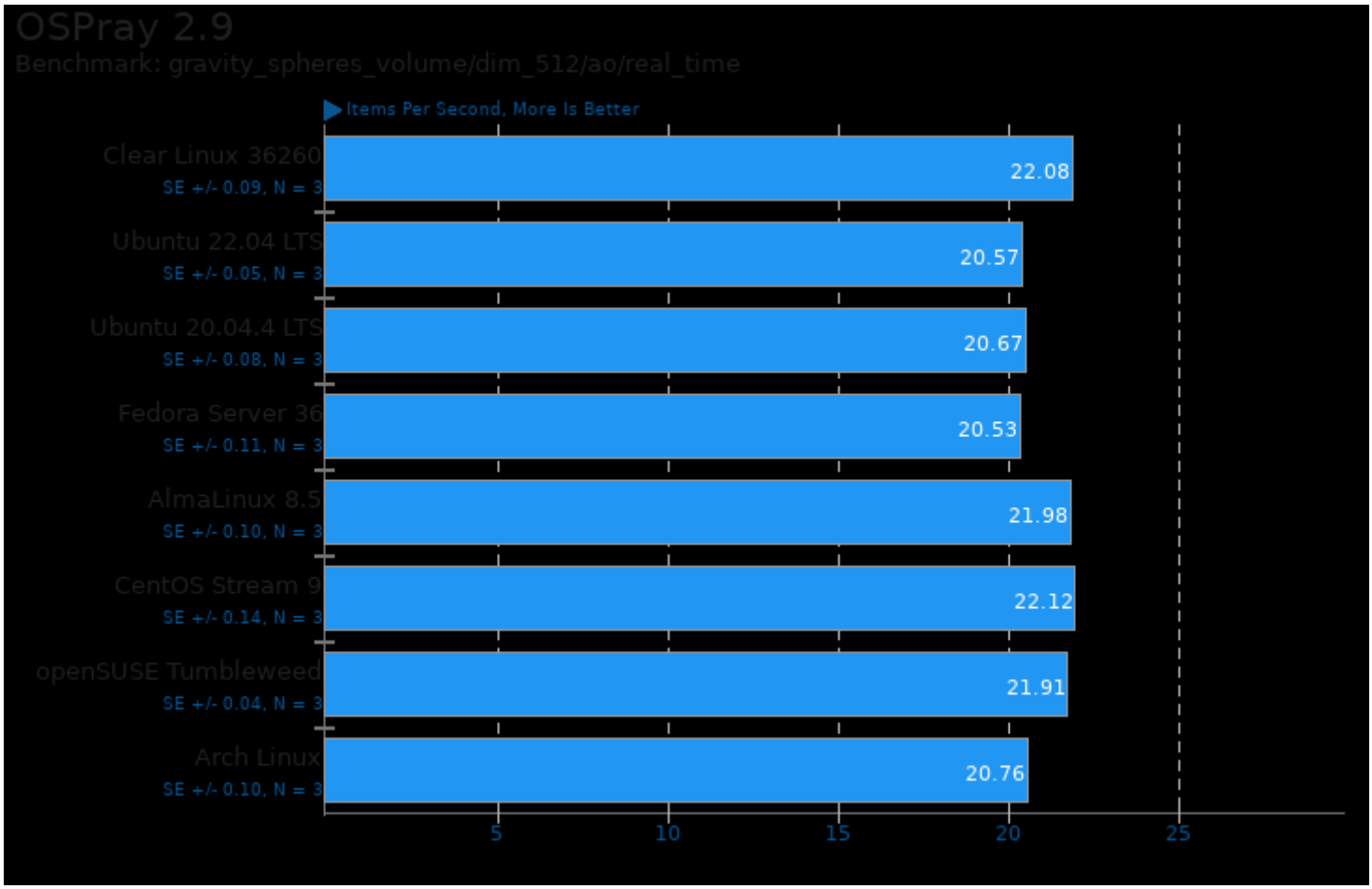

ONNX Runtime 1.11
Model: GPT-2 - Device: CPU - Executor: Standard
Inferences Per Minute, More Is Better
Clear Linux 36260
SE +/- 187.08, N = 12
-pipe -fexceptions -m64 -flto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
10227
Ubuntu 22.04 LTS
SE +/- 12.55, N = 3
13003
Fedora Server 36
SE +/- 195.46, N = 12
10978
AlmaLinux 8.5
SE +/- 60.46, N = 3
-pthread -lpthread
9423
CentOS Stream 9
SE +/- 58.15, N = 3
9272
openSUSE Tumbleweed
SE +/- 110.66, N = 3
9395
Arch Linux
SE +/- 231.19, N = 12
12563
3K
6K
9K
12K
15K
1. (CXX) g++ options: -O3 -ffunction-sections -fdata-sections -march=native -mtune=native -flto -fno-fat-lto-objects -ldl -lrt
ONNX Runtime 1.11
Model: yolov4 - Device: CPU - Executor: Standard
Inferences Per Minute, More Is Better
Clear Linux 36260
SE +/- 0.73, N = 3
-pipe -fexceptions -m64 -flto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
684
Ubuntu 22.04 LTS
SE +/- 0.60, N = 3
693
Fedora Server 36
SE +/- 8.71, N = 12
666
AlmaLinux 8.5
SE +/- 1.76, N = 3
-pthread -lpthread
689
CentOS Stream 9
SE +/- 10.45, N = 9
650
openSUSE Tumbleweed
SE +/- 7.13, N = 4
622
Arch Linux
SE +/- 6.61, N = 12
674
150
300
450
600
750
1. (CXX) g++ options: -O3 -ffunction-sections -fdata-sections -march=native -mtune=native -flto -fno-fat-lto-objects -ldl -lrt


ONNX Runtime 1.11
Model: ArcFace ResNet-100 - Device: CPU - Executor: Standard
Inferences Per Minute, More Is Better
Clear Linux 36260
SE +/- 11.17, N = 3
-pipe -fexceptions -m64 -flto=auto -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
2224
Ubuntu 22.04 LTS
SE +/- 5.49, N = 3
1897
Fedora Server 36
SE +/- 22.96, N = 12
2174
AlmaLinux 8.5
SE +/- 15.21, N = 12
-pthread -lpthread
1891
CentOS Stream 9
SE +/- 11.09, N = 3
1878
openSUSE Tumbleweed
SE +/- 16.03, N = 12
1820
Arch Linux
SE +/- 11.08, N = 3
1909
500
1000
1500
2000
2500
1. (CXX) g++ options: -O3 -ffunction-sections -fdata-sections -march=native -mtune=native -flto -fno-fat-lto-objects -ldl -lrt
ONNX Runtime 1.11
Model: super-resolution-10 - Device: CPU - Executor: Standard
Inferences Per Minute, More Is Better
Clear Linux 36260
SE +/- 654.83, N = 12
-pipe -fexceptions -m64 -flto=auto -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
8130
Ubuntu 22.04 LTS
SE +/- 52.76, N = 3
11847
Fedora Server 36
SE +/- 10.83, N = 3
7100
AlmaLinux 8.5
SE +/- 80.43, N = 3
-pthread -lpthread
10951
CentOS Stream 9
SE +/- 15.27, N = 3
6896
openSUSE Tumbleweed
SE +/- 28.06, N = 3
12429
Arch Linux
SE +/- 73.44, N = 3
12321
3K
6K
9K
12K
15K
1. (CXX) g++ options: -O3 -ffunction-sections -fdata-sections -march=native -mtune=native -flto -fno-fat-lto-objects -ldl -lrt

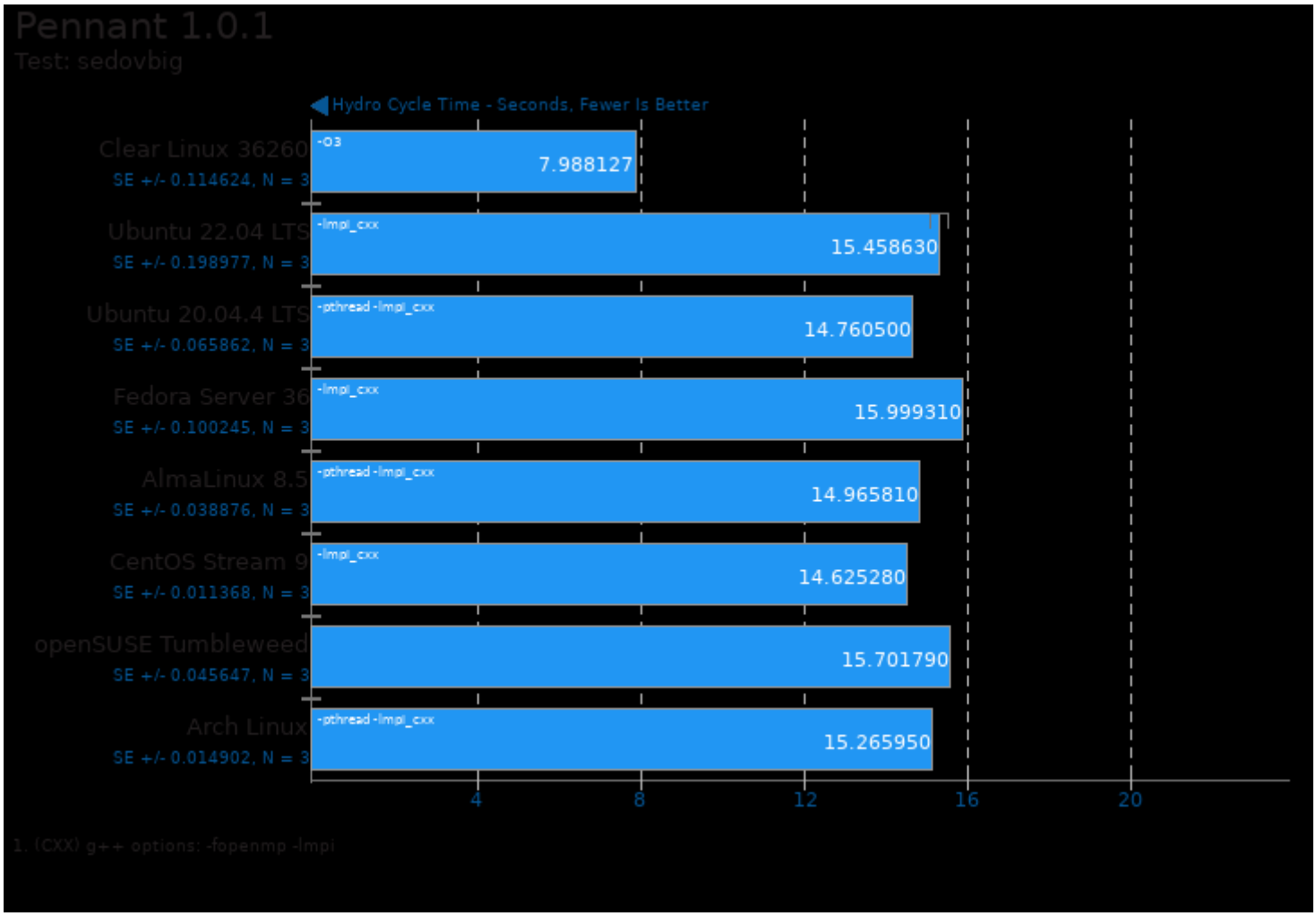
Clear Linux 36260



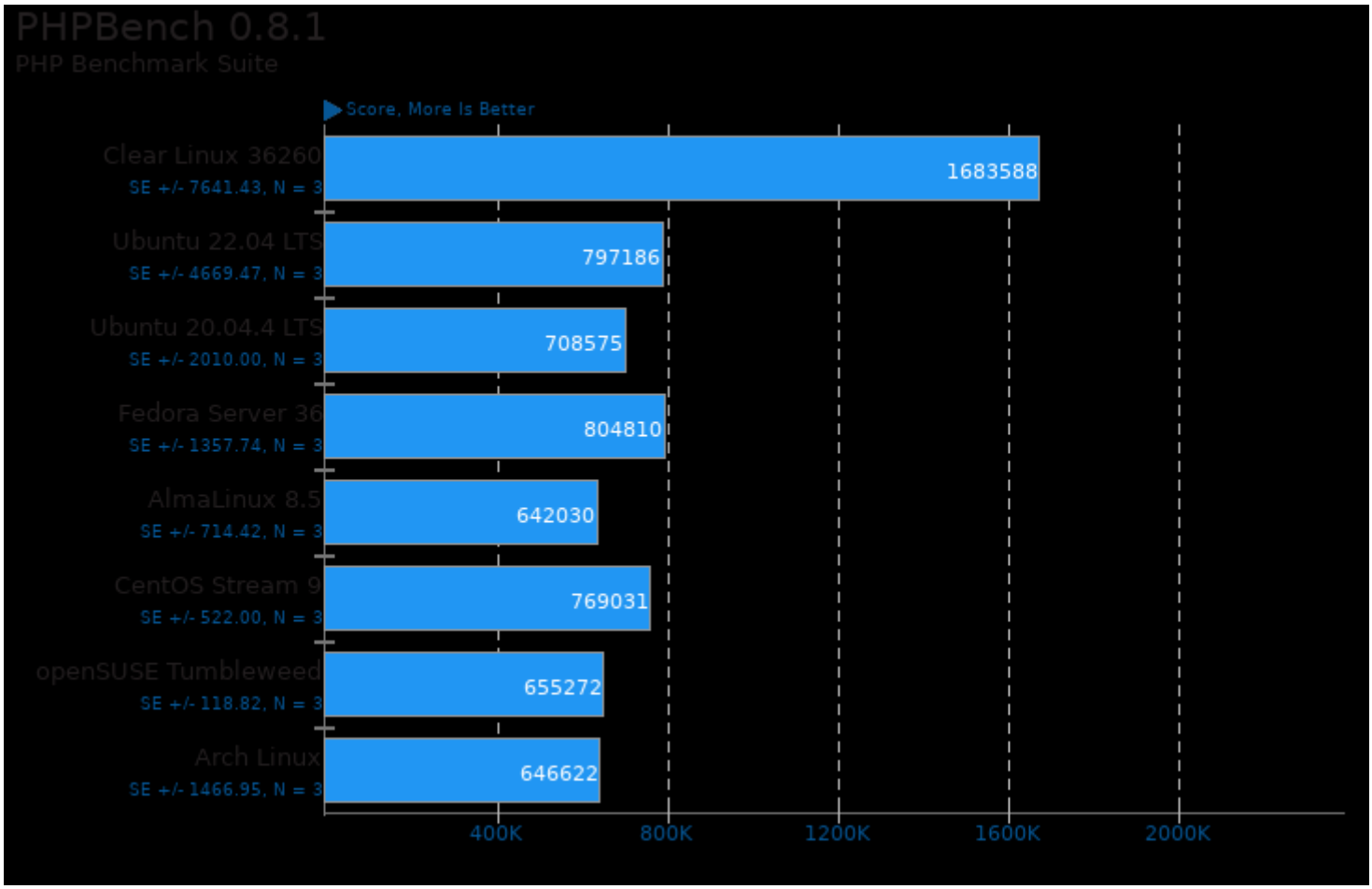
Clear Linux 36260



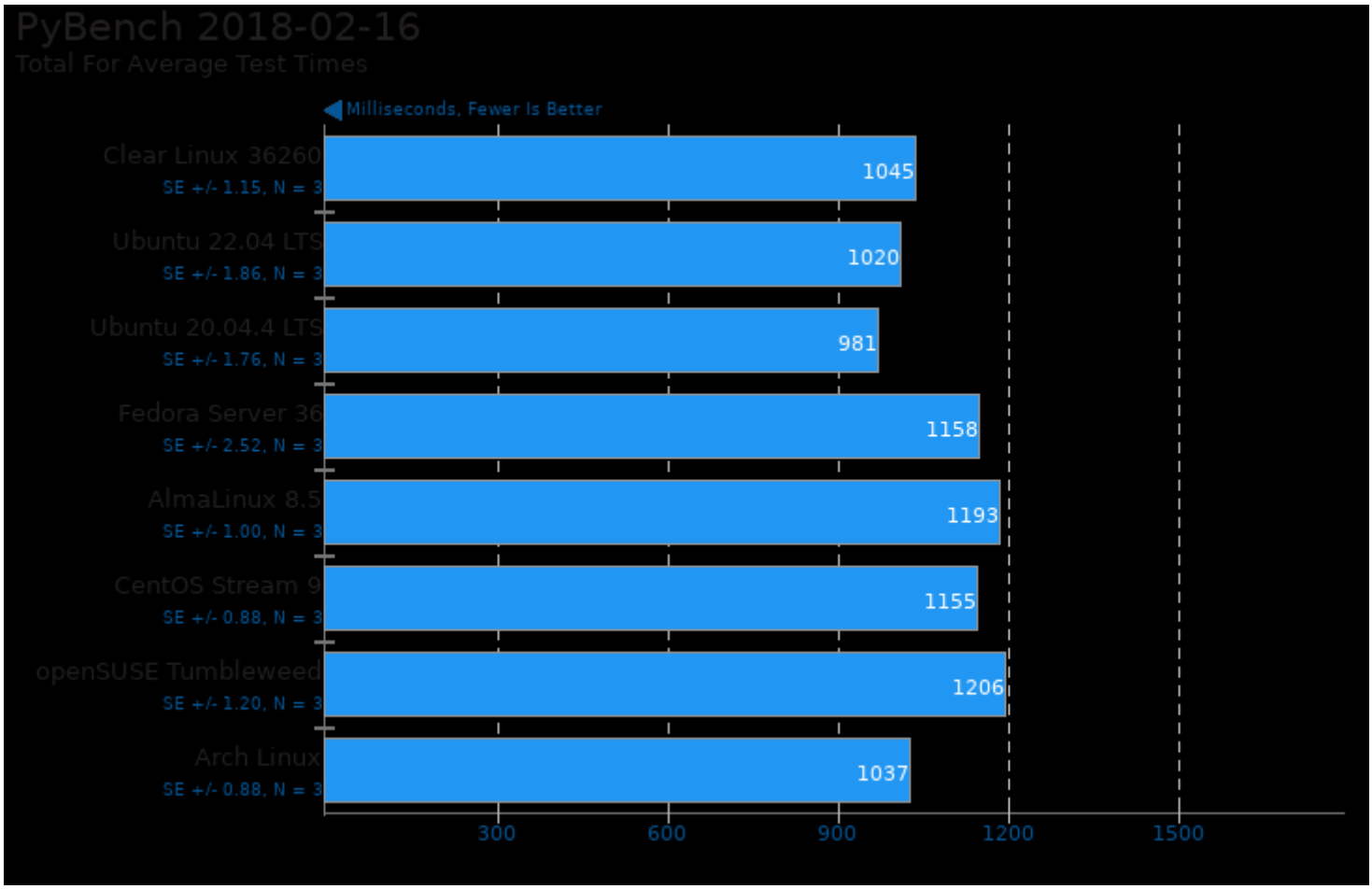
Clear Linux 36260



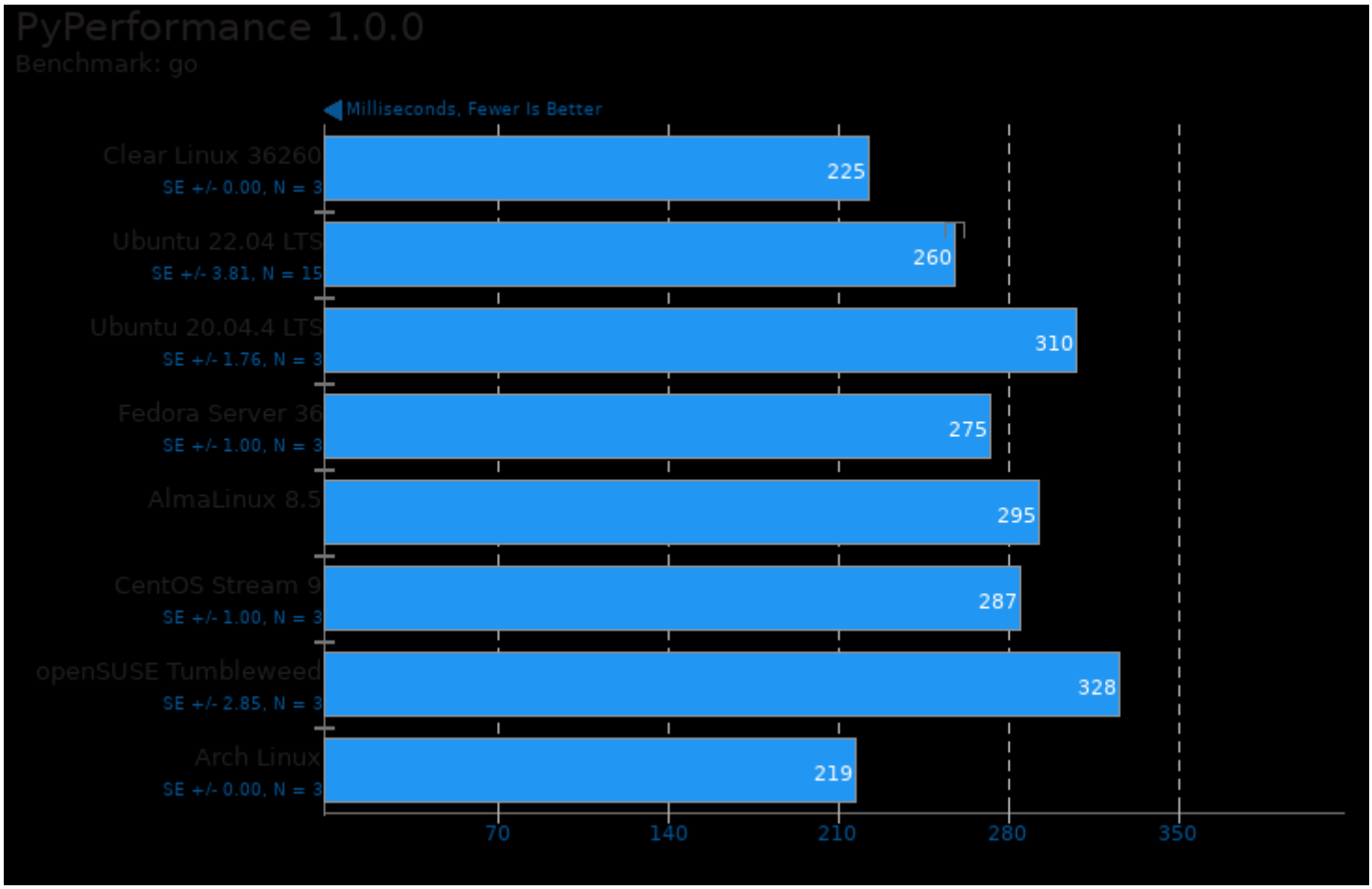
Clear Linux 36260



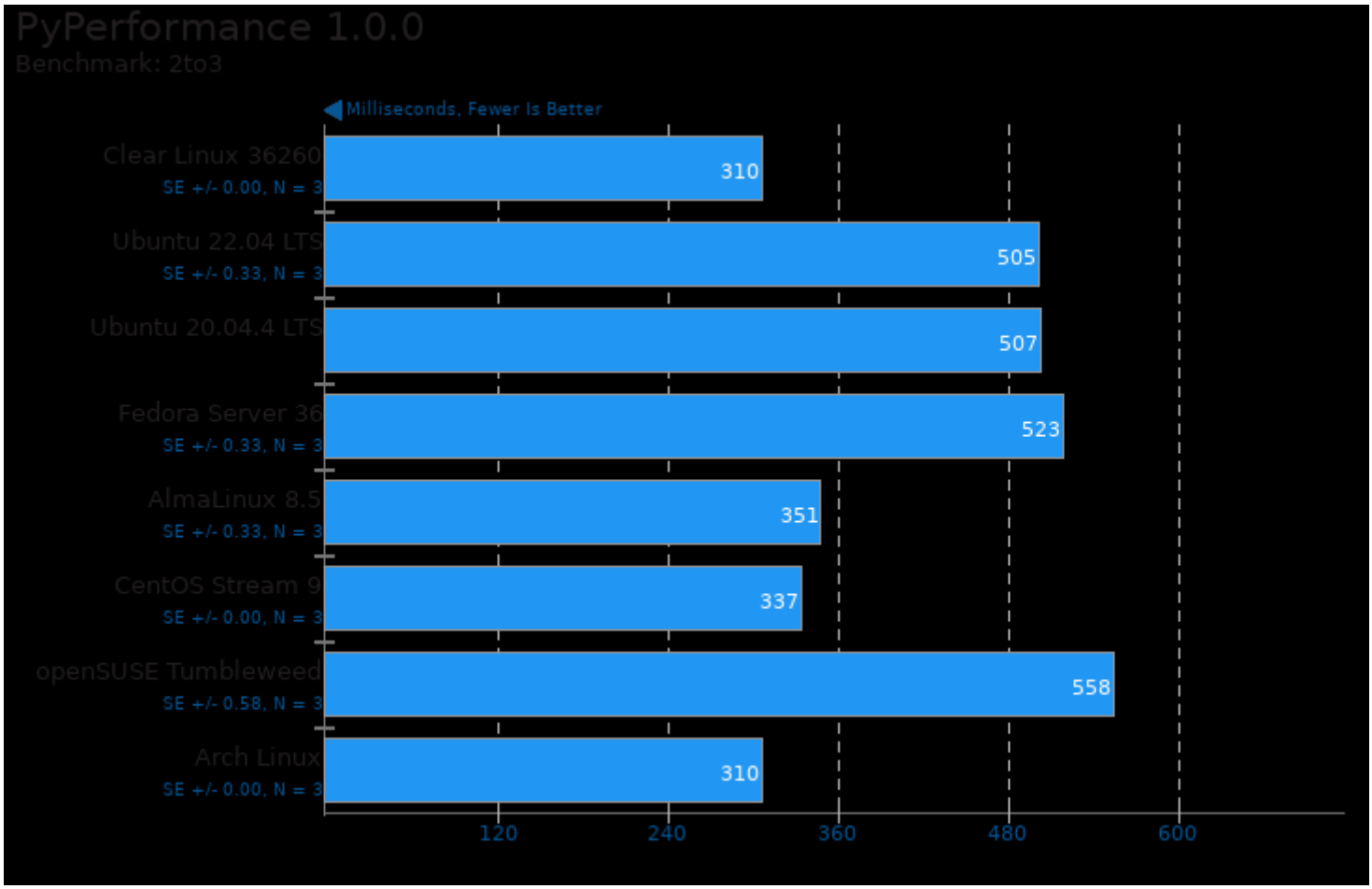
Clear Linux 36260



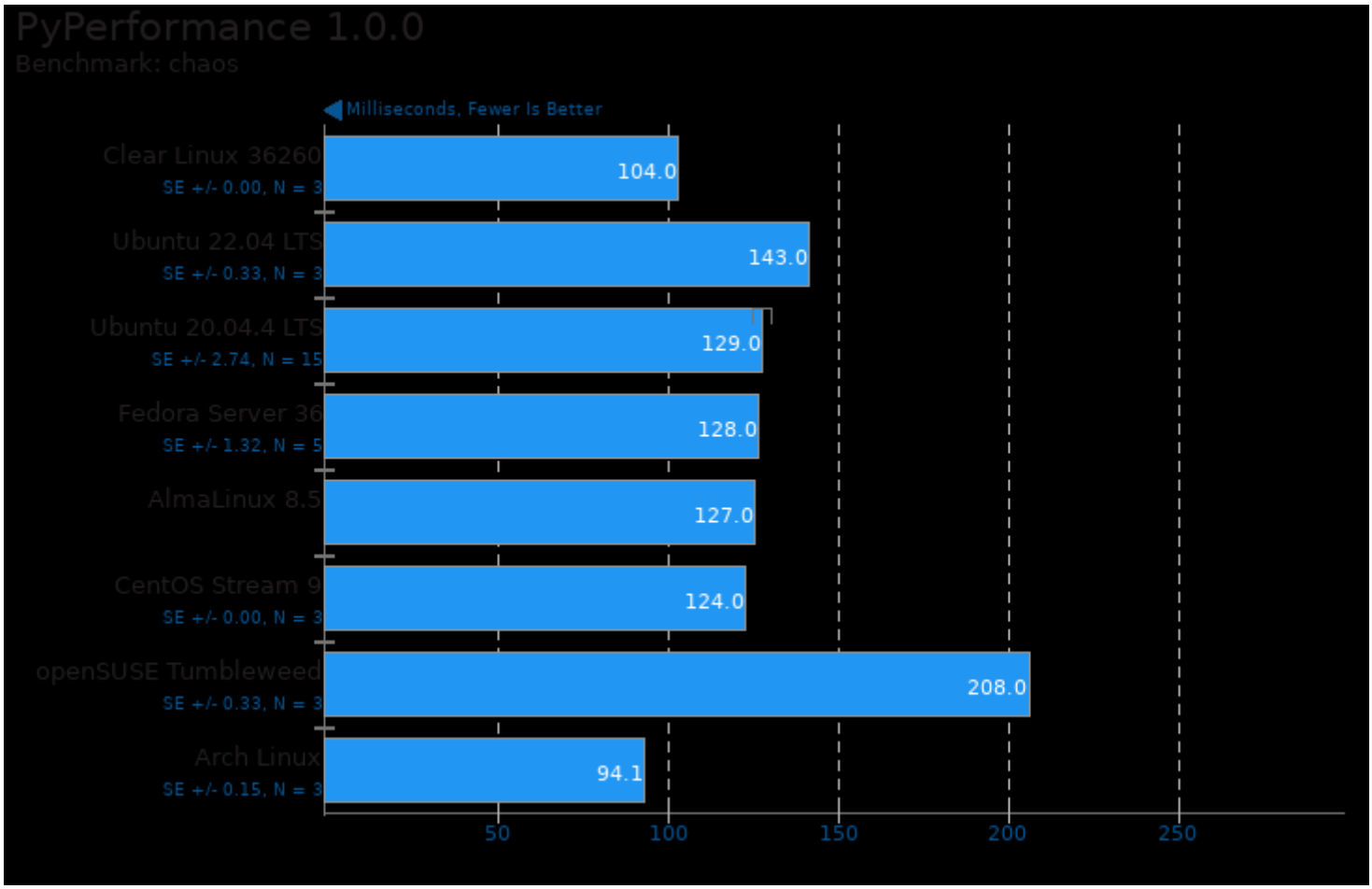
Clear Linux 36260



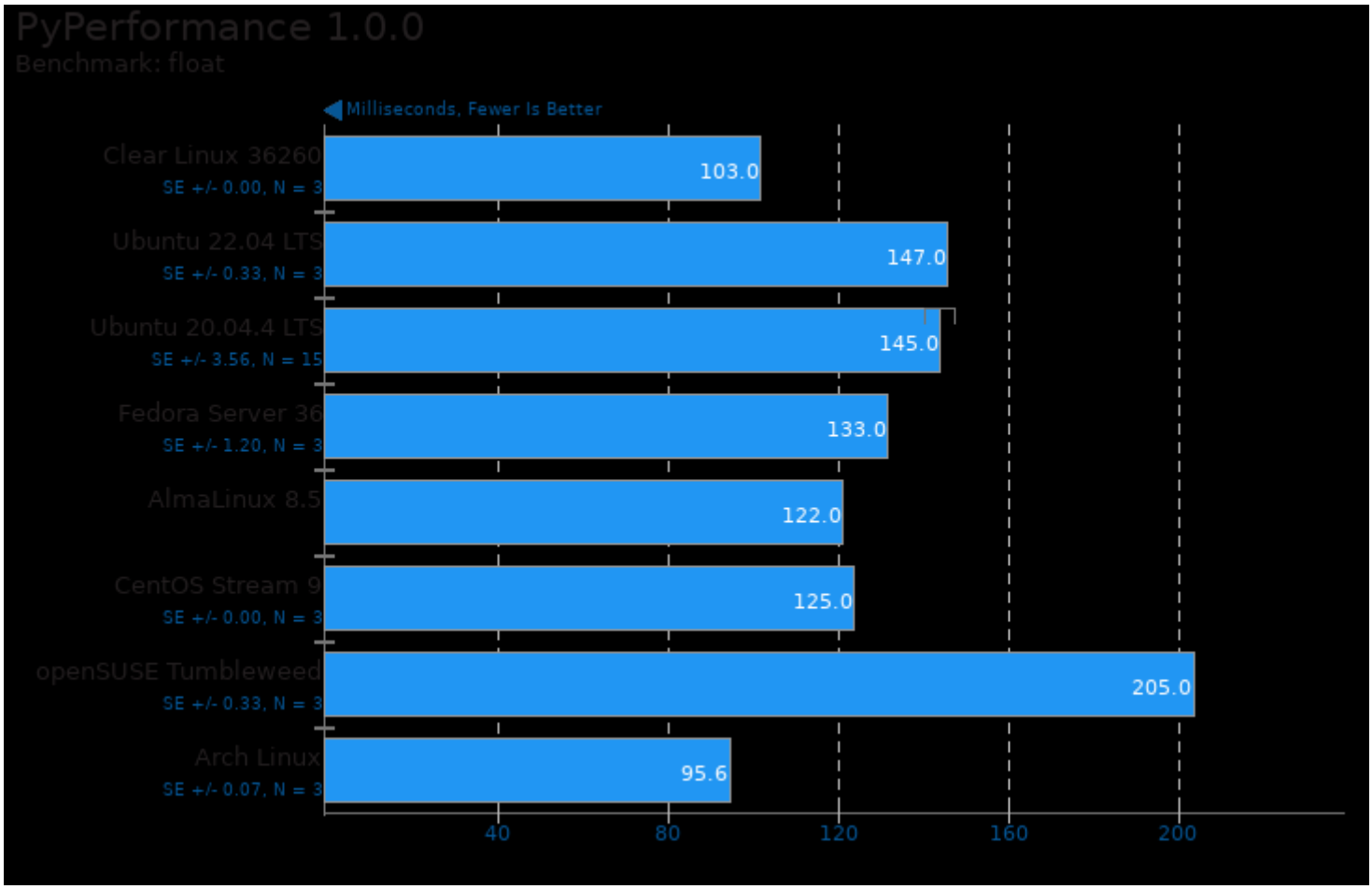
Clear Linux 36260



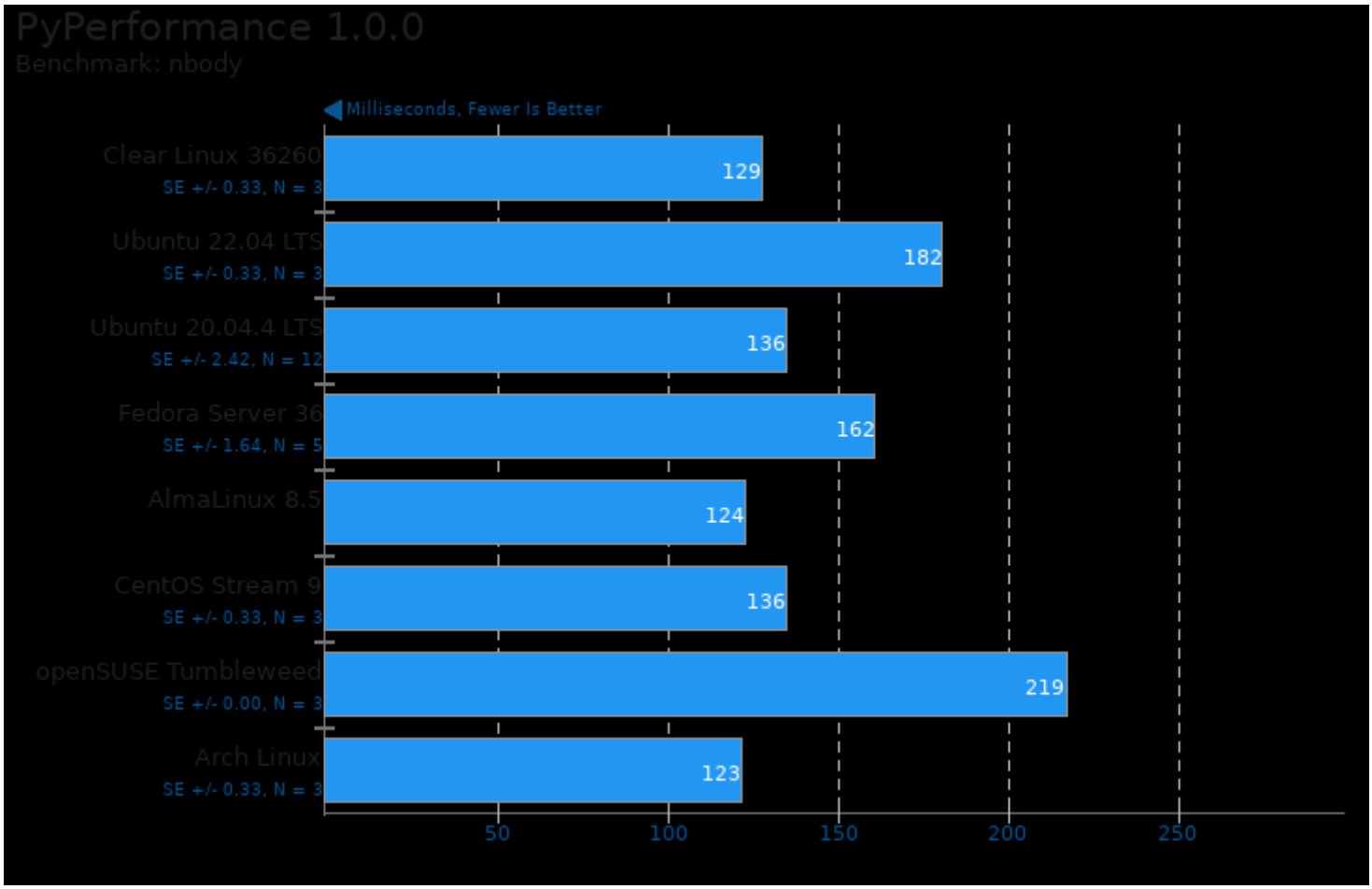
Clear Linux 36260



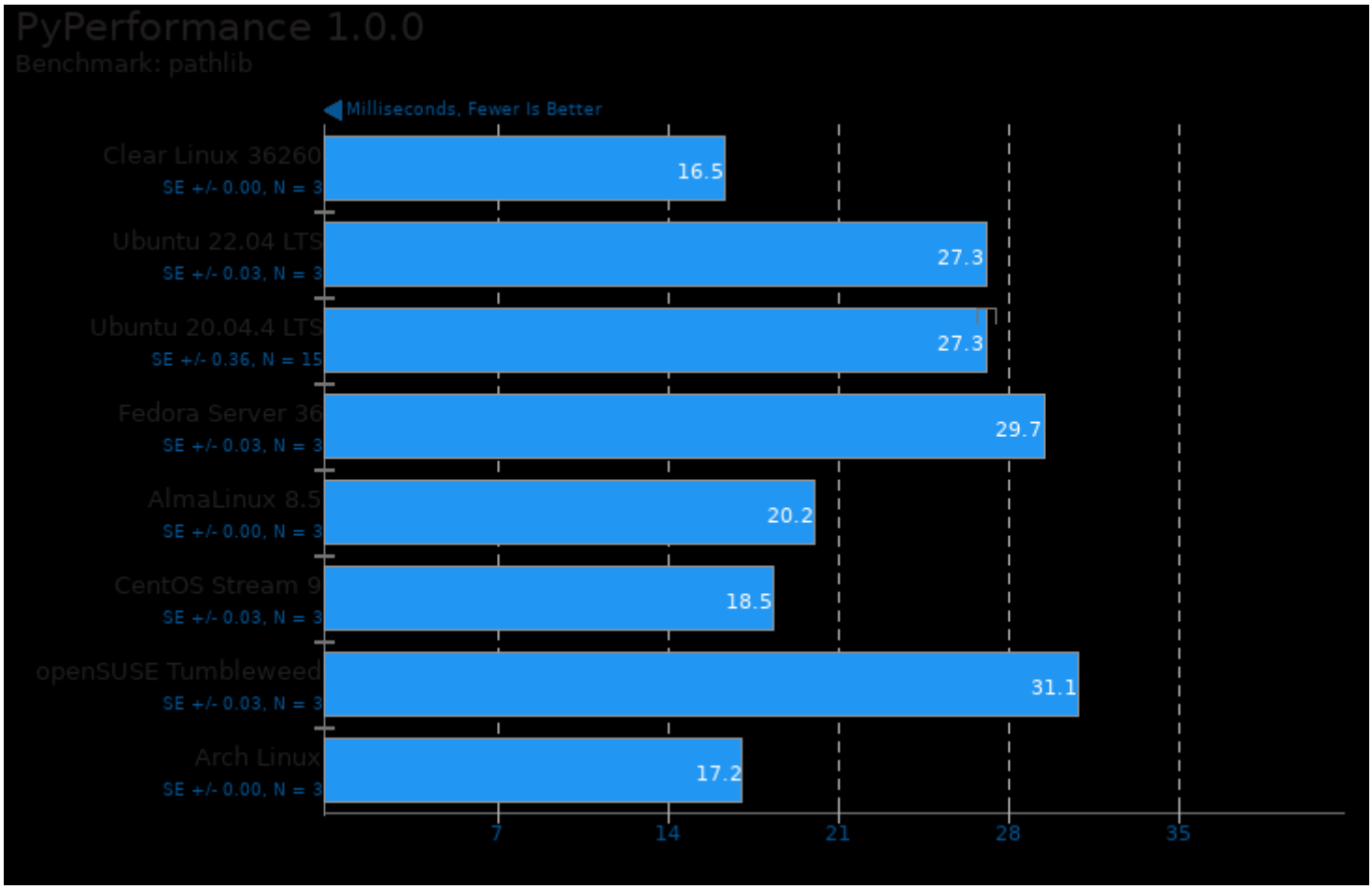
Clear Linux 36260



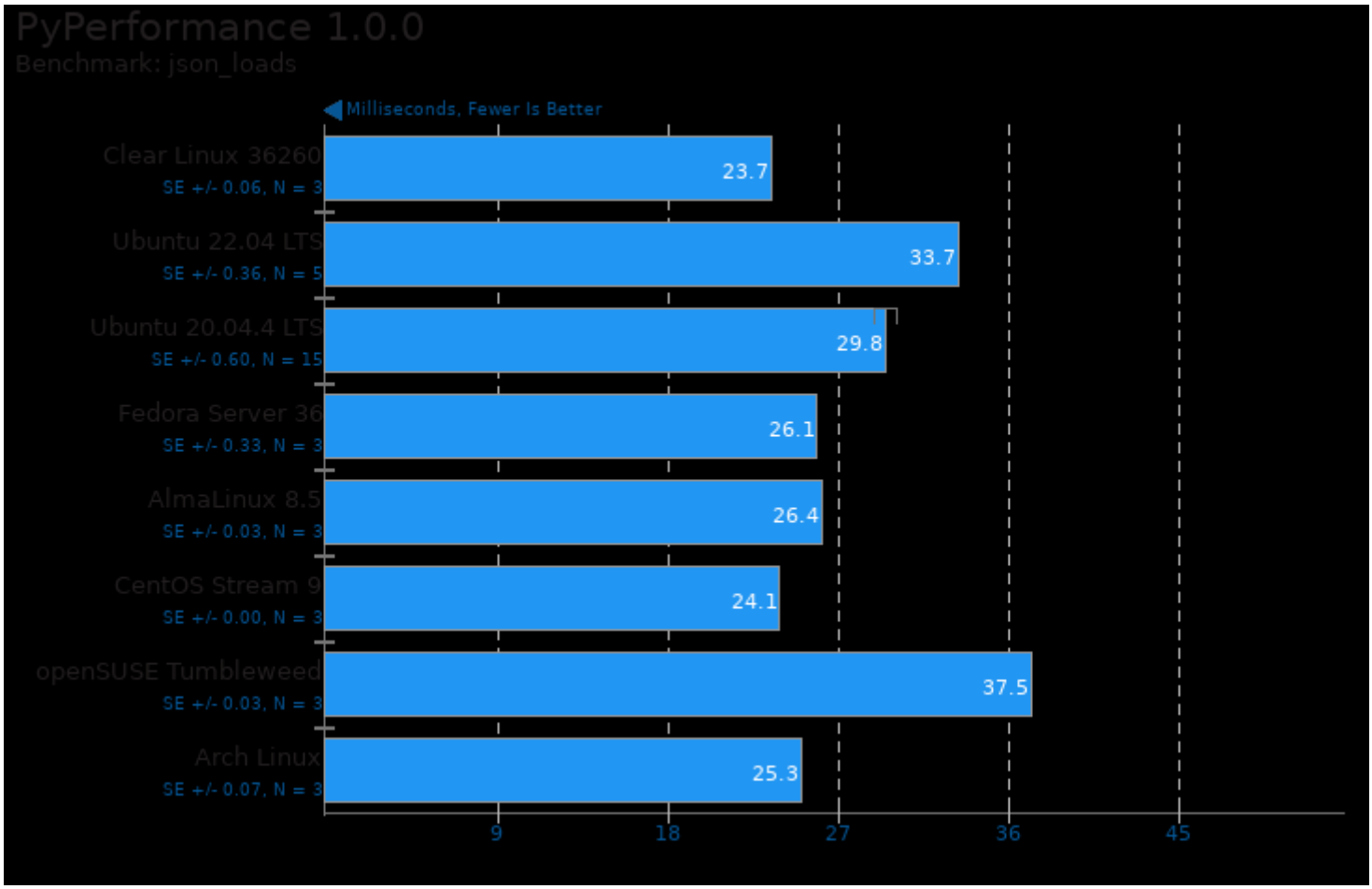
Clear Linux 36260



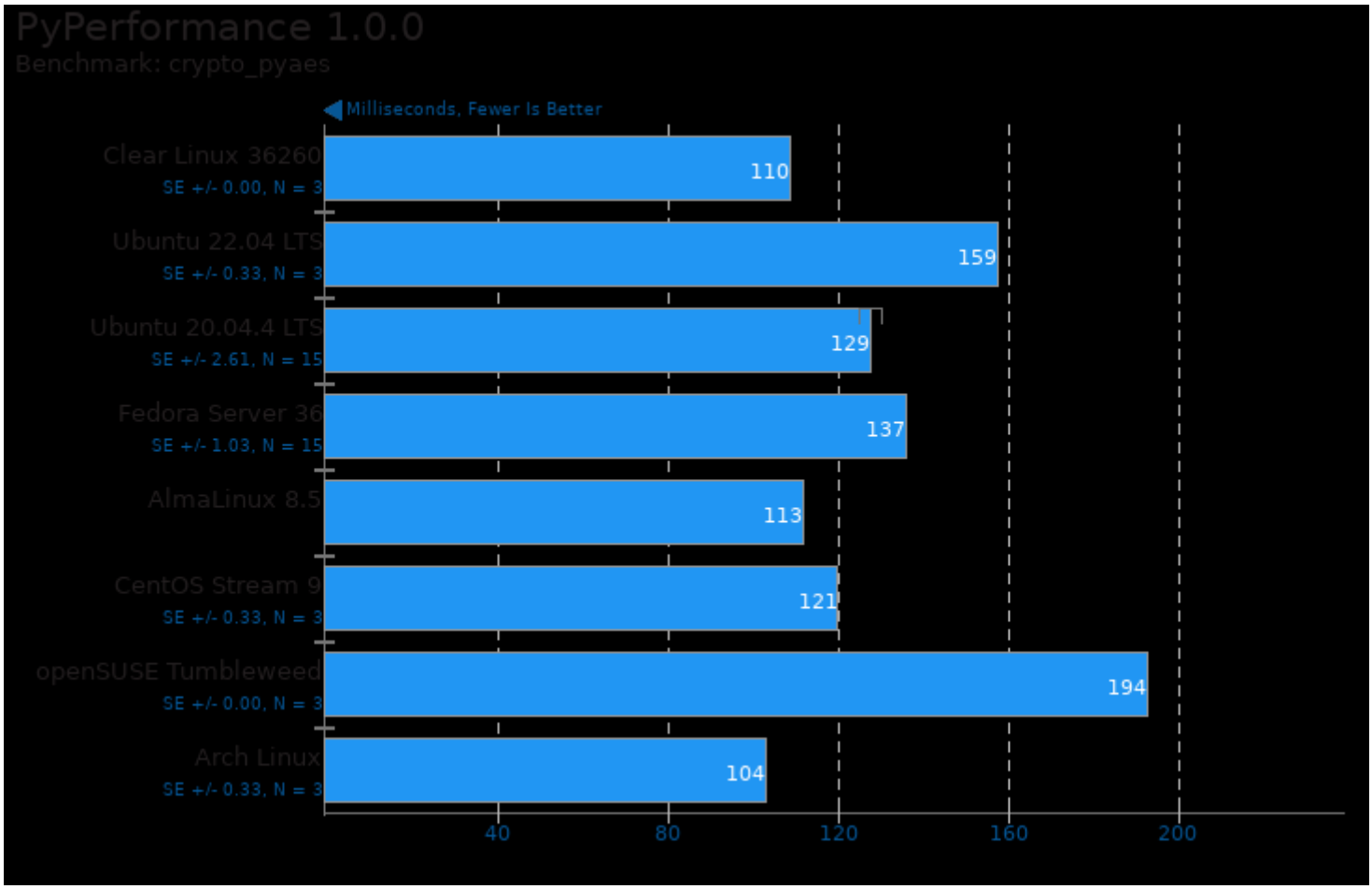
Clear Linux 36260



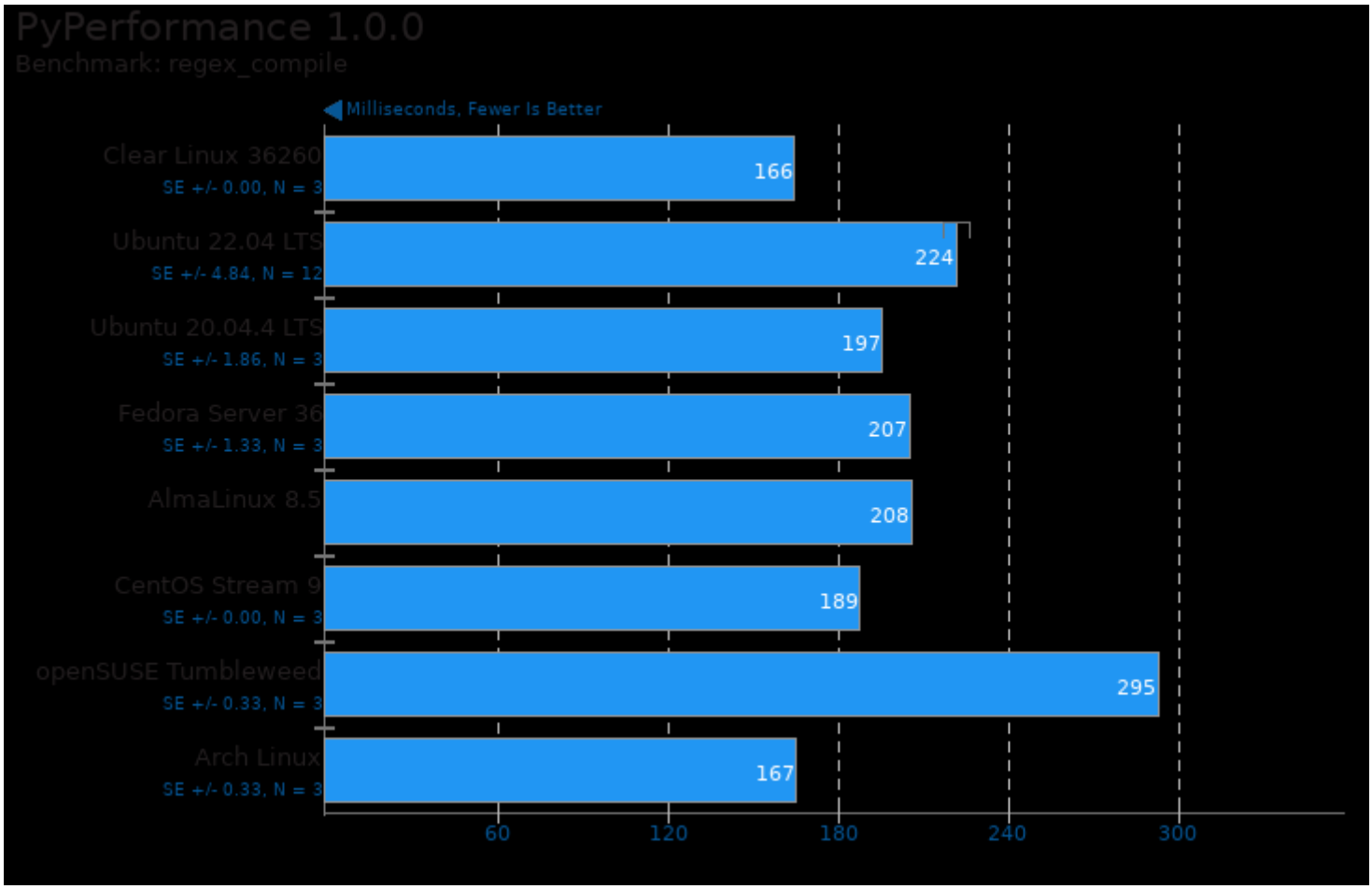
Clear Linux 36260



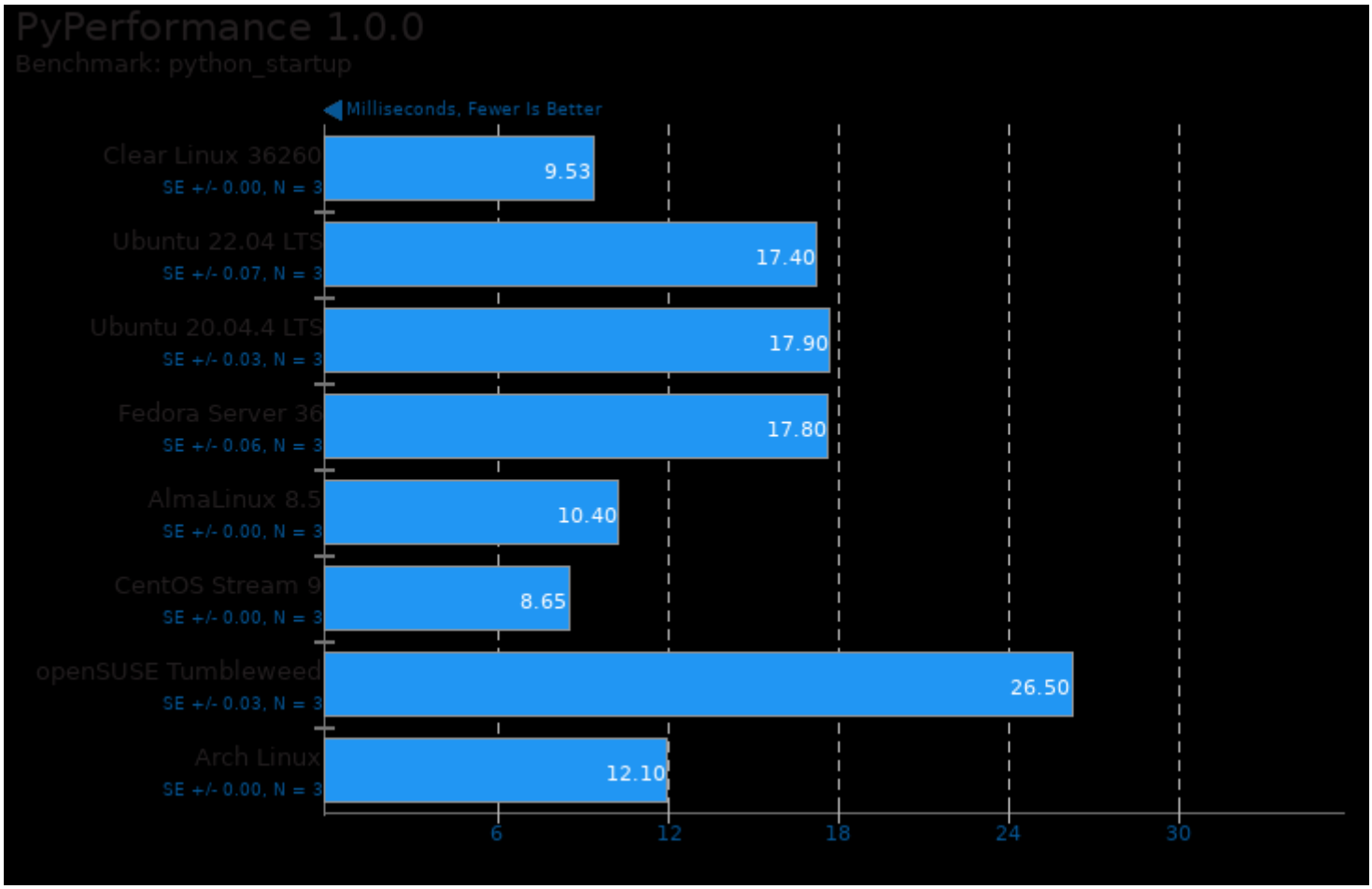
Clear Linux 36260



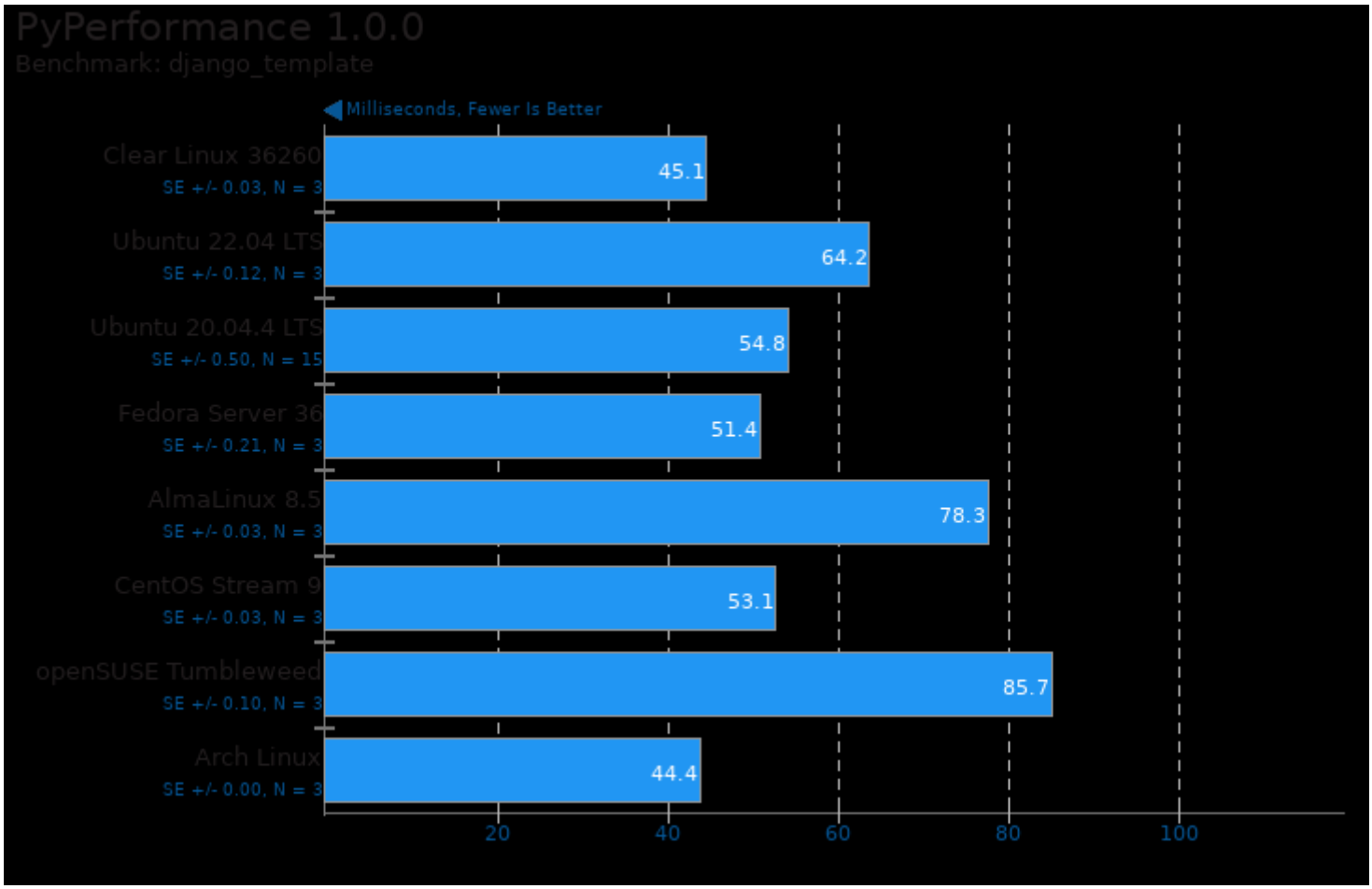
Clear Linux 36260

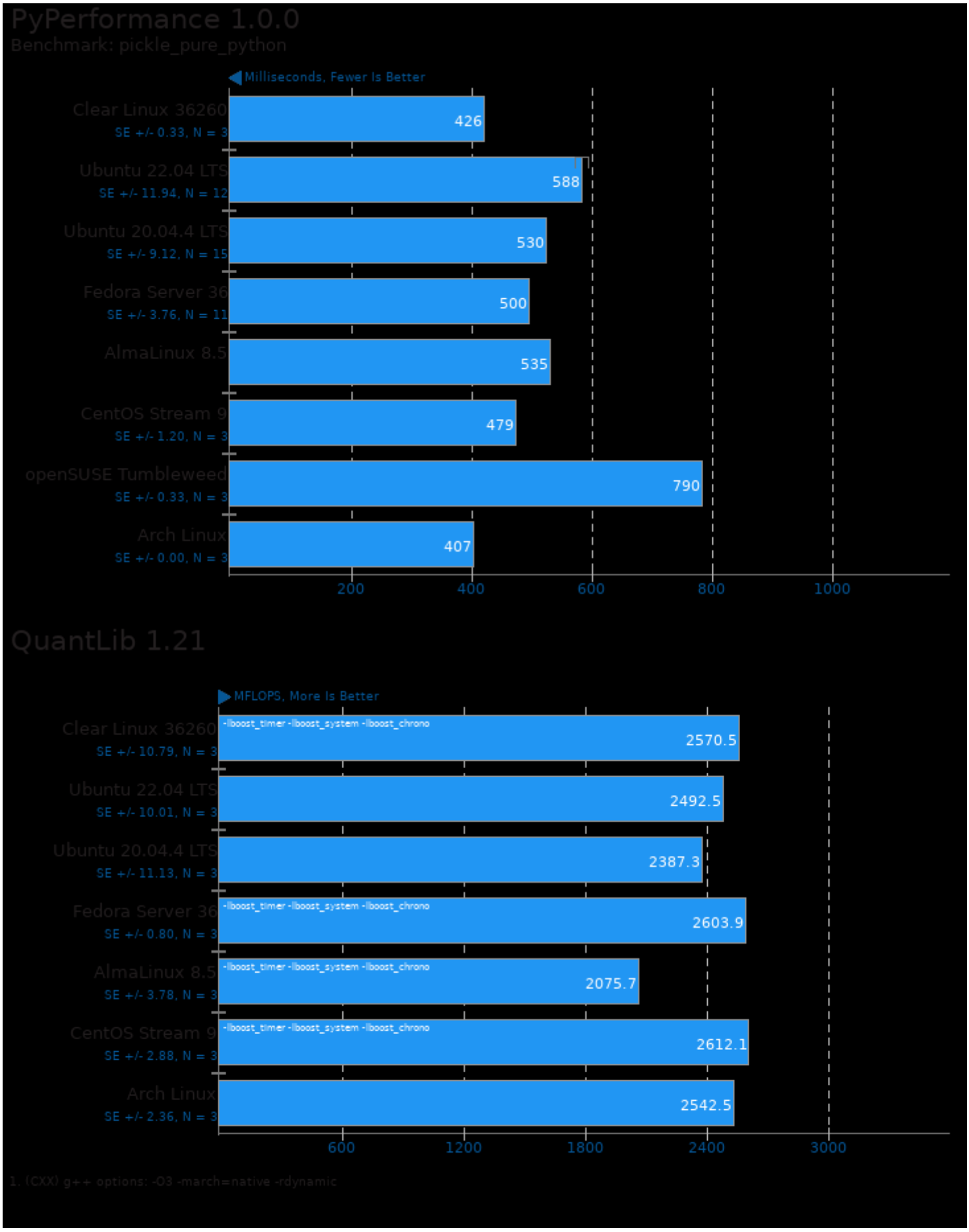


Clear Linux 36260

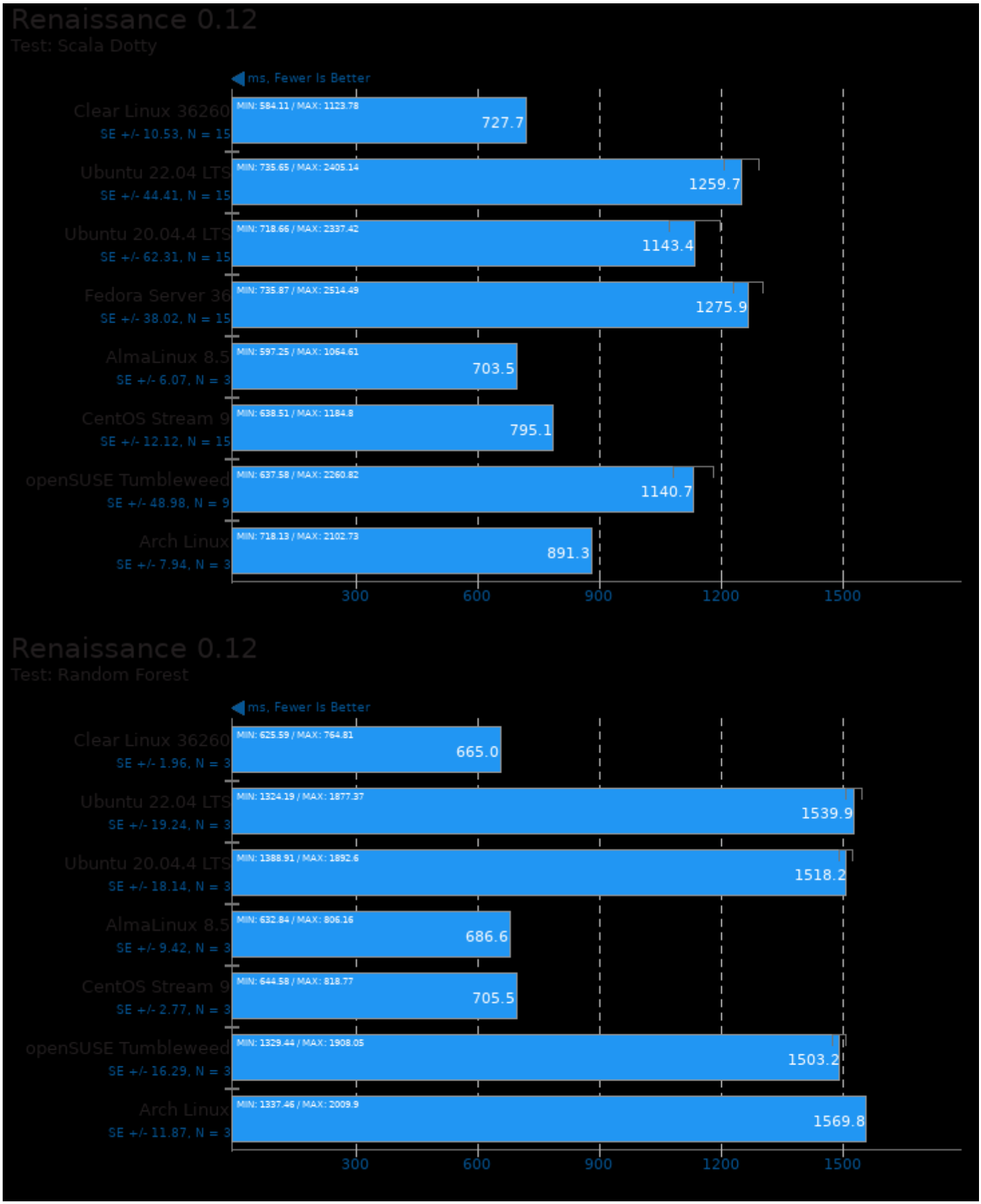


Clear Linux 36260

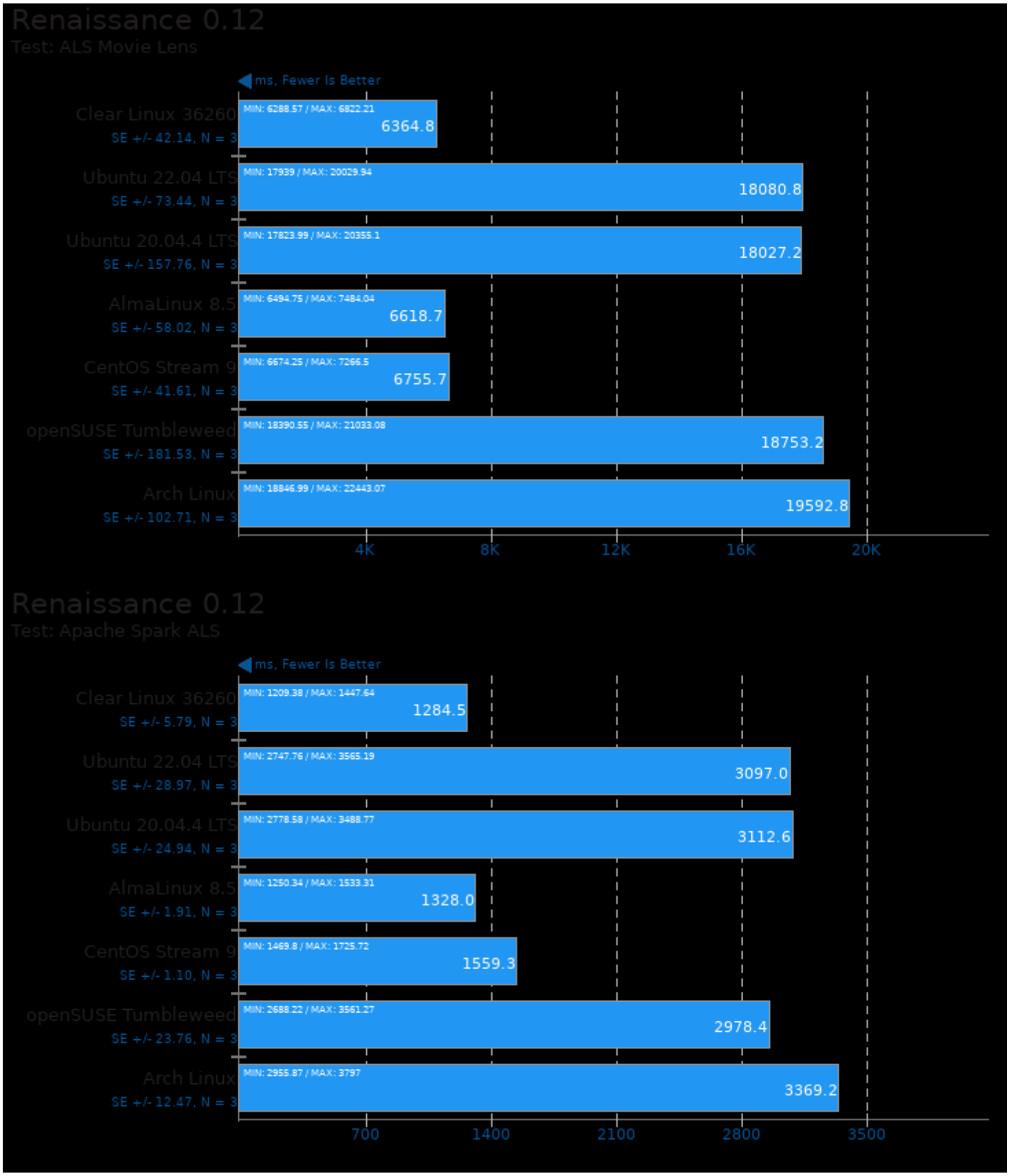



PyPerformance 1.0.0
Benchmark: pickle_pure_python
Milliseconds, Fewer Is Better
Clear Linux 36260
SE +/- 0.33, N = 3
426
Ubuntu 22.04 LTS
SE +/- 11.94, N = 12
588
Ubuntu 20.04.4 LTS
SE +/- 9.12, N = 15
530
Fedora Server 36
SE +/- 3.76, N = 11
500
AlmaLinux 8.5
535
CentOS Stream 9
SE +/- 1.20, N = 3
479
openSUSE Tumbleweed
SE +/- 0.33, N = 3
790
Arch Linux
SE +/- 0.00, N = 3
407
200
400
600
800
1000
QuantLib 1.21
MFLOPS, More Is Better
Clear Linux 36260
SE +/- 10.79, N = 3
-lboost_timer -lboost_system -lboost_chrono
2570.5
Ubuntu 22.04 LTS
SE +/- 10.01, N = 3
2492.5
Ubuntu 20.04.4 LTS
SE +/- 11.13, N = 3
2387.3
Fedora Server 36
SE +/- 0.80, N = 3
-lboost_timer -lboost_system -lboost_chrono
2603.9
AlmaLinux 8.5
SE +/- 3.78, N = 3
-lboost_timer -lboost_system -lboost_chrono
2075.7
CentOS Stream 9
SE +/- 2.88, N = 3
-lboost_timer -lboost_system -lboost_chrono
2612.1
Arch Linux
SE +/- 2.36, N = 3
2542.5
600
1200
1800
2400
3000
1. (CXX) g++ options: -O3 -march=native -rdynamic

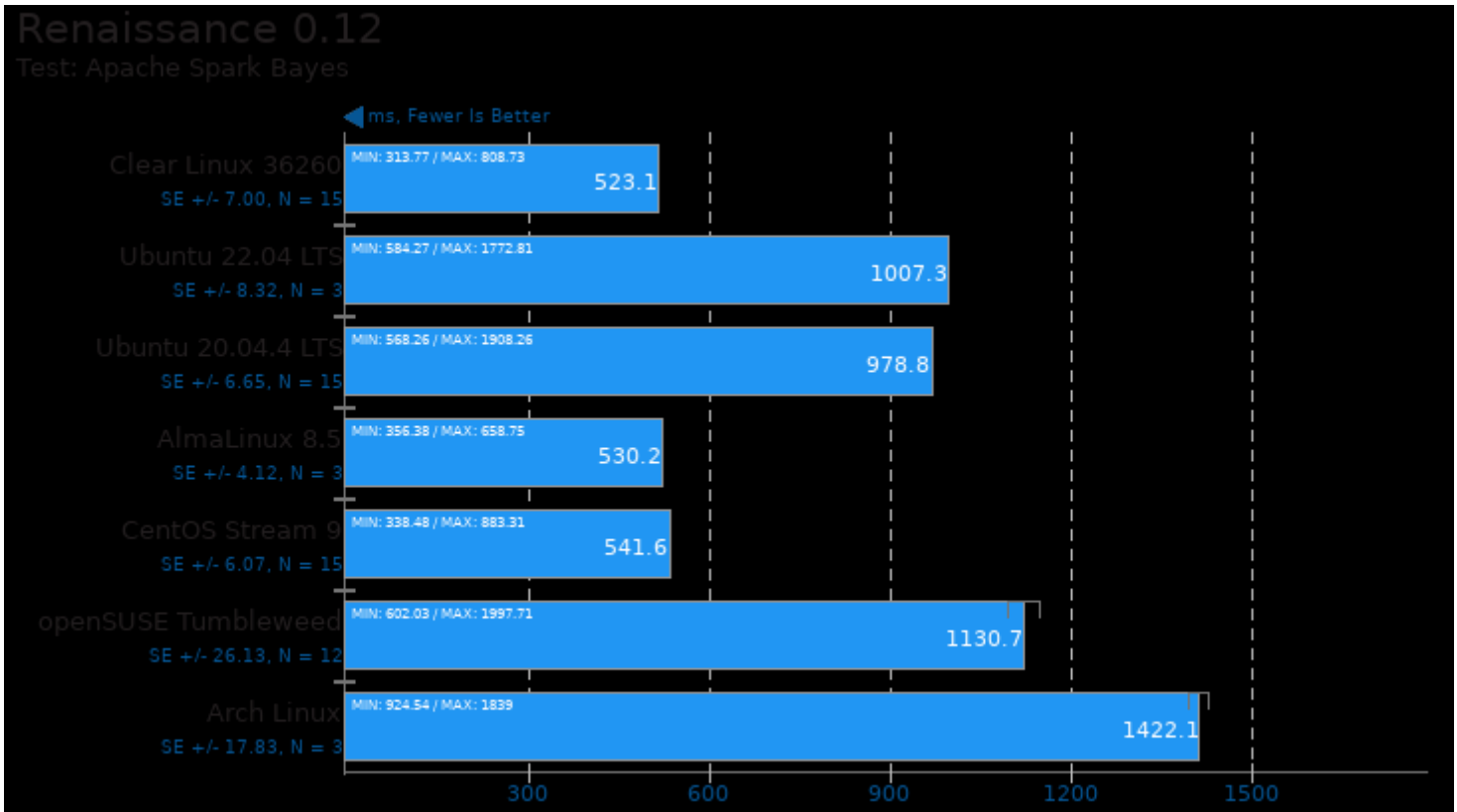
Clear Linux 36260

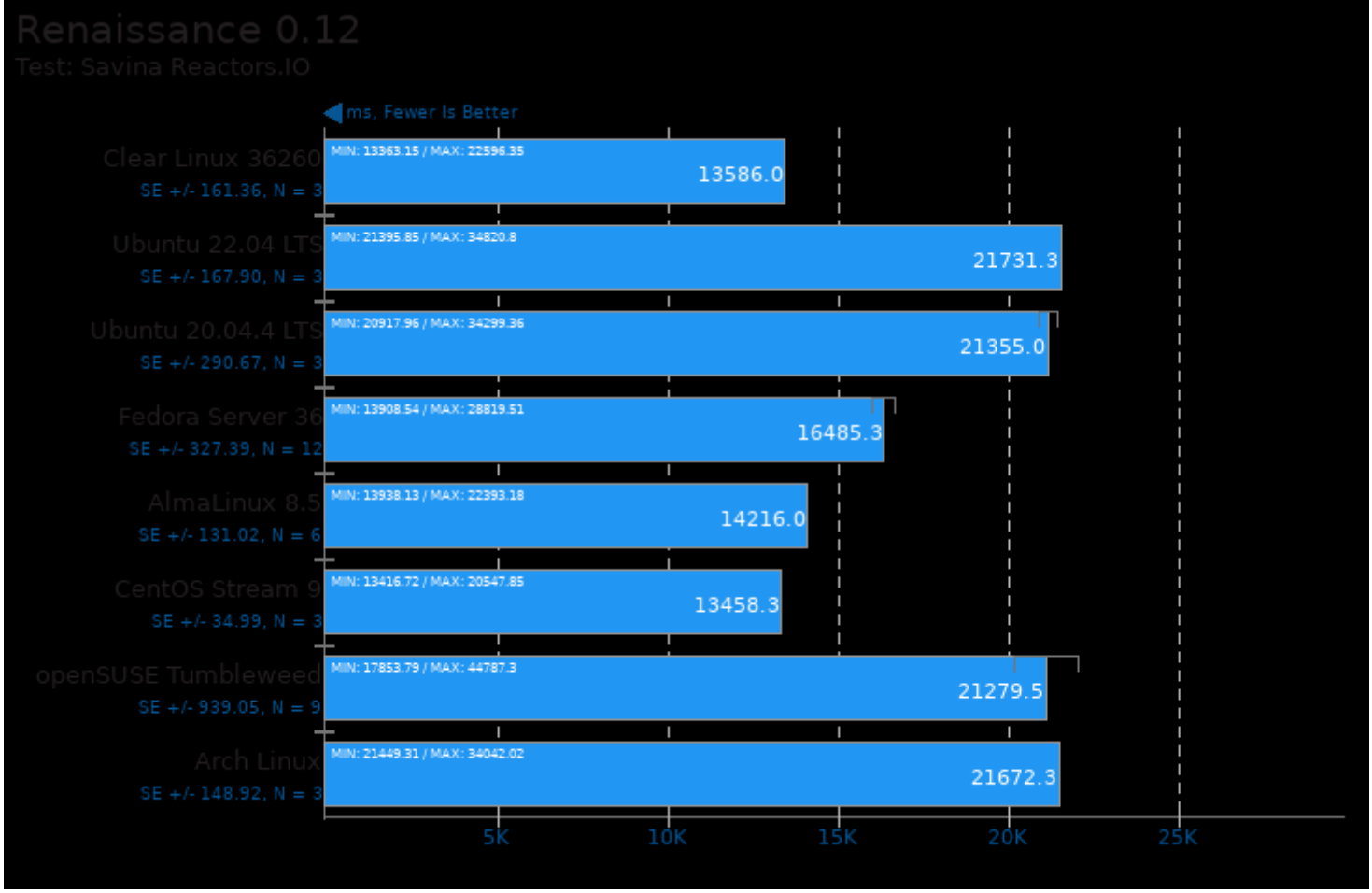


Clear Linux 36260

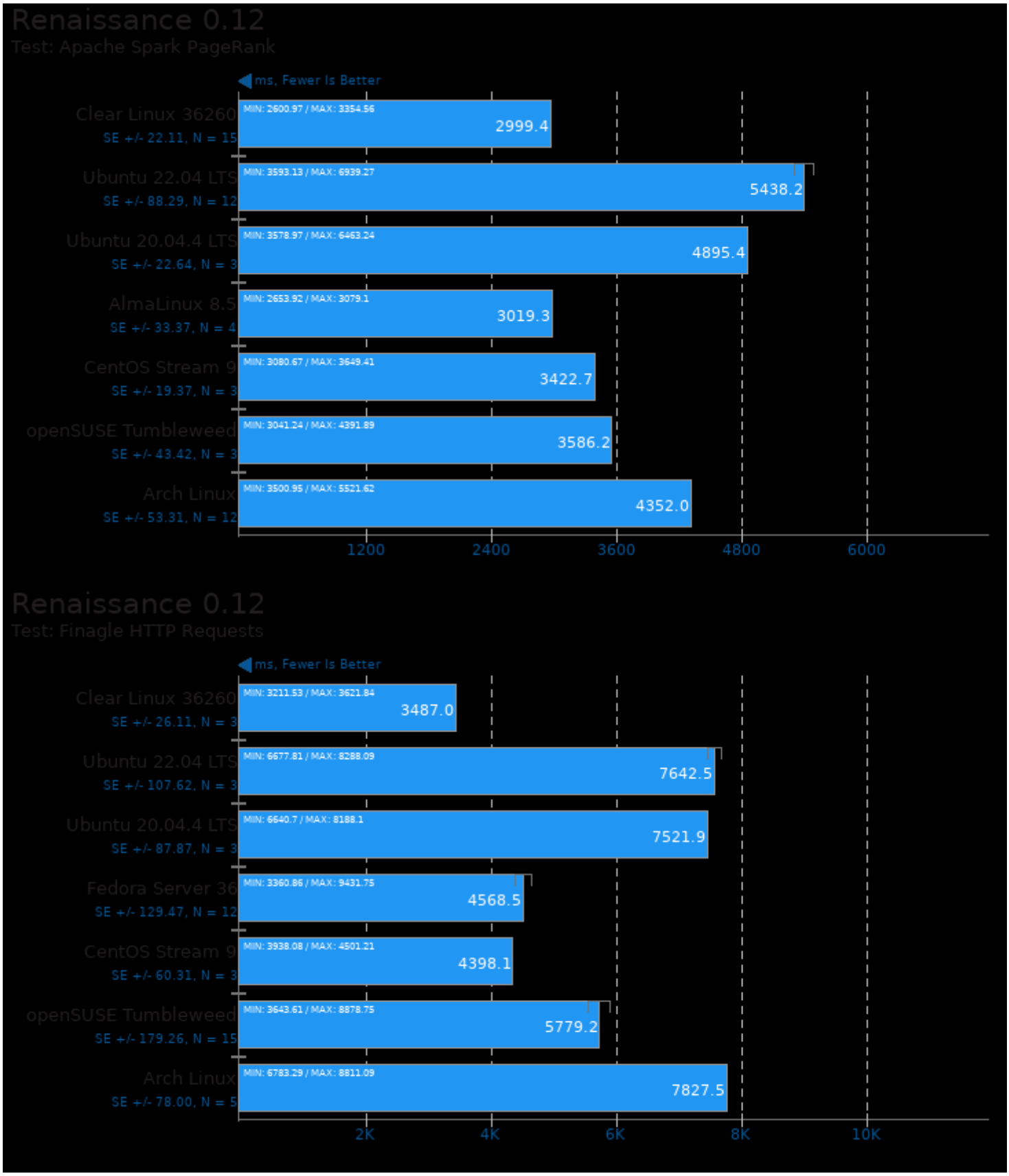


Clear Linux 36260

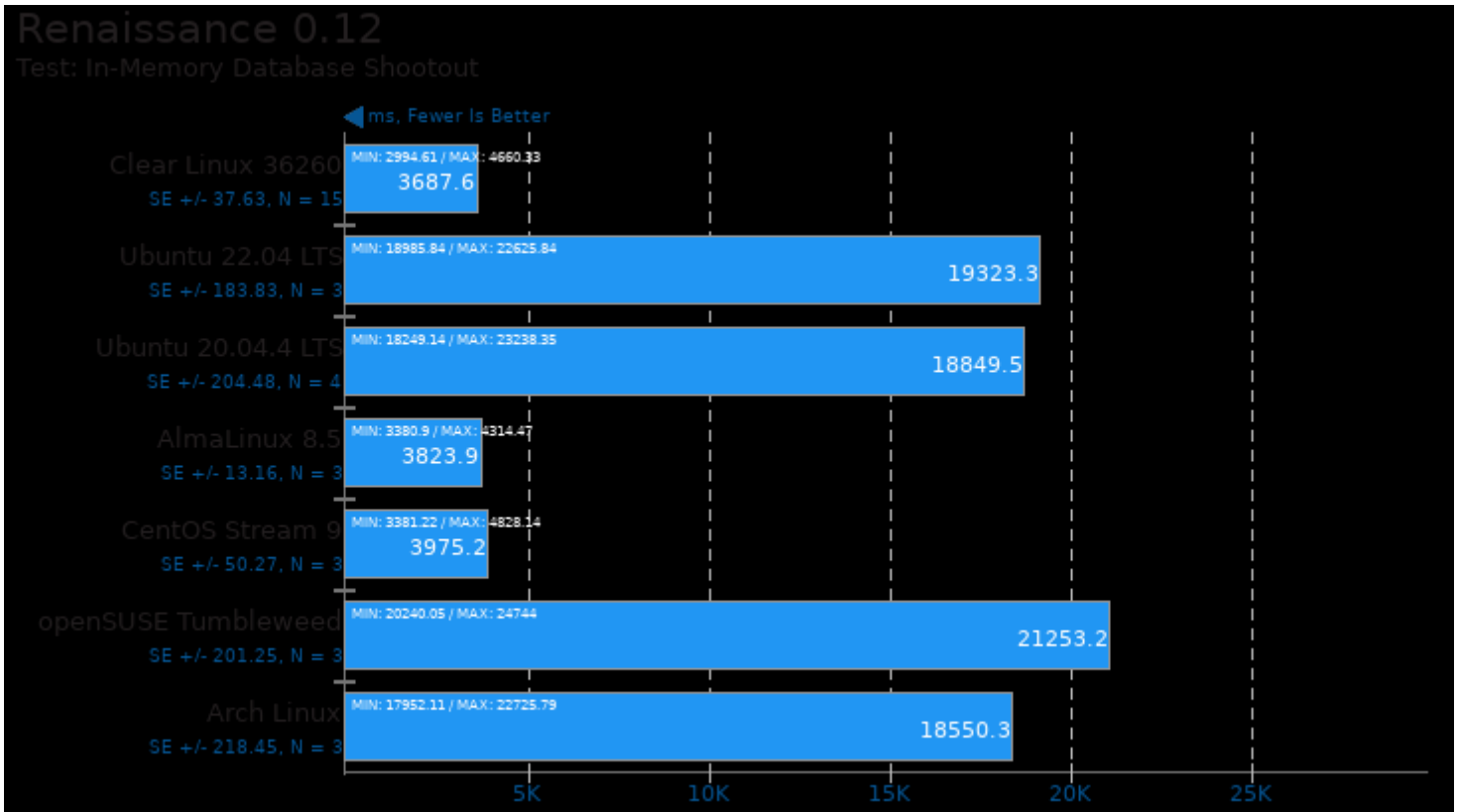


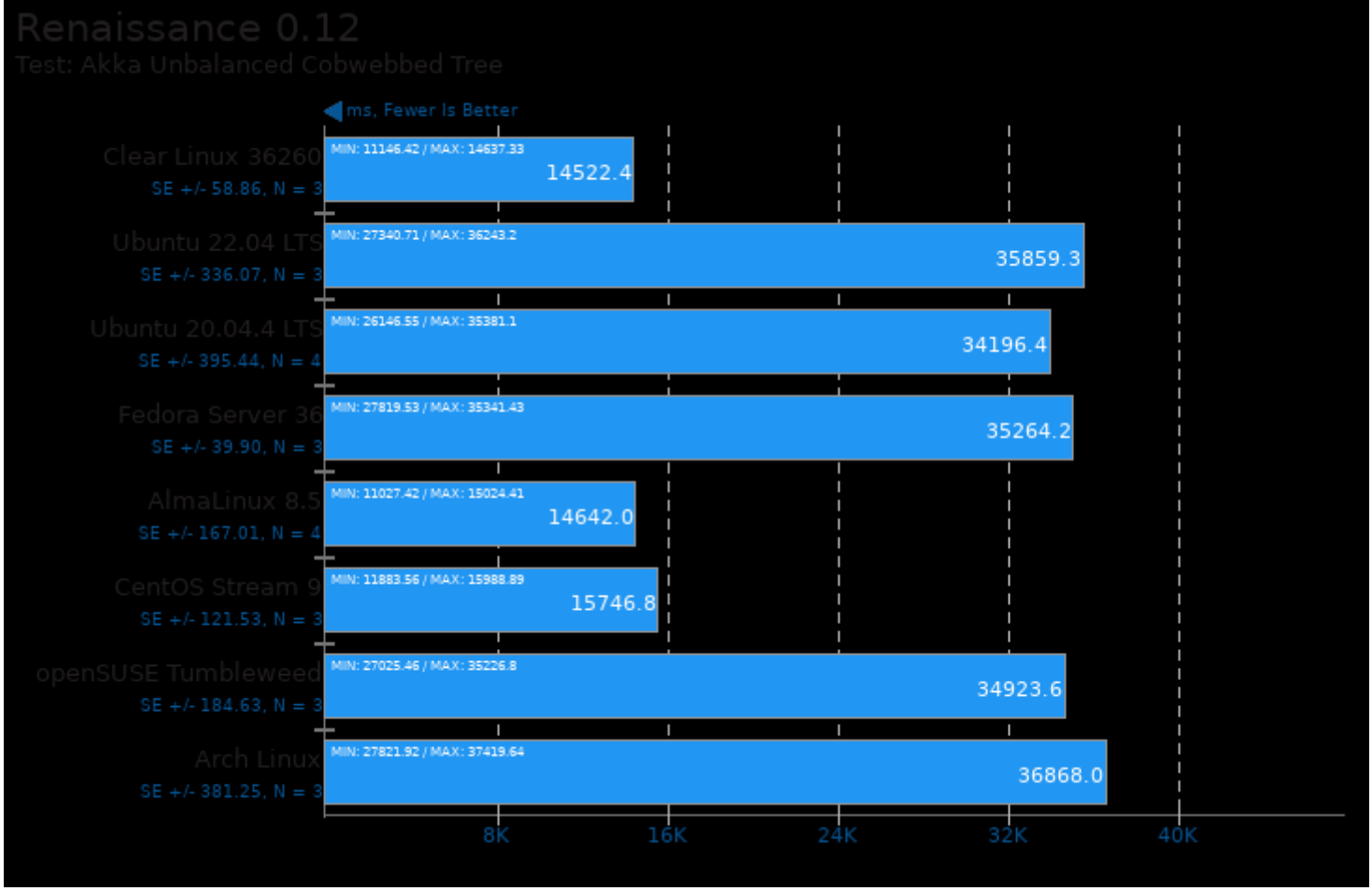


Clear Linux 36260

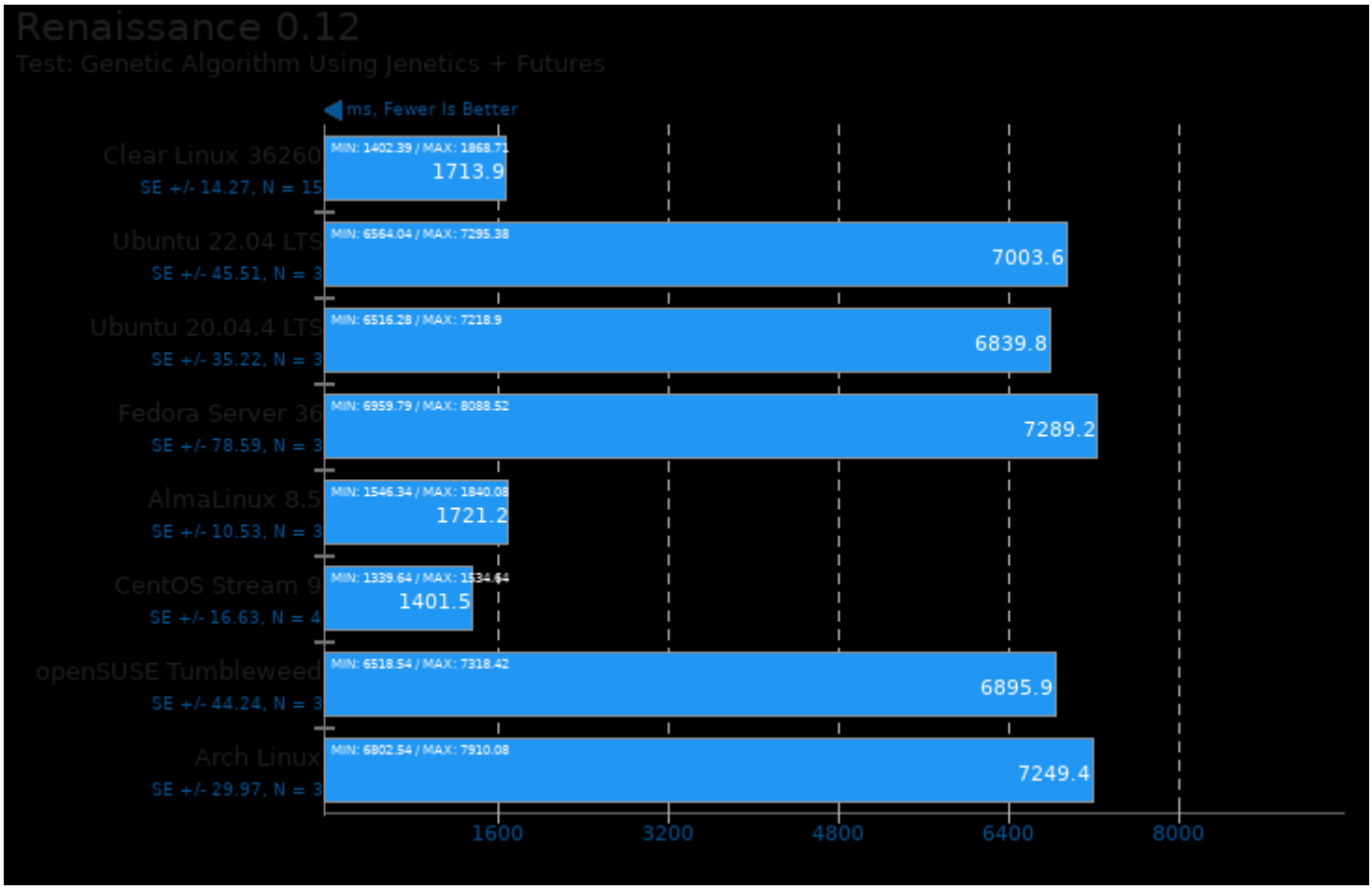


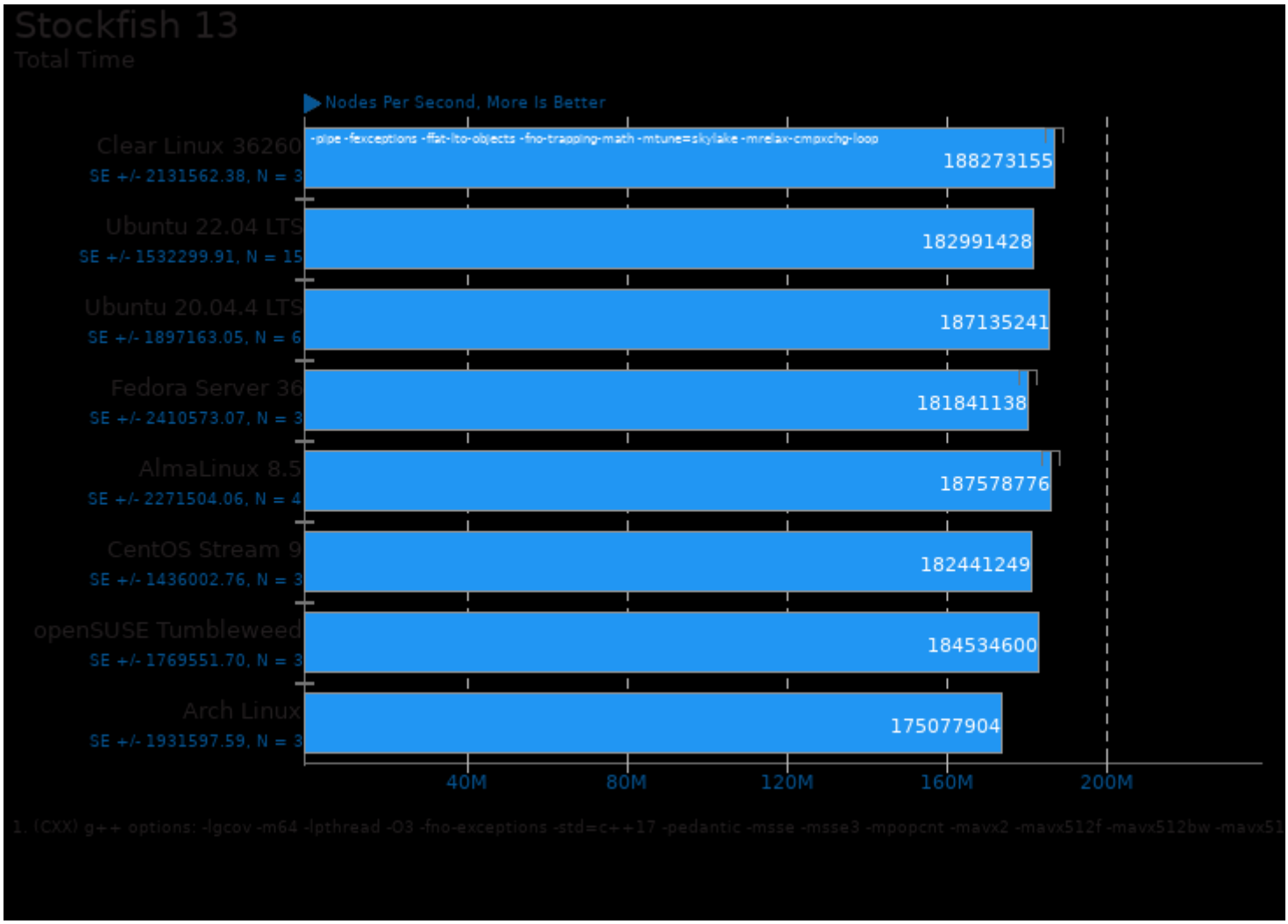
Clear Linux 36260

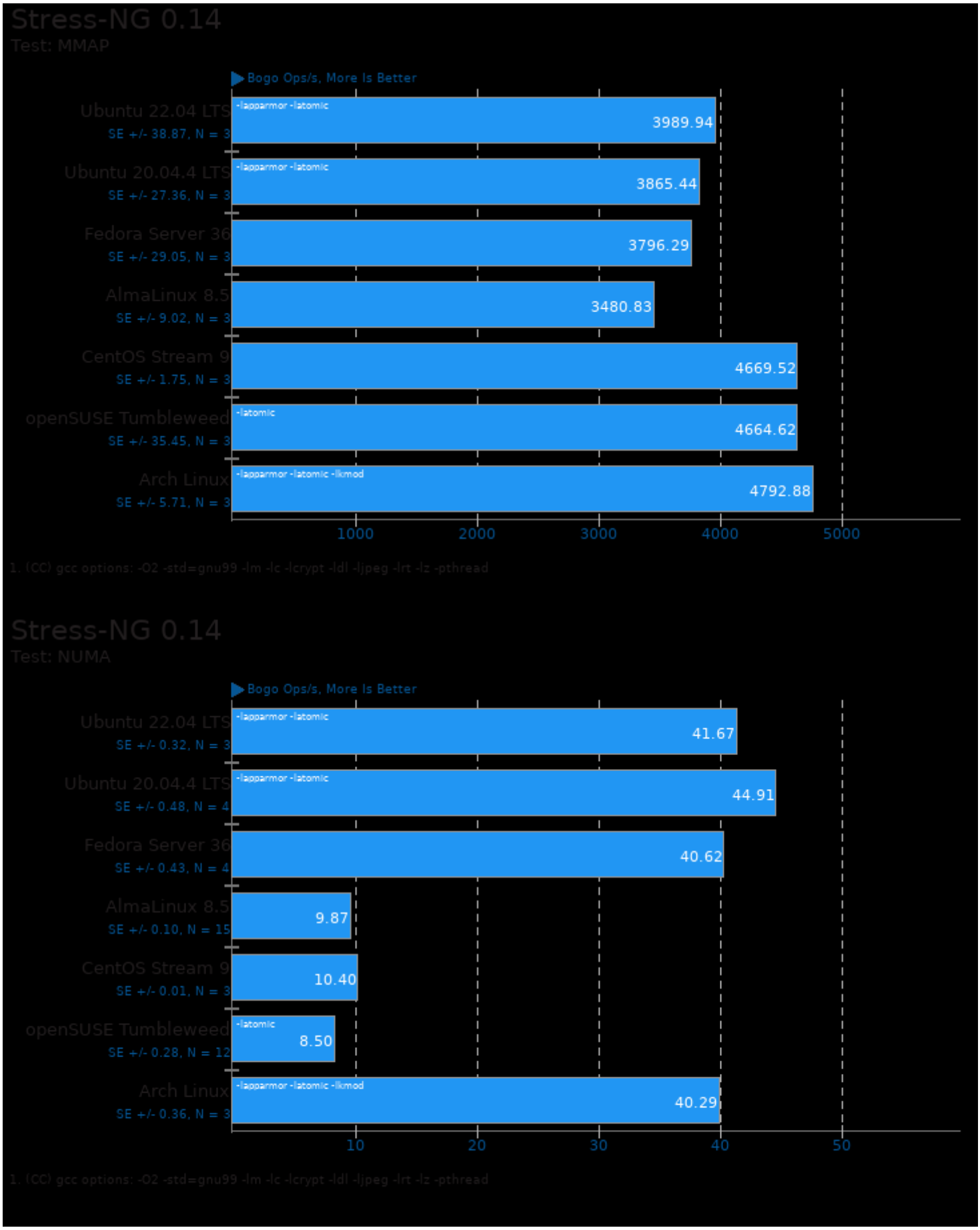


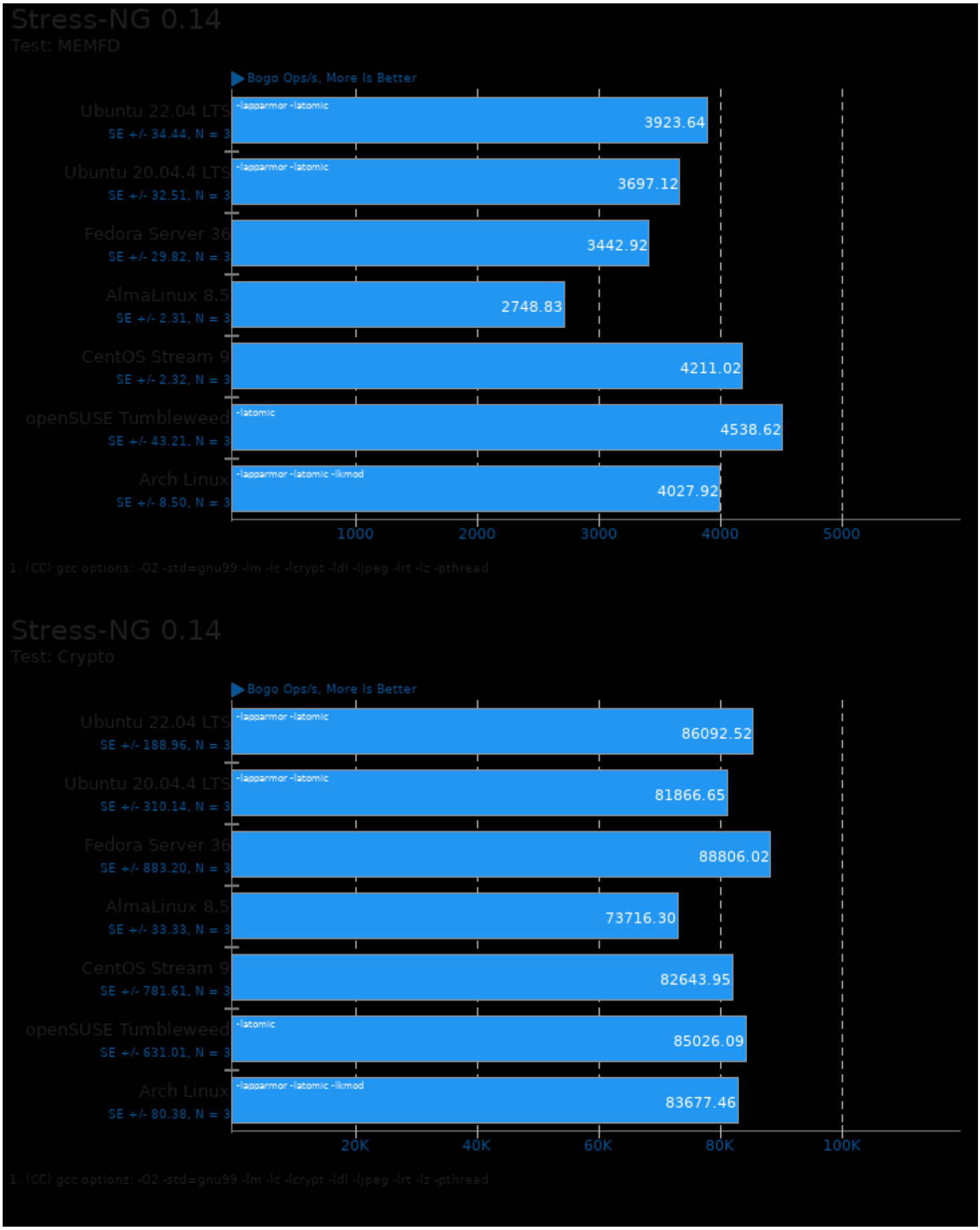


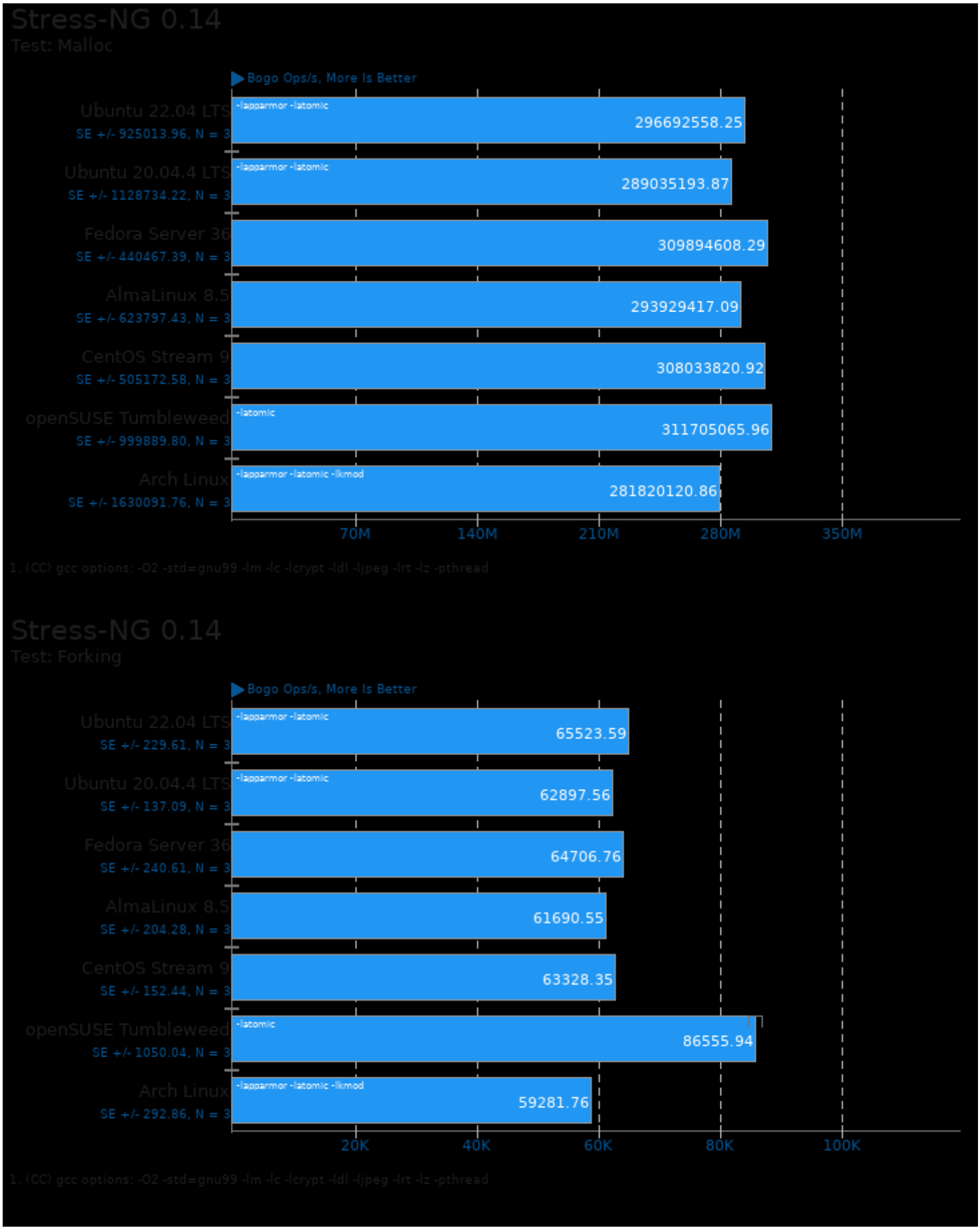
Clear Linux 36260



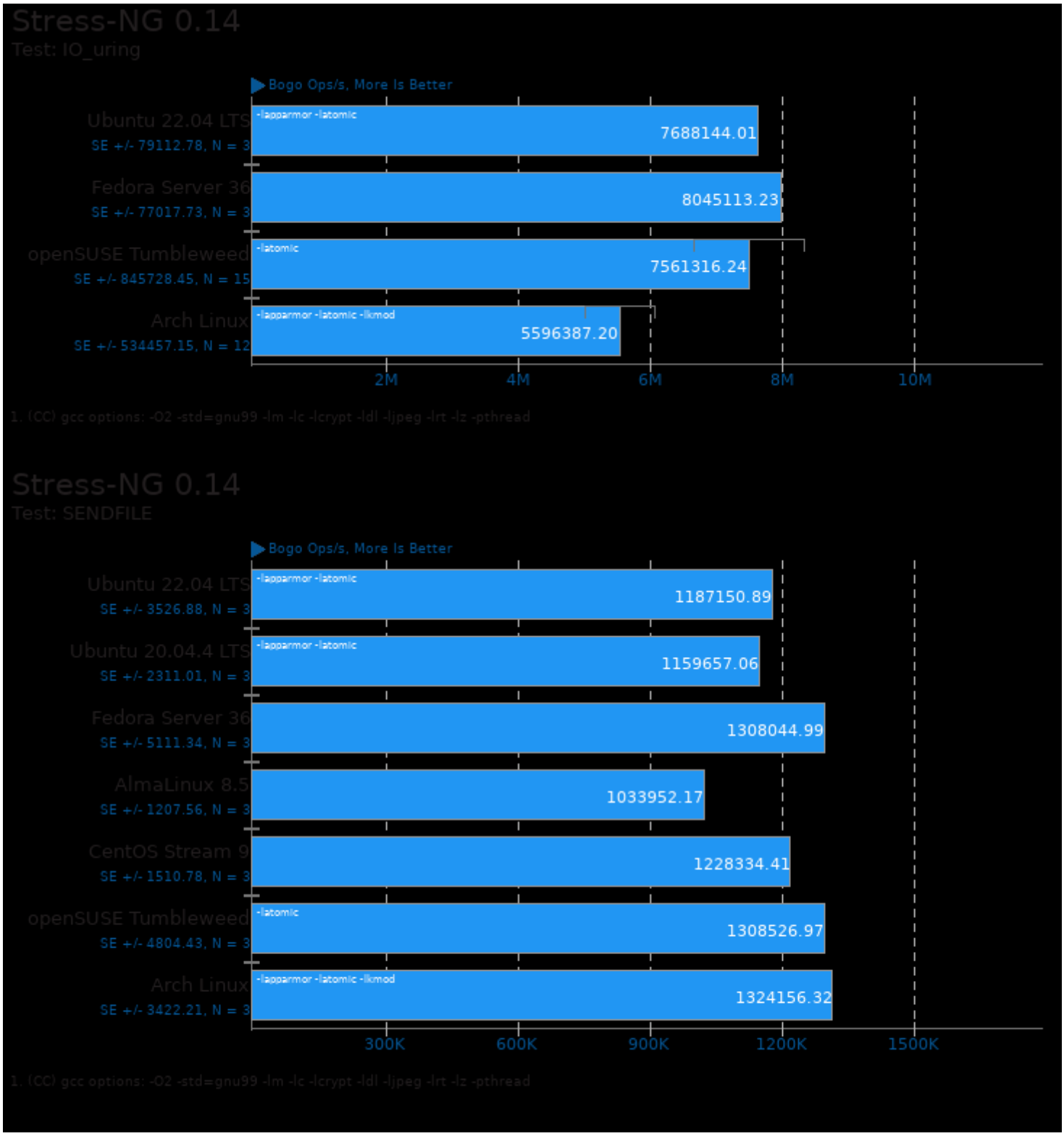

Stockfish 13
Total Time
Nodes Per Second, More Is Better
-pipe -fexceptions -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
Clear Linux 36260
SE +/- 2131562.38, N = 3
188273155
Ubuntu 22.04 LTS
SE +/- 1532299.91, N = 15
182991428
Ubuntu 20.04.4 LTS
SE +/- 1897163.05, N = 6
187135241
Fedora Server 36
SE +/- 2410573.07, N = 3
181841138
AlmaLinux 8.5
SE +/- 2271504.06, N = 4
187578776
CentOS Stream 9
SE +/- 1436002.76, N = 3
182441249
openSUSE Tumbleweed
SE +/- 1769551.70, N = 3
184534600
Arch Linux
SE +/- 1931597.59, N = 3
175077904
40M
80M
120M
160M
200M
1. (CXX) g++ options: -lgcov -m64 -lpthread -O3 -fno-exceptions -std=c++17 -pedantic -msse -msse3 -mpopcnt -mavx2 -mavx512f -mavx512bw -mavx51

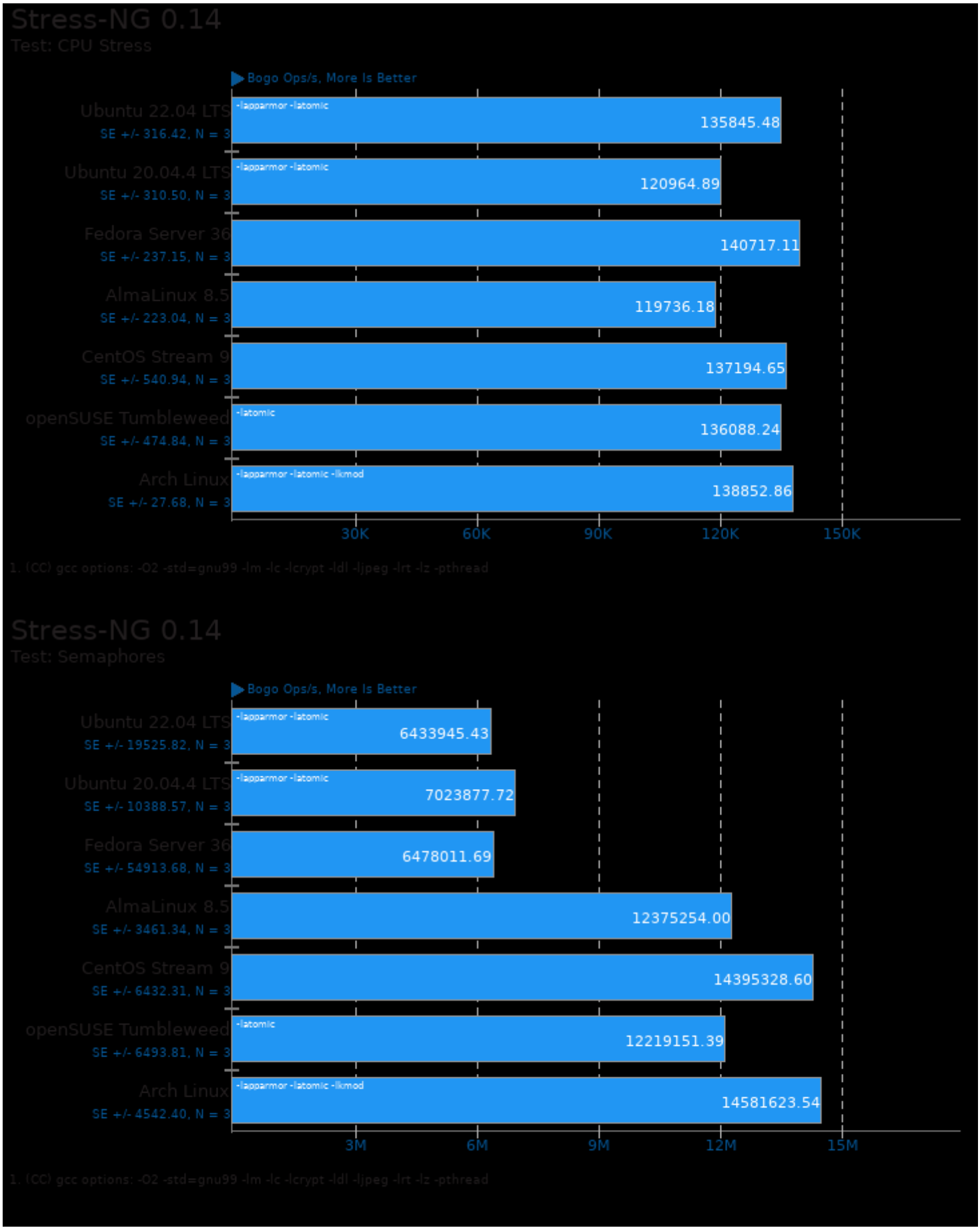

Stress-NG 0.14
Test: MMAP
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 38.87, N = 3
-lapparmor -latomic
3989.94
Ubuntu 20.04.4 LTS
SE +/- 27.36, N = 3
-lapparmor -latomic
3865.44
Fedora Server 36
SE +/- 29.05, N = 3
3796.29
AlmaLinux 8.5
SE +/- 9.02, N = 3
3480.83
CentOS Stream 9
SE +/- 1.75, N = 3
4669.52
openSUSE Tumbleweed
SE +/- 35.45, N = 3
-latomic
4664.62
Arch Linux
SE +/- 5.71, N = 3
-lapparmor -latomic -lkmod
4792.88
1000
2000
3000
4000
5000
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: NUMA
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 0.32, N = 3
-lapparmor -latomic
41.67
Ubuntu 20.04.4 LTS
SE +/- 0.48, N = 4
-lapparmor -latomic
44.91
Fedora Server 36
SE +/- 0.43, N = 4
40.62
AlmaLinux 8.5
SE +/- 0.10, N = 15
9.87
CentOS Stream 9
SE +/- 0.01, N = 3
10.40
openSUSE Tumbleweed
SE +/- 0.28, N = 12
-latomic
8.50
Arch Linux
SE +/- 0.36, N = 3
-lapparmor -latomic -lkmod
40.29
10
20
30
40
50
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread

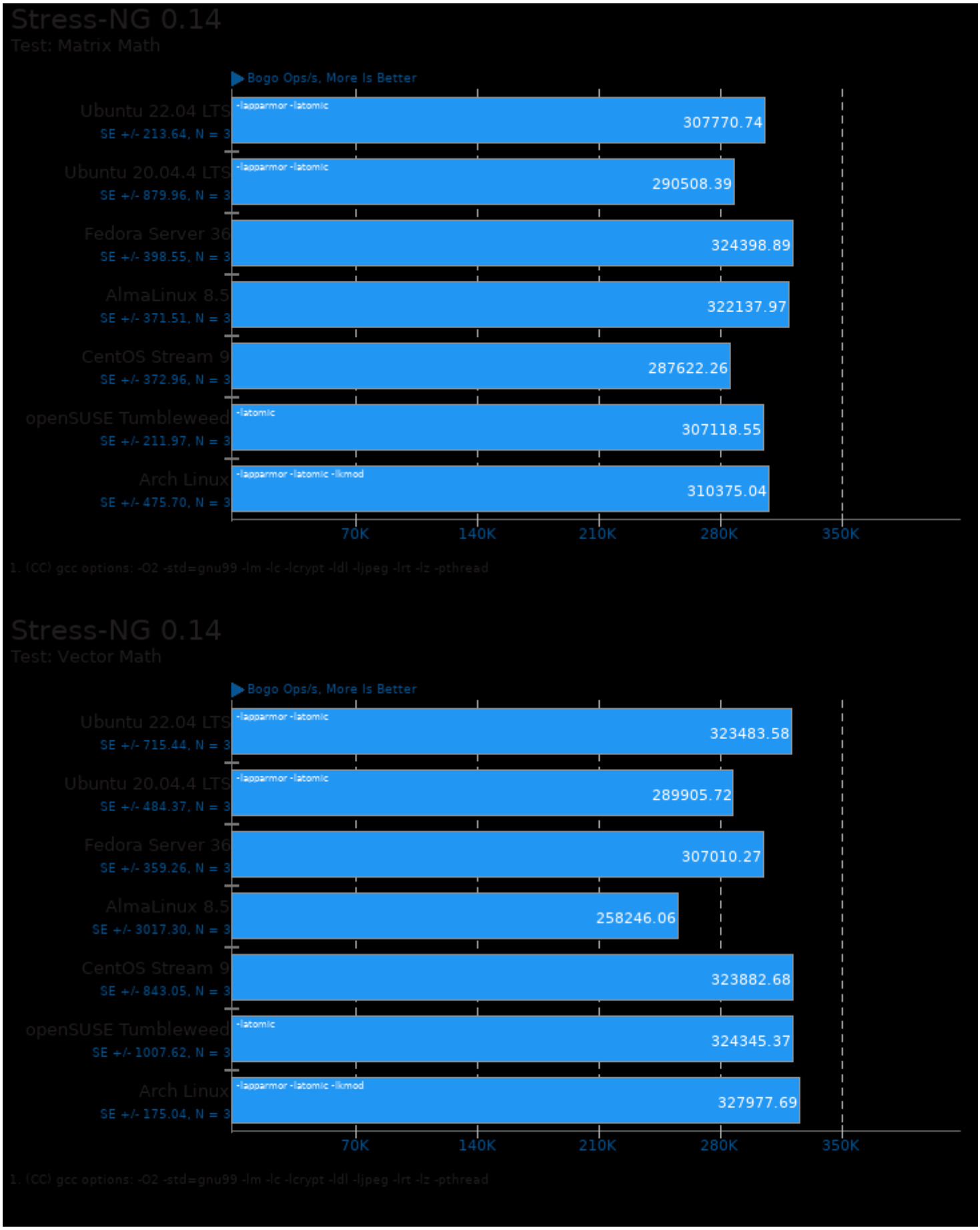

Stress-NG 0.14
Test: MEMFD
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 34.44, N = 3
-lapparmor -latomic
3923.64
Ubuntu 20.04.4 LTS
SE +/- 32.51, N = 3
-lapparmor -latomic
3697.12
Fedora Server 36
SE +/- 29.82, N = 3
3442.92
AlmaLinux 8.5
SE +/- 2.31, N = 3
2748.83
CentOS Stream 9
SE +/- 2.32, N = 3
4211.02
openSUSE Tumbleweed
SE +/- 43.21, N = 3
-latomic
4538.62
Arch Linux
SE +/- 8.50, N = 3
-lapparmor -latomic -lkmod
4027.92
1000
2000
3000
4000
5000
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: Crypto
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 188.96, N = 3
-lapparmor -latomic
86092.52
Ubuntu 20.04.4 LTS
SE +/- 310.14, N = 3
-lapparmor -latomic
81866.65
Fedora Server 36
SE +/- 883.20, N = 3
88806.02
AlmaLinux 8.5
SE +/- 33.33, N = 3
73716.30
CentOS Stream 9
SE +/- 781.61, N = 3
82643.95
openSUSE Tumbleweed
SE +/- 631.01, N = 3
-latomic
85026.09
Arch Linux
SE +/- 80.38, N = 3
-lapparmor -latomic -lkmod
83677.46
20K
40K
60K
80K
100K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread

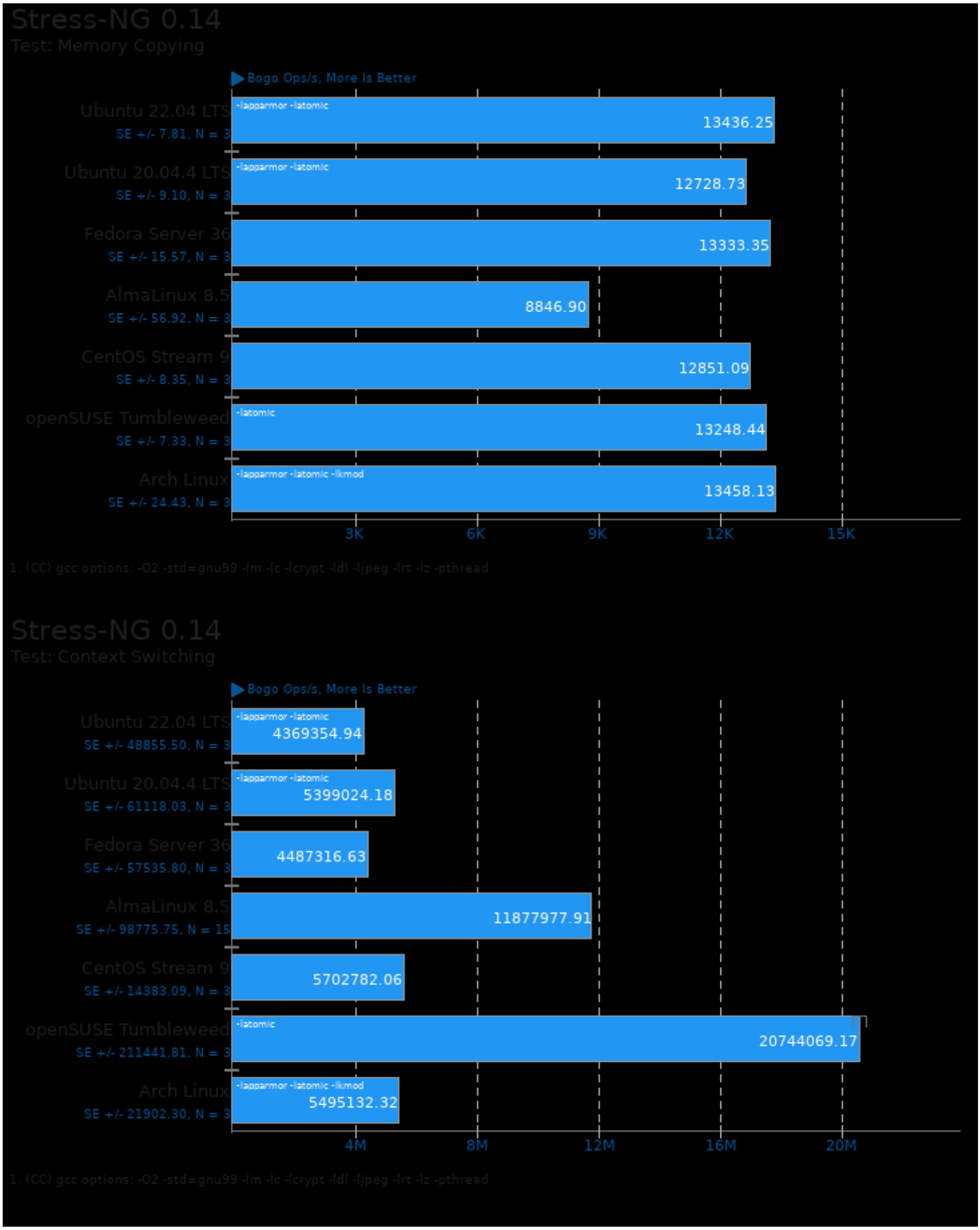

Stress-NG 0.14
Test: Malloc
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 925013.96, N = 3
-lapparmor -latomic
296692558.25
Ubuntu 20.04.4 LTS
SE +/- 1128734.22, N = 3
-lapparmor -latomic
289035193.87
Fedora Server 36
SE +/- 440467.39, N = 3
309894608.29
AlmaLinux 8.5
SE +/- 623797.43, N = 3
293929417.09
CentOS Stream 9
SE +/- 505172.58, N = 3
308033820.92
openSUSE Tumbleweed
SE +/- 999889.80, N = 3
-latomic
311705065.96
Arch Linux
SE +/- 1630091.76, N = 3
-lapparmor -latomic -lkmod
281820120.86
70M
140M
210M
280M
350M
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: Forking
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 229.61, N = 3
-lapparmor -latomic
65523.59
Ubuntu 20.04.4 LTS
SE +/- 137.09, N = 3
-lapparmor -latomic
62897.56
Fedora Server 36
SE +/- 240.61, N = 3
64706.76
AlmaLinux 8.5
SE +/- 204.28, N = 3
61690.55
CentOS Stream 9
SE +/- 152.44, N = 3
63328.35
openSUSE Tumbleweed
SE +/- 1050.04, N = 3
-latomic
86555.94
Arch Linux
SE +/- 292.86, N = 3
-lapparmor -latomic -lkmod
59281.76
20K
40K
60K
80K
100K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread

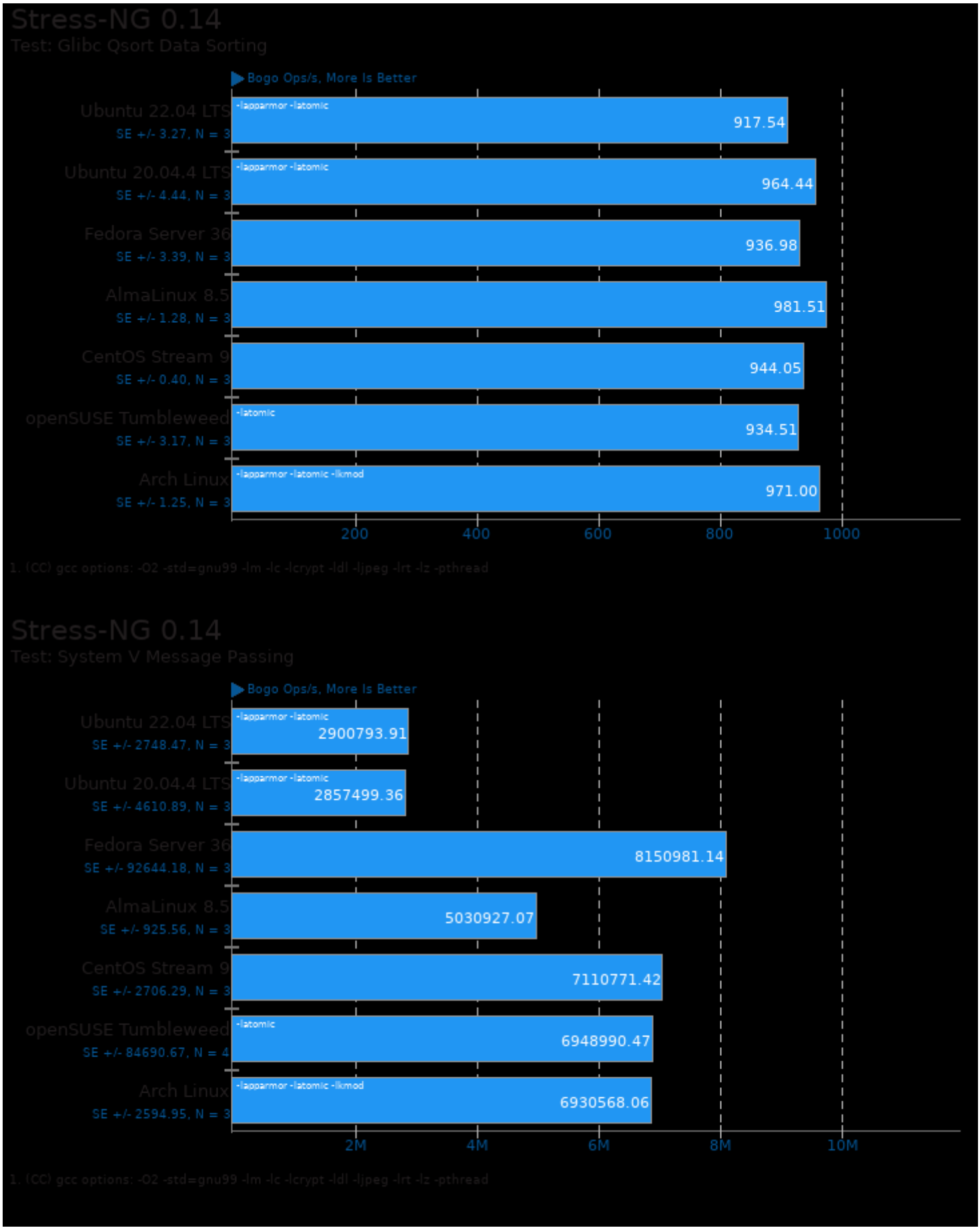
Clear Linux 36260



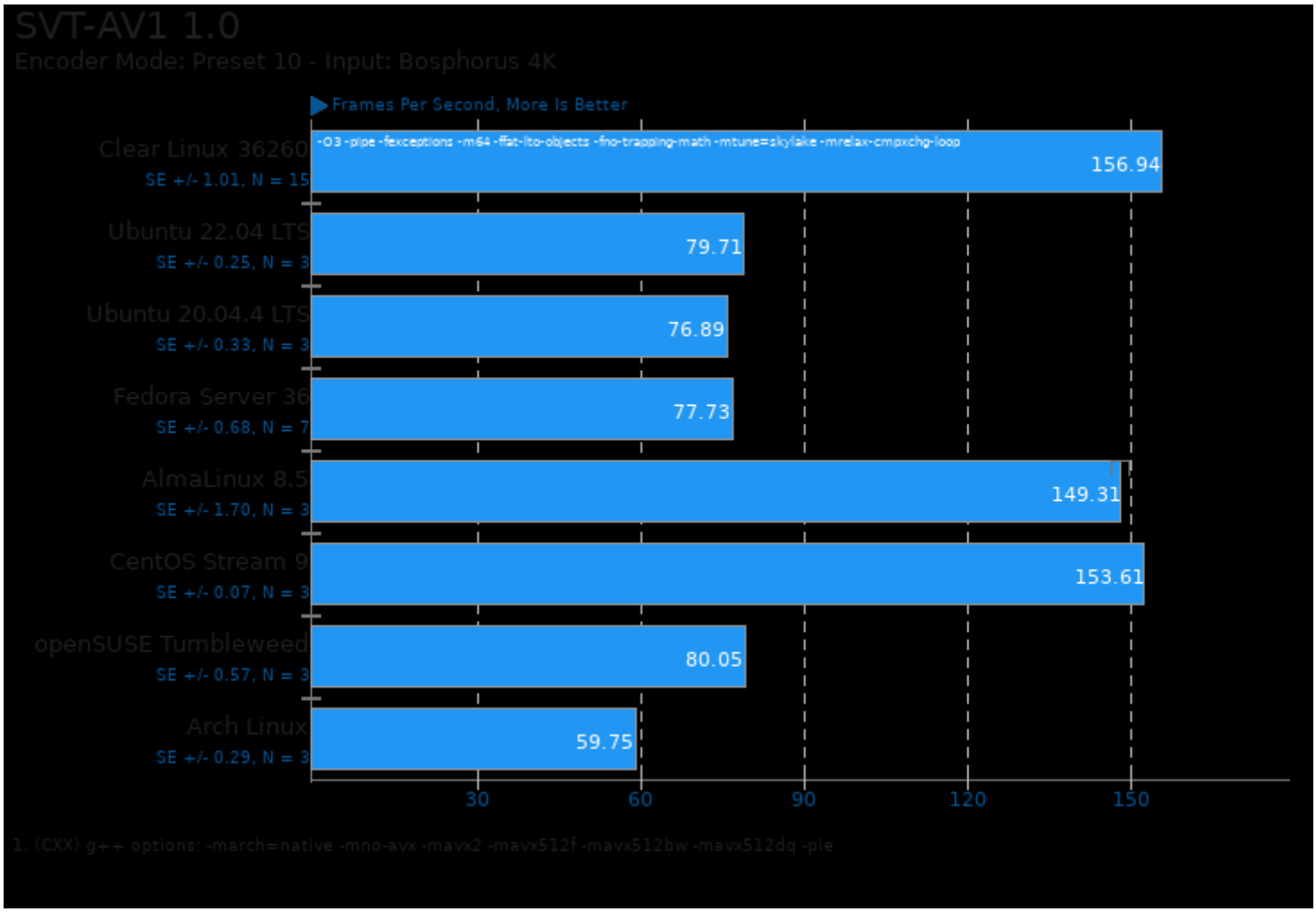

Stress-NG 0.14
Test: CPU Stress
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 316.42, N = 3
-lapparmor -latomic
135845.48
Ubuntu 20.04.4 LTS
SE +/- 310.50, N = 3
-lapparmor -latomic
120964.89
Fedora Server 36
SE +/- 237.15, N = 3
140717.11
AlmaLinux 8.5
SE +/- 223.04, N = 3
119736.18
CentOS Stream 9
SE +/- 540.94, N = 3
137194.65
openSUSE Tumbleweed
SE +/- 474.84, N = 3
-latomic
136088.24
Arch Linux
SE +/- 27.68, N = 3
-lapparmor -latomic -lkmod
138852.86
30K
60K
90K
120K
150K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: Semaphores
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 19525.82, N = 3
-lapparmor -latomic
6433945.43
Ubuntu 20.04.4 LTS
SE +/- 10388.57, N = 3
-lapparmor -latomic
7023877.72
Fedora Server 36
SE +/- 54913.68, N = 3
6478011.69
AlmaLinux 8.5
SE +/- 3461.34, N = 3
12375254.00
CentOS Stream 9
SE +/- 6432.31, N = 3
14395328.60
openSUSE Tumbleweed
SE +/- 6493.81, N = 3
-latomic
12219151.39
Arch Linux
SE +/- 4542.40, N = 3
-lapparmor -latomic -lkmod
14581623.54
3M
6M
9M
12M
15M
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread


Stress-NG 0.14
Test: Matrix Math
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 213.64, N = 3
-lapparmor -latomic
307770.74
Ubuntu 20.04.4 LTS
SE +/- 879.96, N = 3
-lapparmor -latomic
290508.39
Fedora Server 36
SE +/- 398.55, N = 3
324398.89
AlmaLinux 8.5
SE +/- 371.51, N = 3
322137.97
CentOS Stream 9
SE +/- 372.96, N = 3
287622.26
openSUSE Tumbleweed
SE +/- 211.97, N = 3
-latomic
307118.55
Arch Linux
SE +/- 475.70, N = 3
-lapparmor -latomic -lkmod
310375.04
70K
140K
210K
280K
350K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: Vector Math
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 715.44, N = 3
-lapparmor -latomic
323483.58
Ubuntu 20.04.4 LTS
SE +/- 484.37, N = 3
-lapparmor -latomic
289905.72
Fedora Server 36
SE +/- 359.26, N = 3
307010.27
AlmaLinux 8.5
SE +/- 3017.30, N = 3
258246.06
CentOS Stream 9
SE +/- 843.05, N = 3
323882.68
openSUSE Tumbleweed
SE +/- 1007.62, N = 3
-latomic
324345.37
Arch Linux
SE +/- 175.04, N = 3
-lapparmor -latomic -lkmod
327977.69
70K
140K
210K
280K
350K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread

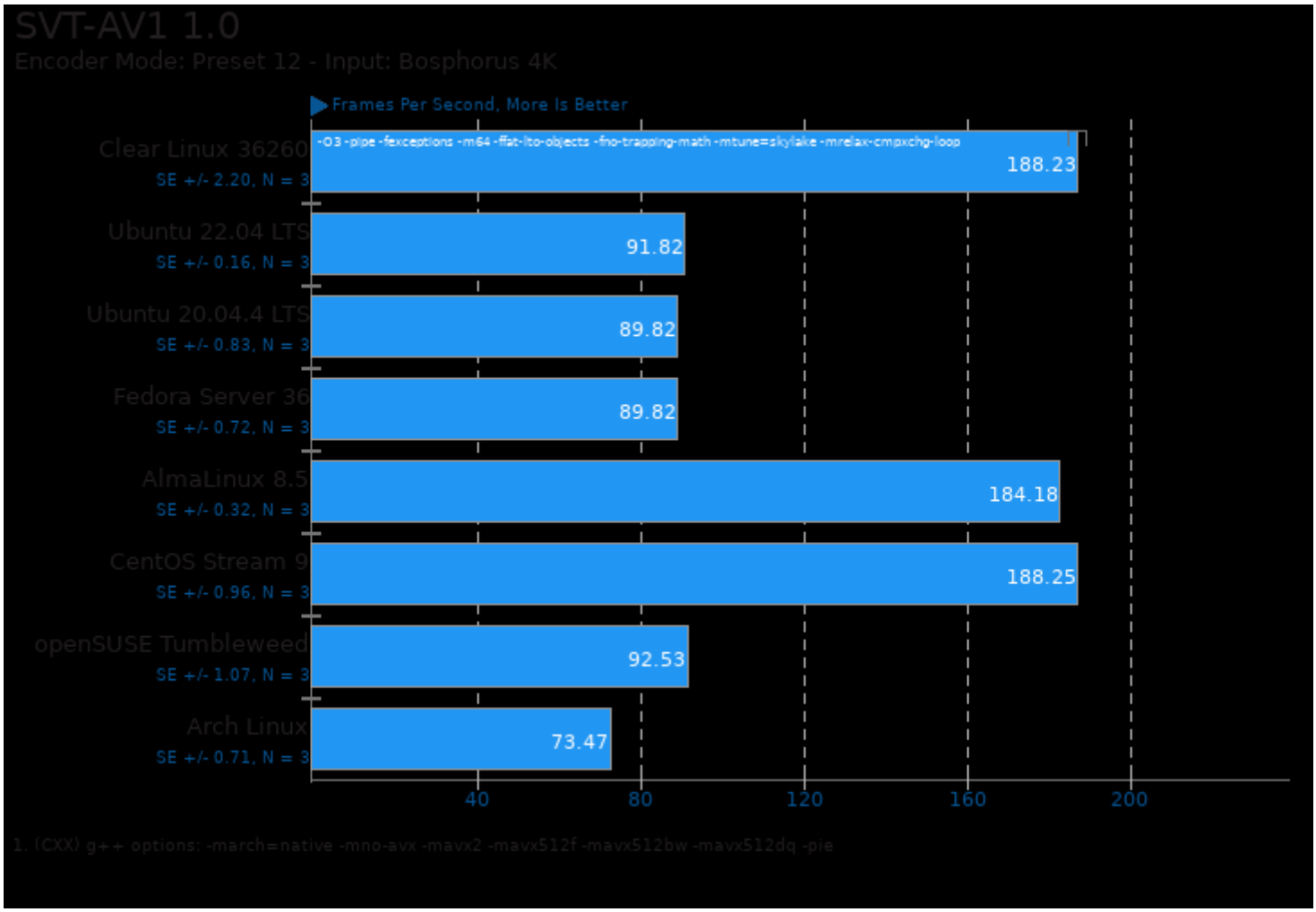

Stress-NG 0.14
Test: Memory Copying
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 7.81, N = 3
-lapparmor -latomic
13436.25
Ubuntu 20.04.4 LTS
SE +/- 9.10, N = 3
-lapparmor -latomic
12728.73
Fedora Server 36
SE +/- 15.57, N = 3
13333.35
AlmaLinux 8.5
SE +/- 56.92, N = 3
8846.90
CentOS Stream 9
SE +/- 8.35, N = 3
12851.09
openSUSE Tumbleweed
SE +/- 7.33, N = 3
-latomic
13248.44
Arch Linux
SE +/- 24.43, N = 3
-lapparmor -latomic -lkmod
13458.13
3K
6K
9K
12K
15K
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: Context Switching
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 48855.50, N = 3
-lapparmor -latomic
4369354.94
Ubuntu 20.04.4 LTS
SE +/- 61118.03, N = 3
-lapparmor -latomic
5399024.18
Fedora Server 36
SE +/- 57535.80, N = 3
4487316.63
AlmaLinux 8.5
SE +/- 98775.75, N = 15
11877977.91
CentOS Stream 9
SE +/- 14383.09, N = 3
5702782.06
openSUSE Tumbleweed
SE +/- 211441.81, N = 3
-latomic
20744069.17
Arch Linux
SE +/- 21902.30, N = 3
-lapparmor -latomic -lkmod
5495132.32
4M
8M
12M
16M
20M
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread


Stress-NG 0.14
Test: Glibc Qsort Data Sorting
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 3.27, N = 3
-lapparmor -latomic
917.54
Ubuntu 20.04.4 LTS
SE +/- 4.44, N = 3
-lapparmor -latomic
964.44
Fedora Server 36
SE +/- 3.39, N = 3
936.98
AlmaLinux 8.5
SE +/- 1.28, N = 3
981.51
CentOS Stream 9
SE +/- 0.40, N = 3
944.05
openSUSE Tumbleweed
SE +/- 3.17, N = 3
-latomic
934.51
Arch Linux
SE +/- 1.25, N = 3
-lapparmor -latomic -lkmod
971.00
200
400
600
800
1000
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread
Stress-NG 0.14
Test: System V Message Passing
Bogo Ops/s, More Is Better
Ubuntu 22.04 LTS
SE +/- 2748.47, N = 3
-lapparmor -latomic
2900793.91
Ubuntu 20.04.4 LTS
SE +/- 4610.89, N = 3
-lapparmor -latomic
2857499.36
Fedora Server 36
SE +/- 92644.18, N = 3
8150981.14
AlmaLinux 8.5
SE +/- 925.56, N = 3
5030927.07
CentOS Stream 9
SE +/- 2706.29, N = 3
7110771.42
openSUSE Tumbleweed
SE +/- 84690.67, N = 4
-latomic
6948990.47
Arch Linux
SE +/- 2594.95, N = 3
-lapparmor -latomic -lkmod
6930568.06
2M
4M
6M
8M
10M
1. (CC) gcc options: -O2 -std=gnu99 -lm -lc -lcrypt -ldl -ljpeg -lrt -lz -pthread

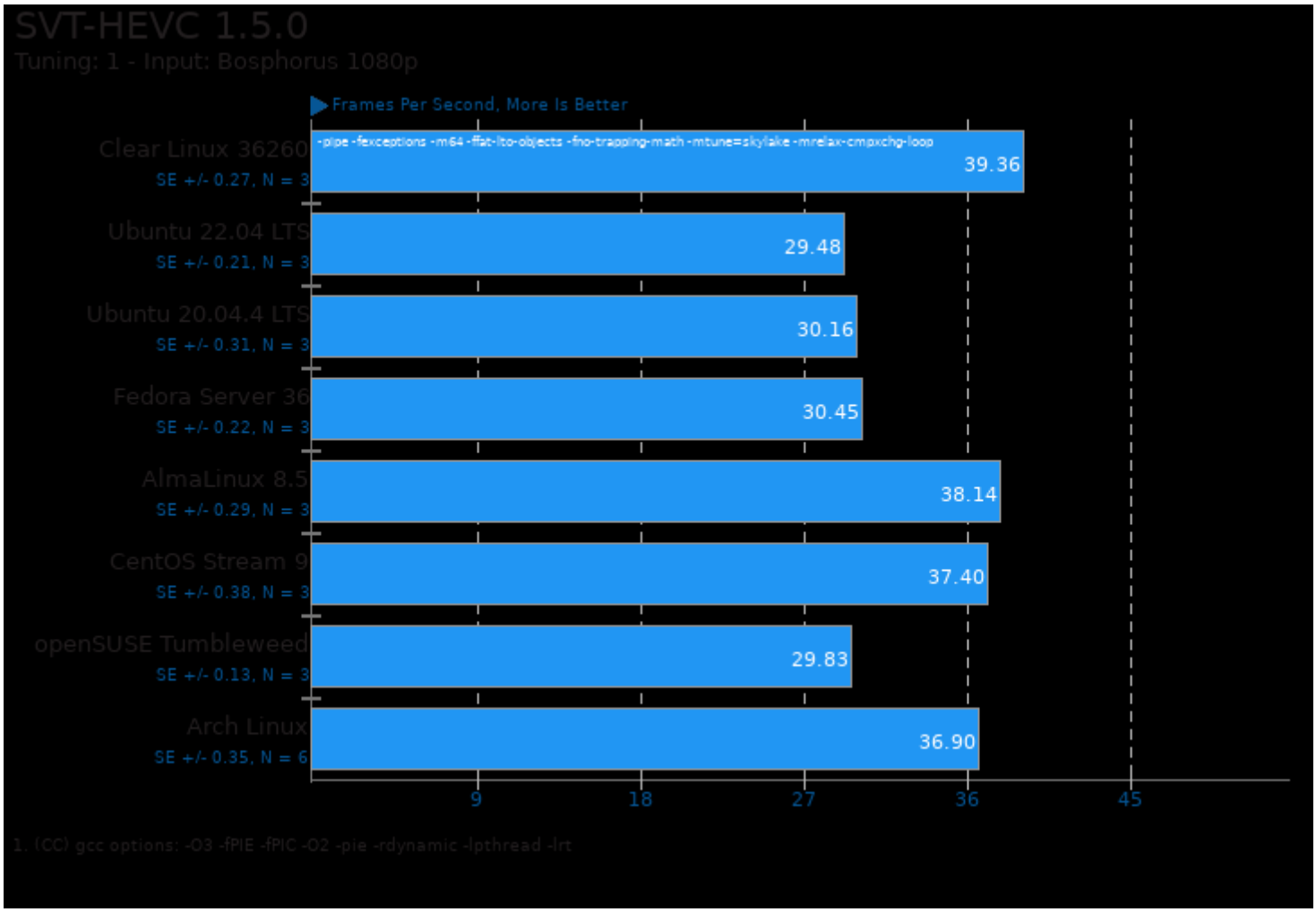
Clear Linux 36260



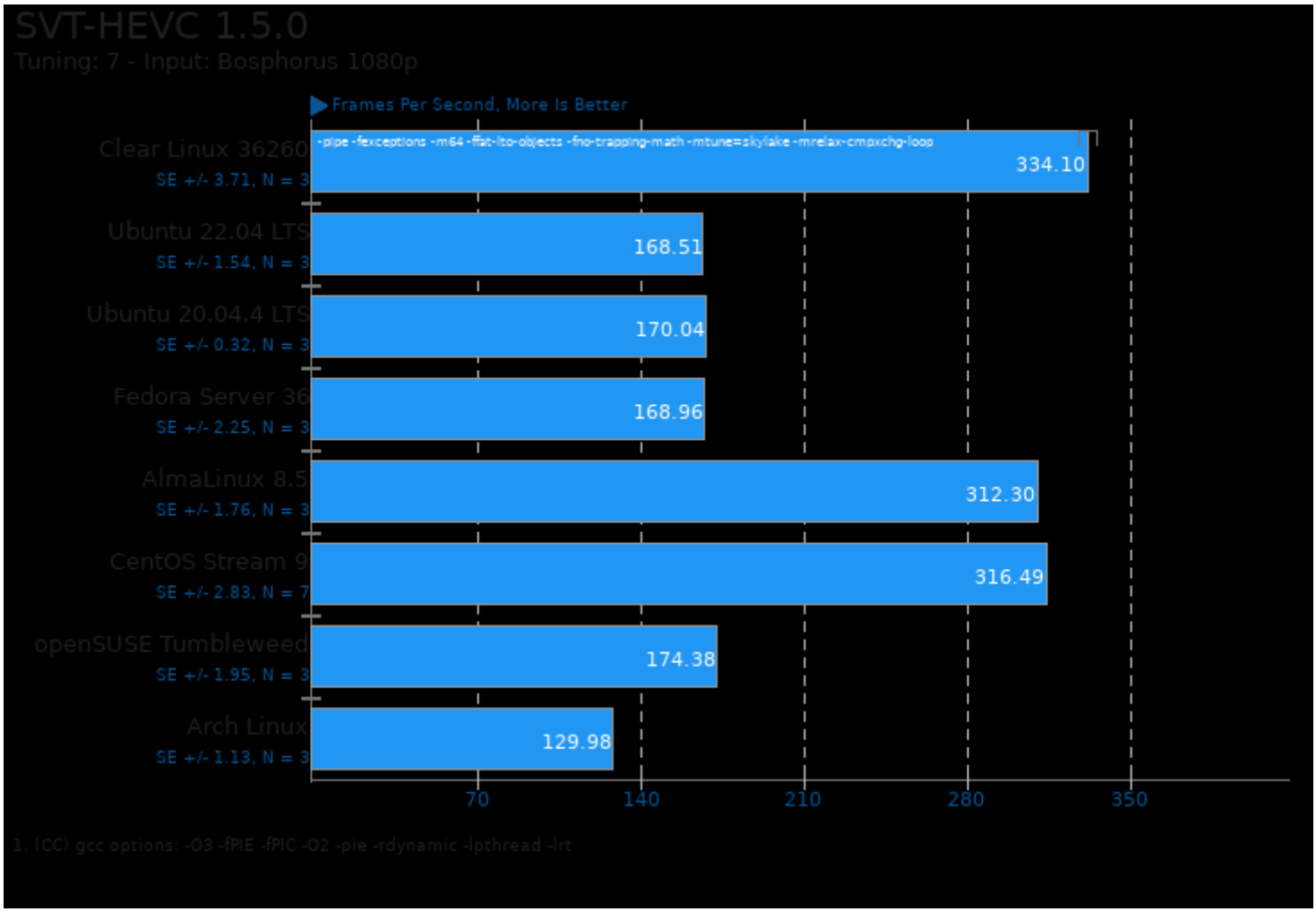
Clear Linux 36260



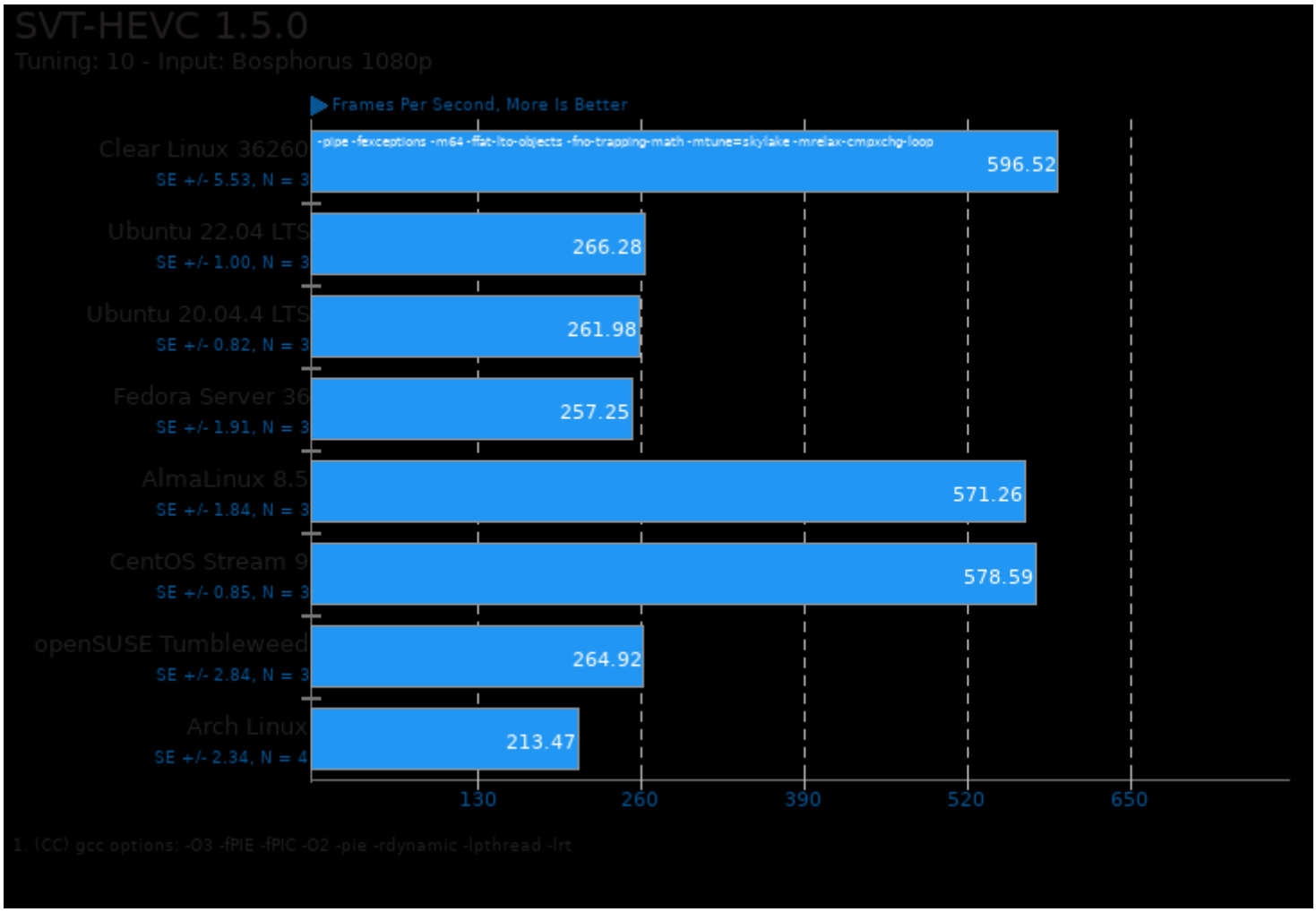
Clear Linux 36260



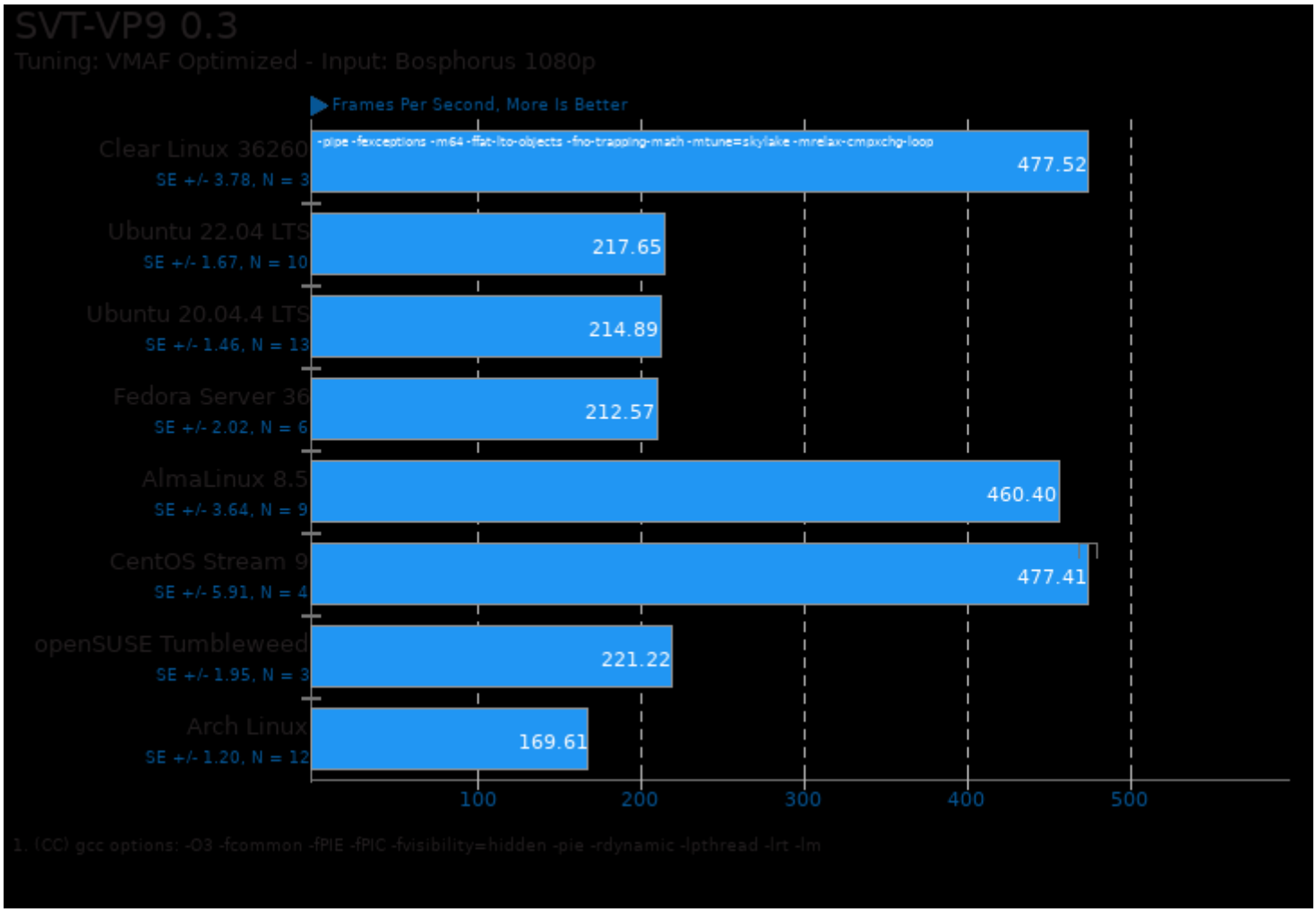
Clear Linux 36260



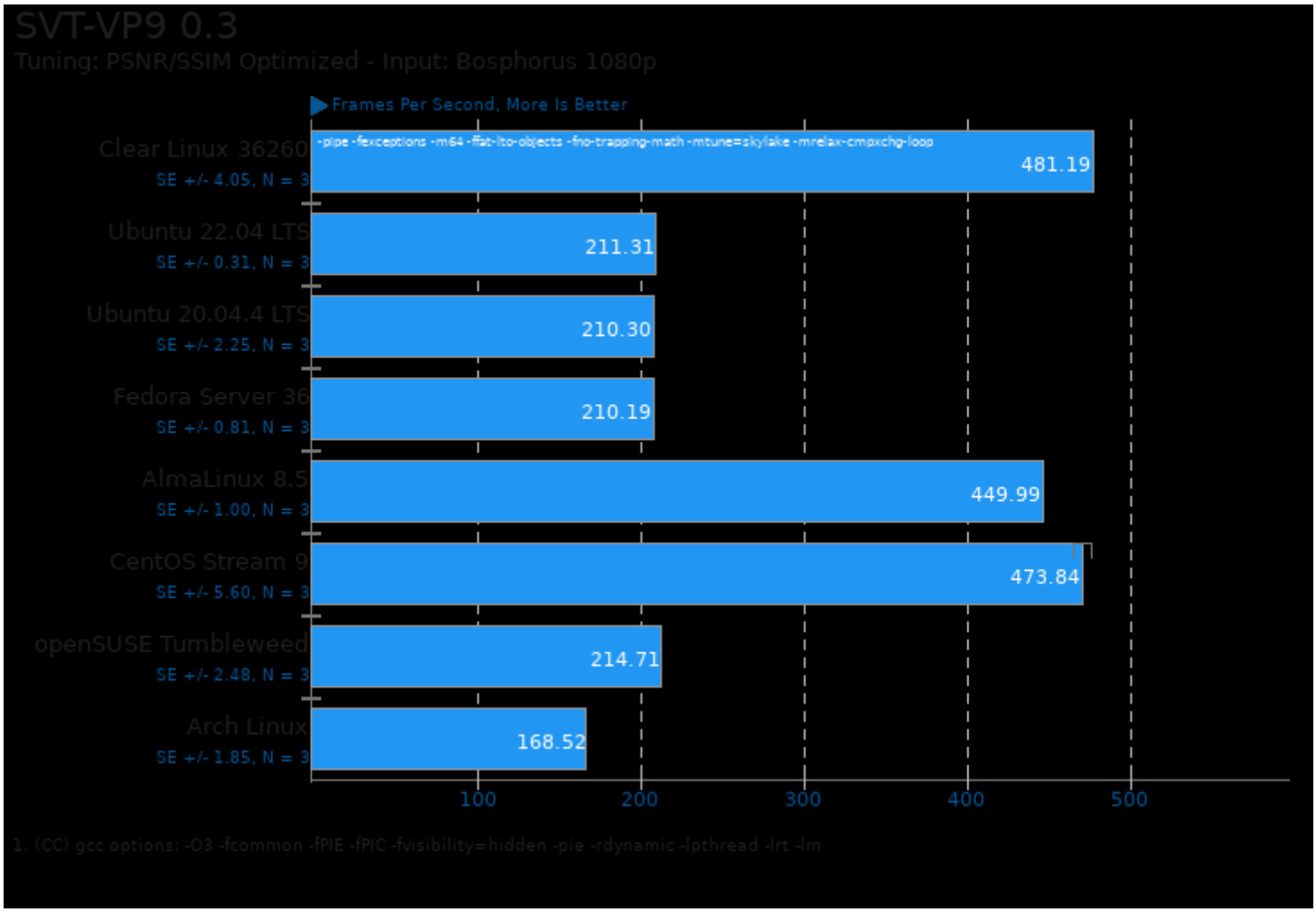
Clear Linux 36260



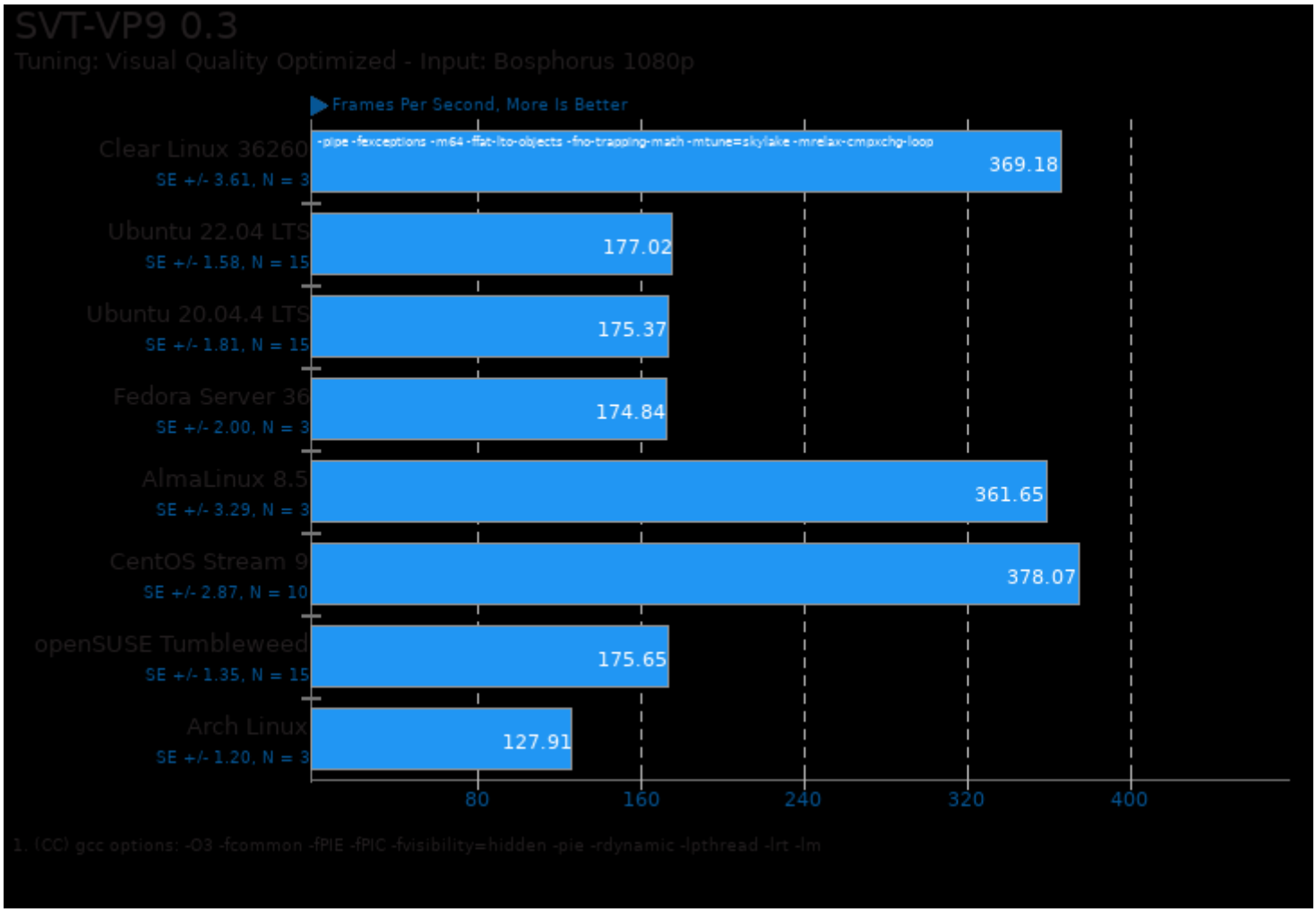
Clear Linux 36260



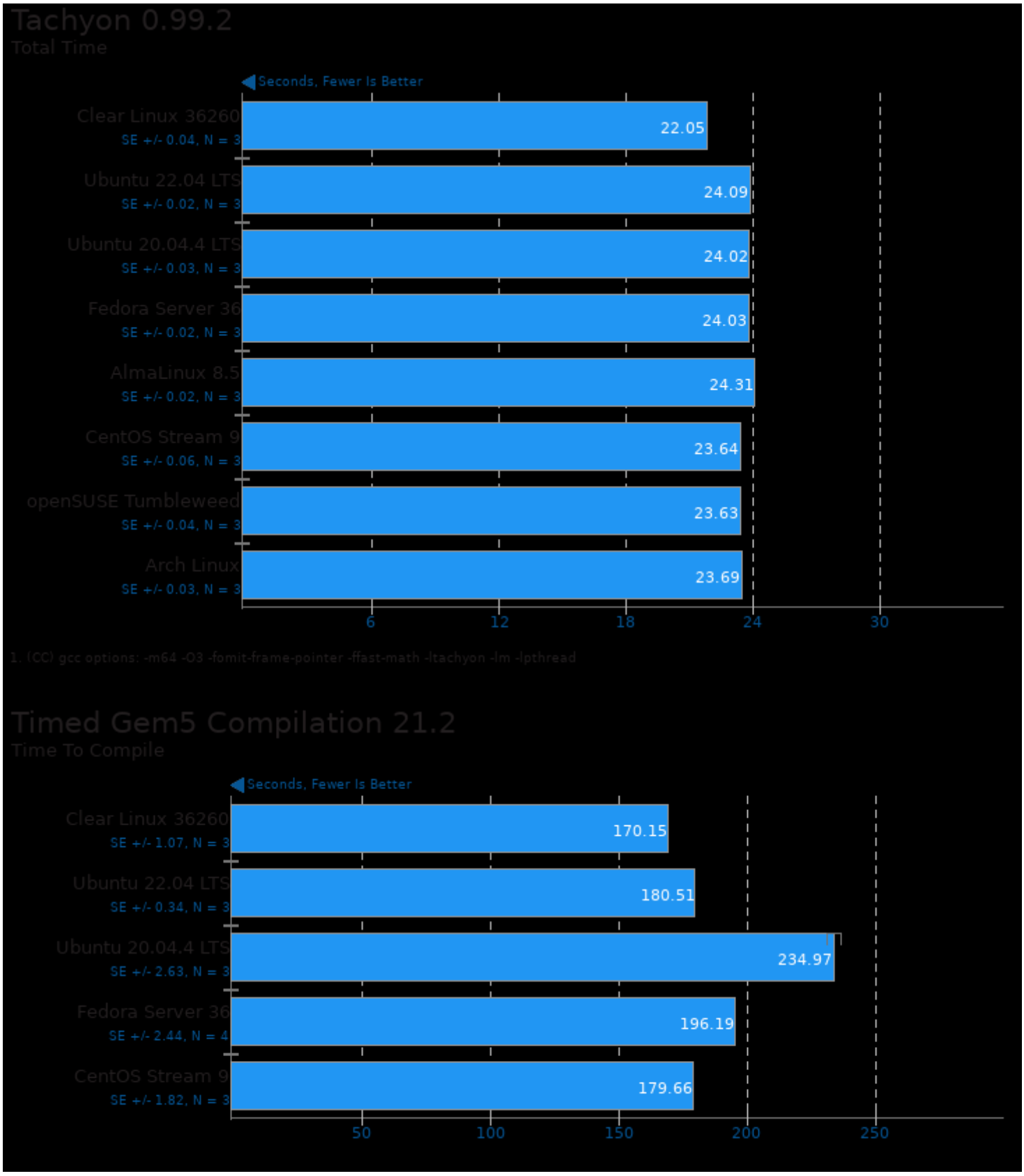
Clear Linux 36260



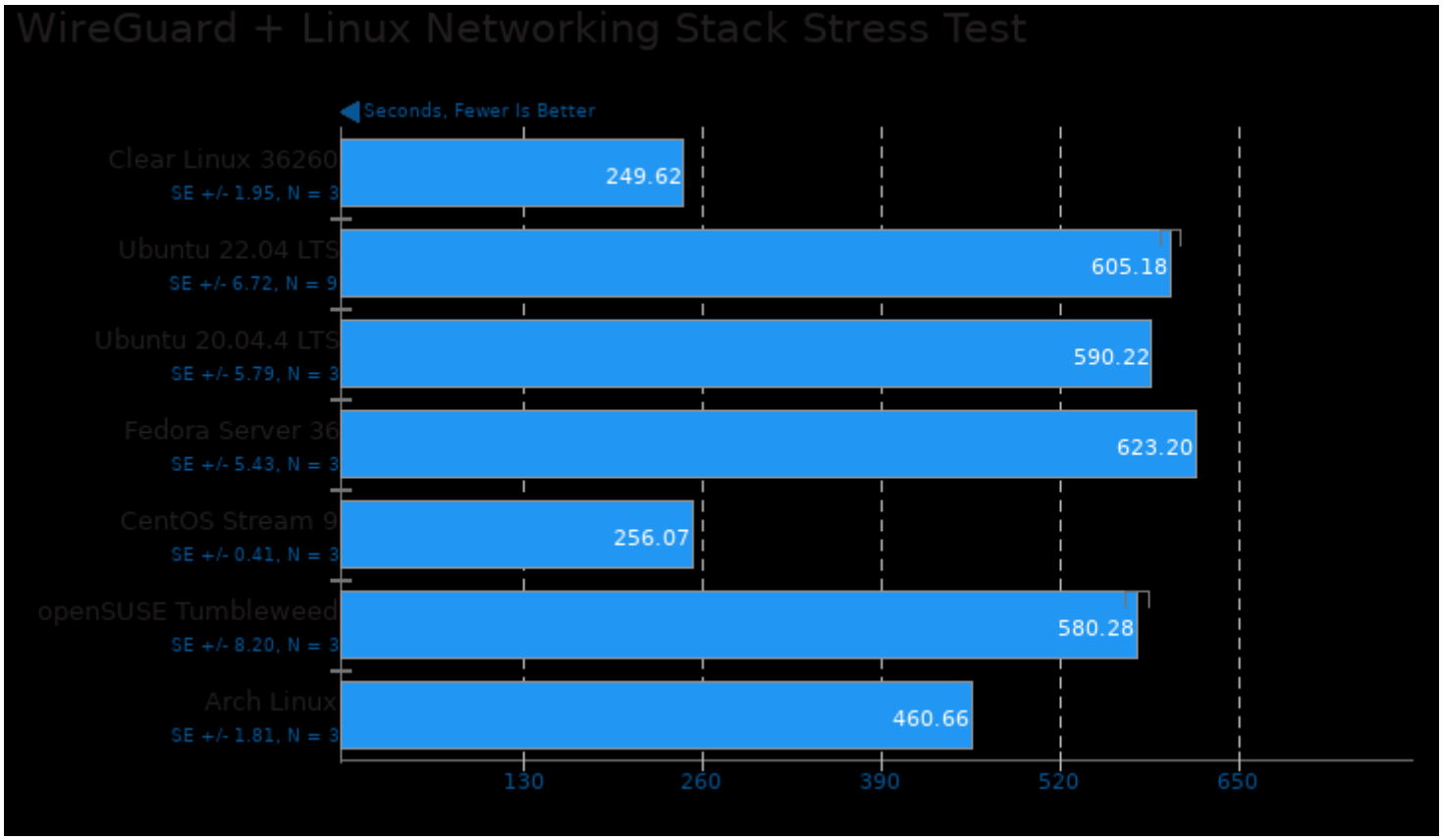
Clear Linux 36260



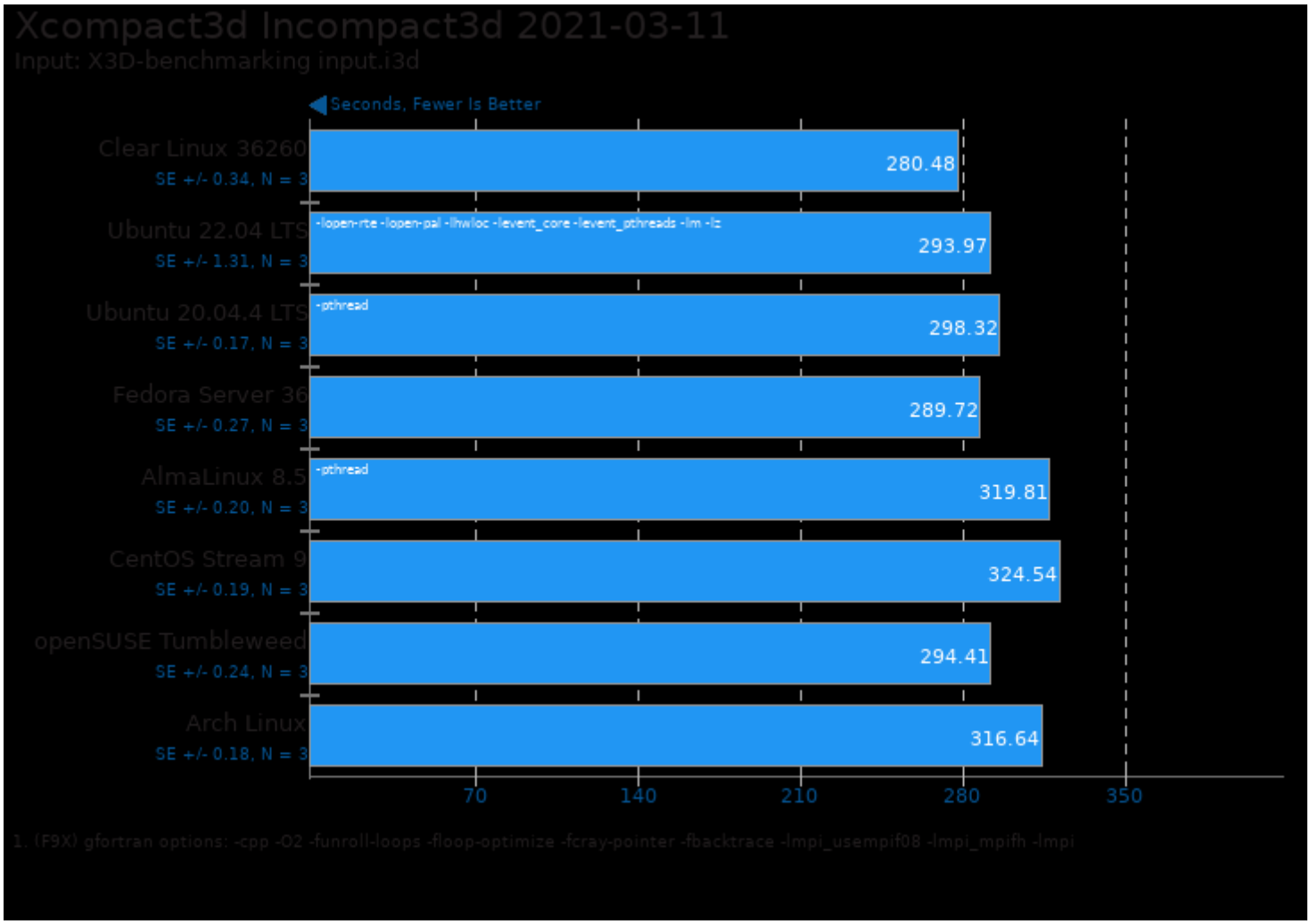
Clear Linux 36260



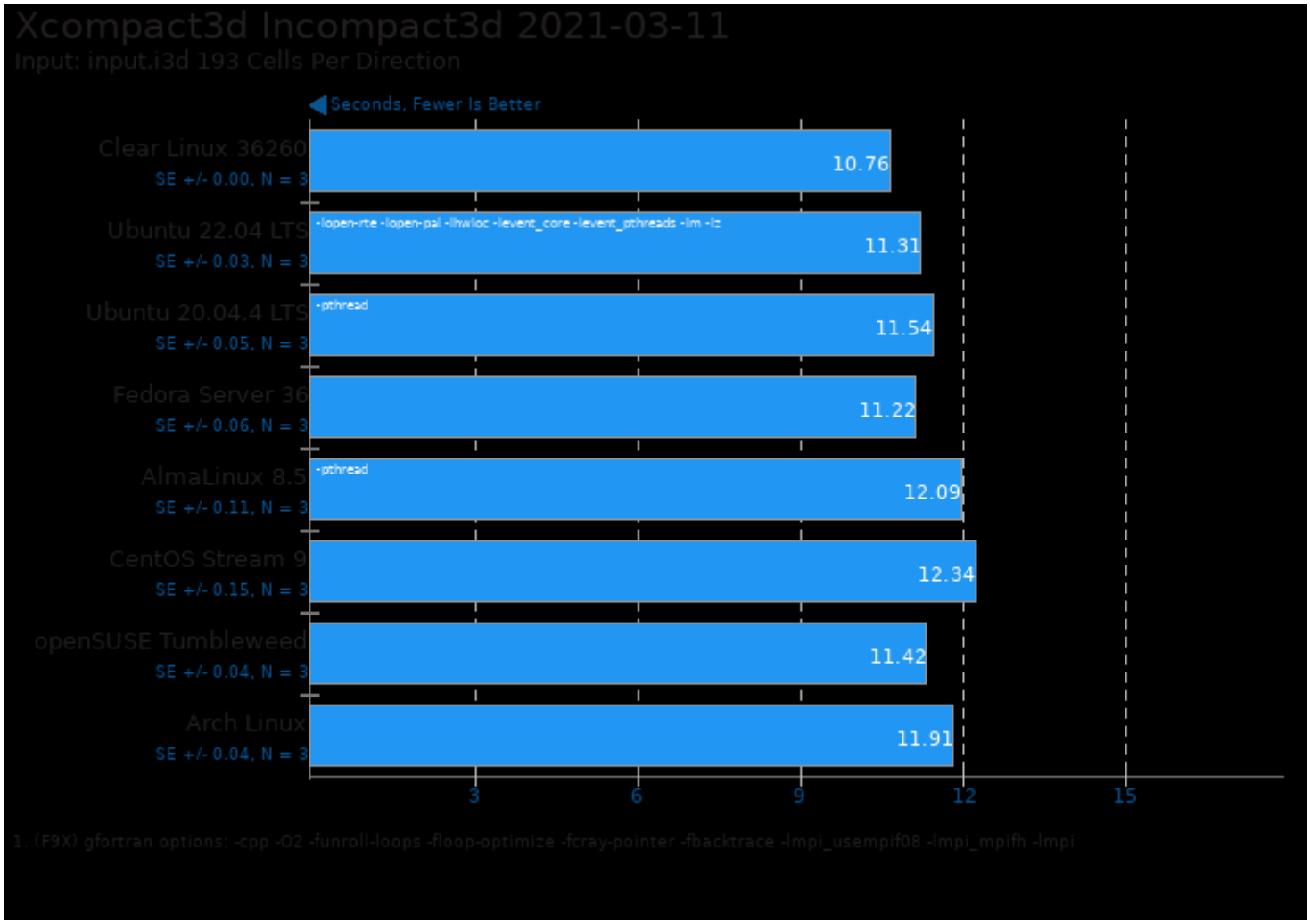
Clear Linux 36260



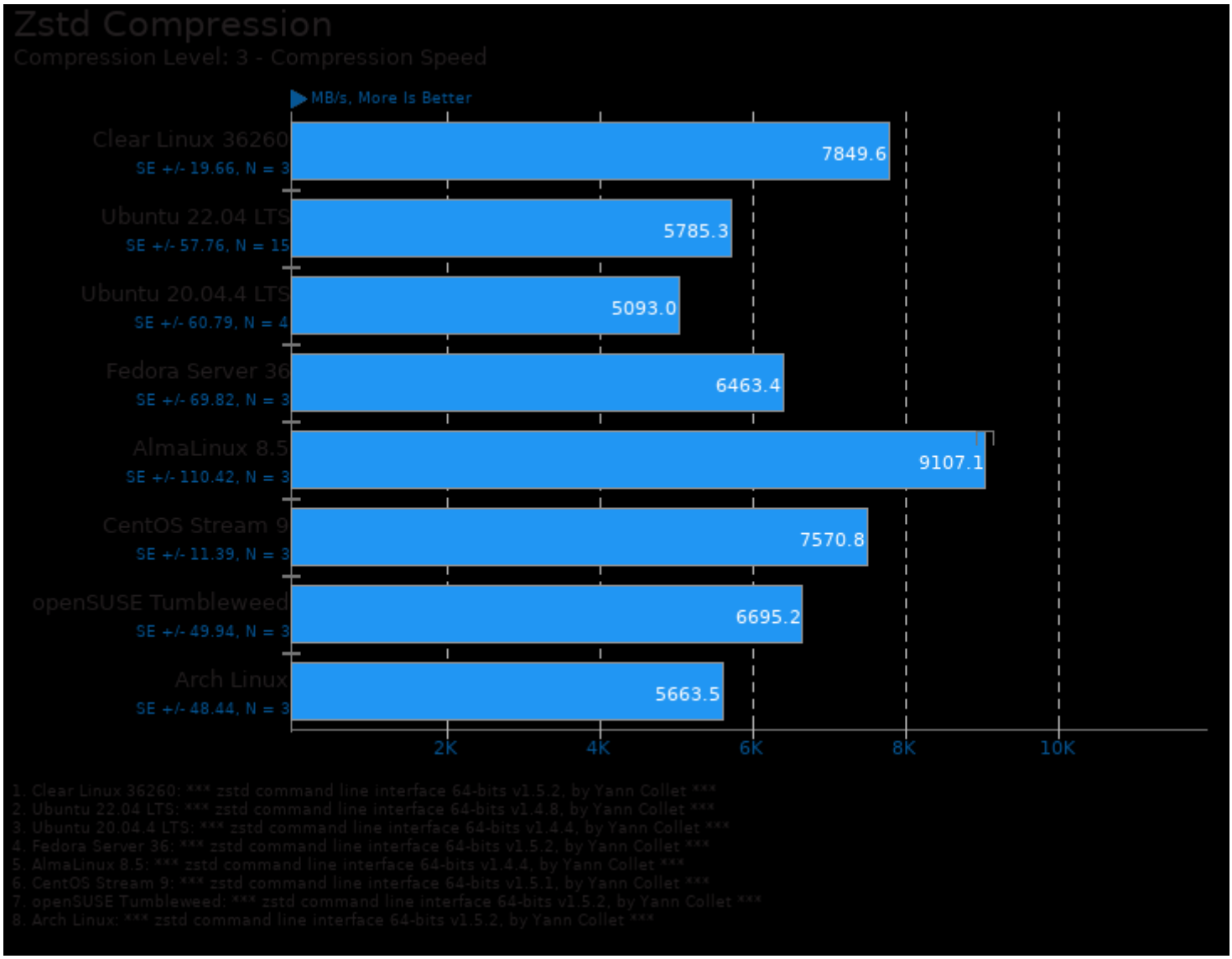
Clear Linux 36260



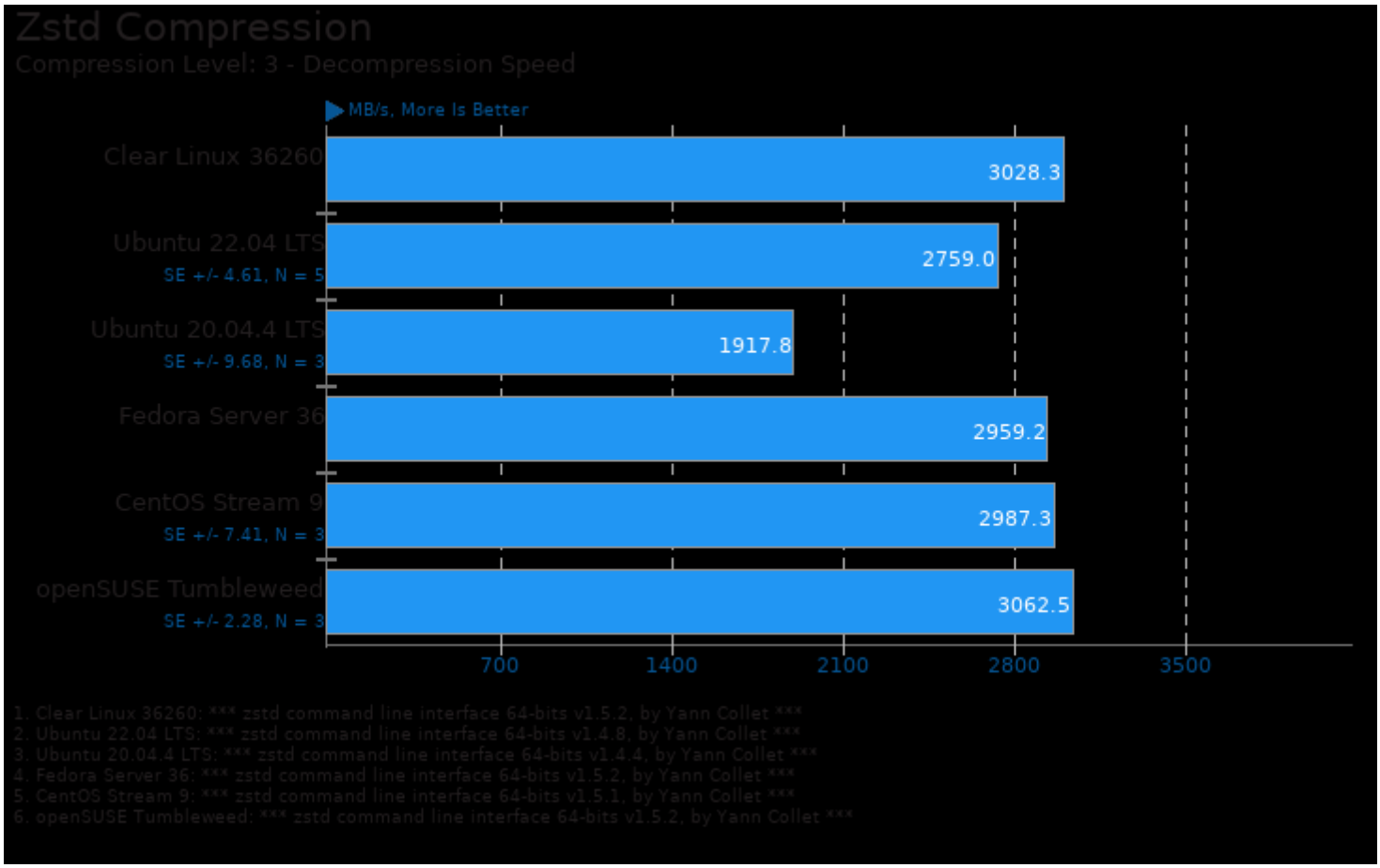
Clear Linux 36260



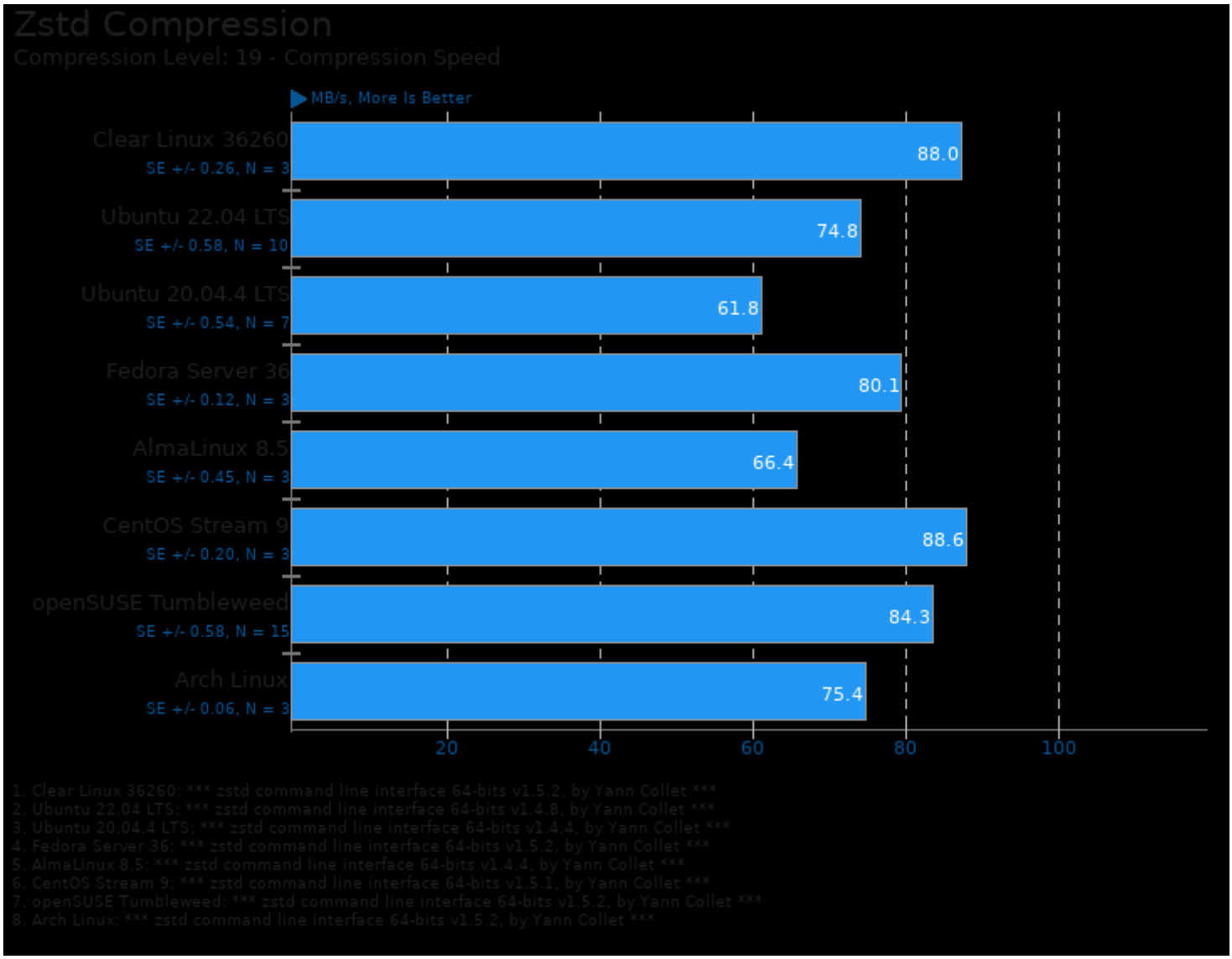
Clear Linux 36260



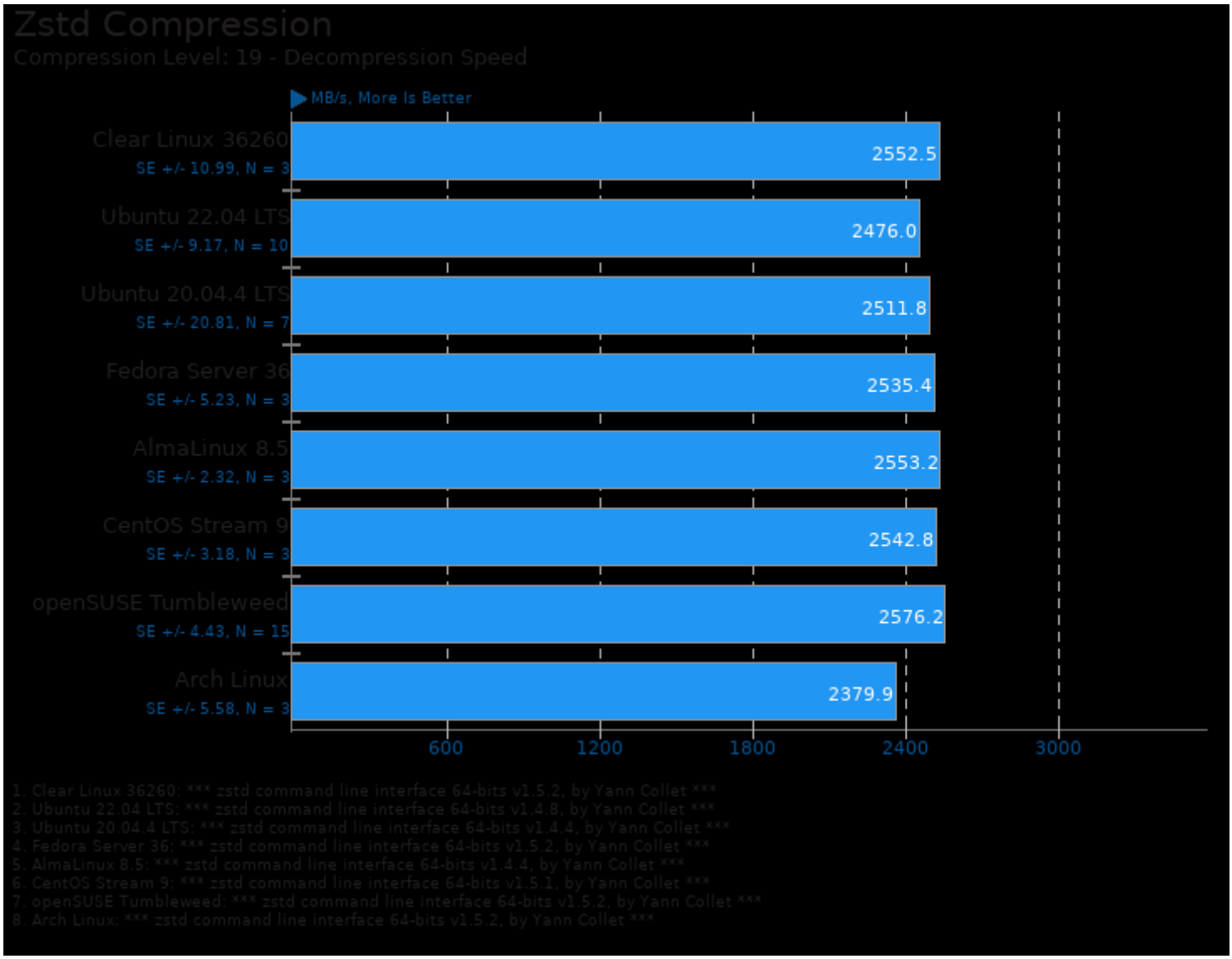
Clear Linux 36260



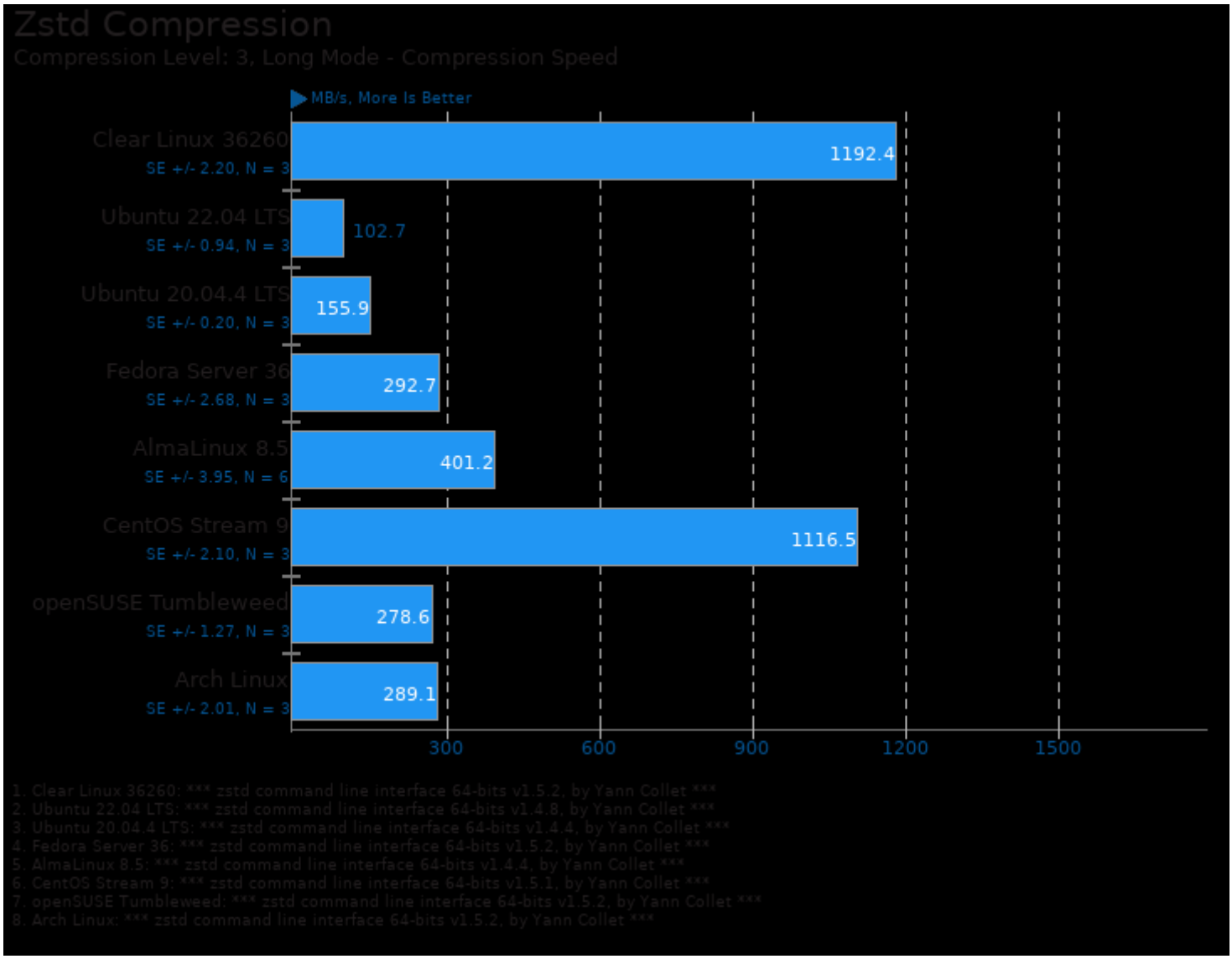
Clear Linux 36260



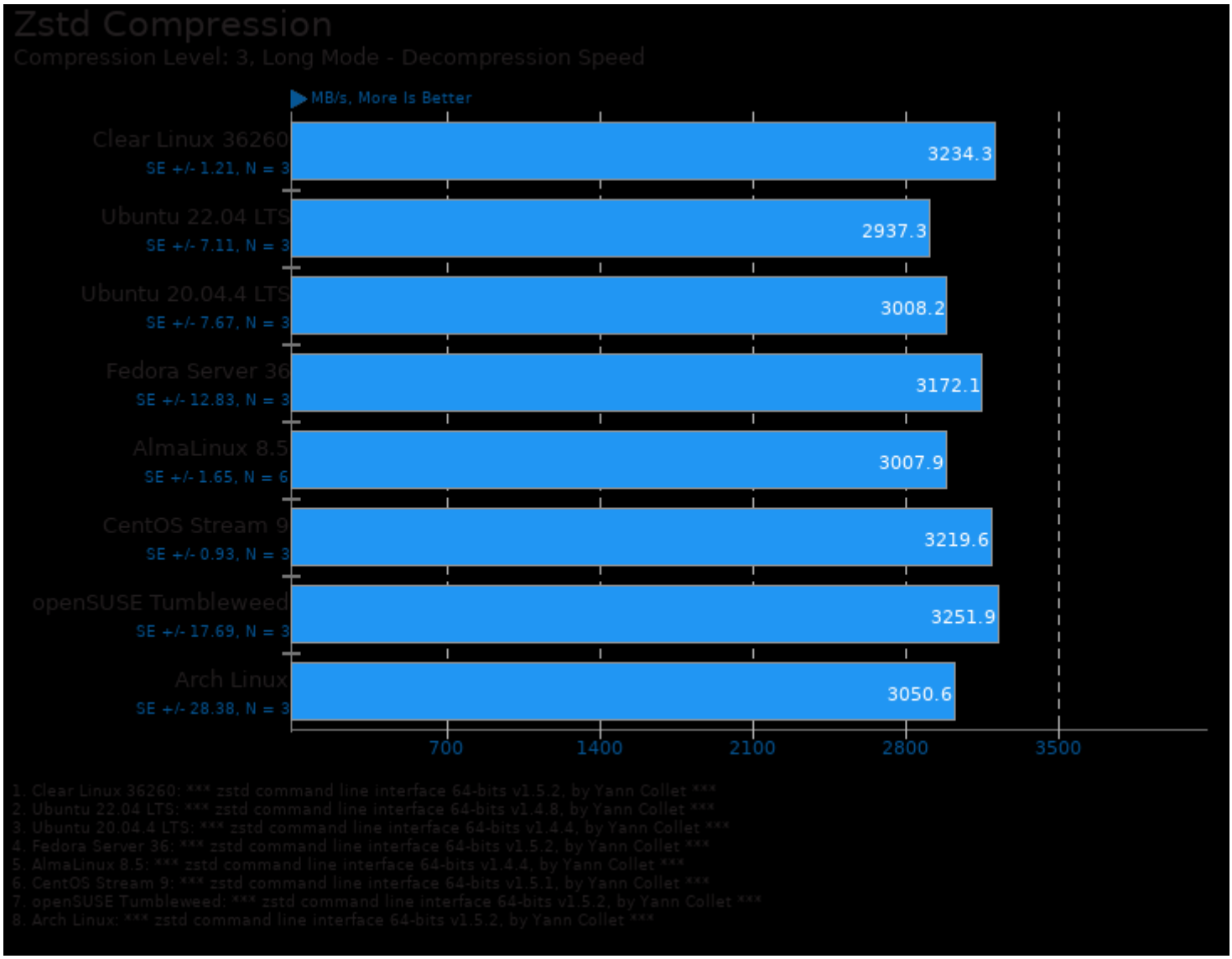
Clear Linux 36260



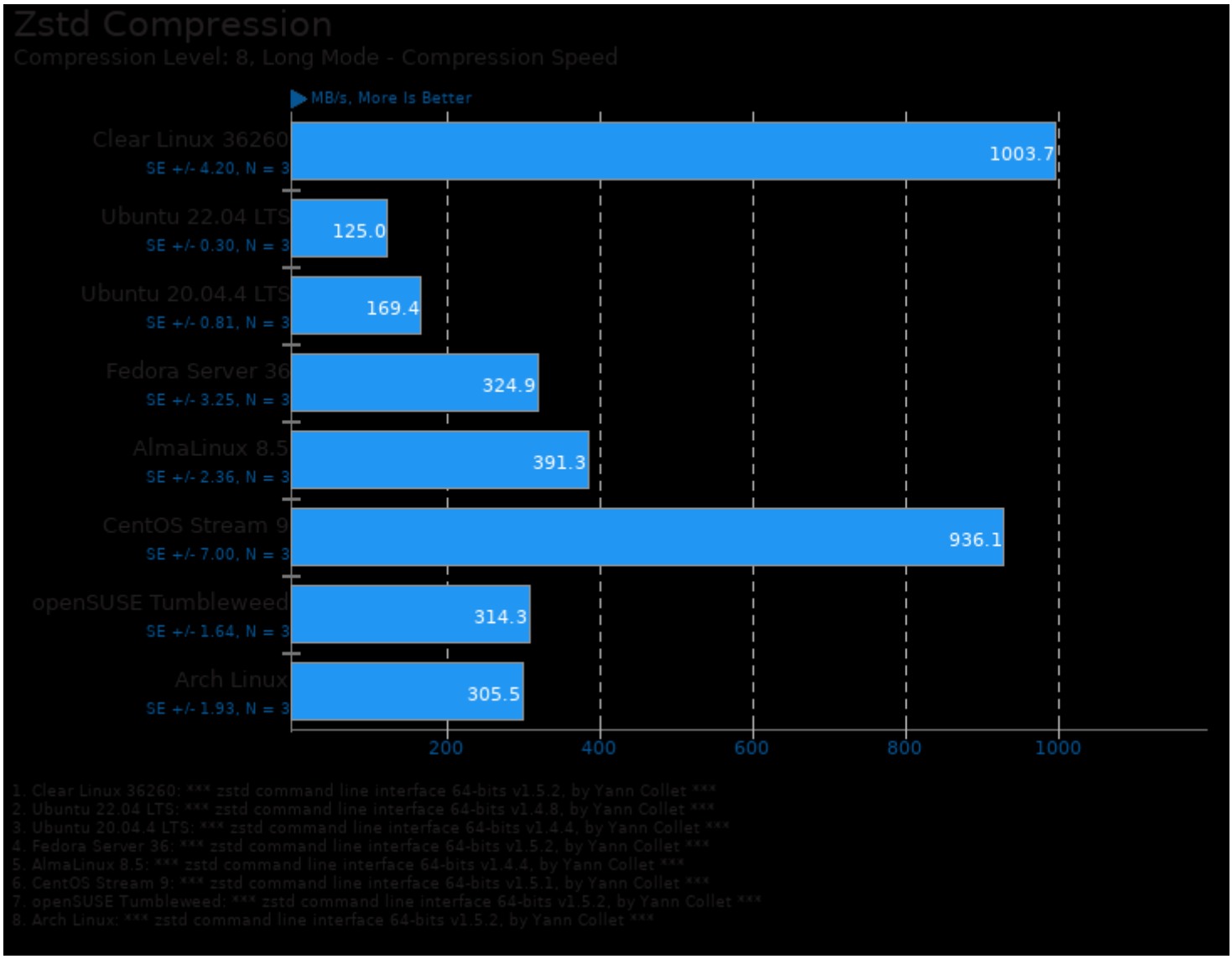
Clear Linux 36260



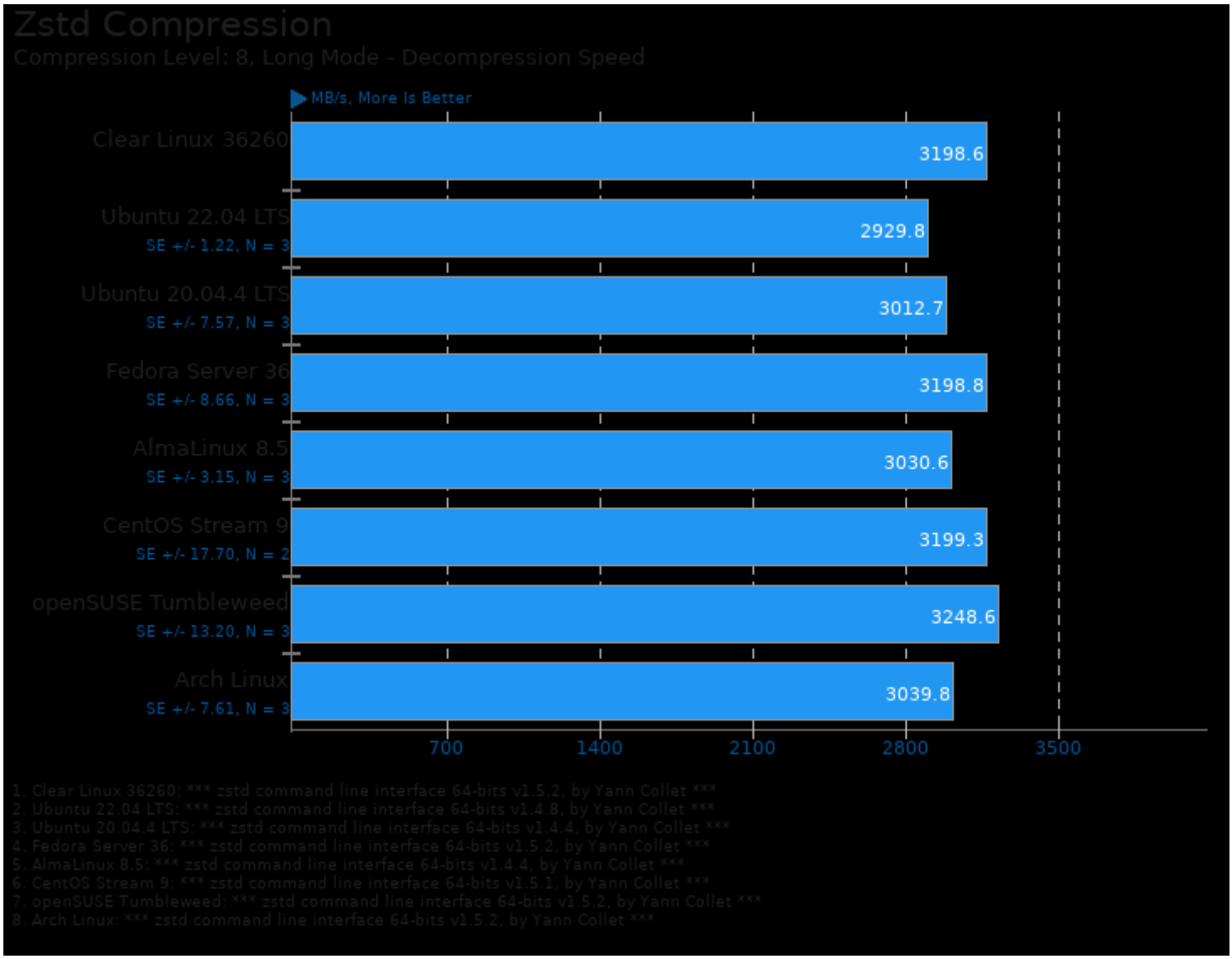
Clear Linux 36260



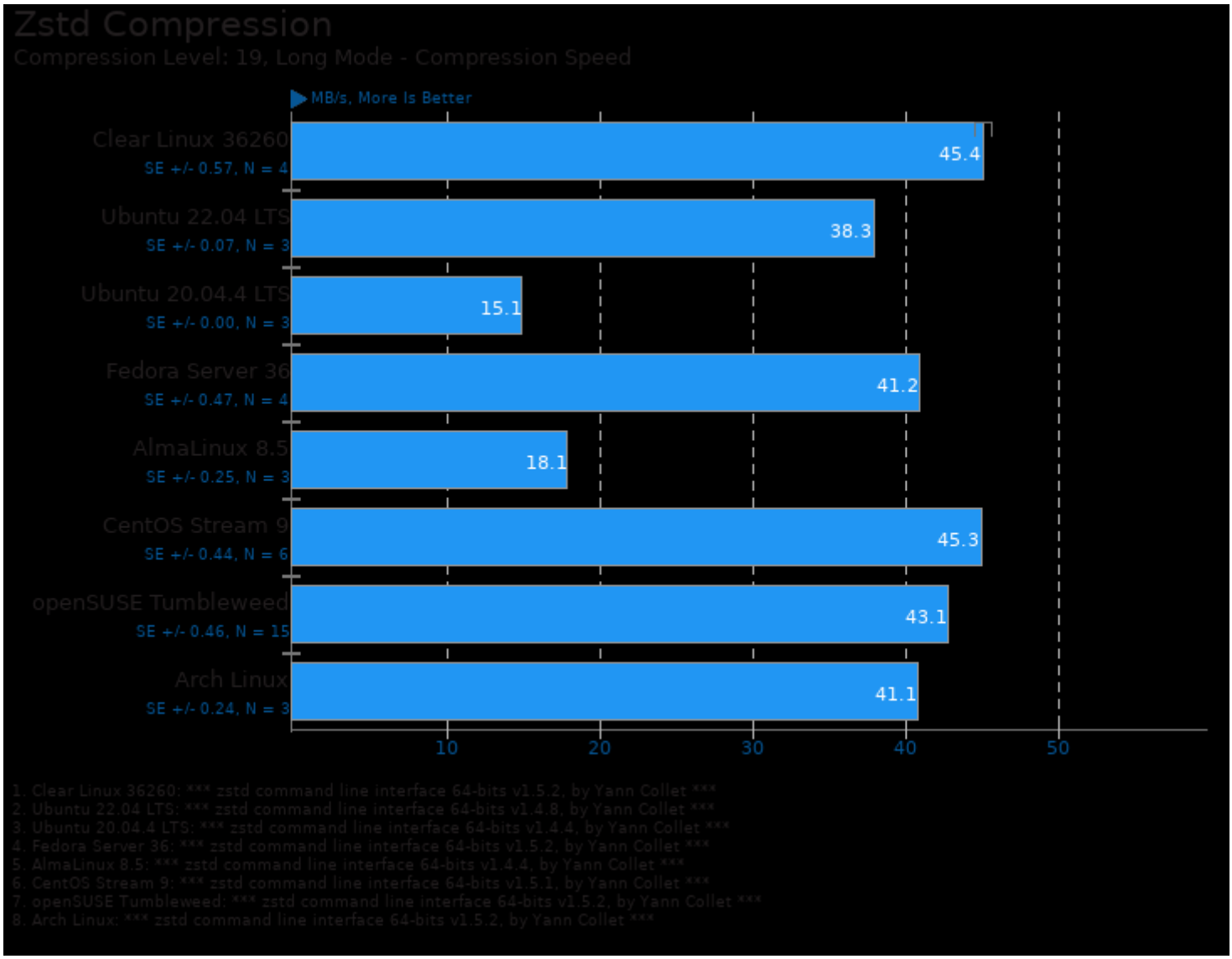
Clear Linux 36260



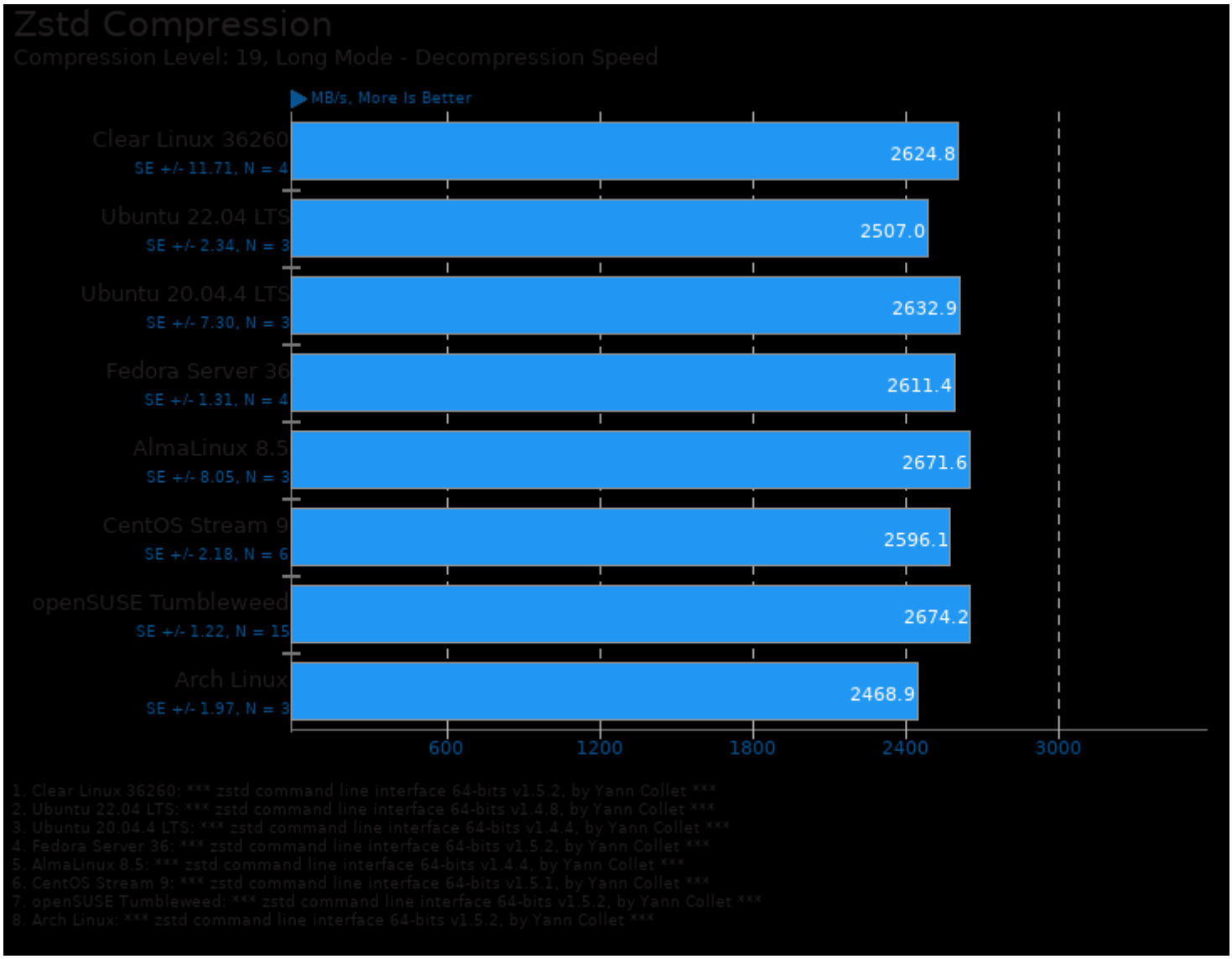
Clear Linux 36260

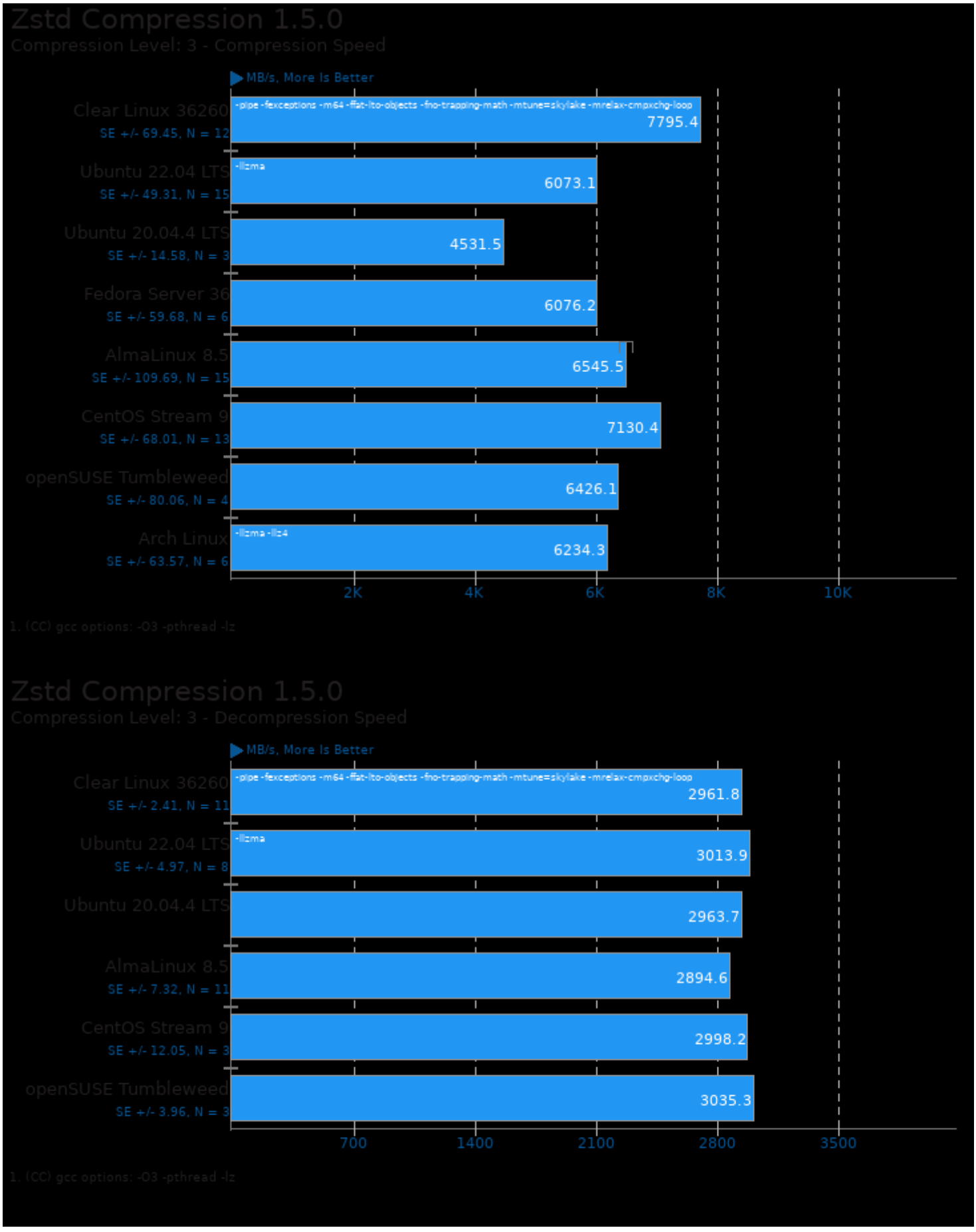


Clear Linux 36260

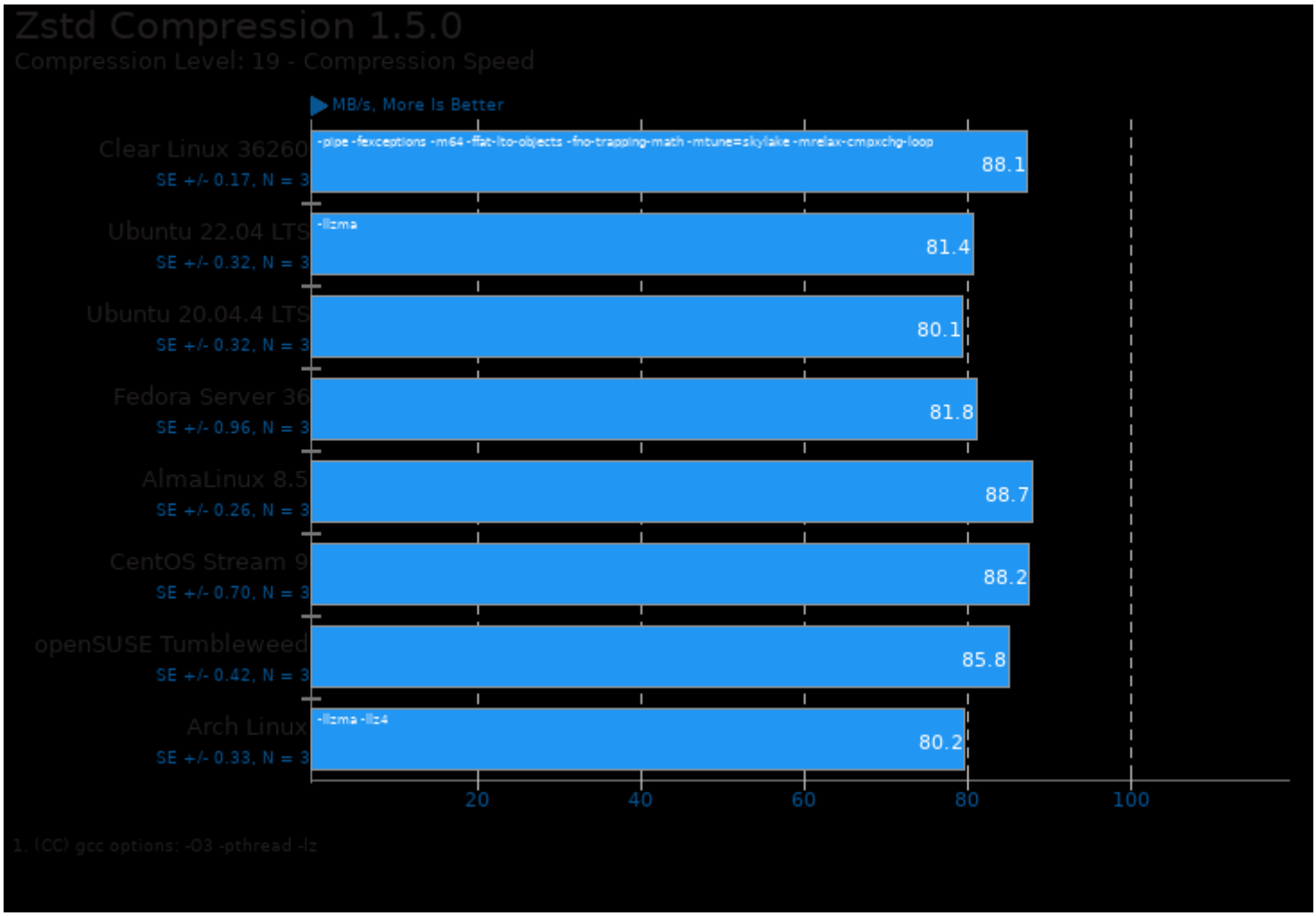


Clear Linux 36260

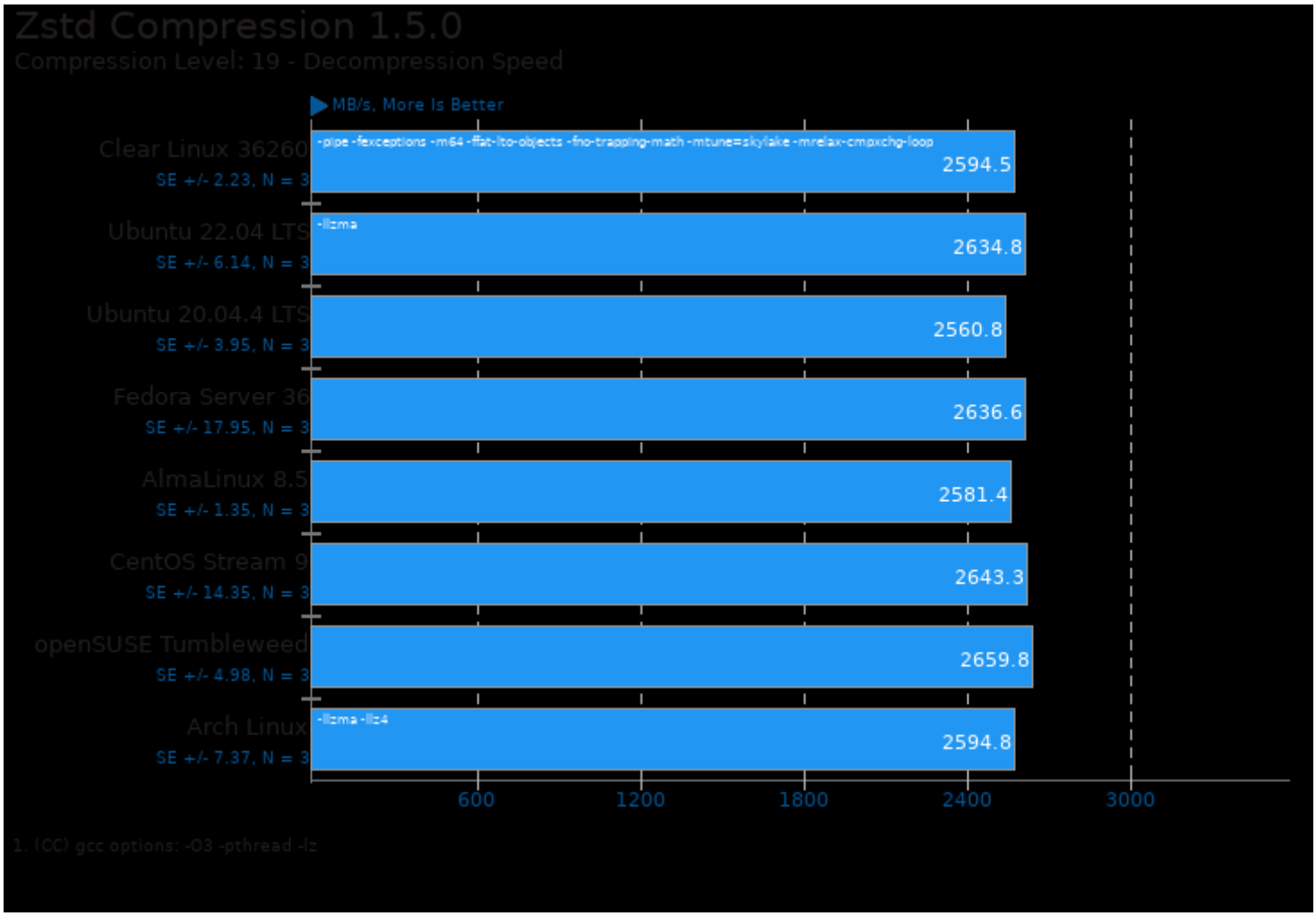



Zstd Compression 1.5.0
Compression Level: 3 - Compression Speed
MB/s, More Is Better
Clear Linux 36260
SE +/- 69.45, N = 12
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
7795.4
Ubuntu 22.04 LTS
SE +/- 49.31, N = 15
-llzma
6073.1
Ubuntu 20.04.4 LTS
SE +/- 14.58, N = 3
4531.5
Fedora Server 36
SE +/- 59.68, N = 6
6076.2
AlmaLinux 8.5
SE +/- 109.69, N = 15
6545.5
CentOS Stream 9
SE +/- 68.01, N = 13
7130.4
openSUSE Tumbleweed
SE +/- 80.06, N = 4
6426.1
Arch Linux
SE +/- 63.57, N = 6
-llzma -llz4
6234.3
2K
4K
6K
8K
10K
1. (CC) gcc options: -O3 -pthread -lz
Zstd Compression 1.5.0
Compression Level: 3 - Decompression Speed
MB/s, More Is Better
Clear Linux 36260
SE +/- 2.41, N = 11
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
2961.8
Ubuntu 22.04 LTS
SE +/- 4.97, N = 8
-llzma
3013.9
Ubuntu 20.04.4 LTS
2963.7
AlmaLinux 8.5
SE +/- 7.32, N = 11
2894.6
CentOS Stream 9
SE +/- 12.05, N = 3
2998.2
openSUSE Tumbleweed
SE +/- 3.96, N = 3
3035.3
700
1400
2100
2800
3500
1. (CC) gcc options: -O3 -pthread -lz

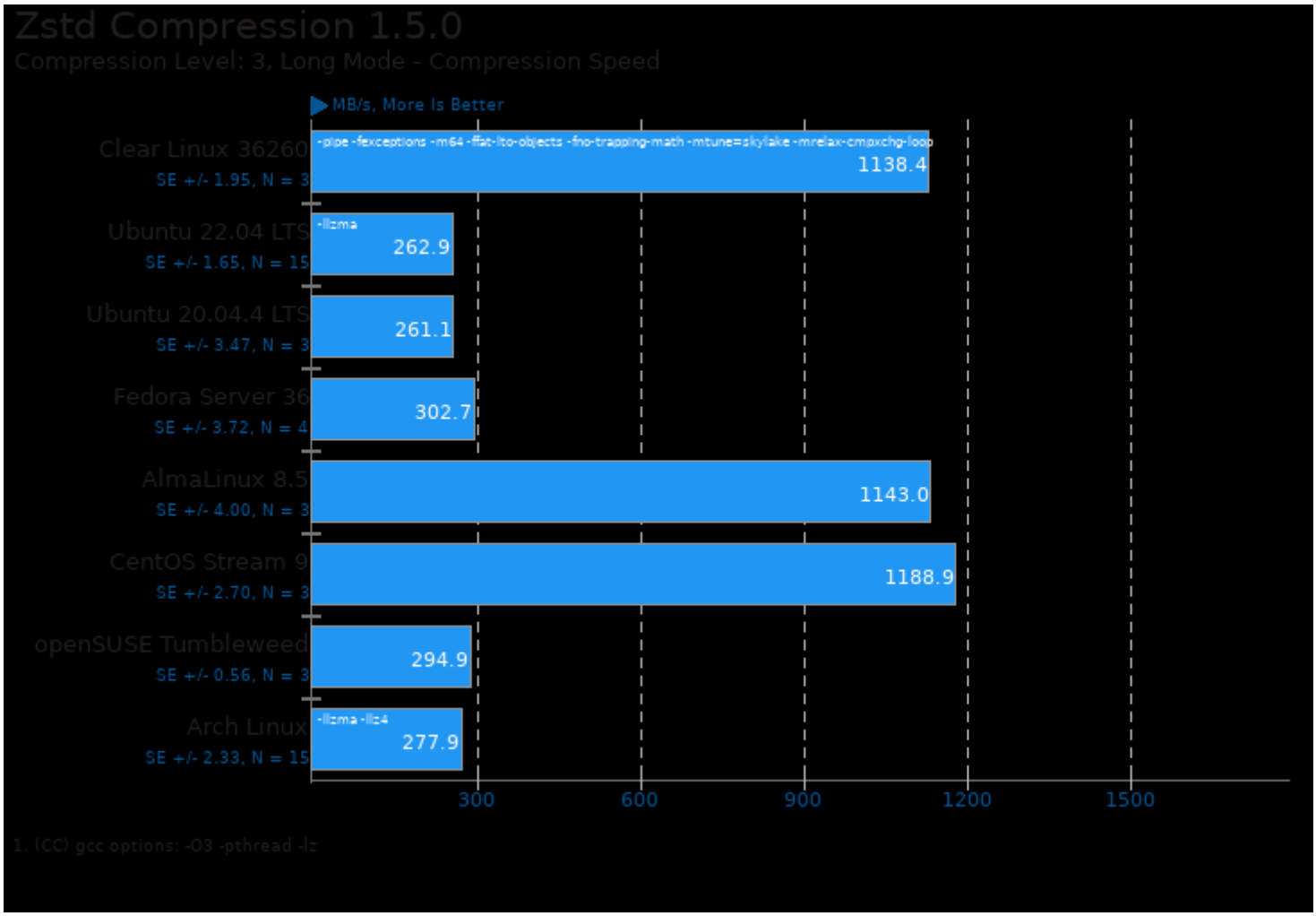
Clear Linux 36260



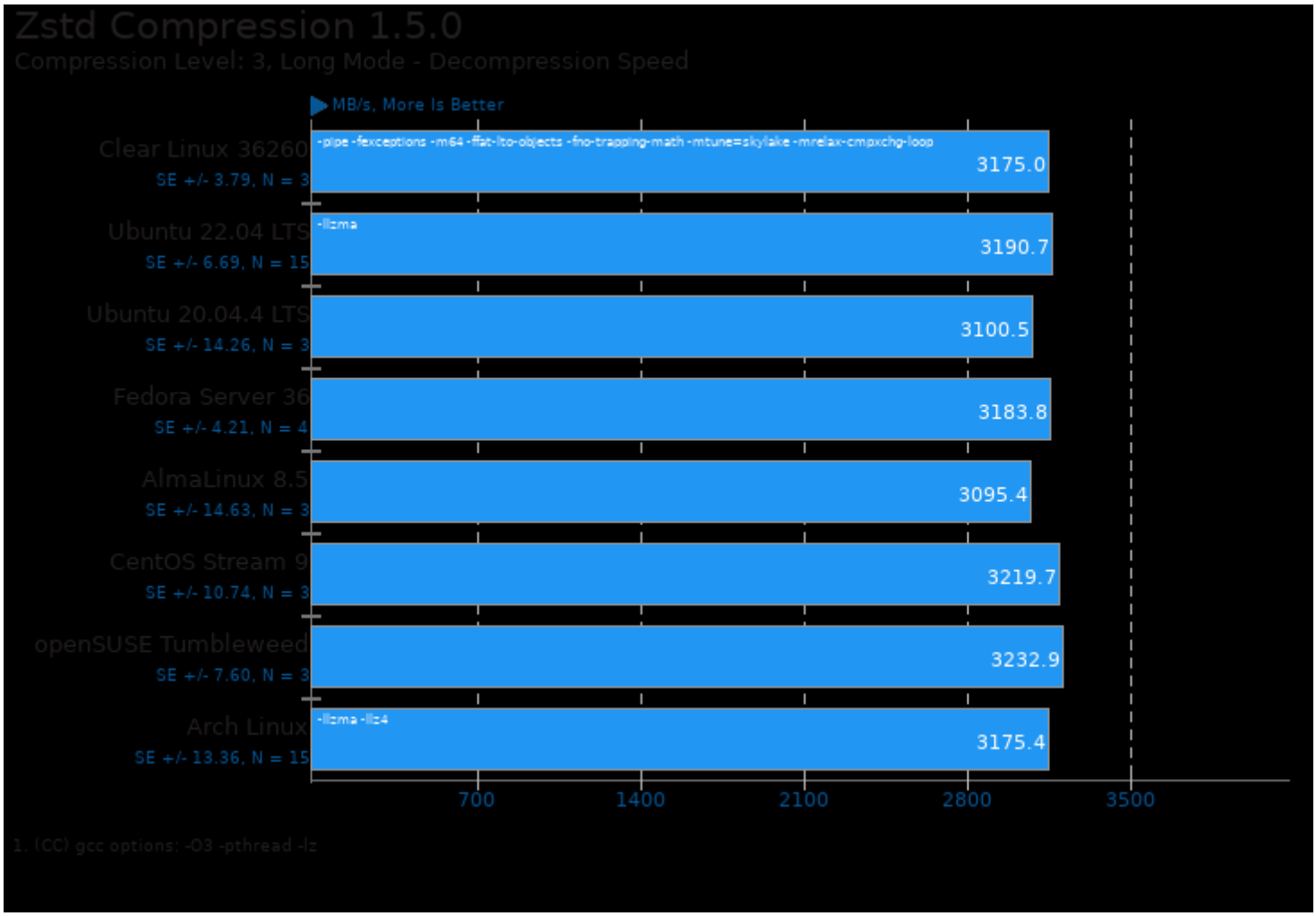
Clear Linux 36260

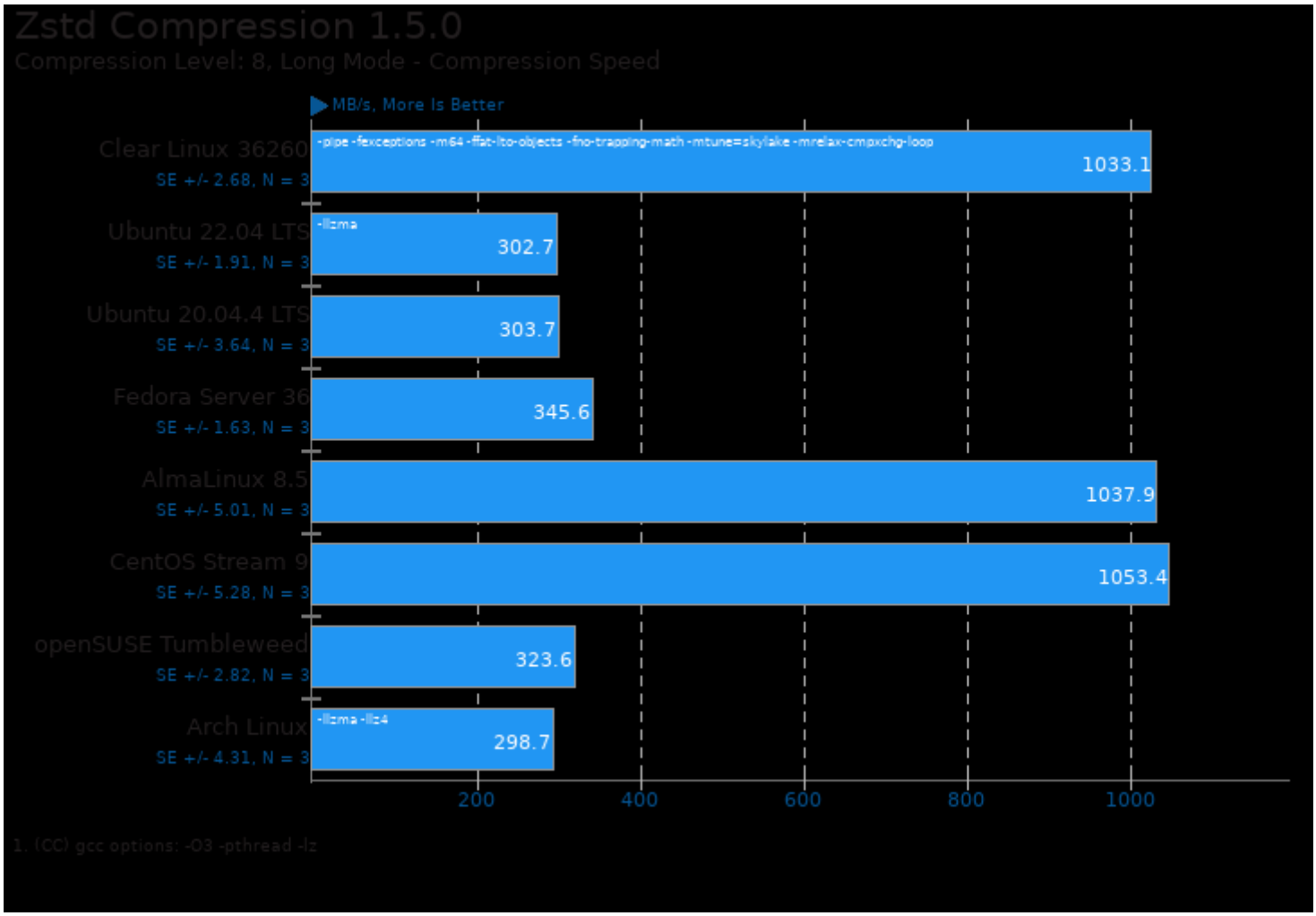


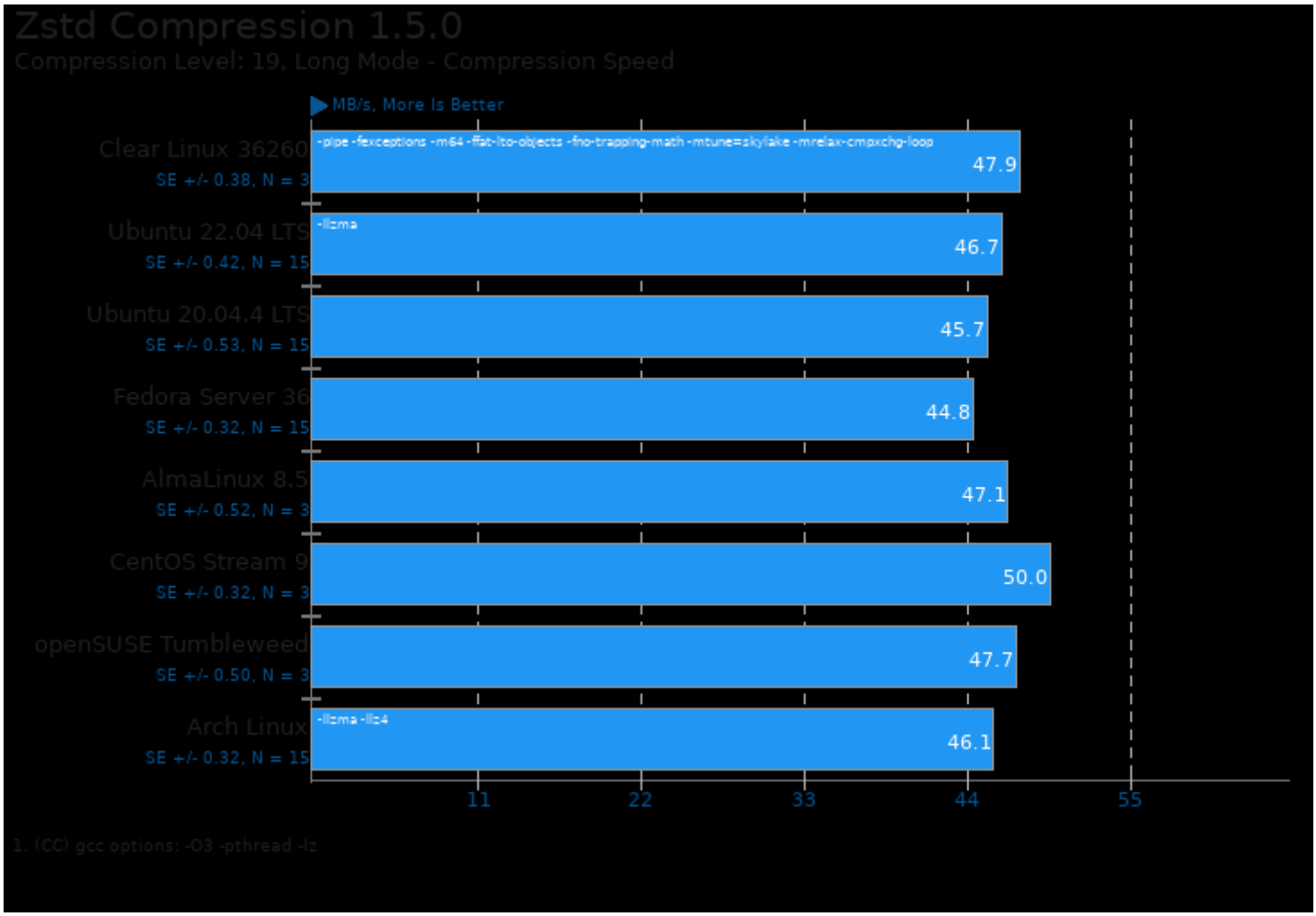
Clear Linux 36260



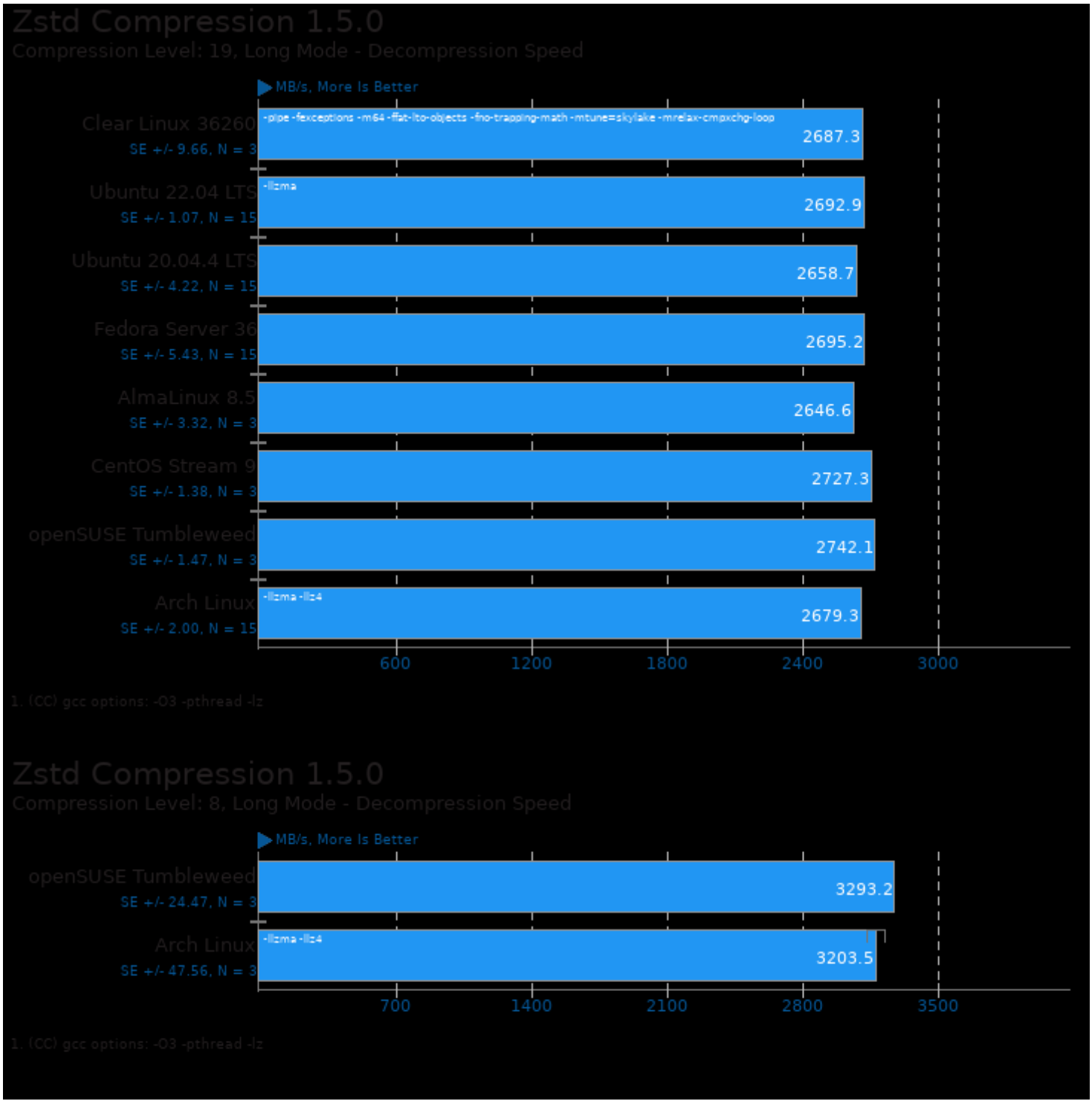
Clear Linux 36260




Zstd Compression 1.5.0
Compression Level: 8, Long Mode - Compression Speed
MB/s, More Is Better
Clear Linux 36260
SE +/- 2.68, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
1033.1
Ubuntu 22.04 LTS
SE +/- 1.91, N = 3
-llzma
302.7
Ubuntu 20.04.4 LTS
SE +/- 3.64, N = 3
303.7
Fedora Server 36
SE +/- 1.63, N = 3
345.6
AlmaLinux 8.5
SE +/- 5.01, N = 3
1037.9
CentOS Stream 9
SE +/- 5.28, N = 3
1053.4
openSUSE Tumbleweed
SE +/- 2.82, N = 3
323.6
Arch Linux
SE +/- 4.31, N = 3
-llzma -llz4
298.7
200
400
600
800
1000
1. (CC) gcc options: -O3 -pthread -lz

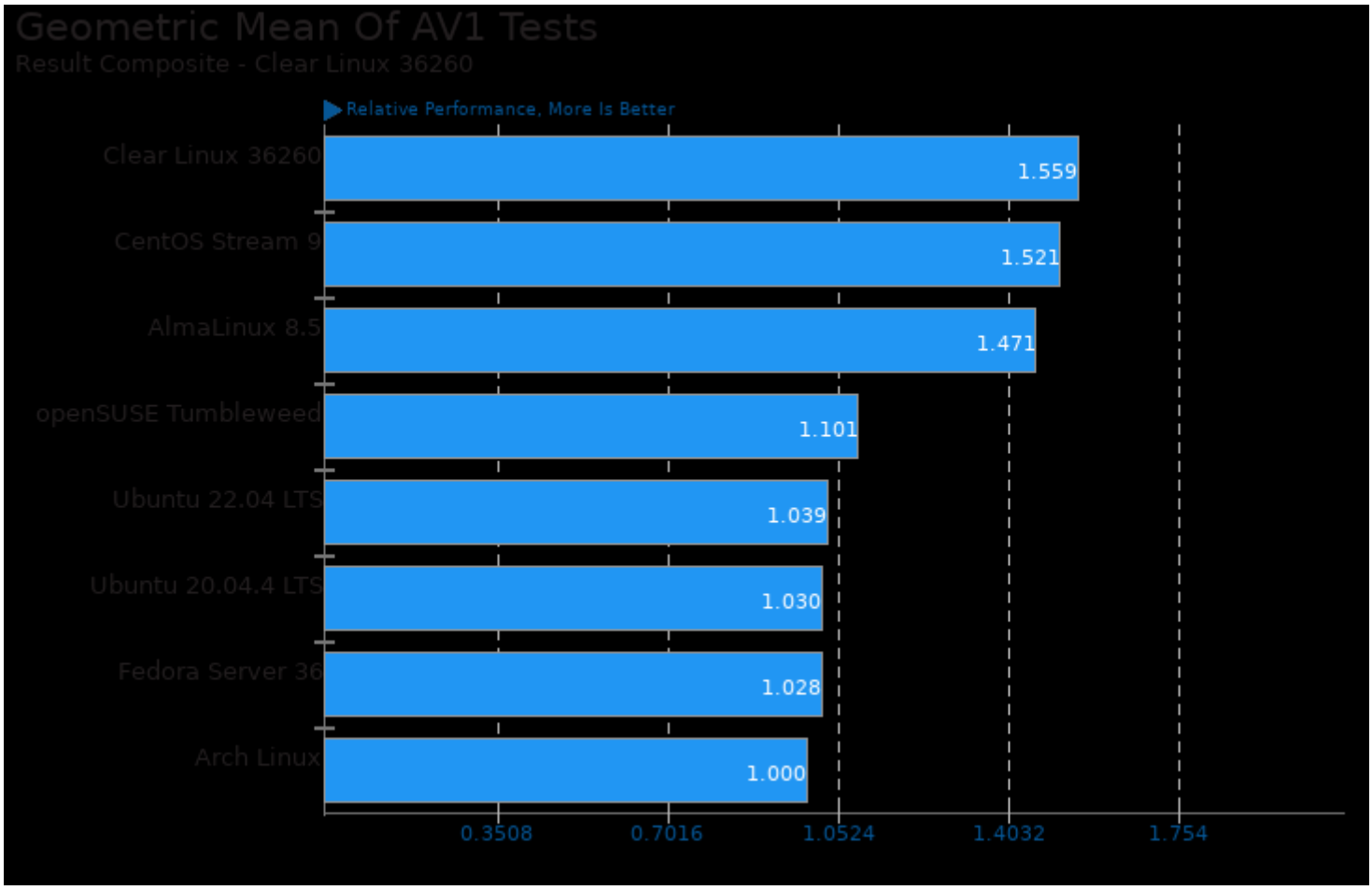

Zstd Compression 1.5.0
Compression Level: 19, Long Mode - Compression Speed
MB/s, More Is Better
Clear Linux 36260
SE +/- 0.38, N = 3
-pipe -fexceptions -m64 -ffat-lto-objects -fno-trapping-math -mtune=skylake -mrelax-cmpxchg-loop
47.9
Ubuntu 22.04 LTS
SE +/- 0.42, N = 15
-llzma
46.7
Ubuntu 20.04.4 LTS
SE +/- 0.53, N = 15
45.7
Fedora Server 36
SE +/- 0.32, N = 15
44.8
AlmaLinux 8.5
SE +/- 0.52, N = 3
47.1
CentOS Stream 9
SE +/- 0.32, N = 3
50.0
openSUSE Tumbleweed
SE +/- 0.50, N = 3
47.7
Arch Linux
SE +/- 0.32, N = 15
-llzma -llz4
46.1
11
22
33
44
55
1. (CC) gcc options: -O3 -pthread -lz

Clear Linux 36260



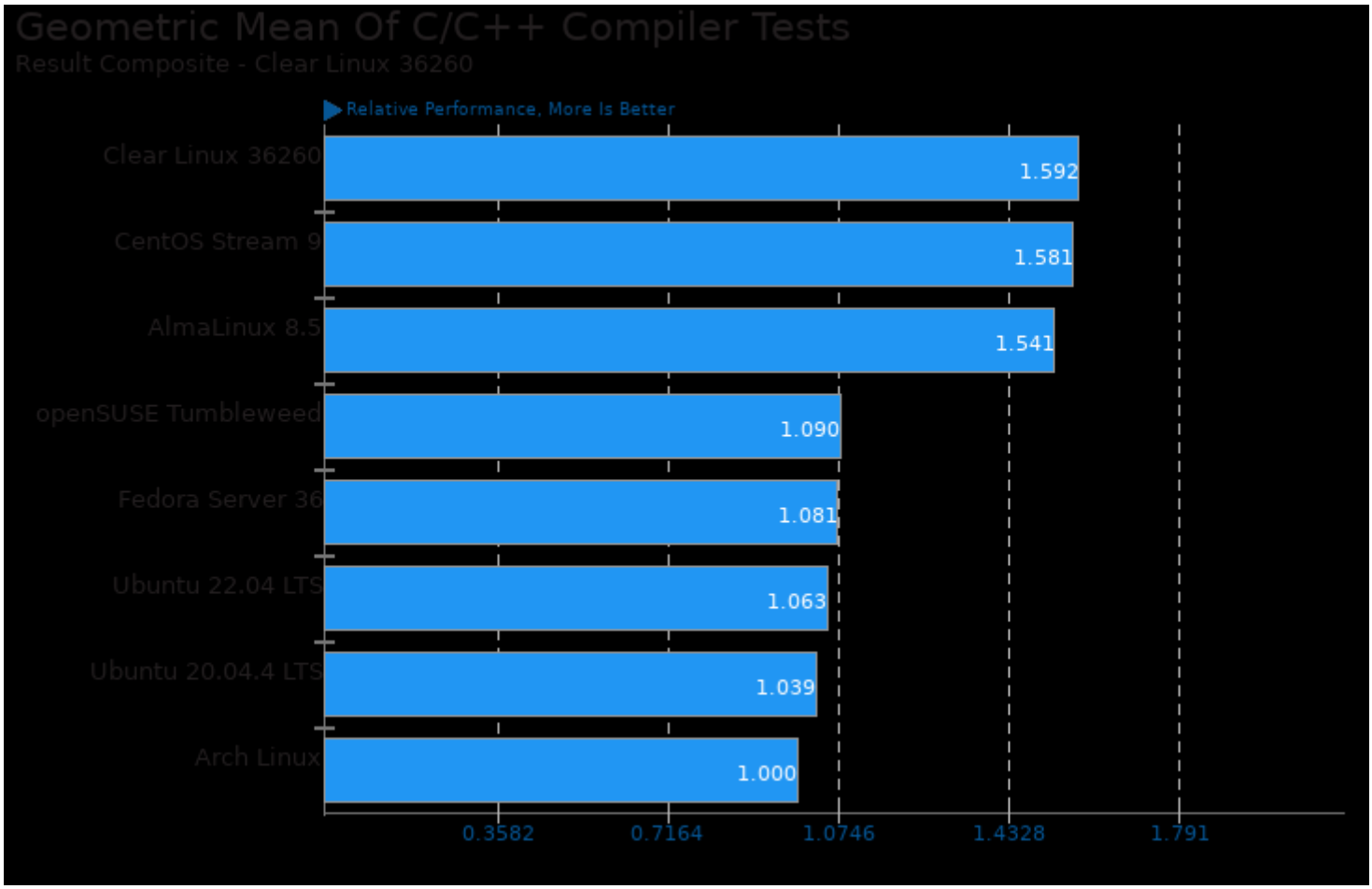
Clear Linux 36260

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



Geometric mean based upon tests: pts/svt-av1 and pts/avifenc

Clear Linux 36260



Geometric mean based upon tests: pts/stockfish, pts/apache, pts/compress-zstd, pts/nginx, pts/lammps, pts/svt-av1, pts/svt-vp9, pts/gromacs and pts/tachyon

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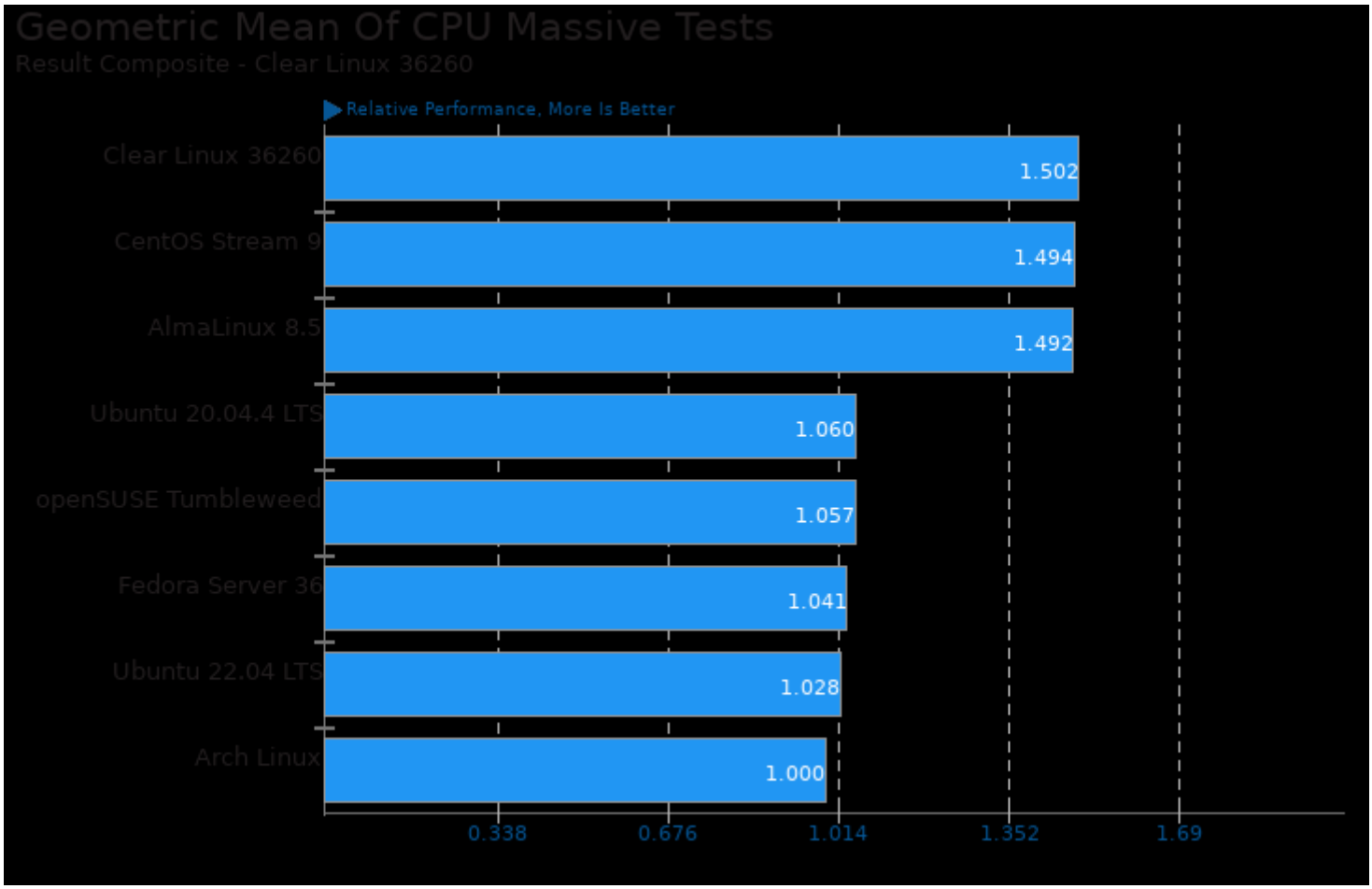

Geometric mean based upon tests: pts/apache, pts/compress-zstd, pts/dacapobench, pts/svt-av1, pts/svt-hevc, pts/svt-vp9, pts/lammps, pts/onednn, pts/nginx, pts/numpy, pts/phpbench, pts/stockfish, pts/stress-ng, pts/tachyon, pts/blender and pts/renaissance

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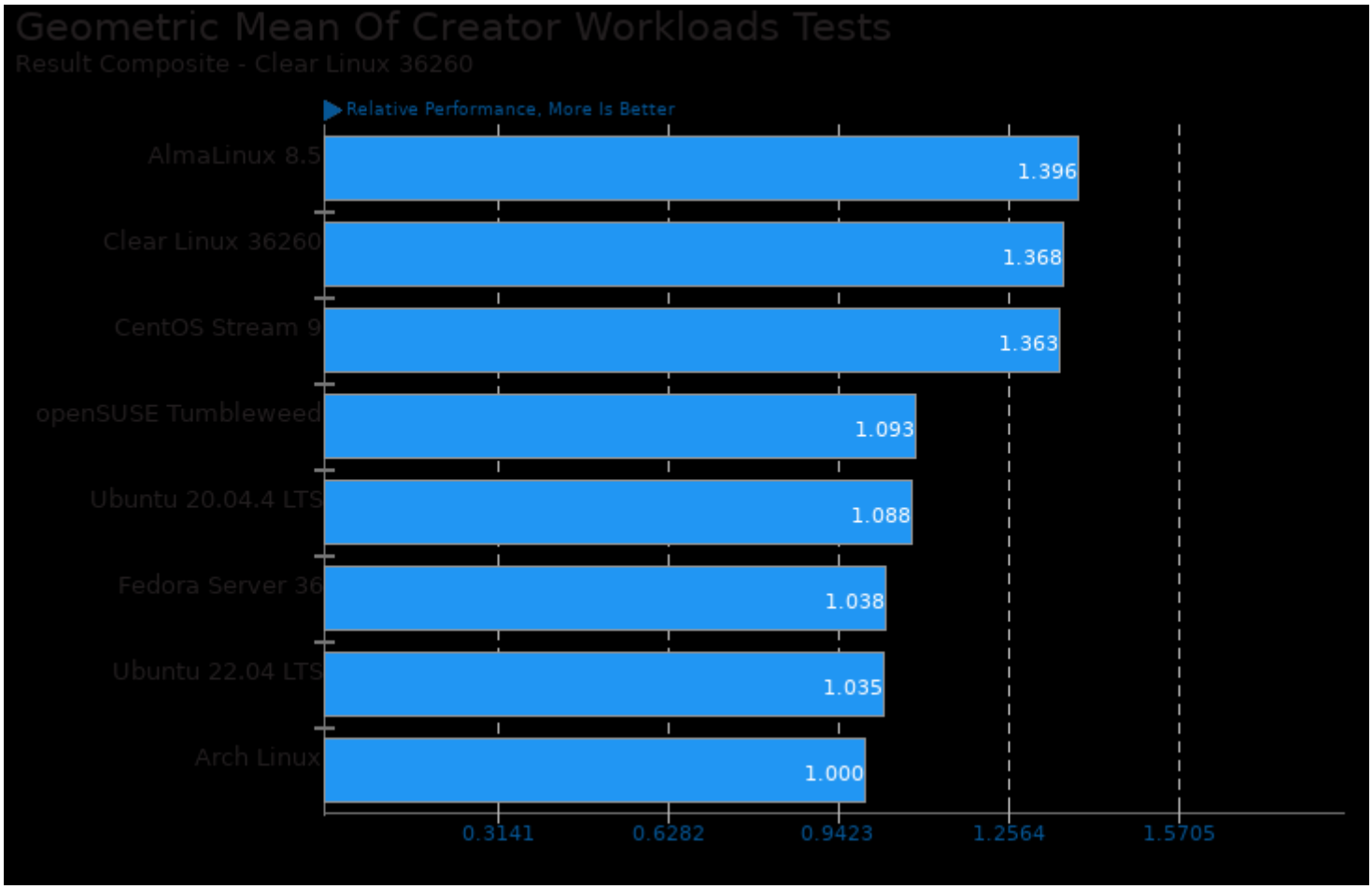
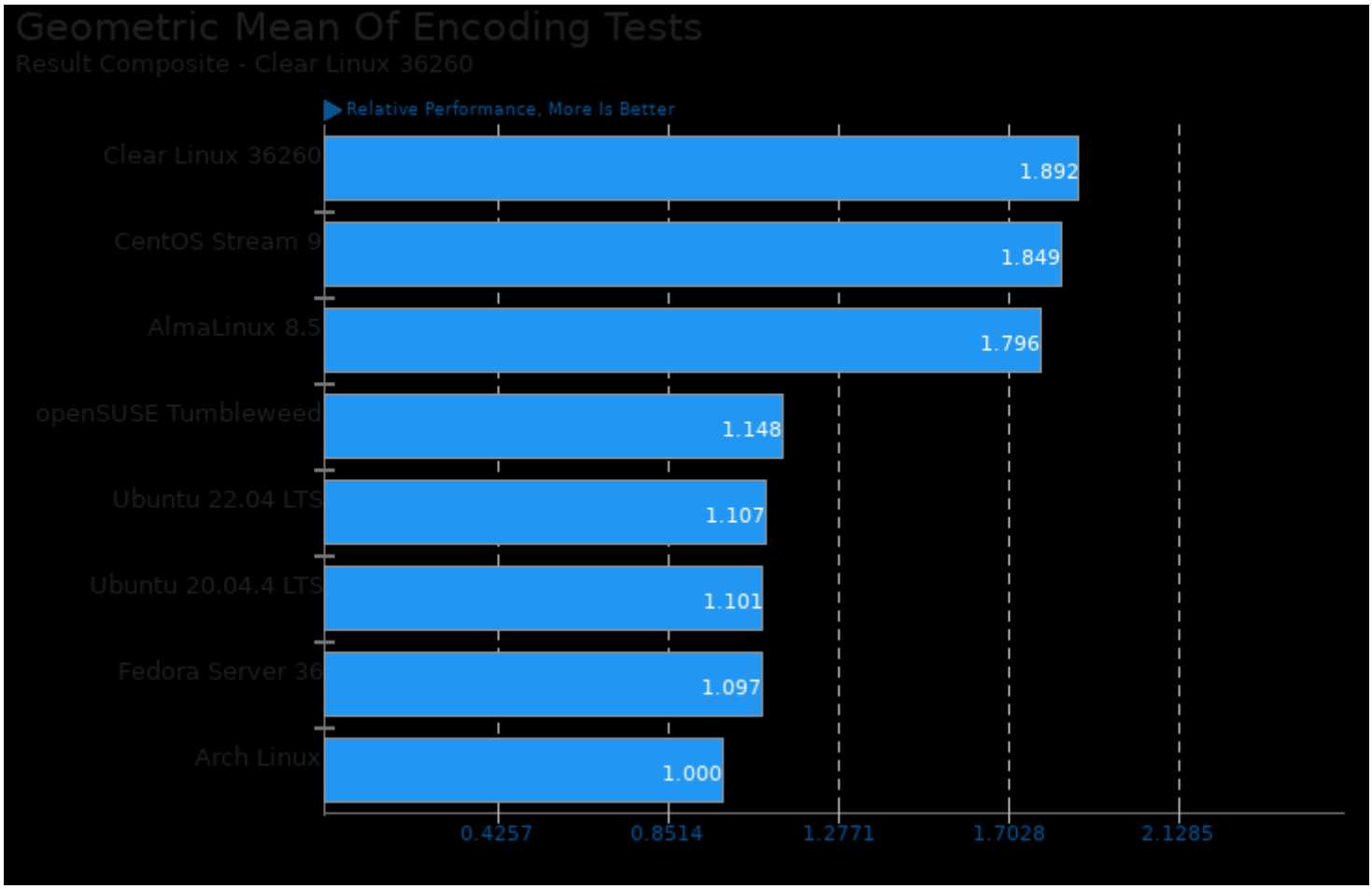
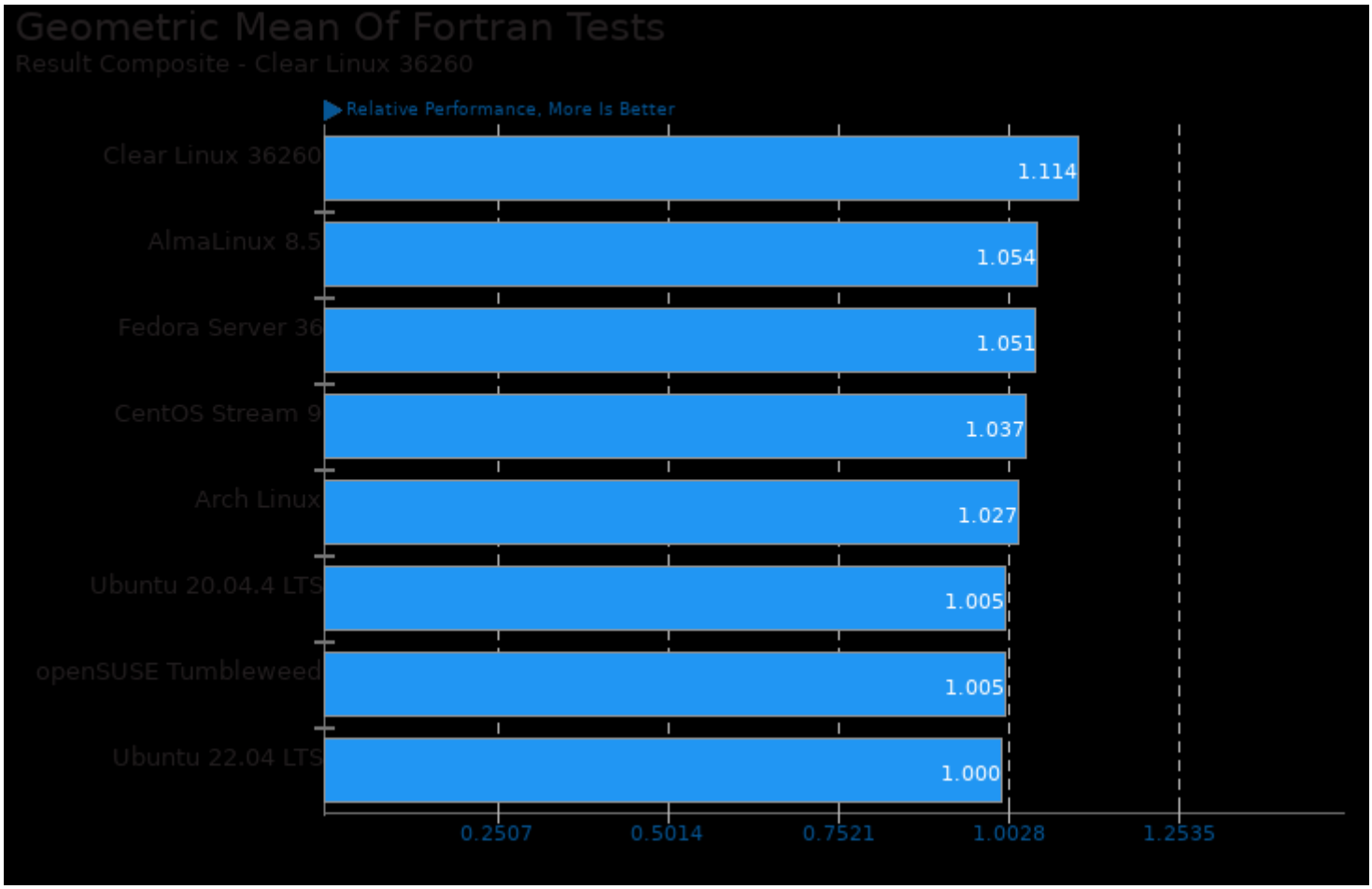


Geometric mean based upon tests: pts/ospray, pts/tachyon, pts/blender, pts/luxcorerender, pts/svt-vp9, pts/svt-hevc, pts/svt-av1, pts/avifenc, pts/embree, pts/onednn and pts/astcenc

Clear Linux 36260

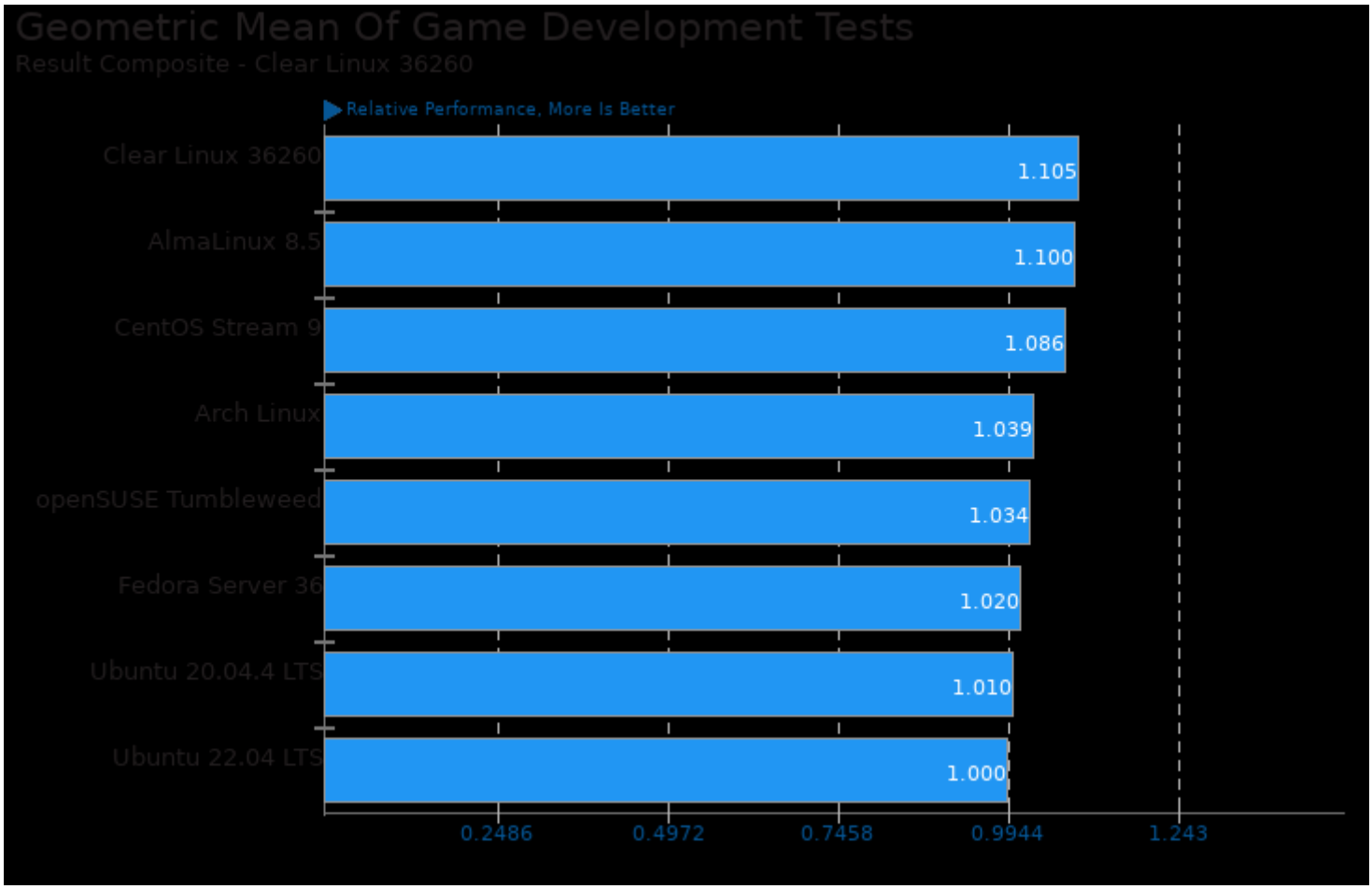


Geometric mean based upon tests: pts/svt-vp9, pts/svt-hevc, pts/svt-av1 and pts/avifenc

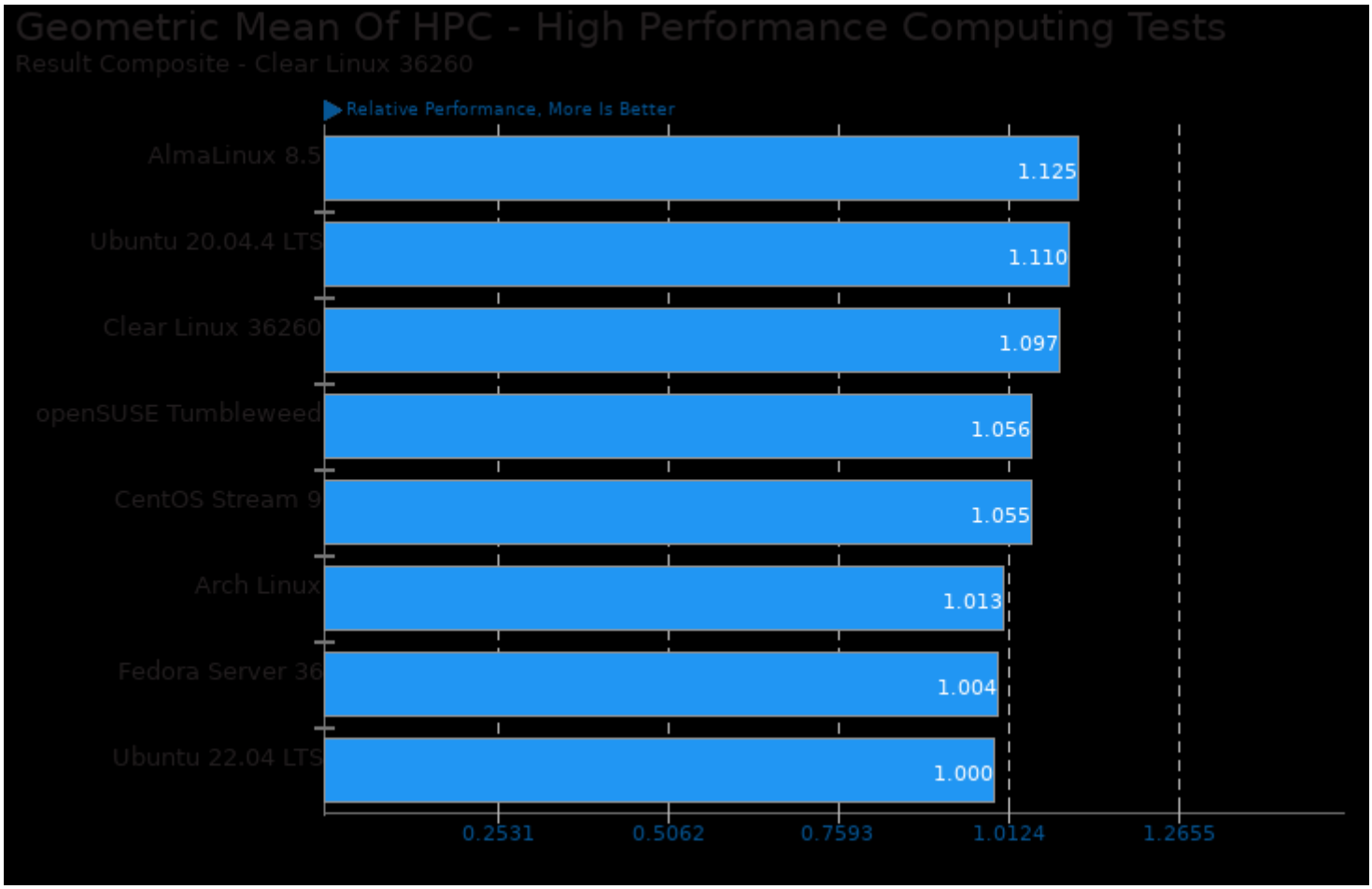


Geometric mean based upon tests: pts/lammps and pts/incompact3d

Clear Linux 36260



Geometric mean based upon tests: pts/astcenc and pts/blender



Geometric mean based upon tests: pts/amg, pts/gromacs, pts/lammps, pts/pennant, pts/incompact3d, pts/numpy, pts/onednn and pts/onnx

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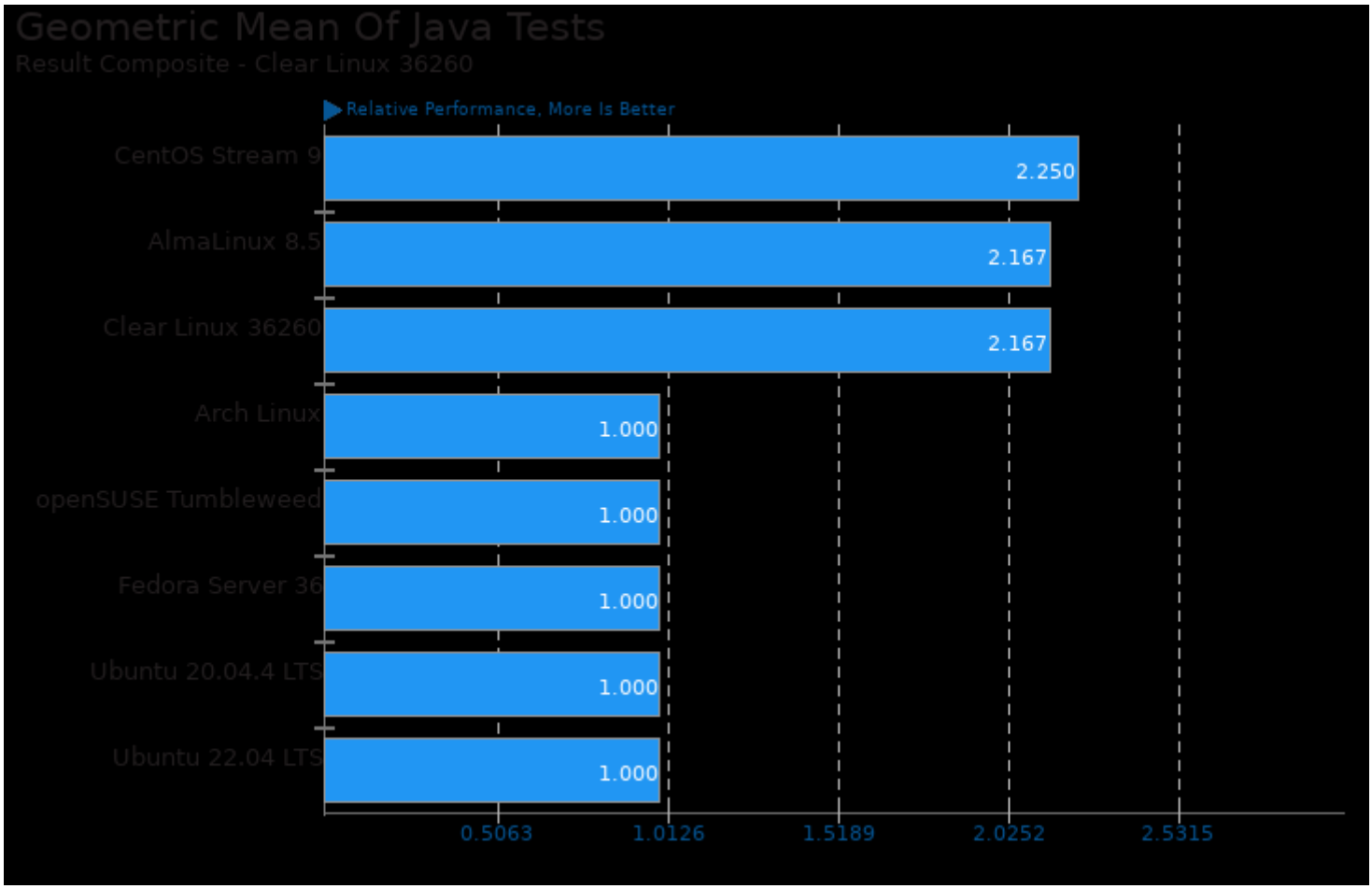
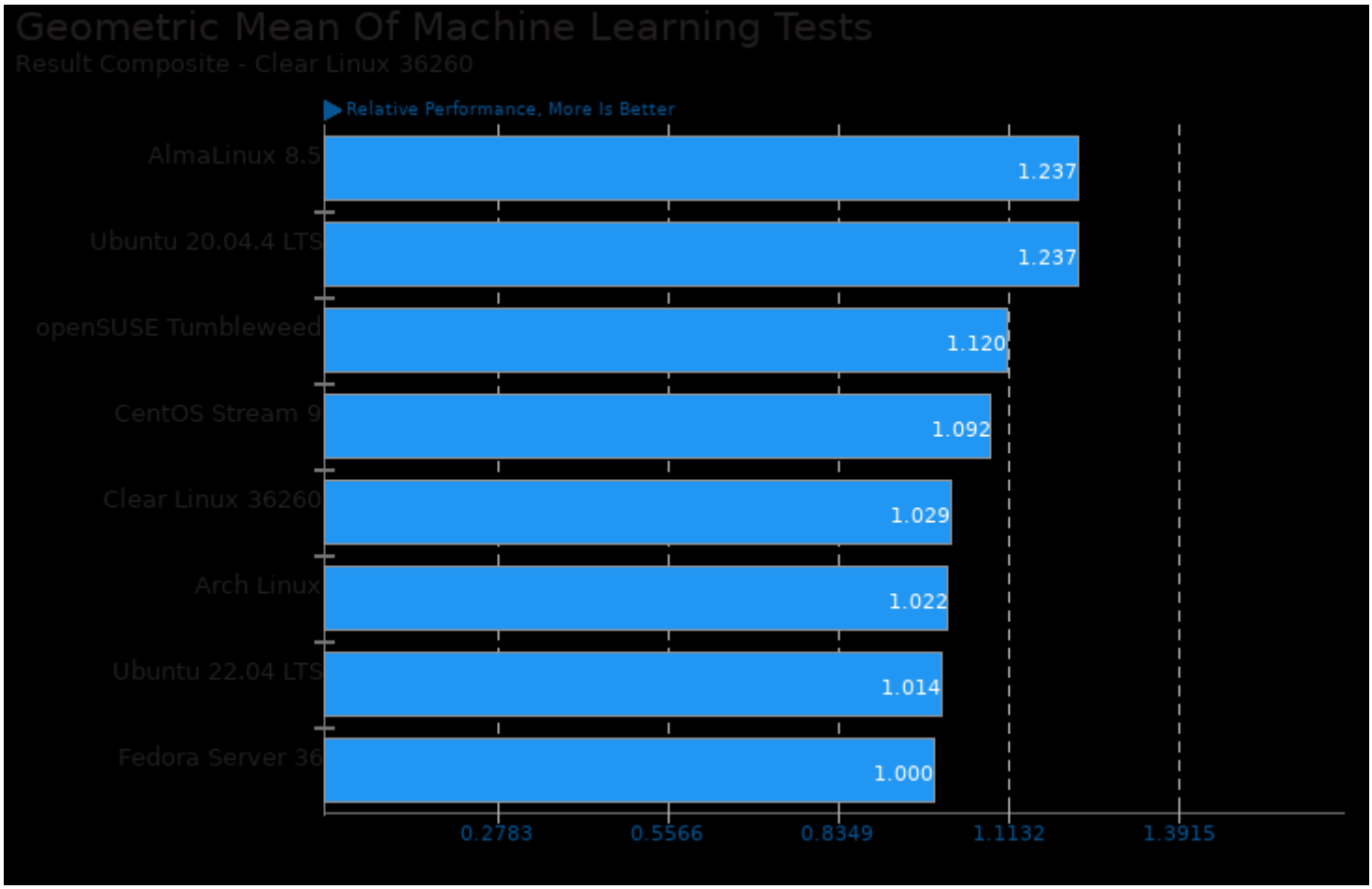
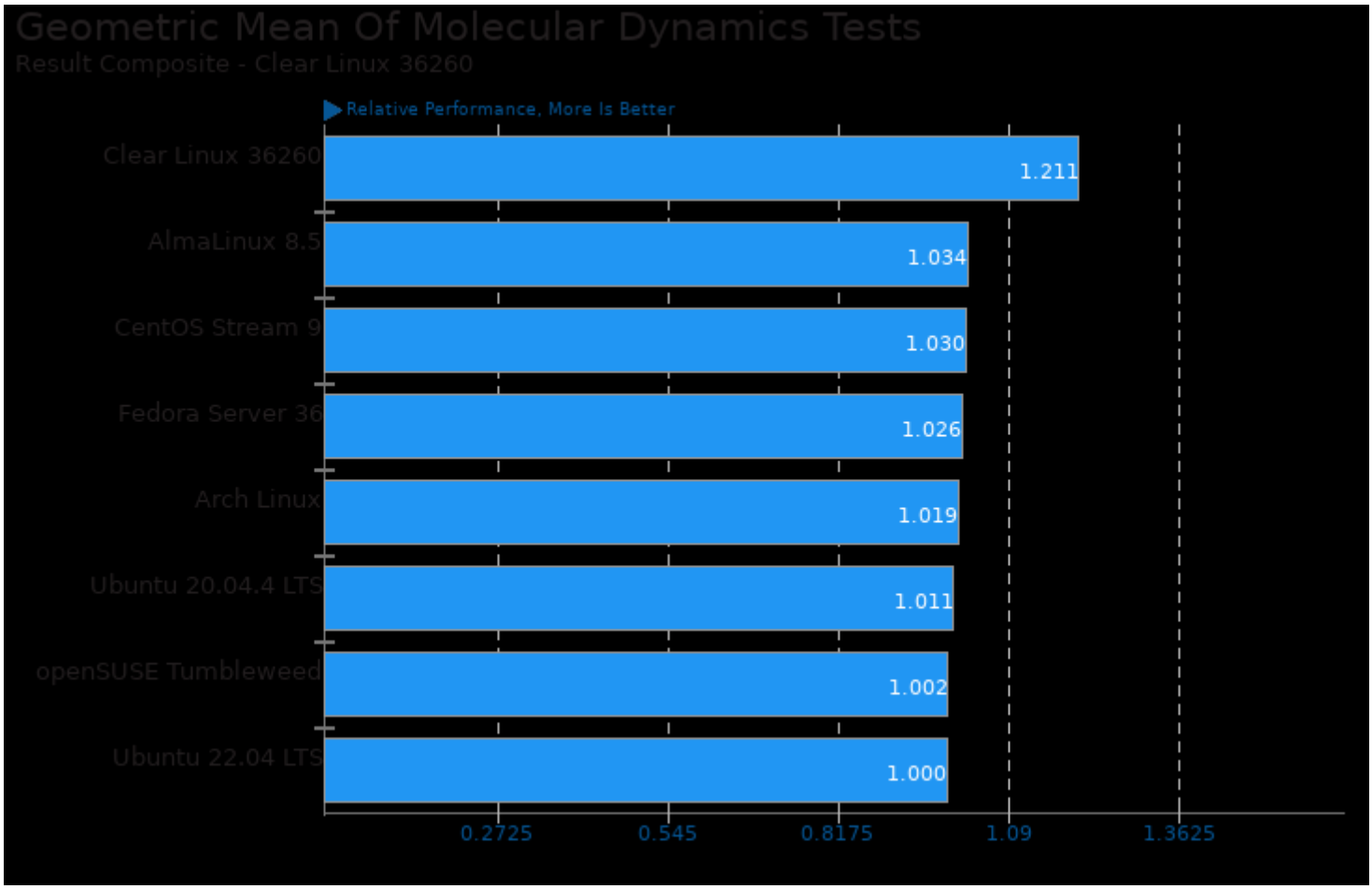


Geometric mean based upon tests: pts/dacapobench and pts/renaissance



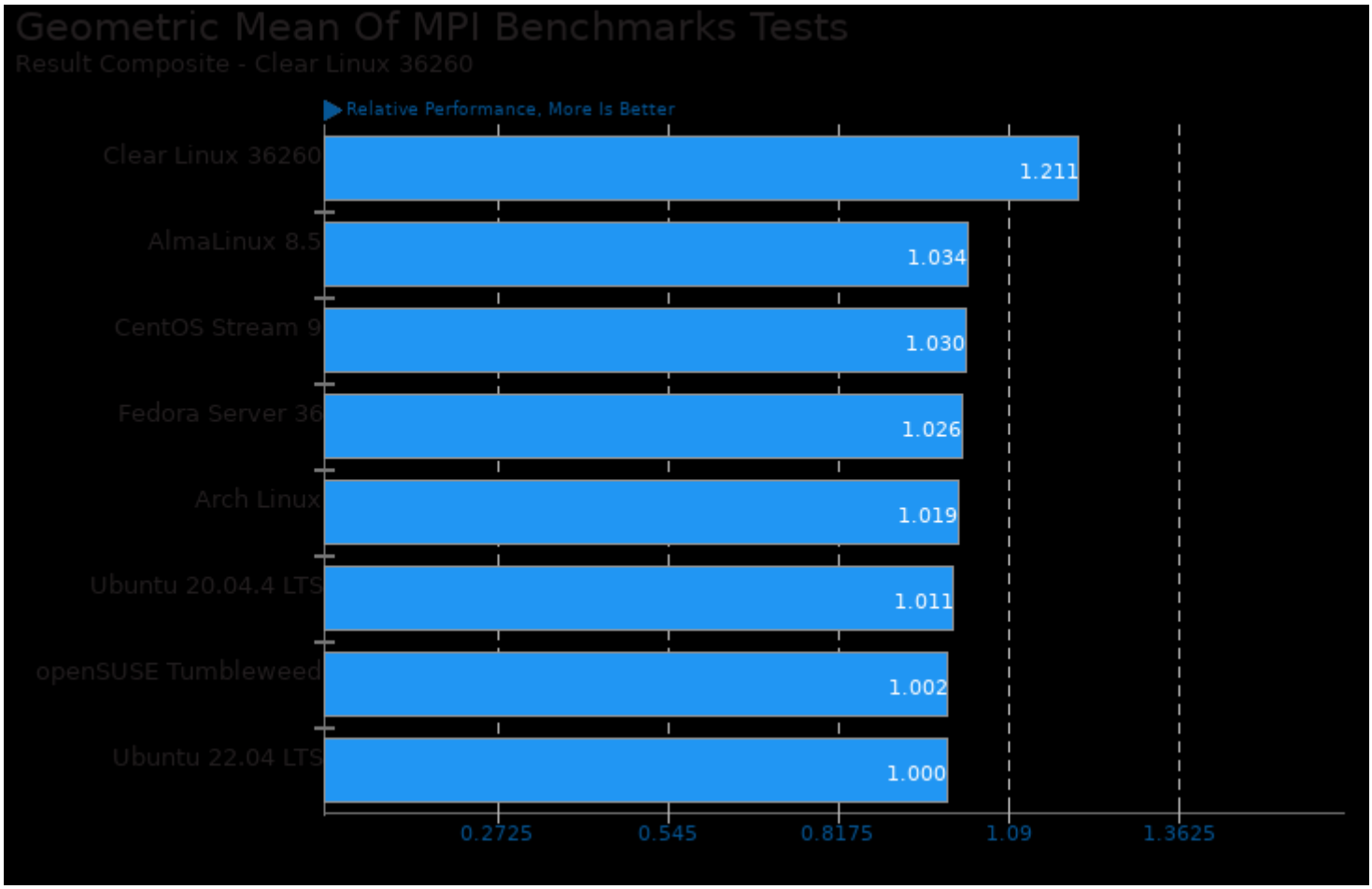
Geometric mean based upon tests: pts/numpy, pts/onednn and pts/onnx

Clear Linux 36260



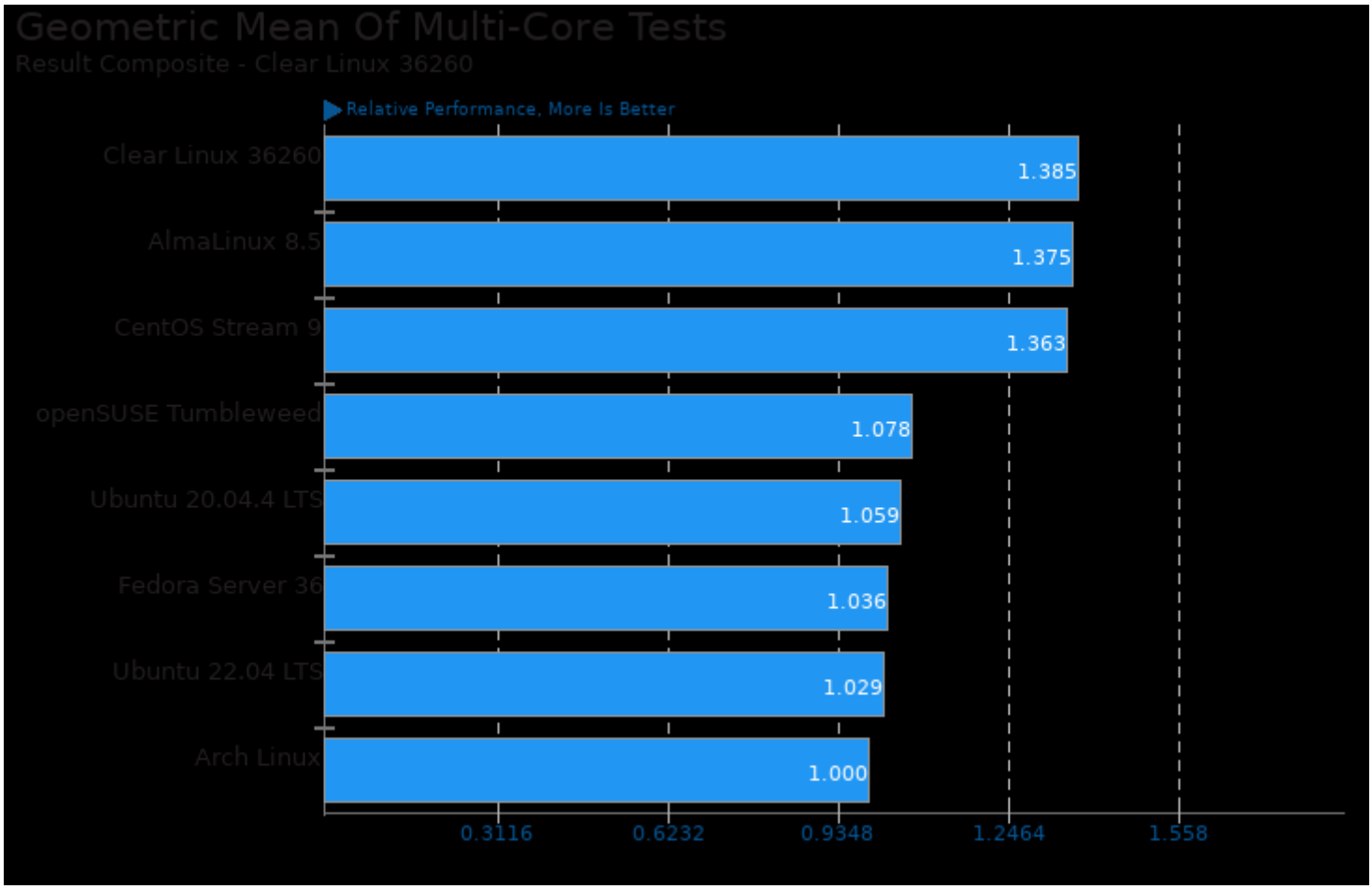
Geometric mean based upon tests: pts/gromacs, pts/lammps, pts/pennant and pts/incompact3d

Clear Linux 36260



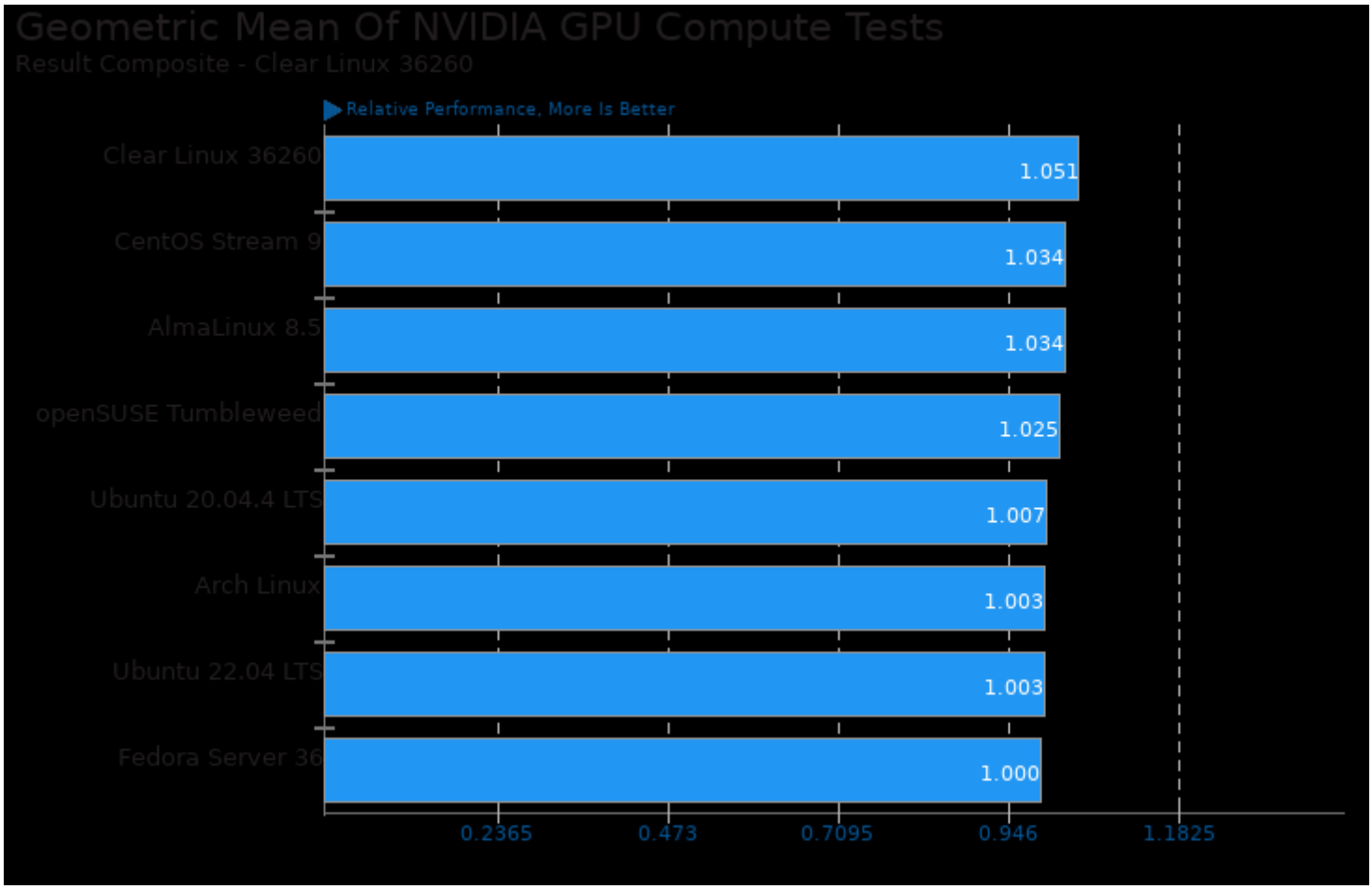
Geometric mean based upon tests: pts/lammps, pts/incompact3d, pts/gromacs and pts/pennant

Clear Linux 36260



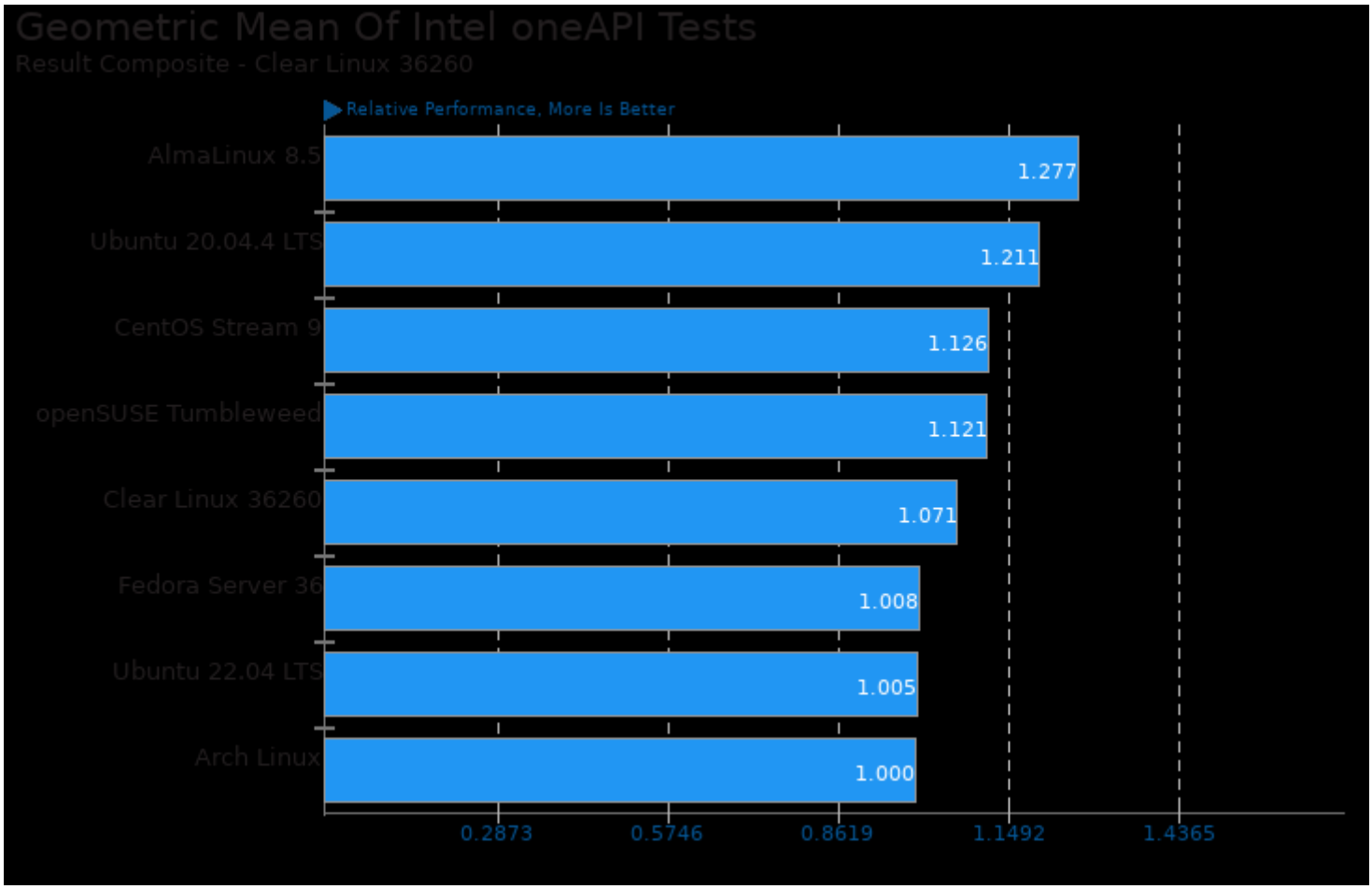
Geometric mean based upon tests: pts/blender, pts/ospray, pts/tachyon, pts/stockfish, pts/svt-vp9, pts/svt-hevc, pts/svt-av1, pts/avifenc, pts/pennant, pts/onednn, pts/lammps, pts/gromacs, pts/compress-zstd, pts/build-gem5, pts/luxcorerender and pts/embree

Clear Linux 36260



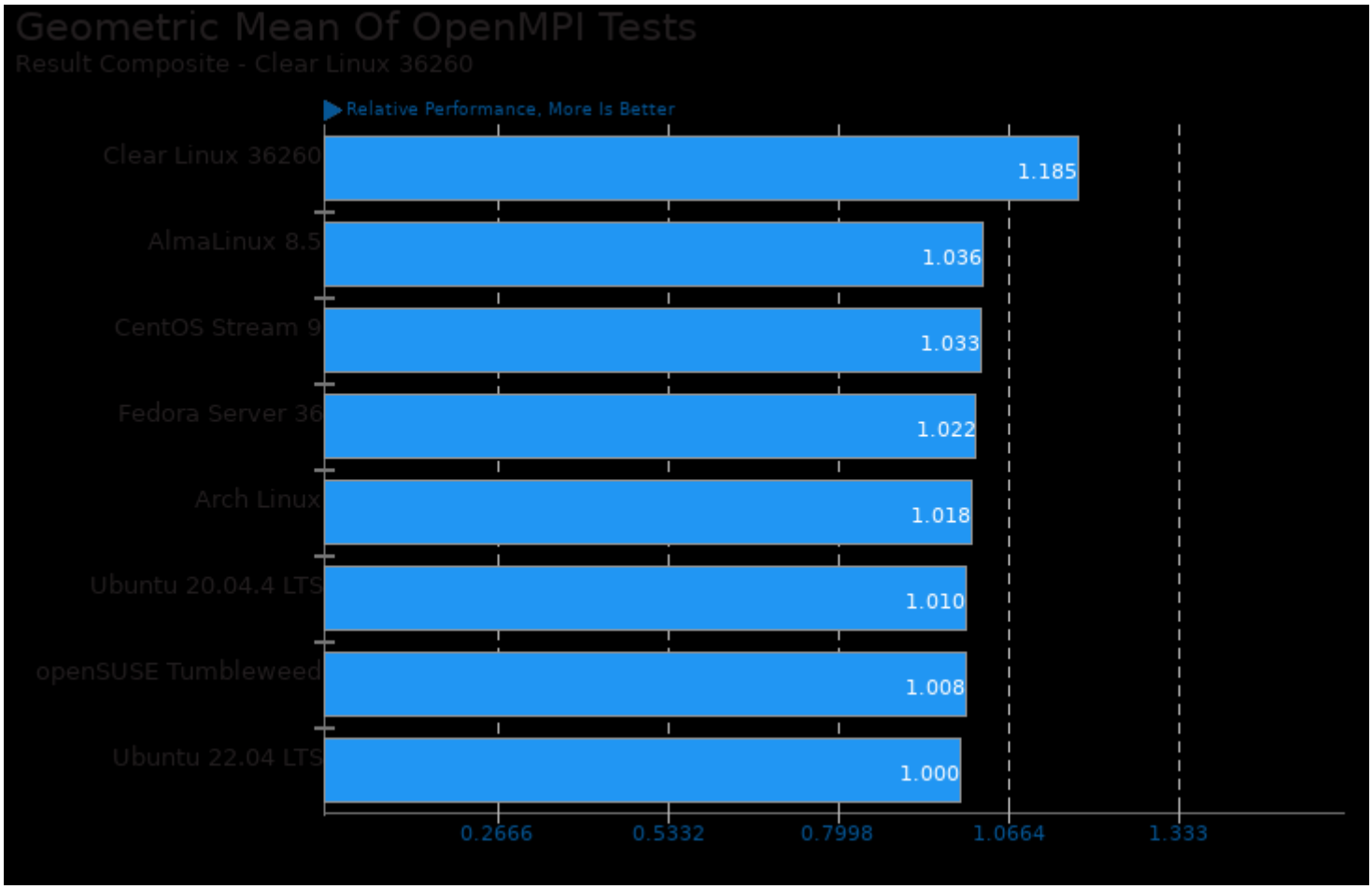
Geometric mean based upon tests: pts/gromacs, pts/luxcorerender and pts/blender

Clear Linux 36260



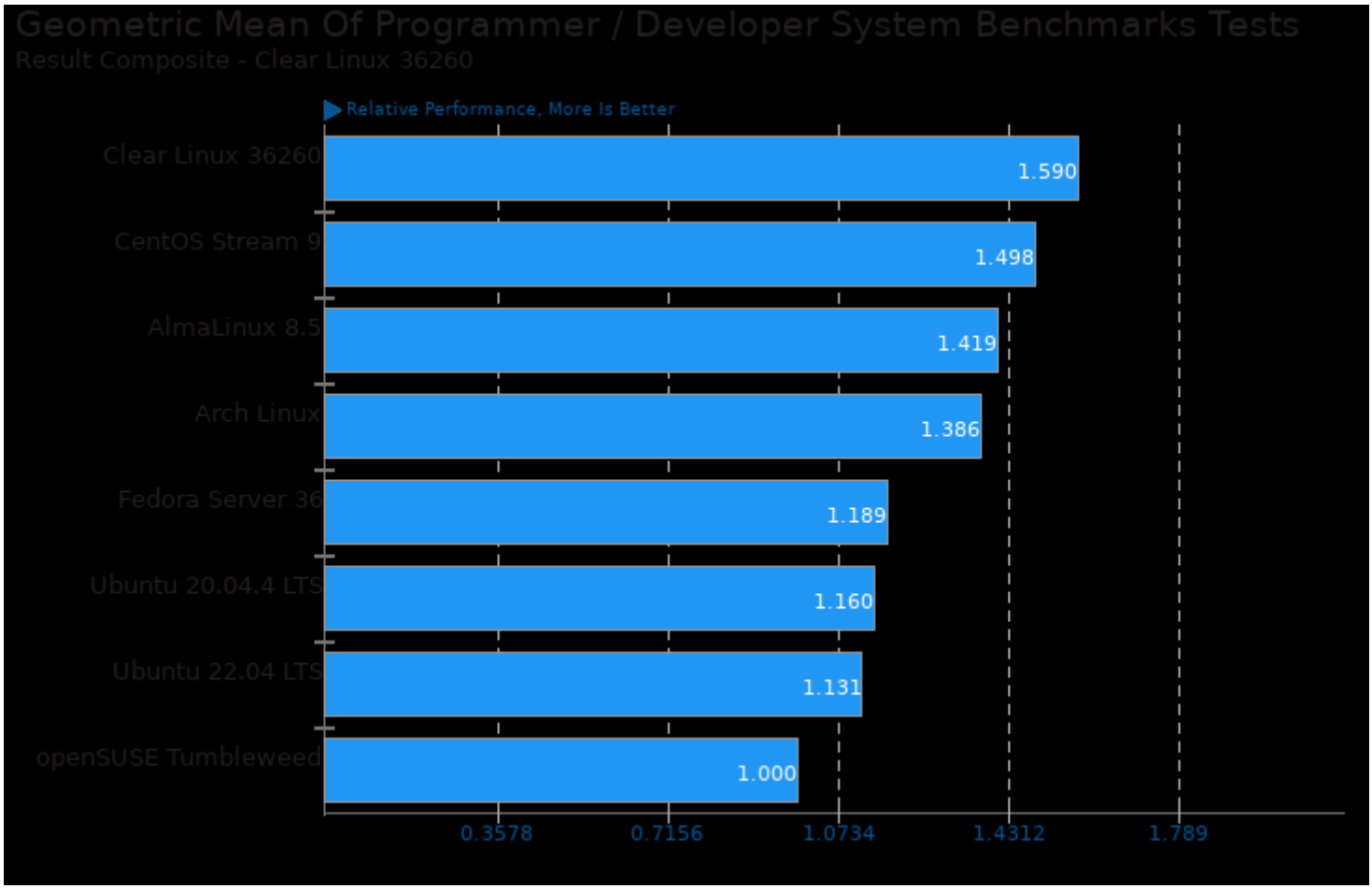
Geometric mean based upon tests: pts/embree, pts/onednn and pts/ospray

Clear Linux 36260



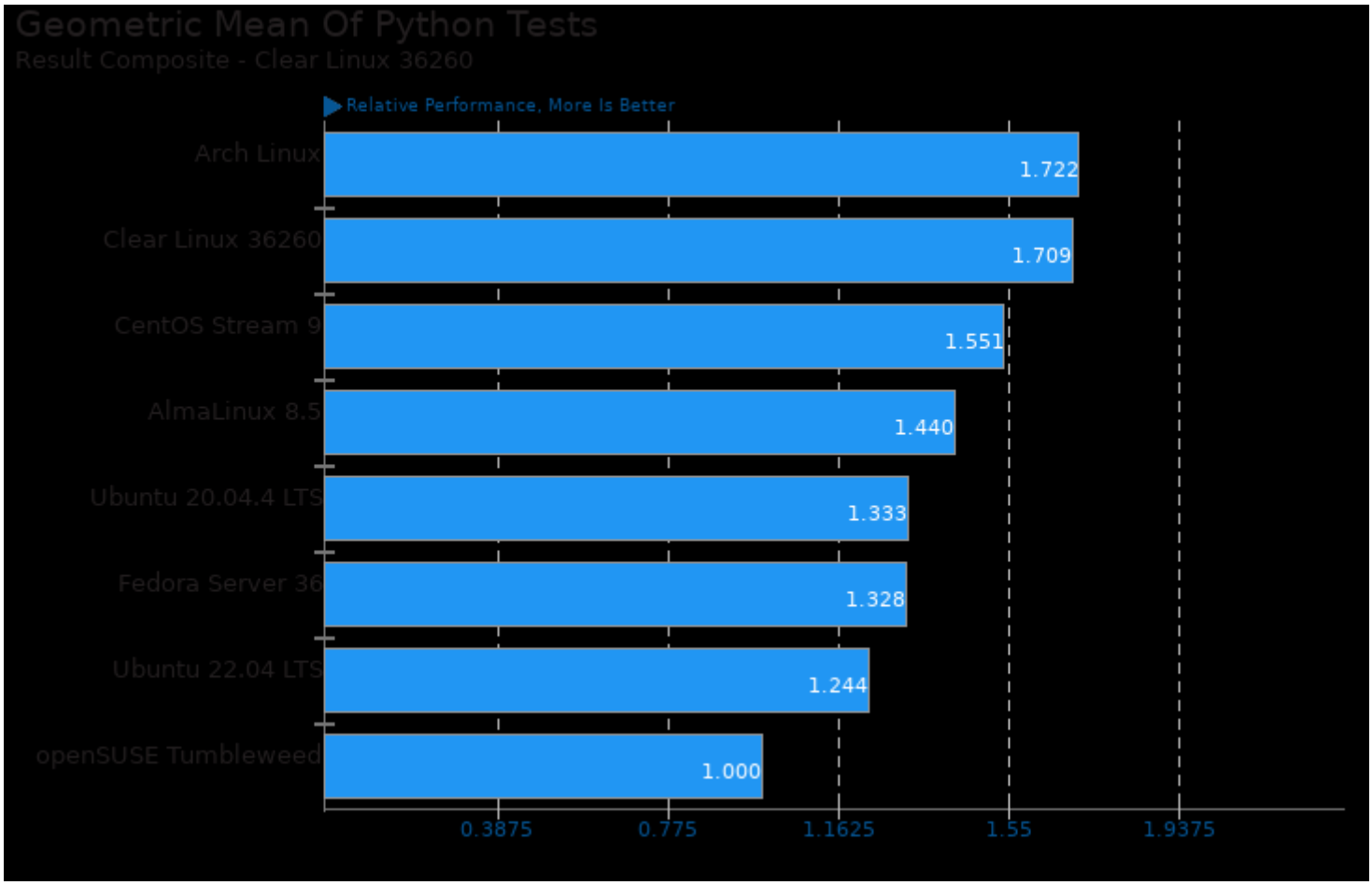
Geometric mean based upon tests: pts/amg, pts/gromacs, pts/lammps, pts/pennant and pts/incompact3d

Clear Linux 36260



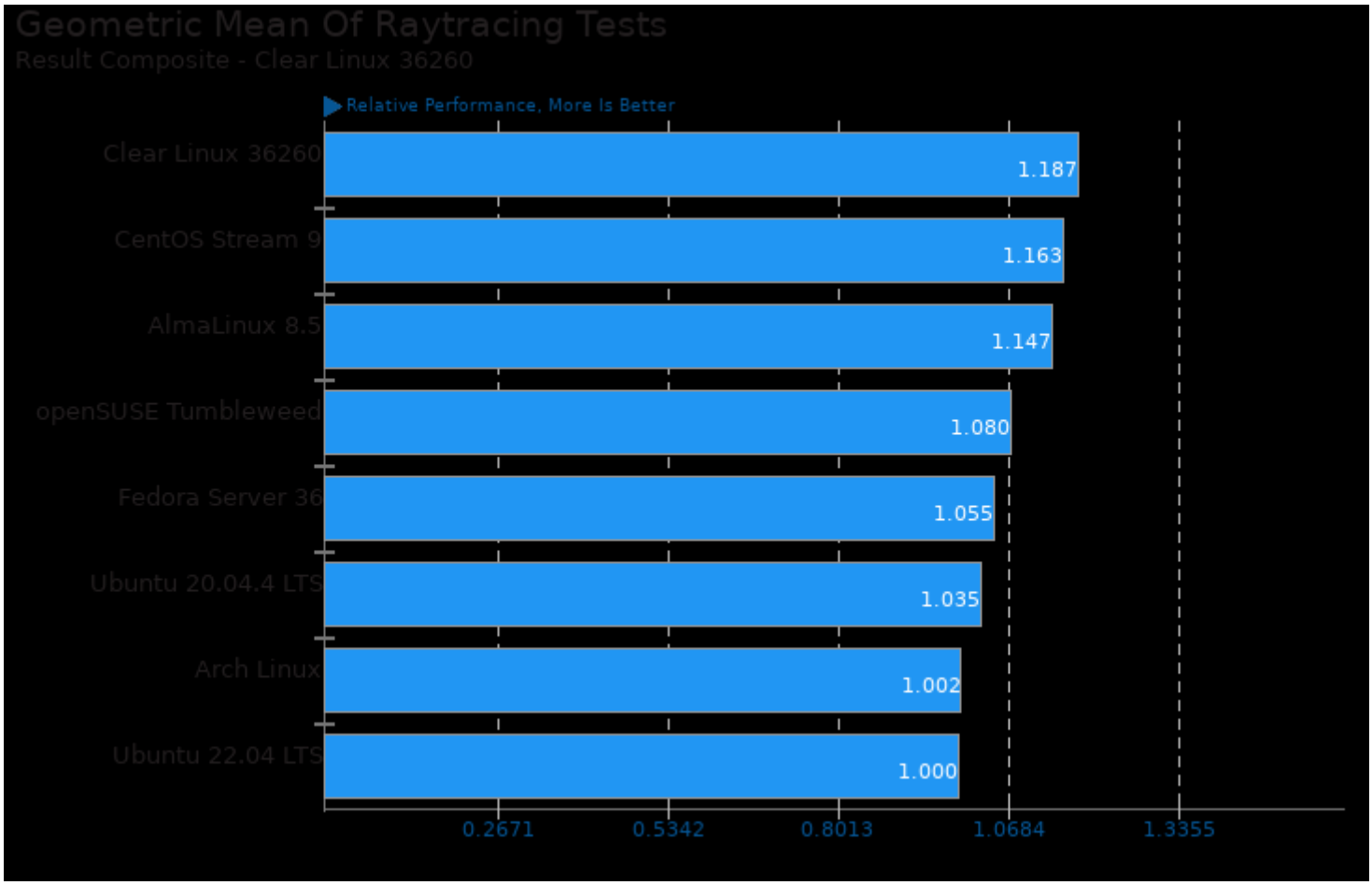
Geometric mean based upon tests: pts/compress-zstd, pts/pyperformance, pts/pybench, pts/build-gem5 and pts/amg

Clear Linux 36260



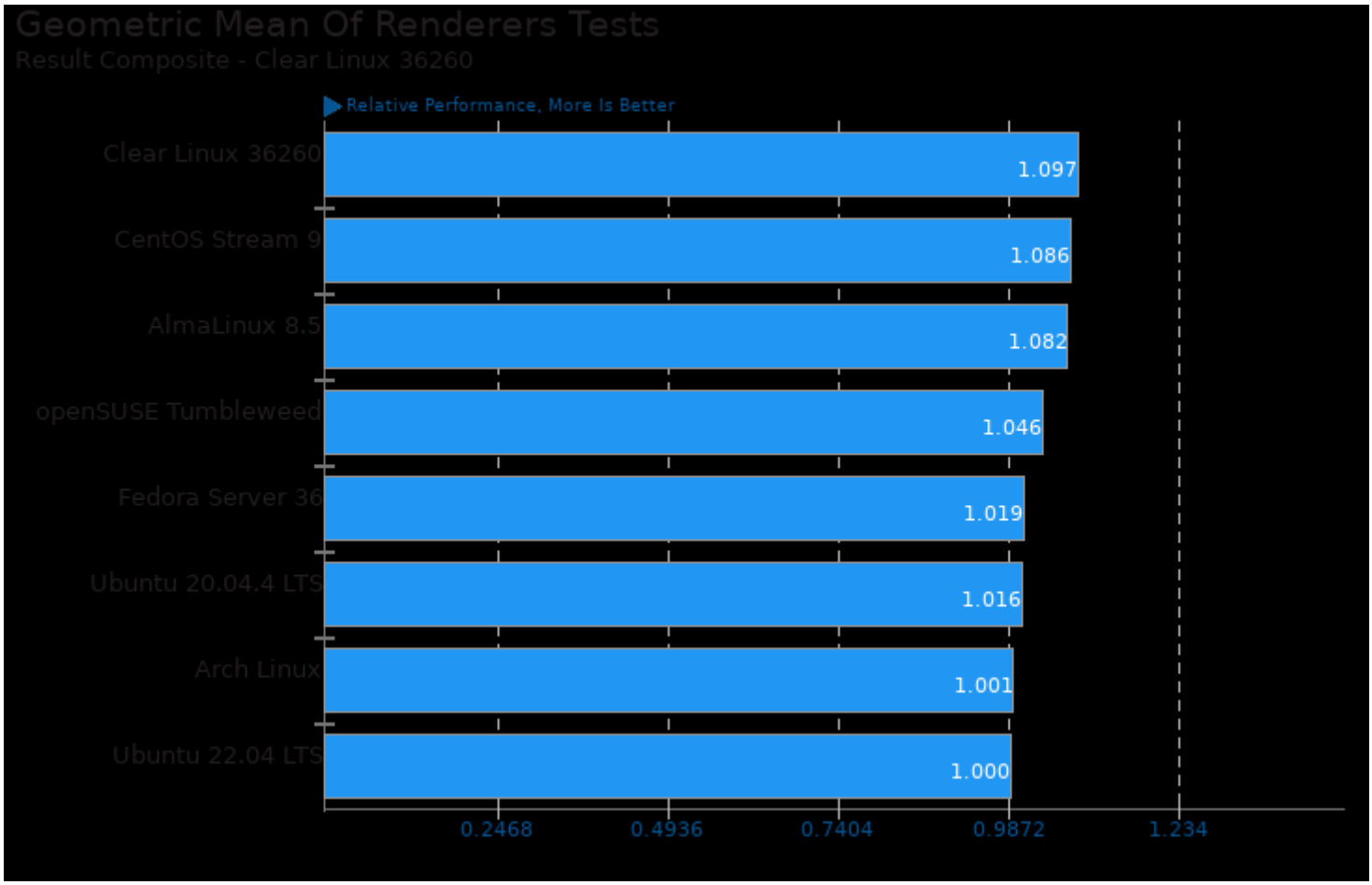
Geometric mean based upon tests: pts/pybench, pts/numpy and pts/pyperformance

Clear Linux 36260



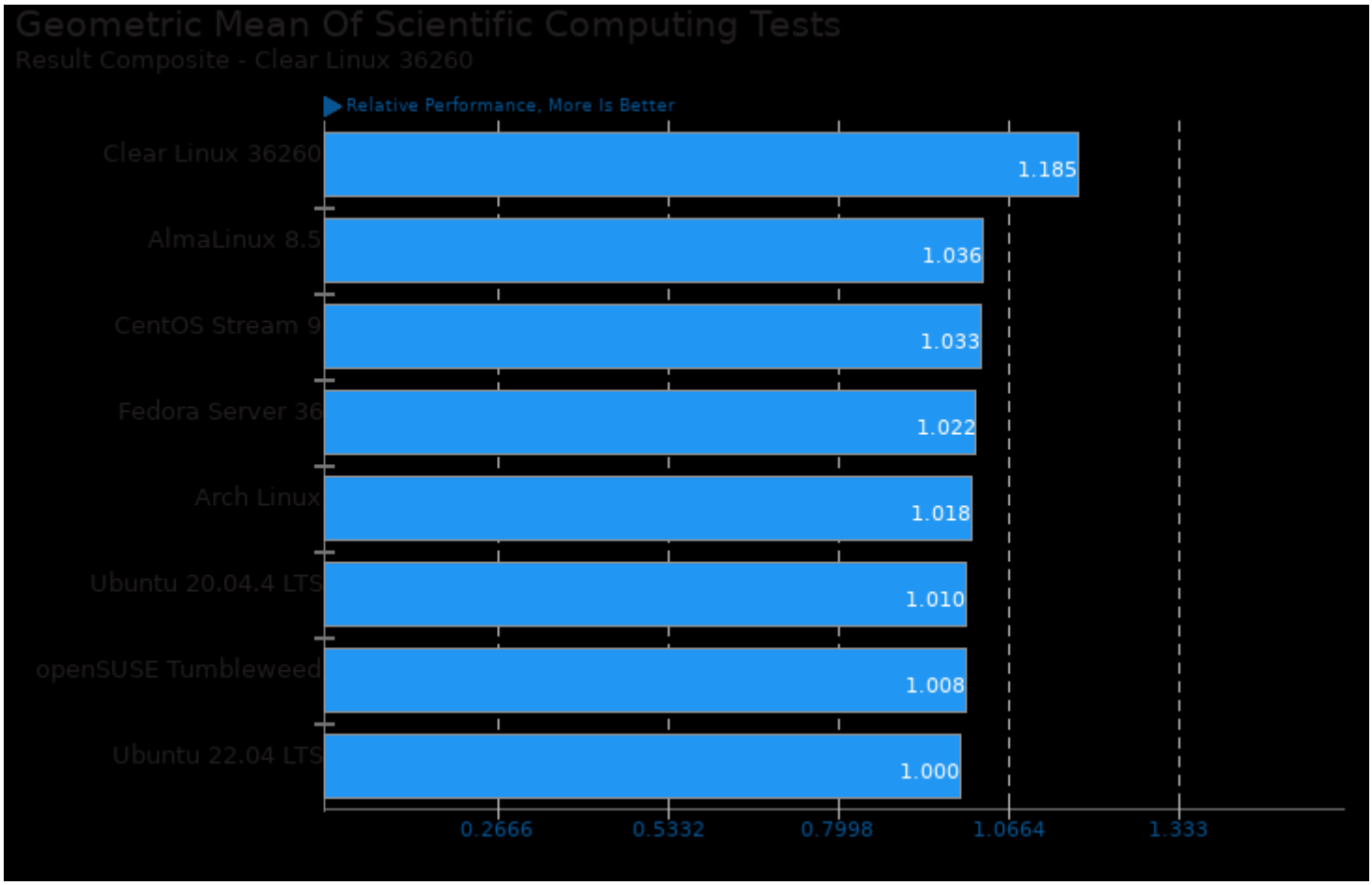
Geometric mean based upon tests: pts/ospray and pts/tachyon

Clear Linux 36260



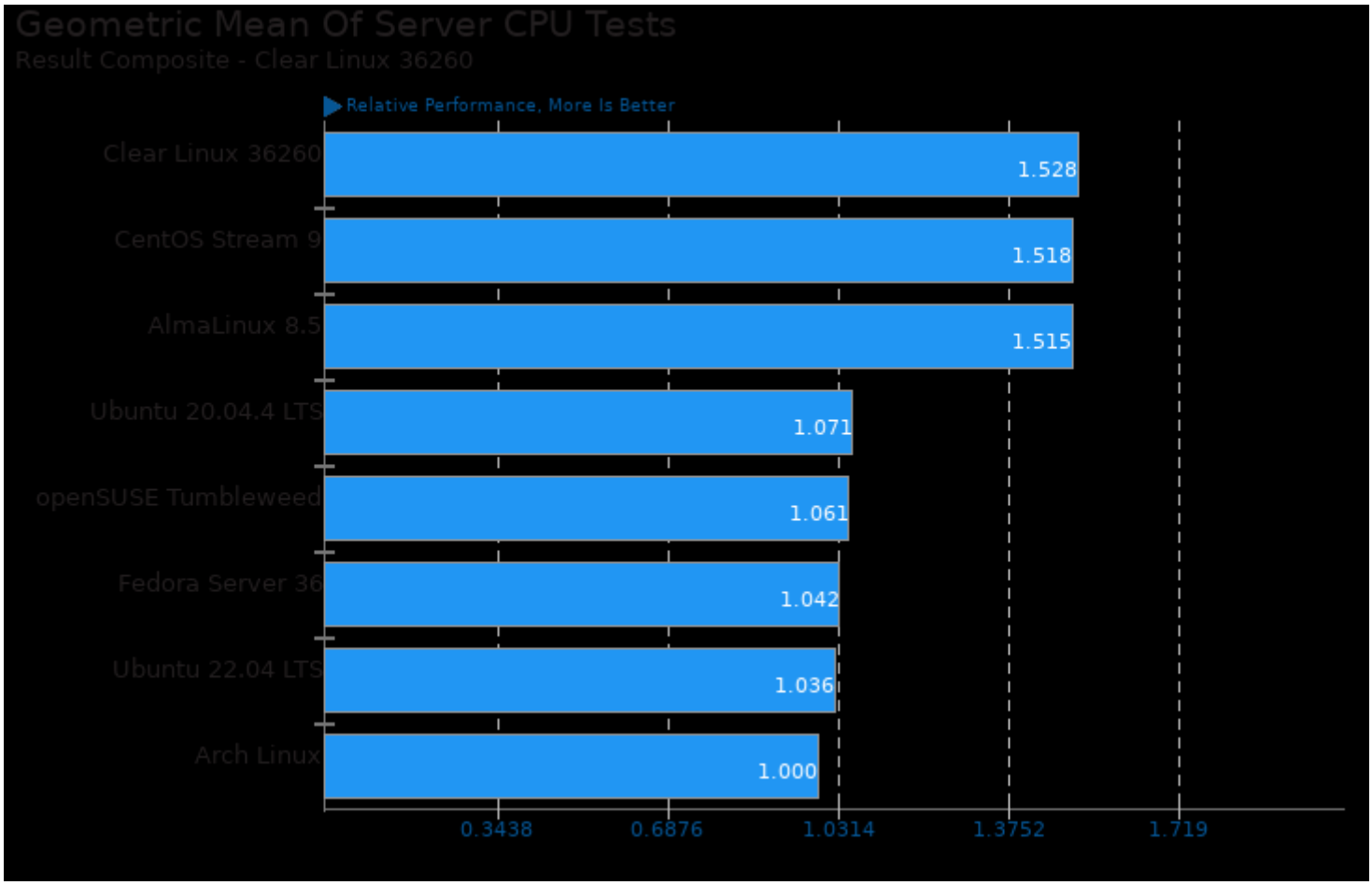
Geometric mean based upon tests: pts/ospray, pts/tachyon, pts/blender and pts/luxcorerender

Clear Linux 36260



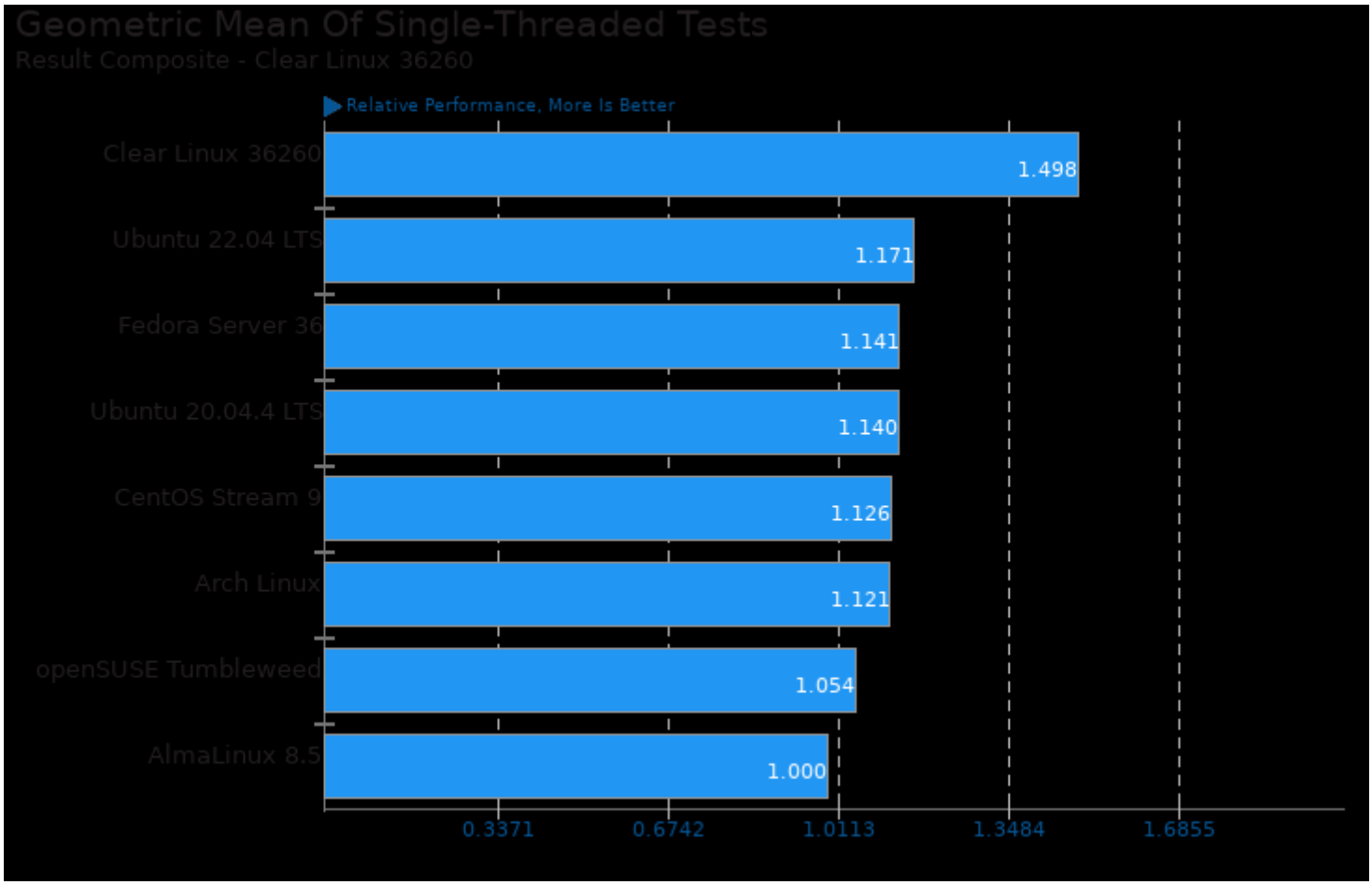
Geometric mean based upon tests: pts/amg, pts/gromacs, pts/lammps, pts/pennant and pts/incompact3d

Clear Linux 36260



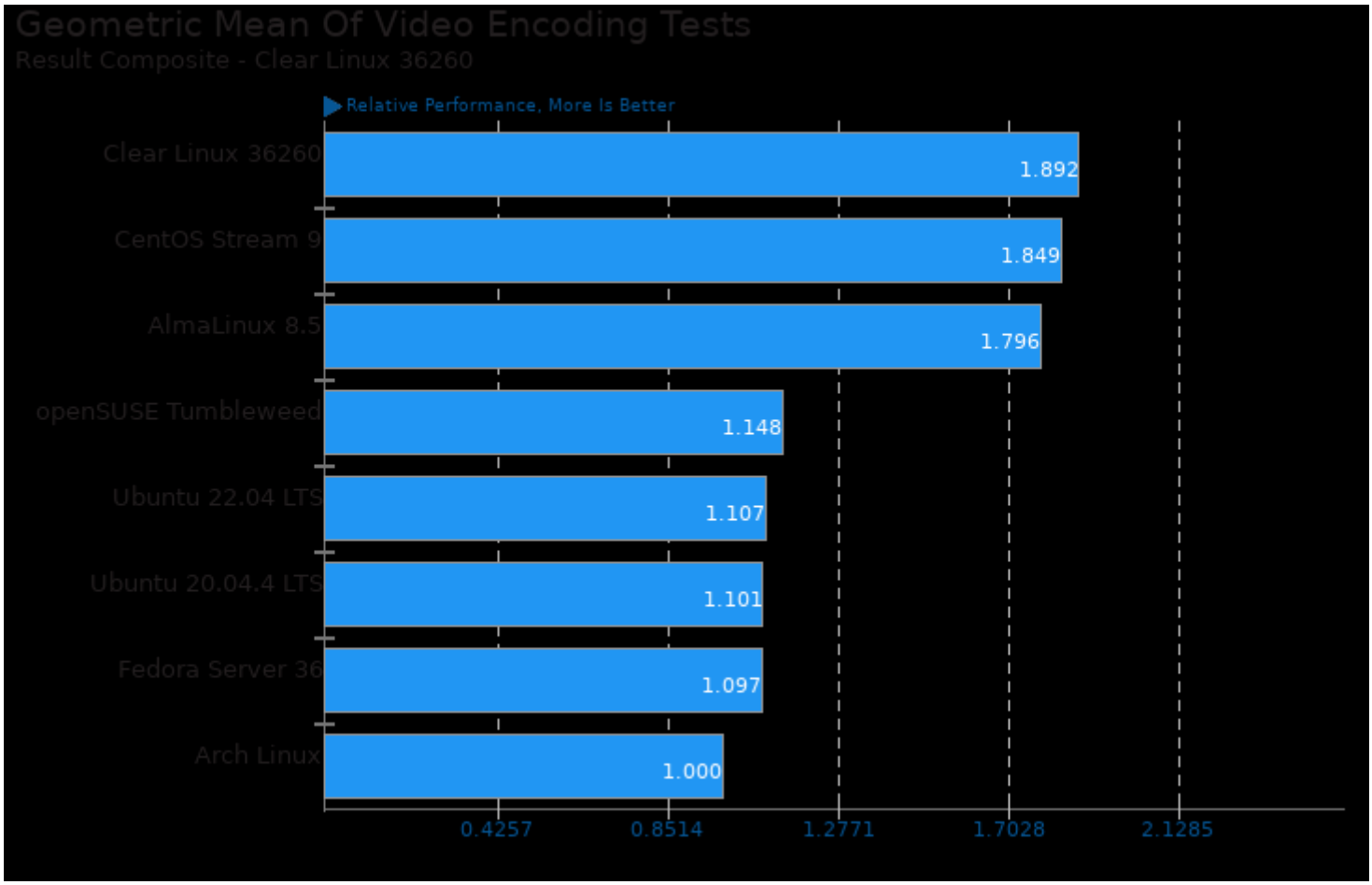
Geometric mean based upon tests: pts/dacapobench, pts/renaissance, pts/onednn, pts/svt-av1, pts/svt-hevc, pts/svt-vp9, pts/stockfish, pts/compress-zstd, pts/stress-ng, pts/blender, pts/pybench, pts/numpy and pts/phpbench

Clear Linux 36260



Geometric mean based upon tests: pts/numpy, pts/pybench, pts/phpbench and pts/nginx

Clear Linux 36260



Geometric mean based upon tests: pts/svt-vp9, pts/svt-hevc, pts/svt-av1 and pts/avifenc

This file was automatically generated via the Phoronix Test Suite benchmarking software on Friday, 29 March 2024 02:04.